Oracle
Primavera
Gateway File Provider Setup Guide

Version 22
October 2022

Contents

Overview

Primavera Gateway is an application that facilitates sharing and synchronizing project, resource, and other data between Primavera applications and enterprise applications. By using providers, which are used as a channel to connect with the corresponding software application, Primavera Gateway enables you to share data with other enterprise applications. For a quick synopsis, watch the ***Overview of Primavera Gateway*** (***https://players.brightcove.net/2985902027001/SyXjZnYeeb_default/index.html?videoId=6174404031001***) video.

The File provider is very *unique* from all other providers supported in Gateway. Use the File provider to:

- export or import data from a file in XML and CSV file formats. However, the XML file must conform to the Gateway schema.
- send data from or to *any* enterprise application using Gateway
- define custom business object mappings and cross-references to import into Gateway. This extends the possibilities of supporting new business objects beyond the finite set supported in Gateway

The File provider offers limitless possibilities to transfer data in batches from a file to an application supported in Gateway.

The *Primavera Gateway File Provider Setup Guide* describes how to set up an integration between the File provider and any of the following applications in Primavera Gateway:

- P6 EPPM
- Oracle Primavera Cloud
- Primavera Unifier
- Oracle Instantis EnterpriseTrack

Within our documentation, some content might be specific for cloud deployments while other content is relevant for on-premises deployments. Any content that applies to only one of these deployments is labeled accordingly.

Setting Up the Integration Environment

To set up the integration environment, see the following sections of the guide:

For Cloud

See ***Setting Up the Integration Environment for Cloud*** (on page 11)

For On-Premises

See ***Setting up the Integration Environment for On-Premises*** (on page 12)

In This Section

Managing Personal Information

Consent notices enable you to convey to your users how personal information (PI) is collected, processed, stored, and transmitted, along with details related to applicable regulations and policies. Consent notices also alert users that the action they are taking may risk exposing PI. Primavera Gateway helps you to ensure that you have requested the appropriate consent to collect, process, store, and transmit the PI your organization holds as part of Primavera Gateway data.

For more details on how to configure consent forms and manage PI data in Gateway, see *Primavera Gateway Administration Guide*.

Setting Up the Integration Environment for Cloud

To set up an integration to export or import data between a file and an application supported by Gateway, contact Oracle Support with your service request to:

- install any of the following products:
  - P6 EPPM
  - Oracle Primavera Cloud
  - Primavera Unifier
  - P6 EPPM
  - Oracle Instantis EnterpriseTrack
- install Primavera Gateway preconfigured with File provider and the provider deployment corresponding to the application you choose to integrate data. For example, for a File - P6 integration, send a service request to install Gateway with File and P6 providers.
- If you choose to integrate data with P6 EPPM, then:
  - install P6 adapter

P6 adapter supports SAML 2.0 authentication. If you choose to use SAML 2.0 authentication between the P6 provider in Gateway and P6, then SAML 2.0 authentication must be enabled in P6 EPPM, Oracle Access Manager, and Primavera Gateway applications.

> **Note:** All P6 users who need to access the Primavera Gateway user interface using SAML authentication must download the SAML token XML file on their client machines.

- enable event notification using JMS Queues for messaging in P6 and Primavera Gateway, if you choose to use P6 *event provider* in Gateway.

- Upon receiving access to Primavera Gateway,
  - configure Gateway settings. For more details, see ***Configuring Gateway Settings*** (on page 19)
  - Edit the File provider deployment. For more details see ***Adding or Editing a File Deployment Connection*** (on page 22)
  - Edit the provider deployments in Gateway. For more details, see *Gateway Help*.

Setting up the Integration Environment for On-Premises

To set up an integration between an enterprise application of your choice supported by Primavera Gateway and the File provider you will need to install:

- Primavera Gateway with the following providers: Gateway, File, and the provider application you choose to integrate data. For more details, see the *Primavera Gateway Installation and Configuration Guide.*
- An enterprise application of your choice which has a corresponding Gateway provider application

  or

  any of the following products supported in Gateway:
  - Oracle Instantis EnterpriseTrack
  - P6 EPPM
  - Oracle Primavera Cloud
  - Primavera Unifier
- If you choose to deploy SampleRestService API for the File provider delivered with Gateway, you will need Apache Ant.
- If you choose to integrate data with P6 EPPM, you will also need:
  - P6 Web Services

    P6 Web Services supports SAML 2.0 authentication. If you choose to use SAML 2.0 authentication between the P6 provider in Gateway and P6 EPPM, then SAML authentication must be enabled in P6 EPPM and Primavera Gateway applications. The server administrator must download the SAML token XML file on the Gateway server machine where the P6 deployment is to be created. The token must also be downloaded for Oracle Access Manager. For more details, see *Primavera Oracle Access Manager Configu*ration G*uide.*

- P6 eventing

  To use the *P6event provider* delivered in Gateway, event notification must be enabled using JMS Queues for messaging in P6 and Gateway.

  To enable event notifications in P6, see *P6 EPPM Business Object Events Guide* in the P6 EPPM documentation library.

  To enable P6 event notification in Gateway, see the *Primavera Gateway Installation and Configuration Guide*.

For detailed installation instructions, see the *Installation and Configuration Guide* for each product. For specific supported software versions, see the *Tested Configurations* document for each Oracle application.

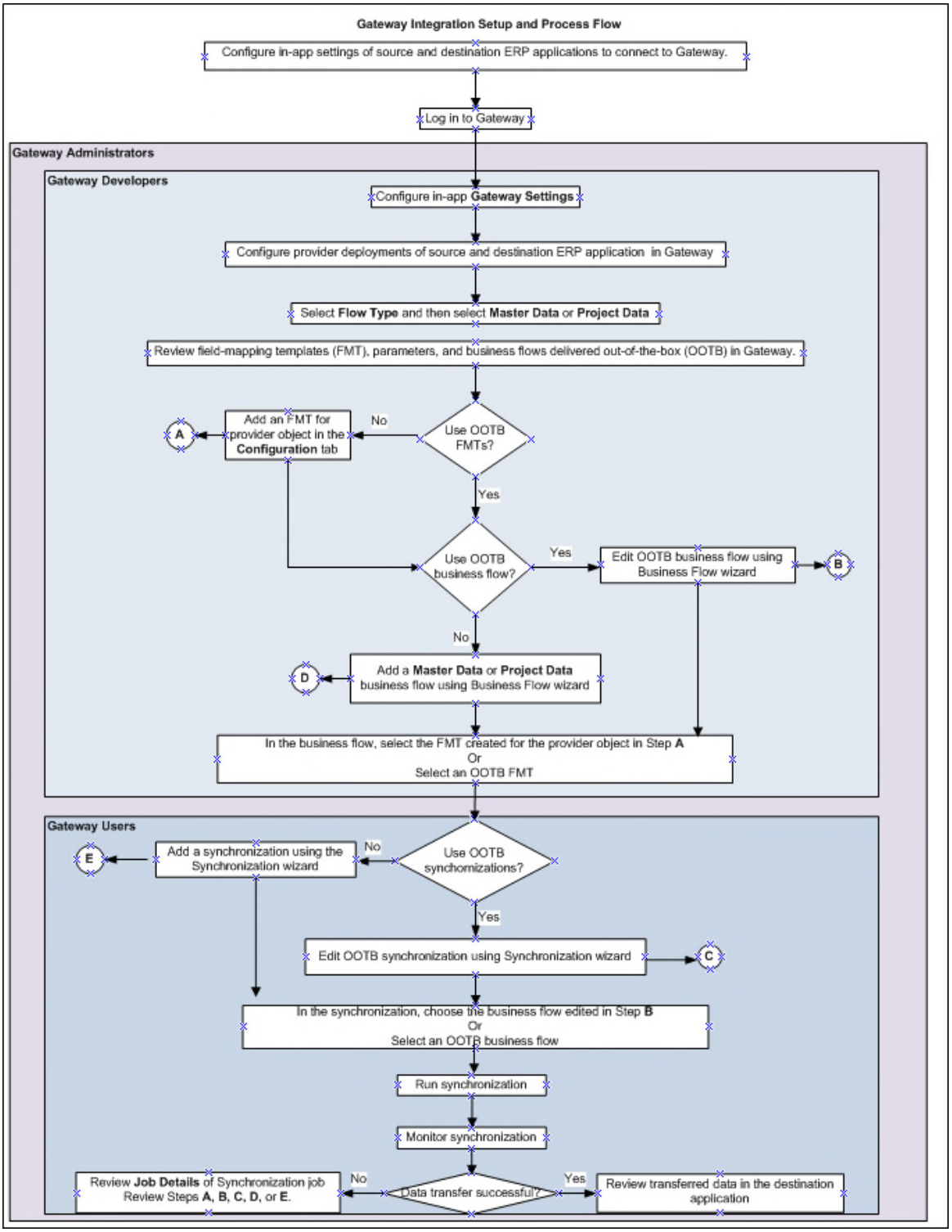
Gateway Setup and Data Transfer Process Flow

This process flow provides a visual outline of key decision points you will need to make when setting up an integration between any two ERP applications, using Gateway. Use this process flow in conjunction with chapters in this guide as well as the detailed examples provided in *Gateway Online Help*.

To troubleshoot issues when transferring data encountered in:

- Step A of the process flow, refer to the procedures in the chapter, *Working with Field Mapping Templates*.
- Step B or D of the process flow, refer to the procedures in the chapter, *Defining Business Flows*.

- Step C or E of the process flow, refer to the procedures in the chapter, *Defining Synchronizations*.



Configuring Applications for Integration

You can set up an integration between the File provider and any of the following applications in Primavera Gateway.

- Oracle Primavera Cloud
- P6 EPPM
- Primavera Unifier
- Oracle Instantis EnterpriseTrack

1) To integrate with any of the supported enterprise applications listed above, configure that application with Gateway settings. Depending on the application, see
   - ***Configuring the Oracle Primavera Cloud User Interface*** (on page 17)
   - ***Configuring P6 EPPM with Gateway Settings*** (on page 18)
   - ***Configuring Unifier with Gateway Settings*** (on page 18)
2) In Gateway application:
   a. Add a deployment for File Provider
   b. Add a deployment for any of the following applications you chose to integrate in step 1. These include:
      - P6 EPPM cloud service or on-premises installations
      - Oracle Primavera Cloud service
      - Primavera Unifier cloud service or on-premises installations
      - Oracle Instantis EnterpriseTrack cloud service

   For more details, see the section, ***Configuring Primavera Gateway*** (on page 19).

In This Section

Configuring the Oracle Primavera Cloud User Interface

To set up the integration environment, specify the default synchronizations that are to be executed in the **Primavera P6 Integration** section of the **Application Settings** page in the Oracle Primavera Cloud interface.

The fields include:

- **Send Projects to P6**
- **Update Projects from P6**
- **Update Resources from P6**

- **Update Roles from P6**

Configuring P6 EPPM with Gateway Settings

Configure P6 EPPM to connect with Gateway as follows:

1) Sign in to P6 EPPM application with administration credentials.
2) Select **Administer**, and then select **Application Settings**.
3) In the sidebar, select **Gateway** and enter the following information:
   a. Enter the Gateway **API URL** in the format: https://<hostname>:<port>/gatewayapi
   b. Select the default export and import synchronizations to be used within P6 to exchange data between P6 and Primavera Cloud.

   For more details on specifying *Gateway* settings in P6, see *P6 Help*.

Configuring Unifier with Gateway Settings

For activity sheet and summary sheet integration, setup connectivity with Gateway in Unifier as follows:

1) Sign in to Unifier with administrator credentials.
2) In the side bar, select **Admin** and then, select **Gateway**.
3) Select **Open** to enter or edit Gateway integration settings.
4) In the **Integration Settings** window:
   - Set up connectivity with Gateway API in the format: *https://<hostname>:<port>/gatewayapi*
   - Select the default export and import synchronizations that are to be executed from within Unifier

   For more details on setting up the *Gateway Node in Unifier,* see *Unifier Help*.

> **Note**: The projects that are to be linked in both applications must have identical **Project Number** and **Project ID** in the respective products.

Summary Sheet Integration Setup

For summary sheet integration with P6, setup the following information in Unifier:

1) Log in to Unifier with administrator credentials
2) Create a project in Unifier. For more details on *creating and managing projects* in Unifier, see *Unifier Help*.

> **Note**: The projects that are to be linked in both applications must have identical **Project Number** and **Project ID** in the respective products.

3) Setup a cost sheet and assign user access to the project and cost sheet.
4) Log in to Unifier with user credentials.
5) In the side bar, select **User**, and open the Unifier project that is to be linked with P6 and add a cost sheet. For more details on *creating a project or shell cost sheet*, see *Unifier Help*.

6) Open the cost sheet and add one or more CBS codes to the cost sheet.
7) Ensure the **Exposed to P6** field is selected for each CBS code to import to P6.

> **Note**: For detailed instructions, see How to Setup the P6 "Send to Summary Sheet" feature (Doc ID 2171842.1) on Oracle Support Center.

Configuring Primavera Gateway

Gateway administrators and developers can configure Primavera Gateway by setting up:

- Application-level configuration properties on the **Settings** page
- Deployments to connect with applications for sending and receiving data
- Configuration Data to seamlessly replicate Gateway configurations, and specific synchronizations
- Field Mapping Templates for business flows
- Custom Steps for business flows
- File Converters to enable sending and receiving data in supported file formats
- Add-Ins to manage customizations
- Consent Forms to activate consent notice for users

These tasks must be completed before you begin to transfer data between applications. The following section describes how to complete each task.

Configuring Gateway Settings

Use the **Settings** page to specify settings for the installed Gateway application. For example, specify the Help location, or the job timeout value in minutes.

> **Note**: The settings available in this dialog box may vary depending on the application connections that have been set up in Gateway.

To configure Gateway application settings:

1) Select ✕ and then select **Settings**.
2) Update the settings as necessary and select **Save** when finished.

   On the **General** tab:

   - **Help URL**: Enter the help system hosted by Oracle as *http://docs.oracle.com/cd/F51420_01/help/en/index.htm.* By default the Help URL displays the most recently delivered version.
   - **Maximum number of job logs to display per page**: Enter a value to control the number of logs displayed on the Monitoring page. By default displays 25 job logs.
   - **Auto delete jobs after XX days (0 turns off auto delete)**: Enter the number of days that a job log can be retained before it is auto deleted. Enter 0 to turn off auto delete. By default, displays 30 for new customers.

- **Maximum wait time for the parallel load/convert steps to complete (in minutes):** Enter the number of minutes after which a synchronization job process is to be timed out. The job status of a timed-out synchronization is set to **Failed.** By default, the timeout is set to **30** minutes.
- **Maximum concurrent jobs in a node:** Enter the maximum number of jobs that can be executed concurrently at a node. By default 4 jobs can be executed concurrently.
- **Job polling Interval (in seconds):** Enter the wait time interval in seconds to check the database if there are new jobs to run. By default, the wait interval is set to 2 seconds.
- **Job timeout value (in minutes)**: Enter the wait time interval in minutes to timeout a synchronization job. By default, the timeout is set to **300** minutes.
- **Maximum File Size Limit (in MB)**: Enter the maximum file size limit for uploading files from Gateway user interface or from external applications. The file size limit applies to all providers and all supported file formats: CSV, XML, XLS, and XLSX. By default, the maximum file size limit is set to 1024 MB. Oracle Primavera Cloud
- **Maximum job log size for XML format (in MB)**: Enter the maximum file size limit for job log size. Job log files over 10 MB (default) are saved in JSON format by default.
- **Enable Configurable Consent Forms**: Select this check box to display the **Consent Forms** tab on the Configuration page in Gateway. If you enable this option and then proceed to configure and enable specific consent forms, your users will need to give their consent to gain full access to specific features and functions of Gateway. By default, the check box is deselected.
- **Disable Logging For Jobs**: For integrations with Unifier, select this check box to improve performance with large sets of earned value management data. By default, the check box is deselected.
- **Enable Object Logging for Jobs**: Select this check box to disable the display of data at the object level in the **Data Details** tab of the **Monitoring** page, and improve performance.
- **Maximum wait time for GSL Custom Steps to Complete (in seconds)**: Enter the maximum wait time in seconds when processing a GSL custom step. By default, the wait time is set to *5* seconds.
- **Maximum wait time for HTTP request to timeout (in minutes)**: Select the maximum wait time for HTTP request timeouts. This timeout is applicable to Oracle Primavera Cloud, P6 EPPM, and Unifier providers only. By default, the maximum wait time is set to 15 minutes.

If you choose to integrate with P6, enter the following information on the **P6** tab:

- **Create new resource code values during synchronization to P6**: Select this check box to enable the creation of new resource code values in the P6 EPPM resource code dictionary if these values do not already exist. By default, the check box is selected.
- **Create new project code values during synchronization to P6**: Select this check box to enable the creation of new project code values in the P6 EPPM project code dictionary if these values do not already exist. By default, the check box is selected.
- **Create new activity code values during synchronization to P6**: Select this check box to enable the creation of new global activity code values in the P6 EPPM activity code dictionary if these values do not already exist. By default, the check box is selected.

- **Include time zone when exporting from P6:** Select this check box to export P6 server time zone information along with P6 date and time fields. By default, this option is **not** selected, except for spread interval data in P6.

  Note: This time zone setting applies only for a Primavera Cloud - P6 integration.

  Send P6 Spread to Unifier as a file: Select this check box to improve the performance of job runs related to a P6 - Unifier synchronizations that include daily spread fields. The daily spread fields on the P6 side are packaged into a separate zip file and sent direct to Unifier bypassing Gateway, whereas all non-spread fields in the synchronization are sent to Unifier using Gateway. By default, the check box is deselected.

  When this check box is deselected, Gateway packages all fields, including the daily spread fields in the synchronization, and sends it to Unifier.
- **Update activity resource assignments when assigned UDF values match**: Enter the UDF code value that is assigned to resource assignments which you want to update during a synchronization. Use this to update the resource assignment with the matching UDF value when the assignment exists multiple times on an activity. By default no UDF value is set.
- **Maximum wait time for the summarizer to complete (in seconds)**: Enter the amount of time in seconds to wait for the summarizer to complete before a warning is given. By default the wait time is set for 120 seconds.
-

On the **Mail Configuration** tab:

- **SMTP Server**: Enter the SMTP server address of your email server.
- **Port Number**: Enter the port number of your email server.
- **Email Security**: Select the applicable email security type. Choices include, **SSL**, **TLS**, and **None**.
- **Email Address**: Enter the email address for the user who is to be notified for a specific status of synchronization jobs. These statuses include: *Completed*, *Review*, *Cancelled*, *Completed with Errors*, *Completed with Warnings*, and *Failed*.
- **Authorized User**: Enter the user name for this email account.
- **Password**: Enter the password for the authorized user.
- **Bounce Email Address**: Enter an alternate email address to be used if mail fails to be delivered to the first email address.

On the **Server** tab:

- **Server Log Detail Level**: From th list, select the type of detailed information to be included in the server log file. Choices include:
  - **Error** (default): Select this value to display application errors in the log file.
  - **Info**: Select this value to display a brief description in the log file.
  - **Debug**: Select this value to display a general debugging event.
  - **Off**: Select this value to not generate any server log details.

Adding or Editing a File Deployment Connection

To move data between applications, Primavera Gateway needs to know where to get and send information. The File provider enables you to export and import data in XML and CSV file formats with the application you choose to integrate with. The XML file must conform to the Gateway schema.

Add a File provider deployment as follows:

1) Sign in to Primavera Gateway with administrator credentials.
2) In the sidebar, select **Configuration**.
3) Select the **Deployments** tab.
4) Select + **Add...** or ✎ **Edit...** to invoke the **Deployment** wizard.
5) In the **General** step, select **File** from the **Select Application Provider** list, and name the deployment.
6) In the **Deployment** step, set up the data source as follows:
   a. In the **File Format** field, select *CSV/XLS/XLSX* or *XML*.
   b. In the **File Data Source Type** field, select any of the following methods to upload a file:

      To upload a file from your local machine:

      - **File Data Source Type**: Select *File Upload* from the list..

      (On-premises only) To select a file from a Gateway server, enter the following information:

      - **File Data Source Type:** Select *File Path* from the list..
      - **Shared Folder on Gateway Server:** Enter the file path and folder location of the data file. For example, *C:\gateway\file*.

      To upload a file using the FTP server, enter the following connection details:

      - **File Data Source Type:** Select *FTPService* from the list.
      - **FTP File Transfer Protocol** list: Select *FTP* or *SFTP*.
      - **FTP Service User Name:** Enter the user name to sign in to the FTP service.
      - **FTP Service Password:** Enter the password of the FTP user.
      - **FTP Server Host:** Enter the server hosting the FTP service.
      - **FTP Server Port Number:** Enter the port number associated with the FTP server.
      - **FTP Server Folder Path:** Enter the default folder location on the ftp server that will contain the XML file.

      To upload a file using REST API, enter the following rest service connection details.

      - **File Data Source Type:** Select *RestService* from the list**.**
      - **Rest Service User Name:** Enter the user name to sign in to the REST service.
      - **Rest Service Password:** Enter the password of the REST service user.
      - **Rest Service URL:** Enter the URL address of the REST service.

> **Note**: *RestService* only supports XML file format.

c. Set **Enable Cross Reference Tracking** to *True* only if you want to ensure Gateway stores and tracks the cross-references for the data being synchronized. This helps the destination application determine if it is for a create or update action.

   If the field is unchecked, cross-references will not be stored, and it will be up to the destination application to determine whether to create or update data in the destination application.

7) Select **Test Connection** to ensure connectivity with the source or destination application.
8) Select **Save**.

Tips

- You can also edit a deployment and select **Save** in any step to exit the wizard.

Adding or Editing a P6 Deployment Connection

To move data between applications, Primavera Gateway needs to know where to get and send information. Set this up by adding application deployment connections by specifying an **Endpoint** URL for each application.

P6 Cloud Service

For P6 cloud service, contact Oracle Support to:

- add one or more P6 deployments
- copy an existing P6 deployment

P6 On-Premises Installations

For on-premises installations, add or edit a P6 deployment connection as follows:

1) Enter the Primavera Gateway URL in the format:
   http://<host name>:<port>/gateway
   Where, <host name> and <port> should match those of your Primavera Gateway domain.
2) Sign in to Primavera Gateway with administration credentials.
3) In the sidebar, select **Configuration**.
4) Select the **Deployments** tab.
5) Select + **Add...** or ✎ **Edit...**.
   The **Deployment** wizard displays.
6) In the **General** step, select **P6** from the **Select Application Provider** list, and name the deployment.

> **Note:** Select **Next** on each screen to advance to the next step.

7) In the **Deployment** step, set up P6 connectivity from Gateway:
   - **P6 Webservices authentication type:** Select any of the following authentication types.
     - *SAML2.0 Token* or

    - *UserName Token*
    - *OAuth*
  - **User Name**: Enter the name of a P6 administrator with access to projects in P6 EPPM.
  - **Password**: If you chose *UserName Token* authentication, enter the case-sensitive password of the P6 administrator.

    Endpoint: Enter the URL to connect with P6 Web Services in the format, *http:<host name>:<port>/p6ws/services/SyncServiceV1*
  - **P6 Database Instance ID:** Enter the database instance ID associated with the P6 application.
  - **SAML 2.0 Token File:** If you chose *SAML2.0 Token* authentication, then browse or enter the location of the downloaded SAML 2.0 token XML file used by P6 Web Services for authentication.
  - If you chose *UserName Token* or *SAML2.0 Token* authentication, then enter the following information:
    - **Enable Encryption:** Select this option if you want to enable encryption when using P6 web services.
    - **Keystore File:** Enter or **Browse...** to the keystore file.

      For more details on how to generate a keystore file and keystore password, see Enabling Encryption Between Gateway and P6 Web Services for On-Premises.
    - **Keystore Password:** Enter the password for the keystore file.
    - **Certificate Alias:** Enter the certificate alias used for authentication.
  - **P6 Currency:** Enter the base currency for the P6 deployment.
8) Select **Test Connection** to ensure connectivity with P6 is established.
9) Select **Save**.

Tips

- You can also edit a deployment and select **Save** in any step to exit the wizard.

Adding or Copying a Primavera Cloud Deployment Connection

To move data between applications, Primavera Gateway needs to know where to get and send information. Set this up by adding application deployment connections by specifying an **Endpoint** URL for each application.

For Primavera Cloud service, contact Oracle Support to:

- add a new Primavera Cloud deployment
- copy an existing Primavera Cloud deployment

Adding or Editing a Unifier Deployment Connection

To move data between applications, Primavera Gateway needs to know where to get and send information. You set this up by adding application deployment connections by specifying an **Endpoint** URL for each application.

For Unifier Cloud service, contact Oracle Support to:

- add one or more Unifier deployments
- copy an existing Unifier deployment

For on-premises Unifier installations, add or edit a Unifier deployment connection as follows:

1) Sign in to Primavera Gateway with administration credentials.
2) In the sidebar, select **Configuration**.
3) Select the **Deployments** tab.
4) Select + **Add...** or ✎ **Edit...** to invoke the **Deployment** wizard.
5) In the **General** step, select *Unifier* from the **Select Application Provider** list, and name the deployment.
6) In the **Deployment** step, set up Unifier connectivity from Gateway:
7) In the **Unifier authentication type** list, choose *Basic* or *OAuth*.

   If you chose *Basic* authentication, enter the following information

   - **Short Name:** Enter the short name of the company used in Unifier.
   - **Authentication Code:** Enter the authentication code to use when data is integrated with Unifier from external systems using web services.
   - **End Point URL:** Enter the URL to connect with Unifier application in the format: *http:///<host name>:<port>*

   If you chose *OAuth* authentication, enter the following information:

   - **User Name**: Enter the name of a Unifier administrator with access to projects in Unifier.
   - **Password**: If you chose *OAuth* authentication, enter the case-sensitive password of the Unifier administrator.
   - **End Point URL:** Enter the URL to connect with Unifier application in the format: *http:///<host name>:<port>*
8) Select **Test Connection** to ensure connectivity with Unifier is established.
9) Select **Save**.

Tips

- You can also edit a deployment and select **Save** in any step to exit the wizard.

Copying a P6 On-Premises Provider Deployment

To use a provider deployment in distinct environments, copy the current deployment and then edit the copied version by modifying the connection information to support the specific environment as needed. All the attributes and values of the current provider deployment are carried over to the copy by default.

To copy a P6 on-premises provider deployment:

1) In the sidebar, select **Configuration**.
2) Select the **Deployments** tab.
3) Select the deployment you want to copy, select the **Actions** ▼ menu, and then select **Copy**.
4) In the **General** step of the **Deployment** wizard:
   a. In the **Deployment Name** field, rename the deployment.

The default name of the copied deployment is always created with the word, *Copy*. For example, a copy of the *P6 Deployment* will be named as *P6 Deployment Copy* by default.

b. In the **Description** field, edit the description of the copied deployment.

> Note: Select Next on each screen to advance to the next step.

5) In the **Deployment** step:

a. Edit the connection information from Gateway as needed.

> **Note**: Passwords cannot be copied, and must be entered manually.

b. Select **Test Connection** to ensure connectivity with the source or destination application.

6) Select **Save** to add the deployment.

Working with Field Mapping Templates

A field mapping template contains a specific combination of objects and fields that will be selected in the source application when a business flow is picked up by a synchronization in Gateway. A business flow can include more than field mapping template. Using the data dictionaries, Gateway developers and administrators can add, edit, copy, view or delete field mapping templates to include specific objects and fields in the template. This in turn would include specific objects and fields that get selected in the source application.

This chapter describes how to use field mapping templates in Gateway.

In This Section

Adding or Editing Field Mapping Templates

Field mapping templates are used by master data and project data business flows to transfer data between any two applications supported by Primavera Gateway.

A field mapping template contains a list of business objects and fields that are to be transferred from the source application to the destination application. It also contains information on how each source business object and a destination business object is mapped with a corresponding Gateway business object. The field-mapping templates determine how a Gateway object, and the corresponding provider object with its supported fields are used in a business flow.

A business flow is a combination of a specific set of field mapping templates that fulfill a data transfer requirement. To create a business flow that processes specific data between any two applications, appropriate field-mapping templates must be created and included in a business flow to support data transfer in a business flow.

Gateway delivers field-mapping templates for Gateway objects that can be used in business flows. Alternatively, you can also create additional field-mapping templates to suit your requirements.

> **Note**: Field-mapping templates can be created using Groovy code or the canonical format (Direct) format of Gateway.

To add or edit field mapping templates:

1) In the sidebar, select **Configuration** and then select the **Field Mapping Templates** tab.
2) Select a Gateway business object from the drop-down.

   All field-mapping templates associated with the Gateway business object display in the field-mapping template table.
3) To add a field-mapping template, select + **Add...**.

   or

In the **Field Mapping Name** column, select a field mapping template and then select **Edit...**.

4) In the **General** step:
   a. In the **Template Name** field, enter a name for the field mapping template.
      This is the only field that can be changed if you choose to edit a field mapping template.
   b. Select the type of template being created from the **Template Type** list.
      - Select **Groovy** if the template will use Groovy code.
      - Select **Direct** if the template will use the canonical format of Gateway.
   c. Select a provider from the **Provider 1** list.
   d. Select a provider from the **Provider 2** list.
   e. Select the object to be supported by the field mapping template from the **Provider 1 Object** list.
   f. Select the object to be supported by the field mapping template from the **Provider 2 Object** list.
   g. (Optional) Select **Use Criteria Step** to set a specific condition to filter data within the field-mapping template.

> **Note:** Select **Next** on each screen to advance to the next step.

5) In the **Criteria** step, specify the condition for field mappings:
   a. Select the field from the **Fields** list of **Provider 1**.
   b. Select the field from the **Fields** list of **Provider 2**.
   c. Enter the **Conditions** to be satisfied by **Provider1** and **Provider 2** fields respectively.
   d. Select **Validate Condition** to validate the syntax entered in the **Condition** text box for the provider fields.
6) In the **Mappings** step, specify field mappings supported by the template:
   a. Select **Auto Generate** to generate mappings for fields that are common to both providers and Gateway.
      When you choose to autogenerate field mapping templates, the field mappings between Gateway and the source application, and Gateway and the destination application are automatically selected for the Gateway field based on the usage of the fields within the respective applications. However, you can override the autogenerated mappings by deleting the field mappings and add new mappings according to your organization's needs.
   b. Specify additional field mappings as follows:
      1. Select the fields supported by the template in the list of both providers, and **Gateway**.
      2. Select **Add**.
      3. Repeat Step b to add multiple fields.
7) In the **Summary** step:
   a. Review all the selections made in the previous steps.
   b. Select any of the following actions:
      - Select **Back** to navigate to a specific step and make changes.

- Select **Save** to add the field-mapping template.

> **Note:** Multiple provider objects can be mapped to a single provider object. For example, when you select *Sample* as **Provider 1** and *P6* as **Provider 2**, both objects in the Sample provider, **WorkOrder** and **WBS**, map to the **WBS** object in P6 EPPM.

Copying Field Mapping Templates

Copy a field-mapping template if you want to maintain similar versions of an existing template that can be used for different purposes within a specific integration scenario.

> **Note**: Providers and provider objects cannot be changed when a template is copied or edited.

To copy a field-mapping template:

1) In the sidebar, select **Configuration** and then select the **Field Mapping Templates** tab.
2) In the **Field Mapping Templates** section, select a Gateway object from the **Select Business Object** list.

   A master list of all mapping templates supporting the Gateway business object across all integrations displays.
3) In the **Field Mapping Name** column, select a template that you want to copy, select the **Actions** ▼ menu, and then select **Copy.**

   The **Template** wizard displays a copy of the selected mapping template.

Editing the Copied Template

Edit the copied template as follows:

1) In the **General** step, rename the template and select **Next**.

> **Note:** Select **Next** on each screen to advance to the next step.

2) In the **Mappings** step, select the field that is to be supported as follows:
   a. Select the field to be supported in the data dictionary of the providers selected as **Provider 1** and **Provider 2**, and **Gateway**, and then select **Add**.
   b. (Optional) Select field-mappings that need not be supported and then select **Delete**.
3) In the **Summary** step, review all the selections made in the previous steps:
   a. Expand each step title to review the selections made in that step.
   b. Select any of the following actions:
      - Select **Back** to navigate to a specific step and make changes.
      - Select **Save** to add the provider object to the data dictionary.

   The mapping template can now be used in a business flow.

For a detailed example, see *Gateway Help*.

Viewing Field Mapping Templates

View field mapping templates for objects to determine whether you would need to create a new field mapping template or edit a field mapping template as follows:

1) In the sidebar, select **Configuration** and then select the **Field Mapping Templates** tab.
2) In the **Field Mapping Templates** section, select a Gateway object from the **Select Business Object** list.

A list of all field mapping templates associated with the selected Gateway business object displays.

Deleting Field Mapping Templates

Before deleting a field mapping template, ensure the following:

- Review all business flows using the field mapping template you plan to delete.
- Use the business flow wizard to deselect the field mapping template from all business flows.

Delete mapping templates as follows:

1) In the sidebar, select **Configuration** and then select the **Field Mapping Templates** tab.
2) From the **Select Business Object** list, select the business object associated with the field mapping template you want to delete.
3) In the **Field Mapping Name** column, select the mapping template you want to delete, select the **Actions** ▼ menu, and then select **Delete.**
4) In the **Confirmation** dialog box, select **Confirm**.

Exporting Configuration Data Files by Provider

Export Gateway configuration data directly from the user interface to replicate Gateway environments as follows:

1) In the sidebar, select **Configuration** and then select the **Import/Export** tab.
2) In the **Export Configuration Data** section, select **By Provider**.
3) Use the **Ctrl** or **Shift** keys to select any of the following providers from the **Provider** list:
   - EnterpriseTrack
   - File
   - Gateway
   - P6
   - Primavera Cloud
   - Sample
   - Unifier
4) By default all the data files are selected for export from the **Data** list. So, use the **Ctrl** or **Shift** keys to *deselect* any of the following configuration data files:
   - Business Flow / Synchronization
   - Cross Reference

- Customization
- Event Provider
- Flow Definition
- Field Mapping Template
- File Converters, only if the File provider is installed
- Metadata
- Provider
- Value Mapping

5) Select **Export** to generate a zip file.
6) Select **Save** to save the zip file.

   The default naming convention for any generated zip file is: *<Provider1Provider2...ProviderN>_ConfigurationFiles_V<GatewayVersion>_<ExportDateFormat_mmddyyyy>*

> **Tip:** The exported data will not contain passwords. So, you must re-enter the password after importing data into Gateway.

Exporting Configuration Data Files by Synchronization

If you create a new business flow for a new synchronization, you can check what objects, fields, cross references, field mapping templates, flow definitions, metadata, value mappings, provider, and business flow will be used by the synchronization, *before* actually running the synchronization in Primavera Gateway, by exporting Gateway configuration data associated with only the specific synchronizations.

To export data files associated with specific synchronizations:

1) In the sidebar, select **Configuration.**
2) Select the **Import/Export** tab.
3) In the **Export Configuration Data** section, select **By Synchronization**.
4) Use the **Ctrl** or **Shift** keys to select multiple synchronizations from the **Synchronization** list.
5) By default all the data files are selected for export from the **Data** list. So, use the **Ctrl** or **Shift** keys to *deselect* any of the following configuration data files:
   - Business Flow / Synchronization
   - Cross Reference
   - Customization
   - Event Provider
   - Field Mapping Template
   - File Converters, only if the File provider is installed
   - Flow Definition
   - Metadata
   - Provider
   - Value Mapping

6) Select **Export** to generate a zip file.
7) Select **Save** to save the zip file.

   The default naming convention for any generated zip file is: Synchronizations_*V<GatewayVersion>_<ExportDateFormat_mmddyyyy>.*

> **Notes:**
>
> - Any custom step created for a business flow using the formula editor in the **Custom Steps** tab of the **Configuration** page will also be included in the export.
> - If multiple synchronizations are selected for export, then the configuration data of all the synchronizations is zipped in the generated export file.
> - The exported data will not contain passwords. So you must re-enter the password after importing data into Gateway.

Importing Configuration Data Files

To import configuration data files to Primavera Gateway: :

1) Create a zip file containing any of the following configuration data files of a provider:
   - Business Flow / Synchronization
   - Cross Reference
   - Customization
   - Event Provider
   - Field Mapping Template
   - Flow Definition
   - File Converters, only if the File provider is installed
   - Metadata
   - Provider
   - Value Mapping
2) In the sidebar, select **Configuration.**
3) Select the **Import/Export** tab.
4) In the **Select File** field, select the **••• Picker** button and browse to a .zip file or an XML file to be imported.
5) Select **Import**.

   A success message displays.

> - **Notes:**
> - Only one zip file can be imported at a time.
> - Any exported custom step created for a business flow using the formula editor in the **Custom Steps** tab of the **Configuration** page when imported, will now be included in the *<provider_name>.xml* file.

All other custom steps created by alternative methods are by default included in the *Customization.xml* file.

- In the metadata files, you can edit the `Entity Name` for fields to uniquely identify that as a row of data supported by an object. The Entity Name descriptions display on the **Data Details** tab of the **Monitoring** page.
- After importing the metadata (metadata.xml) into Gateway, you can send and receive data only after re-entering the deployment's password manually.

(On-premises only) When uploading jar and XML files, it is recommended that you upload the files from the **DBSetup Configuration Utility** when possible.

Adding Custom Steps Using Gateway Scripting Language

A business flow is executed as an ordered sequence of flow steps. Custom steps can be added only after data is loaded from the source application or before being updated in a destination application.

Note: Custom steps can only be defined for a specific provider, the role of the provider in a business flow, and the type of business flow. For example you can add a custom step to the P6 provider which can be used by any project data business flow where P6 is the source application.

To add a custom step:

1) Sign in to Primavera Gateway as an administrator or developer.
2) In the sidebar, select **Configuration.**
3) Select .the **Custom Steps** tab.
4) Select the + **Add...** button.
5) In the **Custom Step** wizard, enter the following information:
   a. In the **Name** field, enter a name for the custom step.
   b. Select a provider from the **Provider** list.
   c. Select the role of the provider in any business flow from the **Flow Side** list. Choices include:
      - *Source*: The provider is a source application in a business flow.
      - *Destination*: The provider is a destination application in a business flow.
   d. Select the type of flow that the custom step is to be associated from the **Flow Type** list. Choices include:
      - *Master Data*: The custom step is associated with a master data business flow.
      - *Project Data*: The custom step is associated with a project data business flow.
   e. In the **Sequence Number** field, enter or select a number to specify the location of the custom step in the flow step sequence of the data flow.

If the provider is a source application, you can add a custom step in the **Sequence Number** range 11 - 19 only.

If the provider is a destination application, you can add a custom step in the **Sequence Number** range 61 - 79 only.

> **Note**: Do not add custom steps after **Sequence Number** *80* associated with the last flow step, *Update Destination*, as it will not be used by any business flow.

6) Select the **Enable** check box to activate the custom step in the master data or project data flow type of the provider.
7) Select **Save.**
8) In the **Formula** section, enter code and validate the custom step using Gateway scripting language.

   For more details, see *Gateway Scripting Guide*.
9) Select **Save**.

Using Add-Ins to Manage Customizations

You can configure Primavera Gateway according to the needs of your organization by adding customizations. These customizations can be imported into Primavera Gateway using the **Import** option or the configuration utility (available with on-premises installations only) to make it available in the Gateway user interface. Customizations delivered by these methods are listed in the **Add-Ins** tab of the **Configuration** page.

Use the **Add-Ins** tab to manage these customizations from within the user interface. You can delete or search for customizations added in Primavera Gateway.

Deleting Add-Ins

To delete customizations Primavera Gateway that were imported or added through the configuration utility:

1) In the sidebar, select **Configuration**.
2) Select the **Add-Ins** tab.
3) Select the row that needs to be deleted, and then select **Delete**.
4) In the **Confirmation** dialog box, select the **Confirm** button to delete the customization from Primavera Gateway.

Adding Parsers and Generators

The File provider allows you to send data from a csv file and receive data into a csv file through synchronizations. To read and write the csv file contents in the source and destination applications respectively, Gateway has been equipped with parsers and generators.

Add a parser or a generator only if you choose to set up a synchronization to have the data read from or written into a csv, xls, or an xlsx file for specific objects and fields. Otherwise, use the **Default Parser** to read any object and any field in Gateway, or the **Default Generator** to write any object and field in Gateway.

Parsers enable Gateway to read the contents of a csv or Excel (xls /xlsx) file. The following parsers have been delivered in Gateway:

- Default Parser

  The **Default Parser** allows Gateway to read any object and field from a csv file.
- Resource Parser

  A **Resource Parser** is a parser created specifically to read only a Resource object from a csv file. Additional parsers for reading specific objects and fields can be created.

To use a parser in a synchronization, you must set up:

- A File deployment supporting a CSV file format.
- The File provider as the source application in a synchronization.

Generators enable Gateway to write and format data into a csv file. The following generators are delivered in Gateway:

- Default Generator

  The **Default Generator** allows Gateway to write any object and any field into a csv file.
- Resource Generator

  The **Resource Generator** is a generator created specifically to write only a Resource object from a csv file. Additional generators to write specific objects and fields into a csv file can be created.

To use a generator in a synchronization, you must set up:

- A File deployment supporting a *CSV* file format.
- The File provider as the *destination* application in a synchronization.

Prerequisite

A File deployment has been added to support *csv,* xls, or xlsx file format.

To add a parser or generator:

1) Sign in to Primavera Gateway as an administrator or developer.
2) In the sidebar, select **Configuration**.
3) Select the **File Converters** tab.
4) Select + **Add...** and enter the following information in the **File Converter** wizard:
   - **Name**: Enter a distinct name for the file parser being added.
   - **Type**: Select the type of file converter being created. Choices include: **Parser** and **Generator**.
   - **Description**: Enter a short description of the purpose of the parser or generator being created.
   - **Script**: Enter the Groovy code to support specific provider objects in the parser or generator.

5) Select **Validate** to ensure the Groovy syntax contains no errors.
6) Select **Save.**
   The new parser or generator is now listed in the **File Converters** tab.

Tips:

- Copy the Groovy source code of the **Resource Parser** or **Resource Generator** and only update the `ObjectName` to support the specific object in Gateway.
- Use Groovy code to define objects and fields while creating additional parsers and generators.

Configuring Consent Notices for Primavera Gateway

To configure consent notices for Primavera Gateway:

1) Sign in to Primavera Gateway as an administrator or developer.
2) Select ✕ and then select **Settings**.
3) In the **General** tab, select **Enable Configurable Consent Forms**.
4) In the sidebar, select **Configuration**.
5) Select the **Consent Forms** tab.
6) In the **Name** field, select a consent form, and then select ✎ **Edit...**.

> **Note**: The **Cookies Consent** is automatically enabled when any consent form is enabled.

7) The **Edit <Consent Form Name>** dialog box displays. For example, *Edit Login Consent Form* displays.
8) Select **Enable Consent Message** to allow the notice to be shown to users of the selected consent form.
   For Gateway administrators, enable *all* consent forms.
   For Gateway administrators with no data access and Gateway developers, enable all consent forms except **Download Consent**.
   For Gateway users, enable **Login Consent**, and **Download Consent**.
   For Gateway users with no data access, enable **Login Consent** only.
9) Enter and format the text for the consent notice in the **Consent Message** area.

> **Note**: Work with your data security and legal teams to determine the wording of the consent notice.

10) Select **Save**.
11) Continue to configure consent notices for other consent forms.

Working with Data Dictionaries

Provider data dictionaries and the Gateway data dictionary can be customized to include new objects and new fields in real-time and on-demand. Depending on the provider and the data dictionary you can perform the following tasks:

- Add objects and fields to data dictionaries
- Edit objects and fields in data dictionaries
- Copy objects in data dictionaries.
- Delete objects and fields from data dictionaries

The Gateway, Unifier, and File data dictionaries support all of the above features. Also refer to the ***Features of Provider Data Dictionaries*** (on page 38)

Advantages

This feature provides great flexibility to customize the Gateway data dictionary and all provider data dictionaries to create and support additional objects and fields directly through the user interface. These objects can then be used in field-mapping templates, business flows, and synchronizations.

In This Section

Defining Object Mappings

Object mapping in data dictionaries enables you to add, edit, or delete provider business objects and supported fields in real-time and on-demand to provider data dictionaries. Object mappings can be added, edited, copied, and deleted only in the following provider data dictionaries:

- File
- Gateway
- Unifier

> **Note:** For all other provider data dictionaries, you can only edit an existing business object to add fields and cross-reference mappings.

Use object mappings to:

- customize and enhance the default data dictionaries directly from the user interface
- experience zero wait time for modifying a provider to support additional objects and fields
- realize real-time instant updates to support new objects and fields for each provider
- define flexible object mappings to one or more Gateway objects
- use Groovy code to define mappings to the new provider objects

When you add a new dynamic object mapping you must also specify:

- fields supported by the business object
- flow type to be associated with the business object to determine if they are to be available in a master data or project data flow
- flow direction to determine whether they are available as a source object, destination object, or both
- cross-reference key mappings with one or more Gateway business objects

To add object mappings:

1) In the sidebar, select **Data Dictionary**.
2) Select a provider data dictionary and then select + **Add...**.
   - Follow the **Object and Fields** wizard to define a new object with a cross-reference mapping to a Gateway object.

Features of Provider Data Dictionaries

All providers extend complete or partial support for objects and fields that are dynamically created in an enterprise application. For example, when new business process objects and fields created in Unifier user interface, corresponding Gateway objects can be created within Unifier to support a Gateway integration. In Gateway, you can add and edit new objects and fields in File, Gateway, and Unifier data dictionaries corresponding to objects created in the native ERP application. All other provider data dictionaries allow you to only add, edit, and delete fields within a business object.

The following table outlines the features supported by each provider data dictionary.

	Provider Data Dictionaries						
Support	**Complete**			**Partial**			
Features	**Gateway**	**File**	**Unifier**	**Enterprise Track**	**MSP (on-premises only)**	**P6**	**Primavera Cloud**
Add Features at Object Level							
Add objects to data dictionary	Yes	Yes	Yes	No	No	No	No

	Provider Data Dictionaries						
Support	**Complete**			**Partial**			
Features	**Gateway**	**File**	**Unifier**	**Enterprise Track**	**MSP (on-premises only)**	**P6**	**Primavera Cloud**
Copy objects to data dictionary	Yes	Yes	Yes	No	No	No	No
Add fields to an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Add flow type (master or project) supported for an object	Yes	Yes	Yes	No	No	No	No
Add flow firection (source, destination, or both) for an object	Yes	Yes	Yes	No	No	No	No
Add cross-reference key mappings for an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Add Features at Field Level							
Add fields to an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edit Features at Object Level							
Edit object name and description	Yes	Yes	Yes	No	No	No	No
Edit fields supported by an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edit flow type (master or project) supported for an object	Yes	Yes	Yes	No	No	No	No

	Provider Data Dictionaries						
Support	**Complete**			**Partial**			
Features	**Gateway**	**File**	**Unifier**	**Enterprise Track**	**MSP (on-premises only)**	**P6**	**Primavera Cloud**
Edit flow direction (source, destination, or both) of an object	Yes	Yes	Yes	No	No	No	No
Edit cross-reference key mappings of an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edit Features at Field Level							
Edit fields supported by an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Delete Features at Object Level							
Delete objects	Yes	Yes	Yes	No	No	No	No
Delete fields supported by an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Delete flow type (master or project) supported for an object	Yes	Yes	Yes	No	No	No	No
Delete flow direction (source, destination, or both) of an object	Yes	Yes	Yes	No	No	No	No
Delete cross-reference key mappings of an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	Provider Data Dictionaries						
Support	**Complete**			**Partial**			
Features	**Gateway**	**File**	**Unifier**	**Enterprise Track**	**MSP (on-premises only)**	**P6**	**Primavera Cloud**
Delete Features at Field Level							
Delete fields supported by an object	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Adding Objects and Fields to Data Dictionaries

New *objects* can only be added in specific data dictionaries. To add a new object to a data dictionary:

1) In the sidebar, select **Data Dictionary** and select any of the following dictionaries:
   - Gateway
   - File
   - Unifier

   - **Notes:**
   - For a checklist of all the features supported in each data dictionary, refer to the ***Features of Provider Data Dictionaries*** (on page 38).
   - XML file format is not supported for objects added manually within the Gateway user interface. To ensure these objects and fields are included by Gateway during a data transfer you must set up a business flow and synchronization where the File provider is set as the destination provider, and select CSV, XLS, or XLSX file formats to ensure these objects will be available in the destination output.

2) Select + **Add...** to add a new provider object to a data dictionary

   The **Object and Fields** wizard displays.

3) In the **General** step describe the object:
   a. Enter an **Object Name** for the new business object.
   b. Select a **Category** for the business object. Choices include: **No Category** (for Gateway only), **BP**, **DynamicBP**, **DynamicUDR**, and **SOAP**.
   c. Enter a **Description** of the business object.

> **Note:** Select **Next** on each screen to advance to the next step.

4) In the **Fields** step to add one or more fields supported by the business object:
   a. Enter a **Field Name** for the new field.
   b. In the **Field Type** field, select the data type of the field. Choices include: **Boolean, DateTime, Double, ForeignKey, Integer,** and **String**.
   c. If you add a **ForeignKey** field, then select the **Join to Object** to join the new field with an existing object in that provider's dictionary.
   d. Select **Read Only Field** to indicate the field value cannot be modified.
   e. Select any of the following actions:
      - Select **Add** to add the field to the field table.
      - Select **Delete** to delete a field from the field table.
   f. Repeat the above sequence to add multiple fields to the business object.
5) In the **Flow Control** step to indicate the combination of flow type and flow direction to be associated with the business object:
   a. In the **Flow Type** field, indicate if the business object will be available in a **Master Data** or **Project Data** flow, or both.
   b. In the **Flow Type Direction** field, indicate if the business object will be available in the **Source** or **Destination** provider, or both.
   c. Select any of the following actions:
      - Select **Add** to add the flow control combination to the flow table.
      - Select **Delete** to delete a flow control combination from the flow table.
   d. Repeat the above sequence to add multiple flow control combinations to the business object.
6) In the **Cross reference** step setup the cross-reference key field to be associated with the Gateway object.
   a. In the **Key Field** field, select the field within the object that is to be used as the cross-reference key by the Gateway object.
   b. In the **Gateway Objects** field, select the Gateway business object from the drop-down to map the cross-reference key of the provider object.

   > **Note:** You can also map the provider object to a new Gateway object that has already been added using this procedure. For more details, see ***Changing Cross-Reference Keys of Data Dictionary Objects*** (on page 47).

   c. Select **Add** to add the cross-reference key and Gateway object combination to the Key table.
   d. Select **Delete** to delete a cross-reference and business object combination from the Key table.
7) In the **Summary** step review a summary of all the selections made in the previous steps:
   a. Expand each tab title to review the selections made in that tab.
   b. Select any of the following actions:

- Select **Back** to navigate to a specific tab and make changes.
- Select **Save** to add a new provider object or update an existing object in the data dictionary.

Copying Objects in Data Dictionaries

When you need to create a new business object similar to an existing object in the data dictionary, copy the current object to create an initial version which can then be edited and modified as follows:

1) In the sidebar, select **Data Dictionary** and choose any of the following provider data dictionaries:
   - Gateway
   - File
   - Unifier

   > **Note:** For a checklist of all the features supported in each data dictionary, refer to the ***Features of Provider Data Dictionaries*** (on page 38).

2) Select the row listing the business object you want to copy, select the**Actions** ▼ menu and then select **Copy**.

   The **Object and Fields** wizard displays a copy of the current object.

3) In the **General** step, rename the object.

   The default name of the object copy is always created with the word, *Copy*. For example, *exchange_rate Copy*.

   > **Note:** Select **Next** on each screen to advance to the next step.

4) In the **Fields** step, add, edit, or delete fields supported by the business object.
5) In the **Flow Control** step, add, edit, or delete the data flows supported by the business object.
6) In the **Cross reference** step, add, or edit the cross-reference key field to be associated with the corresponding *Gateway* object.
7) In the **Summary** step, review a summary of all the selections made in the previous steps:
   a. Expand each step title to review the selections made in that step.
   b. Select any of the following actions:
      - Select **Back** to navigate to a specific step and make changes.
      - Select **Save** to add the provider object to the data dictionary.
8) Proceed to add a business flow using the duplicated business object. For more details, see ***Adding Business Flows*** (on page 49).

   or

   Copy a business flow that uses this business object. For more details, see ***Copying Business Flows*** (on page 50).

> **Note**: For a detailed example of copying a business object, see *Gateway Online Help*.

Editing Objects and Fields in Data Dictionaries

Depending on the selected data dictionary, a business object in a data dictionary can be edited in two ways:

- Edit an object or
- Edit a field supported by an object

Editing an Object

Edit an object to update the name and description of the object, fields supported by an object, flows supported by an object or cross-reference keys of an object.

To edit an object:

1) In the sidebar, select **Data Dictionary.**
2) Select any of the following provider data dictionaries: **Gateway**, **File**, or **Unifier**.
3) Select the row listing the object you want to edit, and then select **Edit...** on the **Data Dictionary** page.

   The **Object and Fields** wizard displays.
4) If you edit an object in the Gateway, File, or Unifier data dictionaries, select the **General** step to edit the **Object Name Category**, and **Description** of the object.

   Otherwise select **Next**.

   > **Note:** Select **Next** on each screen to advance to the next step.
5) In the **Fields** step, add fields, or edit current fields supported by the business object:
   a. (Required) Enter a **Field Name** for the new field.
   b. In the **Field Type** field, select the data type of the field. Choices include: **Boolean, DateTime, Double, ForeignKey, Integer,** and **String**.
   c. If you add a **ForeignKey** field, then select the **Join to Object** to join the new field with an existing object in that provider's dictionary.
   d. Select **Read Only Field** to indicate the field value cannot be modified.
   e. (Required) In the **Description** field, enter a short description of the object.
   f. Select any of the following actions:
      - Select **Add** to add the field to the field table.
      - Select **Update** to edit an existing field in the field table.
      - Select **Reset** to undo all the changes made in the step.
      - Select **Delete** to delete a field from the field table.
   g. Repeat this sequence in the **Fields** step to add multiple fields to a provider object.
6) If you edit an object in the Gateway, File, or Unifier data dictionaries, then select the **Flow Control** step. Select any of the following actions:

- Select **Add** or **Edit** the **Flow Type** and **Flow Direction** combination to be associated with the provider object only.
- Select **Delete** to delete an existing **Flow Type** and **Flow Direction** combination.

7) In the **Cross Reference** step, setup the cross-reference key field to be associated with the Gateway object.
   a. In the **Key Field** field, select the field to be used as the cross-reference key for the object in Gateway.
   b. In the **Gateway Objects** field, select the Gateway business object from the drop-down to map the cross-reference key of the provider object.

> **Note:** You can also map the provider object to a new Gateway object that has already been added using this procedure.

   c. Select any of the following actions:
      - Select **Add** to add the cross-reference key and Gateway object combination to the Key table.
      - Select **Delete** to delete a cross-reference and business object combination from the Key table.

8) In the **Summary** step, review a summary of all selections made.
   a. Expand each step title to review the selections made in that step.
   b. Select any of the following actions:
      - Select **Back** to navigate to a specific step and make changes.
      - Select **Save** toto confirm the changes made to the provider object.

> **Note:** See the *Gateway Online Help* for an example of editing at the object level.

Editing a Field Supported by an Object

A business object can support multiple fields. A business object can be edited to add additional fields, and edit, or delete existing fields supported by the object.

To edit a field within an object:

1) In the sidebar, select **Data Dictionary.**
2) Select a provider data dictionary. For example, *Primavera Cloud*.
   A list of objects supported in the data dictionary displays.
3) Select an object in the data dictionary. For example, *Currency*.
   A list of fields supported by the object displays.
4) Select **Edit...**.
   The **Object and Fields** wizard displays.
5) In the **General** step, select **Next**.

> **Note:** Select **Next** on each screen to advance to the next step.

6) In the **Fields** step, add fields, or edit current fields supported by the object:

a. Enter a **Field Name** for the new field.
b. In the **Field Type** field, select the data type of the field. Choices include: **Boolean, DateTime, Double, ForeignKey, Integer,** and **String**.
c. If you add a **ForeignKey** field, then select the **Join to Object** to join the new field with an existing object in that provider's dictionary.
d. Select **Read Only Field** to indicate the field value cannot be modified.
e. Select any of the following actions:
   - Select **Add** to add the field to the field table.
   - Select **Reset** to undo all the changes made in the step.
   - Select **Delete** to delete an existing field from the field table.
f. Repeat this sequence in the **Fields** step to add multiple fields to a provider object.

7) In the **Flow Control**, and **Cross Reference** steps, select **Next**.
8) In the **Summary** step, review a summary of all selections made.
   a. Expand each step title to review the selections made in that step.
   b. Select any of the following actions:
      - Select **Back** to navigate to a specific step and make changes.
      - Select **Save** to confirm the changes made to the provider object.

Deleting Objects from Data Dictionaries

Objects can be deleted from Gateway, File and Unifier data dictionaries only.

To delete an object from a data dictionary:

1) In the sidebar, select **Data Dictionary** and choose any of the following provider dictionaries:
   - Gateway
   - File
   - Unifier
2) Select the row listing the object you want to delete.
   Tip: Use the **CTRL** or **Shift** Keys to select multiple objects.
3) From the **Actions** ▼ menu, select **Delete.**
4) In the **Confirmation** dialog box select **Confirm** to delete the object from the data dictionary.

Notes:

- All fields supported by the object will also be deleted.
- If the object is used in a field mapping template, the template will also be deleted.
- If the object is used in a business flow, the link to the field mapping template in the business flow will be deleted.

Deleting Fields from Data Dictionaries

Fields can be deleted as follows:

1) In the sidebar, select **Data Dictionary,** and select a provider data dictionary.
2) In the **Business Object** column, select an object in the data dictionary.
3) Select the row listing the field you want to delete.
4) Select the **Actions** ▼ menu and then select **Delete.**

> **Note:** If the field is associated with a field mapping template, then the field will be deleted from all mapping templates.

5) In the **Confirmation** dialog box, select **Confirm** to delete the field.

Importing Objects and Fields into File Data Dictionary

Objects and fields can only be imported into the File data dictionary. The objects and fields must be included in a CSV-format file only.

Prerequisites:

- A csv-formatted file containing only Object indicators (ON) and Field Headers (FH) has been created.

Procedure

To import objects and fields into the File data dictionary:

1) Select **Data Dictionary**, and then select **File**.
2) Select the**Actions** ▼ menu and then select **Import**.
3) In the **Import File** dialog box, enter the following information:
   a. In the **File converter** field, select *Default Parser* from the list.
      or
      If you have created a parser for a specific object, then select the parser for that object.
   b. In the **Import File** field, browse and select the csv-formatted file to import.
4) Select **Import**.
   A success message displays: *CSV File was successfully imported to Gateway.*

Changing Cross-Reference Keys of Data Dictionary Objects

When you change the cross-reference key field for an object in any data dictionary, if that provider object has already been used in a flow and synchronization, then that synchronization will no longer work. To use the changed cross-reference key field:

For Cloud

- Create a new field mapping template that uses the changed cross-reference field, update the business flow, and add a new synchronization.
- Contact Oracle Support to have a new provider application deployment for the source or destination application created, and use the new deplo*yment in* the existing synchronization.

For On-Premises

Perform any of the following tasks:

- Create a new field mapping template that uses the changed cross-reference field, update the business flow, and add a new synchronization.
- Add a new provider application deployment for the source or destination application, and use the new deployment in the *existing* synchronization.

Otherwise, the following error message displays: *Cross-reference entry cannot be found.*

Working with Business Flows

To transfer data between applications, you first need to define business flows. These business flows will then be used to set up synchronization jobs in Gateway that execute the data transfer. For each business flow you must determine the following:

- What data will move between application deployments?
- What is the default role of each provider?
- What common business objects exist between the applications?

You can either use the out-of-the-box business flows delivered in Gateway or create new business flows if these don't fit your needs. Both options are outlined in detail. You can create multiple business flows.

In This Section

Adding Business Flows

To add a business flow in Primavera Gateway:

1) In the sidebar, expand the **Flow Type** menu and select **Master Data** or **Project Data**.
2) In the **Business Flows** tab, select + **Add...**.
3) In the **General** step of the **Business Flow** wizard:
   a. Select the source application from the **Source** list.
   b. Select the destination application from the **Destination** list.
   c. In the **Business Flow Name** field, enter or edit the name for the business flow.
   d. (Optional) Select the **Compare Flag** check box if you want to send only those objects and fields to the destination application that have been added or updated since the last synchronization was run.
   e. (Optional) Select the **Use Custom Steps** check box if you have added the following types of custom steps:
      - (On-premises only) Internal Java custom steps
      - External Java custom steps using the **Customization SDK**
      - Custom Steps using Gateway Scripting Language

If you subsequently choose to not use custom steps in your business flow, the following warning message displays when you deselect this option: *Deselecting the Use Custom Steps option will remove all custom steps already included in the job run sequence. Select Cancel to include the Use Custom Steps option.*

f. In the **Description** field, enter a short explanation and use of the business flow.

> **Note:** Select **Next** on each screen to advance to the next step.

4) In the **Mappings** step:
   a. Select the **Gateway Object Name** and the **Field-Mapping Name** for each object to be supported in the business flow.
   b. In the **Applied For** field, select the type of action that will be performed for each object:
      - *Create*: Creates new values
      - *Update*: Updates existing values
      - *Both*: Create and update values

> **Note**: You can also add a new field-mapping template for a business object in the **Customization** tab, and then select it in the **Mappings** step.

5) In the **Source App Parameters** step, select the source field values, if any, and the attributes of the source parameters.
6) In the **Destination App Parameters** step, select the destination field values, and the attributes of the destination parameters.
7) (Optional) In the **Custom Steps** step, select the custom steps that have been created.
8) In the **Summary** step, review a summary of all the selections made in the previous steps:
   a. Expand each step title to review the selections made in that step.
   b. Select any of the following actions:
      - Select **Back** to navigate to a specific step and make changes.
      - Select **Save.**

   The business flow can now be used in a synchronization.

Tips:

- You can also select **Edit...**, and step through the wizard to update a business flow.
- When you enter a name for the business flow, use a name that will help you remember the type and direction of information in this flow.
- You can also use External Custom Steps in a data flow. For a detailed example, download the documentation from the **Help** menu.

Copying Business Flows

When you need to create a new business flow similar to an existing flow, copy the current business flow and then edit as needed.

To copy a business flow:

1) In the sidebar, select **Flow Type**.
2) Select **Master Data** or **Project Data**.
3) Select the row containing the business flow you want to copy, then select the**Actions** ▼menu and select **Copy**.

   The **Business Flow** wizard displays a copy of the current business flow with the word *Copy*. For example, *Send Unifier Roles to File Copy*.
4) In the **General** step, rename the business flow and select **Next**.

> **Note:** Select **Next** on each screen to advance to the next step.

5) In the **Mappings** step, select the business objects and the field-mapping templates supported in the business flow.

> **Note**: You can also add a new field-mapping template for a business object in the **Customization** tab, and then select it in the **Mappings** step.

6) In the **Source App Parameters** step, select the source field values, if any, and the attributes of the source parameters.
7) In the **Destination App Parameters** step, select the destination field values, and the behavior of the destination parameters.
8) In the **Summary** step, review all the selections made in the previous steps:
   a. Expand each step title to review the selections made in that step.
   b. Select any of the following actions:
      - Select **Back** to navigate to a specific step and make changes.
      - Select **Save**.

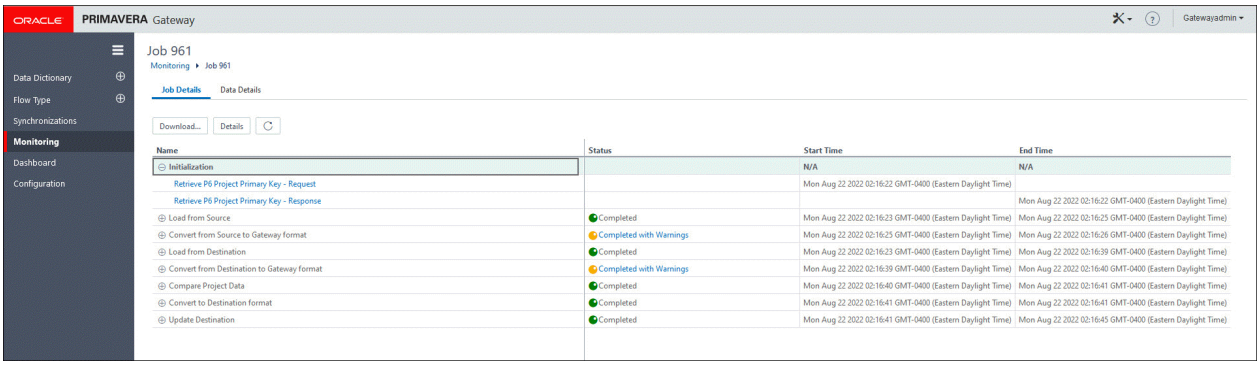
Deleting Business Flows

To delete a business flow:

1) Sign in to Gateway as a developer or an administrator.
2) In the sidebar, expand the **Flow Type** menu, and then select **Master Data, Project Data** or **Migration Data**.
3) Select the row listing the business flow you want to delete, and then select **Delete** from the **Actions** ▼ menu.
4) In the **Confirmation** dialog box, select **Confirm**.

Executing a Business Flow

A business flow is executed as a distinct sequence of flow steps. Each flow step executes a specific action within a flow. For example, the **Load** step loads data from the source application.



The flow step sequence of a business flow can be modified by adding additional custom steps to the sequence. Primavera Gateway allows you to create custom steps through various methods. This section describes the flow step sequence used in each type of business flow.

The following types of flow steps are used in any Gateway business flow:

Initialization

This step initializes the projects in the source application before the data is loaded into Gateway. It is available in Project Data flows and Migration Data flows for the following providers only:

- P6 EPPM
- Primavera Cloud
- Unifier

For single project jobs, the Initialization step displays as the first step.

For parent-child jobs, the Initialization step displays for the parent job because the projects need to be initialized before the number of child jobs is determined. It is the only step displayed for the parent job. This step is not displayed for any child jobs. The start and end times of each step is stored in GMT and displays as per your local time.

- **Notes**:
- "Baseline" Requests / Responses can be suffixed with a number which corresponds to the baselines selected in the relevant parameter. Numbering starts with: 0, 1, 2, 3, etc.
- Primavera Cloud has a hard limit which can cause multiple Request / Responses suffixed with a number. Numbering starts with 1, 2, 3, etc.

The step will only display when the **Project Filter** within the Business Flow / Synchronization uses an option other than *Lookup In <product>*.

Load

This step loads the source data and passes it on to the next step.

Convert

This step converts the source data to the Gateway data structure or Gateway data structure to the destination data structure.

Compare

This step compares the source and destination data and identifies changed, deleted, and added objects so that the system can synchronize the data efficiently.

To ensure that the data follows the same structure when it is compared, both the source and the destination data must be converted to the Gateway format before it can be compared. When identifying objects that are deleted in the source data, the compare step uses the cross reference table to determine whether the data has been synchronized in the past, the presence of the data in the cross reference table indicates that the data has been synchronized in the past. During the Compare step, the system marks objects that have been deleted in the source data for deletion in the destination system only if the record is in the cross reference table and a delete parameter is associated with the flow.

This step compares the source and destination data and identifies the delta or differences for the next step.

Review

(Optional) This step enables you to review the source data before updating the data in the destination application.

Update

This step saves the data into the destination system.

(Optional) External Custom Step

This step loads the external custom step if defined for a data flow specific to an integration. The external custom step can be added anywhere in the above flow sequence.

Flow Step Sequence in a Master Data Business Flow

The **Master Data** flow type, if applicable to an integration, is used to specifically transfer master data between two applications or *distinct environments* of the same application. For example, to transfer data from a P6 Testing environment to P6 production environment or transfer data from P6 to Primavera Cloud.

The flow step sequence for master data is organized as follows:

- **Load from Source:** This step loads the master data from the source application into the Gateway framework so that it can be processed.
- **Convert from Source to Gateway Format:** This step converts the source master data from the source format to the Gateway format.
- **Load from Destination**: This step loads master data from the destination application into the Gateway framework so that it can be processed.

- **Convert from Destination to Gateway Format:** This step converts destination's master data to the Gateway format. The converted data is used for the **Compare** step.
- **Compare Data**: This step compares the converted source Gateway data with the destination Gateway data. This step compares each object and uses the following rules to determine how the data is synchronized in the **Update Destination** step.
  - If the data is in the source object but not in the destination object, the data is created in the destination object during the **Update Destination** step.
  - If the data is in the destination object but not in the source node, the system performs the following steps:

    * Inspects the cross reference tables to determine whether the data has ever been synchronized.

    * Determines whether the Delete parameter has been set for the flow.

    If the data is in the cross-reference tables and the delete parameter has been set for the flow, the data is deleted from the destination during the **Update Destination** step. Otherwise, the data is not deleted in the **Update Destination** step.
  - Objects that contain updated data are marked for synchronization.
  - Objects that contain the same data in both the source and the destination nodes are ignored.
- **Convert to Destination Format:** This step converts the master data from Gateway format to the destination format.
- **Review data:** (Optional) This step enables you to review the source data before updating the data in the destination application.
- **Update Destination:** This step saves the master data into the destination application's database.

Flow Step Sequence in a Project Data Business Flow

The Project Data flow type or business flow is used to transfer project data between two applications or between *two distinct deployments* of the same application. For example, to transfer project data from a *P6 Testing environment to P6 production environment*.

The flow step sequence in a project data business flow is organized as follows:

- **Initialization**

  This step initializes the projects in the source application before the data is loaded into Gateway. It is available in Project Data flows and Migration Data flows for the following providers only:
  - P6 EPPM
  - Primavera Cloud
  - Unifier

  For single project jobs, the Initialization step displays as the first step.

  For parent-child jobs, the Initialization step displays for the parent job because the projects need to be initialized before the number of child jobs is determined. It is the only step displayed for the parent job. This step is not displayed for any child jobs. The start and end times of each step is stored in GMT and displays as per your local time.

- **Notes**:
- "Baseline" Requests / Responses can be suffixed with a number which corresponds to the baselines selected in the relevant parameter. Numbering starts with: 0, 1, 2, 3, etc.
- Primavera Cloud has a hard limit which can cause multiple Request / Responses suffixed with a number. Numbering starts with 1, 2, 3, etc.

The step will only display when the **Project Filter** within the Business Flow / Synchronization uses an option other than *Lookup In <product>*.

- **Load from Source:** This step loads the project data from the source application into the Gateway framework so that it can be processed.
- **Convert from Source to Gateway Format:** This step converts the source project data from the source format to the Gateway format.
- (Optional) **Load from Destination:** This step loads the project data from the destination application into the Gateway framework so that it can be processed.
- (Optional) **Convert from Destination to Gateway Format:** This step converts the destination project data to the Gateway format.
- (Optional) **Compare Project Data:** This step compares the converted source Gateway data with the destination Gateway data. This step compares each object and uses the following rules to determine how the data is synchronized in the **Update Destination** step.
  - If the data is in the source object but not in the destination object, the data is created in the destination object during the **Update Destination** step.
  - If the data is in the destination object but not in the source node, the system performs the following steps:

    * Inspects the cross reference tables to determine whether the data has ever been synchronized.

    * Determines whether the Delete parameter has been set for the flow.

    If the data is in the cross-reference tables and the delete parameter has been set for the flow, the data is deleted from the destination during the **Update Destination** step. Otherwise, the data is not deleted in the **Update Destination** step.
  - Objects that contain updated data are marked for synchronization.
  - Objects that contain the same data in both the source and the destination nodes are ignored.
- **Convert to Destination Format:** This step converts the project data from Gateway format to the destination format.
- (Optional) **Review data:** This step enables you to review the source data before updating the data in the destination application.
- **Update Destination:** This step saves the project data into the destination application's database.

Flow Step Sequence in a Migration Data Business Flow

The **Migration Data** flow type or business flow is used to transfer P6 project data between two *distinct* P6 *deployments* using P6 Export and Import Web Services, or transfer P6 project data to Primavera Cloud.

For example, use this data flow to transfer project data from a *P6 on-premises environment to Primavera Cloud environment*.

The flow step sequence in the migration data business flow is organized as follows:

- **Initialization**

  This step initializes the projects in the source application before the data is loaded into Gateway. It is available in Project Data flows and Migration Data flows for the following providers only:

  - P6 EPPM
  - Primavera Cloud
  - Unifier

  For single project jobs, the Initialization step displays as the first step.

  For parent-child jobs, the Initialization step displays for the parent job because the projects need to be initialized before the number of child jobs is determined. It is the only step displayed for the parent job. This step is not displayed for any child jobs. The start and end times of each step is stored in GMT and displays as per your local time.

  - **Notes**:
  - "Baseline" Requests / Responses can be suffixed with a number which corresponds to the baselines selected in the relevant parameter. Numbering starts with: 0, 1, 2, 3, etc.
  - Primavera Cloud has a hard limit which can cause multiple Request / Responses suffixed with a number. Numbering starts with 1, 2, 3, etc.

  The step will only display when the **Project Filter** within the Business Flow / Synchronization uses an option other than *Lookup In <product>*.
- **Export from Source**: This step exports the P6 project data into the Gateway so that it can be processed.
- **Update Destination**: This step saves the project data into the destination application's database.

Flow Step Sequence for Compare Step in Business Flows

A flow that supports a **Compare** step loads the project from both sides, determines the delta between each side, and uses only the difference to synchronize the data during the final update.

Unlike the normal flow that consists of four steps (load, convert to Gateway, convert from Gateway, and Update Destination), a flow that supports the Compare step includes the following additional steps:

- Load data from the other application

- Convert the data to the Gateway format
- Compare

The Compare step is supported by the Gateway framework code; providers do not have to implement it. Providers will need to implement the extra load and convert steps as these must be implemented by the provider of the destination application. The destination provider must ask for the key of the project that is being loaded to the source side of the implementation when supporting the compare functionality.

Source Provider

In the project data flow, the source provider needs to communicate to the destination side which project it is loading when the Primavera Gateway loads the initial project data from the source side. To do that, the source provider must implement the **getProjectKeyForCompare** method in the **FlowProvider** interface.

Normally, a provider will determine which project it is to load from the filter or the parameters that users set in the Gateway user interface. The implementation of the method needs to return a Gateway side value of this project key.

The following is a sample code snippet from the Project Data flow in **SampleProvider.java**:

```
	@Override
	public Map<String, String> getProjectKeyForCompare(String flowType, FlowContext context)
throws ProviderException {
		SampleFlowType type = getFlowType(flowType);
		switch (type) {
		case SyncProjectImport:
			String sampleProjectKey = (String) context.getParameter("ImportProjectId");
			if (StringUtils.isEmpty(sampleProjectKey)) {
				return null;
			} else {
				Map<String, String> keyMap = new HashMap<String, String>();
				keyMap.put("ObjectId", context.getXRefValueByGuest("Project",
sampleProjectKey));
				keyMap.put("Id", sampleProjectKey);
				return keyMap;
			}
		default:
			throw new UnsupportedOperationException("Compare not supported.");
		}
	}
```

Destination Provider

Similarly, in the project data flow, the destination provider needs to ask for the project key so that it can load the same project. To do that, the destination provider must implement the methods in the **LoadStepContext** interface.

The LoadStepContext interface has two methods for this use case:

- **isLoadStepForCompare** method can tell you whether this load step is invoked as a companion load step for the Compare mechanism.

- **getProjectKeyForCompare** method can tell you which project you should load. The project key returned by **getProjectKeyForCompare** is already a destination side value.

The following is a code snippet from the Project Data flow in **ProjectLoadStep** of the Sample provider:

```
if (context.isLoadStepForCompare()) {
        Map<String, String> projectKeys = context.getProjectKeyForCompare();
                String projectId = null;
                if (projectKeys != null) {
                        String objectId = projectKeys.get("ObjectId");
                        if (StringUtils.isEmpty(objectId)) {
                                projectId = projectKeys.get("Id");
                        } else {
                                projectId = objectId;
                        }
                }
                if ((projectId == null) || projectId.isEmpty()) {
                        return new PDIDocumentImpl();
                } else {
                        return getOneProject(projectId, context);
                }
        }
```

Flow Step Sequence for External Java Custom Steps in Business Flows

An external custom step can be used in a project data or master data flow, and can be limited to an integration between specific provider applications. For example, you would use a project data flow with an external custom step to transfer project data from a Sample to File integration.

The flow step sequence for external Java custom steps can be organized as follows:

- **Load from Source:** This step loads the data from the source application into the Gateway framework so that it can be processed.
- **(Optional) <External Custom Step Name>:** This step can be used anywhere in the flow sequence. In this case, this step loads the external custom step to the source data.

  For more details on how to create an external custom step, download the External Custom Step SDK from the ⓘ **Help** menu in Gateway.
- **Convert from Source to Gateway Format:** This step converts the source data to the Gateway format.
- **Convert to Destination Format:** This step converts the data from Gateway format to the destination format.
- **(Optional) <External Custom Step Name>:** This step can be used anywhere in the flow sequence. In this case, this step loads the external custom step to the destination data.
- **Update Destination:** This step saves the data into the destination application's database.
- **(Optional) <External Custom Step Name>:** This step can be used anywhere in the flow sequence. In this case, this step loads the external custom step to the destination data.

Flow Step Sequence for Internal Java Custom Steps for On-Premises

An internal custom step can be used in a project data or master data flows, and can be limited to an integration between specific provider applications. Internal custom steps must be coded in Java and can be used anywhere in a flow step sequence. For example, use an internal custom step to transfer project data from a Sample to File integration.

The flow steps are organized as follows:

- **Load from Source:** This step loads the data from the source application into the Gateway framework so that it can be processed.
- **(Optional) <Internal Custom Step Name>:** This step can be used anywhere in the flow sequence. In this case, this step loads the internal custom step to the source data.
- **Convert from Source to Gateway Format:** This step converts the source data to the Gateway format.
- **Convert to Destination Format:** This step converts the data from Gateway format to the destination format.
- **(Optional) <Internal Custom Step Name>:** This step can be used anywhere in the flow sequence. In this case, this step loads the internal custom step to the destination data.
- **Update Destination:** This step saves the data into the destination application's database.
- **(Optional) <Internal Custom Step Name>:** This step can be used anywhere in the flow sequence. In this case, this step loads the internal custom step to the destination data.

Flow Step Sequence for Custom Steps in Gateway Scripting Language for Business Flows

For a specific provider, a custom step can be added to the flow step sequence of any business flow from within the Gateway user interface using Gateway scripting language. This flow step is an alternative option to:

- Adding a external custom step using Java
- Adding a internal custom step using Java

> **Note**: Gateway scripting language is distinct from *Groovy* Scripting Language. For more details on how to code a custom step, see *Gateway Scripting Language Guide*.

A business flow is executed as an ordered sequence of flow steps. So, the positioning of a custom step depends on the role of the provider in a business flow.

Use the following table to position a custom step in the default flow step sequence:

If Provider Role in Business Flow is...	Add Custom Step...
Source	with a sequence number in the range 1 - 19.
Destination	with a sequence number in the range 61 - 79.

You can also add a custom step in Gateway between sequence numbers 21 - 59.

The steps can then be organized as follows:

- (Optional for Source Provider) **<Custom Step Name>:** This step runs the custom step to the source data. It can be added in the flow sequence for a *source* provider with a sequence number in the range 1 - 9.
- **Load from Source:** This step loads the data from the source application into the Gateway framework so that it can be processed.
- (Optional for Source Provider) **<Custom Step Name>:** This step runs the custom step to the source data. It can be added in the flow sequence for a *source* provider with a sequence number in the range 11 - 19.
- (Optional in Gateway) **<Custom Step Name>:** This step runs the custom step within Gateway. It can be added in the Gateway flowside sequence with a sequence number in the range 21 - 59.
- **Convert from Source to Gateway Format:** This step converts the source data to the Gateway format.
- **Convert to Destination Format:** This step converts the data from Gateway format to the destination format.
- (Optional) **<Custom Step Name>:** This step runs the custom step to the destination data. It can be added in the flow sequence for a *destination* provider with a sequence number in the range 61 - 69.
- **Review data:** This step enables you to review the source data before updating the data in the destination application.
- (Optional) **<Custom Step Name>:** This step runs the custom step to the destination data. It can be added in the flow sequence for a *destination* provider with a sequence number in the range 71 - 79.
- **Update Destination:** This step saves the data into the database of the destination application.

> **Note**: Although custom steps can be added after the last **Update Destination** flow step (sequence number 80), these will not be processed by the business flow.

Using Master Data Business Flows Delivered in Gateway

Use the **Master Data** flow type to create master data business flows for the supported business objects.

> **Note:** When you are creating a business flow, and choosing the mapping templates for a object, you can mark a mapping template as **Create Only**, **Update Only** or **Both**. For Project Data business flows, if all the mapping templates are create-only templates, then update is not allowed.

Business Objects Supported in Master Data Flow

Depending on the application you choose to integrate data with, the File provider supports several master data business objects. These include:

- File-P6 business objects
- File-Primavera Cloud business objects
- File-Unifier business objects
- File-Sample business objects

File-P6 Business Objects

When *File* is the *source* provider, the following master data business objects are supported between File provider and P6 provider applications:

File Source Business Objects	Gateway Business Objects	P6 Destination Business Objects
ActivityCode	ActivityCode	ActivityCode
ActivityCodeType	ActivityCodeType	ActivityCodeType
BaselineType	BaselineType	ActivityExpense
Calendar	Calendar	Calendar
CostAccount	CostAccount	CBS
Currency	Currency	Currency
EPS	EPS	EPS
ExpenseCategory	ExpenseCategory	ExpenseCategory
FinancialPeriod	FinancialPeriod	FinancialPeriod
Location	Location	Location
NotebookTopic	NotebookTopic	NotebookTopic
ProjectCode	ProjectCode	ProjectCode
ProjectCodeType	ProjectCodeType	ProjectCodeType
Resource	Resource	Resource
ResouceCode	ResouceCode	ResouceCode
ResourceCodeType	ResourceCodeType	ResourceCodeType
ResourceCurve	ResourceCurve	ResourceCurve
ResourceRate	ResourceRate	ResourceRate
ResourceRole	ResourceRole	ResourceRole
Role	Role	Role
RoleLimit	RoleLimit	RoleLimit

File Source Business Objects	Gateway Business Objects	P6 Destination Business Objects
RoleRate	RoleRate	RoleRate
UDFType	UDFType	UDFType
UnitOfMeasure	UnitOfMeasure	UnitOfMeasure
WBSCategory	WBSCategory	WBSCategory

When *File* is the *destination* provider, the following master data business objects are supported between File and P6 providers:

P6 Source Business Objects	Gateway Business Objects	File Destination Business Objects
ActivityCode	ActivityCode	ActivityCode
ActivityCodeType	ActivityCodeType	ActivityCodeType
BaselineType	BaselineType	BaselineType
Calendar	Calendar	Calendar
CostAccount	CostAccount	CostAccount
Currency	Currency	Currency
EPS	EPS	EPS
ExpenseCategory	ExpenseCategory	ExpenseCategory
FinancialPeriod	FinancialPeriod	FinancialPeriod
Location	Location	Location
NotebookTopic	NotebookTopic	NotebookTopic
ProjectCode	ProjectCode	ProjectCode
ProjectCodeType	ProjectCodeType	ProjectCodeType
Resource	Resource	Resource
ResouceCode	ResouceCode	ResouceCode
ResourceCurve	ResourceCurve	ResourceCurve
ResourceRate	ResourceRate	ResourceRate
ResourceRole	ResourceRole	ResourceRole
Role	Role	Role
RoleLimit	RoleLimit	RoleLimit
RoleRate	RoleRate	RoleRate
UDFType	UDFType	UDFType

P6 Source Business Objects	Gateway Business Objects	File Destination Business Objects
UnitOfMeasure	UnitOfMeasure	UnitOfMeasure
WBSCategory	WBSCategory	WBSCategory

File-Primavera Cloud Business Objects

When *File* is the *source* provider, the following master data business objects are supported between File provider and Primavera Cloud provider applications:

File Source Business Objects	Gateway Business Objects	Primavera Cloud Destination Business Objects
Calendar	Calendar	Calendar
EPS	EPS	EPS
Location	Location	Location
Resource	Resource	Resource
Role	Role	Role
UDFType	UDFType	UDFType

When *File* is the *destination* provider, the following master data business objects are supported between File provider and Primavera Cloud provider applications:

Primavera Cloud Source Business Objects	Gateway Business Objects	File Destination Business Objects
ProjectCode	ProjectCode	ProjectCode
ProjectCodeType	ProjectCodeType	ProjectCodeType

File-Unifier Business Objects

When *File* is the *source* provider, the following master data business objects are supported between File provider and Unifier provider applications:

File Source Business Objects	Gateway Business Objects	Unifier Destination Business Objects
BlanketPurchaseOrder	BlanketPurchaseOrder	CompanyCosts
BlanketPurchaseOrderDetail	BlanketPurchaseOrderDetail	CompanyCostsDetail
Resource	Resource	Resource
Role	Role	Role
Timesheet	Timesheet	CompanyLineItem

File Source Business Objects	Gateway Business Objects	Unifier Destination Business Objects
TimesheetDetail	TimesheetDetail	CompanyLineItemDetail
Vendor	Vendor	CompanyLineItem
VendorDetail	VendorDetail	CompanyLineItemDetail
VendorEvaluation	VendorEvaluation	CompanySimple

When *File* is the *destination* provider, the following master data business objects are supported between File and Unifier providers:

Unifier Source Business Objects	Gateway Business Objects	XML Destination Business Objects
Resource	Resource	Resource
Role	Role	Role

File-Sample Business Objects

When *File* is the *source* provider, the following master data business objects are supported between File provider and Unifier provider applications:

File Source Business Objects	Gateway Business Objects	Sample Destination Business Objects
ActivityCode	ActivityCode	OperationCode
ActivityCodeType	ActivityCodeType	OperationCodeType
BlanketPurchaseOrder	BlanketPurchaseOrder	CompanyCosts
BlanketPurchaseOrderDetail	BlanketPurchaseOrderDetail	CompanyCostsDetail
EPS	EPS	EPS
Location	Location	Location
ProjectCode	ProjectCode	ProjectCode
ProjectCodeType	ProjectCodeType	ProjectCodeType
Resource	Resource	Resource
ResourceCode	ResouceCode	ResouceCode
ResourceCodeType	ResourceCodeType	ResourceCodeType
ResourceCurve	ResourceCurve	ResourceCurve
ResourceRole	ResourceRole	ResourceRole
Role	Role	Role

File Source Business Objects	Gateway Business Objects	Sample Destination Business Objects
RoleLimit	RoleLimit	RoleLimit
Timesheet	Timesheet	CompanyLineItem
TimesheetDetail	TimesheetDetail	CompanyLineItemDetail
UDFType	UDFType	UDFType
UnitOfMeasure	UnitOfMeasure	UnitOfMeasure
Vendor	Vendor	CompanyLineItem
VendorDetail	VendorDetail	CompanyLineItemDetail
VendorEvaluation	VendorEvaluation	CompanySimple

When *File* is the *destination* provider, the following master data business objects are supported between File provider and Sample provider applications:

Sample Source Business Objects	Gateway Business Objects	File Destination Business Objects
OperationCode	ActivityCode	ActivityCode
OperationCodeType	ActivityCodeType	ActivityCodeType
CompanyCosts	BlanketPurchaseOrder	BlanketPurchaseOrder
CompanyCostsDetail	BlanketPurchaseOrderDetail	BlanketPurchaseOrderDetail
Calendar	Calendar	Calendar
CostAccount	CostAccount	CostAccount
EPS	EPS	EPS
ExpenseCategory	ExpenseCategory	ExpenseCategory
FinancialPeriod	FinancialPeriod	FinancialPeriod
Location	Location	Location
ProjectCode	ProjectCode	ProjectCode
ProjectCodeType	ProjectCodeType	ProjectCodeType
Resource	Resource	Resource
ResouceCode	ResouceCode	ResouceCode
ResourceCodeType	ResourceCodeType	ResourceCodeType
ResourceCurve	ResourceCurve	ResourceCurve
ResourceRate	ResourceRate	ResourceRate
ResourceRole	ResourceRole	ResourceRole

Sample Source Business Objects	Gateway Business Objects	File Destination Business Objects
Role	Role	Role
RoleLimit	RoleLimit	RoleLimit
RoleRate	RoleRate	RoleRate
CompanyLineItem	Timesheet	Timesheet
CompanyLineItemDetail	TimesheetDetail	TimesheetDetail
UDFType	UDFType	UDFType
UnitOfMeasure	UnitOfMeasure	UnitOfMeasure
CompanyLineItem	Vendor	Vendor
CompanyLineItemDetail	VendorDetail	VendorDetail
CompanySimple	VendorEvaluation	VendorEvaluation
WorkOrderCategory	WBSCategory	WBSCategory

Field-Mapping Templates for Master Data Flows

This section lists the master data field-mapping templates delivered in Primavera Gateway for each integration scenario.

File-P6 Field-Mapping Templates

The following table lists the out-of-the-box field-mapping templates delivered for each master data business object supported by the XML provider in Gateway for an File - P6 integration scenario. Each business object can be also be supported by more than one field-mapping template. You can create business flows by selecting business objects and their corresponding field-mapping templates listed below or create your own field-mapping templates if these templates don't fit your organization's needs. For a detailed list of the fields mapped in each template, select the following links or see ***Appendix A: Fields Supported in Mapping Templates*** (on page 127).

File Business Object	Associated Field-Mapping Template
ActivityCode	***File-P6 ActivityCode Fields*** (on page 128)
ActivityCodeType	***File-P6 ActivityCodeType Fields*** (on page 129)
BaselineType	none delivered
Calendar	***File-P6 Calendar Fields*** (on page 132)
CostAccount	***File-P6 Cost Account Fields*** (on page 134)
Currency	none delivered

File Business Object	Associated Field-Mapping Template
EPS	***File-P6 EPS Fields*** (on page 134)
ExpenseCategory	***File-P6 Expense Category Fields*** (on page 135)
FinancialPeriod	***File-P6 Financial Period Fields*** (on page 135)
Location	***File-P6 Location Fields*** (on page 135)
NotebookTopic	none delivered
ProjectCode	***File-P6 ProjectCode Fields*** (on page 136)
ProjectCodeType	***File-P6 ProjectCodeType Fields*** (on page 136)
Resource	***File-P6 Resource Fields*** (on page 137)
ResourceCode	***File-P6 ResourceCode Fields*** (on page 138)
ResourceCodeType	***File-P6 ResourceCodeType Fields*** (on page 138)
ResourceCurve	***File-P6 ResourceCurve Fields*** (on page 139)
ResourceRate	***File-P6 Resource Rates*** (on page 139)
	File-P6 Resource Max UPT (on page 139)
ResourceRole	***File-P6 ResourceRole Fields*** (on page 140)
Role	***File-P6 Role Fields*** (on page 144)
RoleLimit	***File-P6 RoleLimit Fields*** (on page 145)
RoleRate	***File-P6 Role Rates*** (on page 145)
UDFType	***File-P6 UDFType Fields*** (on page 147)
UnitOfMeasure	***File-P6 UnitOfMeasure Fields*** (on page 147)
WBSCategory	***File-P6 WBS Category Fields*** (on page 148)

File-Unifier Field-Mapping Templates

The following table lists the out-of-the-box field-mapping templates delivered for each master data business object supported by the XML provider in Gateway for a File - Unifier integration scenario. Each business object can be also be supported by more than one field-mapping template. You can create business flows by selecting business objects and their corresponding field-mapping templates listed below or create your own field-mapping templates if these templates don't fit your organization's needs. For a detailed list of the fields mapped in each template, select the following links or see ***Appendix A: Fields Supported in Mapping Templates*** (on page 127).

File Business Object	Associated Field-Mapping Template
BlanketPurchaseOrder	***File-Unifier BlanketPurchaseOrder Fields*** (on

File Business Object	Associated Field-Mapping Template
	page 152)
BlanketPurchaseOrderDetail	***File-Unifier BlanketPurchaseOrderDetail Fields*** (on page 153)
Timesheet	***File-Unifier Timesheet Fields*** (on page 172)
TimesheetDetail	***File-Unifier TimesheetDetail Fields*** (on page 172)
Vendor	***File-Unifier Vendor Fields*** (on page 172)
VendorDetail	***File-Unifier VendorDetail Fields*** (on page 173)
VendorEvaluation	***File-Unifier VendorEvaluation Fields*** (on page 173)

File - Sample Field-Mapping Templates

The following table lists the out-of-the-box field-mapping templates delivered for each master data business object supported by the File provider in Gateway for a File - Sample integration scenario. Each business object can be also be supported by more than one field-mapping template. You can create business flows by selecting business objects and their corresponding field-mapping templates listed below or create your own field-mapping templates if these templates don't fit your organization's needs. For a detailed list of the fields mapped in each template, select the following links or see ***Appendix A: Fields Supported in Mapping Templates*** (on page 127).

File Business Object	Associated Field-Mapping Template
ActivityCode	***Sample-File ActivityCode Fields*** (on page 176)
ActivityCodeType	***Sample-File ActivityCodeType Fields*** (on page 176)
BlanketPurchaseOrder	none delivered
BlanketPurchaseOrderDetail	none delivered
EPS	***Sample-File EPS Fields*** (on page 179)
Location	***Sample-File Location Fields*** (on page 180)
ProjectCode	***Sample-File ProjectCode Fields*** (on page 180)
ProjectCodeType	***Sample-File ProjectCodeType Fields*** (on page 180)
Resource	***Sample-File Project Resource Fields*** (on page 181)
ResourceCode	***Sample-File ResourceCode Fields*** (on page 181)

File Business Object	Associated Field-Mapping Template
ResourceCodeType	***Sample-File ResourceCodeType Fields*** (on page 181)
ResourceCurve	none delivered
ResourceRole	none delivered
Role	***Sample-File Role Fields*** (on page 186)
RoleLimit	none delivered
Timesheet	none delivered
TimesheetDetail	none delivered
UDFType	***Sample-File UDFType Fields*** (on page 189)
UnitOfMeasure	none delivered
Vendor	none delivered
VendorDetail	none delivered
VendorEvaluation	none delivered
WBSCategory	***Sample-File WBS Category Fields*** (on page 189)

Setting Provider-Specific Parameters

Based on the role of the providers in the master data flow, and the data to be transferred in the business flow, provider-specific parameters display as either source or destination application parameters in the **Business Flow** wizard.

Gateway developers and Gateway administrators can set the default behavior of these parameters in a business flow by specifying the **Attribute** for each parameter as any of the following values: **Hidden, Optional, Read-only,** or **Required**.

> **Note:** Data identified by each parameter is processed by a flow step of the business flow. For more information on flow steps, see ***Executing a Business Flow*** (on page 52). All values specified in the filter parameters will be used in the **Load** step of the flow for loading data from the providers designated as the source or the destination.

EnterpriseTrack Provider Parameters

When EnterpriseTrack is the *destination* provider in a project data business flow, set values and attributes for the following parameters:

- **EnterpriseTrack Mandatory Roles (˜ separated list. Required for project creating.)**

Use this setting to specify the user roles only when creating a new project in EnterpriseTrack.

- **EnterpriseTrack Login IDs of Mandatory Roles (˜ separated list. Required for project creating.)**

  Use this setting to specify the login IDs only when creating a new project in EnterpriseTrack.

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

  Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

  Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

  > **Note**: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

- **Partition data to child jobs for large data transfers?**

  Use this setting if you are integrating large data sets between projects and between applications when P6 EPPM or Oracle Primavera Cloudis the source application. This parameter partitions large data sets logically into multiple child jobs.

- **Child job object limit for partitioned data**

  Use this setting in conjunction with the **Partition Data into Child Jobs?** parameter. Enter a limit on the number of objects that can be included in the child jobs in the range 50 - 5000. Zero (0) is the default value.

- **Include only updated data since last run? (Delta Run)**

Use this setting only when you want to transfer only new or changed data that was added after a synchronization was last run. This setting must be used in conjunction with the **Compare** flag selected in the Business Flow wizard.

When EnterpriseTrack is the *source* provider in a project data business flow, set values and attributes for the following parameters:

- **EnterpriseTrack Project ID**

  Use this setting to specify the project ID to be sent from EnterpriseTrack.
- **EnterpriseTrack Project Name**

  Use this setting to identify the project to be sent from EnterpriseTrack by its project name.
- **EnterpriseTrack Project Sub Object**

  Use this setting to additional objects that are to be transferred with a Project business object. Options include:
  - Project Metadata
  - Project Finance Structure
  - Project Finance Current
  - Project Finance Snapshot
- **Finance Data Search Mode (M for Monthly / Y or yearly / A for Aggregate)**

  Use this setting to select the time length of the finance data.
- **From Month (YYYY/MM Format)**

  Use this setting to specify the start year and month of the data being transferred.
- **EnterpriseTrack Project Finance Snapshot Name (Required only for project finance snapshot export)**

  Use this setting to specify the name of the ProjectFinanceSnapshot business object.
- **To Month (YYYY/MM Format)**

  Use this setting to specify the end year and month of the data being transferred.
- **From Year (YYYY Format)**

  Use this setting to specify the start year of the data being transferred.
- **To Year (YYYY Format)**

  Use this setting to specify the end year of the data being transferred.
- **Group Name (Use * if you need data for all groups)**

  Use this setting to specify groups in EnterpriseTrack.
- **Category Name (Use * if you need data for all groups)**

  Use this setting to specify category names in EnterpriseTrack.
- **Element Name (Use * if you need data for all groups)**

  Use this setting to specify Element Names in EnterpriseTrack.
- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

File Provider Parameters

When File provider is the *source* provider in a master data business flow, set values and attributes for the following parameters:

- **File to Upload**

  Enter the XML file name to be uploaded by the business flow. This option is enabled only if you chose to set up an XML deployment with the **File Upload** option in the **Deployment** tab of the **Configurations** page. This information is used in the **Load** step of the flow.

- **File Name**

  Enter the file name to be uploaded by the business flow. This option is enabled only if you chose to set up a **File** deployment with **FilePath** or **FTPService** options in the **Deployments** tab of the **Configuration** page. This information is used in the **Load** step of the flow.

- **CSV Parser**

  This parameter is applicable only if you set up a **File** deployment with CSV Format in the Deployments tab of the **Configuration** page. Select a CSV parser from the drop-down list.

When File provider is the *destination* provider in a master data business flow, set values and attributes for the following parameters:

- **File Name**

  Enter the file name to be uploaded by the business flow. This option is enabled only if you chose to set up a **File** deployment with **FilePath** or **FTPService** options in the **Deployments** tab of the **Configuration** page. The data will be written to the file name specified in this field. This information is used in the **Save** step of the flow.

  CSV Generator

  This parameter is applicable only if you have set up a **File** Deployment with CSV Format in the **Deployments** tab of the **Configuration** page. Select a specific generator from the drop-down list to write into a CSV file in the destination application.

P6 Provider Parameters

When *P6* is the *source* provider in a master data business flow, set values and attributes for the following parameters:

- **Location Filter**

Use this setting to identify and select location values in P6 using **Country Code**, and **State code**. Enter multiple values in the **Country Code**, or **State Code** fields as comma-separated values. Select **Add Row** to enter multiple locations. Select **Edit Row** to change current filter criteria for selecting a location value.

- **Notebook Topic Filter**

  Use this setting to transfer the following types of Notebook Topics in P6: **EPS, Project, WBS,** and **Activity**.

- **Project Code Type Filter**

  Use this setting to identify and select ProjectCodeType values in P6 by using the **Name** field. Enter multiple values in the **Name** field as comma-separated values. Select **Add Row** to enter multiple ProjectCodeType values. Select **Edit Row** to change the current filter criteria for selecting a ProjectCodeType value.

- **Resource Code Type Filter**

  Use this setting to identify and transfer ResourceCodeType values in P6 by using the **Name** field. Enter multiple values in the **Name** field as comma-separated values. Select **Add Row** to enter multiple ResourceCodeType values. Select **Edit Row** to change the current filter criteria for selecting a ResourceCodeType value.

- **Activity Code Type Filter**

  Use this setting to identify and transfer ActivityCodeType values in P6 by using the **Name** field. Enter multiple values in the **Name** field as comma-separated values. Select **Add Row** to enter multiple ActivityCodeType values. Select **Edit Row** to change the current filter criteria for selecting an ActivityCodeType value.

- **Resource Filter**

  Use this setting to identify and select Resource values in P6 by using the following fields: **Resource Ids**, and **Resource Code**. Enter multiple values of **Resource Ids** or **Resource Code** as comma-separated values. Select **Add Row** to enter multiple resource values. Select **Edit Row** to change the current filter criteria for selecting a resource value.

- **Include Resource Hierarchy**

  Select this option to include the P6 resource hierarchy with the Resource objects. This information is used in the **Load** step of the flow.

- **Role Filter**

  Use this setting to identify and transfer role values in P6 by using the **Role Id** field. Enter multiple values in the **Role Ids** field as comma-separated values. Select **Add Row** to enter multiple role values. Select **Edit Row** to change the current filter criteria for selecting a role value.

- **Include Role Hierarchy**

  Select this option to include the P6 role hierarchy with the Role values in the data transfer. This information is used in the **Load** step of the flow.

- **Calendar Filter**

  Use this setting to identify and transfer **Global Calendar** and / or **Resource Calendar** values in P6 by using the **Name** field. Enter multiple values in the **Name** field as comma-separated values. Select **Add Row** to enter multiple calendars. Select **Edit Row** to change the current filter criteria for selecting a calendar.

- **P6 UDF Type Filter**

Use this setting to select and transfer the following UDF Types: **Activity, Activity Expense, Project, Resource, Resource Assignment,** and **WBS**.

- **EPS Filter**

  Use this setting to identify and transfer EPS values in P6. Enter multiple values for the **EPS Ids** field as comma-separated values. Select **Add Row** to enter multiple EPS values. Select **Edit Row** to change the current filter criteria for selecting an EPS value.

- **Expense Category Filter**

  Use this setting to identify and transfer ExpenseCategory values in P6 by using the **ExpenseCategory Names** field. Enter multiple values in the **ExpenseCategory Names** field as comma-separated values. Select **Add Row** to enter multiple ExpenseCategory values. Select **Edit Row** to change the current filter criteria for selecting an ExpenseCategory value.

- **WBS Category Filter**

  Use this setting to identify and transfer WBSCategory values in P6 by using the **WBSCategory Names** field. Enter multiple values for the **WBSCategory Names** field as comma-separated values. Select **Add Row** to enter multiple filter criteria for selecting WBSCategory values. Select **Edit Row** to change the current filter criteria for selecting a WBSCategory value.

When *P6* is the *destination* provider in a master data business flow, set values and attributes for the following parameters:

- **Resource Destination**

  Use this setting to specify the location of the Resource objects imported into P6.

- **Calculate Cost from Units**

  Use this setting to determine whether to calculate costs from the units. This information is used in the **Save** step of the flow.

- **Auto Compute Actuals**

  Select this setting if you want the actuals to be auto-computed in P6. This information is used in the **Save** step of the flow.

- **Role Destination**

  Use this setting to specify the location of the role objects imported into P6. This information is used in the **Save** step of the flow.

- **Save data to P6 if there are errors**

  Use this setting to determine whether to save the imported data in P6 with errors. This information is used in the **Save** step of the flow.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

  Note: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

Primavera Cloud Provider Parameters

When *Primavera Cloud* is the *source* provider in a master data flow, there are no parameters to set for the delivered business flows.

- **Primavera Cloud Location Filter**

  Use this setting to specify location values in Primavera Cloud using *CountryCode* or *WorkspaceId*. Select **Add Row** to enter multiple filter criteria for selecting location values. Select **Edit row** to change a current filter criteria or value for selecting a location.

- **Primavera Cloud Calendar Filter**

  Use this setting to identify and select **Global Calendar** values in Primavera Cloud using *Name* or *WorkspaceId.* Enter multiple values as comma-separated values. Select **Add row** to enter multiple filter criteria for selecting global calendars. Select **Edit row** to change a current filter criteria or value for selecting a global calendar.

- **Primavera Cloud Role Filter**

  Use this setting to select roles in Primavera Cloud using *RoleId* or *WorkspaceId*. Select **Add Row** to enter multiple filter criteria for selecting roles. Select **Edit Row** to change the current filter criteria or value for selecting roles in Primavera Cloud.

- **Primavera Cloud Resource Filter**

  Use this setting to select resources in Primavera Cloud using *RoleId* or *WorkspaceId*. Select **Add Row** to enter multiple filter criteria for selecting resources. Select **Edit Row** to change the current filter criteria or value for selecting resources in Primavera Cloud.

- **Primavera Cloud UDF Type Filter**

  Use this setting to select and transfer the following Primavera Cloud UDF Types: **Activity, Project, Resource Assignment,** and **WBS**.

- **Primavera Cloud UDF By Workspace Filter**

  Use this setting to select UDFs associated with a specific workspace in Primavera Cloud by using *WorkspaceId*. Select **Add Row** to enter multiple filter criteria for selecting UDF types. Select **Edit Row** to change the current filter criteria or value for selecting UDF Types in Primavera Cloud.

When *Primavera Cloud* is the *destination* provider in a master data business flow, set values and attributes for the following parameters

- **Workspace Location**

  Use this setting to specify the default workspace and populate it in a synchronization. If the value is set in Primavera Gateway, then Primavera Cloud will check if the **Primavera Cloud Workspace** field value exists and will use it to create the project.

P6 must send all global data assigned to the project with the project flow. All global data will be assigned to the workspace where the project will be created in Primavera Cloud. This information is used in the **Load** and **Save** steps of the flow.

- **Primavera Cloud Location Filter**

  Use this setting to specify location values in Primavera Cloud using *CountryCode* or *WorkspaceId*. Select **Add Row** to enter multiple filter criteria for selecting location values. Select **Edit row** to change a current filter criteria or value for selecting a location.

- **Save data to Primavera Cloud if there are errors?**

  Use this setting to determine how data is to be processed when a job fails in Gateway. Select this option if you want to save the data in Primavera Cloud when a synchronization job fails in Gateway. Otherwise, deselect this option to ensure data is not saved in Primavera Cloud for failed jobs.

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

  Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

  Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

  Note: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

Sample Provider Parameters

When *Sample* is the *source* provider in a master data flow, set values and attributes for the following parameter:

- **Sample Filter Parameter**

  Use this setting to identify and transfer SampleObject business object. Enter multiple values for the **SampleField** field as comma-separated values. Select **Add Row** to transfer multiple SampleObject business objects.

When *Sample* is the *destination* provider in a master data business flow, set values and attributes for the following parameters

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

  Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

  Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

Unifier Provider Parameters

When *Unifier* is the *source* provider in a master data business flow, there are no parameters to set for any of the delivered business flows.

When *Unifier* is the *destination* provider in a master data business flow, set values and attributes for the following parameters:

- **Business Process Name**

  Use this setting to enter the name of the business process to which the data should be associated in Unifier. This information is used in the **Save** step of the flow.

- **Business Process Detail Tab Name**

  Use this setting to enter the Detail tab name of the business process to which the data should be associated in Unifier. This information is used in the **Save** step of the flow.

- **Line Item Identifier**

  Use this setting only when you need to update line items. Enter the name of the data element (not label) that is to be updated in the **Detail** tab of the business process. This information is used in the **Save** step of the flow.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

Note: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

Using Project Data Business Flows Delivered in Gateway

Use the **Project Data** flow type to create project data business flows for the supported business objects.

> **Note:** When you are creating a business flow, and choosing the mapping templates for a object, you can mark a mapping template as **Create Only**, **Update Only** or **Both**. For Project Data business flows, if all the mapping templates are create-only templates, then update is not allowed.

Business Objects Supported in Project Data Flows

Depending on the application you choose to integrate data with, the File provider supports several project data business objects. These include:

- File - EnterpriseTrack Business Objects
- File - P6 Business Objects
- File - Primavera Cloud Business Objects
- File - Sample Business Objects
- File - Unifier Business Objects

Business objects can be transferred using the out-of-the-box field-mapping templates delivered in Gateway.To view a list of field mapping templates delivered in Primavera Gateway, see ***Appendix A: Fields Supported in Mapping Templates*** (on page 127).

File - EnterpriseTrack Business Objects for On-Premises

When *File* is the *source* provider, the following business objects are supported between File provider and EnterpriseTrack provider applications in a project data flow:

File Source Business Objects	Gateway Business Objects	EnterpriseTrack Destination Business Objects
Project	Project	Project

When File is the *destination* provider, the following business objects are supported between File provider and EnterpriseTrack provider applications in a project data flow:

EnterpriseTrack Source Business Objects	Gateway Business Objects	File Destination Business Objects
Project	Project	Project

File - P6 Supported Business Objects

When *File* is the *source* provider, the following business objects are supported between File provider and P6 provider applications in a project data flow:

File Source Business Objects	Gateway Business Objects	P6 Destination Business Objects
Activity	Activity	Activity
ActivityCode	ActivityCode	ActivityCode
ActivityCodeType	ActivityCodeType	ActivityCodeType
ActivityExpense	ActivtyExpense	ActivityExpense
ActivityRisk	ActivityRisk	ActivityRisk
Calendar	Calendar	Calendar
CBS	CBS	CBS
Project	Project	Project
ProjectCode	ProjectCode	ProjectCode
ProjectCodeType	ProjectCodeType	ProjectCodeType
ProjectResource	ProjectResource	ProjectResource
Relationship	Relationship	Relationship
Resource	Resource	Resource
ResourceAssignment	ResourceAssignment	ResourceAssignment
ResourceCode	ResourceCode	ResourceCode
ResourceCodeType	ResourceCodeType	ResourceCodeType
ResourceRate	ResourceRate	ResourceRate
Risk	Risk	Risk
RiskImpact	RiskImpact	RiskImpact
RiskMatrix	RiskMatrix	RiskMatrix
RiskMatrixScore	RiskMatrixScore	RiskMatrixScore
RiskMatrixThreshold	RiskMatrixThreshold	RiskMatrixThreshold

File Source Business Objects	Gateway Business Objects	P6 Destination Business Objects
RiskResponseAction	RiskResponseAction	RiskResponseAction
RiskResponseActionImpact	RiskResponseActionImpact	RiskResponseActionImpact
RiskResponsePlan	RiskResponsePlan	RiskResponsePlan
RiskThreshold	RiskThreshold	RiskThreshold
RiskThresholdLevel	RiskThresholdLevel	RiskThresholdLevel
Role	Role	Role
UDFType	UDFType	UDFType
WBS	WBS	WBS

When File is the *destination* provider, the business objects are supported between File and P6 providers:

P6 Source Business Objects	Gateway Business Objects	File Destination Business Objects
Activity	Activity	Activity
ActivityCode	ActivityCode	ActivityCode
ActivityCodeType	ActivityCodeType	ActivityCodeType
ActivityExpense	ActivtyExpense	ActivityExpense
ActivityRisk	ActivityRisk	ActivityRisk
Calendar	Calendar	Calendar
CBS	CBS	CBS
CBSDurationSummary	CBSDurationSummary	CBSDurationSummary
CBSExpenseSpread	CBSExpenseSpread	CBSExpenseSpread
CBSResourceSpread	CBSResourceSpread	CBSResourceSpread
Project	Project	Project
ProjectResource	ProjectResource	ProjectResource
Relationship	Relationship	Relationship
Resource	Resource	Resource
ResourceAssignment	ResourceAssignment	ResourceAssignment
Risk	Risk	Risk
RiskImpact	RiskImpact	RiskImpact
RiskMatrix	RiskMatrix	RiskMatrix

P6 Source Business Objects	Gateway Business Objects	File Destination Business Objects
RiskMatrixScore	RiskMatrixScore	RiskMatrixScore
RiskMatrixThreshold	RiskMatrixThreshold	RiskMatrixThreshold
RiskResponseAction	RiskResponseAction	RiskResponseAction
RiskResponseActionImpact	RiskResponseActionImpact	RiskResponseActionImpact
RiskResponsePlan	RiskResponsePlan	RiskResponsePlan
RiskThreshold	RiskThreshold	RiskThreshold
RiskThresholdLevel	RiskThresholdLevel	RiskThresholdLevel
Role	Role	Role
WBS	WBS	WBS
WBSExpenseSpread	WBSExpenseSpread	WBSExpesnseSpread
WBSResourceSpread	WBSResourceSpread	WBSResourceSpread

File - Primavera Cloud Business Objects

When *File* is the *source* provider, the following business objects are supported between File provider and Primavera Cloud provider applications in a project data flow:

File Source Business Objects	Gateway Business Objects	Primavera Cloud Destination Business Objects
Activity	Activity	Activity
ActivityRisk	ActivityRisk	ActivityRisk
Calendar	Calendar	Calendar
Project	Project	Project
Relationship	Relationship	Relationship
Resource	Resource	Resource
ResourceAssignment	ResourceAssignment	ResourceAssignment
Risk	Risk	Risk
RiskImpact	RiskImpact	RiskImpact
RiskMatrix	RiskMatrix	RiskMatrix
RiskMatrixScore	RiskMatrixScore	RiskMatrixScore
RiskMatrixThreshold	RiskMatrixThreshold	RiskMatrixThreshold
RiskResponseAction	RiskResponseAction	RiskResponseAction

File Source Business Objects	Gateway Business Objects	Primavera Cloud Destination Business Objects
RiskResponseActionImpact	RiskResponseActionImpact	RiskResponseActionImpact
RiskResponsePlan	RiskResponsePlan	RiskResponsePlan
RiskThreshold	RiskThreshold	RiskThreshold
RiskThresholdLevel	RiskThresholdLevel	RiskThresholdLevel
UDFType	UDFType	UDFType
Role	Role	Role
WBS	WBS	WBS

When *File* is the *destination* provider, the following business objects are supported between File provider and Primavera Cloud provider applications in a project data flow:

Primavera Cloud Source Business Objects	Gateway Business Objects	File Destination Business Objects
Activity	Activity	Activity
ActivityRisk	ActivityRisk	ActivityRisk
Calendar	Calendar	Calendar
Project	Project	Project
Relationship	Relationship	Relationship
Resource	Resource	Resource
ResourceAssignment	ResourceAssignment	ResourceAssignment
Risk	Risk	Risk
RiskImpact	RiskImpact	RiskImpact
RiskMatrix	RiskMatrix	RiskMatrix
RiskMatrixScore	RiskMatrixScore	RiskMatrixScore
RiskMatrixThreshold	RiskMatrixThreshold	RiskMatrixThreshold
RiskResponseAction	RiskResponseAction	RiskResponseAction
RiskResponseActionImpact	RiskResponseActionImpact	RiskResponseActionImpact
RiskResponsePlan	RiskResponsePlan	RiskResponsePlan
RiskThreshold	RiskThreshold	RiskThreshold
RiskThresholdLevel	RiskThresholdLevel	RiskThresholdLevel
Role	Role	Role
WBS	WBS	WBS

File - Sample Business Objects

When *File* is the *source* provider, the following business objects are supported between the File provider and Sample provider in a project data flow:

File Source Business Objects	Gateway Business Objects	Sample Destination Business Objects
Activity	Activity	Operation
ActivityCode	ActivityCode	OperationCode
ActivityCodeType	ActivityCodeType	OperationCodeType
ActivityExpense	ActivityExpense	OperationExpense
ActivityRisk	ActivityRisk	OperationRisk
BudgetApproval	BudgetApproval	OtherProjectCosts
BudgetApprovalDetail	BudgetApprovalDetail	OtherProjectCostsDetail
BudgetChange	BudgetChange	OtherProjectCosts
BudgetChangeDetail	BudgetChangeDetail	OtherProjectCostsDetail
BudgetTransfer	BudgetTransfer	OtherProjectCosts
BudgetTransferDetail	BudgetTransferDetail	OtherProjectCostsDetail
Calendar	Calendar	Calendar
ChangeOrder	ChangeOrder	ProjectCommits
ChangeOrderDetail	ChangeOrderDetail	ProjectCommitsDetail
Contract	Contract	ProjectCommits
ContractDetail	ContractDetail	ProjectCommitsDetail
Estimate	Estimate	OtherProjectCosts
EstimateDetail	EstimateDetail	OtherProjectCostsDetail
FundAppropriation	FundAppropriation	OtherProjectCosts
FundAppropriationDetail	FundAppropriationDetail	OtherProjectCostsDetail
Invoice	Invoice	ProjectInvoices
InvoiceDetail	InvoiceDetail	ProjectInvoicesDetail
JournalEntry	JournalEntry	OtherProjectCosts
JournalEntryDetail	JournalEntryDetail	OtherProjectCostsDetail
POAmendment	POAmendment	ProjectCommits
POAmendmentDetail	POAmendmentDetail	ProjectCommitsDetail
Payment	Payment	OtherProjectCosts

File Source Business Objects	Gateway Business Objects	Sample Destination Business Objects
PaymentApplication	PaymentApplication	ProjectInvoices
PaymentApplicationDetail	PaymentApplicationDetail	ProjectInvoicesDetail
PaymentDetail	PaymentDetail	OtherProjectCostsDetail
PotentialChangeOrder	PotentialChangeOrder	OtherProjectCosts
PotentialChangeOrderDetail	PotentialChangeOrderDetail	OtherProjectCostsDetail
Project	Project	Project
ProjectInformation	ProjectInformation	ProjectSimple
ProjectResource	ProjectResource	ProjectResource
PurchaseOrder	PurchaseOrder	ProjectCommits
PurchaseOrderDetail	PurchaseOrderDetail	ProjectCommitsDetail
Relationship	Relationship	Relationship
RequestforSubstitution	RequestforSubstitution	ProjectDocument
RequestforSubstitutionDetail	RequestforSubstitution Detail	ProjectDocumentDetail
Resource	Resource	Resource
ResourceAssignment	ResourceAssignment	ResourceAssignment
Risk	Risk	Risk
RiskAndIssue	RiskAndIssue	OtherProjectCosts
RiskAndIssueDetail	RiskAndIssueDetail	OtherProjectCostsDetail
RiskImpact	RiskImpact	RiskImpact
RiskMatrix	RiskMatrix	RiskMatrix
RiskMatrixScore	RiskMatrixScore	RiskMatrixScore
RiskMatrixThreshold	RiskMatrixThreshold	RiskMatrixThreshold
RiskResponseAction	RiskResponseAction	RiskResponseAction
RiskResponseActionImpact	RiskResponseActionImpact	RiskResponseActionImpact
RiskResponsePlan	RiskResponsePlan	RiskResponsePlan
RiskThreshold	RiskThreshold	RiskThreshold
RiskThresholdLevel	RiskThresholdLevel	RiskThresholdLevel

File Source Business Objects	Gateway Business Objects	Sample Destination Business Objects
Role	Role	Role
WBS	WBS	WBS
WorkRelease	WorkRelease	ProjectCommits
WorkReleaseDetail	WorkReleaseDetail	ProjectCommitsDetail

When *File* is the *destination* provider, the following business objects are supported between the File provider and the Sample provider in a project data flow:

Sample Source Business Objects	Gateway Business Objects	File Destination Business Objects
Operation	Activity	Activity
OperationCode	ActivityCode	ActivityCode
OperationCodeType	ActivityCodeType	ActivityCodeType
OperationExpense	ActivityExpense	ActivityExpense
OperationRisk	ActivityRisk	ActivityRisk
OtherProjectCosts	BudgetApproval	BudgetApproval
OtherProjectCostsDetail	BudgetApprovalDetail	BudgetApprovalDetail
OtherProjectCosts	BudgetChange	BudgetChange
OtherProjectCostsDetail	BudgetChangeDetail	BudgetChangeDetail
OtherProjectCosts	BudgetTransfer	BudgetTransfer
OtherProjectCostsDetail	BudgetTransferDetail	BudgetTransferDetail
CBS	CBS	CBS
Calendar	Calendar	Calendar
ProjectCommits	ChangeOrder	ChangeOrder
ProjectCommitsDetail	ChangeOrderDetail	ChangeOrderDetail
ProjectCommits	Contract	Contract
ProjectCommitsDetail	ContractDetail	ContractDetail
OtherProjectCosts	Estimate	Estimate
OtherProjectCostsDetail	EstimateDetail	EstimateDetail
OtherProjectCosts	FundAppropriation	FundAppropriation
OtherProjectCostsDetail	FundAppropriationDetail	FundAppropriationDetail

Sample Source Business Objects	Gateway Business Objects	File Destination Business Objects
ProjectInvoices	Invoice	Invoice
ProjectInvoicesDetail	InvoiceDetail	InvoiceDetail
OtherProjectCosts	JournalEntry	JournalEntry
OtherProjectCostsDetail	JournalEntryDetail	JournalEntryDetail
ProjectCommits	POAmendment	POAmendment
ProjectCommitsDetail	POAmendmentDetail	POAmendmentDetail
OtherProjectCosts	Payment	Payment
ProjectInvoices	PaymentApplication	PaymentApplication
ProjectInvoicesDetail	PaymentApplicationDetail	PaymentApplicationDetail
OtherProjectCostsDetail	PaymentDetail	PaymentDetail
OtherProjectCosts	PotentialChangeOrder	PotentialChangeOrder
OtherProjectCostsDetail	PotentialChangeOrderDetail	PotentialChangeOrderDetail
Project	Project	Project
ProjectSimple	ProjectInformation	ProjectInformation
ProjectResource	ProjectResource	ProjectResource
ProjectCommits	PurchaseOrder	PurchaseOrder
ProjectCommitsDetail	PurchaseOrderDetail	PurchaseOrderDetail
Relationship	Relationship	Relationship
ProjectDocument	RequestforSubstitution	RequestforSubstitution
ProjectDocumentDetail	RequestforSubstitutionDetail	RequestforSubstitutionDetail
Resource	Resource	Resource
ResourceAssignment	ResourceAssignment	ResourceAssignment
Risk	Risk	Risk
OtherProjectCosts	RiskAndIssue	RiskAndIssue
OtherProjectCostsDetail	RiskAndIssueDetail	RiskAndIssueDetail
RiskImpact	RiskImpact	RiskImpact
RiskMatrix	RiskMatrix	RiskMatrix
RiskMatrixScore	RiskMatrixScore	RiskMatrixScore
RiskMatrixThreshold	RiskMatrixThreshold	RiskMatrixThreshold

Sample Source Business Objects	Gateway Business Objects	File Destination Business Objects
RiskResponseAction	RiskResponseAction	RiskResponseAction
RiskResponseActionImpact	RiskResponseActionImpact	RiskResponseActionImpact
RiskResponsePlan	RiskResponsePlan	RiskResponsePlan
RiskThreshold	RiskThreshold	RiskThreshold
RiskThresholdLevel	RiskThresholdLevel	RiskThresholdLevel
Role	Role	Role
WBS	WBS	WBS
ProjectCommits	WorkRelease	WorkRelease
ProjectCommitsDetail	WorkReleaseDetail	WorkReleaseDetail

File - Unifier Business Objects

The following business objects are supported bi-directionally between File provider and Unifier provider applications in a project data flow:

File Business Objects	Gateway Business Objects	Unifier Business Objects
Activity	Activity	P6ActivitySheet
BudgetApproval	BudgetApproval	OtherProjectCosts
BudgetApprovalDetail	BudgetApprovalDetail	OtherProjectCostsDetail
BudgetChange	BudgetChange	OtherProjectCosts
BudgetChangeDetail	BudgetChangeDetail	OtherProjectCostsDetail
BudgetTransfer	BudgetTransfer	OtherProjectCosts
BudgetTransferDetail	BudgetTransferDetail	OtherProjectCostsDetail
CBS	CBS	CBS
ChangeOrder	ChangeOrder	ProjectCommits
ChangeOrderDetail	ChangeOrderDetail	ProjectCommitsDetail
Contract	Contract	ProjectCommits
ContractDetail	ContractDetail	ProjectCommitsDetail
Estimate	Estimate	OtherProjectCosts
EstimateDetail	EstimateDetail	OtherProjectCostsDetail
FundAppropriation	FundAppropriation	OtherProjectCosts
FundAppropriationDetail	FundAppropriationDetail	OtherProjectCostsDetail

File Business Objects	Gateway Business Objects	Unifier Business Objects
Invoice	Invoice	ProjectInvoices
InvoiceDetail	InvoiceDetail	ProjectInvoicesDetail
JournalEntry	JournalEntry	OtherProjectCosts
JournalEntryDetail	JournalEntryDetail	OtherProjectCostsDetail
POAmendment	POAmendment	ProjectCommits
POAmendmentDetail	POAmendmentDetail	ProjectCommitsDetail
Payment	Payment	OtherProjectCosts
PaymentApplication	PaymentApplication	ProjectInvoices
PaymentApplicationDetail	PaymentApplicationDetail	ProjectInvoicesDetail
PaymentDetail	PaymentDetail	OtherProjectCostsDetail
PotentialChangeOrder	PotentialChangeOrder	OtherProjectCosts
PotentialChangeOrderDetail	PotentialChangeOrderDetail	OtherProjectCostsDetail
Project	Project	Project
ProjectInformation	ProjectInformation	ProjectSimple
PurchaseOrder	PurchaseOrder	ProjectCommits
PurchaseOrderDetail	PurchaseOrderDetail	ProjectCommitsDetail
ResourceAssignment	ResourceAssignment	ResourceAssignment
RequestforSubstitution	RequestforSubstitution	ProjectDocument
RequestforSubstitutionDetail	RequestforSubstitutionDetail	ProjectDocumentDetail
RiskAndIssue	RiskAndIssue	OtherProjectCosts
RiskAndIssueDetail	RiskAndIssueDetail	OtherProjectCostsDetail
WBS	WBS	CBS
WorkRelease	WorkRelease	ProjectCommits
WorkReleaseDetail	WorkReleaseDetail	ProjectCommitsDetail

Field-Mapping Templates for Project Data Flows

This section lists the project data field-mapping templates delivered in Primavera Gateway for each integration scenario.

File-P6 Field Mapping Templates

The following table lists the out-of-the-box field-mapping templates delivered for each project data business object supported by the File provider in Gateway for a File-P6 integration scenario. Each business object can be supported by more than one field-mapping template. You can create business flows by selecting business objects and their corresponding field-mapping templates listed below or create your own field-mapping templates if these templates don't fit your organization's needs. For a detailed list of the fields mapped in each template, select the following links or see ***Appendix A: Fields Supported in Mapping Templates*** (on page 127).

File Business Object	Associated Field-Mapping Template
Activity	***File-P6 Activity Mapping*** (on page 129)
ActivityCode	***File-P6 ActivityCode Fields*** (on page 128)
ActivityCodeType	***File-P6 ActivityCodeType Fields*** (on page 129)
ActivityExpense	***File-P6 Activity Expense Fields*** (on page 130)
ActivityRisk	***File-P6 Activity Risk Fields*** (on page 131)
CBS	***File-P6 Export CBS Codes to P6*** (on page 135)
CBSDurationSummary	***File-P6 CBS Duration Summary Fields*** (on page 132)
CBSExpenseSpread	***File-P6 CBS Expense Spread Fields*** (on page 133)
Calendar	***File-P6 Calendar Fields*** (on page 132)
Project	***File-P6 Update P6 Project Header*** (on page 148) ***File-P6 Sync P6 Projects to ERP*** (on page 146) ***File-P6 Sync P6 Project settings to ERP*** (on page 146)
ProjectResource	***File-P6 Project Resource Fields*** (on page 136)
Relationship	***File-P6 Activity Relationship Fields*** (on page 131)
Resource	***File-P6 Resource Fields*** (on page 137)
ResourceAssignment	***File-P6 Assignment Mapping*** (on page 131)
Risk	***File-P6 Risk field mappings*** (on page 140)
RiskImpact	***File-P6 Risk Impact Fields*** (on page 141)
RiskMatrix	***File-P6 Risk Matrix Score Fields*** (on page 141)
RiskMatrixScore	***File-P6 Risk Matrix Threshold Fields*** (on page 142)

File Business Object	Associated Field-Mapping Template
RiskMatrixThreshold	***File-P6 Risk Matrix Threshold Fields*** (on page 142)
RiskResponseAction	***File-P6 Risk Response Action Fields*** (on page 142)
RiskResponseActionImpact	***File-P6 Risk Response Action Impact Fields*** (on page 143)
RiskResponsePlan	***File-P6 Risk Response Plan Fields*** (on page 143)
RiskThreshold	***File-P6 Risk Threshold Fields*** (on page 144)
RiskThresholdLevel	***File-P6 Risk Threshold Level Fields*** (on page 144)
Role	***File-P6 WBS Field Mapping*** (on page 149)
WBS	***File-P6 WBS Field Mapping*** (on page 149) ***File-P6 WBS Field Mapping Example*** (on page 149)
WBSExpnseSpread	***File-P6 WBS Expense Spread Fields*** (on page 148)
WBSResourceSpread	***File-P6 Resource Cost and Unit Spread Fields*** (on page 138)

File-Unifier Field-Mapping Templates

The following table lists the out-of-the-box field-mapping templates delivered for each project data business object supported by the File provider in Gateway for an File-Unifier integration scenario. Each business object can be also be supported by more than one field-mapping template. You can create business flows by selecting business objects and their corresponding field-mapping templates listed below or create your own field-mapping templates if these templates don't fit your organization's needs. For a detailed list of the fields mapped in each template, select the following links or see ***Appendix A: Fields Supported in Mapping Templates*** (on page 127).

File Business Object	Associated Field-Mapping Template
Activity	***File-Unifier Activity Fields For Activity Sheet*** (on page 151) ***File-Unifier Activity Fields*** (on page 151)
BudgetApproval	***File-Unifier BudgetApproval Fields*** (on page 153)
BudgetApprovalDetail	***File-Unifier BudgetApprovalDetail Fields*** (on page 153)

File Business Object	Associated Field-Mapping Template
BudgetChange	***File-Unifier BudgetChange Fields*** (on page 154)
BudgetChangeDetail	***File-Unifier BudgetChangeDetail Fields*** (on page 154)
BudgetTransfer	***File-Unifier BudgetTransfer Fields*** (on page 155)
BudgetTransferDetail	***File-Unifier BudgetTransferDetail Fields*** (on page 155)
CBS	***File-Unifier CBS Fields*** (on page 156)
ChangeOrder	***File-Unifier ChangeOrder Fields*** (on page 156)
ChangeOrderDetail	***File-Unifier ChangeOrderDetail Fields*** (on page 157)
Contract	***File-Unifier Contract Fields*** (on page 158)
ContractDetail	***File-Unifier ContractDetail Fields*** (on page 158)
Estimate	***File-Unifier Estimate Fields*** (on page 159)
EstimateDetail	***File-Unifier EstimateDetail Fields*** (on page 159)
FundAppropriation	***File-Unifier FundAppropriation Fields*** (on page 160)
FundAppropriationDetail	***File-Unifier FundAppropriationDetail Fields*** (on page 160)
Invoice	***File-Unifier Invoice Fields*** (on page 161)
InvoiceDetail	***File-Unifier InvoiceDetail Fields*** (on page 161)
JournalEntry	***File-Unifier JournalEntry Fields*** (on page 162)
JournalEntryDetail	***File-Unifier JournalEntryDetail Fields*** (on page 163)
Payment	***File-Unifier Payment Fields*** (on page 163)
PaymentApplication	***File-Unifier PaymentApplication Fields*** (on page 164)
PaymentApplicationDetail	***File-Unifier PaymentApplicationDetail Fields*** (on page 164)
PaymentDetail	***File-Unifier PaymentDetail Fields*** (on page 165)

File Business Object	Associated Field-Mapping Template
POAmendment	***File-Unifier POAmendment Fields*** (on page 165)
POAmendmentDetail	***File-Unifier POAmendmentDetail Fields*** (on page 166)
PotentialChangeOrder	***File-Unifier PotentialChangeOrder Fields*** (on page 167)
PotentialChangeOrderDetail	***File-Unifier PotentialChangeOrderDetail Fields*** (on page 167)
Project	***File-Unifier Project Fields*** (on page 168)
ProjectInformation	***File-Unifier ProjectInformation Fields*** (on page 168)
PurchaseOrder	***File-Unifier PurchaseOrder Fields*** (on page 168)
PurchaseOrderDetail	***File-Unifier PurchaseOrderDetail Fields*** (on page 169)
ResourceAssignment	none delivered
RequestforSubstitution	***File-Unifier RequestforSubstitution Fields*** (on page 170)
RequestforSubstitutionDetail	***File-Unifier RequestforSubstitutionDetail Fields*** (on page 170)
RiskAndIssue	***File-Unifier RiskAndIssue Fields*** (on page 171)
RiskAndIssueDetail	***File-Unifier RiskAndIssueDetail Fields*** (on page 171)
WBS	***File-Unifier WBS Fields*** (on page 173)
WorkRelease	***File-Unifier WorkRelease Fields*** (on page 174)
WorkReleaseDetail	***File-Unifier WorkReleaseDetail Fields*** (on page 174)

File-Sample Field-Mapping Templates

The following table lists the out-of-the-box field-mapping templates delivered for each project data business object supported by the File provider in Gateway for a File-Sample integration scenario. Each business object can be also be supported by more than one field-mapping template. You can create business flows by selecting business objects and their corresponding field-mapping templates listed below or create your own field-mapping templates if these templates don't fit your organization's needs. For a detailed list of the fields mapped in each template, select the following links or see ***Appendix A: Fields Supported in Mapping Templates*** (on page 127).

File Business Object	Associated Field-Mapping Template
Activity	***Sample-File Activity Mapping*** (on page 177)
ActivityCode	***Sample-File ActivityCode Fields*** (on page 176)
ActivityCodeType	***Sample-File ActivityCodeType Fields*** (on page 176)
ActivityExpense	***Sample-File Activity Expense Fields*** (on page 177)
ActivityRisk	none delivered
BudgetApproval	none delivered
BudgetApprovalDetail	none delivered
BudgetChange	none delivered
BudgetChangeDetail	none delivered
BudgetChangeTransfer	none delivered
BudgetTransfer	none delivered
BudgetTransferDetail	none delivered
Calendar	none delivered
ChangeOrder	none delivered
ChangeOrderDetail	none delivered
Contract	none delivered
ContractDetail	none delivered
Estimate	none delivered
EstimateDetail	none delivered
FundAppropriation	none delivered
FundAppropriationDetail	none delivered
Invoice	none delivered
InvoiceDetail	none delivered
JournalEntry	none delivered
JournalEntryDetail	none delivered
POAmendment	none delivered
POAmendmentDetail	none delivered
Payment	none delivered
PaymentApplication	none delivered

File Business Object	Associated Field-Mapping Template
PaymentApplicationDetail	none delivered
PaymentDetail	none delivered
PotentialChangeOrder	none delivered
PotentialChangeOrderDetail	none delivered
Project	***Sample-File Sync P6 Projects to ERP*** (on page 187) ***Sample-File Sync P6 Project settings to ERP*** (on page 188) ***Sample-File Update P6 Project Header*** (on page 189)
ProjectInformation	none delivered
ProjectResource	***Sample-File Project Resource Fields*** (on page 181)
PurchaseOrder	none delivered
PurchaseOrderDetail	none delivered
Relationship	***Sample-File Activity Relationship Fields*** (on page 178)
RequestforSubstitution	none delivered
RequestforSubstitutionDetail	none delivered
Resource	***Sample-File Resource Fields*** (on page 182)
ResourceAssignment	***Sample-File Assignment Mapping*** (on page 178)
Risk	none delivered
RiskAndIssue	none delivered
RiskAndIssueDetail	none delivered
RiskImpact	none delivered
RiskMatrix	***Sample-File Risk Matrix Fields*** (on page 183)
RiskMatrixScore	***Sample-File Risk Matrix Score Fields*** (on page 184)
RiskMatrixThreshold	none delivered

File Business Object	Associated Field-Mapping Template
RiskResponseAction	***Sample-File Risk Response Action Fields*** (on page 184)
RiskResponseActionImpact	none delivered
RiskResponsePlan	***Sample-File Risk Response Plan Fields*** (on page 185)
RiskThreshold	***Sample-File Risk Threshold Fields*** (on page 185)
RiskThresholdLevel	***Sample-File Risk Threshold Level Fields*** (on page 185)
Role	***Sample-File Role Fields*** (on page 186)
WBS	***Sample-File WBS Field Mapping*** (on page 190)
WorkRelease	none delivered
WorkReleaseDetail	none delivered

Setting Provider-Specific Parameters

Based on the role of the providers in the project data flows, and the data to be transferred in the business flow, provider-specific parameters display as either source or destination application parameters in the **Business Flow** wizard.

Gateway developers and Gateway administrators can set the default behavior of these parameters in a business flow by specifying the **Attribute** for each parameter as any of the following values: **Hidden, Optional, Read-only,** or **Required**.

> **Note:** Data identified by each parameter is processed by a flow step of the business flow. For more information on flow steps, see ***Executing a Business Flow*** (on page 52). All values specified in the filter parameters will be used in the **Load** step of the flow for loading data from the providers designated as the source or the destination.

EnterpriseTrack Provider Parameters

When EnterpriseTrack is the *destination* provider in a project data business flow, set values and attributes for the following parameters:

- **EnterpriseTrack Mandatory Roles (˜ separated list. Required for project creating.)**

  Use this setting to specify the user roles only when creating a new project in EnterpriseTrack.
- **EnterpriseTrack Login IDs of Mandatory Roles (˜ separated list. Required for project creating.)**

  Use this setting to specify the login IDs only when creating a new project in EnterpriseTrack.

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

  Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

  Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

  > **Note**: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

- **Partition data to child jobs for large data transfers?**

  Use this setting if you are integrating large data sets between projects and between applications when P6 EPPM or Oracle Primavera Cloudis the source application. This parameter partitions large data sets logically into multiple child jobs.

- **Child job object limit for partitioned data**

  Use this setting in conjunction with the **Partition Data into Child Jobs?** parameter. Enter a limit on the number of objects that can be included in the child jobs in the range 50 - 5000. Zero (0) is the default value.

- **Include only updated data since last run? (Delta Run)**

> Use this setting only when you want to transfer only new or changed data that was added after a synchronization was last run. This setting must be used in conjunction with the **Compare** flag selected in the Business Flow wizard.

When EnterpriseTrack is the *source* provider in a project data business flow, set values and attributes for the following parameters:

- **EnterpriseTrack Project ID**

  Use this setting to specify the project ID to be sent from EnterpriseTrack.
- **EnterpriseTrack Project Name**

  Use this setting to identify the project to be sent from EnterpriseTrack by its project name.
- **EnterpriseTrack Project Sub Object**

  Use this setting to additional objects that are to be transferred with a Project business object. Options include:
  - Project Metadata
  - Project Finance Structure
  - Project Finance Current
  - Project Finance Snapshot
- **Finance Data Search Mode (M for Monthly / Y or yearly / A for Aggregate)**

  Use this setting to select the time length of the finance data.
- **From Month (YYYY/MM Format)**

  Use this setting to specify the start year and month of the data being transferred.
- **EnterpriseTrack Project Finance Snapshot Name (Required only for project finance snapshot export)**

  Use this setting to specify the name of the ProjectFinanceSnapshot business object.
- **To Month (YYYY/MM Format)**

  Use this setting to specify the end year and month of the data being transferred.
- **From Year (YYYY Format)**

  Use this setting to specify the start year of the data being transferred.
- **To Year (YYYY Format)**

  Use this setting to specify the end year of the data being transferred.
- **Group Name (Use * if you need data for all groups)**

  Use this setting to specify groups in EnterpriseTrack.
- **Category Name (Use * if you need data for all groups)**

  Use this setting to specify category names in EnterpriseTrack.
- **Element Name (Use * if you need data for all groups)**

  Use this setting to specify Element Names in EnterpriseTrack.
- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

File Provider Parameters

When the File provider is the *source* provider in a master data business flow, set values and attributes for the following parameters:

- **File to Upload**

  Enter the XML file name to be uploaded by the business flow. This option is enabled only if you chose to set up an XML deployment with the **File Upload** option in the **Deployment** tab of the **Configurations** page. This information is used in the **Load** step of the flow.

- **File Name**

  Enter the file name to be uploaded by the business flow. This option is enabled only if you chose to set up a **File** deployment with **FilePath** or **FTPService** options in the **Deployments** tab of the **Configuration** page. This information is used in the **Load** step of the flow.

- **File Parser**

  This parameter is applicable only if you set up a **File** deployment with CSV Format in the Deployments tab of the **Configuration** page. Select a CSV parser from the drop-down list.

When the File provider is the *destination* provider in a master data business flow, set values and attributes for the following parameters:

- **File Name**

  Enter the file name to be uploaded by the business flow. This option is enabled only if you chose to set up a **File** deployment with **FilePath** or **FTPService** options in the **Deployments** tab of the **Configuration** page. This information is used in the **Save** step of the flow.

- **File Generator**

  This parameter is applicable only if you have set up a **File** Deployment with CSV Format in the **Deployments** tab of the **Configuration** page. Select a specific generator from the drop-down list to write into a CSV file in the destination application.

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

  Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

  > **Note**: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

- **Partition data to child jobs for large data transfers?**

  Use this setting if you are integrating large data sets between projects and between applications when P6 EPPM or Oracle Primavera Cloudis the source application. This parameter partitions large data sets logically into multiple child jobs.

- **Child job object limit for partitioned data**

  Use this setting in conjunction with the **Partition Data into Child Jobs?** parameter. Enter a limit on the number of objects that can be included in the child jobs in the range 50 - 5000. Zero (0) is the default value.

P6 Provider Parameters

When *P6* is the *source* provider in a project data business flow, set values and attributes for the following parameters:

- **P6 Filter**

  Use this setting to identify and select projects in P6 using *Project Ids, EPS Ids, Project Code, Project Code Type Name,* or *Project Code Value*.

  Select projects by:

  - Entering multiple values for **Project Id** and **Project Code** as comma-separated values
  - Entering multiple values for **EPS Id** as comma-separated values or
  - Entering multiple **Project Codes** with values in the following format:*Type Name = Value Name.*

For example:

1. In the **Fields** list, select *Project Code.*
2. In the **Value** list, enter: *Integrate to P6* = *Yes*, and then select **Add Row.**

   To specify a second condition for **Project Code**:
3. In the **Fields** list, select *Project Code.*

In the **Value** list, enter *Sales Country Code* = *DE*, and then select **Add Row.**

- **Baseline**

  Use this setting to select the type of baseline to be created in Unifier or migrate P6 data. Options include: **No Baseline**, **Baseline Names**, **Project Baseline,** and **All Baseline**.
- **Activity Filter**

  Use this setting to identify and select projects in P6 by using **Activity Ids, Activity Status, Activity Type,** and **Activity Code**. Enter multiple values as comma-separated values. Select **Add Row** to enter multiple filter criteria for selecting activities. Select **Edit Row** to change the current filter criteria or value for selecting activities.
- **Resource Assignment Filter**

  Use this setting to select ResourceAssignments in P6 using **Resource Ids** or **Resource Type**. Enter multiple values as comma-separated values. Select **Add Row** to enter multiple filter criteria for selecting resource assignments. Select **Edit Row** to change the current filter criteria or value for selecting resource assignments.
- **Summarize projects before synchronization?**

  Use this setting to determine whether to summarize projects before a synchronization. This information is used in the **Load** step of the flow.
- **Spread Period Type**

  Use this setting to select the default spread period type in P6 EPPM. Options include: **Week, Month, Day,** and **Financial Period**. This information is used in the **Load s**tep of the flow.
- **Synchronize WBS Hierarchy**

  Use this setting to determine to what extent you would like to synchronize the WBS hierarchy in P6. Options include: **Complete, Partial,** or **Levels**. The P6 WBS setting in P6 will override the Gateway setting.

When *P6* is the *destination* provider in a project data business flow, set values and attributes for the following parameters:

- **EPS Location**

  Use this setting to identify and transfer EPS values in P6. Enter multiple values for the **EPS Ids** field as comma-separated values. Select **Add Row** to enter multiple EPS values. Select **Edit Row** to change the current filter criteria for selecting an EPS value. This information is used in the **Load** and **Save** steps of the flow.
- **Copy from Existing Project or Template**

  Use this setting when you want to add project data in P6 by copying data from another existing project or project template in P6.

  If the project did *not* previously exist in the P6, it is first created from the project or template, and the data from the source application is then sent to P6 to create additional project data using the field-mapping templates included in the business flow.

For existing projects in P6, this parameter is ignored. Data from the source application is sent to P6 to create the project using only the field-mapping templates included in the business flow.

- **Resource Destination**

  Use this setting to specify the location of the Resource objects imported into P6. This information is used in the **Save** step of the flow.

- **Role Destination**

  Use this setting to specify the location of the role objects imported into P6. This information is used in the **Save** step of the flow.

- **Calculate Costs from Units**

  Use this setting to determine whether to calculate costs from the units. This information is used in the **Save** step of the flow.

- **Auto compute Actuals**

  Select this setting if you want the actuals to be auto-computed in P6. This information is used in the **Save** step of the flow.

- **Schedule projects after synchronization?**

  Use this setting to determine whether to schedule projects after a synchronization. This information is used in the **Save** step of the flow.

- **Summarize projects after synchronization?**

  Use this setting to determine whether to summarize projects after a synchronization. This information is used in the **Save** step of the flow.

- **Save data to P6 if there are errors**

  Use this setting to determine whether to save the imported data in P6 with errors. This information is used in the **Save** step of the flow.

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

  Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

  Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

Note: When you run a project data flow, it will delete only project level

data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

Primavera Cloud Provider Parameters

When *Primavera Cloud* provider is the *source* provider in a project data business flow, set values and attributes for the following parameters:

- **Primavera Cloud Project Filter**

  Use this setting to identify and select projects in Primavera Cloud using any of the following fields:

  Lookup in Primavera Cloud,

  Project Ids

  Workspace Ids

  Project Code

  Project Code Type Name

  Project Code Value

  Project Status

  Note: *Lookup in Primavera Cloud* option is available only to Gateway users and administrators for synchronizations only.

  Select **Add Row** to enter multiple filter criteria for selecting projects.

  Select **Edit Row** to change the current filter criteria or value for selecting a project.

  Select **Delete Row** to delete the current filter criteria for selecting projects.

When *Primavera Cloud* provider is the *destination* provider in a project data business flow, set values and attributes for the following parameters:

- **Workspace Location**

  Use this setting to specify the default workspace and populate it in a synchronization. If the value is set in Primavera Gateway, then Primavera Cloud will check if the **Primavera Cloud Workspace** field value exists and will use it to create the project.

  P6 must send all global data assigned to the project with the project flow. All global data will be assigned to the workspace where the project will be created in Primavera Cloud. This information is used in the **Save** step of the flow.

- **Primavera Cloud Location Filter**

Use this setting to specify location values in Primavera Cloud using *CountryCode* or *WorkspaceId*. Select **Add Row** to enter multiple filter criteria for selecting location values. Select **Edit row** to change a current filter criteria or value for selecting a location.

- **Save data to Primavera Cloud if there are errors?**

  Use this setting to determine how data is to be processed when a job fails in Gateway. Select this option if you want to save the data in Primavera Cloud when a synchronization job fails in Gateway. Otherwise, deselect this option to ensure data is not saved in Primavera Cloud for failed jobs.

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

  Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

  Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

  > **Note**: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

Sample Provider Parameters

When *Sample* is the *source* provider in a project data business flow, set values and attributes for the following parameter:

- **Baseline Project Names**

When *Sample* is the *destination* provider in a project data business flow, set values and attributes for the following parameter:

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

  Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

  Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

  > **Note**: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

Unifier Provider Parameters

When *Unifier* is the *source* provider in a project data business flow, set values and attributes for the following parameters:

- **Unifier Project Filter**

  Use this setting to identify and select projects in Unifier by using *Lookup in Unifier, ImportProjectIds* or *ShellAttribute*.

> **Note**: *Lookup in Unifier* option is available only to Gateway users and administrators for synchronizations only.

Enter multiple values for the following fields as comma-separated values. Select **Add Row** to enter multiple filter criteria to select Unifier projects. Select **Edit Row** to change the current filter criteria or value for selecting a Unifier project.

- **Source Business Process Name**

  Use this setting to enter the name of a business process in Unifier.

- **Unifier BP Filter**

  Use this setting to enter record numbers and / or status in Unifier.

  Enter multiple values as comma-separated values using the *IN* operand, or use, *LIKE, EQUAL, NOT EQUAL* with wild characters. Select **Add Row** to enter multiple filter criteria to select Unifier projects. Select **Edit Row** to change the current filter criteria or value for selecting a Unifier project.

- **Cost Column Name**

  Use this setting to enter the cost column names in Unifier.

When *Unifier* is the *destination* provider in a project data business flow, set values and attributes for the following parameters:

- **Unifier Project Location**

  Use this setting to enter the project location in Unifier. This information is used in the **Save** step of the flow.

- **Unifier Project Template Number**

  Use this setting to enter the template number to be associated with the project created in Unifier. This information is used in the **Save** step of the flow.

- **Destination Business Process Name**

  Use this setting to enter the name of the business process to which the data should be associated in Unifier.This information is used in the **Save** step of the flow.

- **Business Process Detail Tab Name**

  Use this setting to enter the Detail tab name of the business process to which the data should be associated in Unifier. This information is used in the **Save** step of the flow.

- **Line Item Identifier**

  Use this setting only when you need to update line items. Enter the name of the data element (not label) that is to be updated in the **Detail** tab of the business process. This information is used in the **Save** step of the flow.

- **Cost Column Name**

  Use this setting to enter the cost column names in Unifier.

- **Provide email notification for selected job status**

  This parameter displays only when you have specified an **Email Address** in the **Mail Configuration** tab of the Gateway **Settings** page.

Use this setting to enter email IDs of individuals who would need to be notified when synchronization jobs are completed with any of the following job statuses on the **Monitoring** page: *Completed, Review, Cancelled, Completed with Errors, Completed with Warnings,* or *Failed*.

Select the **Attach Data Details for Job** check box to include details of the data transfer in the email.

- **Synchronize one project at a time**

  A synchronization job is usually split into multiple child jobs with each child job transferring data in each project. By default all child jobs are executed simultaneously. Use this setting to determine whether to synchronize data one project at a time.

- **Delete data that no longer exists in the source application?**

  Use this setting to determine whether data that no longer exists in the source application is to be deleted in the destination application. This parameter must be used in conjunction with the **Compare** flag selected in the **Business Flow** wizard.

  > **Note**: When you run a project data flow, it will delete only project level data in a business flow, but not the master data. This will prevent you from deleting master data elements such as resources, roles etc., that may be used in another project. However, if used in a master data flow, it will delete all relevant objects and fields.

- **Only delete data that has been linked previously with the source application?**

  To use this parameter, you must also select the parameter, **Delete data that no longer exists in the source application?** During a synchronization, when the data is compared between the source and the destination application, data that has been added only in the destination application will not be deleted. However, if you deleted source data that was previously synced in the destination application, it will also be deleted from the destination application.

Defining Synchronizations

After adding or editing business flows that determine what data is to be transferred between applications, you can now create synchronizations which execute the data transfer dictated by a business flow. This chapter describes procedures for:

- Adding synchronizations
- Copying synchronizations

In This Section

Adding Synchronizations

After adding business flows or editing the out-of-the-box business flows you can add new synchronizations that use these business flows to transfer data between the applications using the **Synchronization** wizard. To transfer data between applications, you need to create and run a synchronization. You have the option to run the synchronization on demand, run based on the occurrence of specific events, or schedule it to run regularly at a time and date of your choosing.

Prerequisites

- Configure application deployment connections for the source and destination applications in the data flow.
- Business flows must be setup for the data transfer.
- If an integration supports master data, then synchronize the master data between applications before you synchronize project data. This will ensure that each deployment has the information necessary to synchronize project data.

Procedure

To transfer data between applications:

1) Sign in to Primavera Gateway as an administrator or a user.
2) In the sidebar, select **Synchronizations**, and then select + **Add...**.
3) Follow the steps in the **Synchronization** wizard to name and configure the synchronization.

> **Note**: If you edit a synchronization and change the business flow, then you must review and update the parameters as needed.

4) Select **Save** in any step of the wizard to save the changes and exit the wizard instantly.
5) Transfer data between applications using any of the following options:
   - To run a synchronization on-demand, highlight the synchronization and select **Run**.
   - To review the data that will be moved from the source application, highlight the synchronization and select the **Actions** ▼ menu and then select **Run with Review**.

> **Note:** If you are a user or administrator with *no* data access privileges, once a synchronization is **Run with Review**, you cannot review the actual data being transfered in each step of a job nor download the job details. When you select the **Review** link, an error message, *Insufficient Permissions*, is displayed.

- (On-premises only) To schedule an event-based synchronization, highlight the synchronization, select the **Actions** ▼menu and then select **Run on Event**.

> **Note:** (On-premises only) You can set up an event-based synchronization using the delivered P6 event provider only if P6 is the source provider in the defined flow. To set up event-based synchronizations for any other provider you will need to develop an event provider for your provider. For more details, refer to the *Primavera Gateway Provider Development Guide*.

- To schedule the synchronization to run at a certain date and time, or a specific sequence of synchronizations, select the synchronization, select the**Actions** ▼ menu and then select **Edit Schedule...**.

6) To delete a synchronization:
   a. Highlight the synchronization.
   b. Select the **Actions** ▼menu and then select **Delete**.
   c. Select **Yes** in the **Confirmation** dialog box.

The following videos showcase how to transfer data between applications:

- ***Send Basic Project Information from Primavera Cloud to P6*** (***https://players.brightcove.net/2985902027001/SyXjZnYeeb_default/index.html?videoId=6174408598001***)
- ***Send Basic Project Information from P6 to Primavera Cloud*** (***https://players.brightcove.net/2985902027001/SyXjZnYeeb_default/index.html?videoId=6174409131001***)
- ***Send P6 Schedule Data to Primavera Cloud*** (***https://players.brightcove.net/2985902027001/SyXjZnYeeb_default/index.html?videoId=6174410341001***)
- ***Send Lean Schedule Data from Primavera Cloud to P6*** (***https://players.brightcove.net/2985902027001/SyXjZnYeeb_default/index.html?videoId=6174412205001***)

Copying Synchronizations

You can modify any delivered synchronization or a synchronization that you custom created in Gateway.

> **Note**: Before you modify, it is recommended that you copy the synchronization and then edit the copy as needed.

To copy a synchronization in Gateway:

1) In the sidebar, select **Synchronizations**.
2) Select the synchronization you want to copy, then select the **Actions** ▼menu and select **Copy**.

   The **Synchronization** wizard displays a copy of the current synchronization.
3) In the **Flow and Deployments** step:
   a. In the **Synchronization Name** field, rename the synchronization.

      The default name of the duplicate synchronization is always created with the word, *Copy*. For example, *Send Primavera Cloud Project Data to P6 Copy*.
   b. In the **Business Flow** field, select a business flow that is to be used by the synchronization.

> **Note:** Select **Next** on each screen to advance to the next step.

4) In the **Parameters** step, edit the value of each parameter as needed.
5) In the **Summary** step, review a summary of all the selections made in the previous steps.

   Select any of the following actions:
   - Select **Back** to navigate to a specific step and make changes.
   - Select **Save** to add the synchronization.

   The synchronization is now available for running and monitoring.

Working with Supported File Formats

Primavera Gateway can send and receive data in any of the following file formats:

- CSV
- Excel (XLS and XLSX)
- XML

Regardless of the file format, you will need to:

1) Create a file listing the projects, objects, and fields in the supported file formats listed above. For more details, see ***Creating Data in Supported File Formats*** (on page 113).

   This file can be created by any user, and not necessarily limited to a specific Gateway user role.

2) Setup Gateway to send and receive data in the supported file formats. For more details, see ***Preparing Gateway for Transferring Data Files*** (on page 123) to create files in accordance to rules compatible for consumption by Gateway.

   This task can be completed by a Gateway administrator or Gateway developer.

3) Run a synchronization to transfer the file to the destination application. For more details, see ***Run Synchronizations to Transfer Data Files*** (on page 125).

   This task can be completed by a Gateway administrator or Gateway user.

The following sections describes details on how to accomplish each task.

In This Section

Creating Data in Supported File Formats

You can send data in the following file formats using Primavera Gateway:

- CSV
- Excel (XSL or XSLX)
- XML

The file content is processed in Gateway using parsers and generators during a synchronization.

Rules for Creating CSV and Excel Files

CSV and Excel files that are to be consumed by Primavera Gateway must be specially formatted to contain specific indicators. *Indicators* are containers of the data represented in the CSV or Excel file. Parsers and generators in Gateway use these indicators as markers to read and write the data contained in the file.

Use the following indicators in a CSV and Excel (XSL or XSLX) files for Gateway:

Row Indicator	Indicator Name	Description	Required?
ON	Object	Use the ON indicator to indicate the name of the provider object in the CSV or Excel file. For example, Project, Role, or Resource. The first column of the spreadsheet must always contain the indicators. An ON row is succeeded by a FH row in a CSV or Excel file. A parser or generator will search for a row labeled 'ON' to begin reading or generating a file. **Note:** A CSV or Excel file must contain at least one object row (ON).	Yes if you use the **Default Parser** or **Default Generator** in the synchronization. No if you use any other parser or generator in the synchronization.
FH	Field Header	Use the FH Indicator to specify the fields contained in a provider object. Only one FH row can be included for each provider object. A FH row is preceded by an ON row, and succeeded by a DR in a CSV or Excel file. For example, a Role object containing two fields, ID and Name.	Yes
DR	Data Row	Use the DR indicator to specify a data row for the fields of a provider object. You can include more than one data row for a provider object to specify multiple values for each field.	Yes
Use the following indicator to include file attachments to a provider object.			
AR	Attachment Row	Use the AR indicator to include a file attachment with a provider object. Each row supports an attachment. Multiple attachments can be included with a provider object. ▸ An attachment can be of any file format. For example, pdf, docx, doc, png, etc. ▸ All attachments must meet the file size requirements specified in Gateway Settings.	No

For more details, see the following sections to create data files that can be consumed by Gateway.

Creating CSV Data Files

To send data in a CSV file, you can:

- Create a CSV file per project

  To create a CSV file for each project, see ***A Single Project CSV File: Example*** (on page 116).

  OR

- Create a CSV file containing data from multiple projects

  You can further organize the data in the file as follows:

  - Organize the data by object

    The CSV file primarily lists all the objects and its corresponding fields whose data is being transferred. If an object is used in more than one project then each data row of the object lists the corresponding value of each field in each project. Therefore, if an object is used in two projects, the CSV file will contain two data rows, with each row listing the values of the object in each project.

    For a detailed example, see ***A CSV File with Multiple Projects Organized by Object: Example*** (on page 116).

    OR

  - Organize the data by project

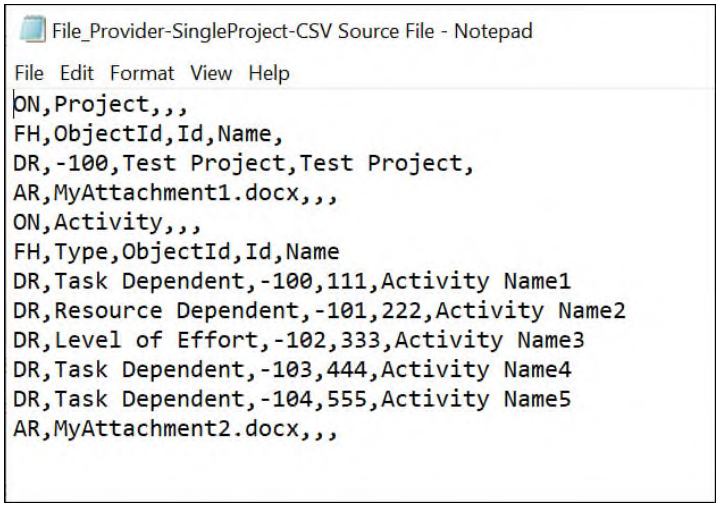
    The CSV file lists each project with its corresponding objects and fields whose data is being transferred. Each row of an object lists the corresponding values of each field in the project. Therefore, a CSV with two projects will include the first project, followed by the second project. The first project will contain a list of objects. Each object will contain a list of fields and one or more data rows. Each data row of the object displays the values of the corresponding field in the object.

    For a detailed example, see ***A CSV File with Multiple Projects Organized by Project: Example*** (on page 117)

> **Note:** Any user can create a csv *source* file, however the processing of the csv file in Gateway will be determined by the user's role in Primavera Gateway.

A Single Project CSV File: Example

This CSV file contains a single project with an Activity object and two attachments. Each data row (DR) corresponds to field values in the Project and Activity objects respectively.



A CSV File with Multiple Projects Organized by Object: Example

This CSV file contains three objects which have been used in multiple projects. The data row (DR) of each object corresponds to the values in each project.

Note: ProjectObjectId must be listed as the first field in the FH row of each object when multiple objects are included in a CSV file. It must be included regardless of the object not having a ProjectObjectId defined in the data dictionary.

*Project-WBS-Activity Example_2 - Notepad

File Edit Format View Help

```
ON,Project,,,,,,,,,,,,
FH,StartDate,Status,Description,ObjectId,Id,FinishDate,ProjectScheduleType,Name,ParentEPSId,,,,
DR,2017-05-09T00:00:00,Active,Example Project Using CSV File Format,100,EPS100,,,Project Example - Library Expansion ,EPS1,,,,
DR,2020-07-07T00:00:00,Active,Test Multi Project CSV File 1,101,EPS110,,,Test Multi Project CSV File-1,EPS1,,,,
DR,2020-07-08T00:00:00,Active,Test Multi Project CSV File 2,102,EPS120,,,Test Multi Project CSV File-2,EPS1,,,,
,,,,,,,,,,,,,
ON,WBS,,,,,,,,,,,,
FH,ProjectObjectId,StartDate,AnticipatedStartDate,CurrentBudget,AnticipatedFinishDate,ObjectId,FinishDate,Code,Name,,,,
DR,100,2017-05-09T00:00:00,2017-05-09T00:00:00,10000,,100,,1,Designs-1,,,,
DR,100,,2017-07-09T00:00:00,100000,,101,,2,Purchase Marterials-1,,,,
DR,100,,2017-08-09T00:00:00,1000000,,102,,3,Construction-1,,,,
DR,101,2020-07-07T00:00:00,2020-07-07T00:00:00,10000,,103,,1,Designs-2,,,,
DR,101,,2020-08-07T00:00:00,100000,,104,,2,Purchase Marterials-2,,,,
DR,101,,2020-09-07T00:00:00,1000000,,105,,3,Construction-2,,,,
DR,102,2020-07-07T00:00:00,2020-07-08T00:00:00,10000,,106,,1,Designs-3,,,,
DR,102,,2020-08-08T00:00:00,100000,,107,,2,Purchase Marterials-3,,,,
DR,102,,2020-09-08T00:00:00,1000000,,108,,3,Construction-3,,,,
,,,,,,,,,,,,,
ON,Activity,,,,,,,,,,,,
FH,ProjectObjectId,ObjectId,ActualStartDate,FinishDate,PlannedDuration,Name,StartDate,ActualFinishDate,Type,WBSObjectId,WBSPath,IsStarred,Id
DR,100,100,2017-05-09T08:00:00,2017-05-15T16:00:00,40,Architect - draft phase,2017-05-09T08:00:00,,Task Dependent,100,EPS100.1,FALSE,D-A1
DR,100,101,,2017-05-15T16:00:00,40,Architect - revise phase,2017-05-09T08:00:00,,Task Dependent,101,EPS100.2,FALSE,D-A2
DR,100,102,,2017-05-15T16:00:00,40,Architect - approval phase,2017-05-09T08:00:00,,Task Dependent,102,EPS100.3,FALSE,D-A3
,,,,,,,,,,,,,
DR,101,103,2020-07-07T08:00:00,2020-07-15T16:00:00,40,Architect - sign off,2020-07-07T08:00:00,,Task Dependent,103,EPS110.1,FALSE,D-A4
DR,101,104,,2020-07-15T16:00:00,40,Concrete,2020-07-07T08:00:00,,Task Dependent,104,EPS110.2,FALSE,M-A1
DR,101,105,,2020-07-15T16:00:00,40,Steel,2020-07-07T08:00:00,,Task Dependent,105,EPS110.3,FALSE,M-A2
,,,,,,,,,,,,,
DR,102,106,2020-07-08T08:00:00,2020-07-16T16:00:00,40,Interior Materials,2020-07-08T08:00:00,,Task Dependent,106,EPS120.1,FALSE,M-A3
DR,102,107,,2020-07-16T16:00:00,40,Equipment,2020-07-08T08:00:00,,Task Dependent,107,EPS120.2,FALSE,C-A1
DR,102,108,,2020-07-16T16:00:00,40,Permits,2020-07-08T08:00:00,,Task Dependent,108,EPS120.3,FALSE,C-A2
DR,102,109,,2020-07-16T16:00:00,40,Contractors,2020-07-08T08:00:00,,Task Dependent,108,EPS120.3,FALSE,C-A3
```

A CSV File with Multiple Projects Organized by Project: Example

This CSV file contains two projects with two objects included under each project.

Note: ProjectObjectId must be listed as the first field in the FH row of each object when multiple objects are included in a CSV file. It must be included regardless of the object not having a ProjectObjectId defined in the data dictionary.

Creating Excel Data Files

To send data in an Excel file, you can:

- Create an Excel file per project

  To create an Excel file for each project, see ***A Single Project Excel File: Example*** (on page 119).

  OR

- Create an Excel file containing data from multiple projects

  You can further organize the data in the file as follows:

  - Organize the data by object

    The Excel file primarily lists all the objects and its corresponding fields whose data is being transferred. If an object is used in more than one project then each data row of the object lists the corresponding value of each field in each project. Therefore, if an object is used in two projects, the Excel file will contain two data rows, with each row listing the values of the object in each project.

    For a detailed example, see ***An Excel File with Multiple Projects Organized by Object: Example*** (on page 119).

    OR

  - Organize the data by project

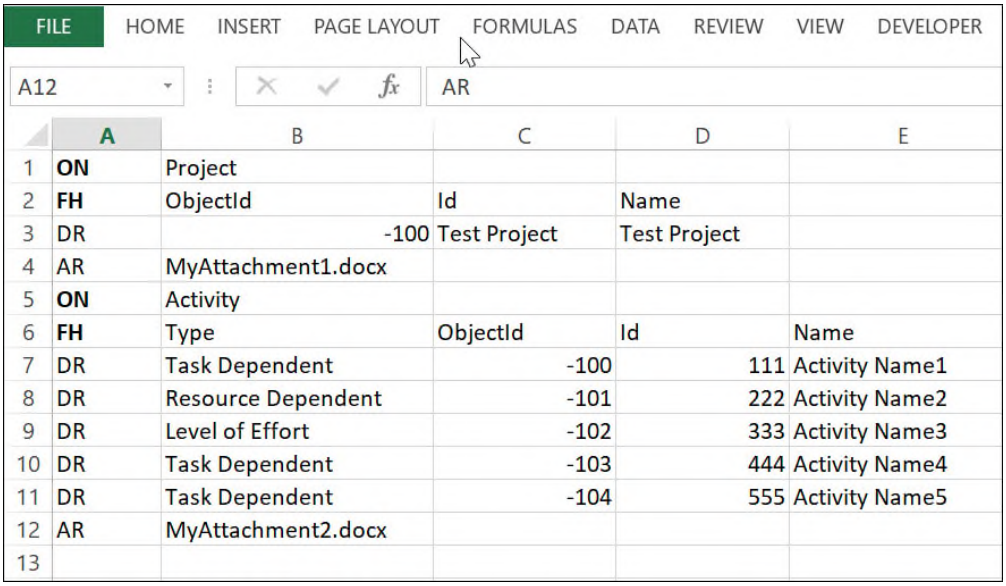
The Excel file lists each project with its corresponding objects and fields whose data is being transferred. Each row of an object lists the corresponding values of each field in the project. Therefore, an Excel file with two projects will include the first project, followed by the second project. The first project will contain a list of objects. Each object will contain a list of fields and one or more data rows. Each data row of the object displays the values of the corresponding field in the object.

For a detailed example, see ***An Excel File with Multiple Projects Organized by Projects: Example*** (on page 120).

> **Note:** Any user can create an Excel *source* file, however the processing of the Excel file in Gateway will be determined by the user's role in Primavera Gateway.

A Single Project Excel File: Example

This Excel file contains a single project with an Activity object and two attachments. Each data row (DR) corresponds to field values in the Project and Activity objects respectively.

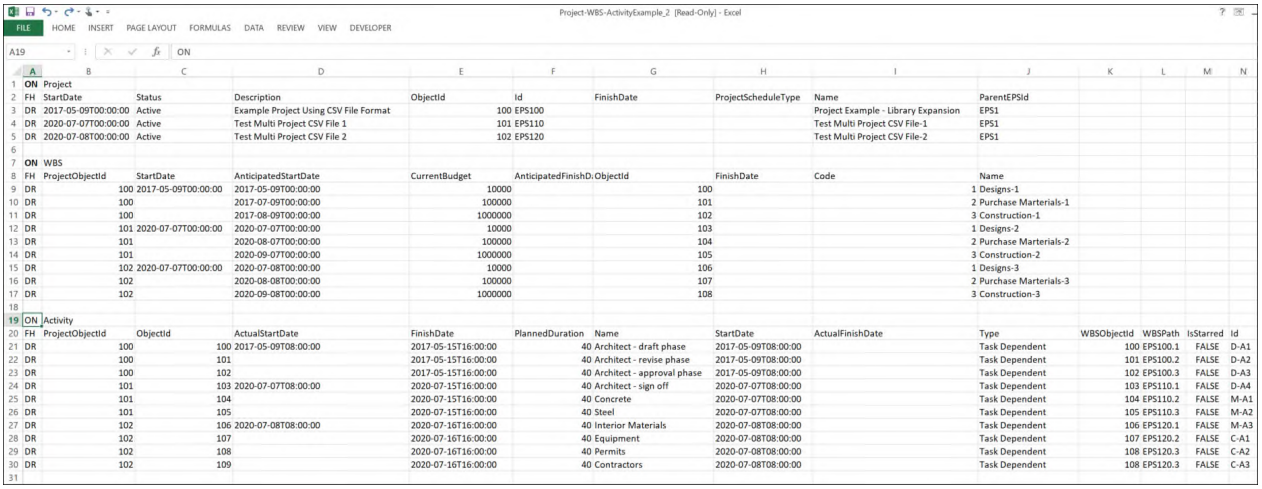


	A	B	C	D	E
1	**ON**	Project			
2	**FH**	ObjectId	Id	Name	
3	DR	-100	Test Project	Test Project	
4	AR	MyAttachment1.docx			
5	**ON**	Activity			
6	**FH**	Type	ObjectId	Id	Name
7	DR	Task Dependent	-100	111	Activity Name1
8	DR	Resource Dependent	-101	222	Activity Name2
9	DR	Level of Effort	-102	333	Activity Name3
10	DR	Task Dependent	-103	444	Activity Name4
11	DR	Task Dependent	-104	555	Activity Name5
12	AR	MyAttachment2.docx			
13					

An Excel File with Multiple Projects Organized by Object: Example

This Excel file contains three objects which have been used in multiple projects. The data row (DR) of each object corresponds to the values in each project.

Note: ProjectObjectId must be listed as the first field in the FH row of each object when multiple objects are included in the Excel file. It must be included regardless of the object not having a ProjectObjectId defined in the data dictionary.

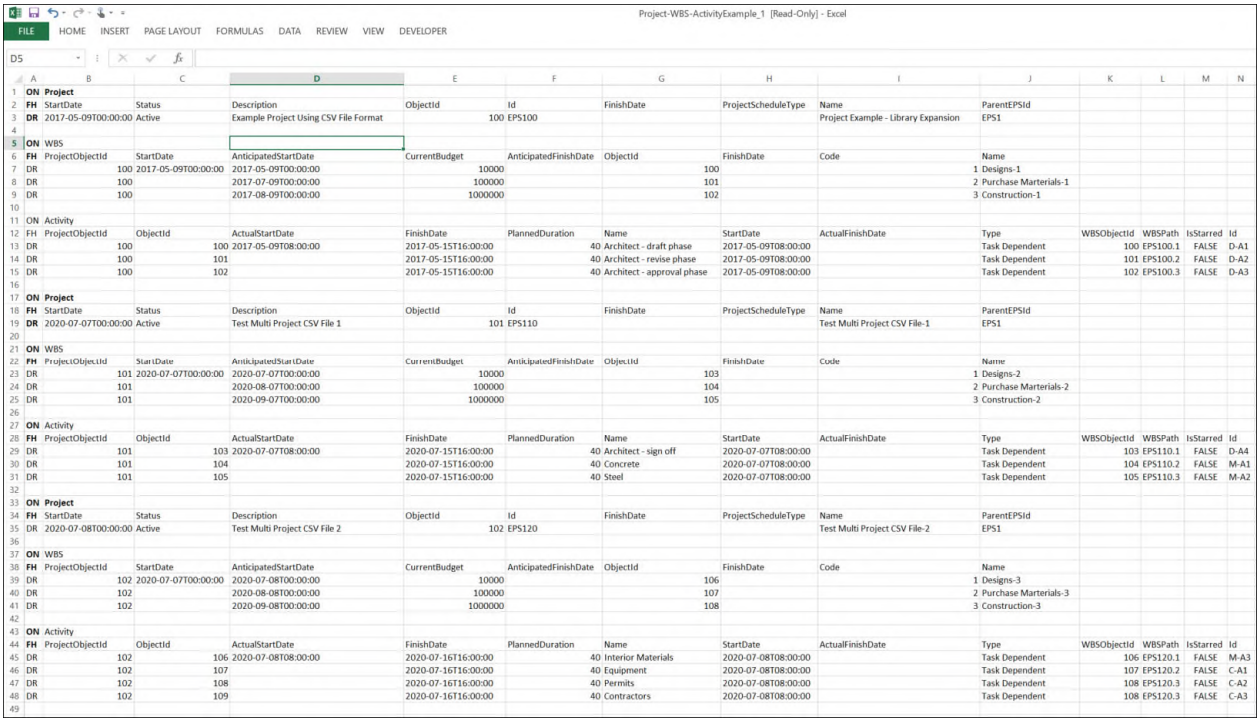


	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	ON	Project												
2	FH	StartDate	Status	Description	ObjectId	Id	FinishDate	ProjectScheduleType	Name	ParentEPSId				
3	DR	2017-05-09T00:00:00	Active	Example Project Using CSV File Format	100	EPS100			Project Example - Library Expansion	EPS1				
4	DR	2020-07-07T00:00:00	Active	Test Multi Project CSV File 1	101	EPS110			Test Multi Project CSV File-1	EPS1				
5	DR	2020-07-08T00:00:00	Active	Test Multi Project CSV File 2	102	EPS120			Test Multi Project CSV File-2	EPS1				
6														
7	ON	WBS												
8	FH	ProjectObjectId	StartDate	AnticipatedStartDate	CurrentBudget	AnticipatedFinishDa	ObjectId	FinishDate	Code	Name				
9	DR	100	2017-05-09T00:00:00	2017-05-09T00:00:00	10000		100			1 Designs-1				
10	DR	100		2017-07-09T00:00:00	100000		101			2 Purchase Marterials-1				
11	DR	100		2017-08-09T00:00:00	1000000		102			3 Construction-1				
12	DR	101	2020-07-07T00:00:00	2020-07-07T00:00:00	10000		103			1 Designs-2				
13	DR	101		2020-08-07T00:00:00	100000		104			2 Purchase Marterials-2				
14	DR	101		2020-09-07T00:00:00	1000000		105			3 Construction-2				
15	DR	102	2020-07-07T00:00:00	2020-07-08T00:00:00	10000		106			1 Designs-3				
16	DR	102		2020-08-08T00:00:00	100000		107			2 Purchase Marterials-3				
17	DR	102		2020-09-08T00:00:00	1000000		108			3 Construction-3				
18														
19	ON	Activity												
20	FH	ProjectObjectId	ObjectId	ActualStartDate	FinishDate	PlannedDuration	Name	StartDate	ActualFinishDate	Type	WBSObjectId	WBSPath	IsStarred	Id
21	DR	100	100	2017-05-09T08:00:00	2017-05-15T16:00:00	40	Architect - draft phase	2017-05-09T08:00:00		Task Dependent	100	EPS100.1	FALSE	D-A1
22	DR	100	101		2017-05-15T16:00:00	40	Architect - revise phase	2017-05-09T08:00:00		Task Dependent	101	EPS100.2	FALSE	D-A2
23	DR	100	102		2017-05-15T16:00:00	40	Architect - approval phase	2017-05-09T08:00:00		Task Dependent	102	EPS100.3	FALSE	D-A3
24	DR	101	103	2020-07-07T08:00:00	2020-07-15T16:00:00	40	Architect - sign off	2020-07-07T08:00:00		Task Dependent	103	EPS110.1	FALSE	D-A4
25	DR	101	104		2020-07-15T16:00:00	40	Concrete	2020-07-07T08:00:00		Task Dependent	104	EPS110.2	FALSE	M-A1
26	DR	101	105		2020-07-15T16:00:00	40	Steel	2020-07-07T08:00:00		Task Dependent	105	EPS110.3	FALSE	M-A2
27	DR	102	106	2020-07-08T08:00:00	2020-07-16T16:00:00	40	Interior Materials	2020-07-08T08:00:00		Task Dependent	106	EPS120.1	FALSE	M-A3
28	DR	102	107		2020-07-16T16:00:00	40	Equipment	2020-07-08T08:00:00		Task Dependent	107	EPS120.2	FALSE	C-A1
29	DR	102	108		2020-07-16T16:00:00	40	Permits	2020-07-08T08:00:00		Task Dependent	108	EPS120.3	FALSE	C-A2
30	DR	102	109		2020-07-16T16:00:00	40	Contractors	2020-07-08T08:00:00		Task Dependent	108	EPS120.3	FALSE	C-A3
31														

An Excel File with Multiple Projects Organized by Projects: Example

This Excel file contains two projects with two objects included under each project.

Note: ProjectObjectId must be listed as the first field in the FH row of each object when multiple objects are included in the Excel file. It must be included regardless of the object not having a ProjectObjectId defined in the data dictionary.



Project-WBS-ActivityExample_1 [Read-Only] - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW DEVELOPER

D5

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	ON	Project												
2	FH	StartDate	Status	Description	ObjectId	Id	FinishDate	ProjectScheduleType	Name	ParentEPSId				
3	DR	2017-05-09T00:00:00	Active	Example Project Using CSV File Format	100	EPS100			Project Example - Library Expansion	EPS1				
4														
5	ON	WBS												
6	FH	ProjectObjectId	StartDate	AnticipatedStartDate	CurrentBudget	AnticipatedFinishDate	ObjectId	FinishDate	Code	Name				
7	DR	100	2017-05-09T00:00:00	2017-05-09T00:00:00	10000		100		1	Designs-1				
8	DR	100		2017-07-09T00:00:00	100000		101		2	Purchase Marterials-1				
9	DR	100		2017-08-09T00:00:00	1000000		102		3	Construction-1				
10														
11	ON	Activity												
12	FH	ProjectObjectId	ObjectId	ActualStartDate	FinishDate	PlannedDuration	Name	StartDate	ActualFinishDate	Type	WBSObjectId	WBSPath	IsStarred	Id
13	DR	100	100	2017-05-09T08:00:00	2017-05-15T16:00:00	40	Architect - draft phase	2017-05-09T08:00:00		Task Dependent	100	EPS100.1	FALSE	D-A1
14	DR	100	101		2017-05-15T16:00:00	40	Architect - revise phase	2017-05-09T08:00:00		Task Dependent	101	EPS100.2	FALSE	D-A2
15	DR	100	102		2017-05-15T16:00:00	40	Architect - approval phase	2017-05-09T08:00:00		Task Dependent	102	EPS100.3	FALSE	D-A3
16														
17	ON	Project												
18	FH	StartDate	Status	Description	ObjectId	Id	FinishDate	ProjectScheduleType	Name	ParentEPSId				
19	DR	2020-07-07T00:00:00	Active	Test Multi Project CSV File 1	101	EPS110			Test Multi Project CSV File-1	EPS1				
20														
21	ON	WBS												
22	FH	ProjectObjectId	StartDate	AnticipatedStartDate	CurrentBudget	AnticipatedFinishDate	ObjectId	FinishDate	Code	Name				
23	DR	101	2020-07-07T00:00:00	2020-07-07T00:00:00	10000		103		1	Designs-2				
24	DR	101		2020-08-07T00:00:00	100000		104		2	Purchase Marterials-2				
25	DR	101		2020-09-07T00:00:00	1000000		105		3	Construction-2				
26														
27	ON	Activity												
28	FH	ProjectObjectId	ObjectId	ActualStartDate	FinishDate	PlannedDuration	Name	StartDate	ActualFinishDate	Type	WBSObjectId	WBSPath	IsStarred	Id
29	DR	101	103	2020-07-07T08:00:00	2020-07-15T16:00:00	40	Architect - sign off	2020-07-07T08:00:00		Task Dependent	103	EPS110.1	FALSE	D-A4
30	DR	101	104		2020-07-15T16:00:00	40	Concrete	2020-07-07T08:00:00		Task Dependent	104	EPS110.2	FALSE	M-A1
31	DR	101	105		2020-07-15T16:00:00	40	Steel	2020-07-07T08:00:00		Task Dependent	105	EPS110.3	FALSE	M-A2
32														
33	ON	Project												
34	FH	StartDate	Status	Description	ObjectId	Id	FinishDate	ProjectScheduleType	Name	ParentEPSId				
35	DR	2020-07-08T00:00:00	Active	Test Multi Project CSV File 2	102	EPS120			Test Multi Project CSV File-2	EPS1				
36														
37	ON	WBS												
38	FH	ProjectObjectId	StartDate	AnticipatedStartDate	CurrentBudget	AnticipatedFinishDate	ObjectId	FinishDate	Code	Name				
39	DR	102	2020-07-07T00:00:00	2020-07-08T00:00:00	10000		106		1	Designs-3				
40	DR	102		2020-08-08T00:00:00	100000		107		2	Purchase Marterials-3				
41	DR	102		2020-09-08T00:00:00	1000000		108		3	Construction-3				
42														
43	ON	Activity												
44	FH	ProjectObjectId	ObjectId	ActualStartDate	FinishDate	PlannedDuration	Name	StartDate	ActualFinishDate	Type	WBSObjectId	WBSPath	IsStarred	Id
45	DR	102	106	2020-07-08T08:00:00	2020-07-16T16:00:00	40	Interior Materials	2020-07-08T08:00:00		Task Dependent	106	EPS120.1	FALSE	M-A3
46	DR	102	107		2020-07-16T16:00:00	40	Equipment	2020-07-08T08:00:00		Task Dependent	107	EPS120.2	FALSE	C-A1
47	DR	102	108		2020-07-16T16:00:00	40	Permits	2020-07-08T08:00:00		Task Dependent	108	EPS120.3	FALSE	C-A2
48	DR	102	109		2020-07-16T16:00:00	40	Contractors	2020-07-08T08:00:00		Task Dependent	108	EPS120.3	FALSE	C-A3
49														

Creating XML Data Files

Create XML files to:

- Send project data or master data to a destination application
- Customize objects and fields in Gateway
- Customize a provider data dictionary

- **Notes**:
- XML files can only support one project. To send data from multiple projects, create an XML file per project.
- XML files Gateway can be created by any user, and not necessarily limited to specific user roles in Gateway. However, the ability to process the XML file within Gateway depends on the user's role in Primavera Gateway.

XML File Format Example

This XML file provides an example of how to include objects in a hierarchy. It includes three roles under DEMO in the hierarchy. To include the parent object, DEMO, in the XML file, include the XML tag, `ParentObjectId,` for each child object, role.

- **Note**: Multibyte characters are not supported in XML tags.

```
<Role>
    <Description/>
    <Id>100</Id>
    <Name>DEMO</Name>
    <ObjectId>10003</ObjectId>
   <ParentObjectId/>   ---Note that DEMO is at the top of the Role hierarchy so it will not have a ParentObjectId
</Role>
<Role>
    <Description/>
    <Id>101</Id>
    <Name>Manager</Name>
    <ObjectId>10000</ObjectId>
   <ParentObjectId>10003</ParentObjectId>  --this links the Role (Manager) as a child Role of DEMO
</Role>
<Role>
    <Description/>
    <Id>QA001</Id>
    <Name>Quality Assurance</Name>
    <ObjectId>10001</ObjectId>
   <ParentObjectId>10003</ParentObjectId>  --this links the Role (Quality Assurance) as a child Role of DEMO
</Role>
<Role>
    <Description/>
    <Id>BA001</Id>
    <Name>Business Analysis</Name>
    <ObjectId>10002</ObjectId>
```

```
   <ParentObjectId>10003</ParentObjectId>  --this links the Role
(Business Analysis) as a child Role of DEMO
</Role>
```

Preparing Gateway for Transferring Data Files

Complete the following tasks to prepare Gateway to transfer data in any of the supported file formats: XML, Excel (XLS and XLSX) or CSV:

1) Sign in to Primavera Gateway as a developer or administrator.
2) Add a File provider deployment supporting the file format of your choice. For more details, see ***Adding or Editing a File Deployment Connection*** (on page 22).

   If you add a File provider deployment for an XML file, proceed to Step 5.

   If you add a File provider deployment for a CSV or Excel file, proceed to the next step.
3) (Optional) Add a parser if you choose to create a parser to read only specific provider objects. For more details, see ***Adding Parsers and Generators*** (on page 34).

   Otherwise, use the **Default Parser** delivered in Gateway to read *any* object and field from a CSV or Excel file.
4) (Optional) Add a generator if you choose to create a generator to write only specific provider objects into a CSV or Excel file. For more details, see ***Adding Parsers and Generators*** (on page 34).

   Otherwise, use the **Default Generator** delivered in Gateway to write *any* object and field into a CSV or Excel file.

   > **Note**: Parsers and generators can only be used to support CSV and Excel (xls and xlsx) files only.

5) Add or edit a field mapping template from the **Customizations** tab in Gateway to create mappings for the objects and fields defined in the CSV or Excel file. For example, add a field mapping template for the Role object to use in a File - Unifier synchronization.
6) Add a master data or project data business flow selecting the field mapping template created in Step 5. For example, create a master data business flow for the Role object to use in a File - Unifier synchronization.

   If the File provider is the *source* application in the business flow, select a parser to read the CSV or Excel file contents in the **Source App Parameters** tab of the **Business Flow** wizard.

   If the File provider is the *destination* application in the business flow, select a generator to write the data into a CSV or Excel file in the **Destination App Parameters** tab of the **Business Flow** wizard.

Transferring Data from File Provider in CSV Format to P6: Example

This example demonstrates how to use Gateway File Provider and synchronize data in CSV file format to P6. This synchronization will create an EPS with a new project containing WBS, Activities, and Resource Assignments. Data from the following csv files will be transferred to P6.

The Role-Resource-ResourceRole-Rates-EPS Example.csv contains:

- An EPS object, with an ID, *EPS1*.
- A Role object containing a hierarchy of roles.
- A Resource object, containing a hierarchy of resources.
- A ResourceRole object containing a list of roles mapped to resources.
- A ResourceRate object containing a list of resource rates associated with each resource.

The Project-WBS-Activity-ResAssignment Example.csv contains:

- A Project object linked to an EPS.
- A WBS object linked to a project.
- An Activity object linked to a WBS.
- An Activity object containing multiple activities defined for the project.
- A ResourceAssignment object, containing a list of resources assigned to activities in the project.

Prerequisites

- Install Gateway selecting File and P6 Providers
- Install P6 EPPM
- Go to Oracle Support and view Doc ID: 2269778.1.
- Download and unzip *UsingCSVFormat.zip* locally.

  The zip includes:
  - Two CSV format files:

    Role-Resource-ResourceRole-Rates-EPS Example.csv

    Project-WBS-Activity-ResAssignment Example.csv
  - *SampleCSVSetup.zip* which contains the metadata files for deployments, templates, business flows, and synchronizations

Setting Up Gateway for Synchronization

1) Sign in to Gateway as an administrator or developer.
2) In the sidebar, select **Configuration**.
3) Select the **Import/Export** tab.
4) In the **Import Configuration Data** section, browse to *SampleCSVSetup.zip*, and then select **Import**.

   A success message displays: *'SampleCSVSetup.zip was successfully added to Gateway.*
5) Select the **Deployments** tab.
   a. Select *Example P6 Deployment* and then select **Edit**.
   b. In the **General** step of the **Deployment** wizard, select **Next**.
   c. In the **Deployment** step:
      1. In the **User Name** field, update the name of the P6 user.
      2. In the **Password** field, update the password for the P6 user.
      3. In the **Endpoint** field, enter the P6 URL in the format, *http://<host>:<port>/p6ws/services/SyncServiceV1*
6) Select **Save**.

Synchronizing Data in Gateway

Run two separate synchronizations from File to P6 as follows:

1) In the sidebar, select **Synchronization**.
2) Run the synchronization, *File-P6 Resource Role ResRoles Rates EPS Example* as follows:
   a. In the **Synchronization Name** column, select *File-P6 Resource Role ResRoles Rates EPS Example.*
   b. *Select* ✎ **Edit...**.
      The synchronization wizard displays.
   c. In the **Flow & Deployments** step, select **Next**.
   d. In the **Parameters** step:
      1. In the **File Name** field, select: *Role-Resource-ResourceRole-Rates-EPS Example.csv*
      2. Select **Save**.
   e. Select **Run**.
3) Run the synchronization, *Project-WBS-Activity-ResAssignment Example.csv* as follows:
   a. In the **Synchronization Name** column, select *File-P6 Project WBS Activity Assignments Example.*
   b. Select ✎ **Edit...**.
   c. In the **Flow & Deployments** step of the **Synchronization** wizard, select **Next**.
   d. In the **Parameters** step:
      1. In the **File Name** field, select the csv file, P6 : *Project-WBS-Activity-ResAssignment Example.csv.*
      2. Select **Save**.
   e. Select **Run**.

Verify Transferred Data in P6

1) Sign in to P6.
2) Select **Projects** and then select **EPS**.
3) Expand EPS1 - EPS Example.

A new EPS with ID, *EPS1*, has been created with a new project containing WBS, activities, and resource assignments.

Run Synchronizations to Transfer Data Files

To transfer data in any of the supported file formats: XML, Excel (XLS and XLSX) or CSV:

1) Sign in to Primavera Gateway as a user or administrator.
2) Add and run a synchronization to sent the data file to the destination application. For more details, see ***Adding Synchronizations*** (on page 109).

   When an attachment is included in a CSV or Excel file and a synchronization is run:

   - All file extensions are supported as attachments in Gateway. However, file extensions may be limited by the specific provider.
   - If an attachment is not supported by a provider, it will not be uploaded to the destination application.

- The attachment will not be opened during the synchronization.
- Attachments are *not* saved in Gateway. When the synchronization run is executed, the content is removed from the Gateway database.
- Gateway users cannot view the contents of the attachment. They can only view the log file of the attachments which contains the Attachment ID and Name.

3) Monitor the synchronization.

Appendix A: Fields Supported in Mapping Templates

Primavera Gateway delivers a set of field-mapping templates that you can use to transfer data using business objects. This Appendix describes the fields supported in each mapping template. These templates are meant to be used as a quick-start to work with Gateway.

> **Note:** You are not limited to using only the delivered templates. If these templates don't fit your needs, you can also create new templates in Primavera Gateway.

In This Section

File-P6 Field-Mapping Templates

The following field-mapping templates are delivered in Gateway for an File-P6 integration:

File-P6 ActivityCode Fields

Description: ActivityCode fields

XML	Gateway	P6
CodeTypeName	CodeTypeName	CodeTypeName
CodeValue	CodeValue	CodeValue
Color	Color	Color
Description	Description	Description

File-P6 ActivityCodeType Fields

Description: ActivityCodeType fields

File	Gateway	P6
EPSObjectId	EPSObjectId	EPSObjectId
Length	Length	Length
Name	Name	Name
ProjectObjectId	ProjectObjectId	ProjectObjectId
Scope	Scope	Scope

File-P6 Activity Mapping

Description: Field mapping for Activity

File	Gateway	P6
Id	Id	Id
PlannedDuration	PlannedDuration	PlannedDuration
ActualStartDate	ActualStartDate	ActualStartDate
ActualFinishDate	ActualFinishDate	ActualFinishDate
FinishDate	FinishDate	FinishDate
Name	Name	Name
PrimaryConstraintDate	PrimaryConstraintDate	PrimaryConstraintDate
PrimaryConstraintType	PrimaryConstraintType	PrimaryConstraintType
StartDate	StartDate	StartDate
Type	Type	Type
CalendarName	CalendarName	CalendarName
LocationName	LocationName	LocationName
IsStarred	IsStarred	IsStarred
MaximumDuration	MaximumDuration	MaximumDuration
MinimumDuration	MinimumDuration	MinimumDuration
MostLikelyDuration	MostLikelyDuration	MostLikelyDuration
WBSPath	WBSPath	WBSPath

File-P6 Activity Mapping Example

Description: Field mapping for Activity example

File	Gateway	P6
ActualFinishDate	ActualFinishDate	ActualFinishDate
ActualStartDate	ActualStartDate	ActualStartDate
FinishDate	FinishDate	FinishDate
Id	Id	Id
IsStarred	IsStarred	IsStarred
Name	Name	Name
PlannedDuration	PlannedDuration	PlannedDuration
ProjectObjectId	ProjectObjectId	ProjectObjectId
StartDate	StartDate	StartDate
Type	Type	Type
WBSObjectId	WBSObjectId	WBSObjectId
WBSPath	WBSPath	WBSPath

File-P6 Activity Expense Fields

Description: Field Mapping for Activity Expenses

File	Gateway	P6
ActualCost	ActualCost	ActualCost
ExpenseCategoryName	ExpenseCategoryName	ExpenseCategoryName
ExpenseItem	ExpenseItem	ExpenseItem
PlannedCost	PlannedCost	PlannedCost

File-P6 Activity Relationship Fields

Description: Field mapping for Activity relationship

File	Gateway	P6
Type	Type	Type

File	Gateway	P6
Lag	Lag	Lag

File-P6 Activity Risk Fields

Description: Activity Risk fields

File	Gateway	P6
RiskId	RiskId	RiskId
ActivityId	ActivityId	ActivityId
ProjectId	ProjectId	ProjectId

File-P6 Assignment Mapping

Description: Field mapping for Resource Assignments

File	Gateway	P6
ResourceType	ResourceType	ResourceType
PlannedUnits	PlannedUnits	PlannedUnits
ActualUnits	ActualUnits	ActualUnits
IsActivityFlagged	IsActivityFlagged	IsActivityFlagged
RemainingUnits	RemainingUnits	RemainingUnits
PlannedLag	PlannedLag	PlannedLag
ResourceId	ResourceId	ResourceId
RoleId	RoleId	RoleId
WBSObjectId	WBSObjectId	WBSObjectId

File-P6 Assignment Mapping Example

Description: Field mapping for Resource Assignments example

File	Gateway	P6
ActivityObjectId	ActivityObjectId	ActivityObjectId
ActualUnits	ActualUnits	ActualUnits
IsActivityFlagged	IsActivityFlagged	IsActivityFlagged
PlannedLag	PlannedLag	PlannedLag
PlannedUnits	PlannedUnits	PlannedUnits
RemainingUnits	RemainingUnits	RemainingUnits
ResourceId	ResourceId	ResourceId
ResourceType	ResourceType	ResourceType
RoleId	RoleId	RoleId
WBSObjectId	WBSObjectId	WBSObjectId

File-P6 Calendar Fields

Description: Calendar fields

File	Gateway	P6
Name	Name	Name
Type	Type	Type
IsPersonal	IsPersonal	IsPersonal
StandardWorkWeek	StandardWorkWeek	StandardWorkWeek
HolidayOrExceptions	HolidayOrExceptions	HolidayOrExceptions

File-P6 CBS Duration Summary Fields

Description: CBS Duration Summary Fields

File	Gateway	P6
ProjectId	ProjectId	ProjectId
ProjectName	ProjectName	ProjectName
SummaryPlannedStartDate	SummaryPlannedStartDate	SummaryPlannedStartDate
SummaryPlannedFinishDate	SummaryPlannedFinishDate	SummaryPlannedFinishDate

File	Gateway	P6
SummaryActualStartDate	SummaryActualStartDate	SummaryActualStartDate
SummaryActualFinishDate	SummaryActualFinishDate	SummaryActualFinishDate
SummaryRemainingStartDate	SummaryRemainingStartDate	SummaryRemainingStartDate
SummaryPlannedStartDate	SummaryPlannedStartDate	SummaryPlannedStartDate
SummaryRemainingFinishDate	SummaryRemainingFinishDate	SummaryRemainingFinishDate
SummaryPlannedDuration	SummaryPlannedDuration	SummaryPlannedDuration
SummaryRemainingDuration	SummaryRemainingDuration	SummaryRemainingDuration
SummaryActualDuration	SummaryActualDuration	SummaryActualDuration
SummaryPercentComplete	SummaryPercentComplete	SummaryPercentComplete

File-P6 CBS Expense Spread Fields

Description: CBS Expense Spread Fields

File	Gateway	P6
PlannedUnits	PlannedUnits	PlannedUnits
ActualUnits	ActualUnits	ActualUnits
RemainingUnits	RemainingUnits	RemainingUnits
AtCompletionUnits	AtCompletionUnits	AtCompletionUnits
PlannedCost	PlannedCost	PlannedCost
ActualCost	ActualCost	ActualCost
RemainingCost	RemainingCost	RemainingCost
AtCompletionCost	AtCompletionCost	AtCompletionCost

File-P6 CBS Resource Spread fields

Description: CBS Resource Spread fields

File	Gateway	P6
PlannedUnits	PlannedUnits	PlannedUnits

File	Gateway	P6
ActualUnits	ActualUnits	ActualUnits
RemainingUnits	RemainingUnits	RemainingUnits
AtCompletionUnits	AtCompletionUnits	AtCompletionUnits
PlannedCost	PlannedCost	PlannedCost
ActualCost	ActualCost	ActualCost
RemainingCost	RemainingCost	RemainingCost
AtCompletionCost	AtCompletionCost	AtCompletionCost

File-P6 Cost Account Fields

Description: Cost Account Field Mappings

File	Gateway	P6
Id	Id	Id
Name	Name	Name
Description	Description	Description

File-P6 EPS Fields

Description: EPS Field Mappings

File	Gateway	P6
Id	Id	Id
Name	Name	Name
SequenceNumber	SequenceNumber	SequenceNumber

File-P6 Expense Category Fields

Description: Expense Category Field Mapping

File	Gateway	P6
ExpenseCategory	ExpenseCategory	Name

File-P6 Export CBS Codes to P6

Description: Export CBS Codes to P6

File	Gateway	P6
CBSCode	CBSCode	CBSCode
CBSDescription	CBSDescription	CBSDescription
CBSStatus	CBSStatus	CBSStatus

File-P6 Financial Period Fields

Description: Financial Period Field Mappings

File	Gateway	P6
EndDate	EndDate	EndDate
Name	Name	Name
StartDate	StartDate	StartDate

File-P6 Location Fields

Description: Location Field Mappings

File	Gateway	P6
Name	Name	Name
Latitude	Latitude	Latitude
Longitude	Longitude	Longitude
AddressLine1	AddressLine1	AddressLine1
AddressLine2	AddressLine2	AddressLine2
City	City	City
Municipality	Municipality	Municipality
State	State	State
StateCode	StateCode	StateCode
Country	Country	Country

File	Gateway	P6
CountryCode	CountryCode	CountryCode
PostalCode	PostalCode	PostalCode

File-P6 ProjectCode Fields

Description: ProjectCode Field Mappings

File	Gateway	P6
CodeTypeName	CodeTypeName	CodeTypeName
CodeValue	CodeValue	CodeValue
Description	Description	Description
Weight	Weight	Weight

File-P6 ProjectCodeType Fields

Description: ProjectCodeType Field Mappings

File	Gateway	P6
Name	Name	Name
Length	Length	Length
Weight	Weight	Weight

File-P6 Project Resource Fields

Description: Field mapping for Project Resource

File	Gateway	P6
ResourceName	ResourceName	ResourceName

File-P6 Project Header Data Example

Description: Project header field mapping example

File	Gateway	P6
Description	Description	Description
FinishDate	FinishDate	FinishDate
Id	Id	Id
Name	Name	Name
ParentEPSId	ParentEPSId	ParentEPSId
ProjectScheduleType	ProjectScheduleType	ProjectScheduleType
StartDate	StartDate	StartDate
Status	Status	Status

File-P6 Resource Fields

Description: Resource Field Mappings

File	Gateway	P6
Id	Id	Id
Name	Name	Name
ResourceType	ResourceType	ResourceType
EmailAddress	EmailAddress	EmailAddress
EmployeeId	EmployeeId	EmployeeId
OfficePhone	OfficePhone	OfficePhone
Title	Title	Title
UnitOfMeasureAbbreviation	UnitOfMeasureAbbreviation	UnitOfMeasureAbbreviation
DefaultUnitsPerTime	DefaultUnitsPerTime	DefaultUnitsPerTime
CalendarName	CalendarName	CalendarName
LocationName	LocationName	LocationName

File-P6 ResourceCode Fields

Description: ResourceCode Field Mappings

File	Gateway	P6
CodeTypeName	CodeTypeName	CodeTypeName
CodeValue	CodeValue	CodeValue
Description	Description	Description

File-P6 ResourceCodeType Fields

Description: ResourceCodeType Field Mappings

File	Gateway	P6
Name	Name	Name
Length	Length	Length

File-P6 Resource Cost and Unit Spread Fields

Description: Key cost and unit fields for WBS ResourceSpread

File	Gateway	P6
PlannedCost	PlannedCost	PlannedCost
ActualCost	ActualCost	ActualCost
RemainingCost	RemainingCost	RemainingCost
AtCompletionCost	AtCompletionCost	AtCompletionCost
PlannedUnits	PlannedUnits	PlannedUnits
ActualUnits	ActualUnits	ActualUnits
RemainingUnits	RemainingUnits	RemainingUnits
AtCompletionUnits	AtCompletionUnits	AtCompletionUnits

File-P6 ResourceCurve Fields

Description: ResourceCurve Field Mapping

File	Gateway	P6
CurveData	CurveData	CurveData

File	Gateway	P6
IsDefault	IsDefault	IsDefault
Name	Name	Name

File-P6 Resource Max UPT

Description: Resource Max Units Per Time Field Mapping

File	Gateway	P6
MaxUnitsPerTime	MaxUnitsPerTime	MaxUnitsPerTime

File-P6 Resource Rates

Description: Resource Rates Field Mappings

File	Gateway	P6
EffectiveDate	EffectiveDate	EffectiveDate
PricePerUnit	PricePerUnit	PricePerUnit
PricePerUnit2	PricePerUnit2	PricePerUnit2
PricePerUnit3	PricePerUnit3	PricePerUnit3
PricePerUnit4	PricePerUnit4	PricePerUnit4
PricePerUnit5	PricePerUnit5	PricePerUnit5

File-P6 ResourceRole Fields

Description: ResourceRole Field Mapping

File	Gateway	P6
Proficiency	Proficiency	Proficiency
ResourceId	ResourceId	ResourceId
ResourceName	ResourceName	ResourceName
ResourceObjectId	ResourceObjectId	ResourceObjectId
RoleId	RoleId	RoleId

File	Gateway	P6
RoleName	RoleName	RoleName
RoleObjectId	RoleObjectId	RoleObjectId

File-P6 Risk field mappings

Description: Sample Risk field mappings

File	Gateway	P6
ProjectId	ProjectId	ProjectId
Id	Id	Id
Name	Name	Name
ResponseTotalCost	ResponseTotalCost	ResponseTotalCost
Type	Type	Type
Status	Status	Status
Description	Description	Description
Cause	Cause	Cause
Effect	Effect	Effect
IdentifiedDate	IdentifiedDate	IdentifiedDate

File-P6 Risk Impact Fields

Description: Risk Impact Fields

File	Gateway	P6
ProjectId	ProjectId	ProjectId
RiskId	RiskId	RiskId
RiskThresholdName	RiskThresholdName	RiskThresholdName
RiskThresholdLevelCode	RiskThresholdLevelCode	RiskThresholdLevelCode

File-P6 Risk Matrix Fields

Description: Risk Matrix Field Mappings

File	Gateway	P6
Name	Name	Name
Description	Description	Description
ImpactThresholdLevel	ImpactThresholdLevel	ImpactThresholdLevel
ProbabilityThresholdLevel	ProbabilityThresholdLevel	ProbabilityThresholdLevel
RiskScoringMethod	RiskScoringMethod	RiskScoringMethod

File-P6 Risk Matrix Score Fields

Description: Risk Matrix Score Field Mappings

File	Gateway	P6
ProbabilityThresholdLevel	ProbabilityThresholdLevel	ProbabilityThresholdLevel
Severity1	Severity1	Severity1
Severity1Label	Severity1Label	Severity1Label
Severity2	Severity2	Severity2
Severity2Label	Severity2Label	Severity2Label
Severity3	Severity3	Severity3
Severity3Label	Severity3Label	Severity3Label
Severity4	Severity4	Severity4
Severity4Label	Severity4Label	Severity4Label
Severity5	Severity5	Severity5
Severity5Label	Severity5Label	Severity5Label
Severity6	Severity6	Severity6
Severity6Label	Severity6Label	Severity6Label
Severity7	Severity7	Severity7
Severity7Label	Severity7Label	Severity7Label
Severity8	Severity8	Severity8
Severity8Label	Severity8Label	Severity8Label
Severity9	Severity9	Severity9
Severity9Label	Severity9Label	Severity9Label

File-P6 Risk Matrix Threshold Fields

Description: Risk Matrix Threshold Fields

File	Gateway	P6
RiskMatrixName	RiskMatrixName	RiskMatrixName
RiskThresholdName	RiskThresholdName	RiskThresholdName

File-P6 Risk Response Action Fields

Description: Risk Response Action Field Mappings

File	Gateway	P6
Id	Id	Id
Name	Name	Name
Status	Status	Status
StartDate	StartDate	StartDate
FinishDate	FinishDate	FinishDate
PlannedStartDate	PlannedStartDate	PlannedStartDate
PlannedFinishDate	PlannedFinishDate	PlannedFinishDate
RemainingCost	RemainingCost	RemainingCost
ActualCost	ActualCost	ActualCost
PlannedCost	PlannedCost	PlannedCost

File-P6 Risk Response Action Impact Fields

Description: Risk Response Action Impact Fields

File	Gateway	P6
RiskResponseActionId	RiskResponseActionId	RiskResponseActionId
RiskThresholdName	RiskThresholdName	RiskThresholdName
RiskThresholdLevelCode	RiskThresholdLevelCode	RiskThresholdLevelCode
RiskId	RiskId	RiskId
ProjectId	ProjectId	ProjectId

File-P6 Risk Response Plan Fields

Description: Risk Response Plan Field Mappings

File	Gateway	P6
Id	Id	Id
Name	Name	Name
IsActive	IsActive	IsActive
ResponseType	ResponseType	ResponseType

File-P6 Risk Threshold Fields

Description: Risk Threshold Field Mappings

File	Gateway	P6
Name	Name	Name
ThresholdType	ThresholdType	ThresholdType

File-P6 Risk Threshold Level Fields

Description: Risk Threshold Level Field Mappings

File	Gateway	P6
Code	Code	Code
Name	Name	Name
Color	Color	Color
Level	Level	Level
Range	Range	Range
CostRange	CostRange	CostRange
ProbabilityRange	ProbabilityRange	ProbabilityRange
ScheduleRange	ScheduleRange	ScheduleRange
ToleranceRange	ToleranceRange	ToleranceRange

File-P6 Role Fields

Description: Role Field Mappings

File	Gateway	P6
Id	Id	Id
Name	Name	Name
Description	Description	Responsibilities

File-P6 RoleLimit Fields

Description: RoleLimit Field Mapping

File	Gateway	P6
EffectiveDate	EffectiveDate	EffectiveDate
MaxUnitsPerTime	MaxUnitsPerTime	MaxUnitsPerTime
RoleObjectId	RoleObjectId	RoleObjectId

File-P6 Role Rates

Description: Role Rates Field Mappings

File	Gateway	P6
PricePerUnit	PricePerUnit	PricePerUnit
PricePerUnit2	PricePerUnit2	PricePerUnit2
PricePerUnit3	PricePerUnit3	PricePerUnit3
PricePerUnit4	PricePerUnit4	PricePerUnit4
PricePerUnit5	PricePerUnit5	PricePerUnit5

File-P6 Summarized Planned and Remaining

Description: All planned fields for WBS Spread

File	Gateway	P6
PlannedExpenseCost	PlannedExpenseCost	PlannedExpenseCost

PlannedLaborCost	PlannedLaborCost	PlannedLaborCost
PlannedLaborUnits	PlannedLaborUnits	PlannedLaborUnits
PlannedMaterialCost	PlannedMaterialCost	PlannedMaterialCost
PlannedNonlaborCost	PlannedNonlaborCost	PlannedNonlaborCost
PlannedNonlaborUnits	PlannedNonlaborUnits	PlannedNonlaborUnits
PlannedNonlaborUnits	PlannedNonlaborUnits	PlannedNonlaborUnits
PlannedTotalCost	PlannedTotalCost	PlannedTotalCost
PlannedValueCost	PlannedValueCost	PlannedValueCost
PlannedValueLaborUnits	PlannedValueLaborUnits	PlannedValueLaborUnits

File-P6 Sync P6 Projects to ERP

Description: Synchronize Project Fields to ERP

File	Gateway	P6
Id	Id	Id
Name	Name	Name
Status	Status	Status
Description	Description	Description
FinishDate	FinishDate	FinishDate
StartDate	StartDate	StartDate
LocationName	LocationName	LocationName
ProjectScheduleType	ProjectScheduleType	ProjectScheduleType

File-P6 Sync P6 Project settings to ERP

Description: Synchronize Project settings Fields to ERP

File	Gateway	P6
CalculateFloatBasedOnFinishDate	CalculateFloatBasedOnFinishDate	CalculateFloatBasedOnFinishDate
ComputeTotalFloatType	ComputeTotalFloatType	ComputeTotalFloatType
CriticalActivityFloatThreshol	CriticalActivityFloatThreshol	CriticalActivityFloatThreshol

File	Gateway	P6
d	d	d
CriticalFloatThreshold	CriticalFloatThreshold	CriticalFloatThreshold
IgnoreOtherProjectRelationships	IgnoreOtherProjectRelationships	IgnoreOtherProjectRelationships
LimitMultipleFloatPaths	LimitMultipleFloatPaths	LimitMultipleFloatPaths
MakeOpenEndedActivitiesCritical	MakeOpenEndedActivitiesCritical	MakeOpenEndedActivitiesCritical
MaximumMultipleFloatPaths	MaximumMultipleFloatPaths	MaximumMultipleFloatPaths
MultipleFloatPathsEnabled	MultipleFloatPathsEnabled	MultipleFloatPathsEnabled
MultipleFloatPathsEndingActivityObjectId	MultipleFloatPathsEndingActivityObjectId	MultipleFloatPathsEndingActivityObjectId
MultipleFloatPathsUseTotalFloat	MultipleFloatPathsUseTotalFloat	MultipleFloatPathsUseTotalFloat
OutOfSequenceScheduleType	OutOfSequenceScheduleType	OutOfSequenceScheduleType
PropertyType	PropertyType	PropertyType
RelationshipLagCalendar	RelationshipLagCalendar	RelationshipLagCalendar
StartToStartLagCalculationType	StartToStartLagCalculationType	StartToStartLagCalculationType
UseExpectedFinishDates	UseExpectedFinishDates	UseExpectedFinishDates

File-P6 UDFType Fields

Description: UDFType Field Mappings

File	Gateway	P6
DataType	DataType	DataType
SubjectArea	SubjectArea	SubjectArea
Title	Title	Title

File-P6 UnitOfMeasure Fields

Description: UnitOfMeasure Field Mapping

File	Gateway	P6
Abbreviation	Abbreviation	Abbreviation
Name	Name	Name
SequenceNumber	SequenceNumber	SequenceNumber

File-P6 Update P6 Project Header

Description: Project Header Mappings

File	Gateway	P6
Id	Id	Id
Name	Name	Name
Status	Status	Status
CurrentBudget	CurrentBudget	CurrentBudget
Description	Description	Description
PlannedStartDate	PlannedStartDate	PlannedStartDate
MustFinishByDate	MustFinishByDate	MustFinishByDate
ActivityDefaultCalendarName	ActivityDefaultCalendarName	ActivityDefaultCalendarName
LocationName	LocationName	LocationName
ProjectScheduleType	ProjectScheduleType	ProjectScheduleType

File-P6 WBS Category Fields

Description: WBS Category Field Mapping

File	Gateway	P6
Name	Name	Name

File-P6 WBS Expense Spread Fields

Description: Key cost fields for WBS expense spread

File	Gateway	P6
PlannedCost	PlannedCost	PlannedCost
ActualCost	ActualCost	ActualCost
RemainingCost	RemainingCost	RemainingCost
AtCompletionCost	AtCompletionCost	AtCompletionCost

File-P6 WBS Field Mapping Example

Description: File - P6 WBS field mapping example.

File	Gateway	P6
AnticipatedFinishDate	AnticipatedFinishDate	AnticipatedFinishDate
AnticipatedStartDate	AnticipatedStartDate	AnticipatedStartDate
Code	Code	Code
CurrentBudget	CurrentBudget	CurrentBudget
FinishDate	FinishDate	FinishDate
Name	Name	Name
ProjectObjectId	ProjectObjectId	ProjectObjectId
StartDate	StartDate	StartDate

File-P6 WBS Field Mapping

Description: Field Mapping for WBS

XML	Gateway	P6
Code	Code	Code
Name	Name	Name
AnticipatedStartDate	AnticipatedStartDate	AnticipatedStartDate
AnticipatedFinishDate	AnticipatedFinishDate	AnticipatedFinishDate
FinishDate	FinishDate	FinishDate
StartDate	StartDate	StartDate

XML	Gateway	P6
CurrentBudget	CurrentBudget	CurrentBudget
WBSCategoryObjectId	WBSCategoryObjectId	WBSCategoryObjectId

File-Unifier Field-Mapping Templates

The following field-mapping templates are delivered in Gateway for an File-Unifier integration:

File-Unifier Activity Fields

Description: Send Activity data to File.

File	Gateway	Unifier
Id	Id	uuu_P6ActivityId
ActualStartDate	ActualStartDate	uuu_P6ActualStart
ActualFinishDate	ActualFinishDate	uuu_P6ActualFinish

File-Unifier Activity Fields For Activity Sheet

Description: Field Mapping for Activity Sheet.

File	Gateway	Unifier
Id	Id	uuu_P6ActivityId
Name	Name	uuu_P6ActivityName
WBSCode	WBSCode	uuu_P6WBSCode
WBSName	WBSName	uuu_P6WBSName
WBSPath	WBSPath	uuu_P6WBSPath
Status	Status	uuu_P6ActivityStatus
Type	Type	uuu_P6ActivityType
PercentComplete	PercentComplete	uuu_P6PercentComplete

File	Gateway	Unifier
PlannedTotalCost	PlannedTotalCost	uuu_P6PlannedTotalCost
ActualTotalCost	ActualTotalCost	uuu_P6ActualTotalCost
AtCompletionTotalCost	AtCompletionTotalCost	uuu_P6AtCompletionTotalCost
RemainingTotalCost	RemainingTotalCost	uuu_P6RemainingTotalCost
PlannedStartDate	PlannedStartDate	uuu_P6PlannedStart
PlannedFinishDate	PlannedFinishDate	uuu_P6PlannedFinish
ActualStartDate	ActualStartDate	uuu_P6ActualStart
ActualFinishDate	ActualFinishDate	uuu_P6ActualFinish
StartDate	StartDate	uuu_P6Start
FinishDate	FinishDate	uuu_P6Finish
RemainingEarlyStartDate	RemainingEarlyStartDate	uuu_P6RemainingEarlyStart
RemainingEarlyFinishDate	RemainingEarlyFinishDate	uuu_P6RemainingEarlyFinish
PlannedDuration	PlannedDuration	uuu_P6PlannedDuration
ActualDuration	ActualDuration	uuu_P6ActualDuration
AtCompletionDuration	AtCompletionDuration	uuu_P6AtCompletionDuration
RemainingDuration	RemainingDuration	uuu_P6RemainingDuration

File-Unifier BlanketPurchaseOrder Fields

Description: BlanketPurchaseOrder to CompanyCosts Field Mappings

File	Gateway	Unifier
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount

File-Unifier BlanketPurchaseOrderDetail Fields

Description: BlanketPurchaseOrderDetail to CompanyCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
ShortDesc	ShortDesc	short_desc
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount

File-Unifier BudgetApproval Fields

Description: BudgetApproval to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier BudgetApprovalDetail Fields

Description: BudgetApprovalDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no

File	Gateway	Unifier
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bItemID
FundCode	FundCode	uuu_fund_code
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier BudgetChange Fields

Description: BudgetChange to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier BudgetChangeDetail Fields

Description: BudgetChangeDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId

File	Gateway	Unifier
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bitemID
FundCode	FundCode	uuu_fund_code
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier BudgetTransfer Fields

Description: BudgetTransfer to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier BudgetTransferDetail Fields

Description: BudgetTransferDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bItemID
FundCode	FundCode	uuu_fund_code
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier CBS Fields

Description: Pull CBS Codes from Unifier.

File	Gateway	Unifier
CBSCode	CBSCode	code
CBSDescription	CBSDescription	item
CBSStatus	CBSStatus	status

File-Unifier ChangeOrder Fields

Description: ChangeOrder to ProjectCommits Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id

File	Gateway	Unifier
CreateDate	CreateDate	uuu_creation_date
DueDate	DueDate	due_date
EffectiveDate	EffectiveDate	uuu_effective_date
CurrencyId	CurrencyId	currencyid
Status	Status	status
Description	Description	description
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path
RefBPO	RefBPO	ref_bpo
RefId	RefId	refid
CurrencyRate	CurrencyRate	currencyrate

File-Unifier ChangeOrderDetail Fields

Description: ChangeOrderDetail to ProjectCommitsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
ParentDetailId	ParentDetailId	ParentDetailId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bItemID
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
RefBPOLineitem	RefBPOLineitem	ref_bpo_lineitem
SOVLineNo	SOVLineNo	uuu_sovlinum

File-Unifier Contract Fields

Description: Contract to ProjectCommits Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
DueDate	DueDate	due_date
EffectiveDate	EffectiveDate	uuu_effective_date
CurrencyId	CurrencyId	currencyid
Status	Status	status
Description	Description	description
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path
RefBPO	RefBPO	ref_bpo
RefId	RefId	refid
CurrencyRate	CurrencyRate	currencyrate

File-Unifier ContractDetail Fields

Description: ContractDetail to ProjectCommitsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
ParentDetailId	ParentDetailId	ParentDetailId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bItemID
ShortDesc	ShortDesc	short_desc
Description	Description	description

File	Gateway	Unifier
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
RefBPOLineitem	RefBPOLineitem	ref_bpo_lineitem
SOVLineNo	SOVLineNo	uuu_sovlinum

File-Unifier Estimate Fields

Description: Estimate to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier EstimateDetail Fields

Description: EstimateDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bItemID
FundCode	FundCode	uuu_fund_code

File	Gateway	Unifier
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier FundAppropriation Fields

Description: FundAppropriation to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier FundAppropriationDetail Fields

Description: FundAppropriationDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bItemID

File	Gateway	Unifier
FundCode	FundCode	uuu_fund_code
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier Invoice Fields

Description: Invoice to ProjectInvoices Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
DueDate	DueDate	due_date
EffectiveDate	EffectiveDate	uuu_effective_date
RefId	RefId	refid
CurrencyId	CurrencyId	currencyid
Amount	Amount	amount
Status	Status	status
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier InvoiceDetail Fields

Description: InvoiceDetail to ProjectInvoicesDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
ParentDetailId	ParentDetailId	ParentDetailId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bItemID
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date
ScheduledValue	ScheduledValue	scheduled_value
RefNum	RefNum	_refnum
BreakDown	BreakDown	_breakdown

File-Unifier JournalEntry Fields

Description: JournalEntry to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier JournalEntryDetail Fields

Description: JournalEntryDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bItemID
FundCode	FundCode	uuu_fund_code
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier Payment Fields

Description: Payment to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier PaymentApplication Fields

Description: PaymentApplication to ProjectInvoices Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
DueDate	DueDate	due_date
EffectiveDate	EffectiveDate	uuu_effective_date
RefId	RefId	refid
CurrencyId	CurrencyId	currencyid
Amount	Amount	amount
Status	Status	status
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier PaymentApplicationDetail Fields

Description: PaymentApplicationDetail to ProjectInvoicesDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
ParentDetailId	ParentDetailId	ParentDetailId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bitemID
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price

File	Gateway	Unifier
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date
ScheduledValue	ScheduledValue	scheduled_value
RefNum	RefNum	_refnum
BreakDown	BreakDown	_breakdown

File-Unifier PaymentDetail Fields

Description: PaymentDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bitemID
FundCode	FundCode	uuu_fund_code
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier POAmendment Fields

Description:POAmendment to ProjectCommits Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no

File	Gateway	Unifier
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
DueDate	DueDate	due_date
EffectiveDate	EffectiveDate	uuu_effective_date
CurrencyId	CurrencyId	currencyid
Status	Status	status
Description	Description	description
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path
RefBPO	RefBPO	ref_bpo
RefId	RefId	refid
CurrencyRate	CurrencyRate	currencyrate

File-Unifier POAmendmentDetail Fields

Description:POAmendmentDetail to ProjectCommitsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
ParentDetailId	ParentDetailId	ParentDetailId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bitemID
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount

File	Gateway	Unifier
RefBPOLineitem	RefBPOLineitem	ref_bpo_lineitem
SOVLineNo	SOVLineNo	uuu_sovlinum

File-Unifier PotentialChangeOrder Fields

Description: PotentialChangeOrder to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier PotentialChangeOrderDetail Fields

Description: PotentialChangeOrderDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bitemID
FundCode	FundCode	uuu_fund_code
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity

File	Gateway	Unifier
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier Project Fields

Description: Sync File and Unifier Projects.

File	Gateway	Unifier
Id	Id	ProjectNumber
Name	Name	ProjectName
ProjectScheduleType	ProjectScheduleType	uuu_int_schedule_type
ObjectId	InternalProjectId	uuu_int_internal_proj_id

File-Unifier ProjectInformation Fields

Description: ProjectInformation to ProjectSimple Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier PurchaseOrder Fields

Description: PurchaseOrder to ProjectCommits Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber

File	Gateway	Unifier
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
DueDate	DueDate	due_date
EffectiveDate	EffectiveDate	uuu_effective_date
CurrencyId	CurrencyId	currencyid
Status	Status	status
Description	Description	description
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path
RefBPO	RefBPO	ref_bpo
RefId	RefId	refid
CurrencyRate	CurrencyRate	currencyrate

File-Unifier PurchaseOrderDetail Fields

Description: PurchaseOrderDetail to ProjectCommitsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
ParentDetailId	ParentDetailId	ParentDetailId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bitemID
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount

File	Gateway	Unifier
RefBPOLineitem	RefBPOLineitem	ref_bpo_lineitem
SOVLineNo	SOVLineNo	uuu_sovlinum

File-Unifier RequestforSubstitution Fields

Description: RequestforSubstitution to ProjectDocument Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
ShortDesc	ShortDesc	short_desc
Status	Status	status
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier RequestforSubstitutionDetail Fields

Description: RequestforSubstitutionDetail to ProjectDocumentDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
LineNo	LineNo	li_num
Name	Name	uuu_name
ShortDesc	ShortDesc	short_desc
LineItemStatus	LineItemStatus	uuu_line_item_status
IssueDate	IssueDate	uuu_issue_date
TabId	TabId	uuu_tab_id

File-Unifier RiskAndIssue Fields

Description: RiskAndIssue to OtherProjectCosts Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier RiskAndIssueDetail Fields

Description: RiskAndIssueDetail to OtherProjectCostsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bitemID
FundCode	FundCode	uuu_fund_code
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
EffectiveDate	EffectiveDate	uuu_effective_date

File-Unifier Timesheet Fields

Description: Timesheet to CompanyLineItem Field Mappings.

File	Gateway	Unifier
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
DueDate	DueDate	due_date
DMPublishPath	DMPublishPath	uuu_dm_publish_path
WeekPicker	WeekPicker	uuu_week_picker

File-Unifier TimesheetDetail Fields

Description: TimesheetDetail to CompanyLineItemDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
ShortDesc	ShortDesc	short_desc
WeekPicker	WeekPicker	uuu_week_picker

File-Unifier Vendor Fields

Description: Vendor to CompanyLineItem Field Mappings.

File	Gateway	Unifier
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date

File	Gateway	Unifier
Status	Status	status
DueDate	DueDate	due_date
DMPublishPath	DMPublishPath	uuu_dm_publish_path
WeekPicker	WeekPicker	uuu_week_picker

File-Unifier VendorDetail Fields

Description: VendorDetail to CompanyLineItemDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
ShortDesc	ShortDesc	short_desc
WeekPicker	WeekPicker	uuu_week_picker

File-Unifier VendorEvaluation Fields

Description: VendorEvaluation to CompanySimple Field Mappings.

File	Gateway	Unifier
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
Status	Status	status
DueDate	DueDate	due_date
DMPublishPath	DMPublishPath	uuu_dm_publish_path

File-Unifier WBS Fields

Description: Send WBS Hierarchy to Unifier.

File	Gateway	Unifier
Code	Code	code
Name	Name	item
SequenceNumber	SequenceNumber	orderid

File-Unifier WorkRelease Fields

Description: WorkRelease to ProjectCommits Field Mappings.

File	Gateway	Unifier
ProjectObjectId	ProjectObjectId	ProjectNumber
RecordNo	RecordNo	record_no
Title	Title	title
CreateUserId	CreateUserId	creator_id
CreateDate	CreateDate	uuu_creation_date
DueDate	DueDate	due_date
EffectiveDate	EffectiveDate	uuu_effective_date
CurrencyId	CurrencyId	currencyid
Status	Status	status
Description	Description	description
Amount	Amount	amount
DMPublishPath	DMPublishPath	uuu_dm_publish_path
RefBPO	RefBPO	ref_bpo
RefId	RefId	refid
CurrencyRate	CurrencyRate	currencyrate

File-Unifier WorkReleaseDetail Fields

Description: WorkReleaseDetail to ProjectCommitsDetail Field Mappings.

File	Gateway	Unifier
ParentObjectId	ParentObjectId	ParentElementId
ParentDetailId	ParentDetailId	ParentDetailId

File	Gateway	Unifier
RecordNo	RecordNo	record_no
TabId	TabId	uuu_tab_id
LineNo	LineNo	li_num
BitemId	BitemId	bitemID
ShortDesc	ShortDesc	short_desc
Description	Description	description
WPId	WPId	wpid
Quantity	Quantity	uuu_quantity
PricePerUnit	PricePerUnit	uuu_unit_price
Amount	Amount	amount
RefBPOLineitem	RefBPOLineitem	ref_bpo_lineitem
SOVLineNo	SOVLineNo	uuu_sovlinum

File-Sample Field-Mapping Templates

The following field-mapping templates are delivered in Gateway for an File-Sample integration:

Sample-File ActivityCode Fields

Description: ActivityCode Fields

Sample	Gateway	File
CodeTypeName	CodeTypeName	CodeTypeName
CodeValue	CodeValue	CodeValue
Color	Color	Color
Description	Description	Description

Sample-File ActivityCodeType Fields

Description: ActivityCodeType Fields

Sample	Gateway	File
EPSElementId	EPSObjectId	EPSObjectId
Length	Length	Length
Name	Name	Name
ProjectElementId	ProjectObjectId	ProjectObjectId
Scope	Scope	Scope

Sample-File Activity Expense Fields

Description: Field Mapping for Activity Expenses

Sample	Gateway	File
ActualCost	ActualCost	ActualCost
ExpenseCategoryName	ExpenseCategoryName	ExpenseCategoryName
ExpenseItem	ExpenseItem	ExpenseItem
PlannedCost	PlannedCost	PlannedCost

Sample-File Activity Mapping

Description: Field mapping for Activity

Sample	Gateway	File
Id	Id	Id
Duration	PlannedDuration	PlannedDuration
ActualStartDate	ActualStartDate	ActualStartDate
ActualFinishDate	ActualFinishDate	ActualFinishDate
FinishDate	FinishDate	FinishDate
OperationShortText	Name	Name
ConstraintDate	PrimaryConstraintDate	PrimaryConstraintDate
ConstraintType	PrimaryConstraintType	PrimaryConstraintType
StartDate	StartDate	StartDate
Type	Type	Type
CalendarName	CalendarName	CalendarName
LocationName	LocationName	LocationName
IsStarred	IsStarred	IsStarred
MaximumDuration	MaximumDuration	MaximumDuration
MinimumDuration	MinimumDuration	MinimumDuration
MostLikelyDuration	MostLikelyDuration	MostLikelyDuration
WBSPath	WBSPath	WBSPath

Sample-File Activity Relationship Fields

Description: Field mapping for Activity relationship

Sample	Gateway	File
Type	Type	Type
Lag	Lag	Lag

Sample-File Assignment Mapping

Description: Field mapping for Resource Assignments

Sample	Gateway	File
ResourceClass	ResourceType	ResourceType
PlannedUnits	PlannedUnits	PlannedUnits
ActualUnits	ActualUnits	ActualUnits
IsActivityFlagged	IsActivityFlagged	IsActivityFlagged
RemainingUnits	RemainingUnits	RemainingUnits
PlannedLag	PlannedLag	PlannedLag
ResourceId	ResourceId	ResourceId
RoleId	RoleId	RoleId
WorkOrderElementId	WBSObjectId	WBSObjectId

Sample-File Cost Account Fields

Description: Cost Account Field Mappings

Sample	Gateway	File
CostAccountId	Id	Id
CostAccountName	Name	Name
Description	Description	Description

Sample-File EPS Fields

Description: EPS Field Mappings

Sample	Gateway	File
Id	Id	Id
Name	Name	Name
SequenceNumber	SequenceNumber	SequenceNumber

Sample-File Expense Category Fields

Description: Expense Category Field Mapping

Sample	Gateway	File
ExpenseCategory	ExpenseCategory	ExpenseCategory

Sample-File Financial Period Fields

Description: Financial Period Field Mappings

Sample	Gateway	File
EndDate	EndDate	EndDate
FinancialPeriodName	Name	Name
StartDate	StartDate	StartDate

Sample-File Location Fields

Description: Location Field Mappings

Sample	Gateway	File
Name	Name	Name
Latitude	Latitude	Latitude
Longitude	Longitude	Longitude
AddressLine1	AddressLine1	AddressLine1
AddressLine2	AddressLine2	AddressLine2
City	City	City
Municipality	Municipality	Municipality

Sample	Gateway	File
State	State	State
StateCode	StateCode	StateCode
Country	Country	Country
CountryCode	CountryCode	CountryCode
PostalCode	PostalCode	PostalCode

Sample-File ProjectCode Fields

Description: ProjectCode Field Mappings

Sample	Gateway	File
CodeTypeName	CodeTypeName	CodeTypeName
CodeValue	CodeValue	CodeValue
Description	Description	Description
Weight	Weight	Weight

Sample-File ProjectCodeType Fields

Description: ProjectCodeType Field Mappings

Sample	Gateway	File
Name	Name	Name
Length	Length	Length
Weight	Weight	Weight

Sample-File Project Resource Fields

Description: Field mapping for Project Resource

Sample	Gateway	File
ResourceName	ResourceName	ResourceName

Sample-File ResourceCode Fields

Description: ResourceCode Field Mappings

Sample	Gateway	File
CodeTypeName	CodeTypeName	CodeTypeName
CodeValue	CodeValue	CodeValue
Description	Description	Description

Sample-File ResourceCodeType Fields

Description: ResourceCodeType Field Mappings

Sample	Gateway	File
Name	Name	Name
Length	Length	Length

Sample-File Resource Cost and Unit Spread Fields

Description: Key cost and unit fields for WBS ResourceSpread

Sample	Gateway	File
PlannedCost	PlannedCost	PlannedCost
ActualCost	ActualCost	ActualCost
RemainingCost	RemainingCost	RemainingCost
AtCompletionCost	AtCompletionCost	AtCompletionCost
PlannedUnits	PlannedUnits	PlannedUnits
ActualUnits	ActualUnits	ActualUnits
RemainingUnits	RemainingUnits	RemainingUnits
AtCompletionUnits	AtCompletionUnits	AtCompletionUnits

Sample-File Resource Fields

Description: Resource Field Mappings

Sample	Gateway	File
ResourceId	Id	Id
EmployeeName	Name	Name
ResourceClass	ResourceType	ResourceType
EmailAddress	EmailAddress	EmailAddress
EmployeeId	EmployeeId	EmployeeId
OfficePhone	OfficePhone	OfficePhone
Title	Title	Title
UnitOfMeasureAbbreviation	UnitOfMeasureAbbreviation	UnitOfMeasureAbbreviation
DefaultUnitsPerTime	DefaultUnitsPerTime	DefaultUnitsPerTime
BusinessUnit	BusinessUnit	BusinessUnit
DepartmentId	DepartmentId	DepartmentId
CalendarName	CalendarName	CalendarName
LocationName	LocationName	LocationName

Sample-File Resource Rates

Description: Resource Rates Field Mappings

Sample	Gateway	File
EffectiveDate	EffectiveDate	EffectiveDate
PricePerUnit	PricePerUnit	PricePerUnit
PricePerUnit2	PricePerUnit2	PricePerUnit2
PricePerUnit3	PricePerUnit3	PricePerUnit3
PricePerUnit4	PricePerUnit4	PricePerUnit4
PricePerUnit5	PricePerUnit5	PricePerUnit5

Sample-File Resource Max UPT

Description: Resource Max Units Per Time Field Mapping

Sample	Gateway	File
MaxUnitsPerTime	MaxUnitsPerTime	MaxUnitsPerTime

Sample-File Risk Matrix Fields

Description: Risk Matrix Field Mappings

Sample	Gateway	File
Name	Name	Name
Description	Description	Description
ImpactThresholdLevel	ImpactThresholdLevel	ImpactThresholdLevel
ProbabilityThresholdLevel	ProbabilityThresholdLevel	ProbabilityThresholdLevel
RiskScoringMethod	RiskScoringMethod	RiskScoringMethod

Sample-File Risk Matrix Score Fields

Description: Risk Matrix Score Field Mappings

Sample	Gateway	File
ProbabilityThresholdLevel	ProbabilityThresholdLevel	ProbabilityThresholdLevel
Severity1	Severity1	Severity1
Severity1Label	Severity1Label	Severity1Label
Severity2	Severity2	Severity2
Severity2Label	Severity2Label	Severity2Label
Severity3	Severity3	Severity3
Severity3Label	Severity3Label	Severity3Label
Severity4	Severity4	Severity4
Severity4Label	Severity4Label	Severity4Label
Severity5	Severity5	Severity5
Severity5Label	Severity5Label	Severity5Label
Severity6	Severity6	Severity6
Severity6Label	Severity6Label	Severity6Label
Severity7	Severity7	Severity7

Sample	Gateway	File
Severity7Label	Severity7Label	Severity7Label
Severity8	Severity8	Severity8
Severity8Label	Severity8Label	Severity8Label
Severity9	Severity9	Severity9
Severity9Label	Severity9Label	Severity9Label

Sample-File Risk Response Action Fields

Description: Risk Response Action Field Mappings

Sample	Gateway	File
Id	Id	Id
Name	Name	Name
Status	Status	Status
StartDate	StartDate	StartDate
FinishDate	FinishDate	FinishDate
PlannedStartDate	PlannedStartDate	PlannedStartDate
PlannedFinishDate	PlannedFinishDate	PlannedFinishDate
RemainingCost	RemainingCost	RemainingCost
ActualCost	ActualCost	ActualCost
PlannedCost	PlannedCost	PlannedCost

Sample-File Risk Response Plan Fields

Description: Risk Response Plan Field Mappings

Sample	Gateway	File
Id	Id	Id
Name	Name	Name
IsActive	IsActive	IsActive
ResponseType	ResponseType	ResponseType

Sample-File Risk Threshold Fields

Description: Risk Threshold Field Mappings

Sample	Gateway	File
Name	Name	Name
ThresholdType	ThresholdType	ThresholdType

Sample-File Risk Threshold Level Fields

Description: Risk Threshold Level Field Mappings

Sample	Gateway	File
Code	Code	Code
Name	Name	Name
Color	Color	Color
Level	Level	Level
Range	Range	Range
CostRange	CostRange	CostRange
ProbabilityRange	ProbabilityRange	ProbabilityRange
ScheduleRange	ScheduleRange	ScheduleRange
ToleranceRange	ToleranceRange	ToleranceRange

Sample-File Role Fields

Description: Role Field Mappings

Sample	Gateway	File
RoleId	Id	Id
RoleName	Name	Name
Description	Description	Description

Sample-File Role Rates

Description: Role Rates Field Mappings

Sample	Gateway	File
PricePerUnit	PricePerUnit	PricePerUnit
PricePerUnit2	PricePerUnit2	PricePerUnit2
PricePerUnit3	PricePerUnit3	PricePerUnit3
PricePerUnit4	PricePerUnit4	PricePerUnit4
PricePerUnit5	PricePerUnit5	PricePerUnit5

Sample-File Summarized Planned and Remaining

Description: All planned fields for WBS Spread

Sample	Gateway	File
PlannedExpenseCost	PlannedExpenseCost	PlannedExpenseCost
PlannedLaborCost	PlannedLaborCost	PlannedLaborCost
PlannedLaborUnits	PlannedLaborUnits	PlannedLaborUnits
PlannedMaterialCost	PlannedMaterialCost	PlannedMaterialCost
PlannedNonlaborCost	PlannedNonlaborCost	PlannedNonlaborCost
PlannedNonlaborUnits	PlannedNonlaborUnits	PlannedNonlaborUnits
PlannedNonlaborUnits	PlannedNonlaborUnits	PlannedNonlaborUnits
PlannedTotalCost	PlannedTotalCost	PlannedTotalCost
PlannedValueCost	PlannedValueCost	PlannedValueCost
PlannedValueLaborUnits	PlannedValueLaborUnits	PlannedValueLaborUnits

Sample-File Sync P6 Projects to ERP

Description: Synchronize Project Fields to ERP

Sample	Gateway	File
ProjectId	Id	Id
ProjectName	Name	Name

Sample	Gateway	File
Status	Status	Status
Description	Description	Description
FinishDate	FinishDate	FinishDate
StartDate	StartDate	StartDate
Comments	Comments	Comments
BusinessArea	BusinessSegment	BusinessSegment
LocationName	LocationName	LocationName
ProjectScheduleType	ProjectScheduleType	ProjectScheduleType

Sample-File Sync P6 Project settings to ERP

Description: Synchronize Project settings Fields to ERP

Sample	Gateway	File
CalculateFloatBasedOnFinishDate	CalculateFloatBasedOnFinishDate	CalculateFloatBasedOnFinishDate
ComputeTotalFloatType	ComputeTotalFloatType	ComputeTotalFloatType
CriticalActivityFloatThreshold	CriticalActivityFloatThreshold	CriticalActivityFloatThreshold
CriticalFloatThreshold	CriticalFloatThreshold	CriticalFloatThreshold
IgnoreOtherProjectRelationships	IgnoreOtherProjectRelationships	IgnoreOtherProjectRelationships
LimitMultipleFloatPaths	LimitMultipleFloatPaths	LimitMultipleFloatPaths
MakeOpenEndedActivitiesCritical	MakeOpenEndedActivitiesCritical	MakeOpenEndedActivitiesCritical
MaximumMultipleFloatPaths	MaximumMultipleFloatPaths	MaximumMultipleFloatPaths
MultipleFloatPathsEnabled	MultipleFloatPathsEnabled	MultipleFloatPathsEnabled
MultipleFloatPathsEndingActivityObjectId	MultipleFloatPathsEndingActivityObjectId	MultipleFloatPathsEndingActivityObjectId
MultipleFloatPathsUseTotalFloat	MultipleFloatPathsUseTotalFloat	MultipleFloatPathsUseTotalFloat
OutOfSequenceScheduleType	OutOfSequenceScheduleType	OutOfSequenceScheduleType

Sample	Gateway	File
PropertyType	PropertyType	PropertyType
RelationshipLagCalendar	RelationshipLagCalendar	RelationshipLagCalendar
StartToStartLagCalculationType	StartToStartLagCalculationType	StartToStartLagCalculationType
UseExpectedFinishDates	UseExpectedFinishDates	UseExpectedFinishDates

Sample-File UDFType Fields

Description: UDFType Field Mappings

Sample	Gateway	File
DataType	DataType	DataType
SubjectArea	SubjectArea	SubjectArea
Title	Title	Title

Sample-File Update P6 Project Header

Description: Project Header Mappings

Sample	Gateway	File
ProjectId	Id	Id
ProjectName	Name	Name
Status	Status	Status
CurrentBudget	CurrentBudget	CurrentBudget
Description	Description	Description
PlannedStartDate	PlannedStartDate	PlannedStartDate
FinishDate	MustFinishByDate	MustFinishByDate
Comments	Comments	Comments
BusinessArea	BusinessSegment	BusinessSegment
OperationDefaultCalendarName	ActivityDefaultCalendarName	ActivityDefaultCalendarName
LocationName	LocationName	LocationName

Sample	Gateway	File
ProjectScheduleType	ProjectScheduleType	ProjectScheduleType

Sample-File WBS Category Fields

Description: WBS Category Field Mapping

Sample	Gateway	File
Name	Name	Name

Sample-File WBS Expense Spread Fields

Description: Key cost fields for WBS expense spread

Sample	Gateway	File
PlannedCost	PlannedCost	PlannedCost
ActualCost	ActualCost	ActualCost
RemainingCost	RemainingCost	RemainingCost
AtCompletionCost	AtCompletionCost	AtCompletionCost

Sample-File WBS Field Mapping

Description: Field Mapping for WBS

Sample	Gateway	File
Id	Code	Code
Description	Name	Name
AnticipatedStartDate	AnticipatedStartDate	AnticipatedStartDate
AnticipatedFinishDate	AnticipatedFinishDate	AnticipatedFinishDate
FinishDate	FinishDate	FinishDate
StartDate	StartDate	StartDate
TotalCurrentBudgetValue	CurrentBudget	CurrentBudget
WorkOrderCategoryElementId	WBSCategoryObjectId	WBSCategoryObjectId

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