

# CA Clarity™ PPM

## Change Impact and Upgrade Guide

v13.0.00



This documentation, which includes embedded help systems and electronically distributed materials, (hereinafter referred to as the "Documentation") is for your informational purposes only and is subject to change or withdrawal by CA at any time.

This Documentation may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA. This Documentation is confidential and proprietary information of CA and may not be disclosed by you or used for any purpose other than as may be permitted in (i) a separate agreement between you and CA governing your use of the CA software to which the Documentation relates; or (ii) a separate confidentiality agreement between you and CA.

Notwithstanding the foregoing, if you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all CA copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to CA that all copies and partial copies of the Documentation have been returned to CA or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENTATION "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL CA BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF CA IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is CA.

Provided with "Restricted Rights." Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2011 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

# Contact CA Technologies

## Contact CA Support

For your convenience, CA Technologies provides one site where you can access the information you need for your Home Office, Small Business, and Enterprise CA Technologies products. At <http://ca.com/support>, you can access the following:

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

## Providing Feedback About Product Documentation

If you have comments or questions about CA Technologies product documentation, you can send a message to [techpubs@ca.com](mailto:techpubs@ca.com).

If you would like to provide feedback about CA Technologies product documentation, complete our short customer survey, which is available on the CA Support website at <http://ca.com/docs>.



# Contents

---

## Chapter 1: Installation and Upgrade 7

About this Guide .....	7
What's New for the Upgrade Process .....	8
New Installer .....	8
Preserving Your File Directory Customizations .....	8
Upgrading Large Datasets .....	10
Database Template Image for New Installations .....	10
New Log File Names .....	11
Dropped Languages .....	11
Supported Upgrade Paths .....	11
Basic Upgrade Process .....	12
What's New for the Report Server and Reports.....	15
Changes to Existing CA PPM Universes .....	16
Upgrade Considerations.....	17
Upgrade Tips .....	20
Known Issues.....	23
Duplicate Cost Plan Code Error .....	23
Missing Data for Resource Financials.....	24
Upgrade Fails if the Default Language for the Admin User Is Not English .....	24
Resume Capability During Upgrade .....	24

## Chapter 2: Administration 25

Auto-Suggest Lookups and Multivalued Lookups in Lists .....	25
New User Group and Access Rights .....	25
Configurable Notifications .....	26
XDM Forms .....	27
New Accessibility Options .....	27
Rooms and Equipment, Events, and Event Calendar Removed .....	28
Auto-Numbering Link Removed from the Data Administration Menu .....	28

## Chapter 3: Project Management 29

New Gantt Page .....	29
Miscellaneous Project Management Changes .....	30
New Project Attribute .....	30
Project Management XML Open Gateway (XOG) Changes.....	31

---

## **Chapter 4: Financial Management** **33**

Multiple Grouping Attributes in Cost Plan .....	33
Process Enabled Cost Plans .....	33
Improvements Using the Resource Plan .....	34
Simple Budget Changes .....	34
Entity Plan Defaults .....	35
System Currency.....	36
External Billing Removed.....	36
Self View and Aggregate View Removed .....	36
Test Rate Matrix Removed .....	36
Changes to Financial Management Links .....	37
Financial XML Open Gateway (XOG) Changes.....	37

## **Chapter 5: Studio** **39**

UI Themes .....	39
Object Actions .....	40
Custom Fiscal Time-scaled Values.....	40
Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets .....	40
Charts .....	41
HTML Portlet Changes.....	42
Tab Changes .....	42
Export to PowerPoint or Excel with Internet Explorer 9 .....	43
New Xcelsius Stock Dashboards .....	43

## **Chapter 6: User Interface** **45**

New Menu Bar and General Navigation.....	45
CAPA Learn Link.....	46
Buttons .....	46
Inline Editing for Grids and Lists.....	46
Display as Pop-up Attribute .....	47
Font Settings .....	47

## **Chapter 7: Architecture** **49**

Architecture Changes .....	49
Memory Requirements .....	50

## **Chapter 8: Data Model Changes** **51**

Database Table Changes .....	51
------------------------------	----

# Chapter 1: Installation and Upgrade

---

This section contains the following topics:

[About this Guide](#) (see page 7)

[What's New for the Upgrade Process](#) (see page 8)

[Supported Upgrade Paths](#) (see page 11)

[Basic Upgrade Process](#) (see page 12)

[What's New for the Report Server and Reports](#) (see page 15)

[Upgrade Tips](#) (see page 20)

[Known Issues](#) (see page 23)

## About this Guide

This guide provides information about the following:

- System preparation before upgrading
- Overview of the upgrade process
- Post-upgrade tasks
- CA Clarity PPM v13 features and enhancements and upgrade actions required for them

Look for recent updates to the Change Impact and Upgrade document before upgrading to CA Clarity PPM v13. The most recent edition of this document and all CA Clarity PPM guides are available from the CA Clarity PPM v13 bookshelf posted to the CA Clarity PPM product support area and documentation area on CA Support Online ([support.ca.com](http://support.ca.com)).

**Important!** Review this entire guide before upgrading to CA Clarity PPM v13. This guide provides insight on planning the upgrade and helps you determine the upgrade options that best suit your business needs. Use this guide to help plan your CA Clarity PPM v13 training and roll-out efforts.

## What's New for the Upgrade Process

### New Installer

The new v13.0 installer includes two components: the v12.1.1 installer and the v13.0 upgrade program.

The installer takes the following actions automatically:

- If your current CA Clarity PPM version is earlier than v12.1.1, the new installer runs the 12.1.1 upgrade automatically before running the 13.0 upgrade process.
- If your current version is v12.1.1, the new installer goes directly to the 13.0 upgrade process.

### Preserving Your File Directory Customizations

During the upgrade, you are prompted for the target installation directory. New preupgrade and postupgrade steps let you copy files to and from the CA Clarity PPM directory using ant-based scripting. Use ant scripts to automate preserving and restoring customization in the CA Clarity PPM directories.

Templates are provided in release-specific upgrade folders located in the installer root directory (at the same level as install.bat file). The templates are: *preprocess-upgrade.xml* and *postprocess-upgrade.xml*.

**Example of preprocess-upgrade.xml script**

```
<project name="content" default="upgrade" basedir=".">
  <target name="upgrade">
    <echo>Preserving customer specified files prior to upgrade from install.dir =
    ${install.dir}</echo>
    <if fileexists="${install.dir}" not="true">
      <fail>Install dir not specified = ${install.dir}</fail>
    </if>
    <delete dir="upgrade_temp"/>
    <mkdir dir="upgrade_temp" />
    <!-- Uncomment the copy below and list the files to be included for preservation
    -->
    <copy todir="upgrade_temp">
      <fileset dir="${install.dir}" >
        <include name="myfiles/my*.*"/>
        <include name="abb/*01.jar"/>
        <include name="a*01.jar"/>
      </fileset>
    </copy>
  </target>
</project>
```

**Example of postprocess-upgrade.xml script**

```
<project name="content" default="upgrade" basedir=".">
  <target name="upgrade">
    <echo>Restoring customer specified files after upgrade to install.dir =
    ${install.target.dir}</echo>
    <if fileexists="${install.target.dir}" not="true">
      <fail>Install dir not specified = ${install.target.dir}</fail>
    </if>
    <!-- Uncomment the copy task below and list the files to be restored that were
    preserved in
    the preprocess-upgrade.xml script.-->
    <copy todir="${install.target.dir}">
      <fileset dir="upgrade_temp" >
        <include name="myfiles/my*.*"/>
        <include name="abb/*01.jar"/>
        <include name="a*01.jar"/>
      </fileset>
    </copy>
  </target>
</project>
```

## Upgrading Large Datasets

If your CA Clarity PPM upgrade processes a large volume of data, CA recommends that you override the default memory settings used by the upgrade. The following use cases are covered:

- [Upgrade from a version less than v12.1.1](#) (see page 10)
- [All upgrades for large datasets](#) (see page 10)

### Upgrade From a Version Less Than v12.1.1

You can override the default memory settings provided in the CA Clarity PPM v13.0 installer for the v12.1.1 portion of the upgrade. Create a file named *memory.properties* and place it in the install/config directory. Set the desired memory values in that file.

The default values used during upgrade are:

- defaultScriptMaxMem=1024m
- defaultScriptPermGenMem=128m

Sample settings in the *memory.properties* file:

- defaultScriptMaxMem=2560m
- defaultScriptPermGenMem=512m

### All Upgrades (including upgrades from less than v12.1.1)

You can pass the higher memory settings for the v13.0 portion of the upgrade directly on the install command line. In addition to any other install parameters, pass the new values like this:

```
install -DdefaultScriptMaxMem=<new value> -DdefaultScriptPermGenMem=<new value>
```

## Database Template Image for New Installations

If you install CA Clarity PPM v13.0 as a fresh (new) install, import the CA Clarity PPM 13.0 database template image before you install. CA Clarity PPM now uses a backup-based database deployment mechanism. Instead of building the database at installation time, CA Clarity PPM provides a prebuilt, fully-populated database backup *base image* on the installation DVD. The base image contains everything that a new CA Clarity PPM installation requires.

The DVD contains the following:

- Microsoft SQL Server base image, compatible with all supported SQL Server versions.
- Oracle base image, compatible with all supported Oracle versions.

For information on importing a database template image, see the *Installation Guide*.

## 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

## Supported Upgrade Paths

The supported upgrade paths for CA Clarity PPM v13 include:

- CA Clarity PPM 8.1 or any 8.1 fix pack or service pack
- CA Clarity PPM 12.0 or any 12.0 service pack
- CA Clarity PPM 12.1

**Note:** Customers on 12.1.0.5849 should be patched with v12.1.0.4a before upgrading.

- CA Clarity PPM 12.1.1

**Important!** Customers on CA Clarity PPM 12.1.2 or higher should not upgrade to v13. For best results, wait for a supported upgrade path to a post-v13 service pack.

## Basic Upgrade Process

The following process shows the basic steps for upgrading to CA Clarity PPM v13.

1. Install the prerequisite third-party software.

Review the Release Notes "Compatibilities" chapter for product architecture stack information. Notable changes include:

  - Dropped support for 32-bit third-party vendor applications.
  - Java runtime must be a supported 64-bit version.
  - Dropped support for MS SQL Server 2005. If you use MS SQL Server 2005 currently, CA recommends upgrading your database to MS SQL server 2008 or 2008 R2 **before** upgrading to CA Clarity PPM v13.0.
  - Dropped Actuate as a supported reporting solution.
  - Dropped integration support for Microsoft Project 2000, 2002, and 2003.
2. Create a full backup of your database, file systems, and customizations (if applicable).

**Best Practice:** Take a *cold* backup to keep sequences in line.
3. Remove customer-added database triggers, stored procedures, indexes, views, and constraints before upgrading.

Due to database schema changes for this release, most custom triggers, indexes, and constraints can cause the upgrade to fail. Customer-added triggers should be removed, not disabled.
4. Review the steps for installing and upgrading in the *Installation Guide*.

Notable change:

  - The installation for an upgrade prompts for the current CA Clarity PPM folder and a target CA Clarity PPM folder. You can indicate the same folder or different folders for these prompts. If you indicate the same folder for both prompts, the existing folder is renamed and CA Clarity PPM v13.0 is installed into an empty folder with the target folder name.
5. Install or upgrade using the steps in the Installation Guide.
6. Complete the following post-installation steps:
  - a. Verify that all installation steps completed successfully.
  - b. Review the Clarity System Administration server admin.log and install.log for errors.
  - c. Reapply database and file system customizations.
  - d. If you have custom Xcelsius dashboards, see [Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets](#) (see page 40).

7. Install or upgrade CABI 3.2 (BusinessObjects) and complete the following steps:

- a. If you are installing CABI for the first time, review the CA Clarity PPM requirements.

See the *Installation Guide* chapter named "Third-Party Software" for more information.

- b. If you are upgrading from a version earlier than CA Clarity PPM v12.1, reset the passwords of your BusinessObjects report users.

Resetting is necessary for all preupgrade users who need to login to Infoview and run reports. You can also set up BusinessObjects trusted authentication between BusinessObjects and CA Clarity PPM, which provides LDAP integration with BusinessObjects and CA Clarity PPM.

- c. Import the universes and reports.

- d. Manually restart scheduled reports.

Scheduled reports configured before the upgrade to this release do not automatically run after the upgrade.

8. Install your current add-ins and connectors.

Notes:

- Review the topic in the *Installation Guide* named "How to Install Add-Ins."
- Back up your CA Clarity PPM installation before installing each add-in so that you can restore the application if necessary.
- The install.log is now written to the CA Clarity PPM install directory instead of the directory where you extracted the add-in jar file. For example, <install.dir>/logs/content/install/<addin.id>/install log.
- 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.

9. 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.

#### 10. 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:

- 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 the NSQL query is valid.

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

- a. User the XML Open Gateway (XOG) to export the failing query.
- b. Correct the broken query constructs or fields.
- c. Use XOG to import the corrected query.
- d. Click the Preview button.
- e. Confirm the NSQL query is valid.

## What's New for the Report Server and Reports

This release of CA Clarity PPM supports CABI 3.2 and BusinessObjects Reporting Server. See the Compatibilities appendix in the *Release Notes* for a complete list of supported CABI 3.2 configurations.

The following changes were made to reports:

- The following stock reports were removed due to functionality that is no longer offered in CA Clarity PPM:
  - Pre-Billing Report
  - Invoice Register Report
  - Customer Invoice Report
- CA Clarity PPM v13 does not support Actuate. Any stock CA Clarity PPM report definitions for Actuate under Reports and Jobs will be deleted during the upgrade.
- A new Investments Financial universe has been added to this release: *CA PPM Investment Financials v13*.
- The existing *CA PPM Investments Financial* universe was modified to provide backward compatibility with custom reports written for previous versions.
- The following change was made to shared reports starting with CA Clarity PPM v12.1:
  - The report can be viewed in PDF format only. A shared report does not use the BusinessObjects report viewer.

## 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_TRANSCASSES'
                    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_TRANSCASSES'
                    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 [Data Model Changes](#) (see page 51) for a list of changed and deprecated fields.

## Upgrade Considerations

Review the details in the *Installation Guide* for complete information about installing and upgrading the BusinessObjects server. Use this section as a guideline to plan your upgrade. The following installation and upgrade use cases are covered:

- [Upgrade from a version earlier than v12.1 to v13](#) (see page 18)
- [Upgrade from v12.1 or v12.1.1 to v13.0](#) (see page 19)
- [New Installation of v13.0](#) (see page 20)

### Upgrade actions:

- If you customized or changed any out-of-the-box reports, make a backup copy of the modified reports. Place the copies in a separate custom folder under the Public Folders/CA Reports/CA Clarity directory. The out-of-the-box reports are overwritten when the new v13.0 reports are installed.
- If you used any Clarity universe objects, create a custom universe and link it to the Clarity universe. The Clarity universe is overwritten when the new v13.0 universes are installed.

## Upgrade from a Version Earlier than v12.1

BusinessObject report instances created in a version earlier than v12.1 can be viewed only as a PDF file after the upgrade.

### Upgrade Actions:

#### Preupgrade:

- Upgrade to CABI 3.2. Refer to the v12.1 CABI 3.2 upgrade instructions in the Clarity 12.1 *Change Impact and Upgrade Guide* and the *Installation Guide*.
- If you modified any out-of-the-box reports, move the modified reports to a custom report folder on the BusinessObjects server before installing the v13 reports.

#### Upgrade:

- Run the Import Wizard to import the two BIAR files specific to your database type (Oracle or MSSQL). The out-of-the-box 12.0.6 reports are overwritten during the upgrade. If you previously purchased the GSE Universes from CA Services, these universes are not overwritten by the v13 out-of-the-box universes.

#### Post-Upgrade:

- Update any user and security configurations required to support CABI 3.2 and trusted authentication integration with CA Clarity PPM. See the *Installation Guide* for details.
- Reset the BusinessObjects InfoView passwords for all preupgrade users who need to log in to InfoView and run reports.
- Use BusinessObjects Central Administration to reset passwords for multiple users
- Manually restart scheduled reports. Scheduled reports configured before the upgrade to 13.0 will not automatically run after the upgrade.
- If LDAP is not configured, 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 cannot run or open a report unless a BusinessObjects account is created explicitly for the user.

The job creates a user in BusinessObjects 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.

## Upgrade from v12.1 or v12.1.1

If you previously purchased the GSE Universes from CA Services, these universes are not overwritten by the v13.0 out-of-the-box universes.

There are no new user or security configurations; v13.0 uses the same CABI 3.2 requirements and trusted authentication integration with CA Clarity PPM as v12.1 and v12.1.1.

### Upgrade Actions:

#### Pre-Upgrade:

- If you are not already using CABI 3.2, upgrade to CABI 3.2. See *Clarity Installation* guide for details.
- If you modified any out-of-the-box reports, move the modified reports to a custom report folder on the BusinessObjects server before installing the v13 reports.

#### Upgrade

- Run Import Wizard to install the two BIAR files specific to your database type (Oracle or MSSQL).

#### Post-Upgrade

- Manually restart scheduled reports. Scheduled reports configured before the upgrade to 13.0 will not automatically run after the upgrade.
- If LDAP is not configured, 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 cannot run or open a report unless a BusinessObject account is created explicitly for the user.

The job creates a user in BusinessObjects 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.

## New Installation of v13.0

The following actions indicate what to do to get reports up and running for a new installation.

For complete information about installing CABI 3.2 and setting up reports, see the *Installation Guide*.

### Installation Actions:

Preparing for installation:

- Install CABI 3.2 on the BusinessObjects server.

Installation:

- Run the Import Wizard to install the two BIAR files specific to your database type (Oracle or MSSQL).

Post Installation

- Update any user and security configurations required to support CABI 3.2 and trusted authentication integration with CA Clarity PPM. See the *Installation Guide* for details.
- If LDAP is not configured, 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 cannot run or open a report unless a BusinessObject account is created explicitly for the user.

The job creates a user in BusinessObjects 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.

## Upgrade Tips

### Preupgrade

- You must have the standard base calendar available in your CA Clarity PPM application before you upgrade. If you deleted the shipped calendar called *Standard*, you must create it before upgrading. Contact Support if your CA Clarity PPM instance is missing the Standard base calendar. (CLRT-63337)
- Before upgrading, process all "In progress" transactions into WIP.

Verify the following:

- 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 required. If extra data is getting sliced, that effort adds to database size and performance.

- Clear the Datamart and recreate the data post-upgrade to improve the processing time of the upgrade. Use *NBI\_Clean\_Datamart\_sp* to clear the Datamart. The script does not clear the following:
  - The configuration table (*NBI\_CFG%*)
  - Time facts tables that contain historical information (*NBI\_PM\_PT\_FACTS* and *NBI\_FM\_PT\_FACTS*)

After the upgrade, run the following jobs to repopulate the Datamart tables:

- Datamart Extraction job
- Datamart Rollup job
- Complete and put on HOLD all processes.
- Remove or delete process history, notifications, jobs or logs, looking for items that do not need to be retained.
- Pause all scheduled jobs.
- Run the CSA Health Report to verify all components are installed and functioning before and after the upgrade.
- Remove all CA Clarity PPM services before running the upgrade using the command: *niku remove all*.
- Verify that no files or folders in the install folder are in use anywhere.

### Post Upgrade

- Check performance metrics. During the upgrade, performance metrics are collected and the following files are written to the Logs folder:

- ScriptMetrics.xml
- Bootstrap.xml

The files contain the following information:

- A list of all upgrade scripts executed
- Row count of every table processed by pre-upgrade and post-upgrade processing
- Execution time and results for each script or object
- Verify that Beacon is running to manage services and view logs.

**Note:** Beacon is required be running always for CA Clarity PPM v13.

- Ask your functional experts to review your upgraded test system side-by-side with a working preupgrade system.

**Tip:** Use dual monitors for side-by-side comparison.

- Review the *app-ca.log* after the functional experts have used the test environment and look for new errors.
- Review customizations: Customer-added database triggers, custom indexes and constraints, file system changes, and custom interfaces. In short, review anything that did not come out-of-the-box with CA Clarity PPM. Adjustments can be required for customizations to work with this release.

## Known Issues

### Duplicate Cost Plan Code Error

The duplication of a *plan* code within a financial plan can cause the upgrade process to fail. The plan code for each plan type within the investment must be unique. For example, you can have a cost plan with the code *MasterPlan2011* and a budget plan with same code, but you cannot have two cost plans with code *MasterPlan2011* for the same investment. The unique database constraint for this rule was added in v13.0.

Due to concurrency issues, there may be a data issue in previous versions. In the case where a duplicate plan type code exists within a single financial plan, the upgrade process fails with an appropriate error message. You must correct the data issue before resuming the upgrade process.

Run the following query to identify possible data issues before you start the upgrade:

```
SELECT p1.id, p1.code, p1.name
FROM fin_plans p1, fin_plans p2
WHERE p1.id != p2.id
AND p1.object_id = p2.object_id
AND p1.code = p2.code
AND p1.plan_type_code = p2.plan_type_code
```

If this query returns any rows, it indicates issues with `fin_plans` table data.

CA recommends that you review all such records and rename the codes for duplicate records. Leave all other data intact. A sample query is available to fix the data issues. Because this known issue deals with financial information, review the query carefully before deciding to use it. The following query appends `_<internalid>` to the duplicate plan code.

```
<!-- Oracle -->
UPDATE fin_plans
SET code = code || '_' || to_Char(id)
WHERE id IN
    ( SELECT p1.id
      FROM fin_plans p1, fin_plans p2
     WHERE p1.id != p2.id
       AND p1.object_id = p2.object_id
       AND p1.code = p2.code
       AND p1.plan_type_code = p2.plan_type_code
    )
```

```
<!-- Mssql -->
UPDATE fin_plans
SET code = code + '_' + CAST(id AS VARCHAR)
WHERE id IN ( SELECT p1.id
```

```
FROM fin_plans p1, fin_plans p2
WHERE p1.id != p2.id
AND p1.object_id = p2.object_id
AND p1.code = p2.code
AND p1.plan_type_code = p2.plan_type_code
)
```

## Missing Data for Resource Financials

If the Resource Class or Transaction Class fields are null for Resource financials, the upgrade process fails. The data must be corrected before you resume the upgrade process.

The *not null* database constraint for columns RESOURCE\_CLASS and TRANSCCLASS in table PAC\_MNT\_RESOURCES was added in v13.0. If you are upgrading from a previous version of CA Clarity PPM, it is possible the information may be missing.

CA recommends running the following query to identify records with this data issue before starting the upgrade.

```
Select * from pac_mnt_resources where RESOURCE_CLASS is null OR transclass is null
```

If this query returns any rows, it indicates issues with the PAC\_MNT\_RESOURCES table data. CA recommends reviewing all returned records and updating the records with valid transaction class and resource class values.

## Upgrade Fails if the Default Language for the Admin User Is Not English

A portion of the upgrade relies on the English locale when it is importing content using the XML Open Gateway. This import fails if the default language of the admin user is not set to English. The workaround is to set the admin user language to English. (CLRT-21964)

## Resume Capability During Upgrade

The ability to resume during an upgrade is not supported in this CA Clarity PPM version. It will be supported in a future release. If your upgrade to v13.0 fails, review the logs to determine the reason for the failure, restore your working pre-upgrade version and database, correct the failure, and restart the upgrade.

# Chapter 2: Administration

---

This section contains the following topics:

[Auto-Suggest Lookups and Multivalued Lookups in Lists](#) (see page 25)

[New User Group and Access Rights](#) (see page 25)

[Configurable Notifications](#) (see page 26)

[XDM Forms](#) (see page 27)

[New Accessibility Options](#) (see page 27)

[Rooms and Equipment, Events, and Event Calendar Removed](#) (see page 28)

[Auto-Numbering Link Removed from the Data Administration Menu](#) (see page 28)

## 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
<i>Account Settings - Navigate</i>	Makes the Account Settings link available in the Home menu so that a user can navigate to the Account Settings page.
<i>Organizer - Access</i>	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.
<i>Projects - Navigate</i>	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

# Chapter 3: Project Management

---

This section contains the following topics:

[New Gantt Page](#) (see page 29)

[Miscellaneous Project Management Changes](#) (see page 30)

[New Project Attribute](#) (see page 30)

[Project Management XML Open Gateway \(XOG\) Changes](#) (see page 31)

## 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



# Chapter 4: Financial Management

---

This section contains the following topics:

[Multiple Grouping Attributes in Cost Plan](#) (see page 33)

[Process Enabled Cost Plans](#) (see page 33)

[Improvements Using the Resource Plan](#) (see page 34)

[Simple Budget Changes](#) (see page 34)

[Entity Plan Defaults](#) (see page 35)

[System Currency](#) (see page 36)

[External Billing Removed](#) (see page 36)

[Self View and Aggregate View Removed](#) (see page 36)

[Test Rate Matrix Removed](#) (see page 36)

[Changes to Financial Management Links](#) (see page 37)

[Financial XML Open Gateway \(XOG\) Changes](#) (see page 37)

## 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



# Chapter 5: Studio

---

This section contains the following topics:

[UI Themes](#) (see page 39)

[Object Actions](#) (see page 40)

[Custom Fiscal Time-scaled Values](#) (see page 40)

[Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets](#) (see page 40)

[Charts](#) (see page 41)

[HTML Portlet Changes](#) (see page 42)

[Tab Changes](#) (see page 42)

[Export to PowerPoint or Excel with Internet Explorer 9](#) (see page 43)

[New Xcelsius Stock Dashboards](#) (see page 43)

## 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 [Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets](#) (see page 40).

## 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.

Studio Name	File Name	Description
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

# Chapter 6: User Interface

---

This section contains the following topics:

[New Menu Bar and General Navigation](#) (see page 45)

[CAPA Learn Link](#) (see page 46)

[Buttons](#) (see page 46)

[Inline Editing for Grids and Lists](#) (see page 46)

[Display as Pop-up Attribute](#) (see page 47)

[Font Settings](#) (see page 47)

## 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



# Chapter 7: Architecture

---

This section contains the following topics:

[Architecture Changes](#) (see page 49)

[Memory Requirements](#) (see page 50)

## Architecture Changes

The following table shows the architecture changes for this release.

Component	Changes to Supported Software Versions
Server Operating System	<ul style="list-style-type: none"><li>■ CA provides support only for upgrading customers with pre-existing installations on Solaris and HP-UX; dropped 32-bit operating systems</li><li>■ Added support for SUSE Enterprise Linux 11</li><li>■ Added support for RHEL 6.0</li></ul>
Server DB	<ul style="list-style-type: none"><li>■ Added Microsoft SQL Server 2008 R2</li><li>■ Dropped support for Microsoft SQL Server 2005</li></ul>
Server Java Runtime	<ul style="list-style-type: none"><li>■ Dropped 32-bit support</li></ul>
Application Server	<ul style="list-style-type: none"><li>■ Dropped 32-bit support</li></ul>
Report Server	<ul style="list-style-type: none"><li>■ Added support for CA Business Intelligence r3.2</li><li>■ Dropped support for CA Business Intelligence r3</li><li>■ Dropped support for Actuate</li></ul>
Client browser	<ul style="list-style-type: none"><li>■ Added Firefox 4.0 through 8.0</li><li>■ Added IE 9.0</li><li>■ Dropped support for IE7 and IE6</li></ul>
Client applications	<ul style="list-style-type: none"><li>■ Support Crystal Reports Designer 2008 SP3 or higher (instead of any service pack)</li><li>■ Dropped support for Microsoft Project 2000, 2002 and 2003</li></ul>
SharePoint Server	<ul style="list-style-type: none"><li>■ Added SharePoint Server 2010</li><li>■ Dropped support for SharePoint Server 2007</li></ul>

## 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.

# Chapter 8: 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	<b>Added</b>
	■ CREATED_DATE
	■ CREATED_BY
	■ LAST_UPDATED_DATE
	■ LAST_UPDATED_BY
CBK_GL_ALLOCATION_DETAIL	■ OVERHEAD_ENTITY_ID
CLNTCLASS	<b>Added</b>
	■ CREATED_DATE
	■ CREATED_BY
	■ LAST_UPDATED_DATE
	■ LAST_UPDATED_BY

Table	Column
FIN_COST_PLAN_DETAILS	<b>Updated</b>
	■ SOURCE (Updated)
	<b>Added</b>
	■ TRANSACTION_CLASS_ID ROLE_ID
	■ CHARGE_CODE_ID
	■ INPUT_TYPE_CODE_ID
	■ LOCATION_ID
	■ RESOURCE_ID
	■ RESOURCE_CLASS_ID
	■ DEPARTMENT_ID
	<b>Deleted</b>
	■ 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	<b>Added</b> <ul style="list-style-type: none"> <li>■ IS_SYS_VAL_FOR_TCC</li> <li>■ TOTAL_COST_OF_CAPITAL</li> <li>■ IS_SYS_VAL_FOR_RR</li> <li>■ REINVESTMENT_RATE</li> <li>■ INITIAL_INVESTMENT</li> <li>■ BUDGET_IRR</li> <li>■ BUDGET_MIRR</li> <li>■ BUDGET_PAYBACK_PERIOD</li> <li>■ FORECAST_IRR</li> <li>■ FORECAST_MIRR</li> <li>■ FORECAST_PAYBACK_PERIOD</li> <li>■ PLANNED_IRR</li> <li>■ PLANNED_MIRR</li> <li>■ PLANNED_PAYBACK_PERIOD</li> </ul>
INV_INVESTMENTS	<b>Added</b> <ul style="list-style-type: none"> <li>■ TARGET_MANAGER_ID</li> <li>■ ASSGN_POOL</li> </ul>
INV_Projects	<b>Deleted</b> <ul style="list-style-type: none"> <li>■ Prbasestart</li> <li>■ Prbasefinish</li> <li>■ prbasetime</li> </ul>
PAC_MNT_RESOURCES	<b>Added</b> <ul style="list-style-type: none"> <li>■ CREATED_DATE</li> <li>■ CREATED_BY</li> <li>■ LAST_UPDATED_DATE</li> <li>■ LAST_UPDATED_BY</li> </ul>

Table	Column
PMA_AGGR_VALUES	<b>Added</b> <ul style="list-style-type: none"><li>■ INITIAL_INVESTMENT</li><li>■ PLANNED_IRR</li><li>■ PLANNED_MIRR</li><li>■ PLANNED_PAYBACK_PERIOD</li><li>■ PLANNED_BREAKEVEN</li><li>■ BUDGET_IRR</li><li>■ BUDGET_MIRR</li><li>■ BUDGET_PAYBACK_PERIOD</li><li>■ BUDGET_BREAKEVEN</li><li>■ FORECAST_IRR</li><li>■ FORECAST_MIRR</li><li>■ FORECAST_PAYBACK_PERIOD</li><li>■ FORECAST_BREAKEVEN</li></ul>
PRAssignment	<b>Deleted</b> <ul style="list-style-type: none"><li>■ Prbasepattern</li><li>■ Prbasesum</li><li>■ Prbasemax</li></ul>
PROJCLASS	<b>Added</b> <ul style="list-style-type: none"><li>■ CREATED_DATE</li><li>■ CREATED_BY</li><li>■ LAST_UPDATED_DATE</li><li>■ LAST_UPDATED_BY</li></ul>

Table	Column
PRTask	<b>Deleted</b> <ul style="list-style-type: none"> <li>■ Prbasestart</li> <li>■ Prbasefinish</li> <li>■ Prbaseduration</li> <li>■ Prbaseisfixed</li> <li>■ Prbasetime</li> </ul>
WIPCLASS	<b>Added</b> <ul style="list-style-type: none"> <li>■ CREATED_DATE</li> <li>■ CREATED_BY</li> <li>■ LAST_UPDATED_DATE</li> <li>■ LAST_UPDATED_BY</li> </ul>

**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).