

Manually Upgrading a P6 Oracle Database to P6 version 7.0

If you want to manually convert P6 version 5.0 and higher databases to P6 version 7.0, upgrade the Project Management and Methodology Management databases by performing the procedures described in this document. These procedures should be performed by an experienced database administrator. This document contains the following sections, which should be completed in the order specified:

- Back up the existing P6 Project Management database (also known as PMDB)
- Run the validate file located in your current Database folder of the physical media or download. Ensure you run your current validate file, not the 7.0 validate file.
- Run the appropriate scripts to upgrade the Project Management database structure to P6 version 7.0
- Run the appropriate scripts to set up the Content Repository
- Back up the existing P6 Methodology Management database (also known as MMDB)
- Run the appropriate scripts to upgrade the Methodology Management database to P6 version 7.0

Back up the existing Project Management database

Perform a cold backup and a full database export.

If you are unsure how to back up your Oracle database, do not proceed with the upgrade. Contact your database administrator or database vendor for assistance with backing up your database before performing the database upgrade. Also, ensure that you are familiar with the process of restoring the backup copy of the database in case you need to do so.

Run the Validate Tool If You're on a 6.2 or Later Oracle Database

Use the validate tool to ensure there are no missing objects in your database that could cause the database to fail to upgrade. You must perform the steps below before you download the 7.0 media pack. If you run the 7.0 validate tool against your current database, it will not work.

1. Double-click **validate.bat** (validate.sh for Linux) in your current Database folder of the physical media or download to start the validate tool.

Note: Ensure you use the validate file from your current Database folder, not the 7.0 database folder.

2. Provide the following:
 - a) In the **Username** field, enter your administrative user name (for example, admuser).
 - b) In the **Database host address** field, enter your database server name or TCP/IP address.

- c) In the **Database host port** field, enter the port number that Oracle is using. The default is 1521.
 - d) In the **Database name** field, enter the Oracle Service Name. It can be found in the TNSNAMES.ORA file, which was created when you or your DBA set up the Oracle client.
- 3. View the HTML page that the tool creates to ensure your database is not missing objects.
 - 4. Go to the 'Client Application' media pack, then locate the \install\database\scripts\ folder to find the scripts you need to fix.

Run the Validate Tool If You're on an Oracle Database Prior to P6.2

If you're on a database prior to P6.2:

- 1. Insert **CD1**.
- 2. Open Windows Explorer and navigate to the following subfolder on CD1:
.\install\database.
- 3. Run the **ValSch.exe** file.
- 4. In the **Database Validation Utility - 1.0** dialog box:
 - a) In the **RDBMS** field, select Oracle.
 - b) In the **Username** field, enter your administrative user name (for example, admuser).
 - c) In the **Password** field, enter the administrative user password.
 - d) In the **TNS String** field, enter your TNS string name.
 - e) In the **Private DB User (PM Only)** field, enter the privileged username (for example, privuser).
- 5. Click **Connect**.
- 6. In the **Database Validation Utility - 1.0** dialog box:
 - a) In the **Choose Schema** field, select your release version. Also, choose **PM** or **MM**.
 - b) In the **Mode** field, select **Full Database Validation**.
- 7. Click **Run**.
- 8. If the report says objects are missing, have your database administrator fix the issues.

9. Go to \install\database\scripts\ to find the scripts you need to fix.

If your Database Administrator requires assistance with correcting these missing objects, please select the 'Save To File' option and provide this file when opening a Service Request with Oracle Support.

Run the upgrade scripts for the Project Management database structure

1. Copy the "scripts" folder to a local drive. The folder can be found in the **Database** directory of the P6 physical media or download.
2. Log on to the database as admuser, or the appropriate administrative user.
3. From the \scripts\common folder on the local drive, run the **or_disable_triggers.sql** script.
4. From the \scripts\upgrade\PM_07_00_00 folder, run one of the following scripts:

ORPM_50.sql, if upgrading from P5

ORPM_50sp1.sql, if upgrading from P5 service pack 1

ORPM_50sp2.sql, if upgrading from P5 service pack 2

ORPM_50sp3.sql, if upgrading from P5 service pack 3

ORPM_p6.sql, if upgrading from P6 version 6.0

ORPM_p61.sql, if upgrading from P6 version 6.1

ORPM_p62.sql, if upgrading from P6 version 6.2 or 6.2.1

ORPM_p621sp1.sql, if upgrading from P6 version 6.2 service pack 1

5. To grant all users with Project Management module access rights to the P6 Web Access projects section, run the **or_update_usereng.sql** script from the \scripts\common folder.

Note: Prior to P6 version 7.0, users with Project Management module access also had rights to the Projects section in P6 Web Access. For security reasons, beginning with P6 version 7.0, Project Management module access only grants rights to log into the Project Management module.

6. From the \scripts\common folder, run the **or_post_upgrade** script.
7. From the \scripts\upgrade\PM_07_00_00 folder, run the **orpm_grants.sql** and **orpm_synonyms.sql** scripts.
8. From the \scripts\source\PM_07_00_00 folder, run the **orpm_src.sql** script.
9. From the \scripts\install\PM_07_00_00 folder, run the **orpm_database_version.sql** and **orpm_querylib.sql** scripts.
10. From the \scripts\common folder, run the **or_enable_triggers.sql** script.

Run the scripts to set up the Content Repository

Depending on sizing needs and performance considerations, you may want to set up the Content Repository in a new Oracle instance instead of adding to an existing Oracle instance containing PMDB data. If you are upgrading from P6 version 6.2 or later, you do not have to set up the Content Repository again. Follow the steps below for the desired setup.

Add the Content Repository to an existing PMDB instance

1. Log on to the PMDB database as admuser, or the appropriate administrative user.
2. From the \scripts\install\JR_01_01_00 folder on the local drive, run the **orjr_ins.sql** script.
3. From the \scripts\source\JR_01_01_00 folder, run the **orjr_src.sql** script.

Add the Content Repository to a new Oracle instance

1. Log on to the new Oracle instance as a SYSTEM or other DBA privileged user.
2. From the \scripts\install\JR_01_01_00 folder on the local drive, run the **orjr_init_db.sql** script.
3. From the same folder, run the **orjr_create_users.sql** script.
4. Log on to the new Oracle database as CRUSER.
5. From the \scripts\install\JR_01_01_00 folder, run the **orjr_ins.sql** script.
6. From the \scripts\source\JR_01_01_00 folder, run the **orjr_src.sql** script.

Back up the existing Methodology Management database

Perform a cold backup and a full database export.

If you are unsure how to back up your Oracle database, do not proceed with the upgrade. Contact your database administrator or your database vendor for assistance with backing up your database before performing the database upgrade. Also, ensure that you are familiar with the process of restoring the backup copy of the database in case you need to do so.

Run the upgrade scripts for the Methodology Management database structure

1. Log on to the database as admuser, or the appropriate administrative user.
2. From the \scripts\common folder on the local drive, run the **or_disable_triggers.sql** script.

3. From the \scripts\upgrade\MM_07_00_00 folder on the local drive, run one of the following scripts:

ORMM_50.sql, if upgrading from P5 (any version)
ORMM_P6.sql, if upgrading from P6 version 6.0
ORMM_P61.sql, if upgrading from P6 version 6.1
ORMM_P62.sql, if upgrading from P6 version 6.2 or 6.2.1
4. From the \scripts\upgrade\MM_07_00_00 folder, run the **ormm_grants.sql** and **ormm_synonyms.sql** scripts.
5. From the \scripts\source\MM_07_00_00 folder, run the **ormm_src.sql** script.
6. From the \scripts\install\MM_07_00_00 folder, run the **ormm_database_version.sql** script.
7. From the \scripts\common folder, run the **or_enable_triggers.sql** script.

POST-UPGRADE NOTES:

- Oracle recommends that you make a backup of your newly upgraded databases.
- P6 version 6.2.1 and later include a new encryption algorithm that provides enhanced security for private database login passwords; however, the new encryption algorithm is not automatically enforced when you manually install or upgrade your database. To enforce existing private database login passwords (including the default login and password, privuser) to use the new encryption algorithm, you must reset or change these passwords as described in the “Changing Database Configuration Settings” section of the *Oracle Primavera P6 Administrator’s Guide*.