Oracle® Retail Active Retail Intelligence

Installation Guide
Release 13.1

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ORACLE

Oracle® Active Retail Intelligence Installation Guide, Release 13.1

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Value-Added Reseller (VAR) Language

Oracle Retail VAR Applications

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Contents

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 Active Retail Intelligence Release 13.1 documentation set:

- *Oracle Retail Active Retail Intelligence Online Help*
- *Oracle Retail Active Retail Intelligence Operations Guide*
- *Oracle Retail Active Retail Intelligence Release Notes*
- *Oracle Retail Active Retail Intelligence User Guide*

See also:

- *Oracle Retail Merchandising Implementation 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.

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Preinstallation Tasks

Note: ARI can be upgraded from release 13.0.2 to release 13.1. The upgrade process is performed manually following installation of ARI 13.1. See the *Oracle Retail Upgrade Guide* (Doc ID 837368.1) at My Oracle Support (formerly MetaLink).

The *Oracle Retail Upgrade Guide* describes the approach that this Oracle Retail application takes for the upgrading process, as well as this product's upgrade assumptions and considerations.

Check Database Server Requirements

General Requirements for a database server running ARI include:

Supported on:	Versions Supported:
Database Server OS	OS certified with Oracle Database 11gR1 Enterprise Edition. Options are: ▪ Oracle Enteprise Linux 5 Update 2 (OEL 5.2) for Linux x86-64 ▪ AIX 6.1 TL1
Database Server	Oracle Database 11g Release 1 Enterprise Edition (minimum 11.1.0.7 patchset required) with the following patches and components: Patches: ▪ 7036284 (LOADJAVA RUN IN A DV ENVIRONMENT CANNOT LOAD CLASSES WITH A NAME LONGER THAN 128) ▪ 7378322 (ORA-00600: internal error code, arguments: [6704], [1], [532241], [532237]) ▪ 6800649 – (AIX only) when non-oracle user uses client utilities sqlldr/sqlplus/impdp/expdp, core dump is generated. Need to "relink all" after applying the patch RAC only ▪ 7697360 ORA-00600: internal error code, arguments: [k2vcbk_6], Database crashed during transaction recovery. Components: ▪ Oracle Database 11g ▪ Oracle Partitioning ▪ Oracle Net Services ▪ Oracle Call Interface (OCI) ▪ Oracle Programmer ▪ Oracle XML Development Kit ▪ Examples CD (Formerly the companion CD) ANSI compliant C compiler (certified with OS and database version) Perl compiler 5.0 or later x-Windows interface

Check Application Server Requirements

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

Supported on:	Versions Supported:
Application Server OS	OS certified with Oracle Application Server 10g version 10.1.2.3. Options are: ▪ Oracle Enteprise Linux 5 Update 2 (OEL 5.2) for Linux x86-64 ▪ AIX 6.1 TL1
Application Server	Oracle Application Server Forms and Reports 10g version 10.1.2.3 Patches: ▪ 7379122 MLR ON TOP OF 10.1.2.3 FOR CPUOCT2008

Sizing factors and other suggestions to factor into hardware configuration of application server include:

- ~3 GB Free disk space for OAS installation
- ~1 GB Free disk space for ARI forms, reports, gif files and help files.

Verify Single Sign-On

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

Check Web Browser and Client Requirements

General requirements for client running ARI include:

Requirement	Version
Operating system	Windows 2000 or XP
Display resolution	1024x768
Processor	Pentium processor (minimum 450 MHz)
Memory	minimum of 256 MB RAM
Networking	Intranet with at least 10Mbps data rate
Sun JRE Plug-in	1.4.2+
Microsoft Internet Explorer	6.0 and higher

Supported Oracle Retail Products

Requirement	Version
Oracle Retail Merchandising System (RMS)/Oracle Retail Trade Management (RTM)/Oracle Retail Sales Audit (ReSA)	13.1

Create a UNIX User Account to Install the Software

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 ARI software

Create Staging Directory for ARI Database Files

1. Create a staging directory for the ARI database installation software. There should be a minimum of 10 MB disk space available.
2. Copy the ari131dbserver.zip file from the CD/dbserverunix directory to the staging directory. This will be referred to as INSTALL_DIR for database installation tasks.
3. Change directories to INSTALL_DIR and extract the ari131dbserver.zip file.

Create Staging Directory for ARI Application Files

1. Create a staging directory for the ARI application software. There should be a minimum of 50 MB disk space available for the application installation files.
2. Copy the file ari131appserver.zip from the CD/appserverunix directory to the staging directory. This is referred to as INSTALL_DIR for application installation tasks.
3. Change directories to INSTALL_DIR and extract the file ari131appserver.zip.
4. Confirm that all scripts in INSTALL_DIR/forms10gr2_scripts have at least execute permissions for the oretail user and its group (r-xr-x---).

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RAC and Clustering

Oracle Retail Active Retail Intelligence has been validated to run in two configurations on Linux:

- Standalone OAS and Database installations
- Real Application Cluster Database and Oracle Application Server Clustering

The Oracle Retail products have been validated against a 11.1.0.7 RAC database. When using a RAC database, all JDBC connections should be configured to use OCI connections rather than THIN connections. It is suggested that when using OCI connections, the Oracle Retail products database be configured in the tnsnames.ora file used by the Oracle Application Server installations.

Clustering for Oracle Application Server 10.1.3 is managed as an Active-Active cluster accessed through a hardware Load Balancer. It is suggested that a VirtualHost be added to the OAS 10.1.3 reflecting the Virtual Server Name configured in the load balancer. It is also suggested that the OC4J select method be configured to prefer the use of local OC4J instances. The Oracle Retail products are currently not validated to be distributable at the application level in an OAS 10.1.3 cluster.

Clustering for Oracle Application Server 10.1.2 is managed as an Active-Active cluster accessed through a hardware Load Balancer. It is suggested that the Web Cache installation included with OAS 10.1.2 be configured to reflect all application server Mid-Tier installations. Validation has been completed utilizing a RAC 11.1.0.7 Oracle Internet Directory database with the OAS 10.1.2 cluster.

References for Configuration:

- Oracle® Application Server High Availability Guide 10g Release 3 (10.1.3) Part Number B15977-02
- Oracle® Application Server High Availability Guide 10g Release 2 (10.1.2) Part Number B14003-05
- Oracle Real Application Clusters Administration and Deployment Guide 11g Release 1 (11.1) Part Number B28254-07

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Database Installation Tasks

It is assumed that Oracle 11g release 2, with appropriate patches, has already been installed. If not, refer to "*Check Database Server Requirements*" in Chapter 1, "Preinstallation Tasks" before proceeding**.** Additionally, *INSTALL_DIR* in this section refers to the directory created in "Create Staging Directory for ARI Database Files", Chapter 1.

Although ARI can exist as a standalone application, these directions assume that it will be installed in an existing RMS database. If this is not the case, it is necessary to create a database per information in the section "Create the Database as Follows". Refer to Appendix A for additional information. Once that has been completed complete the remaining steps in this section.

If ARI will be installed in an existing RMS database proceed to section "Verify Existence of Oracle Packages" and complete the remaining steps.

Note: When running the scripts in this section, the following errors may be encountered:

ORA-00942: table or view does not exist
ORA-00955: name is already used by an existing object
ORA-01432: public synonym to be dropped does not exist
ORA-01434: private synonym to be dropped does not exist
ORA-01921: role name 'XXXXXXX' conflicts with another user or role
ORA-02289: sequence does not exist
ORA-04042: procedure, function, package, or package body does not exist
ORA-04043: object XXXXXXX does not exist
ORA-29807: specified operator does not exist
ORA-29833: indextype does not exist
ORA-29931: specified association does not exist

These errors can be ignored. The ORA errors are caused by dropping the objects the script is about to create.

Create the Database as Follows

1. Login to UNIX as the Oracle user; typically the user that owns the Oracle Database software.
2. Create the Oracle recommended OFA directory structure for the database (datafile directories, adump, bdump, cdump, arch, create, exp, pfile, udump, utl_file_dir).
3. Place an entry in the oratab file for the database and execute oraenv to set the ORACLE_SID and ORACLE_HOME environment variables.
4. Copy INSTALL_DIR/create_db/init102_release.ora to the $ORACLE_HOME/pfile directory and rename it to init${ORACLE_SID}.ora. Modify the parameters according to guidelines specified in this file.
5. Create a symbolic link from $ORACLE_HOME/pfile/init${ORACLE_SID}.ora to $ORACLE_HOME/dbs/init${ORACLE_SID}.ora.

6. Modify the INSTALL_DIR/create_db/crdb1.sql file. Refer to comments in this file regarding modifications that need to be made.
7. Login to SQL*Plus as SYSDBA and execute INSTALL_DIR/create_db/crdb1.sql. Review crdb1.log for errors and correct as needed.
8. Login to SQL*Plus as SYSDBA and execute INSTALL_DIR/create_db/crdb2.sql. Review crdb2.log for errors and correct as needed.
9. Login to SQL*Plus as SYSDBA and execute INSTALL_DIR/create_db/crdb3.sql. Review JServer.log, context.log and xdb_protocol.log for errors and correct as needed.
10. Configure the listener.

Verify the Existence of Oracle Packages

Confirm that the DBMS_SESSION, DBMS_RANDOM, DBMS_ALERT, DBMS_PIPE, DBMS_JOB, and UTL_SMTP packages exist. As sysdba, run the following query:

```
SQL>    select object_name
        from dba_objects
        where owner='SYS'
        and object_name in ('DBMS_SESSION','DBMS_RANDOM',
        'DBMS_ALERT','DBMS_PIPE','DBMS_JOB','UTL_SMTP');
```

The source for these packages are located in the $ORACLE_HOME/rdbms/admin directory. If they do not exist, create them by executing

```
@$ORACLE_HOME/rdbms/admin/catproc.sql as sysdba.
```

Create ARI Tablespaces

Two tablespaces named ari_data and ari_index are required. Refer to Appendix B.

1. Modify INSTALL_DIR/create_db/create_ari_tablespaces.sql. Refer to comments in this file regarding modifications that need to be made.
2. Login to SQL*Plus as sysdba and execute create_ari_tablespaces.sql.

Create ARI Schemas

1. Create a schema that owns the ARI database objects. The following script prompts for the schema name and password. A suggested name for this schema is 'ARI131M'. This is referred to as the <master schema owner>.
2. Change directories to INSTALL_DIR/utility
3. Log into SQL*Plus as sysdba and execute the following:
   `create_master_schema_user.sql`
4. Create a schema that will be used for ARI-generated trigger, packages, procedures and tables. The following script prompts for the schema name and password. A suggested name for this schema is 'ARI131G'. This will be referred to as the <generated schema owner>.
5. Change directories to INSTALL_DIR/utility
6. Log into SQL*Plus as sysdba and execute the following:
   `create_gen_schema_user.sql`

Create ARI Database Objects

Note: When running the scripts in this section the following errors may be encountered "Warning: View created with compilation errors" or "Warning: Package created with compilation errors". These errors can be ignored. The warnings are caused by dependencies on objects that get created later in the install. The warnings will be cleared when objects are re-validated towards the end of the database install.

1. Change directories to INSTALL_DIR/ddl.
2. Log into SQL*Plus as <master schema owner> and execute ari13.sql. Review ari13.log for errors and correct as needed.
3. Change directories to INSTALL_DIR/db_objects.
4. Log into SQL*Plus as <master schema owner> and execute ari13dbo.sql. Review ari13dbo.log for errors and correct as needed.
5. Log into SQL*Plus <master schema owner> as and execute INSTALL_DIR/utility/inv_obj_comp.sql to validate any objects that may have become invalid.

Create ARI Data

1. Change directories to INSTALL_DIR/data.
2. Log into SQL*Plus as <master schema owner> and execute ari13ctl.sql. This script calls several scripts one of which is ari_options.sql. When prompted, enter values for the master and generated schema names when indicated.
3. Upon completion, check the spool file, ari13ctl.log, to verify that no errors were received.
4. Change directories to INSTALL_DIR/data/forms_menu_elements.
5. Log into SQL*Plus as ARI 13 MASTER and run the following command:

```
SQL> @ base_form_menu_elements.sql
```

Insert Language Data

Insert Secondary Language Data

Note: These scripts are only for customers who wish to have a primary language of English and a secondary language of any combination of the following: German, Italian, Spanish, French, Korean, Brazilian Portuguese, Russian, Japanese, Simplified Chinese or Traditional Chinese.

1. Change directories to INSTALL_DIR/data/forms_menu_elements
2. Log into sqlplus as ARI 13 MASTER and run the following command:

```
SQL> @base_form_menu_elements_langs_<lang>.sql (where <lang> is the language code)
```

Language codes are as follows:

- de – German
- es – Spanish
- fr – French
- ja – Japanese
- ko – Korean
- it – Italian
- ru - Russian
- ptb – Brazilian Poruguese
- zhs – Simplified Chinese
- zht – Traditional Chinese

Note: If other languages are desired please use these same steps substituting the language, <lang>

Insert Primary Language Data

Note: These scripts are only for customers who wish to have a primary language of one of the following: German, Italian, Spanish, French, Korean, Brazilian Portuguese, Russian, Japanese, Simplified Chinese or Traditional Chinese.

Note: Only one language can be set as the primary langauge for the system.

1. Change directories to INSTALL_DIR/data/data_<lang>
2. Set the SQL*Plus session so that the encoding component of the NLS_LANG is UTF8.
   Example: RUSSIAN_RUSSIA.UTF8
3. Log into SQL*Plus as ARI 13 MASTER and run the following command:
   `SQL> @ ari13_[lang].sql`
4. Check the log file ari13_[lang].log for any errors.
5. Change directories to INSTALL_DIR/data/forms_menu_elements
6. Log into SQL*Plus as ARI 13 MASTER and run the following command:
   `SQL> @base_form_menu_elements_langs_[lang].sql`

Alter ARI Data

1. Change directories to STAGING_AREA/interface/MTS_Support.
2. Log into SQL*Plus as <master schema owner> and run the following commands:
   SQL> @mts_realm.sql
   SQL> @mts_parm_type.sql
   SQL> @mts_parm.sql
   SQL> @update_group_lookup.sql

Create Generated Schema Synonyms

This script prompts for values for the master and generated schema names.

1. Change directories to INSTALL_DIR/utility.
2. Log into SQL*Plus as < generated schema owner> and execute generated_syns.sql.

Revoke Installation-only Privileges

Certain master and generated schema system privileges are only required during the installation process. Create session and create synonym can be revoked from the generated schema. Create sequence and create view can be revoked from the master schema. This script prompts for values for the master and generated schema names.

1. Change directories to INSTALL_DIR/utility.
2. Log into SQL*Plus as sys and run the following script:
   ```
   SQL> @revoke_install_privs.sql
   ```

Create User Synonyms

Each user of ARI 13.1 requires synonyms to the [MASTER] schema objects and the product(s) that it will be integrated with (e.g. RMS). After ensuring that each user has the 'create synonym' system privilege, create synonyms to each [MASTER] schema object of type table, view, function, package, procedure or sequence. This script prompts for values for the master schema names, the user name, password and database of the user you are creating the synonyms for. The user_syns.sql will create the synonyms to the [MASTER] schema objects. Create the additional synonyms (e.g. to RMS schema) as well.

1. Change directories to INSTALL_DIR/utility.
2. Log into SQL*Plus as <ARI Master Schema Owner> and run the following script:
   ```
   SQL> @user_syns.sql
   ```

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Application Installation Tasks

These instructions assume that Oracle Application Server 10g 10.1.2.3 Forms and Reports Services has been already been installed. If not, refer to "*Check Application Server Requirements*" in Chapter 1, "Preinstallation Tasks" before proceeding. Additionally, *INSTALL_DIR* in this section refers to the directory created in "Create Staging Directory for ARI Application Files", Chapter 1.

It is assumed that Oracle Application Server 10g version 10.1.2.3 (OAS) has already been installed. If not, refer to "Check Application Server Requirements" in Chapter 1, "Preinstallation Tasks" before proceeding**.** Additionally, *INSTALL_DIR* in this section refers to the directory created in "Create Staging Directory for RMS Application Files" in Chapter 1.

In order to use Forms Builder 10g for manual compilation of ARI 13 forms modules, Oracle Developer Suite 10g Release 2 (10.1.2.3) must be used. Please refer to the Oracle Developer Suite 10g Release 2 documentation for the steps to manually compile objects.

> **Note:** It is necessary to have $ORACLE_HOME/network/admin/tnsnames.ora file configured in this OAS installation. Forms/reports use this information for connectivity. Refer to Appendix B for an example setup of the tnsnames.ora file.

Set Environment Variables

> **Note:** ORACLE_HOME is the location where Oracle Application Server 10g (10.1.2.3) has been installed

1. The T2kMotif.rgb file that is sent out with Oracle Application Server 10g (10.1.2.3) must be modified. It located at the following location:

   $ORACLE_HOME/guicommon/tk/admin

   Make a copy of the file ORACLE_HOME/guicommon/tk/admin/Tk2Motif.rgb, and name it Tk2Motif.rgb_ORIG (for example).

   Modify the file Tk2Motif.rgb file so that it contains the following line:

   ```
   Tk2Motif*fontMapCs: iso8859-2=UTF8
   ```

2. The Logon to the application server as the oretail user,
3. Set the DISPLAY variable to the IP address plus ":0.0" (ie: 10.1.1.1:0.0) of the application server.
4. Set the following variables:

   > **Note:** ORACLE_HOME is the location where Oracle Application Server 10g (10.1.2.3) has been installed

   - All OS Platforms
     - PATH=$ORACLE_HOME/bin:$ORACLE_HOME/opmn/bin:$ORACLE_HOME/dcm/bin:INSTALL_DIR/forms10gr2_scripts:$PATH
     - CLASSPATH=$ORACLE_HOME/jlib/importer:$ORACLE_HOME/jlib/debugger.jar:$ORACLE_HOME/jlib/utj.jar:$ORACLE_HOME/jlib/ewt3.jar:$ORACLE_HOME/jlib/share.jar:$ORACLE_HOME/jlib/d

fc.jar:$ORACLE_HOME/jlib/help4.jar:$ORACLE_HOME/jlib/oracle_ice.jar:$ORACLE_HOME/jlib/jewt4.jar

- FORMS_BUILDER_CLASSPATH=$CLASSPATH
- FORMS_PATH= INSTALL_DIR/forms/bin:$ORACLE_HOME/forms
- TK_UNKNOWN==$ORACLE_HOME/guicommon/tk/admin
- UP=<ARI schema owner>/<ARI schema password>@<ARI database>

Note: Verify that TNS is set up correctly by using the UP variable to successfully log into the ARI 13 schema.

Example: /u00/oracle> sqlplus $UP

ARI Forms Installation

1. Copy all libraries (.pll files) in the INSTALL_DIR/forms/src directory to the directories to the INSTALL_DIR/forms/bin directory.
2. Change directories to INSTALL_DIR/forms/bin.
3. Run pll2plx10gr2_ari to compile all ARI .pll's.

   Note: If the pll2plx10gr2_ari script is not used and the libraries are compiled individually, then they must be compiled in the following order (which is noted in the pll2plx10gr2_ari script):

   - ariiflib90.pll
   - arimessage.pll
   - ariswidget.pll
   - aristandard.pll
   - arimblock.pll
   - arimview.pll
4. Check to make sure that each .pll file has a corresponding .plx (to ensure that all .pll's compiled successfully). If a library fails to compile (there is no .plx file), it has to be manually compiled with Oracle Developer Suite 10g (10.1.2.3).
5. Remove all newly created .plx files.
6. Copy all forms (*.fmb files) in the INSTALL_DIR/forms/src directory to the INSTALL_DIR/forms/bin directory.
7. Run fmb2fmx10gr2_fm (in INSTALL_DIR/forms/bin) to compile the ARI reference forms.

   Note: If the fmb2fmx10gr2_fm script is not used and the libraries are compiled individually, then they must be compiled in the following order:

   - fm_refer
   - fm_date
   - fm_edit
   - fm_mblk
   - fm_multi

- fm_work
- fm_xtet

8. Check to make sure that each reference form (fm_*.fmb) file has been compiled by verifying the time stamp changed. fm_edit, fm_mult, fm_work, fm_xtet will not generate an .fmx file which is fine.

> **Note:** Disregard fm_*.fmx files should they be created. These files should be removed.

9. Remove all newly created fm_*.fmx files (reference forms should not have executable files).
10. Run fmb2fmx10gr2 (in INSTALL_DIR/forms/bin) to generate ARI runtime forms – .fmx's.
11. Check to make sure that each non-reference form (.fmb file) has a corresponding .fmx (to ensure that all non-reference .fmb's compiled successfully). If a form fails to compile (there is no .fmx file), it has to be manually compiled with Oracle Developer Suite 10g (10.1.2.3).
12. Remove all non-reference form forms from INSTALL_DIR/forms/bin; the following syntax leaves all reference forms (fm_*.fmb) in the bin directory, while removing all other forms:

```
> for PROG in `ls *.fmb | grep -v fm_`
> do PROGNAME=`echo $PROG`
> rm $PROGNAME
> done
```

13. Copy all menus (*.mmb files) in the INSTALL_DIR/forms/src directory to the INSTALL_DIR/forms/bin directory.
14. Run mmb2mmx10gr2 (in INSTALL_DIR/forms/bin) to generate ARI runtime menus – .mmx's.
15. Check to make sure that each .mmb file has a corresponding .mmx file. If a menu fails to compile (there is no .mmx file), it has to be manually compiled with Oracle Developer Suite 10g (10.1.2.3).
16. Remove all .mmb files from INSTALL_DIR/forms/bin.

> **Note:** .err files may be created by the compilation scripts above. These files are logs of the compilation process and can be removed.

Configure Oracle Application Server 10g 10.1.2.3 for ARI

> **Note:** The proper Oracle Application Server 10g 10.1.2.3 Forms and Reports Services components must be started in order to run Oracle Forms applications.
>
> **Note:** AS10GR2_ORACLE_HOME refers to the location where Oracle Application Server 10g 10.1.2.3 Forms and Reports Services is installed.

1. Make a copy of the file AS10GR2_ORACLE_HOME/forms/server/default.env, and name it ari.env (for example).
2. Modify the new file ari.env by appending the location of the ARI forms modules to the FORMS_PATH variable setting, and by adding the NLS_DATE_FORMAT and NLS_LANG variables to the end of this file. Additionally, the variable

FORMS_REJECT_GO_DISABLED_ITEM=FALSE must also be added to ari.env due to changes between Oracle Forms 6i and Oracle Application Server 10g 10.1.2.3.

Example:
FORMS_PATH=/u00/forms/bin:/u00/oracle/AS10GR2/fo
rms
NLS_DATE_FORMAT=DD-MON-RR

FORMS_USERNAME_CASESENSITIVE=1

NLS_LANG=AMERICAN_AMERICA.UTF8

FORMS_USERNAME_CASESENSITIVE=1
FORMS_REJECT_GO_DISABLED_ITEM=FALSE

3. Log into sqlplus as the ARI 13 master schema owner (ARI13M) and update the ari_language table so that WEBHELP_SERVER is correct:

   WEBHELP_SERVER is the URL http://<server>:<port>**.** where <server> is the name or IP address of the server where Oracle Application Server 10g 10.1.2.3 Forms and Reports Services is installed and <port> is the "Listen" value in AS10GR2_ORACLE_HOME/Apache/Apache/conf/httpd.conf

   Example: SQL> update ari_language set
   WEBHELP_SERVER='http://server:7778' where lang=1;

4. Change directories RMS_INSTALL_DIR/web_html/helpfiles/english and create the directory /ARI (RMS_INSTALL_DIR is the location where the RMS 13 application server files were installed).

   Example:
   > cd RMS_INSTALL_DIR/web_html/helpfiles/english

   > mkdir ARI

5. Change directories to INSTALL_DIR/helpfiles and copy the ARI helpfiles to RMS_INSTALL_DIR/web_html/helpfiles/english/ARI.

   Example:
   > cd INSTALL_DIR/helpfiles

   > cp -R *
   RMS_INSTALL_DIR/web_html/helpfiles/english/ARI/

6. Modify the file formsweb.cfg located at AS10GR2_ORACLE_HOME/forms/server by creating the ARI environment section at the end of this file. Brackets ([ ] in the example below) distinguish a separate environment in this file. Variables to be set in the ARI environment section of formsweb.cfg are: envfile (from step 2 above); width, height, and separateFrame applet parameters; and starting form for the ARI application.

   Example:
   [ari]
   envfile=ari.env
   width=850
   height=585
   separateFrame=true
   form=arimstr.fmx

If Oracle Single Sign-On is to be used with ARI, then

- Set ssoMode to true.
- If Resource Access Descriptors are allowed to be dynamically created, then set ssoDynamicResourceCreate to true.

Example: [ari]

```
envfile=ari.env
width=850
height=585
separateFrame=true
form=arimstr.fmx
ssoMode=true
ssoDynamicResourceCreate=true
```

7. Modify the ORACLE_HOME/Apache/Apache/conf/httpd.conf file by adding the following alias. Replace RMS_INSTALL_DIR with actual directory:

   `Alias /english/ "RMS_INSTALL_DIR/web_html/helpfiles/english/ARI"`

8. Restart the HTTP process. For example:

   `opmnctl restartproc process-type=HTTP_Server`

9. Load ARI in Oracle Application Server 10g 10.1.2.3 mode by entering the following URL in a browser. Prior to testing, the Sun JRE 1.4.1+ plug-in needs to be installed on the client machine. The plug-in can be downloaded from http://java.sun.com/.

   http://<server>:<port>/forms/frmservlet?config=<env>

   - server = name or IP address of server where Oracle Application Server 10g 10.1.2.3 Forms and Reports Services is running
   - port = "Listen" value in AS10GR2_ORACLE_HOME/Apache/Apache/conf httpd.conf (default value is 7778)
   - env = name of the environment in brackets in formsweb.cfg (from step 2 above).

Note: If RMS is configured to use SSO (ssoMode = true), then the Oracle Single Sign-On page should appear. Login using a valid user ID / password found in the OID LDAP server.

Note: The first time ARI is accessed, the user may be prompted with the following security warning. Click Yes.

10. If Single Sign-On is not used, or if a Resource Access Descriptor has not been set up for ARI for this user and ssoDynamicResourceCreate is true, then the ARI logon form appears. On the ARI logon form, enter the appropriate*Username/Password@Connect String* information in the corresponding fields:
    - Username = ARI Master Schema Owner or additional Oracle user created
    - Password = Username password
    - Connect String = Oracle database created in Chapter 2

    Example: Username: ARI13M
    Password: retek
    Connect String: prod_db1

Install Oracle Configuration Manager

This Oracle Retail product has been instrumented for configuration discovery and collection by Oracle Configuration Manager (OCM). It is recommended that you take advantage of OCM in your environment. Please see the *Oracle Configuration Manager Installer Guide* (Doc ID: 835024.1) for more information about OCM instrumentation in Oracle Retail products.

Installing OCM for ARI:

1. Add this new ARI application to the retail inventory:

   Create or modify the $ORACLE_HOME/retail_inventory/oracle_retail_ARIApp.properties file. Add the following lines to this file, substituting where appropriate:

   <IAS_name>.<ARI_name>+ARI_INSTALL_DATE=<yyyy-MM-dd HH:mm:ss>

   <IAS_name>.<ARI_name>+ARI_VERSION=13.1.0

Example:
OH101202_MIDTIER.mspdev69.ari13inst1+ARI_INSTALL_DATE=2007-11-10 09:51:50

OH101202_MIDTIER.mspdev69.ari13inst1+ARI_VERSION=13.1.0

<IAS_name> refers to the name of the OAS 10.1.2.x application server. This name was set when the application server software was installed and can be found in the $ORACLE_HOME/config/ias.properties file in the IASname property.

<yyyy-MM-dd HH:mm:ss> refers to the date of ARI installation. See example value above.

<ARI_name> refers to a unique name to identify this ARI forms installation. This is arbitrary and can be chosen at the time that this oracle_retail_ARIApp.properties file is created.

Note: If there are multiple installations of ARI using the same application server ORACLE_HOME, then there may be multiple sets of properties oracle_retail_ARIApp.properties with different <ARI_name> values.

The <IAS_name>.<ARI_name> string used in this file becomes the OCM *target name* for this ARI installation.

2. Determine whether or not the OCM collector has been installed in the application server ORACLE_HOME. Check for the existence of an $ORACLE_HOME/ccr directory containing the collector software. If there is already an OCM collector installed in this location then the rest of these steps can be skipped.
3. If there is not yet an OCM collector installed in the application server ORACLE_HOME, the Retail OCM Installer should be used to install it. Use the retail-OCM-withAnt.zip file included with the ARI release and follow the instructions in the *Oracle Configuration Manager Installer Guide* (Doc ID: 835024.1) to run the Retail OCM Installer independently.

Import-Export Tool Installation Instructions

The current version of IET (ARI Import-Export Tool) is 1.3.1 (provided in the IET directory). Most clients want to install IET so that they can import prepackaged rules, and move rules between ARI instances. The IET Windows Installer is the file ariiet131.exe. Run this installer on the Windows machine that you want to run IET on (should have database access to all ARI instances). Follow the directions within the installer to complete your IET installation. IET requires a JDK 1.3 compliant Java Virtual Machine; the installer gives you the option of using an existing JVM or installing one that is bundled with IET.

Test the ARI Application

Oracle Retail provides test cases that allow you to smoke test your installation. Refer to the *Oracle Retail Merchandising Installation Test Cases* document; Doc ID 838623.1 on My Oracle Support (formerly MetaLink).

A

Appendix: Oracle 11g Database Creation Scripts

```
###############################################################################
# Oracle 11.1.0.x Parameter file
#
# NOTES: Before using this script:
#        1.  Change <datafile_path>, <admin_path>, <utl_file_path>, <diag_path>
and <hostname>
#            values as appropriate.
#        2.  Replace the word SID with the database name.
#        3.  Size parameters as necessary for development, test, and production
environments.
# ----------------------------------------------------------------------
# MAINTENANCE LOG
#
# Date     By          Parameter           Old/New         Notes
# +------+ +---------+ +-----------------+ +-------------+ +-------------+
#
#
###############################################################################
# ------------------------------------------------------------------------------
# The policy is to give 60% for sga and 40% for PGA out of Memory Target at
startup
# ------------------------------------------------------------------------------
memory_target                          = 2000M
# ------------------------------------------------------------------------------
audit_file_dest              = <admin_path>/adump
compatible            = 11.1.0
control_files                          = (<datafile_path>/control01.ctl
                                         ,<datafile_path>/control02.ctl)
db_block_size             = 8192      # Default is 2k; adjust before db creation,
cannot change after db is created
db_file_multiblock_read_count        = 16        # Platform specific (max io
size)/(block size)
db_name               = SID
diagnostic_dest                        = '<diag_path>'
java_pool_size            = 100M
job_queue_processes           = 5         # Oracle Retail required; number of
cpu's + 1
local_listener                =
"(ADDRESS=(PROTOCOL=TCP)(HOST=<hostname>)(PORT=1521))"
nls_calendar                           = GREGORIAN
nls_date_format               = DD-MON-RR # Oracle Retail required; if RDW
database see later entry for proper format
nls_language              = AMERICAN  # Default
nls_numeric_characters        = ".,"      # Should be explicitly set to ensure all
users/batch get the same results
nls_sort              = BINARY    # Should be explicitly set to ensure all
sessions get the same order
nls_territory             = AMERICA   # Default
open_cursors              = 900       # Oracle Retail required (minimum=900);
default is 50
optimizer_features_enable     = 11.1.0.7
optimizer_mode            = CHOOSE    # Oracle Retail required
```

```
plsql_optimize_level                    = 2         # 10g change; use this setting
to optimize plsql performance
processes             = 500       # Max number of OS  processes that can connect
to the db
query_rewrite_enabled         = TRUE      # Oracle Retail required for function-
based indexes
session_cached_cursors                  = 900       # Oracle Retail required;
undo_management           = AUTO
undo_retention            = 1800      # Currently set for 30 minutes; set to avg
length of transactions in sec
undo_tablespace           = undo_ts
user_dump_dest            = <admin_path>/udump
utl_file_dir                            = <utl_file_path>
workarea_size_policy                    = auto          # Should be set to auto
when pga_aggregate_target is set
#
# ***  Set these parameters for Oracle Retail Data Warehouse (RDW) database ***
#nls_date_format              = DD-MON-RRRR  # Required by MicroStrategy
#query_rewrite_integrity                = TRUSTED
#star_transformation_enabled            = TRUE
#utl_file_dir                           = <Windows_utl_file_path>,
<UNIX_util_file_path>
#
# ***  Archive Logging, set if needed  ***
#log_archive_dest_1                     = 'location=<admin_path>/arch/'
#log_archive_format               = SIDarch_%r_%s_%t.log
#log_buffer            = 10485760    # Set to (512K or 128K)*CPUs
#log_checkpoint_interval                = 51200     # Default:0 - unlimited
#log_checkpoint_timeout                 = 7200      # Default:1800 seconds
```

B

Appendix: Create ARI Tablespaces

```
--------------------------------------------------------------------------------
---
--- Script:        create_ari_tablespaces.sql
--- Execute as:    sysdba
--- Note:          Before running this script:
---                  Modify <datafile_path> values.
---                  Modify datafile storage parameters and sizes as needed
--------------------------------------------------------------------------------
spool create_ari_tablespaces.log

CREATE TABLESPACE ARI_INDEX
DATAFILE '<datafile_path>/ari_index01.dbf'  SIZE 500M
    AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
    EXTENT MANAGEMENT LOCAL
    SEGMENT SPACE MANAGEMENT AUTO
;
CREATE TABLESPACE ARI_DATA
DATAFILE '<datafile_path>/ari_data01.dbf'  SIZE 500M
    AUTOEXTEND ON NEXT 100M MAXSIZE 2000M
    EXTENT MANAGEMENT LOCAL
    SEGMENT SPACE MANAGEMENT AUTO
;

spool off
exit
```

C

Appendix: Single Sign-On Resource Access Descriptors

Oracle Forms applications such as ARI 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 My Oracle Support document number 244526.1.

D

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.

> **Note:** The installation order is not meant to imply integration between products.

Enterprise Installation Order

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)