

# Ride From OnPrem to Oracle Cloud – Lift & Shift Exercise

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# Agenda



- Why & What is Oracle Cloud
- Advantage of being Cloud DBA/Cloud Admin
- Basics of Oracle Cloud for DBAs/Apps DBAs
- Where to get started?
- Walkthrough of Cloud Screens
- Scope for Migrating DB & Oracle Applications to Oracle Cloud
- Demo of Oracle Database - Lift & Shift

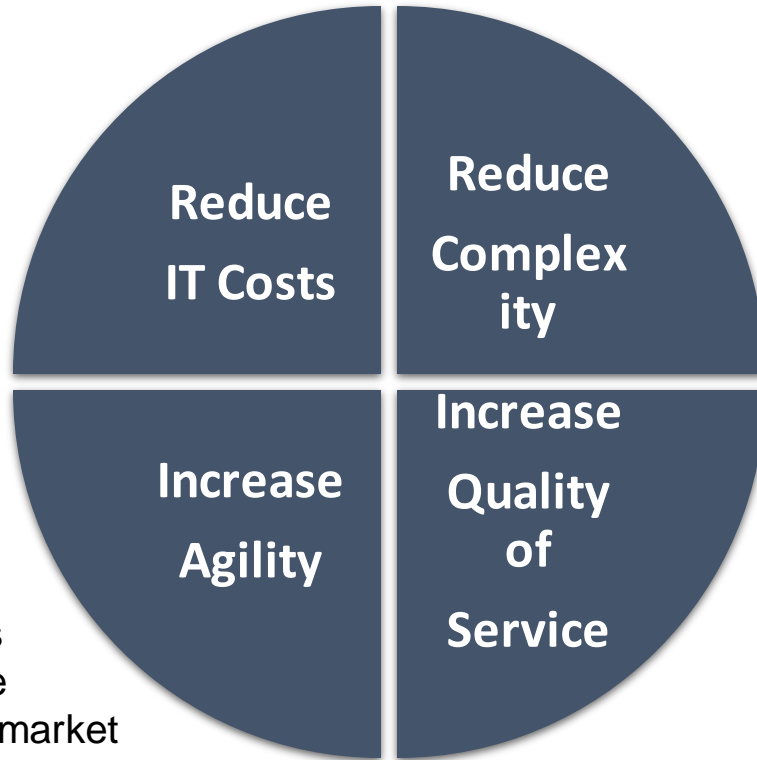
# Why Cloud

Lower:

- CapEx Servers Storage
- OpEx Maintenance Management

Enable:

- Online changes
- Rapid response
- Faster Time to market



Reduce:

- Configurations
- Services

Standardize:

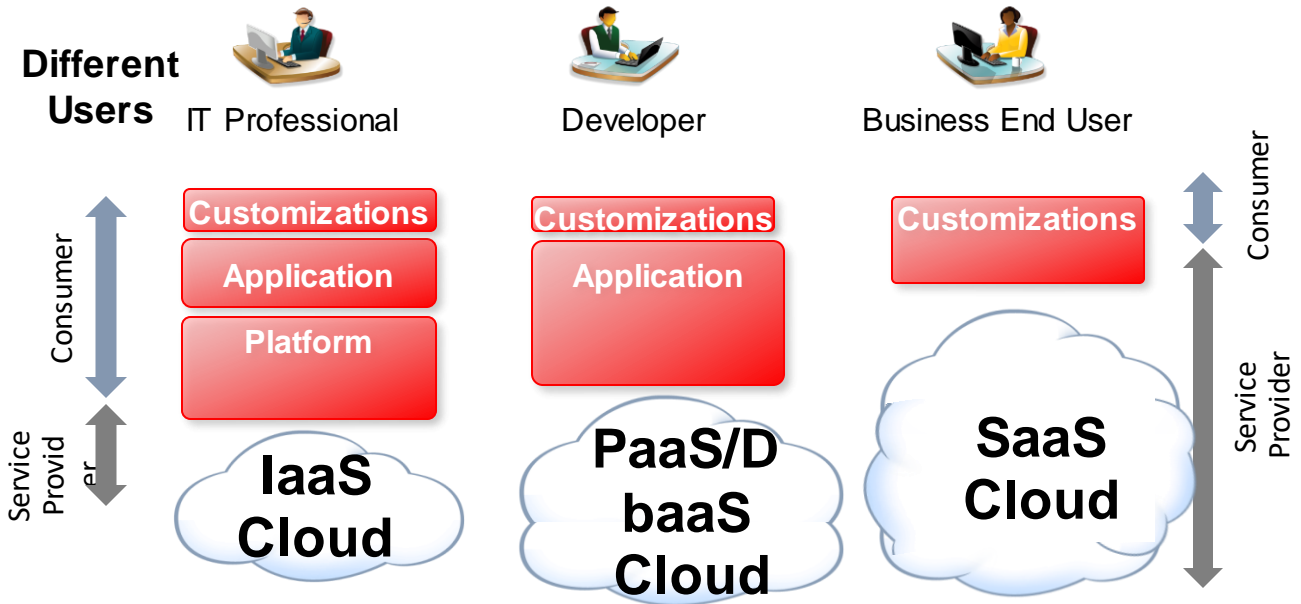
- OS
- DB Versions

Enhance:

- IT service time
- Availability
- Security

# What is Oracle Cloud

- IaaS, PaaS or SaaS



# Advantages of Being Cloud Admin



- Scope of DBAs before Oracle Cloud:
  - Oracle Architecture
  - Backups, recoveries
  - Normal Administration
  - Patching
  - Cloning
  - Performance & Tuning
  - Dataguard Setup
  - RAC setup
  - GG setup

# Advantages of Being Cloud Admin



## ➤ Scope of DBAs with Oracle Cloud:

- All points above +
- Knowledge on Compute
- Memory Sizing
- Capacity Planning
- Basics of Networking
- Knowledge on Storage
- Understanding on How Data centers are laid downs
- MAA practices
- Encryption & Security

# Basics of Oracle Cloud For DBAs

## ➤ DBAs:

- IaaS – Job role doesn't change
- DBaaS – PaaS
  - Regular (Mundane) activities will be taken care by Oracle
  - Cream work of Capacity Planning, Performance Tuning, Business pain points etc can be addressed
  - Architecture, planning, data modeling
  - Data security and lifecycle management
  - Application related tuning
  - End-to-End service level management



# Basics of Oracle Cloud For DBAs



- **The Oracle Database Cloud Service - Virtual Image**—This level includes Oracle Database and supporting software. You have to install this software yourself, and you are responsible for all maintenance operations for this software. You have root privilege, so you can load and run software in the compute environment. You have full administrative privileges for the Oracle database.
- **The Oracle Database Cloud Service**—This level also includes Oracle Database and supporting software. However, the software is installed for you, an Oracle database is created using values you provide when creating the database deployment, and the database is started. Additionally, you can direct Database Cloud Service to set up automatic backups. Finally, the deployment includes cloud tooling that simplifies backup, recovery, patching and upgrade operations. You have root privilege, so you can load and run software in the compute environment. You have full administrative privileges for the Oracle database. You are responsible for making any changes to the automated maintenance setup, and you are responsible for recovery operations in the event of a failure.



# Basics of Oracle Cloud For DBAs

- Install, Configure and Design – Still the same
- Start/Stop Services – With new tools – DBaaSCLI or Console
- Patching – dbpatchm, dbpatchmdg (listing), raccli
- Backup & Recovery – bkup\_api, raccli
- Lift & Shift (Oracle DB to Oracle DBCS – Approaches:
  - Migrate from 11g to 11g in Cloud
  - Migrate from 11g to 12c in Cloud
  - Migrate from 12c CBD to 12c in Cloud
  - Migrate from 12c non-CDB to 12c in Cloud
- High Available Architecture



# Basics of Oracle Cloud For DBAs

- Start/Stop Services using dbaascli

```
[root@Test ~]# dbaascli database bounce
DBAAS CLI version 1.0.0
Executing command database bounce
Database stopped in immediate
Database started
```

```
[root@Test ~]# dbaascli database stop
DBAAS CLI version 1.0.0
Executing command database stop
Database stopped in immediate
[root@Test ~]#
```

```
[root@Test ~]# dbaascli database start
DBAAS CLI version 1.0.0
Executing command database start
Database started
[root@Test ~]#
```



```
login as: opc
Authenticating with public key "imported-openssh-key"
Passphrase for key "imported-openssh-key":
[opc@Test ~]$ sudo -s
[root@Test opc]#
```

# Basics of Oracle Cloud For DBAs



## ➤ Patching Tools/Utilities

```
[root@Test ~]# dbaascli dbpatchm --run -prereq
DBAAS CLI version 1.0.0
Executing command dbpatchm --run -prereq -cli
/var/opt/oracle/patch/dbpatchm -prereq -cli
Starting DBPATCHM
Logfile is /var/opt/oracle/log/dbpatchm/dbpatchm_2018-07-04_11:19:59.log
Config file is /var/opt/oracle/patch/dbpatchm.cfg

INFO: cdb is set to : yes
INFO: dbversion detected : 12102
INFO: patching type : psu

WARN: inventory check: patch 27211757 installed is a oneoff - which could be lost in upgrade process
WARN: and it can be reinstalled manually if needed, post upgrade.
WARN: inventory check: patch 24701882 installed is a oneoff - which could be lost in upgrade process
WARN: and it can be reinstalled manually if needed, post upgrade.
WARN: inventory check: patch 25731006 installed is a oneoff - which could be lost in upgrade process
WARN: and it can be reinstalled manually if needed, post upgrade.
```

# Basics of Oracle Cloud For DBAs



## ➤ Patching Tools/Utilities

```
[root@Test ~]# dbaascli dbpatchm --run -list_patches
DBAAS CLI version 1.0.0
Executing command dbpatchm --run -list_patches -cli
/var/opt/oracle/patch/dbpatchm -list_patches -cli
Starting DBPATCHM
Logfile is /var/opt/oracle/log/dbpatchm/dbpatchm_2018-07-04_11:20:49.log
Config file is /var/opt/oracle/patch/dbpatchm.cfg

INFO: cdb is set to : yes
INFO: dbversion detected : 12102
INFO: patching type : psu

12.1.0.2.171017, ee
Available patches :26925311-EE
Available patches :27338041-EE

dbpatchm Execution completed
```

# Basics of Oracle Cloud For DBAs



## ➤ Lift & Shift

- Data Pump Conventional Export/Import
- Data Pump Full Transportable
- Data Pump Transportable Tablespace
- Remote Cloning a PDB
- Remote Cloning Non-CDB
- RMAN Cross-Platform Transportable PDB
- RMAN Cross-Platform Transportable TS Backup sets
- RMAN Transportable TS with Data Pump
- RMAN Convert TTS with Data Pump
- SQL Developer, Insert/SQL\*Loaded for selected objects
- Unplugging/Plugging a PDB
- Unplugging/Plugging a non-CDB

# Basics of Oracle Cloud For Apps DBAs



## ➤ Apps DBAs - Three Approaches

- PaaS
  - No Apps DBA involvement
- IaaS – No Change in job role
  - Both DB & Middle Tier can be managed
- IaaS + DBaaS
  - Middle Tier as IaaS
  - Database Tier as DBaaS

# Oracle Cloud For Apps DBAs



## ➤ New Learnings:

- EBS Cloud Admin Tool and Cloud Service Console
- DBCS, Backup Storage
- Lift & Shift to Oracle Cloud
- OEM Cloud Control 13c
- Integrations with On-prem to Oracle Cloud
- High Availability Architecture
- Install & Configure using EBS Admin Tool or Console

# Oracle Cloud For Apps DBAs



- EBS Cloud Admin Tool:
  - Create a new Environment
  - Create Environment from Backup
  - Manage Environments
  - Clean up Environments

```
$ cd /u01/install/APPS/apps-unlimited-efs/
```

```
$ perl ProvisionEBS.pl
```



# Oracle Cloud For Apps DBAs



```
=====  
Oracle EBS Cloud Admin Tool - Options  
=====
```

- 1: Create New Environment
- 2: Create Environment from Backup
- 3: Manage Environments
- 4: Clean Up
- 5: Exit

```
Enter your choice from above list: 3
```

```
Available Oracle E-Business Suite installations
```

- 1: myebsenv1
- 2: myebsenv2

```
Choose Oracle E-Business Suite installation from above list: 1
```

# Oracle Cloud For Apps DBAs



```
[Ctrl-B: Back, Ctrl-H: Main Menu]
```

- 1: Clone Environment
- 2: Delete Environment

```
Enter your choice from above list: 1
```

```
Specify APPS password for staged instance:
```

```
{ Specify WebLogic Server password for staged instance: } *See Footnote 1
```

- 1. provnetad1
- 2. ebsclonel-appsad1
- 3. ebsclonel-dbad1
- 4. ebsclonel-lbad1

```
=====
```

```
Use Load Balancer as a Service (LBaaS)
```

```
=====
```

```
Environment: ebsclonel
```

```
[Ctrl-B: Back, Ctrl-H: Main Menu]
```

- 1: Yes
- 2: No

# Oracle Cloud For Apps DBAs



```
=====
Oracle EBS Cloud Admin Tool - Options
=====
```

- 1: Create New Environment
- 2: Create Environment from Backup
- 3: Manage Environments
- 4: Clean Up
- 5: Exit

```
Enter your choice from above list: 4
```

- 1: Object Store Backup
- 2: Incomplete Oracle E-Business Suite Installations

```
Enter your choice from above list: 1
```

# Walk Thru of Screens



Close

## Patch 26725016: ORACLE E-BUSINESS SUITE LIFT TOOL FOR OCI, OCI CLASSIC AND OCC

Last Updated 13-Jun-2018 01:49 (21 days ago)

Size 125.2 MB

Product Oracle Applications Manager

Download Access Software

Classification General

Release Applications R12 (Other)

Patch Tag

Platform Generic Platform

### Bugs Resolved by This Patch

List of bugs fixed is not available. Consult the Readme.

### View Related Knowledge to this Patch

#### Guided Journey

Explore what you can do with Oracle Cloud services

#### Create Instance

Provision a new service in minutes

#### Account Management

Administer and manage your account and orders

#### Customize Dashboard

Specify which services appear on the dashboard


# Walk Thru of Screens



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## Thank you for signing up for Oracle Cloud!

We're setting up your account, which may take up to 15 minutes.


Check your email for your account information.




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# Walk Thru of Screens



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Applications ▾ Platform ▾






## Cloud Account




Cloud Account with Identity Cloud Service ▾?My Services >

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**Administrators**

- Perform administrative tasks for individual services
- Monitor key metrics and notifications for services
- Manage users and roles for cloud services
- Access the console for services you administer

ORACLE Cloud My ServicesDashboard  Users  ? 

 Dashboard Identity Domain pradeepvatterm - APAC ▾

**Guided Journey**

Explore what you can do with Oracle Cloud services

**Create Instance**

Provision a new service in minutes

**Account Management**

Administer and manage your account and orders

**Customize Dashboard**

Specify which services appear on the dashboard



# Walk Thru of Screens



## Demo: Lift-and-shift



# Conclusion

