HP Project and Portfolio Management Center

Software Version: 9.31

Release Notes

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The title page of this document contains the following identifying information:

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Contents

Chapter 1: Overview

This document is an overview of the changes made to Project and Portfolio Management Center (PPM Center) for version 9.31. It contains important information that is not included in the manuals. You can find information about the following in this document:

Software and Hardware Requirements

For information about the installation requirements and compatibility with other products, see the *System Requirements and Compatibility Matrix* for PPM Center version 9.31. The support matrix may be updated between releases, and so is only available at the HP Support web site:

https://softwaresupport.hp.com

Protecting Your Deployment from Security Vulnerabilities

Make sure you take necessary precautions to protect your PPM Center deployment from general security vulnerabilities, especially those related to Web server and related infrastructure vulnerabilities. Patch and configure your Web server's operating system and DNX servers to prevent malicious attacks that could put your organization and data at risk. You can take such steps as disabling unused ports or enabling SSL in your environment. Consult your Web server vendor for the latest patches to prevent harmful attacks such as cross-site scripting.

Chapter 2: Installation Notes

> **Note:** The zip package of PPM Center version 9.31 contains four files:
>
> - `ppm-931-SP1.jar`, the installation jar file for PPM Center version 9.31. The installation instructions are provided in "Installing PPM Center 9.31" below.
>
> - `ppm-931-LP-multi-lang.jar`, language packs installation jar file for PPM Center version 9.31. Required only when you want to install a language pack.
>
>   Instructions for installing language packs are provided in the Release Notes for Language Pack for PPM Center 9.31, available at the HP Manuals site.
>
> - `ppm-931-APM.jar`, the latest installation jar file for the HP APM module, offering the enhanced use of Roadmap. Required only when you need to use the Roadmap feature available with the HP APM module on PPM Center version 9.31.
>
>   For instructions about installing the HP APM module, see "Installing HP APM for PPM 9.31" on page 32
>
> - `ppm-931-OracleApps-patch.zip`, the zip package for installing HP Deployment Management Extension for Oracle E-Business Suite version 9.31.
>
>   For instructions about installing the extension for Oracle E-Business Suite, see "Installing HP Deployment Management Extension for Oracle E-Business Suite Version 9.31" on the next page.

Installing PPM Center 9.31

To install PPM Center version 9.31:

1. Back up your database.

2. Back up your customized data.

3. Stop the PPM Server. The Service Pack cannot be installed on an active server.

4. Copy the Service Pack file `ppm-931-SP1.jar` to the *<PPM_Home>* directory. This is the directory where the PPM Server is installed.

5. Change to the *<PPM_Home>*/bin directory.

6. Start the installation using the following command:

   ```
   sh ./kDeploy.sh -i SP1
   ```

7. Follow the on-screen instructions to complete the installation.

8. Restore your customized data (if any).

9. Start the PPM Server.

Note:

- HP recommends you back up your customized files including scripts before applying PPM Center version 9.31.

- Defect fixes included in version 9.21, 9.22, and patches (up untill 9.22.0004) on top of version 9.22 are rolled into verson 9.31. If you are on PPM Center patch 9.22.0005 (or later), do not upgrade to PPM Center version 9.31 yet, otherwise, you may encounter some regressions regarding the defect fixes included in 9.22.0005.

- PPM Center version 9.31 publishes a security guideline in the following location: https://softwaresupport.hp.com/group/softwaresupport/search-result/-/facetsearch/document/KM01342892
  HP recommends that you follow this document to strengthen your PPM Center instance.

Installing HP Deployment Management Extension for Oracle E-Business Suite Version 9.31

To install HP Deployment Management Extension for Oracle E-Business Suite version 9.31:

1. Create a database link as a PPM user by running the following:

   ```
   CREATE DATABASE LINK <DBLinkName>
   CONNECT TO APPS
   ```

```
IDENTIFIED BY APPS
USING '(DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)
(HOST=<OracleApps server>)(PORT=1521))
(CONNECT_DATA=(SID=<Your SID>)))';
```

2. Start PPM Server.

3. Extract the `ppm-931-OracleApps-patch.zip` package to obtain the following three jar files:

   - `ppm-931-OracleApps.jar`

   - `ppm-931-OracleTech.jar`

   - `ppm-931-OracleApps912.jar`

4. Copy the three jar files to the *<PPM_Home>* directory.

5. Change to the *<PPM_Home>*/`bin` directory.

6. Deploy the `ppm-931-OracleApps.jar` using the following command:

   `sh ./kDeploy.sh –i OracleApps`

   a. Enter PPM admin username and password when required.

   b. Select N for the question `Does this database include the Oracle Apps install where OM/GLM will run?`.

   c. Select Y for the question `Is Oracle Apps (hosting OM/GLM) installed in a different database?`.

   d. Input the database link you created in step 1 when required.

7. Deploy the `ppm-931-OracleTech.jar` using the following command:

   `sh ./kDeploy.sh –i OracleTech`

8. Deploy the `ppm-931-OracleApps912.jar` using the following command:

   `sh ./kDeploy.sh –i OracleApps912`

Out-of-Sync Actuals Data

The following sections describe what to do if the pre-validation process during installation determines that data is not synchronized between the HP Time Management and HP Project Management modules or between the HP Time Management and HP Demand Management modules.

Data Out of Sync Between HP Time Management and HP Demand Management

If, during the installation of PPM Center 9.31, the pre-validation process determines that actuals data in the HP Time Management and HP Demand Management modules are out of sync, an error occurs and you cannot continue with the installation.

To resolve the problem:

1. Navigate to the *<PPM_Home>*/deploy/931/SP1/phases/prevalidation directory and run the CorrectDMTMActualsOutOfSync.sql script.

2. After the CorrectDMTMActualsOutOfSync.sql script has run successfully, re-install PPM Center 9.31.

Data Out of Sync Between HP Time Management and HP Project Management

If, during the installation of PPM Center 9.31, the pre-validation process determines that actuals data in the HP Time Management and HP Project Management modules are out of sync, an error occurs and you cannot continue with the installation.

To resolve the problem:

1. To tag these data for synchronization, navigate to the *<PPM_Home>*/deploy/931/SP1/phases/prevalidation directory and run the MarkPMTMActualsOutOfSync.sql script.

2. Re-install PPM Center 9.31.

3. After you successfully install PPM Center 9.31, navigate to the *<PPM_Home>*/bin directory and run the kPMTMSync.sh script, as follows, and redirect the output to a file:

```
sh ./kPMTMSync.sh -username<username> -password <password>
```

Supported Upgrades

Note: HP strongly recommends upgrading to the latest version of PPM Center. In general, each new PPM Center version includes important product improvements that are not provided in earlier versions.

Table 1-1 Supported upgrades for current PPM Center versions

| Current PPM Center Version | Can be upgraded to | | | |
	8.0x	9.1x	9.2x	9.3x
7.5 SP3 or earlier [1]	8.00 or later	9.10 or later	9.20~9.22	9.30, 9.31
7.5 SP4, 7.5 SP5, 7.5 SP6 [1]	8.02 or later	9.10 or later	9.20~9.22	9.30, 9.31
7.5 SP7 [1]	8.03 or later	**9.12** or later	9.20~9.22	9.30, 9.31
8.00 [2]	8.00.01 or later	9.10 or later	9.20~9.22	9.30, 9.31
8.00.01 [2]	8.02 or later	9.10 or later	9.20~9.22	9.30, 9.31
8.02 [2]	8.03 or later	9.10 or later	9.20~9.22	9.30, 9.31
8.03 [2] (build 1189 and build 1208)	8.04	**9.12** or later	9.20~9.22	9.30, 9.31
8.04	—	**9.14 (build 1460)**	9.20~9.22	9.30, 9.31
9.10	—	9.11 or later	9.20~9.22	9.30, 9.31
9.11	—	9.12 or later	9.20~9.22	9.30, 9.31
9.12	—	9.13 or later	9.20~9.22	9.30, 9.31
9.13	—	**9.14 (build 1460)**	9.20~9.22	9.30, 9.31
9.14 (build 1435 or build 1460)	—	—	9.20~9.22	9.30, 9.31
9.14.0001~9.14.0004 [3]	—	—	9.20~9.22	9.30, 9.31

Table 1-1 Supported upgrades for current PPM Center versions, continued

Current PPM Center Version	Can be upgraded to			
	8.0x	9.1x	9.2x	9.3x
9.14.0005~9.14.0006 [3]	—	—	9.21, 9.22	9.30, 9.31
9.14.0007~9.14.0009 [3]	—	—	9.22	9.30, 9.31
9.20	—	—	9.21, 9.22	9.30, 9.31
9.21	—	—	9.22	9.30, 9.31
9.22	—	—	—	9.30, 9.31
9.22.0001~9.22.0005	—	—	—	9.30, 9.31
9.30	—	—	—	9.31
9.30.0001	—	—	—	9.31

1. If you are upgrading from a version prior to version 8.00, incremental upgrades are necessary (for example: version 7.5 to 8.00, followed by 8.00 to 9.10, 9.10 to 9.20, 9.20 to 9.30, and finally 9.30 to 9.31).

2. If you are upgrading from version 8.0x to 9.1x, you must initially upgrade to version 9.10 before upgrading to version 9.1x.

   For example, PPM Center versions 9.10 and 9.11 were released before versions 8.03 and 9.12. Versions 8.03 and 9.12 include improvements to core functionalities that are not supported on the older versions 9.10 and 9.11.

   If PPM Center is running at version 8.03, do not upgrade to and then run at version 9.10, 9.11, or 9.12. Instead, upgrade from version 8.03 to version 9.10 temporarily without running PPM Center, and then upgrade **immediately** to version 9.12 or later.

3. Defect fixes included in patches (up until 9.14.0004) on top of version 9.14 are rolled into version 9.20. Version 9.21 contains defect fixes included in patches 9.14.0001~9.14.0006. Version 9.22 contains defect fixes included in patches 9.14.0001~9.14.0009. Version 9.22.0001 contains defect fixes included in patches 9.14.0001 through 9.14.0010.

   If PPM Center is running at patch 9.14.0005 (or later, up until 9.14.0009), do not upgrade to and then run at version 9.20 or 9.21. Instead, upgrade from patch 9.14.0005 (or later, up until 9.14.0009) to version 9.20 temporarily without running PPM Center, and then upgrade **immediately** to version 9.22.

   If PPM Center is running at patch 9.14.0010 or later patch on top of version 9.14, do not upgrade to version 9.22 yet, otherwise you may encounter some regression regarding the defect fixes in 9.14.0010. Instead, upgrade from patch 9.14.0010 to version 9.22 temporarily without running PPM Center, and then upgrade **immediately** to version 9.22.0001 or the latest patch.

Regenerating Web Service Stubs for Integrating with HP ServiceCenter

If you have integrated your PPM Center deployment with HP ServiceCenter, you can modify which fields are available through Web services, but you must regenerate the Web service stubs for the integration after installing any PPM Center service pack.

After installing the service pack, regenerate the Web service stubs in the PPM Server from the new Web Services Description Language (WSDL) descriptor as follows:

1. Navigate to the *<PPM_Home>*`/bin/sdi>` directory on the PPM Server.

2. Run the script:
   `sh ./kGenerateServiceCenterStub.sh <wsdl-url> <PPM_Server_Name>`

   where

   `<wsdl-url>` represents the ServiceCenter WSDL URL for Change Management.

   <PPM_Server_Name> represents the subdirectory of *<PPM_Home>*`/server` specified during installation as the value for the `KINTANA_SERVER_NAME` parameter in the `server.conf` file. (It is not necessarily the actual host name of the server.) When generated, the stubs will be placed under this subdirectory.

   For example, run the script:

   ```
   sh ./kGenerateServiceCenterStub.sh http://host:12670/ChangeManagement?wsdl
   kintana
   ```

   > **Note:** The stub configuration might fail if the host is not resolvable by name. To resolve the host by name, make an entry in the hosts file for the machine you want to connect. See the documentation for your operating system for the location of the hosts file.

PPM Community on HPLN

The HP Project and Portfolio Management Center Community on HP Live Network (http://www.hp.com/go/livenetwork) is now live! The PPM Community on HPLN (http://www.hp.com/go/PPM_HPLN) is a virtual community for HP Experts, Partners and Customers to

collaborate and share knowledge, best practices, and add-on content for the PPM product. You can log in to the PPM Community on HPLN to access the latest Content Packs.

Access to HP Live Network is available at no additional cost to all PPM customers. Customers must log in using an HP Passport account. Customers without Passport accounts can register for free on HP Live Network.

Chapter 3: New Features in PPM Center 9.31

The following new features are included in PPM Center version 9.31:

- "Integrating PPM Center Time Sheets with HP Agile Manager" below

- "Enhanced APM Roadmap" on page 29

Integrating PPM Center Time Sheets with HP Agile Manager

In version 9.30, the solution Agile Open SDK integrates PPM Center tasks with HP Agile Manager. In this version the solution is used to realize the integration between PPM Center time sheets and HP Agile Manager.

For more information about Agile Open SDK, see the Introduction to Agile Open SDK section in the *HP Solution Integrations Guide* for version 9.30.

This section contains the following:

- "Introduction to Integrating PPM Center Time Sheets with HP Agile Manager" on the next page

- "Downloading and Installing the HP Agile Manager Connector for PPM 9.31" on page 17

- "Configuring the Integration between PPM Center Time Sheets and HP Agile Manager" on page 20

- "Importing Agile Effort from HP Agile Manager to PPM Center Time Sheets " on page 22

- "REST APIs Called in the Integration" on page 26

- "Data Table Changes" on page 26

- "Troubleshooting and Limitations" on page 27

Introduction to Integrating PPM Center Time Sheets with HP Agile Manager

The integration between PPM Center time sheets and HP Agile Manager enables end users to import agile effort from HP Agile Manager into their PPM Center time sheets, freeing them from reporting their time repeatedly and thus ensuring data consistency between different management tools. This integration also ensures information sharing between product development teams and project managers, which facilitates project execution with right decisions.

This integration is a one-way (from HP Agile Manager to PPM Center) and one-multiple mapping relationship (one time sheet to multiple releases).

How Data is Imported from HP Agile into PPM Center Time Sheets

After users click **Add External Data** on their time sheets, select **HP Agile Manager** from the **Select an external system** drop-down list, and provided required credentials, the Agile Manager Integration Plug-in for PPM calls HP Agile Manager REST APIs to get data in the following sequence,

1. Get release list for a specific project from HP Agile Manager.

2. Get sprint list from available releases, where the sprints shall fall into the user's current time sheet period.

3. Get backlog list from qualified sprints.

   A qualified sprint shall satisfy the following criteria:

   ○ The sprint start date is the same or later than the time sheet period start date

   ○ The sprint end date is same as or earlier than the time sheet period end date.

   If the time sheet period contains unqualified sprints, the effort in these unqualified sprints will not be retrieved by the plug-in. Users will get a warning message when the release contains unqualified sprints.

4. Get task list by `assign-to` value and `status` value, where `assign-to` value is the HP Agile Manager user email address, and the `status` value is `Completed`.

5. Then the Agile Manager Integration Plug-in for PPM does the following:

a. Adds together values for the **Invested (h)** field for all returned tasks for each of the releases.

b. Imports the total effort of a release as an entry.

c. Divides the total effort by available working days in the current time sheet period.

d. Fills the average effort value to each of the working days in the time line.

For details about the REST APIs, see "REST APIs Called in the Integration" on page 26.

Downloading and Installing the HP Agile Manager Connector for PPM 9.31

To integrate PPM Center time sheets with HP Agile Manager, administrators must download and install the free HP Agile Manager Connector for PPM 9.31. This is a one-time action.

HP Agile Manager Connector for PPM 9.31 is an enhancement to HP Agile Manager Connector for PPM 9.30. Installing HP Agile Manager Connector for PPM 9.31 includes the features and entities introduced by HP Agile Manager Connector for PPM 9.30.

For more information about HP Agile Manager Connector for PPM 9.30, see the *HP Solution Integrations Guide* for version 9.30.

Installation Instructions

To download and install HP Agile Manager Connector for PPM 9.31:

1. Obtain the plug-in bundles from the HP Live Network.

   a. Go to the PPM Community on HP Live Network.

   b. On the PPM Community home page, click **Content Catalog**.

   c. Click **Agile Manager Integration Plug-in for PPM** (where HP is the provider).

   d. Click **Downloads**.

      The Agile Manager Integration Plug-In for PPM - Downloads page opens.

   e. Click the **HP Agile Manager Connector for PPM 9.31** folder.

      f.   Click `ppm-931-AgileManagerConnector.zip` to download the file.

      g.   Unzip the file to obtain the `ppm-931-Connector-AGM.jar` file.

2. Stop PPM Server.

3. Unzip the package and copy the two bundles to the *<PPM_Home>* directory.

4. Deploy the bundles by running the following commands from the *<PPM_Home>*`/bin` directory:

    `sh ./kDeploy.sh -i Connector-AGM`

5. Repeat step 3 and step 4 for each of the server nodes in a cluster.

6. Restart PPM Server.

Entities Installed by HP Agile Manager Connector for PPM 9.31

In addition to the entities introduced by HP Agile Manager Connector for PPM 9.30, the following entities are installed by HP Agile Manager Connector for PPM 9.31:

- A new time sheet item type **External Data** to the HP Time Management module.

  Features available with the new item type include:

  - Enable/Disable External Data items to have time information imported and tracked in PPM Center
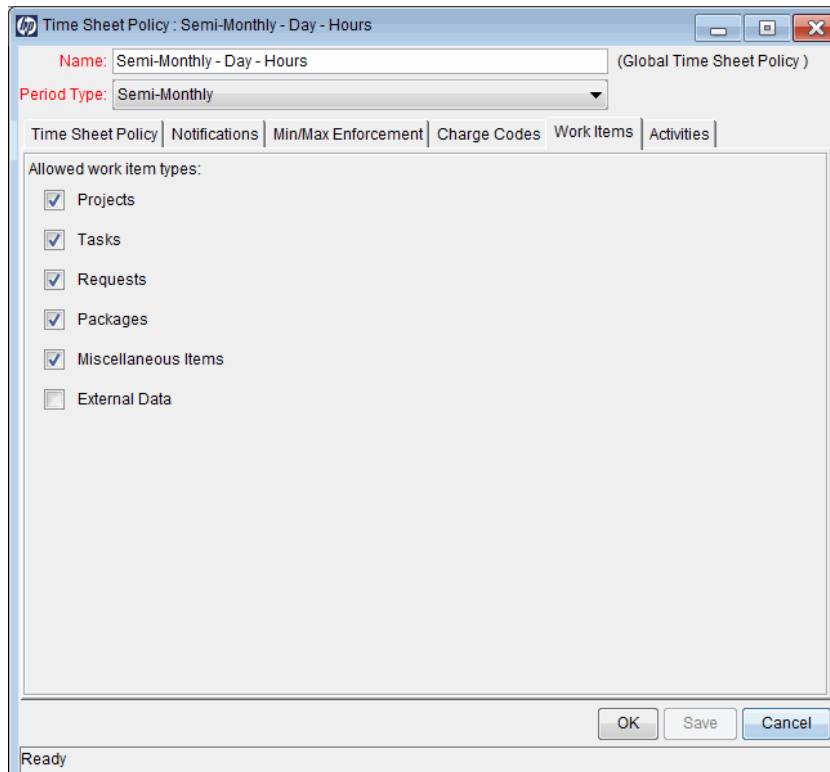
- Charge code can be allocated to External Data items

- Override rules can be applied to External Data items

- Work allocations can be applied on External Data items
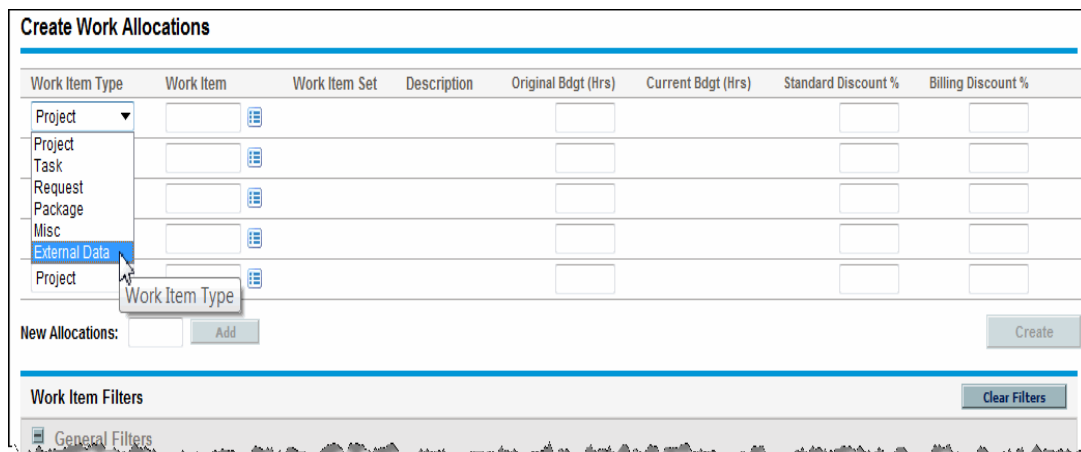
- Activities can be specified on External Data items

- In the Import External Data window, **HP Agile Manager** appears as an available value for the **Select an external system** field. Selecting **HP Agile Manager** loads more configuration settings to the window.

  If the Agile Manager Integration Plug-in is not deployed, the **Select an external system** field is empty.

Configuring the Integration between PPM Center Time Sheets and HP Agile Manager

This section describes the steps that PPM Center administrators must perform to set up the integration between PPM Center time sheets and HP Agile Manager.

Prerequisites

Make sure you satisfy the following prerequisites before you can proceed to set up the integration:

- PPM Center is on version 9.31 and HP Agile Manager Connector for PPM 9.31 is installed.

- You have obtained a valid HP Agile Manager account.

Setting Up the Integration

To set up the integration,

1. Log on to PPM Center as an administrator.

2. (Optional) Launch the Administration Console and check that the `ENABLE_TM_WORK_ITEM_ EXTERNAL_DATA` server configuration parameter is set to `true`.

Parameter Name	Description, Usage	Default and Valid Values
ENABLE_TM_WORK_ITEM_EXTERNAL_DATA	Setting the parameter to `true` makes the **External Data** option available in the following PPM Workbench windows: ○ On the Work Items and Activities tabs of the Time Sheet Policy window Selecting the **External Data** option on the **Work Items** tab ensures that, • The **Add External Data** option is available in the **Add Items** action list of the Time Sheet page • The **External Data** option is available on the Create Work Allocations page as a work item type. For information about the usage of activities, see the *HP Time Management Configuration Guide* and the *HP Time Management User's Guide*. ○ In the Work Item Type drop-down list (under the Dependencies section) of the Override Rule window **Note:** Changes made to the time sheet policy and override rules apply to new time sheets only.	Default value: `true` Valid values: `true`, `false`

The parameter is set to `true` by default. In case you changed the parameter value to `false`, change it back to `true`.

3. In the PPM Workbench, enable the **External Data** option on the Work Items tab of the desired time sheet policy.

   a. From the menu bar, select **Open > Administration > Open Workbench** (or **Open Workbench on Desktop**).

The PPM Workbench opens.

b. From the shortcut bar, select **Time Mgmt > Time Sheet Policies**.

The Time Sheet Policy Workbench opens.

c. Click **List**.

d. From the **Results** tab, select and open the desired time sheet policy.

e. Click the **Work Items** tab.

f. Select the checkbox for the **External Data** option.

> **Note:** This setting applies to new time sheets only. Existing time sheets still load the old time sheet policy, therefore users cannot add external data to their old time sheets.

g. Click **OK**.

4. Add an HP Agile Manager instance for the target HP Agile Manager server system on the integration landing page.

For detailed instructions, see the *Adding an HP Agile Manager Instance* section in the *HP Solution Integrations Guide* for version 9.30.

> **Note:** Version 9.31 introduces two icons (and) in the Update Instance section on the integration landing page. The **WP** icon indicates that the instance is used to integration Agile Manager with PPM Center tasks. The **TS** icon indicates that the instance is used to integration Agile Manager with PPM Center time sheets.

Importing Agile Effort from HP Agile Manager to PPM Center Time Sheets

To import agile effort from HP Agile Manager into your PPM Center time sheet,

1. Log on to PPM Center.

2. From the menu bar, select **Create > Time Sheet**.

The Create Time Sheet page appears.

3. Complete the following fields or option:

   ○ Time Period

   ○ Resource

   ○ Description

   ○ Include Items from My Items List

   For detailed descriptions about these fields, see the *HP Time Management User's Guide.*

4. Click **Create**.

   The time sheet is created and the Edit Time Sheet page appears.

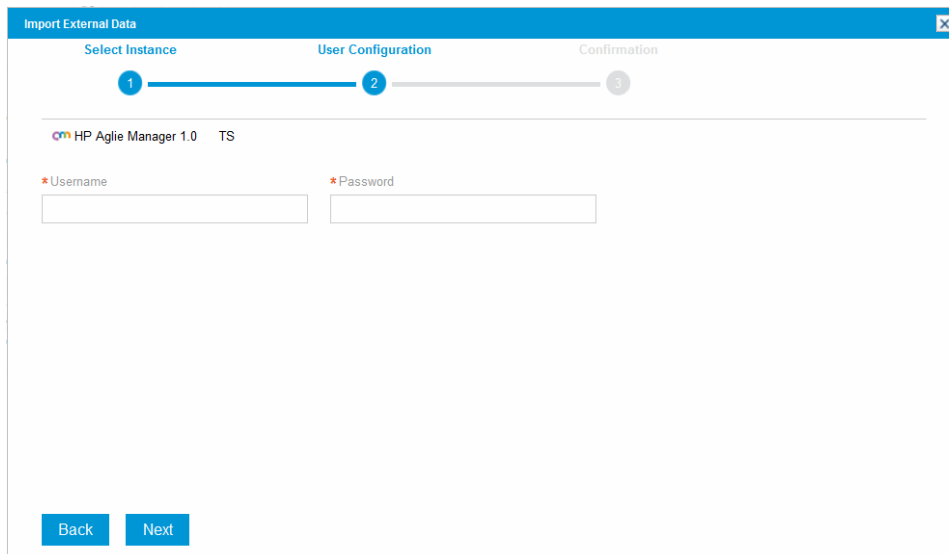5. Click **Add Items**, and then select **Add External Data** from the available actions.

   The Import External Data window appears.

6. From the **Select Instance** drop-down list, select a instance, with the Agile Manager icon in front of the instance name, that your administrator configured.
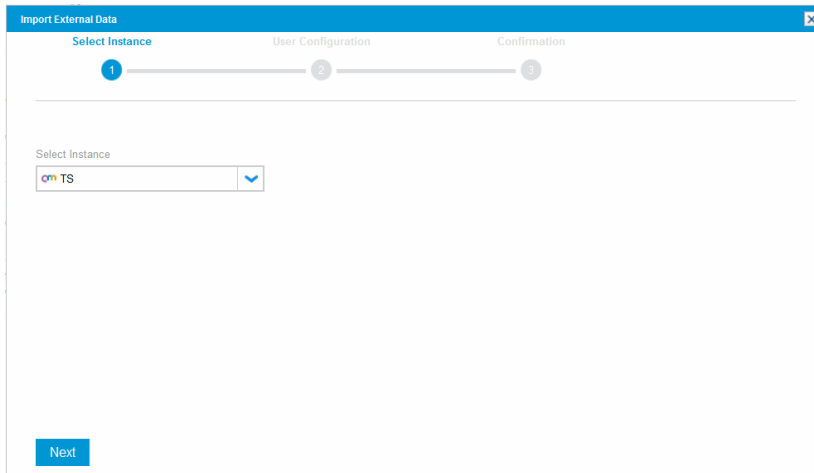
7. Click **Next**.

   You come to step 2 of importing external data.

8. In the **Username** and **Password** fields, enter the username and password you use to log on to the HP Agile Manager.

9. Click **Next**.

   The system retrieves and loads effort data for tasks with status of **Done** from available releases in HP Agile Manager.
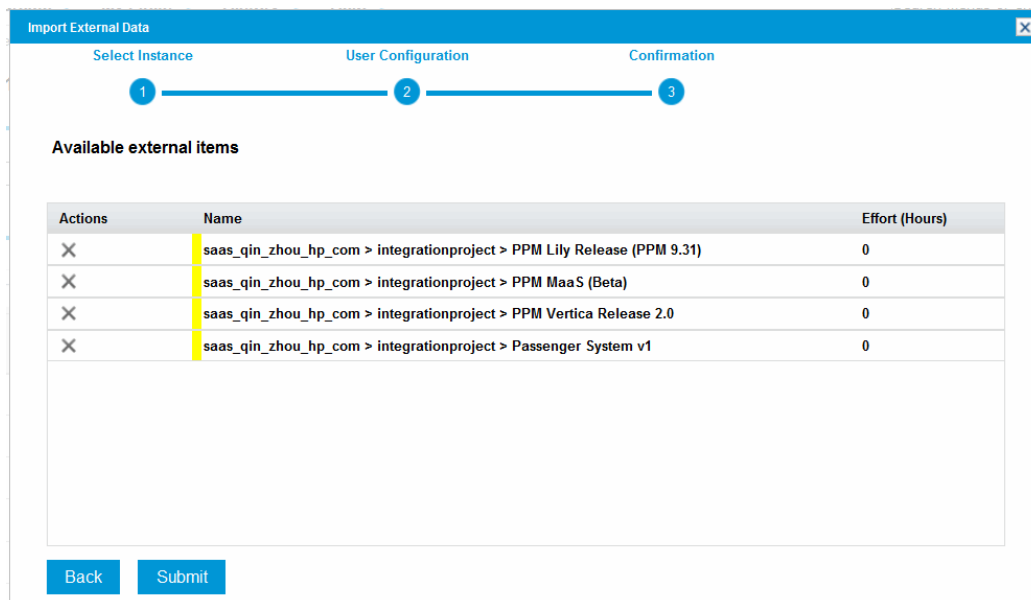
The external item name is displayed in the following format:

<Domain_Name> > <Project_Name> > <Release_Name>

Review the list of available releases. If necessary, you can click the ✕ icon to remove the unwanted external item from the list.

> **Note:** If you see a yellow indicator in front of an external item name, it means that the release from HP Agile Manager is not aligned with the PPM Center time sheet period.

10. Click **Submit**.

    The HP Agile Manager efforts are imported and distributed to each of the working days of the time sheet.

    The time sheet line **Item** name is displayed in the following format:

    <HP_Agile_Instance_Name>:<Release_Name>
    <Domain_Name>><Project_Name>

    The imported entries are displayed under the **External Data** section.

11. Review and edit the time sheet lines if necessary.

12. Click **Save** or **Save&Submit**.

REST APIs Called in the Integration

The following HP Agile Manager REST APIs are called in this integration to retrieve and import data from HP Agile Manager into PPM Center time sheets.

Sequence and Description	HP Agile Manager REST API called
1. Get domain list	https://<*AgileManager_Server_URL*>/qcbin/rest/domains/
2. Get project list of one domain	https://<*AgileManager_Server_URL*>/qcbin/rest/domains/<*domain_name*>/projects/
3. Get release list of one project	https://<*AgileManager_Server_URL*>/qcbin/rest/domains/<*domain_name*>/projects/<*project_name*>/releases/
4. Get a specific release	https://<*AgileManager_Server_URL*>/qcbin/rest/domains/<*domain_name*>/projects/<*project_name*>/releases?query={id[<*release_id*>]}
5. Get sprint list of one release	https://<*AgileManager_Server_URL*>/qcbin/rest/domains/<*domain_name*>/projects/<*project_name*>/release-cycles?query={parent-id[<*release_id*>]}
6. Get backlog list of sprints	https://<*AgileManager_Server_URL*>/qcbin/rest/domains/<*domain_name*>/projects/<*project_name*>/release-backlog-items?query={entity-type[requirement];sprint-id[<*sprint_id1*> OR <*sprint_id2*> OR ...]}
7. Get task list of one backlogs by assign-to and status	https://<*AgileManager_Server_URL*>/qcbin/rest/domains/<*domain_name*>/projects/<*project_name*>/project-tasks?query={release-backlog-item-id[<backlog_id1> OR <backlog_id2> OR ...];assigned-to[<agile_user_mail_address>];status[Completed]}

Data Table Changes

This section describes the changes to the data model as a result of the implementation of this integration solution.

Table changes in 9.22 as compared to 9.21

Table Name	Impact	Change Details
PPM_INT_TIMESHEET_DATA	Added in 9.22 and 9.31	
PPM_INT_WORK_ITEM_SET	Added in 9.22 and 9.31	

Table changes in 9.22 as compared to 9.21, continued

Table Name	Impact	Change Details
ITG_ACTIVITIES	Modified in 9.22 and 9.31	Added the following column: • IS_USED_FOR_ITG
KTMG_POLICIES	Modified in 9.22 and 9.31	Added the following two columns: • ITG_ACTIVITIES_REQUIRED_FLAG • WORKITEM_INT_ENABLED_FLAG
TM_TIME_SHEETS	Modified in 9.22 and 9.31	Added the following two columns: • ITG_ACTIVITIES_REQUIRED_FLAG • WORKITEM_INT_ENABLED_FLAG

For details of these tables, see the *Data Model Guide* for version 9.30.

Troubleshooting and Limitations

This section includes the following:

- "Limitations" below

- "Troubleshooting Problems" on the next page

Limitations

- When you run the following HP Time Management reports, if you set the **Work Item Type** filter to **External Data**, and the **Work Item Set** filter to **HP Agile Manager**, no values are available for **Work Item**:

  ○ Actual Time Summary

  ○ Time Sheet Summary

  ○ Work Allocation Details

- When you set filters for the following HP Time Management portlets, if you set **Work Item Type** to **External Data**, and **Work Item Set** to **HP Agile Manager**, no values are available for **Work Item**:

- ○ Time Sheet Totals by Work Item

- ○ Time Sheet Totals by Resource Group

- ○ Work Allocation Details

- ○ Work Item Set Actuals vs. Allocations

- **External Data** is available for the following HP Time Management portlets only:

  - ○ Time Sheet Totals for Direct Reports

  - ○ Approve Time Sheets

  - ○ Work Item Set Actuals vs. Allocations

  - ○ Time Sheet Totals by Resource Group

  - ○ Time Sheet Totals by Resource

  - ○ My Time Sheets

  External Data is not available for the following portlets:

  - ○ Time Sheet Totals by Work Item

  - ○ Work Allocation Details

  - ○ My Tasks

  - ○ My Work Items

Troubleshooting Problems

Problem: Importing the agile effort data for multiple times during the time period range does not automatically update the effort data in your PPM Center time sheet that you imported previously. Instead, it adds new time lines into your time sheets. You need to manually remove the old time lines of data.

Solution: Import your agile effort only once for each time period, approaching the end of the current period, so that the latest and more accurate effort data can be retrieved and imported.

Enhanced APM Roadmap

Introduction to Enhanced APM Roadmap

HP APM for PPM 9.22 introduced a new entity type Roadmap which defines the lifecycle statuses (roadmap phases) and milestones. You can create a roadmap for any other existing request. In HP APM for PPM 9.31, the use of roadmap is so enhanced that you can create and visualize Roadmaps in different levels.

To understand the enhanced use of roadmaps, you should first understand the following terms used in this document:

- **Roadmap/Roadmap Entity**

  A roadmap or roadmap entity is a roadmap for an individual application/service, or a group of applications/services, including lifecycle statuses (roadmap phases) and milestones. You can create a roadmap entity for any other existing request.

- **Roadmap Type**

  The request types able to have roadmaps attached in the requests are roadmap types. Portfolio is a default roadmap type. Customized roadmap types can be created by the APM administrator to meet your organization's business requirements. For example, you can set the request type APM - Application as the roadmap type.

- **Roadmap Hierarchy/Roadmap Chart**

  Roadmap hierarchy or roadmap chart is a tree-structured chart that can be expanded or collapsed to either present a single roadmap or roadmap hierarchy which includes the parent roadmap with child roadmaps underlying.

To create and visualize roadmaps at different levels means:

- In the request level

  - As an APM administrator, you can set a request type as the roadmap type. Requests of the roadmap type have a new section **Roadmap** added on the request detail page.

  - In the request detail page, you can enter child entities information in the table component field your administrator created.

  - The system fetches the child entities information from the table component field to generate the roadmap hierarchy in the **Roadmap** section.

- In the portfolio level

  - The portfolio manager can add assets in the **Proposals/Projects/Assets** tab of the Portfolio page.

  - The system fetches the assets of the roadmap type from the **Proposals/Projects/Assets** tab to generate a roadmap hierarchy in the **Roadmap** tab.

- In the portlet level

  An OOTB portlet Roadmap is introduced to the Application Portfolio category. With this portlet available, you can view the roadmap hierarchy on the Dashboard page.

You may have a clearer understanding of the enhanced use of roadmap from the following diagram.
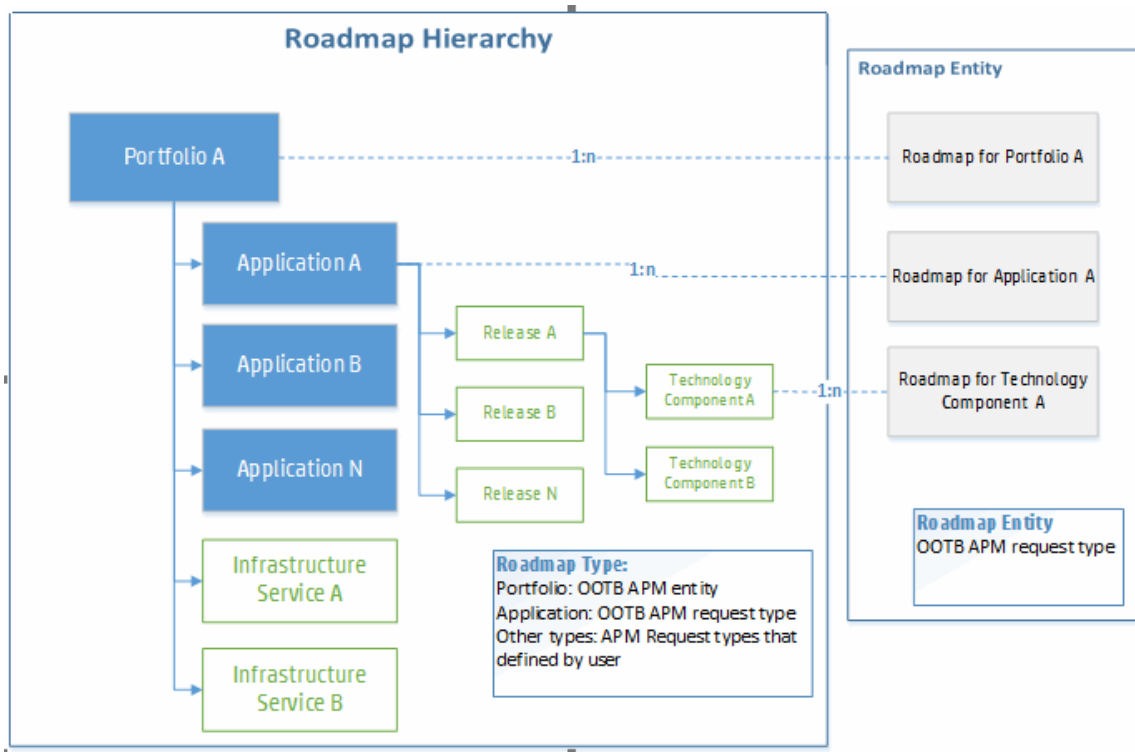
In this diagram, Portfolio is the OOTB roadmap type, while Application, Infrastructure Service, Release, and Technology Component are all customized roadmap types. You can create a roadmap for each of these roadmap types. Portfolio is the parent roadmap type, while Application and Infrastructure are both its child roadmap types. And Release is the child roadmap type of Application.

Upgrading from HP APM for PPM 9.30

If you are on HP APM for PPM 9.30, follow the steps below to upgrade to HP APM for PPM 9.31:

1. Upgrade PPM Center to version 9.31

    For more information, see the "Installation Notes" on page 7.

2. Install PPM Center Best Practices.

    For more information, see the *Installation and Administration Guide* for PPM Center 9.30.

3. Deploy HP APM for PPM 9.31.

    For more information, see "Installing HP APM for PPM 9.31" on the next page

Installing HP APM for PPM 9.31

Before you install HP APM, PPM Center version 9.31 and PPM Center Best Practices must be installed.

> **Caution:** Deploying HP APM for PPM 9.31 fails if you have customized OOTB APM data, such as the validations APM - Phase Type and APM - Roadmap Milestone Type. You may have to remove all your customizations and then reinstall HP APM for PPM 9.31.
>
> This issue does not exist in the fresh installation of HP APM for PPM 9.31.

To install HP APM for PPM on the PPM Server:

1. Back up the database and file system for the PPM Server.

2. Verify that the PPM Server is running.

3. Copy the file `ppm-931-APM.jar` to the *<PPM_Home>* directory.

   This is the directory where your PPM Center instance is installed.

4. Change to the *<PPM_Home>*`/bin` directory.

5. Start the installation by typing the following command:

   ```
   sh ./kDeploy.sh -i APM
   ```

6. Follow the on-screen instructions to complete the installation.

7. Stop the PPM Server.

8. Update the PPM Server configuration using the following command:

   ```
   sh ./kUpdateHtml.sh
   ```

9. Compile the JSP files using the following command:

   ```
   sh ./kJSPCompiler.sh
   ```

10. (Optional) Delete PPM Center's cache in the following directories:

    ```
    <PPM_Home>/server/<PPM_Server_Name>/tmp
    ```

    ```
    <PPM_Home>/server/<PPM_Server_Name>/work
    ```

11. Start the PPM Server.

12. Verify the installation. Type:

    ```
    sh ./kDeploy.sh -l
    ```

    where the last character in the command is the lowercase letter "l".

    The name APM should appear in the list of installed modules. For example, you should see the following entry:

    ```
    Deployment    Version   Deployed              Description
    APM             931      <date and time>   HP Application Portfolio Management
    ```

Roadmap Type Configuration

Generally, the configurations include the following two steps:

1. "Setting Request Type as Roadmap Type" below

2. "Defining Roadmap Hierarchy in the Request Level" on page 35

Setting Request Type as Roadmap Type

> **Note:** In HP APM for PPM 9.22, both Portfolio and Application are default roadmap types. As HP APM for PPM 9.31 uses different method to implement roadmap related functionality, only Portfolio is a default roadmap type. You have to configure the request type APM - Application to set it as the roadmap type.

To set a request type as the roadmap type:

1. Log on to PPM Center.

2. From the menu, select **Open** > **Administration** > **Open Workbench**.

   The PPM Workbench opens.

3. From the shortcut bar, select **Demand Mgmt** > **Request Types**.

   The Request Type Workbench window opens.

4. Click **List** and then select the request type you want to set as the roadmap type.

   The Request Type window opens to the **Fields** tab.

5. Click **New**.

   The Field: New window opens to the Attributes tab.

6. In the **Token** field, type ROADMAP_TYPE.

7. Fill in the mandatory fields.

8. Provide values for the other fields as you desire.

   For detailed instructions about creating fields for a request type, see the Creating Fields for Request Types section in the *HP Demand Management Configuration Guide*.

9. Click **Add** or **OK**.

Defining Roadmap Hierarchy in the Request Level

As an APM administrator, you can use one of the following two ways to define the roadmap hierarchy in the request level:

- "(Recommended) Using Token SUB_ROADMAP_ENTITY to Define Roadmap Hierarchy" below

- "Using APM_ROADMAP_ENTITY_HIERARCHY_V to Define Roadmap Hierarchy" on page 37

(Recommended) Using Token SUB_ROADMAP_ENTITY to Define Roadmap Hierarchy

As an APM administrator, you can create a table component field using the token SUB_ROADMAP_ ENTITY in a roadmap type, so that your users can enter child entities information in the table component field on the request detail page of the parent request.

For example, you can define a table component field in the roadmap type APM- Application, then your users can enter release or technology information on the entity detail page of the application.

The system fetches the child entities information from the table component field to generate the roadmap hierarchy in the **Roadmap** section of the request detail page, so that end users can view roadmap hierarchy from the request detail page of the parent request.

To create a table component field for a roadmap type using the token SUB_ROADMAP_ENTITY:

1. Log on to PPM Center.

2. From the menu, select **Open** > **Administration** > **Open Workbench**.

   The PPM Workbench opens.

3. From the shortcut bar, select **Demand Mgmt** > **Request Types**.

   The Request Type Workbench window opens.

4. Click **List** and then select the desired entity request type that has been set as a roadmap type.

   The Request Type window opens to the **Fields** tab.

5. Click **New**.

   The Field: New window opens to the Attributes tab.

6. In the **Token** field, type SUB_ROADMAP_ENTITY.

7. In the **Validation** field, select a table component type validation.

   For the selected validation, make sure that the column that stores the entity IDs selects PARAMETER1 in the Parameter Col field.

   > **Note:** You can decide which roadmap types can be added as sub-entities. If you do so, your end users can only enter request information of the specified roadmap types in the table component field. If you do not perform such configuration, your end users can add request information of any roadmap type in the field.

8. Provide values for the other fields as you desire.

   For detailed instructions about creating fields for a request type, see the Creating Fields for Request Types section in the *HP Demand Management Configuration Guide*.

9. Click **Add** or **OK**.

Using APM_ROADMAP_ENTITY_HIERARCHY_V to Define Roadmap Hierarchy

You can also define your own roadmap structure by using the database view APM_ROADMAP_ENTITY_ HIERARCHY_V.

The following describes the definition of this view.

Foreign Keys

Primary Key Table	Primary Key Column	Foreign Key Column
APM_ROADMAP_ENTITY_HIERARCHY_V	ENTITY_ID	PARENT_ID
APM_ROADMAP_ENTITY_HIERARCHY_V	ENTITY_TYPE	PARENT_ENTITY_TYPE
PFM_PORTFOLIOS	PORTFOLIO_ID	ENTITY_ID
KCRT_REQUESTS	REQUEST_ID	ENTITY_ID
KCRT_REQUEST_TYPES	REFERENCE_CODE	REQUEST_TYPE

Column Descriptions

Column Name	Null?	Data Type	Description
ENTITY_ID	NOT NULL	VARCHAR	Identifier for the entity. The value of this column should be either portfolio ID or request ID.
ENTITY_TYPE	NOT NULL	VARCHAR	Roadmap type of the entity. The value of this column should be either portfolio or request.
REQUEST_TYPE	NULL	VARCHAR	Entity type if the value of ENTITY_TYPE is request
NAME	NULL	VARCHAR	The name of the entity
PARENT_ID	NULL	VARCHAR	Identifier for the parent entity.
PARENT_ENTITY_ TYPE	NULL	VARCHAR	Identifier for the entity type of the parent entity

Entities Introduced by Roadmap Type

Apart from the **Roadmap** tab on the portfolio page and the Roadmap portlet, the following are introduced by roadmap type.

- If you have set a request type as a roadmap type, the following are added:

  - In the **Roadmap Type** field of the Create New APM - Roadmap page, the request type is included in the auto-complete list.
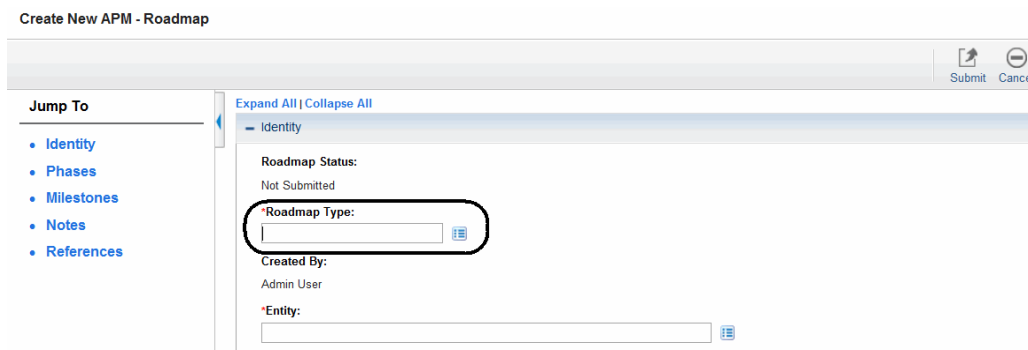
  - A separate section **Roadmap** is added on the request detail page to show the roadmap related information and the roadmap hierarchy if any.
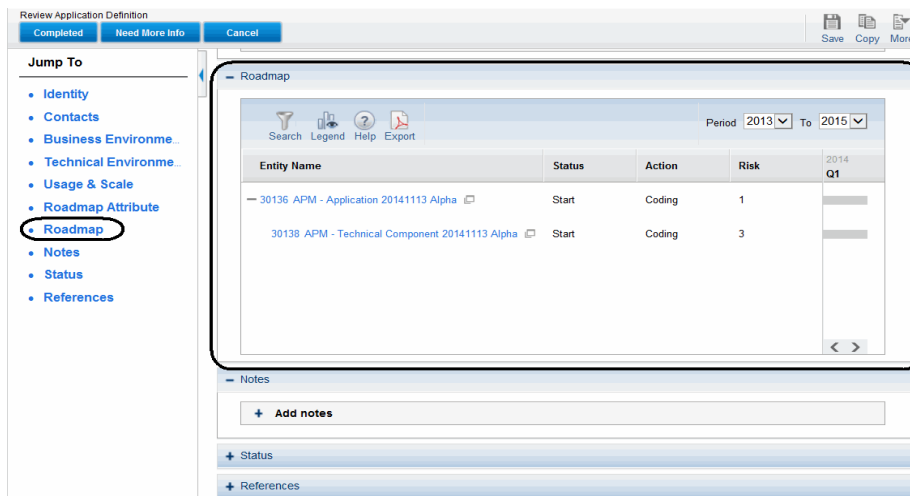
- If you have defined roadmap hierarchy for a roadmap type in the request level using the token SUB_ROADMAP_ENTITY, a table component field is added in the request detail page.

The following is an example of the table component field.

Creating Roadmap for a Request

To create a Roadmap for a request,

1. From the menu bar, select **Open > Application Portfolio > Create Entities**.

2. Select **Roadmap** in the **Entities** section.

   The Create New APM – Roadmap page opens.

   > **Note:** For more ways to create a new entity, see the *Application Portfolio Management User's Guide*.
   >
   > If your administrator has customized the request type APM – Roadmap, you cannot create a roadmap by copying an existing roadmap.

3. Enter information in the following sections:

   - "Identity" below

   - "Phases" on page 41

   - "Milestones" on page 41

   Identity

   In the Identity section, enter the fundamental information that identifies the roadmap.

> **Note:** The Identity section is a subsection of the header section.

The table below describes the Identity fields.

Field (*Required)	Description
Roadmap Status	Read-only. Available roadmap statuses include: ○ **New** – The roadmap is created but not submitted. ○ **Draft** – The roadmap is submitted but not finalized. ○ **Proposed** – The roadmap is finalized but not activated. ○ **Active** – The roadmap is activated but not archived. ○ **Cancelled** – The roadmap is cancelled. ○ **Archived** – The roadmap is archived. The roadmap status changes as you go through different steps of the roadmap workflow.
Roadmap Type*	Available roadmap types include: ○ Portfolio Portfolio is the only default roadmap type. Your administrator can set other request types as roadmap types according to your business needs. For more information, see "Setting Request Type as Roadmap Type" on page 33.
Created By	Read-only. The full name of the user who created the roadmap
Entity*	The entity for which the roadmap is created **Note**: If an entity has a roadmap that is in Active status, you are not able to create another roadmap for this entity.

Phases

In the Phases section, enter the information of the phases the roadmap would go through.

The table below describes the Roadmap Phases fields.

Field (*Required)	Description
Seq	Sequence of the roadmap phase
Name	Name of the roadmap phase
Type	Type of the roadmap phase. Available values include: ○ Evaluation ○ Planned ○ Operational ○ Archived ○ Planned Decommissioned
Link	URL or any other kind of link of the roadmap phase
Start Date	Start date of the roadmap phase
End Date	End date of the roadmap phase
Active	Indicates whether or not the roadmap phase is active

Milestones

In the Milestones section, enter the information of the milestones you set for the roadmap.

The table below describes the Roadmap Milestone fields.

Field (*Required)	Description
Seq	Sequence of the roadmap milestone
Code	Code of the roadmap milestone
Name	Name of the roadmap milestone
Type	Type of the roadmap milestone. Available values include: ○ Major Decision Point ○ Minor Decision Point ○ Release ○ De-Investment ○ Business Function/Business Capability ○ Technology Capability
Date	Date of the roadmap milestone
Decision	Decision that has been made in this milestone
URL	URL of the milestone information

4. Complete other fields as necessary.

5. Click **Submit**.

Editing Roadmap for a Request

- "Edit Roadmap Phases" on the next page

- "Edit Roadmap Milestones" on the next page

> **Caution:** If you have customized the request type APM – Roadmap, you can not edit phases or milestones information for a roadmap.
>
> HP recommends that you do not customize the OOTB request type APM – Roadmap.

Edit Roadmap Phases

To edit roadmap phases,

1. Open the roadmap you want to edit.

2. Click **Edit** in the Phases section.

   The Roadmap Phases section changes into the edit mode.

3. Under the edit mode, you can do the following to edit the phases:

   - Edit the existing phases information.

   - Add a new phase by clicking **Add Row**.

   - Delete a phase by clicking **Delete Row** after selecting the phase you want to delete.

   - Create a phase based on an existing phase by selecting the existing phase and then clicking **Copy** and **Paste**.

   - Adjust the phases sequence by clicking **Move Up** or **Move Down** after selecting the desired phase.

Edit Roadmap Milestones

To edit roadmap milestones,

1. Open the roadmap you want to edit.

2. Click **Edit** in the Milestones section.

   The Roadmap Milestones section changes into the edit mode.
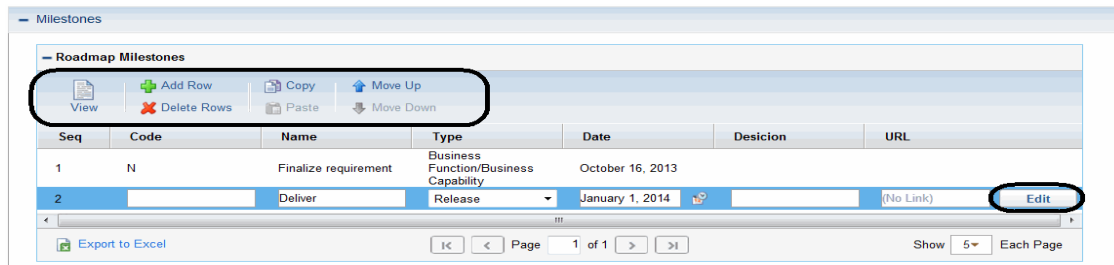
3. Under the edit mode, you can do the followings to edit the milestones:

   ○ Edit the existing milestones information.

   ○ Add a new milestone by clicking **Add Row**.

   ○ Delete a milestone by clicking **Delete Row** after selecting the milestone you want to delete.

   ○ Create a milestone based on an existing milestone by selecting the existing milestone and then clicking **Copy** and **Paste**.

   ○ Adjust the milestones sequence by clicking **Move Up** or **Move Down** after selecting the desired milestone.

   > **Note:** If you want to edit the URL field of a milestone, you may have to click **Edit** at the end of the milestone line to open the Link Properties window.

Building and Viewing Roadmap Hierarchy

Building and Viewing Roadmap Hierarchy in the Request Level

You can build roadmap hierarchy in the APM entity level if your administrator has done the following:

- Set desired request types as roadmap types

- Defined roadmap hierarchy in the request level

Note: If your administrator used the database view APM_ROADMAP_ENTITY_HIERARCHY_V to define roadmap hierarchy, the system generates the roadmap hierarchy according to the view your administrator has defined. You do not need to build roadmap hierarchy by the following instructions.

To build and view roadmap hierarchy in the request level:

1. Open the request detail page where you want to build roadmap hierarchy.

2. In the table component field that your administrator created to store child entities, click **Edit**.

   This field switches to the edit mode. The following is only an example of the field. The field name and its columns can be customized.

3. Click **Add Row** to enter the child entity information.

4. Repeat step 3 until you add all the child entities information.

5. The system fetches the child entities information from the table and generates the roadmap hierarchy in the **Roadmap** section on the entity detail page.

   The following is an example of the roadmap hierarchy.

Note:

- The roadmap hierarchy can have 5 levels in depth at most, displaying no more than 1000 requests along with their roadmaps.

- A request may have more than one roadmap, however, only the active and last updated roadmap is displayed in the roadmap hierarchy. If the request does not have an active roadmap, the right side of the request line is empty.

  For information about creating a roadmap for a request, see

The following table describes the items in the roadmap hierarchy.

Item	Description
Toolbar Section	
Search	Click this to provide filters to search roadmaps. For more information, see .
Legend	Click this to open the Legend window that displays the meanings of the icons in the roadmap chart.
Help	Click this to open the Help text.
Export	Click this to export roadmap hierarchy to PDF.
From	The star year of the roadmap hierarchy you want to view

To	The end year pf the roadmap hierarchy you want to view
Left pane	
Entity Name	For a request, this field displays the value of the Description field on the request detail page. **Note:** If the Description field is updated on the request detail page, the Entity Name value is *not* updated accordingly. Clicking the link opens the request detail page in another window.
<Customized_ Columns>	Customized columns if any. For more information, see "Adding Customized Columns in Roadmap Hierarchy" on page 53.
⊤	The icons ⊤ displayed next to the entity names indicate that the entities have roadmaps attached.
+	Click this to expand entities and roadmaps.
−	Click this to collapse entities and roadmaps.
Right pane	The roadmap Gantt chart shows the phases and milestones of the roadmap for each entity. **Note:** • The maximum number of phases for a request's roadmap displayed in the Gantt chart is 100. • The maximum number of milestones for a request's roadmap displayed in the Gantt chart is 100.

Building and Viewing Roadmap Hierarchy in the Portfolio Level

You can build and view roadmap hierarchy in the portfolio level if your administrator has set the request type asset as the roadmap type.

To build and view roadmap hierarchy in the portfolio level:

1. Open the portfolio page where you want to build roadmap hierarchy.

2. Go to the **Proposals/Projects/Assets** tab.

3. Click **Actions** and then click **Add Proposals/Projects/Assets**.

   The Add New Proposals/Projects/Assets window opens.

4. In the **Include Assets** field, select the entities you want to include in the roadmap hierarchy.

5. Click **Add**.

   Your selected entities are listed as assets in the **Proposals/Projects/Assets** tab.

6. Go to the **Roadmap** tab.

   The system fetches the assets of the roadmap type from the **Proposals/Projects/Assets** tab to generate the roadmap hierarchy.

   The assets not of roadmap type are not included in the roadmap hierarchy.

Note:

- The roadmap hierarchy can have 2 levels in depth at most, displaying no more than 1000 requests along with their roadmaps.

- A request may have more than one roadmap, however, only the active and last updated roadmap is displayed in the roadmap hierarchy. If the request does not have an active roadmap, the right side of the request line is empty.

  For information about creating a roadmap for a request, see "Creating Roadmap for a Request" on page 39

The following table describes the items in the roadmap hierarchy.

Item	Description
Toolbar Section	
▼	Click this to provide filters to search roadmaps. For more information, see "Using Filters in Roadmap Hierarchy" on page 52.
⊪	Click this to open the Legend window that displays the meanings of the icons in the roadmap chart.
⑦	Click this to open the Help text.
📄	Click this to export roadmap hierarchy to PDF.
From	The star year of the roadmap hierarchy you want to view
To	The end year pf the roadmap hierarchy you want to view
Left pane	
Entity Name	For a portfolio, this field displays the portfolio name. Clicking the link opens the request detail page in another window.
<Customized_ Columns>	Customized columns if any. For more information, see "Adding Customized Columns in Roadmap Hierarchy" on page 53.
⚲	The icons ⚲ displayed next to the entity names indicate that the entities have roadmaps attached.
+	Click this to expand entities and roadmaps.
−	Click this to collapse entities and roadmaps.
Right pane	The roadmap Gantt chart shows the phases and milestones of the roadmap for each entity. **Note:** • The maximum number of phases for an asset's roadmap displayed in the Gantt chart is 100. • The maximum number of milestones for an asset's roadmap displayed in the Gantt chart is 100.

Building and Viewing Roadmap Hierarchy in Portlet Level

To build and view roadmap hierarchy in the portlet level:

1. Add the Roadmap portlet to a PPM Dashboard page.

   For information about adding portlets to PPM Dashboard pages, see the *Getting Started* guide.

2. Click the Roadmap portlet to open the Edit Preferences page.

   Edit Preferences: Roadmap (Roadmap)

   Change Title

   Done   Cancel

   Preferences

   *Root Entity Type:
   *Root Entity:
   Entity to Display:
   Start Year:
   End Year:

   Done   Cancel

3. Configure the following fields in the Preferences section.

Field (*Required)	Description
*Root Entity Type	Entity type of the root entity in the roadmap hierarchy. Entity types in the auto-complete list are roadmap types. You can select only one value in this field.
*Root Entity	Root entity in the roadmap hierarchy. The values in this field depend on the value selected in the Root Entity Type field.
Entity to Display	Name of the entity you want to be displayed in the roadmap hierarchy. If you provide a value for this field, only the entities whose level are higher than this entity are displayed while the sub-entities of this entity are not displayed in the roadmap hierarchy

Start Year	Starting year of the roadmap hierarchy
End Year	End year of the roadmap hierarchy

4. Click **Save**.

5. Go back to the Roadmap portlet.
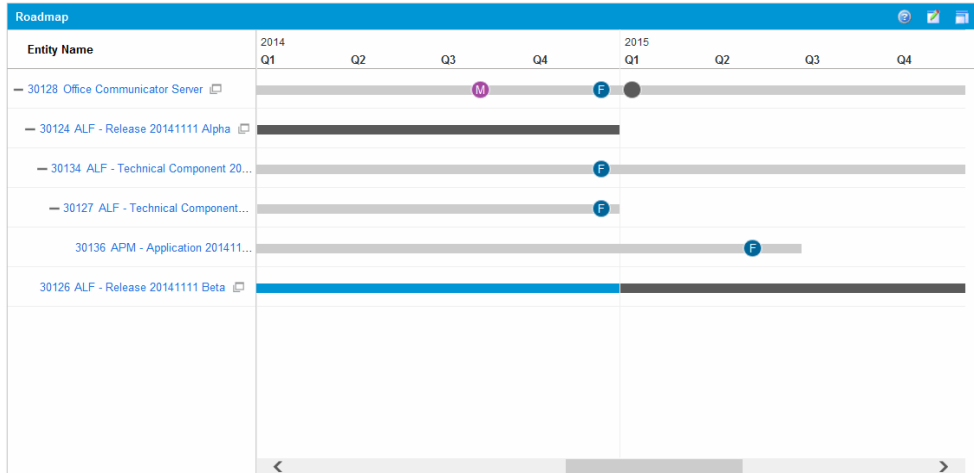
Note:

○ If the root entity is a portfolio, the Roadmap hierarchy can have 2 levels at most, displaying no more than 1000 requests along with their roadmaps.

○ If the root entity is a request, the roadmap hierarchy can have 5 levels in depth at most, displaying no more than 1000 requests along with their roadmaps.

The following table describes the items in the roadmap hierarchy.

Item	Description
	Clicking this to open the help text for the Roadmap portlet, which also illustrate the meanings of the icons in the roadmap chart.
Left pane	
Entity Name	For a portfolio, this field displays the portfolio name. For a request, this field displays the value of the Description field on the request detail page.

	Note: If the Description field is updated on the request detail page, the Entity Name value is *not* updated accordingly.
	Clicking the link opens the request detail page in another window.
<Customized_Columns>	Customized columns if any.
	For more information, see "Adding Customized Columns in Roadmap Hierarchy" on the next page.
⚐	The icons ⚐ displayed next to the entity names indicate that the entities have roadmaps attached.
+	Click this to expand entities and roadmaps.
−	Click this to collapse entities and roadmaps.
Right pane	The roadmap Gantt chart shows the phases and milestones of the roadmap for each entity.
	Note:
	• The maximum number of phases for a request's roadmap displayed in the Gantt chart is 100.
	• The maximum number of milestones for a request's roadmap displayed in the Gantt chart is 100.

Using Filters in Roadmap Hierarchy
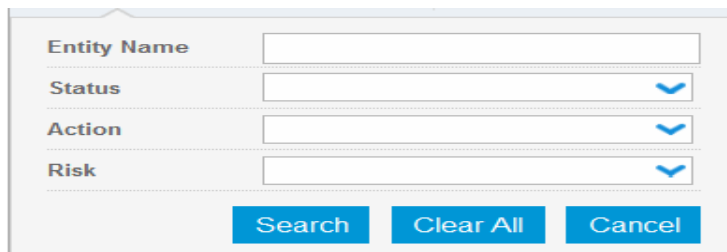
The filters available to be used for searching roadmaps depend on the columns available in the roadmap hierarchy.

To use filters in the roadmap hierarchy to search roadmaps:

1. Open the entity detail page if you want to do this in the request level, or open the portfolio page if you want to do this in the portfolio level.

2. Go to the **Roadmap** section on the request detail page, or the **Roadmap** tab on the portfolio page.

3. Click (or if you are in the **Roadmap** tab of the portfolio page).

The filters dialog box opens. The following is an example.

4. Provide the filter criteria.

> **Note:**
>
> ○ If your administrator does not add customized columns in the roadmap hierarchy, only the filter **Entity Name** is available for use. The **Entity Name** filter does not allow multiple values.
>
> ○ You can use several filters at the same time.

5. Click **Search** to apply the filter criteria, click **Clear All** to wipe out the filter criteria, or click **Cancel** to close the filters dialog box.

   The entities along with their roadmaps are displayed. The filter criteria applied are listed in the toolbar section.

Adding Customized Columns in Roadmap Hierarchy

By default, only the Entity Name column is displayed in the roadmap hierarchy. If you want to see more columns or use these columns as filters to search roadmap in the roadmap hierarchy, your administrator should add customized columns.

To add customized columns in the roadmap hierarchy:

1. Set the parameter `ENABLE_ROADMAP_EXT_ATTR` to `true` in the `server.conf` file.

   By default, the value of this parameter is `false`.

2. Define the database view APM_ROADMAP_ENTITY_EXT_ATTR_V to add columns you want to be

displayed in the roadmap hierarchy.

For the definition of this view, see "APM_ROADMAP_ENTITY_EXT_ATTR_V" below

APM_ROADMAP_ENTITY_EXT_ATTR_V

This view stores all the columns displayed in the roadmap hierarchy.

Foreign Keys

Primary Key Table	Primary Key Column	Foreign Key Column
APM_ROADMAP_ENTITY_HIERARCHY_V	ENTITY_ID	ENTITY_ID
APM_ROADMAP_ENTITY_HIERARCHY_V	ENTITY_TYPE	ENTITY_TYPE

Column Descriptions

Column Name	Null?	Data Type	Description
ENTITY_ID	NOT NULL	VARCHAR	Identifier for entity. The value of this column should be either portfolio ID or request ID.
ENTITY_TYPE	NOT NULL	VARCHAR	Roadmap type of the entity. The value of this column should be either portfolio or request.
ATTR_NAME_A	NULLABLE	VARCHAR	Customized column
ATTR_NAME_B	NULLABLE	VARCHAR	Customized column
ATTR_NAME_C	NULLABLE	VARCHAR	Customized column

Note:

- HP recommends that you add no more than 3 customized columns for the performance sake.

- The column names in this table follow the rules as below when they are displayed in the roadmap hierarchy:

- Only the first letter of each word is capitalized in the roadmap hierarchy.

- The underline between words is switched into space.

For example, the column name STATUS_NAME is displayed as Status Name in the roadmap hierarchy.

Defining Roadmap Phases and Milestones

As an APM administrator, you can define the roadmap phases and milestones according to your business needs.

To define roadmap phases and milestones:

1. Log on to PPM Center.

2. From the menu, select **Open** > **Administration** > **Open Workbench**.

   The PPM Workbench opens.

3. From the shortcut bar, select **Configuration** > **Validation**.

   The Validation Workbench window opens.

4. Click **List** and then do the following:

   - Select **APM - Phase Type** if you want to define roadmap phases.

     The Validation : APM - Phase Type window opens displaying the default roadmap phases.
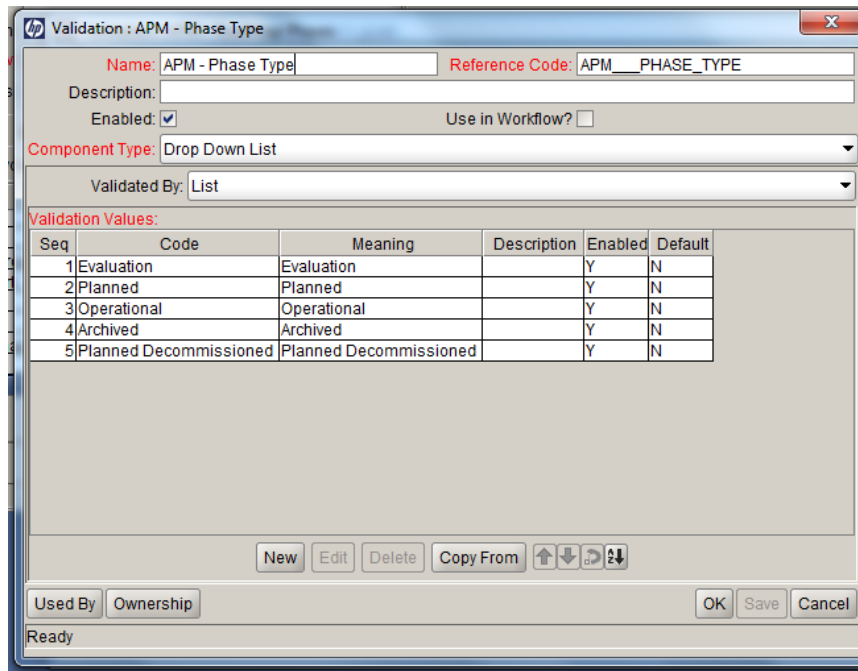
- Select **APM – Roadmap Milestone Type** if you want to define roadmap milestones.

  The Validation : APM – Roadmap Milestone Type window opens displaying the default roadmap milestones.
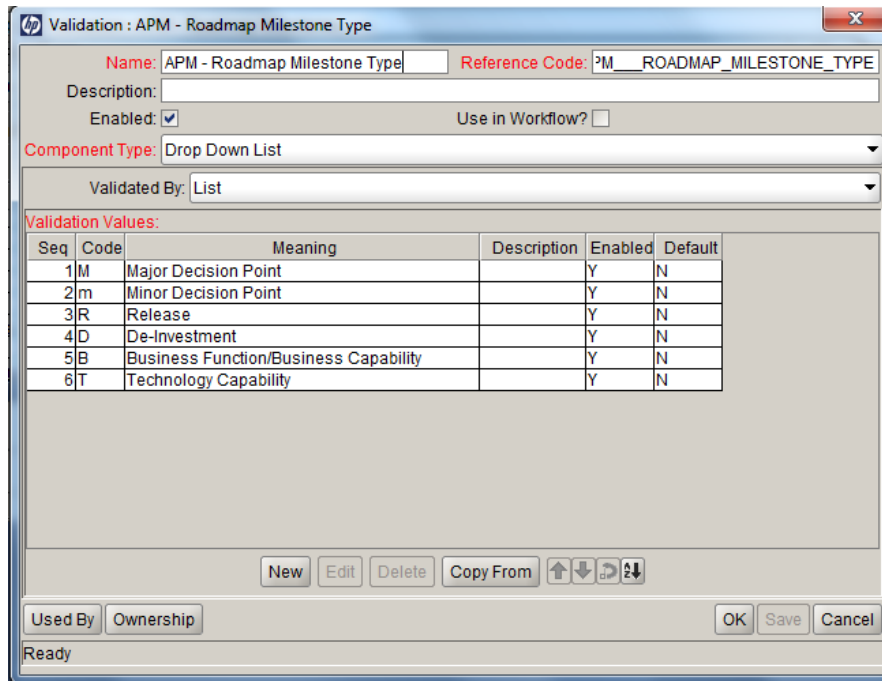
5. Edit the Validation Values section to define roadmap phases and milestones as you want.

6. Click **OK**.

Configuring Indicators for Roadmap Phases and Milestones

If you have the Open Workbench access grant, you can do the following to configure indicators for your defined roadmap phases and milestones:

1. From the PPM menu, select **Open** > **Application Portfolio** > **Roadmap Configure Center** > **Phases & Milestones**.

   The Phases & Milestones Configuration page opens.
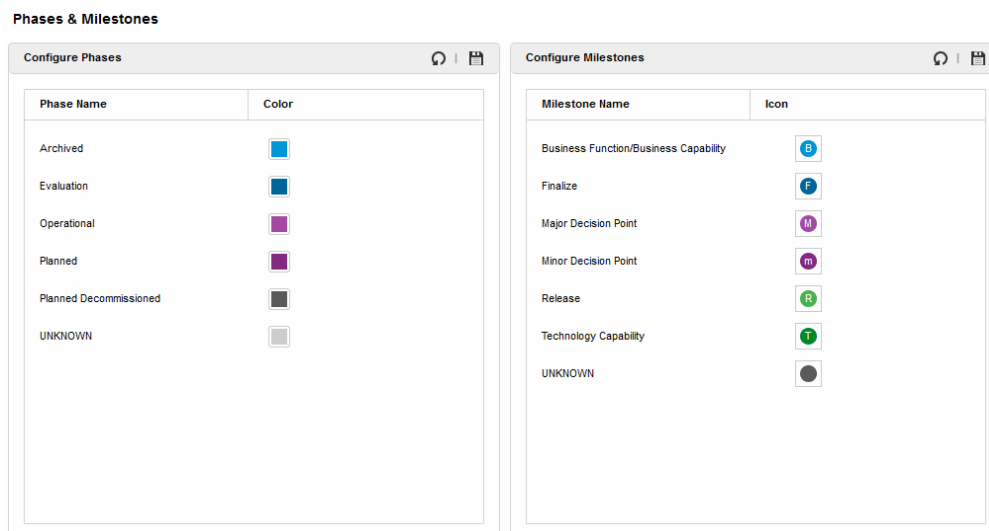
2. Do the following:

   ○ If you want to configure the color for a roadmap phase.

      i. Put your cursor over the color for a phase to select your desired color among multiple options.

      ii. Click 💾 to save your change or click ↺ to cancel your change.

   ○ If you want to configure the icon for a roadmap milestone,

      i. Put your cursor over the icon for a milstone to select your desicred icon among multiple

options.

ii. Click ![save icon] to save your change or click ![cancel icon] to cancel your change.

The changes to the colors of phases and icons of milestones are applied on all existing roadmap charts accordingly.

If you want to customize the indicators for roadmap phases and milestones, you can do the following:

- Edit the file `default_phase_color.conf` located in the directory `<PPM-HOME>\server\<SERVER-NAME>\deploy\itg.war\web\knta\apm\roadmap\conf\`, if you want to customize the colors for roadmap phases.

- Edit the files `APM_Milestone*.png` located in the directory `<PPM-HOME>\server\<SERVER-NAME>\deploy\itg.war\images\apm\milestone\`, if you want to customize the icons for roadmap milestones.

  The files for milesonte icons should be `png` files, with the prefix `APM_Milestone`.

Chapter 4: Enhancements, Certifications, and Fixes in PPM Center 9.31

- "Enhancements" below

- "Certifications" on page 79

- "Fixes" on page 82

Enhancements

The following enhancements are included in version 9.31.

Module	Enhancements
HP Resource Management	"Making Assignments in the Gantt View of Staffing Profile page" on the next page "Rejecting and Forwarding Demand from the Gantt view of the Staffing Profile Page" on page 61 "Assigning Promised Allocations from the Gantt View of the Staffing Profile page" on page 62 "Switching between the Table View and Gantt View in One Staffing Profile Page" on page 63 "Specifying Editable View in Staffing Profile Gantt View page" on page 64 "New Option Added to Resource Pool Notifications" on page 66 "Advanced Resource Finder" on page 66 "Usability Enhancements" on page 68
HP Financial Management	"Enabling and Disabling Cost Rate Audit Trail" on page 72 "Using Cost Rate of Resource Role or Position Role to Calculate Forecasted Labor Cost" on page 73 "Availability of the Adding New Rate Button" on page 73

HP Time Management	• "Setting Start Date for Delinquent Time Sheets Report" on page 75
Integrations	• "Enhancements to Autopass Integration" on page 76 • "More Information to Parse for PPM-ALM Integration" on page 77
Security	• "Disabling SSLv3 as the HTTPS protocol PPM Server uses" on page 78

Enhancements to the HP Resource Management Module

The following enhancements and improved user experience are provided for the HP Resource Management module:

- "Making Assignments in the Gantt View of Staffing Profile page" below

- "Rejecting and Forwarding Demand from the Gantt view of the Staffing Profile Page" on the next page

- "Assigning Promised Allocations from the Gantt View of the Staffing Profile page" on page 62

- "Switching between the Table View and Gantt View in One Staffing Profile Page" on page 63

- "Specifying Editable View in Staffing Profile Gantt View page" on page 64

- "New Option Added to Resource Pool Notifications" on page 66

- "Advanced Resource Finder" on page 66

- "Usability Enhancements" on page 68

Making Assignments in the Gantt View of Staffing Profile page

Before version 9.31, as a resource manager, you can only make assignments to a staffing profile from the **Table** view of the Staffing Profile page and the Resource Allocation Management page. Starting from this version, you can do so from the **Gantt** view of the Staffing Profile as well.

To fill a resource assignment request in the **Gantt** view of the Staffing Profile page:

1. Open a resource pool.

2. In the Resource Requests section of the Resource Pool page, click on the name of a staffing

profile.

The Staffing Profile page opens.

3. In the **Gantt** view of the Staffing Profile page, Click the Assign icon ( ) next to the position or the promise you want to assign one or more resources to.

The Resource Finder dialog box opens.
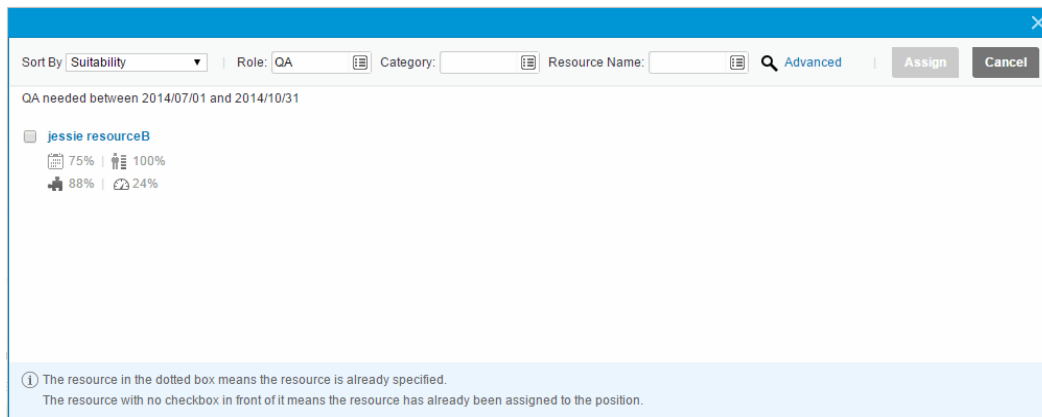
4. Select the checkbox in front of the resource to assign to the position.

You can select more than one resource to assign.

5. Click **Assign**.

For more information about making assignments, see the *HP Resource Management User's Guide* for version 9.30.

Rejecting and Forwarding Demand from the Gantt view of the Staffing Profile Page

Before version 9.31, as a resource manager, you can only reject or forward demand from the **Table** view of the Staffing Profile page and the Resource Allocation Management page. Starting from this version, you can do so from the **Gantt** view of the Staffing Profile as well.

To reject unmet resource demand for a staffing profile line from the **Gantt** view of the Staffing Profile page:

1. Click the down arrow next to the Assign icon of the staffing profile line where you want to reject the unmet resource demand.

2. Click **Reject**.

   The Reject Request for Unmet Demand dialog box opens.

3. Provide a reason for rejecting the unmet demand in the **Comments** field.

4. Click **Done**.

To forward unmet resource demand for a staffing profile line to a different resource pool from the **Gantt** view of the Staffing Profile page:

1. Click the down arrow next to the Assign icon of the staffing profile line where you want to forward the unmet resource demand.

2. Click **Forward**.

   The Forward Request to Another Pool dialog box opens.

3. Specify a resource pool in the **Forward to Resource Pool** field.

4. Provide a reason for forwarding the unmet demand in the **Comments** field.

5. Click **Done**.

Assigning Promised Allocations from the Gantt View of the Staffing Profile page

Before version 9.31, as a resource manager, you can only assign promised allocations from the **Table** view of the Staffing Profile page and the Resource Allocation Management page. Starting from this version, you can do so from the **Gantt** view of the Staffing Profile as well.

To fill a resource assignment request with a promised allocation:

1. Open a resource pool.

2. In the Resource Requests section of the Resource Pool page, click on the name of a staffing profile.

   The Staffing Profile page opens.
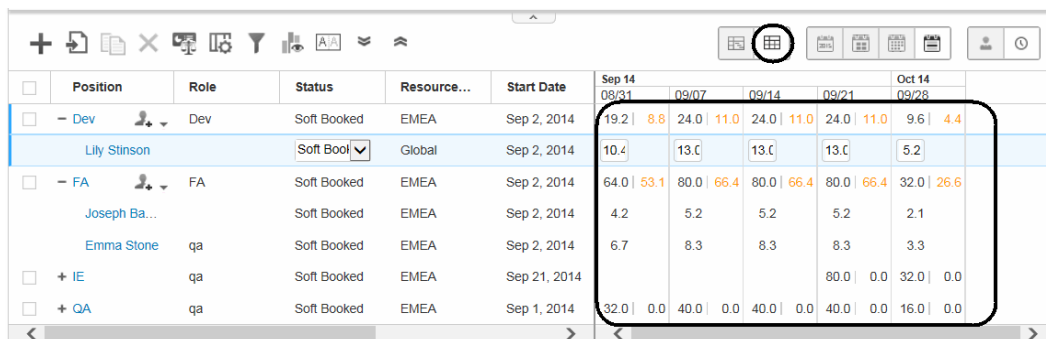
3. In the **Gantt** view of the Staffing Profile page, click the down arrow next to the Assign icon of the staffing profile line where you want to assign promised allocations.

4. Click **Promise**.

Switching between the Table View and Gantt View in One Staffing Profile Page

Staffing profile has two views: Gantt view and Table view, if the Table view is enabled by configuring ENABLE_STAFFING_PROFILE_LEGACY_VIEW. The position table in the Gantt view of the Staffing Profile page also has two views: Gantt view and Table view.

- If you set this parameter to `false`, which is the default value of the parameter, the **Table** view of the Staffing Profile page is not available. You can switch between the two views for the position table in the Gantt view of the Staffing Profile page.

Clicking the **Table** view icon (⊞) in the upper right corner of the position table, you switch the position table to the **Table** view.

Clicking the **Gantt** view icon (⊞) in the upper right corner of the position table, you switch the position table to the **Gantt** view.
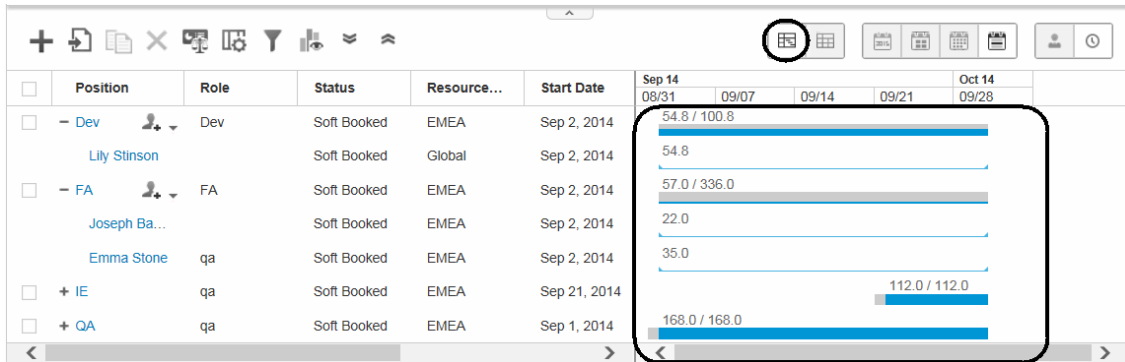
- If you set this parameter to `true`, the **Gantt** view and **Table** view of the Staffing Profile page are both available.

  In this case, you are still able to switch the position table page between two view in the **Gantt** view of the Staffing Profile page.

However you set the parameter, in the **Gantt** view of the Staffing Profile page, the position table is by default displayed in the view under which you can edit effort. For information about configuring editable view, see "Specifying Editable View in Staffing Profile Gantt View page" below.

Specifying Editable View in Staffing Profile Gantt View page

In the Gantt view of the Staffing Profile page, you can select either the Gantt view or the Table view to edit forecast demand and allocation. Once you set one view as the editable view, the other view becomes ready-only.

A new parameter `DEFAULT_STAFFING_EFFORT_EDIT_MODE` is introduced to specify the default editable view. If you set this parameter to `Gantt` in the Administration Console, or do not specify its value, you can only edit effort in the **Gantt** view. If you set this parameter to `Table`, you can only edit effort in the **Table** view. By default, the value is `Gantt`.

Once you have set a value for the parameter, it is applied to all the staffing profiles. However, you can change the editable view for individual staffing profile.

To change the editable view when you create a blank staffing profile:

1. Open the Create a Blank Staffing Profile page.

2. Fill in the required fields.

3. In the **Edit effort in** field, select **Gantt View** or **Table View** as the editable view.

4. Click **Create**.

To change the editable view for an existing staffing profile:

1. Open the staffing profile in the Gantt view.

2. Click **More** > **Change Header** in the upper right corner of the page.

   The Change Staffing Profile Header page opens.

3. From the **Edit effort in** field, select **Gantt View** or **Table View** as the editable view.

4. Click **Done** to save the change and close the Change Header page.

Data Table Changes

A new column is added to the table RSC_STAFFING_PROFILES as a result of this feature.

Column Name	Null?	Data Type	Description
EDIT_MODE	NOT NULL	VARCHAR2(1)	A flag to indicate under which view can effort be edited.

New Option Added to Resource Pool Notifications

A new option is added on the Configure Notifications for Resource Pool page.

With this option available, you can decide whether or not to notify the resource pool manager when a resource's committed allocation changes to soft-booked or is removed, or when the start date, end date, or FTEs of a resource's committed allocation is adjusted. By default, this option is not selected.

Advanced Resource Finder

Starting from version 9.31, you can make assignments by using advanced resource finder in the **Gantt** view of both the Staffing Profile page and the Resource Allocation Management page.

To use the advanced resource finder,

1. In the **Gantt** view of the Staffing Profile page or the Resource Allocation Management page, click the assign icon next to the position or promise you want to assign resources to.

   The following dialog box opens.
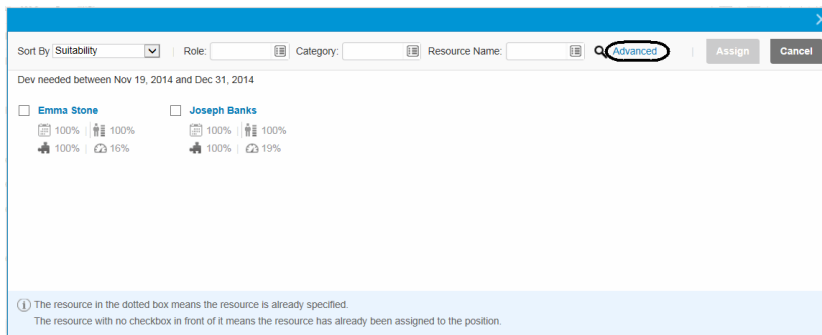
2. Click **Advanced**.

   The Select a Resource to Assign dialog box opens.
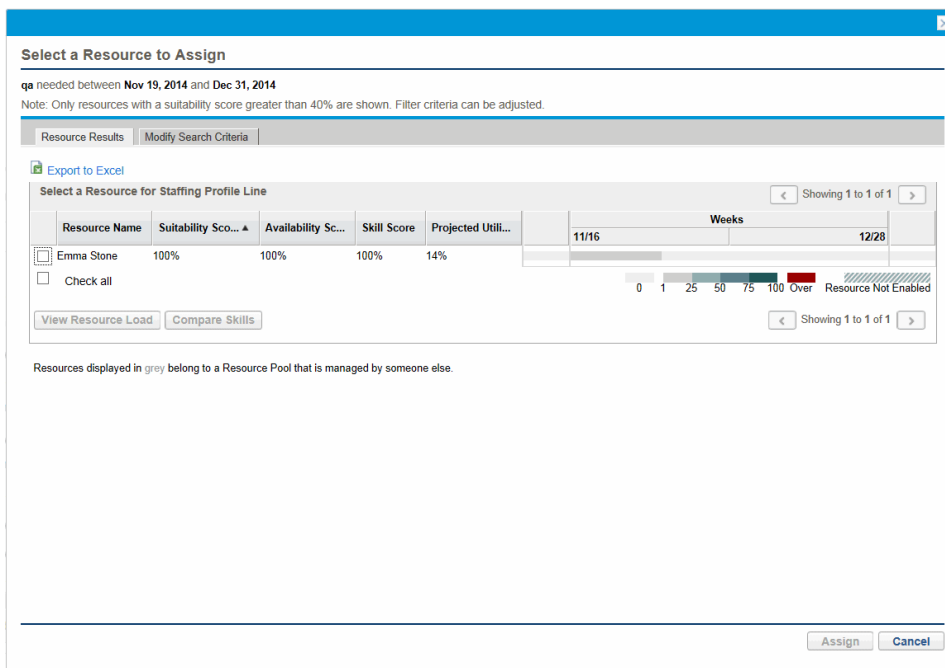
> **Note:** This dialog box also opens when you click **Resource Finder** in the **Table** view of the
> Staffing Profile page, or when you click and select **Find** in the Table view of the
> Resource Allocation Management page.

3. Click the **Modify Search Criteria** to provide the your desired filters.

   The filters you defined before clicking **Advanced** are *not* passed to the Select a Resource to Assign
   dialog box.

4. Click **Search**.

   You are back to the Resource Results tab.

5. Select one or more resources you wan to assign, and then click **Assign**.

For more information about advanced resource finder, see the *Using Resource Finder* section of the *HP Resource Management User's Guide* for version 9.30.

Usability Enhancements

The following usability enhancements are implemented to the HP Resource Management module in version 9.31:

- "Inline Editing Staffing Profile User Data" below

- "Displaying Date When Editing Effort" on the next page

- "Enhancements to the Save, Discard, and Done Buttons" on the next page

- "Prepopulation of the Position Field" on page 70

- "Icon Changes in the Gantt View of the Staffing Profile page" on page 70

- "Moving Filter Criteria to Pie Chart Section" on page 72

Inline Editing Staffing Profile User Data

Starting from version 9.31, you can inline edit staffing profile user data when the following requirements are met:

- The user data is visible and editable.

- You have the access to edit positions.

The user data fields of the following component types support inline editing:

- Text

- Date

- Drop-down list

- Auto-complete list

If a required user data field does not support inline editing, you may have to edit it in the position dialog box.

Displaying Date When Editing Effort

When you edit demanded effort and allocated effort by dragging the bar in the right pane of the position table, the date is displayed for you to better edit effort. The date only shows when:

- The staffing profile is in the **Gantt** view, and

- The right pane of the position table is also in the **Gantt** view.

When you add effort, the date is displayed as you put the cursor over the right pane of the table. When you edit the existing effort, the date appears when you start dragging. In both cases, the date changes until you stop dragging.

Enhancements to the Save, Discard, and Done Buttons

Version 9.31 implements enhancements to the **Save**, **Discard**, and **Done** buttons in the Allocations section of the Staffing Profile page and the Resource Allocation Management page.

- For the **Save** and **Discard** buttons on the above two pages:

  ○ When there are no changes, the **Save** and **Discard** buttons are disabled.

  ○ When you edit a position and when the position line is not in the edit mode, a pop-up message "Save the changes?" appears immediately under the **Save** button.

The message disappears in five seconds and does not appear any longer if you continue editing positions without saving or discarding the changes.

The message appears again if you continue editing positions after you save or discard the changes.

- For the **Done** button on the above two pages, clicking **Done** brings you back to the page from which you open either of the two pages.

Prepopulation of the Position Field

In previous versions, the position field is prepopulated with the value "Position Name" when you add a new position on the Staffing Profile page. Starting from version 9.31, the prepopulation of the Position field becomes more meaningful.

If you add a new position, the Position field is empty, and you can name the position as you want. If you specify a role for the position in the Role field before naming the position, the Position field is prepopulated with the role name.

Icon Changes in the Gantt View of the Staffing Profile page

PPM Center version 9.31 implements several changes to the icons in the Allocations section of the staffing profile **Gantt** view.

- Two new icons are added.

Icon	Description
	Clicking it switches the right pane of the position table to the **Gantt** view.
	Clicking it switches the right pane of the position table to the **Table** view.

For more information about these two icons, see "Switching between the Table View and Gantt View in One Staffing Profile Page" on page 63.
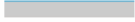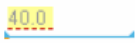
- Several icons are updated since version 9.30.

The following table lists the differences of the icons between version 9.31 and version 9.30.

Icons in Version 9.31	Description	
	Allows you to choose the time period breakdown for the staffing profile.	Year
		Quarter
		Month
		Week
	Allows you to choose the effort type for the position allocations.	FTE
		Hours
		Person Days

- The Gantt Legend icon is enhanced to contain more information.

Moving Filter Criteria to Pie Chart Section

Starting from version 9.31, filter criteria on the Staffing Profile page and the Resource Allocation Management page are moved to the Pie Chart section. In version 9.30, they were respectively located above the position table and staffing profile table.
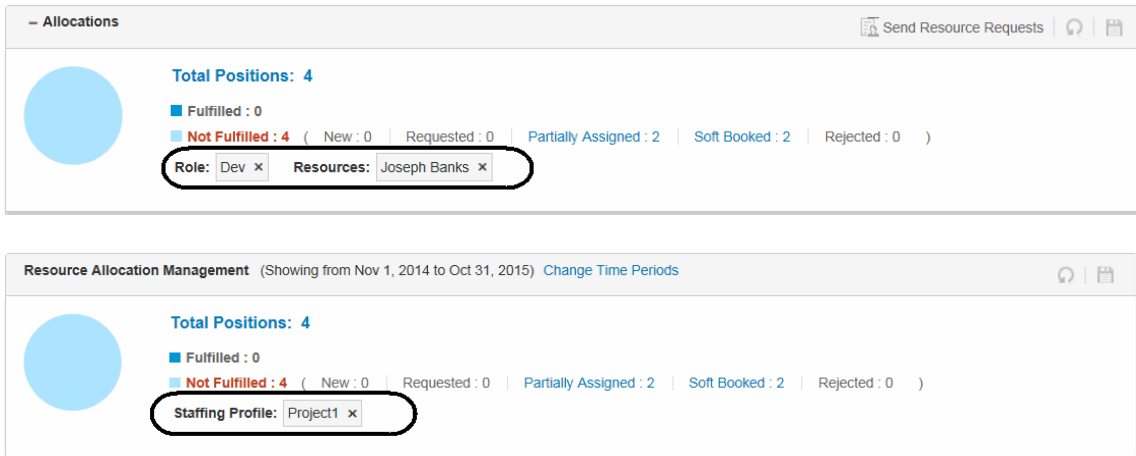
Enhancements to the HP Financial Management Module

The following enhancements and improved user experience are provided for the HP Financial Management module:

- "Enabling and Disabling Cost Rate Audit Trail" below

- "Using Cost Rate of Resource Role or Position Role to Calculate Forecasted Labor Cost" on the next page

- "Availability of the Adding New Rate Button" on the next page

Enabling and Disabling Cost Rate Audit Trail

PPM Center version 9.31 introduces a new parameter FM_COST_AUDIT_ENABLE in the Administration Console. With this parameter available, you can enable or disable the cost rate audit trail.

Parameter Name	Description and Usage	Default and Valid Values
FM_COST_AUDIT_ENABLE	Flags whether or not to enable audit trail for cost rates that are used to calculate	Default: `false` Valid values: `true`, `false`

	costs. If you set this parameter to `true`, you enable the cost rate audit trail.	

When the cost rate audit trail is enabled, you can view the audit trail from the following two tables:

- **PPM_FM_COST_AUDIT**: This table stores cost audit information, including values of all cost factors that are used in the cost rollup service when finding a rate and corresponding rate history.

- **PPM_FM_COST_AUDIT_RATE**: This table stores change history of cost rates that are used to calculate actual cost of tasks.

For details of these two tables, see the *Data Model Guide* for version 9.30.

Using Cost Rate of Resource Role or Position Role to Calculate Forecasted Labor Cost

Starting from version 9.31, you can decide to use one of the following to calculate the forecasted labor cost of a committed resource:

- The cost rate of the resource role, or

- The cost rate of the position role

To enable this functionality, a new parameter SP_RESOURCE_ROLE_RATE_ENABLE is added in the Administration Console.

If you set this parameter to `true`, the forecasted labor cost of a committed resource is calculated by the cost rate of the resource role. If you set this parameter to `false`, the forecasted labor cost of a committed resource is calculated by the cost rate of the position role. By default, this parameter is set to `true`. When the resource has no role defined, and you set the parameter to `true`, the cost rate of the position role is used.

Availability of the Adding New Rate Button

In version 9.30, you cannot add new rate for an existing cost rule after clicking **Modify Existing Rates** on the Edit Cost Rule page. In version 9.31, the button **Add New Rate** is always available on the Edit Cost Rule page. You can add new rate either before or after clicking **Modify Existing Rates**.

Edit Cost Rule #17

	Lock Existing Rates	Delete This Rule	View Audit Trail

Role:
Resource: jessie resourceA
Org Unit:
Region:
Resource Type:
Project:
Request Types:
Package Workflow:
Misc. Work Items:

Add New Rate

Rate History

Start Date	End Date	Currency	Rate	
		United States Dollar	10	Edit

Done
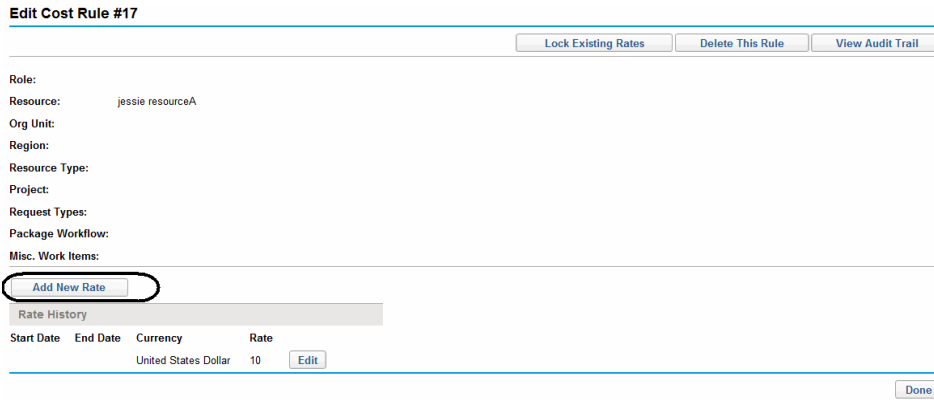
To add new rate for an existing cost rule:

1. Open the Edit Cost Rule page for the existing cost rule.

2. Click **Add New Rate**.

Add Rate

*Rate: Angolan Kwanza

*Effective Start:

Effective Finish:

Add   Cancel
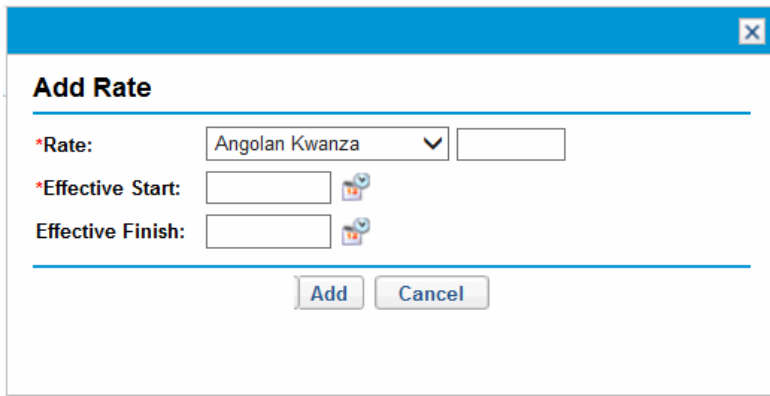
3. Provide values for rate, currency, and effective dates.

4. Click **Add**.

Enhancements to the HP Time Management Module

The following enhancements and improved user experience are provided for the HP Time Management module:

- "Setting Start Date for Delinquent Time Sheets Report" on the next page

Setting Start Date for Delinquent Time Sheets Report

The time sheet policy assigned to a resource takes effect from the start date of the resource. Invalid missing time sheets would be listed in the Delinquent Time Sheets report when the time sheet policy for the resource is changed and when the following option is selected in the new time sheet policy.

In version 9.31, you can set a start date for the Delinquent Time Sheets report. With this functionality available, the Delinquent Time Sheets reports take the start date into calculation.

To set a start date for a Delinquent Time Sheets report:

1. Log on to PPM Center.

2. From the menu bar, select **Open** > **Reports** > **Create Report**.

   The Submit New Report page opens.

3. From the Report Category option, select Time Management.

4. Click Delinquent Time Sheets.

   The Submit Report: Delinquent Time Sheets page opens.

5. Provide the values for the required fields.

6. Select a date in the **Start Date** field.

   The time sheets whose time periods are later than or cover the start date and at the same time meet the other filters will be listed in the report.

Enhancements to HP Integrations Module

The following enhancements and improved user experience are provided for the integrations module:

- "Enhancements to Autopass Integration" below

- "More Information to Parse for PPM-ALM Integration" on the next page

Enhancements to Autopass Integration

PPM Center version 9.30 implemented Autopass integration to replace PPM Center's original licensing mechanism with HP's Autopass licensing mechanism. In version 9.31, the Autopass integration is enhanced by adding the license reader tool, so that the end users can leverage the tool to read information of the licenses installed on your machine.

The license reader tool provides the following two categories of information:

- Detailed information for each license installed on your machine, such as

  - PPM Center module that is licensed for use, including the ID, version, and description

  - IP address of the license

  - Start date and expiration of the license

  - Availability capacity of the license

- A summary of all the licenses installed on your machine

  - Capacity for different PPM Center modules

  - Expiration dates of licenses for different PPM Center modules

  - Licensed IP for different PPM Center modules

To use the license reader, run the following command:

kLicenseReader.sh [-filename *<Autopass_License_File_Name>*] [-filepath *<Autopass_ License_File_Path>*] [-help]

If you do not specify the file name, the license reader provides information of all the licenses installed on your instance. If you do not specify the file patch, the license reader uses the default file path *<PPM_ Home>*/conf.

> **Note:** You can only use the script to read the license information. You cannot use it to modify the license information.

More Information to Parse for PPM-ALM Integration

The table PPM_INT_EVENTS is used to store events of PPM integration. In version 9.31, the following two columns are added in this table for the integration between PPM Center and HP ALM:

- PPM_REQUEST_ID

- SYNC_PARTNER_ID

With these columns added, you, as an admin user, can parse more effective information about PPM-ALM integration issues from the events logged in the table.

The following table describes the two added columns.

Column	Null?	Data Type	Description
PPM_REQUEST_ID	NULLABLE	NUMBER	ID of the request created in PPM Center
SYNC_PARTNER_ID	NULLABLE	NUMBER	ID of the ALM entity that is synchronized with PPM Center request

For more information about the table PPM_INT_EVENTS, see the *Data Model Guide* for version 9.30.

Enhancements to Security

The following enhancement is provided for security:

-

Disabling SSLv3 as the HTTPS protocol PPM Server uses

Version 9.31 disables SSLv3 as the HTTPS protocol the PPM Server uses to enhance security. As a result, the values and usage of the HTTPS_PROTOCOL parameter is modified, and a new server configuration parameter HTTPS_ENABLED_PROTOCOLS is introduced.

The following table describes the detailed information of the two parameters.

Parameter Name	Description, Usage	Default and Valid Values
HTTPS_PROTOCOL	Specifies the HTTPS protocol (TLS) the PPM Server uses.	Default: TLS Valid values: TLS
HTTPS_ENABLED_ PROTOCOLS	Specifies the HTTPS protocols in details.	Default: TLSv1, TLSv1.1, TLSv1.2

Certifications

The following certifications are included in version 9.31:

- The latest version of Mozilla Firefox supported on PPM Center version 9.31 is extended to 31.2 Extended Support Release (ESR).

- Oracle 12.1.0.1 and Oracle 12.1.0.2 (Standard/Enterprise Edition) (RAC and Non-RAC) for all PPM server platforms

  There is a known issue in the Oracle 12 side. To address this issue, you should permanently alter the session parameter "optimizer_adaptive_features".

  To do so:

  a. Log on to PPM Center database schema as PPM schema.

  b. Run the commands as follows:

  ```
  create trigger PPM_LOGON_ORACLE_18311854
  after logon on <PPM_SCHEMA_NAME>.schema
  begin
  execute immediate 'alter session set "optimizer_adaptive_features" = false';
  end;
  ```

- Java SE Development Kit (JDK) 8u25 (1.8.0 Update 25)

  PPM Center version 9.31 supports both JDK 7 and JDK 8.

  If you use JDK 8 for PPM Server platforms, the server configuration parameter SERVER_MAX_PERM_SIZE stops working, and perm size would be included in heap size which is controlled by the parameter SERVER_MAX_HEAP_SIZE. Therefore, HP recommends that you use 64-bit JVM.

  The following warning may appear when you deploy JDK 8, however, you can safely ignore this warning and continue the deployment:

  ```
  Java HotSpot(TM) 64-Bit Server VM warning: ignoring option MaxPermSize=256m;
  support was removed in 8.0
  ```

  In order to avoid compatibility issue in JDK 8, HP recommends that if you use X.509 certificates with RSA keys less than 1024 bits, you should update the RSA keys size to be greater than 1024 bits.

Since both JDK 7 and JDK 8 are supported for PPM platforms, PPM Workbench supports JRE 7 and JRE 8. Note the configuration of the following Java plug-in related parameters in the `server.conf` file.

Parameter Name	Usage, Description	Default and Value Values
WORKBENCH_PLUGIN_ VERSION	Earliest Java plugin version used to access the PPM Workbench interface. Use this parameter to use a specific version (other than the default version) of the Java plug-in to open the PPM Workbench.	Example: `1.7.0_72`
JAVA_PLUGIN_VERSION	Earliest version of the Sun Java plug-in used to start the PPM Workbench.	Default: `1.7.0_72`
JAVA_PLUGIN_PATH_IE [a] [b]	Web location for downloading the cross-platform Java plug-in bundle for Internet Explorer browsers. **Caution:** Internet Explorer versions 7 and 8 display a warning if the JAVA_ PLUGIN_PATH_IE value contains the protocol identifier `"http:"`. If you override the default setting for this parameter, make sure that you	Default: `//java.sun.com/update/1.7.0 /jinstall-7u72-windows-i586.cab`

	remove the protocol identifier "http:".	
JAVA_PLUGIN_PATH_NS [a] [c]	Web location for downloading the cross-platform Java plug-in installer, where users can manually download JRE installation bundle.	Example: `http://www.oracle.com/technetwork/java/javase/downloads/index.html`
JAVA_PLUGIN_XPI_PATH [a] [b]	Web location for downloading the cross-platform Java plug-in installer for Firefox and Chrome browsers.	Default: `http://javadl.sun.com/webapps/download/GetFile/1.7.0_72-b21/windows-i586/xpiinstall.exe`
JAVA_PLUGIN_CLASSID [a] [d]	Class ID for the Java plugin used for the PPM Workbench.	Default: `CAFEEFAC-0017-0000-FFFF-ABCDEFFEDCBA`

a. If the parameter WORKBENCH_PLUGIN_VERSION has a value which is not equal to the value of JAVA_PLUGIN_VERSION, the values of these four parameters are automatically calculated based on the setting of WORKBENCH_PLUGIN_VERSION.

   For example, if you set the value of WORKBENCH_PLUGIN_VERSION to 8u25, the values of these four parameters are automatically set based on 8u25.

   If you do not want to use the automatically-calculated values for these parameters, you can override the values by setting a different value to each of the parameters.

b. If the parameter WORKBENCH_PLUGIN_VERSION has a value, but you do not want the JRE packages to be automatically downloaded, you can set the values of these two parameters to NA, and end users will be directed to the link specified in JAVA_PLUGIN_PATH_NS to manually install JRE bundle.

   If the value of the parameter WORKBENCH_PLUGIN_VERSION is JRE 8, the values of these two parameters are empty because Oracle does not provide address for automatically downloading JRE 8.

c. If the value of the parameter WORKBENCH_PLUGIN_VERSION is JRE 8, the value of this parameter is automatically set to `http://java.com/dt-redirect`

d. If the value of the parameter WORKBENCH_PLUGIN_VERSION is JRE 8, the value of this parameter is automatically set to `CAFEEFAC-0018-0000-FFFF-ABCDEFFEDCBA`.

Fixes

The following fixes are included in PPM Center version 9.31:

Accelerators

Tracking Number	Problem Description
4647765482	Errors appear when the log and output of the concurrent requests are retrieved from Oracle E-Business Suite server. (QCCR1L55089)
	This is because Oracle E-Business Suite server does not use the OpenSSH tool. This issue is fixed in version 9.31 on the condition that you make sure PPM Server password is not required when using the scp command to copy a file from Oracle E-Business Suite server to PPM Server.
4647206595	Errors occur when you deploy preconfigured dashboard pages of the extension for Oracle E-Business Suite.
	To fix this issue, you should install HP Deployment Management Extension for Oracle E-Business Suite version 9.31. For the installation instructions, see "Installing HP Deployment Management Extension for Oracle E-Business Suite Version 9.31" on page 8.

Costing

Tracking Number	Problem Description
N/A	Cost Rollup Service takes more than 15 hours to complete when the time booked against the requests has reached certain threshold. (QCCR1L56261)
	To fix this issue, a new parameter `ASSET_ROLLUP_TIMESHEETLINE_ BATCH_SIZE` is added in the `server.conf` file. You can use this parameter to set the batch size of time sheet lines for assets cost calculation. By default, the value is `800`.
4649248073	The sequence in which the costs in a financial summary are added affects the result of the cost health. (QCCR1L56636)

Dashboard

Tracking Number	Problem Description
4644760020 4645109173	Recurrent OutOfMemory errors appear on user nodes in the case of peak loads, typically when a lot of users submit time sheets. (QCCR1L52338)
4644735012	The Department filter does not work on the **Open Requests by Priority** Portlet. (QCCR1L52737)
4649519889	Any custom portlets with **Preference Fields** fails with the following error: `An index was out of range.` (QCCR1L56372)

Demand Management

Tracking Number	Problem Description
4631492831 4641312788	Performance issue with the **Request List** portlet. (QCCR1L43286)
4635024304 4640647368	When users put a limit for the returned results through the **Limit Rows Returned To** field and sort the results by a column, the maximal (or minimal) value returned in the results is not the maximal (or minimal) value that exists in the system. (QCCR1L44453)
4644410768	An unknown error is displayed when users add the **Associated Programs** field to the Search Requests page, or add the **Request List** portlet and then include the **Associated Programs** field as one of the result columns. (QCCR1L50762) To fix this issue, PPM Center leverages the LISTAGG function which was introduced in Oracle 11.2. You should use Oracle 11.2 or later versions to avoid this issue.
4649061212	If the drop-down value includes an & (ampersand) and users try to update the value using the **Quick Edit** feature in Demand Management, unnecessary values are added to the PARAMETERx column of the KTracking NumberT_REQUESTS_DETAILS table. When the request is updated repeatedly using the **Quick Edit** feature, this column runs out of space and the following error is displayed: `Value too large for column.` (QCCR1L55971, QCCR1L55688)

Tracking Number	Problem Description
4649640542 4648956987	The OOTB token `REQ.MOST_RECENT_USER_NOTE_TEXT` for the note on a request does not provide users with the latest note that is provided in the UI. It provides the latest saved note in the Oracle database instead. (QCCR1L56464, QCCR1L56463)
4649071685	Users run into an error when editing an HP Demand error or request. (QCCR1L56516, QCCR1L56515)
4649596732	The Request List portlet is not paging correctly when the default **Sort by** field is a column that contains duplicated values. (QCCR1L56587)
4649013791	An error appears when a user with "'" (single quote mark) in the name submits a request. (QCCR1L56011, QCCR1L55960)
N/A	When the Associated programs field was added to the Request List portlet as a column, a nested query is added to the portlet SQL, and it results an error when the pagination functionality tries to parse and transform the query. (QCCR1L56893)

Deployment Management

Tracking Number	Problem Description
4648231298	Suppose a request set has two stages and both the stages have the same program A but with different default parameter values. When this request set is migrated into the target instance, the default parameter values of the first stage are overwritten with the default values set for the same program in the second stage. (QCCR1L55049)
N/A	A failed package line blocks the subsequent package lines. (QCCR1L56076) To fix this issue, a new server configuration parameter `BLOCK_PENDING_PKGL_FOR_ERROR` is introduced. If you set this parameter to `false` in the `server.conf` file, when a package line fails, the system continues executing the subsequent package lines. If you set this parameter to `true`, the execution is blocked when a package line fails. By default, this parameter is set to `true`. When a package line fails and its subsequent package lines pass, the status of this execution is still successful in PPM Workbench. However, you should note that even when the status is successful, it does not mean all the package lines are executed successfully in logical

Tracking Number	Problem Description
	relationship to meet your business needs. HP suggests that you exercise caution when setting this parameter to false, unless you are absolutely sure about the consequences.
N/A	Mandatory note can be empty when you run a package line. (QCCR1L56078)
4648229203	Migrating a request type from one instance to another shows the following error in the execution log through kMigrator: `java.lang.NullPointerException`. (QCCR1L56229)

Documentation

Tracking Number	Problem Description
4649987122	Require better explanation about why the request status is not displayed correctly when the request creation confirmation page is skipped. (QCCR1L56808) For details, see "Better explanation about why the request statuses are incorrect after request creation confirmation page is skipped" on page 94.
4649649466	The *Resource Management User's Guide* does not state that the selection of a staffing profile view is done per staffing profile. (QCCR1L56620) For details, see "Selection of staffing profile view is done per staffing profile" on page 95.
4650029182	The *Resource Management User's Guide* does not state that the staffing profile in the **Staffing** tab of the Project Overview page is always displayed in the **Gantt** view. (QCCR1L56827) For details, see "Only Gantt view of staffing profile is displayed in the Staffing tab of the Project Overview page" on page 95.
4644449706	Different display of Mexican peso in PPM pages causes confusion. (QCCR1L52663) For details, see "Need information to explain different display of Mexican peso" on page 96.

Integration

Tracking Number	Problem Description
N/A	When integrating with ALM, the kDeploy.sh script fails to install `ppm-920-ALM.jar` in the `<PPM_HOME>` folder because the name of the `ppm-921-PluginQualityALM.jar` file is also ended with `ALM.jar`. (QCCR1L52882)
4649972382	When you add an attachment with the size exceeding the maximal size defined by the parameter `MAX_WEB_ATTACHMENT_SIZE_IN_MB`, a meaningless error is displayed. (QCCR1L56801)
4649549603	The message "Invalid username and password" pops up when you send a MSP file to PPM Center. (QCCR1L56782, QCCR1L56649)
N/A	Errors appear when applying ALM Integration Plug-in for PPM 9.30. (QCCR1L56874)

Platform

Tracking Number	Problem Description
4644486097	When a user chooses French as the login language and clicks the **Used by** tab for a security group, the user receives an error in PPM Workbench. (QCCR1L51064)
4648702819	The execution time of the Exception Rule Service exceeds 24 hours. (QCCR1L55798) To fix this issue, a new parameter `EXCEPTION_ENGINE_PROCESSING_THREAD_COUNT` is added in the `server.conf` file. You can use this parameter to specify the thread number of the Exception Rule Service. The default value of this parameter is `1`.
4648375025	A whole list of financial summaries and calenders are loaded in memory. (QCCR1L56013, QCCR1L55029)
4649494428	An outage issue with opening PPM Center. (QCCR1L56660)
4644953804	Heap dumps caused by OutOfMemory errors. (QCCR1L53461, QCCR1L51830)
4649611795	Exceptions are thrown when the Staffing Profile Financial Summary Sync

Tracking Number	Problem Description
4649933953	service runs. (QCCR1L56941, QCCR1L56687)
4650066626	The latest version of Cygwin causes OpenSSH to be upgraded to a version not supported by PPM Center. (QCCR1L56915) The Key Exchange algorithms supported by default by the PPM SSH2 client (diffie-hellman-group1-sha1 and diffie-hellman-group-exchangesha1) are not supported by default since OpenSSL 6.7, as they are not considered to provide a sufficient level of security. This fix adds support for Key Exchange algorithms diffie-hellman-group14-sha1 and diffiehellman- group-exchange-sha256 in the PPM SSH2 client, making it work out-of-the-box with OpenSSL 6.7.

Portfolio Management

Tracking Number	Problem Description
N/A	When a user saves a request as a draft first and then submits it, the user receives a `Financial Summary error`. It works well when a request is created and submitted immediately. (QCCR1L56285)
4649915742 4650004127	Error occurs when using the prediction "and rownum..." in a nested query in select/from clause. (QCCR1L56950)

Project Management

Tracking Number	Problem Description
4603717054	Task and Milestone Notifications have `Mercury IT Governance` in the body text instead of `HP PPM`. (QCCR1L15628)
4645616154	Notifications are received only once irrespective of the frequency you set. (QCCR1L53441)
4646661222	An error is displayed when: • A user searches for projects by Project Manager • The project manager's name has an ' (apostrophe), such as O'Neil (QCCR1L53824)

Tracking Number	Problem Description
4646920645	Pressing the Tab key after clicking the **Add Tasks** icon creates a new task instead of moving to the next field in the same line. (QCCR1L54005)
4648854547	When you try to delete a project with a project plan that has been defined, the functionality is not working as expected. (QCCR1L55543)
N/A	The Project Health is not in sync with the Overall Health. (QCCR1L55565)
4648840119 4649278190	When the actual complete percentage of a task is less than 0.5%, the value of the % Complete field for the task is 1, which results in a pop-up message indicating the error when you click **Save** on the Task Details page. (QCCR1L56332, QCCR1L55885)
4650223764	Indent and Outdent icons are placed in different orders in different views of project work plan. (QCCR1L56973)
4650196796	In the **Quick** view of project work plan, the values of the Actual Start Date and the Actual Finish Date columns are not correctly formatted. (QCCR1L56976)

Resource Management

Tracking Number	Problem Description
4646075700 4646661222 4647122326	Searching resources by Organization Unit causes an `Organization Unit: has an invalid input or the input has more than one match` error when an & (ampersand) is used in the organization unit name. (QCCR1L52738)
4647099868	When a resource belongs to more than one organization unit where one is the primary organization unit and others are the matrix organization units, the Run PPM Organization Unit Interface report fails. (QCCR1L54353)
4648953832	Positions can be added to Staffing Profiles and the resource pool manager can allocate resources to this position without stating any demand. (QCCR1L55705)
4649744005	The resources that a resource manager can assign are inconsistent on the Staffing Profile page and Resource Allocation Management page. (QCCR1L56792)
4648630241	Unable to search resource pools with '&' (ampersand) in the names.

Tracking Number	Problem Description
	(QCCR1L55260, QCCR1L55244)
4649381615	A user with Edit Staffing Profiles access and Edit Positions access only on the staffing profile is not able to add new positions to the staffing profile. (QCCR1L56272)

Time Management

Tracking Number	Problem Description
4646295614 4647122326	When an & (ampersand) is used in the organization unit name, searching time sheets by Organization Unit results in the following error: `Organization Unit: has an invalid input or the input has more than one match.` (QCCR1L52905)
4646264039	The Actual Time Summary reports with "resource" in the **Group By** field and without "resource" in the **Group By** field result in different Total Actual Costs. (QCCR1L53111)
4647554254	Searching time sheets is slow. It may take more than 300 seconds to load. (QCCR1L55524)
4648796085	The **Purge Empty Time Sheet Lines Report** is missing. (QCCR1L55529)
4648449339	Freezing time sheets is slow. (QCCR1L55582)
4649425365	The variable length is not enough to contain too many strings, which causes the PPM service node and user node to go down abruptly. (QCCR1L56392)

Chapter 5: Known Problems and Limitations in PPM Center 9.31

The following problems and limitations are known to exist in PPM Center version 9.31. The problems are categorized by the affected product area. If a problem has an assigned internal tracking number, the tracking number is provided (in parentheses) at the end of the problem description.

Integration

Limitation: If you provide a value for the QC/ALM Synchronization Control field, this value is the field in ALM that controls whether the QC/ALM end users want to create a defect in PPM Center as a result of creating a defect in ALM. However, if you set this field in ALM as a required field, errors appear no matter whether or not you build field mapping for this field. (QCCR1L56956)

Workaround: Do not set the field selected in the QC/ALM Synchronization Control field as required in ALM.

HP Resource Management

Problem: When the number of resources is greater than 1000 on the Resource Usage page, the performance is not desirable when you open the page from the work plan. (QCCR1L56507)

Workaround: You can use the Analyze Assignment Load portlet if there are large number of resources in one work plan.

Limitation: If you select a resource pool and time periods in the **Gantt** view of the Resource Allocation Management page, and then refresh the page, your selected resource pool and time periods disappear. (QCCR1L56573)

Workaround: Go to the **Table** view of the Resource Allocation Management page if you want to refresh the page after selecting the resource pool and time periods.

HP Financial Management

Limitation: A resource is assigned to a position. When the resource's full name is changed, the change is reflected in the Staffing Profile page, but not reflected in the Resource Forecast Cost chart of the **Cost** tab on the Project Overview page. (QCCR1L56260)

Workaround: None.

Limitation: When you set a task as a milestone, the schedule duration and schedule effort change to 0. After the Cost Rollup Service is run, the planned labor cost becomes 0, however, the EVM data keep the old values. (QCCR1L55619)

Workaround: None.

Platform

Limitation: If you install language packs after the fresh installation of PPM Center or the upgrade to PPM Center, some strings on the Submit Report page may not be translated. (QCCR1L56840)

Workaround: None.

Limitation: Error appears if you use NT Service on Windows platform to restart PPM Server.

Workaround: If you want to restart PPM Server with NT Service, do the following:

1. Click the **Stop** button to stop PPM Server.

2. Run the `kStatus.sh` script to check and make sure PPM Server is stopped.

3. Click the **Start** button to restart PPM Server.

Limitation: On the following pages, the quick search text field does not work for searching entities but only works for searching menus:

- **Gantt** view of the Staffing Profile page

- **Gantt** view of the Resource Allocation Management page

- **Quick** view of project work plan

Workaround: Go to the Search *<Entities>* page from the **Search** menu if you want to search entities.

Chapter 6: Documentation Errata

The following documentation items are incorrect.

HP Demand Management User's Guide

Better explanation about why the request statuses are incorrect after request creation confirmation page is skipped

Location: *HP Demand Management User's Guide*, version 9.30

Error: It requires a better explanation about why the request statuses are incorrect after the request creation confirmation page is skipped. (QCCR1L56808)

Correction: Updated the note for the request creation confirmation page as follows:

Note: The option **Finish Execution before displaying the request page to the user** does not work for request creation. Therefore, when you select this option and skip the request creation confirmation page, the request page opens before the execution finishes and the request status may be incorrect.

HP Demand Management Configuration Guide

More information about Page Response options when executing request type commands

Location: *HP Demand Management Configuration Guide*, version 9.30

Error: More information is needed about the Page Response options when executing request type commands. (QCCR1L56808)

Correction: Add the following information in the guide:

- **Finish Execution before displaying the request type page to user**: if you select this option, the step will complete the execution before reloading the request page for the user (enabling them to

make further changes).

> **Note:** This option does not work for request creation. It only functions when end users click a workflow action button.

- **Display the request page immediately while execution is still running**: if you select this option, the request page will reload immediately while the execution is still in progress.

> **Note:** The request status on the request page may be incorrect if you select this option.

HP Resource Management User's Guide

Selection of staffing profile view is done per staffing profile

Location: *HP Resource Management User's Guide*, version 9.30

Error: The guide does not clearly indicate that the selection of a staffing profile view (Gantt view or Table view) is done for that particular staffing profile only, not for all staffing profiles. (QCCR1L56620)

Correction: Add the following information in the guide:

The view selected for a staffing profile is effective for that particular staffing profile only, not for all staffing profiles.

Only Gantt view of staffing profile is displayed in the Staffing tab of the Project Overview page

Location: *HP Resource Management User's Guide*, version 9.30

Error: If you open a staffing profile from the **Staffing** tab of the Project Overview page, the staffing profile is always displayed in the **Gantt** view. This information is not included in the guide. (QCCR1L56827)

Correction: Add the following note in the guide:

Note: If you open a staffing profile from the **Staffing** tab of the Project Overview page, the staffing profile is always displayed in the **Gantt** view. If you click **Table View** in the **Staffing** tab, you open the **Table** view of the staffing profile in another window.

HP Financial Management User's Guide

Need information to explain different display of Mexican peso

Location: *HP Financial Management User's Guide*, version 9.20 and 9.30

Error: When users set Formatting Options to **Spanish (Mexico)** in the **Regional Settings** tab of the Edit My Profile page, the sign "$" is displayed before the currency. This sign is for Mexican peso instead of US dollars. A note should be added in the guide to clear the confusion. (QCCR1L52663)

Correction: Added a note as follows in the guide:

Note: When you set Formatting Options to **Spanish (Mexico)** in the **Regional Settings** tab of the Edit My Profile page, the sign "$" is displayed before the currency. The sign is for Mesican peso instead of US dollars. The sign for US dollars is "US$".

And in the Labor Quarter Total line of financial summary, the currency is displayed along with "MXN", which is the code for Mexican peso.

Send Documentation Feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Release Notes (Project and Portfolio Management Center 9.31)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to HPSW-BTO-PPM-SHIE@hp.com.

We appreciate your feedback!