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Primavera

Portfolio Management Bridge for Microsoft Office Project Server User Guide
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Overview

The Project Management Bridge allows information required to manage project investments, such as schedule, cost, and resource information, to be published from Primavera Portfolio Management (PPM) to a Project Management System, where detailed project planning can be performed. Project information can be updated from the Project Management Server to PPM for portfolio management analysis and strategic decision-making.

This product provides the bridge that brings together the capabilities of the experts in portfolio management and project management, respectively. Portfolio management activities are conducted in PPM, while detailed project management information is managed and maintained in the Project Management System. Information can be synchronized between the two applications by two methods: on-demand, or automatically, according to a set periodic schedule.

Category information can be mapped to fields in the Project Management System. Mapped fields can be both published and updated. Publishing category data allows portfolio managers to send project level information such as budget and schedule goals, directly to the project managers' project plans. Updating category data with information from the Project Management System allows the portfolio manager to get accurate project level details such as exact schedule dates and cost/work figures.

In This Section

Basic Principles and Concepts

The Project Management Bridge was designed in accordance with the following guiding principles and concepts to make the system simple and manageable for both users and administrators:

- **Stand alone systems** – With Project Management Bridge, both Primavera Portfolio Management and the Project Management System continue to operate as they do in their standalone mode of operation. The Project Management Bridge allows them to share information, but does not attempt to have one application perform the tasks of the other application. For example, PPM should not be used to manage project level tasks, and the Project Management System shouldn't be used to group projects into portfolios.
- **Unidirectional Information Sharing** – A category in Primavera Portfolio Management can be set to either publish information to the Project Management System or be updated from the Project Management System. A single category cannot be set for both publishing and updating. Thus, conflicts are avoided. For example, a portfolio manager can define and use a category called Estimated Project Cost to publish cost estimates to the Project Management System. The manager can then define another category called Revised Project Cost Estimation to receive updated cost estimates made by the project manager in the Project Management System.

- **Schedule Management** – If a portfolio manger creates a new project in Primavera Portfolio Management, the manager can set the start and end date of the project and its phases. This information can be published once to the Project Management System, but from that point on the portfolio manager cannot overwrite the start and end dates in the Project Management System. In many systems, the Project Management System is configured as the source for updating PPM start and end dates for projects and project phases.
- **Templates and Lifecycles** – When a new project is published, the Project Management System can either use an existing template, or base the project on its PPM lifecycle. In the latter case, the Project Management Bridge uses an empty template and creates a summary task to represent each phase, basing it on the project's lifecycle in PPM. In either case, summary tasks in the Project Management System can be set to update phase information in PPM. This is performed by matching the names of summary tasks and phases. For more information on publishing in MS Project Server , refer to ***Entering Publish Mapping Definitions for Sub-Items Mode*** (on page 27) in ***The MS Project Bridge Settings Wizard*** (on page 23).
- **Project Level Data Mapping** – Categories in Primavera Portfolio Management can be set to publish or update information only at the project level. Task level information cannot be mapped directly to a category in PPM. For example, you can set a category in PPM to be updated by the total cost of the project in the Project Management System. You cannot set a category to map to cost from individual tasks in this project.
- **Filtered Data Mapping** – Data mapped from a field in the Project Management System to Primavera Portfolio Management can be filtered by time or resource. Time filters allow for the creation of categories such as 'Cost 2007' or 'Cost 2008 Q1'. Resource filtering allows you to filter information from the Project Management System fields based on resource field information, thereby creating categories such as 'Programmers Work Hours' and 'Managers Cost'. For more information on mapping in MS Project Server, refer to ***Entering Update Mapping Definitions for Phases Mode*** (on page 29) in ***The MS Project Bridge Settings Wizard*** (on page 23).
- **Baselines** – Baseline information can be mapped from the Project Management System to Primavera Portfolio Management.
- **Synchronization** – The Project Management Bridge can be set to automatically synchronize information between the systems according to a predefined schedule. This means that the system will publish and then update information for any item in Primavera Portfolio Management that is set to be included in the synchronization. In most systems, projects will not be included in the synchronization process unless the portfolio manager determines otherwise. This helps prevent unintentional exposure of sensitive data. The portfolio manager may decide to include items in the synchronization process if the manager wants the item to be updated on a regular basis and there is no fear of exposing data to the project manager and other Project Management System users. For a detailed description of the synchronization process refer to ***Configuring Synchronization*** (on page 10) in ***Configuring Project Management Bridge after Installation*** (on page 8).

Managing Workflow

Workflow between Primavera Portfolio Management (PPM) and the Project Management System can be managed using either a top-down or a project-based approach.

Top-Down Management

The typical Project Management Bridge customer is an organization that has been using Primavera Portfolio Management to manage its investments. Using the Project Management Bridge, it is possible to estimate costs and schedule for projects and candidate projects from within PPM, publish them to the Project Management System Server, and subsequently track their progress. The portfolio managers can also establish target dates and phases for the project manager.

In the Project Management System Server, the project manager fills in detailed project level information such as the resources, costs, and estimated time for the various phases of the project. At some later date which can be pre-arranged or based on a communication between the two managers, the portfolio manager updates Primavera Portfolio Management with the latest data.

At this stage, the portfolio manager can approve or reject the project based on the detailed project plan supplied by the project manager. The cost and work details coming from the project plan have the advantage of relying on exact schedule and resource availability considerations. The portfolio manager can now select in which project to invest based on the results of detailed project planning.

If the project is approved, the portfolio manager can make some notations and again publish the project to the Project Management System Server. The portfolio manager can monitor the project's progress through periodic updates and by comparing actual values to saved baseline values.

Project-Based Management

In this case, a company that has been working with the Project Management System imports its existing projects into Primavera Portfolio Management (PPM). Project managers generate the initial projects in the Project Management System Server, and portfolio managers import the projects into PPM to assess their performance.

The project manager chooses a suitable Project Management System enterprise template and begins generating project details. After the required project information has been entered, the project manager notifies the portfolio manager that the project is ready to be imported into PPM.

Once imported, the portfolio manager can view project details and receive up-to-date reports of costs and time. The portfolio manager can also use PPM to perform portfolio management tasks such as making investment selections based on prioritization and on alignment to business strategy.

Multiple Project Management Systems & Servers Support

The Project Management Bridge supports multiple Project Management systems and Servers. Different items in Primavera Portfolio Management can be mapped to projects located in different servers in the organization. In some organizations, multiple Project Management systems and servers are used for project level management for various reasons, such as:

- Performance – The organization has set up multiple project servers to cope with performance and scalability issues.

- Standards – Different departments may require their Project Management System Servers to be managed using different methods and different field naming conventions.
- System Types—Different departments or subsidiaries may use different project management systems such as P6 EPPM and Microsoft Project Server.
- Geography – An organization may have different Project Management System servers in different geographically dispersed sites.

The Project Management Bridge allows the portfolio manger to overcome the limitations inherited in multiple Project Management systems and server installations by providing:

- Centralized management – Portfolio managers can view all of the organization's projects in one place, regardless of the department or server in which they are located.
- Common Business Language – Fields from different servers and departments can be mapped into a single category in Primavera Portfolio Management, allowing you to compare and evaluate all segregated information in one portfolio.

The Project Management Bridge supports mappings to multiple servers while maintaining each server's ability to retain individual settings and configurations. In addition, you can save maintenance work in instances where your organization wants all or some Project Management systems or servers to share common settings and mapping configurations. Administrators can save or copy the configurations of one server and easily reapply them to other servers.

Configuring Project Management Bridge after Installation

For most configuration tasks, you use the *Bridge Console*, which you can access from the *Tools* menu in Primavera Portfolio Management (PPM). For more information on the Bridge Console, refer to ***Bridge Console*** (on page 16).

> **Note**: For installation information, refer to the *Oracle Primavera Portfolio Management Installation and Upgrade Guide*.

Verifying Installation

If the Bridge Console has been installed properly, one or more entries for **PM Bridge** appears in **Setup > Modules > Add-Ons**. In addition, if the user has Read & View permission on the PM Bridge Add-on module, a Tools menu is added to the menu bar in Primavera Portfolio Management.

If you have upgraded from a previous version, the Bridge Console (**Tools > Bridge Console**) continues to display the PM server the system was connected to before the upgrade.

Security

You must have the appropriate security permissions in order to use and configure PM Bridge. Your security permissions determine which PM Bridge features you can access and use, and the Primavera Portfolio Management objects, items, folders, and portfolios with which you can work. Security permissions are set in PPM. For full instructions on working with security in PPM, refer to *Working with Security* in the *Oracle Primavera Portfolio Management Security Guide*.

Accessing PM Bridge

PM Bridge adds a menu item called *Tools* to your Primavera Portfolio Management menu bar. From the *Tools* menu, you can access PM Bridge functions to the extent that your security permissions allow.

> **Note:** To access the *Tools* menu, you must have at least Read and View permission for the PM Bridge Add-On module.

To define security permissions for adding a Bridge Server:

1) In PPM, access the **Setup** module.
2) From the **Show** drop-down list, select **Modules**.
3) In the Modules window, select **Add-Ons**. A list of add-ons appears in the **Name** column.
4) In the **Name** column, select the relevant PM Bridge module (for example 'MS Project Bridge').
5) Select **Edit** to edit the security properties.

For more information, refer to *Working with Security* in the *Oracle Primavera Portfolio Management Security Guide*.

Publishing and Updating

To use the publishing and updating features, you must have Read and View permission for the PM Bridge Add-On module. You must also have Edit permission for the item you want to publish or update.

In addition, you must have the following access permissions for the data you want to publish or update:

- To perform updates, you must have Edit Data permission for all data you want to update.
- To publish, you must have Read permission for all data you want to publish.

> **Note:** When you do not have permission for part of the data, the Publish and Update processes continue until their completion, skipping the data with no permission. The skipped data is logged in the log report. This report can be opened from the Bridge Server Settings dialog box by your administrator.

Importing and Mapping Data

Importing brings projects from the project management system into Primavera Portfolio Management and maps project data to PPM items. For details, refer to *Data Mapping and Data Flow for MSP Bridge*.

> **Note**: To use the importing features, you must have Admin permission for the PM Bridge Add-On module.

Configuring Synchronization

The PM Bridge synchronization feature allows the administrator to synchronize data between the project management system and Primavera Portfolio Management (PPM), both immediately and at pre-determined intervals.

PM Bridge uses a specially defined Synchronization User, which the synchronization process uses to access data in PPM. For more information, refer to Setting the Synchronization User.

There are several ways for updating data between Primavera Portfolio Management and PM servers:

- **Publishing** – Creates and updates projects in the project management system based on existing PPM items. Refer to *Data Mapping and Data Flow for MSP Bridge*.
- **Updating** – Updates PPM items with information from the projects in the project management system. Refer to *Data Mapping and Data Flow for MSP Bridge*.
- **Importing** – Creates new items in PPM based on existing projects from the project management system.
- **Synchronization** – Updates the project management system with data from PPM and updates PPM fields with data from the PM system.

Defining Synchronization Parameters

Synchronization can be set to occur at defined periodic intervals. Synchronization can also be performed manually.

Each item that has been mapped between Primavera Portfolio Management (PPM) and PM system has a parameter that determines whether the item is included or excluded from the synchronization process. Additionally you can set this parameter to block manual publishing and updating, as well as excluding the item from the synchronization process.

The portfolio manager can use publishing, updating, and synchronization in whatever way works best for the particular project or company. For example, in the initial stages of a project, the manager might wish to maintain strict control over project data. To do this, the manager can disable periodic synchronization. In such cases, when the manager wants updated information in one of the systems, the manager can initiate a Publish or an Update.

In a later stage of the project, the manager might want to make sure there are frequent updates of data between Primavera Portfolio Management and the PM system. At this stage, the manager can change the setting to allow the item to be included in the periodic synchronization. If there is data the manager wishes to exclude from synchronization, the manager can set these items not to be synchronized. If the manager wishes to update these items, the manger can run an update. If there is data the manager never wants updated, the manager can set these items not to be updated either.

There are two stages of configuring synchronization:

- Setting up the synchronization parameters within the Bridge Server Settings wizard.
- Configuring periodic synchronization, or initiating an immediate synchronization from the Bridge Console.

Setting the Sync Mode Parameter

The Sync Mode parameter determines whether an item is published or updated when you publish, update, or synchronize a portfolio. When a portfolio is first published from Primavera Portfolio Management to the PM system or imported from the PM system to PPM, every item in the portfolio receives the default value for the Sync Mode parameter. For instructions on setting this default parameter in MS Project Server, refer to ***Entering General Defaults Information*** (on page 25) in ***The Project Management Bridge Wizard for MS Project*** (on page 23).

Afterwards, you can change the Sync Mode value individually for each item in the portfolio. The following are the possible values for the Sync mode:

- **Sync Periodically** – The item is included in the synchronization process. Additionally, the item can be manually published or updated.
- **Do Not Sync Periodically** – The item is not included in the synchronization process. However, the item can be manually published or updated.
- **Block All Publishing And Updating** – The item is not included in the synchronization process. The item cannot be manually published or updated.

To set the Sync Mode parameter for an item in a portfolio:

1) In Primavera Portfolio Management, open the Scorecard module. For instructions on working with scorecards, refer to *Working with the Portfolio Scorecard* in the *Oracle Primavera Portfolio Management User Guide*.
2) In the **Scorecard** drop-down list, select **Scorecards > System Scorecards > Project Management Bridge > Project Management Bridge Administration**.
3) In the **Portfolio** drop-down list, select the portfolio containing the item with which you are working.

   The following parameters appear for each item:

   - **Server** – The name of the PM Server to which this item is mapped.
   - **Project UID** – A unique ID assigned to each item at the time it is first published to the PM server or imported from the PM server into PPM.
   - **Sync Mode** – The item's synchronization mode, as explained in this section.
   - **Last Published on** – The date on which the item was most recently published to the PM server.

- **Last Published by** – The user that most recently published the item to the PM server.
- **Last Updated on** – The date on which the item was most recently updated.
- **Last Updated by** – The user that most recently updated the item.

4) Click the *Sync Mode* field for the item, and select the Sync Mode value you wish to assign to the item.

> **Note:** The Sync Mode category can be placed in additional Scorecards or Forms to allow better access to it in different workflows.

The Project Management Bridge Menu

Once the PM Bridge is installed, a new menu called *Tools* is added to the Primavera Portfolio Management (PPM) menu bar, Most PM Bridge operations are accessed from this menu.

> **Note:** If the Tools menu is not visible, check that your administrator has assigned you the proper permissions.

All Bridge operations originate in this menu.

To access the PM Bridge Menu, click the **Tools** menu.

The following Bridge-specific functions are accessed from the PM Bridge menu:

- Publish to PM
- Update from PM
- PM Web Access
- Bridge Console
- Help / About

Publish to PM

Publishes information for the current item or portfolio items to MS Project. When you publish a PPM item for the first time, a new project is created in MS Project. Subsequent publishing of an item allows new information to be shared with MS Project. For more information on publishing, refer to *Data Mapping and Data Flow for MSP Bridge*.

> **Note:** If you are in Investor or Scorecard when you publish, all the items in the selected portfolio are published. If you are in Forms, Dashboards or Workbook, only the item displayed or items in the displayed portfolio are published.

Update from PM

MS Project updates the currently selected Primavera Portfolio Management item (or items in the displayed portfolio) with new information from MS Project. Through the update feature, portfolio managers can stay current with the progress of active and developing projects.

Note:

- If you are in Investor or Scorecard when you update, all the items in the displayed portfolio are updated. If you are in Forms, Dashboards or Workbook, only the item displayed or items in the displayed portfolio are updated.
- Update can run only if the selected item is mapped or published to a project on the MS Project. Server.

PM Web Access

PM Web Access opens a browser window to the MS Project web application server, enabling you to view project level details or perform tasks in MS Project. If you have selected an item which is mapped to the server, the browser will open in Project view and display the selected project.

Bridge Console

The Bridge Console is the main window for managing the Bridge. Using the Bridge Console, the administrator can monitor all MS Project servers associated with PPM. Use the console to:

- View all servers, including status information and synchronization information.
- Add and remove MS Project servers.
- Initiate a sync for a single server, or for multiple servers.
- View logs and configurations (reports) of each server.
- Access each server's Project Web Access, MS Project server’s web interface.
- Load, save, and Edit server settings.

Note: The Options dialog that was available from the Tools menu in previous versions can now be accessed by selecting a server and clicking **Edit** from within the Bridge Console.

Help / About

- **Help** – Opens the PM Bridge help.
- **About Project Management Bridge** – Displays version and patent information for PM Bridge.

Importing Projects

The import process is used for one of the following options:

- Create new items in PPM based on projects in a PM System, and map them to each other.
- Map projects from a PM System to existing items in PPM.

The Import feature is used when:

- You are installing the system for the first time in an environment that has been using a PM System but not Primavera Portfolio Management, and you are planning to import all the projects and create new items based on them in PPM.
- You are installing the system for the first time in an environment that has been running both products side by side, and now you want to map projects in PM System to their counterparts in PPM.
- You have an environment where projects are initiated in PM System, and you want to create new mapped items in PPM, based on the projects in PM System.

The following sections provide the procedure for importing projects from PM server to PPM.

> **Note:** In a multiple server environment, you will need to import projects from each server individually (Tools > Bridge Console > Import). After the import, the system remembers to which PM Server each item is mapped and uses this information during subsequent publishing.

Importing by Creating New Items

When you have one or more projects that were created and managed in PM Server, and you want to start managing them inPrimavera Portfolio Management as well, you need to import them into PPM. Since the imported projects were not created in PPM, the system creates a new item in PPM for each imported project and maps it to its counterpart in PM Server. As a result of this mapping these projects share and exchange information during the next Publish and Update processes.

To create new Primavera Portfolio Management items based on projects in PM Server:

1) Select **Tools** > **Bridge Console…**. The Bridge Console dialog box appears.
2) Select a PM server from the list, and click **Import**.
3) In the **Import** wizard, select **Create new items** to have a new item created in PPM for each project imported from the selected server.
4) Select **Map to existing items** to map each imported project to a specific item in PPM.
5) Click **Next** to select the projects you would like to import.

   The left pane lists projects in PM Server that have not yet been imported or mapped to PPM.

> **Note:** When the system creates a new item in PPM during import, it assigns this item the name of the project it is based on in PM Server. The system can not create a new item if there is already an existing item in PPM with the same name. In such a case, either change the name of the project in PM Server before importing it, or use the mapping method described in the ***Importing by Mapping to Existing Items*** (on page 15).

6) Highlight the project or projects you want to import, and click **Add**. The project or projects are moved into the **Selected Projects** pane.

> **Note:** You can select multiple projects by using the corresponding checkboxes and then clicking **Add**. If you select more than one item to

import, they will have the same home portfolio, manager, Status, Sync Mode, and Life Cycle. Only import multiple items if you are certain that the projects share the same settings.

If you selected to **Create new items** in the first step of the wizard, when you click **Next** you will be able to fill out the information needed to create the new items.

1) Assign a portfolio to be the Home Portfolio of the items you are importing. You can change this later within the item itself. This is a required field.
2) Assign a manager to the new Primavera Portfolio Management items.

Note: If you have Admin permission for the specified home portfolio, you can set any other user to be the manager of the new items. If you do not have Admin permission for the specified home portfolio, you can only set yourself to be the manager of the items.

1) Select a Status of **Open**, **Closed**, or **Candidate** for the items.
2) Select the Life Cycle you are applying to the new Primavera Portfolio Management items.
3) Select the Sync Mode you are applying. For more information on Sync Modes, refer to Setting the Sync Mode Parameter in Configuring Project Management Bridge after Installation.
4) Depending on the server settings, you may need to select the Mapping Mode you are applying. For more information on mapping in MS Project Server, refer to Entering Update Mapping Definitions for Phases Mode and The Project Management Bridge Wizard for MS Project.
5) Click **Import** to start importing the selected projects. A progress indicator appears.
6) When the progress indicator displays a message that the process is complete, click **Close**.

Importing by Mapping to Existing Items

There may be cases where one or more projects were created separately in both Primavera Portfolio Managementand PM System, but they were not mapped to each other. If they are not mapped to each other they can not share and exchange information during Publish and Update. This section provides the procedure for mapping projects from PM Server to items in Primavera Portfolio Management. After performing this procedure the system enables these items in PPM to share and exchange information with their corresponding projects in PM Server during Publish and Update.

To map projects in PM Server to existing Primavera Portfolio Management items:

1) Select **Tools** > **Bridge Console…**. The Bridge Console dialog box appears.
2) Select a PM server from the list, and click **Import**.
3) Click **Import**.
4) Select **Map to Existing Items** and click **Next**.

   The left pane displays projects in PM Server that have not been imported or mapped to PPM.
5) Select the project or projects you want to import, and click **Add.** The project or projects are moved into the **Selected Projects** pane.

6) Click **Next**. The left column in the table will list all the projects from PM Server you have selected.
7) For each project in the left column, select the item from PPM you want to map it to from the drop down list in the right column. Items and Projects do not have to have a matching name.
8) If you want to sync information between mapped items and projects immediately following the import, make sure that the **Sync information between mapped items and projects at the time of mapping** checkbox is checked.
   For more information on Sync Modes for MS Project Server, refer to Entering General Bridge Server Settings Information in The Project Management Bridge Wizard for MS Project.
9) Depending on the server settings, you may need to select the Mapping Mode you are applying. For more details on Mapping Modes in MS Project Server, refer to Entering General Defaults Information in The Project Management Bridge Wizard for MS Project.
10) Click **Import**.
11) When the progress indicator displays a message that the process is complete, click **Close**.

Bridge Console

Most PM Bridge administrative tasks are performed via the Bridge Console dialog box. The *Bridge Console* dialog box is accessed from the Tools menu in Primavera Portfolio Management (PPM).

You must have Admin permission to access the Bridge Console dialog box. For users that haven't been granted the Admin permission, the Bridge Console option is grayed out in the Tools menu.

> **Note:** The Tools menu is added to a user's menu options only if the user is assigned View permission in the module security setup for the PM Bridge add-on. If the user does not have View permission, the Tools menu does not appear on the user's toolbar.

To open the Bridge Console, click **Tools**, **Bridge Console**.

The Bridge Console is the main window for working with the PM Bridge. The console provides a list of all configured Project Management system servers, their status, and related synchronization information. The administrator can use the Bridge Console to define Project Management system servers and to monitor their connection and synchronization status.

This chapter consists of the following sections:

- Project Management Systems Server List
- Status Area
- PM Bridge Console Operation

Project Management Systems Server List

The console displays a single row for each Project Management system server associated with the PM Bridge.

You can sort the rows by clicking the column heading of any column.

The following fields appear for each row in the list of servers:

- **Connection Status Column** – The icons in this column represent the status of the connection between the PM Bridge and the Project Management system server. Information about the selected server is shown in the status area. The following table lists the status icons and their meaning.

Icon	Meaning
	Status - OK Connection to Project Management server is valid and properly configured.
	Status – Warning Project Management server is working but not fully functional (i.e. OLAP cube not available etc.)
	Status – Error No connection between the PM Bridge and Project Management server.
...	Loading, Please wait… System is waiting for status information.

> **Note:** The status icon is not refreshed automatically as system events occur. The status is updated after each refresh or load of the window. To refresh the window, press F5.

- **Server Name** – Displays the name of the Project Management system server. To change a server name in MS Project Server, refer to Entering General Bridge Server Settings Information in The Project Management Bridge Wizard for MS Project.
- **Sync Type** – Displays the type of synchronization: **Manual** or **Periodic**. To change the sync type in MS Project Server, refer to Entering General Defaults Information in The Project Management Bridge Wizard for MS Project.
- **Sync Status** – Displays the synchronization between the PM Bridge and the Project Management system server. Possible values are:
  - **Completed (Success)** – The latest synchronization process completed without any errors.
  - **Completed (Errors)** – The latest synchronization process completed, but there were some errors. Check the server log to see the errors.
  - **Failed** – The latest synchronization process failed to complete. Check the server log to see the errors.
  - **Running** – A synchronization process is currently running. You cannot start a new synchronization process until this one is completed.
  - **Never Synced** – No synchronization process has been run for this server.
- **Last Sync** – Displays the date and time the last synchronization process finished. If the sync failed, the date and time of the failure are shown.

- **Next Sync** – Displays the date and time the next sync is scheduled to start. If the sync type is *manual*, *n/a* appears in this field. To change the sync type in MS Project Server, refer to ***Entering General Defaults Information*** (on page 25) in ***The Project Management Bridge Wizard for MS Project*** (on page 23).

Status Area

The status area at the bottom of the console displays status messages for the selected Project Management system server. The same messages can be viewed using the Viewing a PM Server Log Button and in the General step of the Bridge Server Settings wizard. For more information on the status area in MS Project Server, refer to Entering General Bridge Server Settings Information in The Project Management Bridge Wizard for MS Project.

Oracle recommends checking the server logs for any server that indicates an error in the status window on the Bridge Console dialog box.

PM Bridge Console Operation

The Bridge Console is the central place to define and access various PM Bridge components. Perform the necessary operations using the buttons described in the following sub sections:

- Adding a PM Server describes how to add a new Project Management system server.
- Checking Server Status describes how to check the server status.
- Editing the PM Server Configuration describes how to edit an existing Project Management system server.
- Removing a PM Server describes how to remove a Project Management system server from the servers list.
- Synchronizing Projects from a PM Server describes how to synchronize the mapped projects on the selected Project Management system server.
- Importing Projects from a PM Server describes how to import projects from a Project Management system server.
- Accessing a PM Server's Web Interface describes how to access the PM server using its web interface.
- Viewing a PM Server Log describes how to view the Bridge's log for the selected PM server.
- Printing the PM Server Configuration Report describes how to view and print the PM server s settings report.
- Loading PM Server Settings describes how to load existing server settings from one server to another, or from an existing XML file.
- Saving PM Server Settings describes how to save existing PM server settings as an XML file.
- Viewing the System Log describes how to view the system log containing events from all servers.
- Setting the Synchronization User describes how set up the Primavera Portfolio Management user credentials to be used by the synchronization process.

Adding a PM Server

You can set up access to one or more project management servers by using the Add button on the Bridge Console. Each server that you add is listed in the PM Servers List. Once you have added a server, users can publish information to the server and update Primavera Portfolio Management with new information from that server.

To add a server, you need the URL, user name, and password for the server, as well as a name and description to describe the server in the Bridge Console.

To add a project management server to Primavera Portfolio Management, click **Add** on the Bridge Console. If your system is set up to accept more than one kind of project management server, select the server type from the drop-down list. For more information on setting up servers in MS Project Server, refer to Entering General Bridge Server Settings Information in The Project Management Bridge Wizard for MS Project.

Checking Server Status

Each server that you add is listed in the Servers List in the Bridge Console. To the left of each server entry is a status icon indicating the current status of that server. The status of each server can also be viewed from the Options dialog box of the server.

To view detailed status information about the server, select the server in the Bridge Console. To view additional information, or to run the system test that updates the status indications, click **Edit**. For more information refer to Editing the PM Server Configuration.

Editing the PM Server Configuration

You can edit the project management server configuration in the Bridge Console.

To edit a project management server, double-click on the server you want to edit, or select the server name and click **Edit** from the Bridge Console. For more information on editing servers in MS Project Server, refer to Entering General Bridge Server Settings Information in The Project Management Bridge Wizard for MS Project.

Removing a PM Server

You can remove a project management server configuration by using the Remove function on the Bridge Console.

To remove a project management server:

1) On the Bridge Console, select the server you want to remove and click **Remove**.

> **Note:** removing a server causes all of the server settings as well as the project mappings to be lost.

2) Select **OK** to continue or **Cancel** to abort the operation.

Synchronizing Projects from a PM Server

You can synchronize your server by using the Sync button on the Bridge Console.

To synchronize projects from a PM server:

1) On the Bridge Console, select the server you want to remove synchronize and click **Sync**.
2) Select **OK** to continue or **Cancel** to abort the operation.

Importing Projects from a PM Server

You can import project into your server by using the Import function on the Bridge Console. For more information on the Import functionality, refer to Importing Projects.

Accessing a PM Server's Web Interface

Project Web Access is the Project Management server web interface enabling you to view all projects in the Project Server, or view project level details. You can open the Project Web Access for a selected Project Management server from the Bridge Console.

To open Project Web Access for a PM server, from the Bridge Console, select a server row and click **Web Access.** The Project Web Access web page is launched.

> **Note**: The Web Access button is enabled only if a single server is selected.

Viewing a PM Server Log

The server log contains status and error information about individual servers. You may want to check the server log if you see any errors concerning the server in the status area of the Bridge Console.

The server log allows you to follow events that are related to a specific server, such as publishing or updating an item, importing an item, or sync operations that were run on the server.

To view the log for a project management server from the Bridge Console, select a server row and click **Log**. The Project Management server Log Report window appears, displaying all events related to that server.

To view all servers' logs, click **System Log** in the bottom right of the Bridge Console. The System Log window appears, displaying all events related to all bridge servers.

Printing the PM Server Configuration Report

You can view a print-ready report of all the settings for a selected PM server. The report opens in a separate window. The report is intended to assist the Primavera Portfolio Management administrator in comparing and communicating server settings while working in a multiple server environment. It is also a good way to communicate with PM server administrators to ensure that common settings are applied across the enterprise.

To view the report for a PM server:

From the Bridge Console, select a server row and click **Report.** A Project Management server Report window appears, displaying the server's configuration information.

Loading PM Server Settings

You can automatically configure a server, either by loading the configuration from a saved configuration, or by copying the configuration directly from another server.

Loading or copying the server options provides the following benefits:

- Saves work by applying settings that were entered once to multiple targets.
- Provides administrators with a set of standard settings for all servers, with an efficient tool to duplicate settings.
- Allows you to copy settings from a development server to a production server.
- Allows you to move settings from one PPM server to another server.
- Allows you to backup the settings of a server.
- Load settings from a previous version of PPM by loading from an XML file.

For information on saving a configuration to a file, refer to ***Saving PM Server Settings*** (on page 22).

To load options to a server, select one or more servers and click **Load** from the Bridge Console**.**

> **Note**: You can load settings to multiple servers at once by selecting more than one server and then clicking **Load**.

1) To copy a configuration from another server, select **Copy options from server** and select the server from the dropdown list.
2) To load the configuration from a saved configuration file, select **Load options from file** and enter the path to the XML file in the text box. You can also enter the path to the file by browsing for the file using the **Browse** button.

> **Note**:
>
> - Server options can be loaded only from a file that was saved in the Bridge Console, using the Save As button or from a Bridge Package file that was saved using the Bridge Packager in previous versions.
> - It is not possible to load to a P6 server settings file used in MSP project servers and vice versa.

1) When loading options to the server, all of the server's existing options are, by default, replaced with the new options. If you want to exclude an option set from being loaded, uncheck that option on the Load Server Options dialog box. The sets you can exclude are:
    - Sync
    - Defaults
    - Publish
    - Update

Each checkbox correlates to a step in the Bridge wizard. By unchecking the box of a set, you prevent the system from replacing the options that are stored in that set. For example, if you want to copy the Publish and Update category-field mappings from one server to another, but want to preserve the Sync times of the target server, uncheck the Sync checkbox before loading the options.

2) Click **OK** to finish. If you are loading new settings to a single server, a confirmation dialog box appears, warning you that the current settings for this server will be overwritten if you continue.
3) Click **OK** in the confirmation dialog box. The selected options are loaded to the server.

Saving PM Server Settings

You can save a server configuration to a file. You can use this file to backup your server settings before making changes, or to load these settings to another server at another time. You can also copy the file to another machine with Primavera Portfolio Management and Bridge, and use it on that machine to load the configuration to one of the listed PM servers.

To save a server configuration to a file:

1) From the Bridge Console, click **Save As.**
2) Click **Save**.
3) Browse to the directory in which you want to save the file, enter a file name (or leave the default file name), and click **Save**. The settings are saved to the selected file.

Viewing the System Log

The PM Bridge system log contains status and error information about the PM Bridge. You may want to check the system log if you see errors concerning the servers in the status area of the Bridge Console.

The Primavera Portfolio Management Bridge System Log Report allows you to view all the Bridge related events, including all the events that are documented in the different server logs and system level events, such as portfolio publish and update, and system level sync operations. The log opens in a separate window.

To view the system log, click **System Log** in the bottom right of the Bridge Console.

Setting the Synchronization User

Note: This option is relevant only for P6 and MS Project installations.

In order to run, the synchronization process must run under the credentials of a PPM user.

To set the synchronization user:

1) Click **Select…** in the bottom right of the Bridge Console.
2) Select the user name from the drop-down list and specify a password for that user.
3) Click **OK** to set the selected user as the Sync User.

Note: If the password of this user changes, the Sync User password must be updated, or the synchronization process will fail.

The Project Management Bridge Wizard for MS Project

The Project Management Bridge Server Settings wizard lets you setup the transfer of data back and forth between Primavera Portfolio Management (PPM) and the Microsoft Office Project Server.

The MS Project Bridge Settings Wizard provides a step-by-step description of the Bridge Server Settings Wizard for Microsoft Office Project Server.

The MS Project Bridge Settings Wizard

To setup the PM Bridge and MS Project server, complete the steps below:

1) Accessing the Bridge Server Settings Wizard describes how to access the Bridge Server Settings Wizard.
2) Entering General Bridge Server Settings Information describes how to enter general information for the PM Bridge setup including server name, URL, reporting database definition and synchronization schedule.
3) Entering General Defaults Information describes how to enter the defaults that will be used to link PPM items with MSP projects.
4) Entering Mode-specific Defaults Information describes how to enter mapping defaults in Sub-items mode and Phases mode.
5) Entering Mode-specific Publish Mapping Definitions describes how to enter publish mapping definitions for Sub-items mode and Phases mode.
6) Entering Mode-specific Update Mapping Definitions describes how to enter update mapping definitions for Sub-items mode and Phases mode.

Accessing the Bridge Server Settings Wizard

This section describes how to access the Bridge Server Settings Wizard.

1) From the Tools menu select the **Bridge Console** option.
2) Click **Add** to define the bridge server settings for a new server.

   OR

   Select an MS Project server from the list and click **Edit**.

Note: The Bridge Server Settings wizard can also be accessed by double clicking on a specific server name in the Bridge Console window.

Entering General Bridge Server Settings Information

This section describes how to enter general information about the new value list, including the list name and description.

1) Open the *Bridge Server Settings Wizard*, as described in Step 1. The *General* step of the *Bridge Server Settings Wizard* is displayed.
2) In the **Status** area you can view the status of the servers that are currently defined.
3) In the **Synchronization** area, you can define the frequency of the synchronization:
   - Check the Sync every checkbox and enter the number of weeks/days/hours between synchronizations.
   - You can view and edit the date and time of the Next Sync by selecting the necessary date from the pop-up calendar and selecting the hour from the drop-down list.
   - Select a **Sync Time Out** value. The value in this dropdown signifies the time span for which the system will wait for the sync job to complete before it stops the job (in case of a manual sync) or stops the job and restarts the job (in case of a scheduled sync).You can select from the following options:
     - 15 min
     - 30 min
     - 1 hour
     - 3 hours
     - 6 hours
     - 12 hours
     - 23 hours
     - Unlimited
4) Click **Test** to test the connection with the defined server.
5) Click **Log** to open the Project Management Server Log Report window. In this window you can review the PM Bridge – MS Project interactions logged by Primavera Portfolio Management

   The Project Management Server Log Report includes the following columns: **Time**, **Event**, **Object Name**, **Status**, **User**, **Error Code**, and **Description**.
6) In the **Server Name** field, enter the name of the server with which you would like to synchronize.
7) In the **MS Project Server URL** field, enter the URL of the server with which you would like to synchronize.

> **Note:** Make sure that the name and URL you supply are unique in the system and that the server is not mapped to another Primavera Portfolio Management server.

1) In the **Description** field, enter an (optional) description for the defined server.
2) In the **Access to MS Project Server** area, select either **Forms Authentication** or **Windows Authentication** from the **Authentication** drop-down list. Enter the **User Name** and **Password** that will be used to access the server.
3) Click **Next** to proceed to the next step, Entering General Defaults Information.

Entering General Defaults Information

This section describes how to enter the defaults that will be used to link PPM items with MSP projects.

1) In the Bridge Server Settings Wizard, in the **Mapping mode** field, select one of the following mapping modes:
   - **Sub-items**: When data is published or updated with the PPM-MSP bridge, data will be shared at the sub-item level, and you can modify the Defaults, Publish, and Update settings on the Sub-Items Mode tabs.
   - **Phases**: When data is published or updated with the PPM-MSP bridge, data will be shared at the phase level, and you can modify the Defaults, Publish, and Update settings on the Phases Mode tabs.
   - **Either Phases or Sub-Items (User-selectable)**: When data is published or updated with the PPM-MSP bridge, data will be shared at either the sub-item level or the phase-level, and you can edit settings on both the Sub-Items Mode and Phases Mode tabs.
2) Pick the synchronization schedule for newly-mapped items. In the **Sync mode for newly mapped items** field, choose among:
   - **Do not sync periodically:** PPM items containing this setting will not be synchronized automatically.
     In order to have data transfer for these items you need to manually select either **Publish** or **Update** from *Tools* menu.
   - **Sync periodically:** PPM items containing this setting will automatically be synchronized with their mapped projects on MS Project Server on the date and time defined in the *General* step.
   - **Block all publishing and updating:** this option blocks all synchronization operations between MS Project and PPM.

   > **Note:** For a detailed description of the synchronization process refer to Configuring Synchronization in Configuring Project Management Bridge after Installation.

3) In the **Upon Update or Sync, MSP data will be transferred into PPM categories** field, specify which data is transferred to PPM categories when data is updated or synced:
   - **All MSP data, modified or not**: All MSP data is transferred to PPM.
   - **Only the MSP data that was modified**: Only modified MSP data is transferred to PPM. This setting helps improve performance by limiting the amount of data that needs to be transferred.
4) From the **MSP 2013 / 2016 project field to be hyperlinked to Primavera Portfolio Management** drop-down list, select the field that will contain the URL to the PPM item.
5) In the the **Mapping** area, specify how the application handles start and end dates:
   - Check **Add item Start Date and End Date references during initial mapping** to include the PPM item's Start and End dates.
   - To define an automatic update of these milestones during every Publish, check the **Publish item Start Date and End Date changes** checkbox.

> **Note**: When you select to add the Start and End dates for the item during the initial mapping, corresponding Start and End date milestones are created in the MSP application. This means the project will not be able to start later than the specified Start Date nor end before the specified End Date. You may delete these automatically-created milestones.

- When the Add phase date references during initial mapping option is checked, phase date references will be added to the project in MSP.

6) Click **Next**.

Entering Mode-specific Defaults Information

You can enter defaults information for Sub-items mode and Phases mode, depending on the value you chose in the **Mapping mode** field on the general **Defaults** tab.

- Entering Defaults Information for Sub-Items Mode
- Entering Defaults Information for Phases Mode

Entering Defaults Information for Sub-Items Mode

If you set the Mapping mode to **Sub-Items** or **Either Phases or Sub-Items**, you can specify Defaults settings for **Sub-Items Mode**.

To specify Defaults settings for Sub-Items Mode:

1) On the Defaults tab under Sub-Items Mode, in the **Sub-Item type** field, select the kind of data that sub-items represent. The value of this field defines sub-items for the subsequent steps on this tab.
2) In the **Sub-item name defined by** area, specify whether PPM or MSP data defines the names of sub-items:
   - **PPM (publish - Summary Task Level 2)**: Choose this option if you want sub-item names to be defined by PPM, up to the second Summary Task level.
   - **MSP (update - All Summary Task Levels)**: Choose this option if you want sub-item names to be defined by MSP for all Summary Task levels.
3) In the **Publish** area, specify how the application handles sub-items and summary tasks during publication:
   - **Create a new Summary Task for each new sub-item**: Choose this option if you want the application to create a new top-level summary task in MSP for each sub-item that doesn't have a top-level summary task.
   - **Remove any Summary task which lacks a corresponding sub-item**: Choose this option if you want the application to remove every top-level summary task in MSP that does not have corresponding sub-items in OPPM.
   - **Publish data fields of existing projects and Summary Tasks**: Choose this option if you want the application to update the existing top-level summary tasks and projects in MSP with the data in OPPM.

4) In the **Update** area, specify how the application handles sub-items and summary tasks during updates:
   - **Create a new sub-item for each new Summary Task**: Choose this option if you want the application to create a new sub-item for each top-level summary task in MSP that doesn't have a corresponding sub-item in OPPM.
   - **Remove any sub-item which lacks a corresponding Summary Task**: Choose this option if you want the application to remove a every sub-item that doesn't have a corresponding top-level summary task in MSP.
   - **Update categories of existing items and sub-items**: Choose this option if you want the application to update categories that have items and sub-items with data from top-level Summary tasks in MSP.
5) In the **Default template for initial publish** field, choose an MSP template to define how projects are created in MSP during initial publication.
6) Click **Next**.

Entering Defaults Information for Phases Mode

If you set the Mapping mode to **Phases** or **Either Phases or Sub-Items**, you can specify Defaults settings for **Phases Mode**.

To specify Defaults settings for Phases Mode:

1) On the **Defaults** tab under **Phases Mode**, choose among the following Mapping, Publish, and Update options:
   - **Add phase date references during initial mapping**: Choose this option if you want phase date references to be added to the project in MSP.
   - **Publish deliverables**: Choose this option if you want PPM deliverables to be published as milestone tasks in MSP
   - **Update phases from corresponding summary tasks**: Choose this option if you want PPM phase dates and % complete values to be updated during the Update operation.
   - **Update deliverables from corresponding milestone tasks**: Choose this option if you want the due dates and completion dates to be updated during the Update operation
2) Click **Next**.

Entering Mode-specific Publish Mapping Definitions

You can enter publication mapping definitions for Sub-items mode and Phases mode, depending on the value you chose in the **Mapping mode** field on the general **Defaults** tab.

- Entering Publish Mapping Definitions for Sub-Items Mode
- Entering Publish Mapping Definitions for Phases Mode

Entering Publish Mapping Definitions for Sub-Items Mode

You can enter mapping definitions for the Publish operation in Sub-Items Mode. Publish mapping involves selecting a PPM category and matching it to an MSP project field or code.

To map an MSP project field:

1) On the **MSP Project** Fields tab, double-click in the *PPM Categories* column to select the PPM category you would like to map to MSP.
2) Double-click in the *MSP Project Fields* column to select the corresponding MSP project field.
3) Repeat this process for every MSP project field you want to map.
4) To remove a previously defined mapping, select the category or project field from the list and click **Remove**.

To map an MSP task field:

1) On the **Task Fields** tab, double-click in the *PPM Categories* column to select the PPM category you would like to map to MSP.
2) Double-click in the *MSP Task Fields* column to select the corresponding MSP task field.
3) Repeat this process for every MSP task field you want to map.
4) To remove a previously defined mapping, select the category or project field from the list and click **Remove**.
5) When you are done specifying publish mapping definitions, click **Next**.

Entering Publish Mapping Definitions for Phases Mode

You can enter mapping definitions for the Publish operation in Phases Mode. Publish mapping involves selecting a PPM category and matching it to an MSP project field or code.

1) On the Publish tab under Phases Mode, Double-click in the *PPM Categories* column to select the PPM category you would like to map to MSP.
2) Double-click in the *MSP Project Fields* column to select the corresponding MSP project field.
3) Repeat this process for every MSP project field you want to map.
4) To remove a previously defined mapping, select the category or project field from the list and click **Remove**.
5) When you are done specifying Project and Task fields, click **Next**.

Entering Mode-specific Update Mapping Definitions

You can enter update mapping definitions for Sub-items mode and Phases mode, depending on the value you chose in the **Mapping mode** field on the general **Defaults** tab.

- Entering Update Mapping Definitions for Sub-Item Mode
- Entering Update Mapping Definitions for Phases Mode

Entering Update Mapping Definitions for Sub-Item Mode

You can enter mapping definitions for the Update operation in Sub-Item Mode. Update mapping involves selecting an MSP project field and matching it to a PPM category.

To map an MSP project field:

1) On the **MSP Project Fields** tab, double-click in the **MSP Project Fields** column to select the MSP project field you would like to map to PPM.
2) Double-click in the **PPM Categories** column to select the corresponding PPM category.
3) Repeat this process for every MSP project field you want to map.

4) To remove previously defined mapping, select the project field or a category from the list and click **Remove**.

To map an MSP task field at the item level:

1) On the **Task Fields (Item)** tab, double-click in the **Task Fields (Item)** column to select the MSP task field you would like to map to PPM.
2) Double-click in the **PPM Categories** column to select the corresponding PPM category.
3) Repeat this process for every MSP task field you want to map.
4) To remove previously defined mapping, select the project field or a category from the list and click **Remove**.

To map an MSP task Field at the sub-item level:

1) On the **Task Fields (Sub-Item)** tab, double-click in the **MSP Task Fields** column to select the MSP task field you would like to map to PPM.
2) Double-click in the **PPM Categories** column to select the corresponding PPM category.
3) Repeat this process for every MSP task field you want to map.
4) To remove previously defined mapping, select the project field or a category from the list and click **Remove**.

To map a reporting database:

If you want a breakdown of cost or work by time slices or by resource type, you need to map data in the MSP Reporting Database. In general, only task fields are available through the MSP Reporting Database.

1) On the **Reporting Database** tab, double-click in the **MSP Project Fields** column to select the MSP project field you would like to map to PPM.
2) Double-click in the **Filter** column.
3) In the Filter dialog box, in the **Period** field, select the period that you want to summarize.
4) In the **Summarize** field, specify the resources about whom summarized data is shown.
5) Click **OK**.
6) Repeat this process for every MS project field you want to map to the Reporting Database.
7) To remove previously defined mapping, select the project field or a category from the list and click **Remove**.
8) To edit a previously defined Filter, select the project field or category from the list and click **Edit**.
9) When you are done specifying update mapping definitions, click **Finish**.

Entering Update Mapping Definitions for Phases Mode

You can enter mapping definitions for the Update operation in Phases Mode. Update mapping involves selecting an MSP project field and matching it to a PPM category.

To map an MSP project field:

1) In the **Project Fields** tab, double-click in the **MSP Project Fields** column to select the MSP project field you would like to map to PPM.
2) Double-click in the **PPM Categories** column to select the corresponding PPM category.

3) Repeat this process for every MSP project field you want to map.
4) To remove previously defined mapping, select the project field or a category from the list and click **Remove**.

To map an MSP task field:

1) In the **Task Fields** tab, double-click in the **MSP Task Fields** column to select the MSP task fields you would like to map to a PPM category.
2) Double-click in the **PPM Categories** column to select the corresponding PPM category.
3) Repeat this process for every task field you want to map.
4) To remove previously defined mapping, select the task field or a category from the list and click **Remove**.

To map a reporting database project field:

1) In the **Reporting Database** tab, double-click in the **MSP Project Fields** column to select the MSP project field you would like to map to a PPM category.
2) To filter the field, double-click in the **Filter** column, or select the cell and click **Edit**. All fields can be filtered by Period*.* Additionally, some fields can be filtered by Resource Field*.* As you can see in the **Resource Field** drop-down list, only user-defined resource fields are available*.*

   For example, assuming you select a resource field called **Actual Work** and filter it by defining the **Period** as `year`, the **Year** as `2008`, the **Resource** field as `Resource Skill` and the **Value** as `Developer`, as displayed below.
3) Double-click in the **PPM Categories** column to select the corresponding PPM category.
4) Repeat this process for every field you want to map.
5) To remove previously defined mapping, select the project field or category from the list and click **Remove**.
6) When you are done specifying update mapping definitions, click **Finish**.

Viewing Information from the Project Management System

As the portfolio manager, you may occasionally want to look at the project level details that are found in the project plan in the Project Management system. Primavera Portfolio Management provides you with the following ways of accessing and viewing such information:

- **Project Web Access** - A menu command that opens a Project Management system server web page, called Project Web Access, which is in context with your current view in Primavera Portfolio Management.
- **Web Portlet** - A form component that can be set up to show the Project Management system views from within a form in Primavera Portfolio Management.

Project Web Access

The Project Web Access command, found in the Tools menu in Primavera Portfolio Management, enables you to open a Project Management system Web Access view in a new browser window. If you are viewing an item (which has been published to the Project Management server) in the Forms or Workbook module, the browser opens and displays the View A Project page of the project that is mapped to the item in the Project Management system Web Access.

Note: Project Management system Web Access is the name of the web interface of Project Management system Server. Project Management system Web Access is used to access Project Management system Server information via the web. Such information includes project plans, resources pool, etc.

If you are viewing a portfolio (or you are in Scorecard or Investor and no item or portfolio is selected), the browser opens and displays the Project Center from the Project Management system Web Access. The Project Center allows you to view and open any project found in the Project Management system Server.

Note: When a single item is presented or selected in Primavera Portfolio Management, such as within a Form or Scorecard, the system will automatically open the correct Project Management system server for that item. If multiple items are presented or selected, such as an entire portfolio in Scorecard or Workbook, and the portfolio's items are associated with more than one Project Management system server, a dialog box appears asking you to select the Project Management system server that you want to open.

Web Portlet

Web portlets are Form components that can be set up to display Project Management system Web Access views (or any other web page). You can use the toolbars to navigate within the portlet and activate display features.

Note:

- For more information on creating web portlets, refer to *Data Mapping and Data Flow for MSP Bridge.*
- You can map different items to different Project Management system servers. The web portlet can be configured to automatically display project information from the correct Project Management system server for each item.

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