Oracle Database Management Tools

Objectives

After completing this lesson, you should be able to:
- Use SQL*Plus to access the Oracle database
- Use Oracle Enterprise Manager Database Express to perform administrative tasks
- Use Oracle Enterprise Manager Cloud Control to manage the database instance

Oracle Database Management Tools: Introduction

- SQL*Plus provides an interface to your database so that you can:
  - Perform database management operations
  - Execute SQL commands to query, insert, update, and delete data in your database
- SQL Developer
  - Is a graphical user interface for accessing your instance of Oracle Database
  - Supports development in both SQL and PL/SQL
  - Is available in the default installation of Oracle Database
- Oracle Enterprise Manager Database Express
- Oracle Enterprise Manager Cloud Control

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Using SQL*Plus

SQL*Plus is:
- A command-line tool
- Used interactively or in batch mode

```
[oracle@EDRSR11P1 ~]$ sqlplus hr

SQL*Plus: Release 12.1.0.1.0 Production on Tue Jul 9 08:45:39 2013

Copyright (c) 1982, 2012, Oracle.  All rights reserved.

Enter password:
Last Successful login time: Tue Jul 09 2013 08:45:30 +00:00

Connected to:
Oracle Database 12c Enterprise Edition Release 12.1.0.1.0 - 64bit Production
With the Partitioning, OLAP, Advanced Analytics and Real Application Testing options

SQL> SELECT last_name FROM employees;
LAST_NAME
------------------------
Abel
Ande
…
```

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Calling SQL*Plus from a Shell Script

```
$ ./batch_sqlplus.sh

SQL*Plus: Release 12.1.0.1.0 Production on Thu Nov 15 09:10:48 2012

Copyright (c) 1982, 2012, Oracle.  All rights reserved.

Last Successful login time: Wed Nov 14 2012 12:10:11 +00:00

Connected to:
Oracle Database 12c Enterprise Edition Release 12.1.0.1.0 - 64bit Production
With the Partitioning, OLAP, Advan...
Unified Auditing options

SQL>
  COUNT(*)
----------
       107
SQL>
107 rows updated.
SQL>
Commit complete.
SQL> Disconnected from Oracle Database 12c Enterprise Edition Release 12.1.0.1.0
- 64bit Production
With the Partitioning, OLAP, Advanced Analytics, Real Application Testing
and Unified Auditing options
$
```
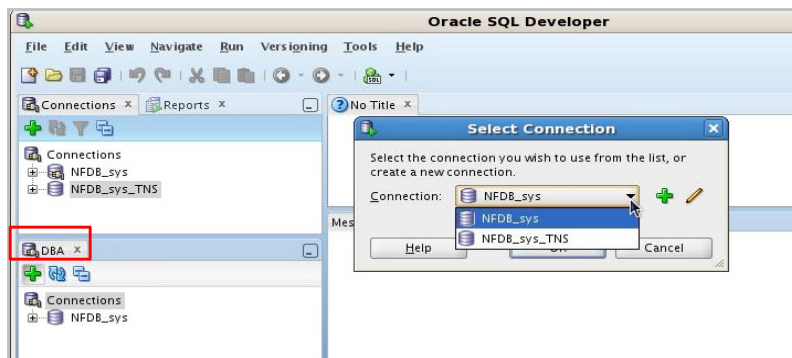
Output

```
# Name of this file: batch_sqlplus.sh
# Count employees and give raise.
sqlplus hr/hr <<EOF
select count(*) from employees;
update employees set salary = salary*1.10;
commit;
quit
EOF
```

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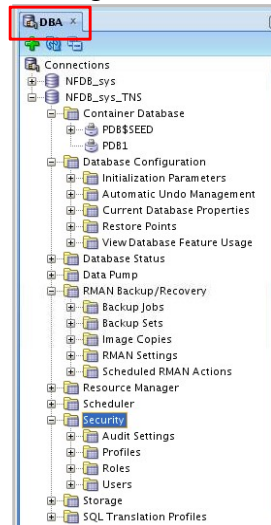## Oracle SQL Developer: Connections

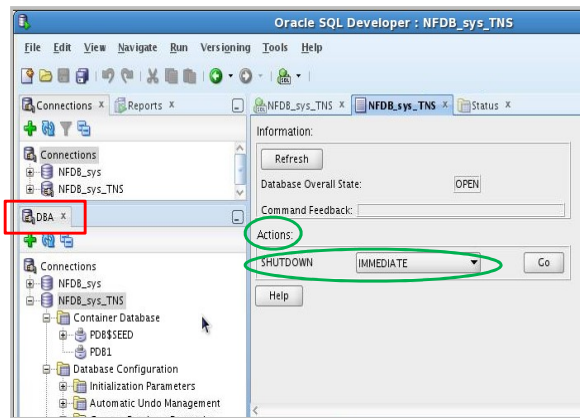Perform DBA operations in the DBA navigator by using DBA connections:

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Oracle SQL Developer: DBA Actions
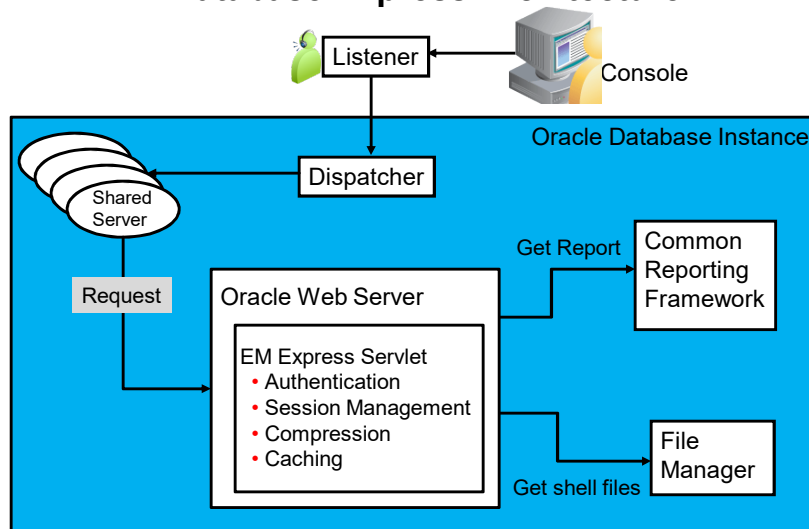
Using DBA features through DBA navigator

Performing DBA actions

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Oracle Enterprise Manager
Database Express Architecture

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Configuring Enterprise Manager
Database Express

- Configure an HTTP listener port for each database instance.

  - Verify `DISPATCHERS` parameter.

```
dispatchers=(PROTOCOL=TCP)(SERVICE=sampleXDB)
```

  - Use `DBMS_XDB.setHTTPPort` procedure.

```
exec DBMS_XDB.setHTTPPort(5500)
```
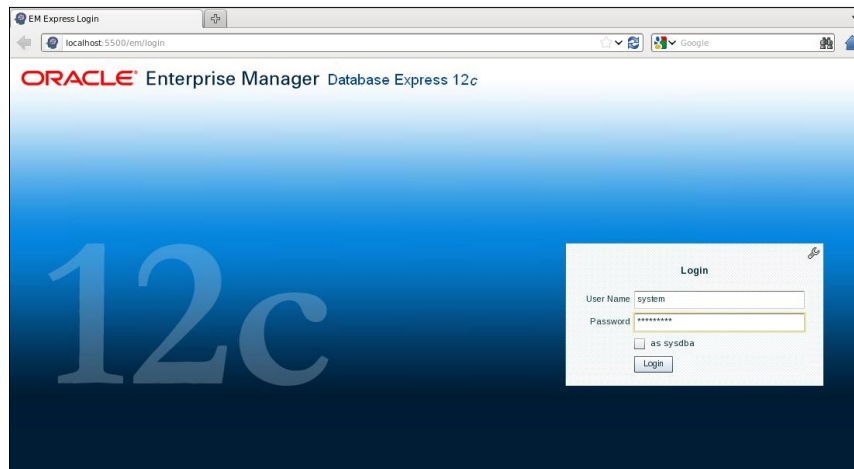
  - Launch Enterprise Manager Database Express:

```
http://hostname:5500/em
```

- Use a different port for each instance.
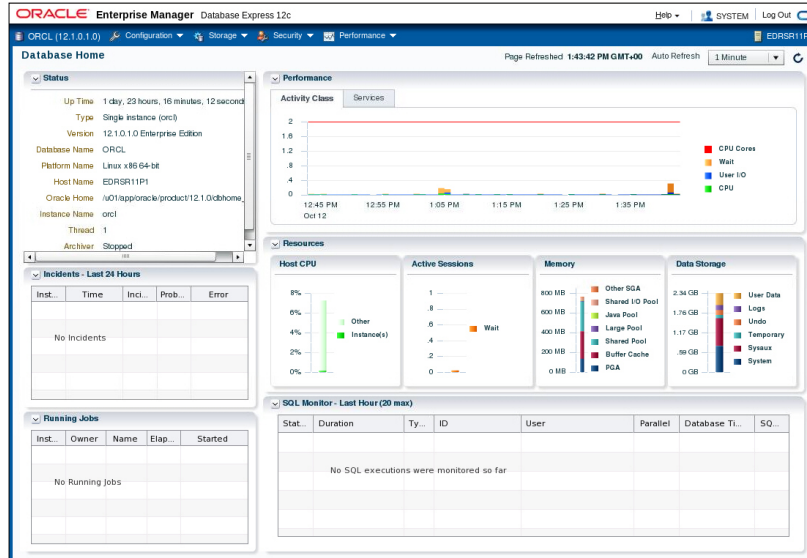- Browser requires Flash plug-in.

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Logging In to Oracle Enterprise Manager
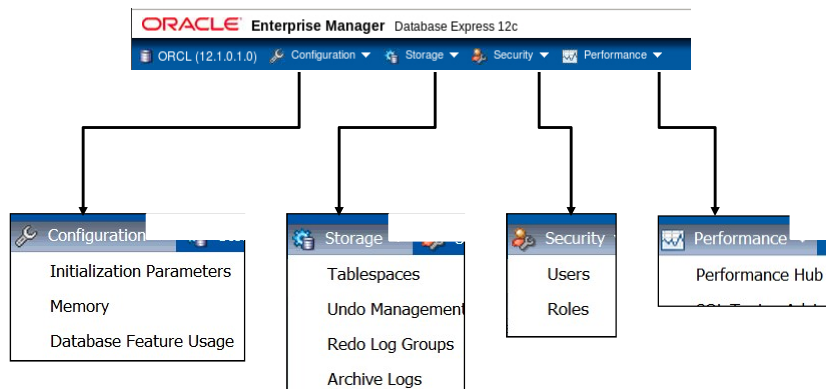## Database Express
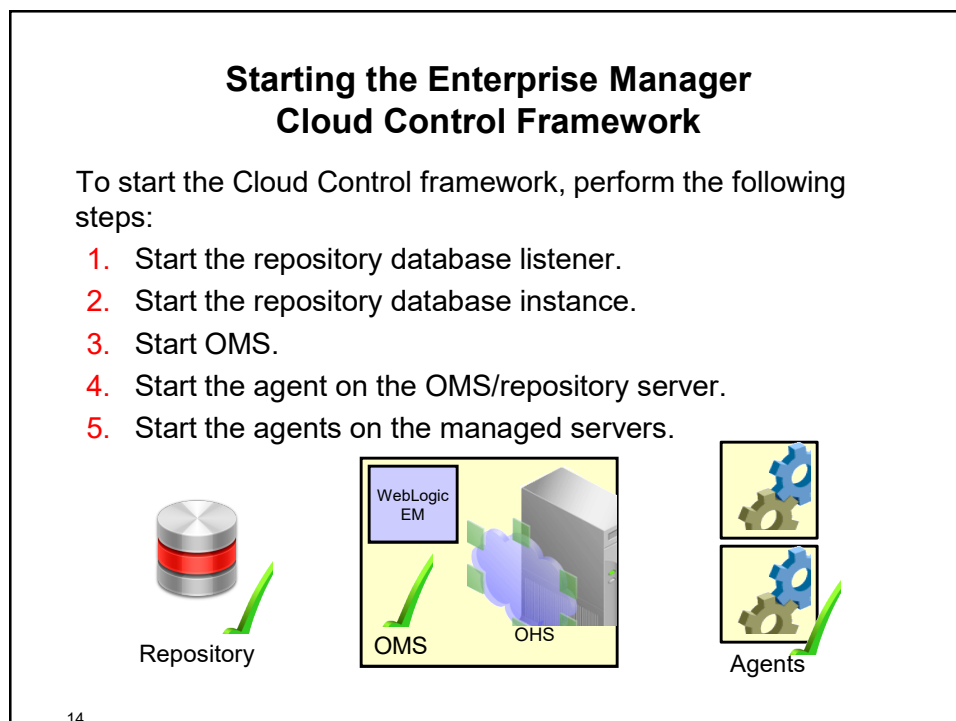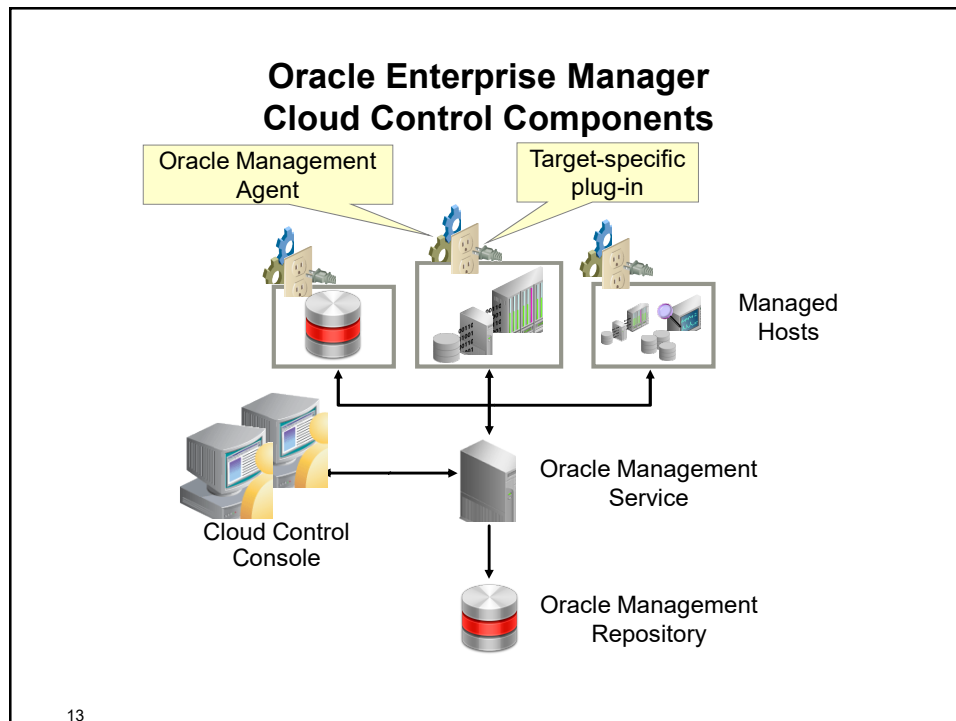

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Using the Database Home Page

Using Enterprise Manager Database Express Menus

Oracle Enterprise Manager
Cloud Control Components

Oracle Management Agent

Target-specific plug-in

Managed Hosts

Cloud Control Console

Oracle Management Service

Oracle Management Repository

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Starting the Enterprise Manager
Cloud Control Framework

To start the Cloud Control framework, perform the following steps:

1. Start the repository database listener.
2. Start the repository database instance.
3. Start OMS.
4. Start the agent on the OMS/repository server.
5. Start the agents on the managed servers.

WebLogic EM

Repository
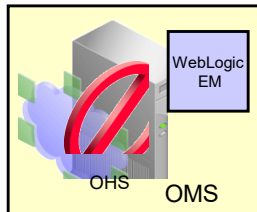
OMS

OHS

Agents

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Stopping the Enterprise Manager
Cloud Control Framework

To stop the Enterprise Manager Cloud Control framework, perform the following steps:

1. Stop the agents on managed servers.
2. Stop the agent on the OMS/repository server.
3. Stop OMS.
4. Stop the repository database instance.

Agents   OHS   OMS   Repository
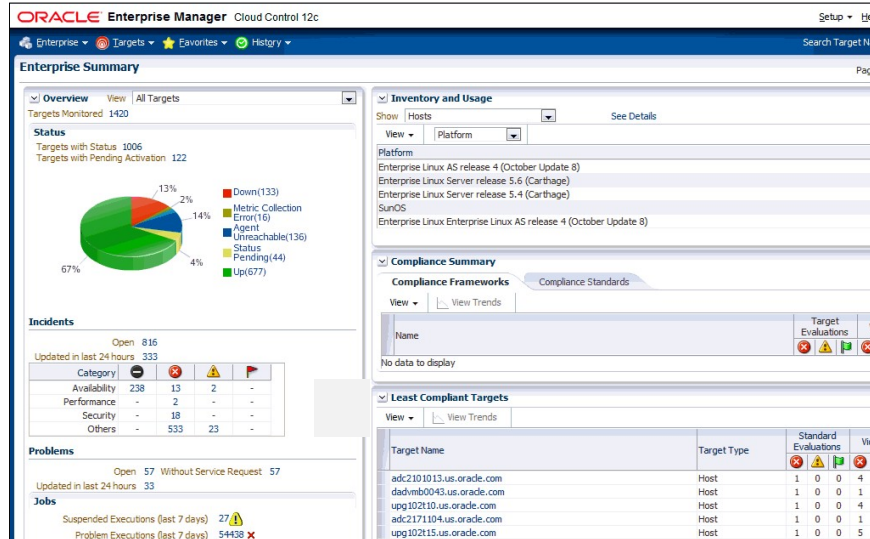
WebLogic EM

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Types of Enterprise Manager
Cloud Control Targets

Enterprise Manager Cloud Control can monitor, administer, maintain, and manage different types of targets including:

- Oracle databases
- Oracle Database Listener
- Oracle Fusion Middleware products
- Oracle Application Server
- Oracle WebLogic Server
- Oracle applications, including E-Business Suite, SOA, Siebel, and PeopleSoft
- Exadata and Exalogic
- Cloud Control Components: OMR and OMS
- Third-party products

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Enterprise Manager Cloud Control

Summary

In this lesson, you should have learned how to:
- Use SQL*Plus to access the Oracle database
- Use Oracle Enterprise Manager Database Express to perform administrative tasks
- Use Oracle Enterprise Manager Cloud Control to manage the database instance