

**Oracle® Project Portfolio Management
Integration Pack for Primavera P6 and Oracle®
E-Business Suite 3.1 - Implementation Guide**

Release 3.1

Part No. E20507-02

June 2011

Oracle Project Portfolio Management Integration Pack for Primavera P6 and Oracle E-Business Suite 3.1 - Implementation Guide

Part No. E20507-02

Copyright © 2009, 2011, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS

Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are “commercial computer software” or “commercial technical data” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

This software and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third party content, products and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third party content, products or services.

Contents

Contents.....	3
Preface.....	5
Oracle AIA Guides.....	5
Additional Resources	5
Common Terms Used in this Guide	6
Chapter 1 - Understanding the Oracle Project Management Integration Pack for Primavera P6 and Oracle E-Business Suite 3.1	7
Overview of the Project Portfolio Management: Primavera P6-EBS Projects PIP	7
Installation and Implementation of the Project Portfolio Management: Primavera P6-EBS Projects PIP.....	8
Solution Assumptions and Constraints	9
Chapter 2 - Synchronizing Global Objects.....	11
Overview of Global Objects.....	11
Solution Assumptions and Constraints	13
Synchronize Planning Resources, Roles, and Expense Category from Oracle Projects to Primavera P6.....	13
Synchronize Planning Resource Rates or Role Rates from Oracle Projects to Primavera P6	17
Chapter 3 - Process Integration for Project Data between Oracle Projects and Primavera P6	19
Overview of Process Integration	19
Solution Assumptions and Constraints	21
Integrating Oracle Projects with Primavera P6 – Workplan-Enabled Project Integration	25
Integrating Oracle Projects with Primavera P6 – Project Integration with Workplan Not Enabled	29
AIA Components	33
Chapter 4 - Configuring the Oracle Project Management Integration Pack for Primavera P6 and Oracle E-Business Suite 3.1	39
Overview of the Implementation Process.....	39
Setting Up the Oracle Projects Application	40
Setting Up the Primavera P6 Application	43
Describing the Transfer of Attributes.....	48
Describing Cross-References	50
Describing the Domain Value Maps.....	53

Setting Configuration Properties	57
Reviewing Default Routing Rules.....	76
Viewing EBO Implementation Maps (EIMs)	76
Index	77

Preface

Welcome to the Oracle Project Portfolio Management Integration Pack for Primavera P6 and Oracle E-Business Suite Projects 3.1.

Oracle Application Integration Architecture (AIA) provides the following guides and resources for this release:

Oracle AIA Guides

- Oracle Fusion Middleware Infrastructure Components and Utilities User's Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1 (11.1.1.4.0)
- Oracle Fusion Middleware Installation and Upgrade Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1 (11.1.1.4.0)
- Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1 (11.1.1.4.0)
- Oracle Fusion Middleware Reference Process Models User's Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1 (11.1.1.4.0)
- Oracle Fusion Middleware Migration Guide for Oracle Application Integration Architecture 11g Release 1 (11.1.1.4.0)
- Oracle Fusion Middleware Developer's Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1 (11.1.1.4.0)

Additional Resources

The following resources are also available:

Resource	Location
Oracle Application Integration Architecture: Product-to-Guide Index	My Oracle Support: https://support.oracle.com/
Known Issues and Workarounds	See Document 889732.1 on My Oracle Support: https://support.oracle.com/
Release Notes	Oracle Technology Network: http://www.oracle.com/technology/
Documentation updates	My Oracle Support: https://support.oracle.com/
Oracle Projects Documentation	Documentation CD http://download.oracle.com/docs/cd/B53825_02/current/html/docset.html
Primavera P6 Documentation	Primavera P6 Online Help can be accessed from the application

Common Terms Used in this Guide

The following table lists the common terms used in the Project Portfolio Management: Primavera P6-EBS Projects PIP:

Term	Definition
Activity	An activity is the fundamental work element of a project for Primavera P6. It is the lowest level of a work breakdown structure (WBS). An activity's primary resource is responsible for managing and tracking the progress of an activity's steps, while the project manager is responsible for managing and tracking the progress of the overall activity.
ABCS	Application Business Connector Service
ABM	Application Business Message
AIA	Application Integration Architecture
BPEL	Business Process Execution Language
OER	Oracle Enterprise Repository
EBM	Enterprise Business Message. This is an AIA artifact.
EBO	Enterprise Business Object. This is an AIA artifact.
EBS	Enterprise Business Service. This is an AIA artifact.
EPS	Enterprise Project Structure, a hierarchy created by the enterprise to organize its projects. It provides functionality to view project priorities, scope, budget, and resource information across the enterprise. Primavera P6 projects are created and stored in EPS.
Financial Structure	A hierarchical arrangement of financial tasks in a project. Financial structure is used to track billing, costs, budgets, and other financial information for a project.
Planning Resource	A resource used for planning work, budget, and forecast for a project. A planning resource is defined in the context of resource format and resource class.
Planning Resource List	A combination of planning resource formats and planning resources. A planning resource list enables you to plan the cost and effort of a project.
Resource	A user-defined group of employees, organizations, jobs, suppliers, expenditure categories, revenue categories, expenditure types, or event types for purposes of defining budgets or summarizing actuals.
Role	A project role describes a user relationship (for example, project manager) and grants view or update access to project information.
Task	A subdivision of project work. Each project can have a set of top tasks and a hierarchy of subtasks. This maps to a WBS for Primavera P6.
Workplan Structure	A hierarchical structure of workplan tasks and deliverables in a project. Workplan structure enables you to plan project work and collect progress information for projects and tasks.
WBS	This is a P6 term. A Work Breakdown Structure (WBS) is a hierarchy of work that must be accomplished to complete a project and defines a product or service. The WBS is structured in levels of work detail, beginning with the deliverable and is then separated into identifiable work elements.

Chapter 1 - Understanding the Oracle Project Management Integration Pack for Primavera P6 and Oracle E-Business Suite 3.1

This chapter provides an overview of the PIP and discusses:

- Installation and implementation of the PIP
- Solutions assumptions and constraints

Overview of the Project Portfolio Management: Primavera P6-EBS Projects PIP

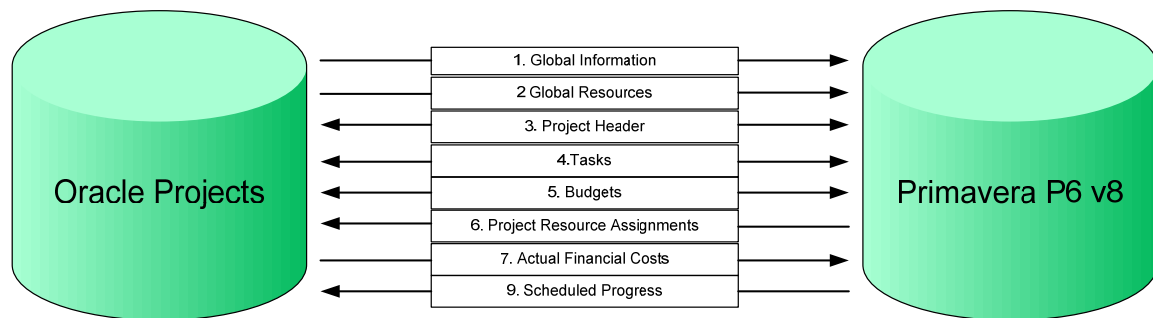
The Project Portfolio Management: Primavera P6-EBS Projects PIP links Oracle Projects and Primavera P6, so that you can work with global objects and projects in both the applications. You can use Oracle Projects for Enterprise Project Management and Primavera P6 for scheduling. The two applications utilize Oracle's Applications Integration Architecture to create an integration that benefits customers who are using both applications or are using just one and would be interested in leveraging their investment by integrating the other.

This PIP enables users to enter and maintain global entities, such as planning resources in the Oracle Projects application, and then allow Primavera P6 to reuse these items without any additional manual effort or one-off integrations. In addition, this PIP enables users to create projects in either of the applications and synchronize the necessary data.

Integrating Oracle Projects with Primavera P6 provides a comprehensive **Enterprise Project Portfolio Management solution** and performs the following features:

- Brings together complex scheduling and industry-specific PPM processes with project financial management, skills and inventory management, and other enterprise solutions
- Provides end-to-end visibility and control for improved decision making, coordination, and collaboration
- Provides consolidated view of enterprise and project portfolio for an accurate, up-to-date view of project, resources, and financial performance
- Creates coherent and complete solution for Enterprise PPM with ERP, database, middleware, and analytics

This diagram illustrates a high-level integration of the business processes between Oracle Projects and Primavera P6:



High-level overview of business processes

Installation and Implementation of the Project Portfolio Management: Primavera P6-EBS Projects PIP

You must install all the participating applications, ensure that each system meets the minimum technical requirements to support the AIA Foundation Pack and the PIP, and then utilize any of the integration processes that are included with this PIP.

For more information about installing AIA Foundation Pack and the Project Portfolio Management: Primavera P6-EBS Projects PIP, see *Oracle Fusion Middleware Installation and Upgrade Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1*.

After installing the PIP, you must complete the implementation steps for this PIP.

For more information about implementing the Project Portfolio Management: Primavera P6 – Oracle Projects PIP, see chapter *Implementing the Oracle Project Management Integration Pack for Primavera P6 and Oracle E-Business Suite 3.1*.

Core AIA Components

The Project Portfolio Management: Primavera P6-EBS Projects PIP uses the following core AIA components:

EBO (.xsd) (Enterprise Business Object)	EBM (.xsd) (Enterprise Business Message)	EBS (.wsdl) (Enterprise Business Service)
ProjectResourceSetEBO	SyncProjectResourceSetListEBM	ProjectResourceSetEBS
ProjectResourceRateScheduleEBO	SyncProjectResourceRateScheduleListEBM	ProjectResourceRateScheduleEBS
ProjectEBO	SyncProjectListEBM	ProjectEBS
ProjectFinancialPlanListEBO	SyncProjectFinancialPlanListEBM	ProjectFinancialPlanEBS

The core EBO and EBM XSD files can be located by EBO within this parent folder:
\$AIA_HOME/AIAMetaData/AIAComponents/EnterpriseObjectLibrary/Core/EBO/.

The core EBS WSDL files can be located by EBO within this parent folder:
\$AIA_HOME/AIAMetaData/AIAComponents/EnterpriseBusinessServiceLibrary/Core/EBO/.

For detailed documentation of individual EBOs and EBMs, click the AIA Reference Doc link on EBO and EBM detail pages in Oracle Enterprise Repository.

For more information about using the Oracle Enterprise Repository and configuring it to provide the AIA Reference Doc link, see *Oracle Fusion Middleware Developer's Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1*, "Configuring and Using Oracle Enterprise Repository as the Oracle AIA SOA Repository."

EBOs can be extended, for instance, to add new data elements. These extensions are protected and remain intact after a patch or an upgrade.

For more information, see *Oracle Fusion Middleware Concepts and Technologies Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1*, "Understanding Extensibility".

Solution Assumptions and Constraints

This section discusses the following assumptions and constraints that are associated with the Project Portfolio Management: Primavera P6-EBS Projects PIP:

1. This PIP is limited to a new Primavera P6 v8 PPM installation and an existing or new Oracle Projects installation.
2. Each Primavera P6 installation supports only one base currency.

Note: Every chapter in this guide contains a detailed assumptions and constraints section.

Chapter 2 - Synchronizing Global Objects

This chapter provides an overview of the global objects and discusses:

- Solution assumptions and constraints
- Synchronize planning resources, roles, and expense category
- Synchronize planning resource rates or role rates

Overview of Global Objects

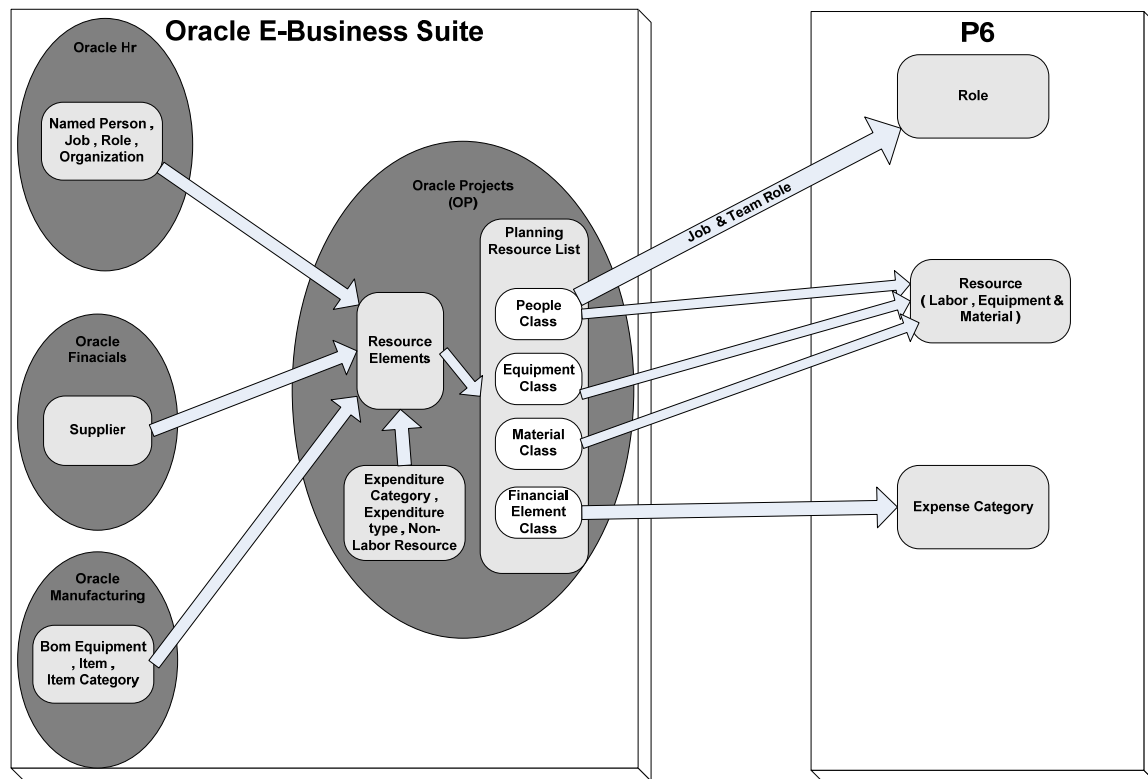
Global objects represent data elements that are shared between two applications. For example, global objects can be planning resources, roles, rates, and expense category. The data originates in Oracle Projects and Primavera P6 receives the updates.

The following table discusses the mapping of global objects between Oracle Projects and Primavera P6:

Oracle Projects	Primavera P6
All planning resources and rates with resource class as People, Material Items, and Equipment except for planning resources with resource format as Team Role and Job	Resources
Planning resources and rates with resource format as Team Role or Job, and resource class as People	Role
Planning resources and rates with resource class as Financial Element	Expense Category

Process Flow

This diagram illustrates the process flow of global data between Oracle Projects and Primavera P6:



Synchronizing global objects process flow

The Integration Options page controls which projects and global data are synchronized. Project managers and administrators are responsible for setting up the global data, such as, defining the planning resources in a planning resource list. The system administrator is responsible for synchronizing the global data from Oracle Projects to Primavera P6.

Pages Used to Synchronize Global Objects

Page Name	Navigation	Usage
Integration Options	Log in to the application using the <i>Projects Super User</i> responsibility. From the Projects: Setup menu, click the <i>Integration Options</i> link.	Select and configure setup steps for a third-party application.
Third Party Application	On the Integration Options page, click the <i>Create/Update</i> button.	Assign planning resource list, rate schedules for employees, jobs, nonlabor resources, operating units, and organization. <i>Currency</i> – Represents the base currency in Primavera P6. The Rate Type and Rate Date Type fields are used for sending planning rates in this currency.

Prerequisites for Synchronization of Global Objects

Before synchronizing data between Oracle Projects and Primavera P6, you must:

1. Define Primavera P6 as a third-party application on the Integration Options page.
2. Assign a planning resource list to the third-party application.
3. Assign rate schedules for sending the global resource rates to Primavera P6.

Solution Assumptions and Constraints

This section discusses the following assumptions and constraints that are associated with synchronizing global objects:

1. Oracle Projects owns the global objects. Any changes to global objects in Primavera P6 are overwritten by Oracle Projects information in the subsequent synchronization.
2. Specify one or more operating units on the Integration Options page. Every P6 installation is associated with one or more operating units. Projects belonging to these operating units must be transferred to the corresponding P6 installation.
3. A single global planning resource list that is centrally controlled is used for one P6 instance.
4. A single global planning resource list is assigned to all the projects belonging to the operating unit that is being integrated. The project workplan and budgeting are done by the planning resources.
5. National Language Support is available for this Project Portfolio Management: Primavera P6-EBS Projects PIP.

Synchronize Planning Resources, Roles, and Expense Category from Oracle Projects to Primavera P6

A planning resource list is associated with a third-party application on the Integration Options page. Planning resources and roles of a planning resource list are synchronized to Primavera P6. Once synchronized, the planning resource list cannot be changed. However, you can add planning resources and synchronize the updates to the planning resource list.

Primavera P6 supports one planning resource list per Primavera P6 installation. Since only one planning resource list is synchronized between Oracle Projects and Primavera P6, you can combine all or some of the project's planning resource lists into one global list for integration.

Note: Any planning resource that is not included in the synchronized planning resource list is not available to be assigned to activities in Primavera P6.

Planning resources can be added at any time to the planning resource list in Oracle Projects. While it is possible to delete a planning resource from a planning resource list, best practice suggests that a planning resource should be disabled rather than deleted. If you still want to delete a planning resource from a planning resource list in Oracle Projects, you must delete the same resource from Primavera P6 manually.

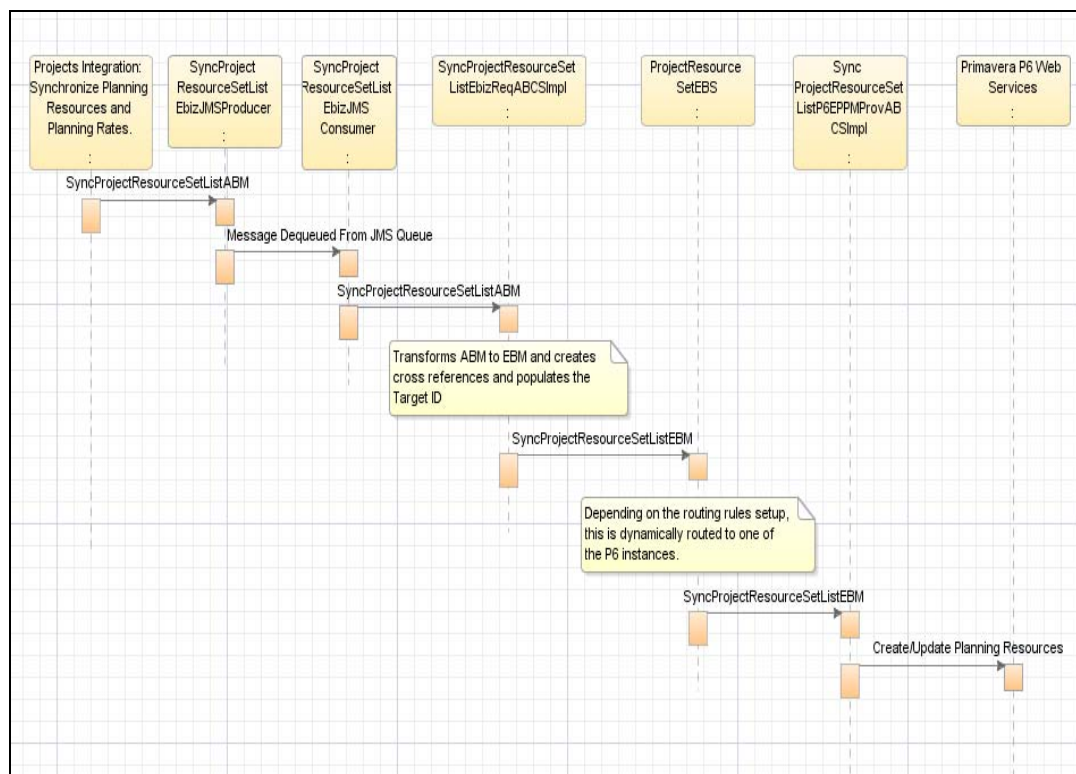
For more information about planning resources and planning resource lists, see *Oracle Projects Implementation Guide*.

ProjectResourceSetEBO is used to synchronize planning resources, roles, and expense categories.

Integration Flow

The SyncProjectResourceSetListEbizReqABCSImpl integration flow is used to synchronize the planning resources and roles between Oracle Projects and Primavera P6.

This sequence diagram illustrates the SyncProjectResourceSetListEbizReqABCSImpl process:



Synchronization of Resources, Roles, and Expense Categories integration flow sequence diagram

Create and Update Planning Resources in Oracle Projects and synchronize to Primavera P6

To create or update a planning resource in Oracle Projects:

For more information about creating a planning resource list, see the Defining a Planning Resource List, *Oracle Projects Implementation Guide*.

1. Access the Third Party Applications page. Click the [Create](#) button. On the Planning Resources tab select the [Planning Resource List](#) that you want to associate with the third-party application.

Once selected, the planning resource list cannot be changed. However, you can update the planning resource list or create a third party application if you need to make changes.

2. In the Planning Resources tab you can also select Rate Schedules.

To synchronize the planning resources in Oracle Projects with Primavera P6:

1. Enter a host name for the **PA: Integration Server URL** profile option. For example, <http://sdc60007sems.us.companyx.com:6873/soa-infra/services/default>.
2. Run the **Projects Integration: Synchronize Planning Resources and Rates** concurrent program. Select [Planning Resources](#) from the [Synchronize](#) list. This concurrent program calls the Requester Application Business Connector Service (ABCS) type and sends it to the planning resource list ABM. Requester ABCS populates the XREF information and transforms ABM to EBM using the XformSyncResourceListABM_to_SyncProjectResourceSetListListEBM.xml file. This in turn initiates the ProjectResourceEBS service. The SyncProjectResourceSetP6ProvABCServiceImpl service connects the data with Primavera P6.

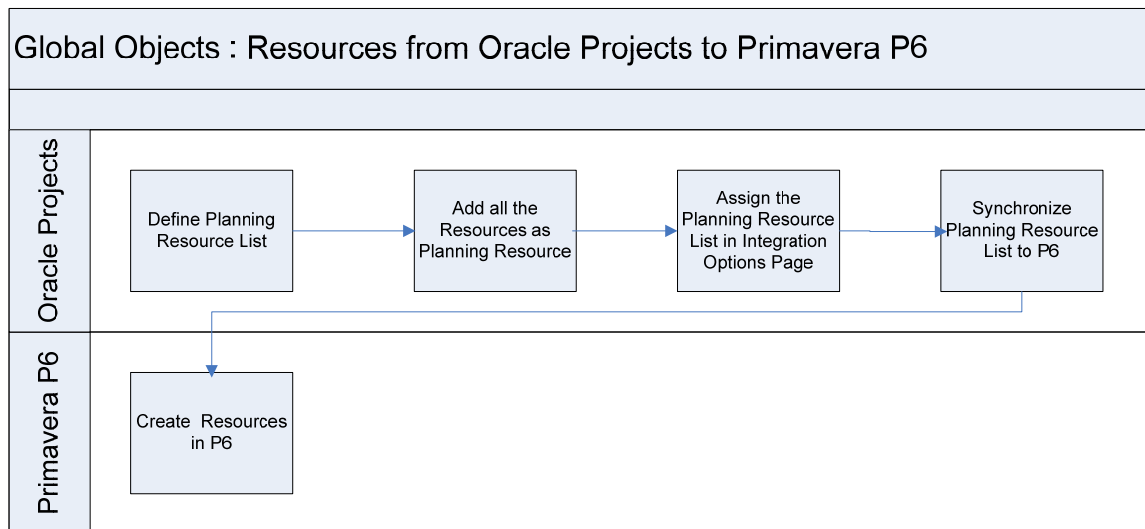
Concurrent program used for synchronizing global objects

The **Projects Integration: Synchronize Planning Resources and Planning Rates** concurrent program is used to synchronize planning resources and rates from Oracle Projects to Primavera P6. It has the following parameters:

Parameter Name	Description
Synchronize	Enables you to select a global object for synchronization. The values are Planning Resources and Planning Rates . The default value is Planning Resources.
Third Party Application	Select the third-party application with which Oracle Projects is synchronized. This parameter contains a list of the third-party applications defined in the Third Party Applications page.
Resource Class	List of values containing the resource classes: People , Equipment , Material Items , and Financial Elements . Resource classes in Oracle Projects map to Resource

Parameter Name	Description
	<p>Types in Primavera P6. The mapping of resource class to resource type is as follows:</p> <ul style="list-style-type: none"> • People – Labor (except Team Role and Job, which map to Role in Primavera P6) • Equipment – Nonlabor • Material Items – Material • Financial Elements – Expense Category
Resource Format	Resource formats are available based on the resource class that is selected. For example, if the resource class is People, available resource formats include: Person Type, Organization, Supplier, or Job – Financial Category.
Resource From/To	Enter planning resource names for the selected planning resource list. This parameter is case sensitive.
Type of Resources	Select <i>All Planning Resources</i> or <i>Disabled Planning Resources</i> .

This flowchart illustrates the process flow of resources between Primavera P6 and Oracle Projects:



Planning resources created in Oracle Projects and synchronized as resources to Primavera P6

Synchronize Planning Resource Rates or Role Rates from Oracle Projects to Primavera P6

Synchronization of planning resource rates from Oracle Projects to Primavera P6 enables you to manage projects based on planning resource and role rates.

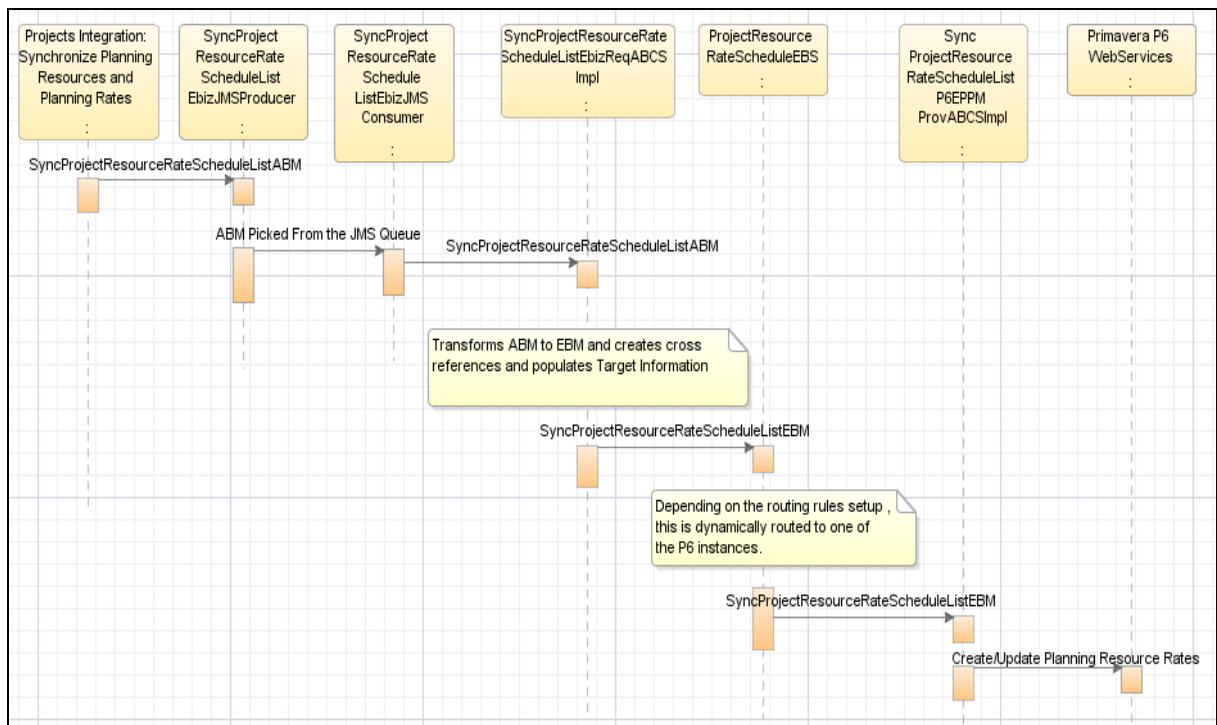
For more information about rates, see Oracle Projects Fundamentals guide, “Rates,” Using Rates for Workplan and Financial Planning.

Important! Planning resources and roles must be synchronized before their rates are synchronized.

ProjectResourceRateScheduleEBO is used to synchronize planning resource rates and role rates.

Integration Flow

The SyncProjectResourceRateScheduleListEbizReqABCSImpl integration flow is used to synchronize the planning resource rates between Oracle Projects and Primavera P6. This sequence diagram illustrates the SyncProjectResourceRateScheduleListEbizReqABCSImpl process:



Synchronization of Planning Resource Rates or Role Rates integration flow sequence diagram

Create Rates for Planning Resources and Roles in Oracle Projects and synchronize to Primavera P6

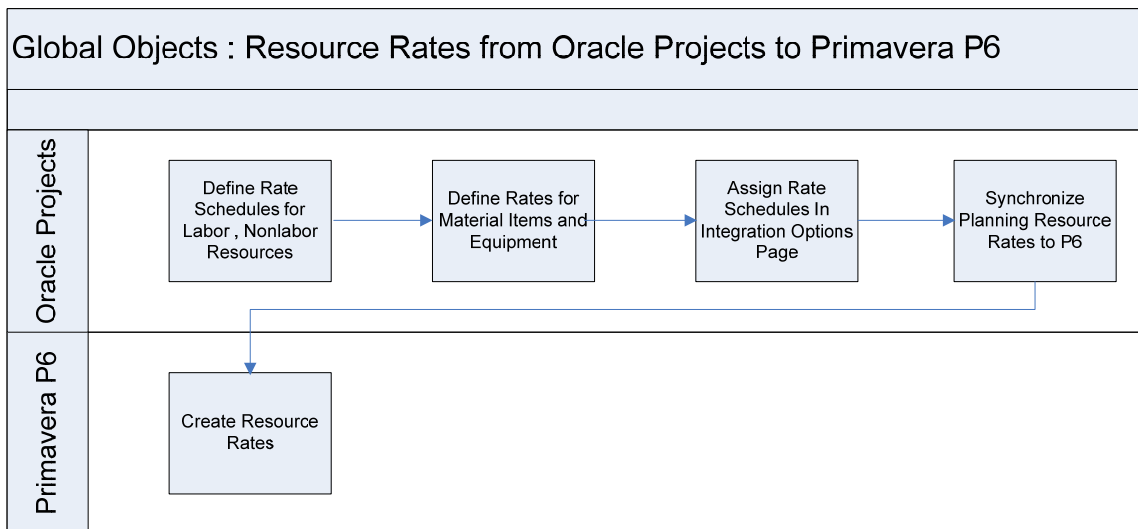
To create rates for planning resources and roles in Oracle Projects:

1. Perform all the three steps as specified in the **To Create or Update a Planning Resource in Oracle Projects** section.
2. Associate each planning resource: Employee, Job, and Nonlabor with suitable rate schedules.

To synchronize the planning resource and role rates in Oracle Projects with Primavera P6:

1. Enter a host name for the **PA: Integration Server URL** profile option. For example, <http://sdc60007sems.us.companyx.com:6873/soa-infra/services/default>.
2. Run the **Projects Integration: Synchronize Planning Resources and Planning Rates** concurrent program. Select **Planning Rates** from the **Synchronize** list. This concurrent program calls the Requester Application Business Connector Service (ABCS) type and sends this to the resource rate schedule list ABM. Requester ABCS populates the XREF information and transforms the object SyncResourceRateScheduleListABM to SyncProjectResourceRateScheduleListEBM using the XformSyncResourceRateScheduleListABM_to_SyncProjectResourceRateScheduleListEBM.xml file. This in turn initiates the ProjectResourceRateScheduleEBS service. The SyncProjectResourceRateScheduleListP6ProvABCImpl service connects the data with Primavera P6.

This flowchart illustrates the process flow of resource rates between Primavera P6 and Oracle Projects:



Planning resource rates created in Oracle Projects and synchronized as resource rates to Primavera P6

Chapter 3 - Process Integration for Project Data between Oracle Projects and Primavera P6

This chapter provides overview of project data synchronization process, prerequisites in the integration between Oracle Projects and Primavera P6 and discusses:

- Solution assumptions and constraints
- Integrating Oracle Projects with Primavera P6 – Workplan-Enabled Project Integration
- Integrating Oracle Projects with Primavera P6 – Project Integration With Workplan Not Enabled
- AIA Components

Overview of Process Integration

The synchronization of project data from Oracle Projects to Primavera P6 and vice-versa supports the following process flows:

- Creating project data in Oracle Projects and synchronizing to Primavera P6
- Updating project data in Oracle Projects and synchronizing to Primavera P6
- Creating project data in Primavera P6 and synchronizing to Oracle Projects
- Updating project data in Primavera P6 and synchronizing to Oracle Projects

Synchronization of project data between Oracle Projects and Primavera P6 includes the following components:

- Project header
- WBS
- Resource assignments
- Budgets
- Actual Cost

Synchronize project from Oracle Projects to Primavera P6

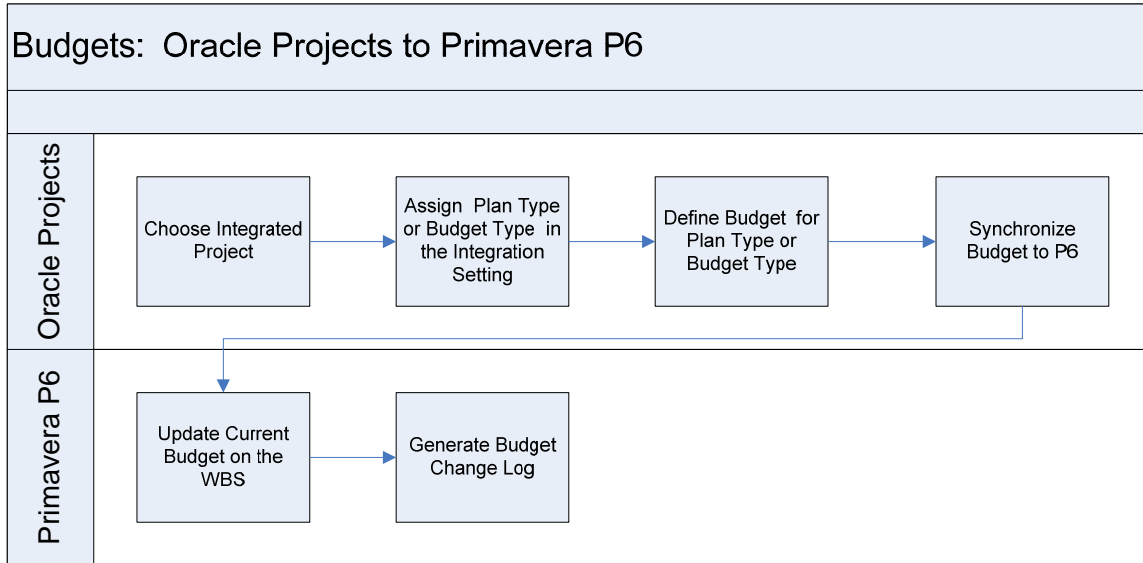
Create a project in Oracle Projects, enable integration, and mark this project to be created in Primavera P6. The integration process creates this project in Primavera P6 and transfers all the project data. The ProjectEBO object is used to transfer the project header, project WBS, actual cost and project resource assignments. Once integrated, any change that you make to the Projects project is reflected in the Primavera project.

Synchronize project from Primavera P6 to Oracle Projects

Create project templates in Oracle Projects and synchronize the templates to Primavera P6. The templates are created as project codes in Primavera P6. Create a project in Primavera P6, assign the project template related code and mark the project to be created in Oracle Projects. The integration process creates this project in Oracle Projects and transfers all the project data. ProjectEBO is used to transfer the project header, project WBS, and project resource assignments. Primavera P6 forecast units and costs can also be integrated with Oracle Projects.

Synchronize budgets between Oracle Projects to Primavera P6

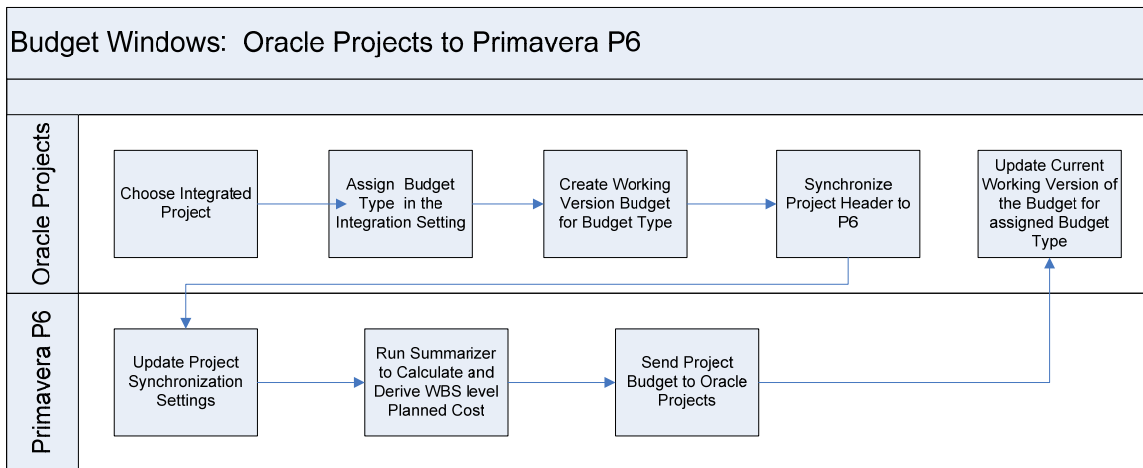
This flowchart illustrates the process flow of budgets between Oracle Projects and Primavera P6:



Budgets created in Oracle Projects and synchronized to Primavera P6

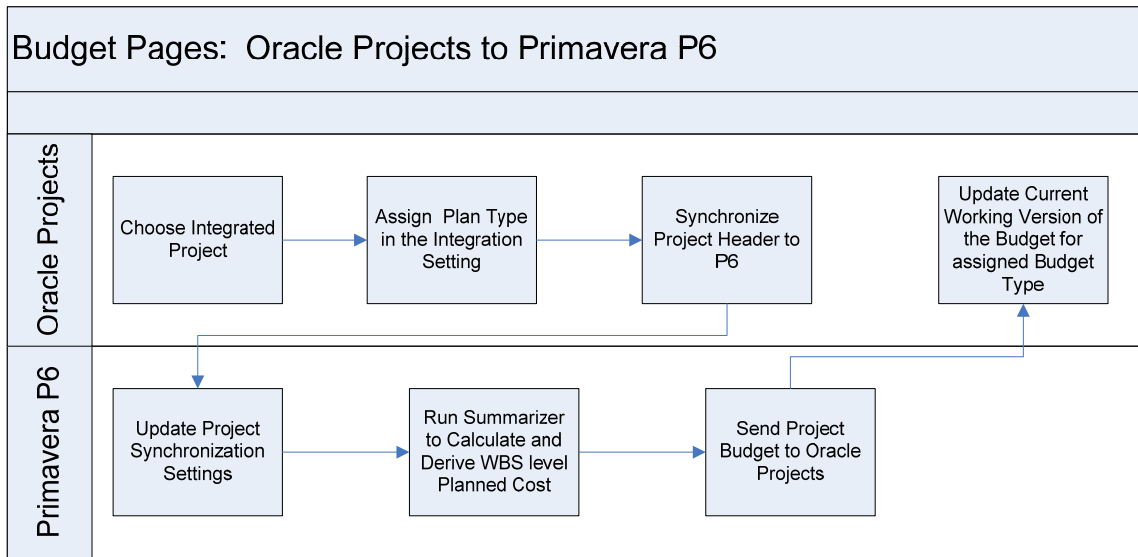
The budget flow is slightly different for budget windows and budget pages.

This flowchart illustrates the process flow for budget windows between Oracle Projects and Primavera P6:



Budgets created in Oracle Projects and synchronized to Primavera P6

This flowchart illustrates the process flow for budget pages between Oracle Projects and Primavera P6:



Budgets created in Oracle Projects and synchronized to Primavera P6

Solution Assumptions and Constraints

This section discusses the following assumptions and constraints that are associated with synchronizing project data:

1. Projects can be created in Oracle Projects or Primavera P6.
2. Project execution and scheduling aspects occur in Primavera P6.
3. Project managers or integration administrators select the projects that must be synchronized. Changes in Oracle Projects or Primavera P6 projects are synchronized at particular intervals of time. For example, projects in some industries may need to be synchronized once a day. Typically, synchronization of active projects occurs weekly or biweekly. Such structured synchronizations help balance the load demands on integration applications.
4. Oracle Projects owns the financial aspects of all projects.
5. A project's budget data can be updated in Oracle Projects. Planned cost of the WBS, activities, and resource assignments comprises of budget data in Oracle Projects. The budgeted cost from Oracle Projects is sent to Primavera P6 as current budget attribute of the Primavera P6 WBS node. Any change in the current budget amount from the previous value from Oracle Projects is created as budget change log in Primavera P6. The source application from which the synchronization is initiated overwrites the existing budget data. For example, if changes to Primavera P6 budget data are done on 01-May-2010 and the Projects Integration: Synchronize Projects, Structures, Budgets and Actuals concurrent program is run on 02-May-2010, then Oracle Projects budget data takes precedence. You can use the working versions feature in Oracle Projects and the budget change log feature in Primavera P6 to save budget information.
6. WBS and Activity Short Name or Code in Primavera P6 is mapped to Task Number in Oracle Projects. In Oracle Projects, task number is unique for a project and for all the WBS levels. However, in Primavera P6 this is unique only for a given level. You must provide a unique Activity Short Name or Code in Primavera P6.

7. In Oracle Projects, for the project templates you must select the following quick entry fields only: Project Name, Project Number, Project Start Date, and Project Finish Date.

For more information on project level fields that are transferred to Primavera P6, see the [Describing the Transfer of Attributes](#) section.

Prerequisites

1. You must synchronize the global objects before attempting to synchronize projects between Oracle Projects and Primavera P6.
2. To integrate with Primavera P6, projects in Oracle Projects require some setup. The setup steps are as follows:
 - a. Create planning resource lists and planning rates schedules.
 - b. Setup integration options for the third-party application.
 - c. Assign planning resource list and rate schedule to third-party application definition. Select the operating units that you want to integrate to Primavera P6.
 - d. To integrate projects, WBS, and budgets, you must select the **Enable Integration** check box on the Integration Settings page.

Note: By default, the **Enable Integration** check box for a project is not selected.

- e. You can synchronize projects by either marking them individually or adding the project to a batch scheduled run.

To mark a single project, open your project; select **Synchronize** from the **Shortcuts** list and then, click the **Go** button.

Note: Select **Desynchronize** from the Shortcuts list to disable a project from synchronization.

To mark a project by adding to a batch scheduled run, execute the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program with **Synchronize** value as **All**.

Note: The **Synchronize** option is available only for those projects for which on the Projects Setup page, in the Integration Settings section the Enable check box is selected.

Pages Used to Integrate Project Data between Oracle Projects and Primavera P6

Integration Settings

The Integration Settings page is used to integrate project data between Oracle Projects and Primavera P6. This page defines the settings that allow a project or template to be enabled for integration.

Navigation

Use the **Projects Super User** responsibility to navigate to the **Integration Settings** page either from a project template or from a project as follows:

1. From **Project Template** - From the **Projects: Setup** menu select the **Project Templates** link. On the Project Templates page for your project template, click the **Update** button. In the Setup Options section click **Expand All**. In the **Setup** list of attributes, under **Project**, for **Integration Settings**, click the **Update** button.
2. From **Project** - Click **Create Project** for new projects or **Project List** for existing projects as follows:
 - a. From the **Projects: Delivery** menu select the **Create Project** link. Select the **Create Project from Template** option. Enter project details and click the **Finish** button. On the project's home page select the **Setup** tab, then click the **Integration Settings** link in the **Other Project Setup** set of links.
 - b. From the **Projects: Delivery** menu select the **Project List** link. To open a project of your choice click the **Project Name** link. On the **Setup** tab click the **Integration Settings** link.

Integration Settings Page

This page has the following fields:

Field Name	Description
Enable Integration	Select this to enable integration of the project with the third-party application.
Integrate	<p>Enables you to integrate a workplan structure or a financial structure. You can select a financial structure only for projects for which the workplan structure is not enabled. However, for Non-Shared: Mapped and Non-Shared: Non-Mapped structures, you can select financial structure even when workplan is enabled at the project or template level.</p> <p>Note: 1. The workplan structure and financial structure for a project are enabled at the project template level. 2. When creating a project, if you enabled both the workplan structure and the financial structure, you can integrate only the workplan structure.</p>
Integrate Option of Workplan	The following fields are displayed when you select the Workplan Structure

Field Name	Description
Structure	<p>option:</p> <ul style="list-style-type: none"> • Send Actual Cost: Select a value to send the actual cost incurred in Oracle Projects to Primavera P6. For fully shared structures Actual Cost is sent at resource assignment level and for other structures it is sent at the WBS level. • Send Task: Select this to send the WBS from Oracle Projects to Primavera P6. <p>Receive Task: Select this to receive the WBS from Primavera P6 to Oracle Projects. For workplan structure WBS and activities are received; for financial structures only WBS is received.</p> <p>Send Task and Receive Task fields govern the application that owns the WBS. Oracle Projects owns the WBS if you select the Send Task check box. Primavera P6 owns the WBS if you select the Receive Task check box. When you select both the check boxes, then both the applications can update or maintain the WBS. However, it is recommended that one application owns the WBS.</p> <p>You can select the Enable Workplan Versioning check box on the Workplan Structure Information page to create working and published workplan versions. If you enable workplan versions and select the Send Task check box, the following fields are displayed:</p> <ul style="list-style-type: none"> • Current Published Version • Current Working Version <p>Send Budget and Receive Budget fields are independent of selecting current working or published workplan version. You can send or receive budget only if you have enabled financial structure. However, for a fully shared structure you can send budget even if the workplan structure is enabled.</p> <ul style="list-style-type: none"> • Send Budget – Select this to send financial plans to Primavera P6. • Receive Budget – Select this to receive financial plans from Primavera P6. <p>When sending financial plans or budgets to Primavera P6, you must also define the following financial plan attributes.</p> <p>Plan Type – Select a plan type to synchronize and integrate the financial plan of a project between Oracle Projects and Primavera P6. Select Cost Only plan type to receive budget.</p> <p>Budget Type – Select a budget type to synchronize and integrate budgets between the participating applications. This option is useful for customers who do not want to implement Oracle Project Management but want to integrate with Oracle Project Costing. Budget or Financial Type has the following fields:</p> <ul style="list-style-type: none"> • Current Baselined Version • Current Working Version

Field Name	Description
	You must select either plan type or budget type. If you select both, only plan type is considered for integration.
Integrate Option of Financial Structure	<p>All the fields are the same as mentioned for Integrate option of workplan structure, except that the fields for sending published and current workplan version fields are not available.</p> <p>If you select the Financial Structure option, the Structure Level Upto field is displayed.</p> <p>Structure Level Upto – Enter the number of WBS levels that Oracle Projects receives from Primavera P6. The default value is '0' indicating all levels.</p> <p>Note: Oracle Project Costing customers who do not want to implement Oracle Project Management, can use the Structure Level Upto field to integrate at summary level with Primavera P6 for scheduling and managing progress. For example, In Primavera P6, you can create a project with 8 levels in the WBS. If you specify the Structure Level Upto as 4 in Oracle Projects then, only four levels of WBS is integrated from Primavera P6.</p>

Integrating Oracle Projects with Primavera P6 – Workplan-Enabled Project Integration

In Primavera P6 you create a project, define a WBS, define activities, and assign resources to activities. When you synchronize the WBS, activities, and assigned resources, Oracle Projects creates a workplan. This workplan is used to perform financial planning, collect cost, and bill customers. Actual cost is sent to Primavera P6 to manage the progress of a project, such as calculating percent complete and ETC.

Important! You must select the **Enable Workplan Structure** check box for a project for workplan-enabled project integration.

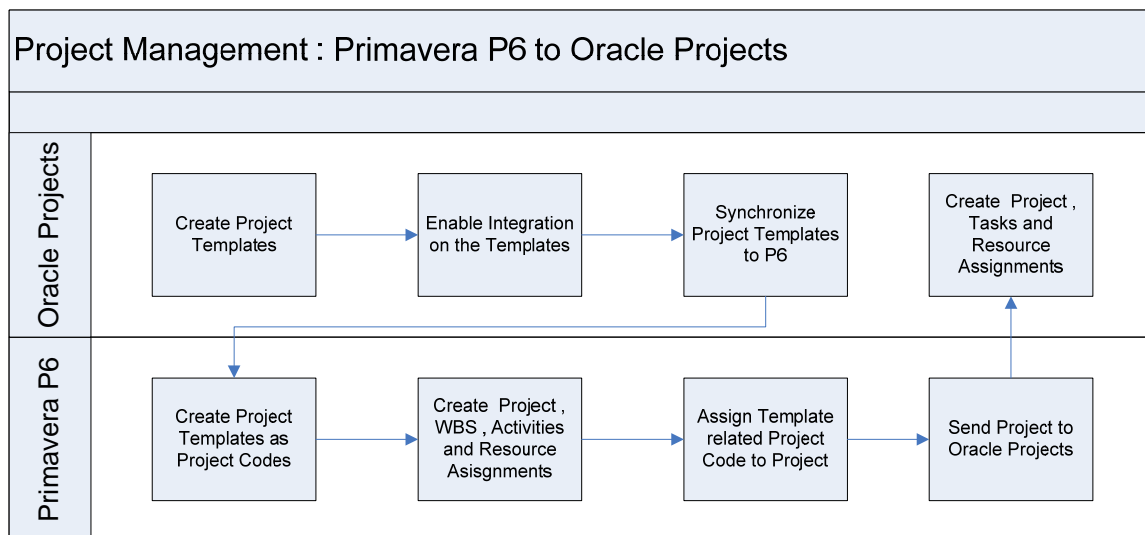
Creating and Synchronizing a Project

To create a project in Primavera P6 and send a copy of the project to Oracle Projects:

1. Create a project template in Oracle Projects. Enable integration for the project and select **Workplan Structure**.

2. In Oracle Projects, run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program. Select **Project Template Header** from the **Synchronize** list. This adds the template name as a project code and saves the integration settings in Primavera P6.
3. In Primavera P6 create a project, create WBS and activities, assign resources to project, and associate a project template, using a project code, with the project.
4. In Primavera P6, run the project status synchronization process using the **Send to ERP** link from the Primavera P6 Web application. Based on the integration settings, this process sends project, WBS, activities, and resource assignments to Oracle Projects.
5. Oracle Projects creates a project using the project template that is sent as an attribute from Primavera P6. It creates a workplan from the Primavera P6 WBS; defining P6 activities as tasks and P6 resource assignments as task assignments.

This flowchart illustrates the process flow of project data between Primavera P6 and Oracle Projects:



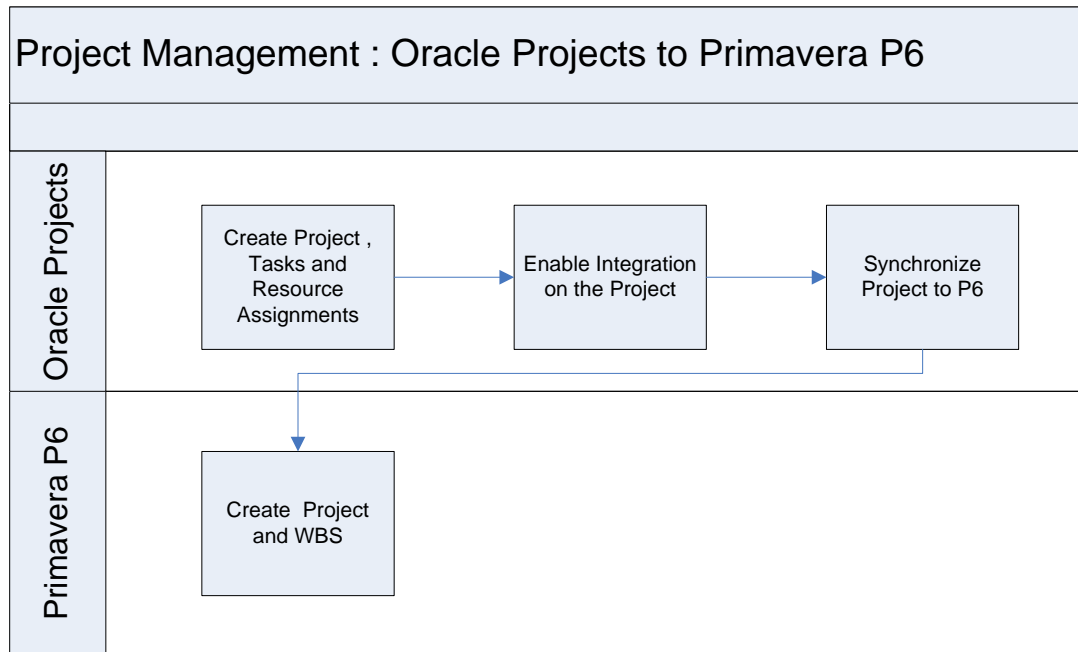
Project created in Primavera P6 and synchronized to Oracle Projects

To create a project in Oracle Projects and send a copy of the project to Primavera P6:

1. In Oracle Projects, create a project from an existing project or a template. Select the **Enable Integration** check box for the project. Create a workplan for the project without assigning any resources to it. Resource assignments created in Oracle Projects are not synchronized to Primavera P6. However, the actual cost associated with the resource assignments that are sent from Primavera P6 are synchronized back to Primavera P6.
2. Run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program to send the project and WBS to Primavera P6.

Primavera P6 creates the project and WBS.

This flowchart illustrates the process flow of project data between Oracle Projects and Primavera P6:



Project created in Oracle Projects and synchronized to Primavera P6

Assigning and Synchronizing Resources to the Project

When you create a project in Primavera P6, you assign resources to the project.

When you create a project in Oracle Projects, first synchronize the project and WBS with Primavera P6 by executing the Projects Integration: Synchronize Projects, Structures, Budgets and Actuals concurrent program. Then, in the Primavera P6 project schedule, expand the WBS, create activities, and assign resources to the project.

Creating a Financial Plan in Oracle Projects

In Oracle Projects, you can generate a financial plan based on a workplan or create one manually.

For more information about workplan and financial plan, see *Oracle Projects Fundamentals* and *Oracle Projects Implementation Guide*.

Collecting and Synchronizing Cost

To collect cost in Oracle Projects and send the actual cost to Primavera P6:

1. In Oracle Projects use the financial structure to collect cost for the project. Run the Project Performance related concurrent programs to map actual costs to the workplan structure.
2. Run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program with the *Synchronize* value as *Actuals* to send actual costs to Primavera P6. The actual costs are sent at project, WBS, and resource assignment levels.

Primavera P6 receives the actual cost for the project.

Managing and Synchronizing Progress

To manage progress information in Primavera P6 and send it to Oracle Projects:

1. In Primavera P6 run the **Summarizer** process, to calculate and derive the progress management attributes such as ETC and EAC.
2. In Primavera P6 run the **Project Status** synchronization process, to send project, WBS, activities, resource assignments, and physical percent complete to Oracle Projects.
3. Oracle Projects updates the project, workplan, and resource assignments with the received progress management data.

Changing and Synchronizing Workplan

In a WBS, you can change the dates, tasks, or structure. The changes can be performed in Oracle Projects or Primavera P6. To synchronize the changes between both the applications run the **Project Status** synchronization program in Primavera P6 or the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program in Oracle Projects. This program updates, creates, and deletes the WBS in the participating applications.

Changing and Synchronizing the Financial Plan

To change a financial plan in Oracle Projects and send the information to Primavera P6:

1. In Oracle Projects, change the financial plan and baseline the changes.
2. In Oracle Projects run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program. Select *Synchronize* value as *Budgets* to send financial plan changes to Primavera P6.

Primavera P6 receives the changes as the current budget. A budget change log is created in Primavera P6 to track the change in budget amount between past and present synchronizations.

Closing and Synchronizing a Project

To close or deactivate a project in Oracle Projects and synchronize it with Primavera P6:

1. In Oracle Projects, set the status of the project to *Closed*.
2. In Oracle Projects run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program. Select *Synchronize* value as *Project Header* to send project header changes to Primavera P6.

The **Status** attribute sends the changes to Primavera P6, which in turn renders the project inactive in Primavera P6.

Note: You must define and map the relevant values between Oracle Projects and Primavera P6 in the PROJECT_STATUSCODE DVM to send the status change from Oracle Projects to Primavera P6.

To close or deactivate a project in Primavera P6 and synchronize it with Oracle Projects:

1. In Primavera P6, set the status of the project to *Inactive*.
2. Change the financial status of the project to render the project inactive by synchronizing from Primavera P6.

Integrating Oracle Projects with Primavera P6 – Project Integration with Workplan Not Enabled

In Primavera P6 you create a project, define WBS, define activities and assign resources to the activities. Enable summarized level or complete WBS level integration in Oracle Projects. After you synchronize the summarized level or complete WBS to Oracle Projects as financial structure, Oracle Projects uses the financial structure to perform financial planning, collect cost, and bill customers. Actual cost is sent to Primavera P6 to manage the progress of a project, such as calculating percent complete and ETC.

Important! You must select the *Enable Financial Structure* check box for a project for project integration with workplan not enabled.

Creating and Synchronizing Project

To create a project in Primavera P6 and send a copy of the project to Oracle Projects:

1. Create and synchronize project templates from Oracle Projects to Primavera P6. This adds the template name as a project code and saves the integration settings in Primavera P6.
2. On the **Integration Settings** page, select *Financial Structure* option for *Enable Integration*.
3. In Primavera P6 create a project, create WBS and activities, assign resources to the project, and associate a project template, using project codes, with the project.
4. In Primavera P6, summarize the project and run the **Project Status** synchronization process. Based on the integration settings for a financial structure enabled project template, the process sends project, detailed or higher level WBS to Oracle Projects.

Oracle Projects creates a project by using the project template that is sent as an attribute from Primavera P6. Oracle Projects creates financial tasks using the P6 WBS.

A project created from a Primavera P6 template or a Primavera P6 project copies Oracle Projects templates with project codes and template parameters. However, when deleting a project you need to manually delete the Project Template Parameters to remove template parameters.

To create a project in Oracle Projects and send a copy of the project to Primavera P6:

5. In Oracle Projects, create a project from an existing project or a template. Select the *Enable Integration* check box for the project and specify the WBS level for integration.
6. Select the *Financial Structure* option on the **Integration Settings** page. Enter *Structure Level Up to* to create a financial structure up to the specified WBS level. This ensures that any task created under this level of the setup is not considered for the integration with Primavera P6.
7. Run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program. Select *Project Header* from the *Synchronize* list.

Primavera P6 creates the project and WBS.

Assigning and Synchronizing Resources to the Project

When you create a project in Primavera P6, you assign resources to the project.

When you create a project in Oracle Projects, first synchronize the project and WBS with Primavera P6 by executing the Projects Integration: Synchronize Projects, Structures, Budgets and Actuals concurrent program. Then, in the Primavera P6 project schedule, expand the WBS, create activities, and assign resources to the project.

Creating a Financial Plan in Oracle Projects

In Oracle Projects, you can

- Create a financial plan manually.
- Synchronize the project to Primavera P6. Primavera P6 expands the project schedule, assigns resources and generates an initial version of the detailed cost plan. In Primavera P6, run the **Budget Synchronization** process to obtain the planned cost as the initial cost financial plan.

For more information about workplan and financial plan, see *Oracle Projects Fundamentals* and *Oracle Projects Implementation Guide*.

Collecting and Synchronizing Cost

To collect cost in Oracle Projects and send the actual cost to Primavera P6:

1. In Oracle Projects use the financial structure to collect cost for the project. Run the Project Performance related concurrent programs to map actual costs to the financial structure.
2. Run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program with *Synchronize* value as *Actuals* to send actual costs to Primavera P6. The actual costs are sent at project, WBS, and resource assignment levels.

Primavera P6 receives the actual cost for the project. Actual cost is received at the WBS level and stored in the UDF fields.

Managing Progress

To manage progress information in Primavera P6:

1. In Primavera P6 run the **Summarizer** process, to calculate and derive progress attributes, such as ETC and EAC.

Changing and Synchronizing WBS

To change WBS in Primavera P6 and send the information to Oracle Projects:

1. In Primavera P6 for a project WBS, you can change the dates, tasks, or structure.
2. In Primavera P6 run the **Project Status** synchronization process, to send the changes to Oracle Projects.

Oracle Projects updates the WBS with the changes. While receiving task details, Oracle Projects identifies the missing tasks, which are later considered for deletion.

To change WBS in Oracle Projects and send information to Primavera P6:

3. In Oracle Projects for a project WBS, you can change the dates, tasks, or structure.
4. Run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program in Oracle Projects to send the changes to Primavera P6.

Primavera P6 updates the WBS with the changes. While receiving task details, Primavera P6 identifies the missing tasks, which are later considered for deletion.

Changing and Synchronizing Financial Plan

To change a financial plan in Oracle Projects and send the information to Primavera P6:

1. In Oracle Projects, change the financial plan and optionally baseline the changes.
2. In Oracle Projects run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program with *Synchronize* value as *Budgets* to send financial plan changes to Primavera P6. Based on the integration settings a working or baselined version of the budget is sent to Primavera P6.

Primavera P6 receives the changes as the current budget. A budget change log is created to track the changes in budget amounts between previous and current synchronizations.

Changing the Project Plan in Primavera P6 and Bringing the Changes as a Cost Budget into Oracle Projects

To make changes to the Project Plan in Primavera P6 and bring them as Cost Budget to Oracle Projects:

1. Change the project plan in Primavera P6.
2. In Primavera P6, run the **Budget** synchronization process to send the changes to Oracle Projects.
3. Oracle Projects receives the project plan changes as the Current Working Budget.

Closing and Synchronizing a Project

To close or inactivate a project in Oracle Projects and synchronize it with Primavera P6:

1. In Oracle Projects, set the status of the project to *Closed*.

2. In Oracle Projects run the **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program with *Synchronize* value as *Project Header* to send the project header changes to Primavera P6.

The **Status** attribute sends the changes to Primavera P6, which in turn renders the project inactive in Primavera P6.

To close or inactivate a project in Primavera P6 and synchronize it with Oracle Projects:

1. In Primavera P6, set the status of the project to *Inactive*.
2. In Oracle Projects, change the financial status of the project to render the project inactive.

AIA Components

The following AIA components are used to synchronize projects between Oracle Projects and Primavera P6.

Adapter

- SyncProjectListEbizAdapter – Used to call the synchronizing projects API to create or update projects in Oracle Projects.
- GetOperatingUnitEbizAdapter – Used to obtain the operating unit for the project or project template in Oracle Projects.
- SyncProjectFinancialListEbizAdapter - Used to call the synchronizing budgets API to create or update budgets in Oracle Projects.
- DeleteProjectListEbizAdapter – Used to call the synchronizing projects API to delete a task and resource assignments in Oracle Projects.

Requester ABCS

- SyncProjectListEbizReqABCSEImpl
- SyncProjectListP6EPPMReqABCSEImpl
- SyncProjectFinancialListEbizReqABCSEImpl
- SyncProjectFinancialPlanListP6EPPMReqABCSEImpl

Provider ABCS

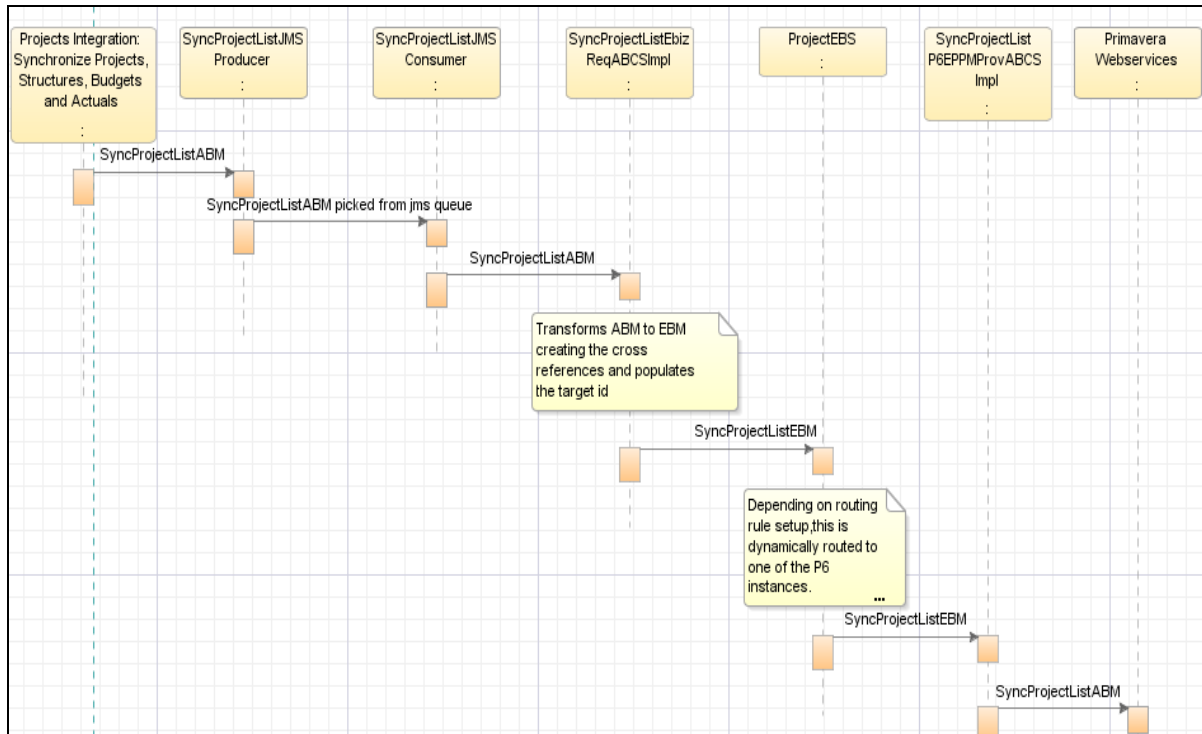
- SyncProjectListEbizProvABCSEImpl
- SyncProjectListP6EPPMProvABCSEImpl
- SyncProjectFinancialListEbizProvABCSEImpl
- SyncProjectFinancialPlanListP6EPPMProvABCSEImpl

SyncProjectListEbizReqABCImpl

SyncProjectListEbizReqABCImpl process is used to synchronize projects from Oracle Projects with Primavera P6. The **Projects Integration: Synchronize Projects, Structures, Budgets and Actuals** concurrent program uses this BPEL process. Requester ABCS populates the XREF information and transforms **SynProjectListABM** to **SynProjectListEBM** using the **XformSyncProjectListABM_to_SyncProjectListEBM.xsl** file. This in turn initiates the **ProjectEBS** service. The SyncProjectListEbizReqABCImpl service connects project data with Primavera P6.

Integration Flow

This sequence diagram illustrates the SyncProjectListEbizReqABCImpl process:



SyncProjectListEbizReqABCImpl sequence diagram

SyncProjectListEbizProvABCImpl

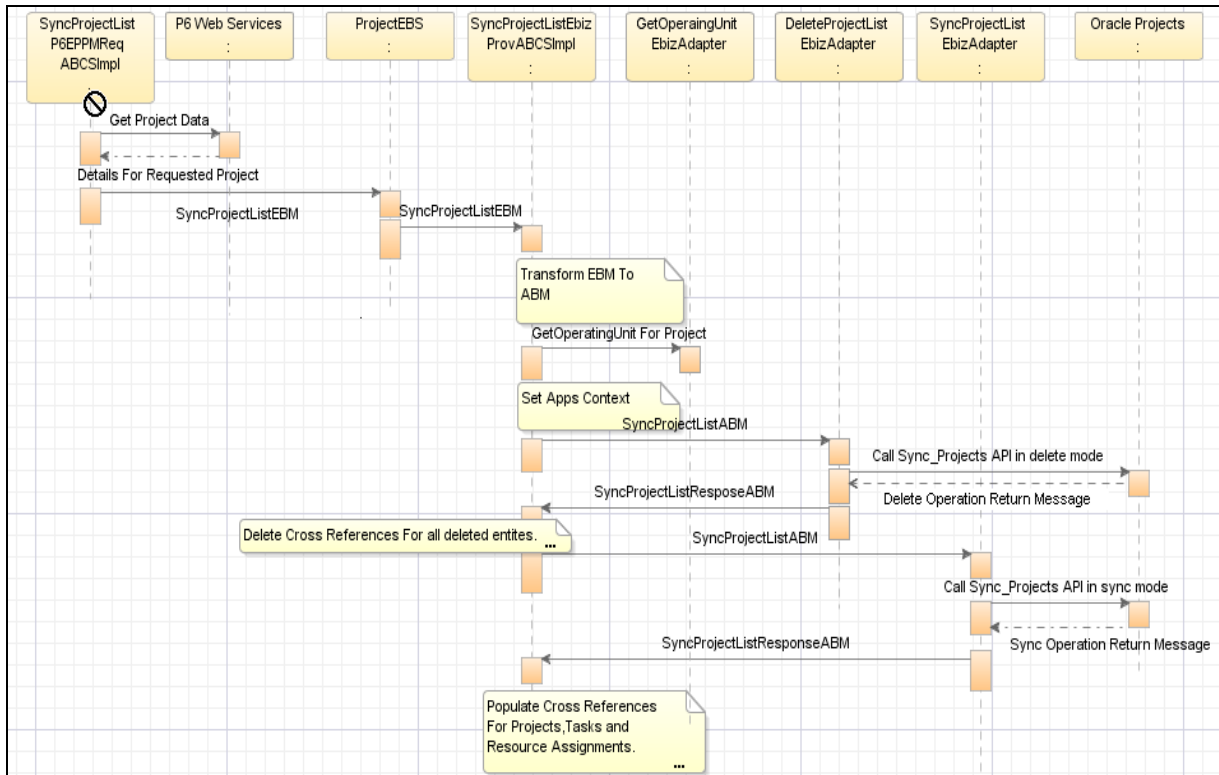
SyncProjectListEbizProvABCImpl process is used to synchronize projects from Primavera P6 with Oracle Projects. This BPEL process calls the **SyncProjects** API to create or update projects in Oracle Projects and populate the XREF tables.

The **XFormSyncProjectListEBM_To_SyncProjectListABM.xsl** file transforms **SynProjectListEBM** to **SynProjectListABM** object.

XformSyncProjectListResponseABM_To_SyncProjectListResponseEBM.xsl transforms **SynProjectListResponseABM** to **SynProjectListResponseEBM** object and updates the cross-reference information.

Integration Flow

This sequence diagram illustrates the SyncProjectListEbizProvABCSImpl process:



SyncProjectListEbizProvABCSImpl sequence diagram

SyncProjectFinancialListEbizProvABCSImpl

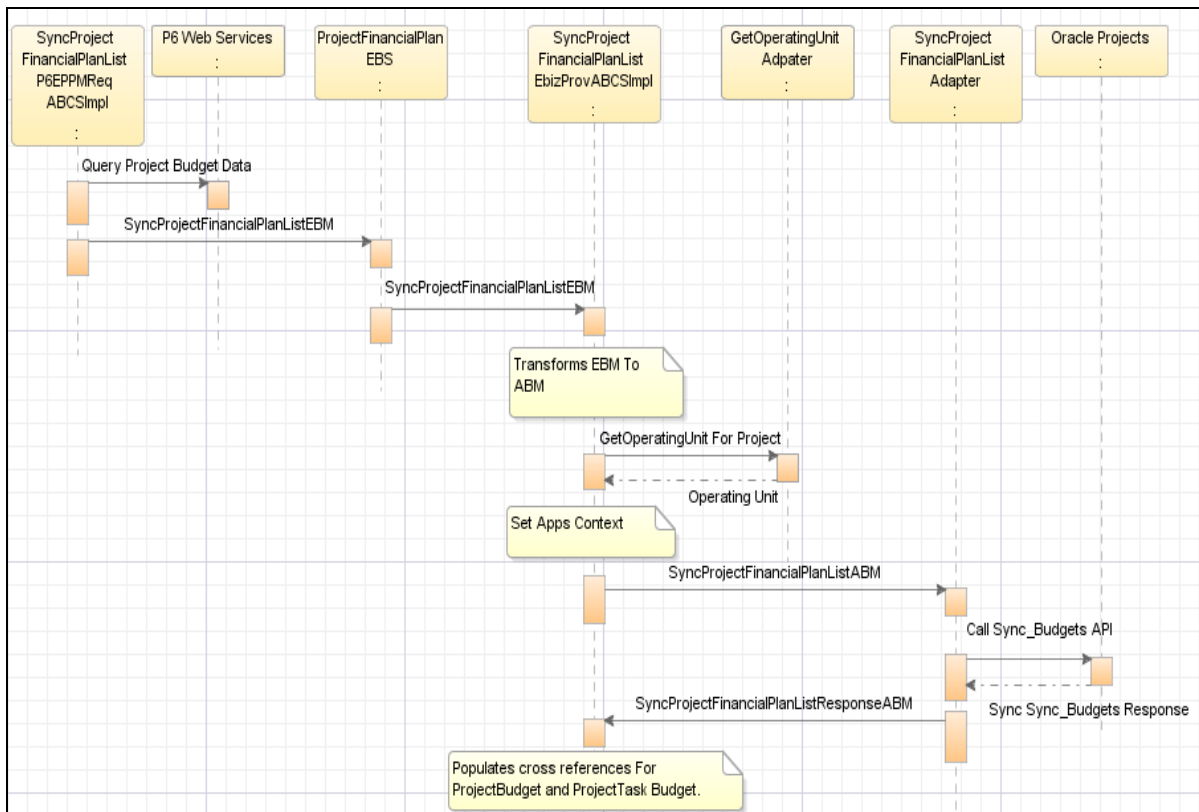
SyncProjectFinancialListEbizProvABCSImpl process is used to synchronize the project financial plan list from Primavera P6 to Oracle Projects. This BPEL process calls the **SyncBudgets** API to create or update budgets in Oracle Projects and populate the XREF tables.

The **XFormSyncProjectFinancialListEBM_To_SyncProjectFinancialListABM.xsl** file transforms **SyncProjectFinancialListEBM** to **SyncProjectFinancialListABM** object.

The **XformSyncProjectFinancialListResponseABM_To_SyncProjectFinancialListResponseEBM.xsl** file transforms **SyncProjectFinancialListResponseABM** to **SyncProjectFinancialListResponseEBM** object and updates the cross-reference information.

Integration Flow

This sequence diagram illustrates the SyncProjectFinancialListEbizProvABCSImpl process:



SyncProjectFinancialListEbizProvABCSImpl sequence diagram

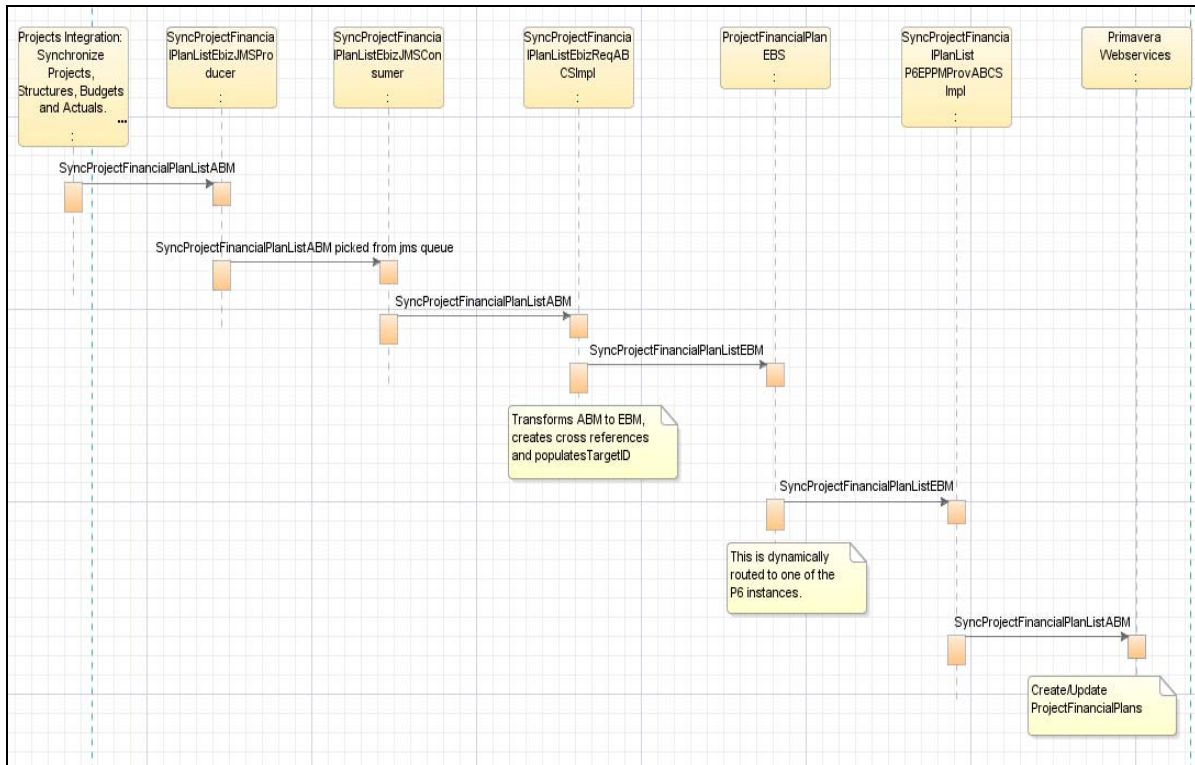
SyncProjectFinancialListEbizReqABCSImpl

SyncProjectFinancialListEbizReqABCSImpl process is used to synchronize a project budget from Oracle Projects to Primavera P6. The Projects Integration: Synchronize Projects, Structures, Budgets and Actuals concurrent program calls this BPEL process and passes it to ProjectFinancialListABM.

The **XformSyncProjectFinancialListABM_to_SyncProjectFinancialListEBM.xsl** file transforms **SyncProjectFinancialListABM** to **SyncProjectFinancialListEBM** object.

Integration Flow

This sequence diagram illustrates the SyncProjectFinancialListEbizReqABCSImpl process:



SyncProjectFinancialListEbizReqABCSImpl sequence diagram

Chapter 4 - Configuring the Oracle Project Management Integration Pack for Primavera P6 and Oracle E-Business Suite 3.1

This chapter provides overview of the implementation process and discusses:

- Setting up the Oracle Projects application
- Setting up the Primavera P6 application
- Describing the transfer of attributes
- Loading cross reference data
- Configuring the PIP
- Describing domain value maps
- Reviewing default routing rules
- Viewing EBO Implementation Maps

Overview of the Implementation Process

Deployment of the Project Portfolio Management: Primavera P6-EBS Projects PIP is carried out by AIA Installer. However, for conducive functioning, this requires certain settings and configurations in the participating applications and AIA configuration properties files.

The following applications should be set before installing the PIP:

- SOA 10.1.3.4 should be installed and MLR8 patch 8372150 is to be applied.
- AIA Foundation Pack P3.1 should be installed with relevant patches applied, if any.
- Primavera P6 v8 must be installed and configured accordingly.
- One of the following from Oracle Projects:
 - 11.5.10 CU2
 - 11i.PJ_PF.M.RUP4 patch 5644830
 - R12.1.2

Setting Up the Oracle Projects Application

You must perform the following before you can send any data from Oracle Projects to Primavera P6 or vice-versa, you must perform the following:

- Set up the application
- Run the concurrent programs
- Set the profile option

Setting the Setup Steps

The setup steps for Oracle Projects are as follows:

Setup Step	Required/Optional	Setup Level	Responsibility	Comments
Define Planning Resource List	Optional	OU or Site	Projects Implementation Super User	Single global planning resource list is used for one P6 instance. All the planning resources that are integrated must be defined in the planning resource list. The list must be centrally controlled and enabled for workplan.
Define Rate Schedule for Employees, Job, Nonlabor Resources	Optional	OU or Site	Projects Implementation Super User	Select the <i>Share Across Operating Units</i> check box for all rate schedules.
Define Third-Party Application	Required	Site	Projects Implementation Super User	<i>Name</i> must be the same as the Primavera P6 instance's third-party application name. <i>Currency</i> must be the same as the base currency of Primavera P6. The following conversion attributes are available only for

Setup Step	Required/Optional	Setup Level	Responsibility	Comments
				the planning resource rates: rate type, rate date type, and rate.
Assign Planning Resource List to Third-Party Application	Optional	Site	Projects Implementation Super User	You must perform this step to synchronize resource assignment and planning resource-based budget information from Primavera P6 to Oracle Projects.
Assign Rate Schedule to Third-Party Application.	Optional	Site	Projects Implementation Super User	You must perform this step to synchronize resource assignment and planning resource-based budget information from Primavera P6 to Oracle Projects.
Assign Operating Units to Third-Party Application	Required	Site	Projects Implementation Super User	Select the <i>All Operating Units</i> check box for selecting all operating units.
Define Project Template and Enable Integration	Required	OU (set at the responsibility level)	System Administrator	To select the <i>Enable Integration</i> check box for a project template, from the Projects: Setup menu select the <i>Integration Settings</i> link.
Define Project and Enable Integration	Optional	OU	System Administrator	To select the <i>Enable Integration</i> check box for a project, from the Projects: Home page, on the Setup tab, select the <i>Integration Settings</i> link.

Integration Settings

1. You must enable a Structure for the project that is going to be integrated. Based on the project structure, select either the **Enable Workplan Structure** or **Enable Financial Structure** check boxes on the Structures page.
2. You must select the **Enable Integration** check box to enable integration of a project.

Executing the Concurrent Programs

The following concurrent programs are used to synchronize data from Oracle Projects to Primavera P6:

Step	Concurrent Program	Responsibility
Synchronize/Send Planning Resource to Primavera P6	Projects Integration: Synchronize Planning Resources and Rates	Projects Implementation Super User
Synchronize/Send Project Templates to Primavera P6	Projects Integration: Synchronize Projects, Structures, Budgets and Actuals	System Administrator
Synchronize/Send Project to Primavera P6	Projects Integration: Synchronize Projects, Structures, Budgets and Actuals	System Administrator
Synchronize/Send Budgets to Primavera P6	Projects Integration: Synchronize Projects, Structures, Budgets and Actuals	System Administrator
Synchronize/Send Actual Cost to Primavera P6	Projects Integration: Synchronize Projects, Structures, Budgets and Actuals	System Administrator

Setting the Profile Option

Set the following profile option in Oracle Projects to connect to the integration server:

Profile Option	Value	Setup Level	Required/ Optional	Navigation
PA: Integration Server URL	<SOA server /host name/port/endpoint point> For example: http://sdc60007sems.us.companyx.com:6873/soa-infra/services/default	Site or User	Required	<ol style="list-style-type: none"> 1. Login as sysadmin/sysadmin 2. Go to System Administrator responsibility 3. Under Profile menu click System link 4. Search for the PA: Integration Server URL profile option and set the appropriate value

Setting Up the Primavera P6 Application

Before you can send any data from Primavera P6 to Oracle Projects, you must set up Primavera P6 to work with Oracle Projects.

Setting up Primavera P6 includes:

- Defining the Configuration Settings
- Defining the Administrative Settings in Primavera P6
- Defining the WebLogic server for Primavera P6
- Authorizing Users to Send Data to ERP systems
- Running the Primavera P6 Setup Utility
- Understanding Primavera P6 Role Name and Resource Rate Data

Defining the Configuration Settings

You use configuration settings to specify how Primavera P6 integrates with ERP applications. This PIP utilizes the values that are entered in the configuration settings that begin with **Database/Instance/AIA**.

This PIP is configured to use the standard default configuration settings. However, if you choose to change any of the values in the AIAConfigurationProperties.xml file, ensure that you update the value in the corresponding configuration property in Primavera P6.

Warning! Only an experienced Primavera P6 administrator should use the P6 Administration application to modify configuration settings.

For more information about Primavera P6 configuration settings, see *Oracle's Primavera P6 Administrator's Guide*, "Installing P6 Web Access", [Configuration Settings for P6 Web Access](#).

Defining the Administrative Settings in Primavera P6

For the Primavera P6 system to communicate with the AIA system, you must set up the following administrative information:

1. Navigate to the Administration Application URL. For example, `http://localhost:7001/p6/admin.jsp`
2. Log in as a Primavera P6 user with database privileges.
3. Set the following configuration for AIA integration settings, which are located at `Configuration\Custom\Primavera P6 Configuration\Database\AIA`:
 - a. Set Enabled to **true**
 - b. Enter a valid value in the Username setting

- c. Enter a valid value in the Target System ID setting
 - d. Leave the remaining AIA integration settings with their default values
- 4. Change the Configuration\Custom\Primavera P6 Configuration\Web Services\Security setting as follows:
 - a. Under Authentication\User Name Token Profile\Nonce, set Require Nonce to **false**
 - b. Under Authentication\User Name Token Profile\Created, set Require Created to **false**
 - c. Under Message protection, set the following to **false**:
 - i. Require Timestamp
 - ii. Require Digital Signatures for Incoming Messages
 - iii. Require Encryption for Incoming
 - iv. Messages
 - d. Under Fusion Integration\Outgoing Messages, set Require Encryption for Incoming Messages to **false**
- 5. Verify that the Configuration\Custom\Primavera P6 Configuration\Application\Ignore Daylight Saving Time value in the Administration Application matches the Ignore Daylight Savings Time setting in the P6 Project Reporter configuration application.

To verify this setting, open the Project Reporter configuration application URL, (for example, <http://localhost:7001/pr/admin>), log in as a user with privileges, and view the Ignore Daylight Savings Time option on the Configuration tab.

Defining the WebLogic server for Primavera P6

To synchronize data with other applications during integrations, you must define the WebLogic server to work with the Primavera P6 system using the following steps:

- 1. Log in to the WebLogic console. For example, <http://localhost:7001/console> to create a data source.
- 2. Click the Lock & Edit button.
- 3. At Domain Structure, expand Services-JDBC-DataSources.
- 4. Click the New button at Summary of JDBC Data Sources.
- 5. On the Create a New JDBC Data Source screen, enter the following values:
 - a. Set Name to **AIA_ProjP6EPPM_DS**
 - b. Set JNDI Name to **AIA_ProjP6EPPM_DS**
- 6. Click the Next button twice.
- 7. Provide the following AIA database connection information:
 - a. Database Name
 - b. Host Name
 - c. Port

- d. Database Username and Password.
8. Click the Next button.
9. Click the Test Configuration button to test the connection.
10. Click the Next button.
11. Select the server that is used by Primavera P6.
12. Click the Finish button.
13. Click the Activate Changes button.
14. To turn off the Enable Keepalives switch, click the Lock & Edit button.
15. At Domain Structure, expand Environment-Servers.
16. Select the server that is used by Primavera P6.
17. Select the Protocols tab from Settings for <Server Name>.
18. From the list of tabs, select HTTP.
19. Deselect the Enable Keepalives check box.
20. Click the Save button, and then click the Activate Changes button.

Authorizing Users to Send Data to ERP Systems

To initiate the integration processes from Primavera P6 to Oracle Projects, users must access the Send to ERP option from the Primavera P6 menu. In order to access this menu option, users must have authorization. A Primavera P6 administrator can set up specific user security profiles with the appropriate privileges to access this menu option and application.

In the Primavera P6 Project Management client, administrators follow these steps to set the appropriate security privileges:

1. Select Admin, and then Security Profiles.
2. In the Security Profiles dialog box, select Project Profiles.
3. Select the Allow Integration with ERP System option in the Privilege table.

After the administrator has set these privileges, the user who has been granted the privilege can view the Send to ERP command from the Open Projects menu on the Activities page of Web Access.

For more information about Primavera P6 security settings, see *Oracle's Primavera P6 Administrator's Guide*, "Application Administration", [*Defining Project Profiles*](#).

Running the Primavera P6 Setup Utility

You must run the AIAP6EPPMSSetupUtility.bat utility before using the PIP. This utility does the following:

- Maximizes the data limits on ID fields

- Creates and validates UDF fields for AIA integrations
- Creates and validates project code that is required for the integration
- Creates and validates EPS node that is required for the integration

The utility and detailed instructions are located in the AIAP6EPPMSetupUtility.zip file. This file is present at the following location on <AIA Home>:

/services/core/PrimaveraP6/UtilityServices/AIAP6EPPMSetupUtility/AIAP6EPPMSetupUtility.zip

UDF Information

When you run the utility several UDFs are created in Primavera P6. Each UDF corresponds to a setting in the AIAConfigurationProperties.xml file. If you update any of the UDFs that this utility creates, you must also update the associated tag in the AIAConfigurationProperties.xml file.

The following table provides information about the UDFs for this PIP:

UDF Name	UDF Subject Area	AIA Configuration Property Tag	UDF Data Type
ERP Description	Project	Project.Description.Field.Name	Text
ERP Description	WBS	WBS.Description.Field.Name	Text
ERP Description	Activity	Activity.Description.Field.Name	Text
ERP Actual Raw Total Cost Amount	WBS	WBS.ActualRawTotalCostAmount.Field.Name	Cost
ERP Actual Raw Total Cost Amount	Activity	Activity.ActualRawTotalCostAmount.Field.Name	Cost
ERP Actual Burdened Total Cost Amount	WBS	WBS.ActualBurdenedTotalCostAmount.Field.Name	Cost
ERP Actual Burdened Total Cost Amount	Activity	Activity.ActualBurdenedTotalCostAmount.Field.Name	Cost
ERP Total Raw Cost Amount	WBS	WBS.TotalRawCostAmount.Field.Name	Cost
ERP Total Burdened Cost Amount	WBS	WBS.TotalBurdenedCostAmount.Field.Name	Cost
ERP Actual Burdened Cost Amount	Resource Assignment	ResAssignment.ActualBurdenedCostAmount.Field.Name	Cost
ERP Total Burdened Cost	Resource Assignment	ResAssignment.TotalBurdenedCostAmount.Field.Name	Cost

UDF Name	UDF Subject Area	AIA Configuration Property Tag	UDF Data Type
Amount			

Enterprise Project Structure

When you create projects in Primavera P6, the system must know what Enterprise Project Structure (EPS) to use so that the project is at the correct hierarchical level. The utility defines the EPS for this PIP as *Imported Projects*.

If you change the EPS for this PIP, you must update the EPS.Default.ID tag in the AIAConfigurationProperties.xml file.

ERP Project Template Field

The utility creates the project code ERP Project Template, which is used when creating a new project in Primavera P6. You must enter a project template in this field so that the Oracle Projects application knows which template to use as the model when creating a new project.

Understanding Primavera P6 Role Name and Resource Rate Data

Some of the Primavera P6 data is handled differently in this PIP than in other applications. To accommodate the differences in each system, some of the items in Primavera P6 are handled differently so that this PIP functions properly.

Role Name

Role Name in Primavera P6 can have a maximum of 100 characters and must be unique. Other applications may not have unique names for roles. Therefore, to ensure that role names are unique, this PIP utilizes this formula when inserting a role name into Primavera P6, using attributes from the ProjectResourceSetEBO:

```
Role name + space + [AlternateObjectKey (if exists) OR Application
Object key.]
```

Resource Rate Unit of Measure

Primavera P6 supports only *Hourly* as a unit of measure for labor and nonlabor resources. Therefore, Primavera P6 can support only those unit codes [UOM] that can be converted into the hourly unit code. The supported UOM codes are: Daily, Weekly, and Monthly. If a UOM code is not supported, it is ignored during processing.

Primavera P6 uses standard conversion rates for the following incoming unit codes when converting to hourly units:

- Hourly = 1 hour
- Daily = 8 hours
- Weekly = 40 hours
- Monthly = 160 hours

Describing the Transfer of Attributes

The following tables list the workplan and financial plan attributes transferred between Oracle Projects and Primavera P6, the direction of data transfer, the Oracle Projects fields, and the corresponding fields in Primavera P6.

The following table lists the Oracle Projects fields, Primavera P6 fields, and direction of data transfer for the **integration** attributes:

Workplan-Enabled Project	Project with Workplan not enabled	Primavera P6	Direction of Data Transfer
Planning Resource List	Planning Resource List	Resources, Roles, Expense Category	Oracle Projects to Primavera P6
Rates Schedule	Rates Schedule	Resources and Role Rates	Oracle Projects to Primavera P6
Project	Project	Project	Both ways
Workplan Task	Financial Task	WBS Node	Both ways
Workplan Task	No Integration	Activities	Both ways
Workplan Resource Assignment	No Integration	Resource Assignments, Activity Expenses, and Role Assignments	Primavera P6 to Oracle Projects Oracle Projects to Primavera P6: Workplan resource assignments created from Primavera P6 are sent to Primavera P6 for synchronizing updates Workplan resource assignments created in Oracle Projects are not sent to Primavera P6
No Integration	Financial Plan / Budget Resource Assignments	Summarized WBS Node Level Planned Cost and Summarized Resource Assignments Level Planned Cost	Primavera P6 to Oracle Projects
Budget Amounts	Budget Amounts	Project and WBS Node Level Current Budget and Original Budget	Oracle Projects to Primavera P6

The following table lists the Oracle Projects fields, Primavera P6 fields, and direction of data transfer for the **project** attributes:

Oracle Projects Field	Primavera P6 Field	Direction of Data Transfer
Number	Project ID	Both ways
Name	Project Name	Both ways
Description	UDF: ERP Description	Both ways
Transaction Start	Planned Start	Both ways
Transaction Finish	Must Finish By	Both ways
Actual Start Date	Actual Start Date	Primavera P6 to Oracle Projects
Actual Finish Date	Actual Finish Date	Primavera P6 to Oracle Projects
Currency Code	P6 Currency (stored in the AIAConfigurationProperties.xml)	Primavera P6 to Oracle Projects
Project Number (Template Code)	Project Code	Primavera P6 to Oracle Projects
Status	Project Status	Oracle Projects to Primavera P6

The following table lists the Oracle Projects fields, Primavera P6 fields, and direction of data transfer for the **task** attributes:

Oracle Projects Field	Primavera P6 Field	Direction of Data Transfer
Task Number	WBS Code / Activity ID	Both ways
Task Name	WBS Name / Activity Name	Both ways
Description (in Task Details)	UDF: ERP Description	Both ways
Transaction Start	Start	Both ways
Transaction Finish	Finish	Both ways
Early Start Date	Early Start (for Activities) Remaining Early Start (for WBS)	Primavera P6 to Oracle Projects
Early Finish Date	Early Finish (for Activities) Remaining Early Finish (for WBS)	Primavera P6 to Oracle Projects
Late Start Date	Late Start (for Activities)	Primavera P6 to Oracle Projects
Late Finish Date	Late Finish (for Activities)	Primavera P6 to Oracle Projects
Scheduled Start date	Planned Start	Both ways
Scheduled Finish date	Planned Finish	Both ways
Baseline Start Date	BL Project Start	Primavera P6 to Oracle Projects For Oracle Projects to Primavera P6, data transfer is accepted only at the activity level
Baseline Finish Date	BL Project Finish	Primavera P6 to Oracle Projects

Oracle Projects Field	Primavera P6 Field	Direction of Data Transfer
		For Oracle Projects to Primavera P6, data transfer is accepted only at the activity level
(External) Remaining Duration	Remaining Duration	Primavera P6 to Oracle Projects
Physical Percent Complete	Performance Percent Complete	Primavera P6 to Oracle Projects
Actual Raw Cost	WBS Node and Activity level UDF: Actual Raw Total Cost Amount	Oracle Projects to Primavera P6
Actual Burden Cost	WBS Node and Activity level UDF: Actual Raw Total Cost Amount	Oracle Projects to Primavera P6
Raw Cost	Planned Total Cost	Both ways
Burden Cost	Current Budget	Oracle Projects to Primavera P6

The following table lists the Oracle Projects fields, Primavera P6 fields, and direction of data transfer for the **resource assignment** attributes:

Oracle Projects Field	Primavera P6 Field	Direction of Data Transfer
Resources	Resource Name, Role Name, Expense Category	Create: from Primavera P6 to Oracle Projects
Planning Resource	Resource Assignment Name	Primavera P6 to Oracle Projects
Task Schedule Start	Planned Start	Both ways
Task Schedule Finish	Planned Finish	Both ways
Planned Quantity	Planned Units	Both ways
Planned Cost	Planned Cost	Both ways
Actual Raw Cost	Actual Cost	Oracle Projects to Primavera P6
Actual Burden Cost	UDF: ERP Actual Burdened Cost Amount	Oracle Projects to Primavera P6
Current Period Actual Raw Cost Current Period Actual Burden Cost	UDF: Actual This Period Cost UDF: ERP Total Burdened Cost Amount	Oracle Projects to Primavera P6

Describing Cross-References

Cross-references map and connect the records within the application network and enable these applications to communicate in the same language. The integration server stores the relationships in a consistent way so that others can refer to it.

For more information, see *Oracle Fusion Middleware Developer's Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1* and the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite*, "Working with Cross References."

Cross-Reference Tables for Project Portfolio Management: Primavera P6-EBS Projects PIP

This table lists the cross-references for the PIP:

XREF_TABLE_NAME	XREF_COLUMN_NAME	Description	Usage
PROJECTRESOURCESET_ID	EBIZ_01	Unique identifier of the planning resource list in Oracle Projects	Populate the value or lookup for the corresponding common value
	COMMON	System generated project identifier	Lookup/display during project resource set flow
PROJECTRESOURCESET_RESOURCEID	EBIZ_01	Unique identifier of the planning resource in a planning resource list	Populate the value or lookup for the corresponding common value
	COMMON	System generated project structure identifier	Lookup/display during project resource set flow
	P6EPPM_01	Resource, expense category, and role object identifiers For resources the data is prefixed with RESOURCE:: For expense category the data is prefixed with NON_SCHEDULABLE:: For roles the data is prefixed with ROLE::	Lookup/display during project resource set flow
PROJECTRESOURCERATESCHEDULE_ID	EBIZ_01	Unique identifier of the resource rate schedule	Populate the value or lookup for the corresponding common value
	COMMON	System generated resource rate identifier	Lookup/display during project resource rate schedule flow
PROJECTRESOURCERATESCHEDULE_LINEID	EBIZ_01	Unique identifier of the resource rate schedule lines	Populate the value or lookup for the corresponding common value
	COMMON	System generated resource rate identifier	Lookup/display during project resource rate schedule flow
	P6EPPM_01	Resource rate and role rate object identifiers For resource rate the data is prefixed with RESOURCERATE::	Lookup/display during project resource rate schedule flow

XREF_TABLE_NAME	XREF_COLUMN_NAME	Description	Usage
		For role rate the data is prefixed with ROLERATE::	
PROJECT_ID	EBIZ_01	Unique identifier of the project	Populate the value or lookup for the corresponding common value
	COMMON	System generated project identifier	Lookup/display during project flow
	P6EPPM_01	Project identifier	Lookup/display during project flow
RESOURCE_ASSIGNMENT_ID	EBIZ_01	Identifier of a resource assignment for a project	Populate the value or lookup for the corresponding common value
	COMMON	System generated resource assignment identifier	Lookup/display during project or task flow
	P6EPPM_01	Resource assignment identifier	Lookup/display during project or task flow
PROJECT_TASK_ID	EBIZ_01	Unique identifier of the project tasks	Populate the value or lookup for the corresponding common value
	COMMON	System generated project task identifier	Lookup/display during project task flow
	P6EPPM_01	WBS and activity object identifiers For WBS the data is prefixed with WBS:: For activity the data is prefixed with ACTIVITY::	Lookup/display during project task flow
PROJECTFINANCIALPLAN_ID	EBIZ_01	Unique identifier of the financial plan or budget for a project	Populate the value or lookup for the corresponding common value
	COMMON	System generated financial plan identifier	Lookup/display during budget flow
	P6EPPM_01	Unique project identifier	Lookup/display during budget flow
PROJECTFINANCIALPLAN_TASK_ID	EBIZ_01	Unique identifier of the budget for a task	Populate the value or lookup for the corresponding common value
	COMMON	System generated financial plan task identifier	Lookup/display during financial task flow
	P6EPPM_01	Unique identifier of the task or WBS for which the budget is allocated	Lookup/display during financial task flow

XREF_TABLE_NAME	XREF_COLUMN_NAME	Description	Usage
PROJECTFINANCIALPLAN_TASKLINE_ID	EBIZ_01	Unique identifier of the budget for resource assignments	Populate the value or lookup for the corresponding common value
	COMMON	System generated financial plan task identifier	Lookup/display during financial task flow

Describing the Domain Value Maps

Domain value maps (DVMs) are a standard feature of the Oracle SOA Suite and enable you to equate lookup codes and other static values across applications. For example, FOOT and FT, or US and USA. DVMs are static in nature, though administrators can add additional maps as needed. Transactional business processes never update DVMs; they only read from them. They are stored in XML files and cached in memory at runtime.

DVM types are predefined for the Project Portfolio Management: Primavera P6-Oracle Projects PIP flows, and administrators can extend the list of mapped values by adding more maps. The DVM data should be in sync with what the participating applications use. This sync-up should be done prior to running any initial loads, or initiating any incremental transactional flows.

Note: DVMs are not automatically synchronized. Therefore, if new UDC values are added in Oracle Projects or new values are added in Primavera P6, those values must be manually added to the appropriate DVM, if applicable.

This section contains the DVMs for the Project Portfolio Management: Primavera P6-Oracle Projects PIP.

For more information, see *Oracle Fusion Middleware Developer's Guide for Oracle Application Integration Architecture Foundation Pack 11g Release 1*, "Developing Custom XPath Functions."

DVM	DVM Column Name	Description of mapping between Oracle Projects and Primavera P6
PROJECTRESOURCE_RATESCHEDULE_TYPECODE	EBIZ_01, COMMON	Project resource rate schedule type code
PROJECTRESOURCE_CLASSIFICATION_CODE	EBIZ_01, COMMON, P6EPPM_01	Resource class code
PROJECTRESOURCESET_RESOURCE_TYPE_COMB_FRMT_CODE	EBIZ_01, COMMON	Resource format combinations
PHONENUMBER_TYPE	EBIZ_01, COMMON, P6EPPM_01	Phone number type
PROJECTRESOURCESET_ENABLED_INDICATOR	EBIZ_01, COMMON, P6EPPM_01	Resource set indicator
CURRENCY_CODE	Existing DVM for EBS,	Currency code

DVM	DVM Column Name	Description of mapping between Oracle Projects and Primavera P6
	COMMON, P6EPPM_01	
PROJECT_STATUSCODE	EBIZ_01, COMMON, P6EPPM_01	Project statuses
UNIT_OF_MEASURE	EBS_PROJECTS_01_UNIT_OF_MEASURE, COMMON, P6EPPM_01, RATECODE	Unit in which the resource rate is applied
PROJECTRESOURCEASSIGNMENT_TRACKINGLEVELCODE	EBIZ_01, COMMON, P6EPPM_01	Project resource assignment tracking levels
PROJECTSYNCBUDGET_LEVELCODE	EBIZ_01, COMMON, P6EPPM_01	Project budget levels for synchronization
PROJECTFINANCIALPLAN_TYPECODE	EBIZ_01, COMMON	Financial plan type
PROJECTBUDGET_PLANCLASSCODE	EBIZ_01, COMMON	Budget plan code
EBIZ_P6_APPS_USER	APPS_USER, LANG_CODE	EBS application user name to implementation language
EBS_PROJECTS_OU_RESP	RESPONSIBILITY, OPERATING_UNIT	Operating unit to EBS responsibility
PROJECTBUDGET_STATUSCODE	COMMON, EBIZ_01	Budget status codes
PROJECT_SUB_STATUSCODE	COMMON, EBIZ_01	Project sub status
LANGUAGE_CODE	COMMON, EBIZ_01	Language codes

Mapping Details

The following tables represent examples of the DVMs that reside in the AIA layer to synchronize data between Oracle Projects and Primavera P6:

The **PROJECTSYNCBUDGET_LEVELCODE** DVM maps the project budget levels for synchronization between the participating applications.

COMMON	EBIZ_01	P6EPPM_01
NONE	NONE	NONE
TOP_TASK	TOP_TASK	Toplevel
LOWEST_TASK	LOWEST_TASK	Lowest
PROJECT	PROJECT	Project

The **PROJECT_RESOURCE_CLASSIFICATION_CODE** DVM maps the resource class codes between the participating applications.

COMMON	EBIZ_01	P6EPPM_01
LABOR	PEOPLE	LABOR
NON_LABOR	EQUIPMENT	NON_LABOR

The **PROJECTRESOURCESET_RESRC_TYPE_COMB_FRMT_CODE** DVM maps the resource format combinations between AIA and Oracle Projects.

COMMON	EBIZ_01
JOB	JOB
PROJECT_ROLE	PROJECT_ROLE

The **PROJECTRESOURCESET_ENABLED_INDICATOR** DVM maps the resource set options between the participating applications.

COMMON	EBIZ_01	P6EPPM_01
TRUE	Y	TRUE
FALSE	N	FALSE

The **PROJECTRESOURCERATESCHEDULE_TYPECODE** DVM maps the resource rate schedule type codes between AIA and Oracle Projects.

COMMON	EBIZ_01
EMPLOYEE	EMPLOYEE
JOB	JOB

The **PROJECTRESOURCEASSIGNMENT_TRACKINGLEVELCODE** DVM maps the resource assignment tracking levels between the participating applications.

COMMON	EBIZ_01	P6EPPM_01
ALL	ALL	ALL
NONE	NONE	NONE
TOP_TASK	TOP_TASK	Toplevel
LOWEST_TASK	LOWEST_TASK	Lowest
PROJECT	PROJECT	Project

The **PHONENUMBER_TYPE** DVM maps the phone number type values between the participating applications.

COMMON	EBIZ_01	P6EPPM_01
WORK	GEN	WORK

The **PROJECT_STATUSCODE** maps the project statuses between the participating applications.

COMMON	EBIZ_01	P6EPPM_01
PLANNED		PLANNED
APPROVED	APPROVED	

The **CURRENCY_CODE** DVM maps the currency code values between the participating applications.

COMMON	EBIZ_01	P6EPPM_01
EUR	EUR	EUR

The **EBIZ_P6_APPS_USER** DVM maps the Oracle Projects user name to implementation language.

APPS_USER	LANG_CODE
SERVICES	AMERICAN

The **EBS_PROJECTS_OU_RESP** DVM maps an operating unit to Oracle Projects responsibility.

OPERATING_UNIT	RESPONSIBILITY
Vision Services	Projects SU, Vision Services (USA)
Vision Project Mfg	Projects SU, Vision Project Mfg (EUR)
Vision Operations	Projects SU, Vision Operations (USA)

The **UNIT_OF_MEASURE** DVM maps the unit in which the resource rate is applied between the participating applications.

COMMON	EBS_PROJECTS_01_UNIT_OF_MEASURE	P6EPPM_01
DAY		8
WEEKS		40
ANN		2000
Per Month		160
HUR	HOURS	1

The **LANGUAGE_CODE** DVM maps the language codes between the participating applications.

COMMON	EBIZ_01
Arabic	Arabic
English	AMERICAN

Setting Configuration Properties

You must set up configuration properties in the AIAConfigurationProperties.xml file for using the Project Portfolio Management: Primavera P6-EBS Projects PIP. The file is located in `<aia.home>/aia_instances/<instanceName>/AIAMetaData/config`. For example, `/slot/ems2885/oracle/AIAHome/aia_instances/P62E1/AIAMetaData/config`.

For more information, see Oracle Fusion Middleware Infrastructure Components and Utilities User's Guide for Oracle Application Integration Architecture Foundation Pack.

SyncProjectResourceSetListEbizReqABCImpl

The following table lists the properties for the SyncProjectResourceSetListEbizReqABCImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	EBIZ_01	System identifier for the Oracle Projects instance
OnExceptionWaitTime	PT2S	Controls the time lag before retrying in case of a concurrent XREF insert error Note: This property is for internal use and must not be modified.
Routing.ProjectResourceSetEBS.SyncProjectResourceSetList.RouteToCAVS	false	Decides if the request must be sent to the CAVS simulator or the Primavera P6 application
Routing.ProjectResourceSetEBS.SyncProjectResourceSetList.CAVS.EndpointURI	http://{fp.server.soaserverhostname}:{fp.server.soaserverport}/event/AIASystem/ValidationSystem/AsyncResponseSimulator	
Custom.Transformations.Abm_To_Ebm	false	
ABCSExtension.PreProcessABM	false	Decides if the user exit for the pre-process ABM should be called or not
ABCSExtension.PreProcessEBM	false	Decides if the user exit for the pre-process EBM should be called or not

SyncProjectResourceRateScheduleListEbizReqABCImpl

The following table lists the properties for the SyncProjectResourceRateScheduleListEbizReqABCImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	EBIZ_01	System identifier for the Oracle Projects instance
Routing.ProjectResourceRateScheduleEBS.SyncProjectResourceRateScheduleList.RouteToCAVS	False	Decides if the request must be sent to the CAVS simulator or the Primavera P6 application
Routing.ProjectResourceRateScheduleEBS.SyncProjectResourceRateScheduleList.CAVS.EndpointURI	http://\${fp.server.soaserverhostname}:\${fp.server.soaserverport}/event/AIASystem/ValidationSystem/AsyncResponseSimulator	
ABCSExtension.PreProcessABM	false	Decides if the user exit for the pre-process ABM should be called or not
ABCSExtension.PreProcessEBM	false	Decides if the user exit for the pre-process EBM should be called or not
Custom.Transformations.Abm_To_Ebm	false	

SyncProjectListEbizReqABCImpl

The following table lists the properties for the SyncProjectListEbizReqABCImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	EBIZ_01	System identifier for the Oracle Projects instance
Routing.ProjectEBSV1.SyncProjectList.RouteToCAVS	false	Decides if the request must be sent to the CAVS simulator or the Primavera P6 application
Routing.ProjectEBSV1.SyncProjectList.CAVS.EndpointURI	http://\${fp.server.soaserverhostname}:\${fp.server.soaserverport}/event/AIASystem/ValidationSystem/AsyncResponseSimulator</Property>	
ABCSExtension.PreProcessABM	false	Decides if the user exit for the pre-process ABM should be called or not
ABCSExtension.PreProcessEBM	false	Decides if the user exit for the pre-process EBM should be called or not

Property Name	Values/Default Value	Description and Values
Custom.Transformations.Abm_To_Ebm	false	

SyncProjectListEbizProvABCSEImpl

The following table lists the properties for the SyncProjectListEbizProvABCSEImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	EBIZ_01	System identifier for the Oracle Projects instance
Routing.SyncProjectListEbizAdapter.RouteToCAVS	false	Decides if the request must be sent to the CAVS simulator or the EBS adapter
Routing.GetOperatingUnitEbizAdapter.RouteToCAVS	false	
ABCSEExtension.PreProcessABM	false	Decides if the user exit for the pre-process ABM should be called or not
ABCSEExtension.PreProcessEBM	false	Decides if the user exit for the pre-process EBM should be called or not
ABCSEExtension.PostProcessEBM	false	Decides if the user exit for the post-process EBM should be called or not
ABCSEExtension.PostProcessABM	false	Decides if the user exit for the post-process ABM should be called or not
Routing.SyncProjectListEbizAdapter.CAVS.EndpointURI	\${fp.server.soaserverhostname}; \${fp.server.soaserverport}/AIAValidation SystemServlet/syncresponsesimulator	
Routing.GetOperatingUnitEbizAdapter.CAVS.EndpointURI	http://\${fp.server.soaserverhostname}; \${fp.server.soaserverport}/AIAValidation SystemServlet/syncresponsesimulator	
Custom.Transformations.Abm_To_Ebm	false	
Custom.Transformations.Ebm_To_Abm	false	
Custom.Transformations.AppsContext. Default Value	false	Decides if the base or custom transformation must be used for populating APPS_HEADER. Example:<Property

Property Name	Values/Default Value	Description and Values
		name="Custom.Transformations.AppsContext">false</Property>
Custom.Transformations.GetOUInput		Decides if the base or custom transformation must be used for populating input to the GET_ORG_NAME API. Example:<Property name="Custom.Transformations.GetOUInput">false</Property>
Routing.SyncProjectListEbizAdapter.EBIZ_01.EndpointURI	http://\${participatingapplications.ebiz.server.hostname}: \${participatingapplications.ebiz.server.port}/ soa- infra/services/default/SyncProjectListEbizAdapter/ SyncProjectListEbizAdapter_ep	
Routing.GetOperatingUnitEbizAdapter.EBIZ_01.EndpointURI	http://\${participatingapplications.ebiz.server.hostname}: \${participatingapplications.ebiz.server.port}/ soa- infra/services/default/GetOperatingUnitEbizAdapter/ GetOperatingUnitEbizAdapter_ep	
Routing.GetOperatingUnitEbizAdapter.CAVS.EndpointURI	http://\${fp.server.soaserverhostname}: \${fp.server.soaserverport}/AIAValidationSystemServlet/ syncresponsesimulator	
Routing.SyncProjectListEbizAdapter.CAVS.EndpointURI	http://\${fp.server.soaserverhostname}: \${fp.server.soaserverport}/AIAValidationSystemServlet/ syncresponsesimulator	
Routing.DeleteProjectListEbizAdapter.CAVS.EndpointURI	http://\${fp.server.soaserverhostname}: \${fp.server.soaserverport}/AIAValidationSystemServlet/ syncresponsesimulator	
Routing.SyncProjectListEbizAdapter.EBIZ_01.EndpointURI	http://\${participatingapplications.ebiz.server.hostname}: \${participatingapplications.ebiz.server.port}/ soa- infra/services/default/DeleteProjectListEbizAdapter/ DeleteProjectListEbizAdapter_ep	

SyncProjectFinancialListEbizProvABCImpl

The following table lists the properties for the SyncProjectFinancialListEbizProvABCImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	EBIZ_01	System identifier for the Oracle Projects instance
Routing.SyncProjectFinancialListEbizAdapter.RouteToCAVS	false	Decides if the request must be sent to the CAVS simulator or the EBS adapter
Routing.GetOperatingUnitEbizAdapter.RouteToCAVS	false	
Routing.SyncProjectFinancialPlanListEbizAdapter.CAVS.EndpointURI	http://\${fp.server.soaserverhostname}:\${fp.server.soaserverport}/AIValidationSystemServlet/syncresponsesimulator	
Routing.GetOperatingUnitEbizAdapter.CAVS.EndpointURI	http://\${fp.server.soaserverhostname}:\${fp.server.soaserverport}/AIValidationSystemServlet/syncresponsesimulator	
ABCSExtension.PreProcessABM	false	Decides if the user exit for the pre-process ABM should be called or not
ABCSExtension.PreProcessEBM	false	Decides if the user exit for the pre-process EBM should be called or not
ABCSExtension.PostProcessEBM	false	Decides if the user exit for the post-process EBM should be called or not
ABCSExtension.PostProcessABM	false	Decides if the user exit for the post-process ABM should be called or not
Routing.SyncProjectFinancialListEbizAdapter.EBIZ_01.EndpointURI	http://\${fp.server.soaserverhostname}:\${fp.server.soaserverport}/soa-infra/services/default/ SyncProjectFinancialPlanListEbizAdapter / SyncProjectFinancialPlanListEbizAdapter_ep	Sets the end point for the adapter service to be called if multiple instances of EBS are used
Custom.Transformations.Abm_To_Ebm	false	
Custom.Transformations.Ebm_To_Abm	false	

Property Name	Values/Default Value	Description and Values
Routing.GetOperatingUnitEbizAdapter.EBIZ_01.EndpointURI	http://{fp.server.soaserverhostname}: \${fp.server.soaserverport}/soa- infra/services/default/ GetOperatingUnitEbizAdapter/ GetOperatingUnitEbizAdapter_ep	

SyncProjectFinancialListEbizReqABCImpl

The following table lists the properties for the SyncProjectFinancialListEbizReqABCImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	EBIZ_01	System identifier for the Oracle Projects instance
Routing.ProjectFinancialListEBS.RouteToCAVS		Decides if the request must be sent to the CAVS simulator or the Primavera P6 application
ABCSExtension.PreProcessABM	false	Decides if the user exit for the pre-process ABM should be called or not
ABCSExtension.PreProcessEBM	false	Decides if the user exit for the pre-process EBM should be called or not
Custom.Transformations.Abm_To_Ebm	false	

SyncProjectListP6EPPMReqABCImpl

The following table lists the properties for the SyncProjectListP6EPPMReqABCImpl service:

Property Name	Values/Default Value	Description and Values
ABCSExtension.PreXformABMtoEBM	True/false Default value = false	Use this property to specify whether preprocess extensions exist for the service. If set to true, the ABCS calls the extension service before processing the ABM.
ABCSExtension.PreInvokeEBS	True/false Default value = false	Use this property to specify whether to call an extension service before sending the EBM to the EBS.
Default.SystemID	P6EPPM_01	System code defined in OER from which requests originate for this process.

Property Name	Values/Default Value	Description and Values
System.P6EPPM_01.TimezoneOffset	No default value	Use this property to specify the time zone that the service uses.
System.P6EPPM_01.CurrencyCode	Entered through installation UI	Use this property to specify the default system currency of P6 installation.
Description.Field.Name	ERP Description	Use this property to specify the name of the field that contains the EBO description.
Routing.ProjectEBSV1.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.ProjectEBSV1.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS.Endpoint URI property. Values are true and false.
Routing.ProjectEBSV1.SyncProject.RouteToDSL	True/false Default value = false	Use this property to specify whether to route the EBM to internal DSL testing tool.
Routing.ProjectEBSV1.SyncProject.DSL.Endpoint	No default value	DSL Endpoint URL, when DSL testing tool routing is enabled.
Routing.SyncPortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.SyncPortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
Routing.SyncPortType.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS.Endpoint URI property. Values are true and false.

Property Name	Values/Default Value	Description and Values
Routing.UDFTypePortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.UDFTypePortType.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS. Endpoint URI property. Values are true and false.
Routing.UDFTypePortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.

SyncProjectFinancialPlanListP6EPPMReqABCSEImpl

The following table lists the properties for the SyncProjectFinancialPlanListP6EPPMReqABCSEImpl service:

Property Name	Values/Default Value	Description and Values
ABCSEExtension.PreXformABMtoEBM	True/false Default value = false	Use this property to specify whether preprocess extensions exist for the service. If set to true, the ABCS calls the extension service before processing the ABM.
ABCSEExtension.PreInvokeEBS	True/false Default value = false	Use this property to specify whether to call an extension service before sending the EBM to the EBS.
Default.SystemID	P6EPPM_01	System code defined in OER from which requests originate for this process.
System.P6EPPM_01.TimezoneOffset	No default value	Use this property to specify the time zone that the service uses.
System.P6EPPM_01.CurrencyCode	Entered through installation UI	Use this property to specify the default system currency of P6 installation.
Routing.ProjectFinancialPlanEBSV1.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.ProjectFinancialPlanEBSV1.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS.EndpointURI property. Values are true and false.
Routing.ProjectFinancialPlanEBSV1.SyncProject.RouteToDSL	True/false Default value = false	Use this property to specify whether to route the EBM to internal DSL testing tool.
Routing.ProjectFinancialPlanEBSV1.SyncProject.DSL.Endpoint	No default value	DSL Endpoint URL, when DSL testing tool routing is enabled.
Routing.SyncPortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.

Property Name	Values/Default Value	Description and Values
Routing.SyncPortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.

SyncProjectFinancialPlanListP6EPPMProvABCImpl

The following table lists the properties for the SyncProjectFinancialPlanListP6EPPMProvABCImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	P6EPPM_01	System code defined in OER from which requests originate for this process.
ABCSExtension.PreXformEBMtoABM	True/false Default value = false	Use this property to specify whether preprocess extensions exist for the service. If set to true, the ABCS calls the extension service before processing the EBM.
ABCSExtension.PreInvokeABS	True/false Default value = false	Use this property to specify whether to call an extension service after before the ABM to the P6 application.
ABCSExtension.PostInvokeABS	True/false Default value = false	Use this property to specify whether to call an extension service after sending the ABM to the P6 application.
Routing.SyncPortType.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS. Endpoint URI property. Values are true and false.
Routing.SyncPortType.CAVS.EndpointURI		CAVS Endpoint URL, when CAVS is enabled.
Routing.SyncPortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.

Property Name	Values/Default Value	Description and Values
System.P6EPPM_01.CurrencyCode	Entered through installation UI	Use this property to specify the default system currency of P6 installation.

SyncProjectListP6EPPMProvABCSImpl

The following table lists the properties for the SyncProjectListP6EPPMProvABCSImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	P6EPPM_01	System code defined in OER from which requests originate for this process.
ABCSExtension.PreXformEBMtoABM	True/false Default value = false	Use this property to specify whether preprocess extensions exist for the service. If set to true, the ABCS calls the extension service before processing the EBM.
ABCSExtension.PostInvokeABS	True/false Default value = false	Use this property to specify whether to call an extension service after sending the ABM to the P6 application.
Routing.SyncPortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.SyncPortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
Routing.SyncPortType.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS. Endpoint URI property. Values are true and false.

Property Name	Values/Default Value	Description and Values
Routing.EPSPortType.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS. Endpoint URI property. Values are true and false.
Routing.EPSPortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.EPSPortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
EPS.Default.ID	Imported Projects	Name of the default EPS to create the projects under.
Project.Description.Field.Name	ERP Description	Stores the description from project EBO in this UDF in Primavera P6.
Project.Description.Field.Type	Text	Type of the Description UDF in Primavera P6.
WBS.Description.Field.Name	ERP Description	Stores the description from WBS EBO in this UDF in Primavera P6.
WBS.Description.Field.Type	Text	Type of the WBS Description UDF in Primavera P6.
WBS.ChargeableIndicator.Field.Name	ERP Chargeable Indicator	Chargeable indicator in P6.
WBS.ChargeableIndicator.Field.Type	Text	Chargeable indicator in P6.
WBS.ActualRawTotalCostAmount.Field.Name	ERP Actual Raw Total Cost Amount	Actual Raw Total Cost Amount in P6.
WBS.ActualRawTotalCostAmount.Field.Type	Cost	Actual Raw Total Cost Amount in P6.

Property Name	Values/Default Value	Description and Values
WBS.ActualBurdenedTotalCostAmount.Field.Name	ERP Actual Burdened Total Cost Amount	Actual Burdened Total Cost Amount in P6.
WBS.ActualBurdenedTotalCostAmount.Field.Type	Cost	Actual Burdened Total Cost Amount in P6.
WBS.TotalRawCostAmount.Field.Name	ERP Total Raw Cost Amount	Total Raw Cost Amount in P6.
WBS.TotalRawCostAmount.Field.Type	Cost	Actual Raw Total Cost Amount in P6.
WBS.TotalBurdenedCostAmount.Field.Name	ERP Total Burdened Cost Amount	Total Burdened Cost Amount in P6.
WBS.TotalBurdenedCostAmount.Field.Type	Cost	Total Burdened Cost Amount in P6.
WBS.PlannedLaborQuantity.Field.Name	ERP Planned Labor Quantity	Planned Labor Quantity in P6
WBS.PlannedLaborQuantity.Field.Type	Double	Planned Labor Quantity in P6.
WBS.PlannedNonLaborQuantity.Field.Name	ERP Planned Non Labor Quantity	Planned Non Labor Quantity in P6
WBS.PlannedNonLaborQuantity.Field.Type	Double	Planned Non Labor Quantity in P6.
WBS.ActualLaborQuantity.Field.Name	ERP Actual Labor Quantity	Actual Labor Quantity in P6
WBS.ActualLaborQuantity.Field.Type	Double	Actual Labor Quantity in P6.
WBS.ActualNonLaborQuantity.Field.Name	ERP Actual Non Labor Quantity	Actual Non Labor Quantity in P6

Property Name	Values/Default Value	Description and Values
WBS.ActualNonLaborQuantity.Field.Type	Double	Actual Non Labor Quantity in P6.
WBS.EstimateAtCompletionLaborQuantity.Field.Name	ERP EAC Labor Quantity	EAC Labor Quantity in P6
WBS.EstimateAtCompletionLaborQuantity.Field.Type	Double	EAC Labor Quantity in P6.
WBS.EstimateAtCompletionCostAmount.Field.Name	ERP EAC Cost Amount	EAC Cost Amount in P6
WBS.EstimateAtCompletionCostAmount.Field.Type	Double	EAC Cost Amount in P6.
WBS.PhysicalPercentComplete.Field.Name	ERP Physical Percent Complete	Physical Percent Complete in P6
WBS.PhysicalPercentComplete.Field.Type	Double	Physical Percent Complete in P6.
Activity.Description.Field.Name	ERP Description	Stores the description from Activity EBO in this UDF in Primavera P6.
Activity.Description.Field.Type	Text	Type of the Activity Description UDF in Primavera P6.
Activity.ActualRawTotalCostAmount.Field.Name	ERP Actual Raw Total Cost Amount	Actual Raw Total Cost Amount in P6.
Activity.ActualRawTotalCostAmount.Field.Type	Cost	Actual Raw Total Cost Amount in P6.
Activity.ActualBurdenedTotalCostAmount.Field.Name	ERP Actual Burdened Total Cost Amount	Actual Burdened Total Cost Amount in P6.
Activity.ActualBurdenedTotalCostAmount.Field.Type	Cost	Actual Burdened Total Cost Amount in P6.

Property Name	Values/Default Value	Description and Values
ResAssignment.ActualBurdenedCostAmount.Fiel eld.Name	ERP Actual Burdened Cost Amount	Actual Burdened Cost Amount in P6.
ResAssignment.ActualBurdenedCostAmount.Fiel eld.Type	Cost	Actual Burdened Cost Amount in P6.
ResAssignment.TotalBurdenedCostAmount.Fiel d.Name	ERP Total Burdened Cost Amount	Total Burdened Cost Amount in P6.
ResAssignment.TotalBurdenedCostAmount.Fiel d.Type	Cost	Total Burdened Cost Amount in P6.
Delete.WBS.Activity.Support	True/false Default value = true	This determines whether the ABCS deletes the WBS's/Activities if only present in P6 application but not in incoming project structure through EBM.
TimezoneOffset	-08:00	Use this property to specify the time zone that the service uses.
Calendar.StartTime	08:00:00	Calendar start time when the date doesn't contain time in incoming start date.
Calendar.EndTime	16:00:00	Calendar end time when the date doesn't contain time in incoming end date.

SyncProjectResourceSetListP6EPPMProvABCSImpl

The following table lists the properties for the
SyncProjectResourceSetListP6EPPMProvABCSImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	P6EPPM_01	System code defined in OER from which requests originate for this process.
ABCSExtension.PreXformEBMtoABM	True/false Default value = false	Use this property to specify whether preprocess extensions exist for the service. If set to true, the ABCS calls the extension service before processing the

Property Name	Values/Default Value	Description and Values
		EBM.
ABCSExtension.PostInvokeABS	True/false Default value = false	Use this property to specify whether to call an extension service after sending the ABM to the P6 application.
Routing.ResourcePortType.RouteToCAVS	True/false Default value = false	Use this property to specify whether to route the EBM to CAVS.
Routing.ResourcePortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.ResourcePortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
Routing.RolePortType.RouteToCAVS	True/false Default value = false	Use this property to specify whether to route the EBM to CAVS.
Routing.RolePortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.RolePortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
Routing.ExpenseCategoryPortType.RouteToCAVS	True/false Default value = false	Use this property to specify whether to route the EBM to CAVS.
Routing.ExpenseCategoryPortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.ExpenseCategoryPortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
Routing.WBSCategoryPortType.RouteToCAVS	True/false Default value = false	Use this property to specify whether to route the EBM to CAVS.
Routing.WBSCategoryPortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.WBSCategoryPortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
Routing.UnitOfMeasurePortType.RouteToCAVS	True/false Default value = false	Use this property to specify whether to route the EBM to CAVS.
Routing.UnitOfMeasurePortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.UnitOfMeasurePortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.

Property Name	Values/Default Value	Description and Values
Routing.ResourceRatePortType.RouteToCAVS	True/false Default value = false	Use this property to specify whether to route the EBM to CAVS.
Routing.ResourceRatePortType.CAVS.EndpointURI	No default value	CAVS Endpoint URL, when CAVS is enabled.
Routing.ResourceRatePortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
WBSCategoryPrefix	GL-	Prefix used by Chart type being synced as wbs category.

SyncProjectResourceRateScheduleListP6EPPMProvABCSImpl

The following table lists the properties for the SyncProjectResourceRateScheduleListP6EPPMProvABCSImpl service:

Property Name	Values/Default Value	Description and Values
Default.SystemID	P6EPPM_01	System code defined in OER from which requests originate for this process.
ABCSExtension.PreXformEBMtoABM	True/false Default value = false	Use this property to specify whether preprocess extensions exist for the service. If set to true, the ABCS calls the extension service before processing the EBM.
ABCSExtension.PostInvokeABS	True/false Default value = false	Use this property to specify whether to call an extension service after sending the ABM to the P6 application.
Routing.ResourceRatePortType.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS. Endpoint URI property. Values are true and false.

Property Name	Values/Default Value	Description and Values
Routing.ResourceRatePortType.CAVS.EndpointURI		CAVS Endpoint URL, when CAVS is enabled.
Routing.ResourceRatePortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
Routing.RoleRatePortType.RouteToCAVS	True/false Default value = false	Property to govern whether the service should route the message to the CAVS endpoint. Default value is false, which does not route to CAVS. If set to true, it routes to CAVS using the endpoint specified in the CAVS. Endpoint URI property. Values are true and false.
Routing.RoleRatePortType.CAVS.EndpointURI		CAVS Endpoint URL, when CAVS is enabled.
Routing.RoleRatePortType.P6EPPM_01.EndpointURI	Entered through installation UI	Endpoint URL of Primavera P6 service.
System.P6EPPM_01.CurrencyCode	Entered through installation UI	Use this property to specify the default system currency of P6 installation.
P6.MULTIRATE.EFFECTIVEDATE.FILTER1	No default value	This is used to filter the rates if there are more than one rate for a given effective date
P6.MULTIRATE.EFFECTIVEDATE.FILTER2	No default value	This is used to filter the rates if there are more than one rate for a given effective date

WSS Security Header

The properties described in this section are used for the services listed in the tables above. The following table lists the properties for the WSS Security Header service:

Property Name	Values/Default Value	Description and Values
Server.P6EPPM_01.URL	Entered through installation UI	The P6 web application server url.
User.P6EPPM_01.Name	Entered through installation UI	The username to login to P6 web application

Property Name	Values/Default Value	Description and Values
User.P6EPPM_01.password	Entered through installation UI	The password to login to P6 web applicataion
User.P6EPPM_01.Session.Timeout	600	This indicates the time after which the session times out (in seconds)

ProjectTemplateUtility

The following table lists the properties for the ProjectTemplateUtility service:

Property Name	Values/Default Value	Description and Values
TemplateNameProjectCode	ERP Project Template	The project code used to store the names of templates/model jobs coming from ERP system
TemplateOptionsUDF	ERP Project Template Parameters	The UDF is set on the project to store the default integration options attached to a template.
DefaultMaximumWBSLevel	0	Default maximum WBS level upto which the integration happens between two systems.
DefaultActivityTrackingIndicator	True	Does the integration include Activities in P6 system or not.
DefaultResourceAssignmentTrackingLevel	All	Does the integration include resource assignments in P6 system or not.
DefaultBudgetSyncLevel	Lowest	When the budget/financial plan sync happens, whats the WBS level upto which the budget data is summarized.
TemplateFileLocation	<aia.home>/config	The template parameters are stored in a file under same location as AIAConfigurationProperties.xml file.

Multi-Instance Configuration

When you are setting up the integration options, if multiple Primavera P6 instances are integrated, then the third-party application name and the Primavera P6 instance's names must be the same. For example, if Primavera P6 instance names are P6EPPM_01 and P6EPPM_02 then, the third-party application names in Oracle Projects must be the same.

Modify the **AIAConfigurationProperties.xml** file available at
AIA_HOME>/aia_instances/\$INSTANCE_NAME/AIAMetaData/config.

Add an additional property for every end point location present in the configuration file. Change the name and the value to the corresponding Primavera P6 values. This must be done for all the Primavera P6 services deployed in the server.

Add new columns to the DVMs present in the server to denote the new Primavera P6 application. Enter values in the columns.

Add the corresponding XREF columns using the following commands:

- a. Telnet to the FMW server.
- b. To login to the XREF shell run the following command:

```
bash-3.00$ export OC4J_USERNAME=oc4jadmin
bash-3.00$ export OC4J_PASSWORD=welcome1
bash-3.00$ cd product/10.1.3.1/OracleAS_1/integration/esb/bin
bash-3.00$ ./xreftool.sh -shell
```

XREF shell log in command

- c. Add columns to all the necessary tables.

Update the EBS routing rules to account for the new instance. You can route to an instance based on your business requirements. To modify the routing rules, you need to add additional rules and redeploy the process. The required files are present at this location:

<AIA_HOME>/pips/EbizToP6EPPM/EBS.

Reviewing Default Routing Rules

Each PIP is delivered with a default set of routing rules. Routing rules are used to control where messages are sent in the system. In some instances, you might choose to update the default routing rules to better suit your business needs.

You can review the default routing rules for the PIP in this location:

<AIA_Home>/pips/EbizToP6EPPM/EBS

Viewing EBO Implementation Maps (EIMs)

For more information about how services are mapped, see the My Oracle Support document: EBO Implementation Maps (EIMs) 881022.1.

Index

- Common Terms, 6
- Concurrent Program, 15, 18, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 40, 42
- Configuration Properties, 57
- Core AIA Components, 8
- Cross-References, 50
- Domain Value Maps, 53
- EBO Implementation Maps, 39, 76
- GetOperatingUnitEbizAdapter, 33, 59, 60, 61
- GetSession, 74
- Global Objects
 - overview, 11
 - pages, 12
 - solution assumptions and constraints, 11, 19
 - synchronize planning resource rates or role rates, 11
 - synchronize planning resources, roles, and expense category, 11
- Integrate Project Data
 - pages, 23
- Multi-Instance Configuration, 76
- Overview of Process Integration, 19
- Overview of the Project Portfolio Management
 - Primavera P6-EBS Projects PIP, 7
- Planning Rates
 - Create Rates for Planning Resources and Roles in Oracle Projects and synchronize to Primavera P6, 18
- Planning Resources
 - Create and Update Planning Resources in Oracle Projects and synchronize to Primavera P6, 15
- Project Integration with Workplan Not Enabled, 29
- ProjectResourceRateScheduleEBO, 8, 17
- ProjectResourceSetEBO, 8, 14, 47
- ProjectTemplateUtility, 75
- Routing Rules, 76
- Set Up Oracle Projects, 40
- Set Up Primavera P6, 43
- Solutions assumptions and constraints, 7
- SyncProjectFinancialListEbizAdapter, 33, 61, 62
- SyncProjectFinancialListEbizProvABCSImpl, 33, 35, 36, 61
- SyncProjectFinancialListEbizReqABCSImpl, 33, 36, 37, 62
- SyncProjectFinancialPlanListP6EPPMProvABCSImpl, 33, 66
- SyncProjectFinancialPlanListP6EPPMReqABCSImpl, 33, 65
- SyncProjectListEbizAdapter, 33, 59
- SyncProjectListEbizProvABCSImpl, 33, 34, 35, 59
- SyncProjectListEbizReqABCSImpl, 33, 34, 58
- SyncProjectListP6EPPMProvABCSImpl, 33, 67
- SyncProjectListP6EPPMReqABCSImpl, 33, 63
- SyncProjectResourceRateScheduleListEbizReqABCSImpl, 17, 58
- SyncProjectResourceRateScheduleListP6EPPMProvABCSImpl, 73

SyncProjectResourceSetListEbizReqABCSImpl, 14, 57

SyncProjectResourceSetListP6EPPMProvABCSImpl, 71

Transfer of Attributes, 22, 48

Workplan-Enabled Project Integration, 19, 25