Contents

About This Guide ........................................................................................................... 5
Convert Methodologies to Projects ............................................................................... 5
Risks Migration .............................................................................................................. 6
Running the Oracle Database Upgrade Scripts for the P6 Professional Database ....... 7
Private Database Credentials for P6 Professional ....................................................... 9
Resetting Private Database Passwords ........................................................................ 10
Legal Notices .................................................................................................................. 11
About This Guide

Scope
This guide describes how to manually upgrade your P6 Professional database to Version 17 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
If you are upgrading from P6 Professional 7.0, you must migrate Methodology Management 7.0 data to P6 Professional Version 17 projects. Use Project Architect in the Project Management module (in P6 Professional 7.0) to convert the data from a methodology to a project.

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.

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

<table>
<thead>
<tr>
<th>Name</th>
<th>P6 Professional 7.0 SP3 Risks Field</th>
<th>P6 Professional Version 17 Risks Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk ID</td>
<td>risk_id</td>
<td>risk_id</td>
</tr>
<tr>
<td></td>
<td>risk_id</td>
<td>risk_code (PROJRISK appended with risk_id)</td>
</tr>
<tr>
<td>Risk Name</td>
<td>risk_name</td>
<td>risk_name</td>
</tr>
<tr>
<td>Risk Description</td>
<td>risk_descr</td>
<td>risk_desc</td>
</tr>
<tr>
<td>Risk Status</td>
<td>status_code</td>
<td>status_code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open= Open; Closed=Managed (closed)</td>
</tr>
<tr>
<td>Risk Category ID</td>
<td>risk_type_id</td>
<td>risk_type_id</td>
</tr>
<tr>
<td>Risk Control</td>
<td>risk_control</td>
<td>cause (with 'Risk Control' heading)</td>
</tr>
<tr>
<td>Risk UDFs</td>
<td>table_name</td>
<td>table_name</td>
</tr>
<tr>
<td>Applies to WBS</td>
<td>wbs_id</td>
<td>cause (with 'Applies to WBS' &lt;WBS name&gt; heading)</td>
</tr>
<tr>
<td>Applies to Resource</td>
<td>rsrc_id</td>
<td>rsrc_id</td>
</tr>
<tr>
<td>Responsible Manager</td>
<td>obs_id</td>
<td>cause (with 'Responsible Manager' &lt;OBS name&gt; heading)</td>
</tr>
<tr>
<td>Priority</td>
<td>priority_type</td>
<td>cause (with 'Priority' &lt;priority_type&gt; heading)</td>
</tr>
<tr>
<td>Project ID</td>
<td>proj_id</td>
<td>proj_id</td>
</tr>
<tr>
<td>Date Identified</td>
<td>add_date</td>
<td>add_date</td>
</tr>
<tr>
<td>Impact Date</td>
<td>impact_date</td>
<td>cause (with 'Impact Date' &lt;add_date in mmm-dd-yyyy format &gt; heading)</td>
</tr>
</tbody>
</table>
Running the Oracle Database Upgrade Scripts for the P6 Professional Database

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 or privuser, update the references with your actual admuser and privuser names.
   - **orppm_grant_privileges.sql**

---

<table>
<thead>
<tr>
<th>Name</th>
<th>P6 Professional 7.0 SP3 Risks Field</th>
<th>P6 Professional Version 17 Risks Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability</td>
<td>prbly_pct</td>
<td>cause (with 'Probability' \langle prbly_pct \rangle heading)</td>
</tr>
<tr>
<td>Impact - Labor Units</td>
<td>impact_work_qty</td>
<td>cause (with 'Impact - Labor Units' \langle impact_work_qty \rangle - 2 decimals heading)</td>
</tr>
<tr>
<td>Impact - Nonlabor Units</td>
<td>impact_equip_qty</td>
<td>cause (with 'Impact - Nonlabor Units' \langle impact_equip_qty \rangle - 2 decimals heading)</td>
</tr>
<tr>
<td>Impact - Material Units</td>
<td>impact_mat_qty</td>
<td>cause (with 'Impact - Material Units' \langle impact_mat_qty \rangle - 2 decimals heading)</td>
</tr>
<tr>
<td>Impact - Expenses</td>
<td>Impact_expense_cost</td>
<td>cause (with 'Impact - Expenses' \langle Impact_expense_cost \rangle - 2 decimals heading)</td>
</tr>
<tr>
<td>Risk Control</td>
<td>risk_control</td>
<td>cause (with 'Risk Control' \langle risk_control \rangle heading)</td>
</tr>
<tr>
<td>Risk Category</td>
<td>risk_type</td>
<td>risk_type</td>
</tr>
<tr>
<td>Risk Category Sequence ID</td>
<td>seq_num</td>
<td>seq_num</td>
</tr>
</tbody>
</table>
If you are not using the schema names admuser, privuser, or bgjobuser, update the references with your actual admuser, privuser, 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, execute `sqlplus sys/<password>@<DBNAME> as sysdba` where <password> is the password for your sysuser and <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`

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`
   - `orppm_grant_privileges.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_p81sp2.sql`, if upgrading from P6 Professional 8.1 Patch Set 2
   - `ORPPM_p81sp3.sql`, if upgrading from P6 Professional 8.1 Patch Set 3
   - `ORPPM_p82.sql`, if upgrading from P6 Professional 8.2
   - `ORPPM_p82sp1.sql`, if upgrading from P6 Professional 8.2 Patch Set 1
   - `ORPPM_p82sp2.sql`, if upgrading from P6 Professional 8.2 Patch Set 2
   - `ORPPM_p82sp3.sql`, if upgrading from P6 Professional 8.2 Patch Set 3
   - `ORPPM_p82sp4.sql`, if upgrading from P6 Professional 8.2 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.

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

10) Log into the database as a privuser.
11) Go to `\database\scripts\source\PPM_<release_level>` and run the `orppm_privuser.sql` script.

   **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.

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**

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 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).

**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.
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 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.
Legal Notices

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

Copyright © 1999, 2017, Oracle and/or its affiliates. All rights reserved. Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are “commercial computer software” pursuant to the applicable Federal Acquisision Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software or hardware and documentation may provide access to or information on content, products and services from third-parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.