

CA Clarity™ PPM

Change Impact and Upgrade Guide - On Premise

Release 13.3.00



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 is proprietary information of CA and may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA.

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 © 2013 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 that you need for your Home Office, Small Business, and Enterprise CA Technologies products. At <http://ca.com/support>, you can access the following resources:

- 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.

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: Change Impact and Upgrade	9
---	----------

Chapter 2: Installation and Upgrade	11
--	-----------

Upgrading to Release 13.3	11
Installation Checker.....	11
Changes to the PRJ_BLB_SLICES Table Require Action for an Oracle Database	12
Upgrade suggestion for Niku 6.x, Clarity 7.x, and CA Clarity 8.x.....	13
MS SQL Server Database Compatibility Level	14
Java 7.....	14
Third-Party Jar Files.....	15
J2EE Installations.....	15
Clarity System Administration (CSA) Changes.....	15
Oracle DB National Character Set Is Supported	16
Oracle 11g Template Is No Longer Available	16
Filestore and Search Index Location Changes.....	17
CSRF Strategies.....	21
Add-ins Compatibilities	21
Add-in Installation	23
CA Clarity PPM Solution Pack Compatibility	23
Reports.....	23
Preserving Your File Directory Customizations	29
Upgrading Large Data Sets	30
Database Backup Image for New Installations.....	31
Supported Upgrade Paths	31
Basic Upgrade Process	34
Upgrade Tips	38
Known Issues.....	41
Duplicate Cost Plan Code Error	41
Missing Data for Resource Financials.....	42
Upgrade Fails if the Default Language for the Admin User Is Not English	42
Resume Capability During the Upgrade	42
Export Icons in Resource Planning Tabs Not Functioning	43
Missing General Action Menu After Upgrade	43
Upgrade Stops if OBS Unit Names Have Special Characters	44
Automatic Update to Curly Brackets in OBS Names During Upgrade.....	46
Report Instance Export from the Report Library	46
Orphan Records in Table CMN_SEC_ASSGND_OBJ_PERM for MSSQL Users	46

CA Clarity PPM Upgrade and Oracle Enterprise Table Compression	47
Update Operation For Some Project Object Attributes Does Not Appear in the Audit Trail.....	47
WebSphere Deployment Does Not Show Database Information in CA Clarity System Administration	48
Generic J2EE Upgrade Produces an Error If the J2EE.home Property Is Not Set	48
An Upgrade With a Non-RAC Database Results in a Disconnect Between the Application Server and the Database (13.3).....	49
Google Chrome Version 30.0.1599.66 m Issues	49
Gantt Printing Issue with Chrome Browser.....	50
Using the Value -1 to Disable the New XOG Governor Limit Does Not Work Correctly for XOG Write	50
Rate Matrix Extraction Job's Scheduled Instances and Job Logs Deleted	50
Documentation Changes	51
Chapter 3: Administration	53
License Type Names Have Changed	53
Process Monitor	54
Changes to the Global Audit Trail Page	54
Chapter 4: Add-in Enhancements	55
CA Microsoft Project Interface Changes	55
Connector for Microsoft SharePoint Changes.....	56
Chapter 5: Demand Management	57
Financially Enabled Ideas	57
Chapter 6: Financial Management	59
Inactive Resources in Cost Plan Population	59
Chapter 7: Open Workbench	61
Java Runtime Environment for Open Workbench	61
Chapter 8: Portfolio Management	63
Portfolio Maximums for Investments, Roles, and Attributes.....	63
Aggregation Rows Added to the Portfolio Waterlines View	63
Chapter 9: Project Management	65
Gantt View Can Be Printed.....	65
Task Duration on the Gantt View Is Editable.....	65

Chapter 10: User Interface **67**

CA Clarity PPM Login Page Can Be Rebranded.....	67
Bubble Chart Improvement.....	68
Drop-down List with More Than 20 Values.....	68
Export Level for Excel and PowerPoint Has Changed.....	69
Chart Y-Axis Field Option Change.....	69

Chapter 11: XML Open Gateway (XOG) Changes **71**

XOG Governor Limit	71
--------------------------	----

Chapter 12: Data Model Changes **73**

Added Tables.....	73
Updated Tables	73
Dropped Tables	74

Chapter 1: Change Impact and Upgrade

This article provides the following information:

- The system preparation before upgrading
- An overview of the upgrade process
- The post-upgrade tasks
- Features and enhancements for this release and the upgrade actions that are required for them

Important! If you are upgrading from a release earlier than Release 13.1, review the *Change Impact and Upgrade Guide* for the 13.0, 13.1, 13.2 releases, and this release. If you are upgrading from Release 13.2 to this release, review this guide before upgrading. 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 plan your training and rollout efforts.

Look for recent updates to this guide before upgrading. The most recent edition of this guide and all CA Clarity PPM documentation are available from the CA Clarity PPM bookshelf. The bookshelf is available on the [Documentation page of CA Support Online](#).

Chapter 2: Installation and Upgrade

This section contains the following topics:

[Upgrading to Release 13.3](#) (see page 11)

[Supported Upgrade Paths](#) (see page 31)

[Basic Upgrade Process](#) (see page 34)

[Upgrade Tips](#) (see page 38)

[Known Issues](#) (see page 41)

[Documentation Changes](#) (see page 51)

Upgrading to Release 13.3

This section provides information about installation and upgrade changes for Release 13.3.

Installation Checker

The Installation Checker (checkinstall) utility assesses an installation or an upgrade. The utility runs automatically at the start of an installation or upgrade and at the end of an upgrade attempt. However, you can run it as a standalone utility. The utility produces a report results file, precheck-results.html, in the <install-root>/checkinstall/check-logs directory.

Upgrade Action: For best results, run the Installation Checker before starting the full installation and upgrade process. Carefully evaluate and resolve warnings before proceeding. For more information about the Installation Checker, see the *Installation Guide*.

Note: On Solaris 10 systems, you can receive the following message:

Warning: Could not verify 64-bit architecture. Ensure this machine is 64-bit and that it is running 64-bit Java.

If the target system is fully compliant with the Release 13.3 installation prerequisites, you can safely ignore this message.

Changes to the PRJ_BLB_SLICES Table Require Action for an Oracle Database

The ID, UNIT, LAST_UPDATED_DATE and LAST_UPDATED_BY columns in the PRJ_BLB_SLICES table have been dropped for the 13.3 release. If you are using Oracle, the table is replicated before the columns are dropped. The replication requires you to verify that the tablespace that PRJ_BLB_SLICES occupies is large enough to accommodate the temporary size increase.

Upgrade Action:

To determine if the tablespace can deal with this condition, have your database administrator (as sysdba) run the following query. Change the schema owner (**bold**) to the owner of the CA Clarity PPM schema:

```
select SLC.owner, SLC.table_name, SLC.TABLESPACE_NAME, SLC.MB MB_NEEDED,
TBSPC.MB_FREE MB_FREE, SIZING.MAX_MB, SIZING.MB_USED,
EXT.AUTOEXTENSIBLE
FROM
(select owner, table_name, NVL(round((num_rows*avg_row_len)/(1024*1024)),0) MB,
TABLESPACE_NAME
from all_tables
where owner = 'CLARITY'
and table_name = 'PRJ_BLB_SLICES') SLC
INNER JOIN (select df.tablespace_name,
(df.totalspace - tu.totalusedspace) "MB_FREE"
from
(select tablespace_name,
round(sum(bytes) / 1048576) TotalSpace
from dba_data_files
group by tablespace_name) df,
(select round(sum(bytes)/(1024*1024)) totalusedspace, tablespace_name
from dba_segments
group by tablespace_name) tu
where df.tablespace_name = tu.tablespace_name) TBSPC ON (SLC.TABLESPACE_NAME =
TBSPC.TABLESPACE_NAME)
INNER JOIN (select distinct(autoextensible), tablespace_name from dba_data_files)
EXT on (slc.tablespace_name = ext.tablespace_name)
INNER JOIN (select tablespace_name
, count(*) as no_of_data_files
, sum(MAXBYTES)/(1024*1024)*count(*) as MAX_MB
, sum(user_bytes)/(1024*1024) MB_USED
, round((sum(user_bytes)/(1024*1024))/(sum(MAXBYTES)/(1024*1024))*100,2)
PERCENT_USED
from dba_data_files
group by tablespace_name) SIZING ON (SLC.TABLESPACE_NAME = SIZING.TABLESPACE_NAME)
```

The following example shows the kind of results that the query returns:

OWNER	TABLE_NAME	TABLESPACE_NAME	MB_NEEDED	MB_FREE	MAX_MB	MB_USED	AUTO-EXTENSIBLE
CLARITY	PRJ_BLB_SLICES	USERS_LARGE	1306	5020	90000	15997	YES

If AUTOEXTENSIBLE is YES:

The tablespace for PRJ_BLB_SLICES can grow automatically up to the MAX_MB value. Ensure that the MAX_MB value is higher than the MB_NEEDED + MB_USED.

If AUTOEXTENSIBLE is NO:

Ensure that the MB_NEEDED value is less than MB_FREE. If the MB_NEEDED value is not lower, the database administrator can allocate or extend extra data files to the tablespace under the TABLESPACE_NAME column.

We recommend increasing the tablespace at least 20 percent more than is needed. The increase helps to ensure that the tablespace can accommodate standard data growth and the temporary replication.

Upgrade suggestion for Niku 6.x, Clarity 7.x, and CA Clarity 8.x

As a best practice, we recommend the following steps for customers on older versions of this product who are upgrading to Release 13.3:

1. Upgrade to CA Clarity PPM 12.1.1, 12.1.2 or 12.1.3 first.
2. Verify that the upgrade is successful and run the CSA Health Report that is available from CA Clarity System Administration.
3. Create a full backup of the database and runtime file system.
For more information, see [Basic Upgrade Process](#) (see page 34).
4. Proceed with the upgrade to 13.3.

MS SQL Server Database Compatibility Level

Release 13.3 supports database compatibility levels for SQL Server 2008 (100) and SQL Server 2012 (110). A new installation of Release 13.3 on SQL Server 2008 has the correct compatibility level of 100. If you are using SQL Server 2012 for Release 13.3, set the compatibility level to 110 from SQL Server Management Studio or use the following command:

```
EXEC SP_DBCMPTLEVEL <database>, 110
```

Note: SQL Server 2005 compatibility level (90) has been removed and is no longer supported.

To identify the compatibility level, use the following query:

```
SELECT NAME DATABASENAME ,COMPATIBILITY_LEVEL COMPATIBILITYLEVEL FROM  
SYS.DATABASES
```

Upgrade Action: None

Java 7

This release uses Java 7. In addition to the CA Clarity PPM server, the following software clients also require Java 7:

- XML Open Gateway (XOG) client
- Service Connect

Starting with Release 13.3, 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.

Note: For an upgrade from a 13.x version, the server installer prompts for the path of JDK 1.7.

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

Third-Party Jar Files

Because of licensing restrictions for some third-party library .jar files (currently the `jgroups-all.jar` and the `xinclude.jar`), changes were made in how the .jar files ship. The jar files are shipped separately from the CA Clarity PPM image in the installation media. The Release 13.3 `install.jar` image does not contain the .jar files mentioned. Any install packages for a previous version included in the `install.jar` also exclude the .jar files. For each release of CA Clarity PPM, the .jar files are bundled into a folder on the installation media containing third-party libraries .jar file. For Release 13.3, the .jar file is named `thirdparty.libs.13.3.0.jar`.

Upgrade Action: Retrieve the `thirdparty.libs.13.3.0.jar` file from the installation media. Place the .jar file in a location in your file system so that it is accessible to the installer.

Tip: To keep the installer from prompting you for the .jar file location, place the .jar file in the installation root directory. If you place the .jar file in another directory, the installer prompts you for the file location.

J2EE Installations

For an upgrade on an installation that uses *generic* as the vendor type, update the DataDirect JDBC driver .jar files in your third-party application server environment. The version for these files has changed in Release 13.3.

Upgrade Action: Update your DataDirect JDBC driver .jar files. For more information, see the *Installation Guide*.

Clarity System Administration (CSA) Changes

As of Release 13.2, the following functionality is no longer available in CSA:

- A new database image import. We recommend that you have a database administrator perform this import.
- The ability to perform an upgrade.

A *Database* link still appears, but clicking the link results in database status information only.

XDM installation and application packaging are still available.

Upgrade Action: None

Oracle DB National Character Set Is Supported

CA Clarity PPM supports the following character sets:

- DB character sets: UTF8 and AL32UTF8
- National DB character sets: UTF8 and AL16UTF16

Consider the following points when using national DB character sets:

- Asian data is more compact in the AL16UTF16 character set than in UTF8. As a result, you can save disk space and have less disk I/O when most of the multilingual data in your database is Asian.
- We recommend using the UTF8 character set for European data. In this case, data in the UTF8 character set is more compact than in AL16UTF16.

See the Oracle documentation for the advantages and disadvantages of using different character sets. CA Clarity PPM works with UTF8 and AL16UTF16 National character sets.

Upgrade Action: None

Oracle 11g Template Is No Longer Available

As of Release 13.2, the Oracle 11g template is no longer available with the CA Clarity PPM installation media. For information about setting up a database instance for the best performance, see the *Installation Guide*.

The Oracle database backup that is provided with CA Clarity PPM contains the complete schema for a fresh installation of the product. The schema in the backup is named NIKU. The tablespaces are:

- INDX_LARGE
- INDX_SMALL
- USERS_LARGE
- USERS_SMALL

If you want to remap the schema or tablespaces, use the Oracle Datapump options. For information about database import operations and Datapump options, see the Oracle website.

Upgrade Action: None

Filestore and Search Index Location Changes

Two significant changes to the 13.x upgrade process directly affect the filestore feature. The changes require you to act during the upgrade process to ensure that the filestore feature operates correctly after the upgrade.

Note: The actions are necessary if your files are not stored in the database. If the files are stored in the database, no action is required.

You can determine if files are stored in the database using the Clarity System Administration (CSA) application. Log in to the application and navigate to the Documents and Search link under the Properties tab, then review the Store Files in Database property.

Important! If the database is not the filestore repository, action is required. Failure to follow the recommended steps can lead to permanent loss of the filestore contents.

The following changes were made to the upgrade process in Version 13:

- The upgrade process always installs to an empty destination folder. During the upgrade, files and folders that exist in the target installation folder are moved to a new location before the new files are installed. If the filestore folder is located in the runtime folder, it is moved with the other content (not recommended). If the filestore is located outside the runtime folder (the recommended configuration), the filestore location is not moved or copied from the backup location.
- The filestore and search index folder structures were altered to accommodate architectural changes in Version 13. This change requires action for all Version 13 upgrades, whether the filestore was located in the installation folder or not.

Your action depends on the following factors:

- Where the filestore was before the upgrade
- The target installation folder that is selected during the upgrade

The correction must be made immediately after the upgrade completes, before any files are added to the filestore. Any files added to the filestore before the correction is made must be manually preserved using the following steps:

1. Use CA Clarity PPM to retrieve the newly checked-in documents and save them to a temporary location on the file system.
2. Perform the steps for the appropriate use case (A, B, or C) presented in the following Upgrade Action.
3. To check the saved documents back into the CA Clarity PPM filestore, use CA Clarity PPM.
4. Execute the following commands from the <runtime>/bin folder:
`'admin search recreate-index-files'`
`'admin search recreate-index-data'`

Upgrade Action: Complete the filestore and search index correction procedure.

Before you start, create a backup of the filestore so that recovery is possible in the event of an unexpected problem. Your document store could be used before this procedure can be completed. If so, the newly included documents must be added back to the filestore after you complete the correction procedure.

The following use cases illustrate the actions to take. To determine the correct course of action, use the filestore location and target installation folder.

Use Case A

- Filestore location: The filestore was located in the CA Clarity PPM runtime folder before the upgrade.
- Target installation folder: The existing (preupgrade) CA Clarity PPM runtime folder was selected as the target installation folder.

Before the upgrade process ran, the file or index folder was in the <runtime> folder. The upgrade process moved the file or folder to a folder named <runtime>_prev based on the chosen upgrade or installation option. The move resulted in the file or index folder being located in the <runtime>_prev folder. The file or index folder must be moved from the <runtime>_prev folder to another location because any subsequent upgrade attempt deletes this folder.

Perform these steps for this use case:

1. If before the upgrade the filestore location was <runtime>/filestore, copy or move the folders under <runtime>_prev/filestore to a new path:
<new directory>/filestore/clarity

Where <new directory> is located outside of the upgrade resulting <runtime> directory. Having the location outside of the runtime folder follows best practices. Placing the folder outside the CA Clarity PPM installation directory also ensures that this process is not repeated when CA Clarity PPM is upgraded.

Log in to the CSA application, navigate to the Documents and Search link under the Properties tab, and update the Filestore Directory location. For example, if the filestore path is <old clarity install directory>/filestore, modify the path to <new directory>/filestore.

Note: Do not append 'clarity' to the path in the CSA. The CA Clarity PPM architecture adds this update internally.

2. If before the upgrade the search index directory location was <runtime>/searchindex, copy or move the folders under <runtime>_prev/searchindex to a new path:
<new directory>/ searchindex /clarity

Where <new directory> is located outside of the upgrade resulting <runtime> directory. Having the location outside of the runtime folder follows best practices.

Log in to the CSA application and navigate to the Documents and Search link under the Properties tab and update the Index Directory location. For example, if the filestore path is <old clarity install directory>/searchindex, modify the path to <new directory>/searchindex.

Note: Do not append 'clarity' to the path in the CSA. The CA Clarity PPM architecture adds this update internally.

3. Execute the following command from the <runtime>/bin folder:
'admin search recreate-index-files'
'admin search recreate-index-data'

Use Case B

- Filestore location: The filestore was located in the runtime folder before the upgrade.
- Target installation folder: A new, empty folder was selected as the target install folder.

Before the upgrade process ran, the file or index folder was located in the <runtime> folder. The upgrade process produced a different folder named <new runtime>. This process was based on the upgrade or installation option to select a different folder for the upgrade result than the current one. This choice has resulted in the file or index folder being located in the <runtime> folder.

Perform these steps for this use case:

1. If before the upgrade the filestore location was <runtime>/filestore, copy or move the folders under <runtime>/filestore to a new path:
<new directory>/filestore/clarity

Where <new directory> is located outside of the upgrade resulting <runtime> directory. Having the location outside of the runtime folder follows best practices. Locating the folder outside the installation directory ensures that this process is not repeated in the future when CA Clarity PPM is upgraded.

Log in to the CSA application and navigate to the Documents and Search link under the Properties tab and update the Filestore Directory location. For example, if the filestore path is <old clarity install directory>/filestore, modify the path to <new directory>/filestore.

Note: Do not append 'clarity' to the path in the CSA. The CA Clarity PPM architecture adds this update internally.

2. If before the upgrade the search index directory location was `<runtime>/searchindex`, copy or move the folders under `<runtime>/searchindex` to a new path:

`<new directory>/ searchindex /clarity`

Where `<new directory>` is located outside the upgrade resulting `<runtime>` directory. Having the location outside the runtime folder follows best practices.

Log in to the CSA application, navigate to the Documents and Search link under the Properties tab, and update the Index Directory location. For example, if the filestore path is `<old clarity install directory>/searchindex`, modify the path to `<new directory>/searchindex`.

Note: Do not append 'clarity' to the path in the CSA. The CA Clarity PPM architecture adds this update internally.

3. Execute the following command from the `<runtime>/bin` folder:
'admin search recreate-index-files'
'admin search recreate-index-data'

Use Case C

- Filestore location: The filestore was located outside the runtime folder before the upgrade.
- Target installation folder: The target installation folder is not relevant to this use case. These steps must be performed for all upgrades with an external filestore.

The file or index folder is not located in the `<runtime>` folder.

Perform these steps for this use case:

1. If the previous filestore folder path is now located in `<some folder>/filestore`, copy or move the folders under `<some folder>/filestore` to a new path:
`<some folder>/filestore/clarity`
2. If the previous search index folder path is now located in `<some folder>/searchindex`, copy or move the folders under `<some folder>/seachindex` to a new path:
`<some folder>/seachindex/clarity`
3. Execute the following command from the `<runtime>/bin` folder:
'admin search recreate-index-files'
'admin search recreate-index-data'

No modification to the Filestore Directory or Index Directory properties is needed. You can view these properties from the Properties tab, Documents and Search subtab in the CSA application.

Note: Do not append 'clarity' to the path in the CSA. The CA Clarity PPM architecture adds this update internally.

CSRF Strategies

As of Release 13.2, CA Clarity PPM supports a configurable set of CSRF strategies. The allowed configurations are:

none

This configuration does not generate CSRF tokens or validate requests. This configuration is the default setting for on-premise installations. This configuration is recommended if CA Clarity PPM is behind your corporate firewall. Customers that upgrade receive this setting automatically.

request

This configuration implements the same strategy that is used in Release 13.1. This strategy generates a new token for each request and validates against a limited size cache in the user session. Due to the possibility of cache exhaustion, this strategy can lead to false-positive validation errors. These errors are especially true for users who work with multiple tabs open in CA Clarity PPM.

session

This configuration generates a single token for the user session and uses the token for validation. This configuration is the recommended strategy for on-demand SaaS and hosted installations. The configuration is also recommended for on-premise customer installations where CA Clarity PPM is outside the corporate firewall.

To change the shipped setting, see the following Technical Bulletin: TEC567263

Add-ins Compatibilities

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

- 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.
Note: For information about installing this connector, search the Microsoft SharePoint Connector content.
- If you are upgrading from Version 13.0, 13.1, or 13.2 to Release 13.3, the following add-ins are upgraded:
 - PMO Accelerator
 - Clarity Solution Pack (CSP)
 - CA Clarity Agile

- If you are upgrading from any version before Version 13.0 to Release 13.3, upgrade all installed add-ins.
- A new installation process is available for add-ins, accelerators, connectors.

Note: For more information, search the Installation content.

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

Accelerator or Connector	New Installation 13.3	Upgrade from 12.x to 13.3	Upgrade from 13.x to 13.3
PMO Accelerator	3.3.00	3.3.0	3.3.0
Clarity Solution Pack (CSP)	3.3.0	3.3.0	3.3.0
Earned Value Manager	2.0.1	2.0.1	2.0.1
Accelerator for PRINCE2	2.0.1	2.0.1	2.0.0 or 2.0.1
Accelerator for the PMBOK	2.0.1	2.0.1	2.0.0 or 2.0.1
Accelerator for New Product Development	2.0.2	2.0.2	2.0.2
PPM Essentials Accelerator	2.0.2	2.0.2	2.0.0, 2.0.1, or 2.0.2
BRM Accelerator	3.0.2	3.0.2	3.0.2
Connector for CA Unicenter Service Desk 12.7 & CA Software Change Manager™ 12.1.0.3	2.0.1	2.0.1	2.0.1
Connector for CA Unicenter Asset Portfolio Management 11.3.4	2.0.2	2.0.2	2.0.2
Connector for Microsoft SharePoint 2013	3.0.0	3.0.0	3.0.0
Service Connect	2.0.0	2.0.0	2.0.0
Catalyst Connector	2.5.0	2.5.0	2.5.0
CA Clarity Agile	13.2 or 13.3	13.2 or 13.3	13.2 or 13.3

Add-in Installation

Add-ins, accelerators, and connectors are now included with CA Clarity PPM. You do not have to download the add-in separately and extract the .jar file.

Note: For more information about the new add-in installation process, see the *Installation Guide*.

Upgrade Action: See the table in the section named "[Add-in Compatibilities](#) (see page 21)" if you are required to install a new version of your existing add-ins, accelerators, or connectors.

CA Clarity PPM Solution Pack Compatibility

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

Important! Review the certified and supported versions chart in the CA Clarity PPM Solution Pack Release Notes to determine if an upgrade of CA Clarity PPM and the PMO Accelerator is required, or optional. For complete information, see the [CA Clarity PPM Solution Pack Index page](#) on CA Support Online.

Reports

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

Upgrade Action For CA Clarity PPM Versions Earlier than Release 13.2: As of Release 13.2, 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 13.3.

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 the compatibility with Release 13.2 and releases beyond.

Post-Upgrade Action: We recommend installing the Clarity Solution Pack, which delivers the Release 13.3 compatible reporting content.

CA Business Intelligence (CABI) Release 3.3 Service Pack 1

This release of CA Clarity PPM uses CABI Release 3.3 Service Pack 1 for reports.

If you do not have CABI installed or if you have an older version, you have two steps to complete. First, you download and install CABI, and then you download and install Service Pack 1.

If you already have a CABI Release 3.3 installation, you only have to download and install Service Pack 1.

The following procedure describes how to complete the installation for all customers.

Follow these steps:

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

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

- a. Log in to the [CA Clarity PPM support page on CA Support Online](#).
- b. At the top of the page, click the Downloads link.
- c. Under Search Products in the Select a Product field, select the product for which you are licensed (for example, CA Clarity Creator User License or CA Clarity PPM Core License).
The Download Center page appears.
- d. In the *Please narrow your search results for "Products" below* section, select the appropriate release number.
- e. Click Go.
The Product Download page appears.
- f. Click the Download link next to the appropriate CA Business Intelligence 3.3 download for your installation.
The Download Method page appears.
- g. Select the appropriate download method to complete the download request,
- h. Install CABI Release 3.3.

2. Download and Install Service Pack 1 on the CABI Release 3.3 installation.
 - a. Download the CABI Release 3.3 Service Pack 1 and the Release Notes from the CA FTP site:

Windows:

```
ftp://ftp.ca.com/caproducts/CABI/CABI-3.x/boeXIR3_SP6/Windows/
```

Note: Download both the zip file and the *CABI 3.3 SP1 Release Notes*.

Linux:

```
ftp://ftp.ca.com/caproducts/CABI/CABI-3.x/boeXIR3_SP6/Linux/
```
 - b. Follow the instructions in the *CABI 3.3 SP1 Release Notes* to install Service Pack 1 on the CABI Release 3.3 instance.

Xcelsius Designer 2008 SP6

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.

CA Clarity PPM Universes

The following CA Clarity PPM Legacy BIAR files are no longer provided with the product:

- CA_Clarity_Legacy_MSSQL.BIAR
- CA_Clarity_Legacy_Oracle.BIAR

The CA Clarity PPM Universes have been updated to reflect database schema changes in Release 13.3.

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

Upgrade Action: Import the BIAR files as part of your Clarity 13.3 upgrade process.

Access Right to View My Reports

To see the My Reports portlet, users must have the following access right:

Report - Access

Allows a user access to the reports pages. This access right is dependent upon one of the following access rights being granted to a user:

- The *Reports - Run - All* access right
- Instance level access rights such as *Report - Run*, *Report - View Output*, or *Report - Edit Properties*

CABI Services Recommended Settings

We recommend the following adjustments to your CABI setup for use with Release 13.2 and following releases. Make the adjustments from the Central Management Console (CMC):

- WebIntelligenceProcessingServer
 - Maximum Connections: Change from 50 to 25.
 - Memory Maximum Threshold (MB): Change from 1800 to 1700.
 - Clone an extra service.
- ReportApplicationServer
 - Max Concurrent Report Jobs: Change from 75 to 50.
 - Clone an extra service.
- AdaptiveJobServer (specific to WEBI)
 - Clone an extra service.
- CrystalReportsJobServer
 - Clone an extra service.
- Stop and disable the following services that CA Clarity PPM does not use:
 - DesktopIntelligenceCacheServer
 - DesktopIntelligenceJobServer
 - DesktopIntelligenceProcessingServer
 - EventsServer
 - ListOfValuesJobServer
 - MultiDimensionalAnalysisServiceServer
 - PMMMeticsServer
 - PMMRepositoryServer

- PMMRulesServer
- PreditiveAnalysisServer (Available only for non-Windows environments)
- ProgramJobServer
- SetsProfileServer
- SetsQueryServer

Upgrade from a Release Earlier than Release 12.1

This topic explains the upgrade actions to take for 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:

- Upgrade to CABI Release 3.3.
Note: For more information about how to upgrade, see the *Installation Guide*.
- 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 13.3 universes are installed.
- If you previously purchased the GSE Universes from CA Services, these universes are not overwritten by the Release 13.3 out-of-the-box universes.
- If you modified any out-of-the-box reports, move the modified reports to a custom report folder on the BusinessObjects server.

Upgrade:

- Follow the instructions in the *Installation Guide*.

Post-Upgrade:

- If you decide to continue using the old reports, see the instructions about reactivating legacy stock report definitions in the topic "[Reports](#) (see page 23)."
Manually reschedule the scheduled reports. The scheduled reports that were configured before the upgrade to Release 13.3 do not automatically run after the upgrade.
- Update any user and security configurations that are required to support CABI Release 3.3 and trusted authentication integration with CA Clarity PPM.
Note: For more information, see the *Installation Guide*.

- Reset the BusinessObjects InfoView passwords for all preupgrade users who must log in to InfoView and run reports.
- To reset passwords for multiple users, use BusinessObjects Central Administration.
- 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 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 from a 12.x Release or Service Pack

This topic explains the upgrade actions to take for reports if you have a CA Clarity PPM version older than Release 12.1.

Release 13.3 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 are not already using CABI Release 3.3, upgrade to this release.
Note: For more information, see the *Installation Guide*.
- 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 13.3 universes are installed.
- If you previously purchased the GSE Universes from CA Services, these universes are not overwritten by the Release 13.3 out-of-the-box universes
- If you modified any out-of-the-box reports, move the modified reports to a custom report folder on the BusinessObjects server.

Upgrade:

- Follow the instructions in the *Installation Guide*.

Post-Upgrade:

- If you decide to continue using the old reports, see the instructions about reactivating legacy stock report definitions in the topic "[Reports](#) (see page 23)."
Manually reschedule the scheduled reports. The scheduled reports that were configured before the upgrade to Release 13.3 do 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 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.

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 that are located in the installer root directory (at the same level as the 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 Data Sets

If your CA Clarity PPM upgrade processes a large volume of data, we recommend that you override the default memory settings that are used by the upgrade.

You can override the default memory settings that are provided in Release 13.3. 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 that are used during upgrade are:

- defaultScriptMaxMem=1024m
- defaultScriptPermGenMem=128m

Here are some sample settings in the *memory.properties* file:

- defaultScriptMaxMem=2560m
- defaultScriptPermGenMem=512m

Database Backup Image for New Installations

If you install Release 13.3 as a new installation, import the Release 13.3 database backup image before you start the installation. CA Clarity PPM now uses a backup-based database deployment mechanism. Instead of building the database at installation time, the product provides a prebuilt, fully populated database backup *base image* on the installation media. The base image contains everything that a new CA Clarity PPM installation requires.

The installation media contains the following images:

- The Microsoft SQL Server base image, compatible with all supported SQL Server versions. Remember to set the database compatibility level to 110 if you are using SQL Server 2012.
- The Oracle base image, compatible with all supported Oracle versions.

Note: For information about importing a database template image, see the *Installation Guide*.

Supported Upgrade Paths

Before you start the upgrade, we recommend that you read the [Basic Upgrade Process](#) (see page 34) process.

If you have any of the following releases installed on the base level with no patches, you can directly upgrade to CA Clarity PPM Release 13.3:

- CA Clarity PPM Release 8.1 or Service Pack or Fix Pack 8.1.x
- CA Clarity PPM Version 12.0 or Service Pack 12.0.x
- CA Clarity PPM Release 12.1 or Service Packs
- CA Clarity PPM Version 13.0 or Service Packs
- CA Clarity PPM Release 13.1
- CA Clarity PPM Release 13.2

Follow the upgrade path mentioned in the following table, only if you have installed any patches on the base versions:

Patch Levels	Upgrade Path
If any patch level is installed on the base version 12.1.0 (i.e. 12.1.0.1 - 12.1.0.8)	Installation of 12.1.0.8 is required before the upgrade to Release 13.3.
If any patch level is installed on the base version 12.1.1 (i.e. 12.1.1.1 - 12.1.1.10)	Installation of 12.1.1.10 is recommended before the upgrade to Release 13.3.

Patch Levels	Upgrade Path
If any patch level is installed on the base version 12.1.2 (i.e. 12.1.2.1 - 12.1.2.3)	Installation of 12.1.2.3 is recommended before the upgrade to Release 13.3.
If any patch level is installed on the base version 12.1.3 (i.e. 12.1.3.1 - 12.1.3.6)	Installation of 12.1.3.6 is recommended before the upgrade to Release 13.3.
If any patch level is installed on the base version 13.0.1 (i.e. 13.0.1.1 - 13.0.1.7)	Installation of 13.0.1.7 is required before the upgrade to Release 13.3.
If any patch level is installed on the base version 13.1.0 (i.e. 13.1.0.1 - 13.1.0.5)	Installation of 13.1.0.5 is recommended before the upgrade to Release 13.3.
If any patch level is installed on the base version 13.2.0 (i.e. 13.2.0.1 - 13.2.0.4)	Installation of 13.2.0.4 is recommended before the upgrade to Release 13.3.

For example:

- If you have CA Clarity PPM SP 12.1.3, you can directly upgrade to Release 13.3.
- If you have CA Clarity PPM 12.1.0.2, then you have to apply CA Clarity PPM 12.1.0.8 first to upgrade to Release 13.3
- If you have CA Clarity PPM 12.1.3.4, then it is recommended that you apply CA Clarity PPM 12.1.3.6 first to upgrade to Release 13.3.
- If you have CA Clarity PPM 12.1.3.6, you can directly upgrade to Release 13.3.

Important! If you are on a CA Clarity PPM patch level that is not included in the preceding list, take care when attempting an upgrade to Release 13.3. Issues could result if you try to upgrade to Release 13.3 from a patch level that is not supported. For best results, wait for a supported upgrade path to a later release or patch. To find out more, contact CA Support or your CA Services representative. You can also find more information by visiting the CA Clarity PPM User Communities.

The Release 13.3 installer can upgrade your data set from a variety of older releases. The installer detects how many incremental upgrade paths are required to bring your current installation up to Release 13.3.

Note: If you are running a version earlier than Release 12.1.1, consider upgrading to 12.1.1, 12.1.2, or 12.1.3 before you upgrade to Release 13.3. Although the interim upgrade is not a requirement, it simplifies the troubleshooting and restart process if an upgrade step fails.

The Release 13.3 installer runs the upgrade processes shown in the following table.

Version, Release, or Service Pack Currently Installed	Upgrade Processes
Earlier than Service Pack 12.1.1	<ul style="list-style-type: none"> ■ Service Pack 12.1.1 ■ Version 13.0 ■ Release 13.1 ■ Release 13.2 ■ Release 13.3
Service Pack 12.1.1, 12.1.2, or 12.1.3	<ul style="list-style-type: none"> ■ Version 13.0 ■ Release 13.1 ■ Release 13.2 ■ Release 13.3

Version, Release, or Service Pack Currently Installed	Upgrade Processes
Version 13.0 or Service Pack 13.0.x	<ul style="list-style-type: none">■ Release 13.1■ Release 13.2■ Release 13.3
Release 13.1	<ul style="list-style-type: none">■ Release 13.2■ Release 13.3
Release 13.2	<ul style="list-style-type: none">■ Release 13.3

Basic Upgrade Process

To upgrade to Release 13.3, complete these steps.

1. Install the prerequisite third-party software.

Review the "Compatibilities" appendix in the release notes for the supporting operating environment information. The following important changes are included:

- Dropped support for 32-bit third-party vendor applications.
- The Java runtime must be a supported 64-bit version.
- Dropped support for Microsoft SQL Server 2005. If you use Microsoft SQL Server 2005 currently, we recommend upgrading your database to MS SQL server 2008, MS SQL server 2008 R2, or MS SQL Server 2012 before upgrading to Release 13.3.
- Dropped Actuate as a supported reporting solution.

2. Create a full backup of your database, file systems, and customizations (if applicable).

Best Practice: To keep sequences in line, take a *cold* backup.

3. Remove customer-added database triggers, stored procedures, indexes, views, and constraints before upgrading.

Due to the database schema changes for this release, most custom triggers, indexes, and constraints can cause the upgrade to fail. We recommend removing, not disabling, customer-added triggers.

4. Review the steps for installing and upgrading in the *Installation Guide*.
Some important changes include:
 - The installation for an upgrade prompts you 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 specify the same folder for both prompts, the existing folder is renamed. Then, Release 13.3 is installed into an empty folder with the target folder name.
 - If you are installing on a different server, review the chapter "How to Set up the Application Server" in the *Installation Guide*.
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 by reviewing the post upgrade report that the installer generates.
 - b. Review the Clarity System Administration server admin.log and install.log for errors.
 - c. Reapply any database and file system customizations.
 - d. If you have custom Xcelsius dashboards, see "Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets" in the Version 13.0 *Change Impact and Upgrade Guide*.
7. Install or upgrade CABI Release 3.3 SP1 (BusinessObjects) and complete the following steps:
 - a. If you are installing CABI for the first time, review the CA Clarity PPM requirements. If you are an upgrading customer, install CABI 3.3 SP1.
Note: For more information, see the *Installation Guide*.
 - b. If you are upgrading from a version earlier than Release 12.1, reset the passwords of your BusinessObjects report users.
Resetting is necessary for all preupgrade users who must log in to Infoview and run reports. You can also set up BusinessObjects trusted authentication between BusinessObjects and CA Clarity PPM, which provides the LDAP integration with BusinessObjects and CA Clarity PPM.
 - c. Import the universes.
 - d. Review the section that is named "[Reports](#) (see page 23)" for information about legacy stock reports and reactivate any existing stock reports that are desired.
 - e. 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.

8. Install your current add-ins and connectors if an upgrade is desired.

Notes:

- Review "How to Install Add-ins" in the *Installation Guide*.
- Back up your CA Clarity PPM installation before installing each add-in so that you can restore the application if necessary.
- 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 PMO Accelerator.
- Review the *System: Clarity Content* add-in for upgrade ready content. To accept the new Release 13.3 upgraded content, apply the changes.

9. 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 either view or the partition.

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

Some tips on reviewing the views:

- The Last Version column identifies changes to stock views in Release 13.3.
- 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=13.3 and the Upgraded column= unchecked.

10. Verify your NSQL queries.

During the upgrade, the NSQL validator script automatically verifies NSQL queries. Results are written to the admin.log. This 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 your custom portlets work, correct any invalid NSQL queries.

Note: For information about the database schema changes, see the chapter "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. In Studio, go to the NSQL tab for the imported query and click the Preview button.
- k. Confirm that the NSQL query is valid.

11. Save the Upgrade Check Install Results Package.

The upgrade process produces a zipped file that contains all of the artifacts that were created during the upgrade. Review the contents and save the zip package for future reference.

The files are zipped into an archive that has a timestamp-encoded name (for example, checkinstall-results_2013-04-17_16-48-31.zip). This file is located in the checkinstall/check-logs directory, and if possible, the file is copied into the <target runtime dir>/logs/checkinstall directory.

Upgrade Tips

To ensure that your upgrade to this release works as planned, read the following preupgrade and postupgrade 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 named *Standard*, create it before upgrading. Contact CA Support if your CA Clarity PPM 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 effort adds to database size and the effort affects performance.
- Clear the Datamart and recreate the data post-upgrade to improve the processing time of the upgrade.
Note: For Release 13.3, the Datamart is automatically cleared for Oracle.
Use *NBI_Clean_Datamart_sp* to clear the Datamart. The script does not clear the following tables:
 - 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 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 before the upgrade.
- To verify that all components are installed and functioning before and after the upgrade, run the CSA Health Report.

- Remove all CA Clarity PPM services before running the upgrade using the following command: *service remove all*.
- Verify that no files or folders in the installation folder are in use anywhere.
- See [Known Issues](#) (see page 41) for conditions that can affect the success of your upgrade. Take corrective actions where they are required.

Post Upgrade

- Review the post upgrade report that the checkinstall utility in the installer generates.

The files are zipped into an archive that has a timestamp-encoded name (for example, *checkinstall-results_2013-04-17_16-48-31.zip*). This file is located in the *checkinstall/check-logs* directory, and if possible, the file is copied into the *<target runtime dir>/logs/checkinstall* directory.

- Verify the 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
 - The row count of every table that is processed by preupgrade and postupgrade processing
 - The execution time and results for each script or object
- Verify that Beacon is running to manage services and view logs.

Note: Beacon is required to be running always for Release 13.3.

- 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 any customizations: Customer-added database triggers, custom indexes and constraints, any file system changes, and custom interfaces. 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.
- Review the system log file sizes. The log file size for all service system log files is set to 5 MB and to keep five rolling logs (for example, *app-system.log*, *app-system.log.1*). For more information, see the Release 13.1 *Change Impact and Upgrade Guide*.

- GEL Tag Restrictions: Release 13.1 gave the ability to restrict certain GEL tags in an environment. For more information, see the Release 13.1 *Change Impact and Upgrade Guide*.
- The Java Runtime Environment (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 are required to register any other attributes (stock or custom) that you want to display.
- Remove the *Resource - Edit Financial* access right.

If your company policy does not allow resource managers access to the Financial Properties subpage for the resources they manage, you can remove that capability.

Run a post installation script to perform the following actions:

- Remove the *Resource - Edit Financial* access right from all current resource managers.
- Clear the setting for the financial option that automatically grants the access right to new resource managers.

Note: To maintain existing behavior, this right is granted during the upgrade. This right replaces the automatic right that was removed as part of the Financially Enabled Roles feature.

Upgrade Action: (Optional) Run the script to remove the access right.

Follow these steps:

1. At the command line on the CA Clarity PPM server, change to the <clarity_home>/bin directory.

The directory contains the dbpatch script.

2. Run the following command:

Windows:

```
dbpatch -install -file
../upgrade/ppm/schema/postupgrade/RevokeResEditFinRightFromResourceMgrs.xml --apply
```

UNIX:

```
./dbpatch -install -file
../upgrade/ppm/schema/postupgrade/RevokeResEditFinRightFromResourceMgrs.xml --apply
```

Known Issues

This section provides known issues for CA Clarity PPM.

Duplicate Cost Plan Code Error

This issue applies *only* to upgrades from a 12.x release to Release 13.3.

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 the same code. However, you cannot have two cost plans with code *MasterPlan2011* for the same investment. The unique database constraint for this rule was added in Version 13.0.

Due to concurrency issues, there can be a data issue in previous versions. When a duplicate plan type code exists within a single financial plan, the upgrade process fails with an appropriate error message. You are required to correct the data issue before resuming the upgrade process. An upgrade check script runs and alerts you that this problem exists.

To identify possible data issues before you start the upgrade, run the following query:

```
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.

We recommend that you rename the codes for duplicate records. Do not change the other data. 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

This issue applies *only* to upgrades from a 12.x release to Release 13.3.

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. An upgrade check script runs and alerts you that this problem exists.

The *not null* database constraint for the RESOURCE_CLASS and TRANSCCLASS columns in the PAC_MNT_RESOURCES table was added in Version 13.0. If you are upgrading from a previous version of CA Clarity PPM, it is possible that the information is missing.

We recommend 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 that there are issues with the PAC_MNT_RESOURCES table data. We recommend 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.

Resume Capability During the Upgrade

This release does not support the ability to resume during an upgrade. If your upgrade fails, review the logs to determine the reason for the failure. Then, restore the working pre-upgrade version and database, correct the failure, and restart the upgrade.

Export Icons in Resource Planning Tabs Not Functioning

Export to Excel and Export to PowerPoint icons on a Resource Planning tab give an error when you click them.

Note: This issue applies only to WebSphere application servers.

As a workaround, use the Export to Excel and Export to PowerPoint links available from the Options icon in the individual portlets on the tabs.

Missing General Action Menu After Upgrade

In some cases, the General Action menu does 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 the 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's Guide*.

Upgrade Stops if OBS Unit Names Have Special Characters

Some special characters in OBS unit names, department names, or location names are automatically replaced with hyphens (-) during the preinstallation check before an upgrade.

The following special characters are replaced:

- Slash (/)
- Colon (:)
- Double quote (")
- Less than (<)
- Greater than (>)

If you do not want hyphens placed in names with special characters, update the names before you begin the upgrade process. You can also manually replace the hyphens with the special characters after the upgrade is done.

You can run the following query to identify the OBS names that contain special characters. If the query returns any rows, OBS names with special characters are present in the PRJ_OBS_UNITS table. We recommend that you review all returned OBS unit, department, or location names and determine whether to update them.

For MSSQL:

```
SELECT * FROM PRJ_OBS_UNITS
WHERE NAME LIKE '%/%' OR
      NAME LIKE '%:%' OR
      NAME LIKE '%["]%' OR
      lower(NAME) LIKE '%&' + 'quot;%' OR
      lower(NAME) LIKE '%&' + 'gt;%' OR
      lower(NAME) LIKE '%&' + 'lt;%' OR
      NAME LIKE '%<%' OR
      NAME LIKE '%>%'
```

For Oracle:

```
SELECT * FROM PRJ_OBS_UNITS
WHERE NAME LIKE '%/%' OR
      NAME LIKE '%:%' OR
      NAME LIKE '%"%' OR
      lower(NAME) LIKE '%&' || 'quot;%' OR
      lower(NAME) LIKE '%&' || 'gt;%' OR
      lower(NAME) LIKE '%&' || 'lt;%' OR
      NAME LIKE '%<%' OR
      NAME LIKE '%>%'
```

To review the use of special characters in the filter expressions (power filters), we also recommend using the following query. Update any OBS names the query returns with the appropriate valid names.

For MSSQL:

```
SELECT * FROM ODF_FILTER_EXPRESSIONS exprs, prj_obs_units units
WHERE exprs.expression like '%'+cast(units.id as nvarchar)+'%'+units.name+'%'
and (units.name LIKE '%/%' OR
     units.name LIKE '%:%' OR
     units.name LIKE '%["]%' OR
     lower(units.name) LIKE '%&' + 'quot;%' OR
     lower(units.name) LIKE '%&' + 'gt;%' OR
     lower(units.name) LIKE '%&' + 'lt;%' OR
     units.name LIKE '%>%' OR
     units.name LIKE '%<%' )
```

For Oracle:

```
SELECT * FROM ODF_FILTER_EXPRESSIONS exprs, prj_obs_units units
WHERE exprs.expression like '%'||units.id||'%' ||units.name||'%'
and (units.name LIKE '%/%' OR
     units.name LIKE '%:%' OR
     units.name LIKE '%"%' OR
     lower(units.name) LIKE '%&' || 'quot;%' OR
     lower(units.name) LIKE '%&' || 'gt;%' OR
     lower(units.name) LIKE '%&' || 'lt;%' OR
     units.name LIKE '%>%' OR
     units.name LIKE '%<%' )
```

Automatic Update to Curly Brackets in OBS Names During Upgrade

If an OBS name contains a left curly bracket ({) or a right curly bracket (}), left or right parentheses replace the characters during the upgrade.

Example: The OBS name External{Department} becomes External(Department) after the upgrade.

Report Instance Export from the Report Library

You cannot export report instances from the report library when the BusinessObjects server is configured with CA Clarity PPM installed on a Windows 2012 server. BusinessObjects Enterprise 3.1 SP5 is not supported for Windows 2012.

Note: Installing the BusinessObjects server on a supported configuration does not avoid this issue. The .jar files that are used for the CA Clarity PPM integration are not compatible with Windows 2012.

Orphan Records in Table CMN_SEC_ASSGND_OBJ_PERM for MSSQL Users

A recent change prevents the creation of orphan records in the table CMN_SEC_ASSGND_OBJ_PERM. However, for MSSQL users, pre-existing orphan records can sometimes remain. You can search for orphan records and can remove them from the table after the upgrade to Release 13.3 is complete.

To verify that orphan records exist in the table, run the following query:

```
select COUNT(*) from (select object_instance_id from cmn_sec_assgnd_obj_perm p
  where p.object_ID = 50680 and object_instance_id not in
(select ID from BPM_RUN_PROCESSES)) q
```

The number value that the query returns indicates the number of orphan records.

To clean up orphan records, invoke the following upgrade script from <clarity_install_dir>/bin using dbpatch:

```
POSTUPGRADE_57954_MSSQL_DEL_PROC_INST_ASSGND_OBJ_PERM.xml
```

Use the following command:

```
dbpatch -install -file
<CLARITY_INSTALL_DIR>\upgrade\13.3.0\component\postupgrade\POSTUPGRADE_57954_MSSQ
L_DEL_PROC_INST_ASSGND_OBJ_PERM.xml -apply
```

Note: The length of time the query runs is dependent on the number of orphan records to be deleted.

CA Clarity PPM Upgrade and Oracle Enterprise Table Compression

If you are using the Oracle Enterprise Edition compression feature, disable the compression feature before starting the CA Clarity PPM upgrade. If the compression feature is enabled, the upgrade fails with the following Oracle database error:

```
[CA Clarity][Oracle JDBC Driver][Oracle]ORA-39726: unsupported add/drop column operation on compressed tables
```

The following procedure explains how to get ready for the upgrade by disabling compression. Once the procedure is complete, you can proceed with the upgrade. When the upgrade has successfully completed, you can compress the tables again.

To prepare for the upgrade, complete the following steps:

1. Identify compressed tables by executing the following query:

```
SELECT TABLE_NAME, COMPRESSION FROM USER_TABLES WHERE COMPRESSION='ENABLED';
```
2. Disable compression. Run the output of this query. Keep this list handy, so that these tables can be compressed again after the upgrade.

```
SELECT 'ALTER TABLE ' || TABLE_NAME || ' MOVE NOCOMPRESS;' FROM USER_TABLES WHERE COMPRESSION='ENABLED';
```
3. Rebuild the unusable indexes. Run the output of this query:

```
SELECT 'ALTER INDEX ' || INDEX_NAME || ' REBUILD;' FROM USER_INDEXES WHERE STATUS='UNUSABLE';
```

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

WebSphere Deployment Does Not Show Database Information in CA Clarity System Administration

During a Generic J2EE installation, the nsa.ear file installs CA Clarity System Administration. Once you start CA Clarity System Administration, you can see the database information after you specify your database credentials. However, if you are installing on WebSphere, the database information is not available. Neither the Install History page or the Installation Overview page in CA Clarity System Administration shows the database as installed, even though it is.

This behavior does not affect your ability to complete the installation and use the application.

Upgrade Action: To get details of the database, run the query CMN_INSTALL_HISTORY.

Generic J2EE Upgrade Produces an Error If the J2EE.home Property Is Not Set

An error is received during an upgrade for a Generic J2EE application server (IBM WebSphere or Oracle WebLogic). Because the vendor is generic, the prompt for the J2EE home directory does not appear and the j2ee.home property is not set. Without a j2ee.home setting, an error occurs in the installation process.

Upgrade Action:

Set the following values in the <installer>/install.properties file:

- j2ee.home=<any value>
- j2ee.vendor=generic

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.

Using the Value -1 to Disable the New XOG Governor Limit Does Not Work Correctly for XOG Write

Setting the Maximum XML Node Limit value to -1 in CA Clarity System Administration disables the XOG Governor limit. Currently, entering this value causes XOG write operations to throw the following error:

XOG-9060: The system cannot import this instance with the current configuration. Increase the 'Maximum XML Nodes' value in the CSA and try again.

Workaround: Set the Maximum XML Node Limit to 10^{15} .

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.

Documentation Changes

The CA Clarity PPM documentation has been improved with these changes to help you find information faster.

- **CA Answer Bar.** Quickly find the CA Clarity PPM information you need using the CA Answer Bar (<https://enable.ca.com/answers/us/CA-Clarity-PPM>). Find the latest “how to” scenario content, discover great insights from CA Support, and more. You’ll spend less time searching and more time focused on getting your job done. Technical content is available for CA Clarity PPM 13.0 and above.
- **CA Clarity PPM Cookbook.** Select CA Clarity PPM technical content is available on the mobile device platform Flipboard. [Watch this video](#) and use the cookbook today. Happy flipping!
 - To add the CA Clarity PPM Cookbook to your RSS feed folder, add this URL:
<http://cookbooks.ca.com/cacppm/?feed=rss2>
 - To view the CA Clarity PPM Cookbook in your browser, rather than the mobile app, access this URL:
<https://flipboard.com/section/ca-clarity-ppm-cookbook-bgk99n>
- **Online Help Bookshelf.** To help simplify and improve how you find content, the bookshelf available from the product only includes the product documentation. Additional information such as release notes, green books, KB articles, social media, and so forth is available in the On Premise and On Demand bookshelves on CA Support Online.
- **New Portfolio Management Scenarios Guide.** Provides “how to” scenario content the Portfolio Manager needs.

- **New Portlet Reference Guide.** Provides a list and details for all out-of-the-box portlets and PMO Accelerator portlets.
- **Accelerator, Add-in, and Connector Guides.** To help improve how you find content, the release notes for the accelerators, add-ins, and connectors are now found in their associated product guide.
- **Basics User Guide and Personalizing CA Clarity User Guide.** To help improve how you find content, the content in the *Personalizing CA Clarity User Guide* is now found in the *Basics User Guide*.
- **Access Rights Reference Guide.** To help improve how you find content, the access rights for all the guides are now found in the *Access Rights Reference Guide*. They are no longer included in the individual guides.
- **XML Open Gateway Developer Guide.** The element syntax *IsComplete* and *completed* were recognized as deprecated forms and are replaced by *complete*. For example, when true, the optional *complete* element for the *OBSAssocs* element indicates that any OBS associations represent a complete replacement as a set. When the value is false, the operation inserts and/or updates any existing OBS associations. Sample content including sample .xsd files may continue to show the old forms. The documentation reflects this recognition of a single standard in topics that include the *complete* element with the following note:
Note: *Complete* replaces deprecated forms *completed* and *IsComplete*.

Chapter 3: Administration

This section contains the following topics:

[License Type Names Have Changed](#) (see page 53)

[Process Monitor](#) (see page 54)

[Changes to the Global Audit Trail Page](#) (see page 54)

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

Chapter 4: Add-in Enhancements

This section contains the following topics:

[CA Microsoft Project Interface Changes](#) (see page 55)

[Connector for Microsoft SharePoint Changes](#) (see page 56)

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.

Chapter 5: Demand Management

This section contains the following topics:

[Financially Enabled Ideas](#) (see page 57)

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

Chapter 6: 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

Chapter 7: 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.

Chapter 8: Portfolio Management

This section contains the following topics:

[Portfolio Maximums for Investments, Roles, and Attributes](#) (see page 63)

[Aggregation Rows Added to the Portfolio Waterlines View](#) (see page 63)

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

Chapter 9: Project Management

This section contains the following topics:

[Gantt View Can Be Printed](#) (see page 65)

[Task Duration on the Gantt View Is Editable](#) (see page 65)

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

Chapter 10: User Interface

This section contains the following topics:

[CA Clarity PPM Login Page Can Be Rebranded](#) (see page 67)

[Bubble Chart Improvement](#) (see page 68)

[Drop-down List with More Than 20 Values](#) (see page 68)

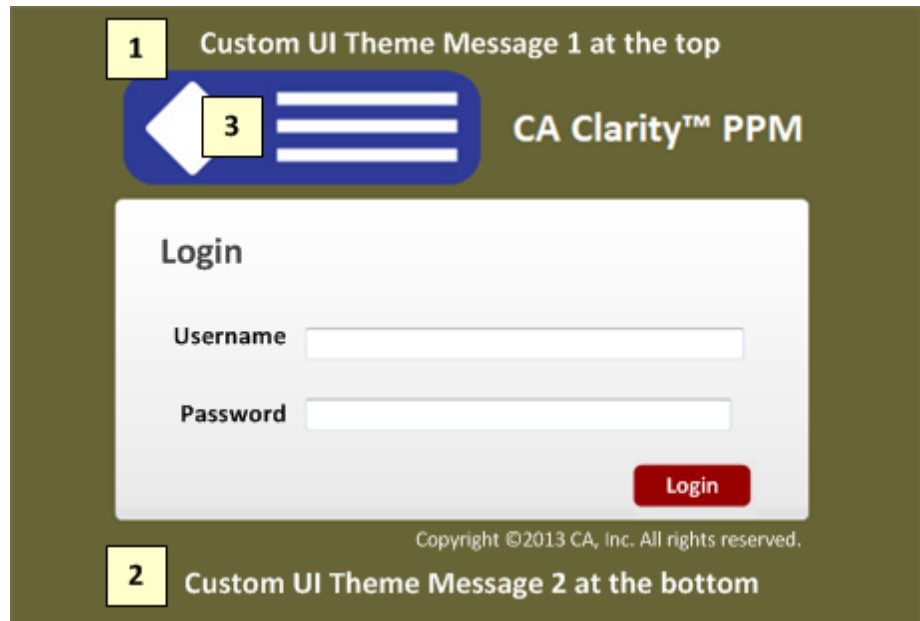
[Export Level for Excel and PowerPoint Has Changed](#) (see page 69)

[Chart Y-Axis Field Option Change](#) (see page 69)

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's 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.

This behavior is governed by the system-level option `ENABLE_PAGE_LEVEL_EXPORT`. The value of this option is *false* by default, which means the information from the current active tab is exported. If the value of this flag is set to *true*, information from the portlets of all page tabs are exported.

Upgrade Action: To put the new value into effect, flush the server cache.

To check the value of this option, use the following SQL:

```
SELECT cov.value FROM cmn_option_values cov, cmn_options cos
WHERE cos.option_code = 'ENABLE_PAGE_LEVEL_EXPORT' AND cov.id = cos.id
```

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.

Chapter 11: XML Open Gateway (XOG) Changes

XOG Governor Limit

When you import or export a large number of instances through XOG, you may encounter Out of Memory (OOM) or time-out exceptions. To handle these issues, you can now configure the Maximum XML Nodes option available under the Application tab in the CSA. The Maximum XML Nodes is referred as nodes limit in the document. The default value for the Maximum XML Nodes is 150,000 for both the On-Demand and On-Premise environments.

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

Chapter 12: Data Model Changes

This section contains the following topics:

[Added Tables](#) (see page 73)

[Updated Tables](#) (see page 73)

[Dropped Tables](#) (see page 74)

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.