

Installing Application Express for Oracle 10g on a Linux RedHat Server

Prepared For:
Brody Technology Consulting
Linux Customers'

Prepared By:
Daniel Brody
Brody Technology Consulting
20 Lawnhurst Blvd, Toronto, ON
M6B 3C7 Canada

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How To Install Application Express for Oracle 10g

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Application Express 3.1

Checking the shared_pool_size of the Target Database

To check the `shared_pool_size` of the target database:

1. `c:\> sqlplus /nolog`
2. `CONNECT / AS SYSDBA`
3. Start the database:
4. `SQL> STARTUP`
5. If necessary, enter the following command to determine whether the system uses an initialization parameter file (`initsid.ora`) or a server parameter file (`spfiledbname.ora`):
6. `SQL> SHOW PARAMETER PFILE;`
7. This command displays the name and location of the server parameter file or the initialization parameter file.
8. Determine the current values of the `shared_pool_size` parameter:
9. `SQL> SHOW PARAMETER SHARED_POOL_SIZE`
10. If the system is using a server parameter file, set the value of the `SHARED_POOL_SIZE` initialization parameter to at least 100 MB:
11. `SQL> ALTER SYSTEM SET SHARED_POOL_SIZE='100M' SCOPE=spfile;`
12. If the system uses an initialization parameter file, change the values of the `SHARED_POOL_SIZE` parameter to at least 100 MB in the initialization parameter file (`initsid.ora`).
13. Shut down the database:
14. `SQL> SHUTDOWN`
15. Restart the database:
16. `SQL> STARTUP`

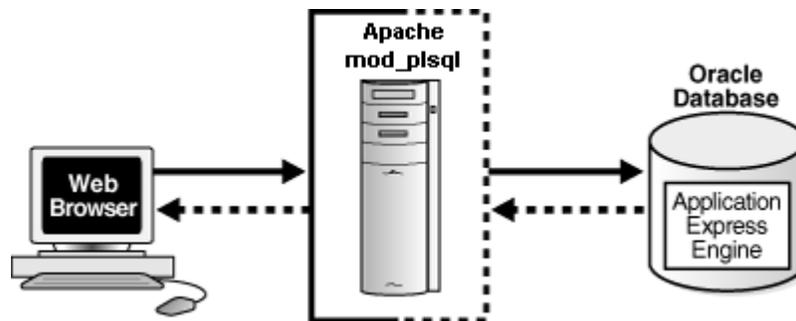
HTTP Server Requirements

Oracle HTTP Server uses the mod_plsql plug-in to communicate to the Oracle Application Express engine within the Oracle database. The following products include appropriate versions of HTTP Server and mod_plsql:

- Oracle9i Application Server release 1 (1.0.2.2) or later
- Oracle Database 10g Companion CD release 1 or 2

About Oracle HTTP Server and mod_plsql

Oracle HTTP Server uses the mod_plsql plug-in to communicate to the Oracle Application Express engine within the Oracle database. It functions as communication broker between the Web server and the Oracle Application Express objects in the Oracle database. More specifically, it maps browser requests into database stored procedure calls over a SQL*Net connection. The following graphic illustrates the Oracle Application Express architecture using Oracle HTTP Server and mod_plsql.



Oracle Text Requirement

Oracle Text must be installed in order to use the searchable online Help in Oracle Application Express. By default, Oracle Text is installed as part of Oracle Database.

In addition, make sure that the default language preferences for Oracle Text have been installed. To install the Oracle Text default language, log in to the Oracle database where you plan to install Oracle Application Express and run the appropriate drdeflang.sql script, which by default is located in ORACLE_BASE\ORACLE_HOME\ctx\admin\defaults. For example, to run the language preferences script for US English, drdefus.sql:

```
c:\> sqlplus /nolog
SQL> connect ctxsys
Enter password: password
SQL> @c:\oracle\10.2.0\db_1\ctx\admin\defaults\drdefus.sql
```

You most likely will see an error because your database was installed in US language mode.

Installing the Oracle Application Express Software

To install Oracle Application Express release 3.1:

1. Download the file apex_3.1.zip from the Oracle Application Express download page.
See:

http://www.oracle.com/technology/products/database/application_express/download.html

Note that the actual file name may differ if a more recent release has shipped since this document was published.

2. Unzip apex_3.1.zip as follows, preserving directory names: Windows: Double click the file apex_3.1.zip in Windows Explorer
3. Change your working directory to apex.
4. Start SQL*Plus and connect to the database where Oracle Application Express is installed as SYS specifying the SYSDBA role. For example:

```
C:\oracle\apex\ sqlplus /nolog
connect sys as sysdba
```

5. Determine the appropriate installation option.

Install a full development environment to provide complete access to the Application Builder environment to develop applications. Install a runtime environment to run applications that cannot be modified.

```
@apexins tablespace_apex tablespace_files tablespace_temp images
```

Where:

- tablespace_apex is the name of the tablespace for the Oracle Application Express application user.
- tablespace_files is the name of the tablespace for the Oracle Application Express files user.
- tablespace_temp is the name of the temporary tablespace.
- images is the virtual directory for Oracle Application Express images. To support future Oracle Application Express upgrades, define the virtual image directory as /i/.

```
@apexins USERS USERS TEMP /i/
```

When Oracle Application Express installs it creates three new database accounts:

- FLOWS_030100 - The account that owns the Oracle Application Express schema and metadata.
- FLOWS_FILES - The account that owns the Oracle Application Express uploaded files.

- **APEX_PUBLIC_USER** - The minimally privileged account used for Oracle Application Express configuration with Oracle HTTP Server and mod_plsql. If you are upgrading from a previous release, **FLWS_FILES**, already exists and **APEX_PUBLIC_USER** is created if it does not already exist.

Changing the Password for the ADMIN Account

In a new installation of Oracle Application Express, or if you are converting a runtime environment to a development environment, you must change the password of the internal ADMIN account. In an upgrade scenario, the password will be preserved and carried over from the prior release.

To change the password for the ADMIN account:

```
C:\oracle\apex\sqlplus /nolog  
connect sys as sysdba
```

When prompted, enter the appropriate password.

@apxchpwd

When prompted enter a password for the ADMIN account

Oracle Application Express Post-installation Tasks

Restarting Processes

After you install Oracle Application Express, you need to restart the processes that you stopped before you began the installation, such as listener and other processes. In addition, restart Oracle HTTP Server.

Unlocking the APEX_PUBLIC_USER Account

The `APEX_PUBLIC_USER` account is locked at the end of a new installation of Oracle Application Express. You need to unlock this account prior to configuring the database access descriptor (DAD) in a new installation.

- `ALTER USER APEX_PUBLIC_USER ACCOUNT UNLOCK`

Changing the Password for the APEX_PUBLIC_USER Account

The `APEX_PUBLIC_USER` account is created with a random password in a new installation of Oracle Application Express. You will need to change the password for this account prior to configuring the database access descriptor (DAD) in a new installation.

To change the password for the `APEX_PUBLIC_USER` account:

- `ALTER USER APEX_PUBLIC_USER IDENTIFIED BY new_password`

Where `new_password` is the new password you are setting for `APEX_PUBLIC_USER`. You will use this password when creating the DAD in the sections that follow.

Copying the Images Directory After an Upgrade

During an upgrade, you must overwrite your existing images directory. Before you begin the upgrade, to ensure that you can revert to the previous version, Oracle recommends that you create a copy of your existing `images` directory for Oracle Application Express, indicating the release number of the images (for example, `images_3_0`).

To locate the `images` directory on the file system, review the following files for the text alias `/i/`:

- Oracle HTTP Server distributed Oracle Application Server 10g — see the `httpd.conf` file.

When you locate the images directory path, copy the existing images directory to a backup location. Doing so enables you to revert to the previous release, if that becomes necessary. After you copy the existing images directory, use the following command syntax to copy the `apex\images` directory from the Oracle Database home to the existing images directory path, overwriting the existing images:

Oracle Application Server 10g:
On Windows:

```
xcopy /E /I APEX_HOME\apex\images C:\oracle\mid_10\Apache\Apache\icons
```

Modifying the Oracle10g httpd.conf

You need to modify the `httpd.conf` file to include an alias that points to the file system path where you copied the images directory. You may also need to modify the `httpd.conf` file to add two new MIME types to support SQL Workshop.

To modify `httpd.conf` file:

1. Use a text editor and open the `httpd.conf` file:
 - o On Windows:
 - o `ORACLE_HTTPSERVER_HOME\Apache\Apache\conf\httpd.conf`
2. Add an alias entry that points to the file system path where you copied the images directory.
 - o Windows example:
 - o `Alias /i/ "C:\oracle\mid_10\Apache\Apache\images/"`

Note you must include the forward slash (/) at the end of the path.

3. Next, add the following two lines to support SQL Workshop if they do not currently exist:
4. `AddType text/xml xbl`
5. `AddType text/x-component htc`
6. Save and exit the `httpd.conf` file.
7. Stop and restart Oracle HTTP Server.

Configuring Oracle HTTP Oracle Application Server 10g

Perform the following post-installation steps if:

- This is a new installation of Oracle Application Express (that is, you are not upgrading from a previous release).
- You are running Oracle HTTP Server distributed with Oracle AS 10g.
- Oracle HTTP Server is installed in an Oracle home.

Topics in this section include:

- Editing the `dads.conf` File
- Stopping and Restarting Oracle HTTP Server

Editing the `dads.conf` File

If this is a new installation of Oracle Application Express, you need to edit the `dads.conf` file. The `dads.conf` file contains the information about the DAD to access Oracle Application Express.

To edit the `dads.conf` file:

Use a text editor and open the `dads.conf`.

- Oracle Application Server 10g:
 - `ORACLE_HTTPSERVER_HOME\Apache\modplsql\conf\dads.`

In the `dads.conf` file, replace `ORACLE_HTTPSERVER_HOME`, `host`, `port`, `service_name`, and `apex_public_user_password` with values appropriate for your environment. Note that the `apex_public_user_password` is the password you changed in "Changing the Password for the APEX_PUBLIC_USER Account".

Note that the path listed is only an example. The path in the `dads.conf` file should reference the file system path described in "Copying the Images Directory".

```
# ----- #
#                               APEX for SMBASE1                               #
# ----- #
Alias /i/ "C:\oracle\mid_10\Apache\Apache\images/"
AddType text/xml          xbl
AddType text/x-component  htc

<Location /pls/apexsmbasel>
    Order deny,allow
    PlsqlDocumentPath      docs
    AllowOverride          None
    PlsqlDocumentProcedure wvw_flow_file_mgr.process_download
    PlsqlDatabaseConnectString smdbbase:1521:smbasel SIDFormat
    PlsqlNLSLanguage        AMERICAN_AMERICA.AL32UTF8
    PlsqlAuthenticationMode Basic
    SetHandler              pls_handler
    PlsqlDocumentTablename  wvw_flow_file_objects$
    PlsqlDatabaseUsername   APEX_PUBLIC_USER
    PlsqlDefaultPage        apex
    PlsqlDatabasePassword   apex_public_password_here
    PlsqlRequestValidationFunction wvw_flow_epg_include_modules.authorize
    Allow from all
</Location>
```

1. Save and exit the `dads.conf` file.
2. To stop and restart Oracle HTTP Server

Logon as Administrator

http://sems.domain.local/pls/apexsmbase1/apex_admin

ADMIN

bubba2004

<http://sems.domain.local/pls/apexsmbase1>

WORKSPACE

USER

PASSWORD