CA Common Components

Release Notes
Release 11.3.6
CA Technologies Product References

This document references the following CA Technologies products:

- CA Embedded Entitlements Manager (CA EEM) (formerly named eTrust® Identity and Access Management (eTrust IAM))
- CA Jobtrac™ Job Management (CA Jobtrac)
- CA Network and Systems Management (CA NSM) (formerly named Unicenter NSM)
- CA Scheduler® Job Management (CA Scheduler)
- CA Universal Job Management Agent (CA UJMA)
- CA Workload Automation AE (formerly named Unicenter® AutoSys® Job Management (Unicenter AutoSys JM))
- CA Workload Control Center (CA WCC)

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.
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Chapter 1: Welcome

Welcome to CA Common Components. This document describes installation considerations, supported operating systems, system requirements, and known issues, if any.

For the latest version of the Release Notes, visit http://ca.com/support. For major releases, a full updated documentation set with a bookshelf is provided. You can find the bookshelf containing the Release Notes by searching the Find a Product Documentation Bookshelf section on the Documentation page.

CA Common Components DVD

You can use the CA Common Components DVD to install the following common components:

- CA Embedded Entitlements Manager (CA EEM) Release 12.51

  Notes:
  - CA EEM is the new name for eTrust® Identity and Access Management (eTrust IAM).
  - For the latest CA EEM support information, see the CA Embedded Entitlements Manager Compatibility Matrix on the CA Support website, http://ca.com/support. This document lists the following:
    - Supported operating systems
    - IPv6 support
    - FIPS 140-2 compliance
    - Section 508 compliance
    - Third-party products that CA EEM supports
    - Embedded CA Technologies products that are shipped with CA EEM

- CA Secure Socket Adapter (SSA) 2.2.8

- Event Management r11.2 SP2

- CA, Inc. Common Communications Interface (CAICCI) r11.2 SP2

- Management Command Center r11.2 SP2

  Note: On Windows, you cannot install Management Command Center using the CA Common Components DVD.
Chapter 2: Known Issues

This chapter provides information about issues that are known to exist in this version.

This section contains the following topics:

- **CA Messaging (CAM) in an IPv6 Environment** (see page 12)
- **Tomcat Administration Web Interface** (see page 12)
- **Error Messages in the igateway.log File** (see page 12)
- **CAF Error After Deploying the CA Event Agent from IT Client Manager r12 SP1 (UNIX only)** (see page 13)
- **Cell/Installation Warning Message (UNIX only)** (see page 13)
- **DIA Setup Failed Error (UNIX only)** (see page 14)
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- **Naming Requirements of the Installation Directories (UNIX only)** (see page 14)
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- **Ensure that My Documents and Related Folders Exist (Windows only)** (see page 22)
- **Enterprise Management on Microsoft Windows Vista (Windows only)** (see page 22)
- **CA High Availability Service (HAS) and the RMI_Server (Windows only)** (see page 23)
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- **Semicolons in Microsoft SQL Server Login Passwords (Windows only)** (see page 24)
- **Use of Non-Microsoft Virtualization Technology (Windows only)** (see page 25)
CA Messaging (CAM) in an IPv6 Environment

If IPv6 is installed on a computer that already has a CAM service running, CAM must be recycled for it to support IPv6. To recycle CAM from a command line, issue "camclose" followed by "cam start".

Tomcat Administration Web Interface

The Tomcat Administration Web Interface does not support localized characters in user names and groups.

Error Messages in the igateway.log File

The igateway.log file may include several entries of the following error message:

SponsorManager:ubmit ponsor[ iRegis try] not found and invocation returned 404 error

If you see this error message in the igateway.log file, remove the localhost value from the <RegistryHostList> <host> tag in the igateway.conf file. For example, after changing the igateway.conf file, it should look like the following:

<RegistryHostList name="RegistryHost-1">
    <host></host>
</RegistryHostList>

Important! Do not remove the localhost value from the <RegistryHostList> <host> tag in the igateway.conf file if iRegistry is already installed or the error message is not in the igateway.log file.
CAF Error After Deploying the CA Event Agent from IT Client Manager r12 SP1 (UNIX only)

Symptom:

After deploying the CA Event Agent from IT Client Manager (Software Delivery), you might get the following error the next time you use SDAgent:

caf: error while loading shared libraries: libetpki2.so

Solution:

This happens because the soft links of ETPKI libraries used by SDAgent were not created during the upgrade process of ETPKI in the CA Common library folder.

To solve this issue, run the following commands from the command line:

```
ln -sf "$CASHCOMP"/ETPKI/lib/libetpki_openssl_crypto.so /opt/CA/CAlib/libetpki_openssl_crypto.so
ln -sf "$CASHCOMP"/ETPKI/lib/libetpki_openssl_ssl.so /opt/CA/CAlib/libetpki_openssl_ssl.so
ln -sf "$CASHCOMP"/ETPKI/lib/libcryptocme2.so /opt/CA/CAlib/libcryptocme2.so
ln -sf "$CASHCOMP"/ETPKI/lib/libetpki2_thread_posix.so /opt/CA/CAlib/libetpki2_thread_posix.so
ln -sf "$CASHCOMP"/ETPKI/lib/libetpki2.so /opt/CA/CAlib/libetpki2.so
ln -sf "$CASHCOMP"/ETPKI/lib/libjetpki.so /opt/CA/CAlib/libjetpki.so
ln -sf "$CASHCOMP"/ETPKI/liblibcryptocme2.sig /opt/CA/CAlib/libcryptocme2.sig
ln -sf "$CASHCOMP"/ETPKI/lib/EtpkiProvider.jar /opt/CA/CAlib/EtpkiProvider.jar
ln -sf "$CASHCOMP"/ETPKI/etpki/log/liblog_api.so /opt/CA/CAlib/liblog_api.so
"$CASHCOMP"/bin/caprofile -s ETPKIHOME /""$CASHCOMP"/ETPKI
```

Cell/Installation Warning Message (UNIX only)

You may receive the following message during cell registration or agent installation:

java.rmi.NotBoundException: RMI registry name:lgene is not bound in server

This message appears because the Distributed Intelligence DNA has not been activated yet and, therefore, cannot communicate with the agentctrl cell. It can be considered a warning rather than an installation error.
DIA Setup Failed Error (UNIX only)

Symptom:

In some CA Event Management upgrades, the CA Distributed Intelligence Architecture (DIA) installation fails with the following error in the DIA logs:

The wizard cannot continue because of the following error: could not find wizard home (101) setup has failed

Solution:

To solve this issue, do the following:
1. Cancel the upgrade process.
2. Delete the following folder:
   `<InstallShield folder>/Universal/common`
   
   Note: The InstallShield folder can be present anywhere on the disk. So, search for the InstallShield folder and follow the steps.
3. Start the upgrade process.

Error Occurs When Running safex on SuSE and Solaris

An error can occur when you run the safex utility on SuSE (Linux) and Solaris (UNIX). To resolve this issue, verify or modify the following items in your configuration:

- On SuSE, include the following line in the LD_LIBRARY_PATH:
  
  `CA_EEM_installation_location/lib`
  
  Note: The default CA EEM installation location is `/opt/CA/SharedComponents/EmbeddedEntitlementsManager`

- On Solaris, set the following environment variable:
  
  `CAPKIHOME=CAPKI_installation_location`
  
  Note: The default CAPKI installation location is `/opt/CA/SharedComponents/CAPKI`

Naming Requirements of the Installation Directories (UNIX only)

The installation fails on Linux and UNIX if the setup script is called from a directory with a name or path that contains blanks. The installation also fails if the product is installed in a directory with a name or path that contains blanks or spaces.
**PostgreSQL Database Installation Fails (UNIX only)**

If a PostgreSQL database has not been uninstalled properly, a socket file and a lock file may remain in the temporary directory (/tmp). If these files are present in the temporary directory and not removed before starting the common components installation, the installer fails to install the PostgreSQL database and the common components installation fails. The socket and lock files can be listed with the following command:

```bash
ls -la /tmp/.s.PGSQl.*
```

**CA Common Components Are Installed in the Default Path (AIX only)**

When you perform a silent installation, the common components are installed in the default path even if you specify a non-default path.
CAICCI Stops Responding on AIX Nodes (AIX only)

Symptom:

The CAICCI remote daemon process (ccirmtd) and the rmtcntrl status command stop responding on AIX 5.3 or 6.1 nodes.

Solution:

To solve this problem, do the following:

1. Issue the following command at the command prompt:
   
   `awservices stop`
   
   The awservices stop.

2. Open the atservices.ini file that is located at the following path:
   
   `$AGENTWORKS_DIR/services/config`

3. Add the UniqueAddress parameter in the awservices block as follows, and save the file:
   
   `UniqueAddress=1`

   Notes:
   
   - You must set the UniqueAddress parameter to 1 on the manager when you have two or more agent nodes sharing the same internal IP address. These nodes likely have multiple IP addresses and were discovered into the MDB using different IP addresses. However, these systems still advertise all IP addresses to the manager.
   
   - If you set the UniqueAddress parameter to 1, the manager does not add duplicate IP addresses for different nodes into the cache.

4. Issue the following command:
   
   `awservices start`
   
   The awservices start.

Example: Add awservices

This example adds a unique address to the existing awservices:

```plaintext
Start=1
Stop=0
Transport=awm_qiksoc
BootDelay=2
StartDelay=2
UniqueAddress=1
```
Coredump Error When Starting and Stopping CA Common Components (AIX only)

After you install and start the common components, the CA-cal service fails with the following error messages:

unisrvcntr start all
Executed CA-emsrvc start.................................OK
Executed CA-help start...................................OK
.CADR_I_DOCINIT Doc/Help server initialized on Sat Nov 20 10:15:01 2010
.CACM_S_047 Calendar daemon initialization in progress...
/etc/rc.d/CA-cal[103]: 1146900 Illegal instruction(coredump)
Executed CA-cal start....................................OK

unisrvcntr stop all
Executed CA-opr stop.................................OK
Stopping calendar daemon.
/etc/rc.d/CA-cal[118]: 1089770 Illegal instruction(coredump)

**Note:** The fix for this issue is available on CA Support Online (http://ca.com/support). The applicable fix number is T5V6018.
Installation Issue on Linux Platforms Using RPM v4.1.1 (Linux only)

Symptom:

If you want to install CA Event Management or CAICCI in a non-default location on a Linux platform that has RPM v4.1.1 installed on it, you must first create a symbolic link from the default location to the non-default location. Otherwise, the installation fails.

Note: All symbolic links must be created from the root user account.

Solution:

You can determine the RPM version on the Linux platform by issuing the following command in a terminal window:

```
 rpm --version
```

To create a symbolic link to change the installation location of CA Shared Components from the default location (/opt/CA/SharedComponents) to a non-standard location:

1. Issue the following command if the /opt/CA directory does not exist:
   ```
   mkdir -p /opt/CA
   ```
   The /opt/CA directory is created.

2. Issue the following command:
   ```
   ln -s <non-default location> /opt/CA/SharedComponents
   ```
   **Example:** `ln -s /tools/CA/SharedComponents /opt/CA/SharedComponents`
   The symbolic link is created.

To create a symbolic link to change the installation location of CA Event Managers or Agent Technology from the default location (/opt/CA/SharedComponents/ccs) to a non-standard location:

1. Issue the following command if the /opt/CA/SharedComponents directory does not exist:
   ```
   mkdir -p /opt/CA/SharedComponents
   ```
   The /opt/CA/SharedComponents directory is created.

2. Issue the following command:
   ```
   ln -s <non-default location> /opt/CA/SharedComponents/ccs
   ```
   **Example:** `ln -s /usr/local/CA/NSM /opt/CA/SharedComponents/ccs`
   The symbolic link is created.
Management Command Center Does Not Launch on Solaris Sparc (x86) After Installation (Solaris only)

For Management Command Center to work, you must update the location where the gtk+ libraries are installed in the LD_LIBRARY_PATH environment variable. For example, on Solaris, the default installation path for gtk is /usr/sfw/lib. But, if you install the libraries in any other location such as /usr/local/lib, you must add the library path to LD_LIBRARY_PATH as follows:

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:gtk_installed_path
```

`gtk_installed_path`

Specifies the gtk installation path.

**Note:** SMCgtk and SMCglib are required packages. The packages are available with the OS installation media and are installed in the /usr/sfw/lib directory. You can also download the packages from http://www.sunfreeware.com; these files are installed in the /usr/local/lib directory.

Upgrade Issue on Solaris (Solaris only)

While upgrading from Event Management r11 on Solaris to Event Management r11.2, the PostgreSQL installation fails because the ca-cs-utils package is not updated correctly. The test fix T5MH043 contains a new ca-cs-utils-11.0.08030.0.Solaris.@pif package that must be installed. The test fix T5MH043 can be applied to either a copy of the master image using the NSMPatchIT from patch RO00573, or it can be applied to an installed image using applyptf. Instructions for applying this fix to either image are included in T5MH043.

**Note:** NSMPatchIT is a utility for patching master images. Contact CA Technical Support at [http://ca.com/support](http://ca.com/support) for test fix T5MH043.
Access Denied for Utility Commands on Microsoft Windows Vista (Windows only)

By default, Microsoft Windows Vista gives administrators only standard user privileges through its User Account Control. Because admin privileges are required to install the common components and run most of the commands, you may receive an 'Access is Denied' message when trying to run utility commands from a command prompt.

To override User Access Control without disabling it completely and obtain the admin level privileges required to run the utilities, we recommend that you open a command prompt with "Run as administrator" on Microsoft Windows Vista systems.

To open a command prompt with "Run as administrator", right-click the Command Prompt option in the Start menu and select "Run as administrator". After you confirm the operation, a command prompt opens titled Administrator: Command Prompt. You can run the utilities requiring administrator privileges from this prompt without being denied access.

Accessing Microsoft Windows Vista Shares (Windows only)

When you map to a Microsoft Windows XP-based computer from a Microsoft Windows Vista computer and try to access the mapped computer, you may get an error message.

Note: For more information about a workaround, see the Microsoft Knowledge Base.

Browsiing Omits Some Microsoft SQL Servers Database Instances (Windows only)

Due to configuration issues with some firewalls, including the default Windows firewall behavior in Microsoft Windows XP Service Pack 2, browsing for Microsoft SQL Servers database instances may not list all active instances.

Note: For more information about how to configure your system to allow such network enumeration, see the Microsoft Knowledge Base and your firewall software documentation.
CA Common Components Installation Does Not Detect Existing Installations (Windows only)

If you select to install Event Management or CAICCI during the common components installation, the installer provides the option to upgrade or remove these common components if the r11 or r11.3 common components are already installed on your computer.

However, if CCISA is already installed on your computer, the installer does not provide the option to upgrade or remove this component and installs the common components on your computer.

Note: CAICCI is the new name for CCISA. In r4.5, CAICCI was referred to as CCISA.

CA EEM Fails to Install on Microsoft Windows (64-bit) Operating Systems (Windows only)

On all supported Microsoft Windows (64-bit) operating systems, when you install CA EEM using the CA Common Components DVD, the installation does not proceed further if a 64-bit version of iTechnology iGateway is already installed on your computer, a message similar to the following is displayed:

iGateway 64 bit detected. EEM 32 bit cannot be installed where iGateway 64 bit is installed.

To resolve this problem, take any one of the following actions:

- Uninstall the 64-bit version of iTechnology iGateway and then install CA EEM using the CA Common Components DVD.
- Use the EEMServer_win64.exe file in the CA Common Components DVD to install CA EEM 64-bit server edition. The EEMServer_win64.exe file is located at DVD_drive\Disk1\InstData\VM\EEM\WIN64.

   DVD_drive
   Identifies the CA Common Components installation media drive.

CA EEM Upgrade Fails (Windows only)

The CA EEM upgrade fails because the installer is unable to update the CA directory file.
Components Not Selectable for Installation (Windows only)

When you attempt to select components during installation, the following message may be displayed preventing the installation process or interview from proceeding:

No supported communications protocols have been found.
RPC registry key (null) may be missing or damaged.
Contact system administrator.

This error results from a problem with the configuration of RPC client protocols in Windows.

Note: For more information about restoring the registry entries under HKEY_LOCAL_MACHINE\Software\Microsoft\Rpc\ClientProtocols, see the Microsoft Knowledge Base.

Ensure that My Documents and Related Folders Exist (Windows only)

The common components installation requires that the folders My Documents, My Pictures, My Videos, and so on, for which the location can be customized for each user, must exist at the time of this installation for the user account that is installing the common components.

Enterprise Management on Microsoft Windows Vista (Windows only)

The IPv6-only shares on Microsoft Windows Vista are not accessible from Microsoft Windows XP or 2003. Therefore, to access remote Event Consoles for IPv6-only computers with Microsoft Windows Vista is not possible.
CA High Availability Service (HAS) and the RMI_Server (Windows only)

If you are using HAS to support fault tolerant functionality when Event Management is running in a cluster environment, on a soft failover, you must ensure that the RMI_Server on the device that failed is no longer running. If it is running when the cluster fails back to this node, remote connections cannot be made to the previously running RMI_Server.

To check if the RMI_Server is running on the failed device
1. Start the Task Manager, and check if the application RMI_Server.exe is running.
2. Start a command prompt if the application RMI_Server.exe is running, and issue the following command:
   ```
rmi_monitor -k localhost
   ```
3. Verify that RMI_Server.exe is no longer running in the Task Manager.

Installation Fails on UAC Enabled Computers (Windows only)

The common components fail to install on User Account Control (UAC) enabled computers. This happens because of UAC restrictions; a standard user from an administrator group does not have full privileges to install the common components.

To install the common components, follow these steps:
1. Right-click setup.exe.
2. Select "run as administrator" option.
3. Install the common components.

Product Icons Not Upgraded (Windows only)

Due to an issue in Windows, when performing an upgrade of a previous version of the common components, the old icons on your desktop, on the Start menu, or in My Documents may not be upgraded to the new product icons.

Note: For more information about this problem and a workaround, see the Microsoft Knowledge Base.
Remote Desktop Connection Local Disk UNC Path Not Supported on Microsoft Windows 2003 or Windows XP (Windows only)

Due to the increased security in Windows installer, installing the common components from a Terminal Services UNC path on Windows 2003 or Windows XP is not supported and generates a 1645 error code. Remote Desktop Connection supports automatically connecting local disk drives in a Windows 2003 or Windows XP Terminal Services session. Instead of using a Remote Desktop Connection to install on Windows 2003 or Windows XP, use one of the following methods:

- A mapped drive to the Terminal Services UNC share
- A mapped drive to the client computer’s share
- A UNC path to the client computer
- A path on the local computer

Semicolons in Microsoft SQL Server Login Passwords (Windows only)

When Microsoft SQL Server is using SQL Server Authentication (also known as Mixed Mode Authentication), it allows login passwords to be defined with semicolons. However, when you attempt to connect to the computer where Microsoft SQL Server is installed using that password, you may see an error message. Do not use Microsoft SQL Server credentials (for example, for the password for the nsmadmin ID or for any other users) that include a semicolon.

Note: For more information about this problem, see the Microsoft Knowledge Base.
Use of Non-Microsoft Virtualization Technology (Windows only)

When installing or using the common components inside of a VMware guest Windows operating system, or within other non-Microsoft virtualization technology, be aware that Microsoft does not test and may not support the environment in which the CA software is deployed.

Note: For more information, see the Microsoft Knowledge Base.

Many of our clients run applications and operating systems under VMware. CA also makes use of VMware to create various Windows and Linux environments. CA is aware of some issues when running the common components in VMware environments. However, CA does not attempt to test every possible setup of the common components with VMware and cannot certify specific client configurations.

Testing within CA on VMware systems has found that, in certain cases, the following may occur:

- Microsoft SQL Server may go into an unavailable state during the installation or upgrade of the common components and cause that process to fail.
- Attempting to open PDF documents stored on the Shared Folder can result in the following error message:
  
  Unable to load required component 'Unicows.dll'
- When performing an installation from a network drive inside a VMware guest operating system, you may experience the following file copy error:

  ERROR_NETNAME_DELETED / "The specified network name is no longer available."

  Note: For more information, see the Microsoft Knowledge Base.

Note: For more information about CA support for VMware, visit [http://ca.com/support](http://ca.com/support).
Chapter 3: Operating System Support

CA supports the subsequent operating systems for the duration of their life cycle (as determined by the operating system's manufacturer or until CA announces that we are dropping support). The supporting operating systems are subject to change. For more information about compatibility and to see the latest operating systems supported, visit http://ca.com/support.

Notes:

- For information about CA EEM Release 12.51 system requirements, installation considerations, and known issues, see the *CA Embedded Entitlements Manager Release Notes*.

- For information about Event Management r11.2 SP2, Management Command Center r11.2 SP2, and CA, Inc. Common Communications Interface (CAICCI) r11.2 SP2 system requirements and installation considerations, see the *CA NSM Release Notes*.

- For information about the supported operating systems, system requirements, and known issues of the CA Technologies product that uses the common components, see the corresponding CA Technologies product *Release Notes*.

This section contains the following topics:

- [Supported UNIX Versions](#) (see page 28)
- [Supported Linux Versions](#) (see page 29)
- [Supported Windows Versions](#) (see page 30)
Supported UNIX Versions

If you want to install a common component on an operating system that is not listed in this topic, do the following:

1. Verify if the common component supports that operating system.

   **Notes:**
   - For information about CA EEM Release 12.51 supported operating systems, see the *CA Embedded Entitlements Manager Release Notes* or visit the CA Embedded Entitlements Manager Product page at [http://ca.com/support](http://ca.com/support) and follow the CA Embedded Entitlements Manager Compatibility Matrix link under the Product Status section.
   - For information about the Event Management r11.2 SP2, Management Command Center r11.2 SP2, and CA, Inc. Common Communications Interface (CAICCI) r11.2 SP2 supported operating systems, see the *CA NSM Release Notes* or visit the CA Network and Systems Management Product page at [http://ca.com/support](http://ca.com/support) and follow the CA Network and Systems Management r11 Release Certification Information link under the Product Status section.

2. Install the common component using the common component installation media.

   For example, if you want to install Event Management on an operating system that is not listed in this topic, see the *CA NSM Release Notes* to verify if Event Management supports that operating system and then install Event Management using the CA NSM media.

The CA Common Components support the following UNIX versions:

- Solaris 10 (SPARC 64-bit)
- HP-UX 11iv2 (PA-RISC 64-bit)
- HP-UX 11iv2 (Itanium 64-bit)
- HP-UX 11iv3 (PA-RISC 64-bit)
- HP-UX 11iv3 (Itanium 64-bit)
- AIX 5.3 (POWER 32-bit and 64-bit)
  
  **Note:** Event Management requires Maintenance Level 3.

- AIX 6.1 (POWER 64-bit)
- AIX 7.1 (POWER 64-bit)

  **Note:** On AIX 6.1 or 7.1 Workload Partitions (WPARs) computers, install the Event Manager using the CA NSM media. The Event Manager that is installed using the CA Common Components DVD is not supported on AIX WPARs computers. However, the Event Agent is supported on AIX 6.1 or 7.1 WPARs computers and so you can install it using the CA Common Components DVD.
Note: For information about CA Workload Automation AE supported operating systems, see the CA Workload Automation AE Release Notes.

**Supported Linux Versions**

If you want to install a common component on an operating system that is not listed in this topic, do the following:

1. Verify if the common component supports that operating system.
   
   Notes:
   
   - For information about CA EEM Release 12.51 supported operating systems, see the CA Embedded Entitlements Manager Release Notes or visit the CA Embedded Entitlements Manager Product page at [http://ca.com/support](http://ca.com/support) and follow the CA Embedded Entitlements Manager Compatibility Matrix link under the Product Status section.
   
   - For information about the Event Management r11.2 SP2, Management Command Center r11.2 SP2, and CA, Inc. Common Communications Interface (CAICCI) r11.2 SP2 supported operating systems, see the CA NSM Release Notes or visit the CA Network and Systems Management Product page at [http://ca.com/support](http://ca.com/support) and follow the CA Network and Systems Management r11 Release Certification Information link under the Product Status section.

2. Install the common component using the common component installation media.

   For example, if you want to install Event Management on an operating system that is not listed in this topic, see the CA NSM Release Notes to verify if Event Management supports that operating system and then install Event Management using the CA NSM media.

   The CA Common Components support the following Linux versions:
   
   - Red Hat Enterprise Linux Server 5 (x86 32-bit and 64-bit)
   - Red Hat Enterprise Linux Server 6 (x86 32-bit and 64-bit)
   - SuSE Linux Enterprise Server 10 (x86 32-bit and 64-bit)
   - SuSE Linux Enterprise Server 11 (x86 32-bit and 64-bit) (Event Management Agent only)

   Notes:
   
   - The gtk-1.2.10-1090.1.i586.rpm package is required to install Management Command Center using the CA Common Components DVD.
   
   - For information about CA Workload Automation AE supported operating systems, see the CA Workload Automation AE Release Notes.
Supported Windows Versions

If you want to install a common component on an operating system that is not listed in this topic, do the following:

1. Verify if the common component supports that operating system.

   **Notes:**
   - For information about CA EEM Release 12.51 supported operating systems, see the *CA Embedded Entitlements Manager Release Notes* or visit the CA Embedded Entitlements Manager Product page at [http://ca.com/support](http://ca.com/support) and follow the CA Embedded Entitlements Manager Compatibility Matrix link under the Product Status section.
   - For information about the Event Management r11.2 SP2, Management Command Center r11.2 SP2, and CA, Inc. Common Communications Interface (CAICCI) r11.2 SP2 supported operating systems, see the *CA NSM Release Notes* or visit the CA Network and Systems Management Product page at [http://ca.com/support](http://ca.com/support) and follow the CA Network and Systems Management r11 Release Certification Information link under the Product Status section.

2. Install the common component using the common component installation media.

For example, if you want to install Event Management on an operating system that is not listed in this topic, see the *CA NSM Release Notes* to verify if Event Management supports that operating system and then install Event Management using the CA NSM media.

The CA Common Components support the following Windows versions:

- Microsoft Windows Server 2003 (x86 32-bit and 64-bit) with any later maintenance release
- Microsoft Windows Server 2003 R2 (x86 32-bit and 64-bit)
  
  **Note:** In 64-bit environment (agents only)-refer to PIB QI86232 for restrictions.
- Microsoft Windows 7 (x86 32-bit and 64-bit)
- Microsoft Windows 2008 (Notification client r11.2 SP2 only)
- Microsoft Windows 2008 R2
- Microsoft Windows Server 2008 (x64)
- Microsoft Windows Server 2008 (x86 32-bit and 64-bit)
- Microsoft Windows Server 2008 R2 (x86 64-bit)
- Microsoft Windows Server 2008 R2 (x64)
- Microsoft Windows 2008 R2 Cluster
- Microsoft Windows Server 2008 R2 SP1
- Microsoft Windows 2008 SP2
- Microsoft Windows XP Professional (32-bit version only), with any later maintenance
- Microsoft Windows Vista (x86 64-bit) for CA NSM remote admin clients

Unicenter Managers are not supported on Microsoft client environments (Windows XP, Windows Vista, and Windows 7). Only the Enterprise Management Event Agent client component is supported on those environments.

**Note:** For information about CA Workload Automation AE supported operating systems, see the *CA Workload Automation AE Release Notes*. 
Chapter 4: IPv6 and Browser Support

This chapter provides IPv6 and browser support information for the following common components:

- SSA
- Event Management
- CAICCI
- Management Command Center

Note: For information about CA EEM Release 12.51 browser support, see the CA Embedded Entitlements Manager Release Notes.

This section contains the following topics:

IPv6 Support (see page 33)
Web Browser Support (see page 33)
Web Servers and Servlet Environment Support (see page 33)
Java Browser Support (see page 34)

IPv6 Support

CA Common Components Release 11.3.6 supports Internet Protocol version 6 (IPv6), as well as the legacy IPv4 only operation, and dual IPv4 and IPv6 stacks.

Web Browser Support

The following web browsers are supported:

- Microsoft Internet Explorer 6 SP1 through 8
- Mozilla Firefox 1.6 and higher

Web Servers and Servlet Environment Support

For the common components, the web applications run as Java Servlets and conform to the Java Servlet 2.3 and JSP 1.2 specifications. CA Common Components Release 11.3.6 is shipped with Apache Tomcat, so a web server is not required to install or run the web applications. JavaScript must be enabled on all supported web browsers for the common components to function correctly.
Java Browser Support

The common components web applications use Java applications in their web pages and require the following browser support for Java:

- Built-in Java support in a web browser, if present. If the built-in support for Java is not present, the dashboards require that you install the Java Runtime Environment (JRE) from the Sun Microsystems web site.
- Install the JRE from the Sun Microsystems web site for the web browser.

If JRE is not detected on your computer when you use the common components web applications, a link appears so you can download JRE from the Sun Microsystems web site. When you install JRE for Windows, ensure that you select the Offline Installation option instead of the Install from the Web option. The common components web applications support JRE 1.5.10 or later.

The graphical displays on dashboards and reports do not appear unless built-in support or the JRE is present.
Chapter 5: System Requirements

This chapter describes the system requirements for the following common components:

- SSA
- Event Management
- CAICCI
- Management Command Center

Note: For information about CA EEM Release 12.51 system requirements, see the CA Embedded Entitlements Manager Release Notes.

This section contains the following topics:

- Hardware Requirements (see page 36)
- Software Requirements (see page 38)
- Java Version for SSA (see page 38)
- GTK Requirements for the Management Command Center (see page 39)
- Database Requirements - UNIX (see page 40)
- Database Requirements - Windows (see page 41)
- su Command on UNIX (see page 42)
- Adobe Acrobat Reader Support (see page 42)
- Kernel Parameter Requirements - HP-UX Installation (see page 43)
- Kernel Parameter Requirements - Linux Installation (see page 45)
- Kernel Parameter and Resource Controls Requirements - Solaris Installation (see page 46)
- tr Command in Unicode Environment on UNIX (see page 47)
Hardware Requirements

If the computer does not have the minimum resources necessary to support the installed components, you will see messages stating that one or more CA services have failed to start. In some cases, even computers that meet or exceed the necessary hardware requirements may experience this behavior if the combination of software products installed cause a temporary shortage of resources during startup. The services may be operational shortly after the errors appear.

If this occurs, it is necessary to delay the startup of CA services to allow other critical services time to completely initialize. In cases where the resources available are insufficient, CA services and other services may fail causing other cascading failures. The overall stability of your system is affected if you install the common components on systems with insufficient resources.

Depending on your operating environment, the following hardware requirements must be met or exceeded for the common components to install and run correctly:

**AIX**
- RS 6000 1.0 GHz
- Physical Memory: 1 GB (minimum) 4 GB (recommended)
- Swap Space: 2 GB
- Disk Space: At least 1 GB of free space

**HP-UX**
- PA RISC 1 GHz
- Physical Memory: 1 GB (minimum) 4 GB (recommended)
- Swap Space: 4 GB
- Disk Space: At least 1 GB of free space

**Linux**
- Intel P4 1.6 GHz
- Physical Memory: 1 GB (minimum) 4 GB (recommended)
- Swap Space: 2 GB
- Disk Space: At least 1 GB of free space
Solaris SPARC
- Processor: SPARC 1.0 GHz
- Physical Memory: 1 GB (minimum) 4 GB (recommended)
- Swap Space: 2 GB
- Disk Space: At least 1 GB of free space

Windows
- Processor: 1 GHz
- Physical Memory: 1 GB
- Disk Space: At least 1 GB of free space
Software Requirements

Depending on your operating environment, the following prerequisite software must be installed for the common components to install and run correctly:

**AIX**
- xlC.rte.5.0, version 8.0.0.9 through 9.0.0.8
- GIMP Toolkit (GTK) 1.2

**HP-UX**
- TOUR packages for IPv6 support
- GTK 1.2

**Linux**
- compat-libstdc++-296 or higher for Red Hat Enterprise Linux 4.0
- compat-libstdc++-33 or higher for Red Hat Enterprise Linux 5.0
- compat for SuSE Linux
- ncurses (32-bit) version 5 or higher on Linux (64-bit)
- GTK 1.2

**Solaris SPARC**
- libgcc-3.4.6
- GTK 1.2
- If you install CA EEM on Solaris 9, you must apply Patch ID 114129-02 or later.
  
  **Note:** You can download the patch from http://www.sunsolve.sun.com.

**Solaris Intel**
- libgcc-3.4.6
- GTK 1.2

---

**Java Version for SSA**

Java 1.4.2_09 or higher is required to install SSA successfully.

To verify the Java version on your computer, issue the following command:

`java -version`
GTK Requirements for the Management Command Center

The Event Manager includes the Management Command Center, which requires libraries from the GNU Image Manipulation Program (GIMP) Toolkit. The GIMP Toolkit (GTK) libraries are not included in the CA Common Components package. If you install the Event Manager or the Management Command Center, you must ensure that specific packages have been installed on the target systems as follows:

**AIX**

You must apply the following required packages:

- glib-1.2.10-2
- gtk+-1.2.10-4

*Note:* You can download the packages from http://www.ibm.com. The files are installed in /opt/freeware/lib.

**HP-UX**

You must apply one of the following required packages:

- GTK libraries from Product B6848BA
  

- gtk+-1.2.10-hppa-11.23.depot
  
  *Note:* You can download the package from http://hpux.connect.org.uk.

You must also add /opt/gnome/lib to SHLIB_PATH as follows:

```
SHLIB_PATH=$SHLIB_PATH:/opt/gnome/lib
export SHLIB_PATH
```
Linux

You must apply GTK-1.2.10 patch and its dependencies.

The packages are available on your installation media and installed with the currently supported operating systems. The only exception is Red Hat Enterprise Linux Server 5, where the packages must be downloaded externally and then installed.

Solaris 10 SPARC and Solaris 10 x86

You must apply the following required packages:
- SMCglib
- SMCgtk

Note: The packages are available on your installation media and installed in /usr/sfw/lib. You can also download the packages from http://www.sunfreeware.com, but these files are installed in /usr/local/lib.

You must also add /usr/sfw/lib and /usr/local/lib to LD_LIBRARY_PATH as follows:

LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/sfw/lib:/usr/local/lib
export LD_LIBRARY_PATH

Database Requirements - UNIX

CA EEM uses DxGrid as its data store. The DxGrid data store is installed when you install CA EEM. The installer performs a pre-installation check to determine if an Ingres database exists. If an Ingres database exists, the data in the Ingres database is migrated to the DxGrid data store.

Note: eTrust IAM r8.3 use an Ingres database.

Event Management requires PostgreSQL 8.2.3. PostgreSQL is automatically installed if you select the Event Manager component during installation. The installer performs a pre-installation check to determine if an Ingres database with the MDB or any CA database exists. If an Ingres database with the MDB or any CA database exists, the installer displays the option to migrate the database data to the PostgreSQL database. If you select the option to migrate the data, the post installation process performs the database data migration.

Note: The migration may take a considerable amount of time depending on the data to be migrated. If you do not select the option to migrate the data, you can migrate the database data manually at a later time. For more information, see the Implementation Guide.
Database Requirements - Windows

CA EEM uses DxGrid as its data store. The DxGrid data store is installed when you install CA EEM. The installer performs a pre-installation check to determine if an Ingres database exists. If an Ingres database exists, the data in the Ingres database is migrated to the DxGrid data store.

Note: eTrust IAM r8.3 use an Ingres database.

Event Management requires Microsoft SQL Server, which must be installed before you install Event Management. The following database versions are supported:

- Microsoft SQL Server 2005 (64-bit)
- Microsoft SQL Server 2005 (32-bit) with SP1 or any later maintenance release
- Microsoft SQL Server 2000 (32-bit) with a minimum of SP4 or any later maintenance release
- Microsoft SQL Server 2008 (x86 64-bit)

Ensure that you adhere to the following database requirements when setting up Microsoft SQL Server:

- Mixed-mode authentication is required.
- A dictionary sort order of case-sensitive or case-insensitive is required.

Note: When installing Microsoft SQL Server 2008, select any of the following collation settings that CA NSM supports:
  - SQL_Latin1_General_CP1_CS_AS: Dictionary order, case-sensitive for use with 1252 Character Set
  - SQL_Latin1_General_CP1_CI_AS: Dictionary order, case-insensitive for use with 1252 Character Set

- The MDB uses JDBC, which requires TCP/IP to be enabled.
- The MDB password is not limited to six characters.
- You can use the English version of Microsoft SQL Server with a code page/character set of 1252 on any of the Windows language versions that CA has certified for use with the common components.
You can use localized versions of Microsoft SQL Server other than English on any of their respective and matching Windows language versions that CA has certified for use with the common components, with the default code page/character set, or with a code page/character set of 1252 if you are not using specific localized character data for that region, even though you are installing on a localized system of that region. You must use the default code page/character set if you plan to use specific localized characters.

You cannot use a Microsoft SQL Server alias that matches the local computer name but which really points to a remote Microsoft SQL Server (whether in another resource group on the same physical node of a cluster or actually on a different computer).

**Note:** MDB creation uses Windows Authentication and must be run by an operating system user who belongs to the System Administrators server role.

---

**su Command on UNIX**

On UNIX, the CA Common Components Event Management installation process must be allowed to run the following command with no user response or interaction:

```
su - root -c "command"
```

The installer embeds other installation packages that are executed by running the su command.

---

**Adobe Acrobat Reader Support**

WRS and Systems Performance reports let you export reports in PDF format. To view reports in PDF format, the computer running the web browser or the Management Command Center must have Adobe Acrobat Reader version 7.0 or any later release (for Windows) or Adobe Acrobat Reader version 5.0.9 or any later release installed.

To download the appropriate version of Adobe Acrobat Reader, visit http://www.adobe.com.

**Note:** To help ensure that you can correctly open reports using Adobe Acrobat Reader, open Adobe Acrobat Reader and clear the Internet category option "Display PDF in browser" under Edit, Preferences.
Kernel Parameter Requirements - HP-UX Installation

To install and run the common components on HP-UX, the following kernel parameter requirements must be met or exceeded:

- The msgmax and msgmnb upper limits must be set to the following values to ensure that the common components function properly:
  
  \[
  \begin{align*}
  \text{msgmax} & = 32768 \\
  \text{msgmnb} & = 65535 
  \end{align*}
  \]

  After the upper limits are set and the parameters are updated during the installation, issue the following command to check whether a restart is required:

  \[
  \$ \text{/usr/sbin/kmtune -u}
  \]

  Restart your computer for the changes to take effect if you encounter a message similar to the following statements:

  \[
  \begin{align*}
  \text{WARNING: maxfiles cannot be set dynamically.} \\
  \text{WARNING: maxusers cannot be set dynamically.}
  \end{align*}
  \]

- Many kernel parameter values must be set at required minimum levels. If you change a kernel parameter, you must rebuild the kernel.

**To update the kernel parameter values and rebuild the kernel**

1. Enter `sam` at the command prompt.
   
   The sam utility starts running.

2. Click kernel configuration, configurable parameters.
   
   A list of configurable parameters appear.
3. Select the following kernel parameters and update the values, if the values in your environment are less than the following required minimum values:

max_thread_proc = 512  
maxdsize = 1073741824  
maxfiles = 576  
maxssiz = 67108864  
maxtsiz = 536870912  
maxusers = 64  #obsolete for HP-UX 11.2  
maxuprc = 200  
msgmap = 258  
msgmni = 128  
msgseg = 8192  
msgsz = 32  
msgtql = 256  
nfile = 2048  
ninode = 2048  
nkthread = 1500  
nproc = 512  
npty = 720  
sema = 1  
semmap = 258  #obsolete for HP-UX 11.2  
semn = 256  
semmns = 512  
semmnu = 80  
semmue = 40  
semvmx = 32767  
shmm = 268435456  
shmmni = 512

4. Select File, Exit, Creating New Kernel, and follow the steps to create the new kernel.  
The sam utility restarts your computer and the updated kernel parameters take effect.
Kernel Parameter Requirements - Linux Installation

To install and run the common components on Linux, the following kernel parameter requirements must be met or exceeded:

- msgmax = 32768
- msgmnb = 65535
- msgmni = 128
- msgseg = 8192
- semmni = 256
- semms = 512
- semmsl = 100
- shmmni = 512
- shmmax = 1073741824
- file-max = 8192
- threads-max = 65262

To update the kernel parameter values

1. Issue the following commands depending on the kernel parameter values you want to see:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>msgmax, msgmnb, msgmni</td>
<td>/sbin/sysctl -a</td>
</tr>
<tr>
<td>semmni, semmns, semmsl</td>
<td>/sbin/sysctl -a</td>
</tr>
<tr>
<td></td>
<td>The results are similar to the following:</td>
</tr>
<tr>
<td></td>
<td>kernel.sem = &lt;semmsl&gt; &lt;semmns&gt; &lt;semm&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;semopm&gt; &lt;semmni&gt;</td>
</tr>
<tr>
<td>shmmax, shmmni</td>
<td>/sbin/sysctl -a</td>
</tr>
<tr>
<td>file-max</td>
<td>/sbin/sysctl -a</td>
</tr>
<tr>
<td>threads-max</td>
<td>/sbin/sysctl -a</td>
</tr>
</tbody>
</table>

The current kernel parameter values are displayed.
2. Edit the `/etc/sysctl.conf` file by adding or updating the following kernel parameters, if the values in your environment are less than the following recommended values:

- `fs.file-max = 8192`
- `kernel.msgmnb = 65535`
- `kernel.msgmni = 128`
- `kernel.msgmax = 32768`
- `kernel.sem = 100 512 100 256`
- `kernel.shmmni = 512`
- `kernel.shmmax = 1073741824`
- `kernel.threads-max = 65262`

3. Issue the following command:

```
/sbin/sysctl -p /etc/sysctl.conf
```

The `sysctl` settings are loaded from `/etc/sysctl.conf` file.

4. Restart your computer.

The updated kernel parameters take effect.

**Kernel Parameter and Resource Controls Requirements - Solaris Installation**

To install and run the common components on Solaris 9, the following kernel parameter requirements must be met or exceeded:

```
forceload: sys/msgsys
forceload: sys/sem.sys
forceload: sys/shmem
set msgsys:msginfo_msgmax = 32768
set msgsys:msginfo_msgmnb = 65535
set msgsys:msginfo_msgmni = 128
set msgsys:msginfo_msgseg = 8192
set msgsys:msginfo_msgtql = 256
set semsys:seminfo_semmap = 258
set semsys:seminfo_semmni = 256
set semsys:seminfo_semmns = 512
set semsys:seminfo_semmns = 512
set semsys:seminfo_semmnu = 80
set semsys:seminfo_seminu = 80
set semsys:seminfo_seminu = 80
set semsys:seminfo_semmom = 20
set semsys:seminfo_seminum = 40
set semsys:seminfo_seminus = 96
set semsys:seminfo_semvmx = 32767
set semsys:seminfo_semaem = 16384
set shmemsys:shminfo_shmmap = 1073741824
set shmemsys:shminfo_shmni = 512
set shmemsys:shminfo_shmseg = 50
set rlim_fd_cur = 576
```
To update the kernel parameter values in Solaris 9

1. Issue the sysdef command.
   The kernel parameters of the Solaris computer are displayed.
2. Add the appropriate set and forceload commands (previously mentioned) to the end of the /etc/system file.
3. Restart your computer.
   The updated kernel parameters take effect.

To install and run the common components on Solaris 10, the following resource controls requirements must be met or exceeded:

```
process.max-msg-qbytes = 65535
project.max-msg-ids = 128
project.max-sem-ids = 256
project.max-shm-ids = 512
project.max-shm-memory = 1073741824
process.max-file-descriptor = 1024
```

To update the resource controls values in Solaris 10, use the Resource Controls Facility.

**Note:** For more information about this facility, see the Solaris 10 *System Administration Guide: Solaris Containers-Resource Management and Solaris Zones.*

---

**tr Command in Unicode Environment on UNIX**

On UNIX, the common components installer runs the following command:

```
tr ‘[:upper:]’ ‘[:lower:]’
```

In a Unicode environment, the tr command must be Unicode compliant. The Unicode compliant version is `/usr/xpg4/bin/tr`. If your environment is Unicode, check the version of tr by running the following command:

```
which tr
```

If the output is `/usr/bin/tr`, you must change the PATH variable to use the Unicode compliant version of tr. To change the PATH environment variable, run the following command:

```
PATH=/usr/xpg4/bin:$PATH
Export PATH
```
Chapter 6: Installation Considerations

This chapter provides information relating to the installation of the common components.

This section contains the following topics:

- **UNIX Installation Considerations** (see page 49)
- **Windows Installation Considerations** (see page 53)
- **Upgrade Considerations** (see page 55)
- **Highly Available Installations** (see page 56)
- **Pending File Operations** (see page 56)
- **Response File Must Not Be Read-Only** (see page 57)

**UNIX Installation Considerations**

*Note:* We recommend that you review the Release Notes of the CA Technologies product that uses these common components, in addition to this Release Notes, before installing the common components.

We recommend that you review the following items before you install the common components:

- On Linux, you must verify that the appropriate RPM packages and operating system patches have been installed before beginning the installation.

- The common components installer automatically determines whether to use graphical mode or character-oriented VT100 mode.

  *Note:* The following prerequisites are required to use graphical mode:

  - JRE 1.6 or higher must be installed on the server.
  - The monitor must be graphics-enabled.
  - The $DISPLAY environment variable must be set to the local terminal.

- You can disable the following common components properties, which are enabled by default, during the Custom installation:

  - Update the login scripts to set the common components environment for all users.
  - Automatically start common components whenever the server is restarted.

- After you install the common components, you cannot change the host names. Before you install the common components, we recommend that you verify that the host name returned by the hostname command and the nslookup command using the IP address match exactly.
Before you install the common components, we recommend that you also review the following important considerations:

- **CA EEM installation considerations** (see page 50)
- **Event Management installation considerations** (see page 51)
- **UNIX installation directories** (see page 52)

## CA EEM Installation Considerations

We recommend that you review the following important considerations before you install CA EEM on UNIX:

- We recommend that you install CA EEM on a dedicated server.
- If your environment uses CA EEM with CA Workload Automation AE, all CA Workload Automation AE and CA WCC servers must reference the same instance of CA EEM. Additionally, all instances of CA WCC in a High Availability group must reference the same instance of CA EEM.
- If you install CA EEM on a computer where CA Workload Automation AE is already installed and active, the CA EEM installation process shuts down the CA Workload Automation AE active processes. You must start the CA Workload Automation AE processes manually after the CA EEM installation is complete.
- During the installation of CA EEM, the installer performs a pre-installation check to determine if an Ingres database exists. If an Ingres database exists, the data in the Ingres database is migrated to the DxGrid data store.
- On Linux, CA EEM supports only kernel version 2.6.
- For information about installing CA EEM, see the *CA Embedded Entitlements Manager Implementation Guide*.

**Note:** A CA EEM administrator user (EiamAdmin) is created when you install CA EEM. You must remember the password that you provide for this administrator user. You need this information when you install the CA Technologies product that uses CA EEM or to manage and configure CA EEM.
Event Management Installation Considerations

We recommend that you review the following important considerations before you install Event Management on UNIX:

- Event Management can be installed on a dedicated server or on the server where the CA Technologies product is installed. However, Event Management is typically installed on a server other than the one used by the CA Technologies product because of the database size requirements.

**Notes:**

- If you install Event Management, CAICCI will automatically be installed. The installer automatically selects CAICCI when you select Event Management.

- When installing Event Management, the CA NSM Event software development kit (SDK) sample code is installed and built. On HP-UX, an ANSI C compiler, for example, HP Product Number B3899BA or B3901BA, must be installed for the SDK compilation to occur.

- The Event Manager installation requires Apache HTTP Server or Netscape Enterprise Server to be installed and running so that URLs created as part of the installation are available. If this requirement is not met, the Event Manager will function but the URL-dependent features such as the Online Help will not be available.

- On AIX 6.1 or 7.1 Workload Partitions (WPARs) computers, install the Event Manager using the CA NSM media. The Event Manager that is installed using the CA Common Components DVD is not supported on AIX WPARs computers. However, the Event Agent is supported on AIX 6.1 or 7.1 WPARs computers and so you can install it using the CA Common Components DVD.

- During the installation of Event Management, you can enable the following options:
  
  **Route Messages**
  
  Routes messages to a consolidated event console. Messages sent directly to the console logs will not be sent to your system log.

  **Activate Facility**
  
  Saves failed events for forwarding at a later time.

  **Disable Commands**
  
  Denies message records and actions that execute UNIXSH and UNIXCMD commands.

  **Process SNMP Traps**
  
  Enables the Event Agent to process SNMP traps. Enterprise Management Provider supports receiving and processing SNMP version 1, version 2c, and version 3 traps.
**UNIX Installation Considerations**

**UNIX Installation Directories**

All common components must be installed in the same parent directory on a computer. After one common component is installed, you cannot specify another target installation directory to install the other common components.

**Defined Aliases May Cause the Installation to Fail**

Defined aliases that alter the native behavior of the operating system commands can cause installation problems. Remove all defined aliases before installing the common components.

**Messages Displayed When Installing SSA**

When you install SSA, the following messages may be displayed on the console. You can ignore these messages because they do not affect the SSA installation.

Couldn't set locale correctly.
Couldn't set locale correctly.
Couldn't set locale correctly.
Windows Installation Considerations

**Note:** We recommend that you review the Release Notes of the CA Technologies product that uses these common components, in addition to this Release Notes, before installing the common components.

We recommend that you review the following items before you install the common components on Windows:

- On the Choose Install Set page of the installation, the Typical install set installs SSA, CAICCI, and CA EEM. The Custom install set lets you select individual components, such as Event Management.
- We recommend that you stop all programs, including antivirus software packages, before installing the common components. The Windows account used to install the common components must have administrative rights.
- If you install the common components in a non-default temporary folder, you must ensure that the TEMP and TMP environment variables are created and point to the same folder.
  
  **Note:** You must create the TEMP and TMP environment variables from My Computer, Properties, Advanced, Environment Variables. The installation fails if you use the command prompt to create these environment variables.
- After you install the common components, you cannot change the host names. Before you install the common components, we recommend that you verify that the host name returned by the hostname command and the nslookup command using the IP address match exactly.

Before you install the common components, we recommend that you also review the following important considerations:

- [CA EEM installation considerations](#) (see page 54)
- [Event Management installation considerations](#) (see page 54)
CA EEM Installation Considerations

We recommend that you review the following important considerations before you install CA EEM on Windows:

- We recommend that you install CA EEM on a dedicated server.
- If your environment uses CA EEM with CA Workload Automation AE, all CA Workload Automation AE and CA WCC servers must reference the same instance of CA EEM. Additionally, all members of a CA WCC High Availability group must reference the same instance of CA EEM.
- You can use the EEMServer_win64.exe file in the CA Common Components DVD to install CA EEM 64-bit server edition. The EEMServer_win64.exe file is located at DVD_drive\Disk1\InstData\VM\EEM\WIN64.

\textit{DVD\_drive}

Identifies the CA Common Components installation media drive.

\textbf{Note:} A CA EEM administrator user (EiamAdmin) is created when you install CA EEM. You must remember the password that you provide for this administrator user. You need this information when you install the CA Technologies product that uses CA EEM or to manage and configure CA EEM.

Event Management Installation Considerations

We recommend that you review the following important considerations before you install Event Management on Windows:

- Event Management can be installed on a dedicated server or on the server where the CA Technologies product is installed. However, Event Management is typically installed on a server other than the one used by the CA Technologies product because of the database size requirements.
- Microsoft SQL Server must be installed and running.
- CAICCI will automatically be installed; it is not necessary to select CAICCI to install it.
- The Event Manager installation requires Microsoft Internet Server, Apache HTTP Server, or Netscape Enterprise Server to be installed and running so that URLs created as part of the installation are available. If this requirement is not met, the Event Manager will function but the URL-dependent features such as the Online Help will not be available.
Upgrade Considerations

If you have a CA Technologies product installed on your system, a previous release of some of the common components may already be present on your computer. For example, common components may be present if you had installed one or more of the following products:

- Unicenter Network and Systems Management (NSM) r11.x or CA NSM r11.2 (Linux only)
- Unicenter AutoSys JM 4.x or r11 or CA Workload Automation AE r11.3 or r11.3 SP1
- CA WCC r11.1 SP1, r11.1 SP2, or r11.3

The current CA Common Components DVD upgrades the common components that you select to install to the version supported by CA Common Components Release 11.3.6.

Notes:

- On UNIX, if the common components are already installed on your computer, the CA Common Components Release 11.3.6 installation process adheres to an upgrade policy. For more information about the upgrade policy, see the Implementation Guide.

- If the iGateway built on Linux 2.4 kernel version is already installed, CA EEM, iGateway, and all other iGateway plug-ins cannot be installed or upgraded. If $IGW_LOC/igw.linux_k26 file is present, then the iGateway built on Linux 2.6 kernel version is installed. In the case where the iGateway built on Linux 2.4 kernel version is already installed, uninstall CA EEM, iGateway, and all other iGateway plug-ins, and then install these products using the CA Common Components DVD. CA EEM policies can then be migrated to the new CA EEM installation. For information about migrating CA EEM policies, see the CA Workload Automation Security Guide. For information about upgrading CA EEM see the CA Embedded Entitlements Manager Implementation Guide.

- On Windows, you can only upgrade the previous release of CAII, installed from the CA Common Components DVD r11.2 or r11.2.5.

- On Windows, you can only upgrade the previous release of Event Management, installed from the CA Common Components DVD r11.2 or r11.2.5; you cannot upgrade a release of Event Management installed on Windows from a source other than the CA Common Components DVD r11.2 or r11.2.5 because the latest release of Event Management on Windows requires Microsoft SQL Server. In that case, you must first remove the existing Event Management, and then install Event Management from the current CA Common Components DVD.
• Event Management installed from the current or previous CA Common Components DVD is IPv6 compliant. Previous releases of Event Management (installed from a source other than the CA Common Components DVD) are not IPv6 compliant.

• During the common components upgrade on Windows, if SSA or any other application using SSA is active, the upgrade fails to change any SSA related binaries or libraries and you may have to restart your computer to complete the common components upgrade. If you must restart your computer, the installer displays the option to restart your computer during the common components upgrade. You can select to restart your computer immediately or later.

Highly Available Installations

On UNIX, you must change all the common component resources to be offline on the current node prior to installing, reinstalling, or upgrading the common components or any CA Technologies products that use the common components on that same node.

Pending File Operations

During the common components installation on Windows, the installation process may recognize that one or more files are in use and prompt for a system restart so that those files can be replaced automatically by the system during the restart. However, in some cases a system restart may not be necessary for CA and third-party software to continue to function properly, even though pending file operations have been scheduled. In addition, some pending file operations will be scheduled by the common components to avoid the need for a restart. For example, some files are placed temporarily in the Windows directory so that they are present in the system PATH for the Microsoft Windows Service Control Manager. In these cases, you will not be prompted to restart.

Other software products, such as Microsoft SQL Server, may detect pending file operations and will not let their installations to proceed until the system is restarted, even though those pending file operations do not affect them. A message similar to the following may appear:

A previous program installation created pending file operations on the installation machine.
You must restart the computer before running setup.

This message does not indicate an error condition. To proceed with that application’s installation, you must manually initiate a system restart.
Response File Must Not Be Read-Only

On UNIX, you cannot use a response file for an unattended installation when the response file is located on a read-only file system or if the response file has the read-only attribute set. The file must be writable because certain values may be altered during installation based on the configuration of the target system. For example, if the directory pointed to by the $CASHCOMP environment variable already exists on the target system, that current location is used instead of what is specified in the response file.
Chapter 7: General Considerations

This chapter provides general information you should know when using the common components.

This section contains the following topics:

HAS Considerations - UNIX (see page 59)
HAS Considerations - Windows (see page 59)
CA EEM Service Name Changes (see page 60)

HAS Considerations - UNIX

Consider the following guidelines for HAS on UNIX:

- CA Common Components Release 11.3.6 includes High Availability services. These services enable HA-ready components in clustered configurations. HA-ready components provided by this deliverable are consistent with those enabled in CCS r11 or CA NSM r11.2 SP2. Any components or configurations that have not been certified as HA-ready in CCS r11 or CA NSM r11.2 SP2 will not be considered HA-ready in CA Common Components Release 11.3.6.
- HA readiness is limited to Linux platforms only.
- On Linux, Event Management r11 was not certified on a cluster and is not planned to be HA-ready in CA Common Components Release 11.3.6.

HAS Considerations - Windows

Consider the following guidelines for HAS on Windows:

- HAS must meet the same hardware requirements as Event Manager r11.2 SP2.
- The Event Manager must be running a version of Microsoft Windows suitable for HAS.
- On computers running Microsoft Clustering Services (MSCS), HAS must run under a cluster domain account to operate across the cluster nodes.
CA EEM Service Name Changes

The eTrust Directory - iTechPoz-hostname service in CA EEM r8.3 or r8.4 is named as CA Directory - iTechPoz in CA EEM Release 12.51.

Note: The eTrust Directory - iTechPoz-hostname-Router, eTrust Directory Administration Daemon - master, and eTrust Directory SSL daemon - iTechPoz-Server services in CA EEM r8.3 or r8.4 are deprecated.
The complete list of published bug fixes for this product can be found through Published Solutions on CA Support Online.
This chapter describes the documents provided with CA Common Components Release 11.3.6 and how to access them.

**Important!** The acknowledgements for third-party components used by CA Common Components are in the acknowledgements.txt file that is located in the root directory of the installed product.

**Important!** The product documentation for future releases of CA Common Components will no longer be available in the product image. You can access the documentation online from CA Technologies approved websites.

### CA Common Components Documentation

CA Common Components Release 11.3.6 includes the following documentation:

- CA Common Components Release 11.3.6 Implementation Guide
- CA Common Components Release 11.3.6 Release Notes
- CA Embedded Entitlements Manager Release 12.51 Release Notes
- CA Embedded Entitlements Manager Release 12.51 Implementation Guide
- CA Embedded Entitlements Manager Release 12.51 Programming Guide
- CA NSM r11.2 SP2 Inside Event Management and Alert Management Guide
Access the Documentation

To access the CA Common Components documentation in the product image, do the following:

- On Windows—Go to the Documentation directory and open the Bookshelf.html file. The bookshelf links to all the guides.
- On UNIX—Use the product DVD.

The CA Workload Automation AE bookshelf links to the CA Workload Automation AE, CA WCC, and CA Common Components guides and lets you search across the documentation sets. You can access the CA Workload Automation AE bookshelf online by going to CA Support (http://ca.com/support) and selecting the CA Workload Automation AE bookshelf from the Find a Product Documentation Bookshelf section on the Documentation page.

Note: To view PDF files, you must download and install the Adobe Reader from the Adobe website if it is not already installed on your computer.

Release Numbers on Documentation

The release number on the title page of a document might not correspond to the current product release number; however, all documentation delivered with the product, regardless of release number on the title page, will support your use of the current product release. The release number changes only when a significant portion of a document changes to support a new or updated product release. If no substantive changes are made to a document, the release number does not change. For example, a document for r11 may still be valid for r11.1 or even r12. Documentation bookshelves always reflect the current product release number.

Occasionally, we must update documentation outside of a new or updated release. To indicate a minor change to the documentation that does not invalidate it for any releases that it supports, we update the edition number on the cover page. First editions do not have an edition number.