

Retek[®] Active Retail Intelligence[™] 11.0

Installation Guide

Corporate Headquarters:

Retek Inc.
Retek on the Mall
950 Nicollet Mall
Minneapolis, MN 55403
USA
888.61.RETEK (toll free US)
Switchboard:
+1 612 587 5000
Fax:
+1 612 587 5100

European Headquarters:

Retek
110 Wigmore Street
London
W1U 3RW
United Kingdom
Switchboard:
+44 (0)20 7563 4600
Sales Enquiries:
+44 (0)20 7563 46 46
Fax:
+44 (0)20 7563 46 10

The software described in this documentation is furnished under a license agreement, is the confidential information of Retek Inc., and may be used only in accordance with the terms of the agreement.

No part of this documentation may be reproduced or transmitted in any form or by any means without the express written permission of Retek Inc., Retek on the Mall, 950 Nicollet Mall, Minneapolis, MN 55403, and the copyright notice may not be removed without the consent of Retek Inc.

Information in this documentation is subject to change without notice.

Retek provides product documentation in a read-only-format to ensure content integrity. Retek Customer Support cannot support documentation that has been changed without Retek authorization.

Retek[®] Active Retail Intelligence[™] is a trademark of Retek Inc.

Retek and the Retek logo are registered trademarks of Retek Inc.

This unpublished work is protected by confidentiality agreement, and by trade secret, copyright, and other laws. In the event of publication, the following notice shall apply:

©2004 Retek Inc. All rights reserved.

All other product names mentioned are trademarks or registered trademarks of their respective owners and should be treated as such.

Printed in the United States of America.

Customer Support

Customer Support hours

Customer Support is available 7x24x365 via email, phone, and Web access.

Depending on the Support option chosen by a particular client (Standard, Plus, or Premium), the times that certain services are delivered may be restricted. Severity 1 (Critical) issues are addressed on a 7x24 basis and receive continuous attention until resolved, for all clients on active maintenance. Retek customers on active maintenance agreements may contact a global Customer Support representative in accordance with contract terms in one of the following ways.

Contact Method	Contact Information
----------------	---------------------

E-mail	support@retек.com
--------	-------------------

Internet (ROCS)	rocs.retek.com Retek's secure client Web site to update and view issues
-----------------	---

Phone	+1 612 587 5800
-------	-----------------

Toll free alternatives are also available in various regions of the world:

Australia	+1 800 555 923 (AU-Telstra) or +1 800 000 562 (AU-Optus)
France	0800 90 91 66
United Kingdom	0800 917 2863
United States	+1 800 61 RETEK or 800 617 3835

Mail	Retek Customer Support Retek on the Mall 950 Nicollet Mall Minneapolis, MN 55403
------	---

When contacting Customer Support, please provide:

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

Contents

Chapter 1 – Hardware and Software Requirements	1
Database Server	1
Application Server	1
Web Browser and Client requirements	2
Chapter 2 – Database Server Installation Instructions	3
Create Staging Directory for ARI database files	3
Verify the existence of Oracle packages	3
Create ARI tablespaces	3
Create ARI Schemas	3
Create ARI Database Objects	4
Create ARI Data	4
Create Generated Schema Synonyms	4
Revoke Installation-only Privileges	4
User Synonyms	5
Chapter 3 – Application Server Installation Instructions	7
Compile ARI Oracle Forms	7
Create Staging Directory for ARI forms files	7
Setup	8
Forms	9
Configure Oracle 9iAS 10g for ARI 11	10
Import-Export Tool Installation Instructions	12
Appendix A – Create ARI Tablespaces	13
Appendix B – Manual ARI Installation Instructions	15
Compile ARI Oracle Forms	15
Setup	15
Compile ARI Forms Libraries (*.pll)	16
Compile ARI Reference Forms (fm_*.fmb)	17
Compile ARI Forms (*.fmb)	17
Compile ARI Menus (*.mmb)	18

Chapter 1 – Hardware and Software Requirements

Prior to installing ARI, review the requirements listed below. Verify that these requirements are met and that the hardware will adequately run the software to be installed, as well as process the anticipated volume of data.

Supported Media	ARI is available on the Retek Fulfillment Center Web Site, https://fulfillment.retek.com/ .
Database Server	Database software requirements.
Application Server	Operating system software and development tools and a list of hardware choices.
Web Browser	Supported OS/Browser/Java plug-in requirements

Database Server

General Requirements for a database server running ARI include:

- Unix based OS(AIX, Solaris, or HP-UX PA RISC) certified with Oracle 9i
- Oracle RDBMS 9i Enterprise Edition (minimum 9.2.0.5 patchset required)
 - Sun platform requires patch for bug 3566662
 - AIX 5.2 platform requires patch for bug 2820694

Application Server

General requirements for an application server running ARI include:

- Unix based OS(AIX, Solaris, or HP-UX PA RISC) certified with Oracle 10G Application Server 9.0.4.0
- Oracle 10G Application Server Forms and Reports Services 9.0.4

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

- ~3 GB Free disk space for 9iAS
- ~1 GB Free disk space for ARI forms, reports, gif files and help files.

Web Browser and Client requirements

General requirements for client running ARI include:

JRE Plugin:

- Sun JRE Plug-in 1.4.1+

Client PCs:

- Pentium Processor
- Windows 2000 or XP
- 1024x768 resolution

Sizing factors and other suggestions to factor into selection of a PC include:

- PC Configuration (minimum 256 MB RAM, 450 MHz)

Browser options to factor into selection include:

- Internet Explorer 5.5, 6.0 and higher

Chapter 2 – Database Server Installation Instructions

Create Staging Directory for ARI database files

- 1 Log into the UNIX server as retek.
- 2 Create a staging directory for the ARI database installation software. There should be a minimum of 10 MB disk space available.
- 3 Copy the ari1ldbserver.zip file from the CD/dbserverunix directory to the staging directory. This will be referred to as INSTALL_DIR for the remainder of this chapter.
- 4 Change directories to INSTALL_DIR and extract the ari1ldbserver.zip file.

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 A

- 1 Modify INSTALL_DIR/create_db/create_ari_tablespaces.sql. Refer to comments in this file regarding modifications that need to be made.

Create ARI Schemas

- 1 Create a schema that will own the ARI database objects. The following script prompts for the schema name and password. A suggested name for this schema is 'ARI11M'. This will be referred to as the <master schema owner>.
- 2 Change directories to INSTALL_DIR/utility
- 3 Log into SQL*Plus as sysdba and execute 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 'ARI11G'. 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 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 `ari11.sql`. Review `ari11.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 `ari11dbo.sql`. Review `ari11dbo.log` for errors and correct as needed.
- 5 Log into SQL*Plus as sysdba 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/sqlplus`.
- 2 Log into SQL*Plus as <master schema owner> and execute `ari11ctl.sql`. This script will call 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, `ari11ctl.log`, to verify that no errors were received.

Create Generated Schema Synonyms

This script will prompt 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 will prompt 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
```


User Synonyms

Each user of ARI 11.0 requires synonyms to the [MASTER] schema objects. 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 will prompt for values for the master schema names, the user name, password and database of the user you are creating the synonyms for.


- 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
```



Chapter 3 – Application Server Installation Instructions

 **Note:** Refer to the RMS 11 Installation Guide for Oracle 10G Forms and Reports Services installation instructions. These installation instructions assume that the RMS 11 application server has been installed/configured and that ARI 11 is using the same application server as RMS.

Compile ARI Oracle Forms

 **Note:** This section details the compilation of the ARI 11 Forms 9i modules, using the compilation utilities provided within Oracle 9iAS 10g Forms and Reports Services. Forms Builder 9i is not included in Oracle 9iAS 10g Forms and Reports Services or Enterprise. In order to use Forms Builder 9i for manual compilation of ARI 11 Forms 9i modules, Oracle 9i Developer Suite (9iDS) 10g must be used. It should be noted that Oracle has not released a version of 9iDS for the AIX 5L platform.

 **Note:** Because of Oracle bugs #3083648 and #2710859, and related Sun JVM Bug #4486745, some column headers and other font fields throughout the ARI application appear to have the bottom portion of text cut off when running in Forms 9i mode. This issue does not affect functionality. An Oracle enhancement request (3083648) has been made for a fix to the forms font handling mechanism.

 **Note:** TNS must be set up within Oracle 9iAS 10g Forms and Reports Services in order to connect to the ARI 11 schema that was created in Chapter 2. This requires that 9iAS10G_ORACLE_HOME/network/admin/tnsnames.ora contain an entry for the Oracle 9i database that was created in Chapter 2 (where the ARI 11 schema resides). See Appendix C of the RMS install guide for a tnsnames.ora example.

Create Staging Directory for ARI forms files

- 1 Log into the application server as the retek user created in Chapter 2 and determine where the ARI application files will be installed. There should be a minimum of 50 MB disk space available for the application installation files.
- 2 Copy the file ari11appserver.zip from the CD/appserverunix directory to the newly created staging directory. This will be referred to as INSTALL_DIR for the remainder of this chapter. It should be noted that RMS_INSTALL_DIR refers to the location where the RMS application server files exist.
- 3 Change directories to INSTALL_DIR and extract the file ari11appserver.zip.
- 4 Make sure all scripts in INSTALL_DIR/forms9i_scripts have at least execute permissions for the retek user and its group (r-xr-x---).

Setup

- 1 As the retek user, set the DISPLAY variable to the IP address plus “:0.0” (ie: 10.1.1.1:0.0) of the machine that is being used to perform the compilation from.
- 2 As the retek user, set the following variables:



Note: INSTALL_DIR is the location where ARI 11 will be installed.



Note: 9iAS10G_ORACLE_HOME is the location where Oracle 9iAS 10g is installed.

ORACLE_HOME=9iAS10G_ORACLE_HOME

PATH=\$ORACLE_HOME/bin:INSTALL_DIR/forms9i_scripts:\$PATH

Solaris only:

LD_LIBRARY_PATH=\$ORACLE_HOME/lib:\$ORACLE_HOME/jdk/jre/lib/sparc:
\$ORACLE_HOME/jdk/jre/lib/sparc/native_threads

HP-UX only:

SHLIB_PATH=\$ORACLE_HOME/lib32:\$ORACLE_HOME/lib:\$ORACLE_HOM
E/jdk/jre/lib/PA_RISC:\$ORACLE_HOME/jdk/jre/lib/PA_RISC/server

AIX only:

LD_LIBRARY_PATH=\$ORACLE_HOME/lib:\$ORACLE_HOME/lib32:\$ORACL
E_HOME/jdk/jre/lib

LIBPATH=\$LD_LIBRARY_PATH

All:

CLASSPATH=\$ORACLE_HOME/jlib/debugger.jar:\$ORACLE_HOME/jlib/utj90.ja
r:\$ORACLE_HOME/jlib/ewt3.jar:\$ORACLE_HOME/jlib/share.jar

FORMS90_BUILDER_CLASSPATH=\$CLASSPATH

FORMS90_PATH=INSTALL_DIR/forms/bin:\$ORACLE_HOME/forms90

Solaris/AIX only:

UP=<ARI master schema owner>/<ARI master schema password>@<ARI
database>

HP-UX only:

UP=<ARI master schema owner>/<ARI master schema password>\@<ARI
database>



Note: For the UP variable setting, the ARI schema and ARI database were created in Chapter 2. TNS must be set up within Oracle 9iAS 10g Forms and Reports Services in order to connect to the ARI 11 schema that was created in Chapter 2. See step 4 of the “Configure Oracle 9iAS 10g for ARI 11” section in this chapter for more information on the tnsnames.ora file. Verify that TNS is set up correctly by using the UP variable to successfully log into the ARI 11 schema.



Example: /u00/oracle> sqlplus \$UP

Forms

- 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 pll2plx9i to compile all ARI .pll's.
- 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 will have to be manually compiled with Oracle 9iDS 10g.
- 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 fmb2fmx9i_fm (in INSTALL_DIR/forms/bin) to compile the ARI reference forms.
- 8 Check to make sure that each reference form (fm_*.fmb) file has been compiled by verifying that the time stamp changed (there may be some with no .fmx file).



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 fmb2fmx9i (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 will have to be manually compiled with Oracle 9iDS 10g.
- 12 Remove all non-reference form forms from INSTALL_DIR/forms/bin; the following syntax will leave 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 mmb2mmx9i (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 will have to be manually compiled with Oracle 9iDS 10g.
- 16 Remove all .mmb files from INSTALL_DIR/forms/bin.



Note: Should .err files be created by the compilation scripts above, these files are logs of the compilation process and can be removed.

Configure Oracle 9iAS 10g for ARI 11

 **Note:** The proper Oracle 9iAS 10g components must be started in order to run Oracle Forms applications.


 **Note:** 9iAS10G_ORACLE_HOME refers to the location where Oracle 9iAS 10g Forms and Reports Services is installed.

- 1 Make a copy of the file 9iAS10G_ORACLE_HOME/forms90/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 FORMS90_PATH variable setting, and by adding the NLS_DATE_FORMAT variable to the end of this file. Additionally, the variable FORMS90_REJECT_GO_DISABLED_ITEM=FALSE must also be added to ari.env due to changes between Oracle Forms 6i and Oracle Forms 9i.

 **Example:**

```
FORMS90_PATH=/u00/forms/bin:/u00/oracle/9iAS10G/forms90
NLS_DATE_FORMAT=DD-MON-RR
FORMS90_REJECT_GO_DISABLED_ITEM=FALSE
```


- 3 Make an entry in the file 9iAS10G_ORACLE_HOME/network/admin/tnsnames.ora for the Oracle 9i database that was created in Chapter2 (where the ARI 11 schema resides). Appendix C of the RMS install guide contains a sample tnsnames.ora file entry for an Oracle 9i database; refer to that sample or the following example for a proper entry in file 9iAS10G_ORACLE_HOME/network/admin/tnsnames.ora.
- 4 Log into sqlplus as the ARI 11 master schema owner (ARI11M) and update the ari_language table so that WEBHELP_SERVER is correct:
 - WEBHELP_SERVER is the url **Error! Hyperlink reference not valid.** where <server> is the name or IP address of the server where Oracle 9iAS 10g is installed and <port> is the “Listen” value in 9iAS10G_ORACLE_HOME/Apache/Apache/conf/httpd.conf

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

- 5 Change directories RMS_INSTALL_DIR/web_html/helpfiles/english and create the irectory /ARI (RMS_INSTALL_DIR is the location where the RMS 11 application server files were installed).

 **Example:** > cd RMS_INSTALL_DIR/web_html/helpfiles/english
> mkdir ARI

- 6 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/

- 7 Modify the file `formsweb.cfg` located at `9iAS10G_ORACLE_HOME/forms90/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 RMS application.

 **Example:** [ari]

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

- 8 Load ARI in Forms 9i 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/>.

Error! Hyperlink reference not valid.

- server = name or IP address of server where Oracle 9iAS 10g is running
- port = “Listen” value in `9iAS10G_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: The first time ARI is accessed, the user may be prompted with the following security warning. Click Yes.



- 9 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 Ch. 2



Example: Username: ARI11M

Password: retek

Connect String: prod_db1

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 will 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.

Appendix A – 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 MANUAL  
;  
CREATE TABLESPACE ARI_DATA DATAFILE  
    '<datafile_path>/ari_data01.dbf'  SIZE 500M  
    AUTOEXTEND ON NEXT 100M MAXSIZE 2000M  
    EXTENT MANAGEMENT LOCAL  
    SEGMENT SPACE MANAGEMENT MANUAL  
;
```

```
spool off
```

```
exit
```


Appendix B – Manual ARI Installation Instructions

Compile ARI Oracle Forms



Note: This section details the compilation of the ARI 11 Forms 9i modules using Forms Builder 9i as released in the product Oracle 9i Developer Suite (9iDS) 10g. It should be noted that Oracle has not released a version of 9iDS for the AIX 5L platform. It is assumed Oracle 9iDS 10g is already installed.

Setup

- 1 As the retek user, set the DISPLAY variable to the IP address plus “:0.0” (ie: 10.1.1.1:0.0) of the machine that is being used to perform the compilation from.
- 2 As the retek user, set the following variables:



Note: INSTALL_DIR is the location where ARI 11 will be installed.



Note: 9iAS10G_ORACLE_HOME is the location where Oracle 9iAS 10g is installed.

ORACLE_HOME=9iAS10G_ORACLE_HOME

PATH=\$ORACLE_HOME/bin:INSTALL_DIR/forms9i_scripts:\$PATH

Solaris only:

LD_LIBRARY_PATH=\$ORACLE_HOME/lib:\$ORACLE_HOME/jdk/jre/lib/sparc:
\$ORACLE_HOME/jdk/jre/lib/sparc/native_threads

HP-UX only:

SHLIB_PATH=\$ORACLE_HOME/lib32:\$ORACLE_HOME/lib:\$ORACLE_HOME/
E/jdk/jre/lib/PA_RISC:\$ORACLE_HOME/jdk/jre/lib/PA_RISC/server

AIX only:

LD_LIBRARY_PATH=\$ORACLE_HOME/lib:\$ORACLE_HOME/lib32:\$ORACLE_HOME/
E_HOME/jdk/jre/lib

LIBPATH=\$LD_LIBRARY_PATH

All:

CLASSPATH=\$ORACLE_HOME/jlib/debugger.jar:\$ORACLE_HOME/jlib/utj90.jar:
\$ORACLE_HOME/jlib/ewt3.jar:\$ORACLE_HOME/jlib/share.jar

FORMS90_BUILDER_CLASSPATH=\$CLASSPATH

FORMS90_PATH=INSTALL_DIR/forms/bin:\$ORACLE_HOME/forms90

Solaris/AIX only:

UP=<ARI master schema owner>/<ARI master schema password>@<ARI
database>

HP-UX only:

UP=<ARI master schema owner>/<ARI master schema password>\@<ARI database>



Note: For the UP variable setting, the ARI schema and ARI database were created in Chapter 2. TNS must be set up within Oracle 9iAS 10g Forms and Reports Services in order to connect to the ARI 11 schema that was created in Chapter 2. See step 4 of the “Configure Oracle 9iAS 10g for ARI 11” section in this chapter for more information on the tnsnames.ora file. Verify that TNS is set up correctly by using the UP variable to successfully log into the ARI 11 schema.



Example: /u00/oracle> sqlplus \$UP

Compile ARI Forms Libraries (*.pll)

- 1 Copy all libraries (.pll files) in the INSTALL_DIR/forms/src directory to the INSTALL_DIR/forms/bin directory.

```
> cp *.pll ../bin
```
- 2 Change directories to INSTALL_DIR/forms/bin.
- 3 Start Form Builder 9i to compile ARI modules.

```
> f90desm &
```

 - a A blue GUI interface is displayed. On the Welcome page click Cancel.
 - b Chose File -> Connect. Log into the database as the ARI 11 schema owner.
 - c Compile the libraries in the following order:
 - ariiflib90.pll
 - arimessage.pll
 - ariswidget.pll
 - aristandard.pll
 - arimblock.pll
 - arimview.pllFor each library file:
 - a Choose File -> Open
 - b Select INSTALL_DIR/forms/bin/<FILENAME>.pll.
 - c Click OK
 - d Once the library is “loaded” select the form library name, select Program, and choose Compile -> All.
 - e After successful compilation click OK.
 - f Save and close the form library.

The ARI libraries have been compiled and should now reside in the bin directory.


Compile ARI Reference Forms (fm_*.fmb)

- 1 Copy all reference forms (fm_*.fmb files) in the INSTALL_DIR/forms/src directory to the INSTALL_DIR/forms/bin directory.

```
> cp fm_*.fmb ../bin
```
- 2 Change directories to INSTALL_DIR/forms/bin.
- 3 Using Form Builder session (f90desm &), navigate to INSTALL_DIR/forms/bin and compile each ARI reference form in that directory in the following order:
 - fm_refer
 - fm_date
 - fm_edit
 - fm_mblk
 - fm_multi
 - fm_work
 - fm_xtet
 - a Choose File -> Open
 - b Select INSTALL_DIR/forms/bin/fm_<FILENAME>.fmb.
 - c Click OK.
 - d Once the reference form is “loaded” select the form name, select Program, and choose Compile -> All.
 - e After successful compilation click OK.
 - f Save and close the reference form.

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

Compile ARI Forms (*.fmb)

- 1 Copy all non-reference form forms (*.fmb files) in the INSTALL_DIR/forms/src directory to the INSTALL_DIR/forms
/bin directory. Do NOT copy fm_*.fmb files from the /src to /bin directory
 **Note:** Make sure not to copy reference forms (fm_*.fmb files) again from the /src to /bin directory as this will overwrite the reference forms that were compiled in step 8 above and possible cause compilation errors for the remaining modules.
- 2 Change directories to INSTALL_DIR/forms/bin.
- 3 Run fmb2fmx9i to generate ARI runtime forms – .fmx’s.

```
> fmb2fmx9i
```

- 4 Check to make sure each .fmb file has a corresponding .fmx file. If a form fails to compile (there is no .fmx file), may have to manually compile the form in Form Builder session (f90desm &).
 - a Choose File -> Open.
 - b Select INSTALL_DIR/forms/bin/FILENAME.fmb.
 - c Click OK.
 - d Once the form is “loaded”, select the form name, select Program, and choose Compile -> All.
 - e After successful compilation, click OK.
 - f Press ‘Ctrl + T’ to convert the form to binary mode.
 - g Save and close the form.
- 5 Remove all non-reference form forms from INSTALL_DIR/forms/bin; the following syntax will leave 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
```

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

Compile ARI Menus (*.mmb)

- 1 Copy all menus (*.mmb files) in the INSTALL_DIR/forms/src directory to the INSTALL_DIR/forms/bin directory.

```
> cp *.mmb ../bin
```
- 2 Change directories to INSTALL_DIR/forms/bin.
- 3 Run mmb2fmx9i to generate ARI runtime menus – .mmx’s.

```
> mmb2mmx9i
```
- 4 Check to make sure each .mmb file has a corresponding .mmx file. If a menu fails to compile (there is no .mmx file), may have to manually compile the menu in Form Builder session (f90desm &).
 - a Choose File -> Open.
 - b Select INSTALL_DIR/forms/bin/FILENAME.mmb.
 - c Click OK.
 - d Once the menu is “loaded”, select the form name, select Program, and choose Compile -> All.
 - e After successful compilation, click OK.
 - f Press ‘Ctrl + T’ to convert the menu to binary mode.
 - g Save and close the menu.

5 Remove all .mmb files from INSTALL_DIR/forms/bin

```
> rm *.mmb
```

The ARI menus have been compiled and should now reside in the bin directory.