

CA Server Automation

Release Notes

Release 12.8



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 © 2013 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 may reference the following CA Technologies products and components or third-party components:

- CA Configuration Automation, formerly CA Application Configuration Manager (CA ACM)
- CA eHealth®
- CA Embedded Entitlements Manager (CA EEM)
- CA IT Asset Manager (CA ITAM)
- CA IT Client Manager (CA ITCM)
- CA Network and Systems Management (CA NSM)
- CA Network Automation™
- CA Patch Manager
- CA Process Automation, formerly CA IT Process Automation Manager (CA IT PAM)
- CA Server Automation
- CA Service Desk Manager (CA SDM)
- CA Software Delivery, a component of CA IT Client Manager
- CA Spectrum® Infrastructure Manager (CA Spectrum)
- CA SystemEDGE
- Racemi DynaCenter®

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	7
Chapter 2: System Requirements	9
Manager Requirements	9
Hardware Requirements	9
Software Requirements	10
Optional Software Requirements	14
Solaris Systems for JumpStart Provisioning	16
CA Server Automation AIM Server and Managed Node Requirements	16
Hardware Requirements for Managed Nodes and AIM Servers	17
SystemEDGE Operating System Support	17
CA Server Automation AIM Operating System Support	20
CA Systems Performance LiteAgent Operating System Support	22
Supported Integration Platforms	24
Active Directory and Exchange Server	24
Cisco Unified Computing System (UCS)	24
Citrix XenDesktop	25
Citrix XenServer	25
Huawei GalaX	25
IBM PowerHA for AIX	25
IBM PowerVM (Logical Partitions, LPAR)	25
Microsoft Cluster (MSCS)	26
Microsoft Hyper-V Server	27
Oracle Solaris Zones	27
Red Hat Enterprise Virtualization	27
VMware vCenter Server	27
VMware vCenter Site Recovery Manager	28
VMware vCloud	28
Internationalization (i18n)	29
Chapter 3: New Features and Enhancements	35
Citrix XenDesktop AIM	35
Documentation	36
CA Process Automation FlexPod Use Cases	36
O-NR-1 Attach VLAN to a Storage Controller	37
O-NR-2 Attach VLAN to the UCS Environment	38

O-NR-5 Attach VLAN to the ESX Environment	38
O-RM-1 Provide Fiber Channel Storage to a Service Profile	39
O-RM-2 Deploy Fiber Channel FlexClone LUN to Service Profile	40
O-RM-4 Deploy Fiber Channel Boot Platform with FlexClone	42
Huawei GalaX	43
Key Performance Database	43
Oracle Solaris Zones	44
Reservation Manager (New Features and Enhancements)	44
Software Requirements	45
User Interface.....	45
VMware vCenter	45
Chapter 4: Patches and Published Fixes	47
Chapter 5: Documentation	49
Related Publications.....	49
Chapter 6: Known Issues	51
CA Process Automation Security Vulnerability	52
CA Network Automation Scripts Fail on a Cisco 5k Switch Device	53
"Field Set detected" Warning When Selecting Start Request Form.....	54
CA Process Automation Action Does Not Support Environment Variable Substitution By Default	55
Localized Service Desk Template Name is Truncated	55
Mozilla Firefox Automatic Upgrade	56
Appendix A: Acknowledgements	57
Third-Party Software Acknowledgments	57

Chapter 1: Introduction

The *Release Notes* provide the new and enhanced features in this release, product requirements, and known issues.

For the most recent CA Server Automation Release Notes, see the [bookshelf](#) at CA Support Online.

Chapter 2: System Requirements

Your system must meet or exceed the requirements in this section for successful installation and operation of CA Server Automation.

This product relies on TCP/IP, SNMP, Domain Name Service (DNS) and other networking technologies. If these technologies are not available, failing, slow, or have incorrect or out-of-date information, product functionality can be adversely affected.

This section contains the following topics:

[Manager Requirements](#) (see page 9)

[Optional Software Requirements](#) (see page 14)

[CA Server Automation AIM Server and Managed Node Requirements](#) (see page 16)

[Supported Integration Platforms](#) (see page 24)

[Internationalization \(i18n\)](#) (see page 29)

Manager Requirements

This section provides details on the hardware and software requirements for a manager installation of CA Server Automation Release 12.8.

Hardware Requirements

The following hardware is required to implement distributed and nondistributed CA Server Automation component implementations.

- CPU: Intel Xeon 51xx 2.6 GHz or equivalent, or Intel Core 2 Duo 2.6 GHz or equivalent

Note: The CPU requirements also apply to client desktops/workstations running the CA Server Automation web browser-based UI.

- RAM:
 - 4 GB for deployments managing up to 1,000 systems
 - 8 GB on a 64-bit operating system for deployments managing up to 5,000 systems
 - 16 GB on a 64-bit operating system for deployments managing more than 5,000 systems
- Network Interface Controller (NIC): 100 Mbps or more
- Free disk space for main installation drive: 30 GB

- Free disk space for drive with databases: 30 GB

Note: In addition, the Performance Chart data collection can require up to 3.5 GB of disk space and 2 GB of RAM on the manager, depending on the number of machines and metrics being monitored.

- Free disk space for upgrade: >30 GB, depending on the size of the existing database

Note: The disk space for the drive holding the databases is required wherever you have configured Microsoft SQL Server to store the databases for this product. The drive can be anywhere: on the same drive that is used for the product installation, on a different drive, or on a different system. If the drive is on the same drive as the product installation, the required free disk space is the sum of the two values. The product databases grow in size depending on the product usage, potentially consuming 30 GB or more, depending on the maintenance that is being done.

Important! If you install CA Server Automation with other CA products, consider the combined impact and adjust the hardware specifications accordingly. For example, if you install CA Server Automation (4-GB RAM) and CA Service Desk Manager (3-GB RAM) on one server, use a server with minimum 7-GB RAM. Review integration product Release Notes on the CA Support Online website: <http://supportconnect.ca.com>.

Software Requirements

This section provides information about the software that is required to implement distributed and nondistributed components.

Manager on Windows

The CA Server Automation manager supports and is certified for the following operating systems:

- Windows Server 2008 Standard, Enterprise, and Datacenter Edition (x86, x64), SP2 optional
- Windows Server 2008 R2 Standard, Enterprise, and Datacenter Edition (x86, x64), SP1 optional
- Windows Server 2012 Standard and Datacenter Edition (x64)

CA Server Automation supports the following Windows versions only for new SystemEDGE installations:

- Windows Server 2003 SP2 and 2003 R2 SP2 Standard, Enterprise, and Datacenter Edition (x86, x64)

The [compatibility matrix](#) on the CA Support Online website provides the most current list of supported operating environments.

Note: For seamless time zone operation, verify that your distributed computing environment is synchronized to a common time source (for example, NTP server, GPS).

Database Requirements

CA Server Automation uses Microsoft SQL Server as its database. Because CA Server Automation integrates with other CA products, review the database requirements for integration products.

This release supports and is certified for the following versions:

- 2008 R2 (32 bit, 64 bit), Standard and Enterprise Editions, SP1 optional
- 2008 R2 Express (32 bit, 64 bit), Database with Management Tools, and Database with Advanced Services Editions, SP1 optional
- 2012 (32 bit, 64 bit), Standard and Enterprise Editions
- 2012 Express (32 bit, 64 bit), Database with Management Tools, and Database with Advanced Services Editions

SQL Server Tools (OSQL.EXE) are required on the manager system to connect to a local or remote SQL Server database.

Important! If you are upgrading an existing 12.6, 12.7, or 12.7.1 installation with SQL Server 2005 or SQL Server 2008, upgrade the SQL Server to a supported version. Then verify that the 12.6, 12.7, or 12.7.1 product is still operational and upgrade to CA Server Automation Release 12.8.

Note the following:

- For your convenience, SQL Server 2012 Express Edition (32 bit) is available on the CA Server Automation installation media at the following location:
DVD1\Installers\Windows\External\MSSQLExpress\SQLEXPRTWT_x86_ENU.exe.
- Named instances and SQL Server clusters are supported. Enable TCP/IP and use static port assignments for each instance. Dynamic ports are not supported.
- The system that is installed with the manager components also must have the SQL client (server tools) installed.
- After SQL Server Tools installation, verify that OSQL.EXE is installed properly to this location (if using the default install path):
 - MS SQL 2012 C:\Program Files\Microsoft SQL Server\110\Tools\Binn

Remote Databases

If you are using a remote database, the local system must have an appropriate matching version of the SQL Server Native Client.

Examples

- A remote 2008 R2, or R2 Express database requires a local 2008 R2 Native Client. A remote 2012 database requires a local 2012 Native Client.

The SQL Server Native Client is available from the Microsoft Download Center by searching, "Feature Pack for Microsoft SQL Server." Based on your *remote* database and operating environment, complete these steps:

1. Select the most recent appropriate version.
2. Download and install the appropriate module for your operating environment on your *local* system.

Example: ENU*<x86 or x64>*\sqlncli.msi

Browser Requirements

CA Server Automation supports the following browsers for the user interfaces. These web browsers are supported for the duration of their lifecycles (as determined by the manufacturer), or until CA Technologies ends support.

- Microsoft Internet Explorer 8.0, 9.0

Note: If you get the message, "A script on this page is causing Internet Explorer to run slowly," review Microsoft KB Article 175500.

- Mozilla Firefox 16.0, including all minor versions

CA Server Automation requires a supported browser with the Adobe Flash Player plug-in to display diagrams and charts. The following versions are supported:

- Adobe Flash Player versions 10.0, 11.1, 11.4

Note: CA Server Automation supports the major versions of the Adobe Flash Player. The minor versions can also work, but they are not certified.

Required CA Software

CA Server Automation requires the following software shipped with the installation media:

CA Embedded Entitlements Manager (CA EEM)

CA Server Automation distributes, supports, and is certified to work with the following CA EEM releases:

- CA EEM release 8.4 SP4 CR15 (8.4.415)
- CA EEM version 12.0 CR 07 (12.0.7.57 and later)
- CA EEM release 12.5 (12.5.0.7)

Note: If you use CA EEM version 12.0, the following functionality is not supported: CA EEM installation, CA EEM user creation using Native Security, and CA EEM configuration of LDAP service. To complete the mentioned actions, perform those procedures from the CA EEM UI and follow the CA EEM procedures.

Note: If you use CA EEM 12.5, CA EEM installation is not supported.

Note: CA EEM FIPS mode is not supported.

CA Server Automation also supports:

- All "CA EEM 8.4" sub-versions – from CA EEM 8.4 SP4 (8.4.244) up to and including the version we distribute, up to and including new "CA EEM 8.4" SP.
- CR sub-versions that ship after the release of this product.

If an insufficient version of CA EEM is detected during installation, the installation program displays the minimum and you can upgrade to a supported version.

To request support, or to certify this product with other versions of CA EEM, contact your CA representative.

Note: If your site has multiple instances of CA Server Automation or CA Virtual Assurance, the CA EEM server cannot be shared.

Note: If this product installs CA EEM, the "Use Transport Layer Security" option is not enabled by default. For additional security, log in to the CA EEM interface and select the TLS option on the Configuration tab.

CA Network Discovery Gateway

This software is required for system and network discovery.

SystemEDGE

CA Server Automation Release 12.8 distributes with SystemEDGE Release 5.8.

Release 5.x.y corresponds to CA Server Automation release 12.x.y.

Example: SystemEDGE 5.7.1 for CA Server Automation 12.7.1

Note: If the latest version of SystemEDGE is not already on your system, the installation program installs it. SystemEDGE is required for the CA Server Automation AIMs. AIMs are functional extensions to the SystemEDGE agent.

SystemEDGE Releases 4.3.4, 4.3.5, 4.3.6, 5.1.0, 5.6.0, 5.7.0, 5.7.1, and 5.8 are supported for managing remote servers in your environment.

Optional Software Requirements

You can use the following optional software with CA Server Automation:

CA Configuration Automation

Versions 12.6 SP1 are supported for change and configuration management.

CA ITCM

Version 12.5 SP1 is required for all server and software provisioning. The following patches also are required:

RO46533

This patch must be applied to the 12.5 SP1 DVD image.

RO49803

This patch is Feature Pack 1 for 12.5 SP1.

RO55831

This patch enables SAN-based provisioning for non-Windows platforms and provides the following support:

- Linux-based boot image deployment of the following ESX hypervisors: VMware ESXi 4.1 and VMware ESXi 5.1
- Linux-based boot image deployment of the following Linux operating systems: Red Hat Enterprise Linux 5.5, Red Hat Enterprise Linux 5.6, and Red Hat Enterprise Linux 6.2
- DSM agent or packager on Windows 8 and Windows Server 2012

CA Network Automation Server

Version 6.4 is required to provide functionality for Cisco routers and switches that run on the Cisco Internetwork Operating System (Cisco IOS) in an enterprise location.

CA Process Automation

CA Server Automation Release 12.8 is certified for:

- CA Process Automation Version 4.0 SP1 with CP level of CP02
- CA Process Automation Version 4.1

A 64-bit operating system is required.

Note: After installation, locate the file <PAM_Home>\server\c2o\bin\c2osvcw.conf, and increase its wrapper.java.maxmemory (heap) size from 1024 to 2048. Restart the PAM service and proceed to load CA Server Automation connectors. For more information about CA Process Automation requirements, see the *CA Process Automation Release Notes*.

CA SDM

Version 12.5 or higher is required to open help desk tickets.

Storage Management Support

CA Server Automation supports the following storage systems:

- EMC CLARiiON CX3 and CX4 Series Servers
- EMC Symmetrix VMAX 10K
- HP InForm OS 3.1.1
- IBM Storwize V7000 Version 6.3
- NetApp Data Fabric Manager (DMF) versions 4.0 and 4.0.2
- NetApp OnCommand Unified Management Core 5.1

VCE Vblock

EMC UIM Version 3.0

Important! CA Server Automation Vblock integration uses EMC® Ionix™ Unified Infrastructure Manager (UIM/P). VCE does not recommend provisioning the Vblock component using any non-UIM product. For example, CA Technologies does not recommend that you manage and provision a Cisco UCS Blade (Vblock UCS) using the UCS Manager directly or the CA Server Automation UCS PMM.

Solaris Systems for JumpStart Provisioning

CA Server Automation supports JumpStart provisioning of the following Solaris systems:

For SPARC-based systems:

- Solaris 8 Release 0204 (additional user configuration is required on the server)
- Solaris 9 (any release)
- Solaris 10 (any release)
- Flash Archives comprised of Solaris 8 0204, 9, or 10

For x86-based systems:

- Solaris 10 Release 1106 or newer
- Flash Archives comprised of Solaris 10 1106 or newer

CA Server Automation AIM Server and Managed Node Requirements

This section provides details on the hardware requirements and operating systems supported by an AIM Server or a Managed Node.

Hardware Requirements for Managed Nodes and AIM Servers

The hardware requirements for SystemEDGE and AIMs are as follows:

Minimum

CPU: Same as OS vendor

RAM: Same as OS vendor

Free disk space: 50 MB (Managed Node, SystemEDGE only *)

Free disk space: 250 MB (AIM Server with all CA Server Automation AIMs installed)

Network Interface Controller (NIC): 100 Mbps

Recommended

CPU: Same as OS vendor

RAM: Same as OS vendor

Free disk space: 150 MB or more (Managed Node, SystemEDGE only **)

Free disk space: 500 MB (AIM Server with all CA Server Automation AIMs installed)

Network Interface Controller (NIC): 100 Mbps or more

(*) The disk space requirement varies for UNIX and Windows platforms. For Windows installations, MSI installer requires the disk space to install SystemEDGE.

(**) Disk space requirements for runtime files increase when diagnostic traces are enabled. By default, the size of diagnostic trace is limited to 10 MB.

SystemEDGE Operating System Support

A system running SystemEDGE Release 5.8 requires one of the following operating systems:

Windows

- Windows Server 2003 SP2 Standard, Enterprise, Datacenter, and Small Business Server Edition (32 bit, x86)
- Windows Server 2003 R2 SP2 Standard, Enterprise, and Datacenter Edition (32 bit, x86)
- Windows Server 2003 SP2 Standard, Enterprise, Datacenter (64 bit, x64)
- Windows Server 2003 R2 SP2 Standard, Enterprise, and Datacenter Edition (64 bit, x64)
- Windows Server 2003 SP2 x64 Edition (64 bit)
- Windows Server 2008 Standard, Enterprise, and Datacenter Edition (32 bit, x86)
- Windows Server 2008 Standard, Enterprise, and Datacenter Edition (64 bit, x64)

- Windows Server 2008 R2 Standard, Enterprise, and Datacenter Edition (64 bit, x64)
- Windows Server 2012 Standard and Datacenter Edition (64 bit, x64)
- Windows XP Professional SP3 (32 bit, x86)
- Windows Vista SP1 Business, Enterprise, and Ultimate Edition (32 bit, x86)
- Windows Vista SP1 Business, Enterprise, and Ultimate Edition (64 bit, x64)
- Windows 7 Professional, Ultimate Edition (32 bit, x86)
- Windows 7 Professional, Ultimate Edition (64 bit, x64)

HP

- HP-UX 11.11 PA-RISC (64 bit)
- HP-UX 11.23 PA-RISC (64 bit)
- HP-UX 11.23 ia64 (64 bit)
- HP-UX 11.31 PA-RISC (64 bit)
- HP-UX 11.31 ia64 (64 bit)

IBM AIX

- IBM AIX Version 6.1 (64 bit)
- IBM AIX Version 7.1 (64 bit)

Linux

- Red Hat Linux Web Server, Advanced Server, and Enterprise Server 5.0 (32 bit, x86)
- Red Hat Linux Web Server, Advanced Server, and Enterprise Server 5.0 (64 bit, x64)
- Red Hat Enterprise Linux 6.0 (32 bit, x86)
- Red Hat Enterprise Linux 6.0 (64 bit, x64)
- SUSE Linux Enterprise Server 10.0 (32 bit, x86)
- SUSE Linux Enterprise Server 10.0 (64 bit, x64)
- SUSE Linux Enterprise Server 11 (32 bit, x86)
- SUSE Linux Enterprise Server 11 (64 bit, x64)
- Debian Linux Version 5.0 (Lenny) (32 bit, x86)
- Debian Linux Version 5.0 (Lenny) (64 bit, x64) - Legacy Mode Only
- Debian Linux Version 6.0 (Squeeze) (32 bit, x86)
- Debian Linux Version 6.0 (Squeeze) (64 bit, x64) - Legacy Mode Only

zLinux

- SUSE Linux Enterprise Server 10 (zSeries) - Legacy Mode Only
- SUSE Linux Enterprise Server 11 (zSeries) - Legacy Mode Only
- Red Hat Enterprise Server 5.0 (zSeries) - Legacy Mode Only
- Red Hat Enterprise Server 6.0 (zSeries) - Legacy Mode Only

Linux on pSeries

- SUSE Linux Enterprise Server 10
- SUSE Linux Enterprise Server 11
- Red Hat Enterprise Server 5.0
- Red Hat Enterprise Server 6.0

Solaris

Note: SystemEDGE supports all Solaris Zone configurations for the Solaris 10 and Solaris 11 operating systems.

- Solaris UltraSPARC 9 (64 bit)
- Solaris UltraSPARC 10 (64 bit)
- Solaris 9 (32 bit, x86)
- Solaris 10 (32 bit, x86)
- Solaris 10 (64 bit, x64)
- Solaris 11 (32bit, x86)
- Solaris 11 (64bit, x64)

Note: CA Server Automation-specific features such as deployment and configuration is not supported on all platforms.

CA Server Automation AIM Operating System Support

The SystemEDGE AIMs and Advanced Encryption shipped with CA Server Automation run on the following operating systems:

Windows: Advanced Encryption

- Windows XP Professional SP3 (32 bit, x86)
- Windows Vista Business, Enterprise, Ultimate SP1 (32 bit, x86)
- Windows Vista Business, Enterprise, Ultimate SP1 (64 bit, x64)
- Windows 7 Professional, Ultimate (32 bit, x86)
- Windows 7 Professional, Ultimate (64 bit, x64)
- Windows Server 2003 SP2 Standard, Enterprise, Datacenter, and Small Business Server Edition (32 bit, x86)
- Windows Server 2003 SP2 x64 Edition (64 bit)
- Windows Server 2003 R2 SP2 Standard, Enterprise, and Datacenter Edition (32 bit, x86)
- Windows Server 2003 R2 SP2 Standard, Enterprise, and Datacenter Edition (64 bit, x64)
- Windows Server 2008 Standard, Enterprise, and Datacenter Edition (32 bit, x86)
- Windows Server 2008 Standard, Enterprise, and Datacenter Edition (64 bit, x64)
- Windows Server 2008 R2 Standard, Enterprise, and Datacenter Edition (64 bit, x64)
- Windows Server 2012 Standard and Datacenter Edition (64 bit, x64)

Windows: Cisco UCS AIM, Huawei GalaX AIM, IBM LPAR AIM, IBM PowerHA AIM, KVM AIM, Remote Monitoring AIM, Solaris Zones AIM, vCenter Server AIM, vCloud AIM, XenServer AIM, XenDesktop AIM

- Windows Server 2008 Standard, Enterprise, and Datacenter Edition (32 bit, x86)
- Windows Server 2008 Standard, Enterprise, and Datacenter Edition (64 bit, x64)
- Windows Server 2008 R2 Standard, Enterprise, and Datacenter Edition (64 bit, x64)
- Windows Server 2012 Standard and Datacenter Edition (64 bit, x64)

Windows: Hyper-V AIM

- Windows Server 2008 R2 Standard, Enterprise, and Datacenter Edition (64 bit, x64)

HP: Advanced Encryption, Service Response Monitoring AIM

- HP-UX 11.11 PA-RISC (64 bit)
- HP-UX 11.23 PA-RISC (64 bit)
- HP-UX 11.23 IA64 (64 bit)
- HP-UX 11.31 PA-RISC (64 bit)
- HP-UX 11.31 IA64 (64 bit)

IBM AIX: Advanced Encryption, Service Response Monitoring AIM

- IBM AIX Version 6.1 (64 bit)
- IBM AIX Version 7.1 (64 bit)

Note: JRE is shipped with the SRM AIM for AIX.

Linux: Advanced Encryption AIM

- Red Hat Linux Web Server, Advanced Server, and Enterprise Server 5.0 (32 bit, x86)
- Red Hat Linux Web Server, Advanced Server, and Enterprise Server 5.0 (64 bit, x64)
- Red Hat Enterprise Linux 6.0 (32 bit, x86)
- Red Hat Enterprise Linux 6.0 (64 bit, x64)
- SUSE Linux Enterprise Server 10.0 (32 bit, x86)
- SUSE Linux Enterprise Server 10.0 (64 bit, x64)
- SUSE Linux Enterprise Server 11 (32 bit, x86)
- SUSE Linux Enterprise Server 11 (64 bit, x64)
- Debian Linux Version 5.0 (Lenny) (32 bit, x86)
- Debian Linux Version 5.0 (Lenny) (64 bit, x64) - Legacy Mode Only
- Debian Linux Version 6.0 (Squeeze) (32 bit, x86)
- Debian Linux Version 6.0 (Squeeze) (64 bit, x64) - Legacy Mode Only

Linux: Service Response Monitoring AIM

- Red Hat Linux Web Server, Advanced Server, and Enterprise Server 5.0 (32 bit, x86)
- Red Hat Linux Web Server, Advanced Server, and Enterprise Server 5.0 (64 bit, x64)
- Red Hat Enterprise Linux 6.0 (32 bit, x86)
- Red Hat Enterprise Linux 6.0 (64 bit, x64)
- SUSE Linux Enterprise Server 10.0 (32 bit, x86)
- SUSE Linux Enterprise Server 10.0 (64 bit, x64)

- SUSE Linux Enterprise Server 11 (32 bit, x86)
- SUSE Linux Enterprise Server 11 (64 bit, x64)
- Debian Linux Version 5.0 (Lenny) (32 bit, x86)
- Debian Linux Version 6.0 (Squeeze) (32 bit, x86)
- Debian Linux Version 6.0 (Squeeze) (64 bit, x64) - Legacy Mode Only

Solaris: Advanced Encryption, Service Response Monitoring AIM

Note: SystemEDGE supports all Solaris Zone configurations for the Solaris 10 and Solaris 11 operating systems.

- Solaris UltraSPARC 9 (64 bit)
- Solaris UltraSPARC 10 (64 bit)
- Solaris 9 (32 bit, x86)
- Solaris 10 (32 bit, x86)
- Solaris 10 (64 bit, x64)
- Solaris 11 (32bit, x86)
- Solaris 11 (64bit, x64)

CA Systems Performance LiteAgent Operating System Support

A computer running CA Systems Performance LiteAgent requires one of the following operating systems:

Windows

Note: The following Windows 2003 operating systems are supported only when upgrading from CA Server Automation 12.6.

- Windows Server 2008 (32 bit, x86)
- Windows Server 2008 (64 bit, x64)
- Windows Server 2008 R2 (64 bit, x64)
- Windows Server 2003 Standard, Enterprise, Datacenter, and Small Business Server Edition (32 bit, x86)
- Windows Server 2003 (64 bit, x64)
- Windows Server 2003 R2 Standard, Enterprise, and Datacenter Edition (32 bit, x86)
- Windows Server 2003 R2 (64 bit, x64)

- Windows XP Professional SP3+ (32 bit, x86)
- Windows XP Professional SP2+ (64 bit, x64)
- Windows Vista Business, Enterprise, Ultimate (32 bit, x86)
- Windows Vista Business, Enterprise, Ultimate (64 bit, x64)

Linux

- Red Hat Linux Enterprise Server 5.0 (32 bit, x86)
- Red Hat Linux Enterprise Server 5.0 (64 bit, x64)
- SUSE Linux Enterprise Server 10.0 (32 bit, x86)
- SUSE Linux Enterprise Server 10.0 (64 bit, x64)

Solaris

Note: CA Server Automation-specific features such as deployment and configuration is not supported on all platforms.

- Solaris UltraSPARC 9 (32 bit)
- Solaris UltraSPARC 9 (64 bit)
- Solaris UltraSPARC 10 (64 bit)
- Solaris 10 (32 bit, x86)
- Solaris 10 (64 bit, x64)

HP

- HP-UX 11.23 PA-RISC (64 bit)
- HP-UX 11.23 IA64 (64 bit)
- HP-UX 11.31 PA-RISC (64 bit)
- HP-UX 11.31 IA64 (64 bit)

Note: For HP-UX 11, we recommend PHNE 27063 s700 800 11 cumulative ARPA Transport patch or later. This patch fixes memory issues with HP-UX libraries.

IBM AIX

- IBM AIX Version 5.3 (32 bit, 64 bit)
- IBM AIX Version 6.1 (64 bit)
- IBM AIX Version 7.1 (64 bit)
- IBM AIX Version 7 (64 bit)

Supported Integration Platforms

CA Server Automation integrates with virtual and physical platforms in your environment. To manage these platforms, install and configure the appropriate SystemEDGE AIMs on the CA Server Automation manager server or on separate AIM servers.

Supported Platforms

[Active Directory and Exchange Server](#) (see page 24)

[Cisco Unified Computing System \(UCS\)](#) (see page 24)

[Citrix XenDesktop](#) (see page 25)

[Citrix XenServer](#) (see page 25)

[Huawei GalaX](#) (see page 25)

[IBM PowerHA for AIX](#) (see page 25)

[IBM PowerVM \(Logical Partitions, LPAR\)](#) (see page 25)

[Microsoft Cluster \(MSCS\)](#) (see page 26)

[Microsoft Hyper-V Server](#) (see page 27)

[Oracle Solaris Zones](#) (see page 27)

[Red Hat Enterprise Virtualization](#) (see page 27)

[VMware vCenter Server](#) (see page 27)

[VMware vCenter Site Recovery Manager](#) (see page 28)

[VMware vCloud](#) (see page 28)

Active Directory and Exchange Server

To enable monitoring for Active Directory and Exchange Server, verify that you have the following product installed in your environment:

- .Net 3.5 or higher versions
- Power shell v2.0
- Exchange Management Tools SP3 on the AIM host to monitor Exchange Server 2007.

Note: Exchange Management Tools SP3 is not required for monitoring Exchange Server 2010.

Cisco Unified Computing System (UCS)

To enable management for Cisco UCS, verify that you have the following product installed in your environment:

- Cisco UCS 1.3, 1.4, and 2.0

Citrix XenDesktop

To enable virtual management for Citrix XenDesktop, verify that you have the following component installed in your environment:

- Citrix XenDesktop version 5.6

Citrix XenServer

To enable virtual management for Citrix XenServer, verify that you have the following component installed in your environment:

- Citrix XenServer version 6.0

Huawei GalaX

To enable monitoring and management for Huawei GalaX, verify that you have the following component installed in your environment:

- Huawei GalaX8800 version 1.0

IBM PowerHA for AIX

To enable monitoring IBM IBM PowerHA Cluster Manager for AIX (formerly HACMP), verify that the following component is installed in your environment:

IBM PowerHA 6.1

IBM PowerHA for AIX version 6.1 platforms let you monitor clusters, nodes, and network interfaces status.

IBM PowerVM (Logical Partitions, LPAR)

To enable virtual management for IBM LPARs verify that you have the following components installed in your environment:

IBM AIX LPAR

IBM LPAR POWER5, POWER6, or POWER7 platforms let you monitor logical partitions on AIX and their managed systems.

IBM AIX Network Installation Manager (NIM) server

To enable imaging functionality for computers running AIX operating systems, install NIM server on AIX 5.3, 6.1, or 7.1. NIM adapter component installations are supported on AIX 5.3 (TL11 or higher), AIX 6.1 (TL4 or higher), and AIX 7.1.

Note: To image NIM clients, NIM server must be running with equal or higher operating system version than that of the NIM client.

IBM AIX Network Installation Manager (NIM) client

NIM clients are supported on AIX 5.3 and 6.1.

IBM Hardware Management Console (HMC)

To manage logical partitions of IBM POWER5, POWER6, or POWER7 platforms, install HMC V7R3.5, V7R7.1, V7R7.2, V7R7.3, or V7R7.4.

Note: HMC V7R7.1 is the minimum level for POWER7 support.

IBM Integrated Virtualization Manager (IVM)

Alternative to HMC for managing logical partitions. Runs on the Virtual I/O Server. Versions 1.5, 2.1, and 2.2 are supported.

IBM Virtual I/O Server

IBM Virtual I/O Server (VIOS) lets you configure IBM AIX POWER5, POWER6, and POWER7 logical partitions. VIOS versions 1.5, 2.1, and 2.2 are supported.

Microsoft Cluster (MSCS)

To enable the management for Microsoft Clusters, verify that your cluster environment is based on *any* of the following servers:

- Windows Server 2003
- Windows Server 2008
- Windows Server 2008 R2

Microsoft Hyper-V Server

To enable virtual management for Microsoft Hyper-V Server, verify that you have at least one of the following products installed in your environment:

- Hyper-V Server 2008 R2 (64 bit, x64)

Important! For Microsoft Hyper-V, install SystemEDGE and the Microsoft Hyper-V AIM on each physical Microsoft Hyper-V Server that you want to manage.

Note: Reservation Manager supports Hyper-V provisioning of Windows Server 2008 operating systems.

Oracle Solaris Zones

To enable virtual management for the Oracle Solaris Zones server, verify that you have the following component installed in your environment:

- Solaris 10 or 11 with zones compatibility to manage Solaris Zones.

Red Hat Enterprise Virtualization

To enable virtual management for Red Hat Enterprise Virtualization, verify that you have the following component installed in your environment:

- RHEV 3.0

VMware vCenter Server

To enable virtual management for VMware vCenter Server, verify that you have one of the following components installed in your environment:

VMware ESX Server/VMware ESXi Server

Version 4.0, 4.1, 5.0, or 5.1 is required to create VM sessions.

Note: ESX and ESXi Server support require that a vCenter Server is configured to manage the ESX or ESXi servers.

VMware vCenter Server

VMware vCenter Server version 4.0, 4.1, 5.0, or 5.1 is required to clone and migrate virtual machines and to manage the VMware vSphere environment.

Note: VMware Tools optimize the virtualization of VMs and it is strongly recommended that they are installed on each VM in your VMware environment. Some features of this product will not be available or may not function correctly for VMs that do not have VMware Tools installed. For this reason, VMs that do not have VMware tools installed are not supported.

VMware vCenter Site Recovery Manager

To enable VMware vCenter Site Recovery Manager, verify that you have one of the following components installed in your environment:

VMware ESX Server/VMware ESXi Server

Version 5.0 or higher is required.

Note: ESX and ESXi Server support require that a vCenter Server is configured to manage the ESX or ESXi servers.

VMware vCenter Server

VMware vCenter Server version 5.0 or higher is required.

Note: VMware Tools optimize the virtualization of VMs and it is strongly recommended that they are installed on each VM in your VMware environment. Some features of this product will not be available or may not function correctly for VMs that do not have VMware Tools installed. For this reason, VMs that do not have VMware tools installed are not supported.

VMware vCloud

To enable virtual management for VMware vCloud, verify that you have the following component installed in your environment:

- VMware vCloud Director 1.0, 1.0.1, 1.5
- VMware vCloud Director 5.1

Internationalization (i18n)

CA Server Automation is an internationalized product (i18n) that uses UTF-8 character encoding to display language-specific characters. For example, the German ü (umlaut), the French è (grave accent), or Japanese characters in input and output data are displayed.

The UTF-8-encoded character support includes, but is not limited to, the following areas:

- Textual descriptions of objects or resources
- Messages
- User names and passwords to connect to manageable resources
- Regular expressions (SystemEDGE)

The installation of this product is supported on English, French, German, Japanese, and Simplified Chinese versions of the supported Microsoft Windows operating systems. Also, for Windows, you can use a supported version of SQL Server that is either English, or the appropriate localized version for that operating system.

Important! If you edit a product file that uses UTF-8 encoding, be sure to save it with UTF-8 encoding. Operating systems that are not English and have multibyte characters must be saved with UTF-8 encoding. Windows Notepad can save with UTF-8 encoding.

General Limitations

Because CA Server Automation integrates with other CA products, review the international support statements for integration products.

CA Server Automation supports only host or cluster names with the characters 'a - z', 'A - Z', '0 - 9' and '-'. A host or cluster name cannot start with a hyphen ('-') or be all numeric. The NetBIOS name of a Windows system must match its DNS host name. CA Server Automation supports non-ASCII Virtual Machine names, but only if they are provisioned using the virtualization vendor software directly. When cloning or provisioning a new Virtual Machine from within CA Server Automation, the Virtual Machine name must be ASCII.

CA Server Automation supports only ASCII characters in:

- SQL Server host names (subject to host name limitations), instance names, user names, and passwords
- CA EEM/Security host names (subject to host name limitations), user names, and passwords
- All SystemEDGE parameters with the exception of policy names
- SystemEDGE Privilege Separation User (UNIX and Linux only)
- SNMP read, read/write, and trap community strings
- %TEMP% environment variable
- Installation target paths of all CA Server Automation components

Customize Console Display

If you want to display console data that contains language-specific characters, verify the following prerequisites for CLI commands and the NodeCfgUtil utility:

- Verify that the appropriate language support is available on your operating system.
- Enable the Lucida Console font for running commands in the Windows Command Prompt or NodeCfgUtil utility.
- Enable UTF-8 character encoding in the UNIX or Linux console that you want to use to run your commands. Enter the following command in the terminal console to display the current language setting:

```
echo $LANG
```

If UTF-8 is not enabled, enter, for example, the following command in a console window (use the appropriate character encoding: en_US.UTF-8, ja_JP.UTF-8, fr_BE.UTF-8, de_DE.UTF-8, and so on):

```
LANG=en_US.UTF-8; export LANG
```

AutoShell and CA Server Automation CLI Commands

AutoShell and CA Server Automation CLI commands support the `-locale` switch that allows you to specify a locale based on an ISO 639_3166 combination (for example: `fr_FR` for French). See the *Invoking AutoShell* section and *CLI Commands* in the *Reference Guide*.

Solaris Zones Uptime

The Solaris Zone Uptime MIB attribute (`zoneAimStatZoneUpTime`) is specified as `DisplayString` that supports ASCII characters only. The corresponding fields in the user interface do not display UTF-8 characters.

Default Package Wrapper Name

The default package wrapper name is not localized and reads 'default' in all supported languages. Custom package wrapper names support UTF-8 characters.

Service Response Monitoring AIM Configuration File

When you modify the `svcrsp.cf` configuration file to add language-specific characters, verify that the text editor you use supports UTF-8 as a storage format. If your text editor inserts a UTF-8 Byte Order Mark when saving the file, SystemEDGE ignores the Byte Order Mark when reading the configuration file.

Service Response Monitoring CLI Commands

The `svcwatch` CLI supports localized output and console help information.

If you use the optional `-L` switch, the utility detects the current locale of the console and language catalog if available. If a language catalog is not found, the utility falls back to English as a default language.

Cisco UCS Limitations

The Cisco Unified Computing System (Cisco UCS) only supports English language characters. Because the UCS Manager treats non-English characters as invalid, CA Server Automation disallows unsupported characters in UCS fields for service profile, pools, and so on.

Rapid Server Imaging Limitations

The RSI Server does accept localized strings (utf-8) for names and descriptions of images, driver sets and driver collections, and stores them in its database. However, it runs only on an English server and does not display localized messages. The RSI agents are also supported only on English servers and so capture/deploy of non-English servers are not supported. The CA Server Automation integration with the RSI server also accepts utf-8 strings for names and descriptions of images, driver sets and driver collections. CA Server Automation has its own localized messages that are displayed, however, the English-only messages from the RSI server is passed through as is.

CA Configuration Automation Limitations

CA Configuration Automation supports only ENG SQL server.

Reservation Manager Requirement for a Common Windows Administrator Account Name

The Reservation Manager requires that all Windows systems that are provisioned, to have a common administrator account name. Because the default administrator account name can differ based on the language of the Windows OS, consider creating a common account name on all systems.

Reservation Manager Limitations

The names of virtual machines deployed by Reservation Manager contain only these characters: 'a - z', 'A - Z', '0 - 9' and '-'. This limitation is enforced to restrict the host names for virtual machines to characters supported by the product.

Business Objects Reports

Business Object reports require Microsoft SQL Server, English, or Japanese versions; no other languages are supported.

Installation Limitations

You can specify the language for a silent installation by using the parameter, `-L <locale>` (for example, `Install.exe -L fr`). The following locales are supported: en (English), ja (Japanese), de (German), and fr (French). If you do not specify a locale, the installer chooses the best fit (system locale or English (en)).

The DVD install path that you specify cannot contain Chinese characters, unless it is a Chinese system. If you specify Chinese characters on a non-Chinese system, the installer fails with the following message:

Unable to extract the compressed file. Please get another copy of the installer and try again.

The product installer accepts non-ASCII characters for the configuration of LPAR, vCenter, Solaris Zones, Microsoft Cluster Service, Hyper-V, SCVMM, Remote Monitoring, and UCS components. However, if non-ASCII characters are entered, the configuration of the associated AIMS can silently fail. If you have to configure an AIM using non-ASCII characters, then configure the AIM post-install using the UI Administration tab or CLI.

Chapter 3: New Features and Enhancements

This section contains the following topics:

[Citrix XenDesktop AIM](#) (see page 35)

[Documentation](#) (see page 36)

[CA Process Automation FlexPod Use Cases](#) (see page 36)

[Huawei GalaX](#) (see page 43)

[Key Performance Database](#) (see page 43)

[Oracle Solaris Zones](#) (see page 44)

[Reservation Manager \(New Features and Enhancements\)](#) (see page 44)

[Software Requirements](#) (see page 45)

[User Interface](#) (see page 45)

[VMware vCenter](#) (see page 45)

Citrix XenDesktop AIM

In this release, the following new features or changes are available:

Citrix XenDesktop Monitoring

CA Server Automation monitors Citrix XenDesktop 5.6 environments. The monitoring includes but is not limited to desktops, controllers, machines, catalogs, hypervisor connections, and service statistics.

Multi-instances

The XenDesktop AIM can manage multiple XenDesktop environments.

Documentation

In this release, the documentation includes an End-to-End bookshelf with links to scenarios and auxiliary information, such as product details, support materials, and education.

You can open the bookshelf directly from the Start menu or click Back to Bookshelf in the navigation pane of the Online Help or Local Help.

The following scenarios and use cases have been added to the documentation and can be accessed directly from the bookshelf:

- How to Adjust SQL Server User Permissions to the Required Minimum
- How to Back Up Manager Servers
- How to Configure Red Hat Enterprise Virtualization Management
- How to Configure the Active Directory and Exchange Server AIM
- How to Configure VCE Vblock Management
- How to Import an OVF Package
- How to Prepare Windows Templates for GalaX Provisioning
- How to Prepare Windows Templates for KVM Provisioning
- How to Provision a VCE Vblock Service
- How to Provision Storage

The Performance Metrics chapter has been removed from the Reference Guide. You can access a new Performance Metrics Reference directly from the bookshelf page.

CA Process Automation FlexPod Use Cases

This section describes the CA Process Automation FlexPod use cases.

O-NR-1 Attach VLAN to a Storage Controller

The use case is used to create a VLAN in a Cisco switch to attach later to a storage controller.

Start Request Name: O-NR-1 Attach VLAN to Stor Star

CA Server Automation Connectors Called

- Query Service Controller
- NMA Run Script
- Storage Create VLAN

Connect Parameters

T_SVC_URL__

T_SVC_USER__

T_SVC_PASSWORD__

T_NMA_SCRIPT__

T_NMA_DEVICE__

T_NMA_VLAN__

T_NMA_VLAN_NAME__

T_HOSTNAME__

T_INTERFACE__

T_SVC_STORAGE_SERVER__

T_SVC_STORAGE_USER__

T_SVC_STORAGE_PASSWORD__

T_SVC_STORAGE_PROTOCOL__

T_SVC_STORAGE_PORT__

T_SVC_STORAGE_TIMEOUT__

O-NR-2 Attach VLAN to the UCS Environment

The use case is used to create a VLAN in a Cisco switch to attach later to a UCS system.

Start Request Name: O-NR-2 Attach VLAN to UCS Start

CA Server Automation Connectors Called

- Query Service Controller
- NMA Run Script
- UCS VLAN Operation

Connect Parameters

T_SVC_URL__

T_SVC_USER__

T_SVC_PASSWORD__

T_NMA_SCRIPT__

T_NMA_SCRIPT2__

T_NMA_DEVICE__

T_NMA_VLAN__

T_NMA_VLAN_NAME__

O-NR-5 Attach VLAN to the ESX Environment

The use-case creates a VLAN in a Cisco switch that is attached later to an ESX environment.

Start Request Name: O-NR-5 Attach VLAN to ESX Start

CA Server Automation Connectors Called

- Query Service Controller
- NMA Run Script (2)

Connect Parameters

NMA VLAN ID

NMA VLAN Name

O-RM-1 Provide Fiber Channel Storage to a Service Profile

The use case creates a FCP zone in the Cisco 5000 switch and is based on the WWPN from a UCS service profile. The information is used to provision an FC storage component and attach it later to the UCS service profile.

Start Request Name: O-RM-1 Prov FC Stor to Svc Start

CA Server Automation Connectors Called

- Query Service Controller
- NMA Run Script
- UCS Service Profile Details
- Storage Provision FCP
- Publish Indication

Connect Parameters

T_SVC_URL__

T_SVC_USER__

T_SVC_PASSWORD__

T_NMA_SCRIPT__

T_NMA_DEVICE__

T_NMA_ZONE__

T_NMA_VSAN_ID__

T_NMA_UCS_PROFILE__

T_NMA_NETAPP_ALIAS1__

T_NMA_NETAPP_ALIAS2__

T_STOR_DATASET__

T_STOR_SIZE__

T_STOR_PROVISION_ID__

T_STOR_RES_POOL__

T_STOR_HOST_TYPE__

O-RM-2 Deploy Fiber Channel FlexClone LUN to Service Profile

The use-case creates a FCP zone in the Cisco 5000 switch and is based on the WWPN from a UCS service profile. This information is used to clone a LUN to the UCS service profile.

Start Request Name: O-RM-2 Deploy FC Boot LUN Start

CA Server Automation Connectors Called

- Query Service Controller
- NMA Run Script
- UCS Service Profile Details
- Storage Clone LUN

Connect Parameters

T_SVC_URL__

T_SVC_USER__

T_SVC_PASSWORD__

T_NMA_SCRIPT__

T_NMA_DEVICE__

T_NMA_ZONE__

T_NMA_VSAN_ID__

T_NMA_UCS_PROFILE__

T_NMA_NETAPP_ALIAS1__

T_NMA_NETAPP_ALIAS2__

T_STOR_LUN_PATH__

T_SVC_STORAGE_SERVER__

T_SVC_STORAGE_PROT__

T_SVC_STORAGE_TIMEOUT__

T_SVC_STORAGE_TYPE__

T_SVC_UCS_MGR__

T_SVC_UCS_PROF_DN__

T_SVC_UCS_VIRTUAL__

O-RM-4 Deploy Fiber Channal Boot Platform with FlexClone

The use-case creates an FCP zone in the Cisco 5000 switch and is based on the WWPN from a UCS service profile. This information is used to clone a LUN and attach it to the UCS service profile.

Start Request Name: O-RM-4 Deploy FC Boot LUN Start

CA Server Automation Connectors Called

- Query Service Controller
- NMA Run Script
- UCS Service Profile Details
- Storage Clone LUN
- UCS Boot Policy Ex

Connect Parameters

T_SVC_URL__

T_SVC_USER__

T_SVC_PASSWORD__

T_NMA_SCRIPT__

T_NMA_DEVICE__

T_NMA_ZONE__

T_NMA_VSAN_ID__

T_NMA_UCS_PROFILE__

T_NMA_NETAPP_ALIAS1__

T_NMA_NETAPP_ALIAS2__

T_STOR_LUN_PATH__

Huawei GalaX

In this release, the following new features or changes are available:

Huawei GalaX Monitoring

CA Server Automation monitors Huawei GalaX environments.

Huawei GalaX Management

CA Server Automation manages Huawei GalaX environments.

Multi-instances

The SystemEDGE GalaX AIM can manage multiple Huawei GalaX environments.

Key Performance Database

In this release, the following changes are available:

Key Performance DB

Collects the performance metrics. The collected metrics are displayed in the Performance Charts. The tooltips provide the corresponding descriptions. Key Performance DB provides:

- A scalable solution that is able to store up to 1 million metrics using a common setup.
- Efficiently used storage space and lower I/O usage
- A user-friendly interface that provides the following information:
 - Categorized metrics
 - Localized metric names and description
 - Units for all metric types

Note: For a list of performance metrics and descriptions, see the *Performance Metrics Reference*.

Important! The Key Performance Database collects the performance data. The Collection Engine that has collected the performance data in previous releases is still available for compatibility reasons.

Oracle Solaris Zones

In this release, the following new features are available:

Zone CPU Cap

CA Server Automation monitors the restriction of the CPU utilization to the defined percentage in the cpu cap resource control.

Solaris 11

CA Server Automation monitors Solaris 11 zones.

Reservation Manager (New Features and Enhancements)

In this release, the following new features or changes are available for Reservation Manager:

New Platform Support

Reservation Manager supports the following new platforms:

- Huawei GalaX
- Red Hat Enterprise Virtualization (RHEV)
- Citrix XenServer

The new features include: creating resource pools, creating images, and creating and reserving reservation templates.

Reservations on Behalf of Another User

Reservation Manager allows you to make the following reservations on behalf of another user:

- System reservations
- Virtual machine reservations
- Reservations from templates

Software Requirements

In this release, consider the following changes to the CA Server Automation software requirements:

- Added CA Server Automation manager support for Windows Server 2012, CA EEM release 12 and 12.5, Microsoft SQL Server 2012.
- Added SystemEDGE and AIM support for Windows Server 2012.
- Added SystemEDGE, Advanced Encryption, and Service Response Monitor support for Debian 6.
- Removed SystemEDGE support for AIX 5.3 and Linux on IA64.
- Removed the AppLogic integration support from CA Server Automation.

User Interface

In this release, the following new features or changes are available:

Localized User Interface

The user interface is available in Simplified Chinese and Japanese.

Product Banner

The top section of the user interface contains the following changes:

- Search can be used to find service templates and applications.

Performance Charts

Provide a graphical representation of performance data collection for monitored platforms. The performance charts offer an up-to-date overview of your data center performance.

Support Agent

The Support Agent collects diagnostics information. To access the Support Agent, use the following address:

`http://<Manager Server>:8556`

VMware vCenter

In this release, CA Server Automation supports the following features:

OVF file import

CA Server Automation supports the Open Virtualization Format (OVF) file import. This capability allows you to create VMs and vApps based on the OVF file.

Note: For more information about importing the OVF files, see the *Reference Guide*.

VMware vCenter Site Recovery Manager 5

CA Server Automation supports VMware vCenter Site Recovery Manager (SRM) 5.

Chapter 4: Patches and Published Fixes

Patches and published fixes may be available for this version of the product. Go to the CA Support Online website <http://supportconnect.ca.com> to download patches or view published fixes before proceeding with the product installation or upgrade. Patches and published fixes are available from the Download Center, Published Solutions pane.

Chapter 5: Documentation

This section contains the following topics:

[Related Publications](#) (see page 49)

Related Publications

The CA Bookshelf provides the following CA Server Automation publications:

Administration Guide

Describes product architecture, troubleshooting, concepts, and configuration tasks for administrators.

Installation Guide

Describes installation prerequisites, best practices, and procedures for CA Server Automation.

Reference Guide

Provides detailed information about AutoShell, CLI scripting commands, and log files.

Performance Metrics Reference

Describes the performance metrics that are available for monitoring the systems performance of the supported platforms.

CA Process Automation Connector Reference Guide

Provides detailed information about CA Process Automation connectors and use cases.

Online Help

Provides information to help you complete tasks using the CA Server Automation user interface.

Reservation Manager Help

Provides information to help users and administrators complete tasks using the Reservation Manager user interface.

Release Notes

Provides information about new and changed features and product implementation information including operating system support, system requirements, and how to contact Technical Support.

Service Response Monitoring User Guide

Provides installation and configuration details of SRM.

SystemEDGE User Guide

Provides end-user information about the SystemEDGE agent.

SystemEDGE Release Notes

Provides information about new and changed features and agent implementation information including operating system support, system requirements, and how to contact Technical Support.

In addition, the CA Bookshelf supplies the following Rapid Server Imaging (RSI) server guides:

- *RSI Server Administration Guide*
- *RSI Server Installation Guide*
- *RSI Server Release Notes*

To view PDF guides, download and install Adobe Reader from the Adobe website if it is not already installed on your computer.

Chapter 6: Known Issues

The *CA Server Automation Release Notes* on CA Support Online contain issues and other information discovered after publication.

For the latest version of the Release Notes, visit <http://ca.com/support>.

1. Log in to CA Support Online.
2. Select Enterprise/Small and Medium Business.
3. Select Documentation.
4. Select the CA Server Automation Bookshelf from the Bookshelf drop-down list, and click Go.
5. Open the Release Notes from the Bookshelf window.

This section contains the following topics:

[CA Process Automation Security Vulnerability](#) (see page 52)

[CA Network Automation Scripts Fail on a Cisco 5k Switch Device](#) (see page 53)

["Field Set detected" Warning When Selecting Start Request Form](#) (see page 54)

[CA Process Automation Action Does Not Support Environment Variable Substitution By Default](#) (see page 55)

[Localized Service Desk Template Name is Truncated](#) (see page 55)

[Mozilla Firefox Automatic Upgrade](#) (see page 56)

CA Process Automation Security Vulnerability

Symptom:

CA Process Automation contains a high-risk vulnerability that can allow a remote attacker to execute arbitrary code. The vulnerability occurs in the JBoss Seam component. An attacker can potentially execute arbitrary Jboss EL (Unified Expression Language extension) and fully compromise the server.

To test for this vulnerability, replace <HOST> with the hostname of the CA Process Automation installation in the following URL:

```
http://<HOST>:8080/admin-console/login.seam?actionOutcome=/test.xhtml%3ftested%3d%23{expressions.getClass().forName('java.lang.Runtime')}
```

This is the expected output if the JBoss EL command is successfully evaluated showing that the installation is vulnerable:

```
http://<HOST>:8080/admin-console/test.seam;jsessionid=0792523D29AE7A237D1CE5329C27A46F.?tested=class+java.lang.Runtime&conversationId=11
```

See the in-depth vulnerability details for further exploitation techniques.

Affected Products:

- CA Process Automation 4.0
- CA Process Automation 4.0 SP1
- CA Process Automation 4.1
- Potentially any CA product using CA Process Automation 4.0 and later.

Unaffected Products:

- CA Process Automation releases before Version 4.0

Solution:

A fix is planned for a future release of CA Process Automation. In the meantime, use the following instructions to manually remove the vulnerable JBoss Seam component from the CA PAM installation. These instructions also disable the JBoss Admin Console.

1. Stop the PAM service.
2. Delete the contents of the following directories:
 - <PAM_Home>\server\c2o\tmp
 - <PAM_Home>\server\c2o\temp
 - <PAM_Home>\server\c2o\tmp
 - <PAM_Home>\server\c2o\work

3. Move the following folders from <PAM_Home>\server\c2o\deployers to a location outside the PAM directory tree to keep as a backup:
 - seam.deployer
 - webbeans.deployer
4. Move the following folder from <PAM_Home>\server\c2o\ to a location outside the PAM directory tree to keep as a backup:
 - admin-console.war
5. Start the PAM service.

Note: If the Admin Console is needed temporarily, stop the PAM service, revert the changes in Step 4 above, and restart the PAM service. Repeat Step 4 when the Admin Console is no longer needed.

CA Network Automation Scripts Fail on a Cisco 5k Switch Device

Symptom:

When I run CA Network Automation scripts on a Cisco 5k switch family device, the job terminates or is skipped.

Solution:

NetMRI did not discover the device properly. Ensure that the Network Administrator configures the device as a Switch or Switch-Router.

Note: CA Network Automation scripts are intended to run on Switch and Switch-Router devices; for example, the Cisco 5k switch families.

"Field Set detected" Warning When Selecting Start Request Form

Symptom:

When creating a CA Process Automation action, a user can get an empty form (no fields) after selecting from a list of Start Request forms. The system displays the following message:

"Field Set detected in one of the pages of this form. Proceed only if this information is not required."

Solution:

In CA Process Automation 4.0 and higher, a new data type (Field Set) can be used to group related fields together. For example, text field, text area, multiline text, and so on. However, when using the CA Server Automation user interface, ensure that only valid fields (not Field Sets) are used.

CA Process Automation Action Does Not Support Environment Variable Substitution By Default

Symptom:

CA Process Automation actions in an *Application for Service Provisioning* do not support environment variable substitution by default.

Solution:

To ensure successful command execution, place **cmd.exe /c** in front of the command directive.

Example:

The following command executes successfully when executed as an installation action of *Execute Program* type in an *Application*.

```
%CD%\..\ORCDAgent\InstallMSI.cmd /i %CD%\httpd-2.2.22-win32-x86-openssl-0.9.8t.msi /qn INSTALLDIR=C:\Apache SERVERADMIN="admin@localhost.com" SERVERNAME=%LOCALHOST% AgreeToLicense=1 ALLUSERS=1 RebootYESNo=No
```

However, the same command fails if used in an installation action of *Process Automation Process* type. To correct this problem, you must append **cmd.exe /c** in front of the original command as follows:

```
cmd.exe /c %CD%\..\ORCDAgent\InstallMSI.cmd /i %CD%\httpd-2.2.22-win32-x86-openssl-0.9.8t.msi /qn INSTALLDIR=C:\Apache SERVERADMIN="admin@localhost.com" SERVERNAME=%LOCALHOST% AgreeToLicense=1 ALLUSERS=1 RebootYESNo=No
```

Localized Service Desk Template Name is Truncated

Symptom:

When CA Server Automation is integrated with CA Service Desk (CA SDM) and the Service Desk template name is localized, template names might be truncated. CA SDM cannot handle template names that exceed the maximum length. The maximum template name length is 30 single-byte or 15 double-byte characters.

Solution:

Open a Technical Support issue, and request a test fix patch. Report problem number USRD 2248.

Mozilla Firefox Automatic Upgrade

Symptom:

After a Mozilla Firefox browser upgrade, you can face page rendering issues when using the CA Server Automation web application.

Solution:

Mozilla Firefox could have been upgraded automatically. If you encounter page rendering issues, verify that your browser was upgraded and perform browser cache cleanup.

Appendix A: Acknowledgements

This appendix contains copyright and licensing agreement information for third-party software used in CA Server Automation.

This section contains the following topics:

[Third-Party Software Acknowledgments](#) (see page 57)

Third-Party Software Acknowledgments

This section provides information about third-party software acknowledgments. The third-party license agreements are available in the \Bookshelf Files\TXT folder in the CA Bookshelf.

- ActiveMQ 5.4.2
- Adobe Flex SDK
- AIX JRE
- Apache Axis2 1.5.2
- Apache HTTP Web Server 2.2.23
- Apache Software Foundation
- Apache Solr 1.4.1
- Apache Tomcat 6.0.36
- Apache Tuscany SDO 1.1.1
- base64 0.00.00B
- Beanshell v.2.0b4
- Boost 1.42
- bzip2 1.0.2
- Castor 0.9.5.4
- concurrent utilities 1.3.4
- curl 7.25.0
- Eclipse BIRT Runtime v. 2.3.2.2
- Expat 2.0.1
- GNUPlot 6.4

- Hibernate 3.2.2
- HP-UX JRE 6.0.14 PA-RISC
- HSQLDB 1.8
- ICU4C 3.4
- ipmitool 1.8.10
- JAXB 2.1
- JAXP 1.4.2
- JBoss Application Server 4.2.3
- JGoodies Looks 2.2.0
- JSMin
- json-lib 2.4
- JSW v.3.2.3
- JXTA 2.3.6
- libarchive 3.0.2
- libcurl 7.21.0 and libcurl 7.21.1
- libssh2 1.2.6
- libtorrent 0.15.7
- Libxml2 2.7.7, Libxml2 2.7.8, Libxml2 2.8.0, and Libxml2 2.9.0
- Libxslt 1.1.24
- Liferay 6.0.6 CE
- Linux Penguin Logo (Tux) 2.0
- Microsoft Cabinet File Software Development Kit (CAB SDK) 1
- MIT Kerberos v5 release 1.4
- Mod_gsoap 0.7
- NetApp NMSDK 4.0
- Netscape Portable Runtime 4.7.1
- netx 0.5
- node.js 0.4.12
- NUNIT 2.2.8
- OpenFire 3.7.1
- OpenLDAP 2.1

- openSSH for Windows CE 0.0.2 Alpha
- OpenSSL 0.9.8g, 0.9.8h, 0.9.8j, and 0.9.8o
- OpenSSL 0.9.8r and OpenSSL 0.9.8u
- OpenSSL 0.9.8x
- opensman 2.0
- Oracle JDBC Driver 10G Release 2
- Oracle JDK 1.6.0_43
- Oracle JRE v.1.6
- PCRE 8.1 and PCRE Library 8.12
- Pegasus 2.7
- Perl 5.12.2
- PHP 5.3.13
- POCO 1.3.2
- PuTTY 0.60
- py2exe for Python 2.6.x 0.6.9
- Python 2.6
- Rhino 1.6R4
- swfobject 2.1
- Ubuntu 10.04
- VIX API
- Windows Installer XML (WiX)
- Zlib 1.2.3 and Zlib 1.2.5