

Oracle® Retail Merchandising System

Installation Guide

Release 13.0.2

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Primary Author: Wade Schwartz

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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 Merchandising System Release 13.0.2 documentation set:

- *Oracle Retail Merchandising System Release Notes*
- *Oracle Retail Merchandising System Operations Guide (Volumes 1 and 2)*
- *Oracle Retail Merchandising System Data Model*
- *Oracle Retail Merchandising Batch Schedule*
- *Oracle Retail Merchandising Data Conversion Operations Guide*

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

<https://metalink.oracle.com>

When contacting Customer Support, please provide the following:

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

Review Patch Documentation

If you are installing the application for the first time, you install either a base release (for example, 13.0) or a later patch release (for example, 13.0.2). If you are installing a software version other than the base release, be sure to read the documentation for each patch release (since the base release) before you begin installation. Patch documentation can contain critical information related to the base release and code changes that have been made since the base release.

Oracle Retail Documentation on the Oracle Technology Network

In addition to being packaged with each product release (on the base or patch level), all Oracle Retail documentation is available on the following Web site (with the exception of the Data Model which is only available with the release packaged code):

http://www.oracle.com/technology/documentation/oracle_retail.html

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

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.

Preinstallation Tasks

Implementation Capacity Planning

There is significant complexity involved in the deployment of Oracle Retail applications, and capacity planning is site specific. Oracle Retail strongly suggests that before installation or implementation you engage your integrator (such as the Oracle Retail Consulting team) and hardware vendor to request a disk sizing and capacity planning effort.

Sizing estimates are based on a number of factors, including the following:

- Workload and peak concurrent users and batch transactions
- Hardware configuration and parameters
- Data sparsity
- Application features utilized
- Length of time history is retained

Additional considerations during this process include your high availability needs as well as your backup and recovery methods.

Check Database Server Requirements

General Requirements for a database server running RMS include:

Supported on:	Versions Supported:
Database Server OS	UNIX based OS certified with Oracle RDBMS 10g Enterprise Edition. Options are: <ul style="list-style-type: none">▪ Oracle Enterprise Linux 4 Patch 5▪ Solaris 10 (SPARC)▪ HP-UX 11.31 (Integrity)▪ AIX 5.3
Database Server	Oracle RDBMS 10g Release 2 Enterprise Edition (minimum 10.2.0.3 patchset required) with the following patches and components: <p>Patches:</p> <ul style="list-style-type: none">▪ 5397953 (ORA-07445: [KKPAPITGETALL()+2152] [SIGSEGV] [ADDRESS NOT MAPPED TO OBJECT] [0X34])▪ 5648872 (SCHEDULER ORA-07445 [OPIDSA()+321] WHEN SETTING UP CHAIN TEST)▪ 5921386 (WRONG RESULT WITH MERGE JOINT OUTER IN THE EXECUTION PLAN) <p>RAC Only</p> <ul style="list-style-type: none">▪ 5721821 (ORA-7445[KGLOBCL] OCCURED AND INSTANCE WENT DOWN) <p>Components:</p> <ul style="list-style-type: none">▪ Oracle Database 10g▪ Oracle Partitioning▪ Oracle Net Services▪ Oracle Call Interface (OCI)▪ Oracle Programmer▪ Oracle XML Development Kit <p>ANSI compliant C compiler (certified with OS and database version)</p> <p>Perl compiler 5.0 or later</p> <p>x-Windows interface</p>

Verify Single Sign-On

If a Single Sign-On is to be used, verify the Oracle Infrastructure Server 10g version 10.1.2.2 server has been installed. Verify the Mid-Tier server hosting Oracle Forms is registered with the Infrastructure Oracle Internet Directory.

Check Application Server Requirements

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

Supported on:	Versions Supported:
Application Server OS	OS certified with Oracle Application Server 10g version 10.1.2.2. Options are: <ul style="list-style-type: none"> ▪ Oracle Enterprise Linux 4 Patch 5 ▪ Solaris 10 (SPARC) ▪ HP-UX 11.31 (Integrity) ▪ AIX 5.3
Application Server	Oracle Application Server Forms and Reports 10g version 10.1.2.2 Patches: <ul style="list-style-type: none"> ▪ 5861907 (IAS 10.1.2.2 PATCHSET UPDATES ORACLEHOMEPROPERTIES.XML WITH WRONG ARU_ID & ARU_I) ▪ 5632264 (NEED UPDATED TIMEZONE FILES (VERSION 4) FOR MORE DST RULE CHANGES)

Note: If installing on HP please refer to Metalink Note 367577.1.

Check Web Browser and Client Requirements

General requirements for client running RMS include:

Requirement	Version
Operating system	Windows 2000 or XP
Display resolution	1024x768
Processor	Pentium processor (minimum 450 MHz)
Memory	minimum of 256 MB RAM
Sun JRE Plug-in	1.4.1+
Microsoft Internet Explorer	version 5.5, 6.0 and higher

Supported Oracle Retail Products

Product	Version
Oracle Retail Active Retail Intelligence (ARI)	13.0.2
Oracle Retail Price Management (RPM)	13.0.2
Oracle Retail Allocation	13.0.2
Oracle Retail Invoice Matching (ReIM)	13.0.2
Oracle Retail Store Inventory Management (SIM)	13.0.2
Oracle Retail Warehouse Management System (RWMS)	13.0.2
Oracle Retail Data Warehouse (RDW)	13.0.2
Oracle Retail Predictive Application Server (RPAS)	13.0.2
Oracle Retail Advanced Inventory Planning (AIP)	13.0.2
Oracle Retail Strategic Store Solutions (ORSSS)	13.0.2

Supported Oracle Retail Integration Technologies

Integration Technology	Version
Oracle Retail Extract, Transform and Load (RETL)	13.0.2
Oracle Retail Integration Bus (RIB)	13.0.2
Oracle Retail Service Layer (RSL)	13.0.2

Create a UNIX user account to install the software

The following user should be created on both the application and database servers.

1. Create a UNIX group named “dev”.
2. Create UNIX user named “oretail” and assign it to the “dev” group. This user will install the RMS software.

Create Staging Directory for RMS Database Schema Patch

1. Log into the database server as oretail.
2. Create a staging directory for the RMS database schema patch.
3. Copy the rms1302dbpatch.zip file from the RMS 13.0.2 release to the staging directory. This is referred to as DB_PATCH_DIR when installing database software.
4. Change directories to DB_PATCH_DIR and extract the rms1302dbpatch.zip file.

Create Staging Directory for RMS Batch Files

1. Log into the database server as oretail.
2. Create a staging directory for the RMS batch files.
3. Copy the rms1302batchpatch.zip file from the RMS 13.0.2 release to the staging directory. This is referred to as BATCH_PATCH_DIR when installing the RMS batch software.
4. Change directories to BATCH_PATCH_DIR and extract the rms1302batchpatch.zip file.

Create Staging Directory for RMS Application Server Files

1. Log into the application server as the oretail user.
2. Create a staging directory for the RMS application patch files.
3. Copy the file rms1302apppatch.zip from the RMS 13.0.2 release to staging directory. This will be referred to as APP_PATCH_DIR when installing application software.
4. Change directories to APP_PATCH_DIR and extract the file rms1302apppatch.zip.

Patch RMS Database

There are two different methods to use for installing the RMS 13.0.2 database schema patch. Option 1 uses the installer to apply the patch. Option 2 uses SQL*Plus directly. Option 1 is a new option that was added for the version 13 release. Both options are given in this chapter.

Option 1: Patch RMS Database using the Installer

The RMS 13.0 database schema installer may be used to apply RMS patches. The entire 13.0.2 RMS patch may be installed by re-running the installer used with the RMS 13.0 full release.

The installer should only be used to apply patches if the schema being patched does not contain customizations or hotfixes. The patch may also be applied using SQL*Plus. *See* Option 2: Patch RMS Database using SQL*Plus later in this chapter for details on this method.

In this section, `INSTALL_DIR` refers to the location where the RMS 13.0 database schema installer was originally expanded. The installer files from the original RMS 13.0 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.0 database schema installer.

Before you apply the RMS 13.0.2 patch:

- Make a backup of all your objects and database schema.
- Check that RMS 13.0.1 is installed.
- Review the enclosed RMS 13.0.2 Patch Release Notes (`rms-1302-rn.pdf`).
- Review each of the enclosed defect documents.

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.

Manual Edits to SQL Scripts

Modify the `rmsdbstart.sql` file that will be used by the installer

Example: `DB_PATCH_DIR/mom-dbpatch/rmsdbstart.sql`

Make the following changes:

1. Locate the primary and secondary language data scripts at the bottom of the file. These sets of data scripts will be commented out in the SQL file using two preceding dash characters. Uncomment the scripts that pertain to your language settings. There can only be one primary language. Leave all primary language scripts commented out for English.
2. Examine the rest of the SQL script to see all of the files that are included in the patch.

Run the RMS Database Schema Installer

Note: Appendix A contains details on screens and fields in the RMS database schema installer.

1. Change directories to `INSTALL_DIR/rms/dbschema`.
2. Source the `oraenv` script to set up the Oracle environment variables (`ORACLE_HOME`, `ORACLE_SID`, `PATH`, etc)

Example:

```
prompt$ . oraenv
ORACLE_SID = [] ? mydb
prompt$
```

Verify the `ORACLE_HOME` and `ORACLE_SID` variables after running this script.

Example:

```
prompt$ echo $ORACLE_HOME
/u00/oracle/product/mydbversion
prompt$ echo $ORACLE_SID
mydb
```

3. Set and export the following environment variables. These variables are needed in addition to the environment variables set by the `oraenv` script above.

Note: The `SQLPATH` environment variable is critical for a patch installation to be successful.

Variable	Description	Example
SQLPATH	Locations to which SQL*Plus will look for referenced SQL scripts. It is important that SQLPATH include the path to the patch directory where <code>rmsdbstart.sql</code> resides.	<code>SQLPATH=<DB_PATCH_DIR>/mom-dbpatch/13.0.2/rms</code>
NLS_LANG	Locale setting for Oracle database client	<code>NLS_LANG=AMERICAN_AMERICA.UTF8</code> <code>export NLS_LANG</code>
DISPLAY	Address and port of X server on desktop system of user running install. Optional for <code>dbschema</code> installer	<code>DISPLAY=<IP address>:0</code> <code>export DISPLAY</code>

4. If you are going to run the installer in GUI mode using an X server, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. See Appendix D: Common Installation Errors for more details.
5. If the installer has already been run in this location you may wish to back up the `ant.install.properties` file. The settings from the RMS 13.0 full install might be in this file, and running the installer again for the patch clears out some of the settings that are not used by the installer's patch mode.
6. Run the `install.sh` script to start the installer.

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

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


If prompted about resuming previous installation, respond with no.

Select the Patch option on the Full Install or Patch Option screen.

7. On the Apply an RMS DB Patch page, provide the path to the DB_PATCH_DIR/mom-dbpatch. This directory should contain a rmsdbstart.sql file, which the installer runs to apply the RMS 13.0.2 patch.
8. After the installer is complete, you can check its log file: rms-install-dbschema.<timestamp>.log.
9. 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 Database Schema Installation

Errors encountered during patch installation should be resolved outside of the installer using SQL*Plus. The installer's resume function is only useful for full installs.

Option 2: Patch RMS Database using SQL*Plus

While the installer can be used to apply the entire RMS database patch, there are situations in which it is better to use SQL*Plus directly with the scripts released in the patch. The installer calls a single start-all script named rmsdbstart.sql which runs all of the files in the patch. If there are any customizations or hotfixes in the schema then certain statements in the patch may result in errors. In this situation it is better to investigate where the conflicts are and fix the SQL scripts accordingly.

Before you apply the RMS 13.0.2 patch:

- Make a backup of all your objects and database schema.
- Check that RMS 13.0 is installed.
- Review the enclosed RMS 13.0.2 Patch Release Notes (rms-1302-rn.pdf).
- Review each of the enclosed defect documents.

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.

Steps:

1. Change directories to DB_PATCH_DIR/mom-dbpatch.
2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc)

Example:

```
prompt$ . oraenv
ORACLE_SID = [] ? mydb
prompt$
```

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

Example: prompt\$ echo \$ORACLE_HOME
 /u00/oracle/product/mydbversion
prompt\$ echo \$ORACLE_SID
 mydb

3. Set and export the NLS_LANG environment variable.

Example: NLS_LANG=AMERICAN_AMERICA.UTF8
export NLS_LANG

4. Log into SQL*Plus as the RMS schema owner (Example: RMSDEV) and run the following command:

SQL> @rmsdbstart.sql

Note: This rmsdbstart.sql script installs the entire patch. It is recommended that you open this file and review all of the scripts that are being called. Some files may require modification for a successful installation.

Batch Installation Tasks

Compile RMS Batch Libraries and Programs

Note: Warning messages may appear during the compilation of the batch. These warnings can be ignored if the batch executables are successfully generated.

Set Environment Variables

Note: RMS_DIR is the location where RMS 13 batch was installed.

Make sure the following variables are set. The RMS 13.0 batch installer should have created a batch.profile file located at RMS_DIR/batch.profile. This profile script can be used to set all of the environment variables listed below.

Example: cd <RMS_DIR>
 ../batch.profile

Variables set by batch.profile:

- PATH must include make, makedepend and the C compiler
- MMHOME=RMS_DIR/rms
- MMUSER=RMS Schema Owner
- PASSWORD=RMS Schema Owner Password
- ORACLE_HOME=Location of Oracle install
- ORACLE_SID=The Oracle Sid for the RMS database

AIX:

- LIBPATH=\$ORACLE_HOME/lib:\$MMHOME/oracle/lib/bin:\$LDPATH
- OBJECT_MODE=64
- LINK_CNTRL=L_PTHREADS_D7

HP:

- SHLIB_PATH=\$ORACLE_HOME/lib:\$MMHOME/oracle/lib/bin:
- \$SH_LIBPATH

Solaris:

- LD_LIBRARY_PATH=\$ORACLE_HOME/lib:
\$MMHOME/oracle/lib/bin:\$LD_LIBRARY_PATH

Oracle Enterprise Linux:

- LD_LIBRARY_PATH=\$ORACLE_HOME/lib:
\$MMHOME/oracle/lib/bin:\$LD_LIBRARY_PATH

Compile Batch Source Code

1. Copy the files from BATCH_PATCH_DIR/batch/proc/src to RMS_DIR/rms/oracle/proc/src.
2. Change directories to RMS_DIR/rms/oracle/proc/src.
3. Create dependencies.
 - a. Run the following command:

```
make -f mts.mk depend 2>&1 | tee srcdpnd.log
```
 - b. Check the srcdpnd.log file for errors.
4. Create batch programs.
 - a. Run the following commands in the order stated.

```
make -f rms.mk PRODUCT_PROCFLAGS=dynamic=ansi ditinsrt
make -f mts.mk rms-ALL recs-ALL resa-ALL rtm-ALL fif-ALL 2>&1 | tee
srcall.log
```
 - b. Check the srcall.log file for errors.
5. Install the batch programs.

```
make -f mts.mk install
```

The batch programs should now be in RMS_DIR/rms/oracle/proc/bin.

Application Server Installation Tasks

The installer should only be used to apply patches if the forms and libraries being patched do not contain customizations or hotfixes. If the patch is applied to customizations, they will be overwritten.

In this section, `INSTALL_DIR` refers to the location where the RMS 13.0.1 application installer was originally expanded. The installer files from the original RMS 13.0.1 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.0.1 application installer.

Before you apply the RMS 13.0.2 patch:

- Make a backup of all your forms and library files.
- Review the enclosed RMS 13.0.2 Patch Release Notes (`rms-1302-rn.pdf`).
- Review each of the enclosed defect documents.

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 file (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.

Copy Forms and Library Patch Files

Note: If you have applied any customizations to any of your forms or libraries, the compiled forms and libraries that are created by the installer will not contain them. If you don't want recompiled versions of these files, remove the appropriate files from `INSTALL_DIR/rms/application/rms13/forms/src` and `INSTALL_DIR/rms/application/rms13/toolset/src`.

1. Copy all files from `APP_PATCH_DIR/base/forms/` to `INSTALL_DIR/rms/application/rms13/forms/src`.
2. Copy all files from `APP_PATCH_DIR/base/toolset/` to `INSTALL_DIR/rms/application/rms13/toolset/src`.

Run the RMS Application Installer

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

1. Logon to your application server as the oretail user.
2. Change directories to `INSTALL_DIR/rms/application`. This directory was created when the `rms13application.zip` file was expanded under `STAGING_DIR`.

3. Set and export the following environment variables.

Variable	Description	Example
ORACLE_HOME	The location where Oracle Application Server 10g (10.1.2.2) has been installed.	ORACLE_HOME= /u00/webadmin/product/OAS/myversion/midtier export ORACLE_HOME
ORACLE_SID	The database/SID where the RMS schema resides	ORACLE_SID=mydb
NLS_LANG	Locale setting for Oracle database client	NLS_LANG=AMERICAN_AMERICA.UTF8 export NLS_LANG
DISPLAY	Address and port of X server on desktop system of user running install. Required for forms application installer	DISPLAY=<IP address>:0 export DISPLAY

4. To install the RMS application you need to be using an X server such as Exceed and have set the DISPLAY environment variable. The installer does not continue otherwise.
5. Run the install.sh script to start the installer.

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

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

Depending on system resources, a typical installation takes anywhere from 45 minutes to two hours.

The installer asks for an installation directory. This is the destination directory for the RMS files. This directory will be referred to as `INSTALL_DIR` for the remainder of this chapter. Do not provide an `INSTALL_DIR` that is located at or underneath `STAGING_DIR`.

6. The RMS Application installer might launch the Retail OCM Installer automatically after it is finished with the RMS installation. You should opt out of the OCM install for this patch by clicking the Cancel button in the Retail OCM Installer.
7. After the installation is complete, you can check its log file: `INSTALL_DIR/base/log/rms.app.install.<timestamp>.log`. The `INSTALL_DIR/base/error` will contain information about possible failed compilations.
8. 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`

9. After the installation is complete, follow the post installation tasks by making backups of the listed files and copying the required files to the specified location.

Example:

```
#####
##          Oracle Application Server Configuration Tasks          ##
#####
Contact your Oracle administrator and have them make backups of the following
files:

/u00/webadmin/product/10.1.2.0.2_FULL/midtier/Apache/Apache/conf/httpd.conf
/u00/webadmin/product/10.1.2.0.2_FULL/midtier/forms/java/oracle/forms/registry/Reg
istry.dat
/u00/webadmin/product/10.1.2.0.2_FULL/midtier/forms/server/formsweb.cfg
/u00/webadmin/product/10.1.2.0.2_FULL/midtier/forms/admin/resource/US/fmrweb.res
/u00/webadmin/product/10.1.2.0.2_FULL/midtier/forms/admin/resource/US/fmrweb.res_u
tf8.res
Have the Oracle administrator copy everything in
/projects/rmsse/con/installs/app/post
to /u00/webadmin/product/10.1.2.0.2_FULL/midtier to update the files,
and then restart the application server for the changes to take effect.

example: cp -R * /u00/webadmin/product/10.1.2.0.2_FULL/midtier
```

Resolving Errors Encountered During Application Installation

In the event a form or menu does not compile, go to
 <INSTALL_LOCATION>/base/error and see which objects did not compile. To try and
 manually recompile the object run <INSTALL_LOCATION>/base/forms.profile and run
 the following command:

```
# frmcmp.sh userid=$UP module_type=form module=FORM_OR_MENU
```

You can also safely rerun the installer to see if the form compiles.

Test the RMS Application

Oracle Retail provides test cases that allow you to smoke test your installation. Refer to
 the *Oracle Retail Merchandising Installation Test Cases* document; Metalink Note 559560.1.

RMS Reports Installation

RMS Reports are included in the RMS Application patch: rms1302apppatch.zip in the reports directory. To install the reports files, copy them from APP_PATCH_DIR/reports to the reports directory created during RMS installation. See the RMS 13.0 installation guide for the instructions for initial setup of Oracle BI Publisher for RMS reports.

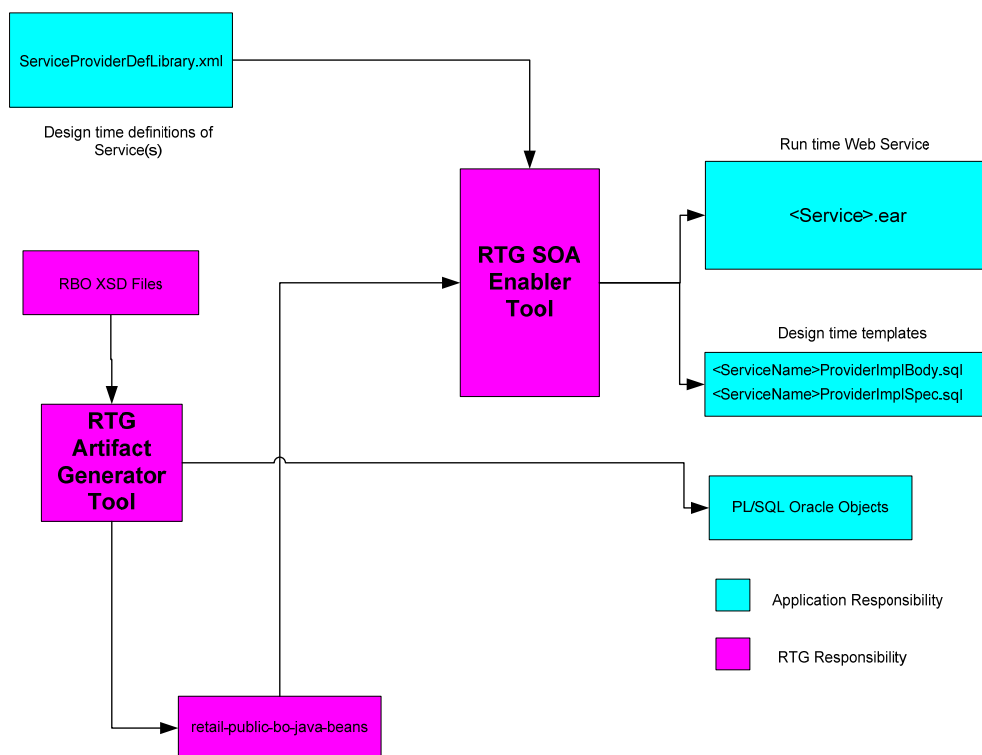
Web Services Installation

Overview

Some Oracle Retail applications; <app> (for example, RMS) use Oracle Objects for the PL/SQL API's. The tool generates a Web Service Provider layer between the external clients and the <app> API's to provide the Web Service functionality, such as faults, logging, and security, as well as the conversion from xml payloads to Oracle Objects.

The Retail Service Enabler (RSE) tool creates the appropriate Provider web service endpoints as well as templates for the PL/SQL API's.

RSE Tool - PL/SQL Provider Service



Example Contents of an <app>_PLSQLServiceProvider.zip

Loading Java Code to the RMS Database Schema

Web service installation is new to RMS 13.0.2. This involves loading java code to the RMS database schema itself. Perform the following procedures to load java code to the RMS database schema.

1. Increase ORACLE initialization parameter `JAVA_POOL_SIZE`. 150MB is recommended.
2. Change the contents of the following files to your RMS schema owner name when seeing the value `<USER>`.
 - `@RMS_INSTALL_DIR/'Web Service Objects'/Consumer/sql/GetDrillBackForwardURLConsumer.sql`
 - `@RMS_INSTALL_DIR/'Web Service Objects'/Consumer/sql/ProcessGLAccountValidationRetailReqABCSImplConsumer.jar`

Example: Change all occurrence of `<USER>` to RMS schema owner `RMS01` in the files below:

```
dbms_java.grant_permission( '<USER>',  
'SYS:java.lang.RuntimePermission', 'setFactory', '' )  
  
to  
  
dbms_java.grant_permission( 'RMS01',  
'SYS:java.lang.RuntimePermission', 'setFactory', '' )
```

3. Run the above files as the database sys user.
4. Load java to the database. Perform the following loadjava commands. These are UNIX side commands, not sqlplus.

```
. oraenv
```
5. Choose the `ORACLE_SID` of the RMS database schema that you want to install to.

```
export MMUSER=<RMS schema owner>  
export PASSWORD=<RMS schema owner password>  
  
cd INSTALL_DIR/'Web Service Objects'/Consumer/lib  
  
loadjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v-r-f missing.jar dbwsclientsws.jar  
dbwsclient102.jar
```
6. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the steps above.

```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v missing.jar dbwsclientsws.jar  
dbwsclient102.jar
```
7. Perform the following commands to load java to the database:

```
cd ../jars  
  
loadjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v-r-f  
GetDrillBackForwardURLConsumer.jar
```
8. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the step above.

```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v  
GetDrillBackForwardURLConsumer.jar
```
9. Perform the following commands to continue loading java to the database:

```
loadjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v-r-f  
ProcessGLAccountValidationRetailReqABCSImplConsumer.jar
```

10. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the step above.

```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v
ProcessGLAccountValidationRetailReqABCSImplConsumer.jar
```

You do NOT create synonyms to each java object loaded as the synonyms were created in packages previously loaded pointing to the exposed java objects.

11. After the database installer has been run perform the following:

- @RMS_INSTALL_DIR/'Web Service Objects'/Consumer/sql/GetDrillBackForwardURLConsumer.sql
- @RMS_INSTALL_DIR/'Web Service Objects'/Consumer/sql/ProcessGLAccountValidationRetailReqABCSImplConsumer.jar
- @RMS_INSTALL_DIR/'Web Service Objects'/Provider/sql/PayTermServiceProviderImplSpec.sql
- @RMS_INSTALL_DIR/'Web Service Objects'/Provider/sql/ReportLocatorServiceProviderImplSpec.sql
- @RMS_INSTALL_DIR/'Web Service Objects'/Provider/sql/ServiceOpContext.sql
- @RMS_INSTALL_DIR/'Web Service Objects'/Provider/sql/ServiceOpStatus.sql
- @RMS_INSTALL_DIR/'Web Service Objects'/Provider/sql/SupplierServiceProviderImplSpec.sql

Web Service installation Process – OC4J

There are two ways of installing the web service application, one using the Oracle Application Server graphical user interface and the other using the command line tools.

The following steps are performed in the installation:

- Meet or verify the prerequisites.
- Creating an oc4j instance to deploy the <app>-service.ear on.
- Configuring the JDBC Data Source required for this application.
- Deploy the <app>-service.ear file to the oc4j instance.

The level of logging can be modified later from the OAS Enterprise Manager to suite your debugging needs.

If this is a newer version to be deployed to an existing environment see the Update section for installation instructions.

Common Steps for both GUI and Command Line Installation Process

Prerequisites

- Retail Business Objects (RBOs) are installed in the target Oracle Database.
- Service Provider implementations are installed in the Oracle Database and are working.

Note the Retail application database information where the Service Provider implementations are hosted.

- Get the <app>_PLSQLServiceProvider.zip from the Oracle Retail Application Team. This zip file contains an .ear file which needs to be deployed to a JavaEE application server.
- OAS server (10.1.3.3) is already installed and working properly using java 5.

Creating an OC4J instance in OAS

1. Create an OC4J instance. Run the following command from the \$ORACLE_HOME/bin directory:

```
createinstance -instanceName <app>-service-oc4j-instance -groupName <app>_service_group
```
2. Reload the opmn. Run the following command from the \$ORACLE_HOME/opmn/bin directory:

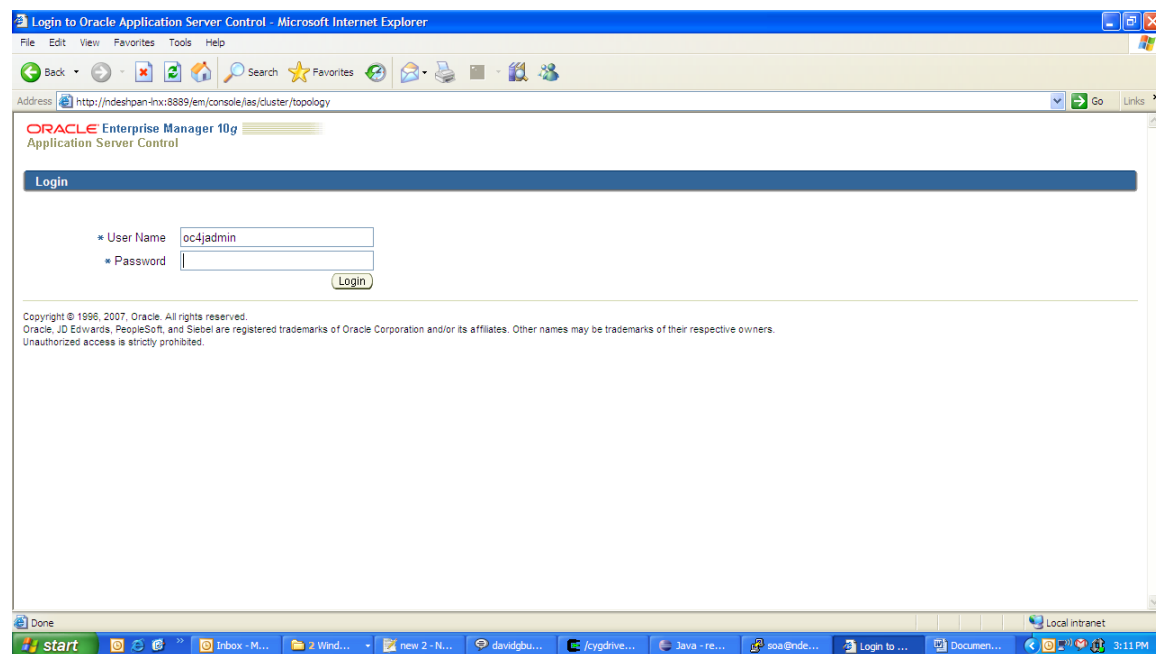
```
opmnctl reload
```
3. Start the instance. Run the following command from the \$ORACLE_HOME/opmn/bin directory:

```
opmnctl startproc process-type= <app>-service-oc4j-instance
```

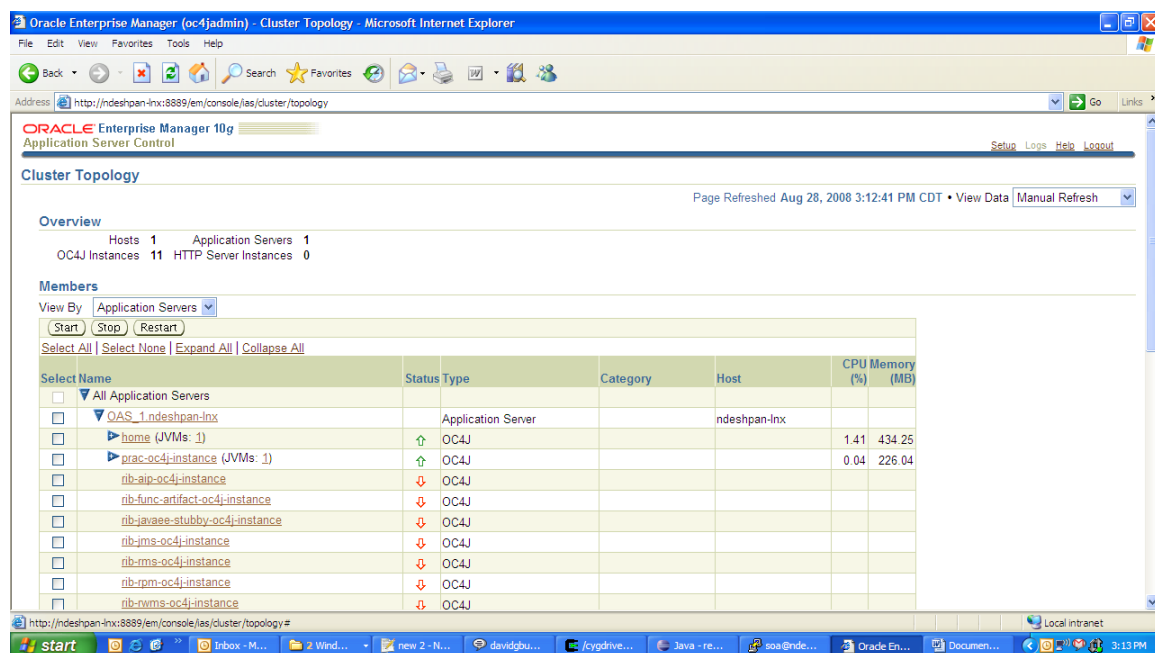
GUI Installation Process

Create a JDBC Data Source

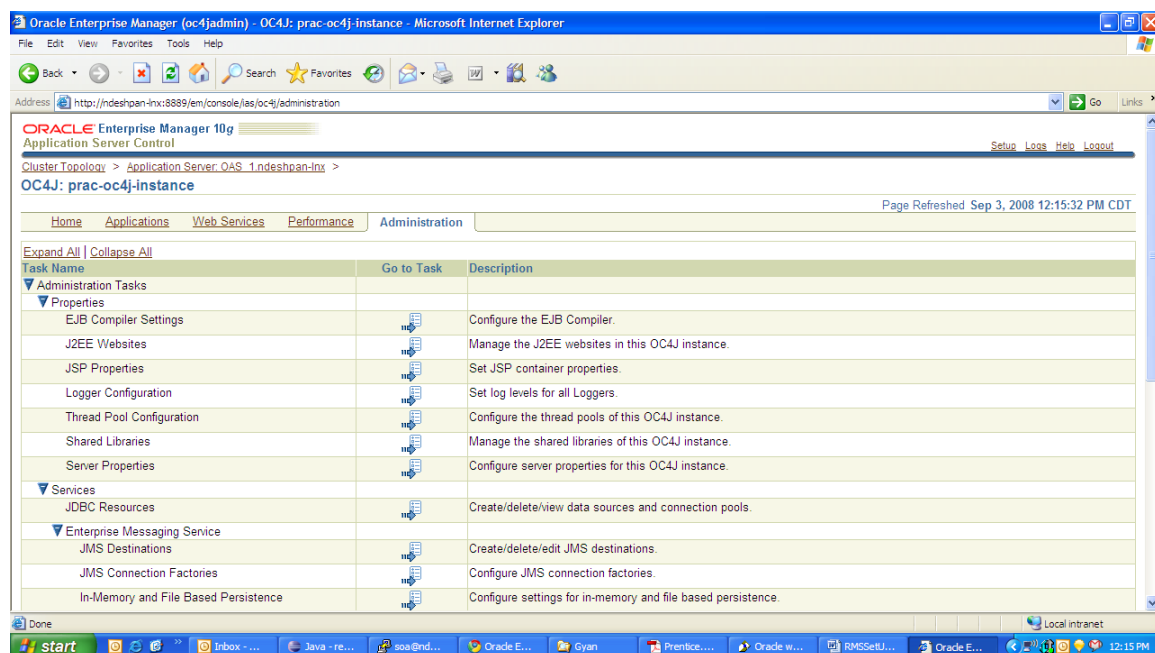
1. Login to the enterprise manager for the OAS where you would like to deploy the service.



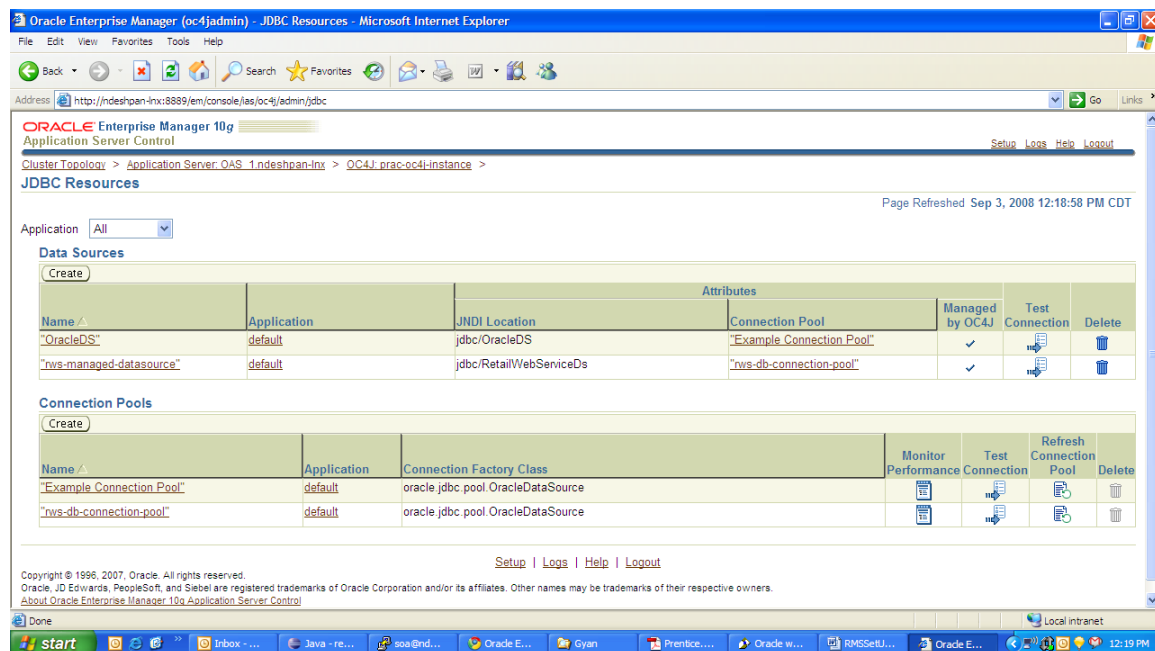
2. Click on the OC4J instance you would like to deploy the service on. eg. <app>-service-oc4j-instance.



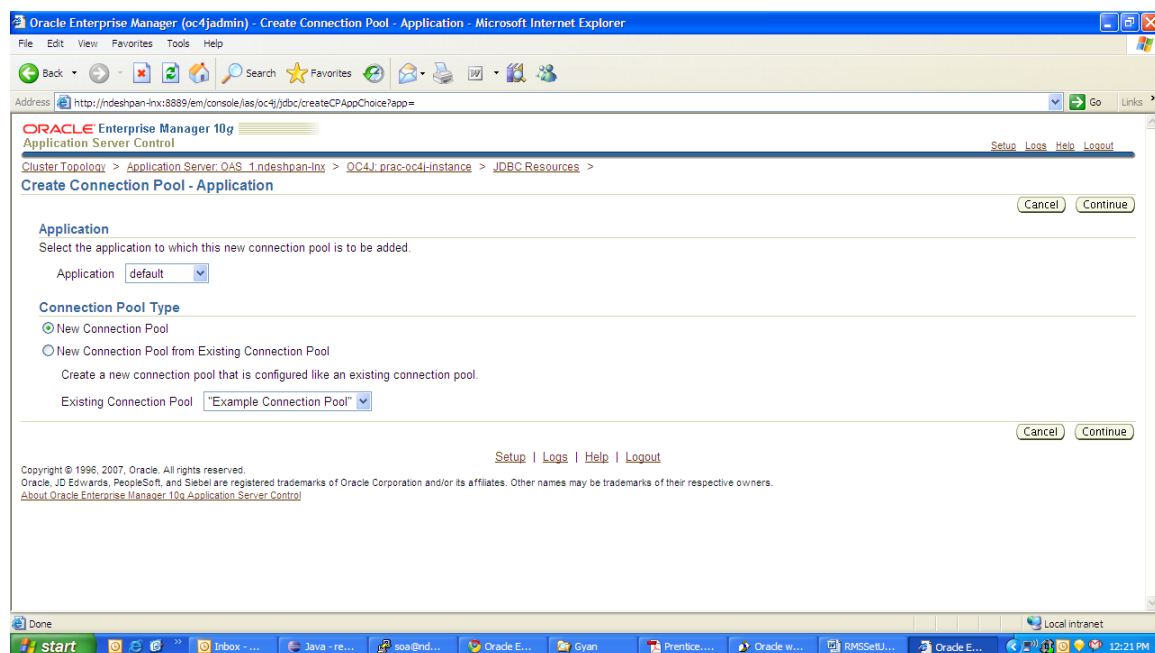
3. Click on the Administration tab.



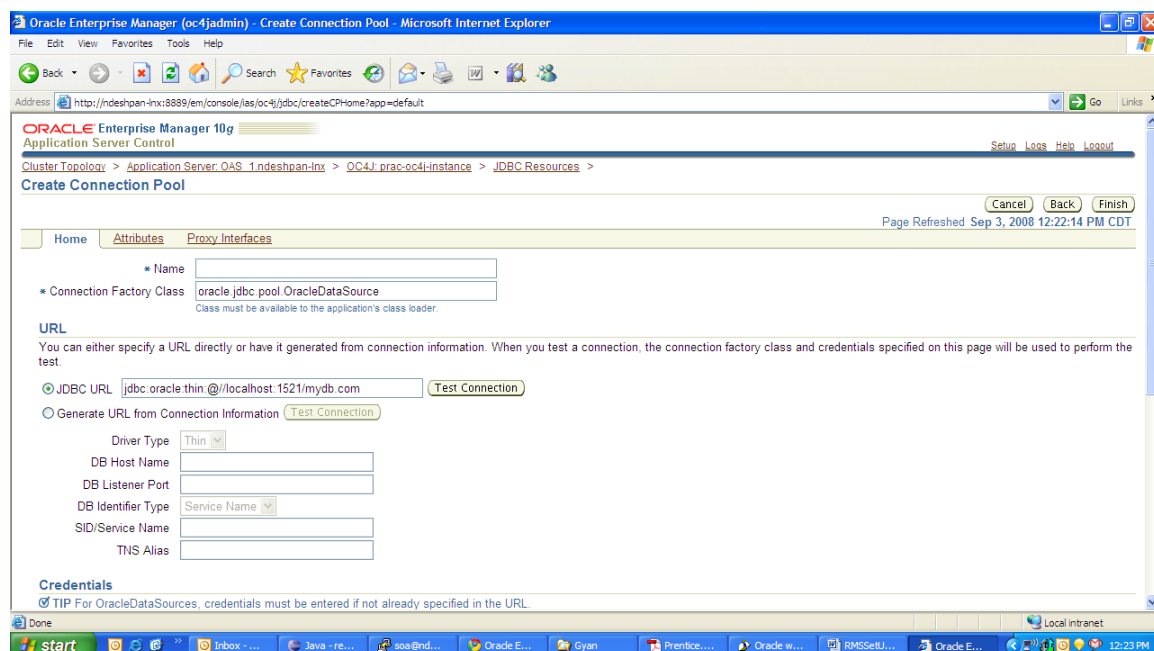
4. Click on the "Go to Task Link" for JDBC resources under Services.



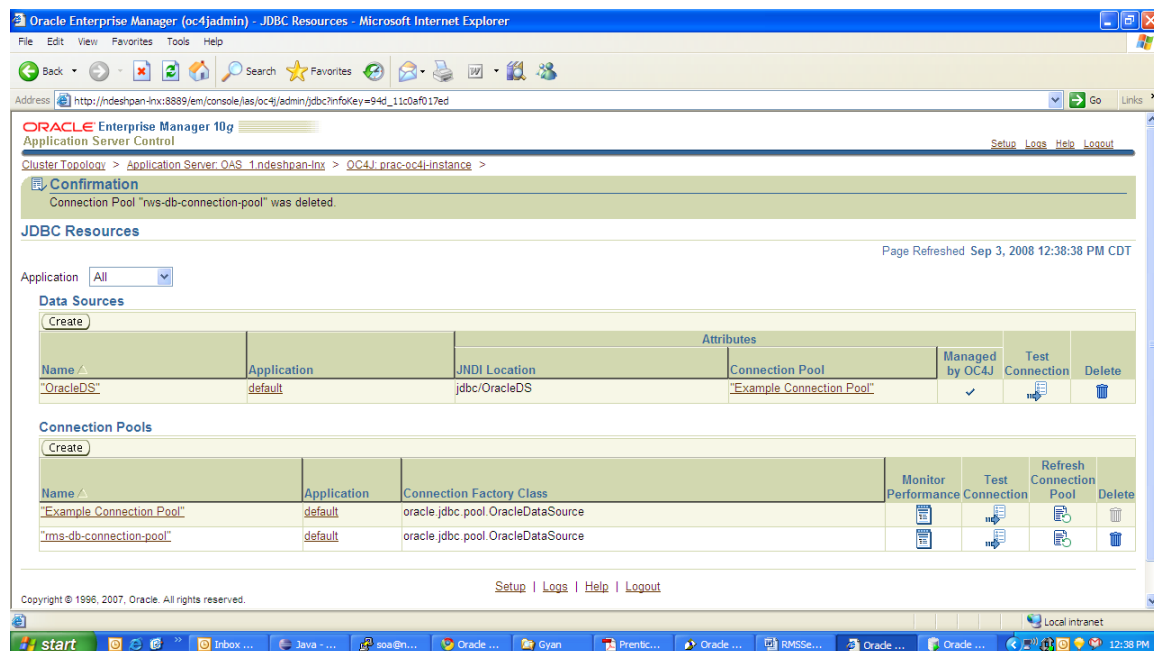
5. Click on the create button under Connection Pools.



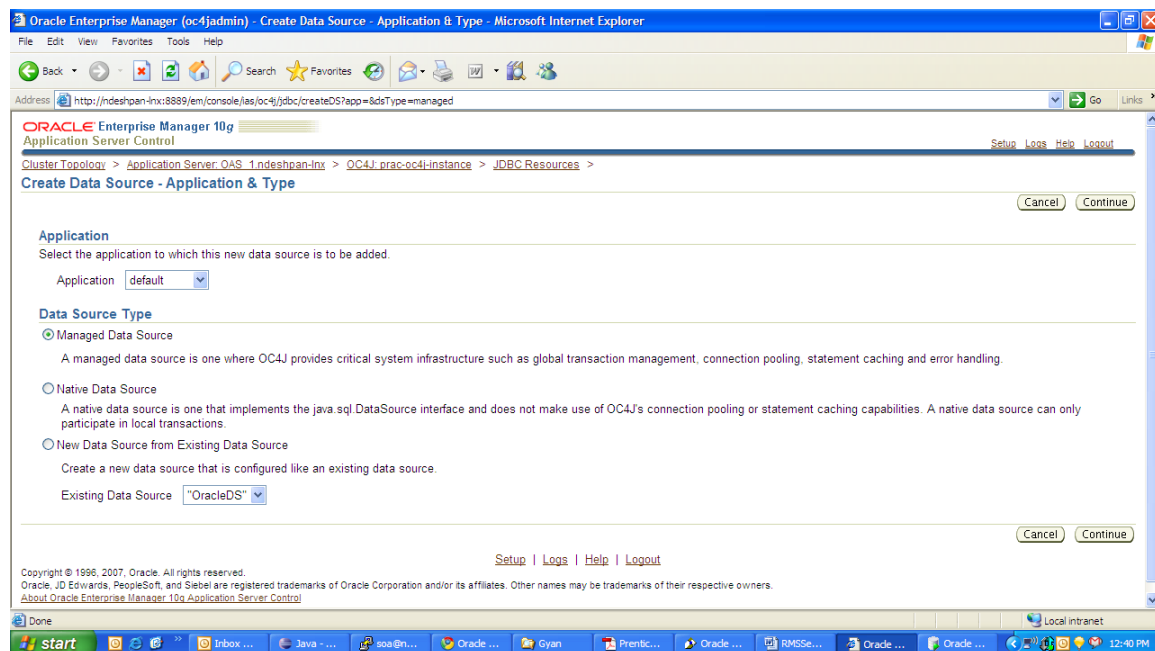
6. Keep the default values and click Continue.



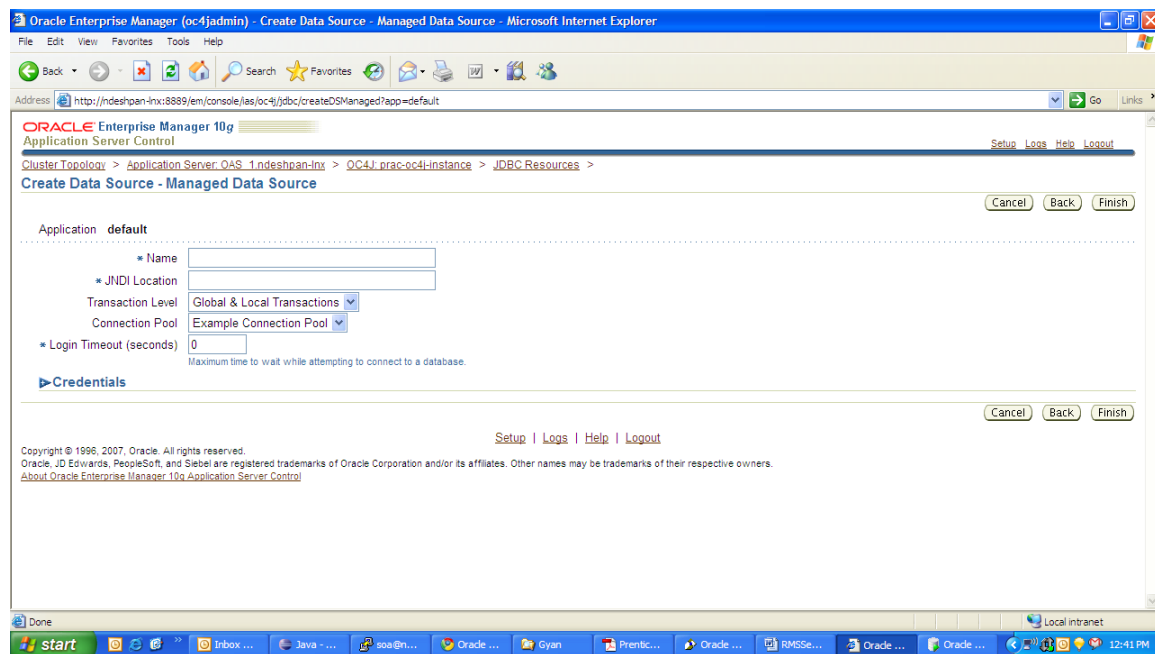
7. Give a name to the connection as **<app>-db-connection-pool**. Connection Factory Class should be oracle.jdbc.pool.OracleDataSource. JDBC URL should contain the values for the correct database in this format(jdbc:oracle:thin:@<hostname>:<port>:<sid>) for example, jdbc:oracle:thin:@ndeshpan-lnx:1523:orcl
If the database is a RAC database see the section on RAC Support.
8. Put in the values for username and password under credentials.
9. Click the Finish button.



10. Click on the Create button under Data Sources.



11. Application should be default and click the radio button for Managed Data Source and click continue



12. Put in the name for the data source as **<app>-managed-datasource**. The JNDI Location must be **jdbc/RetailWebServiceDs**. Select the connection pool name which you created earlier (**<app>-db-connection-pool**) from the Connection Pool drop down. Click the Finish button.

Oracle Enterprise Manager 10g
Application Server Control
Cluster Topology > Application Server: OAS_1.ndeshpan-lnx > OC4J: prac-oc4j-instance >

Confirmation
Data Source rms-managed-datasource has been created.

JDBC Resources
Page Refreshed Sep 3, 2008 12:45:57 PM CDT

Application: All

Data Sources

Name	Application	JNDI Location	Connection Pool	Managed by OC4J	Test Connection	Delete
"OracleDS"	default	jdbc/OracleDS	"Example Connection Pool"	✓		
"rms-managed-datasource"	default	jdbc/RetailWebServiceDs	"rms-db-connection-pool"	✓		

Connection Pools

Name	Application	Connection Factory Class	Monitor Performance	Test Connection	Refresh Connection Pool	Delete
"Example Connection Pool"	default	oracle.jdbc.pool.OracleDataSource				
"rms-db-connection-pool"	default	oracle.jdbc.pool.OracleDataSource				

13. Click on the Test Connection link for the <app>-managed-datasource under Data Sources.

Oracle Enterprise Manager 10g
Application Server Control
Cluster Topology > Application Server: OAS_1.ndeshpan-lnx > OC4J: prac-oc4j-instance > JDBC Resources >

Test Connection: "rms-managed-datasource"

Username: Not Specified
Password: Not Specified
URL: jdbc:oracle:thin:@ndeshpan-lnx:1523:orcl
* SQL Statement: select * from dual

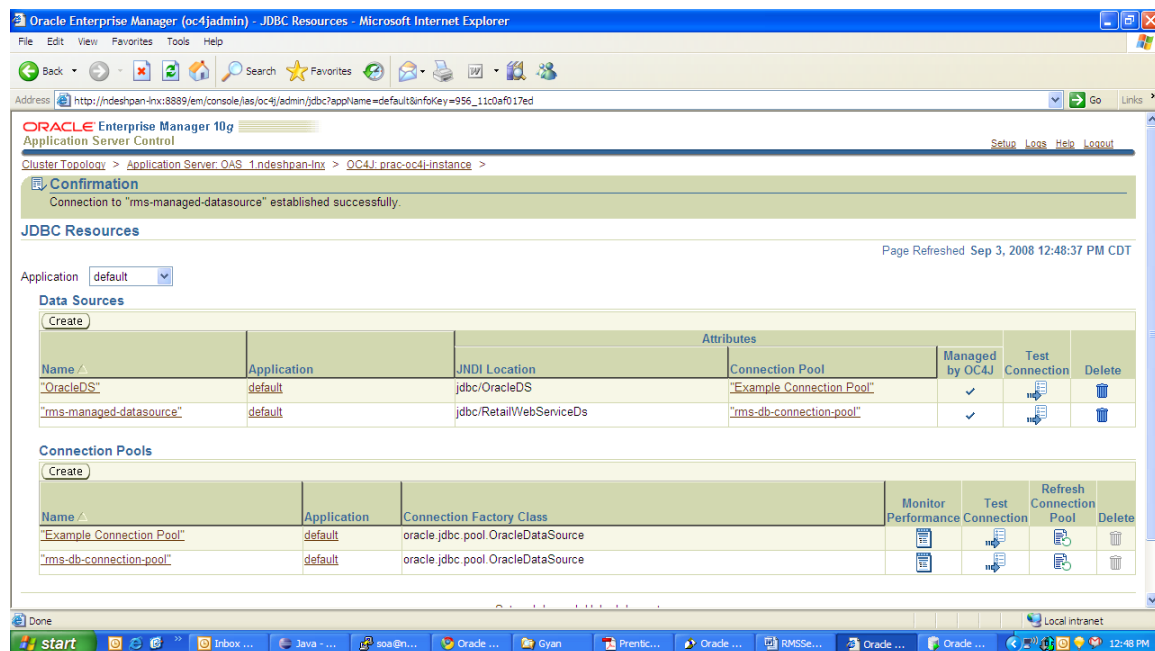
☒ TIP Certain JDBC drivers require restarting the OC4J instance before a change to the URL is reflected in the driver's cache.

Test OK

Setup | Logs | Help | Logout

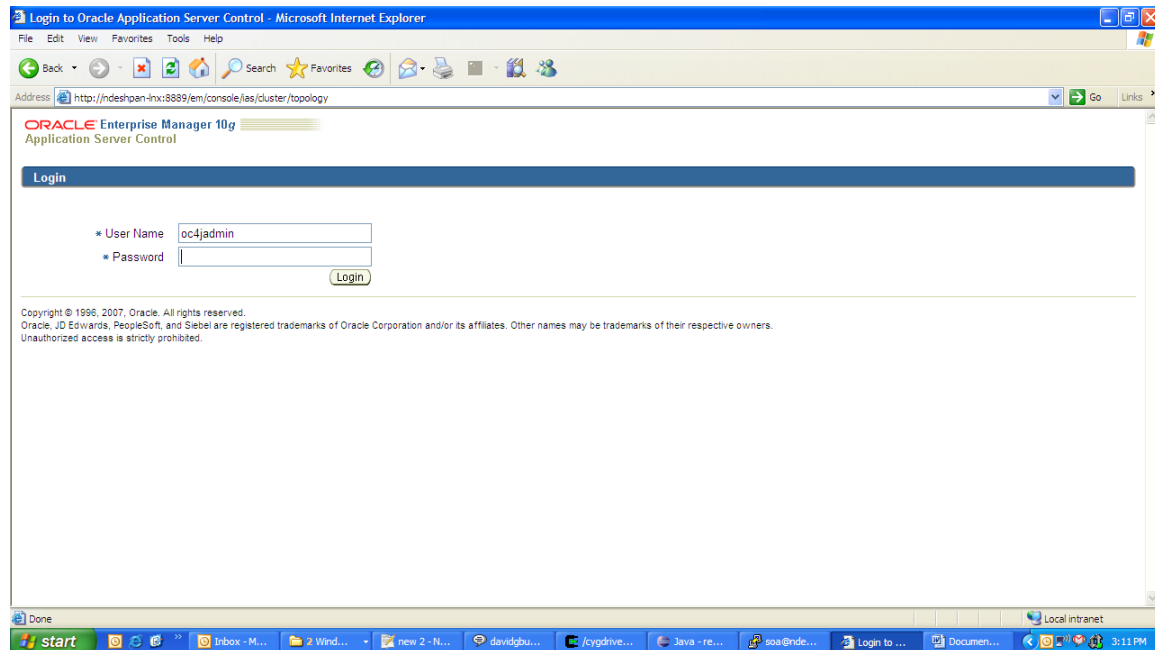
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[About Oracle Enterprise Manager 10g Application Server Control](#)

14. Click on the Test button.



Deploying to the OAS

1. Login to the enterprise manager for the OAS where you would like to deploy the service.



2. Click on the OC4J instance (<app>-service-oc4j-instance) you would like to deploy the service on.

Oracle Enterprise Manager 10g
Application Server Control

Cluster Topology

Page Refreshed Aug 28, 2008 3:12:41 PM CDT • View Data Manual Refresh

Overview

Hosts 1 Application Servers 1
OC4J Instances 11 HTTP Server Instances 0

Members

View By Application Servers

[Start] [Stop] [Restart]

Select All | Select None | Expand All | Collapse All

Select Name	Status	Type	Category	Host	CPU (%)	Memory (MB)
▼ All Application Servers						
QAS_1 ndeshpan-1nx		Application Server		ndeshpan-1nx		
home (JVMs: 1)	↑	OC4J			1.41	434.25
prac-oc4j-instance (JVMs: 1)	↑	OC4J			0.04	226.04
rib-aip-oc4j-instance	↓	OC4J				
rib-func-artifact-oc4j-instance	↓	OC4J				
rib-javawee-stubby-oc4j-instance	↓	OC4J				
rib-jms-oc4j-instance	↓	OC4J				
rib-rms-oc4j-instance	↓	OC4J				
rib-rpm-oc4j-instance	↓	OC4J				
rib-rwms-oc4j-instance	↓	OC4J				

3. Click on the Applications tab.

Oracle Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server: OAS_1 ndeshpan-1nx >
OC4J: prac-oc4j-instance

Page Refreshed Aug 28, 2008 3:18:31 PM CDT

Home Applications Web Services Performance Administration

This page shows the J2EE applications and application components (EJB Modules, WAR Modules, Resource Adapter Modules) deployed to this OC4J instance.

View Applications

[Start] [Stop] [Restart] [Undeploy] [Redeploy] | [Deploy]

Select All | Select None | Expand All | Collapse All

Select Name	Status	Start Time	Active Requests	Request Processing Time (seconds)	Active EJB Methods	Application Defined MBeans
▼ All Applications						
ascontrol	↓					
▼ default	↑	Aug 28, 2008 3:09:38 PM CDT	0	0.0006	0	
► Middleware Services						

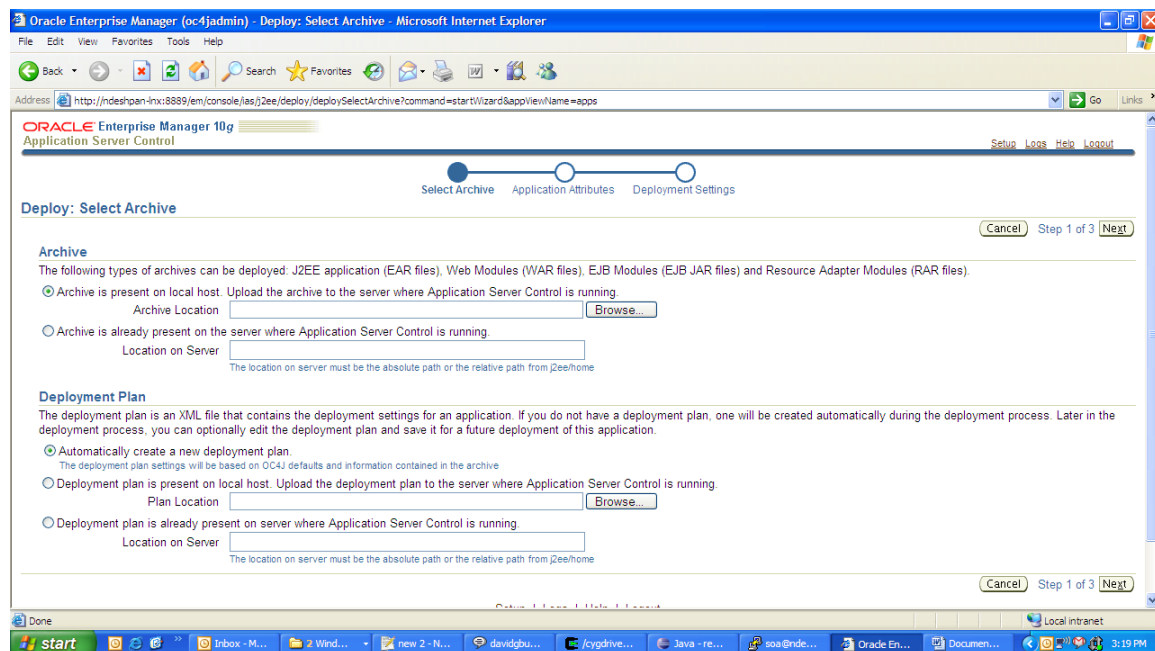
TIP If you stop a parent application (such as the default application), then Enterprise Manager automatically stops any child applications that depend upon the parent application. Similarly, if you start a child application, Enterprise Manager automatically starts the required parent application.

Home Applications Web Services Performance Administration

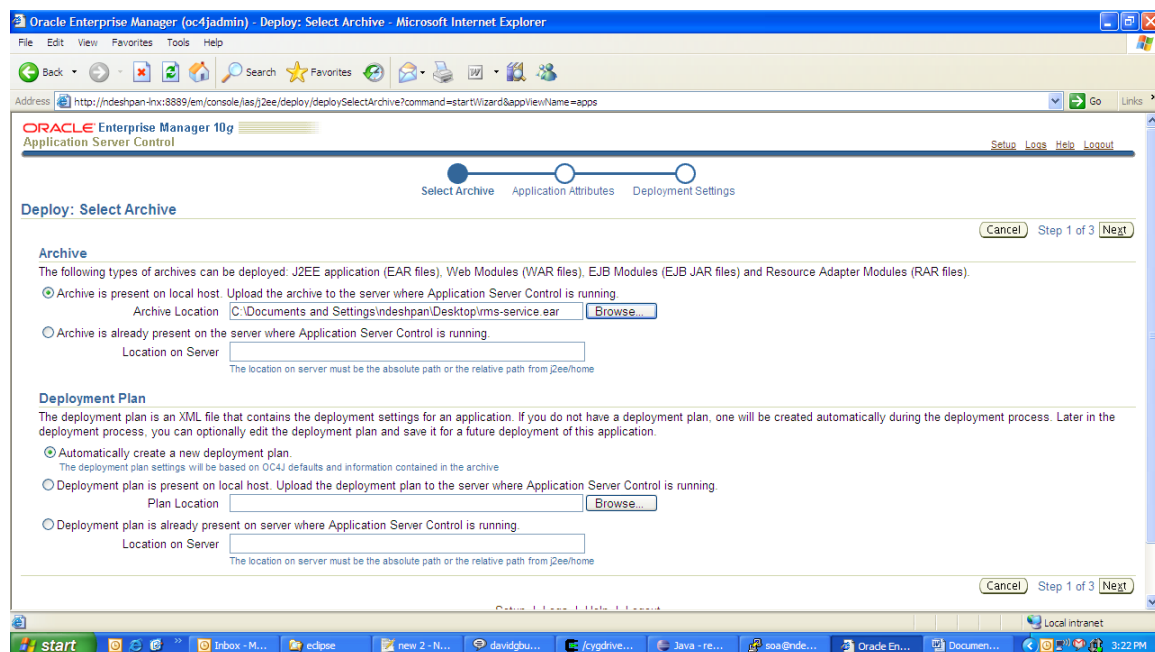
Setup | Logs | Help | Logout

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About Oracle Enterprise Manager 10g Application Server Control

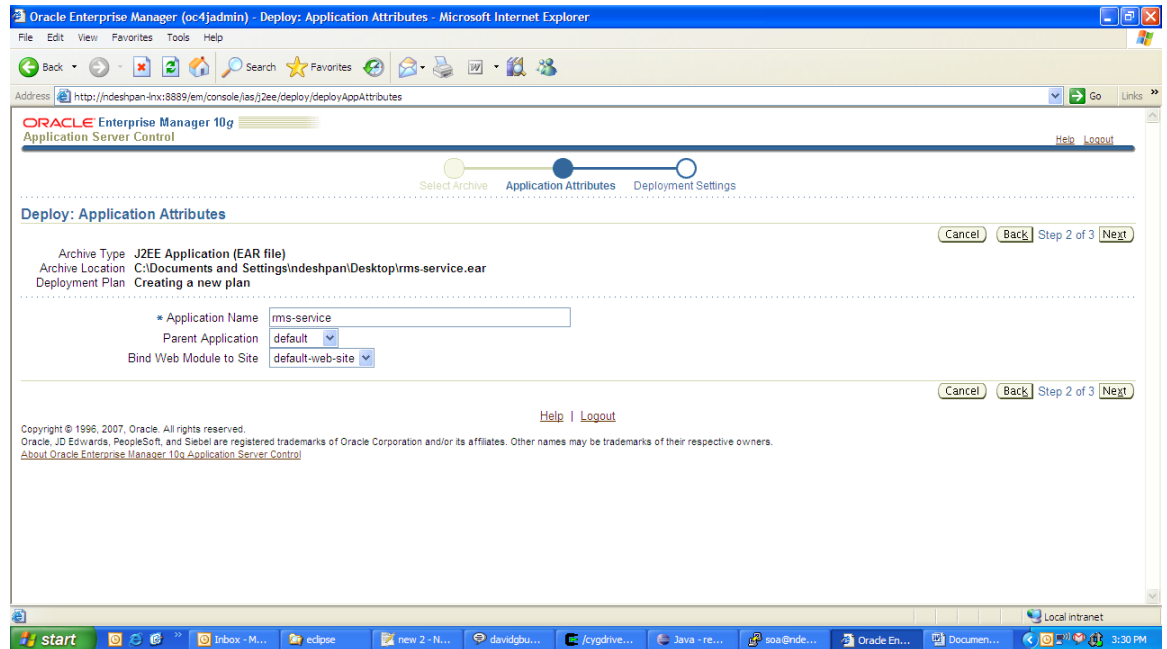
4. Click on the deploy button.



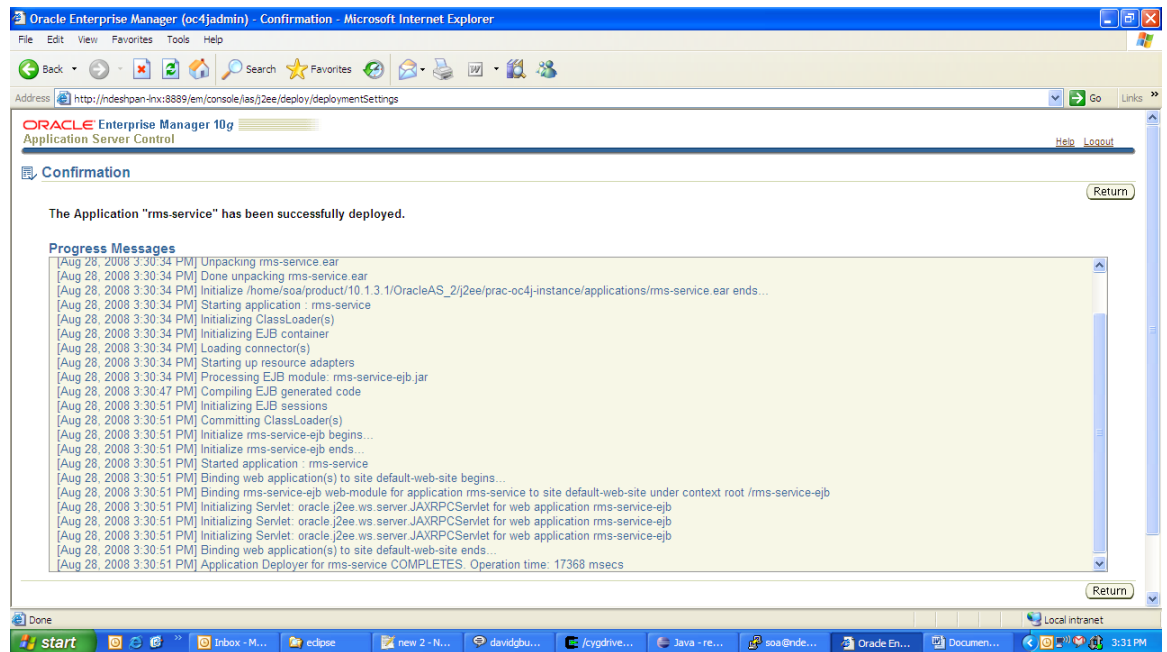
5. If the **<app>-service.ear** file is present on the local host check that radio button and browse for the file else specify the full path of the ear on the machine where the server is running.



6. Click Next.
7. In the Application Name enter **<app>-service** and click Next.



8. Click the Deploy button. This is the final deploy screen when deployment is successful



Command Line Installation Process

Creating a JDBC Data Source

1. Change directory to \${ORACLE_HOME}/j2ee/home.

```
cd ${ORACLE_HOME}/j2ee/home
```
2. Add JDBC Connection Pool.

```
java -jar admin_client.jar deployer:oc4j:<hostname> <username> <password>
-addDataSourceConnectionPool
-applicationName default
-name <connection pool name>
-factoryClass "oracle.jdbc.pool.OracleDataSource"
-dbUser <database user name>
-dbPassword <password>
-url "jdbc:oracle:thin:@<hostname>:<port>:<sid>"
```

If the database is a RAC database the URL should be in the following format

```
jdbc:oracle:thin:@(DESCRIPTION =(ADDRESS_LIST =(ADDRESS = (PROTOCOL =
TCP)(HOST = <host>)(PORT = <port>))(ADDRESS = (PROTOCOL = TCP)(HOST =
<host>)(PORT = <port>))(LOAD_BALANCE = yes))(CONNECT_DATA =(SERVICE_NAME =
<sid>)))
```

Example

```
jdbc:oracle:thin:@(DESCRIPTION =(ADDRESS_LIST =(ADDRESS = (PROTOCOL =
TCP)(HOST = mspvip72)(PORT = 1521))(ADDRESS = (PROTOCOL = TCP)(HOST =
mspvip73)(PORT = 1521))(LOAD_BALANCE = yes))(CONNECT_DATA =(SERVICE_NAME =
dvolr02)))
```

3. Create a JDBC Datasource.

```
java -jar admin_client.jar deployer:oc4j: <hostname> <username> <password>
-addManagedDataSource
-applicationName default
-name <data source name>
-jndiLocation "jdbc/RetailWebServiceDs"
-connectionPoolName <connection pool name>
```
4. Test the connection pool (Optional):

```
java -jar admin_client.jar deployer:oc4j: <hostname> <username> <password>
-testConnectionPool
-connectionPoolName <connection pool name>
-sqlStatement "select * from dual"
```

Deploying to the OAS

1. Deploy the ear file:
If deploying for the first time execute b. If redeploying execute a and b in that order
 - a.

```
java -jar admin_client.jar deployer:oc4j: <hostname> <username> <password>
-undeploy -file <ear file name>.ear -deploymentName <ear file name without
the extension> -bindAllWebApps
```
 - b.

```
java -jar admin_client.jar deployer:oc4j: <hostname> <username> <password>
-deploy -file <ear file name>.ear -deploymentName <ear file name without
the extension> -bindAllWebApps
```
2. Bounce the app server instance.

Web Service System Management

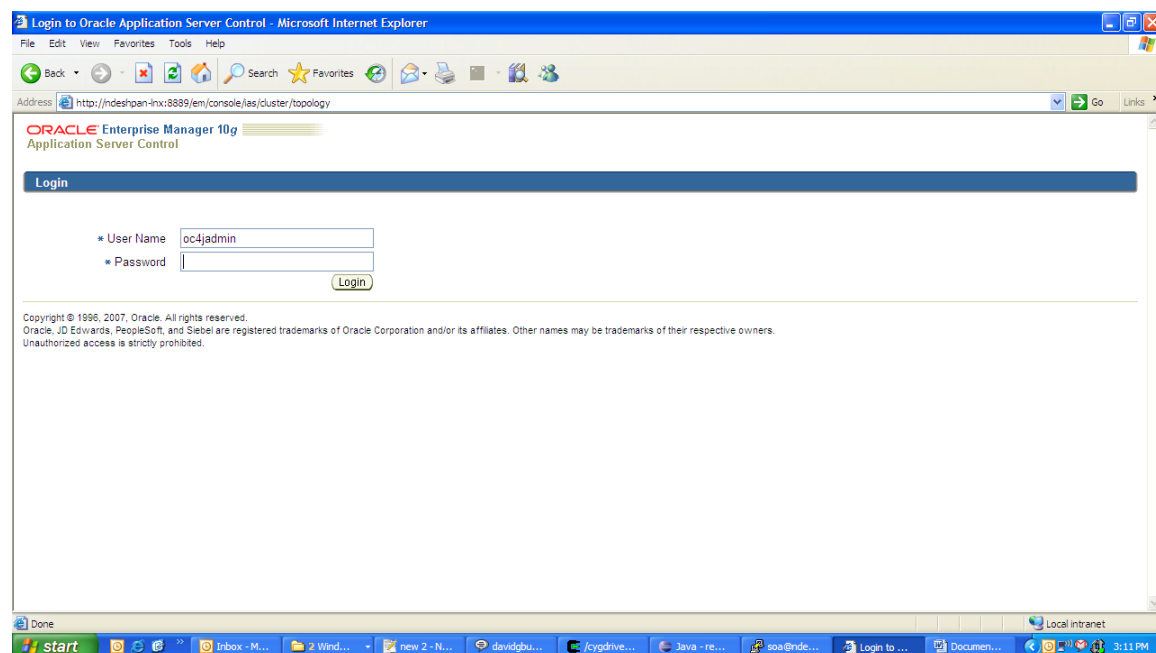
Location of the Log File

The location of the log file is `$ORACLE_HOME/j2ee/home/log/<app>-service.log` where `$ORACLE_HOME` is the OAS' home directory.

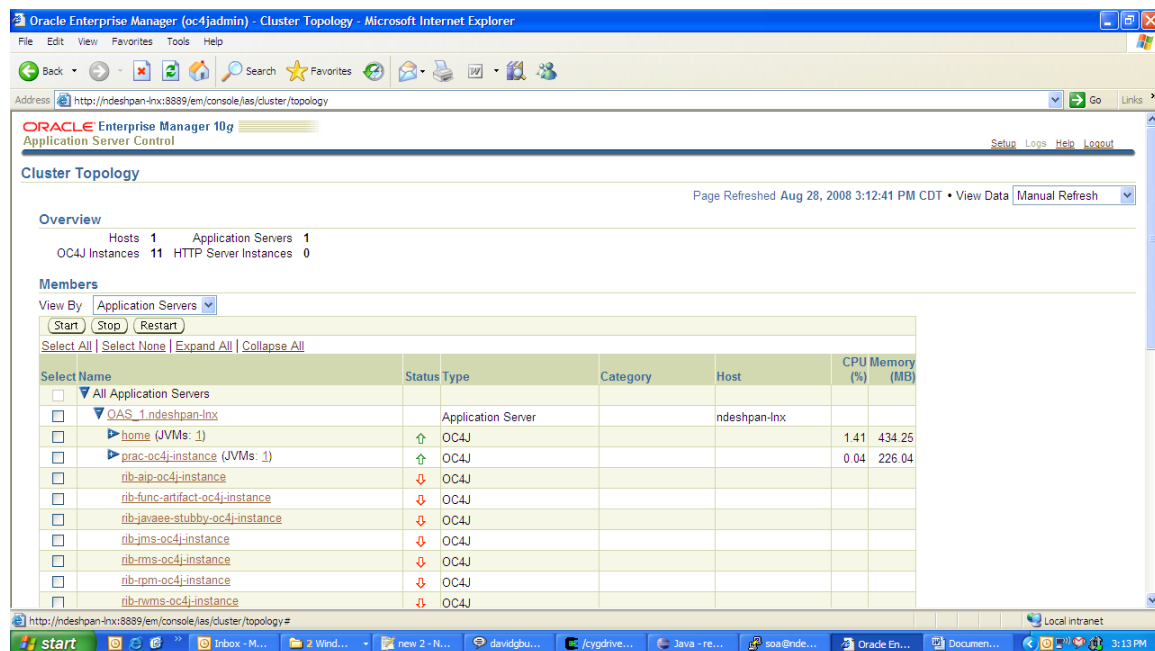
Changing Log Levels

The level of application logging can be controlled by setting the log levels appropriately. Follow the steps below to change the log levels for the application.

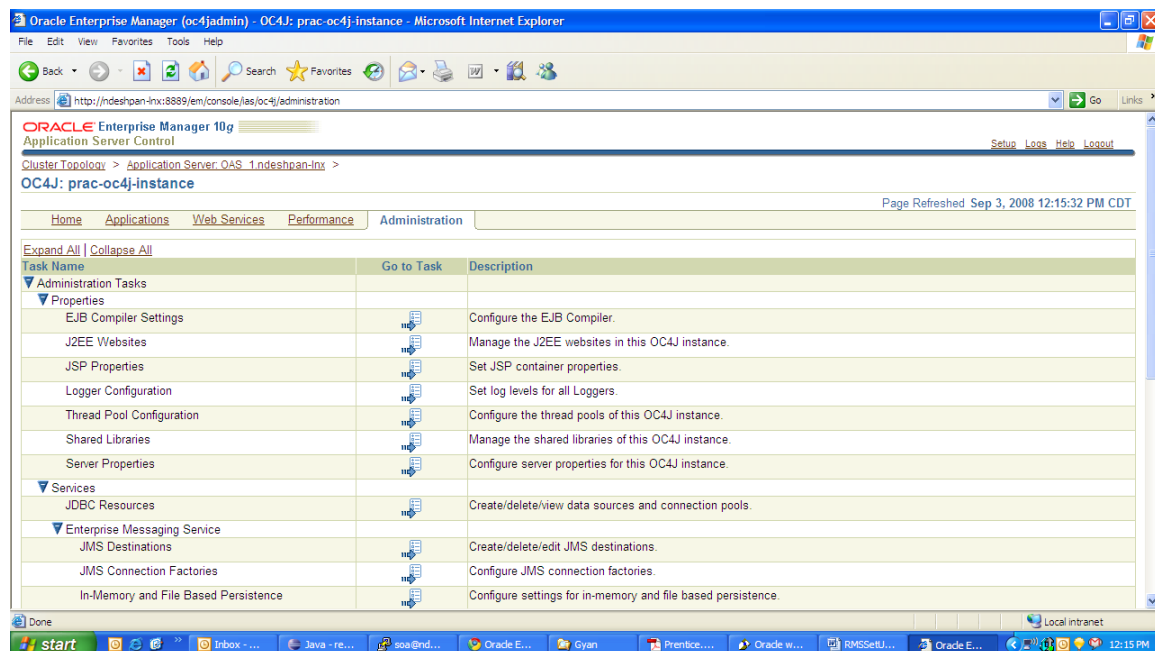
1. Login to the OAS Enterprise Manager.



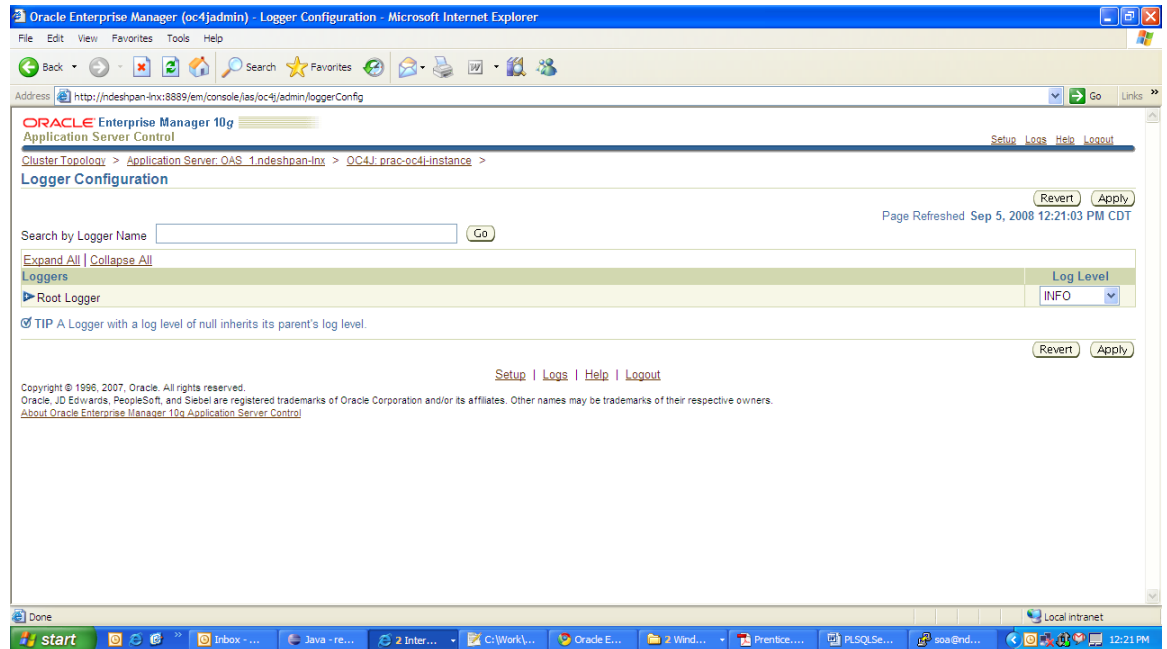
2. Click on the OC4j instance where the `<app>-service.ear` is deployed. For example, `<app>-service-oc4j-instance`.



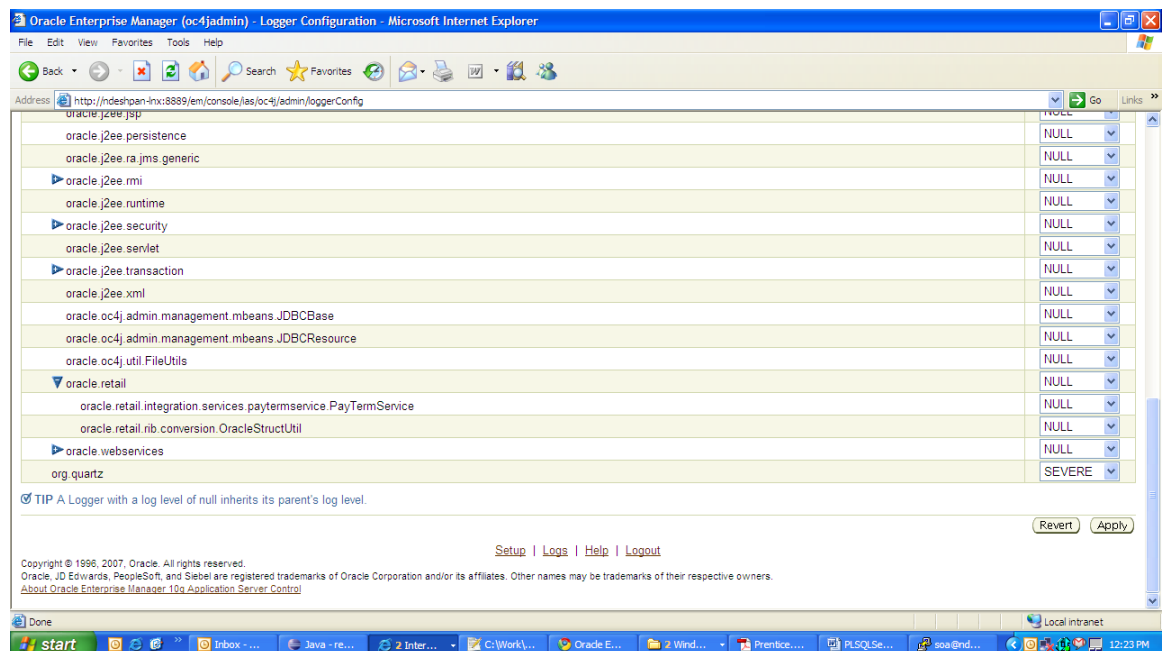
3. Click on the Administration tab.



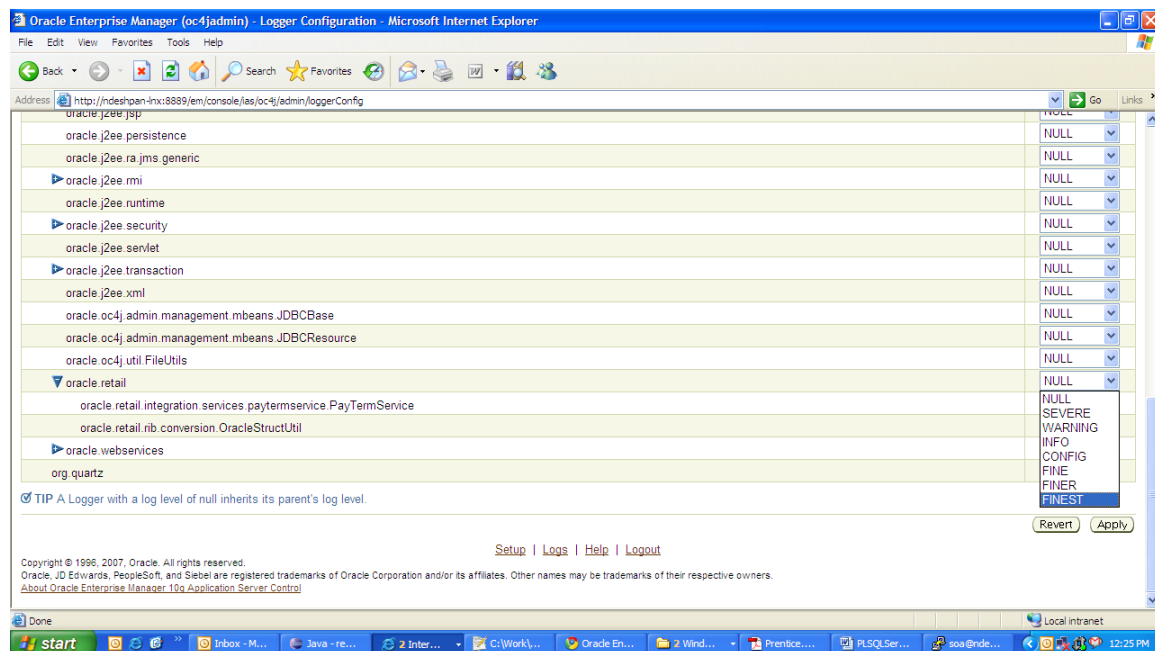
4. Click on the "Go to Task" link for Logger Configuration



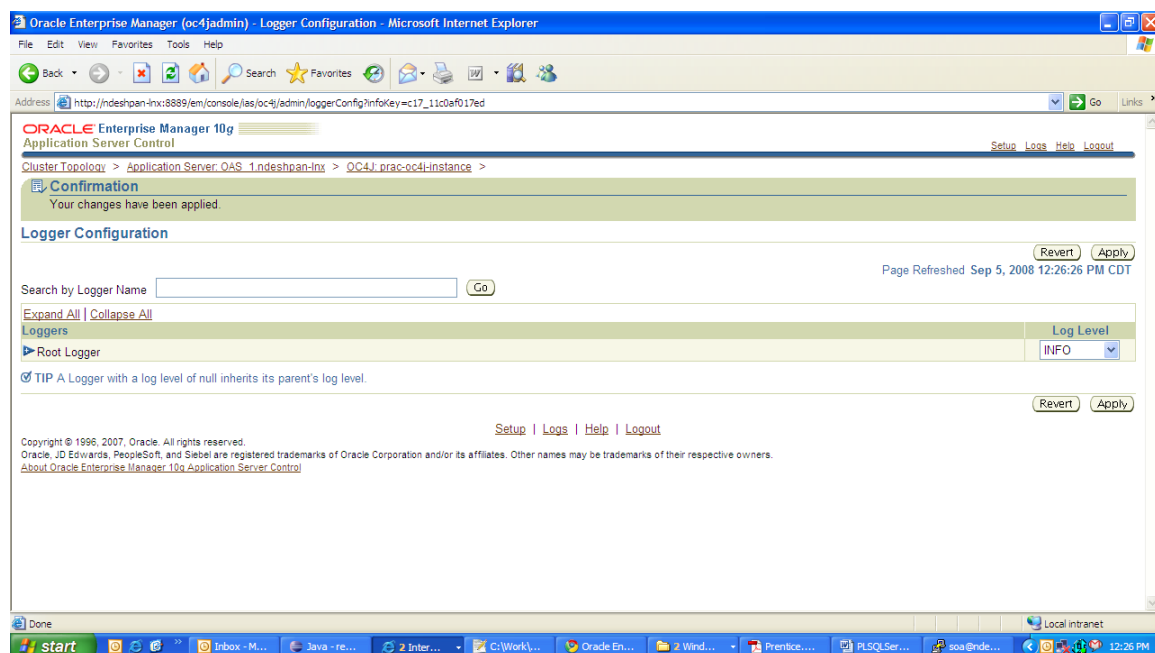
5. Expand the Root Logger. You would see *oracle.retail*.



6. Change the log level for the loggers by selecting the log level from the dropdown on the extreme right.



7. Click the Apply button when finished.



RAC Support for WebServices

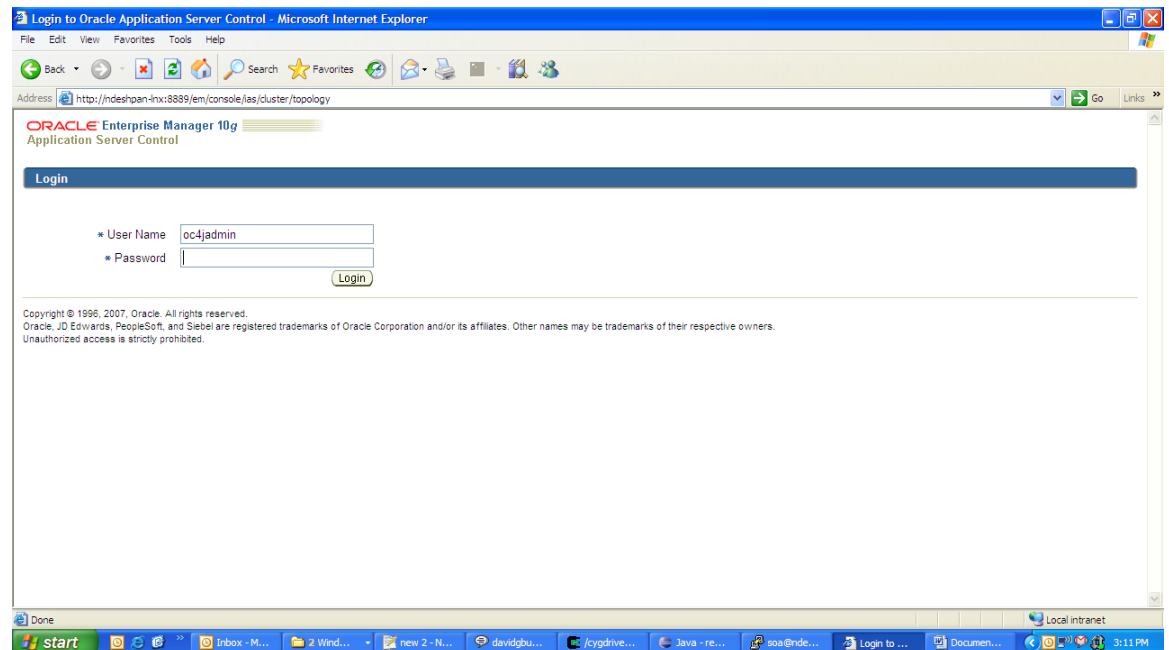
At runtime the <app>-service application uses the database to fetch data from <app>. The <app> tables can be hosted by an Oracle RAC database providing high availability and scalability for these tables.

While creating the JDBC Data Source for the application the RAC URL can be specified. Use the thin jdbc driver.

For example,

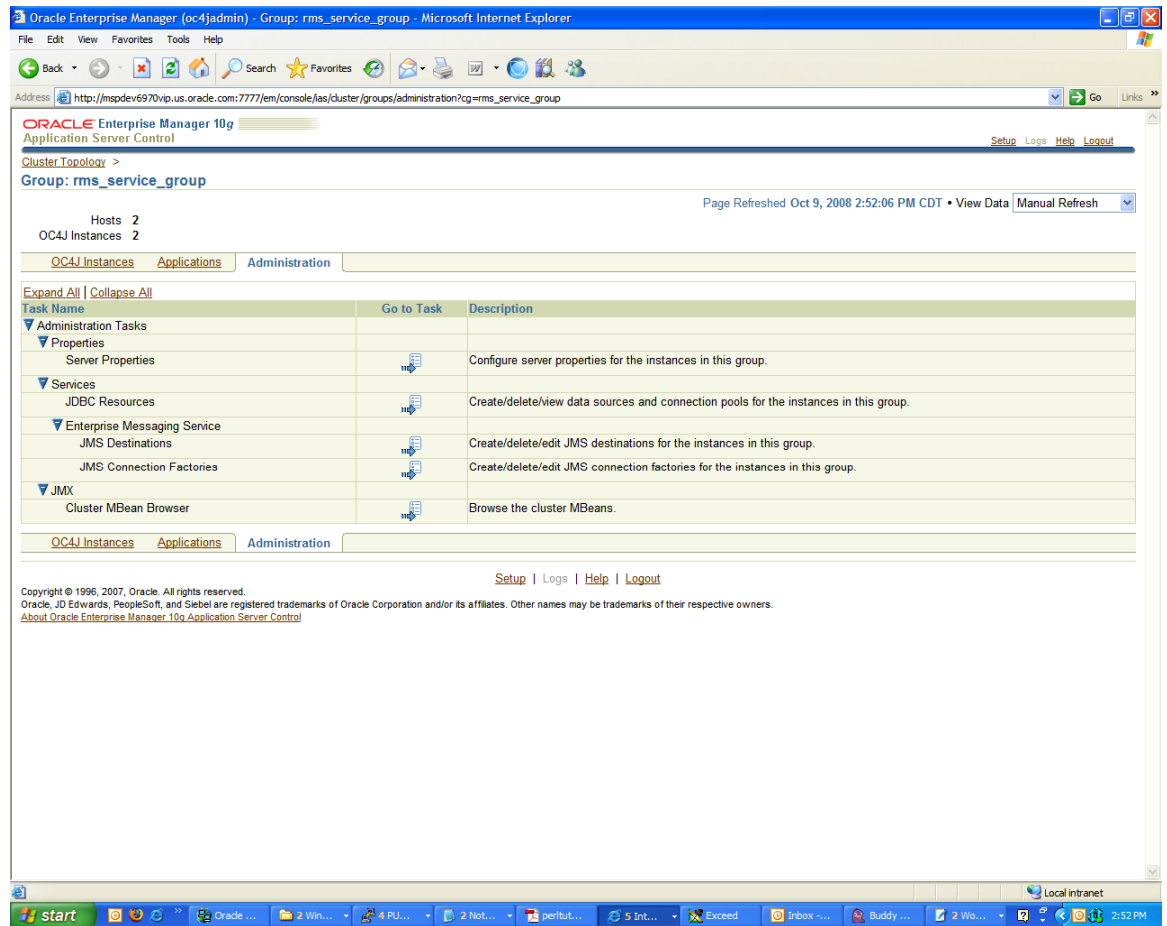
```
jdbc:oracle:thin:@(DESCRIPTION =(ADDRESS_LIST =(ADDRESS = (PROTOCOL = TCP)(HOST = mspvip72)(PORT = 1521))(ADDRESS = (PROTOCOL = TCP)(HOST = mspvip73)(PORT = 1521))(LOAD_BALANCE = yes))(CONNECT_DATA =(SERVICE_NAME = dvolr02)))
```

1. Login to the enterprise manager for the OAS where you would like to deploy the service

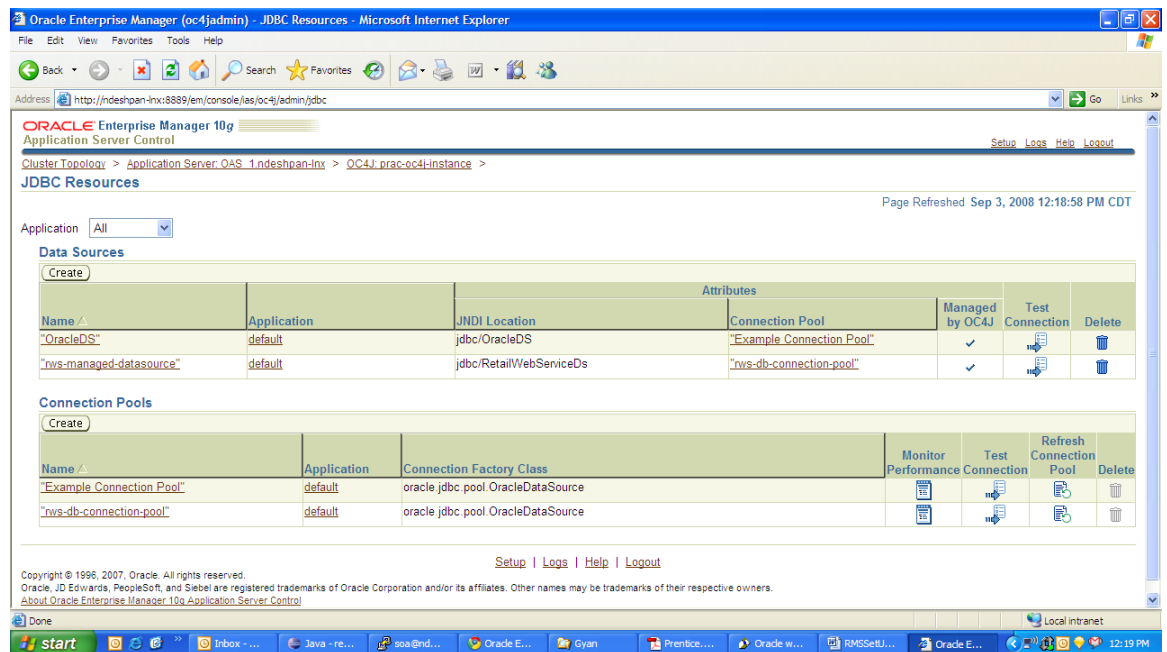


2. Click on the group name you want to create the JDBC datasource on. For example, <app>_service_group.

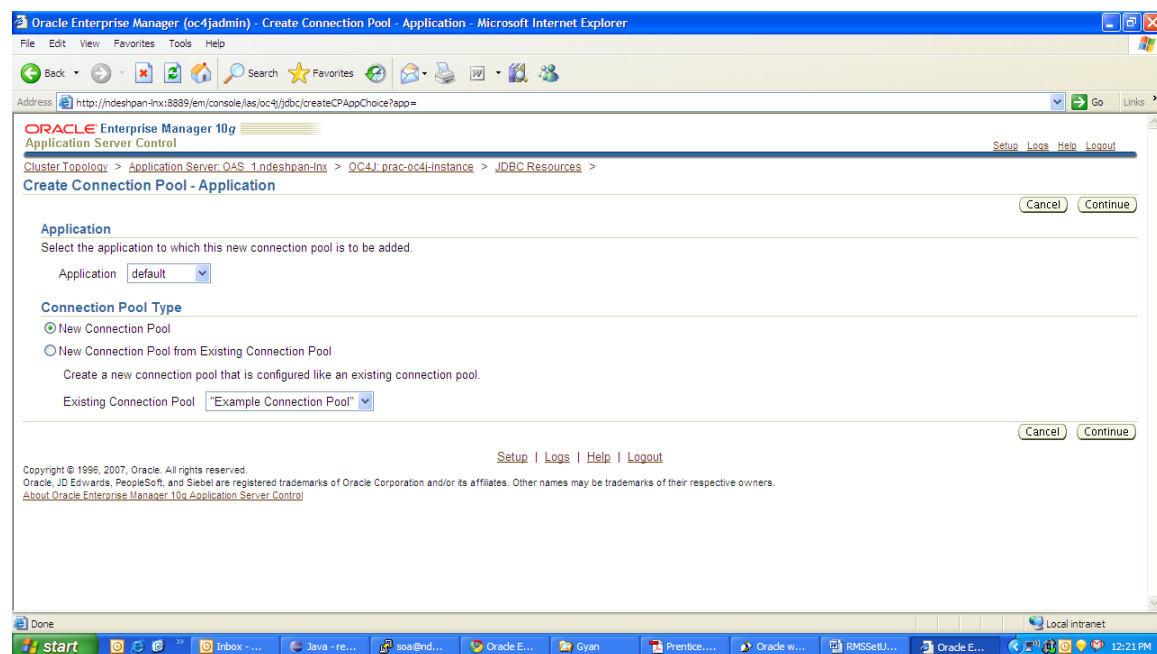




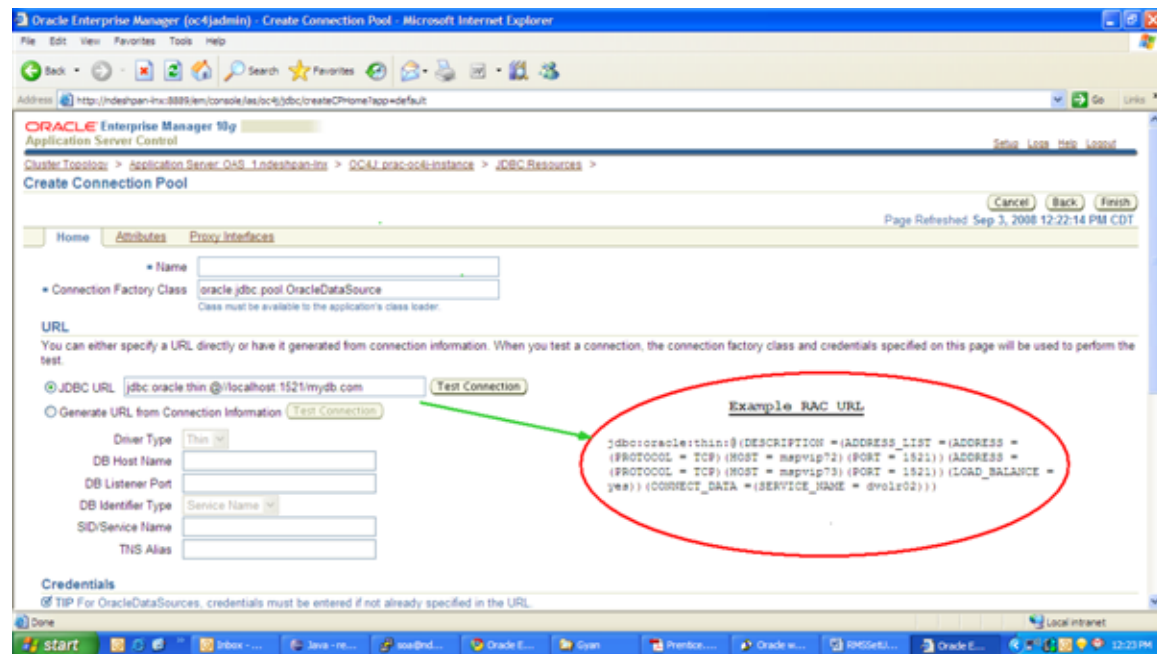
4. Click on the “Go to Task Link” for JDBC resources under Services.



5. Click on the create button under Connection Pools.



6. Keep the default values and click Continue.

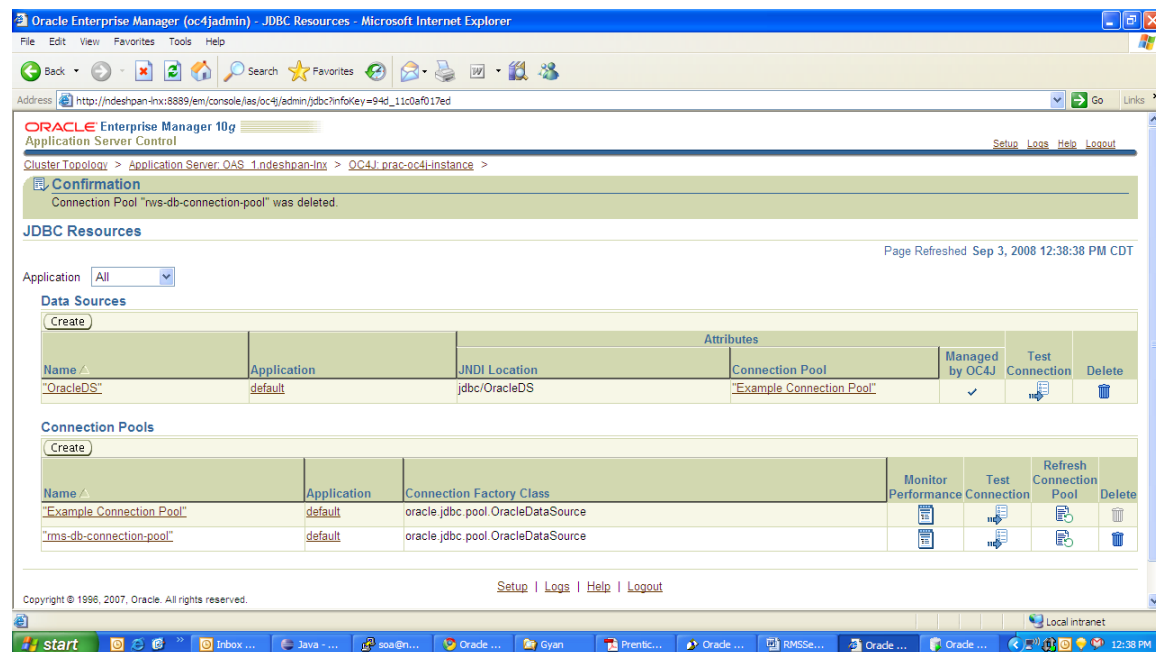


7. Give a name to the connection as **<app>-db-connection-pool**. Connection Factory Class should be oracle.jdbc.pool.OracleDataSource. JDBC URL should contain the values for the correct database.

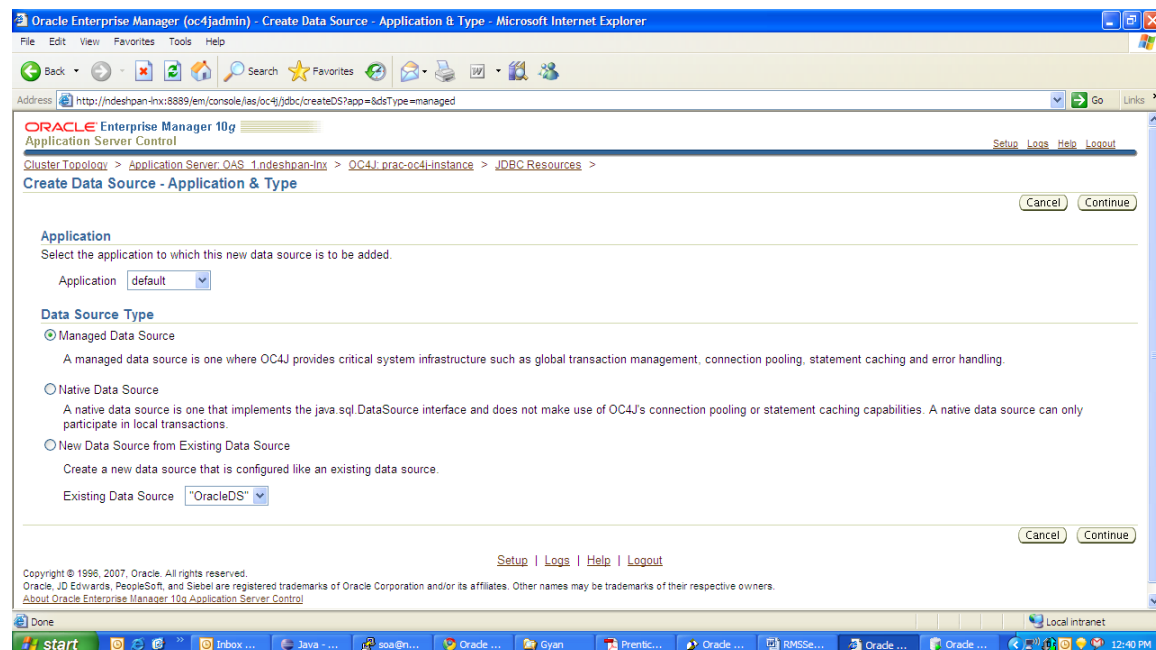
If the database is a RAC database the URL should be in the following format:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=
TCP)(HOST=<host>)(PORT=<port>))(ADDRESS=(PROTOCOL=TCP)(HOST=
<host>)(PORT=<port>))(LOAD_BALANCE=yes))(CONNECT_DATA=(SERVICE_NAME=
<sid>)))
```

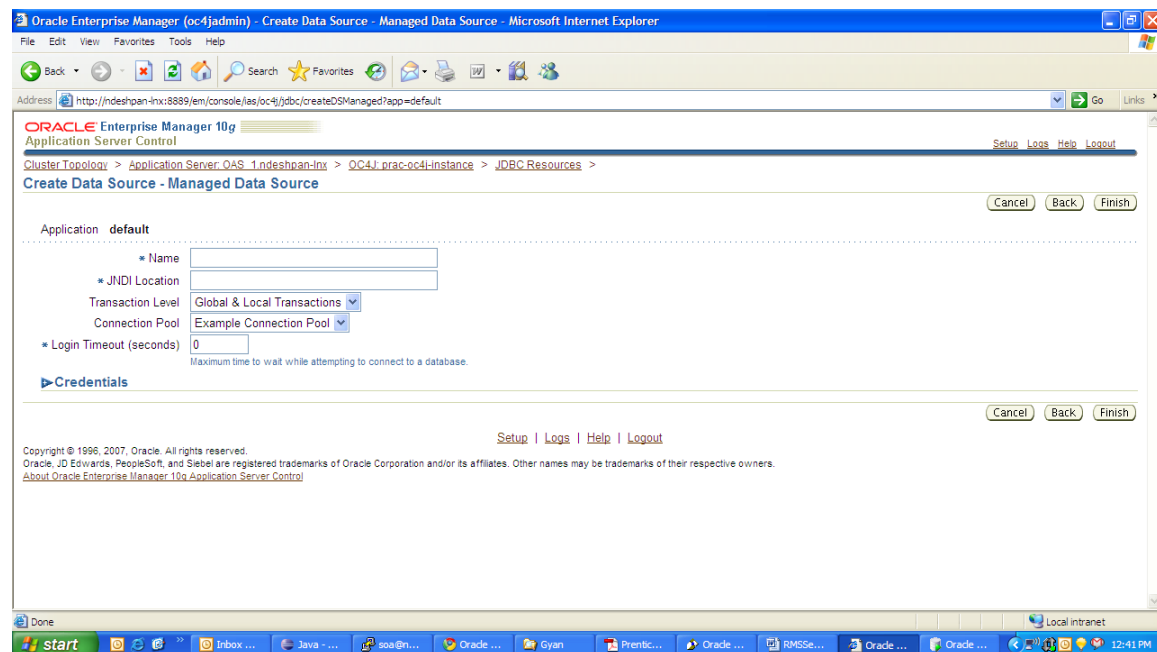
8. Put in the values for username and password under credentials
9. Click the Finish button



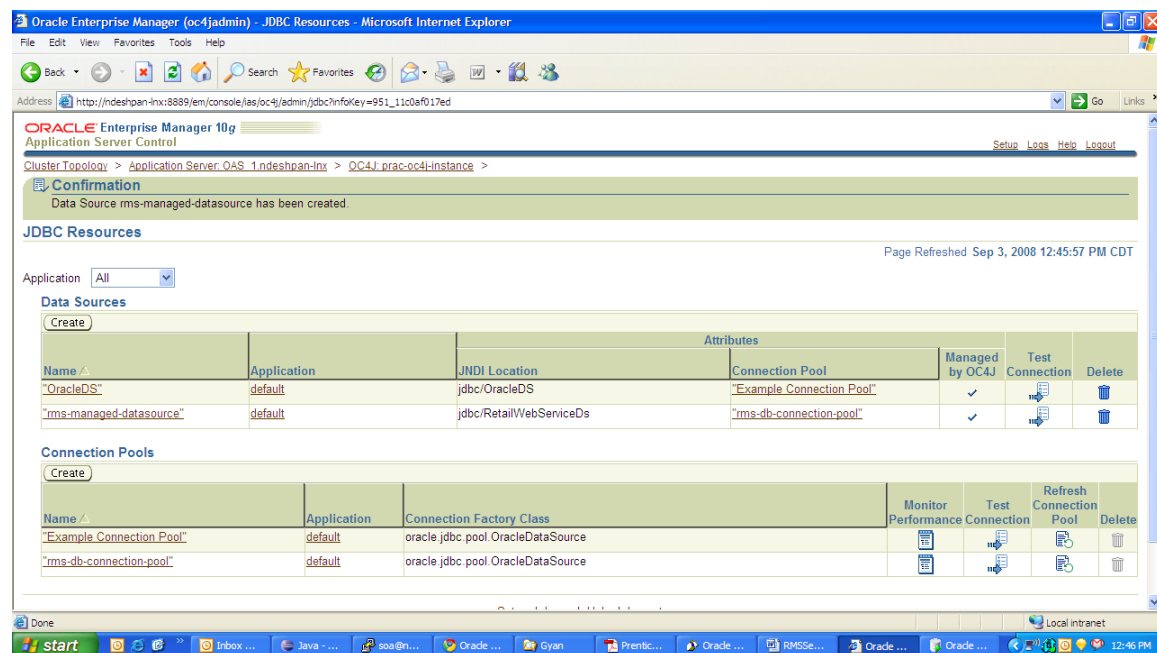
10. Click on the create button under Data Sources.



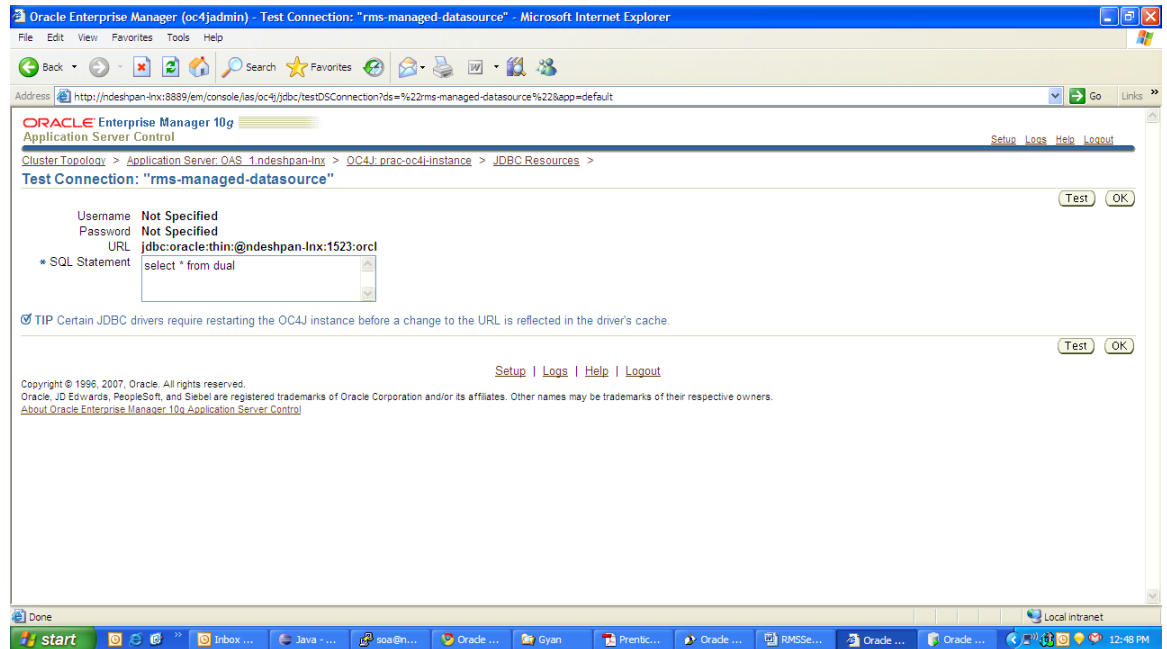
11. Application should be default. Click the radio button for Managed Data Source and click Continue.



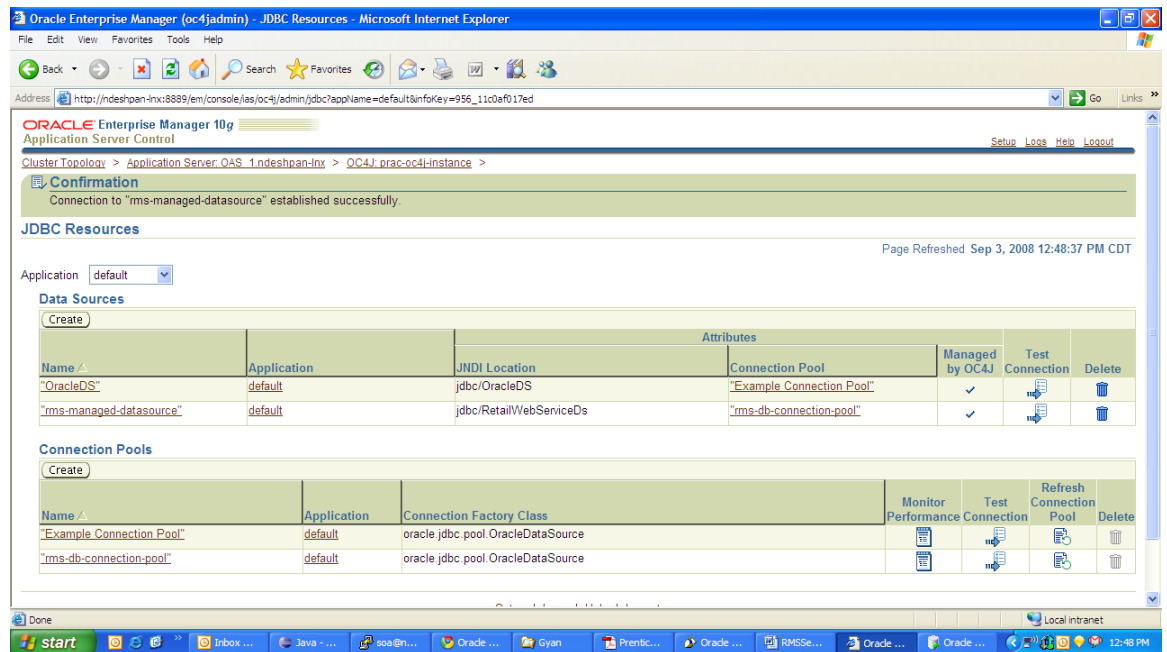
12. Put in the name for the data source as **<app>-managed-datasource**. The JNDI Location must be **jdbc/RetailWebServiceDs**. Select the connection pool name that you created earlier (**<app>-db-connection-pool**) from the Connection Pool drop down. Click the Finish button.



13. Click on the Test Connection link for the **<app>-managed-datasource** under Data Sources.

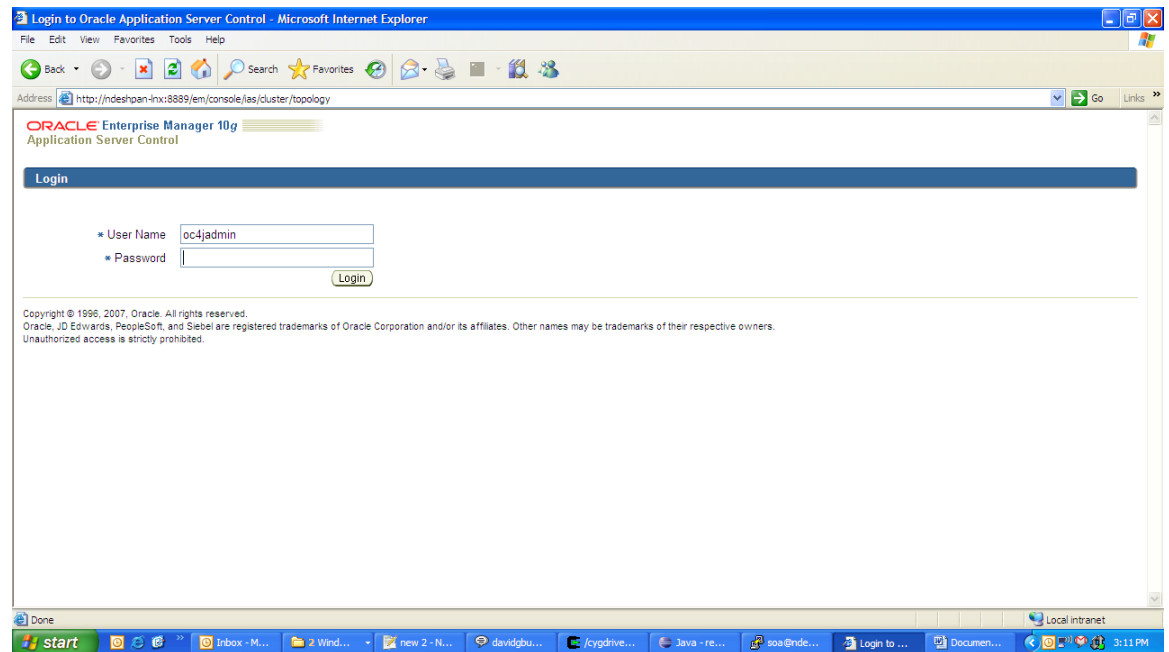


14. Click on the Test button



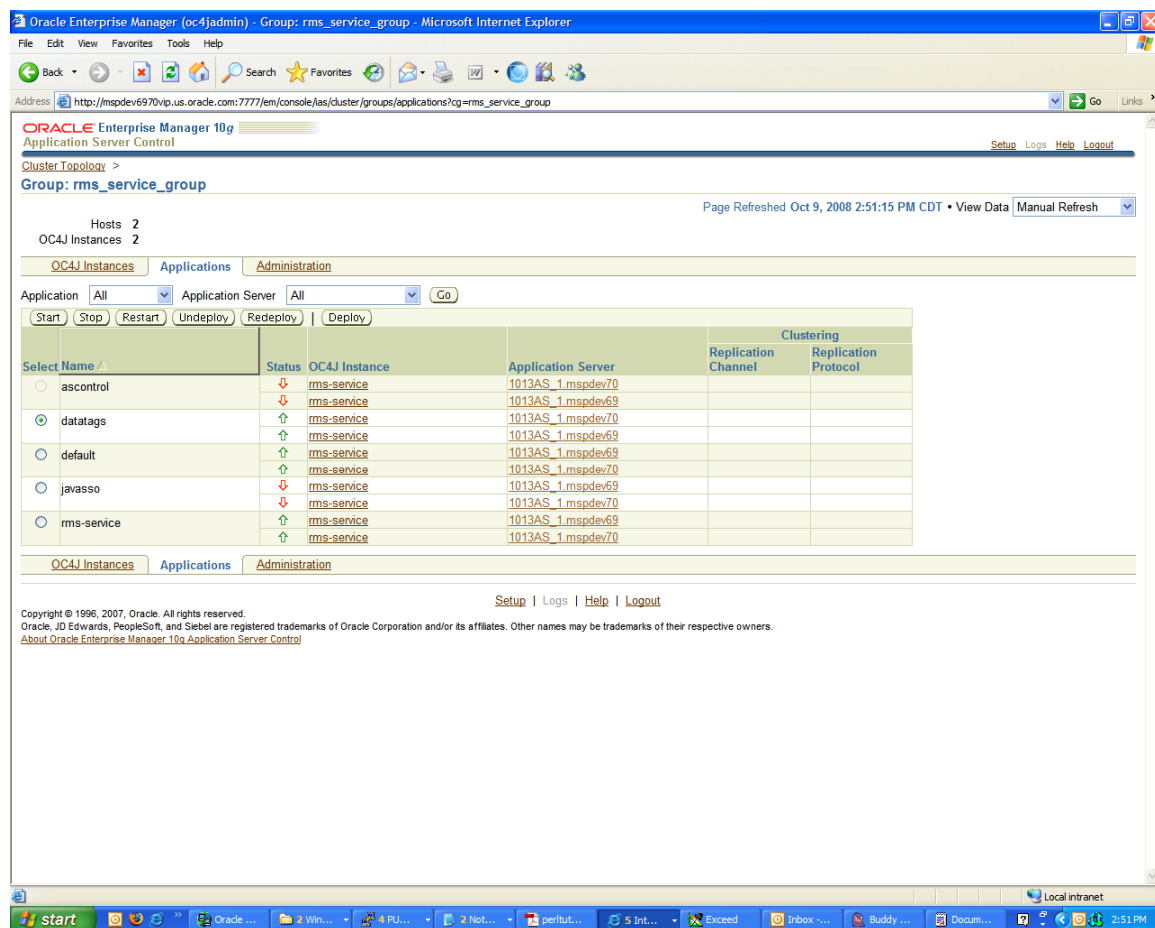
OAS Cluster Support for Web Services

1. Login to the enterprise manager for the OAS where you would like to deploy the service

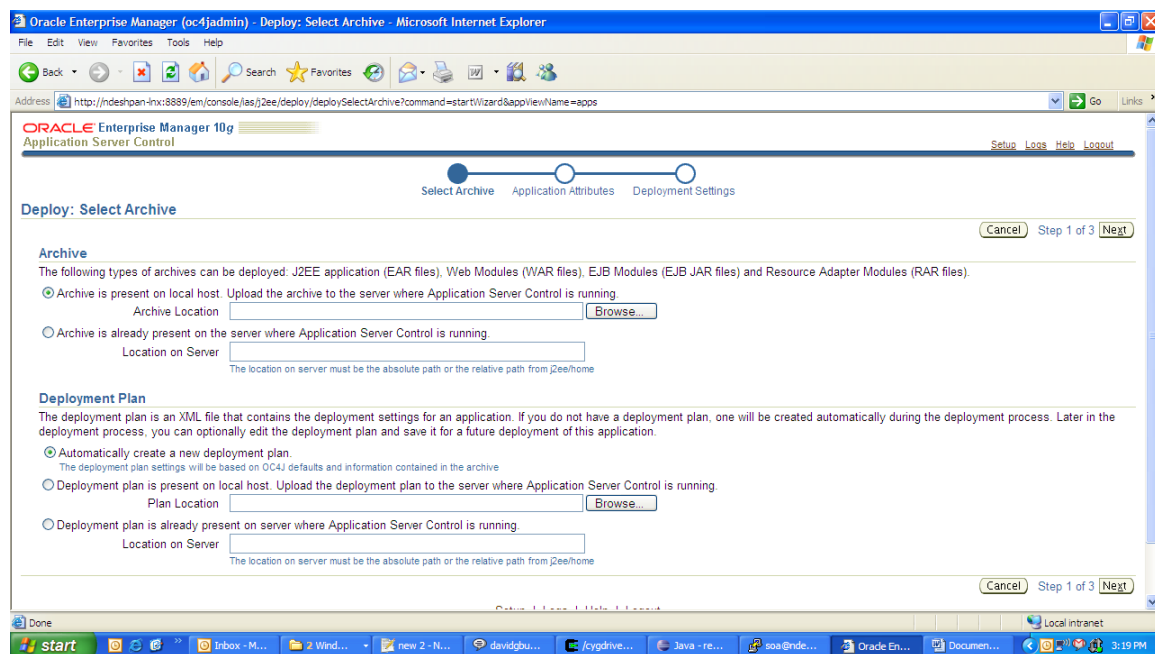


2. Click on the group name you want to deploy the service on. For example, <app>_service_group.

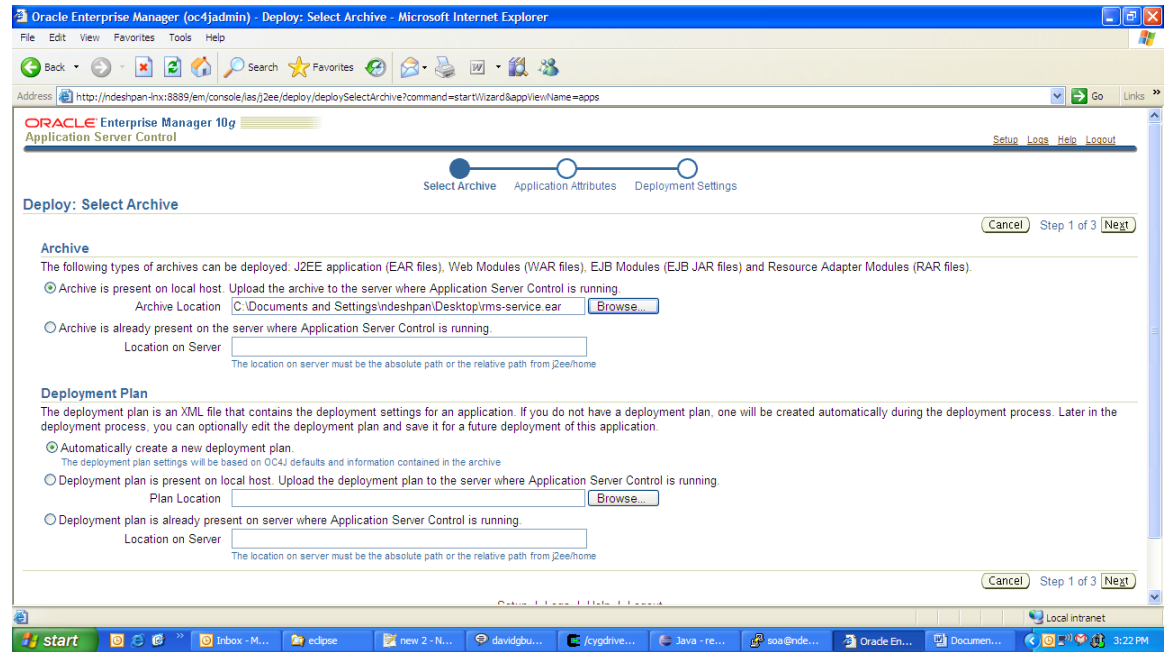




4. Click the Deploy button.

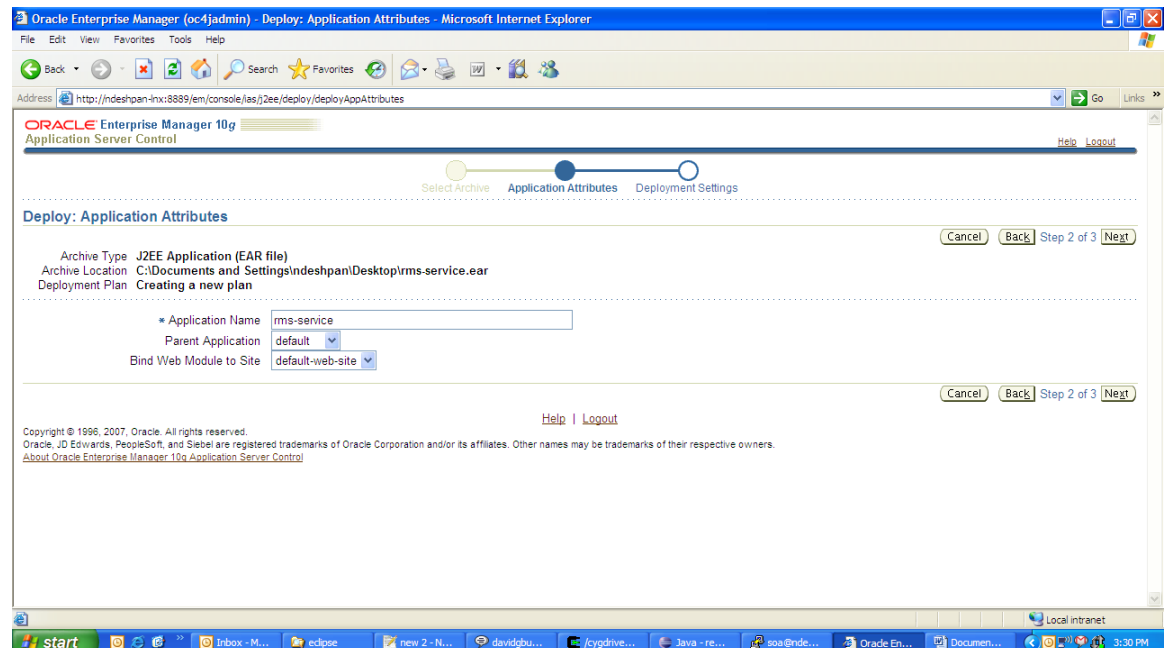


5. If the **<app>-service.ear** file is present on the local host, check that radio button and browse for the file. If it is not present, specify the full path of the ear on the machine where the server is running

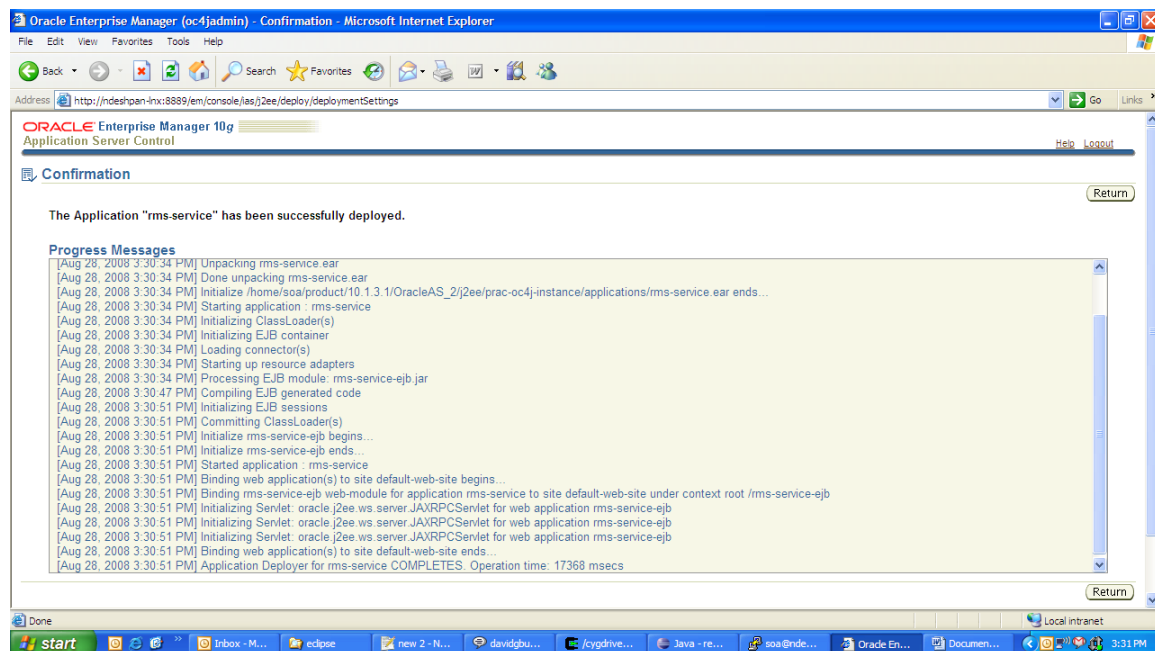


6. Click Next.

7. In the Application Name enter **<app>-service** and click Next.



8. Click the Deploy button. This is the final deploy screen when deployment is successful.



Appendix: RMS DB Installer Screens

You need the following details about your environment for the installer to successfully patch the RMS database schema. Depending on the options you select, you may not see some screens or fields. Starting with the RMS 13.0.1 release, the RMS database schema installer also includes the option to install the database schema objects for the ReIM and Allocation products.

Screen: Full Install or Patch Option

The screenshot shows a window titled "Oracle Retail Merchandise Operations Management" with the Oracle logo. Below the logo is a section titled "Full Install or Patch Option". The text inside the window explains the installer's capabilities: "This installer can create the full 13.0.1 baseline schema or apply a patch." It then lists three options: "Full: Run the bundled scripts to create the 13.0.1 baseline schema.", "Patch: Run a user-provided patch that was downloaded separately.", and "Full+Patch: Run both of the above options to create a new schema up to a certain patch level." Below this text, there is a "Select your choice" label and three radio buttons: "Full", "Patch" (which is selected), and "Full+Patch". At the bottom of the window, there are four buttons: "Cancel", "Back", "Next", and "Install".

Fields on this screen:

Field Title	Full or Patch
Field Description	The installer can create the full baseline schema, apply a patch, or do both. For the RMS 13.0.2 patch release, select Patch
Example	Patch

Screen: Product Selection

Oracle Retail Merchandise Operations Management

ORACLE®

Product Selection

Please select which product or products you would like to install.

RMS/RPM ☒

ReIM ☐

Allocation ☐

Cancel Back Next Install

Fields on this screen:

Field Title	Product Selection
Field Description	By default the RMS database schema installer creates the database objects for RMS/ReSA/RTM and RPM. Optionally, the database objects for ReIM and/or Allocation may be installed at the same time or later.
Example	RMS/RPM

Screen: Database Schema Details

Oracle Retail Merchandise Operations Management

ORACLE

RMS Database Schema Details

Please provide information on a pre-existing database user for this RMS installation. The installer will authenticate as this user and create the RMS database objects.

RMS schema

RMS schema password

RMS Oracle SID

Cancel Back Next Install

Fields on this screen:

Field Title	RMS schema
Field Description	Provide the RMS database user here. The installer logs into the database as this user to create the RMS schema. This user must already exist in the database when the RMS database schema installer is run.
Example	RMS
Field Title	RMS schema password
Field Description	Database password for the RMS schema Owner.
Field Title	RMS Oracle SID
Field Description	Oracle system identifier for the database where RMS will be installed.
Example	rmsdb

The database settings provided are validated by the installer when you advance to the next screen.

Screen: Apply an RMS DB Patch

Oracle Retail Merchandise Operations Management

ORACLE

Apply an RMS DB Patch

You have chosen to apply a patch. The installer will run the rmsdbstart.sql script provided with the patch you have downloaded separately.

The directory provided here must contain an rmsdbstart.sql script

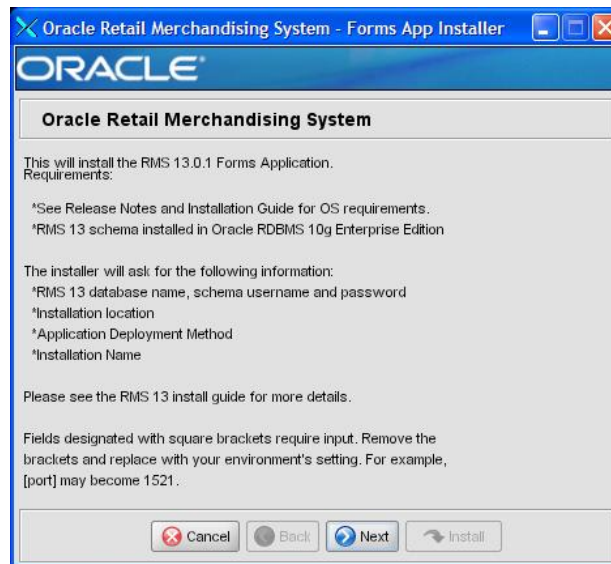
Patch Directory

Fields on this screen:

Field Title	Patch Directory
Field Description	This page appears if the Patch or Full+Patch option is selected on the earlier Full Or Patch screen. Provide the directory path to the downloaded patch you want to install. The installer runs only the patch you provide. Note: The directory you choose must contain an rmsdbstart.sql file.
Example	/path/to/mom-dbpatch/for all 13.0.x patches

Appendix: RMS Application Installer Screens

Screen: Welcome



There are no fields on this screen. The Welcome screen contains information about the RMS Application Installer and prerequisites.

Screen: Data Source Details

Oracle Retail Merchandising System - Forms App Installer

ORACLE®

Data Source Details

Please enter the RMS 13 schema name and password.

RMS Schema Owner: RMSUSER

RMS Schema Password: *****

RMS Oracle Database: mydb

Buttons: Cancel, Back, Next, Install

Fields on this Screen:

Field Title	RMS Schema Owner
Field Description	This is the same username that was used during the RMS Database Schema Installer.
Example	RMS
Field Title	RMS Schema Password
Field Description	This is the same password that was used during the RMS Database Schema Installer.
Field Title	RMS Oracle SID
Field Description	This is the same Oracle SID that was used during the RMS Database Schema Installer.
Example	Rmsdb

Screen: Application Installation Directory
Fields on this Screen:

Field Title	Application Installation Directory
Field Description	The location where the RMS Application (toolset, forms and reports) will be installed. The RMS \$MMHOME path will be a subdirectory of this directory, named "base".
Example	/u01/oracle/retail

Screen: Installation Name

Oracle Retail Merchandising System - Forms App Installer

ORACLE

Installation Name

Please enter the Installation Name. The Installation Name is a unique name that will be used to identify this installation of RMS. This name will be included in the RMS Application URLs and reported by the Oracle Configuration Manager.

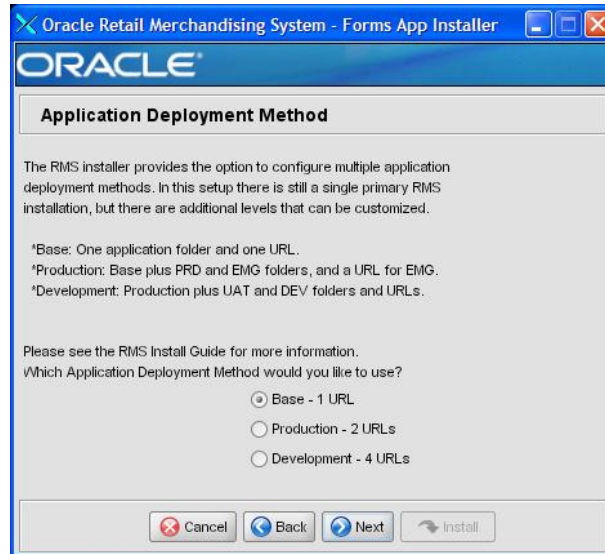
Installation Name

Cancel Back Next Install

Fields on this Screen:

Field Title	Installation Name
Field Description	This value is used in conjunction the Oracle Configuration Manager (OCM). It gives the installation a unique name so the OCM can identify different installations of RMS in the same Oracle Application Server instance.
Example	rms13inst

Screen: Application Deployment Method



Fields on this Screen:

Field Title	Which Environment Deployment Method would you like to use
Field Description	Select the Application Deployment Method you would like. Reference Appendix C for more information.
Example	Base

Screen: Install OCM**Fields on this Screen:**

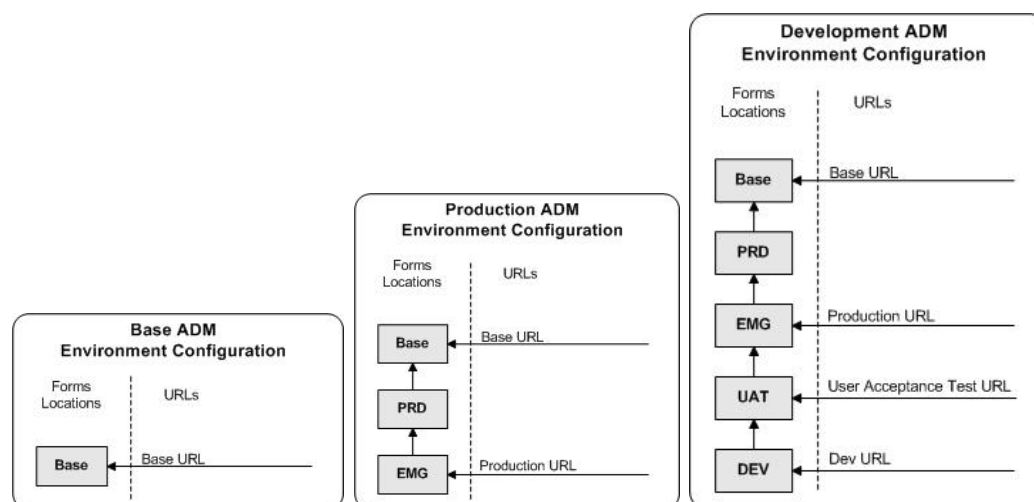
Field Title	Install OCM
Field Description	Install OCM checkbox. This field gives you the option to install or not install OCM. The default option is checked. You should choose to uncheck this and not install OCM for this patch,
Example	Checked/False

Appendix: Application Deployment Method

The RMS installer provides the option to configure multiple application deployment methods. This is a setup where there is still a single primary RMS installation, but there are additional levels where customization can occur. This means multiple URLs configured in formsweb.cfg with cascading FORMS_PATH values.

The installer provides three choices for cascading environment configuration:

- **Base:** A standard RMS base installation with one application installation folder, and one URL.
- **Production:** Base plus two additional forms directories for PRD and EMG and an additional URL for EMG.
- **Development:** Production plus two additional forms directories for UAT and DEV and two additional URLs for UAT and DEV.



The above diagrams show how the application deployment method environment configurations are set up in the forms installation.

The installer creates the set of URLs, and empty directories for the other environments. All forms installed by this installer are placed in the “Base” environment. We are simply laying down the structure for customizations and fixes that the user can make after installation is complete.

Appendix: Common Installation Errors

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

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 or JDK. 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.

Unresponsive Country and Currency Drop-Downs

Symptom:

In GUI mode, when you click on the drop-down list selection for the primary country or currency, the list does not appear, and this message appears in the console window:

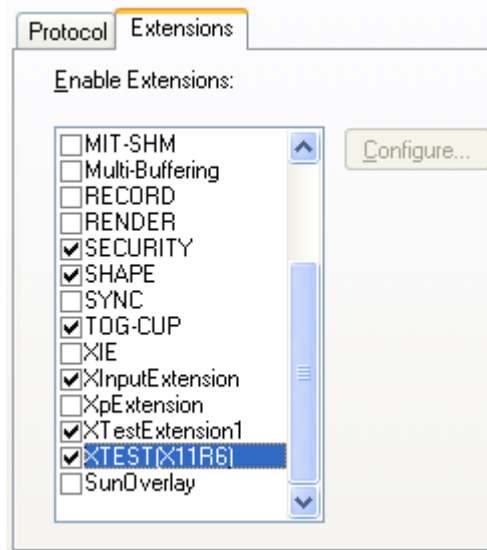
```
XTEST extension not installed on this X server: Error 0
```

Solution:

To run the RMS installer in GUI mode you must have the XTEST extension enabled in your X server.

Enabling XTEST in Exceed:

1. Open Xconfig to edit Exceed configuration
2. Go to the X Server Protocol settings
3. Click on the Extensions tab
4. Make sure that the XTEST extension is selected:



5. Restart the X Server and re-run the RMS installer.

ConcurrentModificationException in Installer GUI

Symptom:

In GUI mode, the errors tab shows the following error:

```
java.util.ConcurrentModificationException
    at
    java.util.AbstractList$Itr.checkForComodification(AbstractList.java:448)
        at java.util.AbstractList$Itr.next(AbstractList.java:419)
... etc
```

Solution:

You can ignore this error. It is related to third-party Java Swing code for rendering of the installer GUI and does not affect the retail product installation.

FRM-30064: Unable to parse statement select while compiling fm_ituda.fmb

Symptom:

When running the application installer you get the following error:

```
FRM-30064: Unable to parse statement select vu.uda_desc, vu.uda_id from v_uda vu
where get_primary_lang = get_user_lang and vu.display_type = 'LV' union all
select nvl(t.translated_value, vu.uda_desc), vu.uda_id from tl_shadow t, v_uda
vu where get_primary_lang != get_user_lang and upper(vu.uda_desc) = t.key(+) and
get_user_lang = t.lang(+) and vu.display_type = 'LV' order by 1.
ORA-28112: failed to execute policy function
Record Group RG_UDA_LOV
Form: FM_ITUDALST
```

FRM-30085: Unable to adjust form for output.

Form not created

Solution:

Disable the database filter policies by running drop_filter_policy.sql, run the application installer again and then run add_filter_policy.sql. Both files can be located with the database installer.

ORA-04031 (unable to allocate memory) error during database schema installation

Symptom:

When running the database schema installer you get the following error one or more times:

```
[ora:sqlplus] alter package
[ora:sqlplus] *
[ora:sqlplus] ERROR at line 1:
[ora:sqlplus] ORA-04031: unable to allocate 92120 bytes of shared memory ("shared
[ora:sqlplus] pool","unknown object","PL/SQL MPCODE","BAMIMA: Bam Buffer")
```

Solution:

There was not enough available memory in the shared pool on the database at the time of compilation. There are several choices to get past this error:

- Log into the database and attempt to recompile invalid objects in the database schema. Subsequent attempts to compile the same object(s) can be successful.
- Have a DBA increase the shared pool size on the database and re-run the installer from scratch on a new schema user.

X Error of failed request: BadWindow (invalid Window parameter)

Symptom:

When compiling forms during the application installation you receive this error one or more times:

```
X Error of failed request: BadWindow (invalid Window parameter)
Major opcode of failed request: 18 (X_ChangeProperty)
Resource id in failed request: 0x1800002
Serial number of failed request: 432
Current serial number in output stream: 437
```

Solution:

This error occurs when there are too many requests made to the X server. If this error occurs manually recompile the form.

Example:

```
frmpcmp.sh userid=$UP module_type=form module=FORM_OR_MENU
```

SP2-0310: unable to open file Error During Patch Mode

Symptom:

When using the installer to apply a database patch, this error message appears repeatedly:

```
[ora:sqlplus] SP2-0310: unable to open file "pricing/dbcs/0021_rpm_promo_dtl.sql"
```

Solution:

SQLPATH is not set properly. Review the instructions for running the installer. SQLPATH must contain the patch directory.

Example:

```
SQLPATH=/path/to/mom-dbpatch/13.0.1/rms; export SQLPATH
```

Appendix: Single Sign-On Resource Access Descriptors

Oracle Forms applications such as RMS use database connections for authentication and authorization purposes. Oracle Single Sign-On, however, uses the Oracle Internet Directory (OID) user ID and password for this purpose. The Forms framework maps OID user IDs to database connections via information stored in Resource Access Descriptors (RADs). A user will have one RAD for each application accessed. RADs may be created by an administrator or by an LDIF script. Depending on the Oracle Internet Directory and/or the formsweb.cfg configuration, RADs may also be created by the user.

A user is prompted for the database connection information whenever formsweb.cfg file specifies ssoMode = true and createDynamicResources = true for an application and no valid RAD exists. RADs may become invalid when passwords have expired or have been changed.

RADs may be created by administrators or users via the Delegated Administration Services application. Note: users can create new RADs only if one or more RADs already exist.

RADs may be created and via LDIF scripts as well. Documentation on this may be found in the Metalink document number 244526.1.

Appendix: Data Conversion

Install Data Conversion Scripts

1. The following directories need to be created:
INSTALL_DIR/external/scripts
INSTALL_DIR/external/data
INSTALL_DIR/external/logs
2. Change directories to DB_PATCH_DIR/mom-dbpach/13.0.1/rms/data_conversion_scripts/external_table_scripts.
3. Copy the external directory to INSTALL_DIR/external/scripts.
> cp -R * INSTALL_DIR/external/scripts
4. Change directories to DB_PATCH_DIR/mom-dbpach/13.0.1/rms/data_conversion_scripts/data_load_scripts.
5. Copy the external directory to INSTALL_DIR/external/scripts.
> cp -R * INSTALL_DIR/external/scripts
6. Log into sqlplus as SYSTEM and run the following commands:
SQL> create or replace directory rms13dev_ext_data as
`INSTALL_DIR/external/data`;
SQL> create or replace directory rms13dev_ext_logs as
`INSTALL_DIR/external/logs`;

Note: You need to replace INSTALL_DIR with your INSTALL_DIR and you can rename the external data and log directory.

Note: The user that creates these directories owns them.

Note: The data and logs directories should be chmoded 777.

7. Log into sqlplus as SYSTEM and grant access to them by running the following commands:
SQL> grant read on directory rms13dev_ext_data to public;
SQL> grant read, write on directory rms13dev_ext_logs to public

Appendix: Installation Order

This section provides a guideline as to the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use some, but not all, of the applications the order is still valid less the applications not being installed.

1. Oracle Retail Merchandising System (RMS), Oracle Retail Trade Management (RTM), Oracle Retail Sales Audit (ReSA)
2. Oracle Retail Service Layer (RSL)
3. Oracle Retail Extract, Transform, Load (RETL)
4. Oracle Retail Active Retail Intelligence (ARI)
5. Oracle Retail Warehouse Management System (RWMS)
6. Oracle Retail Allocation
7. Oracle Retail Invoice Matching (ReIM)
8. Oracle Retail Price Management (RPM)

Note: During installation of RPM, you are asked for the RIBforRPM provider URL. Since RIB is installed after RPM, make a note of the URL you enter. If you need to change the RIBforRPM provider URL after you install RIB, you can do so by editing the `jndi_provider.xml` file.

9. Oracle Retail Central Office (ORCO)
10. Oracle Retail Back Office (ORBO) or Back Office with Labels and Tags (ORLAT)
11. Oracle Retail Store Inventory Management (SIM)

Note: During installation of SIM, you are asked for the AIP provider URL. Since AIP is installed after SIM, make a note of the URL you enter. If you need to change the AIP provider URL after you install AIP, you can do so by editing the `jndi_providers_ribclient.xml` file.

12. Oracle Retail Predictive Application Server (RPAS)
13. Oracle Retail Merchandise Financial Planning (MFP)
14. Oracle Retail Size Profile Optimization (SPO)
15. Oracle Retail Assortment Planning (AP)
16. Oracle Retail Item Planning (IP)
17. Oracle Retail Item Planning configured for COE (IPCOE)
18. Oracle Retail Advanced Inventory Planning (AIP)
19. Oracle Retail Integration Bus (RIB)
20. Oracle Retail Point-of-Service (ORPOS)
21. Oracle Retail Mobile Point-of-Service (ORMPOS)
22. Oracle Retail Analytics Applications
23. Oracle Retail Data Warehouse (RDW)
24. Oracle Retail Workspace (ORW)