

Retek[®] Distribution Management 10.1



Installation Guide (full)



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- Exact error message received.
- Screen shots of each step you take.

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Chapter 1 – Hardware and software requirements

Before you install any Retek Retail Solutions product, you need to make sure that your information systems can adequately run the software that you are installing, as well as process the amount of data that you expect to manage. This section lists the suggested hardware and software requirements for Retek Distribution Management products. The following are suggested hardware and software requirements:

Supported Media – Retek Distribution Management is available on CD-ROM only. Tape is not available.

Database Server – database software requirements.

Application Server – including operating system software and development tools, and a list of hardware choices.

Web Browser – including the requirements that a Web browser must meet and a list of Web browsers and versions from which you can choose. It is important that you choose to install operating system and Web browser version combinations on your users' computers that can run Oracle's JInitiator. JInitiator is the Java runtime environment necessary for viewing and interacting with Retek's Web-enabled products. The following table lists acceptable software versions and Web browser versions.

	Database Server	Application Server	Client
Vendor	Oracle RDBMS 9I – Enterprise Edition	Oracle Application Server (Web Server) Oracle Developer	Web Browser (IE or Netscape) JInitiator
Retek (RDM 10.1)	DDL (Views, Triggers, Tables etc.) Database Objects (Procedures, Packages) Control Scripts Data Scripts	Forms Reports Help Files	

Because you need to choose hardware that has sufficient random access memory (RAM) and program and data storage capacity for the products you choose, each section lists criteria you can use to “size” your hardware selections. The totals you discover after factoring in sizing issues are approximate.

Retek Distribution Management

Database server

General requirements for a database server capable of running RDM include:

- Unix (or Unix variant) based OS certified with Oracle 9i
- ANSI compliant C compiler
- Perl Compiler 5.0 or later
- Oracle RDBMS 9i Enterprise Edition
- Oracle Partitioning
- Oracle Pro*C Precompiler 9.x
- Oracle Net services

For development:

- OCI
- Oracle XML Developers Kit
- Oracle XML SQL Utility

Hardware/OS options as used for development (see Oracle's Web site for certified platforms):

- Sun/Solaris 2.6, 2.7, 2.8
- IBM/AIX 4.3.3.x
- Hewlett Packard/HP UX 11.1

Note: Oracle bug #2200335 regarding table inserts is resolved with patch #1970629, Sun Platform only.

Application server

General requirements for an application server capable of running RDM include:

- UNIX (or UNIX variant) Or Windows NT or Windows 2000 server
- Oracle Application Server (9IAS) 1.0.2.2.x
- x-Windows interface (only if UNIX OS)

Sizing factors and other suggestions to factor into your selection of an application server include:

- CD-ROM drive
- 1 Gbit network adapter
- ~2 GB Free disk space for 9IAS
- ~1 GB Free disk space for RDM forms, reports, gif files and help files.

Hardware/OS options as used for development:

- Sun/Solaris 2.6, 2.7, 2.8
- IBM/AIX 4.3.3 or AIX 5.1
- Hewlett Packard/HP UX 11.0 or 11.11

Web browser and client requirements

General requirements for client capable of running RDM include:

JRE plugin

- Oracle JInitiator 1.1.8.xx

Client PCs

- Pentium Processor
- Use Windows 98, 2000, XP or NT 4.0 with service pack 5 or higher
- Have the resolution set to 1024x768 pixels

Sizing factors and other suggestions to factor into your selection of a PC or network configuration include:

- Bandwidth/Speed
- PC Configuration (minimum 64 MB RAM, 200MHZ processor)

Browser options to factor into your selection include:

- Internet Explorer 5.0 or higher
- Netscape Navigator 4.7 or higher

Chapter 2 – Database installation instructions

Database server installation instructions

Follow these steps to install the database server component of the RDM 10.1 software.

Getting started

Create a UNIX user account

- 1 Create the following UNIX groups:
 - dba
 - rtk
- 2 Create the following UNIX user, using ksh as the default shell:
 - oracle - dba group (owns the Oracle RDBMS)
 - retek - dba and rtk group (owns the RDM app)

The retek user will install and compile the Retek Distribution Management 10.1 Database Server and Application Server objects on UNIX systems. The oracle account should create the oracle rdbms.

Note: A database create script can be found on your cd at /dbcreate. It will take care of creating your database with correct sizing options.

Modify the init.ora file in the \$ORACLE_HOME/dbs directory

- 1 Install Oracle 9i as the Oracle account.
- 2 Place the following in the init.ora:
 - nls_date_format = "DD-MON-RR"
 - job_queue_processes = <number of CPUs + 1>
 - open_cursors=900
 - optimizer_mode should be rule
- 3 Create a 9i database (see Appendix D).

Verify the existence of Oracle packages

The DBMS_SESSION, DBMS_RANDOM, DBMS_LOCK, DBMS_AQ, DBMS_AQADM, DBMS_ALERT, DBMS_PIPE, and DBMS_JOB packages must be created in each database that RDM 10.1 will be run against.

These Oracle packages are provided with the ORACLE software, and are normally created by the `catproc.sql` script as part of the Oracle installation process.

- 1 Log into the database as sys and query the USER_OBJECTS view to verify whether or not the packages have been created.

Note: The source for these packages are located in the \$ORACLE_HOME/rdbms/admin directory.

- 2 If necessary, re-create the packages by running the `catproc.sql` script while logged in as the Oracle user sys.

Create ORACLE tablespaces

RDM 10.1 requires that eleven tablespaces be created initially for the RDM installation.

- 1 Create the following tablespaces: USERS, DAT1, DAT2, DAT3, DAT4, DAT5, IND1, IND2, IND3, IND4, IND5, LOB_DATA and AHL_DAT1. If temp and RBS were not created earlier do so at this time.

Note: These tablespace names are referred to in the table and index creation scripts, so their existence is required.

- 2 The size of all of these tablespaces varies from client to client, depending on how much data the client intends on having in their environment. The test minimums are:

DAT1	- 175 MB
DAT2	- 160 MB
DAT3	- 240 MB
DAT4	- 115 MB
DAT5	- 45 MB
IND1	- 50 MB
IND2	- 75 MB
IND3	- 90 MB
IND4	- 75 MB
IND5	- 70 MB
LOB_DATA	- 10 MB
AHL_DAT1	- 50 MB
USERS	- 10 MB

The system tablespace should have at least 100MB free for each installation of the RDM 10.1 schema.

Note: Analysis of additional tablespaces and sizing parameters should be done prior to setting up the production environment.

Create the file structure

- 1 As the retek user determine where RDM 10.1 install scripts will be placed. There should be about 500 MB of disk space available
- 2 Make sure your ORACLE_SID and ORACLE_HOME environment variables are set correctly before installation. Also make sure that ORACLE_HOME/bin is in your PATH.
- 3 Mount the CD on the database server and log into UNIX as retek.

There are four directories on the RDM 10.1 CD:

- appserverunix
- appservernt
- Retek Workbench
- dbserverunix
- dbcreate
- Rapistan-Kewill_Interface

The dbserverunix directory contains the files for the database server install.

- 4 Change directories to dbserverunix.

Note: At this point, you may complete the install using the automated installation scripts, or by following the manual steps found in Appendix A.

To complete the install using the automated install scripts

- 5 As the retek user run `builddb_rdm.run` from the CD while in the `<cd mount point>/dbserverunix` directory. The installation script must be run on the database server.
 - This script prompts you for a path in which to install the RDM 10.1 database server files on the system. If the entire path does not currently exist, it creates it for you. **This is referred to as <INSTALL_DIR> in these installation instructions.**
 - The `builddb_rdm.run` script copies a tarred and compressed file containing the database files to the specified directory on your server.
 - The `builddb_rdm.run` script decompresses and untars the file to produce the directory structure and files required for the remainder of the installation process. The directory structure is described in Appendix A.
 - The `builddb_rdm.run` script cleans up any extra files produced.
 - The `builddb_rdm.run` script calls another script (`install.rdm`) to finish the remainder of the Database Server installation. See the “Install RDM” section for more information.

Note: `install.rdm` is called by the `builddb_rdm.run` script, but can also be called from the command line if the tar file was decompressed and untarred manually. To start `install.rdm`, CD to `<INSTALL_DIR>/install` and run `install.rdm`.

Install RDM

The `install.rdm` script walks you through most of the manual install processes described in Appendix A. The `install.rdm` script creates the Oracle schema owner for RDM 10.1 and uses scripts from the `<INSTALL_DIR>/install` directory structure to build the database objects.

The basic prompt responses throughout this script are:

- `<Y>` for Yes
- `<N>` for No
- `<Q>` for Quit
- `<S>` for Skip
- `<Enter>` to accept the default

The actions that are allowed at each prompt are noted and all choices can be entered in upper or lower case. Each prompt has our suggested answer as default, where hitting `<Enter>` will accept the default and continue the process.

All of these actions are logged to

`<INSTALL_DIR>/install/logfiles/install.log`.

Each of the following bullets is a primary prompt in the script. Refer to the manual instructions in Appendix A for additional information. The `install.rdm` script does the following:

- Ensures the database has been set up to prior specifications.
- Creates the Oracle RDM user that serves as the schema owner. A name, password and a temporary tablespace for this user are required.
- Generates ddl in the RDM schema.
- Creates all other database objects for RDM 10.1. This includes packages, procedures, and functions.
- Creates the views and triggers that rely on the database objects to compile successfully.
- Runs required data from sql scripts.
- Updates DDL.
- Updates triggers.
- Updates packages, procedures and functions.
- Updates rib xml packages and procedures.
- Updates data.

If at any point you choose to exit the install.rdm script, the next time it is run, it will ask you if you wish to continue where you last left off. Answering Yes causes the script to pick up after the last successful section that was run. Answering No causes the script to start at the beginning. The install.rdm script is located at <INSTALL_DIR>/install/install.rdm.

Note: The install.rdm script was written to install the RDM 10.1 components in a particular order. Use the <S> Skip option with caution!

Note: The scripts that create database objects to hold forms are provided by Oracle. The first time you run this, it will not be able to drop some of the pieces that get created by this script. Also, you may not be able to drop the primary keys for ROSLFDESC or ROSTFDESC if they do not exist. These errors are OK.

Verify that all database objects are valid

- 1 Change directories to <INSTALL_DIR>/install/utility.
- 2 Log into Oracle as the RDM 10.1 schema owner.
- 3 Enter:
SQL> @inv_obj_comp.sql

This script will recompile any invalid objects in the schema. You might want to run this script several times to validate all the objects.

Note: On a clean install number one does not need to be run:

- 1 Run this update: update transshipment_setup set local_oracle_sid = '<sid>;
- 2 Make sure the global_name in the table global_name = the oracle_sid name (DBAs must name this update).
- 3 Change the username password to retek.
- 4 Insert the following record into dms_user: insert into dms_user values ('PR','<schema_name>','RDM Schma Owner',9,'retex',null,'AM',null,null). When you log in to RDM with this schema, a change password window is displayed.
- 5 Change the password to the new password.

Oracle Net Services

Refer to Oracle's install guide for information on configuring Net Services.

Note: See Appendix B for sample listener.ora and tnsnames.ora files. Pay special attention to the exproc entry, which is required for the scaling functiona

Chapter 3 – Application server installation instructions

UNIX (Sun Solaris/ HPUX/AIX)

Note: `INSTALL_DIR` is the directory where the RDM files will be extracted from its tar file. `9IAS_ORACLE_HOME` is the directory chosen as the `ORACLE_HOME` to be used for the 9IAS installation.

Install and Configure Oracle 9IAS

Oracle9i Application Server (9IAS) 1.0.2.X – UNIX

Note: The Oracle installation tools vary by platform. The essential information is given below, but additional questions/options may be presented during the installation. In these cases, use Oracle's default setting, or consult Oracle support. Oracle also recommends staying current on the patches for Developer 6i, so check with Oracle support for the latest patch level.

- 1 Create a UNIX user to be used as the 9IAS Administrator account. The 9IAS administrator user must be in the dba group. Log into the application server as the 9IAS Administration user (example: oracle).
- 2 Insert the Oracle9i Application Server CD into CD-ROM.
- 3 Read the readme.txt file and ensure that the server configuration meets Oracle's requirements. Make sure to complete all pre-installation requirements.
- 4 Start the Oracle Installer.

Note: Run Oracle Installer from a location other than `/cdrom`.

- 5 On the Welcome page, click **Next**.
- 6 Check that the source and destination settings are correct (your `ORACLE_HOME` for 9IAS).

Note: 9IAS cannot share an `ORACLE_HOME` with other Oracle products.

- 7 Select Enterprise Edition.
- 8 Select the following the products to install:
 - Forms and Reports Server
 - Oracle HTTP Server
- 9 On the Database Access Descriptor (DAD) for Oracle9i as Portal page, do not enter any information. Click **Next**.
- 10 On the Database Access Descriptor (DAD) for the Login Server page, do not enter any information. Click **Next**.
- 11 On the Wireless Edition repository information page, do not enter any information. Click **Next**.
- 12 On the Wireless Edition schema information page, do not enter any information. Click **Next**.

- 13 On the System Password page, do not enter any information. Click **Next**.
- 14 On the summary page, check the product list again.
- 15 Click **Install** to begin installation.
- 16 Change CDs when prompted.
- 17 Log in as the `root` user, run `/9IAS_ORACLE_HOME/root.sh` as prompted.

Compile RDM Oracle forms and reports

Setup

To compile the RDM 10.1 Oracle Forms, do the following:

Set up your environment variables

- 1 Set and export your `DISPLAY` variable to the IP address of the machine you are using to do the installation.
Example: `export DISPLAY=10.1.2.153:0.0`
- 2 Set the following variables: `INSTALL_DIR` is the location where you are planning on installing RDM 10.

```
export FORMS60_PATH=<INSTALL_DIR>/rdm/forms/bin
export REPORTS60_PATH=<INSTALL_DIR>/rdm/reports/bin
```

(fill in the appropriate value for `<INSTALL_DIR>`)

In the following, `db_user` will refer to the RDM 10 schema owner while `oracle_db` is the Oracle SID where the RDM 10 schema was created.

```
export UP=<db_user>/<db_user_password>@<Oracle_db>
```

Note: On HP-UX you may need to set the `UP` variable using the following command syntax:

```
export UP=<db_user>/<db_user_password>\@<Oracle_db>
```

Set the `ORACLE_HOME` variable to the Oracle Home used when installing Oracle 9IAS.

```
export ORACLE_HOME=9IAS_ORACLE_HOME/6iserver
export PATH=9IAS_ORACLE_HOME/6iserver/bin:$PATH
export LD_LIBRARY_PATH=
9IAS_ORACLE_HOME/6iserver/lib:9IAS_ORACLE_HOME/6iserver/netwo
rk/jre11/lib/<platform>/native_threads
```

Replace `<platform>` with the correct value for your application server operating system.

OS	Value
Solaris	sparc
HP	PA_RISC
AIX	aix

Note: For HP use SHLIB_PATH instead of LD_LIBRARY_PATH

Create the file structure

- 1 Insert the RDM 10.1 CD-ROM into the Application Server.
- 2 Log in as user retek.
- 3 Change directories to the appserverunix directory on the CD.
- 4 Determine where you want to install the RDM 10.1 application server files.**Note:** RDM 10.1 application files require 1 GB of disk space.

Note: RDM 10.1 application files require 1 GB of disk space.

- 5 Run the script buildapp_rdm.run. This will prompt you for the path where RDM 10.1 is to be installed. This will be referred to as <INSTALL_DIR> in the remainder of the documentation.
 - cd appserverunix
 - ./buildapp_rdm.run

The resulting file structure, located at <INSTALL_DIR>, will contain directories for one RDM environment. The /rdm directory contains the RDM 10.1 source code. Additional environments can be created as necessary.

Note: Your environment variables must be set correctly for the following automatic install to work correctly.

Once it has copied the RDM 10 files to the proper location, the buildapp_rdm.run script will give you a prompt asking if you'd like to continue with the automatic installation of RDM. If you choose 'Y', it will run installapp.rdm to automate the compilation of the libraries and forms. If you choose 'N', refer to appendix B for manual instructions.

The installapp.rdm script will prompt you for the number of threads to use in the compilation process. This will vary by machine. If in doubt, enter 1.

The script walks you through most of the manual install processes described in Appendix B. It compiles libraries, forms and menus.

The installapp.rdm script does the following:

- compiles plls
- compiles and insert forms into database
- compiles reference forms
- compiles forms
- compiles menus
- compile reports

Refer to the manual instructions in Appendix B for additional information on each of these tasks.

Once installapp.rdm has completed, view the log file at <INSTALL_DIR>/install/logfiles to check for errors. Errors that did not prevent the generation of an fmx file for non-reference forms (reference forms start with fm_) can be ignored.

Configuring 9IAS (UNIX)

Note: The 9IAS configuration steps should be done by the Oracle 9IAS administrator account.

- 1 Copy the following files at <INSTALL_DIR>/web_html/samplefiles/ to a temporary directory in the Oracle 9IAS administrator's home directory. The Oracle 9IAS administrator is the unix user that installed 9IAS.
 - ias_web_start – used to start http server and Developer 6i server
 - ias_web_stop – used to stop the http server and Developer 6i server.
 - rdm_env – Contains environment variable information used by ias_web_start. It is used by both scripts to set environment variables necessary for execution. You will have to edit this file to make sure the correct LD_LIBRARY_PATH setting is uncommented depending on your server's operating system. Solaris is the default. Oracle Reports also requires that your DISPLAY is set to a valid Xwindows system – see Oracle documentation for more information
- 2 Edit the above scripts:
 - a Replace 9IAS_ORACLE_HOME with the Oracle Home used during the installation of 9IAS.
 - b Replace **RDM_INSTALL_DIR** with the directory where RDM 10 was installed.
 - c Uncomment the DISPLAY variable and set it's value to a valid Xwindows device.
 - d Include the location of these files in the 9IAS administrator's PATH variable setting.
- 3 Copy the file <INSTALL_DIR>/web_html/samplefiles/rdmunix.conf to 9IAS_ORACLE_HOME/Apache/Apache/conf. rdmunix.conf contains the RDM-specific settings that need to be added to the httpd.conf configuration file that was generated during the installation of 9IAS and is located at 9IAS_ORACLE_HOME/Apache/Apache/conf.
- 4 In rdmunix.conf, replace all occurrences of 9IAS_ORACLE_HOME and **RDM_INSTALL_DIR** with your environment's information

Note: It is good practice to backup original Oracle files, ie: httpd.conf

- 5 Append the contents of rdmunix.conf to the end of httpd.conf.
 Comment out the following lines in httpd.conf if they exist:
 include "9IAS_ORACLE_HOME/Apache/Jserv/etc/jserv.conf"
 include "9IAS_ORACLE_HOME /Apache/Apache/conf/oracle_apache.conf"
- 6 Rename httpd.conf to rdm.conf

- 7 Look through the file and make the following settings (or verify that they are set correctly):


```

Port                HTTP_PORT
ServerAdmin         <set to an admin email account>
ServerName          SERVER_NAME
DocumentRoot        <INSTALL_DIR>\web_html
<Directory <INSTALL_DIR>\web_html> (must be same as
DocumentRoot)
      
```
- 8 Copy the file <INSTALL_DIR>\web_html\samplefiles\Tk2Motif.rgb (if case sensitivity was lost during the ftp, rename the file back to Tk2Motif.rgb during the copy) to 9IAS_ORACLE_HOME\6iserver\guicommon6\tk60\admin\. This file allows the Forms server to run using the Oracle UTF8 toolset.

Check the Web environment directory structure

- 1 Go to directory <INSTALL_DIR>\web_html.
- 2 Verify that the following directories exist:
 - temp
 - log
 - jinitiator
 - gif
 - reptemp
 - help
 - helpfiles

Miscellaneous configuration tasks

Add an entry for the database into the tnsnames.ora files at

```
9IAS_ORACLE_HOME/network/admin/tnsnames.ora
```

```
9IAS_ORACLE_HOME/6iserver/network/admin/tnsnames.ora
```

Here is a sample for this entry:

```

DB_SID=(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=tcp) (host=
DB_SERVER_NAME) (Port=DB_LISTENER_PORT) ) ) (CONNECT_DATA=(SID=
DB_SID) (GLOBAL_NAME=SID.world) ) )
      
```

Edit the netscape_11814.html file

The file is located in <INSTALL_DIR>\web_html\jinitiator.

- 1 Fill in the correct values for Server_Name and Port.
- 2 Save the file.

This file will allow Jinitiator to be dynamically installed on clients when accessed for the first time.

Modify the following file

9IAS_ORACLE_HOME/6iserver/forms60/java/oracle/forms/registry/Registry.dat:

- Set the default.icons.iconpath entry near the end of the file:
default.icons.iconpath=/web_gif/

Copy the keyboard mapping configuration file to the forms60 admin directory

Copy the file fmrweb.res, found in <INSTALL_DIR>/web_html/samplefiles, to
9IAS_ORACLE_HOME/6iserver/forms60/admin/resource/US/.

Create the Retek HTML Start Page

- 1 Copy rdm.html from <INSTALL_DIR>/web_html/samplefiles to
<INSTALL_DIR>/web_html.
- 2 Modify the serverPort setting in the file to point to the port that the forms server is
starting on (refer to ias_web_start – the default is 10001).

Install the Oracle JInitiator Component on the Server

JInitiator 1.1.8.14 is included on the RDM10.1 file structure in the directory
<INSTALL_DIR>/web_html/jinitiator.

Check to make sure the file jinit11814.exe is there.

Browser requirements:

You will need IE 5.0 or Netscape 4.7 (or higher versions) as your Web browser to use
RDM 10.1.

Test the system

Run ias_web_stop then run ias_web_start to bounce the Web processes. Connect the
client to the server by issuing:

```
http://SERVER_NAME:HTTP_PORT/rdm.html
```

The first time that you connect to the server, *jinitiator* will download and install. The
jinitiator download will occur the first time that each machine accesses RDM. Restart
the browser after *jinitiator* is installed.

Windows (NT, Windows 2000)

Install Oracle9i Application Server (9IAS) 1.0.2.X– NT-Windows 2000

Note: The Oracle installation tools vary by platform. The essential information is given below, but sometimes, additional questions/options may be presented during the installation. In these cases, use Oracle's default setting or consult Oracle support. . Oracle also recommends staying current on the patches for Developer 6i, so check with Oracle support for the latest patch level.

- 1 Log in to the machine as the local administrator.
- 2 Insert the Oracle9i Application Server CD into CD-ROM.
- 3 Read the readme.txt file and ensure the server configuration meets Oracle's requirements. Make sure to complete all pre-install requirements.
- 4 The Installer will run automatically.
- 5 On the Welcome page, click **OK**.
- 6 Select Enterprise Edition.
- 7 Select the ORACLE HOME NAME and ORACLE HOME LOCATION for 8.1.7 RSF-based products (this page is displayed if this is the first Oracle product installed on the machine).
- 8 Enter the ORACLE HOME NAME and ORACLE HOME LOCATION for the Oracle9iAS install.

Note: 9IAS cannot share an ORACLE_HOME with other Oracle products.

- 9 Select the ORACLE HOME NAME and ORACLE HOME LOCATION for 8.0.6 RSF-based products (this screen appears if this is the first Oracle product install on the machine this will be the directory... accept the default setting, which is different than that for 8.1.7 RSF-based products)
- 10 Choose to install Forms and Reports Server and Oracle HTTP Server .
- 11 On the Database Access Descriptor [DAD] page for Oracle9iAS Portal, do not enter any information. Click **Next**.
- 12 On the Database Access Descriptor [DAD] page for Login Server, do not enter any information. Click **Next**.
- 13 On the Wireless Edition repository information...page, do not enter any information. Click **Next**.
- 14 On the Wireless Edition schema information... page, do not enter any information. Click **Next**.
- 15 On the ...SYSTEM Password for Wireless Edition page, do not enter any information. Click **Next**.
- 16 On the summary page, check the product list again.
- 17 Click **Install** to begin the installation.
- 18 Change CDs when necessary.

19 The installation is now complete.

Configure Oracle9i Application Server (iAS) 1.0.2.X – NT

Note: Oracle 9IAS on NT/2000 does not include the Oracle Developer tools suite. It only contains the runtime components of Developer 6i server. If you wish to compile/modify forms, you will need to install Developer 6i.

- 1 Copy the file appservernt.exe from the appservernt directory on your installation cd to the directory where you are planning on installing RDM. Execute this file to build the directory structure. This will be referred to as <INSTALL_DIR> in the rest of this document.

- 2 After the installation above, your iAS HTTP listener might have automatically been started. Follow these instructions to shut down the http listener.

By default, the Oracle HTTP server will be installed under 9IAS_ORACLE_HOME/iSuites; and 6iserver will be installed under 9IAS_ORACLE_HOME/806.

- a Make sure the PATH system property contains the following entries:

```
9IAS_ORACLE_HOME\iSuites\Apache\Apache
9IAS_ORACLE_HOME\iSuites\Apache\Apache\bin
9IAS_ORACLE_HOME\iSuites\BIN
9IAS_ORACLE_HOME\806\BIN
```

- b At a DOS prompt, use the command “apache -k shutdown” to stop the http process.

- 3 Copy <INSTALL_DIR>\web_html\samplefiles\rdmnt.conf to 9IAS_ORACLE_HOME\iSuites\Apache\Apache\conf

rdmnt.conf contains the RDM-specific settings that need to be added to the httpd.conf configuration file that was generated during the installation of 9IAS. The file is located at 9IAS_ORACLE_HOME\iSuites\Apache\Apache\conf.

- 4 In rdmnt.conf, replace all occurrences of 9IAS_ORACLE_HOME and **RDM_INSTALL_DIR** with your environment’s information.

Note: It is good practice to backup original Oracle files, ie: httpd.conf

- 5 Append the contents of rdmnt.conf to httpd.conf.
- 6 Rename httpd.conf to rdm.conf.
- 7 Look through rdm.conf and make the following settings (or verify that they are set correctly):

- Port HTTP_PORT
- ServerAdmin <set to an admin e-mail account>
- ServerName SERVER_NAME
- DocumentRoot <INSTALL_DIR>\web_html
- <Directory <INSTALL_DIR>\web_html> (must be the same value as DocumentRoot)

- 8 Modify the file
`9IAS_ORACLE_HOME\806\Forms60\java\oracle\Forms\registry\Registry.dat`:
 - Near the end of the file, add “/web_gif”, so that the iconpath setting looks like “default.icons.iconpath=/web_gif”
- 9 Copy `apache_start`, `apache_stop`, and `rdm_form.bat` from
`<INSTALL_DIR>\web_html\samplefiles` to the directory on your server that will be used to start and stop the web processes.
- 10 In these files, replace any references to `9IAS_ORACLE_HOME` or **RDM_INSTALL_DIR** with your environment’s values. You can choose which port you’d like your forms server to run on, if you wish, by modifying `run_form.bat`– the default port is 10001.
- 11 Make the following entries in the registry at
`HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME0`:


```
REPORTS60_PATH
<INSTALL_DIR>\rdm\forms\bin

REPORTS60_PHYSICAL_MAP      <INSTALL_DIR>\web_html\temp
REPORTS60_SHARED_CACHE      YES
REPORTS60_VIRTUAL_MAP              /reptemp
REPORTS60_WEBLOC              /reptemp
REPORTS60_WEBLOC_TRANSLATED    <INSTALL_DIR>\web_html\temp
REPORTS60_TMP
    <INSTALL_DIR>\web_html\reptemp
FORMS60_PLSQLV1_NAME_RESOLUTION=YES
NLS_DATE_FORMAT=DD-MON-RR
FORMS60_OUTPUT=<INSTALL_DIR>\web_html\temp
```
- 12 Copy `rdm.html` from `<INSTALL_DIR>\web_html\samplefiles` to
`<INSTALL_DIR>\web_html`. Modify the `serverPort` setting in this file to point to the port that the forms server is starting on (refer to `rdm_form.bat`).
- 13 Edit the file `netscape_11814.html` file located at
`<INSTALL_DIR>\web_html\jinitiator`. Replace `SERVER_NAME` and `HTTP_PORT` with the values for your environment.
- 14 Add an entry for the database into the two `tnsnames.ora` files at
`9IAS_ORACLE_HOME\iSuites\network\admin\tnsnames.ora`
`9IAS_ORACLE_HOME\806\net80\admin\tnsnames.ora`
 Here is a sample for this entry - substitute your environment’s setting for `DB_SID`, `SERVER_NAME`, and `DB_LISTENER_PORT`.


```
DB_SID=(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=tcp)(host=
DB_SERVER_NAME)(Port=DB_LISTENER_PORT))) (CONNECT_DATA=(SID=
DB_SID)(GLOBAL_NAME=DB_SID.world)))
```

- 15 Copy the file fmrweb.res from <INSTALL_DIR>\web_html\samplefiles to 9IAS_ORACLE_HOME\806\Forms60. This is the file that controls keyboard mapping for the RDM application.
- 16 Test your environment: Start up your RDM environment by running apache_start.bat and rdm_form.bat from the directory chosen in #3 above. You can access the application by going to http://SERVER_NAME:HTTP_PORT/rdm.html

Chapter 4 – Configure the RF component

Follow the steps below to install the RF component of RDM software, after installing the database server:

- 1 Verify that Developer Server 6i for UNIX is installed with patch set 8 and that the relinking has been performed successfully.
- 2 Log in as `retex` and verify that file permissions are set to 755.
- 3 Edit the file `forms_profile` so that the UNIX environment variables are set to the appropriate values.
- 4 Execute the `forms_profile`. (`. ./forms_profile`)
- 5 Run `menu.sh` and choose the appropriate options to start the application.
- 6 Log in as `rdmusr` for the user ID and `rdmusr` for the password. The main menu is displayed.

Chapter 5 – Install the client component

Follow these steps to install the client component of RDM software, after installing the character/RF component:

Install Developer 6i on the Client PC if required

- 1 Follow Oracle installation instructions for installation procedures. The following products must be installed:

Developer - Forms

Developer - Graphics

Developer - Reports

Net80

SQL*Plus

Copy client files from CD-ROM

Copy the folders bin and icons from /appservernt on the installation CD-ROM to the local C:\RDM folder.

Modify the Windows Registry

- 1 Change these fields to the appropriate values in the Windows Registry files, based on the directory in which RDM has been installed. Verify the parameters (these may need to be changed or added). The values listed beside the string values are examples of what you could use as a value for the field:

FORMS60_PATH= C:\RDM\BIN

TK60_ICON=C:\RDM\ICONS

GRAPHICS60_PATH=C:\RDM\BIN

UI_ICON=C:\RDM\ICONS

FORMS60_PLSQLV1_NAME_RESOLUTION=YES

D2KWUTIL_PATH=C:\RDM\BIN

D2KWUTIL60_PATH=C:\RDM\BIN

REPORTS60_PATH=C:\RDM\BIN

NLS_DATE_FORMAT=mm/dd/rr

This must to be done on each PC that is running RDM. An export can be taken of the HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE branch of the registry and then imported to other PCs.

- 2 An additional entry must be made for Oracle Reports so that reports can be mailed -

HKEY_LOCAL_MACHINE\Software\Microsoft

Outlook=Registered

Modify the tnsnames.ora File

- Using Net80, create a link to the appropriate server instance.

Create the RDM Icon

- 1 Create a new icon on the desktop. The command line should look like this for Windows 95/98:

```
C:\orawin95\bin\ifrun60 logon_scr  
<user_id>/<password>@<instance_name>
```

The command line should look like this for Windows 2000/NT:

```
C:\orant\bin\ifrun60 logon_scr  
<user_id>/<password>@<instance_name>
```

- 2 After the icon is created, modify the Start In attribute of the icon to point to the RDM\bin directory.

Appendix A – Manual database installation instructions

Complete either the steps in this appendix or steps 5 and 6 from the primary installation process. Before beginning these steps, verify that steps 1 through 4 have been completed in the primary installation instructions for the database server.

Note: Beginning after mounting the CDROM in Getting started, Create the file structure, step 4 from the primary installation process.

- 1 Create a directory for the RDM 10 install scripts. It will be referred to as <INSTALL_DIR> for the remainder of this document.

- 2 Copy the dbserverunix.Z from the CD to the <INSTALL_DIR>.

- 3 Uncompress the file:

```
uncompress dbserverunix.Z
```

- 4 Untar the file:

```
tar xvf dbserverunix
```

This creates the directory structure in which the RDM 10.1 files will reside. The tarfile will not retain the permissions settings they had when leaving Retek, so verify that the source code is protected by altering the permissions with the chmod command. Keep in mind there will be some directories that need to be written to during this install process.

- 5 The directory structure will look like this:

```
<INSTALL_DIR>/
```

```
install/
```

```
    db_objects/          -Packages, procedures, functions, shared
libraries.
```

```
    ddl/                 -DDL files.
```

```
    installer_scripts/   -Scripts used by the install utility.
```

```
    logfiles/            -Installation log directory.
```

```
    sqlplus/             -Scripts to populate required data.
```

```
    upgrade/             -10.1 upgrade directory
```

```
    utility/             -Various useful scripts.
```

```
    sample_profiles/     -A profile to aid environment setup
```

- 6 The files necessary for the server portion of the database installation reside in the directory structure above.
- 7 Verify that all files are owned by retek and belong to the dba group. Make ownership and group changes if necessary.

8 Create RDM 10.1 Schema owner in Oracle Instance:

Create the ORACLE user that will correspond to the RDM 10.1 environment.

- a Log into SQLPLUS as the user system.
- b Enter the following commands, replacing the text in the brackets with the appropriate names:

```
SQL>CREATE USER <RDM 10 Schema Owner> IDENTIFIED BY
<Password>

        DEFAULT TABLESPACE users
        TEMPORARY TABLESPACE temp;

SQL>GRANT DBA TO <RDM 10 Schema Owner>;
SQL>GRANT EXECUTE ON DBMS_AQADM TO <RDM 10 Schema Owner>;
SQL>GRANT EXECUTE ON DBMS_AQ TO <RDM 10 Schema Owner>;
SQL>GRANT AQ_ADMINISTRATOR_ROLE TO <RDM 10 Schema Owner>;
SQL>GRANT AQ_USER_ROLE TO <RDM 10 Schema Owner>;
SQL>exec DBMS_AQADM.GRANT_TYPE_ACCESS('<RDM 10 Schema
Owner>');
SQL>CREATE ROLE wms_user;
SQL>GRANT connect,
        resource,
        delete any table,
        execute any procedure,
        insert any table,
        select any table,
        select any sequence,
        update any table
        TO wms_user;
SQL>CREATE USER rdmusr IDENTIFIED BY rdmusr
        DEFAULT TABLESPACE users
        TEMPORARY TABLESPACE temp;

SQL>GRANT wms_user TO rdmusr;
```


- c The ORACLE user <RDM 10 Schema Owner> will serve as the owner of the database objects and should be granted the following permissions. Login to SQLPLUS as the user sys and enter the following command:

```
SQL>GRANT EXECUTE ON DBMS_LOCK TO <RDM 10 Schema Owner>
```

```
SQL>GRANT EXECUTE ON DBMS_PIPE TO <RDM 10 Schema Owner>
```

```
SQL> grant select on v_$session to <RDM 10 schema Owner>
```

9 Create DDL for RDM 10 owner.

- a Log into UNIX as the retek user.
- b Change directories to: <INSTALL_DIR>/install/ddl. This directory contains the scripts required in order to create the tables, indexes and constraints within the RDM for a test, small, medium or large size database.
- c To start the scripts, log in to SQLPLUS as the user (<RDM 10 Schema Owner>) and enter the following command:

For a test database:

```
SQL> @create_tables_test.sql
```

For a small database:

```
SQL> @create_tables_small.sql
```

For a medium database:

```
SQL> @create_tables_med.sql
```

For a large database:

```
SQL> @create_tables_large.sql
```

This runs all of the scripts needed to create tables, indexes, constraints, sequences, and views for the user. A spool file will be created named rdm10.log which is in <INSTALL_DIR>/install/logfiles.

- d Check the log file upon completion to verify that no errors were received.

10 Install base data:

- a Log into UNIX as `retex` and change directories to `<INSTALL_DIR>/install/sqlplus`.
- b Run the `create_base_data.sql` file to start all the scripts. To do this, log in to SQLPLUS as the user `<RDM 10 Schema Owner>` and enter the following:

```
SQL> @create_base_data.sql
```

A spool file named `create_base_data.log` will be created in `<INSTALL_DIR>/install/logfiles`.
- c Check the log file upon completion to verify that the file has no errors.

11 Create remainder of ddl:

- a Log into UNIX as the `retex` user.
- b Change directories to: `<INSTALL_DIR>/install/ddl`. This directory contains scripts required in order to create the remainder of the ddl.
- c Run the `create_tables2.sql` file to start all the scripts. To do this, log in to SQLPLUS as the user `<RDM 10 Schema Owner>` and enter the following:

```
SQL> @create_tables2.sql
```

A spool file named `create_tables2.log` will be created in `<INSTALL_DIR>/install/logfiles`. Verify that this file has no errors upon completion.

12 Create the remainder of the data base objects:

- a Log into UNIX as the `retex` user.
- b Change directories to: `<INSTALL_DIR>/install/db_objects`. This directory contains the scripts required in order to create the remainder of the database objects.
- c Run the `create_db_objects.sql` file to start all the scripts. To do this, log in to SQLPLUS as the user `<RDM 10 Schema Owner>` and enter the following:

```
SQL> @create_db_objects.sql
```

A spool file named `create_db_objects.log` will be created in `<INSTALL_DIR>/install/logfiles`. Verify that this file has no errors upon completion.

Note: This script will produce a number of warnings that will get cleaned up later when we run the `inv_obj_comp.sql` script.

13 Rebuild public synonyms script:

This script will rebuild your public synonyms for you schema owner.

- a Log into UNIX as the `retex` user.
- b Change directories to: `<INSTALL_DIR>/install/utility`.
- c Run the `bld_syn_script` file to start all the scripts. To do this, log in to SQLPLUS as the user `<RDM 10 Schema Owner>` and enter the following:

```
SQL> @bld_syn_script.sql <RDM 10 Schema Owner>
```

Note: Make sure you enter the `<RDM 10 Schema Owner>` after the script so the script will know which user's synonyms to rebuild.

14 Create remaining views and triggers:

Now that all of the stored objects exist in the database, the rest of the views and triggers can be created. The `create_vwtr.sql` script (which runs `create_views.sql` and `create_triggers.sql`) will spool to the `create_vwtr.log` file in the `<INSTALL_DIR>/install/logfiles` directory.

- a To create the remaining views and triggers, change directories to `<INSTALL_DIR>/install/ddl`.
- b Log in to SQLPLUS as the user `<RDM 10 Schema Owner>`.
- c From SQLPLUS, enter the following command:

```
SQL> @create_vwtr.sql
```
- d A spool file named `create_vwtr.log` will be created in `<INSTALL_DIR>/install/logfiles`. Verify that this file has no errors upon completion.

Note: This script will produce a number of warnings that will get cleaned up later when we run the `inv_obj_comp.sql` script.

15 Run `inv_obj_comp.sql`

To validate all the objects, run the script `inv_obj_comp.sql`.

- a Change directories to `<INSTALL_DIR>/install/utility`.
- b Log in to SQLPLUS as the user `<RDM 10 Schema Owner>`.
- c From SQLPLUS, enter the following commands:

```
SQL> @inv_obj_comp.sql
```
- d Continue to run this script until there are no invalid objects or the same number of invalid object show up three times in a row.

16 Run the patch updater script:

This is the sql script that inserts the patch version into the Patches_Installed table when a new patch is installed. To run this script:

- a Change directories to <INSTALL_DIR>/install/ddl.
- b Log in to SQLPLUS as the user <RDM 10 Schema Owner>.
- c From SQLPLUS, enter the following command:


```
SQL> @update_patches.sql 10.1 <RDM 10 Schema Owner>
ORACLE_SID
```

17 Apply referential integrity:

This script will apply all of your foreign keys. To run this script:

- a Change directories to <INSTALL_DIR>/install/ddl.
- b Log in to SQLPLUS as the user <RDM 10 Schema Owner>.
- c From SQLPLUS, enter the following commands:


```
SQL> @apply_ref_integ.ddl
```
- d A spool file named apply_ref_integ.log will be created in <INSTALL_DIR>/install/logfiles. Verify that this file has no errors upon completion.

18 Create Forms60 Tables:

This is the sql script that creates public synonyms. To run this script:

- a Change directories to <INSTALL_DIR>/install/ddl.
- b Log in to SQLPLUS as the user system.
- c From SQLPLUS, enter the following commands:


```
SQL> @create_forms60_tables.sql
```

Note: These are scripts provided by Oracle. The first time you run this, it will not be able to drop some of the pieces that get created by this script. Also, you may not be able to drop the primary keys for ROSLFDESC or ROSTFDESC if they do not exist.

19 Load additional Data:

This is the sqlldr script adds additional data. To run this script:

- a Change directories to <INSTALL_DIR>/install/sqlplus.
- b At the UNIX prompt, enter the following command:


```
$sqlldr <RDM 10 Schema Owner>/<password>
control=rib_doctypes_rdm.ctl
```

20 Update DDL:

- a Change directories to <INSTALL_DIR>/upgrade/ddl.
- b Choose either test, small, medium or large based on how step 9 was installed.
- c Log in to SQLPLUS as the <RDM 10 Schema Owner>.
- d Enter the following command:
SQL> @rdm101_upgrade_<size>.sql
- e View the spool file rdm101_upgrade_<size>.lst when finished to verify that no errors were found.

21 Update Triggers

- a Change directories to <INSTALL_DIR>/upgrade/ddl.
- b Log in to SQLPLUS as the <RDM 10 Schema Owner>.
- c Enter the following command:
SQL> @startall.sql
- d View the spool file checkpack.lst when finished to verify that no errors were found.

22 Update packages, stored procedures and functions

- a On the server, change directories to
<INSTALL_DIR>/upgrade/db_objects.
- b Log in to SQLPLUS as <RDM 10 Schema Owner>.
- c Enter the following command to update packages, procedures, and functions:
SQL> @patch101rdm.sql
- d Exit SQLPlus.
- e View the spool file patch101rdm.log when finished to verify that no errors were found.
- f After you have compiled all these objects, validate any objects that may have become invalid. You can do this by using the Oracle utility
dbms_utility.compile_schema.

23 Update rib XML packages, stored procedures and functions:

- a On the server, change directories to
`<INSTALL_DIR>/upgrade/XML_Uutilities.`
- b Log in to SQLPLUS as `<RDM 10 Schema Owner>`.
- c Enter the following command to update packages, procedures, and functions:
`SQL> @patch101xml.sql`
- d Exit SQLPlus.
- e View the spool file `patch101xml.log` when finished to verify that no errors were found.
- f While in the `<INSTALL_DIR>/upgrade/XML_Uutilities` run the following command:
`$sqlldr rdmdev10/<password> control=rib_doctypes_rdm.ctl`
 After you have compiled all these objects, validate any objects that may have become invalid. You can do this by using the Oracle utility
`dbms_utility.compile_schema.`

24 Update Data:

- a Change directories to `<INSTALL_DIR>/upgrade/ddl`
- b Log in to SQLPLUS as the `<RDM 10 Schema Owner>`.
- c Enter the following command:
`SQL> @rdm101_data_upgrade.sql`
- d View the spool file `rdm101_upgrade.log` when finished to verify that no errors were found.
- e After you have compiled all these objects, validate any objects that may have become invalid. You can do this by using the Oracle utility
`dbms_utility.compile_schema.`

Note: On clean install number one does not need to be run

- 1 Run this update: `update transshipment_setup set local_oracle_sid = '<sid>';`
- 2 Make sure the `global_name` in the table `global_name` = the `oracle_sid` name (DBAs must name this update).
- 3 Change the username password to retek.
- 4 Insert the following record into `dms_user`: `insert into dms_user values ('PR','<schema_name>','RDM Schma Owner',9,'rettek',null,'AM',null,null).` When you log in to RDM with this schema, the change password window is displayed.
- 5 Change the password to the new password.

Appendix B – Manual application server installation instructions

Compile RDM Oracle Forms and Reports

Setup

To compile the RDM 10.1 Oracle Forms, do the following:

Set up your environment variables

- 1 Set and export your DISPLAY variable to the IP address of the machine you are using to do the installation.

Example: `export DISPLAY=10.1.2.153:0.0`

- 2 Set the following variables: INSTALL_DIR is the location where you are planning on installing RDM 10.

```
export
FORMS60_PATH=<INSTALL_DIR>/toolset/bin:<INSTALL_DIR>/rdm/forms/bin
```

```
export REPORTS60_PATH=<INSTALL_DIR>/rdm/reports/bin
```

(fill in the appropriate value for <INSTALL_DIR>)

In the following, db_user will refer to your RDM 10 schema owner while oracle_db is the Oracle SID where the RDM 10 schema was created.

```
export UP=<db_user>/<db_user_password>@<Oracle_db>
```

Note: On HP-UX you may need to set the UP variable using the following command syntax:

```
export UP=<db_user>/<db_user_password>\@<Oracle_db>
```

Set the ORACLE_HOME variable to the Oracle Home used when installing Oracle 9IAS.

```
export ORACLE_HOME=9IAS_ORACLE_HOME/6iserver
```

Note: The ORACLE_HOME setting is different than the setting for the automatic install. ORACLE_HOME needs to be set to the location of Developer 6i – this is located at 9IAS_ORACLE_HOME/6iserver .

```
export PATH=9IAS_ORACLE_HOME/6iserver/bin:$PATH
```

```
export LD_LIBRARY_PATH=
9IAS_ORACLE_HOME/6iserver/lib:9IAS_ORACLE_HOME/6iserver/network/jre11/lib/<platform>/native_threads
```

Replace `<platform>` with the correct value for your application server operating system.

OS	Value
Solaris	sparc
HP	PA_RISC
AIX	aix

Note: For HP use `SHLIB_PATH` instead of `LD_LIBRARY_PATH`

Create the file structure

- 1 Insert the RDM 10.1 CD-ROM into the Application Server.
- 2 Log in as user `retex`.
- 3 Change directories to the `appserverunix` directory on the CD.
- 4 Determine where you want to install the RDM 10.1 application server files.

Note: RDM 10.1 application files require 1 GB of disk space.

- 5 Run the script `buildapp_rdm.run`. This will prompt you for the path where RDM 10.1 is to be installed. This will be referred to as `<INSTALL_DIR>` in the remainder of the documentation.

- `cd appserverunix`
- `./buildapp_rdm.run`

The resulting file structure located at `<INSTALL_DIR>` will contain directories for one RDM environment. The `/rdm` directory contains the RDM 10.1 source code. Additional environments can be created as necessary.

Note: Your environment variables must be set correctly for the following manual install to work correctly.

Once it has copied the RDM 10 files to the proper location, the `buildapp_rdm.run` script will give you a prompt asking if you'd like to continue with the automatic installation of RDM. Choose 'N' to do the manual installation of RDM.

Compile RDM Libraries (*.pll)

- 1 Change directories to `<INSTALL_DIR>/rdm/forms/src`.
- 2 Move all of the libraries (.pll files) in the `<INSTALL_DIR>/rdm/forms/src` directory to the `<INSTALL_DIR>/rdm/forms/bin` directory.
- 3 Change directories to `<INSTALL_DIR>/rdm/forms/bin` directory.
- 4 Start the Form Builder tool to compile all libraries for the RDM application
 - > `f60desm &`
 - a A blue GUI interface will be displayed. Click **Cancel** at the welcome page.
 - b Choose File > Connect. Log into the database as the Retek oracle schema owner.

- c Compile the libraries in the following order and generate plx:

```
messge36.pll
hint.pll
stand36.pll
calend36.pll
d2kcoord.pll
d2kwutil.pll
D2kwutil.pll
dc_view_lib.pll
drag.pll
facility_setup.pll
general.pll
naut_library.pll
og.pll
pcsddate.pll
report_setup.pll
windows.pll
naut_hh_library.pll
naut_gui_library.pll
lib_labor_prod.pll
init_naut.pll
naut_tm_library.pll
d2kcomn.pll
```

- 5 For each library file:
 - a Choose File > Open.
 - b Select <INSTALL_DIR>/rdm/forms/bin/FILENAME.pll.
 - c Click **OK**.
 - d Once the library is loaded, select the library name, select Program, and choose Compile > All.
 - e After the compilation, select library name, and press Ctrl + T to generate plx file.
 - f After successful compilation and generating plx , save and close the library.

Inserting RDM Libraries into Database

- 1 Change directories to <INSTALL_DIR>/rdm/forms/src.
- 2 Set environment variable UP:


```
export UP=<db_user>/<db_user_password>@<Oracle_db>
```
- 3 Use the compile_lib.sh script located in that directory to insert libraries for the Database user.


```
> chmod 755 compile_lib.sh (if necessary)
> ./compile_lib.sh
```

Compile Reference Forms (fm*.fmb)

- 1 Change directories to <INSTALL_DIR>/rdm/forms/src.
 - 2 Move reference forms (fm*.fmb) from <INSTALL_DIR>/rdm/forms/src to <INSTALL_DIR>/rdm/forms/bin.


```
mv fm*.fmb ../bin
```
 - 3 Compile the following reference forms:


```
fmdate36.fmb
fmtdate.fmb
fm_refer.fmb
fmrefe36.fmb
fmtrefer.fmb
```
- Note:** There are some reference forms that you move but do not compile.
- 4 Using your Form Builder session (f60desm &), navigate to <INSTALL_DIR>/rdm/forms/bin/ and compile five reference form mention in step 3 in the <INSTALL_DIR>/rdm/forms/bin/ directory:
 - a Choose File → Open.
 - b Select <INSTALL_DIR>/rdm/forms/bin/*.fmb.
 - c Click **OK**.
 - d Once the reference form is “loaded”, select the form name, select Program, and choose Compile > All.
 - e After successful compilation, click **OK**.
 - f Save and close the reference form.

The reference forms have been compiled and should now reside in the bin directory.

Compile forms (*.fmb)

- 1 Change directories to <INSTALL_DIR>/rdm/forms/src.
- 2 Use the `fmb2fmx` script located in that directory to compile and generate the executable forms (`fmx`).


```
> chmod 755 fmb2fmx (if necessary)
> ./fmb2fmx
```
- 3 Check to make sure each `.fmb` file has a corresponding `.fmx` file. If a form fails to compile (there is no `.fmx` file), you may have to manually compile the form by launching the form builder tool.(f60desm&)
- 4 All resulting `.fmx` files need to be moved to the <INSTALL_DIR>/rdm/forms/bin directory. From the <INSTALL_DIR>/rdm/forms/src directory, issue the following command:


```
> mv *.fmx ../bin
```

Compile menus (*.mmb)

- 1 Change directories to <INSTALL_DIR>/rdm/forms/src
- 2 Use the `mmb2mmx` script located in that directory to compile and generate the executable form menu `*.mmx`.


```
> chmod 755 mmb2mmx (if necessary).
> ./mmb2mmx
```
- 3 The resulting `*.mmx` files need to be moved to the <INSTALL_DIR>/rdm/forms/bin directory. From the <INSTALL_DIR>/rdm/forms/src directory, issue the following command:


```
> mv *.mmx ../bin
```

Compile reports (*.rdf)

- 1 Change directories to <INSTALL_DIR>/rdm/reports/src
- 2 All `*.rdf` files need to be moved to the <INSTALL_DIR>/rdm/reports/bin directory. From the <INSTALL_DIR>/rdm/reports/src directory, issue the following command:


```
> mv *.rdf ../bin
```


Appendix C – Sample NET 8 files for the server

listener.ora

Below is a sample listener.ora file.

retek01 specifies the name of the server where the listener is located.

RETEK specifies the name of the Oracle instance that contains the Retek schema.

```
#####
# File: listener.ora
# Desc: Oracle Net8 listener file.
#####

CONNECT_TIMEOUT_LISTENER = 20
LOG_FILE_LISTENER = LISTENER.log
STARTUP_WAIT_TIME_LISTENER = 0

#-----#
# Valid trace levels are:  OFF | USER | ADMIN | SUPPORT  #
#-----#

TRACE_LEVEL_LISTENER = OFF
TRACE_FILE_LISTENER = LISTENER.trc
USER_PLUG_AND_PLAY_LISTENER = OFF
LISTENER =
  (DESCRIPTION_LIST =
    (DESCRIPTION =
      (PROTOCOL_STACK =
        (PRESENTATION = TTC) (SESSION = NS)
      )
      (ADDRESS =
        (PROTOCOL = tcp) (HOST = retek01) (PORT = 1521)
      )
      (ADDRESS =
        (PROTOCOL = IPC) (KEY = RETEK)
      )
    )
  )
#-----#
-----#
```

```

# The following SID_LIST_LISTENER entry is required only if you
are #
# connecting to an Oracle database version lower than 8.1.5.
#
#-----#
-----#

SID_LIST_LISTENER =
  (SID_LIST =
    (SID_DESC =
      (SID_NAME = RETEK)
      (<ORACLE_HOME >= /files0/oracle/product/8.0.5)
      (PRESPAWN_MAX = 99)
      (PRESPAWN_LIST =
        (PRESPAWN_DESC =
          (PROTOCOL = TCP)
          (POOL_SIZE = 0)
          (TIMEOUT = 1)
        )
      )
    )
  )

#####
#
# Seperate listener process used to handle external procedure
# calls. All of the following entries are required and may
# require
# some changes to match your system. Oracle suggests that the
# LISTENER_EXTPROC be started by a Unix account other than
# oracle.
#
#####

CONNECT_TIMEOUT_LISTENER_EXTPROC = 20
LOG_FILE_LISTENER_EXTPROC = LISTENER_EXTPROC.log
STARTUP_WAIT_TIME_LISTENER_EXTPROC = 0
#-----#

```

```

# Valid trace levels are:  OFF | USER | ADMIN | SUPPORT  #
#-----#
TRACE_LEVEL_LISTENER_EXTPROC = OFF
TRACE_FILE_LISTENER_EXTPROC = LISTENER_EXTPROC.trc
USER_PLUG_AND_PLAY_LISTENER_EXTPROC = OFF

LISTENER_EXTPROC =
  (DESCRIPTION_LIST =
    (DESCRIPTION =
      (PROTOCOL_STACK =
        (PRESENTATION = TTC)
        (SESSION = NS)
      )
      (ADDRESS =
        (PROTOCOL = tcp) (HOST = retek01) (PORT = 1522)
      )
    )
    (ADDRESS =
      (PROTOCOL = IPC) (KEY = extproc_key)
    )
  )

SID_LIST_LISTENER_EXTPROC =
  (SID_LIST =
    (SID_DESC =
      (PROGRAM = extproc)
      (GLOBAL_DBNAME = extproc_agent.world)
      (SID_NAME = extproc_agent)
      (<ORACLE_HOME >= /files0/oracle/product/8.1.5)
      (PRESPAWN_MAX = 99)
    )
  )

```

tnsnames.ora

A tnsnames.ora file is required to connect to any Oracle database on your network. A sample tnsnames.ora is illustrated below. You will need to modify it appropriately to your environment. The extproc_connection_data entry is required along with the LISTENER_EXTPROC entry in the listener.ora file to allow Oracle to access a Unix shell library that is required by one of the stored procedures in the database.

rettek01 specifies the name of the server where the listener is located.

RETEK specifies the name of the Oracle instance that contains the Retek schema.

```
#####
#  File:   tnsnames.ora
#  Desc:   Oracle Net8 TNS Names file.
#####

RETEK =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP) (HOST = rettek01) (PORT = 1521))
    (CONNECT_DATA = (SID = RETEK))
  )

RETEK.WORLD =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP) (HOST = rettek01) (PORT = 1521))
    (CONNECT_DATA = (SID = RETEK))
  )

EXTPROC_CONNECTION_DATA =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = IPC) (Key = extproc_key))
    (CONNECT_DATA = (SID = extproc_agent))
  )
```


Appendix D – Database creation

The following is a sample script that creates the database necessary for the RDM 10.1. Some new 9i features are being used, like the UNDO tablespace, and specifying the TEMP file at creation time. If you don't chose to use these features be sure to create a temp and rollback tablespace.

Note that there are some outstanding Oracle bugs with the new 9i features. Research new features with Oracle prior to implementing. You may decide not to implement these new features.

Note that a different character set may be required for your database. Check with Oracle regarding compatibility of the character set with Developer 6i, as not all character sets will work with Developer 6i. All scripts following the database creation must be run.

Sample database create scripts

As the Oracle owner run all the following as sys.

```
startup nomount pfile=${ORACLE_HOME}/dbs/initRETEK.ora
create database "RETEK"
    maxdatafiles 1000
    character set UTF8
    datafile
        '/files0/oradata/RETEK/system01.dbf' size 100M
    autoextend on next 100m maxsize 2000m
    logfile
        group 1 ('/files0/oradata/RETEK/redola.log') size
10M,
        group 2 ('/files0/oradata/RETEK/redo2a.log') size
10M,
        group 3 ('/files0/oradata/RETEK/redo3a.log') size
10M
    default temporary tablespace temp tempfile
    '/files0/oradata/RETEK/temp01.dbf' size 300M
    undo tablespace undo_ts datafile
    '/files0/oradata/RETEK/undo_ts01.dbf' size 300M;
```

Mandatory database create scripts

Install data dictionary views

```
@$ORACLE_HOME/rdbms/admin/catalog.sql
@$ORACLE_HOME/rdbms/admin/catproc.sql
@$ORACLE_HOME/rdbms/admin/catblock.sql - optional but
useful
```

Grant these privs 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;
```

The following should be run as system:

```
@$ORACLE_HOME/sqlplus/admin/pupbld.sql
```

Install XDK and XSU

```
PROMPT altering system to set _system_trig_enabled to
false

ALTER SYSTEM SET "_system_trig_enabled"=FALSE
SCOPE=MEMORY;
```

Install Java objects

```
@$ORACLE_HOME/javavm/install/initjvm.sql
```

Install XML and XSU

```
@$ORACLE_HOME/rdbms/admin/initxml.sql
```

Create public synonyms and grants

```
CREATE PUBLIC SYNONYM XMLDOM for SYS.XMLDOM;
CREATE PUBLIC SYNONYM XMLPARSER for SYS.XMLPARSER;
CREATE PUBLIC SYNONYM XSLPROCESSOR for SYS.XSLPROCESSOR;
CREATE PUBLIC SYNONYM XMLTYPE for SYS.XMLTYPE;
GRANT EXECUTE ON XMLDOM TO PUBLIC;
GRANT EXECUTE ON XMLPARSER TO PUBLIC;
GRANT EXECUTE ON XMLTYPE TO PUBLIC;
GRANT EXECUTE ON XSLPROCESSOR TO PUBLIC;
```

Validate all invalid Java objects

```
spool javascript.sql

select 'alter java class "'||object_name||'" compile;'
from dba_objects

where object_type = 'JAVA CLASS' and owner = 'SYS' and
status = 'INVALID';

spool off
@javascript.sql
```


Appendix E – RDM users UNIX environment

There are two types of environments for RDM users: the RDM application user and the RDM Host Interface user. The RDM application users can only run the character-based windows of the RDM application, and cannot execute any Host Interface programs. The RDM Host Interface user can only execute the Host Interface programs, and cannot run the character-based screens. This is because the ORACLE_HOME for the RDM application users will be set to point to the Oracle Developer directory and the RDM Host Interface user will be set to point to the Oracle Server directory.

In the past, these were the same directories, but because the libraries for the Oracle Server and the Developer must now be kept separate, the Server software and the Developer software must be installed in different directories.

The following is a sample profile for RDM users (all of these variables need to be set in order for RDM to function properly) and the following assumptions are made:

- 1 The Oracle Server is installed in /u01/app/oracle/product/svr9i.
- 2 The Oracle Developer is installed in /u01/app/oracle/product/dev6i.
- 3 RDM is installed in /u01/app/rdm10.

```
#####
# RDM AND ORACLE VARIABLES #
#####
# RDM Application User
ORACLE_HOME=/u01/app/oracle/product/dev6i      ;export
ORACLE_HOME
TWO_TASK=rdm10                                ;export TWO_TASK
FORMS60_PATH=/u01/app/rdm10/forms/bin           ;export
FORMS60_PATH
FORMS60_TERMINAL=/u01/app/rdm10/forms/bin       ;export
FORMS60_TERMINAL
FORMS60_OUTPUT=/tmp                           ;export
FORMS60_OUTPUT
TK60_ICON=/u01/app/rdm10/forms/bin              ;export
TK60_ICON
UI_ICON=/u01/app/rdm10/forms/bin                ;export
UI_ICON
FORMS60_PLSQLV1_NAME_RESOLUTION=YES            ;export
FORMS60_PLSQLV1_NAME_RESOLUTION
REPORTS60_PATH=/u01/app/rdm10/reports/bin       ;export
REPORTS60_PATH
REPORTS60_TERMINAL=/u01/app/rdm10/forms/bin     ;export
REPORTS60_TERMINAL
REPORTS_OUTPUT=/u01/app/rdm10/reports           ;export
REPORTS_OUTPUT

# RDM Host Interface User
ORACLE_HOME=/u01/app/oracle/product/svr9i      ;export
ORACLE_HOME
DOWNLOAD_DIR=/u01/app/rdm10/hostcomm/download  ;export
DOWNLOAD_DIR
UPLOAD_DIR=/u01/app/rdm10/hostcomm/upload       ;export
UPLOAD_DIR
SORTATION_DIR=/u01/app/rdm10/hostcomm/sortation ;export
SORTATION_DIR

# Common For Both Users
```

```
TNS_ADMIN=/u01/app/oracle/product/svr9i/network/admin
;export TNS_ADMIN

ORACLE_SID=rdm10 ;export
ORACLE_SID

LD_LIBRARY_PATH=$ORACLE_HOME/lib:$ORACLE_HOME/network/jre11
/lib/sparc/native_threads;
export LD_LIBRARY_PATH

TERM=vt220 ;export TERM

ORACLE_TERM=vt220 ;export
ORACLE_TERM

EDITOR=vi ;export EDITOR

PATH=/bin:/usr/bin:/usr/ucb:/usr/sbin:/usr/lbin:$ORACLE_HOM
E/bin:/u01/rdm10/forms/bin ;export PATH


# On Some Platforms The Following Needs To Be Set To The
Correct Character Set To Avoid Core Dumps (Usually HP)
NLS_LANG=AMERICAN_AMERICA.UTF8 ;export NLS_LANG
NLS_PREV_LANG=AMERICAN_AMERICA.UTF8 ;export NLS_PREV_LANG
```


Appendix F – Default RDM directory structure

/u01/app/rdm10/forms/bin	- RDM executables
/u01/app/rdm10/reports	- Temporary files for labels and reports
/u01/app/rdm10/reports/bin	- RDM reports
/u01/app/rdm10/hostcomm/download	- Interface files between Host and RDM
/u01/app/rdm10/hostcomm/upload	- Interface files between RDM and Host
/u01/app/rdm10/sortation	- Interface files for sorters
/u01/app/rdm10/web_html	- html's
/u01/app/rdm10/web_html/gif	- gifs, bmps
/u01/app/rdm10/web_html/jinitiator	- jinitiator, html's
/u01/app/rdm10/web_html/help	- web help files
/u01/app/rdm10/web_html/reptemp	- Temporary files for reports

Appendix G – Database disk space requirements

Object	Small	Medium	Large	Test
Data 1 Tablespace	500 MB	3500 MB	16000 MB	175 MB
Data 2 Tablespace	550 MB	3500 MB	13500 MB	160 MB
Data 3 Tablespace	500 MB	3500 MB	16000 MB	240 MB
Data 4 Tablespace	700 MB	2500 MB	9000 MB	115 MB
Data 5 Tablespace	200 MB	1000 MB	4200 MB	45 MB
Index 1 Tablespace	300 MB	1600 MB	12200 MB	100 MB
Index 2 Tablespace	400 MB	2700 MB	17000 MB	100 MB
Index 3 Tablespace	900 MB	2100 MB	13500 MB	100 MB
Index 4 Tablespace	200 MB	500 MB	1500 MB	100 MB
Index 5 Tablespace	200 MB	600 MB	2000 MB	20 MB
AHL Tablespace	500 MB	1000 MB	2000 MB	50 MB
Lob Tablespace	70 MB	250 MB	500 MB	10 MB
Users Tablespace	10 MB	10 MB	10 MB	10 MB