

# CA Clarity™ Project & Portfolio Manager

## Release Notes

v12.1 Service Pack 2



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# Chapter 1: What's in This Service Pack

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Welcome to CA Clarity PPM v12.1 Service Pack 2. These Release Notes describe new enhancements, changes to third-party software support, upgrade paths, and other information specific to this release. These Release Notes include cumulative information from the CA Clarity PPM v12.1.1 release.

## CA Clarity PPM v12.1 Service Pack 2 Information

This section describes enhancements and changes made in CA Clarity PPM v12.1 Service Pack 2.

### Architecture Changes and Enhancements

Important! Information about supported environments, specific to CA Clarity PPM v12.1 Service Pack 2, is available in the Compatibilities appendix in these Release Notes. You can also get the information from the [Compatibilities](#) link on [support.ca.com](#). The Product Architectural Stack (PAS) document that previously contained this information is no longer published.

### Oracle Character Set Enhancement

CA Clarity PPM v12.1.2 supports AL32UTF8 character set from Oracle. Oracle recommends AL32UTF8, which supports all valid XML characters.

### Prevent Unassigned Timesheet Tasks

CA Clarity PPM v12.1 Service Pack 2 now gives Project Managers the flexibility to allow team members to add unassigned tasks to a specific project. The “Prevent Unassigned Timesheet Tasks” option is available in the Tracking section of the Schedule subpage of Project Properties. If this option is not selected for a project, team members can add unassigned tasks to their timesheet and update time.

“Allow assigned Tasks Only” option is removed from the Timesheet Options in the Administration Tool. The permission is now controlled at the project level.

## CA Clarity PPM v12.1 Service Pack 1 Information

This section describes enhancements and changes made in CA Clarity PPM v12.1 Service Pack 1.

### Architecture Changes and Enhancements

**Important!** Information about supported environments, specific to CA Clarity PPM v12.1 Service Pack 1, is available in the Compatibilities appendix in these Release Notes. You can also get the information from the Compatibilities link on support.ca.com. The Product Architectural Stack (PAS) document that previously contained this information is no longer published.

### Studio Enhancements

#### Resource Workloads Portlet—Filtering Resources by Active Resources and Investments

The Resource Workloads portlet is enhanced to give options to filter both active and inactive resources and investments. These are hidden filters by default, and can be made available by changing the "Hidden in Filter" Studio configuration option in the Resource Workloads portlet.

During Upgrade, the updated Resource Workloads portlet is flagged as Upgrade Ready. For the new functionality, the CA Clarity PPM Administrator must go to the Add-ins page - System: Clarity Content add-in to apply the new portlet.

**Important!** Applying the new updated portlet resets all Studio and end-user configurations to the new out-of-the-box configuration of the portlet. Studio administrators have to reconfigure the portlet and publish it.

**Upgrade action:** (Optional) Go to Resource Workload portlet, Filter Fields layout, and change the Hidden Filters Studio configuration option.



## Enhanced Multi-Valued Lookup Settings

The following attribute properties are added to Multi-Valued Lookup attributes in Studio:

### **Populate Null Values with the Default**

Specifies whether to populate the field with the default value automatically.

### **Value Required**

Specifies whether to require that this field is not blank, either through an administrator-entered default or through end-user entry.

### **Presence Required**

Specifies whether to require that this field appears on the edit properties page on at least one subpage.

### **Read-Only**

Specifies whether to prevent users from changing the value of this field.

**Note:** For more information about Multi-Valued Lookup settings, see the *Studio Developer's Guide*.

**Upgrade action:** None

## Project Management Enhancements

### Two New Allocation and Estimation Jobs

Two staffing features are currently available only through the user interface: Allocate from Estimates and Estimate from Allocation. These actions update Team Allocation and Task level ETCs. This enhancement delivers two separate jobs—one job to automate the Allocate from Estimates operation, and one job to automate the Estimate from Allocation operation:

#### **Update Allocation from Estimates job**

Updates team allocation to match remaining ETC starting from team member ActThrough date.

**Note:** Update Allocation from Estimates job is available only for Projects. The job updates only the allocation values for active projects and ignores all inactive projects.

### Update Estimates from Allocation job

Updates the Effort Task ETC to match Allocation, starting from the team member ActThrough date.

This job option is available for the following investment types:

- Applications
- Assets
- Ideas
- Other Work
- Services
- Projects (projects without an Effort Task are not processed.)
- Products

**Note:** The job updates only the ETC values for active investments and ignores all inactive investments.

**Best Practice:** Run the jobs process team and task data during off-peak hours. Scheduling these jobs during normal work hours possibly affect the overall system performance.

**Note:** For more information about new allocation and estimation jobs, see the *Administration Guide*.

**Upgrade action:** None

## Requisitions using Available Work Units

CA Clarity PPM v12.1 Service Pack 1 now gives the additional option to book requisitions using available work units instead of available percentage. Organizations use roles to plan their staffing requirements. These used roles are allocated to the project at a percentage-based allocation.

When filling the roles with named resources, they can have a calendar with days off and vacations that differ from the assigned calendar. The requisition booking process provides visibility into any work gaps. The differing availabilities between the source team member (role) and the target team member (named resource) creates work gap. However, in current Clarity, the booking process matches on the percent allocation and does not consider the differences in actual allocation hours.

This enhancement provides an option to change the way Clarity decrements the requested amount based on the booked amount. Instead of a percentage-based algorithm, Clarity uses the time-varying values (work units) to determine whether a requisition is fully filled.

All other booking rules remain unchanged.

**Note:** For more information about how to use requisitions, see the *Project Management User Guide*.

**Upgrade action:** (Optional) Go to Administration Tool, Project Management, Settings, change the Requisition Booking field to Use Available Work Units, and save the settings.

## Rate Matrix Extraction

With the enhanced Rate Matrix Extraction functionality, you do not have to execute the Rate Matrix Extraction job before you perform the action. The enhanced Rate Matrix Extraction functionality provides rates to the following CA Clarity PPM actions:

- Post Timesheets
- Baseline a Project
- Baseline a Task
- Update Earned Value Totals using the user interface button or scheduling the job
- Update Earned Value History
- Open a project in Open Workbench or Microsoft Project

**Note:** We recommend scheduling the Rate Matrix Extraction job using the "Incremental Update only" option. Do it at intervals that reduce the need for Clarity to extract the rates in real time for these actions. If the job populates the rates at regular intervals, based on your system data, the performance of these actions improve. For more information about Rate Matrix Extraction, see the *Administration Guide*.

**Upgrade action:** None

## Support for New Languages

The following new languages are supported:

- Hungarian
- Polish
- Russian
- Turkish

Open Workbench v1.2.2 is supported in Japanese.

## Support for New Versions of Client Applications

The following versions of client applications are now supported:

- Microsoft Project 2010
- Microsoft Office 2010

## Chapter 2: Supported Upgrade Paths

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If you currently have any of the following versions of CA Clarity PPM installed, you can upgrade to CA Clarity PPM v12.1 Service Pack 2:

- CA Clarity PPM v8.1 or any 8.1 fix pack or service pack
- CA Clarity PPM v12.0 or any v12.0 service pack
- CA Clarity PPM v12.1 or CA Clarity PPM v12.1 Service Pack 1

If you are running a release earlier than CA Clarity PPM v8.1, upgrade to the v8.1 release before upgrading to v12.1 Service Pack 2. For supported upgrade paths to v8.1 from prior releases, search for the following Knowledge Base article on <http://support.ca.com>: TEC435602.



# Chapter 3: Training

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For implementation teams, CA Technologies offers instructor-led and self paced CA Clarity PPM training. This training is designed to help implementation teams understand CA Clarity PPM functionality so they can make informed decisions on configuring CA Clarity PPM.

For user training, CA Technologies offers the CA Productivity Accelerator (CA PA) solution. You can use this solution to create the following:

- Custom business process materials
- Training materials (both instructor led and online training)
- Assessments
- Post go-live support integrated directly into the Clarity online help menu.

You can use CA PA to reflect your configuration of CA Clarity PPM and integrate processes and procedures of your organization.

CA Education offers these training solutions. To learn more about the training offerings and CA PA, see <http://ca.com/education>.





# Chapter 4: Documentation

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Context-sensitive Online Help is provided with CA Clarity PPM. Localized versions of the CA Clarity PPM Online Help and guides are available within 90 days of product general availability.

The entire set of CA Clarity PPM guides is available from [CA Support](#) and can be accessed from the CA Clarity PPM bookshelf. With this bookshelf, you can view a specific guide or search the entire bookshelf for related information. You can view an HTML version of these guides, download a PDF, or download a .zip of the entire bookshelf.

You can access the CA Clarity PPM bookshelf from the product support page or from the documentation page. Visit [CA Support](#) periodically for the latest editions of CA Clarity PPM guides.

Localized version of CA Clarity PPM Online Help includes:

- Common Features and Personal Options
- Portfolio Management
- IT Service Management
- Project Management
- Requirements Planning
- Demand Management
- Resource Management
- Financial Management
- Using CA Clarity PPM with Open Workbench and Microsoft Project

English versions of Administration and Studio Help are available on the support page.

The following guides are available from the bookshelf:

## Release Documents

Document	Description
CA Clarity PPM Release Notes	Introduces you to key features, and additional resources.
Change Impact and Upgrade Guide	Provides technical information about changes in CA Clarity PPM for this release and highlights user actions to take.

### User Guides

Guide	Description
Common Features and Personal Options	Describes the basic features of CA Clarity PPM for users, such as navigational techniques, reports, and account setup.
Demand Management	Describes how to submit ideas and convert them into projects. This guide also describes how to manage incidents.
IT Service Management	Describes how to manage IT services, and provider and customer relationships. This guide also includes information about the Business Relationship Manager Accelerator.
Portfolio Management	Describes how to create portfolios and analyze investments in portfolios using CA Clarity PPM.
Project Management	Describes how a project manager can create projects, set up project defaults, and schedule and assign tasks using CA Clarity PPM.
Requirements Planning	Describes how to create requirements, create releases for future deliverables, and develop release plans.
Resource Management	Describes how a resource manager can create, manage, and find resources using CA Clarity PPM.
Financial Management	Describes how a financial manager can set up CA Clarity PPM for financial management, create budget summaries and financial plans, and process transactions.
Using CA Clarity PPM with Open Workbench and Microsoft Project	Describes how Open Workbench and Microsoft Project schedulers work with CA Clarity PPM.

### Administrative, Developer, and Technical Guides

Guide	Description
Administration	Describes the administrative features used to support and maintain CA Clarity PPM, such as user accounts, passwords, access, processes, reports, and jobs.
Business Objects Universes for Clarity Reference	Describes how to create Business Objects reports using the Business Objects universes created for CA Clarity PPM.

Guide	Description
CA Clarity-Xcelsius Implementation	Describes Xcelsius visualizations and how you can configure for real-time CA Clarity PPM data transfers using web service connections.
Installation Guide	Describes how to install or upgrade CA Clarity PPM, manage the system, and work with third party software.
Studio Developer	Describes how to configure CA Clarity PPM by creating new pages, fields, and portlets.
Technical Reference	Describes the CA Clarity PPM database tables and columns and entity-relationship diagrams. This guide also includes database schema differences from release to release.
XML Open Gateway Developer	Describes how to import and export CA Clarity PPM data through the XML Open Gateway.



## Chapter 5: CA Clarity PPM Add-in

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The following table shows the add-in versions that are compatible with CA Clarity PPM v12.1 Service Pack 2:

CA Clarity PPM Add-in	Compatible Versions
Accelerator for New Product Development	1.1, 1.1.1
Accelerator for PMBOK	1.1, 1.1.1
Accelerator for PRINCE2	1.2, 1.2.1
Business Relationship Manager Accelerator	2.0, 2.0.1
Earned Value Manager	1.1, 1.1.1
PPM Essentials Accelerator	1.2, 1.2.1
PMO Accelerator	2.2, 2.2.1

Starting CA Clarity PPM v12.1 Service Pack 2 add-ins are also available in following five languages:

- Hungarian (HUN)
- Polish (POL)
- Russian (RUS)
- Turkish (TUR)
- Norwegian (NOR)

**Note:**

- Non English users must install new versions of add-ins.
- An English User can continue to use add-ins installed in Clarity v12.1 Service Pack 1.



# Chapter 6: Client Application Compatibility

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Customers upgrading to CA Clarity PPM who are using Open Workbench, the CA Clarity PPM Microsoft Project Interface, or the XOG client must review the following notes:

- Versions of Open Workbench installed before this release are not compatible with this release.

Uninstall the previous version of Open Workbench and install the version provided with this release, Open Workbench v1.2.2. The installer also prompts for the installation of CA Clarity PPM Schedule Connect, which is required to use Open Workbench with CA Clarity PPM.

- Versions of the CA Clarity PPM Microsoft Project Interface installed before this release are not compatible with this release.

Uninstall the previous version of the Microsoft Project Interface and install the version provided with this release. The installer prompts for the installation of CA Clarity PPM Schedule Connect, which is required to use Microsoft Project with CA Clarity PPM.

**Note:** See the *Using Clarity with Open Workbench and Microsoft Project Guide* for more information about how to map CA Clarity PPM fields to Microsoft Project.

- All XOG client users must upgrade to the CA Clarity PPM version of this client software. Uninstall the XOG client before installing the new version.

**Note:** See the *XML Open Gateway Developer Guide* for more information.





# Chapter 7: Support for Third-party Integrations

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Using multiple versions of third-party software concurrently is not supported as it can cause out-of-sync and compatibility issues.

CA Technologies only supports versions of third-party software supported by the vendor. Issues reported against a nonsupported version require reproduction on a vendor supported version to proceed.



# Chapter 8: Additional Resources

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This chapter mentions the known issues in this release of CA Clarity PPM.

## Known Issues

For information about known issues, visit [CA Support Online](#) by searching on the keyword: *clarity12open*. Refine search results by selecting the following criteria to display only related articles and known issues:

- Product Scope: ALL CA PRODUCTS
- Category: KB Articles

Note the following:

### **CLRT-64234**

The links, buttons, and title on the Property Layout page in the Edit mode of Stock or Custom object do not appear as expected. You encounter this issue only if you do the following steps:

- Create a subpage with an ID and without section.
- Delete the subpage without navigating to any other page.

This issue will be resolved in a future service pack or patch.



# Appendix A: Compatibilities

This appendix contains operating environment information for Service Pack 2, which is also available from the Compatibilities link on [support.ca.com](http://support.ca.com).

Many of the products listed in this appendix are not shipped with CA Clarity PPM and the customer must acquire it directly. The software included with CA Clarity PPM is listed in the section, "Products included with CA Clarity PPM." Refer to your licensing agreement for more information.

## CA Clarity PPM Servers

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

	Oracle Solaris	Microsoft Windows	Hewlett-Packard HP-UX	Linux	IBM AIX
<b>Operating System<sup>1)</sup></b>	<ul style="list-style-type: none"><li>■ Solaris 10 SPARC64 64-bit: any maintenance release<sup>1a)</sup></li></ul>	<ul style="list-style-type: none"><li>■ Windows 2003 Server 32-bit or 64-bit Standard Edition or Enterprise Edition up to SP2 (includes R2 release)</li><li>■ Windows 2008 Server 32-bit or 64-bit Standard Edition or Enterprise Edition up to SP2 (includes R2 release)</li></ul>	<ul style="list-style-type: none"><li>■ HP-UX 11iv3 IA64: any maintenance release</li></ul>	<ul style="list-style-type: none"><li>■ Red Hat Enterprise Linux 5 32-bit or 64-bit for x86 chipsets: any maintenance release</li><li>■ SUSE Linux Enterprise Server 11 SP1 64-bit; any maintenance release<sup>1b)</sup></li></ul>	<ul style="list-style-type: none"><li>■ AIX 5.3: any maintenance release</li><li>■ AIX 6.1: any maintenance release</li></ul>
<b>Virtualization</b>	See the CA Support Statement for Virtualization. To find this document, log in to <a href="#">CA Support Online</a> and navigate to the CA Clarity Product page.				
<b>Database<sup>2)</sup></b>	Oracle 10.2 Standard and Enterprise Edition: version 10.2.0.4 or higher patch level <sup>2a)</sup> Oracle 11.2 Standard and Enterprise Edition: version 11.2.0.2 or higher patch level <sup>2a)</sup> Microsoft SQL Server 2005 Enterprise Edition: Any Service Pack <sup>2b)</sup> Microsoft SQL Server 2008 Enterprise Edition: Any Service Pack <sup>2b)</sup>				

	Oracle Solaris	Microsoft Windows	Hewlett-Packard HP-UX	Linux	IBM AIX
<b>Database Interface</b>	CA Clarity PPM DataDirect Type 4 (Release 3.2) Drivers for Oracle and SQL Server (included in CA Clarity PPM distribution) CA Clarity PPM DataDirect Type 5 (Release 4.2) Drivers for Oracle and SQL Server (included in CA Clarity PPM distribution)				
<b>Java Runtime</b>	■ Sun J2SDK 1.6.0: version 1.6.0_20 or higher patch level	■ Sun J2SDK 1.6.0: version 1.6.0_20 or higher patch level	■ HP JDK 6: 6.0.05 or higher patch level	■ Sun J2SDK 1.6.0: version 1.6.0_20 or higher patch level	■ IBM Java 6 32-bit or 64-bit: SR6 or higher patch level
<b>Application Server</b>	Apache Tomcat 6.0.26 or higher patch level Oracle WebLogic 10.3.5 IBM WebSphere 7.0.0.7 or higher fix level				
<b>Report Server<sup>3)</sup></b>	CA Business Intelligence r3.2 (SAP BusinessObjects Enterprise XI 3.1 Service Pack <sup>3)</sup> - <i>See Appendix E for supported platforms.</i> Actuate 9 iServer <sup>3)</sup> Service Pack 1				
<b>Mail Server</b>	Any SMTP/IMAPI/POP3 mail server can be used. CA Clarity PPM does not explicitly support any one vendor.				

**Notes:**

- <sup>1)</sup>CA Clarity PPM is supported on any localized version of the supported operating systems. <sup>a)</sup> The Oracle UltraSPARC T2 processor is not supported. Solaris on x86 is also not supported. <sup>b)</sup> CA Clarity PPM on SUSE Linux connecting to a Microsoft SQL Server is not currently supported.
- <sup>2)</sup>Databases can be run on any vendor-supported operating system. <sup>a)</sup> Oracle Real Application Cluster (RAC) is supported. <sup>b)</sup> SQL Server Named Instances is supported. SQL Server Clustering is supported with manual intervention after a database failure to restart failed background processes.
- <sup>3)</sup>Actuate iServer is not currently supported on Windows 2008, AIX 6.1, HP-UX Itanium, SUSE Linux, or Red Hat Linux. The reporting server resides on a separate server with a supported configuration apart from the CA Clarity PPM server.
- <sup>4)</sup>See Appendix C for further operating environment compatibility for operation in FIPS 140-2 compliant mode and IPv6 networking capability.

## Integrated Servers

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

<b>Single Sign On Server</b>	CA SiteMinder 6.0: any maintenance release
<b>LDAP Server</b>	Supports any LDAP v3 compliant directory server (such as CA Directory, Microsoft Active Directory, Novell eDirectory, Oracle Directory Server, and so on).
<b>SharePoint Server</b>	SharePoint Server 2010, Enterprise Edition

## Clients

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

	<b>Microsoft Windows</b>	<b>Apple Mac OS</b>	<b>Desktop Linux</b>
<b>Operating System</b>	<ul style="list-style-type: none"> <li>■ Microsoft Windows XP Professional: Service Pack 2 or higher</li> <li>■ Microsoft Windows Vista, all editions</li> <li>■ Windows 7), all editions, 32-bit and 64-bit</li> </ul>	<ul style="list-style-type: none"> <li>■ Mac OS X: release 10.4 or higher patch level</li> </ul>	<ul style="list-style-type: none"> <li>■ Any vendor or version with support for browsers listed under Web Browser section.</li> </ul>
<b>Web Browser</b>	<ul style="list-style-type: none"> <li>■ Internet Explorer 8.0</li> <li>■ Internet Explorer 9.0</li> <li>■ Firefox: version 3.5 or higher patch level</li> <li>■ Firefox: version 5.0</li> </ul>	<ul style="list-style-type: none"> <li>■ Safari: version 4.0. or higher patch level</li> <li>■ Firefox: version 3.5 or higher patch level</li> <li>■ Firefox: version 5.0</li> <li>■ Internet Explorer 9.0</li> </ul>	<ul style="list-style-type: none"> <li>■ Firefox: version 3.5 or higher patch level</li> <li>■ Firefox: version 5.0</li> <li>■ Internet Explorer 9.0</li> </ul>

	Microsoft Windows	Apple Mac OS	Desktop Linux
<b>Client Applications<sup>6</sup></b>	<ul style="list-style-type: none"> <li>■ Microsoft Excel 2007-2010, all editions</li> <li>■ Microsoft PowerPoint 2007-2010, all editions</li> <li>■ Microsoft Project 2010, all editions</li> <li>■ Java 6 Runtime Environment (required for Open Workbench, CA Clarity PPM Microsoft Project interface, and XOG Client): 1.6.0_20 or higher patch level</li> <li>■ Adobe SVG Viewer<sup>5</sup> (for viewing graphs and charts using Internet Explorer). Version 3.03 (all languages).</li> <li>■ Acrobat Reader 7.0 or higher (for reading CA Clarity PPM installation guides, technical manuals, user guides, and offline reports)</li> <li>■ Crystal Reports 2008 Designer (required only for custom report development): any service pack</li> </ul>	<ul style="list-style-type: none"> <li>■ Microsoft Office Excel</li> <li>■ Mac OS Preview PDF viewer (for reading CA Clarity PPM installation guides, technical manuals and user guides)</li> <li>■ <i>No Microsoft Project support</i></li> <li>■ <i>No Open Workbench support</i></li> <li>■ <i>No Crystal Report Designer support</i></li> <li>■ <i>No Offline Timesheet support</i></li> </ul>	<ul style="list-style-type: none"> <li>■ Acrobat Reader 7.0 or higher (for reading CA Clarity PPM installation guides, technical manuals, user guides, and offline reports)</li> <li>■ <i>No Excel Export support</i></li> <li>■ <i>No Microsoft Project support</i></li> <li>■ <i>No Open Workbench support</i></li> <li>■ <i>No Crystal Report Designer support</i></li> <li>■ <i>No Offline Timesheet support</i></li> </ul>
<b>Third-party SOAP Integration Toolkits</b>	<ul style="list-style-type: none"> <li>■ Microsoft Visual Studio 2005 (.NET Framework 2.0)</li> <li>■ Apache AXIS 1.3</li> </ul>	<ul style="list-style-type: none"> <li>■ Apache AXIS 1.3</li> </ul>	<ul style="list-style-type: none"> <li>■ Apache AXIS 1.3</li> </ul>



**Notes:**

- <sup>5)</sup> Adobe no longer supports the SVG viewer. Results could vary.
- <sup>6)</sup> Using multiple versions of third-party software concurrently are 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.

## CA Clarity PPM Internationalization and Localization

CA Clarity PPM is fully internationalized and supports the following languages (see table), and 100+ regional settings for date, time, and number formatting.

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

**Note:** Third-party applications do not support all languages. See the documentation for those products for more information about languages that they support.

## Products Included with CA Clarity PPM

The following table includes third-party software licensed and shipped with CA Clarity PPM. All of the following software is included on the CA Clarity PPM Installation DVD.

Component	Notes
<b>Java Runtime</b>	The JDK installers for all supported operating systems.
<b>Application Server</b>	Apache Tomcat for all supported operating systems.
<b>Client Applications</b>	Xcelsius Designer 2008 Service Pack 3 <b>Note:</b> Supported versions of Xcelisus Designer do not support Microsoft Office 2010 documents. See TEC546956 on <a href="http://support.ca.com">http://support.ca.com</a> for more information.

- Oracle WebLogic and IBM WebSphere are not included with CA Clarity PPM. Customers wishing to use either of these servers over Tomcat must acquire their licenses independent of CA Clarity PPM.
- Actuate eReport Designer Pro is required only for custom report development and is not included with CA Clarity PPM.
- Crystal Reports Designer is required only for custom report development and is not included with CA Clarity PPM.

## Change History

### Changes in v12.1 Service Pack 2

Component	Description
Server OS	■ Added SUSE Linux 11 SP1 for 64-bit
Server DB	■ Added support for AL32UTF8 character set from Oracle.
Browsers	■ Internet Explorer 9 and Firefox 5
Data Direct Driver	■ DataDirect Type 4 (Release 3.2) ■ DataDirect Type 5 (Release 4.2)

### Changes in v12.1 Service Pack 1

Component	Description
Client Application	■ Added support for searching content inside MS Office 2007 and MS Office 2010 files ■ Added support for Microsoft Project 2010 (32-bit) ■ Dropped support for Microsoft Project 2000 and Microsoft Project 2003 ■ Dropped support for MS Office 2000 -2003
Server DB	■ Added support for Oracle 11.2.0.2

## Changes in 12.1

Component	Description
<b>Server Operating System</b>	<ul style="list-style-type: none"> <li>■ Dropped support for Solaris 9</li> <li>■ Dropped support for Solaris 10 SPARC 32-bit</li> <li>■ Added support for HP-UX 11iv3 IA64</li> <li>■ Dropped support for Red Hat Enterprise Linux 4</li> <li>■ Dropped support for SUSE Enterprise Linux 9</li> <li>■ Added support for IBM AIX 6.1</li> </ul>
<b>Server DB</b>	<ul style="list-style-type: none"> <li>■ Dropped support for Oracle 9.2</li> <li>■ Added support for Oracle 11.2</li> <li>■ Added support for MS SQL Server 2008</li> </ul>
<b>Server Java Runtime</b>	<ul style="list-style-type: none"> <li>■ Added support for Java 6</li> <li>■ Dropped support for Java 5</li> </ul>
<b>Application Server</b>	<ul style="list-style-type: none"> <li>■ Added support for Apache Tomcat 6</li> <li>■ Dropped support for Apache Tomcat 5</li> <li>■ Added support for Oracle WebLogic 10.3.5</li> <li>■ Dropped support for BEA WebLogic Server 9</li> <li>■ Added support for IBM WebSphere 7.0.0.7</li> <li>■ Dropped support for IBM WebSphere 6</li> </ul>
<b>Report Server</b>	<ul style="list-style-type: none"> <li>■ Added support for CA Business Intelligence r3.2 - (SAP BusinessObjects Enterprise XI 3.1 Service Pack 3)</li> <li>■ Dropped support for CA BI 2.0</li> <li>■ Dropped support for CA BI 3.0</li> </ul>
<b>LDAP</b>	<ul style="list-style-type: none"> <li>■ Added support for any LDAP v3 compliant directory server</li> </ul>
<b>Client OS</b>	<ul style="list-style-type: none"> <li>■ Added support for MS Windows 7 (all editions), 32-bit and 64-bit</li> <li>■ Dropped support for Mac OS 10.3 (10.4 or higher patch level required)</li> </ul>
<b>Client browser</b>	<ul style="list-style-type: none"> <li>■ Added support for Internet Explorer 8.0</li> <li>■ Added support for Firefox 3.5</li> <li>■ Added support for Safari 4.0</li> </ul>
<b>Client applications</b>	<ul style="list-style-type: none"> <li>■ Added support for Java 6 Runtime Environment</li> </ul>
<b>Products included with Clarity</b>	<ul style="list-style-type: none"> <li>■ Xcelsius Designer 2008 (for creating dashboards)</li> </ul>

## Changes in v12.0 Service Pack 6

Component	Description
Application Server	■ Changed WebSphere support version to 6.1.0.23

## Changes in v12.0 Service Pack 5

Component	Description
Report Server	■ Clarified support for running BusinessObjects on Unix or Linux when CA Clarity PPM is using SQL Server. Appendix E and F were updated.
Client Application	■ Removed MS Excel 2002

## No Changes in v12.0 Service Pack 4

## Changes in v12.0 Service Pack 3

Component	Description
Operating system	■ Changed language to exclude support for the Oracle UltraSPARC T2 processor
Report Server	■ BusinessObjects is now supported on Apache Tomcat only. Installing BusinessObjects on WebLogic and WebSphere is no longer supported for new installations.
Clients	■ Dropped minimum client hardware recommendations.

## Changes in v12.0 Service Pack 2

Component	Description
Report Server	■ Added CABI 2.1 (BusinessObjects XI R2 SP4) support

## Changes in v12.0 Service Pack 1

Component	Description
LDAP Server	■ Added CA eTrust Directory r12

## Changes in v12.0

Component	Description
<b>Server OS</b>	Removed Windows 2000. Removed Solaris 8. Removed Red Hat Enterprise Linux 3. Removed AIX 5.2. Added Windows 2008. Added SUSE Linux 10. Added Red Hat Enterprise Linux 5.
<b>Virtualization</b>	Added Linux (SUSE and Red Hat) support on VMWare ESX Server 3
<b>Database</b>	Removed Oracle 10.1 support. Added Oracle 11g support.
<b>Client Applications</b>	Removed Microsoft Office 2000 support.

## 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 documented by RSA. While other platforms are likely to function correctly, CA cannot verify support for Crypto-J on any other than those platforms listed here.

### Platform Information

Platform	Operating System	Number of Bits	CPU Architecture	Release
<b>Microsoft Windows</b>	2003 Server	32	Intel x86	Oracle JDK 1.6
<b>Oracle Solaris</b>	10	32	32-bit extension for USparc V9	Oracle JDK 1.6
<b>Red Hat Linux</b>	Advanced Server 5.0	32	Intel x86	Oracle JDK 1.6

## 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 utilizes two network interface cards, one configured for IPv6 and the other for IPv4.

### Platform Information

Platform	Operating System	Server/Client Component	Connectivity	Network Configuration
Microsoft Windows	2003 Server	Database (SQLServer 2005)	IPv6	IPv6
		Database (SQLServer 2005)	IPv4	IPv6/IPv4
		Database (Oracle)	IPv4	IPv6/IPv4
		LDAP	IPv4	IPv6/IPv4
		Reporting	IPv4	IPv6/IPv4
		Email	IPv4	IPv6/IPv4
		XOG	IPv6	IPv6
		XOG	IPv4	IPv6/IPv4
		OWB	IPv6	IPv6
		OWB	IPv4	IPv6/IPv4

## CA Business Intelligence r3.2 - (SAP BusinessObjects Enterprise XI 3.1 Service Pack 3) Supported Configurations

The following Business Objects configurations are supported for CA Clarity PPM. Additional information such as minimum Business Objects hardware requirements can be found in the Business Objects Supported Platform documentation available from SAP. For information about virtualization support, refer the following SAP document: Business Objects Support Statement – VMWare ESX Server.

The application servers listed in the following table indicate the minimum releases tested by Business Objects. Subsequent releases (indicated by the last number in the name) are supported, but not necessarily tested by Business Objects. 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 Business Objects is not supported on CA Clarity PPM system using a Unix or Linux operating system and a SQL Server. Run Business Objects on a separate Windows server.

## CA Business Intelligence r3.2 - (SAP BusinessObjects Enterprise XI 3.1 Service Pack 3) Supported Configurations

Operating System	Server Version	Application Server / JDK	CMS & Audit Database Provider / Data Connector
Microsoft Windows	<ul style="list-style-type: none"> <li>■ Windows Server 2003 (32-bit or 64-bit) R2 Enterprise Edition</li> <li>■ Windows Server 2003 (32-bit or 64-bit) SP1 Datacenter Edition</li> <li>■ Windows Server 2003 (32-bit or 64-bit) SP1 Enterprise Edition</li> <li>■ Windows Server 2003 (32-bit or 64-bit) SP1 Standard Edition</li> <li>■ Windows Server 2008 SP2 (32-bit or 64-bit) Standard or Enterprise Edition</li> </ul> <p><b>Note:</b> Business Objects supports and recommends installation of all Microsoft critical patches for the operating systems listed. For all Windows 2003 environments, patch KB925336 is required. If utilizing Query as a WebService (QaaWs), .NET Framework 2.0 is required.</p>	<ul style="list-style-type: none"> <li>■ Tomcat 5.5/JDK 1.5.0_xx (OEM provided)</li> </ul>	<ul style="list-style-type: none"> <li>■ MS SQL Server 2005/MDAC 2.8 &amp; SNAC (32-bit ODBC required)</li> <li>■ MS SQL Server 2008/MDAC 2.8 &amp; SNAC (32-bit ODBC required)</li> <li>■ Oracle 10.2/Oracle Net Client 10.2 (32-bit client required)</li> <li>■ Oracle 11.1/Oracle Net Client 10.2 (32-bit client required)</li> <li>■ Oracle 11.2.0.2/Oracle Net Client 10.2 (32-bit client required)</li> </ul>
Linux	<ul style="list-style-type: none"> <li>■ Red Hat Enterprise Server 5.0 (32-bit and 64-bit).</li> <li>■ SUSE Enterprise Linux 10 (32-bit and 64-bit)</li> </ul>	<ul style="list-style-type: none"> <li>■ Tomcat 5.5/JDK 1.5.0_xx (OEM provided)</li> </ul>	<ul style="list-style-type: none"> <li>■ Oracle 10.2/Oracle Net client 10.2 (32-bit client required)</li> <li>■ Oracle 11.1/Oracle Net Client 10.2 (32-bit client required)</li> <li>■ Oracle 11.2.0.2/Oracle Net Client 10.2 (32-bit client required)</li> </ul>



Operating System	Server Version	Application Server / JDK	CMS & Audit Database Provider / Data Connector
Solaris	<ul style="list-style-type: none"> <li>■ Solaris 10 (32 and 64-bit SPARC) <i>See the Business Objects Supported Platform document for Solaris for minimum patch requirements.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ Tomcat 5.5/JDK 1.5.0_xx (OEM provided)</li> </ul>	<ul style="list-style-type: none"> <li>■ Oracle 10.2/Oracle Net Client 10.2 (32-bit client required)</li> <li>■ Oracle 11.1/Oracle Net client 10.2 (32-bit client required)</li> <li>■ Oracle 11.2.0.2/Oracle Net Client 10.2 (32-bit client required)</li> </ul>
AIX	<ul style="list-style-type: none"> <li>■ AIX 5.3 (32-bit and 64-bit) Minimum patch requirements: Maintenance Level 1 November 2003 C++ Runtime PTF =&gt; xl.Ca50.rte 6.0.0.14 <b>Note:</b> This PTF requires Runtime of Level 6.0.0.0 to be installed before installing the PTF.</li> </ul>	<ul style="list-style-type: none"> <li>■ Tomcat 5.5/JDK 1.5.0_xx (OEM provided)</li> </ul>	<ul style="list-style-type: none"> <li>■ Oracle 10.2/Oracle Net Client 10.2 (32-bit client required)</li> <li>■ Oracle 11.1/Oracle Net client 10.2 (32-bit client required)</li> <li>■ Oracle 11.2.0.2/Oracle Net Client 10.2 (32-bit client required)</li> </ul>
HP-UX	Not supported.		