Managing DBCS Database Deployments

Objectives

- After completing this lesson, you should be able to:
  - Manage the compute node associated with a database deployment
  - Manage network access to a database deployment
  - Scale the compute shape and storage
  - Patch the database deployment

Managing the Compute Node

Action	Result of the Action
Start	An Oracle Compute Cloud Service instance is allocated, resources are attached, and it is started.
Stop	An Oracle Compute Cloud Service instance is stopped. Only actions after stop are start and delete.
Restart	An Oracle Compute Cloud Service instance is stopped and immediately started again.

Managing Network Access to DBCS (OCI Classic)

- By default, network access to the compute node is provided by Secure Shell (SSH) connections on port 22.
- To access network protocols and services by using a port other than port 22:
  - Use the Oracle Compute Cloud Service console or the Oracle Database Cloud Service console to enable an access rule
  - Create an SSH tunnel to the port

Enabling Access to a Compute Node Port (OCI Classic)

- Database Cloud Service relies on Oracle Compute Cloud Service to provide secure network access to database deployments.
- The Oracle Compute Cloud Service security rules that are created, but not enabled, are as follows:
  - ora_p2_dbconsole: For port 1158, used by Enterprise Manager 11*g* Database Control
  - ora_p2_dbexpress: For port 5500, used by Enterprise Manager Database Express 12c
  - ora_p2_dblistener: For port 1521, used by SQL*Net
  - ora_p2_http: For port 80, used for HTTP connections
  - ora_p2_httpssl: For port 443, used for HTTPS connections including Oracle REST Data Services, Oracle Application Express, and Oracle DBaaS Monitor
- You enable the security rules through the Database Cloud Service console.
- Enabling one of the predefined security rules opens the given port to the public Internet.

Scaling a Database Deployment

Action	Description
Scale Up	Select a new compute shape. Add raw storage to the database deployment.
Scale Down	Select a new compute shape.

Patching DBCS

- Patch management tasks:
  - Check prerequisites before applying a patch.
  - Apply a patch.
  - Roll back a patch or a failed patch.
- Tools and utilities:
  - Oracle Database Cloud Service console for single-instance databases
  - `dbpatchm` subcommand of the `dbaascli` utility for single-instance databases
  - `raccli` utility for Oracle RAC databases
  - `dbpatchmdg` utility for Oracle Data Guard configurations

Using the DBCS Console to Manage Patches

- Use the menu on the Patching tab to:
  - Check the prerequisites of a patch before you apply it to a database deployment on Database Cloud Service
  - Apply a patch to a database deployment on Database Cloud Service

Using the `dbaascli` Utility to Manage Patches

- Checking prerequisites:

```
# dbaascli dbpatchm --run -prereq
```

- Applying a patch:

```
# dbaascli dbpatchm --run -apply
```

- Rolling back a patch:

```
# dbaascli dbpatchm --run -rollback
```

Summary

- In this lesson, you should have learned how to:
  - Manage the compute node associated with a database deployment
  - Manage network access to a database deployment
  - Scale the compute shape and storage
  - Patch the database deployment

Practice 6: Overview

- 6-1: Accessing Enterprise Manager Database Express
- 6-2: Exploring a CDB and PDB by Using Enterprise Manager Database Express