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CA Technologies Product References

This document references the following CA Technologies products:

- CA Embedded Entitlements Manager (CA EEM)
- CA Process Automation
- CA Service Desk
- CA Automation Suite for Data Centers (formerly named CA Spectrum® Automation Manager)
- CA Systems Performance for Infrastructure Managers (formerly CA SystemEDGE)
- CA Workload Automation AE (formerly named Unicenter® AutoSys® Job Management (Unicenter AutoSys JM))
- CA Workload Automation Agent for Application Services (CA WA Agent for Application Services)
- CA Workload Automation Agent for Databases (CA WA Agent for Databases)
- CA Workload Automation Agent for i5/OS (CA WA Agent for i5/OS)
- CA Workload Automation Agent for Linux (CA WA Agent for Linux)
- CA Workload Automation Agent for Micro Focus (CA WA Agent for Micro Focus)
- CA Workload Automation Agent for Oracle E-Business Suite (CA WA Agent for Oracle E-Business Suite)
- CA Workload Automation Agent for PeopleSoft (CA WA Agent for PeopleSoft)
- CA Workload Automation Agent for Remote Execution (CA WA Agent for Remote Execution)
- CA Workload Automation Agent for SAP (CA WA Agent for SAP)
- CA Workload Automation Agent for UNIX (CA WA Agent for UNIX)
- CA Workload Automation Agent for Web Services (CA WA Agent for Web Services)
- CA Workload Automation Agent for Windows (CA WA Agent for Windows)
- CA Workload Automation Agent for z/OS (CA WA Agent for z/OS)
- CA Workload Control Center (CA WCC)
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- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

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Chapter 1: Welcome

Welcome to CA WCC. This document describes feature and functionality enhancements for this release, supported operating systems and databases, 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.
Chapter 2: New Features

The Release Notes for CA Workload Control Center (CA WCC) documents new features and changes to existing features for Release 11.3.6. This chapter describes new features added to the product. The chapter "Changes to Existing Features" describes changes that are made to existing features and includes a list of any features that are removed from the product.

New features include the following:

- Upgrade installation process that lets you upgrade CA WCC Release 11.3.5 to the current version. By upgrading, all job templates, SAP filters, views, configuration settings, configured CA Workload Automation AE servers, ECLI global commands, and saved forecast reports are immediately available in the new version.

- Support for CA Workload Automation AE STRICT and EXTERNAL mode authentication.

CA WCC Support for CA Workload Automation AE STRICT and EXTERNAL Mode Authentication

CA WCC Enterprise Command Line and Forecast applications are supported when CA Workload Automation AE is configured to run in unauthenticated user mode set to STRICT or EXTERNAL. For more information about CA Workload Automation AE STRICT and EXTERNAL mode authentication, see the Security Guide.

Notes:

- The currently logged in CA WCC user credentials are used for CA Workload Automation AE command line authentication.

- If CA Workload Automation AE is set to STRICT or EXTERNAL mode, then CA WCC and CA Workload Automation AE must use the same CA EEM server or CA EEM servers from the same CA EEM HA cluster.
Chapter 3: Changes to Existing Features

This chapter documents changes made to existing features and includes a list of any features removed from CA WCC Release 11.3.6.

Changed features include the following:

- You can configure CA WCC to allow only one active session per user at any time.
- You no longer need to deploy server configurations. This functionality has been removed from CA WCC.

Documentation in the Product Image

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

Credentials

Credentials has the following enhancement for this release:

- In the current release, you can view the global and monitoring credentials in the Credentials application if you have access to the create, save, or delete actions for credentials resources that are defined in the ConfigurationControlCredentialsAdminDefault policy. In the previous releases, you could view the global and monitoring credentials only if you have access to the create action for credentials resources that are defined in the ConfigurationControlCredentialsAdminDefault policy.
Dashboard

The Dashboard has the following enhancements for this release:

- The following icons have been added to the Views, Servers, Jobs, and Alerts widgets on the Dashboard tab:
  
  - Open widget menu ()—Opens the widget menu from which you can select the following items:
    
    - Detach widget ()—Lets you detach a widget from the dashboard to a stand-alone browser window.
    
    - (Jobs widget only) Configure this widget ()—Lets you specify a name for the Jobs widget.

  - Maximize () and restore ()—Lets you toggle the widget between its initial size and the largest possible size.

  - Add Widget ()—Opens a menu from which you can select the widgets that you want to display on the Dashboard page.

- A new Jobs widget has been added on the Dashboard tab. This widget can be configured to view jobs based on a specified server or view.

- Filters set in the Servers, Views, Jobs, and Alerts widgets are persisted in the next user session after you log out of CA WCC. The filters on the Dashboard tab can be different than the filters set for the widgets on the Monitoring tab or for any detached widgets. The same functionality also applies to the widget height and rows per page settings.

- CA WCC Release 11.3.6 installs the Jobs widget during the upgrade procedure. However, this widget is not enabled by default. To enable access, you must select the MonitoringJobs action in the WidgetAccess policy in CA EEM.

- Any widgets that were removed from the Dashboard tab in CA WCC Release 11.3.5 will be displayed on the Dashboard after upgrading to CA WCC Release 11.3.6. To remove a widget, click () in the title bar of the widget.
Monitoring

Monitoring has the following enhancements for this release:

- The following icon has been added to the Views, Servers, Jobs, and Alerts sections on the Monitoring tab:
  - Maximize (Maximize) and restore (Restore)—Lets you toggle the section between its initial size and the largest possible size.

- The View Editor columns selections have been simplified to more easily select and order the Job and Alert columns to be displayed for the view.

- Filters set in the Servers, Views, Jobs, and Alerts tables are persisted in the next user session after you log out of CA WCC. The filters set for the widgets on the Dashboard tab can be different than the filters set on the Monitoring tab or for any detached widgets. The same functionality also applies to the widget height and rows per page settings.

Quick View

Quick View has the following enhancement for this release:

- The Starting Conditions and Dependent Jobs sections now display look-back evaluation conditions.

CA EEM

CA EEM for this release has the following changes and enhancements:

- CA WCC supports CA EEM Release 12.51. All functionality is compatible with Release 12.0.

- WidgetAccess
  
  The following action has been added to the WidgetAccess resource class:
  - MonitoringJobs—Enables the Jobs widget option to be displayed on the Dashboard tab. This action is not set by default when upgrading from CA WCC Release 11.3.5.

  Additionally, the CA Workload Automation Security Guide has been enhanced and updated to reflect the CA EEM changes.
Chapter 4: Known Issues

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

**Note:** For information about agent limitations and known issues, see the Readme or Release Notes for your agent.

This section contains the following topics:

- Right-clicking to Open Features (see page 16)
- Valid Users for Enterprise Command Line and Forecast (see page 16)
- Failure of Primary Application Server in CA Workload Automation AE Application Server High Availability Scenario (see page 16)
- CA Workload Automation AE Blank Passwords (see page 17)
- Allowable Character Set for CA Workload Automation AE and its Service Packs (see page 17)
- CA EEM Component Policy Refresh (see page 17)
- Defining Multiple CA Workload Automation AE Application Servers Using a Comma-Delimited List (see page 17)
- CA EEM Performance Issue on Linux (see page 18)
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- CA WCC Fails to Respond if Oracle Database is Restarted (see page 21)
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- Non-Zero Return Codes Displayed at the End of CA WCC Installation on Solaris Zone (see page 23)
- Incorrect Time Shift in Forecast Reports for Times Affected by Daylight Saving Rules (see page 24)
Right-clicking to Open Features

CA WCC Release 11.3.6 does not support the browser feature that lets you right-click an object or tab and open it in another window.

Valid Users for Enterprise Command Line and Forecast

Because of the CA WCC Credentials application, a credential user is no longer required to use either Enterprise Command Line or Forecast. If custom credentials are not defined, the credentials used to log into CA WCC are used. However, for CA Workload Automation AE, the credentials still must be those of a valid OS user.

Failure of Primary Application Server in CA Workload Automation AE Application Server High Availability Scenario

If your enterprise experiences a failover of the primary application server and CA WCC is restarted after the primary application server failover, the Forecast and Enterprise Command Line features of CA WCC will not be able to connect through the alternate application servers. If it is critical to have these features available during the failover, you can use a workaround to modify the primary application server in this situation; however, if the failover is of limited duration, you may choose to leave these features temporarily inactive for the CA Workload Automation AE instance that is in the failover state.

To work around a failover

1. Click the CONFIG tab in the CA WCC user interface.
   The Configuration page appears.

2. Click the CA Workload Automation AE server in the Search Results section that accesses the failed application server.
   The properties for the server appear in the Edit Properties section.

3. Do the following:
   a. Change the Application Server Host Address to the secondary application server host name.
   b. Change the Application Server Host Port to the secondary application server host port.
   c. Click Save.
   The modified server definition is saved.

4. Scroll down to the Deploy section and click Deploy.
   The server is deployed, and the failover situation is resolved.
CA Workload Automation AE Blank Passwords

This version of CA WCC does not support the use of a blank password for CA Workload Automation AE. If you attempt to access a CA Workload Automation AE server using a blank password, you receive an error message.

Allowable Character Set for CA Workload Automation AE and its Service Packs

Job names can only contain the following characters: a-z, A-Z, 0-9, period (.), underscore (_), hyphen (-), and pound (#). Do not include embedded spaces or tabs.

Note: For JIL syntax rules, see the CA Workload Automation AE Reference Guide and the CA Workload Automation AE User Guide.

CA EEM Component Policy Refresh

When you modify policies for CA EEM while users are in active sessions, the revised policies do not take effect until the current session is refreshed.

Defining Multiple CA Workload Automation AE Application Servers Using a Comma-Delimited List

When CA Workload Automation AE is configured for High Availability and the CA Workload Automation AE server definition in CA WCC includes a group of application servers, user credentials must specify the explicit application server for which each user is authorized. For example, if the CA Workload Automation AE server defined in CA WCC Configuration specifies "SERVER1,SERVER2,SERVER3" in the Application Server field, the user ejmcommander must be named "ejmcommander@SERVERn", where n is 1, 2, or 3. The application server used to define the credentials for ejmcommander can technically be any available computer that has a CA Workload Automation AE system agent on it. Users that do not have an explicit application server specified will not be able to log into the back-end CA Workload Automation AE system. You must set up the comma-delimited list of application servers in the CA Workload Automation AE server definition for application server failover to work as expected.
CA EEM Performance Issue on Linux

There can be a CA EEM performance issue when the kernel threading model version used by CA EEM and the Linux kernel version differ. The default kernel threading model used by CA EEM is based on the 2.4 kernel. The Linux kernel version can be either 2.4 or 2.6.

To display the kernel version, run the following command:

`uname -r`

The first two digits in the returned text indicate the Linux kernel version.

Examples are as follows:

- 2.4.19-4GB—indicates Linux kernel version 2.4.
- 2.6.5-4GB—indicates Linux kernel version 2.6.

To select the appropriate kernel threading model

1. Stop iGateway.
2. Do one of the following:
   - **Red Hat**
     Open `/etc/init.d/igatewayd`.
   - **SuSE**
     Open `/etc/init.d/S99igateway`.
3. Do one of the following:
   - If the Linux kernel version is 2.4, verify that the file contains the line `LD_ASSUME_KERNEL=2.4.1` and then close the file.
   - If the Linux kernel version is 2.6, comment out the line `LD_ASSUME_KERNEL=2.4.1` and then save and close the file.
4. Open `$IGW_LOC/S99igateway`, and do one of the following:
   - If the Linux kernel version is 2.4, verify that the file contains the line `LD_ASSUME_KERNEL=2.4.1` and then close the file.
   - If the Linux kernel version is 2.6, comment out the line `LD_ASSUME_KERNEL=2.4.1`, and then save and close the file.
5. Restart iGateway.
Providing Incorrect Password For EiamAdmin User in CA EEM Registration Panel of WCC Installation

During CA WCC installation, if you provide an incorrect password for the EiamAdmin user in the CA EEM registration panel where multiple CA EEM servers are configured in fail-over mode, the EiamAdmin user is locked automatically.

Correct the password and wait five minutes. After five minutes, the EiamAdmin user is automatically unlocked, and you can continue the CA WCC installation.

Prerequisites for CA Workload Automation AE Server Definition in CA WCC Configuration

When you define a CA Workload Automation AE server in Configuration, note the following:

- An agent must be installed and running on the application server machine. This is not required for core CA Workload Automation AE. If the application server is on the CA Workload Automation AE Scheduler machine, an agent is already installed (with the Scheduler) and the requirement is met.
- There must be a machine definition in CA Workload Automation AE for the agent whose name matches the DNS alias associated with the application server host name.
- In Configuration, the name specified in the Application Server Host Address field is case-sensitive and must match the name in the CA Workload Automation AE application server agent machine definition. If the machine definition in CA Workload Automation AE is a fully-qualified host name (machine.domain.com) then the host name in Configuration must also use the fully-qualified host name.
- If multiple host names are specified in the Application Server Host Address field, each host name specified must meet these requirements.

Note: For more information, see Configuration Help.

Reinstalling the CA Workload Automation AE SDK

If it becomes necessary to reinstall the CA Workload Automation AE SDK (SDK), for example, if an update is released, you can install the new version over the current version. You should not remove (uninstall) the currently installed SDK before installing the new version. Note that if you do remove the current SDK, you must reinstall the updated SDK to the original path and folder. For more information about reinstalling the SDK, see the Implementation Guide.
Uninstalling the CA Workload Automation AE SDK on Solaris

After the CA Workload Automation AE SDK is uninstalled, if no other CA Technologies products are installed on the machine, the /etc/profile.CA file may not be properly removed. If no CA Technologies products are installed, you can remove /etc/profile.CA.

Syntax Error Message Displayed After Uninstalling CA WCC on SunOS

After you uninstall CA WCC on SunOS and start a new session, the following error message may appear:

```
# su -
-sh: syntax error: `}'} unexpected
#
```

This is a known issue in which the /etc/profile.CA file may be corrupt. If the syntax error occurs after you uninstall CA WCC, you should remove the /etc/profile.CA file if no dependencies exist.

Reports Do Not Include Job Events Until After The First Run

Events from the CA Workload Automation AE server are not counted in Job Statistics and Job Run Event Summary reports until a job has run at least one time. For example, if a job that has not run at least one time is issued a force start, the Job Statistics Report indicates 0 in the Force Start column. Similarly, if a job that has not run at least one time is issued Job On Ice event, the event is not counted in the Total Events column of the Job Run Event Summary report.

Session Data May Be Lost When a CA WCC Instance in an HA Group Fails

Failure of a CA WCC instance in a High Availability group may result in data loss for users. When a CA WCC instance fails, users’ sessions end and users are notified. Users must then log back into CA WCC using the URL for Apache HTTPD. Because users will be assigned a different CA WCC instance, unsaved data from the previous session may be lost.
Stopping Services on Windows

An error message may be displayed when stopping the CA-wcc and CA-wcc-services services. However, the services are successfully stopped and the message can be ignored.

Script (S99)igateway Messages in the Install Log When Installing on a SuSe Platform

If you are installing CA WCC on a SuSe platform, and CA EEM is already installed on that computer, the following message may be displayed in the CA WCC install log:

```
insserv: Script (S99)igateway is broken: incomplete LSB comment.
```

There is no impact on the CA WCC installation and the message can be ignored.

Configuration Migration Update Error in the Validation Thread Pool Minimum Size

When migrating from CA WCC r11.3 to CA WCC r11.3.5 (and later service packs), the Validation Thread Pool Minimum Size field fails to update.

To work around this error, change the property name in the file that contains the exported data from CA WCC r11.3:

```
config_env_validation_thread_pool_core_size
```

to

```
config_env_cred_validation_thread_pool_core_size
```

The import works properly.

CA WCC Fails to Respond if Oracle Database is Restarted

When an Oracle database used with CA WCC is restarted while CA WCC is running, CA WCC will no longer respond. To resolve this issue, restart CA WCC services. For information about restarting services, see the Implementation Guide.
CA WCC is Unable to Handle Multiple Instances of CA Workload Automation AE

When CA Workload Automation AE services are running within a CA WCC environment, the default application server port is 9000. The user may need to select a different port dependent upon security restrictions or if another port is used by a different application.

To resolve this issue, you must specify a different port. For more information about setting the application server port, see the Implementation Guide.

CA WCC Database Settings Failure in Graphics Mode

When you are installing the product in graphics mode with an MS SQL database, and the database user that is specified in the Database Settings panel has administrative privileges, the software is installed but is not usable. In this case, uninstall CA WCC and then install again.

To avoid this situation when installing CA WCC, ensure that you specify the name of a database user who is not an administrator and that the database name field in the Interview Panel specifies the name of a database that exists prior to installation.
Non-Zero Return Codes Displayed at the End of CA WCC Installation on Solaris Zone

After installing CA WCC on a Solaris zone, an error message is displayed. The WCC_InstallInfo.log contains the following entry:

```
CompleteAsSdkAction:: setting $WCC_WAAE_SDK_LIB$ to <WAAE_SDK_NOT_INSTALLED/autosys/lib>
```

Additionally, the string WAAE_SDK_NOT_INSTALLED occurs twice in the /etc/profile.CA file.

When attempting to launch CA WCC, the Error failed to load <XYZ>: Not Found, appears in the Dashboard and Monitoring tab widgets. All tabs are blank except for Reporting and Enterprise Command Line.

**To correct the errors, follow these steps:**

1. Open a new shell window after the CA WCC installation completes.
2. Enter the following command:
   
   ```
   lsm -q CAWorkloadAutomationAE-SDK | grep INSTALLATION_PATH | cut -f2 -d"=" | sed 's/  */\!/g'
   ```
3. Locate the /etc/profile.CA file and replace the path in the string WAAE_SDK_NOT_INSTALLED with the output from step 2.
4. Save the file.
5. Open a new shell window.
6. Enter echo ${ CA_WAAE_SDK_LIB}.
   
   The output will be similar to /opt/CA/WorkloadAutomationAE/autosys/lib.
7. Restart CA WCC services using the command unisrvcntr restart CA-wcc-services.
8. Launch and log in to CA WCC.
   
   The widgets and the tabs are displayed correctly.
Incorrect Time Shift in Forecast Reports for Times Affected by Daylight Saving Rules

In CA WCC Forecast, reports display the data based on the result of the CA Workload Automation AE forecast command. The forecast command ignores time zone attributes defined for jobs, and daylight saving time changes. This limitation is known and documented in the CA Workload AE Reference Guide. As a result, CA WCC formats the displayed data according to the daylight saving time rules that are valid for the time zone selected in the My Profile settings. This may result in an incorrect time shift in the forecast reports.
CA supports the subsequent operating systems for the duration of their lifecycle (as determined by the operating system's manufacturer or until CA announces that we are dropping support). The supported 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:
- The UNIX instructions in this document also apply to Linux systems unless otherwise noted.
- The term Windows refers to any Microsoft Windows operating system supported by CA WCC unless otherwise noted.

This section contains the following topics:
- Operating Systems (see page 25)
- Database Support (see page 29)

Operating Systems

This section contains the supported operating systems.

UNIX

CA WCC server supports the following UNIX versions:

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<thead>
<tr>
<th>Operating Environment</th>
<th>Supported Versions</th>
<th>Architecture</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solaris</td>
<td>10</td>
<td>SPARC 64-bit</td>
<td>You must install the following patch: 119963-04  SunOS 5.10: Shared library patch for C++ Nov/30/2005</td>
</tr>
<tr>
<td>Solaris</td>
<td>11</td>
<td>SPARC 64-bit</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 5: Operating System and Database Support

Chapter 5: Operating System and Database Support
An unzip application must be installed on the CA WCC server.

**Note:** We recommend you use Solaris 10 update 5. Updates prior to update 4 will work only if you apply the following Solaris operating system patches: 125100-04 Kernel Update Patch, 120473-05 libc nss ldap PAM zfs Patch, and 125800-01 Fault Manager Patch.

## Linux

CA WCC server supports the following Linux versions:

<table>
<thead>
<tr>
<th>Operating Environment</th>
<th>Supported Versions</th>
<th>Architecture</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Enterprise Linux</td>
<td>5</td>
<td>x86 64-bit</td>
<td>compat-libstdc++-33 or higher is required. The 32-bit version is required. libstdc++.so.5 and libstdc++.so.6 or higher are required. libuuid.so.1 is required. The 32-bit version is required. libaio.so.1 is required. The 32-bit version is required. ncurses (32-bit) version 5 or higher is required.</td>
</tr>
<tr>
<td>Operating Environment</td>
<td>Supported Versions</td>
<td>Architecture</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux</td>
<td>6</td>
<td>x86 64-bit</td>
<td>compat-libstdc++-33 or higher is required. The 32-bit version is required. libstdc++.so.5 and libstdc++.so.6 or higher are required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The libstdc++.so.5 shared library is contained in the compat-libstdc++-33-3.2.3-69.el6.i686.rpm package.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The libstdc++.so.6 shared library is contained in the libstdc++-4.4.4-13.el6.i686.rpm package.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>libuuid.so.1 is required. The 32-bit version is required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>libaio.so.1 is required. The 32-bit version is required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ncurses (32-bit) version 5 or higher is required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>libgcc (32-bit) or higher is required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>nss-softokn-freebl (32-bit) or higher is required.</td>
</tr>
<tr>
<td>SuSE Linux Enterprise Server</td>
<td>10</td>
<td>x86 64-bit</td>
<td>The 32-bit versions of libstdc++.so.5 and libstdc++.so.6 or higher are required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The libstdc++.so.5 shared library is contained in the compat-libstdc++ or libstdc++-33 rpm package.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>libuuid.so.1 is required. The 32-bit version is required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>libaio.so.1 is required. The 32-bit version is required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ncurses (32-bit) version 5 or higher is required.</td>
</tr>
</tbody>
</table>
Operating Systems

### Operating Environment

<table>
<thead>
<tr>
<th>Supported Versions</th>
<th>Architecture</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuSE Linux Enterprise Server 11</td>
<td>x86 64-bit</td>
<td>The 32-bit versions of libstdc++.so.5 and libstdc++.so.6 or higher are required. The libstdc++.so.5 shared library is contained in the libstdc++-33 rpm package. libuuid.so.1 is required. The 32-bit version is required. libaio.so.1 is required. The 32-bit version is required. ncurses (32-bit) version 5 or higher is required.</td>
</tr>
</tbody>
</table>

An unzip application must be installed on the CA WCC server.

For Red Hat, the required libraries can be installed by electing to install the Legacy Software Development Package using the Add/Remove Packages application. For SuSE, the required libraries can be installed as needed from their respective RPM Package Managers using YaST.

For information about changes required to kernel parameters on Linux, see the CA Common Components documentation, available from the CA Common Components DVD.

### Windows

CA WCC server supports the following Windows versions:

<table>
<thead>
<tr>
<th>Version</th>
<th>Architecture</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Windows 2008</td>
<td>x86 64-bit</td>
<td>Windows patch 979306 is required.</td>
</tr>
<tr>
<td>Microsoft Windows 2008 R2</td>
<td>x86 64-bit</td>
<td>Windows patch 979306 is required.</td>
</tr>
<tr>
<td>Microsoft Windows 2012</td>
<td>x86 64-bit</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

- You must install CA WCC on a supported 64-bit server. If you attempt to install CA WCC on a 32-bit server, the following error message appears:
  
  Windows error 216 occurred while loading the Java VM

- The cumulative time zone update for Microsoft Windows operating systems may be required. For information, go to [http://microsoft.com](http://microsoft.com).
Database Support

CA WCC supports the following databases:

<table>
<thead>
<tr>
<th>Database</th>
<th>Supported Versions</th>
<th>Architecture</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft SQL Server</td>
<td>2008</td>
<td>32/64-bit</td>
<td></td>
</tr>
<tr>
<td>Microsoft SQL Server</td>
<td>2008 R2</td>
<td>32/64-bit</td>
<td></td>
</tr>
<tr>
<td>Microsoft SQL Server</td>
<td>2012</td>
<td>32/64-bit</td>
<td></td>
</tr>
<tr>
<td>Oracle</td>
<td>10g Release 2 (10.2)</td>
<td>32/64-bit</td>
<td>RAC is required for CA WCC High Availability. Oracle 10g patches are required to address Oracle connectivity problems. For more information, see Oracle 10g Patches (see page 29).</td>
</tr>
<tr>
<td>Oracle</td>
<td>11g Release 2 (11.2.0.3.0)</td>
<td>32/64-bit</td>
<td>RAC is required for CA WCC High Availability.</td>
</tr>
</tbody>
</table>

Oracle 10g Patches

If you are installing CA WCC Release 11.3.6 to work with Oracle 10g, you must install the appropriate Oracle patch to address the following issues:

Oracle Connectivity Problem When Installation Path in Environmental Variable Contains Special Characters on Windows

If the CA WCC installation path specified in the environment variable CA_WCC_INSTALL_LOCATION or the CA Workload Automation AE SDK installation path specified in the environment variable CA_WAAE_SDK_LIB contains special characters (for example, parentheses or quotation marks), you will get connectivity problems with the Oracle database. This is an Oracle problem. See Oracle Bug #3807408.

If you are using an Oracle version not mentioned in this document, contact Oracle support to obtain the necessary patches for your environment. See below for release/patch information.

Description of Oracle Bug #3807408:

Externally authenticated usernames containing a '(',],' or '=' cannot be authenticated, additionally if a program name / path contains these characters, it may not be possible to connect (ORA-12154).
For Oracle 10g on Windows, download and apply the following patches, as appropriate:

- **10.2.0.2:**
  - 32-bit patch 5383042
  - 64-bit (Itanium) patch 5388866
  - 64-bit (x64) patch 5388871

- **10.2.0.1:**
  - 32-bit patch 4923768
  - 64-bit (Itanium) patch 4923780
  - 64-bit (x64) patch 4923787
Chapter 6: System Requirements

System requirements are provided for the servers in the CA WCC environment.

Notes:

- For CA Common Components and CA Workload Automation AE system requirements, see the appropriate Release Notes.
- To check the version of the components and other environmental information after CA WCC is installed, click About, System Information.

This section contains the following topics:

- CA WCC Server (see page 31)
- CA WCC Client (see page 34)
- CA Workload Automation AE Servers (see page 34)
- CA Workload Automation AE, CA WCC, and CA EEM Compatibility (see page 35)

CA WCC Server

The main CA WCC product is installed on the CA WCC server. A DVD-ROM drive is required for installation. Alternatively, you can mount the DVD/ISO image as a drive.

Note: Note: On UNIX and Linux, you must mount the DVD/ISO image as a drive instead of using ISO Buster or a similar tool.

As the number of users and the number of jobs monitored by CA WCC increases, you may see a performance benefit from adding additional memory and/or additional processing power. Additional processing power can be added either by using a faster CPU or by adding additional CPUs.
Hardware Requirements

Depending on the operating system, specific CA WCC server hardware requirements must be met or exceeded for CA WCC to install and run correctly.

**Important!** The following requirements apply to installing CA WCC on the CA WCC server only. Installing CA EEM on the CA WCC server is not recommended; however, if you plan to install other components such as CA EEM or CA Workload Automation AE on the CA WCC server, the RAM and hard disk space requirements for those components must be added to the RAM and hard disk space requirements listed for CA WCC. Additionally, the fastest processor recommended for any single component should be used.

**Note:** The requirements that follow are for a typical enterprise with up to two CA Workload Automation AE instances and up to 15,000 jobs in the database of each CA Workload Automation AE instance.

The requirements for a Windows or Linux x86 computer are as follows:

- 2 GHz or higher processor recommended.
- Two CPUs minimum, four CPUs recommended for large enterprises.
- At least 4 GB of RAM; 8 GB recommended.
  
  **Important!** We strongly recommend 6 GB at minimum for optimal performance.
- 2 GB of hard disk space for the installation, including CA WCC and the required common components.

The requirements for a Solaris computer are as follows:

- 2 GHz or higher processor recommended.
- Two CPUs minimum, four CPUs recommended for large enterprises.
- At least 4 GB of RAM; 8 GB recommended.
  
  **Important!** We strongly recommend 6 GB at minimum for optimal performance.
- 2 GB of hard disk space for the installation, including CA WCC and the required common components.

**Note:** On UNIX and Linux, the /tmp directory should have a minimum of 500 MB of space available. On Windows, %TEMP% and %TMP% must point to a directory with a minimum of 500 MB of space available.
Software Requirements

The following software requirements must be met for CA WCC to run correctly:

- Common component CA EEM must be installed and running before you install CA WCC. CA EEM is typically installed on a dedicated server. Common components are installed using the CA Common Components DVD.
- Adobe Flash Player version 8 or higher must be installed to display graphics in the Monitoring view summary and reports.

Notes:

- CA WCC can communicate with CA EEM running in FIPS or non-FIPS mode.
- CA WCC Release 11.3.6 supports all common components installed using the CA Common Components DVD Release 11.3.6. For information about installing or upgrading common components, see the CA Common Components Implementation Guide.
- On Linux with kernel version 2.4, CA EEM and other common components cannot be upgraded. In this case, CA EEM and other common components must be installed on a clean computer with Linux kernel version 2.6. 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.

The following required software is automatically installed with CA WCC:

- Apache™ Tomcat 7.0.37
- Java Runtime Environment (JRE):
  - 64-bit—1.7.0 update 17
  - 32-bit—1.7.0 update 17
- Note: This is installed as a private JRE and is used by the CA WCC Servlet engines.

Database Requirements

The Configuration, Forecast, and Monitoring applications require a database, known as the CA WCC database. The Reporting application also requires a database, known as the Reporting database. An internal Derby database is provided that can be used by all CA WCC applications. Otherwise, you can use a supported database to which CA WCC has access. For more information, see the Implementation Guide.
CA WCC Client

You can access CA WCC remotely.

**Note:** Access to CA WCC is available only to users created in or referenced by CA EEM.

### Hardware Requirements

The following client hardware requirements must be met or exceeded for CA WCC to run correctly on a Windows x86 computer:

- At least 512 MB of RAM; 1 GB or more recommended.
- 1 GHz processor; 2 GHz or more recommended.
- Minimum screen resolution of 1024 x 768.

### Software Requirements

The following software requirement must be met for CA WCC to run correctly:

- Adobe Flash Player version 8 or above must be installed to display graphics in the Monitoring view summary and reports.

CA WCC supports the following web browsers and versions:

- Microsoft Internet Explorer 8.0, 9.0, and 10.0
- Mozilla Firefox 10, 17.0, and 22.0
- Chrome 27

### CA Workload Automation AE Servers

CA WCC Release 11.3.6 supports CA Workload Automation AE r11.3 SP1, Release 11.3.5, and Release 11.3.6 servers.

**Note:** Certain job types are supported only by CA Workload Automation AE Release 11.3.5 and Release 11.3.6.

### Hardware Requirements

For CA Workload Automation AE hardware requirements, see the CA Workload Automation AE Release Notes.
Software Requirements

The following are CA WCC requirements for CA Workload Automation AE servers:

- If CA EEM without failover is implemented with CA Workload Automation AE, the CA Workload Automation AE servers and the CA WCC servers must reference the same instance of CA EEM. If CA EEM with failover is implemented with CA Workload Automation AE, the CA Workload Automation AE servers and the CA WCC servers do not need to reference the same instance of CA EEM; however, the CA EEM instances referenced must be in the same failover setup.

  Note: For information about configuring CA EEM for failover, see the CA Embedded Entitlements Manager Getting Started Guide, available from CA Support Online.

- If cross-platform scheduling is enabled on the CA Workload Automation AE server, CAICCI must be installed on the CA Workload Automation AE server. CAICCI is a common component, installed using the CA Common Components DVD.

- To enable CA WCC Enterprise Command Line and Forecast functionality with CA Workload Automation AE, you must install the Command Sponsor (also referred to as WCC Command Sponsor) using the CA Workload Automation AE DVD. On Linux, the Command Sponsor supports kernel version 2.6 only.

- On Linux with kernel version 2.4, CA EEM, other common components, and the Command Sponsor cannot be upgraded. In this case, CA EEM, other common components, and the Command Sponsor must be installed on a clean computer with Linux kernel version 2.6. 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.

CA Workload Automation AE, CA WCC, and CA EEM Compatibility

Requirements for compatibility between CA Workload Automation AE, CA WCC, and CA EEM depend on the security configuration of the products.

The following table displays the releases of CA Workload Automation AE, CA WCC, and CA EEM that are compatible:

<table>
<thead>
<tr>
<th>CA WCC Release</th>
<th>CA Workload Automation AE Release</th>
<th>CA EEM Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release 11.3.6 (running in non-FIPS mode)</td>
<td>Release 11.3.6 (running in non-FIPS mode)</td>
<td>Release 12.51 (running in non-FIPS mode)</td>
</tr>
<tr>
<td>CA WCC Release</td>
<td>CA Workload Automation AE Release</td>
<td>CA EEM Release</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Release 11.3.6 (running in non-FIPS mode)</td>
<td>Release 11.3.5 (running in non-FIPS mode)</td>
<td>Release 12.51 (running in non-FIPS mode)</td>
</tr>
<tr>
<td><strong>Note:</strong> We do not recommend this configuration as CA Workload Automation AE Release 11.3.5 does not necessarily contain all maintenance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Release 11.3.6 (running in non-FIPS mode)</td>
<td>r11.3 SP1</td>
<td>Release 12.51 (running in non-FIPS mode)</td>
</tr>
<tr>
<td>Release 11.3.6 (running in FIPS mode)</td>
<td>Release 11.3.6 (running in FIPS mode)</td>
<td>Release 12.51 (running in FIPS mode)</td>
</tr>
<tr>
<td>Release 11.3.6 (running in FIPS mode)</td>
<td>Release 11.3.5 (running in FIPS mode)</td>
<td>Release 12.51 (running in FIPS mode)</td>
</tr>
<tr>
<td><strong>Note:</strong> We do not recommend this configuration as CA Workload Automation AE Release 11.3.5 does not necessarily contain all maintenance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notes:

- In external security mode, CA Workload Automation AE r11.3 and r11.3 SP1 use CA EEM r8.4 SDK libraries to connect to CA EEM r8.4. These libraries also support interactions with CA EEM Release 12.51 running in non-FIPS mode. To run CA WCC Release 11.3.6 in non-FIPS mode with CA Workload Automation AE r11.3 SP1, upgrade to CA EEM Release 12.51 and verify that CA EEM is running in non-FIPS mode. For information about CA EEM, see the CA Embedded Entitlements Manager Implementation Guide.

- In external security mode, CA Workload Automation AE Release 11.3.5 uses CA EEM Release 12.0 SDK libraries to connect to CA EEM Release 12.0. To run CA WCC Release 11.3.6 in FIPS mode with CA Workload Automation AE Release 11.3.5 in FIPS mode, verify that CA EEM is running in FIPS mode. However, for these products to be compatible with each other, we recommend that you take the following actions:
  - Upgrade CA WCC to Release 11.3.6
  - Upgrade CA Workload Automation AE to Release 11.3.6
  - Upgrade CA EEM to Release 12.51 and verify that CA EEM is running in FIPS mode.

- If you install CA WCC Release 11.3.6 on a computer where CA Workload Automation AE is installed, CA Workload Automation AE must also be Release 11.3.6.

- CA Workload Automation Agent for UNIX, Linux, or Windows can be installed on the same server with CA WCC Release 11.3.6 if the agent is installed using the CA Workload Automation AE Release 11.3.6 DVD. On UNIX, you can also install the agent using the CA Workload Automation AE Release 11.3.6 Standalone Agent DVD. Before you install the agent, stop the CA WCC services.

- On UNIX, if you want to install CA Workload Automation AE Release 11.3.6 on a computer where CA WCC Release 11.3.6 is already installed, you must stop the CA WCC services before you install CA Workload Automation AE Release 11.3.6.

- On Windows, to install CA Workload Automation AE and CA WCC successfully on the same computer, you must install CA Workload Automation AE first and then install CA WCC. If you install CA Workload Automation AE on a computer where CA WCC is already installed, the installation fails. To resolve this issue, see Installing CA Workload Automation AE and CA WCC on the Same Computer.
Chapter 7: Related Documentation

This section describes the documents provided with CA WCC Release 11.3.6 and how to access them.

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

This section contains the following topics:

- CA WCC Documentation (see page 40)
- CA Workload Automation AE Documentation (see page 40)
- CA Common Components Documentation (see page 41)
- Agent Documentation (see page 41)
- Access the Documentation (see page 41)
- Release Numbers in Documentation (see page 42)
CA WCC Documentation

CA WCC Release 11.3.6 includes the following documentation:

- CA WCC Application Editor Help
- CA WCC Configuration Batch Interface Help
- CA WCC Configuration Help
- CA WCC Credentials Help
- CA WCC Dashboard Help
- CA WCC Enterprise Command Line Help
- CA WCC Filter Job Types Batch Interface Help
- CA WCC Forecast Help
- CA WCC Implementation Guide
- CA WCC JAWS Help
- CA WCC Job Template Batch Interface Help
- CA WCC Monitoring Batch Interface Help
- CA WCC Monitoring Help
- CA WCC Quick Edit Help
- CA WCC Quick View Help
- CA WCC Release Notes
- CA WCC Reporting Help
- CA WCC Resources Help
- CA Workload Automation Security Guide
- CA WCC Workload Scheduling Guide

CA Workload Automation AE Documentation

CA Workload Automation AE is the automated job control system designed for your distributed enterprise. CA Workload Control Center (CA WCC) is the web-based user interface for CA Workload Automation AE. For more information about using CA Workload Automation AE to manage your workload, see the documentation available on the CA Workload Automation AE Release 11.3.6 DVD.
CA Common Components Documentation

CA Workload Automation AE and CA WCC integrate with CA Common Components including CA EEM, SSA, Event Management, Management Command Center, and CAICCI. You can install these common components using the CA Common Components Release 11.3.6 DVD.

The CA Common Components Release 11.3.6 DVD includes the following documentation:

- CA Common Components Implementation Guide
- CA Common Components Release Notes
- CA EEM Release Notes
- CA EEM Implementation Guide
- CA EEM Programming Guide
- CA NSM Inside Event Management and Alert Management Guide

Agent Documentation

The Implementation Guides, Readmes, and Release Notes for all the agents and agent plug-ins you can use to run various types of CA Workload Automation AE and third-party workload are located on the CA Workload Automation Agent r11.3 SP2 DVD.

Access the Documentation

To access the documentation in the product image, go to the Documentation directory of the appropriate image and open the Bookshelf.html file. The bookshelf links to the documentation set corresponding to that image.

To access all of the above documents from one location, with the ability to search across all of them, go to CA Support (http://ca.com/support) and select 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 in 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 r11.3 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.