CA Clarity™ PPM

Change Impact and Upgrade Guide - On Demand

Release 14.1.00

ca technologies

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Chapter 1: The Upgrade Process

This section contains the following topics:

Overview of the CA Clarity PPM Release 14.1 Upgrade Process (On Demand)

This guide provides insight on planning the CA Clarity PPM upgrade and helps you determine the upgrade options that best suit your business needs. Use this guide to plan your training and rollout efforts.

Full information for the current 14.1 release and summary information for previous releases is provided. To see the complete *Change Impact and Upgrade Guide* for a specific 13.x release, see the documentation for that release.

This guide covers:

- Post-upgrade tasks and tips

- Features and enhancements for the current and previous releases and the upgrade actions that they require

- Known issues

Important! If you are upgrading from an earlier release, review the chapters for the updates in Release 14.1 and the 13.x releases.

Post Upgrade Steps

Complete the following post upgrade steps:

1. If you have custom Xcelsius dashboards, see "Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets" in the chapter "Release 13.0 Updates."

2. For CABI Release 3.3 SP1 (BusinessObjects), manually restart the scheduled reports.

    Note: Any scheduled reports that were configured before the upgrade to this release do not automatically run after the upgrade.

3. Apply your upgraded add-ins and connectors.

    Notes:

    ■   Request a backup of your CA Clarity PPM installation before installing each add-in so that you can restore the application if necessary. You can also use the previous night's regular backup as a restore point.

    ■   Apply the Upgrade Ready content for those items that you are actively using.

        Important! Consider the configurations that you have made to items before applying them. Applying modified items overwrites your configurations.

        Best Practice: If you modified stock CA Clarity PPM content, copy the modified content before upgrading. Then, apply the new incoming stock CA Clarity PPM content, and retrofit the modifications to the new content.

    ■   Read the PMO Accelerator Release Notes for important information about what has changed for the PMO Accelerator.

    ■   Review the *System: Clarity Content* add-in for upgrade ready content (for example, the Role Capacity portlet). To accept the new Release 14.1 upgraded content, apply the changes.

4. Review the Studio views and system content and manually upgrade as needed.

    The upgrade preserves all preexisting Studio view configurations. If an existing view has configurations or if the object for the view is partitioned, the system does not automatically upgrade the view and/or the partition.

    To determine which views were not automatically upgraded, use the Studio Views list page.

    Here are some tips on reviewing the views:

    ■   The Last Version column identifies changes to stock views in Release 14.1.

    ■   If a view was automatically upgraded as part of the upgrade process, a checkmark appears in the Upgraded column. No further action is required.

    ■   If a view that changed in Release 13.3 was not upgraded due to pre-existing configurations, decide whether to apply the changed view.

        Look for views with the following column information:

        Last Version column=14.1 and the Upgraded column= unchecked.

5.   Verify your custom NSQL queries if any exist.

During the upgrade, the NSQL validator script automatically verifies NSQL queries. Results are written to the admin.log.

Put in a ticket to CA Support to get access to the admin.log. The log contains the following information:

■   Query name

■   Query ID

■   Content Source

■   Query ID from CMN_NSQL_QUERIES of the query that failed validation

This release contains database schema changes. To ensure that portlets work, correct any invalid NSQL queries.

Note: For information about the database schema changes, see the section "Data Model Changes."

Upgrade Action:

If the query can be changed in Studio, complete these steps:

a.   Go to the NSQL tab for each failing query.

b.   Click the Preview button.

c.   Review the errors.

d.   Repair the broken query constructs or fields.

e.   Click the Preview button.

f.   Confirm that the NSQL query is valid.

If the query is in use by active portlets and cannot be edited in Studio, complete these steps:

g.   Use the XML Open Gateway (XOG) to export the failing query.

h.   Correct the broken query constructs or fields.

i.   Use XOG to import the corrected query.

j.   Click the Preview button.

k.   Confirm that the NSQL query is valid.

Upgrade Tips

Read the following preupgrade and postupgrade tips to ensure that your upgrade to this release works as planned.

Preupgrade

■ You must have the standard base calendar available in your CA Clarity PPM application before you upgrade. If you deleted the shipped calendar named *Standard*, create it before upgrading. Contact CA Support if your instance is missing the Standard base calendar.

■ Process all "In progress" transactions into WIP.

Verify the following conditions:

   – imp_transactionimport and ppa_transcontrol are clear.

   – WIP adjustments are approved.

Review and fix all invalid transactions.

■ Review Time Slices.

Verify that the table is slicing out only the data that is required. If extra data is getting sliced, the database size increases and affects system performance.

■ Complete and put all processes on hold.

■ Remove or delete process history, notifications, jobs, or logs. Look for items that you do not need to retain.

■ Pause all scheduled jobs. Take special note of the *Time Slicing* job. Pause it before stopping the CA Clarity PPM services prior to upgrade.

Post Upgrade

■ The XML Open Gateway (XOG) client requires the Java Runtime Environment (JRE). If you use the XOG, note that the JRE is no longer available from the Clarity Software Downloads link. Review the supporting documentation and training materials you provide to your users. Wherever these materials direct users to download the JRE from within CA Clarity PPM, update the reference. Direct your users to download the JRE (Version 7) from www.java.com.

■ Register any Portfolio Investment attributes that you want to display in portfolio pages. Although the required attributes display by default, you must register any other attributes (stock or custom) that you want to display.

■ This product supports Microsoft Project 2010 and 2013. If you upgrade and use one of these versions, update your Microsoft Project Desktop to ensure that data populates appropriately in the Microsoft Project Interface. Set the scheduling option to Automatic when you want to open the schedule in the Microsoft Project Interface.

Reports

All reporting content for CA Clarity PPM is delivered in the Clarity Solution Pack.

Upgrade Action For All Prior Clarity Versions: Legacy stock report definitions in Studio are inactivated during the upgrade process. The report definitions are converted from *system-restricted* status to *user-defined* to give you full control over the definitions. The existing reports in your Report Library become hidden because the report definitions have been deactivated. You can use the legacy stock reports and can see related instances in the Report Library by following these steps:

1. Open Administration, and from Studio, click Reports and Jobs.

2. Filter for Inactive Reports.

3. Activate the reports that you want to continue to use with Release 14.1.

Note: CA is no longer providing support for these reports. Activating a report is done with the understanding that you are responsible for all changes to maintain compatibility with Release 13.2 and releases beyond.

Post-Upgrade Action: The Clarity Solution Pack, which delivers the Release 14.1 compatible reporting content, is installed with your upgrade.

Upgrade Reports from a Release Earlier than Release 12.1

This topic explains how to upgrade reports if you have a CA Clarity PPM version earlier than Release 12.1.

Note: BusinessObjects report instances that are created in a version earlier than Release 12.1 can be viewed only as a PDF file after the upgrade.

Upgrade Actions:

Preupgrade:

■ If you used any CA Clarity PPM universe objects, create a custom universe and link it to the CA Clarity PPM universe. The CA Clarity PPM universe is overwritten when the new Release 14.1 universes are installed.

■ If you previously purchased the GSE Universes from CA Services, these universes are not overwritten by the Release 14.1 out-of-the-box universes.

■ If you modified any out-of-the-box reports, either rename them, assign new IDs to them, or export the reports to a BIAR file.

Post-Upgrade:

- If you decide to continue using the old reports, see the instructions about reactivating legacy stock report definitions in the topic "Reports."

  Manually reschedule the scheduled reports. The scheduled reports that were configured before the upgrade to Release 14.1 do not automatically run after the upgrade.

- Reset the BusinessObjects InfoView passwords for all preupgrade users who must log in to InfoView and run reports.

- Synchronize the user lists in BusinessObjects and CA Clarity PPM by running the *Create Business Objects Users* job. If the job is not run, a CA Clarity PPM user must have a BusinessObjects account created to run or open a report.

  The job creates a user in BusinessObjects for every user in CA Clarity PPM. The user that is created in BusinessObjects is given an encrypted password. To log in to the BusinessObjects server using the assigned password, the user ID and password must be reset under BusinessObjects Administration.

Upgrade Reports from a 12.x Release or Service Pack

This topic explains how to upgrade reports if you have a CA Clarity PPM version older than Release 12.1.

There are no new user or security configurations; Release 14.1 uses the same CABI requirements and trusted authentication integration with CA Clarity PPM as Release 12.1 and Service Pack 12.1.1.

Upgrade Actions:

Preupgrade:

- If you used any CA Clarity PPM universe objects, create a custom universe and link it to the CA Clarity PPM universe. The CA Clarity PPM universe is overwritten when the new Release 14.1 universes are installed.

- If you previously purchased the GSE Universes from CA Services, these universes are not overwritten by the Release 14.1 out-of-the-box universes

- If you modified any out-of-the-box reports, export them to a BIAR file.

Post-Upgrade:

- If you decide to continue using the old reports, see the instructions about reactivating legacy stock report definitions in the topic "Reports."

  Manually reschedule the scheduled reports. Scheduled reports that were configured before the upgrade to Release 14.1 do not automatically run after the upgrade.

■ Synchronize the user lists in BusinessObjects and CA Clarity PPM by running the *Create Business Objects Users* job. If the job is not run, a CA Clarity PPM user must have a BusinessObjects account created to run or open a report.

The job creates a user in BusinessObjects for every user in CA Clarity PPM. The user created in BusinessObjects is given an encrypted password. To log in to the BusinessObjects server using the assigned password, the user ID and password must be reset under BusinessObjects Administration.

CA Clarity PPM Universes

The CA Clarity PPM Legacy universes are no longer provided with the service.

Upgrade Action: None

The CA Clarity PPM Universes have been updated to reflect database schema changes in Release 14.1.

Note: See the *Business Objects Universe Developer Guide* for details.

Upgrade Action: As part of your Clarity 14.1 upgrade process, all universes are updated.

Xcelsius Designer 2008 Service Pack 6

Xcelsius Designer definition files created before Release 13.2 are overwritten during the upgrade. To continue to use your older design definition files, back up the files and regenerate new .swf files using Xcelsius 2008 SP6. Retest your interactive portlets after the upgrade to ensure they work with this release.

The Xcelsius Designer 2008 SP6 contains CRSF fixes for .swf files generated from the Xcelsius Designer client.

Post-Upgrade Action: If you created custom Xcelsius Dashboards, we recommend that you regenerate the .swf files for your dashboards using the Xcelsius Designer 2008 SP6 client.

Chapter 2: Release 14.1 Updates

This section contains the following topics:

Upgrade Considerations for Release 14.1

This section provides information about installation and upgrade changes for Release 14.1.

Add-ins Compatibilities

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

- If you are upgrading from a 13.x release to this release, the following add-ins are upgraded, if deployed:

    - PMO Accelerator

    - Clarity Solution Pack (CSP)

    - Clarity Agile

    - Connector for Microsoft SharePoint

- If you are upgrading from any version before Version 13.0 to this release, all installed add-ins are upgraded.

The following table shows the accelerator and connector releases that are installed with Release 14.1.

Accelerator or Connector	Upgraded Version
PMO Accelerator	14.1.0
Clarity Solution Pack (CSP)	14.1.0
Earned Value Manager	2.0.2
Accelerator for PRINCE2	2.0.2
Accelerator for the PMBOK	2.0.2
Accelerator for New Product Development	2.0.3
BRM Accelerator	3.0.2
Connector for CA Unicenter Service Desk & CA Software Change Manager™ for Distributed	2.0.1
Connector for Microsoft SharePoint	3.0.0
Service Connect	2.0.0
Catalyst Connector	2.5.0
CA Clarity Agile	14.1.0
Integration Adaptor	14.1.0
VersionOne Connector	14.1.0

Java 7

This release uses Java 7. The following software client requires Java 7:

■   XML Open Gateway (XOG) client

CA Clarity PPM provides a specific Java Runtime Environment (JRE) for the following clients:

■   Open Workbench

■   Connector for Microsoft SharePoint

The JRE is copied to the hard drive in the installation directory on the end-user workstation. The JRE is used specifically for the clients and is independent of the JRE used for the Windows workstation.

Important! 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 from the Oracle website.

Upgrade Actions: Install Java 7 on workstations that have the software clients for which CA Clarity PPM does not provide the JRE.

Internet Explorer 11

If you are using Internet Explorer 11 with CA Clarity PPM, the browser is automatically set to run in the Internet Explorer 10 compatibility mode for the CA Clarity PPM session. The setting is for the CA Clarity PPM session only and does not affect any other Internet Explorer 11 browser activity.

Known Issues for Release 14.1

This section provides known issues for CA Clarity PPM.

Gantt Printing Issue with Chrome Browser

If you use a Chrome browser, the following issues can occur when you print a Gantt chart:

- Some rows have extra space after the row.
- Some lines break across pages, presenting part of the line on two pages.
- The Gantt schedule lines do not appear correctly.

This issue does not occur in Internet Explorer or Firefox.

Google Chrome Version 30.0.1599.66 m Issues

The following CA Clarity PPM issues occur for users who are using this particular version of Chrome (Version 30.0.1599.66 m):

- The Recent Pages (History) drop-down that lets you navigate back to previously viewed pages does not work.

- Export to Excel and Export to PowerPoint do not work at the portlet level.

- Export to Excel does not work on a list page.

These issues do not appear in other browsers and have been found only in this version of Chrome.

Update Operation For Some Project Object Attributes Does Not Appear in the Audit Trail

In some instances, when auditing is enabled for specific attributes on the Project object, only the insert operation is reported in the audit trail. The update operation does not show for the attributes. The affected attributes include:

- Budgeted Capital Cost

- Planned Capital Cost

- Budgeted Operating Cost

- Planned Operating Cost

Rate Matrix Extraction Job's Scheduled Instances and Job Logs Deleted

During an upgrade from a 12.x release to a 13.0 or higher release, the Rate Matrix Extraction job's scheduled instances and job logs are deleted.

Upgrade action: Reschedule the Rate Matrix Extraction job.

Microsoft Project 2013: Do Not Install Service Pack 1

Service Pack 1 for Microsoft Project 2013 has a known issue that affects how it works with CA Clarity PPM. The following behavior results when the service pack is installed:

- Baselined projects cannot be opened with Microsoft Project 2013. The Visual Basics run-time error '91' is received.

- All the actuals are zeroed out when you launch a project from CA Clarity PPM to Microsoft Project 2013.

For more information, see the following Knowledge Base articles on CA Support Online: TEC610737, TEC615024.

Upgrade Action: Do not apply Service Pack 1 to Microsoft Project 2013. If you have applied this service pack, roll back to Microsoft Project 2013 without any service packs.

Add-in Enhancements

CA Clarity PPM Integration Adaptor

The Integration Adaptor lets you import resource information using a job. The Integration Adaptor is available automatically after a new installation or upgrade.

You can verify that it is available by viewing the list of add-ins. To view the add-in list, open the Administration menu, and from Studio, click *Content - Add-ins*.

The following steps outline the process for uploading resource information.

1. Create and format a delimited file.

2. Upload the file to your secure FTP directory.

3. Run the Integration Data Loader job.

4. Check the error messages and logs to verify your data was updated.

Important: You can add new resources and update information for existing resources. Updating the resource information updates all fields that the delimited file contains. Because all fields are updated, it is possible to overwrite information that you want to keep.

Upgrade Action: None

VersionOne Connector

The CA Clarity PPM VersionOne Connector provides project managers visibility into agile projects and eliminates dual-time entry. Managers can track Clarity projects effectively, along with the allocated cost, resources, and time. Portfolio managers can do top-down planning with increased project transparency.

Upgrade Action: None

Administration

Added Security for Webroot Folder Data

Before this release, storing an HTML page in the webroot folder could make the contents of that folder vulnerable to someone without proper credentials. For example, if you store index.html in the webroot folder, an unauthorized person could gain access to CAPA information without logging in. All the user needs is the server and port number: http://*<servername>*:*<portnumber>*/niku/index.html.

To resolve this issue, a new servlet filter (ClarityContentFilter) was introduced. The filter is registered in the following file: *<installfolder>*/tomcat-app-deploy/conf/web.xml. This servlet prevents users from accessing a page, image, script, or any other file without logging in to the product.

Upgrade Action: None

Apache Tomcat Log Analysis

The following jobs have been added to create and manage data that you can use to analyze performance in an Apache Tomcat environment. You can add custom portlets, queries, or externally available content to provide details regarding system performance. Although the job runs for application servers other than Tomcat, no data is created.

■ Tomcat Access Log Import/Analyze Job

This job imports and analyzes Tomcat access log files from the local CA Clarity PPM environment (all app services). The job stores and summarizes the data in the following designated tables:

– LOG_DETAILS

– LOG_SUMMARY

– LOG_FILES

– LOG_REPORTDEFS

■ Delete Log Analysis Data Job

This job removes the analysis-related data that is stored in CA Clarity PPM. The criteria for removing the data is the LOG_DATE on each of the log analysis tables.

The job is scheduled to run automatically at 1:00 A.M. each day.

Upgrade Action: None

Character Limit for Audited Multi-Valued Lookups Increased

Before Release 13.2.0.1, ODF_AUD_VALUE_FCT returned a value of type Varchar2. With the release of 13.2.0.1, the returned value type was changed to CLOB. This change increases the number of characters that are allowed for auditing multivalued lookups from 4,000 to an unlimited number of characters.

Upgrade Action: Update any reports or portlets that use ODF_AUD_VALUE_FCT.

Set Options for Cross-Site Scripting (XSS) Vulnerability

Cross-Site Scripting (XSS) attacks insert malicious scripts into otherwise trusted web sites. A cross-site scripting attacker uses a web application to send malicious code, generally in the form of a browser side script, to an end user. These attacks succeed when a web application uses input from a user in the output it generates without validating or encoding the input.

To prevent XSS attacks, XSS user input validation and XSS user input restrictions are in place and managed by CA Technologies. If you require changes to the stock configuration, open a support ticket at support.ca.com.

With input validation, CA Clarity PPM compares the user input to a set of commonly used XSS string patterns. If any part of the user input matches one of the common patterns, CA Clarity PPM restricts the XSS string in the user input. The product restricts the XSS string by placing escape characters before and after the string.

The escape characters are visible to the end user. The characters instruct the browser to ignore any script or HTML tag that is attached to the user input. This output encoding ensures that the user input is treated as text and not active content that can be executed. This action helps ensure user input that is returned to the browser is safe from XSS.

The following options apply to user input validation.

RESTRICT.APP.XSS (XSS Restriction Option)

Restricts the XSS string in the user input when the string matches a pattern in the CMN.XSS.PATTERNS option. This system option applies to the entire application, except the URL attributes and site links.

RESTRICT.URL.ATTR.XSS (URL Attribute Value Option)

Restricts the URL attribute value (that you created with Studio) when the value matches a pattern in the CMN.XSS.PATTERNS option.

RESTRICT.SITE.LINKS.XSS (Site Links Option)

Restricts the site links entry value when the value matches a pattern in the CMN.XSS.PATTERNS option.

CMN.XSS.PATTERNS (Common XSS Patterns Option)

Defines the string patterns that are commonly used for XSS.

Upgrade Action: None

Action Item Localization

You can translate action item names and descriptions that are associated with processes. The advantage is that recipients see the action item in the language set for them.

For example, as the process creator, you translate an action item into all CA Clarity PPM supported languages. When the process is executed, the user working in CA Clarity PPM in French sees the action item in French. The user working in CA Clarity PPM in Turkish sees the action item in that language. This change improves the user experience because the action item is seen in the appropriate language.

You can translate an action item by using the translation icon that appears next to the Action Item Name field. The icon appears after the page for the action item is saved. Clicking the icon opens a dialog that lets you specify different language translations for the Action Item Name and Description fields.

Note: The Action Item translation icon is intended as an administrative tool and appears only for action items that are related to processes. The icon is not available to action item operations that end users perform from the Home menu.

Upgrade Action: None

Financial Management

Ignore Non-Labor Resources and Roles on Auto Population

A new option provides a way manually to forecast and preserve planned units, cost, and revenue for non-labor resources. The new option, *Ignore Non-Labor Resources/Roles in Cost Plan Population,* is available on the System Options page.

When this option is selected, team allocation or assignment ETC from non-labor resources and roles is skipped during the autopopulation of a cost plan. For example, Populate from Investment Team. When the option is unselected, cost plan population functions as it has in previous releases. In this case, all data for an investment is included in the cost plan. The option is unselected by default.

Note: This option setting affects any autopopulation action that is run against a new or existing cost plan. Ensure that you understand whether your business needs require non-labor resources and roles for autopopulation.

To navigate to the option, open the Administration menu, and from General Settings, click System Options. The option is located in the section named Other.

Here are some facts and tips on using this enhancement:

- We recommend setting the option once and setting up a business procedure for your users to follow. Do not reset this option frequently. Changing the setting can lead to data discrepancy.

- An unplanned row from a non-labor resource is included in a cost plan because the process is actual-driven. An unplanned row is one that shows actuals but no planned units or cost. This situation occurs when actuals are posted before a planned row has been added to the cost plan either manually or through cost plan population. The application has worked this way in the past, and selecting the option does not change this behavior.

- No existing cost plan row for a non-labor resource added manually is deleted on cost plan repopulation. However, if cost plan population added a row previously, the row is deleted during cost plan repopulation. The application has worked this way in the past, and selecting the option does not change this behavior.

Best Practice: We recommend creating new cost plans to start manually forecasting non-labor resources once the option is selected. This course is more prudent than repopulating existing plans because you cannot determine how a row was originally inserted into a cost plan.

Upgrade Action: None

Length of Money Fields

The value entered in any money field (including custom money fields) is limited to 18 digits. Any value you enter after the 18th digit changes to a zero.

Upgrade Action: None

Change in the Resource Browse Field for Rate Matrix

Before this release, you could select a role or a resource as a value for the Resource field in a rate matrix. The Resource field browse incorrectly showed both resources and roles as selection options. The browse has been corrected to show only resources for the Resource field.

To add financially enabled roles to a rate matrix, use the Resource Role field.

You cannot import a role in the resource code field through the XML Open Gateway (XOG). If the XOG input XML file contains roles in the resource code field, the following error is thrown: REVMGR-20299: Role in Resource code.

Correct any matrix rows with a role in the Resource field. Incorrect matrix rows cause an error when you try to create a cost plan in an investment using roles and resources. In this case, the following error is thrown: REVMGR-20728:Rates and Costs are both missing for one or more roles/resources.

Upgrade Action: Manually update incorrect rate matrix rows.

1. To discover any roles that have been assigned to a rate matrix incorrectly, run the checkinstall script.

   The checkinstall script logs any rate matrix rows that have an incorrect role assignment in the Resource field. The following format for the error is given in the log file: Rate Matrix Name, From Date, To Date, and Role.

2. Open the rate matrix in CA Clarity PPM and manually update the Resource field with the correct resource value.

Open Workbench

Cell Text Wrapping

If you enter text in Open Workbench table cells and the text is larger than the cell width, the text now wraps. This enhancement ensures that the text that you enter from Open Workbench is always visible completely.

Note: This feature is not available when a project is opened from Clarity into Open Workbench.

Upgrade Action: None

Estimate to Complete (ETC) Auto-Calculation

In previous releases, when you assigned a resource to a task in Open Workbench, the ETC was not automatically calculated. With this release, you can configure Open Workbench to calculate ETC automatically. A new field named *Auto Calculate ETC* has been added to Open Workbench. The automatic calculation applies to all resource assignments that you perform in Open Workbench. You can view and manage these automatically calculated ETC values in both CA Clarity PPM and Open Workbench.

By default, the Auto Calculate ETC check box is not selected. To make this option available, you are required to select it.

Note: For more information about the Auto Calculate ETC option, see the *Open Workbench User Guide*.

Upgrade Action: None

Project Management

New Microsoft Project Driver

A new Microsoft Project Interface driver (XML-based) is available for you to select during the installation of the Microsoft Project Interface. You can also select the existing legacy driver, which is COM-based. The two driver versions are available for both 32-bit and 64-bit environments.

If you install Microsoft Project Interface from the CA Clarity PPM user interface, a wizard guides you through the installation for both driver versions.

Upgrade Action: None

Studio

Studio Content Management

You can collect specific CA Clarity PPM content in a content package. Content packages help you identify, assemble, export, and deploy content between development, test, and production systems. A content package also lets you distribute to external third parties. Recipients can import the content as an add-in in their environments and can use the content. For example, you can develop a series of pages, portlets, and queries and can offer them to internal users and external customers.

When you export a content package, the application creates .jar files. The XML Open Gateway (XOG) allows you to migrate these package files to other environments. As a developer, you can design content items, package them for export, and then import them in to another environment.

You can also import Studio content packages that were developed internally or by third parties. Studio content packages extend the functionality of the application.

Note: For more information about Studio content management and the required access rights, see the *Studio Developer Guide*.

Upgrade Action: None

User Interface

Smart Sections

If you have multiple sections on a page with numerous fields on some sections, you can now manage sections easier. In this release, the section header bar acts as a switch to expand or collapse the section. The section header bar also helps you identify the sections with required fields or errors that occur upon saving.

The following changes improve the way page sections operate:

- To open or close all sections on a page, double-click any section header bar.

- To open or close a single section, click the section header bar for the section.

- The header bars for any sections that contain errors when you save are highlighted with a red border.

  If all sections are collapsed, the first highlighted section is expanded for you to make corrections. To make corrections in any remaining highlighted sections, click the section header bar to open the section.

- Any sections that contain required fields display the Required icon on the header bar. If the section contains empty required fields, the icon displays brightly. If all required fields are completed, the icon displays in a dimmed format. This display lets you scan the sections even in the collapsed state to identify which ones contain required fields that need completing.

Note: When you close a page, the status of the sections is saved. The next time that you open the page in the same browser, it appears as you left it. If you change browsers, the status of the sections is not saved and the standard presentation of sections (all open) appears.

The following pages or page components do not have to smart sections:

- The properties page for a report or job.

- The System Options page. To see this page, open the Administration menu, and from General Settings, click System Options.

- Time-scaled value sections. Although time-scaled values resemble sections, they are not true sections and are not included in these changes.

 Upgrade Action: None

Change to Page Menu Behavior

The following changes improve the way menus on pages operate:

- A tab menu now displays when you mouse over the tab. Previously, you clicked the down arrow to see a tab menu. The menu closes automatically when the cursor moves off the menu.

- Other menus (for example, Actions, Scenario, or Open in Scheduler) open when you mouse over the menu name. In this case, the menu stays open until you click in an area outside the menu.

Upgrade Action: None

Data Model Changes

Added Tables

The following tables were added for this release:

- CMS_CONTENT_ADDIN_ITEMS
- CMS_CONTENT_ADDINS
- CMS_CONTENT_ITEMS
- CMS_CONTENT_PACKAGES
- CMS_CONTENT_TYPES
- LOG_DETAILS
- LOG_FILES
- LOG_REPORTDEFS
- LOG_SESSIONS
- LOG_SUMMARY

Updated Tables

The following tables were updated for this release.

CAL_ACTION_ITEM_ASSIGNEES

Added columns:

AI_DESCRIPTION

AI_SUBJECT

CMN_INSTALL_HISTORY

Updated column:

INSTALL_ID

CMN_NOTES

Updated column:

SUBJECT

CMN_NOTIFICATIONS

Added column:

IS_ADMIN_VISIBLE

PRASSIGNMENT

Added column:

ODF_SS_ACTCOST_CURVE

Added index:

PRASSIGNMENT_GN1

PRDEPENDENCY

Added column:

PRLAGFORMAT

RPT_CALENDAR

Added columns:

CREATED_DATE

LAST_UPDATED_DATE

RPT_INV_HIERARCHY

Added columns:

CREATED_DATE

INV_HIERARCHIES_ID

RSM_SKILLS

Updated column:

SKILL_NAME

Dropped Tables

No tables were dropped in this release.

XML Open Gateway (XOG) Changes

Changes to the writeFile GEL tag

The behavior of the GEL tag *writeFile* has been changed when the tag is used with the *line* tag. With this release, each call to the line tag writes the line to the specified output file. This change prevents potential out of memory issues when you run the GEL script. You can override the new behavior by specifying bulkWrite="true" on the writeFile tag.

Note: For writeFile examples, see the *XML Open Gateway Developer Guide*.

The following example shows the writeFile GEL tag.

```
 <f:writeFile
    fileName="projectData.txt" <!-- filename is required -->
    delimiter="&#x9;" <!-- If not specified this is set to a comma (',')
    writeBulk="false" <!-- write one line at a time to the output file. This is the
default behavior. If it is desired to have the result written at the end of the request
set      writeBulk="true" -->
    maxFileSize="1g"  <!-- the maximum file size allowed when bulkWrite="false". 1G
is the default; valid examples are 1024k, 250 m, 2g. -->
    >
  <gel:forEach select="myQuery" var="row">
      <f:line>
        <f:column value="${row.ID}"/>
        <f:column value="${row.NAME}"/>
      </f:line>
  </gel:forEach>
  </f:writeFile>
```

Upgrade Action: None

XML Open Gateway Output File is Not Indented

Starting with Release 13.3, the XOG client output is unformatted without line breaks or indentation. You can use third-party software to convert the output to a more readable, user-friendly format.

Upgrade Action: None

Chapter 3: Release 13.3 Updates

This section contains the following topics:

Upgrade Considerations for Release 13.3

Add-ins Compatibilities

The following section describes important information about upgrading installed add-ins, accelerators, and connectors for Release 13.3.

- If you are upgrading from Version 13.0, Release 13.1, or Release 13.2, to Release 13.3, the following add-ins are upgraded, if deployed:

  - PMO Accelerator

  - Clarity Solution Pack (CSP)

  - Clarity Agile

  - Connector for Microsoft SharePoint

- If you are upgrading from any version before Version 13.0 to Release 13.3, upgrade all installed add-ins.

The following table shows the accelerator and connector releases that are compatible with Release 13.3.

Accelerator or Connector	Upgraded Version
PMO Accelerator	3.3.0
Clarity Solution Pack (CSP)	3.3.0

Accelerator or Connector	Upgraded Version
Earned Value Manager	2.0.1
Accelerator for PRINCE2	2.0.1
Accelerator for the PMBOK	2.0.1
Accelerator for New Product Development	2.0.2
BRM Accelerator	3.0.2
Connector for CA Unicenter Service Desk & CA Software Change Manager™ for Distributed	2.0.1
Connector for Microsoft SharePoint	3.0.0
Service Connect	2.0.0
Catalyst Connector	2.5.0
CA Clarity Agile	13.3

Known Issues for Release 13.3

This section provides known issues for CA Clarity PPM.

Gantt Printing Issue with Chrome Browser

If you use a Chrome browser, the following issues can occur when you print a Gantt chart:

- Some rows have extra space after the row.

- Some lines break across pages, presenting part of the line on two pages.

- The Gantt schedule lines do not appear correctly.

This issue does not occur in Internet Explorer or Firefox.

Google Chrome Version 30.0.1599.66 m Issues

The following CA Clarity PPM issues occur for users who are using this particular version of Chrome (Version 30.0.1599.66 m):

- The Recent Pages (History) drop-down that lets you navigate back to previously viewed pages does not work.

- Export to Excel and Export to PowerPoint do not work at the portlet level.

- Export to Excel does not work on a list page.

These issues do not appear in other browsers and have been found only in this version of Chrome.

Update Operation For Some Project Object Attributes Does Not Appear in the Audit Trail

In some instances, when auditing is enabled for specific attributes on the Project object, only the insert operation is reported in the audit trail. The update operation does not show for the attributes. The affected attributes include:

- Budgeted Capital Cost

- Planned Capital Cost

- Budgeted Operating Cost

- Planned Operating Cost

Administration

License Type Names Have Changed

When the License Information portlets were first introduced in Release 12.1, the License Type Names were defined as:

- Managers

- Team Members

- Enterprise Visibility Option

Effective with Release 13.2 Generic Patch 4 and Release 13.3, the labels for the License Type names are changing. The functionality and use remain the same.

Old Name	New Name	Functionality
Managers	Full	Users have the full use of product functionality.
Team Members	Restricted	Users have specified limited use of product functionality.
Enterprise Visibility Option	View Only	Users can view information but cannot create or edit information except for ideas and incidents.

One extra user type is available for customers who own CA Clarity Agile. Vision Timesheet users have the right to enter time through the CA Clarity PPM and Agile Vision integration. All users are named, not concurrent. Only active users are counted as licensed users.

To see the new user types, open the Administration menu, and under Organization and Access, click License Information.

Upgrade Action: None

Process Monitor

A process monitor has been added to CA Clarity PPM. The monitor ensures certain process types that are known to cause systemic problems are identified and put on hold automatically to prevent a system interruption. A message displays on the process validation page for processes that are flagged as problematic by the process engine.

Upgrade Action: None

Changes to the Global Audit Trail Page

The Global Audit Trail page was updated for this release. This page is available in the Data Administration section of the Administration menu. The updates do not affect the instance audit trail pages available to users.

The following updates were made:

- The Date Range fields now default to the following range:
    - The start date is seven days before the current date.
    - The end date is the current date.
- The Date Range default values appear when the following actions occur:
    - The Global Audit Trail page is opened.
    - An administrator tries to filter without entering any filter values.
    - The selection in the Object field is changed.
- The Show All button was removed from the page.

Upgrade Action: None

Add-in Enhancements

CA Microsoft Project Interface Changes

The following Release 13.3 changes were made for the Microsoft Project Interface:

Resource Leveling

The CA Microsoft Project Interface supports the Microsoft Project Resource Leveling feature. If you do resource leveling in Microsoft Project and save the project into CA Clarity PPM, the resource leveling information is kept in the CA Clarity PPM database. The next time that you open the project in Microsoft Project from CA Clarity PPM, the resource leveling information that you entered is available.

Note: See the Microsoft Project documentation for more information about resource leveling.

Performance Tuning

The Microsoft Project Interface was tuned to improve performance in the following areas:

- Exporting a project from CA Clarity PPM to Microsoft Project

- Importing a project from Microsoft Project to CA Clarity PPM

Smaller projects show performance improvements for the import and export actions. Projects that have large time-scaled value data such as Assignment Actuals and ETC, or Baseline Cost and Usage Curve may not show the expected improvement.

Java Runtime Environment Is Provided

CA Clarity PPM provides a specific Java Runtime Environment (JRE) for use by Microsoft Project. The JRE is copied to the hard drive in the Microsoft Project Interface installation directory on the end-user workstation. The JRE is used for the Microsoft Project Interface integration and is independent of the JRE used for the Windows workstation.

The Microsoft Project Interface uses only the internal JRE version that is provided which we certify to be compatible. This approach eliminates issues that arise when the workstation Windows installation of the JRE is not the correct version or the JRE is missing. An IT department no longer has to update a JRE version when deploying the Microsoft Project Interface.

Silent Installation Support

In this release, the Microsoft Project Interface can be installed silently without any user intervention.

In previous releases, when you ran the Microsoft Project add-in setup, the Windows operating system displayed a message that the publisher could not be verified. You were then asked if you wanted to install the customization.

This message is no longer displayed. You receive a confirmation message after the add-in is successfully installed. The Microsoft Project Interface add-in setup closes the installer window automatically.

Connector for Microsoft SharePoint Changes

The Microsoft SharePoint Connector Release 3.0.0 is new. If you have the Connector for Microsoft SharePoint Release 2.0.2 or earlier installed, you cannot upgrade the existing connector. You are required to install the new Release 3.0.0 connector. The existing connector was based on SharePoint 2010, and the new Release 3.0.0 connector is based on SharePoint 2013.

Demand Management

Financially Enabled Ideas

This release includes financially enabled ideas. The changes include:

- The ability to create cost plans, benefit plans, and budget plans for an idea.

- A Financial Plans tab for any idea that you open in CA Clarity PPM. This tab provides access to cost plans, benefit plans, and budget plans for the idea.

- New access rights for the following Idea pages: Financial (subpage), Cost Plan, Benefit Plan, and Budget Plan.

- A new check box named *Copy Financial Plan and Properties* on the conversion page for an idea. The conversion page lets you convert an idea into an investment. The check box lets you copy the financial data from an idea to a target investment.

- New views for the Idea Cost Plan object which make the Actual attributes unavailable to add to the view.

- New views added for the Idea Benefit Plan Detail object which make the Actual attributes unavailable to add to the view.

- The configuration of workflow processes on idea cost plans.

The following limitations exist for a financial plan on an idea:

- Actuals using transactions are not possible.

- Only a manually created cost plan (plan of record) can be converted to a target investment. A cost plan that you create using the methods *Populated from Investment Team* or *Task Assignment* is not converted.

- A budget plan will not be converted to a target investment.

- A workflow system action is not available to convert an idea financial plan to a target investment. An idea financial plan can only be converted through the user interface.

Upgrade Action: None

Financial Management

Inactive Resources in Cost Plan Population

Starting with Release 13.3. information for both active and inactive resources appears in cost plan detail and is used for the rate calculation. The values for resource attributes are pulled for the rate calculation regardless of the active status if the attributes are specified in the resource profile.

For example, if the transaction class is defined for a resource, the resource transaction class appears in the cost plan. The transaction class is used to pull the rate from the rate matrix. Setting the resource to inactive on the general properties page or the financial properties page does not change this behavior.

If a resource has no defined transaction class but the resource has project allocation, ETC, or actuals, the rate is pulled from the rate matrix. The active status does not change this behavior.

Upgrade Action: None

Open Workbench

Java Runtime Environment for Open Workbench

Starting with Release 13.3, CA Clarity PPM provides a specific Java Runtime Environment (JRE) for use by Open Workbench (OWB). The JRE is copied to the hard drive in the OWB installation directory on the end-user workstation. The JRE is used specifically for OWB and is independent of the JRE used for the Windows workstation.

OWB uses only the internal JRE version that is provided which we certify to be compatible. This approach eliminates issues that arise when the workstation Windows installation of the JRE is not the correct version or the JRE is missing. An IT department no longer has to update a JRE version when deploying OWB.

Portfolio Management

Portfolio Maximums for Investments, Roles, and Attributes

To ensure better performance and usability, the following limits apply to the maximum number of investments, roles, and attributes that you can include in a portfolio:

- Investment attributes: 700

- Investments: 250

- Roles: 25

Upgrade Action: None

Aggregation Rows Added to the Portfolio Waterlines View

The Portfolio Waterlines view has been enhanced to display the aggregated time-varying totals for selected constraints. The time-varying values for the individual investments can also be displayed overlaying the Gantt bars for a selected constraint.

Upgrade Action: None

Project Management

Gantt View Can Be Printed

You can now print a Gantt view. The Printable View icon on the Gantt chart displays a read-only view of the tasks you want to print in a new window. You can view a maximum of 300 tasks at a time. The page height automatically fits the tasks, and the page width automatically fits the column and period configuration.

Before you print the Gantt view, select the background colors and images option in the browser menu.

Browser	Action to Take
Internet Explorer, Firefox	Use the Page Setup option in the browser menu.
Google Chrome	Use the Print option in the browser menu.

Note: Use the Alt key to enable the browser menu for Internet Explorer and Firefox.

Upgrade Action: None

Task Duration on the Gantt View Is Editable

In previous releases, the task Duration on the Gantt view was automatically calculated. The duration was based on the task Start Date and Finish Date on saving. Starting this release, you can edit the task duration on the Gantt view and can see the changes interactively.

However, you cannot edit the task duration in the following cases:

- When a task is a Milestone or Summary Task.

- Timesheet is already submitted for that period.

The following table shows the interactive changes that you see when you edit the task attributes on the Gantt view:

Field Edited	Result
Task Duration	The task Finish Date and the Gantt bar change.
Task Finish Date	The task Duration changes.
Task Start Date	The task Finish Date changes, but the task Duration does not.

Note: For more information about editing the Task Duration field, see the *Project Management User Guide*.

Upgrade Action: None

User Interface

CA Clarity PPM Login Page Can Be Rebranded

You can use the UI theme CSS to customize the appearance of the login page. For example, set a custom logo for an organization or set a message for all users to view when they log in. A sample system maintenance message appears as follows:

The system will be unavailable from Sun April 15 at 11:30 pm until Mon April 16 at 3:30 am.
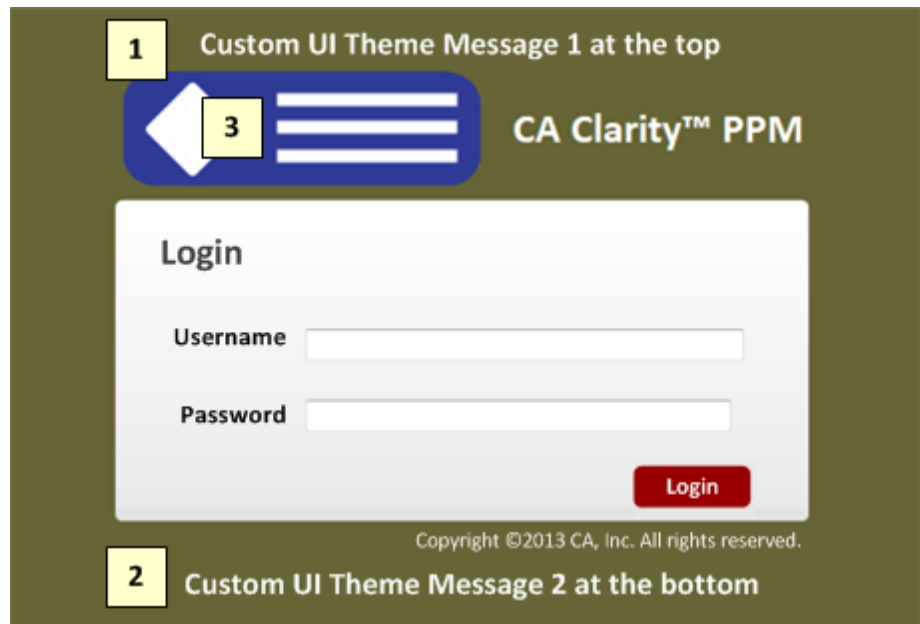
1. Login Page Top Message

You can add a service announcement or custom message at the top of the login page.

2. Login Page Bottom Message

You can add a service announcement or custom message at the bottom of the login page.

3. Login Page Logo

You can insert a custom logo on the login page.

Note: See the *Studio Developer Guide* for more information.

Upgrade Action: None

Bubble Chart Improvement

Starting with Release 13.3, the bubbles in a bubble chart are translucent. This change allows smaller bubbles that appear behind larger bubbles to be viewed. Previously, smaller bubbles were not visible when hidden because the bubbles appeared as solid objects in the chart.

Upgrade Action: None

Drop-down List with More Than 20 Values

A drop-down list that exceeds 20 values for a field changes from a drop-down list to a browse lookup. The browse lookup is easier to use when the list of values is long.

Upgrade Action: None

Export Level for Excel and PowerPoint Has Changed

Before this release, an export to Excel or PowerPoint exported portlet information for all tabs for a selected page. With Release 13.3, only information that is on the selected tab is exported. Exporting the portlet information for a tab is the default behavior.

Chart Y-Axis Field Option Change

The Y-Axis unit of measure for the Major Unit Increment field is *days* when the Y-Axis for a chart represents date data.

Data Model Changes

Added Tables

The following table was added for this release: CMN_GEL_TAGS.

Note: See the *Technical Reference Guide* for information about this table.

Updated Tables

The following list of tables indicates what changed in this release:

CMN_AUDITS

Dropped column:

CLASS_CODE

Added index:

CMN_AUDITS_N6

CMN_SEC_USERS

Added column:

SALT

PRJ_BLB_SLICES

Dropped columns:

ID

CREATED_BY

LAST_UPDATED_BY

LAST_UPDATED_DATE

UNIT

PRTASK

Added columns:

PRMSPWBSLEVEL

PRMSPWBSSEQUENCE

Dropped Tables

No tables were dropped in this release.

XML Open Gateway (XOG) Changes

XOG Governor Limit

When you import or export a large number of instances through the XOG, you may encounter Out of Memory (OOM) or time-out exceptions. To handle these issues, the Maximum XML Nodes value is set to 150,000. The Maximum XML Nodes is referred to as *nodes limit* in this section.

Before this release, for a XOG read request, the entire requested information was sent in a single response which resulted in the OOM or time-out exceptions. Starting this release, the server processes the instances until the node limit is reached. After processing the response is sent back to the client in chunks using pagination. A new read request should be sent to the server with the appropriate information using pagination for the next set of instances. The number of the processed instances for a read request is updated in the skip element of the XOG output.

When you import instances, the server processes 20 instances per iteration. If the node limit is reached even before the 20 instances are loaded, the server processes only those instances that have loaded until that point for the current iteration. The remaining instances are considered automatically for the next iteration.

Note: For more information about setting the XOG Governor limit, see the *XML Open Gateway Developer's Guide*.

Upgrade Action: None

Data Model Changes

Added Tables

The following table was added for this release: CMN_GEL_TAGS.

Note: See the *Technical Reference Guide* for information about this table.

Updated Tables

The following list of tables indicates what changed in this release:

CMN_AUDITS

Dropped column:

CLASS_CODE

Added index:

CMN_AUDITS_N6

CMN_SEC_USERS

Added column:

SALT

PRJ_BLB_SLICES

Dropped columns:

ID

CREATED_BY

LAST_UPDATED_BY

LAST_UPDATED_DATE

UNIT

PRTASK

Added columns:

PRMSPWBSLEVEL

PRMSPWBSSEQUENCE

Dropped Tables

No tables were dropped in this release.

Chapter 4: Release 13.2 Updates

This section contains the following topics:

Upgrade Considerations for Release 13.2 (OD)

Java 7

This release uses Java 7. The following software clients require Java 7:

- XML Open Gateway (XOG) client

- Open Workbench

- Connector for Microsoft SharePoint

- Service Connect

Important! 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 from the Oracle website.

Upgrade Actions: Install Java 7 on workstations that have the software clients listed installed.

Datamart Extraction Job Performance Improvements

For Release 13.2, changes were made to the Datamart Extraction job. The result of the changes is improved performance for a full refresh of the Datamart. The job has been optimized to run faster. The job does a full refresh of the Datamart tables every time it runs. We recommend running the Datamart Extraction job after the upgrade is complete and during off-peak hours.

Upgrade Action: None

Add-ins Compatibilities

The following section describes important information about upgrading installed add-ins, accelerators, and connectors for Release 13.2.

- If you are upgrading from Version 13.0 or Release 13.1 to Release 13.2, the following add-ins are upgraded, if deployed:

  - PMO Accelerator

  - Clarity Solution Pack (CSP)

  - Accelerator for New Product Development (NPD)

  - Connector for Microsoft SharePoint

  - Business Relationship Manager (BRM)

  - CA Clarity Agile

- If you are upgrading from any version before Version 13.0 to Release 13.2, all installed add-ins are upgraded.

The following table shows the accelerator and connector releases that are installed with a Release 13.2.

Accelerator or Connector	Upgraded Version
PMO Accelerator	3.2.0
Clarity Solution Pack (CSP)	3.2.0
Earned Value Manager	2.0.1
Accelerator for PRINCE2	2.0.1
Accelerator for the PMBOK	2.0.1
Accelerator for New Product Development	2.0.2
BRM Accelerator	3.0.2

Accelerator or Connector	Upgraded Version
Connector for CA Unicenter Service Desk & CA Software Change Manager™ for Distributed	2.0.1
Connector for Microsoft SharePoint	2.0.2
Service Connect	2.0.0
Catalyst Connector	3.3.0
CA Clarity Agile	Spring 2013

Update Business Objects Reports Table Job

The *Update Business Objects Reports Table* job has been updated. The following list shows the parameters that were added, removed, or changed.

New parameter

Update Resource Skills Index. This parameter extracts resource skills and proficiencies.

Removed parameters

Update Portfolio Content. This parameter was removed as part of the old Portfolio feature removal.

Week Starting Day. This parameter was obsolete. All reports now use the *First Day of Work Week* parameter as defined in settings that are located by navigating to Administration, Project Management, Settings.

Changed parameters

Update Universe Calendar is now Update Reporting Calendar.

Update Program Hierarchy is now Update Investment Hierarchy. This parameter extracts investment hierarchies and the allocation percentages.

Add-ins Affected by Portfolio Removal

The removal of old Portfolio features affected the following add-ins:

■ BRM Accelerator

■ New Product Development (NPD)

■ PMO Accelerator

All three add-ins had portfolio-related portlets that were removed. For BRM Accelerator and NPD, the pages that displayed the portlets were left in place. The pages were left to accommodate customers who placed custom portlets or other valid portlets on the pages. If no custom or other portlets are present, the pages appear blank.

For the PMO Accelerator, the pages that contained portfolio-related portlets were removed. For the list of portlets and other features that were removed from CA Clarity PPM, see the section named "Removal of the Old Portfolio Feature."

Upgrade Action: If you use BRM Accelerator or NPD, review your Studio portlet pages and delete any that are empty.

Update Business Objects Reports Table Job

The *Update Business Objects Reports Table* job has been updated. The following list shows the parameters that were added, removed, or changed.

New parameter

Update Resource Skills Index. This parameter extracts resource skills and proficiencies.

Removed parameters

Update Portfolio Content. This parameter was removed as part of the old Portfolio feature removal.

Week Starting Day. This parameter was obsolete. All reports now use the *First Day of Work Week* parameter as defined in settings that are located by navigating to Administration, Project Management, Settings.

Changed parameters

Update Universe Calendar is now Update Reporting Calendar.

Update Program Hierarchy is now Update Investment Hierarchy. This parameter extracts investment hierarchies and the allocation percentages.

Known Issues for Release 13.2

This section provides known issues for CA Clarity PPM.

Rate Matrix Extraction Job's Scheduled Instances and Job Logs Deleted

During an upgrade from a 12.x release to a 13.0 or higher release, the Rate Matrix Extraction job's scheduled instances and job logs are deleted.

Upgrade Action: Reschedule the Rate Matrix Extraction job.

Administration

Configurable Organizational Breakdown Structure (OBS)

The Configurable OBS feature lets a CA Clarity PPM administrator configure an OBS like other CA Clarity PPM attributes. Here are some examples of how the CA Clarity PPM administrator can configure the OBS attributes:

- Make the OBS field mandatory.

- Make the OBS field read-only.

- Set the OBS field so that the value is entered only once.

- Set the default value for the OBS field.

- Set the override default value for the OBS field.

- Hide the OBS field.

- Change the label for the OBS field.

- Move the OBS section to another subpage or a secured subpage.

- Rename the OBS section.

- Delete the OBS section.

- Move the OBS fields out of the OBS section to any other section.

- Configure the OBS attributes on the list page.

- Use inline editing.

- Enable audit trail for the OBS attributes.

- Use auto-suggest for the OBS fields.

- Use language translation for the OBS fields.

- Use an OBS field in the system or manual action of a process definition.

When an object is associated with an OBS, the following actions happen:

- The associated object appears as a hyperlink under the Associated Objects section on the OBS Properties page.

■ For a non-financial OBS, an attribute with the OBS name and *OBS - Lookup* Data Type is created on the associated Object Attribute page.

■ For a financial OBS, an attribute named *Department OBS* of *OBS Entity - Lookup* Data Type is created on the associated Object Attribute page. The *Department OBS* attribute is created only on the first association of an object with the financial Department OBS. As a result, you have only one Department OBS attribute in the attributes list of the associated object.

■ These Data Types are reserved only for the OBS attributes and are not available for the custom attribute creation. However no attribute is created when you associate an object with the Location OBS.

The following tables provide you the details of the OBS attributes that are created after the association.

Financial OBS				
OBS Name	**Object Name**	**Attribute Name**	**Attribute ID**	**Data Type**
CA Dept	Project[1]	Department OBS	odf_obs_fin_dept	OBS Entity - Lookup
CA Loc	Project	N/A	N/A	N/A
Non-financial OBS				
OBS Name	**Object Name**	**Attribute Name**	**Attribute ID**	**Data Type**
Resource Pool	Project	Resource Pool[2]	odf_<first four valid characters of the OBS_ID>_<#code of the OBS ID>	OBS - Lookup

Notes:

■ [1]Can be any except the following objects:

– Financial OBS: Company, Incident Category, Job/Report, Page, Portfolio, Portlet, Process Definition, Release, Release Plan, and Requirement.

– Non-financial OBS: Incident Category, Job/Report, Page, Portlet, and Process Definition.

■ [2]By default, the OBS name, and the attribute name are the same when an object is associated with a non-financial OBS.

For more information about the configurable OBS, see the *Administration Guide*.

Add-in Enhancements

Auto-recalculation Feature in Microsoft Project (MSP) Connector

In Microsoft Project (MSP), the whole project is recalculated after being opened in CA Clarity PPM only if the Calculation Mode for a schedule is set to On.

In previous releases, when you exported a project from CA Clarity PPM to MSP, the End Date and Dependency fields change. These fields are recalculated and updated for some tasks. The update occurs even though the Calculation Mode is set to Manual in MSP.

Starting with this release, you can export a project from CA Clarity PPM to MSP without updating the End Date and Dependency date fields. To prevent these fields from updating, complete the following tasks:

- Set the Calculation Mode for the schedule to Off in MSP.

- Set the Loading Pattern for all tasks in a project to Uniform in CA Clarity PPM.

You can update the end date of a task that is assigned to a resource with a termination date earlier than the task end date. The following table illustrates how task end dates are updated in these cases.

Resource Termination Date	Update to the Task Finish Date
Before the task start date	The task finish date is set to the task start date. The task is changed to a milestone task.
After the task start date but before the task finish date	The task finish date is set as the resource termination date.

In both the cases, the task end date is set according to the resource termination date.

PMO Accelerator and Clarity Solution Pack

For enhancement information on these CA Clarity PPM products, see the *PMO Accelerator Release Notes* and the *Clarity Solution Pack Release Notes*.

Financial Management

Capital and Operating Expenses

You can show operating and capital costs separately on the simple budget page and in a detailed financial plan. You can enter the cost information in the following ways:

- For a high-level estimate, enter the sums for these expenses directly on the investment budget page.

- For a more detailed view of cost type information, set up an investment financial plan that collects operating and capital expenses. You can collect detailed cost information from tasks or team allocation.

The following table shows the changes for this new feature.

New Attributes Added	Page or Area	Object	Default Value	User Interface Behavior	XML Open Gateway	Security
Cost Type	Investment financial properties	projfinproperties npiofinancial properties	Operating	The attribute is required on the investment financial properties page. In Release 13.2 the attribute is visible on the financial properties view even if the view is customized.	The attribute is not required in the XOG. It is added as part of the investment general properties.	

New Attributes Added	Page or Area	Object	Default Value	User Interface Behavior	XML Open Gateway	Security
Cost Type	Task	task	None	In Release 13.2, the attribute is not visible by default. It must be configured to display.	The attribute is added as part of task in the Investment XOG.	This attribute is editable only if financial access rights are granted. Although you can edit this attribute in Open Workbench and Microsoft Project, you must have financial access rights to save the edits to CA Clarity PPM.
Capitalization Percent	Team	team	None	The attribute is not visible by default. It must be configured to display.	The attribute is added as part of team in the Investment XOG.	This attribute is editable only if financial access rights are granted.

New Attributes Added	Page or Area	Object	Default Value	User Interface Behavior	XML Open Gateway	Security
Planned Capital Cost Planned Operating Cost Budget Capital Cost Budget Operating Cost Planned Capital % Planned Operating % Budget Capital % Budget Operating %	Simple budget	financials	N/A	The attributes are not visible by default. They must be configured to display.	The following fields are not part of the XOG: Planned Capital % Planned Operating % Budget Capital % Budget Operating % The remaining fields will be added with investment general properties. The following existing fields become read only: Planned Cost Total Budget Cost Total	

Update Investments Created Before Release 13.2 to Display Capital and Operating Expenses

After you upgrade to this release, you can update investments that were created before Release 13.2 to show capital and operating expenses. Updating your investments is optional and depends on your business needs. Update only if you want to display capital and operating expenses separately in financial plans.

The following jobs automate the task of adding the Capital and Operating cost type to investments:

Enable Capitalization

This job sets the Cost Type attribute to Operating or Capital on the investments, tasks, and transactions that you select for the update. You select and map investment charge codes to either Operating cost type or Capital cost type. When the job runs, the cost type that is mapped to the charge code is applied to the investment and its tasks and transactions. This job also updates the capitalization percent on the investment team records if you enter a Capitalization Percent value in the job parameters.

Copy Cost Type Plan of Record Charge Code with Cost Type

> This job creates a copy of an investment plan of record and adds Cost Type to the list of existing grouping attributes. To make an investment eligible for this job, you are required to run the *Enable Capitalization* job successfully on the investment first.

If you do not run the jobs, you see the following results:

- All existing investments have a cost type of Operating.

- All records in the PPA_WIP table have a cost type of Operating.

Upgrade Action: (Optional) Run the jobs in the order that is listed to update investments that were created before Release 13.2.

If you are processing investments with large amounts of data, limit the number of investments for a job run. When all of your investments have been successfully processed to show capital and operating expenses, we recommend deactivating the jobs.

Note: For more information about the jobs, see the *Administration Guide*.

Update Investments Created Before Release 13.2 to Display Capital and Operating Expenses

After you upgrade to this release, you can update investments that were created before Release 13.2 to show capital and operating expenses. Updating your investments is optional and depends on your business needs. Update only if you want to display capital and operating expenses separately in financial plans.

The following jobs automate the task of adding the Capital and Operating cost type to investments:

Enable Capitalization

> This job sets the Cost Type attribute to Operating or Capital on the investments, tasks, and transactions that you select for the update. You select and map investment charge codes to either Operating cost type or Capital cost type. When the job runs, the cost type that is mapped to the charge code is applied to the investment and its tasks and transactions. This job also updates the capitalization percent on the investment team records if you enter a Capitalization Percent value in the job parameters.

Copy Cost Type Plan of Record Charge Code with Cost Type

> This job creates a copy of an investment plan of record and adds Cost Type to the list of existing grouping attributes. To make an investment eligible for this job, you are required to run the *Enable Capitalization* job successfully on the investment first.

If you do not run the jobs, you see the following results:

- All existing investments have a cost type of Operating.

- All records in the PPA_WIP table have a cost type of Operating.

Upgrade Action: (Optional) Run the jobs in the order that is listed to update investments that were created before Release 13.2.

If you are processing investments with large amounts of data, limit the number of investments for a job run. When all of your investments have been successfully processed to show capital and operating expenses, we recommend deactivating the jobs.

Note: For more information about the jobs, see the *Administration Guide*.

Mobile Time Manager

The CA Clarity Mobile Time Manager lets you submit timesheets and approve timesheets from a mobile smartphone. The Mobile Time Manager feature lets you:

- Submit a timesheet

  – Populate timesheet items from the previous timesheet period.

  – Return a timesheet that was previously submitted.

- Approve a timesheet

  – Complete bulk timesheet approvals or returns.

  – Send a reminder to resources who have not submitted their timesheets.

  – Complete ad-hoc and action item timesheet approvals.

Upgrade Action: None.

Note:

- To allow the workflow timesheet action item approvals from the Mobile Time Manager, update the workflow process definition to configure *Approve* and *Return* in the manual action item step.

- A user requires the global access right *Mobile - Access* to view data from a CA Clarity PPM instance using the Mobile Time Manager.

Open Workbench

For any new features and enhancements in OWB, refer to the *OWB Release Notes*.

Date Attribute

Starting with this release, you can use the Date and Time option in the Formatting Options to configure the Date attribute. This option is applicable only for the Date attribute and is cleared by default. When you configure the Date attribute, the configuration can be persisted into the View data just as other options.

The Date and Time option is supported in the following languages:

- French

- German

- Japanese

- Portuguese

Note: The Open Workbench Date format configuration is independent of, and does not affect, the CA Clarity PPM view configuration. The configuration persists only on the client side and cannot be saved back to CA Clarity PPM. If you configure the Date attribute to appear as Date and Time in CA Clarity PPM, the configuration exists only in the application and it does not affect Open Workbench. By default, the Date attribute appears as Date in Open Workbench, unless you have configured that attribute to appear as Date and Time.

Upgrade Action: None

User Interface Improvements

This release includes the following user interface enhancements to make it grid-based:

- **Auto-resizing of columns**

  Double-clicking the column separator in the head of a grid view resizes the column width. The column to the left of the separator automatically resizes so you can see the full content. If the content is wider than the available space, the columns resize so that the fields fill the available space, but leave room for other columns.

- **Auto-resizing of panels**

  Double-clicking the panel separator moves the separator to fit the panel to the left of the separator so that the full panel is visible. If the panel is wider than the screen, the separator moves, pushing the panels to the right off the screen.

■ **Correct scaling of scroll bars to content**

Before this release, the scroll bars did not tell you how much content is in the view and in which position the display is located in the view. Starting with this release, the size of the scroll bars reflects the portion of the screen that is visible in relation to the total content. If the content of the panel is two screens high, the vertical scroll bar handle occupies half of the available scroll bar height. This allows you to see how much content is in the panel and you can also determine the exact position of the display.

■ **Removal of scroll bars when not necessary**

Before this release, the grid scroll bars were available even if there was no scrollable content. Starting with this release, the scroll bars disappear when no scrollable content is present, allowing for a larger display of data.

Upgrade Action: None

Dependency Deletion

The Dependency Deletion feature lets you remove unwanted dependencies. The feature is divided into the following parts:

■ **Dependency Selection**

When you hover over a dependency line in the Gantt chart, the cursor changes to crosshair.

■ **Edit or Delete the Dependency**

Double-clicking the dependency line opens the Task Properties window with the Dependencies tab selected and the successor task highlighted. You can edit or delete the highlighted task.

Upgrade Action: None

Draggable Margins in the Print Preview

You can turn on and off the appearance of separation lines using the Show margins check box in the ribbon menu. The separation lines appear between two display elements, for example, between the page header and the page content. Use these separators to change the delimiters and page area for each element.

Upgrade Action: None

Cost Type Attribute

Starting with this release, the Cost Type attribute is added as part of a task and a project in the investment XOG. You can edit the Cost Type attribute and save it back to CA Clarity PPM only if you have the following access rights:

Global Rights	Instance Rights
Project - Edit Financial - All	*Project - Edit*
Project - Enable Financial	*Project - Edit Financial*

Without these access rights, you can only edit the attribute, but you cannot save it back to CA Clarity PPM.

Note:

■ You can edit and save the Cost Type attribute for all projects and tasks when you have at least one of these Global rights.

■ You can edit and save the Cost Type attribute for specified projects and tasks when you have at least one of these Instance rights.

■ For master or subproject structure, instance rights cannot be inherited from the master project to a subproject.

Upgrade Action: None

Portfolio Management

New Portfolio Feature

The Portfolio functionality was rewritten for Release 13.2. Some of the highlights include the following features:

- The ability to plan portfolios by cost types (capital or operating).

- The ability to plan constraints (cost or resource) by specific period.

- The ability to create portfolio investment ranking rules.

- The ability to rank investments manually.

- Drag and drop capabilities for investment start and end dates and investment rankings.

- The addition of a *sync* job to synchronize the investment information with portfolios manually, or at specified time intervals. This ability lets portlet-based portfolios gather the portfolio information more efficiently from one central area.

- A portfolio dataprovider created with a consistent naming convention.

- A job that is aligned to each portfolio can be configured to update the portfolio investment information at user-defined intervals, or on a manual basis.

The old portfolio feature was removed from the user interface. The new portfolio feature has new data providers and new database tables and columns. Queries, both stock and custom, that worked with previous releases do not work with Release 13.2.

Some old portfolio information is preserved in backup tables during the upgrade. For more information, see the section that is named "Backup of Removed Portfolio Tables."

Upgrade Action: (Optional) Use the new Portfolio feature to create new portfolios using the user interface.

Portfolio Pages

The following descriptions outline the features that are found on each Portfolio page.

Portfolio Properties Page

- Inclusion of the cost type (operating or capital) for use for portfolio planning purposes.

- Ability to select a portfolio manager (one or many) from a list of resources.

- Ability to select a portfolio stakeholder (one or many) from a list of resources.

- Ability to set portfolio synchronization time periods.

- Display of the portfolios last sync date and time.

- Ability to set portfolio effort measurement units (for resources or roles) to either hours or full-time equivalents (FTE's).

Portfolio Contents Editor Page

- Ability to include specific investments by rules or investment criteria.

- Ability to add specific investments to the portfolio manually.

- Ability to add the relationship between parent and child portfolios.

Investment Page

- Ability to view and change selected plan information relating to investments.

- Ability to change, by period, the selected plan investment cost information.

Targets Page

- Ability to distribute targeted costs (operating and expense) by period to be used as a constraint for portfolio planning purposes.

- Ability to distribute targeted benefits by period to be used as a constraint for portfolio planning purposes.

- Ability to distribute targeted role effort by period to be used as a constraint for portfolio planning purposes.

- Ability to filter and repopulate the role capacity information by different parameters.

- Ability to scale the role information higher or lower.

Plan Page

- Ability to distribute targeted costs (operating and expense) by period to be used as a constraint for portfolio planning purposes.

- Ability to distribute targeted benefits by period to be used as a constraint for portfolio planning purposes.

- Ability to rank investments by constraint and other information characteristics.

- Ability to change and run ranking rules against investments.

- Ability to modify an investment ranking manually using drag-and-drop functionality.

- Ability to change *what-if* and investments start and end date by dragging and dropping on an investment timeline.

- A *waterline* to allow the analysis of investment information against portfolio plan constraints.

- Ability to drag-and-drop the waterline manually.

- An indicator (gauge) of portfolio constraints in the relationship to investment information that is above and below the waterline.

- Ability to change the timescale of information for the investment.

Portfolio Access Rights

Users require the new Portfolio access rights after the upgrade. Without the assignment of the new Portfolio access rights, users cannot see the Portfolio menu links after logging in to the application. The system administrator must manually assign users rights. No automatic assignment of new rights for users who had the old Portfolio rights is available.

Upgrade Action: Assign access rights for the new Portfolio feature to the users who require them.

The following access rights are required to work with portfolios:

Portfolio - Create

Allows a user to create Portfolios.

Includes: *Portfolio - Navigate* right to navigate to the portfolio pages.

Type: Instance

Portfolio - Navigate

Lets a user access the portfolio pages.

Type: Instance

Portfolio - Edit All

Lets a user edit all Portfolios.

Type: Global

Portfolio - Edit Access Rights - All

> Lets a user edit the access rights for all portfolios. This access right does not include the *Portfolio - Navigate* or *Portfolio - View* rights.
>
> **Type:** Global

Portfolio - View Access Rights - All

> Lets a user view the access rights for all portfolios. This access right does not include the *Portfolio - Navigate* or *Portfolio - View* rights.
>
> **Type:** Global

Portfolio - View All

> Lets a user view all portfolios.
>
> **Type:** Global

Portfolio - XOG Access

> Lets a user import and export portfolio instances using the XML Open Gateway interface.
>
> **Type:** Instance

You can select a user as a Manager or a Stakeholder on a portfolio's properties page. Being selected as a Manager or Stakeholder automatically a user the following rights to the portfolio:

- Manager. This user can edit information in the portfolio.
- Stakeholder. This user can only view information in the portfolio.

No access rights apply to the investments and plans that are contained in a portfolio. If you have rights to view or edit a portfolio, you can view or edit all investments and plans in the portfolio.

Attribute Registry for the Portfolio Investment Object

The required Portfolio Investment object attributes are displayed by default in your new portfolio pages and views. However, you must register any other Portfolio Investment attributes (stock or custom) that you want to display. You can locate the attribute registry by opening the Portfolio Investment object in Studio and clicking Attribute Registry.

Note: If you make changes in the attribute registry, remember to sync your changes by running the *Synchronize portfolio investments* job. The job refreshes the investments in the portfolio pages with information from actual investments.

For information about using the attribute registry, see the *Studio Developer Guide*.

Removal of the Old Portfolio Feature

The old Portfolio feature has been removed from the product and a new Portfolio Management feature has been added. If your home page was an old Portfolio page or tab, your home page is no longer in the product. In this case, your home page in Release 13.2 reverts to the system default home page.

Upgrade Action: If your home page was an old Portfolio page or tab, log in to CA Clarity PPM and select a new home page.

Portlets from the old Portfolio feature have been deleted, but the pages that contained the portlets remain. The pages were left in place to accommodate customers who customized the pages by adding other valid portlets. Pages with no custom portlets are still visible, but they are empty.

Upgrade Action: Review your Studio portlet pages and delete any that are empty.

During the upgrade, customer-defined objects that include references to the old Portfolio feature are deleted. An audit of deleted objects is written to the upgrade-ca.log file.

Upgrade Action: Review the upgrade-ca.log file for a list of items that are deleted during the upgrade. The deleted items that are logged include:

- Customer-defined and stock objects
- Subobjects
- Pages
- Tabs
- Menu items
- Portlets
- NSQL scripts
- Favorites
- Security rights and groups
- Lookups
- Attributes that are based on deleted lookups
- Database tables, views, triggers, procedures, packages, and functions
- Processes

The following information for the old Portfolio feature was removed from Release 13.2:

- The Portfolio object and any user-defined custom subobjects

- Groups:
  - PortfolioUsers
  - PortfolioManager
  - PortfolioAccess

- Access rights (Instance, OBS, and Global):
  - *Portfolio - Create*
  - *Portfolio - Edit*
  - *Portfolio - Edit Access Rights*
  - *Portfolio - Edit Access Rights - All*
  - *Portfolio - Edit - All*
  - *Portfolio - Manager (Auto)*
  - *Portfolio - Navigate -*
  - *Portfolio - Create Scenarios*
  - *Portfolio - View Scenarios*
  - *Portfolio - View*
  - *Portfolio -View - All*
  - *Portfolio - XOG Access*

- Menu items:
  - The old Portfolios menu option from the Portfolio Management section of the Home menu. This menu item was replaced for the new Portfolios feature.
  - Custom menu items that reference the old Portfolio feature
  - Favorites that reference the old Portfolio feature

- Stock Portlet Pages and Tabs:
  - Portfolio Default Layout
  - PMO Portfolio Layout
  - Products Dashboard (NPD)
  - Projects Dashboard (NPD)
  - Idea Dashboard (NPD)

- Lookups: Portfolio out-of-the box and custom dynamic lookups (static lookups remain)

- NSQL Queries. Any custom NSQL queries that reference affected database tables or database views were removed.

  The following out-of-the-box NSQL queries were removed:

  – Benefits by Goal

  – Planned Costs Monthly

  – Life-cycle Funnel

  – Budget and Forecast by Goal - v13

  – Portfolio Financials Aggregation - v13

  – Portfolio Investment Goals - v13

  – Portfolio Investment Listing - v13

  – Portfolio Investments Scorecard - v13

  – Portfolio Benefits and Costs

  – Portfolio Benefits By Goal

  – Portfolio Listing

  – Resource Capacity and Demand

  – Role Capacity and Demand

  – Capital vs Expense By Period

  – Capital vs Expense Budget and Forecast

  – Key Performance Indicators

  – Cost and Effort Performance

  – Brand Portfolios

  – Portfolio Revenue and Cost

  – Role Capacity and Demand[Plan of Record]

  – Role Capacity and Demand [Scenario]

  – Stage Gate Review

  – Portfolio Listing

  – Portfolio Revenue and Cost per Year

- Portlets. Custom portlets that use information from the Portfolio object were removed. Portlets that use information from out-of-the-box data providers or NSQL queries that reference affected database tables or database views were removed.

  – Investments (id: Investments)

  – Financials (id: Financials)

– Balance (id: Balance)

– Investments (id: cop.prt.pflInvestments)

– Financials (id: cop.prt.pflFinancials)

– Balance (id: cop.prt.pflBalance)

– Gantt (id: Gantt)

– Life-cycle Funnel (id: Life-cycle Funnel)

– Planned Cost/Benefit (id: Cost/Benefit)

– Planned Costs (id: Budgeted Costs)

– Portfolio Planned ROI/Alignment Zones (id: ROI/Alignment Zones)

– Benefits by Goal (id: Benefits by Goal)

– Risk/Reward Quadrants (id: Risk/Reward Quadrants)

– Efficient Frontier (id: efficientFrontier)

– Portfolio (id: xid_prt_portInvDash)

– Prioritized List Chart

– Resource Demand on Investments [--Base Scenario–] (id: cop.pflPrioritizationResourceBase)

– Resource Demand on Investments [--Compare To Scenario–] (id: cop.pflPrioritizationResourceCompare)

– Prioritization of Investments [--Compare To Scenario–] (id: cop.pflPrioritizationInvestmentCompare)

– Prioritization of Investments [--Base Scenario–] (id: cop.pflPrioritizationInvestmentBase)

– Investment Gantt (id: cop.portfolioGanttResource)

– Portfolio Role Capacity and Demand (id: cop.pflRoleCapAlloc)

– Resource Capacity and Allocation (id: cop.pflResCapAlloc)

– Resource Allocation (id: cop.pflResAlloc)

– Capital vs Expense Variance by Period (id: cop.prt.pflFinCapExVarByPeriod)

– Capital vs Expense Budget and Forecast (id: cop.prt.pflFinCapExBdgtFrcst)

– Capital vs Expense by Period (id: cop.prt.pflFinCapExByPeriod)

– Key Performance Indicators (id: cop.portfolioPerformIndicator)

– Cost and Effort Performance (id: cop.portfolioFinPerformance)

– Portfolio Idea Vault (id: npd.prt.portIdeaVault)

- Prioritized Scored List of Projects (id: npd.prt.prioritizedScoreListofProjects)

- Competitive Comparison [Plan of Record] (id: npd.prt.CompetitiveComparisonPR)

- Role Capacity and Demand [Compare to Scenario] (id: npd.prt.portRoleCapDemandScen)

- Role Capacity and Demand [Plan of Record] (id: npd.prt.portRoleCapDemand)

- Product Financials (id: npd.prt.portInvFinancials)

- Product Market Growth (id: npd.prt.ProductMarketGrowth)

- Product Market Growth (plan of record) (id: npd.prt.ProductMarketGrowthplanofrecord)

- Product Financials (plan of record) (id: npd.prt.ProdFinancialsPlanofrecord)

- Ranking of Projects (id: npd.prt.portPrjRanking)

- Resource Demand on Projects (id: npd.prt.portResDemand)

- Projects (id: npd.prt.portfolioInvestments)

- Competitive Comparison [Competitors] (id: npd.prt.prodCompetitiveComparison)

- Stage Gate Review (id: npd.prt.portStageGateReview)

- Portfolio Benefits and Costs (id: cop.portfolioBenefitsCosts)

- Portfolio Investment Benefits by Goal (id: cop.portfolioInvestmentBenefitsByGoal)

- My Portfolios (id: cop.myPortfolios)

- Portfolio Revenue and Cost per Year (id: npd.prt.portfolioRevAndCostperYear)

- Brand Portfolios (id: npd.prt.brandPortfolios)

- Portfolio Revenue and Cost (id: npd.prt.RevAndCost)

- Master Portfolios (id: npd.prt.masterPortfolios)

- Projects In Development (id: npd.prt.productsInDevelopment)

- Scenario Toolbar (filter portlet)

- Service Portfolio (id: bup.servPortfolioITM)

- Service ROI (id: bup.serviceRoiITM)

- Service ROI (id: bup.provServiceROI)

- Portfolio Budget Status (id: bup.budgetStatusITM)

- Portfolio Budget Summary (id: bup.budgetSummaryITM)

- Cost Analysis (id: bup.providerServiceCostAnalysis)

- Cost Analysis (id: bup.serviceCostAnalysis)

- Data Providers:
  - Portfolio: All Investment Types (type: System)
  - Portfolio: Applications only (type: System)
  - Portfolio: Assets only (type: System)
  - Portfolio: Products only (type: System)
  - Portfolio: Projects only (type: System)
  - Portfolio: Services only (type: System)
  - Portfolio Financials Aggregation - v13 (type: Query)
  - Portfolio Investment Goals - v13 (type: Query)
  - Portfolio Investment Listing - v13 (type: Query)
  - Portfolio Investments Scorecard - v13 (type: Query)
  - Portfolio Listing (type: Query)
  - Portfolio Revenue and Cost (type: Query)
  - Portfolio Revenue and Cost per Year (type: Query)
  - Portfolios (type: System)
  - Brand Portfolios (type: Query)
  - InvestmentCostDataProvider (type: System)
  - ServiceRoiDataProvider (type: System)
- Database Objects (stock items only)
  - Tables:
    - PMA_PORTFOLIOS
    - PMA_PORTFOLIO_CONTENTS
    - PMA_PORTFOLIO_ROLES
    - PMA_EF_CANDIDATES
    - PMA_EF_INVESTMENTS
    - PMA_PINNED_INVESTMENTS
    - PMA_PRTFLIO_INCL_CTNT_TYPES
    - PMA_AGGR_VALUES
    - PMA_AGGR_KEYS

- PMA_AGGR_VALUES_VALIDITY

- RPT_PORTFOLIO_CONTENT

- PMA_FINANCIAL_VALUES

- PMA_PRIORITY_CHART_CONF

– Sequences (Oracle only)

- PMA_PORTFOLIOS_S1

- PMA_PORTFOLIO_CONTENTS_S1

- PMA_PORTFOLIO_ROLES_S1

- PMA_AGGR_VALUES_S1

- PMA_PINNED_INVESTMENTS_S1

- PMA_PRTFLIO_INCL_CTNT_TYPES_S1

- PMA_AGGR_KEYS_S1

- PMA_PRIORITY_CHART_CONF_S1

– Views

- COP_FIN_ACT_PERIOD_CAPEX_V

- COP_FIN_PERIOD_CAPEX_V

- COP_FIN_PLAN_PERIOD_CAPEX_V

- COP_PORTFOLIO_CNTS_BASE_V

- COP_PORTFOLIO_CONTENTS_V

- COP_PORTFOLIO_SCENARIO_V

- XID_PORTFOLIO_CONTENTS_V

- NPD_PORTFOLIO_CONTENTS_V

– Triggers

- CAP_SCENARIO_MEMBERS_IUD_TRG1

- CAP_SCENARIO_MEMBERS_U_TRG2

- FIN_FINANCIALS_U_TRG1

- FIN_FINANCIALS_U_TRG2

- FIN_FINANCIALS_U_TRG3

- INV_HIERARCHIES_IUD_TRG1

- INV_INVESTMENTS_U_TRG1

- PMA_PORTFOLIOS_U_TRG1

- – PORTFOLIO_ID column on CAP_SCENARIOS table

- – Procedure RPT_PORTFOLIO_CONTENT_SP and Package RPT_CAPACITYPKG

- – Functions:

  - ■ PMA_CALC_PV_COST_FOR_INV

  - ■ PMA_CALC_PRESENT_VALUE

  - ■ PMA_TRUNC_MONTH_FCT

■ Processes:

- – Communicate Scenario (Any copies made by the customer are left in place.)

■ Add-ins (Portfolio-related content specified in the list):

- – PMO: New and upgrading customers.

- – NPD: New and upgrading customers.

- – BRM. New and upgrading customers.

Backup of Removed Portfolio Tables

After you upgrade to release 13.2, old portfolio information is not available in the general user interface. During the upgrade, information is backed up and maintained in tables within the CA Clarity PPM relational database management system.

The names of the backup tables are in the following format: XBKP_<ORIGINAL_TABLE_NAME>. In the XBKP table name prefix, BKP indicates a backup table. The X causes the table name to display at the bottom of the table list when viewed from a database client.

In common tables like ODF_FILTER_EXPRESSIONS, only records that are portfolio-related are backed up, not all records. The following table lists the names of backup tables and a description of the data they hold.

Backup Table	Description of Table Data
XBKP_PMA_PORTFOLIOS	Portfolio instances.
XBKP_PMA_PRTFLIO_INCL_CTNT_TYP	Investment types a portfolio contains (for example, projects or applications).
XBKP_ODF_FILTER_EXPRESSIONS	Power filters for the investment types a portfolio contains.
XBKP_PMA_PORTFOLIO_CONTENTS	Investments that a portfolio contains.
XBKP_PMA_PORTFOLIO_ROLES	Roles a portfolio contains.

Backup Table	Description of Table Data
XBKP_PMA_PINNED_INVESTMENTS	Investments that are *pinned* to a portfolio.
XBKP_PMA_EF_CANDIDATES	Efficient frontier candidate investments a portfolio contains
XBKP_PMA_EF_INVESTMENTS	Efficient frontier investments a portfolio contains.
XBKP_CAP_SCENARIOS	Scenario instances of a portfolio only (not other *general* scenario instances).
XBKP_CAP_SCENARIO_MEMBERS	Investments contained in a portfolio scenario.
XBKP_PMA_SCENARIO_CONSTRAINTS	Constraints posed on a portfolio scenario.
XBKP_PMA_SCENARIO_OPT_PARAMS	Optimization parameters defined on a portfolio scenario.

Resource Management

Capacity Overview Portlet

The Capacity Overview portlet provides a high-level summary of the capacity, demand, remaining capacity, and the actual hours provided by any given unit in the organization from a Resource OBS hierarchical view. This page provides information both in an aggregated and detailed form using portlets. You can view the aggregated information on the Capacity Overview portlet and the detailed information in the following drill-down portlets:

- **Staff Allocation Overview portlet**

  Displays the resources for the selected OBS unit, their primary role, and their allocation over the same time periods that appear on the Capacity Planning Overview page.

- **Unfilled Roles portlet**

  Displays the unfilled role requests for the OBS unit, the investments that are requesting roles, and allocation information for the role requests.

- **Investment Demand portlet**

  Displays the investments that are associated with the OBS unit, the investment manager, start and finish dates for the investment, and the allocation of resources from the selected OBS.

Note: For more information about the Capacity Overview portlet, see the *Resource Management User Guide.*

User Interface

New Keyboard Shortcuts

The following keyboard shortcuts for lists are added in Release 13.2.

Action	Keyboard Combination
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.	Ctrl+Right Arrow
Move to the beginning of a row	Ctrl+Left Arrow
Page up or down	Ctrl+Alt+Up Arrow Ctrl+Alt+Down Arrow

Action	Keyboard Combination
Move to the top or bottom of a list Note: If the action is in the TSV section of a list, repeat the keyboard combination to leave the TSV section.	Ctrl+Up Arrow Ctrl+Down Arrow

Upgrade Action: None

Keyboard Shortcuts for Time-Scaled Values

The following keyboard shortcuts for TSVs are added in Release 13.2.

Action	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

Upgrade Action: None

Time-Scaled Value Edits

You can edit time-scaled values and scroll to different time periods in the grid. The edits you make are preserved even if they scroll offscreen. The edits persist until you save them or dismiss them without saving.

Upgrade Action: None

New Group-by Feature for Charts

The Group-by feature lets you narrow a chart result set based on an attribute that groups the results to provide a better display. The grouping feature is available for object data providers and portfolio system data providers. For example, for a column chart that shows Planned Costs by Project, the readability of the chart depends on the number of projects. Showing 500 projects along the X-axis or Y-axis does not provide a readable chart that scales to the amount of data available. If you group the column chart data by OBS, the chart result set is smaller and more readable.

The grouping feature uses the following chart property fields to control how the results are grouped and aggregated:

Group By Column

Defines the dimension attribute that controls how the chart results are grouped. For example, you can group data by attributes such as OBS, Stage, or Priority.

Group By Function

Defines the aggregation function that is applied to the chart metric. For example, for a column chart of Projects by Planned Costs, you can group by OBS and select *Planned Cost* as the chart metric. When the Group By column groups the results of the projects by OBS, the planned costs are aggregated based on the Group By Function selection. You can select the aggregation method for the chart metric using one of the following functions: Sum, Average, Count, Minimum, or Maximum.

Note: If you select a date value in the Group By field, you can only select a function of Maximum or Minimum for this field.

The following grouping type attributes (dimensions) are available:

- String
- Number
- Calculated
- Formula
- Boolean
- Lookup
- Virtual

You can use the Group-by feature for the following chart types:

- Bar
- Column

- Pie

- Line

- Area

- Funnel

Upgrade Action: None

New Icon for Exports That Are In Progress

A new loading icon displays when you export information to Excel or PowerPoint. Only one export at a time is allowed. While the icon is present, the export is in progress and you cannot request another export. When the export is complete and the icon is no longer present, you can request another export.

Bubble Chart Export Limited to 255 Data Series

When a bubble chart export exceeds 255 data series, an alert is sent and no file is downloaded. Excel and PowerPoint do not support charts with more than 255 data series.

Row Limit Governor for NSQL Queries

To reduce the chance of an NSQL query using too much of server resources, a row limit governor has been established for grid portlets, chart portlets, and cases where XOG query tags are used. The governor restricts the number of rows that are processed to 50,000. The row limit is applied in the following cases:

- Scenario 1: A portlet is running a single dimension NSQL data provider, and the portlet has an aggregation row defined.

- Scenario 2: A portlet is running a multidimensional NSQL data provider.

When the system detects Scenario 1, the product displays a warning message when the row limit governor has been exceeded. The results up to the row limit (including the aggregation row total) are processed. You can enter filter criteria to display the specific rows you want. This action reduces the number of rows in the result.

When the system detects Scenario 2, the product displays a warning message when the row limit governor has been exceeded. For this scenario, the system does not display any results or aggregation row totals. Because of the nature of multidimensional NSQL queries, the correct result set or aggregation row cannot be determined.

Upgrade Action: None

XML Open Gateway Changes

New XOG Setting to Preserve OBS When Installing an Add-in

A new flag named *complete* has been added. When the flag value is set to *preserveOBS,* it prevents the deletion of the OBS section of property views during an add-in installation. The flag default value is *false*. If both of the following items are true, the flag is required:

- The add-in that you are installing updates the property view of an object that can be associated with an OBS.

- The version in the XML file is 13.2 (<Header action="write" externalSource="NIKU" objectType="contentPack" version="13.2.0"/>).

If the XOG version is from a release earlier than Release 13.2, the OBS section is not deleted.

Upgrade Action: None

Invalid Partition Codes in Imports

Release 13.2 changes how invalid partition codes are handled when data is being imported into the XOG. Invalid partition codes now cause the following actions to occur:

- The instance record is saved with a warning indicating that the partition_code attribute has an invalid value.

- The created instance is assigned to the user's default partition. The default is specified in Account Settings.

- The auto numbered ID value is generated from the scheme of the user's default partition.

Before this release, when an object instance with an invalid partition code was imported, the following actions occurred:

- The instance record was saved with a warning indicating that the partition_code attribute had an invalid value.

- The created instance record contained the invalid partition code value.

- The auto numbered ID value was generated from the system partition (NIKU.ROOT) scheme.

Data Model Changes

Added Tables

The following list shows tables added for Release 13.2.00.

Note: Added tables with the identifier XBPK are not included in the list. These tables are backup tables for the Portfolio feature removed for this release.

- CMN_INSTANCE_RANK

- CMN_RANK_CONTEXTS

- PFM_APPLICATIONS

- PFM_APPLICATIONS_PLAN

- PFM_ASSETS

- PFM_ASSETS_PLAN

- PFM_ATTR_REGISTRY

- PFM_BASELINE_DETAILS

- PFM_CA_FINANCIALS

- PFM_CA_NPIOFINPROPERTIES

- PFM_CLOB_CURVES

- PFM_CONTENT_FILTERS

- PFM_EV_HISTORY

- PFM_FINANCIALS

- PFM_FLAT_HIERARCHIES

- PFM_HIERARCHIES

- PFM_IDEAS

- PFM_IDEAS_PLAN

- PFM_INVESTMENTS

- PFM_INVESTMENTS_PLAN

- PFM_MNT_PROJECTS

- PFM_OTHERS

- PFM_OTHERS_PLAN

- PFM_PINNED_INVESTMENTS

- PFM_PLANS

- PFM_PORTFOLIOS

- PFM_PRODUCTS

- PFM_PRODUCTS_PLAN

- PFM_PROJECTS

- PFM_PROJECTS_PLAN

- PFM_ROLE_CAPACITY

- PFM_ROLE_DEMAND

- PFM_ROLE_DEMAND_PLAN

- PFM_SERVICES

- PFM_SERVICES_PLAN

- PFM_USER_SELECTED_PLAN

- PFM_WEIGHTING_ATTRS

- PFM_WEIGHTING_OPTS

- RPT_INV_HIERARCHY

- RPT_RES_SKILLS_FLAT

- RPT_RES_SKILLS_INDEX

Updated Tables

The following list of tables indicates what changed in the update:

CAP_SCENARIOS

Dropped column:

PORTFOLIO_ID

Dropped index:

CAP_SCENARIOS_N2

CMN_AUDITS

Added columns:

CLASS_CODE

TRANSACTION_ID

Updated column:

ATTRIBUTE_CODE

CMN_AUDITS_TSV

Updated column:

ATTRIBUTE_CODE

CMN_GG_ITEMS

Added column:

GROUP_BY_FUNCTION

CMN_GRAPHS

Added columns:

GROUPBY_COL_CODE

DEFAULT_GROUP_BY_FUNCTION

CMN_GRIDS

Added columns:

SNAP_TO_WATERLINE

OBJECT_INSTANCE_ID

Updated index:

CMN_GRIDS_U1

FIN_COST_PLAN_DETAILS

Added column:

COST_TYPE_ID

Updated index:

FIN_COST_PLAN_DETAILS_U1

FIN_FINANCIALS

Added columns:

BUDGET_ACTUAL_BENEFIT

BUDGET_ACTUAL_BENEFIT_TOTAL

BUDGET_COST_CAPITAL

BUDGET_COST_OPERATING

BUDGET_CST_CAPITAL_TOTAL

BUDGET_CST_OPERATING_TOTAL

ODF_SS_BUDGET_ACTUAL_BENEFIT

ODF_SS_BUDGET_COST_CAP

ODF_SS_BUDGET_COST_OP

ODF_SS_PLAN_ACTUAL_BENEFIT

ODF_SS_PLAN_COST_CAP

ODF_SS_PLAN_COST_OP

PLANNED_ACTUAL_BENEFIT

PLANNED_ACTUAL_BENEFIT_TOTAL

PLANNED_COST_CAPITAL

PLANNED_COST_OPERATING

PLANNED_CST_CAPITAL_TOTAL

PLANNED_CST_OPERATING_TOTAL

Added indexes:

FIN_FINANCIALS_GN1

FIN_FINANCIALS_GN2

FIN_FINANCIALS_GN3

FIN_FINANCIALS_GN4

FIN_FINANCIALS_GN5

FIN_FINANCIALS_GN6

ODF_AUDITED_ATTRIBUTES

Updated column:

ATTRIBUTE_CODE

PAC_MNT_PROJECTS

Added column:

COST_TYPE

PPA_TRANSCONTROL

Added column:

COST_TYPE

PPA_TRANSWIPADJUST

Added column:

COST_TYPE

PPA_WIP

Added column:

COST_TYPE

PRTASK

Added column:

COST_TYPE

Added index:

PRTASK_N6

PRTEAM

Added column:

CAPITAL_PERCENTAGE

Added index:

PRTEAM_N3

PRTIMEENTRY

Added column:

ODF_SS_ACTUALS

Added index:

PRTIMEENTRY_GN1

TEMP_IMP_VALIDATE_TRANSIMPORT

Added column:

COST_TYPE

Dropped Tables

The following tables were dropped for Release 13.2.00:

- PMA_AGGR_KEYS
- PMA_AGGR_VALUES
- PMA_AGGR_VALUES_VALIDITY

- PMA_EF_CANDIDATES

- PMA_EF_INVESTMENTS

- PMA_FINANCIAL_VALUES

- PMA_PINNED_INVESTMENTS

- PMA_PORTFOLIO_CONTENTS

- PMA_PORTFOLIO_ROLES

- PMA_PORTFOLIOS

- PMA_PRIORITY_CHART_CONF

- PMA_PRTFLIO_INCL_CTNT_TYPES

- RPT_PORTFOLIO_CONTENT

Chapter 5: Release 13.1 Updates

This section contains the following topics:

Upgrade Considerations for Release 13.1

This section provides information about installation and upgrade changes since Version 13.0.

Java 7

This release uses Java 7. The following software clients require Java 7:

- XML Open Gateway (XOG) client

- Open Workbench

- Connector for Microsoft SharePoint

- Service Connect

Important! 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 from the Oracle website.

Upgrade Actions: Install Java 7.

Java Runtime Environment Removed From Download Software Link

The Java Runtime Environment (JRE) is no longer available from the Software Downloads link.

Upgrade Action: Review the supporting documentation and training materials you provide to your users. Wherever these materials direct users to download the JRE from within CA Clarity PPM, update the reference to direct users to download the JRE version 7 from www.java.com.

Users can download the latest update of version 7 that is available. The latest version is what www.java.com offers by default. Eventually, when Java 8 is released, it will become the download default on the website. At that point, remind your users to download version 7, not version 8.

New Languages Supported in the User Interface

The product user interface supports the following new languages:

- Korean

- Simplified Chinese

- Traditional Chinese

Upgrade Action: None

Add-ins Compatibilities

The following list shows the add-ins upgraded for Release 13.1:

- If you are upgrading from Version 13.0 to Release 13.1, the following add-ins are upgraded:

  – PMO Accelerator

  – CA Clarity PPM Solution Pack of Dashboards and Reports

    Note: To see the documentation for this add-in, see the CA Clarity PPM Solution Pack Index page on CA Support Online.

  – Earned Value Manager

  – Connector for CA Unicenter Asset Portfolio Management

  – Connector for CA Unicenter Service Desk and CA Software Change Manager for Distributed

Reports for a Release 13.1 New Installation

The following action indicates how to get reports up and running for a new installation.

After the installation, run the Create Business Objects Users job to synchronize the user lists in BusinessObjects and CA Clarity PPM. If the job is not run, a CA Clarity PPM user cannot run or open a report unless a BusinessObject account is created explicitly for the user.

The job creates a BusinessObjects user for every user in CA Clarity PPM. The user created in BusinessObjects is given an encrypted password. If users want to log in to the BusinessObjects server using the assigned password, the user ID and password must be reset under BusinessObjects Administration.

Known Issues for Release 13.1

This section provides known issues for CA Clarity PPM.

Missing General Action Menu After Upgrade

In some cases, the General Action menu may not appear after an upgrade. This issue occurs on the Project object when the following conditions are present:

- In the edit properties view (Layout:Edit), a display condition is defined on the General subpage.

- The General object actions menu for the view is not customized.

You can correct the issue before the upgrade, or you can upgrade and then correct the issue in the new upgraded product.

To correct the issue before the upgrade:

- Remove the display conditions on the General subpage before the upgrade and redefine the display conditions after the upgrade.

Note: If the preupgrade server is on Version 13.0 or a later service pack, you can handle the issue in a different manner. Before you start the upgrade, edit the General Action menu. Move any action that is listed there from the Available Actions list to the Selected Actions list and save. After the upgrade is complete, you can remove any unwanted actions.

To correct the issue after the upgrade:

1. Create an action menu with following details:

   ■ Menu Name: General

   ■ Menu Code: general

   ■ Description: General

2. Move the following out-of-the-box actions from the Available Actions to the Selected Actions list:

   ■ Add to My Projects

   ■ Copy Project from Template

   ■ Remove from My Projects

   ■ Go to Links Page

   ■ Go to Notes Page

Note: For more information about creating an action menu, see the *Studio Developer Guide*.

Administration

Time-Scaled Value Link Exports to Excel

Excel has a 64-KB limit on the number of links that are exported to a worksheet. If you have configured links within your time-scaled value (TSV) cells, you can reach the limit. An Export to Excel operation does not complete successfully when the limit is reached.

A new option named *Enable TSV links for Export to Excel* provides a way to control how TSV links are exported. The option is selected by default so that all TSV links are exported.

If the option is not selected, TSV links are exported only up to the limit. When the limit is reached, the operation continues to export TSV values but without additional links.

Upgrade Action: (Optional) Clear the option to ensure the operation to export does not stop when the limit for links is reached.

Follow these steps:

1. Open Administration and from General Settings, click System Options.

2. In the Other section, clear the Enable TSV links for Export to Excel check box.

3. Save your changes.

Financial Management

Financially-Enabled Roles

The Financially-Enabled Roles feature provides the following functionality:

- Assignment of Transaction Class and Resource Class financial attributes to roles. This action lets you generate cost plans that include this combination of grouping attributes.

- Generation of cost plans based on the following attributes:
  - Role and Location
  - Role and Department

  You can use these attributes when the team member is a role and the Staff OBS Unit attribute on the team record contains either a department or a location.

- Ability to separately secure the Financial Properties subpage for both resources and roles.

New Access Right

Before this release, resource managers were automatically granted access to the Financial Properties subpage of the resources they managed. The automatic granting of a right is named an *autoright*. The Financially Enabled Roles feature replaced the autoright with an explicit access right that can be granted or revoked for any resource manager. This access right is named *Resource – Edit Financial*.

To maintain consistency with existing functionality, the upgrade to Release 13.1 replaces the autoright with an instance-level access *Resource – Edit Financial* access right. This access right is granted to all resource managers for the resources they manage. The upgrade also sets the new Financial option *Grant Resource – Edit Financial instance right to resource manager* to True. With the option set to True, resource managers are automatically granted the new access right.

Upgrade Actions: None, if you want to preserve existing functionality.

You can remove the new *Resource – Edit Financial* access right from resource managers (granted during upgrade) and can prevent future resource managers from receiving this right. To remove the right, run a special post-upgrade script that is provided with this release.

You can always manually grant or revoke the access right, regardless of the setting of the Financial option.

Role Financial Properties

You can enter values for Transaction Class and Resource Class on a role. When the team member or task assignee is a role, these values are used on cost plans and passed to the rate matrix.

Note: A new section has been added to the Role XOG schema to accommodate Transaction Class and Resource class for a role. The following code sample shows how the new section appears:

```
<FinancialInformation>
      <SupplementalInformation active="1" resourceClass="fmGrade3"
transactionClass="fm_Labor"/>
</FinancialInformation>
```

Upgrade Action: (Optional) Populate the new Role Financial properties subpage, and enter Resource Class and Transaction Class values.

Staff OBS Unit Field

The Staff OBS Unit field on the team record is evaluated when the team member or task assignee is a role. If the field contains a department or location, that value is used on cost plans. Then the value is passed to the rate matrix for deeper granularity in financial planning. If the field contains an OBS value that is not a department or location, there is no change in the functionality.

Upgrade Action: None

Baseline

Baseline was modified to include the following items:

- Roles financial attributes
- The Department or Location value in the Staff OBS Unit field when the team member is a role

This change was done to improve the accuracy of the baseline figures.

Upgrade Action: None

Budget Merge or Replace Option

When you submit a cost plan for budget approval, you can replace the existing budget with the cost plan being submitted.

The following options are available:

Merge Option

Select this option only when the structure (grouping attributes and fiscal time period) of the cost plan is identical to the approved budget.

Replace Option

Replaces the currently approved budget. This option lets you do the following actions:

■ Remove unwanted rows from the budget when the structure is the same

■ Replace the structure (grouping attributes or fiscal time period) with different values

You can select this option whether the structure is the same or different.

The Budget XOG schema has been updated to support the option to replace current budgets. The Budget Plan XOG includes the following new required fields:

■ forceReplace

■ sourceCostPlanCode

Note: The Budget Plan XOG schema is not backwards compatible with the Version 13.0 schema because the new required fields were added.

Upgrade Action: None

Resource Management

Enhancements to Resource Planning Tabs and Portlets

The tabs and out-of-the-box portlets under the Resource Planning menu option have changed. For a summary of the functional changes, see the *Release Notes.*

For new installations, the new Resource Planning page layout is automatically available.

If you are upgrading, additional steps are necessary after the upgrade to finalize the installation of the changes. During the upgrade, the changed portlet page layout, the portlets, and the Resource Planning Group are installed into an upgrade ready state. If you previously modified the out-of-the-box configurations of the portlet page, the existing portlets, or both, you can make one of the following choices:

■ Do nothing. You can continue to use the old Resource Planning portlet page and tabs with your existing portlets.

■ Manually add the new portlets onto your existing Resource Planning tab set.

■ Complete the upgrade of the new content by applying the new portlet page and all of the updated portlets, the Resource Planning Group, and the Menu Manager.

Upgrade Actions: (Optional) Apply the new portlet page and updated portlets (the last option in the preceding list).

Follow these steps:

1. Log in as an Administrator user with appropriate access rights to install and upgrade CA Clarity PPM portlets and portlet pages.

2. Apply the changes for the new tabs and portlets by completing the following actions:

   a. Open Administration, and from Studio, click Add-Ins.

   b. Click System: Clarity content.

   c. Review the list of items with an Upgrade Ready status and clear the checkmark for any line items that you do not want upgraded.

   d. Click Apply.

      This action replaces the current configurations with the new content for each selected item.

   e. Review the confirmation page and click Yes.

3. Refresh the Home menu definition by completing the following steps:

   a. Open Administration, and from Studio, click Menu Manager.

   b. Click Application Menu.

   c. Click Resource Management in the menu hierarchy list.

   d. Click Save and Return.

      This action accepts the menu order.

   Note: Instruct all users with access rights to Resource Planning in the Home menu to click the Refresh icon located in the Home menu. This action updates the Home menu to reflect the newly upgraded menu.

4. Complete the adjustment of the portlets and tabs by complete the following steps:

   a. Open Administration, and from Studio, click Portlet Pages.

   b. Open the Resource Planning portlet page.

   c. Click Tabs.

      As part of the upgrade, the following existing out-of-the-box portlets appear on new tabs:

      ■ Unfilled Requirements portlet is now on the Unfilled Allocations tab. This portlet also remains on the Allocations tabs, the preupgrade location.

- Booking Status portlet is now on the Bookings tab. This portlet also remains on the Allocations tabs, the preupgrade location.

- OBS Resource Allocation portlet is now on the Organizational Demand tab. This portlet also remains on the Capacity tab, the preupgrade location.

d. Decide which tab the portlets are to appear on and remove the portlets from one of the tabs.

   Note: To remove a portlet, click a tab name, then click the Content tab to add or remove portlets.

5. (Optional) The menu entry for Resource Planning continues to default to the Workloads tab, which is now in the center of the tabs. If you prefer to start on the first tab when you select Resource Planning from the Home menu, complete the following steps:

   a. Open Administration, and from Studio, click Menu Manager.

   b. Click Application Menu.

   c. Click Resource Management in the menu hierarchy list.

      The properties page appears.

   d. In the Page Name field, select Capacity.

   e. Save your changes.

User Interface

New Fixed Headers

This release includes a new fixed header for list pages. When you are scrolling in a long list or grid, the header remains visible as you scroll. The header is available in both the user and administration areas of the user interface. The fixed header is also available in pop-up pages, and it works when there are multiple grid portlets on a portlet page.

This feature is not available for Internet Explorer 8.

Upgrade Action: None

High Contrast UI Theme

A new UI theme named High Contrast is available for resources who need additional contrast when viewing the user interface. When the High Contrast Color Mode field is selected on the resource properties page, the new High Contrast UI theme is applied for the resource. Previously the Black and White UI theme was applied when the field was selected.

Upgrade Action: None

Data Model Changes

Database Table Changes

The following tables have fields that were updated, added, or removed. Update custom queries or reports that use these fields.

Note: CLASS_CODE is no longer used. The CLASS_CODE column has been removed from all tables where it appeared before this release. For information about all changes to the database tables since the last release, see the *Technical Reference Guide*.

Table	Column
BIZ_COM_PERIODS	**Removed:** ■ P_QUARTER ■ PERIOD
FIN_PLANS	**Added**: ■ SOURCE_COST_PLAN_ID ■ BUDGET_SUBMIT_OPTION
NAMEOPTIONS	**Added**: ■ RES_FIN_EDIT_RIGHT_AUTO
NBI_DIM_FISCAL_TIME	**Updated:** ■ PERIOD_KEY ■ QUARTER_KEY ■ TIME_KEY
PAC_MNT_RESOURCES	**Updated**: ■ RESOURCE_CLASS ■ TRANSCLASS

Chapter 6: Release 13.0 Updates

This section contains the following topics:

Upgrade Considerations for Version 13.0

New Log File Names

Log file names have changed. Previously, log files had the name format *-niku.log* (for example, bg-niku.log). This format has been changed to *-ca.log* (for example, bg-ca.log).

Dropped Languages

The following languages are not available for CA Clarity PPM v13:

- Korean

- Simplified Chinese

- Traditional Chinese

During an upgrade, existing users of these languages are reset to use English.

Upgrade Action: None

About Add-ins and Upgrades

Note the following actions to be taken after you have add-ins or connectors upgraded:

- Apply the Upgrade Ready content for those items that you are actively using.

- Best Practice: If you modified stock CA Clarity PPM content, copy the modified content before upgrading, apply the new incoming stock CA Clarity PPM content, and then retrofit the modifications to the new content.

- Read the PMO Accelerator Release Notes for important information about what has changed for PMO Accelerator v3.0.

- Review the *System: Clarity Content* add-in for upgrade ready content (for example, Role Capacity portlet). Apply the changes to accept the new v13.0 upgraded content.

- Review the Studio views and system content and manually upgrade as needed.

  The upgrade preserves all pre-existing Studio view configurations. If an existing view has configurations or if the object for the view is partitioned, the system does not automatically upgrade the view and/or the partition.

  Use the Studio Views list page to determine which views were not automatically upgraded.

  Some tips on reviewing the views:

  - The Last Version column identifies changes to stock views in CA Clarity PPM v13.

  - If a view was automatically upgraded as part of the upgrade process, a check mark appears in the view's Upgraded column. No further action is required.

  - If a view was changed in CA Clarity PPM v13 but was not upgraded due to pre-existing configurations, decide if you want to apply the changed view.

    Look for views with the following:

    Last Version column=13.0 and the Upgraded column= unchecked.

- Verify your NSQL queries.

  During the upgrade, the NSQL validator script automatically checks NSQL queries. Results are written to the admin.log. This log contains:

  - Query name

  - Query ID

  - Content Source

  - Query ID from CMN_NSQL_QUERIES of the query that failed validation

There are database schema changes in this release. You must correct invalid NSQL queries for portlets to work. See the chapter in this document named "Data Model Changes."

Upgrade action:

If the query can be changed in Studio:

1. Go to the NSQL tab for each failing query.

2. Click the Preview button.

3. Review the errors.

4. Repair the broken query constructs or fields.

5. Click the Preview button.

6. Confirm the NSQL query is valid.

If the query is in use by active portlets and cannot be edited in Studio:

1. User the XML Open Gateway (XOG) to export the failing query.

2. Correct the broken query constructs or fields.

3. Use XOG to import the corrected query.

4. Click the Preview button.

5. Confirm the NSQL query is valid.

Changes to Existing CA PPM Universes

The following changes were made to the existing CA PPM Investment Financials universe to support the v13.0 database schema:

- Added derived tables to the universe to mirror the Group By and Sub-Group By in the Financial Plans for Cost and Budget.

```
SELECT l.pk_id cost_plan_id,
       MAX(CASE WHEN l.seq = 0 THEN
                 CASE WHEN value = 'charge_code_id' THEN 'LOOKUP_CHARGE_CODES'
                      WHEN value = 'role_id' THEN 'SCH_BROWSE_ROLE'
                      WHEN value = 'transaction_class_id' THEN
'FIN_TRANSCLASSES'
                      WHEN value = 'lov1_id' THEN 'FIN_BROWSE_USER_LOV1'
                      WHEN value = 'lov2_id' THEN 'FIN_BROWSE_USER_LOV2'
                      ELSE NULL END
                 ELSE NULL END) AS plan_by_1_code,
       MAX(CASE WHEN l.seq = 0 THEN ln.name ELSE NULL END) AS plan_by_1_name,
       MAX(CASE WHEN l.seq = 1 THEN
                 CASE WHEN value = 'charge_code_id' THEN 'LOOKUP_CHARGE_CODES'
                      WHEN value = 'role_id' THEN 'SCH_BROWSE_ROLE'
                      WHEN value = 'transaction_class_id' THEN
'FIN_TRANSCLASSES'
                      WHEN value = 'lov1_id' THEN 'FIN_BROWSE_USER_LOV1'
                      WHEN value = 'lov2_id' THEN 'FIN_BROWSE_USER_LOV2'
                      ELSE NULL END
                 ELSE NULL END) AS plan_by_2_code,
       MAX(CASE WHEN l.seq = 1 THEN ln.name ELSE NULL END) AS plan_by_2_name
FROM   odf_multi_valued_lookups l
       LEFT OUTER JOIN cmn_lookups_v ln ON l.value = ln.lookup_code
                                        AND ln.lookup_type =
'LOOKUP_FIN_GROUPING_ATTRIBUTES_CAPTIONS'
                                        AND ln.language_code =
@Prompt('param_language','A',,mono,free,,{'en'}
WHERE  l.attribute = 'grouping_attributes'
AND    l.seq IN (0,1)
GROUP BY l.pk_id
```

- Changed the links in the Investment Financials Universe for budget plan details and cost plan details. The previous fields were different from the new v13 fields:

v12.x Field	v13.0 Field
Fin_cost_plan_details.transclass_id	Fin_cost_plan_details.transaction_class_id
Fin_cost_plan_details.prRole_id	Fin_cost_plan_details.role_id
Fin_cost_plan_details.prChargeCode_ID	Fin_cost_plan_details.charge_code_id

The Legacy Universe has been updated to remove references to fields that have been changed or are no longer in the Clarity data schema. See the section named "Data Model Changes" for a list of changed and deprecated fields.

Administration

Auto-Suggest Lookups and Multivalued Lookups in Lists

Auto-suggest displays possible selection values to a user based on keyboard input. The following lookup changes occurred for this release:

■ Auto-suggest is turned on for all lookups by default, but it can be turned off by opening the lookup and clicking the Auto-Suggest tab, then clearing the Auto Suggest Enabled check box.

Auto-suggest for OBS lookups cannot be turned off.

■ Dependent Lookups are not auto-suggest enabled.

■ Multivalued lookups can be configured to work within lists and grids.

Lookups were configured as pull-down lookups in v12.1.1 because it provided easier and quicker access in assigning values. Consider configuring these lookups as browse lookups because auto-suggest makes the assignment of the lookup value easier. In addition to ease of use, browse lookups have a performance benefit because the values do not have to be retrieved up-front, which makes pages render faster.

Upgrade action: (Optional) Review pages that have *query* lookups to see if you want to display additional attribute information in the auto-suggest display to help the user.

New User Group and Access Rights

Greater access control is provided for the Account Settings, Organizer, and Projects pages. You can control who sees the links in the Home menu and navigates to the pages for these features. A user must be granted the explicit right to see each of these features.

In previous releases, the rights to see the pages were granted by default. To allow existing customers who wish to continue to provide these rights to users as a whole, a new out-of-the-box user group named *Basic group for user access* is available with this release. The new user group provides the new access rights.

For Upgrading Customers

All users are assigned to the group, and the new access rights are assigned to preserve existing functionality. You can remove the rights from the group if you wish, or you can add additional rights. The following table lists the new access rights assigned to the group for upgrading customers.

New Access Right	Description
Account Settings - Navigate	Makes the Account Settings link available in the Home menu so that a user can navigate to the Account Settings page.
Organizer - Access	Makes the Organizer link available in the Home menu so that the user can open the Organizer page and view the Action Items and Notifications portlets.
Projects - Navigate	Makes the Projects link available in the Home menu so that a user can navigate to the Projects list page and open projects.

For New Customers

All users are assigned to the group by default, but no access rights are assigned. This gives a new customer the option of adding the rights that are needed. You can modify the group's access rights as needed.

Upgrade action: None

Configurable Notifications

Configurable notifications that allow administrators to add attribute information and any additional text information to a CA Clarity PPM notification are new for this release. The following changes are new:

- Subject and message body of the notifications can be configured by users.

- If you are changing a Studio object notification template, you can add Studio links to the notification that allow you to go directly to the project properties or change request instance.

Tips:

- Look at your most frequently used notifications and modify the notification template with attribute information that will provide better context for your end-users.

- You can rebrand the HTML email template that is sent for email notifications.

- Add attribute context information to the notification subject line so users can quickly assess the notification.

- For a process definition, you can configure a notification template for action items. The notification template can be changed even when the process definition is in an active state. The system picks up the latest notification template changes on the next step that sends out action items.

- Notification templates can be migrated between systems using the XML Open Gateway. This removes the necessity of manually reconfiguring your notifications.

- You must localize any changes made to the standard notification templates provided with CA Clarity PPM.

Upgrade action: None

XDM Forms

The creation of XDM forms is not supported in this release. If you are upgrading, you can continue to use existing XDM forms, but you cannot modify existing forms or create new ones. XDM forms are not available for new customers.

Upgrade action: Make any needed changes to XDM forms before you upgrade. You cannot make XDM changes after the upgrade.

New Accessibility Options

The following accessibility options for users with visual disabilities have been added:

Screen Reader Optimized UI

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

High Contrast Color Mode

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

See the *Administration Guide* for more information on these new options.

Upgrade action: None

Rooms and Equipment, Events, and Event Calendar Removed

All existing entries for the following will be deleted and will not be accessible after the upgrade to this release:

- Rooms and Equipment. This functionality allowed you to book rooms and equipment (for example, laptops and projectors) as resources.

- Events. This functionality let you create a meeting or other special occasions and invite multiple resources to attend.

- Event Calendar. This calendar showed milestones such as meetings or appointments to which you were invited.

Upgrade action: None

Auto-Numbering Link Removed from the Data Administration Menu

The Auto-Numbering link is no longer located in the Data Administration menu available from the Administration menu. To manage auto-numbering, use the functionality available in Studio.

See the *Studio Developer's Guide* for more information.

Upgrade action: None

Project Management

New Gantt Page

The Work Breakdown Structure (WBS) page has changed. The previous WBS page has been removed and replaced with a new Gantt editor page. There are functional differences between the previous WBS page and the v13 Gantt editor. The new Gantt editor includes drag-and-drop, inline insert, toolbar, and full hierarchy support.

Navigation to the new Gantt editor page has changed:

- The Gantt button on the Task List page has been removed.

- The Gantt editor opens in its own browser window.

- New Studio links have been provided to the Gantt editor. Note the following that occurs during an upgrade:

  - Fields configured to link to the previous WBS page are removed from the configuration for the list or portlet. If the field is a custom-added virtual field, redefine the field and select the new link to the new Gantt editor.

  - Fields configured to link to the previous pop-up graphical Gantt chart are replaced by a link to the new Gantt editor.

See the *Project Management User Guide* for more information about the new Gantt page.

Preupgrade action: Review your Studio configurations to identify lists and grid portlets that contain links to the WBS page. The upgrade removes these fields from the list or portlet.

Upgrade action:

- If you configured the WBS view in your previous release, reapply your Studio and end-user configurations to the new Gantt page.

- If you previously configured lists or grid portlets with fields that linked to the WBS page, redefine the fields and add a link to the new Gantt editor.

Miscellaneous Project Management Changes

The following changes have been made in Project Management:

- You now have the option to assign non-project team members directly to tasks.

- When you filter the *Resource Planning: Capacity - Role Capacity* portlet, rows that have no results within the filter criteria are filtered out. This means that empty rows are hidden.

- A project baseline is no longer required to calculate project and task costs.

- You can now view and edit time-varying ETC on task assignments.

Upgrade action: If you previously configured the Role Capacity portlet, you must manually apply the portlet to get the new filter options. See the "Installation and Upgrade" chapter for more information.

New Project Attribute

A new attribute named Assignment Pool has been added to the Project object. The attribute is a required field, so it is added to the Project Create page automatically at the top of the page. You can configure the page and move the new attribute to the position on the page you want.

Upgrade action: (Optional) Adjust the default position of the Assignment Pool attribute on the Project Create page.

Follow these steps:

1. Open Administration, and from Studio, click Objects.

   The objects list appears.

2. Enter Project in the Object Name field and click Filter.

3. Click Project in the list that appears.

   Properties for the Project object appear.

4. Click Views.

5. In the Project Properties row, click *Layout: Create*.

   The layout for the create page appears.

6. Click the Properties and Layout icon for the General section.

   Properties for the General section appear.

7. In the Layout section, highlight Assignment Pool in the Selected column list and move it to the position you want using the arrow keys.

8. Save your changes.

Project Management XML Open Gateway (XOG) Changes

Project XOG: Billing-related attributes billToCompanyCode, billingProjectCode, billExpenses and batchCycle have been deprecated from the Project XOG. These values will be ignored during xog-in.

The billingType attribute only supports types Standard('S') and Internal('I').

Types Contract('P') and Retainer ('R') cannot be used in this release.

Upgrade actions: None

Financial Management

Multiple Grouping Attributes in Cost Plan

The Group By and Sub-Group By fields have been replaced by a multivalued lookup field named *Grouping Attributes*. A cost plan now has ten available grouping attributes instead of five. You can plan by all ten attributes instead of two. For more information on grouping attributes, see the *Financial Management Guide*.

The attributes plan_type_code and sub_plan_type for the object *costplan* have been removed.

Upgrade actions:

- Update custom portlets to remove any reference to the deprecated attributes.

- Financial planning views will be refreshed during the upgrade. All customizations will need to be updated after the upgrade is complete.

- PLAN_DETAIL_1_KEY and PLAN_DETAIL_2_KEY columns have been dropped from table FIN_COST_PLAN_DETAILS. Any custom reference to these columns must be handled prior to the upgrade process.

Process Enabled Cost Plans

Cost plans are processed-enabled in this release. You can create processes on financial plans.

Upgrade action: None

Improvements Using the Resource Plan

The following Financial Management improvements have been made using Resource Planning:

- Getting cost or rate from the rate matrix

  You can create or populate a plan from assignments or allocations the way it is done in CA Clarity PPM v12. Changes have been made to rate calculations to get better and more accurate rates.

- Null grouping attributes

  You can create a plan detail with a null grouping attribute using a resource plan. This enhancement removes some restrictions such as requiring a team member to be financially enabled or assigned a role.

- Insta-slice

    This feature is turned off for the Populate from Resource Plan feature. Time slices are created when the time slice job runs.

Upgrade action: None

Simple Budget Changes

The following changes were made to the Simple Budget for this release:

- Three new fields were added to the Financial Metrics section of the simple budget:
    - IRR (Internal Rate of Return)
    - MIRR (Modified Internal Rate of Return)
    - Planned Payback Period (in months)
- Four new fields were added to the Financial Metrics Options section:
    - Investment Rate
    - Initial Investment
    - Use System Rate for Total Cost of Capital
    - Use System Reinvestment Rate

■ The following Simple Budget forecast fields were removed:

– Forecasted Benefit

– Forecasted Benefit Finish

– Forecasted Benefit Start

– Forecasted Breakeven

– Forecasted Cost

– Forecasted Cost Finish

– Forecasted Cost Start

– Forecasted NPV

– Forecasted ROI

■ The following fields were renamed:

– Forecast equals Budget is now *Budget equals Planned Values.*

– Calculate NPV is now *Calculate Financial Metrics*.

See the *Financial Management User Guide* for more information.

The Simple Budget page will be refreshed during the upgrade if it was not customized.

Upgrade action:

■ If any of the user-defined process uses deprecated simple budget forecast attributes, the process definition is invalidated. Update the process definition to remove references to the deprecated attributes.

■ If any custom portlets use simple budget forecast attributes, update the portlets to remove references to the deprecated attributes.

■ If the investment budget view was customized prior to this release, new IRR/MIRR attributes will not display on an investment's budget page out-of-the-box. Reconfigure the investment budget view in Studio to add the new IRR/MIRR attributes.

If the investment budget view was not customized, it is refreshed during the upgrade and the new out-of-the-box attributes are visible.

Entity Plan Defaults

Entity plan defaults have been updated to support multiple grouping attributes.

Entity plan detail defaults functionality is not available with this release.

Upgrade action: None

System Currency

System currency setup is required before you can complete the following actions:

- Access the following pages:
    - Project Financial Properties
    - Project Simple Budget
- Import an entity using the XML Open Gateway

Upgrade action: None

External Billing Removed

All existing External Billing will be deleted and will not be accessible after the upgrade to this release.

Upgrade action: Any open billing cycles should be processed before you upgrade.

Self View and Aggregate View Removed

In previous versions, CA Clarity PPM supported four plan detail views: Self, flat, aggregate, and billing.

CA Clarity PPM v13.0 supports two:

- Flat (Investment Currency View)
- Billing (Billing Currency View)

Note: In plan detail views, the nongrouping fields are hidden in this release. In CA Clarity PPM v12, the Group By and Sub-Group By columns are always visible, even if only one *group by* attribute is used.

Upgrade action: None

Test Rate Matrix Removed

The Test Rate Matrix feature and the Test Matrix button have been removed and will not be accessible after the upgrade to this release.

Upgrade action: None

Changes to Financial Management Links

The following changes have been made to links in Financial Management:

- Administrative Methods - Removed

- Tax Authorities - Removed

- Define Matrix - Renamed to *Cost Plus Codes*

Upgrade action: None

Financial XML Open Gateway (XOG) Changes

- Cost plan details imported through the XML Open Gateway must have start and end dates that match a valid fiscal period. For CA Clarity PPM v12 matching a fiscal period was not required. The following script segments show the differences between CA Clarity PPM v12 and v13.0.

  v12 cost plan detail:
  ```
  <PlanData cost="700.0" end_date="2011-01-31"
            revenue="750.0" start_date="2011-01-16" units="7.0"/>
  ```

  v13.0
  ```
  <Cost>
       <segment finish="2008-01-31T00:00:00" start="2008-01-01T00:00:00"
  value="100.0"/>
  </Cost>
  ```

- Fiscal period is now included in the XML script for importing entities.

- Financial planning XML Open Gateway scripts are not backward compatible.

- Company XOG: Attribute batchcycle has been deprecated. The attribute value will be ignored during xog-in.

- Entity XOG: The attributes defaultBatchCycle and defaultRemitToLocation have been removed and cannot be used as part of an entity xog-in.

- Project/Investment XOG: The forecastEqualsBudget and calculatePresentValueInfo attributes have been deprecated from the Investment XOG. These values will be ignored during xog-in.

  Use the attributes setBudgetValuesEqualToPlannedValues and calculateFinancialMetrics instead. For details about new simple budget attributes, see the *XML Open Gateway Developer Guide*.

- Investment simple budget forecast attributes have been deprecated and values for these attributes will be ignored during xog-in.

Upgrade action: None

Studio

UI Themes

UI themes developed and used in CA Clarity PPM v12.1.1 cannot be used in this release. You must recreate any custom UI themes used for your application.

Changes to UI themes:

■ The UI theme administration was previously located in Clarity System Administration (CSA), and the information was stored in the file system. Starting with this release, the administration is handled in Studio, and UI theme information is stored in the database.

■ You can migrate a UI theme from one system to another using the XML Open Gateway.

■ UI themes use the CSS3 standard.

■ Custom logo images are no longer stored on the file system. Base64 encoding is now used to convert a logo to ASCII string format.

■ CA Clarity PPM On Demand customers can now rebrand a CA Clarity PPM application using Studio.

Upgrade action: If you have a custom UI theme, you must recreate it using the new UI Themes functionality. If you have a UI theme associated with a partition, you must reconfigure the partition setup for this release. To save time and effort, copy one of the default UI themes and modify the CSS information it contains.

See the *Studio Developer's Guide* for more information.

Object Actions

Object Actions allow you to configure functionality where and when it is needed. This full functionality was not available in CA Clarity PPM v12.1.1.

See the *Studio Developer's Guide* for more information.

Button operations and links that are infrequently used in some areas in the application have been moved under the Actions pull-down menu. If you don't see a button or page link that was present in CA Clarity PPM v13, check the Actions pull-down menu to see if the operation exists there.

If you have areas in the application that require you to navigate to other locations to collect information, you can use an object action to navigate and retrieve the information. Object actions allow you to navigate for the information you need without losing the context of your current location.

Upgrade action: None

Custom Fiscal Time-scaled Values

Fiscal time-scaled values (TSVs) are available with this release. Instead of operating on the standard yearly calendar, fiscal TSVs are based on the fiscal calendar.

You can configure TSV displays based on a specific date for the *Start Date* attribute property.

Upgrade action: None

Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets

For this release, the CA Clarity PPM URL has changed. Any URLs in custom HTML or Xcelsius portlets will not work optimally.

Upgrade action: Search for and replace the portion of the URL where the syntax has changed.

■ To update relative URLs, search for "niku/app?action=" and replace it with "#action:".

■ To update absolute URLs, search for "app?action=" and replace it with "nu#action:".

■ To complete the update for Xcelsius portlets, generate new .swf files in Xcelsius and use the .swf files to update the interactive portlets in CA Clarity PPM.

Charts

Charts for this release have the following changes:

■ All charts are HTML5.

■ SVG charts have been removed.

■ Zooming is available.

■ Some charts have animation.

■ The Area chart type is available.

The out-of-the-box chart colors have changed for this release. If you are using the Color Consistency feature, document your current colors so that you can change the color in the new release, if needed. You can recreate your colors in this release using the custom color palette under System Options.

The charting engine for this release is different than previous releases. As a result, the x-axis and y-axis scales and certain chart display areas might not be an exact replica of the old charts. However, the representation of data within the new charts will be correct.

A few of the charts have chart properties available in prior releases that are not available in this release. See upgrade documentation for details.

Upgrade action: (optional) Document your current colors before you upgrade if you are using the Color Consistency feature. You can use the information to update the colors in this release to your previous settings.

HTML Portlet Changes

The HTML portlet configuration page has been improved. The text entry area now has color-coded syntax and indentation.

Tips for HTML portlets:

- Avoid document.write in javascript.

- Do not reload the current page, such as setting window.location.href in javascript. CA Clarity PPM is a single page ajax-style application. Reloading the page is not optimal and can result in loss of application state data.

- Many CSS style names have changed. If you are currently using v12.*x* CSS style names, those can be incompatible.

Upgrade actions:

- Check CSS style names in custom HTML portlets to verify the style names are current and update where necessary.

- Verify all URL-related logic in javascript is correct for any custom HTML portlets. See the section named "Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets."

Tab Changes

Your ability to customize tabs has been enhanced. To customized tabs, you can:

- Change the labels, including the labels of stock tabs provided with CA Clarity PPM.

- Hide tabs by setting "Active=FALSE".

- Rearrange tabs on a portlet page.

- Create dashboard tabs for the Project portlet pages.

Upgrade action: None

Export to PowerPoint or Excel with Internet Explorer 9

The Export to Excel or Export to PowerPoint can receive an error message if you are using IE 9. To stop the error message from appearing and successfully export, you must change a setting in IE 9.

Upgrade action: Clear the *Do not save encrypted pages to disk* check box in the IE 9 Security settings in Internet Options.

Follow these steps:

1. Open Internet Explorer 9.

2. From the Tools menu, click Internet Options.

   The Internet Options dialog appears.

3. Click the Advanced tab.

4. In the Settings section, scroll down to the Security settings.

5. Clear the *Do not save encrypted pages to disk* check box.

6. Click OK.

New Xcelsius Stock Dashboards

Best Practice: Always make copies of stock Xcelsius dashboards, visualization files and queries before applying customizations. Customize the copied version. CA provides periodic updates to the stock dashboards that overwrites any changes you make to the stock dashboards.

The following table lists the Xcelsius stock dashboards provided with this release.

Studio Name	File Name	Description
Portfolio	xid.prt.portInvDash	Portfolio Investment Analysis - Analyze the impact to your Portfolio by adding and removing investments from the dashboard. Suggested use: Add a new tab with this portlet to the Portfolio Default Page Layout.
Project Status	xid.prt.prjsts	Project Status - Analyze important metrics at a glance for a specific project. Suggested use: Put on a project dashboard on a Project Page Layout.
Investment Overview	xid.prt.prjstsDash	Investment Overview - Using filter criteria, build a list of investments to view and analyze important metrics. Suggested use: Add a new tab with this portlet to the Overview page layout.
Resource Planning	xid.prt.resPlanDash	Resource Planning using Capacity and Demand by Role - view the capacity and demand by role, and analyze impact on capacity and demand by increasing or decreasing capacity using FTE or Hours. Suggested use: Add a new tab with this portlet to the Resource Planning portlet page layout

User Interface

New Menu Bar and General Navigation

Navigation for CA Clarity PPM contains the following changes:

■   New navigation menu bar

The CA Clarity PPM main menu has moved from its traditional place as a left navigation pane to a new overhead fly-out menu. This provides more workspace for the application. The menu contains the same selections and selection placements found in CA Clarity PPM v12.1.1.

Menu names are now Home (the user menu), Administration (administrator's menu), and Favorites.

Hotkeys for the menu system are: Ctrl+Alt+h (Home), Ctrl+Alt+a (Administration), Ctrl+Alt+f (Favorites).

■   Favorites

This new menu is similar to browser Favorites. It allows a user to create and store links to specific pages for easy access.

■   History

The history button preserves a record of recent pages visited. You can open the list of pages from the button and return to any listed.

■   Back Button

This button returns you to pages visited one a time in reverse order.

Upgrade action: None

CAPA Learn Link

The Learn link for CAPA (CA Productivity Accelerator) in the upper right corner of the browser is dynamic. If the CAPA settings are not defined in Clarity System Administration (CSA), the Learn link does not display.

Upgrade action: (Required for CAPA) Define the settings for CAPA in Clarity System Administration. For information on how to set up CAPA, see the documentation provided by CAPA when that feature is purchased.

Buttons

The buttons that appear on the majority of CA Clarity PPM pages have been standardized. The following table shows the new and old button names.

New CA Clarity PPM v13 Buttons	Old CA Clarity PPM v12.1.1 Buttons
Save	Save
Save and Return	Submit
Return	Cancel

There are exceptions to the new button change, and *Submit* is sometimes used where it is more appropriate (for example, Reports and Jobs).

Upgrade action: None

Inline Editing for Grids and Lists

The Actions menu that allowed you to select Edit Mode or Display Mode has been removed. To edit a cell in a list or grid, you click in the cell. If the cell can be edited, it activates so that you can edit. As changes are made, a red flag appears in the cell's upper left corner to indicate the changes have not yet been saved. You can move from one cell to the next, editing as needed before you save.

You can also toggle between display and edit by pressing the Enter key.

Upgrade action: None

Display as Pop-up Attribute

The *Display as Pop-up* check box option within grids and list for the Link field setting has changed. In CA Clarity PPM v12.1.1, the option displayed a new browser window over the old window when the link was clicked. For CA Clarity PPM v13, a modal navigational pop-up displays over the original browser window.

Upgrade action: None

Font Settings

The Font Settings options under Account Settings has been removed. To control the size of the font on a page, use Ctrl+ and Ctrl-.

Upgrade action: None

Architecture

Architecture Changes

The following table shows the architecture changes for this release.

Component	Changes to Supported Software Versions
Server Operating System	■ CA provides support only for upgrading customers with pre-existing installations on Solaris and HP-UX; dropped 32-bit operating systems ■ Added support for SUSE Enterprise Linux 11 ■ Added support for RHEL 6.0
Server DB	■ Added Microsoft SQL Server 2008 R2 ■ Dropped support for Microsoft SQL Server 2005
Server Java Runtime	■ Dropped 32-bit support
Application Server	■ Dropped 32-bit support
Report Server	■ Added support for CA Business Intelligence r3.2 ■ Dropped support for CA Business Intelligence r3 ■ Dropped support for Actuate
Client browser	■ Added Firefox 4.0 through 8.0 ■ Added IE 9.0 ■ Dropped support for IE7 and IE6
Client applications	■ Support Crystal Reports Designer 2008 SP3 or higher (instead of any service pack) ■ Dropped support for Microsoft Project 2000, 2002 and 2003
SharePoint Server	■ Added SharePoint Server 2010 ■ Dropped support for SharePoint Server 2007

Memory Requirements

The move to a 64-bit Java Runtime brings with it the following memory setting recommendations for the CA Clarity PPM application service:

- Heap Space: 2048 megabytes (-Xmx2048m)

- Permanent Generation (Sun JVMs only): 192 megabytes (-XX:MaxPermSize=192m)

The memory settings are checked each time an application service is deployed. If the settings are below the recommended values, they are adjusted automatically. You can override the automatic adjustment by adding the following property to the JVM parameters for a given service: -DforceMemorySettings.

Each environment has unique resource requirements, so the default settings might not be correct in every case. Refer to the *Administration Guide* for more information on this topic.

Upgrade Action: None. The memory settings are adjusted automatically if they are below the recommended values.

Data Model Changes

Database Table Changes

The following tables had deprecated fields that were updated, added, or removed. If you have custom queries or reports that use the fields, they need to be updated.

Table	Column
APMASTER	**Added**
	■ CREATED_DATE
	■ CREATED_BY
	■ LAST_UPDATED_DATE
	■ LAST_UPDATED_BY
CBK_GL_ALOCATION_DETAIL	■ OVERHEAD_ENTITY_ID

Table	Column
CLNTCLASS	**Added**
	■ CREATED_DATE
	■ CREATED_BY
	■ LAST_UPDATED_DATE
	■ LAST_UPDATED_BY

Table	Column
FIN_COST_PLAN_DETAILS	**Updated**
	■ SOURCE (Updated)
	Added
	■ TRANSACTION_CLASS_ID ROLE_ID
	■ CHARGE_CODE_ID
	■ INPUT_TYPE_CODE_ID
	■ LOCATION_ID
	■ RESOURCE_ID
	■ RESOURCE_CLASS_ID
	■ DEPARTMENT_ID
	Deleted
	■ PLAN_DETAIL_1_KEY
	■ PLAN_DETAIL_2_KEY
	■ TRANSCLASS_ID
	■ PRROLE_ID
	■ PRCHARGECODE_ID
	■ AGG_UNITS
	■ AGG_COST
	■ AGG_REVENUE
	■ AGG_UNITS_ACTUAL
	■ AGG_COST_ACTUAL
	■ AGG_REVENUE_ACTUAL
	■ AGG_TOTAL_COST
	■ AGG_TOTAL_UNITS
	■ AGG_TOTAL_REVENUE
	■ AGG_TOTAL_COST_ACTUAL
	■ AGG_TOTAL_UNITS_ACTUAL
	■ AGG_TOTAL_REVENUE_ACTUAL

Table	Column
FIN_FINANCIALS	**Added**
	■ IS_SYS_VAL_FOR_TCC
	■ TOTAL_COST_OF_CAPITAL
	■ IS_SYS_VAL_FOR_RR
	■ REINVESTMENT_RATE
	■ INITIAL_INVESTMENT
	■ BUDGET_IRR
	■ BUDGET_MIRR
	■ BUDGET_PAYBACK_PERIOD
	■ FORECAST_IRR
	■ FORECAST_MIRR
	■ FORECAST_PAYBACK_PERIOD
	■ PLANNED_IRR
	■ PLANNED_MIRR
	■ PLANNED_PAYBACK_PERIOD
INV_INVESTMENTS	**Added**
	■ TARGET_MANAGER_ID
	■ ASSGN_POOL
INV_Projects	**Deleted**
	■ Prbasestart
	■ Prbasefinish
	■ prbasetime
PAC_MNT_RESOURCES	**Added**
	■ CREATED_DATE
	■ CREATED_BY
	■ LAST_UPDATED_DATE
	■ LAST_UPDATED_BY

Table	Column
PMA_AGGR_VALUES	**Added**
	■ INITIAL_INVESTMENT
	■ PLANNED_IRR
	■ PLANNED_MIRR
	■ PLANNED_PAYBACK_PERIOD
	■ PLANNED_BREAKEVEN
	■ BUDGET_IRR
	■ BUDGET_MIRR
	■ BUDGET_PAYBACK_PERIOD
	■ BUDGET_BREAKEVEN
	■ FORECAST_IRR
	■ FORECAST_MIRR
	■ FORECAST_PAYBACK_PERIOD
	■ FORECAST_BREAKEVEN
PRAssignment	**Deleted**
	■ Prbasepattern
	■ Prbasesum
	■ Prbasemax
PROJCLASS	**Added**
	■ CREATED_DATE
	■ CREATED_BY
	■ LAST_UPDATED_DATE
	■ LAST_UPDATED_BY

Table	Column
PRTask	**Deleted**
	■ Prbasestart
	■ Prbasefinish
	■ Prbaseduration
	■ Prbaseisfixed
	■ Prbasetime
WIPCLASS	**Added**
	■ CREATED_DATE
	■ CREATED_BY
	■ LAST_UPDATED_DATE
	■ LAST_UPDATED_BY

Upgrade action:

■ Identify custom queries or reports that use any of the fields that were removed. The references must be updated to use the correct database fields.

■ All baseline information is stored in:

  – PRJ_Baselines (primary revisions)

  – PRJ_Baseline_Details (baseline detail records for each revision)

  For example:

  You can get the current baseline revision by joining the baseline_id from the investment to the PRJ_Baselines table.

  You can get baseline details by joining PRJ_Baseline_details.baseline_id to PRJ_Baselines.id, selecting object type (for example, TASK) and the object ID (for example, PRTask.prid).