

CA Clarity™ PPM

Release Notes - On Premise
Release 14.2.00



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

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Chapter 1: CA Clarity PPM 14.2 Release Notes

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[International Support](#) (see page 7)

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[Known Issues and Resolved Defects](#) (see page 8)

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[Compatibilities](#) (see page 23)

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Training

CA Education offers many training solutions for CA Clarity PPM. One important course you may consider explains the CA Productivity Accelerator (CA PA). To learn more about the training offerings, see the CA Education website at <http://ca.com/education>.

International Support

An internationalized product is an English product that operates correctly on local language versions of the required operating system and required third-party products, and supports local language data for input and output. Internationalized products also support the ability to specify local language conventions for date, time, currency, and number formats.

A translated product (sometimes referred to as a localized product) is an internationalized product that includes local language support for the user interface of the product, online help and other documentation, and local language default settings for date, time, currency, and number formats.

The product is fully localized and supports over 100 regional settings for date, time, and number formatting. The user interface is available in the following languages:

- Brazilian Portuguese
- Catalan
- Czech
- Danish
- Dutch
- English
- Finnish
- French
- German
- Hungarian
- Italian
- Japanese
- Norwegian
- Polish
- Russian
- Simplified Chinese
- Spanish
- Swedish
- Traditional Chinese
- Turkish

Localized versions of some CA Clarity PPM Online Help files and content are available within 90 days of the product general availability.

The most recent versions of localized product documentation are available on the [Documentation page of CA Support Online](#).

Published Fixes

We recommend that you review the Solutions and Patches that Technical Support provides at [CA Support](#). You can review the solutions and patches and any prerequisite published fixes that are required for the product release.

Known Issues and Resolved Defects

Known issues are treated as Knowledge Base articles. To find known issues, go to the [CA Clarity PPM Support by Product page](#), click the Knowledge Base tab, and enter the search term *clarity13open* or *clarity14open*.

Resolved Defects

For information about resolved defects, see the [Resolved Defects page](#) on CA Support Online.

Java Runtime Environment Defects

The Java Runtime Environment (JRE) is updated frequently with fixes for security issues, including issues that are unknown at the time CA Clarity PPM is released. To ensure that you have the latest fixes, we recommend that you download the most recent version 7 JDK.

Supported Upgrade Paths

For information about supported upgrade paths, see the *Change Impact and Upgrade Guide* and the *Installation Guide*.

Add-ins Compatibilities

The following section describes important information about upgrading installed add-ins, accelerators, and connectors.

- If you are upgrading from Version 13.0 through Release 14.1 to Release 14.2, the following add-ins are upgraded:
 - PMO Accelerator
 - Clarity Solution Pack (CSP)

Note: The CSP add-in is supported only for existing customers. This add-in is not supported for new CA Clarity PPM installations.
 - CA Clarity Agile
- If you are upgrading from any version before Version 13.0 to Release 14.2, upgrade all installed add-ins.
- Starting with Version 13.3, a new installation process is required for add-ins, accelerators, and connectors.

Note: For more information, see the *Installation Guide*.

The following table shows the add-in, accelerator, and connector releases that are compatible with Release 14.2.

Add-in, Accelerator, or Connector	New Installation 14.2	Upgrade from 12.x to 14.2	Upgrade from 13.x or 14.1 to 14.2
PMO Accelerator	14.2.0	14.2.0	14.2.0
Clarity Solution Pack (CSP)	14.2.0	14.2.0	14.2.0
Earned Value Manager	2.0.2	2.0.2	2.0.2

Add-in, Accelerator, or Connector	New Installation 14.2	Upgrade from 12.x to 14.2	Upgrade from 13.x or 14.1 to 14.2
Accelerator for PRINCE2	2.0.2	2.0.2	2.0.2
Accelerator for the PMBOK	2.0.2	2.0.2	2.0.2
Accelerator for New Product Development	2.0.3	2.0.3	2.0.3
PPM Essentials Accelerator	2.0.2	2.0.2	2.0.2
BRM Accelerator	3.0.2	3.0.2	3.0.2
Connector for CA Unicenter Service Desk 12.7 & CA Software Change Manager™ 12.1.0.3	2.0.1	2.0.1	2.0.1
Connector for CA Unicenter Asset Portfolio Management 11.3.4	2.0.2	2.0.2	2.0.2
Connector for Microsoft SharePoint 2013	3.0.0	3.0.0	3.0.0
Service Connect	2.0.0	2.0.0	2.0.0
Catalyst Connector	2.5.0	2.5.0	2.5.0
CA Clarity Agile	14.1.0	14.1.0	14.1.0
VersionOne Connector	14.1.0	14.1.0	14.1.0

CA Clarity PPM Solution Pack

The CA Clarity PPM Solution Pack is an add-in based on the content delivered in the PMO Accelerator and customer feedback. The Solution Pack is a collection of Xcelsius dashboards and SAP Crystal Reports to be used with the PMO Accelerator add-in.

Before you install the CA Clarity PPM Solution Pack add-in, verify that the compatible versions of CA Clarity PPM and the PMO Accelerator are installed. The CA Clarity PPM Solution Pack installation fails if you do not install the compatible version of the PMO Accelerator add-in before installing the solution pack.

You can find the Solution Pack release notes, product guide, overview guide, and dashboard and report source files on the [Solution Pack Index page of CA Support Online](#) (login required).

Note: The CA Clarity PPM Solution Pack is supported only for the existing customers.

Important! Review the certified and supported versions chart in the CA Clarity PPM Solution Pack Release Notes to determine if an upgrade of CA Clarity PPM and the PMO Accelerator is required.

Note: You can download Xcelsius Designer 2008 Service Pack 6, Fix Pack 3 from CA Support Online.

CA Business Intelligence (CABI) Release 3.3 Service Pack 2

If you have an older version of CABI, complete both the steps. If you already have a CABI Release 3.3 installation, you only download and install Service Pack 2 (Step 2 in the following procedure).

Follow these steps:

1. Download and install CABI Release 3.3 by completing these steps:

Note: This step is for upgrading customers with an older version of CABI.

- a. Log in to the [CA Clarity PPM support page on CA Support Online](#).
- b. In the Quick Access section, click Download Center.
- c. In the *Please narrow your search results for "Products" below* section, select the product for which you are licensed (for example, CA Clarity PPM Core License), select the appropriate release number, and click Go.
- d. Click the Download link next to the appropriate CA Business Intelligence 3.3 download.
- e. On the Download Method page, select the appropriate download method to complete the download request.
- f. Install CABI Release 3.3.

2. Download and install Service Pack 2 on the CABI Release 3.3 installation.

- a. Download the CABI Release 3.3 Service Pack 2 and the Release Notes from the CA FTP site:

Windows:

`ftp://ftp.ca.com/caproducts/CABI/CABI-3.x/boeXIR3_SP7/Windows/`

Note: Download both the zip file and the *CABI 3.3 SP2 Release Notes*.

Linux:

ftp://ftp.ca.com/caproducts/CABI/CABI-3.x/boeXIR3_SP7/Linux/

- b. Follow the instructions in the *CABI 3.3 SP2 Release Notes* to install Service Pack 2 on the CABI Release 3.3 instance.

Chapter 2: New Features

This section contains the following topics:

[Advanced Reporting and Data Warehouse](#) (see page 13)

[Microsoft Project Field Mapping Administration](#) (see page 14)

Advanced Reporting and Data Warehouse

Advanced Reporting allows you to create an ad hoc view of CA Clarity PPM data that you can save as a report and share using different formats. You configure each ad hoc view and its corresponding report by selecting the data that you want to include. You can run a report immediately or you can set up a schedule. In either case, you control the output method and format.

The CA Clarity PPM Data Warehouse is the main data source for Advanced Reporting. The Data Warehouse schema is optimized specifically for reporting. The schema includes the Investment, Resource, Portfolio, Timesheet, and Project data. The Data Warehouse is populated at scheduled intervals by jobs that load the relevant data from the CA Clarity PPM database to the Data Warehouse. The Data Warehouse can be extended to include custom objects and attributes.

Note: If you have your own preferred reporting tools, you can use them with the Data Warehouse.

CA Clarity PPM provides a set of domains that contain the most frequently used data. When you create an ad hoc view, you select from a list of the available domains. A domain provides a business view of the CA Clarity PPM Data Warehouse. A domain limits your access to data based on your security permissions. For example, if a user is permitted to access specific projects and resources in CA Clarity PPM, that user can access the same projects and resources in the Advanced Reporting domains. If you add custom objects or attributes to the product, these custom objects and attributes can also be included in the domains.

Note: To view the data that is included in the domains, you must have the PMO Accelerator add-in with Jaspersoft Content installed. For more information, see the *PMO Accelerator Product Guide*.

You create ad hoc views in the form of charts, tables, and cross tabs that let you analyze data from the domains. You can also use the ad hoc views to generate reports, which you can share, store, or display in the following ways:

- Single standalone report
- Word, PDF, Excel, PowerPoint document, or other formats
- Email attachment

Note: Advanced Reporting uses the Jasper Reports Server (which is integrated with CA Clarity PPM) to manage ad hoc views and reports. For information about the Jasper Reports Server, see the [Jaspersoft Community](#) web site.

For information about installing, configuring, and using Advanced Reporting and the Data Warehouse, see the *Installation Guide*, *Administration Guide*, and *Basics User Guide*.

Microsoft Project Field Mapping Administration

You can map only the existing CA Clarity PPM attributes that have not been mapped and custom attributes of the Project, Resource, Task, Assignment, and Team objects with the Microsoft Project fields. The attributes must be of following data types:

- Date
- Number
- String
- Boolean
- Lookup string

You can only import, export, or import and export data to and from CA Clarity PPM to Microsoft Project.

The following business rules apply when you map the fields:

- If an Object Type and Clarity Attribute ID mapping already exist, the Create or Update operation results in an error.
- If an Object Type and MSP Field Name already exist, the Create or Update operation results in an error.
- For out-of-the-box mappings with the Clarity Attribute ID set to *prUID*, the Create or Update operation results in an error.
- For mappings with Clarity Attribute ID set to *prUID*, you can modify only the MSP Field Name for an update operation. For example, you can change the mapping of UID from text3 to text4.

Note: You must have the administrator rights to view the MSP Field Mappings page.

Chapter 3: Enhanced Features

This section contains the following topics:

[Changes to the Plugin IDs](#) (see page 17)

[Documentation](#) (see page 17)

[Microsoft Project Improvements](#) (see page 18)

[Portfolio Enhancements](#) (see page 19)

[Resource Average Allocation Percentage](#) (see page 20)

[Updates to Non Project Investment Objects \(NPIOs\)](#) (see page 21)

Changes to the Plugin IDs

The plugin ID for VersionOne has changed from `remote_v1` to `pl_remote_v1`. The change means the command to deploy the plugin changes.

For example, the new command to deploy VersionOne becomes:

```
admin plugin pl_remote_v1
```

Upgrading to the Release 14.2 VersionOne plugin automatically updates the install history to reflect the new ID name.

Documentation

You can find the VersionOne integration documentation in the *Installation Guide*.

The following CA Clarity PPM documentation improvements are available with this release:

- **Advanced Reporting.** A new CA Clarity PPM page, *CA PPM Advanced Reporting and Database Schema Index*, is added to CA Support Online. The link for the page is located under Popular Links on the CA PPM Product Page.

This page contains links for technical information about CA Clarity PPM, Data Warehouse, Jaspersoft, and PMO Accelerator.

To see the page, click the following link:

[CA PPM Advanced Reporting and Database Schema Index.](#)

Note: You must be logged in to see the information that the links present.

The new page contains the following documentation links:

- CA Clarity PPM Database Schema

Note: In the previous releases, this information was included in the Technical Reference Guide. Now a link to the support site has been included where the information was previously.

- Data Warehouse Database Schema

- Data Warehouse ERD Diagram

- PMO Accelerator for Jaspersoft Advanced Reporting

- Advanced Reporting Domain Field Descriptions

- PMO Accelerator Overview Guides

- **Studio Developer Guide.** The last step for creating a custom object was updated to reflect your ability to edit the default menu link to the list page. Previous documentation suggested only that you create a new menu link to the custom object list page. A sample screen image was added to demonstrate the appearance of chart portlet data that is grouped by column or function.

- Prerequisites for content packages were updated to include the required Document Management System (DMS). As an administrator, install and configure the DMS before using content package JAR files in Studio.

- **Financial Management User Guide.** The equations and descriptions in the *Financial Metrics Used for Planning* topic were reviewed and improved.

- **Resource Management User Guide.** The calculation for the default allocation percentage has been improved. Although it does not directly change the steps to perform staffing tasks, resource managers can benefit from more accurate results. See *Resource Average Allocation Percentage* in this guide.

Microsoft Project Improvements

Microsoft Project 2013 Service Pack 1 Support

Microsoft Project 2013 Service Pack 1 is supported only for the new CA Clarity PPM Microsoft Project driver and not the legacy driver.

Auto-Numbering and Project IDs

If auto-numbering is set for the Project object, auto-numbering is enforced on creating and saving a project to CA Clarity PPM. The Project ID field in Microsoft Project becomes read-only.

Assignment Max % Load for the Fixed Unit Tasks

When you open or export a project from Microsoft Project, use the *MSP Assignment Units Mapping with Clarity Assignment 'Max % Load'* option to turn on or off the mapping of Max % Load. When this option is selected, the Microsoft Project unit is mapped based on the Max % Load value in CA Clarity PPM. When this option is cleared, the staff allocation rate that is based on the date the project is opened in Microsoft Project is used to map.

To set this option, open Administration, and from Project Management, click Settings.

When you save or import a project to CA Clarity PPM, the *MSP Assignment Units Mapping with Clarity Assignment 'Max % Load'* value is always written to Max % Load regardless of this setting.

Portfolio Enhancements

Limit on the Portfolio Investments

Starting with this release, there is no limit on the number of investments you can have in a portfolio. As a result, you can now define portfolios with a large number of investments. CA Technologies recommends you to define Content Power Filter Criteria that results in a manageable number of investments in each portfolio.

Note: The more investments you configure in a portfolio, the more time it takes to run the *Portfolio Synchronization* job and to calculate the totals in the waterline view.

Pending Edits for Waterlines

The changes that you make to the portfolio Waterlines view are now saved as pending edits. These edits are saved temporarily until you save them permanently or discard them. If you navigate away from the view or if you close the session, your pending edits are saved until you log back in. When you go back to the view, you can still save or discard your pending edits.

Discard Changes

This is a new button on the Waterlines view that allows you to discard your pending edits if you decide not to save the edits permanently. The button is enabled when there are pending edits on the view.

Improved Waterline View Navigation

You can now scroll infinitely in both directions of the Waterlines view to see the complete list of investments. There is no pagination as the list of investments is continuously refreshed by a buffered view. At a time 150 investments display on the view.

Enhanced Waterline Drag and Drop

When you drag and drop investments to a new location on the Waterlines view, a tool tip appears showing the drop target and the number of rows that are selected with a green check mark icon. If you have already reached the top or bottom of the list, the icon changes to a red circle with a line.

Change to the Synchronize Portfolio Investments Job

Starting this release, when the number of portfolio investments added between runs of the *Synchronize Portfolio Investments* job is equal to or greater than 1,000, an alert appears. The alert breaks down the number of investments by type and asks if you want to continue with the synchronization.

The alert appears only when the threshold of 1,000 added portfolio investments is reached. The alert can be triggered when the Sync Now button initiates the job.

Resource Average Allocation Percentage

The business logic behind the calculation of the default resource allocation percentage has been improved. The application uses the start and finish dates for the team member instead of the investment to calculate the average allocation percentage and total availability hours.

Note: This change can affect your custom metrics and other calculations.

To illustrate the enhancements, create a project with a six-week duration from August 5 to September 13 and staff it with a team of three resources.

- a. On the Team list for the first resource, change the finish date to August 17 (two weeks, 80 hours) and the Default Allocation to 50 percent. The allocation is 40/80 or 50 percent as expected.
- b. For the second resource, change the finish date to August 17 (two weeks, 80 hours) and the Default Allocation to 50 percent. Add a segment from August 18 to 30 (two weeks, 80 hours) at an allocation of 100 percent.
 - Before this release, the application calculated allocation of 120 (40 + 80) and suggested an average allocation percentage for a resource that spans the complete project duration. In other words, the allocation percentage would apply 50 percent to 240, the total hours in the duration of the project (6 weeks x 40 hours = 240).
 - Starting with this release, the application calculates the allocation of 120 hours but yields a more accurate average allocation of 75 percent. The duration is just four weeks for the resource, not six. Their 120 hours divided by 160 total hours results in an average allocation of 75 percent.

- c. For the third resource, change the finish date to August 17 (two weeks, 80 hours) and the Default Allocation to 50 percent. Adjust this segment by specifying an allocation of 100 percent from August 5 to 17.
 - Before this release, the application would calculate an allocation of 40 hours for the two weeks, but an average allocation of 16.7 percent (40/240).
 - New in this release, the application calculates the same allocation of 40 hours but yields an average allocation of 50 percent (40/80).

Updates to Non Project Investment Objects (NPIOs)

The following updates were made to NPIOs (Programs, Applications, Assets, Products, and Other Work):

Enhanced functionality of the *Update Earned Value Totals* job

The *Earned Value Totals* job is renamed to *Update Earned Value and Cost Totals* to reflect added functionality. This job calculates the earned value and costs for projects and costs for NPIOs. The project or the NPIO can be selected using the Investment browse field on the Job Properties page.

New Object Action on the Investment Staff pages

The new object action Update Cost Totals is available on all project and NPIO Staff list and detail pages. This object action calculates the allocation and hard allocation costs. These costs can also be selected on custom portlets that are based on the Team data provider. The Staff list and details pages also display the allocation cost and hard allocation cost.

Time Slice Changes

The following time slices are added or renamed to reflect the new functionality:

Added:

Assignment::ETC Cost

Renamed:

Assignment::Actual Cost (previously Assignment::Actual Cost Curve)

Team::Allocation Cost (previously Team::Allocation Cost Curve)

Team::Hard Allocation Cost (previously Team::Hard Allocation Cost Curve)

Appendix A: Compatibilities

This section contains the following topics:

[CA Clarity PPM Servers](#) (see page 23)

[Integrated Servers](#) (see page 26)

[Clients](#) (see page 26)

[Clarity Mobile Time Manager](#) (see page 29)

[Products Included with CA Clarity PPM](#) (see page 29)

[Change History](#) (see page 30)

[FIPS Operating Mode Restrictions](#) (see page 37)

[IPv6 Network Compatibility Restrictions](#) (see page 37)

[CA Business Intelligence Release 3.3 SP2 - \(SAP BusinessObjects Enterprise XI 3.1 Service Pack 7\) Supported Configurations](#) (see page 40)

[Jaspersoft 5.6.1 Supported Configurations](#) (see page 42)

CA Clarity PPM Servers

The following table lists supported platforms for servers running CA Clarity PPM server software (application and background servers).

Some of the products listed in this appendix are not delivered with CA Clarity PPM, and you must purchase the product. For information about the software that is included with CA Clarity PPM, see [Products Included with CA Clarity PPM](#) (see page 29). Refer to your licensing agreement for more information.

New Installations

	Microsoft Windows	Linux	IBM AIX
Operating System¹⁾	<ul style="list-style-type: none"> ■ Windows Server 2008 R2 SP1 64-bit (Standard, Enterprise Edition) ■ Windows Server 2008 SP2 64-bit (Standard, Enterprise Edition) ■ Windows Server 2012 64-bit (Standard) 	<ul style="list-style-type: none"> ■ Red Hat Enterprise Linux 5.10 64-bit for x86 chipsets: any newer update release ■ Red Hat Enterprise Linux 6.4 64-bit for x86 chipsets: any newer update release ■ SUSE Linux Enterprise Server 10 SP4 64-bit for x86 chipsets; any newer service pack release²⁾ ■ SUSE Linux Enterprise Server 11 SP3 64-bit for x86 chipsets: any newer service pack release ■ Oracle Enterprise Linux Server 6u2 64-bit for x86 chipsets; any newer update release²⁾ 	<ul style="list-style-type: none"> ■ AIX 7.1; TL2: any maintenance release^{3), 4)} ■ AIX 6.1; TL8: any maintenance release^{3), 4)}

Notes:

- ¹⁾CA Clarity PPM is supported on any localized version of the supported operating systems.
- ²⁾CA Clarity PPM on OEL connecting to Microsoft SQL Server database is not currently supported.
- ³⁾WebSphere and Tomcat Application Servers are supported on AIX in CA Clarity PPM r14.2.
- ⁴⁾Support for AIX will be dropped in the future CA Clarity PPM release (first release in the calendar year 2016).

Components

Virtualization	See the CA Support Statement for Virtualization. Log in to CA Support Online . Navigate to the CA Clarity PPM product page. Under Popular Links, click the Compatibility Information link. On the CA Clarity Project and Portfolio Manager Compatibility Information page, click the Virtualization Support information link.
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Database ²⁾	<ul style="list-style-type: none"> ■ Oracle 11.2 Standard and Enterprise Edition: version 11.2.0.3.x or higher patch level^{5a, 5b)} ■ Oracle 11.2 Standard and Enterprise Edition: version 11.2.0.4.x or higher patch level^{5a, 5b)} ■ Microsoft SQL Server 2008 R2 Enterprise Edition: Any service pack^{5c)} ■ Microsoft SQL Server 2012 Enterprise Edition: Any service pack
Database Interface	<ul style="list-style-type: none"> ■ CA Clarity PPM DataDirect Type 5 (v5.1.1) Drivers for Oracle and SQL Server (included in CA Clarity PPM distribution).
Java Runtime	<ul style="list-style-type: none"> ■ Oracle Java SE JDK 1.7 update 67 (64-bit) or higher patch level⁶⁾ ■ IBM Java 7 (64-bit): 7.0.0.100 (SR5) or higher patch level⁶⁾
Application Server	<ul style="list-style-type: none"> ■ Apache Tomcat 7.0.55 or higher patch level (64-bit) ■ IBM WebSphere Application Server v8.5.5^{7a)}
Report Server	CA Business Intelligence™ Release 3.3 SP2 (BOXI 3.1 Service Pack 7). For more information, see CA Business Intelligence Release 3.3 (see page 40). ⁸⁾ Jasper Reports Server 5.6.1 ^{9, 10, 11,)}
Mail Server	Any SMTP/IMAPI/POP3 mail server can be used. CA Clarity PPM does not explicitly support any one vendor.

Notes:

- ⁵⁾Databases can be run on any vendor-supported operating system. Oracle SPARC T-Series servers are not supported. Production databases are not supported on software virtualized operating systems; examples include VMware vSphere, Microsoft Hyper-V, and Citrix XenServer. AIX LPARS, HP-UX VPARS and Solaris containers do not fall into this category and remain supported. It is also recommended that any downstream environments that are intended for performance or high concurrency testing match what is used in production.
 - ^{a)}Oracle Real Application Cluster (RAC) is supported.
 - ^{b)}Where (x) represents the patch level supported. For example, 11.2.0.5 is a new release and is not inherently supported.
 - ^{c)}SQL Server Named Instances are supported. SQL Server Clustering is supported with manual intervention after a database failure to restart failed background processes.
 - ^{d)}Any Microsoft SQL Server deployment that expands beyond five thousand users must be approved by CA Technologies, otherwise Oracle is a requirement due to scalability limitations associated with Microsoft SQL Server and how it handles OLTP (Online Transaction Processing) products like CA Clarity PPM.

- ⁶⁾CA recommends running the latest patch level.
- ⁷⁾CA Clarity PPM is supported on any localized version of the supported application servers.
 - ^{a)}WebSphere is only supported on AIX OS. Support for WebSphere will be dropped in the first release of CA Clarity PPM in the calendar year 2016.
- ⁸⁾CA Business Intelligence r3.3 (BOXI 3.1 Service Pack 7) is supported for existing customers only. Support for CA Business Intelligence r3.3 will be dropped in the first release of CA Clarity PPM in the calendar year 2016.
- ⁹⁾CA Clarity PPM does not support Jaspersoft flash charts.
- ¹⁰⁾Jaspersoft is supported on Tomcat Application Server only.
- ¹¹⁾Jaspersoft Enterprise 5.6.1 includes OLAP Server but CA Clarity PPM r14.2 will not support OLAP Server.

Integrated Servers

The following table lists supported software for servers integrating with CA Clarity PPM.

Single Sign On Server	CA SiteMinder 12.0 SP3 and CA SiteMinder 12.51 CR1
LDAP Server	Supports any LDAP v3 compliant directory server (such as CA Directory, Microsoft Active Directory, Novell eDirectory, Oracle Directory Server, Sun One Directory).
Microsoft Project Server	MS SharePoint Server 2010 SP2, 2013 (64-bit), Enterprise Edition ¹²⁾

Notes:

- ¹²⁾CA Clarity PPM SharePoint 2010 Connector version 2.3.

Clients

The following table lists supported software for client computers accessing CA Clarity PPM.

	Microsoft Windows	Apple Mac OS	Desktop Linux
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	Microsoft Windows	Apple Mac OS	Desktop Linux
Operating System	<ul style="list-style-type: none"> ■ Microsoft Windows XP Professional: SP 3 or higher ■ Microsoft Windows 7 SP 1 32-bit and 64-bit, all editions ■ Microsoft Windows 8.1 32-bit and 64-bit 	<ul style="list-style-type: none"> ■ Mac OS X: Release 10.9.1 or higher patch level 	<ul style="list-style-type: none"> ■ Any vendor or version with support for browsers listed under the Web Browser section.
Web Browser	<ul style="list-style-type: none"> ■ Microsoft Internet Explorer 10.0 and 11.0 and higher patch level (Microsoft Windows 7 and 8.1) ■ Microsoft Internet Explorer 9.0 and higher patch level ■ Microsoft Internet Explorer 8.0 and higher patch level³⁾ ■ Firefox 30.0 and higher release²⁾ ■ Firefox ESR 24.2.0 and higher patch level²⁾ ■ Google Chrome 35 or higher release²⁾ 	<ul style="list-style-type: none"> ■ Safari 7.0 and higher patch level ■ Firefox 30 and higher release²⁾ 	<ul style="list-style-type: none"> ■ Firefox 30 and higher release²⁾

	Microsoft Windows	Apple Mac OS	Desktop Linux
Client Applications ¹⁾	<ul style="list-style-type: none"> ■ Microsoft Excel 2010-2013 32-bit & 64-bit, all editions ■ Microsoft PowerPoint 2010-2013 32-bit & 64-bit, all editions ■ Microsoft Project 2010 SP2, 2013, and 2013 SP1 32-bit & 64-bit, all editions⁸⁾ ■ Java 7 Runtime Environment: 1.7 update 45 or higher update level⁴⁾ ■ Adobe Flash Player 11.9 or higher⁵⁾ ■ Adobe Acrobat Reader 7.0 or higher⁶⁾ ■ CA Open Workbench 2.1.2 ■ Crystal Reports 2013 Designer Client SP5⁷⁾ ■ Jaspersoft Studio 5.6.1 Designer client⁷⁾ 	<ul style="list-style-type: none"> ■ Microsoft Office Excel 2011 ■ Adobe Flash Player 11 or higher⁵⁾ ■ Mac OS Preview PDF viewer⁶⁾ ■ <i>No Microsoft Project support</i> ■ <i>No CA Open Workbench support</i> ■ <i>No Crystal Reports Designer support</i> 	<ul style="list-style-type: none"> ■ Adobe Acrobat Reader 7.0 or higher⁶⁾ ■ Adobe Flash Player 11 or higher⁵⁾ ■ <i>No Excel Export support</i> ■ <i>No Microsoft Project support</i> ■ <i>No CA Open Workbench support</i> ■ <i>No Crystal Reports Designer support</i>
Third-party SOAP Integration Toolkits	<ul style="list-style-type: none"> ■ Microsoft Visual Studio 2013 (.NET Framework 4.5.1) ■ Apache AXIS 1.6 	<ul style="list-style-type: none"> ■ Apache AXIS 1.6 	<ul style="list-style-type: none"> ■ Apache AXIS 1.6

Notes:

- ¹⁾Using multiple versions of third-party software concurrently is not supported as it can cause out-of-sync and compatibility issues. CA Technologies supports only versions of third-party software that the vendor supports.
- ²⁾New Firefox and Chrome releases may be supported with minimal testing after being released. Google Chrome versions 29 and 30 have known issues with CA Clarity PPM and it is recommended to use version 32 or higher.
- ³⁾Support for IE 8.0 and higher patch levels will be dropped in the release after CA Clarity PPM r14.2.
- ⁴⁾Required for Open Workbench, CA Clarity PPM Microsoft Project interface, and XOG Client.
- ⁵⁾For viewing Xcelsius dashboards.

- ⁶⁾For reading CA Clarity PPM installation guides, technical manuals, user guides, and offline reports.
- ⁷⁾Required only for custom report development.
- ⁸⁾Microsoft Project 2013 Service Pack 1 will only be supported for the new CA Clarity PPM Microsoft Project driver.

Clarity Mobile Time Manager

The following table lists the mobile operating system platforms that are supported for the Clarity Mobile Time Manager app.

	iOS	Android
Mobile Operating System	■ Apple iOS 7.0 or higher	■ Google Android OS 4.0 or higher

Products Included with CA Clarity PPM

The following table lists third-party software that is licensed and delivered with CA Clarity PPM. All of the following software is included on the CA Clarity PPM installation media.

Component	Notes
Java Runtime	The JDK installers for all supported operating systems.
Application Server	Apache Tomcat for all supported operating systems.
Report Server	Jasper Reports Server 5.6.1

Notes:

- IBM WebSphere is not included with CA Clarity PPM. To use this server over Tomcat, you must purchase the license independent of CA Clarity PPM.

Change History

Changes in CA Clarity PPM Release 14.2.00

Component	Description
Server Java Runtime	<ul style="list-style-type: none"> Updated support for Oracle Java SE JDK 1.7 update 67 (64-bit).
Application Server	<ul style="list-style-type: none"> Updated support for Apache Tomcat 7.0.55.
Report Server	<ul style="list-style-type: none"> Added support for Jaspersoft 5.6.1. No support for CA Business Intelligence r3.3 SP2 (BOXI 3.1 SP 7) for new customers.
Client Applications	<ul style="list-style-type: none"> Added support for Microsoft Project 2013 SP1 for the new Microsoft Project driver only.

Changes in CA Clarity PPM Release 14.1.00

Component	Description
Operating Systems	<ul style="list-style-type: none"> Added support for Windows Server 2012 64-bit (Standard). Added support for Red Hat Enterprise Linux 5.10 64-bit (supports releases 5.5 to 5.10). Added support for Red Hat Enterprise Linux 6.4 (supports releases 6.0 to 6.4). Added support for SUSE Linux Enterprise Server 11 SP3 64-bit. Added support for Windows 8.1. Dropped support for Solaris. Dropped support for HP UX. Updated support for Mac OS X; Release 10.9.1.
Server Java Runtime	<ul style="list-style-type: none"> Added support for Oracle Java SE JDK 1.7 update 55 (64-bit). Dropped support for HP JDK 7 (64 bit): 7.0.01 or higher patch level.
Products Included	<ul style="list-style-type: none"> Added Crystal Reports Designer 2008 Service Pack 5. Updated Xcelsius 2008, SP6, Fix Pack 3.
Mobile Operating Systems¹⁾	<ul style="list-style-type: none"> Dropped support for Apple iOS 6.

Component	Description
Database Server	<ul style="list-style-type: none"> ■ Dropped support for Oracle 11.2.0.2 Standard and Enterprise Edition. ■ Added support for Oracle 11.2 Standard and Enterprise Edition, version 11.2.0.4x or higher patch level. ■ Dropped support for MS SQL Server 2008.
Application Server	<ul style="list-style-type: none"> ■ Updated support for Apache Tomcat 7.0.50. ■ Dropped support for Oracle Weblogic Server 12.1.1.
Report Server	<ul style="list-style-type: none"> ■ Updated support for CA Business Intelligence r3.3 SP2 (BOXI 3.1 SP7).
Client Browser	<ul style="list-style-type: none"> ■ Updated support for new releases of Firefox, Chrome, and Safari browsers.
Client Applications	<ul style="list-style-type: none"> ■ Dropped support for Microsoft Excel 2007 and Microsoft PowerPoint 2007.
Integrated Servers	<ul style="list-style-type: none"> ■ Added support for CA SiteMinder 12.5 cr01.

Changes in CA Clarity PPM Release 13.3.00

Component	Description
Operating Systems	<ul style="list-style-type: none"> ■ Added support for Windows Server 2008 SP2 64-bit (Standard, Enterprise). ■ Added support for Red Hat Enterprise Linux 5.95 64-bit i.e. supports releases 5.5 to 5.9. ■ Added support for Red Hat Enterprise Linux 6.4 i.e. supports releases 6.0 to 6.4. ■ Added support for SUSE Linux Enterprise Server 11 SP2 64-bit. ■ Added support for Oracle Enterprise Linux Server 6.46u2 64-bit i.e. supports releases 6.2 to 6.4. ■ Added support for AIX 6.1; TL82. ■ Added support for AIX 7.1; TL20. ■ Added support for Mac OS X; Release 10.8.4.
Server Java Runtime	<ul style="list-style-type: none"> ■ Added support for Oracle Java SE JDK 1.7 update 25 (64-bit). ■ Updated the IBM Java version to 7.0.0.100 (SR5).
Mobile Operating Systems ¹⁾	<ul style="list-style-type: none"> ■ Added support for Apple iOS 6.1.4 and iOS 7. ■ Added support for Google Android OS 4.2.2 (Jelly Bean).
Database Server	<ul style="list-style-type: none"> ■ No Changes.
Application Server	<ul style="list-style-type: none"> ■ Dropped support for Apache Tomcat 7.0.33. ■ Added support for Apache Tomcat 7.0.40. ■ Added support for IBM WebSphere Application Server v8.5.5.

Component	Description
Report Server	<ul style="list-style-type: none"> ■ Dropped support for CA Business Intelligence r3.3. ■ Added support for CA Business Intelligence r3.3 SP1 (BOXI 3.1 SP6).
Client Browser	<ul style="list-style-type: none"> ■ Added support for Firefox 19.0.2 22 for Microsoft Windows. ■ Added support for Google Chrome 31.x.x.x for Microsoft Windows. Also added a footnote regarding known issues with version 29, 30, and 31. ■ Added support for Safari 6.0.52 for Apple Mac OS. ■ Added support for Adobe Flash Player version 11.
Client Applications	<ul style="list-style-type: none"> ■ Dropped support for Microsoft Project 2007. ■ Added support for CA Open Workbench 2.1.1. ■ Dropped support for CA Open Workbench 2.1.
Database	<ul style="list-style-type: none"> ■ No Changes.
Integrated Servers	<ul style="list-style-type: none"> ■ Added support for SharePoint Server 2013. ■ Added Sharepoint Connector 2.0.3. ■ Added footnote <i>CA SiteMinder 12.0 SP3 is certified. Additionally SiteMinder 12.51 CR1 is supported.</i>

Changes in CA Clarity PPM Release 13.2.00

Component	Description
Operating Systems	<ul style="list-style-type: none"> ■ Added support for Microsoft Windows XP, SP3. ■ Dropped support for Microsoft Windows XP, SP2. ■ Added support for Microsoft Windows 8, 32-bit and 64-bit, all editions. ■ Dropped support for Microsoft Windows Vista, all editions. ■ Dropped support for Microsoft Windows Server 2008 (non-R2). ■ Added support for Mac OS X 10.8.2. ■ Dropped support for Mac OS X 10.4. ■ Added support for Oracle Enterprise Linux 6u2.
Server Java Runtime	<ul style="list-style-type: none"> ■ Added support for Java JDK 1.7 update 21 and higher.
Mobile Operating Systems¹⁾	<ul style="list-style-type: none"> ■ Added support for Apple iOS 6.0 and higher. ■ Added support for Google Android 4.0 (Ice Cream Sandwich) and higher.

Component	Description
Database Server	<ul style="list-style-type: none"> ■ Added support for Oracle 11.2.0.3 Standard and Enterprise Editions. ■ Added support for Microsoft SQL Server 2012 Enterprise Edition.
Application Server	<ul style="list-style-type: none"> ■ Added support for Tomcat 7.0.33 or higher patch level (64-bit). ■ Dropped support for Tomcat 7.0.26 or higher patch level (64-bit).
Report Server	<ul style="list-style-type: none"> ■ No changes.
Client Browser	<p>Note: CA Technologies only supports browser versions that are supported by their associated third-party vendors.</p> <ul style="list-style-type: none"> ■ Added support for Firefox 19.0.2. ■ Added support for Firefox ESR 17.0.4. ■ Dropped support for Firefox ESR 10.0.5. ■ Added support for Microsoft Internet Explorer 10 (Windows 8 only). ■ Added support for Chrome 25.0.1364.172m. ■ Added support for Apple Safari 6.0.2 (on Mac OSX 10.8.2 or higher).
Client Applications	<ul style="list-style-type: none"> ■ Added support for Xcelsius Designer 2008 Service Pack 6. ■ Dropped support for Xcelsius Designer 2008 Service Pack 5. ■ Added support for Microsoft Project 2010-2013 32-bit and 64-bit, all editions. ■ Added support for Microsoft Excel 2010-2013 64-bit, all editions. ■ Added support for Microsoft PowerPoint 2010-2013 64-bit, all editions. ■ Added support for CA Open Workbench 2.1. ■ Dropped support for CA Open Workbench 2.0.
Database	<ul style="list-style-type: none"> ■ Clarified support around running databases on software virtualized operating systems. ■ Dropped support for Oracle 10.2.0.5.
Integrated Servers	<ul style="list-style-type: none"> ■ Added support for Sharepoint Connector 2.0.2.

Notes:

- ¹⁾This support is for the Clarity Mobile Time Management application only.

Changes in CA Clarity PPM Release 13.1.00

Component	Description
Operating Systems	<ul style="list-style-type: none"> ■ Added support for OEL Server 6u2. ■ Added support for Red Hat Enterprise Linux 5.5 64-bit for x86 chipsets: any maintenance release. ■ Dropped support for Red Hat Enterprise Linux 5 64-bit for x86 chipsets: any maintenance release. ■ Added support for Microsoft Windows Server 2008 R2 Service Pack 1. ■ Dropped support for Microsoft Windows Server 2008 R2 (64-bit) Standard Edition or Enterprise Edition. ■ Dropped support for Microsoft Windows Server 2003 64-bit Standard Edition or Enterprise Edition up to Service Pack 2. ■ Added support for SUSE Linux Enterprise Server 10 Service Pack 4 (64-bit) for x86 chipsets. ■ Dropped support for SUSE Linux Enterprise Server 10 (64-bit) for x86 chipsets: any maintenance release. ■ Added support for Windows Server 2008, SP2. ■ Added support for AIX 7.1: any maintenance release. ■ Dropped support for AIX 5.3: any maintenance release. ■ Added support for Microsoft Windows Vista Service Pack 2, all editions. ■ Dropped support for Microsoft Windows Vista, all editions. ■ Added support for Microsoft Windows 7 Service Pack 1, 32-bit and 64-bit, all editions. ■ Dropped support for Microsoft Windows 7, 32-bit and 64-bit, all editions.
Server Java Runtime	<ul style="list-style-type: none"> ■ Added support for Oracle Java SE JDK 1.7.0_4 or higher patch level (64-bit). ■ Added support for HP JDK v7: 7.0.01 or higher patch level (64-bit). ■ Dropped support for HP JDK 6: 6.0.05 or higher patch level (64-bit). ■ Added support for IBM Java 7.0.0 64-bit: SR10 or higher patch level (64-bit). ■ Dropped support for IBM Java 6 64-bit: SR6 or higher patch level (64-bit). ■ Dropped support for Sun J2SDK 1.6.0: version 1.6.0_20 or higher patch level (64-bit).

Component	Description
Application Server	<ul style="list-style-type: none"> ■ Added support for Tomcat 7.0.26 or higher patch level (64-bit). ■ Dropped support for Tomcat 6.0.35. ■ Added support for Oracle Weblogic Server 12.1.1: any service pack (64-bit). ■ Dropped support for Oracle WebLogic Server 10.3: any service pack (64-bit). ■ Added support for IBM WebSphere Application Server 8.5 (64-bit). ■ Dropped support for IBM WebSphere Application Server 7.0.0.7 (64-bit).
Report Server	<ul style="list-style-type: none"> ■ Added support for CA Business Intelligence Release 3.3 (BOXI 3.1 Service Pack 5). ■ Dropped support for CA Business Intelligence Release 3.2 (BOXI 3.1 Service Pack 3).
Client Browser	<p>Note: CA Technologies only supports browser versions that are supported by their associated third-party vendors.</p> <ul style="list-style-type: none"> ■ Added support for Firefox ESR 10.0.5 and higher release level. ■ Added support for Firefox 13.0 and higher release level. ■ Dropped support for Firefox 3.5. ■ Dropped support for Firefox 8.0. ■ Added support for Chrome 18.0.1.25.152m and higher release level.
Client Applications	<ul style="list-style-type: none"> ■ Added support for Xcelsius Designer 2008 Service Pack 5. ■ Dropped support for Xcelsius Designer 2008 Service Pack 3. ■ Added support for Crystal Reports Designer 2008 Service Pack 5. ■ Dropped support for Crystal Reports Designer 2008 Service Pack 3.
Database	<ul style="list-style-type: none"> ■ Clarified support around running databases on software virtualized operating systems. ■ Dropped support for Oracle 10.2.0.5.

Changes in CA Clarity PPM Service Pack 13.0.01

Component	Description
Client Browser	<ul style="list-style-type: none"> ■ Added support for Firefox 10.0. ■ Dropped support for Firefox 8.0. ■ Added support for Firefox 3.6. ■ Dropped support for Firefox 3.5.
Application Server	<ul style="list-style-type: none"> ■ Added support for Tomcat 6.0.35. ■ Dropped support for Tomcat 6.0.26.

Changes in CA Clarity PPM Version 13.0.00

Component	Description
Server Operating System	<ul style="list-style-type: none"> ■ CA Technologies provides support only for upgrading customers with pre-existing installations on Solaris and HP-UX. ■ Added support for SUSE Enterprise Linux 11. ■ Added support for RHEL 6.0. ■ Dropped 32-bit operating systems.
Server DB	<ul style="list-style-type: none"> ■ Added Microsoft SQL Server 2008 R2. ■ Dropped support for Microsoft SQL Server 2005.
Server Java Runtime	<ul style="list-style-type: none"> ■ Dropped 32-bit support.
Application Server	<ul style="list-style-type: none"> ■ Dropped 32-bit support.
Report Server	<ul style="list-style-type: none"> ■ Added support for CA Business Intelligence Release 3.2. ■ Dropped support for Actuate. ■ Dropped support for CA Business Intelligence Release 3.0.
Client Browser	<ul style="list-style-type: none"> ■ Added support for Firefox 8.0. ■ Added support for Safari 5.1.1. ■ Added support for IE 9.0. ■ Dropped support for IE6 and IE7.
Client Applications	<ul style="list-style-type: none"> ■ Dropped support for Microsoft Project 2000, 2002 and 2003. ■ Defined support for Crystal Reports Designer 2008 as SP3 or higher (instead of any service pack).
SharePoint Server	<ul style="list-style-type: none"> ■ Added support for SharePoint Server 2010. ■ Dropped support for SharePoint Server 2007.

FIPS Operating Mode Restrictions

Not all CA Clarity PPM platforms support RSA BSAFE Crypto-J for FIPS 140-2 certification. The following table displays the compatible platforms and operating systems that RSA documents. While other platforms are likely to function correctly, CA Technologies cannot verify support for Crypto-J on any other than those platforms listed here.

Platform	Operating System	Number of Bits	Release
Microsoft Windows	2008 R2 Server	64	Oracle JDK 1.7 update 55
Red Hat Linux	Advanced Server 6.0	64	Oracle JDK 1.7 update 55
IBM AIX	AIX 6.1	64	IBM Java 7 (64-bit)

Notes:

- The file 'java.security' under '<JAVA_HOME>/jre/lib/security' lists all the security providers along with their preference order. CA Clarity PPM automatically places the Crypto-J provider above the SunJCE provider's location in the providers list. To use the Crypto-J provider with CA Clarity PPM, you must explicitly set the security provider entry in the first index position:
 security.provider.1=com.sun.crypto.provider.SunJCE. The index numbers for the other positions must be adjusted accordingly. Verify that the SunJCE security provider is the first one.
- If you are using the IBM FIPS provider on AIX, you do not need to make the changes described in the previous bullet. AIX uses the IBM FIPS provider for FIPS mode.

IPv6 Network Compatibility Restrictions

CA Clarity PPM is certified to operate in an IPv6 networking environment with restrictions. Other configurations of CA Clarity PPM using IPv6 are likely to work but have not been certified. For mixed IPv6/IPv4 environments, it is assumed that the server instance uses two network interface cards, one configured for IPv6 and the other for IPv4.

Clarity Installations on a Microsoft Windows Configuration

Configuration	App Server	OS for App Server	Database	OS for Database	Status
1	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	MSSQL 2008 R2	Windows 2008 R2	Supported in IPv6 mixed mode and in pure mode.

Configuration	App Server	OS for App Server	Database	OS for Database	Status
2	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	Oracle Enterprise Edition 11.2.0.3	Windows 2008 R2	Supported in pure IPv6 and mixed mode.

Mail Server on a Microsoft Windows Configuration

Configuration	App Server	OS for App Server	Database	OS for Database	Mail Server	Status
3	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	Oracle Enterprise Edition 11.2.0.3	Windows 2008 R2	MIRAK ⁵⁾ 10.3.1	Supported in pure IPv6 and mixed mode.

Business Objects Testing CABI 3.3 SP2 on a Microsoft Windows Configuration

Configuration	App Server	OS for App Server	Database	OS for Database	BO	Status
4	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	MSSQL 2008 R2	Windows 2008 R2	CABI 3.3 SP2	Supported in IPv6 mixed mode and in pure mode.
5	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	Oracle Enterprise Edition 11.2.0.3	Windows 2008 R2	CABI 3.3 SP2	Supported in pure IPv6 and mixed mode.

Upgrade from v12.1.1 to v13.3 on a Microsoft Windows Configuration

Configuration	App Server	OS for App Server	Database	OS for Database	Status
6	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	MSSQL 2008 R2	Windows 2008 R2	Supported in mixed mode.
7	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	Oracle Enterprise Edition 11.2.0.3	Windows 2008 R2	Supported in mixed mode.

Installation on a Hybrid CA Clarity PPM Configuration with a different OS for APP and DB

Configuration	App Server	OS for App Server	Database	OS for Database	Status
8	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	Oracle Enterprise Edition 11.2.0.3	RH6	Supported in pure IPv6 and mixed mode.

Mail Server on a Hybrid CA Clarity PPM Configuration with a different OS for APP and DB

Configuration	App Server	OS for App Server	Database	OS for Database	Mail Server	Status
9	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	Oracle Enterprise Edition 11.2.0.3	RH6	MIRAK 10.3.1 ¹⁾	Supported in mixed mode.

Note: ¹⁾MIRAK is an open source mail server used for testing purposes.

Business Objects Testing CA BI 3.3 SP2 on a Hybrid CA Clarity PPM Configuration with a different OS for APP and DB

Configuration	App Server	OS for App Server	Database	OS for Database	BO	Status
10	Apache Tomcat 7.0.52 (64-bit)	Windows Server 2008 R2 SP1	Oracle Enterprise Edition 11.2.0.3	RH6	CA BI 3.3 SP2	Supported in mixed mode.

Upgrade from v12.1.1 to v13.3 on a Hybrid CA Clarity PPM Configuration with a different OS for APP and DB

Configuration	App Server	OS for App Server	Database	OS for Database	Status
11	Apache Tomcat 7.0.52 (64-bit)	Windows 2008 R2	Oracle Enterprise Edition 11.2.0.3	RH6	Supported in mixed mode.

CA Business Intelligence Release 3.3 SP2 - (SAP BusinessObjects Enterprise XI 3.1 Service Pack 7) Supported Configurations

The following Business Objects configurations are supported for CA Clarity PPM. Additional information, such as minimum CA Business Intelligence (CABI) release 3.3 SP 2 hardware requirements, can be found in the CABI documentation. For information about virtualization support, refer to the following SAP document: *Business Objects Support Statement – VMWare ESX Server*.

The application servers listed in the following table indicate the minimum releases tested for CABI 3.3 (BOXI release 3.1 SP7) in integration with CA Clarity PPM. Subsequent releases (indicated by the last number in the name) are supported, but not necessarily tested in integration with CA Clarity PPM. The same applies to the application server JDKs.

Note: If there are network editions of any application servers listed in the following table, those network editions are not supported. Unless otherwise specified, only 32-bit versions of the application servers (with their underlying JDK) can be used.

Running CABI release 3.3 SP2 has not been tested on a CA Clarity PPM system using a UNIX or Linux operating system and configured with SQL Server. In such cases, we recommend running CABI release 3.3 SP2 on a separate Windows server.

Operating System	Server Version	CABI 3.3 Application Server/JDK	CMS & Audit Database Provider/Data Connector
Microsoft Windows	<ul style="list-style-type: none"> ■ Windows Server 2012 R2 ■ Windows Server 2008 SP2 Standard or Enterprise Edition (32-bit and 64-bit)^{1), 2)} ■ Windows Server 2008 R2 64-bit^{1), 2)} 	<ul style="list-style-type: none"> ■ Tomcat 6.0 (OEM provided)/JDK 1.7.0_xx 	<ul style="list-style-type: none"> ■ MS SQL Server 2008/ODBC SQL Native Client 10, MS SQL Server 2008 JDBC (Sqljdbc.jar 3.0), OLE DB SQL (Native Client) 10 ■ MS SQL Server/Microsoft JDBC 1.2 for SQL Server 2005, Microsoft ODBC SNAC (Native Client), Microsoft OLEDB SNAC (Native Client) ■ Oracle 11g R2/Oracle Net Client 11g R2, Oracle JDBC 11g R2 (Use 32-bit Oracle client installer.)

Operating System	Server Version	CABI 3.3 Application Server/JDK	CMS & Audit Database Provider/Data Connector
Linux	<ul style="list-style-type: none"> ■ Red Hat Enterprise Server 5 (64-bit)³⁾ ■ Red Hat Enterprise Server 6 (64-bit)⁴⁾ ■ SUSE Enterprise Linux 10 Service Pack 2 (64-bit) ■ SUSE Enterprise Linux 11 (64-bit) 	<ul style="list-style-type: none"> ■ Tomcat 6.0 (OEM provided); JDK 1.7.0_xx 	<ul style="list-style-type: none"> ■ Oracle 11g R2/Oracle Net Client 11g R2 (11.2), Oracle JDBC 11g R2 (Use 32-bit Oracle client installer.)
Solaris	<ul style="list-style-type: none"> ■ Solaris 10 (64-bit SPARC)⁵⁾ 	<ul style="list-style-type: none"> ■ Tomcat 6.0 (OEM provided)/JDK 1.7.0_xx 	<ul style="list-style-type: none"> ■ Oracle 11g R2/Oracle Net Client 11g R2 (11.2), Oracle JDBC 11g R2 (Use 32bit Oracle Client Installer)
AIX	<ul style="list-style-type: none"> ■ AIX 6.1 (64-bit)⁶⁾ ■ AIX 7.1 (64-bit)⁷⁾ 	<ul style="list-style-type: none"> ■ Tomcat 6.0 (OEM provided)/JDK 1.7.0_xx 	<ul style="list-style-type: none"> ■ Oracle 11g R2/Oracle Net Client 11g R2 (11.2), Oracle JDBC 11g R2 (Use 32-bit Oracle client installer.)
HP-UX	Not supported.		

Notes:

- ¹⁾Business Objects supports and recommends installation of all Microsoft critical patches for the operating systems listed.
- ²⁾If utilizing Query as a Webservice (QaaS), .NET Framework 2.0 is required.
- ³⁾Minimum patch level for Red Hat Enterprise Server 5: Required minimum operating system install plus RHBA-2007:0619-3
- ⁴⁾Minimum patch requirements for RHEL 6:
compat-libstdc++-33-3.2.3-69.el6.i686 (compatibility standard C++ library from GCC 3.3.4); glibc-2.12-1 (RedHat advisory RHBA-2007:0619-3); libXext.i386; libncurses.so.5
- ⁵⁾Minimum patch requirements for Solaris 10: SUNWgzip; SUNWzlib; SUNWscpu; SUNWbash; SUNWbcp, SUNWxcu4 XCU4 Utilities; SUNWxwft; SUNWxwplt; SUNWlibC; SUNWeu8os - American English/UTF-8 L10N For OS Environment User Files; SUNWeuluf - UTF-8 L10N For Language Environment User Files; SUNWuiu8 - Iconv modules for UTF-8 Locale; SUNWulcf - UTF-8 Locale Environment Common Files; SUNWmfrun; SUNWxwice.
- ⁶⁾Minimum patch requirements for AIX 6.1: Technology Level 2 SP1; IBM C++ Runtime Environment Components for AIX => xIC.aix61.rte:10.1.0.0.
- ⁷⁾Minimum patch requirements for AIX 7.1: Technology Level 7.1.0.0 / 7100-00-00-0000; IBM C++ Runtime Environment Components for AIX => xIC.aix61.rte:11.1.0.1.

Jaspersoft 5.6.1 Supported Configurations

CA Clarity PPM integration with Jaspersoft supports only configurations mentioned in the following table and does not support any other configurations supported by Jaspersoft.

The following table shows supported configurations for Jaspersoft 5.6.1.

Operating System	Server version	Application Server/JDK	Database
Microsoft Windows	<ul style="list-style-type: none"> ■ Windows Server 2008 R2; (64-bit) ■ Windows Server 2012 R2 	<ul style="list-style-type: none"> ■ Tomcat 7.0.55; JDK 1.7.0_67 	<ul style="list-style-type: none"> ■ Microsoft SQL Server 2012 ■ Oracle 11.2.0.3 and above

Operating System	Server version	Application Server/JDK	Database
Linux	<ul style="list-style-type: none">■ Red Hat Enterprise Server 5.5 and above (64-bit)■ Red Hat Enterprise Linux 6.4 64-bit for x86 chipsets: any newer update release■ SUSE Enterprise Linux 10 Service Pack 4 64-bit for x86 chipsets: any newer service pack release■ SUSE Linux Enterprise Server 11 Service Pack 3 64-bit for x86 chipsets; any newer service pack release	<ul style="list-style-type: none">■ Tomcat 7.0.55; JDK 1.7.0_67	<ul style="list-style-type: none">■ Oracle 11.2.0.3 and above

Appendix B: Accessibility Features

CA Technologies is committed to ensuring all customers can successfully use its products and supporting documentation to accomplish business tasks. Enable the accessibility mode to optimize contrast in the user interface and assist a screen reader for those users who need assistance.

CA Clarity PPM accessibility features are best when used with the Mozilla Firefox 13 browser and the Job Access With Speech (JAWS) screen reader.

CA Clarity PPM inherits accessibility enhancements from Windows-based and Macintosh-based environments in the following areas:

- Display
- Sound
- Keyboard
- Mouse

Note: The information in the following topics applies to Windows-based and Macintosh-based applications. Java applications run on many host operating systems, some of which already have assistive technologies available to them. For these existing assistive technologies to provide access to programs written in JPL, they need a bridge between themselves in their native environments and the Java Accessibility support that is available from within the Java Virtual Machine (Java VM). This bridge has one end in the Java VM and the other on the native operating systems, so it will be slightly different for each platform it bridges to. Oracle is currently developing both the JPL and the Win32 sides of this bridge.

This section contains the following topics:

[Mouse](#) (see page 45)

[Keyboard](#) (see page 46)

[Sound](#) (see page 46)

[Set Up Accessibility for a User](#) (see page 47)

[Keyboard Shortcuts](#) (see page 48)

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Mouse

You can use the following options to make your mouse faster and easier to use:

Click Speed

Lets you choose how fast to click the mouse button to make a selection.

Click Lock

Lets you highlight or drag without holding down the mouse button.

Reverse Action

Lets you reverse the functions controlled by the left and right mouse keys.

Blink Rate

Lets you choose how fast the cursor blinks or if it blinks at all.

Pointer Options

Let you do the following:

- Hide the pointer while typing
- Show the location of the pointer
- Set the speed that the pointer moves on the screen
- Choose the pointer's size and color for increased visibility
- Move the pointer to a default location in a dialog box

Keyboard

You can make the following keyboard adjustments:

Repeat Rate

Lets you set how quickly a character repeats when a key is pressed.

Tones

Lets you hear tones when pressing certain keys.

Sticky Keys

Lets those who type with one hand or finger choose alternative keyboard layouts.

Sound

Use sound as a visual alternative or to make computer sounds easier to hear or distinguish by adjusting the following options:

Volume

Lets you turn the computer sound up or down.

Text-to-Speech

Lets you hear command options and text read aloud.

Warnings

Lets you display visual warnings.

Notices

Gives you aural or visual cues when accessibility features are enabled or disabled.

Schemes

Lets you associate computer sounds with specific system events.

Captions

Lets you display captions for speech and sounds.

Set Up Accessibility for a User

Use these steps to set up accessibility for a user.

Follow these steps:

1. Open Administration, and from Organization and Access, click Resources.
2. Click the name of the resource.

The properties page appears.

3. Select the appropriate Accessibility check boxes:

Screen Reader Optimized UI

Determines whether the user interface is optimized so that a screen reader can better recognize the features. Select this check box for any visually impaired user who is using a screen reader.

Default: Cleared

High Contrast Color Mode

Determines whether a specific UI theme to assist color-deficient users is used. If selected, the user sees the High Contrast UI theme.

Default: Cleared

4. Save your changes.
5. (Optional) If you selected the Screen Reader Optimized UI, verify that the screen reader software is running on the user's computer.
6. If the user is logged in to CA Clarity PPM, instruct the user to log out and log back in.

Keyboard Shortcuts

The following table shows the keyboard shortcuts for basic features available on all CA Clarity PPM pages.

Feature	Key Combination
Home Menu	Ctrl+Alt+h
Administration Menu	Ctrl+Alt+a
Favorites Menu	Ctrl+Alt+f
Back	Ctrl+Alt+b or Alt+Left Arrow
Home Page	Ctrl+Alt+Home
Refresh	Ctrl+Alt+F5
Search	Ctrl+Alt+s
History	Ctrl+Alt+v
Help	F1

CA Clarity Keyboard Shortcuts (Actions)

The following table shows keyboard shortcuts for actions on CA Clarity PPM pages.

Action	Key Combination	Alternate Accessibility Key Combination
Activate a field editor (for example, a date picker)	Enter	Alt+Enter
Close a popup	Esc	Shift+Esc
Open a tab menu	Enter	Alt+Enter
Move left, right, up, or down in a menu	Left Arrow Right Arrow Up Arrow Down Arrow	Alt+Up Arrow Alt+Down Arrow Alt+Up Arrow Alt+Down Arrow
Select a highlighted menu item	Enter	Alt+Enter
Open a link in a list page	Ctrl+Enter	

Action	Key Combination	Alternate Accessibility Key Combination
Select or clear a check box Note: Focus must be on the checkbox.	Space Bar	
Expand a hierarchical list Note: Focus must be on the + in the hierarchical list.	Space Bar	

CA Clarity Keyboard Shortcuts (Lists)

The following table shows the keyboard shortcuts for lists.

Action	Mode	Keyboard Combination
Switch between edit and display mode in a list	Display, Edit	Enter
Move from cell to cell through a list (grid)	Display	Left Arrow Right Arrow Up Arrow Down Arrow
Move to different areas within a list: portlet icons, column headers, body of list, buttons	Display	Tab (Forward) Shift+Tab (Back)
Switch to display mode	Edit	Esc or Enter
Move left or right within a cell	Edit	Left Arrow Right Arrow
Move from editable cell to editable cell	Edit	Tab (Forward) Shift+Tab (Back)
Move to the end of a row Note: If the action is on a TSV row, repeat the keyboard combination to leave the TSV section.	Edit	Ctrl+Right Arrow
Move to the beginning of a row	Edit	Ctrl+Left Arrow
Page up or down	Display, Edit	Ctrl+Alt+Up Arrow Ctrl+Alt+Down Arrow
Move to the top or bottom of a list Note: If the action is in a TSV cell, repeat the keyboard combination to leave the TSV section.	Display, Edit	Ctrl+Up Arrow Ctrl+Down Arrow

Action	Mode	Keyboard Combination
Open a drop-down list or a date selector	Edit	Enter
Move through selection items in a drop-down	Edit	Up Arrow Down Arrow
Select a highlighted value in a drop-down or a date selector	Edit	Enter
Highlight a date in a date selector	Edit	Down Arrow
Add a new line in a long text area	Edit	Ctrl+Enter

Keyboard Shortcuts for Time-Scaled Value Cells

The following table shows the keyboard shortcuts for time-scaled value cells in a list.

Action	Key Combination	Alternate Accessibility Key Combination
Select a TSV row	Shift+Ctrl+Right Arrow	
Select a TSV column	Shift+Ctrl+Down Arrow	
Select a single cell to the left or right of the current cell	Shift+Right Arrow Shift+Left Arrow	
Select a single row above or below the current cell	Shift+Up Arrow Shift+Down Arrow	
Copy a TSV cell	Ctrl+c	
Paste a TSV cell	Ctrl+v	
Cut a TSV cell	Ctrl+x	
Undo a cut, copy, or paste operation	Ctrl+z	
Copy from Excel to a TSV cell	Ctrl+c and Ctrl+v	

Display

To increase visibility on your computer display, you can adjust the following options:

Font style, color, and size of items

Lets you choose font color, size, and other visual combinations.

Screen resolution

Lets you change the pixel count to enlarge objects on the screen.

Cursor width and blink rate

Lets you make the cursor easier to find or minimize its blinking.

Icon size

Lets you make icons larger for visibility or smaller for increased screen space.

High contrast schemes

Lets you select color combinations that are easier to see.

Appendix C: Third-Party Acknowledgements

The license information for third-party utilities and software that CA Clarity PPM uses is available by clicking the View TXT link on the bookshelf.