HP Project and Portfolio Management Center

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Release Notes

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This manual's title page contains the following identifying information:

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1 Overview of PPM Center Version 9.14

For PPM Center version 9.14 rebundle file (build 1460):

If you already picked up PPM Center version 9.14 bundle file (`ppm-914-SP4v2.jar`, build 1435) and have not deployed it yet, please pick up the latest rebundle file with build number 1460 and deploy this one instead.

Deployment of the PPM Center version 9.14 rebundle file (build 1460) requires no unique steps. You can simply follow the *Installation Notes* on page 16 to complete the deployment.

If you have already applied the previous bundle file (build 1435) for PPM Center version 9.14 release, there is no need to pick up and deploy the rebundle file (build 1460).

This document provides an overview of the changes made to HP Project and Portfolio Management Center (PPM Center) for version 9.14 (Service Pack 4). It contains important information not included in the manuals. The sections *Enhancements, Integrations, Certifications, and Fixes in PPM Center 9.14*, *Known Problems and Limitations in PPM Center 9.14*, and *Documentation Errata* provide information about the changes introduced with the new features, enhancements, certifications, and fixes for PPM Center version 9.14.

Protecting Your Deployment from Security Vulnerabilities

Make sure you take the 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 DNS 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.

In this Version

The following enhancements are included in PPM Center version 9.14:

- *Enhancements to Resource Management Module*
- *Copying Date Field Value Using Functions of KNTA_USER_UTIL Package*
- *Configuring Initial Text in Mobility Access Email Notifications*
- *Specifying Font Size for Workflow Layout Image*
- *Hierarchical Order of Active Workflow Steps on the Request Search Results Table*
- *Improved Field Level Security Check on Mass Updates*
- *Logging of Physical Memory and Operating System Swap File Space at Server Startup*
- *Improved Control over the Size and Number of Unique Values in Pivot Tables*
- *Custom Rules for Time Sheets*
- *Support for Multi-Domain LDAP Import*
- *Control Over Encryption Suites Used by SSL (TLS) Sockets*
- *New Parameters for the Silent Installation of Microsoft Project Plug-in*
- *Enhancements to PPM Center Integration with Quality Center (Using ALM)*
- *Upgrading PPM Center Integration with Quality Center (Using ALM)*

The following certifications are included in PPM Center version 9.14:

- Microsoft Internet Explorer 9 (32-bit)
- VMware ESX 4.1.0
- SAP BusinessObjects Enterprise XI 3.1 with Service Pack 4 Fix Pack 1 (SBOP Enterprise XI 3.1 SP4 FP1) for the Operational Reporting solution for PPM Center
- Universal CMDB versions 9.04 and 9.05 for PPM Center integrations with Universal CMDB (using ALM)
- HP Service Manager 9.30 when used to integrate PPM Center tasks and Service Manager changes
- HP Application Lifecycle Management version 11.0 and version 11.0 Service Pack 2 for integration with PPM Center
- Oracle 11.2.0.3 (Standard/Enterprise Edition) (RAC and Non-RAC) for all PPM server platforms
- Oracle Enterprise Linux (OEL) version 5 (Red Hat Enterprise Linux Clone) support as PPM Server platform
- Red Hat Enterprise Linux 6 support as PPM Server platform

Documentation Updates

The first page of this release notes document contains the following identifying information:

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Installation Notes

This procedure includes steps that are valid for PPM Center version 9.14 (rebundle file of build 1460).

To install version 9.14 rebundle file:

1. Back up your database.
2. Back up your customized data.

   The upgrade script may overwrite your customized files or clean up some customized data.

   For example, if you configured LDAP integration previously, to avoid data loss, make sure you back up the `LdapAttribute.conf` file, which is located in the `<PPM_Home>/integration/ldap` directory on the PPM Server.
3. Stop the PPM Server. The Service Pack cannot be installed on an active server.
4. Copy the Service Pack file `ppm-914-SP4v2.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 SP4v2
   ```
7. Follow the on-screen instructions to complete the Service Pack installation.

8. Restore your customized data (if any).
9. Start the PPM Server.

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 Project Management

If, during the installation of PPM Center 9.14, 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/914/SP4/phases/prevalidation` directory and run the `MarkPMTMActualsOutOfSync.sql` script.
2. Re-install PPM Center 9.14.
3. After you successfully install PPM Center 9.14, 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>
   ```

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

During installation of PPM Center 9.14, if 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/914/SP4/phases/prevalidation` directory and run the `CorrectDMTMActualsOutOfSync.sql` script.
2. After the `CorrectDMTMActualsOutOfSync.sql` script has run successfully, re-install PPM Center 9.14.

Post-Installation Preparation to Upgrade Operational Reporting CP1 to CP1.1

Operational Reporting functionality was introduced in PPM Center version 9.10. If you have been using or plan to use Operational Reporting, after you upgrade to PPM Center version 9.14, do the following:

1. HP strongly recommends that you log in to the PPM Center database as a DBA and use the following command to flush the shared pool:

   ```
   alter system flush shared_pool;
   ```

2. Upgrade your Operational Reporting solution to Content Pack 1.1 (CP1.1).

   For detailed instructions, see the *PPM Center Release Notes for Operational Reporting Content Pack 1.1*.

For more information about Operational Reporting, see the *Operational Reporting User's Guide,* and the *Operational Reporting Administrator's Guide.*

Post-Installation Command for the Purge Empty Time Sheet Lines Report

Starting from PPM Center version 9.12, a new report is provided to purge empty time sheet lines. To make this report available, run the following command in the `<PPM_Home>` directory after the installation:

```
sh bin/kMigratorImport.sh -username "admin" -password '<admin
password>' -action import ¨Cfilename reports/PurgeTSLReport.zip
-i18n charset -flags NNNNYNYNNNNNNNNNNNN -unescapeUnicode Y
```

For more information, see *New Report: Purge Empty Time Sheet Lines* on page 226.

Supported Upgrades

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
7.5 SP3 or earlier [a]	8.00 or later	9.10 or later
7.5 SP4, 7.5 SP5, 7.5 SP6 [a]	8.02 or later	9.10 or later
7.5 SP7 [a]	8.03 or later	**9.12** or later
8.00 [b]	8.00.01 or later	9.10 or later
8.00.01 [b]	8.02 or later	9.10 or later
8.02 [b]	8.03 or later	9.10 or later
8.03 [b] (build 1189 and build 1208)	8.04	**9.12** or later
8.04	—	9.14
9.10	—	9.11 or later
9.11	—	9.12 or later
9.12	—	9.13 or later
9.13	—	9.14

a. 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, and finally 9.10 to 9.1x.).

b. 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.

Software and Hardware Requirements

Before you install PPM Center version 9.14, make sure that your system meets the minimum requirements, as described in the *System Requirements and Compatibility Matrix* (for PPM Center version 9.14), available at the HP Manuals site.

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
```

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.

2 Enhancements, Integrations, Certifications, and Fixes in PPM Center 9.14

This section includes information about the enhancements, integrations, certifications, and fixes in PPM Center version 9.14.

Enhancements

The following enhancements are included in PPM Center version 9.14:

- *Enhancements to Resource Management Module*
- *Copying Date Field Value Using Functions of KNTA_USER_UTIL Package*
- *Configuring Initial Text in Mobility Access Email Notifications*
- *Specifying Font Size for Workflow Layout Image*
- *Hierarchical Order of Active Workflow Steps on the Request Search Results Table*
- *Improved Field Level Security Check on Mass Updates*
- *Logging of Physical Memory and Operating System Swap File Space at Server Startup*
- *Improved Control over the Size and Number of Unique Values in Pivot Tables*
- *Custom Rules for Time Sheets*
- *Support for Multi-Domain LDAP Import*

- *Control Over Encryption Suites Used by SSL (TLS) Sockets*
- *New Parameters for the Silent Installation of Microsoft Project Plug-in*
- *Enhancements to PPM Center Integration with Quality Center (Using ALM)*
- *Upgrading PPM Center Integration with Quality Center (Using ALM)*

Enhancements to Resource Management Module

The following new features and improved user experiences are provided for the Resource Management module:

- *Utilizing Resource User Data Fields for Resource Searching*
- *Improved Access Control on Resource Attributes*
- *Required Skill and Preferred Skill*
- *Suitability Score Calculation*
- *Enhanced Resource Finder*

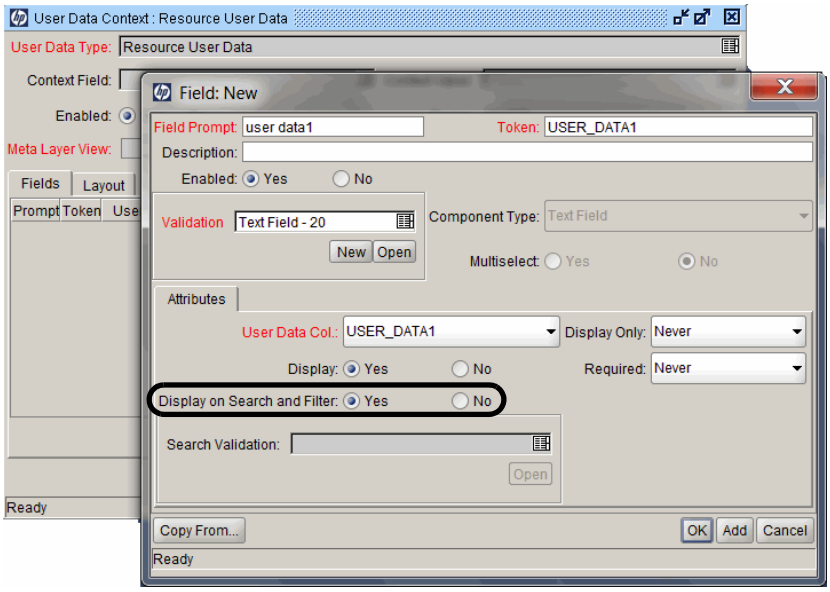
Utilizing Resource User Data Fields for Resource Searching

Starting with version 9.11, PPM Center added 100 resource user data fields to extend the usability for resource entities. This enhancement utilizes these user data fields for resource searching, which enables you to specify the user data fields as search conditions when searching for resources.

Resource User Data

To make user data fields available for resource searching, the **Display on Search and Filter** option is added to the Attributes tab of a resource user data field in Workbench. See *Figure 2-1*.

Figure 2-1. New option in Workbench



This option indicates whether or not the resource user data field is displayed in resource searching pages. If you set this option to `Yes`, the field is displayed in the following pages:

- Modify Search Criteria page for the Resource Finder
- Search Resources page
- Search Resources Availability page

User data fields with the following component types have the **Display on Search and Filter** option:

- Text Field
- Text Area
- Drop Down List
- Radio Buttons (Yes / No)
- Auto Complete List
- Date Field

Fields with other component types, such as Link and Attachment, do not have the **Display on Search and Filter** option. Therefore, these fields cannot be displayed in resource searching pages.

If a user data field uses one of the component types mentioned in *Table 2-1*, the field will be rendered differently a resource searching page (compared with how the field is rendered on the **Details** tab of the Modify Resource page). This is because the system performs a component type switch and adds values for these user data fields. *Table 2-1* details the default component type switches and additional values.

Table 2-1. Default component type switch

Component Type on the Modify Resource page	Component Type on Resource Searching Pages	Additional Value
Drop Down List	Auto Complete List [a]	The value `<Blank>` is added to the Auto Complete List. This option enables you to filter out all resources that have a value set for the field.
Radio Buttons (Yes / No)	Drop Down List	The value `<Blank>` is added to the Drop Down List. This option enables you to filter out all resources that have a value set for the field.
Auto Complete List	Auto Complete List [a]	The value `<Blank>` is added to the Auto Complete List. This option enables you to filter out all resources that have a value set for the field.
Date Field	Date Field	Two Date fields are displayed. These two fields enable you to specify a time period.

a. On resource searching pages, fields with the Auto Complete List component type support multiple selections.

Search Validation

For fields that use the component types mentioned in *Table 2-1*, you can customize the validations (the component type, and possible field values) that the fields use in resource searching pages by configuring the **Search Validation** field in Workbench.

For example, field A is an auto complete list that contains three values (`average`, `good`, `excellent`). You can configure the **Search Validation** field to make it only contain two values (`good`, `excellent`) in resource searching pages.

The **Search Validation** field does not take effect if the **Display on Search and Filter** option is set to `No`.

Retrieving Values from Position User Data Fields

You may create staffing profile position user data fields in Workbench, and specify position user data fields on the **Details** tab of a position page. To simplify your resource searching, a resource user data field will retrieve the value from a position user data field if the resource user data field uses the same token and component type with the position user data field. In this case, the resource user data field is automatically populated with the position user data value when you open a resource searching page.

You can update or remove the value if the populated value does not fit your search criteria.

Improved Access Control on Resource Attributes

This enhancement offers improved access control on resource profiles (the View Resource page) by adding the following two access grants:

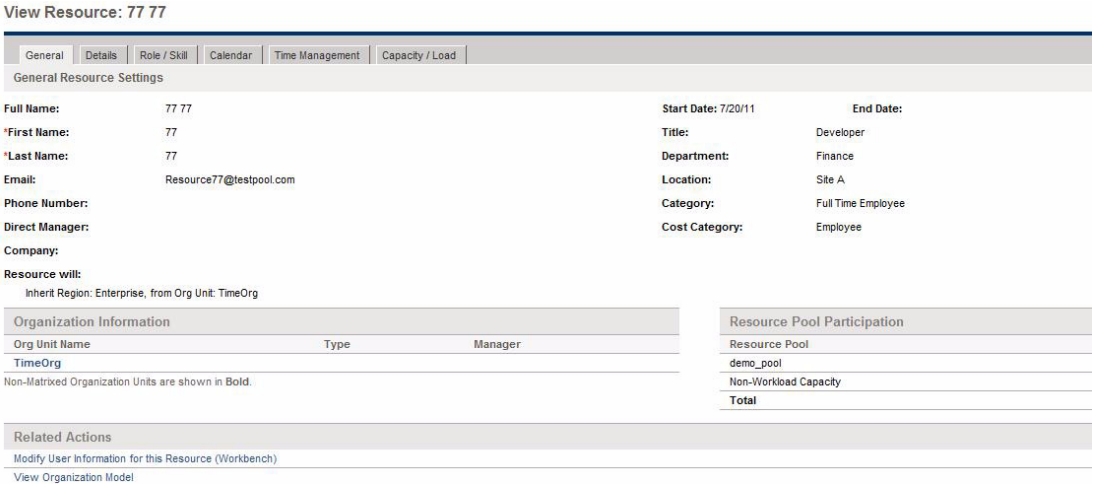
- View Only Resources That I Manage in My Resource Pool
- View Only Resources That I Manage as a Direct Manager

The "View Only Resources That I Manage in My Resource Pool" access grant enables a resource pool manger to view the resource profiles for resources in the resource pools (including child pools) that he or she manages.

The "View Only Resources That I Manage as a Direct Manager" access grant enables a resource manger to view the resource profiles for resources that he or she directly manages.

When a user with these access grants opens the View Resource page, all information are read-only as shown in *Figure 2-2*.

Figure 2-2. Read-Only View Resource Page



These two access grants, which provide only the view access to resource profiles, are designed for a scenario where the resource information is imported from an external system. By creating users (resource pool mangers and direct managers) with these access grants, you can maintain the data integrity between PPM Center the source of the resource information.

Required Skill and Preferred Skill

In some resource searching scenario, you may have to set one or more skills as required skills while the others as nice-to-have (preferred) ones. To fit your business needs, this enhancement classifies skills as follows:

- **Required Skill:** Skills that a resource must have. Additionally, the resource's skill proficiency must meet or exceed the minimum skill proficiency. Otherwise, the resource will be filtered out.
  For more information, see *Skill Proficiency*.

- **Preferred Skill:** Skill that a resource does not have to have. Having a preferred skill increases the Suitability Score of a resource.
  For more information, see *Suitability Score Calculation*.

Adding Skills to a Position

To add skills to a position, follow these steps:

1. Click a position on the staffing profile.

   The position profile (position page) opens.

2. Click the **Skill** tab, and then click **Add a Skill**.

   A skill line pops up for you to select the **Skill** field, and specify the **Aptitude** field.

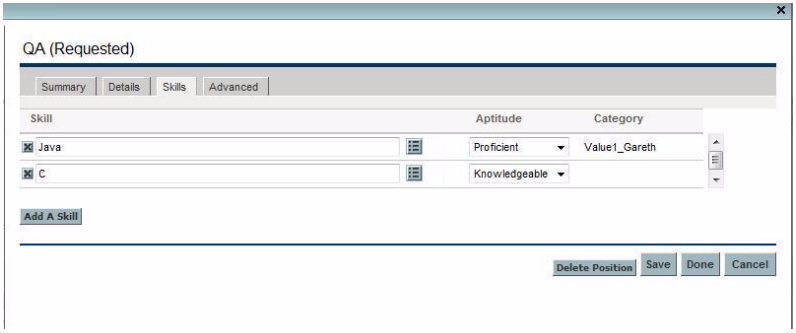
   The **Aptitude** field specifies the minimum skill proficiency that the resource must meet.

3. Select the skill in the auto-complete list, and then specify the aptitude in the drop-down list.

After you select the skill, the category of the skill will be displayed in the **Category** field if it is specified.

You can click the icon to remove a previously-added skill.

Figure 2-3. Skill tab of a position profile

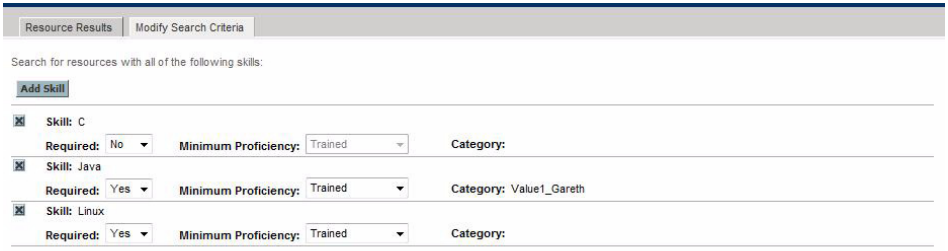


Modifying Skill Criteria for Resource Searching

When you use the Resource Finder to search for resources to assign, the skills you add to the position automatically appear on the **Modify Search Criteria** tab. You can do the following modification to the skill criteria:

- Click **Add Skill** to add more skills.
- Click the icon to remove a skill.
- Set the **Required** field. This field indicates whether the skill is a required skill or a preferred skill. By default, this field is set to `Yes`.
- Modify the **Minimum Proficiency** field for the skill. By default, this field is set to the value you specified in the **Aptitude** field of the position.
  If you set a skill to be a preferred one (set the **Required** field to `No`), the **Minimum Proficiency** field will be grayed out.

Figure 2-4. Modifying skill criteria

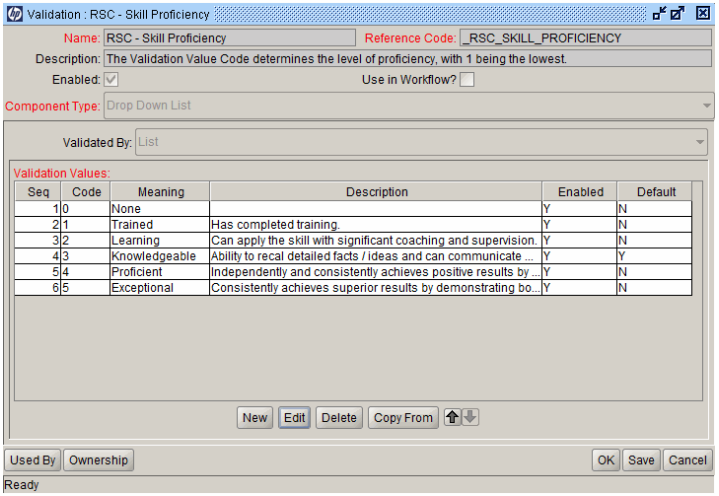


Compared with the skills specified in the position (shown in *Figure 2-3*), the following changes occur after the skill criteria modification (shown in *Figure 2-4*).

- The skill C becomes a preferred skill. And thus, resources that do not have this skill will not be filtered out. While resources that have this skill may have higher suitability scores.
- The minimum proficiency of the skill java is set to “Trained.” This change makes more resources that have the skill Java become eligible.
- The skill Linux is added as a required one. This change filters out all the resources that do not have the skill Linux.

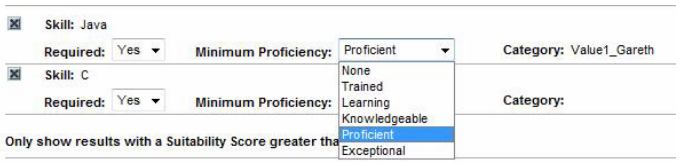
You can modify the value displayed in the **Minimum Proficiency** field by configuring the RSC – Skill Proficiency validation. This validation defines a sequence of proficiency levels. The system measures the proficiency level according to the sequence number. A high sequence number indicates a high proficiency level.

Figure 2-5. RSC - Skill Proficiency validation



In *Figure 2-5*, the value `Exceptional` with the sequence number 6 is the highest proficiency level. *Figure 2-6* illustrates the corresponding values in Web user interfaces.

Figure 2-6. Proficiency levels on UI



Suitability Score Calculation

The Suitability Score is a numeric value representing the resource's suitability for a resource request, based on their related skills, and availability. The higher this score, the better. This enhancement computes suitability scores using the following values:

Availability Score

The availability score is a numeric score representing the resource's availability for a resource request, based on their current load and capacity. This enhancement retains most of the original availability score calculation in PPM Center version 9.1x. However, only the resource allocations from staffing profiles are calculated, which does not include the allocations from requests and project tasks. For more details, see the *HP Resource Management User's Guide*.

Skill Score

The skill score is a numeric score representing the resource's suitability for a resource request, based on their skills and skill proficiency. This enhancement simplifies the skill score calculation. For more detail, see the *New Skill Score Calculation* section.

The availability score and skill score are weighted according to the following formulae to produce the final suitability score:

Availability Weight = 100 – Skill Weight

Suitability Score = Availability Score * (Availability Weight%) + Skill Score * (Skill Weight%)

You can change the skill weight by altering the `RESOURCE_FINDER_SKILL_WEIGHT` server.conf parameter. This parameter represents the weight given to the skill score in suitability score calculations for the Resource Finder. (Possible values: 0~100)

The system computes the suitability score, availability score, and skill score for a resource only when both of the following conditions are true:

- The resource has all the required skills you specify in the Resource Finder.
- For each required skill, the skill proficiency of the resource meets or exceeds the minimum skill proficiency you specify in the Resource Finder.

New Skill Score Calculation

With the implementation of the required skills and preferred skills, this enhancement computes the skill score with the following formula:

Skill Score = 100 * (RSN + PSN) / (SSN)

where,

RSN = number of required skills with a skill proficiency higher or equal to the minimum proficiency that the resource has

PSN = number of preferred skills that the resource has

SSN = number of skills you specify in the Resource Finder

Enhanced Resource Finder

The functionality and usability of the Resource Finder is enhanced. These enhancements enable you to update the search criteria more effectively as previously described in the following sections:

- *Utilizing Resource User Data Fields for Resource Searching*
- *Modifying Skill Criteria for Resource Searching*

Additionally, these enhancements enable you to use the Resource Finder on the Resource Allocation Management page.

By using the Resource Finder on the Resource Allocation Management page, you can assign direct resources in the resource pool only.

Furthermore, user experience is improved when viewing, selecting and comparing resources on the Resource Results tab. For more details, see the *Resource Result Improvements* section.

This enhancement implements the enhanced Resource Finder for staffing profiles, the Resource Allocation Management page, and the Resource Availability search page. The Resource Finder for requests and work plans remains unchanged.

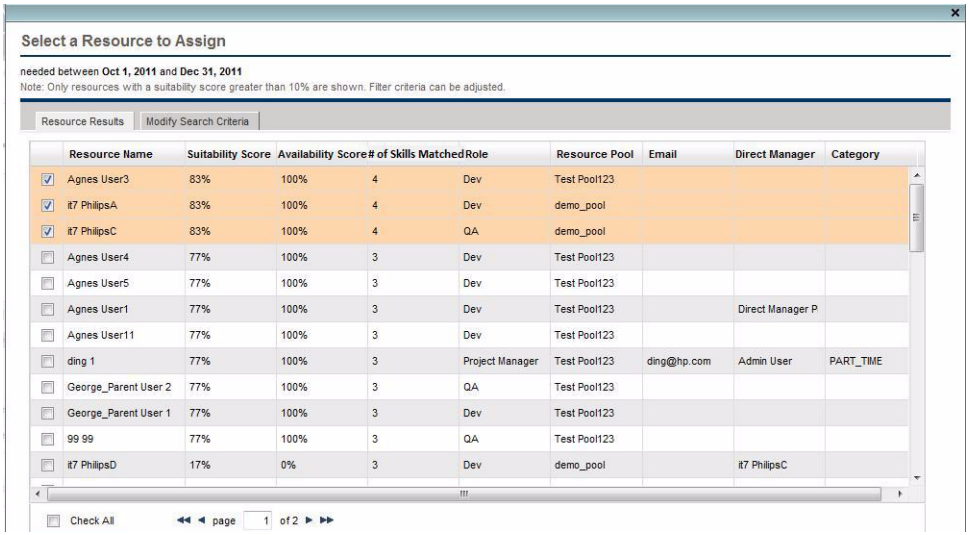
For detailed information about the general usage of the Resource Finder, see the Using the Resource Finder section of the *HP Resource Management User's Guide*.

Resource Result Improvements

This enhancement improves the user experience when you use the **Resource Results** tab. The improvements include:

- *Column Refresh*
- *Scalable Resource Results*

Figure 2-7. Improved resource results



Column Refresh

Columns described in *Table 2-2* are added to the **Resource Results** tab:

Table 2-2. New Columns in Resource Results

Column Name	Description
# of Skill Matched	Represents the sum of RSN and PSN. For more information about RSN and PSN, see the *New Skill Score Calculation* section.
Category	Represents the category (such as full time employee, or contractor) of a resource.
Role	Represents the role of the resource.
Resource Pool	Represents the resource pool of the resource.

Column Name	Description
Email	Represents the Email address of the resource.
Direct Manager	Represents the direct manager of the resource.

The following columns are sortable:

- Resource Name
- Suitability Score
- Availability Score
- #of Skill Matched

By default, the results are sorted by the suitability score in a descending order.

The following columns are removed from the **Resource Results** tab:

- Projected Utilization
- Gantt chart
- Skill Score

Except for the column additions and removals, this enhancement makes the column width resizable. You can drag to expand the column width to display long strings. Correspondingly, a horizontal scroll-bar enables you to view the rightmost data if you expand the column width.

Scalable Resource Results

This enhancement enables to you modify the maximum number of resources that can be targeted in a user search. To do this, you must add the following entry to the `server.conf` file:

```
com.kintana.core.server.SCALABLE_RESOURCE_FINDER_MODE = 1
```

By default, the entry is not added, meaning that the system uses the original Resource Finder mode which reads the `RESOURCE_FINDER_SEARCH_MAX_USERS` parameter to determine the maximum number of resources that can be targeted. Setting the `SCALABLE_RESOURCE_FINDER_MODE` parameter to 0 also makes the system use the original Resource Finder mode.

When you set the SCALABLE_RESOURCE_FINDER_MODE parameter to 1, the system uses the parameters described in *Table 2-3*:

Table 2-3. Parameters for scalable Resource Finder

Parameter	Description	Default Value
SCALABLE_RESOURCE_FINDER_SEARCH_MAX_RESOUCES	Determines the maximum number of resources that can be targeted in a user search. If the targeted number exceeds this value, the Resource Finder displays the message that the number of resources targeted is too large.	5,000
SCALABLE_RESOURCE_FINDER_PAGE_SIZE	Determines the maximum number of resources that can be displayed in one page.	50

Copying Date Field Value Using Functions of KNTA_USER_UTIL Package

To enable formatting dates based on your current regional settings when copying date field values, PPM Center version 9.14 introduces this optional feature. A package of KNTA_USER_UTIL functions are provided for you to use in request type SQL defaulting rules.

KNTA_USER_UTIL Functions

The KNTA_USER_UTIL package includes three functions:

- `KNTA_USER_UTIL.to_char(user, option, dateObject)`

  This function converts a date object to a String according to the specified user's regional settings.

  The return type is string.

  This function takes the three parameters listed in the following table:

Parameter	Type	Description
`user`	String	Current user. For example, `[SYS.USERNAME]`
`option`	String	Date format option. Valid values: `LONG`, `MEDIUM`, `SHORT`
`dateObject`	Date (Oracle date object)	Result of `KNTA_USER_UTIL.to_date` and `KNTA_USER_UTIL.next_date`, or result of Oracle built-in functions like `sysdate`, `to_date()`, `add_months()`, and so on.

- `KNTA_USER_UTIL.to_date(user, option, dateString)`

  This function converts a date string to an Oracle date object according to the specified user's regional setting.

  The return type is Oracle date object.

  This function takes the three parameters listed in the following table:

Parameter	Type	Description
`user`	String	Current user. For example, `[SYS.USERNAME]`
`option`	String	Date format option. Valid values: `LONG`, `MEDIUM`, `SHORT`
`dateString`	String (of a specific date format)	Date string of the specified user's default date format. Use `[REQD.VP.FIELDNAME]` of a date field for this parameter. **Note:** Date Time and Time validation fields are not supported.

- `KNTA_USER_UTIL.next_date(user, option, dateString, dateGap)`

  This function coverts a date String to an Oracle date object according to the specified user's regional setting. Users can change the date to another using a date gap.

  The return type is Oracle date object.

  This function takes the four parameters listed in the following table:

Parameter	Type	Description
`user`	String	Current user. For example, `[SYS.USERNAME]`
`option`	String	Date format option. Valid values: `LONG`, `MEDIUM`, `SHORT`
`dateString`	String (of a specific date format)	Date string of the specified user's default date format. Use `[REQD.VP.FIELDNAME]` of a date field for this parameter. **Note:** Date Time and Time validation fields are not supported.
`dateGap`	Integer	Set the date to several days after if the `dateGap` value is a positive integer, or several days before if the `dateGap` value is a negative integer.

Examples of SQL Defaulting Rules with SQL-default Logic Using KNTA_USER_UTIL Functions

Following are examples of SQL defaulting rules:

- To copy a value from **DATE1** field to **DATE2** field.

  DATE1: Date (Long) validation

  DATE2: Date (Long) validation

  Specify SQL defaulting rule as follows:

```
Select KNTA_USER_UTIL.to_
date('[SYS.USERNAME]','LONG','[REQD.VP.DATE1]'),
'[REQD.VP.DATE1]' from dual
```

- To copy a value from **DATE1** field to **DATE2** field.

  DATE1: Date (Medium) validation

  DATE2: Date (Long) validation

  Specify SQL defaulting rule as follows:

```
Select KNTA_USER_UTIL.to_
date('[SYS.USERNAME]','MEDIUM','[REQD.VP.DATE1]'),
'[REQD.VP.DATE1]' from dual
```

Where

- `KNTA_USER_UTIL.to_ date('[SYS.USERNAME]','MEDIUM','[REQD.VP.DATE1]')` is used to parse a “medium” date string to a date object
- The `VP` value in `'[REQD.VP.DATE1]'` is parsed by the validation. Therefore, there is no need to parse it with an additional SQL statement.

Another example:

DATE1: Date (Long) validation

DATE2: Date (Short) validation

Specify SQL defaulting rule as follows:

```
Select KNTA_USER_UTIL.to_
date('[SYS.USERNAME]','LONG','[REQD.VP.DATE1]'),
'[REQD.VP.DATE1]' from dual
```

Where,

- `KNTA_USER_UTIL.to_ date('[SYS.USERNAME]','LONG','[REQD.VP.DATE1]')` is used to parse a “long” date string to a date object
- The `VP` value in `'[REQD.VP.DATE1]'` is parsed by the validation, and there is no need to parse it with an additional SQL statement.

- To copy a value from **DATE1** field to **TEXT1** field

  DATE1: Date validation

  TEXT1: Text Field

  Specify SQL defaulting rule as follows:

  ```
  Select '[REQD.VP.DATE1]','[REQD.VP.DATE1]' from dual
  ```

- To copy a value from **TEXT1** field to **DATE1** field

  DATE1: Date validation

  TEXT1: Text Field

  Depending on the regional settings, the **TEXT1** value must be of one of the following user default date formats: `LONG`, `SHORT`, or `MEDIUM`.

  In this case, the `LONG` format option is used.

  Specify SQL defaulting rule as follows:

```
Select KNTA_USER_UTIL.to_
date('[SYS.USERNAME]','LONG','[REQD.VP.TEXT1]'),
'[REQD.VP.TEXT1]' from dual
```

- To copy a value from **DATE1** field (with `dateGap` of `+10`) to **DATE2** field

  DATE1: Date (Long) validation

  DATE2: Date (Long) validation

  Specify SQL defaulting rule as follows:

```
Select KNTA_USER_UTIL.next_
date('[SYS.USERNAME]','LONG','[REQD.VP.DATE1]',10),KNTA_
USER_UTIL.to_char('[SYS.USERNAME]','LONG', KNTA_USER_
UTIL.next_
date('[SYS.USERNAME]','LONG','[REQD.VP.DATE1]',10),) from
dual
```

- To copy a value from **DATE1** field (with `dateGap` of `-10`) to **DATE2** field

  DATE1: Date Format (Long) validation

  DATE2: Date Format (Long) validation

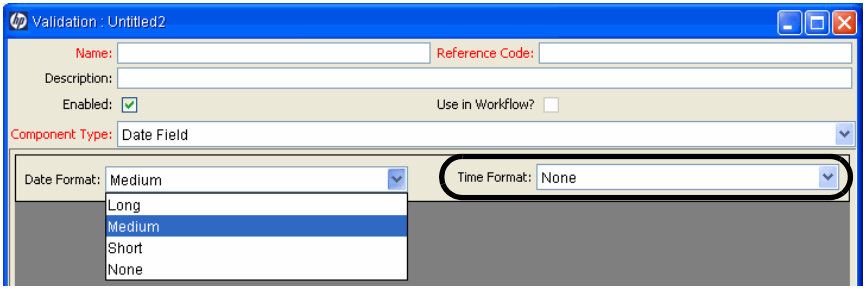
  Specify SQL defaulting rule as follows:

```
Select KNTA_USER_UTIL.next_
date('[SYS.USERNAME]','LONG','[REQD.VP.DATE1]',-10),KNTA_
USER_UTIL.to_char('[SYS.USERNAME]','LONG', KNTA_USER_
UTIL.next_date('[SYS.USERNAME]','LONG','[REQD.VP.DATE1]',-
10),) from dual
```

Limitations

This enhancement is subject to the following limitations:

- It applies to **Date Format** only. Make sure to set **Time Format** to **None**.



- HP strongly recommends using the `VP` value instead of the `P` value in SQL defaulting rules. Because the token engine replaces `P` object value with its `toString()` results, the `P` date object becomes a string similar to `2011-07-12 00:00:00` (JVM determines the format). This unexpected date string from `P` date object may cause errors.
- The SQL defaulting rules using `KNTA_USER_UTIL` functions do not support the following regional settings:
  - English (India)
  - Chinese (Singapore)

Configuring Initial Text in Mobility Access Email Notifications

With PPM Center version 9.14, an enhancement is applied to Mobility Access feature. A new server parameter `MOBILITY_ACCESS_HIDE_INITIAL_MESSAGE` is introduced to control whether to hide or display the initial text in an Mobility Access email notification. Setting the parameter to `true` hides the initial text. The parameter defaults to `false`.

In addition, available action buttons that appeared in the top of an Mobility Access email notification are now moved to the bottom of the email notification.

Specifying Font Size for Workflow Layout Image

To enable customers to specify a font size for displaying larger characters in workflow layout images, PPM Center version 9.14 includes a new server configuration parameter.

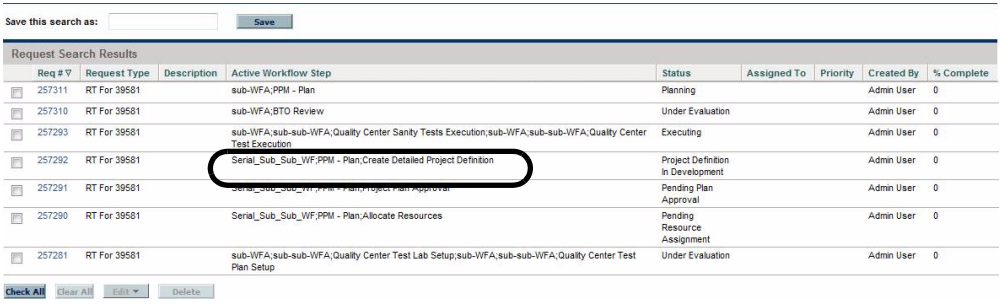
Table 2-4. New `server.conf` parameter

Parameter	Description
FONT_SIZE_OF_GRAPHIC_WORKFLOW	Specifies font size in workflow graphics. Default: `9`

Hierarchical Order of Active Workflow Steps on the Request Search Results Table

The Request Search Results table displays the active workflow steps of requests in hierarchical order. This information is shown on the **Active Workflow Step** column. (See *Figure 2-8*)

Figure 2-8. Hierarchical order of active workflow steps in the Request Search Result table



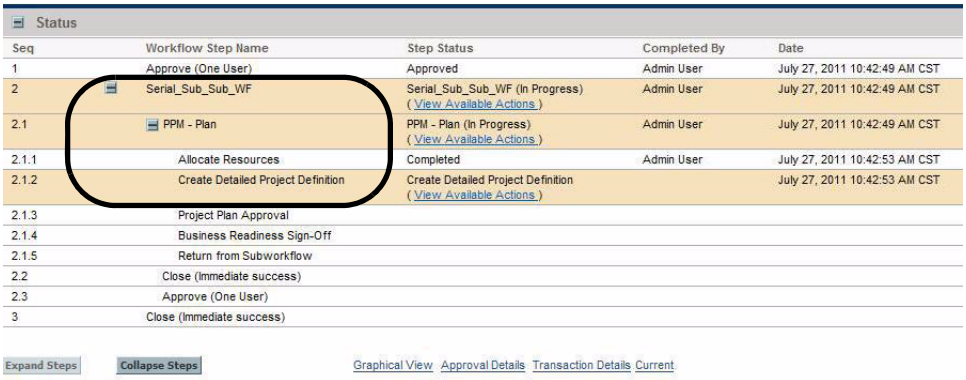
The **Active Workflow Step** column displays the top layer workflow step first, followed by the lower-level workflow steps.

For example, for request 257292, the value of the **Active Workflow Step** column is:

```
Serial_Sub_Sub_WF; PPM - Plan; Create Detailed Project
Definition
```

The order of these three workflow steps shows that `PPM - Plan` is a second-level workflow step, which is subordinate to the top-level workflow step `Serial_Sub_Sub_WF`. Similarly, `Create Detailed Project Definition` is a third-level workflow step, which is subordinate to the second-level workflow step `PPM - Plan`. The **Status** table of the request also illustrates the hierarchy of the workflow steps. (See *Figure 2-9*)

Figure 2-9. Hierarchy of active workflow steps in the Status table



Improved Field Level Security Check on Mass Updates

PPM Center version 9.14 offers improved security check on mass updates by adding pre-checks to the following scenarios:

- When users click **Mass Update** to perform mass updates on selected multiple requests, a security check is performed to verify the selected requests for potential issues that might cause the mass update operation fail. The security check includes the following pre-checks:
  - **Status dependencies check:** Checks field status dependencies for non-editable fields.
  - **Field level security validation:** Validates field level security of the selected requests to see if the user has appropriate privileges.
  - **Display-only check:** Checks for display-only fields.

  With these pre-checks performed, the Request Batch Update page displays the requests for updates accordingly:

- If one column is not editable for ALL the selected requests, then this column is displayed as read-only and grayed out.
- If one column is editable for at least one request among the requests that users selected to update, then this column is displayed as editable.

- When users click **Save** or **Done** on the Request Batch Update page, some more applicable pre-checks are performed, such as checking the status of requests whether they are still valid for the mass update.

  If any potential errors exist, for example,

  - The pre-check finds that the **Editable** option for a request field is set to **No** for the current status, then update to this field would not be applied.
  - A request contains fields that users do not have authorization to edit, then the request could not be updated.

  Then, warning messages are displayed on the Request Batch Update Confirmation page, listing requests that could not be updated, with a descriptions of the reasons. This pro-active warning message would enable users to decide whether they want to continue or not.

- **Workflow transition check.** When users click any workflow actions on Request Batch Update page, some pre-validations are performed, including security check, check request status, and check whether an action is still available for the selected requests. If any potential errors exist, warning messages are displayed on the Request Batch Update Confirmation page for users, listing requests that could not be updated, and a description of the reasons.

Logging of Physical Memory and Operating System Swap File Space at Server Startup

As of this release, total and free physical memory and operating system swap file space are logged during PPM Server startup. The exception to this is AIX systems, on which this information is not available.

Improved Control over the Size and Number of Unique Values in Pivot Tables

PPM Center version 9.14 introduces four new server configuration parameters to increase the usability of pivot tables. These parameters enable you to control the size and number of unique values in a pivot table more effectively. *Table 2-5* details these new parameters.

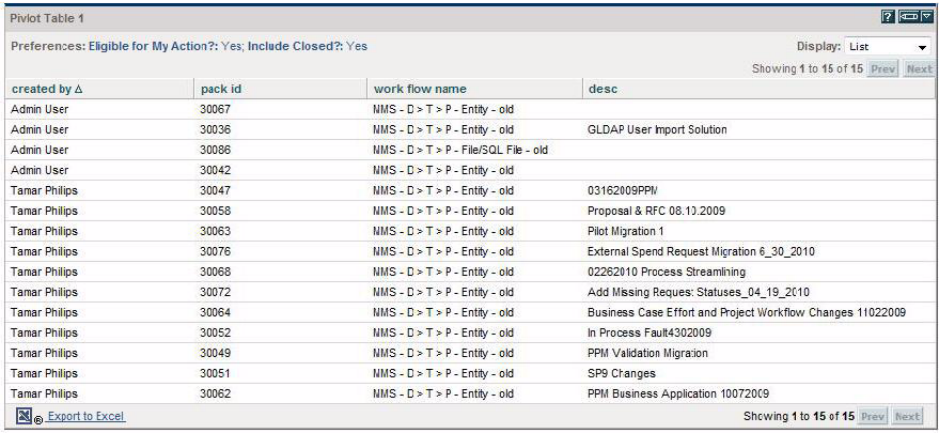
Table 2-5. New server configuration parameters for pivot tables

Parameter	Description	Default Value
dashboard.Pivotdataset-Max-Rows	Determines the maximum number of rows in the List display mode of a pivot table portlet. See *Figure 2-10* for more details.	25,000
dashboard.Pivotdataset-Max-Cells	Determines the maximum number of cells (number of rows * number columns) in the List display mode of a pivot table portlet. See *Figure 2-10* for more details.	120,000
dashboard.Pivotdataset-Max-Distinct-In-Column	Determines the maximum number of unique values in any column of a pivot table. See *Figure 2-11* for more details.	50
dashboard.Pivotdataset-Max-Distinct-Cells	Determines the maximum number of unique aggregations (product of numbers of unique values in each column) in a pivot table. See *Figure 2-11* for more details.	10,000

The maximum number of rows in a pivot table is also affected by the `PORTLET_MAX_ROWS_RETURNED` parameter, which determines the maximum number of rows to display in a portlet. The default value for this parameter is 200, meaning that if you have more than 200 rows to display in a pivot table portlet, you must increase the value of the `PORTLET_MAX_ROWS_RETURNED` parameter accordingly.

- Performance issues may occur if the value you set for any parameter exceeds the corresponding default value.
- Performance varies with hardware, software, and system configurations in your environment. If performance degrades when system load reaches the default values, HP recommends that you lower the values of the parameters.
- If a pivot table has a very large volume of data, HP recommends that you NOT switch between columns and rows in the table.

Figure 2-10. List display mode of a pivot table portlet



Pivlot Table 1

Preferences: Eligible for My Action?: Yes; Include Closed?: Yes — Display: List

Showing 1 to 15 of 15 Prev Next

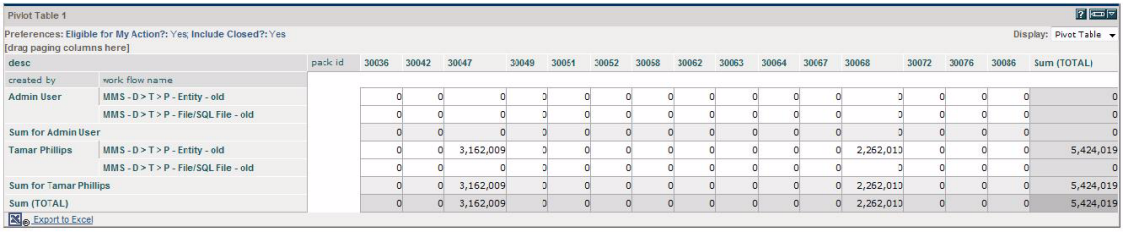
created by △	pack id	work flow name	desc
Admin User	30067	NMS - D > T > P - Entity - old	
Admin User	30036	NMS - D > T > P - Entity - old	GLDAP User Import Solution
Admin User	30086	NMS - D > T > P - File/SQL File - old	
Admin User	30042	NMS - D > T > P - Entity - old	
Tamar Philips	30047	NMS - D > T > P - Entity - old	03162009PPM
Tamar Philips	30058	NMS - D > T > P - Entity - old	Proposal & RFC 08.10.2009
Tamar Philips	30063	NMS - D > T > P - Entity - old	Pilot Migration 1
Tamar Philips	30076	NMS - D > T > P - Entity - old	External Spend Request Migration 6_30_2010
Tamar Philips	30068	NMS - D > T > P - Entity - old	02262010 Process Streamlining
Tamar Philips	30072	NMS - D > T > P - Entity - old	Add Missing Reques: Statuses_04_19_2010
Tamar Philips	30064	NMS - D > T > P - Entity - old	Business Case Effort and Project Workflow Changes 11022009
Tamar Philips	30052	NMS - D > T > P - Entity - old	In Process Fault4302009
Tamar Philips	30049	NMS - D > T > P - Entity - old	PPM Validation Migration
Tamar Philips	30051	NMS - D > T > P - Entity - old	SP9 Changes
Tamar Philips	30062	NMS - D > T > P - Entity - old	PPM Business Application 10072009

Export to Excel — Showing 1 to 15 of 15 Prev Next

In *Figure 2-10*, the number of rows in the List display mode of the pivot table portlet is 15. If the value of `Pivotdataset-Max-Rows` is lower than 15, you receive an error message, advising you to limit the number of rows.

In *Figure 2-10*, the number of cells in the List display mode of a pivot table portlet is 60 (15 * 4). If the value of `Pivotdataset-Max-Cells` is lower than 60, you receive an error message advising you to limit the number of cells.

Figure 2-11. Pivot table display mode of a pivot table portlet



Pivlot Table 1

Preferences: Eligible for My Action?: Yes; Include Closed?: Yes — Display: Pivot Table

[drag paging columns here]

desc		pack id	30036	30042	30047	30049	30051	30052	30058	30062	30063	30064	30067	30068	30072	30076	30086	Sum (TOTAL)
created by	work flow name																	
Admin User	NMS - D > T > P - Entity - old		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NMS - D > T > P - File/SQL File - old		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum for Admin User			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tamar Phillips	NMS - D > T > P - Entity - old		0	0	3,162,009	0	0	0	0	0	0	0	0	2,262,010	0	0	0	5,424,019
	NMS - D > T > P - File/SQL File - old		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum for Tamar Phillips			0	0	3,162,009	0	0	0	0	0	0	0	0	2,262,010	0	0	0	5,424,019
Sum (TOTAL)			0	0	3,162,009	0	0	0	0	0	0	0	0	2,262,010	0	0	0	5,424,019

Export to Excel

In this pivot table, column **pack Id** has 15 unique values, which is the largest number of unique values among all columns. If the value of `Pivotdataset-Max-Distinct-In-Column` is lower than 15, you receive an error message, advising you to limit the number of unique values in this column.

In this pivot table, column **pack Id** has 15 unique values, column `created by` has two unique values, and column `work flow name` has two unique values. Therefore, the number of unique aggregations is 60 (15 * 2 * 2). If the value of

`Pivotdataset-Max-Distinct-Cells` is lower than 60, you receive an error message, advising you to limit the number of aggregations in this table.

Limitations

This enhancement is subject to the following limitations:

- If a pivot table is larger than 2 MB, the table cannot be exported to Excel. This is caused by a default setting in Apache Tomcat. In Apache Tomcat, the `maxPostSize` attribute determines the maximum size in bytes of the POST, which is to be handled by the container `FORM URL` parameter parsing. If not specified, this attribute is set to **`2097152`** (2 MB), which limits the size of the pivot table.

  To work around this limitation, edit the Tomcat's `server.xml` file to add the `maxPostSize` attribute to the `Connector` element, and then set the attribute to a larger value in bytes. Alternatively, set the attribute to **`0`**, which disables the size check.

- These four parameters cannot be set to a value larger than **`2,147,483,647`**, which is the largest integer in Java. A parameter exceeding this threshold is automatically restored to the default value.

Custom Rules for Time Sheets

Introduction

PPM Center version 9.14 provides the ability for customers to create custom time sheet rules that are evaluated when users submit their time sheets. These rules supplement the standard configurable time sheet policies described in the *HP Time Management Configuration Guide*. Users do not see messages for rules violations when they save their time sheets without submitting them.

When using custom rules, the performance of HP Time Management when time sheets are submitted depends on such factors as the number of rules, their complexity, and whether the rules require evaluation of all time sheet lines.

A *violation* of a rule occurs when a user submits a time sheet that does not meet the requirements of the rule.

The rules you need to specify are all written in one XML file, and each rule includes SQL to specify the conditions of a time sheet that constitute a violation. Any data on the time sheet can be validated through SQL.

The custom rules can be restricted to apply to users who are associated with particular time sheet policies.

In the XML file, you specify the SQL that defines the rules. In a properties file, you create the message titles and messages that users see when a rule violation occurs or when a runtime *error* (a failure of the rule to run correctly) occurs.

The messages for all custom rule violations are displayed after any messages for the standard configurable time sheet policy violations, on the same dialog. The dialog has the same general "look and feel" as in the past, with some layout and spacing improvements.

HP provides a sample XML file and a sample properties file to use as models. This document describes examples in those files, but it does not describe how to write the SQL to define the custom rules.

Prerequisites

To create custom rules for time sheets, you must create the new `com.kintana.core.server.TM_ENABLE_POLICY_EXTENSION server.conf` parameter and set it to `true`. For information about creating `server.conf` parameters, see the *Installation and Administration Guide.* This parameter cannot be configured through the Administration Console.

Sample Files

The new `<PPM_Home>/conf/tm_policy` directory initially contains the sample file `config.xml.sample`, which has rules you can use as models for the rules you want to develop and apply.

This directory also contains the schema file `config.xsd`, which you should not change.

The sample properties file, which contains titles and text for violation messages and error messages, is located at:

`server/<PPM_Server_Name>/deploy/itg.war/WEB-INF/conf`

The directory initially contains the sample properties file named:

`TMCustomRulesResources.properties.sample`

You will specify messages for violations and errors in the properties file named:

`TMCustomRulesResources.properties`

The properties files can be localized to specific languages that are supported on a particular PPM Center instance. For example, the properties files could be translated and named:

- `TMCustomRulesResources_en.properties` for English
- `TMCustomRulesResources_de.properties` for German

Structure of a Rule

A rule includes the following attributes:

- `identifier`, which is a number or a string that can help you distinguish multiple rules in the XML file. HP recommends specifying a unique `identifier` for each rule.
- `title`, which specifies the key for a key-value pair in the properties file, where the value is the title of both the violation message and the error message for the rule. The properties file also contains the text used in each of the messages.
- `enabled`, which is a flag to enable or disable a rule
- `restrictTo`, which is an optional attribute that allows the rule to apply to only the specific time sheet policies listed by ID number
- `sql`, which defines the rule
- `violation`, which specifies the key for a key-value pair in the properties file, where the value is the text of the violation message for the rule.
- `error`, which specifies the key for a key-value pair in the properties file, where the value is the text of the runtime error message for the rule. The text can be generic and apply to any number of rules, or it can be specific to one rule.

The SQL in the rule can use the following tokens, which get resolved at run time:

- `[TMG.TIME_SHEET_ID]`, which represents the time sheet being submitted
- `[TMG.CURRENT_USER_ID]`, which represents the user who is currently logged in, not necessarily the time sheet resource

The following examples of rules are provided, in order of increasing complexity, to describe the effect of various rules and properties files on the occurrence and content of violation messages and error messages.

Rule and Messages: Example 1

In the following example, the rule prevents users from logging more than a total of 20 hours on Misc items in a time sheet. This rule uses the `[TMG.TIME_SHEET_ID]` token and it evaluates effort entered by users on time sheet lines.

```
<rule>
   <identifier>misc_excess_hours</identifier>
   <title>misc.excessHours.title</title>
   <enabled>true</enabled>
   <sql><![CDATA[
      SELECT 1
        FROM tm_time_sheets ts,
             tm_time_sheet_lines tsl,
             tm_actuals ta,
             tm_actuals_effort tae
       WHERE ts.time_sheet_id = tsl.time_sheet_id
         AND tsl.time_sheet_line_id = ta.time_sheet_line_id
         AND ta.actuals_id = tae.actuals_id
         AND ta.totals_flag = 'Y'
         AND tsl.work_item_type = 'MISC'
         AND ts.time_sheet_id = [TMG.TIME_SHEET_ID]
      HAVING SUM (tae.actual_effort) > 20
   ]]></sql>
   <violation>misc.excessHours.violation</violation>
   <error>genericError</error>
</rule>
```

Assume this rule uses the following key-value pairs in the properties file:

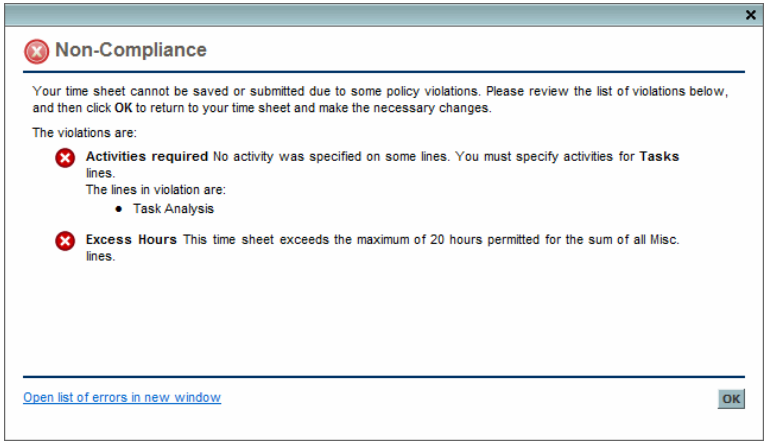
```
misc.excessHours.title=Excess Hours

misc.excessHours.violation=This time sheet exceeds the maximum
of 20 hours permitted for the sum of all Misc. lines.
```

```
genericError=An error occurred while checking this time sheet
rule.
```

Based on the SQL and the properties file, if a user submits a time sheet with too many hours for Misc items, a Non-Compliance message is displayed with the following title and text:

Excess Hours This time sheet exceeds the maximum of 20 hours permitted for the sum of all Misc. lines.

The following figure shows the message that appears when the user submits the time sheet with both a time sheet policy violation (no activities specified for some tasks) and the custom rule violation of this example (excess hours for Misc items).



Based on the SQL and the properties file, if a runtime error occurs during execution of the SQL, the error message that appears consists of the message title specified in the properties file, followed by the generic error message text:

Excess Hours An error occurred while checking this time sheet rule.

Rule and Messages: Example 2

In the following example, the rule prevents users with either of two particular time sheet policies from submitting a time sheet with a request that has been cancelled or closed for more than 30 days. This rule uses the

[TMG.TIME_SHEET_ID] token and it restricts which requests users can enter on time sheets.

The restrictTo attribute is used to apply the rule to time sheet policies 20000 and 20001 only. To find the time sheet policy ID number associated with a policy name, see the KTMG_POLICIES table in the database.

```
<rule>
   <identifier>requests_closed</identifier>
   <title>req.closed.title</title>
   <enabled>true</enabled>
<!-- Restrict this rule to resources associated with particular
                                PPM Time Management policies -->
   <restrictTo>
      <policies>
         <policy id="20000"/>
         <policy id="20001"/>
      </policies>
   </restrictTo>
   <sql><![CDATA[
      SELECT '#' || kr.request_id
        FROM kcrt_requests kr
       WHERE (kr.status_code LIKE 'CLOSED%' OR kr.status_code
                                                 LIKE 'CANCEL%')
         AND EXISTS (
            SELECT 1
              FROM tm_time_sheets ts,
                   tm_time_sheet_lines tsl,
                   ktmg_periods tp,
                   kwfl_workflow_instances kwi
             WHERE ts.time_sheet_id = [TMG.TIME_SHEET_ID]
               AND ts.time_sheet_id = tsl.time_sheet_id
               AND tsl.work_item_type = 'REQUEST'
               AND tsl.work_item_id = kr.request_id
               AND ts.period_id = tp.period_id
               AND kr.request_id = kwi.instance_source_id
               AND kr.workflow_id = kwi.workflow_id
               AND kwi.instance_source_type_code = 'IR'
               AND TRUNC (tp.end_date) - TRUNC
                                    (kwi.completion_date) > 30)
   ]]></sql>
   <violation>req.closed.violation</violation>
   <error>genericError</error>
</rule>
```

Assume this rule uses the following key-value pairs in the properties file:

```
req.closed.title=Closed Requests
```

```
req.closed.violation=The following requests on this time sheet
have been closed or cancelled for more than 30 days: {0} You are
no longer permitted to submit additional effort on these
requests.

genericError=An error occurred while checking this time sheet
rule.
```

The violation message is written to include specific data returned by the SQL, namely one or more request IDs in place of `{0}` in the violation message text. Note that the outermost `SELECT` statement in the SQL is written such that the returned strings shown in the violation message clearly identify the particular items of interest (request IDs in this example).

Based on the SQL and the properties file, if a user submits a time sheet with effort on any requests that have been cancelled or closed for more than 30 days, a Non-Compliance message is displayed with the following title and text (including two example request numbers):

Closed Requests The following requests on this time sheet have been closed or cancelled for more than 30 days:

- #12345
- #23456

You are no longer permitted to submit additional effort on these requests.

Based on the SQL and the properties file, if a runtime error occurs during execution of the SQL, the error message that appears consists of the message title specified in the properties file, followed by the same generic error message text as in example 1:

Closed Requests An error occurred while checking this time sheet rule.

Rule and Messages: Example 3

In the following example, the rule prevents any resource from submitting time sheets with effort on tasks from any project that starts with the word "Operation" but the rule allows their managers to submit such time sheets. This rule uses both the `[TMG.TIME_SHEET_ID]` token and the `[TMG.CURRENT_USER_ID]` token and it restricts which tasks certain users can have on time sheets.

```
<rule>
```

```
   <identifier>tasks_restricted</identifier>
   <title>tasks.restricted.title</title>
   <enabled>true</enabled>
   <sql><![CDATA[
      SELECT ti.name
        FROM wp_task_info ti, wp_tasks t
       WHERE ti.task_info_id = t.task_info_id
         AND EXISTS (
            SELECT 1
              FROM tm_time_sheets ts,
                   knta_users ku,
                   tm_time_sheet_lines tsl,
                   pm_projects prj,
                   pm_work_plans wp
             WHERE ts.time_sheet_id = [TMG.TIME_SHEET_ID]
               AND ts.resource_id = ku.user_id
               AND ku.manager_user_id <> [TMG.CURRENT_USER_ID]
               AND ts.time_sheet_id = tsl.time_sheet_id
               AND tsl.work_item_type = 'TASK'
               AND tsl.work_item_id = t.task_id
               AND t.work_plan_id = wp.work_plan_id
               AND wp.project_id = prj.project_id
               AND prj.project_name LIKE 'Operation%')
             ORDER BY ti.name
   ]]></sql>
   <violation>tasks.restricted.violation</violation>
   <error>tasks.restricted.error</error>
</rule>
```

Assume this rule uses the following key-value pairs in the properties file:

```
tasks.restricted.title=Restricted Tasks

tasks.restricted.violation=You are not permitted to submit
effort on the following tasks: {0}.

tasks.restricted.error=An error occurred while checking this
time sheet rule. Please contact your PPM Center administrator.
```

The violation message is written to include specific data returned by the SQL, namely one or more tasks in place of `{0}` in the violation message text. Note that the outermost `SELECT` statement in the SQL is written such that the returned strings shown in the violation message clearly identify the particular items of interest (task names in this example).

The runtime error message is unique, not generic.

Based on the SQL and the properties file, if a user submits a time sheet with effort on tasks from any project that starts with the word “Operation,” a

Non-Compliance message is displayed with the following title and text (including two example task names):

> **Restricted Tasks** You are not permitted to submit effort on the following tasks:
>
> - Analysis
> - Design6

Based on the SQL and the properties file, if a runtime error occurs during execution of the SQL, the error message that appears consists of the message title specified in the properties file, followed by the unique error message text for this rule:

> **Restricted Tasks** An error occurred while checking this time sheet rule. Please contact your PPM Center administrator.

As with any rule, the SQL could be changed for variations of interest. For example, you could display the project names as well as the subordinate task names, or you could allow delegates as well as managers to log time against projects that begin with "Operation."

Creating Your Own Custom Rules for Time Sheets

To create the rules you need, copy and edit the `config.xml.sample` file and the `TMCustomRulesResources.properties.sample` file or create new ones as needed.

The XML file must be renamed:

`config.xml`

and it must be placed in the directory:

`<PPM_Home>/conf/tm_policy`

The properties file must be renamed:

`TMCustomRulesResources.properties`

and it must be placed in the directory:

`server/<PPM_Server_Name>/deploy/itg.war/WEB-INF/conf`

Any translated properties files must be placed in the same directory.

On successful server startup, a message appears stating that the rules in the XML file were parsed correctly.

Support for Multi-Domain LDAP Import

To provide support for multi-domain LDAP import, two columns, `DISTINGUISHED_NAME` and `LDAP_USERNAME`, are added to the `KNTA_USERS_INT` parameter:

- **`DISTINGUISHED_NAME`:** Maps to `distinguishedName` of the LDAP server. For example, `DISTINGUISHED_NAME` = `distinguishedName`.

  Required if using SSO, LDAP, or NTLM as the user authentication mode.

- **`LDAP_USERNAME`:** Maps to a user's Logon ID, which is used by the user to log on to the NTLM or SSO server. For example, `LDAP_USERNAME` = `sAMAccountName`.

  Required if using SSO, LDAP, or NTLM as the user authentication mode.

The `KNTA_USERS_INT` parameter exists in the following four configuration files under the `<PPM_Server_Name>/integration/ldap` directory:

- `LdapAttribute.conf`
- `LdapAttribute_AD.conf`
- `LdapAttribute_NDS.conf`
- `LdapAttribute_Netscape.conf`

After you upgrade to PPM Center version 9.14:

- The `DISTINGUISHED_NAME` and `LDAP_USERNAME` columns are added into the four configuration files.

  If you do not find the new columns, be sure to add them and their mapping values into each of the four configuration files manually.

- Run the Import Users report.

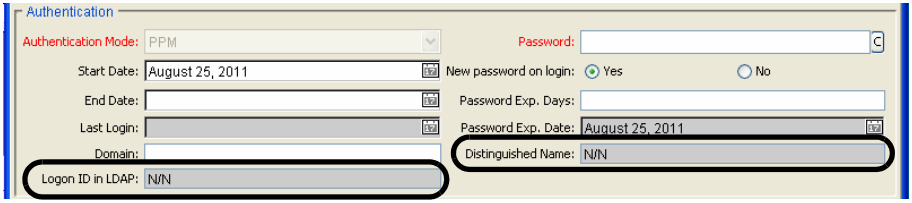
  Do the following:

  a. Log on to PPM Center.

  b. Run the Import Users report.

For details about how to run the report, see the *Open Interface Guide and Reference*.

The **Distinguished Name** and **Logon ID in LDAP** fields are added to the **User Information** tab of the User window in the User Workbench.



Running the Import Users report populates the two new fields with appropriate values.

c. Check for duplicated user information and accuracy of each of the users' information in the PPM Workbench.

The new fields are not editable. If the fields are empty or display incorrect values, contact your HP Software Support representative.

Control Over Encryption Suites Used by SSL (TLS) Sockets

PPM Center now supports control over the encryption suites used by its SSL (TLS) sockets. This can be specified by the new server configuration parameter `SSL_ENCRYPTION_SUITES` added in PPM Center version 9.14.

The value for this parameter should contain a comma-separated list of the encryption suites to be made available to PPM Centre.

These should be specified using the standard SSL/TLS cipher suite names.

For example, to specify that PPM Center should only establish connections using the TLS_DHE_RSA_WITH_AES_256_CBC_SHA cipher suite:

```
com.kintana.core.server.SSL_ENCRYPTION_SUITES=TLS_DHE_RSA_WITH_
AES_256_CBC_SHA
```

Note that if using AES256 or similarly strong encryption, the JDK used by both PPM Center and the client must be configured to use the unlimited

strength Java cryptography jars, if this is permissible in your jurisdiction and under US export laws.

To configure your JDK to use the unlimited strength Java cryptography jars,

1. Download Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files 6 (`jce_policy-6.zip`) by visiting http://www.oracle.com/technetwork/java/javase/downloads/jce-6-download-429243.html.
2. Extract the zip package, copy the `local_policy.jar` and `US_export_policy.jar` files to the `<JDK_HOME>/jre/lib/security` directory on your client side to replace the existing files.

If you enabled secure RMI and are using a high strength encryption suite, such as AES256, be sure to follow the steps above to install the unlimited jars on machines which will run workbench.

New Parameters for the Silent Installation of Microsoft Project Plug-in

PPM Center 9.14 introduces two parameters (`INSTALLDIR` and `ALLUSERS`) for the silent installation of Microsoft Project plug-in. You can use these parameters to specify whether the plug-in is installed for all users or only for the current user on a Windows-based computer. Table *New Parameters* describes the details of these parameters.

Table 2-6. New Parameters

Parameter	Description	Valid and Default Values
INSTALLDIR	Specifies installation directory of the plug-in.	When *ALLUSERS* is null, the installation directory is set to: `%USERPROFILE%\Application Data\Hewlett-Packard\HP PPM Center Add In for MS Project\` When *ALLUSERS* is `1`, the installation directory is set to the common program files folder, for example, `C:\Program Files\Hewlett-Packard\HP PPM Center Add In for MS Project\`
ALLUSERS	Determines whether the plug-in is installed for all users or for the current user. Setting to `1` enables all users to use the plug-in.	Valid values: `1`, or null Default: Null, meaning that only the current user can use the plug-in.

To start the silent installation of the plug-in, run the following command together with the parameters in a command-line prompt:

```
setup.exe /s /v"/qn <parameter1> <parameter2>"
```

If you have to change the default installation directory when the *ALLUSERS* parameter is set to 1, you must set the `INSTALLDIR` parameter to a directory that all users can access, for example, `C:\Program Files`.

Examples

- The following command enables all users to use the plug-in:

  ```
  setup.exe /s /v"/qn  ALLUSERS=1"
  ```

  This command does not specify the installation directory, meaning that the plug-in is installed to the common program files folder, for example:
  `C:\Program Files\Hewlett-Packard\HP PPM Center Add In for MS Project\`

- The following command enables all users to use the plug-in. Also, the command specifies the installation directory to `C:\PPMCenter`. (Make sure that all users can access the `C:\PPMCenter` directory.)
  ```
  setup.exe /s /v"/qn INSTALLDIR=\"C:\PPMCenter\" ALLUSERS=1"
  ```

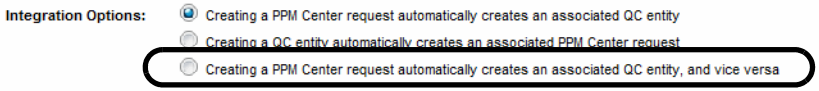
- The following command installs the plug-in to the `C:\APPSYS\PPMProject\` folder. Only the currently user can use the plug-in.
  ```
  setup.exe /s /v"/qn INSTALLDIR=\"C:\APPSYS\PPMProject\""
  ```

- The following command installs the plug-in to the default installation directory. Only the currently user can use the plug-in.
  ```
  setup.exe /s /v"/qn"
  ```

Enhancements to PPM Center Integration with Quality Center (Using ALM)

The following enhancements are implemented for this integration solution:

- Supports *Synchronizing Text Fields Containing 4000 or More Bytes*
- Offers *Best Practices on Mapping Quality Center Field "Detected By"*
- Offers a new way of *Adding New QC Integration Configuration Easily*
- Supports *Specifying Quality Center Version*
- Supports mapping one ALM request type to multiple entities from different QC domains or projects. For details, see *Adding New QC Integration Configuration Easily* on page 64.
- Supports automatic submission of the PPM Center request created as a result of creating a defect in Quality Center
- Supports synchronizing Quality Center defect/requirement status to PPM Center request status. Now status changes of Quality Center defect/ requirement can also trigger corresponding PPM Center request workflow steps or actions, thus changing status of the PPM Center requests.
- Supports bi-directional synchronization of multi-value fields (for example, drop-down list values, QC list field and PPM auto complete list)
- Supports synchronizing PPM usernames, instead of full names, to Quality Center
- For integration of PPM Center request type and Quality Center defect, a third option for bi-directional integration is now available in the **Integration Options** section on the Configure QC Integration for Request Type page: **Creating a PPM Center request automatically creates an associated QC entity and vice versa**.



- Special characters and html tags contained in QC fields can display properly on the Configure QC Integration for Request Type page, including, but not limited to, the follows:

  ~ ! @ # $ % ^ & * ( ) _ + { } | " : ? < > / . , ; ' \ ` [ ] - =

  However, it is highly recommended NOT to use angle brackets and square brackets (<>, []) for security concern.

Synchronizing Text Fields Containing 4000 or More Bytes

With this enhancement, now you can synchronize Quality Center text fields with long texts to PPM Center text fields.

When QC to PPM synchronization is performed, the content from QC text fields with text length greater than 4000 bytes (in UTF-8 encoding) is automatically truncated down to 4000 bytes when populating corresponding PPM text fields.

To prevent the original content in the QC text fields being truncated in future synchronizations, set the text field mapping control to **QC**. This ensures that truncated content in the PPM text fields are not synchronized back to QC text fields.

Best Practices on Mapping Quality Center Field "Detected By"

When you upgrade the integration from Quality Center version 9.2/10 to ALM version 11, keeping the same configuration mapping settings, you may encounter an error with the Quality Center field **Detected By**. In this case, you may try one of the following approaches for mapping Quality Center field **Detected By**:

- Mapping Quality Center field **Detected By** with PPM Center request field **Created By**. When PPM Center user list and Quality Center user list are the same, this approach would be the best choice.
- Mapping Quality Center field **Detected By** with PPM Center custom field (text field). This approach would require you to enter correct information into PPM Center custom field.

For example, you create a text type field in PPM Center and map it to Quality Center field **Detected By**. If you set the control mode to **QC**, then synchronization populates the new PPM Center field automatically with populated the **Detected By** field with the QC Username field.

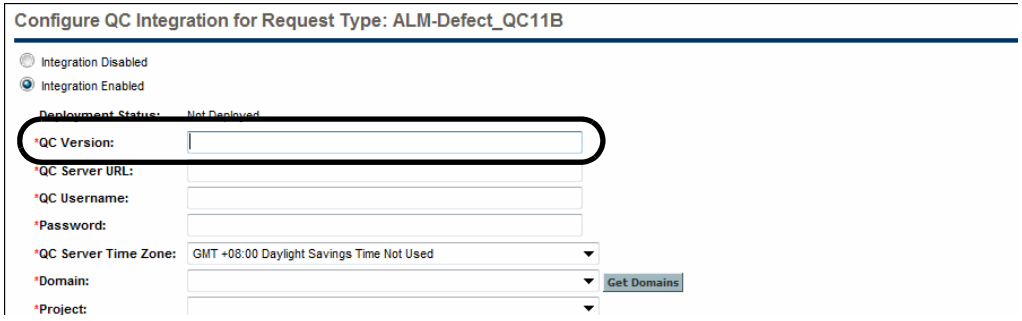
- Mapping Quality Center field **Detected By** with PPM Center custom field (using validation **QC Defect Assigned User**). If you want to get user list from Quality Center directly, this approach would be the best choice.

If you leave this mapping field blank when creating a PPM Center request in order to create a defect in Quality Center, you can set the control mode to **QC**, then the system populates **Detected By** field in Quality Center with the value you specified in **QC Username** field on the integration configuration page.

Specifying Quality Center Version

A new field **QC Version** is added to QC integration configuration page in PPM Center. This field allows you to select the correct ALM version (valid values are `11.0` and `11.2`) in your environment, so that appropriate web services port can be called when synchronization is performed.

Note that the valid values provided for **QC Version** field are for ease of use by the PPM Center integration solution only. `11.0` represents HP Application Lifecycle Management version 11.00; `11.2` represents HP Application Lifecycle Management version 11.00 Service Pack 2.



Adding New QC Integration Configuration Easily

Now at the top right corner of the QC Integration Summary page in PPM Center, a drop-down list of eligible ALM request types and an **Add** button are available. You can select one request type from the drop-down list and click **Add** to add a new QC integration configuration.

This new feature allows you to add a new QC integration configuration easily, or map one ALM request type to multiple entities from different QC domains or projects. For example, you can map one ALM request type to a defect in both project1 and project2 in QC. When creating a request in PPM Center, you need to select the exact QC project that you want the request to map to.

If a PPM request type is already mapped with QC entity type defect (or requirement), then any new integration configurations for the request type shall also be mapped with the same QC entity type of defect (or requirement).

To add a new QC integration configuration,

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > Integration > Quality Center**.

   The QC Integration screen opens.
3. From the drop-down list at the top right corner of the screen, select a desired request type, and click **Add**.

   The Configure QC Integration for Request Type page opens.
4. Configure the integration fields as needed.

   For both **Domain** and **Project** fields, select a value from a drop-down list of available options.

   For more information about configuring ALM 11 integration, see *HP Solution Integrations Guide*.

Upgrading PPM Center Integration with Quality Center (Using ALM)

With PPM Center version 9.14, it is possible to upgrade your PPM Center integration with Quality Center (QC) from QC versions 9.2 or 10 to the latest Quality Center release—HP Application Lifecycle Management (ALM) version 11. This solution applies to upgrading from any combination of QC 9.2/10 with PPM Center 8.0x/7.x to the latest combination of PPM Center 9.14 and ALM 11.

While you prepare to perform the upgrade process, make sure that:

- Both your PPM Server and QC server are running
- No users are accessing either PPM Center or QC products

The upgrade solution involves the following tasks:

- *Preparation: Workflow Checking*
- *Task 1: Upgrading PPM Center to Version 9.14*
- *Task 2: Uninstalling Quality Center 9.2/10, Installing Application Lifecycle Management 11, and Upgrading Quality Center Database*
- *Task 3: Upgrade QC Integration Configuration*

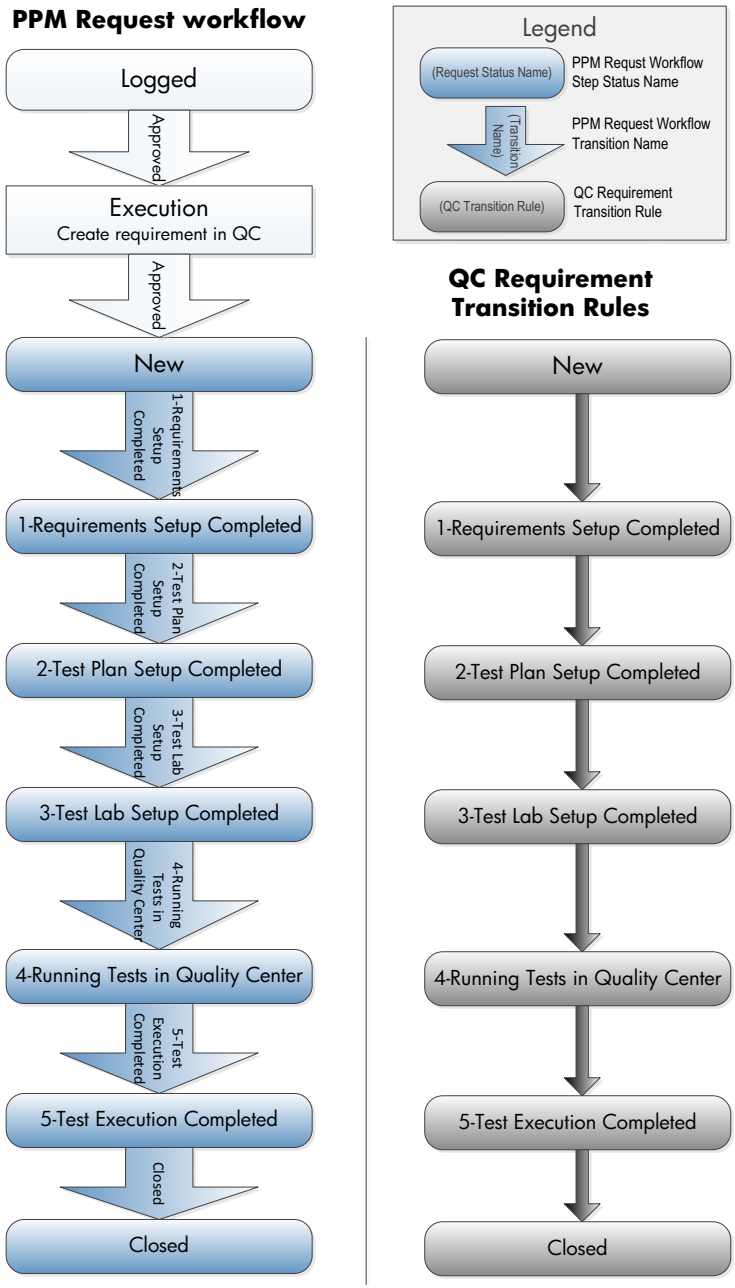
Preparation: Workflow Checking

HP recommends you check, and modify if necessary, your PPM Center workflows against the Quality Center workflow before you upgrade the integration configuration.

For an existing integration with Quality Center version 9.2 or 10, you can use the PPM Center-Quality Center Integration Tool to perform integration configuration. As a result, for example, the workflow related hardcoded configuration can overwrite the workflow script in Quality Center. Then, you can set the control mode to PPM, so that PPM request workflow execution drives the synchronization of PPM request status to Quality Center requirement status.

However, with ALM 11, due to its policy changes, you are no longer allowed to overwrite ALM's workflow script to enforce the PPM workflow execution.

Figure 2-12. An example of PPM request workflow steps statuses matching QC requirement transition rules



To achieve bidirectional status synchronization between PPM request and QC defect or requirement, you can go to PPM Workbench to check and make sure that your PPM request workflow steps are exactly consistent with the transition rules defined in Quality Center.

For example, you have deployed an integration configuration. You create a request in PPM Center to create a requirement in QC. The PPM Center request follows the workflow illustrated in the left part of *Figure 2-12*, and the requirement follows the default transition rules in QC (right part of *Figure 2-12*).

You need to ensure the following for status synchronization between PPM request and QC defect or requirement to work properly:

- For successful status synchronization from PPM to QC, the statuses and sequence of PPM request workflow steps shall be exactly the same as those of transition rules in QC.

  For example, in PPM request workflow of *Figure 2-12*, status of the step following the **Execution Create a requirement in QC** step shall be **New**, as the first requirement rule in QC is **New**. If you provide a different status description, such as **New1**, the status synchronization from PPM to QC would be lost.

  For a defect workflow, status of the step following the **Execution Create a defect in QC** step shall be **New**.

  For detailed descriptions and sequence of transition rules defined in QC, check the TRAN_RULES table in the QC project schema database.

- For successful status synchronization from QC to PPM, in addition to ensuring that the statuses and sequence of PPM request workflow steps are exactly the same as corresponding transition rules in QC, you also need to ensure that in PPM request workflow, the description of a transition is exactly the same as the status of the subsequent request workflow step.

  If, for example, you provided a transition description that is different from its subsequent step status, you would lose synchronization of status from QC to PPM after upgrading your integration configuration to PPM Center 9.14 and ALM 11. However, you can still click **Save** to update other fields, such as Summary and Description, though with error message displayed.

For defect workflow, by default the setting in the TRAN_RULES table of QC is `$ANY` to `$ANY`. If there are custom rules instead, see the example on requirement in this section.

Note that if your workflow is the same as the example illustrated in *Figure 2-12*, HP recommends you to manually deploy the configuration file (`ITGQCIntegration.xml`) again by using the PPM Center-Quality Center Integration Tool. For detailed instructions, seen the *Deploying the Mapping File to PPM Center and Quality Center* section of the *HP Solution Integrations Guide*.

If you are using customized workflow in QC, modify the PPM workflow in the PPM Workbench before you perform the upgrade process.

For answers to any other potential questions you may have regarding the upgrade process, see *Frequently Asked Questions* on page 75.

For known problems and limitations, see *Integrations - Quality Center (ALM)* on page 117.

Task 1: Upgrading PPM Center to Version 9.14

1. If you have not upgraded to PPM Center version 9.14, follow the supported upgrade paths and upgrade your PPM Center instance from an earlier version (7.x or 8.0x) to 9.14.

   For supported upgrade paths and detailed upgrade instructions, see *Supported Upgrades* on page 19 and *Installation Notes* on page 16.

2. Check whether all your QC 9.2/10 integration configurations are listed in the QC Integration Summary page.

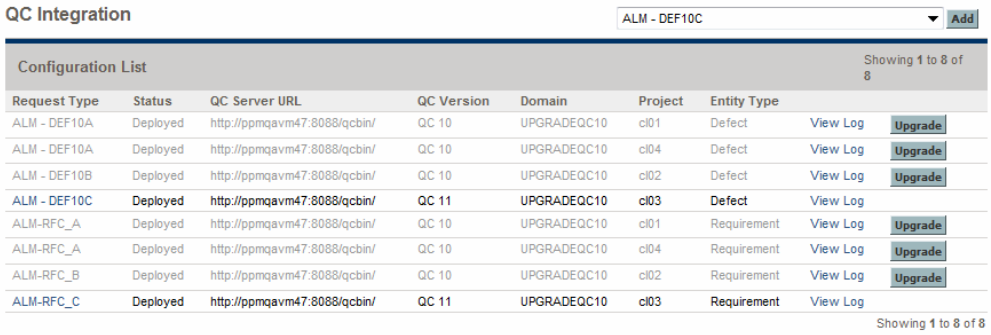
   a. Log on to PPM Center 9.14 as an administrator.

   b. From the menu bar, select **Open > Administration > Integration > Quality Center**.

      The QC Integration Summary page displays.

   c. All QC integration configurations with QC 9.2/10 are grayed out, with an **Upgrade** button available to the right end.

The QC Integration Summary page always displays **QC Version** as **QC 10** even if you are upgrading from QC 9.2.



Task 2: Uninstalling Quality Center 9.2/10, Installing Application Lifecycle Management 11, and Upgrading Quality Center Database

3. Stop Quality Center 9.2/10 service and uninstall Quality Center 9.2/10. Make sure that you have noted down the Quality Center JBoss port number.

   For detailed instructions, see *HP Quality Center Installation Guide*.

4. Install Application Lifecycle Management 11. Make sure that you upgrade QC database from the existing one. Also make sure that the QC JBoss port is using the same one as QC 9.2/10 settings.

   To upgrade from QC 9.2 successfully, make sure that the QC 9.2 database structure password is the default value. If you already changed it, try changing it back to the default.

   For detailed instructions, see the *HP Quality Center Installation Guide* and the *HP Application Lifecycle Management Installation Guide*.

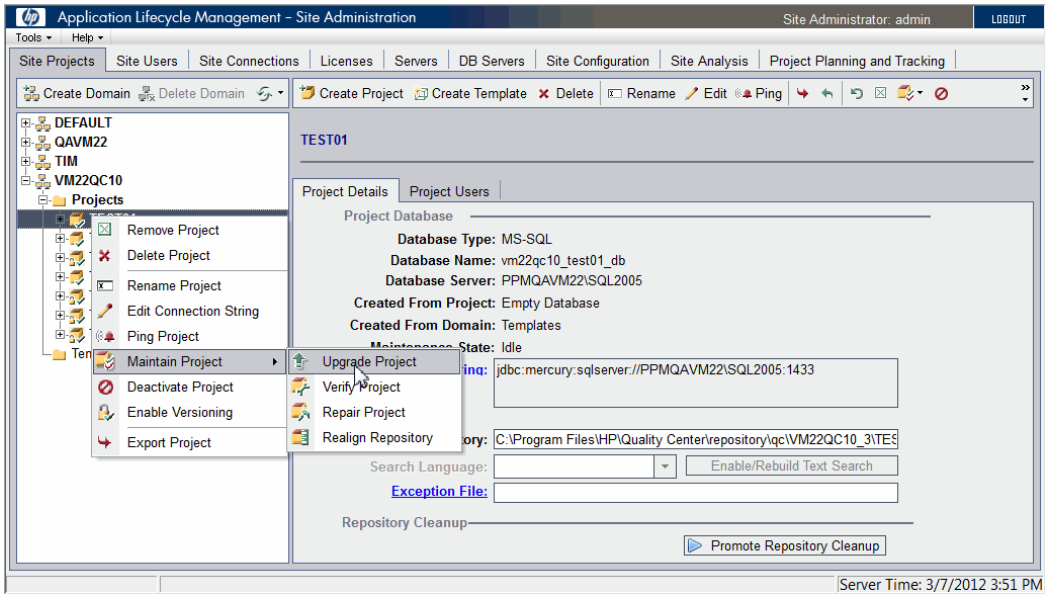
5. Start Application Lifecycle Management 11, and log in to Site Administration.

6. From the navigation pane, locate the project for which you want to upgrade the database.

7. Right click the project and select **Deactivate Project** from the popup menu, then click **OK**.

8. Right click the project again, select **Maintain Project > Upgrade Project**.

   The Upgrade Project dialogue opens.



9. Click **Upgrade Project**.

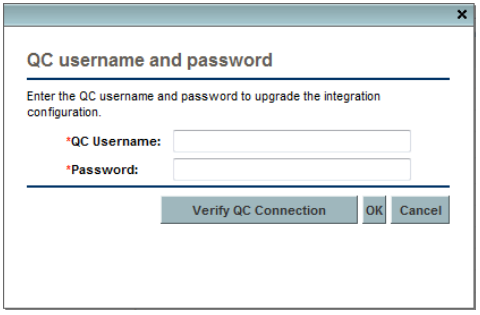
10. Click **Close** when the project is successfully upgraded.

11. Right click the project and select **Activate Project** from the popup menu, then click **OK**.

Task 3: Upgrade QC Integration Configuration

12. Navigate to PPM Center and check that background service **QC Integration Migration Service** is up.
13. On the QC Integration Summary page, locate the QC integration configuration entry you want to upgrade and click **Upgrade**.

    The QC username and password dialog opens.

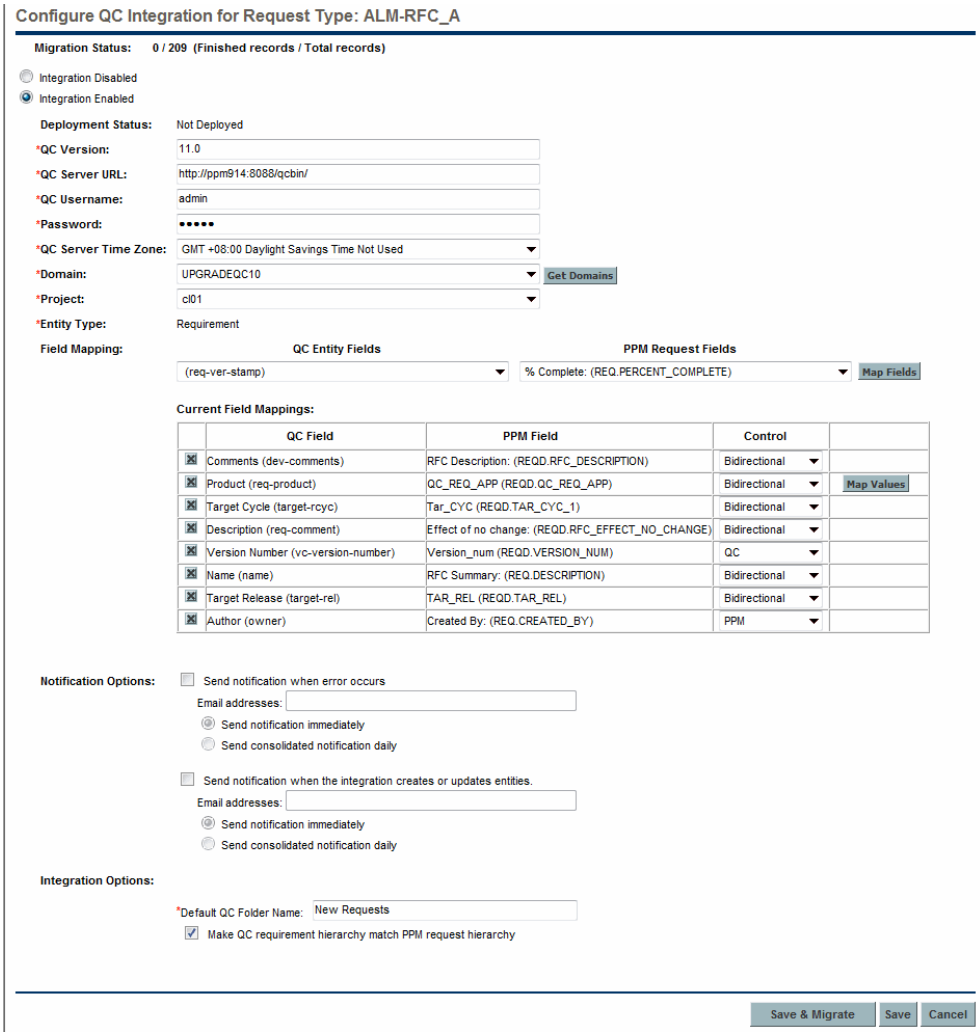


14. Provide values for the **QC Username** and **Password** fields.
15. Click **Verify QC Connection**.

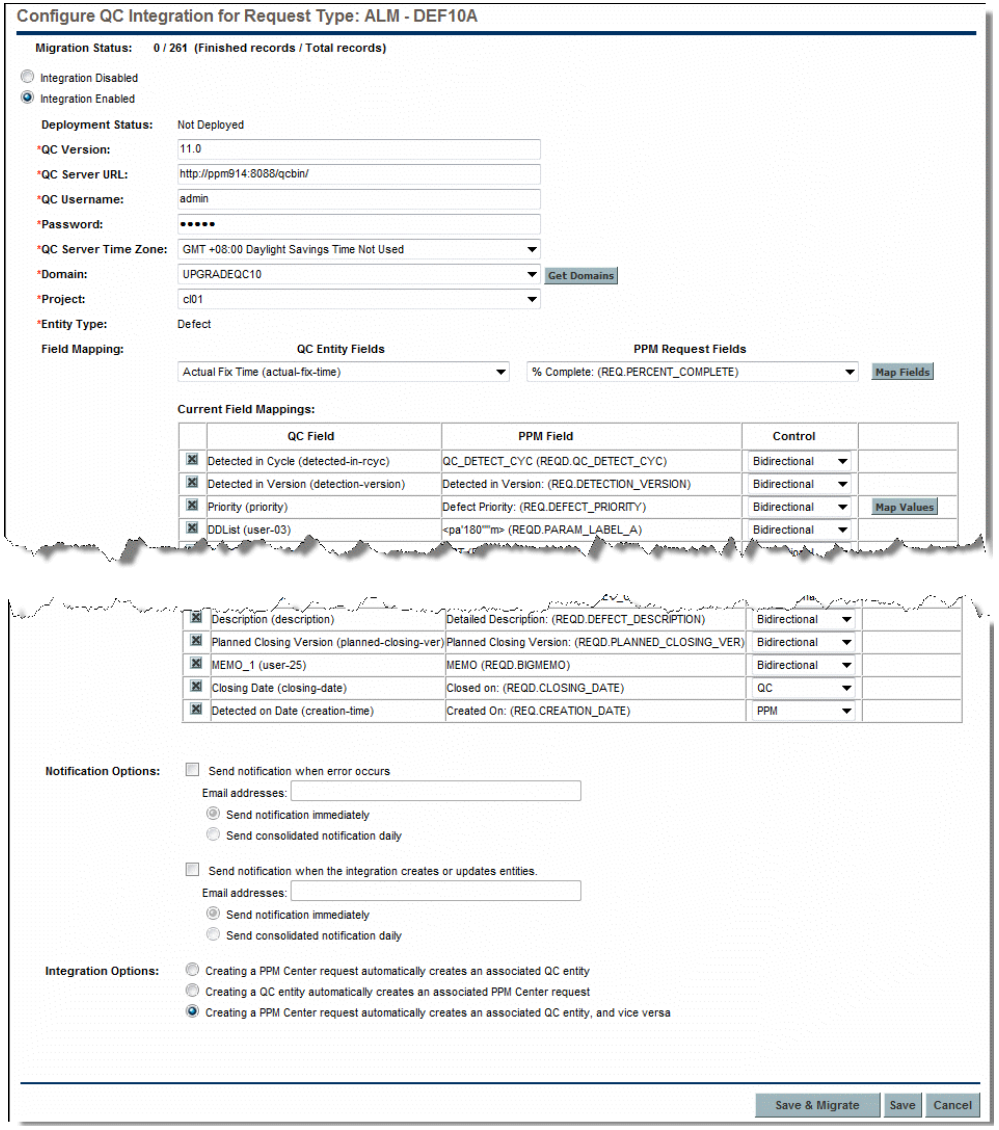
    Wait for the verification to complete, and click **OK** when the verification success prompt pops up.
16. Click **OK** in the QC username and password dialog.

    The Configure QC Integration for Request Type page for upgrade purpose appears.

    A sample page for requirement request type:


Configure QC Integration for Request Type: ALM-RFC_A
Migration Status: 0 / 209 (Finished records / Total records)
Integration Disabled
Integration Enabled
Deployment Status: Not Deployed
*QC Version: 11.0
*QC Server URL: http://ppm914:8088/qcbin/
*QC Username: admin
*Password: •••••
*QC Server Time Zone: GMT +08:00 Daylight Savings Time Not Used
*Domain: UPGRADEQC10
Get Domains
*Project: cl01
*Entity Type: Requirement
Field Mapping:
QC Entity Fields
PPM Request Fields
(req-ver-stamp)
% Complete: (REQ.PERCENT_COMPLETE)
Map Fields
Current Field Mappings:
QC Field
PPM Field
Control
Comments (dev-comments)
RFC Description: (REQD.RFC_DESCRIPTION)
Bidirectional
Product (req-product)
QC_REQ_APP (REQD.QC_REQ_APP)
Bidirectional
Map Values
Target Cycle (target-rcyc)
Tar_CYC (REQD.TAR_CYC_1)
Bidirectional
Description (req-comment)
Effect of no change: (REQD.RFC_EFFECT_NO_CHANGE)
Bidirectional
Version Number (vc-version-number)
Version_num (REQD.VERSION_NUM)
QC
Name (name)
RFC Summary: (REQ.DESCRIPTION)
Bidirectional
Target Release (target-rel)
TAR_REL (REQD.TAR_REL)
Bidirectional
Author (owner)
Created By: (REQ.CREATED_BY)
PPM
Notification Options:
Send notification when error occurs
Email addresses:
Send notification immediately
Send consolidated notification daily
Send notification when the integration creates or updates entities.
Email addresses:
Send notification immediately
Send consolidated notification daily
Integration Options:
*Default QC Folder Name: New Requests
Make QC requirement hierarchy match PPM request hierarchy
Save & Migrate
Save
Cancel

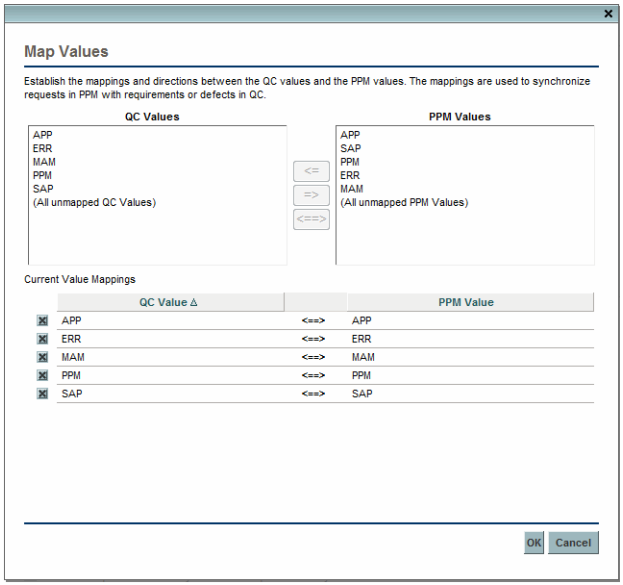
A sample page for defect request type:



17. Check and reconfigure field mappings if necessary.

    By default, the Configure QC Integration for Request Type page loads all settings from the old configuration automatically, including all field mappings.

A **Map Values** button in the Current Field Mappings table indicates that this mapping contains mappings of multi-value fields or drop-down list fields. Click **Map Values**, check and make sure the mappings and directions between QC values and the PPM values are correct.



18. Click **Save & Migrate**.

    Wait for the saving and migration process to complete. You can check **Migration Status** to ensure that all records are successfully migrated. In average it takes around 1minute to migrate 1,000 records.

    Then, click **Done** to leave the upgrade page.

19. Go back to the QC Integration Summary page, you can see that the status for the entry you just upgraded already changed.

20. Go to PPM Center database, you should find some new records in the PPM_INT_QC_ENTITY_MAP table.

Frequently Asked Questions

Does the latest integration of PPM Center 9.14 and ALM 11 support MAC Request Types and Workflows?

If you are using MAC request types and workflows to integrate between QC 9.2/10 with PPM 8.0x/9.10, you can keep using the same request types and workflows after upgrading to integration of PPM Center 9.14 and ALM 11. However, you may want to check the workflows again as QC changed its rules. For details, see *Preparation: Workflow Checking* on page 65.

Does the latest integration of PPM Center 9.14 and ALM 11 support the existing MAC bundle?

If you already deployed the MAC bundle for QC integration with a previous version of PPM Center, there is no need to deploy the new ALM bundle after upgrading PPM Center to version 9.14.

Does the integration with ALM 11 support version controlled ALM project?

Yes.

Does the upgrade process update records on both PPM Center and QC products?

The upgrade process does not update records on both PPM Center and QC products, it only tries to update the integration configuration data in PPM Center.

Is the Integration Tool for QC 10 still necessary?

No. When you perform the upgrade process, it loads all settings of PPM Center integration with a previous version of QC. This means that after upgrade, the integration tool for configuring PPM Center integration with QC 10 is no longer necessary. You can now modify any integration configuration settings directly from PPM Center.

How to manually activate PPM Center fields in QC project and workflow script in QC?

In PPM Center 9.12 and ALM 11, when you set up a new integration between PPM request and QC project, you need to manually activate PPM* fields in QC project and add workflow script in QC project in order to make integration work. This is still necessary with PPM Center 9.14 and ALM 11. Even if you have upgraded from QC 10, you still need to execute the Salts manually in ALM 11 database.

For instructions on how to enable PPM* fields in QC project, go to http://support.openview.hp.com/selfsolve/document/KM1352699.

For instructions to how to activate workflow script in QC project, go to http://support.openview.hp.com/selfsolve/document/KM1352700.

Certifications

The following certifications are included in PPM Center version 9.14:

- Microsoft Internet Explorer 9 (32-bit)
- VMware ESX 4.1.0
- SAP BusinessObjects Enterprise XI 3.1 with Service Pack 4 Fix Pack 1 (SBOP Enterprise XI 3.1 SP4 FP1) for the Operational Reporting solution for PPM Center
- Universal CMDB versions 9.04 and 9.05 for PPM Center integrations with Universal CMDB (using ALM)
- HP Service Manager 9.30 when used to integrate PPM Center tasks and Service Manager changes
- HP Application Lifecycle Management version 11.00 and version 11.00 Service Pack 2 for integration with PPM Center
- Oracle 11.2.0.3 (Standard/Enterprise Edition) (RAC and Non-RAC) for all PPM server platforms
- Oracle Enterprise Linux (OEL) version 5 (Red Hat Enterprise Linux Clone) support as PPM Server platform
- Red Hat Enterprise Linux 6 support as PPM Server platform

For details, see the *System Requirements and Compatibility Matrix.*

Fixes

The following fixes (identified by a tracking number) are included in PPM Center version 9.14:

Admin Tools

4618312726	The Broker In Use Sessions report does not show time in the date stamp, which has impact when you diagnose database connection problems. (QCCR1L28152)
4634543240	After you click Generate fiscal periods in Administration Console, the system does not generate any fiscal periods. Instead, the Generate Support Information screen appears. (QCCR1L44867)

Costing

Tracking Number	Problem Description
4615317678	A program manager receives the following error message when clicking **Add Forecast and Actuals** on an editable financial summary for a program: `The following is a stack trace of the exception: com.kintana.core.server.RuntimeBaseException` (QCCR1L39690)
4618543179	If the system has a large number of records in the Pending Cost Rollup table, the Project Planned Values Update service could cause a high memory consumption, resulting in the “Out of Memory” error. (QCCR1L39777)

4611834161	The system contains requests of an asset request type that are saved as draft before upgrading to version 8.0x from version 7.5. When these drafts are submitted or when you submit new requests of this type, you receive an error message that resembles the following:
	`Financial Summary Error`
	`at com.kintana.crt.web.ctrl.RequestUpdateController.update(RequestUpdateController.java:691)`
	`at com.mercury.itg.servlet.ActionMonitorFilter.doFilter(ActionMonitorFilter.java:82)`
	(QCCR1L43325)

Tracking Number	Problem Description
4617090941; 4613485711	When a staffing profile is synchronized with a budget, the budget is calculated by considering only the resource types of the staffing profile positions. If a resource is assigned to a position of the staffing profile, the resource category of this resource is ignored during the calculation. (QCCR1L43723)
4619994903	You set the `COST_CAPITALIZATION_ENABLED` parameter false in the server.conf file. However, the Expense Type options are still displayed on the Add Cost line page. (QCCR1L43408)
4623477422	Statistics on the Financial Summary page are displayed inconsistently. They are displayed in whole numbers first, and then in decimals after you edit the forecast and actuals and click Done. (QCCR1L43364)
4624950369	In some cases, you can create financial summary lines without filling out the mandatory fields. (QCCR1L43413)
4629784274	You receive the following error message when trying to save a Forecast & Actuals page that has a mandatory field: `Runtime-error Microsoft JScript: 'userModified' is empty or not an object.` (QCCR1L43367)
4631033504	You receive a `NullPointerException` error when trying to copy benefit lines from previous years on the Edit Benefits page. (QCCR1L42559)
4630468905	The financial summary name defaults to a different project's name and shows it was created by someone other than the person that created it. (QCCR1L42745)
4621977532	After you export a financial summary to an Excel file, the values on the excel file in the planned and actual columns are all prefixed with a space. This issue makes it impossible to filter, sum or manipulate the data in Excel. (QCCR1L43337)
4605844207	An Out of Memory error occurs when the Cost Rate Rule Update Service is running. Further investigation shows that an error in the Rate Rule Update Service causes the service to stop processing rows, which eventually leads to an Out of Memory error. (QCCR1L16628)
4620088972	For projects created from proposals, the synchronization from staffing profile to financial summary does not work as expected. This is because the staffing profile is not updated with the settings from the project settings. The staffing profile retains retrieving staffing profile settings from the proposal. (QCCR1L28481)
4624948982	Background services, such as the Financial Metrics Update service, do not update the last run time correctly. This problem causes the services to run unexpectedly. (QCCR1L40255)

Tracking Number	Problem Description
4625274343	You receive a NullPointerException when running the Pending Cost EV Update service. This problem occurs when the system rounds off the project end date while searching for the fiscal period. This behavior can make the system try to retrieve a fiscal period that does not exist in the fiscal period table. (QCCR1L39614)
4625859826	You receive a financial summary error when the validation 3913 is executed on the last day of a fiscal period. (QCCR1L41074)
4627045112	The actual costs of a project are not displayed in the financial summary even if there are totals for the projects and they are displayed in the planned cost. (QCCR1L43185)
4628385673	You create a proposal with a staffing profile. When you try to set the Costs on the Financial Summary setting to "Calculate the forecasted labor costs from the staffing profile.", you receive the following error message: `CalendarUtil blew up the buckets!` (QCCR1L43418)
4628580499	You cannot use Web Services to set the actual and planned costs in base currency in a financial summary. Only local currency is supported. (QCCR1L41188)
4630083903	The synchronization between staffing profiles and financial summaries does not work. This issue makes the “Calculate the forecasted labor costs from the staffing profile.” option in the Project Settings fail. (QCCR1L43023)
4631499082	Errors occur on the Financial Summary page after you modify the `FM_FISCAL_YEARS` validation. (QCCR1L43561)
4631208536	In a project that has the "Calculate the forecasted labor costs from the staffing profile" option disabled, the FS-SP sync service still uses the staffing profile to synchronize with the financial summary. (QCCR1L43169)
4633168179	Cost is not calculated when you add tasks actuals to a work plan by using Web Services. (QCCR1L43186)
4634268570	You receive an `ArrayIndexOutOfBoundsException` error when opening a financial summary from a proposal. (QCCR1L44777)
4633130121	You receive the following error message every day. `Ora-600 error - ORA-00600: internal error code, arguments: [kghsskins1], [], [],` Further investigation shows that a PPM Center job dynamically creates an `IN` clause, which exceeds the maximum number of parameters in Oracle. (QCCR1L44132)

Tracking Number	Problem Description
4635078616	The Cost Category was a required field on staffing profile in version 7.5. However, in version 9.12, the field is not required. (QCCR1L44555)
4634707360	You receive the "HTTP 403 Forbidden" error message when trying to open a financial summary that is associated with an Org Unit. (QCCR1L44615)
4635151128; 4634969039	PPM Center does not synchronize the staffing profile data with the financial summary. Therefore, no cost lines are created from the staffing profile positions. This problem occurs if you create the staffing profile from the Project Details page, instead of the Project Summary page. (QCCR1L44606)
4635470810	The Program Cost Summary data is incorrect after you upgrade the system from version 7.5 to version 9.12. (QCCR1L44778)
4634279144	When the scheduled start dates of the tasks are beyond the current date or not defined, and the project does not have a baseline, the planned value (PV) shows $0. The PV is expected to show nothing instead of $0. (QCCR1L44332)
4634653092	You upgrade PPM Center from version 7.5 Service Pack 7 to PPM Center 8.00, and then to PPM version 9.12. After the upgrade, the Baseline To Date values in version 9.12 differ from the original values in version 7.5 Service Pack 7. (QCCR1L44294)
4635271874	Actual cost from the proposal time sheets is not rolling up in the financial summary periods even when the **Calculate the actual labor costs from time logged against the proposal request** option is selected. (QCCR1L45256)

Dashboard

Tracking Number	Problem Description
4613333573	You export a dashboard page to PDF. In the PDF settings window, if you add line breaks in the Comments text area, in the exported PDF file, these line breaks are displayed as . (QCCR1L43326)
4612800907	After a portlet with language translations is distributed in a read-only module, the language translations of the distributed portlet disappear. (QCCR1L43331)
4621755391	PPM center version 8.02 exports a Request List portlet to an Excel file in its default sort order (sort by request ID) even if your last sort order differs from the default one. (QCCR1L43343)

Tracking Number	Problem Description
4619615968; 4624377227; 4625125061	When secure sockets layer (SSL) is used, you may have to enter your credentials, and click **Submit** twice to log on to the system. (QCCR1L43393)
4616146472	If there is only one record and the X-Axis value is greater than 2, a bubble chart does not show the data as expected. (QCCR1L43338)
4602429100	The progress bar does not show the actual progress on a custom portlet. (QCCR15517)
4618900853	On HP-Unix, after you upgrading PPM Center from version 8.00.01 to 8.02, you receive the following error message when using a portlet: `Portlet could not be shown: org/mozilla/javascript/Scriptable` (QCCR1L27774)
4627219271	The `DEFINITION_LANGUAGE` field changes during a module migration. This behavior makes the modules non editable in the destination environment when you login to PPM Center with the language with which this module was originally created in the source environment. (QCCR1L40920)
4628963223	A custom pivot table portlet throws an “ORA-00936: missing expression” error message on the project overview page when you switch to the List display mode. (QCCR1L41340)
4630707476	Performance issues occur when you use portlets. It could take more than 10 seconds for the system to display a portlet. (QCCR1L44616)
4630346005	The Pivot Table portlet calculates the subtotals incorrectly when one or more of the columns have more than one cells. (QCCR1L43137)
4633612046	When a portlet times out, you will receive a timeout message. However, this message is not formatted as expected. HTML tags are displayed. (QCCR1L44531)
4635129510	A RuntimeBaseException exception is generated when you try to perform a search in PPM Center. This problem occurs because certain background services may generate unknown exception types when there is a slow connection. (QCCR1L44389)
4635194929	On the PPM Center logon page, if you leave the password blank, the browser displays “an error on page” message instead of the Password Required message. (QCCR1L44537)
4619404894	Duplicate UUIDs in the `dsh_portlets` table cause the kImportExport.sh command to fail with an `ORA-01427` error. (QCCR1L29418)

Tracking Number	Problem Description
4635730102; 4635219332	When there is an error in the SQL query created for a portlet, the query appears in the error message. In version 9.12, the query contains HTML tags, which makes you unable to directly copy the SQL query and run it in the database. (QCCR1L44669)
4631599486; 4632345364	You export the Project Overview page to a PDF file. However, the format of the exported file is distorted. For example, the file may contain incorrect font sizes and page break issues. This problem does not occur if you use the default PDF settings when exporting the Project Overview page. (QCCR1L43097)

Demand Management

Tracking Number	Problem Description
4616711595	Make initial text in Mobility Access email message configurable. For details of the solution, see *Configuring Initial Text in Mobility Access Email Notifications* on page 41. (QCCR1L26718)
4618707489	When saving a Request using a certain Request Type, a correlation exception was thrown indicating “value too large” for column COLUMN_PROMPT of the KCRT_ TRANSACTIONS table. The issue is fixed by expanding column width for COLUMN_PROMPT from VARCHAR2(80) to VARCHAR2(100). (QCCR1L27738)
4632576414	Cannot cancel projects after upgrading to PPM Center version 8.03 or 9.12. The issue is now fixed: • The Cancel Request button is now available on Project Details page. • Clicking **Cancel Request** button on the Project Details page cancels the active work plan of the project at the same time, including all tasks in the work plan. Note that the tasks cancelled as a result of clicking **Cancel Request** button can not be recovered by clicking **Reopen Request** button. (QCCR1L44148)
4627366546	Some fonts not readable in workflow graphics due to small size. For details of the solution, see *Specifying Font Size for Workflow Layout Image* on page 42. (QCCR1L43361)

Tracking Number	Problem Description
4622384827	Using SQL to generate a date format that is not supported by the current regional settings is not allowed. For example, the following SQL statement in rules will fail when users copy date fields by changing their regional settings to a different date format other than 'yyyy-mm-dd hh24:mi:ss': `select to_char(to_date(replace('[REQD.P.DATE_1]', '.0'), 'yyyy-mm-dd hh24:mi:ss'),'dd/mm/yyyy'), to_char(to_date(replace('[REQD.P.DATE_1]', '.0'), 'yyyy-mm-dd hh24:mi:ss'),'dd/mm/yyyy') from dual` However, you may use `KNTA_USER_UTIL` functions instead to format dates based on the current regional settings when copying date fields. For detailed examples of SQL defaulting rules using `KNTA_USER_UTIL` functions, see *Copying Date Field Value Using Functions of KNTA_USER_UTIL Package* on page 36. (QCCR1L43451)
4618249844	The `ORA-00936: missing expression` error message is generated in the server log file when you perform a variety of operations (for example, accessing a request, and launching a dashboard). (QCCR1L43332)
4618188710	The following error message is generated in the server log file during the system startup: `Customer getting DB Package error:cannot insert NULL into ("KINTANA"."KNTA_NOTE_ENTRIES"."PARENT_ENTITY_PRIMARY_KEY") {KWFL_RELEASE_HOOKS-5040} (KNTA-10498)` (QCCR1L43359)
4618367255; 4620443243	After you upgrade PPM Center from an earlier version to version 8.02, the Demand Management Module gets sluggish. This can be observed in many operations (for example, searching requests, accessing requests, and clicking any button in a workflow). (QCCR1L43362)
4619517146	When you submit package lines, some package lines may appear more than once in the notification sent to concerned users. This problem occurs after you upgrade the system to PPM Center version 8.02. (QCCR1L43330)
4618459027	It takes a long time to open the graphical view of a workflow. PPM Center 8.04 optimizes the related SQL queue to improve the performance. (QCCR1L27641)
4620299324	You add a radio button to a request type whose definition language is set to a non-English language. If you enable notes history for the button, values of the button will be recorded in English instead of in the definition language. (QCCR1L43358)

Tracking Number	Problem Description
4622025999	When you use filter fields with long names in an auto complete list window, the Find button moves rightward. And thus, the button could be partially or fully out of the window. Because the window is not resizable, you have to move the horizontal scroll bar to access the Find button. (QCCR1L43334)
4621025095	A large number of com.kintana.core.util.CodeString objects consume high CPU usage, causing performance issues. (QCCR1L43368)
4627843304	You receive a `NumberFormatException` error when allocating time to resources on requests with resource tracking enabled. This problem occurs when your regional settings use a comma (,) as the decimal separator. (QCCR1L43391)
4630239001	You receive an error when trying to create a project from a proposal by using a command that resembles the following: `com.kintana.core.server.execution.CreateProject -projectName "USER SP BUDGET ACCESS TEST - 1" -projectTypeName "APSD-Full SIB" -startDate "30160" -endDate "30162" -projectManager "110091" -region "100005" -requestID 93897 -userID 1 -userName "admin"` (QCCR1L41847)
4618701689	You may randomly miss the notification when a resource request is sent to a resource pool. (QCCR1L43351)
4603579958	You use a UI rule with the `setFieldVisible(false)` function to hide an attachment field depending on the result of another field. However, this operation generates a Javascript error if the field already has an attachment. This problem only occurs when the attachment field is not editable. (QCCR1L43323)

4615917904	You receive the empty string error while searching requests on the Search Requests Page. Additionally, a stack trace that resembles the following is generated in the server log:
	`java.lang.NumberFormatException: empty String`
	`at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:994)`
	`at java.lang.Double.parseDouble(Double.java:510)`
	`at com.kintana.crt.web.ctrl.RequestSearchResultsController.`
	`handleTextData(RequestSearchResultsController.java:1247)`
	`at org.apache.jsp.web.knta.crt.RequestSearchResultsContent_jsp.`
	`_jspService(RequestSearchResultsContent_jsp.java:682)`
	`at org.apache.jasper.runtime.HttpJspBase.service(HttpJspBase.java:97)`
	`at javax.servlet.http.HttpServlet.service(HttpServlet.java:810)`
	`at`
	`org.apache.jasper.servlet.JspServletWrapper.service(JspServletWrapper.java:334)`
	`at org.apache.jasper.servlet.JspServlet.serviceJspFile(JspServlet.java:314)`
	`at org.apache.jasper.servlet.JspServlet.service(JspServlet.java:264)`
	(QCCR1L43360)

Tracking Number	Problem Description
4616178220	When you run the `ksc_copy_request` command as user workflow_timeout_ service, the command fails with an error. (QCCR1L43346)
4621588717	You create a UI rule to validate the values of certain fields in a request type, and configure this request type to require reconfirmation. In a request of that type, if you enter the values of the fields on the reconfirmation page, the UI rule cannot be triggered. As a result, you can enter values of any type in those fields. (QCCR1L43328)
4624019774	Some reports, such as the Request Type Detail report, show different layout after upgrading from version 7.1 to version 8.0, for example, the report names are split across lines in 8.0, while in 7.1, they appeared in the same line. (QCCR1L43372)
4625242742	When you enter time by pressing the Tab key in a field with the Date (time long format) validation, the field is filled with "Jan 1, 1970" instead of the current year/ date. (QCCR1L43387)
4626169511	After applying PPM Center version 7.5 Service Pack 7, you receive the following error message when trying to create a request: `ORA-04098: trigger 'KNTA_DBA.KCRT_REQ_HEADER_DETA_30961_3' is invalid and failed re-validation {KCRT_REQ_HEADER_DETAILS_TH-300}` (QCCR1L42675)
4625898787	You have a request type that has a table component required to be reconfirmed on the target status and not editable in the source status. On the reconfirmation page, you encounter the following problem: • When adding a new line, you receive the message `????ENTRY_TXT ???.` • When saving the changes, you received the message `status undefined.` • When clicking Modify Table for a second time, you receive the message `???oldDataStaleMessage???.` (QCCR1L43453)
1604462355	You have an "Apply on field change" rule to clear the data on one or more fields. This rule does not work when a UI rule is applied to these fields to make them editable or non-editable. (QCCR1L13216)
NA	Multi-line text in a text area field collapses to a single line when the field is read-only. This problem occurs when you create a request type rule that copies a number of fields from a request type into another on reload of the page. If the target field is read-only, any line-feeds or carriage returns in the original field take no effect when the data is copied into the new field. (QCCR1L26678)

Tracking Number	Problem Description

4629749874	In previous versions, the system sets the browser cache expiry time to 7 days. This causes sluggish responses very Monday.
	Starting with version 8.04, you can set the browser cache expiry time in PPM Center by using the following two server.conf parameters:
	`com.kintana.core.server.STATIC_COMPONENTS_CACHE_TIMEOUT`
	This parameter determines the cache expiry time for static files (for example, PNG file, and JPG file) in seconds. The default value is 604,800 (7days).
	`com.kintana.core.server.DYNAMIC_COMPONENTS_CACHE_TIMEOUT`
	This parameter determines the cache expiry time for dynamic files (for example, CSS file, and JS file) in seconds. The default value is 604,800 (7days).
	
	Similarly, for Dashboard, the following two parameters are introduced:
	`com.kintana.core.server.dashboard.STATIC_COMPONENTS_CACHE_TIMEOUT`
	This parameter determines the cache expiry time for static files (for example, PNG file, and JPG file) in seconds. The default value is 604,800 (7days).
	`com.kintana.core.server.dashboard.DYNAMIC_COMPONENTS_CACHE_TIMEOUT`
	This parameter determines the cache expiry time for dynamic files (for example, CSS file, and JS file) in seconds. The default value is 604,800 (7days).
	(QCCR1L43383)

4626418669	Notifications cannot be sent to all the recipients. This problem occurs when one of the recipients is invalid. (QCCR1L43403)
4626363874; 4628666761	You receive an `Error 500` message when trying to submit requests of certain types. (QCCR1L42057)
4617137222	You have a request configured to require reconfirmation. If you modify the table without saving, and then move the request to the next workflow step, the table in the reconfirmation window could get malformed. (QCCR1L43449)
4603635046	A workflow step fails when a validation of a field inside a table component tries to select data from outside the table component. This problem occurs because the token of the data outside the table component cannot be resolved. (QCCR1L16052)
4605150277	Rules on a table component field do not work when the dependency is a Date field. (QCCR1L15936)

Tracking Number	Problem Description
4605829909	The following error is displayed in the bottom left corner of the browser: "Error on Page" -> "Object doesn't support this property or method". This problem occurs when you import a certain request type and the corresponding workflow, and when you create a request of that type and link the workflow to the request. (QCCR1L16140)
4608696507	URL fields behave inconsistently in different request statuses. Before the request is submitted, clicking the URL opens the page in the same window. However, after the request is submitted, clicking the URL opens the page in a new window. (QCCR1L16912)
4629376975	The single quotation mark is incorrectly displayed as `'` in the Most Recent Note field. (QCCR1L27470)
4613232334	The `ksc_export_request` command does not work when the source request has more than two fields. (QCCR1L25167)
4617746676	The system does not perform a status dependency check when you use the mass update function. The mass update finally fails because certain fields are not editable in the current status. (QCCR1L27250)
4620032771	You create a project containing a table component by using `ksc_create_project` command in a workflow step. And one of the cells in the table component contains multiple values. Then, you make a copy of this project. In this case, the cell in the copied project does not have any data. (QCCR1L28340)
4620285363	You receive the following error message when performing any action on a request because of an error in the JavaScript code in the default section of the request type field: `Error: The P_41 parameter is malformed` (QCCR1L28464)
4620482925	You use a SQL rule to update a field that has a URL validation. The rule contains a percentage sign (%) and some numbers. In this case, the URL will be unexpectedly tweaked. When you click View URL, you receive a °×The webpage cannot be displayed°± error. (QCCR1L28597)
4620282458	You cannot open a report type in the Workbench if the report type has too many security groups configured (for example, more than 6,000). (QCCR1L29381)
4622610100	It takes a long time (about 30 minutes) to open a workflow in the Workbench. (QCCR1L39183)

Tracking Number	Problem Description
4621870332	When configuring a request type, you set the "Display on Search and Filter" and "Display" settings to NO on a field. However, this field still shows up on the Search Requests page and the Request Search Results table. **Note** The field is hidden in an advanced search. (QCCR1L29582)
4621699826; 4621699826	When you open the Approval Details page of a project change, one or more users in the security group that is set to be able to approve the change may not be shown. This is because the number of users to display is limited to 200. (QCCR1L29838/ 29940)
4625060776	You have a multi select validation that has the Expected List Length field set to long, and contains multiple pages. After you select an item on a certain page, the subsequent pages become incomplete or blank. When the Expected List Length field set to short, you may receive the error "Undefined" during the selection. (QCCR1L42861)
4626277529	You add a field mapping on a demand set that is used to filter out requests based on the value in a particular field. However, on certain portlets, such as the Assignment Queue portlet, the filter does not work correctly. (QCCR1L39983)
4627004826	Link fields are corrupted and cannot be accessed when the request that contains the link fields are completed or closed. (QCCR1L43369)
4627846641; 4629949173	You use SQL rules to update non-editable fields in a request header type. The SQL rules are triggered correctly and can update the fields as expected. However, when trying to save the change, you find the fields are converted back to the original values. (QCCR1L41243)
4630910887	You cannot update a URL field by using the Demand Management Web services operation `setRequestFields` when the URL is longer than 200 characters. (QCCR1L42111)
4632280591; 4634992910	When you create a request, the specified workflow is not populated. Instead, the default workflow Bug Request Type is populated. (QCCR1L42809)
4632278062	If a request spawns a child request when the child request has required field not filled, an error occurs on the parent request. However, the child request can be created without any warning stating one or more required fields are not filled. (QCCR1L42810)
4632280449	When you map fields between source and target request by using the ksc_copy_ request command, header fields are not mapped successfully. (QCCR1L42723)

Tracking Number	Problem Description
4632553269	On the Search Request page, you may receive the following error message when you specify the Active at Workflow Step field to perform the search: `We are unable to complete your search because search time exceeds the maximum setting.` (QCCR1L42832)
4632366165; 4633823350; 4632671150	After you install PPM Center version 9.12, the creator of a project cannot access the financial summary if only the Workflow Security and Created By participants have the view access on the request. (QCCR1L43056)
4632394764	You add proposal field groups to a request type. On the Fields tab, the Region field exists under the Proposal section. However, when you switch to the Layout tab, the Region field disappears. If you move the Region field to the Summary section and then move it back to the Proposal section on the Fields section, the Region field becomes visible under the Proposal section of the Layout tab. (QCCR1L42830)
4632286322	The system does not set the FROM_TM_FLAG flag to in the KCRT_REQUEST_RSC_ACTUALS table to Yes when you input actuals from the Time Management module. This behavior may cause incorrect actuals on a request.(QCCR1L43909)

4632730658	The following error message is generated in the log file when you try to spawn a request type from another request type by using the ksc_copy_request command:
	`Beginning command: KSC Copy Request`
	`Running PL/SQL procedure KCRT_REQUEST_UTIL.COPY_REQUEST`
	`Summary of parameters:`
	`FROM_REQUEST_ID=50802`
	`REQUEST_TYPE_ID=30264`
	`WORKFLOW_ID=36900`
	`COPY_FIELDS=Y`
	`COPY_NOTES=N`
	`CREATE_REFERENCE=Y`
	`REF_RELATIONSHIP_ID=15`
	`STATUS_NAME=`
	`SUBMIT=Y`
	`PROCESS_RULE=N`
	`USER_ID=30565`
	`VALIDATION_NAME=`
	`Exception occured during execution: KCRT_REQUEST_UTIL-Check Interface error group_id=<`*`Group_ID`*`>`
	However, in the `KNTA_INTERFACE_ERRORS` table, you cannot find the group ID mentioned in the error message. (QCCR1L43266)

Tracking Number	Problem Description

4632954989	When you use same sub-workflow multiple times in the main workflow, it only works with the first one. Other sub-works fail with the following error:
	`Error from Front end:(No GUID was generated)`
	`Error 500: Unknown error`
	(QCCR1L43071)

4632971993	The drop down list field and text area field in a table component cannot be expanded after you increase the field width (from the default value 1 to 2, or 3) in Workbench. (QCCR1L43093)
4633489167	After you install PPM Center version 8.03, Apply on creation rules fail with errors. This issue occurs if the rule's dependency refers to the creation date. (QCCR1L43260)
4624407644	Performance issues occur when you update the value of the Assign To field in a request. It may take more than 1 minute to save the change. (QCCR1L44617)
4632860691; 4632622702	On a workflow step, you configure the security setting for the Assigned To field. Additionally, you set this field to have reconfirmation on the transition. In this case, you receive the following error when updating the Assign To field: `Error: "You don't have the privilege to perform workflow event."` (QCCR1L43545)
4628973528	Workday calculation is incorrect when you setup timeout values. Because of this issue timeout that is supposed to occur only on workdays occurs on weekends. (QCCR1L44635)

4633002760	You receive the following Java script error message when clicking on the Save button in a request:
	`Line:  614`
	`Char:  13`
	`Error:  'cellindex' is null or not an object`
	`Code: 0`
	`URL: http://swspvm133.gbr.hp.com:18080/itg/web/knta/crt/RequestDetails.jsp REQUEST_ID=<`*`Request_ID`*`>`
	(QCCR1L44064)

4633719686	You set an Apply-on-Change rule on a table component to populate a non-editable field, such as the Request Type ID and Workflow Type ID. However, when the field change occurs, the rule does not work correctly. (QCCR1L43775)
4634505984	You receive an `ORA-00600` error message if you include the "Associated Program" field in the display columns when performing an advanced request search for PFM - Project and/or PFM ®C Proposal. (QCCR1L44666)

Tracking Number	Problem Description
4633726646	You create a request field that contains HTML code in a request. You expect that clicking this field should open a PPM Center report. This works successfully in version 9.10. However, after you upgrade the system to version 9.12, the following error is generated in the server log when you click this field: `ERROR JSESSIONID=EAB56BDC44BE69E3137572360625E8E9.ppm8,USERNAME=admin:http-0.0.0.0-8082-Processor11: com.kintana.core.web.filter.security:2011/08/25-10:35:15.590 SGT: The input tag contained an attribute that we could not process. The onclick attribute has been filtered out, but the tag is still in place. The value of the attribute was "window.open("http://MHPDEVPPM01.healthgrp.com.sg:8082/itg/reports/rep_34967.html")".` (QCCR1L44664)
4634187696	The creator of a proposal (who also has the View Costs on Financial Summary access grant) cannot view the financial summary of the proposal. When the creator opens the Details page, the Financial Summary field is populated with “No Financial Summary.” However, the financial summary is actually created. (QCCR1L44619)
4632788892	You open a request that has a table entry by using the in-line editing. If you delete the entry, and then try to add a new line to the table (without saving the deletion), you receive a critical error message in Internet Explorer and all Internet Explorer windows close. (QCCR1L44591)
4634852586	You receive an Error 500 message when trying to save a request. This problem occurs when the following conditions are true. • An "Apply before Save" rule is created on certain fields. • The rule compares between multiple fields. • You do not have the Edit access to one or more of these fields. (QCCR1L44231)
4634930014	A URL field cannot contain more than 200 characters since version 9.10. (QCCR1L44276)
4635009660	After you copy a request that has the Resources section enabled into a new request, PPM Center deletes all resources of the original request and all scheduled efforts set for every resource. (QCCR1L44523)
4635137192	You create an Apply on Field Change rule on a table component. If the rule uses an auto completion component as the dependency, the field change cannot trigger the rule. (QCCR1L44587)

Tracking Number	Problem Description
4635308292	The ContinueWorkflowEventError error occurs when you configure certain workflow steps in workbench. (QCCR1L44749)
4636698439	You receive an error message that resembles the following when trying to create a request: `ORA-04098: trigger 'MC_PPMMAC_7580.KCRT_REQ_RHT_AUDIT_30454_1' is invalid and failed re-validation {KCRT_REQUESTS_TH-300} GUID=B771C12B-AD55-0C04-DCE8-DB96F214F920` (QCCR1L45084)
NA	A deadlock occurs when multiple reports with same report type are running concurrently. When this problem happens, subsequent schedule of these reports are deferred. At that point, all executions are queued and cannot be processed. (QCCR1L45175)
4634162763	There is no alternative text for the HP Project and Portfolio Management Center banner. Additionally, the field help in a request is not available. (QCCR1L44643)
4635716801	Request numbers greater than 999,999 are not displayed properly in the My Request portlet. Only the first three digits of the numbers are displayed. (QCCR1L45032)
4636086588	The following error occurs when you use the Request list portlet: `An unknown error has occurred. For more information, please contact your PPM administrator and provide the following GUID number <GUID>.` This problem occurs because the SQL statements for the Request list portlet contain ambiguous columns. (QCCR1L44802)

4636319426	You cannot use modules or portlets after making deployment from the pre-production system to the production environment. Additionally, errors that resemble the following are generated in the server log:
	`ERROR JSESSIONID=BABE6AEE7A818058D5F534787A5A4ECE.1EGT_users_n1,USERNAME=user1:TP-Processor2:org.apache.jsp.arch.Error_jsp:2011/11/26-16:39:25.306 MEZ: com.mercury.dashboard.arch.InternalDashboardException: The current user has no dashboard pages.`
	`ERROR server:pool-39-thread-2:com.kintana.web.portlets:2011/11/28-06:15:49.520 MEZ: An unknown error has occurred. For more information, please contact your PPM administrator and provide the following GUID number: GUID=B9E3CE3B-6C57-56BA-0AB9-E686443D98D8`
	`nested detail:ORA-00918: column ambiguously defined`
	(QCCR1L45038)

4637448158	The Open Requests by Priority portlet fails to open with a timeout error because of a performance issue. (QCCR1L45345)

Tracking Number	Problem Description
4626618911	A long list auto-complete-list validation does not display all results if you do not click Show all. This issue does not occurs on a short list auto-complete-list validation. (QCCR1L40567)
4635945069	A saved request draft is not editable by the creator if you remove the Edit option in the User Access tab of the request type for the creator and for the other user groups. (QCCR1L45023)
463591495	The financial summary is not created when a user that has the Demand Management License and the following access grants created a proposal: • Edit Financial Benefits • Edit Forecasts on Financial Summary • View Costs on Financial Summary • View Financial Benefits (QCCR1L45210)
4635563687	In an MLU environment, you receive an error message when trying to save changes to a field. (QCCR1L45299)
4629621323	You create a request type that has resource tracking enabled. Then, you configure a workflow step with action privileges for the resources in the request by using the `REQ.REQ_RES_USERNAMES` token. In this scenario, if you add a resource to the request when it is in a step where the resources can take actions and then save the request, the newly-added resource cannot take any action to the request until you save the request again. (QCCR1L41544)
4634208260	In PPM Center 8.02, you configure a request type to provide user accesses based on participants of the project associated with the request by using a token. In this case, only 250 users are stakeholders on the project are given access to the associated request. If the project contains more than 250 stakeholders, some users receive an error when trying to access the request. (QCCR1L45000)
4610602808	You receive the following error after triggering a rule and saving the request: `Error: Rule 18 - "Check 100% funding" failed to execute.` Further investigation indicates that this problem occurs because the Token `REQD.T.<`*`TC_VAL_NAME`*`>.TC.VP.<`*`FIELD_TKN`*`>.TOTAL` does not work. (QCCR1L27998)
4636260824	The default value of a drop down list validation in a table component is displayed twice when you expand the list. Additionally, the corresponding hidden value in the database is incorrect if you select the default value on the Web page. (QCCR1L44860)

Tracking Number	Problem Description
4635228375	You create a workflow that generates a child project for one project. The parent project contains a rule that sets a table component field as required on certain conditions. In this case, the project creation execution step fails with the following error: `An unknown error has ocurred. GUID=<GUID>... Field <Field_Name> is required and cannot be empty` (QCCR1L44896)
4636526961	You create a rule in a table component to calculate values based on dependent field values. Under certain circumstances, such as a slow connection, this rule does not work correctly after you enter values and clicking the Total row. (QCCR1L45094)
4628419332	The system does not provide any method for you to hide the "Delegate decision" button for workflow steps where the "Decision Required" option is set to "At Least One" or to "All." PPM Center version 9.14 Introduce a parameter (`com.kintana.core.server.WF_DISABLE_DELEGATE_DECISION_STEP`) to determine whether to hide the Delegate decision button or not. You can hide the Delegate decision button by setting this parameter to `true`. If this parameter is not set or set to `false`, the "Delegate decision" button will be displayed. (QCCR1L40782)

4635868295	Certain workflow execution steps stay in the 'In Progress' state, and cannot complete. When this problem occurs, the following error is generated in the server log:
	`ERROR server:com.kintana.crt.server.CRTExecutionManager Batch ID: 287532:com.kintana.wf:2011/11/08-11:53:03.055 GMT+02:00: Exception while running execution callback event:`
	`An unknown error has occurred. For more information, please contact your PPM administrator and provide the following GUID number:`
	`GUID=0224592B-3A5F-D50D-5DC6-C520599084D4`
	`nested detail:DB Package error:`
	`The workflow engine has aborted processing this event because an excessive number of workflow steps completed. (KWFL-30007) (KNTA-10498)`
	(QCCR1L44868)

Deployment Management

Tracking Number	Problem Description

4622608605; 4620703119; 4621971558; 4621887459 4622292005	The migrator fails to migrate an object with the following error message, which does not explain the root cause:
	`Exception Correlation: GUID=BAF19C01-35EB-E62C-F737-EE68A7FD8E23`
	`Generated Time=2010/11/18-20:24:31.697 CET`
	`Server Node Name: acppm1jp00`
	`at com.kintana.mig.server.ImportTransactionImpl.deriveAndValidateBundle(ImportTransactionImpl.java:510)`
	`at sun.reflect.NativeMethodAccessorImpl.invoke0(NativeMethod)`
	`at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:39)`
	`at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:25)`
	`at java.lang.reflect.Method.invoke(Method.java:597)`
	`at com.kintana.rmi.MethodInvoker.run(MethodInvoker.java:86)`
	`at com.kintana.rmi.util.ThreadPool$WorkerThread.run(ThreadPool.java:276)`
	`Import failed`
	After you install PPM Center version 8.04, a more proper error message will be displayed when the migration fails. (QCCR1L43349)

4628176149; 4001447249	Automatic creation of package lines does not work in PPM Center version 8.02 when you use KDLV_PACKAGE_INT.plb via interface API to insert package lines. (QCCR1L43385)
4620575421	When you migrate an environment by using a workflow object type, only data on the Main tab and the User Data tab is migrated. The data on the Application tab and the Extension tab is not migrated. (QCCR1L28550)
4621350639	Batch package line executions don't work correctly after you upgrade PPM Center to version 8.02. If one package line fails in one workflow step, the other lines fail with the execution code `Failed [Line xxx]`. (This is the expected behavior). However, because of this failure, the other package lines in the batch cannot be re-executed. You have to manually execute the package lines. (QCCR1L29768)
4625523474	You receive a `NumberFormatException` error when trying to run the Compare Filesystem Environments report. (QCCR1L41362)
4628861074	You receive error `ORA-01400`, which is related to ProcessInterruptedExecutions, when starting a node in a cluster. (QCCR1L43672/QCCR1L43359)

Tracking Number	Problem Description
4630077647	The scheduling engine does not work when you want to submit a package. This issue occurs after you upgrade PPM Center to version 9.x. (QCCR1L41765)
4619517146	When you submit package lines, some package lines may appear more than once in the notification sent to concerned users. This problem occurs after you upgrade the system to PPM Center version 8.02. (QCCR1L43330)
4628176149	An error occurs when you use the KDLV.PACKAGES.INT.release_records utility to insert package lines. (QCCR1L43363)
4620298567	The special command `ksc_connect_env_group` does not work when using an environment group. (QCCR1L28590)

Documentation

Global ID	Problem Description
4633188519	Secure logon does not render correct page on logout due to incorrect configuration of `server.xsl` file by following the *Configuring PPM Center with a Load Balancer* section on page 15 of PPM 9.10 *Deployment Best Practices Guide*. For a complete template for editing the `server.xsl` file, see *Configuring PPM Center with a Load Balancer* on page 128. (QCCR1L43898)
4617952703	The instructions about turning on action monitor and portlet monitor are not properly documented in the *Installation and Administration Guide*. For the correct instructions, see *Monitoring Activity in PPM Center* on page 129. (QCCR1L27623)

Integrations

Tracking Number	Problem Description
4620413837	You log into the system in a language other than English. However, on the Document check-in page, labels for the **Delete** and **Check In** buttons and for the **Version History** link are still in English. (QCCR1L43366)
3605821655; 4623199371	For work plans under the Microsoft Project controlled mode, the costs are not summed up to the project or the summary task level. (QCCR1L43373/ QCCR1L43322/QCCR1L21561)
4632791995	You integrate PPM Center with UCMDB, and enable LDAP in UCMDB. In this case, the CI selector does not work (Neither double-clicking the CI nor highlighting the CI takes effect). (QCCR1L44494)
4605425461	You receive the following message when trying to update or delete a request that is integrated with Quality Center in PPM Center: `The system encountered a problem while trying to synchronize changes to Quality Center. The changes have been saved in PPM. Please try saving again later in order to complete the synchronization with Quality Center.` When this problem occurs, a NullPointerException error is generated in the server log. (QCCR1L16635)
NA	You integrate PPM Center with Quality Center. After you create a defect in Quality Center, the values for the Detected in Cycle, Detected in Release, Target Cycle and Target Releases fields in the corresponding PPM Center request are not displayed correctly. (QCCR1L25919)

4621755760; 4624509149	You upgrade PPM Center to version 8.0 and Documentum to version 6.5 SP1 and both servers are running as a separate instance in the production environment. However, you receive the following error message when trying to run the kConfig.sh script to perform the integration:
	`dfc.properties is not correct`
	`This problem occurs even after you have copied the file (dfc.properties) from the "<`*`DOCUMENTUM_HOME`*`>/Shared/config/" to "<`*`PP_HOME`*`>\server\<`*`SERVER_NAME`*`>\conf" after the upgrade.`
	(QCCR1L29436)

4628294224	You synchronize requests from Quality Center to PPM Center. The synchronization fails if the length of a PPM Center field exceeds 4,000 characters. (QCCR1L42110)

Tracking Number	Problem Description
4629017957; 4631156817	You receive the following text when clicking Sign Out on an instance that has single sign-on configured: `<meta http-equiv="refresh" content="0;url=/itg/dashboard/app/portal/PageView.jsp">` (QCCR1L42811)
4637338157	You receive an error message when trying to migrate documents stored in PPM Center to DMS. (QCCR1L45466)
4630735891	The sub domains in `com.kintana.core.server.LDAP_URL_FULL` do not work if you have the `LDAP_BASE_DN` parameter specified in server.conf. (QCCR1L42316)
4631843297	You map a multi-select field in PPM Center to a field in Quality Center. However, the field in Quality Center cannot contain the same number of characters as the PPM field does. Except for the enlarged memo-fields, all fields in Quality Center can only contain 255 characters at most. (QCCR1L44471)
4606880604; 4605425461	You integrated PPM Center with Quality Center ALM. When you try to create a defect in Quality Center, the operation fails on the “create QC defect” step in PPM Center with the following error message: `The following Command Step is not subject to timing out: com.kintana.core.server.execution.CLCommentCommand` (QCCR1L21989)

4630055351	You receive the following error message when trying to integrate PPM Center with Documentum while running kconfig.sh:
	`Error: [DEMOTE_SUPER_USER_STEP] Exception: [[DM_QUERY_E_BAD_GROUP_SAVE]error: "CREATE or ALTER GROUP: Unable to save the group."]`
	`Cause Exception: [No useful information found.] Log Directory: [/u01/app/p2pdb41/itg] Log files are of the form dctm_integration*.`
	`These log files contain detailed information about the integration session. For more information on troubleshooting integration errors, please contact HP Support"`
	(QCCR1L41971)

4630138455	The Import Users report fails with the ORA-03111 error in a lager data environment. (QCCR1L42646)
4631846083	The link between a Quality Center requirement and PPM Center request is corrupted when there is a quotation mark in the title of the PPM Center request. (QCCR1L44472)

Tracking Number	Problem Description
4633649691	You create a request type in PPM Center and use a workflow step to create a request of that type in Quality Center. When you modify the request type in PPM Center and try to synchronize the change to Quality Center, you receive an error that resembles the following: `Error when trying to update requirement with ID 9 for QC server http://vwagwosoe041:8080/qcbin/, domain KLYQ, and project PPMC_1 based on PPM request with ID 30714. Failed to update QC Requirement with id 9. Error when calling QC REST web services. (400) Bad Request` (QCCR1L44401)
4636267415	The single sign-on function does not work on the Microsoft Project plug-in when the system uses Http-only cookies. (QCCR1L45774)
4633715767	When you synchronize a request from Service Manager to PPM Center, a NullPointerException error occurs. This problem happens when PPM Center fails to retrieve the regional settings to format numbers in the request. (QCCR1L43727)
4633649691; 4635672295	You receive an error that resembles the following when trying to synchronize changes from PPM Center to Quality Center 11: `Error when trying to update requirement with ID 9 for QC server http://vwagwosoe041:8080/qcbin/, domain KLYQ, and project PPMC_1 based on PPM request with ID 30714. Failed to update QC Requirement with id 9. Error when calling QC REST web services. (400) Bad Request` This problem occurs after you apply Service Pack 2 to Quality Center. (QCCR1L43971)
4635600820	When PPM Center is integrated with Quality Center, the RESTful web service call invokes many RESTful client connections in Quality Center. These connections are not released properly. (QCCR1L44572)
4635279290	You receive the following error message when running the ITG Organization Unit interface: `ORA-21000: error number argument to raise_application_error of 20000 is out of range {KRSC_ORG_UNIT_INT-3550}` (QCCR1L44886)
4636047738	You delete a task that does not have any actual from a work plan in Microsoft Project. An error occurs when you try to synchronize the work plan with a PPM Center project in the shared mode. Further investigation shows that a dependency conflict associated with the task causes this error. (QCCR1L45052)

Tracking Number	Problem Description
4636948958	You have integrated PPM Center with Quality Center. However, on the configuration page, one or more PPM Center field may contain HTML tags. (QCCR1L45099)
4627627062	Performance issues occur when you try to import a very large work plan (more than 2,000 tasks) from Microsoft Project to PPM Center. (QCCR1L1L43398)
4622401941	Mappings for the date type fields between PPM Center version 7.5 Service Pack 6 and Quality Center 10.0 are not bidirectionally correct. This problem occurs when you update the date field from Quality Center. In this case, PPM Center does not display the field correctly. The values for the month and date are swapped. For example, if you set the date field to 3rd of December 2010 in Quality Center, it is displayed as 12th March 2010 in PPM Center. (QCCR1L1L43356)
NA	When you log on to Windows with a user account other than the user account that you used to install the MSP plug-in, the plug-in does not work. This problem does not occur in versions earlier than 8.03. PPM Center version 9.14 introduces new parameters to address this issue. For more information, see *New Parameters for the Silent Installation of Microsoft Project Plug-in* on page 59 (QCCR1L1L45001)

Platform Management

Tracking Number	Problem Description
N/A	A typo in the following error message corrected, where "`application perver`" shall be "`application server`". `Rule SQL contains invalid token(s). Tokens allowed are system tokens [SYS.*], application perver tokens [AS.*], and tokens of fields defined in the Rule Dependencies list. (KNTA-10561)`
4617308628	Report types cannot have more than 5 filter fields of more than 200 characters. To address this issue, columns PARAMETER40-45 of the table KNTA_REPORT_SUBMISSIONS are enlarged to 4000. Now users can use them in addition to the original PARAMETER46-50 to store large fields. (QCCR1L44855)
4607126685; 4626827008; 4621352006	Ksvc.exe requires that the `com.kintana.core.server.KINTANA_SERVER_NAME` parameter should be defined before the heap parameters (for example, `com.kintana.core.server.SERVER_MAX_HEAP_SIZE`). Otherwise, the heap parameters are set to default values in Windows using Ksvc.exe. (QCCR1L43324)

Tracking Number	Problem Description
4613719278	In PPM Center version 8.0x workbench, the server administration reports do not show the nodes name in the title of the report. (QCCR1L43333)
4623086751	The MigratorExtract.sh scripts fails with the `java.lang.NoClassDefFoundError` exception. (QCCR1L43352)

4620080621	After you upgrade your PPM Center to version 8.02, you receive the following error message when executing any reports that include a SQL statement.
	`ORA-00604: error occurred at recursive SQL level 1`
	`ORA-02248: invalid option for ALTER SESSION`
	Note: Do not use single quotation marks (') when setting environment variables in AIX. Or, you may encounter errors when running SQLPLUS. This may cause reports in PPM Center to fail.
	(QCCR1L43378)

4614329727	You click on a link in an email notification sent by an Asset workflow when you do not log into PPM Center. And then, you are prompted to log into the system to view the request. However, after entering the credentials, instead of navigating the request, you receive a `Request does not exist` error message. (QCCR1L43412)
4607132911; 4629040039	You set your browser locale to a locale (language pack) that is not installed in PPM Center. In this case, you may receive an HTTP 500 error when trying to logon. (QCCR1L16651)

4624788500; 4624929700; 4625396492; 4625828447; 4628069254; 4628961651	After you upgrade to PPM 8.00 SP1, you receive the `Page not found` error when you try to log into the system. When this problem occurs an error message that resemble the following is generated in the server log file:
	`JSESSIONID=3E3F170FBBCB529CC27FBB03FA977706.Test,USERNAME=server:TP-Processor2:com.kintana.core.server.servlet:2010/04/26-08:42:24.622 CDT:`
	`The JSESSIONID cookie with value (J2EE17650000)ID0420268151DB0091778198662152O577End from 172.29.198.66 is malformed`
	`JSESSIONID=3E3F170FBBCB529CC27FBB03FA977706.Test,USERNAME=:TP-Processor2:com.kintana.core.server.servlet:2010/04/26-08:42:24.622 CDT:`
	`org.owasp.stinger.BreakChainException: The JSESSIONID cookie is malformed`
	(QCCR1L41740)

Tracking Number	Problem Description

4625783734	The following error is generated in the `ppm_upgrade.log` and `upgrade-75-to-80.log` files when you try to upgrade the system from version 7.5 Service Pack 7 to version 8.0x:
	`java.sql.SQLException: ORA-20011: ORA-20011: -1722 : ORA-01722: invalid number`
	`[sqlscript] ORA-06512: at "KINTANA.KNTA_VALIDATIONS_NLS_RC_UPD", line 15`
	`[sqlscript] ORA-04088: error during execution of trigger 'KINTANA.KNTA_VALIDATIONS_NLS_RC_UPD' : for reference code _PFM_REVIEW_APPLICATION_DATA`
	`[sqlscript] ORA-06512: at line 915`
	`FAILED: Wed Feb 09 00:22:02 EST 2011`
	`Duration: 00h:00m:02s`
	(QCCR1L43339)

4604235989	PPM Center does not perform a license availability check when you reactivate a user. This may cause license availability conflict. For example, you try to reactivate a user that has the Configuration license when there is no Configuration license left, which exceeds the license usage. In this scenario, PPM Center does not start up upon next service restart. (QCCR1L15648)
4606371755	Links that you added to the My Links menu do not work after you update the instance from PPM Center version 7.5 SP3 to version 8.0x. (QCCR1L16676)
4615966608	PPM Center unexpectedly logs the message “user from current context is null” in the server log when no error occurs. (QCCR1L26392)
4616140066	When you run the Org Unit Open Interface report to update existing org units by using the interface tables, the financial summary fields of the org units are cleared out. (QCCR1L44637)

4615001879; 4626748430	You receive the following error message when trying to run any of the Broker reports either from the Work Bench or by running the kRunServerAdminReport.sh script:
	`org.hibernate.HibernateException: connnection proxy not usable after transaction completion`
	`at org.hibernate.jdbc.BorrowedConnectionProxy.invoke(BorrowedConnectionProxy.java:42)`
	`at $Proxy76.isClosed(Unknown Source)`
	`at com.kintana.core.db.DBConnectionBroker.getServerAdminReport(DBConnectionBroker.java:746)`
	`at com.kintana.core.server.ISIntegrityServerImpl.getServerAdminReport(ISIntegrityServerImpl.java:2062)`
	`at sun.reflect.GeneratedMethodAccessor3070.invoke(Unknown Source)`
	`at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:25)`
	`at java.lang.reflect.Method.invoke(Method.java:597)`
	`at com.kintana.rmi.MethodInvoker.run(MethodInvoker.java:86)`
	`at com.kintana.rmi.util.ThreadPool$WorkerThread.run(ThreadPool.java:276)`
	(QCCR1L43925)

Tracking Number	Problem Description
4618584061	Server logs are not backed up when the serverlog.txt file reaches the roll size if PPM Center is started as a service. (QCCR1L27700)
4619094536	The index `KNTA_USER_SECURITY_U2` is not needed. This index is removed in version 9.14. (QCCR1L28838)
4621769863	User who have a big number of security groups take a long time to login to PPM Center. (QCCR1L41141)
4622318839	When an error occurs during the execution of the kImportAttributes.sh and kExportAttributes.sh scripts, logs are not generated in the corresponding log file. (QCCR1L29329)
4623149218	You receive portlet errors when using the calendar picker for request fields after upgrading PPM Center to version 8.02. This problem occurs if you specify a date pattern in the Workbench. After you install PPM Center version 9.14, dates will be displayed according to the date formatting pattern for the selected locale. (QCCR1L29597)
4629078812	When submitting a PPM Center report, in the Edit Advanced Notifications window, you use a user defined token in the Sent To field. However, the token cannot be resolved and the notification is not sent. (QCCR1L41341)
4629085851	When setting the `jgroups.bind_addr` property, the system does not retrieve value from the `com.kintana.core.server.SERVER_NAME` parameter correctly. (QCCR1L41878)
4630068801	Report lists show incorrect time on the Run Date column. The time field always shows 00.00.00. (QCCR1L44611)
4629342310	Password generation is unnecessarily executed when you try to create a project in a proposal workflow. Therefore, the project cannot be created. (QCCR1L42466)
4631009812	If you set the Scheduling setting to Run Report On and specify a date on the Submit Report page, clicking the Restore Default button does not restore all settings to the default value. (QCCR1L42557)

4631920648	You receive the following cache region validation errors while trying to navigate through menus during the performance testing:
	`Cache region validation not found in cache.conf. (KNTA-11043)`
	`Cache region parametersetcontext not found in cache.conf. (KNTA-11043)`
	(QCCR1L43752)

Tracking Number	Problem Description
4632776848	PPM Center does not clean obsolete information from the ppm_server_instance table during startup. Because of this issue, you may see multiple nodes in the Administration Console after you convert the PPM server from a cluster environment to the standalone mode. (QCCR1L43212)

4632733484	You receive the following error message when trying to import time sheet data into the system by running the kTMDataConversion.sh script:
	`Listening for transport dt_socket at address: 1238`
	`A fatal error has been detected by the Java Runtime Environment:`
	`SIGILL (0x4) at pc=0xfe621c20, pid=199102, tid=8`
	`JRE version: 6.0_17-b04`
	`Java VM: Java HotSpot(TM) Client VM (14.3-b01 mixed mode solaris-sparc )`
	`Problematic frame:`
	`C [libjdwp.so+0x21c20]`
	(QCCR1L43930)

4634617874	PPM Center fails to start on PA-RISC after upgrading to version 9.12. (QCCR1L44525)
4633511002	The Broker Connection report shows connections even after they are closed. Also, the Broker In Use Sessions report generates the following exception: `org.hibernate.HibernateException: connnection proxy not usable after transaction completion.` (QCCR1L43471)
4634323648	If a remote SSH2 server drops the connection during the SSH2 logon phase, the SSH2 session only displays the following unhelpful message: `SSH version received from remote host: null` (QCCR1L44800)

Tracking Number	Problem Description
4635563615; 4635976252	PPM Center does not provide a method to explicitly bind the MULTICAST_PORT multicast socket to a specific network interface card (NIC). Because of this limitation, the following error is generated in the server log of all nodes in a cluster: `r.cluster.MulticastCommsFailureMonitor:2011/10/19-09:36:32.196 CEST: No multicast traffic has been heard from node SSO on the MULTICAST_PORT port for over 3 minutes even though the node appears to be up. Please check your multicast routing, server.conf settings, and/or firewall settings.` `ERROR server:ClusterMonitor.HeartbeatThread:com.kintana.core.server.cluster.MulticastCommsFailureMonitor:2011/10/19-09:36:32.196 CEST: No multicast traffic has been heard from node Server on the MULTICAST_PORT port for over 3 minutes even though the node appears to be up. Please check your multicast routing, server.conf settings, and/or firewall settings.` `ERROR server:ClusterMonitor.HeartbeatThread:com.kintana.core.server.cluster.MulticastCommsFailureMonitor:2011/10/19-09:36:32.212 CEST: No multicast traffic has been heard from node Services on the MULTICAST_PORT port for over 3 minutes even though the node appears to be ...` After you install PPM Center version 9.14, if the `MULTICAST_NIC_IP` parameter is specified in the server.conf file, the JGroup and MULTICAST Channel multicast sockets will bind to the NIC that you specified by using the `MULTICAST_NIC_IP` parameter. The value of the `MULTICAST_NIC_IP` parameter can be a host name or an IP address. (QCCR1L44795)
4635021588	The Baseline Comparison report displays incorrect finish date for a task in a project. (QCCR1L44764)

Portfolio Management

4612550278; 4621069438	When the Project Type Cost and Effort Policy uses the default settings, projects that are created from proposals are not updated with the workload category in the Project Settings. The staffing profile carries over the workload category that was set during the creation of the proposal. (QCCR1L25324)
4611005676; 4611005676	You try to make a change to scoring criteria. Once you accept the change, a pop-up window appears. This window is expected to be closed automatically once the update is done. However, the update does not correctly complete. You have to manually close the pop-up window. (QCCR1L44878)
4615590360	In the Timeline view of a scenario on the Scenario Comparison page, the end bar is one month later than the value on the Finish Period field. (QCCR1L26073)

4615655807	You have a proposal with a read-only name. When you create a staffing profile for the proposal, the proposal name is not carried over to the staffing profile. (QCCR1L43172)
4615590706	When you drill down from the Role Availability Details page of an optimized scenario to the Requirement for Scenario page, the Requirement for Scenario displays all zeroes even when the total FTE required is not zero. (QCCR1L28047)
4625601409	The financial summary of a project does not show the calculated forecast labor costs. This problem occurs if the project is created from a proposal. (QCCR1L44891)
4632879997	You receive the following warning message on the Edit a Cost Line page for a financial summary even if you have entered a value for the required field mentioned in the warning message: `You must provide a value for the field "<field_name>" to complete the validation. You may not have entered a value"` (QCCR1L42983)
4631998734	When you search for proposals to add to a portfolio, the search returns no results. This problem occurs if you do not have the View Requests or Edit Requests access grants. (QCCR1L43796)

Program Management

Tracking Number	Problem Description
4619599778	You have user data fields added to a program. After you set the status of the program to Complete and click Done, all the user data fields are cleared. (QCCR1L43342)
4636205008	In the Content section of the Program Overview page, the Actual Total values have been written into the Actual Non-Labour fields. This problem occurs after you upgrade PPM Center from version 8.03 to version 9.12. (QCCR1L45003)

Tracking Number	Problem Description
4636138456	After a new project manager is added to a project, the related tokens for existing project issues or risks are not updated. As a result, the new project manager does not have access to the project issues or risks that are created before he or she is added to the project. (QCCR1L45071)
4634476974	You successfully create a program with a unique name after receiving a `program name already exists` message. On the Program Overview page, if you click **Done**, you will return to the initial program creation page with the same error. (QCCR1L44033)

Project Management

Tracking Number	Problem Description
4628479929	Task mass update fails with an `ORA-01795` error when there are more than 1,000 tasks to handle. (QCCR1L43374)
4630952913	If the total charged time for a time sheet is negative, the “Activities are required” message is not displayed when a user tries to submit a time sheet that does not contains any activity. (QCCR1L43404)
4625862983	When you try to create a project from a proposal through a workflow, the following error is generated in the execution log: `Server Node Name: kintana com.mercury.itg.exceptions.AuthorizationException` (QCCR1L43348)
4615367809	Performance issues occur while you work with the Project Management module, especially when editing tasks, creating tasks, and saving work plans. (QCCR1L43341)
4616306401; 4626040744	Custom validations for Probability and Risk Impact Level in the Project Risk request header type do not show up in the Risk portlet on the Program page and the Project Summary Page. (QCCR1L43388)
4620857634; 4625683251	When a project is created from a proposal, the advanced search (with Project Health column) for the project does not show the health status. (QCCR1L43357)
4622219471	You receive the "`java.lang.NumberFormatException: For input string: ",911"` error message when trying to add a Project Gantt portlet to the dashboard. (QCCR1L43082)

Tracking Number	Problem Description
4612729746	The preferences of the ProjectID is not populated with the current project ID when the Project Overview layout page is locked down. (QCCR1L43327)
4624450121	The `ksc_update_workplan_status` special command has an error that makes the work plan fail to be activated in a workflow. (QCCR1L43353)
4603843042	Link properties may not be carried through from a proposal to a project. This problem occurs if you do not enter any value in the Description field of the link. (QCCR1L15904)
4605293753	The Project Manager auto-complete list displays inconsistent contents on the Create New Project page and the Configure Project Participants page. On the Create New Project page, the auto-complete list displays all users. However, on the Configure Project Participants page of a project, the auto-complete list only displays the users with the Project Management license. After you apply PPM Center version 9.14, the Project Manager auto-complete list displays the users with the Project Management license only. (QCCR1L16327)
4612486556; 4612486556; 4625679290	You receive a `NullPointerException` error when trying to create a project from a proposal by using workflow steps. (QCCR1L24922)
4618589866	You receive a `NullPointerException` error when trying to change the project name to a new name which is just different in capitalization from the old name (for example, from `Project-Test` to `project-test`). (QCCR1L27810)
4619094536	The index `ITG_SETTINGS_CONT_ATTRS_N2` is not needed. This index is removed in version 9.14. (QCCR1L43556)
4619094536	After you upgrade PPM Center to version 8.00.01, the index on the `PM_WORK_PLANS` table is missing. (QCCR1L43674)
4618954142	After you set a task in the My Task portlet to 100% complete, the state of this task in the work plan is not correctly updated. It remains in the Ready state. (QCCR1L27984)
4619403218	After you export the result of a task searching to Excel, the data on the Resource column disappears. This problem occurs if the number of the tasks is larger than 1,000. (QCCR1L29340)
4623118720	The project Gantt-Chart portlet does not display external predecessor relationships with a dotted-line arrow when the portlet is maximized. (QCCR1L29889)

Tracking Number	Problem Description
4627039424	You receive the following error message when trying to call the Web services method `getProjectDetails` with the project ID: `"Internal error has occurred while calling PPM Web Service. Please contact PPM support with the detail information if the problem persists. (KNTA-11186) Details: java.lang.IndexOutOfBoundsException: Index: 0, Size: 0 Exception Correlation: GUID=4E351733-B109-55F7-51FA-2916CB7B51FD Generated Time=2011/03/09-12:39:09.990 GMT+01:00 Server Node Name: kintana "` (QCCR1L41145)
4628126570	You configure the My Tasks portlet to display only tasks when predecessors are more than 50% complete. However, the portlet still displays tasks without predecessors. (QCCR1L41230)
4628609574	In a work plan, after you configure the indicator columns, the indicator columns will not align correctly. (QCCR1L41355)
4630641277	Moving a project from one queue to another queue results in a significant number of `HTTP 304` requests, which causes great network latency. (QCCR1L43380)
4630653386	After you upgrade PPM Center, the phase of a project is changed to the OOTB project phase “Project,” instead of the one designated to it before the upgrade, such as “Execution.” (QCCR1L42357)
4631300379	You receive a GUID error in a work plan if you only set the From date (and leave the To date empty) when setting the “Tasks starting in” filter. (QCCR1L42649)
4632037935; 4001560979	You load a PPM Center work plan in Microsoft Project. You receive an error message when you double-click the work plan item if there is no resource entered. (QCCR1L43033)
4632778007	You are not able to save a work plan after editing resource assignment for one of the tasks. When this problem occurs, the work plan becomes non-editable. To edit the work plan, you have to refresh the page. (QCCR1L43627)
4631708118	In a project type where Financial Management is enabled, the “Calculate the actual labor costs from the work plan and time sheets” option becomes unchecked and grayed out. Therefore, you cannot enable this option again. (QCCR1L44131)
4633567751	The Schedule Performance Index (SPI) for all projects is set to 1 after you upgrade to PPM Center version 9.11. (QCCR1L43210)
4633800022	You have a task user data that uses the drop down list validation. While editing this task user data in the in-line page, you will be unable to set the user data back to blank after you select a value for it. In this case, you have to open the task to set the user data to blank. (QCCR1L44636)

Tracking Number	Problem Description
4633607572	You receive a Java script error when trying to create a work plan from a template. This issue occurs if you log in with French. (QCCR1L43664)
4634795790	After you upgrade the system to version 9.12, you receive an array index out of bounds exception when trying to view the Associated Programs field on the Project Details tab of a project. (QCCR1L44875)
4634402989; 4634711106	You have already enabled the SSO authentication for PPM Center. However, after you login, you are asked for authentication again when trying to access the Project Summary page. (QCCR1L44554)
4635216485	A RuntimeBaseException error is generated if you leave either the From field or the To field blank when using the "Task Completing in" filter or the "Task Starting in" filter to modify the work plan view. (QCCR1L44586)
4635388323	You receive the following error message when running the Project Status List report after installing Content Pack 1: `A database error occurred. The database error text is: ORA-00942: table or view does not exist (WIS 10901)` (QCCR1L44668)
4612154704	In PPM Center, you have a project that only tracks percent complete of tasks. When you synchronize the project to PPM Center from Microsoft Project after updating the task percent complete to 100%, you receive the following error message: `Some tasks are specified as 100% complete with no actual effort` This problem occurs even when the project is set to only track percent complete. (QCCR1L25570)
4617566410	Changes to the scheduled effort of a task are not saved on a quick edit when the following conditions are true: • The original value is 0 • A resource is assigned to the task (QCCR1L28092)
4619269666	In PPM Center version 8.00.01, you receive an error message after changing the integration mode for a project type from "Control is shared" to "PPM controls all shared work plan information." (QCCR1L28095)

Resource Management

Tracking Number	Problem Description
4621291457	You log into the system in a language other than English, and try to select the pool manager on the Search Resource Pools page. However, in the pop up window, labels of the First Name and Last Name fields are still in English. (QCCR1L43370)
4622278212	In the Add Position window of a staffing profile, if you click the **Add** button several times, you receive the following error message: `Your session has timed out due to inactivity. Any unsaved changes have been lost. Please refresh the Position to continue with your changes.` (QCCR1L43394)
4624363596	The staffing profile forecast does not work for year 2013 and beyond. (QCCR1L29838)
4624363596	The KDRV_WORKING_DAYS table does not contain records for year 2013 and beyond. This makes the system unable to calculate the number of working days for the any of the months starting with January 2013. (QCCR1L43375)
4627567531	You receive the following error message when trying to use the Manage Allocation functionality on the Resource Pool Overview page, for some resource pools we obtain the following error: `java.lang.ArrayIndexOutOfBoundsException:Array index out of range: 2` (QCCR1L43376)
4632374204	When you disable a resource pool with the “Reject outstanding resource requests” option, position requests in the corresponding staffing profile still show the original status instead of “Rejected.” (QCCR1L43410)
4614892601	When you use the Analyze Assignment Load portlet, the system may consume all its JVM memory, finally leading to a hang state. (QCCR1L41545
4629122610	The financial summary page does not show any financial costs for forecast labors entered in the staffing profile after you remove the baseline. (QCCR1L42670)
4631492394	You receive the following error message when trying to use a staffing profile to populate the financial summary labor totals: `Caused by: java.sql.SQLSyntaxErrorException: ORA-01722: invalid number` (QCCR1L42626)
4614099546	When a staffing profile does not have any position, the Compare to Work Plan view does not display any information. (QCCR1L43329)
4620666760	In a staffing profile, the positions do not show the Unmet Demand check box after you remove a resource from multiple staffing profiles. (QCCR1L43450)

Tracking Number	Problem Description
4623265738	In a staffing profile, if a resource name contains a single quotation mark (‘), it will be displayed as `'`. (QCCR1L42392)
4624949849	When you import org units by using the ORG Unit Open Interface report, a child org unit can pass the validation even when the parent org unit fails. (QCCR1L43384)
4629101555	When a staffing profile of a project contains multiple resources, the “Resource load breakdown detail” portlet will display incorrect actual workload for these resources. (QCCR1L41147)
4632741506	In PPM Center version 8.03, the value of actual hours on the Resources section of a request is rounded off. However, value of the total actual hours in the request is calculated accurately with decimals. This problem occurs to users who only have the View Resources access to the Resources section of a request.
4631599486; 4632345364	You export the Project Overview page to a PDF file. However, the format of the exported file is distorted. For example, the file may contain incorrect font sizes and page break issues. This problem does not occur if you use the default PDF settings when exporting the Project Overview page.

4627201052	Whenever they try to create a staffing profile by using Web Services for an existing project, the creation fails with the following error message:
	`Exception in thread "main" org.apache.axis2.AxisFault: Staffing profile start period does not equal to linked project start period`
	`at org.apache.axis2.description.OutInAxisOperationClient.send(OutInAxisOperation.java:271)`
	`at org.apache.axis2.description.OutInAxisOperationClient.execute(OutInAxisOperation.java:202)`
	`at com.mercury.itg.ws.rm.client.StaffingProfileServiceStub.createStaffingProfileHeader(StaffingProfileServiceStub.java:1289)`
	`at com.gitc.rsc.StaffingProfileServiceClient.createStaffingProfileHeader(StaffingProfileServiceClient.java:363)`
	`at com.gitc.rsc.StaffingProfileServiceClient.main(StaffingProfileServiceClient.java:161)`
	(QCCR1L41098)

4629460464	When you use staffing profile Web services to manage allocations for resources, the order of the resources will be reversed. This behavior causes mismatched between allocations and resources. (QCCR1L41625)

Tracking Number	Problem Description
4629460593	When you use Web services to assign resources to positions, the Web services operation requires that the resource pool for the position and the resource allocation must be the same. If you assign a resource from a child pool of the resource pool for the position, an error occurs. (QCCR1L41896)
4632262197	The number of unmet hours is set to a small decimal fraction instead of 0 when a position is completely fulfilled in a staffing profile. (QCCR1L42908)
NA	The unmet demand in a staffing profile is not updated correctly after you assign resources to a position. (QCCR1L43027)
4632665145	After you perform a search on staffing profiles, the returned list is not paginated correctly. For example, you set the system to return 20 results per page. However, certain page may contain only 8 results. (QCCR1L43699)
4634219706	The unmet demand for one or more positions in a staffing profile is not calculated correctly. This problem occurs when the region of a resource differs from the region of the resource pool to which the resource belongs. (QCCR1L44096)
4635952845	The Total Forecast Demand shows incorrect numbers in the Manage Forecast page when one of more of the staffing profiles are cancelled. (QCCR1L44829)
4606980090	You receive a RuntimeBaseException error upon clicking Save after you set the status of a soft-booked resource to Remove in a staffing profile. (QCCR1L16700)
4613955502	The project manager in an asset cannot access staffing profiles created by other users. (QCCR1L26253)
4615279132	On the Modify Project Type page, if you integrate a staffing profile and a financial summary via the "Financial Management" section of the "Cost and Effort" tab, the staffing profile can't be deleted. (QCCR1L26510)

Time Management

Tracking Number	Problem Description
4619914589	The Time Sheet Detail report does not show the actual approver for time sheet lines. Instead, the report shows the first possible approver. (QCCR1L43354)
4619317398	The Resource Mass Update function does not setting a pending record for the TM Evaluate Approvers service. Therefore, changes in the time/billing approvers are not applied to the corresponding time sheets. (QCCR1L43382)

Tracking Number	Problem Description
4621463172	The Add Charge Codes button does not function (cannot add charge codes from override rules) in the Work Item Details window. This problem occurs if a time sheet policy does not allow users to specify activities on their time sheets. (QCCR1L43336)
4624409749	The Time Sheet Detail report shows the default time approver and the default billing approver incorrectly. (QCCR1L43390)
4625468949	In a time sheet policy, if the period type is set to an option other than Period In Percent, the calculations of the total effort in a time sheet, for checking min/max violations, may not be accurate. (QCCR1L43345)
4630927736	You allow the Project Managers participant group to approve time sheets in the Cost & Effort policy for a project. However, the project managers cannot see the time sheets submitted against the project in the Time Approval portlet. Additional they cannot see the Approve and Reject buttons on the time sheets. (QCCR1L42993)
4631313079	When you convert a time sheet to a printable version, no data (hours) appears under 'Time Details' section where the actual hours you entered should be displayed. (QCCR1L43400)
4619317398	The “Time Sheet Details - Approval Details/Transaction History” dialog box does not show the correct time approvers and billing approvers. This is a user interface problem only. The approvers data is correct, but the visible values are not. (QCCR1L43382)
4629377505	A synchronization problem occurs between the work plan and the My Tasks portlet, which makes the finish date of a closed task stays at the original finish date in the portlet after the task is reopened, edited, and then closed again. (QCCR1L43355)

4611060621	You receive the following error message when trying to reject a time sheet:
	`JSESSIONID=6CC982E1282DDD8E67902F3A27294810.HP_PPMProductieServer,USERNAME=ARLauteslager:http-0.0.0.0-8080-Processor25:org.apache.catalina.core.ContainerBase.[jboss.web].[localhost].[/itg].[jsp]:2010/02/25-08:47:19.271 CET: Servlet.service() for servlet jsp threw exception`
	`javax.servlet.jsp.JspException: Error - tag useAttribute : no tiles context found.`
	(QCCR1L24325)

4614721483; 4617791653	You receive a `RuntimeBaseException` error when trying to rework a time sheet or remove a line from the time sheet. (QCCR1L27274)
4617893936	After you remove a time sheet line that is linked to a request from a time sheet, the request’s actual start and finish date fields become blank, and actual effort field value is reduced. (QCCR1L27330)

Tracking Number	Problem Description
4619094536	The column `RESOURCE_ID` on the table `TM_RESOURCE_QUICKLIST_ITEMS` has an unnecessary index. This index is removed in version 9.14. (QCCR1L43569)
4619094536	After you upgrade PPM Center to version 8.00.01, the index on the `TM_TIME_SHEET_LINES` table is missing. (QCCR1L43677)
4627045603	Delegates of approvers are displayed in the same way as direct approvers are displayed. In PPM Center version 9.14, the Delegated By information is appended to a delegate. (QCCR1L40520)
4628834437	You receive an error message when trying to add items from the **My Items/ Suggested Items** list to a time sheet. This problem occurs when you have a value entered in the **% complete** field. (QCCR1L41165)
4629378430	The system does not check the start date and end date of a delegate of a project manager. (QCCR1L43312)
4629733221	The .Net Web services operation searchTimeSheets does not return time sheets for previous time periods. (QCCR1L41635)
4629690626	Corrupt data is generated in the TM Work Unit and TM Time Sheet Lines tables, which causes the Clean Duplicate TM Work Units script runs in a loop. (QCCR1L43928)
4632381153	The deployment of PPM Center version 9.12 fails because there are duplicated entries on the `TIME_SHEET_USER_VIEW_SETTINGS` table. (QCCR1L42926)
4630140289	PPM Center fails with `out of memory` errors because of TM Approvers Evaluation service after performing a resource mass update. (QCCR1L43066)
4630923004	When you use Time Management Web services to rework time sheet lines, the time sheet status is not set to Unsubmitted. (QCCR1L42958)
4631353711	You receive an error message when trying to save a time sheet line that refers to a deleted request. (QCCR1L43267)
4633465367	The oracle function `KTMG_Utils.Derive_Work_Item_Set_ID` causes performance issues in Time Management. (QCCR1L43715)
4634163535	When you submit a time sheet with zero effort lines, the warning message pops up twice. (QCCR1L43746)
4633015224	PPM Center intermittently experiences an out of memory error when the Evaluate TM Approvers service is running. (QCCR1L44728)

Tracking Number	Problem Description
4636194514	An error occurs when the scheduled effort value for a resource reaches four digits. This problem occurs when the formatting options are set to German (Switzerland) on the Edit My Profile page. (QCCR1L44843)
4634708793	In the Time Sheet Details - Approval Details/Transaction History dialogue box, the Billing Approver section displays only latest delegate after you add an item to the time sheet. It displays the first delegate when there is only one. If you add a new delegate, it displays only the second one. (QCCR1L44411)
4634708793	In the Time Sheet Details - Approval Details/Transaction History dialogue box, the Billing Approver section unexpectedly displays non-direct delegates. For example, if John is the delegate of the billing approver, and Jack is the delegate of John, Jack is listed in the Billing Approver section. (QCCR1L44412)
4634965369	After you export a time sheet to an Excel file, the exported time sheet contains the following problems, • First row does not show the time period of the exported time sheet • All the hours rows do not line up with the correct task entries. The hours rows get shifted one row upward, showing hours rows against wrong tasks. (QCCR1L44475)
4614888068	After logging actuals to a task by editing the task, you cannot modify the Activity Code field. When this problem occurs, you can modify the Activity Code filed by using the Quick Edit function. (QCCR1L26715)
4610291359	You receive the following error message when running the Actual Time Summary report `ORA-00920: invalid relational operator` This problem occurs when you select more than one charge codes for the Charge Code field in the report. (QCCR1L24026)
4626887535	The Time Sheet Details report fails while running with the Resource Group filter. (QCCR1L44976)
4636791224	The My Items list displays disabled Miscellaneous items, which makes users be able to add these items to a time sheet and log time against them. (QCCR1L45044)
4636063651	You receive an error message when trying to open the Approval/Transaction Details page of a closed time sheet in PPM Center version 8.04. (QCCR1L45244)
4636063651	You receive an error message when trying to open the Approval/Transaction Details page of a closed time sheet in PPM Center version 8.04. (QCCR1L45348)

3 Known Problems and Limitations in PPM Center 9.14

The following problems and limitations are known to exist in PPM Center version 9.14 (or other software, as indicated). The problems are categorized by the affected product area. If a problem has an assigned internal tracking number, that tracking number is provided (in parentheses) at the end of the problem description.

Integrations - Quality Center (ALM)

LIMITATION	One request type cannot be mapped to both defect and requirement. If it is already mapped to defect, then it should always be defect. (QCCR1L43753)
WORKAROUND	None.
LIMITATION	Synchronization fails due to loss of workflow status when PPM workflow settings are not standard, for example: • For PPM-driven synchronization, a PPM workflow step status name is different from its counterpart in QC, or, • For QC-driven synchronization, a PPM transaction name is different from status name. Note that closing a QC defect/requirement can close the related PPM request though. (QCCR1L43278)
WORKAROUND	If you have upgraded the integration configuration to PPM Center 9.14 and ALM 11, and expect QC status change to drive PPM request status, you need to manually modify the PPM workflow by referring to the TRAN_RULES table from QC project schema database. For more information, see *Preparation: Workflow Checking* on page 65.

PROBLEM	When the control mode of the integration is set to QC, even if you do not map any fields on the integration configuration page, you can still click **Save** or **Save & Deploy**. (QCCR1L45922)
WORKAROUND	None.
PROBLEM	For a **`Number`** type field mapping, when the field value is 1000 or larger, commas are inserted automatically between every third digit, thus the PPM value could not be properly synchronized to QC. (QCCR1L45950)
WORKAROUND	None.
LIMITATION	Unlike the PPM Center integration with QC 10, the PPM Center 9.14 integration with ALM 11 does not display similar text confirmation messages (apart from that for successful creation of a defect in QC). (QCCR1L45958)
WORKAROUND	On the QC Integration Summary page (accessible by clicking **Open > Administration > Integration > Quality Center** in PPM Center), click **View Log** for the concerned integration configuration entry to view detailed event log.
LIMITATION	In the **Map Values** window (as shown in step 17 on page 73), if the length of an item is longer than 50 characters, you would find it difficult to view the entire value as no scroll bars are provided. In addition, the long value could also push available action buttons out. (QCCR1L45374)
WORKAROUND	Though you could try to use Tab key to move from field to field, but it is highly recommended to limit the length of all values to 50 characters.
LIMITATION	Due to design change of the products, upgrade from QC 10 to ALM 11 currently relies on the interval setting of the QC Integration Sync Service in PPM Center. When this service starts to run, it retrieves updates from QC by calling QC REST web service, then synchronizes the updates to PPM. As a result, the updates in PPM requests is not finished instantly and a minor delay is expected.
WORKAROUND	In PPM Center, the QC Integration Sync Service interval setting is set to 5 mins by default. A value below the default value might add performance loads on background service node. HP highly recommends you adjust it to your system tolerance level.

HP Demand Management

LIMITATION	An error occurs when performing Quick Edit or Mass Update on requests of non-PFM-Proposal request types that use PFM - Finish Period by Month validation. This is because the PFM - Finish Period by Month validation requires a field with token KNTA_PLAN_START_DATE for the SQL to be executed, while for most of non-PFM-Proposal request types, there is no such field. (QCCR1L43340)
WORKAROUND	Do not use PFM - Finish Period by Month validation for non-PFM-Proposal request types.
LIMITATION	If you have included too many items in the **Request Type** field or the **Selected Columns** list on the **Search Requests** page, an error might occur when you try to save your search preferences. (QCCR1L39090)
WORKAROUND	Do not include too many items in the **Request Types** field or the **Selected Columns** list on the **Search Requests** page. For better performance, HP recommends that you limit the total size of the **Request Types** field and the **Selected Columns** list to 4000 characters (including separators).

HP Project Management

LIMITATION	When you click **Save** on the Project Details tab of the Project Overview page, you receive the following error message: `An Error has Occured. The parameter (portletNoPreview) is invalid or missing.` (QCCR1L42882)
WORKAROUND	None.

Operational Reporting

LIMITATION	You receive an `ant not found` error when running the `upgradeBIARs.sh` script in SAP BusinessObjects Enterprise (BOE). This problem only occurs when BOE is installed on AIX platforms. (QCCR44348)
WORKAROUND	Run the `dos2unix` command to change the file format from DOS to UNIX, and then run the `upgradeBIARs.sh` script again.
LIMITATION	The `upgradeBIARs.sh` script fails in SUSE platforms when the following conditions are true: • There is a space in the first line of the ant and antRun files. (#! /bin/sh) • The `JAVA_HOME` environment variable is not set. (QCCR44198)
WORKAROUND	Run the `dos2unix` command to change the file format from DOS to UNIX, and then run the `upgradeBIARs.sh` script again.
LIMITATION	You receive the `Web Intelligence Processing Server is busy` or the `Connection failed` error messages when performing common operations on reports, such as opening a report, or clicking a link in a report. This problem only occurs on HP Unix platforms. (QCCR43917)
WORKAROUND	To work around this problem, restart the Web Intelligence Processing Server.

PROBLEM	PPM Center 9.12 users may have no access to attachments in clustered environment if using File System as the document management solution. When having a secondary machine in a cluster, the `dms.conf` file has non-shared directory for attachments, and the cluster setup in the `dms.conf` file is not updated on the secondary machine when running `kUpdateHtml.sh` file. (QCCR1L44782)
WORKAROUND	Manually update the DMS configuration on machines with attachment access problem to ensure that the configuration for all machines in the same cluster are consistent. Starting from PPM Center version 9.13, administrators can edit the DMS configuration directly from the Administrator Console. For details, see *Editing DMS configuration from the Administrator Console* on page 147. For PPM Center version 9.12 or earlier versions, administrators need to manually update the cluster setup in the `dms.conf` file. To do so, 1. Stop the PPM Server that users encounter attachment access issue. 2. Locate the `dms.conf` file in the `<PPM_Home>/conf` directory. 3. Modify the configuration as follows: dms.filesys.attachmentDir=<*Directory path for attachments*> (for example, *N\:\\PPM\\jboss\\attachments*) dms.driverName=com.kintana.dms.filesys.DMSFileSystemDriver 4. Restart the PPM Server. 5. Repeat the process for other machines with attachment access issue (if there are) in the cluster.

4 Documentation Errata

The following items are corrections for the version 9.10 documentation.

CUSTOM_SERVER_INFO Server Parameter

LOCATION	*Customizing the Standard Interface,* 9.10
ERROR	The CUSTOM_SERVER_INFO server parameter is not documented.
CORRECTION	The following information about the parameter shall be added to the *Customizing the Standard Interface* manual: **Parameter Name:** CUSTOM_SERVER_INFO **Description, Usage:** Enables customization of the text displayed in the PPM Workbench title bar. **Default and Valid Values:** Default: N/A Valid value: Text string

Validation Name Changed to “PPM - Department - Enabled”

LOCATION	*HP Resource Management User’s Guide,* page 14
ERROR	The validation name “KNTA - Department - Enabled” mentioned on page 14 was already renamed to “PPM - Department - Enabled” since PPM Center version 7.5, but the guide was not updated accordingly.
CORRECTION	The correct validation name shall be “PPM - Department - Enabled”.

Incorrect Descriptions of the "Sys Admin: Server Administrator" and "Sys Admin: Server Tools: Execute Admin Tools" Access Grants

LOCATION	*Security Model Guide and Reference*, page 163
ERROR	The descriptions of the "Sys Admin: Server Administrator" and "Sys Admin: Server Tools: Execute Admin Tools" access grants contain incorrect information.
CORRECTION	The correct description of "Sys Admin: Server Administrator" is as follows: Log on to the application when the server is started in restricted mode. The correct description of "Sys Admin: Server Tools: Execute Admin Tools" is as follows: Stop the PPM Server by using kStop.sh when you enable authentication with the REMOTE_ADMIN_REQUIRE_AUTH server.conf parameter set to true, send messages through kWall.sh, execute administration reports in the Admin Tools window, and view the SQL Runner window in the Server Tools Workbench.

Microsoft Internet Explorer 7.0/8.0 and Java Plug-Ins: 32-Bit Only

LOCATION	*System Requirements and Compatibility Matrix,* 9.1x *Overview of Platform Support*, 9.1x
ERROR	The two documents are not clear that only 32-bit Microsoft Internet Explorer 7.0/8.0 and Java Plug-ins are supported.
CORRECTION	The correct information should be as follows: Browsers: • Microsoft Internet Explorer 7.0 (32-bit) • Microsoft Internet Explorer 8.0 (32-bit) Java Plug-In: • Java Plug-In 1.6.0_07 (6.0 update 7) or later (32-bit only) for all supported browsers except Mozilla Firefox 3.6 • Java Plug-In 1.6.0_19 (6.0 update 19) or later (32-bit only) for Mozilla Firefox 3.6

KNTA_PERIODS Table Still Referenced in Data Model Guide

LOCATION	*Data Model Guide* 9.13, pages 29, 814, 998
ERROR	According to *What's New and What's Changed* 8.00, the KNTA_PERIODS table was deleted and replaced by PPM_FISCAL_PERIODS table, but the *Data Model Guide* still references the deleted table.
CORRECTION	Replace occurrences of KNTA_PERIODS with PPM_FISCAL_PERIODS, and PERIOD_ID with FISCAL_PERIOD_ID.

Incorrect Description of Server Configuration Parameter LOCAL_IP

LOCATION	*Installation and Administration Guide,* 9.10, page 430
ERROR	Description and usage of the server configuration parameter `LOCAL_IP` in the guide is out of date.
CORRECTION	The correct description and usage should be as follows: Used to construct the servlet URL for use by PPM Server when the PPM Server internally invokes one of its own servlets. An example of this is when a report is executed. Ordinarily, this parameter should not need to be specified. Default and valid values: Defaults to the IP address extracted from the server configuration parameter `RMI_URL` Example `10.1.101.64`

Incorrect Value Suggested for JAVA_HOME Variable

LOCATION	*Operational Reporting Administrator's Guide*, 9.12 Content Pack 1, page 30
ERROR	The document incorrectly suggests to set the JAVA_HOME variable in the system environment of the user account to **<*BO_Home*>\bobje\jdk** on the BusinessObjects server.
CORRECTION	Set the JAVA_HOME variable to **<*BO_Home*>/javasdk**.

Insufficient Information on Timesheet Detail Report

LOCATION	*Reports Guide and Reference*, the *Time Sheet Details Report section*.
ERROR	This section does not explicitly address who can view the information in the Timesheet Detail report.
CORRECTION	The following note will be added to the Time Sheet Details Report section of the Reports Guide and Reference: Only the following users can view the detailed work item information in the Timesheet Detail report: • The resource of the time sheet. • The resource's direct manager. • The time sheet line approver. • The time sheet billing approver. • The delegate of one of the users above. The delegate of the delegate or the manager's manager cannot view the detailed work item information in the report.

Configuring PPM Center with a Load Balancer

If you have a load balancer that receives https requests and connects to nodes through http requests, then, to enable the nodes to correctly perform redirects, you must edit the `server.xsl` file.

To edit the `server.xsl` file:

1. Open the `server.xsl` file, which is located in the `<PPM_Home>/conf/jboss` directory.
2. Edit the file content as follows:

```
<Connector
    enableLookups="true"
    acceptCount="10" debug="0" scheme="https" secure="true" clientAuth="false">
  <xsl:attribute name="scheme">https</xsl:attribute>
  <xsl:attribute name="proxyName">proxyname.domain.com
  </xsl:attribute>
  <!-- assuming users connect to the proxy over port 443 -->
  <xsl:attribute name="proxyPort">443</xsl:attribute>
    <xsl:attribute name="sslProtocol">
       <xsl:choose>
           <xsl:when test="$https_protocol != $empty_string"><xsl:value-of select="$https_protocol"/></xsl:when>
           <xsl:otherwise>TLS</xsl:otherwise>
       </xsl:choose>
    </xsl:attribute>
    <xsl:if test="$https_ciphers != $empty_string">
       <xsl:attribute name="ciphers"><xsl:value-of select="$https_ciphers"/></xsl:attribute>
    </xsl:if>
    <xsl:attribute name="address">${jboss.bind.address}</xsl:attribute>
    <xsl:attribute name="port"><xsl:value-of select="/conf/property[@name='HTTPS_PORT']"/></xsl:attribute>
    <xsl:attribute name="minSpareThreads"><xsl:value-of select="/conf/property[@name='HTTPS_WEB_THREAD_MIN']"/></xsl:attribute>
    <xsl:attribute name="maxSpareThreads"><xsl:value-of select="/conf/property[@name='HTTPS_WEB_THREAD_MIN']"/></xsl:attribute>
    <xsl:attribute name="maxThreads"><xsl:value-of select="/conf/property[@name='HTTPS_WEB_THREAD_MAX']"/></xsl:attribute>
    <xsl:attribute name="keystoreFile"><xsl:value-of select="/conf/property[@name='HTTPS_KEYSTORE_LOCATION']"/></xsl:attribute>
    <xsl:attribute name="keystorePass"><xsl:value-of select="/conf/property[@name='HTTPS_KEYPASSWORD']"/></xsl:attribute>
</Connector>
```

One of the attributes is named “scheme,” and not “proxyScheme.” The JBoss Connector listens for https or http based on the secure attribute. If you leave the secure attribute untouched, this configuration works well.

Keep in mind that this scenario assumes that PPM Server nodes receive no direct requests. All requests must come through the load balancer.

Monitoring Activity in PPM Center

This section contains information about configurable monitors that capture information on user interface activity, portlets, and background services in PPM Center. These monitors capture UI activities (mainly URL requests), background service runs, and portlet activity on the PPM Server.

Action Monitor

The PPM Center action monitor tracks activity in the standard interface. To control the monitor, you use the `ENABLE_UI_MONITOR` and `UI_MONITOR_THRESHOLD` server configuration parameters. The `ENABLE_UI_MONITOR` parameter turns the monitor on (the default), and the `UI_MONITOR_THRESHOLD` parameter controls the threshold value of the action monitor, which is set in milliseconds.

Changing the Action Monitor Parameters Using the Administration Console

You can change the values of `ENABLE_UI_MONITOR` and `UI_MONITOR_THRESHOLD` parameters using the `kConfig.sh` script or, you can change them through the Administration Console without having to stop, and then start the PPM Server. You can also change these parameters settings through the `server.conf` file.

To enable or disable the UI monitor through the Administration Console,

1. Log on to PPM Center. From the menu bar, select **Open > Administration > Open Administration Console**.
2. Under the Administration Console node, select **Administration Task > Application configuration**.
3. On the Application Configuration page, select the desired PPM Server node from the **Scope** drop-down list, and search for parameter `ENABLE_UI_MONITOR`.
4. Set `ENABLE_UI_MONITOR` parameter to **`true`** or **`false`** to enable or disable the UI monitor.

To change the UI_MONITOR_THRESHOLD parameter value,

1. Log on to PPM Center. From the menu bar, select **Open > Administration > Open Administration Console**.
2. Navigate to the Application Configuration page, select the desired PPM Server node from the **Scope** drop-down list, and search for parameter UI_MONITOR_THRESHOLD.
3. Specify a value for the UI_MONITOR_THRESHOLD parameter.

Viewing the Action Monitor Information in Real Time

To see the information captured by the action monitor in real time, go to the JMX console and access the ActionMonitor MBean in the **ppm.monitor** section. The ten UI activities (URL requests) that most affect performance are listed, as well as their average, minimum, and maximum execution times.

Action Monitor Information Log

If the latency for serving the URL request exceeds the threshold value, the captured information is saved to the thresholdLog.txt file, which resides in the <*PPM_Home*>/server/<*PPM_Server_Name*>/logs directory.

The information is formatted as follows:

```
["UI",<User_Name>,"<Requested_URL>","<Execution_Time>(ms)"]
```

The information resembles the following:

```
ActionMonitorLogger:2009/01/11-23:26:-6.179 PST:
"UI",admin,"http://37.30.24.33:8080/itg/web/knta/global/
AutoCompPopup.jsp","78(ms)" ;
```

You can also use the 'UI_MONITOR_PERSIST_STATE' parameter in the Administration Console page to enable or disable persisting the captured information to the database table PPM_PERFORMANCE_LOG.

For information on how to create a report on action monitor activity, see *Deployment Best Practices Guide*.

Portlet Monitor

The PPM Center portlet monitor tracks the load time of portlets. You can use the information it generates to determine the impact of portlet activity on system performance. To control the portlet monitor, you use the ENABLE_PORTLET_MONITOR and PORTLET_MONITOR_THRESHOLD server configuration parameters. The ENABLE_PORTLET_MONITOR parameter turns the monitor on (the default), and the PORTLET_MONITOR_THRESHOLD parameter controls the monitor threshold value, which is set in milliseconds.

Changing the Portlet Monitor Parameters from the JMX Console

You can change the values of the ENABLE_PORTLET_MONITOR and PORTLET_MONITOR_THRESHOLD parameters using the kConfig.sh script, or you can change them from the Administration Console without having to stop and then restart the PPM Server. You can also change these parameters settings through the server.conf file.

To enable or disable the portlet monitor through the Administration Console,

1. Log on to PPM Center. From the menu bar, select **Open > Administration > Open Administration Console**.
2. Navigate to the Application Configuration page, select the desired PPM Server node from the **Scope** drop-down list, and search for parameter ENABLE_PORTLET_MONITOR.
3. Set ENABLE_PORTLET_MONITOR parameter to **true** or **false** to enable or disable the portlet monitor.

To change the PORTLET_MONITOR_THRESHOLD parameter value,

1. Log on to PPM Center. From the menu bar, select **Open > Administration > Open Administration Console**.
2. Navigate to the Application Configuration page, select the desired PPM Server node from the **Scope** drop-down list, and search for parameter PORTLET_MONITOR_THRESHOLD.
3. Specify a value for the PORTLET_MONITOR_THRESHOLD parameter.

You can also use the PORTLET_MONITOR_PERSIST_STATE parameter in the Administration Console page to enable or disable persisting the captured information to the log file.

Portlet Monitor Information Log

If the amount of time required to load the portlet exceeds the threshold value, the captured information is saved to the thresholdLog.txt file, which resides in the <*PPM_Home*>/server/<*PPM_Server_Name*>/logs directory.

For information about how to improve portlet performance, see the *Deployment Best Practices Guide*.

5 Enhancements and Fixes in PPM Center 9.13

This section includes information about the enhancements and fixes in PPM Center version 9.13.

Enhancements

The following enhancements are included in PPM Center version 9.13:

- *PPM Center Document Management Solution Enhancements*
- *Microsoft Project Plug-in Usability Enhancements*

PPM Center Document Management Solution Enhancements

With PPM Center version 9.13, some new features and enhancements are implemented for the PPM Center document management solution to provide more powerful document management functionalities as well as a new document management system.

This section includes the following:

- *Document management solution enhancements*
  - *Editing DMS configuration directly from the Administrator Console*
  - *Editable maximum attachments size*
  - *Editable file name truncation length*
  - *New PPM Center attachments links on-click behavior*

- *KConfig update*
- *PPM Center Database DMS*
- *Searching historical versions*

- *PPM Center Database DMS concepts for database administrators*
- *Configuring Full Text Search in PPM Center Database DMS*
- *Editing DMS configuration from the Administrator Console*
- *Performing DMS Migration from the Administrator Console*

Table 5-1 describes new server parameters that were introduced to implement these enhancements:

Table 5-1. New server parameters introduced (page 1 of 2)

Parameter name	Description, Usage	Default and Valid Values
DMS_DB_ENABLE_FULLTEXT_SEARCH	Setting this value to `true` enables the database fulltext search feature. Note that the administrator shall create and build database indexes in advance. For details, see *Configuring Full Text Search in PPM Center Database DMS* on page 143.	Default: `false` Valid values: `true, false`
DMS_FILENAME_DISPLAY_LENGTH	Specifies filename display length. See *Editable file name truncation length* on page 138	Default: `30` Valid values: `integer`
DMS_MIGRATION_DELAY_BETWEEN_DOCUMENT	Specifies delay (in seconds) between each document migration. Set to `0` by default, but can be increased to lighten the load of migration process on PPM Server. See *Configure migration delay between documents* on page 152.	Default: `0` Valid values: `integer`

Table 5-1. New server parameters introduced (page 2 of 2)

Parameter name	Description, Usage	Default and Valid Values
DMS_MIGRATION_DOCUMENTS_BATCH_SIZE	Specifies number of documents that will be queued for migration every time the DMS Migration Engine Service is invoked. See *Configure migration document batch size* on page 152.	Default: `1000` Valid values: integer
DMS_MIGRATION_THREAD_COUNT	Specifies number of threads that will be migrating documents in parallel. See *Configure migration thread count* on page 151.	Default: `3` Valid values: integer
MAX_WEB_ATTACHMENT_SIZE_IN_MB	Specifies maximum attachment size (in MB) for files uploaded using PPM Center web interface. Attachments size is capped at 2 GB. See *Configure migration document batch size* on page 152.	Default: `2048` Valid values: integer

Document management solution enhancements

The following enhancements were implemented:

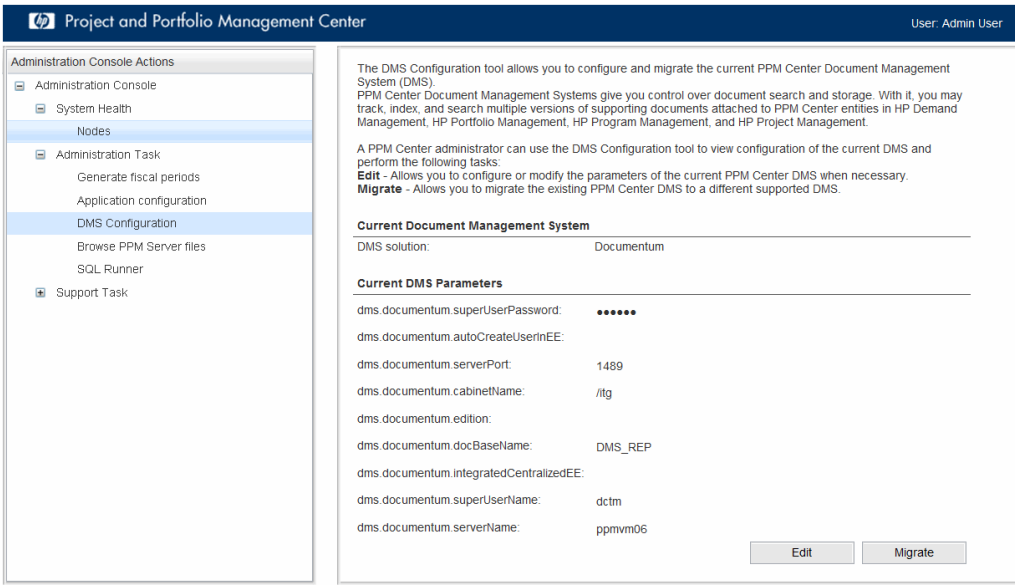
- *Editing DMS configuration directly from the Administrator Console*
- *Editable maximum attachments size*
- *Editable file name truncation length*
- *New PPM Center attachments links on-click behavior*
- *KConfig update*
- *PPM Center Database DMS*
- *Searching historical versions*

Editing DMS configuration directly from the Administrator Console

Before 9.13, in order to modify the DMS configuration (storing Documentum parameters or File System attachments folder path), one had to edit the `dms.conf` file on all PPM Servers and restart the servers.

This is not the case anymore. Starting from PPM Center version 9.13, you can view and edit the DMS parameters directly from the Administrator Console, simply by clicking **Edit** on the DMS Configuration page. For details, see *Editing DMS configuration from the Administrator Console* on page 147.

.



The configuration is centralized. That is to say, you change it once in the Administrator Console and all PPM nodes are impacted when using clustered configuration. Moreover, no PPM Server restart is required for changes to take effect—the DMS Driver will be reloaded on all PPM nodes with the new configuration when you save the updated parameters.

Note that new parameters will be validated first, and the new configuration will be saved and take effect only when the validation is successful.

The `dms.conf` file still remains in PPM Server for archive reasons. It is read and saved to the database the first time your PPM Server starts after you have upgraded it to 9.13. After that, it is not read anymore. So changing the contents

of the file has no effect. You need to go to the Administrator Console to modify DMS configuration.

If, for any reason, you wish to view the DMS parameters without going to the Administrator Console, for example, if the PPM Server cannot start, you can find them in the database table PPM_INT_CONFIGURATIONS, in the CLOB column `CONFIGURATION` of the row with SOLUTION_ID value `1200`. However, you should never edit this value in database manually. The only supported way of updating DMS configuration is to do so in the Administrator Console.

Editing values of DMS parameters in database manually may introduce file syntax errors, which may in turn result in failure of all DMS features as well as exceptions. Moreover, if you change the DMS driver class without going through the migration process, you might lose all your documents.

In addition to centralized configuration of DMS parameters, the DMS Configuration page also allows you to switch your DMS "type" (PPM Center File System, Documentum, PPM Center Database DMS). However, you can not simply change the type, you need to migrate your current DMS to a different supported DMS. To do so, you need to click the **Migrate** button, and follow the migration steps as described in the *Performing DMS Migration from the Administrator Console* section.

Editable maximum attachments size

You can now change the maximum size of attachments directly from the Administrator Console.

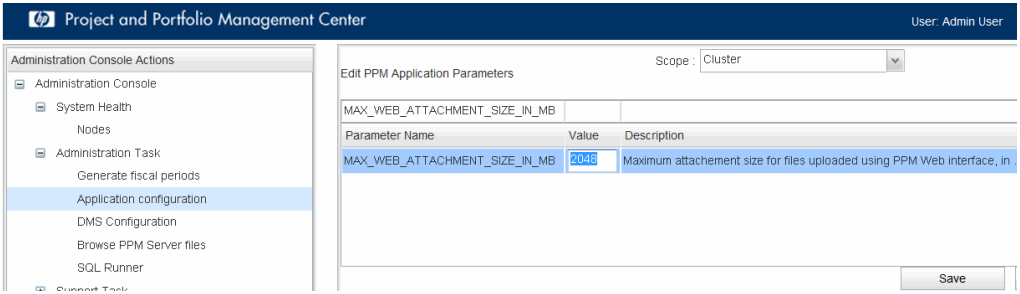
In the Application Configuration screen, update the parameter `MAX_WEB_ATTACHMENT_SIZE_IN_MB` then save. You don't need to restart PPM Server for change to take effect.

To configure the maximum size of attachments,

1. Log on to PPM Center as an administrator.
2. From the menu bar, select **Open > Administration > Open Administration Console.**
3. In the left panel of the Administration Console window, expand the **Administration Task** section, and then click **Application Configuration**.

4. Locate the `MAX_WEB_ATTACHMENT_SIZE_IN_MB` parameter and modify its value. The default value is `2048` (2 GB), which is also the maximum valid value.

.



Any value lower or equal to zero or higher than this limit will result in the maximum valid value being used.

Note that this limit is not constrained any more by the available server heap memory. Moreover, it is safe to set a maximum attachment size larger than configured Java Heap Memory, as PPM Center never stores the whole attachments in memory.

5. Click **Save**.

   The server parameter change takes effect. (No need to restart the PPM Server.)

Configuring server parameters for DMS directly from the Administrator Console is preferred, as it does not require PPM Server restart for the changes to take effect.

Editable file name truncation length

Before PPM Center version 9.13, by default only the first 15 characters of attachment files names are displayed in the References section. Now with PPM Center version 9.13, you can control the file name length displayed by configuring the newly introduced server parameter `DMS_FILENAME_DISPLAY_LENGTH` directly from the Administrator Console.

To configure file name truncation length,

1. In the left panel of the Administration Console window, expand the **Administration Task** section, and then click **Application Configuration**.

2. Locate the `DMS_FILENAME_DISPLAY_LENGTH` parameter and modify its value. The default value is `30`.
3. Click **Save**.

New PPM Center attachments links on-click behavior

Before PPM Center 9.13, clicking on an attachment link in PPM Center Web interface would results in an attempt to "view" the document in the browser, be it a text file, a Microsoft Office document, an HTML file, and so on.

Starting with PPM Center 9.13, a click on a PPM Center attachment link results in the default browser action of clicking internet links. This is usually a "Save/Open" prompt to the user, and clicking **Open** opens the document in whatever default application configured for this file type.

KConfig update

Starting from PPM Center 9.13, for new PPM Center installations, HP is not providing the HP version of Documentum (bundled with PPM Center) anymore as a DMS solution option. Instead, HP recommends the new solution—PPM Center Database DMS.

However, integration of PPM Center with a stand-alone EMC Documentum as a DMS solution is still supported through the Documentum connector, and HP continues to support customers with existing HP version of Documentum installations.

As a result of this change, a few modifications were implemented to kConfig:

- When using kConfig to migrate a PPM Server from PPM Center File System to Documentum, the HP version of Documentum option is not available anymore.
- The migration to stand-alone EMC Documentum is supported only when the current DMS solution is PPM Center File System.

PPM Center Database DMS

The PPM Center Database DMS is introduced as a new document management system (DMS) for PPM Center customers to store and manage their documents.

Requiring no additional software or hardware products, the PPM Center Database DMS stores documents in PPM Center database, but provides documents check-in/out and versioning functionalities out-of-the-box. Full Text Search can also be enabled by creating the required Oracle TEXT indexes and updating a PPM Server parameter from the Administrator Console. For details, see *Configuring Full Text Search in PPM Center Database DMS* on page 143.

The PPM Center Database DMS is shipped with PPM Center version 9.13. No additional deployment or configuration is required, and it involves no extra license cost, even when enabling the Full Text Search feature.

There is no difference to a PPM user between a PPM Server using Documentum (either HP version or stand-alone version) and a PPM Server using PPM Center Database DMS. The only small discrepancy lies in the full text search, where the advanced search operators are slightly different, and PPM Center Database DMS proposes an option to search only in the tip documents, or in both the tip version documents and the history.

Therefore, customers who are managing their PPM Center documents using other solutions, EMC Documentum or the PPM Center file system, can easily migrate their current DMS to the new PPM Center Database DMS. For more information, see *Performing DMS Migration from the Administrator Console*.

For database administrators (DBAs) to understand the features and limitations of the new PPM Center Database DMS solution, see *PPM Center Database DMS concepts for database administrators* on page 141.

Searching historical versions

A new option, Search Historical Versions, is available on the Search <*Entities*> page when the new *PPM Center Database DMS* is used as the current DMS and the *Full Text Search feature* is enabled.

PPM Center Database DMS concepts for database administrators

This section provides information that help database administrators (DBAs) to understand the features and limitations of the new PPM Center Database DMS solution introduced in PPM Center version 9.13, including:

- *PPM Center Database DMS data tables*
- *Documents contents tablespace*
- *Full Text Search feature*

PPM Center Database DMS data tables

There are some database schema updates in relation with PPM Center Database DMS.

Documents information displayed in References section is stored in the KNTA_DOCUMENTS table, just like for PPM Center File System or Documentum DMS. However, three columns are added to the table and are only used during documents migration: MIGRATION_STATUS, LAST_ FLAGGED_TIME, and ENGINE_UUID.

In addition, three new data tables are created:

- KNTA_DOCUMENT_VERSIONS: Stores the document version metadata (version comment, version check in user and date, file size and extension).
- KNTA_DOCUMENT_TIP_CONTENTS: Stores a copy of the document metadata from the KNTA_DOCUMENTS table (document name, description, author, and so on) as well as the binary contents of the latest version of the document in BLOB column DOC_CONTENTS.
- KNTA_DOCUMENT_HISTORY_CONTENTS: Stores a copy of the metadata from KNTA_DOCUMENT_VERSIONS, as well as the binary contents of each non-tip versions of documents in DOC_CONTENTS.

Every time a new version of a document is checked in, the row related to this document is copied from the KNTA_DOCUMENT_TIP_CONTENTS table to the KNTA_DOCUMENT_HISTORY_CONTENTS table, and the document contents of the new version are updated in the DOC_CONTENTS column of the KNTA_DOCUMENT_TIP_CONTENTS table.

For details about these tables, see the *Data Model Guide*.

Documents contents tablespace

All binary documents contents are saved in the two DOC_CONTENTS columns (BLOB) of the KNTA_DOCUMENT_TIP_CONTENTS table and the KNTA_DOCUMENT_HISTORY_CONTENTS table.

These columns are using the PPM default CLOB tablespace upon creation. However, considering that the amount of data stored in attachments can be very large (up to tens of GB), you might prefer to store these attachments in a separate dedicated tablespace, possibly compressed in order to save disk space.

Though this is supported, HP recommends you to change the tablespace of these columns before performing the migration, so that all documents can directly use the newly configured tablespace.

You can use compressed tablespaces. This could significantly reduce the space needed on the disk of PPM Center database.

Full Text Search feature

By default, the Full Text Search feature is not enabled with PPM Center Database DMS.

In order to enable Full Text Search, DBAs must first create the TEXT indexes on documents contents and metadata, and modify a server parameter (from admin console). For detailed instructions, see *Configuring Full Text Search in PPM Center Database DMS*. PPM Server restart is not required.

Why not enable Full text search by default?

The PPM Center Database DMS relies on Oracle TEXT technology to perform Full Text Search. There are multiple ways to configure the Oracle TEXT indexes, and DBAs shall choose which configuration suits their users' preferences best, especially in how often the indexes will be updated.

Moreover, HP recommends DBAs to create the indexes after you have completed migrating your documents, so that the indexes can be created in one run, having no impact on migration performance. As indexes creation is a database-intensive operation, it is also better to let DBAs to decide when this operation should occur in order to minimize the impact on PPM Center users.

Readers are assumed to be knowledgeable about Oracle TEXT. If that is not the case, HP strongly encourage you to read the *Oracle TEXT Application Developer's Guide* (http://download.oracle.com/docs/cd/B28359_01/text.111/b28303.pdf) or to consult Oracle online documentation related to Oracle TEXT.

Configuring Full Text Search in PPM Center Database DMS

To enable full text search in the PPM Center Database DMS,

1. Connect to PPM Center database as SYS DBA, and grant `CREATE JOB` and `CTXAPP` privileges to PPM Center users by executing the following SQL script:

```
/*
This script is to be run by SYSDBA after upgrading PPM to
9.13+ if planning to use KEY WORDS SEARCH feature.
*/
SET SERVEROUTPUT ON
WHENEVER SQLERROR EXIT FAILURE ROLLBACK
DEFINE PPM_SCHEMA = &1
BEGIN
  -- granting access grants to PPM USER
  EXECUTE IMMEDIATE 'GRANT CREATE JOB TO ' || '&PPM_SCHEMA';
  EXECUTE IMMEDIATE 'GRANT CTXAPP TO ' || '&PPM_SCHEMA';
END;
/
```

All SQL scripts provided here are packaged into the Service Pack file `ppm-913-SP3.jar`. After installation of the service pack file, the SQL scripts shall be present in <*PPM_Home*>`/utilities/database_dms/DatabaseDMS_FullTextSearch_Scripts.zip`.

2. Connect PPM Center database with PPM USER (`&PPM_SCHEMA`), and then create full text search indexes by executing the following SQL script:

```
BEGIN
    -- clearing preferences
    BEGIN
            ctx_ddl.drop_preference('PPM_DMS_LEXER');
    EXCEPTION
        WHEN OTHERS THEN
            NULL;
    END;
    BEGIN
            ctx_ddl.drop_preference('PPM_DMS_TIP_DS');
    EXCEPTION
        WHEN OTHERS THEN
```

```
            NULL;
    END;
    BEGIN
            ctx_ddl.drop_preference('PPM_DMS_HIS_DS');
    EXCEPTION
        WHEN OTHERS THEN
            NULL;
    END;
    -- creating preferences and attributes
ctx_ddl.create_preference('PPM_DMS_LEXER', 'WORLD_LEXER');
    ctx_ddl.create_preference('PPM_DMS_TIP_DS', 'MULTI_
COLUMN_DATASTORE');
    ctx_ddl.set_attribute('PPM_DMS_TIP_DS', 'COLUMNS',
'DESCRIPTION, AUTHOR, KEYWORDS, FULL_NAME, VERSION_
COMMENT');
   ctx_ddl.set_attribute('PPM_DMS_TIP_DS', 'FILTER', 'N, N,
N, N, N');
    ctx_ddl.create_preference('PPM_DMS_HIS_DS', 'MULTI_
COLUMN_DATASTORE');
    ctx_ddl.set_attribute('PPM_DMS_HIS_DS', 'COLUMNS', '
EXTENSION, VERSION_COMMENT');
    ctx_ddl.set_attribute('PPM_DMS_HIS_DS', 'FILTER', 'N,
N');
          -- Dropping indexes
       BEGIN
           EXECUTE IMMEDIATE 'DROP INDEX DMS_TIP_META_IDX';
    EXCEPTION
        WHEN OTHERS THEN
            NULL;
    END;
       BEGIN
           EXECUTE IMMEDIATE 'DROP INDEX DMS_HIS_META_IDX';
    EXCEPTION
        WHEN OTHERS THEN
            NULL;
    END;
    BEGIN
            EXECUTE IMMEDIATE 'DROP INDEX DMS_TIP_DOC_IDX';
EXCEPTION
WHEN OTHERS THEN
            NULL;
    END;

    BEGIN
            EXECUTE IMMEDIATE 'DROP INDEX DMS_HIS_DOC_IDX';
    EXCEPTION
        WHEN OTHERS THEN
            NULL;
    -- indexes: you can edit the index update frequency
parameter ("sysdate+1/144"),
    -- change it to your own suitable duration for index
update. Default is every 10 minutes (1/144 day)
```

```
    EXECUTE IMMEDIATE 'CREATE INDEX DMS_TIP_META_IDX ON KNTA_
DOCUMENT_TIP_CONTENTS (FULL_TEXT_META) INDEXTYPE IS
CTXSYS.CONTEXT parameters (''LEXER PPM_DMS_LEXER DATASTORE
PPM_DMS_TIP_DS SYNC (every sysdate+1/144)'')';
    EXECUTE IMMEDIATE 'CREATE INDEX DMS_HIS_META_IDX ON KNTA_
DOCUMENT_HISTORY_CONTENTS (FULL_TEXT_META) INDEXTYPE IS
CTXSYS.CONTEXT parameters (''LEXER PPM_DMS_LEXER DATASTORE
PPM_DMS_HIS_DS SYNC (every sysdate+1/144)'')';
    EXECUTE IMMEDIATE 'CREATE INDEX DMS_TIP_DOC_IDX ON KNTA_
DOCUMENT_TIP_CONTENTS (DOC_CONTENT) INDEXTYPE IS
CTXSYS.CONTEXT parameters (''LEXER PPM_DMS_LEXER DATASTORE
CTXSYS.DEFAULT_DATASTORE FILTER CTXSYS.AUTO_FILTER SYNC
(every sysdate+1/144)'')';
    EXECUTE IMMEDIATE 'CREATE INDEX DMS_HIS_DOC_IDX ON KNTA_
DOCUMENT_HISTORY_CONTENTS (DOC_CONTENT) INDEXTYPE IS
CTXSYS.CONTEXT parameters (''LEXER PPM_DMS_LEXER DATASTORE
CTXSYS.DEFAULT_DATASTORE FILTER CTXSYS.AUTO_FILTER SYNC
(every sysdate+1/144)'')';
END;
/
```

3. Wait for the indexes to be created. This can take a very long time if you have a large number of documents.

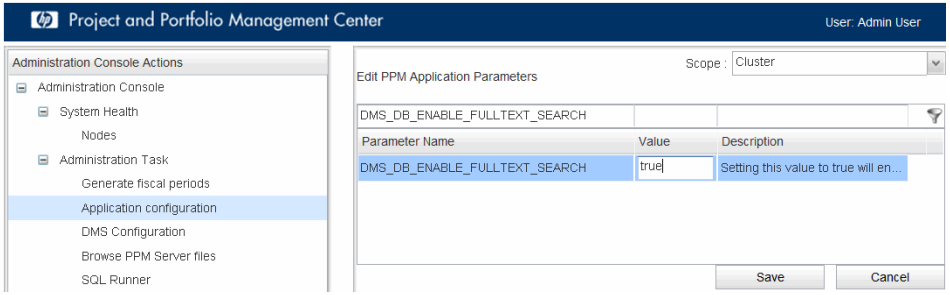
4. Set the value of server parameter `DMS_DB_ENABLE_FULLTEXT_SEARCH` to `true` in PPM Center. To do so,

   a. Log on to PPM Center as administrator.

   b. From the menu bar, select **Open > Administration > Open Administration Console.**

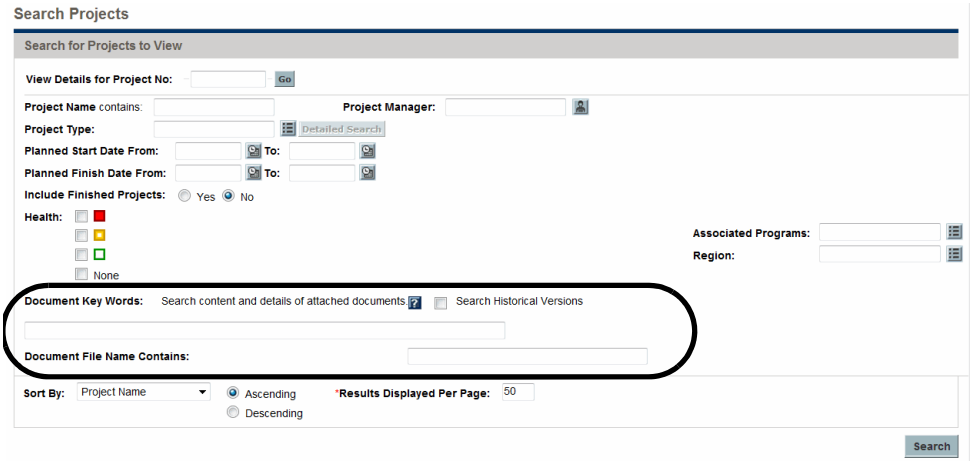
   c. In the left panel of the Administration Console window, expand the **Administration Task** section, and then click **Application Configuration**.

   d. Locate the `DMS_DB_ENABLE_FULLTEXT_SEARCH` parameter, and set its value to `true`.



e. Click **Save**.

5. Verify that the Document Key Words search fields are available in PPM Center by going to **Search > Projects/Programs/Requests**, or any other entity that supports document management.



Enabling the full text search feature requires creation of all the indexes in the first place. Otherwise it might result in an error whenever an user runs a full text search.

Best practices and notes on indexing

- There is no perfect setting related to how often the indexes should be refreshed. Refreshing it too often might result in fragmented indexes, while a very long delay between refreshed would cause outdated indexes and might result in users not being able to search and retrieve documents recently added. It is up to DBAs to decide the optimum setting in accordance with your database administration policies and PPM User's expectations. Note that HP strongly recommends you not using the **SYNC ON COMMIT** setting as it would result in significant performance overhead when documents are added to the system as well as severe index fragmentation.
- The default LEXER used is WORLD_LEXER, which is especially adapted for a multi-lingual document base. If you are only storing documents in a language other than English, then you may use a different LEXER than the WORLD_LEXER used by default. You may use, for example, the

CHINESE_LEXER, if all documents stored are in Chinese. You are free to use whatever LEXER that better fits your needs.

- The multi-column index on metadata of both TIP and HISTORY tables is created on the FULL_TEXT_META column. A trigger is already created that will update this column whenever one of the indexed column is updated. This is required to correctly update the index.
- You may want to configure a significant amount of indexing memory when you create the indexes in case you have a very large amount of documents to index. For more information, see Oracle documentation related to Oracle TEXT indexing performance.
- Oracle TEXT indexes can be very large if there is a large amount of text intensive documents to index (text files, log files, XML, and so on). You may want to make sure that the tablespace hosting these TEXT indexes can accommodate such an amount of data.
- For a list of all the file formats supported for indexing by Oracle TEXT, see *http://download.oracle.com/docs/cd/E11882_01/text.112/e16593/afilsupt.htm*.
- PPM Center Database DMS Full Text Search feature relies on Oracle TEXT only. As a result, the performance and results of PPM documents full text search when using PPM Center Database DMS solely relies on the settings you used when creating these indexes.

Editing DMS configuration from the Administrator Console

To edit DMS configuration from the Administration Console,

1. Log on to PPM Center as administrator.
2. From the menu bar, select **Open > Administration > Open Administration Console.**
3. In the left panel of the Administration Console window, expand the **Administration Task** section, and then click **DMS Configuration**.

   The DMS Configuration page opens, listing information about the current DMS.

4. Click **Edit**.

The **Edit** button is not available if PPM Center Database DMS is your current DMS, as it is shipped with all necessary out-of-the-box functionalities, requiring no additional deployment or configuration. For more information, see *PPM Center Database DMS* on page 139.

5. Edit parameters for the current DMS as necessary.

   If PPM Center File System is the current DMS, only the `dms.filesys.attachmentDir` parameter value is editable. However, modifying the directory path value for this parameter does not migrate the documents stored in the current directory to the new directory.

   If you modify the current DMS parameters to point to an empty DMS, the existing documents in your PPM Center will be lost. If you need to switch your DMS, click **Cancel** to return to the previous page, then click **Migrate**. For details, see *Step-by-step DMS Migration* on page 155.

6. Click **Save**.

Performing DMS Migration from the Administrator Console

Advantages of the DMS Migration feature

The DMS Migration feature included in PPM Center 9.13 allows you to migrate easily to PPM Center Database DMS:

- Migration occurs while PPM Server is online, and has almost no impact on PPM users. They can keep on checking in and checking out files, and add new attachments.
- Once the migration is completed, you are able to test the new solution during a “transition period” while the old solution is still available. If you meet any issue with the new DMS system, you can always cancel the migration and go back to the existing solution, and no document is lost in the process.
- You can schedule the time at which the migration is running, and adjust different parameters to control what load the migration can have on the PPM system. Note however that migration process has a relatively limited impact on PPM Server performance under standard server load.

DMS Migration Engine

The DMS Migration is controlled from the Administrator Console. A dedicated heavy service (DMS Migration Engine Service) runs regularly and fills a queue of documents to migrate on the PPM Server node where the service runs (which could be any node configured to run heavy services). The maximum number of documents to migrate in the queue is defined by the server parameter `DMS_MIGRATION_DOCUMENTS_BATCH_SIZE`.

The number of threads that will migrate the documents in the queue is defined by the server parameter `DMS_MIGRATION_THREAD_COUNT`.

Preparing for the migration

The number of threads to be used for migration should be set before the migration starts. The migration service scheduling or the maximum size of documents migration queue can however be modified in the middle of the migration.

You can adjust different parameters to control when the migration runs, and how much load on PPM Server it might generate.

To help estimate how long the migration may take, you may run some SQLs to count documents and to estimate total size of files in the system:

- To count how many documents are in the system, run the following:

  ```
  SELECT COUNT(*) FROM KNTA_DOCUMENTS
  ```

- To count how many document versions are in the system, run the following:

  ```
  SELECT SUM(VERSION_NUMBER) FROM KNTA_DOCUMENTS
  ```

- To estimate the total size of files in the system, run the following:

  ```
  SELECT SUM(FILESIZE*VERSION_NUMBER) FROM KNTA_DOCUMENTS
  ```

Normally 1 GB of data (around 3000 documents with the average document size of 333 KB) can be migrated in less than 10 minutes.

Configure migration background service

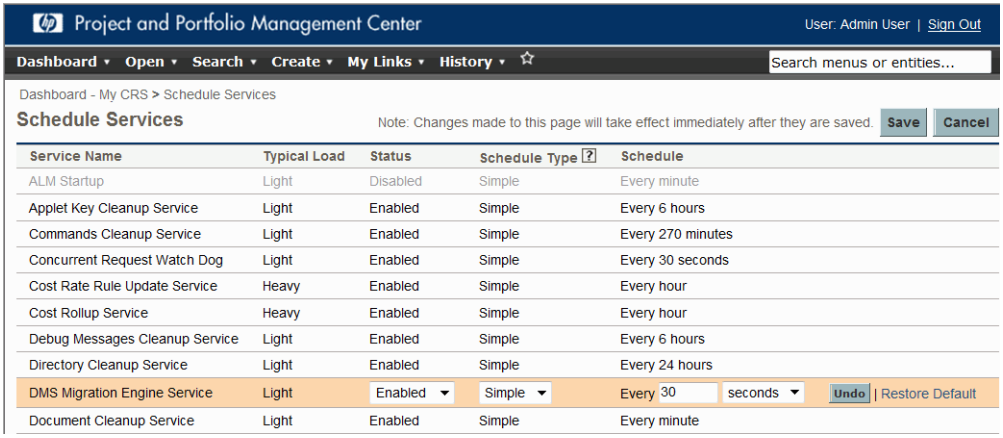
DMS migration engine is triggered by the PPM Center heavy service—DMS Migration Engine Service. You may schedule this service according to your needs to know when the documents migration queue will be refilled. The default schedule is to run the service every 30 seconds.

To schedule the DMS Migration Engine Service,

1. Log on to PPM Center.
2. On the **Open** menu, click **Administration > Schedule Services.**

   The Schedule Services page lists all of the available services, and shows the typical load each service manages, whether the service is enabled, the type of expression used to schedule the service, and the current run schedule.
3. In the **Schedule Services** table, click the **DMS Migration Engine Service** row.

   Items in this row becomes editable.
4. From the list in the **Status** column, select **Enabled**.



5. To select a schedule type, do one of the following:

   - To use a simple expression such as hours, minutes, or seconds to schedule the service, in the **Schedule Type** list, leave **Simple** selected.

- To use a cron expression to schedule the service, from the **Schedule Type** list, select **Cron**.

For detailed help with scheduling the service, next to the **Schedule Type** list heading, click the help icon after the **Schedule Type** column heading.

6. In the **Schedule** column, provide the simple or cron value to specify the DMS Migration Engine Service run interval.
7. In the top right corner of the page, click **Save**.

- All the nodes configured to run PPM Center heavy services will eventually run migration service as scheduled. So migration will eventually run on multiple PPM nodes if more than one node is configured to run heavy services.
- The DMS Migration Engine Service is automatically enabled when you click **Start Migration** in the Administration Console, and disabled when you click **Cancel Migration** or **Commit**.
- The schedule should be set in accordance with the migration batch size. It can negatively impact the speed of migration if the documents migration queue runs out of documents to migrate before the service is re-invoked.

- If the migration service is invoked on a node where the documents migration queue is not empty, it will fill the queue so that the total number of documents in the queue matches the migration batch size.
- When a migration is in progress, disabling the DMS Migration Engine Service terminates the migration. However, you should use the **Pause** button if you want to pause the migration. This is more efficient, as simply disabling the service would still need to wait for all documents in the queue to be processed.

Configure migration thread count

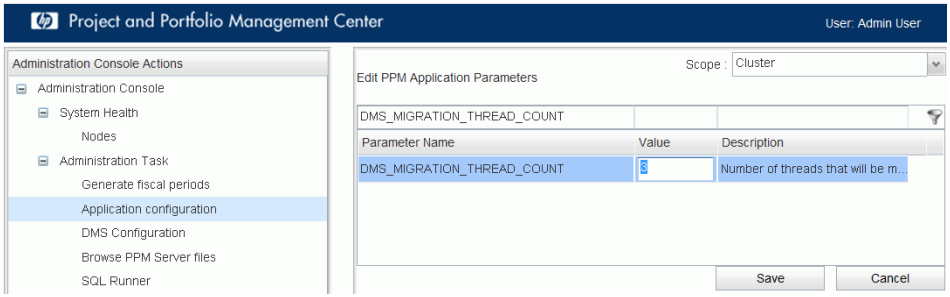
DMS migration runs in multiple threads on the node where the DMS Migration Engine Service is triggered.

To configure the number of threads to run in parallel for the migration:

1. In the left panel of the Administration Console window, expand the **Administration Task** section, and then click **Application Configuration**.

2. Locate the `DMS_MIGRATION_THREAD_COUNT` parameter and modify its value. The default value is `3`.

.



Due to resources locking issues, setting a value larger than `3` may not improve the performance significantly. Moreover, more threads means usage of more resources, including database connections or Documentum sessions, which might result in errors.

3. Click **Save**.

Configure migration document batch size

The DMS Migration Engine Service fills the document migration queue up to a given number every time it runs.

To configure migration document batch size,

1. In the left panel of the Administration Console window, expand the **Administration Task** section, and then click **Application Configuration**.
2. Locate the `DMS_MIGRATION_DOCUMENTS_BATCH_SIZE` parameter and modify its value. The default value is `1000`.

   Set this parameter value based on the schedule period and server capacity. A value set too small may lead to low speed and idle resources. A value too large may lead to too large queue in memory, and possibly a non-optimal balancing of documents to migrate between PPM nodes.

3. Click **Save**.

Configure migration delay between documents

It is possible for the DMS Migration Engine Service to wait for some time between each document migrated. This might be necessary when you want to limit the load generated by the migration process on the PPM Server. Of

course, the overall migration process will be delayed based on that duration. You can specify the delay time to control the migration speed and performance pressure.

By default, there is no delay between documents migration.

To configure migration delay between documents,

1. In the left panel of the Administration Console window, expand the **Administration Task** section, and then click **Application Configuration**.
2. Locate the `DMS_MIGRATION_DELAY_BETWEEN_DOCUMENT` parameter and modify its value. The default value is `0` (no delay) between each document.
3. Click **Save**.

Special notes when Documentum is the current DMS

If you are migrating from Documentum to PPM Center Database DMS, you might run out of Documentum sessions during the migration with the default configuration (including default Documentum Server configuration).

The reason is that documents operations are asynchronous, and Documentum sessions can be busy for some time even when the document operation on PPM Server has completed. As the DMS Migration is a very demanding process, sometimes you might run out of Documentum sessions, which results in failure of some documents to be migrated.

This is not a blocking issue as failed documents can be retried until they are successfully migrated. However, it results in unneeded manual operations.

You can reduce the probability of running into such an issue by resorting to the following options:

- Use one migration thread only.
- Add a delay between documents to migrate (of `1` second or more). This gives time for the asynchronous operations to complete. Considering the performance impact, you should only resort to this option after you have tried to migrate all documents at least once.
- Reduce the documents migration batch size so there can be some idle time between two migration service triggering.

- Increase the maximum number of Documentum sessions on Documentum server: edit the `$DOCUMENTUM/dba/config/<DOCBASE_NAME>/server.ini`, and increase the value of `concurrent_sessions` (`100` by default).

Supported DMS Migration paths

With PPM Center version 9.13, there are three document management systems in total:

- PPM Center File System (default)
- Documentum, which means either of the following:
  - HP version of EMC Documentum Content Server Enterprise Edition software bundled with PPM Center, or
  - Integration of PPM Center with a stand-alone instance of EMC Documentum Content Server Enterprise Edition) using connector

    For more information, see the *Document Management Guide and Reference*.
- PPM Center Database DMS (new)

Depending on what document management system you are currently using, the supported document management system migration paths include the follows:

- Documentum > PPM Center File System
- Documentum > PPM Center Database DMS
- PPM Center File System > PPM Center Database DMS
- PPM Center Database DMS > PPM Center File System

- If you are migrating from Documentum, be sure to read carefully the *Special notes when Documentum is the current DMS* on page 153.

- In order to migrate from PPM Center File System to Documentum (using the Documentum connector), you still have to use the KConfig Documentum migrator.
- Currently it is not supported to migrate directly from PPM Center Database DMS to Documentum.

Step-by-step DMS Migration

The DMS migration is a wizard-driven process. The DMS Migration wizard walks you step-by-step through the entire migration process, including the following stages:

- *Select target DMS*
- *Configure target DMS*
- *DMS migration in progress*
- *Start DMS Transition*
- *DMS Transition in progress*
- *Commit the migration*

To perform DMS migration,

1. In the left panel of the Administration Console window, expand the **Administration Task** section, and then click **DMS Migration**.
2. On the DMS Migration page, click **Migrate**.

   The wizard displays the “Select target DMS” page.

Select target DMS

3. Select a target DMS from the drop-down list.

   If you choose to migrate your current DMS to PPM Center File System from Documentum or PPM Center Database DMS, a warning message shows up stating that some document information might not be preserved due to unsupported functionalities by the target DMS.

4. Click **Next**.

   The wizard displays the “Configure target DMS” page.

Configure target DMS

5. Provide values for all required parameters that are prefaced with a red asterisk (*).

6. Click **Next**.

   Clicking **Next** tests your configuration right away and proceeds to the next page only when the configuration is valid. As part of the validation, it tries to create and delete some temporary documents on your new DMS environment.

   This page also summarizes the target DMS configuration. If you have any concern with the configuration, click **Back** to go back or click **Cancel** to cancel the migration. If you are sure you want to migrate the current DMS to the specified target DMS, click **Start Migration**.

   Upon migration start, the DMS Migration Engine Service is enabled and the documents are migrated in batches.

DMS migration in progress

7. After clicking **Start Migration**, the wizard displays the "DMS migration is IN PROGRESS" page.

   While the DMS Migration is in progress, the DMS Migration Engine Service is running in the background to migrate the documents. If a PPM User checks in new documents or edits the existing documents, these documents are also migrated.

   The DMS Migration Engine Service has no impact on the working of the current DMS system. When PPM Users perform DMS actions, such as checking in or out documents, they are working with the current DMS system.

8. You can click **Refresh** to view the latest progress status of the migration.

The progress data are not updated dynamically. You have to click the refresh button manually if you want to get the latest status.

The migration status contains the following information:

- **Status:** Status of the migration, shown by a progress bar reflecting the percentage of **Files processed**.
- **Start time:** The migration start time, it is recorded when you click **Start Migration**.

- **Files processed:** The number of the files that have been processed. It represents the number of both **Successful** and **Failed** documents.
- **Successful:** The number of documents that have been migrated successfully.
- **Failed:** The number of documents which migration failed. You can click **Retry failed files** to retry migrating them again once the migration completes.
- **Files total:** The total number of documents in the system.

9. You can also perform other actions on this page:

   - **Retry failed files:** Once the migration is completed, if there are any files that failed to be migrated, you can click this button to retry to migrate them until they succeed. All failed files will be re-migrated.

     If there are some failed documents, you need either retry to migrate them until they succeed, or delete them from the system. These failed documents will not be migrated if you go to the next step, and should be considered lost documents once you move to transition period, even if you cancel migration during the transition period.

   - **View failed files logs:** View the migration log for a list of failed files. If a file fails to be migrated, the whole exception details are included in the logs. You can search migration logs based on the time the error occurred.
   - **Pause** | **Resume:** When migration is under way, you can pause it. If migration is paused, you can resume it.
   - **Cancel Migration:** Clicking this button cancels the migration immediately and brings you back to the current DMS Configuration screen. The target DMS environment is left as-is. Documents already migrated to the target DMS system will remain there unless manually removed.

Start DMS Transition

10. When the progress state reaches 100%, the wizard displays the "DMS Migration is completed" message, and the **Start Transition** button becomes available.

    The DMS Transition period allows you to start using the new DMS solution while the old DMS is still available. Any documents added or checked in to the new DMS system by PPM users are synchronized back to the old DMS system as well. This way, if you decide to cancel the migration (in case you meet any issue with the new DMS system), you are not losing any documents updates occurred during the transition process.

11. Click **Start Transition**.

    Starting the transition replaces the current DMS solution with the new target DMS solution. It takes a few seconds to a few minutes to complete this switching action, during which the wizard displays a temporary page.

    During the transition, the PPM Center DMS system becomes read-only for a few seconds while the DMS Driver is reloaded on all PPM Server nodes. If PPM users try to add a new document or check in a new version while the system is locked, they receive a message similar to the follows:

    ```
    PPM Document Management System is currently under
    maintenance. Please try again later.
    ```

    For this reason, and to minimize the potential impact on PPM Users, it is recommended to move to transition while the PPM Server system is not under heavy load.

DMS Transition in progress

12. The wizard displays the "Transition" page.

    In the transition phase, your DMS system is already switched to the target DMS system, and all documents in the legacy DMS System were already migrated.

    The DMS Transition period allows you to start using the new DMS solution while the old DMS is still available. PPM Users are performing DMS actions on the target DMS solution, such as check in, check out, and save documents. Meanwhile, any new documents added or modified documents checked in to the new DMS system by PPM users are

synchronized back to the old DMS system as well. This way, if you choose to cancel the migration and move back to the legacy DMS solution for any reason, you are not losing any documents changes occurred during in the transition process.

13. You can click **Refresh** to view the latest status of transition synchronization.

    The transition status information includes:

    - Transition status
      - Number of Failed documents
    - Documents Migration Summary
      - Start time
      - File processed
      - End time

14. You can perform some other actions base on this period:

    - **Retry failed files:** Just like during the migration, some files may fail to be synchronized back to the legacy DMS Solution. This has no impact if you choose to continue with the new DMS system, but you need to make sure that these documents are synchronized successfully back to the legacy system if you plan to cancel the migration.
    - **View failed files logs:** Errors occurred during synchronization of documents changes are also logged, along with exception details.
    - **Cancel Migration:** Clicking this button during the transition period results in synchronizing any new documents or new versions of documents added or checked in to the new system but not yet synchronized back to the legacy system, and then switching back to the legacy system.

      If PPM Users create and save new entities with attachments in the time lapse between a PPM Center administrator clicking **Cancel Migration** and the completion of the cancellation process, these entities might fail to be created as the DMS is locked during that time window. This is similar to what might happen after the transition period starts.

Commit the migration

15. Click **Commit.**

    By clicking **Commit**, you commit this migration, the DMS Migration Engine Service stops, and you officially switch to and start to use only the target DMS system.

- You can stay in Transition period for as long as you deem necessary to ascertain the stability and performance of the new DMS system.
- All error log for failed documents are cleaned once you click **Commit**.
- The DMS Migration Engine Service is disabled automatically after you click **Commit**. Do NOT try to start it manually.

DMS FAQs and notes

- HP recommends you not to have more than one PPM Center administrator to perform the migration steps at the same time.

PPM Center administrators should never attempt to run kConfig in order to integrate with Documentum when DMS Migration is in progress, especially when the migration is in the Transition period. Doing so might cause DMS configuration corruption and the loss of DMS functionalities in the PPM Center system.

- Document cleanup service is disabled during the whole migration. Any document deleted from PPM Center is not deleted from the underlying DMS system until the migration completes (either committed or cancelled).
- If you are planning to migrate to PPM Center Database DMS, make sure to read *PPM Center Database DMS concepts for database administrators* on page 141 before starting the migration.
- If you are migrating to PPM Center Database DMS and are planning on using the Full Text Search feature, be sure to create TEXT indexes and enable the Full Text Search feature after the migration completes. This means less fragmented indexes, and a lighter database load during migration.
- If you are migrating from Documentum, make sure to read *Special notes when Documentum is the current DMS* on page 153.

- The migration process is designed to be fail-proof (i.e. there will be no impact if a PPM Server unexpectedly stop working while migration is taking place, and migration should resume when server is restarted). However, if for any reason the DMS Configuration were to be corrupted during migration, you can reset the configuration by saving the desired configuration in dms.conf, deleting the row of table PPM_INT_CONFIGURATIONS with `solution_id` value 1200 (it stores the DMS configuration), and restart the PPM Server. The configuration from dms.conf will be used as new DMS configuration.
- If PPM users try to upload an attachment that is over 2 GB in size, it might result in a blank page as this exceeds the maximum size supported for "content-length" HTTP header for browsers like Internet Explorer or FireFox, as well as by PPM Server.

Microsoft Project Plug-in Usability Enhancements

The following minor usability enhancements were implemented for the Microsoft Project Plug-in:

- Added Progress Bar during **Refresh Association.**
- Focus on first task after **Retrieve Actuals from PPM to MSP**.
- When `.mpp` file and User settings points to different PPM Server URLs, prompt user to choose one.

Fixes

The following fixes are included in PPM Center version 9.13:

Documentation

Tracking Number	Problem Description
4633133227	Database parameter _SORT_ELIMINATION_COST_RATIO was omitted from the *Installation and Administration Guide*. The documentation about the parameter was added. For details, see *Database Parameter _SORT_ELIMINATION_COST_RATIO* on page 168. (QCCR1L44292)

Integrations

Microsoft Project Integration - Microsoft Project Plug-in

Tracking Number	Problem Description
4634139793	No hierarchy displayed when exporting workplan to `.mpp` file. (QCCR1L44595)
4633292632	The Microsoft Project Plug-in is not working properly after upgrading PPM Center to version 9.11. (QCCR1L44677)
4628442399	After installing Microsoft Project Plug-in for PPM Center 9.10 on Linux, where single sign-on (SSO) authentication is used via IIS Web server for PPM Center, the Microsoft Project Plug-in is not functioning properly. (QCCR1L42684)

Web Services

Tracking Number	Problem Description
4630923004	The code sample for the reworkTimeSheetLine in the *Web Services Programmer's Guide* needs to be modified. For detailed code sample, see *Code Sample for reworkTimeSheetLine* on page 169. (QCCR1L42824)

6 Known Problems and Limitations in PPM Center 9.13

The following problems and limitations are known to exist in PPM Center version 9.13 (or other software, as indicated). The problems are categorized by the affected product area. If a problem has an assigned internal tracking number, that tracking number is provided (in parentheses) at the end of the problem description.

HP Demand Management

PROBLEM	If the previous step is an execution step and the Processing Type is set to **Immediate**, the status dependencies, such as Clear, will not be triggered in the current step. It requires user interaction for these types of status dependencies. (QCCR1L12363).
WORKAROUND	None.
LIMITATION	PPM Center stores Request Header Type (RHT) fields in the KCRT_REQ_HEADER_DETAILS table, which has only 50 columns available. (QCCR1L13835)
WORKAROUND	None.

7 Documentation Errata

The following items are corrections for the version 9.10 documentation.

PPM Center Integration with Microsoft Project

LOCATION	*What's New and What's Changed,* page 32.
ERROR	The *What's New and What's Changed* needs to add a clarification note that after upgrading to PPM Center 9.10, future upgrade no longer requires uninstalling the older version of the Plug-in for PPM. (QCCR1L42599)
CORRECTION	The last bullet on page 32 shall be changed to the following: • After upgrading to PPM Center 9.10, future upgrade no longer requires uninstalling the older version of the Plug-in for PPM.

License Usage of Expired Users

LOCATION	*Security Model Guide and Reference*
ERROR	The manual does not mention how PPM Center counts licenses assigned to expired users. (QCCR1L43765)
CORRECTION	When a user's login has expired, the user's license becomes available (as long as the license has not expired).

Financial Management Web Services

LOCATION	*Web Services Programmer's Guide*.
ERROR	The guide does not mention the behavior of how the Financial summary Web services works with Financial summary forecast/actual lines that are set to synchronize with a staffing profile. (QCCR1L44068)
CORRECTION	The following note needs to be added to the Financial Management chapter: Financial summary Web services does not update the Financial summary forecast/actual lines if the lines are set to synchronize with a staffing profile.

Incorrect Field Name: Height Field instead of Component Lines Field

LOCATION	*HP Demand Management Configuration Guide*, page 171
ERROR	The field name in the following paragraph is incorrect: For fields of the Text Area component type, you can determine the number of lines the Text Area will display. Select the field and change the value in the **Component Lines** field. (QCCR1L15423)
CORRECTION	It should be the **Height** field instead of the **Component Lines** name.

Database Parameter _SORT_ELIMINATION_COST_RATIO Omitted

LOCATION	*Installation and Administration Guide*
ERROR	Database parameter _SORT_ELIMINATION_COST_RATIO was omitted from the *Installation and Administration Guide*. (QCCR1L44292)
CORRECTION	Added the documentation. For details, see *Database Parameter _SORT_ELIMINATION_COST_RATIO*.

Rework Time Sheet Web Services

LOCATION	*Web Services Programmer's Guide*
ERROR	The code sample for the reworkTimeSheetLine needs to be modified. (QCCR1L42824)
CORRECTION	The code sample needs to be modified. For detailed code sample, see *Code Sample for reworkTimeSheetLine*.

Database Parameter _SORT_ELIMINATION_COST_RATIO

For certain restrictive (with good filters specified) and limited (returns few records) searches, PPM Center uses the FIRST_ROWS_N optimization mode.

If a search such as this also uses SORT on one or more fields returned by the search, Oracle uses the INDEX on the sorted columns under the FIRST_ROW_N optimization, even if other indexes on supplied filters may yield to a better execution plan for a SQL statement. This often leads to a less desirable INDEX FULL SCAN on the index on sorted column.

Recommended Setting

Set the parameter value to `5`. This directs Oracle to consider an execution plan with `ORDER BY` sort elimination, as long as the plan is no more expensive than five times the cost of the best-known plan (that uses sort).

Code Sample for reworkTimeSheetLine

```
public void testReworkTimeSheetLine() {
        System.out.println("testReworkTimeSheetLine started ...");
        try {
            if(createdTimeSheetBean == null)
                testSubmitTimeSheet();
TimeServiceStub stub = new TimeServiceStub(ctx, WSURL);
            ReworkTimeSheetLineDocument reworkTimeSheetLineDocument =
ReworkTimeSheetLineDocument.Factory.newInstance();
TimeSheetBean reworkTimeSheetBean =
reworkTimeSheetLineDocument.addNewReworkTimeSheetLine().addNewTimeSheetBean();

reworkTimeSheetBean.setTimeSheetId(createdTimeSheetBean.getTimeSheetId());
reworkTimeSheetBean.setResourceId(createdTimeSheetBean.getResourceId());

reworkTimeSheetBean.setPeriodId(createdTimeSheetBean.getPeriodId());
           TimeSheetStatus timeSheetStatus = reworkTimeSheetBean.addNewState();
            timeSheetStatus.setCode(new BigInteger("2"));
            timeSheetStatus.setMeaning("pending-approval");
            TimeSheetLineBean timeSheetLineBean =
reworkTimeSheetBean.addNewTimeSheetLines();

timeSheetLineBean.setTimeSheetLineId(createdTimeSheetBean.getTimeSheetLinesArr
ay(0).getTimeSheetLineId());

timeSheetLineBean.setWorkItemId(createdTimeSheetBean.getTimeSheetLinesArray(0)
.getWorkItemId());

timeSheetLineBean.setWorkItemSetId(createdTimeSheetBean.getTimeSheetLinesArray
(0).getWorkItemSetId());

timeSheetLineBean.setWorkItemType(createdTimeSheetBean.getTimeSheetLinesArray(
0).getWorkItemType());
            TimeActualsBean timeActualsBean1 =
timeSheetLineBean.addNewTimeActualsList();
            timeActualsBean1.setTotalsFlag(true);
            timeActualsBean1.setEffortsListArray(new double[]
{1,2,3,4,5,0,0,1,2,3,4,5,0,0,10});

            TimeActualsBean timeActualsBean2 =
timeSheetLineBean.addNewTimeActualsList();
            timeActualsBean2.setTotalsFlag(false);
            timeActualsBean2.setEffortsListArray(new double[]
{1,2,3,4,5,0,0,1,2,3,4,5,0,0,10});



reworkTimeSheetLineDocument.getReworkTimeSheetLine().setTimeSheetLineId(create
dTimeSheetBean.getTimeSheetLinesArray(0).getTimeSheetLineId());
            ReworkTimeSheetLineResponseDocument response =
stub.reworkTimeSheetLine(reworkTimeSheetLineDocument);
            TimeSheetBean returnTimeSheet =
response.getReworkTimeSheetLineResponse().getReturn();

            System.out.println("Time Sheet was reworked " +
returnTimeSheet.getTimeSheetId());
        }
        catch(Exception e) {
            e.printStackTrace();
        }
        System.out.println("testReworkTimeSheetLine completed");
    }
```

8 New Features in PPM Center 9.12

The following new features are included in PPM Center version 9.12:

- *HP Financial Management*
  - *Expected Start and Expected Finish Shown in Proposal and Project Financial Summaries*
  - *Configurable Range of Fiscal Years for Financial Summaries and Financial Data Tables*
  - *Options to Display Capital or Operating Costs in Financial Summary Graph*
  - *Simplified Presentation of (x $1000) in Financial Summaries and Financial Data Tables*
  - *"Forecast and Actuals" Changed to "Costs," and "Planned" Changed to "Forecast"*
  - *Displaying and Editing Data by Year in Financial Summaries and Financial Data Tables*
  - *Displaying Line Totals in Financial Summaries and Financial Data Tables*
  - *Copying Cost Lines from a PFM Request Financial Summary*
  - *Simpler Procedure to Copy Forecast Data Across a Range of Cells in the Same Row*
  - *Capital Expenses in Approved Budgets*
  - *Confirmation for Updating an Approved Budget*

- *HP Portfolio Management*
  - *Redesigned Configure Portfolio Management Page*
  - *New Columns Available in Subportfolios Tab of Portfolios*
  - *New Columns Available in Programs Tab of Portfolios*
  - *New Columns Available in Proposals/Projects/Assets Tab of Portfolios*
  - *Change to Exporting Portfolios to Microsoft Excel*
  - *New Columns Available in Scenario Content Table*
  - *Ways to Change Appearance of Scenario Content in Scenario Comparisons*
  - *Relocated Add Content Button and New Remove Content Button in Scenario Comparisons*
  - *New Update Scenarios Button*
  - *Exporting Scenario Content to Microsoft Excel*
  - *Filtering by Portfolio in Analyze Current Portfolio Portlet and Page*
  - *"Budget" Changed to "Projected Cost" in Analyze Current Portfolio Portlet and Page*
- *HP Project Management*
  - *Project Tasks Indicate an Exception When User Does Not Specify % Complete If Required*
  - *"Planned" Column Changed to "Forecast" in Project Cost Summary Portlet*
- *HP Program Management*
  - *New Columns Available in Program Overview Page*
  - *"Planned" Column Changed to "Forecast" in Program Cost Summary Portlet*
  - *New Options to Group and Ungroup Programs by Column Values*
  - *Exporting Programs to Microsoft Excel*

- *HP Time Management*
  - *Identification of Out-of-Sync Actuals Data Upon Upgrade*
  - *Automatic Saving of Time Sheets to Prevent Data Inconsistencies*
  - *Administration of Time Sheet Activities at the Request-Type Level*
  - *Highlighting of Non-Working Days and Holidays on Time Sheets*
  - *Renamed Buttons on Line Details Window*
  - *New Time Sheet Notes Show "(Pending Save)" Until Time Sheet Is Saved*
  - *Improved Error Management*
  - *Improvements to My Tasks Portlet and Edit Effort Breakdown Page*
- *HP APM for PPM*
- *Integration with Microsoft Project 2010*
- *Updates to HP Deployment Management Extension for Oracle E-Business Suite and HP GL Migrator to Support Oracle E-Business Suite Release 12*
- *HP Demand Management*
  - *New Table Component*
    - *Supported Validations*
    - *New Table Component Layout*
    - *Switching between Original and New Table Component Layouts*
    - *Editing Table Component Directly on Request Pages*
    - *Showing Total of a Table Component Column in Real-time*
    - *Quick Navigation through Table Rows*
    - *Other Changes*
  - *Considerations for Using Rules in Table Component*

Refer to *Figure 8-1*, *Figure 8-2*, and *Figure 8-3* to see where the changes in version 9.12, as described in the following sections, were made to financial summaries and to the Edit Costs page (formerly the Edit Forecast & Actuals page) and Edit Benefits page.

Figure 8-1. Top part of example financial summary for a lifecycle entity in version 9.12

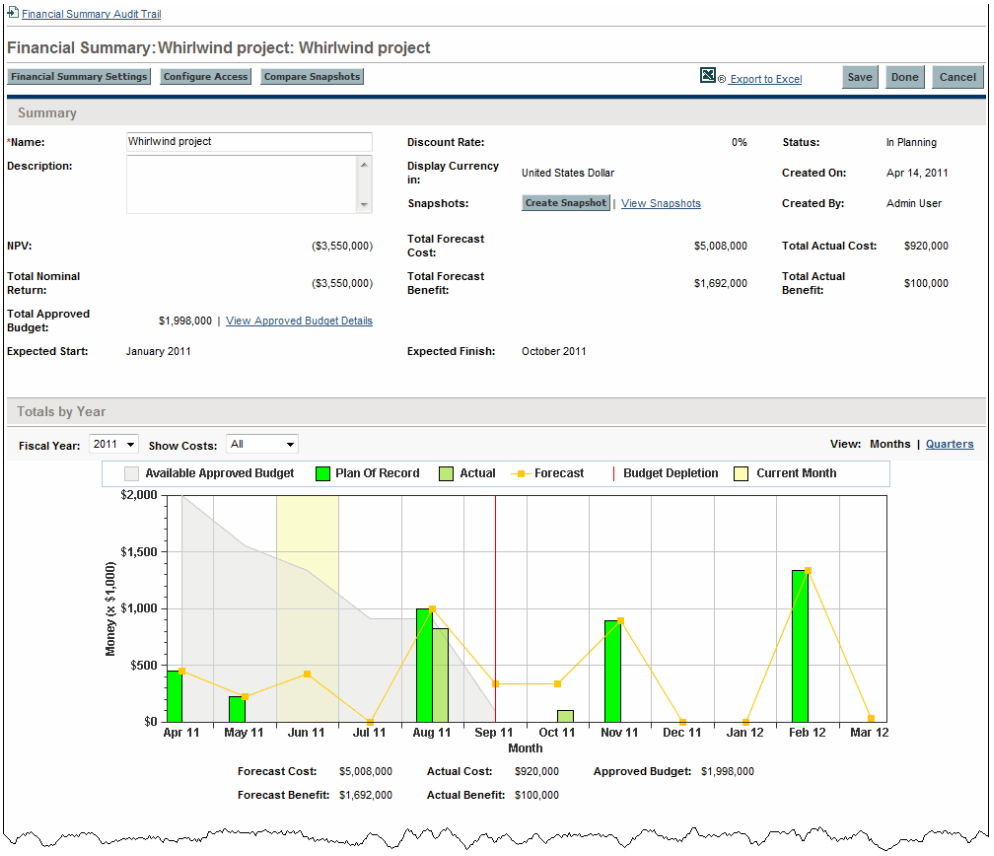
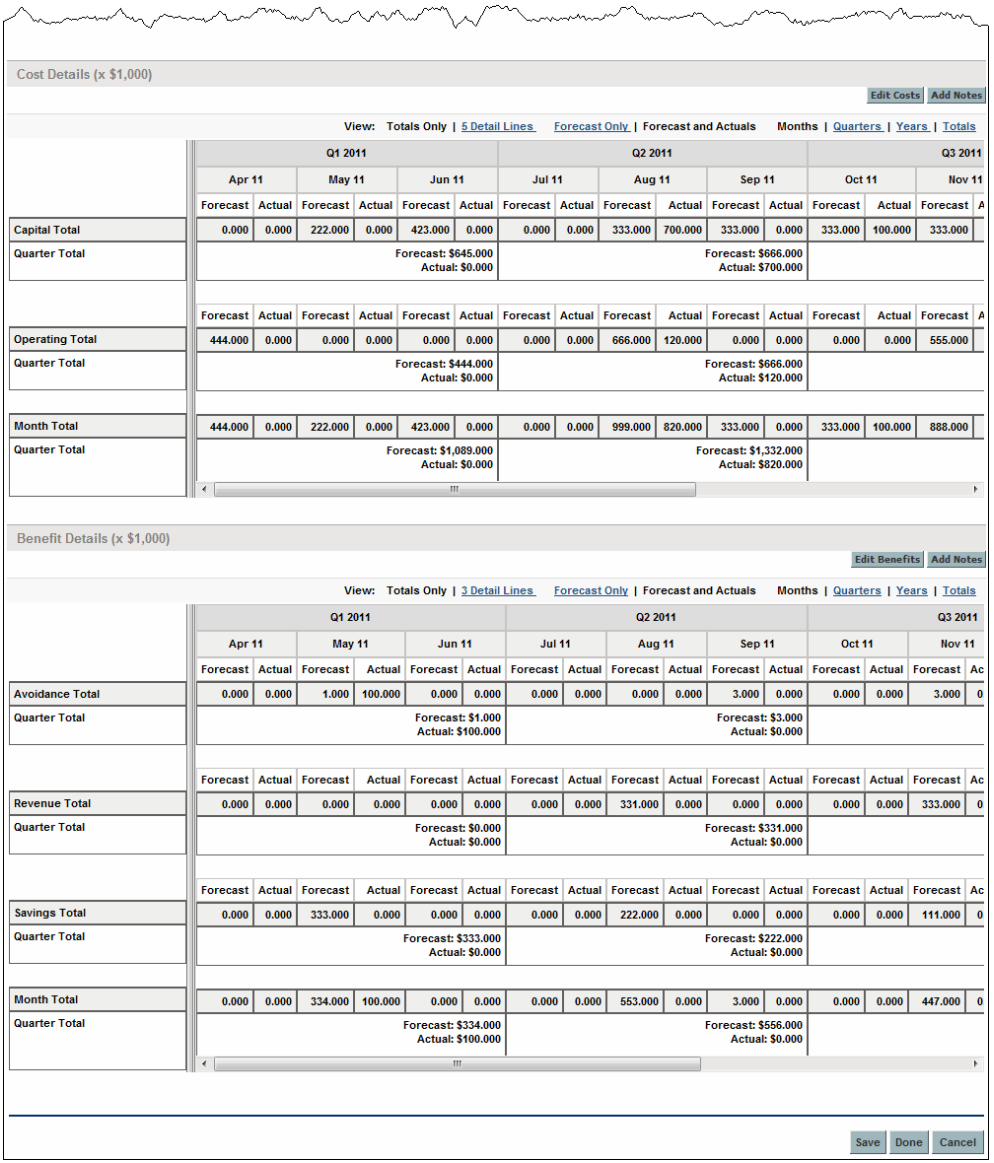


Figure 8-2. Bottom part of example financial summary for a lifecycle entity in version 9.12



Cost Details (x $1,000)

Edit Costs | Add Notes

View: Totals Only | 5 Detail Lines | Forecast Only | Forecast and Actuals | Months | Quarters | Years | Totals

	Q1 2011						Q2 2011						Q3 2011			
	Apr 11		May 11		Jun 11		Jul 11		Aug 11		Sep 11		Oct 11		Nov 11	
	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	A
Capital Total	0.000	0.000	222.000	0.000	423.000	0.000	0.000	0.000	333.000	700.000	333.000	0.000	333.000	100.000	333.000	
Quarter Total					Forecast: $645.000 Actual: $0.000						Forecast: $666.000 Actual: $700.000					
	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	A
Operating Total	444.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	666.000	120.000	0.000	0.000	0.000	0.000	555.000	
Quarter Total					Forecast: $444.000 Actual: $0.000						Forecast: $666.000 Actual: $120.000					
Month Total	444.000	0.000	222.000	0.000	423.000	0.000	0.000	0.000	999.000	820.000	333.000	0.000	333.000	100.000	888.000	
Quarter Total					Forecast: $1,089.000 Actual: $0.000						Forecast: $1,332.000 Actual: $820.000					

Benefit Details (x $1,000)

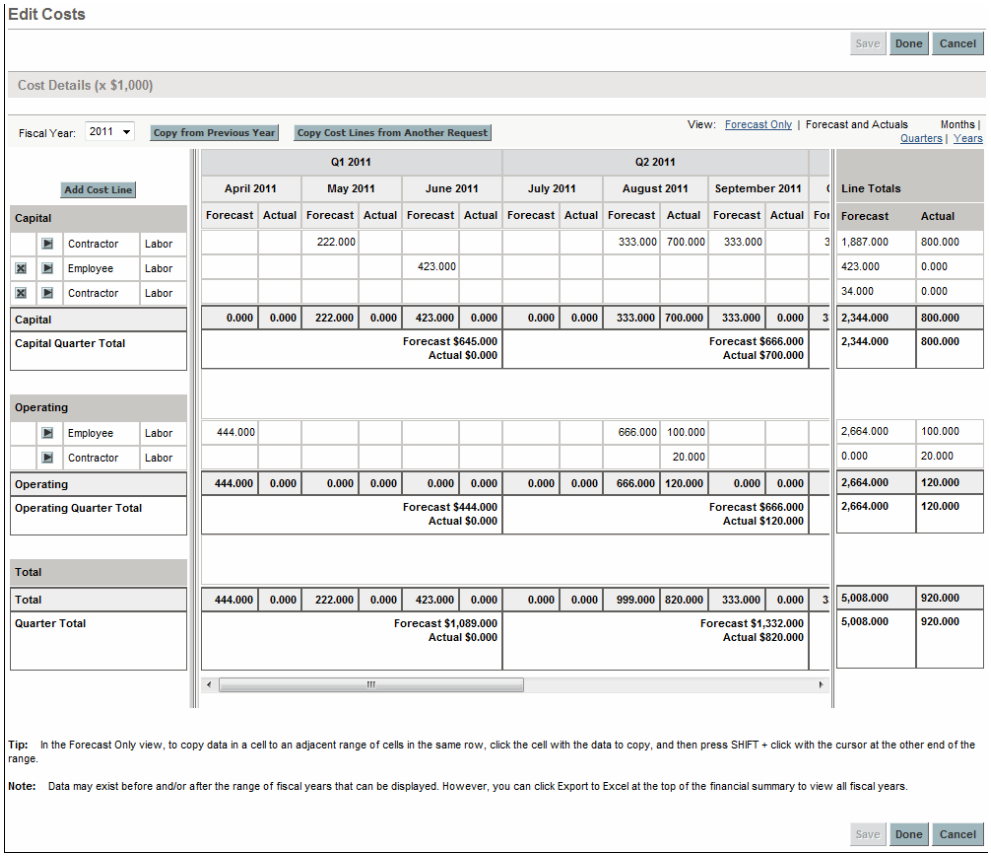
Edit Benefits | Add Notes

View: Totals Only | 3 Detail Lines | Forecast Only | Forecast and Actuals | Months | Quarters | Years | Totals

	Q1 2011						Q2 2011						Q3 2011			
	Apr 11		May 11		Jun 11		Jul 11		Aug 11		Sep 11		Oct 11		Nov 11	
	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Ac
Avoidance Total	0.000	0.000	1.000	100.000	0.000	0.000	0.000	0.000	0.000	0.000	3.000	0.000	0.000	0.000	3.000	0
Quarter Total					Forecast: $1.000 Actual: $100.000						Forecast: $3.000 Actual: $0.000					
	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Ac
Revenue Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	331.000	0.000	0.000	0.000	0.000	0.000	333.000	0
Quarter Total					Forecast: $0.000 Actual: $0.000						Forecast: $331.000 Actual: $0.000					
	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	Ac
Savings Total	0.000	0.000	333.000	0.000	0.000	0.000	0.000	0.000	222.000	0.000	0.000	0.000	0.000	0.000	111.000	0
Quarter Total					Forecast: $333.000 Actual: $0.000						Forecast: $222.000 Actual: $0.000					
Month Total	0.000	0.000	334.000	100.000	0.000	0.000	0.000	0.000	553.000	0.000	3.000	0.000	0.000	0.000	447.000	0
Quarter Total					Forecast: $334.000 Actual: $100.000						Forecast: $556.000 Actual: $0.000					

Save | Done | Cancel

Figure 8-3. Example Edit Costs page in version 9.12



The Edit Benefits page has changes analogous to those in the Edit Costs page.

The following sections are organized in the approximate order that the changes are seen in *Figure 8-1*, *Figure 8-2*, and *Figure 8-3*.

Expected Start and Expected Finish Shown in Proposal and Project Financial Summaries

In version 9.12, the **Expected Start** and **Expected Finish** date fields, if specified, are added at the bottom of the **Summary** section in financial summaries of proposals and projects (but not assets). See *Figure 8-1*. The dates are included when the financial summary is exported to Microsoft Excel®, but are not included in financial summary snapshots.

Configurable Range of Fiscal Years for Financial Summaries and Financial Data Tables

The tables of costs and benefits in financial summaries, financial data tables, and their associated Edit Costs pages and Edit Benefits pages can display forecast values or forecast and actual values. Prior to version 9.12, the data (where present) was displayed over a fixed time range from up to two fiscal years ago to up to five fiscal years in the future. Financial summaries also displayed graphical data for one selected fiscal year in that range.

In version 9.12, administrators can configure the earliest and latest fiscal years of data to display, up to 20 years ago and up to 20 years in the future, by using the Administration Console to specify the new `server.conf` parameters `NUMBER_OF_PAST_YEARS_TO_SHOW_ON_FINANCIAL_SUMMARY` and `NUMBER_OF_FUTURE_YEARS_TO_SHOW_ON_FINANCIAL_SUMMARY`. The valid values range from 0 to 20, and the defaults are 2 and 5 for consistency with the previous design. The tables display data over the range of years calculated from the values specified in the parameters.

In the **Fiscal Year** field, users select one of those years and then graphical data is displayed for that year in the **Totals by Year** section of the financial summary. See *Figure 8-1*.

The same `server.conf` parameters are applied to *snapshots* of financial summaries, but they are applied relative to the fiscal year each snapshot was taken, not relative to the current fiscal year.

Options to Display Capital or Operating Costs in Financial Summary Graph

In version 9.12, the graph in the **Totals by Year** section of a financial summary now includes a new field named **Show Costs,** with the options **All, Capital,** and **Operating.** See *Figure 8-1*. The field appears only if cost capitalization is enabled both in the financial summary and by setting the `COST_CAPITALIZATION_ENABLED server.conf` parameter to `true`. The default option is **All,** which causes the graph to display the same data as in prior versions. If the user selects **Capital** or **Operating,** the graph and the **Forecast Cost, Actual Cost,** and **Approved Budget** fields below the graph display only capital or operating costs accordingly. **Forecast Benefit** and **Actual Benefit** are not affected.

Simplified Presentation of (x $1000) in Financial Summaries and Financial Data Tables

If the `BUDGET_IN_WHOLE_DOLLARS server.conf` parameter is set to `false`, cost and benefit data in financial summaries and financial data tables is shown in thousands of dollars. In other words, the displayed values are to be multiplied by 1000. Prior to version 9.12, **(x1000)** or **(x $1,000)** was shown at the top of the columns for each quarter.

In version 9.12, **(x $1,000)** is shown only once per cost or benefits table in a financial summary or financial data table, as follows:

- After the titles **Cost Details** and **Benefits Details** when viewing the financial summary or financial data table (see *Figure 8-2*)
- After the title **Cost Details** on the Edit Costs page (see *Figure 8-3*)
- After the title **Benefit Details** on the Edit Benefits page (analogous to *Figure 8-3*)

"Forecast and Actuals" Changed to "Costs," and "Planned" Changed to "Forecast"

To improve consistency within and among windows for financial summaries, the term "Forecast and Actual(s)" has been changed to "Cost(s)" as follows:

- In the financial summary, the section formerly titled **Forecast and Actual Details** has been renamed **Cost Details** to more clearly distinguish it from the **Benefit Details** section, which has its own data for forecast and actual benefits.
- The section now named **Cost Details** previously displayed either an **Edit Forecast and Actuals** button or an **Add Forecast and Actuals** button, and these buttons have been renamed **Edit Costs** and **Add Costs.**

To improve consistency within and among windows for financial summaries, the term "Planned" has been changed to "Forecast" as follows:

- The display options (links) formerly labelled **Planned Only** and **Planned and Actuals** in the **Cost Details** and **Benefits Details** sections of the financial

summary and on the Edit Costs and Edit Benefits pages have been renamed **Forecast Only** and **Forecast and Actuals**.

- In the financial summary and the Edit Costs and Edit Benefits pages, all column headings and totals formerly labelled **Planned** have been renamed **Forecast.**
- In the Edit Costs and Edit Benefits pages, the tip about copying data to multiple cells began **"In the Planned Only view..."** and now begins with **"In the Forecast Only view..."**
- The column heading **Planned** has also been changed to **Forecast** in the Project Cost Summary portlet and the Program Cost Summary portlet.

Displaying and Editing Data by Year in Financial Summaries and Financial Data Tables

The tables of costs and benefits in financial summaries, in financial data tables, and in their associated Edit Costs pages and Edit Benefits pages can display forecast values or forecast and actual values. Prior to version 9.12, users could choose to display and edit the data (where present) either by quarter or by month.

In version 9.12, users can also display and edit the data by year. The tables have options that appear as links named **Months, Quarters,** and **Years.** See *Figure 8-2* and *Figure 8-3*.

On the Edit Costs page and the Edit Benefits page, when a user selects the new **Years** option, the tables display all the fiscal years in the configured range (see *Configurable Range of Fiscal Years for Financial Summaries and Financial Data Tables*). The **Fiscal Year** field (drop-down list) and the **Copy from Previous Year** button are no longer applicable and are not displayed.

Analogous to editing data by quarter, when costs and benefits are edited by year they are automatically apportioned equally among the months (and therefore among the quarters) in that year, overwriting all prior entries for months in that year.

Displaying Line Totals in Financial Summaries and Financial Data Tables

In financial summaries and financial data tables, version 9.12 adds the **Totals** option to the costs and benefits tables, after the **Years** option. See *Figure 8-2*. Selecting **Totals** displays, line by line, the sum of all data for the entities over the entire range of years for which they have data, regardless of the range of years available to view in the **Fiscal Year** field of the financial summary.

If a user selects the **Forecast Only** view option, the associated costs or benefits table displays only one **Totals** column for total forecast values. If a user selects the **Forecast and Actuals** view option, the associated costs or benefits table displays one column for total forecast values and one column for total actual values.

In version 9.12, line totals are always shown on the Edit Costs page and the Edit Benefits page, regardless of whether the user has chosen to display **Months, Quarters,** or **Years.** See *Figure 8-3*. The totals are shown in the rightmost column in the **Forecast Only** view or the rightmost two columns in the **Forecast and Actuals** view. If the user displays months or quarters, the totals reflect the values for only the year selected in the **Fiscal Year** field. If the user displays years, the totals reflect the sum of the values for all the fiscal years in the configured range. The totals are updated dynamically as the user edits the displayed months, quarters, or years.

Copying Cost Lines from a PFM Request Financial Summary

In version 9.12, a new **Copy Cost Lines from Another Request** button appears on the Edit Costs page of financial summaries. See *Figure 8-3*. This option allows users to copy all of the cost lines from the financial summary of one PFM request (PFM - Proposal, PFM - Project, or PFM - Asset request type) to the open PFM request. Search capability is provided to find the PFM request from which lines are to be copied. Cost lines rolled up from a staffing profile to the financial summary of the request selected from the search results are not copied to the financial summary of the open PFM request.

If the requests use different currencies, users can copy the cost lines but not any of their cost *data*. If the requests use the same currency, an option appears that allows users to copy the forecast cost data in the cost lines as well as the lines themselves.

The new button also appears on the Edit Costs page of financial data tables. Users can copy cost lines from the financial summary of a selected PFM request to the financial data table, but they cannot copy cost lines from any other financial data table.

Simpler Procedure to Copy Forecast Data Across a Range of Cells in the Same Row

Prior to version 9.12, when viewing forecast (but not forecast and actuals) data on the Edit Costs page and the Edit Benefits page, you could edit costs or benefits across a range of cells in the same row by:

1. Clicking in the cell with the data value you want to copy.
2. Clicking in the cell at the other end of the range of cells into which the data is to be copied.
3. Pressing **SHIFT** + **click.**

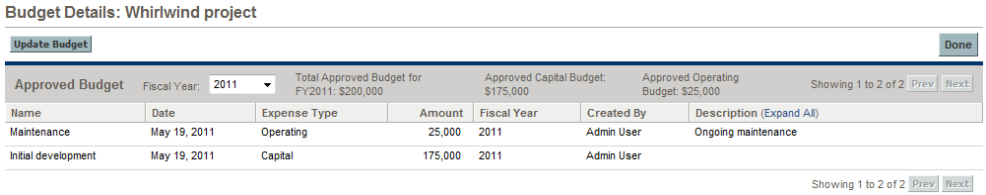
In version 9.12, the procedure is simplified as follows:

1. Click in the cell with the data value you want to copy.
2. With the cursor positioned in the cell at the other end of the range of cells into which the data is to be copied, press **SHIFT** + **click.**

Capital Expenses in Approved Budgets

In version 9.12, a new **Expense Type** field appears on the Update Budget page accessed from the approved budget of the financial summary, with the options **Capital** and **Operating.** See *Figure 8-4*. The field appears only if cost capitalization is enabled both in the financial summary and by setting the `COST_CAPITALIZATION_ENABLED` `server.conf` parameter to `true`.

Figure 8-4. Approved Budget in version 9.12



On the Budget Details page, the **Expense Type** field is added as a new column in the approved budget. Near the top of the page, for the selected **Fiscal Year,** the **Total Capital Approved Budget for FY<*xxxx*>** and the **Total Operating Approved Budget for FY<*xxxx*>** are displayed next to the **Total Approved Budget for FY<*xxxx*>.**

Web services can also specify capital expenses for approved budgets. For more information, see the *Web Services Programmer's Guide.*

For information about data model changes associated with this enhancement, see the *Data Model Guide.*

Upon upgrade to version 9.12, all approved budget entries default to **Operating.**

To change a budget entry for an editable fiscal year from **Operating** to **Capital,** create an offsetting negative budget entry with **Expense Type** set to **Operating** and create a budget entry in the same amount with **Expense Type** set to **Capital.**

Confirmation for Updating an Approved Budget

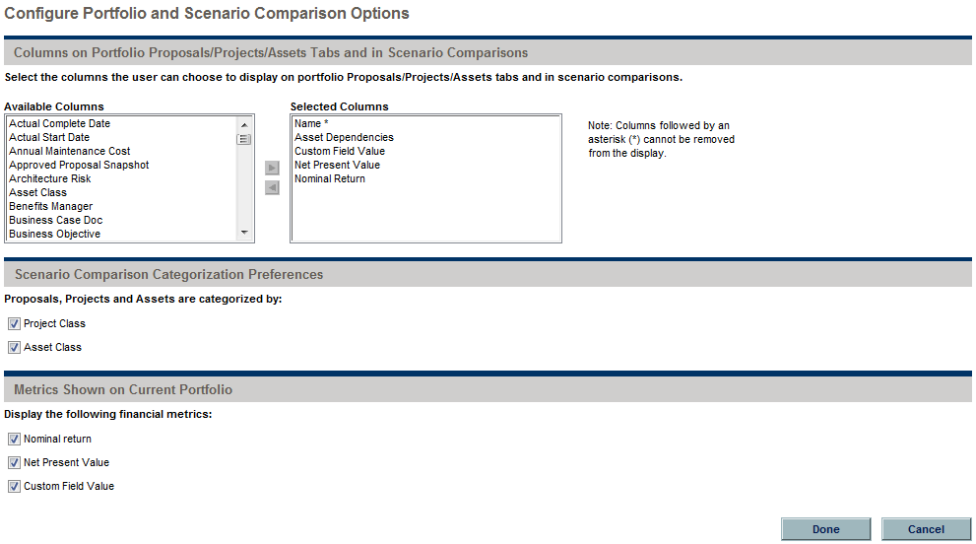
In version 9.12, when updating an approved budget, a confirmation dialog is presented when the user clicks **Done** to allow the user to confirm or cancel the update. After confirmation, an update to an approved budget cannot be modified or deleted. Also, the on-screen text clarifies that the approved budget for the selected year will be increased or decreased by the amount entered.

HP Portfolio Management

Redesigned Configure Portfolio Management Page

The Configure Portfolio Management page has new functionality and it has been renamed as the Configure Portfolio and Scenario Comparison Options page accordingly. In addition, the menu option has been changed from **Open > Administration > Portfolio Management > Configure Portfolio Management** to **Open > Administration > Portfolio Management > Configure Portfolio and Scenario Comparison Options.**

The middle section of the page, titled **Scenario Comparison Categorization Preferences,** is unchanged in version 9.12, but the other sections of the page are changed as described in the following sections.



Columns on Portfolio Proposals/Projects/Assets Tabs and in Scenario Comparisons

In version 9.12, the section previously titled **Configure Columns for Portfolio Proposals/Projects/Assets Tab** has been renamed **Columns on Portfolio Proposals/Projects/Assets Tabs and in Scenario Comparisons,** and it has been relocated from the bottom of the page to the top.

The functionality of this section of the Configure Portfolio Management page has been extended to apply to scenario comparisons, and it continues to apply to portfolios. Specifically, in version 9.12 when an administrator selects columns from the set of **Available Columns** and moves them to the set of **Selected Columns,** users can add those columns to the **Scenario Content** table of any scenario comparison. (As in prior versions, users can also add the **Selected Columns** to the **Proposals/Projects/Assets** tab of any portfolio.)

As in prior versions of PPM Center, administrators can enable (select) up to 20 of the available columns, which are determined from the combination of all the request fields in the PFM - Proposal, PFM - Project, and PFM - Asset request types.

As in prior versions of PPM Center, if the administrator selects **Nominal Return** and/or **Net Present Value** among the fields users can add to the **Proposals/Projects/Assets** tab of a portfolio and a user does add them, those fields will appear on the **Proposals/Projects/Assets** tab only if the user sets the **Fiscal Year** field on the tab to **Total** to display the sum of all years.

For detailed administrative information about selecting columns that users can then display, see the *HP Portfolio Management Configuration Guide.*

If any of the **Nominal return, Net Present Value,** and **Custom Field Value** options were selected in the **Scenario Comparison Tracking Preferences** section on the Configure Portfolio Management page prior to version 9.12, the administrator must manually select the options as columns in the **Columns on Portfolio Proposals/Projects/Assets Tabs and in Scenario Comparisons** section for them to continue to be displayable in scenario comparisons in version 9.12. Users can then choose to display those columns as desired.

As in prior versions of PPM Center, the set of **Available Columns** includes all of the fields in the PFM - Proposal, PFM - Project, and PFM - Asset request types. PPM Center allows the same field to have different validation types in different request types. In this case, in prior versions, the field was not included among the **Available Columns.**

In version 9.12, the field is included among the **Available Columns.** In a scenario comparison or in the **Proposals/Projects/Assets** tab of a portfolio, data in such a displayed column might not be formatted consistently or as expected.

The validation types for the field used in multiple request types do not have to be identical, but they should be compatible. For example, displaying various types of text fields in a column might be acceptable. However, if the inconsistent formatting of the data is unacceptable, the administrator should check the field definitions in the request types and establish unique fields for them that each use appropriate validations so that they will appear as separate columns.

Metrics Shown on Current Portfolio

The section previously titled **Scenario Comparison Tracking Preferences** has been renamed **Metrics Shown on Current Portfolio,** and it has been relocated from the top of the page to the bottom.

In version 9.12, administrators can select the **Nominal return, Net Present Value,** and **Custom Field Value** options (checkboxes) to make them available as filters with ranges of values and as the horizontal or vertical axis in the bubble charts of the Analyze Current Portfolio portlet (formerly the Current Portfolio Map portlet) and the Analyze Current Portfolio page.

In prior versions of PPM Center, administrators could select the options **Nominal return, Net Present Value,** and **Custom Field Value** for display as scenario comparison "tracking preferences." In version 9.12, the display of these metrics in scenario comparisons is configured as described in *Columns on Portfolio Proposals/Projects/Assets Tabs and in Scenario Comparisons*. See that section for important information about upgrade consequences in regard to displaying these fields.

New Columns Available in Subportfolios Tab of Portfolios

In version 9.12, if the `COST_CAPITALIZATION_ENABLED server.conf` parameter is set to `true` to enable separate tracking of capital and operating costs, the following new columns are available to all users to add to the **Subportfolios** tab of any portfolio:

- **Approved Capital Budget**
- **Approved Operating Budget**
- **Forecast Capital Cost**
- **Forecast Operating Cost**
- **Actual Capital Cost**
- **Actual Operating Cost**

New Columns Available in Programs Tab of Portfolios

In version 9.12, if the `COST_CAPITALIZATION_ENABLED server.conf` parameter is set to `true` to enable separate tracking of capital and operating costs, the following new columns are available to all users to add to the **Programs** tab of any portfolio:

- **Approved Capital Budget**
- **Approved Operating Budget**
- **Forecast Capital Cost**
- **Forecast Operating Cost**
- **Actual Capital Cost**
- **Actual Operating Cost**

If a particular program in a portfolio does not have capitalization enabled in its financial summary settings, its forecast and actual costs are shown entirely as operating costs and its capital costs are shown as 0.

New Columns Available in Proposals/Projects/Assets Tab of Portfolios

In version 9.12, if the `COST_CAPITALIZATION_ENABLED server.conf` parameter is set to `true` to enable separate tracking of capital and operating costs, the following new columns are available to all users to add to the **Proposals/Projects/Assets** tab of any portfolio:

- **Approved Capital Budget**
- **Approved Operating Budget**
- **Forecast Capital Cost**
- **Forecast Operating Cost**
- **Actual Capital Cost**
- **Actual Operating Cost**

If a particular proposal, project, or asset in a portfolio does not have capitalization enabled in its financial summary settings, its forecast and actual costs are shown entirely as operating costs and its capital costs are shown as 0.

In addition, the following column names have been changed:

- **Total Cost** is renamed **Projected Cost.**
- **Total Benefit** is renamed **Projected Benefit.**

As with **Total Cost** and **Total Benefit** in prior versions, **Projected Cost** and **Projected Benefit** are available only if the **Fiscal Year** is set to **Total** so that all years are included. They are calculated as the sum of the following:

- **For each previous month,** actual values where reported (that is, where not blank or zero), otherwise forecast values
- **For the current month,** the *higher* of the forecast value and (if reported) the actual value
- **For each future month,** the forecast values

For information about adding columns to the **Proposals/Projects/Assets** tab of a portfolio, see the *HP Portfolio Management User's Guide* or the analogous capability added for version 9.12 for scenario comparisons, as described in *Ways to Change Appearance of Scenario Content in Scenario Comparisons* on page 189.

Change to Exporting Portfolios to Microsoft Excel

Prior to version 9.12, when a user exported a portfolio to Microsoft Excel, all of the available columns on all of the tabs were exported in a pre-determined order, whether the columns were displayed or not.

In version 9.12, only the columns selected for display are exported to Excel, in the same order as they are displayed. In other words, the Excel file reflects any changes a user has made to the columns selected for display and to the column layout.

New Columns Available in Scenario Content Table

Version 9.12 introduces new columns that all users can add to the scenario content table in any particular scenario comparison. Some of the new columns are available only if the `COST_CAPITALIZATION_ENABLED server.conf` parameter is set to `true` to enable separate tracking of capital and operating costs, as indicated in the following list of the new columns:

- **Approved Budget**
- **Approved Capital Budget** (if cost capitalization is enabled)
- **Approved Operating Budget** (if cost capitalization is enabled)
- **Forecast Cost**
- **Forecast Capital Cost** (if cost capitalization is enabled)
- **Forecast Operating Cost** (if cost capitalization is enabled)
- **Actual Cost**
- **Actual Capital Cost** (if cost capitalization is enabled)
- **Actual Operating Cost** (if cost capitalization is enabled)
- **Forecast Benefit**
- **Actual Benefit**

In addition, the following column names have been changed:

- **NPV** is renamed **Net Present Value.**
- **Custom Value** is renamed **Custom Field Value.**

- **Total Cost** is renamed **Projected Cost.**
- **Total Benefit** is renamed **Projected Benefit.**

Projected Cost and **Projected Benefit** are calculated as the sum of the following:

- **For each previous month,** actual values where reported (that is, where not blank or zero), otherwise forecast values
- **For the current month,** the *higher* of the forecast value and (if reported) the actual value
- **For each future month,** the forecast values

For information about adding columns to the scenario content table, see *Ways to Change Appearance of Scenario Content in Scenario Comparisons*.

Ways to Change Appearance of Scenario Content in Scenario Comparisons

In version 9.12, users can change the Scenario Content table in scenario comparisons in the following ways (similar to existing functionality for portfolios), and the changes are retained after they log out and log back in to PPM Center:

- To rearrange columns, click and drag a column heading to the desired position.
- To resize a column, click and drag the dividing line between its column heading and the adjacent column heading.

For the following options, instead of clicking or right-clicking a column heading as described, users can click the drop-down arrow that appears at the right of any column heading when they move the mouse there.

- To hide a table column, right-click any column heading, select **Columns,** and then click (deselect) the name of the column to be hidden.

  To display a column that is not displayed, right-click any column heading, select **Columns,** and then click (select) the name of the column to be displayed.

- To base the sort order of the rows on the values in a column, click that column heading, or right-click in the column heading and click **Sort Ascending** or **Sort Descending.**
- Right-click a column heading and click **Freeze Column "<*column name*>"** to:
  - Move that column as far to the left as possible but to the right of any other previously frozen columns
  - Prevent that column from being moved by clicking and dragging its heading
  - Freeze the width of that column when horizontal scrolling is used for other columns

  Once a column is frozen, the user can right-click the column heading and click **Unfreeze Column "<*column name*>",** which moves the column to the immediate right of any other frozen columns.

Relocated Add Content Button and New Remove Content Button in Scenario Comparisons

In scenario comparisons, the **Add Content** button has been moved to the banner in the **Scenario Content** section, from its former location at the bottom left of the scenario content list. Also, a **Remove Content** button has been added to the banner, and it becomes available when one or more items in the content list are selected.

New Update Scenarios Button

A new **Update Scenarios** button appears in the banner in the **Scenario Content** section. Clicking this button saves any changes the user has made to the selection of items to include or exclude from any scenarios, and it updates the graphs on all the tabs above the **Scenario Content** section accordingly. Clicking this button does *not* save any changes the user made to the basic information fields above the graphs, such as **Comparison Name** and **Description.**

Exporting Scenario Content to Microsoft Excel

An **Export to Excel** link has been added at the upper left of the **Scenario Content** section. Clicking this link exports to Microsoft Excel the basic information fields (at the top of the scenario comparison) and the displayed columns of the scenario content table (including indication of any dependency violations).

Only the displayed columns are exported to Excel, in the order they are displayed. In other words, the Excel file reflects any changes a user has made to the columns selected for display and to the column layout.

The **View Content List** link at the bottom of the **Scenario Content** section has been removed. The content list that was displayed by clicking this link had an **Export to PDF** link that is superseded by the **Export to Excel** link.

Filtering by Portfolio in Analyze Current Portfolio Portlet and Page

On the Analyze Current Portfolio portlet (formerly the Current Portfolio Map portlet) and the Analyze Current Portfolio page, a new filter has been added to select the portfolios to display in the bubble chart. The new filter field is named **Include items from these portfolios (including subportfolios) in graph.**

Users can select one or more portfolios from the associated **Selected portfolios** auto-complete field. In the auto-complete, portfolio names, parent portfolio names (where applicable), and portfolio managers are displayed to assist the user with selection.

The auto-complete automatically excludes portfolios that already have any of their content (proposals, projects, assets, or subportfolios) in the bubble chart. In addition, if a user tries to simultaneously add both a portfolio and any of that portfolio's content where none had been added to the bubble chart previously, only the portfolio is added as a bubble. In these ways, the bubble chart never represents duplicate content among its bubbles.

"Budget" Changed to "Projected Cost" in Analyze Current Portfolio Portlet and Page

On the Analyze Current Portfolio portlet (formerly the Current Portfolio Map portlet) and the Analyze Current Portfolio page, the options formerly labelled **Budget** have been renamed **Projected Cost** for the following fields:

- **Horizontal Axis**
- **Vertical Axis**
- **Size of bubble indicates**

Also, the field name **Budget total greater than ... and less than ...** has been changed to **Projected Cost total greater than ... and less than ...**

Projected cost is the sum of the following:

- **For prior periods,** actual costs where reported (that is, where not blank or zero), otherwise forecast costs
- **For the current period,** the *higher* of forecast costs and (if reported) actual costs
- **For future periods,** forecast costs

HP Project Management

Project Tasks Indicate an Exception When User Does Not Specify % Complete If Required

In version 9.12, the **Exceptions / Warnings** tab on the Task Details page shows an exception indicating that some resources on a task have not entered **% Complete** if both of the following conditions are met:

- **Require resources to enter % Complete along with actual effort** option is selected on the project's Cost and Effort policy.
- A user logs and saves time on a time sheet (or elsewhere) for the task but leaves **% Complete** as 0.

The exception appears on the Task Details page only after the Exception Rule Service runs. For this type of exception, the service runs according to the setting of the `EXCEPTION_ENGINE_WAKE_UP_TIME server.conf` parameter (once a day at 1:00 a.m. by default). For more information, see the *Installation and Administration Guide*.

"Planned" Column Changed to "Forecast" in Project Cost Summary Portlet

For consistency with other changes in PPM Center, the column heading **Planned** has been changed to **Forecast** in the Project Cost Summary portlet.

HP Program Management

New Columns Available in Program Overview Page

In version 9.12, the following new columns are available to all users to add to programs listed on the Program Overview page:

- **Forecast Benefit**
- **Actual Benefit**

In version 9.12, if the `COST_CAPITALIZATION_ENABLED server.conf` parameter is set to `true` and if the financial summary settings for the program also enable separate tracking of capital and operating costs, the following columns are available to all users to add to the Program Overview page:

- **Approved Budget** (subordinate to **Capital Cost** in the list of selectable columns)
- **Approved Budget** (subordinate to **Operating Cost** in the list of selectable columns)

On the other hand, if the `COST_CAPITALIZATION_ENABLED server.conf` parameter is set to `false` or if the financial summary settings for the program disable separate tracking of capital and operating costs, the following column is available to all users to add to the Program Overview page:

- **Approved Budget**

In addition, the following column names have been changed on the Program Overview page:

- In the **Program Costs** section, **Planned** is renamed **Forecast.**
- In the **Content** section:
  - **Planned Labor** is renamed **Forecast Labor.**
  - **Planned Non-Labor** is renamed **Forecast Non-Labor.**
  - **Planned Total** is renamed **Forecast Total.**

"Planned" Column Changed to "Forecast" in Program Cost Summary Portlet

For consistency with other changes in programs, the column heading **Planned** has been changed to **Forecast** in the Program Cost Summary portlet.

New Options to Group and Ungroup Programs by Column Values

In the **Content** section of the Program Overview page, users can organize the rows by grouping them under headings that match the various values in any particular column. To do so, users right-click in the column heading for the column with the values that are to become groupings, and then click **Group by <*column name*>.**

After the groupings (headings) are established, an additional **Ungroup** option appears when users right-click any column. Clicking **Ungroup** removes the headings.

Exporting Programs to Microsoft Excel

Prior to version 9.12, when a user exported a program to Microsoft Excel, all of the available columns in the **Content** section were exported in a pre-determined order, whether they were displayed or not.

In version 9.12, when a user clicks the **Export to Excel** link at the upper right of the Program Overview page, only the displayed columns in the **Content** section are exported to Excel, in the order they are displayed. In other words, the Excel file reflects any changes a user has made to the columns selected for display and to the column layout.

HP Time Management

Identification of Out-of-Sync Actuals Data Upon Upgrade

The pre-validation process for upgrade to version 9.12 determines whether actuals data in HP Time Management and HP Project Management are out of sync and whether actuals data in HP Time Management and HP Demand Management are out of sync. For more information, see *Out-of-Sync Actuals Data* on page 17.

Automatic Saving of Time Sheets to Prevent Data Inconsistencies

Some aspects of time sheet operation have been changed in version 9.12 to improve the user experience and prevent data inconsistencies within PPM Center. Users can save their time sheet data by "explicitly" clicking **Save** or **Save & Submit.** In addition, in version 9.12, time sheets are automatically ("implicitly") saved to the database when users do any of the following:

- Add a new line (work item) to a time sheet
- Remove a line from a time sheet (whether or not the line has data)
- Save any line details
- Group or ungroup the work items on the time sheet

If users take any of these actions, then any valid time entries ("actuals") they have previously typed in a time sheet but not yet explicitly saved are automatically saved to the database.

In addition, when users open the Effort Breakdown window from the My Tasks portlet, enter actuals, and click **Save,** the actuals are saved to the database immediately. Prior to version 9.12, the **Save** button was named **Done** and clicking **Done** did not save the effort breakdown actuals to the database. For more information, see *Improvements to My Tasks Portlet and Edit Effort Breakdown Page* on page 203.

"Automatic Saving of Time Sheets" Dialog for Users (Displayed Once)

In version 9.12, the first time each user opens any time sheet, a message is displayed describing the implicit saving of the time sheet. After the message is displayed to a a user once, it is not displayed to that user again for any time sheet.

However, for instances of PPM Center that support multiple languages, the message is displayed only to users who select English when they log in.

Administrators can prevent this message from ever appearing for any user by using the Administration Console to change the new `TM_ENABLE_SHOW_WHATS_NEW server.conf` parameter from `true` to `false`.

Administration of Time Sheet Activities at the Request-Type Level

In version 9.12, as described in the following sections, administrators can control whether users must specify activities for requests of particular request types when they add those requests to their time sheets. Administrators can specify which activities are available to users on a request-type basis, and can specify a default activity. Implications for copying time sheets are also discussed.

Requiring Users to Specify Activities for Requests of Particular Request Types

In time sheet policies, administrators can already require users to specify activities for *all* requests on their time sheets. In version 9.12, administrators can instead require users to specify activities on time sheet lines for requests of *particular request types* if the following prerequisites are met:

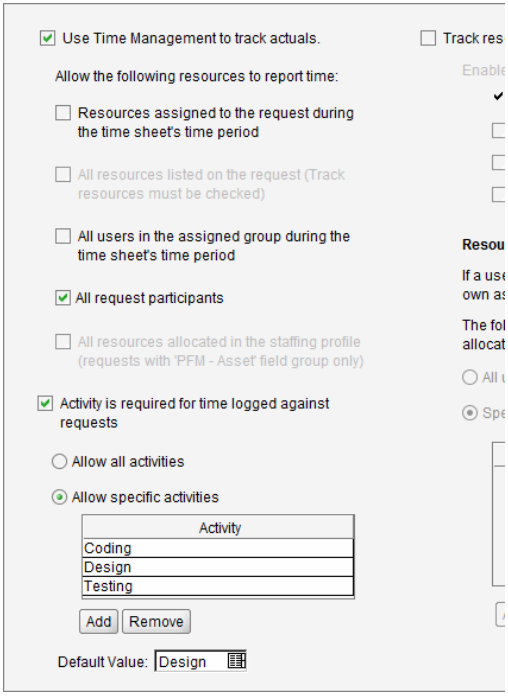
- An administrator has enabled the capability by setting the new `TM_ENABLE_REQ_ACTIVITY_CONTROLS server.conf` parameter to `true` (most conveniently set by using the Administration Console). The default setting is `false`.
- In the PPM Workbench, on the **Resources** tab of the request type, the **Use Time Management to track actuals** option is selected.

To enable the ability to require users to specify activities for a particular request type:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > Open Workbench.**

   The PPM Workbench opens.
3. From the shortcut bar, select **Demand Mgmt > Request Types.**
4. Click **List** to list the request types.
5. Select the request type of interest and click **Open.**
6. Click the **Resources** tab.
7. Make sure the **Use Time Management to track actuals** option (checkbox) is selected.

   The bottom left side of the **Resources** tab has the options related to requiring activities. In the following figure, options have been chosen that enable all the buttons and fields described in the following step and the section *Specifying Which Activities Are Available to Users and Defaults at the Request-Type Level* on page 199.



8. Select the **Activity is required for time logged against requests** (checkbox) option.

   Users are then required to specify activities for requests of this type before they can submit their time sheets. An error message is displayed if they do not do so.

On the **Activities** tab of time sheet policies in the PPM Workbench, administrators can require that users specify activities on time sheets for requests of *all* types, and that setting takes precedence. That is, if the time sheet policy requires entry of activities for requests, users must enter activities for all requests in order to submit their time sheets, regardless of the setting of the new **Activity is required for time logged against requests** option in any request type.

On the other hand, if a time sheet policy does not require that users specify activities for requests on their time sheets, selecting the **Activity is required for time logged against requests** option in the request type requires all users to enter activities on time sheets for that request type.

In both cases described above, only activities that are enabled and configured to use for requests (on the Create Activity or Edit Activity page) are available to users to add to requests on their time sheets.

Specifying Which Activities Are Available to Users and Defaults at the Request-Type Level

When users are required to specify activities on time sheet lines for requests of a particular type as described in *Requiring Users to Specify Activities for Requests of Particular Request Types*, administrators can control which activities are available to users.

On the **Resources** tab of a request type in the PPM Workbench, when the **Activity is required for time logged against requests** option (checkbox) is selected, subordinate options become available. By default **Allow all activities** is selected, but administrators can select **Allow specific activities** and use the **Add** and **Remove** buttons to select specific activities. Then, on time sheets users can add only those specific activities to requests of that request type.

Administrators can optionally specify the **Default Value** field for the activity, whether all activities or only specific activities are allowed. If only specific activities are allowed, the values in the auto-complete for the **Default Value** field are limited to those specific activities. If the **Default Value** field is specified, that activity appears as the default for all requests of that request

type on all time sheets for all users. Users can still click **Line Details** on time sheets to edit the activities on their time sheet lines as usual.

At the time a user adds an activity to a time sheet line, HP Time Management displays the available activities as they are currently configured on the **Resources** tab of the request type. If that configuration has changed since the user last added activities to any time sheet, the user sees the new set of activities. If an activity a user previously selected for a request on a time sheet has since been removed from the set of allowed specific activities on the **Resources** tab, that activity can no longer be added to any request of that type, but it remains on the time sheet and does not cause an error when the time sheet is saved or submitted.

In any case, only activities that are enabled and configured to use for requests (on the Create Activity or Edit Activity page) are available to configure on the **Resources** tab of request types so that users can then add them to requests on their time sheets.

Copying Requests with Disallowed Activities to New Time Sheets

A user can copy an existing time sheet or, if the `TM_DISABLE_INCLUDING_LAST_TS_ITEMS server.conf` parameter is set to `false`, a user can create a new time sheet that includes items from his or her previous time sheet.

Assuming the `TM_ENABLE_REQ_ACTIVITY_CONTROLS server.conf` parameter is set to `true`, consider the following sequence of events:

1. A time sheet is created with a request line that includes one or more specifically allowed activities. (Multiple activities for a time sheet line appear in separate rows in a time sheet.)
2. Some of those activities are later removed from the set of allowed activities (that is, they are disallowed) on the associated request type.
3. A user copies the time sheet.

In this scenario, depending on the activities, the request line is copied to the new time sheet with or without activities as follows:

- When the existing time sheet includes a request line with *one or more* activities and *all* of those activities were later disallowed, no activity is copied to the request line on the new time sheet, that is, the activity for the copied line is blank.

- When the existing time sheet includes a request line that has *multiple* activities and *some but not all* of those activities were later disallowed, the copied request line on the new time sheet includes separate rows for each of the activities that remain allowed.

If the `TM_ENABLE_REQ_ACTIVITY_CONTROLS server.conf` parameter is set to `false`, all activities are copied to the lines in the new time sheet.

Highlighting of Non-Working Days and Holidays on Time Sheets

For time sheets on which time is logged on a daily basis, the columns for non-working days and holidays can be highlighted in color in version 9.12. Holidays reflect the user's regional calendar. By default, this option is not enabled. To enable it, an administrator must set the new `HIGHLIGHT_NONWORKING_DAYS_IN_TIMESHEET server.conf` parameter to `true` (most conveniently set by using the Administration Console).

Renamed Buttons on Line Details Window

The Line Details window, which has the **Charge Codes/Activities, Approvals/Transactions Details, Notes,** and **User Data** tabs, had **Apply, OK,** and **Cancel** buttons in prior versions of PPM Center. In version 9.12, the window has more appropriately named buttons—**Save** and **Cancel.**

New Time Sheet Notes Show "(Pending Save)" Until Time Sheet Is Saved

In version 9.12, when a user adds a note to a time sheet, the time stamp column for **Notes** shows **(Pending Save)** for that note until the user saves the time sheet, either explicitly by clicking **Save** or **Save & Submit,** or implicitly as described in *Automatic Saving of Time Sheets to Prevent Data Inconsistencies* on page 196. When the user saves the time sheet, the time stamp for the note is updated to that time.

Improved Error Management

As in prior versions of PPM Center, on time sheets users can specify and try to save or submit actuals that cause errors such as:

- Time sheet policy violations
- Invalid data values such as:
  - Values that would result in negative total actual effort for a project, a task, or a request, when summed across the user's time sheets.
  - Values for **% Complete** that are not in the range 0–100.
  - Negative values for **Estimated Remaining Effort.**
  - Actuals for a task for which the user has previously entered time in HP Project Management—any particular user can use only time sheets or only HP Project Management to log time against any particular task.

In these cases, version 9.12 introduces the following changes:

- The time sheet page is not reloaded on the screen when the errors occur, so users see faster presentation of error messages.
- Error messages regarding data values are presented separately from error messages for time sheet policy violations. Users must correct the data value errors before the policy violation messages are displayed. (As in prior versions of PPM Center, policy violations are shown only when users submit their time sheets.)
- If a project requires users to enter **% Complete** and a user has not done so, the requirement is indicated on the time sheet only when users submit the time sheet, not when they just save it.

Improvements to My Tasks Portlet and Edit Effort Breakdown Page

Prior to version 9.12, to log and save time from the My Tasks portlet, users opened the Effort Breakdown window, logged time, clicked **Done** to return to the portlet, and clicked **Save** on the portlet.

In version 9.12, the **Done** button on the Effort Breakdown window has been renamed **Save,** and clicking it saves the updates directly to the database, calculates **% Complete** and **Estimated Remaining Effort** for tasks and projects, and then returns the user to the My Tasks portlet.

In addition, from the My Tasks portlet, if a user selects a new time sheet in the **Use Time Sheet** field and clicks **Edit Effort Breakdown** or any value in the **Actual Effort (hrs)** column, the Effort Breakdown window opens and the time sheet is automatically created for the user. Prior to version 9.12, the time sheet was not automatically created until the user clicked **Done** on the Effort Breakdown window and **Save** on the My Tasks portlet.

HP APM for PPM

HP APM for PPM (HP APM) is a new module that runs on top of PPM Center version 9.12. Two new licenses for HP APM are available with PPM Center version 9.12: Application Portfolio Analyst and Application Portfolio User. However, these HP APM licenses must be purchased separately before they can be assigned to users. For more information, contact your HP sales representative or go to http://www.hp.com/go/appportfoliomgmt.

Integration with Microsoft Project 2010

The Plug-in for PPM is integrated with Microsoft Project 2010. While the functionality of the Plug-in for PPM remains the same, you may need to adapt to some new features in Microsoft Project 2010.

The new features in Microsoft Project 2010 that affect how the Plug-in for PPM integrates with it include: task creation mode and the user interface.

Client-Side Requirements

The following software is required on the client:

- Microsoft Project 2010
- Microsoft .NET Framework version 3.5 or later
- Visual Studio Tools for Office (VSTO) version 3.0 (must be installed by a system administrator)
- Microsoft Office 2010 Primary Interop Assemblies (PIA) for Microsoft Project 2010 (must be installed by a system administrator)

Task Creation Mode

In Microsoft Project 2010, users can create tasks in two different modes: Auto Scheduled or Manually Scheduled. To successfully integrate tasks between Microsoft Project 2010 and PPM Center, all Microsoft Project 2010 tasks must be created in Auto Scheduled mode.

If a task is created in Auto Scheduled mode, data in task date and duration fields are validated by Microsoft Project and all tasks can be successfully integrated with PPM Center.

If a task is created in Manually Scheduled mode, data in task date and duration fields are not validated by Microsoft Project. PPM Center considers this data to be invalid and does not integrate the data. To successfully integrate all task data, the task must be changed to Auto Scheduled mode.

To change a task's mode, update the **Task Mode** field.

To set the default task creation mode for new tasks that are added to an existing project, click on the **New Tasks** menu at the bottom of the work plan window and select **Auto Scheduled.**

To set the default task creation mode for new projects, go to the **File** tab and select **Options.** Select **Schedule** and then set the **New tasks created** field to **Auto Scheduled.**

User Interface

The user interface has been changed in Microsoft Project 2010. Instead of the initial drop-down menus, the interface uses tabbed sections.

The location of the Plug-in for PPM menus has changed and can be found as follows:

- The HP PPM Center menu is located in the **Add-Ins** tabbed area.
- The custom **Changed Actuals** tool can be found in the **View** tab and by selecting the **Tables** drop-down menu.
- The custom filters can be found in the **View** tab and by selecting the **Filter** drop-down menu.

Updates to HP Deployment Management Extension for Oracle E-Business Suite and HP GL Migrator to Support Oracle E-Business Suite Release 12

A patch to the HP Deployment Management Extension for Oracle E-Business Suite and a new version of HP GL Migrator provide support for Oracle E-Business Suite Release 12.

For detailed information about supportability of the new HP GL Migrator version 9.12 with various releases of Oracle E-Business Suite and with various versions of PPM Center and HP Object Migrator, see the latest *System Requirements and Compatibility Matrix* for PPM Center version 9.1x.

For detailed information about HP GL Migrator version 9.12, including installation and upgrade procedures, see the *HP GL Migrator Guide* for version 9.12.

A specific product installation or upgrade sequence must be followed when using PPM Center version 9.1x, as described in *Product Installation Sequence with PPM Center Version 9.1x* on page 207.

FSG Functionality Provided in HP GL Migrator Version 9.12

The Migrate FSG Row/Col Sets program migrates user selected FSG Row/Col Sets from a source database to a destination database. The migration is accompanied by an output file displaying all migrated entities along with the status or error codes associated with each record in migration. This program was previously included with HP Object Migrator version 7.5. For more information, see the *HP GL Migrator Guide* for version 9.12.

New Object Types Provided in Extension Patch

As described in *Product Installation Sequence with PPM Center Version 9.1x*, a patch for the HP Deployment Management Extension for Oracle E-Business Suite must be installed. The patch installs the following new PPM Center object types that must be used to support migrations for Oracle E-Business Suite Release 12:

- GL 912 :Budget Organisation
- GL 912 :Consolidations
- GL 912 :Cross Validation Rules
- GL 912 :FSG Row/Col Sets
- GL 912 :Journal Categories
- GL 912 :Journal Entry Sources
- GL 912 :Mass Allocation/Budget
- GL 912 :Summary Templates

These new object types are analogous to existing object types that do not have the “GL 912 :” prefix, except that the GL 912 :FSG Row/Col Sets object type is provided in HP GL Migrator version 9.12 for the first time (see *FSG Functionality Provided in HP GL Migrator Version 9.12*).

The new object types are backward compatible with Oracle E-Business Suite Release 11i, and installing them does not overwrite any existing object types.

Product Installation Sequence with PPM Center Version 9.1x

To prepare to deploy HP GL Migrator version 9.12 and associated prerequisites, download patch PPMC_00098 for HP Deployment Management Extension for Oracle E-Business Suite, which bundles the following files:

- The following zip files for HP GL Migrator version 9.12:
  - `CLGM_912.zip`
  - `CLGM_UPG_912.zip`
- The following zip files for HP Object Migrator version 7.5:
  - `CLM_75.zip`
  - `CLM_75_tar.gz`
  - `CLM_UPG75.zip`
  - `CLM_UPG75_tar.gz`
- The following jar file for the HP Deployment Management Extension for Oracle E-Business Suite patch:

  `ppm-910-OracleApps912.jar`
- The following jar file for the HP Deployment Management Extension for Oracle Technology version 9.10:

  `ppm-910-OracleTech.jar`

Starting with PPM Center version 9.1x (9.10 with or without an associated service pack) as a basis, the following product installations or upgrades must be performed in the following sequence to support using the HP Deployment Management Extension for Oracle E-Business Suite and HP GL Migrator with Oracle E-Business Suite Release 12:

1. HP Object Migrator version 7.5, if not already installed.

   See the *HP Object Migrator Guide* for version 7.5.
2. HP GL Migrator version 9.12.

   See the *HP GL Migrator Guide* for version 9.12.

3. PPM Center version 9.1x, if not already installed.

   See the *Installation and Administration Guide* for version 9.10 and service pack *Release Notes* as appropriate.

4. HP Deployment Management Extension for Oracle E-Business Suite version 9.10, if not already installed.

   See the *HP Deployment Management Extension for Oracle E-Business Suite Guide* for version 9.10.

5. HP Deployment Management Extension for Oracle E-Business Suite patch PPMC_00098 to allow the HP Deployment Management Extension for Oracle E-Business Suite version 9.10 and HP GL Migrator version 9.12 to support Oracle E-Business Suite Release 12.

   For this patch, you must use the following installation command:

```
sh kDeploy.sh -i OracleApps912
```

The HP Deployment Management Extension for Oracle Technology can be installed at any time after PPM Center version 9.1x is installed.

HP Demand Management

New Table Component

In PPM Center version 9.12, table component is implemented using a new way to improve usability.

In addition to seamless support for the existing functionalities, the new table component also offers the following new functionalities:

- *New Table Component Layout*
- *Switching between Original and New Table Component Layouts*
- *Editing Table Component Directly on Request Pages*
  - *Resizing table columns*
  - *In-line row adding* and *In-line row deleting*
  - *Copying and pasting row(s)*
  - *Moving row(s) up or down*
  - *In-line row editing*
  - *Warning prompt when leaving current page without saving the modified table component*
- *Showing Total of a Table Component Column in Real-time*
- *Quick Navigation through Table Rows*

The new table component is supported on the following pages:

- Create New Request page
- Request Details page
- Look-ahead page

Supported Validations

Table component fields support validations of the following component types:

- Text field
- Drop-down list
- Radio buttons (yes/no)
- Auto-complete list
- Text area
- Date field (short, medium, and long)
- Web Address (URL)
- Password field
- Link

For more information about validations, see the *Commands, Tokens, and Validations Guide and Reference*.

Special Note for Link and Web Address (URL) Component Types

When you use `<!--HTML-->` for **Link** and **Web Address (URL)** component types, make sure not to use `<a></a>` tags as they are not allowed. **Link** and **Web Address (URL)** components are `<a></a>` tags in Web UI, you cannot embed `<a></a>` tags within `<a></a>` tags.

`<!--HTML-->` is designed for advanced users and you should use tags that affects font and color only. For example, the script below is valid:

```
<!--HTML--><font color='red'>PPM</font>
<!--HTML--><b>PPM</b>
```

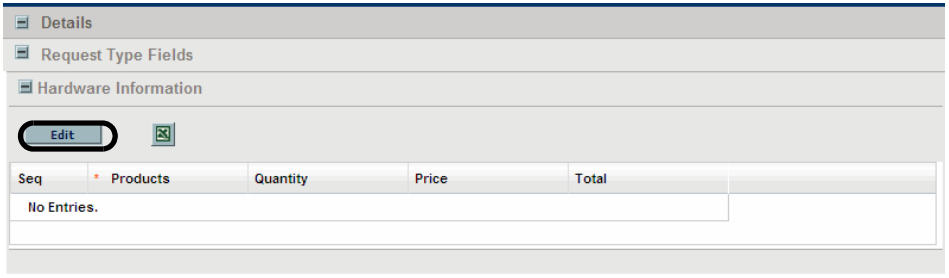
The script below is not allowed for Link and URL:

```
<!--HTML--><a href='http://hp.com'>HP</a>
```

Note that link description is also not allowed.

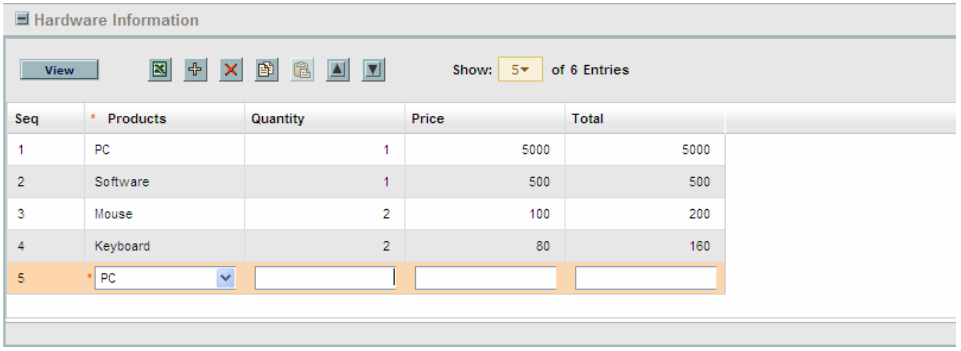
New Table Component Layout

The new table component looks similar to the follows when you have just created a new request:

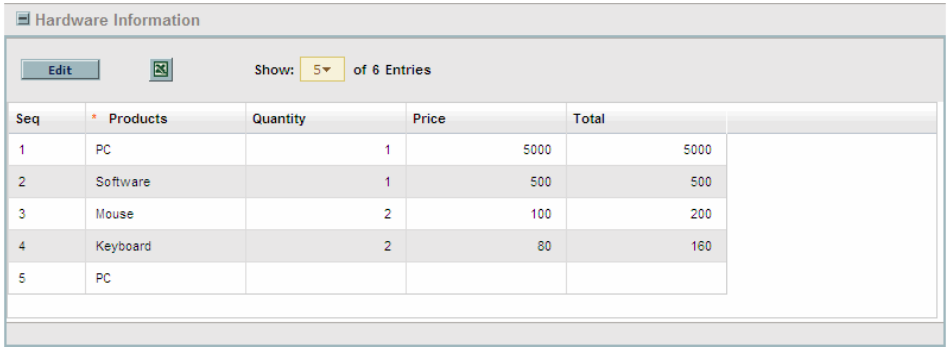


You can click **Edit** to switch to Edit mode directly, and proceed to edit the table by adding rows, filling in data, and performing other operations.

The new table component in Edit mode:



The new table component in View mode:



Switching between Original and New Table Component Layouts

With PPM Center version 9.12, the new table component layout is applied by default. However, you may choose to switch back to the original table component layout by configuring the newly introduced `server.conf` parameter listed in *Table 8-1*.

Table 8-1. New server.conf parameter introduced

Parameter name	Description, Usage	Default and Valid Values
TABLE_COMP_USE_LEGACY	Determines whether the original layout of the table component is used. If set to `true`, the original layout will be applied.	Default: `false` Valid values: `true, false`

Editing Table Component Directly on Request Pages

With the new table component implemented, you can edit the table component directly on the following pages:

- Create New Request page
- Request Details page
- Request look-ahead page

To enter Edit mode, simply click **Edit** in the table component.

Note that the **Edit** button is only available to users with edit access grant to requests or table component.

For detailed information about access grants, see the *Security Model Guide and Reference*.

Resizing table columns

You can resize width of table columns in both View mode and Edit mode by dragging column borders in the table.

When you resize table column width, the table width is also resized automatically.

In-line row adding

Click **Add Row** icon to add or insert new rows directly in the table component.

When you click , a new row is added or inserted to the table immediately below the currently selected row, and the focus shifts to the newly added row with the new row being selected automatically.

In-line row deleting

You can delete rows from the table component directly.

To delete rows from the table component,

1. Select the row to delete, or click additional rows while holding down **Shift** or **Ctrl** key to help select multiple continuous or non-continuous rows.

   When a single row is selected, it is highlighted and becomes editable. When a second row is selected, the editable row becomes non-editable.

2. Click **Delete Selected Rows** icon .

   A warning message pops up asking for your confirmation.

3. Click **OK** if you are sure you want to delete the selected rows.

4. Click **Save Draft** or **Save** on the page. This ensures that the data in the deleted rows are removed.

Save Draft button is available if you set the `server.conf` parameter ALLOW_SAVE_REQUEST_DRAFT to `true`.

Copying and pasting row(s)

The new table component supports copying and pasting of selected row(s).

After clicking **Edit** button in the table component to switch to Edit mode, the **Copy** and **Paste** icons become visible.

Selecting a row in the table component enables the **Copy** icon , then clicking **Copy** icon enables the **Paste** icon .

Copying and pasting row(s) follows the following behaviors:

- By clicking **Copy** icon, the row(s) of your current selection are remembered, including data in the cells and cell styles (such as editable, required, visible, CSS style, and default value as defined by UI rules). You can click **Paste** repeatedly to paste the selected row(s) with their data and cell styles to desired locations in the table component until you select another row or another set of rows to copy.
- When a single row is selected, if you click **Copy** and **Paste** directly, the row is inserted immediately below the currently selected row. If you click **Copy**, then select a second row and click **Paste**, the row is inserted immediately below the second row you selected. In another word, you can select a single row and insert it below any row in the table.
- When multiple rows are selected (you can click additional rows to select them while holding down **Shift** or **Ctrl** key to help select multiple rows), if you click **Copy** and **Paste,** the selected rows are always pasted continuously below the last row in the table component. If you click **Copy**, then select another row in the table component and click **Paste**, the previously selected multiple rows are pasted continuously, immediately below the row of your current selection.

Moving row(s) up or down

The new table component supports moving row(s) up or down in the table. You can select a single row or multiple consecutive rows to move up or down in the table component.

The **Move Up** icon and **Move Down** icon become visible in the table component when you switch to Edit mode by clicking **Edit**.

To move up or move down a single row, select the desired row and click or .

To move up or move down multiple consecutive rows, click additional rows to select them while holding down the **Shift** key, then click or .

After you have finished moving up or down row(s), be sure to click **Save Draft** or **Save** to save the changes.

Note that the **Move Up** icon and **Move Down** icon are disabled in the following situations:

- The **Move Up** icon is disabled when the first row in the table component is selected.
- The **Move Down** icon is disabled when the last row in the table component is selected.
- Both icons are disabled when multiple non-continuous rows are selected.
- There are no entries in the table.

In-line row editing

All validations supported by table component can be set to editable in PPM Workbench. For the list of supported validations, see *Supported Validations* on page 210.

For validations that are set to editable in PPM Workbench, relevant table cells in the table component are editable and you can edit them directly.

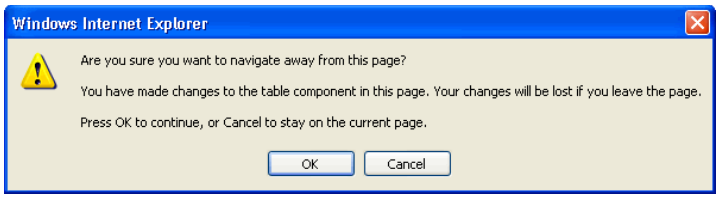
When you click a row in the table component, it becomes highlighted and editable. You can navigate the cells in an editable row by pressing the **Tab** key.

After you have finished editing cells and rows in the table component, click **Save Draft** or **Save** on the page to save the changes.

If any required fields (marked with a red star) are left empty, clicking **Save Draft** or **Save** will prompt a warning similar to the follows, reminding you to provide values for required fields before you can save the table component successfully, and the first required and focusable field will be focused.

Warning prompt when leaving current page without saving the modified table component

If a user is leaving the current page without saving the modified table component, a warning message will pop up asking for confirmation.



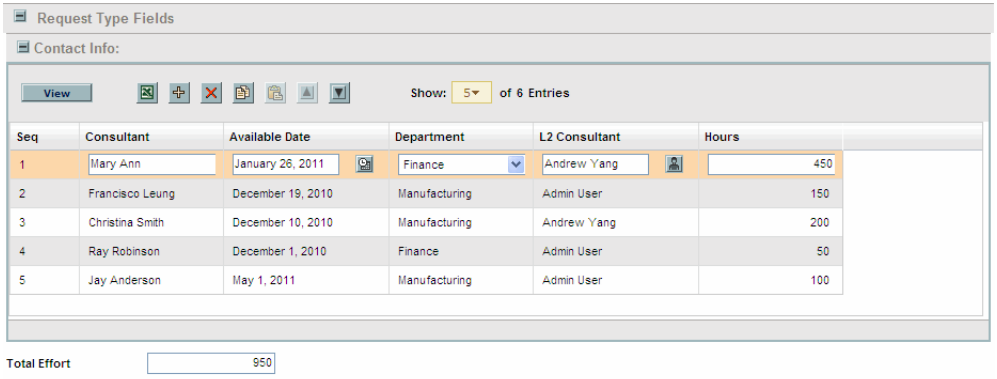
Showing Total of a Table Component Column in Real-time

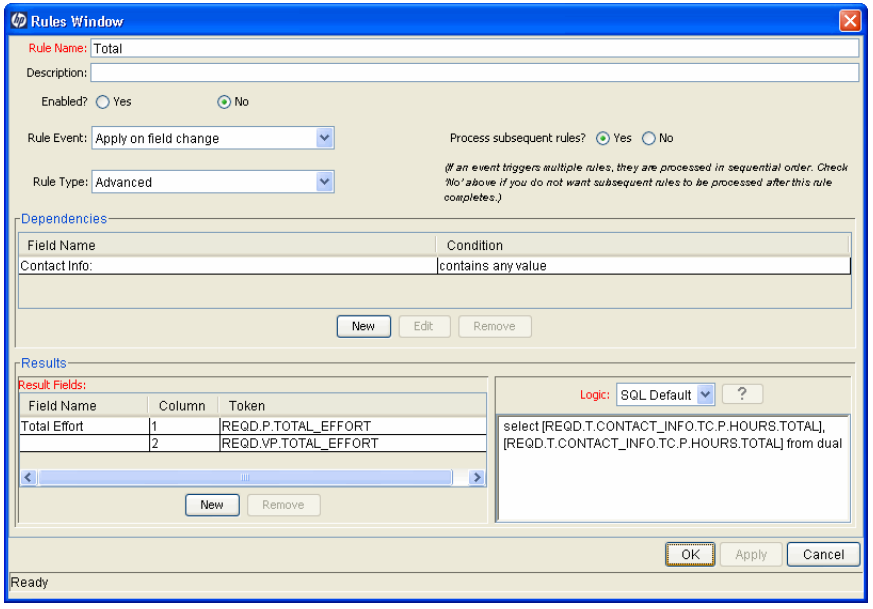
The new table component supports displaying total for a numeric column if you set **Display Total** attribute for the column to **Yes** in PPM Workbench.

- The **Total** field is visible in the table component as the last row when all rows display.
  - The **Total** value is re-calculated and displayed in real-time.
  - Supports showing the **Total** row on Printing Page.
  - Supports showing the **Total** row on exported Excel spreadsheet.
- The **Total** row is invisible in the following situations,
  - When you are not showing all entries in the table.
  - When there are no entries in the table.
  - When there is no column with **Display Total** attribute.

- Supports total token

  For example, the **Total Effort** field in the following screenshot references the total token [REQD.T.CONTACT_INFO.TC.P.HOURS.TOTAL]:

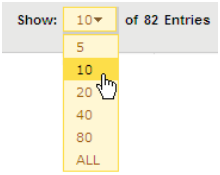




Quick Navigation through Table Rows

The new table component supports displaying current table entries and total row count in real-time. You can choose to show all entries or a certain number of entries in the table component.

When there are more than 5 entries, the **Show: *M* of *N* Entries** field appears to the right of the table component menu icons, where ***M*** is the number of entries currently displayed, ***N*** is the total number of entries in the table. For example,



- Depending on the total row count in the table, options available for ***M*** would be **5, 10, 20, 40, 80, ..., All**.
- When you add, delete, copy and paste, move up or down rows, the table component refreshes **Show: *M* of *N* Entries** status in real-time.
- When you change **Show: *M* of *N* Entries**, you refresh the table component only. The rest of the request page is not refreshed.
- The **Show: *M* of *N* Entries** status is remembered per session.
- When you set ***M*** to **ALL**, ***M*** will always display **ALL**, and the table component automatically expands to show all entries when you add, delete, or copy and paste rows.
- With ***M*** as an integer, when you add, delete, copy and paste, or move up or down rows, it always displays an integer even when ***M*** = ***N***.

Other Changes

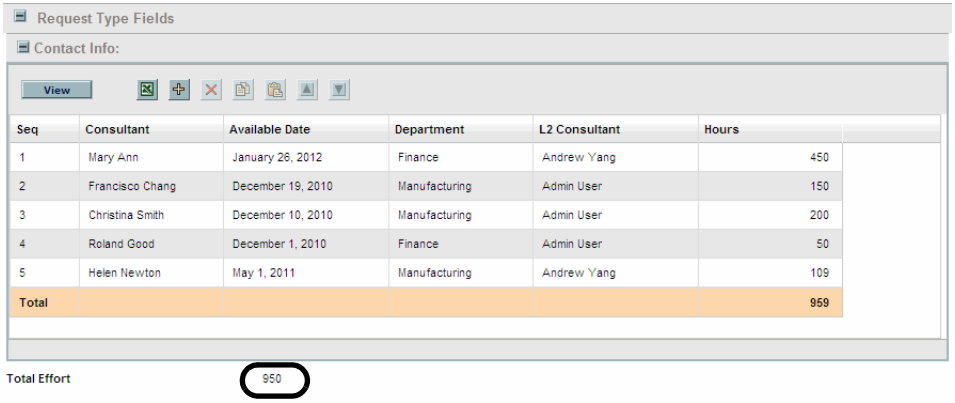
- With the new table component layout, there is no need to configure the **Form Layout** tab anymore, though it is still available.

  Now you can resize column and table width, move table rows up or down directly in the table component on a request page.

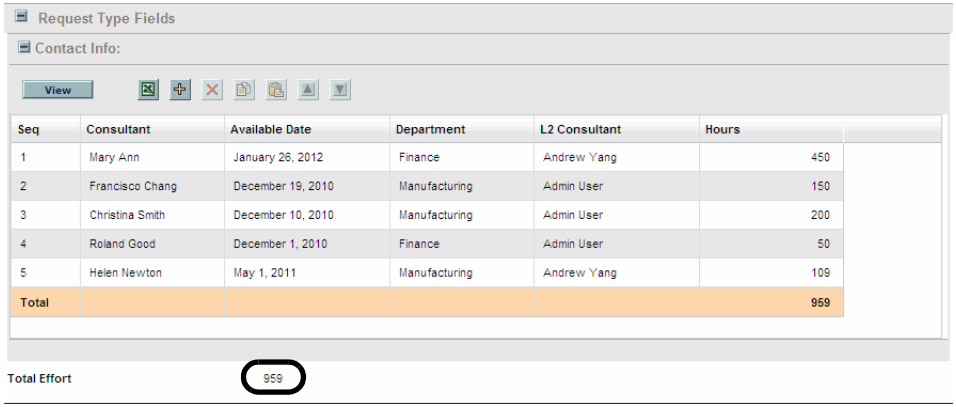
- When one field on a request page is dependent on another field in the table component, UI rule(s) are triggered and the focus (indicated with single light blue boarder lines around the table component) is lost if you click outside the table component; While on a request page with the original table component layout, the UI rule(s) are triggered by clicking **Done**.

  In the following example, the **Total Effort** field references the **Total** token [REQD.T.CONTACT_INFO.TC.P.HOURS.TOTAL]:

  - Before you click outside the table component, the **Total Effort** field value is not updated, and the single light blue boarder lines around the table indicate that the focus is on the table component:



  - After you click outside the table component, the **Total Effort** field value is updated as a result of triggered SQL rule, and the table component focus is lost as the light blue boarder line turn gray.



Considerations for Using Rules in Table Component

The new table component supports using simple and advanced SQL rules and UI rules on the following two rule events:

- **Apply on creation**
- **Apply on field change**

You can use SQL rules and UI rules in the same way you use them on request level. For details about configuring advanced SQL rules and UI rules, see the *HP Demand Management Configuration Guide*.

However, note the following considerations when you configure SQL rules and/or UI rules for table component:

- Set **Process subsequent rules?** option to **`Yes`** or **`No`** for different validations.
- **Dependencies** field is not required for **Apply on creation** rule event, but required for **Apply on field change** rule event.
- **Dependencies** field supports the following validations:
  - Text field
  - Auto-complete list
  - Drop-down list
  - Date field (short, medium, and long)
- **Results** field supports the following validations:
  - Text field
  - Text area
  - Auto-complete list
  - Drop-down list
  - Radio buttons (yes/no)
  - Date field (short, medium, and long)

- Web Address (URL)
- Link

- UI rules support the following JavaScript functions:
  - `setFieldRequired ()`
  - `setFieldEditable ()`
  - `setFieldVisible ()`
  - `showMessage ()`
  - `setFieldStyle ()`

To modify CSS styles, locate and access the `RequestRulesUserCSS.css` file in the following directory: `/opt/ppm/[instance name]/server/[instance name]/deploy/itg.war/web/knta/crt/css/.`

For more information about these JavaScript functions, see the *HP Demand Management Configuration Guide* or access the *Request Rules JavaScript Function Help* by clicking the icon next to the **Logic** field in **Rules** window of the Validations Workbench.

- You can set table component as a dependency to trigger request type rules.
- If a field's `Display` attribute is set to **`No`** or the field is set invisible by its status dependency, you can not make it visible on the Web UI by using UI rules.
- When using SQL rule(s) on text field with **Apply on creation** rule event, make sure not to use strings "`~^~^~`" and/or "`~&~&~`" in any text field as they are reserved.
- When SQL rule(s) with **Apply on creation** rule event are triggered to override default value of a table component column, the default value may still display for a very short period of time (say 0.5 second) due to server speed.
- For any validation (with the exception of Text validation), if you set the **Display Only** attribute to **Yes** for a field, then using UI rule `setFieldEditable(true)` will not make the field editable.

9 Enhancements, Integrations, Certifications, and Fixes in PPM Center 9.12

This section includes information about the enhancements, integrations, certifications, and fixes in PPM Center version 9.12.

Enhancements

The following enhancements are included in PPM Center version 9.12:

- *Display of Project Number in Project Overview Page*
- *Display of Project Number in Time Sheet Lines*
- *Approval of Submitted Time Sheets for Future Periods*
- *User Control of Vertical Size of Time Breakdown Tables on Time Sheets*
- *New Report: Purge Empty Time Sheet Lines*
- *Configurable Access Grants for Request Creators*
- *New Option for Notifications: Prevent any email notifications regarding this staffing profile*
- *New Rule Event: Apply on Copy*
- *Improved Search Result in Microsoft Project*
- *PPM Center Accessibility Improvements*
- *Special Command ksc_copy_request Enhancement*
- *Detecting Multicast Routing and Configuration Issues for a Server Cluster*
- *Improved Startup Checks*

- *SQL Debugging for All Product Areas*
- *Accessing Services Exceptions Details*
- *Enabling Debugging On a Per-User Basis*
- *Improved Services Audit Results Page*
- *Accessing Application Exception Details*
- *Identifying Connection Issues*
- *Updating a Microsoft Project Work Plan Hierarchy Integrated with HP Project Management*

Display of Project Number in Project Overview Page

In version 9.12, to help users distinguish similarly named projects, the project title on the Project Overview page displays the project number (the request ID of the project) as well as the project name, in the format:

Project: <*project number*> <*project name*>

For example: **Project: 12345 Whirlwind**

See also *Display of Project Number in Time Sheet Lines*.

Display of Project Number in Time Sheet Lines

In version 9.12, to help users distinguish similarly named projects, time sheet lines for projects display the project number (the request ID of the project) below the project name, in the format:

<*project name*>
Project: <*project number*>

For example:

Whirlwind
Project: 12345

See also *Display of Project Number in Project Overview Page*.

Approval of Submitted Time Sheets for Future Periods

In version 9.12, submitted time sheets that cover future time periods appear on the Approve Time page and in the Approve Time Sheets portlet.

User Control of Vertical Size of Time Breakdown Tables on Time Sheets

In the Time Breakdown table in time sheets, users specify the amount of time they spent on various work items. The table has one time sheet line for each work item (and the time sheet line uses multiple rows if it has multiple activities). In previous versions of PPM Center (except version 8.03), the vertical size of this table is a fixed number of pixels. As a result, users who have monitors with a vertical resolution of more than 1024 pixels sometimes see considerable white space below the table on the time sheet page. If that white space were available for time sheet lines, users could see more of those lines at one time without scrolling the table.

In version 9.12 (as in version 8.03), each user can control the vertical size of the tables in his or her time sheets. To do so, the administrator must set the new `server.conf` parameter named `TM_ENABLE_GRID_RESIZE_CONTROL` and set it to `true` (it is most conveniently set by using the Administration Console).

When the administrator enables this capability, all users see three new mutually exclusive options on all of their time sheets, as buttons to the right of the **Group | Ungroup Items** options.

From left to right, the buttons have the following appearance and corresponding tooltips (mouseovers):

- One horizontal line, with the tooltip Small
- Two horizontal lines, with the tooltip Medium
- Three horizontal lines, with the tooltip Large

The button (option) the user selects controls the vertical size (number of vertical pixels) available for displaying the Time Breakdown table, for all of that user's time sheets, existing and new. The option affects all of the tabs of the table, and it persists until the user changes it.

The default option for each user is Small, which results in the same vertical table size as previous versions of PPM Center. Users who select Medium or Large might see more time sheet lines as soon as the page is loaded (that is, without scrolling the table), and they might see less white space below the table.

New Report: Purge Empty Time Sheet Lines

The Purge Empty Time Sheet Lines report purges empty time sheet lines from the database.

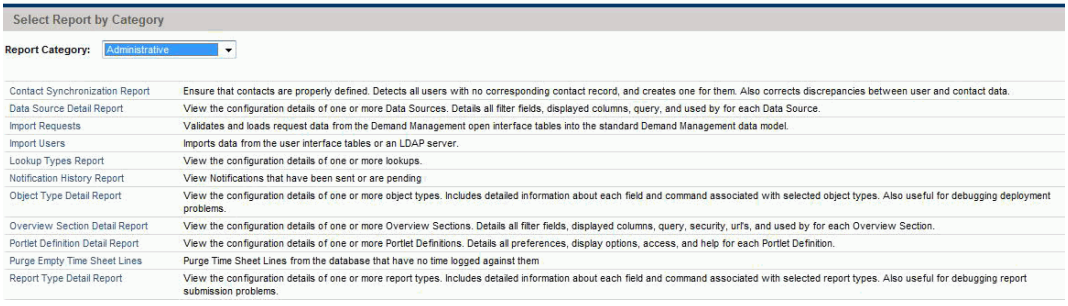
An empty time sheet line is defined as a line in which no actual effort has been entered. This does not mean a time sheet line that has a total effort of 0 because you are allowed to enter negative time as effort.

To keep the data growth under control, HP recommends that you run this report periodically. Optionally, you can prevent resources from submitting empty time sheet lines by using time sheet policies. For more information about how to specify the level of enforcement for empty lines, see the *HP Time Management Configuration Guide*.

- This report only removes empty time sheet lines from times sheets that are in one of the following states:
  - Closed
  - Frozen
  - Canceled
- This report is restricted to users having a User Administration license.

Creating a Purge Empty Time Sheet Lines Report

After you install PPM Center version 9.12, the Purge Empty Time Sheet Lines report is available under the **Administrative** category by clicking **Create > Report** menu.



To create and submit a Purge Empty Time Sheet Lines report, follow these steps:

1. Log on to PPM Center.
2. From the menu bar, select **Create > Report**.

   The Submit New Report page opens.
3. From the **Select Report by Category** section, select **Administrative** from the **Report Category** drop-down list.

   A list of all administrative reports appears.
4. Click **Purge Empty Time Sheet Lines** in the list.

   The **Submit Report: Purge Empty Time Sheet Lines** window opens.
5. To define the report results you want, type or change information in the fields under the **Report Parameters** section.

   For more information, see the *Report Parameters* section.
6. To run the report at a later time, on a periodic basis, or provide a brief notification once the report is finished, expand the **Scheduling** section, and then type or change the information in this section according to the task you want to accomplish.

   For more information, see the *Reports Guide and Reference*.
7. To add a notification that has more comprehensive features than those available with Send email to, expand the **Advanced Notifications** section, and then configure the advanced notification settings according to your requirement.

   For more information, see the *Reports Guide and Reference*.
8. Click **Submit.**

   The report will run immediately, at a later time, or on a periodic basis. This depends on your settings in the Scheduling section.

Report Parameters

This report has four parameters (as shown in *Figure 9-1*). These parameters are described in *Table 9-1*.

Figure 9-1. Report parameters

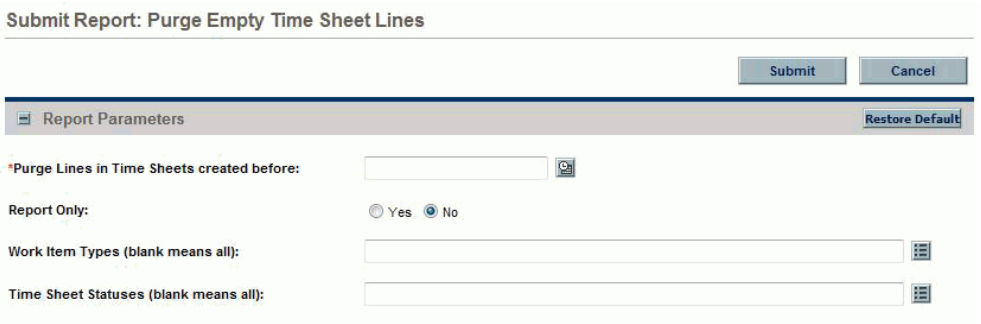


Table 9-1. Purge Empty Time Sheets Lines field descriptions (page 1 of 2)

Field Name (*Required)	Description	Default Value
* Purge Line in Time Sheets created before	Specifies the time threshold of the purge. Only time sheets with period end dates prior to this date will have empty lines deleted.	Blank When you open the calendar, the current date is highlighted.
Report Only	Indicates whether or not to generate a report without deleting the eligible empty time sheet lines. If you set this field to Yes, no lines will be deleted. In this case, only a report of the empty lines that are eligible to delete is generated.	No, which means all eligible empty time sheet lines are deleted after the report completes.

Table 9-1. Purge Empty Time Sheets Lines field descriptions (page 2 of 2)

Field Name (*Required)	Description	Default Value
Work Item Types	Specifies which work item types are eligible to have empty lines deleted.	Blank, which means this report processes time sheet lines of all work item types.
Time Sheet Statuses	Specifies the states of time sheets to process. Only time sheets in the specified states will have empty lines deleted. Choices include: • Closed • Canceled • Frozen	Blank, which means this report processes empty lines for time sheets in all the following states: • Closed • Canceled • Frozen

Report Output

The output of this report includes:

- Report parameters
- The number of time sheet lines that were purged for each period (categorized by period type), work item type, and time sheet status
- The total number of time sheet lines that were purged

Figure 9-2 shows an example of the report output.

Figure 9-2. Report output

Report Parameters

Report Name: Purge Empty Time Sheet Lines
Run Date: September 28, 2010 08:38 AM EEST
Purge Lines in Time Sheets created before: 2010-09-28 00:00:00
Report Only: Yes
Work Item Types (blank means all):
Time Sheet Statuses (blank means all):

Time Sheet Lines to Purge, by Period

Period Type	Period	Time Sheet Lines to Purge
Semi-Monthly	08/16/10 - 08/31/10	1
	07/16/10 - 07/31/10	4
Total:		5
Bi-Weekly	08/09/10 - 08/22/10	51
	07/26/10 - 08/08/10	51
	07/12/10 - 07/25/10	51
Total:		158

Time Sheet Lines to Purge, by Work Item Type

Work Item Type	Total
Package	33
Request	32
Project	31
Misc	32
Task	30
Total:	158

Time Sheet Lines to Purge, by Time Sheet Status

Work Item Type	Total
Frozen	52
Cancelled	51
Closed	55
Total:	158

Configurable Access Grants for Request Creators

In PPM Center version 9.12, the View and Edit access grants for the creator of a request become configurable. Therefore, you can restrict the creator's permissions on a request by configuring these access grants.

This enhancement is typically used in scenarios like the following:

- The request creator is assigned a new role that should not have enough permission to view or edit the requests he or she created.
- You delegate the creation of a request to someone who should not be able to view or edit the request after it is created.

To configure the View and Edit access grants for the creator of a request, follow these steps:

1. Open PPM Workbench, and then select **Demand Mgmt** > **Request Types**.

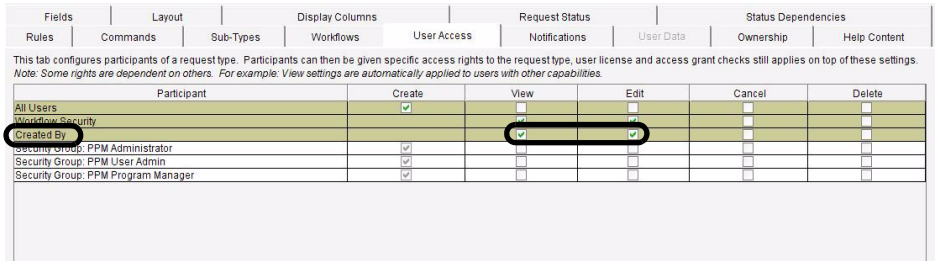
   The Request Type Workbench opens.

2. Open the corresponding request type.

   The Request Type window opens.

3. Click the **User Access** tab. Note that the View and Edit access grants for the Created By participant are configurable.

4. Select or clear the check boxes for these access grants according to your business needs.



   By default, the **View** and **Edit** access grants are selected.

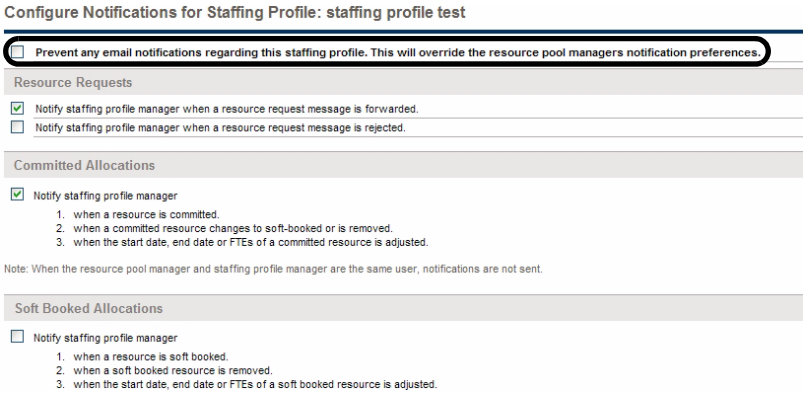
   If you uncheck these two access grants, the request creator cannot view or edit the request unless other security settings provide the creator with the View and Edit access grants to the request.

Limitation

Currently, this enhancement is only available for PPM Center version 9.12 and version 8.03. Request types migrated from other versions do not support this enhancement.

New Option for Notifications: Prevent any email notifications regarding this staffing profile

A new option **Prevent any email notifications regarding this staffing profile** is available on the Configuration Notifications page of a staffing profile.



By default, this option is unchecked. Checking this new option disables all the other options on this page.

This new option is intended for staffing profiles linked to confidential projects. The option enables you to prevent any email notifications about the staffing profile from being sent out. Therefore, checking the option protects the confidential information about the staffing profile and the corresponding project.

For example, by checking this option, you disable the email notifications that the system generates when resource requests are sent to resource pools.

These automatically-generated email notifications cannot be disabled by any original options on the Configuration Notifications page. With the new option checked, only users having the appropriate permissions, such as the staffing profile manager, the resource pool manager, and the project manager can view the resource requests after they log on to the system.

New Rule Event: Apply on Copy

The **Apply on copy** rule event is available in PPM Center version 9.12. When you create a rule by using this rule event for a request type, the rule will be triggered when the requests of that type are copied.

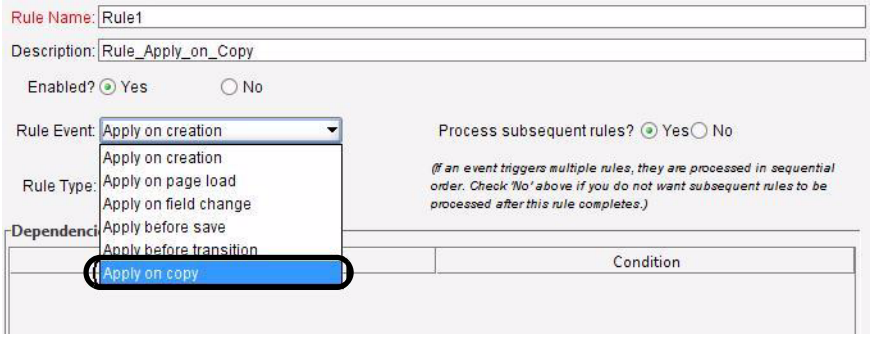
Consider the following scenario for the general usage of the **Apply on copy** rule event:

You create request rules for a request type to achieve dynamic field changes. Requests of this type are frequently copied by multiple PPM users. The rules are expected to be triggered when the users copy the requests.

In this scenario, you can set the rule event of your request rules to **Apply on copy**.

Creating Rules With the "Apply on copy" Rule Event

After you install PPM Center version 9.12, the **Apply on copy** rule event will be available in the Rule Event list of the Rules Window panel in PPM Workbench.



To make the rule be triggered when the corresponding requests are copied, select the Apply on copy rule event in the Rule Event list.

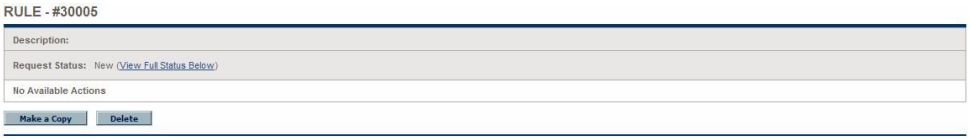
This enhancement only affects the rule event selection step for the request rule creation. The other steps remain the same. For detailed steps about how to create request type rules, see the *Request Type Rules* section of the *HP Demand Management Configuration Guide*.

- The **Apply on copy** rule event is supported in both the simple defaults and the advanced rule types.
- When selecting the **Apply on copy** rule event, you are able to configure field dependencies. This feature is not supported in the **Apply on creation** rule event.
- If a request type contains rules of the **Apply on copy** rule event and rules of the **Apply on creation** rule event, only the **Apply on copy** rules are triggered when users copy the requests of that type.

Triggering "Apply On Copy" Rules

After you create a rule with the **Apply on copy** rule event for a request type, the rule will be triggered when you (or other users) copy the requests of that type.

To copy a request, click **Make a Copy** above the Header section on the detail page for the request.



For detailed steps about how to copy a request, see the *Creating Requests by Copying Requests* section of the *HP Demand Management User's Guide*.

Improved Search Result in Microsoft Project

In Microsoft Project, the project search result is presented in a more user-friendly manner where only projects for which you are the project manager are returned. Therefore, all the projects returned in the search result are accessible, meaning that you can open these projects from PPM Center, and send them to PPM Center.

To search projects in Microsoft Project, you must have the following access grants:

- Project Mgmt: Edit Projects
- Project Mgmt: Synchronize Work Plans

PPM Center Accessibility Improvements

PPM Center version 9.12 introduced several enhancements to improve the accessibility of PPM Center for people with disabilities. The enhancements are primarily in the area of improved navigation for easier use of PPM Center with assistive technologies, such as screen readers.

Now the **Site Map** and **Skip Navigation** links are available on all PPM Center pages, which are configurable through the new `server.conf` parameters listed in *Table 9-2*.

Table 9-2. New `server.conf` parameters introduced

Parameter	Description
ENABLE_SITE_MAP	Enables the **Site Map** link in the header of each page, when set to `true`. Default: `false`
ENABLE_SKIP_NAVIGATION	Enables the **Skip Navigation** link in the header of each page, when set to `true`. Default: `false`

Navigation enhancements introduced to PPM Center pages include:

- **Create Request** page and **View Request** page (including the request look-ahead page)
  - Improved navigation to various sections of the request and workflow section, via headings.
  - Provided meaningful names for links on the page and for frames within autocomplete dialogs.
  - Added titles to fields and buttons, including workflow buttons.
  - Added navigable support to all autocomplete dialogs.
  - Added accessibility support for field-level and section-level help.

- **Search Request** page and **Advanced Search** page
  - Improved navigation to various sections of the page via headings.
  - Provided meaningful names for links on the page and for frames within autocomplete dialogs.
  - Added titles to fields and buttons.
  - Added navigable support to all autocomplete dialogs.
  - Added support to identify rows and columns within table components.
  - Added support for navigation within the **Choose Columns** section.
- **Search Request Results** page
  - Improved navigation to various sections of the page via headings.
  - Provided meaningful names for links on the page.
  - Added support to identify rows and columns within table components.
- **View Reports** page
  - Added support to identify rows and columns within table components.

Special Command ksc_copy_request Enhancement

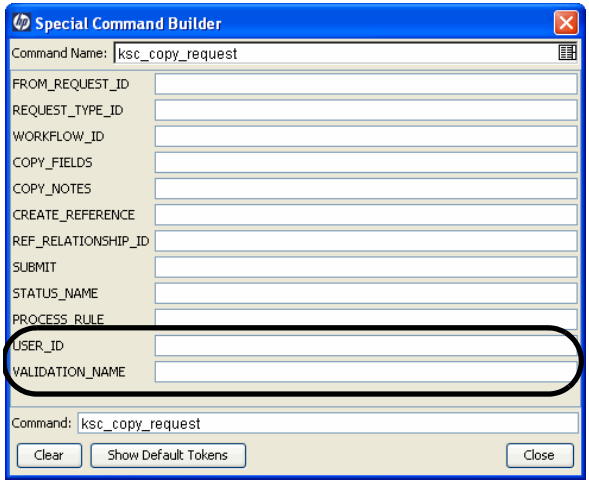
The special command ksc_copy_request is enhanced with two additional parameters introduced in PPM Center version 9.12, so that you can,

- Specify the creator of the copied requests;
- Map fields between source and target requests.

Table 9-3 lists the new parameters introduced.

Table 9-3. New ksc_copy_request parameters introduced

Parameter	Description
USER_ID	Specifies creator user ID of the new request.
VALIDATION_NAME	Specifies a validation to store copied fields with different tokens. The value of the destination token will be replaced by the value of the source token. The source token, source visible token, token type, and destination token are stored in the user data of validation values. You can configure multiple validation values to store multiple pairs of source and target fields. For information about configuring user data for validation values to store field token mappings between source and target requests, see *Enabling User Data Tab for Validations*.



Enabling User Data Tab for Validations

In order to use the enhanced special command ksc_copy_request for the purpose of copying request, you need to create a validation of Auto Complete List component type and validated by List, then enable the User Data tab for the validation value by defining a user data for it.

Create a Validation

To configure a validation,

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > Open Workbench**.

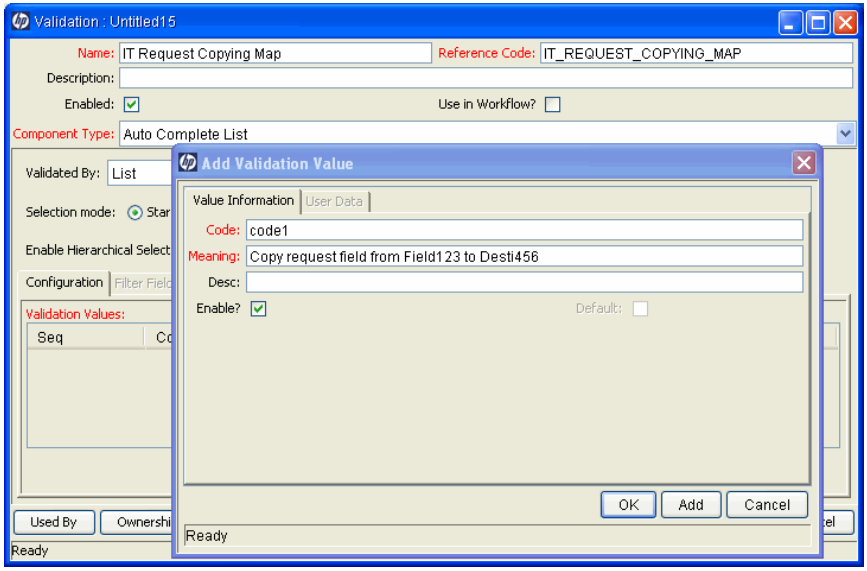
   The PPM Workbench opens.
3. From the shortcut bar, select **Configuration > Validations**.

   The Validation Workbench opens.
4. Click **New Validation**.

   The Validation window opens.
5. Provide the following information:
   - **Name**: Name of the new validation. For example, **`IT Request Copying Map.`**
   - **Reference Code**: Accept the default value.
   - **Enabled**: Select the checkbox.
   - **Component Type:** Auto Complete List.
   - **Validated By**: List

   For more information about configuring validations, see the *Commands, Tokens, and Validations Guide and Reference*.
6. In the Validation Values section, click **New** to add a validation value.

   The Add Validation Value window opens.
7. Provide the information for the validation value.



8. Click **OK**.

Enable User Data Tab for Validations

To define a user data and enable the User Data tab for a validation,

1. From the PPM Workbench shortcut bar, select **Configuration > User Data**.

   The User Data Workbench opens.

2. Click **New**.

   The User Data Context window opens to the Fields tab.

3. Click **User Data Type** auto-complete.

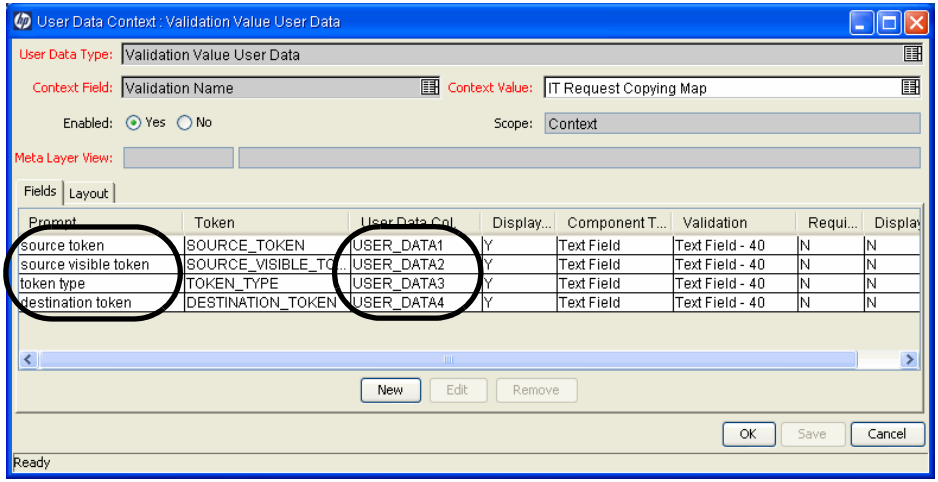
   The **User Data Type** field displays the value **Validation Value User Data**, the **Context Field** field displays the value **Validation Name**, and the **Scope** field displays **Context**.

4. Click the **Context Value** auto-complete, and select the validation you just created in *Create a Validation*. In this example, **IT Request Copying Map**.

5. On the Fields tab, click **New**.

6. Create four fields by strictly following the pairing order below:

Field Prompt	Token	User Data Col.
source token	SOURCE_TOKEN	USER_DATA1
source visible token	SOURCE_VISIBLE_TOKEN	USER_DATA2
token type	TOKEN_TYPE	USER_DATA3
destination token	DESITINATION_TOKEN	USER_DATA4



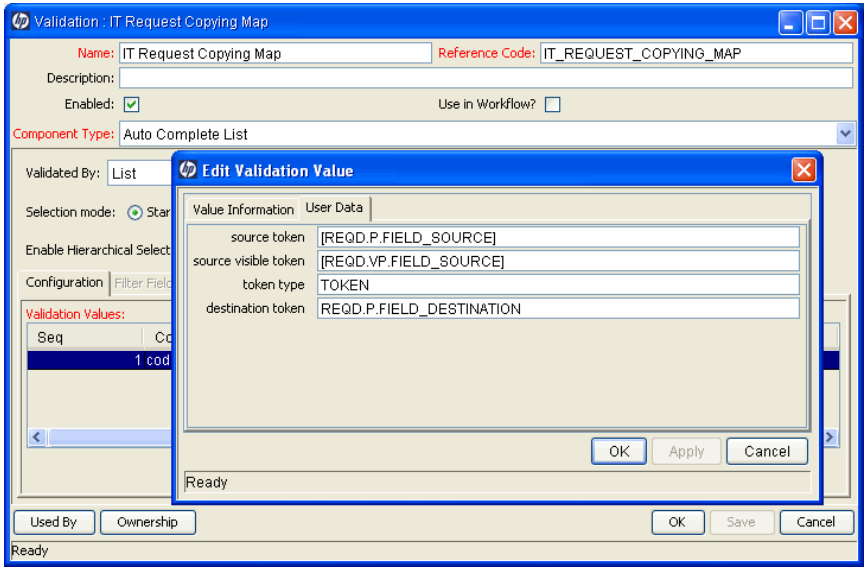
- You can use different names for field prompts, but be sure that USER_DATA1 is paired to source token, USER_DATA2 to source visible token, USER_DATA3 to token type, and USER_DATA4 to destination token.
- For token type, if you want to use both TOKEN and SQL, you may use drop down list as the component type and include TOKEN and SQL options in its validation.

7. Click **OK**.

   The user data is defined for validation **IT Request Copying Map**.

8. (Optional) Go to Validation Workbench and open the validation **IT Request Copying Map**.

   Open the validation value, the User Data tab is now enabled in the Validation Value window.



Creating Multiple Field Pairs

The user data for one validation value stores one pair of source and target fields. If you need to copy multiple request fields, you can add and configure more validations values to specify and store multiple source and target field tokens.

Taking validation **IT Request Copying Map** as an example, to create multiple field pairs,

1. In the Validation Workbench, open the validation **IT Request Copying Map**.

   The Validation: IT Request Copying Map window opens.

2. In the Validation Values section, click **New**.

   The Add Validation Value window opens to Value Information tab.

3. Provide the information for the validation value on the Value Information tab.

   For more information about Value Information tab, see the *Commands, Tokens, and Validations Guide and Reference*.

4. Click **User Data** tab, provide token values of source and target request fields for the following fields:

Field Prompt	Description

source token	Invisible token of the source field to be copied from.
	Value example:
	• When token type is `TOKEN`:
	`[REQD.P.FIELD_SOURCE];`
	• When token type is `SQL`:
	`select '[REQD.P.FIELD_SOURCE]' from dual`

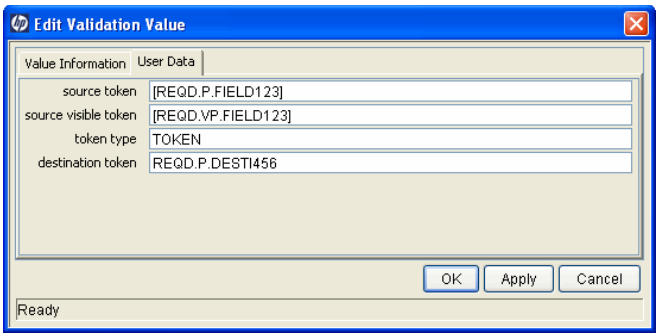
source visible token	Visible token of the source field to be copied from.
	Value example:
	• When token type is `TOKEN`:
	`[REQD.VP.FIELD_SOURCE];`
	• When token type is `SQL`:
	`select '[REQD.VP.FIELD_SOURCE]' from dual`

token type	Specifies supported token type. Valid value: `TOKEN` or `SQL`. **Note:** Only **`TOKEN`** and **`SQL`** are supported.

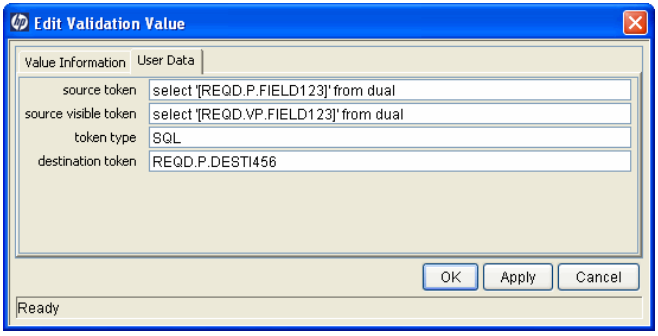
destination token	Token of the destination field to be copied to.
	Value example:
	• When token type is `TOKEN`:
	`REQD.P.FIELD_DESTINATION;`
	• When token type is `SQL`:
	`REQD.P.FIELD_DESTINATION.`
	Note: No square brackets for the destination token value.

For example, if you want to copy the value from field **Field123** to field **Dest456,**

- When token type is `TOKEN`,



- When token type is `SQL`,



5. Click **Add**.
6. Repeat step 2 through step 5 to add more validation values.

Using Special Command ksc_copy_request

When you have configured a validation for the purpose of copying request, you are ready to create a request with the special command ksc_copy_request configured in a workflow to copy any specified request, with the original creator ID and the request fields.

A special command example is as follows:

```
ksc_copy_request FROM_REQUEST_ID="[REQ.REQUEST_ID]"
        USER_ID="[USER_ID]" VALIDATION_NAME="[VALIDATION_NAME]"
```

Detecting Multicast Routing and Configuration Issues for a Server Cluster

In earlier PPM Center versions, if multicast traffic could not pass between two nodes in a server cluster, the nodes ran in isolation and no warning was issued. The only way to determine whether the nodes were communicating was to use the JGroups send and receive test utilities.

Now, PPM Center logs clear warnings in the server logs if multicast traffic has not been detected from a node after a specified time interval has elapsed, even though the node can be reached on its JMS connection factory and the PPM_SERVER_INSTANCE table indicates that the node is running. You can configure the amount of time that must pass before PPM Center logs warnings by setting the new `MULTICAST_WARNING_MINUTES` server configuration parameter.

Node behavior is monitored somewhat differently on the `MULTICAST_PORT` and `APP_SERVER_MULTICAST_PORT` ports. To provide system administrators with better visibility into multicast behavior, server logging was improved as follows:

- The `APP_SERVER_MULTICAST_PORT` port (used to coordinate cluster nodes) logs the following warning if no traffic has been received since either the current node was started, or since other nodes were started:

  ```
  No multicast traffic has been received on the APP_SERVER_
  MULTICAST_PORT port since this node was started, even though
  other nodes in the cluster appear to be active. Please check
  your multicast routing and/or configuration, the APP_SERVER_
  MULTICAST_PORT parameter(in server.conf), or your firewall
  settings.
  ```

  After data first comes in on the port, PPM Center logs the following message just once:

  ```
  First data received on APP_SERVER_MULTICAST_PORT.
  ```

- The `MULTICAST_PORT` (used to monitor the cluster) tracks incoming messages from each node individually. After a given node (X) is first heard from on the port, PPM Center logs the following message to the server log just once:

  ```
  Node X is reachable on MULTICAST_PORT.
  ```

If a node is not heard from on the MULTICAST_PORT port, PPM Center logs the following message:

```
No multicast traffic has been heard from node X on the
MULTICAST_PORT port for over 3 minutes, even though the node
appears to be up. Please check your multicast routing and/or
configuration, the APP_SERVER_MULTICAST_PORT parameter(in
server.conf), or your firewall settings.
```

You can disable the multicast monitoring feature by setting the MULTICAST_WARNING_MINUTES server configuration parameter to zero or less. HP strongly recommends that you not disable the feature unless HP Software Support specifically requests that you do so.

Improved Startup Checks

To help catch common configuration and deployment issues, PPM Center now performs basic startup checks before starting. These checks include:

- Making sure that essential server.conf parameters are present.
- Making sure that none of the ports required by PPM Center are already bound by other processes.
- Making sure that all ports used by the nodes on a given physical server have unique values.

Because of these new startup checks, you may encounter more configuration errors in 9.12 (and beyond) that prevent a PPM Server from starting (whereas a successful start was allowed on a previous version).

A summary of all issues found during the startup checks is traced out into the server log of the node being started. If PPM Center is running as a Windows service, an error is added to the Windows event log asking you to refer to the server log when errors are found. In some rare cases that the server logs could not provide useful details, we recommend that you start PPM Center in the console mode by using the kstart.sh script, and then troubleshoot the configuration and deployment issues. After you fix these issues, you can start PPM Center as a Windows service again.

Errors fall into two categories:

- **Critical errors (Error messages)**: These errors relate to the node being started. PPM Center will refuse to start if there are any critical errors.
- **Non-critical errors (Warning messages)**: These errors relate to other nodes in server.conf than the one being started. It is highly recommended to fix such errors, however they will not prevent the startup. All nodes in the `server.conf` file are checked when any one node is started.

Bypassing the Startup Checks

The `com.kintana.core.server.BYPASS_STARTUP_CHECKS` parameter is introduced in version 9.12 in the `server.conf` file. By default, this parameter is set to `false`.

You can bypass the startup checks by setting this parameter to `true`:
`com.kintana.core.server.BYPASS_STARTUP_CHECKS=true`

This parameter should only be used under advisement from PPM customer support engineers, and if there is a clear and well-understood reason for doing so.

Comprehensive Logging During PPM Server Startup

PPM Center version 9.12 includes a significant number of improvements to the application startup process, from both a logging and configuration validation standpoint. One of the goals of the improvements is to provide customers with as much information as possible about the validity of the configuration of their clustered environments.

Displaying Failed Executions at Startup

To enable the display of failed server executions at startup, make sure that the `FAIL_EXECUTIONS_ON_STARTUP` server configuration parameter is set to `true` in the `server.conf` file. All executions that were interrupted during the last PPM Center shut-down are marked as failed.

Displaying Configuration Parameters at Startup

You can now enable the display (and logging) of all PPM Center server configuration parameters used during startup. To enable this feature, set the `SHOW_PARAMETERS_AT_STARTUP` server configuration parameter to `true`.

Adjusting the Server Log Level

Server startup logs indicate what the server is doing at each step of the startup process (including the successful start of each web context). By default, when the startup check catches a configuration or deployment issue, only a error or warning message will be generated in the server logs. You can modify the logging level to get more details by adding the following entries in the logging.conf file.

```
com.kintana.core.logging.SYSTEM_THRESHOLD = INFO
com.kintana.core.logging.PRODUCT_FUNCTION_LOGGING_LEVEL =
com.kintana.core.server.ServerStartupSanity, INFO
```

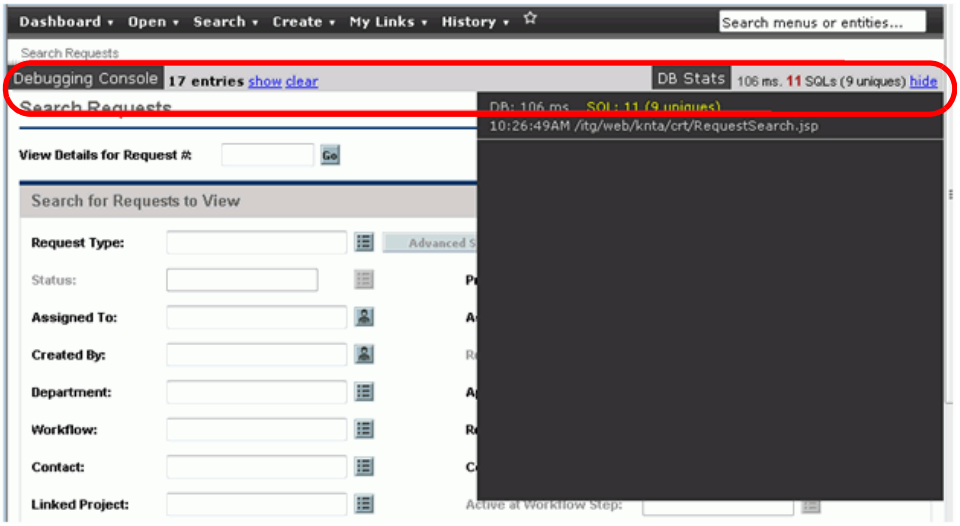
These parameters are designed for advanced troubleshooting. We do not suggest modifying these parameters without advisement from PPM customer support engineers.

SQL Debugging for All Product Areas

If you turn on SQL debugging, PPM Center now collects statistics for the following legacy product areas:

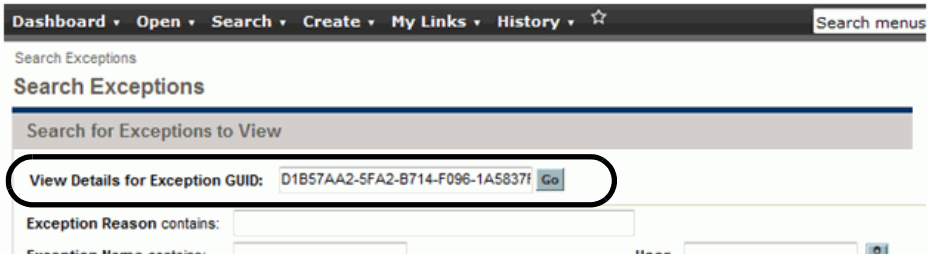
- HP Demand Management web pages
- HP Deployment Management web pages

The debugging console display includes information about the SQL statements executed by the legacy code. The web pages of the legacy areas now display the debugging console.



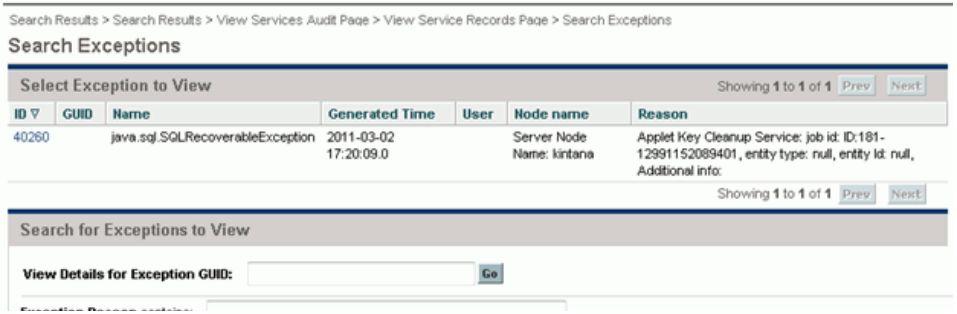
Accessing Services Exceptions Details

In earlier PPM Center versions, exceptions thrown by background services were not immediately visible to users, even though they were recorded in the logs. Now, on the Services Audit Results page, you can see whether any services have thrown exceptions.



If a service has encountered one or more exceptions or errors during its last 50 runs, a red icon (**!**) is displayed to the left of the service name on the Services Audit Results page. You can change the threshold for displaying the icon by changing the value for the `SERVICE_RECORDS_RETAIN_COUNT` server configuration parameter in the `server.conf` file.

To view details about exceptions a service has encountered, click the service name. The Search Exceptions page opens and displays a list of the exceptions.



The Search Exceptions page provides the following information:

- Presence or absence of exceptions during a particular service run.
- Name of the node on which the service was run
- Time the service run started
- Time the service run finished
- Duration of the run, in seconds
- Any additional information provided by the service. All services by default provide the memory footprint during the start and end of the service. This information is useful to troubleshoot any issues related to memory consumption by a service run.

To enable this functionality, add the `LOG_EXCEPTIONS_TO_DB` server configuration parameter to the `server.conf` file and set its value to `true`.

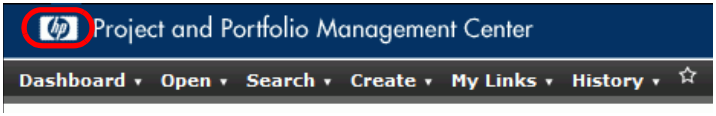
Purging Exceptions Thrown by Services

Whenever a service run is deleted from the system, the exceptions related to that service run are also removed. By default, the system retains the 50 most recent service run records. You can change this by setting a new value for the `SERVICE_RECORDS_RETAIN_COUNT` server configuration parameter in the `server.conf` file.

Enabling Debugging On a Per-User Basis

With PPM Center 9.12, you can turn on the debugging console and set a server logging threshold on a per-user basis.

To enable turning on the debugging console for individual users, add the `SHOW_DEBUGGING_CONSOLE_PER_USER` server configuration parameter to the `server.conf` file, and set it to `true`. After you do, a user logged on to PPM Center can toggle the debugging console by pressing and holding the **`ALT`** key and clicking the HP logo, which is located above the menu bar.



If you customize the logo using a copy of the `web/knta/global/Header.jsp` file, to use this feature, make sure that you customize the copy of the `Header.jsp` file included in the PPM Center 9.12 bundle.

PPM Center supports the following log levels.

Log Level	Description
DEBUG	Print fatal, status, error, warning information and debug log (used in debugging)
INFO	Print fatal, status, error, warning and information log
WARN	Print fatal, status, error and warning
ERROR	Print fatal, status, and error log (default)
STATUS	Print fatal and status messages (Not recommended)
FATAL	Print only fatal messages (Not recommended)

To enable debug logging to the `serverLog.txt` file for a specific user:

1. Set the `ENABLE_DEBUGGING_PER_USER` server configuration parameter to `true`.
2. Open the `logging.conf` file in a text editor, and then set the `USER_THRESHOLD` parameter as follows:

`USER_THRESHOLD = <PPM_Username>, <Log_Level>`

3. To configure finer-grained logging than that specified by the SYSTEM_THRESHOLD parameter, add the following to the logging.conf file:

   ```
   com.kintana.core.logging.USER_THRESHOLD = <Username>,
   <Log_Level>
   ```

The logging.conf file is read periodically, so there is no need to restart the PPM Server(s) to enable debug logging specific to the user.

Logging occurs only for that particular user.

To enable the debug console for multiple users, add USER_THRESHOLD values (on separate lines).

Example:

```
USER_THRESHOLD = gchu, DEBUG
USER_THRESHOLD = pchapin, DEBUG
USER_THRESHOLD = bkordon, DEBUG
```

If the log level value meets the threshold criteria of *either* the USER_THRESHOLD (set for that user) or the SYSTEM_THRESHOLD, then the message is logged.

Example 1

```
SYSTEM_THRESHOLD = ERROR
USER_THRESHOLD = ddalton, DEBUG
```

In Example 1, for a user logged in as ddalton, the system logs all DEBUG and higher (INFO, WARN, ERROR, STATUS and FATAL) messages. For any other user, the system logs only ERROR, STATUS and FATAL messages.

Example 2

```
SYSTEM_THRESHOLD = DEBUG
USER_THRESHOLD = ddalton, ERROR
```

In Example 2, the system logs all messages for all users. In this case, the USER_THRESHOLD value (ERROR) set for ddalton has no effect.

Improved Services Audit Results Page

PPM Center version 9.12improves the Services Audit Results page by adding the **Last Run Node** column.

Services Audit Results

Service Name	Status	Is Running?	Run Interval	Last Run Node	Last Completed Run	Next Scheduled Run
ALM Startup	Disabled	☐	Every minute	-	-	-
Applet Key Cleanup Service	Enabled	■	Every 6 hours	PPM_803	Mar 18, 2011 8:34:38 AM CST	Mar 18, 2011 2:34:37 PM CST
Commands Cleanup Service	Enabled	■	Every 270 minutes	PPM_803	Mar 18, 2011 9:04:43 AM CST	Mar 18, 2011 1:34:43 PM CST
Concurrent Request Watch Dog	Enabled	■	Every 30 seconds	-	Mar 18, 2011 10:40:06 AM CST	Mar 18, 2011 10:40:36 AM CST
Cost Rate Rule Update Service	Enabled	■	Every hour	PPM_803	Mar 18, 2011 9:54:29 AM CST	Mar 18, 2011 10:54:29 AM CST
Cost Rollup Service	Enabled	■	Every hour	PPM_803	Mar 18, 2011 9:54:30 AM CST	Mar 18, 2011 10:54:29 AM CST
Debug Messages Cleanup Service	Enabled	■	Every 6 hours	PPM_803	Mar 18, 2011 8:34:38 AM CST	Mar 18, 2011 2:34:38 PM CST
Directory Cleanup Service	Enabled	■	Every 24 hours	PPM_803	Mar 18, 2011 8:00:00 AM CST	Mar 19, 2011 8:00:00 AM CST
Document Cleanup Service	Disabled	☐	Every 24 hours	-	-	-
Task Actual Rollup Service	Enabled	■	Every 250 seconds	PPM_803	Mar 18, 2011 10:39:11 AM CST	Mar 18, 2011 10:43:21 AM CST
Task Scheduler Service	Enabled	■	Every minute	-	Mar 18, 2011 10:39:38 AM CST	Mar 18, 2011 10:40:37 AM CST
Time Sheet Notifications	Enabled	■	Every 2 hours	PPM_803	Mar 18, 2011 9:54:31 AM CST	Mar 18, 2011 11:54:30 AM CST
TM-PM Sync Service	Enabled	■	Every 3 hours	-	Mar 18, 2011 10:34:30 AM CST	Mar 18, 2011 1:34:30 PM CST
Work Item Pending Assignment Service	Enabled	■	Every 30 seconds	PPM_803	Mar 18, 2011 10:40:08 AM CST	Mar 18, 2011 10:40:37 AM CST
Work Item Pending Update Service	Enabled	■	Every 2 minutes	PPM_803	Mar 18, 2011 10:38:38 AM CST	Mar 18, 2011 10:40:37 AM CST
Workflow Timeout Reaper	Enabled	■	Every 30 seconds	PPM_803	Mar 18, 2011 10:40:08 AM CST	Mar 18, 2011 10:40:37 AM CST

The value on this column represents the node on which the service ran the last time. If the service is currently running when you access this page, the value indicates the node on which the service is running. A dash (-) character indicates that the corresponding service has been triggered, but the service has not run because it does not have any data to process.

This column is designed for services that are enabled. For services that are disabled, a grayed-out dash (-) character will be noted on this column.

Additionally, the column “Last Run Time” is renamed to “Last Completed Run.” Similarly, “Next Scheduled Run Time” is renamed to “Next Scheduled Run.”

Accessing Application Exception Details

Previously, exceptions thrown by PPM Center background services were not immediately visible to PPM Center users, even though they were recorded in the logs. With this release, if an exception occurs, the user sees an error message that displays a GUID number and advises the user to contact the PPM Center administrator. The PPM Center administrator can then get detailed information about the exception from the new Search Exceptions page.

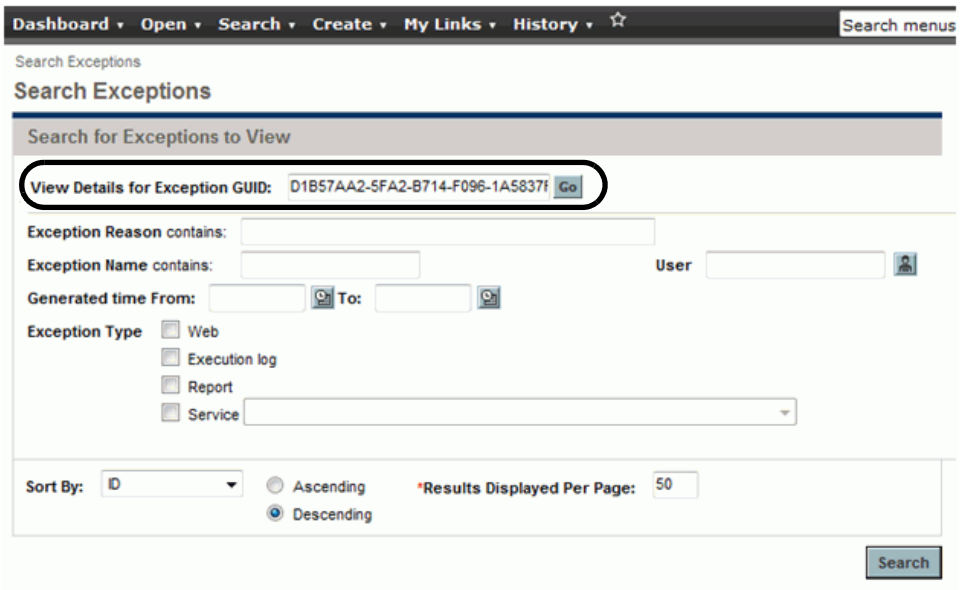
To access the Search Exceptions page, you must have an Administrator license and the “Server Tools: Execute admin tools” access grant.

To enable this functionality, set the `LOG_EXCEPTIONS_TO_DB` server configuration parameter value to `true`.

To access and use the Search Exceptions page:

1. Log on to PPM Center.
2. From the menu bar, select **Search > Administrative > Exceptions.**

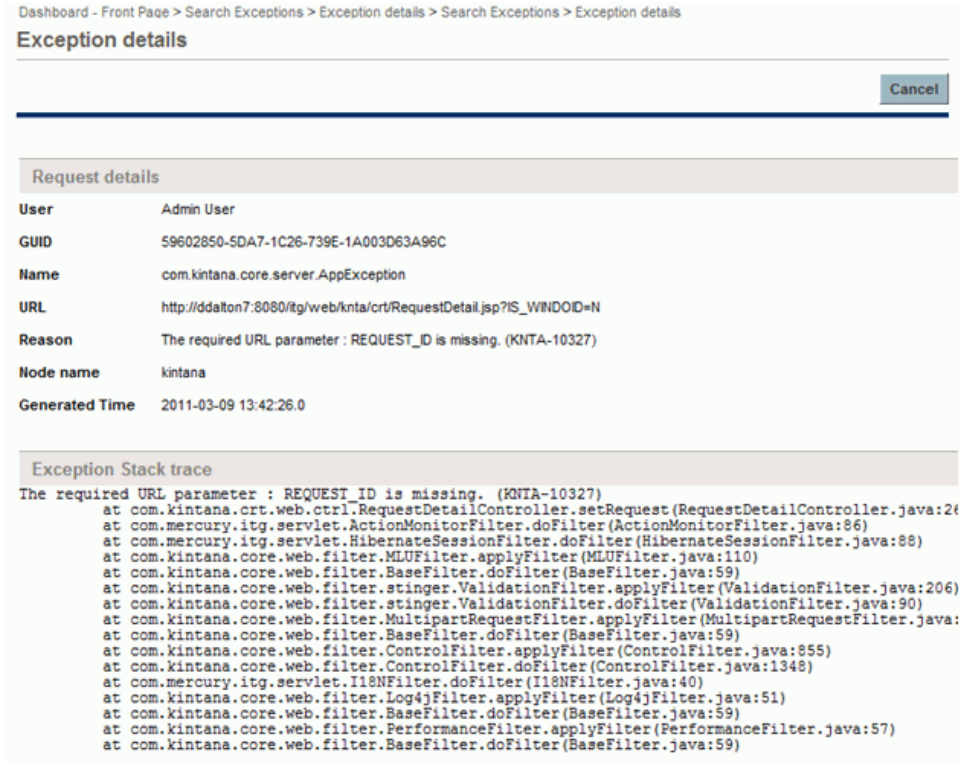
   The Search Exceptions page opens.



3. In the **View Details for Exception GUID** field, enter the GUID provided in the error message.

4. Click **Go.**

The Exception details page opens.



The Exception details page displays the following information:

Field	Description
User	Full name of the logged-in user who encountered this exception. This field is empty if the exception was thrown by a background service.
GUID	GUID identifier for this exception. Most web exceptions are tagged with a GUID. Background service exceptions usually do not have a GUID.
Name	Name of the exception.
URL	URL of the page that encountered this exception.

Field	Description
Reason	Reason the exception occurred. For background service exceptions, this can be an error message.
Node name	Name of the node on which the exception occurred.
Generated Time	Time at which the exception occurred.
Exception Stack trace	Stack trace for the exception.

Purging Exceptions (Other than Services Exceptions)

Exceptions (except for services-related exceptions) older than 14 days are automatically purged by default. You can control the frequency with which exceptions are purged by setting a new value for the `EXCEPTIONS_RETAIN_PERIOD` server configuration parameter in the `server.conf` file.

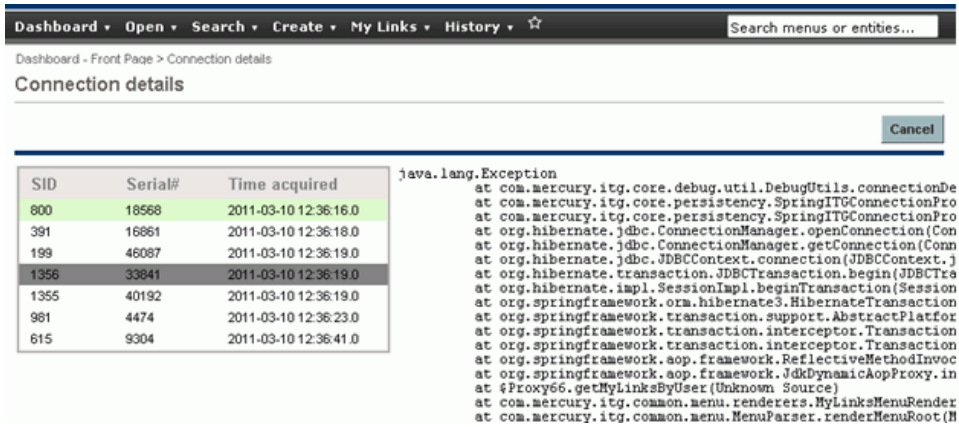
Identifying Connection Issues

The new Connection details page enables you to identify suspect connections that are leaking. To access the Connection details page, you must have an administrator license and the "Server Tools: Execute admin tools" access grant.

To enable this feature, set the `ENABLE_CONNECTION_CORRELATION` server configuration parameter to `true`.

To access the Connection details page:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > View connection correlation.**



The table on the left portion of the page displays the stack trace for each connection recorded when the connection was acquired from the pool.

To display the stack trace associated with the connection at the time it was acquired, click the corresponding connection entry.

Because this feature involves some database overhead, HP recommends that you use it only to troubleshoot connection leak issues.

Updating a Microsoft Project Work Plan Hierarchy Integrated with HP Project Management

If a Microsoft Project work plan is integrated with HP Project Management, in shared control mode, Microsoft Project controls the work plan. However, some changes to the work plan hierarchy that are allowed in a Microsoft Project are not allowed in HP Project Management.

If you convert a leaf task with actuals to a summary task in Microsoft Project, in shared control mode, integration with the HP Project Management work plan fails. Converting a leaf task with actuals to a summary task is not allowed in HP Project Management as it may result in invalid data in HP Time Management.

If you experience an integration error related to the modification of the work plan hierarchy, use an existing backup copy as a starting point from which to reapply your most recent edits. See “Backing Up Microsoft Project Files” in

the *HP Project Management User's Guide* for more information about backups.

Integrations

The following integrations are included in PPM Center version 9.12:

- *Lightweight Single Sign-On Authentication (LW-SSO) Support*
- *SLICK Configuration Tool*
- *CMQC for Quality Center 11.0*
- *Importing New Service Manager Web Service Objects to Enable PPM Center Integration with Service Manager*
- *Administration Tools Enhancements*
- *Importing Requests from XML Files*
- *Attaching Impact Analysis Report for CIs to a Request in PDF format*

Lightweight Single Sign-On Authentication (LW-SSO) Support

LW-SSO support is available with PPM Center version 9.12 for PPM Center integrations with other HP software products.

This section includes the following information:

- *LW-SSO Concepts and References*
  - *LW-SSO Concepts and References*
  - *LW-SSO System Requirements*
  - *LW-SSO Security Warnings*
  - *LW-SSO Known Issues*
  - *LW-SSO Limitations*
- *Configuring PPM Center for LW-SSO Support*

LW-SSO Concepts and References

LW-SSO Authentication Overview

LW-SSO is a method of access control that enables a user to log on once and gain access to the resources of multiple software systems without being prompted to log on again. The applications inside the configured group of software systems trust the authentication, and there is no need for further authentication when moving from one application to another.

The information in this section applies to LW-SSO version 2.3.

LW-SSO Token expiration

The LW-SSO Token's expiration value determines the application's session validity. Therefore, its expiration value should be at least the same value as that of the application session expiration value.

Recommended configuration of the LW-SSO Token expiration

Each application using LW-SSO should configure token expiration. The recommended value is 60 minutes. For an application that does not require a high level of security, it is possible to configure a value of 300 minutes.

GMT Time

All applications participate in an LW - SSO integration must use the same GMT time with a maximum difference of 15 minutes.

Multi-domain Functionality

Multi-domain functionality requires that all applications participating in LW-SSO integration configure the `trustedHosts` settings (or the `protectedDomains` settings), if they are required to integrate with applications in different DNS domains. In addition, they must also add the correct domain in the `lwsso` element of the configuration.

Get SecurityToken for URL functionality

To receive information sent as **SecurityToken for URL** from other applications, the host application should configure the correct domain in the `lwsso` element of the configuration.

The following table lists LW-SSO configuration requirements:

Product	Version	Comments
Java	1.5 and higher	
HTTP Servlets API	2.1 and higher	
Internet Explorer	6.0 and higher	Browser should enable HTTP session cookie and HTTP 302 Redirect functionality.
FireFox	2.0 and higher	Browser should enable HTTP session cookie and HTTP 302 Redirect functionality.
JBoss authentications	• JBoss 4.0.3 • JBoss 4.3.0	
Tomcat authentications	• Standalone Tomcat 5.0.28 • Standalone Tomcat 5.5.20	
Acegi authentications	• Acegi 0.9.0 • Acegi 1.0.4	
Spring Security Authentication	Spring Security 2.0.4	
Web Services engines	• Axis 1 - 1.4 • Axis 2 - 1.2 • AX-WS-RI 2.1.1	

This section describes security warnings that are relevant to the LW-SSO configuration:

- **Confidential `initString` parameter in LW-SSO.** LW-SSO uses Symmetric Encryption to validate and create a LW-SSO token. The `initString` parameter within the configuration is used for initialization of the secret key. An application creates a token, and each application that uses the same `initString` parameter validates the token.

  - It is not possible to use LW-SSO without setting the `initString` parameter.
  - The `initString` parameter is confidential information and should be treated as such in terms of publishing, transporting, and persistency.
  - The `initString` should be shared only between applications integrating with each other using LW-SSO.
  - The `initString` parameter should have a minimum length of 12 characters.

- **Enable LW-SSO only if required.** LW-SSO should be disabled unless it is specifically required.

- **Level of authentication security.** The Application that uses the weakest authentication framework and issues a LW-SSO token that is trusted by other integrated applications, determines the level of authentication security for all the applications.

  It is recommended that only applications using strong and secure authentication frameworks issue an LW-SSO token.

- **Symmetric encryption implications.** LW-SSO uses symmetric cryptography for issuing and validating LW-SSO tokens. Therefore, any application using LW-SSO can issue a token to be trusted by all other applications sharing the same `initString` parameter. This potential risk is relevant when an application sharing the `initString` either resides, or is accessible from, an untrusted location.

- **User mapping (Synchronization).** The LW-SSO framework does not ensure user mapping between the integrated applications. Therefore, the integrated application must monitor user mapping. It is recommended that you share the same user registry (as LDAP/AD) among all integrated applications.

Failure to map users may cause security breaches and negative application behavior. For example, the same user name may be assigned to different real users in the various applications.

In addition, in cases where a user logs onto an application (AppA) and then accesses a second application (AppB) that uses container or application authentication, the failure to map the user will force the user to manually log on to AppB and enter a user name. If the user enters a different user name than was used to log on to AppA, the following behavior can arise: If the user subsequently accesses a third application (AppC) from AppA or AppB, then they will access it using the user names that were used to log on to AppA or AppB respectively.

- **Identity Manager.** Used for authentication purposes, all unprotected resources in the Identity Manager must be configured as `nonsecureURLs` settings in the LW-SSO configuration file.
- **LW-SSO Demo mode**
  - The Demo mode should be used for demonstrative purposes only.
  - The Demo mode should only be used in unsecured networks.
  - The Demo mode must not be used in production. Any combination on the Demo mode with the production mode should not be used.

LW-SSO Known Issues

This section describes known issues for LW-SSO authentication.

- **Security context.** The LW-SSO security context supports only one attribute value per attribute name.

  Therefore, when the SAML2 token sends more than one value for the same attribute name, only one value is accepted by the LW-SSO framework.

  Similarly, if the `IdM` token is configured to send more than one value for the same attribute name, only one value is accepted by the LW-SSO framework.

- **Multi domain logout functionality when using Internet Explorer 7.** Multi domain logout functionality may fail when using Internet Explorer 7 and when the application is invoking more then three consecutive HTTP 302 redirect verbs in the logout procedure.

  In this case, Internet Explorer 7 may mishandle the HTTP 302 redirect response and display an `Internet Explorer cannot display the webpage` error page instead.

  As a workaround, we recommend that, if possible, you reduce the number of application redirect commands in the logout sequence.

LW-SSO Limitations

Note the following limitations when working with LW-SSO authentication:

- **Client Access to the Application**

  If a domain is defined in the LW-SSO configuration:

  - The application's clients must access the application with a Fully Qualified Domain Name (FQDN) in the login URL. For example, http://myserver.**companydomain**.com/WebApp
  - LW-SSO cannot support URLs with an IP address, for example, http://192.168.12.13/WebApp
  - LW-SSO cannot support URLs without a domain, for example, http://myserver/WebApp

  If a domain is not defined in the LW-SSO configuration: The client can access the application without a FQDN in the login URL. Note that in this case a LW-SSO session cookie will be created specifically for a single machine without any domain information, and therefore will not be delegated by the browser to another, and will not pass to other computers located in the same DNS domain. This means that SSO will not work in the same Domain.

- **LW-SSO framework integration.** Applications can leverage and use LW-SSO capabilities only if integrated within the LW-SSO framework in advance.

- **Multi domain support**
  - Multi domain functionality is based on the HTTP referer. Therefore, LW-SSO supports links from one application to another and does not support typing a URL into a browser window, except when both applications are in the same domain.
  - The first cross domain link using **`HTTP POST`** is not supported

    Multi domain functionality does not support the first **`HTTP POST`** request to a second application (only the **`HTTP GET`** request is supported). For example, if your application has an HTTP link to a second application, an **`HTTP GET`** request is supported, but an **`HTTP FORM`** request is not supported. All requests after the first can be either **`HTTP POST`** or **`HTTP GET`**.
  - LW-SSO Token size

    The size of information that LW-SSO can transfer from one application in one domain to another application on another domain is limited to 15 Groups/Roles/Attributes (note that each item may be an average of 15 characters long).
  - Linking from Protected (HTTPS) to non protected (HTTP) in a Multi domain scenario

    Multi domain functionality does not work when linking from a protected (HTTPS) to a non protected (HTTP) page. This is a browser limitation where the referer header is not sent when linking from a protected to a non-protected resource. For an example, see http://support.microsoft.com/support/kb/articles/Q178/0/66.ASP
  - Third-Party cookie behavior in Internet Explorer:

    Microsoft Internet Explorer 6 contains a module that supports the "Platform for Privacy Preferences (P3P) Project", meaning that cookies coming from a Third Party domain are blocked by default in the Internet security zone. Session cookies are also considered Third Party cookies by Internet Explorer, and therefore are blocked, causing LW-SSO to stop working. For details, see http://support.microsoft.com/kb/323752/en-us.

To solve this issue, add the launched application (or a DNS domain subset as ***.mydomian.com**) to the Intranet/Trusted zone on your computer (in Microsoft Internet Explorer, select **Menu > Tools > Internet Options > Security > Local Intranet > Sites > Advanced**), which causes the cookies to be accepted.

The LW-SSO session cookie is only one of the cookies used by the Third Party applications that are blocked.

- **SAML2 token**
  - Logout functionality is not supported when the SAML2 token is used.

    Therefore, if the SAML2 token is used to access a second application, then a user who logs out in the first application will not be logged out in the second application.
  - The SAML2 token's expiration is not reflected in the application's session management.

    Therefore, if the SAML2 token is used to access a second application, then each application's session management will be handled independently of each other.
- **JAAS Realm.** The JAAS Realm in Tomcat is not supported
- **Using spaces in Tomcat directories.** Using spaces in Tomcat directories is not supported.

  It is not possible to use LW-SSO when a Tomcat installation path (folders) includes spaces (for example, Program Files) and the LW-SSO configuration file is located in the `common\classes` Tomcat folder.
- **Load balancer configuration.** A load balancer deployed with LW-SSO must be configured to use sticky sessions.
- **Demo mode.** In Demo mode, LW-SSO supports links from one application to another but does not support typing a URL into a browser window due to an HTTP **referer** header absence in this case.

Configuring PPM Center for LW-SSO Support

Read *LW-SSO Security Warnings* on page 260 before you configure the LW-SSO UI.

To configure PPM Center support for LW-SSO,

1. Add the parameters described in the following table into the `server.conf` file and configure them.

Parameter	Description
ENABLE_LW_SSO_UI	Enables LW-SSO UI when set to `true`. Default: `false`
LW_SSO_DOMAIN	Specifies LW-SSO domain, for example, `xyz.com`
LW_SSO_INIT_STRING	Specifies the string value for the `initString` parameter. For more information about the `initString` parameter, see *LW-SSO Security Warnings* on page 260.
LW_SSO_EXPIRATION_PERIOD	Specifies LW-SSO token expiration period in minutes. For example, `60`.
LW_SSO_TRUSTED_DOMAIN	Specifies one or more LW-SSO trusted domains. Use semicolon (;) to separate multiple domains. For example, `xyz.come;abc.net`
LW_SSO_CLEAR_COOKIE	When set to `true`, specifies that PPM Center needs to clear LW-SSO token when user logs out of PPM Center. Default: `true` **Note:** It is always recommended to set the parameter to `true` for security purpose.

Parameter	Description
ENABLE_LW_SSO_WEB_SERVICE	For integration of PPM Center Tasks with Service Manager RFCs only. Specifies that PPM Center always uses current user to call Service Manager Web service when set to `true`. Default: `false`.

2. Run **`kUpdateHtml.sh.`**
3. Stop, and then restart the server.

SLICK Configuration Tool

The SLICK configuration tool is available with PPM Center version 9.12. Running this tool automatically configures PPM Center support for HP Slick 1.6 for you.

To run the SLICK configuration tool,

1. Create a blank `.properties` configuration file.
2. Include the following parameters in the `.properties` configuration file.
   - Special parameters
     - `FIELD_MAPPING_FILE=<`*`SM_RFC_field_mapping_file_path`*`>`

       For example,

       ```
       FIELD_MAPPING_FILE=C:/temp/slick/
       sm-rfc-mapping.xml.sample
       ```

       The SM RFC field mapping file will be copied to `<`*`PPM_HOME`*`>/conf/smrfc` directory by the Slick configuration tool. If there already exists a mapping file, it will be replaced.

     - `ENCODE_BASE64=false`

       For more information, see

- `server.conf` parameters

  Include the following `server.conf` parameters in the `.properties` file. The values of which will replace the ones in the `server.conf` file:

  ```
  com.kintana.core.server.SM_RFC_INTEGRATION_ENABLED
  com.kintana.core.server.SM_USERNAME
  com.kintana.core.server.SM_URL
  com.kintana.core.server.SM_WEB_URL
  com.kintana.core.server.SM_PASSWORD
  com.kintana.core.server.ENABLE_WEB_SERVICES
  com.kintana.core.server.SERVICE_LIST_SOURCE
  com.kintana.core.server.UCMDB_WS_USER
  com.kintana.core.server.UCMDB_WS_PASSWORD
  com.kintana.core.server.SERVICE_LIST_UCMDB_CI_TYPE
  com.kintana.core.server.SERVICE_LIST_UCMDB_CI_MAPPINGS
  com.kintana.core.server.SERVICE_LIST_UCMDB_WS_MAX_CI_
  NUMBER
  com.kintana.core.server.SERVICE_LIST_UCMDB_CACHE_TIMEOUT
  com.kintana.core.server.UCMDB_WS_MAX_CONNECTION_NUMBER
  com.kintana.core.server.UCMDB_SERVER_URL
  com.kintana.core.server.UCMDB_SERVER_VERSION
  com.kintana.core.server.UCMDB_SSL_KEYSTORE_PATH
  com.kintana.core.server.ENABLE_LW_SSO_UI
  com.kintana.core.server.LW_SSO_DOMAIN
  com.kintana.core.server.LW_SSO_INIT_STRING
  com.kintana.core.server.LW_SSO_EXPIRATION_PERIOD
  com.kintana.core.server.LW_SSO_TRUSTED_DOMAIN
  com.kintana.core.server.LW_SSO_CLEAR_COOKIE
  com.kintana.core.server.ENABLE_LW_SSO_WEB_SERVICE
  ```

Be sure to encrypt the values for password parameters `SM_PASSWORD` and `UCMDB_WS_PASSWORD` if their values are clear text.

3. Run the following command to run the SLICK tool,

   `sh kSLICKConf.sh c:\temp\slick\test.properties`

   Every time you run this shell command, it creates a backup copy of the `server.conf` file before it modifies the file.

   You can check the log file it generates in `<`*`PPM_HOME`*`>/logs/slick` directory for details. The log file name follows `slick_conf_<`*`YYYYMMDD-HHMMSS.serial_number`*`>.log` pattern, for example, `slick_conf_20110221-162200.420.log`.

4. Stop, then restart the server.

CMQC for Quality Center 11.0

To configure CMQC support for Quality Center version 11.0,

1. Add the two new parameters introduced with PPM Center version 9.12 listed in *Table 9-4* to the `server.conf` file:

Table 9-4. Newly introduced server.conf parameters

Parameter	Description
CMQC_QC_VERSION	Specifies Quality Center version for CMQC solution. In this case, `11`.
CMQC_INIT_STRING	The value for `initString` parameter for CMQC solution, for example, `INI:s4OF+cwwevEkcnJ9zWHwpE8ktxfl1pb5y8QoENFQLs8=` You can get the value from Quality Center server. The `initString` value is stored in a properties file (`ALM\jboss\server\default\deploy\20qcbin.war\WEB-INF\siteadmin.xml`) or an XML configuration file (`ALM\conf\qcConfigFile.properties`) on the server where Quality Center is installed.

2. Obtain the latest CMQC patch installation bundle (`ppm-912-CMQC.jar`), and then deploy it on top of CMQC version 9.10 by following the instructions described in the *HP Center Management for Quality Center Guide*.

Make sure that you have installed the PPM Center 9.12 service pack file before you deploy the CMQC patch bundle.

Importing New Service Manager Web Service Objects to Enable PPM Center Integration with Service Manager

This integration enhancement improves the integration solution by offering new Web services objects with PPM Center for users to import to enable the integration, instead of modifying the existing Service Manager Web service objects.

If you already integrated Service Manager with PPM Center, copy and rename two Web service objects in Service Manager as follows to make sure that the integration will continue to work:

- `Change` -> `ChangePPMIntALM`
- `ChangeTask` -> `ChangeTaskPPMIntALM`

To configure Service Manager for the integration,

1. Follow the instructions in the *Configuring HP Service Manager for Integration with PPM Center* section of the *HP Solution Integrations Guide,* but skip the following **WSDL Configuration**-related steps:
   - step d on page 97
   - step 2 on page 98
   - step d on page 100
2. Then, set up Change Management Web service for the integration with PPM Center by importing the unload file provided with PPM Center.

   The unload file is located at:
   `<PPM_Home>\conf\sdi\serviceManagerFiles\PPMIntALMWebService.unl`

   where, `<PPM_Home>` represents the path where the PPM Center instance is installed. For example: `xyzserver/E/PPMServer`.

Administration Tools Enhancements

The following administration tools enhancements are implemented:

- *Browsing and Downloading <PPM_Home> Directory Files from Administration Console*
- *Administration Console SQL Runner*
- *Gathering Support Information*
- *Running kSupport Tool from Administration Console*
- *Managing Hotfixes*

Browsing and Downloading <PPM_Home> Directory Files from Administration Console

As a PPM Center administrator, you can now browse and download <*PPM_Home*> directory files from the Administration Console with the new File Browser tool.

The Administration Console File Browser tool is available to any PPM Administrator with the access grants listed in *Table 9-5*.

Table 9-5. Required server tools access grants

Access Grant	Permissions
Sys Admin: Server Tools: Execute Admin Tools	Lets the user access the Administration Console and the server tools.
Sys Admin: Server Tools: Execute File Browser	New server tools access grant, enables the File Browser menu **Browse PPM Server files** in the Administration Console and lets the user browse and download PPM Server files. Without this access grant, the File Browser menu is invisible.

For details about how to configure access grants, see the *Installation and Administration Guide*.

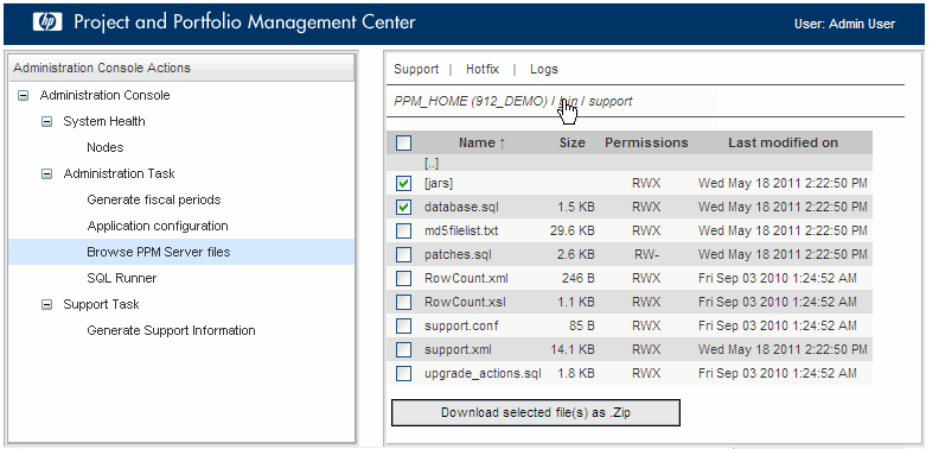
Users can view contents of all the files in <*PPM_Home*> in read-only mode once they have access to the File Browser, HP recommends that you provide the Server Tools: Execute File Browser access grant only to selected PPM Center administrators.

The <*PPM_Home*>/security directory is not accessible through the File Browser and is not listed in the contents of <*PPM_Home*> as it contains the sensitive private key used for SSL encryption. You must connect directly to the PPM Server machine to access this folder.

When initially accessed, the File Browser displays all files and folders located in the <*PPM_Home*> directory:

- You can click on any file to download it, or click on any folder to view its contents.
- When displaying a folder's contents, you can select one or more files or folders and download them as a Zip file by clicking **Download selected file(s) as .Zip** available at the bottom of the pane.

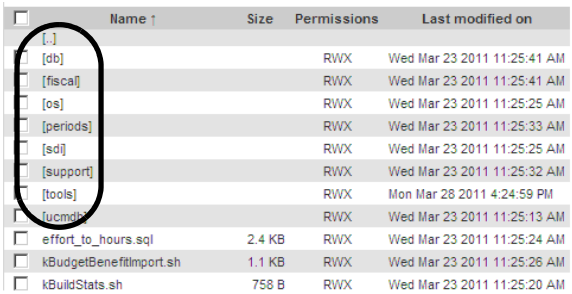
  The folder hierarchy in the zip file will be rebuilt relatively to the <*PPM_Home*> directory. Empty folders in the Zip file will contain an empty file so that empty folders are not removed automatically from the Zip file. These empty files are created dynamically when the Zip file is generated and are not present in the PPM Application Server file system.



  File information displayed includes name, size, permissions (R for read, W for write, X for execute), and last modification date.

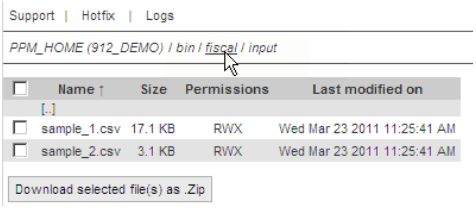
- You can sort the files and folders displayed by clicking a column header. Click twice on the same column header to reverse the sorting order. A small vertical arrow will be displayed in the column header currently used as the sorting criterion.

Note that when sorting files and folders, the folders are always displayed before the files, independently of the sorting criterion.



Also, unless you are viewing the <*PPM_Home*> folder, a [. .] folder is displayed at the beginning of the list to let the user access the parent folder.

- To navigate to other folders, click one of the three bookmarks on top of the File Browser, or click any element of the breadcrumbs representing the current folder (path is relative to <*PPM_Home*>).



- When PPM Center is configured in cluster mode, the File Browser only displays the files of the <*PPM_Home*> directory that contain the PPM Center instance to which you are currently connected to.
- If you want to access another <*PPM_Home*> of the cluster, you must manually connect to a PPM Center instance hosted in this <*PPM_Home*>> folder.
- When zipping files and folders, you can only select files and folders located in the same folder. If you switch to another folder while some items are selected, the selected items are not included in the generated zip file.

Cluster Configuration Considerations

- When PPM Center is configured as a server cluster and there are multiple PPM Center instances in the same <*PPM_Home*>, you can access all the files of all the PPM Center instances located under the same <*PPM_Home*> folder as the instance you are connected to.
- When selecting **Logs** or **HotFix** links in the bookmarks, you must manually choose the PPM instance you want to access. The folder is automatically displayed when the instance is selected.

Performance Concerns

The files listing can take many seconds if there are many thousands of files to list in the folder which contents are displayed, for example, the <*PPM_Home*>/cache folder, where images of PPM Charts are saved and only deleted after 7 days by default.

Note that there is no significant performance or memory impact on the PPM Server if you decide to download the entire contents of <*PPM_Home*> as a zipped file. This is a safe (though time-consuming) operation, but some temporary files might not be included in the resulting zip file if, for example, they are locked when you try to include them in the Zip file.

Administration Console SQL Runner

In earlier PPM Center versions, you could use the SQL Runner from the PPM Workbench to run queries directly against the PPM Center database schema. In PPM Center version 9.12, you access an enhanced SQL Runner through the Administration Console

To use the Administration Console version SQL Runner, you must have the access grants listed in *Table 9-6*, otherwise the **SQL Runner** menu is not visible to you in the Administration Console.

Table 9-6. Required server tools access grant

Access Grant	Permissions
Sys Admin: Server Tools: Execute Admin Tools	Lets the user access the Administration Console and the server tools.
Sys Admin: Server Tools: Execute SQL Runner	Enables the **SQL Runner** menu in the Administration Console and lets the user run SQL queries from the Administration Console. Without this access grant, the **SQL Runner** menu is invisible.

For information about configuring access grants, see the *Installation and Administration Guide*.

To access the Administration Console version SQL Runner feature:

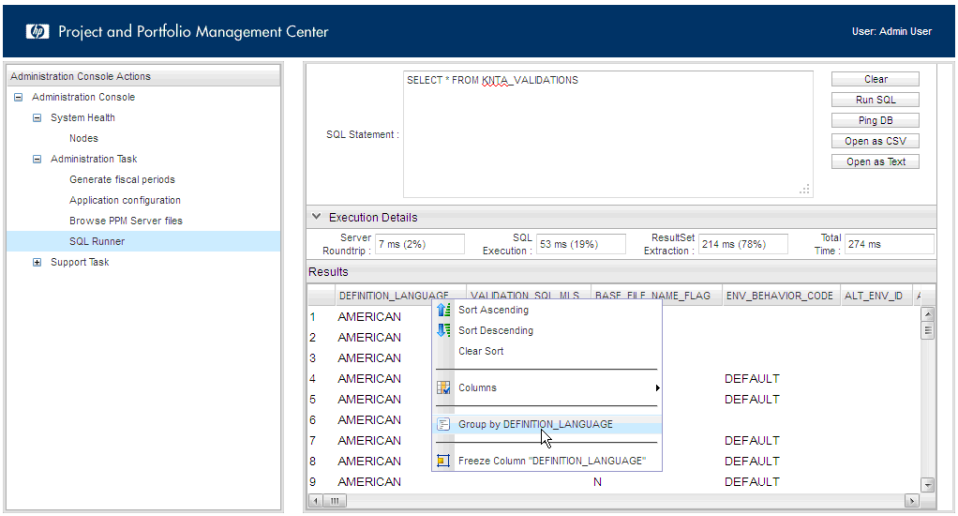
1. Log on to PPM Center as an Administrator.
2. From the **Open** menu, select **Administration > Administration Console.**
3. Under Administration Console actions, expand **Administration Task**, and then click **SQL Runner**.

Notable Enhancements with Administration Console SQL Runner

Though the main functionalities of SQL Runner is identical in the PPM WorkBench and Administration Console versions, there are some notable enhancements in the Administration Console.

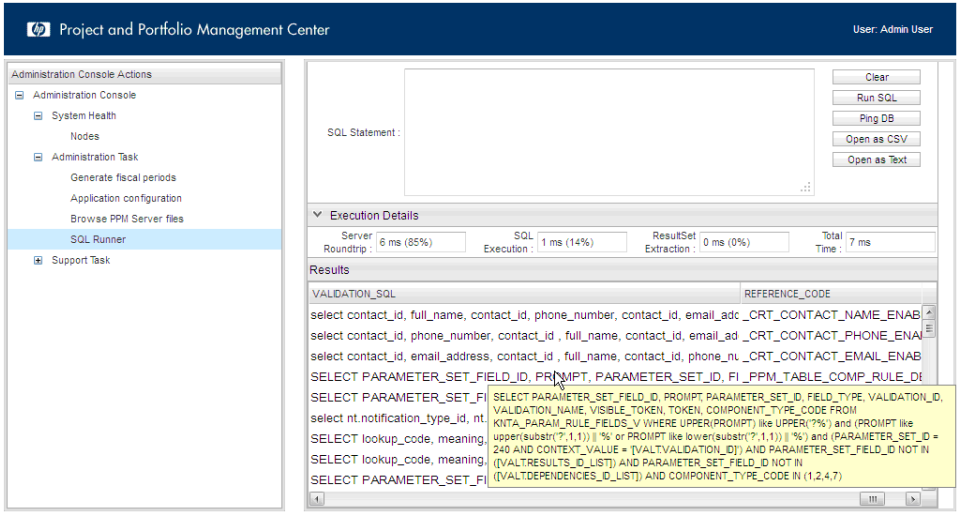
SQL Runner enhancements in the Administration Console are as follows:

- You can run SQL Statements that end with a semicolon (;).
- Results rows are numbered, and can be sorted and grouped within the results table by right-clicking the column headers.



- The **Server Roundtrip** duration represents the time spent between the PPM Application Server and the PPM Database, whereas in Workbench, it measures time spent between the PPM Workbench client and the PPM Server). However, in both cases, it is a good way to measure network latency.
- For the same reason, the **Ping DB** button in Administration Console tests the speed between only the PPM Server and the database. Since a Web Interface is used here, the time spent between the web client and PPM Server is ignored.
- You can now export the data to CSV format (by clicking the **Open as CSV** button, located to the right of the **SQL Statement** text area).
- You can not ping the server by clicking **Ping Server**. This is not necessary with the Administration Console version SQL Runner since it runs on the PPM Server.
- You can select the text in any cell of the results table and copy it to the clipboard.
- Columns are automatically sized to accommodate their contents (and the column headers).

- If the maximum width of a column is reached but at least one of the records is truncated, the values in this column are shown as tooltip text when hovering.



Limitations

The same limitations with PPM WorkBench version of SQL Runner also apply to the Administration Console version of SQL Runner:

- You can only run `SELECT` SQL Statements.
- You can view a maximum of 1000 records. If more than 1000 records are retrieved, only the first 1000 are displayed.
- The results do not include the contents of the BLOB and CLOB columns.
- If a very large number of columns are retrieved, it may take a few seconds before the results are displayed.
- When exporting the results to text or CSV format, the sorting and grouping of results is discarded, and only the raw results are exported.

Gathering Support Information

As a PPM Center administrator, you can run the `kSupport.sh` script or access Administration Console version of the `kSupport` tool to gather the following information:

- Run SQL scripts provided by the HP Software Support team to gather specific database information for troubleshooting purpose.

  In Custom mode, a new option is now available, you can select it in order to collect specific database information for troubleshooting purpose. Then, you can choose to browse for the source SQL script file or the folder that contains SQL files (with `.sql` extension, case-insensitive) to run, or choose to enter manually or paste SQL script in a text area to run. In the server information collection summary page, you will be notified the number of SQL commands that are prohibited from running.

  All of the SQL scripts you select to run are copied into the `<kSupport_Zip_ File>/ppmc/data` directory, and the SQL script content you entered or pasted in the text area is concatenated into a CSV-format file named `runsqls<Time_Stamp>.sql` in the `<kSupport_Zip_File>/ppmc/data` directory.

  If the resulting SQL file is larger than 100 MB, a `java.lang.OutOfMemory` error may be logged in the `<PPM_Home>/bin/support/ppmc/ksupport.log` file. To correct the problem, split the source SQL script into multiple files, and then run them again in batches.

  You can run the kSupport tool in silent mode to gather specific database information in addition to the default information set.

  To run SQL scripts in silent mode:

  ```
  sh kSupport.sh -silent [-runsql <SQL_File_Path>]
  ```

- List invalid PPM Center schema objects and invalid database indexes in the kSupport output `database.html` file.

  After you run the kSupport tool, two new sections are added in the `<kSupport_zip_file>/ppmc/database.html` file:

- **Selecting invalid objects in DB** section lists object types and object names of all invalid objects in the database. Objects of the following types are listed:

  - SEQUENCE
  - PROCEDURE
  - PACKAGE
  - PACKAGE BODY
  - TRIGGER
  - TABLE
  - INDEX
  - VIEW
  - FUNCTION

- **Selecting invalid indexes in DB** section lists invalid database indexes. For example, some INDEX objects are of `UNUSABLE` status in `user_indexes` but of `VALID` status in `all_objects`.

- Collect `stinger.xml` file into the `conf` folder of the kSupport output zip file.

- Collect Bill of Materials (BOM) Information by performing BOM check.

  The resulting Bill of Materials Information page contains three sections:

  - **Files missing** - Files that should exist but missing.
  - **Files unwanted** - Files that are not shipped with PPM.
  - **Files changed** - Files that are different from the ones shipped with PPM.

  You can access the Bill of Materials Information page in the following ways:

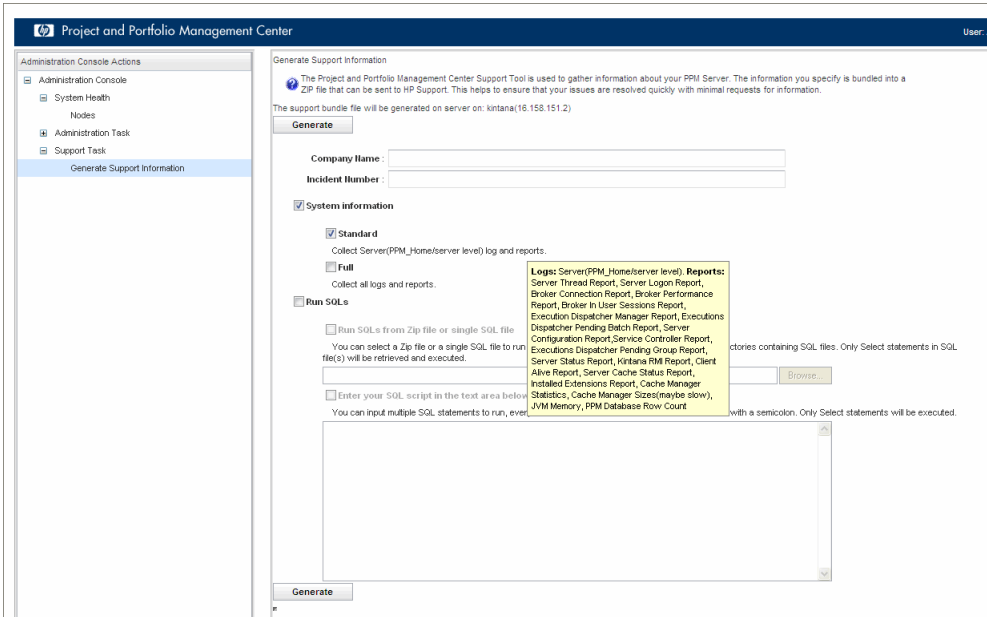
  - Locate and open the `<kSupport_zip_file>/ppmc/index.html` file, and then click **Bill of Materials Information** link.Or,
  - Locate and open the `<kSupport_zip_file>/ppmc/md5filelist.html` file.

Running kSupport Tool from Administration Console

With PPM Center version 9.12, kSupport tool functionality is enhanced. You can now run the kSupport tool from the Administration Console.

To access the Administration Console version kSupport tool,

1. Log on to PPM Center as an Administrator.
2. From the **Open** menu, select **Administration > Administration Console.**
3. Under the Administration Console actions, expand **Support Task**, and then click **Generate Support Information**.



Make sure that the size of SQL commands you enter in the text area does not exceed 1 MB.

Managing Hotfixes

As a PPM Center administrator, you can now use the support tools to deploy hotfixes and view hotfix deployment information.

Deploying hotfixes with kDeploy.sh

To deploy a hotfix, run the following command:

`sh kDeploy.sh -hotfix <Deployment_Hotfix>`

where,

- `-hotfix` is the new parameter added to the `kDeploy.sh` script for deploying hotfixes
- *`<Deployment_Hotfix>`* is the hotfix bundle name.

For example, if the bundle name is

```
912-debug-QCIM1L12345.jar
```

or

```
912-debug-QCIM1L12345-QCCR1L12346.jar
```

Then the corresponding deployment command is

```
sh kDeploy.sh -hotfix 912-debug-QCIM1L12345.jar
```

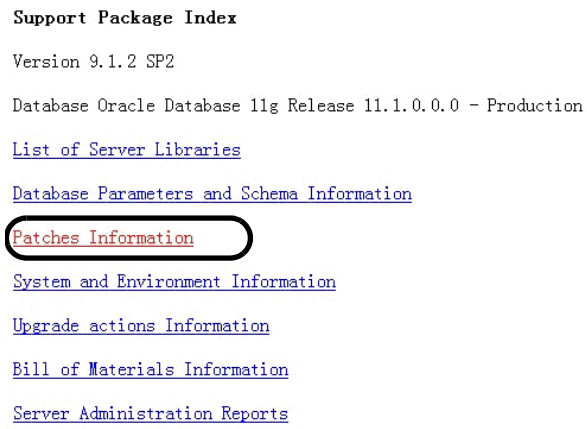
or

```
sh kDeploy.sh -hotfix 912-debug-QCIM1L12345-QCCR1L12346.jar
```

Viewing hotfix deployment information

To view the hotfix deployment information collected,

1. After running the kSupport tool, locate the link **Patches Information** in the resulting `<kSupport_zip_file>/ppm/index.html` file.



2. Click the **Patches Information** link to open the `patches.html` file. The `patches.html` file contains the following sections:
   - Selecting current PPM Center version
   - Selecting patches applied info in current PPM Center version
   - Selecting all the files that exist in the PPM Center file system
   - Selecting all the other files applied in the current PPM Center instance, including SQL files and entities (packages, request types, requests and so on) that have been imported
   - Selecting detailed information of patches that deployed in current PPM Center version
3. Check details under the section(s) you are interested in.

Importing Requests from XML Files

With PPM Center version 9.12, this new feature is implemented for importing requests from XML files as well as exporting requests to XML files. This solution allows you to produce XML files electronically, helping you to complete any processes that may require requests in XML version.

With this feature, you will be able to perform the following tasks:

- *Importing Requests from XML Files*
- *Exporting Requests to XML Files*
- *Exporting Requests by Running the Special Command*

New Settings Introduced

To implement the feature, some new settings are introduced.

Access Grant

A new access grant described below is added to enable users to import requests from XML files.

Table 9-7. New access grant introduced

Access Grant	Permissions
Demand Mgmt: Import Requests	Enables the user to have the access to import requests from XML files.

Validations

Table 9-8 lists three new validations introduced.

Table 9-8. New validations introduced

Validation Name	Description
XML Exportable Request Template	Returns a list of XSLT templates that can be used for exporting requests to.
XML Exportable Request Template By Request Type	Non-configurable system level validation. Returns a list of XSLT templates based on a specific request type.
XML Importable Request Template	Returns a list of XSLT templates that can be used for importing requests from.

New Special Command

A new special command is introduced to help generate exported file for use by PPM Center report.

Table 9-9. New special command introduced

Special Command	Description
ksc_export_request_as_xml	A system special command, used to export a request in either of the following two modes: • Report mode, exports a request to report when the special command is set to `true`. • Request mode, exports a request and the URL of the exported file is updated to a field for the request when the special command is set to `false`.

For details about how to use the special command, see *Exporting Requests by Running the Special Command* on page 296.

Report Type

A new report type **(REFERENCE) Export Request Report** is added.

Importing Requests from XML Files

A new menu **Import Request from XML** is provided to import XML files as requests in PPM Center. The web page takes a XML file as well as the XSLT template as input, and imports the specified XML file to create a new request or update an existing request.

Only users with the **Demand Mgmt: Import Requests** access grant can perform the import task.

Configure an XML Importable Request Template

An XSLT template is necessary for importing XML files to create new requests or update existing requests.

XSLT Template is a standard XSL file that is used to convert a XML file of user-defined format to an XML data file of PPM format as PPM Center can accept PPM format XML data file only.

Developing an XSL File

If you want to import a request from an XML file with your own format, you need to develop an XSL file to convert the user-defined format file to a PPM format XML data file.

You may refer to the following XSD file to develop your own XSL file:

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="requests">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="request">
          <xs:complexType>
```

```
            <xs:sequence>
              <xs:element minOccurs="1" maxOccurs="1" name="requestType"
                                                          type="xs:string"/>
              <xs:element minOccurs="0" maxOccurs="unbounded" name="field">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element minOccurs="0" name="token" type="xs:string"/>
                    <xs:element minOccurs="0" name="tableValue">
                      <xs:complexType>
                        <xs:sequence>
                          <xs:element minOccurs="0" maxOccurs="unbounded"
                                                              name="tableColumn">
                            <xs:complexType>
                              <xs:sequence>
                                <xs:element minOccurs="0" name="columnToken"
                                                                type="xs:string"/>
                                 <xs:element minOccurs="0" maxOccurs="unbounded"
                                                     name="cellValue" type="xs:string"/>
                              </xs:sequence>
                            </xs:complexType>
                          </xs:element>
                        </xs:sequence>
                      </xs:complexType>
                    </xs:element>
                    <xs:element minOccurs="0" name="value" type="xs:string"/>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
      <xs:attribute name="date_format" type="xs:string" use="optional"/>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

This XSD file defines the XML format accepted by PPM Center's generic request import operation. When you develop an XSL template, make ensure that the XML file generated using the XSL template conforms to the format defined by the XSD file. Do not use this file as a template directly.

If you import a request from an XML file without providing any XSL template, you need to ensure that your XML file conform with the format of PPM XML data file.

Configure an XSLT Template

When exporting a request, you can define an XSLT template to convert the raw data XML file to the desired format, such as XML, HTML, Text, and CSV. The XSLT template is a standard XSL file, it can convert the raw XML data file in PPM format.

For more technical details about the format of PPM XML data file, see the XSD file described in *Developing an XSL File* on page 284.

To configure an XSLT template,

1. Log on to PPM Center.
2. On the **Open** menu, click **Administration > Open Workbench**.

   The PPM Workbench opens.
3. On the shortcut bar, click **Configuration > Validations**.

   The Validation Workbench opens.
4. Click **List**, then locate and open the **XML Importable Request Template** validation.

   The Validation: XML Importable Request Template window opens.
5. Click **New**.

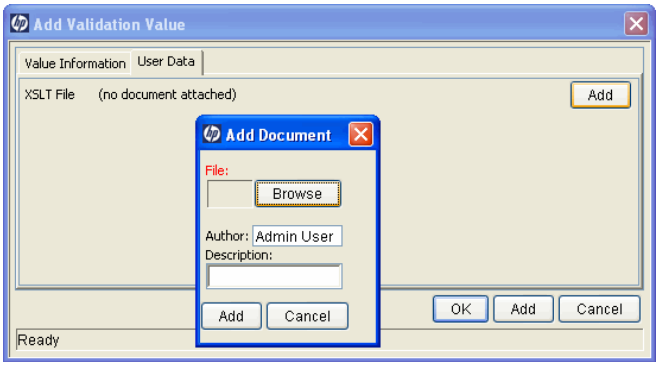
   The Add Validation Value dialogue box opens to Value Information tab.
6. On the Value Information tab, provide values for required **Code** and **Meaning** fields and optional field **Desc** as necessary.

   The value of **Meaning** field will be displayed in the drop-down list for **XSLT Template** field on the Import Request from XML page.
7. To use this new template, for the **Enabled?** field, leave it selected.
8. If you want to set this new template default, select the checkbox for **Default** field. Otherwise, leave it empty.

   For more information about the fields in the Add Validation Value dialogue box, see the *Configuring Static List Validations* section of the *Commands, Tokens, and Validations Guide and Reference*.

9. Click the **User Data** tab.
10. Click **Add**.

    The Add Document dialog box opens.



11. Do the following:

    a. Click **Browse** to locate and select the XSLT file you want to add. Normally it is the file you developed in *Developing an XSL File* on page 284.

    b. In the **Description** field, you can type a short description for the XSLT file.

    c. click **Add**.

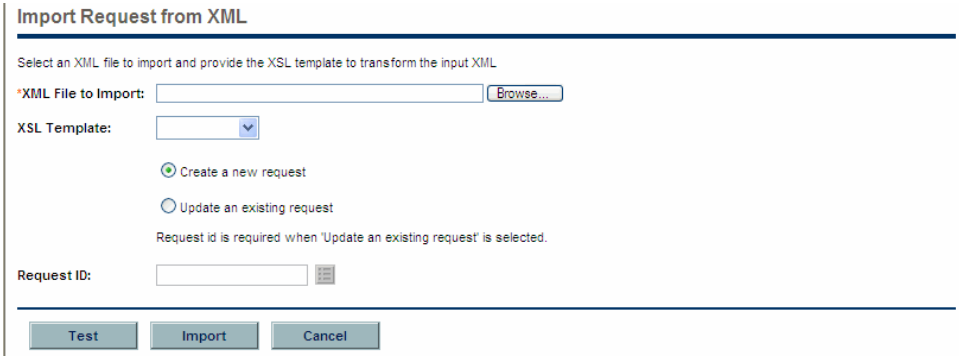
12. To add more values and keep the Add Validation Value window open, click **Add**.
13. To save your changes and close the window, click **OK**.

Import an XML File to Create a New Request

To import an XML file to create a new request,

1. Log on to PPM Center.
2. On the **Open** menu, click **Demand Management > Import Request From XML.**

   The Import Request from XML page opens.



3. For **XML File to Import** field, click **Browse** to locate and select the XML file you want to import.
4. For **XSLT Template** field, click the drop-down button to select the XSLT template you want to associate with the imported XML file.

   XSLT templates are configured in PPM Workbench by admin user. For information about configuring XSLT templates, see *Configure an XML Importable Request Template* on page 284.
5. Select **Create a new request**.
6. (Optional) If it is the first time for you to import an XML file, you may want to run a test before you perform the formal import. In this case, click **Test** button.

It tests if the XML file can be imported successfully.

- If the test result page shows "`Test completed successfully`", proceed to step 7.
- If "`Error parsing the incoming xml file...`", troubleshoot the cause and make sure the XML is ready for import.

7. Click **Import** button.
8. Check the import result and the ID of the new request created.

A "`Test/Import completed successfully`" message will be displayed even when the XML imported does not match the XSL template selected, but no corresponding request ID will be generated and the log will show "`pass:0`".

9. Click **Back** to return to the Import Request from XML page.

Import an XML File to Update an Existing Request

To import an XML file to update an existing request,

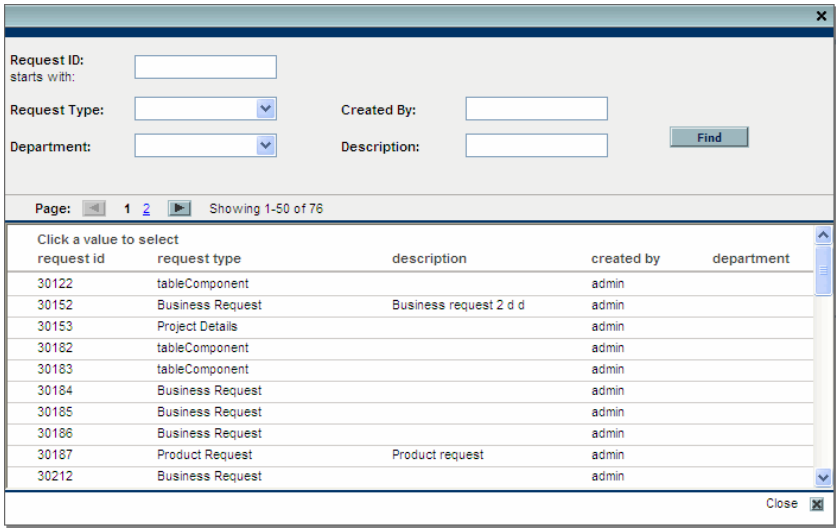
1. Log on to PPM Center.
2. On the **Open** menu, click **Demand Management > Import Request From XML.**

   The Import Request from XML page opens.
3. For **XML File to Import** field, click **Browse** to locate and select the XML file you want to import.
4. For **XSLT Template** field, click the drop-down button to select the XSLT template you want to associate with the imported XML file.

   XSLT templates are configured in PPM Workbench by admin user. For information about configuring XSLT templates, see *Configure an XML Importable Request Template*.
5. Select **Update an existing request.**

   This enables **Request ID** field.
6. For **Request ID** field, click the selector icon.

The popup window lists all available choices. Enter search filter(s) to locate the desired request ID or select a value from the list.



7. (Optional) If it is the first time for you to import an XML file, you may want to run a test before you perform the formal import. In this case, click **Test** button.

   It tests if the XML file can be imported successfully.

   - If the test result page shows "`Test completed successfully`", proceed to step 8.
   - If "`Error parsing the incoming xml file...`", troubleshoot the cause and make sure the XML is ready for import.

8. Click **Import** button.
9. Check the import result and the ID of the new request created.

   A "`Test/Import completed successfully`" message will be displayed even when the XML imported does not match the XSL template selected, but no corresponding request ID will be generated and the log will show "`pass:0`".

10. Click **Back** to return to the Import Request from XML page.

Exporting Requests to XML Files

Exporting a request to an XML file of a specific format involves the following tasks,

1. *Enable Report Type (REFERENCE) Export Request Report*
2. *Configure an XML Exportable Request Template*
3. *Export a Request to an XML File in Specific Format*

Enable Report Type (REFERENCE) Export Request Report

To facilitate exporting a request to XML of a specific format, a new report type **(REFERENCE) Export Request Report** is added. This report type enables you to export a request report to a specific format.

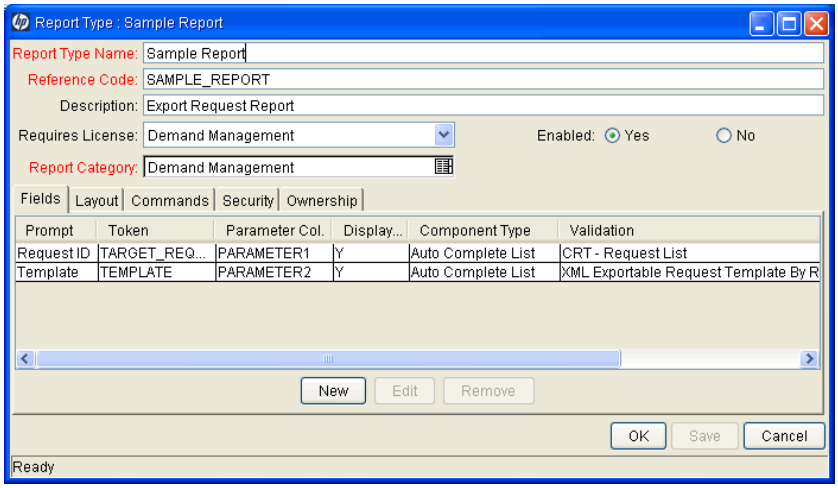
To enable the report type,

1. Log on to PPM Center and launch the PPM Workbench.
2. On the shortcut bar, click **Configuration > Report Types**.

   The Report Type Workbench opens.
3. Click **List**, then locate and select report type **(REFERENCE) Export Request Report**.
4. Click **Copy**.

   The Copy Report Type window opens.
5. Type a **Report Type Name**. For example, **`Sample Report`**.
6. Click **Copy** to continue.
7. When prompted, click **Yes**.

The Report Type: <*Report Type Name*> window opens.



8. For the **Enabled?** field, select **Yes**.
9. Configure other fields or options as necessary.
10. Click **OK**.

Configure an XML Exportable Request Template

To configure a specific format template for exporting a request to,

1. From the Validations Workbench, select validation **XML Exportable Request Template**.
2. Click **New**.

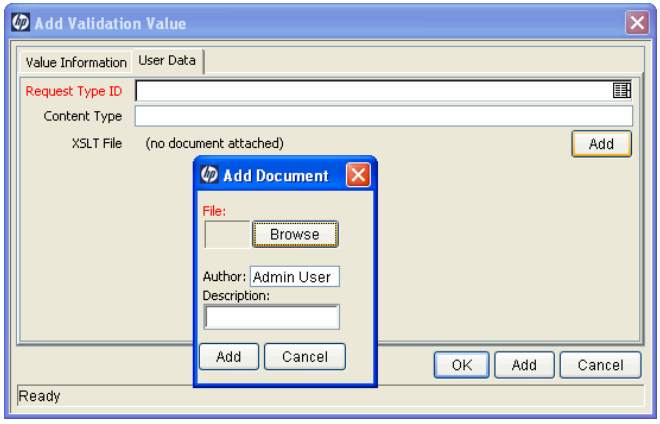
   The Add Validation Value dialogue box opens to Value Information tab.
3. On the Value Information tab, provide values for required **Code** and **Meaning** fields and optional field **Desc** as necessary.

   The value of **Meaning** field will be displayed in the drop-down list for **XSLT Template** field on the Import Request from XML page.
4. To use this new template, for the **Enabled?** field, leave it selected.
5. If you want to set this new template default, select the checkbox for **Default** field. Otherwise, leave it empty.

For more information about the fields in the Add Validation Value dialogue box, see the *Configuring Static List Validations* section of the *Commands, Tokens, and Validations Guide and Reference*.

6. Click the **User Data** tab.
7. Do the following:
   a. In the **Request Type ID** field, select a request type ID using the auto-complete icon.
   b. In the **Content Type** field, you can type a short description of the request type.
   c. For **XSLT File** field, click **Add**.

      The Add Document dialog box opens.



      i. Click **Browse** to locate and select the XSLT file you want to add.
      ii. In the **Description** field, you can type a short description for the XSLT file.
      iii. click **Add**.
8. To add more values and keep the Add Validation Value window open, click **Add**.
9. To save your changes and close the window, click **OK**.

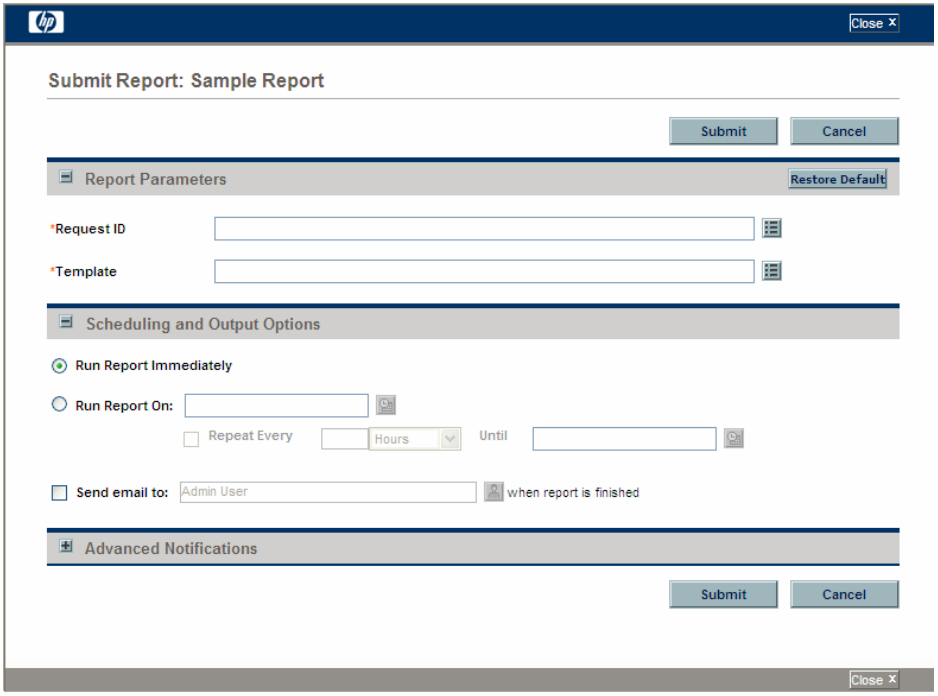
Export a Request to an XML File in Specific Format

To create a report and export a request to XML in specific format,

1. Log on to PPM Center.
2. On the **Open** menu, click **Reports > Create Report**.

   The Submit New Report page opens.
3. From the **Select Report by Category** section:
   - For **Report Category**, select the appropriate category.
   - Click the link for the newly created report type.

   The Submit Report: <*Report Name*> window opens.

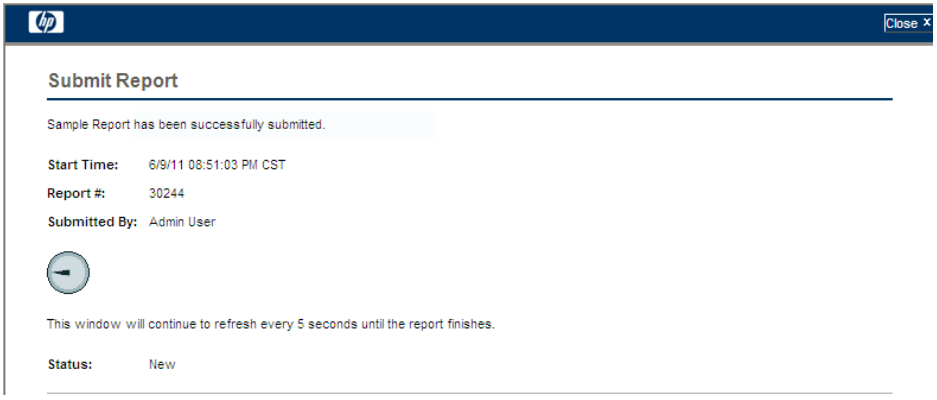


4. Under the **Report Parameters** section,
   a. In the **Request ID** field, specify a request number by using the selector icon.

b. In the **Template** field, select the template you created in *Configure an XML Exportable Request Template* on page 292.

5. Click **Submit**.

   The Submit Report window opens. The status is refreshed until the report is complete.



6. The completed XML report is displayed in a separate window.

Exporting Requests by Running the Special Command

In general, a request is exported via the PPM Center report. A new special command (`ksc_export_request_as_xml`) is introduced to generate the exported file for the report. Setting `true` indicates report mode.

Report mode example:

```
ksc_export_request_as_xml [P.TARGET_REQUEST] "[P.TEMPLATE]"
true [RP.REPORT_SUBMISSION_ID]
```

where,

`[P.TARGET_REQUEST]` – ID of the request to be exported.

`[P.TEMPLATE]` – The template code.

`true` – Report mode, indicates that the result is exported to report.

`[RP.REPORT_SUBMISSION_ID]` – Report submission ID.

You can also use this special command in request mode by integrating it into your own workflows. In this case, the special command generates the exported file and pastes the URL of the exported file to a corresponding field on a specified request. A URL field is necessary for this mode because it shows more readable file name while referring to the full address of the exported file.

Request mode example:

```
ksc_export_request_as_xml [P.TARGET_REQUEST] "[P.TEMPLATE]"
false [REQ.REQUEST_ID] [REQD.P.RESULT]
```

where,

`[P.TARGET_REQUEST]` – ID of the request to be exported.

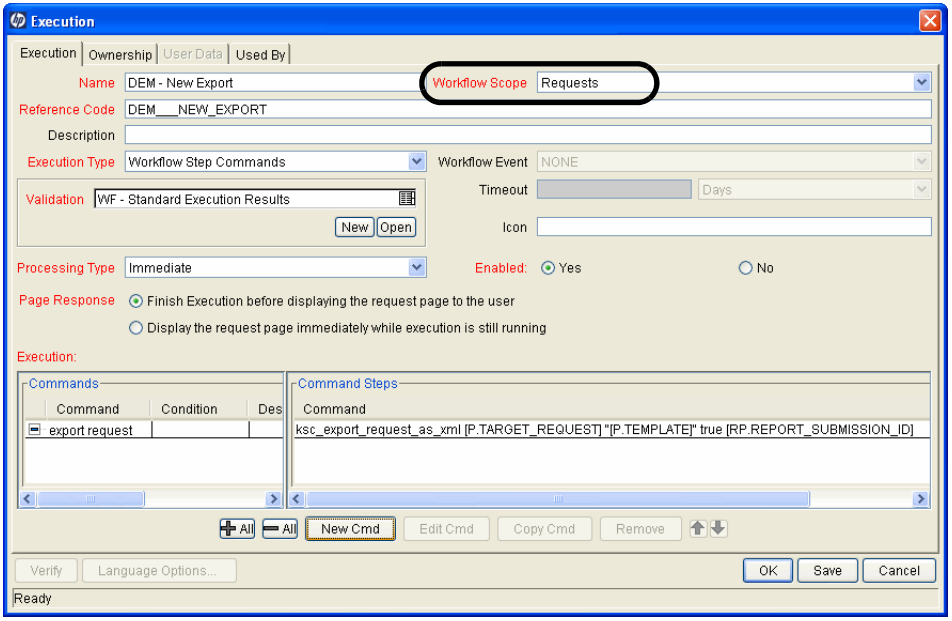
`[P.TEMPLATE]` – The template code.

`false` – Non-report mode, indicates that the URL of the exported file is updated to an appropriate field of the request.

`[REQ.REQUEST_ID]` – ID of the request that contains URL of the exported file.

`[REQD.P.RESULT]` – The field token that contains the URL of the exported file.

When you use the special command in a workflow to export a request, make sure to set **Workflow Scope** to **Requests** in the corresponding execution step. Otherwise you will not get an exported file successfully.



Attaching Impact Analysis Report for CIs to a Request in PDF format

In addition to viewing Universal CMDB Impact Analysis Report online by clicking the **Launch HP Universal CMDB Impact Analysis** button on the request page, you can also attach a Universal CMDB Impact Analysis Report for CIs in PDF format to requests in PPM Center.

This integration solution applies to Universal CMDB version 8.06 only.

New and Modified Settings

To enable this integration, the following settings are modified or introduced:

- **Universal CMDB Impact Analysis** field group**:** This field group is modified to include a new field **Report**. When the field group is enabled for a request type, an **Impact Analysis Report** field for report attachment will be added to any request you create based on the request type.
- **`ksc_download_ucmdb_impactreport`**: A new system special command added for downloading the Universal CMDB Impact Analysis Report.

  The following three optional values are available for advanced configuration purpose. You can append them to the special command, which will offer you the flexibility of setting filters for the report to be generated on the request page.

  - `-CATEGORY "<value>"`
  - `-SEVERITY "<value>"`
  - `-LANG "<value>"`

  If no values are set for the command, the values in `server.conf` will take effect. If no values are found in the `server.conf` file, the following Universal CMDB built-in default values will take effect:

Parameter	Value
Category	`Change`
Severity	`New`
Lang	`en`

  Examples:

  - To invoke the special command directly without any parameters:

    ```
    ksc_download_ucmdb_impactreport
    ```

  - To invoke the special command with parameters:

    ```
    ksc_download_ucmdb_impactreport -CATEGORY "change" -
    SEVERITY "plan" -LANG "fr"
    ```

- To invoke the special command with token parameters:

  ```
  ksc_download_ucmdb_impactreport -CATEGORY "[REQD.P.<token name>]"
  ```

- New `server.conf` parameters

  Table 9-10 lists new parameters that are added to the `server.conf` configuration file to enable the integration.

  The parameter names listed in this table are shortened versions of the actual names, all of which start with the string `com.kintana.core.server`. For example, the full name of the `CMQC_SUPPORT_REQUEST_ID` parameter is `com.kintana.core.server.CMQC_SUPPORT_REQUEST_ID`. To add a parameter to the server.conf file, you must use its full name.

Table 9-10. New server.conf parameters

Parameter Name	Brief Description
IMPACT_ANALYSIS_ REPORT_CATEGORY	Sets default category value for the impact analysis report, for example, `change` or `operation`.
IMPACT_ANALYSIS_ REPORT_SEVERITY	Sets default severity value for the impact analysis report, for example, `MINOR(3)`. For available values, see *Table 9-11*.
IMPACT_ANALYSIS_ REPORT_LANGUAGE	Sets default language code, for example, `fr`. For supported languages and codes, see *Table 9-12*.
ONLINE_IMPACT_ ANALYSIS_REPORT	Enable or disable online impact analysis report. By default, it is enabled.

Table 9-11. Universal CMDB category and severity parameters (page 1 of 2)

Category	Severity	
	ID	Code
Change	0	NO CHANGE
	1	PLAN
	2	NEW
	3	CANCEL

Table 9-11. Universal CMDB category and severity parameters (page 2 of 2)

Category	Severity	
	ID	Code
Operation	0	NORMAL
	1	WARNING(1)
	2	WARNING(2)
	3	MINOR(3)
	4	MINOR(4)
	5	MINOR(5)
	6	MINOR(6)
	7	MAJOR(7)
	8	MAJOR(8)
	9	CRITICAL

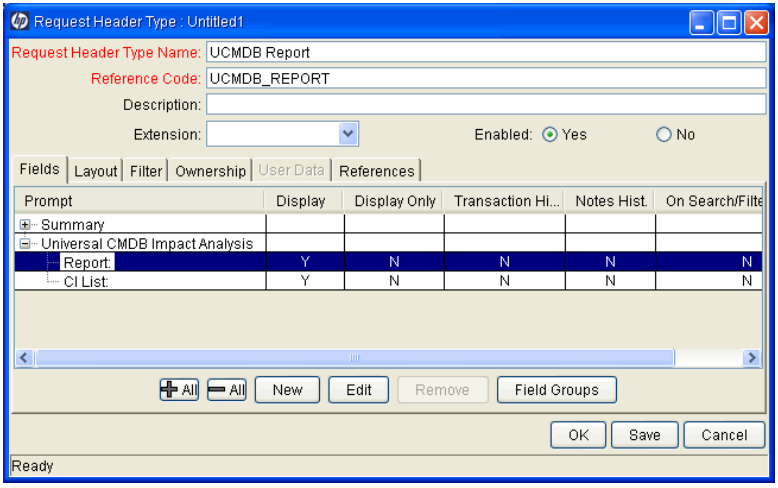
Table 9-12. Languages supported for the Impact Analysis Report

Description	Code
GERMAN	de
ENGLISH	en
SPANISH	es
FRENCH	fr
ITALIAN	it
JAPANESE	ja
KOREAN	ko
BRAZILIAN PORTUGUESE	pt
RUSSIAN	ru
SIMPLIFIED CHINESE	zh

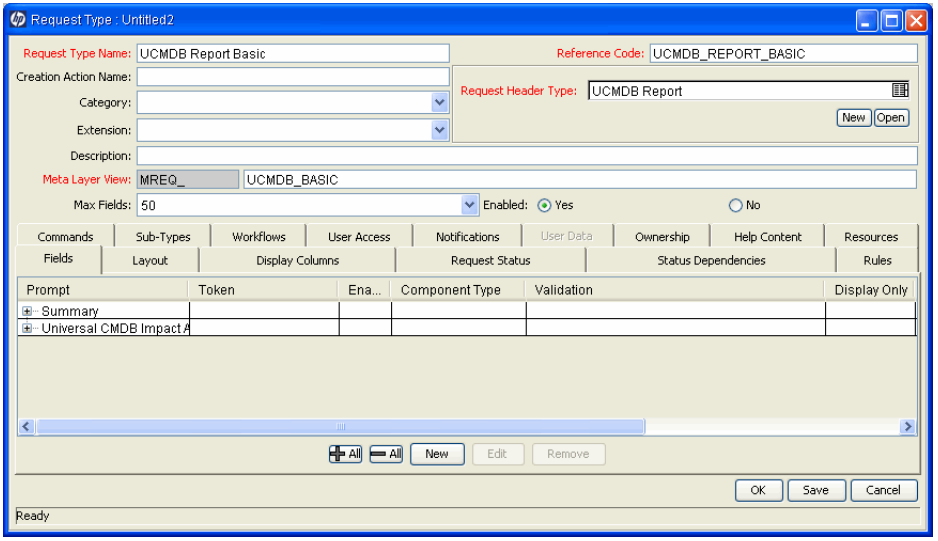
Basic Configuration Example

For a basic configuration, default values will be used.

1. In PPM Workbench, create a new request header type by going to **Demand Mgmt > Request Header Type > New Request Header Type**. Enable **Universal CMDB Impact Analysis** field group, and set **Display** attribute for both **Report** and **CI List** fields to **Yes**.



2. Create a new request type using the request header type you just created.

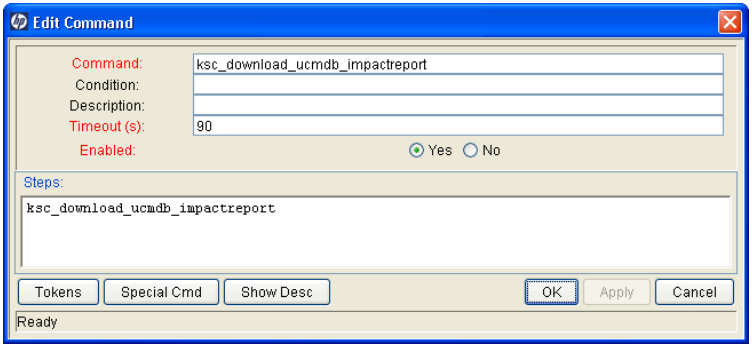


3. Create a workflow execution step that invokes the special command for downloading Universal CMDB Impact Analysis Report: `ksc_download_ucmdb_impactreport`.

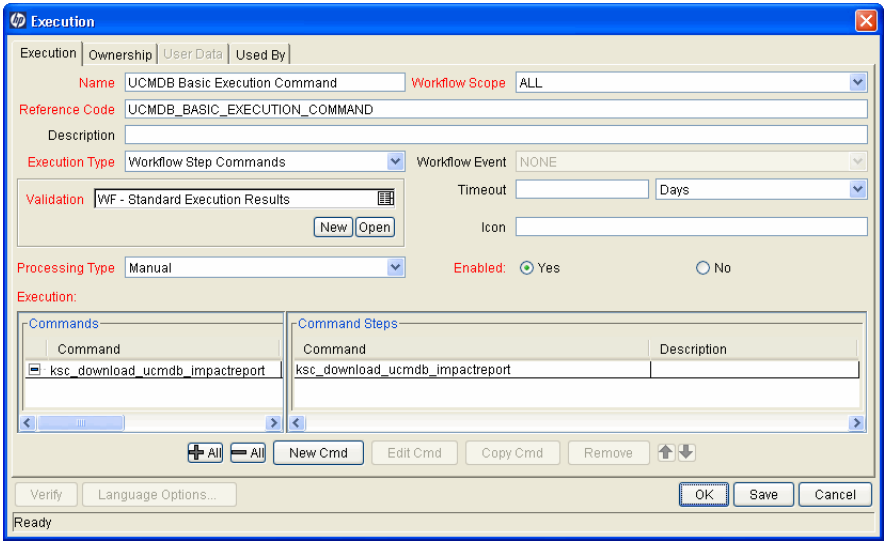
   a. In PPM Workbench, click **Configuration > Workflows**.

   b. In the Workflow Step Sources window, under Workflow Step Sources, select **Executions**, and click **New**. The Execution window opens.

   c. Provide a name for the execution step, select **Workflow Step Commands** for **Execution Type** field, and click **New Cmd**. In the New Command window, enter the new system special command, and click **OK**.



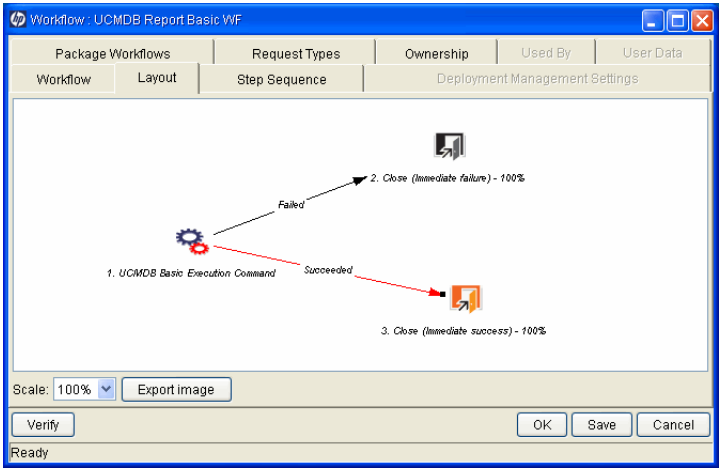
   d. Save the Execution step.



4. Create a new workflow.

   a. In the Workflow Workbench window, click **New Workflow**. In the Workflow window that opens, provide a name, and select **Requests** for the **Workflow Scope** field, and select **Yes** for **Enabled**.

   b. Go to **Layout** tab, drag the workflow execution step you just created to the Layout window, set **Security,** configure the transitions.

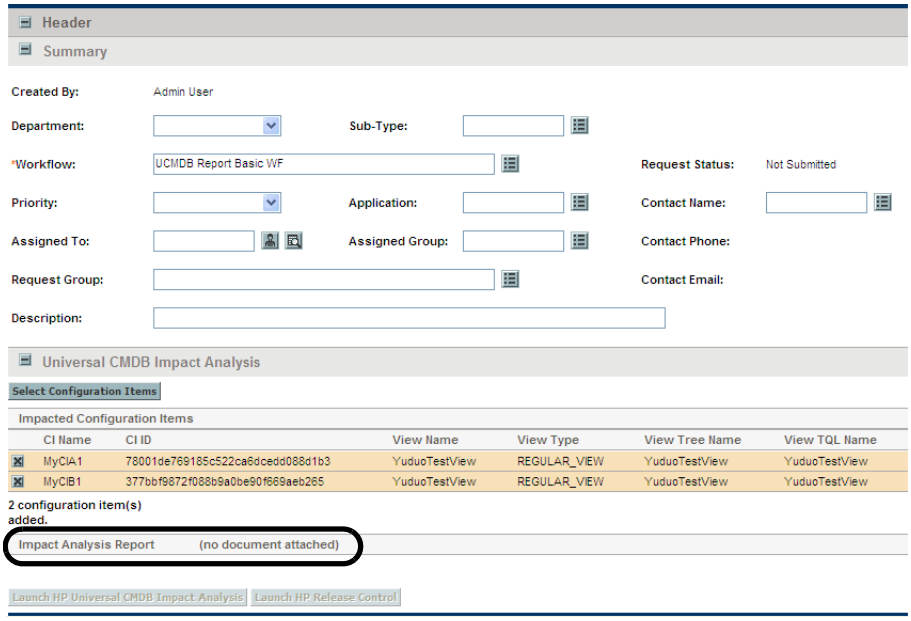


   c. Save the workflow.

5. In PPM Center, create a Universal CMDB request based on the request type you created in step 2 on page 301.

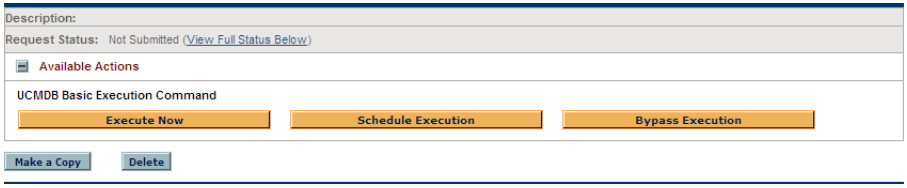
   a. For **Workflow** field, select the workflow you created earlier.

   b. Under Universal CMDB Impact Analysis section, click **Select Configuration Items** and add CIs for which you need to generate a report.

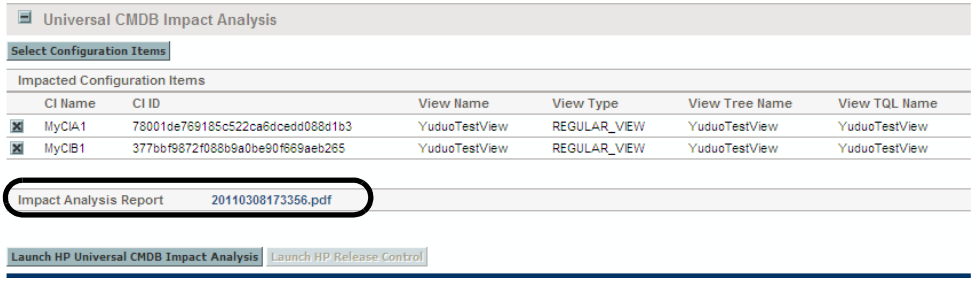


c. Provide values for other fields as necessary and submit the request.

6. Open the request and click **Execute Now** to execute the command.



7. The Impact Analysis Report is attached to the request in PDF format, with automatically generated file name of `<YYYYMMDDHHMMSS>.pdf`.



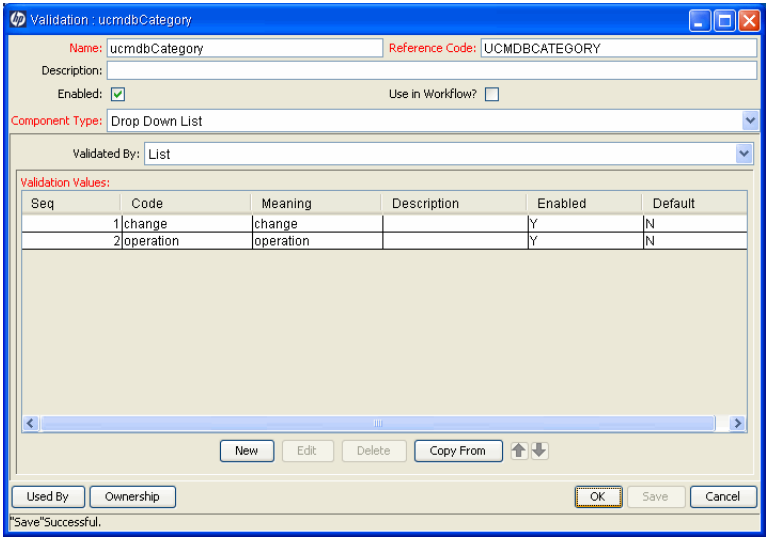
8. You may click the PDF report link to view the report.

Advanced Configuration Example

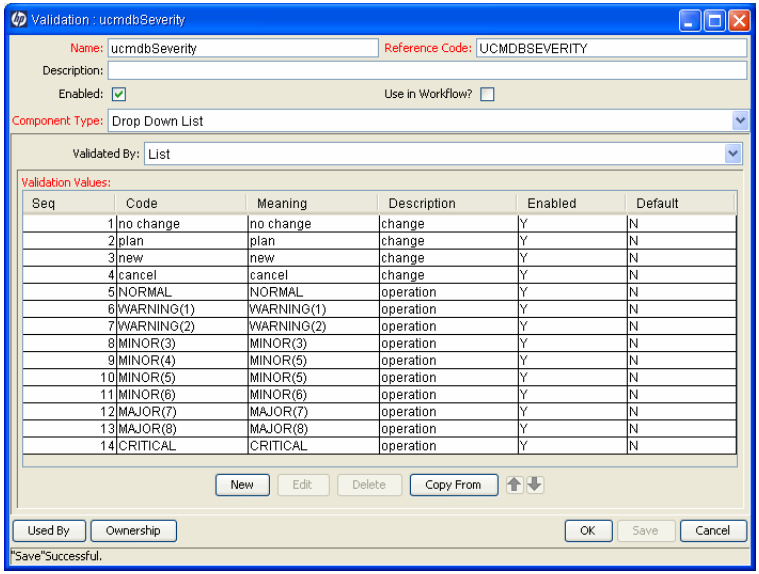
You can choose to pass optional `category`, `severity`, and `language` parameters for Universal CMDB Impact Analysis Report to the system special command. You can also pass them by token.

1. Create new validations for request type field options.

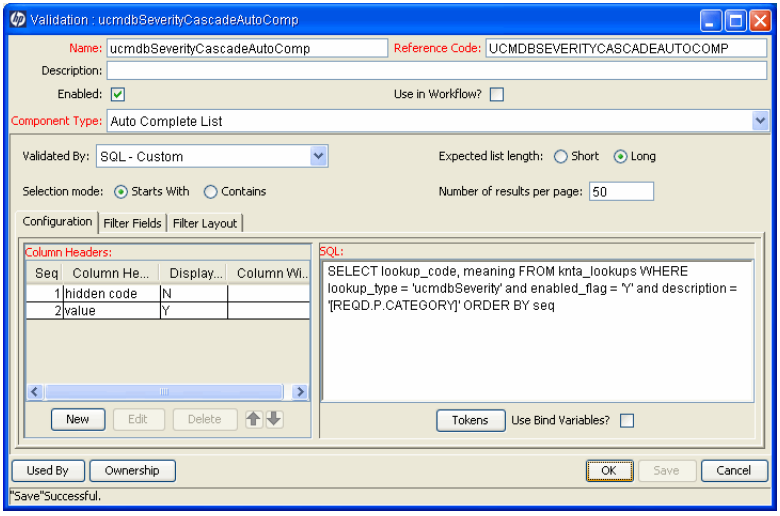
    a. Category



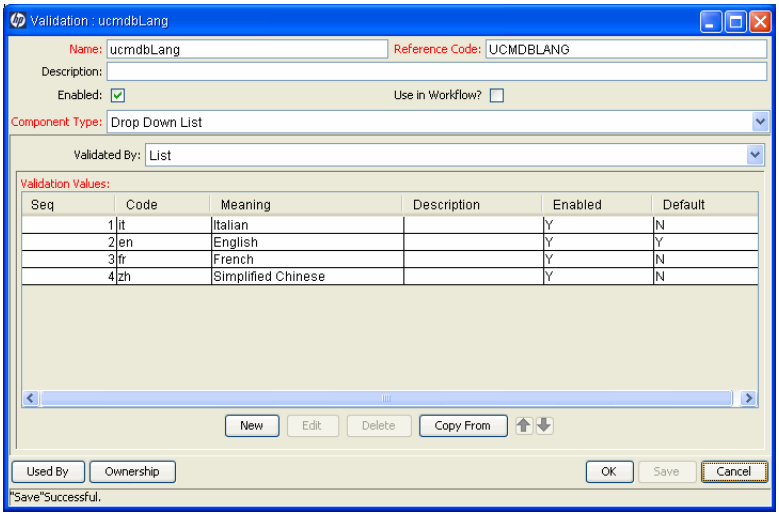
b. Severity



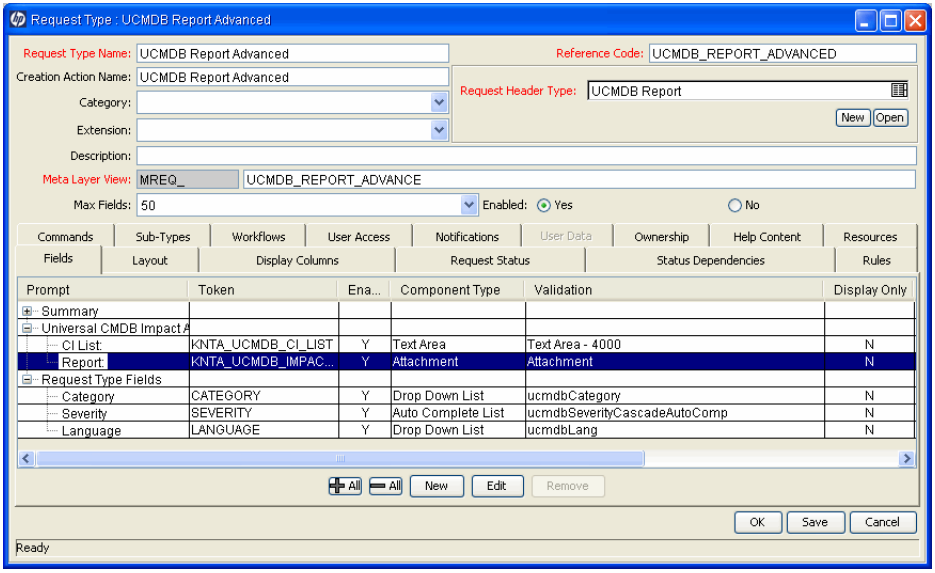
(Optional) You can create an auto-complete list to implement severity cascade on the basis of the above ***ucmdbSeverity*** validation.



c. Language

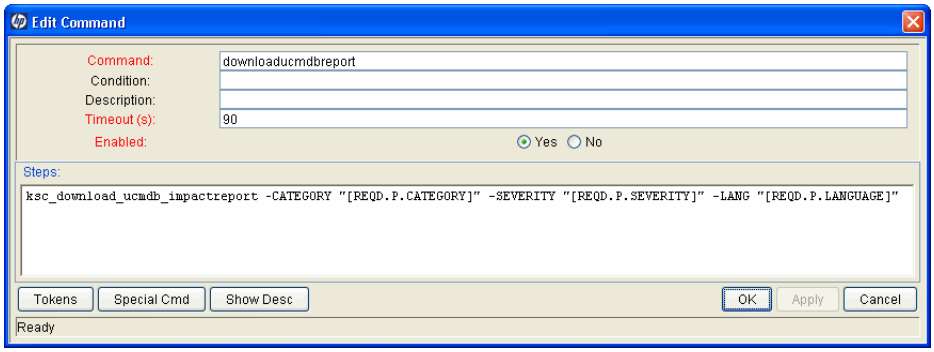


2. Create a Universal CMDB request type, with three request type fields for Category, Severity, and Language.



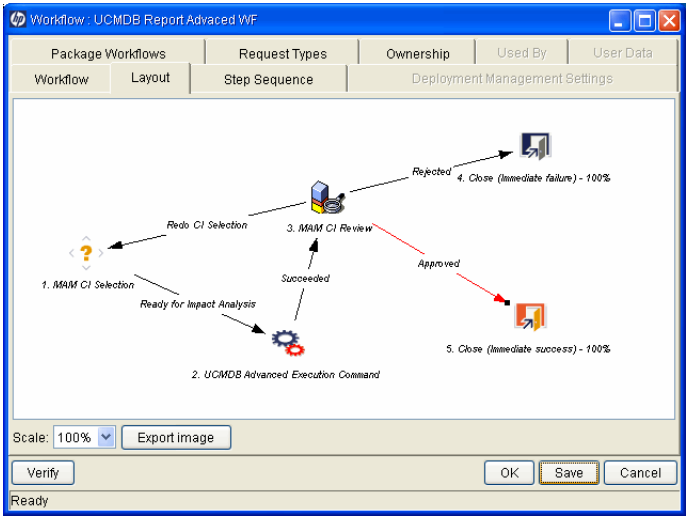
3. Create a workflow execution step that invokes the special command for downloading Universal CMDB Impact Analysis Report with advanced options:

```
ksc_download_ucmdb_impactreport -CATEGORY
"[REQD.P.CATEGORY]" -SEVERITY "[REQD.P.SEVERITY]" -LANG
"[REQD.P.LANGUAGE]"
```

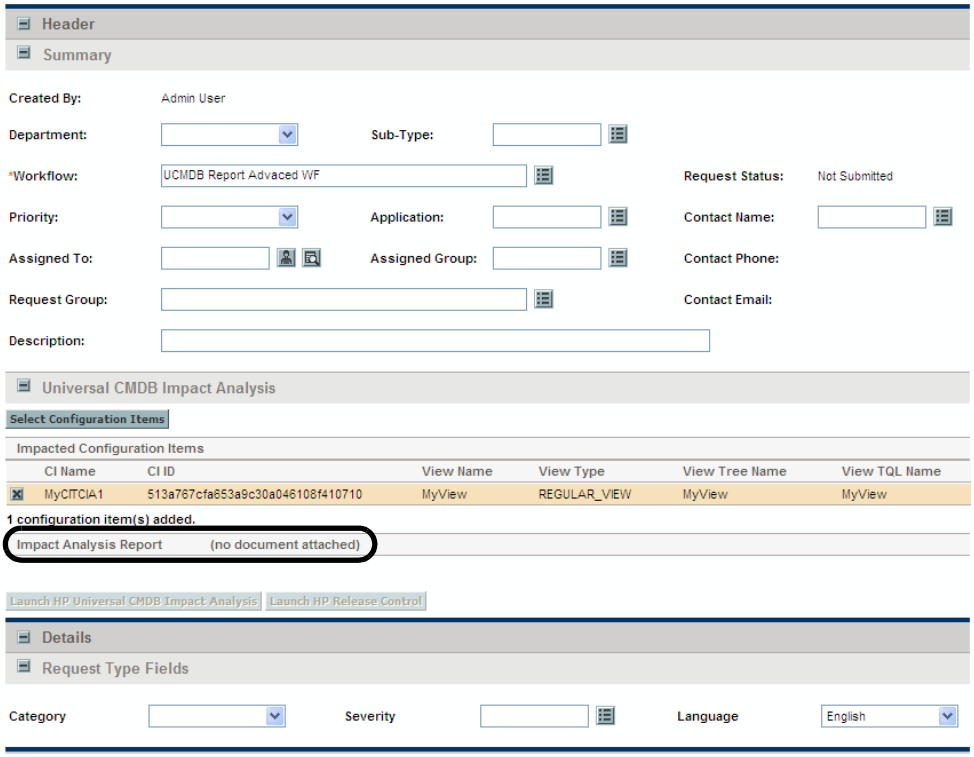


Enter the command manually. Copying and pasting the command may introduce unwanted characters, which may result in potential execution error.

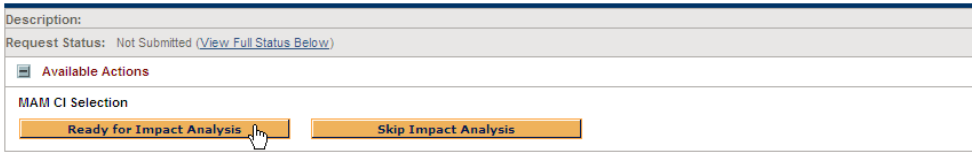
4. Create a workflow with the above workflow execution step, configure the workflow transitions, and save the workflow.



5. In PPM Center, create a Universal CMDB request using the request type you just created. For **Workflow** field, select the one you created earlier. Select configuration items in order to generate an impact analysis report, and submit the request.

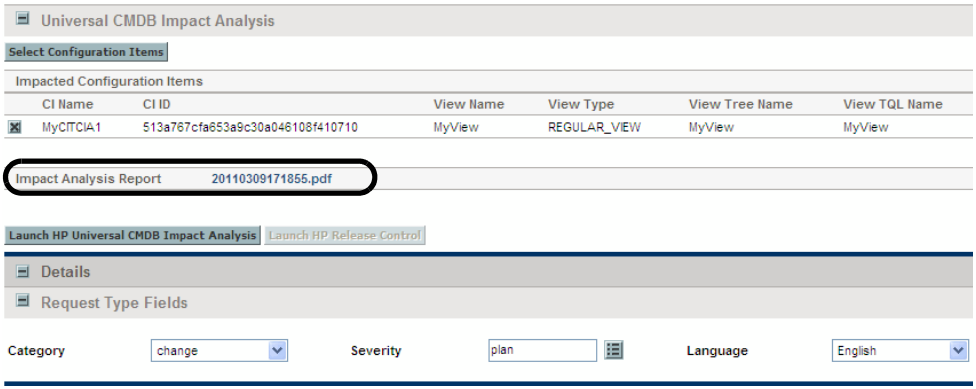


6. Open the request, execute the first workflow execution step.



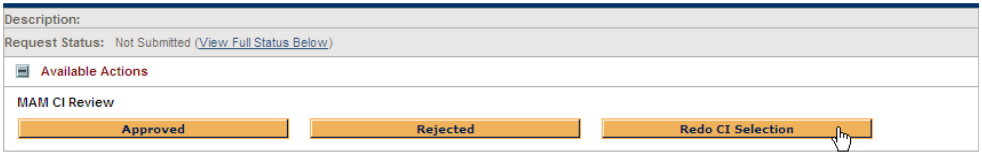
7. Go to the Request Type Fields section of the request, set desired values for **Category**, **Severity**, and **Language** fields as filters for the report to be generated, then click **Execute Now** to execute the second workflow execution step.

8. The impact analysis report is attached to **Impact Analysis Report** field, with automatically generated file name of `<YYYYMMDDHHMMSS>.pdf`.



9. You may click the PDF file link to view the report.

10. (Optional) To generate a report for more CIs, you can click the **Redo CI Selection** workflow step in the Available Actions section to run the workflow again.



Certifications

The following certifications are included in PPM Center version 9.12:

- Microsoft Windows Server 2008 R1 SP2, Standard and Enterprise Edition (both 32- and 64-bit) as PPM Center server platforms
- Microsoft Windows Server 2008 R2, Standard and Enterprise Edition (64-bit) as PPM Center server platforms
- Microsoft Hyper-V running Microsoft Windows 2008 SP2 Enterprise Edition (32-bit) and Red Hat Enterprise Linux AS 4.0 (64-bit) platforms as a virtualization server platform
- Oracle 11.2.0.2.0 (RAC and Non-RAC) support for all PPM Server platforms
- HP Service Manager version 9.21 support for PPM Center integrations with HP Service Manager (ALM and SM RFC)
- HP Quality Center version 11.00 and HP Application Lifecycle Management 11.00 support for CMQC solution:
- Support for HP Universal CMDB versions 8.06, 9.02, and 9.03 when used for impact analysis of PPM Center requests (using ALM) and for service portfolio
- Support for use of HP Deployment Management Extension for Oracle E-Business Suite with Oracle E-Business Suite version 12.1.3 (requires patch PPMC_00098 for the Extension)
- Support for Microsoft Office Project 2010
- 64-bit JDK support for 64-bit Microsoft 2008 R2 Enterprise Edition and 64-bit Red Hat Enterprise Linux AS 5.0, Updates 1 through 6
- Support for tightening the access to the following packages for public roles in Oracle:
  - HTTPURITYPE
  - UTL_INADDR
  - ALL_SOURCE

- Support for Xplore Index Server v1.1 on Documentum Content Server 6.5 SP2

If you are using FAST index server as your Documentum index server, be sure to replace it with Xplore Index Server 1.1 before the support for FAST index server ends (December 31, 2011). For details, see *Migrating Documentum Index Server from FAST to xPlore 1.1*.

For details, see the *System Requirements and Compatibility Matrix.*

Migrating Documentum Index Server from FAST to xPlore 1.1

HP provides PPM Center customers with the option of installing a bundled version of Documentum software for document management. HP's OEM supplier (EMC Corporation) for this software has informed HP that they will be replacing one of the components of this solution with newer technology, and that engineering-fix support for the current component will end on December 31, 2011. The purpose of this section is to describe what is changing, and what action HP recommends you take before 12/31/2011 to keep all of your components of the Documentum solution covered by Support.

Q: What is changing?

A: EMC Documentum xPlore will replace the existing search functionality (FAST Index Server) in the Documentum Content Server, which is a component of the EMC Documentum solution bundled with PPM Center. Engineering support for the FAST Index Server is scheduled to end on 12/31/2011.

Q: What versions of PPM Center are affected by this announcement?

A: PPM Center 8.0x or PPM Center 9.1x using the embedded version of Documentum for document management.

Q: What versions of PPM Center and Documentum do I need to be on to make this change to xPlore Index Server?

A: HP has certified xPlore v1.1 on Documentum v6.5 SP2 for PPM Center 9.12.

Q: What do I need to do to replace my existing FAST Index Server?

A: Go to the HP software patches download site (http://support.openview.hp.com/selfsolve/patches), locate and download the Documentum plug-in installation files package for your platform.

Documentum plug-in package name	Hardware platform
PPMC_00105	Windows (32-bit)
PPMC_00106	Windows (64-bit)
PPMC_00107	Linux (32-bit)
PPMC_00108	Linux (64-bit

Follow the instructions in the *Migrating Documentum Index Server from FAST to xPlore 1.1* section.

Q: What type of support is available for the current FAST Index Server, past the end of support date of 12/31/2011?

A: Both HP and EMC will take support calls for FAST Index Server beyond 12/31/2011, but there will be no engineering fixes available, support will be limited to knowledge base articles and existing fixes.

For more information about EMC Documentum xPlore, see the *Frequently Asked Questions: Documentum xPlore Replacement of FAST Instream* (https://community.emc.com/docs/DOC-8934).

Environment and System Requirements

The environment and system requirements for xPlore include the following:

- Supported xPlore index server version:
  - xPlore index server 1.1 on Documentum Content Server 6.5 SP2 or later
- Supported platforms for xPlore Index Server 1.1:
  - Microsoft Windows Server 2008 SP2 (32-bit and 64-bit)
  - Microsoft Windows Server 2008 R2 (64-bit)

- Red Hat Enterprise Linux Application Server 4.8 (IA-32)
- Red Hat Enterprise Linux Application Server 5.5 (IA-32)
- SUSE Linux Enterprise Server 10 SP3 (IA-32)
- SUSE Linux Enterprise Server 11 SP1(IA-32)

- xPlore 1.1 Index Server may also be hosted on a VMware virtual machine.

For more information, see the *EMC Documentum xPlore version 1.1 Installation Guide*. The document is available in the Documentum plug-in installation files zip package `PPMC_0010x.zip` (under the `/docs` directory) as well as on the Powerlink website (http://powerlink.EMC.com).

Migrating Documentum Index Server from FAST to xPlore 1.1

To migrate Documentum index server from FAST to xPlore 1.1, you must uninstall FAST, install xPlore, and reindex. For details, see *Chapter 7 Migrating from FAST to xPlore* of the *EMC Documentum xPlore version 1.1 Installation Guide*.

Make sure to install the latest cumulative hotfix (patch) for your version of the Documentum Content Server before you start the migration. If you do not install the hotfix (patch), xPlore will not work properly.

The current patch (for example, `CS_6.5_SP2P1100_win_ora.zip` for Windows 32-bit platforms) and its release notes are included in the HP Documentum plugin installation files packages (under the `/docs` directory).

Other EMC Documents

You may also refer to the following EMC documents:

- EMC Documentum xPlore version 1.1 Release Notes
- EMC Documentum xPlore version 1.1 Administration Guide

For more information, see the Powerlink website (http://powerlink.EMC.com).

Fixes

The following fixes are included in PPM Center version 9.12:

CM Tools

Tracking Number	Problem Description

4621511734	A `NullPointerException` that resembles the following is generated in the server log file when you shut down the PPM Server.
	`server:JBoss Shutdown Hook:com.kintana.core.server:2010/10/25-17:06:59.404 MSD: java.lang.NullPointerException`
	`at com.kintana.core.server.cluster.MulticastAgent.send(MulticastAgent.java:175)`
	`at com.kintana.core.server.cluster.MulticastAgent.send(MulticastAgent.java:182)`
	`at com.kintana.core.server.ISIntegrityServerImpl.cleanupForShutdown(ISIntegrityServerImpl.java:1005)`
	`at com.kintana.core.web.listener.ServerStartListener.contextDestroyed(ServerStartListener.java:69)`
	(QCCR1L29039)

Costing

Tracking Number	Problem Description
4627341892	You have a proposal or asset that is saved as a draft before being submitted. When you try to defect the proposal or asset, the following error message occurs: `Error 500: Unknown error` (QCCR1L40565)
4628543623	Performance issues occur when you try to delete an entity in the Financial Management module. In PPM Center version 9.12, the corresponding SQL statements are optimized to improve the performance. (QCCR1L41034)

Tracking Number	Problem Description
4625598236	If you open the Project Settings page when the Cost and Effort policy is locked, and click on **Save** or **Done**, the Financial Management settings for the project get reset to default values. (The ACTUAL_ROLLUP_CODE field in the FM_FORECAST_ACTUALS table is set to MANUAL.) (QCCR1L40549)
4615317678	A program manager receives the following error message when clicking **Add Forecast and Actuals** on an editable financial summary for a program: `The following is a stack trace of the exception: com.kintana.core.server.RuntimeBaseException` (QCCR1L39690)
4618543179	If the system has a large number of records in the Pending Cost Rollup table, the Project Planned Values Update service could cause a high memory consumption, resulting in the “Out of Memory” error. (QCCR1L39777)
4615481812	As pending rollups tables keep growing, the notifications cleanup service could cause the “Out of Memory” error on a services node. When this problem occurs, the following error is generated in the server log: `spRuntimeContext[/itg.war]:org.jboss.web.localhost.Engine:2010/06/02-23:18:01.872 BST: StandardContext[/itg]Background compile failed server:Cost Rollup Service:SystemOut:2010/06/02-23:18:01.875 BST: Exception in thread "ContainerBackgroundProcessor[StandardEngine[jboss.web]]" Exception in thread "ContainerBackgroundProcessor[StandardEngine[jboss.web]]" Exception in thread "Cost Rollup Service" server:FX Rate Update Service:com.kintana.services:2010/06/02-23:18:01.875 BST: java.lang.OutOfMemoryError at oracle.sql.CharacterSetFactoryThin.make(CharacterSetFactoryThin.java:111) at oracle.sql.CharacterSet.make(CharacterSet.java:441)` (QCCR1L39736)
4619456592	In Financial Web services, the result of the `searchCostRules` operation misses one record. This problem occurs if more than 1,000 records are expected to return. (QCCR1L39745)
4620103913	On the Add Cost Line page, if you fill a user data field with any keyword containing the ampersand (&) character, it is converted to “&”. (QCCR1L39749)
4617749271	You enable the tracking of capitalized costs for a project. However, when you try to add a position to the corresponding staffing profile, the Expense Type options are disabled (grayed out). This problem occurs if the Cost and Effort policy is locked. (QCCR1L39750)
4617988793	When you change the Display Only attribute of a Forecast Line text field user data from "Never" to "Always", the text field does not display any value even if there is data in the User Data column in the database. (QCCR1L39757)

Tracking Number	Problem Description
4619493829	You enter forecast values, and then save the change. However, the forecast values displayed in the financial summary could be inconsistent with the values you entered. This problem occurs if you click the **Save** and **Done** buttons multiple times. (QCCR1L39760)
4622039783	If a staffing profile is required during the project creation process, the forecasted labor costs from the staffing profile do not appear in the Financial Summary. This problem occurs even if you enable the “Calculated forecasted labor costs from the staffing profile” option. (QCCR1L39899)
4622238693	After you click **OK** in a cost line, values in the Financial Summary Cost user data fields could be: • Changed to zero. • Displayed in an unexpected format. (QCCR1L39903)
4616924994	If you disable a project resource, his or her actuals submitted and approved through the time sheets will not be rolled up to the corresponding project. Therefore, the system will show less actuals than expected for the project. (QCCR1L39711)
3603716263	If a project has tasks with a deep hierarchy (for example, four or more levels deep), the Cost Rollup Service does not calculate the Cost Performance Index (CPI) and Scheduled Performance Index (SPI) values correctly for the project. (QCCR1L39667)

Tracking Number	Problem Description

4610830017	The following error messages occur on your services node at the beginning of every hour:
	Error Message 1:
	`Cost Rate Rule Update Service:org.hibernate.LazyInitializationException:2010/02/17 -11:00:13.621 CST: failed to lazily initialize a collection of role: com.mercury.itg.core.cost.impl.CostRuleImpl.costRates, no session or session was closed`
	Error Message 2:
	`Cost Rate Rule Update Service:com.mercury.itg.core.cost.util.CostUtils:2010/02/17- 11:00:13.374 CST: Unable to synchronize staffing profile with budget, staffing profile id = 30227`
	(QCCR1L39811)

4622041074	The project labor cost does not calculate on the financial summary. This problem occurs when the project is created from another project. When a project spawns a new project, the synchronization setting between the financial summary and the staffing profile is not carried over to the new project. (QCCR1L39900)

Dashboard

Tracking Number	Problem Description
4626080315	When you import and export dashboard entities between different environments, one or more (OOTB) portlets in the dashboard may lose some settings. (QCCR1L40546)
4628536037	After upgrading to 9.10, the graph type portlets, such as bar charts, bubble charts, do not display dollar amounts correctly. For example, the bubble chart in version 7.5 shows numbers like $5,000,000.00, and $10,000,000.00. However, in version 9.10, the same numbers in a bubble chart are displayed as 5E7, and 1E8. (QCCR1L41195)
4606703773	You receive the following error message when clicking the Back button on a drill-down portlet: `Cannot load this portlet's data due to a misconfigured SQL Query. (KNTA-10836) Please contact your administrator with the following information: --The following error is thrown by the database: ORA-00907: missing right parenthesis` (QCCR1L24482)

Tracking Number	Problem Description
4618644890, 4614316964, 4618427650, 4617151876, 4627312248	In PPM Center 8.00 Service Pack 1, you receive the following error message when trying to open the Project Summary page for a project: `Cannot forward after response has been committed` This problem occurs when PPM Center is integrated with an external Web server and has generic single sign-on enabled. (QCCR1L41048)
4607749400	Health indicators are not correctly displayed when you export a dashboard page to PDF. This problem occurs if HTTPS is used between your browser and the Web server. (QCCR1L29336)
4617973018	You export a portlet to PDF. However, the font size in the exported PDF file gets smaller because long texts are not wrapped. This issue makes the information very hard to read. (QCCR1L39770)

4619019727	The following error occurs when you deploy PPM Center version 8.02:
	`SQLM: ORA-20011: The following error occured -2292 : ORA-02292: integrity constraint (ITGADM.DSH_AUTH_GROUP_FK2) violated - child record found at dsh_portlet_defs_801_SP1_2.sql`
	`ORA-06512: at line 148`
	(QCCR1L39753)

4604650751	After creating a Pivot Table portlet on an instance that has a language pack installed, you find that the numbers in the portlet are still displayed in the US format. (A comma (,) is used as the group separator, and a period (.) is used as the decimal separator.) If you change the display style of the portlet from Pivot Table to List, the numbers use the expected format. (QCCR1L39685)
4609079435	One or more tokens in a validation could be unparseable. This problem make the PPM Module Migrator fails to migrate custom modules. (QCCR1L39697)
4613257346	Your portlet data source has more than one columns with the Currency column type. However, when viewing the portlet, you find only one of the columns has the currency symbol. (QCCR1L39705)
4613768652	You receive the following error message when importing a portlet definition: `Dashboard object import failed: (KNTA-11145)  Message name: MIG_DASHBOARD_IMPORT_FAILED` This problem occurs if the data source of the portlet definition has more than one columns. (QCCR1L39696)
4617758606; 4613768652	You have a portlet definition that contains JavaScript to calculate the column value and the tooltip value. However, when you import the portlet definition, the calculated values for the column and tooltip are missing. (QCCR1L39698)

Tracking Number	Problem Description
4620128479; 4619450282	After PPM Center version 8.02 is deployed on a server with multiple PPM nodes, the dashboard.war file is not exploded on all the nodes in the cluster. (QCCR1L39751)
4611904940	No portlet is displayed in the Choose Portlets section of the PDF Settings page when you try to export a dashboard page to PDF. The generated PDF file is blank. This problem occurs if you select a portlet, instead of the corresponding dashboard page, on the Personalize Dashboard page before the export. (QCCR1L39887)
4603578806	The following error message appears in the server log when users open a bar/pie chart portlet: `cannot deal with property named annotation` (QCCR1L39936)
2605186572	Portlet navigation (the back and forward arrows on the top right corner of the details page) cannot navigate to the items that are not listed on the current page. For example, you create a Request List portlet that contains 10 requests, and you configure the portlet to display 5 requests per page. In this case, by using the portlet navigation, you can only access the first 5 requests. (QCCR1L39668)
4608734916	After you export portlets containing cells that have large data, the data in the exported spreadsheets will be incorrectly displayed as a string of pound signs (#####). (QCCR1L39763)
4615005593	If PPM Center is integrated with EMC Documentum (DCTM), when documents attached to a project, a request or other entities in PPM Center are saved into the DCTM repository, corresponding folders will be created for them in the repository, and the project type name, project name or request type name will become a part of the folder name. However, the slash character ("/") is not allowed in the DCTM repository folder names. So, if the project type name, project name or request type name contains slash character(s), the documents attached to them will fail to be saved into the repository. (QCCR1L39681)

Documentation

Global ID	Problem Description
4623622085	ENABLE_INTERFACE_CLEANUP parameter is deleted from the `server.conf` file, but the *Open Interface Guide and Reference* version 9.10 still refers to it on pages 34, 41, 57, 61, 82, 102, and 129. All occurrences of the ENABLE_INTERFACE_CLEANUP parameter should be removed from the guide. (QCCR1L39575)
4617369649	Reference to the KCRT_FG_PFM_PROJECT_INT table should have been removed from the page 64 and pages 139~141 of the *Open Interface Guide and Reference* version 9.10 since the Open Interface does not support creation of projects starting from PPM version 7.0. (QCCR1L39568)
4612023243	Table description for FM_EXCHANGE_RATES table needs to be updated in version 9.10 of the *Data Model Guide*. (QCCR1L39565)
N/A	Entity Relationship Diagrams in the guide need to be cleaned up. (QCCR1L39114)
4627341495	PM_PROGRAM_PROJECTS table is removed from PPM Center 9.10 schema and PGM_PROGRAM_CONTENT table is used for Program-Project relation, but the HP Program Management interface diagram in the *Data Model Guide* still shows PM_PROGRAM_PROJECTS table. (QCCR1L40543)
4624879873	Issue with maximum length of VARCHAR2 values in Data Type column of PPM Center database data tables, which should be character-length instead of byte-length. (QCCR1L39400)
4624752377	Unused PPM Center table KNTA_APP_SERVER_DETAILS documented in version 9.10 of the Data Model Guide. (QCCR1L37467)
4624586252	Need better documentation on how to customize menu options in version 9.10 of the *Customizing the Standard Interface* guide. For information about adding and changing a menu item, see *New Information for Customizing the Standard Interface* on page 372. (QCCR1L41618)
N/A	Microsoft Windows Server 2008 R2 (both 32- and 64-bit) is not yet certified as PPM Server platform for PPM Center versions 9.10 and 9.11. However, the *System Requirements and Compatibility Matrix* guide of version 9.10 indicates support for it on page 23. (QCCR1L41409)

HP Demand Management

Tracking Number	Problem Description
4624064175	For a date field with the component type Date Field (Long), the selection ranges from January 1970. However, if you manually enter a date, the system does not fire any event to validate the value entered when you tab out from the field. For example, in the date field, you can enter "21 December 0210", which is not a valid value. (QCCR1L29829)
4614999929	On the advanced search page of a request type, the order of fields in the layout differs from the order of fields in the layout created in workbench. (QCCR1L26644)
4622689292	In version 9.11, field-level security does not function at the request header type level. (QCCR1L29693)
4624748715	You use field level security to specify the users that are allowed to view or edit a certain field in a request type. However, if a user has the Edit All Requests access grant, the user will be able to view and edit that field even if the user does not belong to the group of users you specified in field level security. (QCCR1L39388)

4621511247	When you enter values in a text area table component from a request directly, the changes are successfully saved with the following notification message:
	`Changes have been made and will be applied upon save. Total number of rows after save:1 Entry`
	However, if the text area field is required and you enter values on the reconfirming page, the text in the notification message will be displayed incorrectly as the following:
	`Changes have been made and will be applied upon save. Total number of rows after save:1 ???ENTRY_TXT???`
	(QCCR1L28808)

4623436863	The Assignment Queue portlet has no preferences in PPM Center version 9.1x. (QCCR1L29598)
4622452489	The value you entered in the Assigned to field is not added to the Resources section of a request. This problem occurs when the following conditions are true: • The Assign to field is required for a certain status. • You enter value for the Assigned to field via the Reconfirm page. (QCCR1L29317)
4622570183	You add a resource to the Resources section of a request and enter the scheduled effort for the resource. When submitting this request, you receive the `NumberFormatException` error. (QCCR1L29515)

Tracking Number	Problem Description
4000957858	Inconsistent Request Type naming convention, description for Creation Action Name field is not correct on page 159 if version 9.10 of the *HP Demand Management Configuration Guide*. The description is revised to the follows: Optional. You may just leave it empty. You may also provide a value for it, which is displayed under the Create Based On Desired Action section as Most Recently Created on the Create New Request page instead of the request type name itself. (QCCR1L39092)
4619003101	The fact that UI-rule will not be triggered upon field change in an execution step in the Workflow should be documented. The following note is added to the document under the *Important Considerations for Configuring Advanced UI Rules* section: Using special commands, for example, `ksc_store`, in a workflow execution step to change field value will not trigger rules. (QCCR1L39776)
4620003610 4619765121	The *HP Demand Management Configuration Guide* needs an example for using PL/SQL function in a rule. Examples for using PL/SQL function in a rule are added as Appendix B to the document. See details in the updated *HP Demand Management Configuration Guide* of version 9.10. (QCCR1L28369, QCCR1L39740)
4605299889	If you create an advanced rule using **Apply on creation** rule event, you can add a **Dependencies** field, although the field may not work actually. Now the issue is fixed and the **Dependencies** field works properly on **Apply on creation** rule. (QCCR1L39691)
4607698640	ORA-06502: PL/SQL: numeric or value error: character string buffer too small {KCRT_AUDIT-3031} (KNTA-10498) As a result to the fix, the following text on p164 of *HP Demand Management Configuration Guide* can be removed: The total number of fields in a request type cannot exceed 359 if you enabled any one of the following attributes in any field: • Notes History • Transaction History (QCCR1L39874)

Tracking Number	Problem Description
N/A	When applying advanced rules on requests with "Printable Version" and the Print function, the previewed and printed data does not match with what is displayed on the screen. Now rules can be executed on the printable version of Request Details, but with the following limitations: • Only SQL rules and UI Rule `setFieldVisible()` will be executed. • Only **Apply on page load** rule event is supported. • The printable version should be opened from Request Details page instead of by entering the URL address directly. (QCCR1L39873)
4624457868	Two request types or request header types have almost the same field prompt except that one contains a colon (:), but the other does not (such as "Approval:" and "Approval"), or field prompts only have differences in cases (such as "Approval" and "approval"). In this case, you receive the following error message when updating the value of these fields in the corresponding requests: `ORA-01427: single-row subquery returns more than one row ORA-06512: at "KINTANA.KCRT_AUDIT", line 1321 ORA-06512: at "KINTANA.KCRT_REQUEST_DET_AUDIT_34115_1", line 81 ORA-04088: error during execution of trigger` (QCCR1L39993)
4614577718	When a field in the Request List portlet has a token with more than 28 characters, the column for that field does not show any data. (QCCR1L39710)
4616146232	PPM Center does not perform any authorization over the Web service operations to get, update and delete a request. Therefore, by using Web services, users can execute the operations that they are not allowed to perform in user interfaces. (QCCR1L39694)
4616220046	A proposal contains a table component that has a field with the Auto Complete List validation. After you create a project from the proposal, the data in the Auto Complete List field is not copied to the project. (QCCR1L39788)
4614758147	The `ksc_copy_request` special command returns the following error when trying to copy a request that is used in multiple languages: `com.kintana.core.openapi.OpenAPIException: Request with ID 0 was not found in the system.  Import was not performed.` (QCCR1L39764)

Tracking Number	Problem Description
4616011831	If a request that has a financial summary throws the following exception when being saved, some tables in the database will be locked. `QuartzScheduler_scheduler-livpswapppm1.r1-core.r1.aig.net1279415976242_ClusterManager:org.springframework.scheduling.quartz.LocalDataSourceJobStore:2010/07/24-23:18:53.067 EDT: ClusterManager: Error managing cluster: Failure obtaining db row lock: ORA-00060: deadlock detected while waiting for resource` (QCCR1L39767)

4618092273	You create a workflow by copying the DEM - Database Refresh workflow. However, you receive the following error message when reaching the SLA_CLOSE and SET_REJECTED phases.
	`REQUEST_SATISFIED_ON="<Date> <Time>", "<Date> <Time>"`
	`ERROR while setting Token.`
	`The token attempting to be stored is invalid. Please verify that the token name is correct. (KNTA - 10234)`
	(QCCR1L39738)

4615712813	For a Decision step with “Decisions Required” field marked as “All,” you will receive a “No Recipients” error in the transaction details of the request. This problem happens if the step is in a sub-workflow. (QCCR1L39739)
4619492465	After you cancel a project by click the **Cancel Request** button at the bottom of the project, the corresponding work plan is still active. And you cannot cancel this active work plan. (QCCR1L39742)
4613270587	After clicking the selector icon for the Request Type field on Search Requests page, the popup window displays all available request types, which need to be restricted to authorized users only. (QCCR1L26752)

4619123939	The following error occurs when you try to exporting requests by using the `ksc_export_request` special command in a workflow step:
	`com.mercury.itg.ws.dm.integration. ksc_export_request`
	`java.lang.ClassNotFoundException:`
	`com.mercury.itg.ws.dm.integration.DMOutboundWSImpl`
	`at`
	`org.apache.catalina.loader.WebappClassLoader.loadClass(WebappClassLoader.java:1355)`
	`at`
	`org.apache.catalina.loader.WebappClassLoader.loadClass(WebappClassLoader.java:1201)`
	`at java.lang.ClassLoader.loadClassInternal(ClassLoader.java:320)`
	`at java.lang.Class.forName0(Native Method)`
	`at java.lang.Class.forName(Class.java:169)`
	(QCCR1L39743)

4614265052	On a request page, field names in different sections, which have the same number of columns, are not vertically aligned. This issue also occurs in the corresponding field values. (QCCR1L39701)

Tracking Number	Problem Description
4605299889	You create a UI rule that is supposed to be triggered when two Date/Time fields are not equal. However this UI rule is also triggered if the two Date/Time fields are empty. (QCCR1L39691)
4618252264	You create a rule that is supposed to be triggered when the Date/Time value in one field is before the Date/Time value in another field. However, the system does not take the Time part into account when comparing the two fields. As a result, if the two fields have the same Date value, the rule is never triggered. (QCCR1L39766)
4608078383	Setting the default Workflow for a request types in the PPM Workbench does not take effect in PPM Center 8.00. After you save the changes, the original default workflow still exists. (QCCR1L39699)
4612731559	You set the Note field as a required field on several transitions. After you enter a value to the Note field, if you go back through that transition, the field is still populated with what you previously entered. In this case, you can continue the transitions without entering any value to the Note field. (QCCR1L39693)
4619456196	You edit the preferences of a Request List portlet by using the Query Builder. However, you receive the following warning message when you try to add a new entry by clicking the auto complete list button on the Query Builder Search Terms - New Entry window: `You must provide a value for the field "" to complete the validation.` (QCCR1L29628)
4610102616	Zero truncation and extra note problems occur in the following scenario: You have a Text Field validation whose data mask is set to Numeric with two decimal places. You create a field by using this validation, and enable Notes History for the field. On a request that contains this field, you change the value of the field to a number with two decimal places, and the last decimal place is zero (For example, you change it to 123.40). After clicking **Save**, you notice that the last zero is truncated (For example, 123.4). In Notes History, an entry that resembles the following appears (The last zero still exists): <*Date*>, <*Year*> <*Time*> <*Time Zone*> <*Field Name*> changed from 123.33 to 123.40 When you open the request, and save it again without any change, the following entry appears in the Notes History (The last zero is truncated): <*Date*>, <*Year*> <*Time*> <*Time Zone*> <*Field Name*> changed from 123.40 to 123.4. (QCCR1L39762)

Tracking Number	Problem Description
1604111433; 4616489577	You receive the `java.lang.NumberFormatException.forInputString` error message when trying to delete a saved search that has a single quotation mark (‘) or an ampersand (&) in the name. (QCCR1L39885)
4600168340	In PPM Center 7.5 SP6 or earlier versions, you are not allowed to enter more than 200 characters in the Allowed Request Types field on the **Properties** tab of a workflow step. After you install PPM Center version 9.12, you will be able to enter up to 4,000 characters in the field. (QCCR1L39882)
4607698640	Saving a request type in which auditing is enabled for a large number of fields causes the following error message: `ORA-06502: PL/SQL: numeric or value error: character string buffer too small {KCRT_AUDIT-2061} (KNTA-10498).` (QCCR1L39874)
4611127066	After a new project manager is added to a project, the related tokens for existing project issues or risks are not updated. As a result, the new project manager does not have access to the project issues or risks that are created before he or she is added to the project. (QCCR1L39889)
4601699501	After you upgrade PPM Center to version 7.5 SP4, you may receive an error message when searching for requests. This problem occurs when the search result tries to display the fields that have field-level security configured. (QCCR1L39879)
4618903458	When you receive an email by using the Mobility Access feature, the width of the action buttons stretches across the window, and only the part having texts is clickable. This problem occurs in one of the following conditions. • The email client is Outlook 2007. • The email client is Outlook 2003, and the Internet Explorer version is 7 or higher. (QCCR1L39931)
4607078110	No validation of user access grants is performed when users access the DrillDownPortlet JSP directly. After you install PPM Center version 9.12, PPM Center will validate the access grants when a user tries to access the drill down portlet JSP, and if the user does not have the proper access grant, a message is returned, stating that the requested portlet does not exist. (QCCR1L27579)
4605139123	When trying to add an entry to a table component, if you click **Done** multiple times after clicking **Add**, you will receive a `java.lang.NullPointerException` error. In this case, duplicated rows are added to the table. (QCCR1L39875)

Tracking Number	Problem Description
4602190050	Special characters in the target requests are not displayed correctly if you use the following Web services special command to export requests: `ksc_export_request "" RequestTypeName false http://InstanceIP:Port/itgtrue true true aev-core.xsl` This problem still exists after you change the character set in the XML declaration of the XSL stylesheet. (QCCR1L39870)

4615855098	When you try to assign the value of a customized date field from the child request to the parent request by using Web Services, an error that resembles the following occurs in the execution log of the child request:
	`Setting the value of REQ.PLANNED_FINISH_DATE`
	`org.apache.axis2.AxisFault: An error occured when updating request fields at org.apache.axis2.description.OutInAxisOperationClient.send(OutInAxisOperation.java:271) at org.apache.axis2.description.OutInAxisOperationClient.execute(OutInAxisOperation.java:202)`
	`at com.mercury.itg.ws.dm.client.DemandServiceStub.setRequestFields(DemandServiceStub.java:899)`
	`at quicksilver.ws.dm.SetRequestSimpleField.setRequestFields(SetRequestSimpleField.java:118)`
	`at quicksilver.ws.dm.SetRequestSimpleField.main(SetRequestSimpleField.java:89)`
	The parent request may display the wrong value. (QCCR1L39930

4600388484	The following error message occurs when the total length of a note is greater than or equals to 4,000 characters:
	`ORA-06502: PL/SQL: numeric or value error: character string buffer too small`
	`ORA-06512: at "KINTANA.KNTA_NOTE_UTIL", line 124`
	(QCCR1L39692)

N/A	Extend the size of RULE_SQL from 2000 to 4000 characters. (QCCR1L39792)
N/A	An upgrade script in PPM Center 9.10 sets the DEFAULT_CONST_VALUE column width of table KNTA_PARAM_SET_FIELDS_NLS from 4000 to 200. Consequently, an error occurs when saving default request type with the DEFAULT_CONST_VALUE value greater than 200 characters. (QCCR1L39162)

Deployment Management

Tracking Number	Problem Description
4619161578	You receive the following error message when trying to migrate a request type: `An HP internal error has occurred. Please contact HP Project and Portfolio Management support if the problem persists. (KNTA-10023)` However, this error message does not explain the reason why the migration fails. In PPM Center version 9.12, the system will return a more instructive error message. (QCCR1L28051)
1605000160	The `KDLV_DELETED_PACKAGES` table shows incorrect details for the user who deleted a package. In this table, the `DELETED_BY` entry records the value of the `LAST_UPDATED_BY` entry, which causes the audit trail information to incorrectly show the last person that modified the package as the person who deleted the package. (QCCR1L39669)
4609685757; 4615095375	After a workflow, which is created under a non-English language, is migrated to a new environment, the message body of a step notification does not display the correct content. (QCCR1L39678)
4618312726	Database connections cannot be automatically released, which causes packages to be locked with the following error message: Package <*Package ID*> is being updated by another database session. (KNTA-10026). When this problem occurs, you have to restart PPM Center. (QCCR1L39755)
4612733954; 4612552709; 3605705030	You migrate a workflow which includes one sub workflow to another instance, and set the “Replace existing sub workflow” option to Yes in object type PPM Workflow Migrator. In this case, the migration log shows that the migration completes successfully. However, the sub workflow is not replaced. (QCCR1L39883)

Deployment Management Extension for Oracle E-Business Suite

Tracking Number	Problem Description
4627796820	With PPM Center version 9.10 and Java version 1.6_18 or later, after installing the HP Deployment Management Extension for Oracle E-Business Suite version 9.10, the PPM Workbench could not be opened and a message including “The extension panel failed to load...(KNTA-10392)” was displayed. The issue was fixed in the manifest file in the Oracle E-Business Suite client jar file. To obtain the fix, download and install patch PPMC_00098. (QCCR1L25326)

Integrations

Tracking Number	Problem Description
4622741045	You manually install the PPM Plug-in for Microsoft Project for PPM Center version 9.11. However, upon connection to PPM Center from the plug-in, you receive a message that states a new version (6.0.0002) is available and should be installed. The message doesn't disappear after re-installing the plug-in from PPM Center. (QCCR1L29391)
4629230483	Sending a PPM Center project to Microsoft Project (in PPM Controlled Mode) fails when the following conditions are true: • There are both external predecessors and non external predecessors in the PPM Project Task. • The first predecessor of the task is an external predecessor. (QCCR1L41460)

4626503849	You send a work plan from Microsoft Project to a PPM Center version 9.1x project that does not have a work plan and chooses not to include the actual. In this case, you will receive the following error message when you want to view the task details (double-click a task on the PPM Work Plan view) in PPM Center:
	`An Error has Occurred`
	`An unknown exception has occurred. Please reload the page you were editing and try again.`
	`The following is a stack trace of the exception:`
	`com.kintana.core.server.RuntimeBaseException:`
	`An HP internal error has occurred. Please contact HP Project and Portfolio Management support if the problem persists. (KNTA-10023)`
	(QCCR1L40589)

Tracking Number	Problem Description
4622859069	In Microsoft Project, after you import a work plan from PPM Center, all predecessor and successor relations are missing. This problem can occur when the system is set to use a language that doesn't use commas as standard list separators, such as Russian, and French. (QCCR1L29394)
N/A	When saving a change in Service Manager, the system will perform validation. If it fails, the change in the form will not be saved. However, Service Manager still sends update request to PPM even when the validation fails, and the PPM-SM RFC integration log will override the notification message "`Please provide Closure Comments`" and display "`Update RFC finished`" instead. To address the issue, the javascript to be added in *step 8* (page 258) of the *Configuring the Integration of PPM Center Tasks and Service Manager RFCs* section of the *HP Solution Integrations Guide* is modified from: `system.library.HPPPMSMIntegration.integratePPM();` to the follows: **`if(vars.$L_exit!="bad.val")`** `system.library.HPPPMSMIntegration.integratePPM();` (QCCR1L41320)
4616498330	The `java.lang.NumberFormatException` error occurs when you try to upload work plans from Microsoft Project to PPM Center. This problem occurs when the following conditions are true: • Your system uses a language that uses comma (,) instead of a period (.) as a decimal separator, such as French. • The `hoursPerDay` field in Microsoft Project is a decimal value. When this problem occurs, a comma (,), instead of a period (.), is used as a decimal separator. (QCCR1L28378)
4620514041	After you import a work plan from Microsoft Project into a PPM project work plan, all activities are presented in the PPM work plan. However, after you set the status of the work plan root level task to “Active,” all activities that were previously displayed on the work plan are cleared. Additionally, if you modify the activity of the root level task, all the sub tasks’ activities are changed to the same as the root level task’s activity. (QCCR1L39756)
4614609342	You integrate PPM Center with Microsoft Project 2007. However, the Microsoft Project Plug-in for PPM may fail to load when you launch Microsoft Project 2007, which eventually causes an "Out Of Memory" error. (QCCR1L39960)

Tracking Number	Problem Description
4604114864	You create a proposal that has an attachment stored in the EMC Documentum repository. However, after you promote the proposal to a project, some users could not save the project or continue the workflow. (QCCR1L39686)
4613801498	You integrate PPM Center with EMC Documentum. Sporadically, you may receive the `HTTP 500` error when creating or working through a request. (QCCR1L29331)
4616560386	You integrate PPM Center 8.00 with EMC Documentum. You receive an error message that resembles the following when checking out a document for the second time. `[DM_SYSOBJECT_E_CANT_SAVE_IMMU TABLE]error: "Cannot save <document name>since it is immutable."; ERRORCODE: 100; NEXT: null.` (QCCR1L39895)
4609665268	If the base currency is set to a non-US dollar currency, such as Swedish Krona (SEK), you may receive a `NumberFormatException` error when viewing the Project List portlet. (QCCR1L39688)
4619450405	You group the dashboard pages by setting the `GROUP.PRIVATE.PUBLIC.PAGES` server parameter to `TRUE`. In this case, if you create a module that contains multiple pages, the module does not appear in the dashboard menu. (QCCR1L39737)
4615363665	When you click **Select Configuration Items** from the out-of-the-box Universal CMDB field group, the CI selector applet is launched in a very small window. In PPM Center version 9.12, the window size is increased. (QCCR1L39891)
4609759519	Assigned efforts are not distributed evenly in the Resource Usage view in PPM Center when the work plan is imported from Microsoft Project and the working hours configuration does not use the default settings. (QCCR1L39876)
4606232348	If you send an MSP project to PPM Center, the MSP actuals information is imported to PPM Center. This behavior causes different actuals between the time management report and the Actuals view. PPM Center version 9.12 provides options for you to include or exclude actuals information in an MSP project when sending the project to PPM Center. (QCCR1L39896)
4615238656	If you set the "Transfer actual information" setting to Actual Efforts, PPM Center transfers estimated remaining effort (ERE) to Microsoft Project even when the ERE tracking is turned off in PPM Center. PPM Center version 9.12 transfers ERE to Microsoft Project only when the ERE tracking is turned on. (QCCR1L39901)

Platform

Tracking Number	Problem Description
4624903164	On an AIX server, one slow thread that takes a long time to close the connection may block all the other threads from opening new connections. This problem causes Intermittent failures, such as logon failures, on clustered nodes. (QCCR1L41031)

N/A	PPM installer fails with the following error message when deploying the `KTMG_CONFIGURABLE_FILTERS.zip` package:
	`Install failed with message below, please exit the installation now.`
	`Completing the database creation...`
	(QCCR1L29033)

4624752377	The unused table `KNTA_APP_SERVER_DETAILS` exists in PPM Center, which may cause confusion. Starting with PPM Center version 9.12, this table will be removed. (QCCR1L37467)
4617394723	Server properties collection is not thread safe. You can observe this problem by creating multiple projects simultaneously from different proposals. When you do this, various error messages will occur. (QCCR1L40154)
4617557434	You can use the at character (@) in the search box to search for the following entities: • Projects • Programs • Staffing profiles • Tasks However, to search for a request, you have to use the pound charact99er (#). Starting with PPM Center version 9.12, you can use the at character (@) to define a search for a request. (QCCR1L27407)
4617762640	You logon to PPM Center with the Portuguese language. However, when you switch between the Project Summary tab and the Project Details tab on the Project Overview page, some boilerplate texts may change to English. (QCCR1L29485)
4624752377	The PPM table KNTA_APP_SERVER_DETAILS is included in the Data Model Guide but there are no data in it. The table is dropped from PPM Center schema since it is not used, and also removed from the updated Data Model Guide. (QCCR1L37467)

Tracking Number	Problem Description

4626744911	An exception correlation occurs when you open projects in PPM Center. When this problem occurs, the following message is generated in the server log file:
	`Exception Correlation: GUID=41D899F3-615F-2207-C024-B6FDA6398AFB`
	`at`
	`com.kintana.core.web.filter.ControlFilter.applyFilter(ControlFilter.java:911`
	`)`
	`at`
	`com.kintana.core.web.filter.ControlFilter.doFilter(ControlFilter.java:1334)`
	`at com.mercury.itg.servlet.I18NFilter.doFilter(I18NFilter.java:40)`
	`at com.kintana.core.web.filter.Log4jFilter.applyFilter(Log4jFilter.java:49)`
	`at com.kintana.core.web.filter.BaseFilter.doFilter(BaseFilter.java:59)`
	`Caused by: org.apache.jasper.JasperException: /web/knta/dsh/portlet/`
	`PortletHeader.jsp(61,50) Attribute value localeCtrl.getCSSFileName("/itg/web/`
	`knta/dsh/css/PortletSpacing.css",request) is quoted with " which must be`
	`escaped when used within the value`
	`at`
	`com.mercury.itg.common.web.PortletTilesRequestProcessor.process(PortletTiles`
	`RequestProcessor.java:53)`
	`at`
	`com.mercury.itg.servlet.ActionMonitorFilter.doFilter(ActionMonitorFilter.jav`
	`a:86)`
	`at`
	`com.mercury.itg.servlet.HibernateSessionFilter.doFilter(HibernateSessionFilt`
	`er.java:79)`
	(QCCR1L40115)

4609464207	You set the `JSP_RECOMPILE_ENABLED` to `TRUE` in the server.conf file. However, when the server is running, changes to JSP files are not picked up as expected. You still have to restart the server to make the JSP changes visible. (QCCR1L39709)
4609547007; 4615258145	When the server log rotation size specified by the `ROTATE_LOG_SIZE` parameter is reached, the existing serverLog.txt file is not renamed for archiving, and no new log file is created. Instead, the system clears the original serverLog.txt file. This problem occurs when you start PPM as a service. (QCCR1L39741)
4608655631	A deadlock issue happens when you update tasks while the Cost Rollup service is running. (QCCR1L39752)
4611621428	In a field of the Text Validation 4000, the number of characters that you can enter is less than 4000 if multi-byte characters are used. (QCCR1L39890)

4622527565	You receive the following error message when submitting a copied scheduled report that has notifications:
	`This page had the following error:`
	` An HP internal error has occurred. Please contact HP Project and Portfolio`
	`Management support if the problem persists. (KNTA-10023)`
	`An HP internal error has occurred. Please contact HP Project and Portfolio`
	`Management support if the problem persists. (KNTA-10023)`
	`nested detail:DB Package error:`
	`ORA-01407: cannot update ("MITG"."KNTA_NOTIFICATIONS"."ENABLE_EMAIL_`
	`APPROVALS") to NULL {KNTA_NOTIFICATIONS_TH-400} (KNTA-10498)`
	(QCCR1L39942)

Tracking Number	Problem Description
N/A	A thread synchronization error in the Tomcat class loader may lead to a race condition. This can cause PPM Center version 7.5 SP4 running on AIX 5.3 to crash with the following error: `java.lang.IllegalArgumentException: Package org.apache.axis2.client already defined.  at java.lang.ClassLoader.definePackage` (QCCR1L29321)
4619268125	You experience a delay in the PPM Workbench synchronization between multiple instances. The workbench changes made on one instance are not presented in a timely manner when you view the workbench settings from the second instance. (QCCR1L29146)
4614806479	PPM Center may process scheduled tasks that are not actually due. Therefore, you may notice that reports scheduled to run in future have already been executed. (QCCR1L39758)
N/A	Message IDs in the `JMS_MESSAGES` table always start from zero when the active quartz scheduler switches node in a cluster. This may lead to constraint violations on the unique constraint in the `JMS_MESSAGES` table. (QCCR1L39937)
N/A	Under certain conditions, a non-services-enabled PPM cluster node may insert messages into the `JMS_MESSAGES` table. In this case, subsequent startup of a services-enabled node may then lead to a constraint violation on the `JMS_MESSAGES` table. This problem usually occurs if the quartz scheduler switches to being active on the latter node. (QCCR1L26787)
4610046564	A `java.lang.NullPointerException` error occurs when you try to logon to PPM Center. (QCCR1L39872)
4613946799	The KCRT_PARTICIPANT_CHECK_V view has performance issues. This may affect portlets, reports and some core functionality. (QCCR1L39893)
3605882193	A SQL query consumes 100% of the database CPU usage. This problem usually occurs when PPM Center contains projects with many tasks. (QCCR1L39673)
N/A	On HP-UX cluster, background services getting "`SpyJMSException: Cannot get a client ID`" and "`Unable to create new native thread`" error messages. The following patch packages are required: • PHCO_41946 for HP-UX 11.23 (IA-64) • PHCO_41407 for HP-UX 11.23 (IA-64) (QCCR1L41066)

Portfolio Management

Tracking Number	Problem Description
4628508506	When creating or viewing a portfolio, the forecast actual graph generates a null pointer exception. (QCCR1L41033)
4623199992, 4625240258	When the `LOGON_METHOD` is set to `LOGON_ID`, and the user's `LOGON IDENTIFIER` is different from his or her `USERNAME`, the `ksc_create_project` special command and the underlying com.kintana.core.server.execution.CreateProject Web service operation fail without printing any error message. (QCCR1L39525)
4620967635	In PPM Center version 8.02, creating a project by using the `ksc_create` command in an execution step can fail. However, when the creation fails, no error message is generated in the server log file. Only a "failed" message can be found in the execution log on the request. (QCCR1L39917)
4614939197	You use a custom field as a filter in the advanced search when trying to add new content to a scenario comparison. However, the search result is not affected by the match of this custom filed and all requests that meet the rest of criteria are returned. (QCCR1L39675)
N/A	For consistency with the Analyze Current Portfolio page, the Current Portfolio Map portlet has been renamed the Analyze Current Portfolio portlet. Portlets previously created as Current Portfolio Map portlets do not get renamed. (QCCR1L41659)

Program Management

Tracking Number	Problem Description
N/A	If you receive the "`Program name already exists`" message when creating a program, the values entered in user data fields are removed. Because of this issue, you have to enter the values again after you rename the program. (QCCR1L29255)

Project Management

Tracking Number	Problem Description
4616082690	When you use Project Management Web service operation to update a field, such as a date field, an error that resembles the following is generated in the server side: `org.apache.axis2.AxisFault: An error occurred while updating project <Project Name>.` (QCCR1L39644)
4627921745	The work plan policy on the Project Settings page cannot be updated after a work plan is created on the project. (QCCR1L40938)
4625649283, 4627814399	On the Search Projects page, if you type the number of the project in the "View Details for Project No:" field, and then press ENTER, the search result will display all projects instead of displaying the project you search for only. If you click **Go**, the search result will display the correct project. (QCCR1L40905)
4628545376	Performance issues occur in the work plan task query. PPM Center version 9.12 improves the performance of the query. (QCCR1L41228)

4622855391	After you export a project to PDF, the Project Associations portlet fails with the following error:
	`An Error has Occurred`
	`An unknown exception has occurred. Please reload the page you were editing and try again.`
	`The following is a stack trace of the exception:`
	`com.kintana.core.server.AppException:`
	`An HP internal error has occurred.`
	(QCCR1L39274)

4628736126	In PPM Center 9.1x, when you try to select a project manager to add to a project by clicking the **Add Project Manager** button, the search box displays all users, including non-licensed ones. However, you expect that only licensed users are displayed. (QCCR1L41205)

Tracking Number	Problem Description
4627037721	Performance issues occur when you perform a project search. To resolve this problem, PPM Center version 9.12 introduces the following two server.conf parameters to restrict the number of projects being returned on a project search: • ENABLE_RESTRICTIONS_ON_PROJ_SEARCH • MAX_RESULTS_ALLOWED_ON_PROJ_SEARCH The ENABLE_RESTRICTIONS_ON_PROJ_SEARCH parameter specifies whether to enable the restriction on a project search. The default value is `false`, meaning that by default there is no restriction on the number of projects being returned on a project search. To enable the restriction, set the value of this parameter to `true`. The `MAX_RESULTS_ALLOWED_ON_PROJ_SEARCH` parameter specifies the maximum number of projects being returned on a project search. The default value is 1,000, meaning that if the parameter is not specified and the `ENABLE_RESTRICTIONS_ON_PROJ_SEARCH` parameter is set to `true`, at most 1,000 projects can be returned on a project search. (QCCR1L40699)

4626005106	The `TSK.MASTER_PROJECT_ID` and `PRJD.PROJECT_DETAIL_ID` tokens have been removed since version 9.11.
	This behavior change could cause an error message that resembles the following when you click an auto-complete list of a Task User data field on the work plan page:
	`Exception Correlation: GUID=FAF6FDF0-F999-5B78-EE33-38CA36C11A0A`
	`Generated Time=2011/02/15-11:10:32.656 MEZ`
	`Server Node Name: HPPPM8`
	
	`message= ORA-00904: "MASTER_PROJECT_ID": invalid identifier {KNTA_TOKEN_PRIVATE-450}`
	`SELECT MASTER_PROJECT_ID FROM WP_TASKS WHERE TASK_ID = :TASK_ID`
	`select 1, 1 from dual`
	`where 1 = 1`
	`and 1 = 32002`
	`and 1 = [TSK.MASTER_PROJECT_ID]`
	`and 1 = [TSK.TASK_NAME]`
	`and 1 = [PRJ.PROJECT_ID]`
	`and 1 = [PRJD.PROJECT_DETAIL_ID]`
	`and 1 = [SELECTED_TASK_ID]`
	After you install PPM Center version 9.12, these two tokens will be removed from the `knta_entity_tokens` table. And thus, the token builder does not show these tokens any more. (QCCR1L41092)

4601231666	When accessing a task in the project summary page using the link, you receive an error that reports an invalid token. This problem does not occur when you access the task by clicking the **Edit** button. (QCCR1L29274)

Tracking Number	Problem Description

4619713418; 4618494183	The Task Actuals Rollup service fails if there is a task that has more than 1,000 children tasks. When this problem occurs, an error that resembles the following is generated:
	`ppmLightServiceListenerContainer-1:com.kintana.services:2010/09/16-21:30:16.644 GMT: Failed to rollup task actuals for some workplan, rolling back transaction`
	`com.mercury.itg.exceptions.InfrastructureException: org.hibernate.exception.SQLGrammarException: could not execute query`
	`Exception Correlation: GUID=08517E80-6692-5DC2-F2EF-029098A09AF7`
	(QCCR1L39638)

4620661916	When a user removes a time sheet line that has a total effort of zero from a completed task, the Percent complete is set to 0 and the task is re-opened. (The status of the task is changed back to “In Progress.” (QCCR1L39636)
4610263557	Under some circumstances, it is possible to click the **BACK** button in the browser and resubmit the project information, which results in an unreadable error message. In PPM Center version 9.12, this error message has been improved to be understandable by the user. (QCCR1L39643)
4611016471	The Project List portlet shows closed projects even if you clear the **Include Finished Projects** check box when editing the portlet preferences to exclude the closed projects. (QCCR1L39646)
4618967435	When you install PPM Center 8.00 Service Pack 2, the script “upgrades/Production/postupgrade/pm_project_types_800_1.sql” takes a long time to run. (QCCR1L39641)
4613660927	You receive a java error that resembles the following when trying to copy a project type from an existing project type that has been upgraded: `server:http-sms-r73-prod-test2.accenture.com%2F10.3.132.180-80-Processor18:SystemErr:2010/04/26-06:54:12.494 EDT: org.apache.commons.beanutils.ConversionException: Cannot assign value of type 'java.lang.String' to property 'activitySyncEnabled' of type 'java.lang.Boolean'` This problem does not occur if you create a new project type and then copy it. (QCCR1L29257)
4618796807	For proposal, project, and asset requests, you cannot enter more than 200 characters in the Project Manager field. (QCCR1L29258)
2606803977	A seeded query may cause performance issues. Further research on the Automatic Workload Repository (AWR) report indicates that part of the query checks whether all users have the permission to view a project unnecessarily for every task that belongs to the project. (QCCR1L39649)

Tracking Number	Problem Description
4617768670	You cannot export large work plans (for example, work plans that have more than 5,000 entries) to PDF or Excel. After the export screen appears, it continues to refresh and never completes the export. When this problem occurs, an error that resembles the following is generated in the server log: `Thread-42020:com.mercury.itg.pm.workplan.pdf.LoadingThread:2010/07/30-13:23:15.698 GMT-07:00: Loading Excel Exception org.hibernate.exception.SQLGrammarException: could not execute query.` (QCCR1L29263)
4605373109	You fail to delete a project that has no references attached with the following error message: `The reference you are trying to add (Project Project ID) is already deleted and cannot be added as a reference. The entity might be deleted right before you try to save it. Please remove this reference and try again. (KNTA-11017)` This problem occurs when an entity that has a project reference pointed to the project is corrupted. (QCCR1L29267)

1600819251	Standard tokens cannot be resolved for the **Project Details** tab in the following scenario:
	• You create a user with the Project Management and Demand Management licenses and give the user the following access grants:
	  • Demand Mgmt: Edit Requests
	  • Demand Mgmt: View Requests
	  • Project Mgmt: Edit Projects
	  • Project Mgmt: View Projects
	• On the Request Type of a project, you set user access security to a standard token [PRJ.PROJECT_STAKEHOLDER_USERNAME] or [PRJ.PROJECT_MANAGER_USERNAME].
	• You set that user as a stakeholder or the project manager for the project.
	• Customers logon to PPM Center as that user and open the project.
	In this scenario, the token is not resolve for the **Project Details** tab. As a result, this user cannot access the tab. (QCCR1L29269)

Tracking Number	Problem Description

4604050883	If you click **Save Draft** on the Submit Request page of a project request and the project name is duplicated with an existing project, you receive the following error:
	An Error has Occurred
	`An unknown exception has occurred. Please reload the page you were editing and try again.`
	`The following is a stack trace of the exception:`
	`com.mercury.itg.pm.pmo.NameAlreadyExistsException:Project Name Project 1 already exists`
	`com.mercury.itg.pm.dao.ProjectDAO.create(ProjectDAO.java:361)`
	`com.mercury.itg.pm.project.web.CreateProjectHelper.createProject(CreateProjectHelper.java:29)`
	If you search for the request that has been created, and then click the link in the search result, you receive the following error:
	`An Error has Occurred`
	`Cannot load the Project with the specified id: 32003. Project may be deleted by another user.`
	(QCCR1L29270)

4606288867	In a work plan, if you enter the scheduled effort greater than 999 for a task, the value of the **Estimated Remaining Efforts** field will be truncated starting from the comma. For example, if the scheduled effort is 8,000.00, the estimated remaining effort becomes 8.00. (QCCR1L29273)
4609213901	If you click the **Create blank work plan** link multiple times in quick succession, more than one work plans will be created for a project. (QCCR1L29272)
4615367809	Performance issues occur in the Project Management module when you use work plans. (QCCR1L29271)

Resource Management

Tracking Number	Problem Description
4627213561	The system tries to insert a value larger than the database maximum field size (255 characters) to a field on the PPM_NOTIFICATIN_DETAILS table. When this problem occurs, the following message is generated in the sever log file: org.hibernate.exception.GenericJDBCException: Could not execute JDBC batch update JSESSIONID=E079FC449BE14CB72AA43BB45EE90467.ppm1,USERNAME=awarcola server:http-0.0.0.0-80-Processor19:SystemErr:2011/03/12-07:58:30.804 GMT-07:00: at com.mercury.itg.rm.staffing.dao.StaffingProfileDAO.getResourcePoolManagers(StaffingProfileDAO.java:932) JSESSIONID=E079FC449BE14CB72AA43BB45EE90467.ppm1,USERNAME=awarcola server:http-0.0.0.0-80-Processor19:SystemErr:2011/03/12-07:58:30.804 GMT-07:00: ... 22 more JSESSIONID=E079FC449BE14CB72AA43BB45EE90467.ppm1,USERNAME=awarcola server:http-0.0.0.0-80-Processor19:SystemErr:2011/03/12-07:58:30.804 GMT-07:00: Caused by: java.sql.BatchUpdateException: ORA-12899: value too large for column "PPMPROD_DB_SCHEMA"."PPM_NOTIFICATION_DETAILS"."DETAILS6" (actual: 302, maximum: 255) After you install PPM Center version 9.12, the maximum field size is extended to 2,000 characters. (QCCR1L40288)
4619752455	When setting the end date for a resource, the database sets the timestamp at the beginning of the day (00:00) instead of the end of that day (23:59). This behavior causes a resource to be invalid at the last day. (QCCR1L28131)
4622515322	In the Assignment Load Details section of an exported Analyze Assignment Load spreadsheet, the Description column always displays the string “Project Summary”, instead of the project names. (QCCR1L29324)
4616323158	When you search for a resource in a staffing profile, the search result shows all the available resource pools in the Resource Pool Name column. However, you expect that only the user's current resource pools and the corresponding parent pools should be returned. (QCCR1L26696)
N/A	The following exception occurs when you use the Comparing to Workplan operation in a staffing profile: An oracle exception is thrown: ORA-01795: maximum number of expressions in a list is 1000 (QCCR1L24493)

Tracking Number	Problem Description
4622504964	The Organization Model portlet does not display correct information in the Manager field. This field displays the manager's username (logon ID) instead of the full name. (QCCR1L29226)
4629234050	You select the option to reject outstanding resource requests when a resource pool is disabled. However, when disabling a resource pool, the outstanding request resources are not removed from the resource pool overall page. Additionally, their status is not updated to “Rejected” in the staffing profiles overall page. (QCCR1L41258)
4626436569	Staffing profiles display unmet demand data even though all the resource requests are fulfilled. (QCCR1L40902)
4620291219	You create a project that has Financial Management for Staffing Profile enabled in the project settings. And then, you create a staffing profile for the project and add many positions and resources. In this case, you may encounter performance issues when you try to do the following: • Adding a position to the staffing profile. • Assigning a resource to a position. (QCCR1L39821)
4611288078	Setting the `RM_OVERRIDE_ASSIGNMENT_CONTROLS` parameter does not affect what resources can be mapped between HP Project Management and Microsoft Project. (QCCR1L39301)
4602335556	In the Assignment Load Details section of an exported Analyze Assignment Load spreadsheet, the Description column does not display the project names. Instead, the column displays the string “Project Summary”, which is the same value with the Type column. (QCCR1L39682)
4619713418; 4618494183	In the <PPM_HOME> directory, huge binary files with the name java_pid*.hprof are created when "Out Of Memory” errors occur. These files consume a lot of disk space, which affects the system performance. (QCCR1L39906)
4620109634	You have an instance that uses a language pack, such as the French language pack. When you try to add a resource to a project, you may receive an error message stating that the cost is invalid. (QCCR1L39746)
4621652875	If you assign a resource to a certain position by using the **Manage Allocation** button on the resource pool page, the system will not send out the notification for this resource assignment. (QCCR1L39761)

Tracking Number	Problem Description

4612790558	When you try to set the end period to an earlier date for a staffing profile that is associated with a lifecycle entity (such as a proposal, a project, or an asset), you receive the following error message:
	
	`An unknown exception has occurred. Please reload the page you were editing and try again`
	`The following is a stack trace of the exception`
	`com.kintana.core.server.RuntimeBaseException`
	`A HP internal error has occurred. Please contact HP PPM support if the problem persists (KNTA-10023)`
	
	This problem also occurs if you change the staffing end period to a later date and then try to change it back to the original one.
	This problem occurs when both of the following conditions are true:
	• If the lifecycle entity is a project, the “Calculate the forecasted labor costs from the staffing profile” option must be selected.
	• You have created positions and made assignments for the staffing profile.
	(QCCR1L39683)

4613485146	Users that have the “View all Resource Pools” and “Edit Resource Pools” access grants can disable resource pools for which they are not the pool manager. In PPM Center version 9.12, only the resource pool manager will be able to disable a resource pool unless the user has the “Edit All Resource Pools” access grant. (QCCR1L39700)
4609215161	You track time against a certain request type by using Time Management. Users enter some actuals against a request of that type. However, the Analyze Assignment Load portlet does not show the actuals. (QCCR1L39935)

4617238862	You receive the following error message when clicking **Manage Allocation** on the Resource Pool page:
	`An unknown exception has occurred. Please reload the page you were editing and try again.`
	`java.lang.ArrayIndexOutOfBoundsException:2`
	`com.mercury.itg.rsc.staffing.web.PageMarks.updatePageMarks(ManageAllocationActionHelper.java:1236)`
	`com.mercury.itg.rsc.staffing.web.ManageAllocationAction.doExecute(ManageAllocationAction.java:569)`
	`com.mercury.itg.common.web.BaseAction.execute(BaseAction.java:146)`
	`org.apache.struts.action.RequestProcessor.processActionPerform(RequestProcessor.java:421)`
	(QCCR1L39744)

4614068689	You may see more actual FTEs than expected in the resource plan view of the scenario comparison for a project. (QCCR1L39869)

Tracking Number	Problem Description
4611224778	The Analyze Assignment Load (AAL) portlet shows logged time incorrectly. The total number of hours shown on the AAL portlet is correct. However, the hours are incorrectly distributed across the month contours. (QCCR1L39932)
4605545720	Cost rate rules that contain the Org Units cost factor do not work correctly for Time Management Reports. (QCCR1L39812)
4611421308	Data is truncated in an exported spreadsheet if this spreadsheet includes a staffing profile that contains a single quote mark (‘) in the name. (QCCR1L39934)
4605161025	Compare to Workplan--View by Role does not display any Actual Effort data if there is time logged against the project. (QCCR1L39933)

2607413269	Staffing Profile notifications do not work correctly when using the default notification settings. The recipient can not receive the notifications. When this problem occurs, the following error is generated in the server log:
	`server:RM Notification Service:com.kintana.services:2009/06/05-08:30:03.897 EDT: java.lang.IndexOutOfBoundsException: Index: 0, Size: 0`
	`at java.util.ArrayList.RangeCheck(ArrayList.java:546)`
	`at java.util.ArrayList.get(ArrayList.java:321)`
	`at com.mercury.itg.rm.notification.service.NotificationContent.<init>(NotificationContent.java:31)`
	`at com.mercury.itg.rm.notification.service.ResReqNotificationContent.<init>(ResReqNotificationContent.java:23)`
	`at com.mercury.itg.rm.notification.rule.RMNotificationRule.getEmailMessages(RMNotificationRule.java:236)`
	(QCCR1L39680)

4600458010	You receive the “`Components size is bigger than compressed data`” error message when trying to open a staffing profile. (14816)
4605746526	Previously entered user data values do not appear when you open a staffing profile header. (QCCR1L39689)

Time Management

Tracking Number	Problem Description
4625907931	Negative total effort appears in a task when the project manager rejects invalid time sheets in the Time Approval portlet on the Project Overview page. (QCCR1L40813)
4616643099, 4625477790	Additional database connections are being opened as part of loading a time sheet that contains project or task items. This is unnecessary and causes the connection pool to exhaust its available connections and throw the following error: `: org.hibernate.exception.GenericJDBCException: Cannot open connection` (QCCR1L28613)
4625907931	If you enter actuals in a time sheet and set the % Complete field to zero, a popup message will inform you that % Complete cannot be zero when there is effort in the work item. In this case, if you click **OK** on the popup message, and then refresh the page, the actuals you entered will be reset to zero in the Time Breakdown table. However, on the Other Actuals table, the actuals will still exist in the Actual Effort field. If you click **Save**, the actuals will not be synchronized to the corresponding work units, which results in corrupted data. (QCCR1L40812)
4617145058	Removing actuals from a time sheet by making the cell blank instead of entering zero and then clicking **Save** makes the actuals return to the time sheet but still be deducted from the work item. This behavior makes the actuals and the total actual effort of the work item unsynchronized. (QCCR1L41207)
4626930631	You have tasks with activities in your My Items list. You use the “Include Items from My Items List” option when creating a time sheet. However, the time sheet line only includes the tasks. The activities are not included in the time sheet line. (QCCR1L40319)
4623952277	When you use the Create, Update or Submit operation in Time Management Web services and include the record for the `TM_ACTUALS` totals in the Web service XML, the operation creates a duplicate totals row in the system. (QCCR1L41405)
4615300483	Consider that you have multiple lines in a time sheet, and the vertical scroll bar appears. In the Time Break Down window, if you use the Tab key to move the cursor from the cell displayed at the end of the window to the beginning cell of the next line, the Time Break Down window will moves upwards. However, the corresponding the time sheet details (such as the Item, and Total columns) do not move. This causes mismatches between the time sheet details and the data logged in the Break Down window. (QCCR1L39654)

Tracking Number	Problem Description
4615289730	You use Override Rules to setting Charge Codes for certain time sheets. If there are many charge codes added to a time sheet line, the charging on certain items could be over 100%. (QCCR1L39653)
4621524577	PPM Center reevaluates approvers when loading and saving any time sheet, which affects the performance. PPM Center version 9.12 improves the performance by checking the auto approval flag to decide whether a reevaluation of the approvers is needed or not. (QCCR1L39650)
4600633164	When a time sheet is frozen or closed, the LAST_UPDATE_DATE field and the LAST_UPDATED_BY field in the TM_TIME_SHEETS table are not updated with details of the freeze/close user. (QCCR1L29284)

4000772317	If you use the German (Switzerland) regional settings, you receive the following error message when editing or submitting your time sheets:
	`Error:`
	`Invalid Actual Effort`
	`Details:`
	`Actual Effort has an invalid value, must be a numeric value.`
	This problem usually occurs if you enter numbers greater than 1,000 in the time sheets. (QCCR1L29285)

4610784235	You cannot approve, freeze or close time sheets older than 12 periods when using the following server.conf setting: `com.kintana.core.server.TM_MAX_PREVIOUS_TIME_PERIODS=200` (QCCR1L29294)

4616369512	You receive the following error message when submitting a time sheet:
	`server:Resource Pool Rollup Service:com.kintana.services:2009/10/20-11:55:00.602 EDT: java.lang.NullPointerException`
	`at com.mercury.itg.core.calendar.impl.CalendarWorkingDayCacheImpl.getNumOfWorkDays(CalendarWorkingDayCacheImpl.java:427)`
	`at com.mercury.itg.core.calendar.impl.ITGCalendarImpl.getNumOfWorkDays(ITGCalendarImpl.java:580)`
	(QCCR1L29297)

4603592385	If you disable one or more MISC items for a submitted time sheet, and then copy that time sheet, the new one will have all the items including the disabled ones. (QCCR1L29293)
3606071468	When searching for time sheets to approve on the Approve Time page, you select **Check all** to select all the time sheets returned in the search result. However, after you click **Approve**, only the first time sheet is approved. (QCCR1L29296)

Tracking Number	Problem Description
4613955180	After you click **Printable Version** on the Edit Time Sheet page, the printable version of the time sheet takes a long time (about 15 seconds) to appear. (QCCR1L29299)
4609850155	A project has more than one task with the same name, and these tasks are added to the same time sheet, with different activities to each of them. In this case, the display of the time sheet is corrupted. There is non-related output between the Line Details window and the time sheet main page. (QCCR1L29295)
3605836805	The default time sheet policy is defined as auto-approve. You set a time sheet override rule to configure the charge code but you do not define the Time Approver and the Billing Approver in the rule. In this case, time sheets cannot be approved automatically. (QCCR1L29303)
4617035816	You enter the request ID of an existing request when trying to add this request to a time sheet. However, after you click **Search**, the following message appears: `No results returned. Please modify your search.` As a result, you cannot add this request to your time sheet. (QCCR1L29287)
3605845930	If you set the **Resource** field to another user when making a copy of a time sheet of a Resource Pool Manager or Direct Manager, that user can log time against the project even though the user is not in the staffing profile. (QCCR1L29290)

4616369512	You receive the following error message when submitting a time sheet:
	`server:Resource Pool Rollup Service:com.kintana.services:2009/10/20-11:55:00.602 EDT: java.lang.NullPointerException`
	`at com.mercury.itg.core.calendar.impl.CalendarWorkingDayCacheImpl.getNumOfWorkDays(CalendarWorkingDayCacheImpl.java:427)`
	`at com.mercury.itg.core.calendar.impl.ITGCalendarImpl.getNumOfWorkDays(ITGCalendarImpl.java:580)`
	(QCCR1L29297)

4603592385	If you disable one or more MISC items for a submitted time sheet, and then copy that time sheet, the new one will have all the items including the disabled ones. (QCCR1L29293)
3606071468	When searching for time sheets to approve on the Approve Time page, you select **Check all** to select all the time sheets returned in the search result. However, after you click **Approve**, only the first time sheet is approved. (QCCR1L29296)
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Tracking Number	Problem Description
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3605836805	The default time sheet policy is defined as auto-approve. You set a time sheet override rule to configure the charge code but you do not define the Time Approver and the Billing Approver in the rule. In this case, time sheets cannot be approved automatically. (QCCR1L29303)
4617035816	You enter the request ID of an existing request when trying to add this request to a time sheet. However, after you click **Search**, the following message appears: `No results returned. Please modify your search.` As a result, you cannot add this request to your time sheet. (QCCR1L29287)
3605845930	If you set the **Resource** field to another user when making a copy of a time sheet of a Resource Pool Manager or Direct Manager, that user can log time against the project even though the user is not in the staffing profile. (QCCR1L29290)
N/A	When no periods exist in KTMG_PERIODS table for HP Time Management and there is no time sheet, on the **My Tasks** portlet clicking the **Go To Time Sheet** button or clicking a value (link) in the Actual Effort (hrs) column causes a NumberFormatException. To address this issue, the code was changed so that the button is not shown and the values in the column have no links when there is no time sheet. (QCCR1L41648)
N/A	The value of the **Code** field in the TMG - Misc. Work items validation must be numeric. Since version 9.10, an error message has been presented if an administrator tries to specify a non-numeric value. Prior to version 9.10, the presence of a non-numeric value in the **Code** field caused a stack trace. Customers who established non-numeric values for the **Code** field before version 9.10 must make those values numeric. (QCCR1L42207)

10 Known Problems and Limitations in PPM Center 9.12

The following problems and limitations are known to exist in PPM Center version 9.12 (or other software, as indicated). The problems are categorized by the affected product area. If a problem has an assigned internal tracking number, that tracking number is provided (in parentheses) at the end of the problem description.

New and modified text and field names introduced in version 9.12 are not translated into other languages. As a result, users who log into PPM Center un a non-English language will see some screens in the interface that have some English words. Future releases will provide translated text.

Best Practices - PPM Dashboard

PROBLEM	If you open PPM Center in Internet Explorer 7, and try to open a submenu (for example, **Dashboard > Private > My Reporting Portlets > ...**), the submenu may not open. This can occur if you have a large number of submenus for a given PPM Dashboard menu item. (QCCR1L41326)
WORKAROUND	Maintain the number of submenus at 15 or fewer per PPM Dashboard menu item.

PPM Dashboard

PROBLEM	When the length of a word in a portlet name exceeds 30 characters (without a space), after you click **Find Portlets** in the **Add Portlets** window, the Portlet Name column in the resulting list is resized automatically, other columns are pushed to the right side, and no horizontal scrollbar is available. If the word is really long (say, 100 characters), the buttons in the right side of the window may disappear. (QCCR1L41717)
WORKAROUND	Maximize the **Add Portlets** window.
PROBLEM	When a request contains HTML related characters in its request description, the request is not displayed in the **My Requests** portlet. (QCCR1L42543)
WORKAROUND	Make sure not to include any HTML related characters in the description of a request.

Installation and Administration

LIMITATION	If you open the generated CSV file in `\ppmc\data\` folder after running `kSupport.sh` to generate support information, and make some format changes, such as changing column width, then save the CSV file (with or without warning), many lines of records display error next time you open it as Excel removes comma (,) by default. (QCCR1L41464)
WORKAROUND	Instead of clicking **Save** directly, save the file in CSV file type by following the **Save As** option and selecting **CSV (Comma delimited) (*.csv)** for the **Save as type** field.
LIMITATION	If a data sheet in the PPM Center database contains values starting with a special character, such as `%`, when you open the resulting CSV file in `\ppmc\data\` folder after running `kSupport.sh` to generate support information, and if you have associated the .csv file type with Excel, the CSV file will not display properly for the cells containing special characters. (QCCR1L41463)
WORKAROUND	To display the CSV file properly, 1. Rename the desired CSV file by appending `.txt` file extension to it. 2. Open the renamed file in Excel and select the following options in the Text Import Wizard: - For **Original data type**, select **Delimited**; - For **Delimiters**, select **Comma**; - For **Column data format**, select **Text** for each of the columns.

LIMITATION	Software bundles that require PPM Center version 9.12 to be installed and are installed using `kDeploy.sh` should not set the DEPENDS_ON_VERSION variable in the `deploy.info` file. (QCCR1L41406)
WORKAROUND	If configured, remove the DEPENDS_ON_VERSION variable and its value from the `deploy.info` file.
LIMITATION	PPM Center version 9.1x does not support adding a top level menu. Your new customized menu items may fall under **Open**, **Create**, or **Search** menu.
WORKAROUND	None.

LIMITATION	If you perform BOM check by running the kSupport tool after deploying a service pack bundle file, the **Files changed** section in the resulting Bill of Materials Information page incorrectly lists some system libraries that can be ignored, for example:
	`/deploy/itg.war/WEB-INF/lib/XBeans-packaged.jar`
	`/deploy/itg.war/WEB-INF/lib/knta_classes.jar`
	`/deploy/itg.war/WEB-INF/lib/pm-web.jar`
	`/deploy/itg.war/WEB-INF/lib/webservice.jar`
	`/deploy/itg.war/WEB-INF/lib/webservice_client.jar`
	`/deploy/itg.war/html/client/knta_client.jar`
	`/lib/jboss/boot/knta_logging.jar`
	(QCCR1L41888)

WORKAROUND	None available at this time.

Integrations

PROBLEM	If you are using the Plug-in for PPM, Microsoft Office Primary Interop Assemblies (PIA) for Microsoft Project must be installed. (QCCR1L39188)
WORKAROUND	Install one of the following versions of Microsoft Office Primary Interop Assemblies (PIA) for Microsoft Project: • Version 2003 for Microsoft Project 2003 • Version 2007 for Microsoft Project 2007 • Version 2010 for Microsoft Project 2010

LIMITATION	A “`Test/Import completed successfully`" message will be displayed even when the XML imported does not match the XSL template selected, but no corresponding request ID will be generated and the log will show “`pass:0`”. (QCCR1L41359)
WORKAROUND	None.
PROBLEM	If text field(s) of a request contain such special characters as “<“ and “&“, error occurs when you try to export the request to an XML file. (QCCR1L42539)
WORKAROUND	None available at this time.

Integrations - ALM

LIMITATION	When you click drilldown list in the **ALM - Releases By Category** portlet, no result is displayed due to an error in the portlet definition in ALM bundle. (QCCR1L42542)
WORKAROUND	None available at this time.

Integrations - CMQC

PROBLEM	If PPM Center is integrated with Quality Center version 11.00, you create a CMQC - QA Test Status Report request and try to select a priority level from the autocomplete popup window for the field **Define Priority Defect Levels**, the autocomplete popup window shows nothing. This is because Quality Center 11.00 renamed the table that stores all list values from `ALL_LISTS` in Quality Center 10.00 to `LISTS`. (QCCR1L42561)
WORKAROUND	To get the values for all priority levels, use a different SQL statement: 1. Launch PPM Workbench. 2. From the shortcut bar, select **Configuration > Validations**. 3. Locate and open validation **CMQC_CMN_QC_PRIORITY**. 4. Replace the existing SQL statement with the following: `ksc_capture_output sh ./ext/qcm/scripts/kqcm_qc_TdsqlQuery.sh TdProject:#@# "[REQD="[REQD.P.QC_INSTANCE_NAME]".VP.QC_ADMIN_DB_JDBC_URL]" "[REQD="[REQD.P.QC_INSTANCE_NAME]".VP.QC_ADMIN_SCHEMA_NAME]" "[REQD="[REQD.P.QC_INSTANCE_NAME]".VP.QC_DBADM_USERNAME]" "[REQD="[REQD.P.QC_INSTANCE_NAME]".VP.QC_DBADM_PASSWORD]" "[REQD.VP.QC_TARGET_DOMAIN]" "[REQD.VP.QC_TARGET_PROJECT]" "SELECT LS_NAME,LS_NAME FROM LISTS WHERE LS_FATHER_ID IN (SELECT SF_ROOT_ID FROM SYSTEM_FIELD WHERE SF_TABLE_NAME = 'BUG' AND SF_COLUMN_NAME = 'BG_PRIORITY')"` 5. Click **OK**.

HP Demand Management

LIMITATION	If you are setting up multiple rules, note that unsaved token value(s) will not be applied by the subsequent rules in real-time. (QCCR1L29880)
WORKAROUND	None.
LIMITATION	If a field is set to “Display = No" or invisible by status dependency, you can not make it visible on the web UI by using UI rules. (QCCR1L40010)
WORKAROUND	None.
LIMITATION	Auto-complete component's valid value list is not in client UI, so when using rule to set values for auto-complete component, the values are not validated and invalid values can be set. As a result, when users create a request, a value that is not in auto-complete list can be inserted and saved in an auto-complete field as triggered by the SQL rule. (QCCR1L41050)
WORKAROUND	PPM administrators who configure SQL rules to set values for auto-complete list should make sure that only valid values are set.
LIMITATION	When applying advanced rules on requests with "Printable Version" and the Print function, the previewed and printed data does not match with what is displayed on the screen.
WORKAROUND	Now rules can be executed on the printable version of Request Details, but with the following limitations: • Only SQL rules and UI Rule `setFieldVisible()` will be executed. • Only **Apply on page load** rule event is supported. • The printable version should be opened from Request Details page instead of by entering the URL address directly. (QCCR1L39873)
PROBLEM	After you enable field group **Program Issue: Allows Requests to be considered as Issues In a Program** for a request header type, no Program Issue section is added to the Fields tab of the request header type.(QCCR1L41722)
WORKAROUND	This behavior is by design and it has no functional impact. Request types using this request header type can still be used as program issue type and it works fine for program issue tracking.

LIMITATION	SQL for Hierarchical Display (tree validation) now supports resolving such static tokens as [SYS.USERNAME] and [SYS.USER_ID]. Other types of tokens, such as Request Details or Context related tokens, are not supported. (QCCR1L40379)
WORKAROUND	None available at this time.
LIMITATION	Rule dependency is not supported if the dependency field is using the `()` pattern to present negative numbers. For example, using `(1000)` to represent `-1000`. (QCCR1L42478)
WORKAROUND	None available at this time.
LIMITATION	Long field names in a request are not wrapped over multiple lines, which makes content on the rightmost of the page fail to display. (QCCR1L39695)
WORKAROUND	Scroll the screen sideways to view the content.

HP Deployment Management

PROBLEM	Transfer of bundle to Destination environment fails as the ksc_copy command is not working for the Request Type Migrator. (QCCR1L40858)
WORKAROUND	Set variable `DISABLE_SCP_FILENAME_QUOTE` in the Environment User Data. For details, see *WORKAROUND* on page 400 for QCCR1L24976.

HP Portfolio Management

LIMITATION	The COST_CAPITALIZATION_ENABLED `server.conf` parameter cannot be changed using the Administration Console. (QCCR1L41323)
WORKAROUND	The flag can be changed directly in the `server.conf` parameters as needed. However, HP strongly recommends not disabling cost capitalization if it has been enabled.

HP Project Management

LIMITATION	Work plan workflow special commands might fail intermittently due to concurrency limitations. Processing of the **Create Project** special command must complete before processing of the **Create Work Plan** special command (`ksc_create_workplan`) or the **Update Work Plan Status** special command (`ksc_update_workplan_status`) begins, if the special commands are in the same workflow step or in a subsequently executed workflow. (QCCR1L42591)
WORKAROUND	The following 30-second delay should be executed before the **Create Work Plan** special command or the **Update Work Plan Status** special command if it follows a **Create Project** special command (in the same or subsequent workflow steps): `ksc_local_exec sleep 30`

Platforms

LIMITATION	If you run `kStop.sh` while background services are running, your PPM Center instance (either the nodes in a cluster or a single, stand-alone server) may take a while to shut down. In a cluster setup, service nodes may experience this, while the user node will not. The kStop.sh script waits for services to complete before it brings down the PPM Center instance. (QCCR1L29568)
WORKAROUND	None.
PROBLEM	SOCKS support for the RMI connection made by workbench to the PPM server is not working. Workbench will fail to establish the connection to the SOCKS server. (QCCR1L41991)
WORKAROUND	None available at this time.
PROBLEM	Quartz Scheduler Reassignment and Restart. On a server cluster, after a services node starts the quartz scheduler, the quartz scheduler pauses. Another services node detects the scheduler inactivity and starts the quartz scheduler again. This does not affect functionality. Background services are scheduled normally. (QCCR1L42301)
WORKAROUND	None available at this time.

PROBLEM	Users cannot open the PPM Workbench using the combination of the Mozilla Firefox 3.6 browser and version 1.6.0_07 (6.0 update 7) of the Java plug-in. Mozilla has desupported this combination of browser and plug-in. (QCCR1L42400)
WORKAROUND	Firefox 3.6 users who use the PPM Workbench must download and install version 1.6.0_19 (6.0 update 19) or later of the Java plug-in from the JRE downloads on the following Web page: http://www.oracle.com/technetwork/java/javase/downloads/index.html
PROBLEM	Internet Explorer versions 7 and 8 display a warning if the value set for the server configuration parameter `JAVA_PLUGIN_PATH_IE` contains the protocol identifier "`http:`". (QCCR1L42208)
WORKAROUND	If you override the default setting for the `JAVA_PLUGIN_PATH_IE` parameter (`//java.sun.com/update/1.6.0/jinstall-1_6_0_7-windows-i586.cab`), make sure that you remove the protocol identifier "`http:`"

Report Types

LIMITATION	When configuring an existing field or adding a new field from the **Fields** tab in a report type, if you set the **Validation** field to **Text Area - 4000,** the value of the **Parameter Col.** field does not automatically change to **PARAMETER46** or a higher parameter number, as it should. (QCCR1L41587)
WORKAROUND	After you select **Text Area - 4000** as the **Validation** for the field, manually change the value of the **Parameter Col.** field to **PARAMETER46** or a higher parameter number.

Resource Management

LIMITATION	Data display format inconsistency between the staffing profile page and the Analyze Assignment Load portlet: the staffing profile page displays data by hours in the format of one decimal place, while the Analyze Assignment Load portlet displays data in the format of two decimal places.
WORKAROUND	None.

11 Documentation Errata

The following items are corrections for the version 9.10 documentation.

Changing PPM Center Master Data

LOCATION	*Installation and Administration Guide,* page 282.
ERROR	The *Installation and Administration Guide* needs to include a clear statement advising against changing PPM Center master data directly through the database. (QCCR1L40130)
CORRECTION	A new section titled “Changing PPM Center Data” was added to Chapter 7, “Maintaining the Database” to advise against changing PPM Center master data directly in the database.

APP_SERVER_MULTICAST_PORT and MULTICAST_PORT Parameters

LOCATION	*Installation and Administration Guide,* page 179.
ERROR	The descriptions provided for the `APP_SERVER_MULTICAST_PORT` and `MULTICAST_PORT` parameters in Table 5-2 were inaccurate. (QCCR1L40190)
CORRECTION	The parameter descriptions were modified to reflect their true functionality. A new edition of the 9.12 *Installation and Administration Guide* is available at the HP manuals site.

Required Permissions for PPM Center Database Access

LOCATION	*Installation and Administration Guide,* page 68.
ERROR	PPM Center database users need the Oracle RESOURCE role and CONNECT roles. The access needed is very broad. (QCCR1L40254)
CORRECTION	A new section titled “Default Permissions for PPM Center Schemas” was added to Chapter 3 of the *Installation and Administration Guide* to provide clear details of the access required for the PPM Center application and RML user.

Limits on Physical Memory for 32-bit Windows Operating Systems

LOCATION	*Installation and Administration Guide,* page 53.
ERROR	The guide needs to include information about how to make sure that the physical RAM inside a Windows 2003 (Standard Edition) server machine is actually available.(QCCR1L40159)
CORRECTION	The following note was added to the section “Preparing to Install PPM Center” in Chapter 3: Limits on physical memory for 32-bit Windows operating systems depend in part on whether the Physical Address Extension (PAE) is enabled. The PAE allows some 32-bit Windows systems (Windows Server 2008 Datacenter and Windows Server 2008 Enterprise) to use more than 4 GB of physical memory. (To enable PAE, use the /PAE switch in the Boot.ini file.) However, PAE is not available for Windows Server 2003 Standard Edition, so the total available physical RAM on this system is limited to 4 GB. For detailed information about memory support and memory limitations on Windows operating systems, see Microsoft Support online.

Server Cluster Configuration: Assigning Ports Outside of the Ephemeral Port Range

LOCATION	*Installation and Administration Guide,* page 73.
ERROR	The *Installation and Administration Guide* must advise administrators to avoid conflict between the ports assigned in the `server.conf` file and the ephemeral port range of the operating system. (QCCR1L39996)
CORRECTION	The following section was added to Chapter 3: PPM Center uses many client sockets for its internal communications. These are allocated randomly from the operating system's ephemeral port range. To prevent conflicts between internal client socket use and your PPM Server port settings, you must check to make sure that the ephemeral port range set for your operating system does not conflict with any of the ports assigned in your `server.conf` file. For information about the default ephemeral port range on your operating system and how to adjust it, see the documentation for your specific operating system.

Setting the ulimit Value on UNIX Systems

LOCATION	*Installation and Administration Guide,* page 94.
ERROR	On UNIX systems, PPM Center (through the `kStart.sh` script) uses the ulimit utility to set the maximum number of open file descriptors to 1000. In a server cluster configuration, this setting may be too low, causing nodes to come down. The *Installation and Administration Guide* must include guidelines on how to set the ulimit value.

CORRECTION	(UNIX only) Setting the ulimit Value
	On UNIX systems, PPM Center (through the `kStart.sh` script) uses the ulimit utility to set the maximum number of open file descriptors to 1000. In a server cluster configuration, this setting may be too low, causing nodes to come down.
	If the default ulimit setting does not meet your requirements, reset it as follows:
	1. Navigate to the <*PPM_Home*>/bin directory and open the kStart.sh file in a text editor.
	2. Locate the following text:
	`if [ $HOST_TYPE = UNIX ]; then`
	`  ulimit -n 1000`
	`  umask 022`
	3. Change the ulimit value as follows:
	`ulimit -n 1100`
	4. Repeat step 1 through step 3 for each additional node in the cluster.
	For example, if your server cluster consists of five nodes, then specifying the ulimit value of 1100 for each allocates 5500 open file descriptors for the PPM Server cluster deployment.

Changing PPM Center Master Data

LOCATION	*Installation and Administration Guide,* page 111.
ERROR	The “Configuring Secure Web Logon” section needs additional information about important issues to consider if your users access PPM Center using Internet Explorer (IE) 6.0 or 7.0, or if you have PPM Servers running on AIX. (QCCR1L27117)
CORRECTION	**Additional Considerations for Configuring Secure Web Logon** This section describes additional steps required to set up secure Web logon if your users access PPM Center using Internet Explorer (IE) 6.0 or 7.0, or if you have PPM Servers running on AIX. **Enabling Transport Layer Security on Internet Explorer 6.0 and 7.0** Make sure that users who access PPM Center using Internet Explorer (IE) 6.0 or 7.0 enable Transport Layer Security (TLS) on their browsers. (On the **Advanced** tab of the Internet Options dialog box, select the **Use TLS 1.0** checkbox.) **Editing the server.xml File (AIX Only)** If you have PPM Servers running on AIX, open the `server.xml` file, and add `algorithm="IbmX509"` to it, as follows: `<Connector clientAuth="false" secure="true" scheme="https" debug="0" acceptCount="10" enableLookups="true" sslProtocol="TLS" address="${jboss.bind.address}" port="22383" minSpareThreads="5" maxSpareThreads="5" maxThreads="75" keystoreFile="/<PPM_Home>/key.store" keystorePass="iamnotroot" algorithm="IbmX509" />`

Upgrading Secondary Physical Servers

LOCATION	*Upgrade Guide,* page 56.
ERROR	Documentation is unclear with regard to upgrading secondary physical servers. (QCCR1L40257)
CORRECTION	Modified the procedure described in the section “Upgrading a PPM Center Server Cluster”.

Keeping Request Rules and Customized JavaScript Methods During an Upgrade

LOCATION	*Upgrade Guide,* page 34.
ERROR	The *Upgrade Guide* must let users know that JavaScript files customized in the currently installed PPM Center instance will be overwritten during an upgrade to PPM Center version 9.10. (QCCR1L29817)
CORRECTION	“Task 8, Back Up Customizations” was changed to indicate that JavaScript files that are customized in the currently installed instance will be overwritten during an upgrade to PPM Center version 9.10. The task now reads “Back up any customizations (such as request rules and JavaScript methods, which are overwritten during an upgrade) that you want to continue to use with PPM Center version 9.12.”

Portlets: When this filter has a value, append Where Clause

LOCATION	*Creating Portlets and Modules,* page 35.
ERROR	The **When this filter has a value, append to Where Clause** filter field description is missing information. (QCCR1L39262)
CORRECTION	The following information should be included in the *Creating Portlets and Modules,* in the **When this filter has a value, append to Where Clause** filter field description: Single quotation marks (‘), including those that may be embedded in a variable, cannot be used in the **When this filter has a value, append to Where Clause** filter field.

Edit Security Groups Access Grant

LOCATION	*Security Model Guide and Reference,* Access Grants appendix.
ERROR	The document is missing information about the behavior of the Edit Security Groups access grant. (QCCR1L28519)
CORRECTION	The following information should be included in the *Security Model Guide and Reference,* Access Grants appendix: Any user given the Edit Security Groups access grant can add themselves to the PPM All Access Grants security group. This security group allows complete access to PPM Center. You cannot modify this security group to limit this ability. If this complete access is not desired but you need to assign a user the Edit Security Groups access grant, you can limit this ability by creating a copy of the PPM All Access Grants security group, modifying the copy of the security group to limit access to itself, and disabling the existing PPM All Access Grants security group: 1. Copy the PPM All Access Grants security group. From the Security Group Workbench, select the PPM All Access Grants security group and click **Copy.** 2. Edit the copied security group: In the **Ownership** tab, set the ability to edit the copied security group. In the **Users** tab, assign all users who are part of the PPM All Access Grant security group to the copied security group. Make any additional updates to limit access to the security group. Save your changes. 3. From the PPM All Access Grants security group, remove all users and save your changes. 4. Disable the PPM All Access Grants security group by running the following SQL statements: UPDATE knta_security_groups SET enabled_flag='N' WHERE security_group_id = 3; commit; 5. Restart the PPM Server.

Projected Utilization Calculation

LOCATION	*HP Resource Management User's Guide,* page 172.
ERROR	The document states that "If the resource **is not** overallocated, projected utilization is less than 100%. If the resource **is** overallocated, projected utilization is greater than 100%." (QCCR1L29905)
CORRECTION	The document should state that "If the resource **will not be** overallocated, projected utilization is less than 100%. If the resource **will be** overallocated, projected utilization is greater than 100%."

Preparation to Install Deployment Management Extensions

LOCATION	*HP Deployment Management Extension for Oracle E-Business Suite Guide,* page 39. *HP Deployment Management Extension for Oracle Technology Guide,* page 13. *HP Deployment Management Extension for SAP Solutions Guide,* page 17.
ERROR	Bulleted lists on the indicated pages incorrectly include the item "The username and password you were given at the time you purchased the Extension."
CORRECTION	Delete the item from the bulleted lists on each of the indicated pages.

Tracking of Capitalized Costs When a Proposal Becomes a Project

LOCATION	*HP Financial Management User's Guide*, page 74 *HP Portfolio Management User's Guide*, page 19 *HP Project Management User's Guide*, page 54
ERROR	The documents need to clarify the tracking of capitalized costs when there is a conflict between the settings for a proposal and the project it becomes.
CORRECTION	A proposal may or may not track capitalized costs (in addition to operating costs) based on the setting of the option **The proposal is for a project that tracks capital costs** on the Financial Summary Settings page of the proposal. When the proposal becomes a project, this setting can conflict with the setting of the option **Allow capitalized costs on this project** on the Cost and Effort policy of the project. If the Cost and Effort policy of the project type is *locked* (meaning that no individual project of that type can be made to override any settings of that policy) *and* if the policy setting for tracking of capitalized costs conflicts with the financial summary setting for the proposal, the setting of the Cost and Effort policy prevails. Otherwise, the setting for tracking the project's capitalized costs is consistent with the setting for the proposal.

Availability of Net Present Value and Nominal Return Columns to Display on Proposals/Projects/Assets Tab of Portfolios

LOCATION	*HP Portfolio Management User's Guide,* page 54.
ERROR	The **Net Present Value** and/or **Nominal Return** columns have been configured on the Configure Portfolio Management page to be displayable on the **Proposals/Projects/Assets** tab of portfolios, but the columns are not available to users to display when they right-click a column heading on the tab and select the **Columns** option.
CORRECTION	To add the **Net Present Value** and/or the **Nominal Return** columns, users must first change the **Fiscal Year** field on the tab to **Total.**

Columns Available in Proposals/Projects/Assets Tab of Portfolios

LOCATION	*HP Portfolio Management Configuration Guide,* page 16.
ERROR	On the Configure Portfolio Management page, an administrator can configure which fields users can select in the **Proposals/Projects/Assets** tab of portfolios. As stated in the document, the full set of fields that an administrator can configure is the combination of all the request fields in the PFM - Proposal, PFM - Project, and PFM - Asset request types. However, if a field appears in multiple request types and uses different validation types among any of those request types, HP Portfolio Management does not make that field available to configure, and the document does not explain this.
CORRECTION	If different validation types are used in the request types and the field needs to be an available column, the validation types must be made identical.

Maximum Number of Columns in Proposals/Projects/Assets Tab of Portfolios

LOCATION	*HP Portfolio Management Configuration Guide,* page 17. *HP Portfolio Management User's Guide,* page 53.
ERROR	For display of the **Proposals/Projects/Assets** tab of portfolios, users can select from a set of columns that are always available and selectable (there are 18), and they can also add any subset of columns that administrators have configured to be available to them on the Configure Portfolio Management page. However, the documents state that the maximum number of columns users can select in the **Proposals/Projects/Assets** tab of portfolios is 20.
CORRECTION	The limit of 20 applies to the set of additional columns that administrators can select on the Configure Portfolio Management page. Users can add any subset of these columns to the 18 columns that are always available and selectable on the **Proposals/Projects/Assets** tab. If administrators make 20 columns available to users to add, users can display up to 38 columns on the **Proposals/Projects/Assets** tab.

In Financial Summaries, Adding Categories and Values to Benefits

LOCATION	*HP Financial Management User's Guide:* • For benefit categories in proposal, project, and asset financial summaries, pages 48 and 59 • For benefit categories in program financial summaries, pages 91 and 99 • For financial data tables, page 124
ERROR	The descriptions of adding new benefit categories in financial summaries are incorrect.
CORRECTION	The notes regarding adding benefit categories and values should state: An administrator can add new categories and values for the benefit **Category** in the Benefit Details section of a financial summary by creating the following drop-down list validations in the PPM Workbench: • Financial Benefits Line Category List • Financial Benefit Revenue Category List Administrators can change the values for these two new benefit-related validations and for the existing Financial Benefits Line Category List validation. Also note that the same set of validations and values used for costs and benefits in the financial summaries of proposals, projects, and assets are also used for costs and benefits in program financial summaries and financial data tables. For more information about validations, see the *Commands, Tokens, and Validations Guide and Reference.*

Revised Field Names in Financial Data Tables

LOCATION	*HP Financial Management User's Guide,* pages 122-123.
ERROR	Some field names shown in Figure 4-9 on page 122 and Table 4-16 on page 123 were renamed in version 9.10.
CORRECTION	The corrections are as follows: • The field shown as **Total Forecasts** was renamed **Total Forecast Cost.** • The field shown as **Total Actuals** was renamed **Total Actual Cost.** • The field shown as **Total Benefits Planned** was renamed **Total Forecast Benefits.** • The field shown as **Total Benefits Actuals** was renamed **Total Actual Benefits.**

Time Sheet Override Rules Do Not Apply if Work Item Is Not Specified

LOCATION	*HP Time Management Configuration Guide*, page 85.
ERROR	The document needs to clarify that for a project and its tasks, time sheet override rules for approvers are not applied when a **Work Item** is not specified.
CORRECTION	Note that the time approver and billing approver results of an override rule for a project and its tasks do not take effect if both of the following conditions are met: • The option **Time logged against this project must be approved by a project representative from the following group** in the Cost and Effort policy for the project is selected. • In the **Dependencies** section of the override rule, the **Work Item Type** is **Project** or **Task** (so the **Work Item Set** is the project name) and the **Work Item** is not specified.

Percent Complete and Estimated Remaining Effort Calculations

LOCATION	*HP Project Management Configuration Guide,* page 60.
ERROR	The calculations for percent complete and estimated remaining effort are incomplete or incorrect for the `includePC` option of the `kPMTMSync.sh` synchronization script.
CORRECTION	The following describes the calculations for percent complete (PC) and estimated remaining effort (ERE) for the `includePC` option of the `kPMTMSync.sh` synchronization script. The calculations may use actual effort (AE) or scheduled effort (SE).
	If `includePC` is set to yes and if **Track Estimated Remaining Effort per resource assignment** in the **Cost and Effort** policy is enabled: **ERE Calculations** • ERE = SE – AE • If ERE <= 0, ERE = 0 **PC Calculations** • If ERE > 0, PC = [AE / (AE + ERE)] * 100 • If ERE <= 0, PC = 100
	If `includePC` is set to yes and if **Track Estimated Remaining Effort per resource assignment** in the **Cost and Effort** policy is not enabled: **PC Calculations** • If AE = 0, PC = 0 • If AE > 0, PC is calculated by HP Project Management
	If `includePC` is set to no or is not included (the setting of **Track Estimated Remaining Effort per resource assignment** in the **Cost and Effort** policy is not relevant): **ERE Calculations** • If PC = 0, ERE = SE – AE • If PC = 100, ERE = 0 • If 0 < PC < 100 and AE = 0, ERE = SE • if 0 < PC < 100 and AE > 0, ERE = (AE * 100 / PC) – AE **PC Calculations** • PC is calculated by HP Project Management

New Information for *Customizing the Standard Interface*

This section provides information about customizing menu items.

Adding a Menu Item

Add a new menu item only when it is really necessary to meet your business needs.

➤ Make sure that your new menu item follows the XML schema (`<PPM_Home>/conf/menus/menu.xsd`).

➤ PPM Center version 9.1x does not support adding a top level menu. Your new customized menu items may fall under **Open**, **Create**, or **Search** menu.

To add a new menu item, follow the steps below:

1. Locate the `menu.xml` file that describes content of menu items in the `<PPM_Home>/conf/menus/menu.xml` directory and open it in an XML editor.
2. Locate the line that represents the menu group under which you want to add the new menu item.

   For example, the line for the **Demand Management** menu group under **Open** menu looks like:

   ```
   <menu id="DEMAND_MANAGEMENT_MENU" key="DEMAND_MANAGEMENT_
   MENU_TEXT.TXT" bundle="KNTA_Resources" seq="10">
   ```

   For **Create** menu group, the line looks like:

   ```
   <menu id="MENU_CREATE" key="menu.create"
   bundle="CoreResources" sorting="leaves-top">
   ```

3. Depending on the security level you want to apply to the new menu item, under the desired menu group, locate a code snippet with similar security requirements, copy and paste it into the appropriate location in the `menu.xml` file as a starting point for editing it.

   For example, if your new menu item has security requirements similar to the menu item **Create > Project,** copy and paste the following code section:

```
<menu id="CREATE_PROJECT" key="entity.project"
bundle="CoreResources">
   <url>/itg/project/CreateProjectPage.do</url>
   <security>
      <and>
         <or>
            <license reference-code="6" />
            <license reference-code="8" />
            <license reference-code="3" />
            <license reference-code="2" />
         </or>
         <access-grant reference-code="1316" />
         <or>
            <access-grant reference-code="1095" />
            <access-grant reference-code="1091" />
         </or>
      </and>
   </security>
</menu>
```

If your new menu item has no security requirements, you may simply copy and paste a code snippet with the `<menu id>` element and the `<url>` element, for example:

```
<menu id="IMPORT_CATALOG_DATA_MENU" key="IMPORT_CATALOG_
DATA_MENU_TEXT.TXT" bundle="KNTA_Resources">
   <url>/itg/web/knta/src/SRCXMLImporter.jsp</url>
</menu>
```

For more information about applying security requirements on a menu item, see *Restricting Access to a Menu Item* on page 376.

4. Edit menu item text.

   a. Create a custom resource bundle under `<PPM_Home>\server\<server name>\deploy\itg.war\WEB-INF\resources\web`. For example, *MyResources.properties*.

   b. Add a new resource in this file by adding a line, as follows:
   "myCustomLabel"=My Custom Label

   c. Edit the code section you pasted in the *menu.xml* file by changing the menu ID, key, and bundle values to make them look like the following:
   <menu id="MyMenuItem" key="myCustomLabel" bundle="MyResources">

5. Edit menu item URL.

   To provide a URL for your new menu item, make sure that you already have a URL available for use.

   After editing, the URL for the new menu item should look similar to URLs for other menu items under the same menu group.

   For example,

   ```
   <url>/itg/MyMenuItem/MyMenuItemPage.do</url>
   ```

   Or,

   ```
   <url>/itg/web/knta/dem/MyMenuItemPage.jsp</url>
   ```

6. Edit security requirements.

   See details in *Restricting Access to a Menu Item by Configuring Access Grants and Licenses* on page 376.

7. Save and close the file.

   If you are using non-standard (foreign language) characters, such as â, ç, é, ö, or ñ, make sure you encode the file in UTF-8 format.

   Microsoft® Notepad supports UTF-8 encoding when using the **Save As** functionality.

8. Stop, and then restart the PPM Server.

9. (Optional, although highly recommended) Verify the changes by logging off, and then logging back onto PPM Center and reviewing the menu item.

Changing a Menu Item

Sometimes you may want to change an existing menu item so that it points to your custom entity. For example, you may want to change the PPM Center default proposal request type to your default request type for creating proposals.

Taking the PPM Center default proposal request type as an example, to change the menu item and make it point to your custom request type, follow the steps below:

1. Locate the code snippet representing **Create > Proposal** menu item in the `menu.xml` file:

```
<menu id="CREATE_PROPOSAL" key="entity.proposal"
bundle="CoreResources">
   <url>/itg/web/knta/crt/
   RequestCreateDispatcher.jsp?BUSINESS_KEY=_PFM_PROPOSAL</
   url>
   <security>
      <and>
         <license reference-code="2" />
         <or>
            <access-grant reference-code="1045" />
            <access-grant reference-code="1041" />
         </or>
      </and>
   </security>
</menu>
```

2. (Optional) Edit menu item text.

   a. Under the `<PPM_Home>\server\<server name>\deploy\itg.war\WEB-INF\resources\web` directory, locate the `CoreResources.properties` resource bundle file and open it.

   b. Locate the line representing the **Proposal** entity:

      ```
      entity.proposal=Proposal
      ```

      Modify the line as necessary, for example:

      ```
      entity.myproposal=MyProposal
      ```

   c. Edit the *`menu.xml`* file by changing the menu ID, key, and bundle values to make them look like the following:

      ```
      <menu id="CREATE_PROPOSAL" key="entity.myproposal"
      bundle="CoreResources">
      ```

3. Edit the menu item URL to make it point to your default proposal request type.

   You should already have a URL for your default proposal request type.

   Replace the URL value in the following line with the URL for your default proposal request type:

```
<url>/itg/web/knta/crt/
RequestCreateDispatcher.jsp?BUSINESS_KEY=_PFM_PROPOSAL</
url>
```

4. Save and close the file.
5. Stop, and then restart the PPM Server.
6. (Optional, although highly recommended) Verify the changes by logging off, and then logging back onto PPM Center and reviewing the menu item.

Restricting Access to a Menu Item

Starting from PPM Center version 9.10, you can restrict access to a menu item by combining any of the following four ways:

- Access grant
- License
- Security group
- Server parameter

Restricting Access to a Menu Item by Configuring Access Grants and Licenses

You may control the security level of the menu item by combining PPM Center product licenses and access grants.

The code line for a product license looks like:

```
<license reference-code="<PRODUCT_KEY>" />
```

where the value for `license reference-code` represents a product key.

The code line for an access grant looks like:

```
<access-grant reference-code="<ACCESS_GRANT_KEY>" />
```

where the value for `access-grant reference-code` represents an access grant.

Edit the following code by adding or removing necessary lines to apply desired security level to your new menu item:

```
<security>
   <and>
      <or>
         <license reference-code="6" />
         <license reference-code="8" />
         <license reference-code="3" />
         <license reference-code="2" />
      </or>
      <access-grant reference-code="1316" />
      <or>
         <access-grant reference-code="1095" />
         <access-grant reference-code="1091" />
      </or>
   </and>
</security>
```

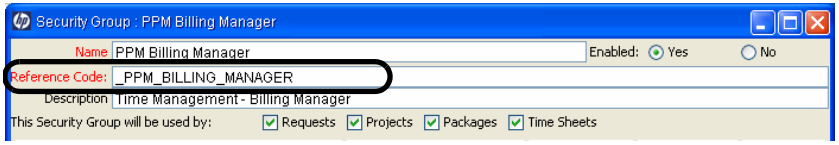
For product names and their corresponding product keys, check the KNTA_PRODUCTS view for PRODUCT_NAME column and PRODUCT_KEY column in your Oracle database for PPM Center.

For access grant names and their corresponding access grant keys, check the KNTA_ACCESS_GRANTS view for ACCESS_GRANT_NAME column and ACCESS_GRANT_KEY column in your Oracle database for PPM Center.

Restricting Access to a Menu Item by Configuring Security Group Reference Code

To restrict access to a menu item by security group, you need to configure security group reference code in the `menu.xml` file.

For example, if you want to restrict the access to PPM Billing Manager that has Demand Management license,



The `menu.xml` file configuration would looks like the follows:

```
<security>
   <and>
      <security-group reference-code="_PPM_BILLING_MANAGER" />
      <license reference-code="2" />
   </and>
</security>
```

Note that the value of **Reference Code** field from the Security Group: PPM Billing Manager window in the Security Group Workbench is used to refer to access key for restricting access by security group.

Restricting Access to a Menu Item by Configuring server.conf Parameter Value

You can also use server parameters to restrict access to a menu item. This applies to `server.conf` parameters with a `true/false` value only.

Example:

```
<security>
   <and>
      <license reference-code="2" />
      <server-parameter name="COST_CAPITALIZATION_ENABLED" />
   </and>
</security>
```

This means that the menu item affected will be accessible when both of the following conditions are satisfied:

- The user has Demand Management license
- `server.conf` has a setting of `COST_CAPITALIZATION_ENABLED=true`

12 New Features in PPM Center 9.11

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 functionality that are compatible between those versions, but 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 or 9.11. Instead, upgrade from version 8.03 to version 9.10 temporarily without running PPM Center, and then upgrade *immediately* to version 9.12.

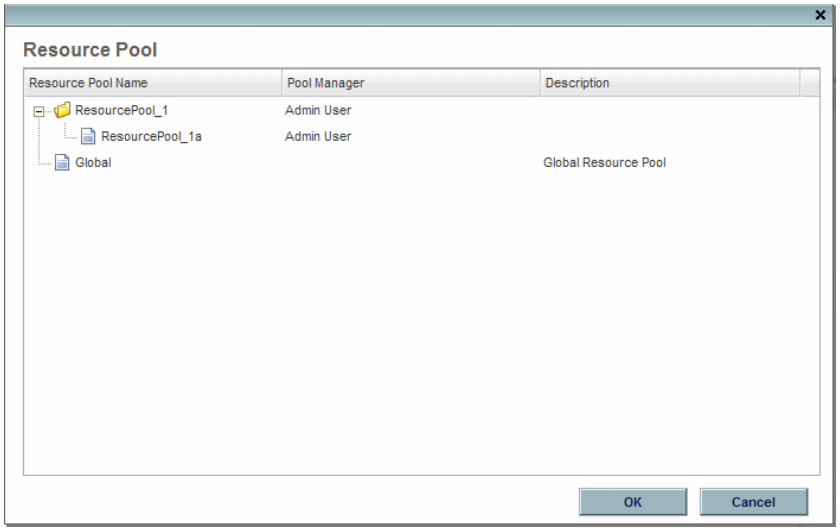
The following new features are included in PPM Center version 9.11:

- *Hierarchical Selection*
- *User Data for Resources*

Hierarchical Selection

Hierarchical selection is the ability to list selectable field values in the form of a hierarchy or tree. If the field values can be defined hierarchically, the selectable field values can be presented to the user in a hierarchical list. For example, when a resource pool (ResourcePool_1a) is created, a parent resource pool can be set. If a parent resource pool (ResourcePool_1) is configured to ResoucePool_1a, in the hierarchical selection, Resource_Pool_1a appears as a child to ResourcePool_1.

Figure 12-1. Hierarchical selection example



Hierarchical selection must be enabled by the system administrator and is only available for the Auto Complete List validation.

Upgrade Considerations

Hierarchical selection can be enabled on upgraded Auto Complete List validations. By default, hierarchical selection is disabled.

Enabling Hierarchical Selection

Hierarchical selection can be enabled for Auto Complete List validations only.

To enable hierarchical selection:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > Open Workbench.**

   The PPM Workbench opens.
3. On the shortcut bar, click **Configuration > Validations.**
4. From the Validations Workbench,

If you are creating a new validation, click **New Validation.** Enter the required fields (Name and Reference Code). For Component Type, select **Auto Complete List.** For Validation By, select **SQL - Custom.**

If you are updating a validation, click **List,** and then find and double-click on the validation.

5. Select the **Enable Hierarchical Selection?** checkbox. The Hierarchical Display tab is enabled.

If you cannot select the **Enable Hierarchical Selection?** checkbox, hierarchical selection cannot be enabled for the validation.

6. From the Hierarchical Display tab, set the following fields:

Field	Description
Is folder selectable?	In a hierarchical selection, a parent node may be a container for selectable values or the parent node may be a selectable value. Enable this checkbox if the parent node is a selectable value. Selecting this checkbox allows the parent node value to be selected as the field value. Disable this checkbox if the parent node is only a container or folder. Disabling this checkbox does not allow the parent node value to be selected as a field value.
SQL	Provide the Select statement that queries the database information. An ending semicolon is not necessary. See *Hierarchical Display Tab Query Example* for more information.

7. Enter any other information for the validation.
8. Select **OK.**

If a field uses this validation, the hierarchical selection icon ( ) appears next to the field.

Hierarchical Display Tab Query Example

A basic SQL query used in the Hierarchical Display tab consists of the following:

```
Select <PrimaryIDColumn> id,
<ParentIDColumn> parentId,
<FolderDefinition> isFolder,
<BusinessKeyColumn> name,
<DisplayInfo_1>, <DisplayInfo_2>, ... , <DisplayInfo_n>
from <Table_1>, <Table_2>, ... , <Table_n>
where <Condition_1> and <Condition_2> and ... and <Condition_n>
and NVL(<ParentIDColumn>,0) = :parentId
```

where

<PrimaryIDColumn>	Required. Column name whose data type is numeric. Identifies the object that is displayed in the hierarchical selection list, such as a resource pool (`rpl.resource_pool_id`) or skill (`sk.skill_id`).
<ParentIDColumn>	Required. Column name whose data type is numeric and is a parent. Identifies the parent of the selected object such as a parent resource pool (`rpl.parent_resource_pool_id`) or parent skill (`sk.parent_skill_id`).

<FolderDefinition>	Required. A column name (such as a flag) or sub-query that determines if the object is a folder. The value or result must be either 'Y' or 'N.' An example of a column name is: `sk.is_skill_folder_flag` An example of a sub-query is: `decode(sign((select count(rpl2.resource_pool_id) from RSC_RESOURCE_POOLS rpl2 where rpl2.enabled_flag='Y' and rpl2.parent_resource_pool_id= rpl.resource_pool_id)),1,'Y','N')`
<BusinessKeyColumn>	Required. The user-defined name of the object that is displayed in the hierarchical selection list.
<DisplayInfo_1>, ... , *<DisplayInfo_n>*	Optional. Additional information about the object to be displayed in the hierarchical selection list.
<Table_1>, ... , *<Table_n>*	Required. The name of the table from which to query. For example, `RSC_RESOURCE_POOLS` or `RSC_SKILLS`.
<Condition_1> and ... and *<Condition_n>*	Conditions to be met in order for the object to be selected to display in the hierarchical selection list. At a minimum, you must include the following condition: **NVL(***<ParentIDColumn>*,0) = :parentId

The following is an example of a hierarchical display query that could be used for a resource pool validation:

```
select rpl.resource_pool_id id,

rpl.parent_resource_pool_id parentId,

decode(sign((select count(rpl2.resource_pool_id) from
RSC_RESOURCE_POOLS rpl2 where rpl2.enabled_flag='Y' and
rpl2.parent_resource_pool_id=rpl.resource_pool_id)),1,'Y','N')
isFolder,

rpl.resource_pool_name name,

krsc_utils.get_pool_managers_list(rpl.resource_pool_id),
rpl.description

from RSC_RESOURCE_POOLS rpl

where rpl.enabled_flag='Y' and
NVL(rpl.parent_resource_pool_id, 0) = :parentId
```

Using Hierarchical Selection

Hierarchical selection is enabled for a field when the hierarchical selection icon ( ) appears next to the field. Clicking the hierarchical selection icon opens a list of selectable field values in the form of a hierarchy or tree.

If the field allows only one value to be entered, you can choose only one value from the hierarchical selection. If a value exists in the field, the selected value replaces the existing value.

If the field allows more than one value to be entered, you can choose one or more values from the hierarchical selection. If a value exists in the field, the selected values are appended to the existing value.

To create skills with hierarchical selection:

1. Open `createSkills` Web Service to create a parent skill and set folders to `true`.
2. Create some sub-skills and set parent name to the name of the parent skill you created.

You can set folders to `true` when creating a new skill, but you cannot set folders to `true` when updating an existing skill.

For more information about Web Services, see the *Web Services Programmer's Guide*.

User Data for Resources

Pages in PPM Center display a set of standard fields for collecting and displaying information. User data is the set of custom fields that can be defined by the system administrator.

If you want to include additional fields in a resource's page, you can define them in the User Data Workbench.

Resource user data are customizable resource attributes that are added to the **Details** tab in a resource's page. The system administrator configures the resource attributes that are displayed in a resource's page and the resource can modify the values of these resource attributes from the **Details** tab.

Resource user data is not available in the Search Resources page nor can they be modified for multiple resources simultaneously.

To configure user data:

1. Log on to PPM Center.
2. Select **Open > Administration > Open Workbench.**

   The PPM Workbench opens.
3. From the shortcut bar, select **Configuration > User Data.**

   The User Data Workbench opens.
4. Click **List.**

   The Results tab opens with the available user data types.
5. To configure resource user data, select **Resource User Data** and click **Open.**

   The User Data Context window opens.
6. To add a field, click **New.**

   The Field: New window opens.

7. From the Field: New window, do the following:

    a. Configure up to 100 fields. Enter the following information:

        i. In the **Field Prompt** box, type the label to display for the new field.

        ii. In the **Token** box, type an uppercase text string to use to identify this field.

            The token name must be unique to the specific user data. An example token name is `ASSIGNED_TO_USER_ID`.

        iii. In the **Description** box, you can enter text that describes what the field captures and how it is to be used.

        iv. To enable the new field, leave **Enabled** selected.

        v. In the **Validation** box, enter or select the validation logic to use to determine the valid values for the field.

            This can be a list of user-defined values, a rule that the result must be a number, and so on.

        vi. The **Component Type** field indicates the field type (list, free-form text field, and so on). This read-only field is derived from the validation you selected.

        vii. If the field lists selectable items, and you want users to be able to select more than one of these, select **Multiselect.**

            If you select **Multiselect,** the PPM Workbench displays a dialog box that lists limitations imposed on multiselect user fields.

            If you selected **Multiselect,** make a note of the limitations, and then click **Yes.**

    b. On the **Attributes** tab, enter the following information:

        i. In the **User Data Col** list, select the internal column in which the field value is to be stored.

            You can store information in up to 100 columns, which means that you can create up to 100 custom fields for resources. No two fields in user data can use the same column.

ii. To make the new field read-only at all times, in the **Display Only** list, select **Always.** To make the field editable at all times, select **Never.**

iii. To make the field visible to users, next to **Display,** leave **Yes** selected. To hide the field, select **No.**

iv. To make the field required (the user must specify a value) at all times, in the **Required** list, select **Always.** To make the field optional at all times, select **Never.**

c. To configure a default value for the user data field, open the **Default** tab and enter the following information:

i. To indicate that the field is to have a default value, in the **Default Type** list, do one of the following:

- To specify that the field default is to be a constant value, select **Constant.**
- To specify that the field default is to have no default, select **None.**

ii. If you specified a constant default type, then in the **Visible Value** list, select the constant value.

8. To save your changes and create another field, click **Add.** The Field window clears so that you can create another new field. Repeat step 7, as needed.

   To save your changes and close the Field window, click **OK.**

9. From the User Data Context window, use the **Layout** tab to rearrange the fields as you want the user to view them from the **Details** tab.

10. Click **OK.**

13 Enhancements, Integrations, Certifications, and Fixes in PPM Center 9.11

This section includes information about the enhancements, integrations, certifications, and fixes in PPM Center version 9.11.

Enhancements

The following enhancement is included in PPM Center version 9.11:

- User data for positions

  With this enhancement, users now may add up to 100 fields.

Certifications

The following certifications are included in PPM Center version 9.11:

- *Support for Universal CMDB versions 9.00 and 9.01*
- *Support for CCRM 9.1*

Support for Universal CMDB versions 9.00 and 9.01

This certification provides Universal CMDB versions 9.00 and 9.01 support for the following PPM Center integration solutions:

- PPM Center integration with Universal CMDB for Service Portfolio

  Note the following impact to configuration:

  - Define the UCMDB_SERVER_VERSION parameter in the `server.conf` file with the proper value. For example, `9.00`.

  For more information about this integration solution, see the *HP Solution Integrations Guide.*

- PPM Center integration with Universal CMDB (using ALM)

  Note the following impacts to installation and configuration:

  - PPM Server must have the same domain name as the Universal CMDB server. For example, if the Universal CMDB server domain name is *abc*.chn.hp.com, the PPM Server must be *xyz*.chn.hp.com, such as anbo.chn.hp.com.
  - PPM Server must be running on the save protocol as the Universal CMDB server. For example, if the Universal CMDB server is running on HTTPS, the PPM Server must be running on HTTPS as well.
  - Define the UCMDB_SERVER_VERSION parameter in the `server.conf` file with the proper value. For example, `9.00`.
  - Consult your Universal CMDB server administrator and define the following new parameters in the `server.conf` file for impact analysis report:

Parameter	Description
IMPACT_ANALYSIS_REPORT_CATEGORY	Impact analysis report category, for example, `UCMDB`
IMPACT_ANALYSIS_REPORT_SEVERITY	impact analysis report severity, for example, `Warning(1)`
UCMDB_NAME_FIELD	The field that stores the CI name, for example, `name`

- Starting from PPM Center version 9.11, you need to encrypt the Universal CMDB password with PPM's encryption tool `kEncrypt.sh`.

  To encrypt the password,

  i. Navigate to the `<PPM_Home>/bin` directory.

  ii. Run the following:

  ```
  sh kEncrypt.sh -t admin
  ```

  The encrypted text returns.

  iii. Copy and paste the encrypted text as the value for parameter UCMDB_PASSWORD in the `server.conf` file, making sure that you do not copy any carriage returns into the file.

Cookies need to be enabled for the browser you use.

For more information about the integration solution, see the *HP Solution Integrations Guide.*

Support for CCRM 9.1

This certification provides Change Configuration and Release Management (CCRM) 9.1 support for the following PPM Center extensions:

- PPM Project Task to SM RFC Integration
- SM RFC to PPM Project Task Integration

Make sure that these two extensions support Service Manager 9.20, which is required for CCRM 9.1 support.

Fixes

The following fixes are included in PPM Center version 9.11:

Costing - Staffing Profile Budget Sync

Tracking Number	Problem Description
N/A	Exception appears when editing header of any Staffing Profile that was synchronized with Financial Summary (budget) before upgrade. (QCCR1L27897)

Dashboard

Tracking Number	Problem Description
N/A	Discrepancies in indexes between upgrade and fresh. (QCCR1L27989)

Integrations - SM RFC

Tracking Number	Problem Description
N/A	Task finish date is changed after synchronization to SM RFC. (QCCR1L28357)

Platform

Tracking Number	Problem Description
N/A	Discrepancies in indexes between upgrade and fresh. (QCCR1L27408)
N/A	Cannot add security group to users from workbench. (QCCR1L27785)

Resource Management

Tracking Number	Problem Description
4620109634	Error occurs when adding resources to a project or saving tasks in work plan on a PPM Center instance with French (Canada) Formatting Options in User Profile and CAD currency. (QCCR1L28441)
N/A	Discrepancies in indexes between upgrade and fresh. (QCCR1L27990)

Time Management

Tracking Number	Problem Description
N/A	Discrepancies (missing) in indexes from fresh install to upgraded instance for TM_TIME_SHEET_LINES and PM_WORK_PLANS. (QCCR1L27986)

14 Known Problems and Limitations in PPM Center 9.11

The following problems and limitations are known to exist in PPM Center version 9.11 (or other software, as indicated). The problems are categorized by the affected product area. If a problem has an assigned internal tracking number, that tracking number is provided (in parentheses) at the end of the problem description.

Center Management for Quality Center

LIMITATION	CMQC bundle does not support Oracle 11.2.0.1. Deployment of the bundle using that environment will result in an error. (QCCR1L27892)
WORKAROUND	Oracle 11.1.0.7 is supported.

Installation

LIMITATION	Because the PPM Center installation and configuration wizards are not fully localized in Chinese and Portuguese (Brazilian) languages, some of the text in wizard steps are shown in English only during installation or system configuration. (QCCR1L27173)
WORKAROUND	None.
LIMITATION	After you install PPM Center and then install language packs, the Import Notifications section of all of the language pack deployment logs saved to the `<PPM_Home>\logs\Lang_Pack\` directory contain the error “Fail to deploy NotifBody...” These error messages have no functional significance and can be ignored. (QCCR1L27539)
WORKAROUND	None.

Dashboard

PROBLEM	Any PPM Center portlets that contain the word “program” do not display the new Chinese translation for “program” and instead display the old Chinese translation for “program”. (QCCR1L27636)
WORKAROUND	None.

Integrations

PROBLEM	Using Internet Explorer and Microsoft Project 2007, opening a work plan in Microsoft Project from PPM Center generates a lock file for the Microsoft Project file. However, after closing the Microsoft Project file, the lock file is not reset. When opening the same work plan in Microsoft Project from PPM Center (without restarting Internet Explorer), the File in Use message is displayed and the Microsoft Project file can only be opened in read-only mode (you may also choose to be notified when the file is no longer in use). (QCCR1L25812)
WORKAROUND	After closing the Microsoft Project file you can reset the lock file by doing one of the following: • Delete the lock file. From any Internet Explorer window, do the following: 1. Select **Tools > Internet Options.** 2. In the General tabbed area, in the Temporary Internet files section, click **Delete Files.** 3. From the Delete Files dialog, click **OK.** 4. From the Internet Options dialog, click **OK.** • Restart Internet Explorer • Restart the system on which Internet Explorer is running.

Integration with Quality Center (ALM)

LIMITATION	Synchronization of workflows is not supported. PPM Center and Quality Center each has its own workflow to manage the process of defect handling. When driving the workflows from both sides, and moving a defect to another step in PPM Center's workflow, it cannot be reflected in Quality Center’s workflow, and vice versa.
WORKAROUND	None available at this time.
LIMITATION	Bi-directional synchronization of drop-down list values is not supported. (QCCR1L25919)
WORKAROUND	None available at this time.
LIMITATION	Comments and description format tags are displayed in PPM Center directly in normal text. (QCCR1L25815)
WORKAROUND	None available at this time.

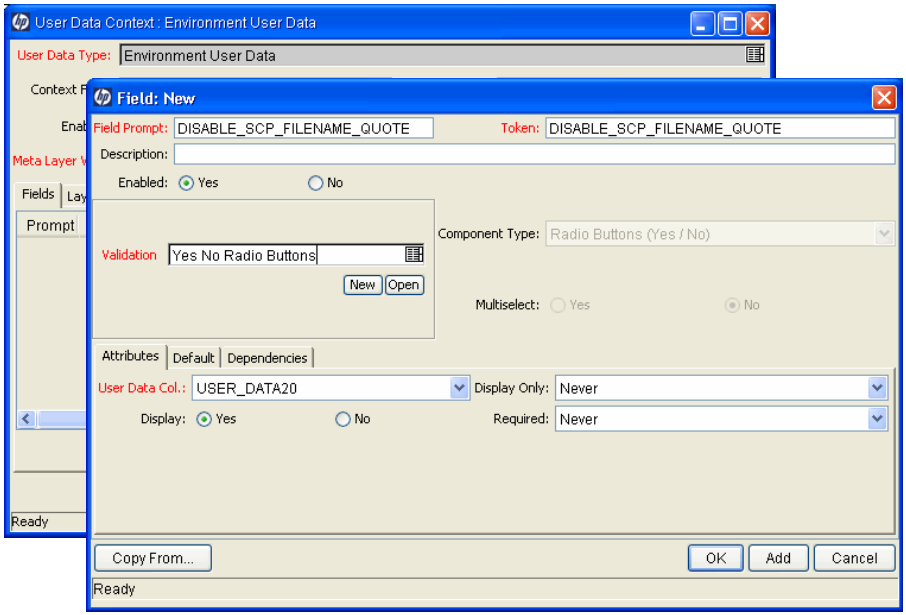
LIMITATION	If a date-type field in Quality Center has a special format, the mapping field in PPM Center must have the same format, otherwise the date will not be synchronized to PPM Center correctly. (QCCR1L25917)
WORKAROUND	None available at this time.
LIMITATION	Quality Center support multi-value fields, such as target release and target cycle. However, current design of PPM Center does not support mapping a PPM field to a multi-valued Quality Center field.
WORKAROUND	None available at this time.

Integration with Universal CMDB (ALM)

PROBLEM	If a user selects more CIs than the maximum allowed CI number, an error message will pop up and it returns to the CI selector, but the selected CIs are gone. The user needs to select them again.
WORKAROUND	None available at this time.
PROBLEM	View Type, View Tree Name, and View TQL Name are deprecated in Universal CMDB 9.0, thus their values are not available.
WORKAROUND	None available at this time.
LIMITATION	Due to Universal CMDB 9.0 limitation, PPM Server must have the same domain name as the Universal CMDB server. For example, if the Universal CMDB server domain name is abc.chn.hp.com, the PPM Server must be xyz.chn.hp.com, such as anbo.chn.hp.com.
WORKAROUND	None available at this time.
LIMITATION	Due to Universal CMDB 9.0 limitation, PPM Server must be running on the save protocol as the Universal CMDB server. For example, if the Universal CMDB server is running on HTTPS, the PPM Server need to be running on HTTPS too.
WORKAROUND	None available at this time.

HP Demand Management

PROBLEM	If a request contains a rule that uses `KNTA_MULTI.Find_User_full_names([SYS.USER_ID])` from `sys.dual`, saving the request may fail or removing associated entities from the request may fail. (QCCR1L24349)
WORKAROUND	Use `KNTA_MULTI.Find_UserNames([SYS.USER_ID])` from `sys.dual` instead.
LIMITATION	A token unparseable error occurs when creating a request of a request type, where its validation referenced a non-existing token. (QCCR1L27418)
WORKAROUND	When you specify a validation for your request type, report type, or object type, make sure that the token(s) referenced by the validation already exist.
LIMITATION	When Text Field is set to “is equal to” the value of an Auto Complete List or Drop Down List value in the Dependencies section of the Rules tab in the request type workbench, the dependencies do not work; However, if the Text Field is set to match the code of the Auto Complete List or Drop Down List, the dependencies work well. (QCCR1L27020)
WORKAROUND	Considering the fact that Auto Complete List and/or Drop Down List values can be localized, which will then cause consistency issue for the dependencies, HP recommends you to match Text Field code to the code of Auto Complete List or Drop Down List when you set up request type field dependencies.

PROBLEM	File transfer from source environment to destination environment using Reflection for Secure IT for Unix (version 7.1) server fails when the environments were configured in a workflow execution step. (QCCR1L24976)
WORKAROUND	To use Reflection for Secure IT for Unix server to transfer files successfully, 1. Create a new Environment User Data using the following values: • **Field Prompt:** **DISABLE_SCP_FILENAME_QUOTE** • **Token:** DISABLE_SCP_FILENAME_QUOTE • **Enabled:** Yes • **Validation:** Yes No Radio Buttons • **User Data Column:** Select a value from the drop down list. • **Display:** Yes • **Display Only:** Never • **Required:** Never  Then, in the Environment you want to use, enable the newly created user data. For more information about creating and enabling user data, see the *HP Deployment Management Configuration Guide*. 2. Note down the Server environment and Client environment values you used in step 1. 3. Configure the workflow execution step and use the Server environment and Client environment values you noted down earlier for **Source Environment** and **Dest Environment** fields.

PROBLEM	If you used environment tokens in Object Type with special command `ksc_copy_server_server` and set the Source and Destination environments as its parameters, file transfer from source environment to destination environment with Reflection for Secure IT for Unix (version 7.1) server fails. (QCCR1L27758)
WORKAROUND	Modify the environment settings by following the instructions described in the *WORKAROUND* for QCCR1L24976.

HP Portfolio Management

PROBLEM	Transaction History and Notes History cannot be enabled in the Associated Programs field of a PFM - Asset, PFM - Project, or PFM - Proposal request header type or a copy of one of these request header types. Selecting **Yes** or **No** does not enable these auditing features. (QCCR1L26865)
WORKAROUND	None available at this time.

HP Program Management

PROBLEM	Program risk request types are not available.
WORKAROUND	Program risk request types are part of the Best Practices content. Best Practices must be installed/re-installed in order to use this content.

Multilingual User Interface (MLU)

PROBLEM	When deploying language packs, the logs will show the following error for all languages, except for the system language: `[java] java.sql.SQLIntegrityConstraintViolationException: ORA-02291: Integrity-Constraint (GEEK_01.KNTA_NOTIFICATIONS_LOC_FK) violated` This error has no functional impact. (QCCR1L27539).
WORKAROUND	None.

PROBLEM	When using Internet Explorer, using tooltips in the work plan may display a message about the page containing secure and nonsecure items, prompting you to continue. Each time a work plan is redrawn or refreshed, using tooltips in the work plan displays this message. (QCCR1L24383)
WORKAROUND	This message may be disabled from the Security Settings of the browser. From Internet Explorer: 1. Select **Tools > Internet Options.** 2. Select the **Security** tab. 3. Select the **Internet** Web content zone. 4. Click **Custom Level.** 5. Under **Miscellaneous** and **Display mixed content,** select **Enable.** 6. Click **OK.** 7. Click **OK.** 8. Restart Internet Explorer.
PROBLEM	When a user (such as a project manager or summary task owner) edits a task's resources directly from the work plan page, resources who are already assigned to the task are deleted if they do not belong to a resource pool managed by that user. Resources who have entered actual efforts for the task are not deleted. (QCCR1L26798)
WORKAROUND	Assign all users who manage resource assignments for the project as a resource pool manager to all resource pools that are associated with the project.
PROBLEM	If a user edits a task's external predecessor from the work plan page, when the task is saved, the external predecessor is deleted. (QCCR1L27616)
WORKAROUND	Use the Task Details page to edit a task's external predecessors. Do not edit external predecessors from the work plan page.
PROBLEM	When exporting a work plan to both PDF and Excel, if the work plan has a task with a name that contains double-byte numbers, the exported PDF differs from the exported Excel. In the exported PDF, the task name does not contain the doublebyte numbers. (QCCR1L14109)
WORKAROUND	None.

Operational Reporting

PROBLEM	Opening a linked report from the parent WEB Intelligence report results in the removal of data from the parent report results. This happens only if you open a linked report after you export the parent report to Excel and save it. Thereafter, if you click the refresh button on the parent report prompt, saved filter values are lost. (QCCR1L16514)
WORKAROUND	After you export a parent report to Excel, re-run the report with new prompt values, and then open the linked report without exporting it to Excel.
PROBLEM	Although you can run the operational reports that HP supplies, you cannot create or edit reports in InfoView without security risk. If you attempt to create or edit a Web Intelligence document in InfoView, a dialog box displays the message, “The application’s digital signal has an error. Do you want to run the application?” (QCCR1L25229)
WORKAROUND	Do not attempt to create or edit a Web Intelligence document in InfoView. If you do, then after the message, “The application's digital signal has an error. Do you want to run the application?” is displayed, click **Cancel.**
PROBLEM	A database error occurs if you provide a query prompt value that contains a backslash (\) character. (QCCR1L16066)
WORKAROUND	If you provide the prompt value manually, type two backslash characters instead of just one.
PROBLEM	If you export a Web Intelligence document that contains Asian characters to PDF format, the Asian characters are not exported. (QCCR1L25538)
WORKAROUND	None.
PROBLEM	In order to display a long text string so that it wraps to fit the width of a cell, InfoView adds a hyphen to the string in Web Intelligence documents. If a text string such as this contains Asian or particular European (Russian, Turkish) characters, InfoView places the hyphen(s) incorrectly so that some characters are not displayed in report results. This can occur in the Time Sheet Compliance report if the resource pool names are long and contain Asian characters. (QCCR1L25537)
WORKAROUND	Increase the width of cells in the report.
PROBLEM	If you modify the fiscal period definition in PPM Center after you set up the Operational Reporting schema and load PPM Center data, the changes to the fiscal period definition are not brought into in the Operational Reporting schema during subsequent incremental ETL operations. (QCCR1L27596)

WORKAROUND	Re-run the setup and load scripts to bring your changes to the fiscal period definition into the Operational Reporting schema.
PROBLEM	HP-supplied operational reports can sometimes omit result rows or incorrectly total row values if the results require a large number of rows to display. If you run an HP-supplied operational report and you specify query filter options that include a wide range of data that generate a large number of result rows, the last few rows and totals may be hidden by the Query Filter options text in the report results displayed. (QCCR1L26958)
WORKAROUND	Run the report from a new Web browser session.
PROBLEM	If the PPM Center database schema is restored from a data dump in which BusinessObjects was already configured, and the BusinessObjects scripts are re-run on the restored dump, the setup script cannot automatically drop the Oracle Change Data Capture (CDC) tables.
WORKAROUND	If the PPM Center database schema is restored from a data dump in which BusinessObjects was already configured, and you must re-run the BusinessObjects scripts on the restored dump, make sure that you manually drop all of the CDC tables before you re-run the BusinessObjects setup script.
PROBLEM	HP has noticed Oracle Internal Errors (Ora 600) for certain test data sets when accessing the HP PPM Operational Reports or during the process of ETL in the HP PPM Operational Reports.
WORKAROUND	If you encounter such errors, upgrade your Oracle Database software to version 11.2.0.1 or later to fix the problem.

After you install PPM Center version 9.11, you can locate the packages `rpt_sync_objects.plb` and `rpt_request_update_dimension.plb` under the `OpsReporting` folder, and then deploy these two packages on your Reporting DB schema to replace the previous version.

Other

LIMITATION	Because Oracle Enterprise DB Server is not supported on VMware, PPM Center (including the Operational Reporting solution) does not work with Oracle Enterprise DB Server on VMware.
WORKAROUND	None.