

Oracle Application Express: Administration

Activity Guide

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Practices for Lesson 1: Course Overview

Chapter 1

Practice 1-1: Practices Overview

There are no hands-on practices for this lesson. A few guidelines for the rest of the practices are listed here.

- You will be assigned a machine by your instructor to perform all the practices.
- You can access all the lab, code example, and solution files from the `/home/oracle/labs` folder.
- The software to be installed is located under `/stage` directory.

Practices for Lesson 2: Introduction to Application Express

Chapter 2

Practice 2: Introduction to Application Express

Overview

This practice consists of a series of quiz questions designed to check your understanding of the key concepts discussed in this lesson. You can attempt these questions as given below. To access an html format of the quiz, open the `quiz.html` file from the `/home/oracle/labs/files/quiz.html` directory or click [here](#).

Assumptions

None

Questions

- a. Oracle Application Express is a tool used to deploy web-based applications created using `mod_plsql`.
 - True
 - False

- b. Which of the following statements are true regarding Oracle Application Express?
 - 1) It allows you to create applications and application components declaratively.
 - 2) It allows you to create only applications that should be deployed to the web.
 - 3) It provides a graphical interface to perform administration tasks.
 - 4) It requires a separate client-side software installation.
 - 5) It has a simple installation but a complex configuration.

- c. Which of the following components from the Oracle Application Express architecture is responsible for rendering the application webpages?
 - 1) Application schema
 - 2) Metadata repository
 - 3) Application Express engine
 - 4) Web server
 - 5) Web browser

- d. Which of the following statements describes a workspace in Oracle Application Express?
 - 1) The area within Oracle Application Express from where you can administer all the applications created using Oracle Application Express.
 - 2) The area you log in to to create, maintain, and deploy your applications in Oracle Application Express.
 - 3) A private database where you can store data and metadata related to your Oracle Application Express applications.

- e. The workspace from which you configure, administer, and monitor an entire Oracle Application Express instance is called _____.

- f. Match the Oracle Application Express roles to their correct descriptions.
- 1) I can only view applications created in Oracle Application Express.
 - 2) I can create applications as well as create users in the workspace.
 - 3) I can create applications and database objects.
 - 4) I create workspaces and workspace administrators.
- g. You want to create a page to administer database objects. Which of the following components of the Application Express development interface will you use?
- 1) SQL Workshop
 - 2) Administration
 - 3) Administration Services
 - 4) Application Builder
 - 5) Team Development

- a) Instance Administrator
- b) Workspace Administrator
- c) Developer
- d) End User

Practice Solutions 2: Introduction to Application Express

Overview

This practice solution consists of the answers to the quiz questions designed to check your understanding of the key concepts discussed in this lesson. The answers are given in bold.

Assumptions

None

Questions

- a. Oracle Application Express is a tool used to deploy web-based applications created using mod_plsql.
 - o **False:** Oracle Application Express is used to create, maintain, as well as deploy applications.

- b. Which of the following statements are true regarding Oracle Application Express?
 - 1) **It allows you to create applications and application components declaratively.**
 - 2) It allows you to create only applications that should be deployed to the web.
 - 3) **It provides a graphical interface to perform administration tasks.**
 - 4) It requires a separate client-side software installation.
 - 5) It has a simple installation but a complex configuration.

- c. Which of the following components from the Oracle Application Express architecture is responsible for rendering the application webpages?
 - 1) Application schema
 - 2) Metadata repository
 - 3) **Application Express engine**
 - 4) Web server
 - 5) Web browser

- d. Which of the following statements describes a workspace in Oracle Application Express?
 - 1) The area within Oracle Application Express from where you can administer all the applications created using Oracle Application Express.
 - 2) **The area you log in to to create, maintain, and deploy your applications in Oracle Application Express.**
 - 3) A private database where you can store data and metadata related to your Oracle Application Express applications.

- e. The workspace from which you configure, administer, and monitor an entire Oracle Application Express instance is called **an internal workspace**.

- f. Match the Oracle Application Express roles to their correct descriptions.
- 1) I can only view applications created in Oracle Application Express.
 - 2) I can create applications as well as create users in the workspace.
 - 3) I can create applications and database objects.
 - 4) I create workspaces and workspace administrators.

End User

Workspace Administrator

Developer

Instance Administrator

- g. You want to create a page to administer database objects. Which of the following components of the Application Express development interface will you use?

- 1) SQL Workshop
- 2) Administration
- 3) Administration Services
- 4) **Application Builder**
- 5) Team Development

Practices for Lesson 3: Installing Application Express

Chapter 3

Practice 3: Installing Application Express

Overview

In this practice, you will verify some system requirements and then install APEX in full development environment mode. You will also configure the users required for proper functioning of APEX.

Assumptions

You have been assigned a machine by your instructor to perform these practices.

Tasks

- a. Verify that the `SYSTEM` tablespace has at least 100 MB of free space.
- b. Verify that an `APEX` tablespace is created and has at least 185 MB of free space.
- c. Verify that Oracle XML Database is installed.
- d. Install APEX in full development environment.
- e. Locate and view the installation log to confirm that the installation was successful.
- f. Query the `DBA_REGISTRY` table to confirm that the installation is valid.
- g. Review the database users created.
- h. Change the password for Admin user to Welcome1.
- i. Unlock `APEX_PUBLIC_USER` user and set its password to Welcome1.
- j. Use the script `lab_03_j1` to grant connect privileges to the `APEX_040000` user.
- k. Grant the `APEX_040000` user privileges to use the Oracle Text URL datastore.
- l. Change the number of `JOB_QUEUE_PROCESSES` to 20.

Practice Solutions 3: Installing Application Express

Overview

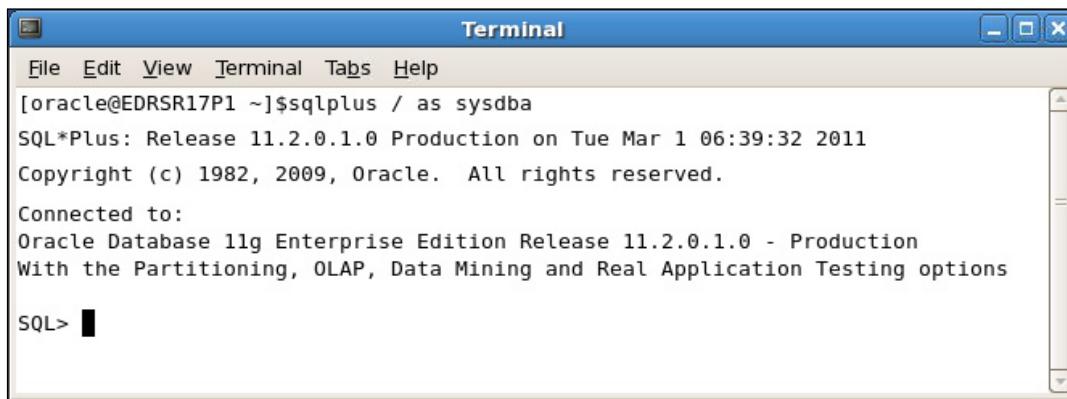
In these practice solutions, the steps to verify some system requirements, install APEX in full development environment mode, and configure the users required for proper functioning of APEX are provided.

Assumptions

You have been assigned a machine by your instructor to perform these practices.

Solutions

- a. Verify that the SYSTEM tablespace has at least 100 MB of free space.
 - 1) Open a terminal window. To connect to SQL*Plus as sysdba, enter `sqlplus / as sysdba` and press Enter.



The screenshot shows a terminal window titled "Terminal". The window title bar includes standard icons for minimize, maximize, and close. The menu bar contains "File", "Edit", "View", "Terminal", "Tabs", and "Help". The main pane displays the output of a SQL*Plus session:
[oracle@EDRSR17P1 ~]\$sqlplus / as sysdba
SQL*Plus: Release 11.2.0.1.0 Production on Tue Mar 1 06:39:32 2011
Copyright (c) 1982, 2009, Oracle. All rights reserved.
Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
SQL> ■

- 2) Enter the following query.

```
SELECT tablespace_name, SUM(bytes/1048576) as "Free MB"  
FROM dba_free_space  
WHERE tablespace_name='SYSTEM'  
GROUP BY tablespace_name;
```



The screenshot shows a terminal window titled "Terminal". The window title bar includes standard icons for minimize, maximize, and close. The menu bar contains "File", "Edit", "View", "Terminal", "Tabs", and "Help". The main pane displays the output of a SQL*Plus session:
SQL> SELECT tablespace_name, SUM(bytes/1048576) as "Free MB"
2 FROM dba_free_space
3 WHERE tablespace_name = 'SYSTEM'
4 GROUP BY tablespace_name;

TABLESPACE_NAME Free MB

SYSTEM 141.8125
SQL> ■

The SYSTEM tablespace has approximately 141 MB of free space.

Note: The actual MB value might differ for you.

- b. Verify that an APEX tablespace is created and has at least 185 MB of free space.
- In a terminal window, ensure that you are connected to SQL*Plus as sysdba and enter the following query.

```
SELECT tablespace_name, SUM(bytes/1048576) as "Free MB"
FROM dba_free_space
WHERE tablespace_name='APEX'
GROUP BY tablespace_name;
```

The screenshot shows a terminal window titled "Terminal". The menu bar includes File, Edit, View, Terminal, Tabs, and Help. The main area displays the following SQL command and its output:

```
SQL> SELECT tablespace_name, SUM(bytes/1048576) as "Free MB"
  2  FROM dba_free_space
  3  WHERE tablespace_name = 'APEX'
  4  GROUP BY tablespace_name;

TABLESPACE_NAME          Free MB
-----
APEX                      199

SQL> ■
```

- c. Verify that Oracle XML Database is installed.
- In a terminal window, ensure that you are connected to SQL*Plus as sysdba and enter the following query.

```
SELECT * FROM all_users WHERE username = 'XDB';
```

The screenshot shows a terminal window titled "Terminal". The menu bar includes File, Edit, View, Terminal, Tabs, and Help. The main area displays the following SQL command and its output:

```
SQL> SELECT * FROM all_users WHERE username = 'XDB';

USERNAME          USER_ID CREATED
-----
XDB                  45 13-AUG-09

SQL> ■
```

- 2) If the above query returns a result, enter the following command:

```
DESC RESOURCE_VIEW
```

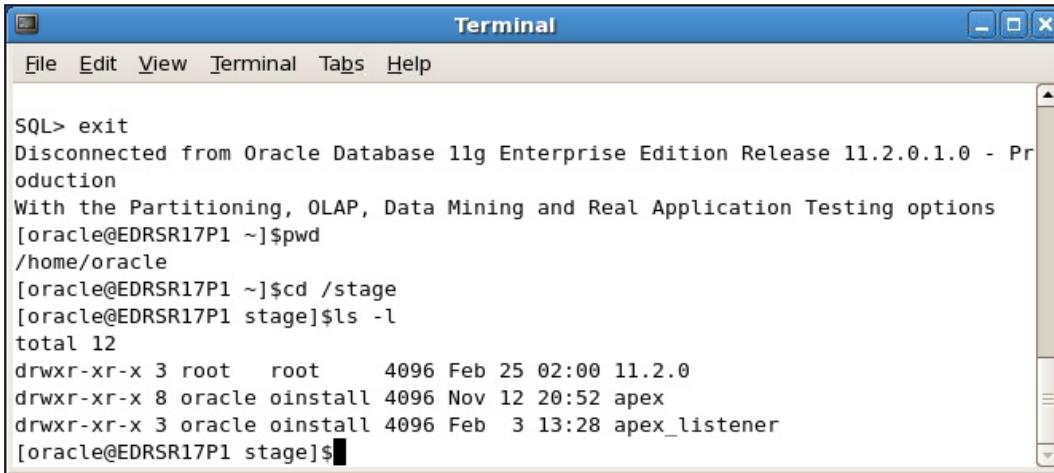
The screenshot shows a terminal window titled "Terminal". The menu bar includes File, Edit, View, Terminal, Tabs, and Help. The main area displays the following SQL command and its output:

```
SQL> DESC RESOURCE_VIEW
Name           Null?    Type
-----
RES
ANY_PATH
RESID

XMLTYPE(XMLSchema "http://xmlns.oracle.com/xdb/XDBResource.xsd" Element "Resource")
VARCHAR2(4000)
RAW(16)

SQL> ■
```

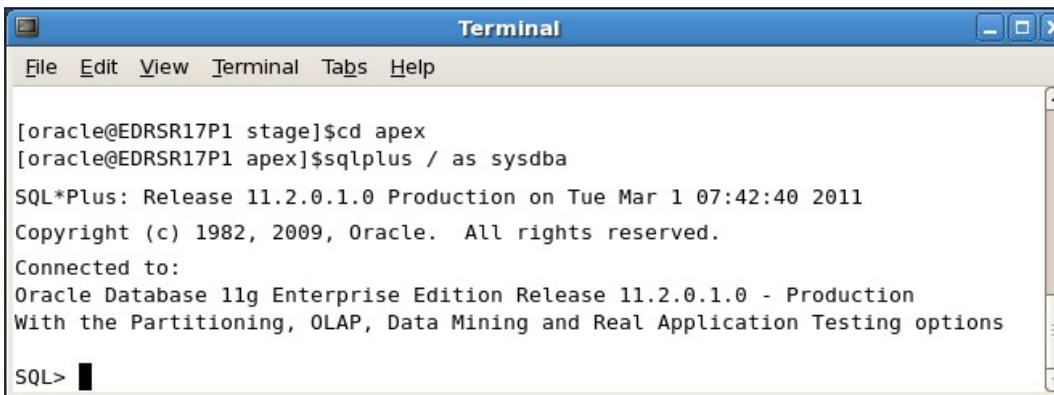
- d. Install APEX in full development environment.
- 1) If you are already connected to SQL*Plus, enter `exit` to return to the terminal prompt.
 - 2) To identify the current working directory, enter `pwd` and press Enter.
 - 3) To confirm if the apex directory has write privileges, enter `cd /stage` and press Enter. Next, enter `ls -l` and press Enter.



```
Terminal
File Edit View Terminal Tabs Help

SQL> exit
Disconnected from Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Pr
oduction
With the Partitioning, OLAP, Data Mining and Real Application Testing options
[oracle@EDRSR17P1 ~]$pwd
/home/oracle
[oracle@EDRSR17P1 ~]$cd /stage
[oracle@EDRSR17P1 stage]$ls -l
total 12
drwxr-xr-x 3 root      root      4096 Feb 25  02:00 11.2.0
drwxr-xr-x 8 oracle    oinstall  4096 Nov 12 20:52 apex
drwxr-xr-x 3 oracle    oinstall  4096 Feb   3 13:28 apex_listener
[oracle@EDRSR17P1 stage]$
```

- 4) To set the current working directory to the apex folder, enter `cd apex` and press Enter.
- 5) To connect to SQL*Plus as sysdba, enter `sqlplus / as sysdba` and press Enter.



```
Terminal
File Edit View Terminal Tabs Help

[oracle@EDRSR17P1 stage]$cd apex
[oracle@EDRSR17P1 apex]$sqlplus / as sysdba
SQL*Plus: Release 11.2.0.1.0 Production on Tue Mar 1 07:42:40 2011
Copyright (c) 1982, 2009, Oracle. All rights reserved.
Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
SQL>
```

- 6) Check if any password complexity rules exist for the default profile by entering the following query

```
SELECT * FROM dba_profiles
WHERE profile = 'DEFAULT' and
resource_name = 'PASSWORD_VERIFY_FUNCTION';
```

- 7) Now, install APEX in full development environment by running the apexins.sql file.

```
@apexins APEX APEX TEMP /i/
```

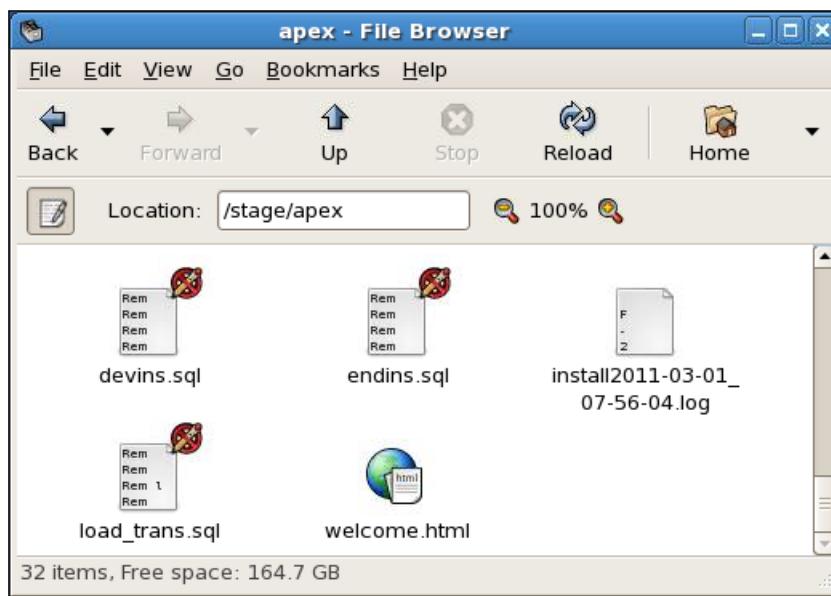
```
SQL> @apexins APEX APEX TEMP /i/
```

PROFILE	RESOURCE_NAME	RESOURCE LIMIT
DEFAULT	PASSWORD_VERIFY_FUNCTION	PASSWORD NULL

```
...0 operators
...Exiting validate 08:10:14
timing for: Validate Installation
Elapsed: 00:01:53.84
timing for: Development Installation
Elapsed: 00:11:01.32
Disconnected from Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
[oracle@EDRSR17P1 apex]$
```

Note: If you receive a “file not found” or “unable to read/open file” error, then ensure that you connected to SQL*Plus from the /stage/apex directory.

- e. Locate and view the installation log to confirm that the installation was successful.
- Open a file browser and navigate to /stage/apex. Locate the log file and open it to view its contents. You should see a success message stating that the installation was successful.



The screenshot shows a text editor window titled "install2011-03-01_07-56-04.log - gedi". The content of the window is as follows:

```
F
-
2
PL/SQL procedure successfully completed.

Ln 67484, Col 1      INS
```

- f. Query the DBA_REGISTRY table to confirm that the installation is valid.
- 1) In a terminal window, ensure that you are connected to SQL*Plus as sysdba and enter the following query.

```
SELECT status FROM dba_registry WHERE comp_id = 'APEX';
```

The screenshot shows a terminal window titled "Terminal". The content of the window is as follows:

```
Copyright (c) 1982, 2009, Oracle. All rights reserved.
Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
SQL> SELECT status FROM dba_registry WHERE comp_id = 'APEX';

STATUS
-----
VALID

SQL>
```

- g. Review the database users that get created.
- 1) To view the APEX users, ensure that in a terminal window you are connected to SQL*Plus as sysdba and enter the following query.

```
SELECT * from all_users
WHERE username LIKE '%APEX%' OR
username LIKE '%FLOWS%';
```

The screenshot shows a terminal window titled "Terminal". The content of the window is as follows:

```
SQL> SELECT * FROM all_users
  2 WHERE username like '%APEX%' or
  3 username like '%FLOWS%';

USERNAME                      USER_ID CREATED
-----
FLOWS_FILES                     75 13-AUG-09
APEX_PUBLIC_USER                 76 13-AUG-09
APEX_030200                      78 13-AUG-09
APEX_040000                      96 01-MAR-11

SQL>
```

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- h. Change password for Admin user to Welcome1.
- 1) In a terminal window, ensure that you are connected to SQL*Plus as sysdba and run the apxchpwd.sql file.

```
@apxchpwd.sql
```

- 2) When prompted, enter **Welcome1** for password.

```
Terminal
File Edit View Terminal Tabs Help
SQL> @apxchpwd
Enter a value below for the password for the Application Express ADMIN user.
Enter a password for the ADMIN user      []
Session altered.
...changing password for ADMIN
PL/SQL procedure successfully completed.

Commit complete.

SQL> ■
```

Note: If you receive a “file not found” or “unable to read/open file” error, then ensure that you connected to SQL*Plus from the /stage/apex directory.

- i. Unlock APEX_PUBLIC_USER user and set its password to Welcome1.
- 1) In a terminal window, ensure that you are connected to SQL*Plus as sysdba and enter the following command.

```
ALTER USER APEX_PUBLIC_USER ACCOUNT UNLOCK
IDENTIFIED BY Welcome1
```

```
Terminal
File Edit View Terminal Tabs Help
SQL> ALTER USER APEX_PUBLIC_USER
  2 ACCOUNT UNLOCK
  3 IDENTIFIED BY Welcome1;
User altered.

SQL> ■
```

- j. Use the script lab_03_j1 to grant connect privileges to the APEX_040000 user.
- 1) In a terminal window, ensure that you are connected to SQL*Plus as sysdba and run the lab_03_j1 script file.

```
Terminal
File Edit View Terminal Tabs Help
SQL> @ /home/oracle/labs/files/lab_03_j1
PL/SQL procedure successfully completed.

Commit complete.

SQL> ■
```

- k. Grant the APEX_040000 user privileges to use the Oracle Text URL datastore.
- 1) In a terminal window, ensure that you are connected to SQL*Plus as sysdba and enter the following query to identify if a role to access Oracle Text URL datastore exists.

```
SELECT par_value
FROM ctxsys.ctx_parameters
WHERE par_name = 'FILE_ACCESS_ROLE';
```

The screenshot shows a terminal window titled "Terminal". The menu bar includes "File", "Edit", "View", "Terminal", "Tabs", and "Help". The main area contains the following SQL command:

```
SQL> SELECT par_value
  2  FROM ctxsys.ctx_parameters
  3 WHERE par_name = 'FILE_ACCESS_ROLE';

PAR_VALUE
-----
```

- 2) Create a role called APEX_URL_DATASTORE_ROLE.

```
CREATE ROLE APEX_URL_DATASTORE_ROLE;
```

- 3) Add the privilege for accessing the URL datastore to the new role.

```
EXEC ctxsys.ctx_adm.set_parameter
('file_access_role', 'APEX_URL_DATASTORE_ROLE');
```

- 4) Grant the newly created role to APEX_040000.

```
GRANT APEX_URL_DATASTORE_ROLE to APEX_040000;
```

The screenshot shows a terminal window titled "Terminal". The menu bar includes "File", "Edit", "View", "Terminal", "Tabs", and "Help". The main area contains the following SQL commands:

```
SQL> CREATE ROLE APEX_URL_DATASTORE_ROLE;
Role created.

SQL> EXEC ctxsys.ctx_adm.set_parameter('file_access_role',
  'APEX_URL_DATASTORE_ROLE');

PL/SQL procedure successfully completed.

SQL> GRANT APEX_URL_DATASTORE_ROLE to APEX_040000;
Grant succeeded.

SQL> ■
```

- l. View the current value for the JOB_QUEUE_PROCESSES parameter and change the number of JOB_QUEUE_PROCESSES to 20.
- 1) In a terminal window, ensure that you are connected to SQL*Plus as sysdba and enter the following query.

```
SELECT VALUE
FROM v$parameter
WHERE NAME = 'job_queue_processes';
```

- 2) To set the number of JOB_QUEUE_PROCESSES to 20, enter the following command.

```
ALTER SYSTEM SET JOB_QUEUE_PROCESSES = 20;
```

The screenshot shows a terminal window titled "Terminal". The menu bar includes "File", "Edit", "View", "Terminal", "Tabs", and "Help". The main area displays the following SQL session:

```
SQL> SELECT value
  2  FROM v$parameter
  3 WHERE name = 'job_queue_processes';
VALUE
-----
1000
SQL> ALTER SYSTEM SET job_QUEUE_PROCESSES = 20;
System altered.
SQL> █
```

Practices for Lesson 4: Installing and Configuring the Oracle APEX Listener

Chapter 4

Practice 4: Installing and Configuring the Oracle APEX Listener

Overview

In this practice, you will deploy APEX and APEX images to the WebLogic Server application server. You will create the WebLogic Server users and roles required to access APEX Listener. Finally, you will configure APEX Listener.

Assumptions

You have completed the previous practice of installing APEX in full development mode and configured the APEX accounts.

Tasks

- a. Use a Java JAR command and create a WAR file named `i` for the Application Express images.
- b. Deploy the `apex.war` file to the WebLogic Sever.
- c. Deploy Application Express images WAR file to the WebLogic Server.
- d. Create an administrator WebLogic Server user and an Admin role.
- e. Assign the Admin role to the administrator user.
- f. Create a manager WebLogic server user and a Manager role.
- g. Assign the Manager role to the manager user.
- h. Access the APEX Listener configuration interface and create a database connection. Apply the configuration and confirm that the Application Express login page is displayed correctly.
- i. Access the APEX Listener administration interface and view all the available configuration options.

Practice Solution 4: Installing and Configuring Oracle APEX Listener

Overview

In these practice solutions, the steps to deploy APEX and APEX images to the WebLogic Server application server, create the WebLogic Server users and roles required to access APEX Listener, and configure APEX Listener are provided.

Assumptions

You have completed the previous practice of installing APEX in full development mode and configured the APEX accounts.

Solutions

- a. Use a Java JAR command and create a WAR file named `i` for the APEX images.
 - 1) Open a terminal window and enter `pwd` to view the current working directory.
 - 2) To set the working directory to the images folder, enter
`cd /stage/apex/images` and press Enter.
 - 3) Enter the following JAR command. Notice the period (.) at the end of the command, which should not be missed out.

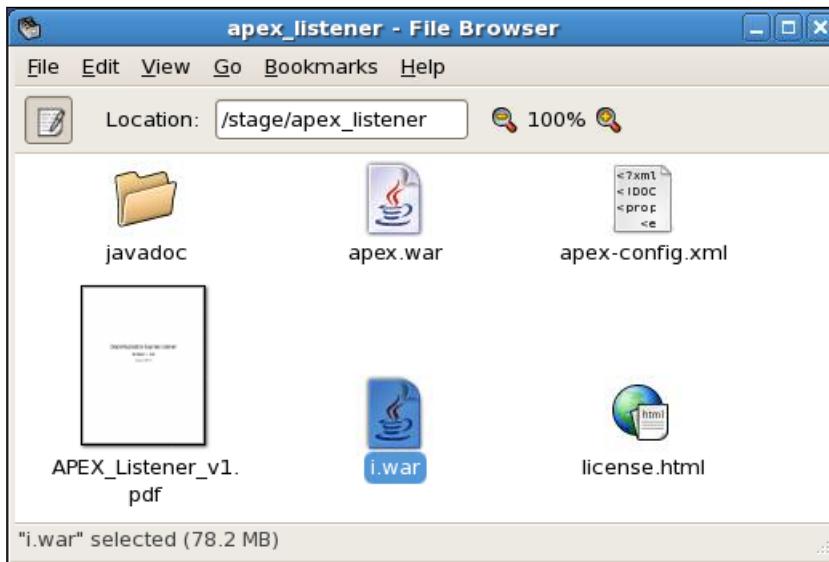
```
jar cvf0 /stage/apex_listener/i.war .
```



The screenshot shows a terminal window titled "Terminal". The user has run the following commands:

```
[oracle@EDRSR17P1 ~]$pwd  
/home/oracle  
[oracle@EDRSR17P1 ~]$cd /stage/apex/images  
[oracle@EDRSR17P1 images]$jar cvf0 /stage/apex_listener/i.war .
```

- 4) Using a file browser, navigate to the `/stage/apex_listener` directory and confirm that the `i.war` file got created.



- b. Deploy Application Express WAR file to the WebLogic Sever.

- 1) To start WebLogic Server, double-click the **Start_Weblogic** icon from the desktop.



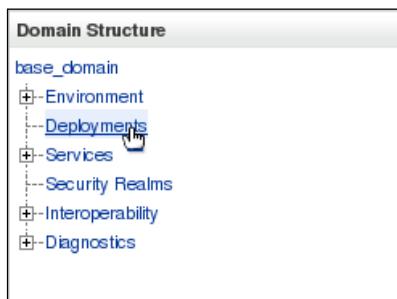
- 2) To access the WebLogic Server console, open a browser and enter the following URL in the browser address bar.

http://localhost:9001/console

- 3) Enter **weblogic** for Username and **Welcome1** for Password.

A screenshot of a web browser showing the "Welcome" page of the WebLogic Server administration console. It has fields for "Username" (weblogic) and "Password" (redacted), and a "Login" button.

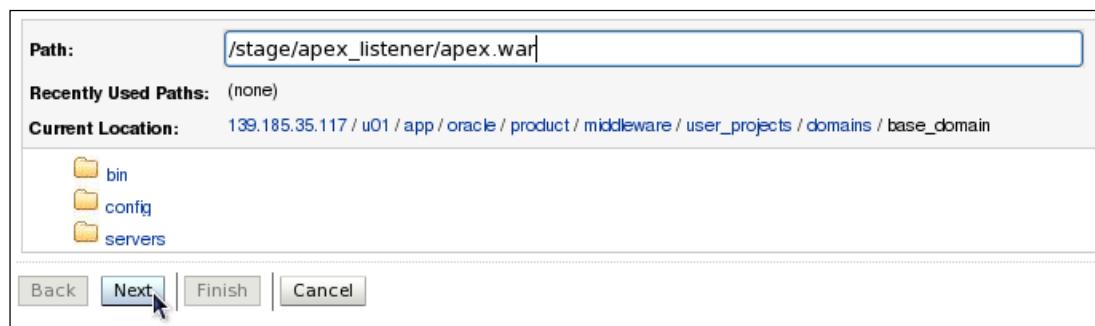
- 4) From the WebLogic Server administration home page, under Domain Structure, click the **Deployments** link.



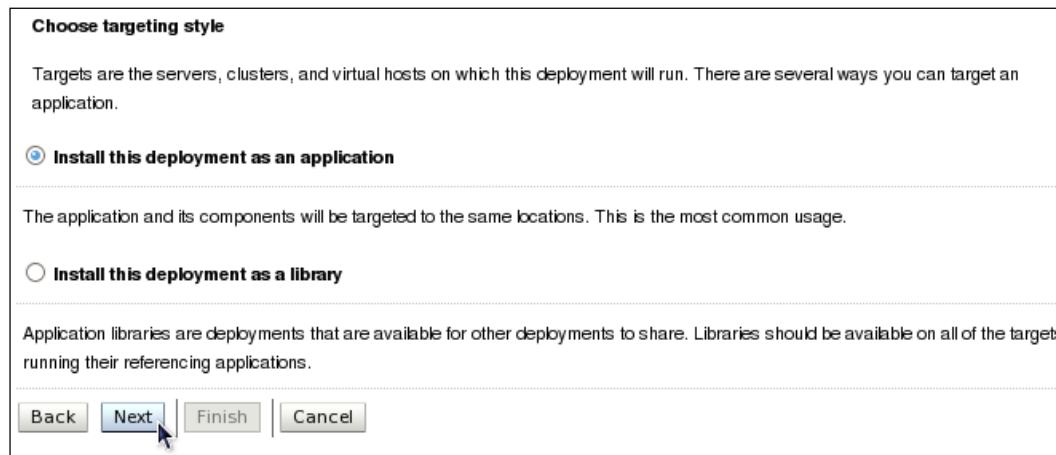
- 5) A summary of deployments is displayed. Click the **Install** button.

A screenshot of the "Deployments" list page in the WebLogic Server administration console. The "Install" button is highlighted with a mouse cursor. The table header includes columns for Name, State, Health, Type, and Deployment Order. Below the table, a message says "There are no items to display".

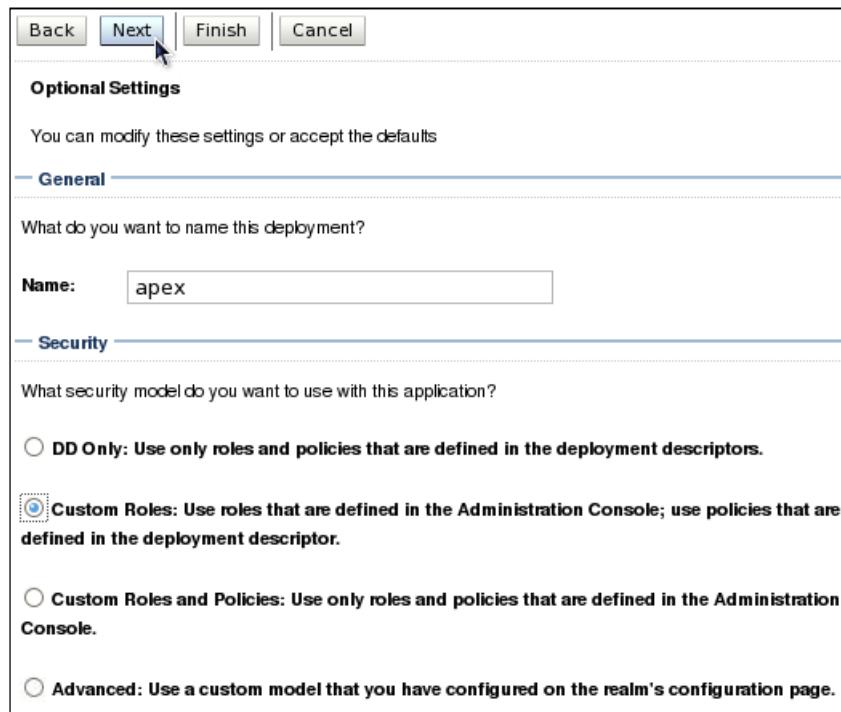
- 6) An install application wizard appears. Enter **/stage/apex_listener/apex.war** in the Path field and click **Next**.



- 7) Accept the default selection for targeting style and click **Next**.



- 8) Confirm that **apex** is entered in the Name field. Select **Custom Roles** for security model, and accept the default for the other fields. Click **Next**.



- 9) Review the summary information and click **Finish**.

Deployment: /stage/apex_listener/apex.war

Name: apex

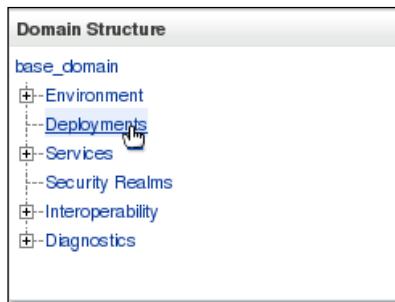
Staging mode: Use the defaults defined by the chosen targets

Security Model: CustomRoles: Use policies that are defined in the deployment descriptor. Create custom role mappings later.

Target Summary	
Components	Targets
apex	AdminServer

Buttons: Back, Next, **Finish**, Cancel

- c. Deploy Application Express images WAR file to the WebLogic Server.
- From the WebLogic Server administration home page, click the **Deployments** link.



- A summary of deployments is displayed. Click the **Install** button.

Deployments

Install	Update	Delete	Start	Stop
Showing 1 to 1 of 1 Previous Next				
Name	State	Health	Type	Deployment Order
apex	Active	OK	Web Application	100
Install	Update	Delete	Start	Stop
Showing 1 to 1 of 1 Previous Next				

- An install application wizard appears. Enter `/stage/apex_listener/i.war` in the Path field and click **Next**.

Path: /stage/apex_listener/i.war

Recently Used Paths: /stage/apex_listener

Current Location: 139.185.35.117 / stage / apex_listener

- javadoc
- apex.war
- i.war

Buttons: Back, **Next**, Finish, Cancel

- 4) Accept the default selection for targeting style and click **Next**.

Choose targeting style

Targets are the servers, clusters, and virtual hosts on which this deployment will run. There are several ways you can target an application.

Install this deployment as an application

The application and its components will be targeted to the same locations. This is the most common usage.

Install this deployment as a library

Application libraries are deployments that are available for other deployments to share. Libraries should be available on all of the targets running their referencing applications.

Back **Next** **Finish** **Cancel**

- 5) Confirm that **i** is entered in the Name field, **DD Only** is selected for security model, and accept the default for the other fields. Click **Next**.

Optional Settings

You can modify these settings or accept the defaults

General

What do you want to name this deployment?

Name:

Security

What security model do you want to use with this application?

DD Only: Use only roles and policies that are defined in the deployment descriptors.

Custom Roles: Use roles that are defined in the Administration Console; use policies that are defined in the deployment descriptor.

Back **Next** **Finish** **Cancel**

- 6) Review the summary information and click **Finish**.

Summary

Deployment: /stage/apex_listener/i.war

Name: i

Staging mode: Use the defaults defined by the chosen targets

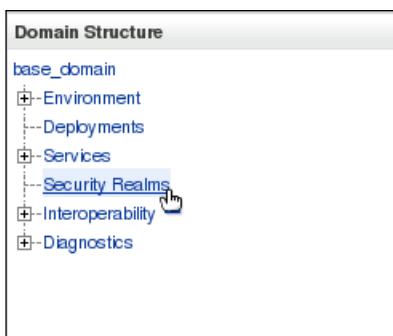
Security Model: DDOnly: Use only roles and policies that are defined in the deployment descriptors.

Target Summary

Components	Targets
i	AdminServer

Back **Next** **Finish** **Cancel**

- d. Create an administrator WebLogic Server user and an Admin role.
- From the WebLogic Server home page, click the **Security Realms** link.



- Click the **myrealm** link.

Realms (Filtered - More Columns Exist)		
Showing 1 to 1 of 1 Previous Next		
	Name	Default Realm
<input type="checkbox"/>	myrealm	true
Showing 1 to 1 of 1 Previous Next		
New	Delete	

- The settings for the security realm are displayed. Click the **Users and Groups** tab.



- Click the **New** button.

Users		
Showing 1 to 2 of 2 Previous Next		
	Name	Description
<input type="checkbox"/>	OracleSystemUser	Oracle application software system user.
<input type="checkbox"/>	weblogic	This user is the default administrator.
New	Delete	

- A Create New User page is displayed. In the Name field, enter **adminlistener**.
- In the Description field, enter **APEX Listener administrator user**.
- In the Provider drop-down list, ensure that **DefaultAuthenticator** is selected.
- In the Password and Confirm Password fields, enter **welcome1**.
- Click **OK**.

What would you like to name your new User?

Name: adminlistener

How would you like to describe the new User?

Description: APEX Listener administrator user

Please choose a provider for the user.

Provider: DefaultAuthenticator

The password is associated with the login name for the new User.

Password: ••••••

Confirm Password: ••••••

OK **Cancel**

- 10) An administrator user is successfully created. To create an Admin role, click the **Roles and Policies** tab.

Messages

✓ User created successfully

Settings for myrealm

Configuration **Users and Groups** Roles and Policies Credential Mappings Providers Migration

Users Groups

- 11) Expand the **Deployments** node and locate the apex node.

Roles

Name	Resource Type	Role Policy
+ Deployments		
+ Domain		
+ Global Roles		
+ JCOM		
+ JDBC		
+ JMS		
+ Servers		

Showing 1 to 7 of 7 Previous | Next

12) Expand the **apex** node and click **Roles**.

Edit Role		
Showing 1 to 7 of 7 Previous Next		
Name	Resource Type	Role Policy
Deployments		
apex	Web Application	
+ Roles		
+ Web Module		
i	Web Application	

13) Click the **New** button.

Stand-Alone Web Application Scoped Roles	
New	Delete
Showing 0 to 0 of 0 Previous Next	
<input type="checkbox"/> Name	Provider Name
There are no items to display	
New	Delete
Showing 0 to 0 of 0 Previous Next	

14) Enter **Admin** in the Name field and click **OK**. Remember that role names are case-sensitive.

What would you like to name your new role?

*Name: Admin

Which role mapper would you like to use with this role?

Provider Name: XACMLRoleMapper

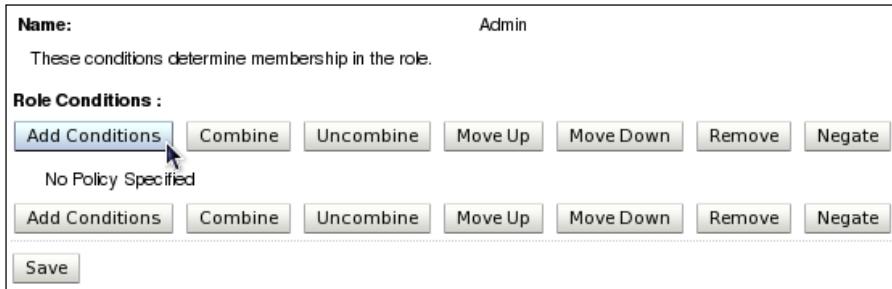
OK Cancel

e. Assign the Admin role to the administrator user.

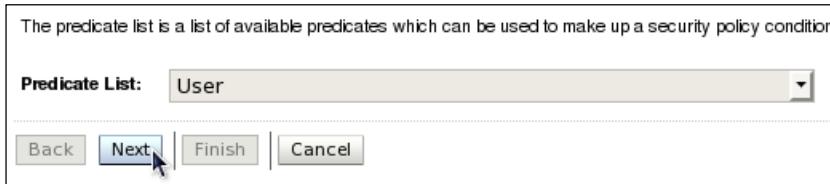
1) Click the **Admin** role name.

Stand-Alone Web Application Scoped Roles	
New	Delete
Showing 1 to 1 of 1 Previous Next	
<input type="checkbox"/> Name	Provider Name
<input checked="" type="checkbox"/> Admin	XACMLRoleMapper
New	Delete
Showing 1 to 1 of 1 Previous Next	

- 2) Click the **Add Conditions** button.



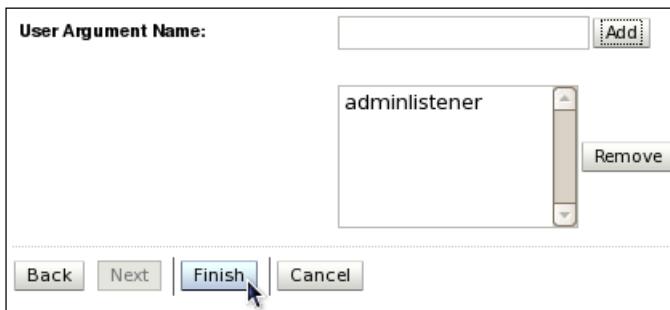
- 3) For Predicate List, select **User** and click **Next**.



- 4) Enter adminlistener and click **Add**.



- 5) Click **Finish**.



- 6) Click the **Save** button.



- 7) The changes are saved successfully. Click the **Users and Groups** link.

The screenshot shows a navigation path: Home > Summary of Deployments > apex > Summary of Deployments > i > Summary of Security Realms > myrealm > **Users and Groups** > Realm Roles > Roles > Edit Stand-Alone Web Application Scoped Roles. Below the navigation, there is a 'Messages' section with a green checkmark icon and the text 'Changes saved successfully'.

- f. Create a manager WebLogic Server user and a Manager role.

- 1) Click the **New** button.

The screenshot shows a table of existing users with columns: Name, Description, and Provider. The 'Name' column is sorted. At the top left, there are 'New' and 'Delete' buttons. Below the table, there are 'Showing 1 to 3 of 3' and 'Previous | Next' links. At the bottom, there are 'New' and 'Delete' buttons again, along with 'Showing 1 to 3 of 3' and 'Previous | Next' links.

- 2) A Create New User page is displayed. In the Name field, enter **managerlistener**.
- 3) In the Description field, enter **APEX Listener manager user**.
- 4) In the Provider drop-down list, ensure that **DefaultAuthenticator** is selected.
- 5) In the Password and Confirm Password fields, enter **Welcome1**.
- 6) Click **OK**.

The dialog box has the following fields:

- Name:** managerlistener
- Description:** APEX Listener manager user
- Provider:** DefaultAuthenticator
- Password:** (Redacted)
- Confirm Password:** (Redacted)

At the bottom are 'OK' and 'Cancel' buttons, with 'OK' being highlighted.

- 7) An administrator user is successfully created. To create a Manager role, click the **Roles and Policies** tab.

- 8) Expand Deployments node to locate the apex node and click **Roles**.

Edit Role		
Showing 1 to 7 of 7 Previous Next		
Name	Resource Type	Role Policy
Deployments		
apex	Web Application	
+ Roles		
+ Web Module		
i	Web Application	

- 9) Click the **New** button.

Stand-Alone Web Application Scoped Roles	
Showing 1 to 1 of 1 Previous Next	
Name	Provider Name
Admin	XACMLRoleMapper

- 10) Enter Manager for the role Name field and click **OK**.

What would you like to name your new role?

Name: Manager

Which role mapper would you like to use with this role?

Provider Name: XACMLRoleMapper

OK Cancel

g. Assign the Manager role to the manager user.

1) Click the **Manager** role name.

Stand-Alone Web Application Scoped Roles	
New	Delete
<input type="checkbox"/> Name	Provider Name
<input type="checkbox"/> Admin	XACMLRoleMapper
<input checked="" type="checkbox"/> Manager	XACMLRoleMapper
New	Delete

Showing 1 to 2 of 2 Previous | Next

Showing 1 to 2 of 2 Previous | Next

2) Click the **Add Conditions** button.

Name:	Manager
These conditions determine membership in the role.	
Role Conditions :	
<input type="button" value="Add Conditions"/> <input type="button" value="Combine"/> <input type="button" value="Uncombine"/> <input type="button" value="Move Up"/> <input type="button" value="Move Down"/> <input type="button" value="Remove"/> <input type="button" value="Negate"/>	
No Policy Specified	
<input type="button" value="Add Conditions"/> <input type="button" value="Combine"/> <input type="button" value="Uncombine"/> <input type="button" value="Move Up"/> <input type="button" value="Move Down"/> <input type="button" value="Remove"/> <input type="button" value="Negate"/>	

3) For Predicate List, select **User** and click **Next**.

The predicate list is a list of available predicates which can be used to make up a security policy condition	
Predicate List:	<input type="button" value="User"/>
<input type="button" value="Back"/>	<input type="button" value="Next"/>
<input type="button" value="Finish"/>	<input type="button" value="Cancel"/>

4) Enter **managerlistener** and click **Add**.

User Argument Description	
User Argument Name:	<input type="text" value="managerlistener"/> <input type="button" value="Add"/>
<input type="button" value="Remove"/>	

5) Click **Finish**.

User Argument Description	
User Argument Name:	<input type="text"/> <input type="button" value="Add"/>
<input type="button" value="Remove"/>	
<input type="button" value="Back"/>	<input type="button" value="Next"/>
<input type="button" value="Finish"/>	<input type="button" value="Cancel"/>

- 6) Click the **Save** button.

Name: Manager

These conditions determine membership in the role.

Role Conditions :

Add Conditions Combine Uncombine Move Up Move Down Remove Negate

User : managerlistener

Add Conditions Combine Uncombine Move Up Move Down Remove Negate

Save

- h. Access the APEX Listener configuration interface and create a database connection. Apply the configuration and confirm that the Application Express login page is displayed correctly.

- 1) Open a browser and enter the following URL.

http://localhost:9001/apex/listenerConfigure

- 2) The APEX Listener administration appears. To create a database connection, enter `APEX_PUBLIC_USER` in the Username field. For Password, enter `Welcome1`, and for Hostname, enter `localhost`.
- 3) For the other fields, accept the default values and click the **Apply** button.

ORACLE® Application Express Listener

Administration

Connection Security Caching Pre-Post Processing Status Miscellaneous

Database Connection

Username: APEX_PUBLIC_USER

Password:

Connection Type: Basic

Hostname: localhost

Port: 1521

SID orcl

Service name

▶ JDBC Settings

Cancel Apply

- 4) If you entered the correct details, the APEX development interface login page appears.

The screenshot shows the Oracle Application Express login interface. At the top, it says "Enter Application Express workspace and credentials." Below this are fields for "Workspace", "Username", and "Password", followed by a yellow "Login" button. A link "Click here to learn how to get started" is also present. The main content area contains a large illustration of a stack of cylinders with a pencil and ruler resting on them. Below the illustration, a text box states: "Oracle Application Express is a rapid Web application development tool that lets you share data and create custom applications. Using only a Web browser and limited programming experience, you can develop and deploy powerful applications that are both fast and secure." On the left, there's a "Workspace" sidebar with links for "Reset Password", "Find My Workspace", and "Administration". In the center, a "Getting Started" sidebar lists "Learn ...", "Oracle Technology Network", "apex.oracle.com", and "Oracle by Example's". On the right, a "Community" sidebar lists "Discussion Forum", "Packaged Applications", "Partners", and "BLOGs".

- i. Access the APEX Listener administration interface and view all the available configuration options.
- 1) Open a browser and enter the following URL.
http://localhost:9001/apex/listenerAdmin
 - 2) You will be prompted for the WebLogic administration user credentials. Enter **adminlistener** for User Name and **Welcome1** for Password.



- 3) If you entered the correct details, the APEX Listener Administration page is displayed. Click each tab and review the available options.

ORACLE Application Express Listener

Administration

Connection **Security** **Caching** **Pre-Post Processing** **Status** **Miscellaneous**

Database Connection

Username: APEX_PUBLIC_USER

Password: *****

Connection Type: Basic

Hostname: localhost

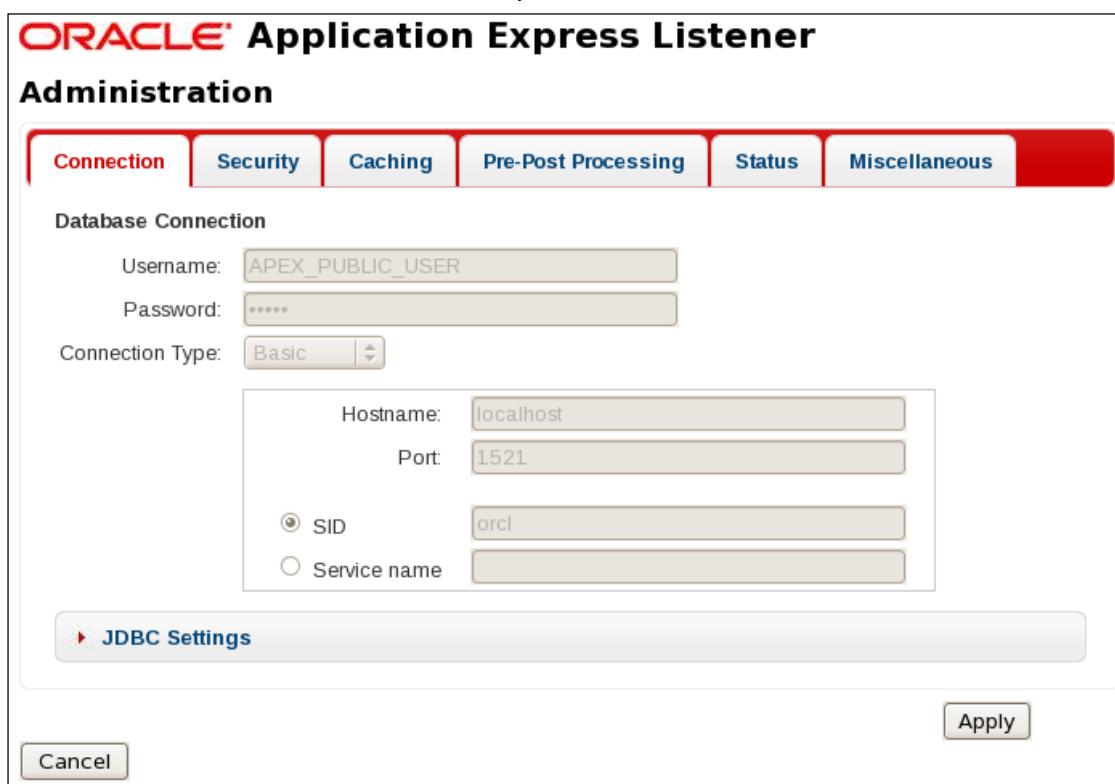
Port: 1521

SID: orcl

Service name:

▶ JDBC Settings

Cancel Apply



Practices for Lesson 5: Creating Workspaces

Chapter 5

Practice 5: Creating Workspaces, Users, and Schemas

Overview

In this practice, you will create a workspace and add users and schemas to the workspace.

Assumptions

You have completed the previous practices.

Tasks

- Create a workspace using the following details.

Workspace Name	ora01
New Schema Name	ora01
Schema Password	ora01
Workspace Administrator Name	ora01_admin
Workspace Administrator Password	ora01
Workspace Administrator Email	ora01_admin@oracle.com

- Configure workspace provisioning such that users can request for workspaces without email verification.
- For the ora01 workspace, create the following users.

User Role	Developer
User Name	ora01_dev
Email	ora01_dev@oracle.com
Password	ora01
User Role	End user
User Name	ora01_user
Email	ora01_user@oracle.com
Password	ora01

- Add the existing HR database schema to the ora01 workspace.
- Create a new schema using the following details.

Schema Name	apex_admin
Password	apex
Default Tablespace	APEx
Temporary Tablespace	TEMP

- View the database privileges for the schemas you have created for the ora01 workspace.

Practice Solutions 5: Creating Workspaces, Users, and Schemas

Overview

In this practice solution, the steps to create a workspace and add users and schemas to the workspace are provided.

Assumptions

You have completed the previous practices.

Solutions

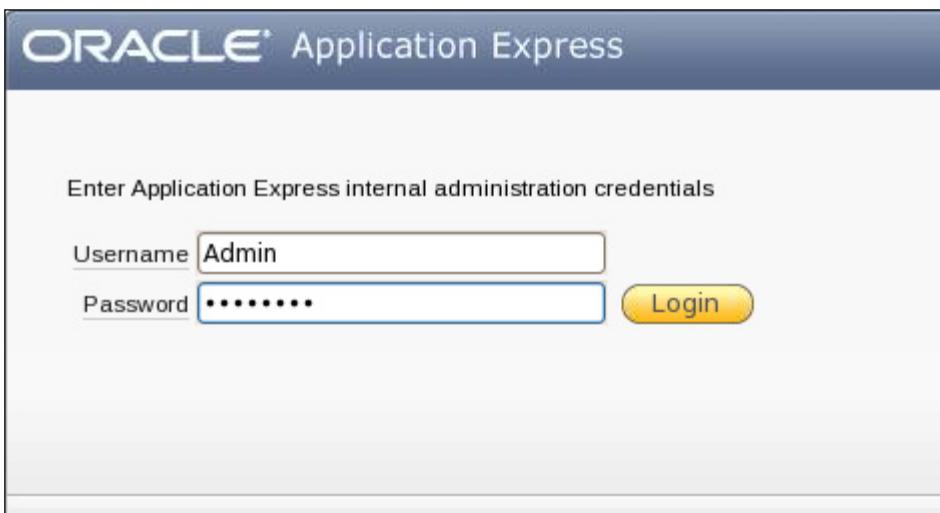
- Create a workspace using the following details.

Workspace Name	ora01
New Schema Name	ora01
Schema Password	ora01
Workspace Administrator Name	ora01_admin
Workspace Administrator Password	ora01
Workspace Administrator Email	ora01_admin@oracle.com

- Access the Administration Services using the following URL:

http://localhost:9001/apex/apex_admin

- In the login page, enter **admin** for Username, **Welcome1** for Password, and click **Login**.
(Note: This is the password you set for the admin user after installing APEX.)



Note: You will be prompted to reset the password. Create a new password and log in to Administration Services using the new password.

- 3) From the Administration Services home page, click the **Create Workspace** button.



- 4) Enter **ora01** for Workspace Name and click **Next**.

Create Workspace

Cancel **Next >**

* Workspace Name

Workspace ID

Workspace Description

- 5) Enter **ora01** for Schema Name and Schema Password and click **Next**.

Create Workspace

Cancel < Previous **Next >**

Select whether or not the schema already exists. If the schema exists, select the schema from the list. If the schema does not exist, enter a name and password and choose the size of the associated tablespace to be created.

Re-use existing schema?

* Schema Name

* Schema Password

* Space Quota (MB)

- 6) Enter `ora01_admin` for Administrator Username, `ora01` for Administer Password, and `ora01_admin@oracle.com` for Email. Click **Next**.

Create Workspace

Cancel < Previous **Next >**

* Administrator Username	ora01_admin
* Administrator Password	*****
First Name	
Last Name	
* Email	ora01_admin@oracle.com

- 7) Review the entered details and click **Create Workspace**.

Confirm Request

Cancel < Previous **Create Workspace**

You have requested to provision a new Workspace.

Workspace Information:

Name	ora01
Security Group ID	System Assigned
Description	...

Administrator Information:

User Name	ora01_admin
E-mail	ora01_admin@oracle.com

Schema Information:

Reuse Existing Schema	No
Schema Name	ORA01
Tablespace will be created	APEX_XXX
Datafile for tablespace	/u01/app/oracle/oradata/orcl/APEX_XXX.DBF

- 8) The workspace is created successfully. Click **Done**.

Workspace Created

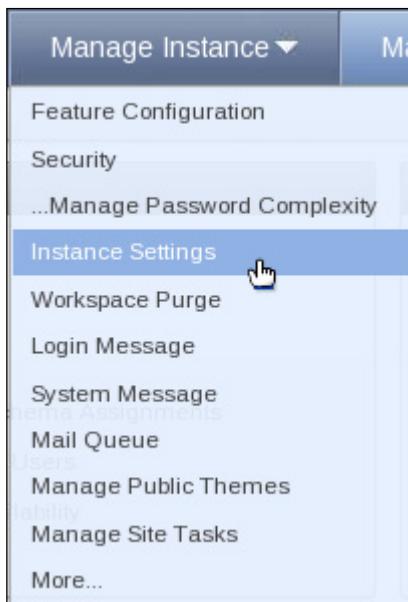
Done

Workspace successfully provisioned.

Workspace ora01 provisioned with administrator ora01_admin.

Database user ORA01 created with default tablespace APEX_1279100227807290 using datafile /u01/app/oracle/oradata/orcl/APEX_1279100227807290.dbf

- b. Configure workspace provisioning such that users can request for workspaces without email verification.
- 1) Click the down arrow in the Manage Instance tab and select **Instance Settings**.



- 2) Under Self Service, select the **Request** radio button and click **Apply Changes**.

A screenshot of a configuration page titled 'Self Service'. At the top, there is a toolbar with buttons for 'Show All', 'Self Service' (which is selected and highlighted in blue), 'Email Provisioning', 'Storage', 'Email', 'Wallet', 'Report Printing', 'New Workspace Request Size', and 'Workspace Change Request Size'. Below the toolbar, the title 'Self Service' is repeated. Underneath, there is a section for 'Provisioning Status' with three radio button options: 'Manual - An administrator manually creates each workspace' (unchecked), 'Request - Link displayed on login page enabling users to request workspaces' (checked), and 'Email Verification - Workspace created after email address is verified by the user' (unchecked). At the bottom of the page is a field labeled 'Development Service URL' with a placeholder value 'http://localhost:8080'. In the top right corner, there are two buttons: 'Cancel' and 'Apply Changes' (which has a yellow background and a small hand cursor icon).

- c. For the ora01 workspace, create the following users.

User Role	Developer
User Name	ora01_dev
Email	ora01_dev@oracle.com
Password	ora01
User Role	End user
User Name	ora01_user
Email	ora01_user@oracle.com
Password	ora01

- 1) Click the **Manage Workspaces** tab and click the **Manage Developers and Users** link under Workspace Actions.



- 2) Click the **Create User** button.

User	Full Name	Workspace	Default Schema	Created	Last Updated	Password
ADMIN		INTERNAL	-	1.6 years ago	70 minutes ago	-
ORA01_ADMIN		ORA01	ORA01	13 minutes ago	13 minutes ago	Reset

- 3) Enter **ora01_dev** for Username and **ora01_dev@oracle.com** for Email Address.

* Username	ora01_dev
* Email Address	ora01@oracle.com
First Name	
Last Name	
Description	

- 4) Select ora01 for Workspace and ora01 for Default Schema. Select **No** for User is an administrator.

Account Privileges

* Workspace ORA01 (1279029668807276)

* Default Schema ORA01

User is an administrator: Yes No

User is a developer: Yes No

Application Builder Access Yes

SQL Workshop Access Yes

Team Development Access Yes

Account Availability Unlocked



- 5) Enter ora01 for Password and Confirm Password.

Password

Password: Passwords are case sensitive

Confirm Password:

Require Change of Password on First Use Yes



- 6) Click the **Create and Create Another** button.



- 7) Enter ora01_user for Username and ora01_user@oracle.com for Email Address.

User Attributes

* Username: ora01_user

* Email Address: ora01_user@oracle.com

First Name:

Last Name:

Description:



- 8) Select ora01 for Workspace and ora01 for Default Schema. Select **No** for User is an administrator and **No** for User is a developer.

* Workspace ORA01 (1279029668807276)
* Default Schema ORA01
User is an administrator: Yes No
User is a developer: Yes No
Application Builder Access No
SQL Workshop Access No
Team Development Access Yes
Account Availability Unlocked

- 9) Enter ora01 for Password and Confirm Password.

Password ***** Passwords are case sensitive
Confirm Password *****
Require Change of Password on First Use Yes

- 10) Click the **Create** button.

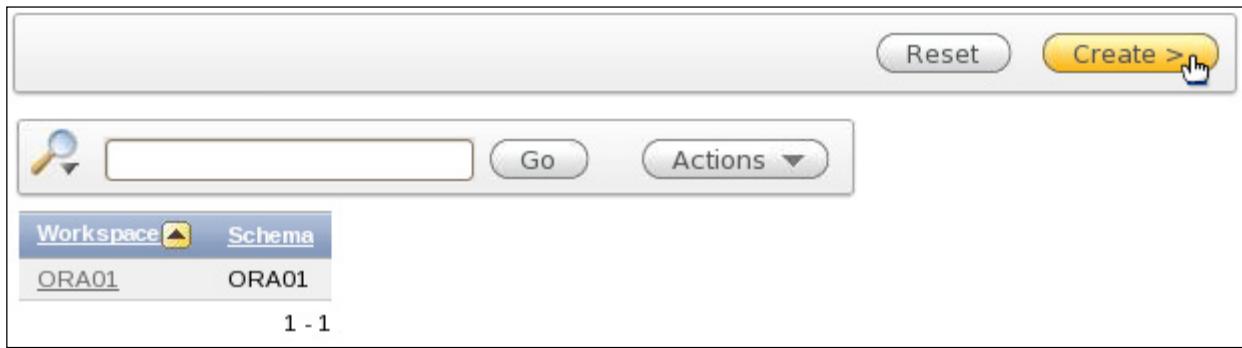


- d. Add the existing HR database schema to the ora01 workspace.

- 1) Click the down arrow in the Manage Workspaces tab and select **Manage Schema Assignments**.



- 2) Click the **Create** button.



- 3) Ensure that the **Existing** option is selected and click **Next**.



- 4) Select **ora01** for Workspace and click **Next**.



- 5) Select **HR** for Schema and click **Next**.



- 6) Review the details you entered and click **Add Schema**.



- e. Create a new schema using the following details.

Schema Name	apex_admin
Password	apex
Default Tablespace	APEX
Temporary Tablespace	TEMP

- 1) From the Manage Workspace to Schema Assignments page, click the **Create** button.

The screenshot shows the 'Manage Workspace to Schema Assignments' page. At the top right are 'Reset' and 'Create >' buttons. Below them is a search bar with a magnifying glass icon and a 'Go' button. An 'Actions' dropdown menu is also present. The main area displays a table with two rows:

Workspace	Schema
ORA01	HR
ORA01	ORA01

Below the table is a page number '1 - 2'.

- 2) Select the **New** option and click **Next**.

The screenshot shows the 'New or Existing Schema' dialog box. It has 'Cancel' and 'Next >' buttons at the top right. The question 'The schema is:' has two options: 'Existing' (radio button) and 'New' (radio button, which is selected). The 'New' option is highlighted with a dashed border.

- 3) Select **ora01** for Workspace and click **Next**.

The screenshot shows the 'Select Workspace' dialog box. It has 'Cancel', '< Previous', and 'Next >' buttons. The question '* Workspace' has a dropdown menu showing 'ORA01' selected.

- 4) Enter **apex_admin** for Schema and **apex** for Password. Select **APEX** for Default Tablespace and **TEMP** for Temporary Tablespace. Click **Next**.

The screenshot shows the 'Identify Schema' dialog box. It has 'Cancel', '< Previous', and 'Next >' buttons. The fields are:

* Schema	apex_admin
* Password	****
* Default Tablespace	APEX
* Temporary Tablespace	TEMP

- 5) Review the details you entered and click **Add Schema**.

The screenshot shows the 'Confirmation' dialog box. It has 'Cancel', '< Previous', and 'Add Schema' buttons. The table summarizes the entered details:

New or Existing	New
Schema	apex_admin
Schema Password	****
Default Tablespace	APEX
Temporary Tablespace	TEMP
Workspace	ORA01

- f. View the database privileges for the schemas you have created for the ora01 workspace.
- 1) Click the **Manage Workspaces** tab and select the **Workspace Database Privileges** link under Workspace Reports.



- 2) An interactive report listing the database privileges for all schemas in each workspace is displayed.

Workspace	Schema	Privilege	Administration Option
INTERNAL	APEX_040000	CREATE TABLESPACE	NO
INTERNAL	APEX_040000	CREATE ANY CONTEXT	YES
INTERNAL	APEX_040000	DROP PUBLIC SYNONYM	NO
INTERNAL	APEX_040000	UNLIMITED TABLESPACE	YES
INTERNAL	APEX_040000	CREATE PUBLIC SYNONYM	NO
INTERNAL	APEX_040000	ALTER USER	NO
ORA01	APEX_ADMIN	CREATE JOB	NO
ORA01	APEX_ADMIN	CREATE TYPE	NO
ORA01	APEX_ADMIN	CREATE VIEW	NO
ORA01	APEX_ADMIN	CREATE TABLE	NO
ORA01	APEX_ADMIN	CREATE CLUSTER	NO
ORA01	APEX_ADMIN	CREATE SESSION	NO
ORA01	APEX_ADMIN	CREATE SYNONYM	NO
ORA01	APEX_ADMIN	CREATE TRIGGER	NO
ORA01	APEX_ADMIN	CREATE OPERATOR	NO
ORA01	APEX_ADMIN	CREATE SEQUENCE	NO
ORA01	APEX_ADMIN	CREATE DIMENSION	NO
ORA01	APEX_ADMIN	CREATE INDEXTYPE	NO
ORA01	APEX_ADMIN	CREATE PROCEDURE	NO
ORA01	APEX_ADMIN	CREATE ANY CONTEXT	NO

21 - 40

Practices for Lesson 6: Configuring Administration Services

Chapter 6

Practice 6: Configuring Administration Services

Overview

In this practice, you will configure email, report printing, and some other settings.

Assumptions

You should have completed practices 3 and 4.

Tasks

- a. Set apex_admin@oracle.com as the administrator email address for tasks that generate an email. Also, configure Administration Services so that you receive request notifications at the email address administrator@oracle.com.
- b. Create a PDF file for the Developers and Users interactive report (that is, the Manage Developers and Users page). What happens?
- c. Configure PDF printing of report regions. BI Publisher is already installed in your ACES machines. The port number is 9704 and the print server script is located at /xmlpserver/convert.
- d. Again, create a PDF file for the Developers and Users interactive report. What happens?
- e. Enable workspace purging by using the following details:
 - Use wksp_purge_admin@oracle.com as the user ID from which workspace inactive purge notifications are sent to workspace administrators.
 - Mark a workspace as inactive, if there is no activity in a workspace for 60 days.
 - Provide a 15-day period from the time a workspace is marked as inactive till it is actually purged.
 - Send reminder emails 5 days before a workspace is purged.
 - Allow a 30-day period from the time a workspace administrator confirms that they do not want to purge the workspace till the workspace is marked as inactive again.
- f. Create a workspace password policy conforming to the following rules:
 - Password should contain at least eight characters.
 - It should be alphanumeric, with at least one uppercase character.
 - It should be different from the username and workspace name.
- g. Enable users to monitor the database from the APEX development interface.

Practice Solutions 6: Configuring Administrative Services

Overview

In this practice solution, the steps to configure email, report printing, and some other settings are provided.

Assumptions

You should have completed practices 3 and 4.

Solutions

- a. Set apex_admin@oracle.com as the administrator email address for tasks that generate an email. Also, configure Administration Services so that you receive request notifications at the email address administrator@oracle.com.
- 1) From the Administration Services home page, click the **Manage Instance** icon.



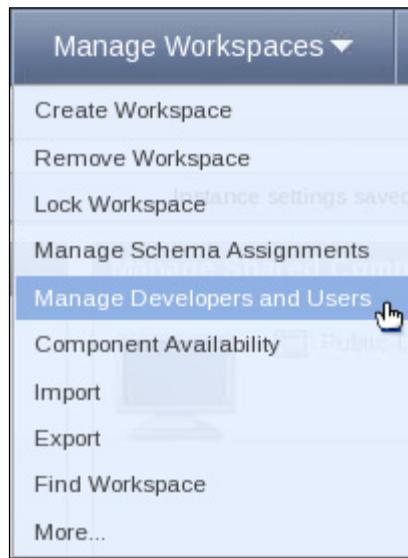
- 2) Click the **Instance Settings** link under Instance Settings.



- 3) Click the Email tab. Enter **apex_admin@oracle.com** in Administration Email Address and **administrator@oracle.com** in Notification Email Address. Click **Apply Changes**.



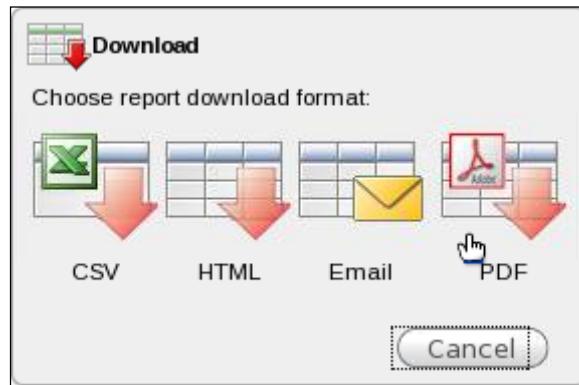
- b. Create a PDF file for the Developers and Users interactive report (that is, the Manage Developers and Users page). What happens?
- 1) Click the down arrow in the Manage Workspaces tab and select **Manage Developers and Users** link.



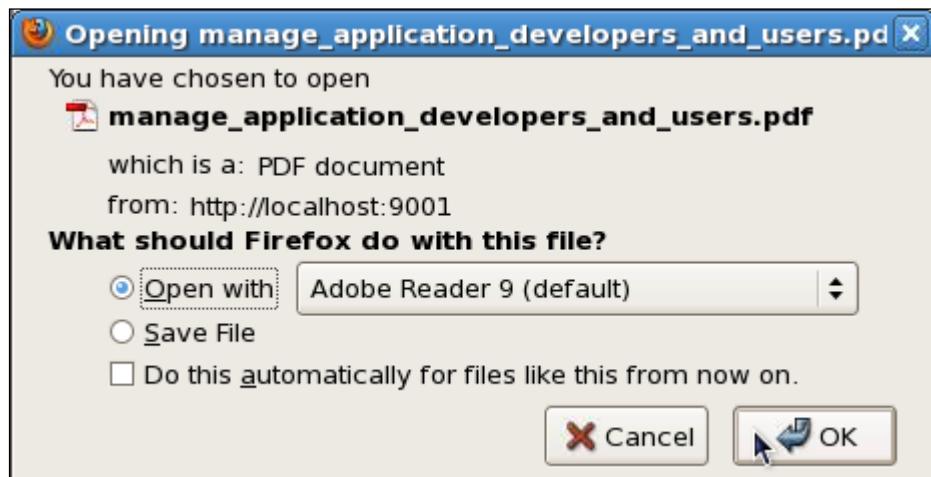
- 2) An interactive report listing all the users in the APEX instance is displayed. To save this report in PDF format, click the down arrow in the **Actions** button and select **Download**.

The screenshot shows a list of users in an Oracle APEX application. The columns are User, Full Name, Workspace, Last Updated, and Password. The 'Actions' button is open, displaying a context menu with options like Select Columns, Filter, Rows Per Page, Format, Flashback, Save Report, Reset, Help, and Download. The 'Download' option is highlighted with a mouse cursor. The workspace and user are set to INTERNAL and ADMIN respectively.

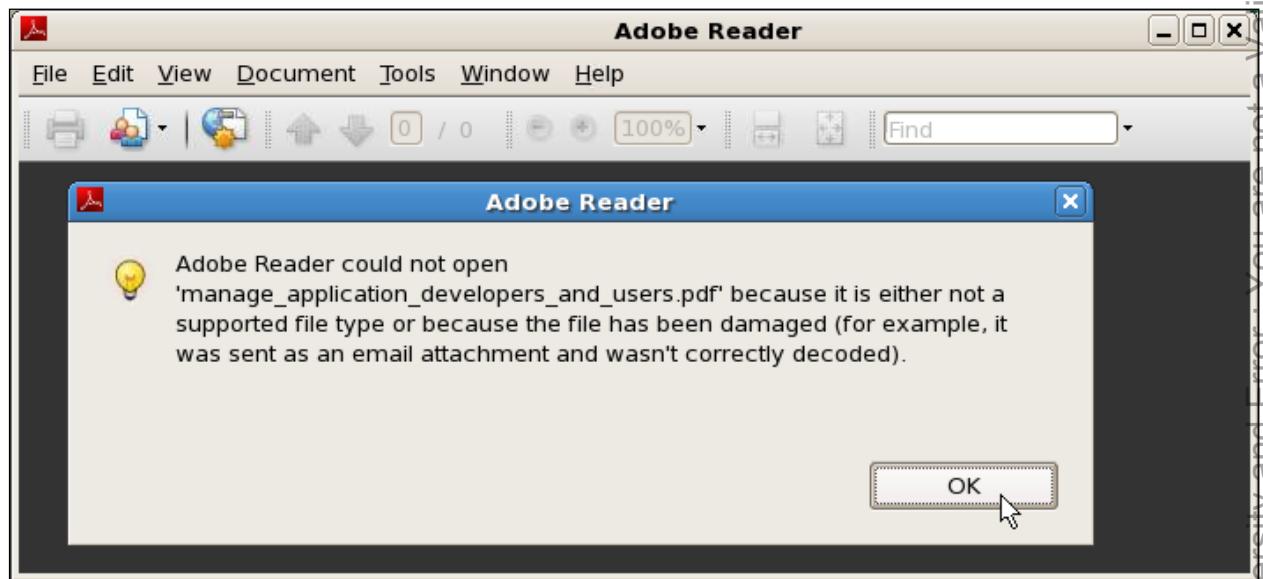
- 3) Select the PDF option.



- 4) Click **OK** to open this file by using Adobe Reader.

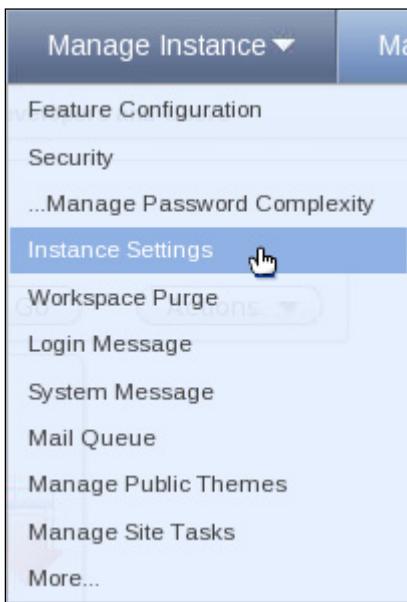


You will receive an error message. This is because you have not yet configured the Print Server by using BI Publisher. Click the **OK** button.



- c. Configure PDF printing of report regions. BI Publisher is already installed in your ACES machines. The port number is 9704 and the print server script is located at /xmlpserver/convert.

- 1) Click the down arrow in the Manage Instance tab and click **Instance Settings**.



- 2) Click the **Report Printing** tab and select the **Advanced** option for Print Server.

A screenshot of a configuration page titled 'Report Printing'. At the top, there is a horizontal bar with tabs: Show All, Self Service, Email Provisioning, Storage, Email, Wallet, Report Printing (which is highlighted in blue), New Workspace Request Size, and Workspace Change Request Size. Below the tabs, the page title is 'Report Printing'. There are several configuration fields:

- Print Server: A radio button group with 'Standard' and 'Advanced (requires Oracle BI Publisher)' options. 'Advanced' is selected.
- Print Server Protocol: A radio button group with 'HTTP' and 'HTTPS' options. 'HTTP' is selected.
- Print Server Host Address: An input field containing the placeholder text 'Print Server Host Address'.
- Print Server Port: An input field containing the placeholder text 'Print Server Port'.
- Print Server Script: An input field containing the placeholder text 'Print Server Script'.

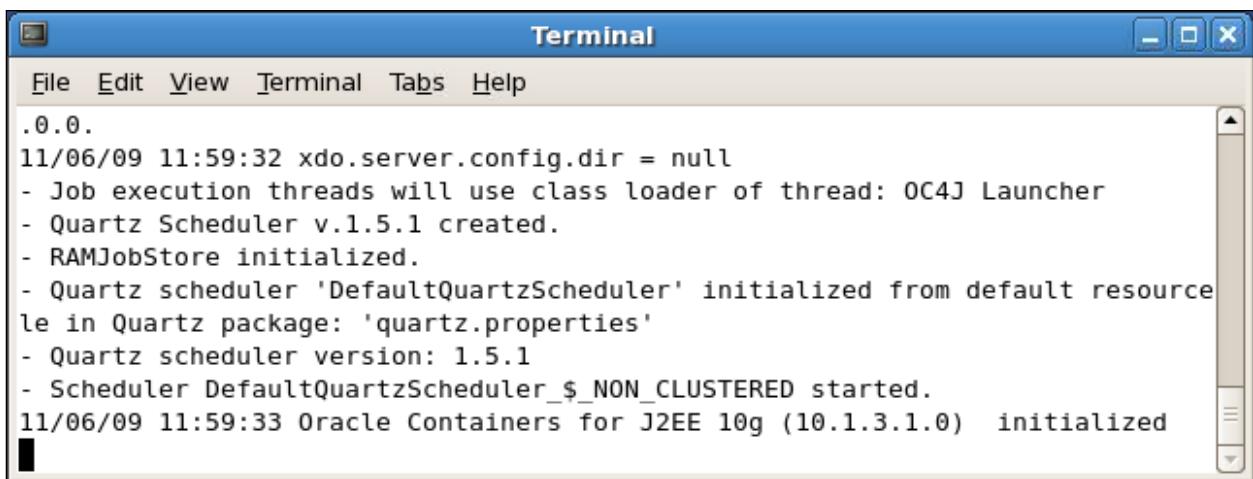
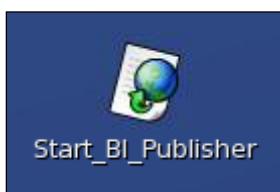
- 3) Enter **localhost** in the Print Server Host Address field and enter **9704** in the Print Server Port field. Enter **/xmlpserver/convert** in the Print Server Script field and click **Apply Changes**.

A screenshot of the same configuration page after changes have been applied. The fields now contain the following values:

- Print Server: 'Advanced (requires Oracle BI Publisher)' is selected.
- Print Server Protocol: 'HTTP' is selected.
- Print Server Host Address: 'localhost' is entered.
- Print Server Port: '9704' is entered.
- Print Server Script: '/xmlpserver/convert' is entered.

The 'Apply Changes' button is visible at the top right of the form.

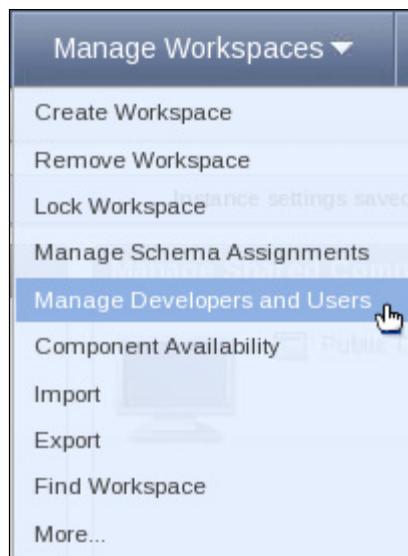
- 4) You have configured BI Publisher for APEX. To be able to use the BI Publisher services, you need to start it. Click the Start_BI_Publisher icon from the desktop.



A screenshot of a terminal window titled "Terminal". The window shows the following log output:

```
.0.0.  
11/06/09 11:59:32 xdo.server.config.dir = null  
- Job execution threads will use class loader of thread: OC4J Launcher  
- Quartz Scheduler v.1.5.1 created.  
- RAMJobStore initialized.  
- Quartz scheduler 'DefaultQuartzScheduler' initialized from default resource  
le in Quartz package: 'quartz.properties'  
- Quartz scheduler version: 1.5.1  
- Scheduler DefaultQuartzScheduler_$_NON_CLUSTERED started.  
11/06/09 11:59:33 Oracle Containers for J2EE 10g (10.1.3.1.0) initialized
```

- d. Again, create a PDF file for the Developers and Users interactive report. What happens?
- 1) Click the down arrow in the Manage Workspaces tab and select **Manage Developers and Users** link.



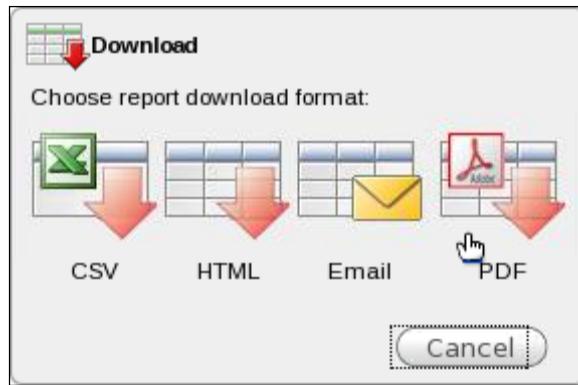
- 2) An interactive report listing all the users in the APEX instance is displayed. To save this report in PDF format, click the down arrow in the Actions button and select Download.

The screenshot shows a list of database users in a grid format. The columns are labeled 'User', 'Full Name', 'Workspace', and 'Last Updated'. The data includes:

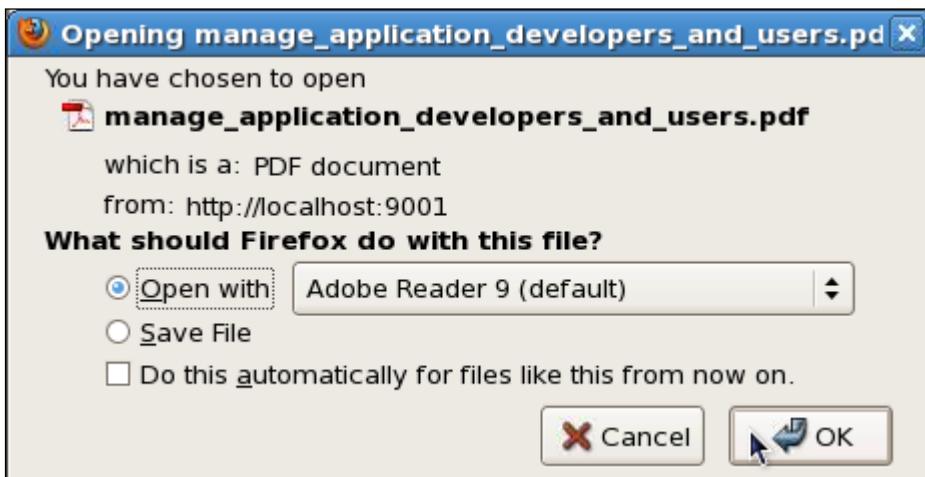
User	Full Name	Workspace	Last Updated
ADMIN		INTERNAL	1.6 years ago
ORA01_ADMIN		ORA01	2 hours ago
ORA01_DEV		ORA01	90 minutes ago
ORA01_USER		ORA01	59 minutes ago

An 'Actions' dropdown menu is open, showing options like 'Select Columns', 'Filter', 'Rows Per Page', 'Format', 'Flashback', 'Save Report', 'Reset', 'Help', and 'Download'. The 'Download' option is highlighted with a mouse cursor icon.

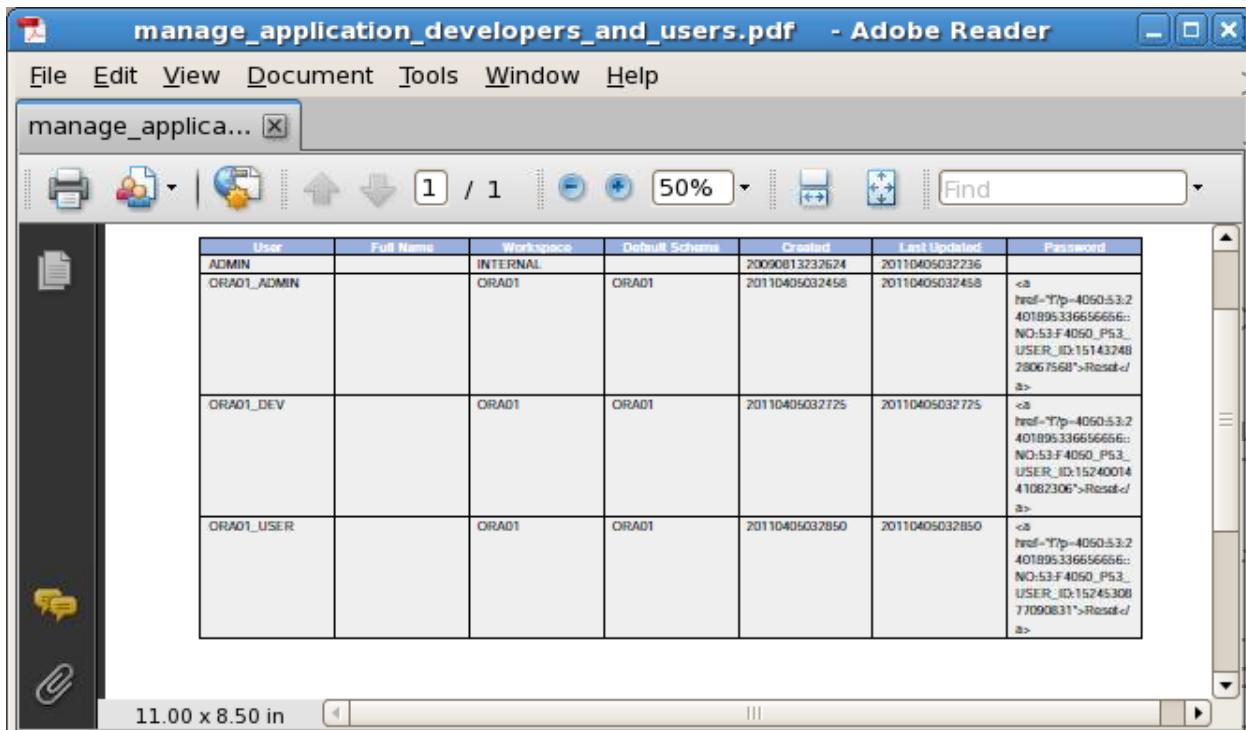
- 3) Select the **PDF** option.



- 4) Click **OK** to open this file by using Adobe Reader.



- 5) The PDF file is created successfully this time.



Note: If you are not able to create the PDF successfully, ensure that BI Publisher has been started.

- e. Enable workspace purging by using the following details:

- Use wksp_purge_admin@oracle.com as the user ID from which workspace inactive purge notifications are sent to workspace administrators.
 - Mark a workspace as inactive, if there is no activity in a workspace for 60 days.
 - Provide a 15-day period from the time a workspace is marked as inactive till it is actually purged.
 - Send reminder emails 5 days before a workspace is purged.
 - Allow a 30-day period from the time a workspace administrator confirms that they do not want to purge the workspace till the workspace is marked as inactive again.

- 1) Click the down arrow in the Manage Instance tab and select **Workspace Purge**.



- 2) Select **Yes** for Enabled. Enter **wksp_purge_admin@oracle.com** in the Purge Administration Email Address field. Enter **60** in the Days Inactive field. Enter **15** in the Days Until Purge field. Enter **5** in the Reminder Days in Advance field. Enter **30** in the Grace Period field. Click **Apply Changes**.

The dialog box is titled "Workspace Purge Settings". It contains the following fields:

- * Enabled: Yes (selected)
- * Language: English
- * Application Express Instance URL: http://localhost:9001/apex/
- * Application Express Images URL: http://localhost:9001/i/
- * Purge Administration Email Address: wksp_purge_admin@oracle.com
- Send Summary Email To: (empty input field)
- * Days Until Purge: 15
- * Reminder Days In Advance: 5
- * Days Inactive: 60
- * Grace Period (Days): 30
- Maximum Execution Time (Hours): (empty input field)
- Maximum Number of Workspaces: (empty input field)
- Maximum Number of Emails: (empty input field)

At the bottom right of the dialog box is a "Monitor Activity" button.

f. Create a workspace password policy conforming to the following rules.

- Password should contain at least eight characters.
- It should be alphanumeric, with at least one uppercase character.
- It should be different from the username and workspace name.

1) From the Manage Instance page, click the **Security** link under Instance Settings.



2) Click the **Workspace Password Policy** tab. Enter **8** in the Minimum Password Length field. Select **Yes** for the Must Contain At Least One Numeric Character, Must Contain At Least One Upper Case Character, Must Not Contain Username, and Must not Contain Workspace Name fields.

Manage password policy for Application Express users (workspace administrators, developers, and end users) in all workspaces.	
Minimum Password Length	<input type="text" value="8"/>
Minimum Password Differences	<input type="text"/>
Must Contain At Least One Alphabetic Character	<input type="text" value="No"/>
Must Contain At Least One Numeric Character	<input type="text" value="Yes"/>
Must Contain At Least One Punctuation Character	<input type="text" value="No"/>
Must Contain At Least One Upper Case Character	<input type="text" value="Yes"/>
Must Contain At Least One Lower Case Character	<input type="text" value="No"/>
Must Not Contain Username	<input type="text" value="Yes"/>
Must Not Contain Workspace Name	<input type="text" value="Yes"/>
Must Not Contain	<input type="text" value="oracle:hello:welcome:guest:user:database"/>
Alphabetic Characters	<input type="text" value="abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ"/>
Punctuation Characters	<input #\$%&()~*+,="" -;<='>?_"/' type="text" value="!\"/>

3) Click the **Account Login Control** tab. The Maximum Login Failures Allowed and Account Password Lifetime fields should not be blank. If these fields are blank, enter some values.

Manage security settings for workspace administrator and workspace developer accounts.	
Require User Account Expiration and Locking	<input type="text" value="No"/>
Maximum Login Failures Allowed	<input type="text" value="3"/>
Account Password Lifetime (days)	<input type="text" value="180"/>

- 4) Click **Apply Changes**.

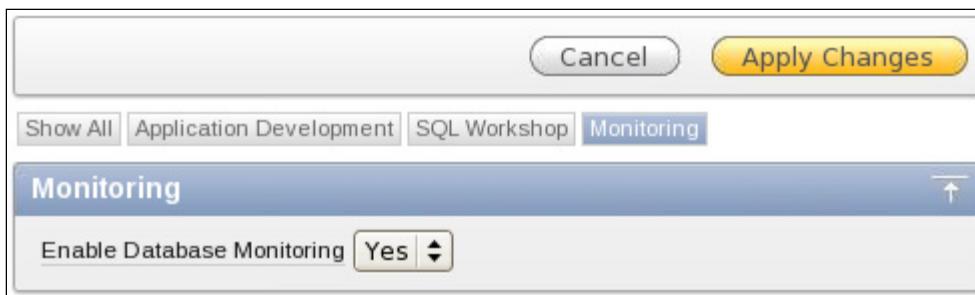


- g. Enable users to monitor the database from the APEX development interface.

- 1) From the Manage Instance page, click the **Feature Configuration** link.



- 2) Click the **Monitoring** tab. Select **Yes** for Enable Database Monitoring and click **Apply Changes**.



Practices for Lesson 7: Administering a Workspace

Chapter 7

Practice 7: Administering a Workspace

Overview

In this practice, you will log in to the APEX development interface as a workspace administrator and perform various tasks.

Assumptions

You have completed all the previous labs.

Tasks

- a. Log in to the ora01 workspace you created in Practice 5 as the ora01_admin workspace administrator.
- b. Place a request for a new schema called Projects for the ora01 workspace.
- c. Request for additional 10-MB storage for the ora01 workspace.
- d. Place a request to delete the ora01 workspace.
- e. Email the Workspace Summary Report for the latest week to my_manager@oracle.com.
- f. Create a new developer user for the ora01 workspace by using the following details:

User Role	Developer
User Name	ora01_dev2
Email	ora01_dev2@oracle.com
Password	Developer2

- g. Display a report that lists all the active sessions in the workspace.
- h. Display a report listing all the login attempts in to the workspace.
- i. View the Workspace and Users dashboards.
- j. From the APEX developer interface login page, request for a new workspace by using the following details:

First Name	john
Last Name	smith
Email Address	john.smith@oracle.com
Workspace name	my_workspace
New schema name	my_schema
New schema password	my_schema
Justification	Practicing requesting a workspace.

Practice Solutions 7: Administering a Workspace

Overview

In this practice solution, the steps to log in to the APEX development interface as a workspace administrator and perform various tasks are provided.

Assumptions

You have completed all previous labs.

Solutions

- a. Log in to the `ora01` workspace you created in Practice 5 as the `ora01_admin` workspace administrator.

1) Access the APEX development interface login page by using the following URL:

`http://localhost:9001/apex`

- 2) Enter `ora01` for workspace, `ora01_admin` for username, and `ora01` for password.
Click the **Login** button.

Enter Application Express workspace and credentials.

Workspace `ora01`

Username `ora01_admin`

Password `.....`

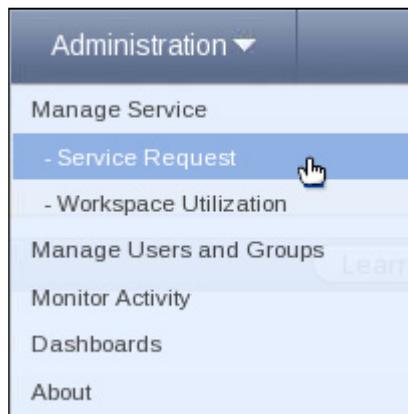
Login

Click here to learn how to get started

Oracle Application Express is a rapid Web application development tool that lets you share data and create custom applications. Using only a Web browser and limited programming experience, you can develop and deploy powerful applications that are both fast and secure.

You will be prompted to change the password. Remember the password policy you created earlier. Use a password like Apex1234. Log in again by using the new password.

- b. Place a request for a new schema called `Projects` for the `ora01` workspace.
 - 1) Click the down arrow in the Administration tab and select **Service Request**.



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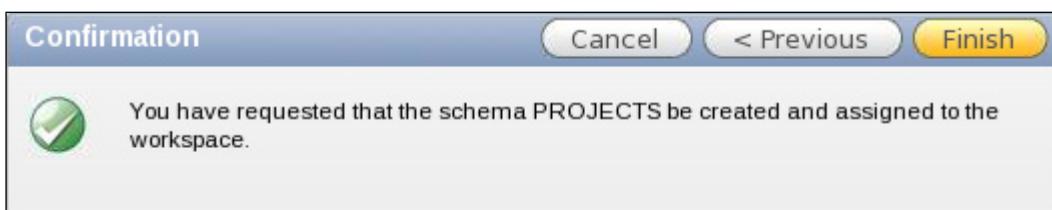
- 2) Select the **Request Schema** option and click **Next**.



- 3) Select **Request a new schema** and enter **Projects** in the Schema Name field. Click **Next**.

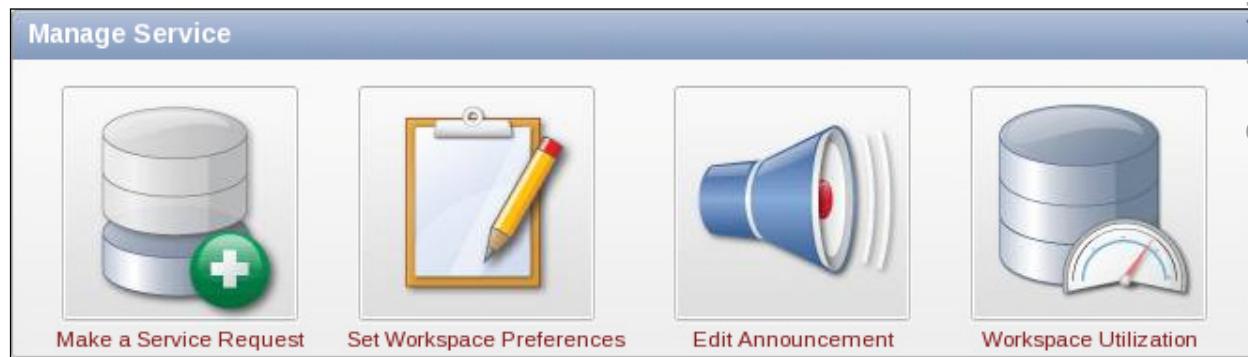


- 4) Click **Finish**.



- c. Request for additional 10-MB storage for the ora01 workspace.

- 1) Click the **Make a Service Request** icon from the Manage Service page.



- 2) Select the **Request Storage** option and click **Next**.



- 3) Select **10** for the Amount of storage to add field and click **Next**.

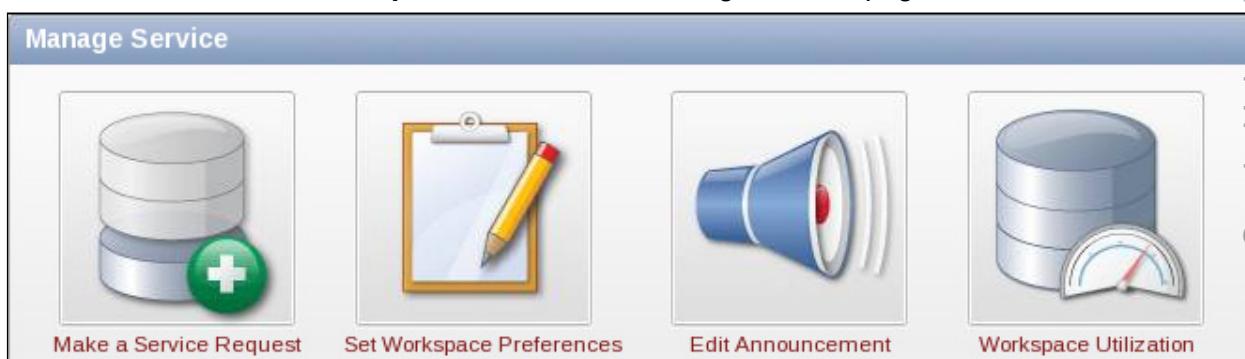


- 4) Click the **Request Storage** button.



- d. Place a request to delete the ora01 workspace.

- 1) Click the **Make a Service Request** icon from the Manage Service page.



- 2) Select **Request Termination** and click **Next**.



- 3) Review the displayed details and click **Next**.



- 4) Click the **Terminate Service** button.



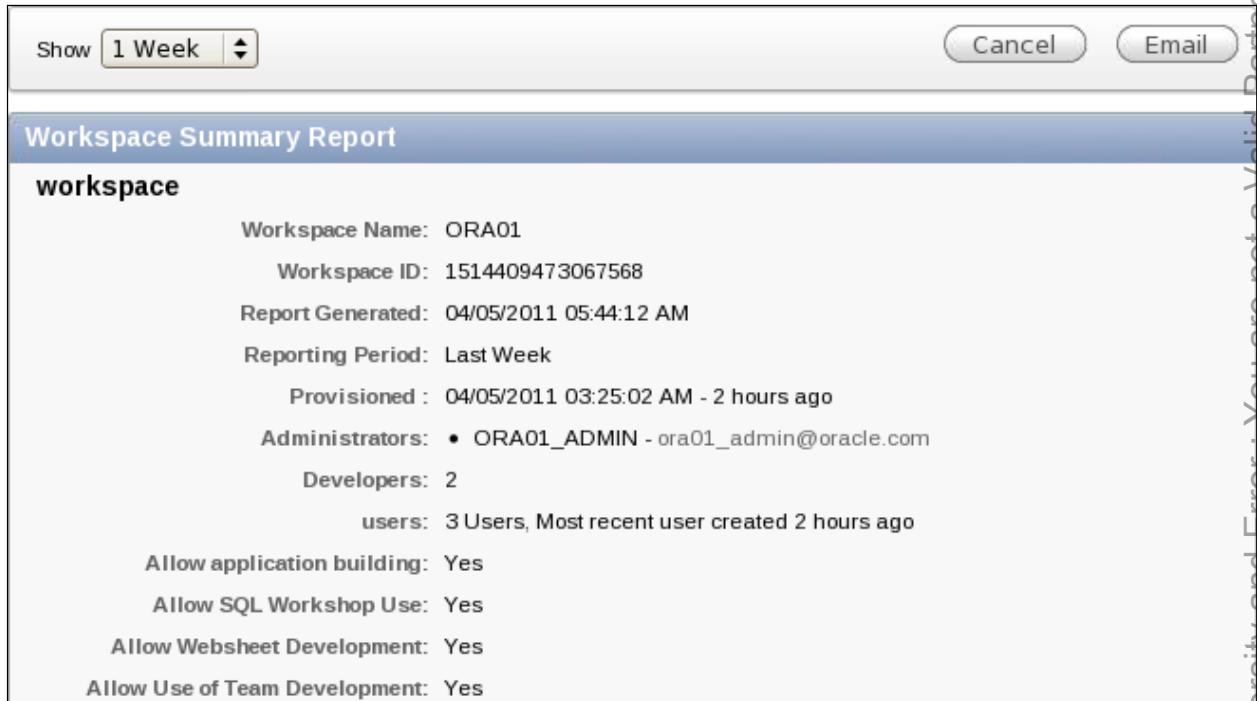
- e. Email the Workspace Summary Report for the latest week to my_manager@oracle.com.
- 1) To view the Workspace Summary Report, click the **Workspace Utilization** icon from the Manage Service page.



- 2) Select **1 Week** from the Show drop-down list.



- 3) Click the **Email** button.



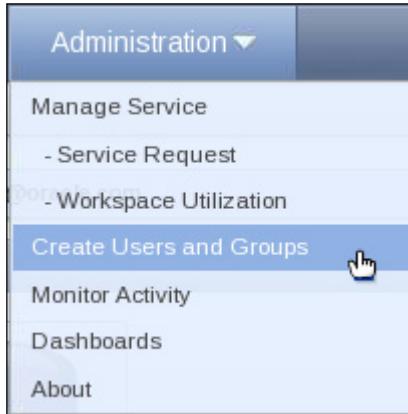
- 4) Enter **my_manager@oracle.com** in the To field and click **Email**.

The screenshot shows a software interface for sending an email. At the top, there is a reporting period dropdown set to "1 Week". On the right, there are "Cancel" and "Email" buttons. Below this is a blue header bar labeled "Email". Underneath, there are three input fields: "To" containing "my_manager@oracle.com", "Subject" containing "ORA01 workspace summary", and a large "Body" area which is currently empty. The "Body" area has a "Body" label at its top left corner.

- f. Create a new developer user for the ora01 workspace by using the following details.

User Role	Developer
User Name	ora01_dev2
Email	ora01_dev2@oracle.com
Password	Developer2

- 1) Click the down arrow in the Administration tab and select **Create Users and Groups**.



- 2) Click the **Create User** button.

Edit	User	Email	Account Type	Default Schema	Locked	Password Status	Builder	Last Login	Created
	ORA01_ADMIN	ora01_admin@oracle.com	Workspace Administrator	ORA01	No	Password Valid	46 minutes ago	3 hours ago	
	ORA01_DEV	ora01_dev@oracle.com	Developer	ORA01	No	Password Valid	-	3 hours ago	
	ORA01_USER	ora01_user@oracle.com	End User	ORA01	No	No Developer Privilege	-	3 hours ago	

- 3) Enter **ora01_dev2** for username and **ora01_dev2@oracle.com** for Email Address.

The form contains the following fields:

- * Username: ora01_dev2
- * Email Address: ora01_dev2@oracle.com
- First Name: (empty)
- Last Name: (empty)
- Description: (empty)

- 4) Accept the default settings for Account Privileges and enter **Developer2** for Password and Confirm Password fields.

The screenshot shows two stacked configuration pages. The top page is titled 'Account Privileges' and contains the following settings:

- Default Schema: ORA01
- Accessible Schemas (null for all): [empty input field]
- User is a workspace administrator: Yes No
- User is a developer: Yes No
- Application Builder Access: Yes
- SQL Workshop Access: Yes
- Team Development Access: Yes
- Set Account Availability: Unlocked

The bottom page is titled 'Password' and contains the following fields:

- * Password: [redacted] (case sensitive)
- * Confirm Password: [redacted]
- Require Change of Password on First Use: Yes

- 5) Click **Create User**.



- g. Display a report that lists all the active sessions in the workspace.

- 1) Click the down arrow in the Administration tab and select **Monitor Activity**.



- 2) Select **Active Sessions** under Sessions.



- 3) The Active Session report is displayed.

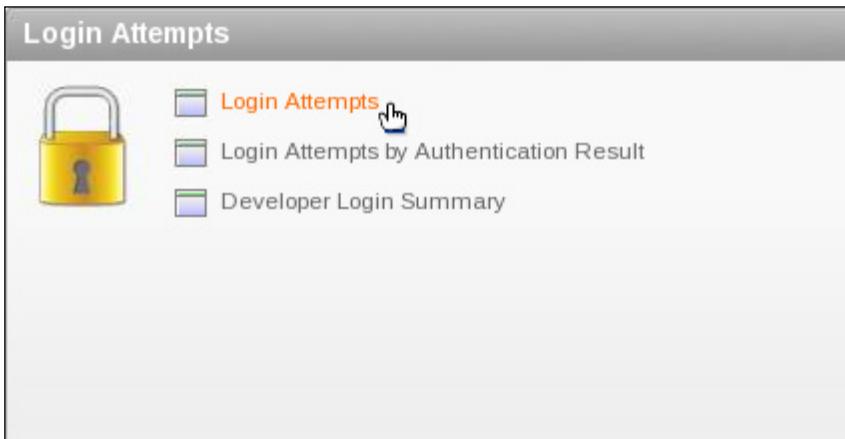
Active Sessions: 1							Reset
<input type="text"/> Go		Actions ▾					
Active Session	Owner	Created	Session Items	IP Address	Most Recent View	Distinct Applications	
1244915062354689	ORA01_ADMIN	69 minutes ago	44	127.0.0.1	113 seconds ago	3	1 - 1

- h. Display a report listing all the login attempts in to the workspace.

- 1) Click the **Monitor Activity** Breadcrumb.



- 2) Click **Login Attempts** under Login Attempts.



- 3) The **Login Attempts** report is displayed.



The screenshot shows a report titled "Login Attempts". At the top, there are filters: "Since 1 day" with a dropdown arrow, a "Set" button, and a "Reset" button. Below the filters is a search bar with a magnifying glass icon and a "Go" button. To the right of the search bar is a "Actions" dropdown menu. The main area is a table with the following columns: User, Application, Authentication Method, Login Date, Login Time, Authentication Result, IP Address, and Custom Status. Two rows of data are shown:

User	Application	Authentication Method	Login Date	Login Time	Authentication Result	IP Address	Custom Status	
ORA01_ADMIN	4550	Workspace Login	04/05/2011	05:20:44 AM	73 minutes ago	Normal, successful authentication	127.0.0.1	-
ORA01_ADMIN	4550	Workspace Login	04/05/2011	05:13:21 AM	81 minutes ago	Password First Use	127.0.0.1	-

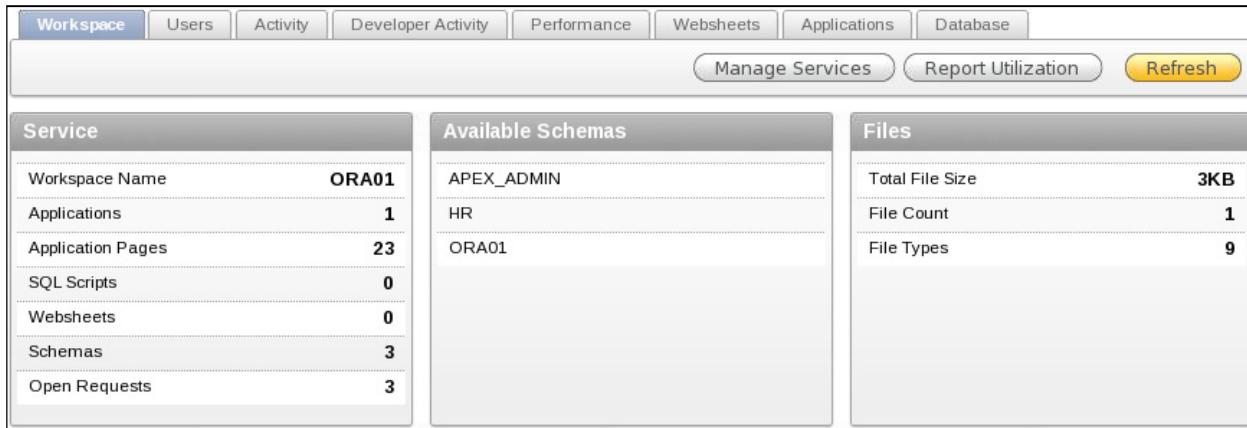
A note at the bottom of the report states: "This report shows the recent logins to applications in this workspace . All end user logins to applications that use the Application Express login API in their authentication scheme are logged."

- i. View the Workspace and Users dashboards.

- 1) Click the down arrow in the Administration tab and select **Dashboards**.



- 2) The Workspace dashboard is displayed. Click the **Users** tab.



The screenshot shows the Workspace dashboard with the "Users" tab selected. The top navigation bar includes tabs for Workspace, Users, Activity, Developer Activity, Performance, Websheets, Applications, and Database, along with "Manage Services", "Report Utilization", and "Refresh" buttons. The main content area is divided into three sections: "Service", "Available Schemas", and "Files".

- Service:**

Workspace Name	ORA01
Applications	1
Application Pages	23
SQL Scripts	0
Websheets	0
Schemas	3
Open Requests	3
- Available Schemas:**

APEX_ADMIN
HR
ORA01
- Files:**

Total File Size	3KB
File Count	1
File Types	9

- 3) The Users Dashboard is displayed.

Your Account	
Username	ORA01_ADMIN
Workspace	ORA01
Workspace Administrator	Yes
Application Developer	Yes
Websheet Developer	Yes
eMail	ora01_admin@oracle.com
User Created	3 hours ago

Workspace Users	
Users	4
Workspace Administrators	1
Application Developers	3
Websheet Developers	0
End Users	1
Created Last 24 Hours	4
Created Last Week	4

- j. From the APEX developer interface login page, request for a new schema by using the following details:

First Name	john
Last Name	smith
Email Address	john.smith@oracle.com
Workspace name	my_workspace
New schema name	my_schema
Justification	Practicing requesting a workspace.

- 1) Access the APEX development interface login page. Click the **Request a Workspace** link.

- 2) Click **Next**.

ORACLE® Application Express

Cancel Next >

Application Express Registration



Welcome to Application Express Registration. Please complete this request form to gain access to Application Express. After the request has been reviewed by the Application Express site administrator, your account password or other status information will be sent to you in an email.

- 3) Enter **john** for First Name, **Smith** for Last Name, and **john.smith@oracle.com** for Email. Click **Next**.

ORACLE® Application Express

Cancel < Previous Next >

Application Express Registration

Please identify the administrator who will manage the requested service. Once the request is approved, the administrator will have the privilege to set up other administrators and developers.

* First Name

* Last Name

* Email
(used to email your credentials)

- 4) Enter **my_workspace** for Workspace and click **Next**.

ORACLE Application Express

Cancel < Previous Next >

Application Express Registration

Please enter the workspace name you would like to have. When your service is approved, you will login using a workspace / username / password combination.

* Workspace



- 5) Enter **my_schema** as the new schema to create and click **Next**.

ORACLE Application Express

Cancel < Previous Next >

Application Express Registration

Please enter the name of the Oracle database schema you would like to have created for your workspace.

* New schema to create

Initial Space Allocation (MB):



- 6) Enter the justification and click **Next**.

ORACLE® Application Express

Cancel < Previous Next >

Application Express Registration

This information helps the Application Express administrator understand how you intend to use this service.

* Why are you requesting this service?
Practice requesting a new workspace.



- 7) Enter the verification code as displayed in your browser and click **Submit Request**.

ORACLE® Application Express

Cancel < Previous Submit Request

Confirmation

* Verification Code: 6mEGY



Enter case sensitive Verification Code and click **Submit Request**.

Workspace Information:

Name	my_workspace
Description	Practice requesting a new workspace....

Administrator Information:

First Name	John
Last Name	Smith
E-mail	John.smith@oracle.com

Schema Information:

Reuse Existing Schema	No
Schema Name	my_schema
Database Size	10

- 8) The request for a new workspace has been submitted.

The screenshot shows a confirmation message from Oracle Application Express. The message reads: "Workspace: my_workspace requested. After the request has been reviewed, the administrator account password or other status information will be sent to the email address: John.smith@oracle.com." Below the message, there is a "Confirmation" section with three links:

- [Return to Application Express Login Page](#)
- [Application Express Oracle Technology Network Home Page](#)
- [Application Express Discussion Forum](#)

Practices for Lesson 8: Administering an APEX instance

Chapter 8

Practice 8: Administering an APEX Instance

Overview

In this practice, you will log in to Administration Services and perform various tasks of an instance administrator.

Assumptions

You have completed all the previous labs.

Tasks

- a. Log in to the Administration Services and view the various service requests you have received. Where all are these requests listed?
- b. Approve the request for Projects schema for the ora01 workspace.
- c. Approve the request for additional 10-MB storage for the ora01 workspace.
- d. Decline the request to delete the ora01 workspace. Include this message "This workspace is required to complete the rest of the practices."
- e. Approve the new workspace request.
- f. View the Email Log report. Are the notification and the Workspace Summary Report emails listed?
- g. Display a report that lists all the active sessions in the entire APEX instance.
- h. Display the following message on the APEX development interface login page: The Development interface will be unavailable from 8:00 AM till 13:00 PM IST on 28th April 2011.
- i. Display the following message on the home page of all workspaces: A new theme called custom is available.

Practice Solutions 8: Administering an APEX instance

Overview

In this practice solution, the steps to log in to Administration Services and perform various tasks of an instance administrator are provided.

Assumptions

You have completed all the previous labs.

Solutions

- a. Log in to the Administration Services and view the various service requests you have received. Where are all these requests listed?
 - 1) Access the Administration Services login page and enter the admin credentials.

ORACLE Application Express

Enter Application Express internal administration credentials

Username

Password

Login

- 2) View the Service Requests numbers listed under Pending Requests in the home page. You can click the number links to view the requests in more detail.



- 3) You can also view the requests from the New Service Requests report region in the home page.

New Service Requests	
Service Request	Date of Request
John.smith@oracle.com requests new workspace "MY_WORKSPACE" with size of 10MB	4 hours ago
ORA01 - REMOVE_EXISTING_SERVICE -	5 hours ago
ORA01_ADMIN of workspace "ORA01" has requested change of database size of an additional 10MB	5 hours ago
ORA01_ADMIN has requested a new schema for workspace "ORA01" with PROJECTS	5 hours ago
1 - 4	

- b. Approve the request for Projects schema for the ora01 workspace.

- 1) This is a change request. Hence, click the number link next to Service Change under Pending Requests from the home page.

Pending Requests	
New Service:	1
Service Change:	3 

- 2) Click the **View Request** link for the New Schema request.

Open Requests	All Workspace Requests	All Change Requests	Reset
<input type="button" value="Search"/> Go Actions ▾			
<input type="checkbox"/>  Status Code = '1' <input checked="" type="checkbox"/> 			
Workspace	Requested Change	Value	Date ▾
ORA01	REMOVE_EXISTING_SERVICE	-	5 hours ago
ORA01	CHANGE_DB_SIZE	10	5 hours ago
ORA01	NEW_SCHEMA	PROJECTS	6 hours ago
			Action
			Status
			View Request
			Requested
			View Request
			Requested
			View Request 
			Requested
1 - 3			

- 3) Click **Create Schema**.

Change Request

Comments:

Delete this request if denying?

Service Name	Service Attribute	Requested On	Requested By	Request Work Log	Status
New Schema	PROJECTS	04/05/2011 05:24:15 AM Tuesday	ORA01_ADMIN	-	Requested

- c. Approve the request for additional 10-MB storage for the ora01 workspace.

- 1) Click the **View Request** link for the change storage request.

Status Code = '1'

Workspace	Requested Change	Value	Date	Requested By	Action	Status
ORA01	REMOVE_EXISTING_SERVICE	-	5 hours ago	ORA01_ADMIN	View Request	Requested
ORA01	CHANGE_DB_SIZE	10	6 hours ago	ORA01_ADMIN	View Request	Requested

1 - 2

- 2) Click the **Add Space** button.

Change Request

Comments:

Delete this request if denying?

Service Name	Service Attribute	Requested On	Requested By	Request Work Log	Status
Request Storage	10	04/05/2011 05:32:45 AM Tuesday	ORA01_ADMIN	-	Requested

- d. Decline the request to delete the ora01 workspace. Include this message “This workspace is required to complete the rest of the practices.”

- 1) Click the **View Request** link for the workspace termination request.

Status Code = '1'

Workspace	Requested Change	Value	Date	Requested By	Action	Status
ORA01	REMOVE_EXISTING_SERVICE	-	6 hours ago	ORA01_ADMIN	View Request	Requested

1 - 1

- 2) Enter your comments in the Comments field and click the **Deny Request** button.

The screenshot shows a 'Change Request' dialog box. At the top right are buttons for 'Cancel', 'Deny Request', and 'Terminate Service'. The title bar says 'Change Request'. A 'Comments' section contains the text: 'This workspace is required to complete the rest of the practices.' Below this is a checkbox labeled 'Delete this request if denying?'. A table at the bottom lists the request details:

Service Name	Service Attribute	Requested On	Requested By	Request Work Log	Status
Remove Workspace	-	04/05/2011 05:38:18 AM Tuesday	ORA01_ADMIN	-	Requested

- e. Approve the new workspace request.

- 1) Click the **All Workspace Requests** tab.

The screenshot shows the 'All Workspace Requests' tab selected in a navigation bar. Below it is a search bar with filters for 'Status Code = '1'', 'Go', and 'Actions'. A message below the search bar says 'No data found.'

- 2) Click the **Provision** link under the Action column for the workspace request.

The screenshot shows a table with columns: Workspace, Schema, Administrator, Database Size, Country, Request Date, Status, and Action. One row is visible for 'MY_WORKSPACE' with 'john.smith@oracle.com' as the administrator. The 'Action' column for this row contains a link labeled 'Provision'.

- 3) Click the **Approve** button.

The screenshot shows a dialog box titled "Provisioning Request". It contains the following information:

Workspace Name	MY_WORKSPACE
Administrator First Name	John
Administrator Last Name	Smith
Administrator Email	John.smith@oracle.com
Administrator Userid	JOHN.SMITH@ORACLE.COM
Workspace Use Status	
Database Size	10
Schema Name	MY_SCHEMA
Description	Practice requesting a new workspace.
Justification	
Request Date	04/05/2011 06:47:21 AM

- 4) Review the email that will be sent out and click the **Approve and Send Email** button.

The screenshot shows a dialog box titled "Approval Message". It contains the following information:

Email Message

Your request for an account has been approved.

Workspace: MY_WORKSPACE
User ID: JOHN.SMITH@ORACLE.COM
Password: *****

Go to <http://localhost:9001/apex/> to get started.

- f. View the Email Log report. Are the notification and the Workspace Summary Report emails listed?

- 1) Click the **Monitor Activity** tab.



- 2) Click the **Mail Log** link under Logs.



- 3) All the mails sent from APEX are listed here.

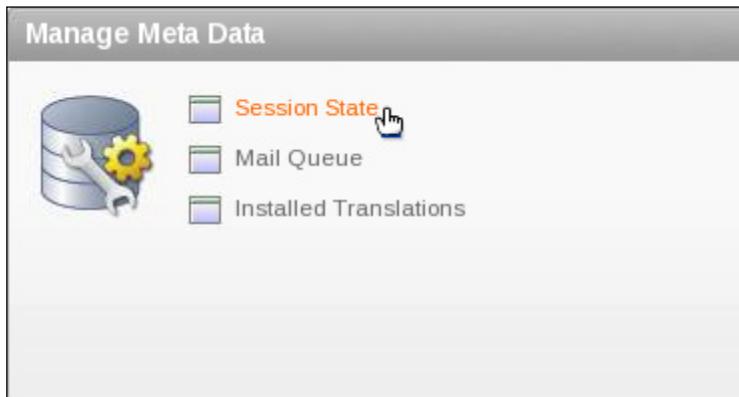
To	From	Subject	CC	BCC	Date Created	Created By	Error	Created
John.smith@oracle.com	apex_admin@oracle.com	Approved: account request for John Smith	-	-	04/05/2011 11:27:18 AM	ADMIN	-	3 minutes ago
ora01_admin@oracle.com	apex_admin@oracle.com	Change request denied	-	-	04/05/2011 11:18:57 AM	ADMIN	-	12 minutes ago
ora01_admin@oracle.com	apex_admin@oracle.com	Change request approved	-	-	04/05/2011 11:14:04 AM	ADMIN	-	16 minutes ago
ora01_admin@oracle.com	apex_admin@oracle.com	Change request approved.	-	-	04/05/2011 11:02:58 AM	ADMIN	-	28 minutes ago
administrator@oracle.com	apex_admin@oracle.com	Application Express - New Workspace Request	-	-	04/05/2011 06:47:21 AM	APEX_PUBLIC_USER	-	5 hours ago
my_manager@oracle.com	ora01_admin@oracle.com	ORA01 workspace summary	-	-	04/05/2011 05:45:14 AM	ORA01_ADMIN	-	6 hours ago

- g. Display a report that lists all the active sessions in the entire APEX instance.

- 1) Click the **Manage Instance** tab.



- 2) Click the **Session State** link under Manage Meta Data.



- 3) Click the **Recent Sessions, with drill down to session details** link.



- 4) The sessions are listed.

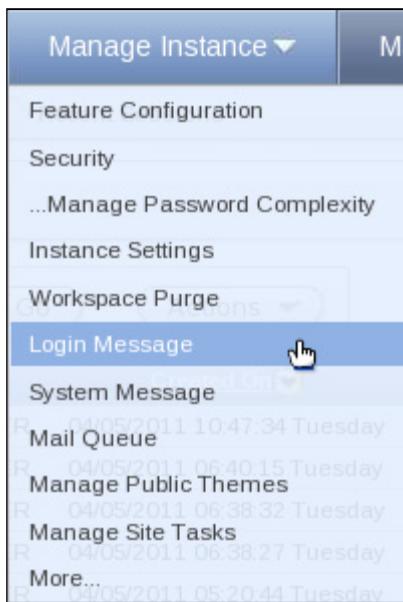
The screenshot shows a 'Session Details' page. At the top are buttons for 'Reset' and 'Purge Sessions >'. Below is a search bar with a magnifying glass icon and a 'Go' button, followed by an 'Actions' dropdown. The main area is a table with the following data:

Session Number	Database User	Created On	User
3597221343466737	APEX_PUBLIC_USER	04/05/2011 10:47:34 Tuesday	ADMIN
4806383845756743	APEX_PUBLIC_USER	04/05/2011 06:40:15 Tuesday	APEX_PUBLIC_USER
3263827535605718	APEX_PUBLIC_USER	04/05/2011 06:38:32 Tuesday	nobody
2716942523738765	APEX_PUBLIC_USER	04/05/2011 06:38:27 Tuesday	nobody
1244915062354689	APEX_PUBLIC_USER	04/05/2011 05:20:44 Tuesday	ORA01_ADMIN
1726635093380490	APEX_PUBLIC_USER	04/05/2011 05:13:21 Tuesday	nobody
3272897106412975	APEX_PUBLIC_USER	04/05/2011 05:13:06 Tuesday	nobody
1368122106271123	APEX_PUBLIC_USER	04/05/2011 05:06:18 Tuesday	APEX_PUBLIC_USER
3583130444432566	APEX_PUBLIC_USER	04/05/2011 05:06:12 Tuesday	nobody
350849960065298	APEX_PUBLIC_USER	04/05/2011 05:06:10 Tuesday	nobody
3822353358390543	APEX_PUBLIC_USER	04/05/2011 05:02:12 Tuesday	APEX_PUBLIC_USER
1974313121578354	APEX_PUBLIC_USER	04/05/2011 05:02:07 Tuesday	nobody
780481828954380	APEX_PUBLIC_USER	04/05/2011 05:02:04 Tuesday	nobody

1 - 13

- h. Display the following message on the APEX development interface login page: **The Development interface will be unavailable from 8:00 AM till 13:00 PM IST on 28th April 2011.**

- 1) Click the down arrow in the Manage Instance tab and select **Login Message**.



- 2) Select **Custom Message** and enter the message in the Message field. Click **Apply Changes**.

Cancel **Apply Changes**

Login Message

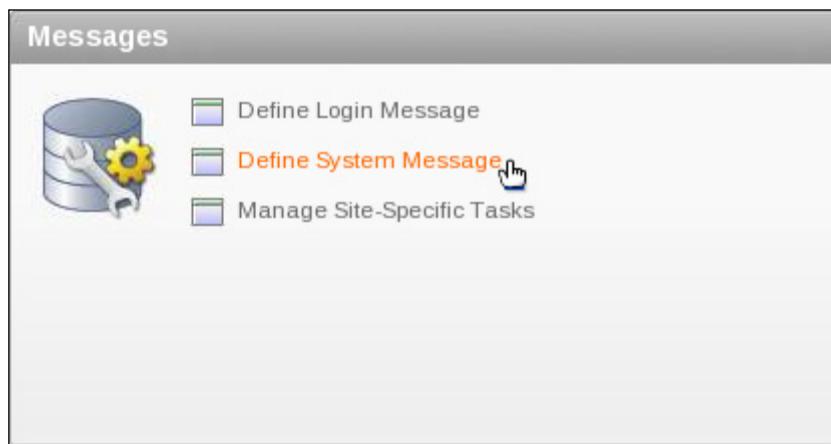
Login Message No Message Custom Message

Message

The Development interface will be unavailable from 8:00 AM till 13:00 PM IST on 28th April 2011.

- i. Display the following message on the home page of all workspaces: **A new theme called custom is available.**

- 1) From the Manage Instance page, click the **Define System Message** link under Messages.



- 2) Select **Custom Message** and enter the message in the Message field. Click **Apply Changes**.

Cancel **Apply Changes**

System Message

System Message No Message
 Custom Message

Message

A new theme called custom is available.

Practices for Lesson 9: Using the APEX_INSTANCE_ADMIN API

Chapter 9

Practice 9-1: Using the APEX_INSTANCE_ADMIN API

Overview

In this practice, you will perform some of the APEX administration tasks by using the APEX_INSTANCE_ADMIN API.

Assumptions

You have completed the previous practices. You will use the APEX_INSTANCE_ADMIN API for these tasks.

Tasks

- a. Create a workspace called “my_api_workspace” and assign the HR schema as the primary schema for this workspace. Also, add the ORA01 schema as an additional schema for this workspace.
- b. View the schemas assigned to the ORA01 workspace.
- c. Add the ORA21 schema to the ORA01 workspace.
- d. Display the email configuration settings for the entire instance.
- e. Log in to Administration Services and confirm that the my_api_workspace was created.

Practice Solutions 9: Using the APEX_INSTANCE_ADMIN API

Overview

In this practice solution, the steps to perform some of the APEX administration tasks by using the APEX_INSTANCE_ADMIN API are provided.

Assumptions

You have completed the previous practices.

Solutions

- a. Create a workspace called "my_api_workspace" and assign the HR schema as the primary schema for this workspace. Also, add the ORA01 schema as an additional schema for this workspace.
 - 1) Open a terminal window and log into SQL*Plus as sysdba.
 - 2) Run the following code to create a workspace.

```
EXEC APEX_INSTANCE_ADMIN.ADD_WORKSPACE (null, 'my_api_workspace',
                                         'HR', 'ORA01');

Commit;
```

- b. View the schemas assigned to the ORA01 workspace.

- 1) Run the following PL/SQL block.

```
SET SERVEROUTPUT ON
DECLARE
  my_schemas varchar2(4000);
BEGIN
  my_schemas := APEX_INSTANCE_ADMIN.GET_SCHEMAS('ORA01');
  DBMS_OUTPUT.PUT_LINE(my_schemas);
END;
/
```

- c. Add the HR schema to the ORA01 workspace.

- 1) Run the following code.

```
EXEC APEX_INSTANCE_ADMIN.ADD_SCHEMA('ORA01', 'ORA21');

Commit;
```

- d. Display the email configuration settings for the entire instance.

- Run the following code.

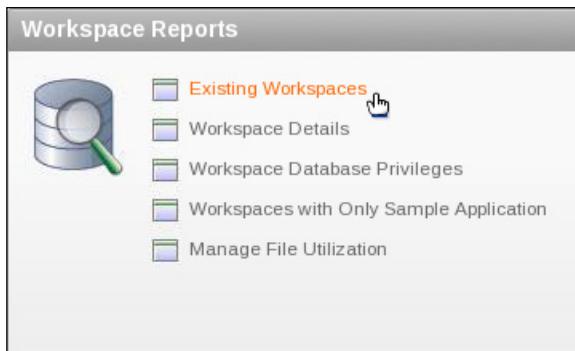
```
SELECT
  APEX_INSTANCE_ADMIN.GET_PARAMETER('SMTP_HOST_ADDRESS')
FROM DUAL;
SELECT
  APEX_INSTANCE_ADMIN.GET_PARAMETER('SMTP_HOST_PORT')
FROM DUAL;
SELECT
  APEX_INSTANCE_ADMIN.GET_PARAMETER('SMTP_FROM')
FROM DUAL;
```

- e. Log in to Administration Services and confirm that the `my_api_workspace` workspace was created.

- Log in to Administration Services and click the **Manage Workspaces** tab.



- Click the Existing **Workspaces** link under the Workspaces region.



- The newly created workspace will be listed.

The screenshot shows a table listing workspaces. The columns are: Workspace Name, Users, Developers, Applications, Provision Status, Provisioned, Auto Purge, Source Identifier, and Action. The table contains three rows:

Workspace Name	Users	Developers	Applications	Provision Status	Provisioned	Auto Purge	Source Identifier	Action
INTERNAL	1	0	13	-	-	Yes	INTERNAL	
MY_API_WORKSPACE	0	0	0	-	-	Yes	-	Delete
ORA01	1	1	1	APPROVED	31 minutes ago	Yes	ORA01	Delete

Practices for Lesson 10: Key APEX Administration Tasks

Chapter 10

Practice 10: Key APEX Administration Tasks

Overview

In this practice, you will perform some of the key APEX administration tasks you learned in this lesson. Some of the Instance Administrator tasks were already covered in previous practices and will not be included in this practice.

Assumptions

You have completed the previous practices.

Task

- a. Lock the ORA01 workspace. Next, unlock the ora01_admin user.
- b. Reset the password for the ora01_admin user.
- c. Log in to Enterprise Manager and view the database performance page.
- d. Locate and view the database alert log.
- e. Log in to WebLogic server administration console and view the server log messages.

Practice Solutions 10 : Key APEX Administration Tasks

Overview

In this practice solution, the steps to perform some of the key APEX administration tasks you learned in this lesson are provided.

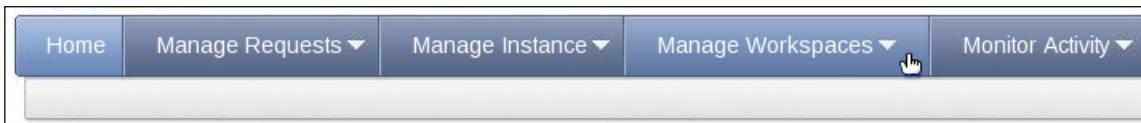
Assumptions

You have completed the previous practices.

Solutions

- a. Lock the ora01 workspace. Next, unlock the ora01_admin user.

- 1) From the Administration Services home page, click the **Manage Workspaces** tab.



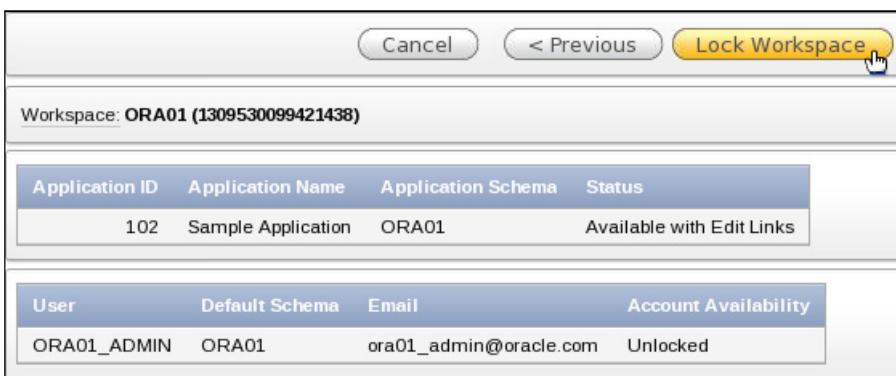
- 2) Under Workspace Actions, click the **Lock Workspace** link.



- 3) Select the ORA01 workspace and click **Next**.



- 4) Click **Lock Workspace**.



- 5) Now to unlock the ora01_admin user, click the **Manage Developers and Users** link under Workspace Actions.



- 6) Click the pencil icon next to the ora01_admin user.

User	Full Name	Workspace	Default Schema	Created	Last Updated	Password
ADMIN		INTERNAL	-	1.8 years ago	2 hours ago	-
ORA01_ADMIN		ORA01	ORA01	12 minutes ago	9 minutes ago	Reset

- 7) Under Account Privileges, set the Account Availability to **Unlocked**.

Account Privileges	
* Workspace	ORA01 (1309530099421438)
* Default Schema	ORA01
User is an administrator:	<input checked="" type="radio"/> Yes <input type="radio"/> No
User is a developer:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Application Builder Access	Yes
SQL Workshop Access	Yes
Team Development Access	Yes
Account Availability	Unlocked

- 8) Click **Apply Changes**.

Cancel	Delete User	Apply Changes
------------------------	-----------------------------	-------------------------------

- b. Reset the password for the ora01_admin user.

- 1) From the Manage Developers and Users page, click the **Reset** link under the Password column for the ora01_admin user.

User	Full Name	Workspace	Default Schema	Created	Last Updated	Password
ADMIN		INTERNAL	-	1.8 years ago	2 hours ago	-
ORA01_ADMIN		ORA01	ORA01	16 minutes ago	Now	Reset

- 2) Accept the default selection and click **Change Password**.



- c. Log in to Enterprise Manager and view the database performance page.

- 1) Open a web browser and enter the following URL:

```
https://localhost:1158/em
```

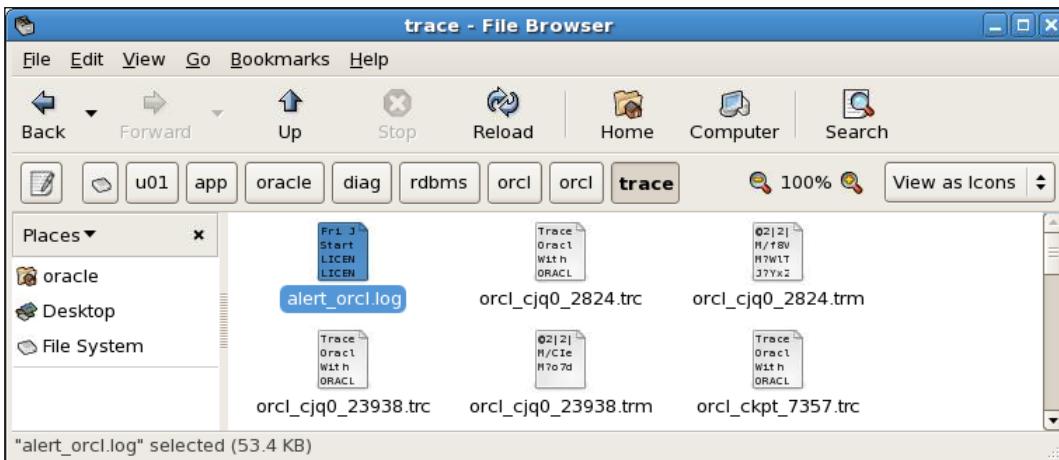
- 2) Enter **sys** for User Name, **oracle** for Password, and **SYSDBA** for Connect As. Click **Login**.

- 3) Click the **Performance** Link on top.



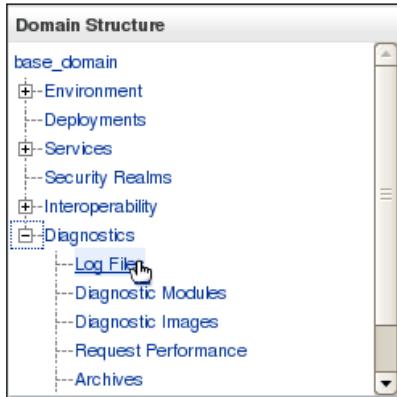
- d. Locate and view the database alert log.

- 1) Open a file browser and navigate to
u01/app/oracle/diag/rdbms/orcl/orcl/trace



- 2) Locate the `alert_orcl.log` file and view its contents.
- e. Log in to WebLogic server administration console and view the server log messages.
 - 1) Ensure that WebLogic server is started.
 - 2) Open a web browser and enter the following URL:

`http://localhost:9001/console`
 - 3) Log in to WebLogic server administration by using the credentials `weblogic/Welcome1`.
 - 4) In the left pane of the Console, expand **Diagnostics** and select **Log Files**.



- 5) In the **Log Files** table, select the radio button next to the server instance log file you want to view and click **View**.

Log Files		
<input type="button" value="View"/>		
Showing 1 to 5 of 5 Previous Next		
Name	Type	Server
DomainLog	Domain Log	AdminServer
EventsDataArchive	Instrumentation	AdminServer
HarvestedDataArchive	Metric Data	AdminServer
HTTPAccessLog	HTTP Access	AdminServer
ServerLog	Server Log	AdminServer

Showing 1 to 5 of 5 Previous | Next