

Oracle  
**Primavera P6 Professional**  
**Manual Upgrade Guide (Oracle Database) for On-Premises**

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Oracle Primavera P6 Professional Manual Upgrade Guide (Oracle Database) for On-Premises

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# About This Guide

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## Scope

This guide describes how to manually upgrade your P6 Professional database to Version 23 from release 7.0 or later.

Complete these processes in the following order:

- ▶ Back up the existing P6 Professional database.
- ▶ If you are upgrading from P6 Professional 7.0, migrate all your methodologies. Use Project Architect in the Project Management module (R7.0) to convert the data from a methodology to a project. See **Convert Methodologies to Projects** (on page 5).
- ▶ Run the appropriate scripts to upgrade the P6 Professional database structure. Oracle recommends that you use SQL Plus to run scripts in this guide.
- ▶ To configure an Oracle database server for SSL, see the *Advanced Security Administrator's Guide* included with the Oracle Database Server Documentation for configuring the Oracle Server and Oracle Client(s) for SSL.

## Audience

Database administrators should use this guide.

## Using This Guide

This guide assumes you can perform common database administration procedures and have experience using the command line.

# Convert Methodologies to Projects

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If you are upgrading from P6 Professional 7.0, you must migrate Methodology Management 7.0 data to P6 Professional Version 23 projects. Use Project Architect in the Project Management module (in P6 Professional 7.0) to convert the data from a methodology to a project.

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**Note:** You can create only one project at a time. If you want all of your Methodology Management data moved to projects, contact Oracle Consulting to automate the process.

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To convert Methodology Management data to a project:

- 1) Create a new EPS node in Project Management where you can store all your Methodology Management projects.
- 2) Use Project Architect in Project Management to create projects from Methodology Management data. For more information on using Project Architect, see the *Oracle Primavera P6 Project Management Reference Manual* for release 7.0

After you have converted all your Methodology Management data to projects, you can upgrade P6 Professional.

## Risks Migration

If you are upgrading from P6 Professional 7.0, all risk data fields are migrated. The following table illustrates the risks data field mapping when upgrading from P6 Professional database (7.0 SP3) to the current version.

**Note:** Some fields migrate to text fields instead new fields because certain fields no longer correspond. The new text fields are noted below.

**Risks Fields Migration Table**

Name	P6 Professional 7.0 SP3 Risks Field	P6 Professional Version 23 Risks Field
Risk ID	risk_id	risk_id
	risk_id	risk_code (PROJRISK appended with risk_id)
Risk Name	risk_name	risk_name
Risk Description	risk_descr	risk_desc
Risk Status	status_code	status_code Open= Open; Closed=Managed (closed)
Risk Category ID	risk_type_id	risk_type_id
Risk Control	risk_control	cause (with 'Risk Control' heading)
Risk UDFs	table_name	table_name
Applies to WBS	wbs_id	cause (with 'Applies to WBS' <WBS name> heading)
Applies to Resource	rsrc_id	rsrc_id
Responsible Manager	obs_id	cause (with 'Responsible Manager' <OBS name> heading)
Priority	priority_type	cause (with 'Priority' <priority_type> heading)
Project ID	proj_id	proj_id
Date Identified	add_date	add_date
Impact Date	impact_date	cause (with 'Impact Date' <add_date in mmm-dd-yyyy format > heading)

Name	P6 Professional 7.0 SP3 Risks Field	P6 Professional Version 23 Risks Field
Probability	prbly_pct	cause (with 'Probability' <prbly_pct> heading)
Impact - Labor Units	impact_work_qty	cause (with 'Impact - Labor Units' <impact_work_qty> - 2 decimals heading)
Impact - Nonlabor Units	impact_equip_qty	cause (with 'Impact - Nonlabor Units' <impact_equip_qty> - 2 decimals heading)
Impact - Material Units	impact_mat_qty	cause (with 'Impact - Material Units' <impact_mat_qty> - 2 decimals heading)
Impact - Expenses	Impact_expense_cost	cause (with 'Impact - Expenses' <impact_expense_cost> - 2 decimals heading)
Risk Control	risk_control	cause (with 'Risk Control'<risk_control> heading)
Risk Category	risk_type	risk_type
Risk Category Sequence ID	seq_num	seq_num

## Running the Oracle Database Upgrade Scripts for the P6 Professional Database

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To upgrade your database:

- 1) Go to `\database\scripts\install\PPM_<release level>` and update the following scripts in a text editor:
  - ▶ **manual\_script\_before\_install.sql**  
By default, grant options are being made to the SYSTEM schema user. The upgrade requires entry of a DBA user account, so if you use SYSTEM, no update is needed. However, if you use another DBA account for the upgrade, update the references to SYSTEM with the actual DBA account.
  - ▶ **manual\_script\_before\_upgrade.sql**  
If you are not using the schema names admuser, privuser, or pxrptuser, update the references with your actual admuser, privuser, and pxrptuser names.
  - ▶ **orppm\_grant\_privileges.sql**

If you are not using the schema names admuser, privuser, pubuser, pxrptuser, or bgjobuser, update the references with your actual admuser, privuser, pubuser, pxrptuser, and bgjobuser names.

- 2) If you are upgrading from P6 Professional 7.0, go to `\database\scripts\install\PPM_<release_level>` and update the `orppm_create_bguser_upgrade.sql` script in a text editor. If you changed the default tablespace name (PMDB\_DAT1) or the default bgjobuser name, modify the tablespace or bgjobuser name in this script.
- 3) From the command line, run `sqlplus sys/@<DBNAME> as sysdba` and enter the password when prompted.  
where <DBNAME> is the Net Service Name for your database, which can be found in your `$ORACLE_HOME\NETWORK\ADMIN\TNSNAMES.ORA` file.
- 4) Go to `\database\scripts\install\PPM_<release_level>` and run the following scripts:
  - ▶ `manual_script_before_install.sql`
  - ▶ `manual_script_before_upgrade.sql`
  - ▶ `orppm_grant_privileges.sql`
- 5) If you are upgrading from P6 Professional 7.0, go to `\database\scripts\install\PPM_<release_level>` and run the following scripts:
  - ▶ `orppm_create_bguser_upgrade.sql`
- 6) Log into the database as the admuser (or use your custom administrative user name if you created one).
- 7) Go to `\database\scripts\common` and run the `or_disable_triggers.sql` script.
- 8) Go to `\database\scripts\upgrade\PPM_<release_level>` and run one of the following scripts:
  - `ORPPM_p70sp1.sql`, if upgrading from P6 Professional 7.0 or 7.0 Service Pack 1
  - `ORPPM_p70sp3.sql`, if upgrading from P6 Professional 7.0 Service Pack 3
  - `ORPPM_p70sp5.sql`, if upgrading from P6 Professional 7.0 Service Pack 5
  - `ORPPM_p81.sql`, if upgrading from P6 Professional 8.1
  - `ORPPM_p81sp1.sql`, if upgrading from P6 Professional 8.1 Patch Set 1
  - `ORPPM_p82.sql`, if upgrading from P6 Professional 8.2
  - `ORPPM_p82sp1.sql`, if upgrading from P6 Professional 8.2 Patch Set 1
  - `ORPPM_p82sp3.sql`, if upgrading from P6 Professional 8.2 Patch Set 3
  - `ORPPM_p82sp5.sql`, if upgrading from P6 Professional 8.2 Patch Set 5
  - `ORPPM_p83.sql`, if upgrading from P6 Professional 8.3
  - `ORPPM_p83sp2.sql`, if upgrading from P6 Professional 8.3 Patch Set 2
  - `ORPPM_p83sp3.sql`, if upgrading from P6 Professional 8.3 Patch Set 3
  - `ORPPM_p83sp4.sql`, if upgrading from P6 Professional 8.3 Patch Set 4
  - `ORPPM_p84.sql`, if upgrading from P6 Professional 8.4
  - `ORPPM_p841.sql`, if upgrading from P6 Professional 8.4 Patch Set 1
  - `ORPPM_p843.sql`, if upgrading from P6 Professional 8.4 Patch Set 3
  - `ORPPM_P151.sql`, if upgrading from P6 Professional 15 R1



**ORPPM\_P152.sql**, if upgrading from P6 Professional 15 R2

**ORPPM\_P161.sql**, if upgrading from P6 Professional 16 R1

**ORPPM\_P162.sql** if upgrading from P6 Professional 16 R2

- 9) Go to `\database\scripts\source` and run the **orppm\_admuser\_upgrade.sql** script.

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**Note:** If you changed the default user names, you must update the privuser and pubuser names in this script with your custom user names.

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- 10) Log into the database as a privuser.

- 11) Go to `\database\scripts\source\PPM_<release_level>` and run the **orppm\_privuser.sql** script.

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**Caution:** The **orppm\_privuser.sql** script contains a table called PUBUSER. Do not replace it if you have to change the pubuser user name.

**Note:** If you changed the default user names, you must update the admuser, privuser, and pubuser names in this script with your custom user names.

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- 12) Go to `\database` and run **databaselogins.bat** (with Windows) or **databaselogins.sh** (with UNIX or Linux) to upgrade the encryption of privilege user passwords. See **Private Database Credentials for P6 Professional** (on page 9) for more information.

- 13) Log into the database as background job user.

- 14) Go to `\database\source\install\PPM_<release_level>` and run the **orppm\_bguser.sql** script.

- 15) Log into the database as a system user.

- 16) Go to `\database\scripts\source\PPM_<release_level>` and run the **orppm\_reset\_priv.sql** script.

## Private Database Credentials for P6 Professional

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The P6 server and P6 Professional components obtain their run-time database connection credentials from a credential configuration table in the P6 Professional database. The P6 run-time database credentials (known as privuser or P6 private database login) are stored in an encrypted format in this special P6 configuration table. Any time that you change or rotate the privuser password credentials in your Oracle, Oracle Autonomous Database, or MS SQL Server database, you must re-synchronize the stored credentials in the P6 credential table by using the Database Login tool.

Because encryption algorithms are often enhanced in newer releases, Oracle highly recommends that you reset these stored privuser credentials when you perform a major version upgrade of P6 Professional. By resetting the stored credentials, the new encryption algorithm can be applied to other stored credentials (for example, pubuser) in the P6 Professional credential table. For information about resetting private database passwords, see **Resetting Private Database Passwords** (on page 10).

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**Note:** This tool does not reset database user logins or passwords. Administrators should use SQL Developer or other DBA consoles to set or reset database user passwords.

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## Resetting Private Database Passwords

Password encryption algorithms are frequently improved in new releases of P6 Professional and P6 Professional. You should reset private database passwords in order to use improved password encryption algorithms.

To reset private database passwords to use the new encryption algorithm:

- 1) Go to **P6 Professional <release\_level>\database** or **P6 Professional <release\_level>\database**.
- 2) Run **databaselogins.bat** (with Windows) **databaselogins.sh** (with UNIX or Linux).
- 3) In the **Database Connection** dialog box:
  - a. Select the database.
  - b. Type the user name and password of a privileged database user (for example, privuser). This login should have administrative rights on the database.
  - c. Enter the connection details for the database.

For an Oracle Database, enter the host address, host port, and database/instance name specific to your installation. The Port field displays the default port for the database type you selected.

For an Oracle Autonomous Database, enter the location of the unzipped wallet file and the service name.

For a Microsoft SQL Server Database, enter the host address, host port, and database/instance name specific to your installation. The Port field displays the default port for the database type you selected.
  - d. Click **Next**.
- 4) In the **Private Database Logins** dialog box:
  - a. Select the private database user name that you wish to reset.
  - b. Highlight the password and change it (or re-enter the existing password).
  - c. Click **Update Password**.
  - d. Click **Save**.
  - e. Click **OK**.