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

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

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

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

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

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

The manufacturer of this Documentation is CA.

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

Copyright © 2012 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.
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.
Documentation Changes

The following documentation updates have been made since the last edition of this guide.

**Second Edition:**
- **Java 7**—This topic had an *Important* notice added regarding the Java 7 JDK.
- **Commands for GEL Tag Restrictions.** This topic was updated to clarify the values for setting the gelTagRestriction command. The examples were updated.
- **CA Clarity PPM Solution Pack Compatibility.** This topic includes information about installing the CA Clarity PPM Solution Pack add-in.
- **Supported Upgrade Paths.** This topic had a change in the supported patch levels for Version 13.0 or its service packs.
- **Basic Upgrade Process.** This topic had an *Important!* paragraph added. The new paragraph warns that applying add-in items can overwrite existing add-in configurations.

**Third Edition:**
- **Additional Upgrade Steps (Niku 6.x, Clarity 7.x, CA Clarity 8.x).** This topic covers steps that customers upgrading from an older product version must complete.
Chapter 1: About this Guide

Chapter 2: Installation and Upgrade

About Release 13.1 ........................................................................................................................9
  New Installer .................................................................................................................................9
  Installation Checker .......................................................................................................................10
  Additional Upgrade Steps (Niku 6.x, Clarity 7.x, CA Clarity 8.x) ................................................10
  Java 7.........................................................................................................................................10
  Java Runtime Environment Removed From Download Software Link ........................................11
  Post Installation Step to Remove the Resource - Edit Financial Right .........................................11
  New System Log File Default Limits ..........................................................................................12
  Commands for GEL Tag Restrictions .........................................................................................13
  Filestore and Search Index Location Changes ..........................................................................14
  New Languages Supported in the User Interface .......................................................................18
  Add-ins Compatibilities .............................................................................................................18
  CA Clarity PPM Solution Pack Compatibility ............................................................................19
  Reports for a Release 13.1 New Installation ..............................................................................20
  Upgrade Considerations for Reports ..........................................................................................20
  About Version 13.0 Installation and Upgrade Processes ............................................................23
    Preserving Your File Directory Customizations ......................................................................23
    Upgrading Large Data Sets ........................................................................................................24
    Database Backup Image for New Installations .......................................................................25
    New Log File Names ..................................................................................................................26
  Supported Upgrade Paths ............................................................................................................26
  Basic Upgrade Process ...............................................................................................................27
  Upgrade Tips ...............................................................................................................................27
  Known Issues .............................................................................................................................32
    Duplicate Cost Plan Code Error ...............................................................................................32
    Missing Data for Resource Financials ......................................................................................33
    Upgrade Fails if the Default Language for the Admin User Is Not English ..............................34
    Resume Capability During the Upgrade ..................................................................................34
    nsa.ear File Not Generated During Installation .....................................................................34
    Potential Infinite URL Redirect Issue .....................................................................................34
    Export Icons in Resource Planning Tabs Not Functioning .......................................................35
    Missing General Action Menu After Upgrade ........................................................................35
Chapter 3: Administration  
Time-Scaled Value Link Exports to Excel ................................................................. 37

Chapter 4: Financial Management  
Financially-Enabled Roles ......................................................................................... 39
   New Access Right ................................................................................................ 39
   Role Financial Properties .................................................................................... 40
   Staff OBS Unit Field ......................................................................................... 40
   Baseline ........................................................................................................... 40
Budget Merge or Replace Option .............................................................................. 41

Chapter 5: Resource Management  
Enhancements to Resource Planning Tabs and Portlets ........................................ 43

Chapter 6: User Interface  
New Fixed Headers ................................................................................................ 47
High Contrast UI Theme ......................................................................................... 47

Chapter 7: Data Model Changes  
Database Table Changes ....................................................................................... 49
Chapter 1: About this Guide

This guide provides the following information:

- System preparation before upgrading
- Overview of the upgrade process
- Post-upgrade tasks
- Features and enhancements for this release and upgrade actions that are required for them

Important! If you are upgrading from a release earlier than Version 13.0, carefully review the Change Impact and Upgrade Guide for the 13.0 release. If you are upgrading from Version 13.0 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 is 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:

- About Release 13.1 (see page 9)
- About Version 13.0 Installation and Upgrade Processes (see page 23)
- Supported Upgrade Paths (see page 26)
- Basic Upgrade Process (see page 27)
- Upgrade Tips (see page 30)
- Known Issues (see page 32)

About Release 13.1

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

New Installer

The new Release 13.1 installer includes the following components:

- Service Pack 12.1.1 installer
- Version 13.0 installer

The Release 13.1 installer runs the upgrade processes shown in the following table.

<table>
<thead>
<tr>
<th>Version, Release, or Service Pack Currently Installed</th>
<th>Upgrade Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earlier than Service Pack 12.1.1</td>
<td>■ Service Pack 12.1.1</td>
</tr>
<tr>
<td></td>
<td>■ Version 13.0</td>
</tr>
<tr>
<td></td>
<td>■ Release 13.1</td>
</tr>
<tr>
<td>Service Pack 12.1.1 or a later service pack of 12.1</td>
<td>■ Version 13.0</td>
</tr>
<tr>
<td></td>
<td>■ Release 13.1</td>
</tr>
<tr>
<td>Version 13.0 or Service Pack 13.0.1</td>
<td>■ Version 13.1</td>
</tr>
</tbody>
</table>
Installation Checker

A new installation checker is available to assess an installation or upgrade before you start. Although the tool runs automatically at the start of the installation or upgrade, you can run it as a standalone utility. The results are saved in a file named results.htm.

Note: On Solaris 10 systems, you may 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 Version 13.1 installation prerequisites, you can safely ignore this message.

Upgrade Action: None. For more information about the Installation Checker, see the Installation Guide.

Additional Upgrade Steps (Niku 6.x, Clarity 7.x, CA Clarity 8.x)

Important! If you are upgrading to Release 13.1 and have had an older product version (Niku 6.x, Clarity 7.x, or CA Clarity 8.x) installed, additional steps are required for a successful installation.

Complete these steps if one of the following conditions apply:

- You are currently using one of the listed products.
- You previously had one of the listed products installed.

Upgrade Action: Complete the following steps.

1. Upgrade to CA Clarity PPM Version 13.0.
2. Before you upgrade to either Release 13.1 (or 13.0.1.x), copy the caches.xml file from the following source folder to the appropriate target folder:
   
   UNIX/Linux
   
   Source Folder: $NIKU_HOME/.setup/templates/config
   
   Target Folder: $NIKU_HOME/config
   
   Windows
   
   Source Folder: %NIKU_HOME%\setup\templates\config
   
   Target Folder: %NIKU_HOME%\config
3. Complete the upgrade to Release 13.1 as documented.
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
- Open Workbench
- Connector for Microsoft Sharepoint
- Service Connect

**Note:** For new installations or for an upgrade from a 13.0.x version, the server installer prompts for the path of JDK 1.7. For upgrades from earlier versions (12.0.x and 12.1.x), the installer prompts for the paths of JDK 1.6 and 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 Actions:** Install Java 7.

Java Runtime Environment Removed From Download Software Link

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

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

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

Post Installation Step to Remove the Resource - Edit Financial 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:

- Removes the Resource - Edit Financial access right from all current resource managers.
- Clears 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 to replace 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:**
   ```bash
   dbpatch -install -file
   ../upgrade/ppm/schema/postupgrade/RevokeResEditFinRightFromResourceMgrs.xml
   -apply
   ```
   
   **UNIX:**
   ```bash
   ./dbpatch -install -file
   ../upgrade/ppm/schema/postupgrade/RevokeResEditFinRightFromResourceMgrs.xml
   -apply
   ```

**New System Log File Default Limits**

The default behavior for service system logging has changed. Before this release, the size of the system logs for CA Clarity PPM services (for example, the app-system.log) grew continuously unless manual intervention occurred.

As of this release, the default behavior is to restrict the log file size for all service system log files to 5 MB and to keep five rolling logs (for example, app-system.log, app-system.log.1, and so on).

**Upgrade Actions:** None. The default settings are automatic.

You can change the default settings, to customize the size and number of log files.

Follow these steps:

1. Log in to Clarity System Administration.
2. Open Home, and click Servers.
3. Click the Properties icon for the server to edit log information.
4. Click the Logs tab.
5. Click the Edit Configuration subtab.
6. In the System Logging section, complete the following fields:
   
   **Maximum number of system logs (per service)**
   
   Indicates the number of files to keep for each service. Changing this value requires restarting the services. The default value is five.

   **Maximum size of each system log**
   
   Indicates the size of the system log files for each service in megabytes. Changing this value requires restarting the services. The default value is 5 MB.

7. Save the changes.
8. Restart the affected services.

### Commands for GEL Tag Restrictions

Use the following commands to control GEL tag restriction:

- **admin general restrict-gel-tags**
  
  Sets the value of the gelTagRestriction property to `on`.

- **admin general allow-gel-tags**
  
  Sets the value of the gelTagRestriction property to `off`.

The property gelTagRestriction is referenced to determine if gel tags are restricted. The property is on the system element. It is an optional element.

Use the values `on` or `off` to set GEL tag restrictions for the environment. Specifying any value other than `off` enables GEL tag restriction. GEL tag restrictions are off by default.

### Examples

Properties.xml file with no GEL tag restriction:

```xml
<system online="true" multiCurrency="false" licenseTypes="old"
  singleTenantMode="true"/>
```

or

```xml
<system online="true" multiCurrency="false" licenseTypes="old"
  singleTenantMode="true" gelTagRestriction="off"/>
```
Properties.xml file with GEL tags restricted:
<system online="true" multiCurrency="false" licenseTypes="old"
singleTenantMode="false" gelTagRestriction="on"/>

**Upgrade Action:** None

**Filestore and Search Index Location Changes**

Two significant changes to the Version 13 upgrade process directly affect the filestore feature. The changes require you to act during the upgrade process for Release 13.1 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 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, you must take action. 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, any 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. 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. Use CA Clarity PPM Clarity to check the saved documents back into the CA Clarity PPM filestore.

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. Use the filestore location and target installation folder to determine the correct course of action.

**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 change the Filestore Directory location to the new 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 change the Index Directory location to the new 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, and 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 change the Filestore Directory location to the new 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 change the Index Directory location to the new 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 scenario. 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>/searchindex` to a new path:
   `<some folder>/searchindex/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.

### New Languages Supported in the User Interface

The product user interface supports the following new languages:

- Korean
- Simplified Chinese
- Traditional Chinese

**Upgrade Action:** None

### Add-ins Compatibilities

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

- If you are upgrading from Version 13.0 to Release 13.1, the following add-ins are upgraded:
  - PMO Accelerator
  - Earned Value Manager
  - Connector for CA Unicenter Asset Portfolio Management
  - Connector for CA Unicenter Service Desk and CA Software Change Manager for Distributed

  **Note:** If you plan to use one of the languages added for Release 13.1 (Korean, Simplified Chinese, or Traditional Chinese), upgrade all installed add-ins.

- If you are upgrading from any version before Version 13.0 to Release 13.1, upgrade all installed add-ins.
The following table shows the accelerator and connector releases that are required for Version 13.0, Service Pack 13.0.1, and Release 13.1.

<table>
<thead>
<tr>
<th>Accelerator or Connector</th>
<th>13.0 and 13.0.1 Installation</th>
<th>New 13.1 Installation</th>
<th>Upgrade from 12.x to 13.1</th>
<th>Upgrade from 13.0 or 13.0.1 to 13.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMO Accelerator</td>
<td>3.0</td>
<td>3.1</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Earned Value Manager</td>
<td>2.0</td>
<td>2.0.01</td>
<td>2.0.01</td>
<td>2.0.01</td>
</tr>
<tr>
<td>Accelerator for PRINCE2</td>
<td>2.0</td>
<td>2.0.01</td>
<td>2.0.01</td>
<td>2.0 or 2.0.01</td>
</tr>
<tr>
<td>Accelerator for the PMBOK</td>
<td>2.0</td>
<td>2.0.01</td>
<td>2.0.01</td>
<td>2.0 or 2.0.01</td>
</tr>
<tr>
<td>Accelerator for New Product Development</td>
<td>2.0</td>
<td>2.0.01</td>
<td>2.0.01</td>
<td>2.0 or 2.0.01</td>
</tr>
<tr>
<td>PPM Essentials Accelerator</td>
<td>2.0</td>
<td>2.0.01</td>
<td>2.0.01</td>
<td>2.0 or 2.0.01</td>
</tr>
<tr>
<td>BRM Accelerator</td>
<td>3.0</td>
<td>3.0.01</td>
<td>3.0.01</td>
<td>3.0 or 3.0.01</td>
</tr>
<tr>
<td>Connector for CA Unicenter Service Desk &amp; CA Software Change Manager™ for Distributed</td>
<td>2.0</td>
<td>2.0.01</td>
<td>2.0.01</td>
<td>2.0.01</td>
</tr>
<tr>
<td>Connector for CA Unicenter Asset Portfolio Management</td>
<td>2.0</td>
<td>2.0.01</td>
<td>2.0.01</td>
<td>2.0.01</td>
</tr>
<tr>
<td>Connector for Microsoft SharePoint</td>
<td>2.0</td>
<td>2.0.01</td>
<td>2.0.01</td>
<td>2.0 or 2.0.01</td>
</tr>
<tr>
<td>Service Connect</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Catalyst Connector</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**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 for a Release 13.1 New Installation

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

For complete information about installing CA Business Intelligence™ (CABI) Release 3.3 and setting up reports, see the Installation Guide.

Installation Actions:

Preparing for the installation:
- Install CABI Release 3.3 on the BusinessObjects server.

Installation:
- Run the Import Wizard to install the two BIAR files specific to your database type (Oracle or Microsoft SQL).

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

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

Upgrade Considerations for Reports

Use this section as a guideline to plan your upgrade. The following installation and upgrade use cases are covered:

- **Upgrade from an installed version earlier than Release 12.1** (see page 21)
- **Upgrade from Release 12.1 or Service Pack 12.1.1** (see page 22)
Note: For complete information about installing and upgrading the BusinessObjects server, see the Installation Guide.

Upgrade Actions:

- If you customized or changed any out-of-the-box reports, make a backup copy of the modified reports. Place the copies in a separate custom folder under the Public Folders/CA Reports/CA Clarity directory. The out-of-the-box reports are overwritten when the new Release 13.1 reports are installed.

- 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 13.1 universes are installed.

Upgrade from a Version Installed Earlier than Release 12.1

BusinessObject report instances 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 modified any out-of-the-box reports, move the modified reports to a custom report folder on the BusinessObjects server before installing the Release 13.1 reports.

Upgrade:

- Run the Import Wizard to import the two BIAR files specific to your database type (Oracle or Microsoft SQL). The out-of-the-box Service Pack 12.0.6 reports are overwritten during the upgrade. If you previously purchased the GSE Universes from CA Services, these universes are not overwritten by the Release 13.1 out-of-the-box universes.

Post-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 need to log in to InfoView and run reports.

- Use BusinessObjects Central Administration to reset passwords for multiple users.

- Manually restart the scheduled reports. Scheduled reports that were configured before the upgrade to Release 13.1 will not automatically run after the upgrade.
If LDAP is not configured, synchronize the user lists in BusinessObjects and CA Clarity PPM by running the Create Business Objects Users job. If the job is not run, a CA Clarity PPM user cannot run or open a report unless a BusinessObjects account is created explicitly for the user.

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

Upgrade from Release 12.1 or Service Pack 12.1.1

If you previously purchased the GSE Universes from CA Services, these universes are not overwritten by the Release 13.1 out-of-the-box universes.

There are no new user or security configurations; Release 13.1 uses the same CABI requirements and trusted authentication integration with CA Clarity PPM as Release 12.1 and Service Pack 12.1.1.

Upgrade Actions:

Preupgrade:

- If you are not already using CABI Release 3.3, upgrade to this release. For more information, see the Installation Guide.
- If you modified any out-of-the-box reports, move the modified reports to a custom report folder on the BusinessObjects server before installing the Release 13.1 reports.

Upgrade:

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

Post-Upgrade:

- Manually restart the scheduled reports. Scheduled reports that were configured before the upgrade to Release 13.1 will not automatically run after the upgrade.
- If LDAP is not configured and you want to synchronize the users that are not already in Business Objects, run the Create Business Objects Users job. If the job is not run, a CA Clarity PPM user cannot run or open a report unless a BusinessObject account is created explicitly for the user.

The job creates a user in BusinessObjects for every user in CA Clarity PPM. The user created in BusinessObjects is given an encrypted password. If users want to log in to the BusinessObjects server using the assigned password, the user ID and password must be reset under BusinessObjects Administration.
About Version 13.0 Installation and Upgrade Processes

This section provides information about changes to the installation or upgrade processes for the Version 13.0 release.

**Note:** See the Version 13.0 *Change Impact and Upgrade Guide* for complete information.

Preserving Your File Directory Customizations

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

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

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

```xml
<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**

```xml
<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>
        <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 used by the upgrade.

**Upgrade from a version less than Service Pack 12.1.1**

You can override the default memory settings provided in the Release 13.1 installer for the Service Pack 12.1.1 portion of the upgrade. Create a file named `memory.properties` and place it in the `install/config` directory. Set the desired memory values in that file.

The default values that are used during upgrade are:

- `defaultScriptMaxMem=1024m`
- `defaultScriptPermGenMem=128m`

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

- `defaultScriptMaxMem=2560m`
- `defaultScriptPermGenMem=512m`
All upgrades for large data sets (including upgrades from releases before Service Pack 12.1.1)

The Version 13.0 and Release 13.1 portions of the upgrade apply the memory setting overrides in memory.properties if they are present. To run the Version 13.0 or Release 13.1 upgrade phases with different memory settings, optionally specify the properties for defaultScriptMaxMem, defaultScriptPermGenMem, or both in the release-specific install property files for each release.

To override the Version 13.0 memory defaults:
1. Locate the Version 13.0 JAR file in the following location:
   /install-packages/13.0.0/upgrade-repack.13.0.0.7032a.jar.
2. Extract the contents of the JAR file to a subfolder named:
   upgrade-repack.13.0.0.7032a.

   **Note:** The complete path for the subfolder is
   /install-packages/13.0.0/upgrade-repack.13.0.0.7032a.
3. Create a file in the subfolder (upgrade-repack.13.0.0.7032a) named release-install.properties.
4. Add the defaultScriptMaxMem and defaultScriptPermGenMem properties and values to the release-install.properties file.

To override the 13.1 memory defaults:
2. Create a file in the 13.1.0 folder named release-install.properties.
3. Add the defaultScriptMaxMem and defaultScriptPermGenMem properties and values to the release-install.properties file.

**Database Backup Image for New Installations**

If you install Release 13.1 as a new installation, import the Release 13.1 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:

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

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

**New Log File Names**

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

**Supported Upgrade Paths**

Before you start the upgrade, we recommend that you read the *Basic Upgrade Process* (see page 27) topic.

If you have any of the following releases installed, you can upgrade to CA Clarity PPM Release 13.1:

- 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
  
  Supported patch levels:
  - 12.1.0.1 through 12.1.0.8
  - 12.1.1.1 through 12.1.1.7
  - 12.1.2.1 through 12.1.2.3
  - 12.1.3.1 through 12.1.3.3
- CA Clarity PPM Version 13.0 or Service Packs
  
  Supported patch levels:
  - 13.0.1.1 through 13.0.1.2

**Important**! Customers on a CA Clarity PPM patch level not listed in the preceding list should take caution when attempting an upgrade to Release 13.1 as there may be issues. 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 may also find more information by visiting the CA Clarity PPM User Communities.
Basic Upgrade Process

Complete these steps to upgrade to Release 13.1.

1. Install the prerequisite third-party software.
   Review the "Compatibilities" appendix in the release notes for the supporting operating environment information. Some important changes include the following:
   - 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 or 2008 R2 before upgrading to Release 13.1.
   - Dropped Actuate as a supported reporting solution.

2. Create a full backup of your database, file systems, and customizations (if applicable).
   **Best Practice**: Take a cold backup to keep sequences in line.

3. Remove customer-added database triggers, stored procedures, indexes, views, and constraints before upgrading.
   Due to database schema changes for this release, most custom triggers, indexes, and constraints can cause the upgrade to fail. Customer-added triggers should be removed, not disabled.

4. Review the steps for installing and upgrading in the *Installation Guide*.
   Some important changes include the following:
   - 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 and Release 13.1 is installed into an empty folder with the target folder name.
   - If you are installing on a different server, review the Server Database Software topic 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.
   b. Review the Clarity System Administration server admin.log and install.log for errors.
   c. Reapply database and file system customizations.
   d. If you have custom Xcelsius dashboards, see the "Correcting the CA Clarity PPM URL for HTML and Xcelsius Portlets" topic in the Version 13 Change Impact and Upgrade Guide.

7. Install or upgrade CABI Release 3.3 (BusinessObjects) and complete the following steps:
   a. If you are installing CABI for the first time, review the CA Clarity PPM requirements.
      
      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 need to log in to Infoview and run reports. You can also set up BusinessObjects trusted authentication between BusinessObjects and CA Clarity PPM, which provides LDAP integration with BusinessObjects and CA Clarity PPM.
   c. Import the universes and reports.
   d. Manually restart the scheduled reports.
      
      Note: 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.

Notes:
- Review the How to Install Add-ins topic 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.
- The install.log is now written to the CA Clarity PPM install directory instead of the directory where you extracted the add-in jar file. For example, <install.dir>/logs/content/install/<addin.id>/install log.
- Apply the Upgrade Ready content for those items that you are actively using.

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, apply the new incoming stock CA Clarity PPM content, and then retrofit the modifications to the new content.
■ Read the PMO Accelerator Release Notes for important information about what has changed for PMO Accelerator Version 3.0.

■ Review the System: Clarity Content add-in for upgrade ready content (for example, Role Capacity portlet). Apply the changes to accept the new Release 13.1 upgraded content.

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 view and/or the partition.

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

Some tips on reviewing the views:

■ The Last Version column identifies changes to stock views in Release 13.1.

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

■ If a view was changed in Release 13.1 but was not upgraded due to pre-existing configurations, decide if you want to apply the changed view.

Look for views with the following:

Last Version column=13.1 and the Upgraded column= unchecked.

10. Verify your NSQL queries.

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

■ Query name
■ Query ID
■ Content Source
■ Query ID from CMN_NSQLE QUERIES of the query that failed validation
There are database schema changes in this release. You must correct invalid NSQL queries for portlets to work.

**Note:** For more information about 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 the NSQL query is valid.

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

g. Use the XML Open Gateway (XOG) to export the failing query.
h. Correct the broken query constructs or fields.
i. Use XOG to import the corrected query.
j. Click the Preview button.
k. Confirm the NSQL query is valid.

---

**Upgrade Tips**

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

**Preupgrade**

- You must have the standard base calendar available in your CA Clarity PPM application before you upgrade. If you deleted the shipped calendar named *Standard*, you must 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, that effort adds to database size and affects performance.
■ Clear the Datamart and recreate the data post-upgrade to improve the processing
time of the upgrade. Use `NBI_Clean_Datamart_sp` to clear the Datamart. The script
does not clear the following 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.
■ Run the CSA Health Report to verify that all components are installed and
functioning before and after the upgrade.
■ Remove all CA Clarity PPM services before running the upgrade using the following
command: `niku remove all`.
■ Verify that no files or folders in the installation folder are in use anywhere.

**Post Upgrade**
■ 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 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 13.1.
Known Issues

- Ask your functional experts to review your upgraded test system side-by-side with a working preupgrade system.
  
  **Tip:** Use dual monitors for side-by-side comparison.

- Review the `app-ca.log` after the functional experts have used the test environment and look for new errors.

- Review customizations: Customer-added database triggers, custom indexes and constraints, file system changes, and custom interfaces. Review anything that did not come out-of-the-box with CA Clarity PPM. Adjustments can be required for customizations to work with this release.

**Known Issues**

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 13.1.

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 must correct the data issue before resuming the upgrade process. An upgrade check script runs and alerts you that this problem exists.

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

```sql
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.

```sql
<!-- 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 13.1.

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 TRANSCLASS 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 the information may be 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.
Known Issues

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 to Release 13.1 fails, review the logs to determine the reason for the failure, restore the working pre-upgrade version and database, correct the failure, and restart the upgrade.

nsa.ear File Not Generated During Installation

If you select Generic for the J2EE vendor during a new Version 13.1 installation, the installation script overrides your selection and sets the value to Tomcat. As a result, an exception appears in the install.log file, and the nsa.ear J2EE archive is not produced.

Complete these steps to correct this issue after installation:

1. Ignore the exception in the install.log file.
2. In the properties.xml file, change the value of the vendor attribute to generic in the applicationServer element.
3. Execute the following command in the install.dir/bin directory:
   ```
   admin package nsa
   ```
   This command produces the nsa.ear file that the installation program normally produces.
Potential Infinite URL Redirect Issue

Potential infinite URL redirect issues can arise when you run CA Clarity PPM in SSL mode. To avoid these issues, we recommend entering the same host name in the following locations:

- The URL to access the application (https://<hostname>:<ssl_port>/niku/nu)
- The HTTPS Entry URL field in the Application subtab under the Properties tab in Clarity System Administration

Complete these steps if you see the infinite URL redirect issue while operating in SSL mode:

1. Stop the product.
2. Review the HTTPS Entry URL field in CSA.
3. Correct the entry if needed and restart the application service.

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 may not appear after an upgrade. This issue occurs on the Project object when the following conditions are present:

- In the edit properties view (Layout:Edit), a display condition is defined on the General subpage.
- The General object actions menu for the view is not customized.
You can correct the issue before the upgrade, or you can upgrade and then correct the issue in the new upgraded product.

**To correct the issue before the upgrade:**
- Remove the display conditions on the General subpage before the upgrade and redefine the display conditions after the upgrade.

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

**To correct the issue after the upgrade:**
1. Create an action menu with following details:
   - Menu Name: General
   - Menu Code: general
   - Description: General
2. Move the following out-of-the-box actions from the Available Actions to the Selected Actions list:
   - Add to My Projects
   - Copy Project from Template
   - Remove from My Projects
   - Go to Links Page
   - Go to Notes Page

**Note:** For more information about creating an action menu, see the *Studio Developer's Guide*. 
This section contains the following topics:

**Time-Scaled Value Link Exports to Excel** (see page 37)

## Time-Scaled Value Link Exports to Excel

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

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

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

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

Follow these steps:

1. Open Administration and from General Settings, click System Options.
2. In the Other section, clear the Enable TSV links for Export to Excel check box.
3. Save your changes.
This section contains the following topics:

Financially-Enabled Roles (see page 39)
Budget Merge or Replace Option (see page 41)

Financially-Enabled Roles

The Financially-Enabled Roles feature provides the following functionality:

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

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

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

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

New Access Right

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

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

Upgrade Actions: None, if you want to preserve existing functionality.
You can remove the new Resource – Edit Financial access right from resource managers (granted during upgrade) and can prevent future resource managers from receiving this right. To remove the right, run a special post-upgrade script that is provided with this release.

**Note:** For more information, see the Post Installation Step to Remove the Resource - Edit Financial Access Right (see page 11) topic.

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

### Role Financial Properties

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

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

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

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

### Staff OBS Unit Field

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

**Upgrade Action:** None
Baseline

Baseline was modified to include the following items:

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

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

**Upgrade Action**: None

Budget Merge or Replace Option

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

The following options are available:

**Merge Option**

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

**Replace Option**

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

- Remove unwanted rows from the budget when the structure is the same
- Replace the structure (grouping attributes or fiscal time period) with different values

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

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

- forceReplace
- sourceCostPlanCode

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

**Upgrade Action**: None
Chapter 5: Resource Management

This section contains the following topics:

Enhancements to Resource Planning Tabs and Portlets (see page 43)

Enhancements to Resource Planning Tabs and Portlets

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

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

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

- Do nothing. You can continue to use the old Resource Planning portlet page and tabs with your existing portlets.
- Manually add the new portlets onto your existing Resource Planning tab set.
- Complete the upgrade of the new content by applying the new portlet page and all of the updated portlets, the Resource Planning Group, and the Menu Manager.

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

Follow these steps:

1. Log in as an Administrator user with appropriate access rights to install and upgrade CA Clarity PPM portlets and portlet pages.
2. Apply the changes for the new tabs and portlets by completing the following actions:
   a. Open Administration, and from Studio, click Add-Ins.
   b. Click System: Clarity content.
   c. Review the list of items with an Upgrade Ready status and clear the checkmark for any line items that you do not want upgraded.
   d. Click Apply.
This action replaces the current configurations with the new content for each selected item.

e. Review the confirmation page and click Yes.

3. Refresh the Home menu definition by completing the following steps:
   a. Open Administration, and from Studio, click Menu Manager.
   b. Click Application Menu.
   c. Click Resource Management in the menu hierarchy list.
   d. Click Save and Return.
      This action accepts the menu order.

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

4. Complete the adjustment of the portlets and tabs by complete the following steps:
   a. Open Administration, and from Studio, click Portlet Pages.
   b. Open the Resource Planning portlet page.
   c. Click Tabs.
      As part of the upgrade, the following existing out-of-the-box portlets appear on new tabs:
      ■ Unfilled Requirements portlet is now on the Unfilled Allocations tab. This portlet also remains on the Allocations tabs, the preupgrade location.
      ■ Booking Status portlet is now on the Bookings tab. This portlet also remains on the Allocations tabs, the preupgrade location.
      ■ OBS Resource Allocation portlet is now on the Organizational Demand tab. This portlet also remains on the Capacity tab, the preupgrade location.
   d. Decide which tab the portlets are to appear on and remove the portlets from one of the tabs.
      **Note:** To remove a portlet, click a tab name, then click the Content tab to add or remove portlets.

5. (Optional) The menu entry for Resource Planning continues to default to the Workloads tab, which is now in the center of the tabs. If you prefer to start on the first tab when you select Resource Planning from the Home menu, complete the following steps:
   a. Open Administration, and from Studio, click Menu Manager.
   b. Click Application Menu.
c. Click Resource Management in the menu hierarchy list.
   The properties page appears.

d. In the Page Name field, select Capacity.

e. Save your changes.
Chapter 6: User Interface

This section contains the following topics:

New Fixed Headers (see page 47)
High Contrast UI Theme (see page 47)

New Fixed Headers

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

This feature is not available for Internet Explorer 8.

Upgrade Action: None

High Contrast UI Theme

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

Upgrade Action: None
Chapter 7: Data Model Changes

This section contains the following topics:

Database Table Changes (see page 49)

Database Table Changes

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

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

<table>
<thead>
<tr>
<th>Table</th>
<th>Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIZ_COM_PERIODS</td>
<td>Removed:</td>
</tr>
<tr>
<td></td>
<td>■ P_QUARTER</td>
</tr>
<tr>
<td></td>
<td>■ PERIOD</td>
</tr>
<tr>
<td>FIN_PLANS</td>
<td>Added:</td>
</tr>
<tr>
<td></td>
<td>■ SOURCE_COST_PLAN_ID</td>
</tr>
<tr>
<td></td>
<td>■ BUDGET_SUBMIT_OPTION</td>
</tr>
<tr>
<td>NAMEOPTIONS</td>
<td>Added:</td>
</tr>
<tr>
<td></td>
<td>■ RES_FIN_EDIT_RIGHT_AUTO</td>
</tr>
<tr>
<td>NBI_DIM_FISCAL_TIME</td>
<td>Updated:</td>
</tr>
<tr>
<td></td>
<td>■ PERIOD_KEY</td>
</tr>
<tr>
<td></td>
<td>■ QUARTER_KEY</td>
</tr>
<tr>
<td></td>
<td>■ TIME_KEY</td>
</tr>
<tr>
<td>PAC_MNT_RESOURCES</td>
<td>Updated:</td>
</tr>
<tr>
<td></td>
<td>■ RESOURCE_CLASS</td>
</tr>
<tr>
<td></td>
<td>■ TRANSCLASS</td>
</tr>
</tbody>
</table>