# AppsRules Suite

## Installation Guide

Software Version 7.0

LogicalApps®

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# Contents

# Chapter 1

# AppsRules Suite Installation Overview

The AppsRules Suite is a set of five integrated applications that work with Oracle Applications to define business processes, enhance security, and safeguard data integrity:

- AppsForm modifies the security, navigation, field, and data properties of Oracle Applications forms.
- AppsFlow works with Oracle Applications Workflows to define and implement business processes.
- AppsAudit tracks changes to the values of fields in database tables and displays reports that present information about changes to each field.
- AppsControl applies change control to Oracle Applications fields — it can monitor change, require a reason for a change, or require approval for a change.
- AppsAccess defines and detects segregation-of-duties conflicts, either preventing them from occurring or uncovering them so that they can be properly managed.

These applications are installed on the database and forms servers on which Oracle Applications run. The installation process implements the following architecture:

- Database Schema: Installation requires the identification of a schema for use by LogicalApps applications. LogicalApps recommends strongly the creation of a new schema named XXLAAPPS. However, a user who has already established a schema for third-party products may choose to use that schema instead.

- Tablespace: LogicalApps recommends creating a tablespace for indexes used by LogicalApps database objects. (An already established tablespace may be used.)
- Database Objects: AppsRules makes use of database tables, packages, sequences, and workflows, which are placed in the XXLAAPPS (or user-specified) schema. All LogicalApps table names begin with the prefix *LA*.
- Application Server Objects: AppsRules uses custom forms, which are installed on the application server. Custom forms are located in the $XXLAAPPS_TOP/forms/US directory.
- Program Executables: AppsRules uses program executables to report on, migrate, and compile business rules. The following objects are installed on the concurrent manager server (typically the database server): reports, programs, and Java files. Custom programs are located in the $XXLAAPPS_TOP/forms/US directory; some executable programs may also reside in the $XXLAAPPS_TOP/bin directory.

LogicalApps provides two comprehensive Installer programs that place AppsRules applications on the database and forms servers. (In addition, they install AppsCore, a rules engine that provides functionality to the applications.) Each Installer may be run in any of three modes:

- GUI: The Installer programs present a series of windows that prompt you to provide information necessary for the installation. Each window also provides access to a help file. As you progress through the windows, you can return to windows you had completed earlier in order to review or change the entries in them. (The Installers retain any entry you don't change, even if you return to a step earlier than the one in which such an entry was made.) GUI mode is the default.
- Console: The Installer programs present a series of command prompts in a UNIX console, in response to which you provide information necessary for the installation. Console mode prompts for the same information as GUI mode, but does not enable you to return to earlier prompts and does not provide help screens.
- Silent: The Installer programs read parameters from properties files, and then run without user interaction.

To run each Installer program, you would type its name — ladbinstall.bin or lafrminstall.bin — at the UNIX command prompt. The name alone launches GUI mode if no properties files are present, or silent mode if properties files are present; the name along with the argument *–i console* launches the console mode.

# Preparatory Procedures

Before installing AppsRules, ensure that the following requirements have been met:

- Grant the following APPS schema objects the execute privilege to the XXLAAPPS schema:
  - FND_FILE — Package Spec and Body
  - FND_PROFILE — Package Spec and Body

- Confirm that Java is in your path. Type the following at the UNIX command prompt:

  ```
  which java
  ```

- Verify that you use Java version 1.3 or higher. Type the following at the UNIX command prompt:

  ```
  java -version
  ```

  If more than one copy of Java exists on your system, verify the version on the copy in the opt directory (for example, /usr/opt1.3/bin/java).

- Ensure that the Oracle Advanced Security product is installed. (LogicalApps uses DBMS_Obfuscation for encrypting the password.) Type the following at the UNIX command prompt:

  ```
  adapters
  ```

  Look for Oracle Security Server Authentication Adapter among the return values.

- Each of your database server, forms server, and concurrent manager server may run on its own host machine. If so, complete the following tasks to confirm that the host machines communicate properly:
  - Send a file via FTP from the database server to the concurrent manager server, and from the concurrent manager server to the forms server.
  - Perform a remote execution of the shell file, by any of the following methods: Enable rsh (remote shell), enable ssh (secured shell), have a common mount point, manual.

## Sizing Considerations

Ensure that your forms server has 100 megabytes (MB) of disk space for AppsRules files, and that the database server has 100 MB of disk space for AppsRules executable files.

Moreover, the XXLAAPPS schema requires the following amounts of disk space:

- 100 MB for most AppsRules database tables.
- An additional 1 gigabyte (GB) for two temp tables used in AppsAudit processing — LAAD_AUDIT_KEYS and LAAD_AUDIT_VALUES.
- An additional amount for two tables that hold "user conflicts" generated by AppsAccess. The space requirement varies according to the number of conflicts a system may generate. The first table, LAA_USER_CONFLICT_ENTITIES, holds the most recent "snapshot," or set of conflicts; the other, LAA_USER_CONFLICT_ENTITIES_H, is a history table that holds archived snapshots. So one would, in effect, want to allow for double the number of conflicts that may be generated. The largest LogicalApps clients generate approximately 5,000,000 conflicts and so need to allow for 10,000,000, and 2 GB of disk space meets this requirement.

Finally the APPS (Oracle Applications) schema requires space to encompass shadow tables used by AppsAudit — one-third of the space taken by each table that is audited.

# Downloading Installation Files

To begin the installation process, download the file LOGICALAPPS.zip to a temporary directory on your local system from the FTP site provided by LogicalApps. From it, extract the two files — ladbinstall.bin and lafrminstall.bin — you will run for database and forms installation. If you intend to use the silent installation mode, also extract the two files from which the Installers will read parameters — ladbinstall.properties and lafrminstall.properties.

# Preparing Properties Files

If you intend to run the Installer programs in silent mode, you need first to edit the two properties files you extracted from LOGICALAPPS.zip, inserting information specific to your installation. (If you intend to use GUI or console mode, you don't need the properties files, and you can ignore this section.)

To insert values in the files, use a text editor such as vi. Each file consists of a series of name-value statements, each of which sets a parameter name equal to a value and each of which is preceded by an explanatory comment. (Each comment begins with a # symbol.) In each statement, edit information to the right of an equals sign; do not (with one exception, discussed below) modify text to the left of the equals sign.

You insert into the files exactly the same information as you would supply in response to prompts if you were to run the Installers in GUI mode. For detailed descriptions of that information, see Chapter 2, "Installing AppsRules Suite."

The two properties files — ladbinstall.properties (database) and lafrminstall.properties (forms) — share many parameters, which correspond as follows to the GUI prompts discussed in Chapter 2:

- CUST_NAME and LICENSE_KEY: Prompts in the License Key window, step 1 on page 7 (database), or step 1 on page 11 (forms).
- #STAGE_DIR: Prompt in the Staging window, step 2 on page 7 (database), or step 2 on page 12 (forms).

  This statement is the exception, noted above, to the rule that you should leave parameter names (to the left of the equals sign) intact. In the assumption you will want the Installers to set default staging directories, this statement is commented out in the properties file. To use the statement, you must not only supply a staging directory path to the right of the equals sign, but also delete the # symbol at the beginning of the statement.
- DB_HOST_NAME, DB_SID, and DB_PORT: Prompts in the Database Host window, step 3 on page 8 (database), or step 3 on page 12 (forms).
- DB_XXLAAPPS_SCHEMA_NAME, DB_XXLAAPPS_PASS, DB_APPS_SCHEMA_NAME, and DB_APPS_PASS: Prompts in the Database Schema window, step 4 on page 8 (database), or step 4 on page 12 (forms).

  Another exception: The database-installation window does not prompt for the Oracle Applications schema name, although the forms-installation window does.

The properties file requires it (typically APPS) as the value for the DB_APPS_SCHEMA_NAME parameter.

- XXLAAPPS_SHORT_NAME and APPL_TOP: Prompts in the Application TOP window, step 5 on page 9 (database), or step 5 on page 12 (forms).
- ENVFILE and ADOVARS: Prompts in the Environment window, step 6 on page 10 (database), or step 6 on page 13 (forms).

The ladbinstall.properties file contains one parameter — INDEX_TABLESPACE — that does not appear in lafrminstall.properties. This parameter corresponds to the Index Table Space prompt in step 4 on page 8.

The lafrminstall.properties file contains two parameters that do not appear in the ladbinstall.properties file. These two parameters correspond as follows to the GUI prompts discussed in Chapter 2:

- APPSORA: The final prompt in the Environment window, step 6 on page 13.
- CUSTOM_CHOICE: The prompt in the CUSTOM.pll window, step 7 on page 13. In the properties file, any value other than *No* (case-sensitive) is equivalent to *Yes*.

Finally, both files contain a parameter that does not correspond to any GUI prompt. For you to run the Installers in silent mode, an INSTALLER_UI parameter must be set to the value *silent*. This is the default; don't change it.

Chapter 2

# Installing AppsRules Suite

In broad terms, the AppsRules Suite installation process involves four steps:

1. Create a tablespace for LogicalApps indexes, and a custom database user/schema. LogicalApps recommends strongly that the user/schema be named XXLAAPPS.
2. Run the Installer program to place LogicalApps tables, packages, sequences, and workflows on the database server. All LogicalApps table names begin with the prefix *LA*, and all tables reside in the LogicalApps schema (typically XXLAAPPS). The database server installation must precede the forms server installation.
3. Run the Installer program to place LogicalApps forms on the forms server. All custom forms are located in the $XXLAAPPS_TOP/forms/US directory.
4. Configure a remote compilation feature, which makes libraries resident on the concurrent sever available to the forms server.

## Creating a User and Tablespace

After extracting installation files from LOGICALAPPS.zip and editing the properties files if you intend to use silent mode (see "Downloading Installation Files" and "Preparing Properties Files" on page 3), create the LogicalApps tablespace and database user/schema. The latter must be granted the connect and resource privileges in the Oracle Applications database. LogicalApps recommends using the name XXLAAPPS for the new user, and creating all LogicalApps database objects in the XXLAAPPS schema.

The following is a sample SQL script that can be used to create the user:

```
CREATE USER XXLAAPPS
IDENTIFIED BY XXLAAPPS
DEFAULT TABLESPACE &DEF_TSPACE
TEMPORARY TABLESPACE &TMP_TSPACE
QUOTA UNLIMITED ON &DEF_TSPACE
QUOTA 0K ON SYSTEM;

GRANT CONNECT TO XXLAAPPS;
GRANT RESOURCE TO XXLAAPPS;
```

Allocate a minimum of 80 MB of space, 40 on the tmp directory and 40 on the file system from which the installer is to be launched.

# Installing Database Server Components

To install database server components of AppsRules, run the file ladbinstall.bin:

1. Transfer the ladbinstall.bin file to the database server, via FTP in binary mode. Use the applmgr account.
2. Use applmgr to log in to the database server. Ensure that the user (login ID) has write and read privileges on $APPL_TOP.
3. Execute the environment file, if it is not included in the profile:

   ```
   $..$APPL_TOP/$APPLFENV
   ```

4. Set the execute permission on ladbinstall:

   ```
   $.chmod +x ladbinstall.bin
   ```

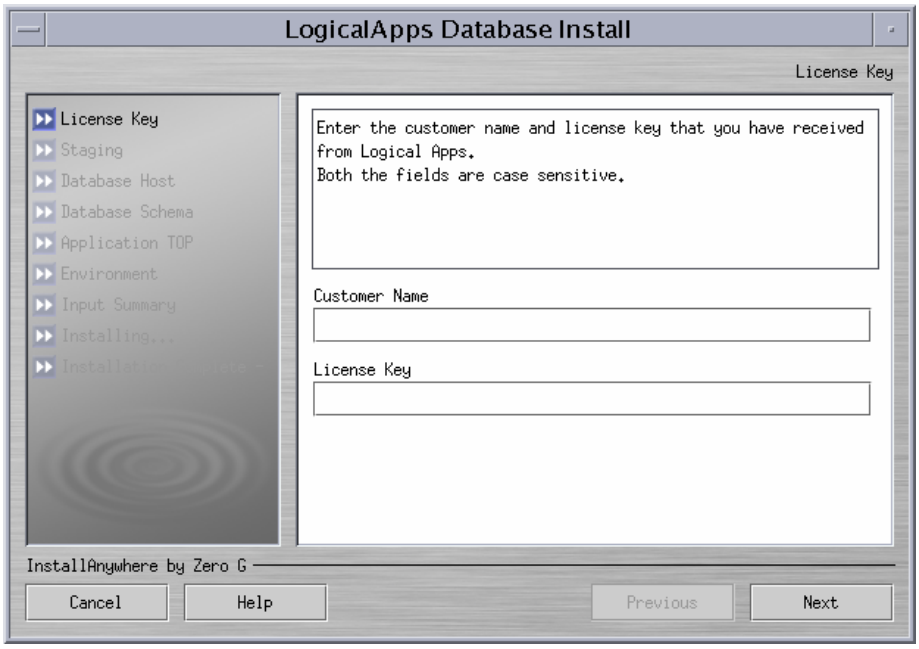
5. Execute ladbinstall.bin:
   - To run in GUI or console mode, ensure that ladbinstall.properties is absent from the directory where ladbinstall.bin resides. To run in silent mode, be sure that both files are in the same directory.
   - Use the name *ladbinstall.bin* as the command to run in GUI or silent mode. Add the argument *–i console* to run in console mode.

All three Installer modes require the same information; GUI and console prompt for it, and silent reads it from files. If you choose GUI mode (as shown in the following procedure), you can perform these operations in each of the windows:

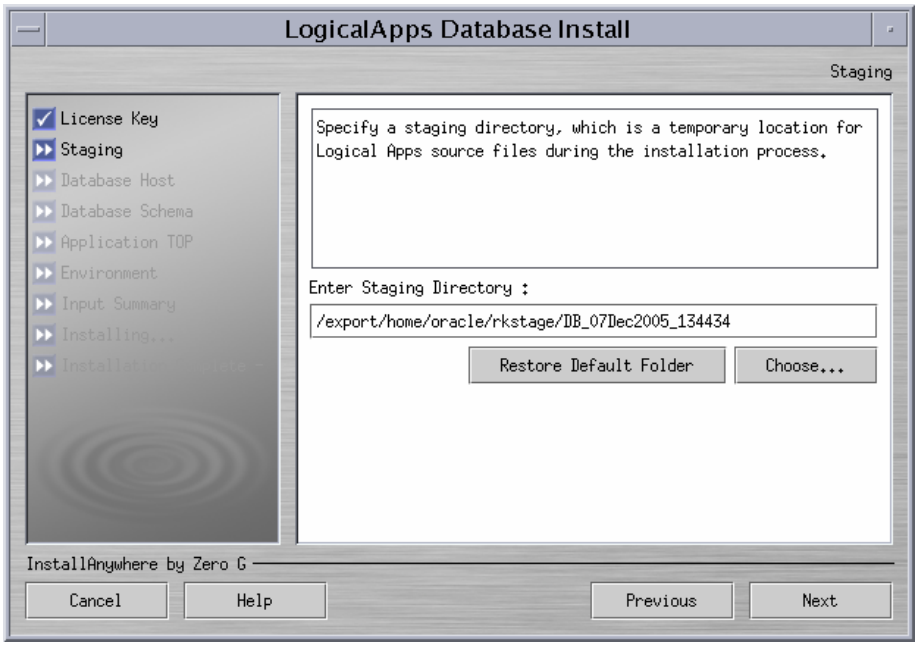
- Review a brief description of the information you need to provide.
- Click on the Help button to open a window that provides a more expansive description of the information you need to provide. (After you review this information, click on the Close button to exit the Help window.)
- Type installation information in the labeled text boxes (or accept default values).
- When you complete one window, click on the Next button to move from it to the next window.
- Click the Previous button if you wish to return to a window you completed earlier.
- Note that titles of windows you have completed appear in black along the left of each window; those yet to be completed are shown in grey.

To complete the database server installation:

1. Enter your customer name and license key, as LogicalApps provided them to you. The fields are case-sensitive. When you click Next, a message displays the applications you are licensed to install; click the OK button to clear the message.



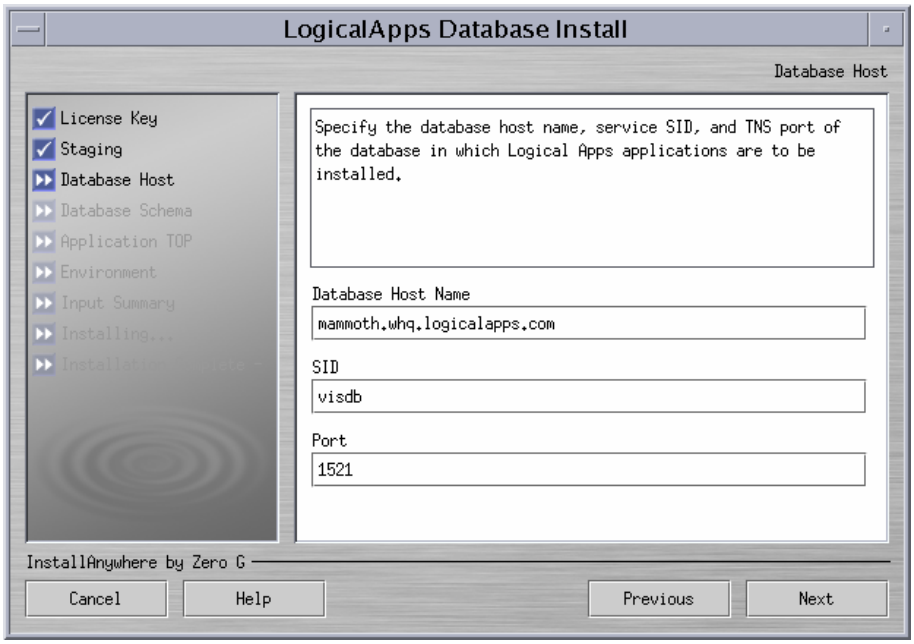

2. Specify a staging directory — a temporary location for source files:



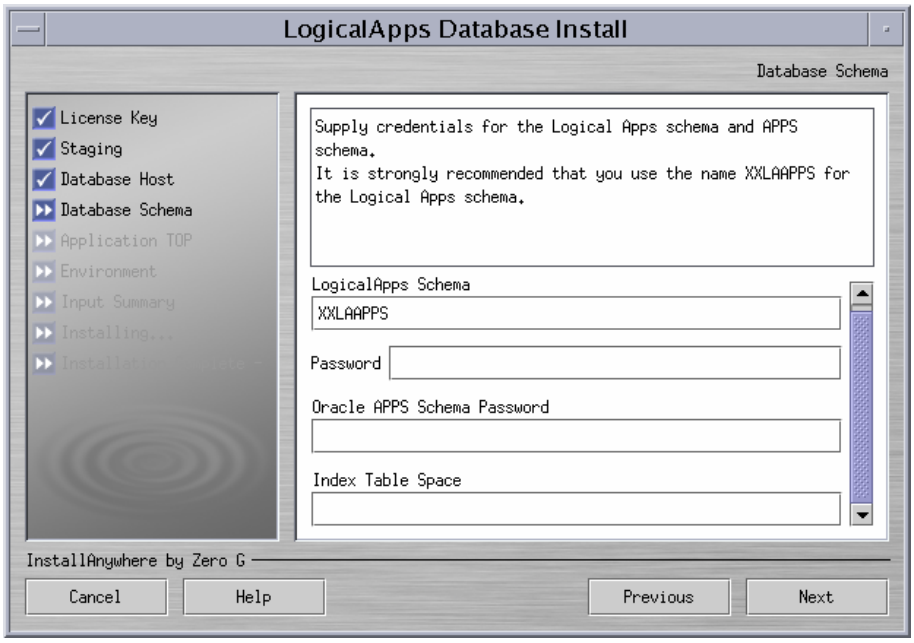

The Installer suggests a default directory; its name is a timestamp for the moment you perform the installation, with *DB* (for database). If you wish to select another directory, click the Choose button and, in a Select a Folder window, navigate to the directory you want. If you specify a nonexistent directory, the Installer creates that directory. If you navigate away from the default directory and want to return

to it, click on the Restore Default Folder button. Make a note of the directory name; you'll need it later, when you configure remote compilation.

**3** Verify the default values for the host name, SID (service identifier) and network port of the Oracle Applications database server, which the Installer takes from the shell environment. If the defaults are not correct, enter correct values.



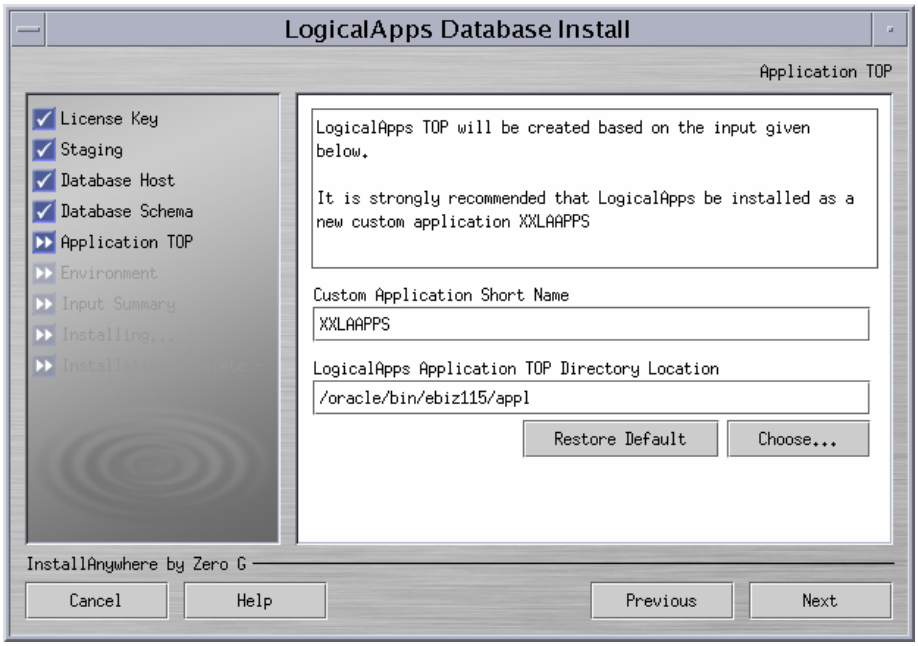

**4** Supply log-on values for the LogicalApps and Oracle Applications (APPS) schemas:




As noted earlier, LogicalApps recommends strongly the creation of a dedicated schema called XXLAAPPS, and the Installer provides this value by default. If you follow the recommendation, accept the default; otherwise, replace it with the name of the schema you will use for LogicalApps database objects. Also enter

the passwords for the LogicalApps and Oracle APPS schemas, and the name of the tablespace for indexes used by LogicalApps database objects.

**5** Establish the LogicalApps TOP — the high-level directory for the storage of AppsRules files. Specify a directory that is the parent of the LogicalApps TOP and an application short name that is appended to the parent directory to form the LogicalApps TOP directory.




By default, the Installer selects the Oracle Applications TOP as the parent directory and XXLAAPPS as the application short name. These values are recommended, but you can change them.

To select another parent directory, click on the Choose button and, in a Select a Folder window, navigate to the directory you want. If you enter the name of a nonexistent directory, the Installer creates that directory. To return to the default directory, click the Restore Default button.

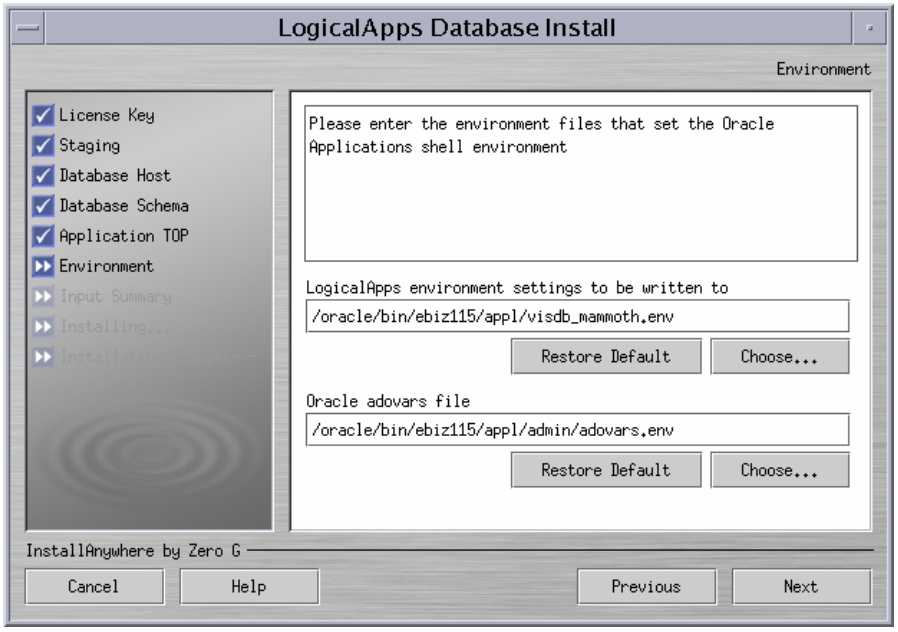
No matter what case you use to enter values, the Installer saves the short name as all uppercase (and adds the uppercase *_TOP* to create a top shell variable), and the directory location as all lowercase. (However, for a reinstallation, the Installer does not change the case of an existing application TOP.)

If you have selected an application short name that is already in use, the Installer displays a warning message when you click the Next button:

To respond to this warning:

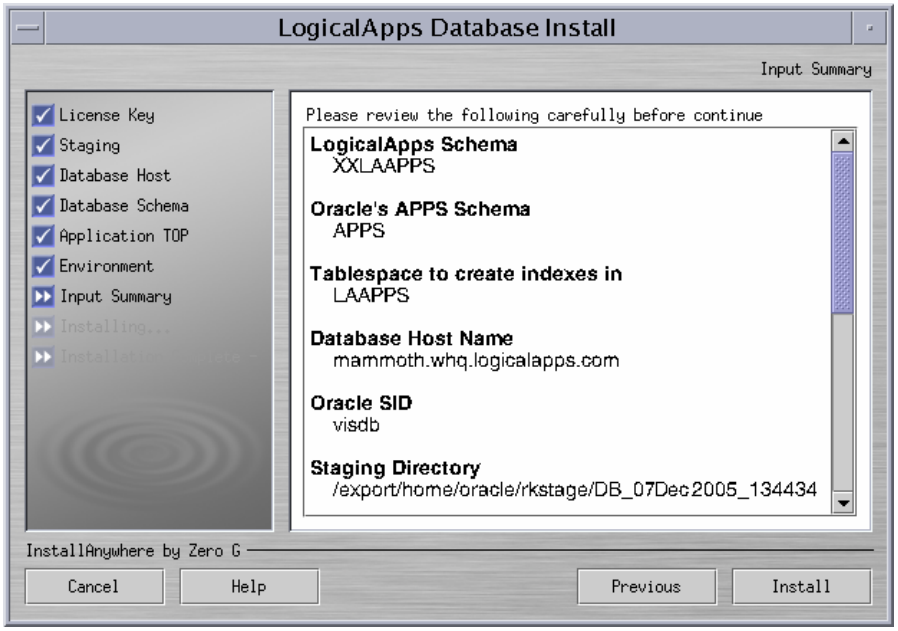
- Click Enter Again to return to the Application TOP form and set a new value.
- Click Continue to accept the duplicate application short name. Doing so, however, would cause AppsRules and another application to share the name, with the risk that files for one application or the other might be overwritten.
- Click Abort to abandon the AppsRules installation.

**6** Specify paths to files that contain environment variables for the Oracle Applications shell. (The installation appends LogicalApps-specific entries to these files.)




Accept the defaults, or click a Choose button and, in a Select a Folder window, navigate to a directory you want. If you enter the name of a nonexistent directory, the Installer creates that directory. To return to the default directory, click the Restore Default button.

**7** Review your selections in the Input Summary form:




If you determine that any of the entries is inappropriate, you can click on the Previous button until you reach the form in which you selected the entry, and change it. (The Installer retains any entries you don't change, even if you pass by them as you return to an earlier step in the installation process.)

8 In the Input Summary form, the label for the button at the lower right has changed from *Next* to *Install*. When you are satisfied with your selections in earlier forms, click on the Install button to complete the database server installation.

The Installer displays error messages (if any are warranted) upon completing the installation of each LogicalApps application, and displays an overall status upon completing the installation of all products. If the overall status is Success, the installation has finished with no errors.

If errors occur, they or the overall status may be classified as Warning, Nonfatal, or Fatal, depending on severity. The Installer recovers (restores the system to its state prior to the installation) for Fatal errors, but not for Warning or Nonfatal errors. For details about errors and the installation process, navigate to the directory from which the Installer ran and review two log files: LADB_LOG_*timestamp*.log and LADB_ERROR_*timestamp*.log, where *timestamp* is the date and time at which the Installer ran.

# Installing Forms Server Components

To install forms server components of AppsRules, run the file lafrminstall.bin:

1 If the database and forms servers run on the same host, re-source the environment by opening a new shell.

2 Transfer the lafrminstall.bin file to the forms server, via FTP in binary mode. Use the applmgr account.

3 Use applmgr to log in to the forms server. Ensure that the user (login ID) has write and read privileges on $APPL_TOP.

4 Execute the environment file, if it is not included in the profile:

```
$..$APPL_TOP/$APPLFENV
```

5 Set the execute permission on lafrminstall:

```
$.chmod +x lafrminstall.bin
```

6 Execute lafrminstall.bin:.

- To run in GUI or console mode, ensure that lafrminstall.properties is absent from the directory where lafrminstall.bin resides. To run in silent mode, be sure both files are in the same directory.
- Use the name *lafrminstall.bin* as the command to run in GUI or silent mode. Add the argument *–i console* to run in console mode.

Most windows (or console prompts) for the forms installation are identical to those for the database installation. If you select GUI mode, each window enables you to perform the same operations as you could in the database-server Installer (see page 8).

To complete the forms server installation:

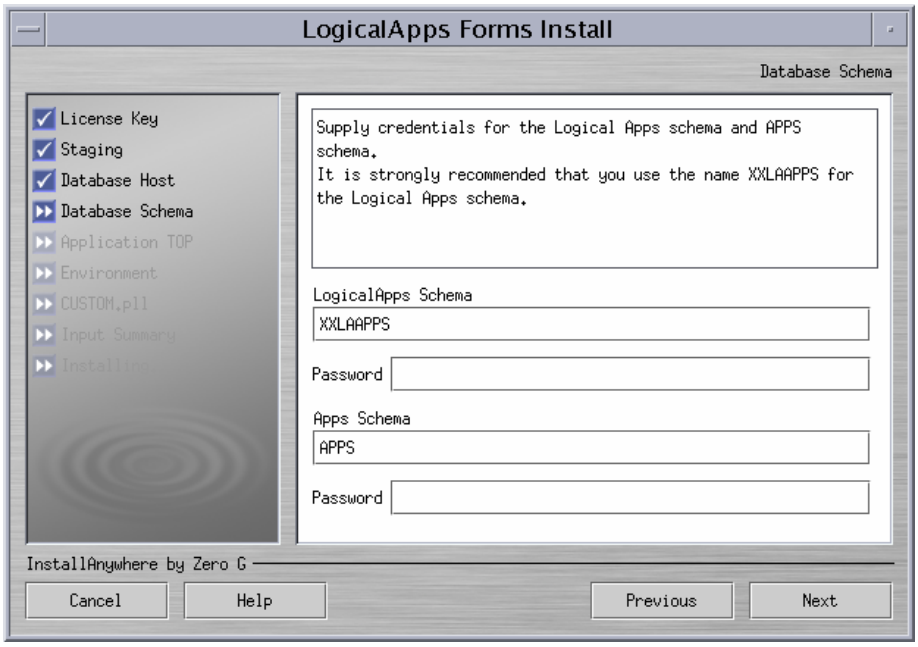
1 In the License Key window, once again enter the customer name and license key provided to you by LogicalApps. These are the same as the values for database-server installation. Again, when you click the Next button a message displays the applications you are licensed to install; click the OK button to clear the message.

2 In the Staging form, once again select a directory for the temporary placement of source files. The Installer once again suggests a default — its name this time a time-stamp for the moment you perform the installation, along with *FRM* (for forms).

If you wish to select another directory, click on the Choose button. In a Select a Folder window, navigate to the directory you want. If you specify a nonexistent directory, the Installer creates that directory. If you navigate away from the default directory and want to return to it, click on the Restore Default Folder button.

3 In the Database Host form, select the database host name used where the database installation has been run, and the appropriate SID and port values.

4 In the Database Schema window, there is no longer an Index Table Space field (as it would be inapplicable to forms installation), but where the database-server Installer requested only a password for the Oracle Applications schema, the forms-server Installer asks for a name as well:




For the Apps Schema field, accept the default value, APPS. (This needs to match the database-server value, which is hard-coded.) For each of the remaining fields, enter the same value as you entered for the database installation.

Once again, LogicalApps recommends the creation of a dedicated schema called XXLAAPPS. To follow this recommendation, accept the default value; otherwise replace it with the name of the schema you will use for LogicalApps database objects. Also enter the passwords for the LogicalApps and Oracle APPS schemas.

5 In the Application TOP form, establish the LogicalApps TOP for the forms server — the highest-level directory for the storage of AppsRules files. Specify a directory that is to serve as the parent of the LogicalApps TOP, and an application short name that is appended to the parent directory to form the LogicalApps TOP directory.

The Installer defaults to the forms-server-specific Oracle Applications TOP as the parent directory and XXLAAPPS as the application short name. These values are recommended.

Ensure that the application short name for the forms server is the same as the database server's. If you wish to select another parent directory, click on the Choose button and, in a Select a Folder window, navigate to the directory you want. If you enter the name of a nonexistent directory, the Installer creates that directory. To return to the default directory, click the Restore Default button.

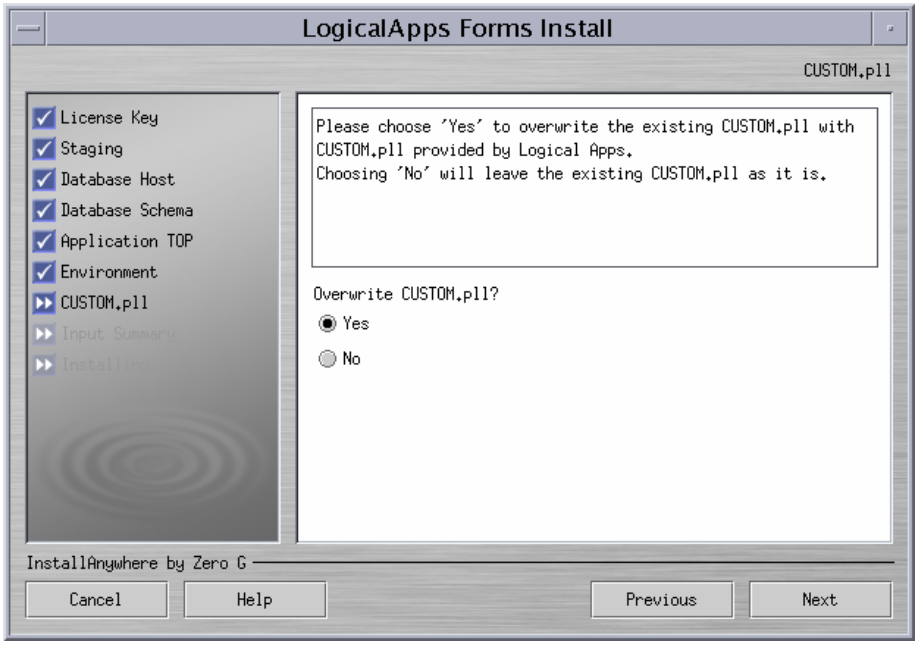
No matter what case you use to enter values, the Installer saves the short name as all uppercase (and adds the uppercase *_TOP* to create a top shell variable), and the directory location as all lowercase. (However, for a reinstallation, the Installer does not change the case of an existing application TOP.)

The forms-server Installer, like its database-server counterpart, presents a warning if you select an application short name that is already in use and it presents the same response options:

- Click Enter Again to return to the Application TOP form and set a new value.
- Click Continue to accept the duplicate application short name. Doing so, however, would cause AppsRules and another application to share the name, with the risk that files for one application or the other might be overwritten.
- Click Abort to abandon the AppsRules installation.

**6** In the Environment form, specify paths to files that contain environment variables for the Oracle Applications shell (the first two prompts) and for forms paths (the APPSORA prompt). Accept the defaults, or click a Choose button and, in a Select a Folder window, navigate to a directory you want. If you enter the name of a nonexistent directory, the Installer creates that directory. To return to the default directory, click the Restore Default button. In any case select values that are appropriate for the forms server.

**7** When you complete the Environment form, the forms server Installer presents a CUSTOM.pll form:



Forms server installation requires that an existing CUSTOM.pll file be modified so that it can link to an LACUSTOM.pll file. If you select Yes, the Installer backs up your existing CUSTOM.pll, and then overwrites the original with a modified copy that contains the necessary links to LACUSTOM.pll. (The backup copy has a time-stamp appended to the *.pll* file extension.) If your existing CUSTOM.pll contained any customization, a Yes selection in this form would require you to copy your customizations manually from the backup file to the LogicalApps-provided CUSTOM.pll.

If you select No, the Installer retains your existing CUSTOM.pll. In this case, you need to edit the file to insert links to LACUSTOM.pll (see below).

8. In the Input Summary form, review the selections you have made. If you determine that any of the entries is inappropriate, you can click on the Previous button until you reach the form in which you selected the entry, and change it. (The Installer retains any entries you don't change, even if you pass by them as you return to an earlier step in the installation process.)

9. When you are satisfied with the selections you have made in preceding forms, click on the Install button in the Input Summary form to complete the forms server installation.

The Installer displays error messages (if any are warranted) upon completing the installation of each LogicalApps application, and displays an overall status upon completing the installation of all products. If the overall status is Success, the installation has finished with no errors.

If errors occur, they or the overall status may be classified as Warning, Nonfatal, or Fatal, depending on severity. The Installer recovers (restores the system to its state prior to the installation) for Fatal errors, but not for Warning or Nonfatal errors. For details about errors and the installation process, navigate to the directory from which the Installer ran and review two log files: LAFRM_LOG_*timestamp*.log and LAFRM_ERROR_*timestamp*.log, where *timestamp* is the date and time at which the Installer ran.

## CUSTOM.pll Modifications

If you chose (in step 7) not to overwrite your CUSTOM.pll file, edit the CUSTOM.pll file. (If you selected Yes in step 7, ignore this section and skip ahead to "Configuring the Remote Compilation.")

1. In place of the existing code for *Procedure Event(event_name varchar2)*, substitute the following:

```
PROCEDURE event(event_name varchar2) is

  form_name          varchar2(30) := name_in('system.current_form');
  block_name         varchar2(30) := name_in('system.cursor_block');
  field_name         varchar2(30) := name_in('system.current_item');
  function_name      varchar2(30);
  parameters         varchar2(2000);
```

```
begin
  if (event_name = 'ZOOM') then
    la_enhncmtmgr_pkg.la_zooms(form_name,block_name,function_name,
        parameters);
      if function_name is not NULL
      then
        if parameters is null then
          fnd_function.execute(function_name,'Y','N');
        elsif 'ZOOMSPECIAL' = substr(parameters,1,11) then
          lacustom.event('ZOOMSPECIAL'); -----new code 081903
      else
        parameters := lazoom.zoom_event(parameters);
        fnd_function.execute(function_name,'Y','N',parameters);
      end if;
  end if;
-----------------------------------WNF
  elsif (event_name='WHEN-NEW-FORM-INSTANCE') then
   lacustom.event('WNF');
--------------------------WNB
  elsif (event_name = 'WHEN-NEW-BLOCK-INSTANCE') then
   lacustom.event('WNB');
----------------------------WNI
  elsif (event_name = 'WHEN-NEW-ITEM-INSTANCE') then
   lacustom.event('WNI');
-----------------------WNR
  elsif (event_name = 'WHEN-NEW-RECORD-INSTANCE') then
   lacustom.event('WNR');
-----------------------WNV
  elsif (event_name = 'WHEN-VALIDATE-RECORD') then
   lacustom.event('WVR');
------------------------
  elsif (substr(event_name,1,7) = 'SPECIAL') then
   execute_menu(event_name);
-------------------------------------------
   else lacustom.event(event_name);   --put other events here
   end if;
end event;
```

**2** In place of the code for *Function zoom_available*, substitute the following:

```
FUNCTION zoom_available return boolean is
    v_enabled    varchar2(20);

  begin   --x
    v_enabled := lazoom.zoom_enabled;
    IF v_enabled = 'TRUE' THEN
      return TRUE;
    else
      return FALSE;
    end if;
  RETURN NULL;
  end zoom_available;
```

**3** Attach the following libraries. (Remove the path when attaching the libraries.)

- LACUSTOM.pll
- LABRSQL.pll

**4** Compile the file and ensure there are no compilation errors.

# Configuring the Remote Compilation

To finish the installation, you must configure a remote compilation feature, which makes libraries resident on the concurrent sever available to the forms server.

1. Log on to the database server.
2. Determine the full path to the Java executable: First, source out the Oracle Applications shell environment. Then, at the command prompt, type:

   ```
   which java
   ```

3. Navigate to the staging directory (which you selected in step 2 of the database server installation process).
4. Grant the execute permission on a file called laconfig.sh:

   ```
   chmod +x AppsCore/db/scripts/laconfig.sh
   ```

5. Run the laconfig.sh file:

   ```
   AppsCore/db/scripts/laconfig.sh arg1 arg2
   ```

   - In place of *arg1*, insert the full path of the LogicalApps TOP directory, followed by "/bin." Note that the path to the LogicalApps TOP directory typically contains more than the values you selected in step 5 of the database server installation process. To determine the path to this directory, use the echo command, specifying the application short name you selected in step 5 of the database server installation, followed by "_TOP." For example:

     ```
     echo $XXLAAPPS_TOP
     ```

     As an example of a correct value for *arg1*, the path to the LogicalApps TOP configured on page 11 might be:

     ```
     /oracle/bin/ebiz115/appl/XXLAAPPS/11.5.0/bin
     ```

   - In pace of *arg2* insert the full path of the staging directory (which you selected in step 2 of the database server installation process), followed by "/AppsCore." For example, the correct value for the staging directory configured on page 9 might be:

     ```
     /export/home/oracle/rkstage/DB_27Jun2005_134434/AppsCore
     ```

Running the laconfig.sh file produces a series of command-line prompts. Respond to them as follows:

1. Enter the full path of the Java executable used by Oracle Applications.
2. You are prompted to enter the LogicalApps short name. The value you enter must be the same as the short name you created in step 5 on page 11.
3. The following prompt appears:

   ```
   Choose your Configuration from below:
   1.  Single-Tier (all tiers on a single node)
   2.  Multi-node (a separate node for each server)
   3.  Two Node (one database/concurrent proc. node, one forms/web
       node)
   4.  Two Node (one forms/concurrent proc. node, one database node
   5.  Exit Program
   ```

Enter 1 if all of the database, forms, and concurrent servers reside on a single machine; enter 2 if each resides on its own machine; enter 3 if the database and concurrent servers reside on one machine, and the forms server on another; enter 4 if the forms and concurrent servers reside on one machine, and the database server on another.

4. The following prompt appears:

```
Environment File is 'filename'
Does this environment file set Oracle Home (Y/N)
```

Select *Y* for yes or *N* for no as appropriate. If you select *N*, the system prompts you for the name of the file that does set the Oracle Home; enter the file name.

5. If you selected option 2, 3, or 4 in step 2, the following prompt appears:

```
Choose the execution method from below:
1) Secured Shell – ssh
2) Remote execution – rexec
3) Manual
```

Enter the number corresponding to the protocol you will use for communication among the machines on which your servers reside.

6. If you selected option 2, 3, or 4 in step 2, the following prompt appears:

```
Enter the Number of Form Servers:
```

Enter the number of form servers you have.

7. The following set of prompts appears once for each of the form servers you enumerated in step 6 (with the *x* replaced by a form server number):

```
Enter the Form Server Number x Host Name:
Enter the Login ID:
Enter the Password:
Enter the full path of LogicalApps binaries on the FORM
Server:
```

For each set of prompts, enter the host name, the login ID for the owner of APPL_TOP, that owner's password, and the appropriate path. You can get the last of these values by logging on to the form server and typing the following command:

```
echo @XXLAAPPS_TOP_bin
```

Once you have finished executing the laconfig.sh file, verify that the following files exist and make sure both the Java path and Classpath are set correctly:

- Database server (under $XXLAAPPS_TOP/bin): LAGENLIB.prog, LAMIGRATE.prog, LAIMPORT.prog
- Forms server: LAFORMSGEN.prog

Finally, if you want to enable migration (the ability to port AppsRules configurations from one instance to another) with password security:

1. Navigate to \\System Administration Responsibility\Profile\System.
2. Query for the LAAPPS: Enable Migration Security profile option.
3. Set the value to Yes at site level. (This can be controlled further at the responsibility and user levels.)

# Bouncing the Servers

When you finish configuring the remote compilation feature, bounce both the form server and the concurrent manager server.

# Chapter 3

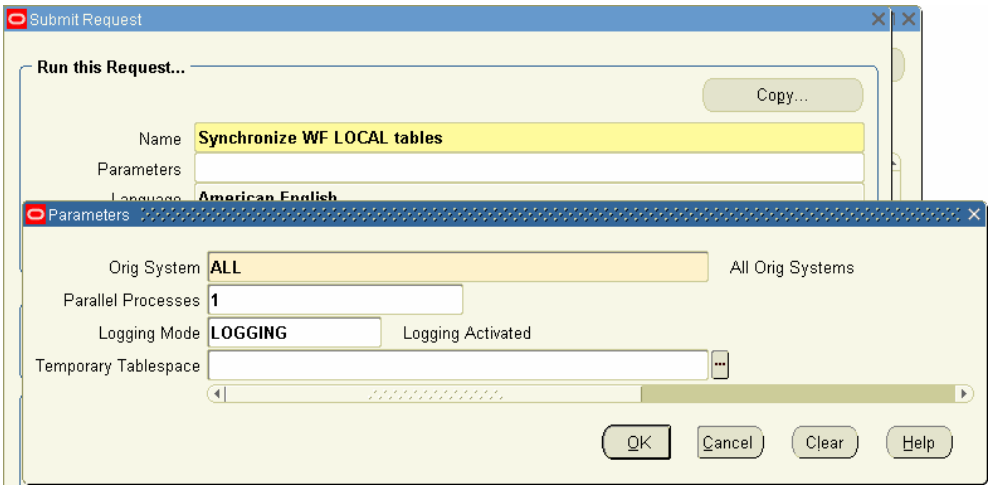
# Postinstallation Tasks

Once the installation is complete, you must perform additional tasks specific to the applications you've installed.

## AppsFlow

To use AppsFlow, run the Synchronize WF LOCAL Tables concurrent program:

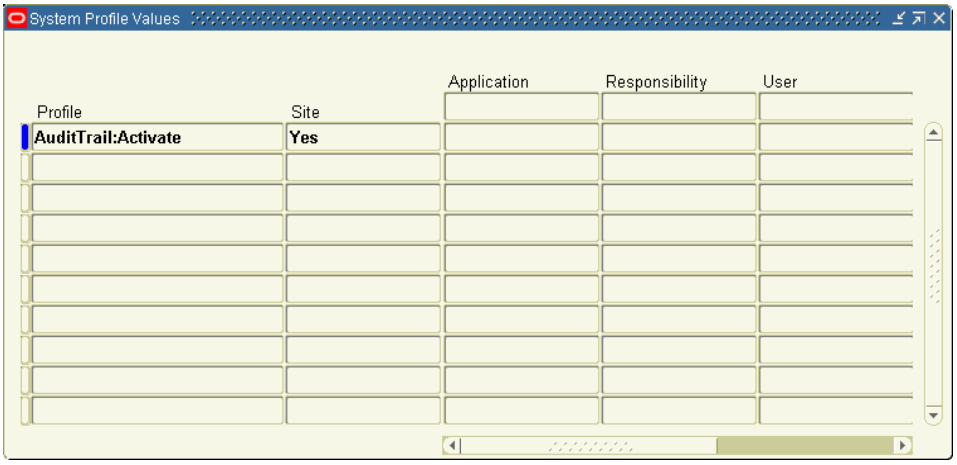
1. Log on to the System Administrator responsibility in Oracle Applications.
2. Click on View in the Oracle Applications menu bar, then on Requests in the View menu. The Find Requests form appears.
3. Click the Submit a New Request button. At the prompt, select Single Request and click OK. The Submit Request form appears.
4. In the Name list of values, select Synchronize WF LOCAL Tables. Click on the OK button.
5. A Parameters form appears. Enter the following values (as shown at the top of the next page), then click on the OK button:
   - Orig System: ALL
   - Parallel Processes: 1
   - Logging Mode: LOGGING
   - Temporary Tablespace: Choose an appropriate temporary tablespace.
6. In the Submit Request form, click on the Submit button.




# AppsAudit

To use AppsAudit, complete three tasks. First, set the AuditTrail:Activate profile option to Yes:

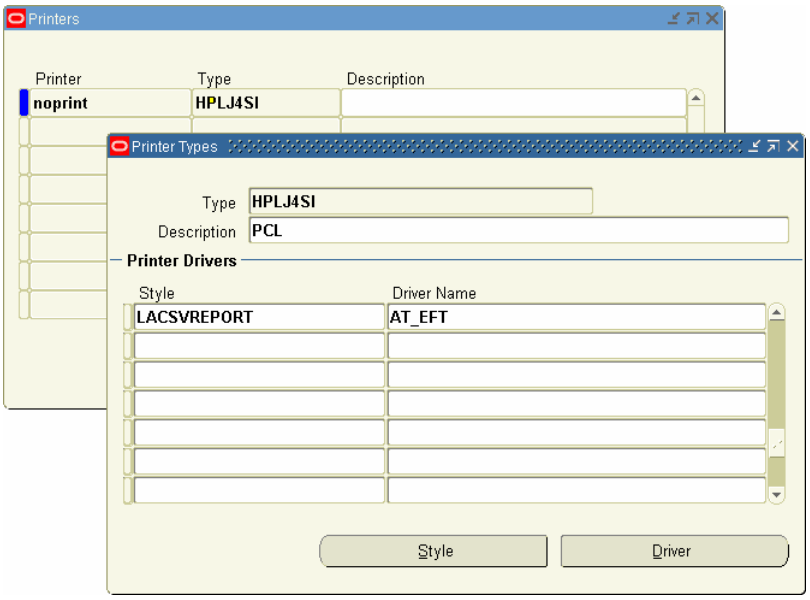
1. Log on to the System Administrator responsibility in Oracle Applications.
2. In the Navigator, select Profile, then System.
3. In the Find System Profile Values form, select AuditTrail:Activate in the Profile list of values. Then click on the Find button.
4. Ensure that the AuditTrail:Activate option is set to Yes at the Site level:




Second, add the LACSVREPORT style to the printer you will use for AppsAudit:

1. In the System Administrator responsibility, select Install, then Printer, then Register.
2. A Printers form appears. In its Printer list of values, select the printer you wish to use with AppsAudit. Note the value that appears in the Type field when you select the printer, and then click on the Printer Types button.
3. A Printer Types form appears. In its Type field, query for the Type you noted in step 2. (Press the F11 key; enter the Type value in the Type field; press Ctrl+F11.)

4 In the Style list of values, select LACSVREPORT. (The software automatically supplies an associated value under Driver Name.)



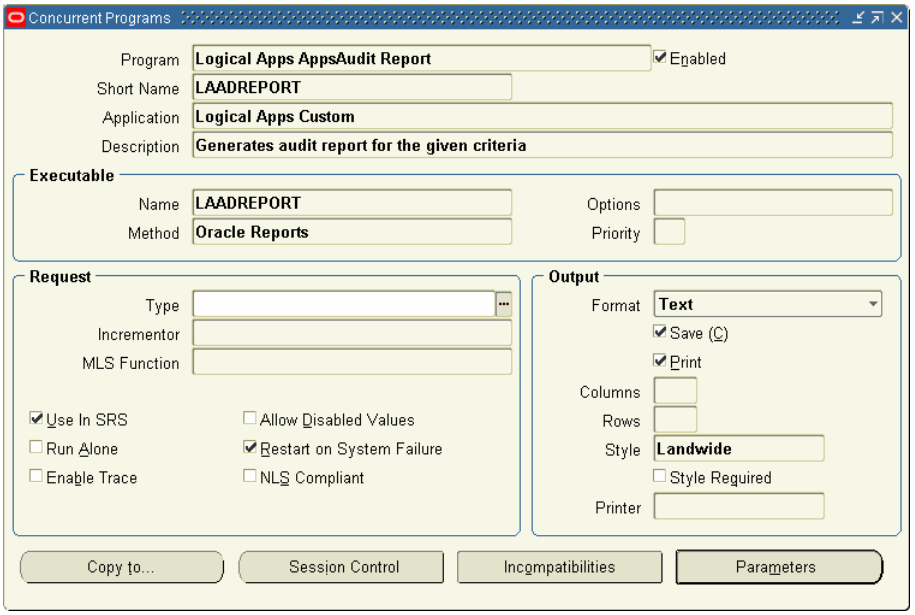

5 Click on File in the menu bar, then on Save in the File menu.

Third, modify the report style:

1 Still in the System Administrator responsibility, select Concurrent, then Program, then Define.

2 A Concurrent Programs form appears. In its Program field, query for LogicalApps AppsAudit Report. (Press the F11 key; enter *LogicalApps AppsAudit Report* in the Program field; press Ctrl+F11.)

3 The Style field displays the value Landwide. Change this to Landscape.



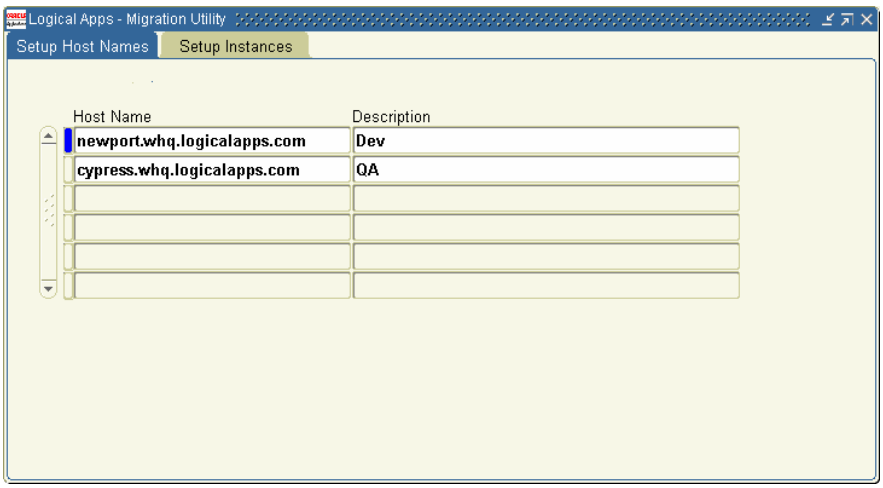

4 Click on File in the menu bar, then on Save in the File menu.

# AppsAccess and AppsControl

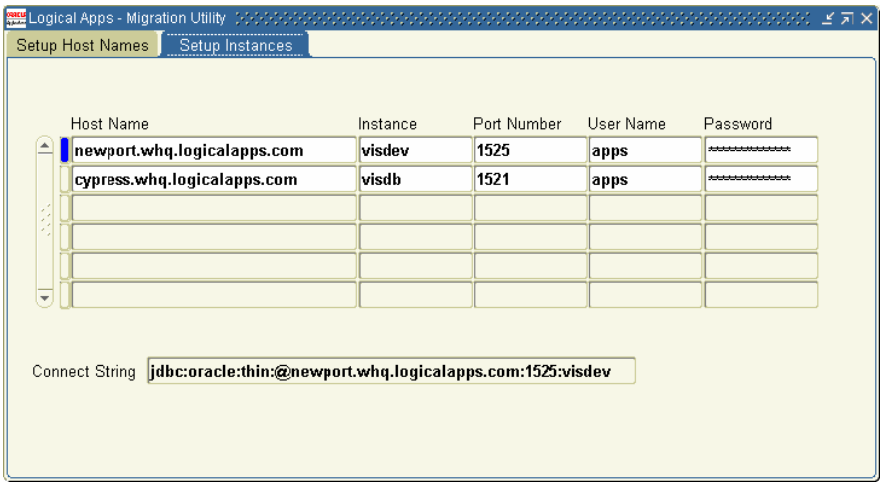
To use AppsAccess you must import two xml files, and to use AppsControl you must import three xml files. To do so, you use a migration utility, which the Installer programs set up automatically as a part of the installation process.

First, ensure that the migration utility is configured correctly:

1. Log on to the LogicalApps responsibility in Oracle Applications. In that responsibility, select AppsRules.
2. Once the AppsRules form is open, click on LogicalApps Utilities in the menu bar, then on Migration Setup in the Utilities menu.
3. A Migration Utility form appears. Ensure that the Setup Host Names tab is selected:




4. Confirm that the database server host name (the one selected in step 3 of the database server installation process) is displayed in the Host Name column. The Installer program should have inserted this value during installation.
5. Click on the Setup Instances tab:




6. Ensure that appropriate values are displayed in the Host Name, Instance (SID), Port Number, User Name, and Password columns. (The first three values are

those specified in step 3 of the database server installation process, and the last two are those specified in step 4.) Again, the Installer should have inserted these values automatically.

7 Having confirmed these values (or, if necessary, entered them), close the Migration Utility form.

The five xml files are located in subdirectories of the staging directory you selected in step 2 of the database server installation process. For AppsAccess the files are located in *StagingDirectory*/AppsAcces/db/scripts, and include the following:

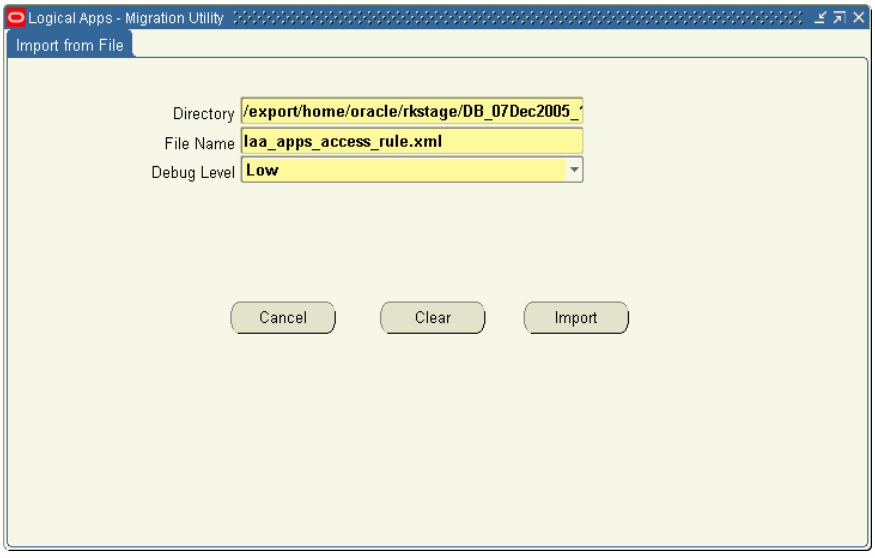
- laa_apps_access_rule.xml
- laa_apps_access_flow.xml

For AppsControl the files are located in *StagingDirectory*/AppsControl/db/scripts, and include the following:

- appscontrol_notification.xml
- appscontrol_approval.xml
- appscontrol_reject.xml

For each application, the files must be imported in the order shown. Complete the following procedure once for each of the files:

1 With AppsRules open, click on LogicalApps in the menu bar, then on Import from File in the Utilities menu. An Import from File form appears:




2 In the directory box, type the path to the folder that contains the import file.

3 In the File Name box, type the name of the file you want to import.

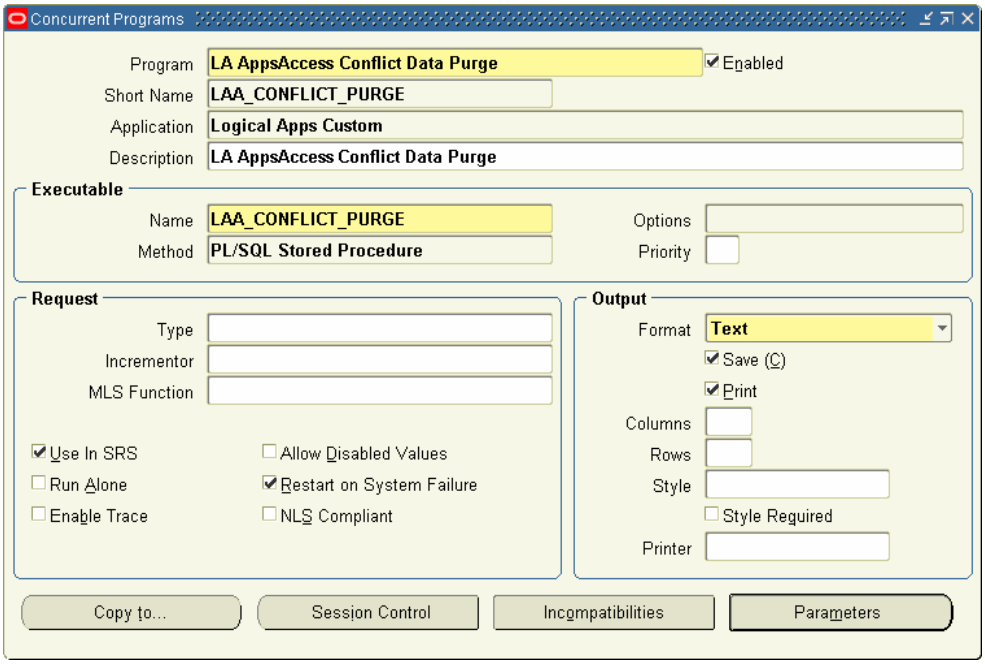
4 Select a value for Debug Level. Ordinarily, select Low; select High instead if you need to uncover the cause of a failed import.

5 Click on the Import button. A concurrent request message displays the ID number of the concurrent request under which the import operation is carried out. Click on the OK button to clear the message.

# AppsAccess Concurrent Program

If you are upgrading AppsAccess from an earlier version, the name of one of its concurrent programs may not have been updated correctly. To correct the program name:

1. Log on to the System Administrator responsibility in Oracle Applications.
2. In the Navigator, select Concurrent, then Program, then Define. The Concurrent Programs form opens.
3. Query for the Conflict Data Purge program: Press F11, type the phrase *LA AppsAccess Conflict Data Purge* in the Program field, and press Ctrl+F11.




4. In both the Program and Description fields, type the following new value for the name of the program: *LA AppsAccess Archive User Conflict Data*. Do not change any other values.
5. Save the change: Click on File in the menu bar, and then Save in the File menu. Then close the Concurrent Programs form (click on the × symbol).

If you are performing a new installation of AppsAccess, this issue does not arise; the program is named correctly, and you need not take any corrective action.

# SQL Rule Compilation

From within AppsRules, you must run a option to compile SQL rules:

1. Log on to the LogicalApps responsibility in Oracle Applications. In that responsibility, select AppsRules..
2. Once the AppsRules form is open, click on Tools in the menu bar, and then AppsRules Compile All Active SQL Rules in the Tools menu.

3. A pop-up message informs you of an ID number for the concurrent request that executes the SQL rule compilation. Make a note of the number, and then click on the OK button to close the message.
4. Verify that the request is successfully completed.
   a. Click on View in the menu bar, then on Requests in the View menu.
   b. A Find Requests form opens. In it, click on the Specific Request radio button. Type the ID number of your concurrent request in the Request ID field, and click on the Find button.
   c. A Requests form opens. In the row displaying information about your request, ensure that the entry in the Phase field is *Completed* (you may need to click the Refresh Data button), and the entry in the Status field is *Normal*.
   d. Click on the × in the upper right corner of the Requests form to close it.

## Special Cases

If the database server and concurrent manager server are on different hosts, make the following changes to the TKprof script (LATKPROF.prog), which is located in the LogicalApps binary directory on the concurrent manager server. (The changed lines are shown in boldface.) The value <db_login> is the database server name, and the value <db_hostname> is the user name to log on to the database server.

```
#!/bin/sh
oracle_login=$1
tempfile=$$latkprof.txt
temptrc=$$latkprof.trc
echo Temp file $tempfile
echo tkprof directory "$5"
pwd
tkfiles='ssh <db_login>@<db_hostname> ls $5'
for i in $tkfiles
do
echo processing $i
scp <db_login>@<db_hostname>:$i /tmp/$temptrc
tkprof /tmp/$temptrc /tmp/$tempfile explain=$1
cat /tmp/$tempfile
rm /tmp/$tempfile
rm /tmp/$temptrc
done
```

If you have multiple APPS schemas, the LA_ENHNCMTMGR_PKG must be created as a synonym under each of these schemas. To perform this operation, run the following command:

```
create synonym LA_ENHNCMTMGR_PKG for apps.LA_ENHNCMTMGR_PKG
```

If this is not set, the following error message appears when a user attempts to log on to a read-only or MRC (multiple reporting currency) responsibility:

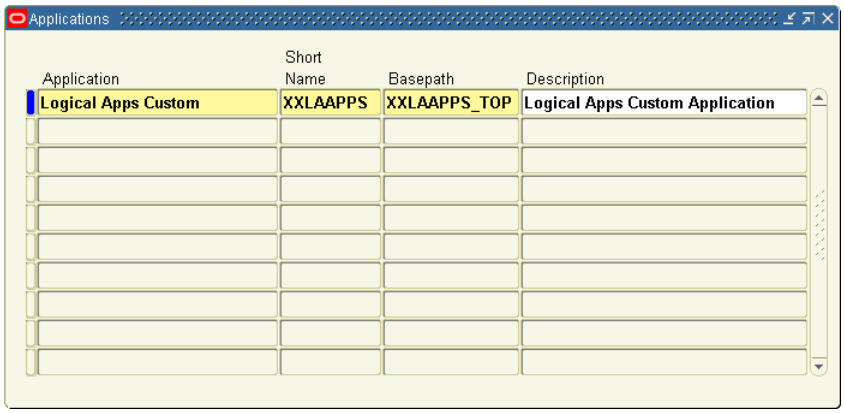
```
la_enhncmtmgr_pkg not declared
```

# Chapter 4

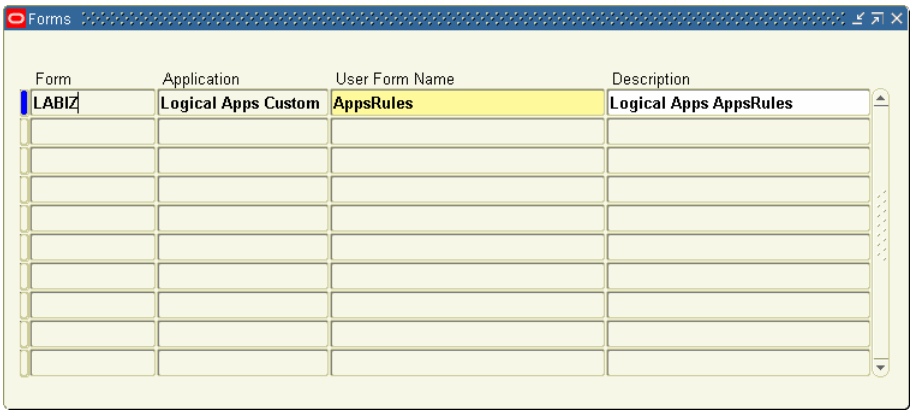
# Validation

As a part of the installation process, the Installer programs complete several "behind-the-scenes" tasks. Open Oracle Applications forms to confirm that these tasks have been completed. (As you perform these validation steps, you may be instructed to "query for" a value. If so, press the F11 key, type the specified value in a specified field, and press Ctrl+F11.)

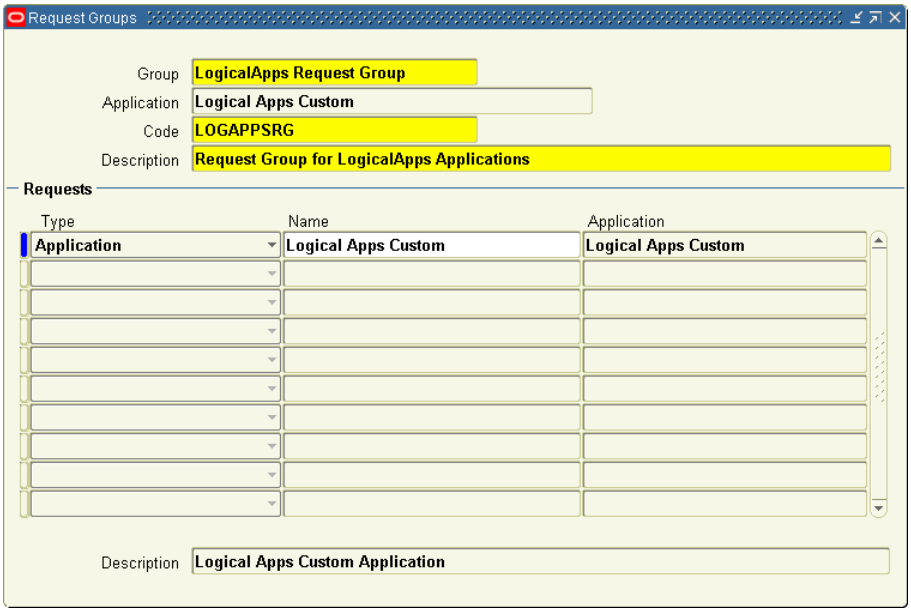
1. Log on to the System Administrator responsibility in Oracle Applications.
2. Select Application, then Register.
3. In the Application field, query for LogicalApps Custom. The form should contain the following values:



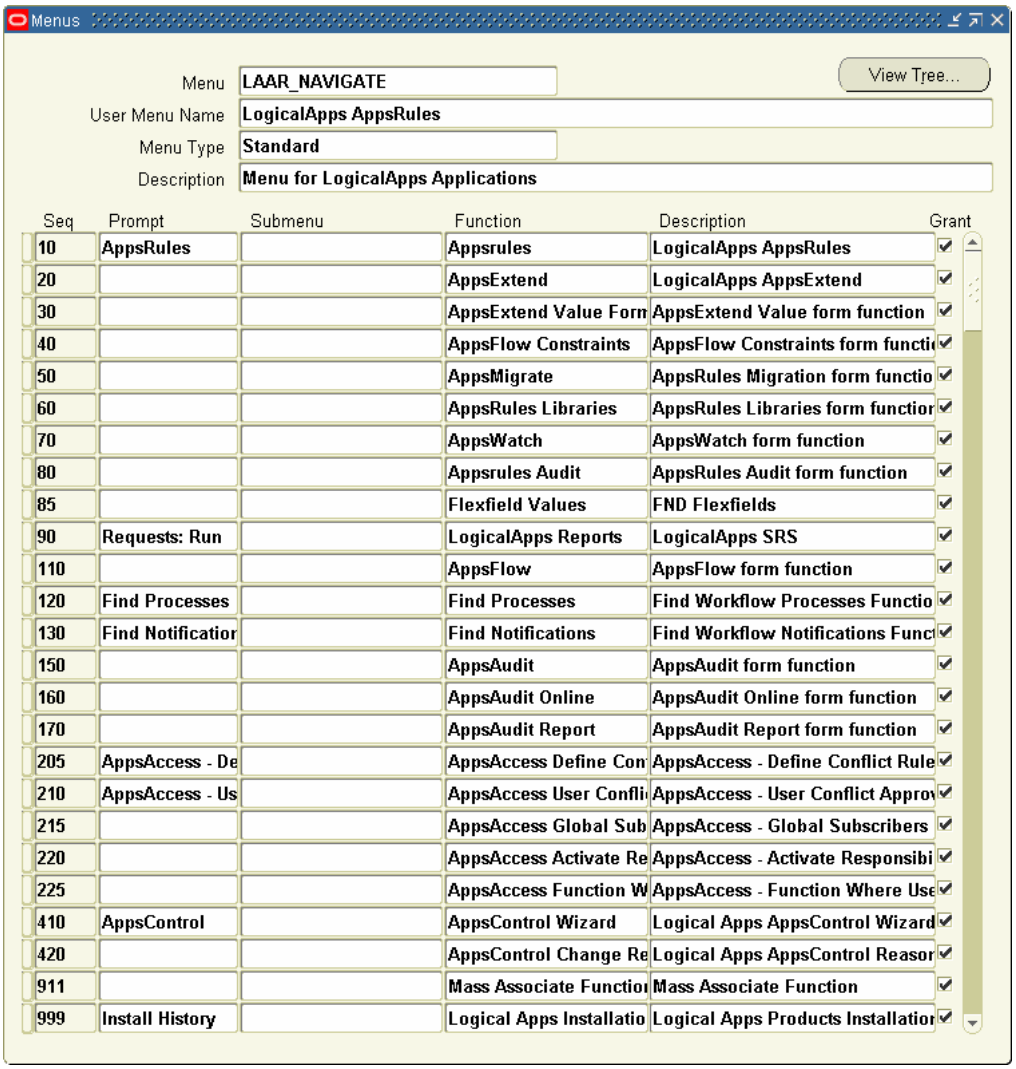
4 Switch to the Application Developer responsibility. (Select File in the menu bar, then Switch Responsibility in the File menu; then select Application Developer in the Responsibilities form.) In the Application Developer Navigator, double-click on Application, then Form. In the Form field, query on LABIZ. The form should contain the following values:




5 Switch back to the System Administrator responsibility. In its Navigator, select Security, then Responsibility, then Request. In the Request Groups form, query for the LogicalApps Request Group. The form should contain the following values:



**6** Still in the System Administrator responsibility, select Application, then Menu in the Navigator. In the Menus form, query for LAAR_NAVIGATE and confirm the values shown in the following illustration. (Note that the illustration is a composite, showing entries that would appear if you were to use the scroll bar in the Menus form.)



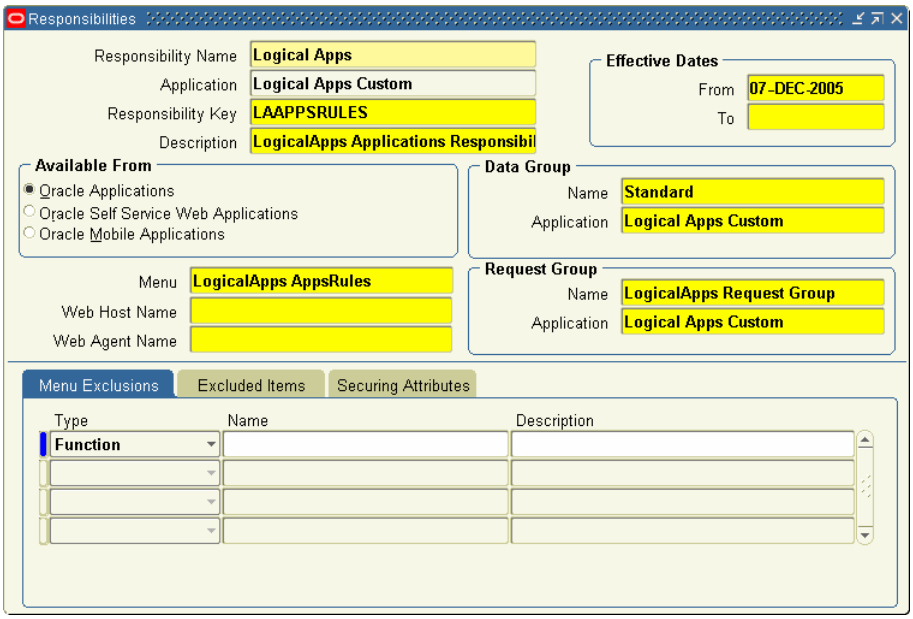

| Seq | Prompt | Submenu | Function | Description | Grant |
|---|---|---|---|---|---|
| 10 | AppsRules | | Appsrules | LogicalApps AppsRules | ☑ |
| 20 | | | AppsExtend | LogicalApps AppsExtend | ☑ |
| 30 | | | AppsExtend Value Form | AppsExtend Value form function | ☑ |
| 40 | | | AppsFlow Constraints | AppsFlow Constraints form functi | ☑ |
| 50 | | | AppsMigrate | AppsRules Migration form functio | ☑ |
| 60 | | | AppsRules Libraries | AppsRules Libraries form functior | ☑ |
| 70 | | | AppsWatch | AppsWatch form function | ☑ |
| 80 | | | Appsrules Audit | AppsRules Audit form function | ☑ |
| 85 | | | Flexfield Values | FND Flexfields | ☑ |
| 90 | Requests: Run | | LogicalApps Reports | LogicalApps SRS | ☑ |
| 110 | | | AppsFlow | AppsFlow form function | ☑ |
| 120 | Find Processes | | Find Processes | Find Workflow Processes Functio | ☑ |
| 130 | Find Notificatior | | Find Notifications | Find Workflow Notifications Funct | ☑ |
| 150 | | | AppsAudit | AppsAudit form function | ☑ |
| 160 | | | AppsAudit Online | AppsAudit Online form function | ☑ |
| 170 | | | AppsAudit Report | AppsAudit Report form function | ☑ |
| 205 | AppsAccess - De | | AppsAccess Define Con | AppsAccess - Define Conflict Rule | ☑ |
| 210 | AppsAccess - Us | | AppsAccess User Confli | AppsAccess - User Conflict Approv | ☑ |
| 215 | | | AppsAccess Global Sub | AppsAccess - Global Subscribers | ☑ |
| 220 | | | AppsAccess Activate Re | AppsAccess - Activate Responsibi | ☑ |
| 225 | | | AppsAccess Function W | AppsAccess - Function Where Use | ☑ |
| 410 | AppsControl | | AppsControl Wizard | Logical Apps AppsControl Wizard | ☑ |
| 420 | | | AppsControl Change Re | Logical Apps AppsControl Reasor | ☑ |
| 911 | | | Mass Associate Functio | Mass Associate Function | ☑ |
| 999 | Install History | | Logical Apps Installatio | Logical Apps Products Installatior | ☑ |

**If you are upgrading from an earlier version**, the menu may contain an obsolete item and may lack two new items. Check that entries appear at sequence numbers 205 and 210, and contain the following values. If not, create the entries manually.

- Sequence 205: Prompt is "AppsAccess - Define Conflict Rules"; Submenu is blank; Function is "AppsAccess Define Conflict Rules"; Description is "AppsAccess - Define Conflict Rules"; Grant box is checked.
- Sequence 210: Prompt is "AppsAccess - User Conflict Approval"; Submenu is blank; Function is "AppsAccess User Conflict Approval"; Description is "AppsAccess - User Conflict Approval"; Grant box is checked.

Also, delete an entry with the value "AppsAccess" in the Prompt and Function columns, if one exists.

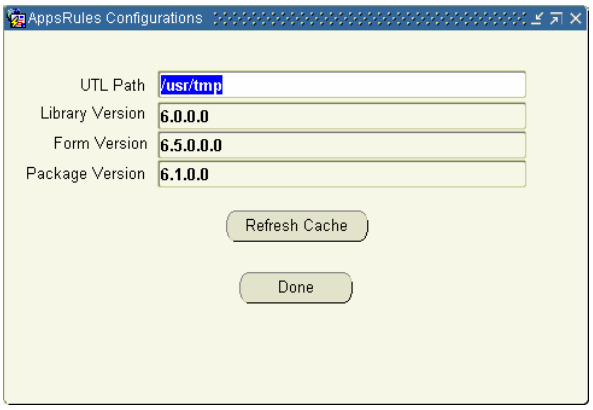
**7** In the System Administrator Navigator, select Security, then Responsibility, then Define. In the Responsibilities form, query for LogicalApps. (This is the responsibility you would assign to Oracle Applications users so that they can use LogicalApps applications.)




Switch to the LogicalApps responsibility and, in the LogicalApps Navigator, select AppsRules. Then do the following:

**1** Select Tools in the menu bar, then on AppsRules Configurations in the Tools menu.

**2** An AppsRules Configurations form appears. Confirm that a value displayed in the UTL Path field:

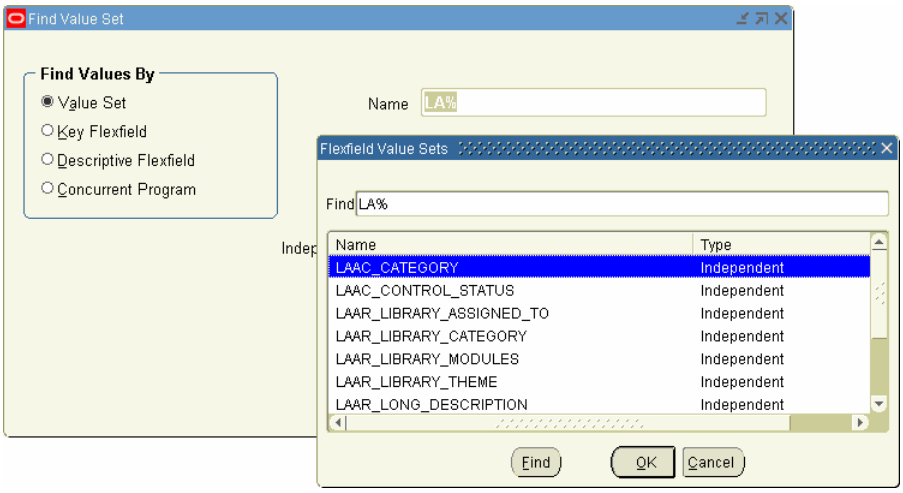



**3** The UTL Path field value should match the name of one of the directories set for UTL_PATH in your environment. To confirm that it does, run the following SQL query to generate a list of those directories:

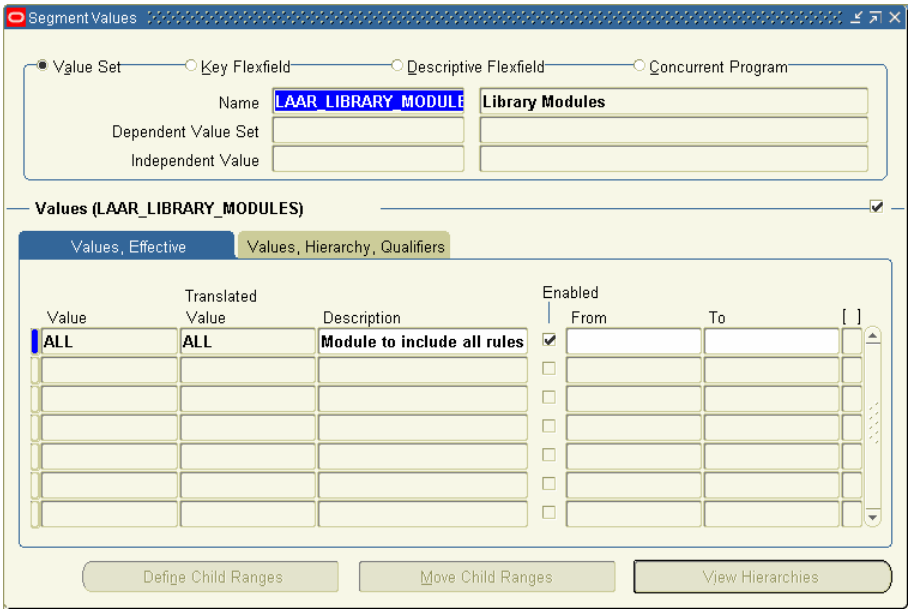
```
select value from gv$parameter where name='utl_file_dir'
```

Finally, confirm that appropriate values have been set for AppsRules libraries:

1. With AppsRules open, click on LogicalApps Utilities in the menu bar, then on AppsRules Libraries in the LogicalApps Utilities menu.
2. With a LogicalApps Libraries form open, click on Tools in the menu bar, then on Value Sets in the Tools menu.
3. In the Name field of the Find Value Set form, enter the value *LA%* and click on the Find button.




4. Select (one at a time) the LAAC_CATEGORY, LAAR_LIBRARY_MODULES, and LAAR_LIBRARY_THEME entries. For each, confirm that a Segment Values form displays the value *ALL* in the Values field of the Values, Effective tab. For example:

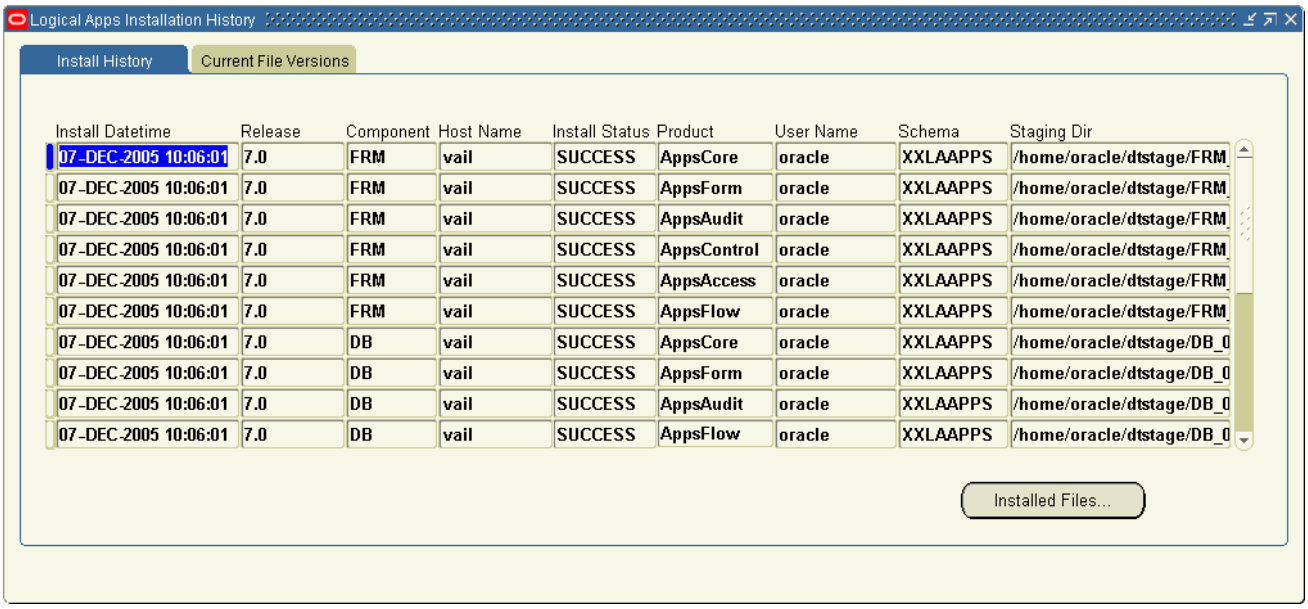


# Installation History

You can review information about the installation of files for your AppsRules implementation. To do so:

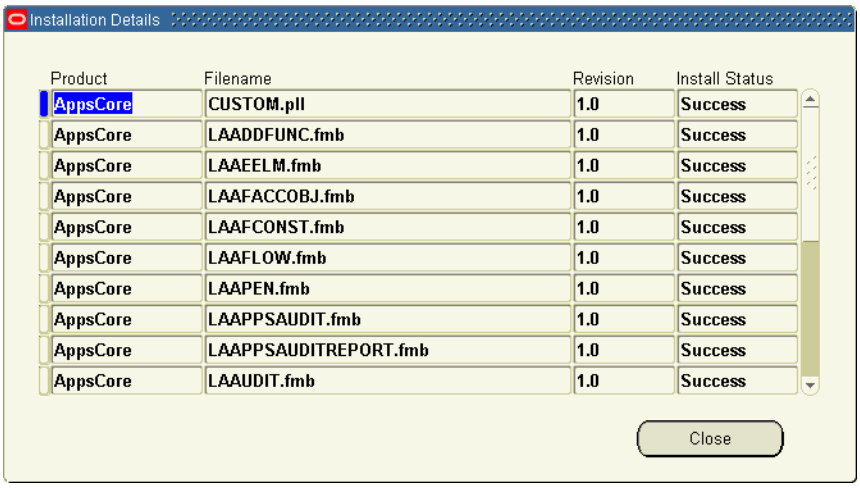
1 Log on to the LogicalApps responsibility.

2 In the Navigator, select Install History. The Installation History form appears:



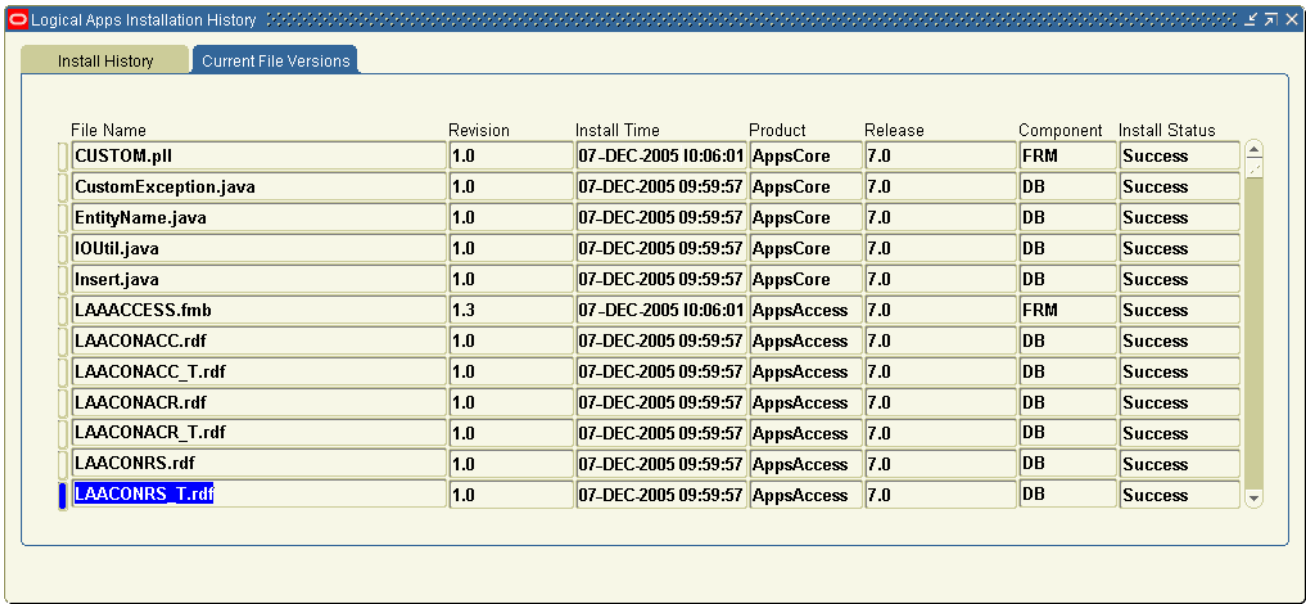

Each row provides information about the installation of a LogicalApps program element — for example, the top row in this illustration shows that the AppsCore element for version 7.0 of the forms server was successfully installed. Because there are several elements for each of the forms and database servers, a single installation of AppsRules fills multiple rows in the grid — for example, all of the rows in this illustration pertain to an installation performed on the seventh of July.

3 To view a list of the files installed for a given element, click on the row for that element and then on the Installed Files button. The following form appears:




Click on the Close button to clear this form.

4 Finally, to review information about all currently installed files (regardless of whether they were added in the most recent installation), click on the Current File Versions tab:




| File Name | Revision | Install Time | Product | Release | Component | Install Status |
|---|---|---|---|---|---|---|
| CUSTOM.pll | 1.0 | 07-DEC-2005 10:06:01 | AppsCore | 7.0 | FRM | Success |
| CustomException.java | 1.0 | 07-DEC-2005 09:59:57 | AppsCore | 7.0 | DB | Success |
| EntityName.java | 1.0 | 07-DEC-2005 09:59:57 | AppsCore | 7.0 | DB | Success |
| IOUtil.java | 1.0 | 07-DEC-2005 09:59:57 | AppsCore | 7.0 | DB | Success |
| Insert.java | 1.0 | 07-DEC-2005 09:59:57 | AppsCore | 7.0 | DB | Success |
| LAAACCESS.fmb | 1.3 | 07-DEC-2005 10:06:01 | AppsAccess | 7.0 | FRM | Success |
| LAACONACC.rdf | 1.0 | 07-DEC-2005 09:59:57 | AppsAccess | 7.0 | DB | Success |
| LAACONACC_T.rdf | 1.0 | 07-DEC-2005 09:59:57 | AppsAccess | 7.0 | DB | Success |
| LAACONACR.rdf | 1.0 | 07-DEC-2005 09:59:57 | AppsAccess | 7.0 | DB | Success |
| LAACONACR_T.rdf | 1.0 | 07-DEC-2005 09:59:57 | AppsAccess | 7.0 | DB | Success |
| LAACONRS.rdf | 1.0 | 07-DEC-2005 09:59:57 | AppsAccess | 7.0 | DB | Success |
| LAACONRS_T.rdf | 1.0 | 07-DEC-2005 09:59:57 | AppsAccess | 7.0 | DB | Success |

5 To close the Installation History form, click on its × symbol.