Rational. Portfolio Manager

Version 7.0.2.2
Windows, UNIX

Release Notes

GI11-6760-00

Rational® Portfolio Manager

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Before using this information, be sure to read the general information under “Notices,” on page 25.

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About this book

This document outlines Rational Portfolio Manager 7.0.2.2 release notes. It covers migration procedures, new features added in this release, a list of known problems, and problems that have been fixed in this release.

Who should read this book

This document is intended for any Rational Portfolio Manager user and database or system administrators responsible for Rational Portfolio Manager upgrades.

Proprietary notice

Chapter 1. About this release

Documentation updates

There is an updated version of Rational® Portfolio Manager Web Services API guide included in this release. All updated documents are available as part of product installation media, or from the IBM® Publications Center.

To locate the publications center for your area, go to http://www.ibm.com and search on the term **Publications center**. Follow the instructions at your Publications Center site to locate individual documents.

Customer change requests implemented in 7.0.2.2

This section describes the customer change requests implemented in version 7.0.2.2 of Rational Portfolio Manager.

IBM Rational Portfolio Manager/IBM Rational ClearQuest® integration

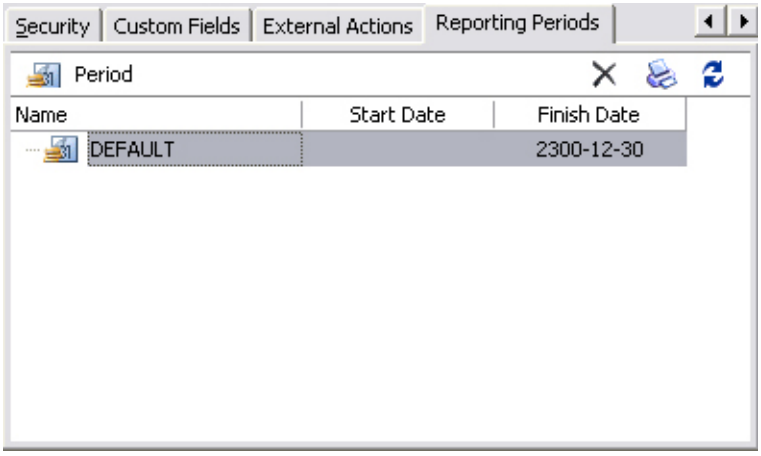
For a full description of the installation and use of this integration, refer to the RPM/CQ integration guide located in the `%MIGRATION_HOME%\Documents` folder.

Reporting periods

Rational Portfolio Manager provides the ability to create flexible fiscal periods to be used for reporting. This ability provides the organizations to support their practices around "job costing" so that they have even reporting periods which they can analyze cost and performance. To create reporting periods:

1. Select the **Application Administration** from the navigation bars. (security permission required)
2. Select the **Reporting Periods** tab.

   The **Reporting Periods** tab is populated with a **DEFAULT** period which has a finish date of 2300-12-30.



   Note: The default period cannot be deleted.

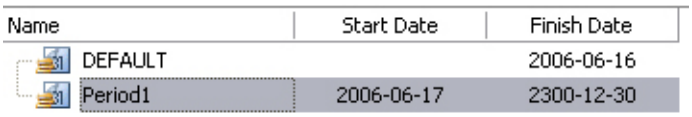
3. Drag and drop the **Period** icon from the toolbar to the workspace.

4. Name the period and hit the **Enter** key on your keyboard.

   Note: The period names must be unique. Duplicate names are not allowed.

   The new entry start date will be the day of the week that is set in the **Financials** tab of **Application Administration**, **Timesheet starts on** field. For example, if the **Timesheet starts on** is Saturday, the start date will be the previous Saturday from the current date. The finish date of the previous entry becomes a day before the new period start date. (Friday)

   Note: The finish dates cannot be modified. To modify the finish date of a period, the start date of the next period must be modified, then the finish date of the previous period is automatically adjusted to be a day before the next start period.



5. Continue adding as many periods as required.

Creating reporting periods business rules

- Reporting periods cannot be nested as a child of the root or other periods.
- The finish date cannot be modified. To modify the finish date, the start date of the next period must be modified.
- The start date of a reporting period is the day of the week that is set in **Timesheet starts on** filed of the **Financials** tab in **Application Administration**.
- The minimum reporting period is one week.
- Inserting a period between two periods is allowed as long as the gap between two periods is greater than one week.
- When inserting a period between two periods, the new period is inserted before the period where it is dropped.
- **DEFAULT** period cannot be deleted.
- Duplicate period names are not allowed.

Pivots that include the reporting periods

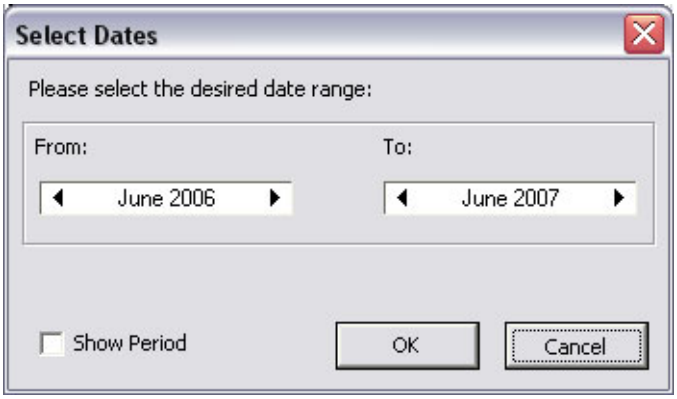
All pivot tables that have a date selection to run the pivot include the reporting periods. These are:

- Resource Utilization
- Weekly Resource Utilization
- Monthly Resource Utilization
- Timesheets
- Timesheet Steps
- Missing Timesheets
- Timephased Budgets
- Cost Center Cross Charge
- Project Cross Charge

To view the reporting periods in the above mentioned pivots:

1. Select a project or portfolio of projects in the **Work Management** view.
2. Click the **Portfolio** icon on the toolbar.
3. Click the **OLAP Pivots** icon in the **Portfolio Dashboard** view.

4. Select the required pivot. The **Select Dates** dialog is displayed.



5. Mark the check box of **Show Period**.

The pivot will include two new columns for **Period Index** and **Period Name**.

WBS labor and non-labor

WBS labor and non-labor are re-timephased based on the reporting periods only.

Example: a resource (R1) is assigned to a task (T1) in a project (P1) one hour per day from 2006-04-10 to 2006-05-31. (including all weekends)

The result set will be:

Table 1. WBS labor and non-labor example

Project	Task	Resource	Year	Month	Hours	Reporting Period
P1	T1	R1	2006	04	28	2006_Period_05
P1	T1	R1	2006	04	2	2006_Period_06
P1	T1	R1	2006	05	21	2006_Period_06
P1	T1	R1	2006	05	10	2006_Period_07

Worksheet labor

For worksheet labor, reporting periods are used based on the first day of the fiscal month. No re-timephasing is done.

Example: a charge code (CC1) is assigned to a task (T1) in project (P1) $306 per month from 2006-03-01 to 2006-07-31.

The result set will be:

Table 2. Worksheet labor example

Project	Task	Charge Code	Year	Month	Cost	Reporting Period
P1	T1	CC1	2006	03	306	2006-Period_03
P1	T1	CC1	2006	04	306	2006-Period_05
P1	T1	CC1	2006	05	306	2006-Period_06
P1	T1	CC1	2006	06	306	2006-Period_07
P1	T1	CC1	2006	07	306	2006-Period_08

Financial business rules

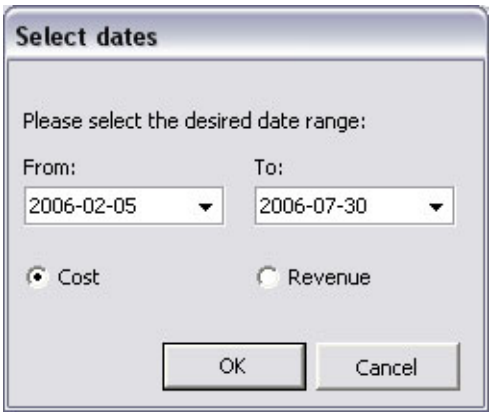
Table 3. Reporting period financial business rules

Financial Category	Business Rule
Worksheet non-labor amounts	The amount of each month is displayed against the period, which includes the first day of that month.
Project and task assignment and WBS expenses	The amount of each period is displayed based on the assignment contour or the date of the invoice item.
WBS estimate and actual (excluding invoices)	The amount of each period in a month is equal to the amount of the month divided by the number of real (working and non-working) days of the month multiplied by the number of the real days of the period. The round off error is added to the last period.

Cost Center Cross Charge With Attributes pivot to show cost and revenue

The **Cost Center Cross Charge With Attributes** pivot includes an option to see cost or revenue in the result set. To run this pivot:

1. Select a project or portfolio of projects in the **Work Management** view.
2. Click the **Portfolio** icon in the toolbar.
3. Click the **OLAP Pivots** icon and select **Finance** from the menu, then select **Cost Center Cross Charge With Attributes** pivot. This opens the **Select dates** dialog.



4. Select the desired date range.
5. Select the **Cost** radio button to see cost information in the pivot, or select the **Revenue** radio button to see revenue information.

Depending on the selection the **Cost** or **Revenue** column is displayed under the **Detail** band.

Note: To see revenue in the pivot the assignment must be billable.

64 bit platforms support

The following table lists the 64 bit platforms that are supported with this version of Rational Portfolio Manager:

Table 4. 64 bit platforms support

Database	Version	Operating System
DB2®	8.2	AIX® 5.2
Oracle	9i	RedHat ES V3
Oracle	10g	RedHat ES V3
Oracle	9i	SuSE Linux® V9.1
Oracle	10g	SuSE Linux V9.1
Oracle	9i	Solaris 2.8
Oracle	10g	Solaris 2.8
Oracle	9i	Solaris 2.9
Oracle	10g	Solaris 2.9
Oracle	9i	AIX 5.2
Oracle	10g	AIX 5.2
Oracle	9i	AIX 5.3
Oracle	10g	AIX 5.3
Oracle	9i	HP-UX B.11

Chapter 2. Status of change requests

This section explains the status of noteworthy problems in this release.

Known problems

This section describes known problems in this release of Rational Portfolio Manager.

Microsoft .NET version 1.1 limitations

Due to limitations in Microsoft® .NET version 1.1, customers should be aware that integrations built using the Rational Portfolio Manager Web Services API will likely result in experiencing several problems, especially in areas where default values of object properties are set to null. IBM recommends that customers use the Microsoft .NET version 2.0 framework when developing integrations with the Rational Portfolio Manager Web Services API.

Incorrect results when leveling a duration-based task with actuals on Oracle database

When calculate/level a duration-based project on an Oracle database, the dates displayed in the **Calculate/Level** band of the **Work Management** view are wrong. There is no workaround for this issue in this release of Rational Portfolio Manager. Note that this issue is only occurred on a Rational Portfolio Manager server with Oracle database.

Long file names in Microsoft Project

Microsoft Project files in Simplified Chinese that have a file name of more than 133 Chinese characters will fail when importing to Rational Portfolio Manager. The workaround is to rename the file to use less than 133 characters.

PMR 71380 999 672; Workflow conditions with Chinese characters

Rational Portfolio Manager crashes when trying to modify the workflow conditions with Chinese characters. There is no workaround for this issue.

Problems fixed in this release

This section lists the problems fixed in this release of Rational Portfolio Manager.

Table 5. Customer originated problems fixed in this release

Problem ID	Description
PMR 01343 999 862; APAR PK20731	Proficiency Level values cannot be deleted in the Datafields tab of Application Administration.
PMR 00166 49R 000	Cold import of XML file fails on PMOR2 server.
PMR 00185 SGC 821; APAR PK26079	The length of the Document Attribute field is too short.
PMR 00188 SGG 821; APAR PK27206	Scorecards are not added when a project is created from a template.

Table 5. Customer originated problems fixed in this release (continued)

Problem ID	Description
PMR 00839 49R 000; APAR PK26081	Investment Map settings is not changed in RPM version 7.x.
PMR 01319 49R 000; APAR PK26163	Unable to assign 'affected' resource to PBFS tasks.
PMR 17057 072 649; APAR PK24735	Error in the calculation of FTE across master projects in General Health pivot.
PMR 24803 422 000	Actual duration in General Health pivot is not the same as in the WBS view.
PMR 28529 49R 000; APAR PK22406	Adopted from template project has different profile names, number of assigned profiles and number of working hours.
PMR 31866 550 000	Double timesheet records in Timesheet pivot. (due to irregular fiscal month start)
PMR 49159 999 616	'Invalid Variant Type Conversion' error when modifying dates in Schedule Dates portlet.
PMR 49242 999 616	Default Task Type field is missing in project Identification portlet.
PMR 70750 999 672; APAR PK23832	Workflow state is not shown correctly when the state is in double-byte character set. (e.g. Chinese)
PMR 76679 49R 000; APAR PK21376	Unhandled error 100 when responding a document workflow.
PMR 78288 49R 000; APAR PK24066	Scorecard is not carried over when creating project from template.
PMR 78745 999 000	Documents not copied when creating project from RUP® template.
PMR 78837 49R 000; APAR PK22760	Incorrect attributes displaying in General Health pivot.
PMR 80090 999 000; APAR 19611	Error when trying to download settings in 6.2. (environment migrated from 6112)
PMR 87763 49R 000	Assets disappearing from the Assets view when a transferred scope element with attached asset is deleted.
PMR 89819 49R 000; APAR PK25351	Staffing search using wildcard.
PMR 91698 999 000	Utilization(h) / Baseline(L) column does not display right information in the Weekly Resource Utilization pivot.
PMR 92336 999 000; APAR PK23911	EV BCWS[PV] does not show any value in pivot.
PMR 93834 999 000; APAR PK24966	Error (D-34)/data corruption after calculating a project.

Chapter 3. Migrating to this version

Before you begin

Before you proceed with the migration you need to backup the IBM Rational Portfolio Manager database. Make sure that total recovery of the database is possible from this backup. All database migration instructions listed bellow must be done by the instance owner and the user that connects to the database from the web server.

Note: If you were unsuccessful during migration, you need to restore your old database, check the log files to troubleshoot, and restart the migration steps.

Note: All the migration scripts when transferred to AIX host should preserve their Type/Mode (ASCII/BIN) and Right (file ownership).

Migrating Rational Portfolio Manager on DB2 for UNIX

This section tells you how to migrate the Rational Portfolio Manager database from version 7.0.1.1 to version 7.0.2.2 on DB2 for UNIX.

Note: (for Database Administrators) As a rule of thumb for RPM Database maintenance, schedule a nightly job that will run `REORG` and `RUNSTATS` on RPM database tables and then do a rebind of RPM packages using the following command:

```
db2rbind database /l logfile all /u userid /p password
```

You can use `ReorgStats70.sh` located in the `${MIGRATION_HOME}/Database/DB2/Unix/migration`.

Prerequisites for migration

- A successful Rational Portfolio Manager version 7.0.1.1 installation
- Rational Portfolio Manager version 7.0.2.2 migration package
- DB2 v 8.2
- DB2 migration is performed through a manual process, the migration steps are carried out using UNIX® shell script. RPM migration procedure is using bourne shell interpretor
- Make sure that all `.sh` files located under `${MIGRATION_HOME}/Database/DB2/Unix/migration`, `${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix`, (if using 32 bit DB2 instance) `${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix64` (if using 64 bit DB2 instance) and `${MIGRATION_HOME}/Database/DB2/Unix/csp_Linux` have execute rights

Definition of terms used in this section

- **Instance Owner**: is the user owning the DB2 Instance which is defined as logical database server environment.
- **Connected User**: is the user who connects to database from web application and has been granted rights to make update, insert, delete, select on database tables. Connected User can be the instance owner too.

You can migrate the database using the schema of your choice:

- Scenario 1: All tables are created using the user name of the instance owner as schema. The instance owner is the user who connects to database from the web application.
- Scenario 2: All tables are created using the user name of the instance owner as schema. The connected user is the user who will be connecting to the database from the web application. The table aliases are created for the connected user. The alias names are created using the user name of the connected user as alias names.

Note: You should choose the scenario that you are using with your current RPM database.

The migration process is carried out through scripts by supplying all the corresponding values for parameters. A message is displayed for each step and a log file is created for each step that you might need to look at in case of unsuccessful migration. You will be asked a series of questions to provide values for parameters.

The log files are located in `${MIGRATION_HOME}/Database/DB2/Unix/migration/Logs` folder. There is one main script file called `migration7022.sh` which carries out all the steps for migration.

Migration steps

1. Stop the web application and the Alert server associated with the RPM database.
2. Go to `${MIGRATION_HOME}/Database/DB2/Unix/migration` and run:

   ```
   ./migration7022.sh
   ```

Steps used when migrating from version 7.0.1.1

Here are the steps and the names of log files created for each step of migration process:

1. Renames the existing RPM library file located in the `${INSTHOME}/sqllib/function` from `ibmrpm.so` to `ibmrpm_7011.so` for backup, where `${INSTHOME}` is the path to DB2 instance directory where DB2 is installed
2. Copies the RPM library file from `${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix` (if using AIX 32 bit DB2 instance), `${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix64` (if using AIX 64 bit DB2 instance) or `${MIGRATION_HOME}/Database/DB2/Unix/csp_Linux` (if using Linux) to `${INSTHOME}/sqllib/function/` folder
3. Gets the name of the OS in use (if the OS is AIX then will ask for 32 or 64 bit DB2 instance)
4. Checks for the version number in RPM database table to decide whether to continue or exit. If version is other than 7.0.1.1 then exits
5. Stops and starts RPM database
6. Drops triggers > `drop_triggers70.out`
7. It starts the migration process > `migration7022.out`
8. If using scenario 2 creates alias and grants rights for new tables added in migration to the connected user
9. Creates triggers > `triggers70.out`
10. Runs statistics on tables > `Reorgstats70.out`

11. Creates stored procedures for v 7.0.2.2 > `createsp.out`
12. Binds RPM v 7.0.2.2 code > `bindall.out`
13. Verifies the count of RPM database objects after migration (table, index, trigger, UDF, and stored procedure counts)
14. The results from step 13 and the required RPM database objects for RPM v 7.0.2.2 are copied into `${MIGRATION_HOME}/Database/DB2/Unix/migration/Logs/DB_CHECK.out` folder. Please verify the `DB_CHECK.out` file for differences. In case of having less DB objects than required for RPM v 7.0.2.2 please contact support. See Chapter 4, "Contacting IBM Customer Support for Rational software products," on page 23
15. Verifies if DDL changes during migration were successful and prints out the corresponding success/failure message
16. Checks for successful RPM database code migration > Output will be displayed on the screen

Note: If the output file contains 7.0.2.2, the migration is successful, if not, then verify all the log files. In any case it is recommended to check all the log files.

Note: During the migration steps you might see the following `SQLSTATE` numbers in your log files. These can be ignored since they are only warnings:

- `SQLSTATE=02000 (...the result set of the query is an empty table)`
- `SQLSTATE=42704 (...is an undefined name)`

Deploying Rational Portfolio Manager Application Server

Modifying the RPMVersion.xml file

To modify the `RPMVersion.xml` file:

1. Go to `${IBMRPM_WAR_HOME}/WEB-INF/classes` directory and open `RPMVersion.xml` for editing.
2. Change the version number from 7.0.1.1 to 7.0.2.2
3. Save and close the file. The new settings will take effect when the web application server is loaded.

Copying the client installer files

To copy the Client installer files:

1. Go to `${MIGRATION_HOME}/Client_Installers` directory and copy all files into `${IBMRPM_WAR_HOME}/client_installer`

Deploying RPM Web Services API ear module

Note: If you have already deployed RPM Web Services API with your RPM 7.0 installation, you need to uninstall the previous API module from your Application Server and deploy the new ear file supplied with this migration package.

The `rpm-web-services-7.0.2.2.ear` and `rpm-web-services-7.0.2.2.war` files are located in the `${MIGRATION_PACKAGE}/WebServicesAPI` folder.

For detail information about RPM Web Services API refer to RPM7.0.2.2_Web_Services_API_Guide.pdf located in the ${MIGRATION_PACKAGE}/Documents folder.

Verifying the installation

This section describes the process of verifying that the installation is completed and correctly configured.

Validating the database connection

Validate that the connection to the database was successful by opening the ${WAS_HOME}/AppServer/logs/server1/SystemOut.log file. Look for ConnectionPool Loaded (####ms) value. This value validates that the application is connected to the database.

Testing the Web browser connection

To test the Web browser connection:

1. Open a browser window.
2. Go to http://hostname:portnumber/webapp/IBMRPM/PMOServlet.wss

You should see the welcome screen for IBM Rational Portfolio Manager.

Migrating Rational Portfolio Manager on Oracle for UNIX

This section tells you how to migrate the Rational Portfolio Manager database from version 7.0.1.1 to version 7.0.2.2 on Oracle for UNIX.

It is also possible to run the migration scripts from a remote machine. In this case, you need to make sure you can connect to the remote database using SQLplus.

Note: Rational Portfolio Manager 7.0.2.2 migration script uses SQLplus located under ${ORACLE_HOME}/bin directory. Therefore you should run the migration scripts on a machine that has this utility.

Prerequisites for migration

- A successful Rational Portfolio Manager version 7.0.1.1 installation
- Rational Portfolio Manager version 7.0.2.2 migration package
- SQLplus utility for running Oracle migration scripts
- Oracle migration is carried out through shell script using korn or bash shell environments
- Make sure you have execute rights for mig_owner.sh and mig_con_user.sh files

Migration steps

Rational Portfolio Manager migration to version 7.0.2.2 has 2 steps:

1. Migrating RPM schema owner
2. Migrating RPM connected user (if a connected user is used)

Steps to migrate RPM schema owner

1. Tablespaces used in the migration scripts are:
   - PMO_IDX_64K for indexes
   - PMO_DATA_64K for tables

Note: If the tablespaces in your RPM database are different from the above mentioned names, you need to change the name of the tablespaces in the migration scripts in the following file:

`${MIGRATION_HOME}/Database/Oracle/scripts/step1.sql`

2. Stop the application server associated with the RPM database
3. Shutdown the RPM database
4. Startup the RPM database
5. Open a shell window and change the directory to `${MIGRATION_HOME}/Database/Oracle` and run `./mig_owner.sh`

   Migration script will run and ask you a series of questions:
6. Have you performed pre_migration steps? Before migration you need to backup your database, if you have a backup, answer yes to continue. If you answer no, no migration will be performed
7. The script uses the `${ORACLE_HOME}` environment variable of the machine which you are running the script from. Enter the required information when prompted
8. Is your RPM database installed on this machine? If you answer no, you will be prompted to enter:
   - TNS string
   - IBMRPM schema owner
   - IBMRPM schema owner password

   If you answer yes, you will be prompted to enter:
   - ORACLE_SID value
   - IBMRPM schema owner
   - IBMRPM schema owner password
9. Are you sure you want to migrate your database now? Answer yes to start the migration
10. At the end of migration you will be provided with migration report. Migration report includes the following information:
    - The current version of the database (which at this level must be 7.0.2.2)
    - The number of invalid objects in the database (which we expect to be 0)
    - The number of objects (needed for 7.0.2.2) for each object type and their status in the migrated RPM database

    Note: Comparing the number of objects for each object type in the **YOUR_RPM_DATABASE** and **NUMBER_OF_OBJECTS_MUST_BE** columns helps you to check if the migration has been successful. Obviously we expect these values to be equal.
11. Migration log files will be created under `${MIGRATION_HOME}/Database/Oracle/logs` folder. It is always recommended to look at the log files to see if migration was successful
12. Stop Oracle listener

    `${ORACLE_HOME}/bin/lsnrctl stop`
13. `LevelingLib.so` located under `${MIGRATION_HOME}/Database/Oracle/leveling/[your OS/your Oracle version]/` folder must be manually copied to the right location on the database server
14. Start Oracle listener

    `${ORACLE_HOME}/bin/lsnrctl start`

Steps to migrate RPM connected user

1. Open a shell window and change the directory to `${MIGRATION_HOME}/Database/Oracle` and run `./mig_con_user.sh`

   Migration script will run and ask you a series of questions.
2. The script uses the `${ORACLE_HOME}` environment variable of the machine which you are running the script from. Enter the required information when prompted
3. Is your RPM database installed on this machine? If you answer no, you will be prompted to enter:
   - TNS string
   - IBMRPM schema owner
   - IBMRPM schema owner password

   If you answer yes, you will be prompted to enter:
   - Verify the ORACLE_SID value
   - Enter IBMRPM schema owner
   - Enter IBMRPM schema owner password
4. Enter RPM connected user name when prompted
5. Enter RPM connected user password when prompted
6. Enter the password for sys user when prompted
7. Are you sure you want to migrate your connected user now? Answer yes to start the migration
8. Migration log files will be created under `${MIGRATION_HOME}/Database/Oracle/logs` folder. It is always recommended to look at the log files to see if migration was successful

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1. Go to `${IBMRPM_WAR_HOME}/WEB-INF/classes` directory and open `RPMVersion.xml` for editing.
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3. Save and close the file. The new settings will take effect when the web application server is loaded.

Copying the client installer files

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1. Go to `${MIGRATION_HOME}/Client_Installers` directory and copy all files into `${IBMRPM_WAR_HOME}/client_installer`

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Migrating Rational Portfolio Manager on DB2 for Windows®

This section tells you how to migrate the Rational Portfolio Manager database from version 7.0.1.1 to version 7.0.2.2 on DB2 for Windows.

Note: (for Database Administrators) As a rule of thumb for RPM Database maintenance, schedule a nightly job that will run REORG and RUNSTATS on RPM database tables and then do a rebind of RPM packages using the following command:

```
db2rbind database /l logfile all /u userid /p password
```

You can use ReorgStats70.bat located in the %MIGRATION_HOME%\Database\DB2\Windows\migration.

Prerequisites for migration

- A successful Rational Portfolio Manager version 7.0.1.1 installation
- Rational Portfolio Manager version 7.0.2.2 migration package
- DB2 v 8.2

Definition of terms used in this chapter

- **Instance Owner**: is the user owning the DB2 Instance which is defined as logical database server environment.
- **Connected User**: is the user who connects to database from web application and has been granted rights to make update, insert, delete, select on database tables. Connected User can be the instance owner too.

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- Scenario 1: All tables are created using the user name of the instance owner as schema. The instance owner is the user who connects to database from the web application.
- Scenario 2: All tables are created using the user name of the instance owner as schema. The connected user is the user who will be connecting to the database from the web application. The table aliases are created for the connected user. The alias names are created using the user name of the connected user as alias names.

Note: You should choose the scenario that you are using with your current RPM database.

The migration process is carried out through batch process by supplying all the corresponding values for parameters. A message is displayed for each step and a log file is created for each step that you might need to look at in case of unsuccessful migration.

The log files are located in `%MIGRATION_HOME%\Database\DB2\Windows\migration\Logs` folder. There is one main batch process called `migration7022.bat` which carries out all the steps for migration. During migration process you will be asked a series of questions to supply corresponding values for parameters.

Migration steps

1. Stop the web application and the Alert server associated with the RPM database
2. Go to `%MIGRATION_HOME%\Database\DB2\Windows\migration` and run:
   `migration7022`

Batch process steps used when migrating from version 7.0.1.1

Here are the steps and the names of log files created for each step of migration process:

1. Renames the existing RPM library file located in the `%DB2TEMPDIR%function` and `%DB2TEMPDIR%function\Unfenced` from `ibmrpm.dll` to `ibmrpm_7011.dll` for backup
2. Copies the RPM library file from `%MIGRATION_HOME%\Database\DB2\Windows\csp` folder into `%DB2TEMPDIR%function` and `%DB2TEMPDIR%function\Unfenced` folders
3. Checks for the version number in RPM database table to decide whether to continue or exit. If version is other than 7.0.1.1 then exits
4. Stops and starts RPM database
5. Drops triggers > `drop_triggers70.out`
6. It starts the migration process > `migration7022.out`
7. If using scenario 2 creates alias and grants rights for new tables added in migration to the connected user
8. Runs statistics on tables > `Reorgstats70.out`
9. Creates stored procedures for v 7.0.2.2 > `createsp.out`
10. Binds RPM v 7.0.2.2 code > `bindall.out`
11. Verifies the count of RPM database objects after migration (table, index, trigger, UDF, and stored procedure counts)

12. The results from step 11 and the required RPM database objects for RPM v 7.0.2.2 are copied into %MIGRATION_HOME%\Database\DB2\Windows\migration\Logs\DB_CHECK.out folder. Please verify the DB_CHECK.out file for differences. In case of having less DB objects than required for RPM v 7.0.2.2 please contact support. See Chapter 4, "Contacting IBM Customer Support for Rational software products," on page 23
13. Verifies if DDL changes during migration were successful and prints out the corresponding success/failure message
14. Checks for successful RPM database code migration > Output will be displayed on the screen

Note: If the output contains 7.0.2.2, the migration is successful, if not, then verify all the log files. In any case it is recommended to check all the log files.

Note: During the migration steps you might see the following SQLSTATE numbers in your log files. These can be ignored since they are only warnings:

- SQLSTATE=02000 (...the result set of the query is an empty table)
- SQLSTATE=42704 (...is an undefined name)

Deploying Rational Portfolio Manager Application Server

Modifying the RPMVersion.xml file

To modify the RPMVersion.xml file:

1. Go to %IBMRPM_WAR_HOME%\WEB-INF\classes directory and open RPMVersion.xml for editing.
2. Change the version number from 7.0.1.1 to 7.0.2.2
3. Save and close the file. The new settings will take effect when the web application server is loaded.

Copying the client installer files

To copy the Client installer files:

1. Go to %MIGRATION_HOME%\Client_Installers directory and copy all files into %IBMRPM_WAR_HOME%\client_installer

Deploying RPM Web Services API ear module

Note: If you have already deployed RPM Web Services API with your RPM 7.0 installation, you need to uninstall the previous API module from your Application Server and deploy the new ear file supplied with this migration package.

The rpm-web-services-7.0.2.2.ear and rpm-web-services-7.0.2.2.war files are located in the %MIGRATION_PACKAGE%\WebServicesAPI folder.

For detail information about RPM Web Services API refer to RPM7.0.2.2_Web_Services_API_Guide.pdf located in the %MIGRATION_PACKAGE%\Documents folder.

Verifying the installation

This section describes the process of verifying that the installation is completed and correctly configured.

Validating the database connection

Validate that the connection to the database was successful by opening the `%WAS_HOME%\AppServer\logs\server1\SystemOut.log` file. Look for `ConnectionPool Loaded (####ms)` value. This value validates that the application is connected to the database.

Testing the Web browser connection

To test the Web browser connection:

1. Open a browser window.
2. Go to `http://hostname:portnumber/webapp/IBMRPM/PMOServlet.wss`

You should see the welcome screen for IBM Rational Portfolio Manager.

Migrating Rational Portfolio Manager on Oracle for Windows

This section tells you how to migrate the Rational Portfolio Manager database from version 7.0.1.1 to version 7.0.2.2 on Oracle for Windows.

It is also possible to run the migration scripts from a remote machine. In this case, you need to make sure you can connect to the remote database using SQLplus.

Note: Rational Portfolio Manager 7.0.2.2 migration script uses `SQLplus.exe` located under `%ORACLE_HOME%\bin` directory. Therefore you should run the migration scripts on a machine that has this utility.

Prerequisites for migration

- A successful Rational Portfolio Manager version 7.0.1.1 installation
- Rational Portfolio Manager version 7.0.2.2 migration package
- `SQLplus.exe` utility for running Oracle migration scripts

Migration steps

Rational Portfolio Manager migration to version 7.0.2.2 has 2 steps:

1. Migrating RPM schema owner
2. Migrating RPM connected user (if a connected user is used)

Steps to migrate RPM schema owner

1. Tablespace used in the migration scripts are:
   - `PMO_IDX_64K` for indexes
   - `PMO_DATA_64K` for tables

   Note: If the tablespace in your RPM database is different from the above mentioned names, you need to change the name of the tablespace in the migration scripts in the following file:

   `%MIGRATION_HOME%\Database\Oracle\scripts\step1.sql`
2. Stop the application server associated with the RPM database
3. Shutdown the RPM database
4. Startup the RPM database
5. Open a command prompt window and change the directory to `%MIGRATION_HOME%\Database\Oracle` and run `mig_owner.bat`

Migration script will run and ask you a series of questions:

6. Have you performed pre_migration steps? Before migration you need to backup your database, if you have a backup, answer yes to continue. If you answer no, no migration will be performed
7. The script uses the %ORACLE_HOME% environment variable of the machine which you are running the script from. Enter the required information when prompted
8. Is your RPM database installed on this machine? If you answer no, you will be prompted to enter:
   - TNS string
   - IBMRPM schema owner
   - IBMRPM schema owner password

   If you answer yes, you will be prompted to enter:
   - ORACLE_SID value
   - IBMRPM schema owner
   - IBMRPM schema owner password
9. Are you sure you want to migrate your database now? Answer yes to start the migration
10. At the end of migration you will be provided with migration report. Migration report includes the following information:
    - The current version of the database (which at this level must be 7.0.2.2)
    - The number of invalid objects in the database (which we expect to be 0)
    - The number of objects (needed for 7.0.2.2) for each object type and their status in the migrated RPM database

      Note: Comparing the number of objects for each object type in the **YOUR_RPM_DATABASE** and **NUMBER_OF_OBJECTS_MUST_BE** columns helps you to check if the migration has been successful. Obviously we expect these values to be equal.
11. Migration log files will be created under %MIGRATION_HOME%\Database\Oracle\logs folder. It is always recommended to look at the log files to see if migration was successful
12. Stop Oracle listener

    ```
    %ORACLE_HOME%\bin\lsnrctl stop
    ```
13. LevelingLib.dll located under %MIGRATION_HOME%\Database\Oracle\leveling\win\your Oracle version\ folder must be manually copied to the right location on the database server
14. Start Oracle listener

    ```
    %ORACLE_HOME%\bin\lsnrctl start
    ```

Steps to migrate RPM connected user

1. Open a command prompt window and change the directory to %MIGRATION_HOME%\Database\Oracle and run mig_con_user.bat

   Migration script will run and ask you a series of questions.
2. The script uses your %ORACLE_HOME% environment variable of the machine which you are running the script from. Enter the required information when prompted
3. Is your RPM database installed on this machine? If you answer no, you will be prompted to enter:

- TNS string
- IBMRPM schema owner
- IBMRPM schema owner password

If you answer yes, you will be prompted to enter:

- Verify the ORACLE_SID value
- Enter IBMRPM schema owner
- Enter IBMRPM schema owner password

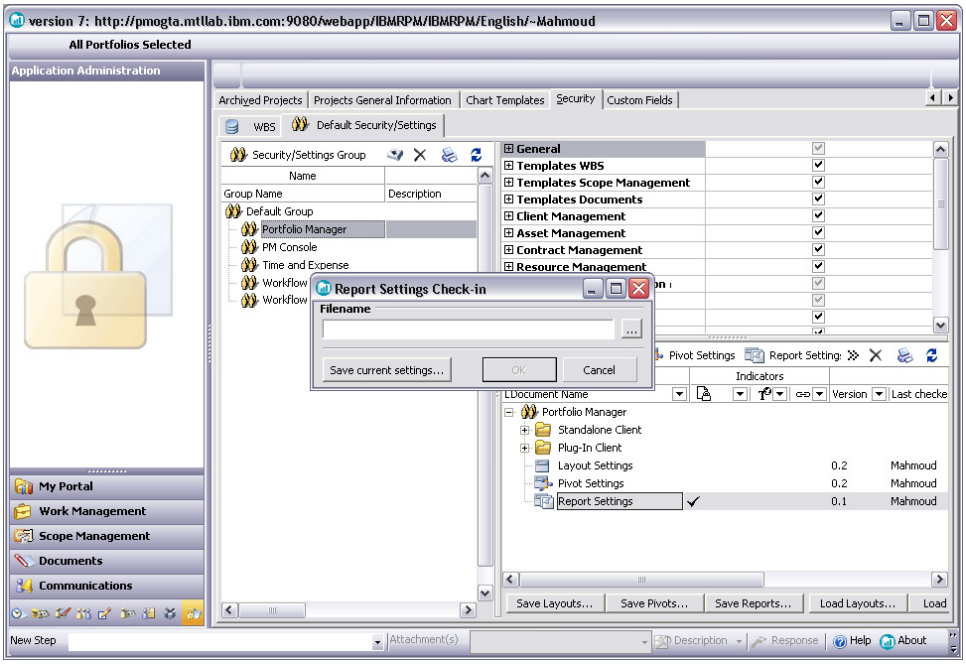
4. Enter RPM connected user name when prompted
5. Enter RPM connected user password when prompted
6. Enter the password for sys user when prompted
7. Are you sure you want to migrate your connected user now? Answer yes to start the migration
8. Migration log files will be created under `%MIGRATION_HOME%\Database\Oracle\logs` folder. It is always recommended to look at the log files to see if migration was successful

Post Installation Instructions

Upload report settings.

1. In the lower right frame drag and drop a  **Report Settings** icon.

   Note: It is also possible to create the report settings under specific client and operating system folders.
2. This will display the **Reports Settings Check-in** dialog.



3. Click the **Ellipsis** icon and browse for the **IBMRPM.pmoReports** file located under %PACKAGE_ROOT%\Post-Install directory.
4. Click **Open** to open the file.
5. Click **OK** to upload the report settings to the server.

   Note: You can also click **Save current settings...** to save the settings on your local machine.

Deploying Rational Portfolio Manager Application Server

Modifying the RPMVersion.xml file

To modify the `RPMVersion.xml` file:

1. Go to `%IBMRPM_WAR_HOME%\WEB-INF\classes` directory and open `RPMVersion.xml` for editing.
2. Change the version number from 7.0.1.1 to 7.0.2.2
3. Save and close the file. The new settings will take effect when the web application server is loaded.

Copying the client installer files

To copy the Client installer files:

1. Go to `%MIGRATION_HOME%\Client_Installers` directory and copy all files into `%IBMRPM_WAR_HOME%\client_installer`

Deploying RPM Web Services API ear module

Note: If you have already deployed RPM Web Services API with your RPM 7.0 installation, you need to uninstall the previous API module from your Application Server and deploy the new ear file supplied with this migration package.

The `rpm-web-services-7.0.2.2.ear` and `rpm-web-services-7.0.2.2.war` files are located in the `%MIGRATION_PACKAGE%\WebServicesAPI` folder.

For detail information about RPM Web Services API refer to `RPM7.0.2.2_Web_Services_API_Guide.pdf` located in the `%MIGRATION_PACKAGE%\Documents` folder.

Verifying the installation

This section describes the process of verifying that the installation is completed and correctly configured.

Validating the database connection

Validate that the connection to the database was successful by opening the `%WAS_HOME%\AppServer\logs\server1\SystemOut.log` file. Look for `ConnectionPool Loaded (####ms)` value. This value validates that the application is connected to the database.

Testing the Web browser connection

To test the Web browser connection:

1. Open a browser window.
2. Go to `http://hostname:portnumber/webapp/IBMRPM/PMOServlet.wss`

You should see the welcome screen for IBM Rational Portfolio Manager.

Chapter 4. Contacting IBM Customer Support for Rational software products

If you have questions about installing, using, or maintaining this product, contact IBM Customer Support as follows:

The IBM Software Support Internet site provides you with self-help resources and electronic problem submission. The IBM Software Support home page for Rational products can be found at http://www.ibm.com/software/rational/support/.

Voice Support is available to all current contract holders by dialing a telephone number in your country (where available). For specific country phone number, go to http://www.ibm.com/planetwide/.

Note: When you contact IBM Customer Support, please be prepared to supply the following information:

- Your name, company name, ICN number, telephone number, and e-mail address
- Your operating system, version number, and any service packs or patches you have applied
- Your database, version number, and any service packs or patches you have applied
- Your application server, version number, and any service packs or patches you have applied
- Product name and release number
- Your PMR number (if you are following up on a previously reported problem)

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