CA Virtual Assurance for Infrastructure Managers

Reference Guide

Release 12.7

This Documentation, which includes embedded help systems and electronically distributed materials, (hereinafter referred to as the “Documentation”) is for your informational purposes only and is subject to change or withdrawal by CA at any time.

This Documentation may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA. This Documentation is confidential and proprietary information of CA and may not be disclosed by you or used for any purpose other than as may be permitted in (i) a separate agreement between you and CA governing your use of the CA software to which the Documentation relates; or (ii) a separate confidentiality agreement between you and CA.

Notwithstanding the foregoing, if you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all CA copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to CA that all copies and partial copies of the Documentation have been returned to CA or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENTATION “AS IS” WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL CA BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF CA IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is CA.

Provided with “Restricted Rights.” Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2012 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

CA Technologies Product References

This document references the following CA Technologies products:

- CA eHealth®
- CA Embedded Entitlements Manager (CA EEM)
- CA IT Asset Manager
- CA IT Client Manager
- CA Network and Systems Management (CA NSM)
- CA Patch Manager
- CA Server Automation
- CA Service Desk Manager (CA SDM)
- CA Spectrum ®
- CA SystemEDGE
- CA Virtual Assurance for Infrastructure Managers
- CA Software Delivery

Contact CA Technologies

Contact CA Support

For your convenience, CA Technologies provides one site where you can access the information that you need for your Home Office, Small Business, and Enterprise CA Technologies products. At http://ca.com/support, you can access the following resources:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

Providing Feedback About Product Documentation

If you have comments or questions about CA Technologies product documentation, you can send a message to techpubs@ca.com.

To provide feedback about CA Technologies product documentation, complete our short customer survey which is available on the CA Support website at http://ca.com/docs.

Contents

Chapter 1: Introduction 15

Scope of This Guide 15
Audience 15
Related Publications 15
Conventions 16

Chapter 2: AutoShell 19

About AutoShell 19
Manager Shell and Client Shell 21
Valid AutoShell User 21
Accessing AutoShell 22
Common Information Model (CIM) Objects 22
- Retrieve CIM Classes 22
- Retrieve Antecedents and Dependents From CIM Objects 23
- Retrieve CIM Objects 24

Invoking AutoShell 26
- Use Interactive Mode 28
- Use Remote Interactive Mode 29
- Batch Mode 29
- Remote Batch Mode 30

Stringification 31
Writing Data to the Console (stdout) 32
Reading Data from the Keyboard (stdin) 33
Accessing the Operating System 34
- Using the OSRedirect Class 34

Running Scripts 35
- Using the run-local Command 36
- Using the run-remote Command 38

AutoShell Core Reference 44
- Commands, Functions, and Classes According to Categories 44
- General AutoShell Commands 47
- AutoShell Functions 110
- AutoShell Classes 134

AutoShell Loadable Modules' Command Reference 159
- CA VMware vCenter Server AutoShell Commands 160
- CA Microsoft Hyper-V AutoShell Commands 200

CA IBM LPAR AutoShell Commands 300
CA Oracle Solaris Zones AutoShell Commands 327
Deployment and Policy Configuration AutoShell Commands 347

Chapter 3: Command Line Scripting 383

Command Line Instructions (CLIs) 383
CA VMware vCenter Server CLI Commands 383
dpmvc addesxhost Command--Add an ESX Host 384
dpmvc addvmvdisk Command--Add Virtual Disk 386
dpmvc addvmvnic Command--Add Virtual NIC 388
dpmvc clone Command--Clone a VM 391
dpmvc createdatastore Command--Create a Datastore 399
dpmvc cycle Command--Cycle a VM 401
dpmvc datastore Command--Get Data Store Properties 405
dpmvc delete Command--Destroy a VM 407
dpmvc distributedswitch Command--Manage Virtual Distributed Switches 410
dpmvc entermaintenancemode Command--Set to the Maintenance Mode 415
dpmvc exitmaintenancemode Command--Exit the Maintenance Mode 417
dpmvc faulttolerance Command--Specify Fault Tolerant Operations 419
dpmvc getavailablescsidisks Command--Get Available SCSI Disks 421
dpmvc gethosthba Command--Get Host Bus Adapters 422
dpmvc getresources Command--Get VM Resources 423
dpmvc getshares Command--Get VM Shares 426
dpmvc getsnapshots Command--Get VM Snapshots 428
dpmvc imgjobcheck Command--Get Clone Job Status 430
dpmvc migrate Command--Migrate a VM 433
dpmvc removedatastore Command--Remove a Datastore 436
dpmvc removevmvdisk Command--Remove Virtual Disk 437
dpmvc removevmvnic Command--Remove Virtual NIC 439
dpmvc setcpu Command-- Set CPUs for a VM 441
dpmvc setmemory Command-- Set memory size for a VM 443
dpmvc setresources Command--Set VM Resources 445
dpmvc setshares Command--Set VM Shares 448
dpmvc snapshot Command--Manage Snapshots 452
dpmvc templatetovm Command--Convert Template to VM 457
dpmvc vapp Command--Manage vApp 460
dpmvc virtualswitch Command--Manage Virtual Switches 464
dpmvc vmtotemplate Command--Convert VM to Template 468
CA Hyper-V CLI Commands 470
dpmhyperv AddVMNic Command--Add a Network Adapter Controller to a VM 471
dpmhyperv AddVMSCSIController Command--Create a SCSI Controller for a VM 472

dpmhyperv AgentGet Command--Return an Agent Value 474
dpmhyperv AgentSet Command--Set an Agent Value 475
dpmhyperv ChangeVMState Command--Change the State of a VM 476
dpmhyperv CreateTemplateFromVM Command--Create a Template from a VM 478
dpmhyperv CreateVirtDisk Command--Create a Virtual Disk Image 479
dpmhyperv CreateVirtFloppy Command--Create a Virtual Floppy Disk Image 481
dpmhyperv CreateVM Command--Create a VM 482
dpmhyperv CreateVMFromTemplate Command--Create a VM from a SCVMM Server Template 486
dpmhyperv CreateVMFromTemplate Command--Create a VM from a Template 490
dpmhyperv DeleteVM Command--Delete a VM 497
dpmhyperv ExpandVirtDisk Command--Expand the Size of a Virtual Disk 498
dpmhyperv ExportVM Command--Export a VM 500
dpmhyperv ExportVMEx Command--Export a VM 501
dpmhyperv GetHostSwitches Command--Get Switches of a Host 503
dpmhyperv GetJobErrorInfo Command--Get the Error Information of a Job 504
dpmhyperv GetJobInfo Command--Get Information of a Job 505
dpmhyperv GetJobState Command--Get the State of a Job 507
dpmhyperv GetServerInfo Command--Get all Managed Servers 508
dpmhyperv GetVersion Command--Get the PMM Version 509
dpmhyperv GetVMProperties Command--Get VM Properties 510
dpmhyperv GetVMState Command--Get a VM State 511
dpmhyperv ImportVM Command--Import a VM 512
dpmhyperv ImportVMEx Command--Copy and Import a VM 514
dpmhyperv SetClustered Command--Add or Remove a VM from a Cluster 515
dpmhyperv SetSysPrepProperties Command--Sets Sysprep Properties 517
dpmhyperv SetVMDisk Command--Assign a Drive or Disk to a Drive Controller 520
dpmhyperv SetVMProperties Command--Set Properties of a VM 522
dpmhyperv SetVMVirtFloppy Command--Assign a Virtual Floppy Image to a VM Floppy Drive 525
dpmhyperv ShowClusterSharedVolumes Command--Show all Cluster Shared Volumes 526
dpmhyperv ShowDirectories Command--Show Directory Properties on a Hyper-V Server 527
dpmhyperv ShowLogicalDisks Command--Show all Logical Disks 528
dpmhyperv ShowPhysDisks Command--Show Physical Disks of a Host 529
dpmhyperv ShowSCVMMHardwareProfiles Command--Show all SCVMM Hardware Profiles 530
dpmhyperv ShowSCVMMGuestOSProfiles Command--Show Guest Operating System Profiles 531
dpmhyperv ShowTemplates Command--Show all VM Templates 532
dpmhyperv ShowVirtFloppy Command--Show the List of Virtual Floppy Drives 533
dpmhyperv ShowVMDisks Command--Show all Virtual Disks 535
dpmhyperv ShowVMNics Command--Show all Network Interface Cards 536
dpmhyperv ShowVMs Command--Show all VMs 537
dpmhyperv ShowVMSCSIControllers Command--Show all SCSI Controllers 538
dpmhyperv ValidateAgentSNMPAccess Command--Validate SNMP Access to an Agent 539
dpmhyperv ValidateServerAccess Command--Check Server Access 540

dpmhyperv DeleteTemplate Command--Deletes a Template 541
CA IBM LPAR CLI Commands 542
dpmlpar cycle Command--Cycle a Logical Partition 543
dpmlpar delete Command--Delete a Logical Partition 547
dpmlpar getresources Command--Get LPAR Resources 549
dpmlpar image Command--Create an IBM AIX LPAR 551
dpmlpar imgjobcheck Command--Retrieve Status of IBM AIX Imaging Job 563
dpmlpar list Command--List HMC Resources 564
dpmlpar setresources Command--Add Memory Resources 567
dpmlpar setresources Command--Add Processor Resources 569
dpmlpar setresources Command--Subtract Memory Resources 572
dpmlpar setresources Command--Subtract Processor Resources 574
dpmlpar setresources Command--Update Memory Resources 577
dpmlpar setresources Command--Update Processor Resources 578
CA Microsoft Cluster Server CLI Commands 581
dpmmscs getclusterinfo Command--Get Information of a Cluster 581
dpmmscs getgroupresourcesinfo Command--Get Resource Information of a Cluster group 582
dpmmscs getnetworkinterfacesinfo Command--Get Network Interface Information 584
dpmmscs getnetworksinfo Command--Get Network Information 585
dpmmscs getnodesinfo Command--Get Cluster Nodes Information 586
dpmmscs getresourcegroupsinfo Command--Get Cluster Resource Groups Information 587
dpmmscs getresourcesdependenciesinfo Command--Get Dependency Information of Resources 588
dpmmscs getresourcetypesinfo Command--Get Cluster Resource Types Information 589
dpmmscs getservicesinfo Command--Get Cluster Services Information 590
dpmmscs movegroup Command--Move a Resource Group to another Node 591
dpmmscs pauseservice Command--Pause a Cluster Service 592
dpmmscs bringgrouponline Command--Bring a Resource Group Online 593
dpmmscs bringresourceonline Command--Bring a Resource Online 594
dpmmscs resumeservice Command--Resume a Cluster Service 596
dpmmscs startservice Command--Start a Cluster Service 597
dpmmscs stopservice Command--Stop a Cluster Service 598
dpmmscs takegroupoffline Command--Take a Resource Group Offline 599
dpmmscs takeresourceoffline Command--Take a Resource Offline 600
CA Solaris Zones CLI Commands 601
dpmzone associateproject Command--Associate a Task with a Project 601
dpmzone clonezone Command--Clone a Zone 602
dpmzone createandinstallzone Command--Create and Install a Zone 603
dpmzone createpool Command--Create Resource Pool 606
dpmzone createproject Command--Create a Project 608
dpmzone createzone Command--Create a Zone 609
dpmzone customcommand Command--Run a Custom Command 612
dpmzone deleteproject Command--Delete a Project 613

dpmzone deletezone Command--Delete a Zone 614
dpmzone installzone Command--Install a Zone 615
dpmzone movezone Command--Move a Zone 616
dpmzone rebootzone Command--Reboot a Zone 617
dpmzone renamezone Command--Rename a Zone 618
dpmzone setpoolscheduler Command--Set the Pool Scheduler 619
dpmzone setprocessorset Command--Set the Maximum Number of CPUs for a Processor Set 620
dpmzone showinterfaces Command--Show Network Interfaces 621
dpmzone showpools Command--Show Resource Pools 622
dpmzone showprojects Command--List the Properties of a Project 623
dpmzone showresourceset Command--Show Resource Sets 623
dpmzone showtasks Command--List the Tasks of a Project 624
dpmzone showzoneinterfaces Command--Show Network Interfaces of a Zone 625
dpmzone showzoneprocess Command--Show Processes of a Zone 626
dpmzone showzoneprojects Command--Show Projects of a Zone 626
dpmzone showzones Command--Show Zones 627
dpmzone startzone Command--Start a Zone 628
dpmzone stopzone Command--Stop a Zone 629
dpmzone uninstallzone Command--Uninstall a Zone 630
CA Cisco UCS Commands 630
dpmucs associateserviceprofile--Associate Service Profile With a Blade 632
dpmucs cloneserviceprofile--Clone a Service Profile 633
dpmucs createmacpool Command--Create MAC Address Pool 634
dpmucs createorg Command--Create Organization 636
dpmucs createserverpool Command--Create Server Pool 637
dpmucs createserviceprofile Command--Create a Service Profile 639
dpmucs createtemplatefromserviceprofile Command--Create a Template from a Service Profile 640
dpmucs createuuidpool Command--Create UUID Pool 642
dpmucs createwwpool Command--Create WWNN Pool 643
dpmucs deletemacpool Command--Delete MAC Address Pool 645
dpmucs deleteorg Command--Delete Organization 646
dpmucs deleteserverpool Command--Delete Server Pool 648
dpmucs deleteserviceprofile--Delete a Service Profile 649
dpmucs deleteuuidpool Command--Delete UUID Pool 650
dpmucs deletewwpool Command--Delete WWNN Pool 651
dpmucs deployimage Command--Deploy a Cisco UCS Image 653
dpmucs disassociateserviceprofile Command--Disassociate Service Profile 655
dpmucs failoverserviceprofile Command--Associate a Service Profile With a Blade for Failover 656
dpmucs getblades Command--Get Blade Information 657
dpmucs getchassis Command--Get Chassis Information 659
dpmucs getpolicy Command--Gets Policy from a UCS Manager 660
dpmucs getserviceprofilestatus Command--Get Service Profile Status 661

dpmucs getswitches Command--Get Switch Information 662
dpmucs gettopsystem Command--Get System Information 664
dpmucs listserviceprofiles Command--List Service Profiles 665
dpmucs powercycle Command--Power Cycle Blades 666
dpmucs renamepool Command--Rename Pool 668
dpmucs serviceprofileupdate Command--Execute Service Profile Operations 669
Administrative Command Line Utilities 671
dpmutil Syntax 671
dpmutil -amq Command--Configure the ActiveMQ Message Broker 672
dpmutil ecs Command--Configure Windows Scheduler 673
dpmutil eiam Command--Configure CA EEM 674
dpmutil -hd Command--Configure Help Desk 674
dpmutil -hmc Command--Configure HMC or IVM Server 675
dpmutil -hyperv Command--Configure Hyper-V Server 676
dpmutil mgmtdb Command--Configure Management Database 676
dpmutil -perfdb Command--Configure the Performance Database 677
dpmutil remotevcaim Command--Configure Remote VC AIM 678
dpmutil -sc Command--Configure the Service Controller 679
dpmutil -scvmmserver Command--Configure SCVMM Server 680
dpmutil -snmp Command--Configure SNMP 681
dpmutil -systemcredential Command--Configure External System Credentials 682
dpmutil -sysuser Command--Configure Local Credentials Used at Service Startup 683
dpmutil vcdefault Command--Configure Default VMware vCenter Administrator User 684
dpmutil vcserver Command--Configure VMware vCenter 685
dpmutil -vioserver Command--Configure VIO Server 686
Common Discovery Commands 686
dpmcda cancelnetworkscan Command--Cancel a Network Discovery 687
dpmcda deletenetwork Command--Delete a Network 687
dpmcda discoverhost Command--Discover a Host 688
dpmcda discovernetwork Command--Discover a Network 690
Collection Engine Commands 691
dpmce ceconfig -configuremetric Command--Configure Metric 691
dpmce ceconfig -configuremetricfilter Command--Configure Metric Filter 694
dpmce ceconfig -disablemetric Command--Disable a Metric 696
dpmce ceconfig -disablemetricforoverall Command--Disable and Exclude a Metric From Overall Calculation 697
dpmce ceconfig -enablemetric Command--Enable a Metric 698
dpmce ceconfig -enablemetricforoverall Command--Enable and Include a Metric for Overall Calculation 699
dpmce ceconfig -getglobal Command--Retrieve Data Center Intervals 700
dpmce ceconfig -getnode Command--Retrieve Host Collection Intervals 701
dpmce ceconfig -getmetriclist Command--Retrieve Metric List 702

dpmce ceconfig -refreshmetriclist Command--Retry Metric Collection 703
dpmce ceconfig -setalias Command--Set Alias 704
dpmce ceconfig -setglobal Command--Set Data Center Intervals 706
dpmce ceconfig -setnode Command--Set Intervals for a Host 708
dpmce ceconfig -updatemetric Command--Update a Metric 709
Event Commands 711
dpmeventmanager create_event Command--Create an Event 711
dpmeventmanager get_events Command--Retrieve Events 712
General Shell Commands 715
caaipsecurity Command--Specifies Credentials for Web Service Security Check 715
createdpmdefaultgroup Command--Create or Update Service 716
dpmcmd run Command--Run Scripts 716
dpmix export|import|verify Command--Migrate System Data 717
dpmrpt schedulereport Command--Schedule a Report 723
dpmssh run Command--Run Remote Shell Commands or Scripts 725
Help Desk Commands 726
dpmhd addcomment Command--Update a Ticket with a Comment 726
dpmhd close Command--Close a Help Desk Ticket 727
dpmhd getattribute Command--Get an Attribute Value of a Ticket 728
dpmhd getstatus Command--Get the Status of a Ticket 730
dpmhd open Command--Open a Help Desk Ticket 730
dpmhd setattribute Command--Set an Attribute of a Ticket 732
dpmhd setstatus Command--Set the Status of a Ticket 733
Imaging Commands 734
dpmimg image Command--Deploy a Solaris Image 735
dpmimg imgjobcheck Command--Get Solaris Imaging Job Status 740
Policy Commands 741
dpmpolicy createdefaultactions Command--Create Default Actions 741
dpmpolicy exportaction Command--Export Actions to a File 742
dpmpolicy exportrule Command--Export Rules to a File 743
dpmpolicy findbestmachine Command--Find the Best Server 744
dpmpolicy findcandidatemachine Command--Find the Candidate Servers 745
dpmpolicy getruleexeccount Command--Retrieve rule execution count 747
dpmpolicy importaction Command--Import Actions from a File 748
dpmpolicy importrule Command--Import Rules from a File 749
dpmpolicy resetruleexeccount Command--Reset Retries to Run a Rule 750
dpmpolicy runaction Command--Run an Action 752
dpmpolicy setruleexeclimit Command--Set Limits for a Rule 754
Policy Configuration 756
caismutility Command -- Add Functionalities to Policy Configuration UI 757
Resource Manager Commands 759
dpmresourcemgr addbaremetal Command--Add a Physical Computer 759

dpmresourcemgr addcomputertonetwork Command--Add Server to Network 760
dpmresourcemgr addipaddresspool Command--Add IP Address Pools 762
dpmresourcemgr addmachinestoservice Command--Add Servers to a Service 763
dpmresourcemgr addtocontainer Command--Add Content to a Container 765
dpmresourcemgr createcontainer Command--Create a Container 765
dpmresourcemgr createdatacenter Command--Create a Data Center 766
dpmresourcemgr createdefaultservice Command--Create Default Service 767
dpmresourcemgr createipnetwork Command--Create Network 769
dpmresourcemgr createresourcegroup Command--Create Resource Group 771
dpmresourcemgr createresourcetemplate Command--Create Server Group Template 772
dpmresourcemgr createservice Command--Create a Service 773
dpmresourcemgr deletebaremetal Command--Delete a Physical Computer 775
dpmresourcemgr deletecontainer Command--Delete a Container 776
dpmresourcemgr deleteipnetworks Command--Delete a Network 777
dpmresourcemgr deletesystem Command--Delete a System 778
dpmresourcemgr getdiscoverednetworks Command--Get Discovered Networks 779
dpmresourcemgr getipaddresspools Command--List IP Address Pools 779
dpmresourcemgr getipnetworks Command--List Networks 781
dpmresourcemgr getserverlist Command--Get a List of Servers 781
dpmresourcemgr getservicelist Command--Get List of Services 782
dpmresourcemgr removecomputerfromipnetwork Command--Remove Server From Network 784
dpmresourcemgr removefromcontainer Command--Remove Content from a Container 785
dpmresourcemgr removeipaddresspool Command--Remove IP Address Pool 786
dpmresourcemgr removemachinesfromservice Command--Remove Servers From a Service 787
dpmresourcemgr removeresourcegroup Command--Remove Resource Group 788
dpmresourcemgr removeservice Command--Remove a Service 789
dpmresourcemgr removesourcetemplate Command--Remove Resource Template 790
dpmresourcemgr retrieveresourcegroup Command--Retrieve Resource Group 791
dpmresourcemgr retrieveresourcetemplate Command--Retrieve Resource Template 792
dpmresourcemgr setcontainername Command--Set Container Name 793
dpmresourcemgr setcontainerservice Command--Set Container to a Service 794
dpmresourcemgr setmanagementip Command--Set the Management IP for a Host 796
dpmresourcemgr setmanagementstatus Command--Set the Management Status for a Host 797
dpmresourcemgr setserviceproperties Command--Set Service Properties 798
dpmresourcemgr updateresourcegroup Command--Update Resource Group 799
dpmresourcemgr updateresourcetemplate Command--Update Resource Template 800
dpmresourcemgr updateservice Command--Update a Service 802
dpmresourcemgr updateipnetwork Command--Update a Network 803
dpmresourcemgr updatesubnetdefaults Command--Update Network Defaults 804
dpmresourcemgr getsubnetdefaults Command--List Subnet Defaults 806
dpmresourcemgr updateipaddresspool Command--Update IP Address Pool 807
Remote Monitoring Commands 808

rmonwatch add Command--Add Rows to a MIB Table 808
rmonwatch del Command--Delete Rows from a MIB Table 810
rmonwatch getTable Command--View rmonWbem MIB Tables 812
rmonwatch getVersion Command--View Version Information 814
Advanced SNMP Parameters 815
Log Files 817
Log Files Available 818
Log File Settings 820

Chapter 4: Performance Metrics 821

CA HP UNIX Performance Metrics 821
CA IBM AIX Performance Metrics 822
CA IBM LPAR Performance Metrics 823
CA IBM pSeries Logical Partition Performance Metrics 823
CA IBM pSeries Performance Metrics 824
Processor Pools Support 825
CA IBM HACMP Performance Metrics 828
IBM HACMP Cluster Metrics 829
IBM HACMP Node Metrics 829
IBM HACMP Resource Group Metrics 829
IBM HACMP Network Metrics 830
CA Linux Performance Metrics 830
CA Microsoft Hyper-V Performance Metrics 831
CA Oracle Solaris Performance Metrics 831
CA Oracle Solaris Zones Performance Metrics 832
Solaris Zones Server Metrics 832
Solaris Zones Server Disk Metrics 833
Solaris Zones Server Network Metrics 834
Solaris Zones Server Memory Metrics 834
Solaris Zones Server CPU Metrics 835
Solaris Zones Metrics 835
Solaris Zones CPU Metrics 835
Solaris Zones Memory Metrics 836
Solaris Zones Maximum Swap Metrics 836
Solaris Zones Shared Memory Metrics 837
Solaris Zones Resource Pool Metrics 837
Solaris Zones Project Metrics 837
CA SystemEDGE Performance Metrics 838
CA SystemEDGE Enhancement Metrics 841
CA VMware vCenter Server Performance Metrics 849
VMware VC ESX Host 850

VMware VC ESX Host CPU 850
VMware VC ESX Host Disk 851
VMware VC ESX Host Memory 852
VMware VC ESX Host Network 852
VMware VC ESX Host per CPU 853
VMware VC VM 853
VMware VC VM CPU 854
VMware VC VM Disk 855
VMware VC VM Memory 856
VMware VC VM Network 857
VMware VC Cluster 858
VMware VC Datastore 858
VMware VC Compute Resource 859
VMware VC Resource Pool 859
VMware VC Server 861
CA Citrix XenServer Performance Metrics 861
Citrix Xen Host 861
Citrix Xen Host pNic 862
Citrix Xen Host Storage 862
Citrix Xen VM 862
Citrix Xen VM vDisk 863
Citrix Xen VM vNic 863
CA Windows Microsoft Cluster Performance Metrics 864
CA Windows Performance Metrics 864
Cisco Unified Computing System (UCS) Performance Metrics 865
Remote Monitoring Performance Metrics 868

Index **873**

Chapter 1: Introduction

This section contains the following topics:

Scope of This Guide (see page 15)
Audience (see page 15)
Related Publications (see page 15)
Conventions (see page 16)

Scope of This Guide

This guide describes AutoShell, CA Virtual Assurance CLI commands, and performance metrics. A glossary explains specific terminology used in virtualization technologies.

AutoShell is the central command line interface of CA Virtual Assurance that you can use to automate complex recurring and management tasks. AutoShell provides a standalone JavaScript implementation for object orientation, XML and regular expression processing. AutoShell uses an out-of-the-box version of the Mozilla Spidermonkey JavaScript interpreter which also provides JavaScript functionality to the Mozilla Firefox web browser. The interpreter allows you to use JavaScript syntax directly in the AutoShell, for example, for displaying a directory listing.

This guide provides you all AutoShell commands, examples, and best practices of this user interface.

Audience

This guide is intended for administrators who install, configure, and use CA Virtual Assurance to manage virtual environments. It assumes that you are familiar with the operating systems used in your environment, virtualization technologies, and SNMP.

Related Publications

The CA Virtual Assurance documentation consists of the following deliverables:

Administration Guide

Explores how to administer and use CA Virtual Assurance to manage virtual resources in your environment.

Installation Guide

Contains brief architecture information, various installation methods, post-installation configuration information, and Getting Started instructions.

Online Help

Provides window details and procedural descriptions for using the CA Virtual Assurance user interface.

Reference Guide

Provides detailed information about AutoShell, CLI commands, MIB attributes, and performance metrics.

Release Notes

Provides information about operating system support, system requirements, published fixes, international support, known issues, and the documentation roadmap.

Service Response Monitoring User Guide

Provides installation and configuration details of SRM.

SystemEDGE User Guide

Provides installation and configuration details of SystemEDGE.

SystemEDGE Release Notes

Provides information about operating system support, system requirements, and features.

Conventions

This guide uses the following conventions:

Case-Sensitivity

All names of classes, commands, directives, environment parameters, functions, and properties mentioned in this guide are case-sensitive and you must spell them exactly as shown. System command and environment variable names *may* be case-sensitive, depending on your operating system's requirements.

Cross-References

References to information in other guides or in other sections in this guide appear in the following format:

Guide Name

Indicates the name of another guide.

"Chapter Name"

Indicates the name of a chapter in this or another guide.

Synonyms

Terms such as attribute, object, object identifier (OID) are synonymous to the term 'variable' in this document.

Terms such as SystemEDGE Agent, CA SystemEDGE are synonymous to SystemEDGE in this document.

Syntax

Syntax and user input use the following form:

Italic

Indicates a variable name or placeholder for which you must supply an actual value.

{a|b}

Indicates a choice of mandatory operands, a or b.

[ ] or [[ ]]

Indicates optional operands.

Syntax Example

The following example uses these conventions:

`modify -t ZONE [-m zoneserver] -p psetname {-min mincpu|-max maxcpu} pset -session ssh`

The operands -min and -max are mandatory, but you can only use one of them depending on what you want to define, the minimum number of CPUs in the processor set or the maximum number. The operand -m is not required for this command to function. All other parts of the command must be entered as shown.

Default Directory

CASYSEDGE used in path statements indicates the directory in which SystemEDGE is installed. **Default:** C:\Program Files\CA\SystemEDGE.

Installation Path

Install_Path used in path statements indicates the directory in which CA Virtual Assurance or components of CA Virtual Assurance are installed.

Defaults:

- Windows x86: C:\Program Files\CA
- Windows x64: C:\CA, C:\Program Files (x86)\CA, or C:\Program Files\CA
- UNIX, Linux: /opt/CA

Chapter 2: AutoShell

AutoShell is a command line and scripting environment that you can use to automate complex recurring and management tasks.

This chapter details AutoShell and provides you many examples and best practices of this user interface.

This section contains the following topics:

About AutoShell (see page 19)
Manager Shell and Client Shell (see page 21)
Valid AutoShell User (see page 21)
Accessing AutoShell (see page 22)
Common Information Model (CIM) Objects (see page 22)
Invoking AutoShell (see page 26)
Stringification (see page 31)
Writing Data to the Console (stdout) (see page 32)
Reading Data from the Keyboard (stdin) (see page 33)
Accessing the Operating System (see page 34)
Running Scripts (see page 35)
AutoShell Core Reference (see page 44)
AutoShell Loadable Modules' Command Reference (see page 159)

About AutoShell

AutoShell is a combination of a scripting language and a command line shell. It is based on the standardized scripting language ECMA-Script, most commonly referred to as JavaScript. While JavaScript is mostly known as a scripting language that is used on web pages, it does not need to run in a browser. It is a standalone scripting language implementing support for object orientation, XML and regular expression processing. AutoShell uses an out-of-the-box version of the Mozilla Spidermonkey JavaScript interpreter which also provides JavaScript functionality to the Mozilla Firefox web browser. This allows you to use JavaScript syntax directly in the AutoShell, for example, for displaying a directory listing.

Typically, strings must be surrounded by quotes, special characters must be escaped, or function calls must be enclosed in parentheses. Entering instructions in this manner is not efficient, so AutoShell implements a unique command translation layer on top of the JavaScript language that accepts typical shell-type commands with mandatory and optional arguments. These commands do not require strings to be placed in quotes and translated into the underlying JavaScript syntax.

Key AutoShell features include the following:

- Operating system access to run child processes and capture their output.
- Parallel remote script execution to permit efficient processing of tasks that cannot be run centrally.
- Remote file system access for advanced provisioning by copying files directly between computers.
- Support for common Application Programming Interface (API) mechanisms typically used by management APIs, such as library calls, Java, and COM, to permit access from scripts to these APIs.
- Remote registry access (Windows specific).
- Ability to push and install its own client shell and arbitrary install packages to remote Windows systems.

Note: For information about JavaScript language references and examples, see the website https://developer.mozilla.org/en/JavaScript. AutoShell uses JavaScript version 1.7.

More Information

Manager Shell and Client Shell (see page 21)
Invoking AutoShell (see page 26)
Stringification (see page 31)
Running Scripts (see page 35)
AutoShell Core Reference (see page 44)

Manager Shell and Client Shell

AutoShell consists of two parts: the manager shell and the client shell. To enter commands or start the execution of scripts, work with the manager shell to perform local tasks on the manager system. The client shell is considered to be part of the AutoShell remote execution infrastructure. To enable remote execution and remote file system access, the client shell must be installed on all managed remote nodes. Other than that you do not need to use the client shell. The manager shell invokes the client shell for remote operations through secure SSH connections. The term AutoShell always refers to the manager shell for this reason.

Manager Shell

Lets you interactively enter commands, start scripts and perform local tasks on the manager computer.

Client Shell

Enables remote execution and remote file system access using Secure Shell (SSH) connections, and must be installed on all managed server remote nodes.

AutoShell can be invoked in interactive mode or scripting (batch) mode.

Valid AutoShell User

During the CA Virtual Assurance installation, you define a CA Embedded Entitlements Manager (Embedded Entitlements Manager) user identity and password in the Native Security User Information screen of the installation wizard. The credentials are stored in the Embedded Entitlements Manager database. The user is assigned to the CA Virtual Assurance administrator group and can be used to log in to the CA Virtual Assurance User Interface and AutoShell manager.

If CA Virtual Assurance components that use Embedded Entitlements Manager are installed on a local or remote system, the AutoShell manager always validates the login credentials against the Embedded Entitlements Manager data. If not, the AutoShell manager validates the login credentials against Windows authentication.

Accessing AutoShell

You can access AutoShell from the CA Virtual Assurance server.

To access AutoShell

1. Open the Windows Explorer and navigate to the following directory:
   C:\Program Files\CA\SC\AutoShellClient
2. Double-click caaipaomautoshellclient.exe.
   The AutoShell Command Prompt window opens.
3. Enter user name and password of a valid CA Virtual Assurance user.

   The AutoShell command prompt appears.

More Information

Valid AutoShell User (see page 21)

Common Information Model (CIM) Objects

CA Virtual Assurance uses a CIM-based object model to store information about managed objects. Managed objects can be retrieved, queried, and manipulated as native objects inside the AutoShell scripting environment. For CIM detail, see the CIM specification published by the Distributed Management Task Force (DMTF): http://www.dmtf.org/standards/cim/. For DMTF CIM documentation format and feature specifications, see http://www.dmtf.org/standards/published_documents/DSP0202_1.0.0.pdf.

To enable the optional AutoShell CIM feature during installation, select the AutoShell CIM ALM (AutoShell Loadable Module).

Important! AutoShell provides full write access to the CA Virtual Assurance object store. Using improper AutoShell commands or scripts can invalidate the integrity of this store, causing malfunction of other CA Virtual Assurance components. Always perform read-only operations on the object store from within AutoShell.

Retrieve CIM Classes

You can retrieve CIM classes in AutoShell.

To retrieve DMTF CIM classes, use the following command:

```
get-autoShellClasses CIM_*
```

To retrieve CA-defined CIM extension classes, use the following command:

```
get-autoShellClasses CA_*
```

Retrieve Antecedents and Dependents From CIM Objects

You can use getAntecedents() and getDependents() methods to retrieve CIM object antecedents and dependents.

To retrieve CIM object antecedents, call the getAntecedents() method:

```
// Retrieve all computer systems
arr=CA_ComputerSystem.getInstances()
// Continue working with the first computer system returned
cs=arr[0]
// retrieve the antecedents
arrAnt = cs.getAntecedents()
for(i=0; i<arrAnt.length; i++)
{
        show-cimObject arrAnt[i]
}
```

To retrieve antecedents instances of a CIM class, call getAntecedents() method:

```
os = cs.getAntecedents("CIM_OperatingSystem");
show-cimObject os
```

To retrieve CIM object dependents, call the getDependents() method:

```
// Retrieve all computer systems,
arr=CA_ComputerSystem.getInstances()
// Continue working with the first computer system returned
cs=arr[0]
// retrieve the dependents
arrAnt = cs. getDependents()
for(i=0; i<arrAnt.length; i++)
{
        show-cimObject arrAnt[i]
}
```

To retrieve dependents instances of a CIM class, call the getDependents() method:

```
fs = cs. getDependents("CIM_FileSystem");
show-cimObject fs
```

Retrieve CIM Objects

Each CIM class has a static getInstances() method that returns an array of class objects.

To retrieve all systems managed by CA Virtual Assurance, use the following command:

```
aObjs = CA_ComputerSystem.getInstances()
? "Query returned", oObjs.length
```

To retrieve a subset of systems managed by CA Virtual Assurance, use one of the following filter expressions:

```
aObjs = CA_ComputerSystem.getInstances("ElementName=’Everest.local'")
```

or

```
aObjs = CA_ComputerSystem.getInstances("ElementName like 'Ev*'")
```

To retrieve system names and descriptions, use the following command:

```
aObjs = CA_ComputerSystem.getInstances();
for(i=0; i<aObjs.length; i++)
        ? aObjs[i].getElementName(),aObjs[i].getDescription()
```

To retrieve CIM object properties and values, use the following command:

```
aObjs = CA_ComputerSystem.getInstances("ElementName='Debian1'")
show-cimObject aObjs[0]
```

Example: Output for show-cimObject command

```
CA_ComputerSystem
=================
Caption: null
Description: null
ElementName: Debian1
Facets: 44
InstallDate: null
Name: 47332da1-e782-0308-d614-c2e99de989bc
OperationalStatus: undefined
StatusDescriptions: undefined
Status: null
HealthState: 5
PropagatedHealthState: null
IsPropagated: true
PrimaryStatus: null
DetailedStatus: null
OperatingStatus: null
CommunicationStatus: null
ManagementStatus: null
EnabledState: null
OtherEnabledState: null
RequestedState: null
EnabledDefault: null
TimeOfLastStateChange: null
AvailableRequestedStates: undefined
TransitioningToState: null
CreationClassName: CA_ComputerSystem
NameFormat: null
PrimaryOwnerName: null
PrimaryOwnerContact: null
Roles: undefined
OtherIdentifyingInfo: undefined
IdentifyingDescriptions: undefined
Dedicated: undefined
OtherDedicatedDescriptions: undefined
ResetCapability: null
PowerManagementCapabilities: undefined
HostName: 192.168.1.119
IpAddress: null
SerialNumber: null
Version: null
CpuCount: 1
TotalVisibleMemorySize: 256
PatchLevel: null
BiosVersion: null
Fans: null
Chassis: null
```

```
DrCapable: null
VendorId: null
MacAddress: null
ArchTypeUID: null
Available: null
LastUpdate: null
SnapshotType: null
TotalStorageCapacity: null
Model: null
CpuSpeed: null
SystemImageId: null
HardwareClassId: null
```

Invoking AutoShell

You can invoke the AutoShell from a command line interface by using the following command:

`caaipaomautoshell.exe [-U username] [-P password] [-h host] [[-f] scriptfile] [scriptargs]] [-e expr] [-i]`

-U *username*

Specifies a valid CA Virtual Assurance user. You can also set the user name by using the CAASUSER environment variable.

-P *password*

Specifies the password for that user. You can also set the password by using the CAASPASS environment variable.

-f *scriptfile* [*scriptargs*]

(Optional) Loads the specified script file with its optional script arguments. This parameter can be used multiple times.

-e *expr*

(Optional) Evaluates the specified expression.

-i

(Optional) Enters interactive mode after loading scripts.

-locale=*locale*

(Optional) Specifies an IS0 639_3166 combination (for example: fr_FR for French) to override the default English output. To use the locale of the command prompt, specify "native".

Examples

Run the hello.js script:

```
caaipaomautoshell.exe -U vaimuser -P topsecret -f hello.js
```

Calculate the value of 4*3:

```
caaipaomautoshell.exe -U vaimuser -P topsecret -e 4*3
```

Set the environment variables for username and password and calculate the value of sin(PI/2):

```
set CAASUSER=vaimuser
set CAASPASS=topsecret
caaipaomautoshell.exe -e Math.sin(Math.PI/2)
```

More Information

Valid AutoShell User (see page 21)
Use Interactive Mode (see page 28)
Use Remote Interactive Mode (see page 29)
Batch Mode (see page 29)
Remote Batch Mode (see page 30)

Use Interactive Mode

Use interactive mode to perform simple operations on a local or remote host or for testing small code fragments when you create scripted command sequences.

To use interactive mode

1. Run the following AutoShell executable in one of the following ways:

   ```
   caaipaomautoshell.exe
   ```

   AutoShell prompts you for a user name and password. AutoShell then either performs an authentication check or stores the credentials for future use, such as authenticating to remote clients. This decision depends on the type of product integration.

   ```
   caaipaomautoshell.exe –U bob –P mypassword
   ```

   You specify the user name and password by using the –U and –P switches.

2. (Optional) Specify credentials by setting the environment variables CAASUSER and CAASPASS as follows:

   ```
   set CAASUSER=bob
   set CAASPASS=mypassword
   ```

   The AutoShell prompt appears after a successful logon.

   asmgr::->

   asmgr

   Specifies the local host name.

3. Enter any valid JavaScript expression at the prompt because AutoShell uses JavaScript as its underlying scripting language.

   Example:

   2+3 displays 5

   AutoShell has an automatic result display that eliminates the need to use output commands at the command prompt for simple expressions. However, displaying the result of the expression in a script does require you to use an output command. See also the run-local command (see page 36) section.

4. Enter one of the following commands to terminate the AutoShell interactive session:

   ```
   quit
   exit
   ```

Use Remote Interactive Mode

You can start a remote interactive session to a managed system that has the AutoShell client installed. AutoShell uses SSH for communication between manager and client shells to connect to any SSH server system with user name and password as login credentials. In this case, the available commands are not AutoShell commands, but the commands of the SSH configured on the remote system.

To use remote interactive mode

1. Specify the remote host name with the –h switch:

   ```
   caaipaomautoshell.exe –h ascl1
   ```

   The interactive command prompt displays and contains the name of the remote host specified. Commands entered at the prompt are executed in the client shell on the remote system. The result returns to the manager shell and displays in the interactive session.

   Note: When scripts are specified for execution in an interactive remote session, they must reside on the remote system.

2. Enter *one* of the following options to terminate the AutoShell interactive session:

   ```
   quit
   exit
   ```

Batch Mode

AutoShell scripts can be invoked from interactive mode, but they are typically run without any manual intervention.

To use batch mode

Invoke AutoShell with the –f switch and the path name of the script to run:

```
caaipaomautoshell.exe –f hello.js
```

AutoShell runs the script and terminates when script execution finishes. Interactive mode starts after the script finishes. Specify -i at the end of the command (order matters) to enter interactive mode after processing the script:

```
caaipaomautoshell.exe –f hello.js -i
```

Note: In these examples, add –U / -P switches with credentials or set the CAASUSER / CAASPASS environment variables. If credentials are not defined, AutoShell prompts for them before starting script execution.

You can also pass arguments to the script:

```
caaipaomautoshell.exe –f hello.js 1 abc "x y z"
```

Passes 1, "abc" and "x y z" to the script. These arguments can be accessed through the arguments array which is a standard JavaScript mechanism.

Specify multiple scripts using multiple occurrences of the –f switch:

```
caaipaomautoshell.exe –f hello.js –f world.js
```

The scripts are executed in the order they are specified. When specifying arguments, each script receives its own set of arguments, for example;

```
caaipaomautoshell.exe –f hello.js 1 –f world.js 2
```

In this case the hello.js script receives the actual parameter 1 and world.js the parameter 2.

Expression evaluation is another variant. Instead of adding simple expressions to a script and execute them using –f, they can be specified on the command line using the –e switch:

```
caaipaomautoshell.exe -e Math.sqrt(2)
caaipaomautoshell.exe -e "for(i=1;i<11;i++)qout(i)"
```

Remote Batch Mode

You can run one or multiple scripts on a remote system with remote batch mode.

To use remote batch mode

Specify the host name using the –h switch before specifying the script files. For example, enter the following command:

```
caaipaomautoshell.exe –h ascl1 –f hello.js –f world.js
```

The script files reside on the manager system and are transferred to the remote client for execution.

Stringification

Stringification takes a sequence of characters and turns it into a JavaScript literal string. For example, the AutoShell get-help command that takes a filter string as an optional parameter:

```
get-help help
```

Because AutoShell uses an out-of-the-box JavaScript interpreter, any command entered at the prompt or in a script file, is translated into valid JavaScript syntax. The AutoShell command translation layer turns the command into a JavaScript function call:

```
help( "help" );
```

Literal strings in JavaScript must always be enclosed in quotes, therefore the command translation layer automatically places quotes around the string specified in the command. If quotes are found around a string, it is not stringified again.

Special characters inside literal JavaScript strings must be escaped. In particular, backslash and quotes inside quote delimited strings. Escaping is done by prefixing these special characters with a backslash. Consider the AutoShell dir command (1) that gets translated to a function call (2):

```
(1) dir c:\Program Files\CA\*.*
(2) ca.aip.direct.directory("c:\\Program Files\\CA\\*.*" ,"",false,false, false,
false);
```

Quotes may be required when dealing with strings that contain spaces and take multiple input parameters in one option. If a string with spaces inside is specified without quotes, the space is interpreted as an argument delimiter until all input parameters a matched. To prevent this behavior use quotes.

Instead of using a command without quotes (1), escape backslashes, and enclose the path in quotes so that AutoShell correctly identifies arguments (2):

```
(1) copy c:\Program Files\CA\*.* c:\temp
(2) copy "c:\\Program Files\\CA\\*.*" c:\temp
```

Note: Because the command translation layer does not stringify the path, special characters inside the string must be escaped manually.

To keep a string including spaces together and still get automatic escaping of special characters, you can also use the _S() macro:

```
copy _S(c:\Program Files\CA\*.*) c:\temp
```

When using AutoShell commands to automate tasks, parts of the commands must often accept input from JavaScript variables. In this case, prevent stringification. Otherwise, the variable name is turned into a literal string and the command does not produce the expected result. To prevent stringification of an expression, place the expression into parenthesis:

```
var topic = "help";
get-help (topic)
```

Writing Data to the Console (stdout)

Scripts often display results or diagnostic messages. Use "?" and "??" commands to write any type of output to stdout, which specifies the console screen when no redirection is specified. To write output from within an expression to stdout, use the qout() and qqout() functions. The function qout() is equivalent to "?" and qqout() to "??". Both commands and functions accept lists of arguments.

?, qout

Writes the string representation of each argument in a list to stdout. A single space is automatically placed between each displayed argument. The output is terminated with a linefeed character.

??, qqout

Writes the string representation of each argument in a list to stdout. A single space is automatically placed between each displayed argument.

Note: The "?" and "??" output commands can only be used at the beginning of a line.

Examples

The "?" command prints the specified value followed by a line feed:

```
? "Hello World"
Hello World
```

The "?" command also accepts a comma-separated list of arguments. The displayed arguments are separated with a single space in the output:

```
? "Hello", "World"
Hello World
```

The "??" command works like "?", but does not add the line feed at the end of the output. Several "??" commands can be used in a script to construct a single-line output:

```
?? "Hello"
?? " "
?? "World"
```

Both commands accept any data type and combinations thereof:

```
? "Today is", new Date
? "The square root of 2 is", Math.sqrt(2)
```

Display the numbers from 1 to 10:

```
for(i=1;i<11;i++)qout(i);
```

Reading Data from the Keyboard (stdin)

If a script requires input while it is running, use one of the following commands:

wait

Waits for a key press and optionally stores the typed character in a variable.

accept

Reads a string from the keyboard (stdin) until enter is pressed:

Examples

Wait until an arbitrary key has been pressed:

```
wait "Press any key…"
```

Wait until one key has been pressed and store the resulting character in the variable ch.

```
wait ""Press any key" to ch
```

Read a string until an enter is encountered and store it to the variable str.

```
accept to str
```

Display the prompt message "Enter amount: ", read the input string until an enter is encountered, and store it to the variable str.

```
accept "Enter amount: " to str
```

Accessing the Operating System

Management shells often call operating system commands or other native utilities to accomplish system-related tasks. From the interactive AutoShell prompt or from within scripts, execute OS commands by prefixing them with an exclamation mark. The exclamation mark must always be the first non-whitespace character of the input line.

By default, AutoShell writes the output of OS commands directly to the AutoShell console. However, output that is written to the AutoShell console is not directly accessible by AutoShell for further processing. Applications that process child process output typically redirect the output to a file and read that file after the child process terminates. AutoShell lets you directly assign child process output to a JavaScript object. See the following examples.

You can launch any application from AutoShell using the OS access. When invoking OS commands, AutoShell always waits for the command to complete before returning to the command prompt or continuing script execution.

Examples

List the files in the current directory, print the version of the running OS, and start Notepad. These sample commands run without any AutoShell interaction. The first of the following commands uses the operating system dir command but not the built-in Autoshell dir command. AutoShell waits until the Notepad application is closed.

```
! dir
! ver
! notepad
```

Concatenate commands by using an ampersand "&" and execute them with a single child process:

```
! dir >t.txt & type t.txt
```

Using the OSRedirect Class

AutoShell uses the predefined OSRedirect class for output redirection when invoking child commands. To redirect output and capture the child process return code, create an OSRedirect object and pass it in the command invocation using the optional –output clause:

```
out = new OSRedirect();
! dir –output out
```

When you interactively execute this command in the AutoShell console, it does not display any information in the console. It redirects the output to the specified object. After completion, you can call a set of methods on the specified object to get information about the command execution:

```
? "Error occurred during command execution:", out.errorOccurred()
? "Did command complete:", out.hasCompleted()
? "Output produced by command:", out.output()
? "Command return code (errorlevel):", out.result()
```

The methods output() and result() return the required information. The output() method returns a string with the complete directory listing. You can use the standard JavaScript string functions to further process this output. For example, parse the lines into an array and display them line-by-line:

```
lines=out.output().split("\n");
for(i=0;i<lines.length;i++)qout(lines[i]);
```

If you want to invoke the dir operating system command with the ! AutoShell command, allocate an OSRedirect object before issuing the ! command. To save this step, you can also invoke OS commands using the !! command. The !! command creates an OSRedirect object and assigns it to the specified variable if it does not exist.

The following command outputs the current directory listing to the variable out, even if no OSRedirect object is explicitly allocated:

```
!! dir -output out
```

If you issue the !! command without the optional -output clause, it automatically writes the directory information to variable $$stdout:

```
!! dir
? $$stdout.output()
```

Running Scripts

This section covers the execution of scripts on the local host and on multiple remote hosts.

More Information

Using the run-local Command (see page 36)
Using the run-remote Command (see page 38)

Using the run-local Command

Use the run-local command to evaluate script expressions or to run script files locally. The run-local command allows passing of parameters to the script code.

To evaluate an expression, specify the expression, for example:

```
run-local 1+1
```

The expression parameter is stringified, so you can specify expressions with or without quotes.

To execute a script, specify the pathname of the script in the optional –file clause:

```
run-local –file scripts\primes.js
```

The run-local command with the –file option is the only way for a running script to invoke another script. Specifying the pathname of a JavaScript file to invoke the script only works at the interactive prompt. Pathname specification is not supported inside script files. If you want to execute scripts from scripts, consider the following example:

```
// Begin of script file: hello.js
function hello()
{
    ? "Hello World!"
}
// End of script file
```

Use the following command to invoke this script:

```
run-local –file hello.js
```

This command makes the hello() function available in the current scripting context, but it does not execute it, so nothing is visible on the console. After the run-local command returns, the calling script can invoke the newly defined function to print the expected greeting:

```
hello();
```

When invoking a script file, only code that is not contained in any surrounding scope (like a function) is executed during the run-local command runs. Changing the script to the following example, prints the greeting before the run-local command returns.

```
// Begin of script file: hello2.js
? "Hello World!"
// End of script file
```

To make the function available to the call and still execute the code, the script file can contain a call to the function itself:

```
// Begin of script file: hello3.js
hello();
function hello()
{
    ? "Hello World!"
}
// End of script file
```

Directly executable code in script files can appear anywhere outside function scopes. Placing executable code in front of the first function declaration, as in the previous example, is not necessary.

You can pass parameters in an expression or in a script being run with the run-local command using the optional –with clause. The parameters are accessible in the expression or script through the standard JavaScript arguments array:

```
// Begin of script file: args.js
var i, l;
l = arguments.length;
for(i=0; i < l; i++)
{
    ? arguments[i]
}
// End of script file
```

The script prints all the arguments that are passed to it. For example, the following command prints "1", "abc" and the current date and time.

```
run-local –file args.js –with 1, "abc", new Date()
```

More Information

Accessing the Operating System (see page 34)
Using the OSRedirect Class (see page 34)
run-local Command--Execute a Script on the Local System (Funclet) (see page 91)

Using the run-remote Command

The run-remote command executes expressions or script files on one or more remote AutoShell client systems. For remote execution to work, the remote target node must have the AutoShell client installed and be configured.

The run-remote command supports specifying expressions, scripts and arguments in the same way as the run-local command. Script files must reside on the manager system and transfer to the target systems for execution. In addition, specify the remote clients with the on clause. Specifying a server name is the simplest way of invoking the run-remote command:

```
run-remote "1+2" on "ascl1"
```

Note: Stringification is not supported for the host name.

You can specify multiple targets for remote execution by using a list:

```
run-remote "1+2" on "ascl1", "ascl2"
```

Using run-remote this way does not get any information about the remote job that was executed. The job runs or fails without any further indication. Remote commands execute asynchronously which means run-remote commands return while the actual remote command is still executing.

To wait until the remote command processes or until an error occurs, invoke run-remote with the –wait option:

```
run-remote "1+2" on "ascl1" -wait
```

More control over remote execution provides the predefined RemoteTarget AutoShell class.

More Information

Using the RemoteTarget Class (see page 39)
run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)

Using the RemoteTarget Class

Use the run-remote command with the RemoteTarget class in the following ways:

- Work with RemoteTarget objects returned by the run-remote command.
- Create RemoteTarget objects and pass them to the run-remote command.

The run-remote command always returns an array of RemoteTarget objects. The length of this array is equal to the number of remote targets that have been specified in the on clause. The array elements directly correspond to the remote targets by position:

```
arrRT = run-remote -file hello.js on "ascl1", "ascl2"
```

The run-remote command returns an array with two RemoteTarget objects:

- arrRT[0] contains a RemoteTarget object that corresponds to the execution of the script hello.js on the remote host named ascl1.
- arrRT[1] corresponds to the execution of the same script on ascl2.

RemoteTarget objects make status information of the script available, regarding its execution process, output, or result. The following RemoteTarget methods retrieve this status information:

hasCompleted()

Indicates if the command processing has been completed (true) or not (false). If run-remote is invoked without the optional -wait switch, command execution runs asynchronously. Call this method to verify if a command completes and if a result is available. The method hasCompleted() returns true when the command successfully completes or false when an error occurs that prevents further processing.

Return values: true or false

errorOccurred()

Indicates whether the command finishes successfully and the output and result can be verified (false), or if an error occurs (true).

Return values: true or false

output()

Returns a string that contains the captured output produced by running the specified script on the corresponding remote system.

Return value: *string*

result()

Returns an XML-encoded value of the specified script that has been executed on the corresponding remote system.

Return value: *XML*

See the AutoShell Classes (see page 134) section for additional methods of the RemoteTarget class.

Examples

Assuming the previously introduced hello.js script produces the "Hello World!" greeting, the output() methods for both RemoteTarget objects return this string. The following script puts this type of processing in a larger context:

```
var t;
var arrRT;
var i, l;

arrRT = run-remote -file hello.js on "ascl1", "ascl2"
l = arrRT.length;

// Wait for completion, could use -wait clause above as well
// but this way we can bail out on our own timeout
t = 0;

while(t<60)
{
    for(i=0; i<l; i++)
    {
        if(!arrRT[i].hasCompleted())
            break;
    }
    // Break if all invocations finished
    if(i==l)
        break;
    sleep(500);
    t++;
}
```

```
for(i=0; i<l; i++)
{
    if(arrRT[i].hasCompleted())
    {
        if(arrRT[i].errorOccurred())
        {
            ? "Error occurred on ", arrRT[i].getHostName()
        }
        else
        {
            ? arrRT[i].getHostName(),"returned output:"
            ? arrRT[i].output()
        }
    }
    else
    {
        arrRT[i].abort();
    }
}
```

Combining remote execution with OS command invocation enables access to OS services or data on remote systems. For example, the following code queries and returns the OS version string of the operating system running on server ascl1.

```
arrRT = run-remote ! ver on "ascl1" -wait
? arrRT[0].output()
```

AutoShell only displays the remote command output in the previous examples. Expressions or scripts processed remotely can also return a value:

```
arrRT = run-remote 2*21 on "ascl1" -wait
```

In this case the expression "2*21" is sent to server ascl1 for remote calculation. When the command completes, the result is available through the result() method of the corresponding RemoteTarget object.

The result() method does not return the value directly, but an XML representation of it:

```
? arrRT[0].result()
<value type="number">42</value>
```

To turn this XML string into a regular JavaScript value, use get-remoteResult():

```
v = get-remoteResult(arrRT[0])
? typeof v, v
```

AutoShell serialization also applies to remote scripts which return complex types like arrays or objects. Serialization enables the transfer of large amounts of structured data between remote servers without losing structural data. The following example shows a remote execution that returns an array consisting of three elements:

```
arrRT = run-remote [1,"abc",new Date()] on "ascl1" -wait
v = get-remoteResult(arrRT[0])
? typeof v, v
```

Another way of working with RemoteTarget objects is to create them before invoking the actual remote command. A RemoteTarget object is constructed by specifying the name of the target host in the object creation:

```
var rt1 = new RemoteTarget("ascl1");
var rt2 = new RemoteTarget("ascl2");
```

Explicitly creating RemoteTarget objects is useful when more than one command or script is executed for the same remote host. In this case, the same RemoteTarget object can be reused for each run-remote. Otherwise, run-remote creates a RemoteTarget object for each invocation.

To use the RemoteTarget objects with run-remote, specify them instead of the host names:

```
run-remote -file hello.js on rt1, rt2 -wait
? rt1.output()
? rt2.output()
run-remote Math.log(Math.E) on rt1, rt2
? get-remoteResult(rt1)
? get-remoteResult(rt2)
```

The usage of RemoteTarget objects does not require to store the array returned by run-remote. The array only contains references to the RemoteTarget objects that were initially passed to the command. So the explicitly created RemoteTarget objects can be directly accessed to query results of the execution.

You can specify remote targets in a list like in the previous example or as an array.

```
arrRT = [new RemoteTarget("ascl1"), new RemoteTarget("ascl2")];
run-remote -file hello.js on arrRT
```

RemoteTarget objects let you reuse objects in subsequent run-remote command invocations, and also provide a way to manage remote client session creation.

When AutoShell executes run-remote, it connects to the specified remote system through SSH. By default, the SSH server on the remote system starts a new instance of the client AutoShell. The newly created AutoShell process evaluates the passed script and the process is destroyed after evaluation finishes. For multiple subsequent command invocation, multiple client AutoShell processes are created and destroyed on the remote system. Additionally, any context information created when running a script is lost and is not available to subsequent remote scripts.

The RemoteTarget class implements an easy to use mechanism to control the client AutoShell session creation on the remote host. Call createRemoteContext() on a RemoteTarget object to create a permanent client AutoShell session on the remote host for this RemoteTarget object:

```
var rt = new RemoteTarget("ascl1");
rt.createRemoteContext()
```

Subsequent run-remote invocations do not allocate a temporary client AutoShell session on the remote host, but rather use the permanent one created by createRemoteContext(). Additionally, any context information that is created when running a script is available to any remote scripts executed later. The permanent client AutoShell session on the remote host is automatically destroyed when the RemoteTarget object is collected. The session can also be explicitly destroyed by calling destroyRemoteContext() on the corresponding object.

The effect of using createRemoteContext() can easily be verified using the following example:

```
var rt = new RemoteTarget("ascl1");
rt.createRemoteContext()
run-remote X=5 on rt -wait
run-remote X on rt -wait
? get-remoteResult(rt)
rt.destroyRemoteContext()
run-remote X=5 on rt -wait
run-remote X on rt -wait
? get-remoteResult(rt)
```

The second command invocation returns 5 because the variable X created in the first call still exists in the permanent client AutoShell session. When the remote client session is destroyed, the two remaining invocations trigger the creation of two temporary client AutoShell sessions. The second command returns an empty result, because the variable X was created in another session was already destroyed.

More Information

RemoteTarget Class (see page 145)

AutoShell Core Reference

This section describes the commands, functions, and classes which are specific to the AutoShell core. Further commands that belong to platform-specific extensions are described in the ALM Command Reference (see page 159) section.

AutoShell commands are grouped into cmdlets and funclets:

Cmdlets

Specify command definitions that must start with the first non-whitespace character in a line. Because of this restriction they can only be used standalone and not as part of a broader JavaScript expression. Specifically, they cannot be used as rvalues (right-hand side operand of an assignment operator). ? is an example of an AutoShell cmdlet.

Funclets

Maintain verbose command-like syntax with optional clauses, stringification, and so on, and can also return values. Often funclets, are used like cmdlets, that is, standalone in a single line. They can however return a value that can be processed as part of a broader expression.

Commands, Functions, and Classes According to Categories

AutoShell provides the following CA Virtual Assurance-specific commands (cmdlets, funclets), functions, and classes. Use these commands to create appropriate AutoShell applications to manage your virtual environment.

Cmdlet

!, !!, ?, ??, accept, arrdump, cat, cd, DBG_PROMPT, DBG_PROMPT_LINE, exit, external, get-autoShellClassInfo, get-webServiceInfo, help, mkdir, objdump, pwd, quit, set alternate to, set console, set result disp, start-java, type, wait, weak external

Funclet

add, ASSERT, associate, chdir, clone, copy, cp, create, custom, del, dir, get-help, get-remoteResult, install, ls, modify, move, mv, new-SSHSession, new-ZONESession, new-comObject, new-webService, push-client, push-winRemote, push-winRemote, PW_GET, query-service, reboot, rebuild, rem-client, remove, ren, rename, reset, rm, rmdir, run-SSHCommand, run-SSHShell, run-ZONECommand, run-client, run-local, run-remote, run-winRemote, show, shutdown, start, start-service, status, stop, stop-service, uninstall

Functions

base64Decode, base64Encode, curDir, delete, disable, enable, gete, memoRead, memoWrit, platform, pute, qout, qqout, regCreateKey, regCreateSubkeys, regDeleteKey, regDeleteVal, regGetKeyValues, regGetSubKey, regGetVal, regIsKey, regIsVal, reSetKeyValues, regSetVal, setProcExitCode, shellType, typeName

Classes

OSRedirect, RemoteTarget

AutoShell commands, functions, and classes can be categorized according to the following criteria:

Arrays

arrdump

AutoShell deployment

exit, quit, push-client, rem-client, run-client, setProcExitCode, shellType

Classes and objects

new-comObject, get-autoShellClassInfo, get-remoteResult, objdump, OSRedirect, RemoteTarget, run-local, run-remote, typeName

Command execution

!, !!, get-remoteResult, OSRedirect, push-winRemote, RemoteTarget, run-local, run-remote, run-SSHCommand, run-SSHShell, run-winRemote, run-ZONECommand

Datatypes

typeName

Encryption

base64Decode, base64Encode

Environment variables

gete, pute

Files and directories

cat, cd, chdir, copy, cp, curDir, del, dir, ls, mkdir, mv, pwd, ren, rm, rmdir, type

Help

get-help, help

Input and output

?, ??, accept, DBG_PROMPT, DBG_PROMPT_LINE, PW_GET, qout, qqout, set alternate to, set console, set result disp, wait

Mathematical expressions

ASSERT

Miscellaneous

external, start-java, weak external

Platforms

push-winRemote, run-LPARCommand, run-winRemote, run-ZONECommand, platform

Registry

regCreateKey, regCreateSubkeys, regDeleteKey, regDeleteVal, regGetKeyValues, regGetSubKey, regGetVal, regIsKey, regIsVal, reSetKeyValues, regSetVal

Remote access

get-remoteResult, push-winRemote, RemoteTarget, run-remote, run-SSHCommand, run-SSHShell, run-winRemote

Services

get-webServiceInfo, new-webService, query-service, start-service, stop-service

Sessions

new-SSHSession, new-ZONESession

Solaris Zones

associate, clone, create, custom, delete, disable, enable, install, modify, move, reboot, rename, show, start, status, stop, uninstall

Strings

accept, PW_GET, memoRead, memoWrit, typeName

General AutoShell Commands

This section details the general AutoShell core commands (cmdlets, funclets) in alphabetic order. These general commands are not platform-specific to LPAR or Solaris Zones. AutoShell defines a series of commands that simplify invoking the corresponding tasks.

The following regular JavaScript function call obtains a detailed directory listing of C:\:

```
ca.aip.direct.directory("C:\\*.*" , "",false,false,false,true)
```

The corresponding AutoShell command looks like the following:

```
dir C:\*.* -l
```

Examples

Lists the content of the current directory in the console:

```
dir *.*
```

Assign the directory listing to an array:

```
arr = dir *.* -retval
```

!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet)

Run an operating system command or start an application as child process. A user-specified OSRedirect object or a default system variable ($$stdout) automatically captures child process output.

The command has the following syntax:

```
!! cmd [-output osRedirect]
```

cmd

Command to execute or application to run. Multiple commands can be concatenated using a && sequence. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

osRedirect

(Optional) Existing OSRedirect object to receive the output of the child process and capture it in the specified variable.

Default: $$stdout

Examples

Get DOS memory information about Windows OS with output redirected to a variable, out, that is not initialized before the call:

```
!! mem -output out
// Output line by line
aLines = out.output().split(String.fromCharCode(10));
arrdump aLines
```

Perform a DNS lookup and automatically capture the output to $$stdout:

```
!! nslookup ca.com
? $$stdout.output()
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
OSRedirect Class (see page 135)

! Command--Invoke Command or Child Process (Cmdlet)

Run an operating system command or start an application as child process. The output produced by the child process is written to the AutoShell console by default. Optionally, redirect the output to an AutoShell OSRedirect object.

The command has the following syntax:

```
! cmd [-output osRedirect]
```

cmd

Specifies a command to execute or application to run. Multiple commands can be concatenated using a && sequence. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code into parenthesis.

osRedirect

(Optional) Existing OSRedirect object to receive the output of the child process.

Default: ""

Examples

Display the version string of a Windows OS:

```
! ver
```

Display the version string of a Windows OS display current directory:

```
! ver && cd
```

Ping a system on the network and capture output:

```
out=new OSRedirect();
! ping 192.168.0.100 -output out
if(out.result()==0)
{
    ? out.output();
}
else
{
    ? "Ping failed"
}
```

See also:

!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect Class (see page 135)

?? Command--Write Output in a List to stdout (Cmdlet)

Writes the string representation of each argument in a list to stdout. A single space is automatically placed between each displayed argument. Subsequent output calls using ?, ??, qout() or qqout() place their output immediately after the original output, so ?? or qqout() are typically used to construct output lines using several invocations.

The command has the following syntax:

```
?? [x]
```

x

(Optional) List of arguments to output.

Examples

Print three column headers with separating spaces:

```
??  "Col1"
??  "  "
??  "Col2"
??  "  "
?   "Col3"
```

The third label is printed using the ? command to move the cursor to the beginning of the next line.

See also:

!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect Class (see page 135)

? Command--Write Output to stdout (Cmdlet)

This command (cmdlet) writes the string representation of each argument in a list to stdout. A single space is automatically placed between each argument. The set console and set alternate commands can redirect or suppress the output. The output terminates with a linefeed character.

The command has the following syntax:

```
? [x]
```

x

(Optional) List of arguments to output. If the list is empty, only a linefeed character prints.

Examples

Print "Hello World!":

```
? "Hello World!"
```

Print a list of numbers:

```
? 1,2,3
```

Print an empty line:

```
?
```

Output the numbers from 1 to 10. The ? command can only be used at the beginning of a line, to output text from within an expression the corresponding qout() function must be used:

```
for(i=1;i<11;i++) qout(i);
```

See also:

?? Command--Write Output in a List to stdout (Cmdlet) (see page 50)
qqout--Write Output to stdout (Function) (see page 117)
qout--Write Output Followed by Linefeed to stdout (Function) (see page 116)
set alternate to Command--Set Alternate Output File (Cmdlet) (see page 104)
set console Command--Suppress Console Output (Cmdlet) (see page 105)

accept Command--Read String From stdin and Assign it to a Variable (Cmdlet)

Optionally prompts for input, reads characters until an enter is encountered and assigns the character string without the enter to a variable.

The command has the following syntax:

```
accept [prompt] to var [-hidden]
```

prompt

(Optional) Specifies a character string to display.

var

Name of variable to assign the string holding the read characters to.

-hidden

(Optional) Masks the input string to enter a password.

Examples

Read a string and assign it to the variable name:

```
accept "Enter your name: " to name
```

Mask input to enter a password:

```
accept "Enter password:" to password -hidden
```

See also:

wait Command--Wait for a Key Press (Cmdlet) (see page 109)
PW_GET Command--Input Hidden Data (Funclet) (see page 83)

arrdump Command--Display an Array (Cmdlet)

This command lists all elements of a one-dimensional array.

The command has the following syntax:

arrdump *arr*

arr

Defines the array to display.

Example

Display an array:

```
a = [1,2,"a", true, new Date()];
arrdump a
```

See also:

objdump Command--Display Enumerable Properties of an Object (Cmdlet) (see page 79)

ASSERT Command--Compare Mathematical Expressions (Funclet)

This command (funclet) checks if the statement or assertion that consists of two mathematical expressions and an operation is true or false. The mathematical expressions can be composed of the following elements:

- Functions
- Operations
- Decimal fractions
- Numerical values in decimal, octal, or hexadecimal format

If the statement or assertion is false, AutoShell raises a customizable error message.

To write numbers in octal format, precede the value with a 0, for example, 0123. To write numbers in hexadecimal format, precede the value with a 0x, for example, 0x123.

The command has the following syntax:

```
ASSERT x relation v [-msg msg]
```

x

Defines a mathematical expression that is compared against the expression v.

relation

Specifies the relation used for the comparison. Options include the following:

- eq (equal)
- ne (not equal)
- gt (greater than)
- lt (less that)
- ge (greater or equal)
- le (less or equal)

v

Defines a mathematical expression.

-msg *msg*

(Optional) Defines an alternative error message instead of the default error message raised when the comparison returns false.

Default: null

Examples

Show that the statement 6>7 is wrong:

```
ASSERT 6 gt 7 -msg "This is wrong."
This is wrong.
```

Verifies if the octal value 0123 is equal to 0x9e:

```
ASSERT 0123 eq 0x9e
Failed: 0123==158, actual=83
```

Check if PI is greater than 4.5*sin(PI/2):

```
ASSERT Math.PI gt 4.5*Math.sin(Math.PI/2)
Failed: Math.PI>4.5, actual=3.141592653589793
```

cat, type Commands--Display Text Files (Cmdlets)

These commands (cmdlets) write the content of one or more text files to the standard output stream. Using with set alternate to concatenate multiple files.

The commands have the following syntax:

`{cat|type}` *`fileList`*

fileList

Defines a comma-separated list of absolute or relative file names display. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Examples

Display Windows boot options:

```
cat c:\boot.ini
```

Concatenate two files:

```
set alternate to output.txt
cat input1.txt, input2.txt
set alternate to
```

See also:

memoRead--Read a Text File Into a String (Function) (see page 113)

cd, chdir Commands--Change Directory (Cmdlet, Funclet)

These commands change the current directory on the local system. If p is supplied, it defines the new directory. If p is a relative path, the command uses the current path as a prefix for the directory.

The command has the following syntax:

```
cd [p] (Cmdlet)
chdir [p] (Funclet)
```

p

(Optional) Defines the directory to change to. The separation character on Windows can be a backslash (\) or a forward slash (/). For UNIX-like systems, it must be a forward slash. For cross-platform script compatibility, only use the forward slash in path specifications.

Default: ""

Examples

Change to root directory:

```
cd /
```

Change to directory c:/test

```
cd c:/test
```

Change to the parent directory:

```
cd ..
```

See also:

dir, ls Commands--Get File and Directory Information (Funclets) (see page 62)
mkdir Command--Create a Directory (Cmdlet) (see page 70)
pwd Command--Print Name of Working Directory (Cmdlet) (see page 84)
curDir--Retrieves the Current Directory (Function) (see page 111)

copy, cp Commands--Copy Files and Directories (Funclets)

These commands (funclets) copy files or directories to another location. Either the source or the target location must be on the local server. Operations between two remote systems are not supported. To specify a remote host, prefix the pathname with the hostname followed by two colons (::). The operation is performed through SFTP. Thus the remote system does not necessarily have the client AutoShell installed, an SSH server with SFTP access is sufficient. You can write the output to a file using the set alternate command.

The command has the following syntax:

`{copy|cp} src trg [-silent] [-retval] [-R] [-user` *`username`*`] [-pass` *`password`*`] [-key` *`key phrase`*`] [-port` *`portnumber`*`]`

src

Defines a search mask that specifies the directories or files to copy. The separation character on Windows can be a backslash (\) or a forward slash (/). For UNIX-like systems, it must be a forward slash. For cross-platform script compatibility, only use the forward slash in path specifications.

Search masks use a simplified regular expression syntax that is compatible with DOS wildcard matching:

- * matches any sequence of characters, including zero characters.
- ? matches exactly one character.
- [abc] matches exactly one character which is a, b, or c.
- [a-f] matches anything from a through f.
- [^a-f] matches anything *except* a through f.
- [-_] matches - or _; [^-_] matches anything else. The dash "-" is not a special character when it occurs immediately after the opening bracket or after ^.
- [a^] matches an a or a ^. (The caret "^" is not a special character when it does *not* occur immediately after the opening bracket.
- *, \?, \[, \], \\ match the single characters *, ?, [,], \.

All other characters are not special characters and match themselves.

trg

Defines the path of the target location.

-silent

(Optional) Suppresses output to the active output stream.

-retval

(Optional) Creates an array representing the return value. The array contains information about new file names. Each element consists of a string representing the fully qualified name of one destination file.

-R

(Optional) Copies directories recursively.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

Specifies the passphrase for a private key. If the key is not encrypted, the phrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

Examples

Copy file c:/test/test1.log to directory c:/test1

```
copy c:/test/test1.log c:/test1
```

Copy entire directory c:/test to directory c:/test1

```
cp c:/test c:/test1 -R
```

Copy entire directory c:/test to the remote host remotesys into directory c:/test1

```
cp c:/test1/ remotesys::c:/test1/ -R
```

See also:

mv, ren Commands--Move Files and Directories (Funclets) (see page 72)

DBG_PROMPT Command--Break Script Execution for Inspection (Cmdlet)

The DBG_PROMPT command (cmdlet) interrupts script execution and displays an interactive prompt to evaluate expressions in the current script context. Typically used for inspecting current variable values, the debug prompt reoccurs until an empty input line is entered.

The command has the following syntax:

```
DBG_PROMPT [prompt]
```

prompt

Specifies a string with optional prompt to display. When using several prompts, the prompt can be used to indicate the location that triggered the interruption.

Default: "Dbg> "

Examples

Break during the last iteration of the loop:

```
for(i=0; i<11; i++)
{
    if(i==10)
    DBG_PROMPT
    ? i
}
```

Break using a custom prompt:

```
for(i=0; i<11; i++)
{
    if(i==10)
    DBG_PROMPT "i==10> "
    ? i
}
```

See also:

DBG_PROMPT_LINE Command--Break Script Execution for Inspection With Line Numbers (Cmdlet) (see page 59)

DBG_PROMPT_LINE Command--Break Script Execution for Inspection With Line Numbers (Cmdlet)

The DBG_PROMPT_LINE command (cmdlet) interrupts script execution and displays an interactive prompt to evaluate expressions in the current script context. The prompt automatically includes the current line number. Typically used for inspecting current variable values, the debug prompt reoccurs until an empty input line is entered.

The command has the following syntax:

```
DBG_PROMPT_LINE [prompt]
```

prompt

Specifies a string with optional prompt to display. When using several prompts, the prompt can be used to indicate the location that triggered the interruption. If prompt is specified, it displays "prompt(n)> "

Default: "Dbg(n)> "

n

Displays the line number as input prompt.

Examples

Break during the last iteration of the loop:

```
for(i=0; i<11; i++)
{
    if(i==10)
    DBG_PROMPT_LINE
    ? i
}
```

Break using a custom prompt:

```
for(i=0; i<11; i++)
{
    if(i==10)
    DBG_PROMPT_LINE "i==10> "
    ? i
}
```

See also:

DBG_PROMPT Command--Break Script Execution for Inspection (Cmdlet) (see page 58)

del, rm Commands--Delete Files (Funclets)

These commands (funclets) delete files or directories. To specify a remote host, prefix the pathname with the hostname followed by two colons (::). The operation is performed through SFTP. Thus the remote system does not necessarily have the client AutoShell installed, an SSH server with SFTP access is sufficient.

The command has the following syntax:

`{del|rm} src [-silent] [-retval] [-R] [-user` *`username`*`] [-pass` *`password`*`] [-key` *`key phrase`*`] [-port` *`portnumber`*`]`

src

Defines the files or directories to delete.

-silent

(Optional) Suppresses output to the active output stream.

-retval

(Optional) Creates an array representing the return value. The array contains information about new file names. Each element consists of a string representing the fully qualified name of one destination file.

-R

(Optional) Copies directories recursively.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

Specifies the passphrase for a private key. If the key is not encrypted, the phrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

Examples

Delete file c:/test/test1.log:

```
del c:/test/test1.log
```

Remove entire directory c:/test:

```
rm c:/test -R
```

Delete entire directory c:/test on the remote host remotesys:

```
del remotesys::c:/test1/ -R
```

dir, ls Commands--Get File and Directory Information (Funclets)

These commands (funclets) list information about the contents in the specified directory on a local or remote system. You can write the output to a file using the set alternate to command.

They have the following syntax:

`{dir|ls} mask [-silent] [-retval] [-l] [-user username] [-pass password] [-key key phrase] [-port portnumber]`

mask

Defines a string with a search mask optionally containing an absolute or relative directory specification. The separation character on Windows can be a backslash (\) or a forward slash (/). For UNIX-like systems, it must be a forward slash. For cross-platform script compatibility, only use the forward slash in path specifications.

Search masks use a simplified regular expression syntax that is compatible with DOS wildcard matching:

- * matches any sequence of characters, including zero characters.
- ? matches exactly one character.
- [abc] matches exactly one character which is a, b, or c.
- [a-f] matches anything from a through f.
- [^a-f] matches anything *except* a through f.
- [-_] matches - or _; [^-_] matches anything else. The dash "-" is not a special character when it occurs immediately after the opening bracket or after ^.
- [a^] matches an a or a ^. (The caret "^" is not a special character when it does *not* occur immediately after the opening bracket.
- *, \?, \[, \], \\ match the single characters *, ?, [,], \.

All other characters are not special characters and match themselves.

Default: ""

-silent

(Optional) Suppresses output to the active output stream.

-retval

(Optional) Creates an array representing the return value. The array contains the file information. Each element consists of a string representing the file name. If argument -l is specified, each element consists of an array containing following items:

- item[0] - string representing the file name
- item[1] - number representing the file size
- item[2] - date representing the last modification time
- item[3] - Boolean value representing the directory flag
- item[4] - string representing fully qualified file name including path

-l

(Optional) Use long listing format for output.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

Specifies the passphrase for a private key. If the key is not encrypted, the phrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

Examples

Get file names of the current directory:

```
dir
```

Get file names of directory c:\test:

```
dir c:/test
```

Get file names of directory c:\test and c:\test\more as content of the file test.list:

```
set alternate to test.list
dir c:\test
dir c:\test\more
set alternate to
```

List the directory contents of c:\temp on the remote server ascli1:

```
dir ascli1::c:/temp
```

Get file names of directory c:/test/more as an array for further processing and suppress any output to stdout:

```
set result disp off
aRet = dir c:/test/more -silent -retval
```

Get extended information for files of directory c:/test/more as an array for further processing:

```
aRet = dir c:/test/more -silent -retval -l
```

See also:

cd, chdir Commands--Change Directory (Cmdlet, Funclet) (see page 55)
pwd Command--Print Name of Working Directory (Cmdlet) (see page 84)
set alternate to Command--Set Alternate Output File (Cmdlet) (see page 104)

exit, quit Commands--Terminate an AutoShell Session (Cmdlets)

These commands (cmdlets) terminate the current Autoshell session. Issue the command either at the interactive command prompt or inside a script.

The command has the following syntax:

```
exit
quit
```

See also:

setProcExitCode--Set AutoShell Exit Code (Function) (see page 131)

external Command--Declare a Native External Function (Cmdlet)

Declares a native external function.

The command has the following syntax:

`external` *`decl`*

decl

Specifies a native external function.

get-autoShellClassInfo Command--Display Methods and Properties for Autoshell Native Classes (Cmdlet)

This command (cmdlet) displays methods and properties for AutoShell native classes. AutoShell defines a number of classes extending the standard Spidermonkey/JavaScript scripting environment. Product-specific AutoShell loadable modules (ALMs) can register additional classes. These classes contain type information for their constructors, methods, variables and enumerations. This information can be displayed using the get-autoShellClassInfo cmdlet.

Note: This information is not identical to the help information. AutoShell generates the information solely based on internal class definitions.

The command has the following syntax:

```
get-autoShellClassInfo class [-super]
```

class

Specifies the AutoShell class for which to display information. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. An object name can be passed instead of a class name. In this case, the get-autoShellClassInfo command retrieves the class name from the objects and attempts to query the class information. To prevent stringification, the object expression must be passed in parenthesis.

Examples

Display details of RemoteTarget class:

```
get-autoShellClassInfo RemoteTarget
```

Display details of OSRedirect class from an object:

```
os = new OSRedirect();
get-autoShellClassInfo (os)
```

See also:

help Command--Request Help Information (Cmdlet) (see page 69)
get-help Command--Get Help Information (Funclet) (see page 67)

get-help Command--Get Help Information (Funclet)

This command (funclet) displays help information for AutoShell commands, functions and classes and optionally redirects it to a file.

The command has the following syntax:

```
get-help [mask] [-output outFile]
```

mask

(Optional) Specifies the mask that is used to filter out the commands about which help information is needed. You can use the asterisk "*" and the question mark "?" as wildcards.

Default: "help"

outFile

(Optional) Specifies the absolute or relative path of the file to contain the help information. Any existing file with the same name and path is overwritten.

Default: ""

Example

Display help for the run-remote funclet:

```
help run-remote
```

Display help for the RemoteTarget class including all constructors and methods:

```
help RemoteTarget*
```

List all help topics and write them to a file:

```
help * -output help.txt
```

See also:

help Command--Request Help Information (Cmdlet) (see page 69)
get-autoShellClassInfo Command--Display Methods and Properties for Autoshell Native Classes (Cmdlet) (see page 66)

get-remoteResult Command--Get Result from a Remote Target (Funclet)

This funclet retrieves the result of a remote execution from a RemoteTarget object. The return value of a remote execution must be transferred over the network back to the system that originated the request. The result is serialized into an XML representation on the remote system and the RemoteTarget.result() method returns the result value in its serialized representation.

Turn the serialized representation into a regular JavaScript value using the get-remoteResult() funclet with the RemoteTarget object itself as a parameter. Typically there is no need for script to call result() directly. Serialization maintains type information, so when the remote node returns a number, get-remoteResult() returns a value of type number. If the remote system returns a Date object, it also becomes a Date on the originating system.

Return values from remote scripts are not limited to simple data types. Complex arrays or data-only objects can also be returned, allowing remote execution to transfer large amounts of date between servers. The only limitation is that the data structures must not contain any circular references.

The command has the following syntax:

```
get-remoteResult remoteTarget
```

The funclet returns a polymorphic value from the remote execution process. If the execution has not finished, the return value is of type undefined. If another error occurs, an exception is created.

remoteTarget

Specifies the name of the remote target system.

Example

Get serialized representation and actual value of a remote execution:

```
rt = new RemoteTarget("ascli1", "bob", "ca123456");
run-remote "new Date()" on rt -wait
? rt.result()            // XML string
v = get-remoteResult(rt) // Calls result() internally
? v
? typeName(v)            // Date
```

See also:

RemoteTarget Class (see page 145)
RemoteTarget.output Method (see page 156)
RemoteTarget.result Method (see page 158)

get-webServiceInfo Command--Display WSDL Info (Cmdlet)

The get-webServiceInfo displays WSDL information.

```
get-webServiceInfo w [-detail]
```

w

Specifies the name of the web service.

help Command--Request Help Information (Cmdlet)

This command (cmdlet) displays help information for AutoShell commands, functions and classes and optionally redirects it to a file.

The command has the following syntax:

```
help [mask] [-output outFile]
```

mask

(Optional) Specifies the mask that is used to filter out the commands about which help information is needed. You can use the asterisk "*" and the question mark "?" as wildcards.

Default: "help"

outFile

(Optional) Specifies the absolute or relative path of the file to contain the help information. Any existing file with the same name and path is overwritten.

Default: ""

Example

Display help for the run-remote funclet:

```
help run-remote
```

Display help for the RemoteTarget class including all constructors and methods:

```
help RemoteTarget*
```

List all help topics and write them to a file:

```
help * -output help.txt
```

See also:

get-autoShellClassInfo Command--Display Methods and Properties for Autoshell Native Classes (Cmdlet) (see page 66)
get-help Command--Get Help Information (Funclet) (see page 67)

mkdir Command--Create a Directory (Cmdlet)

This command creates a directory on the local or a remote system, if it does not exist.

The function automatically creates path elements leading to the specified directory location. To specify a remote host, prefix the pathname with the hostname followed by two colons (::). The operation is performed through SFTP. Thus the remote system does not necessarily have the client AutoShell installed, an SSH server with SFTP access is sufficient.

The command has the following syntax:

`mkdir` *`d`* `[-silent] [-user` *`username`*`] [-pass` *`password`*`] [-key` *`key phrase`*`] [-port` *`portnumber`*`]`

d

Defines the name of the new directory.

-silent

(Optional) The command suppresses any output to stdout.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

Specifies the passphrase for a private key. If the key is not encrypted, the phrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

Examples

Create directory c:\temp\xyz:

```
mkdir c:\temp\xyz
```

Create a directory on the remote server ascl1:

```
mkdir ascl1::/home/alice/data
```

Create directory temp as subdirectory of current working directory, but suppress any output to stdout:

```
mkdir temp -silent
```

See also:

cd, chdir Commands--Change Directory (Cmdlet, Funclet) (see page 55)
dir, ls Commands--Get File and Directory Information (Funclets) (see page 62)
rmdir Command--Remove Directory (Funclet) (see page 88)
pwd Command--Print Name of Working Directory (Cmdlet) (see page 84)

mv, ren Commands--Move Files and Directories (Funclets)

These commands move files or directories to another location. Either the source or target location must be on the local server. Operations between two remote systems are not supported. To specify a remote host, prefix the pathname with the hostname followed by two colons (::). The operation is performed through SFTP. Thus the remote system does not necessarily have the client AutoShell installed, an SSH server with SFTP access is sufficient. You can write the output to a file using the set alternate command.

Moving or renaming is equivalent in this case.

The commands have the following syntax:

`{mv|ren} src trg [-silent] [-retval] [-R] [-user username] [-pass password] [-key key phrase] [-port portnumber]`

src

Defines a search mask that specifies the directories or files to move. The separation character on Windows can be a backslash (\) or a forward slash (/). For UNIX-like systems, it must be a forward slash. For cross-platform script compatibility, only use the forward slash in path specifications.

Search masks use a simplified regular expression syntax that is compatible with DOS wildcard matching:

- * matches any sequence of characters, including zero characters.
- ? matches exactly one character.
- [abc] matches exactly one character which is a, b, or c.
- [a-f] matches anything from a through f.
- [^a-f] matches anything *except* a through f.
- [-_] matches - or _; [^-_] matches anything else. The dash "-" is not a special character when it occurs immediately after the opening bracket or after ^.
- [a^] matches an a or a ^. (The caret "^" is not a special character when it does *not* occur immediately after the opening bracket.
- *, \?, \[, \], \\ match the single characters *, ?, [,], \.

All other characters are not special characters and match themselves.

trg

Specifies the path of the target location.

-silent

(Optional) Suppresses output to the active output stream.

-retval

(Optional) Creates an array representing the return value. The array contains information about new file names. Each element consists of a string representing the fully qualified name of one destination file.

-R

(Optional) Copies directories recursively.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

Specifies the passphrase for a private key. If the key is not encrypted, the phrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

Examples

Move file c:/test/test1.log to directory c:/test1:

```
mv c:/test/test1.log c:/test1
```

Move entire directory c:/test to directory c:/test1:

```
mv c:/test c:/test1 -R
```

Move entire directory c:/test to the remote host remotesys into the directory c:/test1:

```
mv c:/test1/ remotesys::c:/test1/ -R
```

See also:

copy, cp Commands--Copy Files and Directories (Funclets) (see page 56)

new-comObject Command--Instantiate a COM Object (Funclet)

COM is a Windows-specific standardized API that allows application to expose services for consumption by COM clients. COM client support allows access to a wide range of COM servers like Internet Explorer, Microsoft Office, or various management-related OS services, in particular WMI. The new-comObject command creates proxy client objects that make the services exposed by a COM server available for scripting.

The command has the following syntax:

```
new-comObject progid [-locale lcid]
```

progid

Specifies a string that identifies the COM object to instantiate. The string can either be the human readable program ID (PROGID) or the internal CLSID. When specifying a CLSID, it must be contained in curly brackets.

lcid

Specifies an integer that defines the desired locale for COM servers supporting multiple locales.

Default: 0

Return value

The new-comObject returns an object that represents a proxy between the AutoShell and the COM server. The object mirrors the methods and properties exposed by the COM server. For details about the public interface of a COM server, refer to the programmer documentation of that particular server. The exposed methods and properties are accessed using regular JavaScript syntax on the returned AutoObject.

Examples

Open a web page in Internet Explorer and query its URL:

```
o = new-comObject InternetExplorer.Application
// Make Internet Explorer visible
o.Visible = true;
o.navigate("www.ca.com");
// Get active document (another COM object)
doc = o.document
? doc.Url     // for example http://www.ca.com/us
```

Get the computer name using the scripting object:

```
o = new-comObject WScript.Network
? o.ComputerName
```

Retrieve some information about the operating system and logical drives using WMI:

```
loc=new-comObject WbemScripting.SWbemLocator
// Security is actually not required for localhost
loc.Security_.AuthenticationLevel=0; // wbemAuthenticationLevelDefault
loc.Security_.ImpersonationLevel=3; // wbemImpersonationLevelImpersonate
wmisrv=loc.connectServer("localhost", "root\cimv2");
items = wmisrv.ExecQuery("Select * from Win32_OperatingSystem");
// Returned collection has only one item,
// since there is just one OS running
os = items[0];
? "OS Type:", os.Caption;
? "Service Pack:", os.CSDVersion;
? "Computer name:", os.CSName;
? "FreePhysicalMemory:", os.FreePhysicalMemory;
? "RegisteredUser:", os.RegisteredUser;
? "TotalVisibleMemorySize:", os.TotalVisibleMemorySize;
? "Version:", os.Version;
? "WindowsDirectory:", os.WindowsDirectory;
// Now for the disks
items = wmisrv.ExecQuery("Select * from Win32_LogicalDisk");
// Iterate over returned disks
for(i in items)
{
    disk = items[i];
    ? "Description:", disk.Description;
    ? "DeviceID:", disk.DeviceID;
    ? "FileSystem:", disk.FileSystem;
    ? "FreeSpace:", disk.FreeSpace;
    ? "Name:", disk.Name;
    ? "Size:", disk.Size;
}
```

new-SSHSession Command--Create a new Secure SSH Session (Funclet)

The new-SSHSession command creates a session on an SSH server and returns a CASSHELL object that represents the session. This object must be saved to perform any future action on the session. Typically used with the run-SSHCommand or run-SSHShell commands.

The command has the following syntax:

```
new-SSHSession -host hostname [-user username] [-pass password] [-key key]
[-prompt prompt][-port portnumber]
```

-host *hostname*

The name of the SSH server.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required when either password or public key authentication is used. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

-prompt *prompt*

(Optional) Specifies the fixed portion at the end of the prompt string displayed by the SSH server to indicate it is ready for input (for example: "::->" for AutoShell). This information is required to determine the completion of commands executed during the SSH session. Specify as many fixed characters as possible. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: "::->"

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

Return value

Returns a CASSHELL object. This object can be passed to the run-SSHCommand funclet to execute commands or to run-SSHSession to run an interactive session on the SSH server.

Example

Create an SSH session, assuming the server has AutoShell configured as SSH shell for the specified account. Run a command and disconnect:

```
ssh=new-SSHSession -host client8 -user bob -pass xyz42 -prompt ::->
? run-SSHCommand -session ssh -command "! ver"
ssh.disconnect();
```

See also:

run-SSHCommand Command--Run a Remote Command Through SSH (Funclet) (see page 97)
run-SSHShell Command--Run an Interactive SSH Command Line (Funclet) (see page 100)

new-webService Command--Create a Web Service Object (Funclet)

This command creates a web service object.

The command has the following syntax:

```
new-webService WSDLURI [-endpoint endpoint] [-user username] [-pass password]
[-proxy proxyname] [-proxyUser username] [-proxyPass password]
```

WSDLURI

Specifies the WSDLURI.

-endpointt *endpoint*

(Optional) Specifies the end point.

Default: ""

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required when password authentication is used. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-proxy *proxyname*

(Optional) Specifies the name of the proxy.

Default: ""

-proxyUser *username*

(Optional) Specifies the user name to use to log in to the proxy.

Default: $$User

-proxyPass *password*

(Optional) Specifies password to use to log in to the proxy.

Default: $$Pass

objdump Command--Display Enumerable Properties of an Object (Cmdlet)

This command (cmdlet) lists the numerable properties of the specified object, their types, and optionally the current value.

The command has the following syntax:

`objdump` *`obj`* `[-detail]`

obj

Specifies the object to display.

-detail

(Optional) When this option is specified, the command also displays the current value of the listed properties.

Example

Display properties of an object:

```
o = new Object();
o.num = 42;
o.str = "Hello";
objdump o
```

Display current values:

```
objdump o -detail
```

See also:

arrdump Command--Display an Array (Cmdlet) (see page 52)

push-client Command--Install the Autoshell Client on a Remote Windows System (Funclet)

This command installs the AutoShell client on a remote Windows system.

This command copies and executes on one or multiple remote Windows systems. Available versions are:

- Single-target version (1)
- Multi-target version (2)

The command has the following syntax:

(1) `push-client -host` *`hostname`* `[-localPath` *`path`*`] [-user` *`username`*`>] [-pass` *`password`*`]`
(2) `push-client [-localPath` *`path`*`] [-user` *`username`*`>] [-pass` *`password`*`] on` *`remoteTargets`*

The single-target command returns true on success.

The multi-target command returns an array of WinRemote objects. Each element of this array corresponds by position to the remote Windows node listed in the *remoteTargets* list. The WinRemote objects can verify if execution completes, if errors occur, and query the output and the returned result if execution finishes. If a remote node had been specified using an WinRemote object already, the array contains a reference to the original RemoteTarget object. If a target system is specified by a string, a new RemoteTarget object is created internally and assigned to the array.

-host *hostname*

(Optional) Specifies the name of the remote Windows host. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

-localPath *path*

(Optional) Specifies the path pointing to the AutoShell client to copy. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

-user *username*

(Optional) Specifies the user name to log on to the remote Windows server. The user must have rights to connect to the $ADMIN share. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

on *remoteTargets*

Specifies a comma-separated list of remote systems to run the specified script on. The target nodes can be identified in two ways: By hostname/address or by WinRemote objects. Specifying target systems by name or address while using WinRemote objects offers more flexibility to control the execution process, for example, different credentials for different hosts. WinRemote objects and strings with hostname/address can be mixed in the remote target list. Elements of the target list are not automatically stringified, so when using literal strings for hostnames they must be placed in quotes.

Examples

To install the AutoShell client on host1:

```
push-client -host host1
```

To install the AutoShell client on host1 and host2:

```
x = push-client on "host1", "host2";
? x[1].hasCompleted();
? x[1].result();
? x[1].output();
```

See also:

rem-client Command--Remove the Autoshell Client from a Remote Windows System (Funclet) (see page 86)
run-client Command--Run the Autoshell Client on a Remote Windows System (Funclet) (see page 90)
push-winRemote Command--Copy and Execute on Multiple Remote Windows Systems (Funclet) (see page 81)
run-winRemote Command--Execute a Command on Multiple Remote Windows Systems (Funclet) (see page 102)

push-winRemote Command--Copy and Execute on Multiple Remote Windows Systems (Funclet)

This command copies and executes on one or multiple remote Windows systems. Available versions are:

- Single-target version (1)
- Multi-target version (2)

The command has the following syntax:

(1) `push-winRemote -host` *`hostname`* `-localPath` *`path`* `[-cmd` *`cmd`*`] [-user` *`username`*`] [-pass` *`password`*`]`
(2) `push-winRemote -localPath` *`path`* `[-cmd` *`cmd`*`] [-user` *`username`*`] [-pass` *`password`*`] on` *`remoteTargets`*

The single target version returns the result code of the executed command.

The multi-target version returns an array of WinRemote objects. Each element of this array corresponds by position to the remote Windows node listed in the *remoteTargets* list. The WinRemote objects can verify if execution completes, if errors occur, and query the output and the returned result when execution finishes. If a remote node is specified using an WinRemote object, the array contains a reference to the original RemoteTarget object. If a target system is specified by a string, a new RemoteTarget object is created internally and assigned to the array.

-host *hostname*

Specifies the name of the remote Windows host. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

-localPath *path*

Specifies the path pointing to the AutoShell client to copy. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

-cmd *cmd*

(Optional) Specifies the command to execute on the remote Windows system. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

-user *username*

(Optional) Specifies the user name to log on to the remote Windows system. The user must have rights to connect to the $ADMIN share. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions place the expression code into parenthesis.

Default: $$Pass

on *remoteTargets*

Specifies a comma-separated list of remote systems to run the specified script on. The target nodes can be identified in two ways: By hostname/address or by WinRemote objects. Specifying target systems by name or address while using WinRemote objects offers more flexibility to control the execution process, for example, different credentials for different hosts. WinRemote objects and strings with hostname/address can be mixed in the remote target list. Elements of the target list are not automatically stringified, so when using literal strings for hostnames they must be placed into quotes.

Examples

To install myinstall.exe on host1:

```
push-winRemote -host host1 -localpath c:\installations\myinstall.exe -cmd
myinstall.exe
```

To install myinstall.exe on host1 and host 2 and verify the results on host1:

```
push-winRemote -cmd myinstall.exe -localpath c:\installations\myinstall.exe on
"host1", "host2";
? x[0].hasCompleted();
? x[0].result();
? x[0].output();
```

See also:

run-winRemote Command--Execute a Command on Multiple Remote Windows Systems (Funclet) (see page 102)
push-client Command--Install the Autoshell Client on a Remote Windows System (Funclet) (see page 79)
run-client Command--Run the Autoshell Client on a Remote Windows System (Funclet) (see page 90)
rem-client Command--Remove the Autoshell Client from a Remote Windows System (Funclet) (see page 86)

PW_GET Command--Input Hidden Data (Funclet)

This command (funclet) optionally prompts for input and reads characters until a enter is encountered. For each character typed, the command displays an asterisk (*) to hide the input.

The command has the following syntax:

```
PW_GET(prompt)
```

The command returns a string holding the characters entered in clear text.

prompt

String to be display as input prompt. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code into parenthesis.

Default: ""

Example

Use this command to hide passwords, if the password cannot be typed in clear text as part of a command:

```
run-remote Math.PI on "ascl1" -user alice -pass PW_GET(Enter password:)
```

See also:

accept Command--Read String From stdin and Assign it to a Variable (Cmdlet) (see page 51)

pwd Command--Print Name of Working Directory (Cmdlet)

This command prints out the name of the current working directory.

The command has the following syntax:

```
pwd
```

Example

When you have installed the AutoShell in its default location, the pwd command displays C:\Program Files\CA\SC\AutoShellManager.

query-service Command--Query the Status of a Windows Service (Funclet)

The query-service command queries the status of a Windows service on the local system or a remote system. The query-service command returns the status of the service as a string. Possible return values are:

- stopped
- starting
- stopping
- running
- continue pending
- pause pending
- paused On error
- query failed

The command has the following syntax:

```
query-service -svcName sName [-host hostname] [-user username] [-pass password]
```

-svcName *sName*

Specifies the name of the service.

-host *hostname*

(Optional) The name of the remote Windows system.

Default: ""

-user *username*

(Optional) The user name used to log in to the remote Windows system. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-pass *password*

The password used to log in to the remote Windows system. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

Examples

To query the local Apache service

```
? query-service -svcName Apache2.2
```

To query the Microsoft SQL Server service on a remote server REMOTESYS

```
? query-service -svcName MSSQLSERVER -host REMOTESYS -user admin -pass notsecret
```

See also:

start-service Command--Start a Windows Service on a Remote or Local System (Funclet) (see page 106)
stop-service Command--Stop a Windows Service on a Remote or Local System (Funclet) (see page 107)

rem-client Command--Remove the Autoshell Client from a Remote Windows System (Funclet)

The rem-client command removes the AutoShell client from a remote Windows system.

The command has the following syntax:

```
rem-client -host hostname [-user username] [-pass password]
```

The command returns true on success.

-host *hostname*

Specifies the remote Windows host. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

-user *username*

(Optional) Specifies the user name to log on to the remote Windows system. The user must have rights to connect to the $ADMIN share. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use when log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

Example

To uninstall the AutoShell client on host1.

```
rem-client -host host1
```

See also:

push-client Command--Install the Autoshell Client on a Remote Windows System (Funclet) (see page 79)
push-winRemote Command--Copy and Execute on Multiple Remote Windows Systems (Funclet) (see page 81)
run-client Command--Run the Autoshell Client on a Remote Windows System (Funclet) (see page 90)
run-winRemote Command--Execute a Command on Multiple Remote Windows Systems (Funclet) (see page 102)

rmdir Command--Remove Directory (Funclet)

This command removes a directory. The specified directory must be empty and must not contain files or subdirectories. To specify a remote host, prefix the pathname with the hostname followed by two colons (::). The operation is performed through SFTP. Thus the remote system does not necessarily have the client AutoShell installed, an SSH server with SFTP access is sufficient.

The command has the following syntax:

`rmdir d [-silent] [-user username] [-pass password] [-key key phrase] [-port portnumber]`

d

Defines the name of the directory to remove. To specify a remote host, prefix the pathname with the hostname followed by two colons (::). The operation is performed through SFTP. Thus the remote system does not necessarily have the client AutoShell installed, an SSH server with SFTP access is sufficient. You can write the output to a file using the set alternate command.

-silent

(Optional) The command suppresses any output to stdout.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

Specifies the passphrase for a private key. If the key is not encrypted, the phrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

Examples

Remove the directory c:\temp:

```
rmdir c:/temp
```

Remove the directory temp as subdirectory of current working directory, but suppress any output to stdout:

```
rmdir temp -silent
```

Remove a directory from the remote system ascl1:

```
rmdir ascl1::/home/alice/data
```

See also:

dir, ls Commands--Get File and Directory Information (Funclets) (see page 62)
cd, chdir Commands--Change Directory (Cmdlet, Funclet) (see page 55)
mkdir Command--Create a Directory (Cmdlet) (see page 70)
del, rm Commands--Delete Files (Funclets) (see page 60)
pwd Command--Print Name of Working Directory (Cmdlet) (see page 84)

run-client Command--Run the Autoshell Client on a Remote Windows System (Funclet)

The run-client command (funclet) runs the AutoShell client on a remote Windows system. Input and output are redirected to the calling AutoShell.

The command has the following syntax:

```
run-client -host hostname [-user username>] [-pass password]
```

The command returns true or false.

-host *hostname*

Specifies the name of the remote Windows host. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

-user *username*

(Optional) Specifies the user name to log on to the remote Windows system. The user must have rights to connect to the $ADMIN share. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

Example

To run the AutoShell client on host1.

```
run-client -host host1
```

See also:

push-client Command--Install the Autoshell Client on a Remote Windows System (Funclet) (see page 79)
push-winRemote Command--Copy and Execute on Multiple Remote Windows Systems (Funclet) (see page 81)
rem-client Command--Remove the Autoshell Client from a Remote Windows System (Funclet) (see page 86)
run-winRemote Command--Execute a Command on Multiple Remote Windows Systems (Funclet) (see page 102)

run-local Command--Execute a Script on the Local System (Funclet)

The run-local funclet executes JavaScript code contained in a string or a disk file on the local machine in the current AutoShell session and returns the result. Code that is not contained in a surrounding function declaration is directly executed. Function declarations are processed so that the functions become available for later execution but are not called. While JavaScript file can be executed from the interactive command prompt by simply entering their pathname, run-local is the only way to execute external scripts from script files or to pass parameters to a script file when invoking it from the interactive command prompt.

The command has the following syntax:

```
run-local [script] [-file file] [-with args,...]
```

The return value depends on the specified script.

script

(Optional) Specifies a string containing the JavaScript code to execute. The funclet either executes a script from a string or from a file. Thus the *script* and *file* arguments are mutually exclusive. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-file *file*

(Optional) Specifies the absolute or relative path to the script file to execute. The funclet either executes a script from a string or from a file. Thus the *script* and *file* arguments are mutually exclusive. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-with *args,...*

Specifies a comma-separated list of actual arguments to pass to the script. The script code can access these arguments using the standard JavaScript arguments array.

Examples

Evaluate a simple expression:

```
run-local 1+2
```

Evaluate an expression from memory passing an argument:

```
run-local "arguments[0]*arguments[0]" -with 2
```

Write a script file and execute it:

```
s = "var i;"
s +="for(i=0;i<arguments.length;i++)"
s +="qout(arguments[i]);"
s +="true;"
memoWrit("script.js", s);
run-local -file script.js -with 1, "abc", new Date()
```

Note: The script code is only directly executed when it is not contained in a function definition. The script does not return the result (in this case true) using the return statement, but by specifying it in the last expression executed.

See also:

run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)

run-remote Command--Execute a Script on Remote Systems (Funclet)

The run-remote command executes JavaScript code contained in a string or in a disk file on one or more remote systems. For remote execution to work, the remote target node must have the client AutoShell installed and be properly configured. Script files have to reside on the manager system and transfer to the target systems for execution. By default, script execution is asynchronous, meaning that local processing is continuing before the remote execution completes.

The command has the following syntax:

```
run-remote [script] [-file file] [-wait] [-with args,...] [-user username]
[-pass password] [-key key phrase] [-port portnumber] on remoteTargets
```

The run-remote command returns an array of RemoteTarget objects representing the execution state of the script on the specified servers. Each element of this array corresponds by position to the remote node listed in the *remoteTargets* list. The RemoteTarget objects can verify several results, for example, if execution completes, if errors occur, or if the execution finishes successfully. If a remote node had been specified using an RemoteTarget object already, the array contains a reference to the original RemoteTarget object. If a target system is specified by a string, a new RemoteTarget object is created internally and assigned to the array.

script

(Optional) Specifies a string containing the JavaScript code to execute. The funclet either executes a script from a string or from a file. Thus the *script* and *file* arguments are mutually exclusive. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-file file

(Optional) Specifies the absolute or relative path to the script file to execute. The funclet either executes a script from a string or from a file. Thus the *script* and *file* arguments are mutually exclusive. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-wait

(Optional) By default run-remote will return after kicking off remote execution and remote processing is asynchronous. When the -wait option is specified, run-remote waits until all remote tasks either finish successfully or abort with an error.

-with args,...

(Optional) Specifies a comma-separated list of actual arguments to pass to the script. The script code can access these arguments using the standard JavaScript arguments array.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication is used. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. The specified user name is only used for remote systems that are identified by *hostname* in the *remoteTargets* list. When specifying a host using RemoteTarget objects, each host has its individual user name set through the RemoteTarget object.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. The specified password is only used for remote systems that are identified by hostname in the remoteTargets list. When specifying a host using RemoteTarget objects, each host has its individual user name set through the RemoteTarget object.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

(Optional) Specifies the passphrase for a private key. If the key is not encrypted, the passphrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-port *portnumber*

(Optional) Specifies the port on which to connect to the target system. The specified port is only used for remote systems that are identified by *hostname* in the *remoteTargets* list. When specifying host using RemoteTarget objects, each host can have its individual port set through the RemoteTarget object.

Default: SSH standard port 22.

on *remoteTargets*

Specifies a comma-separated list of remote systems to run the specified script on. The target nodes can be identified in two ways: By hostname/address or by WinRemote objects. Specifying target systems by name or address while using WinRemote objects offers more flexibility to control the execution process, for example, different credentials for different hosts. WinRemote objects and strings with hostname/address can be mixed in the remote target list. Elements of the target list are not automatically stringified, so when using literal strings for hostnames they must be placed into quotes.

Examples

Evaluate a simple expression and wait until execution completed:

```
aRT = run-remote "1+2" on "ascli1" -wait
? "Error occurred:", aRT[0].errorOccurred()
? "Result:", get-remoteResult(aRT[0])
```

Evaluate a script from a file on two remote systems, wait until execution completed and display output ("Hello World!") and result (42):

```
s="? 'Hello World';42;"
// Create script file for illustration purpose only
// could also call:
// aRT=run-remote (s) on "ascli1", "ascil2"
memoWrit("hello.js", s);
aRT=run-remote -file hello.js on "ascli1", "ascli2"
for(i=0; i<aRT.length; i++)
{
    ? "Target:", aRT[i].getHostName()
    ? "Error occurred:", aRT[i].errorOccurred()
    ? "Output:", aRT[i].errorOccurred()
    ? "Result:", get-remoteResult(aRT[i])
}
```

Evaluate a script on two remote systems using RemoteTarget objects, specifying different credentials for the target systems:

```
rt1 = new RemoteTarget("ascli1", "alice", "casogood42");
rt2 = new RemoteTarget("ascli2", "bob", "!secret!7");
// Get OS version string from remote systems
aRT = run-remote "! ver" on rt1, rt2
// Perform wait ourselves
while(true)
{
    // If an error occurs hasCompleted() will
    // return true as well
    if(rt1.hasCompleted() && rt2.hasCompleted())
    break;
    sleep(500);
}
// We can either use the original RemoteTarget objects
// (see above) or the references in the returned array
// (below).
for(i=0; i<aRT.length; i++)
{
    ? "Target:", aRT[i].getHostName()
    ? "Error occurred:", aRT[i].errorOccurred()
    ? "Output:", aRT[i].errorOccurred()
}
```

See also:

get-remoteResult Command--Get Result from a Remote Target (Funclet) (see page 68)
RemoteTarget Class (see page 145)
run-local Command--Execute a Script on the Local System (Funclet) (see page 91)

run-SSHCommand Command--Run a Remote Command Through SSH (Funclet)

The run-SSHCommand executes a command within an existing SSH session or creates a session for command execution. The session is destroyed after the specified command is executed. Although AutoShell uses SSH as its primary remote communication conduit, the remote node for this command does not require a running client AutoShell running. The run-remote command is preferable for executing commands on remote nodes running the client AutoShell because it returns more detailed information about the command execution.

Commands can be executed on any system running an SSH server. The available commands and their options depend on the configured shell on the remote node.

The command has the following syntax:

`run-SSHCommand [-host` *`hostname`*`] [-user` *`username`*`] [-pass` *`password`*`] [-key` *`key phrase`*`] [-prompt` *`prompt`*`] -command` *`cmd`* `[-port` *`portnumber`*`] [-session` *`ssh`*`]`

-host *hostname*

The name of the SSH server.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies the password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

Specifies the passphrase for a private key. If the key is not encrypted, the passphrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-prompt *prompt*

(Optional) Specifies the fixed portion at the end of the prompt string displayed by the SSH server to indicate it is ready for input (for example: "::->" for AutoShell). This information is required to determine the completion of commands executed during the SSH session. Specify as many fixed characters as possible. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: "::->"

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

-cmd *cmd*

(Optional) Specifies the command to execute on the remote Windows system. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: cmd

-session *ssh*

A CASSHELL object as returned by new-SSHSession. When passing an existing SSH session object, run-SSHCommand does not need to create an SSH session to execute the specified command. When executing multiple commands session negotiation and logon are only performed once typically resulting in improved performance over multiple session allocations. If this parameter is specified, values passed for *host, user, pass, key, phrase,* and *port* are ignored. This information is already specified when creating the session.

Default: null

Examples

Run a directory listing on a remote node using an SSH session explicitly specifying user name and password:

```
s=run-SSHCommand -host srv14 -user bob -pass xyz42 -prompt :> -command ls
```

Run a directory listing on a remote node using an SSH session with user name and password used for AutoShell login:

```
s = run-SSHCommand -host srv14 -prompt ":>" -command "ls"
```

Execute two commands in an explicitly allocated SSH session:

```
ssh=new-SSHSession -host client8 -user bob -pass xyz42 -prompt ::->
? run-SSHCommand -session ssh -command "! ver"
? run-SSHCommand -session ssh -command "ls *.* -l"
ssh.disconnect();
```

See also:

new-SSHSession Command--Create a new Secure SSH Session (Funclet) (see page 76)
run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)

run-SSHShell Command--Run an Interactive SSH Command Line (Funclet)

The run-SSHCommand command accepts input lines, sending them to a remote system through SSH and displays the output from the remote node. The command line can be run within an existing SSH session or a new SSH session. The session is destroyed when the input ends. Although AutoShell uses SSH as its primary remote communication conduit, the remote node for this command does not require a running client AutoShell. Commands can be executed on any system running an SSH server. The available commands, their options and the way to end the input loop depend on the configured shell on the remote node. Typically the input loop can be terminated by entering "quit" or "exit".

The command has the following syntax:

`run-SSHShell [-host hostname] [-user username] [-pass password] [-key key phrase] [-prompt prompt] [-port portnumber] [-session ssh]`

-host *hostname*

The name of the SSH server.

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies the password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-key *key*

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote node. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: ""

phrase

Specifies the passphrase for a private key. If the key is not encrypted, the passphrase is not required. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-prompt *prompt*

(Optional) Specifies the fixed portion at the end of the prompt string displayed by the SSH server to indicate it is ready for input (for example: "::->" for AutoShell). This information is required to determine the completion of commands executed during the SSH session. Specify as many fixed characters as possible. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: "::->"

-port *portnumber*

(Optional) Port on which to connect to the target system.

Default: SSH standard port 22.

-session *ssh*

Specifies a CASSHELL object as returned by new-SSHSession. When passing an existing SSH session object run-SSHShell does not need to create an SSH session for execution of the commands from the command line. If this parameter is specified, values passed for *host, user, pass, key, phrase,* and *port* are ignored. This information is specified when creating the session.

Default: null

Examples

Run an interactive command line shell on a host using an SSH session with password authentication:

```
run-SSHShell -host svr14 -user bob -pass xyz42 -prompt :>
```

Explicitly allocate SSH session, run a command first and then drop into the command line input loop:

```
ssh=new-SSHSession -host client8 -user bob -pass xyz42 -prompt ::->
run-SSHCommand -session ssh -command "cd /"
run-SSHShell -session ssh
ssh.disconnect();
```

See also:

new-SSHSession Command--Create a new Secure SSH Session (Funclet) (see page 76)
run-SSHCommand Command--Run a Remote Command Through SSH (Funclet) (see page 97)

run-winRemote Command--Execute a Command on Multiple Remote Windows Systems (Funclet)

The run-winRemote command executes a command on one or multiple remote Windows systems. The command comes in two flavors:

- Single-target version
- Multi-target version

The single-target version redirects input and output to the calling AutoShell.

The multi-target version of run-winRemote is asynchronous. See the sample code on how to retrieve results.

The command has the following syntax:

(1) run-winRemote -host *hostname* [-cmd *cmd*] [-user *username*] [-pass *password*] [-workDir *workDir*]

(2) run-winRemote [-cmd *cmd*] [-user *username*] [-pass *password*] [-workDir *workDir*] on *remoteTargets*

The single targeted version of run-winRemote returns the result code of the executed command.

The multi-target version returns an array of WinRemote objects. Each element of this array corresponds by position to the remote Windows node listed in the *remoteTargets* list. The WinRemote objects can verify several results, for example, if the execution completes, if errors occur, or if the execution finishes successfully. If a remote node is specified using an WinRemote object, the array contains a reference to the original RemoteTarget object. If a target system is specified by a string, a new RemoteTarget object is created internally and assigned to the array.

-host *hostname*

(Optional) Specifies the name of the remote Windows host. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

-cmd *cmd*

(Optional) Specifies the command to execute on the remote Windows system. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis. This parameter is only required when creating an SSH session on the fly using public key authentication.

Default: cmd

-user *username*

(Optional) Specifies the user name to log on to the remote Windows system. The user must have rights to connect to the $ADMIN share. If no user name is specified, the user name entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$User

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. To enter a hidden password after issuing this command, specify PW_GET() with an optional prompt as argument. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: $$Pass

-workDir *workdir*

Specifies the actual working directory.

Default: ""

on *remoteTargets*

Specifies a comma-separated list of remote systems to run the specified script on. The target nodes can be identified in two ways: By hostname/address or by WinRemote objects. Specifying target systems by name or address while using WinRemote objects offers more flexibility to control the execution process, for example, different credentials for different hosts. WinRemote objects and strings with hostname/address can be mixed in the remote target list. Elements of the target list are not automatically stringified, so when using literal strings for hostnames they must be placed into quotes.

Examples

To run cmd.exe (the command shell) on host1:

```
run-winRemote -host host1 -cmd cmd.exe
```

To run mybatch.bat on host1 and host 2 and verify the results of host2

```
x = run-winRemote -cmd mybatch.bat -localpath c:\installations\myinstall.exe on
"host1", "host2";
? x[1].hasCompleted();
? x[1].result();
? x[1].output();
```

See also:

push-winRemote Command--Copy and Execute on Multiple Remote Windows Systems (Funclet) (see page 81)
push-client Command--Install the Autoshell Client on a Remote Windows System (Funclet) (see page 79)
run-client Command--Run the Autoshell Client on a Remote Windows System (Funclet) (see page 90)
rem-client Command--Remove the Autoshell Client from a Remote Windows System (Funclet) (see page 86)

set alternate to Command--Set Alternate Output File (Cmdlet)

This command (cmdlet) sets or resets an alternate output file, for example, for ?, ??, qout(), or qqout(). When setting an alternate output file, any output from commands or functions is not only written to stdout, but also to the specified file. To write to only the alternate output file, suppress stdout using the "set console off" command.

The command has the following syntax:

```
set alternate to outFile [-append]
```

outFile

Specifies a string with an absolute or relative path of the alternate output file. If no file name is specified, the command restores the alternate output stream to the previous setting.

-append

(Optional) Appends the output stream to the specified file.

Examples

Write numbers 1 through 10 to output.txt and the console:

```
set alternate to output.txt
for(i=1; i<11; i++)
{
    ? i
}
set alternate to
```

Append numbers 11 through 20 to output.txt and the console:

```
set alternate to output.txt -append
for(i=11; i<21; i++)
{
    ? i
}
set alternate to
```

Write a directory listing to a file:

```
set alternate to dir.txt
dir -l
set alternate to
```

See also:

? Command--Write Output to stdout (Cmdlet) (see page 50)
qout--Write Output Followed by Linefeed to stdout (Function) (see page 116)
?? Command--Write Output in a List to stdout (Cmdlet) (see page 50)
qqout--Write Output to stdout (Function) (see page 117)
set console Command--Suppress Console Output (Cmdlet) (see page 105)

set console Command--Suppress Console Output (Cmdlet)

This command (cmdlet) is used to suppress any output to stdout which is the console in interactive mode generated by ?, ??, qout(), or qqout(). Typically used with the set alternate command when writing to a file.

The command has the following syntax:

```
set console {on|off}
```

on

Writes output to stdout.

off

Suppresses console output.

Example

Suppress console output and write numbers 1 through 10 to output.txt:

```
set console off
set alternate to output.txt
for(i=1; i<11; i++)
{
    ? i
}
set alternate to
set console on
```

See also:

set alternate to Command--Set Alternate Output File (Cmdlet) (see page 104)

set result display on/off Command--Turn Automatic Result Display On or Off (Cmdlet)

This command turns the result display on or off.

The command has the following syntax:

```
set result disp {on|off}
```

See also:

dir, ls Commands--Get File and Directory Information (Funclets) (see page 62)

start-service Command--Start a Windows Service on a Remote or Local System (Funclet)

The start-service command starts a Windows service on the local or remote system.

The command has the following syntax:

```
start-service -svcName sName [-host hostname] [-user username] [-pass password]
```

The command returns 1 on success and 0 on failure.

-svcName *sName*

Specifies the name of the service.

-host *hostname*

(Optional) The name of the remote server.

Default: ""

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

Examples

To start the local Apache service:

```
? start-service -svcName Apache2.2
```

To start the Microsoft SQL Server service on a remote server REMOTESRV

```
? start-service -svcName MSSQLSERVER -host REMOTESRV -user admin -pass notsecret
```

stop-service Command--Stop a Windows Service on a Remote or Local System (Funclet)

The stop-service command stops a Windows service on the local or remote system.

The command has the following syntax:

```
stop-service -svcName sName [-host hostname] [-user username] [-pass password]
```

The command returns 1 on success and 0 on failure.

-svcName *sName*

Specifies the name of the service.

-host *hostname*

(Optional) The name of the remote server.

Default: ""

-user *username*

(Optional) Specifies the user name to use to log in to the remote node. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

-pass *password*

(Optional) Specifies password to use to log in to the remote node. If no password is specified, the password entered during AutoShell login is used. Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

Default: ""

Examples

To stop the local Apache service:

```
? stop-service -svcName Apache2.2
```

To stop the Microsoft SQL Server service on a remote server REMOTESRV:

```
? stop-service -svcName MSSQLSERVER -host REMOTESRV -user admin -pass notsecret
```

start-java Command--Start Java Virtual Machine (Cmdlet)

This command starts the Java Virtual Machine.

The command has the following syntax:

```
start-java [-classpath cp]
```

cp

(Optional) Specifies the class path.

Default: ""

wait Command--Wait for a Key Press (Cmdlet)

This command comes in the following versions:

- Optionally displays a prompt, waits for a key press, and assigns the character equivalent of the pressed key to a string variable.
- Optionally displays a prompt and waits for a key press.

The command has the following syntax:

```
wait [prompt] to var
wait [prompt]
```

prompt

(Optional) String to be displayed as input prompt. If no prompt is specified, the command automatically displays "Press any key...". To display no prompt, pass an empty string (""). Unquoted argument tokens are automatically stringified. Prevent automatic quoting for expressions by placing expression code in parenthesis.

var

Name of variable to assign the pressed key character to.

Examples

Wait for a key press and display a custom prompt message:

```
do
{
    wait "Enter a number between 1 and 5:" to x
    x = parseInt(x);
}
while(x<1 || x>5)
```

See also:

accept Command--Read String From stdin and Assign it to a Variable (Cmdlet) (see page 51)

weak external Command--Declare Native External Function (Cmdlet)

This command declares a native external function.

The command has the following syntax:

```
weak external decl
```

decl

Specifies the declaration.

AutoShell Functions

This section details the AutoShell core functions. Functions define a set of processing instructions that receive a number of zero or more arguments and return no or exactly one value. Function arguments are passed in parenthesis and must comply with JavaScript language syntax. Literal strings must be placed in quotes and special characters inside the string like backslashes must be escaped.

Example

```
// Concatenate s n times
function repeat(s,n)
{
    var i;
    var ret="";
    for(i=0; i < n; i++)
        ret += s;
    return(ret);
}
? repeat("*", 10);
? repeat("\\", 25);
```

base64Decode--Decode a base64 Encoded String (Function)

This function performs the decoding of a base64 encoded string. The input string does not require base64Encode(). Any valid base64 encoded string can be passed for decoding.

The function has the following syntax:

```
base64Decode(sEncoded)
```

The function returns a string holding the decoded data. If an error occurs, for example, in case of malformed input data, the function raises an exception.

sEncoded

Specifies the string to decode.

Example

Decode a string with error handling:

```
try
{
    ? base64Decode("SGVsbG8gV29ybGQh");
}
catch(ex)
{
    ? "Error decoding string"
}
```

See also:

base64Encode--Perform a base64 Encoding of a String (Function) (see page 111)

base64Encode--Perform a base64 Encoding of a String (Function)

This function performs base64 encoding of the input data.

The function has the following syntax:

```
base64Encode(sData)
```

The function returns a string holding the base64 encoded data passed in sData. The result string is formatted using a line length of 76 characters.

sData

Defines the string to encode.

Example

Encode "Hello World":

```
? base64Encode("Hello World!")
```

See also:

base64Decode--Decode a base64 Encoded String (Function) (see page 110)

curDir--Retrieves the Current Directory (Function)

This function retrieves the current directory.

The function has the following syntax:

```
curDir()
```

The function returns a string holding the absolute path of the current working directory.

Example

Change to parent directory and retrieve its path:

```
chdir ..
? curDir()
```

See also:

cd, chdir Commands--Change Directory (Cmdlet, Funclet) (see page 55)

gete--Get Environment Variable (Function)

Retrieves the value of an environment variable. This function an alternative way of getting environment variables apart from the standard JavaScript environment variable.

The function has the following syntax:

```
gete(sVar)
```

This function returns a string holding the current value of the environment variable specified by sVar. If the variable does not exist, an empty string is returned.

sVar

Specifies the environment variable.

Example

Retrieve the current path setting:

```
? gete("PATH");
```

See also:

pute--Set an Environment Variable (Function) (see page 115)

memoRead--Read a Text File Into a String (Function)

The memoRead() function reads a text file into a string.

Note: Using memoRead() on files containing binary information produces unpredictable results.

The function has the following syntax:

```
memoRead(sFileName [,nOffset] [,nCount])
```

The function returns the content of the text file as a JavaScript string.

sFilename

Specifies the name of a text file. If the specified file does not exist, the function creates an exception.

nOffset

(Optional) Specifies the number of characters from the beginning of the text file to the starting point of the read process.

nCount

(Optional) Specifies the number of characters that are read into a string.

Examples

Read Windows boot configuration:

```
s=memoRead("c:\boot.ini");
? s
```

Read a text file from offset 10 to the end of file:

```
s = memoRead("file.txt", 10);
```

Read five characters from a text file starting at offset 10:

```
s = memoRead("file.txt", 10, 5);
```

See also:

memoWrit--Write a String to a File (Function) (see page 114)
cat, type Commands--Display Text Files (Cmdlets) (see page 54)

memoWrit--Write a String to a File (Function)

The memoWrit() function writes the content of a JavaScript string to a file.

Note: If the file exists, it can either replace the existing file or append the string to the existing string content.

The function has the following syntax:

```
memoWrit(sFileName, sString [, bAppend])
```

sString

Defines the string.

sFileName

Defines the name of a text file. If the specified file does not exist, the function raises an exception.

, bAppend

If set to true, the function adds the string to the given file.

The function returns with the number of bytes written to the specified file.

Note: If there are problems accessing the file, the function creates an exception.

Examples

Write a single-line text file:

```
memoWrit("file.txt", "First line\");
```

Append a second line to the existing file:

```
memoWrit("file.txt","Second line\", true);
```

See also:

memoRead--Read a Text File Into a String (Function) (see page 113)

platform--Query Operating System Type (Function)

This function returns the type of operating system the script is currently running on.

The function has the following syntax:

```
platform()
```

The function returns the system type name in a string.

Example

Verify that a script is being run on Windows:

```
if(platform()!="Windows")
{
    ? "This script uses Windows specific features!"
    ? "Please run on Windows only."
    quit
}
start-service -svcName Apache2.2
```

See also:

shellType--Query AutoShell Type (Function) (see page 132)

pute--Set an Environment Variable (Function)

Sets the value of an existing environment variable or creates one with the specified value if the variable does not exist. This function an alternative way of setting environment variables apart from the standard JavaScript environment variable.

The function has the following syntax:

```
pute(sVar, sVal)
```

The function returns true or false indicating success or failure.

sVar

Specifies the name of the environment variable.

sVal

Defines the value of the environment variable.

Example

Append the current work directory to the path:

```
pute(gete("PATH")+";"+curDir());
```

See also:

gete--Get Environment Variable (Function) (see page 112)

qout--Write Output Followed by Linefeed to stdout (Function)

The qout function writes output followed by linefeed to stdout. The function writes the string representation of each argument in a list to stdout. A single space is automatically placed between each argument. The set console and set alternate commands can suppress or redirect the output. The output terminates with a linefeed character.

The function has the following syntax:

```
qout([x,...])
```

x

(Optional) Defines a list of arguments to display. If the list is empty, a linefeed character is printed.

This function does not return a value.

Examples

Print "Hello World!":

```
? "Hello World!"
```

Print a list of numbers:

```
? 1,2,3
```

Print an empty line:

```
?
```

Output the numbers from 1 to 10.

Note: The ? command can only be used at the beginning of a line. To output text from within an expression, use the corresponding qout() function:

```
for(i=1;i<11;i++) qout(i);
```

See also:

?? Command--Write Output in a List to stdout (Cmdlet) (see page 50)
qqout--Write Output to stdout (Function) (see page 117)

qqout--Write Output to stdout (Function)

The qqout function writes the string representation of each argument in a list to stdout. A single space is automatically placed between each argument. The set console and set alternate commands can redirect or suppress the output. Subsequent output calls using ?, ??, qout() or qqout() will place their output immediately after the original output, so ?? or qqout() are typically used to construct output lines using several invocations.

The function has the following syntax:

```
qqout([x,...])
```

x

(Optional) Defines a list of arguments to display. If the list is empty, a linefeed character is printed.

This function does not return a value.

Examples

Print three column headers with separating spaces:

```
??  "Col1"
??  "  "
??  "Col2"
??  "  "
?  "Col3"
```

The third label is printed using the ? function so the cursor moves to the beginning of the next line.

See also:

? Command--Write Output to stdout (Cmdlet) (see page 50)
qout--Write Output Followed by Linefeed to stdout (Function) (see page 116)
?? Command--Write Output in a List to stdout (Cmdlet) (see page 50)
set alternate to Command--Set Alternate Output File (Cmdlet) (see page 104)
set console Command--Suppress Console Output (Cmdlet) (see page 105)

regCreateKey--Create a Registry Key (Function)

The regCreateKey function creates a key or a key hierarchy under the registry key specified by *sKeyParent* on the local system or a remote system.

This function has the following syntax:

```
regCreateKey(sKeyParent, sKey)
```

sKeyParent

Specifies the parent key.

sKey

Defines the new key

If the function fails, it raises an exception. Otherwise it returns true. The function succeeds if the specified key or part of a key hierarchy exists.

Examples

Create key ACEM under the local machine SOFTWARE key with error handling:

```
try {
    regCreateKey("HKLM\\SOFTWARE", "ACME");
    ? "Success"
}
    catch(e) {
    ? "Failure", e
}
```

Create a key hierarchy:

```
regCreateKey("HKLM\\SOFTWARE", "ACME\\HOME");
```

Create key ACEM on remote machine client8:

```
regCreateKey("client8::HKLM\\SOFTWARE", "ACME");
```

See also:

regSetVal--Set Registry Value (Function) (see page 130)
regDeleteKey--Delete a Registry Key or a Key Hierarchy (Function) (see page 120)

regCreateSubkeys--Create Subkeys From an Array (Function)

The regCreateSubKeys function creates a key subtree under a given key from an array on the local system or a remote system. The array must contain the names of the keys to be created as relative path strings starting at *sKey*. regGetSubKeys() returns this type of array.

This function has the following syntax:

```
regCreateSubKeys(sKey, aSubKeys)
```

sKey

Specifies the registry key.

aSubKeys

Specifies the key subtree.

If the function fails, it raises an exception. Otherwise it returns true.

Examples

Create keys 'x', 'y' and 'z' under HKLM\Software\ACME:

```
regCreateSubKeys("HKLM\\Software\\ACME", ["x", "y", "z"]);
```

Create nested subkey tree:

```
regCreateSubKeys("HKLM\\Software\\ACME", ["a\b\c", "x\y\z"]);
```

Get subkey tree from remote system client8 and apply it to remote system client9:

```
arr = regGetSubKeys("client8::HKLM\\Software\\ACME", true);
regSetSubKeys("client9::HKLM\\Software\\ACME", arr);
```

Note: The key values must be handled separately.

See also:

regCreateKey--Create a Registry Key (Function) (see page 118)
regGetSubKey--Retrieve Sub Keys of a Registry Key (Function) (see page 124)

regDeleteKey--Delete a Registry Key or a Key Hierarchy (Function)

The regDeleteKey function removes a key and all associated values from the registry on the local system or a remote system. If the specified key contains subkeys, the removal fails by default. However by passing true for *fRecurse* the function deletes *sKey* including all nested subkeys.

The function has the following syntax:

```
regDeleteKey(sKey [, fRecurse])
```

sKey

Specifies the registry key

, fRecurse

Deletes nested subkeys.

If the function fails, it raises an exception. Otherwise it returns true.

Examples

Delete key named "Settings" from HKLM\Software\ACME with error handling:

```
try {
    regDeleteKey("HKLM\\Software\\ACME\\Settings");
    ? "Success"
}
catch(e) {
    ? "Failure:", e
}
```

Delete "Settings" key forcing recursive delete of subkeys:

```
regDeleteKey("HKLM\\Software\\ACME\\Settings", true);
```

Delete "Settings" key on remote machine client8:

```
regDeleteKey("client8::HKLM\\Software\\ACME\\Settings");
```

See also

regCreateKey--Create a Registry Key (Function) (see page 118)
regDeleteVal--Delete a Registry Value (Function) (see page 121)

regDeleteVal--Delete a Registry Value (Function)

The regSetVal function removes a value from the registry key specified by *sKey* on the local system or a remote system.

The function has the following syntax:

```
regDeleteVal(sKey, sValName)
```

sKey

Specifies the registry key.

sValName

Specifies the value.

If the function fails, it raises an exception. Otherwise, it returns true.

Examples

Delete value named "Label" from HKLM\Software\ACME with error handling:

```
try {
    regDeleteVal("HKLM\\Software\\ACME", "Label");
    ? "Success"
}
catch(e) {
    ? "Failure:", e
}
```

Delete a value on remote machine client8:

```
regDeleteVal("client8::HKLM\\Software\\ACME", "Name");
```

See also:

regDeleteKey--Delete a Registry Key or a Key Hierarchy (Function) (see page 120)
regSetVal--Set Registry Value (Function) (see page 130)

regGetKeyValues--Get Registry Key Value Information (Function)

The regGetKeyValues function returns a two-dimensional array with name, actual value, and type of registry values for a key on a local or remote system. The returned array can be passed to regSetKeyValues() to copy value settings from one system to another.

The function has the following syntax:

```
regGetKeyValues(sKey)
```

sKey

Specifies the registry key.

The function returns a two-dimensional array. Each top-level element holds a three element sub-array containing a string representing the value name, a polymorphic value for the setting, and an integer for the value type. The type of registry value determines the type of the return value.

- REG_DWORD values are returned as numeric
- REG_SZ and REG_EXPAND_SZ as string
- REG_MULTI_SZ as an array of strings
- REG_EXPAND_SZ values are already expanded using the current environment variables
- REG_BINARY values are returned as AutoShell CharArr objects because JavaScript string variables cannot properly handle binary data.

If the function fails, it raises an exception.

Examples

Retrieve and display value information for the key HKLM\Software\ACME\Settings:

```
arr = regGetKeyValues("HKLM\\Software\\ACME\\Settings");
    l = arr.length;
    for(i=0; i < l; i++)
    {
      ? "Name: ", arr[i][0]
      ? "Value:", arr[i][1]
      ?? "Type:  "
      switch(arr[i][2])
      {
        case REG_SZ:
          ? "REG_SZ"
          break;
        case REG_EXPAND_SZ:
          ? "REG_EXPAND_SZ"
          break;
        case REG_BINARY:
          ? "REG_BINARY"
          break;
        case REG_DWORD:
          ? "REG_DWORD"
          break;
        case REG_MULTI_SZ:
          ? "REG_MULTI_SZ"
          break;
        default:
          ? "Unknown"
      }
    }
```

Get values from remote system client8 and apply them to remote system client9:

```
arr = regGetKeyValues("client8::HKLM\\Software\\ACME\\Settings");
regSetKeyValues("client9::HKLM\\Software\\ACME\\Settings", arr);
```

See also:

regGetVal--Get Registry Value (Function) (see page 126)
regSetKeyValues--Set Registry Key Values From an Array (Function) (see page 129)

regGetSubKey--Retrieve Sub Keys of a Registry Key (Function)

The regGetSubKeys function returns the subkeys of a specified registry key on the local system or a remote system in an array. By default only the direct subkeys are returned. Optionally all subkeys can be retrieved recursively.

The function has the following syntax:

```
regGetSubKeys(sKey, fRecurse)
```

sKey

Specifies the registry key

, fRecurse

Retrieves nested subkeys.

This function returns an array holding the names of the subkeys of *sKey*. An individual subkey name is returned as a relative path starting at *sKey*. The returned array can be passed regCreateSubKeys() to copy a subkey tree from one system to another.

If the function fails, it raises an exception.

Examples

Get subkeys of HKLM\Software\CA with error handling:

```
try {
    var arr, i, l;
    arr = regGetSubKeys("HKLM\\Software\\CA");
    l = arr.length;
    for(i=0; i < l; i++)
    {
        ? arr[i]
    }
}
catch(e) {
    ? "Failure:", e
}
```

Recursively get all subkeys of HKLM\Software\CA:

```
arr = regGetSubKeys("HKLM\\Software\\CA", true);
l = arr.length;
for(i=0; i < l; i++)
{
    ? arr[i]
}
```

Get subkey tree from remote system client8 and apply it to remote system client9:

```
arr = regGetSubKeys("client8::HKLM\\Software\\ACME", true);
regSetSubKeys("client9::HKLM\\Software\\ACME", arr);
```

Note: The key values must be handled separately.

See also:

regCreateKey--Create a Registry Key (Function) (see page 118)
regCreateSubkeys--Create Subkeys From an Array (Function) (see page 119)

regGetVal--Get Registry Value (Function)

The regGetVal function retrieves the setting of the value *valName* under the registry key specified by *key* on the local system or a remote system.

The function has the following syntax:

```
regGetVal(sKey, sValName)
```

sKey

Specifies the registry key.

sValName

Specifies the value.

If the specified value exists, the function returns a polymorphic value representing the setting of the specified value. The type of the registry value determines the type of the return value.

- REG_DWORD values are returned as numeric
- REG_SZ and REG_EXPAND_SZ as string
- REG_MULTI_SZ as an array of strings.
- REG_EXPAND_SZ values are already expanded using the current environment variables.
- REG_BINARY values are returned as AutoShell CharArr objects because JavaScript string variables cannot properly handle binary data.

If the specified key or the value does not exist, the function raises an exception.

Examples

Get value named "Number" from key HKLM\Software\ACME:

```
regGetVal("HKLM\\Software\\ACME", "Number");
```

Get value named "Label" from key HKLM\Software\ACME with error handling:

```
try {
    regGetVal("HKLM\\Software\\ACME", "Label");
    ? "Success"
}
catch(e) {
    ? "Failure:", e
}
```

Get value from remote machine client8:

```
regGetVal("client8::HKLM\\Software\\ACME", "Name");
```

See also:

regSetVal--Set Registry Value (Function) (see page 130)
regGetKeyValues--Get Registry Key Value Information (Function) (see page 122)

regIsKey--Check the Existence of a Registry Key (Function)

The regIsKey function checks if the specified registry key exists on the local or a remote system.

The function has the following syntax:

```
regIsKey(sKey)
```

sKey

Specifies the registry key.

The function returns a Boolean value indicating the presence of *sKey*:

true

Indicates that the key exists.

false

Indicates that the key does not exist.

Examples

Locate an ACME key under HKLM\SOFTWARE on the local system:

```
if(regIsKey("HKLM\\SOFTWARE\\ACME"))
? "Key was found!"
else
? "Key does not exist"
```

Perform the same check on the remote system ascl1:

```
if(regIsKey("ascl1::HKLM\\SOFTWARE\\ACME"))
? "Key was found"
else
? "Key does not exist"
```

See also:

regCreateKey--Create a Registry Key (Function) (see page 118)
regIsVal--Check the Existence of a Registry Value (Function) (see page 128)

regIsVal--Check the Existence of a Registry Value (Function)

The regIsVal function checks if the specified registry value exists on the local or a remote system.

The function has the following syntax:

```
regIsVal(sKey, sValName)
```

sKey

Specifies the registry key.

sValName

Specifies the name of the value.

The function returns a Boolean indicating presence of *sValName*:

true

Indicates that the value exists.

false

Indicates that the value does not exist.

Examples

Verify HKLM\SOFTWARE\ACME for a value, 'home':

```
if(regIsVal("HKLM\\SOFTWARE\\ACME", "home"))

{
    ? "Value was found"
}
else
{
    ? "Value does not exist"
}
```

See also:

regGetVal--Get Registry Value (Function) (see page 126)
regIsKey--Check the Existence of a Registry Key (Function) (see page 127)
regSetVal--Set Registry Value (Function) (see page 130)

regSetKeyValues--Set Registry Key Values From an Array (Function)

The regSetKeyValues() function creates or sets values for a key from a two-dimensional array on the local or a remote system. Each top-level element in the array must contain a sub-array with a string representing the name of the value, a polymorphic JavaScript value to set, and optionally, an integer specifying the type of the value to create or set. regGetKeyValues() returns this type of array.

The function has the following syntax:

```
regSetKeyValues(sKey, aVals)
```

sKey

Specifies the registry key.

sVals

Defines the array that contains the values.

If the function fails, it raises an exception. Otherwise it returns true.

Examples

Set values 'Number' and 'Label' for HKLM\Software\ACME:

```
vals = [["Number", 42],["Label", "Hello"]];
regSetKeyValues("HKLM\\Software\\ACME\\Settings", vals);
```

Set values explicitly specifying type:

```
vals = new Array(2);
val[0] = ["MyPath", "%Path%;c:\\MyDir", REG_EXPAND_SZ];
val[1] = ["Number", 42, REG_DWORD];
regSetKeyValues("HKLM\\Software\\ACME\\Settings", vals);
```

Get values from remote system client8 and apply them to remote system client9:

```
arr = regGetKeyValues("client8::HKLM\\Software\\ACME\\Settings");
regSetKeyValues("client9::HKLM\\Software\\ACME\\Settings", arr);
```

See also:

regGetKeyValues--Get Registry Key Value Information (Function) (see page 122)
regSetVal--Set Registry Value (Function) (see page 130)

regSetVal--Set Registry Value (Function)

The regSetVal creates or sets a value for the registry key specified by *sKey* on the local system or a remote system. If the value identified by *sValName* does not exist, it is created, otherwise the existing setting is overwritten with the *value*.

The function has the following syntax:

```
regSetVal(sKey, sValName, value, [type])
```

sKey

Specifies the registry key.

sValName

Specifies the name of the value.

value

Defines the value.

type

Specifies the type of the value.

If the function fails, it raises an exception. Otherwise it returns true.

Examples

Set REG_DWORD value for key HKLM\Software\ACME named "Number" to 42:

```
regSetVal("HKLM\\Software\\ACME", "Number", 42);
```

Set REG_SZ value for key HKLM\Software\ACME named "Label" to "Hello" with error handling:

```
try {
    regSetVal("HKLM\\Software\\ACME", "Label", "Hello");
    ? "Success"
}
catch(e) {
    ? "Failure:", e
}
```

Set a REG_EXPAND_SZ value:

```
regSetVal("HKLM\\Software\\ACME", "MyPath", "%Path%;c:\\MyDir", REG_EXPAND_SZ);
```

Set a REG_MULTI_SZ value:

```
arr=["Alice", "Bob", "Carol"];
    regSetVal("HKLM\\Software\\ACME", "People", arr);
```

Set string value on remote machine client8:

```
regSetVal("client8::HKLM\\Software\\ACME", "Name", "Bob");
```

See also:

regCreateKey--Create a Registry Key (Function) (see page 118)
regDeleteVal--Delete a Registry Value (Function) (see page 121)
regGetVal--Get Registry Value (Function) (see page 126)
regSetKeyValues--Set Registry Key Values From an Array (Function) (see page 129)

setProcExitCode--Set AutoShell Exit Code (Function)

This function sets the AutoShell exit from a user script overriding a possible AutoShell defined exit code. On Windows systems, the exit code can be retrieved through the %errorlevel% variable after AutoShell terminates.

The function has the following syntax:

```
setProcExitCode(iExitCode)
```

iExitCode

Specifies the exit code.

Example

Set the AutoShell exit code to -42 and exit AutoShell:

```
setProcExitCode(-42);
quit
```

See also:

exit, quit Commands--Terminate an AutoShell Session (Cmdlets) (see page 65)

shellType--Query AutoShell Type (Function)

This function is used to determine if a script is currently being executed inside a manager AutoShell or a client AutoShell. The client AutoShell does not provide all the functionality of the manager AutoShell (for example, no remote execution). shellType() can be used to verify that a script is being executed inside the intended AutoShell version.

The function has the following syntax:

```
shellType()
```

The function returns a string indicating the type of AutoShell which is currently active:

- manager
- client

Example

Verify AutoShell type and quit when running inside a client shell:

```
if(shellType()!="manager")
{
    ? "This script requires AutoShell manager!"
    quit
}
```

See also:

platform--Query Operating System Type (Function) (see page 114)

typeName--Get the Type Name of an Expression (Function)

This function retrieves the type name of an arbitrary expression. In particular, for objects it returns the name of the defining class.

The function has the following syntax:

```
typeName(val)
```

The function returns a string holding the type name of the passed value. For simple types, it returns one of the following strings:

- Boolean
- function
- null
- number
- string
- void
- xml

For objects, it returns the name of the defining class.

val

Defines the expression.

Example

Get the type of some expressions:

```
? typeName(19)  // number
d = new Date;
? typeName(d)   // Date
a = ["a","b","c"];
? typeName(a)   // Array
? typeName(a[0])// string
```

See also:

gete--Get Environment Variable (Function) (see page 112)
platform--Query Operating System Type (Function) (see page 114)

AutoShell Classes

This section details the AutoShell class definitions. AutoShell is based on JavaScript, so object orientation is achieved through function objects as in JavaScript. Functions can serve as regular functions, classes, constructors, or methods.

Objects are created as function instances using the new operator, for example:

```
now = new Date();
```

AutoShell also implements its own classes that are instantiated using the new operator. In many cases, there is no need to work directly with the AutoShell classes because they are encapsulated using AutoShell command definitions.

Constructors are methods called when an object is created. There may be several constructors for a class. In this case, it depends on the actual arguments in the object instantiation which constructor is called.

Methods are a set of associated functions called on an object using the '.' operator and access or manipulate object data using the "this" property.

See also a JavaScript language reference.

Example

Calculate the date/time ten hours from the current time. Day wrapping at midnight is handled properly.

```
d = new Date();
d.setHours(d.getHours()+10)
```

More Information

OSRedirect Class (see page 135)
RemoteTarget Class (see page 145)

OSRedirect Class

OSRedirect is a utility class that is used with the run-local command running scripts locally. Its primary use is to redirect the output of child processes into JavaScript strings. The system variable $$stdout, used by the !! command, is also an instance of the OSRedirect class.

Constructor

OSRedirect()

Methods

bool clear()

bool errorOccurred()

string errout()

bool hasCompleted()

string output()

int result()

Event Handlers

void onCompleted(fCompleted)

void onError(fError)

void receivedErrOutput(s)

void receivedOutput(s)

void receivedResult(rc)

See also:

OSRedirect.OSRedirect Constructor (see page 136)
OSRedirect.clear Method (see page 136)
OSRedirect.errorOccurred Method (see page 137)
OSRedirect.errout Method (see page 138)
OSRedirect.hasCompleted Method (see page 139)
OSRedirect.onCompleted Method (see page 140)
OSRedirect.onError Method (see page 140)
OSRedirect.output Method (see page 141)
OSRedirect.receivedErrOutput Method (see page 142)
OSRedirect.receivedOutput Method (see page 142)
OSRedirect.receivedResult Method (see page 143)
OSRedirect.result Method (see page 144)
run-local Command--Execute a Script on the Local System (Funclet) (see page 91)

OSRedirect.OSRedirect Constructor

The constructor called when creating an object.

The constructor has the following syntax:

```
OSRedirect()
```

A constructor does not return a value. If an error occurs, it raises an exception.

Example

Create an OSRedirect object and use it in an invocation.

```
out = new OSRedirect();
! ping ascli1 -output out
? out.output();
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)

OSRedirect.clear Method

This method resets the output and error output buffers of OSRedirect() objects. The method is called internally by the ! and !! commands, so there is no need to call it explicitly when using the same OSRedirect() instance in multiple OS invocations.

This method has the following syntax:

```
clear()
```

The method does not return a value.

Example

```
out = new OSRedirect();
! ping ascli1 -output out
? out.output();
out.clear();
? out.output();   // Empty output
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)

OSRedirect.errorOccurred Method

This method checks if an error occurs during remote execution. If an error occurs, errout() may provide an error description.

This method has the following syntax:

```
errorOccurred()
```

The method returns the following values:

true

Indicates that an error occurred.

false

Indicates that no error occurred.

Example

Execute invalid command with error check:

```
!! asdfghjk
if($$stdout.errorOccurred())
    ? "Error:", $$stdout.errout()
else
    ? $$stdout.output()
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.errout Method (see page 138)

OSRedirect.errout Method

Child processes produce the following types of result information.

- Regular output written to the screen
- Error output written to the screen
- Final exit code ("errorlevel")

This method has the following syntax:

```
errout()
```

This method returns a string with the output written by the child process to stderr.

Example

Invoke a nslookup and display regular and error output:

```
!! nslookup ascli1
? $$stdout.output()
? $$stdout.errout()
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.errorOccurred Method (see page 137)
OSRedirect.output Method (see page 141)

OSRedirect.hasCompleted Method

This method checks if the execution of a remote command has completed. If run-remote is invoked without the optional -wait switch, the execution runs asynchronously. Call this method to verify if a command completes and a result is available. The method hasCompleted() returns true when the command successfully completes, or false when an error occurs that prevents further processing.

This method has the following syntax:

```
hasCompleted()
```

The method returns the following values:

true

Indicates if the command processing has been completed.

false

Indicates if the command processing has not been completed, for example, host not found.

Example

```
!! dir c:\*.* /s
? $$stdout.hasCompleted()    // true
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)

OSRedirect.onCompleted Method

Event handlers are optional functions that can be implemented in user scripts and called by AutoShell when certain events occur. If present, the event handler is called after the child process finishes.

This method has the following syntax:

```
onCompleted(fCompleted)
```

Note: The AutoShell ignores event handler return values.

Example

Specify completion event handler:

```
out = new OSRedirect();
out.onCompleted = function(f){if(f)qout("ret=", this.result());};
! ver -output out
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.result Method (see page 144)

OSRedirect.onError Method

Event handlers are optional functions that can be implemented in user scripts and called by AutoShell when certain events occur. If present, the event handler is called when the error state of the OSRedirect object changes.

This method has the following syntax:

```
onError(fError)
```

Note: The AutoShell ignores event handler return values.

Example

Specify completion event handler:

```
out = new OSRedirect();
out.onError = function(f){if(f)qout("An error occurred!");};
! ver -output out
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.errorOccurred Method (see page 137)

OSRedirect.output Method

Child processes produce three types of result information. The regular output typically written to the screen, error output typically written to the screen, and a final exit code ("errorlevel"). This method returns a string with the output written by the child process to stdout.

This method has the following syntax:

```
output()
```

The method returns a string that contains the command output.

Example

Get Windows OS version string:

```
!! ver
? $$stdout.output()
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.errout Method (see page 138)
OSRedirect.result Method (see page 144)

OSRedirect.receivedErrOutput Method

Event handlers are optional functions that can be implemented in user scripts and called by AutoShell when certain events occur. If present, the event handler is called when the child process writes to stderr. You can call this handler multiple times.

This method has the following syntax:

```
receivedErrOutput(s)
```

Note: The AutoShell ignores event handler return values.

Example

Display error output while being received:

```
out = new OSRedirect();
out.receivedErrOutput = function(s){qout(s);};
! ver -output out
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.receivedOutput Method (see page 142)

OSRedirect.receivedOutput Method

Event handlers are optional functions that can be implemented in user scripts called by AutoShell when certain events occur. If present, the event handler is called when the child process writes to stdout. You can call this handler multiple times.

This method has the following syntax:

```
receivedOutput(s)
```

Note: The AutoShell ignores event handler return values.

Example

Display output while being received:

```
out = new OSRedirect();
out.receivedOutput = function(s){qout(s);};
! ver -output out
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.receivedErrOutput Method (see page 142)
OSRedirect.receivedResult Method (see page 143)

OSRedirect.receivedResult Method

Event handlers are optional functions that can be implemented in user scripts and called by AutoShell when certain events occur. If present, the event handler is called when the exit code of the child process is set.

This method has the following syntax:

```
receivedResult(rc)
```

Note: The AutoShell ignores event handler return values.

Example

Display exit code from event handler:

```
out = new OSRedirect();
out.receivedResult = function(rc){qout("Exit code", rc);};
! ver -output out
```

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.receivedOutput Method (see page 142)

OSRedirect.result Method

Child processes produce three types of result information. The regular output typically written to the screen, error output typically written to the screen, and a final exit code ("errorlevel").

This method has the following syntax:

```
result()
```

This method returns the child process exit code.

Example

On Windows ping sets the exit code to 0 if the specified host responded otherwise to 1. Check and display result:

```
!! ping ascli1
if($$stdout.result()==0)
    ? "Ping successful"
else
    ? "Ping failed"
```

Note: An application-specific failure does not cause the errorOccurred() flag of OSRedirect() to be set.

See also:

! Command--Invoke Command or Child Process (Cmdlet) (see page 49)
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) (see page 48)
OSRedirect.output Method (see page 141)

RemoteTarget Class

RemoteTarget is a utility class that is used with the run-remote command in remote script execution. RemoteTarget specifies details of the target system, like host name and address, credentials to use for authentication, or retrieves status and result information, like error condition, output, and final result.

Constructor

RemoteTarget(host [,user] [,pass] [,key] [,phrase] [, port])

Methods

void abort()

int createRemoteContext()

int destroyRemoteContext()

bool errorOccurred()

bool execute(strScript)

int getError()

string getHostName()

bool hasCompleted()

string output()

string result()

bool wasAborted()

Event Handlers

int onError(e)

int receivedOutput(s)

int receivedResult(s)

Variables

static readonly REM_ERR_NONE

static readonly REM_ERR_CON

static readonly REM_ERR_AUTH

static readonly REM_ERR_CHN

static readonly REM_ERR_READ

static readonly REM_ERR_EXEC

static readonly REM_ERR_ABORT

static readonly REM_ERR_DISC

See also:

RemoteTarget.RemoteTarget Constructor (see page 146)
RemoteTarget.abort Method (see page 148)
RemoteTarget.createRemoteContext Method (see page 148)
RemoteTarget.destroyRemoteContext Method (see page 149)
RemoteTarget.errorOccurred Method (see page 150)
RemoteTarget.execute Method (see page 151)
RemoteTarget.getError Method (see page 152)
RemoteTarget.getHostName Method (see page 154)
RemoteTarget.hasCompleted Method (see page 154)
RemoteTarget.onError Method (see page 155)
RemoteTarget.output Method (see page 156)
RemoteTarget.receivedOutput Method (see page 156)
RemoteTarget.receivedResult Method (see page 157)
RemoteTarget.result Method (see page 158)
RemoteTarget.wasAborted Method (see page 159)
run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)

RemoteTarget.RemoteTarget Constructor

The constructor called when creating an object. A constructor does not return a value. If an error occurs, it raises an exception.

The constructor has the following syntax:

```
RemoteTarget(host [,user] [,pass] [,key] [,phrase] [, port])
```

host

Specifies the name of the remote host.

user

(Optional) Specifies the user name to use to log in to the remote node. A user name is required for password or public key authentication. If no user name is specified, the user name entered during AutoShell login is used.

Default: $$User

pass

(Optional) Specifies password to use to log in to the remote host. If no password is specified, the password entered during AutoShell login is used.

Default: $$Pass

key

(Optional) Specifies an absolute or relative path to a file containing a private RSA key to use to log in to the remote host. If a private key and a password are specified, AutoShell attempts a public key logon first, and if that fails, a password logon.

Default: ""

phrase

(Optional) Specifies the passphrase for a private key. If the key is not encrypted, the passphrase is not required.

Default: ""

port

(Optional) Specifies the port on which to connect to the remote host.

Default: SSH standard port 22.

Examples

Create a RemoteTarget object using password authentication:

```
rt = new RemoteTarget("ascli1", "bob", "ca123456");
```

Create a RemoteTarget object attempting public key authentication followed by password if public key authentication fails:

```
rt = new RemoteTarget("ascli1", "bob", "ca123456", "bob_rsa.key");
```

In this case the file bob_rsa.key contains the private RSA key.

See also:

run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)

RemoteTarget.abort Method

Remote script execution by default is performed asynchronously. If an outstanding operation must be aborted, call abort() on the RemoteTarget object associated with the remote operation.

This method has the following syntax:

```
abort()
```

This method does not return a value.

Example

Abort a remote operation:

```
rt = new RemoteTarget("ascli1");
run-remote Math.sin(Math.PI/2) on rt
if(!rt.hasCompleted())
{
    rt.abort()
    ? "Operation aborted:", rt.wasAborted()
}
```

See also:

run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)
RemoteTarget.wasAborted Method (see page 159)

RemoteTarget.createRemoteContext Method

By default, a new Autoshell session is created for each command run on a RemoteTarget object. When running multiple commands on the same target, it is preferable to use a single persistent session to execute multiple scripts. Additionally a persistent session maintains state. For example, a variable created during one execution is still available during subsequent evaluations.

Calling createRemoteContext() on a RemoteTarget object creates a new Autoshell session on the remote system, and keeps it open until either destroyRemoteContext() is called, or the RemoteTarget object is collected. Calling createRemoteContext() when a context exists destroys the existing context and creates a new one.

This method has the following syntax:

```
createRemoteContext()
```

The method returns one of the following error codes:

RemoteTarget.REM_ERR_NONE

Indicates success.

RemoteTarget.REM_ERR_CON

Indicates a connection error, for example, host unknown.

RemoteTarget.REM_ERR_AUTH

Indicates an authentication error.

Example

Create a persistent session, define a variable in the first evaluation and retrieve it in the second one:

```
rt=new RemoteTarget("ascli1");
if(rt.createRemoteContext()==RemoteTarget.REM_ERR_NONE)
{
    run-remote x=42 on rt
    run-remote x on rt -wait
    ? get-remoteResult(rt)  // 42
    rt.destroyRemoteContext();
    ? get-remoteResult(rt)  // empty
}
else
{
    ? "Error occurred!";
}
```

See also:

RemoteTarget.destroyRemoteContext Method (see page 149)

RemoteTarget.destroyRemoteContext Method

This method destroys a context previously created by createRemoteContext(). After destroying a persistent context the RemoteTarget object can still be used in remote execution. Until another context is created, it creates and destroys a context internally for each script evaluation.

This method has the following syntax:

```
destroyRemoteContext()
```

The method returns one of the following error codes:

RemoteTarget.REM_ERR_NONE

Indicates success.

RemoteTarget.REM_ERR_DISC

Indicates a disconnection from the remote system.

Example

Create a persistent session, define a variable in the first evaluation and retrieve it in the second one:

```
rt=new RemoteTarget("ascli1");
if(rt.createRemoteContext()==RemoteTarget.REM_ERR_NONE)
{
    run-remote x=42 on rt
    run-remote x on rt -wait
    ? get-remoteResult(rt)  // 42
    rt.destroyRemoteContext();
    ? get-remoteResult(rt)  // empty
}
else
{
    ? "Error occurred!";
}
```

See also:

RemoteTarget.createRemoteContext Method (see page 148)

RemoteTarget.errorOccurred Method

This method checks if an error occurs during remote execution. If an error occurs, getError() provides further information.

This method has the following syntax:

```
errorOccurred()
```

The method returns the following values:

true

Indicates that an error occurred.

false

Indicates that no error occurred.

Example

Check for error after remote execution finishes:

```
rt = new RemoteTarget("ascli1");
run-remote Math.cos(0) on rt -wait
if(rt.errorOccurred())
{
    ? "Error occurred!"
}
else
{
    ? get-remoteResult(rt)
}
```

See also:

RemoteTarget.getError Method (see page 152)

RemoteTarget.execute Method

This method is the core method invoked by the run-remote command. This method should not be called directly because run-remote performs certain processing on the specified script before passing it to this method.

This method has the following syntax:

```
execute(strScript)
```

The method returns the following values:

true

Indicates that the asynchronous execution kicked off successfully.

false

Indicates that a failure occurs when starting the remote execution.

Examples

Evaluate an expression (recommended):

```
rt = new RemoteTarget("ascli1");
run-remote Math.sqrt(1) on rt
? get-remoteResult(rt);
```

Evaluate an expression (not recommended):

```
rt = new RemoteTarget("ascli1");
rt.execute("Math.sqrt(1)");
? get-remoteResult(rt);
```

See also:

run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)

RemoteTarget.getError Method

This method returns detailed error information after a remote execution attempt fails.

This method has the following syntax:

```
getError()
```

The method returns one of the following error codes:

RemoteTarget.REM_ERR_NONE

Indicates success.

RemoteTarget.REM_ERR_CON

Indicates a connection error, for example, host unknown.

RemoteTarget.REM_ERR_AUTH

Indicates an authentication error.

RemoteTarget.REM_ERR_CHN

Indicates an error when establishing a channel.

RemoteTarget.REM_ERR_READ

Indicates an error when reading from a remote system.

RemoteTarget.REM_ERR_EXEC

Indicates an error when evaluating expressions.

RemoteTarget.REM_ERR_ABORT

Indicates when a user aborts an operation.

RemoteTarget.REM_ERR_DISC

Indicates an error when disconnecting from a remote system.

Example

Display detailed error information:

```
rt = new RemoteTarget("ascli1");
run-remote Math.sqrt(1) on rt -wait
switch(rt.getError())
{
    case RemoteTarget.REM_ERR_NONE:
        ? "Success"
        break;
    case RemoteTarget.REM_ERR_CON:
        ? "Error connecting"
        break;
    case RemoteTarget.REM_ERR_AUTH:
        ? "Error authenticating"
        break;
    case RemoteTarget.REM_ERR_CHN:
        ? "Error establishing channel"
        break;
    case RemoteTarget.REM_ERR_READ:
        ? "Error reading from remote system"
        break;
    case RemoteTarget.REM_ERR_EXEC:
        ? "Error evaluating expression"
        break;
    case RemoteTarget.REM_ERR_ABORT:
        ? "Operation aborted by user"
        break;
    case RemoteTarget.REM_ERR_DISC:
        ? "Error disconnecting from remote system"
        break;
    default:
        ? "Unknown error"
}
```

See also:

RemoteTarget.errorOccurred Method (see page 150)
RemoteTarget.onError Method (see page 155)

RemoteTarget.getHostName Method

This method returns the host name or address that was specified when creating the RemoteTarget object.

This method has the following syntax:

```
getHostName()
```

The method returns a string with the hostname or address of the target node.

Example

Implicitly create a RemoteTarget object and retrieve the hostname:

```
aRT = run-remote "! ver" on "ascli1"
? aRT[0].getHostName()
```

See also:

run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)
RemoteTarget.RemoteTarget Constructor (see page 146)

RemoteTarget.hasCompleted Method

This method checks the execution state of a remote script evaluation. Execution is considered complete if the abort() call ends execution, if an error occurs during processing, or if the script is successfully run on the target node. Find out if execution completes successfully or an error occurs using the errorOccurred() and getError() methods.

This method has the following syntax:

```
hasCompleted()
```

The method returns the following values:

true

Execution complete.

false

Execution is not complete.

Example

Manually implement a wait for completion.

```
aRT = run-remote "! ver" on "ascli1"
while(!aRT[0].hasCompleted())
{
    sleep(500);
}
if(aRT[0].errorOccurred())
{
    ? "Error"
}
else
{
    ? "Result:", get-remoteResult(aRT[0])
}
```

Usually scripts only use the -wait option of the run-remote command.

See also:

run-remote Command--Execute a Script on Remote Systems (Funclet) (see page 93)
RemoteTarget.abort Method (see page 148)
RemoteTarget.errorOccurred Method (see page 150)
RemoteTarget.getError Method (see page 152)

RemoteTarget.onError Method

Event handlers are optional functions that can be implemented in user scripts and called by AutoShell when certain events occur. If present, the event handler is called when an error occurs during remote execution.

This method has the following syntax:

```
onError(e)
```

Note: The AutoShell ignores event handler return values.

Example

Specify error handler for a RemoteTarget:

```
rt = new RemoteTarget("ascli1");
// Assign event handler
rt.onError = function(e){qout("Error occured, code=", e);};
run-remote "2*2" on rt
```

See also:

RemoteTarget.errorOccurred Method (see page 150)
RemoteTarget.getError Method (see page 152)

RemoteTarget.output Method

Scripts produce two types of result information. The output that is typically written to the screen and a final return value. This method returns a string with the output generated by the script running on the remote system. The output is accumulated while the script is running, so this method can return a non-empty result before script execution completes.

This method has the following syntax:

```
output()
```

The method returns a string with the date written to stdout by the script.

Example

Remotely query list of running services on a Windows host:

```
rt = new RemoteTarget("ascli1", "bob", "casogood42");
run-remote "! sc query" on rt -wait
? rt.output()
```

See also:

RemoteTarget.result Method (see page 158)

RemoteTarget.receivedOutput Method

Event handlers are optional functions that can be implemented in user scripts and called by AutoShell when certain events occur. If present, the event handler is called when output is received from the remote target. This handler can be called multiple times.

This method has the following syntax:

```
receivedOutput(s)
```

Note: The AutoShell ignores event handler return values.

Example

Specify output handler for a RemoteTarget and access associated object in the event handler:

```
rt = new RemoteTarget("ascli1");
// Assign output handler
rt.receivedOutput = function(s){
    qout("Output received=", s);
    qout("Originating host=", this.getHostName());
};
run-remote "! ver" on rt
```

See also:

RemoteTarget.output Method (see page 156)

RemoteTarget.receivedResult Method

Event handlers are optional functions that can be implemented in user scripts and called by AutoShell when certain events occur. If present, this event handler is called when the final result value is received from the remote target.

This method has the following syntax:

```
receivedResult(s)
```

Note: The AutoShell ignores event handler return values.

Example

Specify result handler for a RemoteTarget and access associated object in the event handler:

```
rt = new RemoteTarget("ascli1");
// Assign output handler
rt.receivedResult = function(s){
    qout("Result received=", s);
    qout("Originating host=", this.getHostName());
};
run-remote "Math.SQRT2" on rt
```

See also:

RemoteTarget.result Method (see page 158)

RemoteTarget.result Method

Scripts produce two types of result information. The output typically written to the screen and a final return value. This method retrieves a representation of the return value of a remote execution process. Because returning a result is the last step in script evaluation, this method only returns a valid value if script execution successfully completes. hasCompleted() returns true and errorOccurred() returns false. Because the return value of a remote execution must be transferred over the network to the system that originated the request, it is serialized into an XML representation on the remote system and the RemoteTarget.result() method returns the result value in its serialized representation.

Turn the serialized representation into a regular JavaScript value using the get-remoteResult() funclet with the RemoteTarget object itself as a parameter. Typically there is no need for scripts to call result() directly. Serialization maintains type information. for example, if the remote node returns a number, get-remoteResult() returns a value of type number. If the remote system returns a Date object, it also becomes a date on the originating system.

Return values from remote scripts are not limited to simple data types. Complex arrays or data-only objects can also be returned, allowing remote execution to transfer large amounts of date between servers. The only limitation is that the data structures must not contain any circular references.

This method has the following syntax:

```
result()
```

The remote script returns a string with a serialized XML representation of the value.

Example

Get serialized representation and actual value of a remote execution:

```
rt = new RemoteTarget("ascli1", "bob", "ca123456");
run-remote "[1,2,3]" on rt -wait
? rt.result()
v = get-remoteResult(rt) // Calls result() internally
? typeof v      // Array
? typeof v[0]   // number
arrdump v
```

See also:

get-remoteResult Command--Get Result from a Remote Target (Funclet) (see page 68)
RemoteTarget.output Method (see page 156)

RemoteTarget.wasAborted Method

This method checks if remote script execution is aborted programmatically an abort() call.

This method has the following syntax:

```
wasAborted()
```

The method returns the following values:

true

Indicates that the execution has been aborted.

false

Indicates that the execution has not been aborted.

Example

Check if a remote operation is aborted:

```
rt = new RemoteTarget("ascli1");
run-remote Math.sin(3/2*Math.PI) on rt
if(!rt.hasCompleted())
{
    rt.abort()
    ? "Operation aborted:", rt.wasAborted()
}
```

See also:

RemoteTarget.abort Method (see page 148)

AutoShell Loadable Modules' Command Reference

This section describes the commands which belong to the following optional platform-specific AutoShell Loadable Modules:

- Microsoft Hyper-V
- Oracle Solaris Zones
- VMware vCenter Server

More Information

CA IBM LPAR AutoShell Commands (see page 300)
CA Microsoft Hyper-V AutoShell Commands (see page 200)
CA Oracle Solaris Zones AutoShell Commands (see page 327)
CA VMware vCenter Server AutoShell Commands (see page 160)

CA VMware vCenter Server AutoShell Commands

You can use the AutoShell to script and automate CA VMware vCenter Server commands and run actions based on the command results. Corresponding commands are also available in the CLI.

dpmvc-addesxhost Command--Add an ESX Host (Funclet)

The dpmvc-addesxhost command adds an ESX host to a vCenter Server.

This command has the following format:

```
dpmvc-addesxhost
-esx_host_name esxhostname
-vc_server vcservername
-esx_host_user esxhostuser
-esx_host_password esxhostpassword
[-management_ip managementip]
[-host_connect_port hostconnectport]
[-folder_name foldername]
[-datacenter_name datacentername]
[-cluster_name clustername]
[-vim_account_user vimaccountuser]
[-vim_account_password vimaccountpassword]
```

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-esx_host_user *esxhostuser*

(Optional) Specifies the user name to access the ESX host.

-esx_host_password *esxhostpassword*

Specifies the password used to access the ESX host.

-management_ip *managementip*

(Optional) Specifies the management IP.

-host_connect_port *hostconnectport*

(Optional) Specifies the port used by ESX host to communicate with vCenter Server.

-folder_name *foldername*

(Optional) Specifies the name of the folder where you can add the ESX host.

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-cluster_name *clustername*

(Optional) Specifies the name of the cluster where you can add the ESX host.

-vim_account_user *vimaccountuser*

(Optional) Specifies the username of the VIM account.

-vim_account_password *vimaccountpassword*

(Optional) Specifies the password to access the VIM account.

Example: Add an ESX Host

This example adds an ESX host, "esx1" to the vCenter Server "myvcenter."

```
dpmvc-addesxhost -esx_host_name esx1 -vc_server myvcenter -esx_host_user admin
-esx_host_password topsecret
```

dpmvc-addvmvdisk Command--Add Virtual Disk (Funclet)

The dpmvc-addvmvdisk command adds a virtual disk to a VM.

This command has the following format:

```
dpmvc-addvmvdisk
-datastore_name datastorename
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
-capacity_in_mb disk_capacity
[-controller_key controllerkey]
[-disk_mode
{append|independent_nonpersistent|independent_persistent|nonpersistent|persistent
|undoable}]
-thin_provisioning {no|yes}
[-unit_number unitnumber]
```

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-capacity_in_mb *disk_capacity*

Specifies the capacity of the virtual disk in MB.

-controller_key *controllerkey*

(Optional) Specifies the controller key of the disk.

-disk_mode {append | independent_nonpersistent | independent_persistent | nonpersistent | persistent | undoable}

(Optional) Specifies the mode of the disk.

-thin_provisioning {no | yes}

(Optional) Indicates whether the disk must be thin provisioned.

-unit *disk_unitnumber*

(Optional) Specifies the unit number of the disk.

Example: Add a Virtual Disk

This example adds a virtual disk to the VM, "myvm."

```
dpmvc-addvmvdisk -datastore_name disk1 -vm_name myvm -vc_server myvcenterserver
-capacity_in_mb 20000 -thin_provisioning no
```

dpmvc-addvmvnic Command--Add Virtual NIC (Funclet)

The dpmvc-addvmvnic command adds a virtual NIC to a VM.

This command has the following format:

```
dpmvc-addvmvnic
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
-devicetype {e1000 | vmxnet}
-network_name networkname
[-mac_address macaddress]
-wake_on_lan_enabled {no | yes}
```

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-devicetype {e1000 | vmxnet}

Indicates the type of network device.

-network_name *networkname*

Specifies the virtual network the NIC must be connected to. You can distinguish the names of Standard Switches and Distributed Virtual Switches based on the following naming convention:

- For Standard Switches, the name is the network name.
- For Distributed Virtual Switches, the name is a concatenation of the dvPort group name followed by the Distributed Virtual Switch name enclosed in parentheses: dvPortGroupName (dvSwitchName)

-mac_address *macaddress*

(Optional) Specifies the MAC (Media Access Control) address of the network device.

-wake_on_lan_enabled {no | yes}

Indicates whether to start the VM when LAN is enabled.

Example: Add a vNIC

This example adds a virtual NIC to a VM.

```
dpmvc-addvmvnic -vm_name myvm -vc_server myvcenterserver -devicetype vmxnet
-network_name net1 -wake_on_lan_enabled no
```

dpmvc-clone Command--Clone a VM (Funclet)

The dpmvc-clone command lets you clone a VM.

This command has the following format:

```
dpmvc-clone
{-template_name templatename | -cloned_from vmname}
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
-esx_host_name esxhostname
-datacenter_name datacentername
-data_store_name datastorename
-compute_resource_name name
-resource_pool_name resourcepool
-spec_name specificationname
[-auto_deploy value]
[-deploy_template templatename]
[-network_connection
"nic=sequence_number,network_name=name,ip_address=ip_address,def_gateway=default_
gateway,alt_gateway=alt_gateway,subnet_mask=subnet_mask[,win_dns_server=wins_dns_
server,win_alt_dns=wins_alt_dns,wins_primary=wins_primary,wins_secondary=wins_sec
ondary"]]
[-global_dns_search_suffix suffix1[,suffix2,suffix3,…]]
[-linux_domain_name domain_name]
[-linux_dns_servers primary_dns=value,secondary_dns=value,tertiary_dns=value]
[-create_disk MB,datastorename,controller]
[-modify_disk key, datastorename]
[-set_memory number]
[-set_cpu number]
-vm_os_username username
[-vm_os_password password]
[-auth_file authorizationfilename]
[-auth_comp componentID]
[-scalability_server scalabilityservername]
```

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-compute_resource_name *name*

Specifies the cluster or VMware ESX host where the VM is created.

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-vm_name *vmname*

Specifies the VM.

-resource_pool_name *resourcepool*

Specifies the name of the resource pool from which you want to select the VM for cloning.

-spec_name *specificationname*

(Optional) Specifies the name of the specification you want to use for the cloned virtual machine.

-auto_deploy {yes|no}

Specifies whether CA Virtual Assurance agents are deployed automatically. Options include the following:

yes

Deploys CA Virtual Assurance agents automatically.

no

Prevents CA Virtual Assurance agents from being deployed automatically.

Default: no

-deploy_template *templatename*

(Optional) Specifies the name of the generic template created in CA Virtual Assurance.

Note: Do not confuse this template with the templates created and managed by VMware vCenter.

-network_connection *"nic=sequence_number,network_name=name,ip_address=ip_address,def_gateway=default_gateway,alt_gateway=alt_gateway,subnet_mask=subnet_mask,win_dns_server=wins_dns_server,win_alt_dns=wins_alt_dns,wins_primary=wins_primary,wins_secondary=wins_secondary"*

Windows:

(Optional) Creates network connections for a VM. This parameter can be specified multiple times. Sequence number is the integer value starting with one (1) that identifies the network connection. The full set of parameters must be enclosed in parentheses if it includes any spaces. All values except nic, network_name, ip_address, def_gateway and subnet_mask; can be reset by entering the name without a value (for example, "nic=123,alt_gateway=").

-network_connection *"nic=sequence_number,network_name=name,ip_address=ip_address,def_gateway=default_gateway,alt_gateway=alt_gateway,subnet_mask=subnet_mask"*

Linux:

(Optional) Creates one or more network connections. This parameter can be specified multiple times. The sequence number is the integer value starting with one (1) that identifies the network connection. The full set of parameters must be enclosed in parentheses if it contains any spaces. Only alt_gateway can be reset by entering the name without a value (for example, "nic=123,alt_gateway=").

-global_dns_search_suffix *suffix1{,suffix2,suffix3,…}*

Linux:

Specifies one or more DNS search suffixes.

Windows:

(Optional) Specifies one or more DNS search suffixes.

-linux_domain_name *domain_name*

Linux:

(Optional) Specifies the domain name for a Linux VM.

-linux_dns_servers *primary_dns=value{,secondary_dns=value,tertiary_dns=value}*

Linux:

(Optional) Specifies the IP addresses of DNS servers for a Linux VM. One or more of the values can be omitted (for example, primary_dns=123.123.123.13,secondary_dns=,tertiary_dns=123.123.123.15) to unset the value.

-create_disk *MB,datastore_name,controller*

(Optional) Creates one or more additional hard drives. This parameter can be specified multiple times.

MB

Defines the size in megabytes of the hard drive.

Datastore_name

Specifies the name of the data store for this hard drive. Currently only one data store is supported per VM.

Controller

Specifies the controller key for this hard drive.

-modify_disk {*key,datastore_name*}

(Optional) Specifies the data store where the hard drive resides. Can be specified multiple times.

key

Specifies an existing disk.

datastore_name

Specifies the name of the data store that this disk moves to.

-set_memory *number*

(Optional) Defines the amount of memory in megabytes (MB) for the cloned VM. This value overrides the value specified in the template.

-set_cpu *number*

(Optional) Define the number of CPUs for the cloned VM. This value overrides the value specified in the template.

-vm_os_username *user name*

Specifies the user for the cloned VM. This user name is also used for authentication when you auto-deploy the image.

Windows: Must be the user name defined in the customization specification.

Linux: Must be the user name defined in the template.

-vm_os_password *password*

(Optional) Specifies the password for the user for the cloned VM. This password is also used for authentication when you auto-deploy the image.

Windows: Must be the same password defined in the customization specification.

Linux: Must be the same password defined in the template.

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-template_name *templatename*

Specifies the name of the template you want to use for the cloned virtual machine. This parameter replaces -vm_name_cloned_from and you cannot specify both together.

-vm_name_cloned_from *vmname*

Specifies the name of the virtual machine to use as a template for the cloned virtual machine. This parameter replaces -template_name and you cannot specify both together.

-resource_pool_name *resourcepool*

Specifies the name of the resource pool from which you want to select the VM for cloning.

-scalability_server *servername*

(Optional) Specifies the [assign itcm product name for the adsm variable] scalability server for software distribution.

-spec_name *specificationname*

(Optional) Specifies the name of the specification you want to use for the cloned virtual machine.

-compute_resource_name *name*

Specifies the cluster or VMware ESX host where the VM is created.

Example: Clone a VM using Global Credentials

This example creates a VM, "testvm01" using the template "BaseW2k3" on the data center, Specifies VAS/MyCity. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc-clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name VAS/MyCity -datastore_name storage1
-compute_resource_name VPMCluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword
```

Example: Clone a VM using Authorization File and Component

This example creates a VM, "testvm01" using the template "BaseW2k3" on the data center, VAS/MyCity. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc-clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name Specifies VAS/MyCity -datastore_name
storage1
-compute_resource_name VPMCluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -auth_file c:\localauth.dat -auth_comp Imaging
```

Example: Clone a VM using Global Credentials and Create 2 CPUs

This example creates a VM, "testvm01" using the template "BaseW2k3" on the data center, VAS/MyCity and creates 2 CPUs for the VM. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc-clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name VAS/MyCity -datastore_name storage1
-compute_resource_name VPMCluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -set_cpu 2
```

Example: Clone a VM using Default Authorization File and Set Memory to 4096 MB

This example creates a VM, "testvm01" using the template "BaseW2k3" on the data center, VAS/MyCity and sets the memory to 4096. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc-clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name VAS/MyCity -datastore_name storage1
-compute_resource_name VPMCluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -set_memory 4096
```

Example: Clone a VM using Default Authorization File and Create Two Hard Disks

This example creates a VM, "testvm01" using the template "BaseW2k3" on the data center, VAS/MyCity and creates two hard disks for data store storage1. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc-clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name VAS/MyCity -datastore_name storage1
-compute_resource_name VASCluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -create_disk 10000,storage1,1000
-create_disk 10000,storage1,2001
```

Example: Clone a VM and Create a Network Connection

This example creates a VM, "testvm01", a network connection using the template "BaseW2k3" on the data center, VAS/MyCity, and sets the initial values. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc-clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name VAS/MyCity -datastore_name storage1
-compute_resource_name VASCluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -network_connection "nic=1,network_name=VM
Network,ip_address=123.321.5.22,def_gatewat=123.321.1.108,subnet_mask=255.255.255
.0,win_dns_server=123.321.42.1,win_alt_dns=123.321.3.101,wins_primary=123.321.3.3
"
```

Example: Clone a VM using Default Authorization File from a Powered off VM

This example creates a VM, "testvm01" using VM “testvm02” in place of a template on the data center, VAS/MyCity. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc-clone -datacenter_name "VAS/MyCity" -vm_name testvm01 -datastore_name storage1
-esx_host_name vc1.ca.com -resource_pool_name Resources/DPMTest
-compute_resource_name DPMCluster/ussdCluster -vm_name_cloned_from testvm02
-auto_deploy yes -spec_name w2k3_spec_01 -vm_os_username administrator
-vm_os_password mypassword
```

Example: Clone a VM using Default Authorization File and Modify an Existing Hard Disk

This example creates a VM, "testvm01" using the template "BaseW2k3" on the data center, VAS/MyCity and creates two hard disks for data store storage1. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc-clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name VAS/MyCity -datastore_name storage1
-compute_resource_name VPMCluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -create_disk 10000,storage1,1000 -modify_disk
2000,storage2
```

dpmvc-createdatastore Command--Create a Datastore (Funclet)

The dpmvc-createdatastore command creates a datastore.

This command has the following format:

```
dpmvc-createdatastore
-datastore_name datastorename
-esx_host_name esxhostname
-vc_server vcservername
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
-datastore_type {local|nas|vmfs}
[-vmfs_device_path path]
[-vmfs_block_size_mb blocksize]
[-local_path lpath]
[-nas_user_name nasuser]
[-nas_password naspasswd]
[-nas_remote_hostname nasremhost]
[-nas_remote_path nsarempath]
[-nas_access_mode {read-only|read-write}]
[-sc sc_url]
```

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-datastore_type {vmfs|nas|local}

Specifies the type of datastore to create, VMFS, NAS, or local.

-vmfs_device_path *path*

(Optional) Specifies the device path of the VMFS disk to use when creating a datastore. You can obtain the path using the "getavailablescsidisks" command.

-vmfs_block_size_mb *blockzize*

(Optional) Specifies the block size to use when creating a datastore, in MB. Blocksizes available are 1, 2, 4 and 8. Blocksizes enable VM disk files to reach a maximum of 256GB, 512GB, 1024GB, and 2048GB respectively.

-local_path *lpath*

(Optional) When creating a local datastore, this path specifies the ESX host local file system path that used to create the datastore.

-nas_user_name *nasuser*

(Optional) Specifies the remote host user name for NAS datastore creation.

-nas_password *naspasswd*

(Optional) Specifies the remote host password for NAS datastore creation.

-nas_remote_hostname *nasremhost*

(Optional) Specifies the hostname of the server hosting the network-based storage.

-nas_remote_path *nasrempath*

(Optional) Specifies the file system path on the remote server used for the NAS datastore

-nas_access_mode *nasaccmode*

(Optional) Specifies the desired access to the network-based storage used for the NAS datastore. Available modes are "read-only" and "read-write".

Default: "read-write"

dpmvc-cycle Command--Cycle a VM (Funclet)

The dpmvc-cycle command powers on, powers off, resets, or suspends a VM.

This command has the following format:

```
dpmvc-cycle
-powerop {poweron|poweroff|reset|suspend|shutdown guest}
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
```

-powerop {poweron|poweroff|reset|suspend|shutdown guest}

Specifies the power operation to perform on the VM. Options include the following:

poweron

Powers on the VM.

poweroff

Powers off the VM.

reset

Resets the VM.

suspend

Temporarily suspends the VM.

shutdown guest

Shuts down the guest OS gracefully.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-vm_name *vmname*

Specifies the VM.

Example: Turn off a VM when there are Multiple vCenter Servers in the Data Center

This example powers off a VM from a specific vCenter Server.

```
dpmvc-cycle –powerop poweroff –vc my_server1 –vm_name my_vm
```

Example: Turn on a VM in Single vCenter Server Environment

This example powers off the VM, "testvm" that belongs to the data center "VAS/MyCity."

```
dpmvc-cycle -vm_name testvm -powerop poweron -datacenter_name VAS/MyCity
```

dpmvc-datastore Command--Get Data Store Properties (Funclet)

The dpmvc-datastore command retrieves the free space and capacity settings for a specific VMware vCenter data store.

This command has the following format:

```
dpmvc-datastore
{-datacenter_name datacentername | -vc vcenterservername}
-datastore_name datastorename
[-getproperty {all|capacity|freespace}]
```

-getproperty {all|capacity|freespace}

(Optional) Specifies which property to retrieve. Options include the following:

all

Retrieves capacity and free space in the data store.

capacity

Retrieves the capacity in the data store.

freespace

Retrieves the free space in the data store.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

Example: Get all Properties for the Data Store

This example retrieves both free space and capacity for the data store.

```
dpmvc-datastore -getproperty all -datacenter_name VAS/MyCity -datastore_name
storage1
```

dpmvc-delete Command--Destroy a VM (Funclet)

The dpmvc-delete command deletes a VM that is in a powered off state. Use this command to clean up and free unused resources.

Important! Verify that you back up any important data *before* you issue this command. This command deletes the VM data store and data files for the VM, including the disk image.

This command has the following format:

```
dpmvc-delete
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
```

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-vm_name *vmname*

Specifies the VM.

Example: Delete a VM in a Single vCenter Server Environment

This example deletes the VM "vm11."

```
dpmvc-delete -vm_name vm11 -datacenter_name lab444
```

Example: Delete a VM in a Multiple vCenter Server Environment

This example deletes the VM "vm11."

```
dpmvc-delete -vm_name vm11 -datacenter_name lab444 -vc vc_server_1
```

dpmvc-distributedswitch Command--Manage Virtual Distributed Switches (Funclet)

The dpmvc distributedswitch command lets you manage virtual distributed switches.

- Add a new virtual distributed switch to the datacenter
- Update the properties of a virtual distributed switch
- Delete a virtual distributed switch
- Create a new distributed port group to a virtual distributed switch
- Update the port group properties of a virtual distributed switch
- Remove a distributed port group from a virtual distributed switch
- Rename a distributed port group of a virtual distributed switch

The command has the following formats:

```
dpmvc-distributedswitch {-vds_add | -vds_update}
-vc_server vcservername
-datacenter_name datacentername
-vds_folder vdsfolder
-switch_name switchname
[-hostnics hostname1:nic1,nic2,…nicn [;hostname2:nic2,…nicn >]*]
[-uplink_port_names uplink1[,uplink2,…,uplinkn]]
[-maxports maxports]

dpmvc-distributedswitch -vds_remove
-vc_server vcservername
-switch_name switchname
```

```
dpmvc-distributedswitch -add_portgroup
-vc_server vcservername
-switch_name switchname
-portgroup_name portgroupname
[-bindtype  earlyBinding | ephemeral | lateBinding]
[-vlan vlanID]
[-numports numberofports]

dpmvc-distributedswitch -update_portgroup
-vc_server vcservername
-portgroup_name portgroupname
[-portgroup_newname portgroupnewname]
[-bindtype  earlyBinding | ephemeral | lateBinding]
[-vlan vlanID]
[-numports numberofports]

dpmvc-distributedswitch -remove_portgroup
-vc_server vcservername
-portgroup_name portgroupname

dpmvc-distributedswitch -rename_portgroup
-vc_server vcservername
-portgroup_name portgroupname
-portgroup_newname portgroupnewname
```

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-datacenter_name *datacentername*

Specifies the datacenter to which the virtual distributed switch belongs.

-vds_folder *vdsfolder*

Specifies the folder of the virtual distributed switch in the CA Virtual Assurance Explorer pane.

-switch_name *switchname*

Specifies the switch name to perform the operation on.

-hostnics *hostname1:nic1,nic2,…nicn [;hostname2:nic2,…nicn >]*

(Optional) Specifies lists of NICs associated with the ESX host members.

-uplink_port_names *uplink1[,uplink2,…,uplinkn]*

(Optional) Specifies a comma-separated list of uplink port names to use.

-maxports *maxports*

(Optional) Specifies the maximum number of ports for the switch. This number limits the total number of ports (numports) from all of the portgroups on the switch.

-bindtype earlyBinding | ephemeral | lateBinding

(Optional) Specifies the bind type of the port group. Valid values are:

earlyBinding

Assigns the ports when the VM binds to the portgroup. This type of binding ensures connectivity at all times, but permanently reserves the port. This binding type is the default.

lateBinding

Assigns a port to a VM if the VM is powered on and its NIC is in connected state. This binding type reassigns the port when the VM is powered off or its NIC is disconnected. LateBinding is configurable through vCenter.

ephemeral

Assigns a port to a VM if the VM is powered on and its NIC is in connected state. This binding type reassigns the port when the VM is powered off or its NIC is disconnected. Ephemeral binding is configurable through the ESX Host and vCenter.

-numports *numberofports*

(Optional) Specifies the number of ports of the port group.

-portgroup_name *portgroupname*

Specifies the port group name.

-portgroup_newname *portgroupnewname*

Specifies the new port group name.

-vlan *vlanID*

(Optional) Specifies an Integer value (vlan ID) used for the virtual portgroup operations.

Example: Create a New Virtual Distributed Switch

This example creates a new virtual distributed switch.

```
dpmvc-distributedswitch -vds_add -vc_server vc5master -datacenter_name dc3
-vds_folder vds -switch_name vdswitch1
```

Example: Updates an Existing Virtual Distributed Switch

This example updates a virtual distributed switch. It specifies NICs for MYSERVER1, and removes MYSERVER2 from the virtual distributed switch. When you want to delete a host from a virtual distributed switch, specify the servername without NICs assigned to it (server name followed by colon, for example, MYSERVER2:).

```
dpmvc-distributedswitch -vds_update -vc_server VAS-VC5 -datacenter_name VC5
-switch_name vdistSwitch -hostnics MYSERVER1:nxmgt2,tmp2;MYSERVER2:
```

The command updates vdistSwitch:

- Host MYSERVER1 is using NICs nxmgt2 and tmp2
- Host MYSERVER2 is removed from the switch

dpmvc-entermaintenancemode Command--Set to the Maintenance Mode (Funclet)

The dpmvc-entermaintenancemode command sets an ESX host to the maintenance mode

This command has the following format:

```
dpmvc-entermaintenancemode
-esx_host_name esxhostname
-vc_server vcservername
-timeout timeout
[-evacuate_powered_off_vm {no | yes}]
```

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-timeout *timeout*

Specifies the timeout time to enter or exit the maintenance mode in seconds.

-evacuate_powered_off_vm {no | yes}

(Optional) Specifies whether to exit after the VM stops.

Example: Enter Maintenance Mode

This example sets an ESX host into maintenance mode.

```
dpmvc-entermaintenancemode -esx_host_name esx1 -vc_server myvcserver -timeout 60
```

dpmvc-exitmaintenancemode Command--Exit the Maintenance Mode (Funclet)

The dpmvc-exitmaintenancemode command sets the ESX host out of the maintenance mode.

This command has the following format:

```
dpmvc-exitmaintenancemode
-esx_host_name esxhostname
-vc_server vcservername
-timeout timeout
```

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-timeout *timeout*

Specifies the timeout time to enter or exit the maintenance mode in seconds.

Example: Exit the Maintenance Mode

This example sets the esx1 ESX host out of maintenance mode.

```
dpmvc-exitmaintenancemode -esx_host_name esx1 -vc_server myvcserver
-timeout 60
```

dpmvc-faulttolerance Command--Specify Fault Tolerant Operations (Funclet)

The dpmvc-faulttolerance command turns on, turns off, enables, disables, tests fault tolerance, or migrates the secondary VM.

This command has the following format:

```
dpmvc-faulttolerance
-turn_on -vm_name <value> [-esx_host_name <value>]|
-turn_off -vm_name <value>|
-enable -vm_name <value>|
-disable -vm_name <value>|
-test_ft -vm_name <value>|
-migrate_secondary -vm_name <value> -esx_host_name <value>
```

-turn_on

Turns on fault tolerance for the specified VM.

(Optional) Specifies the ESX host name of the secondary VM.

-turn_off

Turns off fault tolerance for the specified VM.

Note: This operation deletes the secondary VM.

-enable

Enables fault tolerance for the specified VM.

-disable

Disables fault tolerance for the specified VM.

-test_ft

Tests fault tolerance on the specified VM.

-migrate_secondary

Migrates the fault tolerance secondary VM to another ESX server. The -esx_host_name option is required.

-vm_name

Defines the name of computer resource.

-esx_host_name

Specifies the ESX server where the VM resides.

-vc_server

Specifies virtual center server host name.

dpmvc-getavailablescsidisks Command--Get Available SCSI Disks (Funclet)

The dpmvc-getavailablescsidisks command lists the available SCSI disks.

This command has the following format:

```
dpmvc-getavailablescsidisks
[-datastore_name datastorename]
-esx_host_name esxhostname
-vc_server vcservername
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
```

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

dpmvc-gethosthba Command--Get Host Bus Adapters (Funclet)

The dpmvc-gethosthba command retrieves the list of host bus adapters configured on the specified ESX host.

This command has the following format:

```
dpmvc-gethosthba
-esx_host_name esxhostname
-vc_server vcservername
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
```

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

dpmvc-getresources Command--Get VM Resources (Funclet)

The dpmvc-getresources command retrieves CPU or memory share limits or reservations.

This command has the following format:

```
dpmvc-getresources
-vm_name vmname
{-datacenter_name datacentername | -vc vcenterservername}
[-resource {all|vm_cpulimit|vm_cpureserv|vm_memlimit|vm_memresrv}]
```

-vm_name *vmname*

Specifies the VM.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-resource {*all|vm_cpulimit|vm_cpureserv|vm_memlimit|vm_memresrv*}

Specifies whether a specific resource is retrieved or all resources. Options include the following:

all

Retrieves all CPU and memory share limits and reservations for the VM.

vm_cpulimit

Retrieves the limit for the number of shares of CPU for the VM.

vm_cpureserv

Retrieves the number of shares of CPU reserved for the VM.

vm_memlimit

Retrieves the limit for the number of shares of memory for the VM.

vm_memresrv

Retrieves the number of shares of memory reserved for the VM.

Example: Get all Resources for a VM in a Single vCenter Server Environment

This example retrieves all resources for usa-vm2.

```
dpmvc-getresources -resource all -datacenter_name MyCity -vm_name usa-vm2
```

dpmvc-getshares Command--Get VM Shares (Funclet)

The dpmvc-getshares command lets you view how many shares of CPU or memory are allocated to a VM.

This command has the following format:

```
dpmvc-getshares
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
[-share {cpu | memory}]
```

-share {cpu | memory}

Displays how many shares of CPU or memory are allocated to a VM. Shares are used to determine which VMs are given more of the available physical resources proportionally to other running VMs. If you allocate more shares to a VM, more physical resources are given to that VM. If you allocate fewer shares to a VM, fewer physical resources are given to that VM.

cpu

Specifies that CPU values are being retrieved.

memory

Specifies that memory values are being retrieved.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-vm_name *vmname*

Specifies the VM.

Example: Get the CPU Values for a VM

This example retrieves CPU values for usa-vm2.

```
dpmvc-getshares -resource cpu -datacenter_name MyCity -vm_name usa-vm2
```

dpmvc-getsnapshots Command--List Snapshots of a VM (Funclet)

The dpmvc-getsnapshots command lists the snapshots of a VM.

This command has the following format:

```
dpmvc-getsnapshots
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
[-name_only]
```

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-vm_name *vmname*

Specifies the VM.

-name_only

(Optional) Provides snapshot names only.

Example: List Snapshots

This example lists the snapshots of a VM.

```
dpmvc-getsnapshots –vc my_server1 –vm_name my_vm
```

dpmvc-imgjobcheck Command--Get Clone Job Status (Funclet)

The dpmvc-imgjobcheck command obtains the cloning job status for a specific CA Virtual Assurance job ID or a specific vCenter task ID. The job ID is provided for certain dpmvc commands. Use this command to check the status on vCenter.

This command has the following format:

```
dpmvc-imgjobcheck
-status job ID
[-vc vcenterservername]
```

-status *jobID*

Specifies the job ID used to obtain the job status.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

Example: Get the Cloning Job Status Using the Job ID in a Single vCenter Server Environment

This example obtains the cloning job status using a CA Virtual Assurance job ID.

```
dpmvc-imgjobcheck -status 42
```

dpmvc-migrate Command--Migrate a VM (Funclet)

The dpmvc-migrate command migrates a VM from one host server to another host server.

This command has the following format:

```
dpmvc-migrate
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vm
-migrate_to_target_host name
-migrate_to_target_resource_pool_name name
-migrate_to_compute_resource_name name
```

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-vm_name *vmname*

Specifies the VM.

-migrate_to_target_host *name*

Specifies the name of the host to which you are migrating the VM.

-migrate_to_target_resource_pool_name *name*

Specifies the target resource pool.

-migrate_to_compute_resource_name *name*

Specifies the name of the cluster or VMware ESX host to which you are migrating the VM.

Example: Migrate a VM

This example migrates the VM, "MyVM1", from the data center VPM/MyCity to ServerC-dcavc.

```
dpmvc-migrate -vm_name MyVM1 -datacenter_name VAS/MyCity
-migrate_to_compute_resource_name VASCluster/ClusterA
-migrate_to_target_resource_pool_name Resources/VASTest
-migrate_to_target_host ServerC-dcavc.MyCompany.com
```

dpmvc-removedatastore Command--Remove a Datastore (Funclet)

The dpmvc-removedatastore command deletes a datastore.

This command has the following format:

```
dpmvc-removedatastore
-datastore_name datastorename
-esx_host_name esxhostname
-vc_server vcservername
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
```

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

dpmvc-removevmvdisk Command--Remove Virtual Disk (Funclet)

The dpmvc-removevmvdisk command removes a virtual disk from a VM.

This command has the following format:

```
dpmvc-removevmvdisk
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
-disk_device_key diskdevicekey
-delete_data {yes | no}
```

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-disk_device_key *diskdevicekey*

Integer that specifies the device key of the disk, for example, 2000.

-delete_data {yes | no}

Indicates whether to delete data while deleting a disk.

Example: Remove a Virtual Disk

This example removes virtual disk with the device key of 2000 from the myvm VM.

```
dpmvc-removevmvdisk -vm_name myvm -vc_server myvcserver -disk_device_key 2000
-delete_data yes
```

dpmvc-removevmvnic Command--Remove Virtual NIC (Funclet)

The dpmvc-removevmvnic command removes a virtual NIC from a VM.

This command has the following format:

```
dpmvc removevmvnic
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
-device_key devicekey
```

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-device_key *devicekey*

Integer that specifies the device key of the network interface, for example, 3000.

Example: Remove a vNIC

This example removes a vNIC from a VM.

```
dpmvc-removevmvnic -vm_name myvm -vc_server myvcserver -device_key 3000
```

dpmvc-setresources Command--Set VM Resources (Funclet)

The dpmvc-setresources command lets you adjust CPU or memory share limits or reservations.

This command has the following format:

```
dpmvc-setresources
-resource {setcpulimit|setcpureserv|setmemlimit|setmemresrv}
-value value
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
```

setcpulimit

Defines the limit for the number of shares of CPU for the VM.

setcpureserv

Defines the number of shares of CPU reserved for the VM.

setmemlimit

Defines the limit for the number of shares of memory for the VM.

setmemresrv

Defines the number of shares of memory reserved for the VM.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-vm_name *vmname*

Specifies the VM.

-value *value*

Specifies the value for the resource parameter.

Example: Set Resource CPU Limit to 1000 Shares in a Single vCenter Server Environment

This example adjusts the CPU share limit for the virtual machine "MyVM1" to 1000.

```
dpmvc-setresources -resource setcpulimit -value 1000 -vm_name MyVM1 -datacenter_name
VAS/MyCity
```

dpmvc-setshares Command--Set VM Shares (Funclet)

The dpmvc-setshares command lets you set how many shares of CPU or memory are allocated to a VM.

This command has the following format:

```
dpmvc-setshares
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
-setshare {cpu_add_prop_value | cpu_subtract_prop_value |
cpu_overwrite_prop_value |mem_add_prop_value |mem_subtract_prop_value |
-mem_overwrite_prop_value}
-value value
```

-setshare {cpu_add_prop_value | cpu_subtract_prop_value | cpu_overwrite_prop_value | mem_add_prop_value | mem_subtract_prop_value | mem_overwrite_prop_value}

Defines how many shares of CPU or memory to add, subtract, or change. Shares are used to determine which VMs are given more of the available physical resources proportionally to other running VMs. If you allocate more shares to a VM, more physical resources are given to that VM. If you allocate fewer shares to a VM, fewer physical resources are given to that VM.

cpu_add_prop_value

Defines the number of shares of CPU to add to the VM.

-cpu_subtract_prop_value *value*

Defines the number of shares of CPU to subtract from the VM.

-cpu_overwrite_prop_value *value*

Defines the number of shares of CPU to use for the VM.

-mem_add_prop_value *value*

Defines the number of shares of memory to add to the VM.

-mem_subtract_prop_value *value*

Defines the number of shares of memory to subtract from the VM.

-mem_overwrite_prop_value *value*

Defines the number of shares of CPU to use for the VM.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-vm_name *vmname*

Specifies the VM.

-value *value*

Specifies the value for the resource parameter.

Example: Increase CPU Shares for a VM in a Single vCenter Server Environment

This example increases the CPU shares for the virtual machine "MyVM01" by 1000 in the data center "VAS/MyCity."

```
dpmvc-setshares -vm_name MyVM01 -datacenter_name VAS/MyCity -setshare
cpu_add_prop_value -value 1000
```

dpmvc-snapshot Command--Manage Snapshots (Funclet)

The dpmvc-snapshot command lets you manage snapshots for a VM. You can create snapshots, delete one or all snapshots, or revert to a snapshot using this command.

This command has the following format:

```
dpmvc-snapshot
-create
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
-vm_snapshot_name vmsnapshotname
[-vm_snapshot_desc description]
[-withmemory {true|false}]
[-poweron]

dpmvc-snapshot
-remove
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
[-vm_snapshot_name vmsnapshotname [-withchildren]]

dpmvc-snapshot
-revert
{-datacenter_name datacentername | -vc vcenterservername}
-vm_name vmname
-vm_snapshot_name vmsnapshotname
```

-operation {create|remove|revert}

Specifies to create, remove, or revert a VM snapshot.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vm_snapshot_name *vmsnapshotname*

Defines a name for the VM snapshot.

-vm_snapshot_desc *description*

(Optional) Defines a description for the VM snapshot.

-withmemory {true | false}

(Optional) Specifies that the snapshot includes memory. This parameter is invalid for -remove or -revert.

-withchildren

(Optional) Specifies that you want to remove all children of the snapshot. This parameter is invalid for -create or -revert.

-poweron

(Optional) Specifies that you want to power on the VM. This parameter is invalid for -remove or -revert.

Example: Create a VM Snapshot in a Single vCenter Server Environment

This example creates a snapshot named "Hello world" with a description of "This is my first snapshot" for the VM system named MyVM01.

```
dpmvc-snapshot -create -vm_snapshot_name "Hello world" -vm_snapshot_desc "First
snapshot"
-vm_name MyVM01 -datacenter_name VAS/MyCity
```

Example: Revert to a VM Snapshot in a Single vCenter Server Environment

This example reverts MyVM01 to the snapshot named "Hello world".

```
dpmvc-snapshot -revert -vm_snapshot_name "Hello world" -vm_name MyVM01
-datacenter_name VAS/MyCity
```

Example: Remove a VM Snapshot in a Single vCenter Server Environment

This example deletes the snapshot named "Hello world" from a VM system named MyVM01.

```
dpmvc-snapshot -remove -vm_snapshot_name "Hello world" -vm_name MyVM01
-datacenter_name VAS/MyCity
```

dpmvc-templatetovm Command--Convert Template to VM (Funclet)

The dpmvc-templatetovm command converts virtual machine templates back to VMs. This capability allows you to apply patches or software updates to the converted VM and then convert it back to a template, for example.

This command has the following format:

```
dpmvc-templatetovm
-template_name templatename
{-datacenter_name datacentername | -vc vcenterservername}
-compute_resource_name hostname
-resource_pool_name resourcepool
-esx_host_name hostname
```

-template_name *templatename*

Defines the name of the template.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

-compute_resource_name *name*

Specifies the cluster or VMware ESX host where the VM is created.

-resource_pool_name *resourcepool*

Specifies the name of the resource pool from which you want to select the VM for cloning.

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

Example: Convert a Template into a VM in a Single vCenter Server Environment

This example converts the template named convertTest into a VM.

```
dpmvc-templatetovm -datacenter_name VAS/MyCity -template_name convertTest
-compute_resource_name onDemand/myhost.myco.com -esx_host_name myhost.myco.com
-resource_pool_name Resources/QA
```

dpmvc vapp Command--Manage vApp

The dpmvc vapp command supports the following operations on vApps:

- Create New vApp
- Clone
- Power On
- Power Off
- Suspend
- Delete vApp from VMware vCenter
- Unregister from VMware vCenter
- Add VMs to vApp
- Add resource pool to vApp
- Add vApps to a vApp
- Update vApp configuration

The command has the following formats:

```
dpmvc-vapp -create

-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-cpu_allocation isExpandableReservation, limit, reservation, sharesLevel, shares]
[-mem_allocation isExpandableReservation, limit, reservation, sharesLevel, shares]

dpmvc-vapp -clone

-vc_server vcservername
-vapp_path vapppath
[-target_vapp_path targetvapppath]
[-vapp_name vappname]
[-target_vapp_host targetvapphost]
[-target_vapp_datastore targetvappdatastore]

dpmvc-vapp [-power_on | -power_off | -suspend | -delete | -unregister ]

-vc_server vcservername
-vapp_path vapppath

dpmvc-vapp -add_vms_to_vapp

-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-vms vms]
```

```
dpmvc-vapp -add_rps_to_vapp

-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-rps resourcepool]

dpmvc-vapp -add_vapps_to_vapp

-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-vapps vapps]
[-locale iso639value]

dpmvc-vapp -update_vapp_config

-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-config_settings
vappName,objecType,startAction,startDelay,startOrder,stopAction,stopDelay,waitFor
Guest]
[-cpu_allocation isExpandableReservation, limit, reservation, sharesLevel, shares]
[-mem_allocation isExpandableReservation, limit, reservation, sharesLevel, shares]
[-locale iso639value]
```

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vapp_path *vapppath*

Specifies the vApp path.

-vapp_name *vappname*

(Optional) Specifies the vApp name.

-cpu_allocation *isExpandableReservation, limit, reservation, sharesLevel, shares*

(Optional) Specifies the CPU allocation settings when updating a vApp configuration.

isExpandableReservation

Specifies if the allocation is expandable. Possible values: true or false.

limit

Specifies the allocation limit.

reservation

Specifies the reservation allocation.

sharesLevel

Specifies the shares level that is 0 for low, 1 for normal, 2 for high and 3 for custom. e.g. true,-1,1000,1,4000

shares

Specifies the allocation shares.

-mem_allocation *isExpandableReservation, limit, reservation, sharesLevel, shares*

Specifies the memory allocation settings when updating a vApp configuration.

isExpandableReservation

Specifies if the allocation is expandable. Possible values: true or false.

limit

Specifies the allocation limit.

reservation

Specifies the reservation allocation.

sharesLevel

Specifies the shares level that is 0 for low, 1 for normal, 2 for high and 3 for custom. e.g. true,-1,1000,1,4000

shares

Specifies the allocation shares.

-vms *vms*

(Optional) Specifies the VMs you want to add to vApp.

-rps *resourcepool*

(Optional) Specifies the name of the resource pool which you want to add to a vApp.

-vapps *vapps*

(Optional) Specifies the vApps you want to add to a vApp.

-config_settings *vappName,objecType,startAction,startDelay,startOrder,stopAction,stopDelay,waitForGuest*

(Optional) Specifies the configuration settings of the vApp. Proper format is "

startAction *none|powerOn*

Specifies the start action. The available options are none or powerOn

stopAction *none|powerOff|guestShutdown|suspend*

Specifies the start action. The available options are none or powerOff or guestShutdown or suspend.

-target_vapp_path *targetvapppath*

Specifies the target vApp path of the vApp you want to create.

-target_vapp_host *targetvapphost*

(Optional) Specifies the host where the new vApp is to reside on.

-target_vapp_datastore *targetvappdatastore*

(Optional) Specifies the name of the data store where the vApp is to reside on.

dpmvc-virtualswitch Command--Manage Virtual Switches (Funclet)

The dpmvc-virtualswitch command lets you manage virtual switches.

- Create a virtual switch
- Update the properties of a virtual switch
- Delete a virtual switch
- Create a port group for a virtual switch
- Update the port group properties of a virtual switch
- Remove a port group from a virtual switch
- Rename a port group of a virtual switch

The command has the following formats:

```
dpmvc-virtualswitch {-vs_add | -vs_update}
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
-nic_names nicname1 [,nicname2, ...]

dpmvc-virtualswitch -vs_remove
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
```

```
dpmvc-virtualswitch -add_portgroup
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
-portgroup_name portgroupname
[-vlan vlanID]

dpmvc-virtualswitch -update_portgroup
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
-portgroup_name portgroupname
[-portgroup_newname portgroupnewname]
[-vlan vlanID]

dpmvc-virtualswitch -remove_portgroup
-vc_server vcservername
-esx_host_name esxhostname
-portgroup_name portgroupname
[-vlan vlanID]

dpmvc-virtualswitch -rename_portgroup
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
-portgroup_name portgroupname
-portgroup_newname portgroupnewname
```

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-switch_name *switchname*

Specifies the switch name to perform the operation on.

-nic_names *nicname1 [,nicname2, ...]*

Specifies a list of physical NICs seperated by a comma. If you specify multiple NICs, use double quotes to escape the argument, for example: "sc1,nfs1,mnic1,mnic2".

-portgroup_name *portgroupname*

Specifies the port group name.

-portgroup_newname *portgroupnewname*

Specifies the new port group name.

-vlan *vlanID*

(Optional) Specifies an Integer value (vlan ID) used for the virtual portgroup operations.

Example

This example creates a new virtual switch.

```
dpmvc-virtualswitch -vs_add -vc_server vc5master -esx_host_name esx5
-switch_name switch1 -nic_names "sc1,nfs1,mnic1,mnic2"
```

dpmvc-vmtotemplate Command--Convert VM to Template (Funclet)

The dpmvc-vmtotemplate command converts virtual machines to templates. This capability helps you to enforce consistency across multiple servers in the data center.

This command has the following format:

```
dpmvc-vmtotemplate
-vm_name vmname
{-datacenter_name datacentername | -vc vcenterservername}
```

-vm_name *vmname*

Specifies the VM.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc v*centerservername*

Specifies the vCenter Server where the VM is located.

Example: Convert a VM into a Template in a Single vCenter Server Environment

This example converts the VM named convertTest test into a template.

```
dpmvc-vmtotemplate -datacenter_name VAS/MyCity -vm_name convertTest
```

dpmvc-wait Command--Time to Wait for a Job (Funclet)

The dpmvc-wait command specifies the time to wait until a job is performed. This command does not return the status until the job is complete or timeout occurs.

This command has the following format:

```
dpmvc-wait
-job <jobid>
[-timeout timeout]
```

-job *jobid*

Specifies the Job Id.

-timeout *timeout*

Specifies the timeout value to specify the job status.

Example: Status of Job

This example specifies that job 125635 waits 20 seconds until it is performed.

```
dpmvc-wait -job 125635 -timeout 20
```

CA Microsoft Hyper-V AutoShell Commands

You can use the AutoShell to script and automate CA Hyper-V AutoShell Commands and run actions based on the command results. Corresponding commands are also available in the CLI.

Note: The *vmname* option is not unique in the Hyper-V server environment. You can specify a VM by *vmname* for convenience. However, if the *vmname* is not unique, the command fails. In this case you must use the *vmid* option instead. You cannot use the following parameter pair in an AutoShell command: *vmname, vmid* and *template, templateid.* For example, if you use *vmname*, you cannot use *vmid*.

dpmhv-addVMNic (Cmdlet) Command--Add a Network Interface Controller to a VM

The dpmhv-addVMNic command lets you add network adapter to a VM and provides an option to connect it to a virtual switch.

This command has the following format:

```
dpmhv-addVMNic
-host hostname
-vm vmname|-vmid vmguid
[-mac_address macaddress]
[-switch switchname]
[-legacy]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-mac_address *macaddress*

(Optional) Defines the MAC address of the new network adapter. Valid entry: 12 digit hexadecimal values (for example, A-F, 0-9, a-f) in the format: 0013724C2140 or 00:13:72:4C:21:40.

Note: If the macaddress is not specified, Hyper-V automatically generates it.

-switch *switchname*

Specifies the virtual network switch name to connect the network adapter of the VM. If you do not specify this option, the network adapter of the VM is not connected to the virtual network.

Default: None

-legacy

(Optional) Creates legacy network adapter instead of Hyper-V synthetic adapter.

Note: Use this option when installing operating systems that do not have Hyper-V integration services.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Add a Network Interface Controller to a VM

This example adds NIC to a VM," TestVM."

```
dpmhv-addVMNic
-host hvserver
-vm TestVM
-switch "Local Area Connection
- Virtual Network"
```

dpmhv-addVMSCSIController (Cmdlet) Command--Add SCSI Controllers to a VM

The dpmhv-addVMSCSIController command lets you add up to four SCSI Controllers to a VM. You can add up to 64 disks to a SCSI controller.

This command has the following format:

```
dpmhv-addVMSCSIController
-host hostname
-vm vmname|-vmid vmguid
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Add SCSI Controllers to a VM

This example adds a SCSI Controller to the VM, " TestVM."

```
dpmhv-addVMSCSIController -host hvserver -vm TestVM
```

dpmhv-changeVMState (Cmdlet) Command--Change the State of a VM

The dpmhv-changeVMState command changes the state of the VM. The various states are: start, suspend, stop, pause, shutdown, and reboot.

This command has the following format:

```
dpmhv-changeVMState
-host hostname
-vm vmname|-vmid vmguid
-state {start,suspend,stop,pause,shutdown,reboot}
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-state {start,suspend,stop,pause,shutdown,reboot}

Specifies the state of the VM. State options are the following:

start

Starts or resumes the VM.

suspend

Suspends the VM temporarily.

stop

Stops the VM.

pauses

Stops the VM temporarily.

shutdown

Shuts down the VM.

reboot

Restarts the VM.

Note:

If you specify an invalid state change, the system reports an exception.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Change the state of a VM

This example starts the VM, "TestVM."

```
dpmhv-changeVMState -host hvserver -vm TestVM -state start
```

dpmhv-createTemplateFromVM (Funclet) Command--Create a Template from a VM

The dpmhv-createTemplateFromVM command creates the template using an existing VM. You can use the template to create multiple VMs.

The template copies the VM specifications and virtual hard disks attached to the VM. If you create a template using the VM with snapshots, only the current state is exported without snapshots. This command creates a template catalog for each Hyper-V server. The template catalog is maintained and can be queried from the following location: %ALLUSERSPROFILE%\ca\vpm\Hyper-V_Templates\TemplateCatalog.xml

This command has the following format:

```
dpmhv-createTemplateFromVM
-host hostname
-vm vmname|-vmid vmguid
-template templatename
[-async]
[-path pathname]
[-description description]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-template *templatename*

Specifies the name of the generic template created in the template catalog.

Note: The template name must be unique in the local template catalog.

-async

(Optional) Specifies the option to execute the command asynchronously. By default, this command is executed synchronously.

Note: If this command completes the execution before executing this option, it returns a job ID that is used to view the operation status.

-dest *pathname*

(Optional) Specifies the path of the VM that you want to create (template is stored). If this option is not specified, VM is created in the Hyper-V Server default location. The name of the template created is stored in the following location: %ALLUSERSPROFILE%\ca\vpm\Hyper-V_Templates.

Note: We recommend not creating VMs in the Hyper-V default location. It conflicts with virtual disk image file names that do not change when creating VMs using templates.

-description *description*

(Optional) Specifies the template description.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

When the dpmhv-createTemplateFromVM command is executed synchronously, it returns an empty string. If executed asynchronously, a string representing job ID is passed to *dpmhv-getJobErrorInfo*, *dpmhv-getJobInfo,* or *dpmhv-getJobStatus*. If an error occurs during execution, the command reports an exception.

Example: Create a Template from a VM

This example creates the template, "MyTemplate" from the VM, "TestVM."

```
dpmhv-createTemplateFromVM -vm TestVM -template MyTemplate -host hvserver
```

dpmhv-createVirtDisk (Funclet) Command--Create a Virtual Disk

The dpmhv-createVirtDisk command lets you create virtual disk.

This command has the following format:

```
dpmhv-createVirtDisk
-host hostname
-path pathname
-type{fixed,dynamic}
-sizeGB size
[-async]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-path *pathname*

Specifies the path of the virtual disk that you want to create.

-type {fixed, dynamic}

Specifies the type of the virtual disk that you want to create. Options include the following:

fixed

Specifies the virtual disk type as fixed.

dynamic

Specifies the virtual disk type as dynamic.

-sizeGB *size*

Specifies the size of the virtual disk in gigabytes.

-async

(Optional) Specifies the option to execute the command asynchronously. By default, this command is executed synchronously.

Note: If this command completes the execution before executing this option, it returns a job ID that is used to view the operation status.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Create a Virtual Disk

This example creates the virtual disk of size 1 GB.

```
dpmhv-createVirtDisk -host hvserver -path C:\data\Disks\01.vhd -type fixed -sizeGB
1
```

dpmhv-createVirtFloppy (Cmdlet) Command--Create a Virtual Floppy

The dpmhv-createVirtFloppy command lets you create virtual floppy disk image file. The virtual floppy can be attached to a VM using the *dpmhv-setVMVirtFloppy* command.

This command has the following format:

```
dpmhv-createVirtFloppy
-host hostname
-path pathname[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-path pathname

Specifies the path of the virtual floppy disk image file that you want to create. If not specified, the image file is created in the default directory of Hyper-V virtual hard disk.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Create a Virtual Floppy

This example creates a virtual floppy disk image file, "fdd.vfd."

```
dpmhv-createVirtFloppy -host hvserver -path C:\VMDisks\fdd.vfd
```

dpmhv-createVM (Funclet) Command--Create a VM

The dpmhv-createVM command lets you create a VM. This command creates VM without system components such as network adapter or hard disks. Upon creating VM, you can create system components using respective commands.

This command has the following format:

```
dpmhv-createVM
-host hostname
-name name
[-path pathname]
[-template templatename]
[-templateid vmguid]
[-mem mem]
[-cpus cpus]
[-cpuidlimit limit]
[-cpureserve reserve]
[-cpulimit limit]
[-cpuweight weight]
[-startAction {none|auto|always}]
[-startDelay delay]
[-stopAction {save,off,shutdown}]
[-recoveryAction {none,restart,revert}]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-name name

(Optional) Specifies the name of the VM.

Note: The name of the VM must be unique.

-dest *pathname*

(Optional) Specifies the path of the VM that you want to create (template is stored). If this option is not specified, VM is created in the Hyper-V Server default location. The name of the template created is stored in the following location: %ALLUSERSPROFILE%\ca\vpm\Hyper-V_Templates.

Note: We recommend not creating VMs in the Hyper-V default location. It conflicts with virtual disk image file names that do not change when creating VMs using templates.

-template templatename

(Optional) Specifies the name of the existing VM. This option is used to copy the configuration settings of existing VMs to create new VMs. We recommend not creating VMs from existing VMs. Two VMs share resources such as virtual disk and cannot be run at the same time.

Note: The template name must be unique in the local template catalog.

-templateid *vmguid*

(Optional) Specifies the unique ID (GUID) of the existing VM. This option is used to copy the configuration settings of the existing VMs to create new VMs. We recommend not creating VMs from existing VMs. Two VMs can share resources such as virtual disks and cannot be run at the same time.

Default: -1

Note: This option does not represent the template ID from VM catalog, but it represents the existing VM in Hyper-V environment.

-mem *mem*

(Optional) Specifies the RAM memory in megabytes (MB) for the VM that you want to create.

Default: -1

-cpus *cpus*

(Optional) Specifies the number of CPU core that you want to assign to the VM.

-cpuidlimit *limit*

(Optional) Specifies the limit of CPU ID functionality of VM. This option improves the compatibility with legacy operating systems such as Windows NT.

Default: -1

-cpureserve *reserve*

(Optional) Specifies the percentage of the CPU that you want to reserve for the VM. If this option is not specified, Hyper-V server assigns CPU cycles based on the overall system usage.

Default: -1

-cpulimit *limit*

(Optional) Specifies the limit for the number of CPU resources used by a VM. This option improves the compatibility while moving VMs between physical hosts with different CPU capabilities.

Default: -1

-cpuweight w*eight*

(Optional) Specifies the relative weight of the virtual machine. This option controls resource allocation when more than one VM is running. Valid entry: integer, 1-10000.

Default: -1

-startAction {none,auto,always}

(Optional) Specifies the action that you want to perform on the VM when the Hyper-V host starts up. Options include the following:

none

Performs no action.

auto

Starts the VM automatically.

Note: Use this option if the VM was running before the Hyper-V host is shut down.

always

Starts the VM always.

-startDelay *delay*

(Optional) Specifies the delay in seconds to start the VM after the Hyper-V host is up and running.

Default: -1

-stopAction {save,off,shutdown}

(Optional) Specifies the action that you want to perform on the VM when the physical Hyper-V shuts down. Options include the following:

save

Suspends the VM.

off

Power offs the VM.

shutdown

Shuts down the system.

-recoveryAction {none,restart,revert}

(Optional) Specifies the action to perform on the VM after the Hyper-V host restarts from unexpected shutdown. Options include the following:

none

Performs no action.

restart

Restart the VM.

revert

Reverts to the last snapshot of the VM.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

This command returns a string with the unique identifier (GUID) of newly created VM.

Example: Create a VM with default settings

This example creates VM, "TestVM" with default settings.

```
dpmhv-createVM -host hvserver -name TestVM
```

Example: Create a VM with default settings in user-defined directory

This example creates VM,"TestVM" with default settings in user-defined directory.

```
dpmhv-createVM -host hvserver -name TestVM -path c:\VMs\TestVM
```

Example: Create a VM with custom memory and CPU core values

This example creates VM,"TestVM" with custom memory and CPU core values.

```
dpmhv-createVM -host hvserver -name TestVM -mem 1024 -cpus 2
```

dpmhv-createVMFromTemplate (Funclet) Command--Create a VM Using a Template

The dpmhv-createVMFromTemplate command creates a VM from a previously created Microsoft System Center Virtual Machine Manager (SCVMM) template and optionally customizes settings for Windows images.

The template is left untouched, so that a single template can be used to create any number of virtual machines. The command supports (SCVMM) hosted templates only. See dpmhv-createVMFromTemplateEx for local template support without SCVMM.

This command has the following format:

```
dpmhv-createVMFromTemplate
-host hostname
-vm vmname
-template templatename
-dest pathname
-scvmmHost  scvmmHostname
-adminPass adminPW
[-computerName computerName]
[-ip4addr ip4addr]
[-ip4dhcp ip4dhcpInt]
[-ip4mask ip4mask]
[-ip4gw ip4gw]
[-ip4metric ip4metric]
[-ip4dns ip4dns]
[-productKey key]
[-userName UserName]
[-organization orgname]
[-domain domainname]
[-domainAdmin domad]
[-domainAdminPass dompw]
[-workgroup wgname]
[-adminUser adminUser]
[-adminUserPass adminUserPW]
[-mem mem]
[-cpus cpus]
[-hardwareProf hwprof]
[-guestOSProf osprof]
[-startVM]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-template *templatename*

Specifies the name of the source template that you want to use to create the VM.

Note: The template name must be unique in the local template catalog.

-dest *pathname*

(Optional) Specifies the path of the VM that you want to create (template is stored). If this option is not specified, VM is created in the Hyper-V Server default location. The name of the template created is stored in the following location: %ALLUSERSPROFILE%\ca\vpm\Hyper-V_Templates.

Note: We recommend not creating VMs in the Hyper-V default location. It conflicts with virtual disk image file names that do not change when creating VMs using templates.

-scvmmHost *scvmmHostname*

(Optional) Specifies the host name of the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter is valid when you use SCVMM integration to provision VMs.

-adminPass *adminPW*

(Optional) This option is used to set the default administrator account password for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This parameter is ignored in asynchronous execution.

Note: To set this option successfully, set the Windows Server administrator password which is created using Sysprep tool as empty.

-computerName *computerName*

(Optional) Specifies the computer name of the VM. Support for this parameter requires an image using Sysprep tool. This option is invalid for asynchronous execution of the command.

-ip4addr *ip4addr*

(Optional) Specifies the static IPv4 address that you want to assign to an interface of the VM. To set an IP address for a specific interface, the IP address is prefixed with known interface name and '#' as separator. For example, -ip4addr "Local Area Connection#192.168.1.200". If the template image has more than one network adaptor, the IP address is assigned to the first interface. This option is invalid for asynchronous execution of the command.

-ip4dhcp *ip4dhcpInt*

(Optional) Specifies an option to turn on DHCP of a particular interface of the VM. You can also specify the interface name for this option. For example, -ip4dhcp "Local Area Connection." If the template image has more than one network adaptor, DHCP is turned on for the first interface. This option is invalid for asynchronous execution of the command.

Default: local

-ip4mask *ip4mask*

(Optional) Specifies the subnet mask that you want to assign for the VM. This option is used with -ip4ddr option. If an interface name is specified in the -ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of the command.

-ip4gw *ip4gw*

(Optional) Specifies the option to set the gateway for VM. This option is used with *-ip4ddr* option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Note: If an interface name is specified in the -ip4addr option, same interface name must be used in this option.

-ip4metric *ip4metric*

(Optional) Specifies the interface metric that you want to set for the VM. This option is used with *-ip4ddr* option. If an interface name is specified in the -ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: 1

-ip4dns *ip4dns*

(Optional) Specifies the DNS server that you want to set for the VM. This option is used with *-ip4ddr* option. If an interface name is specified in the -ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-adminPass *adminPW*

(Optional) This option is used to set the default administrator account password for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This parameter is ignored in asynchronous execution.

Note: To set this option successfully, set the Windows Server 2003 administrator password which is created using Sysprep tool as empty.

-productKey *key*

(Optional) Specifies the Windows product activation key for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-userName *UserName*

(Optional) Specifies the user name of the Windows image (created using sysprep tool) which is installed on the new VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-organization *orgname*

(Optional) Specifies the organization name of the Windows image (created using sysprep tool) which is installed on the new VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-domain *domainname*

(Optional) Specifies the domain name for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command. Domain and workgroup specifications are mutually exclusive.

-domainAdmin *domad*

(Optional) Specifies the user account as Domain Administrator that you want to create in the domain. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-domainAdminPass *dompw*

(Optional) Specifies the password for Domain Administrator user account that you want to create in the domain. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-workgroup *wgname*

(Optional) Specifies the workgroup that you want to create for the VM. Support for this parameter requires a Windows image created using Sysprep tool. Domain and workgroup specifications are mutually exclusive. This option is invalid for asynchronous execution of command.

-adminUser *adminUser*

(Optional) Specifies the administrator user name that you want to create as a part of the default Administrators group. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-adminUserPass *adminUserPW*

(Optional) Specifies the password of the administrator user account that you want to create as a part of the default Administrators group. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-mem *mem*

(Optional) Specifies the RAM memory in megabytes (MB) for the VM that you want to create.

Default: -1

-cpus *cpus*

(Optional) Specifies the number of CPU core that you want to assign to the VM.

Default: -1

-scvmmHost *scvmmHostname*

(Optional) Specifies the host name of the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter is valid when you use SCVMM integration to provision VMs.

-hardwareProf *hwprof*

(Optional) Specifies the name of the hardware profile defined by the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter overwrites the hardware configuration settings stored in the SCVMM template. This parameter is valid when you use SCVMM integration to provision VMs.

-guestOSProf *osprof*

(Optional) Specifies the name of the guest operating system profile defined by the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter overwrites the operating system configuration settings stored in the SCVMM library server. This parameter is valid when you use SCVMM integration to provision VMs.

-startVM

(Optional) Specifies the option to start the VM automatically after it is created. By default, the new VM is in powered-off state. You must customize the IP configuration options required to start the VM.

Return Value

The dpmhv-createVMFromTemplate command returns an empty string when it is executed synchronously. If executed asynchronously, a string representing job ID is passed to *dpmhv-getJobErrorInfo*, *dpmhv-getJobInfo,* or *dpmhv-getJobStatus*. If an error occurs during execution, the command reports an exception.

Example: Create a VM from an SCVMM Template

This example lets you create VM from an SCVMM template with options to specify the hardware and guest OS profiles:

```
dpmhv-createVMFromTemplate -host hvserver -vm NewVM -dest c:\VMs\NewBox -template
Win2k3Clean
-scvmmHost SCVMMLibSrv -hardwareProf hw_def -guestOSProf os_def -async -adminPass
#admin#
```

See also:

dpmhv-createVMFromTemplateEx (Funclet) Command--Create a VM Using a Template (see page 217)

dpmhv-createVMFromTemplateEx (Funclet) Command--Create a VM Using a Template

The dpmhv-createVMFromTemplate command lets you create VM using existing templates. If the original template is created in Sysprep state, you can customize the (Windows) settings of the VM created (image) using the command parameters. Upon the creation of the VM, you can create system components using respective commands. You can use one template to create multiple virtual machines.

Note: You can customize the Windows Settings image when the command is run synchronously. For asynchronous execution, you can use dpmhv-setSysprepProperties command to customize the image after the execution is complete.

This command has the following format:

```
dpmhv-createVMFromTemplateEx
-host hostname
-vm vmname
-template templatename
-dest pathname
[-computerName computerName]
[-ip4addr ip4addr]
[-ip4dhcp ip4dhcpInt]
[-ip4mask ip4mask]
[-ip4gw ip4gw]
[-ip4metric ip4metric]
[-ip4dns ip4dns]
[-disableAdmin]
[-adminPass adminPW]
[-autoLogon alcnt]
[-duplicatorString dupstr]
[-timeZone timezone]
[-productKey key]
[-userName UserName]
[-organization orgname]
[-domain domainname]
[-domainAdmin domad]
[-domainAdminPass dompw]
[-workgroup wgname]
[-adminUser adminUser]
[-adminUserPass adminUserPW]
[-custom custom]
[-async]
[-mem mem]
[-cpus cpus]
[-cpuidlimit limit]
[-cpufeatlimit limit]
[-cpureserve reserve]
[-cpulimit limit]
[-cpuweight weight]
[-startAction {none,auto,always}]
[-startDelay delay]
[-stopAction {save,off,shutdown}]
[-recoveryAction {none,restart,revert}]
[-scvmmHost  scvmmHostname]
[-hardwareProf hwprof]
[-guestOSProf osprof]
[-startVM]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-template *templatename*

Specifies the name of the source template that you want to use to create the VM.

Note: The template name must be unique in the local template catalog.

-dest *pathname*

(Optional) Specifies the path of the VM that you want to create (template is stored). If this option is not specified, VM is created in the Hyper-V Server default location. The name of the template created is stored in the following location: %ALLUSERSPROFILE%\ca\vpm\Hyper-V_Templates.

Note: We recommend not creating VMs in the Hyper-V default location. It conflicts with virtual disk image file names that do not change when creating VMs using templates.

-computerName *computerName*

(Optional) Specifies the computer name of the VM. Support for this parameter requires an image using Sysprep tool. This option is invalid for asynchronous execution of the command.

-ip4addr *ip4addr*

(Optional) Specifies the static IPv4 address that you want to assign to an interface of the VM. To set an IP address for a specific interface, the IP address is prefixed with known interface name and '#' as separator. For example, -ip4addr "Local Area Connection#192.168.1.200". If the template image has more than one network adaptor, the IP address is assigned to the first interface. This option is invalid for asynchronous execution of the command.

-ip4dhcp *ip4dhcpInt*

(Optional) Specifies an option to turn on DHCP of a particular interface of the VM. You can also specify the interface name for this option. For example, -ip4dhcp "Local Area Connection." If the template image has more than one network adaptor, DHCP is turned on for the first interface. This option is invalid for asynchronous execution of the command.

Default: local

-ip4mask *ip4mask*

(Optional) Specifies the subnet mask that you want to assign for the VM. This option is used with
-ip4ddr option. If an interface name is specified in the
-ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of the command.

-ip4gw *ip4gw*

(Optional) Specifies the option to set the gateway for VM. This option is used with *-ip4ddr* option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Note: If an interface name is specified in the -ip4addr option, same interface name must be used in this option.

-ip4metric *ip4metric*

(Optional) Specifies the interface metric that you want to set for the VM. This option is used with *-ip4ddr* option. If an interface name is specified in the -ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: 1

-ip4dns *ip4dns*

(Optional) Specifies the DNS server that you want to set for the VM. This option is used with *-ip4ddr* option. If an interface name is specified in the -ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-disableAdmin

(Optional) Specifies an option to disable default administrator account for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-adminPass *adminPW*

(Optional) This option is used to set the default administrator account password for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This parameter is ignored in asynchronous execution.

Note: To set this option successfully, set the Windows Server administrator password which is created using Sysprep tool as empty.

-autoLogon *alcnt*

(Optional) Specifies an option to set the number of accounts that you want to create to log in automatically with default administrator account. The accounts are created after the completion of Sysprep process. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default:
-1

-duplicatorString *dupstr*

(Optional) Specifies the name of the system duplicator that you want to set in the registry of the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-timeZone *timezone*

(Optional) Specifies the time zone used by the VM that are created using the template. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default:
-1

-productKey *key*

(Optional) Specifies the Windows product activation key for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-userName *UserName*

(Optional) Specifies the user name of the Windows image (created using sysprep tool) which is installed on the new VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-organization *orgname*

(Optional) Specifies the organization name of the Windows image (created using sysprep tool) which is installed on the new VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-domain *domainname*

(Optional) Specifies the domain name for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command. Domain and workgroup specifications are mutually exclusive.

-domainAdmin *domad*

(Optional) Specifies the user account as Domain Administrator that you want to create in the domain. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-domainAdminPass *dompw*

(Optional) Specifies the password for Domain Administrator user account that you want to create in the domain. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-workgroup *wgname*

(Optional) Specifies the workgroup that you want to create for the VM. Support for this parameter requires a Windows image created using Sysprep tool. Domain and workgroup specifications are mutually exclusive. This option is invalid for asynchronous execution of command.

-adminUser *adminUser*

(Optional) Specifies the administrator user name that you want to create as a part of the default Administrators group. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-adminUserPass *adminUserPW*

(Optional) Specifies the password of the administrator user account that you want to create as a part of the default Administrators group. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-custom *custom*

(Optional) Specifies the list of comma-separated custom commands that you want to execute at the end of Sysprep process. This parameter requires Windows image of Sysprep. This parameter is ignored in asynchronous execution.

-async

(Optional) Specifies the option to execute the command asynchronously. By default, this command is executed synchronously.

Note: If this command completes the execution before executing this option, it returns a job ID that is used to view the operation status.

-mem *mem*

(Optional) Specifies the RAM memory in megabytes (MB) for the VM that you want to create.

Default: -1

-cpus *cpus*

(Optional) Specifies the number of CPU core that you want to assign to the VM.

Default: -1

-cpuidlimit *limit*

(Optional) Specifies the limit of CPU ID functionality of VM. This option improves the compatibility with legacy operating systems such as Windows NT.

Default: -1

-cpufeatlimit *limit*

(Optional) Specifies the limit for the functionality of the CPU resources used by a VM. This option improves the compatibility while moving VMs between physical hosts with different CPU capabilities.

Default: -1

-cpureserve *reserve*

(Optional) Specifies the percentage of the CPU that you want to reserve for the VM. If this option is not specified, Hyper-V server assigns CPU cycles based on the overall system usage.

Default: -1

-cpulimit *limit*

(Optional) Specifies the limit for the number of CPU resources used by a VM. This option improves the compatibility while moving VMs between physical hosts with different CPU capabilities.

Default: -1

-cpuweight w*eight*

(Optional) Specifies the relative weight of the virtual machine. This option controls resource allocation when more than one VM is running. Valid entry: integer, 1-10000.

Default: -1

-startAction {none,auto,always}

(Optional) Specifies the action that you want to perform on the VM when the Hyper-V host starts up. Options include the following:

none

Performs no action.

auto

Starts the VM automatically.

Note: Use this option if the VM was running before the Hyper-V host is shut down.

always

Starts the VM always.

-startDelay *delay*

(Optional) Specifies the delay in seconds to start the VM after the Hyper-V host is up and running.

Default: -1

-stopAction {save,off,shutdown}

(Optional) Specifies the action that you want to perform on the VM when the physical Hyper-V shuts down. Options include the following:

save

Suspends the VM.

off

Power offs the VM.

shutdown

Shuts down the system.

-recoveryAction {none,restart,revert}

(Optional) Specifies the action to perform on the VM after the Hyper-V host restarts from unexpected shutdown. Options include the following:

none

Performs no action.

restart

Restart the VM.

revert

Reverts to the last snapshot of the VM.

-scvmmHost *scvmmHostname*

(Optional) Specifies the host name of the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter is valid when you use SCVMM integration to provision VMs.

-hardwareProf *hwprof*

(Optional) Specifies the name of the hardware profile defined by the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter overwrites the hardware configuration settings stored in the SCVMM template. This parameter is valid when you use SCVMM integration to provision VMs.

-guestOSProf *osprof*

(Optional) Specifies the name of the guest operating system profile defined by the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter overwrites the operating system configuration settings stored in the SCVMM library server. This parameter is valid when you use SCVMM integration to provision VMs.

-startVM

(Optional) Specifies the option to start the VM automatically after it is created. By default, the new VM is in powered-off state. You must customize the IP configuration options required to start the VM.

Return Value

The dpmhv-createVMFromTemplateEX command returns an empty string when it is executed synchronously. If executed asynchronously, a string representing job ID is passed to *dpmhv-getJobErrorInfo*, *dpmhv-getJobInfo,* or *dpmhv-getJobStatus*. If an error occurs during execution, the command reports an exception.

Example: Create a VM from a Template

This example lets you create VM,"TestVM" using a template setting as complete static IPv4 configuration:

```
dpmhv-createVMFromTemplateEx -host hvserver -vm NewVM -dest c:\VMs\NewBox -template
Win2k3SysPrepped
-ip4addr 192.168.1.25 -ip4mask 255.255.255.0 -ip4gw 192.168.1.1 -ip4dns 192.168.1.1
-computerName NewBox
```

See also:

dpmhv-createVMFromTemplate (Funclet) Command--Create a VM Using a Template (see page 211)

dpmhv-destroyTemplate (Cmdlet) Command--Delete a Template

The dpmhv-destroyTemplate command lets you delete existing templates from the template catalog.

This command has the following format:

```
dpmhv-destroyTemplate
-template templatename
-host hostname
```

-template *templatename*

Specifies the name of the generic template created in the template catalog.

Note: The template name must be unique in the local template catalog.

-host *hostname*

Specifies the name of the Hyper-V server host.

Example: Delete a Template

This example deletes a Template from the template catalog.

```
dpmhv-destroyTemplate -host hvserver -template MyTemplate
```

dpmhv-destroyVM (Cmdlet) Command--Delete VM

The dpmhv-destroyVM command lets you delete existing VM specifications, virtual disks, floppy images, and its related snapshots.

This command has the following format:

```
dpmhv-destroyVM
-host hostname
-vm vmname|-vmid vmguid
[-delvhd]
[-delvfd]
[-deliso]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-delvhd

(Optional) Deletes the virtual hard disk assigned to the VM.

-delvfd

(Optional) Deletes the virtual floppy disk assigned to the VM.

-deliso

(Optional) Deletes the ISO image assigned to the VM.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Delete a VM

This example deletes VM with the virtual hard disk and floppy disk attached to the VM.

```
dpmhv-destroyVM -host hvserver -vm TestVM -delvhd -delvfd
```

dpmhv-expandVirtDisk (Funclet) Command--Expand Virtual Disk

The dpmhv-expandVirtDisk command lets you increase the virtual disk size. To use the expanded virtual disk space, you must partition the virtual disk in the guest operating system running on a virtual machine.

This command has the following format:

```
dpmhv-expandVirtDisk
-host hostname
-path pathname
-sizeGB size
[-async]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-path pathname

Specifies the path name of the virtual disk that you want to expand.

-sizeGB *size*

Specifies the size of the virtual disk in gigabytes.

-async

(Optional) Specifies the option to execute the command asynchronously. By default, this command is executed synchronously.

Note: If this command completes the execution before executing this option, it returns a job ID that is used to view the operation status.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-expandVirtDisk command returns an empty string when it is executed synchronously. If executed asynchronously, a string representing job ID is passed to *dpmhv-getJobErrorInfo*, *dpmhv-getJobInfo,* or *dpmhv-getJobStatus*. In synchronous mode, if an error occurs during execution, the command returns the error code and reports the error.

Example: Expand Virtual Disk

This example expands the size of the virtual disk to 4 GB.

```
dpmhv-expandVirtDisk -host hvserver -path C:\VMDisks\hdd.vhd -sizeGB 4
```

dpmhv-exportVM (Funclet) Command--Export a VM

The dpmhv-exportVM command lets you export VM specifications, including their related virtual disks and floppy disks. This command is deprecated, use dpmhv-exportVMEx instead.

This command has the following format:

```
dpmhv-exportVM
-host hostname
-vm vmname|-vmid vmguid
-dest dest
[-nostate]
[-async]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-dest *dest*

Specifies the destination path of the VM that you want to export.

-nostate

(Optional) Specifies that only the VM specification is exported. This option prevents the exported VM from referring to the original VM disk images.

-async

(Optional) Specifies the option to execute the command asynchronously. By default, this command is executed synchronously.

Note: If this command completes the execution before executing this option, it returns a job ID that is used to view the operation status.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-exportVM command returns an empty string when it is executed synchronously. If executed asynchronously, a string representing job ID is passed to *dpmhv-getJobErrorInfo*, *dpmhv-getJobInfo,* or *dpmhv-getJobStatus*. In synchronous mode, if an error occurs during execution, the command returns the error code and reports the error.

Example: Export a VM

This example you export VM specifications, including its related virtual disks and floppy disks.

```
dpmhv-exportVM -host hvserver -vm VM_0000001 -dest c:\DATA\Export\
```

dpmhv-exportVMEx (Funclet) Command--Export a VM

The dpmhv-exportVMEx command lets you export VM specifications, including its related virtual disks, floppy disks and snapshots.

This command has the following format:

```
dpmhv-exportVMEx
-host hostname
-vm vmname|-vmid vmguid
-dest dest
[-noruntimeInfo]
[-nosnapshots]
[-nostorage]
[-nosubdir]
[-snapshot ss]
[-snapshotid ssguid]
[-async]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-dest *dest*

Specifies the destination path of the VM that you want to export.

-noruntimeInfo

(Optional) Specifies not to export runtime information of the VM.

-nosnapshots

(Optional) Specifies not to export snapshots of the VM. This option exports only the current state of the VM.

-nostorage

(Optional) Specifies not to export the virtual disk of the VM.

Note: Do not use this option when you export the snapshot of the VM.

-nosubdir

(Optional) Specifies not to create a sub directory with the VM display name underneath the directory specified as the export path.

-snapshot *ss*

(Optional) Specifies the display name of the snapshot of the VM. The exported VM is in the state (snapshot) similar to the source VM. The exported VM does not include snapshot.

Note: Use
-ssid option as snapshot display name is not unique in the Hyper-V environment.

-snapshotid *ssguid*

(Optional) Specifies the unique ID (GUID) of the snapshot of the VM. The exported VM is in the state (snapshot) similar to the source VM. The exported VM does not include snapshot.

-async

(Optional) Specifies the option to execute the command asynchronously. By default, this command is executed synchronously.

Note: If this command completes the execution before executing this option, it returns a job ID that is used to view the operation status.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-exportVMEx command returns an empty string when it is executed synchronously. If executed asynchronously, a string representing job ID is passed to *dpmhv-getJobErrorInfo*, *dpmhv-getJobInfo,* or *dpmhv-getJobStatus*. In synchronous mode, if an error occurs during execution, the command returns the error code and reports the error.

Example: Export a VM Without Snapshots

This example exports a VM without snapshots.

```
dpmhv-exportVMEx -host hvserver -vm TestVM -dest c:\Ex\TestVM1 -nosubdir -nosnapshots
```

dpmhv-getHostSwitches (Funclet) Command--Show Host Switches on a Hyper-V Host

The dpmhv-getHostSwitches command displays host switches (virtual networks) defined on a Hyper-V host.

This command has the following format:

```
dpmhv-getHostSwitches
-host hostname
[-retval]
[-silent]
[-detail]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the virtual networks (host networks).

Return Value

The dpmhv-getHostSwitches command returns an array of objects with each object representing one virtual switch (virtual host) on the specified host.

The following properties are returned in regular mode:

- BytesReceivedPersec
- BytesSentPersec
- Caption
- ElementName
- Name
- StatusDescriptions

The following properties are returned in detail mode:

- BroadcastPacketsReceivedPersec
- BroadcastPacketsSentPersec
- BytesPersec
- BytesReceivedPersec
- BytesSentPersec
- Caption
- CreationClassName
- Dedicated
- Description
- DirectedPacketsReceivedPersec
- DirectedPacketsSentPersec
- ElementName
- EnabledDefault
- EnabledState
- HealthState
- IdentifyingDescriptions
- InstallDate
- LearnedMacAddresses
- LearnedMacAddressesPersec
- MaxChimneyOffloads
- MaxVMQOffloads

- MulticastPacketsReceivedPersec
- MulticastPacketsSentPersec
- Name
- Name1
- NameFormat
- NumLearnableAddresses
- OperationalStatus
- OtherDedicatedDescriptions
- OtherEnabledState
- OtherIdentifyingInfo
- PacketsFlooded
- PacketsFloodedPersec
- PacketsPersec
- PacketsReceivedPersec
- PacketsSentPersec
- Path
- PowerManagementCapabilities
- PrimaryOwnerContact
- PrimaryOwnerName
- PurgedMacAddresses
- PurgedMacAddressesPersec
- RequestedState
- ResetCapability
- Roles
- ScopeOfResidence
- Status
- StatusDescriptions
- TimeOfLastStateChange

Example: Show Host Switches

This example displays the list of host switches on a Hyper-V host.

```
dpmhv-getHostSwitches -host hvserver
```

dpmhv-getJobInfo (Funclet) Command--Show Job Information

The dpmhv-getJobInfo command retrieves all the information pertaining to an asynchronous job such as completion percentage, error information, and start time.

This command has the following format:

```
dpmhv-getJobInfo
-jobref job
[-silent]
[-retval]
[-detail]
```

-jobref *job*

Specifies the job ID of an asynchronous job.

Note: Upon the complete execution of asynchronous job, Hyper-V holds the job information for few minutes (five) only, beyond which it becomes invalid.

-silent

Specifies not to direct the output to the screen.

-retval

Returns a value for further processing.

-detail

(Optional) Displays the information details of the asynchronous job.

Return Value

The dpmhv-getJobInfo command returns objects where each object represents the current job state.

Hyper-V Jobs:

The following properties are returned for local Hyper-V in regular mode:

- Caption
- ElementName
- ErrorCode
- ErrorDescription
- JobStatus
- PercentComplete
- ResultVMName
- Status
- StatusDescriptions

The following properties are returned for local Hyper-V in detail mode:

- Cancellable
- Caption
- DeleteOnCompletion
- Description
- ElapsedTime
- ElementName
- ErrorCode
- ErrorDescription
- ErrorSummaryDescription
- HealthState
- InstallDate
- InstanceID
- JobRunTimes
- JobState
- JobStatus
- LocalOrUtcTime
- Name

- Notify
- OII- OperationalStatus
- OtherRecoveryAction
- Owner
- Path
- PercentComplete
- Priority
- RecoveryAction
- ResultVMName
- RunDay
- RunDayOfWeek
- RunMonth
- RunStartInterval
- ScheduledStartTime
- StartTime
- Status
- StatusDescriptions
- TimeBeforeRemoval
- TimeOfLastStateChange
- TimeSubmitted
- UntilTime

Microsoft System Center Virtual Machine Manager (SCVMM) Jobs:

Properties returned for SCVMM in regular mode:

- CurrentStep
- Description
- ErrorInfo
- IsCompleted
- OII
- ProgressValue
- ResultVMName
- Status
- StatusString

Properties returned for SCVMM in detail mode:

- AdditionalMessages[]
- AreAuditRecordsAvailable
- AuditRecords[]
- CmdletName
- CurrentStep
- Description
- EndTime
- ErrorInfo
- ID
- IsCompleted
- IsFullyCached
- IsRestartable
- IsStoppable
- IsVisible
- MarkedForDeletion
- Name
- OII
- Owner
- OwnerSID
- PROTipID
- Progress
- ProgressValue
- ResultName
- ResultObjectID
- ResultObjectType
- ResultObjectTypeName
- ResultVMName
- ServerConnection
- Source
- StartTime
- Status

- StatusString
- Steps[]
- Target
- TargetObjectID
- TargetObjectType
- WasNotifiedOfCancel

Example: Show Job Information

This example displays status of completion of an export job.

```
jref = dpmhv-exportVMEx -host hvserver -vm TestVM -dest c:\Ex-async
    do
    {
      sleep(5000)
      job = dpmhv-getJobInfo -jobref (jref) -silent -retval
      ? "Completion:", job.PercentComplete+"%"
    } while(job.ErrorCode==0 && job.PercentComplete<100)
    ? job.StatusDescriptions
    if(job.ErrorCode!=0)
    {
      ? job.ErrorDescription
    }
```

Example: Show SCVMM Job Information

This example displays the status of the completion of new VM created using an SCVMM template.

```
jref=dpmhv-createVMFromTemplate -host hvserver -vm NewVM -dest c:\VMs\NewBox
-template Win2k3Clean -scvmmHost SCVMMLibSrv -async
    do
    {
       sleep(5000)
       job = dpmhv-getJobInfo -jobref (jref) -silent -retval
       ? "Completion:", job.ProgressValue+"%"
    } while(!job.IsCompleted)
    ? job.StatusString
    s = job.ErrorInfo;
    errorCode = parseInt(s.substr(s.lastIndexOf('(')+1).left(-1));
    if(errorCode!==0)
    {
      ? job.ErrorInfo
    }
```

dpmhv-getJobStatus (Funclet) Command--Show Job Status

The dpmhv-getJobStatus command retrieves the status of an asynchronous job.

This command has the following format:

```
dpmhv-getJobStatus
-jobref job
```

-jobref *job*

Specifies the job ID of an asynchronous job.

Note: Upon the complete execution of asynchronous job, Hyper-V holds the job information for few minutes (five) only, beyond which it becomes invalid.

Return Value

The dpmhv-getJobStatus command returns the following status information of the specified job:

- Canceled
- Created
- Failed
- Progressing
- Succeeded
- Unknown
- Waiting

Example: Show Job Status

This example displays the status of an export job.

```
jref = dpmhv-exportVMEx -host hvserver -vm TestVM -dest c:\Ex -async
dpmhv-getJobState -jobref (jref)
```

dpmhv-getPhysDisks (Funclet) Command--Show all Physical Disks

The dpmhv-getPhysDisks command lists the physical disks to attach to virtual machines on a Hyper-V server. The physical disks should be displayed in offline status in Windows Disk Manager.

This command has the following format:

```
dpmhv-getPhysDisks
-host hostname
[-silent]
[-retval]
[-detail]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the physical disks attached to a virtual machine.

Return Value

The dpmhv-getPhysDisks command returns an array of objects representing the SCSI controllers of the specified virtual machine.

The properties returned in regular mode are:

- Caption
- DriveNumber
- ElementName
- Name
- Path
- StatusDescriptions

The properties returned in detail mode are:

- AdditionalAvailability
- Availability
- Capabilities
- CapabilityDescriptions
- Caption
- CompressionMethod
- CreationClassName
- DefaultBlockSize
- Description
- DeviceID
- DriveNumber
- ElementName
- EnabledDefault
- EnabledState
- ErrorCleared
- ErrorDescription
- ErrorMethodology
- HealthState
- IdentifyingDescriptions
- InstallDate
- LastCleaned

- LastErrorCode
- LoadTime
- LocationIndicator
- MaxAccessTime
- MaxBlockSize
- MaxMediaSize
- MaxQuiesceTime
- MaxUnitsBeforeCleaning
- MediaIsLocked
- MinBlockSize
- MountCount
- Name
- NeedsCleaning
- NumberOfMediaSupported
- OperationalStatus
- OtherEnabledState
- OtherIdentifyingInfo
- Path
- PowerManagementCapabilities
- PowerManagementSupported
- PowerOnHours
- RequestedState
- Security
- Status
- StatusDescriptions
- StatusInfo
- SystemCreationClassName
- SystemName
- TimeOfLastMount
- TimeOfLastStateChange
- TotalMountTime
- TotalPowerOnHours
- UncompressedDataRate

- UnitsDescription
- UnitsUsed
- UnloadTime

Example: Show all Physical Disks

This example displays the basic information about the physical disk attached to a virtual machine.

```
dpmhv-getPhysDisks -host hvserver
```

dpmhv-getVersion (Funclet) Command--Show the Web Service Version

The dpmhv-getVersion command retrieves the version of the Web Service of the C*A Vir*tual Assurance.

This command has the following format:

```
dpmhv-getVersion
[-retval]
[-silent]
```

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-getVersion command returns a string indicating the web service version of the C*A Vir*tual Assurance.

Example: Show the Web Service Version

This example displays the version of the Web Service of the C*A Vir*tual Assurance.

```
ver = dpmhv-getVersion -retval -silent
? ver
```

dpmhv-getVMInfo (Funclet) Command--Show all VMs

The dpmhv-getVMInfo command retrieves the information and settings of a virtual machine.

This command has the following format:

```
dpmhv-getVMInfo
-vm vmname|-vmid vmguid
-host hostname
[-retval]
[-silent]
[-detail]
```

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-getVMInfo command returns objects with information of virtual machine.

The following properties are returned in regular mode:

- vm
- Caption
- ElementName
- Name
- OperationalStatus
- StatusDescriptions
- vminfo
- MemoryUsage
- ProcessorLoad
- ProcessorLoadHistory
- vmsettings
- AutoActivate
- AutomaticRecoveryAction
- AutomaticShutdownAction
- AutomaticStartupAction
- AutomaticStartupActionDelay
- Description
- ElementName
- ExternalDataRoot
- SnapshotDataRoot
- SystemName
- vmcursettings
- BaseBoardSerialNumber
- BIOSGUID
- BIOSSerialNumber
- ChassisAssetTag
- ChassisSerialNumber
- SystemName

The following properties are returned in detail mode:

- vm
- AssignedNumaNodeList
- Caption
- CreationClassName
- Dedicated
- Description
- ElementName
- HealthState
- IdentifyingDescriptions
- InstallDate
- Name
- NameFormat
- OnTimeInMilliseconds
- OperationalStatus
- OtherDedicatedDescriptions
- OtherEnabledState
- OtherIdentifyingInfo
- PowerManagementCapabilities
- PrimaryOwnerContact
- PrimaryOwnerName
- ProcessID
- RequestedState
- ResetCapability
- Roles
- Status
- StatusDescriptions
- TimeOfLastConfigurationChange
- TimeOfLastStateChange
- vminfo
- AsynchronousTasks
- CreationTime
- ElementName
- EnabledState

- GuestOperatingSystem
- HealthState
- Heartbeat
- MemoryUsage
- Name
- Notes
- NumberOfProcessors
- OperationalStatus
- Path
- ProcessorLoad
- ProcessorLoadHistory
- Snapshots
- StatusDescriptions
- ThumbnailImage
- UpTime
- vmsettings
- AdditionalRecoveryInformation
- AllowFullSCSICommandSet
- AutoActivate
- AutomaticRecoveryAction
- AutomaticShutdownAction
- AutomaticStartupAction
- AutomaticStartupActionDelay
- Caption
- CreationTime
- DebugChannelId
- Description
- ElementName
- ExternalDataRoot
- InstanceID
- OtherVirtualSystemType
- Path
- ScopeOfResidence

- SettingType
- SnapshotDataRoot
- SystemName
- Version
- VirtualSystemType
- vmcursettings
- BIOSGUID
- BIOSSerialNumber
- BaseBoardSerialNumber
- ChassisAssetTag
- ChassisSerialNumber
- SystemName

Example: Show all VMs

This example displays the information of a virtual machine.

```
dpmhv-getVMINfo -host hvserver -vm TestVM
```

dpmhv-getVMProperties (Funclet) Command--Show VM Properties

The dpmhv-getVMProperties command retrieves the properties of the VM such as CPU, memory, and actions settings.

This command has the following format:

```
dpmhv-getVMProperties
-vm vmname|-vmid vmguid
-host hostname
[-retval]
[-silent]
```

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-getVMProperties command returns objects where each object represents the VM properties as follows:

- memory
- cpu
- cpuSocketCount
- cpuidLimit
- cpuReserve
- cpuLimit
- cpuWeight
- actions
- startAction
- startDelay
- stopAction
- recoveryAction

Example: Show VM Properties

This example displays the following VM properties: VM CPU and memory allocation.

```
dpmhv-getVMProperties -host hvserver -vm TestVM
```

Example: Show CPU and Memory Allocation of VM

This example displays the CPU and the memory allocation of the VM, "TestVM."

```
props=dpmhv-getVMProperties -host hvserver -vm TestVM -retval -silent
? "Memory:", props.memory+"MB"
? "CPU cores:", props.cpu.cpuSocketCount
```

dpmhv-getVMState (Funclet) Command--Show the VM State

The dpmhv-getVMState command retrieves the power state of the VM.

This command has the following format:

```
dpmhv-getVMState
-vm vmname|-vmid vmguid
-host hostname
[-retval]
[-silent]
```

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-host *hostname*

Specifies the name of the Hyper-V server host.

-silent

Specifies not to direct the output to the screen.

-retval

Returns a value for further processing.

Return Value

The dpmhv-getVMState command returns a string indicating the power state of the VM. The values returned are:

- disabled: VM is turned off
- enabled: VM is running
- paused: VM is paused
- suspended: VM is suspended

Example: Show the VM State

This example checks whether the VM is running.

```
s = dpmhv-getVMState -host hvserver -vm TestVM -retval -silent
if(s=="enabled")
? "VM is running"
else
? "VM is not running"
```

dpmhv-importVM (Funclet) Command--Import a VM

The dpmhv-importVM command imports an exported VM, which was exported using *dpmhv-exportVM* command. You can import VM for only one time as it is imported to a location similar to the exported VM.

This command has the following format:

```
dpmhv-importVM
-host hostname
-path pathname
[-vm vmname]
[-nonewid]
[-async]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-path pathname

Specifies the path of the VM that you want to import.

-vm *vmname*

Specifies the name of the VM.

-nonewid

(Optional) Specifies not to generate a unique GUID for the VM that you want to import. The imported VM has the GUID similar to the source VM (exported VM). Two VMs with same GUID creates conflicts and is not recommended.

-async

(Optional) Specifies the option to execute the command asynchronously. By default, this command is executed synchronously.

Note: If this command completes the execution before executing this option, it returns a job ID that is used to view the operation status.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-importVM command returns an empty string when it is executed synchronously. If executed asynchronously, a string representing job ID is passed to dpmhv-getJobErrorInfo, dpmhv-getJobInfo, or dpmhv-getJobStatus. In synchronous mode, if an error occurs during execution, the command returns the error code and reports the error.

Example: Import a VM

This example imports a VM which is exported using dpmhv-exportVM command.

```
dpmhv-exportVM -host hvserver -vm TestVM -dest c:\Ex\MyVM dpmhv-importVM
-host hvserver -path c:\Ex\MyVM -vm TestVM1
```

Additionally, you can issue dpmhv-importVM command to create multiple VMs from the originally exported VM.

dpmhv-importVMEx (Funclet) Command--Copy and Import VM

The dpmhv-importVMEx command lets you import and copy an exported VM, which was exported using *dpmhv-exportVMEx* command. You can import VM for multiple times as it is imported to a location different to the exported VM.

This command has the following format:

```
dpmhv-importVMEx
-host hostname
-path pathname
[-dest dest]
[-vm vmname]
[-nonewid]
[-async]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-path pathname

Specifies the path of the VM that you want to import and copy.

-dest dest

Specifies the destination path to import and copy the VM to.

-vm *vmname*

Specifies the name of the VM.

-nonewid

(Optional) Specifies not to generate a unique GUID for the VM that you want to import. The imported VM has the GUID similar to the source VM (exported VM). Two VMs with same GUID creates conflicts and is not recommended.

-async

(Optional) Specifies the option to execute the command asynchronously. By default, this command is executed synchronously.

Note: If this command completes the execution before executing this option, it returns a job ID that is used to view the operation status.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-importVMEx command returns an empty string when it is executed synchronously. If executed asynchronously, a string representing job ID is passed to *dpmhv-getJobErrorInfo*, *dpmhv-getJobInfo,* or *dpmhv-getJobStatus*. In synchronous mode, if an error occurs during execution, the command returns the error code and reports the error.

Example: Import VM

This example imports a VM which is exported using *dpmhv-exportVMEx* command.

```
dpmhv-exportVMEx -host hvserver -vm TestVM -dest c:\Ex\MyVM -nosubdir
dpmhv-importVMEx -host hvserver -path c:\Ex\MyVM -dest C:\VMs\TestVM1 -vm TestVM1
```

Additionally, you can issue *dpmhv-importVMEx* command to create multiple VMs from the originally exported VM.

dpmhv-setSysprepProperties (Cmdlet) Command--Create a Virtual Disk

The dpmhv-setSysprepProperties command lets you create a virtual disk image.

This command has the following format:

```
dpmhv-setSysprepProperties
-host hostname
-vm vmname|-vmid vmguid|-jobref job
[-computerName computerName]
[-ip4addr ip4addr]
[-ip4dhcp ip4dhcpInt]
[-ip4mask ip4mask]
[-ip4gw ip4gw]
[-ip4metric ip4metric]
[-ip4dns ip4dns]
[-disableAdmin]
[-adminPass adminPW]
[-autoLogon alcnt]
[-duplicatorString dupstr]
[-timeZone timezone]
[-productKey key]
[-userName UserName]
[-organization orgname>]
[-domain domname]
[-domainAdmin domad]
[-domainAdminPass dompw]
[-workgroup wgname]
[-adminUser adminUser]
[-adminUserPass adminUserPW]
[-custom custom]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

Default: $$HVHost

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-jobref *job*

Specifies the job ID of an asynchronous job.

Note: Upon the complete execution of asynchronous job, Hyper-V holds the job information for few minutes (five) only, beyond which it becomes invalid.

-computerName *computerName*

(Optional) Specifies the name of the computer. Support for this parameter requires an image using Sysprep tool. This option is invalid for asynchronous execution of the command.

Default: Null

-ip4addr *ip4addr*

(Optional) Specifies the static IPv4 address that you want to assign to an interface of the VM. To set an IP address for a specific interface, the IP address is prefixed with known interface name and '#' as separator. For example, -ip4addr "Local Area Connection#192.168.1.200". If the template image has more than one network adaptor, the IP address is assigned to the first interface. This option is invalid for asynchronous execution of the command.

Default: ""

-ip4dhcp *ip4dhcpInt*

(Optional) Specifies an option to turn on DHCP of a particular interface of the VM. You can also specify the interface name for this option. For example, -ip4dhcp "Local Area Connection." If the template image has more than one network adaptor, DHCP is turned on for the first interface. This option is invalid for asynchronous execution of the command.

Default: local

-ip4mask *ip4mask*

(Optional) Specifies the subnet mask that you want to assign for the VM. This option is used with -ip4ddr option. If an interface name is specified in the -ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of the command.

Default: ""

-ip4gw *ip4gw*

(Optional) Specifies the option to set the gateway for VM. This option is used with *-ip4ddr* option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Note: If an interface name is specified in the -ip4addr option, same interface name must be used in this option.

Default: ""

-ip4metric *ip4metric*

(Optional) Specifies the interface metric that you want to set for the VM. This option is used with *-ip4ddr* option. If an interface name is specified in the -ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: 1

-ip4dns *ip4dns*

(Optional) Specifies the DNS server that you want to set for the VM. This option is used with *-ip4ddr* option. If an interface name is specified in the -ip4addr option, same interface name must be used in this option. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: ""

-disableAdmin

(Optional) Specifies an option to disable default administrator account for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

-adminPass *adminPW*

(Optional) This option is used to set the default administrator account password for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This parameter is ignored in asynchronous execution.

Note: To set this option successfully, set the Windows Server 2003 administrator password which is created using Sysprep tool as empty.

Default: Null

-autoLogon *alcnt*

(Optional) Specifies an option to set the number of accounts that you want to create to log in automatically with default administrator account. The accounts are created after the completion of Sysprep process. hyperv_sp_dupstr. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default:
-1

-duplicatorString *dupstr*

(Optional) Specifies the name of the system duplicator that you want to set in the registry of the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: Null

-timeZone *timezone*

(Optional) Specifies the time zone used by the VM that are created using the template. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default:
-1

-productKey *key*

(Optional) Specifies the Windows product activation key for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: Null

-userName *UserName*

(Optional) Specifies the user name of the Windows inside the VM is licensed to. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: Null

-organization *orgname*

(Optional) Specifies the organization the Windows copy inside the VM is licensed to. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: Null

-domain *domainname*

(Optional) Specifies the domain name for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command. Domain and workgroup specifications are mutually exclusive.

Default: Null

-domainAdmin *domad*

(Optional) Specifies the user account as Domain Administrator that you want to create in the domain. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: Null

-domainAdminPass *dompw*

(Optional) Specifies the password for Domain Administrator user account that you want to create in the domain. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: Null

-workgroup *wgname*

(Optional) Specifies the workgroup that you want to create for the VM. Support for this parameter requires a Windows image created using Sysprep tool. Domain and workgroup specifications are mutually exclusive. This option is invalid for asynchronous execution of command.

Default: Null

-adminUser *adminUser*

(Optional) Specifies the administrator user name that you want to create as a part of the default Administrators group. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: Null

-adminUserPass *adminUserPW*

(Optional) Specifies the password of the administrator user account that you want to create as a part of the default Administrators group. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid for asynchronous execution of command.

Default: Null

-custom *custom*

(Optional) Specifies the list of comma-separated custom commands that you want to execute at the end of Sysprep process. This parameter requires Windows image of Sysprep. This parameter is ignored in asynchronous execution.

Default: Null

Return Value

The dpmhv-setSysprepProperties command returns an empty string when it is executed synchronously. If executed asynchronously, a string representing job ID is passed to dpmhv-getJobErrorInfo, dpmhv-getJobInfo, or dpmhv-getJobStatus. If an error occurs during execution, an exception is reported.

Example: Create a Virtual Disk

This example creates a dynamic virtual 2GB disk.

```
dpmhv-createVirtDisk -host hvserver -path C:\VMDisks\hdd.vhd -type dynamic -sizeGB
2
```

dpmhv-setVMClustered (Cmdlet) Command--Set a VM in a Cluster

The dpmhv-setVMClustered command lets you add or remove a VM from the shared cluster resources. In Hyper-V server environment, the VMs in a cluster can either be a shared cluster resource or private resource of the Hyper-V server. If the VM is a cluster shared resource, you cannot enable it for Quick or Live Migration between cluster nodes. Also, you cannot migrate the VM resources located on private storage such as virtual disk on a local hard drive, instead of cluster shared storage.

This command has the following format:

```
dpmhv-setVMClustered
-host hostname
-vm vmname|-vmid vmguid
-clustered {on,off}[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-clustered {on, off}

Specifies the sharing mode of the cluster.

on

VM is a shared cluster resource.

off

VM is a private resource of the Hyper-V server.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Set a VM in a Cluster

This example adds a VM to the shared cluster resources.

```
dpmhv-setVMClustered -host hvserver -vm TestVM -clustered on
```

dpmhv-setVMDisk (Funclet) Command--Create a Drive or Disk on a Drive Controller

The dpmhv-setVMDisk command lets you create a drive or disk on a drive controller. You can use the option to connect/disconnect an image.

This command has the following format:

```
dpmhv-setVMDisk
-host hostname
-vm vmname|-vmid vmguid
[-path pathname]
-drive{HDD,DVD}
-type{scsi,ide}[-id id]
[-lun lun]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-path pathname

(Optional) Specifies the path where the drive or disk is created on a drive controller.

-drive {*HDD, DVD*}

Specifies the drive type that you want to assign to the VM. You can assign the following drive types:

HDD

Represents the hard drive

DVD

Represents the drive of either Compact Disk (CD) or Digital Video Disk (DVD).

-type {scsi, ide}

Specifies the controller type that you want to attach to the virtual hard disk of the VM. Hyper-V supports the following two types:

SCSI

Specify the controller type as SCSI.

IDE

Specify the controller type as IDE.

-id *id*

(Optional) Specifies the ID of the controller mentioned in the controller type. For controller type IDE, the value is 0 or 1. For SCSI, the value is 0,1,2, or 3 based on the number of SCSI controllers added to the VM. If no id (or -1) is specified the command chooses the first controller of the specified type that has a channel available.

Default:
-1

-lun *lun*

(Optional) Specifies the logical unit of the controller in the form of <type> and <id>. For IDE, value is 0 or 1, for SCSI it is including the limit [0, 63]. If no unit number (or -1) is specified, the command chooses the available channel on the specified controller.

Default:
-1

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Create a Virtual Drive on a SCSI Controller

This example attaches a virtual hard drive image file to the first channel on the first SCSI controller.

```
dpmhv-setVMDisk -host hvserver -vm TestVM -type scsi -id 0 -lun 0 -drive HDD
-path c:\VHDs\disk.vhd
```

Example: Attach a DVD to a VM

This example attaches a physical DVD-ROM drive to the VM, "Test VM."

```
dpmhv-setVMDisk -host hvserver -vm TestVM -type ide -id 0 -lun 1 -drive DVD
-path D:
```

Example: Attach a Physical Host Disk to a SCSI Controller

This example gets the physical host disks and attaches them to the first available SCSI channel.

```
pd=dpmhv-getPhysDisks -host hvserver -retval -silent

dpmhv-setVMDisk -host hvserver -vm TestVM -type scsi -drive HDD -path (pd[0].Path)
```

dpmhv-setVMProperties (Cmdlet) Command--Set VM Properties

The dpmhv-setVMProperties command lets you set the properties of the VM.

This command has the following format:

```
dpmhv-setVMProperties
-host hostname
-vm vmname|-vmid vmguid
[-name name]
[-mem mem]
[-cpus cpus]
[-cpuidlimit limit]
[-cpureserve reserve]
[-cpulimit limit]
[-cpuweight weight]
[-startAction {none,auto,always}]
[-startDelay delay]
[-stopAction {save,off,shutdown}]
[-recoveryAction {none,restart,revert}]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-name *name*

Displays the name of the VM.

-mem *mem*

(Optional) Specifies the RAM memory in megabytes (MB) for the VM that you want to create.

Default: -1

-cpus *cpus*

(Optional) Specifies the number of CPU core that you want to assign to the VM.

-cpuidlimit *limit*

(Optional) Specifies the limit of CPU ID functionality of VM. This option improves the compatibility with legacy operating systems such as Windows NT.

Default: -1

-cpureserve *reserve*

(Optional) Specifies the percentage of the CPU that you want to reserve for the VM. If this option is not specified, Hyper-V server assigns CPU cycles based on the overall system usage.

Default: -1

-cpulimit *limit*

(Optional) Specifies the limit for the number of CPU resources used by a VM. This option improves the compatibility while moving VMs between physical hosts with different CPU capabilities.

Default: -1

-cpuweight w*eight*

(Optional) Specifies the relative weight of the virtual machine. This option controls resource allocation when more than one VM is running. Valid entry: integer, 1-10000.

Default: -1

-startAction {none,auto,always}

(Optional) Specifies the action that you want to perform on the VM when the Hyper-V host starts up. Options include the following:

none

Performs no action.

auto

Starts the VM automatically.

Note: Use this option if the VM was running before the Hyper-V host is shut down.

always

Starts the VM always.

-startDelay *delay*

(Optional) Specifies the delay in seconds to start the VM after the Hyper-V host is up and running.

Default: -1

-stopAction {save,off,shutdown}

(Optional) Specifies the action that you want to perform on the VM when the physical Hyper-V shuts down. Options include the following:

save

Suspends the VM.

off

Power offs the VM.

shutdown

Shuts down the system.

-startDelay *delay*

(Optional) Specifies the delay in seconds to start the VM after the Hyper-V host is up and running.

Default: -1

-recoveryAction {none,restart,revert}

(Optional) Specifies the action to perform on the VM after the Hyper-V host restarts from unexpected shutdown. Options include the following:

none

Performs no action.

restart

Restart the VM.

revert

Reverts to the last snapshot of the VM.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Change number of Core CPUs

This example changes the number of CPU cores assigned to the VM to two. To run the command successfully, turn off the VM.

```
dpmhv-setVMProperties -host hvserver -vm TestVM -cpus 2
```

dpmhv-SetVMVirtFloppy (Cmdlet) Command--Connect a Virtual Floppy Image to the VM Floppy Drive

The dpmhv-SetVMVirtFloppy command lets you connect a virtual floppy image to the specified VM floppy drive on the Hyper-V host.

This command has the following format:

```
dpmhv-setVMVirtFloppy
-host hostname
-vm vmname|-vmid vmguid
[-path pathname]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-path pathname

(Optional) Specifies the path of the virtual floppy image (*.vfd) file that you want to create.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Example: Attach a Floppy Image to VM Floppy Drive on Hyper-V Host

This example attaches a floppy image, "floppy.vfd" to the VM floppy drive on the Hyper-V host, "TestVM."

```
dpmhv-setVMVirtFloppy
-host hvserver
-vm TestVM
-path c:\img\floppy.vfd
```

Example: Detaches a Floppy Image from VM Floppy Drive on Hyper-V Host

This example detaches a floppy image from the VM floppy drive on the Hyper-V host.

```
dpmhv-setVMVirtFloppy -host hvserver -vm TestVM
```

dpmhv-ShowClusterSharedVolumes (Funclet) Command--Show all Cluster Shared Volumes

The dpmhv-ShowClusterSharedVolumes command displays all cluster shared volumes on a Hyper-V server.

This command has the following format:

```
dpmhv-showClusterSharedVolumes
-host hostname
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-ShowClusterSharedValumes command returns the current key and value pair from an array of objects.

Example: Show all Cluster Shared Volumes

This example returns a list of shared volumes on the host, "hvserver."

```
dpmhv-showClusterSharedVolumes -host hvserver
```

dpmhv-ShowDirectories (Funclet) Command--Show all Directories

The dpmhv-ShowDirectories command displays all subdirectories under a specified directory within a system. The specified system can be Hyper-V server or a Windows system with remote WMI enabled.

This command has the following format:

```
dpmhv-showDirectories
-host hostname
-dir dir
[-retval]
[-silent]
[-detail]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-dir *dir*

Specifies the name of the directory.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the list of directories.

Return Value

The dpmhv-ShowDirectories command returns an array of objects which represents a subdirectory under the specified parent directory.

The following properties are returned in regular mode:

- Caption
- Drive
- FileName
- Name
- Path
- Writeable $<<prop_detail
- AccessMask
- Archive
- CSCreationClassName
- CSName
- Caption
- Compressed
- CompressionMethod
- CreationClassName
- CreationDate
- Description
- Drive
- EightDotThreeFileName
- Encrypted
- EncryptionMethod
- Extension
- FSCreationClassName
- FSName
- FileName
- FileSize
- FileType
- Hidden
- InUseCount
- InstallDate

- LastAccessed
- LastModified
- Name
- Path
- Readable
- Status
- System
- Writeable

Example: Show all Directories

This example displays the subdirectories under the root directory (c: drive) of the host hvserver.

```
dpmhv-showDirectories
-host hvserver
-dir c:\
```

Example: Show all Directories under Program Files

This example displays the subdirectories of "C:\Program Files".

```
function walkDir(sPath)
{
  dirs = dpmhv-showDirectories -host hvserver -dir (sPath) -retval -silent
  for each (subdir in dirs)
  {
    ? subdir.Name
    walkDir(subdir.Name);
  }
}
walkDir("C:\Program Files");
```

dpmhv-ShowHosts (Funclet) Command--Show all Hyper-V Servers

The dpmhv-ShowHosts command displays all Hyper-V Servers.

This command has the following format:

```
dpmhv-showHosts
[-detail]
[-retval]
[-silent]
```

-detail

(Optional) Displays the details of the virtual networks (host networks).

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-ShowHosts command returns an array of objects representing Hyper-V Servers. The property, "Name" is returned in the regular mode.

The following properties are returned in detail mode:

- AssignedNumaNodeList
- CIMV2_AdminPasswordStatus
- CIMV2_AutomaticManagedPagefile
- CIMV2_AutomaticResetBootOption
- CIMV2_AutomaticResetCapability
- CIMV2_BootOptionOnLimit
- CIMV2_BootOptionOnWatchDog
- CIMV2_BootROMSupported
- CIMV2_BootupState
- CIMV2_Caption
- CIMV2_ChassisBootupState
- CIMV2_CreationClassName
- CIMV2_CurrentTimeZone
- CIMV2_DNSHostName
- CIMV2_DaylightInEffect
- CIMV2_Description
- CIMV2_Domain
- CIMV2_DomainRole
- CIMV2_EnableDaylightSavingsTime
- CIMV2_FrontPanelResetStatus
- CIMV2_InfraredSupported
- CIMV2_InitialLoadInfo
- CIMV2_InstallDate
- CIMV2_KeyboardPasswordStatus
- CIMV2_LastLoadInfo
- CIMV2_Manufacturer
- CIMV2_Model
- CIMV2_Name
- CIMV2_NameFormat

- CIMV2_NetworkServerModeEnabled
- CIMV2_NumberOfLogicalProcessors
- CIMV2_NumberOfProcessors
- CIMV2_OEMLogoBitmap
- CIMV2_OEMStringArray
- CIMV2_PCSystemType
- CIMV2_PartOfDomain
- CIMV2_PauseAfterReset
- CIMV2_PowerManagementCapabilities
- CIMV2_PowerManagementSupported
- CIMV2_PowerOnPasswordStatus
- CIMV2_PowerState
- CIMV2_PowerSupplyState
- CIMV2_PrimaryOwnerContact
- CIMV2_PrimaryOwnerName
- CIMV2_ResetCapability
- CIMV2_ResetCount
- CIMV2_ResetLimit
- CIMV2_Roles
- CIMV2_Status
- CIMV2_SupportContactDescription
- CIMV2_SystemStartupDelay
- CIMV2_SystemStartupOptions
- CIMV2_SystemStartupSetting
- CIMV2_SystemType
- CIMV2_ThermalState
- CIMV2_TotalPhysicalMemory
- CIMV2_UserName
- CIMV2_WakeUpType
- CIMV2_Workgroup
- Caption
- ClusterName
- CreationClassName

- Dedicated
- Description
- ElementName
- EnabledDefault
- EnabledState
- HealthCritical
- HealthOk
- HealthState
- HostCPUUtilisationPercent
- HostMemoryAvailableMB
- IdentifyingDescriptions
- InstallDate
- IsHyperVClusterNode
- NET_ArpAlwaysSourceRoute
- NET_ArpUseEtherSNAP
- NET_Caption
- NET_DHCPEnabled
- NET_DHCPLeaseExpires
- NET_DHCPLeaseObtained
- NET_DHCPServer
- NET_DNSDomain
- NET_DNSDomainSuffixSearchOrder
- NET_DNSEnabledForWINSResolution
- NET_DNSHostName
- NET_DNSServerSearchOrder
- NET_DatabasePath
- NET_DeadGWDetectEnabled
- NET_DefaultIPGateway
- NET_DefaultTOS
- NET_DefaultTTL
- NET_Description
- NET_DomainDNSRegistrationEnabled
- NET_ForwardBufferMemory

- NET_FullDNSRegistrationEnabled
- NET_GatewayCostMetric
- NET_IGMPLevel
- NET_IPAddress
- NET_IPConnectionMetric
- NET_IPEnabled
- NET_IPFilterSecurityEnabled
- NET_IPPortSecurityEnabled
- NET_IPSecPermitIPProtocols
- NET_IPSecPermitTCPPorts
- NET_IPSecPermitUDPPorts
- NET_IPSubnet
- NET_IPUseZeroBroadcast
- NET_IPXAddress
- NET_IPXEnabled
- NET_IPXFrameType
- NET_IPXMediaType
- NET_IPXNetworkNumber
- NET_IPXVirtualNetNumber
- NET_Index
- NET_InterfaceIndex
- NET_KeepAliveInterval
- NET_KeepAliveTime
- NET_MACAddress
- NET_MTU
- NET_NumForwardPackets
- NET_PMTUBHDetectEnabled
- NET_PMTUDiscoveryEnabled
- NET_ServiceName
- NET_SettingID
- NET_TcpMaxConnectRetransmissions
- NET_TcpMaxDataRetransmissions
- NET_TcpNumConnections

- NET_TcpUseRFC1122UrgentPointer
- NET_TcpWindowSize
- NET_TcpipNetbiosOptions
- NET_WINSEnableLMHostsLookup
- NET_WINSHostLookupFile
- NET_WINSPrimaryServer
- NET_WINSScopeID
- NET_WINSSecondaryServer
- Name
- NameFormat
- OnTimeInMilliseconds
- OperationalStatus
- OtherDedicatedDescriptions
- OtherEnabledState
- OtherIdentifyingInfo
- Path
- PowerManagementCapabilities
- PrimaryOwnerContact
- PrimaryOwnerName
- ProcessID
- RequestedState
- ResetCapability
- Roles
- Status
- StatusDescriptions
- TimeOfLastConfigurationChange
- TimeOfLastStateChange
- VSMS_BiosLockString
- VSMS_Caption
- VSMS_DefaultExternalDataRoot
- VSMS_DefaultVirtualHardDiskPath
- VSMS_Description
- VSMS_ElementName

- VSMS_InstanceID
- VSMS_MaximumMacAddress
- VSMS_MinimumMacAddress
- VSMS_NumaSpanningEnabled
- VSMS_PrimaryOwnerContact
- VSMS_PrimaryOwnerName
- VSMS_ScopeOfResidence

Example: Show all Hyper-V Servers

This example returns a list of Hyper-V Servers.

```
dpmhv-showHosts
```

Example: Show all Hyper-V Servers and VMs on a Host

This example displays a list of Hyper-V Servers and displays VMs on each host.

```
a = dpmhv-showHosts -retval -silent
    for each(h in a)
    {
      ?
      ? "Host:", h.Name
      dpmhv-showVMs -host (h.Name)
    }
```

dpmhv-ShowLogicalDisks (Funclet) Command--Show all Logical Disks

The dpmhv-ShowLogicalDisks command displays all logical disks attached to a Windows system. The specified system can be Hyper-V server or a Windows system with remote WMI enabled. This command determines the location of a VM in the Windows file system of a remote Hyper-V server.

This command has the following format:

```
dpmhv-showLogicalDisks
-host hostname
[-retval]
[-silent]
[-detail]
```

-host hostname

Specifies the name of the host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the list of logical disks.

Return Value

The dpmhv-ShowLogicalDisks command returns an array of objects which represents the logical disk attached to a specified host.

The following properties are returned in regular mode:

- Caption
- DeviceID
- FreeSpace
- Name
- Path
- Size

The following properties are returned in detail mode:

- Access
- Availability
- BlockSize
- Caption
- Compressed
- ConfigManagerErrorCode
- ConfigManagerUserConfig
- CreationClassName
- Description
- DeviceID
- DriveType
- ErrorCleared
- ErrorDescription
- ErrorMethodology
- FileSystem
- FreeSpace
- InstallDate
- LastErrorCode
- MaximumComponentLength
- MediaType
- Name
- NumberOfBlocks

- PNPDeviceID
- Path
- PowerManagementCapabilities
- PowerManagementSupported
- ProviderName
- Purpose
- QuotasDisabled
- QuotasIncomplete
- QuotasRebuilding
- Size
- Status
- StatusInfo
- SupportsDiskQuotas
- SupportsFileBasedCompression
- SystemCreationClassName
- SystemName
- VolumeDirty
- VolumeName
- VolumeSerialNumber

Example: Show all Logical Disks

This example returns the list of logical disks attached to the host.

```
dpmhv-showLogicalDisks -host hvserver
```

dpmhv-ShowSCVMMHardwareProfiles (Funclet) Command--Show all SCVMM Hardware Profiles

The dpmhv-ShowSCVMMHardwareProfiles command displays a list of hardware profiles, defined by Microsoft System Center Virtual Machine Manager (SCVMM), that are available for a VM when creating a VM using an SCVMM template.

This command has the following format:

```
dpmhv-showSCVMMHardwareProfiles
-scvmmHost scvmmHostname
[-retval]
[-silent]
[-detail]
```

-scvmmHost *scvmmHostname*

(Optional) Specifies the host name of the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter is valid when you use SCVMM integration to provision VMs.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the list of directories.

Return Value

The dpmhv-ShowSCVMMHardwareProfiles command returns an array of objects which represents a hardware profile defined under specified library server.

The following properties are returned in regular mode:

- CPUCount
- Description
- Memory
- Name

The following properties are returned in detail mode:

- Accessibility
- AddedTime
- BootOrder[]
- Connection
- CPUCount
- CPUMax
- CPUReserve
- CPUType
- ID
- IsFullyCached
- MarkedForDeletion
- Name
- ServerConnection
- Description
- DiskIO
- Enabled
- ExpectedCPUUtilization
- HostDrive
- ID
- IsFullyCached
- IsHighlyAvailable
- LimitCPUForMigration

- LimitCPUFunctionality
- MarkedForDeletion
- Memory
- ModifiedTime
- MostRecentTask
- Name
- NetworkUtilization
- NumLockEnabled
- ObjectType
- Owner
- RelativeWeight
- ServerConnection
- CEIPOptIn
- CPUPriority
- Channel
- CompanyName
- DatabaseInstanceName
- DatabaseName
- DatabaseServerName
- DiskIOPriority
- EvaluationDaysLeft
- FQDN
- FullyQualifiedDomainName
- IsConnected
- IsEvaluationVersion
- IsWorkgroupEdition
- LibraryRefresherEnabled
- LibraryRefresherFrequency
- MOMReportingEnabled
- MOMReportingServerURL
- MemoryPriority
- MinimumSupportedAgentVersion
- NetworkPriority

- ObjectCache
- OpsMgrReportingEnabled
- OpsMgrReportingServerURL
- OpsMgrServer
- PROAutomationLevel
- PROMonitoringLevel
- PhysicalAddressRangeEnd
- PhysicalAddressRangeStart
- PlacementGoal
- ProductID
- ProductVersion
- Profile
- SelfServiceContactEmail
- ServerInterfaceVersion
- UserName
- VMConnectDefaultPort
- VMRCAccessAccount
- VMRCDefaultPort
- ShareSCSIBus
- UndoDisksEnabled
- VirtualCOMPorts[]
- VirtualDVDDrives[]
- VirtualFloppyDrive
- ServerConnection
- VirtualFloppyDisk
- VirtualNetworkAdapters[]
- VirtualSCSIAdapters[]

Example: Show all SCVMM Hardware Profiles

This example displays the hardware profiles on the SCVMM library server SCVMMLibSrv.

```
dpmhv-showSCVMMHardwareProfiles
-scvmmHost SCVMMLibSrv
```

Example: Show Hardware Profiles for more than one CPU

This example displays all hardware profiles defined for more than one CPU core.

```
profs = dpmhv-showSCVMMHardwareProfiles -scvmmHost SCVMM -retval -silent
    for each(prof in profs)
    {
      if(prof.CPUCount > 1)
        ? prof.Name, "has more than 1 CPU cores"
    }
```

dpmhv-ShowSCVMMOSProfiles (Funclet) Command--Show all Guest OS Profiles

The dpmhv-ShowSCVMMOSProfiles command displays all guest operating system (OS) profiles that are available for a VM while creating a VM using the SCVMM template.

This command has the following format:

```
dpmhv-showSCVMMOSProfiles
-scvmmHost scvmmHostname
[-retval]
[-silent]
[-detail]
```

-scvmmHost *scvmmHostname*

(Optional) Specifies the host name of the Microsoft System Center Virtual Machine Manager (SCVMM) library server. This parameter is valid when you use SCVMM integration to provision VMs.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the list of directories.

Return Value

The dpmhv-ShowSCVMMOSProfiles command returns an array of objects which represents a guest OS profile on the specified SCVMM library server.

The following properties are returned in regular mode:

- Admin
- AdminPasswordHasValue
- ComputerName
- Description
- DomainAdmin
- DomainAdminPasswordHasValue
- JoinDomain
- JoinWorkgroup
- Name
- OperatingSystem
- OrgName
- ProductKeyHasValue

The following properties are returned in detail mode:

- Accessibility
- AddedTime
- Admin
- AdminPasswordHasValue
- ComputerName
- Description
- DomainAdmin
- DomainAdminPasswordHasValue
- Enabled
- FullName
- GuiRunOnceCommands
- ID
- IsFullyCached
- JoinDomain
- JoinWorkgroup
- MarkedForDeletion

- MergeAnswerFile
- ModifiedTime
- MostRecentTask
- Name
- ObjectType
- OperatingSystem
- AllowsOrgNameInSysprep
- Architecture
- Description
- Edition
- ID
- IsCustomizationAllowed
- IsFullyCached
- MarkedForDeletion
- Name
- ProductType
- RequiresAdministratorAccountNameInSysprep
- RequiresPIDInSysprep
- RequiresXMLSysprepFormat
- ServerConnection
- Version
- OrgName
- Owner
- ProductKeyHasValue
- ServerConnection
- CEIPOptIn
- CPUPriority
- Channel
- CompanyName
- DatabaseInstanceName
- DatabaseName
- DatabaseServerName
- DiskIOPriority

- EvaluationDaysLeft
- FQDN
- FullyQualifiedDomainName
- IsConnected
- IsEvaluationVersion
- IsWorkgroupEdition
- LibraryRefresherEnabled
- LibraryRefresherFrequency
- MOMReportingEnabled
- MOMReportingServerURL
- MemoryPriority
- MinimumSupportedAgentVersion
- Name
- NetworkPriority
- ObjectCache
- OpsMgrReportingEnabled
- OpsMgrReportingServerURL
- OpsMgrServer
- PROAutomationLevel
- PROMonitoringLevel
- PhysicalAddressRangeEnd
- PhysicalAddressRangeStart
- PlacementGoal
- ProductID
- ProductVersion
- Profile
- SelfServiceContactEmail
- ServerInterfaceVersion
- UserName
- VMConnectDefaultPort
- VMRCAccessAccount
- VMRCDefaultPort
- SysprepScript

- TimeZone

Example: Show all Guest OS Profiles

This example displays the guest OS profiles on the SCVMM library server SCVMMLibSrv:

```
dpmhv-showSCVMMOSProfiles
-scvmmHost SCVMMLibSrv
```

Example: Show all Guest OS Profiles without Password

This example displays all guest OS profiles without an Administrator password.

```
profs = dpmhv-showSCVMMOSProfiles -scvmmHost SCVMMLibSrv -retval -silent
    for each(prof in profs)
    {
      if(prof.AdminPasswordHasValue=="false")
        ? prof.Name,"does not have an Admin password defined"
    }
```

dpmhv-ShowTemplates (Funclet) Command--Show Templates on a Hyper-V Host

The dpmhv-ShowTemplates command returns a list of templates on the Hyper-V host or a Microsoft System Center Virtual Machine Manager (SCVMM) library server. The templates are the exported VMs which are managed in a template catalog and are used to provision new VMs.

This command has the following format:

```
dpmhv-showTemplates
[-host hostname]
[-scvmmHost scvmmHost]
[-detail]
[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-scvmmHost *scvmmHost*

(Optional) Specifies the name of the SCVMM library server. This parameter returns the templates created and maintained externally using SCVMM on the specified library server. This parameter is valid when you use SCVMM integration to provision VMs.

-detail

(Optional)Displays the details of the list of templates.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-ShowTemplates command returns an array of objects representing the templates.

The following properties are returned in regular mode:

- ElementName
- Name

The following properties are returned in detail mode:

- DiskspaceRequired
- ElementName
- MemoryAllocation
- Name
- NetworkInterfaceAddresses
- NetworkInterfaces
- NumberOfProcessors
- TemplateCreationDate
- TemplateDescription
- TemplateFileSystemPath
- TemplateSourceVM

Example: Get a List of VM Templates

This example returns the list of VM templates.

```
dpmhv-showTemplates
-host hvserver
```

Example: Get detailed information of templates and process

This example returns a list of template with detailed information of templates and process.

```
tt = dpmhv-showTemplates -host hvserver -silent -retval
for each(t in tt)
? t.ElementName, t.Description
```

dpmhv-ShowVMDisks (Funclet) Command--Show all Virtual Disks

The dpmhv-ShowVMDisks command displays all virtual disks in a VM on a Hyper-V host server.

This command has the following format:

```
dpmhv-showVMDisks
-vm vmname|-vmid vmguid
-host hostname
[-retval]
[-silent]
[-detail]
```

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the list of virtual disks.

Return Value

The dpmhv-ShowVMDisks command returns an array of objects which represents the disks attached to a VM.

The following properties are returned in regular mode:

- Caption
- Connection
- ElementName
- HostResource
- ResourceSubType

The following properties are returned in detail mode:

- Address
- AllocationUnits
- AutomaticAllocation
- AutomaticDeallocation
- Caption
- Connection
- ConsumerVisibility
- Description
- ElementName
- HostResource
- InstanceID
- Limit
- MappingBehavior
- OtherResourceType
- Parent
- Path
- PoolID
- Reservation
- ResourceSubType
- ResourceType
- VirtualQuantity
- VirtualSystemIdentifiers
- Weight

Example: Show all Virtual Disks of a VM

This example returns the list of virtual disks attached to the VM.

```
dpmhv-showVMDisks
-host hvserver
-vm TestVM
```

Example: Show all Disks and Virtual Hard Drive Image Files

This example returns the list of disk and virtual hard drive image files attached to the VM.

```
dd = dpmhv-showVMDisks -host hvserver -vm TestVM -detail -retval -silent
for each(d in dd)
{
  if(d.ResourceSubType=="Microsoft Virtual Hard Disk")
  {
  ? d.Connection
  }
}
```

dpmhv-showVMFloppy (Funclet) Command--Show the Properties of Floppy Drive

The dpmhv-showVMFloppy command lets you retrieve information about all floppy drives attached to every VM on the Hyper-V host.

This command has the following format:

```
dpmhv-showVMFloppy
-vm vmname|-vmid vmguid
-host hostname
[-retval]
[-silent]
[-detail]
```

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the information details of the floppy drive of the VM.

Return Value

The dpmhv-showVMFloppy command returns the objects representing the information details of the VM floppy drive properties.

The following properties are returned in regular mode:

- Caption
- Connection
- ElementName

The following properties are returned in detail mode:

- Address
- AllocationUnits
- AutomaticAllocation
- AutomaticDeallocation
- Caption
- Connection
- ConsumerVisibility
- Description
- ElementName
- HostResource
- InstanceID
- Limit
- MappingBehavior
- OtherResourceType
- Parent
- Path
- PoolID
- Reservation
- ResourceSubType
- ResourceType
- VirtualQuantity
- VirtualSystemIdentifiers
- Weight

Example: Show all Floppy Drives of a VM

This example returns the list of floppy drives attached to the VM.

```
dpmhv-showVMFloppy -host hvserver -vm TestVM
```

dpmhv-showVMNICs (Funclet) Command--Show all Network Interface Cards

The dpmhv-showVMNICs command displays all Network Interface Cards (NIC) in the VM on a Hyper-V host.

This command has the following format:

```
dpmhv-showVMNICs
-vm vmname|-vmid vmguid
-host hostname
[-retval]
[-silent]
[-detail]
```

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the list of NICs.

Return Value

The dpmhv-showVMNICs command returns the objects.

The following properties are returned in regular mode:

- Address
- ElementName
- StaticMacAddress

The following properties are returned in detail mode:

- Address
- AllocationUnits
- AutomaticAllocation
- AutomaticDeallocation
- Caption
- Connection
- ConsumerVisibility
- Description
- ElementName
- HostResource
- InstanceID
- Limit
- MappingBehavior
- OtherResourceType
- Parent
- Path
- PoolID
- Reservation
- ResourceSubType
- ResourceType
- StaticMacAddress
- VirtualQuantity
- VirtualSystemIdentifiers
- Weight

Example: Show VM NIC Information

This example shows the information of the NICs of the VM, "TestVM" on the host "hvserver."

```
dpmhv-showVMNICs -host hvserver -vm TestVM
//Find virtual network the first adapter of a VM is connected To
anic  = dpmhv-showVMNICs -host hvserver -vm TestVM -detail -silent -retval
lines = anic[0].Connection.split(",");
    for each(line in lines)
    {
      if(line.startsWith("SystemName="))
      {
        nsw = line.substr(11);
        nsw = nsw.trim('"');
        break;
      }
    }
    // Get switches
    asw = dpmhv-getHostSwitches -host hvserver -silent -retval
    // Find match
    for each(sw in asw)
    {
      if(sw.Name == nsw)
      {
        ?? "NIC",anic[0].ElementName
        ? " is connected to switch", sw.ElementName
      }
    }
```

dpmhv-showVMSCSI (Funclet) Command--Show all SCSI Controllers

The dpmhv-showVMSCSI command displays all SCSI controllers in the VM on a Hyper-V host. You can assign up to four SCSI controllers to a Hyper-V server.

This command has the following format:

```
dpmhv-showVMSCSI
-vm vmname|-vmid vmguid
-host hostname
[-retval]
[-silent]
[-detail]
```

-vm *vmname*

Specifies the name of the VM.

-vmid *vmguid*

Specifies the unique ID of the VM.

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

-detail

(Optional) Displays the details of the list of SCSI Controllers.

Return Value

The dpmhv-showVMSCSI command returns an array of objects representing the SCSI controllers of the specified VM.

The following properties are returned in regular mode:

- Caption
- ElementName

The following properties are returned in detail mode:

- Address
- AllocationUnits
- AutomaticAllocation
- AutomaticDeallocation
- Caption
- Connection
- ConsumerVisibility
- Description
- ElementName
- HostResource
- InstanceID
- Limit
- MappingBehavior
- OtherResourceType
- Parent
- Path
- PoolID
- Reservation
- ResourceSubType
- ResourceType
- VirtualQuantity
- VirtualSystemIdentifiers
- Weight

Example: Show all SCSI Controllers

This example displays the basic details of all SCSI controllers of the VM, "TestVM" on the host, "hvserver."

```
dpmhv-showVMSCSI
-host hvserver
-vm TestVM
```

Example: Show all SCSI Controllers in Detail

This example displays the details of the SCSI controllers of the VM, "TestVM" on the host, "hvserver."

```
dpmhv-showVMSCSI -host hvserver -vm TestVM -detail
```

dpmhyperv ShowVMs (Funclet) Command--Get all VMs

The dpmhv-showVMs command returns a list of VMs on a Hyper-V host server. The command gets the names and corresponding GUIDs of the specified VM.

This command has the following format:

```
dpmhv-showVMs
-host hostname[-retval]
[-silent]
```

-host *hostname*

Specifies the name of the Hyper-V server host.

-retval

Returns a value for further processing.

-silent

Specifies not to direct the output to the screen.

Return Value

The dpmhv-showVMs command returns an array of objects representing the VMs on the specified host.

The objects include the following properties:

guid

Represents the unique ID of the VM.

name

Represents the display name of the VM.

Example: Get all VMs

This example returns a list of VMs and their corresponding GUIDs on the host, "hvserver."

```
dpmhv-showVMs
-host hvserver
```

Example: Show VM Properties for all VMs

This example returns displays the properties of all VMs on the host, "hvserver."

```
a = dpmhv-showVMs -host hvserver -retval -silent
    for each(vm in a)
    {
      ?
      ? "VM:", vm.ElementName
      dpmhv-getVMProperties -host hvserver -vmid (vm.Name)
    }
```

CA IBM LPAR AutoShell Commands

You can use the AutoShell to script and automate CA IBM LPAR commands and run actions based on the command results. Corresponding commands are also available in the CLI.

dpmlpar-cycle Command--Cycle a Logical Partition (Funclet)

The dpmlpar-cycle command powers on, powers off, resets, or suspends a logical partition.

This command has the following format:

```
dpmlpar-cycle
-powerop {activate|restart|shutdown}
-hmc name
-managed_system managedsystemname
-partition_name partitionname
[-type {delayed|immediate|os_shutdown|immediate_os_shutdown}]
[-profile_name profilename]
[-activate_bootmode {normal|open_firmware}]
[-activate_keylock {normal|manual}]
[-verbose add_commandinfo]
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

-powerop {activate|restart|shutdown}

Specifies the power operation to perform on the LPAR. Options include the following:

activate

Turns on the LPAR.

restart

Turns off the LPAR, if necessary, and then turns it on.

shutdown

Turns off the LPAR.

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {immediate|os_shutdown|immediate_os_shutdown}

Specifies to use the imaging operation type resource group (res_group) or individual resources (individual_res). Options include the following:

immediate

Shuts down the partition immediately. This option can cause undesirable results if the data has only been partially updated.

os_shutdown

Shuts down the partition by issuing the command for a typical shutdown. The partition must be imaged for this option to succeed.

immediate_os_shutdown

Shuts down the partition by issuing the operating system command to shut down the system as soon as possible. This command bypasses typical shutdown activities including sending messages to other users. The partition must be imaged for this option to succeed.

-profile_name *lparprofile* (HMC only)

[-profile_name *lparname*] (IVM only)

Specifies the partition profile to use when you activate the logical partition. Required for HMC. Optional for IVM, and if specified the name must match the partition name.

-activate_bootmode {normal|open_firmware}

(Optional) Specifies the keylock mode for the activate operation. Options include the following:

normal

Starts the partition in the typical manner.

open_firmware

Starts the partition and opens the open firmware prompt.

-activate_keylock {normal|manual|bypass}

(Optional) Specifies the keylock mode for the activate operation. Options include the following:

normal

Starts the partition in unattended mode and requires no user interaction during activation.

manual

Starts the partition in attended mode and requires user interaction during activation.

bypass

Does not activate the keylock mode.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Activate a Logical Partition with the Default Profile

This example activates the logical partition, "testlpar," using the default profile.

```
dpmlpar-cycle -powerop activate -hmc uslihmc -managed_system testComputer
-partition_name testlpar -profile_name testlparprofile
```

Example: Activate a Logical Partition with a Specified Profile

This example activates the logical partition, "testlpar," using the profile testlparprofile.

```
dpmlpar-cycle -powerop activate -hmc uslihmc -managed_system testComputer
-partition_name testlpar -profile_name testlparprofile
```

Example: Activate a Logical Partition to Open Firmware Prompt

This example activates the logical partition "testlpar" using the profile testlparprofile and opens to the open firmware prompt.

```
dpmlpar-cycle -powerop activate -hmc usliivm -managed_system testMS
-partition_name testlpar -activate_bootmode open_firmware
```

Example: Delayed Shut Down of a Logical Partition

This example performs a delayed shutdown of the logical partition, "testlpar."

```
dpmlpar-cycle -hmc testivm -powerop shutdown -managed_system managedsys1
-partition testlpar -type delayed
```

dpmlpar-delete Command--Delete a Logical Partition (Funclet)

The dpmlpar-delete command deletes a logical partition that is deactivated.

Important! Verify that you back up any important data *before* you issue this command. This command deletes the LPAR and the data files for the LPAR. The LPAR must be powered off when you issue this command.

This command has the following format:

```
dpmlpar-delete
-hmc name
-managed_system managedsystemname
-partition_name partitionname
[-verbose add_commandinfo]
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name partitionname

Specifies the name of a logical partition to delete. This partition must exist on the managed system.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Delete a Logical Partition

This example deletes the logical partition lpar01.

```
dpmlpar-delete -hmc hmc02 -managed_system system05 -partition_name lpar01
```

dpmlpar-getresources Command--Get LPAR Resources (Funclet)

The dpmlpar-getresources command retrieves memory units, processor units, or processors for IBM AIX LPARs.

This command has the following format:

```
dpmlpar-getresources
-resource {all|memory|processors|processor_units}
-hmc name
-managed_system managedsystemname
-partition_name partitionname
[-verbose add_commandinfo]
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

-resource {all|memory|processors|processor_units}

Specifies whether a specific resource is retrieved or all resources. Options include the following:

all

Retrieves and displays all partition resources.

memory

Retrieves and displays only the memory resources for the partition.

processors

Retrieves and displays only the processor resources for the partition.

processor units

Retrieves and displays only the processor unit resources for the partition.

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition for which resources are being listed. The partition must exist on the managed system.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Get all Resources for an LPAR

This example retrieves all resources for lpar06.

```
dpmlpar-getresources -resource all -partition_name lpar06
-hmc hmc_02 -managed_system abcsystem4
```

Example: Get the Memory Resources for an LPAR

This example retrieves the memory resources for lpartest01.

```
dpmlpar-getresources -resource memory -partition_name lpartest01
hmc ivm_02 -managed_system abcsystem2
```

dpmlpar-image Command--Create an IBM AIX LPAR (Funclet)

The dpmlpar-image command creates an IBM AIX LPAR using the HMC and a target IBM AIX managed system. You can optionally deploy the IBM AIX operating system after you create the LPAR.

This command has the following format:

```
dpmlpar-image
-hmc name -managed_system managedsystemname
-partition_name partitionname
-profile_name profilename
-min_mem size
-desired_mem size
-max_mem size

-proc_mode {shared|dedicated}
-min_proc_units units
-desired_proc_units units
-max_proc_units units
-min_procs number
-desired_procs number
-max_procs number

-max_virtual_slots number
-share_mode {capped|uncapped}
[-uncap_weight weight]
[-io_slot DRC index,{true|false}]
[-lpar_io_pool_id id {,id, …}]

[-virtual_serial_adapter slot_num, remote_lpar_name, remote_slot_num, is_required]
[-virtual_scsi_client_adapter slot_num, remote_lpar_name, remote_slot_num,
is_required] |
[-virtual_scsi_server_client_adapter virtual_io_server_name, backing_device_name,
client_slot_num, is_required]
[-virtual_eth_adapter slot_num, is_IEEE, port_vlan_id, (additional_vlan_id,
additional_vlan_id, …), trunk_priority, is_required]

[-virtual_fc_server_client_adapter virtual_io_server_name, physical_fc_port_name,
client_slot_num, is_required
[virtual_io_server_name,physical_fc_port_name,client_slot_num,is_required;...]]
[-verbose add_commandinfo]

[-create_logical_volume <false|true>]
[-logical_volume_size <value>]
[-volume_group_names <value>]
[-logical_volume_name <value>]
[-use_logical_volume_name_as_prefix {no|yes}]
[-default_vio_server_name vioserver]
```

```
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

Additional parameters for provisioning AIX using a resource group

```
-provision_aix true
-type res_group
-res_group_name resourcegroupname
-machine_res_name machineresourcename
-target_username targetusername
[-target_password targetpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
-nim_master_host_name nimmasterhostname
[-scalability_server servername]
[-deploy_template templatename]
-auto_deploy {yes|no}
[-wait [timeout]]
```

Additional parameters for provisioning AIX using individual resources

```
-provision_aix true
-type individual_res
-machine_res_name machineresourcename
-lpp lppresource
-spot spotresource
-bosinst_data bosdata
-resolv_conf resolveconf
-fb_script fbscript
-post_inst_scripts script1,script2,script3
-target_username targetusername
[-target_password targetpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
-nim_master_host_name nimmasterhostname
[-scalability_server servername]
[-deploy_template templatename]
-auto_deploy {yes|no}
[-wait [timeout]]
```

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the name of the logical partition to create.

-profile_name *lparprofile* (HMC only)

[-profile_name *lparname*] (IVM only)

Specifies the partition profile to use when you activate the logical partition. Required for HMC. Optional for IVM, and if specified the name must match the partition name.

-min_mem *size*

Defines the minimum amount of memory for the partition.

-desired_mem *size*

Defines the desired amount of memory for the partition.

-max_mem *size*

Defines the maximum amount of memory for the partition.

-proc_mode {shared|dedicated}

Specifies the type of processor mode for the partition. Options include the following:

shared

Shares processor resources with other partitions.

dedicated

Specifies that the partition has dedicated processor resources.

-min_proc_units *units*

Defines the minimum number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-desired_proc_units *units*

Defines the assigned number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-max_proc_units *units*

Defines the maximum number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-min_procs *number*

Defines the minimum number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-desired_procs *number*

Defines the assigned number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-max_procs *number*

Defines the maximum number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-shared_mode {capped|uncapped}

Specifies whether the managed system allows the logical partition to use idle processing units that are not committed to another partition from the shared processor pool.

Note: This option can only be used with shared processors.

Options include the following:

capped

Specifies that the partition can only use the number of processing units that are committed to it.

uncapped

Specifies that the partition can use idle processor units from the shared processor pool when they are available.

-uncap_weight *weight*

(Optional) Defines a weighted average of processing priority when you select uncapped sharing mode.

Limits: 0 - 255

-max_virtual_slots *number*

Defines the maximum number of virtual adapters for this partition.

Default: 2

Limits: 2 - 65,536

-io_slot *DRC-Index*,{true|false}

(Optional) Specifies the I/O slot for a physical component. You can specify this value multiple times for different I/O devices.

DRC-Index

Specifies the slot dynamic reconfiguration connector (DRC) index.

true

Specifies that a DRC index is required for the I/O slot.

false

Specifies that a DRC index is not required for the I/O slot.

-io_pool_id *id* {,*id* ...}

(Optional) Defines the group of I/O adapters that can be taken over and used by any of a specified group of logical partitions without any active intervention from the HMC. The group of partitions can be a comma-separated list of I/O pool IDs.

-virtual_serial_adapter *slot_num, remote_lpar_name, remote_slot_num, is_required*

(Optional) Defines the virtual serial adapters for this logical partition. The variable is_required can be set to true or false. Only client serial adapter is supported, but can be specified multiple times.

Default: Two server serial adapters created in slots 1 and 2.

Note: Not supported for creating an LPAR on IVM.

-virtual_eth_adapter_client *slot_num, is_IEEE, port_vlan_id1 (vlanid2,vlanid3,...), trunk_priority, is_required*

(Optional) Defines the virtual ethernet adapters for this logical partition and can be specified multiple times. Optional values are *vlan_id*n and *trunk_priority*. The variables *is_IEEE* and *is_required* can be set to true or false. Additional *vlan_id*s must be comma-separated and enclosed in parentheses.

Note: When creating an LPAR on IVM, *slot_num* must be greater than or equal to 4.

Example: 4,false,1,,,true

-virtual_scsi_client_adapter *slot_num, remote_lpar_name, remote_slot_num, is_required*

(Optional) Defines the virtual client SCSI adapters for this logical partition and can be specified multiple times. The variable is_required can be set to true or false.

-virtual_scsi_server_client_adapter *virtual_io_server_name, backing_device_name, client_slot_num, is_required*

(Optional) Defines a virtual SCSI server device and virtual SCSI client device, which is automatically linked after the server device is created and the server slot number is identified. This parameter can be specified multiple times. The variable *is_required* can be set to true or false.

Example: CUST-VIOSERVER,hdisk5,3,true

Note: If you create Logical Volume using the dpmlpar image command and set the -create_logical_volume option to 'yes', the -virtual_scsi_server_client_adapter option is not required and shall be omitted.

-virtual_fc_server_client_adapter *virtual_io_server_name, physical_fc_port_name, client_slot_num, is_required [;virtual_io_server_name, physical_fc_port_name, client_slot_num, is_required;...]*

(Optional) Defines a virtual Fibre Channel (FC) client adapter, FC server adapter on VIO server, and associates the FC server adapter to the physical FC port. This option is not valid when the -provision_aix option is set to true. This parameter can be specified multiple times. The variable *is_required* can be set to true or false.

-create_logical_volume {no|yes}

(Optional) Specifies whether to create Logical Volume.

Default: no

Note: If you create Logical Volume using the dpmlpar image command and set the -create_logical_volume option to 'yes', the -virtual_scsi_server_client_adapter option is not required and shall be omitted.

-logical_volume_size *logical_volume_size*

(Optional) Defines the size of the Logical Volume in MB.

-volume_group_names *volume_group_1, volume_group_2, volume_group_3*

(Optional) Specifies the Logical Volume group names as a comma-separated list.

-logical_volume_name *logical_volume_name*

(Optional) Defines the name of the Logical Volume.

-use_logical_volume_name_as_prefix {no|yes}

(Optional) Specifies whether to use the Logical Volume Name as a prefix.

Default: no

-default_vio_server_name *vioserver*

(Optional) Specifies the VIO server that is used for creation of Logical Volumes.

-itcm_server *itcm_servername*

(Optional) Specifies the name of the [assign itcm product name for the adsm variable] Server.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Required parameters for provisioning

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-auto_deploy {yes|no}

Specifies whether CA Virtual Assurance agents are deployed automatically. Options include the following:

yes

Deploys CA Virtual Assurance agents automatically.

no

Prevents CA Virtual Assurance agents from being deployed automatically.

Default: no

-bosinst_data *bos_install_data_resource*

Specifies a file that contains information for the base operating system (BOS) installation program. Optional if –install_type is mksysb. Required if -install_type is rte.

-deploy_template *templatename*

(Optional) Specifies the name of the generic template created in CA Virtual Assurance.

Note: Do not confuse this template with the templates created and managed by VMware vCenter.

-fb_script *fbscript*

(Optional) Defines the name of the file to use to configure devices when a NIM client is initially booting after the BOS installation process is complete.

-lpp *lpp_resource*

Specifies the licensed program product files to use for an imaging request. Optional if –install_type is mksysb. Required if -install_type is rte.

-machine_res_name *machineresourcename*

Defines the name of the machine resource. This name must be predefined at the NIM Master.

-nim_master_host_name *nimmasterhostname*

Defines the NIM master host name to perform the image deployment.

-post_inst_scripts *script1,script2,script3*

(Optional) Specifies a comma-separated list of scripts to run after installation.

-provision_aix {true|false}

Indicates whether the partition is imaged using NIM, after you create it.

true

Uses NIM to image the partition that you created. If you set to true, the NIM resource group or NIM individual resource parameters are used. See the dpmnim image Command|Deploy an IBM AIX Image Using a Resource Group and dpmnim image Command|Deploy an IBM AIX Image Using an Individual Resource. The job ID is returned when NIM provisioning starts.

false

Does not use NIM to image the partition that you created. No job ID is returned.

-res_group_name *resource group name*

Defines the name of the resource group.

-resolve_conf *resolveconf*

(Optional) Defines a file that contains valid */etc/resolv.conf* entries that define Domain Name Protocol name-server information for local resolver routines.

-scalability_server *servername*

(Optional) Specifies the [assign itcm product name for the adsm variable] scalability server for software distribution.

-spot *spotResource [mksysbResource]*

Defines the shared product object tree to use for an imaging request.

-target_password *targetpassword*

(Optional) Defines the user password used for deploying agents to the target host server to which you are deploying the image. If you do not specify the password, it is retrieved from the authorization file.

Note: Use the dpmutil CLI to set up the authorization file.

-target_username *targetusername*

Defines the user name used for deploying agents to the target host server to which you are deploying the image.

-type {res_group|individual_res}

Specifies to use the imaging operation type resource group or individual resources.

res_group

Specifies to use the resource group for imaging.

individual_res

Specifies to use individual resources for imaging.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

Example: Create an IBM AIX Logical Partition

This example creates a logical partition, but does not provision it.

```
dpmlpar-image -hmc ivm01 -managed_system testMS -partition_name lpartest01
-profile_name Default -max_virtual_slots 10 -min_mem 128 -desired_mem 256
-max_mem 2048 -min_procs 1 -desired_procs 2 -max_procs 5 -proc_mode shared
-share_mode uncapped -uncap_weight 123 -min_proc_units .5 -max_proc_units 3.25
-desired_proc_units 1.75 -virtual_serial_adapter 2,serial_partition,1,true
-virtual_scsi_client_adapter 3,scsi_partition,7,true
-virtual_eth_adapter 4,true,1,(22,35,54),,true -io_slot 21020003,false
```

Example: Create an IBM AIX Logical Partition and Image it Using Individual Resources

This example creates a logical partition and provisions it using individual resources.

```
dpmlpar-image -hmc hmc01 -managed_system testMS -partition_name IRTEST
-profile_name Default -max_virtual_slots 10 -min_mem 128 -desired_mem 256
-max_mem 2048 -min_procs 1 -desired_procs 1 -max_procs 1 -proc_mode dedicated
-virtual_serial_adapter 2,SerialPartition,1,true
-virtual_scsi_client_adapter 3,SCSIPartition,7,true
-virtual_eth_adapter 4,true,1,(22,35,54),0,true -io_slot 21020003,false
-provision_aix true -type individual_res -lpp 530lpp_res -spot 530spot_res
-bosinst_data 530_bid_ow -resolv_conf master_net_conf -post_inst_scripts piScript
-machine_res_name MachineName -nim_master_host_name machine.mydomain.com
-auto_deploy no -target_username root -target_password password
```

Example: Create an IBM AIX Logical Partition and Image it Using a Resource Group

This example creates a logical partition and provisions it using a resource group.

```
dpmlpar-image -hmc hmc01 -managed_system testMS -partition_name RGTEST
-profile_name Default -max_virtual_slots 10 -min_mem 128 -desired_mem 256
-max_mem 2048 -min_procs 1 -desired_procs 2 -max_procs 5 -proc_mode dedicated
-virtual_serial_adapter 2,SerialPartition,1,true
-virtual_scsi_client_adapter 3,SCSIPartition,7,true
-virtual_eth_adapter 4,true,1,(22,35,54),,true -io_slot 21020003,false
-provision_aix true -type res_group -res_group_name Res_grp -machine_res_name
Machine
-nim_master_host_name machine.mydomain.com -auto_deploy no
-target_username root -target_password password
```

dpmlpar-imgjobcheck Command--Retrieve Status of IBM AIX Imaging Job (Funclet)

The dpmlpar-imgjobcheck command retrieves the status of the IBM AIX logical partition imaging job for a specific CA Virtual Assurance job ID.

This command has the following format:

```
dpmlpar-imgjobcheck -status jobID [-verbose add_commandinfo]
```

-status *jobID*

Specifies the CA Virtual Assurance job ID used to obtain the job status.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

Example: Retrieve the Status of the IBM AIX Imaging Job Using the Job ID

This example obtains the job status of the IBM AIX logical partition imaging job using the CA Virtual Assurance job ID 42.

```
dpmlpar-imgjobcheck -status 42
```

dpmlpar-list Command--List HMC Resources (Funclet)

The dpmlpar-list command lists information from the Hardware Management Console.

This command has the following format:

```
dpmlpar-list
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-display {managed_systems | managed_system_details | partitions | io_components |
backing_devices | scsi_adapters | partition_details | profiles | wwpns}
[-verbose add_commandinfo]
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

-display {managed_systems|managed_system_details|partitions|io_components|backing_devices|scsi_adapters|partition_details|profiles|wwpns}

Specifies which resources to list. Options include the following:

managed_systems

Lists the managed systems controlled by the management hardware console.

managed_system_details

Provides detailed information about a managed system.

partitions

Lists the partitions on a managed system.

io_components

Lists the I/O components of a managed system.

backing_devices

Lists the devices that are available to be attached as backing devices to the Server Virtual SCSI Adapter.

scsi_adapters

Lists the SCSI adapters of a managed system.

partition_details

Lists the details for a partition.

profiles

Lists the list of profiles for a partition.

wwpns

Displays the worldwide port names for a partition.

-hmc *name*

Specifies the HMC/IVM for which to list information.

-managed_system *managedsystemname*

(Optional) Specifies the managed system on which the logical partition resides for which you want to list information.

Note: Do not use with managed_systems option.

-partition_name *partitionname*

(Optional) Specifies the logical partition for which you want to list information.

Note: Do not use with managed_systems option.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Display the List of Managed Systems

This example displays the managed systems for the hardware management console "labhmc."

```
dpmlpar-list -display managed_systems -hmc labhmc
```

Example: Display the SCSI Adapters

This example displays the SCSI adapters for the managed system "testMS."

```
dpmlpar-list -display scsi_adapters -hmc labhmc
-managed_system testMS
```

Example: Display Partition Details

This example displays the details for the logical partition "testlpar."

```
dpmlpar-list -display partition_details -hmc uslihmc
-managed_system testMS -partition_name testlpar
```

dpmlpar-setresources Command--Add Memory Resources (Funclet)

The dpmlpar-setresources command adjusts memory units for IBM AIX LPARs.

This command has the following format:

```
dpmlpar-setresources
-add_memory value
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all}
[-verbose add_commandinfo]
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

-add_memory *value*

Defines the amount of memory to add to the partition.

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the current profile value. The adjusted values are saved for the partition.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Add Memory to a Logical Partition

This example adds 128 MB of memory to the logical partition "lpartest01."

```
dpmlpar-setresources -add_memory 128 -partition_name lpartest01
-hmc uni02 -managed_system usil01system1 -type dynamic
```

Example: Add Memory to a Logical Partition and Update a Profile

This example adds 128 MB of memory to the logical partition "lpartest01" and updates the partition profile file.

```
dpmlpar-setresources -add_memory 128 -partition_name lpartest01
-hmc uni02 -managed_system usil01system1 -type all -profile_name lpartest01
```

dpmlpar-setresources Command--Add Processor Resources (Funclet)

The dpmlpar-setresources command adds processors and processor units for IBM AIX LPARs.

This command has the following format:

```
dpmlpar-setresources
{-add_processors|add_processor_units} value
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all}
[-verbose add_commandinfo]
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

-add_processors *value*

Defines the number of processors to add to the partition.

-add_processor_units *value*

Defines the processor units to add to the partition.

Limits: .01 increments

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the current profile value. The adjusted values are saved for the partition.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Add Processors for a Partition and Update Profile

This example adds a processor to the partition "lpartest01" and updates the partition profile.

```
dpmlpar-setresources -add_processors 1 -partition_name lpartest01
-hmc uni02 -managed_system MSsystem1 -type all -profile_name lpartest01
```

Example: Add Processors and Processor Units for a Partition

This example temporarily adds the processor and processor unit resources for the partition "lpartest01."

```
dpmlpar-setresources -add_processors 1 -add_processor_units 4.5
partition_name lpartest01 -hmc uni02 -managed_system MSsystem1 -type dynamic
```

dpmlpar-setresources Command--Subtract Memory Resources (Funclet)

The dpmlpar-setresources command removes memory units for IBM AIX LPARs.

This command has the following format:

```
dpmlpar-setresources
-subtract_memory value
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all}
[-verbose add_commandinfo]
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

-subtract_memory *value*

Defines the amount of memory to remove from the partition.

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the current profile value. The adjusted values are saved for the partition.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Subtract Memory from a Logical Partition

This example subtracts 128 MB of memory from the logical partition "lpartest01."

```
dpmlpar-setresources -subtract_memory 128 -partition_name lpartest01
-hmc con02 -managed_system MSsystem1 -type dynamic
```

Example: Subtract Memory from a Logical Partition and Update a Profile

This example subtracts 128 MB of memory from the logical partition "lpartest01" and updates the partition profile file.

```
dpmlpar-setresources -subtract_memory 128 -partition_name lpartest01
-hmc con02 -managed_system MSsystem1 -type all
```

dpmlpar-setresources Command--Subtract Processor Resources (Funclet)

The dpmlpar-setresources command removes processors and processor units from IBM AIX LPARs.

This command has the following format:

```
dpmlpar-setresources
{-subtract_processors|subtract_processor_units} value
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all}
[-verbose add_commandinfo]
[-sc URL]
[-ws_remote_user username]
[-ws_remote_password password]
[-pre]
[-post]
```

-subtract_processors *value*

Defines the number of processors to remove from the partition.

-subtract_processor_units *value*

Defines the processor units to remove from the partition.

Limits: .01 increments

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the current profile value. The adjusted values are saved for the partition.

-verbose *add_commandinfo*

Provides additional information about how to execute the command.

-sc *URL*

(Optional) Specifies the URL of the service controller.

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Subtract Processors From a Partition and Update Profile

This example subtracts a processor from the partition "lpartest01" and updates the partition profile

dpmlpar-setresources -subtract_processors 1 -partition_name lpartest01
-hmc hmc02 -managed_system MSsystem1 -type all

Example: Subtract Processors and Processor Units From a Partition

This example temporarily adjusts the processor and processor unit resources for the partition "lpartest01."

```
dpmlpar-setresources -subtract_processors 1 -subtract_processor_units 4.5
-partition_name lpartest01 -hmc ivm02 -managed_system MSsystem1 -type dynamic
```

CA Oracle Solaris Zones AutoShell Commands

You can use the AutoShell to script and automate CA Oracle Solaris Zones commands and run actions based on the command results. Corresponding commands are also available in the CLI.

dpmzone-associateproject Command--Associate a Task with a Project (Funclet)

The dpmzone-associateproject command associates a task with a project. Projects and tasks are the basic entities used to identify workloads in a Solaris 10 operating system. Projects are collections of tasks, which are collections of processes. Each process belongs to only one task, and each task belongs to only one project.

This command has the following format:

```
dpmzone-associateproject
-host hostname -name zonename
-proj_name pname -task_id tid
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone that provides the project.

-proj_name *pname*

Specifies the project.

-task_id *tid*

Specifies the ID number of the task.

Example

Associate a task with a project:

```
dpmzone-associateproject -host SolarisServer2 -name myzone1 -project_name myproject1
-task_id 1954
```

dpmzone-clonezone Command--Clone a Zone (Funclet)

The dpmzone-clonezone command creates a duplicate zone from an existing zone. The source zone must be halted to start the cloning process. Cloning occurs on the Solaris 10 server and may take some time.

This command has the following format:

```
dpmzone-clonezone
-host hostname
-name zonename
-new_name nzonename
-new_path npath
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone that you want to clone.

-new_name *nzonename*

Defines the new zone name.

-new_path *npath*

Defines the name of the path from the global zone to the current zone.

Example

Clone a zone on host SolarisServer2:

```
dpmzone-clonezone -host SolarisServer2 -name myzone1 -new_name myzone2
-new_path /opt/zones/myzone2
```

dpmzone-createandinstallzone Command--Create and Install a Zone

The createandinstallzone command creates and installs a zone with custom parameters on the Solaris host.

This command has the following format:

```
dpmzone-createandinstallzone
[-sc sc_host]
-host hostname
-name zonename
-path zonepath
-type type
[-archive_path path]
[-autoboot]
[-if_type name]
[-ip ip]
[-pool_name pool]
[-sched_type sched]
[-phy_mem pmem]
[-swap_mem smem]
[-lock_mem lmem]
[-desc desc]
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Defines the name of the new zone.

-path *zonepath*

Defines the path of the new zone.

-type *type*

Specifies the type of the new zone. Options include the following:

native

Creates a non-global zone with a Solaris 10 operating environment for running applications.

whole-root

Creates a whole root zone that does not inherit packages.

branded

Creates a non-global zone that contains a non-native operating environment for running applications.

Default: native

-archive_path *path*

(Optional) Specifies the path of the operating environment installer for a branded zone.

Limits: This argument is required for branded zones, but not required for native zones.

-autoboot

(Optional) Specifies that a zone boots automatically at system boot.

Note: If the zones service is disabled on the server, the zone does not autoboot, regardless of the setting of this property. You can enable the service by using the following command:

```
svcadm enable svc:/system/zones:default
```

-if_type *name*

(Optional) Specifies the type of the network interface used by the zone, for example, eri0.

-ip *ip*

(Optional) Defines the IP address of the zone.

-pool_name *pool*

(Optional) Specifies the name of the pool with which you associate the zone.

-sched_type *shed*

(Optional) Specifies the type of scheduler used to allocate CPU time based on shares. Shares are the portion of the system CPU resources allocated to a project. Valid values include the following:

ts

Specifies the Time Share Scheduler which fairly allots CPU resources to every process and does not concentrate CPU resources on a particular process. ts is the default scheduler for the Solaris operating environment.

fss

Specifies the Fair Share Scheduler which allows you to allocate CPU time based on shares.

-phy_mem *pmem*

(Optional) Defines the physical memory that is assigned to the zone. A scale (K, M, G, T) can be applied to the value of this number, for example, 1M is one megabyte.

-swap_mem *smem*

(Optional) Defines the swap memory that is assigned to the zone.

-lock_mem *lmem*

(Optional) Defines the locked memory that is assigned to the zone. Locked memory cannot be paged.

-desc description

(Optional) Defines a description for the zone.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmzone-createpool Command--Create a Resource Pool (Funclet)

The dpmzone-createpool command creates a resource pool on a Solaris 10 host.

This command has the following format:

```
dpmzone-createpool
-host hostname
-pset_name pset
-cpu_min mincpu
-cpu_max maxcpu
-pool_name pool
-sched_type sched
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-pset_name *pset*

Defines the processor set. Each processor set (grouping of CPUs) can contain zero or more CPUs.

-cpu_min *mincpu*

Defines the minimum number of CPUs in the processor set.

-cpu_max *maxcpu*

Defines the maximum number of CPUs in the processor set.

-pool_name *pool*

Defines the name of the pool with which you associate the zone.

-sched_type *shed*

Specifies the type of scheduler used to allocate CPU time based on shares. Shares are the portion of the system CPU resources allocated to a project. Options include the following:

ts

Specifies the Time Share Scheduler which fairly allots CPU resources to every process and does not concentrate CPU resources on a particular process. ts is the default scheduler for the Solaris operating environment.

fss

Specifies the Fair Share Scheduler which allows you to allocate CPU time based on shares.

Example

Create the resource pool POOL1 on host SolarisServer2.

```
dpmzone-createpool -host SolarisServer2 -pset_name PSET1 -cpu_min 1 -cpu_max 20
-pool_name POOL1 -sched_type FSS
```

dpmzone-createproject Command--Create a Project (Funclet)

The dpmzone-createproject command creates a project in a zone.

This command has the following format:

```
dpmzone-createproject
-host hostname -name zonename
-user_id uid
[-project_id pid]
-proj_name pname
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone name.

-user_id *uid*

Specifies one of the users of the zone.

Example: root

-project_id p*id*

(Optional) Defines the project ID. You can assign the ID or let the system automatically generate one.

-proj_name *pname*

Defines the name of the new project.

Example

Create a project in a zone:

```
dpmzone-createproject -host SolarisServer2 -name myzone1 -user_id root
-proj_name myProject
```

dpmzone-createzone Command--Create a Zone (Funclet)

The dpmzone-createzone command creates a zone with custom parameters on the Solaris 10 host.

This command has the following format:

```
dpmzone-createzone
-host hostname
-name zonename
-path zonepath
-type type
[-autoboot]
[-if_type name]
[-ip ip]
[-pool_name pool]
[-sched_type sched]
[-phy_mem pmem]
[-swap_mem smem]
[-lock_mem lmem]
[-desc desc]
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Defines the name of the new zone.

-path *zonepath*

Defines the pathname from the global zone to the current zone.

-type *type*

Specifies the type of the new zone. Options include the following:

native

Creates a non-global zone with a Solaris 10 operating environment for running applications.

whole-root

Creates a whole root zone that does not inherit packages.

branded

Creates a non-global zone that contains a non-native operating environment for running applications.

Default: native

-autoboot

Specifies that a zone boots automatically at system boot.

Note: If the zones service is disabled on the server, the zone does not autoboot, regardless of the setting of this property. You can enable the service by using the following command:

```
svcadm enable svc:/system/zones:default
```

-if_type *name*

Specifies the network interface used by the zone, for example, eri0.

-ip *ip*

(Optional) Defines the IP address of the zone.

-pool_name *pool*

Specifies the pool with which you associate the zone.

-sched_type *shed*

Specifies the type of scheduler used to allocate CPU time based on shares. Shares are the portion of the system CPU resources allocated to a project. Options include the following:

ts

Specifies the Time Share Scheduler which fairly allots CPU resources to every process and does not concentrate CPU resources on a particular process. ts is the default scheduler for the Solaris operating environment.

fss

Specifies the Fair Share Scheduler which allows you to allocate CPU time based on shares.

-phy_mem *pmem*

Defines the physical memory that is assigned to the zone. A scale (K, M, G, T) can be applied to the value of this number, for example, 1M is one megabyte.

-swap_mem *smem*

Defines the swap memory that is assigned to the zone.

-lock_mem *lmem*

Defines the locked memory that is assigned to the zone. Locked memory cannot be paged.

-desc *description*

(Optional) Defines a description of the zone.

Example

Create a zone called WebServer4:

```
dpmzone-createzone -host MySolarisServer -name WebServer4 -path /Zones/Apache
-type native -autoboot -if_type eri0 -ip 192.168.100.100 -pool_name WebServer
-sched_type fss -phy_mem 1024M -swap_mem 2048M
```

dpmzone-customcommand Command--Run a Custom Command (Funclet)

The dpmzone-customcommand command lets you run external commands or scripts on the Solaris server.

Note: For information about restricted external commands, see the Custom Commands appendix in this guide.

This command has the following format:

```
dpmzone-customcommand
-host hostname
-cmd command
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-cmd *command*

Defines which program or script to run.

Example

Run a command on host SolarisServer2.

```
dpmzone-customcommand -host SolarisServer2 -cmd
/usr/local/lab/scripts/test_connections.pl
```

dpmzone-deleteproject Command--Delete a Project (Funclet)

The dpmzone-deleteproject command deletes a project from a zone.

This command has the following format:

```
dpmzone-deleteproject
-host hostname
-name zonename
-proj_name pname
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone that is associated with the project.

-proj_name *pname*

Specifies the project that you want to delete.

Example

Delete a project:

```
dpmzone-deleteproject -host SolarisServer2 -name myzone1 -project_name myproject1
```

dpmzone-deletezone Command--Delete a Zone (Funclet)

The dpmzone-deletezone command lets you delete a zone on the Solaris server.

This command has the following format:

```
dpmzone-deletezone
-host hostname
-name zonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to delete.

Example

Delete a zone on host SolarisServer2.

```
dpmzone-deletezone -host SolarisServer2 -name myzone
```

dpmzone-installzone Command--Install a Zone (Funclet)

The dpmzone-installzone command starts the installation command on the Solaris 10 server. The installation process may take some time. Check the status of the zone with the showprocesses command to confirm that the installation process is running.

This command has the following format:

```
dpmzone-installzone
-host hostname
-name zonename
[-archive_path path]
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone that you want to install.

-archive_path *path*

(Optional) Defines the path of the operating environment installer for a branded zone.

Limits: This argument is required for branded zones, but not required for native zones.

Examples

Install a native zone:

```
dpmzone-installzone
-host SolarisServer
-name MyZone3
```

Install a branded zone with Solaris 8 on SolarisServer:

```
dpmzone-installzone -host SolarisServer -name MyZone4
-archive_path /opt/zoneos/branded/Solaris8Installer
```

dpmzone-movezone Command--Move a Zone (Funclet)

The dpmzone-movezone command lets you move a zone from one path to a new path.

This command has the following format:

```
dpmzone-movezone
-host hostname
-name zonename
-new_path path
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to move to a new location.

-new_path *path*

Defines the new path for the zone to move.

Example

Move a zone on host SolarisServer2:

```
dpmzone-movezone -host SolarisServer2 -name myzone1
-new_path /opt/zones/myzone1
```

dpmzone-rebootzone Command--Reboot a Zone (Funclet)

The dpmzone-rebootzone command lets you reboot a zone on an Oracle Solaris server.

This command has the following format:

```
dpmzone-rebootzone
-host hostname
-name zonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to reboot.

Example

Reboot a zone on host SolarisServer2:

```
dpmzone-rebootzone -host SolarisServer2 -name myzone
```

dpmzone-renamezone Command--Rename a Zone (Funclet)

The dpmzone-renamezone command lets you rename a zone on the Oracle Solaris server.

This command has the following format:

```
dpmzone-renamezone
-host hostname
-name czonename
-new_name nzonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *czonename*

Specifies the current zone name.

-new_name *nzonename*

Defines the new zone name.

Example

Rename a zone on host SolarisServer2:

```
dpmzone-renamezone -host SolarisServer2 -name myzone -new_name yourzone
```

dpmzone-setpoolscheduler Command--Set the Pool Scheduler (Funclet)

The dpmzone-setpoolscheduler command sets the type of scheduler to use for the resource pool. Resource pools can have two scheduler types, the Fair Share Scheduler (FSS) and the Time Share Scheduler (TS).

This command has the following format:

```
dpmzone-setpoolscheduler
-host hostname
-pool_name poolname
-sched_type sched
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-pool_name *poolname*

Specifies an associated group of resources that can be partitioned.

-sched_type *shed*

Specifies the type of scheduler used to allocate CPU time based on shares. Shares are the portion of the system CPU resources allocated to a project. Options include the following:

ts

Specifies the Time Share Scheduler which fairly allots CPU resources to every process and does not concentrate CPU resources on a particular process. ts is the default scheduler for the Solaris operating environment.

fss

Specifies the Fair Share Scheduler which allows you to allocate CPU time based on shares.

Examples

Set the scheduling for the Resource Pool to the Fair Share Scheduler:

```
dpmzone-setpoolscheduler
-host SolarisServer
-pool_name test_pool
-sched_type FSS
```

Set the scheduling for the Resource Pool to the Time Share Scheduler.

```
dpmzone-setpoolscheduler
-host SolarisServer
-pool_name test_pool
-sched_type TS
```

dpmzone-setprocessorset Command--Set the Maximum Number of CPUs for a Processor Set (Funclet)

The dpmzone-setprocessorset command sets the maximum number of CPUs for a processor set.

This command has the following format:

```
dpmzone-setprocessorset
-host hostname
-processor_set_name psetname
-cpu_max maxcpu
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-processor_set_name *psetname*

Specifies the processor set. Each pset (grouping of CPUs) can contain zero or more processors.

-cpu_max *maxcpu*

Defines the maximum number of CPUs in the processor set.

Example

Set the maximum number of CPUs for a processor set:

```
dpmzone-setprocessorset -host SolarisServer -processor_set_name test_pset -cpu_max
64
```

dpmzone-showinterfaces Command--Show Network Interfaces (Funclet)

The dpmzone-showinterfaces command lists all the network interfaces present on the Solaris 10 host.

This command has the following format:

```
dpmzone-showinterfaces
-host hostname
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

Example

List all network interfaces on the host SolarisServer2:

```
dpmzone-showinterfaces -host SolarisServer2
```

dpmzone-showpools Command--Show Resource Pools (Funclet)

The dpmzone-showpools command lists all the resource pools present on the Solaris 10 host.

This command has the following format:

```
dpmzone-showpools
-host hostname
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

Example

List all resource pools on the host SolarisServer2:

```
dpmzone-showpools -host SolarisServer2
```

dpmzone-showprojects Command--List the Properties of a Project (Funclet)

The dpmzone-showprojects command lists the properties of a project.

This command has the following format:

```
dpmzone-showprojects
-host hostname
-name zonename
-proj_name pname
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

-proj_name *pname*

Specifies the project.

Example

List the properties of a project:

```
dpmzone-showprojects -host SolarisServer2 -name myzone1 -project_name myproject1
```

dpmzone-showresourceset Command--Show Resource Sets (Funclet)

The dpmzone-showresourceset command lists the resources of a resource pool.

This command has the following format:

```
dpmzone-showresourceset
-host hostname
-pool_name poolname
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-pool_name *poolname*

Specifies an associated group of resources that can be partitioned.

Example

List the resource sets in MyZonesResourcePool:

```
dpmzone-showresource_set -host SolarisServer2 -pool_name MyZonesResourcePool
```

dpmzone-showtasks Command--List the Tasks of a Project (Funclet)

The dpmzone-showtasks command lists the tasks of a project.

This command has the following format:

```
dpmzone-showtasks
-host hostname
-name zonename
-proj_name pname
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

-proj_name *pname*

Specifies the project.

Example

List the tasks of a project:

```
dpmzone-showtasks -host SolarisServer2 -name myzone1 -project_name myproject1
```

dpmzone-showzoneinterfaces Command--Show Network Interfaces of a Zone (Funclet)

The dpmzone-showzoneinterfaces command lists all the network interfaces on a zone.

This command has the following format:

```
dpmzone-showzoneinterfaces
-host hostname
-name zonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

Example

List all network interfaces on the zone MyZone3 on SolarisServer2:

```
dpmzone-showzoneinterfaces -host SolarisServer2 -name MyZone3
```

dpmzone-showzoneprocess Command--Show Processes of a Zone (Funclet)

The dpmzone-showzoneprocess command lists all processes on a zone.

This command has the following format:

```
dpmzone-showzoneprocess
-host hostname
-name zonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

Example

List the processes of zone MyZone3 on SolarisServer2:

```
dpmzone-showzoneprocess -host SolarisServer2 -name MyZone3
```

dpmzone-showzoneprojects Command--Show Projects of a Zone (Funclet)

The dpmzone-showzoneprojects command lists all the projects on a zone.

This command has the following format:

```
dpmzone-showzoneprojects
-host hostname
-name zonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

Example

List all projects of zone MyZone3 on SolarisServer2:

```
dpmzone-showzoneprojects -host SolarisServer2 -name MyZone3
```

dpmzone-showzones Command--Show Zones (Funclet)

The dpmzone-showzones command lists all the zones present on the Solaris host.

This command has the following format:

```
dpmzone-showzones
-host hostname
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

Example

List all zones on host SolarisServer2:

```
dpmzone-showzones -host SolarisServer2
```

dpmzone-startzone Command--Start a Zone (Funclet)

The dpmzone-startzone command lets you start a zone on the Solaris server.

This command has the following format:

```
dpmzone-startzone
-host hostname
-name zonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to start.

Example

Start a zone on host SolarisServer2:

```
dpmzone-startzone -host SolarisServer2 -name myzone
```

dpmzone-stopzone Command--Stop a Zone (Funclet)

The dpmzone-stopzone command lets you stop a zone on the Solaris server.

This command has the following format:

```
dpmzone-stopzone
-host hostname
-name zonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to stop.

Example: Stop a Zone on the Host

Stop a zone on host SolarisServer2:

```
dpmzone-stopzone -host SolarisServer2 -name myzone
```

dpmzone-uninstallzone Command--Uninstall a Zone (Funclet)

The dpmzone-uninstallzone command lets you uninstall a zone on the Solaris server.

This command has the following format:

```
dpmzone-uninstallzone
-host hostname
-name zonename
```

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to uninstall.

Example

Uninstall a zone on host SolarisServer2:

```
dpmzone-uninstallzone -host SolarisServer2 -name myzone
```

Deployment and Policy Configuration AutoShell Commands

This section details the Deployment and Policy Configuration AutoShell commands in an alphabetic order. You can access ISM functions from the AutoShell command line. You can display the full list of functions using the command, help ism-* from the AutoShell command line prompt.

ism-applyPolicyForService Command--Apply a Policy to all Systems (Funclet)

The ism-applyPolicyForService command applies a policy to all computer systems in a managed service.

This command has the following format:

```
ism-applyPolicyForService
-policyName policy_name
-policyType policy_type
-serviceName service_name
-templateName templateName
-templateOs templateOs
```

-policyName *policy_name*

Specifies the policy name to apply.

Default: Null

-policyType *policy_type*

Specifies the policy type.

-serviceName *service_name*

Specifies the name of the managed service.

Note: In the service name, use double backslash as a delimiter. Using single backslash as a delimiter is interpreted as an escape sequence. For example, specify service name as “Enterprise\\Data Center\\servicename”, instead of “Enterprise\Data Center\servicename”.

-templateName *templateName*

Specifies the name of the template.

-templateOs *templateOs*

Specifies the policy template operating system.

Example: Apply a Policy to all Systems

This example applies the policy, SystemEDGE to the managed service, CA Virtual Assurance.

```
ism-applyPolicyForService -policyName policy5 -policyType SystemEDGE -serviceName
"Enterprise\\Data Center\\CA Virtual Assurance Services" -templateName template2
-templateOs windows
```

ism-applyPolicies Command--Apply Policies to a Group of Hosts (Funclet)

The ism-applyPolicies command applies the specified policy to a group of hosts.

This command has the following format:

```
ism-applyPolicies
-policyName policy_name
-policyType policy_type
-hostName host_name
[-timeout time]
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

-hostName *host_name*

Specifies the name of the host computer.

-timeout *time*

(Optional) Specifies the time limit in seconds for this command to wait until the hosts are successfully configured after which the timeout occurs. If not specified, this command does not wait for the hosts to be successfully configured.

Default: 30 seconds.

Note: If you specify zero, the default system wide timeout occurs.

Example: Apply Policies to a Group of Hosts

This example applies the specified policy to a group of hosts.

```
ism-applyPolicies -policyName policy5 -policyType SystemEDGE -hostName "s1"-timeout
30
```

ism-applyPolicyWait Command--Apply a Policy and Wait (Funclet)

The ism-applyPolicyWait command applies a policy to a host and returns the host name on which the policy is applied. This command does not return the host name until the policy is applied or timeout occurs.

This command has the following format:

```
ism-applyPolicyWait
-policyName policy_name
-policyType policy_type
-hostName host_name
[-timeout time]
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

-hostName *host_name*

Specifies the name of the host computer.

-timeout *time*

(Optional) Specifies the time limit in seconds for this command to wait until the hosts are successfully configured after which the timeout occurs. If not specified, this command does not wait for the hosts to be successfully configured.

Default: 30 seconds.

Example: Apply a policy and Wait

Apply a policy, policy5 to the host, hvserver.

```
ism-applyPolicy -policyName policy5 -policyType SystemEDGE.SRM.Policies
-hostname hvserver -timeout 400
```

ism-applyPolicyTemplates Command--Apply Policy Templates to a Group of Hosts (Funclet)

The ism-applyPolicyTemplates command applies the specified policy templates to a group of hosts.

This command has the following format:

```
ism-applyPolicyTemplates
-templateName templateName
-templateOs templateOs
-hostName hostname
[-timeout time]
[-replaceExisting replaceExisting]
```

-templateName *templateName*

Specifies the name of the template.

-templateOs *templateOs*

Specifies the policy template operating system.

-hostName *host_name*

Specifies the name of the host computer.

-timeout *time*

(Optional) Specifies the time limit in seconds for this command to wait until the hosts are successfully configured after which the timeout occurs. If not specified, this command does not wait for the hosts to be successfully configured.

Default: 30 seconds.

Note: If you specify zero, the default system wide timeout occurs.

-replaceExisting *replaceExisting*

(Optional) Replaces the existing configuration of the host with the new configuration.

Example: Apply policy templates to a Group of Hosts

Apply policy templates to a group of hosts.

```
ism-applyPolicyTemplates -templateName template2 -templateOs windows -hostName
"s1","s2","s3"-timeout 400 -replaceExisting yes
```

ism-applyPoliciesAndTemplates Command--Apply Policies and Templates to a Group of Hosts (Funclet)

The ism-applyPoliciesAndTemplates command applies both policies and templates to a group of hosts.

This command has the following format:

```
ism-applyPoliciesAndTemplates
-policyName policyName
-policyType policyType
-hostName hostname
-templateName templateName
-templateOs  templateOs
[-timeout time]
[-replaceExisting replaceExisting]
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

-hostName *host_name*

Specifies the name of the host computer.

-templateName *templateName*

Specifies the name of the template.

-templateOs *templateOs*

Specifies the policy template operating system.

-timeout *time*

(Optional) Specifies the time limit in seconds for this command to wait until the hosts are successfully configured after which the timeout occurs. If not specified, this command does not wait for the hosts to be successfully configured.

Default: 30 seconds.

Note: If you specify zero, the default system wide timeout occurs.

-replaceExisting *replaceExisting*

(Optional) Replaces the existing configuration of the host with the new configuration.

Example: Apply policies and templates to a group of Hosts

Apply policies and templates to a group of hosts.

```
ism-applyPoliciesAndTemplates -policyName policy6 -policyType
SystemEDGE.SRM.Policies -hostName "s4","s5","s6" -templateName template2
-templateOs windows -timeout 400 -replaceExisting yes
```

ism-applyPoliciesForService Command--Apply Policies to all Systems (Funclet)

The ism-applyPoliciesForService command applies the policies to all computer systems in a managed service.

This command has the following format:

```
ism-applyPoliciesForService
-policyName policy_name
-policyType policy_type
-serviceName service_name
[-timeout time]
```

-policyName *policy_name*

Specifies the policy name to apply.

Default: Null

-policyType *policy_type*

Specifies the policy type.

-serviceName *service_name*

Specifies the name of the managed service.

Note: In the service name, use double backslash as a delimiter. Using single backslash as a delimiter is interpreted as an escape sequence. For example, specify service name as “Enterprise\\Data Center\\servicename”, instead of “Enterprise\Data Center\servicename”.

-timeout *time*

(Optional) Specifies the time limit in seconds for this command to wait until the hosts are successfully configured after which the timeout occurs. If not specified, this command does not wait for the hosts to be successfully configured.

Default: 30 seconds.

Note: If you specify zero, the default system wide timeout occurs.

Example: Apply Policies to all Systems

This example applies the policies to the managed service, CA Virtual Assurance.

```
ism-applyPoliciesForService -policyName policy7 -policyType SystemEDGE -serviceName
"Enterprise\\Data Center\\CA Virtual Assurance Services" -timeout 400
```

ism-applyPolicyTemplatesForService Command--Apply Policy Templates to all Systems (Funclet)

The ism-applyPolicyTemplatesForService command applies a policy templates to all computer systems in a managed service.

This command has the following format:

```
ism-applyPolicyTemplatesForService
-templateName templateName
-templateOs templateOs
-serviceName serviceName
[-timeout time]
[-replaceExisting replaceExisting]
```

-templateName *templateName*

Specifies the name of the template.

-templateOs *templateOs*

Specifies the policy template operating system.

-serviceName *service_name*

Specifies the name of the managed service.

Note: In the service name, use double backslash as a delimiter. Using single backslash as a delimiter is interpreted as an escape sequence. For example, specify service name as “Enterprise\\Data Center\\servicename”, instead of “Enterprise\Data Center\servicename”.

-timeout *time*

(Optional) Specifies the time limit in seconds for this command to wait until the hosts are successfully configured after which the timeout occurs. If not specified, this command does not wait for the hosts to be successfully configured.

Default: 30 seconds.

Note: If you specify zero, the default system wide timeout occurs.

-replaceExisting *replaceExisting*

(Optional) Replaces the existing configuration of the host with the new configuration.

Example: Apply Policy Templates to all Systems

This example applies policy templates, SystemEDGE to the managed service, CA Virtual Assurance.

```
ism-applyPolicyTemplatesForService –templateName template3 -templateOs windows
-serviceName "Enterprise\\Data Center\\CA Virtual Assurance Services" –timeout 200
-replaceExisting yes
```

ism-applyPoliciesAndTemplatesForService Command--Apply Policies and Templates to all Systems (Funclet)

The ism-applyPoliciesAndTemplatesForService command applies both policies and templates to all computer systems in a managed service.

This command has the following format:

```
ism-applyPoliciesAndTemplatesForService
-policyName policy_name
-policyType policy_type
-serviceName service_name
-templateName templateName
-templateOs templateOs
[-timeout time]
[-replaceExisting replaceExisting]
```

-policyName *policy_name*

Specifies the policy name to apply.

Default: Null

-policyType *policy_type*

Specifies the policy type.

-serviceName *service_name*

Specifies the name of the managed service.

Note: In the service name, use double backslash as a delimiter. Using single backslash as a delimiter is interpreted as an escape sequence. For example, specify service name as “Enterprise\\Data Center\\servicename”, instead of “Enterprise\Data Center\servicename”.

-templateName *templateName*

Specifies the name of the template.

-templateOs *templateOs*

Specifies the policy template operating system.

-timeout *time*

(Optional) Specifies the time limit in seconds for this command to wait until the hosts are successfully configured after which the timeout occurs. If not specified, this command does not wait for the hosts to be successfully configured.

Default: 30 seconds.

Note: If you specify zero, the default system wide timeout occurs.

-replaceExisting *replaceExisting*

(Optional) Replaces the existing configuration of the host with the new configuration.

Example: Apply Policies and Templates to all Systems

This example applies both policies and templates to the managed service, CA Virtual Assurance.

```
ism-applyPoliciesAndTemplatesForService -policyName policy5 -policyType SystemEDGE
-serviceName "Enterprise\\Data Center\\CA Virtual Assurance Services" -templateName
template2 -templateOs windows -timeout 400 -replaceExisting yes
```

ism-cancelJob Command--Cancel a Job (Funclet)

The ism-cancelJob command cancels any pending tasks in a job. You can specify either the job UUID or friendly ID.

Note: The command cannot cancel active tasks.

This command has the following format:

```
ism-cancelJob -jobID job_ID
```

-jobID *job_ID*

Specifies the job UUID or friendly ID.

Example: Cancel a Job

This example cancels all the pending tasks in the job, J00004.

```
ism-cancelJob -jobID J00004
```

ism-copyPolicy Command--Copy a Policy (Funclet)

The ism-copyPolicy command creates a policy by copying from an existing policy.

This command has the following format:

```
ism-copyPolicy -policyName policy_name
-policyType policy_type
-policyVersion [policy_version]
-newName new_policy_name
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

-hostName *host_name*

Specifies the name of the host computer.

-policyVersion *policy_version*

(Optional) Specifies the version of the policy to apply.

Default: Null

-newName *new_policy_name*

Defines the name of the copied policy.

Example: Copy a Policy

The following example creates a policy, test1ver1 using the existing default policy.

```
ism-copyPolicy -policyName default -policyType SystemEDGE -policyVersion 1 -newName
test1ver1
```

ism-createJobTemplate Command--Create a Job Template (Funclet)

The ism-createJobTemplate command creates a job template from an existing job. This command returns the template ID of the created job.

This command has the following format:

```
ism-createJobTemplate -name new_template_name
-jobID existing_job_ID
```

-name *new_template_name*

Defines the name of the template.

-jobID *job_ID existing_job_ID*

Specifies the existing job UUID or friendly ID.

Example: Create a Job Template

The following example creates a job template, Job_template_08 from the existing job ID, J00004.

```
ism-createJobTemplate -name Job_template_08 -jobID J00004
```

ism-deleteJobTemplate Command--Delete a Job Template (Funclet)

The ism-deleteJobTemplate command deletes an existing job template. If you specify a duplicate name, the command returns an error.

This command has the following format:

```
ism-deletejobTemplate job_template_name
```

job_template_name

Specifies the template name to delete. You can also specify the template UUID.

Example: Delete a Job Template

This example deletes an existing job template, Job_template_08.

```
ism-deleteJobTemplate Job_tempate_08
```

ism-deletePolicy Command--Delete a Policy (Funclet)

The ism-deletePolicy command deletes an existing policy. If you do not specify the policy version, the latest version is selected.

This command has the following format:

```
ism-deletePolicy -policyName policy_name
-policyType policy_type [-policyVersion policy_version]
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

-policyVersion *policy_version*

(Optional) Specifies the version of the policy to apply.

Default: Null

Example: Delete a Policy

This example deletes an existing policy, policy5.

```
ism-deletePolicy -policyName policy5 -policyType SystemEDGE.SRM.Policies
-policyVersion 3.2
```

ism-deployPackageToHost Command--Deploy a Package to a Host (Funclet)

The ism-deployPackageToHost command deploys a specified package wrapper to a host. This command returns the UUID of the deployment job.

This command has the following format:

```
ism-deployPackageToHost
[-jobName job_name]
-package package_name
[-packageVer package_version]
[-wrapper wrapper_name]
-hostName host_name
-user user_name
-password password
-acceptEula
[-encrypted]
[-redeploy]
[-ignoreDepends]
```

-jobName *job_name*

(Optional) Specifies the job name that is used in the deployment job list and audit trail.

-package *package_name*

Specifies the name or ID of the deployment package.

-packageVer *package_version*

(Optional) Specifies the deployment package version.

-wrapper *wrapper_name*

(Optional) Specifies the name package wrapper to use. If the wrapper is not specified, the default wrapper is used.

-hostName *host_name*

Specifies the name of the host computer.

-user *user_name*

Specifies the user name to log on.

-password *user_passsword*

Specifies the user password to log on.

-acceptEula

Indicates to accept all End User License Agreements (EULAs) for all deployed packages.

-encrypted

(Optional) Indicates that the username and password are encrypted.

-redeploy

(Optional) Indicates forced redeployment of existing packages.

-ignoreDepends

(Optional) Indicates forced deployment even when there are missing package dependencies.

Example: Deploy a Package to a Host

This example deploys the package, SystemEDGE on the host, hvserver.

```
ism-deployPackageHost
-package "CA SystemEDGE"
-hostName hvserver
-user admin
-password #test#
-acceptEula
-redeploy
-ignoreDepends
```

ism-deployTemplate Command--Deploy Packages from a Template (Funclet)

The ism-deployTemplate command deploys all packages defined in a template to all computers. This command returns the UUID of the deployment job.

This command has the following format:

```
ism-deployTemplate
[-jobName job_name]
-template template_name
-user user_name
-password password
-acceptEula
[-encrypted]
[-redeploy]
[-ignoreDepends]
```

-jobName *job_name*

(Optional) Specifies the job name that is used in the deployment job list and audit trail.

-template *template_name*

Specifies the name or UUID of the job template used as a source for the deployment. Use the template UUID if there are more than one template with the same name.

-user *user_name*

Specifies the user name to log on.

-password *user_passsword*

Specifies the user password to log on.

-hostName *host_name*

Specifies the name of the host computer.

-acceptEula

Indicates to accept all End User License Agreements (EULAs) for all deployed packages.

-encrypted

(Optional) Indicates that the username and password are encrypted.

-redeploy

(Optional) Indicates forced redeployment of existing packages.

-ignoreDepends

(Optional) Indicates forced deployment even when there are missing package dependencies.

Example: Deploy all Packages from a Template

This example deploys all packages defined in the template, SysTemplate to all computers.

```
ism-deployTemplate
-template SysTemplate
-user admin
-password #test#
-hostName hvserver
-acceptEula
-redeploy
-ignoreDepends
```

ism-deployTemplateForService Command--Deploy Template Packages in a Service (Funclet)

The ism-deployTemplate command deploys all packages defined in a job template to all computers listed in a service. This command returns the UUID of the deployment job.

This command has the following format:

```
ism-deployTemplateForService
[-jobName job_name]
-template template_name
-service service_name
-user user_name
-password password
-acceptEula
[-encrypted]
[-redeploy]
[-ignoreDepends]
```

-jobName *job_name*

(Optional) Specifies the job name that is used in the deployment job list and audit trail.

-template *template_name*

Specifies the name or UUID of the job template used as a source for the deployment. Use the template UUID if there are more than one template with the same name.

-serviceName *service_name*

Specifies the name of the managed service.

Note: In the service name, use double backslash as a delimiter. Using single backslash as a delimiter is interpreted as an escape sequence. For example, specify service name as “Enterprise\\Data Center\\servicename”, instead of “Enterprise\Data Center\servicename”.

-user *user_name*

Specifies the user name to log on.

-password *user_passsword*

Specifies the user password to log on.

-acceptEula

Indicates to accept all End User License Agreements (EULAs) for all deployed packages.

-encrypted

(Optional) Indicates that the username and password are encrypted.

-redeploy

(Optional) Indicates forced redeployment of existing packages.

-ignoreDepends

(Optional) Indicates forced deployment even when there are missing package dependencies.

Example: Deploy Template Packages in a Service

This example deploys all packages defined in the template, SysTemplate in the service, Enterprise\Data Center\MyNewService.

```
ism-deployTemplateForService -template SysTemplate
-service Enterprise\Data Center\MyNewService
-user admin -password #test# -hostName hvserver
-acceptEula -redeploy -ignoreDepends
```

ism-deployTemplateToHost Command--Deploy Template Packages on a Host (Funclet)

The ism-deployTemplate command deploys all packages defined in a job template to a specified host. This command returns the UUID of the deployment job.

This command has the following format:

```
ism-deployTemplate
[-jobName job_name]
-template template_name
-hostname host_name
-user user_name
-password password
-acceptEula
-encrypted
[-redeploy]
[-ignoreDepends]
```

-jobName *job_name*

(Optional) Specifies the job name that is used in the deployment job list and audit trail.

-template *template_name*

Specifies the name or UUID of the job template used as a source for the deployment. Use the template UUID if there are more than one template with the same name.

-hostName *host_name*

Specifies the name of the host computer.

-user *user_name*

Specifies the user name to log on.

-password *user_passsword*

Specifies the user password to log on.

-hostName *host_name*

Specifies the name of the host computer.

-acceptEula

Indicates to accept all End User License Agreements (EULAs) for all deployed packages.

-encrypted

(Optional) Indicates that the username and password are encrypted.

-redeploy

(Optional) Indicates forced redeployment of existing packages.

-ignoreDepends

(Optional) Indicates forced deployment even when there are missing package dependencies.

Example: Deploy Template Packages on a Host

This example deploys all packages defined in the template, SysTemplate to the host, hvserver.

```
ism-deployTemplate -template SysTemplate
-hostname hvserver
-user admin
-password #test#
-hostName hvserver
-acceptEula
-redeploy
-ignoreDepends
```

ism-encryptString Command--Encrypt a String (Funclet)

The ism-encryptString command encrypts a given text and returns the encrypted text to the console.

This command has the following format:

```
ism-ism-encryptString encypted_text
```

encrypted_text

Specifies the text to encrypt.

Example: Encrypt a String

This example encrypts the text string, passwordText.

```
ism-deleteJobTemplate passwordText
```

ism-listComputerSystems Command--Displays all Computer Systems (Funclet)

The ism-listComputerSystems command lists all computer systems including host names, platforms, managed services, and deployed packages.

This command has the following format:

```
ism-listComputerSystems [hostFilter]
```

hostFilter

(Optional) Specifies a partial host name. Use wildcards such as asterisk *.

Default: Null

Example: Display all Computer Systems

The following example displays all computer systems having h as the first character in the host name.

```
ism-listComputerSystems h*
```

ism-listDeployedSystems Command--List all Hosts With a Package Deployed (Funclet)

The ism-listDeployedSystems command lists all host names on which a specific package is deployed to.

Note: This view is an audit-trail view, so if hosts are removed or reimaged later, they still appear in this list.

This command has the following format:

```
ism-listDeployedSystems -package package_name
-platform platform_name [-version package_version]
```

-package *package_name*

Specifies the name or ID of the deployment package.

-platform *platform_name*

Specifies the operating system of the package.

-version *package_version*

(Optional) Specifies the version of the package.

Note: Specify the version only if there are more than one package versions.

Example: List all Hosts Having a Package Deployed

This example lists all host names on which the package, 7e033e5d-test-404d-82in-a2f7bbe960a4 is deployed to.

```
ism-listDeployedSystems -package 7e033e5d-test-404d-82in-a2f7bbe960a4 -platform
Windows
```

ism-listJobs Command--List all Jobs (Funclet)

The ism-listJob command lists all deployment jobs. You can filter by job status and partial operating environment name using wildcards.

This command has the following format:

```
ism-listJobs [-status job_status] [-platFormFilter platform_filter]
```

-status *job_status*

(Optional) Indicates the status of the deployment job. You can specify a filter by a comma-separated list of status names: Active, Pending, Complete, or Failed.

-platFormFilter *platform_filter*

(Optional) Indicates the full or partial operating environment name using wildcards.

Example: List all jobs with status Active

This example lists all jobs with the Active status.

```
ism-listJobs -status Active
```

ism-listJobStatus Command--List a Job Status (Funclet)

The ism-listJobStatus command displays the status of a deployment job.

This command has the following format:

```
ism-listJobStatus -jobID job_ID
```

-jobID *job_ID*

Specifies the job UUID or friendly ID.

Example: List a Job Status

This example displays the status of the job, aa-12348-test0-9883

```
ism-listJobStatus -jobId aa-12348-test0-9883
```

ism-listJobTemplates Command--List all Job Templates (Funclet)

The ism-listJobTemplates command lists UUIDs and names of all defined deployment job templates.

This command has the following format:

```
ism-listJobTemplates [-detail]
```

-detail

Show package and target details of each job template.

Example: List a Job Status

This example displays the deployment job templates.

```
ism-listJobTemplates
```

ism-listPackages Command--List all Packages (Funclet)

The ism-listPackages command lists all wrappers and packages.

Note: Packages that are referenced using an existing wrapper are not displayed.

This command has the following format:

```
ism-listJob [-platFormFilter platform_filter]
```

-platFormFilter *platform_filter*

(Optional) Indicates the full or partial operating environment name. Use wildcards such asterisk *.

Example: List all Packages

This example lists all wrappers and packages with operating environment name starting with the letter w.

```
ism-listPackages -platFormFilter w*.
```

ism-listPolicies Command--List all Policies (Funclet)

The ism-listPolicies command lists all policies. You can filter policies by policy type.

This command has the following format:

```
ism-listPolicies [-policyTypeFilter policytype_filter] [-allVersions]
```

-policyTypeFilter *policytype_filter*

(Optional) Indicates the policy type filter.

-allVersions

(Optional) Indicates to list all versions of all policies.

Example: List all Policies

This example lists all versions of all policies.

```
ism-listPolicies -allVersions
```

ism-listPolicyStatus Command--List a Policy Status (Funclet)

The ism-listPolicyStatus command lists a policy delivery status of all hosts.

This command has the following format:

```
ism-listPolicyStatus -policyName policy_name
-policyType policy_type [-policyVersion policy_version]
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

-policyVersion *policy_version*

(Optional) Specifies the version of the policy to apply.

Default: Null

Example: List a Policy Status

This example lists the policy delivery status of the policy, policy5

```
ism-listPolicyStatus -policyName policy5
-policyType SystemEDGE.SRM.Policies -policyVersion 3.2
```

ism-listServiceSystems Command--List all Computer Systems in Services (Funclet)

The ism-listServiceSystems command lists all computer systems in services matching a filter string. The list includes the host names, platforms, managed services, and deployed packages.

This command has the following format:

```
ism-listServiceSystems service_filter
```

service_filter

Specifies the full or partial service name. Use wildcards such as asterisk (*).

Example: List all Computer Systems in Services

This example lists all computer systems in all services starting with the character b.

```
ism-listServiceSystems b*
```

ism-listSysEdgeConfig Command--List the SystemEDGE Configuration (Funclet)

The listSysEdgeConfig command displays the SystemEDGE configuration that has been cached on the manager server for a given host name and a policy type.

This command has the following format:

```
ism-listSysEdgeConfig -hostName host_name -policyType policy_type
```

-hostName *host_name*

Specifies the name of the host computer.

-policyType *policy_type*

Specifies the policy type.

Example: List the SystemEDGE Configuration

This example lists the systemEDGE configuration.

```
ism-listSysEdgeConfig -hostname hvserver -policyType SystemEDGE.SRM.Policies
```

ism-listSystemPoliciesForService Command--List all Policies in a Service (Funclet)

The ism-listSystemPoliciesForService command lists all policies deployed to each hosts in a service.

This command has the following format:

```
ism-listSystemPoliciesForService -serviceName service_name
```

-serviceName *service_name*

Specifies the name of the managed service.

Note: In the service name, use double backslash as a delimiter. Using single backslash as a delimiter is interpreted as an escape sequence. For example, specify service name as “Enterprise\\Data Center\\servicename”, instead of “Enterprise\Data Center\servicename”.

Example: List all Policies in a Service

This example lists all policies in the service, Enterprise\DataCenter\MyNewService.

```
ism-listServiceSystems Enterprise\DataCenter\MyNewService
```

ism-listTemplateEulas Command--Display EULAs in a Template (Funclet)

The ism-listTemplateEulas command displays the full text of all End-User License Agreements (EULAs) in a template. If there are more than one template names, use the template UUID.

This command has the following format:

```
ism-listTemplateEulas -template template_name
```

-template *template_name*

Specifies the template name. You can also specify the template UUID.

Example: Display all EULAs in a Template

This example displays all EULAs in the template, test_template.

```
ism-listTemplateEulas -template test_template
```

ism-renamePolicy Command--Rename a Policy (Funclet)

The ism-renamePolicy command renames the latest version of a policy.

Note: You cannot rename a previous policy version, create a copy instead.

This command has the following format:

```
ism-renamePolicy -policyName policy_name
-policyType policy_type
-newName new_policy_name
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

-newName *new_policy_name*

Defines the new policy name.

Example: Rename a Policy

This example renames a policy, policy5 to a new name, NewPolicy5.

```
ism-applyPolicy -policyName policy5
-policyType SystemEDGE.SRM.Policies -newName NewPolicy5
```

ism-setMaintenanceMode Command--Set the Maintenance Mode of a Host (Funclet)

The ism-setMaintenanceMode command sets the maintenance mode of a host.

This command has the following format:

```
ism-setMaintenanceMode -hostname host_name
[-on {true|false}]
```

-hostName *host_name*

Specifies the name of the host computer.

-on {true|false}

(Optional) Defines whether the host is set to the maintenance mode. Specify false to set the system out of the managed mode.

Default: true

Example: Set the Host Maintenance Mode

This example sets the host, hvserver to the maintenance mode.

```
ism-setMaintenenceMode -hostname hvserver
```

ism-listSystemPolicies Command--List all Policies (Funclet)

The ism-listSystemPolicies command lists all policies and policy templates deployed to each host.

This command has the following format:

```
ism-listSystemPolicies -hostName hostName
```

-hostName *hostName*

Specifies the name of the host.

Example: List all Policies in a Service

This example lists all policies and policy templates deployed to the given host, test2, along with the delivery status. The time when policies and policy templates were last applied and exceptions, if any.

```
ism-listSystemPolicies -hostName test2
```

Output

```
Policy                  Status          OS Type  Ver    Applied        Exc

-------------------------------------------------------------------------

-- test2 ---------------------------------------------------------------

-- Policies------------------------------------------------------------

default SystemEDGE.SR Delivery requested Windows 0 2011-08-02 18:35:36 No

default SystemEDGE    Configured         Windows 0 2011-08-08 12:54:59 No

-- Templates ----------------------------------------------------------

test3 SystemEDGE      Configured         Windows 0 2011-08-08 12:54:59 No
```

ism-setMaintenanceModeForService Command--Set the Maintenance Mode in a Service (Funclet)

The ism-setMaintenanceModeForService command sets the maintenance mode of all computer systems in a service.

This command has the following format:

```
ism-setMaintenanceModeForService
-servicename service_name
[-on {true|false}]
```

-serviceName *service_name*

Specifies the name of the managed service.

Note: In the service name, use double backslash as a delimiter. Using single backslash as a delimiter is interpreted as an escape sequence. For example, specify service name as “Enterprise\\Data Center\\servicename”, instead of “Enterprise\Data Center\servicename”.

-on {true|false}

Defines whether all computer systems in the service are set to the maintenance mode. Specify false to set these systems out of the managed mode.

Default: true

Example: Set the Maintenance Mode in a Service

This example sets all hosts in the service, Enterprise\DataCenter\MyNewService to the maintenance mode.

```
ism-setMaintenanceModeForService -servicename Enterprise\DataCenter\MyNewService
-on true
```

ism-setSysEdgeLogLevel Command--Set the SystemEDGE Log Level (Funclet)

The ism-setSysEdgeLogLevel command sets the SystemEDGE log level for a host.

This command has the following format:

```
ism-setSysEdgeLogLevel -hostname host_name -level level
```

-hostName *host_name*

Specifies the name of the host computer.

-level *level*

Indicates the agent to log messages up to a given level. The levels are: fatal, critical, warning, info, debug, debug1, debug2, and debug3. The higher the value, the more information is logged. Fatal is the lowest level, and debug3 is the highest level.

Example: Set the SystemEDGE Log Level

This example sets the System Edge Log level to fatal.

```
ism-setSysEdgeLogLevel -hostname hvserver -level fatal
```

ism-setSysEdgeLogLevelForService Command--Set the SystemEDGE Log Level in a Service (Funclet)

The ism-setSysEdgeLogLevelForService command sets the SystemEDGE log level for all hosts in a service.

This command has the following format:

```
ism-setSysEdgeLogLevelForService -servicename service_name -level level
```

-serviceName *service_name*

Specifies the name of the managed service.

Note: In the service name, use double backslash as a delimiter. Using single backslash as a delimiter is interpreted as an escape sequence. For example, specify service name as “Enterprise\\Data Center\\servicename”, instead of “Enterprise\Data Center\servicename”.

-level *level*

Indicates the agent to log messages up to a given level. The levels are: fatal, critical, warning, info, debug, debug1, debug2, and debug3. The higher the value, the more information is logged. Fatal is the lowest level, and debug3 is the highest level.

Example: Set the SystemEDGE Log Level in a Service

This example sets the SystemEDGE Log level in the service, Enterprise\DataCenter\MyNewService.

```
ism-setSysEdgeLogLevel -servicename Enterprise\DataCenter\MyNewService -level info
```

ism-updateAllExceptionSystems Command--Apply the Latest Policy (Funclet)

The ism-updateAllExceptionSystems command finds all hosts with policy exceptions and applies the latest policy. The command returns OK on success or displays an error message.

This command has the following format:

```
ism-updateAllExceptionSystems
```

Example: Apply the Latest Policy

This example finds all hosts with policy exceptions and applies the latest policy.

```
ism-updateAllExceptionSystems
```

ism-updateAllOldPolicies Command--Update all Old Policies (Funclet)

The ism-updateAllOldPolicies command finds all hosts with out-of-date policy configurations and applies the latest policy.

This command has the following format:

```
ism-updateAllOldPolicies
```

Example: Update all Old Policies

This example finds all hosts with old policies and applies the latest policies.

```
ism-updateAllOldPolicies
```

ism-updateAllPolicies Command--Update all Policies (Funclet)

The ism-updateAllPolicies command applies the latest policies to all computers.

This command has the following format:

```
ism-updateAllPolicies
```

Example: Update all Policies

This example applies the latest policies to all computers.

```
ism-updateAllPolicies
```

ism-updateAllUpToDateSystems Command--Update all Up-To-Date Systems (Funclet)

The ism-updateAllUpToDateSystems command reapplies the latest policies to all hosts that are up-to-date.

This command has the following format:

```
ism-updateAllUpToDateSystems
```

Example: Update all Up-To-Date Systems

This example reapplies the latest policies to all computers that are up-to-date.

```
ism-updateAllUpToDateSystems
```

ism-updateExceptionSystems Command--Apply the Latest Policy (Funclet)

The ism-updateExceptionSystems command finds all hosts with policy exceptions for a policy and applies the latest configuration.

This command has the following format:

```
ism-updateExceptionSystems -policyName policy_name
-policyType policy_type
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

Example: Update to the Latest Policy

This example updates all policy exceptions for the default policy and applies the latest configuration.

```
ism-updateExceptionSystems -policyName default -policyType SystemEDGE
```

ism-updateOldSystems Command--Update an old Policy (Funclet)

The ism-updateOldSystems command finds all hosts that have out-of-date configurations for a specified policy and applies the latest policy configuration.

This command has the following format:

```
ism-updateOldSystems -policyName policy_name
-policyType policy_type
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

Example: Update an Old Policy

This example updates all hosts that have out-of-date configurations for the default policy and applies the latest configuration.

```
ism-updateOldSystems -policyName default -policyType SystemEDGE
```

ism-updatePolicies Command--Update Configuration of a Policy (Funclet)

The ism-updateSystems command applies the latest configuration to all hosts running the specified policy.

This command has the following format:

```
ism-updateSystems -policyName policy_name
-policyType policy_type
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

Example: Update Configuration of a Policy

This example applies the latest configuration to all hosts running the default policy.

```
ism-updateSystems -policyName default -policyType SystemEDGE
```

ism-updateUpToDateSystems Command--Reapply a Policy (Funclet)

The ism-updateUpToDateSystems command reapplies the latest configuration of the specified policy to all hosts that are considered up-to-date for that policy.

This command has the following format:

```
ism-updateUpToDateSystems -policyName policy_name
-policyType policy_type
```

-policyName *policy_name*

Specifies the policy name to apply.

-policyType *policy_type*

Specifies the policy type.

Example: Reapply a Policy

This example reapplies the latest configuration to all hosts running the default policy.

```
ism-updateUpToDateSystems -policyName default -policyType SystemEDGE
```

ism-copyPolicyTemplate Command--Copy a Policy Template (Funclet)

The ism-copyPolicyTemplate command creates a policy template by copying from an existing policy template.

This command has the following format:

```
ism-copyPolicyTemplate -templateName templateName
-templateType templateType
-templateOs templateOs
-newName newName
```

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-templateOs *templateOs*

Specifies the policy template operating system.

-newName *newName*

Defines the new name of the copied policy template.

Example: Copy a Policy Template

This example creates a new copy of the selected policy template, test 1. The copy is created with the new name test 2.

```
ism-copyPolicyTemplate -templateName test1 -templateType SystemEDGE -templateOs
windows -newName test2
```

ism-deletePolicyTemplate Command--Delete a Policy Template (Funclet)

The ism-deletePolicyTemplate command deletes an existing policy template.

This command has the following format:

```
ism-copyPolicyTemplate -templateName templateName
-templateType templateType
-templateOs templateOs
```

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-templateOs *templateOs*

Specifies the policy template operating system.

Example: Delete a Policy Template

This example deletes an existing policy template.

```
ism-deletePolicyTemplate -templateName test3 -templateType SystemEDGE -templateOs
windows
```

ism-listPolicyTemplateStatus Command--List a Policy Template Status (Funclet)

The ism-listPolicyTemplateStatus command lists a policy template delivery status of all computer systems using the named policy template.

This command has the following format:

```
ism-copyPolicyTemplate -templateName templateName
-templateType templateType
-templateOs templateOs
```

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-templateOs *templateOs*

Specifies the policy template operating system.

Example: List a Policy Template Status

This example lists the policy template delivery status of all computer systems.

```
ism-listPolicyTemplateStatus -templateName Test1 -templateType SystemEDGE
-templateOs windows
```

ism-removePolicyTemplate Command--Remove a Policy Template (Funclet)

The ism-removePolicyTemplate command removes a policy template from the list of policies associated with the given host.

This command has the following format:

```
ism-removePolicyTemplate -templateName templateName
-templateType templateType
-hostName hostName
```

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-hostName *hostName*

Specifies the name of the host computer.

Example: Remove a Policy Template

This example removes a policy template from the list of policies associated with the host name specified.

```
ism-removePolicyTemplate -templateName templateName -templateType templateType
–hostName hostName
```

ism-renamePolicyTemplate Command--Rename a Policy Template (Funclet)

The ism-renamePolicyTemplate command renames a policy template.

This command has the following format:

```
ism-renamePolicyTemplate -templateName templateName
-templateType templateType
-templateOs templateOs
-newName newName
```

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-templateOs *templateOs*

Specifies the policy template operating system.

-newName *newName*

Specifies the new name of the policy template renamed.

Example: Rename a Policy Template

This example renames the selected policy template.

```
ism-renamePolicyTemplate -templateName test2 -templateType SystemEDGE -templateOs
windows -newName test3
```

ism-updateExceptionSystemsTemplate Command--Apply the Latest Policy Template (Funclet)

The ism-updateExceptionSystemsTemplate command finds all hosts with policy exceptions for a policy template and applies the latest configuration.

This command has the following format:

```
ism-updateExceptionSystemsTemplate –templateName templateName
-templateType templateType
–templateOs templateOs
```

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-templateOs *templateOs*

Specifies the policy template operating system.

Example: Update to the Latest Policy Template

This example updates all policy exceptions for the policy template and applies the latest configuration.

```
ism-updateExceptionSystemsTemplate -templateName tpl1 -templateType SystemEDGE
-templateOs windows
```

ism-updateOldSystemsTemplate Command--Update all Old System Templates (Funclet)

The ism-updateOldSystemsTemplate command finds all hosts with out-of-date configurations for all system templates and applies the latest configuration.

This command has the following format:

ism-updateOldSystemsTemplate –templateName templateName
-templateType templateType
–templateOs templateOs

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-templateOs *templateOs*

Specifies the policy template operating system.

Example: Update all Old System Templates

This example finds all hosts with old configurations for all system templates and apply the latest policies.

```
ism-updateOldSystemsTemplate -templateName tpl1 -templateType SystemEDGE
-templateOs windows
```

ism-updateSystemsTemplate Command--Apply a System Template (Funclet)

The ism-updateSystemsTemplate command applies the latest configuration of the specified system template to all hosts.

This command has the following format:

```
ism-updateSystemsTemplate –templateName templateName
-templateType templateType
–templateOs templateOs
```

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-templateOs *templateOs*

Specifies the policy template operating system.

Example: Apply a System Template

This example applies the latest configuration to all hosts running the system template.

```
ism-updateSystemsTemplate -templateName tpl1 -templateType SystemEDGE -templateOs
windows
```

ism-updateUpToDateSystemsTemplate Command--Reapply a System Template (Funclet)

The ism-updateUpToDateSystemsTemplate command reapplies the latest configuration of the specified system template to all hosts that are considered up-to-date for that system template.

This command has the following format:

```
ism-updateUpToDateSystemsTemplate –templateName templateName
-templateType templateType
–templateOs templateOs
```

-templateName *templateName*

Specifies the name of the template.

-templateType *templateType*

Specifies the policy template type.

-templateOs *templateOs*

Specifies the policy template operating system.

Example: Reapply a System Template

This example reapplies the latest configuration to all hosts running the system template.

```
ism-updateUpToDateSystemsTemplate -templateName tpl1 -templateType SystemEDGE
-templateOs windows
```

ism-listPolicyTemplate Command--List all Policy Templates (Funclet)

The ism-listPolicyTemplate command lists all policy templates of all computer systems.

This command has the following format:

```
ism-listPolicyTemplate -policyTypeFilter policyTypeFilter
```

-policyTypeFilter policyTypeFilter

Specifies the filter type to sort and display all policy templates.

Default: Null

Example: List all Policy Templates

This example lists all policy templates of all computer systems.

```
ism-listPolicyTemplate -policyTypeFilter policyTypeFilter
```

Chapter 3: Command Line Scripting

CA Virtual Assurance provides platform commands that you can run from a Command Prompt window. These commands correspond to the AutoShell commands for VMware vCenter Server, Solaris Zones, Hyper-V, MSCS, and so on.

This section contains the following topics:

Command Line Instructions (CLIs) (see page 383)
CA VMware vCenter Server CLI Commands (see page 383)
CA Hyper-V CLI Commands (see page 470)
CA IBM LPAR CLI Commands (see page 542)
CA Microsoft Cluster Server CLI Commands (see page 581)
CA Solaris Zones CLI Commands (see page 601)
CA Cisco UCS Commands (see page 630)
Administrative Command Line Utilities (see page 671)
Common Discovery Commands (see page 686)
Collection Engine Commands (see page 691)
Event Commands (see page 711)
General Shell Commands (see page 715)
Help Desk Commands (see page 726)
Imaging Commands (see page 734)
Policy Commands (see page 741)
Policy Configuration (see page 756)
Resource Manager Commands (see page 759)
Remote Monitoring Commands (see page 808)
Log Files (see page 817)

Command Line Instructions (CLIs)

Command line instructions (CLIs) are available for scripting and automating tasks. You can use these commands to write scripts for anything that you can do in the CA Virtual Assurance user interface. CLI commands generate their own log files.

Important: Verify that you have sufficient privileges to run CLI commands from a Command Prompt.

CA VMware vCenter Server CLI Commands

You can use the CLI to script and automate CA VMware vCenter Server commands and run actions based on the command results. Corresponding commands are also available in the AutoShell.

dpmvc addesxhost Command--Add an ESX Host

The dpmvc addesxhost command adds an ESX host to a vCenter Server.

This command has the following format:

```
dpmvc addesxhost
-esx_host_name esxhostname
-vc_server vcservername
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
-esx_host_user esxhostuser
-esx_host_password esxhostpassword
[-management_ip managementip]
[-host_connect_port hostconnectport]
[-folder_name foldername]
[-datacenter_name datacentername]
[-cluster_name clustername]
[-vim_account_user vimaccountuser]
[-vim_account_password vimaccountpassword]
[-locale iso639value]
```

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-esx_host_user *esxhostuser*

(Optional) Specifies the user name to access the ESX host.

-esx_host_password *esxhostpassword*

Specifies the password used to access the ESX host.

-management_ip *managementip*

(Optional) Specifies the management IP.

-host_connect_port *hostconnectport*

(Optional) Specifies the port used by ESX host to communicate with vCenter Server.

-folder_name *foldername*

(Optional) Specifies the name of the folder where you can add the ESX host.

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-cluster_name *clustername*

(Optional) Specifies the name of the cluster where you can add the ESX host.

-vim_account_user *vimaccountuser*

(Optional) Specifies the username of the VIM account.

-vim_account_password *vimaccountpassword*

(Optional) Specifies the password to access the VIM account.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add an ESX Host

This example adds an ESX host, "esx1" to the vCenter Server "myvcenter."

```
dpmvc addesx -esx_host_name esx1 -vc_server myvcenter -esx_host_user admin
-esx_host_password topsecret
```

dpmvc addvmdisk Command--Add Virtual Disk

The dpmvc addvmdisk command adds a virtual disk to a VM.

This command has the following format:

```
dpmvc addvmdisk
-datastore_name datastorename
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
-capacity_in_mb disk_capacity
[-controller_key controllerkey]
[-disk_mode
{append|independent_nonpersistent|independent_persistent|nonpersistent|persistent
|undoable}]
-thin_provisioning {no|yes}
[-unit_number unitnumber]
[-locale iso639value]
```

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-capacity_in_mb *disk_capacity*

Specifies the capacity of the virtual disk in MB.

-controller_key *controllerkey*

(Optional) Specifies the controller key of the disk.

-disk_mode {append | independent_nonpersistent | independent_persistent | nonpersistent | persistent | undoable}

(Optional) Specifies the mode of the disk.

-thin_provisioning {no | yes}

(Optional) Indicates whether the disk must be thin provisioned.

-unit *disk_unitnumber*

(Optional) Specifies the unit number of the disk.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add a Virtual Disk

This example adds a virtual disk to the VM, "myvm."

```
dpmvc addvmvdisk -datastore_name disk1 -vm_name myvm -vc_server myvcenterserver
-capacity_in_mb 20000 -thin_provisioning no
```

dpmvc addvmvnic Command--Add Virtual NIC

The dpmvc addvmvnic command adds a virtual NIC to a VM.

This command has the following format:

```
dpmvc addvmvnic
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
-devicetype {e1000 | vmxnet}
-network_name networkname
[-mac_address macaddress]
-wake_on_lan_enabled {no | yes}
[-locale iso639value]
```

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-devicetype {e1000 | vmxnet}

Indicates the type of network device.

-network_name *networkname*

Specifies the virtual network the NIC must be connected to. You can distinguish the names of Standard Switches and Distributed Virtual Switches based on the following naming convention:

- For Standard Switches, the name is the network name.
- For Distributed Virtual Switches, the name is a concatenation of the dvPort group name followed by the Distributed Virtual Switch name enclosed in parentheses: dvPortGroupName (dvSwitchName)

-mac_address *macaddress*

(Optional) Specifies the MAC (Media Access Control) address of the network device.

-wake_on_lan_enabled {no | yes}

Indicates whether to start the VM when LAN is enabled.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add a vNIC

This example adds a virtual NIC to a VM.

```
dpmvc addvmvnic -vm_name myvm -vc_server myvcenterserver -devicetype vmxnet
-network_name net1 -wake_on_lan_enabled no
```

dpmvc clone Command--Clone a VM

The dpmvc clone command lets you clone a VM.

This command has the following format:

```
dpmvc clone
[-sc sc_url]
-datacenter_name datacentername
-compute_resource_name name
-esx_host_name esxhostname
-datastore_name datastorename
-vm_name vmname
-resource_pool_name resourcepool
-spec_name specificationname
[-auto_deploy value]
[-deploy_template templatename]
[-network_connection
"nic=sequence_number,network_name=name,ip_address=ip_address,def_gateway=default_
gateway,alt_gateway=alt_gateway,subnet_mask=subnet_mask[,win_dns_server=wins_dns_
server,win_alt_dns=wins_alt_dns,wins_primary=wins_primary,wins_secondary=wins_sec
ondary"]]
[-global_dns_search_suffix suffix1[,suffix2,suffix3,…]]
[-linux_domain_name domain_name]
[-linux_dns_servers primary_dns=value,secondary_dns=value,tertiary_dns=value]
[-create_disk MB,datastorename,controller]
[-modify_disk key, datastorename]
[-set_memory number]
[-set_cpu number]
-vm_os_username username
[-vm_os_password password]
[-vc_server vcservername]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID] {-template_name templatename |
-vm_name_cloned_from -vmname}
[-scalability_server scalabilityservername]
[-wait [timeout]]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-compute_resource_name *name*

Specifies the cluster or VMware ESX host where the VM is created.

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-vm_name *vmname*

Specifies the VM.

-resource_pool_name *resourcepool*

Specifies the name of the resource pool from which you want to select the VM for cloning.

-spec_name *specificationname*

(Optional) Specifies the name of the specification you want to use for the cloned virtual machine.

-auto_deploy {yes|no}

Specifies whether CA Virtual Assurance agents are deployed automatically. Options include the following:

yes

Deploys CA Virtual Assurance agents automatically.

no

Prevents CA Virtual Assurance agents from being deployed automatically.

Default: no

-deploy_template *templatename*

(Optional) Specifies the name of the generic template created in CA Virtual Assurance.

Note: Do not confuse this template with the templates created and managed by VMware vCenter.

-network_connection *"nic=sequence_number,network_name=name,ip_address=ip_address,def_gateway=default_gateway,alt_gateway=alt_gateway,subnet_mask=subnet_mask,win_dns_server=wins_dns_server,win_alt_dns=wins_alt_dns,wins_primary=wins_primary,wins_secondary=wins_secondary"*

Windows:

(Optional) Creates network connections for a VM. This parameter can be specified multiple times. Sequence number is the integer value starting with one (1) that identifies the network connection. The full set of parameters must be enclosed in parentheses if it includes any spaces. All values except nic, network_name, ip_address, def_gateway and subnet_mask; can be reset by entering the name without a value (for example, "nic=123,alt_gateway=").

-network_connection *"nic=sequence_number,network_name=name,ip_address=ip_address,def_gateway=default_gateway,alt_gateway=alt_gateway,subnet_mask=subnet_mask"*

Linux:

(Optional) Creates one or more network connections. This parameter can be specified multiple times. The sequence number is the integer value starting with one (1) that identifies the network connection. The full set of parameters must be enclosed in parentheses if it contains any spaces. Only alt_gateway can be reset by entering the name without a value (for example, "nic=123,alt_gateway=").

-global_dns_search_suffix *suffix1{,suffix2,suffix3,…}*

Linux:

Specifies one or more DNS search suffixes.

Windows:

(Optional) Specifies one or more DNS search suffixes.

-linux_domain_name *domain_name*

Linux:

(Optional) Specifies the domain name for a Linux VM.

-linux_dns_servers *primary_dns=value{,secondary_dns=value,tertiary_dns=value}*

Linux:

(Optional) Specifies the IP addresses of DNS servers for a Linux VM. One or more of the values can be omitted (for example, primary_dns=123.123.123.13,secondary_dns=,tertiary_dns=123.123.123.15) to unset the value.

-create_disk *MB,datastore_name,controller*

(Optional) Creates one or more additional hard drives. This parameter can be specified multiple times.

MB

Defines the size in megabytes of the hard drive.

Datastore_name

Specifies the name of the data store for this hard drive. Currently only one data store is supported per VM.

Controller

Specifies the controller key for this hard drive.

-modify_disk {*key,datastore_name*}

(Optional) Specifies the data store where the hard drive resides. Can be specified multiple times.

key

Specifies an existing disk.

datastore_name

Specifies the name of the data store that this disk moves to.

-set_memory *number*

(Optional) Defines the amount of memory in megabytes (MB) for the cloned VM. This value overrides the value specified in the template.

-set_cpu *number*

(Optional) Define the number of CPUs for the cloned VM. This value overrides the value specified in the template.

-vm_os_username *user name*

Specifies the user for the cloned VM. This user name is also used for authentication when you auto-deploy the image.

Windows: Must be the user name defined in the customization specification.

Linux: Must be the user name defined in the template.

-vm_os_password *password*

(Optional) Specifies the password for the user for the cloned VM. This password is also used for authentication when you auto-deploy the image.

Windows: Must be the same password defined in the customization specification.

Linux: Must be the same password defined in the template.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-template_name *templatename*

Specifies the name of the template you want to use for the cloned virtual machine. This parameter replaces -vm_name_cloned_from and you cannot specify both together.

-vm_name_cloned_from *vmname*

Specifies the name of the virtual machine to use as a template for the cloned virtual machine. This parameter replaces -template_name and you cannot specify both together.

-resource_pool_name *resourcepool*

Specifies the name of the resource pool from which you want to select the VM for cloning.

-scalability_server *servername*

(Optional) Specifies the [assign itcm product name for the adsm variable] scalability server for software distribution.

-spec_name *specificationname*

(Optional) Specifies the name of the specification you want to use for the cloned virtual machine.

-compute_resource_name *name*

Specifies the cluster or VMware ESX host where the VM is created.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Clone a VM using Global Credentials

This example creates a new VM, "testvm01" using the template "BaseW2k3" on the data center, DCA/MyCity. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name DCA/MyCity -datastore_name storage1
-compute_resource_name DCACluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -vc_server vc_server_1
```

Example: Clone a VM using Authorization File and Component

This example creates a new VM, "testvm01" using the template "BaseW2k3" on the data center, DCA/MyCity. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name DCA/MyCity -datastore_name storage1
-compute_resource_name DCACluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -vc_server vc_server_1 -vc_user VCAdmin1
-auth_file c:\localauth.dat -auth_comp Imaging
```

Example: Clone a VM using Global Credentials and Create Two CPUs

This example creates a new VM, "testvm01" using the template "BaseW2k3" on the data center, DCA/MyCity and creates two CPUs for the VM. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name DCA/MyCity -datastore_name storage1
-compute_resource_name DCACluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -set_cpu 2 -vc_server vc_server_1
```

Example: Clone a VM using Default Authorization File and Set Memory to 4096 MB

This example creates a new VM, "testvm01" using the template "BaseW2k3" on the data center, DCA/MyCity and sets the memory to 4096. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name DCA/MyCity -datastore_name storage1
-compute_resource_name DCACluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -set_memory 4096 -vm_server vm_server_1
-vm_user VCAdmin1
```

Example: Clone a VM using Default Authorization File and Create Two Hard Disks

This example creates a new VM, "testvm01" using the template "BaseW2k3" on the data center, DCA/MyCity and creates 2 hard disks for data store storage1. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name DCA/MyCity -datastore_name storage1
-compute_resource_name DCACluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -create_disk 10000,storage1,1000
-create_disk 10000,storage1,2001 -vm_server_1 -vm_user VCAdmin1
```

Example: Clone a VM and Create a Network Connection

This example creates a new VM, "testvm01" and network connection using the template "BaseW2k3" on the data center, DCA/MyCity and creates a network connection and sets the initial values. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name DCA/MyCity -datastore_name storage1
-compute_resource_name DCACluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -network_connection "nic=1,network_name=VM
Network,ip_address=123.321.5.22,def_gatewat=123.321.1.108,subnet_mask=255.255.255
.0,win_dns_server=123.321.42.1,win_alt_dns=123.321.3.101,wins_primary=123.321.3.3
"
```

Example: Clone a VM using Default Authorization File from a Powered off VM

This example creates a new VM, "testvm01" using VM “testvm02” in place of a template on the data center, DCA/MyCity. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc clone -datacenter_name "DCA/MyCity" -vm_name testvm01 -datastore_name storage1
-esx_host_name ussd-dpmvc.ca.com -resource_pool_name Resources/DPMTest
-compute_resource_name DPMCluster/ussdCluster -vm_name_cloned_from testvm02
-auto_deploy yes -spec_name w2k3_spec_01 -vm_os_username administrator
-vm_os_password mypassword -vc_server vm_server_1.myco.com -vc_user VCAdmin1
```

Example: Clone a VM using Default Authorization File and Modify an Existing Hard Disk

This example creates a new VM, "testvm01" using the template "BaseW2k3" on the data center, DCA/MyCity and creates 2 hard disks for data store storage1. When the clone operation is complete, CA Virtual Assurance agents are automatically deployed.

```
dpmvc clone -vm_name testvm01 -template_name Templates/BaseW2k3 -auto_deploy yes
-spec_name w2k3_spec_01 -datacenter_name DCA/MyCity -datastore_name storage1
-compute_resource_name DCACluster/ClusterServerA -vm_os_username administrator
-vm_os_password testpassword -create_disk 10000,storage1,1000 -modify_disk
2000,storage2
-vm_server_1 -vm_user VCAdmin1
```

dpmvc createdatastore Command--Create a Datastore

The dpmvc createdatastore command creates a new datastore.

This command has the following format:

```
dpmvc createdatastore
-datastore_name datastorename
-esx_host_name esxhostname
-vc_server vcservername
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
-datastore_type {local|nas|vmfs}
[-vmfs_device_path path]
[-vmfs_block_size_mb blocksize]
[-local_path lpath]
[-nas_user_name nasuser]
[-nas_password naspasswd]
[-nas_remote_hostname nasremhost]
[-nas_remote_path nsarempath]
[-nas_access_mode {read-only|read-write}]
[-sc sc_url]
[-locale iso639value]
```

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-datastore_type {vmfs|nas|local}

Specifies the type of datastore to be created, VMFS, NAS, or local.

-vmfs_device_path *path*

(Optional) Specifies the device path of the VMFS disk to use when creating a new datastore. You can obtain the path using the "getavailablescsidisks" command.

-vmfs_block_size_mb *blockzize*

(Optional) Specifies the block size to use when creating a new datastore, in MB. Blocksizes available are 1, 2, 4 and 8. They enabled VM disk files to reach a maximum of 256GB, 512GB, 1024GB, and 2048GB respectively.

-local_path *lpath*

(Optional) When creating a local datastore, this path specifies the ESX host's local file system path that will be used to create the datastore.

-nas_user_name *nasuser*

(Optional) Specifies the remote host user name for NAS datastore creation.

-nas_password *naspasswd*

(Optional) Specifies the remote host password for NAS datastore creation.

-nas_remote_hostname *nasremhost*

(Optional) Specifies the hostname of the server hosting the network-based storage.

-nas_remote_path *nasrempath*

(Optional) Specifies the file system path on the remote server which is to be used for the NAS datastore

-nas_access_mode *nasaccmode*

(Optional) Specifies the desired kind of access to the network-based storage which will be used for the NAS datastore. Available modes are "read-only" and "read-write". If not specified, the default mode is read-write.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

dpmvc cycle Command--Cycle a VM

The dpmvc cycle command powers on, powers off, resets, or suspends a VM.

This command has the following format:

```
dpmvc cycle
[-sc sc_url]
-powerop {poweron|poweroff|reset|suspend|shutdown guest}
-datacenter_name datacentername
-vm_name vmname
[-vc_server vcserver]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
[-wait [timeout]]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-powerop {poweron|poweroff|reset|suspend|shutdown guest}

Specifies the power operation to perform on the VM. Options include the following:

poweron

Powers on the VM.

poweroff

Powers off the VM.

reset

Resets the VM.

suspend

Temporarily suspends the VM.

shutdown guest

Shuts down the guest OS gracefully.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Turn off a VM when there are Multiple vCenter Servers in the Data Center

This example turns off a VM from a specific vCenter Server.

```
dpmvc cycle –powerop poweroff –vc_server my_server1 -datacenter_name my_dc –vm_name my_vm
```

Example: Turn off a VM using Global Credentials in Single vCenter Server Environment

This example turns off the VM, "testvm" that belongs to the data center "DCA/MyCitySan Diego."

```
dpmvc cycle -vm_name testvm -powerop poweroff -datacenter_name DCA/MyCity
```

Example: Turn off a VM using Default Authorization File

This example turns off the VM, "testvm" that belongs to the data center "DCA/MyCitySan Diego."

```
dpmvc cycle -vm_name testvm -powerop poweroff -datacenter_name DCA/MyCity
-vc_server vc_server_1
```

Example: Turn on a VM using Specified Authorization File and Component

This example turns on the VM, "testvm" that belongs to the data center "DCA/MyCitySan Diego."

```
dpmvc cycle -vm_name testvm -powerop poweron -datacenter_name DPM/San Diego
-vc_server vc_server_1 -vc_user VCAdmin1 -auth_file c:\localauth.dat
-auth_component Imaging
```

Example: Turn on a VM using Default Authorization File and Specified Component

This example turns on the VM, "testvm" that belongs to the data center "DCA/MyCitySan Diego."

```
dpmvc cycle -vm_name testvm -powerop poweron -datacenter_name DPM/San Diego
-vc_server vc_server_1 -vc_user VCAdmin1 -auth_component Imaging
```

dpmvc datastore Command--Get Data Store Properties

The dpmvc datastore command retrieves the free space and capacity settings for a specific VMware vCenter data store.

This command has the following format:

```
dpmvc datastore
[-sc sc_url]
-getproperty {all|capacity|freespace}
-datacenter_name datacentername
-datastore_name datastorename
[-vc_server vcserver]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-getproperty {all|capacity|freespace}

(Optional) Specifies which property to retrieve. Options include the following:

all

Retrieves capacity and free space in the data store.

capacity

Retrieves the capacity in the data store.

freespace

Retrieves the free space in the data store.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get all Properties for the Data Store using Global Credentials

This example retrieves both free space and capacity for the data store.

```
dpmvc datastore -getproperty all datacenter_name DCA/MyCity
-datastore_name storage1 -vc_server vc_server_1
```

Example: Get all Properties for the Data Store

This example retrieves both free space and capacity for the data store.

```
dpmvc datastore -getproperty all datacenter_name DCA/MyCity
-datastore_name storage1 -vc_server vc_server_1
```

Example: Get all Properties for the Data Store

This example obtains both free space and capacity for the data store.

```
dpmvc datastore -getproperty all datacenter_name DCA/MyCity
-datastore_name storage1 -vc_server vc_server_1
```

dpmvc delete Command--Destroy a VM

The dpmvc delete command deletes a VM that is in a powered off state. Use this command to clean up and free unused resources.

Important! Verify that you back up any important data *before* you issue this command. This command deletes the VM data store and data files for the VM, including the disk image.

This command has the following format:

```
dpmvc delete
[-sc sc_url]
-datacenter_name datacentername
-vm_name vmname
[-vc_server vcservername]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID] [-wait [timeout]]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Destroy a VM using Global Credentials in Single vCenter Server Environment

This example destroys the VM "vm11."

```
dpmvc delete -vm_name vm11 -datacenter_name "lab 444"
```

Example: Destroy a VM using Global Credentials in Multiple vCenter Server Environment

This example destroys the VM "vm11."

```
dpmvc delete -vm_name vm11 -datacenter_name "lab 444" -vc_server vc_server_1
```

dpmvc distributedswitch Command--Manage Virtual Distributed Switches

The dpmvc distributedswitch command lets you manage virtual distributed switches.

- Add a new virtual distributed switch to the datacenter
- Update the properties of a virtual distributed switch
- Delete a virtual distributed switch
- Create a new distributed port group to a virtual distributed switch
- Update the port group properties of a virtual distributed switch
- Remove a distributed port group from a virtual distributed switch
- Rename a distributed port group of a virtual distributed switch

The command has the following formats:

```
dpmvc distributedswitch {-vds_add | -vds_update}
-vc_server vcservername
[-datacenter_name datacentername]
-vds_folder vdsfolder
-switch_name switchname
[-hostnics hostname1:nic1,nic2,…nicn [;hostname1:nic2,…nicn ]]
[-uplink_port_names uplink1[,uplink2,…,uplinkn]]
[-maxports maxports]
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
[-locale iso639value]
```

```
dpmvc distributedswitch -vds_remove
-vc_server vcservername
-switch_name switchname
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]

dpmvc distributedswitch -add_portgroup
-vc_server vcservername
-switch_name switchname
-portgroup_name portgroupname
[-bindtype earlyBinding | ephemeral | lateBinding]
[-vlan vlanID]
[-numports numberofports]
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]

dpmvc distributedswitch -update_portgroup
-vc_server vcservername
-portgroup_name portgroupname
[-portgroup_newname portgroupnewname]
[-bindtype  earlyBinding | ephemeral | lateBinding]
[-vlan vlanID]
[-numports numberofports]
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]

dpmvc distributedswitch -remove_portgroup
-vc_server vcservername
-portgroup_name portgroupname
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]
```

```
dpmvc distributedswitch -rename_portgroup
-vc_server vcservername
-portgroup_name portgroupname
-portgroup_newname portgroupnewname
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]
```

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vds_folder *vdsfolder*

Specifies the folder of the virtual distributed switch in the CA Virtual Assurance Explorer pane.

-switch_name *switchname*

Specifies the switch name to perform the operation on.

-hostnics *hostname1:nic1,nic2,…nicn [;hostname1:nic2,…nicn]*

(Optional) Specifies lists of NICs associated with the ESX host members.

-uplink_port_names *uplink1[,uplink2,…,uplinkn]*

(Optional) Specifies a comma-separated list of uplink port names to use.

-maxports *maxports*

(Optional) Specifies the maximum number of ports.

-bindtype earlyBinding | ephemeral | lateBinding

(Optional) Specifies the bind type of the port group. Valid values are:

earlyBinding

Assigns the ports when the VM binds to the portgroup. This type of binding ensures connectivity at all times, but permanently reserves the port. This binding type is the default.

lateBinding

Assigns a port to a VM if the VM is powered on and its NIC is in connected state. This binding type reassigns the port when the VM is powered off or its NIC is disconnected. LateBinding is configurable through vCenter.

ephemeral

Assigns a port to a VM if the VM is powered on and its NIC is in connected state. This binding type reassigns the port when the VM is powered off or its NIC is disconnected. Ephemeral binding is configurable through the ESX Host and vCenter.

-numports *numberofports*

(Optional) Specifies the number of ports of the port group.

-portgroup_name *portgroupname*

Specifies the port group name.

-portgroup_newname *portgroupnewname*

Specifies the new port group name.

-vlan *vlanID*

(Optional) Specifies an Integer value (vlan ID) used for the virtual portgroup operations.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a New Virtual Distributed Switch

This example creates a new virtual distributed switch.

```
dpmvc distributedswitch -vds_add -vc_server vc5master -datacenter_name dc3
-vds_folder vds -switch_name vdswitch1
```

Example: Updates an Existing Virtual Distributed Switch

This example updates a virtual distributed switch. It specifies NICs for MYSERVER1 and removes MYSERVER2 from the virtual distributed switch. When you want to delete a host from a virtual distributed switch, specify the servername without NICs assigned to it (server name followed by colon, for example, MYSERVER2:).

```
dpmvc distributedswitch -vds_update -vc_server VAS-VC5 -datacenter_name VC5
-switch_name vdistSwitch -hostnics MYSERVER1:nxmgt2,tmp2;MYSERVER2:
-ws_user admin -ws_password ca_admin -post
```

The command updates vdistSwitch:

- Host MYSERVER1 is using NICs nxmgt2 and tmp2
- Host MYSERVER2 is removed from the switch

dpmvc entermaintenancemode Command--Set to the Maintenance Mode

The dpmvc entermaintenancemode command sets an ESX host to the maintenance mode

This command has the following format:

```
dpmvc entermaintenancemode
-esx_host_name esxhostname
-vc_server vcservername
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
-timeout timeout
[-evacuate_powered_off_vm {no | yes}]
[-locale iso639value]
```

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-timeout *timeout*

Specifies the timeout time to enter or exit the maintenance mode in seconds.

-evacuate_powered_off_vm {no | yes}

(Optional) Specifies whether to exit after the VM stops.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Enter Maintenance Mode

This example sets an ESX host into maintenance mode.

```
dpmvc entermaintenancemode -esx_host_name esx1 -vc_server myvcserver -timeout 60
```

dpmvc exitmaintenancemode Command--Exit the Maintenance Mode

The dpmvc exitmaintenancemode command sets the ESX host out of the maintenance mode.

This command has the following format:

```
dpmvc exitmaintenancemode
-esx_host_name esxhostname
-vc_server vcservername
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
-timeout timeout
[-locale iso639value]
```

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-timeout *timeout*

Specifies the timeout time to enter or exit the maintenance mode in seconds.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Exit the Maintenance Mode

This example sets the esx1 ESX host out of maintenance mode.

```
dpmvc exitmaintenancemode -esx_host_name esx1 -vc_server myvcserver
-timeout 60
```

dpmvc faulttolerance Command--Specify Fault Tolerant Operations

The dpmvc faulttolerance command turns on, turns off, enables, disables, tests fault tolerance, or migrates the secondary VM.

This command has the following format:

```
dpmvc faulttolerance
{-turn_on|-turn_off|-enable|-disable|-test_ft|-migrate_secondary }
[-datacenter_name datacentername]
-vm_name vmname
[-esx_host_name esxhostname]
-vc_server vcservername
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
[-locale iso639value]
```

-turn_on

Turns on fault tolerance for the specified VM.

(Optional) Specifies the ESX host name of the secondary VM.

-turn_off

Turns off fault tolerance for the specified VM.

Note: This operation deletes the secondary VM.

-enable

Enables fault tolerance for the specified VM.

-disable

Disables fault tolerance for the specified VM.

-test_ft

Tests fault tolerance on the specified VM.

-migrate_secondary

Migrates the fault tolerance secondary VM to another ESX server. The -esx_host_name option is required.

-vm_name *vmname*

Specifies the VM.

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-esx_host_name *esxhostname*

(Optional) Specifies the VMware ESX server where the VM resides.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmvc getavailablescsidisks Command--Get Available SCSI Disks

The dpmvc getavailablescsidisks command lists the available SCSI disks.

This command has the following format:

```
dpmvc getavailablescsidisks
[-datastore_name datastorename]
-esx_host_name esxhostname
-vc_server vcservername
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-sc sc_url]
[-locale iso639value]
```

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmvc gethosthba Command--Get Host Bus Adapters

The dpmvc gethosthba command retrieves the list of host bus adapters configured on the specified ESX host.

This command has the following format:

```
dpmvc gethosthba
-esx_host_name esxhostname
-vc_server vcservername
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-sc sc_url]
[-locale iso639value]
```

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmvc getresources Command--Get VM Resources

The dpmvc getresources command retrieves CPU or memory share limits or reservations.

This command has the following format:

```
dpmvc getresources
[-sc sc_url]
-vm_name vmname
-datacenter_name datacentername
-resource {all|cpulimit|cpureserv|memlimit|memresrv}
[-vc_server vcserver]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-vm_name *vmname*

Specifies the VM.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-resource {*all*|*vm_cpulimit*|*vm_cpureserv*|*vm_memlimit*|*vm_memresrv*}

Specifies whether a specific resource is retrieved or all resources. Options include the following:

all

Retrieves all CPU and memory share limits and reservations for the VM.

vm_cpulimit

Retrieves the limit for the number of shares of CPU for the VM.

vm_cpureserv

Retrieves the number of shares of CPU reserved for the VM.

vm_memlimit

Retrieves the limit for the number of shares of memory for the VM.

vm_memresrv

Retrieves the number of shares of memory reserved for the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get all Resources for a VM

This example retrieves all resources for usa-vm2.

```
dpmvc getresources -resource all -datacenter_name MyCity -vm_name usa-vm2
```

Example: Get the CPU Limit for a VM

This example retrieves the individual resource cpulimit for vm uss-vm3.

```
dpmvc getresources -resource cpulimit -datacenter_name MyCity
-vm_name uss-vm3 -vc_server vc_server_1
```

dpmvc getshares Command--Get VM Shares

The dpmvc getshares command lets you view how many shares of CPU or memory are allocated to a VM.

This command has the following format:

```
dpmvc getshares
[-sc sc_url] {-cpu|-memory}
-datacenter_name datacentername
-vm_name vmname
[-vc_server vcserver]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cpu|-memory

Displays how many shares of CPU or memory are allocated to a VM. Shares are used to determine which VMs are given more of the available physical resources proportionally to other running VMs. If you allocate more shares to a VM, more physical resources are given to that VM. If you allocate fewer shares to a VM, less physical resources are given to that VM.

-cpu

Specifies that CPU values are being retrieved. Do not use with -memory.

-memory

Specifies that memory values are being retrieved. Do not use with -cpu.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get the CPU Values for a VM

This example retrieves CPU values for usa-vm2.

```
dpmvc getshares -resource all -datacenter_name MyCity -vm_name usa-vm2
-vc_server vc_server_1
```

Example: Get the CPU values for a VM in a Single vCenter Server Environment

This example retrieves CPU values for usa-vm2.

```
dpmvc getshares -resource all -datacenter_name MyCity -vm_name usa-vm2
```

Example: Get the Memory Values for a VM using Global Credentials in a Multiple vCenter Server Environment

This example shows getting the individual resource cpulimit for vm uss-vm3.

```
dpmvc getshares -resource cpulimit -datacenter_name MyCity -vm_name uss-vm3
-vc_server vc_server_1
```

dpmvc getsnapshots Command--Get VM Snapshots

The dpmvc getsnapshots command lists the snapshots of a VM.

This command has the following format:

```
dpmvc getsnapshots
[-sc sc_url]
-datacenter_name datacentername
-vm_name vmname
[-vc_server vcserver]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: List Snapshots

This example lists the snapshots of a VM.

```
dpmvc getsnapshots –vc_server my_server1 -datacenter_name my_dc
–vm_name my_vm
```

dpmvc imgjobcheck Command--Get Clone Job Status

The dpmvc imgjobcheck command obtains the cloning job status for a specific CA Virtual Assurance job ID or a specific VC task ID. The job ID is provided for certain dpmvc commands. Use this command to verify the status on VC.

This command has the following format:

```
dpmvc imgjobcheck
[-sc sc_url]
-status {job ID|vc task ID}
[-vc_server vcserver]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-status *jobID*

Specifies the job ID used to obtain the job status.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get the Cloning Job Status Using the Job ID in a Single vCenter Server Environment

This example obtains the cloning job status using a CA Virtual Assurance job ID.

```
dpmvc imgjobcheck -status 42
```

Example: Get the Cloning Job Status Using the VC Task ID in a Single vCenter Server Environment

This example obtains the cloning job status using a VC task ID.

```
dpmvc imgjobcheck -status task -21099
```

dpmvc migrate Command--Migrate a VM

The dpmvc migrate command migrates a VM from one host server to another host server.

This command has the following format:

```
dpmvc migrate
[-sc sc_url]
-datacenter_name datacentername
-vm_name vm -migrate_to_target_host name
-migrate_to_target_resource_pool_name name
-migrate_to_compute_resource_name name
[-vc_server vcserver]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID] [-wait [timeout]]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-migrate_to_target_host *name*

Specifies the name of the host to which you are migrating the VM.

-migrate_to_target_resource_pool_name *name*

Specifies the target resource pool.

-migrate_to_compute_resource_name *name*

Specifies the name of the cluster or VMware ESX host to which you are migrating the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Migrate a VM using the Default Authorization File

This example migrates the VM, "MyVM1", from the data center DCA/MyCity to ServerC-dcavc.

```
dpmvc migrate -vm_name MyVM1 -datacenter_name DCA/MyCity
-migrate_to_compute_resource_name DCACluster/ClusterA
-migrate_to_target_resource_pool_name Resources/DCATest
-migrate_to_target_host ServerC-dcavc.MyCompany.com
-vm_server VM_Server1 -vc_user VCAdmin1
```

dpmvc removedatastore Command--Remove a Datastore

The dpmvc removedatastore command deletes a datastore.

This command has the following format:

```
dpmvc removedatastore
-datastore_name datastorename
-esx_host_name esxhostname
-vc_server vcservername
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-sc sc_url]
[-locale iso639value]
```

-datastore_name *datastorename*

Specifies the name of the data store where the new VM is located.

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmvc removevmvdisk Command--Remove Virtual Disk

The dpmvc removevmvdisk command removes a virtual disk from a VM.

This command has the following format:

```
dpmvc removevmvdisk
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
-disk_device_key diskdevicekey
-delete_data {yes | no}
[-locale iso639value]
```

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-disk_device_key *diskdevicekey*

Integer that specifies the device key of the disk, for example, 2000.

-delete_data {yes | no}

Indicates whether to delete data while deleting a disk.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove a Virtual Disk

This example removes virtual disk with the device key of 2000 from the myvm VM.

```
dpmvc removevmvdisk -vm_name myvm -vc_server myvcserver -disk_device_key 2000
-delete_data yes
```

dpmvc removevmvnic Command--Remove Virtual NIC

The dpmvc removevmvnic command removes a virtual NIC from a VM.

This command has the following format:

```
dpmvc removevmvnic
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
-device_key devicekey
[-locale iso639value]
```

-datacenter_name *datacentername*

(Optional) Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-device_key *devicekey*

Integer that specifies the device key of the network interface, for example, 3000.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove a vNIC

This example removes a vNIC from a VM.

```
dpmvc removevmvnic -vm_name myvm -vc_server myvcserver -device_key 3000
```

dpmvc setcpu Command-- Set CPUs for a VM

The dpmvc setcpu command sets the number of CPUs for a VM.

This command has the following format:

```
dpmvc setcpu
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
-set_cpu number
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
[-locale iso639value]
```

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-set_cpu *number*

(Optional) Define the number of CPUs for the cloned VM. This value overrides the value specified in the template.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set CPUs for a VM

This example sets the number of four CPUs for the myvm VM.

```
dpmvc setcpu -vm_name myvm -vc_server myvcserver -set_cpu 4
```

dpmvc setmemory Command-- Set memory size for a VM

The dpmvc setmemory command sets the memory size for a VM.

This command has the following format:

```
dpmvc setmemory
[-datacenter_name datacentername]
-vm_name vmname
-vc_server vcservername
-set_memory number
[-sc sc_url]
[-wait timeout]
[-pre]
[-post]
[-locale iso639value]
```

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-set_memory *number*

(Optional) Defines the amount of memory in megabytes (MB) for the cloned VM. This value overrides the value specified in the template.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set memory size for a VM

This example sets the memory size of the myvm VM to 4 GB.

```
dpmvc setmemory -vm_name myvm -vc_server myvcserver -set_memory 4000
```

dpmvc setresources Command--Set VM Resources

The dpmvc setresources command lets you adjust CPU or memory share limits or reservations.

This command has the following format:

```
dpmvc setresources
[-sc sc_url] {-setcpulimit|-setcpureserve|-setmemlimit|-setmemresrv} value
-datacenter_name datacentername
-vm_name vmname
[-vc_server vcservername]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
[-wait [timeout]]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

setcpulimit

Defines the limit for the number of shares of CPU for the VM.

setcpureserv

Defines the number of shares of CPU reserved for the VM.

setmemlimit

Defines the limit for the number of shares of memory for the VM.

setmemresrv

Defines the number of shares of memory reserved for the VM.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Resource CPU Limit to 1000 Shares using Global Credentials in a Single vCenter Server Environment

This example adjusts the CPU share limit for the virtual machine "MyVM1" to 1000.

```
dpmvc setresources -setcpulimit 1000 -vm_name MyVM1
-datacenter_name DCA/MyCity
```

Example: Set Resource CPU Limit to 1000 using a Specific Component ID

This example adjusts the CPU share limit for the virtual machine "MyVM1" to 1000.

```
dpmvc setresources -setcpulimit 1000 -vm_name MyVM1 -datacenter_name DCA/MyCity
-vc_server vc_server_1 -vc_user VCAdmin1 -auth_comp Imaging
```

dpmvc setshares Command--Set VM Shares

The dpmvc setshares command lets you set how many shares of CPU or memory are allocated to a VM.

This command has the following format:

```
dpmvc setshares
[-sc sc_url] {-cpu_add_prop_value value|-cpu subtract_prop_value
value|-cpu_overwrite_prop_value value|-mem_add_prop_value
value|-mem_subtract_prop_value value|-mem_overwrite_prop_value value}
-datacenter_name datacentername
-vm_name vmname
[-vc_server vcservername]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
[-wait [timeout]][-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cpu_add_prop_value *value*|-cpu subtract prop value *value*|-cpu_overwrite_prop_value *value*|-mem_add_prop_value *value*|-mem_subtract_prop_value *value*|-mem_overwrite_prop_value *value*

Specifies how many shares of CPU or memory to add, subtract, or change. Shares are used to determine which VMs are given more of the available physical resources proportionally to other running VMs. If you allocate more shares to a VM, more physical resources are given to that VM. If you allocate less shares to a VM, less physical resources are given to that VM.

-cpu_add_prop_value *value*

Specifies the number of shares of CPU to add to the VM.

-cpu_subtract_prop_value *value*

Specifies the number of shares of CPU to subtract from the VM.

-cpu_overwrite_prop_value *value*

Specifies the number of shares of CPU to use for the VM.

-mem_add_prop_value *value*

Specifies the number of shares of memory to add to the VM.

-mem_subtract_prop_value *value*

Specifies the number of shares of memory to subtract from the VM.

-mem_overwrite_prop_value *value*

Specifies the number of shares of CPU to use for the VM.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Increase CPU Shares for a VM using Global Credentials in a Single vCenter Server Environment

This example increases the CPU shares for the virtual machine "MyVM01" by 1000 in the data center "DCA/MyCity."

```
dpmvc setshares -vm_name MyVM01 -datacenter_name DCA/MyCity
-cpu_add_prop_value 1000
```

Example: Increase CPU Shares for a VM using Global Credentials in a Multiple vCenter Server Environment

This example increases the CPU shares for the virtual machine "MyVM01" by 1000 in the data center "DCA/MyCity."

```
dpmvc setshares -vm_name MyVM01 -datacenter_name DCA/MyCity
-cpu_add_prop_value 1000 -vc_server vc_server_1
```

Example: Overwrite CPU Shares for a VM using Specified Authorization File and Component ID

This example set the CPU shares for the virtual machine "MyVM01" to 1200 in the data center "DCA/MyCity."

```
dpmvc setshares -vm_name MyVM01 -datacenter_name DCA/MyCity
-cpu_overwrite_prop_value 1200 -vc_server vc_server_1
-vc_user VCAdmin1 -auth_file c:\localauth.dat -auth_comp Imaging
```

dpmvc snapshot Command--Manage Snapshots

The dpmvc snapshot command lets you manage snapshots for a VM. You can create snapshots, delete one or all snapshots, or revert to a snapshot using this command.

This command has the following format:

```
dpmvc snapshot
[-sc sc_url]
-operation create
-datacenter_name datacentername -vm_name vmname
-vm_snapshot_name vmsnapshotname
[-vm_snapshot_desc description]
[-withmemory {yes|no}]
[-quiesce {yes|no}][-poweron]
[-vc_server vcservername]
[-vc_user vcusername]
[-vc_password vcpassword]
[-auth_file authorizationfile]
[-auth_comp componentID] [-wait [timeout]]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

```
dpmvc snapshot
[-sc sc_url]
-operation remove
-datacenter_name datacentername -vm_name vmname
[-vm_snapshot_name vmsnapshotname]
[-vm_snapshot_id snapid]
[-withchildren {yes|no}]
[-vc_server vcservername]
[-vc_user vcusername]
[-vc_password vcpassword]
[-auth_file authorizationfile]
[-auth_comp componentID] [-wait [timeout]]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

```
dpmvc snapshot
[-sc sc_url]
-operation revert
-datacenter_name datacentername -vm_name vmname
-vm_snapshot_name vmsnapshotname
[-vm_snapshot_id snapid]
[-vc_server vcservername]
[-vc_user vcusername]
[-vc_password vcpassword]
[-auth_file authorizationfile]
[-auth_comp componentID] [-wait [timeout]]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-operation {create|remove|revert}

Specifies to create, remove, or revert a VM snapshot.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vm_name *vmname*

Specifies the VM.

-vm_snapshot_name *vmsnapshotname*

Defines a name for the VM snapshot.

-vm_snapshot_desc *description*

(Optional) Defines a description for the VM snapshot.

-withmemory {true | false}

(Optional) Specifies that the snapshot includes memory. This parameter is invalid for -remove or -revert.

-quiesce {yes|no}

(Optional) If set to yes and the virtual machine is powered on when the snapshot is taken, VMware Tools quiesce the file system in the virtual machine. This assures that a disk snapshot represents a consistent state of the guest file systems. If the virtual machine is powered off or VMware Tools are not available, the command ignores the quiesce flag.

-vm_snapshot_id *snapid*

(Optional) Defines the snapshot identifier.

-withchildren

(Optional) Specifies that you want to remove all children of the snapshot. This parameter is invalid for -create or -revert.

-poweron

(Optional) Specifies that you want to power on the VM. This parameter is invalid for -remove or
-revert.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a VM Snapshot using Global Credentials in a Single vCenter Server Environment

This example creates a snapshot named "Hello world" with a description of "This is my first snapshot" for the VM system named MyVM01.

```
dpmvc snapshot -create -vm_snapshot_name "Hello world" -vm_snapshot_desc "First
snapshot"
-vm_name MyVM01 -datacenter_name VAS/MyCity
```

Example: Revert to a VM Snapshot using Global Credentials in a Single vCenter Server Environment

This example reverts MyVM01 to the snapshot named "Hello world".

```
dpmvc snapshot -revert -vm_snapshot_name "Hello world" -vm_name MyVM01
-datacenter_name VAS/MyCity
```

Example: Remove a VM Snapshot using Global Credentials in a Single vCenter Server Environment

This example deletes the snapshot named "Hello world" from a VM system named MyVM01.

```
dpmvc snapshot -remove -vm_snapshot_name "Hello world" -vm_snapshot_desc "First
snapshot"
-vm_name MyVM01 -datacenter_name VAS/MyCity
```

Example: Create a Snapshot for a VM using Global Credentials in a Multiple vCenter Server Environment

This example creates a snapshot named PayrollSnapshot on the VM system named PayrollVM.

```
dpmvc snapshot -create -vm_snapshot_name PayrollSnapshot -vm_snapshot_desc "First
snapshot"
-vm_name MyVM01 -datacenter_name VAS/MyCity -vc_server vc_server_1
```

Example: Remove a VM Snapshot using Specified Authorization File and Component ID

This example set the CPU shares for the virtual machine "MyVM01" to 1200 in the data center "DCA/MyCity."

```
dpmvc snapshot -remove -vm_snapshot_name "Snapshot 1" -vm_name MyVM01
-datacenter_name VAS/MyCity -vc_server vc_server_1 -vc_user VCAdmin1
-auth_file c:\localauth.dat -auth_comp Imaging
```

dpmvc templatetovm Command--Convert Template to VM

The dpmvc templatetovm command converts virtual machine templates back to VMs. This capability allows you to apply patches or software updates to the converted VM and then convert it back to a template, for example.

This command has the following format:

```
dpmvc templatetovm
[-sc sc_url]
-template_name templatename
-datacenter_name datacentername
-compute_resource_name hostname
-resource_pool_name resourcepool
-esx_host_name hostname
[-vc_server vmserver]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-template_name *templatename*

Defines the name of the template.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-compute_resource_name *name*

Specifies the cluster or VMware ESX host where the VM is created.

-resource_pool_name *resourcepool*

Specifies the name of the resource pool from which you want to select the VM for cloning.

-esx_host_name *esxhostname*

Specifies the VMware ESX server where the VM resides.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Convert a Template into a VM using Global Credentials in a Single vCenter Server Environment

This example converts the template named convertTest into a VM.

```
dpmvc templatetovm -datacenter_name VAS/MyCity -template_name convertTest
-compute_resource_name onDemand/myhost.myco.com
-esx_host_name myhost.myco.com -resource_pool_name Resources/QA
```

Example: Convert a Template into a VM using Global Credentials in a Multiple vCenter Server Environment

This example converts the template named payrollSystem1 into a VM.

```
dpmvc templatetovm -datacenter_name VAS/MyCity -template_name payrollSystem1
-compute_resource_name onDemand/myhost.myco.com -esx_host_name myhost.myco.com
-resource_pool_name Resources/QA -vc_server vc_server_1
```

Example: Convert a Template into a VM using Specified Authorization File and Component ID

This example converts the template named Win2K3 into a VM.

```
dpmvc templatetovm -datacenter_name VAS/MyCity -template_name Win2K3
-compute_resource_name onDemand/myhost.myco.com
-esx_host_name myhost.myco.com -resource_pool_name Resources/QA
-vc_server vc_server_1 -vc_user VCAdmin1 -auth_file c:\localauth.dat
-auth_comp Imaging
```

dpmvc vapp Command--Manage vApp

The dpmvc vapp command supports the following operations on vApps:

- Create New vApp
- Clone
- Power On
- Power Off
- Suspend
- Delete vApp from VMware vCenter
- Unregister from VMware vCenter
- Add VMs to vApp
- Add resource pool to vApp
- Add vApps to a vApp
- Update vApp configuration

The command has the following formats:

```
dpmvc vapp -create
-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-cpu_allocation isExpandableReservation, limit, reservation, sharesLevel, shares]
[-mem_allocation isExpandableReservation, limit, reservation, sharesLevel, shares]
[-locale iso639value]

dpmvc vapp -clone
-vc_server vcservername
-vapp_path vapppath
[-target_vapp_path targetvapppath]
[-vapp_name vappname]
[-target_vapp_host targetvapphost]

dpmvc vapp [-power_on | -power_off | -suspend | -delete | -unregister ]
-vc_server vcservername
-vapp_path vapppath

dpmvc vapp -add_vms_to_vapp
-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-vms vms]
```

```
dpmvc vapp -add_rps_to_vapp
-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-rps resourcepool]

dpmvc vapp -add_vapps_to_vapp
-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-vapps vapps]
[-locale iso639value]

dpmvc vapp -update_vapp_config
-vc_server vcservername
-vapp_path vapppath
[-vapp_name vappname]
[-config_settings
vappName,objecType,startAction,startDelay,startOrder,stopAction,stopDelay,waitFor
Guest]
[-cpu_allocation isExpandableReservation, limit, reservation, sharesLevel, shares]
[-mem_allocation isExpandableReservation, limit, reservation, sharesLevel, shares]
[-locale iso639value]
```

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vapp_path *vapppath*

Specifies the vApp path.

-vapp_name *vappname*

(Optional) Specifies the vApp name.

-cpu_allocation *isExpandableReservation, limit, reservation, sharesLevel, shares*

(Optional) Specifies the CPU allocation settings when updating a vApp configuration.

isExpandableReservation

Specifies if the allocation is expandable. Possible values: true or false.

limit

Specifies the allocation limit.

reservation

Specifies the reservation allocation.

sharesLevel

Specifies the shares level that is 0 for low, 1 for normal, 2 for high and 3 for custom. e.g. true,-1,1000,1,4000

shares

Specifies the allocation shares.

-mem_allocation *isExpandableReservation, limit, reservation, sharesLevel, shares*

Specifies the memory allocation settings when updating a vApp configuration.

isExpandableReservation

Specifies if the allocation is expandable. Possible values: true or false.

limit

Specifies the allocation limit.

reservation

Specifies the reservation allocation.

sharesLevel

Specifies the shares level that is 0 for low, 1 for normal, 2 for high and 3 for custom. e.g. true,-1,1000,1,4000

shares

Specifies the allocation shares.

-vms *vms*

(Optional) Specifies the VMs you want to add to vApp.

-rps *resourcepool*

(Optional) Specifies the name of the resource pool which you want to add to a vApp.

-vapps *vapps*

(Optional) Specifies the vApps you want to add to a vApp.

-config_settings *vappName,objecType,startAction,startDelay,startOrder,stopAction,stopDelay,waitForGuest*

(Optional) Specifies the configuration settings of the vApp. Proper format is "

startAction *none|powerOn*

Specifies the start action. The available options are none or powerOn

stopAction *none|powerOff|guestShutdown|suspend*

Specifies the start action. The available options are none or powerOff or guestShutdown or suspend.

-target_vapp_path *targetvapppath*

Specifies the target vApp path of the vApp you want to create.

-target_vapp_host *targetvapphost*

(Optional) Specifies the host where the new vApp is to reside on.

-target_vapp_datastore *targetvappdatastore*

(Optional) Specifies the name of the data store where the vApp is to reside on.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmvc virtualswitch Command--Manage Virtual Switches

The dpmvc virtualswitch command lets you manage virtual switches.

- Create a new virtual switch
- Update the properties of a virtual switch
- Delete a virtual switch
- Create a new port group for a virtual switch
- Update the port group properties of a virtual switch
- Remove a port group from a virtual switch
- Rename a port group of a virtual switch

Note: This operation does not run asynchronously, and the result gets back immediately. However, the PMM treats the operation as a tasked operation. Therefore the response contains a task ID, but it is always an empty string (“”).

The command has the following formats:

```
dpmvc virtualswitch {-vs_add | -vs_update}
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
-nic_names nicname1[,nicname2, ...]
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]

dpmvc virtualswitch -vs_remove
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]
```

```
dpmvc virtualswitch -add_portgroup
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
-portgroup_name portgroupname
[-vlan vlanID]
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]

dpmvc virtualswitch -update_portgroup
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
-portgroup_name portgroupname
[-portgroup_newname portgroupnewname]
[-vlan vlanID]
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]

dpmvc virtualswitch -remove_portgroup
-vc_server vcservername
-esx_host_name esxhostname
-portgroup_name portgroupname
[-vlan vlanID]
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]

dpmvc virtualswitch -rename_portgroup
-vc_server vcservername
-esx_host_name esxhostname
-switch_name switchname
-portgroup_name portgroupname
-portgroup_newname portgroupnewname
[-sc sc_url]
[-wait [timeout]]
[-pre]
[-post]
[-locale iso639value]
```

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-esx_host_name *esxhostname*

Specifies the name of the ESX server that hosts a VM.

-switch_name *switchname*

Specifies the switch name to perform the operation on.

-nic_names *nicname1 [,nicname2, ...]*

Specifies a list of physical NICs seperated by a comma. If you specify multiple NICs, use double quotes to escape the argument, for example: "sc1,nfs1,mnic1,mnic2".

-portgroup_name *portgroupname*

Specifies the port group name.

-portgroup_newname *portgroupnewname*

Specifies the new port group name.

-vlan *vlanID*

(Optional) Specifies an Integer value (vlan ID) used for the virtual portgroup operations.

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

This example creates a new virtual switch.

```
dpmvc virtualswitch -vs_add -vc_server vc5master -esx_host_name esx5
-switch_name switch1 -nic_names "sc1,nfs1,mnic1,mnic2"
```

dpmvc vmtotemplate Command--Convert VM to Template

The dpmvc vmtotemplate command converts virtual machines to templates. This capability helps you to enforce consistency across multiple servers in the data center.

This command has the following format:

```
dpmvc vmtotemplate
[-sc sc_url]
-vm_name vmname
-datacenter_name datacentername
[-vc_server vmserver]
[-vc_user vcuser]
[-vc_password vcpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
[-pre]
[-post]
[-ws_user wsuser]
[-ws_password wspassword]
[-prompt {yes|no}]
[-encrypted_password {yes|no}]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-vm_name *vmname*

Specifies the VM.

-datacenter_name *datacentername*

Specifies the data center where the VM is located.

-vc_server *vcservername*

Specifies the vCenter Server to access when you have multiple vCenter Servers. Optional for single vCenter Server environments.

-vc_user *vcuser*

(Optional) Specifies the vCenter Server user ID. It is optional depending on whether global credentials are enabled.

-vc_password *vcpassword*

(Optional) Specifies the password for the vCenter server user ID. When this option is omitted an encrypted password is retrieved for the user (-vc_user option) and component (-auth_comp option), if specified from either the default authorization file or a specific authorization file (-auth_file).

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *wsuser*

(Optional) Specifies the web service user name to connect to the VC Platform Management Module (PMM).

-ws_password *wspassword*

(Optional) Specifies the password for the web service user to connect to the VC Performance Management Module (PMM).

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-encrypted_password {yes|no}

(Optional) Specifies whether you want to encrypt the VC user password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Convert a VM into a Template using Global Credentials in a Single vCenter Server Environment

This example converts the VM named convertTest test into a template.

```
dpmvc vmtotemplate -datacenter_name VAS/MyCity -template_name convertTest
-compute_resource_name onDemand/myhost.myco.com -esx_host_name myhost.myco.com
-resource_pool_name Resources/QA
```

Example: Convert a VM into a Template using Global Credentials in a Multiple vCenter Server Environment

This example converts the template named payrollSystem1 into a VM.

```
dpmvc vmtotemplate -datacenter_name VAS/MyCity -template_name payrollSystem1
-compute_resource_name onDemand/myhost.myco.com -esx_host_name myhost.myco.com
-resource_pool_name Resources/QA -vc_server vc_server_1
```

Example: Convert VM into a Template using Specified Authorization File and Component ID

This example converts the template named Win2K3 into a VM.

```
dpmvc vmtotemplate -datacenter_name VAS/MyCity -template_name Win2K3
-compute_resource_name onDemand/myhost.myco.com -esx_host_name myhost.myco.com
-resource_pool_name Resources/QA -vc_server vc_server_1 -vc_user VCAdmin1
-auth_file c:\localauth.dat -auth_comp Imaging
```

CA Hyper-V CLI Commands

Use the CLI to script and automate CA Hyper-V commands and run actions based on the command results. Corresponding commands are also available in the AutoShell.

dpmhyperv AddVMNic Command--Add a Network Adapter Controller to a VM

The dpmhyperv AddVMNic command adds a network adapter to a VM.

This command has the following format:

```
dpmhyperv AddVMNic
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm VM_name|-vmguid vm_ID
[-mac mac_value]
[-switch switch_name]
[-legacy]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-mac *mac_value*

(Optional) Specifies the Media Access Control (MAC) address of the network adapter.

-switch *switch_name*

(Optional) Specifies the virtual network switch name to connect to the network adapter. If this parameter is not specified, then the network adapter does not have any connectivity.

-legacy

(Optional) Specifies whether to create a legacy network adapter instead of a Hyper-V synthetic adapter. This option must only be used when installing operating systems that do not have Hyper-V integration services available.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add a Network Adapter Controller to a VM

This example adds a network adapter controller to the VM, "TestVM" and connects to it to the switch, "Local Area Connection - Virtual Network."

```
dpmhyperv
-addVMNic
-ws_user dcaadmin
-ws_password #test#
-hypervHost hvserver
-vm TestVM
-switch "Local Area Connection - Virtual Network"
```

dpmhyperv AddVMSCSIController Command--Create a SCSI Controller for a VM

The dpmhyperv AddVMSCSCIController command creates a SCSI controller for a VM on a Hyper-V host.

This command has the following format:

```
dpmhyperv AddVMSCSIController
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password] -hypervHost hostname
-vm vm_name|-vguid vm_ID
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a New SCSI Controller for a VM on a Hyper-V host

This example creates new SCSI controller for the VM with the GUID, "38F29B6A-8CE2-42D2-8269-BFED14644376" on the Hyper-V host, "hserver."

```
dpmhyperv AddVMSCSIController
-ws_user dcaadmin
-ws_password #test#
-hypervHost hserver
-vmguid 38F29B6A-8CE2-42D2-8269-BFED14644376
```

dpmhyperv AgentGet Command--Return an Agent Value

The dpmhyperv AgentGet command returns an agent value.

This command has the following format:

```
dpmhyperv AgentGet
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-modelPath modelpath_value attributeName attribute_name
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-host *hostname*

Specifies the host name of the Hyper-V server.

-jobRef *job_ref_identifier*

Specifies the reference identifier of the asynchronous job.

-modelPath *modelpath_value*

Specifies the model path of the object to get value from.

-attributeName *attribute_name*

Specifies the name of the attribute that you want to get.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Return an Agent Value

This example returns the agent value.

```
dpmhyperv AgentGet
-ws_user dcaadmin
-ws_password #test#
-hypervHost hserver –modelPath
"https://localhost/aip/AOM/root/cimv2:CA_ComputerSystem.CreationClassName=\"CA_Co
mputerSystem\",Name=\"8a2a30a0-a184-11df-84a8-00155d7c7405\""  -attributeName
DPM.HYPERV.SERVER.CRITICALVMS.MONITOR
```

dpmhyperv AgentSet Command--Set an Agent Value

The dpmhyperv AgentSet command sets an agent value.

This command has the following format:

```
dpmhyperv AgentSet
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-modelPath model_path attributeName attribute_name
-snmpValue snmp_value
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-host *hostname*

Specifies the host name of the Hyper-V server.

-jobRef *job_ref_identifier*

Specifies the reference identifier of the asynchronous job.

-modelPath *modelpath_value*

Specifies the model path of the object to get value from.

-attributeName *attribute_name*

Specifies the name of the attribute that you want to get.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set an Agent Value

This example sets the agent value.

```
dpmhyperv AgentSet
-ws_user admin
-ws_password #test#
-hypervHost hserver
-modelPath
"https://localhost/aip/AOM/root/cimv2:CA_ComputerSystem.CreationClassName=\"CA_Co
mputerSystem\",Name=\"8a2a30a0-a184-11df-84a8-00155d7c7405\""  -attributeName
DPM.HYPERV.SERVER.CRITICALVMS.MONITOR -snmpValue 1
```

dpmhyperv ChangeVMState Command--Change the State of a VM

The dpmhyperv ChangeVMState command changes the state of a VM on a Hyper-V host.

This command has the following format:

```
dpmhyperv ChangeVMState
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password] -hypervHost hostname
-vm vm_name|-vguid vm_ID
-state {Start|Suspend|Stop|Pause|Shutdown|Reboot}
-[pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-state {Start|Suspend|Stop|Pause|Shutdown|Reboot}

Specifies the state of the VM. Options include the following:

Start

Turns on the VM.

Suspend

Suspends the VM temporarily.

Stop

Stops the VM.

Pause

Stops the VM temporarily.

Shutdown

Shuts down the VM.

Reboot

Performs a hard reset of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Change the State of a VM

This example sets the state of the VM, "vmtest" to enabled.

```
dpmhyperv ChangeVMState -ws_user admin -ws_password #test# -hypervHost hvserver -vm
vmtest –state start
```

dpmhyperv CreateTemplateFromVM Command--Create a Template from a VM

The dpmhyperv CreateTemplateFromVM command creates a template from an existing VM.

This command has the following format:

```
dpmhyperv CreateTemplateFromVM
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vmname vm_name|-vmguid vm_ID
-template template_name
[-description template_description]
[-path template_location]
[-async]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-template *template_name*

Defines the name of the new template.

-description *template_description*

(Optional) Specifies the template description.

-path *template_location*

(Optional) Defines the full path of the directory where you want to create the template.

-async

(Optional) Runs the command in the asynchronous mode.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Template from a VM

This example creates the template, "MyTemplate" from the VM, "TestVM."

```
dpmhyperv -CreateTemplateFromVM -ws_user admin -ws_password #test#
-hypervHost hvserver -vm TestVM -template MyTemplate
```

dpmhyperv CreateVirtDisk Command--Create a Virtual Disk Image

The dpmhyperv CreateVirtDisk command lets you create a virtual disk image on a Hyper-V host.

This command has the following format:

```
dpmhyperv CreateVirtDisk
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-path location
-diskType {dynamic|fixed}
-size drive_size
[-async]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-path *location*

Defines the full path of the virtual disk image.

-diskType {fixed|dynamic}

Specifies the type of the virtual disk image. Options include the following:

fixed

Indicates that the disk is of fixed size and cannot be increased later.

dynamic

Indicates that the disk is of dynamic size and can be increased later on as required.

-size *drive_size*

Specifies the size of the drive in GB.

Note: The size of the disk can be changed later on.

-async

(Optional) Runs the command in the asynchronous mode.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Virtual Disk Image

This example creates a virtual disk, "01.vhd" of 5 GB.

```
dpmhyperv CreateVirtDisk -hypervHost hvserver -path C:\data\Disks\01.vhd -type
dynamic -size 5 –async
```

dpmhyperv CreateVirtFloppy Command--Create a Virtual Floppy Disk Image

The dpmhyperv CreateVirtFloppy command creates a virtual floppy disk image on a Hyper-V host.

This command has the following format:

```
dpmhyperv CreateVirtFloppy
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-path location
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-path *location*

Defines the full path of the virtual floppy image

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Creates a Virtual Floppy Disk image

This example creates a virtual floppy disk image on the Hyper-V host, "hvserver."

```
dpmhyperv CreateVirtFloppy -ws_user dcaadmin -ws_password #test# -hypervHost
hvserver -path C:\data\Floppy\1.vfd
```

dpmhyperv CreateVM Command--Create a VM

The dpmhyperv CreateVM command creates a VM on a Hyper-V host.

This command has the following format:

```
dpmhyperv CreateVM
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
[-templatevm vm_template]|
[-templatevmguid template_ID]
[-path location]
[-memory memory_size]
[-cpuSocketCount total_CPU_socket_count]
[-cpuidLimit]
[-cpufeatlimit]
[-cpuReserve cpu_reserve]
[-cpuLimit max_CPU_resources]
[-cpuWeight cpu_wieight]
[-startAction {none|auto|always}]
[-startDelay start_delay_secs]
[-stopAction {save|off|shutdown}]
[-recoveryAction {none|restart|revert}]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-templatevm *vm_template*

(Optional) Specifies the name of the VM from which you want to copy the configuration. This parameter identifies an existing VM in the Hyper-V environment and not a template from the VM catalog.

Note: We do not recommend creating VMs from the existing VMs because the shared resources results in potential conflicts.

-templatevmguid *template_ID*

(Optional) Specifies the GUID of the VM from which you want to copy the configuration. This parameter identifies an existing VM in the Hyper-V environment and not a template from the VM catalog.

Note: We do not recommend creating VMs from the existing VMs because the shared resources results in potential conflicts.

-path *location*

(Optional) Defines the full path of the new VM.

-memory *memory_size*

(Optional) Defines the memory size of the VM in MB.

-cpuSocketCount *total_CPU_socket_count*

(Optional) Defines the number of CPU cores in the VM. The number of the CPU cores of the VM cannot be more than the total number of the CPU cores available in the Hyper-V host.

-cpuidLimit

(Optional) Indicates whether the processor must limit the maximum CPUID value.

-cpufeatlimit

(Optional) Indicates whether the VM must limit the CPU features exposed to the operating system.

-cpuReserve *cpu_reserve*

(Optional) Specifies the amount of CPU resources that are reserved for use by the VM.

-cpuLimit *max_CPU_resources*

(Optional) Specifies the maximum amount of CPU resources that the VM can consume.

-cpuWeight *cpu_weight*

(Optional) Specifies the relative weight of the virtual machine from 1 to 10000.

Default: 100

-startAction {none|auto|always}

(Optional) Specifies the action to perform after the VM startup. Options include the following:

none

Performs no action on the VM.

auto

Starts the VM automatically if it was running before the Hyper-V host was shut down.

always

Starts the VM every time Hyper-V starts.

-startDelay *start_delay_secs*

(Optional) Specifies the delay in seconds to start the VM after the Hyper-V host starts up.

-stopAction {save|off|shutdown}

(Optional) Specifies the action to perform on the VM before the Hyper-V host stops. Options include the following:

save

Suspends the VM.

off

Turns off the VM.

shutdown

Shuts down the VM. To use this option, the Hyper-V tools must be installed.

-recoveryAction {none|restart|revert}

(Optional) Specifies the action to perform on the VM after the VM worker process terminates abnormally and recovers. Options include the following:

none

Performs no action.

restart

Restarts the VM.

revert

Returns to the last snapshot. To use this option, the VM should have at least one snapshot.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a VM

This example creates the VM, "TestVM" in the "VM" folder.

```
dpmhyperv CreateVM -ws_user dcaadmin -ws_password #test# -hypervHost hvserver -name TestVM -path c:\VM\TestVM
```

dpmhyperv CreateVMFromTemplate Command--Create a VM from a SCVMM Server Template

The dpmhyperv CreateVMFromTemplate command creates a VM from an SCVMM server template.

This command has the following format:

```
dpmhyperv CreateTemplateFromVM
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
[-prompt {yes|no}] -hypervHost hostname
-vmname vm_name
-template template_name
[-dest destination]
[-computerName computer_Name]
[-ip4addr ip4addr]
[-ip4dhcp ip4dhcp]
[-ip4dhcpInt ip4dhcpInt]
[-ip4mask ip4mask]
[-ip4gw ip4gw]
[-ip4metric ip4metric]
[-ip4dns ip4dns]
[-adminPass admin_password]
[-productKey product_key]
[-userName user_name]
[-organization org_name]
[-domain domain_name]
[-domainAdmin domain_admin_login]
[-domainAdminPass domain_admin_password]
[-adminUser admin_username]
[-startVM start_vm]
{-memory memory_size]
[cpuSocketCount total_CPU_socket]
[-scvmmHost scvmm_host]
[-scvmmHardwareProf scvmm_hardware_profile]
[-scvmmGuestOSProf scvmm_guest_os_profile]
[-auto_deploy autodeploy]
[-async]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the user name and password.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-template *template_name*

Defines the name of the new template.

-dest destination_path

(Optional) Specifies the destination path where the template is created.

-computerName *computer_name*

(Optional) Specifies the computer name of the VM.

-ip4addr *ip4addr*

(Optional) Specifies the static IPv4 address that you want to assign to the VM interface.

-ip4dhcp *ip4dhcp*

(Optional) Specifies whether to use DHCP.

Default: local

-ip4dhcpInt *ip4dhcpInt*

(Optional) Specifies the DHCP address.

-ip4mask *network_mask*

(Optional) Specifies the subnet mask that you want to assign to the VM. Use this option with the -ip4ddr option.

-ip4gw *gateway_address*

(Optional) Specifies the option to set the gateway for the VM. Use this option with the *-ip4ddr* option.

-ip4metric *ip_metric*

(Optional) Specifies the interface metric that you want to set for the VM. Use this option with the *-ip4ddr* option.

-ip4dns *dnsserver_ip*

(Optional) Specifies the DNS server for the VM. Use this option with the *-ip4ddr* option.

-adminPass *admin_password*

(Optional) Specifies the default administrator password for the VM.

-productKey *product_key*

(Optional) Specifies the Windows product activation key for the VM.

-userName *user_name*

(Optional) Specifies the user name of the Windows in the VM.

-organization *org_name*

(Optional) Specifies the organization name of the Windows OS in the VM.

-domain *domain_name*

(Optional) Specifies the domain name of the VM.

-domainAdmin *domain_admin_login*

(Optional) Specifies the domain administrator login.

-domainAdminPass *domain_admin_password*

(Optional) Specifies the password for the domain administrator account. This option is invalid for the asynchronous mode.

-adminUser *admin_username*

(Optional) Specifies the user name that is the member of the default Administrators group.

-startVM *start_vm*

(Optional) Indicates whether to start the VM.

-memory *memory_size*

(Optional) Defines the size of the memory in bytes.

-cpuSocketCount *total_CPU_socket*

(Optional) Specifies the number of processor sockets in the VM.

-scvmmHost *scvmm_hostname*

(Optional) Specifies the name of the SCVMM server host.

-scvmmHardwareProf *scvmm_hardware_profile*

(Optional) Specifies the name of the SCVMM defined hardware profile.

-scvmmGuestOSProf *scvmm_guest_os_profile*

(Optional) Specifies the name of the SCVMM defined guest operating system profile.

-autodeploy autodeploy

(Optional) Indicates automatic deployment.

-async

(Optional) Runs the command in the asynchronous mode.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

Note: If you are not using the -async mode, the following parameters are ignored: memory, cpuSocketCount, cpuidLimit, cpufeatlimit, cpuReserve, cpuLimit, cpuWeight, startAction, startDelay, stopAction, and recoveryAction.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a VM from a Standalone Server Template

This example creates the VM, "NewVM" using the standalone template, "Win2kSysPrepped."

```
dpmhyperv createVMFromTemplate -ws_user dcaadmin -ws_password #test# -hypervHost
hvserver -vm NewVM -dest c:\VMs\NewBox -template Win2k3SysPrepped -ip4addr 127.0.0.1
-ip4mask 255.255.255.0 -ip4gw 127.0.0.1 -ip4dns 127.0.0.1 -computerName NewBox
```

dpmhyperv CreateVMFromTemplate Command--Create a VM from a Template

The dpmhyperv CreateVMFromTemplateEx command creates a VM from a standalone Hyper-V server template.

This command has the following format:

```
dpmhyperv CreateTemplateFromVMEx
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
[-prompt {yes|no}]
-hypervHost hostname
-vmname vm_name
-template template_name
[-dest destination]
[-computerName computer_Name]
[-ip4addr ip4addr]
[-ip4dhcp ip4dhcp]
[-ip4dhcpInt ip4dhcpInt]
[-ip4mask ip4mask]
[-ip4gw ip4gw]
[-ip4metric ip4metric]
[-ip4dns ip4dns]
[-disableAdmin]
[-adminPass admin_password]
[-autoLogon autologon]
[-duplicatorString dupicate_String]
[-timeZone timezone]
[-productKey product_key]
[-userName user_name]
[-organization org_name]
[-domain domain_name]
[-domainAdmin domain_admin_login]
[-domainAdminPass domain_admin_password]
[-workgroup workgroup_name]
[-adminUser admin_username]
[-adminUserPass admin_password] [adminGroup admin_group_name]
[-startVM start_vm]
[-custom custom]
[-memory memory_size] [cpuSocketCount total_CPU_socket]
[-cpuidLimit cpu_id_limit]
[-cpufeatlimit cpu_feat_limit]
[-cpuReserve cpu_reserve]
[-cpuLimit max_CPU_usage]
[-cpuWeight cpu_wieight]
[-startAction {none|auto|always}]
[-startDelay start_delay_secs]
[-stopAction {save|off|shutdown}]
[-recoveryAction {none,restart,revert}]
[-scvmmHost scvmm_host]
[-scvmmHardwareProf scvmm_hardware_profile]
[-scvmmGuestOSProf scvmm_guest_os_profile]
[-async]
[-pre]
```

```
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the user name and password.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-template *template_name*

Defines the name of the new template.

-dest destination_path

(Optional) Specifies the destination path where the template is created.

-computerName *computer_name*

(Optional) Specifies the name of the computer.

-ip4addr *ip4addr*

(Optional) Specifies the static IPv4 address that you want to assign to the VM interface.

-ip4dhcp *ip4dhcp*

(Optional) Specifies whether to use DHCP.

Default: local

-ip4dhcpInt *ip4dhcpInt*

(Optional) Specifies the DHCP address.

-ip4mask *network_mask*

(Optional) Specifies the subnet mask that you want to assign to the VM. Use this option with the -ip4ddr option.

-ip4gw *gateway_address*

(Optional) Specifies the option to set the gateway for the VM. Use this option with the *-ip4ddr* option.

-ip4metric *ip_metric*

(Optional) Specifies the interface metric that you want to set for the VM. Use this option with the *-ip4ddr* option.

-ip4dns *dnsserver_ip*

(Optional) Specifies the DNS server for the VM. Use this option with the *-ip4ddr* option.

-disableAdmin

(Optional) Specifies an option to disable default administrator account for the VM.

-adminPass *admin_password*

(Optional) Specifies the default administrator password for the VM.

-autoLogon *autologon*

(Optional) Specifies the option to set the number of accounts that automatically log on with the default administrator account Sysprep process is complete.

-duplicatorString *duplicate_string*

(Optional) Specifies the name of the system duplicator to set in the VM registry.

-timeZone *timezone*

(Optional) Specifies the time zone used by the VM that are created using the template.

-productKey *product_key*

(Optional) Specifies the Windows product activation key for the VM.

-userName *user_name*

(Optional) Specifies the user name of the Windows in the VM.

-organization *org_name*

(Optional) Specifies the organization name of the Windows in the VM.

-domain *domain_name*

(Optional) Specifies the domain name of the VM.

-domainAdmin *domain_admin_login*

(Optional) Specifies the domain administrator login.

-domainAdminPass *domain_admin_password*

(Optional) Specifies the password for the domain administrator account. This option is invalid for the asynchronous mode.

-workgroup *workgroup_name*

(Optional) Specifies the workgroup of the VM. This option is invalid for the asynchronous mode.

-adminUser *admin_username*

(Optional) Specifies the user name that is the member of the default Administrators group.

-adminUserPass *admin_password*

(Optional) Specifies the password of the default Administrators group.

-adminGroup *admin_group_name*

(Optional) Specifies the group name of the administrator.

-startVM *start_vm*

(Optional) Indicates whether to start the VM.

-custom *custom*

(Optional) Specifies the list of comma-separated custom commands that are executed at the end of the Sysprep process.

-memory *memory_size*

(Optional) Defines the size of the memory in bytes.

-cpuSocketCount *total_CPU_socket*

(Optional) Specifies the number of processor sockets in the VM.

-cpuidLimit *cpu_id_limit*

(Optional) Indicates whether the processor must limit the maximum CPUID value.

cpufeatlimit *cpu_feat_limit*

(Optional) Indicates whether the VM must limit the CPU features exposed to the operating system.

-cpuReserve *cpu_reserve*

(Optional) Specifies the amount of CPU resources that are reserved for use by the VM.

-cpuLimit *max_CPU_usage*

(Optional) Specifies the maximum amount of CPU resources that the VM can consume.

-cpuWeight *cpu_weight*

(Optional) Specifies the relative weight of the virtual machine from 1 to 10000.

-startAction {none|auto|always}

(Optional) Specifies the action to perform on the VM after the Hyper-V host starts up. Options include the following:

none

Performs no action.

auto

Starts the VM automatically if it was running before the Hyper-V host was shut down.

always

Starts the VM every time Hyper-V starts.

-startDelay *start_delay_secs*

(Optional) Specifies the delay in seconds to start the VM after the Hyper-V host starts up.

-stopAction {save|off|shutdown}

(Optional) Specifies the action to perform on the VM before the Hyper-V host shuts down. Options include the following:

save

Suspends the VM.

off

Turns off the VM.

shutdown

Shuts down the VM.

-recoveryAction {none,restart,revert}

(Optional) Specifies the action to perform on the VM after the Hyper-V host restarts after an unexpected shutdown. Options include the following:

none

Performs no action.

restart

Restarts the VM.

revert

Returns to the last snapshot.

-scvmmHost *scvmm_hostname*

(Optional) Specifies the name of the SCVMM server host.

-scvmmHardwareProf *scvmm_hardware_profile*

(Optional) Specifies the name of the SCVMM defined hardware profile.

-scvmmGuestOSProf *scvmm_guest_os_profile*

(Optional) Specifies the name of the SCVMM defined guest operating system profile.

-async

(Optional) Runs the command in the asynchronous mode.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

Note: If you are not using the -async mode, the following parameters are ignored: memory, cpuSocketCount, cpuidLimit, cpufeatlimit, cpuReserve, cpuLimit, cpuWeight, startAction, startDelay, stopAction, and recoveryAction.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a VM from a Standalone Hyper-V Server Template

This example creates the VM, "NewVM" using the template, "Win2kSysPrepped."

```
dpmhyperv -createVMFromTemplateEx -ws_user dcaadmin -ws_password #test# -hypervHost
hvserver -vm NewVM -dest c:\VMs\NewBox -template Win2k3SysPrepped -ip4addr 127.0.0.1
-ip4mask 255.255.255.0 -ip4gw 127.0.0.1 -ip4dns 127.0.0.1 -computerName NewBox
```

dpmhyperv DeleteVM Command--Delete a VM

The dpmhyperv DeleteVM command deletes a VM on a Hyper-V host. This command also deletes virtual disks, virtual floppy drives, and ISO images assigned to a VM.

This command has the following format:

```
dpmhyperv DeleteVM
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password] -hypervHost hostname
-vm vm_name|-vguid vm_ID
[-delvhd]
[-delvfd]
[-deliso]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-delvhd

(Optional) Indicates whether to delete virtual hard drives.

-delvfd

(Optional) Indicates whether to delete virtual floppy disk images associated with the VM.

-deliso

(Optional) Indicates whether to delete virtual CD/DVD images associated with the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a VM from a Hyper-V Host

This example deletes the VM with the GUID, "346597794004894538F29B6A-8CE2-42" from the Hyper-V host, "hserver". This command also deletes virtual disks images, virtual floppy drives, and CD/DVD ISO images assigned to the VM.

```
dpmhyperv DeleteVM -ws_user admin -ws_password #test# -hypervHost hserver -vmguid
38F29B6A-8CE2-42D2-8269-BFED14644376 –delvhd –delvfd –deliso
```

dpmhyperv ExpandVirtDisk Command--Expand the Size of a Virtual Disk

The dpmhyperv ExpandVirtDisk command expands the size of a virtual disk image on a Hyper-V host.

This command has the following format:

```
dpmhyperv ExpandVirtDisk
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-path location
-size disk_size
[-async]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-path *location*

Defines the location of the virtual disk.

-size *drive_size*

Specifies the size of the drive in GB.

Note: The size of the disk can be changed later on.

-async

(Optional) Runs the command in the asynchronous mode.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Expand the Size of a Virtual Disk

This example expands the size of the virtual disk image on the Hyper-V host, "hserver" to 2 GB in the asynchronous mode. This command returns the Hyper-V job ID of the created task.

```
dpmhyperv ExpandVirtDisk -ws_user admin -ws_password #test# -hypervHost hserver -path
C:\data\Disks\1.vhd –size 2 -async
```

dpmhyperv ExportVM Command--Export a VM

The dpmhyperv ExportVM command stores files having information of a VM to a directory on a Hyper-V host. This command is deprecated, use dpmhv ExportVMEx instead.

This command has the following format:

```
dpmhyperv ExportVM
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vm_name|-vmguid vm_ID
-dest dest_location
[-nostate]
[-async]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-dest *dest_location*

(Optional) Defines the destination location of the imported file.

-nostate

(Optional) Specifies that only the VM specification is exported. This option prevents the exported VM from trying to refer to the original VM disk images.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Export a VM

This example stores files having information of the VM, "TestVM" from the Hyper-V host, "hserver."

```
dpmhv ExportVM -hypervHost hserver -vm TestVM -dest c:\DATA\Export
```

dpmhyperv ExportVMEx Command--Export a VM

The dpmhyperv ExportVM command lets you export a virtual machine.

This command has the following format:

```
dpmhyperv ExportVM
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vm_name|-vmguid vm_ID
-dest dest_folder
[-noruntimeInfo]
[-nosnapshots]
[-nostorage]
[-nosubdir]
[-snapshot snapshot_name]|[-snapshotid snapshot_ID]
[-nostate]
[-async]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-dest *dest_location*

(Optional) Defines the destination location of the imported file.

-noruntimeInfo

(Optional) Specifies not to export the run time-related information.

-nosnapshots

(Optional) Specifies not to export snapshots.

-nostorage

(Optional) Specifies not to export virtual disk image files.

-nosubdir

(Optional) Specifies not to create a sub directory with the VM display name in the directory specified as the export path.

-snapshot *snapshot_name*

(Optional) Specifies the name of the snapshot that you want to export.

-snapshot *snapshot_ID*

(Optional) Specifies the GUID of the snapshot that you want to export.

-nostate

(Optional) Specifies that only the VM specification is exported. This option prevents the exported VM from trying to refer to the original VM disk images.

-async

(Optional) Runs the command in the asynchronous mode.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Export a VM

This example exports the VM, "TestVM" without snapshots and creates the exported VM, "textvmExp."

```
dpmhyperv ExportVMEx -ws_user admin -ws_password #test# -hypervHost hserver -vm
TestVM -dest c:\Ex\TestVMExp -nosubdir -nosnapshots
```

dpmhyperv GetHostSwitches Command--Get Switches of a Host

The dpmhyperv GetHostSwitches command returns switches of a Hyper-V host. You can specify a filter condition to get specific switches.

This command has the following format:

```
dpmhyperv GetHostSwitches
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname [filter filter_condition]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-host *hostname*

Specifies the host name of the Hyper-V server.

-jobRef *job_ref_identifier*

Specifies the reference identifier of the asynchronous job.

-filter *condition*

(Optional) Specifies a filter condition such as "*".

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Switches of a Host

This example returns switches of the host, "hvserver."

```
dpmhyperv GetHostSwitches -ws_user admin -ws_password #test# -hypervHost hvserver
```

Example: Get Switches of a Host Using Filters

This example returns all the switches having "n" somewhere in the switch name.

```
dpmhyperv GetHostSwitches -ws_user admin -ws_password #test# -hypervHost hvserver
-filter *n*
```

dpmhyperv GetJobErrorInfo Command--Get the Error Information of a Job

The dpmhyperv GetJobErrorInfo command returns the error details of an asynchronous job running on a Hyper-V host.

This command has the following format:

```
dpmhyperv GetJobErrorInfo
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-jobRef job_ref_identifier
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-host *hostname*

Specifies the host name of the Hyper-V server.

-jobRef *job_ref_identifier*

Specifies the reference identifier of the asynchronous job.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get the Error Information of a Job

This example returns the error information of the job, "\\hserver\root\virtualization:Msvm_ConcreteJob.InstanceID="86C9700348-4117-ABA8-445456"."

```
dpmhyperv GetJobErrorInfo -ws_user admin -ws_password admin -hypervHost hvserver
-jobRef
\\hserver\root\virtualization:Msvm_ConcreteJob.InstanceID="86C9700348-4117-ABA8-4
45456"
```

dpmhyperv GetJobInfo Command--Get Information of a Job

The dpmhyperv GetJobInfo command returns the details of an asynchronous job on a Hyper-V host. The details include the percentage completed, error information, and the start time.

This command has the following format:

```
dpmhyperv GetJobInfo
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-jobRef job_ref_identifier
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-host *hostname*

Specifies the host name of the Hyper-V server.

-jobRef *job_ref_identifier*

Specifies the reference identifier of the asynchronous job.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Information of a Job

This example returns the information about the Hyper-V job, "\\hserver\root\virtualization:Msvm_ConcreteJob.InstanceID="86TSTC4-ABA8-C82734036"."

```
dpmhyperv GetJobInfo -ws_user admin -ws_password #test# -hypervHost hvserver -jobRef
\\hserver\root\virtualization:Msvm_ConcreteJob.InstanceID="86TSTC4-ABA8-C82734036
"
```

dpmhyperv GetJobState Command--Get the State of a Job

The dpmhyperv GetJobState command returns the state of an asynchronous job running on a Hyper-V host.

This command has the following format:

```
dpmhyperv GetJobState
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-jobRef job_ref-identifier
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-host *hostname*

Specifies the host name of the Hyper-V server.

-jobRef *job_ref_identifier*

Specifies the reference identifier of the asynchronous job.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get the State of a Job

This example returns the state of the job, "\\hvserver\root\virtualization:Msvm_ConcreteJob.InstanceID="86CD04TEST82795D6F036"."

```
dpmhyperv GetJobState -ws_user admin -ws_password #test# -hypervHost hserver -jobRef
\\hserver\root\virtualization:Msvm_ConcreteJob.InstanceID="86CD04TEST82795D6F036"
```

dpmhyperv GetServerInfo Command--Get all Managed Servers

The dpmhyperv GetServerInfo command returns all Hyper-V host with its properties in the CA Virtual Assurance system.

This command has the following format:

```
dpmhyperv GetServerInfo
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

This example returns the properties of each Hyper-V host registered in the CA Virtual Assurance system.

```
dpmhyperv GetServerInfo -ws_user admin -ws_password #test#
```

dpmhyperv GetVersion Command--Get the PMM Version

The dpmhyperv GetVersion command returns the version of the Platform Management Module (PMM).

This command has the following format:

```
dpmhyperv GetVersion
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get the PMM Version

This example displays the version of the current Hyper-V PMM.

```
dpmhyperv GetVersion -ws_user admin -ws_password #test#
```

dpmhyperv GetVMProperties Command--Get VM Properties

The dpmhyperv GetVMProperties command lets you view VM properties.

This command has the following format:

```
dpmhyperv GetVMProperties
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vmname|-vmguid vm_ID
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get VM Properties

This example displays the properties of the VM, "vm-01" on the host, "hserver."

```
dpmhyperv GetVMProperties -ws_user admin -ws_password #test# -hypervHost hserver -vm
vm01
```

dpmhyperv GetVMState Command--Get a VM State

The dpmhyperv GetVMState command returns the current state of a VM. The following list describes the four states:

- disabled: VM is turned off
- enabled: VM is up and running
- paused: VM is temporarily stopped
- suspended: VM is stopped

This command has the following format:

```
GetVMState
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vmname|-vmguid vm_ID
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get a VM State Using the VM Name

This example returns the state of the VM, "vm01" on the host, "hserver."

```
dpmhyperv GetVMState -ws_user admin -ws_password #test# -hypervHost hserver -vm
test-vm01
```

Example: Get a VM State Using the VM GUID

This example returns the state of the virtual machine having the GUID, "38FTESTED14644376" on the host, "hserver."

```
dpmhyperv GetVMState -ws_user admin -ws_password #test# -hypervHost hserver -vmguid
38FTESTED14644376
```

dpmhyperv ImportVM Command--Import a VM

The dpmhyperv ImportVM command lets you import a VM to a Hyper-V hypervHost.

This command has the following format:

```
dpmhyperv ImportVM
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password] -hypervHost hostname
-path location
[-name vm_name]
[-noNewID]
[-async]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-path *location*

Defines the location of the imported VM.

-vm *vm_name*

Specifies the VM name.

-noNewID

(Optional) Indicates not to generate a new VM GUID. In this case, the imported VM and the imported from VM have the same GUID. We recommend not to use this option to avoid potential conflicts with other VMs.

-async

(Optional) Runs the command in the asynchronous mode.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Import a VM to a Hyper-V Host

This example imports the VM, "test-vm01-imported" to the Hyper-V host, "hserver." This command does not generate a new ID.

```
dpmhyperv ImportVM -ws_user admin -ws_password #test# -hypervHost hserver –path
C:\data\Export\test-vm01 –name test-vm01-imported -noNewID.
```

dpmhyperv ImportVMEx Command--Copy and Import a VM

The dpmhyperv ImportVMEx command copies and imports an already exported VM to a Hyper-V host.

This command has the following format:

```
dpmhyperv ImportVMEx
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password] -hypervHost hostname
-path location [dest dest_location]
[-name vm_name]
[-noNewID]
[-async]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-path *location*

Defines the location of the server.

-dest *dest_location*

(Optional) Defines the destination location of the imported file.

-vm *vm_name*

Specifies the VM name.

-noNewID

(Optional) Indicates not to generate a new VM GUID. In this case, the imported VM and the imported from VM have the same GUID. We recommend not to use this option to avoid potential conflicts with other VMs.

-async

(Optional) Runs the command in the asynchronous mode.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Copy and Import a VM to a Hyper-V host

This example imports an exported VM to a Hyper-V host and does not generate a new ID for it.

```
dpmhyperv ImportVMEx -ws_user admin -ws_password #test# -hypervHost hserver –path
C:\data\Export\test –name test-vm01-imported -noNewID
```

dpmhyperv SetClustered Command--Add or Remove a VM from a Cluster

The dpmhyperv SetClustered command either adds or removes a VM from the Hyper-V cluster.

This command has the following format:

```
dpmhyperv SetClustered
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm VM_name|-vmguid vm_ID
-clustered {on|off}
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-host *hostname*

Specifies the host name of the Hyper-V server.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-clustered {on|off}

Indicates whether to add or remove the VM from the cluster.

on

Indicates to add the VM to the cluster.

off

Indicates to remove the VM from the cluster.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Append a VM to a Hyper-V Cluster

This example appends the VM with the GUID, "38F29B6A-TEST-BFED14644376" to the Hyper-V cluster.

```
dpmhyperv SetClustered -ws_user admin -ws_password #test# -hypervHost hserver -vmguid
38F29B6A-TEST-BFED14644376 -clustered on
```

Example: Remove a VM from a Hyper-V Cluster

This example removes the VM, "test-vm01" from the Hyper-V cluster.

```
dpmhyperv SetClustered -ws_user admin -ws_password #test# -hypervHost hserver -vm
test-vm01 -clustered off
```

dpmhyperv SetSysPrepProperties Command--Sets Sysprep Properties

The dpmhyperv SetSysPrepProperties command lets you set sysprep properties on a Hyper-V server.

This command has the following format:

```
dpmhyperv SetSysPrepProperties
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm VM_name|-vmguid vm_ID
[-jobRef job_reference]
[-computerName computer_name]
[-ip4addr ip4_address]
[-ip4dhcp]
[-ip4dhcpint ip4dhcpint]
[-ip4mask network_mask]
[-ip4gw gateway_address]
[-ip4metric ip_metric]
[-ip4dns dnsserver_ip]
[-disableAdmin]
[-adminPass administrator_password]
[-autoLogon autologon]
[-duplicatorString duplicator_string]
[-timezone timezone]
[-productKey product_key]
[-userName user_name]
[-organization org_name]
[-domain domain_name]
[-domainAdmin domain_admin_login]
[-domainAdminPass domain_admin_password]
[-workgroup workgroup_name]
[-adminUser admin_username]
[-adminUserPass admin_password]
[-adminGroup admin_groupname]
[-custom custom]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-jobRef *job_reference*

Specifies the job identifier.

-computerName *computer_name*

(Optional) Specifies the name of the computer.

-ip4addr *ip4_address*

(Optional) Specifies the static IPv4 address that you want to assign to the VM interface.

-ip4dhcp *ip4dhcpInt*

(Optional) Specifies the DHCP address.

-ip4mask *network_mask*

(Optional) Specifies the subnet mask that you want to assign to the VM. Use this option with the -ip4ddr option.

-ip4gw *gateway_address*

(Optional) Specifies the option to set the gateway for the VM. Use this option with the *-ip4ddr* option.

-ip4metric *ip_metric*

(Optional) Specifies the interface metric that you want to set for the VM. Use this option with the *-ip4ddr* option.

-ip4dns *dnsserver_ip*

(Optional) Specifies the DNS server for the VM. Use this option with the *-ip4ddr* option.

-disableAdmin

(Optional) Specifies the option to disable default administrator account for the VM. Support for this parameter requires a Windows image created using Sysprep tool. This option is invalid in the asynchronous mode.

-adminPass *administrator_password*

(Optional) Specifies the default administrator password for the VM.

-autoLogon *autologon*

(Optional) Specifies the option to set the number of accounts that automatically log on with the default administrator account after the Sysprep process completes.

-duplicatorString *duplicate_string*

(Optional) Specifies the name of the system duplicator to set in the VM registry.

-timeZone *timezone*

(Optional) Specifies the time zone used by the VM that are created using the template.

Default:
-1

-productKey *product_key*

(Optional) Specifies the Windows product activation key for the VM.

-userName *User_name*

(Optional) Specifies the user name of the Windows in the VM.

-organization *org_name*

(Optional) Specifies the user name of the Windows in the VM. This option is invalid in the asynchronous mode.

-domain *domain_name*

(Optional) Specifies the domain name of the VM.

-domainAdmin *domain_admin_login*

(Optional) Specifies the domain administrator login.

-domainAdminPass *domain_admin_password*

(Optional) Specifies the password for the domain administrator account. This option is invalid for the asynchronous mode.

-workgroup *workgroup_name*

(Optional) Specifies the workgroup of the VM. This option is invalid for the asynchronous mode.

-adminUser *admin_username*

(Optional) Specifies the user name that is the member of the default Administrators group.

-adminUserPass *admin_password*

(Optional) Specifies the password of the default Administrators group.

-custom *custom*

(Optional) Specifies the list of comma-separated custom commands that are executed at the end of the Sysprep process.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Sysprep Properties on the Hyper-V Server

This example sets the sysprep properties on the host, "hserver."

```
dpmhyperv SetSysPrepProperties -hypervHost hserver -vm VM_05 -ip4addr 130.119.0.40
-ip4mask 255.255.0.0 -ip4gw 130.119.0.100
```

dpmhyperv SetVMDisk Command--Assign a Drive or Disk to a Drive Controller

The SetVMDisk command lets you assign a virtual drive or disk to a drive controller.

This command has the following format:

```
dpmhyperv SetVMDisk
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password] -hypervHost hostname
-vm vm_name|-vmguid vm_ID
-drive {HDD|DVD} -driveType {scsi|ide}
[-path location]
-id drive_ID_number
[-lun logical_unit_num]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-drive {HDD|DVD}

Specifies the type of drive that the image is assigned to. Options include the following:

HDD

Indicates that the drive type is hard drive.

DVD

Indicates that the drive type is CD/DVD drive.

-driveType {scsi|ide}

Specifies the type of drive controller that the image is assigned to. Options include the following:

scsi

Indicates that the drive controller is SCSI.

ide

Indicates that the drive controller is IDE. For CD/DVD images the controller type must IDE.

-path *location*

(Optional) Defines the location of the virtual disk or drive.

-id *drive_ID_number*

Specifies the ID number of the drive. Specify 0 for the IDE and 0,1, or 2 for the SCSI drive.

-lun *logical_unit_num*

(Optional) Specifies the Logical Unit Number (LUN) number of the SCSI drive. For IDE controllers, the LUN must be 0 or 1 and for SCSI controllers, the LUN must be from 0 to 63. If no number is specified, the available channel is assigned automatically.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Assign a Drive on a Drive Controller

This example assigns the virtual hard drive image file, "disk.vhd" to the first channel on the first SCSI controller:

```
dpmhv-setVMDisk -hypervHost hvserver -vm TestVM -type scsi -id 0 -lun 0 -drive HDD
-path c:\VHDs\disk.vhd
```

dpmhyperv SetVMProperties Command--Set Properties of a VM

The dpmhyperv SetVMProperties command lets you change the properties of a VM.

This command has the following format:

```
dpmhyperv SetVMProperties
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vm_name|-vguid vm_ID
[-memory memory_size]
[-cpuSocketCount total_CPU_socket_count]
[-cpuidLimit CPU_ID_Limit]
[-cpufeatlimit CPU_Feature_Limit]
[-cpuReserve cpu_reserver]
[-cpuReserve cpu_reserve]
[-cpuLimit max_CPU_usage]
[-cpuWeight cpu_wieight]
[-startAction {none|auto|always}]
[-startDelay start_delay_secs]
[-stopAction {save|off|shutdown}]
[-recoveryAction {none|restart|revert}]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-memory *memory_size*

(Optional) Defines the size of the memory size of the VM in MB.

-cpuSocketCount *total_CPU_socket_count*

(Optional) Defines the number of CPU cores in the VM. The CPU cores cannot be more than the total number of the CPU cores available in the Hyper-V host.

-cpuidLimit *CPU_ID_Limit*

(Optional) Indicates whether the VM must lower the CPU identifier for better compatibility with legacy operating systems like Windows NT.

cpufeatlimit *CPU_Feature_Limit*

(Optional) Indicates whether the VM must limit the CPU features exposed to the operating system.

-cpuReserve *cpu_reserve*

(Optional) Specifies the amount of CPU resources that are reserved for use by the VM.

-cpuLimit *max_CPU_usage*

(Optional) Specifies the maximum amount of CPU resources that the VM can consume.

-cpuWeight *cpu_weight*

(Optional) Specifies the relative weight of the virtual machine from 1 and 10000.

Default: 100

-startAction {none|auto|always}

(Optional) Specifies the time interval to wait before performing the start-up action. Options include the following:

none

Performs no action.

auto

Starts the VM automatically if it was running before the Hyper-V host was shut down.

always

Starts the VM every time Hyper-V starts.

-startDelay *start_delay_secs*

(Optional) Specifies the delay in seconds to start the VM after the Hyper-V host is started.

-stopAction {save|off|shutdown}

(Optional) Specifies the action to perform on the VM before the Hyper-V host shuts down. Options include the following:

save

Suspends the VM.

off

Turns off the VM.

shutdown

Shuts down the VM.

-recoveryAction {none|restart|revert}

(Optional) Specifies the action to perform on the VM after the Hyper-V host restarts after an unexpected shutdown. Options include the following:

none

Performs no action.

restart

Restarts the VM.

revert

Returns to the last snapshot.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Properties of a VM

This example changes the number of assigned CPU cores to two.

```
dpmhyperv -setVMProperties -ws_user dcaadmin -ws_password #test# -hypervHost hserver
-vm TestVM -cpus 2
```

dpmhyperv SetVMVirtFloppy Command--Assign a Virtual Floppy Image to a VM Floppy Drive

The dpmhyperv SetVMVirtFloppy command assigns a virtual floppy image to a VM floppy drive on the Hyper-V host.

This command has the following format:

```
dpmhyperv SetVMVirtFloppy
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password] -hypervHost hostname
-vm vm_name|-vguid vm_ID
[-path location]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-path *location*

Defines the location of the virtual floppy image.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Assign a Virtual Floppy Image to the VM Floppy Drive on a Hyper-V Host

This example connects the virtual floppy image, "1.vfd" to the VM floppy drive on the Hyper-V host, "hserver."

```
dpmhyperv SetVMVirtFloppy -ws_user admin -ws_password test -hypervHost hserver
-vm test-vm01 -path C:\data\Floppy\1.vfd
```

dpmhyperv ShowClusterSharedVolumes Command--Show all Cluster Shared Volumes

The dpmhyperv ShowClusterSharedVolumes command lists all cluster shared volumes on a Hyper-V server.

This command has the following format:

```
dpmhyperv ShowClusterSharedVolumes
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show all Cluster Shared Volumes on a Hyper-V Host

This example lists all shared volumes on the host, "hserver."

```
dpmhyperv ShowClusterSharedVolumes -ws_user admin -ws_password #test# -hypervHost
hserver
```

dpmhyperv ShowDirectories Command--Show Directory Properties on a Hyper-V Server

The dpmhyperv ShowDirectories command lists all the properties of a directory on a Hyper-V host.

This command has the following format:

```
dpmhyperv ShowDirectories
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-directory directory_path
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-directory *location*

Defines the location of the directory on the Hyper-V host.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show Properties of a Directory on a Hyper-V Host

This example lists all the properties of the directory, " c:\test" on the host, "hserver."

```
dpmhyperv ShowDirectories -ws_user admin -ws_password #test# -hypervHost hserver
-directory c:\test
```

dpmhyperv ShowLogicalDisks Command--Show all Logical Disks

The dpmhyperv ShowLogicalDisks command lists all logical disks and its properties on a Hyper-V host.

This command has the following format:

```
dpmhyperv ShowLogicalDisks
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show all Logical Disks on a Hyper-V Host

This example lists all logical disks on the Hyper-V host, "hserver."

```
dpmhyperv ShowLogicalDisks -ws_user admin -ws_password #test# -hypervHost hserver
```

dpmhyperv ShowPhysDisks Command--Show Physical Disks of a Host

The dpmhyperv ShowPhysDisks command all physical disks on a Hyper-V host.

This command has the following format:

```
dpmhyperv ShowPhysDisks
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
[-prompt]
-hypervHost hostname
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the user ID and password.

Default: Yes

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show Physical Disks of a Host

This example shows all physical disks on the Hyper-V host, "hserver".

```
dpmhyperv ShowPhysDisks -ws_user admin -ws_password #test# -hypervHost hserver
```

dpmhyperv ShowSCVMMHardwareProfiles Command--Show all SCVMM Hardware Profiles

The dpmhyperv ShowSCVMMHardwareProfiles command lists all hardware profiles on the SCVMM host.

This command has the following format:

```
dpmhyperv ShowSCVMMHardwareProfiles
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password] -scvmmHost scvmm_hostname
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-scvmmHost *scvmm_hostname*

(Optional) Specifies the name of the SCVMM server host.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Hardware Profiles on an SCVMM Host

This example shows all hardware profiles on the SCVMM host, "ms01."

```
dpmhyperv ShowSCVMMHardwareProfiles -ws_user admin -ws_password #test# -scvmmHost
ms01
```

dpmhyperv ShowSCVMMGuestOSProfiles Command--Show Guest Operating System Profiles

The dpmhyperv ShowSCVMMGuestOSProfiles command lists all profiles of the guest operating system on the SCVMM host.

This command has the following format:

```
dpmhyperv ShowSCVMMGuestOSProfiles
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-scvmmHost scvmm_hostname
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-scvmmHost *scvmm_hostname*

(Optional) Specifies the name of the SCVMM server host.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show Guest Operating System Profiles

This example lists all guest operating system profiles on the SCVMM host, "ms01."

```
dpmhyperv ShowSCVMMGuestOSProfiles -ws_user admin -ws_password #test# -scvmmHost
ms01
```

dpmhyperv ShowTemplates Command--Show all VM Templates

The dpmhyperv ShowTemplates command lists all VM templates on a Hyper-V host.

This command has the following format:

```
dpmhyperv ShowTemplates
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
[-filter condition]
[-scvmmHost scvmm_hostname]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-filter *condition*

(Optional) Specifies a filter condition such as "*".

-scvmmHost *scvmm_hostname*

(Optional) Specifies the name of the SCVMM server host.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show all VM Templates

This example lists all the VM templates on the host, "hserver."

```
dpmhyperv ShowTemplates -ws_user admin -ws_password #test# -hypervHost hserver
```

dpmhyperv ShowVirtFloppy Command--Show the List of Virtual Floppy Drives

The dpmhyperv ShowVirtFloppy command lists all virtual floppy disks assigned to a VM.

This command has the following format:

```
dpmhyperv GetVMState
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vmname|-vmguid vm_ID
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show all Floppy Disks

This example lists all the virtual floppy disks assigned to the VM having the GUID, "38900009000000yy."

```
dpmhyperv ShowVirtFloppy -ws_user admin -ws_password #test# -hypervHost hserver
-vmguid 38900009000000yy
```

dpmhyperv ShowVMDisks Command--Show all Virtual Disks

The dpmhyperv ShowVMDisks command lists all virtual disks in a VM on a Hyper-V host.

This command has the following format:

```
dpmhyperv ShowVMDisks
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vmname|-vmguid vm_ID
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show all Virtual Disks on a Hyper-V Host

This example lists all virtual disks with its properties in the VM, "vm01" on the host "hserver."

```
dpmhyperv ShowVMDisks -ws_user admin -ws_password #test# -hypervHost hserver -vm
test-vm01
```

dpmhyperv ShowVMNics Command--Show all Network Interface Cards

The dpmhyperv ShowVMNics command lists all network interface cards in a VM.

This command has the following format:

```
dpmhyperv ShowVMNics
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vmname|-vmguid vm_ID
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show all Network Interface Cards

This example lists all network interface cards with its properties in the VM, "vm01" on the host, "hserver."

```
dpmhyperv ShowVMDisks -ws_user admin -ws_password #test# -hypervHost hserver -vm
test-vm01
```

dpmhyperv ShowVMs Command--Show all VMs

The dpmhyperv ShowVMs command lists all VMs on a Hyper-V host. The command gets VM names and their corresponding GUIDs.

This command has the following format:

```
dpmhyperv ShowVMs
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show all VMs

This example lists all VMs and their corresponding GUIDs on the host, "hserver."

```
dpmhyperv ShowVMs -ws_user admin -ws_password #test# -hypervHost hserver
```

dpmhyperv ShowVMSCSIControllers Command--Show all SCSI Controllers

The dpmhyperv ShowVMSCSIControllers command lists all SCSI controllers in a VM.

This command has the following format:

```
dpmhyperv ShowVMSCSICControllers
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-vm vmname|-vmguid vm_ID
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-vm *vm_name*

Specifies the VM name.

-vmguid *vm_ID*

Specifies the unique GUID of the VM.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Show all SCSI Controllers on the SCVMM host

This example lists all the SCSI controllers with their properties in the virtual machine, "vm01" on the host, "hserver."

```
dpmhyperv ShowVMSCSIControllers -ws_user admin -ws_password #test# -hypervHost
hserver -vm vm01
```

dpmhyperv ValidateAgentSNMPAccess Command--Validate SNMP Access to an Agent

The dpmhyperv ValidateAgentSNMPAccess command validates whether an agent can be accessed using SNMP community string.

This command has the following format:

```
dpmhyperv ValidateAgentSNMPAccess
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
-snmpAccessName snmp_name -checkWriteAccess write_access
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-host *hostname*

Specifies the host name of the Hyper-V server.

-snmpAccessName *snmp_name*

Specifies the SNMP community string.

-checkWriteAccess *write_access*

Specifies whether to select write access.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Validate SNMP Access to an Agent

This example validates SNMP access to the host, "hserver."

```
dpmhyperv ValidateAgentSNMPAccess -hypervHost hserver -snmpAccessName public
-checkWriteAccess -ws_user admin -ws_password #test#
```

dpmhyperv ValidateServerAccess Command--Check Server Access

The dpmhyperv ValidateServerAccess command checks whether you can access a host server.

This command has the following format:

```
dpmhyperv ValidateServerAccess
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
-hypervHost hostname
[-user username]
[-pass password]
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-user *username*

(Optional) Specifies the name of the user.

-pass *password*

(Optional) Specifies the password of the user.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Verify Server Access

This example verifies whether you can access the Hyper-V host, "hserver."

```
dpmhyperv ValidateServerAccess -ws_user admin -ws_password #test# -hypervHost
hserver
```

dpmhyperv DeleteTemplate Command--Deletes a Template

The dpmhyperv DeleteTemplate command deletes a template on a Hyper-V host.

This command has the following format:

```
dpmhyperv Deletetemplate
[-ws_user username]
[-ws_password password]
[-ws_encrypted_password]
[-prompt]
-hypervHost hostname
-template template_name
[-pre]
[-post]
[-locale iso639value]
```

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

-ws_encrypted_password

(Optional) Indicates whether the CA Virtual Assurance password is encrypted.

-hypervHost *hostname*

Specifies the name of the Hyper-V host.

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the user ID and password.

Default: Yes

-template *template_name*

Specifies the template name to delete.

-pre

(Optional) Generates an event before the operation is complete.

-post

(Optional) Generates an event after the operation is complete.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Deletes a Template

This example deletes the template, "template_5" on the Hyper-V host, "hserver".

```
dpmhyperv ShowPhysDisks -ws_user admin -ws_password #test# -hypervHost hserver
-template template_5
```

CA IBM LPAR CLI Commands

You can use the CLI to script and automate CA IBM LPAR commands and run actions based on the command results. Corresponding commands are also available in the AutoShell.

dpmlpar cycle Command--Cycle a Logical Partition

The dpmlpar cycle command powers on, powers off, resets, or suspends a logical partition.

This command has the following format:

```
dpmlpar cycle
[-sc sc_url]
-powerop {activate|restart|shutdown}
-hmc name
-managed_system managedsystemname
-partition_name partitionname
[-type {delayed|immediate|os_shutdown|immediate_os_shutdown}]
[-profile_name profilename]
[-activate_bootmode {normal|open_firmware}]
[-activate_keylock {normal|manual}]
[-pre] [-post]
[-ws_user username]
[-ws_password password]
[-prompt <no|yes>]
[-ws_remote_user username]
[-ws_remote_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-powerop {activate|restart|shutdown}

Specifies the power operation to perform on the LPAR. Options include the following:

activate

Turns on the LPAR.

restart

Turns off the LPAR, if necessary, and then turns it on.

shutdown

Turns off the LPAR.

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {immediate|os_shutdown|immediate_os_shutdown}

Specifies to use the imaging operation type resource group (res_group) or individual resources (individual_res). Options include the following:

immediate

Shuts down the partition immediately. This option can cause undesirable results if the data has only been partially updated.

os_shutdown

Shuts down the partition by issuing the command for a typical shutdown. The partition must be imaged for this option to succeed.

immediate_os_shutdown

Shuts down the partition by issuing the operating system command to shut down the system as soon as possible. This command bypasses typical shutdown activities including sending messages to other users. The partition must be imaged for this option to succeed.

-profile_name *lparprofile* (HMC only)

[-profile_name *lparname*] (IVM only)

Specifies the partition profile to use when you activate the logical partition. Required for HMC. Optional for IVM, and if specified the name must match the partition name.

-activate_bootmode {normal|open_firmware}

(Optional) Specifies the keylock mode for the activate operation. Options include the following:

normal

Starts the partition in the typical manner.

open_firmware

Starts the partition and opens the open firmware prompt.

-activate_keylock {normal|manual|bypass}

(Optional) Specifies the keylock mode for the activate operation. Options include the following:

normal

Starts the partition in unattended mode and requires no user interaction during activation.

manual

Starts the partition in attended mode and requires user interaction during activation.

bypass

Does not activate the keylock mode.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

Example: Activate a Logical Partition with the Default Profile

This example activates the logical partition, "testlpar," using the default profile.

```
dpmlpar cycle -powerop activate -hmc uslihmc
-managed_system testComputer -partition_name testlpar
```

Example: Activate a Logical Partition with a Specified Profile

This example activates the logical partition, "testlpar," using the profile testlparprofile.

```
dpmlpar cycle -powerop activate -hmc usliivm
-managed_system testComputer -partition_name testlpar
-profile_name testlparprofile
```

Example: Activate a Logical Partition to Open Firmware Prompt

This example activates the logical partition "testlpar" using the profile testlparprofile and opens to the open firmware prompt.

```
dpmlpar cycle -powerop activate -hmc uslihmc
-managed_system testMS -partition_name testlpar
-activate_bootmode open_firmware
```

Example: Delayed Shut Down of a Logical Partition

This example performs a delayed shutdown of the logical partition, "testlpar."

```
dpmlpar cycle -hmc testivm -powerop shutdown
-managed_system managedsys1 -partition testlpar -type delayed
```

dpmlpar delete Command--Delete a Logical Partition

The dpmlpar delete command deletes a logical partition that is deactivated.

Important! Verify that you back up any important data *before* you issue this command. This command deletes the LPAR and the data files for the LPAR. The LPAR must be powered off when you issue this command.

This command has the following format:

```
dpmlpar delete
[-sc sc_url]
-hmc name
-managed_system managedsystemname
-partition_name partitionname
[-pre] [-post]
[-ws_user username]
[-ws_password password]
[-prompt <false|true>]
[-ws_remote_user username]
[-ws_remote_password password]
[-delete_logical_value <false|true>]
[-locale  iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the name of a logical partition to delete. This partition must exist on the managed system.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

Example: Delete a Logical Partition

This example deletes the logical partition, "lpar01."

```
dpmlpar delete -hmc hmc02 -managed_system system05
-partition_name lpar01
```

dpmlpar getresources Command--Get LPAR Resources

The dpmlpar getresources command retrieves memory units, processor units, or processors for IBM AIX LPARs.

This command has the following format:

```
dpmlpar getresources
[-sc sc_url]
-resource {all|memory|processors|processor_units}
-hmc name
-managed_system managedsystemname
-partition_name partitionname
[-pre] [-post]
[-ws_user username]
[-ws_password password]
[-prompt <false|true>]
[-ws_remote_user username]
[-ws_remote_password password]
[-locale  iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-resource {all|memory|processors|processor_units}

Specifies whether a specific resource is retrieved or all resources. Options include the following:

all

Retrieves and displays all partition resources.

memory

Retrieves and displays only the memory resources for the partition.

processors

Retrieves and displays only the processor resources for the partition.

processor units

Retrieves and displays only the processor unit resources for the partition.

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition for which resources are being listed. The partition must exist on the managed system.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

Example: Get all Resources for an LPAR

This example retrieves all resources for lpar06.

```
dpmlpar getresources -resource all -partition_name lpar06
-hmc ivm_02 -managed_system abcsystem4
```

Example: Get the Memory Resources for an LPAR

This example retrieves the memory resources for lpartest01.

```
dpmlpar getresources -resource memory -partition_name lpartest01
-hmc hmc_02 -managed_system abcsystem2
```

dpmlpar image Command--Create an IBM AIX LPAR

The dpmlpar image command creates an IBM AIX LPAR using the HMC/IVM and a target IBM AIX managed system. (Optional) You can deploy the IBM AIX operating system after you create the LPAR.

This command has the following format:

```
dpmlpar image [-sc sc_url]
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-profile_name lparprofile (HMC only)
[-profile_name lparname] (IVM only)

-min_mem size
-desired_mem size
-max_mem size

-proc_mode {shared|dedicated}
-min_proc_units units
-desired_proc_units units
-max_proc_units units

-min_procs number
-desired_procs number
-max_procs number

-max_virtual_slots number
-share_mode {capped|uncapped}
[-uncap_weight weight]
[-io_slot DRC index,{true|false}]
[-lpar_io_pool_id id {,id, …}]
```

[-virtual_serial_adapter *slot_num, remote_lpar_name, remote_slot_num, is_required*]
[-virtual_scsi_client_adapter *slot_num, remote_lpar_name, remote_slot_num, is_required*] |
[-virtual_scsi_server_client_adapter *virtual_io_server_name, backing_device_name, client_slot_num, is_required*]
[-virtual_eth_adapter *slot_num, is_IEEE, port_vlan_id*, (*additional_vlan_id, additional_vlan_id, …*), *trunk_priority, is_required*]
[-virtual_fc_server_client_adapter *virtual_io_server_name*, *physical_fc_port_name*, *client_slot_num*, *is_required*
[*virtual_io_server_name*,*physical_fc_port_name*,*client_slot_num*,*is_required*;...]]

[-pre] [-post]
[-ws_user *username*]
[-ws_password *password*]

[-encrypted_password {no|yes}]
[-prompt <no|yes>]

[-ws_remote_user *username*]
[-ws_remote_password *password*]

[-create_logical_volume <false|true>]
[-logical_volume_size <value>]
[-volume_group_names <value>]
[-logical_volume_name <value>]
[-use_logical_volume_name_as_prefix {no|yes}]
[-default_vio_server_name *vioserver*]
[-itcm_server *itcmservername*]
[-locale *iso639value*]

Parameters for imaging AIX using the NIM MKSYSB utility

[-install_type {rte|mksysb}]

-mksysb *mksysb_resource*

-lpp *lpp_resource*

-bosinst_data *bos_install_data_resource*

-image_data *image_data_resource*

Parameters for provisioning AIX using a resource group

```
-provision_aix true
-type res_group
-res_group_name resourcegroupname
-machine_res_name machineresourcename
-target_username targetusername
[-target_password targetpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
-nim_master_host_name nimmasterhostname
[-scalability_server servername]
[-deploy_template templatename]
-auto_deploy {yes|no}
[-wait [timeout]]
```

Parameters for provisioning AIX using individual resources

```
-provision_aix true
-type individual_res
-machine_res_name machineresourcename
-lpp lppresource
-spot spotresource
-bosinst_data bosdata
-resolv_conf resolveconf
-fb_script fbscript
-post_inst_scripts script1,script2,script3
-target_username targetusername
[-target_password targetpassword]
[-auth_file authorizationfilename]
[-auth_comp componentID]
-nim_master_host_name nimmasterhostname
[-scalability_server servername]
[-deploy_template templatename]
-auto_deploy {yes|no}
[-wait [timeout]]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the name of a logical partition to create.

-profile_name *lparprofile* (HMC only)

[-profile_name *lparname*] (IVM only)

Specifies the partition profile to use when you activate the logical partition. Required for HMC. Optional for IVM, and if specified the name must match the partition name.

-min_mem *size*

Defines the minimum amount of memory for the partition.

-desired_mem *size*

Defines the desired amount of memory for the partition.

-max_mem *size*

Defines the maximum amount of memory for the partition.

-proc_mode {shared|dedicated}

Specifies the type of processor mode for the partition. Options include the following:

shared

Shares processor resources with other partitions.

dedicated

Specifies that the partition has dedicated processor resources.

-min_proc_units *units*

Defines the minimum number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-desired_proc_units *units*

Defines the assigned number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-max_proc_units *units*

Defines the maximum number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-min_procs *number*

Defines the minimum number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-desired_procs *number*

Defines the assigned number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-max_procs *number*

Defines the maximum number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-shared_mode {capped|uncapped}

Specifies whether the managed system allows the logical partition to use idle processing units that are not committed to another partition from the shared processor pool.

Note: This option can only be used with shared processors.

Options include the following:

capped

Specifies that the partition can only use the number of processing units that are committed to it.

uncapped

Specifies that the partition can use idle processor units from the shared processor pool when they are available.

-uncap_weight *weight*

(Optional) Defines a weighted average of processing priority when you select uncapped sharing mode.

Limits: 0 - 255

-max_virtual_slots *number*

Defines the maximum number of virtual adapters for this partition.

Default: 2

Limits: 2 - 65,536

-io_slot *DRC-Index*,{true|false}

(Optional) Specifies the I/O slot for a physical component. You can specify this value multiple times for different I/O devices.

DRC-Index

Specifies the slot dynamic reconfiguration connector (DRC) index.

true

Specifies that a DRC index is required for the I/O slot.

false

Specifies that a DRC index is not required for the I/O slot.

-io_pool_id *id* {,*id* ...}

(Optional) Defines the group of I/O adapters that can be taken over and used by any of a specified group of logical partitions without any active intervention from the HMC. The group of partitions can be a comma-separated list of I/O pool IDs.

-virtual_serial_adapter *slot_num, remote_lpar_name, remote_slot_num, is_required*

(Optional) Defines the virtual serial adapters for this logical partition. The variable is_required can be set to true or false. Only client serial adapter is supported, but can be specified multiple times.

Default: Two server serial adapters created in slots 1 and 2.

Note: Not supported for creating an LPAR on IVM.

-virtual_eth_adapter_client *slot_num, is_IEEE, port_vlan_id1 (vlanid2,vlanid3,...), trunk_priority, is_required*

(Optional) Defines the virtual ethernet adapters for this logical partition and can be specified multiple times. Optional values are *vlan_id*n and *trunk_priority*. The variables *is_IEEE* and *is_required* can be set to true or false. Additional *vlan_id*s must be comma-separated and enclosed in parentheses.

Note: When creating an LPAR on IVM, *slot_num* must be greater than or equal to 4.

Example: 4,false,1,,,true

-virtual_fc_server_client_adapter *virtual_io_server_name, physical_fc_port_name, client_slot_num, is_required [;virtual_io_server_name, physical_fc_port_name, client_slot_num, is_required;...]*

(Optional) Defines a virtual Fibre Channel (FC) client adapter, FC server adapter on VIO server, and associates the FC server adapter to the physical FC port. This option is not valid when the -provision_aix option is set to true. This parameter can be specified multiple times. The variable *is_required* can be set to true or false.

-virtual_scsi_client_adapter *slot_num, remote_lpar_name, remote_slot_num, is_required*

(Optional) Defines the virtual client SCSI adapters for this logical partition and can be specified multiple times. The variable is_required can be set to true or false.

-virtual_scsi_server_client_adapter *virtual_io_server_name, backing_device_name, client_slot_num, is_required*

(Optional) Defines a virtual SCSI server device and virtual SCSI client device, which is automatically linked after the server device is created and the server slot number is identified. This parameter can be specified multiple times. The variable *is_required* can be set to true or false.

Example: CUST-VIOSERVER,hdisk5,3,true

Note: If you create Logical Volume using the dpmlpar image command and set the -create_logical_volume option to 'yes', the -virtual_scsi_server_client_adapter option is not required and shall be omitted.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-encrypted_password {no|yes}

(Optional) Specifies whether the user password is encrypted.

Default: No

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-create_logical_volume {no|yes}

(Optional) Specifies whether to create Logical Volume.

Default: no

Note: If you create Logical Volume using the dpmlpar image command and set the -create_logical_volume option to 'yes', the -virtual_scsi_server_client_adapter option is not required and shall be omitted.

-logical_volume_size *logical_volume_size*

(Optional) Defines the size of the Logical Volume in MB.

-volume_group_names *volume_group_1, volume_group_2, volume_group_3*

(Optional) Specifies the Logical Volume group names as a comma-separated list.

-logical_volume_name *logical_volume_name*

(Optional) Defines the name of the Logical Volume.

-use_logical_volume_name_as_prefix {no|yes}

(Optional) Specifies whether to use the Logical Volume Name as a prefix.

Default: no

-default_vio_server_name *vioserver*

(Optional) Specifies the VIO server that is used for creation of Logical Volumes.

-itcm_server *itcm_servername*

(Optional) Specifies the name of the [assign itcm product name for the adsm variable] Server.

Parameters used for imaging with NIM mksysb

-install_type {rte|mksysb}

(Optional) NIM installation type. Accepted values are rte or mksysb. rte is the default if –install_type is not specified.

-mksysb *mksysbResource*

mksysb resource. Only valid if –install_type is mksysb.

-lpp *lpp_resource*

Specifies the licensed program product files to use for an imaging request. Optional if –install_type is mksysb. Required if -install_type is rte.

-bosinst_data *bos_install_data_resource*

Specifies a file that contains information for the base operating system (BOS) installation program. Optional if –install_type is mksysb. Required if -install_type is rte.

-image_data *imageDataResource*

(Optional) Specifies the image data resource file that describes how physical disks, volume groups, logical volumes, file systems, and paging space are configured on the root volume.

Parameters used for provisioning

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-auto_deploy {yes|no}

Specifies whether CA Virtual Assurance agents are deployed automatically. Options include the following:

yes

Deploys CA Virtual Assurance agents automatically.

no

Prevents CA Virtual Assurance agents from being deployed automatically.

Default: no

-bosinst_data *bos_install_data_resource*

Specifies a file that contains information for the base operating system (BOS) installation program. Optional if –install_type is mksysb. Required if -install_type is rte.

-deploy_template *templatename*

(Optional) Specifies the name of the generic template created in CA Virtual Assurance.

Note: Do not confuse this template with the templates created and managed by VMware vCenter.

-fb_script *fbscript*

(Optional) Defines the name of the file to use to configure devices when a NIM client is initially booting after the BOS installation process is complete.

-lpp *lpp_resource*

Specifies the licensed program product files to use for an imaging request. Optional if –install_type is mksysb. Required if -install_type is rte.

-machine_res_name *machineresourcename*

Defines the name of the machine resource. This name must be predefined at the NIM Master.

-nim_master_host_name *nimmasterhostname*

Defines the NIM master host name to perform the image deployment.

-post_inst_scripts *script1,script2,script3*

(Optional) Specifies a comma-separated list of scripts to run after installation.

-provision_aix {true|false}

Indicates whether the partition is imaged using NIM, after you create it.

true

Uses NIM to image the partition that you created. If you set to true, the NIM resource group or NIM individual resource parameters are used. See the dpmnim image Command|Deploy an IBM AIX Image Using a Resource Group and dpmnim image Command|Deploy an IBM AIX Image Using an Individual Resource. The job ID is returned when NIM provisioning starts.

false

Does not use NIM to image the partition that you created. No job ID is returned.

-res_group_name *resource group name*

Defines the name of the resource group.

-resolve_conf *resolveconf*

(Optional) Defines a file that contains valid */etc/resolv.conf* entries that define Domain Name Protocol name-server information for local resolver routines.

-scalability_server *servername*

(Optional) Specifies the [assign itcm product name for the adsm variable] scalability server for software distribution.

-spot *spotResource [mksysbResource]*

Defines the shared product object tree to use for an imaging request.

-target_password *targetpassword*

(Optional) Defines the user password used for deploying agents to the target host server to which you are deploying the image. If you do not specify the password, it is retrieved from the authorization file.

Note: Use the dpmutil CLI to set up the authorization file.

-target_username *targetusername*

Defines the user name used for deploying agents to the target host server to which you are deploying the image.

-type {res_group|individual_res}

Specifies to use the imaging operation type resource group or individual resources.

res_group

Specifies to use the resource group for imaging.

individual_res

Specifies to use individual resources for imaging.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

Example: Create an IBM AIX Logical Partition

This example creates a logical partition, but does not provision it.

```
dpmlpar image -hmc ivm01 -managed_system testMS
-partition_name lpartest01 -profile_name lpartest01
-max_virtual_slots 10 -min_mem 128 -desired_mem 256
-max_mem 2048 -min_procs 1 -desired_procs 2 -max_procs 5
-proc_mode shared -share_mode uncapped -uncap_weight 123
-min_proc_units .5 -max_proc_units 3.25 -desired_proc_units 1.75
-virtual_serial_adapter 2,serial_partition,1,true
-virtual_scsi_client_adapter 3,scsi_partition,7,true
-virtual_eth_adapter 4,true,1,(22,35,54),,true
-io_slot 21020003,false
```

Example: Create an IBM AIX Logical Partition and Image it Using Individual Resources

This example creates a logical partition and provisions it using individual resources.

```
dpmlpar image -hmc hmc01 -managed_system testMS
-partition_name IRTEST -profile_name Default
-max_virtual_slots 10 -min_mem 128 -desired_mem 256
-max_mem 2048 -min_procs 1 -desired_procs 1
-max_procs 1 -proc_mode dedicated
-virtual_serial_adapter 2,SerialPartition,1,true
-virtual_scsi_client_adapter 3,SCSIPartition,7,true
-virtual_eth_adapter 4,true,1,(22,35,54),0,true
-io_slot 21020003,false -provision_aix true
-type individual_res -lpp 530lpp_res -spot 530spot_res
-bosinst_data 530_bid_ow -resolv_conf master_net_conf
-post_inst_scripts piScript -machine_res_name MachineName
-nim_master_host_name machine.mydomain.com -auto_deploy no
-target_username root -target_password password
```

Example: Create an IBM AIX Logical Partition and Image it Using a Resource Group

This example creates a logical partition and provisions it using a resource group.

```
dpmlpar image -hmc hmc02 -managed_system testMS
-partition_name RGTEST -profile_name Default
-max_virtual_slots 10 -min_mem 128 -desired_mem 256
-max_mem 2048 -min_procs 1 -desired_procs 2 -max_procs 5
-proc_mode dedicated -virtual_serial_adapter 2,SerialPartition,1,true
-virtual_scsi_client_adapter 3,SCSIPartition,7,true
-virtual_eth_adapter 4,true,1,(22,35,54),,true
-io_slot 21020003,false -provision_aix true -type res_group
-res_group_name Res_grp -machine_res_name Machine
-nim_master_host_name machine.mydomain.com -auto_deploy no
-target_username root -target_password password
```

dpmlpar imgjobcheck Command--Retrieve Status of IBM AIX Imaging Job

The dpmlpar imgjobcheck command retrieves the status of the IBM AIX logical partition imaging job for a specific CA Virtual Assurance job ID.

This command has the following format:

```
dpmlpar imgjobcheck
[-sc sc_url]
-status jobID
[-pre] [-post]
[-ws_user username]
[-ws_password password]
[-prompt <no|yes>]
[-ws_remote_user username]
[-ws_remote_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-status *jobID*

Specifies the CA Virtual Assurance job ID used to obtain the job status.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

Example: Retrieve the Status of the IBM AIX Imaging Job Using the Job ID

This example obtains the job status of the IBM AIX logical partition imaging job using the CA Virtual Assurance job ID 42.

```
dpmlpar imgjobcheck -status 42
```

dpmlpar list Command--List HMC Resources

The dpmlpar list command lists information from the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM).

This command has the following format:

```
dpmlpar list [-sc sc_url]
-hmc name
[-managed_system managedsystemname]
[-partition_name partitionname]
-display {managed_systems | managed_system_details | partitions | io_components |
backing_devices | scsi_adapters | partition_details | profiles | wwpns}
[-pre] [-post]
[-ws_user username]
[-ws_password password]
[-prompt <no|yes>]
[-ws_remote_user username]
[-ws_remote_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-display
{managed_systems|managed_system_details|partitions|io_components|backing_devices|scsi_adapters|partition_details|profiles|wwpns}

Specifies which resources to list. Options include the following:

managed_systems

Lists the managed systems controlled by the management hardware console.

managed_system_details

Provides detailed information about a managed system.

partitions

Lists the partitions on a managed system.

io_components

Lists the I/O components of a managed system.

backing_devices

Lists the devices that are available to be attached as backing devices to the Server Virtual SCSI Adapter.

scsi_adapters

Lists the SCSI adapters of a managed system.

partition_details

Lists the details for a partition.

profiles

Lists the list of profiles for a partition.

wwpns

Displays the worldwide port names for a partition.

-hmc *name*

Specifies the HMC/IVM for which to list information.

-managed_system *managedsystemname*

(Optional) Specifies the managed system on which the logical partition resides for which you want to list information.

Note: Do not use with managed_systems option.

-partition_name *partitionname*

(Optional) Specifies the logical partition for which you want to list information.

Note: Do not use with managed_systems option.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

Example: Display the List of Managed Systems

This example displays the managed systems for the hardware management console "labhmc."

```
dpmlpar list -display managed_systems -hmc labhmc
```

Example: Display the SCSI Adapters

This example displays the SCSI adapters for the managed system "testMS."

```
dpmlpar list -display scsi_adapters -hmc uslihmc
-managed_system testMS
```

Example: Display Partition Details

This example displays the details for the logical partition "testlpar."

```
dpmlpar list -display partition_details -hmc uslihmc
-managed_system testMS -partition_name testlpar
```

dpmlpar setresources Command--Add Memory Resources

The dpmlpar setresources command adjusts memory units for IBM AIX LPARs.

This command has the following format:

dpmlpar setresources
[-sc *sc_url*]
-add_memory *value*
-hmc *name*
-managed_system *managedsystemname*
-partition_name *partitionname*
-type {*dynamic*|*all*}
[-pre] [-post]
[-ws_user *username*]
[-ws_password *password*]
[-prompt <no|yes>]
[-ws_remote_user *username*]
[-ws_remote_password *password*]
[-locale *iso639value*]

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-add_memory *value*

Defines the amount of memory to add to the partition.

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the current profile value. The adjusted values are saved for the partition.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native". Example: Add Memory to a Logical Partition

This example adds 128 MB of memory to the logical partition "lpartest01."

```
dpmlpar setresources -add_memory 128 -partition_name lpartest01
-hmc uni02 -managed_system usil01system1 -type dynamic
```

Example: Add Memory to a Logical Partition and Update a Profile

This example adds 128 MB of memory to the logical partition "lpartest01" and updates the partition profile file.

```
dpmlpar setresources -add_memory 128 -partition_name lpartest01
-hmc uni02 -managed_system usil01system1 -type all
-profile_name lpartest01
```

dpmlpar setresources Command--Add Processor Resources

The dpmlpar setresources command adds processors and processor units for IBM AIX LPARs.

This command has the following format:

```
dpmlpar setresources
[-sc sc_url]
{-add_processors|add_processor_units} value
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all}
[-pre] [-post]
[-ws_user username]
[-ws_password password]
[-prompt <no|yes>]
[-ws_remote_user username]
[-ws_remote_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-add_processors *value*

Defines the number of processors to add to the partition.

-add_processor_units *value*

Defines the processor units to add to the partition.

Limits: .01 increments

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the current profile value. The adjusted values are saved for the partition.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

Example: Add Processors for a Partition and Update Profile

This example adds a processor to the partition "lpartest01" and updates the partition profile.

```
dpmlpar setresources -add_processors 1 -partition_name lpartest01
-hmc uni02 -managed_system MSsystem1 -type all -profile_name lpartest01
```

Example: Add Processors and Processor Units for a Partition

This example temporarily adds the processor and processor unit resources for the partition "lpartest01."

```
dpmlpar setresources -add_processors 1 -add_processor_units 4.5
-partition_name lpartest01 -hmc uni02 -managed_system MSsystem1
-type dynamic
```

dpmlpar setresources Command--Subtract Memory Resources

The dpmlpar setresources command removes memory units for IBM AIX LPARs.

This command has the following format:

```
dpmlpar setresources
[-sc sc_url]
-subtract_memory value
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all}
[-pre] [-post]
[-ws_user username]
[-ws_password password]
[-prompt <no|yes>]
[-ws_remote_user username]
[-ws_remote_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subtract_memory *value*

Defines the amount of memory to remove from the partition.

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the current profile value. The adjusted values are saved for the partition.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

Example: Subtract Memory from a Logical Partition

This example subtracts 128 MB of memory from the logical partition "lpartest01."

```
dpmlpar setresources -subtract_memory 128 -partition_name lpartest01
-hmc con02 -managed_system MSsystem1 -type dynamic
```

Example: Subtract Memory from a Logical Partition and Update a Profile

This example subtracts 128 MB of memory from the logical partition "lpartest01" and updates the partition profile file.

```
dpmlpar setresources -subtract_memory 128 -partition_name lpartest01
-hmc con02 -managed_system MSsystem1 -type all
```

dpmlpar setresources Command--Subtract Processor Resources

The dpmlpar setresources command removes processors and processor units from IBM AIX LPARs.

This command has the following format:

```
dpmlpar setresources
[-sc sc_url]
{-subtract_processors|subtract_processor_units} value
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all}
[-pre] [-post]
[-ws_user username]
[-ws_password password]
[-prompt <no|yes>]
[-ws_remote_user username]
[-ws_remote_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subtract_processors *value*

Defines the number of processors to remove from the partition.

-subtract_processor_units *value*

Defines the processor units to remove from the partition.

Limits: .01 increments

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the current profile value. The adjusted values are saved for the partition.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_remote_user username

(Optional) Specifies the CA Virtual Assurance remote user name.

-ws_remote_password password

(Optional) Specifies the CA Virtual Assurance remote password.

-locale *iso639value*

Example: Subtract Processors From a Partition and Update Profile

This example subtracts a processor from the partition "lpartest01" and updates the partition profile

```
dpmlpar setresources -subtract_processors 1 -partition_name lpartest01
-hmc hmc02 -managed_system MSsystem1 -type all
```

Example: Subtract Processors and Processor Units From a Partition

This example temporarily adjusts the processor and processor unit resources for the partition "lpartest01."

```
dpmlpar setresources -subtract_processors 1 -subtract_processor_units 4.5
-partition_name lpartest01 -hmc hmc02 -managed_system MSsystem1 -type dynamic
```

dpmlpar setresources Command--Update Memory Resources

The dpmlpar setresources command adjusts memory units for IBM AIX LPARs.

This command has the following format:

```
dpmlpar setresources
[-sc sc_url]
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all|profile}
-min_mem size
-desired_mem size
-max_mem size
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*|*profile*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the profile value. The adjusted values are saved for the partition.

profile

Adjusts the profile value.

-min_mem *size*

Defines the minimum amount of memory for the partition.

-desired_mem *size*

Defines the desired amount of memory for the partition.

-max_mem *size*

Defines the maximum amount of memory for the partition.

dpmlpar setresources Command--Update Processor Resources

The dpmlpar setresources command updates processors for IBM AIX LPARs.

This command has the following format:

```
dpmlpar setresources
[-sc sc_url]
-hmc name
-managed_system managedsystemname
-partition_name partitionname
-type {dynamic|all|profile}
[-proc_mode {shared |dedicated}]
[-min_proc_units units]
-desired_proc_units units
[-max_proc_units units]
[-min_procs number]
-desired_procs number
[-max_procs number]
[-share_mode {capped |uncapped} [-uncap_weight weight]]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-hmc *name*

Specifies the Hardware Management Console (HMC) or Integrated Virtualization Manager (IVM) that controls the managed systems where the logical partition resides.

-managed_system *managedsystemname*

Specifies the managed system on which the logical partition resides. The managed system must exist on the HMC/IVM.

-partition_name *partitionname*

Specifies the logical partition to which the resources are going to be applied. The partition must exist on the managed system.

-type {*dynamic*|*all*|*profile*}

Specifies whether the adjustment is temporary or permanent. Options include the following:

dynamic

Adjusts the current resources only and the adjusted values are lost when you shut down the partition.

all

Adjusts the current resources and the profile value. The adjusted values are saved for the partition.

profile

Adjusts the profile value.

-proc_mode {shared|dedicated}

(Optional) Specifies the type of processor mode for the partition. Options include the following:

shared

Shares processor resources with other partitions.

dedicated

Specifies that the partition has dedicated processor resources.

-min_proc_units *units*

(Optional) Defines the minimum number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-desired_proc_units *units*

Defines the assigned number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-max_proc_units *units*

(Optional) Defines the maximum number of processing units for this partition.

Limits: .01 increments

Note: This option can only be used with shared processors.

-min_procs *number*

(Optional) Defines the minimum number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-desired_procs *number*

Defines the assigned number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-max_procs *number*

(Optional) Defines the maximum number of virtual processors for this partition.

Note: This option can only be used with shared processors.

-shared_mode {capped|uncapped}

Specifies whether the managed system allows the logical partition to use idle processing units that are not committed to another partition from the shared processor pool.

Note: This option can only be used with shared processors.

Options include the following:

capped

Specifies that the partition can only use the number of processing units that are committed to it.

uncapped

Specifies that the partition can use idle processor units from the shared processor pool when they are available.

-uncap_weight *weight*

(Optional) Defines a weighted average of processing priority when you select uncapped sharing mode.

Limits: 0 - 255

CA Microsoft Cluster Server CLI Commands

You can use the CLI to script and automate CA MSCS commands and run actions based on the command results. Corresponding commands are also available in the AutoShell.

dpmmscs getclusterinfo Command--Get Information of a Cluster

The getclusterinfo command returns general information of a cluster.

This command has the following format:

```
dpmmscs getclusterinfo
[-sc <scUrl>]
-cluster <cluster>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Information of a Cluster

```
dpmmscs.exe getclusterinfo -cluster MYCLUSTER  -ws_user admin -ws_password admin
```

dpmmscs getgroupresourcesinfo Command--Get Resource Information of a Cluster group

The getgroupresourcesinfo command returns resource information for a cluster group

This command has the following format:

```
dpmmscs getgroupresourcesinfo
[-sc <scUrl>]
-cluster <cluster>
-resgroup <resource group>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-resgroup

Specifies the resource group.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Resource Information of a Cluster group

```
dpmmscs.exe getgroupresourcesinfo -cluster MYCLUSTER -resgroup "Group 0" -ws_user
admin -ws_password admin
```

dpmmscs getnetworkinterfacesinfo Command--Get Network Interface Information

The getnetworkinterfacess info command returns cluster network interface information.

This command has the following format:

```
dpmmscs getnetworkinterfacesinfo
[-sc <scUrl>]
-cluster <cluster>
-net <network name>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-net

Specifies the network name.

-cluster

Specifies the cluster name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Cluster Network Interface Information.

```
dpmmscs.exe getnetworkinterfacesinfo -cluster MYCLUSTER  -net "Local Area Connection
2" -ws_user admin -ws_password admin
```

dpmmscs getnetworksinfo Command--Get Network Information

The getnetworksinfo command returns cluster network information.

This command has the following format:

```
dpmmscs getnetworksinfo
[-sc <scUrl>]
-cluster <cluster>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Cluster Network Information.

```
dpmmscs.exe getnetworksinfo -cluster MYCLUSTER  -ws_user admin -ws_password admin
```

dpmmscs getnodesinfo Command--Get Cluster Nodes Information

The getnodesinfo command returns cluster nodes information.

This command has the following format:

```
dpmmscs getnodesinfo
[-sc <scUrl>]
-cluster <cluster>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Cluster Nodes Information.

```
dpmmscs.exe getnodesinfo -cluster MYCLUSTER  -ws_user admin -ws_password admin
```

dpmmscs getresourcegroupsinfo Command--Get Cluster Resource Groups Information

The getresourcegroupsinfo command returns cluster resource groups information.

This command has the following format:

```
dpmmscs getresourcegroupsinfo
[-sc <scUrl>]
-cluster <cluster>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Network Cluster Resource groups Information.

```
dpmmscs.exe getresourcegroupsinfo -cluster MYCLUSTER  -ws_user admin -ws_password
admin
```

dpmmscs getresourcesdependenciesinfo Command--Get Dependency Information of Resources

The getresourcedependenciesinfo command returns dependency information for a cluster resource.

This command has the following format:

```
dpmmscs getresourcedependenciesinfo
[-sc <scUrl>]
-cluster <cluster>
-res <resource name>
-restype <resource type>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-res

Specifies the resource name.

-restype

Specifies the resource type.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Dependency Information of Cluster Resources

```
dpmmscs.exe getresourcedependenciesinfo -cluster MYCLUSTER -res "SQL Server
Fulltext" -restype "Generic Service"  -ws_user admin -ws_password admin
```

dpmmscs getresourcetypesinfo Command--Get Cluster Resource Types Information

The getresourcetypes info command returns cluster resource types information.

This command has the following format:

```
dpmmscs getresourcetypesinfo
[-sc <scUrl>]
-cluster <cluster>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Cluster Resource Types Information.

```
dpmmscs.exe getresourcetypesinfo -cluster MYCLUSTER  -ws_user admin -ws_password
admin
```

dpmmscs getservicesinfo Command--Get Cluster Services Information

The getservicesinfo command returns cluster services information.

This command has the following format:

```
dpmmscs getservicesinfo
[-sc <scUrl>]
-cluster <cluster>
[-locale iso639value]
[-ws_user username]
[-ws_password password]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Get Cluster Service Information.

```
dpmmscs.exe getservicesinfo -cluster MYCLUSTER  -ws_user admin -ws_password admin
```

dpmmscs movegroup Command--Move a Resource Group to another Node

The movegroup command lets you move a resource group to another node.

This command has the following format:

```
dpmmscs movegroup
[ -sc <scUrl> ]
-cluster <cluster>
-resgroup <resource group>
-node <node name>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-resgroup

Specifies the resource group.

-node

Specifies the node name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Move a Resource Group to another Node

```
dpmmscs.exe movegroup -cluster MYCLUSTER -resgroup "Group 0" -node ATS-281-W2k3CL
-ws_user admin -ws_password admin
```

dpmmscs pauseservice Command--Pause a Cluster Service

The pauseservice command lets you pause a cluster service on a node.

This command has the following format:

```
dpmmscs pauseservice
[ -sc <scUrl> ]
-cluster <cluster>
-node <node name>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-node

Specifies the node name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Pause a cluster service on a node:

```
dpmmscs.exe pauseservice -cluster MYCLUSTER -node ATS-281-W2k3CL -ws_user admin
-ws_password admin
```

dpmmscs bringgrouponline Command--Bring a Resource Group Online

The bringgrouponline command lets you bring a resource group online.

This command has the following format:

```
dpmmscs bringgrouponline
[ -sc <scUrl> ]
-cluster <cluster>
-resgroup <resource group>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-resgroup

Specifies the resource group.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Bring a Resource Group Online

```
dpmmscs.exe bringgrouponline -cluster MYCLUSTER -resgroup "Group 0" -ws_user admin
-ws_password admin
```

dpmmscs bringresourceonline Command--Bring a Resource Online

The bringresourceonline command lets you bring a resource online.

This command has the following format:

```
dpmmscs bringresourceonline

[ -sc <scUrl> ]
-cluster <cluster>
-res <resource name>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-res

Specifies the resource name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Bring a Resource Online

```
dpmmscs.exe bringresourceonline -cluster MYCLUSTER -res "SQL Server Fulltext"
-ws_user admin -ws_password admin
```

dpmmscs resumeservice Command--Resume a Cluster Service

The resumeservice command lets you resume a cluster service on a node.

This command has the following format:

```
dpmmscs resumeservice

[ -sc <scUrl> ]
-cluster <cluster>
-node <node name>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-node

Specifies the node name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Resume a cluster service on a node

```
dpmmscs.exe resumeservice -cluster MYCLUSTER -node ATS-281-W2k3CL -ws_user admin
-ws_password admin
```

dpmmscs startservice Command--Start a Cluster Service

The startservice command lets you start a cluster service on a node.

This command has the following format:

```
dpmmscs startservice

[ -sc <scUrl> ]
-cluster <cluster>
-node <node name>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-node

Specifies the node name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Start a cluster service on a node

```
dpmmscs.exe startservice -cluster MYCLUSTER -node ATS-281-W2k3CL -ws_user admin
-ws_password admin
```

dpmmscs stopservice Command--Stop a Cluster Service

The stopservice command lets you stop a cluster service on a node.

This command has the following format:

```
dpmmscs stopservice

[ -sc <scUrl> ]
-cluster <cluster>
-node <node name>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-node

Specifies the node name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Stop a cluster service on a node

```
dpmmscs.exe stopservice -cluster MYCLUSTER -node ATS-281-W2k3CL -ws_user admin
-ws_password admin
```

dpmmscs takegroupoffline Command--Take a Resource Group Offline

The takegroupoffline command lets you take a resource group offline.

This command has the following format:

```
dpmmscs takegroupoffline
[ -sc <scUrl> ]
-cluster <cluster>
-resgroup <resource group>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-resgroup

Specifies the resource group.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Take a Resource Group Offline

```
dpmmscs.exe takegroupoffline -cluster MYCLUSTER -resgroup "Group 0" -ws_user admin
-ws_password admin
```

dpmmscs takeresourceoffline Command--Take a Resource Offline

The takeresourceoffline command lets you take a resource offline.

This command has the following format:

```
dpmmscs takeresourceoffline
[ -sc <scUrl> ]
-cluster <cluster>
-res <resource name>
[ -locale <locale> ]
[ -ws_user <username> ]
[ -ws_password <password> ]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-cluster

Specifies the cluster name.

-res

Specifies the resource name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-ws_user *username*

(Optional) Specifies the CA Virtual Assurance user name.

-ws_password *password*

(Optional) Specifies the CA Virtual Assurance user password.

Example: Take a Resource Offline

```
dpmmscs.exe takeresourceoffline -cluster MYCLUSTER -res "SQL Server Fulltext"
-ws_user admin -ws_password admin
```

CA Solaris Zones CLI Commands

You can use the CLI to script and automate CA Solaris Zones commands and run actions based on the command results. Corresponding commands are also available in the AutoShell.

dpmzone associateproject Command--Associate a Task with a Project

The associateproject command associates a task with a project. A task is a collection of processes that represent a set of work over time. Each task is associated with one project.

This command has the following format:

```
dpmzone associateproject
[-sc sc_host]
-host hostname
-name zonename
-proj_name pname
-task_id tid
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone that provides the project.

-proj_name *pname*

Specifies the project.

-task_id *tid*

Specifies the ID number of the task.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Associate a task with a project:

```
dpmzone associateproject -host SolarisServer2 -name myzone1 -project_name myproject1
-task_id 1954
```

dpmzone clonezone Command--Clone a Zone

The clonezone command creates a duplicate zone from an existing zone. The source zone must be halted to start the cloning process. Cloning occurs on the Solaris 10 server and may take some time.

This command has the following format:

```
dpmzone clonezone [-sc sc_host]
-host hostname
-name zonename
-new_name nzonename
-new_path npath
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone that you want to clone.

-new_name *nzonename*

Defines the new zone name.

-new_path *npath*

Defines the path of the new zone.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Clone a zone on host SolarisServer2.

```
dpmzone clonezone -host SolarisServer2 -name myzone1 -new_name myzone2
-new_path /opt/zones/myzone2
```

dpmzone createandinstallzone Command--Create and Install a Zone

The createandinstallzone command creates and installs a zone with custom parameters on the Solaris host.

This command has the following format:

```
dpmzone createandinstallzone
[-sc sc_host]
-host hostname
-name zonename
-path zonepath
-type type
[-archive_path path]
[-autoboot]
[-if_type name]
[-ip ip]
[-pool_name pool]
[-sched_type sched]
[-phy_mem pmem]
[-swap_mem smem]
[-lock_mem lmem]
[-desc desc]
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Defines the name of the new zone.

-path *zonepath*

Defines the path of the new zone.

-type *type*

Specifies the type of the new zone. Options include the following:

native

Creates a non-global zone with a Solaris 10 operating environment for running applications.

whole-root

Creates a whole root zone that does not inherit packages.

branded

Creates a non-global zone that contains a non-native operating environment for running applications.

Default: native

-archive_path *path*

(Optional) Specifies the path of the operating environment installer for a branded zone.

Limits: This argument is required for branded zones, but not required for native zones.

-autoboot

(Optional) Specifies that a zone boots automatically at system boot.

Note: If the zones service is disabled on the server, the zone does not autoboot, regardless of the setting of this property. You can enable the service by using the following command:

```
svcadm enable svc:/system/zones:default
```

-if_type *name*

(Optional) Specifies the type of the network interface used by the zone, for example, eri0.

-ip *ip*

(Optional) Defines the IP address of the zone.

-pool_name *pool*

(Optional) Specifies the name of the pool with which you associate the zone.

-sched_type *shed*

(Optional) Specifies the type of scheduler used to allocate CPU time based on shares. Shares are the portion of the system CPU resources allocated to a project. Valid values include the following:

ts

Specifies the Time Share Scheduler which fairly allots CPU resources to every process and does not concentrate CPU resources on a particular process. ts is the default scheduler for the Solaris operating environment.

fss

Specifies the Fair Share Scheduler which allows you to allocate CPU time based on shares.

-phy_mem *pmem*

(Optional) Defines the physical memory that is assigned to the zone. A scale (K, M, G, T) can be applied to the value of this number, for example, 1M is one megabyte.

-swap_mem *smem*

(Optional) Defines the swap memory that is assigned to the zone.

-lock_mem *lmem*

(Optional) Defines the locked memory that is assigned to the zone. Locked memory cannot be paged.

-desc description

(Optional) Defines a description for the zone.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmzone createpool Command--Create Resource Pool

The createpool command creates a resource pool on a Solaris 10 host.

This command has the following format:

dpmzone createpool
[-sc *sc_host*]
-host *hostname*
-pset_name *pset*
-cpu_min *mincpu*
-cpu_max *maxcpu*
-pool_name *pool*
-sched_type *sched*
[-pre]
[-post]
[-locale *iso639value*]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-pset_name *pset*

Defines the name of the processor set. Each processor set (grouping of CPUs) can contain zero or more CPUs.

-cpu_min *mincpu*

Defines the minimum number of CPUs in the processor set.

-cpu_max *maxcpu*

Defines the maximum number of CPUs in the processor set.

-pool_name *pool*

Specifies the name of the pool with which you associate the zone.

-sched_type *shed*

Specifies the type of scheduler used to allocate CPU time based on shares. Shares are the portion of the system CPU resources allocated to a project. Options include the following:

ts

Specifies the Time Share Scheduler which fairly allots CPU resources to every process and does not concentrate CPU resources on a particular process. ts is the default scheduler for the Solaris operating environment.

fss

Specifies the Fair Share Scheduler which allows you to allocate CPU time based on shares.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Create the resource pool POOL1 on host SolarisServer2:

```
dpmzone createpool -host SolarisServer2 -pset_name PSET1 -cpu_min 1 -cpu_max 20
-pool_name POOL1 -sched_type FSS
```

dpmzone createproject Command--Create a Project

The createproject command creates a project in a zone.

This command has the following format:

dpmzone createproject
[-sc *sc_host*]
-host *hostname*
-name *zonename*
-user_id *uid*
[-project_id *pid*]
-proj_name *pname*
[-pre]
[-post]
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

-user_id *uid*

Specify a user.

Example: root

-project_id *pid*

(Optional) Defines the project ID. You can assign the ID or let the system automatically generate one.

-proj_name *pname*

Defines the name of the new project.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Create a project in a zone:

```
dpmzone createproject -host SolarisServer2 -name myzone1 -user_id root
-proj_name myProject
```

dpmzone createzone Command--Create a Zone

The createzone command creates a zone with custom parameters on the Solaris host.

This command has the following format:

```
dpmzone createzone
[-sc sc_host]
-host hostname
-name zonename
-path zonepath
-type type
[-autoboot]
[-if_type name]
[-ip ip]
[-pool_name pool]
[-sched_type sched]
[-phy_mem pmem]
[-swap_mem smem]
[-lock_mem lmem]
[-desc desc]
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Defines the name of the new zone.

-path *zonepath*

Defines the path of the new zone.

-type *type*

Specifies the type of the new zone. Options include the following:

native

Creates a non-global zone with a Solaris 10 operating environment for running applications.

whole-root

Creates a whole root zone that does not inherit packages.

branded

Creates a non-global zone that contains a non-native operating environment for running applications.

Default: native

-autoboot

(Optional) Specifies that a zone boots automatically at system boot.

Note: If the zones service is disabled on the server, the zone does not autoboot, regardless of the setting of this property. You can enable the service by using the following command:

```
svcadm enable svc:/system/zones:default
```

-if_type *name*

(Optional) Specifies the type of the network interface used by the zone, for example, eri0.

-ip *ip*

(Optional) Defines the IP address of the zone.

-pool_name *pool*

(Optional) Specifies the name of the pool with which you associate the zone.

-sched_type *shed*

(Optional) Specifies the type of scheduler used to allocate CPU time based on shares. Shares are the portion of the system CPU resources allocated to a project. Valid values include the following:

ts

Specifies the Time Share Scheduler which fairly allots CPU resources to every process and does not concentrate CPU resources on a particular process. ts is the default scheduler for the Solaris operating environment.

fss

Specifies the Fair Share Scheduler which allows you to allocate CPU time based on shares.

-phy_mem *pmem*

(Optional) Defines the physical memory that is assigned to the zone. A scale (K, M, G, T) can be applied to the value of this number, for example, 1M is one megabyte.

-swap_mem *smem*

(Optional) Defines the swap memory that is assigned to the zone.

-lock_mem *lmem*

(Optional) Defines the locked memory that is assigned to the zone. Locked memory cannot be paged.

-desc description

(Optional) Defines a description for the zone.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Create a zone called WebServer4:

```
dpmzone createzone -host MySolarisServer -name WebServer4 -path /Zones/Apache -type
native
-autoboot -if_type eri0 -ip 192.168.100.100 -pool_name WebServer -sched_type fss
-phy_mem 1024M -swap_mem 2048M
```

dpmzone customcommand Command--Run a Custom Command

The customcommand command lets you run external commands or scripts on the Solaris server.

Note: For information about restricted external commands, see the Custom Commands appendix in this guide.

This command has the following format:

```
dpmzone customcommand
[-sc sc_host]
-host hostname
-cmd command
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-cmd *command*

Specifies the name of the program or script to run.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Run a command on host SolarisServer2:

```
dpmzone customcommand -host SolarisServer2
-cmd /usr/local/private/scripts/test_connections.pl
```

dpmzone deleteproject Command--Delete a Project

The deleteproject command deletes a project from a zone.

This command has the following format:

```
dpmzone deleteproject
[-sc sc_host]
-host hostname
-name zonename
-proj_name pname
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone that is associated with the project.

-proj_name *pname*

Specifies the project to delete.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Delete a project:

```
dpmzone deleteproject -host SolarisServer2 -name myzone1 -project_name myproject1
```

dpmzone deletezone Command--Delete a Zone

The deletezone command lets you delete a zone on the Solaris server.

This command has the following format:

```
dpmzone deletezone
[-sc sc_host]
-host hostname
-name zonename
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to delete.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Delete a zone on host SolarisServer2:

```
dpmzone deletezone -host SolarisServer2 -name myzone
```

dpmzone installzone Command--Install a Zone

The installzone command starts the installation command on the Solaris server. The installation process may take some time. Verify the status of the zone with the showprocesses command to confirm that the installation process is running.

This command has the following format:

```
dpmzone installzone
[-sc sc_host]
-host hostname
-name zonename
[-archive_path path]
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to install.

-archive_path *path*

(Optional) Specifies the path of the operating environment installer for a branded zone.

Limits: This argument is required for branded zones, but not required for native zones.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Install a Native Zone

This example installs MyZone3 on SolarisServer.

```
dpmzone installzone
-host SolarisServer
-name MyZone3
```

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example

Install MyZone4 with Solaris 8 on SolarisServer.

```
dpmzone installzone -host SolarisServer -name MyZone4
-archive_path /opt/zoneos/branded/Solaris8Installer
```

dpmzone movezone Command--Move a Zone

The movezone command lets you move a zone from one path to a new path.

This command has the following format:

```
dpmzone movezone
[-sc sc_host]
-host hostname
-name zonename
-new_path path
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to move to a new location.

-new_path *path*

Defines the new path of the zone.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Move a zone on host SolarisServer2:

```
dpmzone movezone -host SolarisServer2 -name myzone1
-new_path /opt/zones/myzone1
```

dpmzone rebootzone Command--Reboot a Zone

The rebootzone command lets you reboot a zone on a Solaris server.

This command has the following format:

dpmzone rebootzone
[-sc *sc_host*]
-host *hostname*
-name *zonename*
[-pre]
[-post]
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to reboot.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Reboot a zone on host SolarisServer2:

```
dpmzone rebootzone -host SolarisServer2 -name myzone
```

dpmzone renamezone Command--Rename a Zone

The renamezone command lets you rename a zone on the Solaris 10 server.

This command has the following format:

dpmzone renamezone
[-sc *sc_host*]
-host *hostname*
-name *czonename*
-new_name *nzonename*
[-pre]
[-post]
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-old_name *czonename*

Specifies the current zone name.

-new_name *nzonename*

Defines the new zone name.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Rename a zone on host SolarisServer2:

```
dpmzone renamezone -host SolarisServer2 -name myzone -new_name yourzone
```

dpmzone setpoolscheduler Command--Set the Pool Scheduler

The setpoolscheduler command sets the type of scheduler to use for the resource pool. Resource pools can have two scheduler types, the Fair Share Scheduler (FSS) and the Time Share Scheduler (TS).

This command has the following format:

dpmzone setpoolscheduler
[-sc *sc_host*]
-host *hostname*
-pool_name *poolname*
-sched_type *sched*
[-pre]
[-post]
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-pool_name *poolname*

Specifies an associated group of resources that can be partitioned.

-sched_type *shed*

Specifies the type of scheduler used to allocate CPU time based on shares. Shares are the portion of the system CPU resources allocated to a project. Options include the following:

ts

Specifies the Time Share Scheduler which fairly allots CPU resources to every process and does not concentrate CPU resources on a particular process. ts is the default scheduler for the Solaris operating environment.

fss

Specifies the Fair Share Scheduler which allows you to allocate CPU time based on shares.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set the Pool Scheduler to FSS

This example sets the scheduling for the Resource Pool using the Fair Share Scheduler.

```
dpmzone setpoolscheduler -host SolarisServer -pool_name test_pool
-sched_type FSS
```

Example: Set the Pool Scheduler to TS

This example sets the scheduling for the Resource Pool using the Time Share Scheduler.

```
dpmzone setpoolscheduler -host SolarisServer -pool_name test_pool
-sched_type TS
```

dpmzone setprocessorset Command--Set the Maximum Number of CPUs for a Processor Set

The setprocessorset command sets the maximum number of CPUs for a processor set.

This command has the following format:

dpmzone setprocessorset
[-sc *sc_host*]
-host *hostname*
-processor_set_name *psetname*
-cpu_max *maxcpu*
[-pre]
[-post]
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-processor_set_name *psetname*

Specifies the processor set. Each pset (grouping of CPUs) can contain zero or more processors.

-cpu_max *maxcpu*

Defines the maximum number of CPUs in the processor set.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Set the maximum number of CPUs for the processor set:

```
dpmzone setprocessorset -host SolarisServer -processor_set_name test_pset -cpu_max
64
```

dpmzone showinterfaces Command--Show Network Interfaces

The showinterfaces command lists all the network interfaces present on the Solaris 10 host.

This command has the following format:

dpmzone showinterfaces
[-sc *sc_host*]
-host *hostname*
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List all network interfaces on host SolarisServer2:

```
dpmzone showinterfaces -host SolarisServer2
```

dpmzone showpools Command--Show Resource Pools

The showpools command lists all the resource pools present on the Solaris host.

This command has the following format:

dpmzone showpools
[-sc *sc_host*]
-host *hostname*
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List all resource pools on host SolarisServer2:

```
dpmzone showpools -host SolarisServer2
```

dpmzone showprojects Command--List the Properties of a Project

The showprojects command lists the properties of a project.

This command has the following format:

dpmzone showprojects
[-sc *sc_host*]
-host *hostname*
-name *zonename*
-proj_name *pname*
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

-proj_name *pname*

Specifies the project that is associated with the zone.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List the properties of a project:

```
dpmzone showprojects -host SolarisServer2 -name myzone1 -project_name myproject1
```

dpmzone showresourceset Command--Show Resource Sets

The showresourceset command lists the resources of a resource pool.

This command has the following format:

dpmzone showresourceset
[-sc sc_host]
-host hostname
-pool_name poolname
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-pool_name poolname

Specifies an associated group of resources that can be partitioned.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List the resource sets in MyZonesResourcePool:

```
dpmzone showresourceset -host SolarisServer2 -pool_name MyZonesResourcePool
```

dpmzone showtasks Command--List the Tasks of a Project

The showtasks command lists the tasks of a project.

This command has the following format:

dpmzone showtasks
[-sc *sc_host*]
-host *hostname*
-name *zonename*
-proj_name *pname*
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

-proj_name *pname*

Specifies the project that is associated with the zone.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List the tasks of a project:

```
dpmzone showtasks -host SolarisServer2 -name myzone1 -project_name myproject1
```

dpmzone showzoneinterfaces Command--Show Network Interfaces of a Zone

The showzoneinterfaces command lists all the network interfaces of a zone.

This command has the following format:

dpmzone showzoneinterfaces
[-sc *sc_host*]
-host *hostname*
-name *zonename*
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List all network interfaces on zone MyZone3 on SolarisServer2:

```
dpmzone showzoneinterfaces -host SolarisServer2 -name MyZone3
```

dpmzone showzoneprocess Command--Show Processes of a Zone

The showzoneprocess command lists all processes on a zone.

This command has the following format:

dpmzone showzoneprocess
[-sc *sc_host*]
-host *hostname*
-name *zonename*
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List the processes on zone MyZone3 on SolarisServer2:

```
dpmzone showzoneprocess -host SolarisServer2 -name MyZone3
```

dpmzone showzoneprojects Command--Show Projects of a Zone

The showzoneprojects command lists all the projects on a zone.

This command has the following format:

dpmzone showzoneprojects
[-sc *sc_host*]
-host *hostname*
-name *zonename*
[-locale iso639value]

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List all projects on zone MyZone3 on SolarisServer2:

```
dpmzone showzoneprojects -host SolarisServer2 -name MyZone3
```

dpmzone showzones Command--Show Zones

The showzones command lists all the zones present on the Solaris host.

This command has the following format:

```
dpmzone showzones
[-sc sc_host]
-host hostname
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

List all zones on host SolarisServer2:

```
dpmzone showzones -host SolarisServer2
```

dpmzone startzone Command--Start a Zone

The startzone command lets you start a zone on the Solaris 10 server.

This command has the following format:

```
dpmzone startzone
[-sc sc_host]
-host hostname
-name zonename
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to start.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Start a zone on host SolarisServer2:

```
dpmzone startzone -host SolarisServer2 -name myzone
```

dpmzone stopzone Command--Stop a Zone

The stopzone command lets you stop a zone on the Solaris 10 server.

This command has the following format:

```
dpmzone stopzone
[-sc sc_host]
-host hostname
-name zonename
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to stop.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Stop a zone on host SolarisServer2:

```
dpmzone stopzone -host SolarisServer2 -name myzone
```

dpmzone uninstallzone Command--Uninstall a Zone

The uninstallzone command lets you uninstall a zone on the Solaris 10 server.

This command has the following format:

```
dpmzone uninstallzone
[-sc sc_host]
-host hostname
-name zonename
[-pre]
[-post]
[-locale iso639value]
```

-sc *sc_host*

(Optional) Specifies the host name of the Service Controller.

-host *hostname*

Specifies the Solaris Zones server. This parameter is case-sensitive.

-name *zonename*

Specifies the zone to uninstall.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example

Uninstall a zone on host SolarisServer2:

```
dpmzone uninstallzone -host SolarisServer2 -name myzone
```

CA Cisco UCS Commands

You can use dpmucs CLI commands to retrieve Cisco Unified Computing System (UCS) device information, statistics, service profiles, pools, and execute blade and chassis operations.

More Information

dpmucs associateserviceprofile--Associate Service Profile With a Blade (see page 632)
dpmucs cloneserviceprofile--Clone a Service Profile (see page 633)
dpmucs createmacpool Command--Create MAC Address Pool (see page 634)
dpmucs createorg Command--Create Organization (see page 636)
dpmucs createuuidpool Command--Create UUID Pool (see page 642)
dpmucs createserverpool Command--Create Server Pool (see page 637)
dpmucs createserviceprofile Command--Create a Service Profile (see page 639)
dpmucs createtemplatefromserviceprofile Command--Create a Template from a Service Profile (see page 640)
dpmucs createwwpool Command--Create WWNN Pool (see page 643)
dpmucs deletemacpool Command--Delete MAC Address Pool (see page 645)
dpmucs deleteorg Command--Delete Organization (see page 646)
dpmucs deleteserverpool Command--Delete Server Pool (see page 648)
dpmucs deleteserviceprofile--Delete a Service Profile (see page 649)
dpmucs deleteuuidpool Command--Delete UUID Pool (see page 650)
dpmucs deletewwpool Command--Delete WWNN Pool (see page 651)
dpmucs disassociateserviceprofile Command--Disassociate Service Profile (see page 655)
dpmucs failoverserviceprofile Command--Associate a Service Profile With a Blade for Failover (see page 656)
dpmucs getblades Command--Get Blade Information (see page 657)
dpmucs getchassis Command--Get Chassis Information (see page 659)
dpmucs getserviceprofilestatus Command--Get Service Profile Status (see page 661)
dpmucs getpolicy Command--Gets Policy from a UCS Manager (see page 660)
dpmucs getswitches Command--Get Switch Information (see page 662)
dpmucs gettopsystem Command--Get System Information (see page 664)
dpmucs listserviceprofiles Command--List Service Profiles (see page 665)
dpmucs powercycle Command--Power Cycle Blades (see page 666)
dpmucs renamepool Command--Rename Pool (see page 668)
dpmucs serviceprofileupdate Command--Execute Service Profile Operations (see page 669)

dpmucs associateserviceprofile--Associate Service Profile With a Blade

Use this command to associate a service profile with a specific blade. This command shows the status of the blade before the association. To verify the association, use the getserviveprofilestatus command.

This command has the following format:

```
dpmucs associateserviceprofile
[-sc sc_url]
-ucs_manager ucsmanagername
-service_profile_dn serviceprofiledn
-blade_dn bladename
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-service_profile_dn *serviceprofiledn*

The fully qualified and unique name of a blade service profile. The blade service profile must be created before provisioning an OS. A service profile contains boot order, network settings, and storage (local or remote). Valid format: *org-root*/*serviceprofile.*

-blade_dn *bladename*

The fully qualified and unique name of a blade. If a blade is not provided, an unassociated, available blade is selected. Valid format: *systemid*/*chassisid*/*bladeid.*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Associate a Profile With a Blade

This example associates a profile with the specified blade.

```
dpmucs associateserviceprofile -ucs_manager EngManager200
-service_profile_dn org-root/ls-dev-boot-from-san-esx-2
-blade_dn sys/chassis-1/blade-1
```

dpmucs cloneserviceprofile--Clone a Service Profile

Use this command to clone a service profile.

This command has the following format:

```
dpmucs cloneserviceprofile
[-sc sc_url]
-ucs_manager ucsmanagername
-service_profile_dn serviceprofiledn
-cloneName clonename
[-org_path org_path]
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-service_profile_dn *serviceprofiledn*

The fully qualified and unique name of a blade service profile. The blade service profile must be created before provisioning an OS. A service profile contains boot order, network settings, and storage (local or remote). Valid format: *org-root/serviceprofile.*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Clone a Service Profile

This example clones a service profile.

```
dpmucs cloneserviceprofile -ucs_manager EngManager200
-service_profile_dn org-root/ls-dev-boot-from-san-esx-2
-cloneName org-root/ls-dev-boot-from-san-esx-2
```

dpmucs createmacpool Command--Create MAC Address Pool

Use this command to create a MAC address pool with one or multiple slot ranges. The pool can be created at any organization level.

This command has the following format:

```
dpmucs createmacpool
[-sc sc_url]
-ucs_manager ucsmanagername
-pool_name poolname
-description pooldescription
-org_path organizationpath
-ranges fromrange|torange fromrange|torange...
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-description *pooldescription*

Defines the pool being created.

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-ranges *fromrange|torange fromrange|torange...*

Defines the slot ranges for pools. Valid entries per pool type: MAC addresses in the format: XX:XX:XX:XX:XX:XX, UUID in the format: XXXX-XXXXXXXXXXXX, and WWNN/WWPN in the format: XX:XX:XX:XX:XX:XX:XX:XX. Delimit from-to range entries with |, and slot ranges with a single space.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a MAC Address Pool

This example creates a MAC address pool with multiple pool slots.

```
dpmucs createmacpool
-ucs_manager ucsmanager
-pool_name TEST_MAC_POOL
-description TEST POOL -org_path ""
-ranges 00:25:B5:00:00:C0|00:25:B5:00:00:C3 00:25:B5:00:00:C4|00:25:B5:00:00:C9
00:25:B5:00:00:CA|00:25:B5:00:00:CF
-ws_user ba
-ws_password ba
```

dpmucs createorg Command--Create Organization

Use this command to create an organization.

This command has the following format:

```
dpmucs createorg [-sc sc_url]
-ucs_manager ucsmanagername
-parentOrg_dn parentorganization
-org_name organizationname
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-parentOrg_dn *parentorganization*

Defines the fully qualified name of the parent organization of the current component. Valid format: *parentorganization*/*org*.

-org_name *organizationname*

Defines the fully qualified name of the organization. Valid format: *org-root/org-name*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create an Organization

This example creates a parent and subordinate organization.

```
dpmucs createorg
-ucs_manager EngManager200
-parentOrg_dn org-root
-org_name TEST_ORG
```

dpmucs createserverpool Command--Create Server Pool

Use this command to create a server pool.

This command has the following format:

```
dpmucs createwwpool
[-sc sc_url]
-ucs_manager ucsmanagername
-pool_name poolname
-description pooldescription
-org_path organizationpath
-chassisbladepairs pairs
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-description *pooldescription*

Defines the pool being created.

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-chassisbladepairs *pairs*

Defines chassis-blade pairs for a server pool. Valid entries: chassis name, followed by blade name, separated by bar (|); separate pairs with a single space. Example: chassis1|blade1 chassis2|blade2.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Server Pool

This example creates a server pool with multiple chassis blade pairs.

```
createserverpool
-ucs_manager ucsmanager
-pool_name TEST_SERVER_POOL
-description TEST POOL
-org_path ""
-chassisbladepairs Eng1|Blade2 Test1|Blade1 QA1|Blade3
```

dpmucs createserviceprofile Command--Create a Service Profile

Use this command to create one or more simple service profiles that are based on a hardware default, with the option to create a default vNIC or vHBA. The service profiles also can be created based on a template.

This command has the following format:

```
dpmucs createserviceprofile
[-sc sc_url]
-ucs_manager ucsmanagername
-service_profile_name serviceprofilename
[-org_path org_path -description description]
-policyType profiletype
[-templatename templatename
-number number
-createvnic createvnic
-createvhba createvhba]
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-service_profile_name *serviceprofilename*

Specifies name for new service profile.

-templatename *templatename*

Specifies the template name.

-number *number*

Specifies the number of objects created.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Service Profile

This example creates a service profile for the specified UCS Manager.

```
dpmucs.exe createserviceprofile
-ucs_manager Engmanager
-service_profile_name sptest_1
```

dpmucs createtemplatefromserviceprofile Command--Create a Template from a Service Profile

Use this command to create a template from an existing service profile.

This command has the following format:

```
dpmucs createtemplatefromserviceprofile
[-sc sc_url]
-ucs_manager ucsmanagername
-service_profile_dn serviceprofiledn
-templatename templatename
[-templatetype templatetype -org_path org_path]
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create Template from Service Profile

This example creates a template from a service profile for the specified UCS Manager.

```
dpmucs.exe createtemplatefromserviceprofile
-ucs_manager Engmanager
-service_profile_dn sptest_1
-templatename template_sp_1
```

dpmucs createuuidpool Command--Create UUID Pool

Use this command to create a pool of Universal Unique Identifiers (UUIDs) for blades with one or more slot ranges.

This command has the following format:

```
dpmucs createuuidpool
[-sc sc_url]
-ucs_manager ucsmanagername
-pool_name poolname
-description pooldescription
-org_path organizationpath
-ranges fromrange|torange fromrange|torange...
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-description *pooldescription*

Defines the pool being created.

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-ranges *fromrange|torange fromrange|torange...*

Defines the slot ranges for pools. Valid entries per pool type: MAC addresses in the format: XX:XX:XX:XX:XX:XX, UUID in the format: XXXX-XXXXXXXXXXXX, and WWNN/WWPN in the format: XX:XX:XX:XX:XX:XX:XX:XX. Delimit from-to range entries with |, and slot ranges with a single space.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a UUID Pool

This example creates a UUID pool with multiple pool slots.

```
dpmucs createuuidpool
-ucs_manager EngManager200
-pool_name TEST_POOL_UUID
-description TEST POOL
-org_path ""
-ranges 5500-000000000030|5500-000000000032 5500-000000000035|5500-000000000040
5500-000000000042|5500-000000000045
-ws_user cba
-ws_password cba
```

dpmucs createwwpool Command--Create WWNN Pool

Use this command to create a World Wide Note Name (WWNN) port or node pool for blades.

This command has the following format:

```
dpmucs createwwpool
[-sc sc_url]
-ucs_manager ucsmanagername
-pool_name poolname
-description pooldescription
-org_path organizationpath
-ranges fromrange|torange fromrange|torange...-wwpool_type type
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-description *pooldescription*

Defines the pool being created.

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-ranges *fromrange|torange fromrange|torange...*

Defines the slot ranges for pools. Valid entries per pool type: MAC addresses in the format: XX:XX:XX:XX:XX:XX, UUID in the format: XXXX-XXXXXXXXXXXX, and WWNN/WWPN in the format: XX:XX:XX:XX:XX:XX:XX:XX. Delimit from-to range entries with |, and slot ranges with a single space.

-wwpool_type *type*

Defines the pool type as node or port. Valid entries: node or pool. Default = node.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a WWNN Pool

This example creates a WWNN node pool.

```
dpmucs createwwpool
-ucs_manager EmgManager200
-pool_name TEST_POOL_WW
-description TEST POOL
-org_path "" -ranges 20:00:00:25:B6:01:00:F0|20:00:00:25:B6:01:00:F3
20:00:00:25:B6:01:00:F5|20:00:00:25:B6:01:00:F7 -wwpool_type node -ws_user cba
-ws_password cba
```

dpmucs deletemacpool Command--Delete MAC Address Pool

Use this command to delete a MAC address pool.

This command has the following format:

```
dpmucs deletemacpool
[-sc sc_url]
-ucs_manager ucsmanagername
-pool_name poolname
-org_path organizationpath
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a MAC Address Pool

This example deletes a MAC address pool.

```
dpmucs deletemacpool
-ucs_manager ucsmanager
-pool_name TEST_POOL
-org_path ""
-ws_user cba -ws_password cba
```

dpmucs deleteorg Command--Delete Organization

Use this command to delete an organization.

This command has the following format:

```
dpmucs createorg
[-sc sc_url]
-ucs_manager ucsmanagername
-org_name organizationname
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-org_name *organizationname*

Defines the fully qualified name of the organization. Valid format: *org-root/org-name*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete an Organization

This example deletes an organization.

```
dpmucs deleteorg
-ucs_manager EngManager200
-org_dn org-root/org-TEST_ORG
```

dpmucs deleteserverpool Command--Delete Server Pool

Use this command to delete a server pool.

This command has the following format:

```
dpmucs deleteserverpool
[-sc sc_url]
-ucs_manager ucsmanagername
-org_path orgpath
-pool_name poolname
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a Server Pool

This example deletes a server pool.

```
dpmucs.exe deleteserverpool
-ucs_manager ucsmanager
-org_path1/Eng/test
-pool_name TEST_POOL
```

dpmucs deleteserviceprofile--Delete a Service Profile

Use this command to delete a service profile.

This command has the following format:

```
dpmucs deleteserviceprofile
[-sc sc_url]
-ucs_manager ucsmanagername
-service_profile_dn serviceprofiledn
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-service_profile_dn *serviceprofiledn*

The fully qualified and unique name of a blade service profile. The blade service profile must be created before provisioning an OS. A service profile contains boot order, network settings, and storage (local or remote). Valid format: *org-root/serviceprofile.*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmucs deleteuuidpool Command--Delete UUID Pool

Use this command to delete a UUID pool.

This command has the following format:

```
dpmucs deleteuuidpool
[-sc sc_url]
-ucs_manager ucsmanagername
-pool_name poolname
-org_path organizationpath
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a UUID Pool

This example deletes a UUID pool.

```
dpmucs deleteuuidpool
-ucs_manager EngManager200
-pool_name "TEST_POOL"
-org_path ""
-ws_user cba
-ws_password cba
```

dpmucs deletewwpool Command--Delete WWNN Pool

Use this command to delete a WWNN pool.

This command has the following format:

```
dpmucs deletewwpool
[-sc sc_url]
-ucs_manager ucsmanagername
-pool_name poolname
-org_path organizationpath
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a WWNN Pool

This example deletes a WWNN pool.

```
dpmucs deletewwpool
-ucs_manager EngManager200
-pool_name "TEST_POOL"
-org_path ""
-ws_user cba
-ws_password cba
```

dpmucs deployimage Command--Deploy a Cisco UCS Image

Use this command to deploy an image to a Cisco UCS blade using RSI or ITCM.

This command has the following format:

```
dpmucs deployimage
[-sc sc_url] -deploytype RSI|ITCM
ITCM Only: -passwordEncrypted yes|no -osPassword password
-inputparam "ucsManagerHost|ucsManager"
-inputparam "bladeDn|bladeDN"
-inputparam "macAddress|macaddress"
-inputparam "osType|os_type"
-inputparam "profileDn|profileDN"
-inputparam "profileTemplateDn|profileTemplateDn"
-inputparam "selectFirstBlade|{false|true}"
-inputparam "serviceProfileName|serviceprofilename"
-inputparam "... deploytype_options"
[-ws_user username][-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-inputparam *argument*|*value*

Specifies input parameters for image deployment.

Important: RSI argument/value sets must be enclosed in quotations marks.

-bootServerName|*bootserver*

Specifies boot server for ITCM deployment.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Deploy Image Using RSI

This example deploys an image to a Cisco UCSblade using RSI.

```
dpmucs.exe deployimage -deploytype RSI
-inputparam "ucsManagerHost|lodcisco1-mc1.ca.com"
-inputparam "ipAddress|blade-2"
-inputparam "macAddress|00:26:51:09:5D:E4"
-inputparam "osType|Microsoft_Windows-2008_R2_*-x86_64"
-inputparam "bladeDn|sys/chassis-1/blade-2"
-inputparam "serviceProfileName|blade2_netboot1"
-inputparam "profileDn|org-root/ls-blade2_netboot1"
-inputparam "selectFirstBlade|false"
-inputparam "profileTemplateDn|org-root/ls-template1"
-inputparam "RSIServer|ucs03-racemi"
-inputparam "RSIImage|ATS_WIN2K8_IMG"
-inputparam "EnableScale|no"
```

Example: Deploy Image Using ITCM

This example deploys an image to a Cisco UCS blade using ITCM.

```
dpmucs.exe deployimage -deploytype ITCM
-passwordEncrypted no -osPassword secret123
-inputparam "ucsManagerHost|lodcisco1-mc1.ca.com"
-inputparam "computerName|hostname1"
-inputparam "ipAddress|blade-2"
-inputparam "macAddress|00:26:51:09:5D:E4"
-inputparam "osType|Any"
-inputparam "osImage|Windows2003_Image -bootServerName|ITCM_BootServer1"
-inputparam "osUser|Administrator"
-inputparam "osPassword|password"
-inputparam "bladeDn|sys/chassis-1/blade-2"
-inputparam "serviceProfileName|blade2_netboot1"
-inputparam "profileDn|org-root/ls-blade2_netboot1"
-inputparam "selectFirstBlade|false"
-inputparam "templateName|Default_Software_List"
-inputparam "profileTemplateDn|org-root/ls-template1"
```

dpmucs disassociateserviceprofile Command--Disassociate Service Profile

Use this command to disassociate a service profile from a blade.

This command has the following format:

```
dpmucs diassociateserviceprofile
[-sc sc_url]
-ucs_manager ucsmanagername
-service_profile_dn serviceprofiledn
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-service_profile_dn *serviceprofiledn*

The fully qualified and unique name of a blade service profile. The blade service profile must be created before provisioning an OS. A service profile contains boot order, network settings, and storage (local or remote). Valid format: *org-root/serviceprofile.*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Disassociate a Service Profile

This example disassociates a service profile.

```
dpmucs diassociateserviceprofile
-ucs_manager EngManager200
-service_profile_dn org-root/ls-dev-boot-from-san-esx-10
```

dpmucs failoverserviceprofile Command--Associate a Service Profile With a Blade for Failover

Use this command to transfer an existing service profile association to another profile for the purpose of blade failover.

This command has the following format:

```
dpmucs failoverserviceprofile
[-sc sc_url]
-ucs_manager ucsmanagername
-service_profile_dn serviceprofiledn
-blade_dn bladename
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-service_profile_dn *serviceprofiledn*

The fully qualified and unique name of a blade service profile. The blade service profile must be created before provisioning an OS. A service profile contains boot order, network settings, and storage (local or remote). Valid format: *org-root*/*serviceprofile.* The profile specified must be an associated service profile.

-blade_dn *bladename*

The fully qualified and unique name of a blade. If a blade is not provided, an unassociated, available blade is selected. Valid format: *systemid*/*chassisid*/*bladeid*.If a blade is not provided (""), a random available blade is selected.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create Failover Service Profile

This example associates a random, available blade with a service profile for failover.

```
dpmucs.exe failoverserviceprofile
-ucs_manager ucsmanager
-service_profile_dn org-root/ls-dev-boot-from-san-esx-2 -blade_dn "
```

dpmucs getblades Command--Get Blade Information

Use this command to get information for all blades or a specific blade for a UCS Manager.

This command has the following format:

```
dpmucs getblades
[-sc sc_url]
-ucs_manager ucsmanagername
[-dn distinguishedname]
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-dn *distinguishedname*

Defines the full-qualified, unique name of a Cisco UCS chassis, blade, or switch. Valid entry: Device name, or an empty string ("") to denote all chassis, blades, or switches. If not specified, device details are listed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Blade Information

This example gets information for the blade, -dn "sys/chassis-1/blade-1" for the UCS Manager, EngManager200.

```
dpmucs getblades
-ucs_manager EngManager200
-dn sys/chassis-1/blade-1
-ws_user cba
-ws_password cba
```

dpmucs getchassis Command--Get Chassis Information

Use this command to get information for all chassis, or a specific chassis in a UCS Manager.

This command has the following format:

```
dpmucs getchassis
[-sc sc_url]
-ucs_manager ucsmanagername
[-dn distinguishedname]
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-dn *distinguishedname*

Defines the full-qualified, unique name of a Cisco UCS chassis, blade, or switch. Valid entry: Device name, or an empty string ("") to denote all chassis, blades, or switches. If not specified, device details are listed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Chassis Information

This example gets chassis information for sys/chassis-1.

```
dpmucs getchassis
-ucs_manager EngManager200
-dn sys/chassis-1
–ws_user cba
-ws_password cba
```

dpmucs getpolicy Command--Gets Policy from a UCS Manager

Use this command to get policy from a UCS Manager.

This command has the following format:

```
dpmucs getpolicy
[-sc sc_url]
-ucs_manager ucsmanagername
[-policyType policytype|All]
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Policy

This example gets all policy for the specified UCS Manager.

```
dpmucs.exe getpolicy
-ucs_manager Engmanager
-policytype All
```

dpmucs getserviceprofilestatus Command--Get Service Profile Status

Use this command to get the status of a service profile.

This command has the following format:

```
dpmucs getserviceprofilestatus
[-sc sc_url]
-ucs_manager ucsmanagername
-service_profile_dn serviceprofiledn
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-service_profile_dn *serviceprofiledn*

The fully qualified and unique name of a blade service profile. The blade service profile must be created before provisioning an OS. A service profile contains boot order, network settings, and storage (local or remote). Valid format: *org-root/serviceprofile.*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Service Profile Status

This example gets the service profile status.

```
dpmucs getserviceprofilestatus
-ucs_manager ucsmanager
-service_profile_dn org-root/ls-dev-boot-from-san-esx-11
```

dpmucs getswitches Command--Get Switch Information

Use this command to get information for all switches or a specific switch for a UCS Manager.

This command has the following format:

```
dpmucs getswitches
[-sc sc_url]
-ucs_manager ucsmanagername
[-dn distinguishedname]
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-dn *distinguishedname*

Defines the full-qualified, unique name of a Cisco UCS chassis, blade, or switch. Valid entry: Device name, or an empty string ("") to denote all chassis, blades, or switches. If not specified, device details are listed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Switch Information

This example gets information for the switch, syst/switch-A, on the UCS Manager, EngManager200.

```
dpmucs getswitches
-ucs_manager EngManager200
-dn sys/switch-A
-ws_user cba
-ws_password cba
```

dpmucs gettopsystem Command--Get System Information

Use this command to get information from the top system for a UCS Manager information.

This command has the following format:

```
dpmucs gettopsystem
[-sc sc_url]
-ucs_manager ucsmanagername
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get System Information

This example gets the top system for the UCS manager, EngManager200.

```
dpmucs gettopsystem
–sc https://HOST/dpm/ucsws
–ucs_manager EngManager200
–ws_user cba
–ws_password cba
```

dpmucs listserviceprofiles Command--List Service Profiles

Use this command to list service profiles for a specified UCS Manager.

This command has the following format:

```
dpmucs listserviceprofiles
[-sc sc_url]
-ucs_manager ucsmanagername
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: List Service Profiles

This example lists service profiles for the UCS Manager, EngManager200.

```
dpmucs listserviceprofiles
-ucs_manager EngManager200
-ws_user cba
-ws_password cba
```

dpmucs powercycle Command--Power Cycle Blades

Use this command to perform power cycle operations on a blade.

This command has the following format:

```
dpmucs powercycle
[-sc sc_url]
-ucs_manager ucsmanagername
[-dn distinguishedname]
-operation operation
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-dn *distinguishedname*

Defines the full-qualified, unique name of a Cisco UCS chassis, blade, or switch. Valid entry: Device name, or an empty string ("") to denote all chassis, blades, or switches. If not specified, device details are listed.

-operation *operations*

Defines the blade power cycle options. Valid entries are:

- 2 = Power Cycle. Immediately powers down the blade, then powers up the blade.
- 3 = Graceful Shut Down. Allows data to be saved, then powers down the blade, and powers up the blade.
- 4 = Reset Immediately. Allows you to unplug the power supply to the blade, and then plug it back without saving data.
- 5 = Reset Wait. Allows data to be saved before you unplug the power supply, and plug it back in.
- 6 = Soft Shut Down. Notifies all running applications of a shutdown so data is saved.
- 7 = Shut Down. Shuts down the blade without saving data.
- 8 = Boot Up. Boots the blade.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Power Cycle a Blade

This example immediately power cycles the blade, sys/chassis-1/blade-3.

```
dpmucs powercycle
-ucs_manager EngManager200
-dn "sys/chassis-1/blade-3"
-operation 2
-ws_user cba
-ws_password cba
```

dpmucs renamepool Command--Rename Pool

Use this command to rename a pool type.

This command has the following format:

```
dpmucs renamepool
[-sc sc_url]
-ucs_manager ucsmanagername
-pool_type pooltype
-pool_name poolname
-new_pool newpoolname
-org_path organizationpath
-description description
-ranges fromrange|torange fromrange|torange...
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-pool_type *pooltype*

Specifies the pool type. Valid pool types (case-sensitive): MacPool, UuidPool, ComputePool, WWNodeNamePool, WWPortNamePool.

-pool_name *poolname*

Specifies pool name. Valid entry: 1-16 alphanumeric characters.

-new_pool_name *newpoolname*

Defines the new pool name. Valid entry: 1-16 characters, excluding spaces and ^!@#$%&*()+={}\|;”<>,/?`~

-org_path *organizationpath*

Defines the fully qualified path name to the organization. Valid format: *Org-root/org-suborg1/org-suborg2/org-suborg3...*

-ranges *fromrange|torange fromrange|torange...*

Defines the slot ranges for pools. Valid entries per pool type: MAC addresses in the format: XX:XX:XX:XX:XX:XX, UUID in the format: XXXX-XXXXXXXXXXXX, and WWNN/WWPN in the format: XX:XX:XX:XX:XX:XX:XX:XX. Delimit from-to range entries with |, and slot ranges with a single space.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Rename a Pool

```
This example renames a pool.
dpmucs.exe renamepool
-ucs_manager ucsmanager
-pool_type UuidPool
-pool_name TEST_POOL
-new_pool_name NEW_TEST_POOL
-org_path ""
-description Windows pool
```

dpmucs serviceprofileupdate Command--Execute Service Profile Operations

Use this command to execute one of the following service profile operations: associate, disassociate, or failover.

This command has the following format:

```
dpmucs serviceprofileupdate
[-sc sc_url]
-ucs_manager ucsmanagername
-update_operation operation
-service_profile_dn serviceprofiledn
[-blade_dn bladedn]
[-ws_user username]
[-ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ucs_manager *ucsmanagername*

Defines the name of the UCS Manager for retrieving information or an operation.

-update_operation *operations*

Defines the operations to perform for the service profile. Valid entries:

associate = associates a service profile with the specified blade.

disassociate = disassociates a service profile from the specified blade.

failover = fails over from one service profile to another.

-service_profile_dn *serviceprofiledn*

The fully qualified and unique name of a blade service profile. The blade service profile must be created before provisioning an OS. A service profile contains boot order, network settings, and storage (local or remote). Valid format: *org-root*/*serviceprofile.*

-blade_dn *bladename*

The fully qualified and unique name of a blade. If a blade is not provided, an unassociated, available blade is selected. Valid format: *systemid*/*chassisid*/*bladeid.*

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Execute Operation on a Service Profile

This example associates a service profile for the specified blade.

```
dpmucs.exe serviceprofileupdate
-ucs_manager Engmanager
-update_operation associate
-service_profile_dn org-root/ls-dev-boot-from-san-esx-1 -blade_dn
sys/chassis-1/blade-1
```

Administrative Command Line Utilities

dpmutil Syntax

dpmutil is a command line utility that lets you change the configuration of CA Virtual Assurance components. To use dpmutil, Management DB information must be available in the Registry, and the Microsoft SQL client must be installed. To access dpmutil, you must have a user name with administrator privileges. The dpmutil command line utility syntax accepts either *set, get,* or *delete* requests as a first argument, and then lets you set or get information about the components. If you input invalid or no arguments, an error message appears with syntax information and the list of components that you can configure. The dpmutil syntax includes the following:

`dpmutil {-set|-get|-delete} -`*`category|component`* `[-user`*`username`*`] [-password`*`password`*`] [-help] [-validateonly][-locale `*`iso639value`*`]`

-set

Defines or updates the configuration settings for the component.

-get

Displays the configuration settings for the component.

-delete

Deletes the configuration settings for the component.

-***category|component***

Defines the category or component from which you want to obtain or change data.

-user*username*

(Optional) Specifies the EEM user. Without this parameter, dpmutil prompts you for valid EEM credentials before allowing access to configuration updates and deletes, or a display of existing configuration information.

-password*password*

(Optional) Specifies the EEM password. Without this parameter, dpmutil prompts you for valid EEM credentials before allowing access to configuration updates and deletes, or a display of existing configuration information.

Note: There is no space between the user and password parameters and their value.

-help

Displays the dpmutil help.

-validateonly

(Optional) Validates the information entered when used with set and a valid command as follows:

`dpmutil -set command -validateonly`

This command does not create or update information.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Note: Restart the Apache HTTP Server for the changes to take effect.

dpmutil -amq Command--Configure the ActiveMQ Message Broker

The dpmutil set|get|delete amq command lets you configure the ActiveMQ Message Broker for CA Virtual Assurance. Some CA Virtual Assurance components use the Message Broker to pass data between them. This command sets the Message Broker URL.

This command has the following format:

`dpmutil {-set|-get|-delete} -amq [-locale iso639value]`

-set

Defines the URL for the ActiveMQ Message Broker.

Example: *tcp*://*servername*:*port*

servername

Identifies the name of the server where the ActiveMQ Message Broker is installed.

port

Specifies the ActiveMQ Message Broker listening port.

Default: 61616

-get

Displays the URL configured for the ActiveMQ Message Broker.

-delete

Deletes the URL configured for the ActiveMQ Message Broker.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil ecs Command--Configure Windows Scheduler

The dpmutil set|get ecs command configures the scheduler server.

This command has the following format:

```
dpmutil {-set|-get} -ecs [-locale iso639value]
```

-set

Defines the configuration settings for the scheduler server.

-get

Displays the configuration settings for the scheduler server.

-ecs

Defines the scheduler server to configure. You are prompted to decide whether ECS is the active scheduler (type Y for yes or hit Enter to skip configuration).

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil eiam Command--Configure CA EEM

The dpmutil set|get eiam command configures the CA EEM server that CA Virtual Assurance uses. This server manages user authorization and authentication.

This command has the following format:

`dpmutil {-set|-get|-delete} -eiam [-locale iso639value]`

-set

Defines the configuration settings for the CA EEM server.

-get

Displays the configuration settings for the CA EEM server.

-delete

Deletes CA EEM servers from CA Virtual Assurance, but they remain in the Management DB and Performance DB for historical purposes. You are prompted for each parameter.

-eiam

Defines the CA EEM server to configure. You are prompted for the server name, administrator user name, and password for that server.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -hd Command--Configure Help Desk

The dpmutil set|get hd command configures help desk information for CA Virtual Assurance. You can use this command to configure the help desk system on an existing installation of CA Virtual Assurance.

This command has the following format:

`dpmutil {-set|-get|-delete} -hd [locale iso639value]`

-set

Defines the configuration settings for the help desk system.

-get

Displays the configuration settings for the help desk system.

-delete

Deletes help desk servers from CA Virtual Assurance, but they remain in the Management DB and Performance DB for historical purposes. You are prompted for each parameter.

-hd

Defines the information required to connect to the help desk server. You are prompted for the help desk server name, the administrator user name and password, and the port.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -hmc Command--Configure HMC or IVM Server

The dpmutil hmc command adds, modifies, lists, or deletes the configured HMC or IVM servers. You can use this command to configure HMC or IVM server on an existing installation of CA Virtual Assurance. Your CA Virtual Assurance administrator user name and password and the port is required to set or get information.

Note: Restart the Apache HTTP Server for the changes to take effect.

This command has the following format:

`dpmutil {-set|-get|-delete} -hmc [-locale iso639value]`

-set

Adds or changes the configuration settings for HMC or IVM servers including the server name, the user name, and password.

-get

Displays the configuration settings for HMC or IVM servers including the server name, the user name.

-delete

Deletes HMC or IVM servers, but they remain in the Management DB and Performance DB for historical purposes. You are prompted for each parameter.

-hmc

Defines the HMC or IVM servers.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -hyperv Command--Configure Hyper-V Server

The dpmutil set|get -hvserver command adds, modifies, lists, or deletes the configured Hyper-V servers for virtual machine (VM) provisioning. You can use this command to install the Hyper-V component on an existing installation of CA Virtual Assurance. Your CA Virtual Assurance administrator user name and password and the port is required to set or get information. You do not need to restart Apache after you change this setting.

This command has the following format:

`dpmutil {-set|-get|-delete} -hyperv [locale iso639value]`

-set

Adds or changes the configuration settings for Hyper-V servers including the server name, the user name, the port, and the protocol.

-get

Displays the configuration settings for Hyper-V servers including the server name, the user name, the port, and the protocol.

-delete

Deletes Hyper-V servers, but they remain in the Management DB and Performance DB for historical purposes. You will be prompted for each parameter.

-hyperv

Defines the Hyper-V server.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil mgmtdb Command--Configure Management Database

The dpmutil set|get -mgmtdb command configures the Management Database that almost all components in the product suite use as the main database.

This command has the following format:

`dpmutil {-set|-get} -mgmtdb [-locale iso639value]`

-set

Defines the configuration settings for the Management Database.

-get

Displays the configuration settings for the Management Database.

-mgmtdb

Defines the Management Database to configure. You are prompted for the database server, version, port, and (if you use SQL authorization) the credentials to use to access the main product tables.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Note: Changing this information requires the dependent product services (CAAIPApache and CAAIPTomcat) to be recycled for the changes to take effect.

dpmutil -perfdb Command--Configure the Performance Database

The dpmutil set|get -perfdb command configures the Performance DB for CA Virtual Assurance. This database stores all of the performance information collected by CA Virtual Assurance.

This command has the following format:

`dpmutil {-set|-get|-delete} -perfdb [-locale` *`iso639value`*`]`

-set

Defines the configuration settings for the Performance DB.

-get

Displays the configuration settings for the Performance DB.

-delete

Deletes the configuration settings for the Performance DB.

-perfdb

Defines the component you want to configure. You are prompted for the server name, administrator user name and password, database type, database instance, and database port. The Performance DB credentials are typically the same as the Management DB credentials.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Note: Changing this information requires the dependent product services (CAAIPApache and CAAIPTomcat) to be recycled for the changes to take effect.

dpmutil remotevcaim Command--Configure Remote VC AIM

The dpmutil set|get remotevcaim command configures the remote VC AIM.

This command has the following format:

```
dpmutil {-set|-get|-delete} -remotevcaim [-locale iso639value]
```

-set

Defines the configuration settings for the remote VC AIM.

-get

Displays the configuration settings for the remote VC AIM.

-delete

Deletes a currently configured remote VC AIM.

-remotevcaim

Defines the remote VC AIM to configure. You are prompted for the server where VC AIM is installed, the server where VC itself is installed, and the SNMP write access string to use for connecting to the VC server.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -sc Command--Configure the Service Controller

The dpmutil set|get -sc command lets you configure the service controller for CA Virtual Assurance. The service controller is the communications traffic controller that lets the different CA Virtual Assurance components communicate with each other.

This command has the following format:

`dpmutil {-set|-get|-delete} -sc [-locale iso639value]`

-set

Defines the configuration settings for the service controller.

-get

Displays the configuration settings for the service controller.

-delete

Deletes the configuration settings for the service controller.

-sc

Defines the service controller for the local server.

Mode

Defines configuration settings for the method used to locate the service controller. The following modes are supported:

SRV automatic lookup

Locates the service controller using a DNS SRV record.

Manual override

Identifies the installed and running service controller based on the specified URL.

Example: https://*hostname:port*/dpm/sc

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -scvmmserver Command--Configure SCVMM Server

The dpmutil set|get -scvmmserver command adds, modifies, lists, or deletes the configured SCVMM servers for virtual machine (VM) provisioning. You can use this command to install the SCVMM component on an existing installation of CA Virtual Assurance. Your CA Virtual Assurance administrator user name and password and the port is required to set or get information. You do not need to restart Apache after you change this setting.

This command has the following format:

`dpmutil {-set|-get|-delete} -scvmmserver [-locale iso639value]`

-set

Adds or changes the configuration settings for SCVMM servers including the server name, the user name, the port, and the protocol.

-get

Displays the configuration settings for SCVMM servers including the server name, the user name, the port, and the protocol.

-delete

Deletes SCVMM servers, but they remain in the Management DB and Performance DB for historical purposes. You will be prompted for each parameter.

-scvmmserver

Defines the SCVMM servers.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -snmp Command--Configure SNMP

The dpmutil set|get|delete -snmp command configures data center or server-level SNMP settings for receiving SNMP information.

This command has the following format:

`dpmutil {-set|-get|-delete} -snmp [-locale` *`iso639value`*`]`

-set

Adds or changes the configuration settings for the data center or a server, including:

- data center or server level
- server name if it is a server setting
- SNMP name
- timeout
- retries
- write access
- version
- security user
- authorization type
- authorization password
- privacy type
- privacy password
- community string

You are prompted for each parameter. You can configure a server to use both server and data center SNMP configuration or server SNMP configuration only.

-get

Lists the configuration settings of SNMP for the data center or a server, including:

- SNMP name
- version
- port
- timeout
- retries
- write access
- authorization type
- privacy type
- security user
- community string

You can only list a server SNMP configuration even though the server uses the data center default SNMP configuration.

-delete

Deletes a data center or a server SNMP configuration. You are prompted to delete a data center or server SNMP configuration. For server SNMP configuration, you are prompted for the server name and SNMP port. For data center SNMP configuration, you are prompted for SNMP name and port.

-snmp

Defines the SNMP configuration.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -systemcredential Command--Configure External System Credentials

The dpmutil set|get -systemcredential command configures the external system credentials for both global and system-specific access.

This command has the following format:

`dpmutil {-set|-get|-delete} -systemcredential [-locale` *`iso639value`*`]`

-set

Defines the configuration settings for the external system credentials for both global and system-specific access.

-get

Displays the configuration settings for the external system credentials for both global and system-specific access.

-delete

Deletes the external system credentials for both global and system-specific access depending on the credential chosen to delete.

-systemcredential

Defines the external system credentials for both global and system-specific access to configure. You are prompted for the credential level (inherited by the entire data center or only at the server level). Depending on the credential level, you may be prompted to enter a specific server name for which to apply the credentials. In addition, you are prompted for the credential name, the credential information itself (user/password), and optionally, any groups to which the credentials belong.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -sysuser Command--Configure Local Credentials Used at Service Startup

The dpmutil set|get -sysuser command configures the local credentials used at service startup for the main product CAAIPApache service.

This command has the following format:

`dpmutil {-set|-get} -sysuser [-locale iso639value]`

-set

Defines the configuration settings for the local credentials used at service startup.

-get

Displays the configuration settings for the local credentials used at service startup.

-sysuser

Defines the local credentials used at service startup to configure. You are prompted for the username and password. This user and password must be valid to log in to the configured EEM Server. You can use the dpmutil –get –eiam command to display the current EEM information.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Note: Changing this information requires the dependent product services (CAAIPApache and CAAIPTomcat) to be recycled for the changes to take effect.

dpmutil vcdefault Command--Configure Default VMware vCenter Administrator User

The dpmutil set|get|delete vcdefault command lets you configure the default VMware vCenter administrator user for CA Virtual Assurance. CA Virtual Assurance uses the default VMware vCenter administrator user (vcdefault) when a VMware vCenter server is discovered. This command sets the vcdefault.

This command has the following format:

`dpmutil {-set|-get|-delete} -vcdefault [-locale iso639value]`

-set

Defines a vcdefault user for VMware vCenter.

-get

Displays the default user or users configured for VMware vCenter discovery.

-delete

Deletes the default user or users configured for VMware vCenter discovery.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil vcserver Command--Configure VMware vCenter

The dpmutil set|get vcserver command adds, modifies, lists, or deletes the configured VMware vCenter servers for virtual machine (VM) provisioning. You can use this command to install the VMware VirtualCenter component on an existing installation of CA Virtual Assurance. Your CA Virtual Assurance administrator user name and password and the port is required to set or get information. You do not need to restart Apache after you change this setting.

This command has the following format:

`dpmutil {-set|-get|-delete} -vcserver [-locale` *`iso639value`*`]`

-set

Adds or changes the configuration settings for VMware vCenter servers including the server name, the user name, the port, and the protocol.

-get

Displays the configuration settings for VMware vCenter servers including the server name, the user name, the port, and the protocol.

-delete

Deletes VMware vCenter servers, but they remain in the Management DB and Performance DB for historical purposes. You are prompted for each parameter.

-vcserver

Defines the VMware vCenter servers.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmutil -vioserver Command--Configure VIO Server

The dpmutil -vioserver command adds, modifies, lists, or deletes the configured VIO servers. You can use this command to configure VIO server on an existing installation of CA Virtual Assurance. Your CA Virtual Assurance administrator user name and password and the port is required to set or get information.

Note: Restart the Apache HTTP Server for the changes to take effect.

This command has the following format:

`dpmutil {-set|-get|-delete} -vioserver [-locale iso639value]`

-set

Adds or changes the configuration settings for VIO servers including the server name, the user name, and password.

-get

Displays the configuration settings for VIO servers including the server name, the user name.

-delete

Deletes VIO servers, but they remain in the Management DB and Performance DB for historical purposes. You are prompted for each parameter.

-vioserver

Defines the VIO servers.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Common Discovery Commands

The Discovery commands are used for discovering computers using IP address or subnet IP address. You can use the CLI to script and automate Discovery commands and run actions based on the command results.

dpmcda cancelnetworkscan Command--Cancel a Network Discovery

The dpmcda cancelnetworkscan command cancels a network discovery that is in progress.

This command has the following format:

`dpmcda cancelnetworkscan [-sc sc_url] -network_name networkname [-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-network_name *networkname*

Subnet name. Duplicate network names are not allowed; you can only discover one subnet with a specific network name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Cancel a Network Discovery

This command cancels a network discovery that is in progress.

```
dpmcda cancelnetworkscan -network_name Network1
```

dpmcda deletenetwork Command--Delete a Network

The dpmcda deletenetwork command deletes a specific network.

This command has the following format:

`dpmcda deletenetwork [-sc sc_url] -network_name networkname [-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-network_name *networkname*

Subnet name. Duplicate network names are not allowed; you can only discover one subnet with a specific network name.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a Network

This command deletes the network Network1.

```
dpmcda deletenetwork -network_name Network1
```

dpmcda discoverhost Command--Discover a Host

The dpmcda discoverhost command discovers a host.

This command has the following format:

```
dpmcda discoverhost [sc sc_url] -host_name hostname [-system_user username
-system_password password][-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostnames*

Defines one or more hosts. Valid entry: Comma-separated host names or IP addresses.

-system_user *username* -system_password *password*

Defines the target system credentials for enhanced discovery (retrieving hardware characteristics).

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Discovery a host

This example discovers a host.

```
dpmcda discoverhost -host_name 172.24.255.255 -ws_user wsuser -ws_password
wsuserpassword
```

dpmcda discovernetwork Command--Discover a Network

The dpmcda discovernetwork command discovers a network.

This command has the following format:

dpmcda discovernetwork [-sc *sc_url*] -ipv4_addr *ipv4address* -network_name *networkname* [-dnsserver *dnsserver*] [-domain *domain*][-system_user *username* -system_password *password*][-ws_user username -ws_password password][-locale *iso639value*]

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ipv4_addr *ipv4address*

Defines the subnet IPv4 address for discovery. Valid IPv4 address format for subnet: xxx.xxx.x.* or xxx.xxx.x.{1-10} or xxx.xxx.x.0/24.

-network_name *networkname*

Subnet name. Duplicate network names are not allowed; you can only discover one subnet with a specific network name.

-dns_server *dnsserver*

Defines the IP address of the DNS server.

-domain *domain*

Defines the domain name for DNS discovery.

-system_user *username* -system_password *password*

Defines the target system credentials for enhanced discovery (retrieving hardware characteristics).

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Discover a Network

This example discovers the network named NetworkA with an IPv4 address.

```
dpmcda discovernetwork -ipv4_addr 172.24.255.255 -network_name NetworkA -ws_user
wsuser -ws_password wsuserpassword
```

Collection Engine Commands

You can use the CLI to script and automate Collection Engine commands and run actions based on the command results. Using these commands requires expert knowledge of SNMP.

Note: You must have expert knowledge of SNMP to use these commands. You must also have expert knowledge to configure column-based metrics for supported MIBs.

dpmce ceconfig -configuremetric Command--Configure Metric

The dpmce ceconfig -configuremetric command lets you add, change, and delete metrics on a host.

This command has the following format:

```
dpmce ceconfig -configuremetric [-sc sc_url] -host_name hostname -operation
add|delete -sourceType 3 -metricname metricname -metric_type metrictype
-metric_subtype metricsubtype -metric_instance metricinstance [-metric_method
exact|complement] [-metric_datatype metricdatatype] [-lower_threshold
lowerthreshold] [-upper_threshold upperthreshold] [-metric_enabled metricenabled]
[metric_update yes|no][-ws_user username -ws_password password][-locale
iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-operation add|delete

Adds or deletes an alias (-setalias) or metric (-configuremetric).

-sourceType

Defines the source for collecting metrics. Valid entries: 1 = System Metrics (Performance Lite metrics), 3 = collection from SNMP interface.

-metricname *metricname*

Defines a name for the metric.

-metric_type *metrictype*

The MIB name followed by the symbolic name of the metric.

-metric_subtype *MIBOID*

Defines the MIB Object Identifier (OID) that uniquely identifies managed objects.

-metric_instance *metricinstance*

The column number for collecting data.

-metric_method exact|complement|exact_delta|exact_complement

Defines the methods for calculation and collection. Valid entries:

- exact = uses the exact metric value. As the value of the metric increases, it contributes to a higher overall usage. Example: Memory.
- complement = uses the metric in a complementary way. The higher the value, it contributes to a lower overall usage. Example: CPU Idle Percent.
- exact_delta = uses the difference between consecutive values. Example: MIB2.Instance.ifInOctets (number of incoming bytes).

complement_delta = uses the difference between consecutive values in a complementary way. Example: CPU Total Idle.

-metric_datatype *metricdatatype*

Defines the data type for the metric. Valid entries: integer, floating-point, or double.

-lower_threshold *lowerthreshold*

Defines the lower overall usage threshold for the metric. The lower threshold must always be less than the upper threshold.

Limits: 0-100%

-upper_threshold *upperthreshold*

Defines the upper overall usage threshold for the metric. The upper threshold must always be greater than the lower threshold.

Limits: 1-100%

-metric_enabled yes|no

Defines if the metric is enabled for collection. Valid entries: yes or no.

-metric_update yes|no

Defines whether the metric is updated in the database. Valid entries: yes or no.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Configure Metric for Data Collection

This example adds metric configuration data for the host.

```
dpmce ceconfig -configuremetric -host_name SOL1054 -operation add -sourceType 3
-metricname SysEDGE.loadAverage15Min -metric_type SysEDGE.loadAverage15Min
-metric_subtype 1.3.6.1.4.1.546.1.1.7.8.28.0 -metric_method exact -metric_update
yes -ws_user admin -ws_password admin
```

dpmce ceconfig -configuremetricfilter Command--Configure Metric Filter

The dpmce ceconfig -configuremetricfilter command lets you add, change, and delete the metric filter.

This command has the following format:

`dpmce ceconfig -configuremetricfilter [-sc sc_url] -host_name hostname -operation add|delete -sourceType 3 -metric_os_type metricOStype -metric_type metrictype -metric_subtype metricsubtype -metric_instance metricinstance [-metric_method exact|complement] [-metric_datatype metricdatatype] [-metric_filter_default 0|1] [-include_for_overall yes|no] [-lower_threshold lowerthreshold] [-upper_threshold upperthreshold] [-metric_enabled yes|no] [-ws_user username -ws_password password][-locale iso629value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-operation add|delete

Adds or deletes an alias (-setalias) or metric (-configuremetric).

-sourceType

Defines the source for collecting metrics. Valid entries: 1 = System Metrics (Performance Lite metrics), 3 = collection from SNMP interface.

-metric_os_type metricOStype

Defines the operating system type for metric. Valid entries: WINDOWS, AIX, HPUX, LINUX, or SOLARIS.

-metricname *metricname*

Defines a name for the metric.

-metric_subtype *MIBOID*

Defines the MIB Object Identifier (OID) that uniquely identifies managed objects.

-metric_instance *metricinstance*

The column number for collecting data.

-metric_method exact|complement|exact_delta|exact_complement

Defines the methods for calculation and collection. Valid entries:

- exact = uses the exact metric value. As the value of the metric increases, it contributes to a higher overall usage. Example: Memory.
- complement = uses the metric in a complementary way. The higher the value, it contributes to a lower overall usage. Example: CPU Idle Percent.
- exact_delta = uses the difference between consecutive values. Example: MIB2.Instance.ifInOctets (number of incoming bytes).
- complement_delta = uses the difference between consecutive values in a complementary way. Example: CPU Total Idle.

-metric_datatype *metricdatatype*

Defines the data type for the metric. Valid entries: integer, floating-point, or double.

-metric_filter_default yes|no

Defines whether the metric is collected by default. Valid entries: yes or no.

-include_for_overall Yes|No

Defines whether the metric is included in the overall calculation.

Yes

Includes the metric in the overall calculation.

No

Excludes the metric from the overall calculation.

-lower_threshold *lowerthreshold*

Defines the lower overall usage threshold for the metric. The lower threshold must always be less than the upper threshold.

Limits: 0-100%

-upper_threshold *upperthreshold*

Defines the upper overall usage threshold for the metric. The upper threshold must always be greater than the lower threshold.

Limits: 1-100%

-metric_enabled yes|no

Defines if the metric is enabled for collection. Valid entries: yes or no.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Configure Metric Filter

This example adds a metric filter.

```
dpmce ceconfig -configuremetricfilter -operation add -sourceType 3 -metric_os_type
WINDOWS -metricname "Fake.cpuTotalUserPercent" -metric_subtype "xxxxxxxxxxxxxxxx"
-metric_method complement_delta -ws_user dcauser -ws_password dcapassword
```

dpmce ceconfig -disablemetric Command--Disable a Metric

The dpmce ceconfig -disablemetric command lets you disable a metric that is being collected for a host.

This command has the following format:

```
dpmce ceconfig -disablemetric [-sc sc_url] -host_name hostname -metricname metricname
[-ws_user username -ws_password password][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-metricname *metricname*

Defines a name for the metric.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Disable a Memory Metric for a Host

This example disables the metric Memory: AvailableMbytes for the host ServerZ.

```
dpmce ceconfig -disablemetric -host_name ServerZ -metricname Memory: AvailableMbytes
```

dpmce ceconfig -disablemetricforoverall Command--Disable and Exclude a Metric From Overall Calculation

The dpmce ceconfig -disablemetricforoverall command lets you disable a currently collected host metric and exclude it from the overall calculation.

This command has the following format:

```
dpmce ceconfig -disablemetricforoverall [-sc sc_url] -host_name hostname -metricname
metricname [-ws_user username -ws_password password][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-metricname *metricname*

Defines a name for the metric.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Disable a Memory Metric for a Host

This example disables the metric Memory: AvailableMbytes and excludes it from the overall calculation for the host ServerZ.

```
dpmce ceconfig -disablemetricforoverall -host_name ServerZ -metricname Memory:
AvailableMbytes
```

dpmce ceconfig -enablemetric Command--Enable a Metric

The dpmce ceconfig -enablemetric command lets you enable a host metric. The metric must be available for collection.

This command has the following format:

```
dpmce ceconfig -enablemetric [-sc sc_url] -host_name hostname -metricname metricname
[-include_for_overall Yes|No][-ws_user username -ws_password password][-locale
iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-metricname *metricname*

Defines a name for the metric.

-include_for_overall Yes|No

Defines whether the metric is included in the overall calculation.

Yes

Includes the metric in the overall calculation.

No

Excludes the metric from the overall calculation.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Enable a Memory Metric for a Host

This example enables the metric Memory: AvailableMbytes and includes it in the overall calculation for the host ServerZ.

```
dpmce ceconfig -enablemetric -host_name ServerZ -metricname Memory: AvailableMbytes
-include_for_overall Yes
```

dpmce ceconfig -enablemetricforoverall Command--Enable and Include a Metric for Overall Calculation

The dpmce ceconfig -enablemetricforoverall command lets you enable a currently collected host metric and include it in the overall calculation.

This command has the following format:

```
dpmce ceconfig -enablemetricforoverall [-sc sc_url] -host_name hostname -metricname
metricname [-ws_user username -ws_password password][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-metricname *metricname*

Defines a name for the metric.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Enable a Memory Metric for a Host to be Included in Overall Calculation

This example enables the metric Memory: AvailableMbytes and includes it in the overall calculation for the host ServerZ.

```
dpmce ceconfig -enablemetricforoverall -host_name ServerZ -metricname Memory:
AvailableMbytes
```

dpmce ceconfig -getglobal Command--Retrieve Data Center Intervals

The dpmce ceconfig -getglobal command lets you retrieve data center level collection, recording, and retention intervals.

This command has the following format:

```
dpmce ceconfig -getglobal [-sc sc_url][-ws_user username -ws_password
password][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retrieve Collection, Recording, and Retention Intervals

This example retrieves the data center level collection, recording, and retention intervals.

```
dpmce ceconfig -getglobal
```

dpmce ceconfig -getnode Command--Retrieve Host Collection Intervals

The dpmce ceconfig -getnode command lets you retrieve collection, recording, and retention intervals for a host.

This command has the following format:

```
dpmce ceconfig -getnode [-sc sc_url] -host_name hostname [-ws_user username
-ws_password password][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retrieve Collection, Recording, and Retention Intervals for Host ServerZ

This example retrieves the intervals for the host ServerZ.

```
dpmce ceconfig -getnode -host_name ServerZ
```

dpmce ceconfig -getmetriclist Command--Retrieve Metric List

The dpmce -getmetriclist command lets you retrieve metrics for a specific host.

This command has the following format:

```
dpmce ceconfig -getmetriclist [-sc sc_url] -host_system hostname [-ws_user username
-ws_password password][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retrieve Metric List

This example retrieves the metric list for the host, S0L1054.

```
dpmce ceconfig -getmetriclist -host_name S0L1054
```

dpmce ceconfig -refreshmetriclist Command--Retry Metric Collection

The dpmce ceconfig -refreshmetriclist command lets you retry metric collection. For example, if the agent was not installed during discovery, no metrics would be detected for collection. If you install the agent on the system later, you can use this command to retry the metric collection without having to rediscover the system.

This command has the following format:

dpmce ceconfig -refreshmetriclist [-sc *sc_url*] -host_name *hostname* [-ws_user *username* -ws_password *password*][-locale *iso629value*]

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retry Metric Collection

This example retries metric collection on several hosts.

```
dpmce ceconfig -refreshmetriclist -host_name SOL1054:engManager200:QALAB01
```

dpmce ceconfig -setalias Command--Set Alias

The dpmce ceconfig -setalias command creates an alias for an ESX host so its metrics can be included in the ESX Server overall calculation.

This command has the following format:

```
ceconfig -setalias [-sc sc_url] -operation add|delete -caller_id PMM -metricname
metricname -alias_host_name aliashostname -parent_host_name parenthostname
-include_for_overall yes|no [-ws_user username -ws_password password][-locale
iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-operation add|delete

Adds or deletes an alias (-setalias) or metric (-configuremetric).

-caller_id PMM

Defines the interface (Product Management Module) for the alias. Valid entries: PMM.

-metricname *metricname*

Defines a name for the metric. Valid entries: The metric name or ALL (if you want to delete all metrics associated with the alias host name).

-alias_host_name *aliashostname*

Defines the ESX server or VM managed by the parent_host_name (AIM).

-parent_host_name *parenthostname*

Defines the system installed with the AIM.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Alias

This example sets an alias for an ESX host.

```
ceconfig -setalias -caller_id PMM -metricname SysEDGE.memInUseCapacity
-alias_host_name hostDA12 -parent_host_name engServer200 -include_for_overall yes
-ws_user admin -ws_password admin
```

dpmce ceconfig -setglobal Command--Set Data Center Intervals

The dpmce ceconfig -setglobal command lets you set the data center level collection, recording, and retention intervals and thresholds.

This command has the following format:

```
dpmce ceconfig -setglobal [-sc sc_url] -recording_interval value
-retention_sec value -retention_day value
-lower_threshold lowerthreshold -upper_threshold upperthreshold
[-ws_user username -ws_password password][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-recording_interval *value*

Defines the recording interval. This value is required if retention_day or retention_sec is not defined.

Unit: seconds

-retention_day *value*

Defines how long to store the average of the daily data in the Performance DB (daily rollup data retention). This value is required if recording_interval or retention_sec are not defined.

Unit: days

-retention_sec *value*

Defines how long to store the polled data in the Performance DB (polled data retention). Consider the number of managed systems, services, and metrics collected when defining this number. The stored polled data objects accumulate over time and can impact performance. If performance issues arise, decrease the number of retention days. This value is required if recording_interval or retention_day are not defined.

Unit: days

-lower_threshold *lowerthreshold*

Defines the lower overall usage threshold for the metric. The lower threshold must always be less than the upper threshold.

Limits: 0-100%

-upper_threshold *upperthreshold*

Defines the upper overall usage threshold for the metric. The upper threshold must always be greater than the lower threshold.

Limits: 1-100%

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Collection and Recording Intervals for the Data Center

This example sets the collection and recording intervals for the data center.

```
dpmce ceconfig -setglobal -recording_interval 120
```

Example: Set Thresholds for the Data Center

This example sets the lower and upper thresholds for the data center.

```
dpmce ceconfig -setglobal -lower_threshold 10 -upper_threshold 90
```

dpmce ceconfig -setnode Command--Set Intervals for a Host

The dpmce ceconfig -setnode command lets you set collection, recording, and retention intervals for a host.

This command has the following format:

`dpmce ceconfig -setnode [-sc sc_url] -host_name hostname -recording_interval value -retention_sec value -retention_day value [-ws_user username -ws_password password][-locale iso629value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-recording_interval *value*

Defines the recording interval. This value is required if retention_day or retention_sec is not defined.

Unit: seconds

-retention_sec *value*

Defines how long to store the polled data in the Performance DB (polled data retention). Consider the number of managed systems, services, and metrics collected when defining this number. The stored polled data objects accumulate over time and can impact performance. If performance issues arise, decrease the number of retention days. This value is required if recording_interval or retention_day are not defined.

Unit: days

-retention_day *value*

Defines how long to store the average of the daily data in the Performance DB (daily rollup data retention). This value is required if recording_interval or retention_sec are not defined.

Unit: days

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Retention Interval for Host ServerZ

This example sets the retention interval for the host ServerZ.

```
dpmce ceconfig -setnode -host_name ServerZ -retention_day 300
```

dpmce ceconfig -updatemetric Command--Update a Metric

The dpmce ceconfig -updatemetric command lets you update currently collected host metrics, thresholds, and overall calculation attributes.

This command has the following format:

```
dpmce ceconfig -updatemetric [-sc sc_url] -host_name hostname -metricname metricname
[-lower_threshold lowerthreshold][-upper_threshold upperthreshold]
include_for_overall Yes|No [-ws_user username -ws_password password][-locale
iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *hostname*

Defines the name of the host computer.

-metricname *metricname*

Defines a name for the metric.

-lower_threshold *lowerthreshold*

Defines the lower overall usage threshold for the metric. The lower threshold must always be less than the upper threshold.

Limits: 0-100%

-upper_threshold *upperthreshold*

Defines the upper overall usage threshold for the metric. The upper threshold must always be greater than the lower threshold.

Limits: 1-100%

-include_for_overall Yes|No

Defines whether the metric is included in the overall calculation.

Yes

Includes the metric in the overall calculation.

No

Excludes the metric from the overall calculation.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update a Memory Metric for the Host ServerZ

This example updates the upper and lower thresholds for the metric Memory: AvailableMbytes and includes it in the overall calculation for the host ServerZ.

```
dpmce ceconfig -updatemetric -host_name ServerZ -metricname Memory: AvailableMbytes
-lower_threshold 10 -upper_threshold 90 -include_for_overall Yes
```

Event Commands

You can use the CLI to script and automate Event commands and run actions based on the command results.

dpmeventmanager create_event Command--Create an Event

The dpmeventmanager create event command creates an event.

This command has the following format:

`dpmeventmanager create_event [-sc sc_url] [-status eventstatus] [-component eventcomponent] [-message eventmessage] [-source eventsource] [-target eventtarget] [-action eventaction] [-audit {0|1}][-locale iso629value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-status *eventstatus*

(Optional) Indicates the status of the event.

-component *eventcomponent*

(Optional) Defines the product component to which the event corresponds.

Example: Policy, Imaging, and so on.

-message *eventmessagesubstring*

(Optional) Defines the event message substring to match against.

-source *eventsource*

(Optional) Defines the computer that generates the event.

-target *eventtarget*

(Optional) Defines the target computer for which the event occurred.

-action *eventaction*

(Optional) Defines the category of the event.

-audit={0|1}

(Optional) Indicates whether an event is an auditing event. Use 1 (audit event) or 0 (not an audit event).

Default: 0

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create an Event for a Server Discovery

This example creates an event for a server discovery for ServerXYZ.

```
dpmeventmanager create_event -status 1 -component ccm -message "1 New Managed System
Added - xyz" -source xyz -action "Inventory Event"
```

dpmeventmanager get_events Command--Retrieve Events

The dpmeventmanager get events command retrieves events.

This command has the following format:

```
dpmeventmanager get_events [-sc sc_url] [-status event_status] [-component
eventcomponent] [-message eventmessagesubstring] [-source eventsource] [-target
eventtarget] [-action eventaction] [-from_start_date_time] [-to_end_date_time]
[-audit {0|1}] [-user_name username][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-status *eventstatus*

(Optional) Indicates the status of the event.

-component *eventcomponent*

(Optional) Defines the product component to which the event corresponds.

Example: Policy, Imaging, and so on.

-message *eventmessagesubstring*

(Optional) Defines the event message substring to match against.

-source *eventsource*

(Optional) Defines the computer that generates the event.

-target *eventtarget*

(Optional) Defines the target computer for which the event occurred.

-action *eventaction*

(Optional) Defines the category of the event.

-from *start_date_time*

(Optional) Specifies the start date and time for events that you want to retrieve using a specified month (*mm*), day (*dd*), or year (*yyyy*). The default is all events regardless of date. This parameter includes the following:

mm

Includes events created starting in this month.

Limits: 1-12

dd

Includes events created starting on this day.

Limits: 1-31

yyyy

Includes events created starting in this year.

Limits: 1970 or later

hh

Includes events created starting at this hour.

Limits: 0-23

mm

Includes events created starting at this minute.

Limits: 0-59

ss

Includes events created starting at this second.

Limits: 0-59

-to *end_date_time*

(Optional) Specifies the end date and time for events that you want to retrieve using a specified month (*mm*), day (*dd*), and year (*yyyy*). The default is all events regardless of date. This parameter includes the following:

mm

Includes events created ending in this month.

Limits: 1-12

dd

Includes events created ending on this day.

Limits: 1-31

yy

Includes events created ending in this year.

Limits: 01-09

hh

Includes events created ending at this hour.

Limits: 1-24

mm

Includes events created ending at this minute.

Limits: 1-60

ss

Includes events created ending at this second.

Limits: 1-60

-audit={0|1}

(Optional) Indicates whether an event is an auditing event. Use 1 (audit event) or 0 (not an audit event).

Default: 0

-user_name *username*

Defines the user name of the user who made the policy change that triggered the event. The CLI automatically determines the user name from the operating system.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retrieve Policy Events for a Specific Time Period

This example retrieves all Policy events from 10:10:10 AM, March 8, 2009 to the present.

```
dpmeventmanager get_events -component policy -from "3/08/2009 10:10:10"
```

General Shell Commands

You can use the CLI to script and automate miscellaneous commands and run actions based on the command results.

caaipsecurity Command--Specifies Credentials for Web Service Security Check

The caaipsecurity command lets you specify the credentials for your own web service session. When you use caaipsecurity in a web service session, other CLI commands do not prompt you for credentials.

This command has the following format:

```
caaipsecurity setcurrentsession
[-prompt {yes|no}]
[-ws_user username -ws_password password -locale iso639value]

caaipsecurity deletecurrentsession
[-prompt {yes|no}]
[-ws_user username -ws_password password -locale iso639value]
```

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

createdpmdefaultgroup Command--Create or Update Service

The createdpmdefaultgroup command creates or populates a service with servers that are being used by the product deployment. If the service does not exist, it is created and the servers are added to the service. If you are adding an unmanaged server or a server that has not been discovered by CA Virtual Assurance, it is automatically discovered and managed. If the service already exists, the servers are simply added to the existing service.

This command has the following format:

```
createdpmdefaultgroup
```

Example: Populate Service

This command has no arguments.

```
createdpmdefaultgroup
```

dpmcmd run Command--Run Scripts

The dpmcmd run command is the command line interface for running scripts.

This command has the following format:

```
dpmcmd run -cmdline commandline [-pre] [-post][-locale iso639value]
```

-cmdline *commandline*

Defines the shell command or path where the script file that you want to run is located.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Run a Script and Create Events

This example runs the script named MyScript and creates an event before and after the script is run.

```
dpmcmd run -cmdline C:\scripts\MyScript.bat -pre -post
```

dpmix exportlimportlverify Command--Migrate System Data

The dpmix command line utility provides a means for saving specific CA Virtual Assurance data objects for subsequent redeployment into a newly installed or an additional CA Virtual Assurance system. You can import or export actions, rules, jobs, for example, to new or existing systems. Management DB information must be available in the registry and the Microsoft SQL client must be installed for the utility to work. You must have a user name with administrator privileges to access dpmix. If you input invalid arguments or no arguments, an error message appears with syntax information and the list of data types that you can migrate.

This command has the following format:

```
dpmix {-export|-import|-verify} -f filename [-clean] [-replace] [–noprompt]
[–nohelpdesk] [–verbose] -user adminusername -password adminpassword [-auth_file
authorizationfilename] -cohesion_server {none|default_cohesion|preserve|name}
[-port ccaportnumber] [-default {all|none}] [-service {all|none}] [-server
{all|none}] [-action {all|none}] [-rule {all|none}] [-job {all|none}] [-resource
{all|none}] [-dpm_ibm_hmc {all|none}] [-serviceprocessor {all|none}] [-vCenter
{all|none}] [-networkdevice {all|none}]
```

-export

Saves and exports selected (or default) data types and associated data from the local CA Virtual Assurance system to the data file specified.

-import

Saves and imports selected (or default) data types and associated data from the data file specified to the local CA Virtual Assurance system.

-verify

Examines the syntax of the data in the data file and lists any problems found, but does not update the CA Virtual Assurance server. The following types of data are verified:

- Data such as ServerName is not empty.
- Data such as PollInterval is a number.
- The format of data such as conditionName.
- The lower and upper thresholds.
- The number sequence of a data section to verify that the sequence starts at 1 and is consecutive.

The version and build number are present in the data file.

-f *filename*

Defines the full path name of the file to which data is imported to or exported from.

Note: If you specify a file name only and not a fully qualified file path, the current directory is used, by default.

-clean

(Optional) Specifies to delete target objects before importing data or to delete existing data file before exporting data. This option is used with import or export. For import, this option may be useful in environments where data has accumulated over time and you want to restore the system to the image from an earlier point in time (when data was saved using export). For export, this option may be useful when the name of the data file you specified with export already exists and you want to delete the existing data file and export to a new file with the same name.

Important! This option has the potential for data destruction, so a warning prompt is issued requiring you to confirm the operation. You will not receive this warning prompt if you have -noprompt specified.

-replace

(Optional) Specifies to update existing target objects with imported data objects sharing the same name, when importing data. This option is used with the import parameter. If you do not specify this option, the original objects are preserved, by default, and only new objects are imported.

-noprompt

(Optional) Specifies to suppress confirmation prompts typically issued by the program.

-nohelpdesk

(Optional) Used with the -import argument to prevent the help desk related data of an action from being imported into a CA Virtual Assurance system. This prevents failures if there is no help desk configured on the CA Virtual Assurance system.

-verbose

(Optional) Used with the -verify argument to display additional information about the data.

-user *adminusername*

Defines the CA Virtual Assurance administrator user name.

-password *adminpassword*

Defines the CA Virtual Assurance administrator password specified in -user. You can avoid entering this sensitive value at the command line by omitting this argument. Instead, you will be prompted to enter the password without it being echoed back to the console in clear text. For non-interactive situations, such as scripts, you can substitute –password with –auth_file.

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-cohesion_server {none|default_cohesion|preserve|name}

Specifies which CCA server to use during discovery of servers. This parameter is used with the import parameter. Options include the following:

none

Specifies not to use [assign the value for acm in your book] for discovery. This is the default.

default_cohesion

Specifies to use the default CCA server that is configured in CA Virtual Assurance for discovery.

preserve

Specifies to use the CCA servers defined for each server in the data file for discovery. This option preserves the original associations between the CA Virtual Assurance systems and the CCA servers.

Note: If any of the CCA servers are not available to the target system where the import is being performed, then you should modify these names in the data file to reference valid CCA server names.

name

Specifies to use the specified CCA server for discovery.

-port *ccaportnumber*

Defines the communication port for the CCA source server. This option is only used if you specify a CCA server name for –acm_server.

-default={all|none}

(Optional) Specifies the data type selection default.

all

Specifies that all data type arguments are included. This is the default.

none

Specifies that all data type arguments are excluded.

-service={all|none}

(Optional) Specifies whether to include or exclude services from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all services are included.

none

Specifies that all services are excluded.

-server={all|none}

(Optional) Specifies whether to include or exclude servers and their enabled metrics from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all servers are included.

none

Specifies that all servers are excluded.

-action {all|none}

(Optional) Specifies whether to include or exclude actions from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all actions are included.

none

Specifies that all actions are excluded.

-rule={all|none}

(Optional) Specifies whether to include or exclude rules from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all rules are included.

none

Specifies that all rules are excluded.

-job={all|none}

(Optional) Specifies whether to include or exclude jobs from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all jobs are included.

none

Specifies that all jobs are excluded.

-resource={all|none}

(Optional) Specifies whether to include or exclude resource groups and templates from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all resource groups and templates are included.

none

Specifies that all resource groups and templates are excluded.

-dpm_ibm_hmc={all|none}

(Optional) Specifies whether to include or exclude IBM Hardware Management Consoles (HMCs) from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all HMCs are included.

none

Specifies that all HMCs are excluded.

-serviceprocessor={all|none}

(Optional) Specifies whether to include or exclude system service processors (SSPs) from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all SSPs are included.

none

Specifies that all SSPs are excluded.

-vCenter={all|none}

(Optional) Specifies whether to include or exclude vCenter servers from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all vCenter servers are included.

none

Specifies that all vCenter servers are excluded.

-networkdevice={all|none}

(Optional) Specifies whether to include or exclude network devices from importing or exporting. The default value is determined by the -default option setting that is in effect. Options include the following:

all

Specifies that all network devices are included.

none

Specifies that all network devices are excluded.

Example: Export Actions Only

This example exports only action data from the CA Virtual Assurance system.

```
dpmix export -f c:\data.ini -default none -action all
```

Example: Import in Replace Mode

This example uses the -replace option to import all data items, both new and those already defined to the CA Virtual Assurance system.

```
dpmix import -f c:\data.ini -replace
```

Example: Import in Clean Mode Without Prompt

This example imports all types of data and deletes existing objects first, without issuing a warning prompt.

```
dpmix import -f c:\data.ini -clean -noprompt
```

dpmrpt schedulereport Command--Schedule a Report

The dpmrpt schedulereport command lets you schedule a report.

This command has the following format:

```
dpmrpt deliver [-sc sc_url] -host_name hostname -port_number portnumber -cms_name
cmsname -cms_port_number cmsportnumber -auth auth -bo_username bousername
[-bo_password bopassword] -report_name reportname -encrypted {yes|no} [-start_time
starttime] [-end_time endtime] [-server_group reportservice] [-system_name
systemname] [-metric_name metricname] [-no_server_group numberofservices]
[-no_system numberofsystems] [-pre] [-post]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *reportservername*

Defines the name of the host report server.

-port number *portnumber*

Defines the communication port for the report server.

-report_name *reportname*

Defines a BusinessObjects report name.

-cms_port number *cmsportnumber*

Defines the communication port for the BusinessObjects CMS.

-auth {secEnterprise|secLDAP|secWinAD}

Defines a report server authentication protocol to use. There is no default, so you must specify a protocol. Options include the following:

secEnterprise

Specifies secure enterprise authentication protocol.

secLDAP

Specifies secure LDAP authentication protocol.

secWinAD

Specifies secure Windows AD authentication protocol.

-bo_username *user name*

Defines a user name for BusinessObjects.

-bo_password *password*

(Optional) Defines a password for the user for BusinessObjects.

-report_name *reportname*

Defines a BusinessObjects report name.

-encrypted={Yes|No}

Specifies whether the user name and password are encrypted.

Yes

Specifies that the user name and password are encrypted.

No

Specifies that the user name and password are not encrypted.

-start_time *starttime*

(Optional) Specifies the start time for the report.

Limits: milliseconds

-end_time *endtime*

(Optional) Specifies the end time for the report.

Limits: milliseconds

-server_group *reportservice*

(Optional) Defines the service for the report.

-system_name *systemname*

(Optional) Defines the name of the system (server) for the report.

-metric_name *metricname*

(Optional) Defines a name for the report metric.

-no_server_group *numberservices*

(Optional) Defines the number of services in the report.

-no_system *numbersystems*

(Optional) Defines the number of systems (servers) in the report.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Schedule a Report

This example schedules a BusinessObjects report to run at a specified time.

```
dpmrpt schedulereport -host_hostname dcamreporting -port_number 8081 -cms_name
dcamreporting -cms_port_number 8081 -auth secEnterprise -bo_username Administrator
-encrypted no -report_name -start_time 86400000 -end_time 86400000
```

dpmssh run Command--Run Remote Shell Commands or Scripts

The dpmssh run command allows remote login and execution of shell commands or scripts on a target Linux or UNIX system using Secure Socket Shell (SSH) for secure communication.

This command has the following format:

```
dpmssh run -cmdline commandline -target_host targethostname -target_user
targetusername -target_password targetpassword [-pre] [-post]
```

-cmdline *commandline*

Defines the shell command or path where the script file that you want to run is located.

-target_host *targethostname*

Defines the name of the target Linux or UNIX host server.

-target_user *targetusername*

Defines the user name for the target Linux or UNIX host server.

-target_password *targetpassword*

Specifies the user password for the target Linux or UNIX host server.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

Example: Run a Shell Command and Create Events

This example runs the ls command against the /tmp directory.

```
dpmssh run -cmdline "ls /tmp" -target_host linuxserver -target_user myusername
-target_password pswd -pre -post
```

Example: Run a Remote Script

This example runs the script named MyScript.

```
dpmssh run -cmdline "/tmp/MyScript.sh" -target_host unixbox -target_user root
-target_password pass1
```

Help Desk Commands

You can use the CLI to script and automate help desk commands and run actions based on the command results.

dpmhd addcomment Command--Update a Ticket with a Comment

The dpmhd addcomment command adds a comment to an existing help desk ticket.

This command has the following format:

```
dpmhd addcomment [-sc sc_url] -id ticketid -value comment [-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-id *ticketid*

Defines the unique ID assigned to the ticket by the help desk system when the ticket was opened.

Example: cr:100400

-value *comment*

Defines the comment string to update the ticket with.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add Comment to Ticket

This example updates the help desk ticket, cr:400335, indicating that a power off operation started for all virtual machines in SERVICEA.

```
dpmhd addcomment -id cr:400335 -value "Powering off SERVICEA"
```

dpmhd close Command--Close a Help Desk Ticket

The dpmhd close command closes a help desk ticket.

This command has the following format:

```
dpmhd close [-sc sc_url] –id ticketid [-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-id *ticketid*

Defines the unique ID assigned to the ticket by the help desk system when the ticket was opened.

Example: cr:100400

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Close a Help Desk Ticket

This example closes the help desk ticket identified by ticket ID cr:400335.

```
dpmhd close -id cr:400335
```

dpmhd getattribute Command--Get an Attribute Value of a Ticket

The dpmhd getattribute command gets the value of an existing help desk ticket attribute.

This command has the following format:

```
dpmhd getattribute [-sc sc_url] -id ticketid -name attr_name  [-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-id *ticketid*

Defines the unique ID assigned to the ticket by the help desk system when the ticket was opened.

Example: cr:100400

-name *attr_name*

Defines the name of a ticket attribute. The supported attribute names are as follows:

- description
- status
- summary

Note: These attribute names are case-sensitive.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get the Value of a Ticket Attribute

This example retrieves the value of the description attribute of the help desk ticket identified by the ticket ID cr:400335.

```
dpmhd getattribute -id cr:400335 -name description
```

dpmhd getstatus Command--Get the Status of a Ticket

The dpmhd getstatus command gets the status of an existing help desk ticket.

This command has the following format:

```
dpmhd getstatus [-sc sc_url] –id ticketid [-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-id *ticketid*

Defines the unique ID assigned to the ticket by the help desk system when the ticket was opened.

Example: cr:100400

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retrieve Ticket Status

This example retrieves the status of the help desk ticket identified by the ticket ID cr:400335.

```
dpmhd getstatus -id cr:400335
```

dpmhd open Command--Open a Help Desk Ticket

The dpmhd open command opens a new help desk ticket.

This command has the following format:

```
dpmhd open [-sc sc_url] -summary summarytext [-description descriptiontext]
[-affected_user username] [-entity_name entityname] [-type tickettype] [-template
templatename] [-pre] [-post][-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-summary *summarytext*

Defines an abbreviated description for the reason the ticket is being opened.

-description *descriptiontext*

(Optional) Specifies the reason the ticket is being opened.

-entity_name *entityname*

(Optional) Defines the name of the server or service used to match the ticket with a known configuration item in the help desk system. If the configuration item host name is the same as the entity name, the ticket is associated with that configuration item.

-affected_user *username*

(Optional) Defines the end user associated with this ticket.

-type *tickettype*

(Optional) Defines the type of ticket to open. This parameter is required with the -template parameter. If you do not specify a type, the default ticket for which the help desk system is configured is used. Ticket types that are supported depend on the configuration of the help desk system. For example, if Unicenter Service Desk is configured for ITIL support, Change Order, Incident, Problem, and Request ticket types are supported.

-template *templatename*

(Optional) Defines the name of the template to use when opening a ticket. The template contains the default ticket settings. When using the template option, the ticket type is required to locate the template.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmhd setattribute Command--Set an Attribute of a Ticket

The dpmhd setattribute command updates an attribute of an existing help desk ticket.

This command has the following format:

`dpmhd setattribute [-sc sc_url] –id ticketid –name attr_name -value attr_value [-locale iso629value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-id *ticketid*

Defines the unique ID assigned to the ticket by the help desk system when the ticket was opened.

Example: cr:100400

-name *attr_name*

Defines the name of a ticket attribute. The supported attribute names are as follows:

- description
- status
- summary

Note: These attribute names are case-sensitive.

-value *attr_value*

Defines the value to update an attribute with.

Note: If using setattribute to update the ticket status, enter the internal code associated with the status.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update Ticket Attribute

This example sets the value of the description attribute of the help desk ticket identified by ticket ID 400335.

```
dpmhd setattribute –id cr:400335 –name description -value "Poweroff server1"
```

dpmhd setstatus Command--Set the Status of a Ticket

The dpmhd setstatus command updates the status of an existing help desk ticket.

This command has the following format:

```
dpmhd setstatus [-sc sc_url] -id ticketid -value statuscode [-locale iso629value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-id *ticketid*

Defines the unique ID assigned to the ticket by the help desk system when the ticket was opened.

Example: cr:100400

-value *statuscode*

Indicates the status code that you are updating the ticket with. For example, for Unicenter Service Desk enter the internal code associated with the status. Valid codes used to set the status of Unicenter Service Desk tickets include:

APP

Sets the status to approved.

CL

Sets the status to closed.

OP

Sets the status to open.

REJ

Sets the status to rejected.

RSCH

Sets the status to researching.

WIP

Sets the status to work in progress.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update Ticket Status

This example updates the status of the help desk ticket identified by ticket ID cr:400335 to Approved.

```
dpmhd setstatus -id cr:400335 -value APP
```

Imaging Commands

You can use the CLI to script and automate Imaging commands and run actions based on the command results.

dpmimg image Command--Deploy a Solaris Image

Use the dpmimg image command to deploy a Solaris image from a JumpStart server to a Solaris client, to image a Solaris client using a JumpStart boot server that is different from the JumpStart installation server, or to image Solaris 10 x86 clients.

This command has the following format:

```
dpmimg image [-sc sc_url] -target_host targethostname -target_mac macaddress
[-itcm_server itcm domain manager] -auto_deploy {Yes|No} [-deploy_template
templatename] -target_username username [-target_password password] [-auth_file
authorizationfile] [-auth_comp componentID] -img_host imagehostname -img_name
imagename -img_location location [-boot_img_name bootimagename] [-boot_img_location
bootimagelocation] [-boot_img_host bootimagehost] [-servproc_hostname
serviceprochostname] [-servproc_user serviceprocusername] [-servproc_pw
serviceprocpassword] -dhcp_hostname dhcphostname [-itcm_server SD_adapter_server]
[-scalability_server scalabilityservername] [-wait [timeout]] [-pre] [-post]
[[-ws_user <value> -ws_password <value>]|[-prompt <yes|no>]][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-target_host *targethostname*

Defines the name of the target host server to which you are deploying the image.

-target_mac *macaddress*

Defines the hardware address of the computer to which you are deploying the image.

-itcm_server *itcmdomainmanager*

(Optional) Defines the name of the [assign itcm product name for the adsm variable] Domain Manager where the software delivery adapter resides. Optional when only one Software Delivery adapter or [assign itcm product name for the adsm variable] domain manager is configured. Valid for CA Virtual Assurance only.

-auto_deploy {yes|no}

Specifies whether CA Virtual Assurance agents are deployed automatically. Options include the following:

yes

Deploys CA Virtual Assurance agents automatically.

no

Prevents CA Virtual Assurance agents from being deployed automatically.

Default: no

-deploy_template *templatename*

(Optional) Specifies the name of the generic template created in CA Virtual Assurance.

Note: Do not confuse this template with the templates created and managed by VMware vCenter.

-target_username *targetusername*

Defines the user name used for deploying agents to the target host server to which you are deploying the image.

-target_password *targetpassword*

(Optional) Defines the user password used for deploying agents to the target host server to which you are deploying the image. If you do not specify the password, it is retrieved from the authorization file.

Note: Use the dpmutil CLI to set up the authorization file.

-auth_file *authorizationfilename*

(Optional) Specifies the full path name of the authorization file to use to retrieve the encrypted password. This file contains the CA Virtual Assurance administrator credentials that were generated using the dpmutil set auth command. When this option is not specified, the default authorization file is used.

-auth_comp *componentID*

(Optional) Specifies a component ID that you can use to group hosts and users.

-img_host *RSIserver*

Defines the name of the RSI server.

-img_name *imagename*

Defines the name of the image to deploy.

-img_location *imagelocation*

Defines the location of the image to deploy.

-boot_img_name *bootimagename*

(Optional) Defines the name of the boot image that you want to deploy.

-boot_img_location *bootimagelocation*

(Optional) Defines the location of the image that you want to deploy.

-boot_img_host *bootimagehost*

(Optional) Defines the name of the server where the boot image is located.

-servproc_hostname *serviceprochostname*

(Optional) Defines the host name (Solaris 10 x86 type) of the service processor.

-servproc_user *serviceprocusername*

(Optional) Defines the user name (Solaris 10 x86 type) of the user connecting to the service processor.

-servproc_pw *serviceprocpassword*

(Optional) Defines the password of the user (Solaris 10 x86 type) connecting to the service processor.

-itcm_server *itcmdomainmanager*

(Optional) Defines the name of the [assign itcm product name for the adsm variable] Domain Manager where the software delivery adapter resides. Optional when only one Software Delivery adapter or [assign itcm product name for the adsm variable] domain manager is configured. Valid for CA Virtual Assurance only.

-dhcp_hostname *dhcphostname*

Defines the host name (Solaris 10 x86 type) that is used to connect to the DHCP server.

-scalability_server *servername*

(Optional) Specifies the [assign itcm product name for the adsm variable] scalability server for software distribution.

-wait *timeout*

(Optional) Indicates whether to display the status of the job and not return until the operation completes, fails, or the timeout period is met (if you specify a timeout value). If you do not specify this option, the CLI returns without waiting for completion. If there is no response, the optional timeout value defines the timeout period in minutes. If you enter the wait option with no timeout value, the CLI uses the default wait time from the caimgconf.cfg file or defaults to 120 minutes. In addition to any positive integer, the following timeout values are also possible:

""

No timeout value.

0

Wait indefinitely.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user wsuser

(Optional) Specifies the web service user name to connect to the Imaging Service module.

-ws_password wspassword

(Optional) Specifies the password for the web service user to connect to the Imaging Service module.

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Deploy an Image to a Solaris Client Computer

This example deploys a Solaris image from a JumpStart server to a Solaris client computer and does not wait for image deployment to complete.

```
dpmimg image -imghost sunserver001 -img_name jump_5.10 -auto_deploy Yes -target_host
sunserver002 -target_username rootuser -target_password rootuserpassword
-target_mac 00:00:00:00:00:00 -img_location /export/jump_5.10
```

Example: Deploy an Image to a Solaris 10 x86 Client Computer

This example deploys a Solaris image from a JumpStart server to a Solaris 10 x86 client computer.

```
dpmimg image -target_host sunserver001 -target_mac 00:00:00:00:00:00 -auto_deploy no
-target_username root -target_password rootuserpassword -img_host sunimageserver001
-img_name sol_10_508_x86 -img_location /jsimages/SunImageServer/sol_10_508_x86
-servproc_hostname sunserver002 -servproc_user root -servproc_pw rootuserpassword
-dhcp_hostname sunimageserver002 -boot_img_host sunimageserver001 -boot_img_name
sol_10_508_x86_bt -boot_img_location /jsboot/SunImageserver/sol_10_508_x86_bt
-wait 120 -pre -post
```

Example: Use Multiple JumpStart Servers to Deploy a Solaris Image to a Solaris Server

This example uses multiple JumpStart servers to deploy a Solaris image to a Solaris server sunserver002. The install OS image is located on sunserver003 and the boot image is located on the boot server sunserver004. The command waits 2 hours for the image to deploy and then runs.

```
dpmimg image -target_host sunserver002 -target_mac 00:00:00:00:00:00 -auto_deploy
yes -target_username root -target_password rootuserpassword -img_host sunserver003
-img_name sol_10_sparc -img_location /jsimages/sol_10_sparc -boot_img_host
sunserver004 -boot_img_name sol_10_sparc_boot -boot_img_location
/jsboot/sol_10_sparc_boot -wait 120 -pre -post
```

Example: Use Multiple JumpStart Servers to Deploy a Solaris 10 x86 Image to a Solaris 10 x86 Server

This example uses multiple JumpStart servers to deploy a Solaris 10 x86 image to a Solaris 10 x86 server sunserver002. The installation OS image is located on sunserver002 and the boot image is located on the boot server sunserver003. It connects to the service processor server sunserver004 and the DHCP server dhcpserver001.

```
dpmimg image -target_host sunserver002m -target_mac 00:00:00:00:00:00 -auto_deploy
no -target_username root -target_password rootuserpassword -img_host sunserver002
-img_name sol_10_x86 -img_location /jsimages/sol_10_x86 -servproc_hostname
sunserver004 -servproc_user root -servproc_pw rootuserpassword -dhcp_hostname
dhcpserver001 -boot_img_host sunserver003 -boot_img_name sol_10_x86_boot
-boot_img_location /jsboot/sol_10_x86_boot -wait 120 -pre -post
```

dpmimg imgjobcheck Command--Get Solaris Imaging Job Status

The dpmimg imgjobcheck command retrieves the Solaris image job status for a specific CA Virtual Assurance job ID.

This command has the following format:

```
dpmimg imgjobcheck [-sc sc_url] -status jobID [-pre] [-post] [[-ws_user <value>
-ws_password <value>]|[-prompt <yes|no>]][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-status={*job ID*}

Defines the job ID used to obtain the job status.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user wsuser

(Optional) Specifies the web service user name to connect to the Imaging Service module.

-ws_password wspassword

(Optional) Specifies the password for the web service user to connect to the Imaging Service module.

-prompt {yes|no}

(Optional) Specifies whether you are prompted for the web service user ID and password.

Default: Yes

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Job Status for Solaris Provisioning Job

This example retrieves the job status for a specific Solaris provisioning job.

```
dpmimg imgjobcheck –status 45
```

Policy Commands

You can use the dpmpolicy CLI to script and automate Policy commands and run actions based on the command results.

dpmpolicy createdefaultactions Command--Create Default Actions

The dpmpolicy createdefaultactions command creates the four default Set Health State actions. These actions are created during installation. Use this command if you want to create these actions again, for example, after having removed them accidentally.

This command has the following format:

```
dpmpolicy createdefaultactions [-sc sc_url] [-ws_user username -ws_password
password] [-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmpolicy exportaction Command--Export Actions to a File

The dpmpolicy exportaction command exports actions to a file.

This command has the following format:

```
dpmpolicy exportaction [-sc sc_url] [-action_name actionname] -file filename
[-ws_user username -ws_password password] [-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-action_name *actionname*

Defines the name of the action. If you do not specify this parameter, all actions are exported.

-file *filename*

Defines the file name.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Export Actions to a File

This example exports a single action to a file.

```
dpmpolicy exportaction -action_name ACTION_A -file C:\ACTION_A.txt
```

dpmpolicy exportrule Command--Export Rules to a File

The dpmpolicy exportrule command exports rules to a file.

This command has the following format:

```
dpmpolicy exportrule [-sc sc_url] [-rule_name rulename] -file filename [-ws_user
username -ws_password password] [-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-rule_name *rulename*

Defines the name that you assigned to the rule that you created.

-file *filename*

Defines the file name.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Export a Rule to a File

This example exports a single rule to a file.

```
dpmpolicy exportrule -rule_name SERVER_RULE_A -file C:\SERVER_RULE_A.txt
```

Example: Export All Rules to a File

This example exports all rules to a file.

```
dpmpolicy exportrule -file C:\ALL_RULES.txt
```

dpmpolicy findbestmachine Command--Find the Best Server

The dpmpolicy findbestmachine command finds the server with the lowest overall usage from a specified list of servers.

This command has the following format:

`dpmpolicy findbestmachine [-sc` *`sc_url`*`] -machine_list` *`machinelist`* `[-ws_user` *`username`* `-ws_password` *`password`*`][-locale` *`iso639value`*`]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Find the Best Server

This example finds the server with the lowest overall usage from the specified server list.

```
dpmpolicy findbestmachine -machine_list "machine1.ca.com, machine2.ca.com,
172.24.36.107"
```

dpmpolicy findcandidatemachine Command--Find the Candidate Servers

The dpmpolicy findcandidatemachine command finds the servers that match user-defined specifications.

This command has the following format:

```
dpmpolicy findcandidatemachine [-sc sc_url] [-machine_list machinelist] -constraint
Source:OP:Value [-constraint Source:OP:Value] [-ws_user username -ws_password
password] [-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-constraint={Source:OP:Value},...

Defines the specifications that the candidate servers must meet. Options include the following:

Source={MEMORY|CPUSPEED|STORAGE|ARCH}

Specifies the type of constraint and an associated value.

MEMORY

Specifies a memory constraint.

Limits: MB

CPUSPEED

Specifies a CPU processing speed constraint.

Limits: MHz

STORAGE

Specifies a storage constraint.

Limits: MB

ARCH

Specifies a hardware constraint.

Limits: X86, SPARC, PA-RISC, POWERPC or X64.

OP={EQ|NEQ|GT|GTE|LT|LTE}

Specifies an operand. Operands include the following:

EQ=equal to

NEQ=not equal to

GT=greater than

GTE=greater than or equal to

LT=less than

LTE=less than or equal to

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Find Servers

This example finds servers with more than 2000 MB of system memory.

```
dpmpolicy findcandidatemachine -constraint MEMORY:GT:2000
```

Example: Find Servers in the List

This example finds servers with more than 2000 MB of system memory and 2400 MHz of CPU or more from the provided list of servers.

```
dpmpolicy findcandidatemachine -constraint MEMORY:GT:2000 -constraint
CPUSPEED:GTE:2400 -machine_list alert.ca.com, 141.202.224.59
```

dpmpolicy getruleexeccount Command--Retrieve rule execution count

The dpmpolicy getruleexeccount command returns the number of times the rule has attempted to run.

This command has the following format:

```
dpmpolicy getruleexeccount [-sc sc_url] -rule_name rulename [-ws_user username
-ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-rule_name *rulename*

Defines the name that you assigned to the rule that you created.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get Rule Execution Count

This example retrieves the number of times a rule has been executed.

```
dpmpolicy getruleexeccount -rule_name GENERIC_RULE
```

dpmpolicy importaction Command--Import Actions from a File

The dpmpolicy importaction command imports actions from a file.

This command has the following format:

```
dpmpolicy importaction [-sc sc_url] -file filename [-action_name actionname]
[-ws_user username -ws_password password] [-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-file *filename*

Defines the file name.

-action_name *actionname*

Defines the name of the action. When the file contains only one action, this option can be used to rename the action upon import. If the file contains more than one action, the value is ignored.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Import Actions From a File

This example imports an action and renames it.

```
dpmpolicy importaction -file C:\ACTION_A.txt -action_name ACTION_B
```

dpmpolicy importrule Command--Import Rules from a File

The dpmpolicy importrule command imports rules from a file.

This command has the following format:

```
dpmpolicy importrule [-sc sc_url] [-entity_type entitytype -entity_name entityname]
-file filename [-rule_name rulename] [-ws_user username -ws_password password]
[-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-entity_type={*server*|*service*}

Defines whether this rule is associated with a server or service.

-entity_name *entityname*

Defines the name of the server or service.

-file *filename*

Defines the file name.

-rule_name *rulename*

Defines the name that you assigned to the rule that you created. When the file contains only one rule, this option can be used to rename the rule upon import. If the file contains more than one rule, the value is ignored.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Import a Rule From a File

This example imports a rule and renames it.

```
dpmpolicy importrule -file C:\RULE_A.txt -rule_name RULE_B
```

dpmpolicy resetruleexeccount Command--Reset Retries to Run a Rule

The dpmpolicy resetruleexeccount command resets the number of times the rule has attempted to run back to zero.

This command has the following format:

```
dpmpolicy resetruleexeccount [-sc sc_url] -entity_type entitytype -entity_name
entityname -rule_name rulename [-ws_user username -ws_password password] [-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-entity_type={*server*|*service*}

Defines whether this rule is associated with a server or service.

-entity_name *entityname*

Defines the name of the server or service.

-rule_name *rulename*

Defines the name that you assigned to the rule that you created.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Reset Server Threshold

This example resets the threshold for a rule that runs on a server.

```
dpmpolicy resetruleexeccount -entity_type 0 -entity_name machine1.ca.com -rule_name
SERVER1_RULE
```

Example: Reset Retries for a Service Rule

This example resets the number of retries to zero for a rule that runs on a service.

```
dpmpolicy resetruleexeccount -entity_type 1 -entity_name SERVICE1 -rule_name
SERVICE1_RULE
```

dpmpolicy runaction Command--Run an Action

The dpmpolicy runaction command runs actions and action sequences.

This command has the following format:

dpmpolicy runaction [-sc *sc_url*] -action_name *action name* [-event_source *event source*] [-event_message *event_message*] [-rule_name *rule name*] [-server_name *server name*] [-service_name *service name*] [-propagate] [-vm_name *vm name*] [-datacenter *datacenter name*] [-host_system *host system*] [-wait_rc] [-pre] [-post] [-ws_user *username* -ws_password *password*][-locale *iso639value*] [-D-*overwrite Parameter*=*value*]

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-action_name *actionname*

Defines the name of the action.

-event_source *eventsource*

(Optional) Defines the value with which to populate the %EVENTSOURCE% substitution variable.

-event_message *eventmessage*

(Optional) Defines the value with which to populate the %EVENTMESSAGE% substitution variable.

-rule_name *rulename*

(Optional) Defines the value with which to populate the %RULENAME% substitution variable.

-server_name *servername*

(Optional) Defines the value with which to populate the %SERVER% substitution variable.

-service_name *servicename*

(Optional) Defines the value with which to populate the %SERVICE% substitution variable.

-propagate

(Optional) Specifies that you want to run an action against all servers in the service that you specified in the -service_name option.

-vm_name *vmname*

(Optional) Defines the value with which to populate the %VMNAME% substitution variable.

-datacenter_name *datacentername*

(Optional) Defines the value with which to populate the %DATACENTER% substitution variable.

-host_system *hostsystem*

(Optional) Defines the value (the name of the VMware ESX host computer) with which to populate the %HOSTSYSTEM% substitution variable.

-wait_rc

(Optional) Specifies whether to wait for a Run Command Script action to finish.

-pre

(Optional) Specifies whether to generate an event before the operation is performed.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

-D*-overwrite Parameter*=*value*

(Optional) Defines a new value for the specified parameter.

Example: Run Action to Bring a Server Online

This example runs an action that brings a server online.

```
dpmpolicy runaction –action_name  BringServerOnline –server_name Server001
–service_name Production –pre –post
```

Example: Run Action

This example runs an action.

```
dpmpolicy runaction -action_name Action1
```

Example: Run an Action Against all Servers in a Service

This example runs an action against all servers in the SERVICE1 service.

```
dpmpolicy runaction -action_name ACTION1 -service_name SERVICE1 -propagate
```

Example: Run an Action Requiring a VM

This example runs an action using a VM.

```
dpmpolicy runaction -action_name vc_action -vm_name Finance\Group\FinVMServer1
-datacenter FINANCE\NYC
```

Example: Run an Action with a Different Parameter Value

This example runs an action with a vm_name parameter value that is different to the value set in the CA Virtual Assurance user interface.

```
dpmpolicy runaction –action_name Create_snapshot -D-vm_name=VM02
```

dpmpolicy setruleexeclimit Command--Set Limits for a Rule

The dpmpolicy setruleexeclimit command sets a limit that determines how many times your rule retries.

This command has the following format:

```
dpmpolicy setruleexeclimit [-sc sc_url] -entity_type entitytype -entity_name
entityname -rule_name rulename -limit_option option [-limit_value value] [-ws_user
username -ws_password password] [-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-entity_type={*server*|*service*}

Defines whether this rule is associated with a server or service.

-entity_name *entityname*

Defines the name of the server or service.

-rule_name *rulename*

Defines the name that you assigned to the rule that you created.

-limit_option=[limited|unlimited|disabled]

Specifies the limit option for the number of times the rule runs. Options are as follows:

limited

Specifies the number of times the rule runs.

unlimited

Specifies that the rule can run an unlimited number of times.

disabled

Specifies that the rule limit option is disabled.

-limit_value *value*

(Option) Defines the limit value. This option is valid only when you use it with the limit option set to *limited*.

Limits: 0 and greater

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Rule Retries

This example sets the limit to 40 retries for a rule that runs on a service.

```
dpmpolicy setruleexeclimit -entity_type service -entity_name SERVICE1 -rule_name
SERVICE1_RULE -limit_option limited -limit_value 40
```

Example: Set Rule Retries to Unlimited

This example sets no limit on the number of times the rule can run on a server.

```
dpmpolicy setruleexeclimit -entity_type server -entity_name machine1.ca.com
-rule_name MACHINE1_RULE -limit_option unlimited
```

Example: Disable the Limit Option

This example disables the limit option for this rule.

```
dpmpolicy setruleexeclimit -entity_type server -entity_name machine2.ca.com
-rule_name MACHINE2_RULE -limit_option disabled
```

Policy Configuration

You can use the caismutility CLI to add new functionality to the Policy Configuration user interface.

caismutility Command -- Add Functionalities to Policy Configuration UI

Use the caismutility command to provide functionality policies to configure the user interface. Functionality policies include:

- Import the existing eHealth templates to CA Virtual Assurance as Policy Configuration templates. The Policy Configuration templates are updated on the CA Virtual Assurance UI and applied to SystemEDGE agents.
- Instruct SystemEDGE to report to a new Distribution Server during the following condition:
  - The old Distribution Server is decommissioned.
  - Additional Distribution Servers are added.
  - Moved to a different location where another Distribution Server manages the agents.
- Instruct SystemEDGE to report to a new Domain Server during the following condition:
  - The old Domain Server is decommissioned.
  - A parallel upgrade is performed on CA Virtual Assurance.
- Import and export the SystemEDGE policies and templates, and SRM policies to the Domain Server during the following conditions:
  - The new policies and templates are created on test computers are migrated to a production computer.
  - A parallel upgrade is performed on CA Virtual Assurance.

This command has the following format:

```
caismutility
[-f server]
[-o sysEDGE|sysEDGESRM]
[-l]
[-d -p policy]
[-importEH dir|file]
[-useDirName]
[-overwrite]
[-c manager agent1]
[-user user]
[-password password]
[-locale locale]
[-import dir|file]
[-type SEPolicy|SETemplate|SRMPolicy|SRMThreshold|SRMTest|auto]
[-export dir]
```

Note: All options are case-sensitive.

-f *server*

Specifies to connect to a domain server.

-o {*sysEDGE*|*sysEDGESRM*}

Specifies the type of configuration to use.

-l

Lists the objects that are available.

-d {-p *policy*}

Delivers the policy to an agent.

-importEH {*dir*|*file*}

Imports the eHealth templates.

-useDirName

Specifies the parent directory name.

-overwrite

Specifies to overwrite an existing template.

-c manager {*agent1* ...}

Instructs the agents to report to the new manager.

-user *user*

Specifies the user name.

-password *password*

Specifies the password.

-locale *iso639value*

Specifies an IS0 639_3166 combination (for example: fr_FR for French) to override the default English output. To use the locale of the command prompt, specify "native".

-import {*dir*|*file*}

Specifies the policies or templates to add to filestore.

-type {*SEPolicy*|*SETemplate*|*SRMPolicy*|*SRMThreshold*|*SRMTest*|*auto*}

Specifies the type of file to import.

-export *dir*

Copies all policies and templates to the specified directory.

Example: To import a set of eHealth templates

This example imports a set of eHealth templates.

```
caismutility -user xxx -password yyy -importEH c:\templates\
```

Example: To import SystemEDGE policies into a domain server

This example imports some SystemEDGE policies into this domain server.

```
caismutility -user xxx -password yyy -type SEPolicy -import c:\policies
```

Example: Instruct the agent to report to a new manager

This example moves an agent on host agent.com to a new manager manager.com.

```
caismutility -user xxx -password yyy -o sysEDGE -c manager.com agent.com
```

Resource Manager Commands

You can use the dpmresourcemgr CLI to script and automate Resource Manager commands and run actions based on the command results.

dpmresourcemgr addbaremetal Command--Add a Physical Computer

The addbaremetal command adds a physical computer to the data center.

This command has the following format:

```
dpmresourcemgr addbaremetal [-sc sc_url] -server_name hostname -MAC_address
macaddress [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *source host name*

Defines the name of the source server in the operation.

-MAC_address *macaddress*

Defines the MAC address of the target computer. Valid entry: 12 digit hexadecimal values (for example, A-F, 0-9, a-f) in the format: 0013724C2140 or 00:13:72:4C:21:40.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add a Physical Computer

This example adds computer baremetal2 with a MAC address of 00:13:72:4C:21:40.

```
dpmresourcemgr addbaremetal -sc https://servicecontroller/dpm/sc -server_name
baremetal2 -MAC_address 00:13:72:4C:21:40 -ws_user wsuser -ws_password
wsuserpassword
```

dpmresourcemgr addcomputertonetwork Command--Add Server to Network

The dpmresourcemgr addcomputertonetwork command adds servers to an existing network.

This command has the following format:

```
dpmresourcemgr addcomputertonetwork [-sc sc_url] -vlan_id vlanid -mac_list
macaddresses [-vlan_tagged][-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-vlan_id *vlanid*

Defines the integer for the virtual network (VLAN). Valid entry: Integer 1-4094, where 1 is the default network interface card (NIC).

-mac_list *macaddresses*

Defines a list of NIC MAC addresses for the server. Valid entry: Comma-separated NIC MAC addresses in the format, xx:xx:xx:xx:xx:xx.

-vlan_tagged

Defines the VLAN as tagged. If not specified, the VLAN is untagged.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add Server to Network

This example adds a server to the VLAN 4556.

```
dpmresourcemgr addcomputertonetwork -vlan 4556 -mac_list 11:22:33:44:55:66 -ws_user
wsuser -ws_password wsuserpassword
```

dpmresourcemgr addipaddresspool Command--Add IP Address Pools

The dpmresourcemgr addipaddresspool command adds an IP address pool using static IP addresses or DHCP.

This command has the following format:

```
dpmresourcemgr addipaddresspool [-sc sc_url] -subnet_address address -starting_ip
ipaddress -ending_ip ipaddress -ip_assignment_type static|dhcp [-name name][-owner
ownername][-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subnet_address *address*

Defines the IP address of the network. Valid entry: xxx.xxx.xxx.xxx or xxx.xxx.xxx.xxx/xx.

-starting_ip *ipaddress*

Defines the starting valid IP address in the range for use in the static IP address pool. Valid entry: xxx.xxx.xxx.xxx.

-ending_ip *ipaddress*

Defines the ending IP address in an IP range. Valid entries: xxx.xxx.xxx.xxx.

-ip_assignment_type static | dhcp

Defines the method in which servers get their IP addresses (static IP address or DHCP).

-name *name*

Defines the item name. Valid entry: 1-128 alphanumeric characters.

-owner *ownername*

Defines the owner of the IP address pool. Valid entry: 1-128 alphanumeric characters.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add IP Address Pool

This example adds the IP address pool, engpool, with the IP address range of 10.10.21.130 to 10.10.21.140 and sets the IP assignment method to DHCP.

```
dpmresourcemgr addipaddresspool -subnet_address 10.10.21.0 -starting_ip
10.10.21.130 -ending_ip 10.10.21.140 -ip_assigment_type DHCP -ws_user wsuser
-ws_password wsuserpassword
```

dpmresourcemgr addmachinestoservice Command--Add Servers to a Service

The addmachinestoservice command adds servers to a service.

This command has the following format:

```
dpmresourcemgr addmachinestoservice [-sc sc_url] -service_name servicename
-machine_list machinelist [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-service_name *servicename*

Defines the name of the service. Valid entry: Full path to the service name. Use backslash \ to delimit parent service and sub service.

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add Servers to a Service

This example adds a list of servers to a service named SERVICEA.

```
dpmresourcemgr addmachinestoservice -service_name SERVICEA -machine_list
"machine4.MyCompany.com, machine5.MyCompany.com, 192.168.255.255" -ws_user wsuser
-ws_password wsuserpassword
```

dpmresourcemgr addtocontainer Command--Add Content to a Container

The dpmresroucemgr addtocontainer command adds servers or a subcontainers to a container.

This command has the following format:

```
dpmresourcemgr addtocontainer [-sc sc_url] -container_name containername
[-machine_list machinelist|-subcontainer_name subcontainername] [-ws_user username
-ws_password password][-locale iso639value]
```

-container_name *containername*

Defines a collection of objects. Valid entry: the full path to the container name using backslash (\) to delimit parent container and child container.

-machine_list *machinelist* | -subcontainer *subcontainername*

Defines the machine list or subcontainer and its objects.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Add Content to a Container

This example adds a subcontainer named, ManagedVMs, to the container named, Managed.

```
dpmresourcemgr addtocontainer -container_name Managed -subcontainer_name
ManagedVMs.
```

dpmresourcemgr createcontainer Command--Create a Container

The createcontainer command creates an object to hold a collection of other objects.

This command has the following format:

```
dpmresourcemgr createcontainer [-sc sc_url] -parent_container parentcontainer
-container_name containername -machine_list machinelist [-ws_user username
-ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-parent_container *parentcontainer*

Defines the full path service name for the parent service.

-container_name *containername*

Defines a collection of objects. Valid entry: the full path to the container name using backslash (\) to delimit parent container and child container.

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Container

This example creates a container named, ManagedVMs.

```
dpmresourcemgr createcontainer -parent_container Managed -container_name ManagedVMs
```

dpmresourcemgr createdatacenter Command--Create a Data Center

The createdatacenter command creates a data center container.

This command has the following format:

```
dpmresourcemgr createdatacenter [-sc sc_url] -datacenter_name datacentername
[-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-datacenter_name *datacenter*

Defines the name of the datacenter. Valid entries: Full path service name of the datacenter.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Data Center

This example creates the data center named, datacenterEast.

```
dpmresourcemgr createdatacenter -datacenter_name datacenterEast.
```

dpmresourcemgr createdefaultservice Command--Create Default Service

The createdefaultservice command creates the default service with the local system and any external systems configured during the installation.

This command has the following format:

```
dpmresourcemgr createdefaultservice [-sc sc_url] [-retry retrynumber]
[-discover_local_subnet] [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-retry *retrynumber*

Defines the number of retries for creating the service.

-discover_local_subnet

Automatically discovers the local subnet after creating a default service if specified.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Default Service

This example creates a default service that tries to connect ten times, and automatically discovers the local subnet.

```
dpmresourcemgr createdefaultservice -retry 10 -discover_local_subnet -ws_user wsuser
-ws_password wsuserpassword
```

dpmresourcemgr createipnetwork Command--Create Network

The dpmresourcemgr createipnetwork command specifies an existing network in your datacenter for use with [assign the value for ssrm in your book]. The [assign the value for ssrm in your book] end user can then reserve a virtual machine on a specific network.

This command has the following format:

`dpmresourcemgr createipnetwork [-sc sc_url] -subnet_address subnetaddress -vlan_id vlanid -ip_netmask ipnetmask -name networkname -ip_gateway_list ipaddresses -dns_domainname domainname [-description description] [-dns_list ipaddresses][-dns_suffix_list suffixes][-netbios_server_list ipaddresses][-ntp_server_list ipaddresses][-ws_user username -ws_password password][-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subnet_address *address*

Defines the IP address of the network. Valid entry: xxx.xxx.xxx.xxx or xxx.xxx.xxx.xxx/xx.

-vlan_id *vlanid*

Defines the integer for the virtual network (VLAN). Valid entry: Integer 1-4094, where 1 is the default network interface card (NIC).

-ip_mask *ipnetmask*

Defines the subnet mask. Valid entry: Standard IP netmask in the format: xxx.xxx.xxx.x, or CIDR format: xxx.xxx.xxx.x/8-28. Prefix length is 8-28.

-name *name*

Defines the item name. Valid entry: 1-128 alphanumeric characters.

-ip_gateway_list *ipaddresses*

Defines the IP addresses for default and alternate gateways using a comma-separated list. Default and alternate gateways must be on the same network. Valid entry: xxx.xxx.xxx.xxx.

-dns_domainname *domainname*

Defines the DNS domain name of the network. Valid entry: 1-63 alphanumeric characters per dotted address (for example, xxx.yyy.com). Address cannot start with a number.

-description *description*

Defines the network for user understanding. Valid entry: 1-128 alphanumeric characters.

-dns_list *ipaddresses*

Defines the DNS list of preferred and alternate DNS servers, and primary and secondary Windows Internet Name Service (WINS) servers. Valid entry: Comma-separated IP addresses in the format: xxx.xxx.xxx.xxx.

-dns_suffix_list *suffixes*

Defines a list of DNS suffixes for the network. Valid entry: Comma-separated list in the format, *name*.*name*.com.

-netbios_server_list *ipaddresses*

Defines a list of NETBIOS Name Server IP addresses. Valid entry: Comma-separated list of IP addresses in the format: xxx.xxx.xxx.xxx.

-ntp_server_list *ipaddresses*

Defines the Network Time Protocol (NTP) servers. Valid entry: Comma-separated list with the format: xxx.xxx.xxx.xxx.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Network

This example specifies the existing datacenter network, san diego 209 subnet, for use by the [assign the value for ssrm in your book] end-user portal when reserving a virtual machine.

```
dpmresourcemgr createipnetwork -subnet_address 10.10.21.0 -vlan_id 4001 -ip_mask
255.255.255.0 -name "san diego 209 subnet" -ip_gateway_list
10.10.21.124,10.10.21.125 -dns_domainname turbo.com -ws_user wsuser -ws_password
wsuserpassword
```

dpmresourcemgr createresourcegroup Command--Create Resource Group

The createresourcegroup command creates a package group.

This command has the following format:

```
dpmresourcemgr createresourcegroup [-sc sc_url] -group_name groupname
-group_description description -group_type type -group_attribute attribute
-package_list packagelist [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-group_name *groupname*

Defines the name of the group.

-group_description *description*

Defines the description of the group.

-group_type *type*

Defines the type of resource group. Set to 1 for packaging group. Set to zero for all groups.

-group_attribute *attribute*

Defines the group attribute.

-package_list *packagelist*

Defines individual packages.
Example: -package_list "<package name A>|<package procedure A>|<procedure type A>|<package name B>|...".

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create Resource Group

This example creates a resource group.

```
dpmresourcemgr createresourcegroup -group_name "AGENT PACKAGE GROUP"
-group_description "Agent package group" -group_type 1 -group_attribute 0
-package_list "CA Product - Win r11.2|Install|INSTALL|Generic Agent Win32
r5.0|Install|INSTALL"
```

dpmresourcemgr createresourcetemplate Command--Create Server Group Template

The createresourcetemplate command creates a package template.

This command has the following format:

```
dpmresourcemgr createresourcetemplate [-sc sc_url] -template_name templatename
-template_description description -template_os_type OStype [-group_list grouplist]
[-package_list packagelist][-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-template_name *templatename*

Defines the name of the template.

-template_description *description*

Defines a description of the template.

-template_os_type *OStype*

Defines the OS type of the resource template for deployment.

-group_list *grouplist*

Defines list of groups for adding to the resource template. Valid entry: -group_list "<group name A>|<group type 1=Software Package Group>|<group name B>|... "

-package_list *packagelist*

Defines individual packages. Define this option if the group type is set to 1(PACKAGE). Valid entries: -package_list "<package name A>|<package procedure A>|<procedure type A>|<package name B>|... ".

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create Resource Template

This example creates a package template.

```
dpmresourcemgr createresourcetemplate -template_name "Generic template"
-template_description "Generic template description" -template_os_type 0 -group_list
"Package group A|1|Package group B|1"  -package_list "CAProduct - Win
r11.2|Install|INSTALL|Generic Agent Win32 r5.0|Install|INSTALL"
```

dpmresourcemgr createservice Command--Create a Service

The createservice command creates a service. A service can have multiple sub services.

This command has the following format:

```
dpmresourcemgr createservice [-sc sc_url] -service_name servicename [-machine_list
machinelist] [-lower_threshold lowerthreshold] [-upper_threshold upperthreshold]
[-lag lag] [-priority priority] [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-service_name *servicename*

Defines the name of the service. Valid entry: Full path to the service name. Use backslash \ to delimit parent service and sub service.

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-lower_threshold *lowerthreshold*

(Optional) Specifies the lower overall usage threshold for the service. Lower threshold must be less than upper threshold. Valid entry: 1-100 (%)

-upper_threshold *upperthreshold*

(Optional) Specifies the upper overall usage threshold for the service. Upper threshold must always be greater than lower threshold. Valid entry: 1-100 (%)

-lag *lagvalue*

(Optional) Specifies the lag value. Valid entry: 0 or higher (seconds).

-priority *priorityvalue*

(Optional) Specifies the priority for the service. Valid entry: 1 or higher.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Create a Service

This example creates a service, named SERVICE1.

```
dpmresourcemgr createservice -service_name SERVICE1 -machine_list
"ComputerList.MyCompany.com, 172.31.255.255, Computer1.MyCompany.com"
-lower_threshold 20 -upper_threshold 80 -lag 1 -priority 1 -ws_user wsuser
-ws_password wsuserpassword
```

dpmresourcemgr deletebaremetal Command--Delete a Physical Computer

The deletebaremetal command deletes a physical computer from the data center.

This command has the following format:

`dpmresourcemgr deletebaremetal [-sc` *`sc_url`*`] -server_name` *`hostname`* `-MAC_address` *`macaddress`* `[-ws_user` *`username`* `-ws_password` *`password`*`][-locale` *`iso639value`*`]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *source host name*

Defines the name of the source server in the operation.

-MAC_address *macaddress*

Defines the MAC address of the target computer. Valid entry: 12 digit hexadecimal values (for example, A-F, 0-9, a-f) in the format: 0013724C2140 or 00:13:72:4C:21:40.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a Physical Computer

This example deletes the EngServer1 server from the data center.

```
dpmresourcemgr deletebaremetal -server EngServer1 -MAC_address 11:22:33:44:55:66
-ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr deletecontainer Command--Delete a Container

The deletecontainer command deletes a container and its contents.

This command has the following format:

```
dpmresourcemgr deletecontainer [-sc sc_url] -container_name containername
[-recursive] [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-container_name *containername*

Defines a collection of objects. Valid entry: the full path to the container name using backslash (\) to delimit parent container and child container.

-recursive

If set, the command is run recursively to sub services or containers.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a Container

This example creates a container named, ManagedVMs.

```
dpmresourcemgr deletecontainer -container_name ManagedVMs.
```

dpmresourcemgr deleteipnetworks Command--Delete a Network

The dpmresourcemgr deleteipnetworks command deletes a network from CA Virtual Assurance, but only if there are no current or existing reservations that use the network.

This command has the following format:

```
dpmresourcemgr deleteipnetworks [-sc sc_url] -subnet_address_list subnetaddress
[-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subnet_address_list *addresses*

Defines a list of networks by IP addresses. Valid entry: Comma-separated IP addresses in the format xxx.xxx.xxx.xxx or xxx.xxx.xxx.xxx/xx.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a Network

This example deletes the san diego 209 subnet for use by CA Virtual Assurance.

```
dpmresourcemgr deleteipnetworks -subnet_address_list 10.10.21.0,10.10.21.130
-ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr deletesystem Command--Delete a System

The deletesystem command deletes servers from the data center.

This command has the following format:

```
dpmresourcemgr deletesystem [-sc sc_url] -machine_list machinelist [-post] [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-post

(Optional) Specifies whether to generate an event after the operation is performed.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Delete a System

This example deletes the server named, ServerB.

```
dpmresourcemgr deletesystem -machine_list "machine4.MyCompany.com,
machine5.MyCompany.com, 192.168.255.255" -ws_user wsuser -ws_password
wsuserpassword
```

dpmresourcemgr getdiscoverednetworks Command--Get Discovered Networks

The getdiscoverednetworks command retrieves a list of all discovered networks.

This command has the following format:

```
dpmresourcemgr getdiscoverednetworks [-sc sc_url][-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retrieve All Networks

This example retrieves a list of all discovered networks.

```
dpmresourcemgr getdiscoverednetworks -ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr getipaddresspools Command--List IP Address Pools

The dpmresourcemgr getipaddresspools command lists existing the IP address pools by owner or assignment type.

This command has the following format:

```
dpmresourcemgr getipaddresspools [-sc sc_url] -subnet_address subnetaddress [-owner ownername][-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subnet_address *address*

Defines the IP address of the network. Valid entry: xxx.xxx.xxx.xxx or xxx.xxx.xxx.xxx/xx.

-owner *ownername*

Defines the owner of the IP address pool. Valid entry: 1-128 alphanumeric characters.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update IP Address Pool

This example lists the existing IP address pools for the network at IP address 10.10.21.30.

```
dpmresourcemgr getipaddresspools -subnet_address 10.10.21.130 -owner Reservation
Manager -ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr getipnetworks Command--List Networks

The dpmresourcemgr getipnetworks command lists the networks specified in CA Virtual Assurance using the createipnetwork command.

This command has the following format:

`dpmresourcemgr getipnetworks [-sc sc_url][-ws_user username -ws_password password][-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: List Networks

This example lists the networks for use by CA Virtual Assurance.

```
dpmresourcemgr getipnetworks -ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr getserverlist Command--Get a List of Servers

The getserverlist command retrieves a list of servers from the data center.

This command has the following format:

`dpmresourcemgr getserverlist [-sc sc_url] -service_name servicename [-ws_user username -ws_password password][-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-service_name *servicename*

Defines the name of the service. Valid entry: Full path to the service name. Use backslash \ to delimit parent service and sub service.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get a List of Servers

This example retrieves a list of servers that belong to the service, SERVICE2.

```
dpmresourcemgr getserverlist -service_name SERVICE2 -ws_user wsuser -ws_password
wsuserpassword
```

dpmresourcemgr getservicelist Command--Get List of Services

The getserverlist command retrieves a list of services from a server.

This command has the following format:

```
dpmresourcemgr getservicelist [-sc sc_url][-parent_service_name
parentservice][-server_name servername][-recursive][-ws_user username -ws_password
password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-parent_service_name *parentservice*

Defines a parent service. Valid entries: the full path service to the parent service.

-server_name *servername*

Defines the name of the server. If not specified, the command returns a list of all defined services.

-recursive

If set, the function is executed recursively to subservices.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Get List of Services

This example retrieves a list of services that belong to the parent service, SERVICE2 and the server, EngServer1.

```
dpmresourcemgr getservicelist -parent service_name SERVICE2 -server_name EngServer1
-ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr removecomputerfromipnetwork Command--Remove Server From Network

The dpmresourcemgr removecomputerfromipnetwork removes servers from a network.

This command has the following format:

```
dpmresourcemgr removecomputerfromipnetwork [-sc sc_url] -vlan_id vlanid -mac_list
macaddresses [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-vlan_id *vlanid*

Defines the integer for the virtual network (VLAN). Valid entry: Integer 1-4094, where 1 is the default network interface card (NIC).

-mac_list *macaddresses*

Defines a list of NIC MAC addresses for the server. Valid entry: Comma-separated NIC MAC addresses in the format, xx:xx:xx:xx:xx:xx.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove Server From Network

This example removes the server, 11:22:33:44:55:66 from the VLAN 4556.

```
dpmresourcemgr removecomputerfromipnetwork -vlan 4556 -mac_list 11:22:33:44:55:66
-ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr removefromcontainer Command--Remove Content from a Container

The removefromcontainer command removes a list of machines or a subcontainer from a container.

This command has the following format:

`dpmresourcemgr removefromcontainer [-sc sc_url] -container_name containername [-machine_list machinelist|-subcontainer_name subcontainername] [-ws_user username -ws_password password][-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-container_name *containername*

Defines a collection of objects. Valid entry: the full path to the container name using backslash (\) to delimit parent container and child container.

-machine_list machinelist |-subcontainer *subcontainername*

Defines the list of machines or subcontainer and its objects. Valid entries: The full path container for the subcontainer.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove Content From a Container

This example removes a subcontainer named, ManagedVMs, from the container, Managed.

```
dpmresourcemgr removefromcontainer -container_name Managed -subcontainer_name ManagedVMs.
```

dpmresourcemgr removeipaddresspool Command--Remove IP Address Pool

The dpmresourcemgr removeipaddresspool command removes the IP address pool.

This command has the following format:

```
dpmresourcemgr removeipaddresspool [-sc sc_url] -name name|-starting_ip ipaddress [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-name *name* | -starting_ip *ipdaddress*

Defines the name or starting IP address range. Valid entry: 1-128 alphanumeric characters or xxx.xxx.xxx.xxx.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove IP Address Pool

This example removes the IP address pool starting with the address, 10.10.21.130

```
dpmresourcemgr removeipdaddresspool -starting_ip 10.10.21.130 -ws_user wsuser
-ws_password wsuserpassword
```

dpmresourcemgr removemachinesfromservice Command--Remove Servers From a Service

The removemachinesfromservice command removes servers from a service.

This command has the following format:

```
dpmresourcemgr removemachinesfromservice [-sc sc_url] -service_name servicename
-machine_list machinelist [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-service_name *servicename*

Defines the name of the service. Valid entry: Full path to the service name. Use backslash \ to delimit parent service and sub service.

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove Servers From a Service

This example removes two servers from the service, SERVICE2.

```
dpmresourcemgr removemachinesfromservice -service_name SERVICE2 -machine_list
"machine1.MyCompany.com, machine2.MyCompany.com" -ws_user wsuser -ws_password
wsuserpassword
```

dpmresourcemgr removeresourcegroup Command--Remove Resource Group

The removeresourcegroup command removes a resource group.

This command has the following format:
`dpmresourcemgr removeresourcegroup [-sc sc_url] -group_name groupname -group_type grouptype [-ws_user username -ws_password password][-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-group_name *groupname*

Defines the name of the group.

-group_type *type*

Defines the type of resource group. Set to 1 for packaging group. Set to zero for all groups.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove Resource Group

This example removes the resource group named, Agent Package Group.

```
dpmresourcemgr removeresourcegroup -group_name "AGENT PACKAGE GROUP" -group_type 1
```

dpmresourcemgr removeservice Command--Remove a Service

The removeservice command removes a service from the data center.

This command has the following format:

```
dpmresourcemgr removeservice [-sc sc_url] -service_name servicename
[-recursive][-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-service_name *servicename*

Defines the name of the service. Valid entry: Full path to the service name. Use backslash \ to delimit parent service and sub service.

-recursive

If set, the command is executed recursively to subservices.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove a Service

This example removes the service named, TESTGROUP.

```
dpmresourcemgr removeservice -service_name TESTGROUP -ws_user wsuser -ws_password
wsuserpassword
```

dpmresourcemgr removesourcetemplate Command--Remove Resource Template

The removeresourcetemplate command removes a package template.

This command has the following format:

```
dpmresourcemgr removeresourcetemplate [-sc sc_url] -template_name templatename
-template_os_type OStype [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-template_name *templatename*

Defines the name of the template.

-template_os_type *OStype*

Defines the OS type of the resource template for deployment.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Remove Resource Template

This example removes the package template named, Generic template.

```
dpmresourcemgr removeresourcetemplate -template_name "Generic template"
-template_os_type 0
```

dpmresourcemgr retrieveresourcegroup Command--Retrieve Resource Group

The retrieveresourcegroup command retrieves a package group.

This command has the following format:

```
dpmresourcemgr retrieveresourcegroup [-sc sc_url] [-group_name groupname]
-group_type type [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-group_name *groupname*

Defines the name of the group.

-group_type *type*

Defines the type of resource group. Set to 1 for packaging group. Set to zero for all groups.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retrieve Resource Group

This example retrieves all package groups of any resource type.

```
dpmresourcemgr retrieveresourcegroup -group_type 0
```

Example: Retrieve All Package Groups

This example retrieves all package group information.

```
dpmresourcemgr retrieveresourcegroup -group_type 1
```

Examale: Retrieve Specific Package Group

This example retrieves specific package group information

```
dpmresourcemgr retrieveresourcegroup -group_name "AGENT PACKAGE GROUP" -group_type
1
```

dpmresourcemgr retrieveresourcetemplate Command--Retrieve Resource Template

The retrieveresourcetemplate command retrieves a package template.

This command has the following format:

```
dpmresourcemgr retrieveresourcetemplate [-sc sc_url] [-template_name templatename]
-template_os_type OStype [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-template_name *templatename*

Defines the name of the template.

-template_os_type *OStype*

Defines the OS type of the resource template for deployment. Set to -1 for all OS types.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Retrieve Resource Template

This example retrieves package template information of any OS type.

```
dpmresourcemgr retrieveresourcetemplate -template_name "Generic template"
-template_os_type -1
```

dpmresourcemgr setcontainername Command--Set Container Name

The setcontainername command changes the name of an existing container.

This command has the following format:

```
dpmresourcemgr setcontainername [-sc sc_url] -container_name containername
-container_new_name containernewname [-ws_user username -ws_password
password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-container_name *containername*

Defines a collection of objects. Valid entry: the full path to the container name using backslash (\) to delimit parent container and child container.

-container_new_name *containernewname*

Defines the new name of the container.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Container Name

This example changes the name of the container from ManagedVM1 to ManagedVM3.

```
dpmresourcemgr setcontainername -container_name ManagedVM -container_new_name
ManagedVM3.
```

dpmresourcemgr setcontainerservice Command--Set Container to a Service

The setcontainerservice command converts a container to a service.

This command has the following format:

```
dpmresourcemgr setcontainerservice [-sc sc_url] -container_name containername
-machine_list machinelist -lower_threshold lowerthreshold -upper_threshold
upperthreshold -lag lag -priority priority [-ws_user username -ws_password
password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-lower_threshold *lowerthreshold*

(Optional) Specifies the lower overall usage threshold for the service. Lower threshold must be less than upper threshold. Valid entry: 1-100 (%)

-upper_threshold *upperthreshold*

(Optional) Specifies the upper overall usage threshold for the service. Upper threshold must always be greater than lower threshold. Valid entry: 1-100 (%)

-lag *lagvalue*

(Optional) Specifies the lag value. Valid entry: 0 or higher (seconds).

-priority *priorityvalue*

(Optional) Specifies the priority for the service. Valid entry: 1 or higher.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Convert a Container to a Service

This example converts a container named, Managed1, into a service.

```
dpmresourcemgr setcontainterservice -container_name Managed1 -machine_list
"ComputerList.MyCompany.com, 172.31.255.255, Computer1.MyCompany.com"
-lower_threshold 20 -upper_threshold 80 -lag 1 -priority 1
```

dpmresourcemgr setmanagementip Command--Set the Management IP for a Host

The dpmresorucemgr setmanagementip command sets the management IP address for a host.

Note: If any duplicate *hostname* exists for the server-name parameter, a console message requests use of the system_uuid parameter instead. When this occurs, you can acquire the UUID from the corresponding record of the [_Name] column in the database table [aom2].[dbo].[_CA_ComputerSystem]; or you can get it from the output of "...*productname*\bin\caaipaomwsclient.exe /enum=CA_ComputerSystem".

This command has the following format:

`dpmresourcemgr setmanagementip [-sc sc_url] -server_name hostname | -system_uuid uuid -ip_address ipaddress [-ws_user username -ws_password password][-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

dpmresourcemgr setmanagementstatus Command--Set the Management Status for a Host

The setmanagementstatus command sets a host to a managed or unmanaged state.

This command has the following format:

```
dpmresourcemgr setmanagementstatus [-sc sc_url] -server_name hostname
-management_status 0|1 [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-host_name *source host name*

Defines the name of the source server in the operation.

-management_status 0 | 1

Defines the management status of the server. Valid entry: 0 = unmanaged state; 1 = managed state.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Host to Managed State

This example sets the management status for a host named ServerA to a managed state.

```
dpmcda setmanagementstatus -sc https://localhost/dpm/sc -host_name ServerA
-management_status 1
```

Example: Set Host to Unmanaged State

This command lets you set the management status of host named ServerB to an unmanaged state.

```
dpmcda setmanagementstatus -host_name ServerB -management_status 0 -ws_user wsuser
-ws_password wsuserpassword
```

dpmresourcemgr setserviceproperties Command--Set Service Properties

The setserviceproperties command lets you create service properties.

This command has the following format:

```
dpmresourcemgr setserviceproperties [-sc sc_url] -servicename servicename
-lower_threshold lowerthreshold -upper_threshold upperthreshold -lag lag -priority
priority [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-service_name *servicename*

Defines the name of the service. Valid entry: Full path to the service name. Use backslash \ to delimit parent service and sub service.

-lower_threshold *lowerthreshold*

(Optional) Specifies the lower overall usage threshold for the service. Lower threshold must be less than upper threshold. Valid entry: 1-100 (%)

-upper_threshold *upperthreshold*

(Optional) Specifies the upper overall usage threshold for the service. Upper threshold must always be greater than lower threshold. Valid entry: 1-100 (%)

-lag *lagvalue*

(Optional) Specifies the lag value. Valid entry: 0 or higher (seconds).

-priority *priorityvalue*

(Optional) Specifies the priority for the service. Valid entry: 1 or higher.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Set Service Properties

In this example, service properties are set for the service, Service12.

```
dpmresourcemgr setserviceproperties -servicename Service12 -lower_threshold 2
-upper_threshold 4 -log 2 -priority 2 -ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr updateresourcegroup Command--Update Resource Group

The updateresourcegroup command updates a package group.

This command has the following format:

```
dpmresourcemgr updateresourcegroup [-sc sc_url] -group_name groupname
-group_description description -group_type grouptype -group_attribute attribute
[-package_list packagelist][-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-group_name *groupname*

Defines the name of the group.

-group_description *description*

Defines the description of the group.

-group_type *type*

Defines the type of resource group. Set to 1 for packaging group. Set to zero for all groups.

-group_attribute *attribute*

Defines the group attribute.

-package_list *packagelist*

Defines individual packages. Define this option if the group type is set to 1(PACKAGE). Valid entries: -package_list "<package name A>|<package procedure A>|<procedure type A>|<package name B>|... ".

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update Resource Group

This example updates a resource group.

```
dpmresourcemgr updateresourcegroup -group_name "AGENT PACKAGE GROUP"
-group_description "Agent package group" -group_type 1 -group_attribute 0
-package_list "Generic Agent Win32 r5.0|install|INSTALL"
```

dpmresourcemgr updateresourcetemplate Command--Update Resource Template

The updateresourcetemplate command updates a package template.

This command has the following format:

```
dpmresourcemgr updateresourcetemplate [-sc sc_url] -template_name templatename
-template_description templatedescription -template_os_type OStype [-group_list
grouplist][-package_list package_list][-ws_user username -ws_password
password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-template_name *templatename*

Defines the name of the template.

-template_description *description*

Defines a description of the template.

-template_os_type *OStype*

Defines the OS type of the resource template for deployment.

-group_list *grouplist*

Defines list of groups for adding to the resource template. Valid entry: -group_list "<group name A>|<group type 1=Software Package Group>|<group name B>|... "

-package_list *packagelist*

Defines individual packages. Define this option if the group type is set to 1(PACKAGE). Valid entries: -package_list "<package name A>|<package procedure A>|<procedure type A>|<package name B>|... ".

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update Package Template

This example updates a package template.

```
dpmresourcemgr updateresourcetemplate -template_name "Generic template"
-template_description "Generic template description" -template_os_type 0 -group_list
"Package group A|1|Package group B|1" -package_list "Generic Agent Win32
r5.0|Install|INSTALL
```

dpmresourcemgr updateservice Command--Update a Service

The updateservice command changes service characteristics.

This command has the following format:

```
dpmresourcemgr updateservice [-sc sc_url] -service_name servicename -machine_list
machinelist -lower_threshold lowerthreshold -upper_threshold upperthreshold -lag lag
-priority priority [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-service_name *servicename*

Defines the name of the service.

-machine_list *machinelist*

(Optional) Specifies the list of available servers. Valid entry: Comma-separated machine names.

-lower_threshold *lowerthreshold*

(Optional) Specifies the lower overall usage threshold for the service. Lower threshold must be less than upper threshold. Valid entry: 1-100 (%)

-upper_threshold *upperthreshold*

(Optional) Specifies the upper overall usage threshold for the service. Upper threshold must always be greater than lower threshold. Valid entry: 1-100 (%)

-lag *lagvalue*

(Optional) Specifies the lag value. Valid entry: 0 or higher (seconds).

-priority *priorityvalue*

(Optional) Specifies the priority for the service. Valid entry: 1 or higher.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update a Service

This example updates the thresholds, lag, and priority for service, TESTGROUP1.

```
dpmresourcemgr updateservice -service_name TESTGROUP1 -machine_list
"machine4.MyCompany.com, machine5.MyCompany.com, 192.168.255.255" -lower_threshold
10 -upper_threshold 85 -lag 0 -priority 2 -ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr updateipnetwork Command--Update a Network

The dpmresourcemgr updateipnetwork command updates parameters of an existing network.

This command has the following format:

`dpmresourcemgr updateipnetwork [-sc sc_url] -subnet_address subnetaddress [-vlan_id vlanid] [-name name] [-description description] [-ws_user username -ws_password password][-locale iso639value]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subnet_address *address*

Defines the IP address of the network. Valid entry: xxx.xxx.xxx.xxx or xxx.xxx.xxx.xxx/xx.

-vlan_id *vlanid*

Defines the integer for the virtual network (VLAN). Valid entry: Integer 1-4094, where 1 is the default network interface card (NIC).

-name *name*

Defines the item name. Valid entry: 1-128 alphanumeric characters.

-description *description*

Defines the network for user understanding. Valid entry: 1-128 alphanumeric characters.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update a Network

This example adds a description to the network, san diego 209 subnet.

```
dpmresourcemgr updateipnetwork -subnet_name 10.10.21.130 -vlan_id 4001 -name "san diego 209 subnet" -description "5th floor lab" -ws_user wsuser -ws_password wsuserpassword
```

dpmresourcemgr updatesubnetdefaults Command--Update Network Defaults

The dpmresourcemgr updatesubnetdefaults command updates existing network defaults.

This command has the following format:

```
dpmresourcemgr updatesubnetdefaults [-sc sc_url] -subnet_address subnetaddress -ip_gateway_list ipaddresses -dns_domainname domainname -dns_list ipaddresses -dns_suffix_list suffixes -netbios_server_list ipaddresses -ntp_server_list ipaddresses [-ws_user username -ws_password password][-locale iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subnet_address *address*

Defines the IP address of the network. Valid entry: xxx.xxx.xxx.xxx or xxx.xxx.xxx.xxx/xx.

-ip_gateway_list *ipaddresses*

Defines the IP addresses for default and alternate gateways using a comma-separated list. Default and alternate gateways must be on the same network. Valid entry: xxx.xxx.xxx.xxx.

-dns_domainname *domainname*

Defines the DNS domain name of the network. Valid entry: 1-63 alphanumeric characters per dotted address (for example, xxx.yyy.com). Address cannot start with a number.

-dns_list *ipaddresses*

Defines the DNS list of preferred and alternate DNS servers, and primary and secondary Windows Internet Name Service (WINS) servers. Valid entry: Comma-separated IP addresses in the format: xxx.xxx.xxx.xxx.

-dns_suffix_list *suffixes*

Defines a list of DNS suffixes for the network. Valid entry: Comma-separated list in the format, *name*.*name*.com.

-netbios_server_list *ipaddresses*

Defines a list of NETBIOS Name Server IP addresses. Valid entry: Comma-separated list of IP addresses in the format: xxx.xxx.xxx.xxx.

-ntp_server_list *ipaddresses*

Defines the Network Time Protocol (NTP) servers. Valid entry: Comma-separated list with the format: xxx.xxx.xxx.xxx.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an ISO 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update Network Defaults

This example updates the defaults for the network, san diego 209 subnet.

```
dpmresourcemgr updatesubnetdefaults -subnet_address 10.10.21.130 -ip_gateway_list
10.10.33.0,10.10.34.0 -dns_domainname turbo.com -dns_list 10.10.55.21
-netbios_server_list 10.10.21.130 -ntp_server_list 10.10.33.135 -ws_user wsuser
-ws_password wsuserpassword
```

dpmresourcemgr getsubnetdefaults Command--List Subnet Defaults

The dpmresourcemgr getsubnetdefaults command lists the current network defaults.

This command has the following format:

`dpmresourcemgr getsubnetdefaults [-sc` *`sc_url`*`] -subnet_address` *`address`* `[-ws_user` *`username`* `-ws_password` *`password`*`][-locale` *`iso639value`*`]`

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-subnet_address *address*

Defines the IP address of the network. Valid entry: xxx.xxx.xxx.xxx or xxx.xxx.xxx.xxx/xx.

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: List Network Defaults

This example updates the defaults for the network with the IP address, 10.10.21.130.

```
dpmresourcemgr getsubnetdefaults -subnet_address 10.10.21.130 -ws_user wsuser
-ws_password wsuserpassword
```

dpmresourcemgr updateipaddresspool Command--Update IP Address Pool

The dpmresourcemgr updateipaddresspool command lets you edit the method for IP assignment for an existing pool.

This command has the following format:

```
dpmresourcemgr updateipaddresspool [-sc sc_url] -name name|-starting_ip ipaddress
-ip_assignment_type static|dhcp [-ws_user username -ws_password password][-locale
iso639value]
```

-sc *sc_url*

(Optional) Defines the URL for the service controller host.

Example: https://*hostname:port*/...

hostname

Defines the fully qualified host where the service controller is installed.

Example: localhost.ca.com

port

Defines the listening port for the service controller server.

Example: 80

-name *name* | -starting_ip *ipdaddress*

Defines the name or starting IP address range. Valid entry: 1-128 alphanumeric characters or xxx.xxx.xxx.xxx.

-ip_assignment_type static | dhcp

Defines the method in which servers get their IP addresses (static IP address or DHCP).

-ws_user *username* -ws_password *password*

(Optional) Specifies the credentials to use for the web service security check. If you do not include credentials, you are prompted to enter them. Avoid the prompt for credentials by setting up your own session using caaipsecurity.

-locale *iso639value*

(Optional) Specifies an IS0 639_3166 combination to override the default English output, for example, fr_FR for French. To use the locale of the command prompt, specify "native".

Example: Update IP Address Pool

This example changes the IP assignment method to DHCP for the IP address pool starting with 10.10.21.130.

```
dpmresourcemgr updateipaddresspool -starting_ip 10.10.21.130 -ip_assigment_type
DHCP -ws_user wsuser -ws_password wsuserpassword
```

Remote Monitoring Commands

Remote Monitoring provides a command line interface (rmonwatch) to the RM AIM that you can use to automate tasks. For example, you can use it to assign a Remote Monitoring system to a Remote Monitoring configuration set.

This command has the following format:

```
rmonwatch [options] getVersion | {add|del} configfile | getTable tablename
```

rmonwatch add Command--Add Rows to a MIB Table

Use the add command to add rows to the rmonWbemSysTable and rmonWbemCredTable MIB tables.

The add command reads a configuration file containing details about the systems and credentials entries. This file uses an .ini style format where each section specifies a system or credentials entry. Because section names must be unique, the term _<*n*> is appended with <n> starting from 1. Each section contains variable and value assignments for the configurable attributes of the respective MIB table.

Example: A sample configuration file (rmonwatch.cf)

```
[System_1]
SystemName = sys01-01
RowStatus = active
ConfigSet = default
Credentials = test
MaxInstances = 100
[Credentials_1]
Credentials = test
RowStatus = active
UserName = Administrator
Password = IE7vse8zkBzurAwz588OvyTpc9v
```

The Password attribute of a credentials entry must be specified in encrypted form. Use the CA SystemEDGE se_enc utility to encrypt a password as follows:

```
se_enc -s -i in.txt -o out.txt
```

Put the password to be encrypted into in.txt (do not add any new lines). After calling the command, copy the encrypted password from out.txt and use it as the value for the Password attribute.

The add command uses the following syntax:

`rmonwatch [`*`options`*`] add `*`configfile`*

rmonwatch uses the following options:

--version

Displays the program version number and exits.

--help

Displays the rmonwatch help

-h *hostname* | -h *ipAddr*

(Optional) Specifies the CA SystemEDGE host running the RM AIM.

Default: localhost

-p *port*

(Optional) Specifies the CA SystemEDGE SNMP port.

Default: 161

-c *community*

(Optional) Specifies the SNMP read/write community string for SNMP version 1 and 2c.

Default: public

Example: Using the add command to add table rows defined in rmonwatch.cf

```
rmonwatch -c admin add rmonwatch.cf
RMONWBEM AIM Watch Program, version 1.0.0
### Processing Credentials entry 'test'
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.12.1.3.4.116.101.115.116 -s Administrator
1.3.6.1.4.1.546.16.22.12.1.3.4.116.101.115.116 Administrator
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.12.1.4.4.116.101.115.116 -s IE7vse8zkBzurAwz588OvyTpc9v=
1.3.6.1.4.1.546.16.22.12.1.4.4.116.101.115.116 IE7vse8zkBzurAwz588OvyTpc9v=
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.12.1.2.4.116.101.115.116 -i 1
1.3.6.1.4.1.546.16.22.12.1.2.4.116.101.115.116 1
### Processing System entry ' sys01-01'
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.11.1.3.8.115.121.115.48.49.45.48.49 -s "default"
1.3.6.1.4.1.546.16.22.11.1.3.8.115.121.115.48.49.45.48.49 default
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.11.1.4.8.115.121.115.48.49.45.48.49 -s "test"
1.3.6.1.4.1.546.16.22.11.1.4.8.115.121.115.48.49.45.48.49 test
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.11.1.5.8.115.121.115.48.49.45.48.49 -i 1
1.3.6.1.4.1.546.16.22.11.1.5.8.115.121.115.48.49.45.48.49 1
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.11.1.6.8.115.121.115.48.49.45.48.49 -i 100
1.3.6.1.4.1.546.16.22.11.1.6.8.115.121.115.48.49.45.48.49 100
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.11.1.2.8.115.121.115.48.49.45.48.49 -i 1
1.3.6.1.4.1.546.16.22.11.1.2.8.115.121.115.48.49.45.48.49 1
```

rmonwatch del Command--Delete Rows from a MIB Table

Use the del command to delete rows from the rmonWbemSysTable and rmonWbemCredTable MIB tables.

The del command reads a configuration file containing details about the systems and credentials entries. This file uses an .ini style format where each section specifies a system or credentials entry. Because section names must be unique, the term _<*n*> is appended with <n> starting from 1. Each section contains variable and value assignments for the configurable attributes of the respective MIB table.

Example: A sample configuration file (rmonwatch.cf)

```
[System_1]
SystemName = sys01-01
RowStatus = active
ConfigSet = default
Credentials = test
MaxInstances = 100
[Credentials_1]
Credentials = test
RowStatus = active
UserName = Administrator
Password = password01
```

The delete command uses the following syntax:

`rmonwatch [options] del configfile`

rmonwatch uses the following options:

--version

Displays the program version number and exits.

--help

Displays the rmonwatch help

-h *hostname* | -h *ipAddr*

(Optional) Specifies the CA SystemEDGE host running the RM AIM.

Default: localhost

-p *port*

(Optional) Specifies the CA SystemEDGE SNMP port.

Default: 161

-c *community*

(Optional) Specifies the SNMP read/write community string for SNMP version 1 and 2c.

Default: public

Example: Using the del command to delete table rows defined in rmonwatch.cf

```
rmonwatch -c admin del rmonwatch.cf
```

Note: Deletion of rows only requires the specification of index attributes in the configuration file.

```
RMONWBEM AIM Watch Program, version 1.0.0
### Processing Credentials entry 'test'
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.12.1.2.4.116.101.115.116 -i 6
1.3.6.1.4.1.546.16.22.12.1.2.4.116.101.115.116 6
### Processing System entry ' sys01-01'
E:\sysedge\bin\snmpset -h localhost -p 161 -v 1 -c admin -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.11.1.2.8.115.121.115.48.49.45.48.49 -i 6
1.3.6.1.4.1.546.16.22.11.1.2.8.115.121.115.48.49.45.48.49 6
```

rmonwatch getTable Command--View rmonWbem MIB Tables

Use the getTable command to view the contents of the following MIB tables. The name of the table must include the term printed in bold; case does not matter.

- rmonWbem**CSet**Table
- rmonWbem**Sys**Table
- rmonWbem**Cred**Table
- rmonWbem**Conf**Table
- rmonWbem**Query**Table
- rmonWbem**Inst**Table

The getTable command uses the following syntax:

```
rmonwatch [options] getTable {cset | sys | cred | conf | query | inst}
```

rmonwatch uses the following options:

--version

Displays the program version number and exits.

--help

Displays the rmonwatch help

-h *hostname* | -h *ipAddr*

(Optional) Specifies the CA SystemEDGE host running the RM AIM.

Default: localhost

-p *port*

(Optional) Specifies the CA SystemEDGE SNMP port.

Default: 161

-c *community*

(Optional) Specifies the SNMP read/write community string for SNMP version 1 and 2c.

Default: public

Example: getTable command run against the system table

```
rmonwatch getTable sys
RMONWBEM AIM Watch Program, version 1.0.0
E:\sysedge\bin\walktree -h localhost -p 161 -v 1 -c public -m 0 -t 30 -r 3 -o
1.3.6.1.4.1.546.16.22.11
rmonWbemSysSystemName   <sys01-01>   .sys01-01
rmonWbemSysSystemName   <sys02-01-8>   .sys02-01-8
rmonWbemSysSystemName   <sys03-01-7>   .sys03-01-7
rmonWbemSysRowStatus   active   .sys01-01
rmonWbemSysRowStatus   active   .sys02-01-8
rmonWbemSysRowStatus   active   .sys03-01-7
rmonWbemSysDescr   <nul>   .sys01-01
rmonWbemSysDescr   <nul>   .sys02-01-8
rmonWbemSysDescr   <nul>   .sys03-01-7
rmonWbemSysContact   <nul>   .sys01-01
rmonWbemSysContact   <nul>   .sys02-01-8
rmonWbemSysContact   <nul>   .sys03-01-7
rmonWbemSysQualifiers   .sys01-01
rmonWbemSysQualifiers   .sys02-01-8
rmonWbemSysQualifiers   .sys03-01-7
rmonWbemSysConfigSet   <default>   .sys01-01
rmonWbemSysConfigSet  <metricNet,metricFS,metricDisk>  .sys02-01-8
rmonWbemSysConfigSet   <default>   .sys03-01-7
rmonWbemSysCredentials   <test>   .sys01-01
rmonWbemSysCredentials   <win2008>   .sys02-01-8
rmonWbemSysCredentials   <win7>   .sys03-01-7
rmonWbemSysProtocol   dcom   .sys01-01
rmonWbemSysProtocol   dcom   .sys02-01-8
rmonWbemSysProtocol   dcom   .sys03-01-7
rmonWbemSysMaxInstances   <100>   .sys01-01
rmonWbemSysMaxInstances   <100>   .sys02-01-8
rmonWbemSysMaxInstances   <100>   .sys03-01-7
```

```
rmonWbemSysIPAddress   <192.168.0.10>   .sys01-01
rmonWbemSysIPAddress   <192.168.0.11>   .sys02-01-8
rmonWbemSysIPAddress   <192.168.0.12>   .sys03-01-7
rmonWbemSysMACAddress   <00:12:3F:64:1D:AE>   .sys01-01
rmonWbemSysMACAddress   <00:50:56:97:7D:BA>   .sys02-01-8
rmonWbemSysMACAddress   <00:25:64:A9:98:86>   .sys03-01-7
rmonWbemSysAdded   <2010-5-17,17:26:35.0,+2:0>   .sys01-01
rmonWbemSysAdded   <2010-5-17,17:26:37.0,+2:0>   .sys02-01-8
rmonWbemSysAdded   <2010-5-17,17:26:40.0,+2:0>   .sys03-01-7
rmonWbemSysLastBoot   <2010-5-17,7:52:25.0,+2:0>   .sys01-01
rmonWbemSysLastBoot   <2010-5-1,20:53:22.0,+2:0>   .sys02-01-8
rmonWbemSysLastBoot   <2010-5-1,20:53:22.0,+2:0>   .sys03-01-7
rmonWbemSysLastPoll   <0d 00:10:41>   .sys01-01
rmonWbemSysLastPoll   <0d 00:11:11>   .sys02-01-8
rmonWbemSysLastPoll   <0d 00:11:11>   .sys03-01-7
rmonWbemSysLastSuccess   <0d 00:10:41>   .sys01-01
rmonWbemSysLastSuccess   <0d 00:11:11>   .sys02-01-8
rmonWbemSysLastSuccess   <0d 00:11:11>   .sys03-01-7
rmonWbemSysLastError   success   .sys01-01
rmonWbemSysLastError   success   .sys02-01-8
rmonWbemSysLastError   success   .sys03-01-7
rmonWbemSysQueryNumber   <14>   .sys01-01
rmonWbemSysQueryNumber   <17>   .sys02-01-8
rmonWbemSysQueryNumber   <14>   .sys03-01-7
rmonWbemSysQueryFailed   <0>   .sys01-01
rmonWbemSysQueryFailed   <0>   .sys02-01-8
rmonWbemSysQueryFailed   <0>   .sys03-01-7
```

rmonwatch getVersion Command--View Version Information

Use the getVersion command to view the value of the rmonWbemVersion MIB variable.

The getVersion command uses the following syntax:

`rmonwatch [`*`options`*`] getVersion`

rmonwatch uses the following options:

--version

Displays the program version number and exits.

--help

Displays the rmonwatch help

-h *hostname* | -h *ipAddr*

(Optional) Specifies the CA SystemEDGE host running the RM AIM.

Default: localhost

-p *port*

(Optional) Specifies the CA SystemEDGE SNMP port.

Default: 161

-c *community*

(Optional) Specifies the SNMP read/write community string for SNMP version 1 and 2c.

Default: public

Example: Results returned for the getVersion command

```
RMONWBEM AIM Watch Program, version 1.0.0
E:\sysedge\bin\snmpget -h localhost -p 161 -v 1 -c public -m 0 -t 5 -r 3 -o
1.3.6.1.4.1.546.16.22.1.0
1.3.6.1.4.1.546.16.22.1.0 SysEDGE RMONWBEM AIM, VERSION:1.0.0 BUILD:10137
REQUIRES:5.0.0
```

Advanced SNMP Parameters

The following parameters are identical for rmonwatch add, del, getTable, and getVersion commands. These parameters are only required if you are using SNMP version 2c or 3 or if you are using a non-default time-out and retries.

-v snmpVersion

(Optional) Specifies the SNMP version. Possible values are:

1

2c

3

Default: 1

-u secName

(Optional) Specifies the name of the SNMPv3 secure user.

-s secLevel

(Optional) Specifies the level of security for SNMPv3. Possible values are (no default):

1 = noAuthNoPriv

2 = AuthNoPriv

3 = AuthPriv

-n contextName

(Optional) Specifies the instance name for a MIBMuxed agent (no default).

-a authPassword

(Optional) Identifies the authentication password required when SNMPv3 is selected with security AuthNoPriv or AuthPriv (no default).

-A authProtocol

(Optional) Specifies the authentication protocol. Possible values are:

MD5 = authentication protocol HMAC-MD5

SHA = authentication protocol HMAC-SHA

Default: MD5

-x privPassword

(Optional) Specifies the privacy (encryption) password for SNMPv3 with security level 3 (AuthPriv).

-X encryptProtocol

(Optional) Specifies the use of encryption protocol for privacy (no default). Possible values are:

DES – Data Encryption Standard

AES – Advanced Encryption Standard using cryptographic keys of 128 bits (AES128)

-m FIPSmode

(Optional) Specifies the FIPS mode. Possible values are:

0 = non-FIPS

1 = FIPS coexistence

2 = FIPS only

Default: 0

-t timeout

(Optional) Specifies the SNMP set and get command timeout in seconds.

Default: 5

--timeout=walktreetimeout

(Optional) Specifies the SNMP timeout for the walktree command.

Default: 30

-r snmpretries

(Optional) Specifies the number of times to retry the SNMP command.

Default: 3

Log Files

This section provides an excerpt of the available CA Virtual Assurance log files and their configuration settings.

Log Files Available

Different components in CA Virtual Assurance produce log files which you can examine when you encounter problems in the product. You may also need these log files to help you communicate with Technical Support. The log files listed are located in the following directory:

Install_Path\CA\VPM\log

The log files available and the information they contain are as follows:

CA Virtual Assurance External Component Manager

DPMExtCompMgr.log

Contains logging information for the external component manager.

CLI Log Files

dpmimgcli.log (dpmimg.exe)

Contains logging information for imaging commands issued.

dpmvccli.log (dpmvc.exe)

Contains logging information for vCenter commands issued.

dpmlparcli.log (dpmlpar.exe)

Contains logging information for LPAR commands issued.

dpmzonecli.log (dpmzone.exe)

Contains logging information for Solaris Zone commands issued.

dpmcmdcli.log (dpmcmd.exe)

Contains logging information for general purpose shell commands issued.

dpmresourcemgrcli.log (dpmresourcemgr.exe)

Contains logging information for the resource manager commands issued.

Event Manager

DPMEventMgr.log

Contains logging information for the event manager.

Imaging

dpm-imaging.log

Contains logging information for the imaging service.

Initiation

dpm-schedadapter.log

Contains runtime logging information for the initiation service.

SchedInitialize.log

Contains initialization logging information for the initiation service.

Performance Monitor

coll_eng.log

Contains logging information for the performance monitor.

Policy Engine

capolicyeng.log

Contains logging information for the policy engine.

Resource Manager

ResourceMgr.log

Contains logging information for the resource manager.

Service Controller

servcon.log

Contains logging information for the service controller.

VirtualCenter Adapter

dpm-vcadapter.log

Contains logging information for the native run-time components of the VirtualCenter adapter.

vcadapter_java.log

Contains logging information for the Java run-time component of the VirtualCenter adapter.

Log File Settings

You can configure each log file by editing the *dpmlogging.cfg* file with Notepad or a similar text editor. The file is located in the following directory:

Install_Path\conf

You can change the settings for the following properties:

Max Log Size (Bytes)

Defines the size of the log.

Max Rollover

Defines how many log files should be saved after the maximium size is reached.

log level

Defines the level of events you want the log to capture.

The syntax and log levels available are shown in the *dpmlogging.cfg* file.

Chapter 4: Performance Metrics

The following section describes performance metrics that are available by default for the CA Virtual Assurance agent and SystemEDGE.

This section contains the following topics:

CA HP UNIX Performance Metrics (see page 821)
CA IBM AIX Performance Metrics (see page 822)
CA IBM LPAR Performance Metrics (see page 823)
CA IBM HACMP Performance Metrics (see page 828)
CA Linux Performance Metrics (see page 830)
CA Microsoft Hyper-V Performance Metrics (see page 831)
CA Oracle Solaris Performance Metrics (see page 831)
CA Oracle Solaris Zones Performance Metrics (see page 832)
CA SystemEDGE Performance Metrics (see page 838)
CA SystemEDGE Enhancement Metrics (see page 841)
CA VMware vCenter Server Performance Metrics (see page 849)
CA Citrix XenServer Performance Metrics (see page 861)
CA Windows Microsoft Cluster Performance Metrics (see page 864)
CA Windows Performance Metrics (see page 864)
Cisco Unified Computing System (UCS) Performance Metrics (see page 865)
Remote Monitoring Performance Metrics (see page 868)

CA HP UNIX Performance Metrics

The following list provides information about the metrics that are monitored for HP UNIX servers.

CA Memory Group: Percentage Free Physical Memory

The percentage of physical memory free on the system.

CPU: Percentage Total

The total percentage of CPU utilization on the system.

CA CPU Group: Total Usage Percentage User

Total CPU utilization due to user activity on the system.

CA CPU Group: Total Usage Percentage System

Total CPU utilization due to OS activity on the system.

CA CPU Group: Load Averages Fifteen

The 15-minute load average of the system.

CA CPU Group: Total Usage Percentage Idle

The percentage of CPU used by the system idle process.

CA Disk Group: Bytes per Second

The number of bytes read and written per second by the disk.

CA Disk Group: Reads per Second (average)

The average number of reads per second by the disk.

CA Disk Group: Writes per Second (average)

The average number of writes per second by the disk.

CA Network Group: TCP Operations Packets Received per Second

The number of packets received per second by the network adapter.

CA Network Group: TCP Operations Packets Sent per Second

The number of packets sent per second by the network adapter.

CA File System Group: Free Space

Amount of free space (in bytes) of the file system.

CA File System Group: Used Space

Amount of used space (in bytes) of the file system.

CA IBM AIX Performance Metrics

The following list provides information about the metrics that are monitored for IBM AIX servers.

CA Memory Group: Percentage Free Physical Memory

The percentage of physical memory free on the system.

CPU: Percentage Total

The total percentage of CPU utilization on the system.

CA CPU Group: Total Usage Percentage User

Total CPU utilization due to user activity on the system.

CA CPU Group: Total Usage Percentage System

Total CPU utilization due to OS activity on the system.

CA CPU Group: Load Averages Fifteen

The 15-minute load average of the system.

CA Disk Group: Bytes per Second

The number of bytes read and written per second by the disk.

CA Disk Group: Reads per Second (average)

The average number of reads per second by the disk.

CA Disk Group: Writes per Second (average)

The average number of writes per second by the disk.

CA Network Group: TCP Operations Packets Received per Second

The number of packets received per second by the network adapter.

CA Network Group: TCP Operations Packets Sent per Second

The number of packets sent per second by the network adapter.

CA File System Group: Free Space

Amount of free space (in bytes) of the file system.

CA File System Group: Used Space

Amount of used space (in bytes) of the file system.

CA CPU Group: Total Usage Percentage Idle

The percentage of CPU used by the system idle process.

CA IBM LPAR Performance Metrics

The following list provides information about performance metrics that are monitored for IBM Logical Partitions.

CA IBM pSeries Logical Partition Performance Metrics

The following list provides the descriptions of the IBM pSeries Logical Partition performance metrics.

CPU Usage (Percent)

The percentage of CPU usage of the logical partition (requires CA Virtual Assurance agent installed on the LPAR).

Memory Usage (Percent)

The percentage of memory (RAM) usage of the logical partition (requires CA Virtual Assurance agent installed on the LPAR).

One Minute Load Average

The one-minute load average of the logical partition (requires CA Virtual Assurance agent installed on the LPAR).

Five Minute Load Average

The five-minute load average of the logical partition (requires CA Virtual Assurance agent installed on the LPAR).

Fifteen Minute Load Average

The 15-minute load average of the logical partition (requires CA Virtual Assurance agent installed on the LPAR).

CPU Allocation

The number of physical CPUs that are assigned to the logical partition.

Memory Allocation

The number of logical memory blocks (LMBs) that are assigned to the logical partition.

Unavailable Partitions

This partition is not properly configured to provide information to the sponsor (for example, broken or failed devices), but the sponsor is aware of its existence. If a partition is shown and you want performance information, you must have CA Virtual Assurance agent installed on this LPAR. The managed node is shown as an instance of this metric.

Entitlement Capacity (Percent)

The capacity of the logical partition in a percentage with respect to the physical processors consumed.

Physical Busy

Represents processor busy state as a calculation of entitlement capacity percentage times the set desired CPU entitlement.

Physical Processor Consumed

The number of processor units that the logical partitions has consumed.

CA IBM pSeries Performance Metrics

The following list provides the descriptions of the IBM pSeries Logical Partition performance metrics.

Average CPU Usage (Percent)

The average CPU usage of the logical partitions on the server.

CPU Usage (Percent)

The total CPU usage of the server.

Average Memory Usage (Percent)

The average RAM usage of the logical partitions on the server.

Memory Usage (Percent)

The total RAM usage of the server.

One Minute Load Average

The average one-minute load average of all the logical partitions on the server.

Five Minute Load Average

The average five-minute load average of all the logical partitions on the server.

Fifteen Minute Load Average

The average 15-minute load average of all the logical partitions on the server.

Unavailable Systems

The managed systems on which there are no logical partitions (LPARs) from which the sponsor can collect information.

Physical Processor Consumed

The number of physical processors consumed.

Processor Pools Support

This section explains the concepts of processor pools and provides information about the CPU metrics for IBM LPARs.

Processor Pools

A *processor pool* is a set of physical processors that can be shared across different logical partitions. Shared Processor Pools have been available since the introduction of POWER5-based IBM Power Systems. POWER5-based servers support *one* shared processor pool which is identical with the physical shared processor pool.

POWER6-based and later servers support multiple shared-processor pools. The *multiple shared-processor pools (MSPPs)* is a capability that is supported on Power6 and later servers. This capability enables the creation of multiple processor pools to make allocation of the CPU resource more flexible. All Power Systems that support the multiple shared-processor pools capability have a minimum of one shared processor pool and up to a maximum of 64 shared processor pools. The default shared processor pool always has an ID of 0. The default behavior of the system, with only the default shared processor pool, is the current behavior of a POWER5 server with only a physical shared processor pool defined.

The Pool Capacity

Each shared processor pool has a maximum capacity that is associated with it. The *maximum pool capacity* defines the upper boundary of the processor capacity that the set of partitions in the shared processor pool can utilize. The maximum pool capacity must be equal to or greater than the entitled pool capacity in a shared processor pool.

The system administrator can reserve processor capacity for any uncapped LPAR within the shared processor pool. The *reserved pool capacity* is the number of processing units that are reserved for the use of all uncapped logical partitions within the shared processor pool.

If some partitions in a processor pool do not use their capacity entitlement, other uncapped LPARs within the same pool are allocated the additional capacity according to the weighting of the LPARs.

The *entitled pool capacity* of a shared processor pool defines the guaranteed processor capacity that is available to the group of partitions in the processor pool. The entitled pool capacity is the sum of the entitlement capacities of the partitions in the shared processor pool plus the reserved pool capacity. The entitled capacity of a partition provides the basis for utilization statistics and monitoring. A partition consuming all of its entitled capacity reports 100 percent utilization. Depending on its virtual processor configuration, an uncapped partition can consume unused processing capacity from the shared processor pool and in that case it reports more than 100 percent utilization.

Default Shared Processor Pool

The default shared processor pool has the same attributes as a user-defined pool, but these attributes have fixed values and are not directly under the control of the system administrator. The maximum pool capacity is equal to all capacity in the physical shared processor pool and the reserved pool capacity is 0.

The maximum capacity of the default pool can change indirectly through system administrator actions such as powering on a dedicated processor partition, or dynamically moving physical processors in or out of the physical shared processor pool.

Capped and Uncapped LPARs

Logical partitions that use shared processors can have a sharing mode of capped or uncapped.

A *capped logical partition* is a logical partition that cannot use more processor power than its assigned processing units. The capped partition is assigned a maximum capacity and guarantees a capacity that cannot be exceeded and cannot affect the overall behavior of the physical system.

An *uncapped logical partition* is a logical partition that can use more processor power than its assigned processing capacity. The limiting factors are the number of virtual processors that are assigned to the logical partition or the maximum processing unit of the shared processor pool. The uncapped partition is guaranteed a minimum resource level, with the potential to use more and creates a minimum service level for the partition.

If multiple uncapped LPARs need additional processor capacity at the same time, the server can distribute the unused processing capacity to all uncapped LPARs. The uncapped weights of every LPARs determine this distribution process. The default uncapped weight value is 128 with 255 being the highest weight. When you set the uncapped weight to 0, no unused capacity is distributed to the logical partition.

CPU Metrics

This section provides CPU metrics that are of key importance for CPU utilization of environments that support processor pools.

Consumption Metrics

The number of processing units that are currently allocated to a partition represents its entitlement. If a partition is an uncapped shared partition, it might consume more processing units than allocated. The two corresponding metrics are the physical consumption and entitlement consumption.

Physical consumption (physical processor consumed)

Represents the amount of processing unit currently consumed. The physical consumption corresponds to the entitled capacity of the partition that is multiplied by its entitlement consumption.

Example: If a partition with entitled capacity of 0.50 processing units is having an entitled capacity consumption of 150 percent, it is consuming 0.50 * 1.5 = 0.75 physical processor.

Entitlement consumption (entitled capacity consumed)

Represents the percentage of processing unit currently consumed compared to the number of processing units that are allocated to the partition. A partition consuming all of its entitled capacity reports 100 percent utilization. Consequently, uncapped shared partitions can have an entitlement consumption that exceeds 100 percent.

Capacity Metrics

Shared-processor pools provide control of the processor capacity that a specific set of partitions can consume from the physical shared-processor pool. Each partition within a processor pool is guaranteed its processor entitlement. The uncapped partitions may be allocated additional capacity from the reserved pool capacity. If some partitions in a processor pool do not use their capacity entitlement, the unused capacity is ceded. Other uncapped partitions within the same pool are allocated the additional capacity according to their uncapped weighting. The following metrics characterize the utilization of the processor capacity within a shared-processor pool:

Entitled pool capacity

Represents the sum of the entitlement capacities of the partitions in the shared-processor pool plus the reserved pool capacity.

Available pool capacity

Indicates the available physical processors (app) in the shared pool, that is, the unused part of the shared pool.

Example: The relation between available physical processors and the CPU utilization

The "lparstat" command shows the available physical processors (app) in the shared pool. The lparstat command can be run from any logical partition that has enabled the shared processor pool utilization authority. The size of the shared pool is 8 CPUs (psize). The available processors for each sample interval are shown under the "app" column. System configuration is as follows: type=Shared, mode=Uncapped, smt=4, lcpu=4, mem=1024 MB, psize=8, ent=0.10. For the value of 7.92 available processors, the CPU utilization is 1.0 percent and is calculated as follows: ((8.0 - 7.92) / 8.0).

CA IBM HACMP Performance Metrics

The following section provides information about the metrics that are monitored for IBM HACMP.

IBM HACMP Cluster Metrics

The following list provides the descriptions of the IBM HACMP Cluster performance metrics.

Cluster State (hacmpAimStatClusterState)

Indicates the state of the HACMP cluster.

Cluster Substate (hacmpAimStatClusterSubState)

Indicates the substate of the HACMP cluster.

Cluster Service State (hacmpAimStatServiceState)

Indicates the operating system service state.

IBM HACMP Node Metrics

The following list provides the descriptions of the IBM HACMP node performance metrics.

Node State (hacmpAimStatNodeState)

Indicates the state of the node.

Total Memory (kB) (hacmpAimStatNodeTotalMemory)

Identifies the total memory of the node in kilobytes.

Memory Usage (kB) (hacmpAimStatNodeUsedMemory)

Identifies the total memory usage of the node in kilobytes.

Memory Usage (%) (hacmpAimStatNodeUsedMemory)

Identifies the total memory usage of the node in percents.

CPU Usage (%) (hacmpAimStatNodeMemoryUsage)

Identifies the CPU usage of the server in percents.

IBM HACMP Resource Group Metrics

The following item provides the descriptions of the IBM HACMP Resource Group performance metrics.

Resource Group State (hacmpAimStatResourceGroupState)

Indicates the state of the Resource Group.

IBM HACMP Network Metrics

The following list provides the descriptions of the IBM HACMP Network performance metrics.

Network State (hacmpAimStatNetworkState)

Indicates the network state.

Network Interface State (hacmpAimStatNetworkInterfaceState)

Indicates the network interface state.

CA Linux Performance Metrics

The following metrics are monitored for Linux servers.

CA CPU Group: Total Usage Percentage User

The percentage of elapsed time that the process spends to run user instructions.

CA CPU Group: Total Usage Percentage System

The percentage of elapsed time that the processor spends to run operating system instructions.

CA CPU Group: Load Average Fifteen

The 15-minute load average.

CA Disk Group: Bytes per Second

The rate at which data is read from and written to the physical disk.

CA Disk Group: Reads per Second

The rate at which data is read from the physical disk.

CA Disk Group: Writes per Second

The rate at which data is written to the physical disk.

CA Network Group: TCP Operations Packets Received per Second

The rate at which the network interface is receiving packets.

CA Network Group: TCP Operations Packets Sent per Second

The rate at which the network interface is sending packets.

CA File System Group: Free Space

Available storage space in the file system in kilobytes.

CA File System Group: Used Space

Used storage space in the file system in kilobytes.

CA Microsoft Hyper-V Performance Metrics

The following list provides information about the metrics that are monitored for Microsoft Hyper-V servers.

Hyper-V Host Number of Critical VMs

The number of critical VMs. If the value exceeds the specified number, a critical warning appears.

OID: 1.3.6.1.4.1.546.16.56.2.1.2.1.16.1

Hyper-V Host CPU Usage (Percent)

The total CPU usage of the server. If the value exceeds 80 percent, a warning appears.

OID: 1.3.6.1.4.1.546.16.56.2.1.2.1.9

Hyper-V Host Memory Usage (Percent)

The total RAM usage of the server. If the value exceeds 60 percent, a warning appears.

OID: 1.3.6.1.4.1.546.16.56.2.1.2.1.10

VM CPU Usage (Percent)

The total CPU usage of VMs. If the value exceeds 80 percent, a warning appears.

OID: 1.3.6.1.4.1.546.16.56.2.2.2.1.21

VM Health State

The health state of VMs. If the health state shows a major failure, a major warning appears. If the health state shows a critical failure, a critical warning appears.

OID: 1.3.6.1.4.1.546.16.56.2.2.2.1.6

CA Oracle Solaris Performance Metrics

The following list provides information about the metrics that are monitored for Oracle Solaris servers.

CA CPU Group: Total Usage Percentage User

The percentage of elapsed time that the process spends to run user instructions.

CA CPU Group: Total Usage Percentage System

The percentage of elapsed time that the processor spends to run operating system instructions.

CA CPU Group: Load Averages Fifteen

The 15-minute load average.

CA Disk Group: Bytes per Second

The rate at which data is read from and written to the physical disk.

CA Disk Group: Reads per Second

The rate at which data is read from the physical disk.

CA Disk Group: Writes per Second

The rate at which data is written to the physical disk.

CA Network Group: TCP Operations Packets Received per Second

The rate at which the network interface is receiving packets.

CA Network Group: TCP Operations Packets Sent per Second

The rate at which the network interface is sending packets.

CA File System Group: Free Space

Available storage space in the file system in kilobytes.

CA File System Group: Used Space

Used storage space in the file system in kilobytes.

CA Oracle Solaris Zones Performance Metrics

The following list provides information about performance metrics that are monitored for Solaris Zones servers.

Solaris Zones Server Metrics

The following list provides the descriptions of the Solaris Zones Server performance metrics.

Number of CPUs

The total number of physical CPUs on the server.

Number of vCPUs

The number of CPUs on the nonglobal zones.

Number of Resource Pools

The number of resource pools on the server.

Total Number of Zones

The total number of zones on the server, including the global zone.

Zone State

The status of the global zone.

Solaris Zones Server Disk Metrics

The following list provides the descriptions of the Solaris Zones Server Disk performance metrics.

KB Read/Second

The number of kilobytes read per second.

KB Written/Second

The number of kilobytes written per second.

KB Read

The number of kilobytes read.

KB Written

The number of kilobytes written.

Disk Space Used

The total amount of used disk space.

Disk Space Available

The total amount of available disk space.

DiskBusyPct

The percentage of time for which the disk is busy (transactions in progress).

DiskWaitPct

The percentage of time for which transactions are waiting for a service (queue nonempty).

Solaris Zones Server Network Metrics

The following list provides the descriptions of the Solaris Zones Server Network performance metrics.

KB Received

The number of kilobytes received.

KB Transmitted

The number of kilobytes transmitted.

KB Received/Second

The number of kilobytes received per second based on the poll interval.

KB Transmitted/Second

The number of kilobytes transmitted per second based on the poll interval.

State

The connected state of PNET.

Solaris Zones Server Memory Metrics

The following list provides the descriptions of the Solaris Zones Server Memory performance metrics.

Configured Memory KB

The configured server memory in kilobytes.

Free Memory KB

The free server memory in kilobytes.

Memory Usage (percentage)

The current memory usage of the server.

Used Memory KB

The used server memory in kilobytes.

Solaris Zones Server CPU Metrics

The following table provides the descriptions of the Solaris Zones Server CPU performance metrics.

CPU Usage (percentage)

The current CPU usage of the server.

CPU Idle Seconds (percentage)

The average of time spent in the CPU idle state in a percentage based on the poll interval.

CPU Used Seconds (percentage)

The average of time spent using the CPU in a percentage based on the poll interval.

CPU Wait Seconds (percentage)

The number of CPU shares allocated to the server.

Solaris Zones Metrics

The following list provides the descriptions of the Solaris Zones performance metrics.

Zone CPU Count

The number of CPUs allocated to the zone.

Project CPU Shares

The number of CPUs allocated to the project.

Solaris Zones CPU Metrics

The following list provides the descriptions of the Solaris Zones CPU performance metrics.

CPU Usage (percentage)

The current percentage of CPU usage of the zone.

CPU Idle Seconds (percentage)

The average percentage of CPU time spent in an idle state based on the poll interval.

CPU Used Seconds (percentage)

The average percentage of time spent using the CPU based on the poll interval.

CPU Sys Seconds (percentage)

The average percentage of time that the system uses the CPU based on the poll interval.

CPU Wait Seconds (percentage)

The average percentage of time spent in the CPU wait state based on the poll interval.

Configured CPU Shares

The number of CPU shares allocated to the zone.

Configured CPU Maximum (percentage)

The configured CPU maximum reservation threshold in a percentage.

Configured CPU Minimum (percentage)

The configured CPU minimum reservation threshold in a percentage.

Solaris Zones Memory Metrics

The following list provides the descriptions of the Solaris Zones Memory performance metrics.

Locked Memory MB

The configured zone memory in MB.

Used Memory KB

The used zone memory in KB.

Memory Usage (percentage)

The current memory usage of the zone.

If PhyMemory limit is set for the zone, it is used for calculation of the Memory usage. In that case the usage is given at the local zone level, and can reach 100 percent.

Solaris Zones Maximum Swap Metrics

The following list provides the descriptions of the Solaris Zones Maximum Swap performance metrics.

Maximum Swap KB

The amount of memory available to use for swap space in kilobytes.

Solaris Zones Shared Memory Metrics

The following list provides the descriptions of the Solaris Zones Shared Memory performance metrics.

Shared Memory KB

The amount of shared memory in kilobytes.

Solaris Zones Resource Pool Metrics

The following list provides the descriptions of the Solaris Zones Resource Pool performance metrics.

CPU Shares (percentage)

The overall CPU shares of the resource pool in a percentage.

Solaris Zones Project Metrics

The following list provides the descriptions of the Solaris Zones Project performance metrics.

Memory Cap

The maximum memory limit in megabytes.

Shared Memory Maximum

The total amount of memory permitted to be used by the processes that run in this project in megabytes.

Task Count

The task count for the project.

CPU Usage

The amount of CPU the project is using.

Memory Usage

The amount of memory the project is using.

CA SystemEDGE Performance Metrics

The following performance metrics are monitored by the SystemEDGE agent.

activeMemory (AIX, HP-UX, Linux, Solaris)

The total active real memory (kilobytes) sampled over a fixed period. The sampling interval is system-dependent. In SunOS, the kernel updates this parameter once every seconds. Memory is active when a process running in memory actually uses it. This value should be less than or equal to memInUse. A high value can indicate a system with insufficient memory.

cpuTotalIdle (AIX, HP-UX, Linux, Solaris, Windows)

The total number of 'ticks' spent by all CPUs in Idle mode. This variable is not supported by NT. This value may wrap 32-bit counter.

cpuTotalIdlePercent (AIX, HP-UX, Linux, Solaris, Windows)

The percentage of time (over the sample period) for which the CPUs of the system were idle.

cpuTotalSys (AIX, HP-UX, Linux, Solaris, Windows)

The total number of 'ticks' spent by all CPUs in Kernel or system mode. This value may wrap a 32-bit counter.

cpuTotalSysPercent (AIX, HP-UX, Linux, Solaris, Windows)

The percentage of time (over the sample period) for which the CPUs of the system were executing the kernel or operating system.

cpuTotalUser (AIX, HP-UX, Linux, Solaris, Windows)

The total number of 'ticks' spent by all CPUs in User mode. This value may wrap 32-bit counter.

cpuTotalUserPercent (AIX, HP-UX, Linux, Solaris, Windows)

The percentage of time (over the sample period) for which the CPUs of the system were executing in user mode.

loadAverage15Min (AIX, HP-UX, Linux, Solaris)

The load average over the last 15 minutes. The load average represents the average number of jobs in the run queue over the specified time range. The value reported is the load average multiplied by 100. For example, if the value 50 represents a load average of 0.50.

loadAverage1Min (AIX, HP-UX, Linux, Solaris, Windows)

The load average over the last 1 minute. The load average represents the average number of jobs in the run queue over the specified time range. The value reported is the load average multiplied by 100. For example, if the value 50 represents a load average of 0.50.

loadAverage5Min (AIX, HP-UX, Linux, Solaris, Windows)

The load average over the last 5 minutes. The load average represents the average number of jobs in the run queue over the specified time range. The value reported is the load average multiplied by 100. For example, if the value 50 represents a load average of 0.50.

memCapacity (AIX, HP-UX, Linux, Solaris, Windows)

The percentage of the system's active memory in use. The value of this object can be approximated by dividing activeMem(10) by memory(system.3) and converting to a percentage. Because virtual memory allows systems to operate with a higher memCapacity value, this value alone should not be used to judge how loaded a system is. Managers should also monitor swapCapacity.

memInUse (AIX, HP-UX, Linux, Solaris, Windows)

The amount of system's memory in use.

memInUseCapacity (AIX, HP-UX, Linux, Solaris, Windows)

The percentage of the system's memory in use. The value of this object can be approximated by dividing memInUse(9) by memory(system.3) and converting to a percentage. Because virtual memory allows systems to operate with a higher memCapacity value, this value alone should not be used to judge how loaded a system is. Managers should also monitor swapCapacity.

numOpenFiles (AIX, HP-UX, Linux, Solaris, Windows)

The systemwide total number of open files.

numPageFaults (AIX, HP-UX, Solaris, Windows)

The total number of page faults that have occurred since the kernel was last initialized. A page fault occurs when a running process attempts to access a virtual memory page that is not currently in physical memory. This attempt results in a hardware page fault. A high rage of page faults can indicate an overloaded system or one with insufficient memory.

numPageInsPerScan (AIX, HP-UX, Linux, Solaris)

The total number of pages that have been paged in since the kernel was last initialized. Page-in is an operation performed by the virtual memory system in which the contents of a page are read from secondary storage. A high rate of change can indicate an overloaded system.

numPageOutsPerScan (AIX, HP-UX, Linux, Solaris, Windows)

The total number of pages that have been paged out since the last scan. Page-out is an operation performed by the virtual memory system in which the contents of a page are written to secondary storage. A high rate of change can indicate an overloaded system.

numProcs (AIX, HP-UX, Linux, Solaris, Windows)

The number of processes table slots currently allocated and in use. On older BSD-based systems, this metric is important because it places an upper bound on the total number of processes that may run on the system at any one time.

numSwitches (AIX, HP-UX, Linux, Solaris, Windows)

The total number of context switches that have occurred since the kernel was last initialized. A context switch occurs each time a process gives up the CPU and another takes its place. This counter reflects the level of system activity; a high rate of context switching is indicative of the system load.

numSyscalls (AIX, HP-UX, Solaris, Windows)

The total number of system calls that have occurred since the kernel was last initialized. System calls occur when a process calls a function which must execute in kernel or privileged mode. It is an indicator of the system load and can be higher on servers or computers shared by many users.

numZombieProcs (AIX, HP-UX, Linux, Solaris, Windows)

Current number of zombie processes found on the system. This MIB object is found by adding up all processes with a processStateStr of zombie. The lower the number the better. Supported in SystemEDGE 4.1 and higher.

runQLen (AIX, HP-UX, Linux, Solaris, Windows)

The length of the scheduler's run queue sampled over a fixed period. The sampling interval is system-dependent. In SunOS, the kernel updates this parameter once every 5 seconds. The load average of the system is computed from the value of runQLen; the load average is defined as the average runQLen value over some interval.

swapCapacity (AIX, HP-UX, Linux, Solaris, Windows)

The percentage of the system's total swap in use. The value of this object can be computed by dividing swapInUse(13) by totalSwapSpace(29) and multiplying by 100. It is included here for convenient polling, monitoring, and history sampling. This object is an aggregate value over all the swap partitions and areas.

swapInUse (AIX, HP-UX, Linux, Solaris, Windows)

The amount of swap space (KBytes) currently in use by the system. Swap space is used when memory is in short supply. Typically, entire processes are swapped out to secondary storage. Comparing this value to totalSwap (in Concord's kernelConfig group) can help indicate if additional swap space is needed.

totalSwapSpace (AIX, HP-UX, Linux, Solaris, Windows)

Total system swap space in KBytes. Swap is a region on secondary storage (primarily disks) that is used for swapping and paging. Swapping is a memory management policy in which entire processes are written to secondary storage when memory is in short supply. When a process begins, all its pages are in virtual memory; only those pages actively being used are brought in from disk or swap.

CA SystemEDGE Enhancement Metrics

Enhance SystemEDGE with the following metrics to enable migration of NSM system and Performance agents. SystemEDGE agent reads the required variables from OS every 30 seconds and stores them to the internal cache the same way other statistics are retrieved.

New variables are visible under the same name as in CA Systems Performance LiteAgent but on a different OID. The following tables map the required CA Systems Performance LiteAgent variables to SystemEDGE variables:

Linux

NSM Item	SystemEDGE Item	Description
CPU	cpuGroup. cpuTotalUtilPercent cpuStatsEntry. cpuStatsUtilPercent	%total - Sum of the user and system CPU usage.
ForkRequestssec	kernelperf.forkRequestssec	Number of forks per second.
FreePhysical Memory	performance. memoryStats. freePhysicalMemory	The percentage of physical (real) memory not in use.
RequestsPage Inssec	performance. memoryStats. requestsPageInssec	The number of pages paged in per second.
RequestsPage Outssec	performance. memoryStats. requestsPageOutssec	The number of pages that are paged out per second.
SystemUsageFree Memory	performance. memoryStats. systemUsageFreeMemory	The total amount of unallocated virtual memory. (in kBytes)
SystemUsageTotal Memory	performance. memoryStats. systemUsageTotalMemory	The total amount of virtual memory available on the system. (in kBytes)
SystemUsageUsed Memory	performance. memoryStats. systemUsageUsedMemory	System Usage Used Memory - The total number of kBytes of virtual memory in use.
ScanRatePage Scanssec	performance. memoryStats. scanRatePageScanssec	The frequency with which the kernel checks for free memory pages.
RequestsPageFree Bytessec	performance.memoryStats. requestsPageFreeBytessec	The amount of space that is released to the kernel by terminating processes.

NSM Item	SystemEDGE Item	Description
RequestsPageFrees	performance. memoryStats.requestsPageFrees	The total number of pages that are released to the kernel since the system was started.
RequestsPage Freessec	performance. memoryStats. requestsPageFreessec	The number of pages that are released to the kernel by terminating processes.
RequestsPage InBytessec	performance. memoryStats. requestsPageInBytessec	The amount of data that is paged in per second.
RequestsPage OutBytessec	performance. memoryStats. requestsPageOutBytessec	The amount of data that is paged out per second.
RequestsPage ReclaimBytessec	performance.memoryStats. requestsPageReclaimBytessec	The amount of space in pages that is reclaimed from the free list.
RequestsPage Reclaimssec	performance. memoryStats. requestsPageReclaimssec	The number of pages that are reclaimed per second.
InterfaceTraffic Incomingsec	performance.network.ifEntry. <index>. interfaceTrafficIncomingsec	Number of input packets per second for each interface card.
InterfaceTraffic Outgoingsec	performance. network .ifEntry. <index>. interfaceTrafficOutgoingsec	Number of output packets per second for each interface card.
InputErrors	performance. network.ifEntry. <index>.inputErrors	The number of input errors. These errors usually indicate faulty hardware, which can range from another computer that is generating bad packets to a bad connector or terminator.
inputpackets	performance. network .ifEntry. <index>.inputpackets	The number of input packets that are transferred on the interface.
outputpackets	performance. network .ifEntry. <index>.outputpackets	The number of output packets that are transferred on the interface.
blkss	diskStatsTable.<index>. diskStatsBlkss	Number of bytes transferred (in 512-byte units) from and to the device.

NSM Item	SystemEDGE Item	Description
rws	diskStatsTable.<index>. diskStatsRWs	Number of data transfers per second (read and writes) from and to the device.
AllocatedSpace	devTable. <index>. devAllocatedSpace	Total number of MB available in the file system.
FreeSpace	devTable. <index>. devFreeSpace	Number of available MB on the file system. This item may not include space that is reserved for the superuser.
InodesFree	devTable. <index>. devFfiles	Number of free inodes for the file system (corresponds to the number of files and devices that are allowed on a file system). The inode table on some systems is dynamically allocated so the number of free entries is small.
InodesUsed	devTable. <index>. devInodesUsed	Number of inodes or files in use for the file system.
SpaceUsed	devTable. <index>. devCapacity	Percentage of file system space in use for the file system. For most file systems, this item does not include any extra space that is reserved for the superuser. Thus the value agrees with df, unlike the "Filesystem" group which reports all the space on the partition, some of which may not be available to the ordinary user. This difference typically applies to file systems such as /opt, /var, or /home but / or /tmp.
UsedSpace	devTable. <index>. devUsedSpace	Number of MB in use on the file system.

NSM Item	SystemEDGE Item	Description
DiskTime, busy	diskStatsTable.<index>. diskStatsUtilization	The utilization rate (percentage utilization) for this disk over the last measurement period. This item could also be expressed as:(disk-busy-time / elapsed-time) * 100. %busy - Portion of time that the device was busy servicing a request.
AvgDiskBytesRead	diskStatsTable.<index>. diskStatsAvgBytesRead	Average number of bytes transferred from the disk during read operations.
AvgDiskBytesWrite	diskStatsTable.<index>. diskStatsAvgBytesWrite	Average number of bytes transferred to the disk during write operations.
DiskReadTime	diskStatsTable.<index>. diskStatsReadTime	Percentage of elapsed time that the selected disk drive is busy servicing read requests.
DiskWriteTime	diskStatsTable.<index>. diskStatsWriteTime	Percentage of elapsed time that the selected disk drive is busy servicing write requests.
AvgDiskQueue Length	diskStatsTable.<index>. diskStatsQueueLength	The average number of operations waiting in the service queue over the last measurement period.
DiskReadBytessec	diskStatsTable.<index>. diskStatsReadBytessec	The rate at which bytes are transferred from the disk during read operations.
DiskWriteBytessec	diskStatsTable.<index>. diskStatsWriteBytessec	The rate at which bytes are transferred to the disk during write operations.
AvgDisksecTransfer	diskStatsTable.<index>. diskStatsServiceTime	The average service time in milliseconds for operations that are served on this disk over the last measurement period. Also expressed as:disk-busy-time / number-of-transfers.

Solaris

NSM Item	SystemEDGE Item	Description
ForkRequestssec	kernelperf. forkRequestssec	Number of forks per second.
FreePhysicalMemory	performance.memoryStats. freePhysicalMemory	The percentage of physical (real) memory not in use.
RequestsPage Inssec	performance.memoryStats. requestsPageInssec	The number of pages paged in per second.
RequestsPage Outssec	performance.memoryStats. requestsPageOutssec	The number of pages that are paged out per second.
SystemUsageFree Memory	performance.memoryStats. systemUsageFreeMemory	The total amount of unallocated virtual memory. (in kBytes)
SystemUsageTotal Memory	performance.memoryStats. systemUsageTotalMemory	The total amount of virtual memory available on the system. (in kBytes)
SystemUsageUsed Memory	performance.memoryStats. systemUsageUsedMemory	System Usage Used Memory - The total number of kBytes of virtual memory in use.
ScanRatePage Scanssec	performance.memoryStats. scanRatePageScanssec	The frequency with which the kernel checks for free memory pages.
PagesIntransit	kernelperf. pagesIntransit	The total number of in-transit blocking page faults.
PagesIntransitsec	kernelperf. pagesIntransitsec	The number of in-transit blocking page faults per second.
RequestsPageFree Bytessec	performance.memoryStats. requestsPageFreeBytessec	The amount of space that is released to the kernel by terminating processes.
RequestsPageFrees	performance.memoryStats. requestsPageFrees	The total number of pages that are released to the kernel since the system was started.
RequestsPage Freessec	performance.memoryStats. requestsPageFreessec	The number of pages that are released to the kernel by terminating processes.
RequestsPage InBytessec	performance.memoryStats. requestsPageInBytessec	The amount of data that is paged in per second.

NSM Item	SystemEDGE Item	Description
RequestsPage OutBytessec	performance.memoryStats. requestsPageOutBytessec	The amount of data that is paged out per second.
RequestsPage ReclaimBytessec	performance.memoryStats. requestsPageReclaimBytessec	The amount of space in pages that is reclaimed from the free list.
RequestsPage Reclaimssec	performance.memoryStats. requestsPageReclaimssec	The number of pages that are reclaimed per second.
SystemUsage LockedMemory	performance.memoryStats. systemUsageLockedMemory	The total number of kBytes of locked memory.
InputErrors	performance.network.ifEntry. <index>.inputErrors	The number of input errors. These errors usually indicate faulty hardware, which can range from another computer that is generating bad packets to a bad connector or terminator.
blkss	diskStatsTable. <index>.blkss	Number of bytes transferred (in 512-byte units) from and to the device.
rws	diskStatsTable. <index>.rws	Number of data transfers per second (read and writes) from and to the device.
avwait	diskStatsTable.<index>. diskStatsAvWait	Average time in milliseconds that transfer requests waited idly on the queue for the device.
InodesFree	devTable.<index>.devFfiles	Number of free inodes for the file system (corresponds to the number of files and devices that are allowed on a file system). The inode table on some systems is dynamically allocated so the number of free entries is small.
InodesUsed	devTable.<index>. devInodesUsed	Number of inodes or files in use for the file system.

Windows

NSM Item	SystemEDGE Item	Description
AvgDiskBytesRead	diskStatsTable.<index>. diskStatsAvgBytesRead	Average number of bytes transferred from the disk during read operations.
AvgDiskBytesWrite	diskStatsTable.<index>. diskStatsAvgBytesWrite	Average number of bytes transferred to the disk during write operations.
AvgDisksecTransfer	diskStatsTable.<index>. diskStatsServiceTime	The average service time in milliseconds for operations that are served on this disk over the last measurement period. Also expressed as:disk-busy-time / number-of-transfers.
AvgDiskQueueLength	diskStatsTable.<index>. diskStatsQueueLength	The average number of operations waiting in the service queue of the disk over the last measurement period.
DiskReadTime	diskStatsTable.<index>. diskStatsReadTime	Percentage of elapsed time that the selected disk drive is busy servicing read requests.
DiskWriteTime	diskStatsTable.<index>. diskStatsWriteTime	Percentage of elapsed time that the selected disk drive is busy servicing write requests.
DiskReadBytessec	diskStatsTable.<index>. diskStatsReadBytessec	The rate at which bytes are transferred from the disk during read operations.
DiskWriteBytessec	diskStatsTable.<index>. diskStatsWriteBytessec	The rate at which bytes are transferred to the disk during write operations.

Solaris/Windows

NSM Item	SystemEDGE Item	Description
CPU	cpuGroup.cpuTotalUtil Percent cpuStatsEntry. cpuStatsUtilPercent	%total - Sum of the user and system CPU usage.
InterfaceTraffic Incomingsec	performance.network. ifEntry. <index>. interfaceTrafficIncomingsec	Number of input packets per second for each interface card.

NSM Item	SystemEDGE Item	Description
InterfaceTraffic Outgoingsec	performance.network. ifEntry. <index>. interfaceTrafficOutgoingsec	Number of output packets per second for each interface card.
inputpackets	performance. network. ifEntry. <index>.inputpackets	The number of input packets that are transferred on the interface.
outputpackets	performance. network. ifEntry. <index>.outputpackets	The number of output packets that are transferred on the interface.
blkss	diskStatsTable.<index>. diskStatsBlkss	Number of bytes transferred (in 512-byte units) from and to the device.
rws	diskStatsTable.<index>. diskStatsRWs	Number of data transfers per second (read and writes) from and to the device.
AllocatedSpace	devTable. <index>. devAllocatedSpace	Total number of MB available in the file system.
FreeSpace	devTable. <index>. devFreeSpace	Number of available MB on the file system. This item may not include space that is reserved for the superuser.
SpaceUsed	devTable.<index>. devCapacity	Percentage of file system space in use for the file system. For most file systems, this item does not include any extra space that is reserved for the superuser. Thus the value agrees with df, unlike the "Filesystem" group which reports all the space on the partition, some of which may not be available to the ordinary user. This difference typically applies to file systems such as /opt, /var, or /home but / or /tmp.
UsedSpace	devTable.<index>. devUsedSpace	Number of MB in use on the file system.

NSM Item	SystemEDGE Item	Description
DiskTime, busy	diskStatsTable.<index>. diskStatsUtilization	The utilization rate (percentage utilization) for this disk over the last measurement period. This item could also be expressed as:(disk-busy-time / elapsed-time) * 100. %busy - Portion of time that the device was busy servicing a request.
AvgDiskBytesRead	diskStatsTable.<index>. diskStatsAvgBytesRead	Average number of bytes transferred from the disk during read operations.
AvgDiskBytesWrite	diskStatsTable.<index>. diskStatsAvgBytesWrite	Average number of bytes transferred to the disk during write operations.
AvgDiskQueue Length	diskStatsTable.<index>. diskStatsQueueLength	The average number of operations waiting in the service queue over the last measurement period.
DiskReadBytessec	diskStatsTable.<index>. diskStatsReadBytesSec	The rate at which bytes are transferred from the disk during read operations.
DiskWriteBytessec	diskStatsTable.<index>. diskStatsWriteBytesSec	The rate at which bytes are transferred to the disk during write operations.
AvgDisksecTransfer	diskStatsTable.<index>. diskStatsServiceTime	The average service time in milliseconds for operations that are served on this disk over the last measurement period. This item could be expressed as:disk-busy-time / number-of-transfers.

CA VMware vCenter Server Performance Metrics

The following list provides information about performance metrics that are monitored for VMware vCenter Servers and VMware ESX Hosts.

VMware VC ESX Host

The following list provides the descriptions of the VMware VC ESX Host performance metrics.

Number of CPUs

The total number of CPUs on the system.

Registered VM Count

The total number of registered VMs.

Running VM Count

The total number of running VMs.

System Uptime

The total amount of time in milliseconds that the system has been online.

VMware VC ESX Host CPU

The following list provides the descriptions of the VMware VC ESX Host CPU performance metrics.

CPU Usage (percent)

The current CPU usage of the server.

CPU Usage per CPU (percent)

The current CPU usage of each CPU on the server.

CPU Idle Seconds (percent)

The average of time spent in the CPU idle state in a percentage based on the poll interval.

CPU Used Seconds (percent)

The average of time spent using the CPU in a percentage based on the poll interval.

Configured CPU Shares

The number of CPU shares allocated to the server.

Configured CPU Maximum (percent)

The configured CPU maximum reservation threshold in a percentage.

Configured CPU Minimum (percent)

The configured CPU minimum reservation threshold in a percentage.

VMware VC ESX Host Disk

The following list provides the descriptions of the VMware VC ESX Host Disk performance metrics.

Bus Resets

The total number of bus resets.

Bus Resets/Second

The number of bus resets per second.

Commands Aborted

The total number of commands aborted.

Commands Aborted/Second

The number of commands aborted per second.

KB Read/Second

The number of kilobytes read per second.

KB Written/Second

The number of kilobytes written per second.

KB Read

The number of kilobytes read.

KB Written

The number of kilobytes written.

Reads

The number of reads.

Writes

The number of writes.

Reads/Second

Number of reads per second.

Writes/Sec

The number writes per second.

VMware VC ESX Host Memory

The following list provides the descriptions of the VMware VC ESX Host Memory performance metrics.

Available Memory KB

The available server memory in kilobytes.

Configured Memory KB

The configured server memory in kilobytes.

Free Memory KB

The free server memory in kilobytes.

Physical Memory Available KB

The available physical memory in kilobytes.

Memory Usage (percent)

The current memory usage of the server.

Used Memory KB

The used server memory in kilobytes.

Memory Balloon KB

The amount of memory used by memory control.

VMware VC ESX Host Network

The following list provides the descriptions of the VMware VC ESX Host Network performance metrics.

Packets Received

The total number of packets received.

Packets Transmitted

The number of packets transmitted.

Packets Transmitted/Second

The number of packets transmitted per second based on the poll interval.

Packets Received/Second

The number of packets received per second based on the poll interval.

KB Received

The number of kilobytes received.

KB Transmitted

The total number of kilobytes transmitted.

KB Received/Second

The number of kilobytes received per second based on the poll interval.

KB Transmitted/Second

The number of kilobytes transmitted per second based on the poll interval.

VMware VC ESX Host per CPU

The following list provides the descriptions of the VMware VC ESX Host per CPU performance metrics.

CPU Usage per CPU (percent)

The current CPU usage of each CPU on the server.

VMware VC VM

The following list provides the descriptions of the VMware VC VM performance metrics.

Number of Connected Users

Number of connected users on this VM.

VM System Uptime

The total amount of time in milliseconds that system has been online.

VM System Heartbeat

The response state indicator of the VM.

VM System OS State

The operation mode of the OS.

VM System Virtual CPU count

The number of virtual CPUs allocated.

VM System VM State

The status of the VM.

VMware VC VM CPU

The following list provides the descriptions of the VMware VC VM CPU performance metrics.

CPU Shares (percent)

Percentage of CPU performance statistics of VM.

CPU Extra Seconds (percent)

The average of the extra amount of time spent using the CPU in a percentage based on the poll interval.

CPU Used Seconds (percent)

The average of the time spent using the CPU in a percentage based on the poll interval.

CPU Ready Seconds (percent)

The average of the amount of time spent in the CPU ready state in a percentage based on the poll interval

CPU Wait Seconds (percent)

The average of the amount of time spent in the CPU wait state in a percentage based on the poll interval.

Configured CPU Shares

The number of CPU shares allocated to the VM.

CPU Shares Active

The CPU performance statistics of the VM, in MHz.

CPU Shares Percentage

Percentage of CPU performance statistics of VM.

Configured CPU Maximum (percent)

The configured CPU maximum reservation threshold in a percentage.

Configured CPU Minimum (percent)

The configured CPU minimum reservation threshold in a percentage.

CPU Affinity

The status of the VM CPU affinity.

Percentage of Time VM Ready

The percentage of time that the VM was ready but could not get scheduled to run on a physical CPU.

VM CPU Allocation Percent

The VM CPU allocation in percent.

VMware VC VM Disk

The following list provides the descriptions of the VMware VC VM Disk performance metrics.

Bus Resets

The total number of bus resets.

Bus Resets/Second

The number of bus resets per second.

Commands Aborted

The total number of commands aborted.

Commands Aborted/Second

The number of commands aborted per second.

KB Read/Second

The number of kilobytes read per second.

KB Written/Second

The number of kilobytes written per second.

KB Read

The number of kilobytes read.

KB Written

The number of kilobytes written.

Reads

The number of reads.

Writes

The number of writes

Reads/Second

The number of reads per second.

Writes/Second

The number of writes per second.

Shares

The amount of disk shares used in resource scheduling.

VMware VC VM Memory

The following list provides the descriptions of the VMware VC VM Memory performance metrics.

Available Memory KB

The available VM memory in kilobytes.

Configured Memory KB

The configured VM memory in kilobytes.

Free Memory KB

The free VM memory in kilobytes.

Used Memory KB

The used VM memory in kilobytes.

Memory Usage (percent)

The current memory usage of the VM.

Overhead Memory KB

The amount of memory that is overhead in kilobytes.

Shared Memory KB

The amount of memory that is currently being shared in kilobytes.

Swapped Memory KB

The amount of memory that is currently being swapped in kilobytes.

Size Memory KB

The total amount of memory for the VM in kilobytes.

Configured Memory Shares

The configured amount of memory shared dedicated to the VM for resource contention.

Configured Memory Minimum KB

The configured memory minimum reservation threshold in kilobytes.

Configured Memory Maximum KB

The configured memory maximum reservation threshold in kilobytes.

Memory Balloon KB

The amount of memory used by memory control.

Memory Balloon Target KB

The amount of memory that can be used by memory control.

Memory Shares Assigned

The status of VM Memory Shares Assigned.

Memory Min

Current lower-bound on memory usage of VM, in megabytes.

Memory Max

Current upper-bound on memory usage of VM, in megabytes.

Memory Actual

The VM memory size of the virtual machine, in megabytes.

Memory Active

VM active memory status, in megabytes.

Memory Percentage

The status of VM memory in percent.

Memory Control

The VM memory control, in megabytes.

Memory Overhead

The VM memory overhead, in megabytes.

VMware VC VM Network

The following list provides the descriptions of the VMware VC VM Network performance metrics.

Packets Received

The number packets received.

Packets Transmitted

The number of packets transmitted.

Packets Transmitted/Second

The number of packets transmitted per second based on the poll interval.

Packets Received/Second

The number of packets received per second based on the poll interval.

KB Received

The number of kilobytes received.

KB Transmitted

The number of kilobytes transmitted.

KB Received/Second

The number of kilobytes received per second based on the poll interval.

KB Transmitted/Second

The number of kilobytes transmitted per second based on the poll interval.

VMware VC Cluster

The following list provides the descriptions of the VMware VC Cluster performance metrics.

CPU Fairness

The fairness of distributed CPU allocation.

Memory Fairness

The fairness of distributed memory allocation.

Effective CPU MHz

The amount of CPU recourses available in megahertz.

Effective Memory KB

The amount of memory resources available in kilobytes.

Failover Tolerance

The number of failures that can be tolerated.

VMotion Rate

Migration thresholds for DR.

VMware VC Datastore

The following list provides the descriptions of the VMware VC Datastore performance metrics.

Free Space %

The available space on the datastore in percent.

Free Space KB

The available space on the datastore in kilobytes.

Total Space KB

The total space on the datastore in kilobytes.

Utilized Space %

The utilized space on the datastore in percent.

Utilized Space KB

The utilized space on the datastore in kilobytes.

VMware VC Compute Resource

The following list provides the descriptions of the VMware VC Compute Resource performance metrics.

Overall Status

The status of the compute resource.

Effective CPU MHz

The amount of CPU resources available to run VMs in megahertz.

Effective Memory KB

The amount of memory resources available to run VMs in kilobytes.

Total CPU MHz

The amount of CPU resources across all servers in megahertz.

Total Memory KB

The amount of memory across all servers in kilobytes.

VMware VC Resource Pool

The following list provides the descriptions of the VMware VC Resource Pool performance metrics.

Overall Status

The status of the resource pool.

Memory Overall Usage (percent)

The overall memory usage of the resource pool in a percentage.

CPU Overall Usage (percent)

The overall CPU usage of the resource pool in a percentage.

CPU Expand Reservation

In a resource pool with an expandable reservation(1), the reservation on a resource pool can grow beyond the specified value, if the parent resource pool has unreserved resources. A nonexpandable(0) reservation is called a fixed reservation.

CPU Max

The maximum CPU (MHz) for the resource pool.

CPU Min

The minimum CPU (MHz) for the resource pool.

CPU Shares

The CPU Shares assigned to the resource pool.

Memory Expand Reservation

In a resource pool with an expandable reservation(1), the reservation on a resource pool can grow beyond the specified value, if the parent resource pool has unreserved resources. A nonexpandable(0) reservation is called a fixed reservation.

Mem Max

The maximum Memory (MB) for the resource pool.

Mem Min

The minimum Memory (MB) for the resource pool.

Mem Shares

The Memory Shares assigned to the resource pool.

CPU Max Usage

The current upper-bound on CPU usage.

CPU Usage Pct

The resource pool CPU Usage Percentage.

CPU Reserve Used

Reserve CPU used for the resource pool.

CPU Reserve Used For VM

The CPU Reserve Used for running VM in this resource pool or any of its child resource pools.

CPU UnReserve For Pool

The CPU UnReserved for a child resource pool.

CPU UnReserve For VM

The CPU UnReserved for a child virtual memory.

Mem Max Usage

The maximum memory usage of resource pool, in megabytes.

Mem Usage Pct

The resource pool Memory Usage Percentage.

Mem Reserve Used

The memory reserved for all the children of resource pool.

Mem Reserve Used For VM

The reserved memory used for running VM in this resource pool or any of its child resource pools.

Mem UnReserve For Pool

The memory unreserved for resource pool.

Mem UnReserve For VM

The memory unreserved for a child VM.

VMware VC Server

The following list provides the descriptions of the VMware vCenter Server performance metrics.

Aggregate CPU Usage (percent)

Aggregate CPU usage of all hosts in vCenter Server.

Aggregate Memory Usage (percent)

Aggregate memory usage of all hosts in vCenter Server.

CA Citrix XenServer Performance Metrics

The following list provides information about performance metrics that are monitored for Citrix XenServers.

Citrix Xen Host

The following list provides descriptions of Citrix XenServer host performance metrics.

Total Memory (MB)

Total memory available in the server in MB.

Free Memory (MB)

Free memory available in the server in MB.

Memory Usage (MB)

Memory usage of the server in MB.

Memory Usage (%)

Memory usage of the server in %.

CPU Usage (%)

CPU usage of the server in %.

Citrix Xen Host pNic

The following list provides descriptions of Citrix XenServer host pNic performance metrics.

Read Rate (kBps)

Read rate of the physical network interface in kB per second.

Write Rate (kBps)

Write rate of the physical network interface in kB per second.

Speed (kBps)

Speed of the physical network interface in kB per second.

Citrix Xen Host Storage

The following list provides descriptions of Citrix XenServer host storage performance metrics.

Virtual allocation (MB)

Sum of the sizes of all virtual disk images in the storage repository in MB.

Physical Utilization (MB)

Physical utilization of the storage repository in MB.

SR Capacity (MB)

Total capacity of the Storage Repository in MB.

SR Free Space (MB)

Free space of the Storage Repository in MB.

Citrix Xen VM

The following list provides descriptions of Citrix XenServer VM performance metrics.

VM vCPU Usage (%)

CPU usage of this VM in %.

Memory Usage (MB)

Memory usage of this VM in MB.

Memory Usage (%)

Memory usage of this VM in %.

Guest Actual Memory (MB)

Actual memory in the guest operating system in MB.

Guest Total Memory (MB)

Total memory in the guest operating system in MB.

Guest Free Memory (MB)

Free memory in the guest operating system in MB.

Citrix Xen VM vDisk

The following list provides descriptions of Citrix XenServer VM vDisk performance metrics.

Read Rate (kBps)

Read rate of the virtual disk in kB per second.

Write Rate (kBps)

Write rate of the virtual disk in kB per second.

Virtual Size (MB)

Size of the virtual disk in MB.

Physical Utilization (MB)

Actual physical utilization by virtual disk from the storage repository in MB.

Citrix Xen VM vNic

The following list provides descriptions of Citrix XenServer VM vNic performance metrics.

Read Rate (kBps)

Read rate of the virtual network interface in kB per second.

Write Rate (kBps)

Write rate of the virtual network interface in kB per second.

CA Windows Microsoft Cluster Performance Metrics

The following list provides information about the metrics that are monitored for Windows Microsoft Cluster servers.

Uptime Percentage: Windows MSCS Cluster

The percentage of time a cluster has been evaluated by CA Virtual Assurance and was in the "Up" state.

Uptime Percentage: Windows MSCS Node

The percentage of time a cluster node has been evaluated by CA Virtual Assurance and was in the "Up" state.

Uptime Percentage: Windows MSCS Resource Group

The percentage of time a cluster resource group has been evaluated by CA Virtual Assurance and was in the "Up" state.

Uptime Percentage: Windows MSCS Resource

The percentage of time a cluster resource has been evaluated by CA Virtual Assurance and was in the "Up" state.

Uptime Percentage: Windows MSCS Network Interface

The percentage of time a cluster network interface has been evaluated by CA Virtual Assurance and was in the "Up" state.

Uptime Percentage: Windows MSCS Network

The percentage of time a cluster network has been evaluated by CA Virtual Assurance and was in the "Up" state.

CA Windows Performance Metrics

The following list provides information about the metrics that are monitored for Windows servers.

Physical disk: Disk Read Bytes per second

The rate which data is read from the physical disk.

Physical disk: Disk Write Bytes per second

The rate which data is written to the physical disk.

Physical disk: Percentage Disk Time

The percentage of elapsed time that the disk drive is busy servicing read or write requests.

Percentage Processor Time

The percentage of elapsed time that the processor spends running a non-idle thread.

Memory: Available MB

The amount of physical memory in megabytes available to processes running on the computer.

Memory: Pages per Second

The rate at which pages are read from or written to the disk to resolve hard page faults.

Memory: Percentage Committed Bytes in Use

The percentage of total possible physical memory in use for which space has been reserved in the paging file if it must be written to the disk.

Network Interface: Bytes Total per Second

The rate at which bytes are sent and received over each network adapter including message framing characters.

Network Interface: Current Bandwidth

The estimated current bandwidth of the network interface in bits per second. For example, 10000 represents 10 Mbps.

Network Interface: Packets per Second

The rate at which packets are sent and received on the network interface.

Cisco Unified Computing System (UCS) Performance Metrics

The following list provides information about the metrics that are monitored for Cisco UCS.

caBladeServerCpuLoad

Average percentage of a minute when the processors on this server blade were not idle.

caBladeServerMemorySize

Total available read/write memory in MB, typically RAM, of a particular server blade.

caBladeServerCurrentAllocatedMemory

Amount of read/write memory in MB currently allocated by the server blade (memory in use).

caBladeServerTotalLocalStorageSize

Size of local disk storage in MB not including networked drives.

caBladeServerTotalUsedLocalStorage

Size of local disk storage in MB currently allocated and occupied.

caBladeIfHCInUcastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfHCInMulticastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfHCInBroadcastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfHCOutUcastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfHCOutMulticastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfHCOutBroadcastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfHCInOctets

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfHCOutOctets

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfInOctets

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfOutOctets

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfInUnknownProtos

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfInErrors

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfOutErrors

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfMtu

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfInUcastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfInMulticastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfInBroadcastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfInDiscards

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfOutUcastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfOutMulticastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfOutBroadcastPkts

Like object of ifVHCPacketGroup from RFC 2863.

caBladeIfOutDiscards

Like object of ifVHCPacketGroup from RFC 2863.

caUcsChassisFanAmbientTemp

Degrees Celsius.

caUcsChassisPsuAmbientTemp

Temperature, in Celsius, sensed by the PSU.

caUcsChassisFabricExtenderAmbientTemp

Degrees Celsius.

caUcsCpuTemp

Currently available temperature readings from the CPU temp sensor.

caUcsMotherboardIoSensorTemp

Degrees Celsius.

caUcsMotherboardRearSensorTemp

Degrees Celsius.

Remote Monitoring Performance Metrics

The following list provides descriptions of the Remote Monitoring performance metrics included out-of-the-box. The metric names are consistent with the CIM property names, adding a prefix like CPU_, Disk_, Net_, and so on, to indicate the CIM class being queried.

CPU_PercentIdle

The percentage of time the processor (total) was idle in the last interval.

Disk_PercentIdle

The percentage of time this disk was idle in the last interval.

FSys_FreeMBDecrease

The decrease of free space in megabytes on this disk in the last interval.

FSys_FreeMB

The free space in megabytes on this disk at the last poll.

Mem_PercentUsed

The percentage of commit limit used for committed memory at the last poll.

Net_IPAddress

The IP addresses of the system; this entry is mandatory.

Net_MACAddress

The MAC addresses of the system; this entry is mandatory.

Net_QueueLength

The output queue length in packets of this interface at the last poll.

Proc_PercentCPU

The percentage of time used by the Top1 process in the last interval.

Proc_PercentMemory

The percentage of physical memory used by the Top1 process at the last poll.

Event_SystemError

The number of Error events written to the System event log in the last interval.

Srvc_StoppedAuto

The number of stopped services with automatic startup type at the last poll.

Sys_LastBootTime

The time the system was last booted; this entry is mandatory.

Sys_LastLocalTime

The local date and time of the system at the last poll.

Sys_OSInfo

The information about the installed operating system.

Sys_PhysMemKB

The size in kilobytes of total physical memory.

BIOS_SerialNumber

The BIOS serial number.

BIOS_Version

The BIOS version.

Disk_QueueLength

The average number of read and write requests queued for this disk in the last interval.

Disk_ReadPerSec

The average time in seconds for a read from this disk during the last interval.

Disk_WritePerSec

The average time in seconds for a write to this disk during the last interval.

Mem_FreePages

The number of free page table entries at the last poll.

Mem_NonPagedMB

The size of the nonpaged pool (memory used by the OS that is not pageable) in megabytes at the last poll.

Mem_NonPagedMB_3GB

The size of the nonpaged pool (memory used by the OS that is not pageable) in megabytes at the last poll.

Mem_PagedMB

The size of the paged pool (memory used by the OS that is pageable) in megabytes at the last poll.

Mem_PagedMB_3GB

The size of the paged pool (memory used by the OS that is pageable) in megabytes at the last poll.

Mem_PagingPerSec

The rate in pages per second of page reads and writes to disk to resolve page faults during the last interval.

Mem_FreeMB

The physical memory in megabytes available to running processes at the last poll.

Net_PercentBusy

The percentage of bandwidth used to send and receive over this interface during the last interval.

Sys_Has3GBSwitch

The maximum memory in kilobytes that can be allocated to a process.

Sys_Is64bit

The OS architecture (for example, 32-bit, 64-bit Intel, or 64-bit AMD).

Sys_OSType

The OS type.

Disk_AvgDiskBytesPerRead

The average number of bytes transferred from this disk during read operations in the last interval.

Disk_AvgDiskBytesPerWrite

The average number of bytes transferred to this disk during write operations in the last interval.

Disk_AvgDiskReadQueueLength

The average number of read requests queued for this disk in the last interval.

Disk_AvgDiskWriteQueueLength

The average number of write requests queued for this disk in the last interval.

Disk_DiskReadsPersec

The rate of read operations per second from this disk in the last interval.

Disk_DiskWritesPersec

The rate of write operations per second to this disk in the last interval.

Disk_PercentDiskReadTime

The percentage of time this disk was busy servicing read requests in the last interval.

Disk_PercentDiskWriteTime

The percentage of time this disk was busy servicing write requests in the last interval.

Disk_SplitIOPerSec

The rate of single I/O requests split to multiple per second to this disk in the last interval.

FSys_PercentFreeSpace

The percentage of free space on this disk at the last poll.

Net_PacketsOutboundErrors

The number of erroneous outbound packets on this interface at the last poll.

Net_PacketsReceivedDiscarded

The number of discarded inbound packets on this interface at the last poll.

Net_PacketsReceivedErrors

The number of erroneous inbound packets on this interface at the last poll.

Net_PacketsReceivedNonUnicastPersec

The rate of broadcast and multicast packets received per second on this interface in the last interval.

Net_PacketsReceivedUnicastPersec

The rate of unicast packets received per second on this interface in the last interval.

Net_PacketsSentNonUnicastPersec

The rate of broadcast and multicast packets requested to be sent per second on this interface in the last interval.

Net_PacketsSentUnicastPersec

The rate of unicast packets requested to be sent per second on this interface in the last interval.

Index

!

! Command--Invoke Command or Child Process (Cmdlet) • 49
!! Command--Invoke Command or Child Process and Auto-capture Output (Cmdlet) • 48

?

? Command--Write Output to stdout (Cmdlet) • 50
?? Command--Write Output in a List to stdout (Cmdlet) • 50

A

About AutoShell • 19
accept Command--Read String From stdin and Assign it to a Variable (Cmdlet) • 51
Accessing AutoShell • 22
Accessing the Operating System • 34
Administrative Command Line Utilities • 671
Advanced SNMP Parameters • 815
arrdump Command--Display an Array (Cmdlet) • 52
ASSERT Command--Compare Mathematical Expressions (Funclet) • 53
Audience • 15
AutoShell • 19
AutoShell Classes • 134
AutoShell Core Reference • 44
AutoShell Functions • 110
AutoShell Loadable Modules' Command Reference • 159

B

base64Decode--Decode a base64 Encoded String (Function) • 110
base64Encode--Perform a base64 Encoding of a String (Function) • 111
Batch Mode • 29

C

CA Cisco UCS Commands • 630
CA Citrix XenServer Performance Metrics • 861
CA HP UNIX Performance Metrics • 821
CA Hyper-V CLI Commands • 470
CA IBM AIX Performance Metrics • 822
CA IBM HACMP Performance Metrics • 828
CA IBM LPAR AutoShell Commands • 300
CA IBM LPAR CLI Commands • 542
CA IBM LPAR Performance Metrics • 823
CA IBM pSeries Logical Partition Performance Metrics • 823
CA IBM pSeries Performance Metrics • 824
CA Linux Performance Metrics • 830
CA Microsoft Cluster Server CLI Commands • 581
CA Microsoft Hyper-V AutoShell Commands • 200
CA Microsoft Hyper-V Performance Metrics • 831
CA Oracle Solaris Performance Metrics • 831
CA Oracle Solaris Zones AutoShell Commands • 327
CA Oracle Solaris Zones Performance Metrics • 832
CA Solaris Zones CLI Commands • 601
CA SystemEDGE Enhancement Metrics • 841
CA SystemEDGE Performance Metrics • 838
CA Technologies Product References • 3
CA VMware vCenter Server AutoShell Commands • 160
CA VMware vCenter Server CLI Commands • 383
CA VMware vCenter Server Performance Metrics • 849
CA Windows Microsoft Cluster Performance Metrics • 864
CA Windows Performance Metrics • 864
caaipsecurity Command--Specifies Credentials for Web Service Security Check • 715
caismutility Command -- Add Functionalities to Policy Configuration UI • 757
Capacity Metrics • 828
Capped and Uncapped LPARs • 826
cat, type Commands--Display Text Files (Cmdlets) • 54
cd, chdir Commands--Change Directory (Cmdlet, Funclet) • 55
Cisco Unified Computing System (UCS) Performance Metrics • 865
Citrix Xen Host • 861
Citrix Xen Host pNic • 862
Citrix Xen Host Storage • 862
Citrix Xen VM • 862
Citrix Xen VM vDisk • 863
Citrix Xen VM vNic • 863
Collection Engine Commands • 691

Command Line Instructions (CLIs) • 383
Command Line Scripting • 383
Commands, Functions, and Classes According to Categories • 44
Common Discovery Commands • 686
Common Information Model (CIM) Objects • 22
Consumption Metrics • 827
Contact CA Technologies • 4
Conventions • 16
copy, cp Commands--Copy Files and Directories (Funclets) • 56
CPU Metrics • 827
createdpmdefaultgroup Command--Create or Update Service • 716
curDir--Retrieves the Current Directory (Function) • 111

D

DBG_PROMPT Command--Break Script Execution for Inspection (Cmdlet) • 58
DBG_PROMPT_LINE Command--Break Script Execution for Inspection With Line Numbers (Cmdlet) • 59
Default Shared Processor Pool • 826
del, rm Commands--Delete Files (Funclets) • 60
Deployment and Policy Configuration AutoShell Commands • 347
dir, ls Commands--Get File and Directory Information (Funclets) • 62
dpmcda cancelnetworkscan Command--Cancel a Network Discovery • 687
dpmcda deletenetwork Command--Delete a Network • 687
dpmcda discoverhost Command--Discover a Host • 688
dpmcda discovernetwork Command--Discover a Network • 690
dpmce ceconfig -configuremetric Command--Configure Metric • 691
dpmce ceconfig -configuremetricfilter Command--Configure Metric Filter • 694
dpmce ceconfig -disablemetric Command--Disable a Metric • 696
dpmce ceconfig -disablemetricforoverall Command--Disable and Exclude a Metric From Overall Calculation • 697
dpmce ceconfig -enablemetric Command--Enable a Metric • 698
dpmce ceconfig -enablemetricforoverall Command--Enable and Include a Metric for Overall Calculation • 699
dpmce ceconfig -getglobal Command--Retrieve Data Center Intervals • 700
dpmce ceconfig -getmetriclist Command--Retrieve Metric List • 702
dpmce ceconfig -getnode Command--Retrieve Host Collection Intervals • 701
dpmce ceconfig -refreshmetriclist Command--Retry Metric Collection • 703
dpmce ceconfig -setalias Command--Set Alias • 704
dpmce ceconfig -setglobal Command--Set Data Center Intervals • 706
dpmce ceconfig -setnode Command--Set Intervals for a Host • 708
dpmce ceconfig -updatemetric Command--Update a Metric • 709
dpmcmd run Command--Run Scripts • 716
dpmeventmanager create_event Command--Create an Event • 711
dpmeventmanager get_events Command--Retrieve Events • 712
dpmhd addcomment Command--Update a Ticket with a Comment • 726
dpmhd close Command--Close a Help Desk Ticket • 727
dpmhd getattribute Command--Get an Attribute Value of a Ticket • 728
dpmhd getstatus Command--Get the Status of a Ticket • 730
dpmhd open Command--Open a Help Desk Ticket • 730
dpmhd setattribute Command--Set an Attribute of a Ticket • 732
dpmhd setstatus Command--Set the Status of a Ticket • 733
dpmhv-addVMNic (Cmdlet) Command--Add a Network Interface Controller to a VM • 200
dpmhv-addVMSCSIController (Cmdlet) Command--Add SCSI Controllers to a VM • 202
dpmhv-changeVMState (Cmdlet) Command--Change the State of a VM • 202
dpmhv-createTemplateFromVM (Funclet) Command--Create a Template from a VM • 204
dpmhv-createVirtDisk (Funclet) Command--Create a Virtual Disk • 205
dpmhv-createVirtFloppy (Cmdlet) Command--Create a Virtual Floppy • 206

dpmhv-createVM (Funclet) Command--Create a VM • 207
dpmhv-createVMFromTemplate (Funclet) Command--Create a VM Using a Template • 211
dpmhv-createVMFromTemplateEx (Funclet) Command--Create a VM Using a Template • 217
dpmhv-destroyTemplate (Cmdlet) Command--Delete a Template • 225
dpmhv-destroyVM (Cmdlet) Command--Delete VM • 226
dpmhv-expandVirtDisk (Funclet) Command--Expand Virtual Disk • 227
dpmhv-exportVM (Funclet) Command--Export a VM • 228
dpmhv-exportVMEx (Funclet) Command--Export a VM • 229
dpmhv-getHostSwitches (Funclet) Command--Show Host Switches on a Hyper-V Host • 231
dpmhv-getJobInfo (Funclet) Command--Show Job Information • 234
dpmhv-getJobStatus (Funclet) Command--Show Job Status • 239
dpmhv-getPhysDisks (Funclet) Command--Show all Physical Disks • 239
dpmhv-getVersion (Funclet) Command--Show the Web Service Version • 243
dpmhv-getVMInfo (Funclet) Command--Show all VMs • 244
dpmhv-getVMProperties (Funclet) Command--Show VM Properties • 248
dpmhv-getVMState (Funclet) Command--Show the VM State • 249
dpmhv-importVM (Funclet) Command--Import a VM • 251
dpmhv-importVMEx (Funclet) Command--Copy and Import VM • 252
dpmhv-setSysprepProperties (Cmdlet) Command--Create a Virtual Disk • 254
dpmhv-setVMClustered (Cmdlet) Command--Set a VM in a Cluster • 259
dpmhv-setVMDisk (Funclet) Command--Create a Drive or Disk on a Drive Controller • 260
dpmhv-setVMProperties (Cmdlet) Command--Set VM Properties • 262
dpmhv-SetVMVirtFloppy (Cmdlet) Command--Connect a Virtual Floppy Image to the VM Floppy Drive • 265
dpmhv-ShowClusterSharedVolumes (Funclet) Command--Show all Cluster Shared Volumes • 266
dpmhv-ShowDirectories (Funclet) Command--Show all Directories • 266
dpmhv-ShowHosts (Funclet) Command--Show all Hyper-V Servers • 269
dpmhv-ShowLogicalDisks (Funclet) Command--Show all Logical Disks • 276
dpmhv-ShowSCVMMHardwareProfiles (Funclet) Command--Show all SCVMM Hardware Profiles • 279
dpmhv-ShowSCVMMOSProfiles (Funclet) Command--Show all Guest OS Profiles • 284
dpmhv-ShowTemplates (Funclet) Command--Show Templates on a Hyper-V Host • 288
dpmhv-ShowVMDisks (Funclet) Command--Show all Virtual Disks • 290
dpmhv-showVMFloppy (Funclet) Command--Show the Properties of Floppy Drive • 292
dpmhv-showVMNICs (Funclet) Command--Show all Network Interface Cards • 294
dpmhv-showVMSCSI (Funclet) Command--Show all SCSI Controllers • 296
dpmhyperv AddVMNic Command--Add a Network Adapter Controller to a VM • 471
dpmhyperv AddVMSCSIController Command--Create a SCSI Controller for a VM • 472
dpmhyperv AgentGet Command--Return an Agent Value • 474
dpmhyperv AgentSet Command--Set an Agent Value • 475
dpmhyperv ChangeVMState Command--Change the State of a VM • 476
dpmhyperv CreateTemplateFromVM Command--Create a Template from a VM • 478
dpmhyperv CreateVirtDisk Command--Create a Virtual Disk Image • 479
dpmhyperv CreateVirtFloppy Command--Create a Virtual Floppy Disk Image • 481
dpmhyperv CreateVM Command--Create a VM • 482
dpmhyperv CreateVMFromTemplate Command--Create a VM from a SCVMM Server Template • 486
dpmhyperv CreateVMFromTemplate Command--Create a VM from a Template • 490
dpmhyperv DeleteTemplate Command--Deletes a Template • 541
dpmhyperv DeleteVM Command--Delete a VM • 497
dpmhyperv ExpandVirtDisk Command--Expand the Size of a Virtual Disk • 498
dpmhyperv ExportVM Command--Export a VM • 500

dpmhyperv ExportVMEx Command--Export a VM • 501
dpmhyperv GetHostSwitches Command--Get Switches of a Host • 503
dpmhyperv GetJobErrorInfo Command--Get the Error Information of a Job • 504
dpmhyperv GetJobInfo Command--Get Information of a Job • 505
dpmhyperv GetJobState Command--Get the State of a Job • 507
dpmhyperv GetServerInfo Command--Get all Managed Servers • 508
dpmhyperv GetVersion Command--Get the PMM Version • 509
dpmhyperv GetVMProperties Command--Get VM Properties • 510
dpmhyperv GetVMState Command--Get a VM State • 511
dpmhyperv ImportVM Command--Import a VM • 512
dpmhyperv ImportVMEx Command--Copy and Import a VM • 514
dpmhyperv SetClustered Command--Add or Remove a VM from a Cluster • 515
dpmhyperv SetSysPrepProperties Command--Sets Sysprep Properties • 517
dpmhyperv SetVMDisk Command--Assign a Drive or Disk to a Drive Controller • 520
dpmhyperv SetVMProperties Command--Set Properties of a VM • 522
dpmhyperv SetVMVirtFloppy Command--Assign a Virtual Floppy Image to a VM Floppy Drive • 525
dpmhyperv ShowClusterSharedVolumes Command--Show all Cluster Shared Volumes • 526
dpmhyperv ShowDirectories Command--Show Directory Properties on a Hyper-V Server • 527
dpmhyperv ShowLogicalDisks Command--Show all Logical Disks • 528
dpmhyperv ShowPhysDisks Command--Show Physical Disks of a Host • 529
dpmhyperv ShowSCVMMGuestOSProfiles Command--Show Guest Operating System Profiles • 531
dpmhyperv ShowSCVMMHardwareProfiles Command--Show all SCVMM Hardware Profiles • 530
dpmhyperv ShowTemplates Command--Show all VM Templates • 532
dpmhyperv ShowVirtFloppy Command--Show the List of Virtual Floppy Drives • 533
dpmhyperv ShowVMDisks Command--Show all Virtual Disks • 535
dpmhyperv ShowVMNics Command--Show all Network Interface Cards • 536
dpmhyperv ShowVMs (Funclet) Command--Get all VMs • 299
dpmhyperv ShowVMs Command--Show all VMs • 537
dpmhyperv ShowVMSCSIControllers Command--Show all SCSI Controllers • 538
dpmhyperv ValidateAgentSNMPAccess Command--Validate SNMP Access to an Agent • 539
dpmhyperv ValidateServerAccess Command--Check Server Access • 540
dpmimg image Command--Deploy a Solaris Image • 735
dpmimg imgjobcheck Command--Get Solaris Imaging Job Status • 740
dpmix export|import|verify Command--Migrate System Data • 717
dpmlpar cycle Command--Cycle a Logical Partition • 543
dpmlpar delete Command--Delete a Logical Partition • 547
dpmlpar getresources Command--Get LPAR Resources • 549
dpmlpar image Command--Create an IBM AIX LPAR • 551
dpmlpar imgjobcheck Command--Retrieve Status of IBM AIX Imaging Job • 563
dpmlpar list Command--List HMC Resources • 564
dpmlpar setresources Command--Add Memory Resources • 567
dpmlpar setresources Command--Add Processor Resources • 569
dpmlpar setresources Command--Subtract Memory Resources • 572
dpmlpar setresources Command--Subtract Processor Resources • 574
dpmlpar setresources Command--Update Memory Resources • 577
dpmlpar setresources Command--Update Processor Resources • 578
dpmlpar-cycle Command--Cycle a Logical Partition (Funclet) • 300

dpmlpar-delete Command--Delete a Logical Partition (Funclet) • 304
dpmlpar-getresources Command--Get LPAR Resources (Funclet) • 305
dpmlpar-image Command--Create an IBM AIX LPAR (Funclet) • 307
dpmlpar-imgjobcheck Command--Retrieve Status of IBM AIX Imaging Job (Funclet) • 316
dpmlpar-list Command--List HMC Resources (Funclet) • 317
dpmlpar-setresources Command--Add Memory Resources (Funclet) • 319
dpmlpar-setresources Command--Add Processor Resources (Funclet) • 321
dpmlpar-setresources Command--Subtract Memory Resources (Funclet) • 323
dpmlpar-setresources Command--Subtract Processor Resources (Funclet) • 325
dpmmscs bringgrouponline Command--Bring a Resource Group Online • 593
dpmmscs bringresourceonline Command--Bring a Resource Online • 594
dpmmscs getclusterinfo Command--Get Information of a Cluster • 581
dpmmscs getgroupresourcesinfo Command--Get Resource Information of a Cluster group • 582
dpmmscs getnetworkinterfacesinfo Command--Get Network Interface Information • 584
dpmmscs getnetworksinfo Command--Get Network Information • 585
dpmmscs getnodesinfo Command--Get Cluster Nodes Information • 586
dpmmscs getresourcegroupsinfo Command--Get Cluster Resource Groups Information • 587
dpmmscs getresourcesdependenciesinfo Command--Get Dependency Information of Resources • 588
dpmmscs getresourcetypesinfo Command--Get Cluster Resource Types Information • 589
dpmmscs getservicesinfo Command--Get Cluster Services Information • 590
dpmmscs movegroup Command--Move a Resource Group to another Node • 591
dpmmscs pauseservice Command--Pause a Cluster Service • 592
dpmmscs resumeservice Command--Resume a Cluster Service • 596
dpmmscs startservice Command--Start a Cluster Service • 597
dpmmscs stopservice Command--Stop a Cluster Service • 598
dpmmscs takegroupoffline Command--Take a Resource Group Offline • 599
dpmmscs takeresourceoffline Command--Take a Resource Offline • 600
dpmpolicy createdefaultactions Command--Create Default Actions • 741
dpmpolicy exportaction Command--Export Actions to a File • 742
dpmpolicy exportrule Command--Export Rules to a File • 743
dpmpolicy findbestmachine Command--Find the Best Server • 744
dpmpolicy findcandidatemachine Command--Find the Candidate Servers • 745
dpmpolicy getruleexeccount Command--Retrieve rule execution count • 747
dpmpolicy importaction Command--Import Actions from a File • 748
dpmpolicy importrule Command--Import Rules from a File • 749
dpmpolicy resetruleexeccount Command--Reset Retries to Run a Rule • 750
dpmpolicy runaction Command--Run an Action • 752
dpmpolicy setruleexeclimit Command--Set Limits for a Rule • 754
dpmresourcemgr addbaremetal Command--Add a Physical Computer • 759
dpmresourcemgr addcomputertonetwork Command--Add Server to Network • 760
dpmresourcemgr addipaddresspool Command--Add IP Address Pools • 762
dpmresourcemgr addmachinestoservice Command--Add Servers to a Service • 763
dpmresourcemgr addtocontainer Command--Add Content to a Container • 765
dpmresourcemgr createcontainer Command--Create a Container • 765
dpmresourcemgr createdatacenter Command--Create a Data Center • 766
dpmresourcemgr createdefaultservice Command--Create Default Service • 767
dpmresourcemgr createipnetwork Command--Create Network • 769
dpmresourcemgr createresourcegroup Command--Create Resource Group • 771
dpmresourcemgr createresourcetemplate Command--Create Server Group Template • 772

dpmresourcemgr createservice Command--Create a Service • 773
dpmresourcemgr deletebaremetal Command--Delete a Physical Computer • 775
dpmresourcemgr deletecontainer Command--Delete a Container • 776
dpmresourcemgr deleteipnetworks Command--Delete a Network • 777
dpmresourcemgr deletesystem Command--Delete a System • 778
dpmresourcemgr getdiscoverednetworks Command--Get Discovered Networks • 779
dpmresourcemgr getipaddresspools Command--List IP Address Pools • 779
dpmresourcemgr getipnetworks Command--List Networks • 781
dpmresourcemgr getserverlist Command--Get a List of Servers • 781
dpmresourcemgr getservicelist Command--Get List of Services • 782
dpmresourcemgr getsubnetdefaults Command--List Subnet Defaults • 806
dpmresourcemgr removecomputerfromipnetwork Command--Remove Server From Network • 784
dpmresourcemgr removefromcontainer Command--Remove Content from a Container • 785
dpmresourcemgr removeipaddresspool Command--Remove IP Address Pool • 786
dpmresourcemgr removemachinesfromservice Command--Remove Servers From a Service • 787
dpmresourcemgr removeresourcegroup Command--Remove Resource Group • 788
dpmresourcemgr removeservice Command--Remove a Service • 789
dpmresourcemgr removesourcetemplate Command--Remove Resource Template • 790
dpmresourcemgr retrieveresourcegroup Command--Retrieve Resource Group • 791
dpmresourcemgr retrieveresourcetemplate Command--Retrieve Resource Template • 792
dpmresourcemgr setcontainername Command--Set Container Name • 793
dpmresourcemgr setcontainerservice Command--Set Container to a Service • 794
dpmresourcemgr setmanagementip Command--Set the Management IP for a Host • 796
dpmresourcemgr setmanagementstatus Command--Set the Management Status for a Host • 797
dpmresourcemgr setserviceproperties Command--Set Service Properties • 798
dpmresourcemgr updateipaddresspool Command--Update IP Address Pool • 807
dpmresourcemgr updateipnetwork Command--Update a Network • 803
dpmresourcemgr updateresourcegroup Command--Update Resource Group • 799
dpmresourcemgr updateresourcetemplate Command--Update Resource Template • 800
dpmresourcemgr updateservice Command--Update a Service • 802
dpmresourcemgr updatesubnetdefaults Command--Update Network Defaults • 804
dpmrpt schedulereport Command--Schedule a Report • 723
dpmssh run Command--Run Remote Shell Commands or Scripts • 725
dpmucs associateserviceprofile--Associate Service Profile With a Blade • 632
dpmucs cloneserviceprofile--Clone a Service Profile • 633
dpmucs createmacpool Command--Create MAC Address Pool • 634
dpmucs createorg Command--Create Organization • 636
dpmucs createserverpool Command--Create Server Pool • 637
dpmucs createserviceprofile Command--Create a Service Profile • 639
dpmucs createtemplatefromserviceprofile Command--Create a Template from a Service Profile • 640
dpmucs createuuidpool Command--Create UUID Pool • 642
dpmucs createwwpool Command--Create WWNN Pool • 643
dpmucs deletemacpool Command--Delete MAC Address Pool • 645
dpmucs deleteorg Command--Delete Organization • 646
dpmucs deleteserverpool Command--Delete Server Pool • 648
dpmucs deleteserviceprofile--Delete a Service Profile • 649

dpmucs deleteuuidpool Command--Delete UUID Pool • 650
dpmucs deletewwpool Command--Delete WWNN Pool • 651
dpmucs deployimage Command--Deploy a Cisco UCS Image • 653
dpmucs disassociateserviceprofile Command--Disassociate Service Profile • 655
dpmucs failoverserviceprofile Command--Associate a Service Profile With a Blade for Failover • 656
dpmucs getblades Command--Get Blade Information • 657
dpmucs getchassis Command--Get Chassis Information • 659
dpmucs getpolicy Command--Gets Policy from a UCS Manager • 660
dpmucs getserviceprofilestatus Command--Get Service Profile Status • 661
dpmucs getswitches Command--Get Switch Information • 662
dpmucs gettopsystem Command--Get System Information • 664
dpmucs listserviceprofiles Command--List Service Profiles • 665
dpmucs powercycle Command--Power Cycle Blades • 666
dpmucs renamepool Command--Rename Pool • 668
dpmucs serviceprofileupdate Command--Execute Service Profile Operations • 669
dpmutil -amq Command--Configure the ActiveMQ Message Broker • 672
dpmutil ecs Command--Configure Windows Scheduler • 673
dpmutil eiam Command--Configure CA EEM • 674
dpmutil -hd Command--Configure Help Desk • 674
dpmutil -hmc Command--Configure HMC or IVM Server • 675
dpmutil -hyperv Command--Configure Hyper-V Server • 676
dpmutil mgmtdb Command--Configure Management Database • 676
dpmutil -perfdb Command--Configure the Performance Database • 677
dpmutil remotevcaim Command--Configure Remote VC AIM • 678
dpmutil -sc Command--Configure the Service Controller • 679
dpmutil -scvmmserver Command--Configure SCVMM Server • 680
dpmutil -snmp Command--Configure SNMP • 681
dpmutil Syntax • 671
dpmutil -systemcredential Command--Configure External System Credentials • 682
dpmutil -sysuser Command--Configure Local Credentials Used at Service Startup • 683
dpmutil vcdefault Command--Configure Default VMware vCenter Administrator User • 684
dpmutil vcserver Command--Configure VMware vCenter • 685
dpmutil -vioserver Command--Configure VIO Server • 686
dpmvc addesxhost Command--Add an ESX Host • 384
dpmvc addvmvdisk Command--Add Virtual Disk • 386
dpmvc addvmvnic Command--Add Virtual NIC • 388
dpmvc clone Command--Clone a VM • 391
dpmvc createdatastore Command--Create a Datastore • 399
dpmvc cycle Command--Cycle a VM • 401
dpmvc datastore Command--Get Data Store Properties • 405
dpmvc delete Command--Destroy a VM • 407
dpmvc distributedswitch Command--Manage Virtual Distributed Switches • 410
dpmvc entermaintenancemode Command--Set to the Maintenance Mode • 415
dpmvc exitmaintenancemode Command--Exit the Maintenance Mode • 417
dpmvc faulttolerance Command--Specify Fault Tolerant Operations • 419
dpmvc getavailablescsidisks Command--Get Available SCSI Disks • 421
dpmvc gethosthba Command--Get Host Bus Adapters • 422
dpmvc getresources Command--Get VM Resources • 423
dpmvc getshares Command--Get VM Shares • 426
dpmvc getsnapshots Command--Get VM Snapshots • 428
dpmvc imgjobcheck Command--Get Clone Job Status • 430
dpmvc migrate Command--Migrate a VM • 433
dpmvc removedatastore Command--Remove a Datastore • 436
dpmvc removevmvdisk Command--Remove Virtual Disk • 437

dpmvc removevmvnic Command--Remove Virtual NIC • 439
dpmvc setcpu Command-- Set CPUs for a VM • 441
dpmvc setmemory Command-- Set memory size for a VM • 443
dpmvc setresources Command--Set VM Resources • 445
dpmvc setshares Command--Set VM Shares • 448
dpmvc snapshot Command--Manage Snapshots • 452
dpmvc templatetovm Command--Convert Template to VM • 457
dpmvc vapp Command--Manage vApp • 194, 460
dpmvc virtualswitch Command--Manage Virtual Switches • 464
dpmvc vmtotemplate Command--Convert VM to Template • 468
dpmvc-addesxhost Command--Add an ESX Host (Funclet) • 160
dpmvc-addvmvdisk Command--Add Virtual Disk (Funclet) • 161
dpmvc-addvmvnic Command--Add Virtual NIC (Funclet) • 163
dpmvc-clone Command--Clone a VM (Funclet) • 164
dpmvc-createdatastore Command--Create a Datastore (Funclet) • 171
dpmvc-cycle Command--Cycle a VM (Funclet) • 172
dpmvc-datastore Command--Get Data Store Properties (Funclet) • 173
dpmvc-delete Command--Destroy a VM (Funclet) • 174
dpmvc-distributedswitch Command--Manage Virtual Distributed Switches (Funclet) • 175
dpmvc-entermaintenancemode Command--Set to the Maintenance Mode (Funclet) • 178
dpmvc-exitmaintenancemode Command--Exit the Maintenance Mode (Funclet) • 179
dpmvc-faulttolerance Command--Specify Fault Tolerant Operations (Funclet) • 180
dpmvc-getavailablescsidisks Command--Get Available SCSI Disks (Funclet) • 181
dpmvc-gethosthba Command--Get Host Bus Adapters (Funclet) • 182
dpmvc-getresources Command--Get VM Resources (Funclet) • 182
dpmvc-getshares Command--Get VM Shares (Funclet) • 183
dpmvc-getsnapshots Command--List Snapshots of a VM (Funclet) • 184
dpmvc-imgjobcheck Command--Get Clone Job Status (Funclet) • 185
dpmvc-migrate Command--Migrate a VM (Funclet) • 185
dpmvc-removedatastore Command--Remove a Datastore (Funclet) • 186
dpmvc-removevmvdisk Command--Remove Virtual Disk (Funclet) • 187
dpmvc-removevmvnic Command--Remove Virtual NIC (Funclet) • 188
dpmvc-setresources Command--Set VM Resources (Funclet) • 188
dpmvc-setshares Command--Set VM Shares (Funclet) • 189
dpmvc-snapshot Command--Manage Snapshots (Funclet) • 191
dpmvc-templatetovm Command--Convert Template to VM (Funclet) • 192
dpmvc-virtualswitch Command--Manage Virtual Switches (Funclet) • 197
dpmvc-vmtotemplate Command--Convert VM to Template (Funclet) • 199
dpmvc-wait Command--Time to Wait for a Job (Funclet) • 199
dpmzone associateproject Command--Associate a Task with a Project • 601
dpmzone clonezone Command--Clone a Zone • 602
dpmzone createandinstallzone Command--Create and Install a Zone • 603
dpmzone createpool Command--Create Resource Pool • 606
dpmzone createproject Command--Create a Project • 608
dpmzone createzone Command--Create a Zone • 609
dpmzone customcommand Command--Run a Custom Command • 612
dpmzone deleteproject Command--Delete a Project • 613
dpmzone deletezone Command--Delete a Zone • 614
dpmzone installzone Command--Install a Zone • 615
dpmzone movezone Command--Move a Zone • 616
dpmzone rebootzone Command--Reboot a Zone • 617
dpmzone renamezone Command--Rename a Zone • 618
dpmzone setpoolscheduler Command--Set the Pool Scheduler • 619

dpmzone setprocessorset Command--Set the Maximum Number of CPUs for a Processor Set • 620
dpmzone showinterfaces Command--Show Network Interfaces • 621
dpmzone showpools Command--Show Resource Pools • 622
dpmzone showprojects Command--List the Properties of a Project • 623
dpmzone showresourceset Command--Show Resource Sets • 623
dpmzone showtasks Command--List the Tasks of a Project • 624
dpmzone showzoneinterfaces Command--Show Network Interfaces of a Zone • 625
dpmzone showzoneprocess Command--Show Processes of a Zone • 626
dpmzone showzoneprojects Command--Show Projects of a Zone • 626
dpmzone showzones Command--Show Zones • 627
dpmzone startzone Command--Start a Zone • 628
dpmzone stopzone Command--Stop a Zone • 629
dpmzone uninstallzone Command--Uninstall a Zone • 630
dpmzone-associateproject Command--Associate a Task with a Project (Funclet) • 327
dpmzone-clonezone Command--Clone a Zone (Funclet) • 328
dpmzone-createandinstallzone Command--Create and Install a Zone • 329
dpmzone-createpool Command--Create a Resource Pool (Funclet) • 332
dpmzone-createproject Command--Create a Project (Funclet) • 333
dpmzone-createzone Command--Create a Zone (Funclet) • 334
dpmzone-customcommand Command--Run a Custom Command (Funclet) • 336
dpmzone-deleteproject Command--Delete a Project (Funclet) • 336
dpmzone-deletezone Command--Delete a Zone (Funclet) • 337
dpmzone-installzone Command--Install a Zone (Funclet) • 337
dpmzone-movezone Command--Move a Zone (Funclet) • 338
dpmzone-rebootzone Command--Reboot a Zone (Funclet) • 339
dpmzone-renamezone Command--Rename a Zone (Funclet) • 339
dpmzone-setpoolscheduler Command--Set the Pool Scheduler (Funclet) • 340
dpmzone-setprocessorset Command--Set the Maximum Number of CPUs for a Processor Set (Funclet) • 341
dpmzone-showinterfaces Command--Show Network Interfaces (Funclet) • 341
dpmzone-showpools Command--Show Resource Pools (Funclet) • 342
dpmzone-showprojects Command--List the Properties of a Project (Funclet) • 342
dpmzone-showresourceset Command--Show Resource Sets (Funclet) • 343
dpmzone-showtasks Command--List the Tasks of a Project (Funclet) • 343
dpmzone-showzoneinterfaces Command--Show Network Interfaces of a Zone (Funclet) • 344
dpmzone-showzoneprocess Command--Show Processes of a Zone (Funclet) • 344
dpmzone-showzoneprojects Command--Show Projects of a Zone (Funclet) • 345
dpmzone-showzones Command--Show Zones (Funclet) • 345
dpmzone-startzone Command--Start a Zone (Funclet) • 346
dpmzone-stopzone Command--Stop a Zone (Funclet) • 346
dpmzone-uninstallzone Command--Uninstall a Zone (Funclet) • 347

E

Event Commands • 711
exit, quit Commands--Terminate an AutoShell Session (Cmdlets) • 65
external Command--Declare a Native External Function (Cmdlet) • 65

G

General AutoShell Commands • 47
General Shell Commands • 715
get-autoShellClassInfo Command--Display Methods and Properties for Autoshell Native Classes (Cmdlet) • 66
gete--Get Environment Variable (Function) • 112
get-help Command--Get Help Information (Funclet) • 67

get-remoteResult Command--Get Result from a Remote Target (Funclet) • 68
get-webServiceInfo Command--Display WSDL Info (Cmdlet) • 69

H

help Command--Request Help Information (Cmdlet) • 69
Help Desk Commands • 726

I

IBM HACMP Cluster Metrics • 829
IBM HACMP Network Metrics • 830
IBM HACMP Node Metrics • 829
IBM HACMP Resource Group Metrics • 829
Imaging Commands • 734
Introduction • 15
Invoking AutoShell • 26
ism-applyPolicies Command--Apply Policies to a Group of Hosts (Funclet) • 348
ism-applyPoliciesAndTemplates Command--Apply Policies and Templates to a Group of Hosts (Funclet) • 351
ism-applyPoliciesAndTemplatesForService Command--Apply Policies and Templates to all Systems (Funclet) • 354
ism-applyPoliciesForService Command--Apply Policies to all Systems (Funclet) • 352
ism-applyPolicyForService Command--Apply a Policy to all Systems (Funclet) • 347
ism-applyPolicyTemplates Command--Apply Policy Templates to a Group of Hosts (Funclet) • 350
ism-applyPolicyTemplatesForService Command--Apply Policy Templates to all Systems (Funclet) • 353
ism-applyPolicyWait Command--Apply a Policy and Wait (Funclet) • 349
ism-cancelJob Command--Cancel a Job (Funclet) • 355
ism-copyPolicy Command--Copy a Policy (Funclet) • 356
ism-copyPolicyTemplate Command--Copy a Policy Template (Funclet) • 376
ism-createJobTemplate Command--Create a Job Template (Funclet) • 356
ism-deleteJobTemplate Command--Delete a Job Template (Funclet) • 357
ism-deletePolicy Command--Delete a Policy (Funclet) • 357
ism-deletePolicyTemplate Command--Delete a Policy Template (Funclet) • 377
ism-deployPackageToHost Command--Deploy a Package to a Host (Funclet) • 358
ism-deployTemplate Command--Deploy Packages from a Template (Funclet) • 359
ism-deployTemplateForService Command--Deploy Template Packages in a Service (Funclet) • 361
ism-deployTemplateToHost Command--Deploy Template Packages on a Host (Funclet) • 362
ism-encryptString Command--Encrypt a String (Funclet) • 363
ism-listComputerSystems Command--Displays all Computer Systems (Funclet) • 364
ism-listDeployedSystems Command--List all Hosts With a Package Deployed (Funclet) • 364
ism-listJobs Command--List all Jobs (Funclet) • 365
ism-listJobStatus Command--List a Job Status (Funclet) • 365
ism-listJobTemplates Command--List all Job Templates (Funclet) • 366
ism-listPackages Command--List all Packages (Funclet) • 366
ism-listPolicies Command--List all Policies (Funclet) • 366
ism-listPolicyStatus Command--List a Policy Status (Funclet) • 367
ism-listPolicyTemplate Command--List all Policy Templates (Funclet) • 381
ism-listPolicyTemplateStatus Command--List a Policy Template Status (Funclet) • 377
ism-listServiceSystems Command--List all Computer Systems in Services (Funclet) • 367
ism-listSysEdgeConfig Command--List the SystemEDGE Configuration (Funclet) • 368
ism-listSystemPolicies Command--List all Policies (Funclet) • 370
ism-listSystemPoliciesForService Command--List all Policies in a Service (Funclet) • 368
ism-listTemplateEulas Command--Display EULAs in a Template (Funclet) • 369
ism-removePolicyTemplate Command--Remove a Policy Template (Funclet) • 378
ism-renamePolicy Command--Rename a Policy (Funclet) • 369
ism-renamePolicyTemplate Command--Rename a Policy Template (Funclet) • 379

ism-setMaintenanceMode Command--Set the Maintenance Mode of a Host (Funclet) • 370
ism-setMaintenanceModeForService Command--Set the Maintenance Mode in a Service (Funclet) • 371
ism-setSysEdgeLogLevel Command--Set the SystemEDGE Log Level (Funclet) • 372
ism-setSysEdgeLogLevelForService Command--Set the SystemEDGE Log Level in a Service (Funclet) • 372
ism-updateAllExceptionSystems Command--Apply the Latest Policy (Funclet) • 373
ism-updateAllOldPolicies Command--Update all Old Policies (Funclet) • 373
ism-updateAllPolicies Command--Update all Policies (Funclet) • 374
ism-updateAllUpToDateSystems Command--Update all Up-To-Date Systems (Funclet) • 374
ism-updateExceptionSystems Command--Apply the Latest Policy (Funclet) • 374
ism-updateExceptionSystemsTemplate Command--Apply the Latest Policy Template (Funclet) • 379
ism-updateOldSystems Command--Update an old Policy (Funclet) • 375
ism-updateOldSystemsTemplate Command--Update all Old System Templates (Funclet) • 380
ism-updatePolicies Command--Update Configuration of a Policy (Funclet) • 375
ism-updateSystemsTemplate Command--Apply a System Template (Funclet) • 380
ism-updateUpToDateSystems Command--Reapply a Policy (Funclet) • 376
ism-updateUpToDateSystemsTemplate Command--Reapply a System Template (Funclet) • 381

L

Log File Settings • 820
Log Files • 817
Log Files Available • 818

M

Manager Shell and Client Shell • 21
memoRead--Read a Text File Into a String (Function) • 113
memoWrit--Write a String to a File (Function) • 114
mkdir Command--Create a Directory (Cmdlet) • 70
mv, ren Commands--Move Files and Directories (Funclets) • 72

N

new-comObject Command--Instantiate a COM Object (Funclet) • 74
new-SSHSession Command--Create a new Secure SSH Session (Funclet) • 76
new-webService Command--Create a Web Service Object (Funclet) • 78

O

objdump Command--Display Enumerable Properties of an Object (Cmdlet) • 79
OSRedirect Class • 135
OSRedirect.clear Method • 136
OSRedirect.errorOccurred Method • 137
OSRedirect.errout Method • 138
OSRedirect.hasCompleted Method • 139
OSRedirect.onCompleted Method • 140
OSRedirect.onError Method • 140
OSRedirect.OSRedirect Constructor • 136
OSRedirect.output Method • 141
OSRedirect.receivedErrOutput Method • 142
OSRedirect.receivedOutput Method • 142
OSRedirect.receivedResult Method • 143
OSRedirect.result Method • 144

P

Performance Metrics • 821
platform--Query Operating System Type (Function) • 114
Policy Commands • 741
Policy Configuration • 756
Processor Pools • 825
Processor Pools Support • 825
push-client Command--Install the Autoshell Client on a Remote Windows System (Funclet) • 79
push-winRemote Command--Copy and Execute on Multiple Remote Windows Systems (Funclet) • 81
pute--Set an Environment Variable (Function) • 115
PW_GET Command--Input Hidden Data (Funclet) • 83
pwd Command--Print Name of Working Directory (Cmdlet) • 84

Q

qout--Write Output Followed by Linefeed to stdout (Function) • 116
qqout--Write Output to stdout (Function) • 117
query-service Command--Query the Status of a Windows Service (Funclet) • 85

R

Reading Data from the Keyboard (stdin) • 33
regCreateKey--Create a Registry Key (Function) • 118
regCreateSubkeys--Create Subkeys From an Array (Function) • 119
regDeleteKey--Delete a Registry Key or a Key Hierarchy (Function) • 120
regDeleteVal--Delete a Registry Value (Function) • 121
regGetKeyValues--Get Registry Key Value Information (Function) • 122
regGetSubKey--Retrieve Sub Keys of a Registry Key (Function) • 124
regGetVal--Get Registry Value (Function) • 126
regIsKey--Check the Existence of a Registry Key (Function) • 127
regIsVal--Check the Existence of a Registry Value (Function) • 128
regSetKeyValues--Set Registry Key Values From an Array (Function) • 129
regSetVal--Set Registry Value (Function) • 130
Related Publications • 15
rem-client Command--Remove the Autoshell Client from a Remote Windows System (Funclet) • 86
Remote Batch Mode • 30
Remote Monitoring Commands • 808
Remote Monitoring Performance Metrics • 868
RemoteTarget Class • 145
RemoteTarget.abort Method • 148
RemoteTarget.createRemoteContext Method • 148
RemoteTarget.destroyRemoteContext Method • 149
RemoteTarget.errorOccurred Method • 150
RemoteTarget.execute Method • 151
RemoteTarget.getError Method • 152
RemoteTarget.getHostName Method • 154
RemoteTarget.hasCompleted Method • 154
RemoteTarget.onError Method • 155
RemoteTarget.output Method • 156
RemoteTarget.receivedOutput Method • 156
RemoteTarget.receivedResult Method • 157
RemoteTarget.RemoteTarget Constructor • 146
RemoteTarget.result Method • 158
RemoteTarget.wasAborted Method • 159
Resource Manager Commands • 759
Retrieve Antecedents and Dependents From CIM Objects • 23
Retrieve CIM Classes • 22
Retrieve CIM Objects • 24
rmdir Command--Remove Directory (Funclet) • 88
rmonwatch add Command--Add Rows to a MIB Table • 808
rmonwatch del Command--Delete Rows from a MIB Table • 810
rmonwatch getTable Command--View rmonWbem MIB Tables • 812
rmonwatch getVersion Command--View Version Information • 814
run-client Command--Run the Autoshell Client on a Remote Windows System (Funclet) • 90
run-local Command--Execute a Script on the Local System (Funclet) • 91
Running Scripts • 35
run-remote Command--Execute a Script on Remote Systems (Funclet) • 93
run-SSHCommand Command--Run a Remote Command Through SSH (Funclet) • 97
run-SSHShell Command--Run an Interactive SSH Command Line (Funclet) • 100
run-winRemote Command--Execute a Command on Multiple Remote Windows Systems (Funclet) • 102

S

Scope of This Guide • 15
set alternate to Command--Set Alternate Output File (Cmdlet) • 104
set console Command--Suppress Console Output (Cmdlet) • 105
set result display on/off Command--Turn Automatic Result Display On or Off (Cmdlet) • 106
setProcExitCode--Set AutoShell Exit Code (Function) • 131
shellType--Query AutoShell Type (Function) • 132
Solaris Zones CPU Metrics • 835
Solaris Zones Maximum Swap Metrics • 836
Solaris Zones Memory Metrics • 836
Solaris Zones Metrics • 835
Solaris Zones Project Metrics • 837
Solaris Zones Resource Pool Metrics • 837

Solaris Zones Server CPU Metrics • 835
Solaris Zones Server Disk Metrics • 833
Solaris Zones Server Memory Metrics • 834
Solaris Zones Server Metrics • 832
Solaris Zones Server Network Metrics • 834
Solaris Zones Shared Memory Metrics • 837
start-java Command--Start Java Virtual Machine (Cmdlet) • 108
start-service Command--Start a Windows Service on a Remote or Local System (Funclet) • 106
stop-service Command--Stop a Windows Service on a Remote or Local System (Funclet) • 107
Stringification • 31

T

The Pool Capacity • 826
typeName--Get the Type Name of an Expression (Function) • 133

U

Use Interactive Mode • 28
Use Remote Interactive Mode • 29
Using the OSRedirect Class • 34
Using the RemoteTarget Class • 39
Using the run-local Command • 36
Using the run-remote Command • 38

V

Valid AutoShell User • 21
VMware VC Cluster • 858
VMware VC Compute Resource • 859
VMware VC Datastore • 858
VMware VC ESX Host • 850
VMware VC ESX Host CPU • 850
VMware VC ESX Host Disk • 851
VMware VC ESX Host Memory • 852
VMware VC ESX Host Network • 852
VMware VC ESX Host per CPU • 853
VMware VC Resource Pool • 859
VMware VC Server • 861
VMware VC VM • 853
VMware VC VM CPU • 854
VMware VC VM Disk • 855
VMware VC VM Memory • 856
VMware VC VM Network • 857

W

wait Command--Wait for a Key Press (Cmdlet) • 109
weak external Command--Declare Native External Function (Cmdlet) • 109
Writing Data to the Console (stdout) • 32