# **CA Server Automation**

## **Release Notes**

**Release 12.7.1** 



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## **CA Technologies Product References**

This document may reference the following CA Technologies products and components or third-party components:

- CA AppLogic<sup>®</sup>
- 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®

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- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
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# **Contents**

Chapter 1: Introduction	7
Chapter 2: System Requirements	9
Manager Requirements	9
Hardware Requirements	10
Software Requirements	10
Database Requirements	11
Browser Requirements	12
Solaris Systems for JumpStart Provisioning	13
Optional Software Requirements	13
Internationalization (i18n)	15
CA Server Automation AIM Server and Managed Node Requirements	19
Hardware Requirements for Managed Nodes and AIM Servers	20
SystemEDGE Operating System Support	20
CA Server Automation AIM Operating System Support	22
CA Systems Performance LiteAgent Operating System Support	25
Supported Integration Platforms	26
Cisco Unified Computing System (UCS)	27
Citrix XenServer	27
Huawei GalaX	27
IBM HACMP for AIX	27
IBM PowerVM (Logical Partitions, LPAR)	27
Microsoft Cluster (MSCS)	28
Microsoft Hyper-V Server	28
Oracle Solaris Zones	
VMware vCenter Server	
VMware vCloud	29
Chapter 3: New Features and Enhancements	31
Huawei GalaX	31
Remote Deployment	31
User Interface	32
Documentation	32

Chapter 4: New Features and Enhancements of the Previous Release 12.7	33
Amazon EC2	33
CA AppLogic	34
CA Process Automation Connectors	34
Cisco UCS	34
Citrix XenServer	35
IBM HACMP	35
IBM LPAR	35
Installation	37
CA Network Automation	37
Oracle Solaris Zones	37
Policy Configuration	38
Rapid Server Imaging (RSI)	40
Remote Deployment	
Reservation Manager	41
Self-Service Portal	44
Service Provisioning	45
Storage Provisioning	46
Update Utilities	46
User Interface	47
VCE Vblock Provisioning Support	48
Verification	48
VMware vCloud	48
Chapter 5: Patches and Published Fixes	49
SNMPv3 Trap Forwarding Issue	49
Chapter 6: Documentation	51
Related Publications	51
Chapter 7: Known Issues	53
"Field Set detected" Warning When Selecting Start Request Form	E2
CA Process Automation Action Does Not Support Environment Variable Substitution By Default	
Localized Service Desk Template Name is Truncated	
Mozilla Firefox Automatic Upgrade	
Appendix A: Acknowledgements	57
Appendix A: Acknowledgements	
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 <u>bookshelf</u> 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 13)

Internationalization (i18n) (see page 15)

CA Server Automation AIM Server and Managed Node Requirements (see page 19)

Supported Integration Platforms (see page 26)

## **Manager Requirements**

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

CA Server Automation supports the following Windows versions only for new SystemEDGE installations or for the CA Server Automation manager upgrades from release 12.6 or 12.7:

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

The <u>compatibility matrix</u> 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).

**Note**: To optimize Windows Memory Management performance on the CA Server Automation manager or AIM server, apply the settings described in the Microsoft Knowledge Base article: <a href="http://support.microsoft.com/kb/Q315407">http://support.microsoft.com/kb/Q315407</a>

### **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
- 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!** To avoid unlimited growth of your transaction log, see the Microsoft KB Article 873235 for Microsoft SQL Server configuration instructions.

**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: <a href="http://supportconnect.ca.com">http://supportconnect.ca.com</a>.

## **Software Requirements**

The following software is required for CA Server Automation:

#### **CA Embedded Entitlements Manager (CA EEM)**

CA Server Automation distributes, supports, and is certified to work with CA EEM version 8.4 SP4 CR14 (8.4.414).

CA Server Automation also supports:

- All "CA EEM 8.4" subversions 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 subversions 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.

#### **Adobe Acrobat Reader**

Viewing or exporting reports in PDF format requires Adobe Acrobat Reader 9.

## **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 SP2 (32 bit, 64 bit), Standard and Enterprise Editions, SP3 optional
- 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 or 12.7 installation that uses SQL Server 2005: first upgrade the SQL Server to a supported version, verify that the 12.6 or 12.7 product is still operational, then upgrade to CA Server Automation Release 12.7.1.

Note the following considerations:

- For your convenience, SQL Server 2008 R2 Express Edition (32 bit) is available on the CA Server Automation installation media at the following location: DVD1\Installers\Windows\External\MSSQLExpress\setup.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 must also have the SQL client (server tools) installed.
- After the installation of SQL Server Tools, check to see that OSQL.EXE is properly installed to this location (if using the default install path):
  - MS SQL 2008: C:\Program Files\Microsoft SQL Server\100\Tools\Binn

**Important!** To ensure continued optimal performance, see the Microsoft KB Article 189858 for information on detecting and resolving database fragmentation.

#### **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 SP2, R2, or R2 Express database requires a local 2008 SP2 or 2008 R2
 Native Client, either is acceptable. 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.

## 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

## **Optional Software Requirements**

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

#### **CA AppLogic**

Versions 3.0, 3.1, and 3.5 are supported.

#### **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. Patch RO46533 is required.

#### **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 12.7.1 is certified for CA Process Automation Version 4.0 SP1 with CP level of CP02.

**Note:** 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.

#### **EMC**

Storage arrays:

- CLARiiON CX3 and CX4 Series Servers:
- Solaris, HPUX, IBM AIX, Linux, and Windows virtual and physical servers
- VMware vCenter
- IBM LPAR VIO
- Cisco UCS blade

#### **NetApp OnCommand Server**

Versions 4.0 and 4.0.2. All storage arrays are supported.

#### **SystemEDGE**

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 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, and 5.7.0 are supported for managing remote servers in your environment.

#### **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. We do 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.

## 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, and Japanese 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', 'O - 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 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 the 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.

# 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 5.7.1 requires one of the following operating systems:

#### Windows

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

- Windows Server 2008 R2 Standard, Enterprise and Data Center 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 10.0 (64 bit, ia\_64)
- 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 5.0 (Lenny) (64 bit, ia\_64) 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

#### Linux on pSeries

- Red Hat Enterprise Server 5.0
- Red Hat Enterprise Server 6.0

#### **Solaris**

**Note:** SystemEDGE supports all Solaris Zone configurations for the Solaris 10 operating system.

- 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)

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

## Windows: Cisco UCS AIM, HACMP AIM, vCenter Server AIM, vCloud AIM, Solaris Zones AIM, LPAR AIM, Remote Monitoring AIM, XenServer AIM

- Windows Server 2003 SP2 Standard, Enterprise, Data Center (32 bit, x86)
- Windows Server 2003 R2 SP2 Standard, Enterprise, and Data Center Edition (32 bit, x86)
- Windows Server 2003 R2 SP2 Standard, Enterprise, and Data Center Edition (64 bit, x64)
- Windows Server 2003 SP2 Edition (64 bit, x64)
- Windows Server 2008 Standard, Enterprise and Data Center Edition (32 bit, x86)
- Windows Server 2008 Standard, Enterprise and Data Center Edition (64 bit, x64)
- Windows Server 2008 R2 Standard, Enterprise and Data Center Edition (64 bit, x64)

#### Windows: Hyper-V AIM

Windows Server 2008 R2 Standard, Enterprise and Data Center 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 5L Version 5.3 (32 bit, 64 bit)
- 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, 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 Linux 64-bit Itanium Web Server, Advanced Server, and Enterprise Server
   5.0 (64 bit)
- Red Hat Enterprise Linux 6.0 (32 bit)
- Red Hat Enterprise Linux 6.0 (64 bit, using 32-bit binaries)
- SUSE Linux Enterprise Server 10.0 (32 bit, x86)
- SUSE Linux Enterprise Server 10.0 (64 bit, x64)
- SUSE Linux Enterprise Server 10 (64 bit, ia\_64)
- SUSE Linux Enterprise Server 11 (32 bit, x86)
- SUSE Linux Enterprise Server 11 (64 bit, x64)
- Debian Linux Version 5.0 (Lenny) (32 bit)

#### Solaris: Advanced Encryption, Service Response Monitoring AIM

**Note:** SystemEDGE supports all Zone or Container configurations for the Solaris 10 operating system.

- 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)

## **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, Data Center, and Small Business Server Edition (32 bit, x86)
- Windows Server 2003 (64 bit, x64)
- Windows Server 2003 R2 Standard, Enterprise, and Data Center 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.

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

#### **Supported Platforms**

Cisco Unified Computing System (UCS) (see page 27)

<u>Citrix XenServer</u> (see page 27)

Huawei GalaX (see page 27)

IBM HACMP for AIX (see page 27)

IBM PowerVM (Logical Partitions, LPAR) (see page 27)

Microsoft Cluster (MSCS) (see page 28)

Microsoft Hyper-V Server (see page 28)

Oracle Solaris Zones (see page 29)

VMware vCenter Server (see page 29)

VMware vCloud (see page 29)

## **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 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 HACMP for AIX**

To enable monitoring for IBM HACMP for AIX, verify that you have the following component installed in your environment:

#### **IBM HACMP 6.1**

IBM HACMP 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 or POWER6 platforms, install HMC V7R3.5, V7R7.1, or V7R7.2.

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 management for Microsoft Clusters, verify that you have the following component installed in your environment:

Microsoft Clusters based on Windows Server 2003 and Windows Server 2008

## 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)

**Note:** Reservation Manager supports Hyper-V provisioning of Windows Server 2003 and Windows Server 2008 operating systems.

#### **Oracle Solaris Zones**

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

■ Solaris 10 with zones compatibility to manage Solaris Zones.

#### **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 vCloud

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

■ VMware vCloud Director version 1.5 and 5.1

# Chapter 3: New Features and Enhancements

This section contains the following topics:

Huawei GalaX (see page 31)

Remote Deployment (see page 31)

User Interface (see page 32)

Documentation (see page 32)

## 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.

## **Remote Deployment**

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

#### **Support for Deploying AIMs**

Provides a default package wrapper that allows deployment of the Huawei GalaX AIM.

## **User Interface**

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

#### **Localized User Interface**

The user interface is available in English 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.
- The Help drop-down list provides a link to CA Support channels, which replaces the Get Satisfaction link.

## **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 Configure Huawei GalaX Management Components
- How to Create Virtual Private Clouds
- How to Manage Huawei SingleCLOUD Environments
- How to Adjust SQL Server User Permissions to the Minimum Necessary

# Chapter 4: New Features and Enhancements of the Previous Release 12.7

This section contains the following topics:

Amazon EC2 (see page 33)

<u>CA AppLogic</u> (see page 34)

CA Process Automation Connectors (see page 34)

<u>Cisco UCS</u> (see page 34)

Citrix XenServer (see page 35)

IBM HACMP (see page 35)

**IBM LPAR** (see page 35)

<u>Installation</u> (see page 37)

**CA Network Automation** (see page 37)

Oracle Solaris Zones (see page 37)

**Policy Configuration** (see page 38)

Rapid Server Imaging (RSI) (see page 40)

Remote Deployment (see page 40)

Reservation Manager (see page 41)

Self-Service Portal (see page 44)

Service Provisioning (see page 45)

Storage Provisioning (see page 46)

Update Utilities (see page 46)

<u>User Interface</u> (see page 47)

VCE Vblock Provisioning Support (see page 48)

<u>Verification</u> (see page 48)

VMware vCloud (see page 48)

## **Amazon EC2**

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

#### Multiple Amazon Web Service (AWS) Accounts

Adds support for multiple AWS accounts. Previously, only one AWS account was supported.

#### **New Instance Type**

Adds support for the instance type, m1.medium.

## **CA AppLogic**

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

#### **CA AppLogic Releases**

Support for CA AppLogic Releases 3.0, 3.1, and 3.5.

#### **CA AppLogic Application Model Tab**

View the component model for a CA AppLogic application in the Model tab for the application.

## **CA Process Automation Connectors**

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

#### **CA Process Automation Support for CA Server Automation**

CA Process Automation supports the use of CA Server Automation functions as part of CA Process Automation processes.

#### **CA Process Automation Connector Reference Guide**

In this release, the documentation *CA Process Automation Connector Reference Guide* is a separate book and part of the CA Server Automation bookshelf. In previous releases, this documentation was part of the *CA Server Automation Administration Guide*.

## Cisco UCS

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

#### **EMC Storage Provisioning**

In addition to NetApp, CA Server Automation supports storage provisioning for blades.

#### **Event Subscription**

Provides capabilities to subscribe to events from registered Cisco UCS Managers.

## Citrix XenServer

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

#### **Citrix XenServer Management and Monitoring**

CA Server Automation monitors and manages Citrix XenServer 6.0 environments.

#### Multi-instances

The XenServer AIM can manage multiple XenServers.

#### **Customized XenServer Provisioning**

CA Server Automation supports customized provisioning of new virtual machines (VM) running Windows 2003 R2 Server (32 bit and 64 bit), Windows 2008 (32 bit and 64 bit) or Windows 2008 R2 Server (64 bit). Customization options include a number of settings. For example, changing the built-in Administrator account password, computer name, and the network configuration.

### **IBM HACMP**

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

#### **HACMP** monitoring

HACMP AIM provides performance metrics for HACMP monitoring.

## **IBM LPAR**

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

#### **Unified Administration Panel**

The IBM PowerVM configuration has been unified with other platforms like VC or Zones. All Power servers that are managed by the HMC that is configured are managed automatically. CA Server Automation discovers new Power servers that are added later to the HMC are automatically.

#### **Multiple Shared Processor Pools**

Enables creation of multiple processor pools for flexible allocation of resources. The Processor Pools Pane was added to the Summary tab for a selected Managed Power System.

#### **Dual HMC**

CA Server Automation supports dual HMC. A *dual HMC* is a redundant Hardware Management Console (HMC) management system that provides high availability. When two HMCs manage one system, they are peers. Each HMC can be used to control the managed system. One HMC can manage multiple managed systems, and each managed system can have two HMCs.

#### **Preferred AIM**

The HMC/IVM Server Configuration in the Administration tab of the user interface has been enhanced to specify preferred AIM.

#### **Management Status**

The HMC/IVM Server Configuration allows enabling or disabling management of the HMC/IVM server.

#### Virtual I/O Server (VIOS) Default Credentials

The VIOS default credentials apply to VIOS that are discovered for a particular HMC server.

#### **Multiple Virtual I/O Servers**

CA Server Automation supports multiple Virtual I/O servers (VIOS). *Multiple Virtual I/O servers* offer capability that increase application availability by enabling Virtual I/O server maintenance without a downtime for the client partitions. CA Server Automation discovers all VIOS attached to a Power server and allows configuring VIOS access credentials.

#### **Deferred Load of Unconfigured Components**

This functionality provides a warning status (Not configured) for registered components that are not configured.

#### **Fibre Channel Support**

The CA Server Automation provides important information about the status of Fibre Channel virtualization and availability of worldwide port names (WWPN). *Fibre Channel* is a standardized gigabit-speed technology for transmitting data between computer devices. Fibre Channel is especially suited for connecting computer servers to shared storage devices and for interconnecting storage controllers and drives.

### **Installation**

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

#### **Installation Wizard**

- Validates your environment before installation and lets you apply available patches at the end of installation
- Installs a standalone patch utility that is available in the System Tray after installation
- Provides a simplified installation path for installing core components; CA integration products (such as CA Process Automation) can be configured in the user interface after installation.

#### **Upgrade**

- Upgrade is documented in the CA Server Automation Installation Guide.
- Allows upgrades from 12.6 and 12.7.
- Uninstall is no longer required for an upgrade.

#### **CA Network Automation**

CA Network Automation provides network change and configuration management for network devices. CA Network Automation can manage VLANs and other devices. To view the CA Network Automation user interface, click >> (Network Automation Home Page) from the Network Automation page toolbar on the Administration, Configuration page.

CA Server Automation integrates with CA Network Automation to provide functionality for Cisco routers and switches that run on the Cisco Internetwork Operating System (Cisco IOS) in an enterprise location. You can use it to add, delete, and update discovered network devices. CA Server Automation provides scripts to perform additional changes to the network devices that it manages.

## **Oracle Solaris Zones**

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

#### **Whole Root Zone Provisioning**

Lets users specify the 'whole root Zone' type when creating a Zone. A whole root zone is a self-contained zone that does not inherit packages and is independent of the Global Zone OS.

# **Policy Configuration**

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

#### **Enhanced Search Results of a Machine**

Provides policy configuration information in search results of the CA Server Automation user interface.

#### **Multiple Monitor Deletion**

Enables you to delete multiple monitors from a policy or a template in a single action to facilitate easy configuration monitoring.

#### **ACL Association with Global SNMP Objects**

Supports Access Control Lists in global SNMP objects to be applied to systems through policies.

#### **Server-specific SNMP Settings**

Supports Access Control Lists and SNMP settings at the server level. You can decide whether to apply these settings to systems through policies.

#### **Autowatchers**

Supports dynamic resource monitoring through generic, service, and process autowatchers.

#### **Discover Agent**

Allows Policy Configuration to detect an agent that is not yet registered with Policy Configuration, using all available names and addresses.

#### **Reindex Monitors and Autowatchers**

Allows the index of monitors and autowatchers to be reassigned in a single operation.

#### **Import and Export of Policies or Templates**

Allows Policies and templates to be exported from a CA Server Automation instance, and imported into another CA Server Automation instance.

#### **Change Manager Support**

Allows an existing manager to reconfigure remote SystemEDGE agents, so that they register with a different manager.

In this release, CA Server Automation provides the following Policy Configuration reports:

#### **Agent List by Distribution Server Report**

Shows SystemEDGE agents managed by each of the distribution servers and indicates whether the configuration is up-to-date.

#### **Agent List by Policy Report**

Shows SystemEDGE agents managed by policy and indicates whether the configuration is up-to-date.

#### **Configuration Exceptions by System Report**

Shows the report of Systems, where the configuration has been modified through SNMP, since a policy or a template was last applied.

#### **Managed Agent List Report**

Lists the SystemEDGE agents in managed mode.

#### **Out-of-Date Configurations by Policy/Template Report**

Shows the out-of-date policies and templates currently on agents by each Policy and Template.

#### **Out-of-Date Configurations by System Report**

Shows the out-of-date policies and templates currently on agents by each Machine.

#### **Policy and Policy Template Details Report**

Shows the report of a selected Policy or Template.

#### **System Configuration Details Report**

Shows the report of the configuration that was applied to a selected System.

#### **Systems not Configured Report**

Shows the systems which are not registered in Policy Configuration.

# Rapid Server Imaging (RSI)

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

#### **Server Migration**

CA Server Automation combines the existing RSI capture and deploy functions into a single RSI Migration function. RSI migration enables you to capture the image of a physical or virtual server and to deploy the image to another physical or virtual server. Server migration includes options to use bare metal servers or to provision a new virtual machine to host the migrated server image.

#### **RSI Documentation**

In this release, the full documentation for Rapid Server Imaging is part of the CA Server Automation bookshelf. In previous releases, this documentation was on DVD3 of the installation media.

# **Remote Deployment**

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

#### **New Platform Support**

SystemEDGE support for RedHat Linux on IBM Power PC using Remote Deployment.

#### **Deployment Reports**

Provides a new report to get Deployment Job Status for a given distribution server over a timespan. Report Component Selection and Jobs Selection provide various report generation options.

#### **Deployment to Managed Nodes through Context Menu**

Lets you open the remote deployment job wizard. The job wizard deploys only to the selected node as the target.

#### **Updates to Jobs Panel**

Provides paging, filtering, sorting and other customizing support for the job detail.

#### **Support for Deploying the AIMs**

Provides a default package wrapper that allows deployment of the following AIMs:

- High Availability Cluster Multiprocessing (HACMP) AIM
- Citrix Xen Server (XEN) AIM

#### **Common Job Tracking Portlet**

Provides enhanced job tracking of Remote Deployment jobs.

#### **Enhanced Search Results**

Provides swift access to Remote Deployment operations under search results.

#### **Multi-NIC Support**

Supports multiple NICs in deployment jobs.

#### **Updates to Deployment Job Wizard**

Removal of EULA in the Job wizard

#### **Updates to SystemEDGE Package Wrapper**

Updates to validate SNMP community strings in wrappers

# **Reservation Manager**

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

#### **Service Provisioning**

Multi-tier applications can be deployed in a single reservation.

#### Improved Insight into Resource Allocation

Administrators are provided additional views into resource allocations for VMware resource pools. The new views list allocation information at the ESX server level to provide better insight into the reserved and available capacity for the resource pool. Administrators can see a detailed breakdown that lists the reserved memory for each virtual machine in the resource pool.

#### **Global Access to Public Resources**

Resources made available to the Public organizational unit are now automatically made available to everyone. Administrators no longer have to provide access to each organizational unit to provide access to everyone.

#### **Datastore Provisioning to EMC CLARiiON Storage**

In a single operation, storage can be provisioned on EMC CLARiiON storage systems, automatically attached to an ESX server, and added to a resource pool.

#### **Simplified Set Up of Network Address Pools**

Selection of port groups is now allowed when setting up network address pools for configuring systems for specific VLANs or static IPs. This port group selection provides administrators greater control over the port groups that are used when the network address pool is selected for vNIC configuration.

#### **Automatic Creation of Organizational Unit for New Tenants**

When an administrator defines a new tenant, an organizational unit is created by default with all access privileges authorized for the tenant.

#### **New Email Notifications**

New email notifications have been added for the following events:

- Completion of virtual machine snapshot operations
- Extension of a reservation

#### **Multiple Email Recipients**

When creating reservations, multiple recipients can be specified to receive the end user email notifications.

#### **Performance and Scalability Improvements**

Reservation request processing is optimized to improve the speed of processing in large-scale environments. Lists of reservations and reserved systems display much faster as data is downloaded to the browser one page at a time.

#### **Virtual Machine Reconfiguration Enhancements**

A new confirmation dialog is displayed before a user request is processed to change the configuration of a VMware virtual machine.

**Note:** Upon completion of the configuration change, the virtual machine is returned to the power state that existed when the configuration request was submitted. Previously, the virtual machine was always set to Power On at completion of reconfiguration.

#### **Forcing Reservation Extension**

When a user is unable to extend a reservation because of unavailable resources or limits, the administrator can now force an override of the limits. If the user still needs a virtual machine, the administrator can prevent the virtual machines from being reclaimed.

#### **Substitution Parameter Enhancements**

The %RESERVATIONNOTES% and %VCSERVERNAME% substitution variables are now available for use with custom actions. The parameter values associated with a reservation are passed to any CA Server Automation action that runs before provisioning a system, after provisioning is completed, or during expiration processing.

#### Resource Based Chargeback for AppLogic

The chargeback model for AppLogic is changed to support setting rates at the resource level (CPU, memory and bandwidth) to make administration easier.

#### **Monitoring Movement of VMware Virtual Machines Across Pools**

Movement of VMware virtual machines to new clusters and resource pools is now monitored. The new location is taken into account when evaluating resource availability and showing resource allocations.

#### **Command-Line Support for Adding and Listing Software Groups**

New dpmrm commands are provided to add software groups to the inventory and to list the software groups currently in the inventory.

#### Command-Line Support for Verifying Consistency with vSphere

A new dpmrm command is provided to verify the consistency of Reservation Manager database records with vSphere as to virtual machine location. A new dpmrm command is provided to synchronize the Reservation Manager database with vSphere data.

#### **Mobile Application Update**

The Reservation Manager mobile application now supports provisioning of the following items:

- Service templates
- Hyper-V images
- LPAR templates
- AIX images and templates
- Physical server images and templates
- Solaris Jumpstart images and templates
- Amazon EC2 images

## **Self-Service Portal**

In this CA Server Automation release, the following new feature are available:

#### **Self-Service Portal Interface**

This CA Server Automation release provides a new user interface with a fully customizable Liferay Portal capability. The Self-Service Portal includes:

- For the end user, streamlined CA AppLogic and service template reservations.
- For the Tenant Administrator, reservations and organizational unit management.
- For the Cloud Administrator:
  - Reservation queue management
  - Server configuration
  - USM Modeler integration for CA AppLogic templates
  - Resource pool management

The Self-Service Portal is available from both the Start Menu and CA Server Automation user interface.

# **Service Provisioning**

In this release, CA Server Automation provides Service Consumers with one-click service provisioning based on service templates. Service Administrators can construct complex multi-tier service templates that consist of one or more applications on one or more host machines.

CA Server Automation provides a set of ready-to-use application definitions and service templates, including the following service:

■ Apache HTTP Server for Windows

CA Server Automation supports service provisioning to the following environments:

- VMware vCenter
- CA AppLogic

In this release, service provisioning features the following functionality:

#### **One-Click Provisioning**

Select a service template to provision an instance of the service.

#### **Resource Configuration**

Specify target environment resources and default machine templates available to host provisioned services.

#### **Application Definition**

Specify applications, their dependencies, and the executable actions that are required to install and run them as part of a service.

#### **Service Template Definition**

Specify the applications that a service consists of, and the machine configurations that are required to host the service.

#### **Extensible Templates**

Create base service templates that allow service consumers to specify additional applications to deploy with it.

#### **Custom Machine Definition**

Specify the machine requirements for multi-tier service provisioning, including resource requirements, clustering, shared and individual disk requirements, network configurations, and custom licensing and domain specifications.

#### vCenter Service Capture

Create service templates that are based on services already running on VMware vCenter.

#### **Application Definition and Service Template Sharing**

Export and import definition files, enabling you to share application definitions and service templates across instances of CA Server Automation.

#### **Reservation Manager Provisioning**

Use Reservation Manager to manage service provisioning resource pools and for scheduled service provisioning using reservation templates that are automatically created from service templates.

#### **CA ITCM Integration**

Deploy CA ITCM managed software packages as part of application definitions.

#### **CA Process Automation Integration**

Execute CA Process Automation processes as part of application definitions.

#### **CA Configuration Automation Integration**

Specify CA Configuration Automation blueprints to use to compare a deployed application against a stored configuration.

# **Storage Provisioning**

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

#### **New Hardware and Platform Support**

- Adds support for EMC SMI-S storage arrays: CLARiiON CX3 and CX4 Series
- Adds support for VCE Vblock for EMC UIM 3.0 (provision, activate, delete, deactivate service)

Note: The new name for NetApp Data Fabric Manager is: NetApp OnCommand Server.

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. We do 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.

# **Update Utilities**

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

#### **CA Server Automation Update**

From the Start menu, you can run the CA Server Automation Update utility to select and download available PTFs (program temporary fixes) for CA Server Automation. You can install the patches through dpminstapplyptfs.exe which is located in the product bin directory.

## **User Interface**

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

#### **Product Banner**

The top section of the user interface contains the following new controls:

- Self-Service Portal link accesses the Liferay-based portal interface.
- Management/Dashboard link toggles between the Dashboard and operational pages.
- Help drop-down menu provides:
  - Online Help (latest documentation at support.ca.com)
  - Local Help (for systems without Web access)
  - CA Support (support.ca.com requires registered login)
  - Get Satisfaction (online feedback discussion)
  - About (product information)

#### **Dashboard**

The Dashboard is larger and more streamlined in this release and provides:

- First Step Dashboard for operational choices in an interview format.
- Service Dashboard for access to service provisioning functions.
- Estimated Savings Dashboard for savings calculations based on operational environment.
- Jobs/Events/Alarms console with grouping and root cause correlation.

At lower right corner, a Configure menu accesses:

- Dashboard (Properties and Library for dashboards and portlets)
- User Preference... (Refresh and Events settings)

#### Management

Added features:

- Jobs table in bottom panel
- Drag and drop: servers to services and service profiles to UCS blades

# **VCE Vblock Provisioning Support**

CA Server Automation Release 12.7 supports VCE Vblock integration to manage one or more Vblock servers, using the UIM 3.0 API for the EMC Ionix Unified Infrastructure Manager (UIM).

Before you configure CA Server Automation, create UIM Service Offerings using the UIM FlexUI (under Administration) and Mark Available. UIM/P consoles (FlexUI) also are required for Vblock discovery and to decommission a service. In addition, the UIM 3.0 API does not support Vblock resource configuration.

On the CA Server Automation user interface, use the Administration, Configuration, VCE Vblock page to establish a connection with one or more VCE Vblock UIM servers. Once the connection is established, add a Vblock AIM instance to the bottom pane on the same page. CA Server Automation automatically configures the selected AIM with the connection data of the VCE Vblock UIM servers. Then CA Server Automation initially discovers the VCE Vblock UIM servers and populates the database with the discovered data.

The discovered VCE Vblock resources and available operations reside on the Resources, Explore tree in the CA Server Automation user interface. From the Explore tree, Vblock services can be discovered, planned, provisioned, and managed.

## **Verification**

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

#### **Service Relationship Diagram**

Enables you to view a graphical representation of all communication relationships for all services in your data center.

## VMware vCloud

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

#### VMware vCloud management and monitoring

CA Server Automation monitors and manages VMware vCloud Director 1.0, 1.0.1, or 1.5 environments.

#### **Multi-instances**

The vCloud AIM can manage multiple VMware vCloud Director servers.

# **Chapter 5: Patches and Published Fixes**

Patches and published fixes may be available for this version of the product. Go to the CA Support Online website <a href="http://supportconnect.ca.com">http://supportconnect.ca.com</a> 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.

This section contains the following topics:

SNMPv3 Trap Forwarding Issue (see page 49)

# **SNMPv3 Trap Forwarding Issue**

The CA NSM Event Manager must be configured in a specific manner to successfully receive CA Server Automation SNMPv3 traps. If the CA NSM Event Manager is not configured properly, trap processing terminates.

Important! CA NSM 11.1: You must apply CA fix QO99777 and Microsoft fix 931565.

For more information about the CA NSM issue, see fix number Q099777 on CA Support Online at <a href="http://ca.com/support">http://ca.com/support</a>. Click Technical Support, then Download Center, and enter fix number Q099777 in the Quick Search field to locate the Product Information Bulletin.

You should also search the Microsoft Support website for Knowledge Base article 931565, which discusses the situation in which a WinSNMP application stops responding when you run third-party security scanning software on a Windows Server 2003-based computer.

# **Chapter 6: Documentation**

This section contains the following topics:

**Related Publications** (see page 51)

### **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, log files, and performance metrics.

#### **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 for AppLogic User and 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 7: 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 <a href="http://ca.com/support">http://ca.com/support</a>.

- 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:

"Field Set detected" Warning When Selecting Start Request Form (see page 53)

CA Process Automation Action Does Not Support Environment Variable Substitution By

Default (see page 54)

Localized Service Desk Template Name is Truncated (see page 54)

Mozilla Firefox Automatic Upgrade (see page 55)

# "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 Mozilla Firefox browser upgrade, you may face page rendering issues when using the CA Server Automation web application.

#### **Solution:**

Mozilla Firefox could be automatically upgraded. If you encounter page rendering issues, check if 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.

- 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 6.0.35
- 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
- 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
- JRE v1.6
- 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 (../../TXT/Libxslt1.1.24.txt)
- 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
- Oracle JDK 1.6.0\_32 (../../TXT/OracleJDK1.6.0\_32.txt)
- 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
- openwsman 2.0
- Oracle JDBC Driver 10G Release 2
- Oracle JRE v.1.6
- PCRE 8.1 and PCRE Library 8.12
- Pegasus 2.7
- Perl 5.12.2
- PHP 5.3.13 (.../../TXT/PHP5.3.13.txt)
- POCO 1.3.2
- **PuTTY 0.60**
- py2exe for Python 2.6.x 0.6.9
- Python 2.6
- Rhino 1.6R4
- Sun JDK 1.6.0
- swfobject 2.1
- Ubuntu 10.04
- VIX API
- Windows Installer XML (WiX)
- Zlib 1.2.3 and Zlib 1.2.5