

**Version 6.2.2.3**  
Windows, UNIX, Linux



## Release Notes



**Version 6.2.2.3**  
Windows, UNIX, Linux



## Release Notes

Before using this information, be sure to read the general information under "Notices," on page 51.

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## About this book

This document outlines Rational Portfolio Manager 6.2.2.3 release notes. It covers web services API changes, migration procedures, new features added in this release, a list of known problems, and problems that have been fixed in this release.

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## 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.

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## Chapter 1. About this release

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### Customer change requests implemented in 6.2.2.3

This section describes the customer change requests implemented in version 6.2.2.3 of Rational® Portfolio Manager.

#### Web Services API for CESAR's integration

Web Services API supports CESAR's integration for the following areas:

- Project Description/Financials
- Cost codes in Application administration
- Resource Management

See Web Services API chapter for details.

#### Resource Utilization pivot customization

The ID (task ID) column has been added to Resource Weekly Utilization, and the Resource Monthly Utilization pivots under the Task Reference band. This ID was also added in the task description view, Identification portlet.

The Skills and Skills Proficiency columns have been added under Resource Reference band in Resource Utilization, Weekly Resource Utilization, and the Monthly Resource Utilization pivots.

#### Authentication support for environments using TAM Webseal

Rational Portfolio Manager supports the use of TAM Webseal as an authentication mechanism.



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## Chapter 2. Status of change requests

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

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### Known problems

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

#### Problem in the response dialog box of document workflows

After a document workflow step with mandatory layout has been sent to a user and the user opens the document description view, the response dialog box does not open. When the description view is closed, the response dialog box is open but it's not possible to submit a response. There is no workaround for this issue and it will be fixed in the future releases of Rational Portfolio Manager.

#### Workflow security

After submitting a workflow step, project role security on custom fields changes incorrectly. The workaround is to log out and log back in to the application.

#### Monthly resource utilization pivot error

The -727 error is displayed when trying to open the **Monthly Resource Utilization** pivot. There is no workaround for this issue and it will be fixed in the future releases of Rational Portfolio Manager.

#### Custom fields

The value of check box items is not set to "N" after creating a custom field with default value as "Unchecked". The workaround is to add the check box to the description view, check it and uncheck it.

#### Can view list of documents without security rights

Users can see the list of documents inside the projects from the template view without having the security rights for **Access Documents**. There is no workaround for this issue and it will be fixed in the future releases of Rational Portfolio Manager.

#### Folder participant security rights

Users with security rights as **Folder Participants** cannot create elements in **Scope Management** or **Documents** views under the assigned folders. The workaround is to grant **Project Visitor** access to those users.

#### Web services API financial total labor

The **Total Labor** row in the **Financials** portlet of the Web Services API is missing.

#### Web services API financial expense labor

The **Expense Labor** calculation in the **Financials** portlet of the Web Services API is wrong. The rule is: expense labor = hours X average cost/hr

## Importing MSP's project default task type

Rational Portfolio Manager is not respecting the MSP's project default task type upon importing. The workaround is after importing an MSP file into Rational Portfolio Manager, you need to open the project description view and in the **Identification** portlet change the **Default Task Type** to what was specified in MSP.

## Actuals are not respected when leveling a fixed duration task

You will not be able to level a project correctly if any duration based tasks happen to have actuals assigned to them. There is no workaround for this issue and it will be fixed in the future releases of Rational Portfolio Manager.

## Workflow steps with layouts are not submitted

When running a project workflow with a layout attached to its first step and the step is submitted, the response dialog stays on the screen and the history of the element shows that the step is open. There is no workaround for this issue and it will be fixed in the future releases of Rational Portfolio Manager.

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## Problems fixed in this release

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

*Table 1. Customer originated problems fixed in this release*

Problem ID	Description
PMR 08563 228 631	JDBC Driver Type 4 is failing at special characters.
PMR 09098 228 631	Project manager name in general health pivot is wrong.
PMR 12453 999 848	Invalid parameter in SP_WBS_MSP causing import to fail.
PMR 20933 379 000; APAR# PK22452	Running a custom report leaves the busy cursor on.
PMR 20936 379 000; APAR# PK22453	Modifying a report leaves busy cursor on.
PMR 30680 379 000; APAR# PK21783	Alerts failing for RPM 6.2.1.1 on oracle.
PMR 43129 122 000; APAR# PK21717	Unhandled Exception: Edatabase Error in WBS Elements with Attributes pivot.
PMR 71292 999 672; APAR# PK22137	RPM scope elements portlets are not showing in Template view.
PMR 76141 49R 000	Cannot drag and drop just part of a project template (e.g. a deliverable) to a project WBS.
PMR 78354 999 000; APAR# PK18665	Cannot remove 'Collect Metrics' field from the Identification portlet.
PMR 79445 999 000; APAR# PK19307	Division and Department codes do not roll up in Timesheet and Demand & Supply pivots.
PMR 81532 999 000; APAR# PK18959	Grand totals is missing from pivot.
PMR 78745 999 000	Documents not copied when creating project from RUP template.
PMR 79508 999 000; APAR# PK19311	MM Calculation in General Health Pivot & Weekly Resource Utilization & Project deliveables.
PMR 87955 999 760; APAR# PK22065	Servlet error after upgrading from 6.1.1.3 to 6.1.2.6.

*Table 1. Customer originated problems fixed in this release (continued)*

<b>Problem ID</b>	<b>Description</b>
PMR 91143 999 000; APAR# PK23360	Task Analysis pivot not displaying duration.



---

## Chapter 3. Web Services API

This section of the Release Notes for 6.2.2.3 contains late-breaking information about important changes applied to the following sections of Rational Portfolio Manager Web Services Application Programming Interface (API).

- Supported Client Environments
- RPM Web Services Configuration
- Transactions
- Xpaths
- Application Interfaces
- The Object model
- Limitations

Interfaces available with this release include:

- Application Administration
- Asset
- Client/Cost Center
- Contracts
- Custom field
- Documents
- Expense
- Financial
- Framework
- Resource Management
- Security
- Scope Management
- Scorecard
- Timesheets
- Workflow
- Work Management (WBS)

**Note:** From this release onward generic naming conventions such as `rpmws-x.x.x.x.war`, where `x.x.x.x` represents the version of the RPM Web services release, will be used for file names throughout the documentation.

---

### Supported Client Environments

*Table 2. Client Environments no longer supported*

SOAP Client	Supported Version	Programming Environment	Operating Environment
WebSphere Webservices	6.0	IBM JDK 1.4.X	Any environment supported by JAVA

---

## RPM Web Services Configuration

RPM Web Services is configured using two property files: `com.ibm.rpm.GeneralOptions.properties` and `com.ibm.rpm.LdapOptions.properties`. These files are located in the directory where `rpm-web-services.ear` has been deployed.

### General options

The file `com.ibm.rpm.GeneralOptions.properties` contains the set of general options for RPM Web Services. The values of these options must be edited as required for your application.

#### Authentication Type

- Property name: **authenticationType**
- Type: String
- Default Value: Database
- Description: Specifies the type of authentication used when the RPM Web Services' client calls **Authenticate.login**(username, password, dsn). Valid values are: Database, LDAP.
  - When using Database authentication, the username and password supplied are matched with the username and password specified in the Resource Management section of RPM's database.

**Note:** When Database authentication is specified, the file `com.ibm.rpm.LdapOptions.properties` is ignored.

- When using LDAP authentication, the username supplied is matched with the one specified in the Resource Management section of RPM's database. The password is then matched with the one specified on the configured LDAP server. The Ldap configuration is located in `com.ibm.rpm.LdapOptions.properties`.

**Note:** The **changePassword** method is not available when LDAP authentication is specified.

#### Use Session Timeout

- Property name: **useSessionTimeout**
- Type: boolean
- Default Value: false
- Description: If this value is set to true, the RPM Web Services will automatically disable sessions which have remained inactive for a period of time greater than is specified in the parameter **sessionTimeoutDelayInSeconds**.

#### Session Timeout Delay In Seconds

- Property name: **sessionTimeoutDelayInSeconds**
- Type: Integer
- Default Value: 600 seconds
- Description: This value specifies the lapse of time in seconds during which a session can remain inactive before it times out. This parameter is not used if the **useSessionTimeout** parameter is set to false. The value range of this parameter is 1 to 2147483647. If an invalid value is detected, the default value is applied.

## Ldap options

The file `com.ibm.rpm.LdapOptions.properties` contains the set of LDAP options for RPM Web Services. It is used only if the general option **authenticationType** is set to LDAP. Edit the values of these options as required for your application.

**Note:** The content of this file should be identical to the content of RPM Middleware configuration file `com.ibm.rpm.auth.jndi.JNDIController.properties`.

### Search Context

- Property name: **com.ibm.rpm.auth.jndi.ldapsearchcontext**
- Type: String
- Default Value: `CN=Users,DC=corp,DC=hq,DC=ibm,DC=com`
- Description: Defines the subset of the LDAP server to be searched for the specified username. It is used as a filter during the directory search.

### User ID Attribute

- Property name: **com.ibm.rpm.auth.jndi.ldapuseridattr**
- Type: String
- Default Value: `uid`
- Description: LDAP attribute that will be used to match **Authenticate.login's username** parameter.

### User Authentication Distinguished Name

- Property name: **com.ibm.rpm.auth.jndi.ldapuserauthdn**
- Type: String
- Default Value: `dn`
- Description: Unique name for an entry in the LDAP directory.

### LDAP Server URL

- Property name: **java.naming.provider.url**
- Type: String
- Default Value: `ldap://bluepages.ibm.com:389`
- Description: The LDAP server's URL

**Note:** You must modify this value if you are not installing within IBM.

### LDAP Context Implementation

- Property name: **java.naming.factory.initial**
- Type: String
- Default Value: `com.sun.jndi.ldap.LdapCtxFactory`
- Description: LDAP context implementation class

**Note:** This value is rarely modified

### LDAP Version

- Property name: **java.naming.ldap.version**
- Type: Integer
- Default Value: `3`
- Description: Version of LDAP to be used, valid values are: 2, 3.

**Note:** This field is rarely modified

### **Security Protocol**

- Property name: **java.naming.security.protocol**
- Type: String
- Default Value: simple
- Description: Security protocol to be used. Valid values are: simple, ssl.

### **Security Authentication**

- Property name: **java.naming.security.authentication**
- Type: String
- Default Value: none
- Description: Specifies the authentication mechanism that the service provider will use.

The following values are valid:

- none - use no authentication (anonymous)
- simple - use weak authentication (clear text password)

If this option is not set but the **java.naming.security.principal** property has been, the service provider will use simple authentication. If neither property is set, the service provider will bind anonymously.

### **SSL Key Store**

- Property name: **javax.net.ssl.keyStore**
- Type: String
- Default Value: *No default value*
- Description: Specifies the location where to find key material for the default KeyManager.

### **SSL Key Store Type**

- Property name: **javax.net.ssl.keyStoreType**
- Type: String
- Default Value: jks
- Description: Specifies the KeyStore file type for key material for the default KeyManager.

### **SSL Key Store Password**

- Property name: **javax.net.ssl.keyStorePassword**
- Type: String
- Default Value: *No default value*
- Description: Specifies the password to be used with this KeyStore.

### **SSL Trust Store**

- Property name: **javax.net.ssl.trustStore**
- Type: String
- Default Value: *No default value*
- Description: Specifies the location of where to find key material for the default TrustManager.

## SSL Trust Store Type

- Property name: `javax.net.ssl.trustStoreType`
- Type: String
- Default Value: `jks`
- Description: Specifies the KeyStore file type for key material for the default TrustManager.

## SSL Trust Store Password

- Property name: `javax.net.ssl.trustStorePassword`
- Type: String
- Default Value: *No default value*
- Description: Specifies the password to be used with this KeyStore.

## Data Source Recommended Settings

The following settings are recommended for the `RPMDATASOURCE` connection pool:

- Connection timeout: 600 seconds
- Maximum connections: 50
- Minimum connections: 10
- Reap time: 180 seconds
- Unused timeout: 1800 seconds

It is recommended to keep the **maximum connections** number equal or higher to the number of concurrent threads configured on the web server.

---

## Transactions

Each call to the API is treated as a single transaction. If any critical error is detected during a call to the API, the call will be rolled back and the list of errors will be returned to the client.

---

## XPaths

Note that field names are always prefixed with the `@` character and that they are case insensitive.

The following is a list of examples:

### Example 1:

```
/Pool[@name='Pool Name']
```

This query will return all the pools named 'Pool Name'.

### Example 2:

```
/Pool[@name='Pool Name']/Resource
```

This query will return all the resources contained in all the pools named 'Pool Name'.

### Example 3:

```
/resource[@EffectiveStartDate>'2005-08-15 09:50:43']
```

This query will return all the resources that have an effective start date that occurs after 2005-08-15 9:50:43.

**Example 4:**

```
/pool[@resources[@fullName='Resource Name']]
```

This query will return all the pools that contain a resource named 'Resource Name'.

---

## Changes to the Application API

This section describes the changes to the Application Web Service, the old and new versions of each operation signature are detailed using Java syntax.

Exception reporting has been uniformed to rend robustness to the API and facilitate its understanding and its use. Looking at the method signature changes, you will notice that most operations no longer throw exceptions, instead the list of exceptions is returned within the results of the method which has been called, either a **Result**, a **SingleResult** or an **ArrayResult**. In addition, these results also contain a list of warnings. These are notifications, therefore, do not cause an operation to fail.

**Result Objects:**

- **Result:** Contains a list of exceptions and a list of warnings.
- **SaveResult:** Deprecated. Extends Result. Contains one RPMObject and the inherited lists of exceptions and warnings.
- **SingleResult:** Extends SaveResult. Replaces SaveResult and is backward compatible. Contains the inherited RPMObject and the lists of exceptions and warnings.
- **LoadResult:** Deprecated. Extends Result. Contains a list of RPMObject and the inherited lists of exceptions and warnings.
- **ArrayResult:** Extends LoadResult. Replaces LoadResult and is backward compatible. Contains the inherited lists of RPMObject, exceptions and warnings.

## Application API Objects

Table 3. List of Application API objects

Object	Changes
Result	<ul style="list-style-type: none"><li>• <b>taskSuccessfull</b> has been renamed <b>successful</b></li><li>• <b>exceptions</b> has been renamed to <b>errors</b></li><li>• <b>warningFree</b> has been added</li><li>• <b>warnings</b> has been added</li></ul>
PropertyArray	<ul style="list-style-type: none"><li>• <b>propertyList</b> has been renamed <b>properties</b></li></ul>
RPMException	<ul style="list-style-type: none"><li>• <b>severity</b> has been added</li></ul>

**RPMException**'s severity can be set to any of the following levels listed in this table:

Table 4. List of severity levels for RPMException

Severity Level	Description
Information	Not implemented in this release.
Warning	Indicates an abnormal situation but not critical, it does not cause an operation to fail. For example, when the object being loaded refers to an object that no longer exists. In this case, the reference will be set to null and a warning will be added to the list.
Error	Indicates an error situation: The operation will fail. Many such errors can accumulate during the validation phase.
SevereError	Indicates a severe error situation: The operation will fail and terminate immediately. Hence, if there is such an error, it should be the last one of the exception list.
FatalError	Indicates a fatal error situation: The Web service will stop.

## Application API Operations

Table 5. List of Application API operations

Operation	Description
getAllProperties	<ul style="list-style-type: none"> <li><b>old:</b> PropertyArray getAllProperties(String sessionID) throws RPMException</li> <li><b>new:</b> PropertyArray getSystemInfo(String sessionID) throws RPMException</li> </ul> <p>This operation's result now includes key "<b>com.ibm.rpm.ws.database.version</b>".</p>
getProperty	<ul style="list-style-type: none"> <li><b>old:</b> String getProperty(String sessionID, String key) throws RPMException</li> <li><b>new:</b> -- Deleted operation --</li> </ul> <p>This information is available through <b>getSystemInfo()</b>. You must then find the value matching the key.</p>
getDatabaseVersion	<ul style="list-style-type: none"> <li><b>old:</b> String getDatabaseVersion(String sessionID) throws RPMException</li> <li><b>new:</b> -- Deleted operation -</li> </ul> <p>This information is available through <b>getSystemInfo()</b>. You must then find the value matching the key "<b>com.ibm.rpm.ws.database.version</b>".</p>
save	<ul style="list-style-type: none"> <li><b>old:</b> SaveResult save(String sessionID, RPMObject rpmObject, RPMObjectScope rpmObjectScope, ReloadType reloadType) throws RPMException</li> <li><b>new:</b> SingleResult save(String sessionID, RPMObject rpmObject, RPMObjectScope rpmObjectScope, ReloadType reloadType)</li> </ul>

Table 5. List of Application API operations (continued)

Operation	Description
delete	<ul style="list-style-type: none"> <li>• <b>old:</b> void delete(String sessionID, RPMObject rpmObject) throws RPMException</li> <li>• <b>new:</b> Result delete(String sessionID, RPMObject rpmObject)</li> </ul>
loadFromXpath	<ul style="list-style-type: none"> <li>• <b>old:</b> LoadResult loadFromXpath(String sessionID, String xpath, RPMObjectScope scope) throws RPMException</li> <li>• <b>new:</b> ArrayResult loadFromXpath(String sessionID, String xpath, RPMObjectScope scope)</li> </ul>
loadFromID	<ul style="list-style-type: none"> <li>• <b>old:</b> SingleResult loadFromID(String sessionID, RPMObject rpmObject, RPMObjectScope scope) throws RPMException</li> <li>• <b>new:</b> SingleResult loadFromID(String sessionID, RPMObject rpmObject, RPMObjectScope scope)</li> </ul>
loadArrayFromID	<ul style="list-style-type: none"> <li>• <b>old:</b> LoadResult loadArrayFromID(String sessionID, RPMObjectArray rpmObjectArray, RPMObjectScope scope) throws RPMException</li> <li>• <b>new:</b> ArrayResult loadArrayFromID(String sessionID, RPMObjectArray rpmObjectArray, RPMObjectScope scope)</li> </ul>
startWorkflow	<ul style="list-style-type: none"> <li>• <b>old:</b> Result startWorkflow(String sessionID, WorkflowProcess process, RPMObject object, String initiatorId) throws RPMException</li> <li>• <b>new:</b> SingleResult startWorkflow(String sessionID, WorkflowProcess process, RPMObject object, Resource initiator)</li> </ul> <p><b>Note:</b> The <b>RPMObject</b> field of <b>SingleResult</b> is reserved for future use. It is currently set to <i>null</i>.</p>
assignScoreCard	<ul style="list-style-type: none"> <li>• <b>old:</b> SingleResult assignScoreCard(String sessionID, RPMObject objectToAssign, RPMObjectScope objectToAssignScope, Scorecard scoreCardToAssign, ReloadType reloadType) throws RPMException</li> <li>• <b>new:</b> SingleResult assignScoreCard(String sessionID, RPMObject objectToAssign, RPMObjectScope objectToAssignScope, Scorecard scoreCardToAssign, ReloadType reloadType)</li> </ul>

Table 5. List of Application API operations (continued)

Operation	Description
publishScorecard	<ul style="list-style-type: none"> <li>• <b>old:</b> SingleResult publishScorecard(String sessionID, AssignedScorecard assignedScorecard, AbstractScorecardScope scorecardScope) throws RPMException</li> <li>• <b>new:</b> SingleResult publishScorecard(String sessionID, AssignedScorecard assignedScorecard, AbstractScorecardScope scorecardScope)</li> </ul>
acceptTaskAssignmentChanges	<ul style="list-style-type: none"> <li>• <b>old:</b> SaveResult acceptTaskAssignmentChanges(String sessionID, TaskAssignment taskAssignment, TaskAssignmentScope scope, boolean acceptEETC, boolean acceptForecastDates) throws RPMException</li> <li>• <b>new:</b> SingleResult acceptTaskAssignmentChanges(String sessionID, TaskAssignment taskAssignment, TaskAssignmentScope scope, boolean acceptEETC, boolean acceptForecastDates)</li> </ul>
rejectTaskAssignmentChanges	<ul style="list-style-type: none"> <li>• <b>old:</b> SaveResult rejectTaskAssignmentChanges(String sessionID, TaskAssignment taskAssignment, TaskAssignmentScope scope, boolean rejectEETC, boolean rejectForecastDates) throws RPMException</li> <li>• <b>new:</b> SingleResult rejectTaskAssignmentChanges(String sessionID, TaskAssignment taskAssignment, TaskAssignmentScope scope, boolean rejectEETC, boolean rejectForecastDates)</li> </ul>
copyProposedToPlan	<ul style="list-style-type: none"> <li>• <b>old:</b> SaveResult copyProposedToPlan(String sessionID, WorkElement workElement, WorkElementScope workElementScope) throws RPMException</li> <li>• <b>new:</b> SingleResult copyProposedToPlan(String sessionID, WorkElement workElement, WorkElementScope workElementScope)</li> </ul>
commitAffectedResources	<ul style="list-style-type: none"> <li>• <b>old:</b> SaveResult commitAffectedResources(String sessionID, GenericProject genericProject, WorkElementScope workElementScope) throws RPMException</li> <li>• <b>new:</b> SingleResult commitAffectedResources(String sessionID, GenericProject genericProject, WorkElementScope workElementScope)</li> </ul>

Table 5. List of Application API operations (continued)

Operation	Description
replaceProfileByResource	<ul style="list-style-type: none"> <li>• <b>old:</b> void replaceProfileByResource(String sessionID, Profile profile, Resource resource) throws RPMException</li> <li>• <b>new:</b> Result replaceProfileByResource(String sessionID, Profile profile, Resource resource)</li> </ul>
replaceResourceByProfile	<p>This is a new operation.</p> <ul style="list-style-type: none"> <li>• Result replaceResourceByProfile(String sessionID, ResourceTaskAssignment assignment)</li> </ul>

## Changes to the Object Model

This section describes the changes to the object model. Each subsection represents a package and contains a table listing the objects that have been updated for this release and a description of their change.

In addition, at the end of each package a subsection illustrates, in the form of diagrams, the modified structure and object relationships resulting from the changes applied.

### ApplicationAdministration

The following table provides a summary of changes applied to the **Application Administration** package in this release.

Table 6. List of changes to the Application Administration package

Object	Changes
AttributeScope	<ul style="list-style-type: none"> <li>• The field <b>attribute</b> has been renamed <b>attributes</b></li> <li>• The field <b>category</b> has been renamed <b>categories</b></li> <li>• The field <b>classification</b> has been renamed <b>classifications</b></li> </ul>
CalendarDay	Added object
CalendarException	Added object
CurrencyScope	The field <b>currencyExchangeRanges</b> has been renamed <b>exchangeRanges</b>
Geographical	<b>Geographical</b> structure was changed to replace the typed arrays of children with a single array of Geographical objects.
GeographicalScope	<ul style="list-style-type: none"> <li>• The field <b>children</b> has been added</li> <li>• The field <b>cities</b> was removed</li> <li>• The field <b>countries</b> was removed</li> <li>• The field <b>locations</b> was removed</li> <li>• The field <b>regions</b> was removed</li> <li>• The field <b>states</b> was removed</li> </ul>

Table 6. List of changes to the Application Administration package (continued)

Object	Changes
Organizational	<b>Organizational</b> structure was changed to replace the typed arrays of children with a single array of Organizational objects.
OrganizationalScope	<ul style="list-style-type: none"> <li>• The field <b>children</b> has been added</li> <li>• The field <b>departments</b> has been removed</li> <li>• the field <b>groups</b> has been removed</li> <li>• The field <b>offices</b> has been removed</li> <li>• The field <b>organizations</b> has been removed</li> </ul>
RPMCalendar	The field <b>exceptions</b> type has been renamed <b>CalendarExceptions</b>

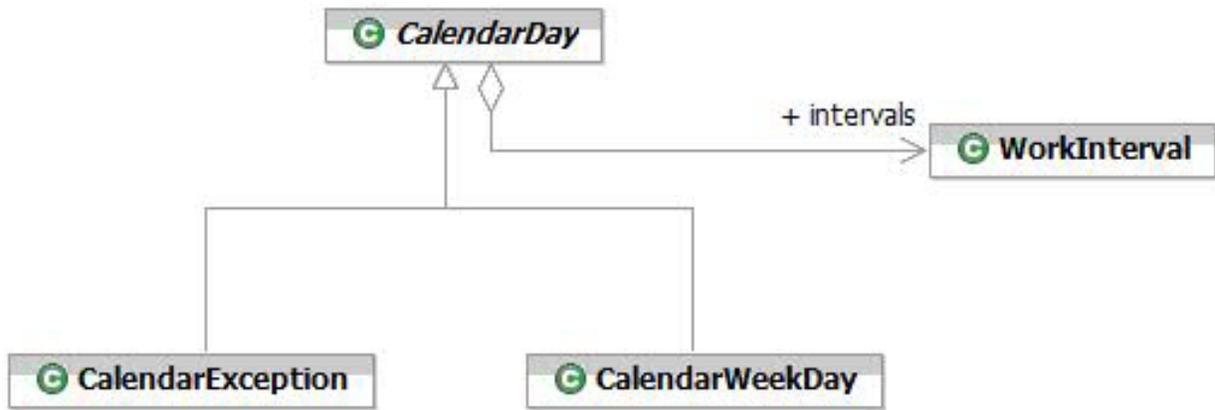


Figure 1. CalendarDay object relationship

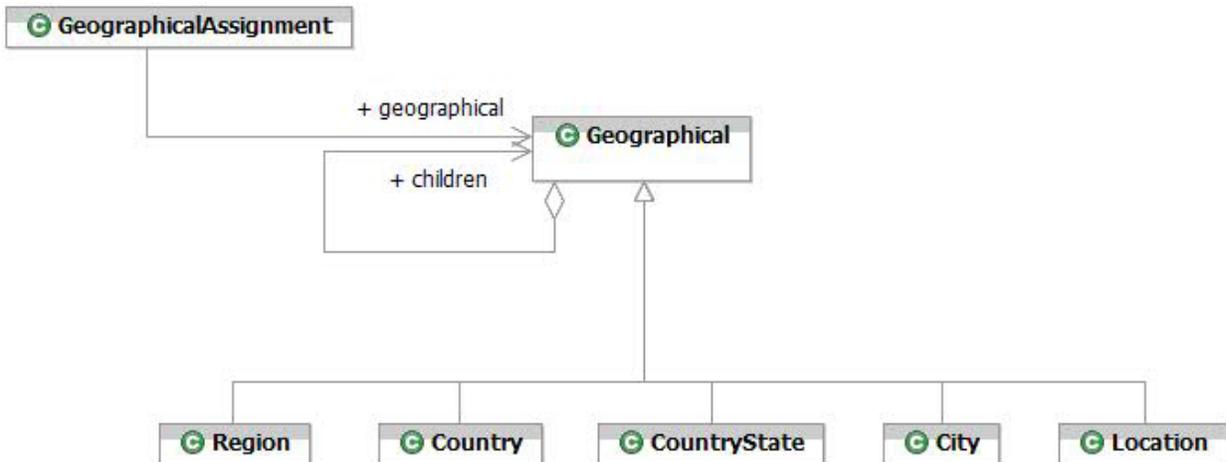


Figure 2. Geographical object relationship

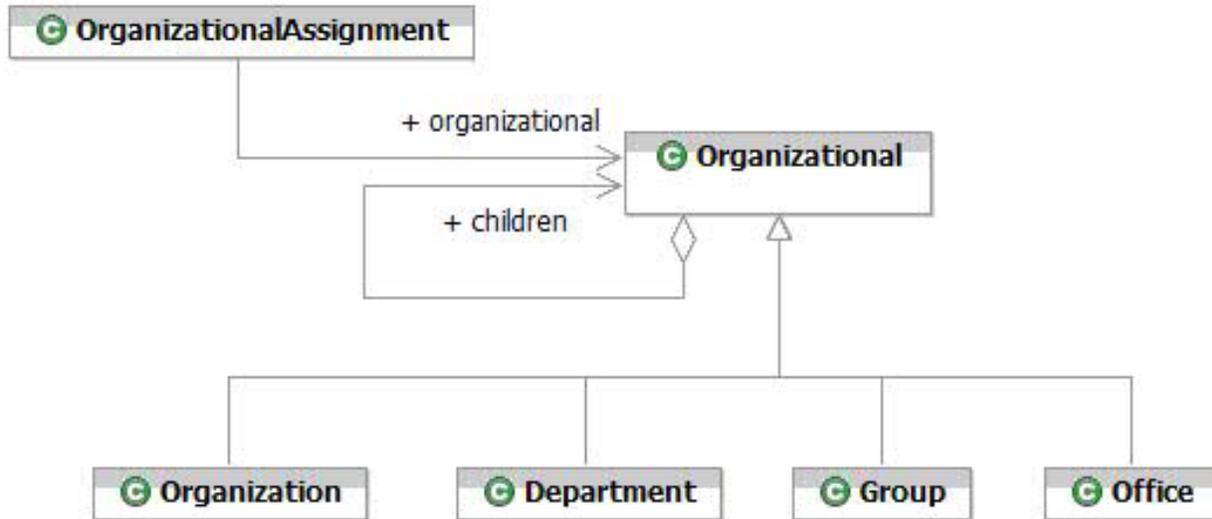


Figure 3. Organizational object relationship

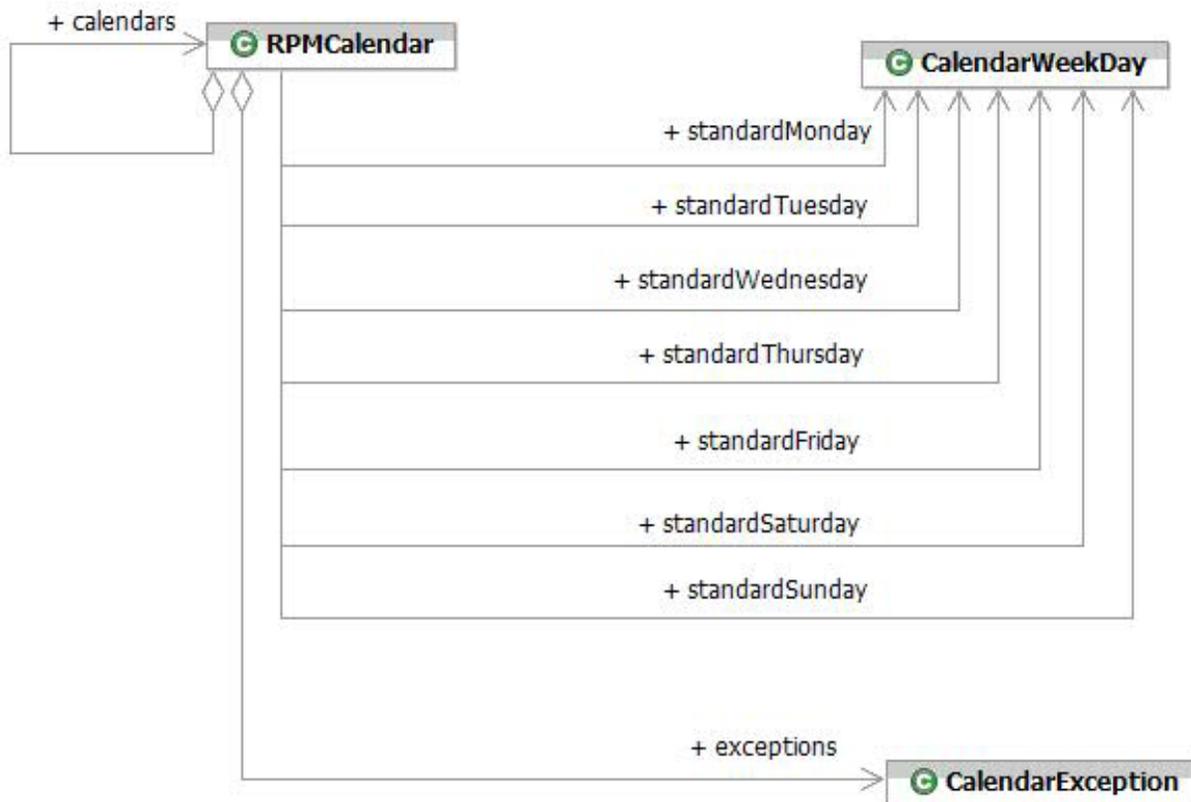


Figure 4. RPMCalendar object relationship

## Asset

The following table provides a summary of changes applied to the **Asset** package in this release.

*Table 7. List of changes to the Asset package*

Object	Changes
AssetScope	<ul style="list-style-type: none"><li>• The field <b>organizationalAssignment</b> has been renamed <b>assetOrganizationalAssignment</b></li><li>• The field <b>assetResourceAssignment</b> has been renamed <b>assetResourceAssignments</b></li><li>• The field <b>crossChargeFinancial</b> has been renamed <b>crossChargeFinancials</b></li><li>• The field <b>depreciationSchedule</b> has been renamed <b>depreciationSchedules</b></li></ul>
CrossChargeFinancialsScope	The field <b>chargeType</b> has been added

## Client/Cost Center

The following table provides a summary of changes applied to the **Client/Cost Center** package in this release.

*Table 8. List of changes to the Client/Cost Center package*

Object	Changes
ClientModuleScope	The field <b>clientCostCenters</b> has been renamed <b>clients</b>

## Custom Field

The following table provides a summary of changes applied to the **Custom Field** package in this release.

*Table 9. List of changes to the Custom Field package*

Object	Changes
CustomPortletCategory	The field <b>customPortlets</b> has been renamed <b>children</b>
CustomPortletScope	The field <b>customPortlets</b> has been renamed <b>children</b>

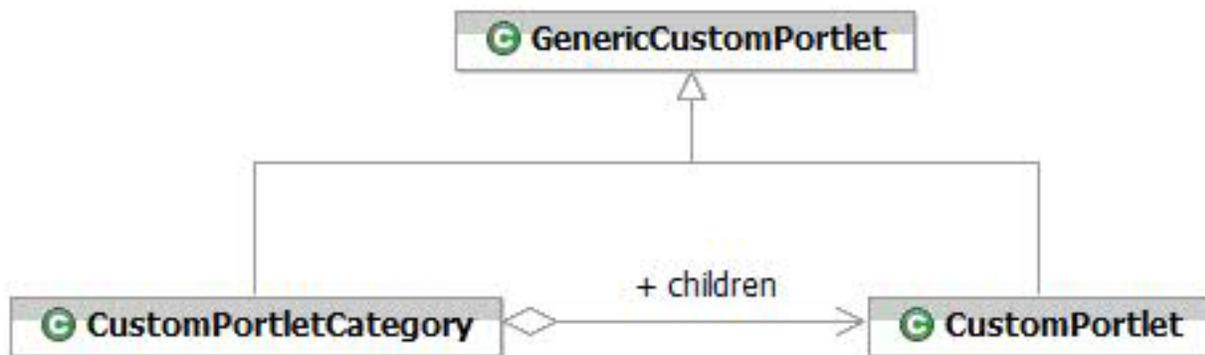


Figure 5. CustomField object relationship

## Document

The following table provides a summary of changes applied to the **Document** package in this release.

Table 10. List of changes to the Document package

Object	Changes
DocumentElement	The field <b>documentElements</b> has been renamed <b>children</b>
DocumentScope	The field <b>documentElements</b> has been renamed <b>children</b>
GenericDocument	The field <b>statusUpdate</b> has been renamed <b>statusUpdates</b>
URL	The object has been renamed <b>UrlDocument</b>

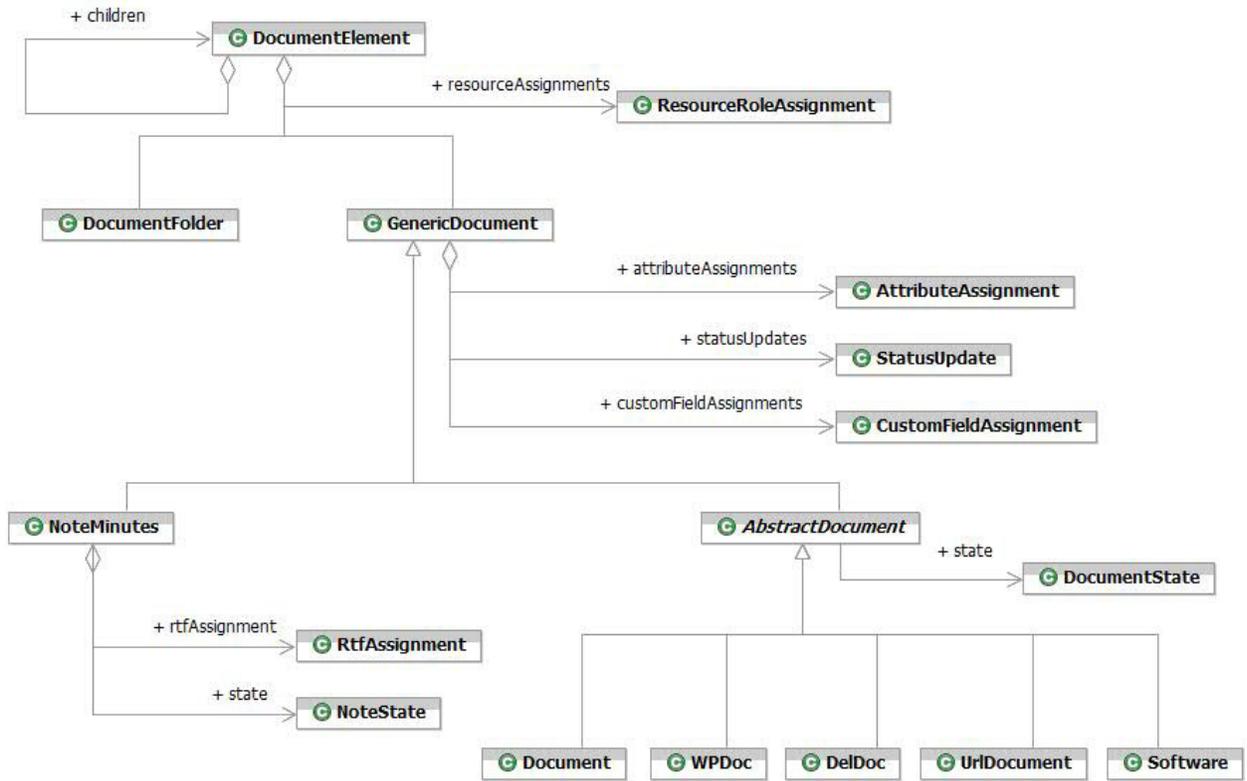


Figure 6. Document object relationship

## Financial

The following table provides a summary of changes applied to the **Financial** package in this release.

Table 11. List of changes to the Financial package

Object	Changes
FinancialModule	The field <b>timeCodeCategories</b> has been renamed <b>timeCodeGroups</b>
FinancialModuleScope	<ul style="list-style-type: none"> <li>The field type of <b>chargeCodeStages</b> has been changed to boolean.</li> <li>The field <b>timeCodeCategories</b> has been renamed <b>timeCodeGroups</b></li> </ul>

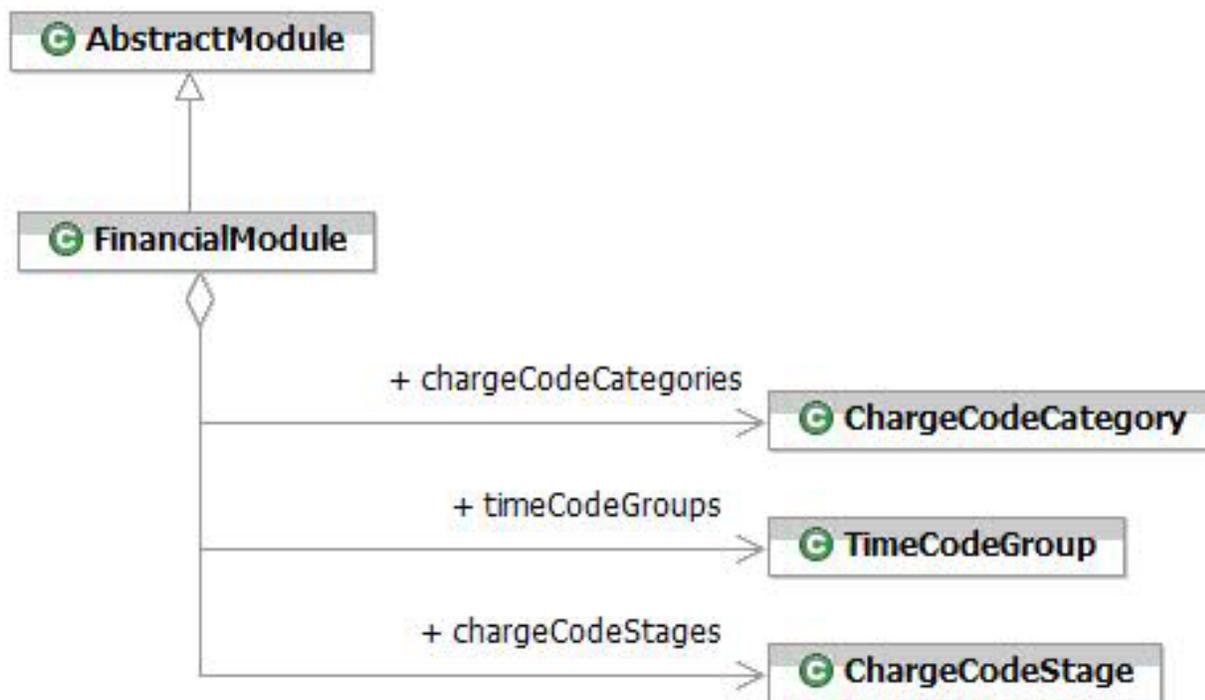


Figure 7. FinancialModule object relationship

## Resource

The following table provides a summary of changes applied to the **Resource** package in this release.

Table 12. List of changes to the Resource package

Object	Changes
PoolScope	The field <b>securityRole</b> has been added
ResourceAttributeCompetencyClassification	The field <b>resourceAttributes</b> has been renamed <b>attributes</b>
ResourceAttributeSkillClassification	The field <b>resourceAttributes</b> has been renamed <b>attributes</b>
ResourceAttributeScope	The field type of <b>proficiencyLevel</b> has been changed to boolean.
Resource	The field <b>projectHistory</b> has been renamed <b>projectHistories</b>
ResourceScope	The field <b>resourceRates</b> has been renamed <b>rates</b>

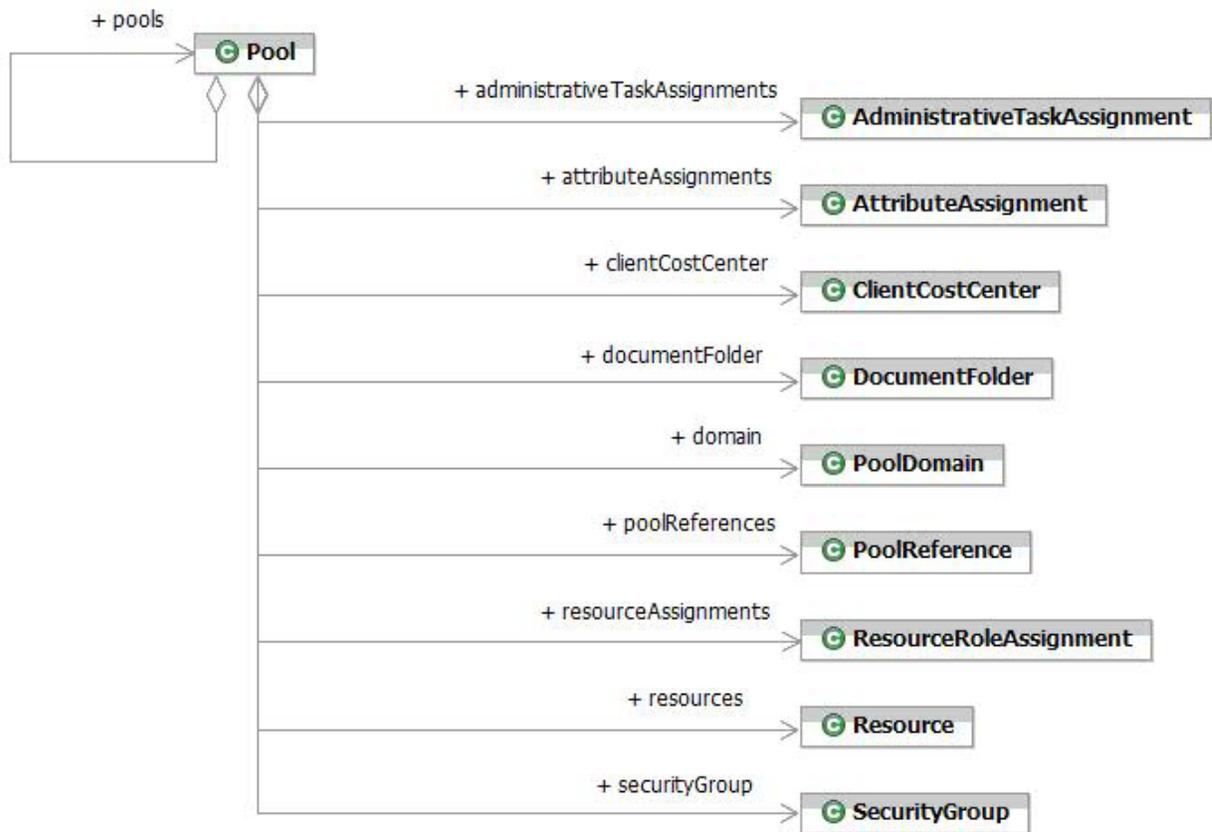


Figure 8. Pool object relationship

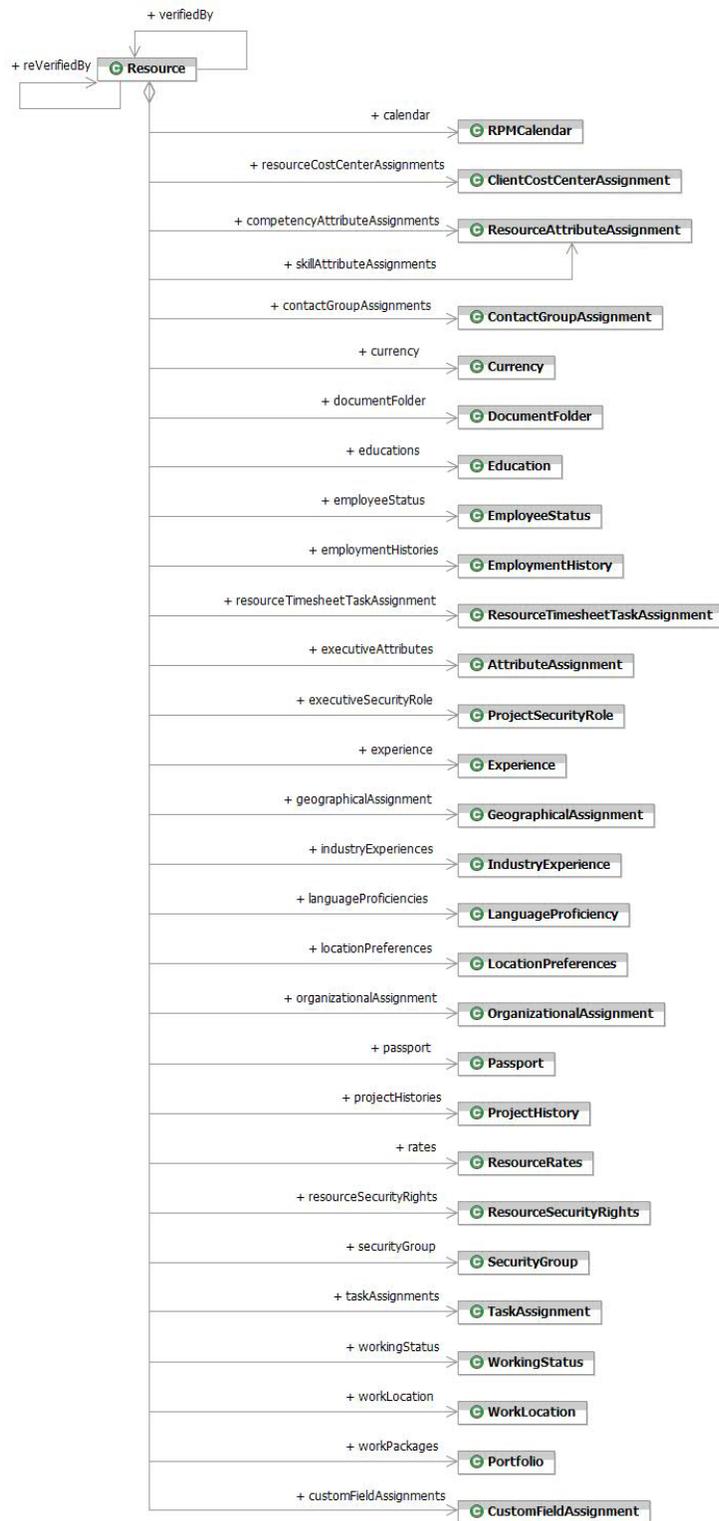


Figure 9. Resource object relationship

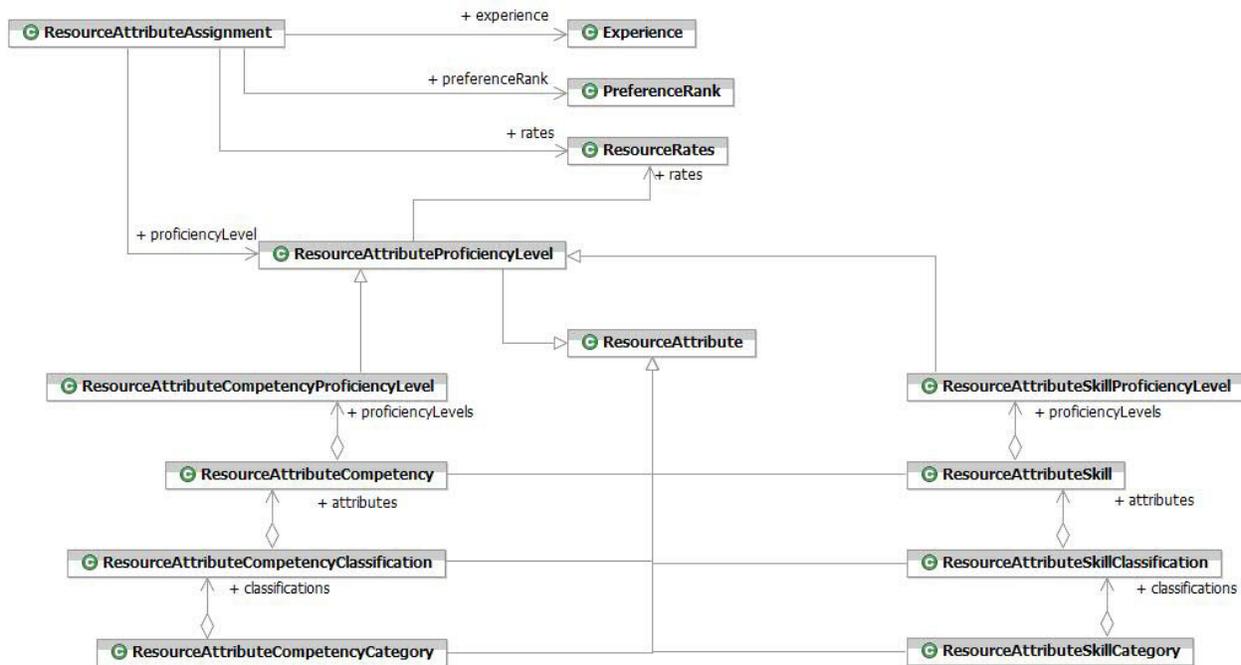


Figure 10. ResourceAttribute object relationship

## Security

The following table provides a summary of changes applied to the **Security** package in this release.

**Note:** All fields are read-only

Table 13. List of changes to the Security package

Object	Changes
GenericSecurityRole	This object has been added
SecurityRole	<ul style="list-style-type: none"> <li>The field <b>name</b> has been added</li> <li>The field <b>securityRoles</b> has been added</li> </ul>
SecurityRoleCategory	This object has been added
SecurityGroup	This object has been modified
SecurityGroupScope	The field <b>parent</b> has been added
ActionItemSecurityRole	This object has been modified
ChangeRequestSecurityRole	This object has been modified
DefectSecurityRole	This object has been modified
DeliverableSecurityRole	This object has been modified
DocumentSecurityRole	This object has been modified
IssueSecurityRole	This object has been modified
NotesMinutesSecurityRole	This object has been modified
ProjectSecurityRole	This object has been modified
RequirementSecurityRole	This object has been modified

Table 13. List of changes to the Security package (continued)

Object	Changes
RiskSecurityRole	This object has been modified
ServiceRequestSecurityRole	This object has been modified
TaskSecurityRole	This object has been modified
ActionItemSecurityRoleType	The field <b>ActionItemWorkflowVisitor</b> has been added
ChangeRequestSecurityRoleType	The field <b>ChangeRequestWorkflowVisitor</b> has been added
DocumentSecurityRoleType	The field <b>DocumentWorkflowVisitor</b> has been added
FolderSecurityRoleType	The field <b>FolderWorkflowVisitor</b> has been added
IssueSecurityRoleType	The field <b>IssueWorkflowVisitor</b> has been added
NotesMinutesSecurityRoleType	The field <b>NotesMinutesWorkflowVisitor</b> has been added
ProjectSecurityRoleType	<ul style="list-style-type: none"> <li>• The field <b>ProjectWorkflowVisitor</b> has been added</li> <li>• The field <b>ExecutiveRoles</b> has been added</li> </ul>
RequirementSecurityRoleType	The field <b>RequirementWorkflowVisitor</b> has been added
RiskSecurityRoleType	The field <b>RiskWorkflowVisitor</b> has been added
ServiceRequestSecurityRoleType	The field <b>ServiceRequestWorkflowVisitor</b> has been added
TaskSecurityRoleType	The field <b>TaskWorkflowVisitor</b> has been added



Figure 11. Security Role object relationship

## Scope Management

The following table provides a summary of changes applied to the **Scope Management** package in this release.

Table 14. List of changes to the Scope Management package

Object	Changes
AggregateScope	The field <b>scopeElements</b> has been renamed <b>children</b>
AggregateScopeTask	The field <b>financialAssignments</b> has been renamed <b>wbsFinancials</b>

Table 14. List of changes to the Scope Management package (continued)

Object	Changes
ScopeElement	<ul style="list-style-type: none"> <li>The field <b>project</b> has been added</li> <li>The field <b>resourceAssignments</b> has been renamed <b>resourceTaskAssignments</b></li> </ul>
ScopeElementScope	<ul style="list-style-type: none"> <li>The field <b>project</b> has been added</li> <li>The field <b>resourceAssignments</b> has been renamed <b>resourceTaskAssignments</b></li> <li>The field <b>scopeElements</b> has been renamed <b>scopeElements</b></li> <li>The field <b>wbsFinancial</b> has been renamed <b>wbsFinancials</b></li> <li>The field <b>worksheetFinancial</b> has been renamed <b>worksheetFinancials</b></li> </ul>

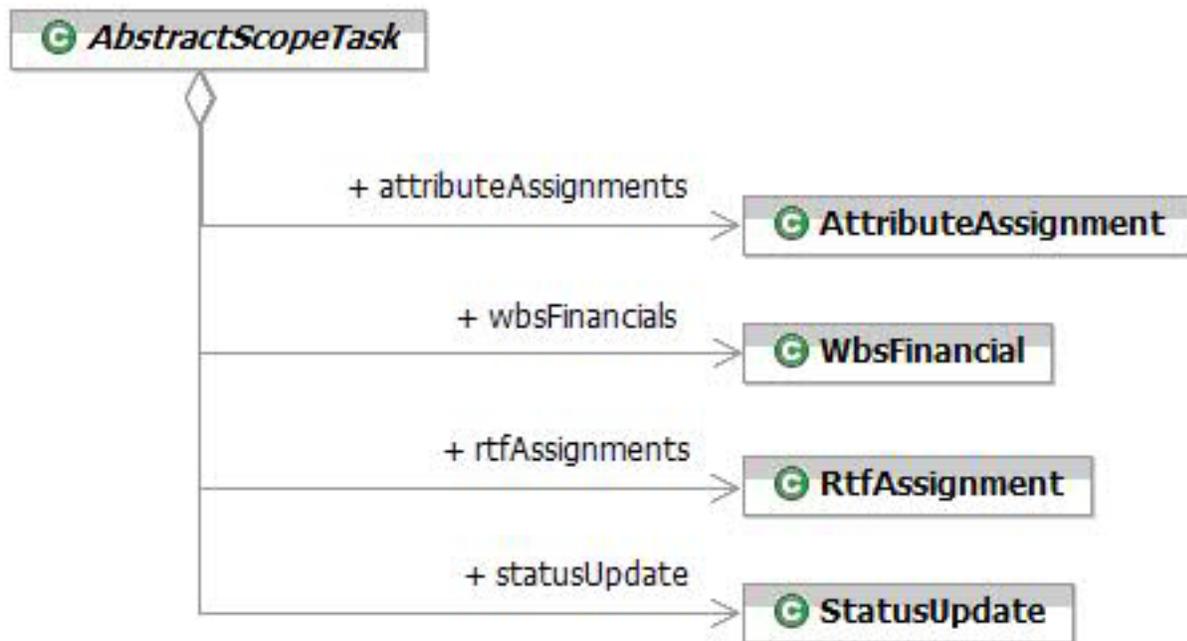


Figure 12. AbstractScope object relationship

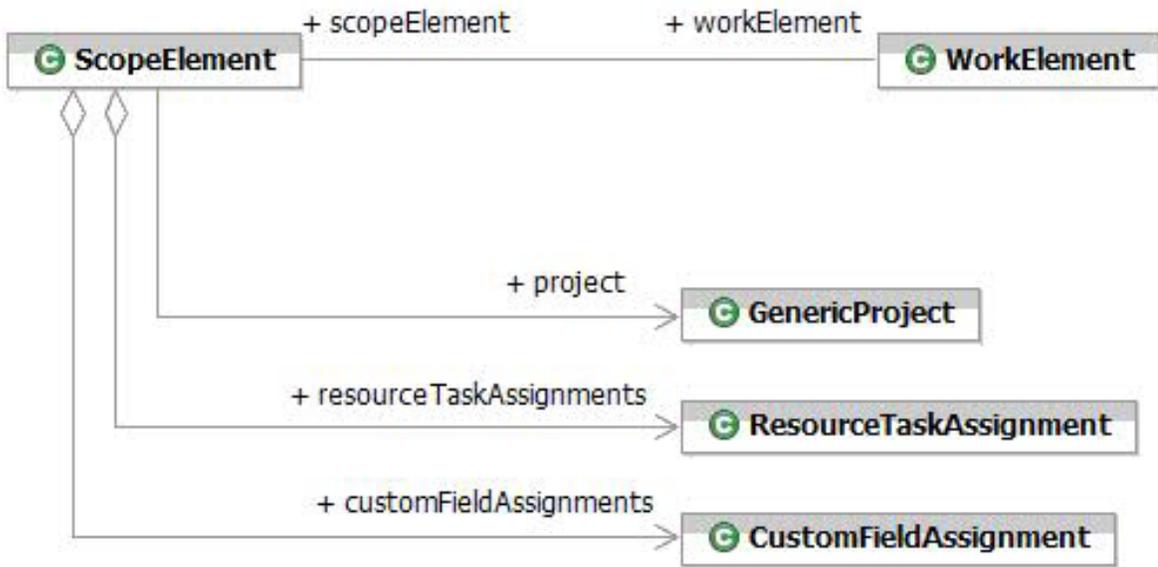


Figure 13. ScopeElement object relationship

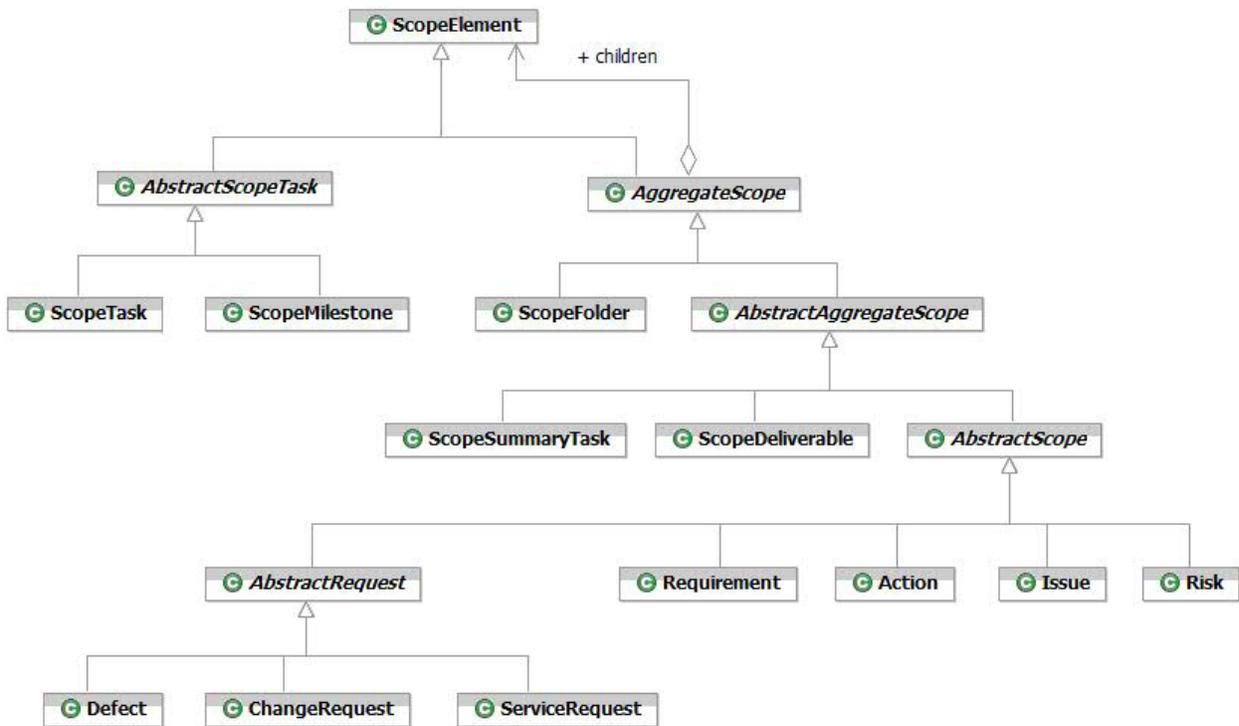


Figure 14. ScopeManagement object relationship

## Timesheet

The following table provides a summary of changes applied to the **Timesheet** package in this release.

Table 15. List of changes to the Timesheet package

Object	Changes
ResourceTimesheetTaskAssignment	The field <b>timesheetTasksAssignments</b> has been renamed <b>timesheetTaskAssignments</b>

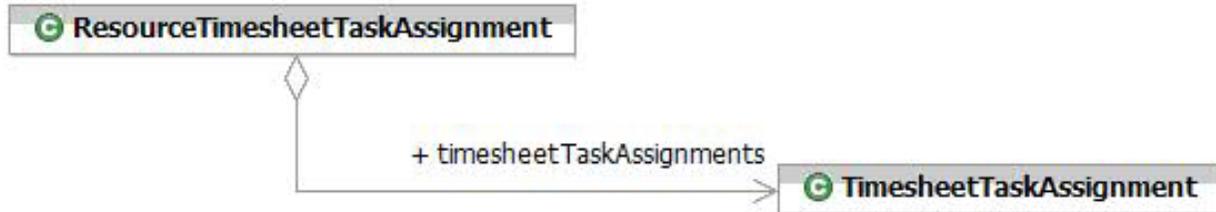


Figure 15. ResourceTimesheetTaskAssignment object relationship

## Wbs

The following table provides a summary of changes applied to the **Wbs** package in this release.

Table 16. List of changes to the Wbs package

Object	Changes
AggregateNode	The field <b>workElements</b> has been renamed <b>children</b>
ProfileScope	<ul style="list-style-type: none"> <li>The field <b>profileCompetencyAssignment</b> has been renamed <b>profileCompetencyAssignments</b></li> <li>The field <b>profileSkillAssignment</b> has been renamed <b>profileSkillAssignments</b></li> </ul>
ResourceTaskAssignmentScope	The field type of <b>parent</b> has been changed to <b>RPMObjectScope</b> .
TaskAssignment	<ul style="list-style-type: none"> <li>The field <b>plannedDurationHours</b> has been added</li> <li>The field <b>plannedFinishDate</b> has been removed</li> <li>The field <b>plannedStartDate</b> has been removed</li> <li>The field <b>proposedFinishDate</b> has been removed</li> <li>The field <b>proposedStartDate</b> has been removed</li> </ul>

Table 16. List of changes to the Wbs package (continued)

Object	Changes
WorkElement	<ul style="list-style-type: none"> <li>The field <b>lastModifiedDate</b> has been added</li> <li>The field <b>project</b> has been renamed <b>containingProject</b> and the type changed to WorkElement.</li> </ul>
WorkElementScope	<ul style="list-style-type: none"> <li>The field <b>financialAssignments</b> has been removed</li> <li>The field <b>parent</b> has been renamed <b>containingProject</b></li> <li>The field <b>relatedAttributeAssignments</b> has been added</li> <li>The field <b>scopeAssignedScorecards</b> has been renamed <b>relatedAssignedScorecards</b></li> <li>The field type of <b>timecode</b> has been changed to boolean</li> <li>The field <b>workElements</b> has been renamed <b>children</b></li> </ul>

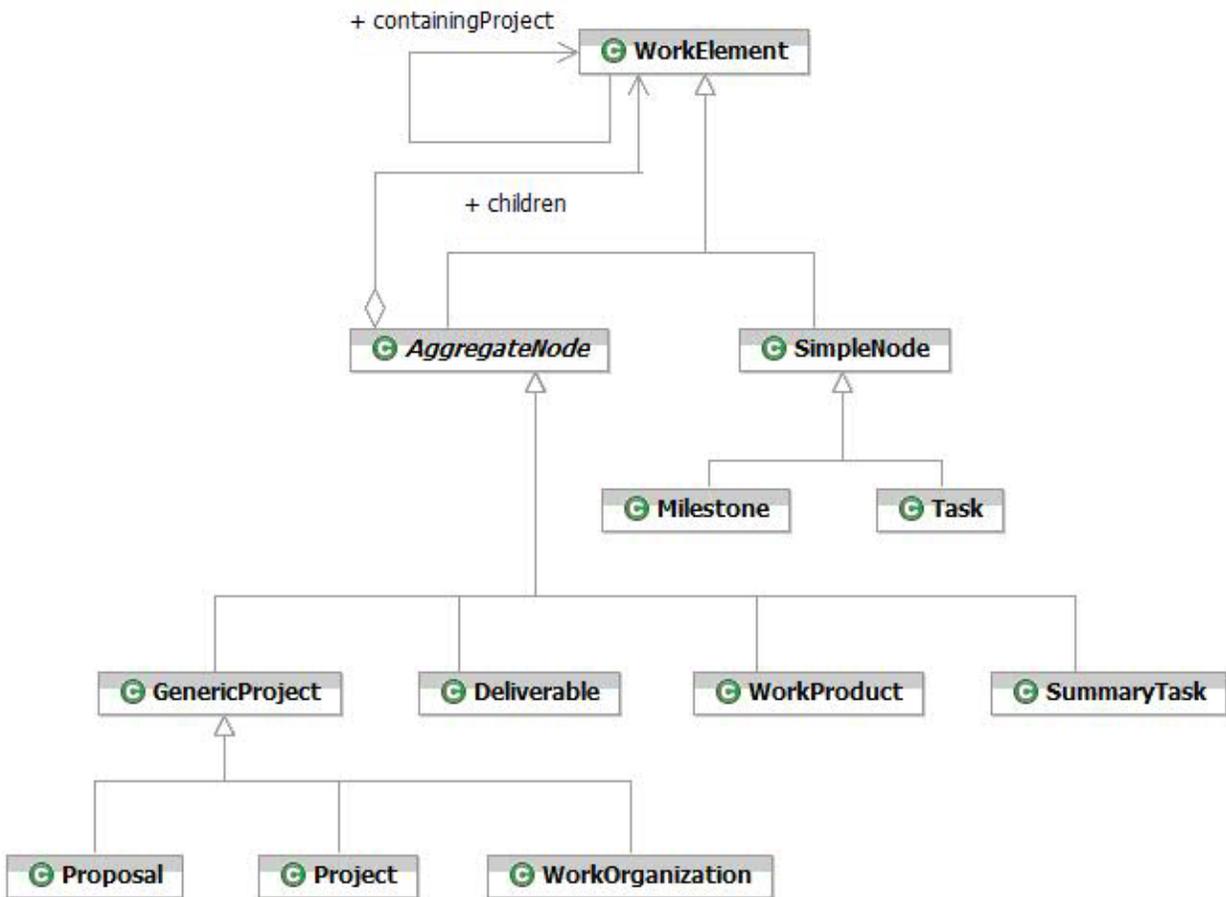


Figure 16. Wbs object relationship

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## Limitations

The following sections provide a summary of limitations for each of the interfaces currently implemented in the Rational Portfolio Manager Web Services API.

### Application Administration interface

The following list contains the limitations of the **Application Administration** interface.

*Table 17. List of limitations in the Application Administration interface*

Object	Limitation
ArchivedProject	Not implemented in this release

### Asset interface

The following list contains the limitations of the **Asset** interface.

*Table 18. List of limitations in the Asset interface*

Object	Limitation
CrossChargeFinancials	Not implemented in this release

### Custom Field interface

The following list contains the limitations of the **Custom Field** interface.

*Table 19. List of limitations in the Custom Field interface*

Object	Limitation
CustomPortlet	Not implemented in this release
CustomPortletCategory	Not implemented in this release
GenericCustomPortlet	Not implemented in this release
CustomPortletScope	Not implemented in this release

### Expense interface

The following list contains the limitations of the **Expense** interface.

*Table 20. List of limitations in the Expense interface*

Object	Limitation
ExpenseItem	Not implemented in this release
Invoice	Not implemented in this release

### Framework interface

The following list contains the limitations of the **Framework** interface.

*Table 21. List of limitations in the Framework interface*

Object	Limitation
AdministrativeTask	Not implemented in this release
AdministrativeTaskAssignment	Not implemented in this release
PersonalTask	Not implemented in this release

Table 21. List of limitations in the Framework interface (continued)

Object	Limitation
TimesheetTaskAssignment	Not implemented in this release
ResourceTimesheetTaskAssignment	Not implemented in this release

## Timesheet interface

The following list contains the limitations of the **Timesheet** interface.

Table 22. List of limitations in the Timesheet interface

Object	Limitation
StatusUpdate	Not implemented in this release



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## Chapter 4. Migrating to this version

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### 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 below 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).

This section outlines the steps to migrate IBM Rational Portfolio Manager Database (DB2® V8.1 and Oracle 9i or 10g) from version 6.2.1.2 to version 6.2.2.3.

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## Migrating Rational Portfolio Manager on DB2 for UNIX

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### Prerequisites for migration

- A successful Rational Portfolio Manager version 6.2.1.2 installation
- Rational Portfolio Manager version 6.2.2.3 migration package
- DB2 v 8.1 FP 7, 9a, & 10 (Rational Portfolio Manager 6.2 does not support DB2 v 7.2)
- 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 interpreter
- Make sure that all .sh files located under `${MIGRATION_HOME}/Database/DB2/Unix/migration`, `${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix` and `${MIGRATION_HOME}/Database/DB2/Unix/csp_Linux` have execute rights

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### 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 `${MIGRATION_HOME}/Database/DB2/Unix/migration` , `${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix` and `${MIGRATION_HOME}/Database/DB2/Unix/csp_Linux` folders. There is one main script file called `migration6223.sh` which carries out all the steps for migration.

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## Migration steps

1. Copy `ibmrpm.so` from `${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix` (if using AIX) or `${MIGRATION_HOME}/Database/DB2/Unix/csp_Linux` (if using Linux) to `${INSTHOME}/sqlllib/function/` directory prior to migration, where `${INSTHOME}` is the path to DB2 instance directory where DB2 is installed.

**Note:** Make sure you have a backup of your current library files before copying these files.

2. Stop the web application and the Alert server associated with the RPM database.
3. Go to `${MIGRATION_HOME}/Database/DB2/Unix/migration` and run:  
`./migration6223.sh`

---

## Steps used when migrating from version 6.2.1.2

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

1. Gets the name of the OS in use
2. Checks for the version number in RPM database table to decide whether to continue or exit. If version is other than 6.2.1.2 then exits
3. Stops and starts RPM database
4. It starts the migration process: `migration6223.out`
5. Creates stored procedures for v 6.2.2.3 > `createsp.out`  
`${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix`  
  
or,  
`${MIGRATION_HOME}/Database/DB2/Unix/csp_Linux`
6. Binds RPM v 6.2.2.3 code > `bindall.out`  
`${MIGRATION_HOME}/Database/DB2/Unix/csp_Aix`  
  
or,  
`${MIGRATION_HOME}/Database/DB2/Unix/csp_Linux`
7. Runs statistics on tables > `Reorgstats62.out`
8. Checks for successful migration > Output will be displayed on the screen

**Note:** If the output file contains 6.2.2.3, 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)

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## 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 6.2.1.2 to 6.2.2.3
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`

### Copying the com folder

**Note:** Make sure you have a backup of your existing com folder.

To copy the com folder:

1. Go to `${MIGRATION_HOME}/WebServer` directory and copy the com folder into `${IBMRPM_WAR_HOME}/WEB-INF/classes` directory

### Copying RPM/PjC files

To properly configure RPMPJCWebService.ear:

1. Rename the existing RPMWebService.class file located in the `${RPMPJCWebService.war}/WEB-INF/classes/com/ibm/rpm/ws/service/` folder to RPMWebService.class.orig
2. Copy the new RPMWebService.class file from `${MIGRATION_PACKAGE}/RPMPJCWebService` folder into the `${RPMPJCWebService.war}/WEB-INF/classes/com/ibm/rpm/ws/service/` folder
3. Restart the Application Server

The RPMAdapter.jar file also needs to be replaced on the Project Console server. To do this:

1. Copy the RPMAdapter.jar file from `${MIGRATION_PACKAGE}/RPMPJCWebService` folder to where Project Console was installed.

Windows example:

`C:\Program Files\Rational\ProjectConsole\CDA\adapters\RPMPProtocol`

## Deploying RPM Web Services API ear module

**Note:** If you have already deployed RPM Web Services API with your RPM 6.2.x 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-6.2.2.3.ear file is located in the `${MIGRATION_PACKAGE}/WebServicesAPI` 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 6.2.1.2 to version 6.2.2.3 on Oracle.

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 6.2.2.3 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 6.2.1.2 installation
- Rational Portfolio Manager version 6.2.2.3 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 6.2.2.3 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

**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 `${MIGRATION_HOME}/Database/Oracle` and run `./mig_owner.sh`  
Migration script will run and ask you a series of questions:
6. Have you performed pre\_migration steps? Before migration you need to backup your database, if you have a backup, answer yes to continue. If you answer no, no migration will be performed
7. The script uses your `${ORACLE_HOME}` environment variable. 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 6.2.2.3)
    - The number of invalid objects in the database (which we expect to be 0)
    - The number of objects (needed for 6.2.2.3) 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

## Steps to migrate RPM connected user (if you use a connected user)

1. Open a command prompt 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 your `${ORACLE_HOME}` environment variable. Enter the required information when prompted
3. Is your RPM database installed on this machine? If you answer no, you will be prompted to enter:
  - TNS string
  - IBMRPM schema owner
  - IBMRPM schema owner passwordIf you answer yes, you will be prompted to enter:
  - Verify the `ORACLE_SID` value
  - Enter IBMRPM schema owner
  - Enter IBMRPM schema owner password
4. Enter RPM connected user name when prompted
5. Enter RPM connected user password when prompted
6. Enter the password for sys user when prompted
7. Are you sure you want to migrate your connected user now? Answer yes to start the migration
8. Migration log files will be created under `${MIGRATION_HOME}/Database/Oracle/logs` folder. It is always recommended to look at the log files to see if migration was successful

---

## 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 6.2.1.2 to 6.2.2.3
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`

### Copying the com folder

**Note:** Make sure you have a backup of your existing com folder.

To copy the com folder:

1. Go to `${MIGRATION_HOME}/WebServer` directory and copy the com folder into `${IBMRPM_WAR_HOME}/WEB-INF/classes` directory

### Copying RPM/PjC files

To properly configure `RPMPJCWebService.ear`:

1. Rename the existing `RPMWebService.class` file located in the `${RPMWebService.war}/WEB-INF/classes/com/ibm/rpm/ws/service/` folder to `RPMWebService.class.orig`
2. Copy the new `RPMWebService.class` file from `${MIGRATION_PACKAGE}/RPMWebService` folder into the `${RPMWebService.war}/WEB-INF/classes/com/ibm/rpm/ws/service/` folder
3. Restart the Application Server

The `RPMAdapter.jar` file also needs to be replaced on the Project Console server. To do this:

1. Copy the `RPMAdapter.jar` file from `${MIGRATION_PACKAGE}/RPMWebService` folder to where Project Console was installed.

Windows example:

```
C:\Program Files\Rational\ProjectConsole\CDA\adapters\RPMProtocol
```

## Deploying RPM Web Services API ear module

**Note:** If you have already deployed RPM Web Services API with your RPM 6.2.x 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-6.2.2.3.ear` file is located in the `${MIGRATION_PACKAGE}/WebServicesAPI` 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 DB2 for Windows®

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### Prerequisites for migration

- A successful Rational Portfolio Manager version 6.2.1.2 installation
- Rational Portfolio Manager version 6.2.2.3 migration package
- DB2 v 8.1 FP 7, 9a, & 10 (Rational Portfolio Manager 6.2 does not support DB2 v 7.2)

---

## 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 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, and %MIGRATION\_HOME%\Database\DB2\Windows\csp folders. There is one main batch process called migration6223.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. Copy ibmrpm.dll from %MIGRATION\_HOME%\Database\DB2\Windows\csp to both%DB2TEMPDIR%function and %DB2TEMPDIR%function\unfenced directories prior to migration.

**Note:** Make sure you have a backup of your current library files before copying these files.

2. Stop the web application and the Alert server associated with the RPM database
3. Go to %MIGRATION\_HOME%\Database\DB2\Windows\migration and run:  
migration6223

---

## Batch process steps used when migrating from version 6.2.1.2

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

1. Checks for the version number in RPM database table to decide whether to continue or exit. If the version number is other than 6.2.1.1 then exits
2. Stops and starts RPM database
3. It starts the migration process:migration6223.out
4. Creates stored procedures for v6.2.2.3 > createsp.out

- `%MIGRATION_HOME%\Database\DB2\Windows\csp`
- 5. Binds RPM v6.2.2.3 code > bindall.out  
`%MIGRATION_HOME%\Database\DB2\Windows\csp`
- 6. Runs statistics on tables > Reorgstats62.out
- 7. Checks for successful migration > Output will be displayed on the screen

**Note:** If the output contains 6.2.2.3, 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 6.2.1.2 to 6.2.2.3
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`

### Copying the com folder

**Note:** Make sure you have a backup of your existing com folder.

To copy the com folder:

1. Go to `%MIGRATION_HOME%\WebServer` directory and copy the com folder into `%IBMRPM_WAR_HOME%\WEB-INF\classes` directory

### Copying RPM/PjC files

To properly configure RPMPJCWebService.ear:

1. Rename the existing RPMWebService.class file located in the `%RPMPJCWebService.war%\WEB-INF\classes\com\ibm\rpm\ws\service\` folder to `RPMWebService.class.orig`
2. Copy the new RPMWebService.class file from `%MIGRATION_PACKAGE%\RPMPJCWebService` folder into the `%RPMPJCWebService.war%\WEB-INF\classes\com\ibm\rpm\ws\service\` folder
3. Restart the Application Server

The RPMAdapter.jar file also needs to be replaced on the Project Console server. To do this:

1. Copy the RPMAdapter.jar file from %MIGRATION\_PACKAGE%\RPMPJCWebService folder to where Project Console was installed.

Example:

C:\Program Files\Rational\ProjectConsole\CDA\adapters\RPMPProtocol

## Deploying RPM Web Services API ear module

**Note:** If you have already deployed RPM Web Services API with your RPM 6.2.x 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-6.2.2.3.ear file is located in the %MIGRATION\_PACKAGE%\WebServicesAPI 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 6.2.1.2 to version 6.2.2.3 on Oracle.

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 6.2.2.3 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 6.2.1.2 installation
- Rational Portfolio Manager version 6.2.2.3 migration package
- SQLplus.exe utility for running Oracle migration scripts

---

## Migration steps

Rational Portfolio Manager migration to version 6.2.2.3 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

**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 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 your %ORACLE\_HOME% environment variable. 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 6.2.2.3)
- The number of invalid objects in the database (which we expect to be 0)
- The number of objects (needed for 6.2.2.3) 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

---

## Steps to migrate RPM connected user (if you use a 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. 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 passwordIf 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

---

## 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 6.2.1.2 to 6.2.2.3
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

### Copying the com folder

**Note:** Make sure you have a backup of your existing com folder.

To copy the com folder:

1. Go to %MIGRATION\_HOME%\WebServer directory and copy the com folder into %IBMRPM\_WAR\_HOME%\WEB-INF\classes directory

## Copying RPM/PjC files

To properly configure RPMPJCServlet.ear:

1. Rename the existing RPMWebService.class file located in the %RPMPJCServlet.war%\WEB-INF\classes\com\ibm\rpm\ws\service\ folder to RPMWebService.class.orig
2. Copy the new RPMWebService.class file from %MIGRATION\_PACKAGE%\RPMPJCServlet folder into the %RPMPJCServlet.war%\WEB-INF\classes\com\ibm\rpm\ws\service\ folder
3. Restart the Application Server

The RPMAdapter.jar file also needs to be replaced on the Project Console server. To do this:

1. Copy the RPMAdapter.jar file from %MIGRATION\_PACKAGE%\RPMPJCServlet folder to where Project Console was installed.

Example:

```
C:\Program Files\Rational\ProjectConsole\CDA\adapters\RPMPProtocol
```

## Deploying RPM Web Services API ear module

**Note:** If you have already deployed RPM Web Services API with your RPM 6.2.x 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-6.2.2.3.ear file is located in the %MIGRATION\_PACKAGE%\WebServicesAPI 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.



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## Chapter 5. 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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