

# Retek<sup>®</sup> Service Layer<sup>™</sup> 11.0.2

## Release Notes



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Contact Method	Contact Information
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E-mail	support@retex.com
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Internet (ROCS)	<a href="https://rocs.retek.com">rocs.retek.com</a> Retek's secure client Web site to update and view issues
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Phone	+1 612 587 5800
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Toll free alternatives are also available in various regions of the world:

Australia	+1 800 555 923 (AU-Telstra) or +1 800 000 562 (AU-Optus)
France	0800 90 91 66
Hong Kong	800 96 4262
Korea	00 308 13 1342
United Kingdom	0800 917 2863
United States	+1 800 61 RETEK or 800 617 3835

Mail	Retek Customer Support Retek on the Mall 950 Nicollet Mall Minneapolis, MN 55403
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### When contacting Customer Support, please provide:

- Product version and program/module name.
- Functional and technical description of the problem (include business impact).
- Detailed step-by-step instructions to recreate.
- Exact error message received.
- Screen shots of each step you take.

# Overview

RSL handles the interface between a client application and a server application wishing to communicate in a synchronous fashion. The client application typically runs on a different computing host than the service. However, RSL allows for the service to be called internally in the same program or Java Virtual Machine as the client without the need for code modification.

RSL works within the J2EE framework. All services are contained within an interface offered by a Stateless Session Bean. To a client application, each service appears to be merely a method call.

Some Retek applications, such as RMS, are implemented in the PL/SQL language, which runs inside of the Oracle Database. RSL uses a generalized conversion process that converts the input java object to a native Oracle Object and any output Oracle Objects to the returned java object from the service. There is a one-to-one correspondence of all fields contained in the Java parameters as in the Oracle Objects used.

RSL provides two different models for service providers. The election of what model to use depends on what type of application the “service provider” developer is adding the RSL layer to. For applications that follow the J2EE or simple Java architecture, a J2EE model will be a better fit. An Oracle PL/SQL model is better fit for applications that heavily depend on database business logic, such as Oracle Forms-based applications (RMS.)

“Client application” developers do not need to be aware of this distinction as the integration team provides them with wrapper classes that encapsulate the calls for retrieving a service proxy. The developer only needs to implement the code that creates an instance of the wrapper class and makes the calls using a predefined set of payload objects for argument and return type.

## RSL Application Support – Integrating applications

Currently, RSL provides support for integrating Retek applications to RMS and RPM. In other words, through RSL, other applications can make specific service calls to RMS and RPM services.

RSL provides the following paks which are distributed internally and are implemented by the application developers:

- Server Paks: Implement services for other “client” applications to call:
  - RSLPak1102forRPM110: Provides services for RPM. Distributed inside RPM
- Client Paks: Provides API calls that developers integrate into their applications:
  - RSLClientPak1102forRPM110: Contains APIs and dependencies for calling RPM services.
  - RSLClientPak1102forRMS110: Contains APIs and dependencies for calling RMS services.

The following pak is distributed as a standalone enterprise application and is not integrated with other applications. This has to be installed separate:

- RSLPak1102forRMS110: Provides services for RMS.

# List of deliverables

The following listing contains the name of deliverable packages and their content with a brief explanation of each one. Packages denoted as (internal release) are delivered to other Retek application teams to distribute with their software; packaged denoted as (external release) are standalone enterprise applications that include an installer:

## **rsclientpak1102forrms110\_eng\_ga.tar (internal release):**

- `rsl.jar`: Core RSL classes.
- `rsl-rms-access.jar`: Classes that wraps the functionality to call the remote RMS services. Application developers will interact with RSL through these classes. It hides all the communication infrastructure so “client application” developers can use them just as they would use any other simple Java class.
- `jndi_providers.xml`: JNDI configuration file with host and port information to contact the RMS services. It needs to be configured with correct values for the environment.
- `service_flavors.xml`, `services_rsl.xml`: Configuration files used by `rsl` core classes to contact the desired RMS services. These are already configured and do not require environment specific changes.

## **rslpak1102forrms110\_eng\_ga.tar (external release):**

- `rsl-rms.ear`: Enterprise application that contains implementation of RMS services.
- `ojdbc14.jar`: Oracle JDBC driver classes.
- `*.sql`: Oracle object declarations to be imported in database.
- `commons-logging.properties`, `hibernate-cfg.xml`, `log4j.dtd`, `log4j.xml`, `service_flavors.xml`, `services_rsl.xml`: Configuration files used by RSL core classes and services. No user configuration is required.
- `*.jacl`, `*.sh`, `rsl-config.properties`, `RSLPak1102forRMS110.bom.out`: These files are required to successfully install the enterprise application.

## **rsclientpak1102forrpm110\_eng\_ga.tar (internal release):**

- `rsl.jar`: Core RSL classes.
- `rsl-pricemgt-access.jar`: Classes that wraps the functionality to call the remote RPM services. Application developers will interact with RSL through these classes.
- `jndi_providers.xml`: JNDI configuration file with host and port information to contact the RPM services. It needs to be configured with correct values for the environment.
- `service_flavors.xml`, `services_rsl.xml`: Configuration files used by `rsl` core classes to contact the desired RMS services. These are already configured and do not require environment specific changes.

**rslpak1102forrpm110\_eng\_ga.tar (internal release):**

- rsl.jar: Core RSL classes.
- rsl-pricemgt-access.jar: Classes that wraps the functionality to call the remote RPM services. Application developers will interact with RSL through these classes.
- rsl-pricemgt-ejb.jar: EJB implementation of RPM services. Currently not used.
- rsl-pricemgt-server.jar: Local RPM services. These classes forward the client calls to the business logic services implemented by the “service provider” developers. It hides all the service infrastructure so the developer can concentrate on the business logic.

## RSL release and supplementary documentation

The following documents are newly available with RSL 11.0.2:

- Retek Service Layer - 11.0.2 Installation Guide
- Retek Service Layer - 11.0.2 Programmers Guide

## RSL 11.0.2 known issues with planned resolution

Issue	Description	Mitigation / Workaround
1	<p>The following exceptions might show up intermittently after unused database connections expire in the WebSphere server:</p> <ol style="list-style-type: none"> <li>1) java.sql.SQLException: Logical handle no longer valid or</li> <li>2) javax.transaction.SystemException: Failed to start the transaction association or</li> <li>3) XAException occurred. Error code is: XAER_PROTO</li> </ol>	<p>Apply both of these changes:</p> <ol style="list-style-type: none"> <li>1) Open the \$WAS_HOME_INSTANCE/rsl-rms/log4j.xml file and replace occurrences of &lt;level value="DEBUG"/&gt; with &lt;level value="INFO"/&gt;</li> <li>2) <b>Log into the WebSphere Administrative console, click on Resources on the left panel and navigate to JDBC Providers &gt; Oracle JDBC Thin Driver (XA) &gt; Data Sources. Set the “Aged Timeout” value to zero.</b></li> </ol>
2	<p>The RSLforRMS install script (rslinstall.sh) throws two exceptions for java.lang.NoClassDefFoundError: com/retex/rib/binding/payload/Payload and two exceptions for Incomplete config id: need closing parenthesis in ""</p>	Both sets of exceptions can be disregarded.

Issue	Description	Mitigation / Workaround
3	The RSLforRMS install script (rsinstall.sh) fails to create the RSL_LIB library and set the Classloader Mode to PARENT_LAST in WAS.	<p>Create the RSL_LIB and set the Classloader mode manually from AdminConsole GUI:</p> <p>Log into the Admin Console for the server instance where RSLforRMS was installed</p> <p>Create and associate RSL_LIB with RSLforRMS application:</p> <ol style="list-style-type: none"> <li>1) Go to Environment-&gt;Shared Libraries (panel at left)</li> <li>2) Choose correct server, hit Apply, then click on New (panel at right)</li> <li>3) Set Name = RSL_LIB and Classpath = %WAS_HOME%/rsl-rms (substitute %WAS_HOME% with correct path for your environment) Click Apply.</li> <li>4) Go to Applications-&gt;Enterprise Applications (panel at left)</li> <li>5) Select RSLforRMS application (panel at right)</li> <li>6) Scroll down and click on Libraries</li> <li>7) Click on Add and select RSL_LIB from the dropdown menu</li> <li>8) Click Apply and then Save</li> </ol> <p>Modify Classloader mode:</p> <ol style="list-style-type: none"> <li>1) Go to Applications-&gt;Enterprise Applications (panel at left)</li> <li>2) Select RSLforRMS application (panel at right)</li> <li>3) Set Classloader Mode property to PARENT_LAST</li> <li>4) Click Apply and then Save</li> </ol> <p>Bounce WAS instance.</p>



Issue	Description	Mitigation / Workaround
4	RSL clients (e.g.: SIM) cannot communicate with RSL services provided by RPM	<p>A section is missing in the services_rsl.xml file.</p> <p>NOTE: this file can have a different name when provided by client applications (e.g.: In SIM, it is called services_rpm.xml). In any case, look for a services_&lt;app&gt;.xml file that contains a section for the rpm service (app="rpm").</p> <p>Add the following section to the services_rsl.xml file, right after the previous &lt;interface&gt;&lt;/interface&gt; section and within the &lt;customizations&gt;&lt;/customizations&gt; section:</p> <pre>&lt;interface package="com.retek.platform.service" app="rpm"&gt;   &lt;impl package="com.retek.platform.service.impl" /&gt; &lt;/interface&gt;</pre>