

Oracle® Retail Store Inventory Management
Installation Guide
Release 11.1.1

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Preface

Oracle Retail Installation Guides contain the requirements and procedures that are necessary for the retailer to install Oracle Retail products.

Audience

This Installation Guide is written for the following audiences:

- Database administrators (DBA)
- System analysts and designers
- Integrators and implementation staff

Related Documents

For more information, see the following documents in the Oracle Retail Store Inventory Management Release 11.1.1 documentation set:

- Oracle Retail Store Inventory Management Release Notes
- Oracle Retail Store Inventory Management Operations Guide Addendum
- Oracle Retail Store Inventory Management User Guide
- Oracle Retail Store Inventory Management Hand Held Quick Reference Guide
- Oracle Retail Store Inventory Management Data Model

Customer Support

- <https://metalink.oracle.com>

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.

Conventions

Navigate: This is a navigate statement. It tells you how to get to the start of the procedure and ends with a screen shot of the starting point and the statement “the Window Name window opens.”

Note: This is a note. It is used to call out information that is important, but not necessarily part of the procedure.

This is a code sample
It is used to display examples of code

A hyperlink appears like this.

System Requirements

Before you can install SIM, you should ensure that your information systems can adequately support the SIM application. This chapter lists the recommended hardware and software requirements for running SIM on your clients (including handheld wireless devices and printers), application servers, and database servers.

Because the SIM architecture is a flexible platform, system requirements for the clients, application servers, and database servers will vary depending on each company's business requirements.

Client Requirements

The following are the minimum requirements for the store-level clients:

- Java Runtime Environment (JRE) 1.4.2 (Java 2)
- 128 MB of RAM Note: If you plan to run multimedia files with POS, the recommended minimum for memory is 256 MB of RAM
- 1 GB of disk space (does not include operating system)
- TCP/IP support (NIC required)
- CPU: 1 GHz recommended, 500 MHz supported
- Minimum of 800 x 600 video resolution
- Pointing device (mouse) and keyboard
- Full-time network connection to data tier
- Tethered scanner (optional)

Supported Operating Systems for Clients

The store-level clients support the following operating systems:

- Windows 2000
- Windows XP®

Note: Oracle Retail does not recommend or explicitly support terminal sessions such as MTS or Citrix.

Wireless Handheld Devices and Printers

Contact Oracle Retail for requirements, recommendations, and evaluations of currently deployed equipment for operating SIM on wireless handheld devices and printers. The SIM – Wireless Foundation™ has a component that runs on the handheld device and a corresponding component that runs on the application server. Wireless component installation and configuration is not covered in this installation guide.

Application Server Requirements

The following are the minimum requirements for any application servers that support a JVM:

- Java 1.4.2

Note: Native hardware-specific JREs on UNIX platforms may perform better than other JREs. For example, the Sun JVM may perform better than an IBM JVM on a Sun server.

- 512 MB of RAM
- 1 GB of disk space
- TCP/IP support
- Oracle® 9.2.0.X Client needs to be installed on the application server prior to performing the install
- WinZip® (Windows) or the zip/unzip utilities(UNIX) need to be installed on the application server

Supported Operating Systems for Application Servers

The application servers support the following operating systems:

- Solaris
- HP-UX
- AIX

The table below lists operation requirements of the application server.

Operation Requirements for the Application Servers

Feature	Requirements
Memory usage	Each service on an application server requires a minimum of 4 MB of RAM and 16 to 20 MB of free memory.
Service monitoring	Service usage and traffic patterns should be monitored and idle instances of services should be terminated.
Maintenance: reboot/kill idle services	The system services should be restarted during a regularly scheduled maintenance routine. Restarting services should be done during off-peak and idle times.
Disk usage	To prevent logging errors, the disk partition on the application server should be a minimum of 1 GB of disk space.
Log Directory	Application needs 'WRITE' authority to the directory where the log files are written.

Database Requirements

The following are the minimum requirements for the database servers:

- Oracle® 9.2.0.X RDBMS (Enterprise Edition)
- 1 GB of RAM

Oracle Retail Dependencies

The following Oracle Retail products can be integrated with SIM. Next to each product is an indication of whether it is required or optional for SIM to function properly:

- Retail Integration Bus (RIB) – Required
 - RIBforISO is a separately-packaged component that connects SIM to the RIB. The SIM application installer can install RIBforISO along with SIM if you provide the RIBforISO package prior to starting the installer. See the *Application Installation* section of this document for details.
 - Although typically used to integrate SIM with RMS, RIB can also be used to integrate SIM with other merchandising systems.

Note: RIB requires custom modifications to use a merchandising system other than RMS

- Retail Merchandising System (RMS) - Optional
- Retail Service Layer for RMS (RSLforRMS) – Optional
- Retail Price Management (RPM) - Optional

The above products can be installed before or after SIM. However, it is helpful to know the connection details for the other products ahead of time so that you can provide them to the SIM application installer, which will configure the connection points for you.

Database Installation Tasks

Before you apply the SIM 11.1.1 patch:

- Make a backup of all your objects and database schema.
- Check that SIM 11.1 is installed.
- Review the enclosed SIM 11.1.1 Patch Release Notes (sim-1111-rn.pdf).

Before copying over any files:

- Note whether customizations have been made to the module. If so, then the customizations must be reapplied over the new version of the module (or the fix may need to be applied to the custom version of the code).
- Copy the original files to a different directory before copying over them in case they need to be referred to at a later date.

Note: These instructions refer to SIM11DEV as the Oracle owning schema.

Mount CD-ROM on the Database Server

1. Copy the sim1111dbpatch.zip file from the CD /dbserverunix directory to a newly created staging directory on your UNIX server.
2. Unzip the file by entering:
`unzip sim1111dbpatch.zip`

Alter SIM Objects

Alter SIM Tables

1. Change directories to STAGING_AREA/dbcs
2. Log into sqlplus as SIM11DEV and run the following command:
`SQL> @patch1111dbcs.sql`
3. Check the log file patch1111dbcs.log for any errors

Update Data for SIM

1. Change directories to STAGING_AREA/data
2. Log into sqlplus as SIM11DEV and run the following command:
`SQL> @patch1111ctl.sql`
3. Check the log file patch1201ctl.log for any errors.

Application Installation Tasks

Application Installation

The SIM 11.1.1 application distribution is a full install. It does not require a previous SIM application server installation. If there is a previous installation at the destination directory specified, the SIM application installer will back it up with a `<timestamp>` suffix (See *Backups Created By Installer* below).

The first step in the installation process is to copy the SIM application distribution (`sim11.1.application.zip`) onto the application servers. SIM must be copied on a server that has IP connectivity to other back-office servers.

Note: The Java Runtime Environment (JRE) 1.4.2 must be installed on the application server before installing SIM on the application servers. To verify the current version of Java loaded on an application server, type `java -version` at a command line.

Expand the SIM Application Distribution

1. Log into the UNIX server as the user who will own the SIM application server files. Create a new staging directory for the SIM application distribution (`sim11.1.application.zip`). There should be a minimum of 500 MB disk space available for the application installation files.

This location will be referred to as `INSTALL_DIR` for the remainder of this chapter.

2. Copy `sim11.1.application.zip` to `INSTALL_DIR` and extract its contents.

Download RIBforISO

SIM 11.1.1 is compatible with both RIB 11 and RIB 12. You must download the proper RIBforISO package for your combination of SIM and RIB.

It is recommended that you download the RIBforISO package and provide it to the SIM installer. The SIM installer will run the RIBforISO installation script for you, and it will configure the RIBforISO files automatically.

If you choose not to install RIBforISO with SIM, you can still install it later using the installation procedure documented in the RIB install guide.

When you run the SIM application installer, it will look to the `INSTALL_DIR/sim/application/RIBforISO` directory for a RIBforISO tar file. If one is found, then the installer will give you the option of installing and configuring RIBforISO along with SIM. This can save you time and effort in manually modifying the RIB configuration files.

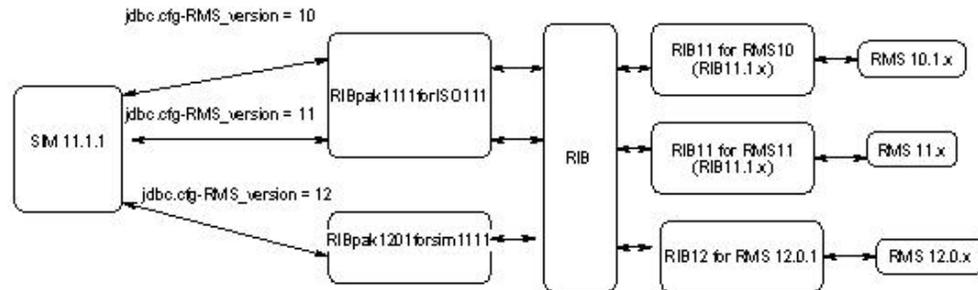
RIB 11 Example: `cp ribpak1111foriso111_eng_06222006.tar <INSTALL_DIR>/sim/application/RIBforISO/`

RIB 12 Example: `cp ribpak1201forsim1111_eng_090106.tar <INSTALL_DIR>/sim/application/RIBforISO/`

Do not expand the tar file. The installer will do this for you.

The SIM installer only runs the SIM portion of the RIB install. Other RIB installation activities, such as the creation of the RIB tables in the SIM database schema, need to be done according to the RIB install guide.

Below is a diagram that shows integration between SIM and different versions of RIB and RMS:



Download jonas_timer.jar (JOTM)

The SIM application requires the `jonas_timer.jar` file to function properly. You must download the binary release of JOTM 1.4.3, expand it, and locate `jotm-1.4.3/lib/jonas_timer.jar`. Copy this file into the following subdirectories of `<INSTALL_DIR>/sim/application/ISO_<version>`:

`clientWindows/retek/library/`

`serverUnix/retek/library/`

`serverUnix/retek/library/ent/`

If you have already run the SIM application installer, you can copy this file directly into the same directories of the SIM server and client installations.

The JOTM downloads page is located at

http://forge.objectweb.org/project/showfiles.php?group_id=19

Note: The file you download might be a gzipped file, even though it has a `.tar` extension. If this is the case, rename the file to have a `.tar.gz` extension, gunzip it, and then untar it.

Run the SIM Application Installer

The SIM application installer will install and configure the SIM application server.

Note: Appendix B contains details on every screen and field in the application installer.

1. Expand the `sim11.1application.zip` distribution into `INSTALL_DIR`.
2. Set the `JAVA_HOME` environment variable. `JAVA_HOME` should point to a Java 1.4.2 JRE or JDK. The installer is not compatible with earlier versions of Java.
3. If you are using an X server such as Exceed, set the `DISPLAY` environment variable so that you can run the installer in GUI mode (recommended). If you are not using an X server, or the GUI is too slow over your network, unset `DISPLAY` for text mode. (Caution: password fields are masked in GUI mode, but in text mode your input is shown in plain text in the terminal window).

4. Run the `install.sh` script. This will launch the installer. After installation is completed, a detailed installation log file is created: `sim11install.<timestamp>.log`.

Note: Below are the usage details for `install.sh`. The typical usage for GUI mode is no arguments.

```
install.sh [text | silent]
```

5. The installer leaves behind the `ant.install.properties` file for future reference and repeat installations. This file contains all inputs you provided, including passwords. As a security precaution, make sure that the file has restrictive permissions.

Example: `chmod 600 ant.install.properties`

Resolving Errors Encountered During Application Installation

If the application installer encounters any errors, it will halt execution immediately. You can run the installer in silent mode so that you don't have to retype the settings for your environment. See Appendix C of this document for instructions on silent mode.

See Appendix E of this document for a list of common installation errors.

Since the application installation is a full reinstall every time, any previous partial installs will be overwritten by the successful installation.

Backups Created by Installer

The SIM application installer will back up previous installations by renaming them with `<timestamp>` suffixes. This is done to prevent the removal of any custom changes you might have. These backup directories can be safely removed without affecting the current installation.

Examples: `serverUnix.200605011726`, `clientWindows`
`configured.zip.200605011726`

Data Seeding from RMS 12

If you have already run `DataSeeding` for RMS 11 and you don't need to run `DataSeeding` again. If your SIM server is going to integrate with RMS 12, you must run the `DataSeeding` utility at this time to load data from RMS into SIM. We highly recommend installing the SIM application server on the same machine with SIM database server when using `DataSeeding` utility. Verify that the following environment variables are set correctly.

<code>RMS_USER</code>	RMS Schema Owner
<code>RMS_PWD</code>	RMS Schema Owner Password
<code>RMS_DB</code>	ORACLE_SID for RMS Database

In this section, SIM_INSTALL_DIR refers to the SIM installation directory that you provided to the SIM application installer.

Note: There is a known issue with the IBM JRE on the AIX platform.. If you are using AIX with the JRE provided with IBM, edit the file java.security (located at JAVA_HOME/jre/lib/security). Remove the following line if it exists:
`security.provider.3=com.ibm.crypto.provider.IBMJCE`

If your SIM installation is to be integrated with RMS, do the following:

1. Change directories to SIM_INSTALL_DIR/server<Platform>/retek/sim/bin.
2. Run DataSeedCreateRMSIndexes.sh to create indexes in RMS.
3. Because they are temporary, do not run statistics on indexes above. Please review DataSeedCreateRMSIndexes.sql.
4. Modify your rmsToRssCopy.cfg and set MAX_THREADS and SIM_COMMIT_BLOCK
Recommended values: 1.5 threads per cpu for MAX_THREADS, Commit Block 100000 for SIM_COMMIT_BLOCK
5. Edit DataSeedAll.sh and set environment variables, userids, and passwords for SIM and RMS databases.
6. Run the following command:
`nohup ./DataSeedAll.sh &`
7. After data load completed successfully, run DataSeedClear.sh to remove dat, dsc, log and bad files.
8. Run DataSeedDropRMSIndexes.sh to drop indexes from RMS.

SIM Client Files

The SIM application installer configures the client files at the same time as the server files, and then creates the clientWindows-configured.zip file. You can download this file onto the client machine, expand it, and run it to connect to the SIM server.

SIM Configuration Files

See Appendix F of this document for details on which configuration files and parameters are modified by the SIM application installer.

Start the SIM Application Server and Client

Start the Application Server

1. After you have completed the application server, client, and database portions of the install, you will need to start the application server.
2. While logged in to the application server, change directories to `SIM_INSTALL_DIR/server<Platform>/retek/sim/bin` and run the script `startup.sh`. You can view the script to determine the three subscripts that are being called by this master script.

The application server should now be running. The log files generated by the application server are located at `SIM_INSTALL_DIR/server<Platform>/retek/sim/log`.

Start the Client

On the client machine, change directories to `SIM_CLIENT_INSTALL_DIR/client<Platform>/retek/sim/bin`. Run the command `sim.bat`.

LDAP Configuration

Getting SIM to Work With OpenLDAP

Setup of LDAP

There are a number of commercial LDAP servers available on the market – a commonly used one is OpenLDAP (available at www.openldap.org).

Note: Development of LDAP functionality in the SIM product was carried out by using OpenLDAP 2.1.12 server with a Berkeley DB 4.1.25 back-end on UNIX

Once an LDAP server has been selected and installed, the SIM data schema (SIM.schema) must be loaded on top of the default LDAP core schema (core.schema) supplied by the server. The following sample configuration files and scripts are included in this release at SIM_INSTALL_DIR/server<Platform>/retek/sim/files/prod/database/ldap for use with OpenLDAP and Berkeley DB installations:

Note: The following scripts and configuration files are provided as examples only. Variations may be necessary based on the LDAP server that is chosen and installed.

- slapd.conf
An example OpenLDAP server configuration file.
- start_ldap.sh (start_ldap.bat)
An example Start up script that starts just the LDAP stand-alone server. <LDAPServerName> and <LDAPServerPort> will have to be set to fit your environment.
- loadnStart.sh (loadnStart.bat)
An example script that removes any LDAP databases, recreates the data directory, starts the LDAP stand-alone server, and loads a sample LDIF file. The sample LDIF files are discussed in the next section. This script will need to be modified to conform to your environment's directory structure and LDAP server.

Note: Running this script will completely delete any data in the target LDAP repository and insert the test data contained in the ldif file the script references.

- stop_ldap.sh
Stops the LDAP standalone server by killing the process.

Note: A stop script for Windows was not created – simply use ctrl-c to stop the server process in the CMD window in which it is running

- `sim.schema`
Contains the SIM LDAP schema that is loaded over the `core.schema` provided with the LDAP server.
- Several `.ldif` files that contain sample data are also included. They are explained further in the next section.

To Configure SIM in an OpenLDAP Environment LDAP Server:

1. Customize the `stop_ldap.sh` script:
 - Change the argument of the kill command to the location of the `slapd.pid` file as specified by the 'pidfile' key in the LDAP configuration file (`slapd.conf`).
2. Customize the `start_ldap.sh` and the `loadnStart.ldap` scripts:
 - Change the `LD_LIBRARY_PATH` key to the location of the BerkeleyDB libraries (this depends on the distribution of OpenLDAP used, some are static-linked against the BerkeleyDB libraries and do not need this).
 - In `loadnStart.sh`, change the lines that delete and recreate the LDAP database to reference your specific setup.
 - Change line that launches the LDAP server. The format of the line is given in the script.
 - In `loadnStart.sh`, change the line that loads the sample data into the LDAP server. The format of the line is given in the script.
3. Customize the `slapd.conf` file:
 - Ensure that the `SM.schema` file is referenced correctly near the top of the `slpad.conf` file.
4. Execute `stop_ldap.sh` (if the LDAP server is already running)
5. Execute `start_ldap.sh` or `loadnStart.sh` to start the stand-alone LDAP server.
If `loadnStart.sh` is run, a scrolling list of data inserts into the LDAP repository should be displayed. If you get an error starting the server - check to make sure the server was not started anyway.

For connection errors, double check that the rootdn name and password specified in `slapd.conf` and `start_ldap.sh/loadnStart.sh` match.

SIM Data Schema Loads

A Lightweight Directory Access Protocol (LDAP) Server handles user authentication in SIM. In order to have SIM setup correctly and have users login to the application, SIM needs to communicate with a LDAP server. Once the LDAP server is configured and installed, the SIM data schema must be loaded on top of the default LDAP core schema (core.schema) supplied by the server. This is done by the example script loadnStart.sh above.

Loading the data consists of creating 3 primary objects that SIM uses:

1. Users
2. Roles
3. Stores

Several sample data entry files are available in the SIM_INSTALL_DIR/server<Platform>/retek/sim/files/prod/database/ldap directory and illustrate the formatting of the required data. The file sampleData.ldif contains a sample entry for the SIM schema. The other sample data files, testData.ldif and superLDIF.ldif contain varying amounts of sample data.

Note: You can have more than one rsimStoreID by simply repeating the userStore line, but should only have 1 homeStore.

Note: Any user store entry for the user object must have a corresponding Store data populated in the SIM Oracle database to allow a successful login (table PA_STR_RTL).

Note: SIM does not currently use/validate against the employmentStatus field, but may at some future release. Valid types are below.

0 = active
 1 = terminated
 2 = onleave
 3 = oncall

User roles contain various privileges that users assigned this rsimRoleName can access. If a role is set to TRUE in isStoreSuperUser, that role can perform all privileges in any store they are assigned to as long as that task is available in that store. If a user has TRUE in isSuperUser, they can perform any task in any store as long as that task is available in that store.

The privileges available in SIM are listed below.

- Create/View Stock Count (my store) - 1
- Create/View Stock Count (all stores) - 2
- Authorize Count - 4
- Item Lookup - 8
- Transfer Receive - 16
- Transfer Create/Save - 32
- Supplier Lookup - 64
- DSD - 128
- Return Stock - 256
- Warehouse Delivery - 512
- Container Lookup - 1024
- Inventory Adjustment - 2048
- Pricing - 4096
- View/Perform Stock Count - 8192
- Store Admin/Configuration - 16384
- Transfer Requests - 32768
- Item Requests - 65536
- Sequencing - 131072

LDAP store data must match the location data maintained in the SIM database. Stores also have privileges assigned to them. It needs to be noted that store privileges override user privileges. For example, if privilege 512 is not available to a store, users logged into that store will not be able to perform function 512 even if their role specifically allows it.

Once an LDAP user is correctly set up for a store that is present in your SIM database you will be able to log in to the SIM client.

Appendix: SIM Database Schema Installer Screens

You will need the following details about your environment for the installer to successfully create the SIM database schema. Depending on the options you select, you may not see some screens or fields.

Screen: Create Database User

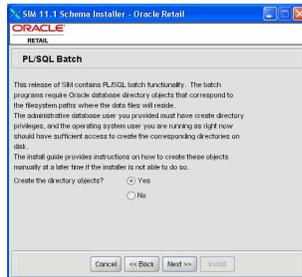
Fields on this Screen:

Field Title	SYSTEM (or admin) user
Field Description	<p>If the SIM user does not yet exist:</p> <p>The installer will authenticate as this user to create the SIM schema. By default, this is the SYSTEM user. If you do not have access to the SYSTEM database account, you can provide a different user here. The user you provide must have sufficient privileges to create the SIM user. See the <code>INSTALL_DIR/sim/dbschema/dbscripts/utility/create_user.sql</code> script for the actual SQL statement that is run to create the SIM user.</p> <p>If the SIM user has already been created:</p> <p>If you are installing into an existing database user, then you can provide the username and password of the SIM user here in addition to the SIM 11.1 schema to create value. When the SIM user already exists, this user is only used to verify the existence of tablespaces and other expected database settings.</p>
Example	SYSTEM
Notes	

Field Title	SYSTEM user password
Field Description	Database password for the SYSTEM (or admin) user. Caution: If you are in text mode, this value will be displayed on the screen as you type. GUI mode will mask this value.
Notes	
Field Title	Oracle database SID
Field Description	Oracle System Identifier for your database instance
Example	Mydatabase
Notes	
Field Title	SIM 11.1 JDBC URL
Field Description	URL used by the SIM application to access the SIM database schema. See Appendix D: URL Reference for expected syntax.
Example	jdbc:oracle:thin:@myhost:1525:mydatabase
Notes	
Field Title	SIM 11.1 schema to create
Field Description	Database username for the SIM schema. The installer will create this user if it does not already exist. If the user already exists, the installer will proceed with creating the SIM objects.
Example	SIM11DEV
Notes	
Field Title	SIM 11.1 schema password
Field Description	Password for the SIM database schema user Caution: If you are in text mode, this value will be displayed on the screen as you type. GUI mode will mask this value.
Notes	

Field Title	Temporary tablespace name
Field Description	An existing temporary tablespace to use during installation
Example	TEMP
Notes	

Screen: PL/SQL Batch



Fields on this Screen:

Field Title	Create the directory objects?
Field Description	The PL/SQL batch programs included in SIM require the use of a set of Oracle directory objects. The installer can create these objects, or you can create them manually at a later time. See the Database Schema Installation section of this document for more details.
Example	Yes
Notes	

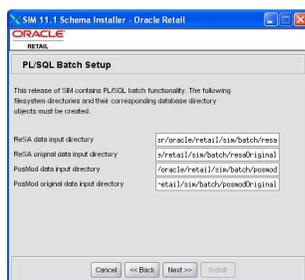
Screen: PL/SQL Batch Setup – Base Directory



Fields on this Screen:

Field Title	PL/SQL batch data file location
Field Description	The ReSA and PosMod batch programs use directories on the filesystem for data files. This directory is the top-level parent directory of these data directories.
Example	/usr/oracle/retail/sim/batch
Notes	

Screen: PL/SQL Batch Setup



Fields on this Screen:

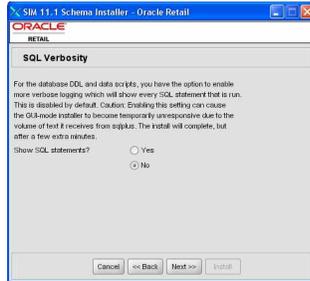
Field Title	ReSA data input directory
Field Description	This is the directory on the filesystem which will store the input data files for the ReSA File Parser batch program.
Destination	RESA_DIR database directory object
Example	/usr/oracle/retail/sim/batch/resa
Notes	

Field Title	ReSA original data input directory
Field Description	This directory stores backup copies of the input files from the ReSA data input directory.
Destination	RESA_ORIGINAL_DIR database directory object
Example	/usr/oracle/retail/sim/batch/resaOriginal
Notes	

Field Title	PosMod data input directory
Field Description	This is the directory on the filesystem which will store the input data files for the PosMod File Parser batch program.
Destination	POSMOD_DIR database directory object
Example	/usr/oracle/retail/sim/batch/posmod
Notes	

Field Title	PosMod original data input directory
Field Description	This directory stores backup copies of the input files from the PosMod data input directory.
Destination	POSMOD_ORIGINAL_DIR database directory object
Example	/usr/oracle/retail/sim/batch/posmodOriginal
Notes	

Screen: SQL Verbosity



Fields on this Screen:

Field Title	Show SQL statements?
Field Description	For the scripts containing the SIM DDL and initial data, you have the option of the installer turning ECHO ON when it runs sqlplus. If you answer Yes to this question, then the installer will show the details of every SQL statement. Caution: This can slow down the installation considerably, causing it to appear frozen for a few minutes. If you answer Yes, allow a few extra minutes for the installation to complete.
Example	No
Notes	

Appendix: SIM Application Installer Screens

You will need the following details about your environment for the installer to successfully configure and install the SIM application. Depending on the options you select, you may not see some screens.

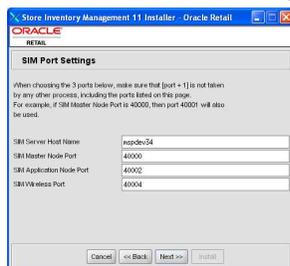
Screen: SIM Installation Directory



Fields on this Screen:

Field Title	SIM Installation Directory
Field Description	This is the directory where the SIM server files will be installed. You will be prompted to create the directory if it does not exist. This directory will be the parent of the serverUnix directory.
Destination	rib.properties, log4j.xml
Example	/usr/oracle/retail/sim
Notes	

Screen: SIM Port Settings



Fields on this Screen:

Field Title	SIM Server Host Name
Field Description	Hostname of the server that will run SIM. This field is automatically detected and filled in by the installer, but it can still be modified on this screen.
Destination	network.cfg
Example	myhost
Notes	
Field Title	SIM Master Node Port
Field Description	SIM master naming service port. This port (Ex: 40000), and its next consecutive port (Ex: 40001), must be available.
Destination	network.cfg
Example	40000
Notes	
Field Title	SIM Application Node Port
Field Description	SIM application server naming service port. This port (Ex: 40002), and its next consecutive port (Ex: 40003), must be available.
Destination	network.cfg
Example	40002
Notes	

Field Title	SIM Wireless Port
Field Description	Port for the SIM wireless server to use. This port (Ex: 40004), and its next consecutive port (Ex: 40005), must be available.
Destination	wireless_services.cfg
Example	40004
Notes	

Screen: LDAP directory server details



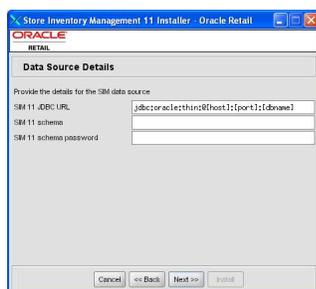
Fields on this Screen:

Field Title	LDAP server URL
Field Description	URL for your LDAP directory server. See <i>Appendix D: URL Reference</i> for expected syntax.
Destination	ldap.cfg
Example	ldap://myhost:389/
Notes	

Field Title	Search User DN
Field Description	Distinguished name of the user that SIM will use to authenticate to the LDAP directory.
Destination	ldap.cfg
Example	cn=admin,dc=mycompany,dc=com
Notes	

Field Title	Search User Password
Field Description	Password for the search user DN. Caution: If you are in text mode, this value will be displayed on the screen as you type. GUI mode will mask this value.
Destination	ldap.cfg
Notes	
Field Title	LDAP search base DN
Field Description	Distinguished name of the LDAP directory entry under which SIM should search for users and stores.
Destination	ldap.cfg
Example	cn=Users,dc=mycompany,dc=com

Screen: Data Source Details



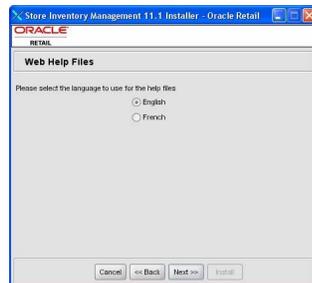
Fields on this Screen

Field Title	SIM 11 JDBC URL
Field Description	URL used by the SIM application to access the SIM database schema. See Appendix D: URL Reference for expected syntax.
Destination	jdbc.cfg
Example	jdbc:oracle:thin:@myhost:1525:mydatabase
Notes	

Field Title	SIM 11 schema
Field Description	Database user where the SIM database schema was installed. This should match what was given in the <i>SIM 11.1 schema to create</i> field of the SIM database installer.
Destination	jdbc.cfg, hibernate.cfg.xml
Example	SIM12DEV
Notes	

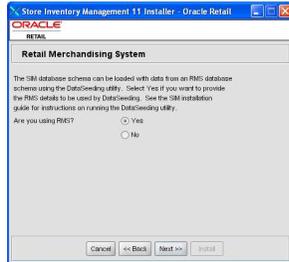
Field Title	SIM 11 schema password
Field Description	Password for the JDBC username. This should match what was given in the SIM 11.1 schema password field of the SIM database installer. Caution: If you are in text mode, this value will be displayed on the screen as you type. GUI mode will mask this value.
Destination	jdbc.cfg, hibernate.cfg.xml
Notes	

Screen: Web Help Files



Field Title	Please select the language to use for the help files
Field Description	When you click the "Help" button in the SIM client, the web help is launched. These web help files are placed on the client by the installer. The help files are kept on the client side, under clientWindows/retex/sim/files/prod/OnlineHelp. Under this path is a zip file for each language choice. The zip file for the selected language is expanded in this directory to create the 'WebHelp' subdirectory.
Example	English
Notes	

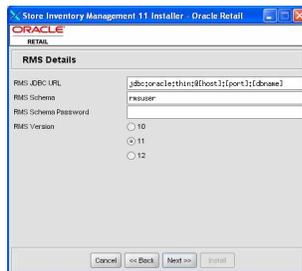
Screen: Retail Merchandising System



Fields on this Screen

Field Title	Are you using RMS?
Field Description	Answer "Yes" if you are integrating SIM with RMS.
Example	Yes
Notes	

Screen: RMS Details



Fields on this screen:

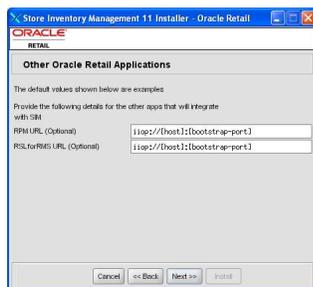
Field Title	RMS JDBC URL
Field Description	URL used by SIM to access the RMS database schema. See Appendix D: URL Reference for expected syntax.
Destination	jdbc.cfg
Example	jdbc:oracle:thin:@myhost:1525:mydatabase
Notes	

Field Title	RMS schema
Field Description	Database user where the RMS database schema was installed.
Destination	jdbc.cfg
Example	RMS12DEV
Notes	

Field Title	RMS schema password
Field Description	Password for the RMS schema. Caution: If you are in text mode, this value will be displayed on the screen as you type. GUI mode will mask this value.
Destination	jdbc.cfg
Notes	

Field Title	RMS version
Field Description	Version of RMS being integrated with SIM
Destination	jdbc.cfg
Example	11
Notes	

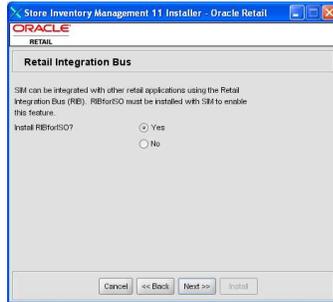
Screen: Other Oracle Retail Applications



Fields on this Screen

Field Title	RPM URL (Optional)
Field Description	URL which SIM will use to find the RPM application. Integration of RPM with SIM is optional. See Appendix D: URL Reference for expected syntax.
Destination	jndi_providers.xml
Example	iiop://myhost:2809
Notes	
Field Title	RSLforRMS URL (Optional)
Field Description	URL which SIM will use to find the RSLforRMS application. RSLforRMS is optional and is only required if you are integrating SIM with RMS. See Appendix D: URL Reference for expected syntax.
Destination	jndi_providers.xml
Example	iiop://myhost:2810
Notes	

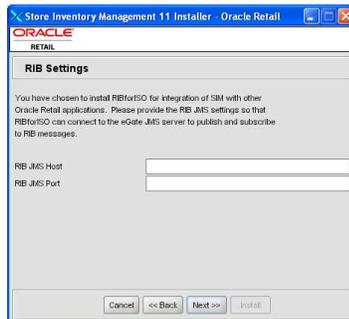
Screen: Retail Integration Bus



Fields on this Screen

Field Title	Install RIBforISO?
Field Description	Answer “Yes” if you are going to connect SIM to the RIB for integration with other Oracle Retail applications.
Example	Yes
Notes	

Screen: RIB Settings



Fields on this Screen

Field Title	RIB JMS Host
Field Description	Host name of the JMS server used by the RIB.
Destination	ribmessaging.cfg
Example	myjmshost
Notes	

Field Title	RIB JMS Port
Field Description	port for the JMS server used by the RIB
Destination	ribmessaging.cfg
Example	24053
Notes	

Appendix: Installer Silent Mode

Repeating an Installation Attempt

In addition to the GUI and text interfaces of the SIM installer, there is a silent mode that can be run. This mode is useful if you wish to run a repeat installation without retyping the settings you provided in the previous installation. It is also useful if you encounter errors in the middle of an installation and wish to continue.

The installer runs in two distinct phases. The first phase involves gathering settings from the user. At the end of the first phase, a properties file named `ant.install.properties` is created with the settings that were provided. Then the second phase begins, where this properties file is used to provide your settings for the installation.

To skip the first phase and re-use the `ant.install.properties` file from a previous run, follow these instructions:

1. Edit the `ant.install.properties` file and correct any invalid settings that may have caused the installer to fail in its previous run.
2. Run the installer again with the **silent** argument.

Example: `install.sh silent`

Re-Using `ant.install.properties` in a Different Staging Directory

`ant.install.properties` is the input file for the installer back-end and is created after you answer all of the prompts. This file can be used for repeat attempts from the same staging area (see *Repeating an Installation Attempt* above). If this file is moved to a different staging directory, then the **basedir** property needs to be removed from the file before running the installer again. Simply delete the line containing the `basedir` property from the file.

Appendix: URL Reference

Both the database schema and application installers for the Security Manager product will ask for several different URLs. These include the following.

JDBC URL for a Database

Used by the Java application and by the installer to connect to the database.

Syntax: jdbc:oracle:thin:@<host>:<port>:<sid>

- <host>: hostname of the database server
- <port>: database listener port
- <sid>: system identifier for the database

Example: jdbc:oracle:thin:@myhost:1521:mysid

LDAP Server URL

Used by the Java application to connect to the LDAP directory.

Syntax: ldap://<host>:<port>

- <host>: hostname of the directory server
- <port>: LDAP server port

Example: ldap://myhost:389

JNDI Provider URL for an Application

Used by the application client to access the application running in the server. Also used by other applications for server-to-server calls.

OracleAS:

Syntax: opmn:ormi://<host>:<port>:<instance>/<app>

- <host>: hostname of the OracleAS environment
- <port>: OPMN request port of the OracleAS environment. This can be found in the <ORACLE_HOME>/opmn/conf/opmn.xml file.
- <instance>: Name of the OC4J instance running the application
- <app>: Deployment name for the application.

Example: opmn:ormi://myhost:6003:rsm-oc4j-instance/rsm12

Note: The JNDI provider URL can have a different format depending on your cluster topology. Consult the Oracle Application Server documentation for further details.

WebSphere :

Syntax: iiop://<host>:<port>

- <host>: hostname of the WebSphere environment
- <port>: BOOTSTRAP port of the WebSphere server that is running the application.

Example: iiop://myhost:2809

Appendix: Common Installation Errors

This section provides some common errors encountered during installation of RSM.

Database Installer Hangs on Startup

Symptom:

When the database schema installer is run, the following is written to the console and the installer hangs indefinitely:

```
Running pre-install checks
Running tnsping to get listener port
```

Solution:

The installer startup script is waiting for control to return from the **tnsping** command, but **tnsping** is hanging. Type Control+C to cancel the installer, and investigate and solve the problem that is causing the **tnsping <sid>** command to hang. This can be caused by duplicate database listeners running.

Unreadable Buttons in the Installer

If you are unable to read the text within the installer buttons, it probably means that your JAVA_HOME is pointed to a pre-1.4.2 JRE. Set JAVA_HOME to a Java runtime environment of version 1.4.2 or later and run the installer again.

“Could not create system preferences directory” Warning

Symptom:

The following text appears in the installer Errors tab:

```
May 22, 2006 11:16:39 AM java.util.prefs.FileSystemPreferences$3 run
WARNING: Could not create system preferences directory. System
preferences are unusable.
May 22, 2006 11:17:09 AM java.util.prefs.FileSystemPreferences
checkLockFile0ErrorCode
WARNING: Could not lock System prefs. Unix error code -264946424.
```

Solution:

This is related to Java bug 4838770. The /etc/.java/.systemPrefs directory may not have been created on your system. See <http://bugs.sun.com> for details.

This is an issue with your installation of Java and does not affect the Oracle Retail product installation.

“Couldn't find X Input Context” Warnings

Symptom:

The following text appears in the console window during execution of the installer in GUI mode:

```
Couldn't find X Input Context
```

Solution:

This message is harmless and can be ignored.

Appendix: SIM Configuration Files

Note: Directory structures going forward will use the UNIX file separator standard - /. If the install is on a Windows machine, the file separator will actually be \ . In addition, scripts will be referred to as having a .sh extension - when performing a Windows installation the actual extension will be .bat.

SIM Configuration Files Modified by the SIM Installer

network.cfg (both server and client side)

The network.cfg file is located at

SIM_INSTALL_DIR/server<Platform>/retek/sim/files/prod/config/. The following settings are changed by the installer:

MASTER_NODE	IP address and naming server port
APPLICATION_NODE	IP address and application server port

Note: The default port settings are 40000 and 40002 - if you are using Windows and you wish to change these port settings, the scripts rns.bat and node_rns.bat. (located at SIM_INSTALL_DIR/serverWindows/retek/sim/bin) will need to be changed for to pass in the appropriate non-default port numbers.

jdbc.cfg (both server and client side)

The jdbc.cfg file is located at

SIM_INSTALL_DIR/server<Platform>/retek/sim/files/prod/config/. The following settings are changed by the installer:

URL	SIM JDBC URL (see Appendix D: URL Reference)
USER_NAME	SIM database user
PASSWORD	SIM database password

The following settings are configured if SIM is to be integrated with RMS:

RMS_URL	RMS JDBC URL (see Appendix D: URL Reference).
RMS_USER_NAME	RMS database user
RMS_PASSWORD	RMS database password
RMS_VERSION	Version of RMS being used. ("10", "11" or "12"). Note: On the <u>client</u> side, this is the only parameter that must be configured in jdbc.cfg.

messaging.cfg (server side only)

Configuration of messaging.cfg is only necessary if you are running RPOS and are integrating SIM and RPOS using a JMS server.

Note: messaging.cfg is NOT related to the RIB, and should NOT be configured with the eGate JMS settings. The **ribmessaging.cfg** file that is applied with RIBforISO should be used for this setting.

The messaging.cfg file is located at

SIM_INSTALL_DIR/server<Platform>/retek/sim/files/prod/config/. Change the BROKER setting to point at the server name and port where the SIM JMS server is running(see Note below):

BROKER=<server name>:<port>

Note: USERNAME and PASSWORD should be blank

Note: OpenJMS or another third party JMS Messaging server is required to allow SIM to push same day price changes to POS within SIM. To utilize this feature, a JMS server must be installed using the installation instructions provided with the product. A topic called PRICE_UPDATE needs to be created on the JMS server for this functionality to work; consult the JMS Sever documentation for instructions for creating a messaging -topic.

wireless_services.cfg (server side only)

The wireless_services.cfg file is located at

SIM_INSTALL_DIR/server<Platform>/retek/sim/files/prod/config/. The installer configures the PORT parameter to the port you want your wireless container to listen on (default is 40004). Ensure that the PORT you choose is not in use by another application.

A known Solaris bug requires the following changes to WirelessContainer.xml located at SIM_INSTALL_DIR/server<Platform>/retek/sim/files/prod/tuning. The SIM installer will detect your operating system and take care of this change automatically.

If you are running the SIM server on Solaris, then you should have the following command-line arguments configured near the top of WirelessContainer.xml (changes in bold):

```
<commandLineArgs length="8">
<java.lang.String>CONTAINER_FILE=WirelessContainer</java.lang.String>
<java.lang.String>STATS_CLASS=com.retek.iso.cr.node.UnixProcessStats</java.lang.St
ring>
<java.lang.String>DEFAULT_GROUP=RTK.USA.MN.Minneapolis.RetekOnTheMall.Server.Windo
ws</java.lang.String>
<java.lang.String>DEVICE_TYPE=1</java.lang.String>
<java.lang.String>DEVICE_ID=WirelessContainer</java.lang.String>
<java.lang.String>USER_CONFIG=wireless_client_master.cfg</java.lang.String>
<java.lang.String>java.security.policy=../../library/policy</java.lang.String>
<java.lang.String>file.encoding=Cp1252</java.lang.String>
</commandLineArgs>
```

If you are running the SIM server on a platform other than Solaris, then you should have the following command-line arguments configured near the top of `WirelessContainer.xml`:

```
<commandLineArgs length="7">
<java.lang.String>CONTAINER_FILE=WirelessContainer</java.lang.String>
<java.lang.String>STATS_CLASS=com.retek.iso.cr.node.UnixProcessStats</java.lang.String>
<java.lang.String>DEFAULT_GROUP=RTK.USA.MN.Minneapolis.RetekOnTheMall.Server.Windows</java.lang.String>
<java.lang.String>DEVICE_TYPE=1</java.lang.String>
<java.lang.String>DEVICE_ID=WirelessContainer</java.lang.String>
<java.lang.String>USER_CONFIG=wireless_client_master.cfg</java.lang.String>
<java.lang.String>java.security.policy=../../library/policy</java.lang.String>
  <!-- Uncomment for Solaris
java.lang.String>file.encoding=Cp1252</java.lang.String -->
</commandLineArgs>
```

wireless_client_master.cfg (server side only)

The `wireless_client_master.cfg` file is located at `SIM_INSTALL_DIR/server<Platform>/retек/sim/files/prod/config/`. The installer configures the `TCP_PORT` parameter to the port you want your wireless container to listen on (default is 40005).

Contact Oracle Retail for requirements, recommendations, and evaluations of currently deployed equipment for operating SIM on wireless handheld devices and printers.

ldap.cfg (server side only)

The `ldap.cfg` file is located at `SIM_INSTALL_DIR/server<Platform>/retек/sim/files/prod/config/`. The installer changes the following settings:

<code>PRIMARY_LDAP_URL</code>	URL of your LDAP server (See Appendix D: URL Reference).
<code>BASE_DN</code>	LDAP distinguished name of the entry in the directory under which SIM will search for user and store entries.
<code>APPLICATION_LOGIN</code>	LDAP distinguished name of the entry in the directory that SIM will use for authentication.
<code>APPLICATION_PASSWORD</code>	user password for the entry specified in the <code>APPLICATION_LOGIN</code> parameter.

Note: LDAP configuration is further discussed in Chapter 3.

jndi_providers.xml (server side only)

The jndi_providers.xml file is located at

SIM_INSTALL_DIR/server<Platform>/retek/sim/files/prod/config/retek. The installer configures the RPM and RSLforRMS JNDI provider URLs in this file so that the SIM server can properly integrate with those applications.

Example:

```
<?xml version="1.0" ?>
<ejb_context_overrides>
  <provider app="rpm" url="iiop://mspdev37:23813"
factory="com.ibm.websphere.naming.WsnInitialContextFactory">
  </provider>
  <provider app="rms" url="iiop://mspdev05:2809"
factory="com.ibm.websphere.naming.WsnInitialContextFactory">
  </provider>
</ejb_context_overrides>
```

RIBforISO Configuration Files Modified by the SIM Installer

If you provide the RIBforISO tar file to the SIM application installer, then it will run the RIBforISO installation and configure the following files:

```
server<platform>/retek/sim/files/prod/config/rib.properties
server<platform>/retek/sim/files/prod/config/hibernate.cfg.xml
server<platform>/retek/sim/files/prod/config/ribmessaging.cfg
server<platform>/retek/sim/files/prod/config/log4j.xml
```

See the RIB install guide for exact details on which parameters need to be configured in these and other files.

Appendix: Sample Oracle 9.2.0.x Database Creation Scripts

Read carefully. The scripts below are samples and may need to be modified for your environment. Oracle Retail recommends using UNDO instead of Rollback segments.

Script: crdb1.sql

Execute as: sysdba

Note: Modify file paths and “MODIFY_SID” for your environment. The redo logs, TEMP and UNDO are not currently sized for a production environment.

Database Creation Script Part 1

```

spool SID.log
startup nomount pfile=${ORACLE_HOME}/dbs/init${ORACLE_SID}.ora
create database "MODIFY_SID"
    maxdatafiles 1000
    character set UTF8
    DATAFILE
        '/u00/oradata/${ORACLE_SID}/system01.dbf' SIZE 100M
        AUTOEXTEND ON NEXT 10M MAXSIZE 2000M
    LOGFILE
        group 1 ('/u00/oradata/${ORACLE_SID}/redo1a.log') size 100M,
        group 2 ('/u00/oradata/${ORACLE_SID}/redo2a.log') size 100M,
        group 3 ('/u00/oradata/${ORACLE_SID}/redo3a.log') size 100M
    DEFAULT TEMPORARY TABLESPACE TEMP
        TEMPFILE '/u01/oradata/${ORACLE_SID}/temp01.dbf' SIZE 500M
        EXTENT MANAGEMENT LOCAL UNIFORM SIZE 1M
    undo tablespace UNDO_TS
        DATAFILE '/u00/oradata/${ORACLE_SID}/undo_ts01.dbf' SIZE 500M
;

spool off
exit
Script: crdb2.sql
Execute as: sysdba

```

Database Creation Script Part 2

```
spool ${ORACLE_SID}2.log

REM # install data dictionary views:
PROMPT Running catalog.sql
@$ORACLE_HOME/rdbms/admin/catalog.sql
PROMPT Running catproc.sql
@$ORACLE_HOME/rdbms/admin/catproc.sql
PROMPT Running catblock.sql
@$ORACLE_HOME/rdbms/admin/catblock.sql

REM * If you create the oracle user externally, then set os_authent_prefix="" in
the init.ora
create user oracle identified externally;
grant dba to oracle;

REM * These privs needed for admin users to run proper grant code when creating
users.
grant select on dba_jobs to public with grant option;
grant select on dba_roles to public with grant option;
grant select on dba_role_privs to public with grant option;
grant execute on dbms_ols to public with grant option;

REM * These privs needed to be granted to all due to 9i security changes.
grant select_catalog_role to public;
grant execute_catalog_role to public;
grant execute on dbms_lock to public;
grant execute on dbms_ols to public;

REM * query rewrite privilege needed to create function-based indexes
grant query rewrite to public;

REM * dbms_system is needed for tracing
REM * grant execute on sys.dbms_system to public;

REM * For each DBA user, run DBA synonyms SQL script. Don't forget that EACH
REM * DBA USER created in the future needs dba_syn.sql run from its account.
REM *
connect system/manager
PROMPT Running pupbld.sql
@$ORACLE_HOME/sqlplus/admin/pupbld.sql

PROMPT Creating PLAN table owned by SYSTEM
@$ORACLE_HOME/rdbms/admin/utlxplan.sql

PROMPT Creating public synonymn for the plan table
create public synonym PLAN_TABLE for SYSTEM.PLAN_TABLE;

REM * Drop dbsnmp user since we are not using OEM and Oracle Intelligent Agent
REM * drop user dbsnmp cascade;

disconnect

Script: crdb3.sql
Execute as: sysdba
```

Database Creation Script Part 3

```
spool ${ORACLE_SID}3.log

REM * Install XDK and XSU
PROMPT altering system to set _system_trig_enabled to false
ALTER SYSTEM SET "_system_trig_enabled"=FALSE SCOPE=MEMORY;

PROMPT Running initjvm.sql to install Java objects
@${ORACLE_HOME}/javavm/install/initjvm.sql

PROMPT Running initxml.sql to install XML and XSU
@${ORACLE_HOME}/rdbms/admin/initxml.sql

PROMPT Running xmlja.sql to install NCOMP'ed XML Parser
@${ORACLE_HOME}/xdk/admin/xmlja.sql

PROMPT Running catjava.sql to install catalog scripts for Java
@${ORACLE_HOME}/rdbms/admin/catjava.sql

PROMPT Creating public synonyms and grants
CREATE PUBLIC SYNONYM XMLQUERY for SYS.DBMS_XMLQUERY;
GRANT EXECUTE ON XMLQUERY TO PUBLIC;
GRANT EXECUTE ON XMLPARSER TO PUBLIC;
GRANT EXECUTE ON XMLDOM TO PUBLIC;
CREATE PUBLIC SYNONYM XSLPROCESSOR for SYS.XSLPROCESSOR;
GRANT EXECUTE ON XSLPROCESSOR TO PUBLIC;

PROMPT Revaliding invalid objects
@${ORACLE_HOME}/rdbms/admin/utlrp.sql

spool off
```

Sample Database init.ora

```
#####
# Oracle 9.2.0.x Parameter file
#
# NOTES:
# 1. Change all file directory paths as necessary for your environment.
# 2. Search and replace the string "MODIFY_SID" with your database name.
# 3. Modify parameters as necessary for your development, test,
#    and production environments.
#
# -----
# MAINTENANCE LOG
#
# Date      By      Parameter      Old/New      Notes
# +-----+ +-----+ +-----+ +-----+ +-----+
# 09/15/03 Retek      NA              NA              creation
#
#####

# -----
# The following SGA parameters are CRITICAL to the performance of the
# database. The following settings are based off 1GB of allotted memory.
# Adjust these parameters for your environment.
# The SGA is composed of:
#   db_cache_size, log_buffer, java_pool_size, large_pool_size, shared_pool_size
# -----
db_cache_size          = 256M
java_pool_size         = 150M                # Retek required
  (minimum=100M)
log_buffer              = 10485760
shared_pool_size       = 150M

# -----
# The following parameters do not affect SGA size and should be adjusted for
# your environment.
# -----
background_dump_dest   = $ORACLE_BASE/admin/$ORACLE_SID/bdump
compatible              = 9.2.0
control_files           = (/u01/oradata/MODIFY_SID/MODIFY_SID_01.ctl
                          ,/u01/oradata/MODIFY_SID/MODIFY_SID_02.ctl)
core_dump_dest          = $ORACLE_BASE/admin/$ORACLE_SID/cdump
db_block_size          = 8192                # default is 2k; adjust
before db creation, cannot change after db is created
db_files                = 200                # default is 200; set to
max number of database files
db_file_multiblock_read_count = 8          # (max io size)/(block
size); adjust as needed; platform specific

db_name                 = MODIFY_SID
job_queue_processes     = 9                  # Retek required; number
of cpu's +1
local_listener          =
"(ADDRESS=(PROTOCOL=TCP) (HOST=localhost) (PORT=1521))"
nls_date_format         = DD-MON-RR         # Retek required
nls_calendar            = GREGORIAN
nls_language            = AMERICAN         # default
nls_territory           = AMERICA         # default
open_cursors            = 900              # Retek required
  (minimum=900); default is 50
optimizer_features_enable = 9.2.0
optimizer_mode          = CHOOSE           # Retek required
```

```
processes                          = 500                                # max number of os
processes that can connect to oracle
query_rewrite_enabled              = TRUE                                # Retek required; fct
based indexes
remote_dependencies_mode           = SIGNATURE                             # Retek required; default
is TIMESTAMP
sessions                           = 1500                               # ~(3*processes); one
forms connection can spawn several sessions

session_cached_cursors             = 100                                # default is 0
undo_management                    = AUTO
undo_tablespace                    = undo_ts                               # match with tablespace
name used in your creation script
undo_retention                     = 1800                                # currently set for 30
minutes; set to avg length of transactions in secs
user_dump_dest                     = $ORACLE_BASE/admin/$ORACLE_SID/udump
utl_file_dir                       = $ORACLE_BASE/utl_file

# *** Archive Logging, set if needed ***
#log_archive_dest                  = 'location=$ORACLE_BASE/admin/$ORACLE_SID/arch/'
#log_archive_format                = $ORACLE_SIDarch%s.log
#log_archive_min_succeed_dest      = 1
#log_archive_start                 = TRUE
#log_checkpoint_interval           = 999999999
```

Appendix: SIM User Creation Script

Below are the contents of the create_user.sql script that the SIM database schema installer uses to create the SIM user. Check the script located at INSTALL_DIR/sim/dbschema/dbscripts/utility/create_user.sql for the most up-to-date version.

```
WHenever SQLERROR EXIT FAILURE ROLLBACK
spool create_user.log
create user &1
identified by &2
default tablespace retek_data
temporary tablespace &3
/

grant select_catalog_role,
      alter session,
      analyze any,
      create any synonym,
      create type,
      create database link,
      create library,
      create procedure,
      create public database link,
      create public synonym,
      create sequence,
      create session,
      create synonym,
      create table,
      create trigger,
      create view,
      drop any synonym,
      execute any procedure,
      select any sequence,
      select any table,
      query rewrite to &1
/

alter user &1 quota unlimited on retek_data
/

alter user &1 quota unlimited on retek_index
/

alter user &1 quota unlimited on lob_data
/

grant select on sys.dba_role_privs to &1
/

grant select on sys.dba_jobs to &1
/

grant select on sys.dba_roles to &1
/
```