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PRIMAVERA

**P6 Reporting Database for ODS Installation and Configuration Guide
Release 3.2**

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About P6 Reporting Database

P6 Reporting Database works with the P6 EPPM database to provide a robust and powerful reporting solution. P6 Reporting Database consists of the Star and ODS databases.

The Star Database

The Star database enables an organization to perform advanced business analysis on project and portfolio data. It supplies a dimensional schema that organizes P6 EPPM hierarchical relationships. The Star schema allows organizations to store data for History Levels (Project, WBS, Activity, or Assignment) for a specific History Interval (Year, Quarter, Financial Period, Month, Week, or Day). This data allows for tracking trends for advanced business intelligence. The Star database captures data for activities, resource assignments and utilization, and user defined fields. P6 Analytics requires the Star database.

The Operational Data Store (ODS)

The ODS portion of P6 Reporting Database is an optional relational database that supplies day-to-day, easy to understand operational views of the P6 EPPM database data. You can also use the P6 Extended Schema to provide this information.

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About the P6 EPPM Extended Schema

The P6 EPPM Extended Schema and related Publication Services, provide near real-time reporting directly in P6 via BI Publisher. These files enable users to control what data to calculate and store, and the frequency at which this is done.

P6 Reporting Database is populated directly from logical views that are part of the P6 EPPM Extended Schema. The P6 EPPM Extended Views can also be used as a data source to create operational reports using BI Publisher.

For a more detailed overview of the P6 EPPM Extended Schema, see the P6 EPPM documentation.

About the Operational Data Store (ODS)

Note: The ODS became an optional component of P6 Reporting Database when P6 EPPM R8.1 introduced the P6 EPPM Extended Schema. Oracle recommends using the P6 EPPM Extended Schema. You should use the ODS only when users do not require near real-time reporting, or if you need to move operational reporting from the transactional database to a data repository used strictly for reporting purposes.

The Operational Data Store portion of P6 Reporting Database is an optional relational database that supplies day-to-day, easy to understand operational views of the P6 EPPM database data.

Though the ODS is optional, you can still use it for supporting third-party reporting tools, off-line analysis, and consolidation of P6 data into larger corporate data warehouses.

P6 Reporting Database users can view the same Operational Breakdown Structure (OBS), project, cost, and resource data in ODS as they can in P6 EPPM.

The P6 EPPM Extended Views populates the ODS database.

About the ODSETL Process

The ODSETL process provides data movement between the P6 EPPM extended database and the ODS database. You can schedule the process to run at regular intervals, using operating system-specific scheduling tools, to ensure up-to-date data freshness.

Decide when and how often to update the databases from the P6 EPPM extended schema. The database will undergo a full refresh when it is updated. Oracle recommends that you run the data refresh process daily during non-peak hours.

You can update the ODS database in the following ways:

- ▶ Manually when required.
- ▶ Scheduled to occur one time in the future.
- ▶ Scheduled to recur during regular intervals.

The files that launch the database refresh process are:

- ▶ `odsetl.bat` on a Windows platform.
- ▶ `odsetl.sh` on a non-Windows platform. For information on supported non-Windows platforms, see the *Tested Configurations* document.

These files are in your P6 Reporting Database installation folder: *installation folder*\ods.



The user who initiates the database refresh process needs read/write access to the P6 Reporting Database installation folder. You can use the Windows AT command, Task Scheduler, or Unix CRON to launch the ODS file.

About ODS Security

The ODS security model emulates the P6 EPPM security model. The Resource and Project Access control policies are maintained in ODS. See **ODS Security Configuration** (on page 27) for more information.

Fields in the ODS

The Operational Data Store (ODS) portion of the P6 Reporting Database is a relational database that contains the following information from the P6 EPPM database:

- ▶ Physical fields
- ▶ Calculated fields
- ▶ De-normalized fields (including Hierarchies, Calendars, and Spreads). There is no dependency on running the P6 EPPM summarizer in order to be able to produce reports on summary data.

Physical Fields from the P6 EPPM Database

The ODS is a point in time capture of data derived from the P6 EPPM extended schema views. Refer to the OdsFieldMapTable.html file, located in the physical media or download location, for detailed information relating to the fields in the ODS.

Note: For diagrams of the ODS schema, see the ODS_SCHEMA.zip file included in the documentation folder of the Media pack. You need to use Oracle SQL Developer Data Modeler software in order to open this file. For information about downloading this software, see the following website:
<http://www.oracle.com/technetwork/developer-tools/datamodeler/overview/index.html>

De-Normalized Fields from P6 EPPM

By de-normalizing the fields from P6 EPPM, the ODS database is particularly conducive to generating reports, as extensive joins will not be necessary. The following types of fields are de-normalized in the ODS:

- ▶ Name fields
- ▶ Hierarchies
- ▶ Calendars
- ▶ Spreads

Refer to the OdsFieldMapTable.html file located in the physical media or download location for detailed information relating to the fields in the ODS.

Hierarchies

There are several hierarchy tables in ODS. The purpose of these hierarchy tables is to facilitate many types of roll-up queries. Instead of writing complex recursive or "tree-walking" SQL, users can take advantage of the extra rows and columns in these hierarchy tables to write much simpler queries. The ODS contains the following hierarchy tables:

- ▶ CostAccountHierarchy
- ▶ EPSHierarchy
- ▶ ProjectCodeHierarchy
- ▶ ActivityCodeHierarchy
- ▶ ResourceCodeHierarchy
- ▶ ResourceHierarchy
- ▶ WBSHierarchy

For each hierarchy table, there is a row for every parent-descendant relationship.

Note: This is more extensive than merely a row for every parent-child relationship. There is also a reflexive row for each object (where the object is both parent and child).

Each hierarchy table contains a set of columns for the parent object, and a set of columns for the child object. In addition, there are several metadata columns that contain the number of levels from the top for the parent and child, and whether the child has children.

ODS Calendar Table

The **Calendar** table in the ODS represents days for which work occurs. There are three types of calendars:

- ▶ Global
- ▶ Resource
- ▶ Project

For each calendar defined in the P6 EPPM Database, the ODS Calendar table will contain a set of rows representing each distinct day within the Full Calendar Date Range (as defined in the ODS configuration screen). Each row contains the calendar **name** it represents, the calendar **type**, the actual **date** of the day it represents, and a bitmap of work hours.

ODS Field Name	Data Type	Example Value	Description
ObjectId	integer	566	The unique ID generated by the system.

ODS Field Name	Data Type	Example Value	Description
IsDefault	string	N	The flag that identifies the default global calendar (applies to global calendars only). 'Y' or 'N'.
Name	string	Crew4	The name of the calendar.
ProjectObjectI d	integer	275	The unique ID of the associated project.
BaseCalendar ObjectI d	integer	633	The unique ID of the global calendar to which this calendar is linked. Any changes to the global calendar are automatically propagated to this calendar.
lastchangedat e	date	7/6/07 16:46	The date that the calendar was last edited.
Type	string	Resource	The calendar type - either Global, Resource, or Project. Global calendars can be assigned to projects and resources. Resource calendars can be assigned only to resources. Project calendars are specific to projects.
daydate	date	9/20/07 0:00	The actual day that the calendar row represents.
WeekdayNum ber	integer	5	Integer day of week (1-7), Sunday=1 if Sunday is selected as the first day of the week in the Admin Preferences of the P6 EPPM module.
WorkDayFlag	string	Y	'Y' or 'N', indicates if this day has work time.
TotalWorkHours	double	8	Number of work hours for the day.
WorkHoursByHa lfHour	string	000000000000 00000111111 11001111111 10000000000 0000	Bit mask (48 bits) for each half hour of the day, indicating whether the half hour is work time. 0=nonwork time, 1=work time. The first bit represents 00:00-00:30, the second bit represents 00:30-01:00, etc.
WorkDayStartTi me	date	9/20/07 8:00	Time of day when work first starts.

ODS Field Name	Data Type	Example Value	Description
WorkDayFinishTime	date	9/20/2007 17:00:00 pm	Time of day when work stops.
IsBaseline	string	N	Set to 'Y' if this is a project calendar and the project is a baseline project.
isTemplate	string	Y	Set to 'Y' if project is a template project.

Spreads

The following tables in the ODS contain spread bucket data:

- ▶ EPSSpread
- ▶ ProjectSpread
- ▶ WBSspread
- ▶ ActivitySpread
- ▶ ResourceAssignmentSpread

Each spread table contains spread data columns. Each spread row contains the spread data for a given object (for example: EPS, project, or WBS) for a particular time period. The spread data is aggregated from the Activity and Resource Assignment Spread tables to the WBS, project, and EPS Spread tables.

Prerequisites

This section describes the prerequisites for installing and using ODS.

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P6 EPPM and JRE Requirements

You must install P6 EPPM 8.2 SP1 or greater and create a P6 EPPM database before you begin the procedures in this guide.

See the *Tested Configurations* document for information on supported versions.

You must install the appropriate version of JRE on the machine where the ETL process will run. For information on the specific JRE versions and supported operating system configurations, see the *Tested Configurations* document on the release media or download.

The P6 Reporting Database database must be in an Oracle instance. If the P6 EPPM database is on a Microsoft SQL Server database, you must use the Oracle Database Gateway application to connect the P6 EPPM database to the Oracle server. Using Microsoft SQL Server for the P6 Reporting Database database is not supported. See *Configuring the Oracle Database Gateway to Link to a P6 EPPM Database on a Microsoft SQL Server System* for more information.

Configuring and Running P6 EPPM Publication Services

The ETL process relies on data from the P6 EPPM Extended schema and related Publication Services. You must run this process prior to running the ETL process. The Publication Services enable users to control what data to calculate and store, and how often the data is updated.

The logical views that are part of the P6 EPPM Extended Schema are used to populate the P6 Reporting Database via the ETL process.

For the ETL process to access P6 EPPM data, you must configure and run the P6 EPPM publication services before running the ETL process.

To configure the P6 EPPM publication services:

- 1) Login to P6.
- 2) Click the **Administer** ▼ menu and select **Application Settings**.
- 3) On the **Application Settings** pane, click **Services**.
- 4) On the **Services** page, in the **Publication** section, set how much and how often data updates in the P6 EPPM Extended Schema. The reporting databases use the:
 - ▶ **Start Date** to determine the start date for all time distributed data published.
 - ▶ **Finish date is current date plus** to determine the rolling end date for all time distributed data published.
 - ▶ **Time distributed interval** (Day or Week) for the spread data bucket types.
- 5) Select the **Enable Publish Projects** option and adjust the remaining options in this section as necessary for your data.

Once you've enabled publication, projects that qualify for publication based on your settings will begin to publish to the P6 EPPM Extended Schema.

- 6) Once all necessary projects publish, run the P6 EPPM Global Scheduled Services:
 - a. Click the **Administer** ▼ menu and select **Global Scheduled Services**.
 - b. Set each service to run immediately.

See the *P6 Help* for more information on the P6 Publication Services.

Notes:

- You must run the publication services before you set up the P6 Reporting Database.
 - After you complete the above steps, you should configure the Global Scheduled Services to run at regular intervals to work in conjunction with any changes to the P6 EPPM data.
-

Oracle Database Password Requirements



For information on Oracle password requirements, see the following web site:

http://download.oracle.com/docs/cd/B28359_01/server.1111/b28337/tdpsg_user_accounts.htm#BEICECGF

Required Files, Database Instances, Collation Requirements, and Database Locations

Oracle tnsnames.ora File Requirements

Ensure that the **tnsnames.ora** file contains references to the P6 EPPM database and the P6 Reporting Database. The **tnsnames.ora** file must be on the machine where you installed your P6 Reporting Database application.

Required Database Instances

The P6 Reporting Database instance for ODS or Star must already exist based on which database you're using. ODS and Star schemas can be in the same instance or separate instances.

Database Collation Requirements

The database collation must match the database collation you set for the P6 EPPM database when you created it.

Recommended Database Instance Locations

Oracle recommends that the database instance reside on different physical machines from the P6 EPPM database. This minimizes the impact that the P6 Reporting Database has on the performance of the P6 EPPM database server.

Operating System User Permissions



To install P6 Reporting Database and run the ETL process, the users for Windows or non-Windows platforms must have full read/write access to the P6 Reporting Database installation directory. They also need access to the Oracle Client Files (such as tnsnames.ora and sqlloader) and Java.

Oracle Client Requirements

You must install an Oracle database client on the server where the ETL process will run.

Note: The staretl process requires the Oracle component SQLLDR. SQLLDR is automatically installed with a full Oracle Client install. If you cannot install the full Oracle Client, you must install SQLLDR manually before you begin installing P6 Reporting Database.

In a Linux or Unix environment, you must manually set both the ORACLE_HOME and PATH on the server where the ETL will run. PATH should be the ORACLE_HOME\bin folder.

Disk Storage Space Requirements

For detailed information, refer to the *P6 Analytics and P6 Reporting Database Planning and Sizing Guide*.

Creating the Oracle Tablespaces

Before installing P6 Reporting Database, log onto SQL Plus as System\<>system password> to create the Oracle tablespaces.

Before creating the tablespace definitions, make sure that the database is in its proper location. See **Required Files, Database Instances, Collation Requirements, and Database Locations** (on page 13) for more information.

Creating the ODS Tablespace

After logging onto SQL Plus as System\<>system password>, do the following to create the ODS tablespace:

- 1) Connect to the P6 Reporting Database ODS instance with a user that has "create tablespace" privileges.
- 2) Create tablespace ODS_DAT1. For example (as all one line):

```
CREATE SMALLFILE TABLESPACE ODS_DAT1 DATAFILE 'path/ods_dat1.dbf' SIZE  
100M AUTOEXTEND ON NEXT 100M MAXSIZE UNLIMITED LOGGING EXTENT MANAGEMENT  
LOCAL UNIFORM SIZE 1M SEGMENT SPACE MANAGEMENT AUTO;
```

Where *path* is the actual path to the location of the Oracle tablespaces.

Configuring the Oracle Database Gateway to Link to a P6 EPPM Database on a Microsoft SQL Server System

Note: If your P6 EPPM database is not located on a Microsoft SQL server, skip this section.

This section describes how to configure the Oracle Database Gateway to link a P6 EPPM database on Microsoft SQL Server to a P6 Reporting Database on Oracle. If your P6 EPPM database is a Microsoft SQL Server database, you must first install and configure the Oracle Database Gateway. See the Tested Configurations document for supported versions.

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Configuring the Oracle Database Gateway for a Microsoft SQL Server Database

If your P6 EPPM database is a Microsoft SQL Server database, perform the following steps to configure the Oracle Database Gateway:

- 1) Go to the *Oracle Database Gateway install directory\dg4msql\admin* folder.
- 2) Edit the **initdg4msql.ora** file:

- a. Edit the **HS_FDS_CONNECT_INFO=** parameter to be in the format:

```
HS_FDS_CONNECT_INFO=servername/instancename/pmdbdatabase
```

Where *servername* refers to the server name, *instancename* refers to the instance, and *pmdbdatabase* refers to the database.

For example:

```
HS_FDS_CONNECT_INFO=win2k2/sqlserver/pmdb
```

The following example shows the parameter when an *instancename* is not specified:

```
HS_FDS_CONNECT_INFO=serverSQL//proj_pmdb
```

- b. Save and close the file.

- 3) Edit the **tnsnames.ora** file and add a new TNSnames entry for each new SQLServer Gateway. For example:

```
dg4msql =
  (DESCRIPTION=
    (ADDRESS= (PROTOCOL=tcp) (HOST=server name) (PORT=1521))
    (CONNECT_DATA= (SID=dg4msql))
    (HS=OK)
```

)

- 4) Edit the **Listener.Ora** file and add information for each necessary gateway. For example:

```
(SID_LIST=
(SID_DESC=
(SID_NAME=dg4msql)
(ORACLE_HOME=C:\product\11.1.0\tg_1)
(PROGRAM=dg4msql)
)
```

)

- 5) Stop any existing Listeners on the Oracle Gateway server.
- 6) If you need to connect to other Oracle instances, you must configure the TNS Names in the directory where you installed the Gateway.
- 7) Start the Gateway Listener. The following Initialization parameters were set for the Gateway:

- ▶ HS_RPC_FETCH_SIZE=1000000
- ▶ HS_ROWID_CACHE_SIZE=10000
- ▶ HS_FDS_ROW_SIZE=50000

For a dataset with similar statistics:

- ▶ TASK - 6 million rows
- ▶ TASKACTV - 15 million rows
- ▶ TASKRSRC - 9 million rows
- ▶ UDFVALUE - 3 million rows
- ▶ RSRCHOUR - 50 million rows
- ▶ PROJWBS - 2 million rows

- 8) When configuring the Gateway, set HS_LANGUAGE for the Oracle character set of your instance:

- a. On the gateway machine, go to the gateway install directory (for example, C:\product\11.1.0\tg_2\dg4msql\admin)
- b. Edit the **initdg4msql.ora** file and add the following parameter specific to your Oracle dataset. Depending on your character set, either add the following or adjust for UTF8:

```
HS_LANGUAGE=american_america.WE8ISO8859P15
```

Or, add all of the following:

```
HS-NLS_LENGTH_SEMANTICS=CHAR
HS_FDS_CHARACTER_SEMANTICS = TRUE
HS_KEEP_REMOTE_COLUMN_SIZE=ALL
```

- c. Save the **initdg4msql.ora** file.
- d. Restart the Gateway listener.

Installing and Configuring the ODS Database

This section describes the steps necessary to install and configure the ODS database.

Before installing the P6 Reporting Database software:

- ▶ Be sure you have met the installation prerequisites. See **Prerequisites** (on page 11).
- ▶ The Oracle database instances must already exist before running the installation. See **Required Files, Database Instances, Collation Requirements, and Database Locations** (on page 13).

Note: Due to the global nature of the Oracle Universal Installer (OUI), you cannot use the *OUI Help* to install or uninstall P6 Reporting Database. See **Installing the ODS Database** (on page 20) instead for installation instructions.

If you are upgrading from a previous version of P6 Reporting Database, see **Upgrading the ODS Database to the Latest Version** (on page 31).

The P6 Reporting Database includes two separate databases: ODS and Star. When installing P6 Reporting Database, you can:

- ▶ Install the ODS database only.
- ▶ Install the Star database only.
- ▶ Install both the ODS and Star databases (each has its own installer that you must use to install each database).

Note: If you are installing both the ODS and Star databases, it does not matter which order you install them. See the *P6 Analytics and Star Database Installation and Configuration Guide* for information on installing Star.

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Installing the ODS Database

Caution: The ODS database portion of the P6 Reporting Database 3.2 **must** be installed in a **new** directory. Do **not** install the ODS database in the same directory where you installed a previous version of P6 Reporting Database.

Use the following procedure to install the ODS database:

- 1) Download the **Primavera P6 Reporting Database 3.2 for <platform>** folder and extract the contents.
- 2) Go to the location where you extracted the contents and run one of the following depending on your system type:
 - ▶ If you are installing on a Microsoft Windows system, navigate to the **P6_R32_RDB\ODS\win\Disk1\install** directory, and then double-click on the **setup.exe** file.
 - ▶ If you are installing on a non-Microsoft Windows system:
 1. Navigate to the **P6_R32_RDB\ODS\<Operating System>\Disk1\install** directory, where **<Operating System>** is a supported non-Windows platform. For information on supported non-Windows platforms, see the *Tested Configurations* document on the release media or download.
 2. Run the **runInstaller** file.
- 3) On the **Welcome** window, click **Next**.

Note: Click **Next** on each wizard dialog box to advance to the next step.

- 4) On the **Specify Home Details** window:
 - a. In the **Name** field, enter or verify the name for the ODS database.
 - b. In the **Path** field, verify or browse to the installation location for the ODS database.
- 5) On the **Java Runtime** screen, type or browse to the location of the JRE version. For example, C:\Program Files\Java\jre1.7.0_XX, where XX is the supported version of JRE for this release. See the *Tested Configurations* document.

This must be a JRE location, not a JDK location.

Note: You must install the appropriate version of JRE on the machine where odsetl will run. For information on the specific JRE versions and supported operating system configurations, see the *Tested Configurations* document on the release media or download.

If the location is a JDK location, select the JRE subfolder (for example, C:\Program Files\Java\jdk1.7.0_xx\jre).

- 6) On the **Summary** screen:

- a. Read the summary information that explains where the ODS database will be installed, the product languages, the space requirements, and what is being installed.
 - b. Click **Install** to install the ODS database.
- 7) Prior to installation completion, the P6 Reporting Database configuration utility will launch in a separate window.

Note: See **Configuring the Oracle ODS Database** (on page 21).

- 8) After completing the P6 Reporting Database configuration utility, the **End of Installation** window displays. Click **Exit** to finish the installation.

Configuring the Oracle ODS Database

This section describes how to configure the ODS database portion of P6 Reporting Database. The Configuration Utility launches after the installation of the ODS database completes.

Note: During the configuration phase, some fields might already contain data. Check the data and change it as necessary.

Start with one of the following sections:

- ▶ If the P6 EPPM database is on an Oracle instance, see **Configuring the P6 EPPM Database Connection for ODS on an Oracle Instance** (see "Configuring the P6 EPPM Database Connection on an Oracle Instance" on page 21).
- ▶ If the P6 EPPM database is on a Microsoft SQL Server, see **Configuring the P6 EPPM Database Connection on a Microsoft SQL Server Database** (on page 22).

Configuring the P6 EPPM Database Connection on an Oracle Instance

Use the fields on the **Reporting Database Configuration Utility - [ODS]** configuration wizard to configure the ODS database.

- 1) On the **Welcome** screen, click **Next** to begin.
- 2) On the **EPPM Reporting Database Connection** screen:
 - a. For the **Database Type** option, choose **Oracle**.
 - b. In the **Oracle Database Connection** section:
 1. In the **Host Name** field, enter the server machine name or IP address where you installed the P6 EPPM database.
 2. In the **Port Number** field, enter or verify the port number for this database.
The default for Oracle is 1521.
 3. Choose the Service Name or SID option. Enter the Service Name or SID.
 - c. In the **Reporting User** section:

1. In the **Username** field, enter or verify your P6 EPPM reporting database name (for example, PxRptUser).
 2. In the **Password** field, enter the password for the reporting database user.
- 3) Click **Next**.
- When you click next, the wizard will test that the connection is valid. If the test fails, ensure you have entered all the information correctly and try again.
- Follow the steps in the **Configuring the ODS Database Connection** (on page 23).

Configuring the P6 EPPM Database Connection on a Microsoft SQL Server Database

Use the instructions in this section only if your P6 EPPM database is on a Microsoft SQL server. You must have already installed the Oracle Gateway software before installing the Primavera P6 Reporting Database software. See *Configuring the Oracle Database Gateway to Link to a P6 EPPM Database on a Microsoft SQL Server System* for information about installing the gateway.

- 1) On the **Welcome** screen, click **Next** to begin.
- 2) On the **EPPM Reporting Database Connection** screen:
 - a. For the **Database Type** option, choose **SQL Server**.
 - b. In the **SQL Server Connection** section:
 1. In the **Host Name** field, enter the server machine name or IP address where you installed the P6 EPPM database.
 2. This is the SQL Server instance name of the Microsoft SQL Server where the P6 EPPM database resides. For example, `SQLServerName\databaseInstanceName`.
 3. In the **Port Number** field, enter or verify the port number for this database.
The default for Microsoft SQL Server is 1433.
 4. In the **Database Name** field, enter the name of the P6 EPPM database. This database must already exist.
 - c. In the **Oracle Gateway Connection** section:
 1. In the **Host Name** field, enter the machine name or IP address where you installed the Oracle Gateway.
 2. In the **Port Number** field, enter the port number where you installed the Oracle Gateway.
 3. Choose the Service Name or SID option. Enter the Service Name or SID.
 - d. In the **Reporting User** section:
 1. In the **Username** field, enter or verify your P6 EPPM reporting database name (for example, PxRptUser).
 2. In the **Password** field, enter the password for the reporting database user.
- 3) Click **Next**.

When you click next, the wizard will test that the connection is valid. If the test fails, ensure you have entered all the information correctly and try again.

Configuring the ODS Database Connection

Use the **ODS Database Connection** screen to configure the Oracle connection settings for the ODS database instance:

- 1) In the **Oracle Database Connection** section:
 - a. In the **Host Name** field, enter the server machine name or IP address where you installed the database.
 - b. In the **Port Number** field, enter or verify the port number for your database. The default for Oracle is 1521.
 - c. Choose the Service Name or SID option. Enter the Service Name or SID.
- 2) In the **Database Credentials** section, enter the Oracle system username and password:
 - a. In the **Username** field, enter or verify your DBA user name that has DBA privileges for the ODS database. The default name is **SYSTEM**.
 - b. In the **Password** field, enter the password for the DBA user.
- 3) In the **New User** section, enter the connection information for the table owner:
 - a. In the **Username** field, enter or verify the ODS user name. This user will own the ODS tables.
 - b. In the **Password** and **Confirm Password** fields, enter a password for the ODS user.
- 4) Click **Next**.

Configuring ETL Settings for ODS

On the **ETL Settings** screen:

- 1) In the **JVM Location** field, enter or verify the path to the Java Virtual Machine (JRE path).
 - ▶ You must have the appropriate version of JRE installed on the machine where the ETL process will run. For information on the specific JRE versions and supported operating system configurations, refer to the *Tested Configurations* document on the release media or download.
 - ▶ The path must refer to a location on the local machine where you installed the P6 Reporting Database configuration utility.
- 2) In the **Log Detail Level** field, choose the level of logging detail that you want to use. The following are the logging detail levels you can choose:
 - ▶ **Errors and Warnings** Logs errors and warnings.
 - ▶ **General Information** This is the default value. This logs errors, warnings, and informational messages on the progress of each step.

- ▶ **Debug and Trace Information** Provides all general information, errors and warnings, and detailed output of each executed script, query, and connection.
 - ▶ **Errors Only** Logs only errors and no other information.
 - ▶ **Extra Debug Information** Provides all general information, errors and warnings. It provides more fine grained information on each executed step and script.
- 3) In the **Max Java Heap Size (MB)** field, enter parameter for the Java Heap Size. This value maps to the JVM -Xmx setting in the Java Runtime Environment settings. The default value (and recommended value) is 1,024 MB.
- ▶ The minimum value is 512 MB.
 - ▶ When changing the Maximum Java Heap Size setting, the values must be in increments of 512 MB.
- 4) In the **Log Detail Level** field, choose the level of logging detail that you want to use. The following are the logging detail levels you can choose:
- ▶ **Errors and Warnings** Logs errors and warnings.
 - ▶ **General Information** This is the default value. This logs errors, warnings, and informational messages on the progress of each step.
 - ▶ **Debug and Trace Information** Provides all general information, errors and warnings, and detailed output of each executed script, query, and connection.
 - ▶ **Errors Only** Logs only errors and no other information.
 - ▶ **Extra Debug Information** Provides all general information, errors and warnings. It provides more fine grained information on each executed step and script.
- 5) In the **General Thread Count** field, choose the number of threads the ETL process will run. Extraction and Load processes are multi-threaded.
Oracle recommends keeping the default (5) for this setting.
- 6) In the **Index Building Thread Count** field, choose the number of threads that will build the index. It specifies how many threads to run for building indexes for the ODS or Star database.
Oracle recommends keeping the default (5) for this setting.
- 7) Click **Next**.

Finishing the Configuration Wizard for ODS

To complete the configuration:

- 1) Choose whether you want to run the **Reporting Database Diagnostic Utility**. It will help you troubleshoot your configuration if you choose to run it.
- 2) Click **Finish**.

This generates all the scripts that go into the scripts directory.

All the settings configured with the ODS database configuration utility will be stored in the following location:

<installation path>\ods\res\odsetl.properties

This file is a Java properties file, which is a simple key = value storage file. For example:

db.ods.application.username=ODSUSER

Finishing the ODS Database Configuration

After you complete the installation and all configuration tasks, execute the `odsetl` file to complete the installation and configuration process by doing the following:

- 1) Go to the installation directory where you installed the ODS database.
- 2) Click **odsetl.bat** (or **odsetl.sh**) to execute the file.

ODS Security Configuration

This section describes the ODS security configuration tasks. These include adding a new user, modifying user access, and deleting an existing user.

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Adding a User or Updating an Existing User

When adding a new user, the user name **must** conform to the format restrictions listed in **User-Level Security and User Name Restrictions** (on page 37).

For detailed information on adding a new P6 EPPM user, see the *P6 EPPM Post Installation Administrator's Guide* or the *P6 Help*.

For additional information on ODS security, see the *Security Guidance for P6 Analytics and P6 Reporting Database*. Use the following procedure to add a new user for the ODS or to update an existing user:

- 1) Login to P6.
- 2) Add a new user.
 - ▶ This username must start with a letter.
 - ▶ It must also conform to the username format restrictions described in **User-Level Security and User Name Restrictions** (on page 37).
- 3) Configure the user's P6 EPPM security attributes.
- 4) Assign Enterprise Reports module access.
- 5) Run one of the following files to create the database user:
 - ▶ **odsetl.bat** (on a Windows platform)
 - ▶ **odsetl.sh** (on a non-Windows platform)

This adds the user to the ODS database, creates Views for the user, and adds the user to Server Logins.

When odsetl is run, a new database user will be created in the ODS instance.

- ▶ The user will be given role privileges to the **P6Reports** role. The password for that database user must be manually altered for the user to connect directly as that user.
- ▶ The P6Reports role enables the user to connect and query the public synonyms for 'P6'.

Modifying User Access in ODS

Users given access to the ODS will be able to access only the data they have rights to in the P6 EPPM database.

For example, if a user has the “Edit EPS Costs/Financials” privilege in the P6 EPPM database, then that user will be able to view project cost information in the ODS. Conversely, if a user does not have the “Edit EPS Costs/Financials” privilege in the P6 EPPM database, they would see the word **null** in place of the value in fields that contain cost information.

Use the following procedure to give a user the ability to view cost information.

- 1) Login to P6.
- 2) Click the **Administer** ▼ menu and select **User Access**.
- 3) On the **User Access** page, click **Project Security Profiles**.
- 4) Select the **Edit EPS Costs/Financials** privilege to give the user access to cost information.
- 5) If necessary, give users the **View Resource and Role Costs/Financials** privilege to enable users to view resources costs if the users have resource access.
 - a. Click **Global Security Profiles**.
 - b. Select the **View Resource and Role Costs/Financials** privilege.
- 6) Run one of the following files to create the database user:
 - ▶ **odsetl.bat** (on a Windows platform)
 - ▶ **odsetl.sh** (on a non-Windows platform)

Deleting an ODS User

Use the following procedure to delete a user from ODS.

- 1) Login to the P6 application.
- 2) Click the **Administer** ▼ menu and select **User Access**.
- 3) On the **User Access** page, click **Users**.
- 4) On the **Users** page, click the **Module Access** detail window.
- 5) Remove Enterprise Reports from the user's module access.
- 6) On the machine where the ODS database resides, run one of the following files:
 - ▶ **odsetl.bat** (on a Windows platform)
 - ▶ **odsetl.sh** (on a non-Windows platform)

This removes the **create a session** privilege, and removes access to the public synonyms for the database user.

The Oracle ODS user you created will still exist in the ODS instance.

- ▶ This user will not have access to any views pertaining to ODS tables.

- ▶  You can drop this user from the ODS instance by executing the following query as the Oracle Instance system account or a user with permissions to drop other database users:

```
Drop user deleteUserName cascade;
```

For information on deleting a P6 EPPM user, see the *P6 Help*.

Upgrading the ODS Database to the Latest Version

The `odsetl` will update everything when you run it (there are no incremental updates). Follow the procedures in **Upgrading the ODS Database** (on page 31) to upgrade the database.

Note: You **must** install the ODS database in a **new** directory. Do **not** install it in the same directory where you installed a previous version of P6 Reporting Database.

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Upgrading the ODS Database

To upgrade your ODS database:

Notes:

- You cannot install the ODS database on a Microsoft SQL Server system.
 - The upgrade file only works if you are upgrading from R3.0. If you are upgrading from any previous release, you must do a complete install of the newest release.
-

- 1) Upgrade your P6 EPPM database to P6 EPPM 8.2 SP1 or greater.
 - 2) Follow the instructions in **Installing the ODS Database** (on page 20).
 - 3) Use the information in the topics in the **Finishing the ODS Database Configuration** (on page 25) section to configure it for Oracle.
-

Note: Make a note of any customizations applied to the ODS.

- 4) Drop the existing `odsuser` using this command:
`drop user odsuser cascade;`
- 5) Reapply any customizations done to the existing `odsuser`.
- 6) Run **`odsetl.bat`** (or **`odsetl.sh`**).

Post Installation Administrative Tasks

This section describes the general administrative tasks, including how to secure the properties file, how to clear and refresh data, and how to schedule or manually launch a database update.

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Securing the odsetl.properties File

 This section contains information you need when securing the odsetl.properties file.

Ensure that only the user running the P6 Reporting Database scripts or processes has access to the odsetl.properties, located in the <installation directory>\ods\res folder.

Only trusted users should have access to this file or folder.

File system protection can be set on all of the supported operating systems. Based on the settings applied, the \res folder can be password protected or hidden. A new user can be created with the least amount of permissions to this file and folder. Do not give any other user access to this location.

For options for operating system-specific security, either contact your local administrator or search for file system security for your specific operating system.

Clearing and Refreshing the Data

To clear and refresh all the data in the ODS database:

Note: This procedure assumes that you chose the default username (ODSUSER) during the installation. If you chose a different name, use it instead of the default.

- 1) Login to the P6 Reporting Database instance with a user account that has the **Drop User** system privilege (such as System).
- 2) Run the following command:

```
drop user odsuser cascade;
```

- 3) Run the following to drop the public synonyms for P6 EPPM data:

```
begin
  for syndrop in (select synonym_name from all_synonyms where synonym_name
    like 'P6%')
  loop
    execute immediate 'drop public synonym '||syndrop.synonym_name;
  end LOOP;
end;
```

Dropping the users listed in step 2 of the preceding procedure will remove all data from the P6 Reporting Database instance. You can rerun the **odsetl** file to populate the ODS database with the P6 EPPM database information.

Creating a Filtered ODS

You can apply a filter during the odsetl process to pull over data matching a determined criteria. The P6 EPPM extended tables and P6 EPPM database calculate the data. When you create a view, you can limit the projects you include in ODS to a portfolio, an EPS, or another criteria; you can customize ODS with only the projects that are important to you.

When creating the ODS filter, you must use the PXRptUser.

Use this example to create a view for a portfolio called **My Top 10 Projects** and a filter called **it_portfolio_view**.

- 1) Use the following to create the **it_portfolio_view** filter:

```
create or replace view it_portfolio_view
as
select PROJECTOBJECTID objectid
from projectportfolio pp, projectprojectportfolio ppp
where pp.objectid = ppp.PROJECTPORTFOLIOOBJECTID
and pp.name = 'My Top 10 Projects'
```

- 2) Edit the **odsetl.properties** file in **\res**:

a. Add this entry:

```
ods.project.filter.ds1=
```

b. Enter the name of the view you created. For example:

```
ods.project.filter.ds1=it_portfolio_view
```

- 3) Run the following command:

```
run odsetl.bat
```

- 4) After the process completes, ensure you can connect to the view through the database link and return the list of object IDs. For example:

```
select * from it_portfolio_view@ods2pxrpt
```

This will return the objectid's that will populate the **etl_projectlist**.

Scheduling the ODS Database Update

To keep the ODS database current, you must run the `odsetl` periodically. Typically, this is done nightly during off hours.

Schedulers exist for both Windows and non-Windows operating systems. For Windows operating systems, use the Windows Task Scheduler. For non-Windows operating systems, use a cron job with the Crontab command. Please refer to your operating system documentation for specifics on how to configure the process to run as a recurring job.

Caution: When configuring the scheduler, Oracle recommends that you select the option to "not start the next job until the previous job has completed."

Manually Launching the ODS Database Update Process

To launch the database update for ODS, execute one of the following files on the machine where you installed the ODS database:

- ▶ **odsetl.bat** (on a Windows platform)
- ▶ **odsetl.sh** (on a non-Windows platform)

The account used to launch the file must have administrative privileges on the machine.

BI Publisher Administration Tasks

This section describes the BI Publisher administrative tasks, including installing BI Publisher, configuring the JDBC connection, copying the P6REPORTS folder, configuring BI Publisher security, and setting up BI Publisher database authentication. You may have already completed many of these steps if you connected BI Publisher to P6 EPPM.

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Overview of BI Publisher

BI Publisher is an Oracle enterprise reporting solution you can use with the ODS. For complete overview information about BI Publisher, go to the following web site:

<http://www.oracle.com/technology/products/xml-publisher/index.html>

User-Level Security and User Name Restrictions

For the ODS to properly implement P6 EPPM user-level security, the ODS will create a database-level user if you give a user the **Enterprise Reports** module access in P6 (see the *P6 Help* for more information).

You will have two options for creating security for the ODS user.

Option 1: Use the Database Security Model

For this method, you create the database users, and their views are based on what they have security access to view. The P6 EPPM user name must:

- ▶ Be between 1 and 30 characters. The ODS will remove extra characters.
- ▶ Not have any special characters (such as @ # \$ % , ^ & * . () - + \ / : _ ; | < > , etc.). The ODS will automatically remove special characters. For example, if the P6 EPPM user name is **johnd@company.org**, the ODS database will create **johnd**.
- ▶ Be all one word (without any spaces).

- ▶ Start with a letter, not a number.

The ODS implements security that applies to the Oracle database, which is why you must use these specifications for the user name.

Database views are created for the ODS tables. The ODS database then creates public synonyms and gives users access to these synonyms. When the ODS database user accesses the tables, row, and fields through these synonyms, a filter is applied that gives users access to data based on their P6 EPPM security attributes.

If the user is an application user and has Enterprise Reports module access in the P6 EPPM database, the Oracle instance of the ODS database will create a database login for the user. The user can log into the P6 EPPM application with the application user password. The user cannot log into the ODS database directly (for example, using SQL Plus) because the ODS user has been created with a randomly generated password. Therefore, the application user must have the ODS database user's password reset by a system administrator.

If you use this option, you will need to use Database Authentication and the JDBC connection with the Proxy option selected when using BI Publisher. If you use this option, your user names would compare as follows:

- ▶ P6 user name: johnd@company.org
- ▶ BI Publisher: johnd

Method 2: Use the Security Package (SECPAC)

Your second option is to use SECPAC. SECPAC is an internal database security package for Oracle that sets session variables for security. If you use SECPAC, you will need to consider the following when using BI Publisher.

- ▶ You can use any authentication mode.
- ▶ You would need to set the pre-process function (call `Secpac.SET_BIP_USER(:xdo_user_name)`) for the JDBC connection setup in BI Publisher.
- ▶ Your user names will be the same in both the P6 and BI Publisher databases.

Installing Oracle BI Publisher

For information on installing the Oracle BI Publisher, see the documentation included with BI Publisher.

About Configuring P6 Database Connection Settings for BI Publisher

The *Connecting BI Publisher to P6* guide contains information about configuring P6 database connection settings for BI Publisher and using the P6 Administrator application.

Configuring the JDBC Connection

To configure the JDBC connection:

Note: If you connected P6 and BI Publisher, you may have already completed these steps.

- 1) Login to BI Publisher as an administrative user.
- 2) In BI Publisher 11g, click the **Administration** link.
- 3) Under **Data Sources**, click the **JDBC Connection** link.
- 4) Click **Add Data Source**.
- 5) In the **General** section:
 - a. In the **Data Source Name** field, enter P6RPT.
 - b. In the **Driver Type** field, select your version.
 - c. In the **Database Driver Class** field, enter the JDBC driver class for your database.
 - d. In BI Publisher 11g, select the **Use System User** option if you are connected to the OBI Server and want to use this option.
 - e. In the **Connection String** field, enter your JDBC connection string for the P6 EPPM Database.
 - f. In the **Username** field, enter your odsuser name.
 - g. In the **Password** field, enter your odsuser password.
 - h. Do one of the following:
 - Choose the option for **Use Proxy Authentication** if you are using the database security model.
 - Choose to specify the Pre Process Function (**Secpac.SET_BIP_USER(:xdo_user_name)**) if you are using the SECPAC security model.

See **User-Level Security and User Name Restrictions** (on page 37) for more information.
- 6) Click **Apply**.

Copying the P6REPORTS Folder for BI Publisher 11g

To add sample reports:

- 1) Copy the **P6Reports.zip** from the P6 media pack to a temporary location.
- 2) Extract the contents of **P6Reports.zip** and open the extracted folder.
- 3) Depending on your database, open the **P6reportsOraBIPub11g** or **P6reportsSQLBIPub11g** folder.
- 4) Open the **Other** folder.
- 5) Copy the **P6reportsOraBIPub11g_Other.xdrz** or **P6reportsSQLBIPub11g_Other.xdrz** to the BI Publisher repository (or preferred location).

Example:

C:\Oracle\Middleware\user_projects\domains\bifoundation_domain\config\bipublisher\repository\Reports

- 6) Login to BI Publisher as an administrative user.
- 7) Select **Catalog**.
- 8) In the **Folders** pane, highlight **P6Reports**.
- 9) In the **Tasks** pane, click **Upload**.
- 10) In the **Upload** dialog box:
 - a. Click **Browse**.
 - b. Go to the location where you copied the **P6reportsOraBIPub11g_Other.xdrz** or **P6reportsSQLBIPub11g_Other.xdrz** file and select it.
 - c. Click **Open**.
 - d. Click **Upload**.
- 11) Verify that **P6reportsOraBIPub11g_Other.xdrz** or **P6reportsSQLBIPub11g_Other** folder is now under the P6Reports folder.
- 12) Rename the folder if necessary.
- 13) Under **Browse/Manage...**, click **Catalog Folders**.
- 14) Expand **P6Reports**.
- 15) Open the **Activity** folder.
- 16) Under the **Activity Look Ahead** report, click **Edit**.
- 17) Click the Magnifying Glass icon (top left corner).
- 18) In the **Choose Existing Data Model** window:
 - a. Expand **P6Reports** and select **Activity**.
 - b. Choose **Activity Look Ahead**.
 - c. Click **Open**.
- 19) Close the report.

Note: Repeat these steps for each sample report. Choose the matching data source for each report.

Tips

The P6REPORTS.zip also includes a folder named "Samples." This folder contains PDF files that show what each of the sample reports will look like when run.

Configuring BI Publisher Security

Login to BI Publisher, and do the following:

Note: These instructions may vary based on which security option you chose to use.

- 1) In BI Publisher 11g, click the **Administration** link at the top of your screen.
- 2) In the **Security Center** section, select **Security Configuration**.

- 3) In the **Local Superuser** section:
 - a. Select the **Enable Local Superuser** option.
 - b. In the **Superuser name** field, enter the Superuser's name.
 - c. In the **Password** field, enter the Superuser's password.



Note: Oracle BI Publisher enables an administrator to setup a security model based on roles and permissions. You can enforce these roles and permissions on folders containing reports created from ODS data. For more information, see information about defining security models in the Oracle BI Publisher online help.

- 4) In the **Security Model** section:
 - a. From the **Security Model** list, choose the model to use. This can be:
 - BI Publisher Security
 - OBI Server
 - Oracle Database
 - LDAP
 - Oracle Fusion Middleware
 - b. Enter the **Connection String**. This is the connection string used to connect to the JDBC Data Source you previously configured. See **Configuring the JDBC Connection** (on page 38).
- 5) Click **Apply**.

BI Publisher Database Authentication Setup

Refer to the documentation for BI Publisher for information on setting up authentication.

Setting Up LDAP with BI Publisher

Refer to the documentation for BI Publisher for information on setting up LDAP.

Running the Configuration Utility

This section describes how to run the Configuration Utility to reconfigure Settings, Options, and Codes after you install and configure P6 Reporting Database.

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Overview of the Configuration Utility for ODS

This section describes where to find the information you need to change settings and options after you install and configure the ODS database.

For the ODS database, you can change:

- ▶ Java Runtime Environment location
- ▶ Logging detail level
- ▶ Thread Settings

Note: Fields for the P6 EPPM database and ODS will not be available for change.

 Ensure you control access to the configuration utility and that the administrator controls it.

Running the Configuration Utility for the ODS Database

Do the following to run the Configuration Utility for the ODS database:

Note: To change passwords, a user with database administrative privileges must manually change them. If the administrative user changes the odsuser password, they must re-run the Configuration Utility and enter the new user password.

- 1) Locate the folder where you installed P6 Reporting Database.
- 2) Run **configODS.cmd**.
 - ▶ You must enter the proper PxRptUser security authorization to access any data from the utility.
 - ▶ After authorization completes, you should see **Settings** on the configuration utility.

- ▶ See **Configuring ETL Settings for ODS** (on page 23) for information on changing these settings.

3) Click **Finish**.

Configuring the Secure Sockets Layer

 This section describes how to configure the Secure Sockets Layer (SSL). SSL ensures a secure connection between servers over the network.

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Configuring the SSL Connection

Use My Oracle Support's Knowledge article: [762286.1: End to End Examples of using SSL with Oracle's JDBC THIN Driver](#). This article will provide examples of:

- ▶ Creating a self-signed Oracle wallet for the server and client.
- ▶ Configuring the database to use TCPS with the server key.
- ▶ Configuring a SQL client to connect through the TCPS protocol.
- ▶ Creating simple java clients that show how to connect through TCPS in several different examples.

Use these examples to guide you in creating your SSL connection.

Note: Oracle assumes that you understand the concept of wallets and the Secure Socket Layer (SSL) functionality.

Configuring ODS to Use SSL to Run the ETL Process

To configure ODS to use SSL:

- 1) Using the wallet manager or OraclePKI:
 - a. Export the trusted certificate that is on the server.
 - b. Copy it to the client where you installed P6 Reporting Database.
- 2) On the client machine, import the certificate using the keytool. For example:

```
C:\Program Files\Java\jre1.7.0_XX\bin>keytool -importcert -file  
C:\wallets\server_wallet\cert -keystore "C:\Program  
Files\Java\jre1.7.0_XX\lib\security\cacerts"
```

where XX is the version of JRE that is supported in this release. See the Tested Configurations document.

Note: The default password for the Java default keystore file JAVA_HOME/lib/security/cacerts is **changeit**.

- 3) Edit the odsetl properties file as follows:
 - a. Replace all occurrences of the default port number with the number of the SSL port.
 - b. Replace all occurrences of **PROTOCOL = TCP** with **PROTOCOL = TCPS**.
- 4) Go to the installation directory \etl\common\ folder and run the **runSubstitution.cmd** file to update all files with the new port number and TCPS setting.
- 5) Go to the installation directory \scripts folder.
- 6) Edit the **odsetl.bat** (or **odsetl.sh**).
- 7) Add the following variable to the first line of the file:
 - ▶ For Windows:

```
SET PRM_SSL_CONNECTION=Y
```
 - ▶ For Linux:

```
EXPORT PRM_SSL_CONNECTION=Y
```

Utility Tables, Log Files, and Troubleshooting

This section describes the log files that can provide information about the installation and daily operation of P6 Reporting Database.

In case a problem occurs, this section tells where to get help if the log files do not provide sufficient information.

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ODS Log Files

P6 Reporting Database creates extensive log files for each step of the odsetl processes. The log files are stored in a 'log' folder in the root of the P6 Reporting Database installation location.

The log files contain detailed information that you should inspect after running each file in the installation process, and after running the database refresh process.

Log files

The following lists the log files, identifies when they are created, and gives a brief description of their contents:

File	Description
odsetlprocess.log	Created when you run odsetlprocess.bat (or odsetlprocess.sh). Contains the details of the SQL commands run to perform the database refresh updates.
odsetlprocess.html	Created when you run odsetlprocess.bat (or odsetlprocess.sh). Contains results of the processes run to create the users, tables, and transfer of data. Provides the time it took for each step to run. Derived from the ETL_PROCESSMASTER, ETL_PROCESSINFO, and ETL_PROCESSEXCEPTION tables.

Troubleshooting for ODS

P6 Reporting Database writes detailed process information to the “log” directory under the P6 Reporting Database home folder. The log directory contains information about the installation, as well as about each run of the odsetl process. If an error occurs, depending on the nature of the error, the files of the log directory may include diagnostic information. Analyzing these files can help lead you to the resolution or to the file or process which caused the error.

Oracle Database Gateway 11.2 Reporting Incorrect Column Size

If the Oracle Database Gateway 11.2 reports incorrect column size, and the extract fails, ensure that the following are set in the **initdg4msql.ora** file:

- ▶ HS_NLS_LENGTH_SEMANTICS=CHAR
- ▶ HS_FDS_CHARACTER_SEMANTICS = TRUE
- ▶ HS_KEEP_REMOTE_COLUMN_SIZE=ALL

The configuration utility does not launch during the P6 Reporting Database installation process

If you are installing P6 Reporting Database and the Configuration utility never launches, the location of the JRE may be incorrect. To correct this issue, run the following:

- ▶ For ODS on a Microsoft Windows system:
\ODS\Disk1\install\setup.exe
- ▶ For ODS on a non-Microsoft Windows system:
\ODS\Disk1\install\runInstaller

Ensure that you specify the correct location for your systems Java Runtime Environment (JRE). The installer will show you an example of the correct path.

ETL and OBI query performance

P6 Reporting Database adds default hints based on data samples. The hints aim to improve performance across all data sets. To further improve performance, you can add non-default hints to P6 Reporting Database. You should investigate adding non-default hints if you see bottlenecks in the OBI query performance or when you run the ETL process on your data set.

Contacting Customer Support

See **Where to Get Support** (on page 53) for detailed information about contacting Customer Support.

If you have a question about using P6 Reporting Database that you or your network administrator cannot resolve with information in the documentation, please contact Customer Support.

Uninstalling P6 Reporting Database

This section describes how to uninstall the P6 Reporting Database for Windows and non-Windows systems. For information on supported Windows and non-Windows platforms, see the *Tested Configurations* document on the release media or download.

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Uninstalling the Software

To uninstall P6 Reporting Database, perform the following steps:

- 1) From the P6 Reporting Database physical media or download location, run one of the following depending on your system type:
 - ▶ If you are uninstalling P6 Reporting Database on a Microsoft Windows system:
Windows \ Disk1 \ install \ setup.exe
 - ▶ If you are uninstalling P6 Reporting Database on a non-Microsoft Windows system:
<Operating System> \ Disk1 \ install \ runInstaller
- 2) Click **Deinstall Products**.
- 3) Select the name that represents the P6 Reporting Database installation and click **Remove**.

You determined the name that represents the P6 Reporting Database installation when you installed the product. You can remove multiple installations at this time.
- 4) If the name of the item to remove is correct, click **Yes** to confirm.
- 5) Click **Close**.
- 6) Click **Cancel** and then **Yes** to confirm.
- 7) If you are uninstalling on a Microsoft Windows system, delete the *installation folder/p6rdb* folder, where *installation folder* is the folder in which you installed P6 Reporting Database.

For More Information

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Where to Get Documentation

For the most up-to-date versions of all manuals and technical documents related to installing, administering, and using P6 Analytics, go to:

http://download.oracle.com/docs/cd/E49048_01/index.htm

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

You can also access the versions of the product manuals and technical documents that were available at the time of the release from the P6 Analytics Documentation Center, located in the \Documentation\Documentation_library\language folder of the P6 Analytics physical media or download.

The following table describes the core documents available for P6 Analytics and lists the recommended readers by role.

Title	Description
<i>What's New in P6 Analytics</i>	This guide highlights the new and enhanced features included in this release. You can also use the <i>Cumulative Feature Overview Tool</i> to identify the features that have been added since a specific release level. All users should read this guide.
<i>P6 Analytics and P6 Reporting Database Planning and Sizing Guide</i>	This guide details how to plan your installation and ensures you have the necessary technical specifications to successfully install P6 Analytics and P6 Reporting Database. It also includes checklists for P6 Analytics and P6 Reporting Database to help guide you through the installation. All administrators should read this guide.

Title	Description
<i>P6 Analytics and Star Database Installation and Configuration Guide</i>	<p>This guide gives step-by-step instructions for installing and configuring P6 Analytics and the Star database portion of P6 Reporting Database.</p> <p>All administrators should read this guide.</p>
<i>P6 Reporting Database for ODS Installation and Configuration Guide</i>	<p>This guide explains how to install and configure the ODS portion of P6 Reporting Database. It describes how to install and configure the Oracle Gateway if the P6 Reporting Database is installed on a Microsoft SQL Server. It also provides information about how to run the Configuration Utility and configure P6 Reporting Database with BI Publisher.</p> <p>All administrators should read this guide.</p>
<i>P6 Analytics Post Installation Administrator's Guide</i>	<p>This guide provides information about P6 Analytics administrative tasks. It also includes information for Star security configuration, OBI installation and configuration, Financial Periods installation and configuration, and for configuring the Secure Sockets layer.</p> <p>All administrators should read this guide.</p>
<i>P6 Analytics Reference Manual</i>	<p>This manual has examples of sample dashboards and Burn Down activity use cases. It also tells users how to get started with P6 Analytics.</p> <p>All non-administrator users should read this guide.</p>
<i>P6 EPPM and P6 Analytics 3.2 System Architecture Data Sheet</i>	<p>The data sheet provides information on P6 EPPM, P6 Analytics, and P6 Reporting Database. It also provides a diagram to show how all products work together.</p> <p>All administrators should read this guide.</p>
<i>Security Guidance for P6 Analytics and P6 Reporting Database</i>	<p>This guide enables you to plan your security strategy for P6 Analytics and P6 Reporting Database. It includes information on safe deployments, authentication options, and specific security settings for the Star and ODS database.</p> <p>All administrators should read this guide.</p>
<i>Tested Configurations</i>	<p>Lists the configurations that have been tested and verified to work with P6 Analytics.</p> <p>The network administrator/database administrator and P6 Analytics administrator should read this document.</p>

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

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/us/support/contact-068555.html> or visit <http://www.oracle.com/us/corporate/accessibility/support/index.html> if you are hearing impaired.

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** which are moderated by Oracle providing a place for collaboration among industry peers to share best practices.
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