ORACLE®

PRIMAVERA

**Gateway Installation and Configuration Guide
15 R2**

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Contents

Overview

The *Gateway Installation and Configuration Guide* describes how to:

▸ Download and install the Primavera Gateway application using the installation wizard.

Depending on WebLogic version, the installation wizard provides the following options:

  ▸ On WebLogic 12c, you can install Primavera Gateway on an Admin server or a Managed server with OWSM. However, to use Primavera Gateway APIs, you must install Primavera Gateway on a Managed server only.

  ▸ On WebLogic 11g, you can install Primavera Gateway on an Admin server only.

> **Note:** To install Primavera Gateway on WebLogic 11g with OWSM enabled, refer to the *Primavera Gateway Manual Deployment Guide*.

▸ Set up and configure the WebLogic domain for Primavera Gateway
▸ Create Primavera Gateway users and add them to the Primavera Gateway user groups
▸ Configure Primavera Gateway components

This guide is intended for IT professionals who are installing and configuring the server environment for Primavera Gateway and who are supporting Primavera Gateway users.

For the full list of system requirements and versions, see the *Primavera Gateway Tested Configurations* document.

In This Section

Downloading Primavera Gateway

To download Primavera Gateway:

1) Go to the Oracle Software Delivery Cloud.
2) Download Primavera Gateway and extract the file content to the following folders:
   ▸ Disk1
   ▸ gatewayapiclient
   ▸ GatewayUtility
   ▸ script
3) Go to the location where you extracted the contents and run the following:

   If you are installing on a Microsoft Windows system, double-click and run **setup.exe** from the following directory:

   ▸ Windows 64-bit: Double-click **setup.exe** file from the **win64\Disk1\install** directory

If you are installing on a Linux or Solaris system, execute **./runInstaller.sh** from the following directories:

Give execute permission to run the installer using the syntax: **chmod 755 <file name>**

- ▸ Linux 64-bit: Execute **./runInstaller.sh** file from the **linux64/Disk1/install** directory
- ▸ Solaris 64-bit: Execute **./runInstaller.sh** file from the **solaris64/Disk1/install** directory

Installation Prerequisites

This section outlines the prerequisites for installing and configuring Primavera Gateway.

Notes:

- 🛡 Oracle recommends using strong passwords. Strong passwords in Primavera Gateway are defined as passwords containing between 8 and 20 characters and at least one numeric and one alpha character. To further strengthen the password, use a mixture of upper and lower case letters.

- 🛡 For security reasons, Oracle strongly recommends that you replace the default database users' passwords immediately after a manual database installation or an upgrade. Do not use special characters in the database name, for example: { } [ ] : ; < > , . ? ! @ # $ % ^ & * ( ) - _ | / \ ~ ` _

In This Section

Installing the Oracle Database

You must install the Oracle database server before you can install the Primavera Gateway database. Your Oracle account representative is always your best source for licensing details. For supported versions of the database, see the *Tested Configurations* document.

Notes:

- You must install Oracle Multimedia, along with these supporting components: Oracle JVM, Oracle XML DB (XDB), and XML Developer's Kit (XDK). Unless you specify otherwise, all these components automatically get installed with the latest versions of the supported Oracle database. If you chose not to install these components, you will need to install them before you install Primavera Gateway. See the *Oracle Multimedia's User's Guide* on the Oracle Technology Network (OTN) for information on how to install these components.
- Oracle Text is a required component of Oracle Database.
- You must use UTF8 encoding to support Primavera Gateway's localized user interface.

Installing Supported JDK

Install and configure Oracle JDK as follows:

1) Download the supported version of Oracle JDK from Oracle website. For supported versions of Java, see the *Tested Configurations* document.
2) Set the JAVA_HOME and Path environment variables as follows:
    - On Windows, set the **JAVA_HOME** and **Path** environment variables to the installed Java location.
    - On Linux and Solaris, export **JAVA_HOME** variable to installed java location, and update the **PATH** variable with the **Java_Home/bin** path.

      Note: The JDK folder name must *not* contain a space.

3) Ensure java -version command shows the correct java version in the console.

Installing WebLogic

You will need to install WebLogic to deploy Primavera Gateway. For supported versions, see the *Tested Configurations* document. Also, consult WebLogic's documentation for installation instructions.

   Note: On Windows, Oracle recommends you install the application server to a folder with a short name containing no spaces.

Installing Oracle Fusion Middleware Infrastructure (WebLogic 12c Only)

You must run Oracle Fusion Middleware's **fmw_infra_<version>.jar** executable only if you are installing Primavera Gateway on a Managed server.

   Notes:

- Do **not** install Oracle Fusion Middleware Infrastructure if you are installing Primavera Gateway on an Admin server.

- ▪ Rename the derby.jar file to prevent the derby server from startup when Primavera Gateway is restarted.

Oracle Fusion Middleware installs specific files that WebLogic 12c needs to work with Primavera Gateway. This file is part of Application Development Runtime. See the *Tested Configurations* document for supported versions.

These files ensure that the correct templates are used when creating or extending a WebLogic domain. It will also download the Repository Creation Utility (RCU), which you will run later.

> **Note:** Specify the WebLogic home as the Oracle Home for this installation.

Now proceed to run the RCU.

Running the Repository Creation Utility (RCU)

Oracle Web Services Manager (OWSM) authentication is required to support external REST service authentication in Primavera Gateway. To install the schema needed to support OWSM authentication, you will need to run the Repository Creation Utility (RCU).

To run the RCU:

- ▸ For Windows installations, run **rcu.bat.**
- ▸ For Linux and Solaris installations, run **./rcu.sh**

Run the RCU as follows:

1) Go to the location where RCU was installed after running the **fmw_infra_<version>.jar**. For example, C:\oracle\Middleware\Oracle_Home\oracle_common.

2) On the **Welcome** screen, select **Next**.

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

- ▸ On the **Create Repository** screen, select **Create Repository** and **System Load and Product Load**.
1) On the **Database Connection Details** screen, enter the following details:
    - ▸ **Database Type:** Select Oracle Database.
    - ▸ **Host Name:** The host name or the server IP address for the Primavera Gateway database.
    - ▸ **Port:** A unique port number for the Gateway database schema. Port number **1521** displays by default.
    - ▸ **Service Name:** The global database name. For example, orcl.us.oracle.com.
    - ▸ **Username:** The user name with DBA privileges who can install a schema. For example, *sys*.
    - ▸ **Password:** The password for user name provided above.
    - ▸ **Role:** Role of the user who will be creating the MDS schema. If *sys* is the user, **SYSDBA** is displayed.

2) On the **Select Components** screen, select a new prefix. Make a note of the prefix you choose. This information is required when you run the Gateway install wizard.

In the **Components** section, select the following:

- **Metadata Services**
- **Audit Services**
- **Audit Services Append**
- **Audit Services Viewer**
- **Oracle Platform Security Services**
- **ServiceTable**

3) On the **Schema Passwords** screen, select the **One password for all components** password method for handling your passwords. Make note of the password you use.

4) On the **Map Tablespaces** screen, select the defaults. Make notes of your selections.

5) On the **Summary** screen, review your selected installation options and select **Create**.

6) When the wizard is finished, click **Close**.

Installing the Primavera Application Database

Gateway supports integration with the following Primavera applications:

▶ P6 Enterprise Project Portfolio Management (P6 EPPM)

> **Note:** When you run Primavera Gateway, and connect to a P6 EPPM database, information about your P6 EPPM installation is needed when you install the P6 Adapter.

▶ Prime
▶ Unifier
▶ EnterpriseTrack

To connect with any of the above applications using Gateway, you will need to install the relevant product and database. For detailed installation instructions, go to http://www.oracle.com/technetwork/apps-tech/primavera/documentation/index.html.

Installing the P6 Adapter

If you want to integrate with P6 EPPM, Primavera Gateway requires you to install the P6 Adapter. See the *Installing and Configuring the P6 Adapter* document in the P6 EPPM documentation library for more information about deploying and configuring the P6 Adapter.

Downloading Third-Party Providers

If you want to integrate with any third party enterprise application, download the necessary third-party provider files that needs to be installed in Primavera Gateway to a separate folder location. You will need to specify this folder location in the **Select Third-Party Providers** screen when you install Primavera Gateway using the installation wizard.

Execute a Manual Script Before Installation

Before running the install wizard, execute a manual script:

1) From the command line, execute:

    sqlplus <sysdba_username>/<sysdba_password>@<SID> as sysdba

    Where:

    <sysdba_username> is a sysdba user name (sys by default)

    <sysdba_password> is a sysdba password

    <SID> is a SID of the Oracle database instance

    For example, sqlplus sys/myPassword@ORCL as sysdba

    > **Note:** The command will be different if you are connecting from the host other than the host where the database is installed, or connecting to the database using a service name.

2) At the SQL prompt, execute:

    SQL>@<path>\manual_script_before_install.sql

    Where, <path> is an absolute path to the directory where the script is located.

    For example,

    On Windows: If the installer is located in c:\installer\win64, the command to execute the script will be

    @C:\install\win64\script\manual_script_before_install.sql

    On Linux: If the installer is located in /home/user/installer/linux64, the command to execute the script will be

    @/home/user/installer/linux64/script/manual_script_before_install.sql

    On Solaris: If the installer is located in /home/user/installer/solaris64, the command to execute the script will be

    @/home/user/installer/solaris64/script/manual_script_before_install.sql

This script grants sys.DBMS_REPUTIL privileges to the system user which will be validated during database installation.

Installing Primavera Gateway

This chapter describes the how to install Primavera Gateway using the:

▶ Install using the installation wizard
▶ Install using a save response file
▶ Configure the Gateway database using the configuration utilities
▶ Create Gateway users and associating them with a role
▶ Configure providers added to Gateway
▶ Configure provider deployment targets
▶ Un-install Primavera Gateway

In This Section

Installing Primavera Gateway Using the Wizard

The Gateway installation wizard can be used for the following purposes:

▶ Installing and configuring Primavera Gateway
▶ Installing Primavera Gateway with an existing Gateway database

If you have already installed Primavera Gateway, you can use the installation wizard for:

▶ Creating another new Gateway database
▶ Re-installing Gateway without any configuration
▶ Re-installing Gateway, configuring, and connecting to an existing database
▶ Re-installing Gateway, creating a new database, and configuring and connecting to the new database

The installation wizard installs and configures the following:

▶ Primavera Gateway database
▶ WebLogic domain in which Primavera Gateway is to be deployed
▶ Providers

For Linux and Solaris 64-bit   Installations:

1) Give execute permission to run the installer using the syntax: **chmod 755 runinstaller.sh**
2) Execute **./runInstaller.sh** from the **linux64/Disk1/install** directory.

For Microsoft Windows 64-bit Installations: Double-click **setup.exe** file from the **win64\Disk1\install** directory

1) On the **Welcome** screen, select **Next**.

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

2) On the **Select Installation Type** screen, select any of the following installation options:
   - **Install and Configure Primavera Gateway**: Select this installation option to install the Primavera Gateway application, configure the WebLogic domain for Gateway, and create and connect to the Gateway database. This option is selected by default for all new installations. Proceed to the **Specify Installation Location** screen.
   - **Install Primavera Gateway:** Select this installation option to only install the Primavera Gateway application. It will not create the WebLogic domain, and will not create or connect to the Gateway database. Proceed to the **Specify Installation Location** screen.
   - **Install Primavera Gateway Database:** Select this installation option to only create or upgrade the Gateway database. It will not install the Gateway application or the WebLogic domain for Gateway. Proceed to the **Specify Installation Location** screen.

3) On the **Specify Installation Location** screen, enter the following information:

   Primavera Gateway Home: Enter the path and directory or select **Browse** to select the directory and path for installing Primavera Gateway.

   For Windows installations, the default Primavera home installation location is **C:\PrimaveraGateway**.

   For Linux installations, the default Primavera home installation location is **/home/<User ID>/PrimaveraGateway**.

   For Solaris installations, the default Primavera home installation location is **/home/<User ID>/PrimaveraGateway**.

4) On the **Specify Database Installation Type** screen select any of the following database installation options:
   - **Install New Database:** Select this option to install a new Primavera Gateway database. If the database already exists, then upon selecting this option, you will have to specify a new schema owner.
   - **Use Existing Database:** Select this option to install the Primavera Gateway application, and continue using the current Gateway database. However, if the existing Gateway database is the previous version, then it will be upgraded to the current version.

5) On the **Database Connection Details** screen, enter the following information to connect to the Gateway database:
   - **Database Host Address:** Enter the host name or the server IP address for the Primavera Gateway database.
   - **Database Host Port**: Enter a unique port number for the Gateway database schema. Port number **1521** displays by default.
   - **Database Name:** Enter the database name to connect with the Gateway database. By default, **orcl**. Select **Service** to deploy Gateway in a managed server.
     - **SID:** Select this option to connect to the database using the system identifier.
     - **Service:** Select this option to connect to the database using a service name.

If you chose **Install New Database**, the following additional fields display:

▸ **Schema Owner:** Enter the name of the Primavera Gateway database schema owner.

▸ **Schema Password:** Enter a case-sensitive password for the schema owner.

▸ **Confirm Password:** Re-enter the case-sensitive password.

> **Note:** Make a note of the schema owner and password. You will need these to connect to the database.

▸ **DBA User Name:** Enter the user name of the Oracle database administrator.

▸ **DBA Password:** Enter the password of the Oracle database administrator.

▸ Select **Test Connection** to check for database connectivity. If the test is successful, the following message displays: *Connection is successful*. If the test is not successful, check the port number specified, schema user ID and case-sensitive password combination, SID or Service value, and the database host address.

If you chose **Use Existing Database**, then enter the **Schema Password**, and the **DBA Password**.

6) On the **Specify JDK and Middleware Locations** screen, enter the following information:

▸ **Java Home Directory**: Enter or select **Browse** to locate the JAVA_HOME location that will be used by the WebLogic domain.

> ▪ **Note:** Refer to the *Tested Configurations* document for supported versions of JDK.

▸ **Oracle Middleware Home:** Enter or select **Browse** to navigate the path and locate the Middleware folder.

▸ **WebLogic Server Directory:** Enter or select **Browse** to navigate the path and locate the WebLogic server directory. For example, C:\<WebLogic_Home>\wlserver.

▸ **Domain Location**: Enter or select **Browse** to navigate and locate the WebLogic domain folder. For example, C:\<WebLogic_Home>\user_projects\domains.

▸ **Apply Patch:** Select this option to install a patch. This option is enabled only if a patch is required, and has not been applied.

7) On the **New Domain Details** screen, enter the following information to create the WebLogic domain for Primavera Gateway:

▸ **Administrator User Name:** Enter a name for the WebLogic domain administrator.

▸ **Administrator User Password:** Enter an alphanumeric password of at least 8 characters for the WebLogic domain administrator. Passwords may contain the following special characters: underscore (_), dollar ($), or pound (#).

> **Note:** Make a note of the domain administrator user name and password.

▸ **Confirm Password:** Re-enter the case-sensitive password.

▸ **Domain Name:** Enter a new WebLogic domain name for Primavera Gateway. For example, PrimaveraGateway. The installer will create a sub-folder with this domain name under the domain location folder provided on the previous screen.

▸ **Administrator Server Port:** Enter a unique SSL port number for the new domain.

▸ **Administrator Server SSL Port:** Enter a unique port number for the new SSL domain.

8) (Optional) If you choose to install Gateway on a managed server, enter the following information on the **Managed Server Details** screen:

▸ **Managed Server Deployment**: Select this option to deploy Primavera Gateway in a Managed server. Also specify a database service name in the **Database Connection Details** screen.

▸ **Managed Server Port**: Enter a unique port number for the managed server.

▸ **Node Manager Port**: Enter a unique port number for the node manager. The port number **5556** displays by default.

9) If you chose to install Primavera Gateway on a *managed server*, enter the MDS database connection information that was specified on running the RCU on the **MDS Database Details** screen:

▸ **Database Host Address:** Enter the host name or the server IP address for the MDS database.

▸ **Database Host Port**: Enter a unique port number for the MDS database schema.

▸ **Database Service Name:** Enter the service name to connect to the MDS database.

▸ **MDS Schema Prefix:** Enter the prefix that was used for the MDS schema in the RCU.

▸ **MDS Schema Password:** Enter the password for the MDS schema.

10) In the **Gateway Administrator Details** screen, create a user profile for a Primavera Gateway administrator as follows:

▸ **Gateway Administrator User Name:** Enter a name for the Primavera Gateway administrator. The admin user, **GatewayAdmin,** displays by default.

▸ **Gateway Administrator Password**: Enter an alphanumeric password of at least 8 characters for the Primavera Gateway administrator.

▸ **Confirm Password:** Re-enter the case-sensitive password.

11) On the **Install Primavera Providers** screen, the following Primavera providers will be installed by default:

▸ EnterpriseTrack

▸ P6

▸ Prime

▸ Unifier

Select **Restore Providers** to restore all primavera providers in the displayed list.

Select **Remove Provider** to remove a selected provider from the displayed list.

12) On the **Select Third Party Providers** screen, select the providers you wish to install.

▸ **Primavera's Sample Provider:** Select this option to install the Primavera sample provider packaged with Gateway. This option is selected by default.

▸ **Third-Party Providers:** Select this option to add or delete alternative third-party providers.

▪ Select **Add Provider** to navigate and locate the home directory for each third-party provider. Ensure that the **lib** sub-folder includes the provider's jar file, the **data** sub-folder includes the metadata xml files. The optional **supplement** sub-folder can contain any additional files. Folder names are case-sensitive.

▪ Select **Delete Provider** to delete a selected third-party provider from the displayed list.

13) The **Installation Summary** screen displays all the components selected for installation in the previous steps. Review all the selected installation options. Select **Save** if you want to save the installation summary details in an .ini file. This is also a Saved Response file.

Select **Back** or select the appropriate window in the left pane to change your install options.

Select **Install** to begin installing Primavera Gateway.

> **Note:** Save the stored **.**ini file as a backup of your current installation and configuration choices in a secure location.

14) The **Installation Progress** window displays a success message on successful completion.

If you chose **Install and Configure Primavera Gateway** (1st option) in the **Select Installation Type** screen, the **Configuration Progress** screen displays after Primavera Gateway is successfully installed.

If you chose **Install Primavera Gateway** (2nd option) in the **Select Installation Type** screen, the **Installation Complete** screen displays.

If you chose **Install Primavera Gateway Database** (3rd option) in the **Select Installation Type** screen, the **Configuration Progress** screen displays.

> **Note:** Copy the properties files in the **wlst** folder to a save location if you want to replicate the installation using the silent installer later.

15) The **Configuration Progress** screen displays the progression of the installation and configuration tasks.

16) On the **Installation Complete** screen, select **Finish** to complete Primavera Gateway installation and close the wizard. Log in to Primavera Gateway with the Gateway Admin user profile created during installation.

Installing Primavera Gateway Using the Save Response File

Use this method to clone Primavera Gateway installations across servers. To proceed with this installation method, you need the Save Response File which captures the options selected during installation. The Save Response file is created when you click **Save** on the **Installation Summary** screen of the installation wizard.

To install Primavera Gateway in the silent mode using the save response file created from the wizard installation:

1) Locate the **Save Response File** that was created using the Primavera Gateway installation wizard.

2) In the **wlst** folder, enter or replace the `<SECURE VALUE>` for password with the actual password in the properties file.

3) Run the installer in the silent mode as follows:

For Windows installations, execute:

```
setup.exe -silent -responseFile c:\<path to>\<YourResponseFile.ini>
```

For Linux and Solaris installations, execute:

```
./runInstaller -silent -responseFile /<path to>/<YourResponseFile.ini>
```

> **Note:** The path to the .ini file must be the absolute path.

The output displays in the command console. Upon completion, the following success message displays: *The installation of Primavera Gateway completed successfully.*

4) Logs and errors from the installation are located in the following default locations:

For Windows installations, the default location is: C:\Program Files\Oracle\Inventory\logs

For Linux and Solaris installations, the default location is: <user home directory>/oraInventory/logs

Installing the Gateway Database Using the Install Utility

If you chose to only installed the Gateway application using the wizard, you can:

▶ Re-run the installation wizard, and select the **Install Primavera Gateway Database** option
For more details, *Installing Primavera Gateway Using the Wizard* (on page 13).
or

▶ Run the **Gateway-DBInstallation** utility from the **<INSTALLER_FOLDER>\GatewayUtility** folder or the **<Primavera_Gateway_Home>\pdi\snapshots\dbsetup-dist** folder

To install the Gateway database using the **Gateway-DBInstallation**:

1) Navigate to the **<Primavera_Gateway_Home>\pdi\snapshots\dbsetup-dist folder**.
2) If you are installing on a non-Microsoft Windows system, type the following command:

> **chmod 755 Gateway-DBInstallation.sh**

3) Run the following command:
   ▶ For Windows installations, run **Gateway-DBInstallation.bat**
   ▶ For Linux and Solaris installations, run **./Gateway-DBInstallation.sh**
4) Enter the following database connection details:
   ▶ **DBA User Name**: Enter the name of the database administrator.
   ▶ **DBA Password**: Enter the password for the database administrator.
   ▶ **Database Host**: Enter the host name of the Oracle database on which you will be updating the Primavera Gateway database.
   ▶ **Database Host Port**: Enter the port number of the Oracle database.
   ▶ **Database Name**: Enter the Gateway database name and select any of the following methods to connect to the database.
      ▪ **SID**: Enter the SID of the Oracle database.
      ▪ **Service**: Enter the service name of the Oracle database.
   ▶ **Schema Owner**: Enter the name of the schema owner. The owner **gatewayuser** displays by default.
   ▶ **Schema Password**: Enter the password for the schema owner.
   ▶ **Provider data folder**: Select **Add** to include all the source and destination data paths which contain XMLs with the metadata to load to the Gateway database.

For example, to install the Sample database and P6 data. In that provider data folder, include the P6provider\data folder, the sampleprovider\data folder and the sampleprovider\data\p6 folder to create the Gateway database. Otherwise, the error message: *No field mapping data found*, displays.

> **Note:** The data folder of at least two providers must be selected, in addition to the **pdi/data** folder to complete the installation successfully.

▸ Select **Test Connection**. Modify the applicable fields if the connection fails and repeat as necessary.

▸ Select **Run** to install the Gateway database.

Starting and Stopping the Primavera Gateway Domain

Depending on the operating system, use the following commands to start and stop Primavera Gateway domain.

On Windows System

Start and stop the Gateway domain on windows installations as follows:

Primavera Gateway Installed on an Admin Server

To start Primavera Gateway, from the Windows **Start** menu, select **Oracle, Primavera Gateway,** and then **Start Primavera Gateway.** This invokes the startGatewayWLDomain.cmd file.

To stop Primavera Gateway, from the Windows **Start** menu, select **Oracle, Primavera Gateway,** and then **Stop Primavera Gateway.** This invokes the stopGatewayWLDomain.cmd file.

Primavera Gateway Installed on a Managed Server

To start Primavera Gateway, from the Windows **Start** menu, select **Oracle, Primavera Gateway,** and then **Start Primavera Gateway.** This invokes the gatewayQuickStart.cmd file.

To stop Primavera Gateway, from the Windows **Start** menu, select **Oracle, Primavera Gateway,** and then **Stop Primavera Gateway.** This invokes the stopPrimavera.cmd file.

On Linux and Solaris Systems

Start and stop the Gateway domain on linux and solaris installations as follows:

Primavera Gateway Installed on an Admin Server

To start Primavera Gateway on an Admin server:

1) Enter `cd <Primavera Gateway_Home>/WLST`

2) Run `./startGatewayWLDomain.sh`

> ▪ **Notes**:

- You may need to set permissions on the startGatewayWLDomain.sh file. If so, enter the following command: `chmod 755 startGatewayWLDomain.sh`.

- You must use the <PrimaveraGateway_home>\WLST\startGatewayWLDomain.* scripts to start the Primavera Gateway domain because these scripts contain the specific memory and timezone settings required by Primavera Gateway.

To stop Primavera Gateway:

1) Enter `cd <Primavera Gateway_Home>/WLST`

2) Run `./stopGatewayWLDomain.sh`

> **Note**: You may need to set permissions on the stopGatewayWLDomain.sh file. If so, enter the following command: `chmod 755 stopGatewayWLDomain.sh`.

Primavera Gateway Installed on a Managed Server

To start Primavera Gateway on a managed server:

1) Enter `cd <Primavera Gateway_Home>/bin`, and then

2) Run `./gatewayQuickStart.sh`

> **Note**: You may need to set permissions on the startGatewayWLDomain.sh file. If so, enter the following command: `chmod 755 gatewayQuickStart.sh`.

To stop Primavera Gateway on a managed server:

1) Enter `cd <Primavera Gateway_Home>/bin`,

2) Run `./stopPrimavera.sh`

> **Note**: You may need to set permissions on the stopPrimavera.sh file. If so, enter the following command: `chmod 755 stopPrimavera.sh`.

Configuring Primavera Gateway

In This Section

Creating Users and Associating them with a Role

Gateway users and user groups are created in the Gateway WebLogic domain. By default, the following types of user roles are created using the Gateway installation wizard:

▶ PrimaveraGatewayAdmin

Users have complete access to the entire Gateway application as a user, developer, and administrator. Assign this role to create a Gateway administrator *with* complete administration privileges and data access privileges.

▶ PrimaveraGatewayAdminNoData

Users with this role can administer the Gateway application, however they do not have access to view the actual data being transferred on the Job Details page of a synchronization in the Gateway application. This role limits the user's access to sensitive data. Assign this role to create additional gateway administrators, but with *no access* to data.

▶ PrimaveraGatewayDeveloper

Users with this role can create new providers for Gateway and also customize delivered providers to support their ERP applications.

▶ PrimaveraGatewayUser

Users with this role can create, run and monitor synchronization jobs in the Gateway application. They can also view the actual data being transferred on the Job Details page of a synchronization. Assign this role to create Gateway users *with* access to data.

▶ PrimaveraGatewayUserNoData

Users with this role can create, run and monitor synchronization jobs, however, they cannot the actual data being transferred on the Job Details page of a synchronization. Assign this role to create Gateway users with *no access* to data.

Create users and assign their roles as follows:

1) Ensure the Primavera Gateway domain is running.
2) Log in to the WebLogic Administration Server Console for the Gateway domain:

    a. In a browser, enter the following location:

    http://<hostname>:<port>/console

    Where, hostname and port is the hostname and port of your Primavera Gateway domain in WebLogic. The default port is **7001**.

    b. Enter the WebLogic administrator user name and password.

3) In the **Change Center** pane, select **Lock and Edit** before you make any changes to the domain.

4) Select **Security Realms**.

5) Select **myrealm**.

6) Create users and assign them to the user groups and roles created in the previous steps as follows.

    a. Select the **Users and Groups** tab, **Users** tab, and then select **New**.

    b. Enter a **Name** and **Description** for the user.

    c. Enter a **Password** for the user and confirm it.

    d. Select **OK**.

    e. Now select the check box adjacent to the user name, and select the user

    f. In the **Settings for <user name>** pane, select the **Groups** tab.

    g. Depending on the role that you would like to assign to the user in Gateway, move one of the following items to the **Chosen** box.

- PrimaveraGatewayAdmin
- PrimaveraGatewayAdminNoData
- PrimaveraGatewayDeveloper
- PrimaveraGatewayUser
- PrimaveraGatewayUserNoData

    h. Select **Save**.

    i. Repeat step 6 for each user.

7) Select **Activate Changes**.

8) Select **Release Configuration.**

9) Verify the user name and password by logging into Primavera Gateway with the user and password that you just created.

Configuring Gateway Domain for P6 Event Notification

If you choose to use the P6 Event provider delivered in Gateway, then configure the Gateway WebLogic domain to consume P6 event messages as follows:

1) Ensure the Primavera Gateway domain is running.

2) Log in to the WebLogic Administration Server Console for the Gateway domain:

    a. In a browser, enter the following location:

    http://<hostname>:<port>/console

    Where, hostname and port is the hostname and port of your Primavera Gateway domain in WebLogic. The default port is **7001**.

    b. Enter the WebLogic administrator user name and password.

3) In the **Change Center** pane, select **Lock and Edit** before you make any changes to the domain.

4) Create a JMS server as follows:

    a. In the **Domain Structure** pane, expand **Services, Messaging, JMS Servers.**

    b. In the **Summary of JMS Servers** pane, select **New**.

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

    1. Enter a **Name** for the JMS Server. For example, *Gateway JMS Server*.

    2. Select **Create a New Store**.

    3. Select **Type** as *File Store* from the drop-down.

    4. Enter a **Name** for the File Store.

    5. Select the **Target** for the file store:

        For Admin server, select *AdminServer.*

        For Managed server, select *GatewayCluster*.

    6. Enter the **Directory** or the physical location of the file store. For example, c:\JMSFilestore.

    7. Select **OK**.

    8. Select **Finish**.

5) Create a JMS module as follows:

    a. In the **Domain Structure** pane, expand **Services, Messaging,** and **JMS Modules**

    b. In the **Summary of JMS Modules** pane, select **New**.

    1. Enter a **Name** for the JMS module.

    2. Depending on your configuration, select the **Target** for the file store, as *AdminServer,* or *GatewayCluster* for a managed server.

    3. Select **Finish**.

6) Create a Foreign Server in the JMS module as follows:

    a. In the **Domain Structure** pane, expand **Services, Messaging,** and **JMS Modules**.

    b. Select the JMS module created in step 5.

    c. On the **Configuration** tab of the **Settings for <JMS Module>** pane, select **New**.

    d. Select **Foreign Server**.

    e. Enter a **Name** for the foreign server.

    f. Depending on the configuration, select the **Target** as *AdminServer,* or *gatewayCluster* for a Managed server.

    g. Select **Advanced Targeting** and then select **Create a New SubDeployment**.

    h. Enter a name for the **subdeployment** and then select **OK**.

    i. Select the created subdeployment from the drop-down.

    j. Depending on your configuration, select the **Target** as *AdminServer,* or *gatewayCluster* for a Managed server, and the JMS server created in step 4.

    k. Select **Finish**.

     l.   Select **Save** to save the foreign server with a subdeployment.

7) Enter configuration settings for the foreign server created as follows:

    a. Select the foreign server created in step 6.

    b. In the **Settings for <Foreign Server Name>** pane, select the **Configuration tab**, and then the **General** tab.

    c. Select the new foreign server created and enter values for the following configuration settings:

- In the **JNDI Initial Context Factory** field, retain the default value.
- In the **JNDI Connection URL** field, enter the URL to the P6 EPPM domain in the format: *t3://<P6_EPPM_host>:<port>/*
- In the **JNDI Properties Credential** field, enter the P6 EPPM WebLogic domain password.
- In the **Confirm JNDI Properties Credential** field, reconfirm the entered password.
- In the **JNDI Properties** field, enter the P6 EPPM WebLogic domain user name in the following format: *java.naming.security.principal=<P6 EPPM WebLogic domain user name>*
- Select **Save**. The newly created foreign server displays in the **Configuration** tab.

    d. Create a connection factory for the foreign server as follows:

       1. In the **Settings for <Foreign Server Name>** pane, select the **Configuration tab**, and then the **Connection Factories** tab.

       2. Select **New**.

       3. Enter a **Name** for the connection factory.

       4. Enter the **Local JNDI Name**. For example, *jms/newCF*.

> **Note:** Make a note of the value entered in this field. You will need to enter this value to set up an event provider to a P6 Application deployment.

       5. Enter the JNDI name of the P6 EPPM Connection Factory as the **Remote JNDI Name**.

       6. Select **OK**.

    e. Create a destination for the foreign server as follows:

       1. In the **Settings for <Foreign Server Name>** pane, select the **Configuration tab**, and then the **Destinations** tab.

       2. Select **New**.

       3. Enter a name for the foreign destination.

       4. In the **Local JNDI Name**, enter the name of the JMS queue used by Gateway. For example, *jms/newGWQueue*.

> **Note:** Make a note of the value entered in this field. You will need to enter this value to set up an event provider to a P6 Application deployment.

       5. Enter the name of the P6 EPPM JMS queue as the **Remote JNDI Name**. For example, *jms/P6Queue*.

       6. Select **OK**.

8) In the **Change Center** pane, select **Activate Changes** to enforce all the changes made to the domain.

Using the Gateway Configuration Utilities

The following configuration utilities are provided in Primavera Gateway. Run each utility for the purpose described below:

▶ **Gateway-P6Setup**: Run this utility to add User Defined Fields (UDFs) and codes to P6 EPPM.

Access the Gateway-P6Setup utility from the **<Primavera_Gateway_Home>\pdi\snapshots\dbsetup-dist** folder or the **<INSTALLER_FOLDER>\GatewayUtility** folder.

▶ **Gateway-Configuration**: Run this utility to manage metadata, and add or remove providers and customizations.

The following configuration options are available:

  ▶ Manage Gateway metadata
  ▶ Manage providers
  ▶ Manage customizations

Access the Gateway-Configuration utility from the **<Primavera_Gateway_Home>\pdi\snapshots\dbsetup-dist** folder or the **<INSTALLER_FOLDER>\GatewayUtility** folder.

> **Note:** Before executing the utilities on Windows, Linux, or Solaris, ensure the following:
>
> ▪ The **bin** folder of the supported Java JDK is included in the PATH.
> ▪ If there are other JDK bin folders in the PATH, then the supported Java JDK should be listed first.

Adding User-Defined Fields (UDFs) and Codes to P6 EPPM

You have the option to add User-Defined Fields (UDFs) and codes to P6 EPPM and to prepare the P6 EPPM database for synchronizing the data. Use this procedure to also add UDFs and codes from Oracle Primavera Prime, Primavera Unifier, to P6 EPPM.

For example, if your application has UDFs or codes that P6 EPPM does not have, you can add these UDFs or codes using an XML file that you edit and then point to it in the Gateway Configuration utility. The XML file needs to conform to the DataConfiguration.xsd schema. For more information on the DataConfiguration.xsd schema, see the *Primavera Gateway Developer's Guide*.

To add your application UDFs or codes to P6 EPPM:

1) Ensure that your **JAVA_HOME** variable is pointing to a supported JDK folder.

> **Note:** Ensure the following:
>
> ▪ The **bin** folder of the supported Java JDK is included in the PATH.

- If there are other JDK bin folders in the PATH, it should be listed first.

2) Navigate to the **<Primavera_Gateway_Home>/pdi/snapshots/dbsetup-dist folder**.

3) If you are installing on a non-Microsoft Windows system, type the following command to give execute permission for the utility:

chmod 755 Gateway-P6Setup.sh

4) Run the following command:
   - For Windows installation, run **Gateway-P6Setup.bat**
   - For Linux and Solaris installations, run **./Gateway-P6Setup.sh**

5) Enter the following information in the **Primavera P6 Data Setup Utility** dialog box:

   a. In the **P6 Admin User Name** field, enter the user name of a user who has admin privileges on the P6 deployment.

   b. In the **P6 Admin Password** field, enter the password of the admin user.

   c. In the **P6 Adapter Endpoint URL** field, enter the address of the **SyncServiceV1 wsdl** file that is served by the P6 adapter you deployed as a prerequisite. This address would follow the format:

   <protocol>://<hostname>:<port number>/p6adapter/services/SyncServiceV1?wsdl

   d. In the **P6 database instance ID**, enter the system ID (SID) for the P6 database instance.

   e. In the **P6 Data XML File Path**, enter or select **Browse** to specify the path to the XML file that you modified with the UDFs or codes which you want to add to P6 EPPM.

   For a P6 EPPM with Sample provider integration, ensure you have installed the Sample provider, and now select the **SampleP6DataSetup.xml** in the **<Primavera_Gateway_Home>\sample\sampleprovider\data\p6data** folder. The path you enter must be the absolute path to the file.

   For a P6 EPPM with Oracle Primavera Prime integration, select the **PrimeP6DataSetup.xml** file in the **<Primavera_Gateway_Home>\primeprovider\data\p6data** folder. The path you enter must be the absolute path to the file.

   For a P6 EPPM with Primavera Unifier integration, locate the **UnifierP6DataSetup.xml** file for the Unifier provider. The path you enter must be the absolute path to the file.

   For a P6 EPPM with any third-party enterprise application integration, select the relevant **<third-party provider P6datasetup>XML** file from the **data** folder. The path you enter must be the absolute path to the file.

   f. Select **Run**. The UDFs or codes will be imported into the P6 EPPM deployment you selected.

   g. Select **Finish** to close the utility.

Adding P6 User-Defined Fields and Codes to Providers

To have additional P6 UDFs and codes available for synchronization and field mapping templates for a selected provider, the UDFs and codes must be included in the:

- metadata.xml
- P6ExtraMetaData.xml

▶ PDIExtraMetaData.xml

Adding P6 UDFs and Codes to the Sample Provider

Add UDFs or codes in the P6ExtraMetaData and PDIExtraMetaData files in the **<Primavera_Gateway_Home>\sample\sampleprovider\data\p6** folder.

Adding P6 UDFs and Codes to the Prime Provider

Add UDFs or codes in the P6ExtraMetaData and PDIExtraMetaData file in the **<Primavera_Gateway_Home>\primeprovider\data** folder.

Adding P6 UDFs and Codes to the Unifier Provider

Add UDFs or codes in the PDIExtraMetaData.xml file in the **<Primavera_Gateway_Home>\unifierprovider\data** folder.

Adding P6 UDFs and Codes for Third-party Providers

For all third-party providers, add UDFs or codes in the P6ExtraMetaData.xml and PDIExtraMetaData.xml files located under the **data** folder of the third-party provider.

> **Note:** Ensure that **P6data** folder is listed before the third-party provider folders.Otherwise the third-party provider fails to load.

Adding, Updating, or Customizing Gateway Metadata

After modifying the P6ExtraMetaData and PDIExtraMetaData files, run the **Gateway-Configuration** utility to add your application's UDFs or Codes in the Gateway metadata. The utility is located in the following location:

▶ On Windows, go to **C:\<Primavera_Gateway_Home>\pdi\snapshots\dbsetup-dis**t
▶ On Linux and Solaris, go to **C:/<Primavera_Gateway_Home>/pdi/snapshots/dbsetup-dist**

1) Navigate to the **<Primavera_Gateway_Home>/pdi/snapshots/dbsetup-dist** folder.
2) If you are installing on a non-Microsoft Windows system, type the following command to give execute permission for the utility:

   chmod 755 Gateway-Configuration.sh

3) Run the following command:
   ▶ For Windows installations, run **Gateway-Configuration.bat**
   ▶ For Linux and Solaris installations, run **./Gateway-Configuration.sh**

4) In the **Primavera Gateway Configuration Utility** dialog box, enter the following information:
   a. Select **Manage Metadata**, and select **Next**.
   b. Select any of the following options to manage Gateway metadata and select **Next**.
      ▪ **Replace Gateway Metadata**
      ▪ **Update Gateway Metadata**
      ▪ **Customize Gateway Metadata**

      > **Note:** The **Customize Gateway Metadata** option only updates the Gateway database with metadata.

5) Based on the **Manage Metadata** option selected in the previous step, enter the following database connection details:

   a. In the **DBA User Name** field, enter the user name of the oracle database administrator.

   b. In the **DBA Password** field, enter the password of the oracle database administrator.

   c. In the **Database Host** field, enter the host name of the Oracle database on which you will be updating the Primavera Gateway database.

   d. In the **Database Host Port** field, enter the port number of the Oracle database.

   e. In the **Database Name** field, enter the Gateway database name and select any of the following methods to connect to the database.

      ▪ In the **SID** field, enter the SID of the Oracle database.

      ▪ In the **Service** field, enter the service name of the Oracle database.

   f. In the **Schema Owner** field, enter the schema owner name.

   g. In the **Schema Password** field, enter the password for the schema owner.

   h. In the **Provider data folder** field, verify the path name for the following, as applicable:

      ▪ If you are using the Sample provider, then verify that this field contains the default Sample directory that contains all the Sample XML metadata/mapping templates.

      ▪ If you chose to install additional providers, then verify that this field contains the home directory for each provider. The XML files in the associated **data** subdirectory must include all the required data to load metadata and mapping templates.

      For more information about these files, see the *Gateway Developer's Guide*.

      To add providers, select **Add** and locate the **data** folder for each provider you wish to add.

      To remove providers, select a provider and select **Remove**.

   i. In the **Gateway Data Folder** field, verify the path name to the PDI data folder. For example, C:/PrimaveraGateway/pdi/data.

   j. If you chose to **Customize Gateway Metadata**, then specify the XML file in the **Customization XML** field. Enter the path name or select **Browse** and locate the Customization.xml file for the specific provider.

      Note: This field displays only when you select the Customize Gateway Metadata option.

   k. Select **Test Connection**. If the connection fails, modify the applicable fields and repeat as necessary.

   l. Select **Run** to run the configuration utility.

Adding or Removing Providers

To add or remove providers, including Primavera providers, to Primavera Gateway:

1) Stop the Gateway domain before adding or removing providers or customizations.

2) Ensure the following:

   ▸ The **bin** folder of the supported Java JDK is included in the PATH.

   ▸ If there are other JDK bin folders in the PATH, they should be listed first.

3) Navigate to the **<Primavera_Gateway_Home>/pdi/snapshots/dbsetup-dist** folder.

4) If you are installing on a non-Microsoft Windows system, type the following command:

   chmod 755 Gateway-Configuration.sh

5) Run the following command:

   ▸ For Windows installations, run **Gateway-Configuration.bat**

   ▸ For Linux and Solaris installations, run **./Gateway-Configuration.sh**.

6) In the **Primavera Gateway Configuration Utility** dialog box, enter the following information:

   a. Select **Manage Providers**, and select **Next**.

   Selecting this option updates the gateway.ear file and the Gateway database with custom metadata from the XML files.

   b. In the **Select Gateway ear file (gateway.ear) location**, enter or click **Browse** to locate the .ear file.

   c. In the **Gateway domain location** field, enter or click **Browse** to specify the Gateway domain.

   d. In the **Installed Gateway Providers** field, review the list of providers displayed and perform any of the following actions:

      ▪ To add a provider, select **Add Provider**, and navigate to the location of the provider.

      ▪ To remove a provider listed in the Gateway user interface, select the provider in the **Remove** column.

7) Enter the following database connection details:

   a. In the **DBA User Name** field, enter the name of the database administrator.

   b. In the **DBA Password** field, enter the password for the database administrator.

   c. In the **Database Host** field, enter the host name of the Oracle database on which you will be updating the Primavera Gateway database.

   d. In the **Database Host Port** field, enter or verify the port number of the Oracle database.

   e. In the **Database Name** field, enter the Gateway database name and select any of the following methods to connect to the database.

      ▪ In the **SID** field, enter the SID of the Oracle database.

      ▪ In the **Service** field, enter the service name of the Oracle database.

   f. In the **Schema Owner** field, enter the database user name to be used for the Primavera Gateway database. (This name should match the **Schema   Owner** name when you installed Primavera Gateway.)

   g. In the **Schema Password** field, enter the database password to be used for the Primavera Gateway database.

   h. Select **Test Connection**. Modify the applicable fields if the connection fails and repeat as necessary.

   i. Click **Update**. The status field displays a success message.

   j. Click **Finish** to exit the configuration utility.

   > **Note:** Redeploy gateway.ear in WebLogic to ensure the changes are reflected in Primavera Gateway.

Adding or Removing Customizations

Use this procedure if a customization includes XML files, jar files, and other files such as Java customization. If you have installed Gateway on a managed server, see ***Updating the gateway.ear File*** (on page 31) for more details.

> **Note:** If a customization does not include any jar files, and uses Groovy customization, then upload the XML file from the Gateway user interface.

To add or remove customization files in Gateway:

1) Stop the Gateway domain before adding or removing providers or customizations.
2) Ensure the following:
   ‣ The **bin** folder of the supported Java JDK is included in the PATH.
   ‣ If there are other JDK bin folders in the PATH, it should be listed first.
3) Navigate to the **<Primavera_Gateway_Home>/pdi/snapshots/dbsetup-dist** folder.
4) If you are installing on a non-Microsoft Windows system, type the following command for execute privileges:

   chmod 755 Gateway-Configuration.sh
5) Run the following command:
   ‣ For Windows installations, run **Gateway-Configuration.bat**
   ‣ For Linux and Solaris installations, run ./**Gateway-Configuration.sh**
6) In the **Primavera Gateway Configuration Utility** dialog box, enter the following information:
   a. Select **Manage Customizations**, and select **Next**.

   Selecting this option updates the gateway.ear file and the Gateway database with custom metadata from the customization XML files.
   b. In the **Select Gateway ear file (gateway.ear) location**, enter or select **Browse** to locate the .ear file.
   c. In the **Installed Gateway Customizations** field, review the list of customization files displayed in the dialog box, and perform any of the following actions:
      ▪ To add a customization, select **Add Customization**, and navigate to the folder location of the customization file.
      ▪ To remove a customization, select the customization in the **Remove** column.
7) Enter the following database connection details:
   ‣ **DBA User Name:** Enter the name of the database administrator.
   ‣ **DBA Password**: Enter the password for the database administrator.
   ‣ **Database Host:** Enter the host name of the Oracle database on which you will be updating the Primavera Gateway database.
   ‣ **Database Host Port**: Enter the port number of the Oracle database.
   ‣ **Database Name:** Enter the Gateway database name and select any of the following methods to connect to the database.
      ▪ **SID**: Enter the SID of the Oracle database.
      ▪ **Service:** Enter the service name of the Oracle database.

‣ **Schema Owner:** Enter the name of Gateway schema owner. (This name should match the name that was entered when you installed Primavera Gateway.)

‣ **Schema Password:** Enter the password for the schema owner.

‣ Select **Test Connection**. Modify the applicable fields if the connection fails and repeat as necessary.

‣ Select **Update**. The status field displays a success message.

‣ Select **Finish** to exit the configuration utility.

Updating the gateway.ear File

Complete the following steps to update the gateway.ear file if it has been modified:

1) Ensure the Primavera Gateway domain is running.
2) Log in to the WebLogic Administration Server Console for the Gateway domain:
   a. In a browser, enter the following location:

   http://<hostname>:<port>/console

   Where, hostname and port is the hostname and port of your Primavera Gateway domain in WebLogic. The default port is **7001**.

   b. Enter the WebLogic administrator user name and password.
3) In the **Change Center** pane, select **Lock & Edit**.
4) In the **Domain Structure** pane, select **Deployments**.
5) In the **Deployments** tab, select **gateway** in the **Name** column and select **Stop** to stop the deployment.
6) Select **Update** to update gateway.ear.
7) Save the changes from the left pane (**Activate Changes**).
8) Restart **gateway.ear** deployment.

Configuring Gateway Settings

Use the **Settings** dialog box to configure Primavera Gateway settings such as the Help location or whether to create new code values during synchronization. The settings available in this dialog box may vary depending on the specific providers Primavera Gateway is currently using.

The following settings must be configured for a Primavera Gateway deployment.

To configure the settings:

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

   On the **General** tab:

   ‣ **Help URL**: The Oracle Technology Network (OTN) Help location is http://docs.oracle.com/cd/E63838_01/help/en/index.html. If you deployed the local Help, enter the default Help URL location as: *http://<hostname>:<port>/gatewayhelp.*

   ‣ **Maximum number of job logs to display**: Enter a value to control the number of logs displayed on the Monitoring page.

▸ **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. By default, the duration is set to **30** minutes. The job status of a timed-out synchronization is set to **Failed.**

▸ **Maximum concurrent jobs in a node:** Enter the maximum number of jobs that can be executed concurrently at a node.

▸ **Job Polling Interval (in seconds):** Enter the wait time interval in seconds to check the database if there are new jobs to run.

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 option to enable the creation of new resource code values in the P6 EPPM resource code dictionary if these values do not already exist.

▸ **Create new project code values during synchronization to P6**: Select this option to enable the creation of new project code values in the P6 EPPM project code dictionary if these values do not already exist.

▸ **Create new activity code values during synchronization to P6**: Select this option to enable the creation of new global activity code values in the P6 EPPM activity code dictionary if these values do not already exist.

▸ **Include time zone when exporting from P6:** Select this option 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 P6 - Prime integration.

▸ **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.

▸ **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.

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.

▸ **Email Address**: Enter the email address for the user who set up Primavera Gateway.

▸ **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.

Configuring Deployment Targets

Depending on the applications you chose for sharing data, and the providers installed in Gateway, you must configure each provider and specify a deployment target in the Gateway user interface. This information is required to ensure Gateway knows where to receive and send data. For more details on how to add, edit, or configure a deployment in Gateway, see the relevant *Connecting Guide*.

Adding an EnterpriseTrack Deployment Connection

To move data between applications, Primavera Gateway needs to know where to get and send information. If you choose to integrate with Instantis EnterpriseTrack, add an application deployment connection for Oracle Instantis EnterpriseTrack by specifying an **Endpoint** URL as follows:

1) Enter the Primavera Gateway URL in the format:

   http://<host name>:<port number>/gateway

   Where, <host name> and <port number> should match those of your Primavera Gateway domain.

2) Login to Primavera Gateway with administration credentials.
3) Select **Configuration**.
4) Select **Deployments**.
5) Select **Add**.
6) Follow the steps in the **Add Deployment** wizard to name the deployment and set the following parameters:
   ‣ **EnterpriseTrack Login ID:** Enter the login ID that has all the necessary permissions to update project attributes. Otherwise, project import may fail.
   ‣ **EnterpriseTrack Password:** Enter the password of the EnterpriseTrack user.
   ‣ **EnterpriseTrack Login URL:** Enter the URL for accessing the application in the format: *http://<server_name>/SiteWand/Submission/<accountname>*.
   ‣ **EnterpriseTrack Initiative:** Enter a valid initiative to create or update a project.
   ‣ **Date Format:** Enter a valid date format supported in EnterpriseTrack.
   ‣ **EnterpriseTrack Connector Debug Flag:** Set the flag value to Y if you want to enable debugging generate a log file.
7) Select **Test Connection** ensure connectivity with Gateway.
8) Select **Save**.

Adding a P6 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.

Add a P6 deployment connection as follows:

1) Enter the Primavera Gateway URL in the format:

http://<host name>:<port number>/gateway

Where, <host name> and <port number> should match those of your Primavera Gateway domain.

2) Log in to Primavera Gateway with administration credentials.
3) Select **Configuration**.
4) Select **Deployments**.
5) Select **Add** to invoke the **Add Deployment** wizard.
6) On the **General** tab, select **P6 Provider**, and name the deployment.

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

7) On the **Deployment** tab, set up P6 connectivity from Gateway:
   ‣ **User Name:** Enter the name of the P6 administrator.
   ‣ **Password:** Enter the case-sensitive password of the P6 administrator.
   ‣ **Endpoint:** Enter the URL to connect to the P6 adapter in the format:
     http:<host name>:<port>/p6adapter/services/SyncServiceV1
   ‣ **Authentication Type:** Select **SAML 2.0** or **Username Token** from the drop-down.
     ▪ **SAML 2.0 Token File:** If you chose SAML 2.0 authentication, then browse or enter the location of the downloaded SAML 2.0 token XML file that is used by the P6 adapter for authentication.
   ‣ **P6 Database Instance ID:** Enter the database instance ID associated with the P6 application.
   ‣ **Enable Encryption:** If you want to enable encryption for the P6 adapter, select **True** and enter the following information:
     ▪ **Keystore File:** Enter, or browse and locate the keystore file.
       For more details on how to generate a keystore file and keystore password, see ***Enabling Encryption Between Primavera Gateway and P6 Adapter*** (on page 36).
     ▪ **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) (Optional) If you choose to synchronize P6 events on the Web using the delivered *P6 Event provider*, enter the following information in the **Event Provider** tab:
   ‣ In the **JMS Connection Factory** field, enter the local JNDI name from the Connection Factory object created in ***Configuring Gateway Domain for P6 Event Notification*** (on page 22). The connection factory contains a set of configuration parameters to connect with the P6 event provider.
   ‣ In the **JMS Queue** field, enter the local JNDI name of the JMS Queue used to send and receive messages on P6 events from the destination setup created in ***Configuring Gateway Domain for P6 Event Notification*** (on page 22).
9) Select **Test Connection** to ensure the connectivity with P6 is established.
10) Select **Save**.

Adding a Prime Deployment Connection

To move data between applications, you must first add application deployment connections for Prime and P6 EPPM so Primavera Gateway knows where to retrieve and send information.

To add an application deployment connection you must specify the **Endpoint** URL:

1) Login to Primavera Gateway with administration credentials.
2) Select **Configuration**.
3) Select **Deployments**.
4) Select **Add** to invoke the **Add Deployment** wizard.
5) In the **General** tab, select the provider from the drop-down and name the deployment.
6) In the **Deployment** tab, set up Prime connectivity from Gateway as follows:
   ▸ **User Name:** Enter the name of the user with administration access to the Prime application.
   ▸ **Password:** Enter the password to the Prime application.
   ▸ **End Point:** Enter the URL to connect to the Prime application in the format: *http://<server>:port/primavera*.
7) Select **Test Connection** to ensure the connectivity with Prime is established.
8) Select **Save**.

Adding a Sample Deployment Connection

To move data between applications, Primavera Gateway needs to know where to get and send information. If you choose to integrate with the Sample provider, add an application deployment connection for the Sample provider by specifying an **Endpoint** URL as follows:

1) Enter the Primavera Gateway URL in the format:
   http://<host name>:<port number>/gateway
   Where, <host name> and <port number> should match those of your Primavera Gateway domain.
2) Login to Primavera Gateway with administration credentials.
3) Select **Configuration**.
4) Select **Deployments**.
5) Select **Add**.
6) Follow the steps in the **Add Deployment** wizard to name the deployment and set the following parameters:
   ▸ **Deployment Name**: Enter a name for the Sample provider deployment.
   ▸ **Description**: Enter a description for the deployment.
   ▸ **User Name**: Enter the name of the user having access to the Sample provider deployment.
   ▸ **Password:** Enter the user's password.
   ▸ **XML File Source**: Enter the location of the xml file that is to be used by the Sample provider.

▸ **Data Source Type**: Select the format of the data source being used. Choices include: **File**, **Database**.

7) Select **Test Connection** ensure connectivity with Gateway.

8) Select **Save**.

Adding 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.

Add a Unifier deployment connection as follows:

1) Login to Primavera Gateway with administration credentials.

2) Select **Configuration**.

3) Select **Deployments**.

4) Select **Add** to invoke the **Add Deployment** wizard.

5) In the **General** tab, select the provider from the drop-down and   name the deployment.

6) In the **Deployment** tab, set up Unifier connectivity from Gateway as follows:

▸ **Short Name:** Enter a one-word, unique, short name, up to eight characters of your company name. The Short Name is used throughout Unifier in place of the company name.

▸ **Authentication Code:** Enter a unique code used when data is integrated with Unifier from external systems via Web Services.

▸ **End Point URL:** Enter the URL to connect to the Unifier application.

7) Select **Test Connection** to ensure the connectivity with Unifier is established.

8) Select **Save**.

Enabling Encryption Between Primavera Gateway and P6 Adapter

To ensure all requests and responses between Primavera Gateway and P6 Adapter are encrypted:

1) Create a Keystore file as follows:

   a. Create a folder, for example, C:\keystore.

   b. Use the Java keytool genkey command to create a keystore with the private key:

      From the command line, execute:

```
keytool -genkey -alias <alias_name> -keyalg RSA -sigalg SHA1withRSA
-keypass <keyPassword> -storepass <storePassword> -keystore <keystore
file location>
```

      Where:

`<alias>` is the key alias

`<keyPassword>` is the password of the private key

`<storePassword>` is the password of the keystore

      For example:

```
keytool -genkey -alias myAlias -keyalg RSA -sigalg SHA1withRSA
-keypass myPassword -storepass myPassword -keystore
c:\keystore\keystore.jks
```

   c. Enter information for each of the following questions:

- What is your first and last name?
  Enter the Gateway host name.
- What is the name of your organization?
- What is the name of your city or locality?
- What is the name of your state or province?
- What is the two-letter country code for this unit? For example, US.
- Is CN=<Gateway host name>, OU=<organization unit name>, O=<organization name>, L=<location>, ST=<state code>, C=<country code> correct? Enter Y or N.

> **Note:** If P6Adapter is deployed on other than a Gateway machine, then copy the keystore folder with keystore.jks to the P6Adapter machine.

2) In the Gateway user interface, select the **Configuration** tab and enter deployment information for P6. For more details, see ***Adding a P6 Deployment Connection*** (on page 33).

3) In P6 EPPM administration application:

   a. Enter the keystore information that was entered in the keystore file. The values must be identical.

   b. Modify the message protection node setting as follows:

- Set the **Require Timestamp** value as *True*.
- Set the **Require Digital Signature for Incoming Messages** value as *True.*
- Set the **Require Encryption for Incoming Messages** value as *True.*
- In the **KeyStore Type** field, enter *JKS.*
- In the **File Location** field, enter the location of the .jks file. For example, c:\keystore\keystore.jks.
- In the **KeyStore Password** field, enter the password for the keystore file provided in keytool command.
- In the **Private Key Alias** field, enter the alias name provided in keytool command.
- In the **Private Key Password** field, enter the private key password for the keystore file provided in the keytool command.
- Set the **Encrypt Response** value as *True.*

4) After encryption is set, restart the P6 adapter domain in WebLogic.

Configuring Online Help

Primavera Gateway provides two configuration options you can use to set up online help:

- Host the Online Help on the Oracle Technology Network (default configuration).
- Deploying Online Help locally.

Hosting Online Help on Oracle Technology Network (OTN)

This is the default configuration for the application online help. The online help is hosted on the Oracle Technology Network (OTN) website where it is accessed when users click the **Help** button in the Gateway application. The benefit of using this configuration is that the content on the OTN website is continually updated and you can be sure users are accessing the most current documentation.

The URL of the online help hosted on the OTN website is preconfigured in the online help location setting in the Gateway Configuration Settings.

Deploying Online Help Locally

If you want to deploy the application online help locally, you must download the online help WAR file from the Oracle Technology Network (OTN) website and deploy it in your environment. The WAR file can be deployed in the same domain as Primavera Gateway or in a separate domain.

You can download the online gatewayhelp WAR file from the following URL:

http://docs.oracle.com/cd/E63838_01/help/war/gatewayhelp.war

After you download and deploy the Online Help, you must specify the URL to access the online help in the Configuration Settings of the Gateway application. For information about configuring the Online Help location setting, refer to *Configuring Gateway Settings* (on page 31).

To deploy the Online Help locally:

1) Download the Online Help WAR file from the OTN website.
2) Log in to the WebLogic Administration Console at
   `http://<hostname>:<port>/console.`
3) In the **Change Center** pane, click **Lock & Edit**.
4) In the **Domain Structure** pane, click **Deployments**.
5) In the **Summary of Deployments** pane, in the **Control** tab, click **Install**.
6) In the **Install Application Assistant** pane:
   a. Enter the path of the directory where the online help WAR file is located.
   b. Select the **gatewayhelp.war** option.

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

   c. Select the **Install this deployment as an application** option.
   d. Depending on your configuration, select the **Target** as AdminServer or GatewayCluster for a managed server.
7) Click **Next**.
8) Review the configuration settings you have chosen, and then click **Finish** to complete the installation.
9) In the **Settings for Primavera** window, click **Save**.

10) Select **Activate Changes**.

11) To test the online help deployment, launch a web browser and enter the URL of the online help deployment using this address:

```
http://<hostname>:<port>/gatewayhelp/en/user/helpmain.htm
```

Uninstalling Primavera Gateway

Uninstall Primavera Gateway as follows:

1) Invoke the Uninstall wizard as follows:

   ‣ For Windows, from the **Start** menu, select **Programs, Oracle-Primavera Gateway, Uninstall Primavera Gateway**.

   ‣ For Linux and Solaris, execute the following commands:

   cd <GatewayHome>/oui/bin

   ./runInstaller -deinstall

2) On the **Welcome** screen, click **Next**.

3) On the **Deinstall Oracle Home** screen, click **Deinstall**.

4) On the **Deinstallation Progress** screen select any of the following buttons to confirm the uninstall:

   ‣ Click **Yes** to uninstall Primavera Gateway.

   ‣ Click **No** to uninstall Primavera Gateway without deleting the Oracle Home directory.

5) On the **Deinstallation Complete** screen, click **Finish** to exit the wizard.

6) For Windows, from the **Start** menu, select **Programs, Oracle WebLogic,** and then **User Projects** and delete the Gateway domain that was created at installation.

7) Delete the Gateway domain folder.

   ‣ For admin server, delete the Gateway domain folder from the **<WebLogic_HOME>/user_projects/domains** directory.

   ‣ For managed server, delete the Gateway domain folder from the **<WebLogic_HOME>/user_projects/domains** and **<WebLogic_HOME>/user_projects/applications** directories.

8) (For Managed server only) Run the RCU utility to drop the repository.

9) Log in to the Oracle database and drop the Gateway schema user that was created at installation.

10) Delete the Primavera Gateway home folder that was created at installation.

For More Information

In This Section

Where to Get Documentation

Complete documentation libraries for Primavera Gateway releases are available on the Oracle Technology Network (OTN) at:

http://www.oracle.com/technetwork/documentation/default-1923957.html

From this location you can either view libraries online or download them to have local copies. We recommend viewing them from OTN to ensure you always access the latest versions, including critical corrections and enhancements.

Primavera Gateway is configured to access its help system on OTN. However, a downloadable version of the Gateway help system is also available on OTN if you need to download, deploy, and access a local copy.

The documentation assumes a standard setup of the product, with full access rights to all features and functions.

The following table describes the core documents available for Primavera Gateway and lists the recommended readers by role.

Title	Description
Gateway Help	Describes how to work with Primavera Gateway and provides information to help users accomplish tasks. All users should read the Help.
Gateway Developer's Guide	Provides information on how third-party systems such as enterprise resource management (ERP) and enterprise asset management (EAM) systems can create their own providers in order to integrate with Primavera products. Developers of third-party providers that integrate with Primavera products via Primavera Gateway should read this book.

Title	Description
Gateway Customization Guide	Provides information on how to customize an existing third-party integration. Developers interested in customizing existing third-party providers that integrate with Primavera products via Primavera Gateway should read this book.
Gateway Provider Reference Guide	Provides a list of the business objects available for each supported provider. Developers of third-party providers that integrate with Primavera products via Primavera Gateway should read this book.
EBS Provider Reference Guide	Provides a list of the business objects available for the EBS provider. Developers of third-party providers that integrate with Primavera products via Primavera Gateway should read this book.
VCP Provider Reference Guide	Provides a list of the business objects available for the VCP provider. Developers of third-party providers that integrate with Primavera products via Primavera Gateway should read this book.
Manual Deployment Guide	Provides information on how to manually install and configure Primavera Gateway. The Primavera Gateway network administrator/database administrator and the administrator for the third-party or ERP system should read this guide.
Gateway Installation and Configuration Guide	Provides information on how to install and configure Primavera Gateway. Primavera Gateway is a product that facilitates integrations with Primavera products and third-party systems such as enterprise resource management (ERP) and enterprise asset management (EAM) systems. The Primavera Gateway network administrator/database administrator and the administrator for the third-party or ERP system should read this guide.
Gateway Upgrade Guide	Provides a sequence of procedures that must be completed to upgrade to a new version of Primavera Gateway. The Primavera Gateway network administrator/database administrator and the administrator for the third-party or ERP system should read this guide.

Title	Description
Gateway Performance and Sizing Guide	Provides hardware and software requirements for deploying Primavera Gateway. The Primavera Gateway network administrator/database administrator and the administrator for the third-party or ERP system should read this guide.
Gateway Security Guide	Provides guidelines on establishing a highly secure environment for all Primavera Gateway environments. The Primavera Gateway network administrator/database administrator and the administrator for the third-party or ERP system should read this guide.
Gateway API Programmer's Guide	Provides instructions on how to access and use Primavera Gateway REST APIs. The Primavera Gateway network administrator/database administrator and Primavera Gateway users having the Gateway Developer role should read this guide.
Connecting with Instantis EnterpriseTrack	Provides instructions on how to setup the integration environment for Oracle Instantis EnterpriseTrack in Primavera Gateway. The Primavera Gateway network administrator/database administrator and the administrator for the third-party system should read this guide.
Connecting Prime and P6 EPPM	Provides instructions on how to setup the integration environment between Oracle Primavera Prime and P6 Enterprise Project Portfolio Management in Primavera Gateway. The Primavera Gateway network administrator/database administrator and the administrator for the third-party system should read this guide.
Connecting Unifier and P6 EPPM	Provides instructions on how to setup the integration environment between Oracle Primavera Unifier and P6 Enterprise Project Portfolio Management in Primavera Gateway. The Primavera Gateway network administrator/database administrator and the administrator for the third-party system should read this guide.
Migrating P6 Data Between Distinct Environments	Provides instructions on how to setup the integration environment between distinct P6 deployments to transfer P6 data in Primavera Gateway. The Primavera Gateway network administrator/database administrator and the administrator should read this guide.

Title	Description
Connecting E-Business Suite	Provides instructions on how to setup the integration environments for Oracle E-Business Suite with P6 Enterprise Project Portfolio Management and Instantis EnterpriseTrack in Primavera Gateway.
	The Primavera Gateway network administrator/database administrator and the administrator for the third-party system should read this guide.
Connecting Value Chain Planning and P6 EPPM	Provides instructions on how to setup the integration environment between Oracle Value Chain Planning and P6 Enterprise Project Portfolio Management in Primavera Gateway.
	The Primavera Gateway network administrator/database administrator and the administrator for the third-party system should read this guide.
Configuring Gateway for Single Sign On	Provides instructions on how to configure Oracle Access Manager (OAM) and then enable Single Sign On for Primavera Gateway.
	The Primavera Gateway network administrator/database administrator should read this guide.
Primavera Cloud Service Administrator's Guide	This guide describes how to configure and administer Primavera products hosted on the Oracle Cloud for industries. It supersedes all the other installation and configuration guides for Primavera products, since they are for on-premises deployments.
	Cloud administrators should read this guide.
Gateway Licensing Information User Manual	Lists licensing information of all third-party software that is used or associated with the Oracle software program.
Tested Configurations	Lists the configurations that have been tested and verified to work with Primavera Gateway.
	The Primavera Gateway network administrator/database administrator and the administrator for the third-party or ERP system should read this guide.

Distributing Information to the Team

You can copy the online documentation to a network drive for access by project participants. Each team member can then view or print those portions that specifically relate to his or her role in the organization.

Throughout this documentation, the Security Guidance icon 🛡 helps you to quickly identify security-related content to consider during the installation and configuration process.

Where to Get Training

To access comprehensive training for all Primavera products, go to:

http://education.oracle.com

Oracle Learning Library

The Oracle Learning Library (OLL) provides online learning content covering Primavera products. Content includes videos, tutorials, articles, demos, step-by-step instructions to accomplish specific tasks, and self-paced interactive learning modules.

To access the learning library's Primavera content, go to:

http://www.oracle.com/goto/oll

Where to Get Support

If you have a question about using Oracle products that you or your network administrator cannot resolve with information in the documentation or help, click http://support.oracle.com/. This page provides the latest information on contacting Oracle Global Customer Support, knowledge articles, and the support renewals process. For more information about working with Support, visit https://support.oracle.com/epmos/faces/DocumentDisplay?id=888813.2 to view **Support Tools & Tips**.

To get the latest information about Critical Patch Updates, visit http://www.oracle.com/technetwork/topics/security/alerts-086861.html.

Primavera Gateway integrates with different Oracle applications; when you create a Service Request, be sure to open the request with the proper Support team. To ensure you reach the proper Support team, enter the correct product information when you create the Service Request. Each product has its own support line.

▶ Use the **Primavera Gateway** support line when you are having installation, configuration, connection, or application issues related to Primavera Gateway.
▶ Use one of the following support lines when you are having installation or configuration issues that do not relate to Primavera Gateway.
  ▶ P6 Enterprise Project Portfolio Management (EPPM)
  ▶ Oracle Primavera Prime
  ▶ Primavera Unifier
  ▶ Oracle Instantis EnterpriseTrack
  ▶ Oracle E-Business Suite
  ▶ Oracle Value Chain Planning
  ▶ Oracle WebLogic Server
  ▶ Oracle Server

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit   http://www.oracle.com/us/corporate/accessibility/support/index.html.

Using Primavera's Support Resource Centers

Primavera's Support Resource Center provides links to important support and product information. Primavera's Product Information Centers (PICs) organize documents found on My Oracle Support (MOS), providing quick access to product and version specific information such as important knowledge documents, Release Value Propositions, and Oracle University training. PICs also offer documentation on Lifetime Management, from planning to installs, upgrades, and maintenance.

Visit https://support.oracle.com/epmos/faces/DocumentDisplay?id=1486951.1 to access links to all of the current PICs.

PICs also provide access to:

▶ **Communities** are moderated by Oracle providing a place for collaboration among industry peers to share best practices.
▶ **News** from our development and strategy groups.
▶ **Education** contains a list of available Primavera product trainings through Oracle University. The Oracle Advisor Webcast program brings interactive expertise straight to the desktop using Oracle Web Conferencing technology. This capability brings you and Oracle experts together to access information about support services, products, technologies, best practices, and more.

For more information about working with Support, visit https://support.oracle.com/epmos/faces/DocumentDisplay?id=888813.2.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

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Oracle Primavera Gateway Installation and Configuration Guide