



# Cloud at Customer Academy 3.0

Exadata Cloud - Move to ExaC@C

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Licenses and Systems

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August, 2023



# Nossos Valores

Integridade

Compliance

Trabalho em  
Equipe

Satisfação do  
Cliente

Qualidade

Ética

Inovação

Respeito  
Mútuo

Justiça

Comunicação

Como empresa líder em tecnologia, abraçamos a **diversidade** em todas as suas formas. Acreditamos realmente que a **inovação** começa com a **inclusão**. E isso só pode ser alcançado com a cooperação de nossos **parceiros**. Afirmamos nosso **compromisso** em manter um **ambiente respeitoso e livre de discriminação** e esperamos isso dos nossos **parceiros de negócios**.

A Oracle espera que seus **parceiros** conduzam os negócios de forma **justa** e **ética**, para cumprir as leis anticorrupção em todo o mundo, para cooperar com os pedidos de informação da Oracle e evitar envolver-se em qualquer atividade que envolva até mesmo a aparência de impropriedade.

É vital que os nossos parceiros sejam aderentes aos valores do **Código de Ética e Conduta Empresarial da Oracle**, que baseia-se e implementa os valores que são essenciais para o nosso sucesso como empresa. Nossos valores são a base de tudo o que fazemos e todos nós devemos viver esses valores todos os dias.



Utilize o QR code para acessar o Código de  
Ética e Conduta Empresarial da Oracle.



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## MARCEL LAMARCA

Exadata Cloud Specialist

Upgrade, Utilities, Patching, Performance & Migrations

Exadata X9M Implementation Certified Specialist



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This presentation!



# Exadata Academy 3.0 | Register Now



## Oracle Exadata Cloud at Customer Academy

Visando capacitar nossos parceiros em OCI Services, criamos a Academia Oracle Exadata Cloud at Customer ou Academia Oracle ExaC@C.

A academia contará com **10 sessões de treinamentos**, a partir de **10 de julho**, que permitirá aos participantes conhecer os principais recursos e funcionalidades do Oracle ExaC@C. Também será uma excelente oportunidade para você esclarecer todas as suas dúvidas para obter a sua certificação!

Participe conosco dessa academia e descubra por que o Oracle ExaC@C é a maneira mais simples de migrar as cargas de trabalho críticas do Oracle Database de uma organização para a nuvem.

Confira a agenda a seguir e inscreva-se. Contamos com a sua participação!

### Agenda

#### Troubleshooting tools – Demo Session

21 de agosto

10h às 11h30h (horário de Brasília)

[Inscreve-se](#)

#### Monitoring – Demo Session

28 de agosto

10h às 11h (horário de Brasília)

[Inscreve-se](#)

#### Smart Scan, HCC compression & In-Memory – Demo Session

11 de setembro

10h às 12h (horário de Brasília)

[Inscreve-se](#)

#### A&Q for Certification

18 de setembro

10h às 12h (horário de Brasília)

[Inscreve-se](#)

#### New Features - Demo Session

25 de setembro

10h às 12h (horário de Brasília)

[Inscreve-se](#)

#### PCA - Private Cloud Appliance

17 de julho

10h às 12h (horário de Brasília)

[Inscreve-se](#)

#### Patching – Demo Session

24 de julho

10h às 12h (horário de Brasília)

[Inscreve-se](#)

#### Backup & Restore – Demo Session

31 de julho

10h às 11h30h (horário de Brasília)

[Inscreve-se](#)

[Click Here](#)

# Agenda

What is S.O endian format ?

Oracle Linux (Exadata Cloud Version)

ExaC@C Physical & Logical Migrations

Oracle Migration Tools

Target and Source Databases

Demo – CPTA Report Analysis

# Little Endian Format | Solaris, Linux and Windows

```
SQL> SELECT platform_name, endian_format  
      FROM v$transportable_platform  
     WHERE endian_format='Little';
```

PLATFORM_NAME	ENDIAN_FORMAT
Apple Mac OS (x86-64)	Little
HP IA Open VMS	Little
HP Open VMS	Little
HP Tru64 UNIX	Little
Linux IA (32-bit)	Little
<b>Linux IA (64-bit)</b>	<b>Little</b>
<b>Linux x86 64-bit</b>	<b>Little</b>
Microsoft Windows IA (32-bit)	Little
<b>Microsoft Windows IA (64-bit)</b>	<b>Little</b>
<b>Microsoft Windows x86 64-bit</b>	<b>Little</b>
Solaris Operating System (x86)	Little
<b>Solaris Operating System (x86-64)</b>	<b>Little</b>

# Big Endian Format | AIX, HP-UX and more..

```
SQL> SELECT platform_name, endian_format  
      FROM v$transportable_platform  
     WHERE endian_format!='Little';
```

PLATFORM_NAME	ENDIAN_FORMAT
AIX-Based Systems (64-bit)	Big
Apple Mac OS	Big
HP-UX (64-bit)	Big
HP-UX IA (64-bit)	Big
IBM Power Based Linux	Big
IBM zSeries Based Linux	Big
Linux OS (S64)	Big
Solaris[tm] OE (32-bit)	Big
Solaris[tm] OE (64-bit)	Big

# Nice to meet you! I'm Oracle Linux Exadata Image

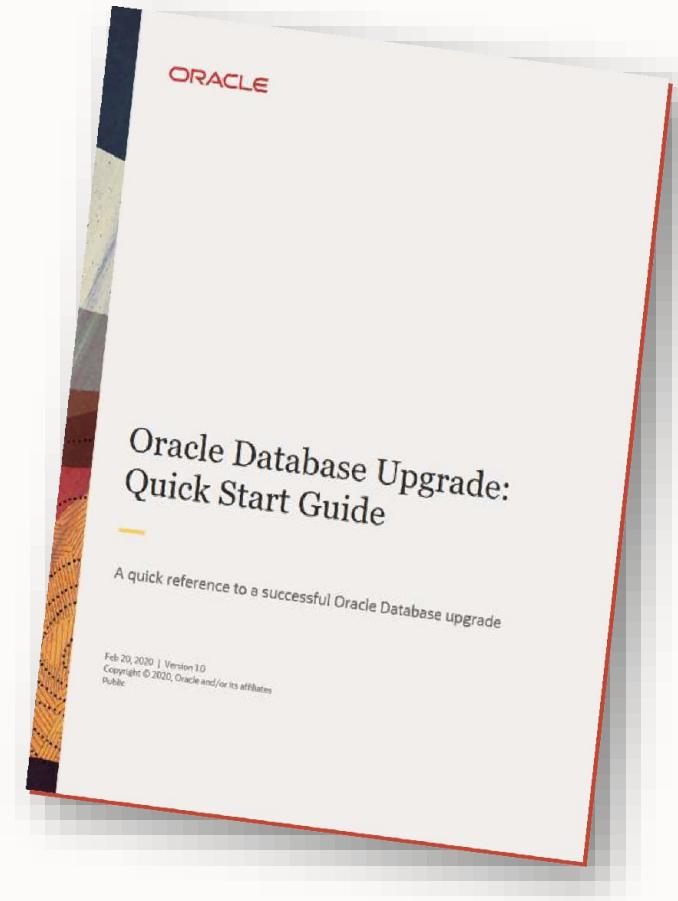


- Yeah I'm a little-endian format as all Oracle OCI database Linux
- Source database in little-endian format makes things easier
- You can think about choosing a Physical Migration Method
- Be sure I'm on my most recent version before start moving your data
  - MOS Note : [Doc ID 1553103.1](#)  
[Doc ID 2333222.1](#)  
[Doc ID 2391164.1](#)

## And dont forget to upgrade | Other VM Cluster components



SCAN ME



- Upgrade Cloud Tooling
- Upgrade Oracle Home to the most patch level
- Upgrade Grid Home to the most recent patch level

[Click Here](#)



# Different Migration Types



## *Offline Migration*

- One-time copy of the database
- Requires applications to be offline during migration

## *Physical Migration*

- Blockwise copy of database files
- Requires database vendors and versions be same on source and target
- No filtering or transformation
- Tools: RMAN, DataGuard

## *Direct Connection*

- Source database can be accessed directly from target network
- Requires VPN/FastConnect for On-Prem

## *Online Migration*

- Initial copy of database followed by change data capture during migration
- Applications can stay online during migration

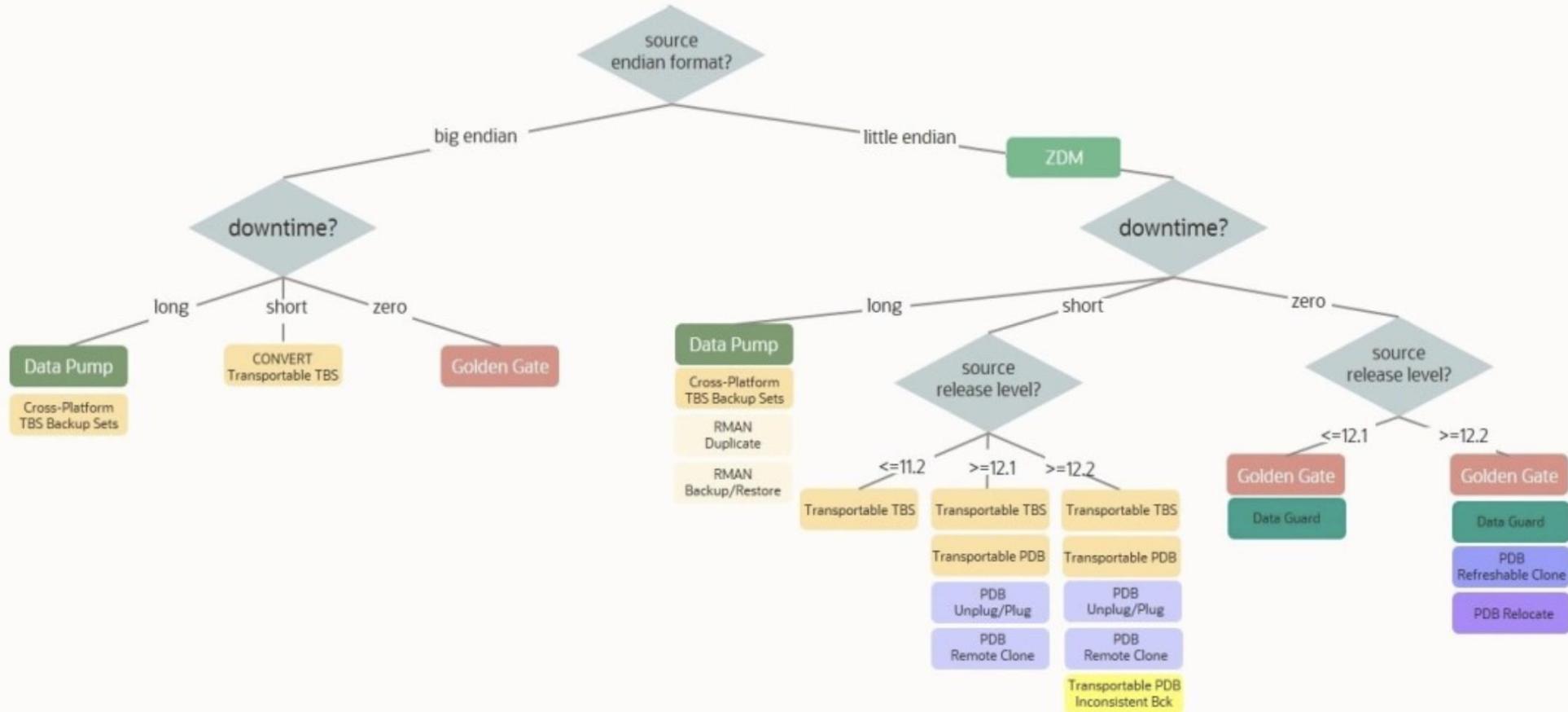
## *Logical Migration*

- Logically interpret database contents and copy to database in target format
- Source and target can be different
- Tools: Datapump, GoldenGate

## *Indirect Connection*

- Source database cannot be accessed directly, behind firewall
- Requires migration tool with agent

# Database Migration Decision Tree



# Migration requirements and constraints

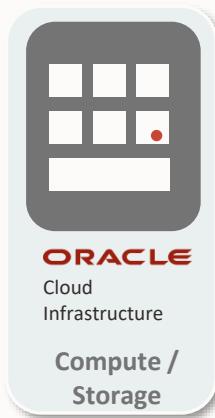
What you should know before you design a migration strategy...



Source Database	Target Database	Runtime Constraints
<ul style="list-style-type: none"><li>• Database version</li><li>• Database size and number of database tables</li><li>• Workload Type</li><li>• Usage and performance requirements</li><li>• Single/Multi-tenant Architecture</li><li>• Endian format</li><li>• Character set</li></ul>	<ul style="list-style-type: none"><li>• Database Type</li><li>• Database version</li><li>• HA and DR requirements</li></ul>	<ul style="list-style-type: none"><li>• Bandwidth and Connectivity</li><li>• Fallback Capability</li><li>• Down-time requirements for migration</li><li>• Project resources available for migration</li></ul>

# Oracle Cloud Database

Range of options



ORACLE  
Cloud  
Infrastructure

Compute /  
Storage



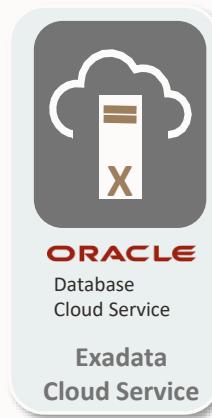
ORACLE  
Database  
Cloud Service

Virtual  
Machines



ORACLE  
Database  
Cloud Service

Bare  
Metal



ORACLE  
Database  
Cloud Service

Exadata  
Cloud Service



ORACLE  
Autonomous  
Database

Transaction  
Processing



ORACLE  
Autonomous  
Database

Data  
Warehouse

The Right Cloud Database for Every Use Case

100%  
Administrator  
Operated

Economic,  
Managed DB Service,  
100% Configurable

Max Performance &  
Consolidation,  
Integrated  
Database HW/SW

Fully Autonomous Operation,  
Dynamic Scalability

# Plug/Unplug

## Migration Methodology

### Source databases:

- CDB Databases 18c, 19c
- Non-CDB or CDB Databases 12c
- Non-CDB Databases 11g (via Upgrade)



### Target databases:

- DBaaS VM, DBaaS BM, ExaCS, ExaCC
- Versions: 12c, 18c, 19c

### When to use

- ✓ Source DB is Little-endian
- ✓ Supports small to large databases
- ✓ Migrate from non-CDB to CDB
- ⚠ Requires knowledge of migration tools like RMAN and Data Pump
- ⚠ Requires some down-time
- ⚠ Upgrade before migrate for 11g and lower versions



Simple



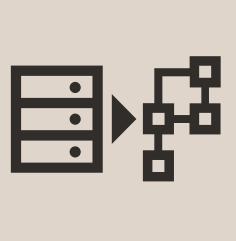
Flexible Architecture  
Enterprise fleet-scale  
migrations



Free

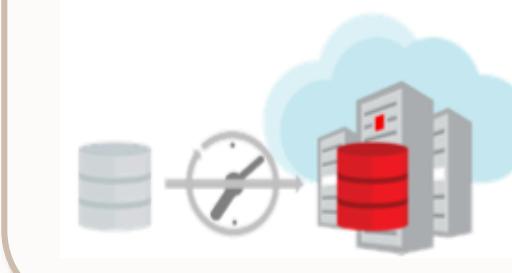
# Oracle Solutions to migrate databases to Oracle Cloud

## OCI Database Migration (DMS)



- Fully managed
  - Graphical guidance
  - Online and offline migrations
  - Autonomous Database target
- Based on Zero Downtime Migration

## Zero Downtime Migration (ZDM)



- User Managed Expert Tool
- Fleet Migrations
- Logical and Physical Migrations
- Migrations to ExaCC

## SQL Developer



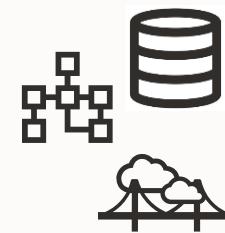
- Developer Experience
- Fine-grained transformations

## Enterprise Manager



- Integrated with EM ecosystem
- Use as part of EM Automation and Monitoring

## Database Tools



- Manual use of DB Tools (RMAN, Data Guard, Datapump, GoldenGate)
- Full expert control
- Special use cases (bi-directional replication, etc.)

# Recovery Manager (RMAN)

Reliable and Versatile offline migration tool



## Source databases:

- CDB/PDB Databases 12c, 18c, 19c
- Non-CDB Databases 11g, 12c, 18c, 19c



## Target databases:

- DBaaS VM, DBaaS BM, ExaCS, ExaCC
- Versions: 12c, 18c, 19c

## When to use

- ✓ Cross-platform migration possible
- ✓ Allows point-in time recovery
- ✓ Migrate from non-CDB to CDB
- ✓ Small to Large Database size
- ⚠ Requires knowledge of various RMAN methods
- ⚠ Requires some down-time



Point-in-Time  
Recovery



Interoperability with  
versions



Enterprise fleet-scale  
migrations

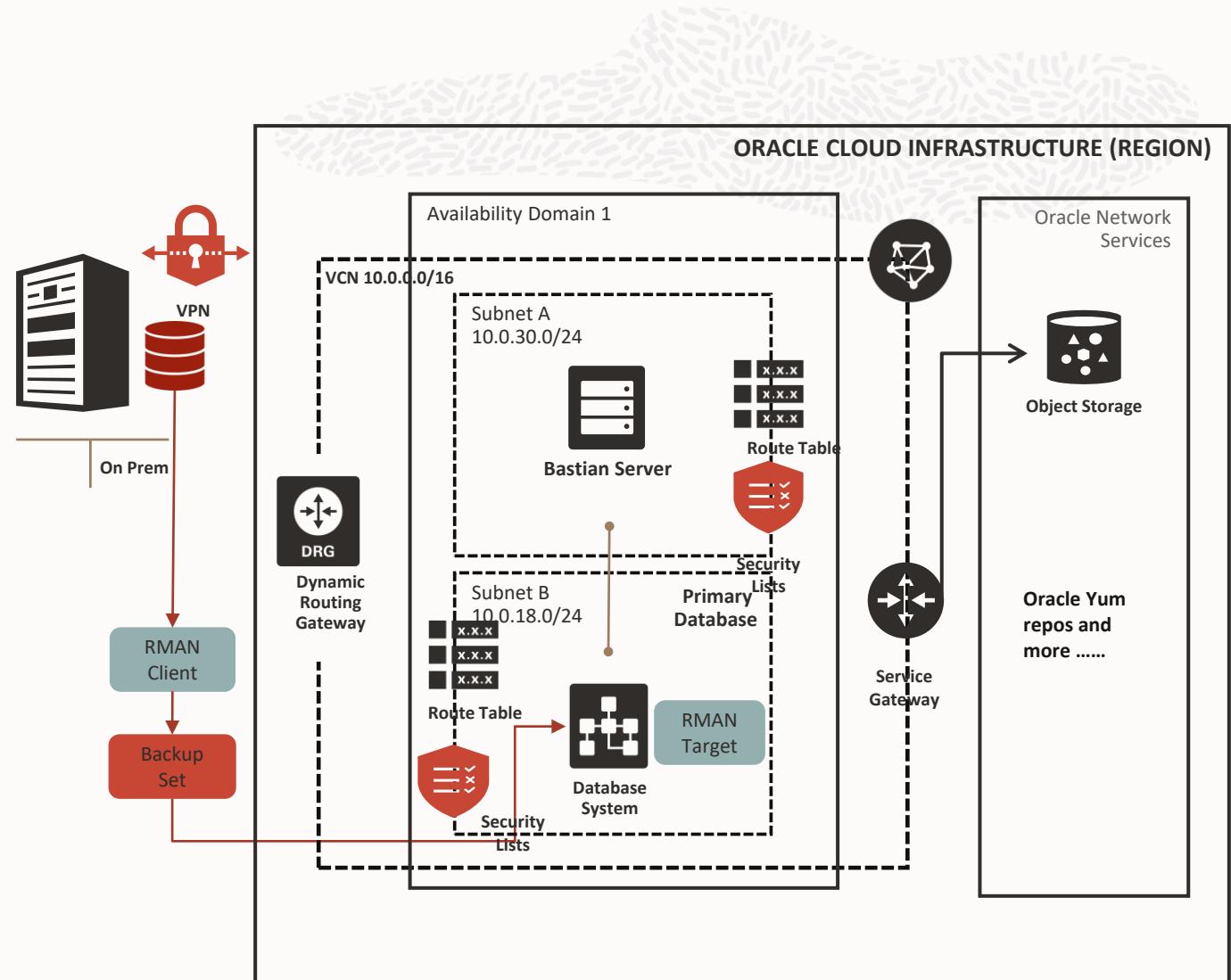


Free

# RMAN Reference Architecture

## Migration Steps

- On-premises Target Database – perform backup & recovery operations
- RMAN Client – command line interface to interpret and execute
- RMAN Methods
  - RMAN Cross-Platform Transportable PDB
  - RMAN Cross-Platform Transportable Tablespace Backup Sets
  - RMAN Transportable Tablespace with Data Pump
  - RMAN DUPLICATE from an Active Database
  - RMAN CONVERT Transportable Tablespace with Data Pump



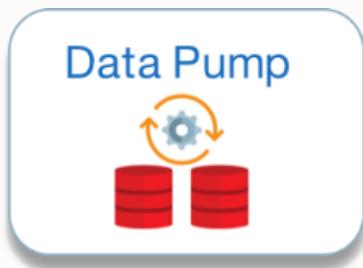
# Data Pump

Fast, full offline database migration tool



## Source databases:

- CDB/PDB Databases 12c, 18c, 19c
- Non-CDB Databases 11g, 12c, 18c, 19c



## Target databases:

- DBaaS VM, DBaaS BM, ExaCS, ExaCC
- Versions: 12c, 18c, 19c

## When to use

- ✓ Supports small to large databases
- ✓ Supports cross-endian and character-set
- ✓ In-flight Upgrade possible
- ✓ Changes to database structure possible
- ⚠ Requires knowledge of various methods
- ⚠ Requires some down-time



Simple



Interoperability with  
versions



Enterprise fleet-scale  
migrations

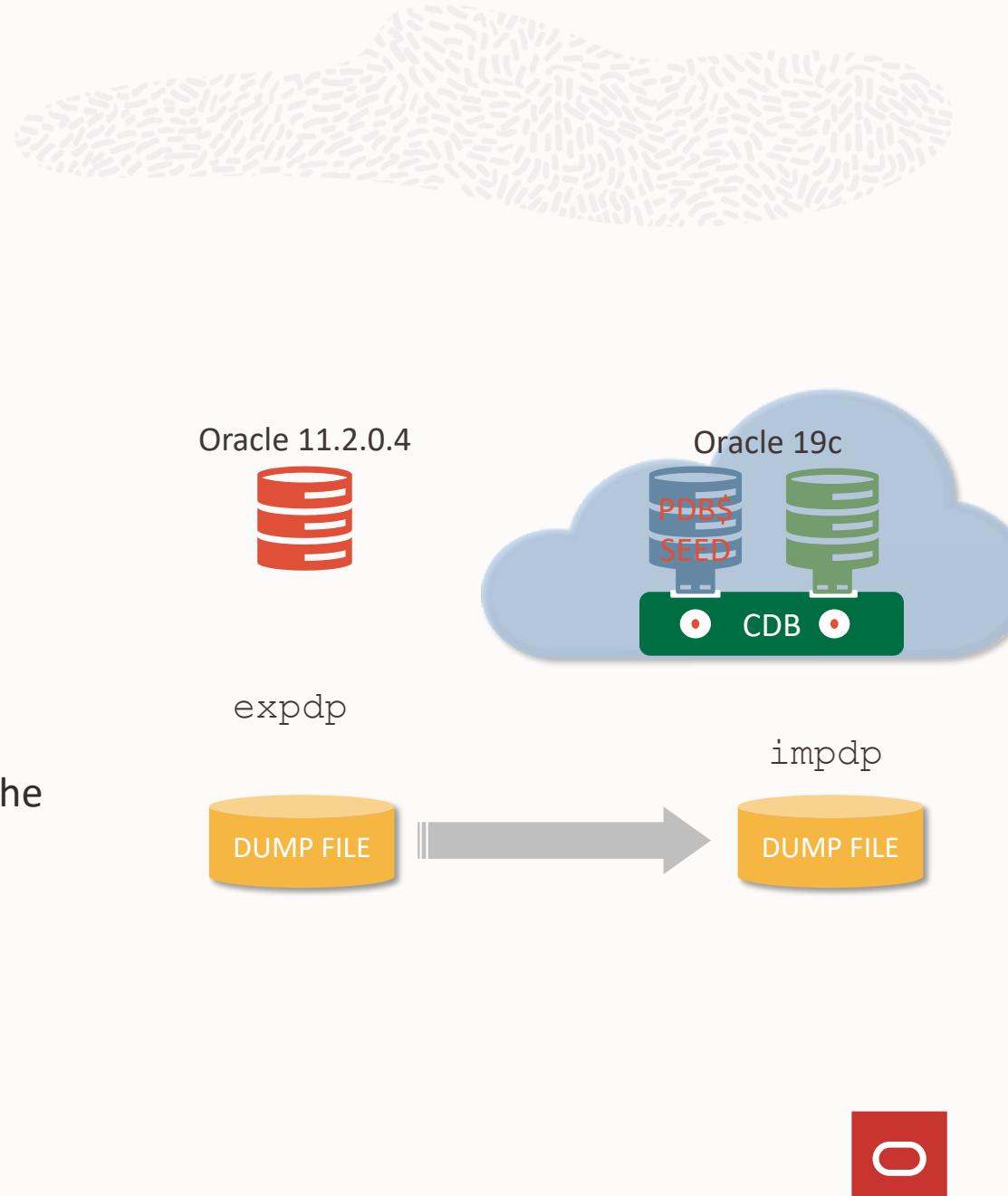


Free

# Data Pump

## Features and Capabilities

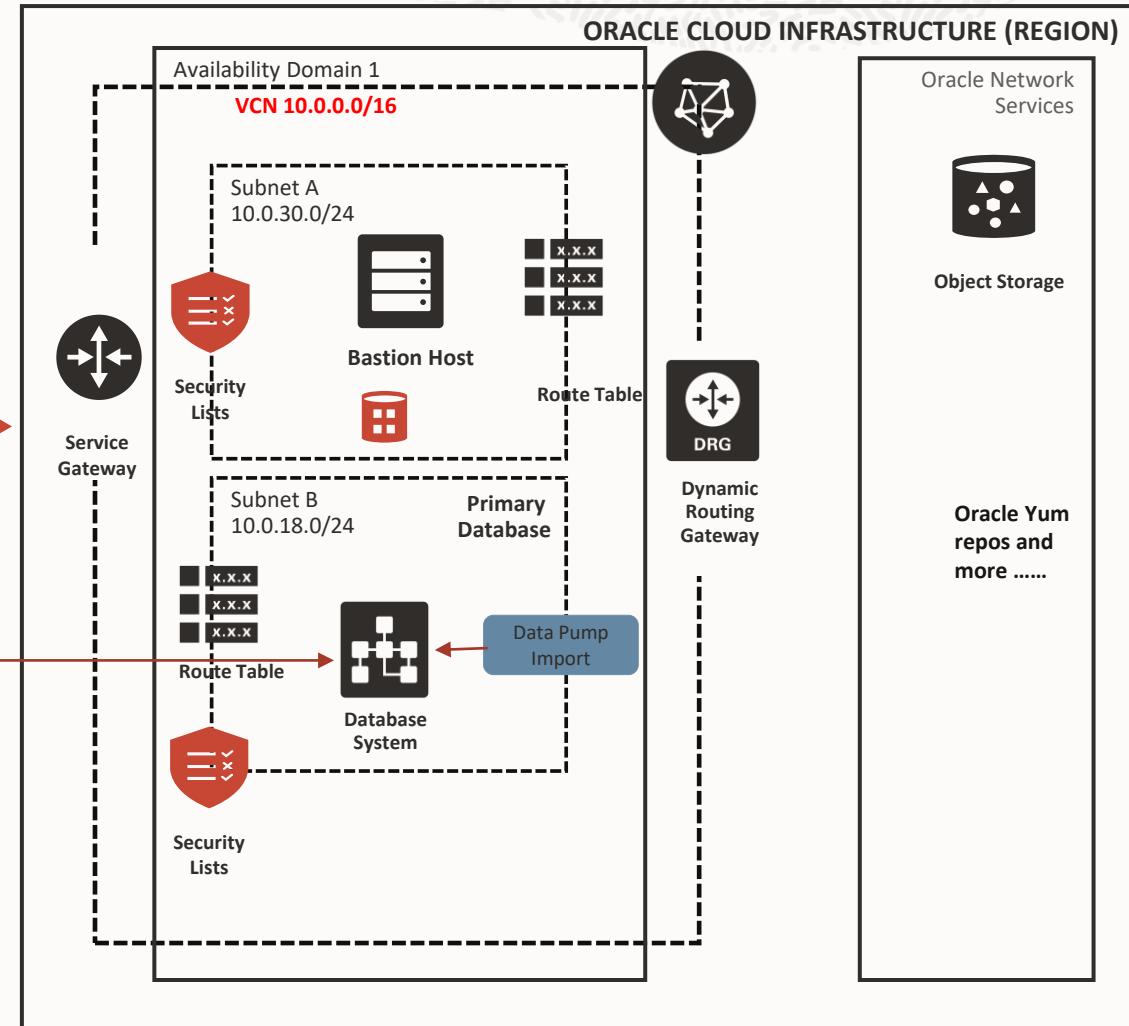
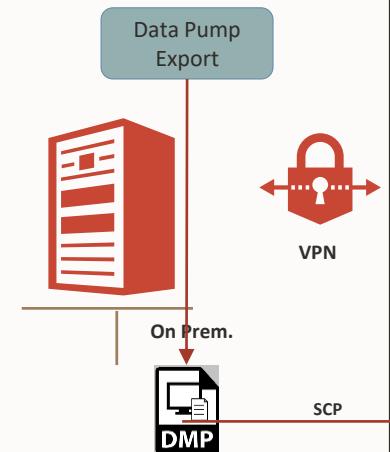
- Oracle Data Pump enables high-speed movement of data and metadata from one database to another
- Oracle Data Pump is available on Oracle Database 10g & later
- There are five different modes of data unloading
  - **Schema Mode** - default mode, specific schemas
  - **Table Mode** - specified set of tables dependent objects
  - **Tablespace Mode** - the tables in the specified tablespace
  - **Transportable Tablespace Mode** - only the metadata for the tables and dependent objects within a specified set of tablespaces
  - **Full Export Mode** - entire database



# Use Case: Data Pump Migration Conventional Export/Import

## Migration Steps

- Invoke Data Pump Export on-premises DB
- Secure copy the dump file to the OCI Database System
  - On OCI DB System invoke Data Pump Import
  - Validate the import



# Data Guard

## Real-time Data Protection & Availability

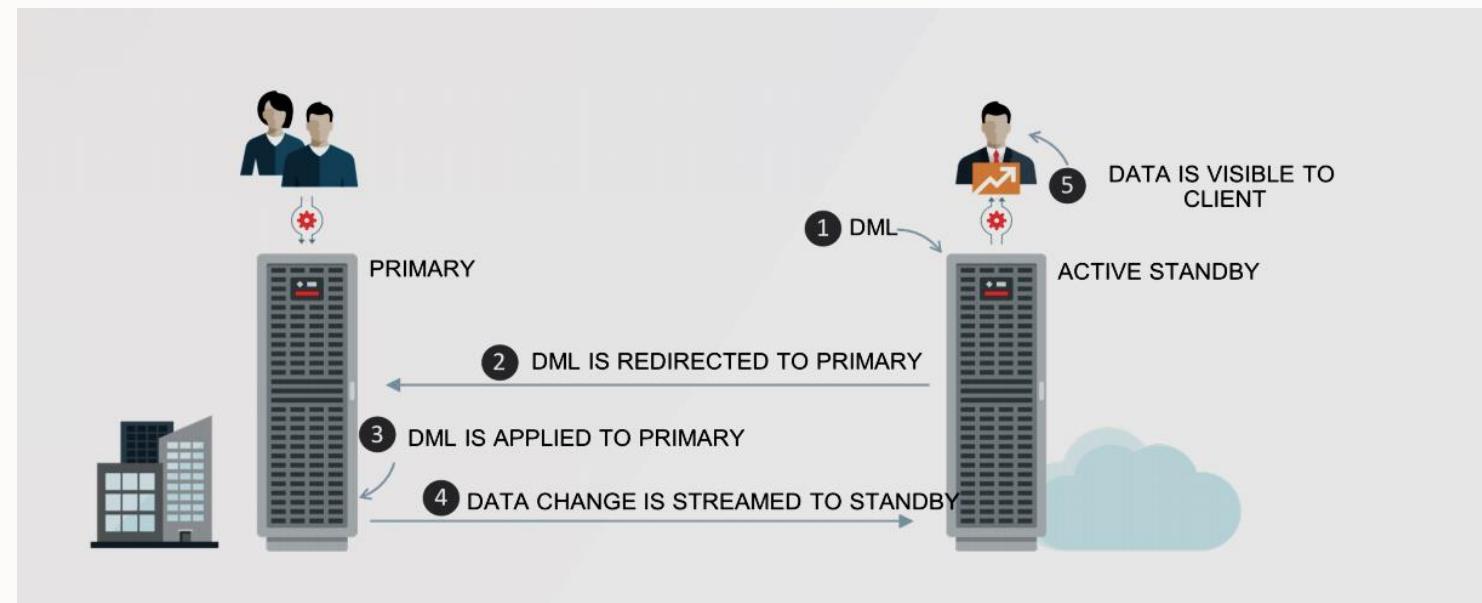


### When to use

- ✓ Provides HA and DR solutions
- ✓ Minimal downtime migration
- ✓ Source version 11.2.0.4, 12.1.0.2, 12.2.0.1, 18, 19
- ✓ Only for Little Endian platforms  
Only non-CDB to non-CDB or PDB to PDB
- ⚠ No structural changes
- ⚠ No upgrade to new version

Oracle Data Guard ensures high availability, data protection, and disaster recovery for enterprise data.

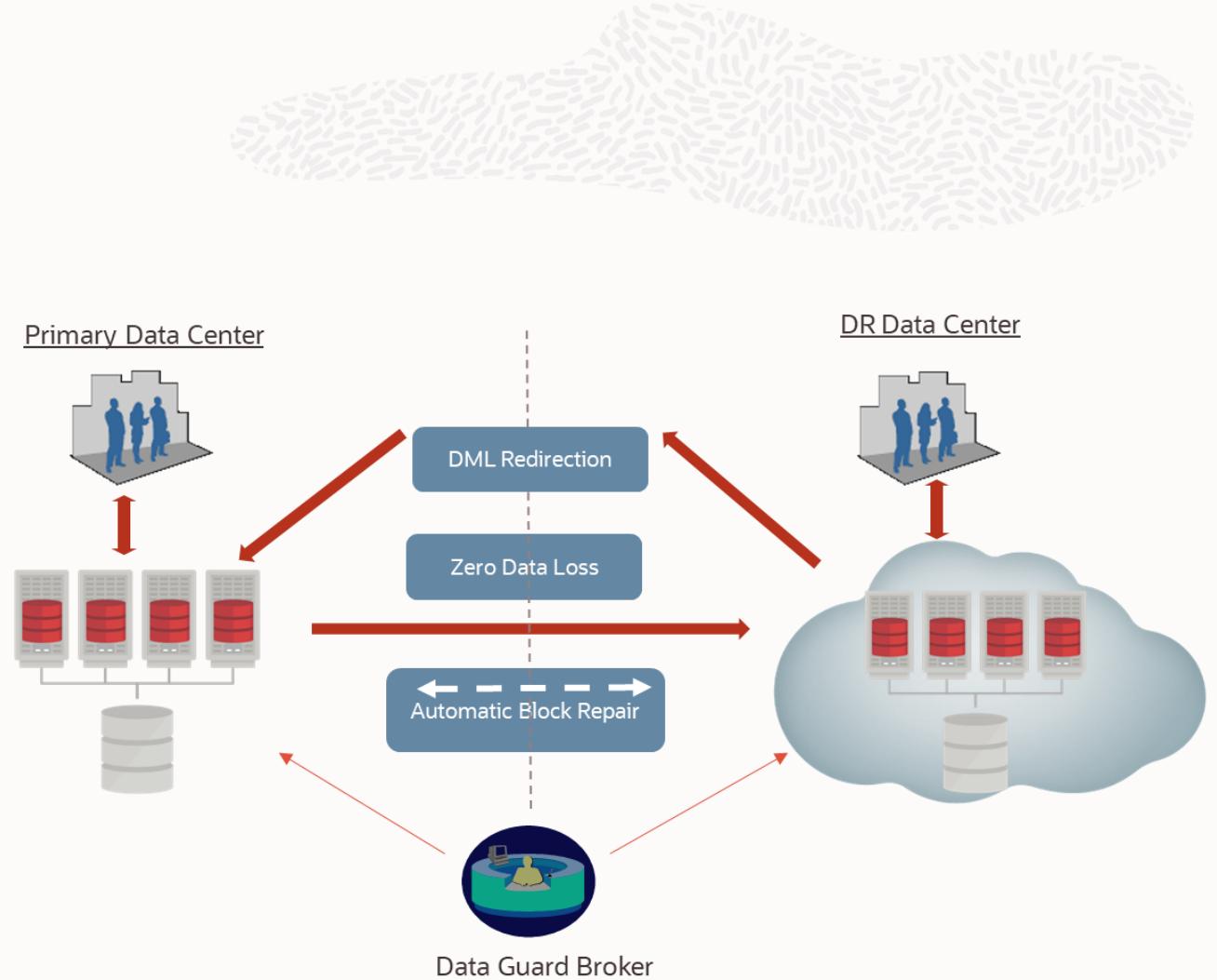
It provides a comprehensive set of services that create, maintain, manage, and monitor one or more standby databases.



# Active Data Guard

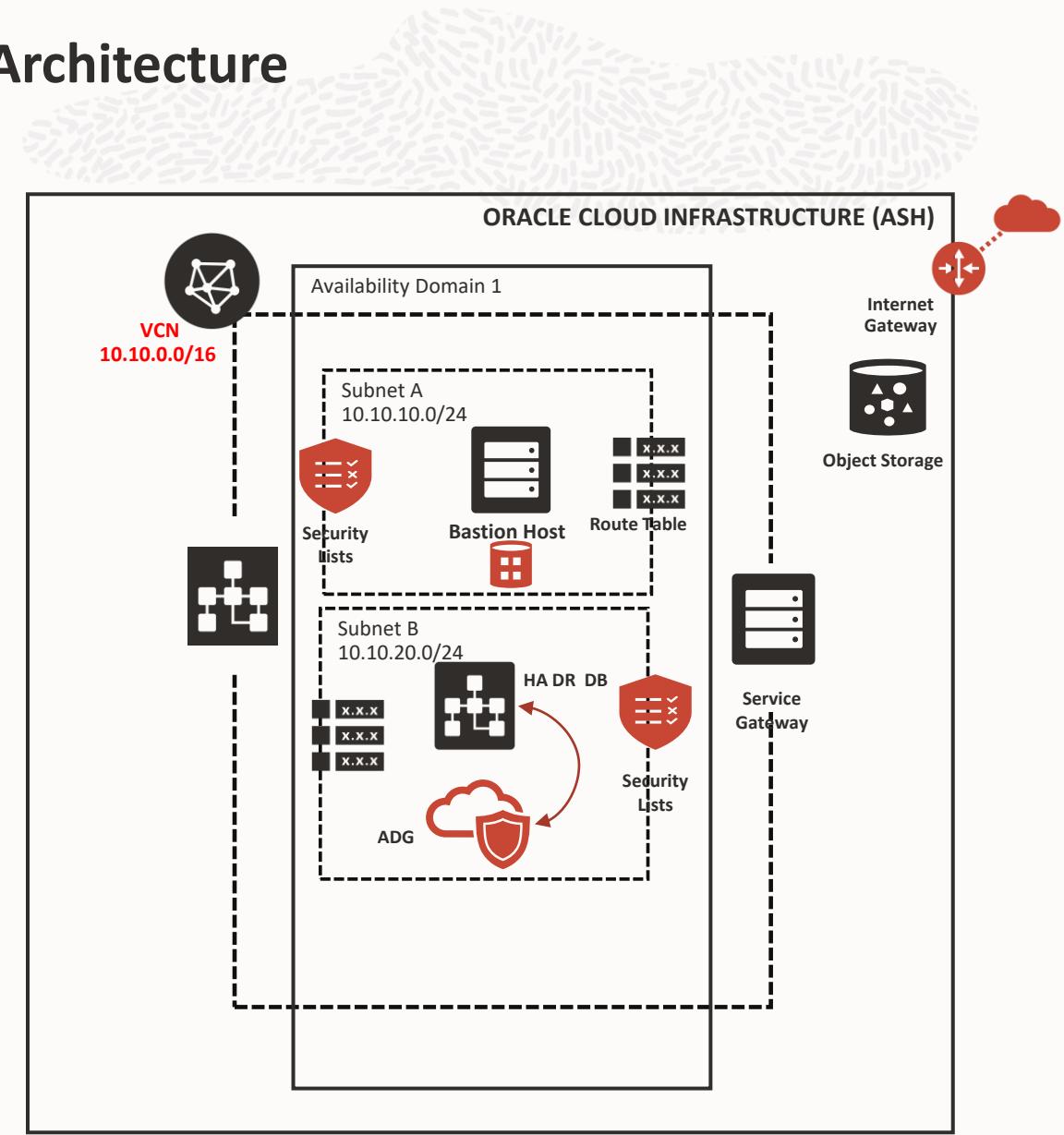
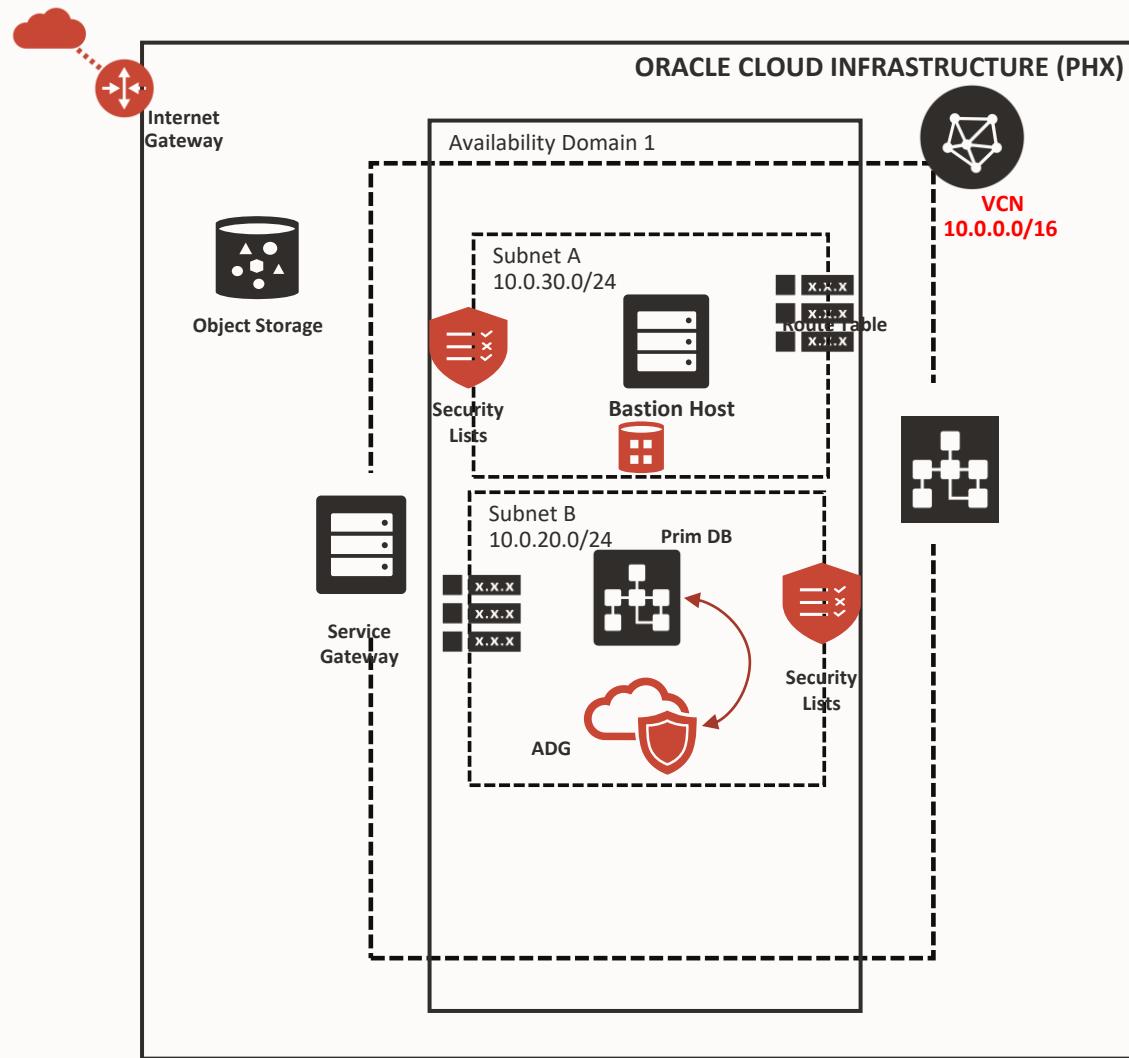
Oracle solution for Active Disaster Recovery

- Eliminates single point of failure
- Efficiently uses network bandwidth
- Provides unique levels of data protection
- Fast-Start failover to the standby
- Switchover to a standby
- Read Write mode on Standby.
- A True Sync between Primary and Secondary Instances.



# Disaster Recovery Across Regions – Reference Architecture

## Active Data Guard



# Zero Downtime Migration (ZDM)

## Simple migration tool for lift and shift use cases



### Source databases:

- CDB/PDB Databases 12c, 18c, 19c
- Non-CDB Databases 11g, 12c, 18c, 19c



### OCI Target database:

- DBaaS VM, DBaaS BM, ExaCS, ExaCC
- Versions: 11g, 12c, 18c, 19c

### When to use

- ✓ Free, easy to use tool
- ✓ Small to Large Database sizes
- ✓ Lift and Shift like to like versions
- ✓ Requires no downtime
- ⚠ In-Flight upgrade not possible
- ⚠ Cross-endian/ Cross-platform not possible



Simple



MAA Enabled



Enterprise fleet-scale  
migrations

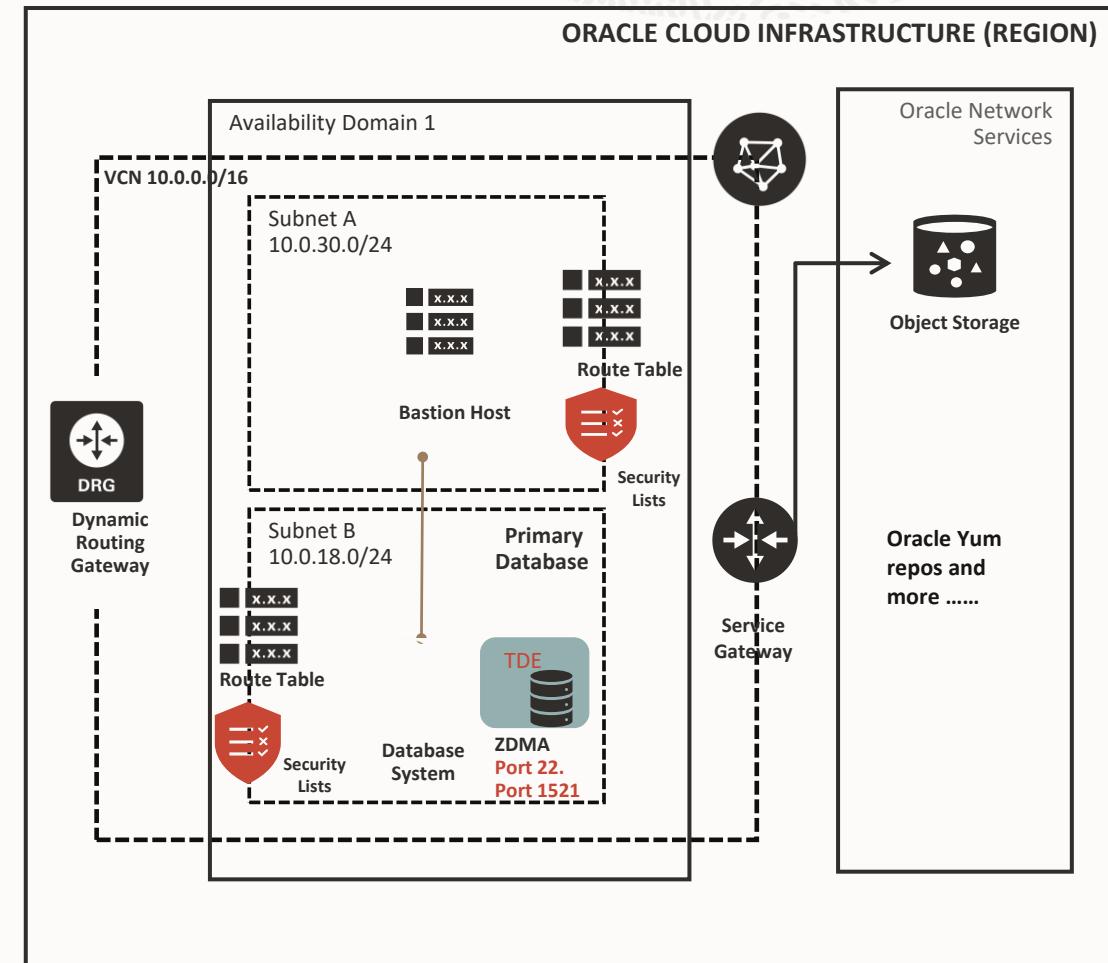
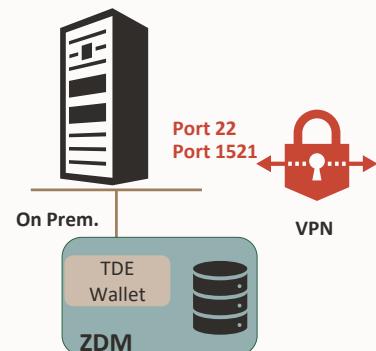


Free

# Migration Process using Zero Downtime Migration Tool

## Migration Steps

1. Network Configuration
2. Installing ZDM Tool
3. Setting up communication
4. Checking Encryption Wallet
5. Configuring ZDM Tool
6. Migration pre-check
7. Migrate the Database



# Oracle Cloud Infrastructure – Database Migration

## Database Migrations

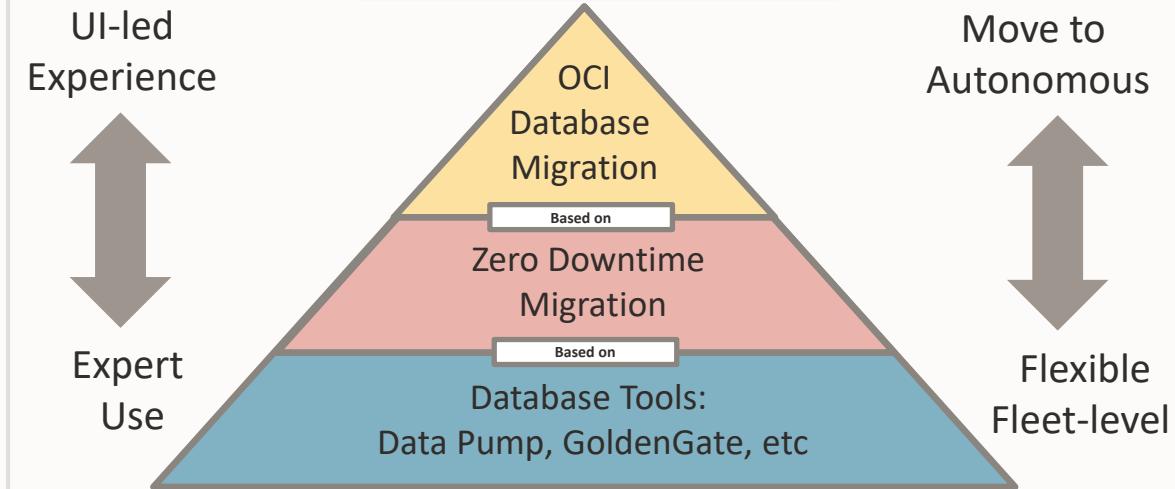
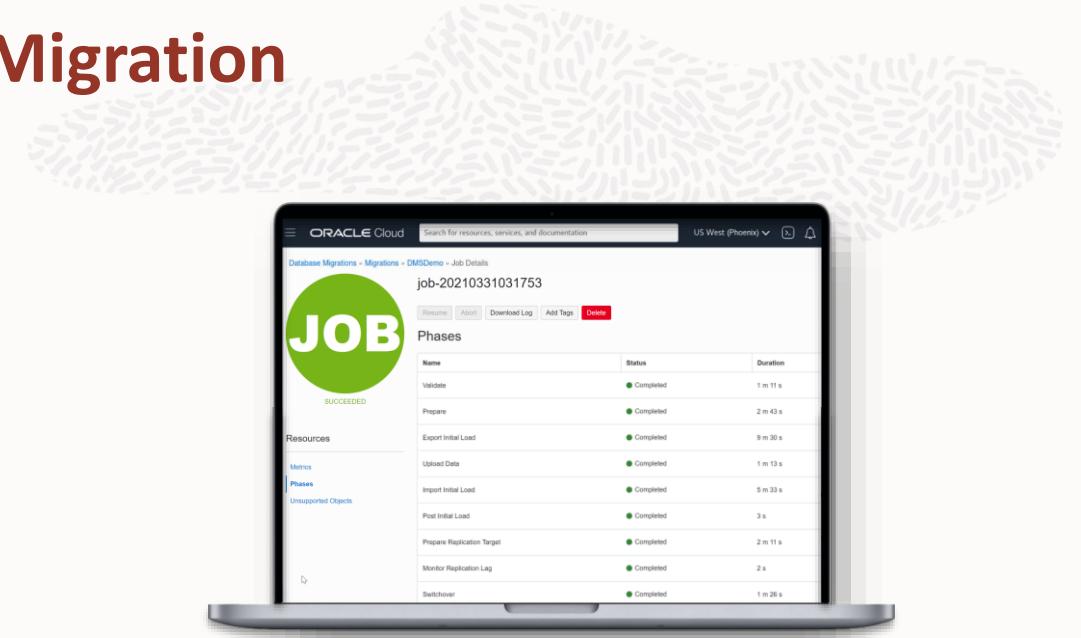
- Reduce cost and improve performance in Oracle Cloud
- Migrate databases, free for 6 months per migration

## Core Use Cases

- Machine-assisted migrations for Oracle Databases, Data Marts and Data Warehouses into Oracle Cloud

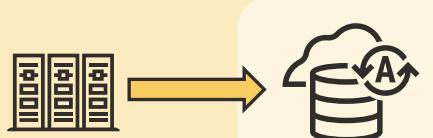
## Differentiated Use Cases

- Simplifies underlying technologies and resources
- Logical Offline and Online Migrations
- Schema/Metadata Migration
- Based on enterprise-strength Oracle tools Zero Downtime Migration, GoldenGate, and Data Pump

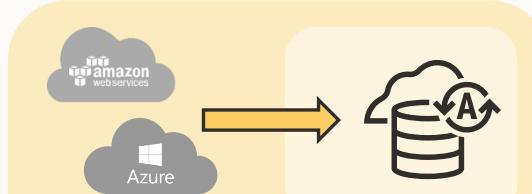


# OCI Database Migration - Use Cases

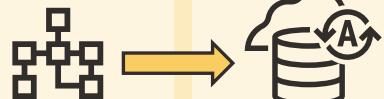
## All Source Locations



Migrate On-Premises to OCI Cloud



Migrate Third-party Cloud to OCI Cloud

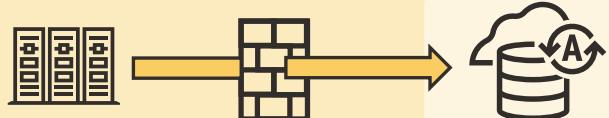


Migrate Oracle legacy cloud to OCI Cloud



Migrate Within OCI Cloud

## With or Without Direct Connection



Offline Migration from behind firewall using Agent



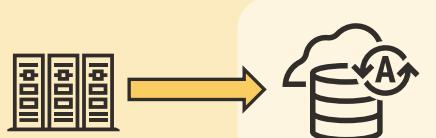
Offline Migration using FastConnect/VPN connection



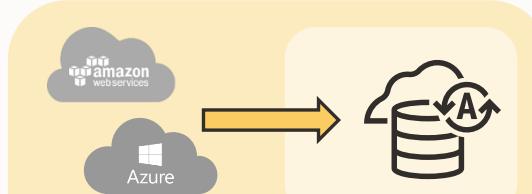
Online Migration using FastConnect/VPN connection

# OCI Database Migration - Use Cases

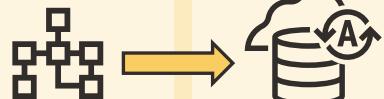
## All Source Locations



Migrate On-Premises to OCI Cloud



Migrate Third-party Cloud to OCI Cloud

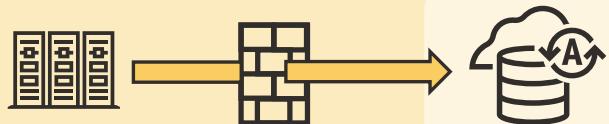


Migrate Oracle legacy cloud to OCI Cloud

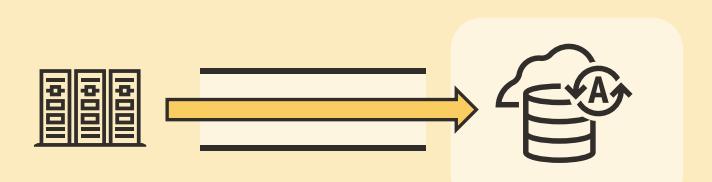


Migrate Within OCI Cloud

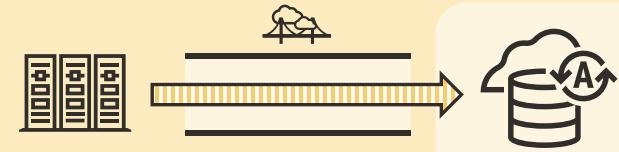
## With or Without Direct Connection



Offline Migration from behind firewall using Agent

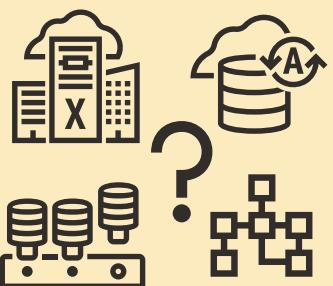


Offline Migration using FastConnect/VPN connection



Online Migration using FastConnect/VPN connection

# Tools for all Steps of the Migration Process



## Decision

Which Oracle Cloud Solution should I use?

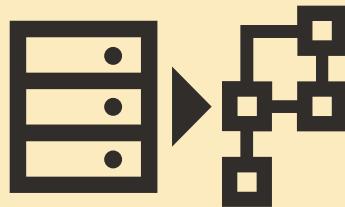
Oracle.com  
Cloud Services Navigator  
Migration Method Advisor



## Planning

Is my data supported for migration?

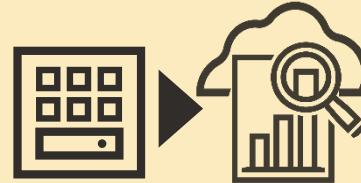
Cloud Premigration Advisor Tool (CPAT)



## Database Migration

How to move my Databases?

OCI Database Migration



## Application Migration

How to move applications and VMs to the cloud?

OCI Application Migration

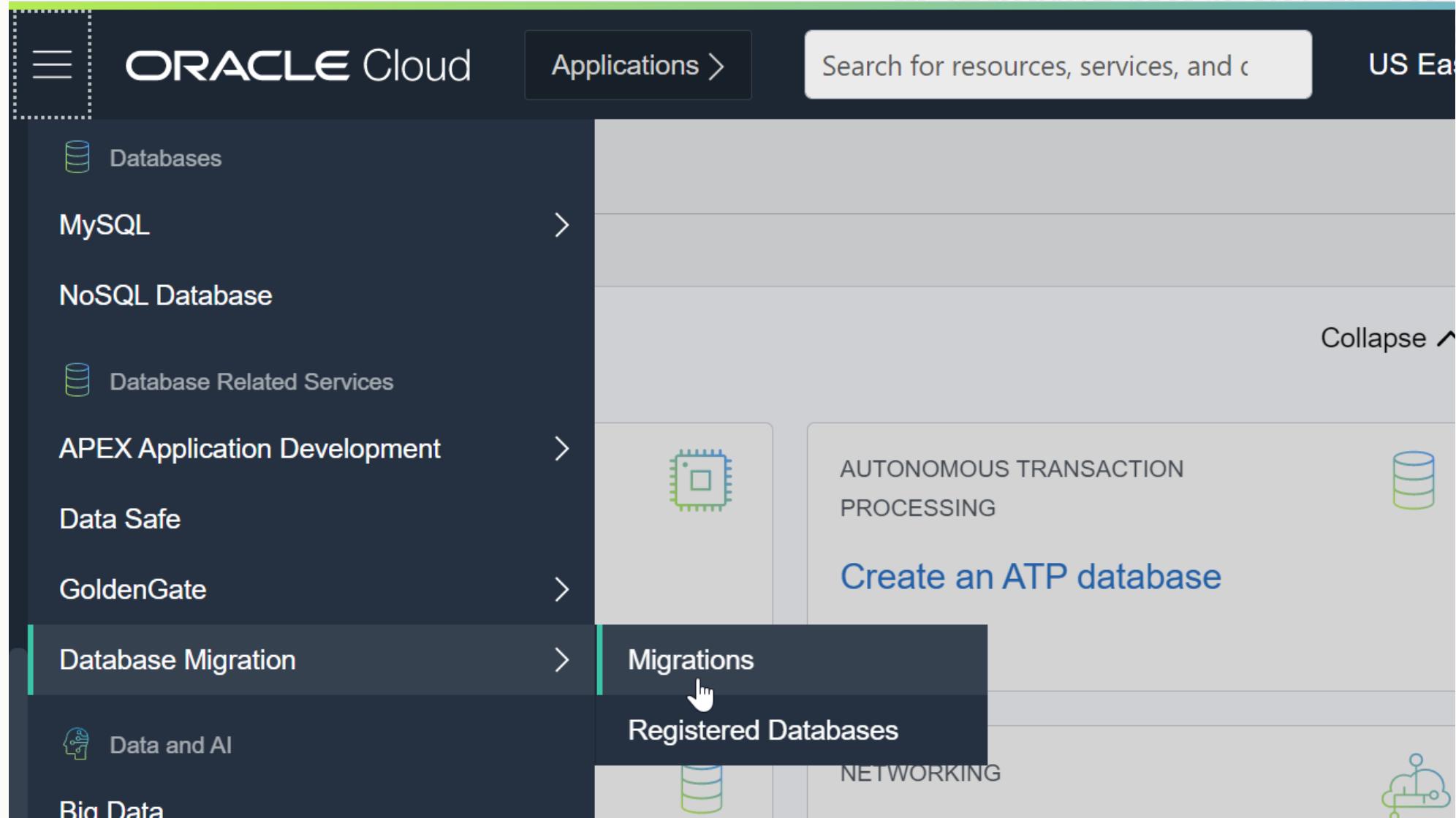


## Validation

Was my data completely migrated?

GoldenGate Veridata

# Step 1: Open Database Migration on the OCI Console



# Step 2: Register Source and Target Databases

Provide reusable connection information and credentials for databases

## Register Database

[Help](#)

**1 Database Details**

**2 Connection Details**

Name: MySourcePDB

Compartment: DMS\_LA  
ggsstage (root)/DMS\_LA

Vault in DMS\_LA [\(Change Compartment\)](#)  
DMS\_Vault

Encryption Key in DMS\_LA  
[\(Change Compartment\)](#)  
DMS\_Key

Select Database  
 Manually Configure Database

Database Type: Database (Bare Metal, VM, Exadata)

Database System in DMS\_LA  
[\(Change Compartment\)](#)  
SourceDB

## Register Database

[Help](#)

**1 Database Details**

**2 Connection Details**

Name: MyTargetATP

Compartment: DMS\_LA  
ggsstage (root)/DMS\_LA

Vault in DMS\_LA [\(Change Compartment\)](#)  
DMS\_Vault

Encryption Key in DMS\_LA  
[\(Change Compartment\)](#)  
DMS\_Key

Select Database  
 Manually Configure Database

Database Type: Autonomous Database

Database in DMS\_LA [\(Change Compartment\)](#)  
TargetATP

# Step 3: Create Migration

Select migration method and other settings to move a database to the cloud

### Create Migration

[Help](#)

**1 Add Details**

Name: MyMigration

Compartment: DMS\_LA

ggsstage (root)/DMS\_LA

Direct connection to source database  
The source database is directly accessible from the Cloud

No direct connection to source database  
Requires you to download and install an agent to use as a bridge to the source database

Vault in DMS\_LA [\(Change Compartment\)](#)  
DMS\_Vault

Encryption Key in DMS\_LA [\(Change Compartment\)](#)  
DMS\_Key

**2 Select Databases**

**3 Migration Options**

[Next](#) [Cancel](#)

### Create Migration

[Help](#)

**1 Add Details**

**2 Select Databases**

**3 Migration Options**

**Source Database**

Registered Database in DMS\_LA [\(Change Compartment\)](#)  
MySourcePDB

Database is pluggable database (PDB)

Registered Container Database in DMS\_LA [\(Change Compartment\)](#)  
MySourceCDB

**Target Database**

Registered Database in DMS\_LA [\(Change Compartment\)](#)  
MyTargetATP

[Previous](#) [Next](#) [Cancel](#)

### Create Migration

[Help](#)

**1 Add Details**

**2 Select Databases**

**3 Migration Options**

Initial Load  
 Datapump via Database Link  
 Datapump via Object Storage

Object Storage Bucket in DMS\_LA [\(Change Compartment\)](#)  
DMSStorage

**Export Directory Object**

Name [\(i\)](#) dumpdir Path [\(i\)](#) /u01/app/oracle

Use Online Replication

GoldenGate Hub URL [\(i\)](#)  
https://193.122.169.5

GoldenGate Administrator Username  
oggadmin

GoldenGate Administrator Password  
.....

**Source Database**

GoldenGate Deployment Name  
Source

[Previous](#) [Create](#) [Cancel](#)

# Step 4: Validate Migration

Confirm all prerequisites, permissions, and connectivity to source and target

The screenshot shows the Oracle Cloud Infrastructure Migration Service (MIGRATE) console interface. On the left, there is a large green circular icon with 'DM' in white, labeled 'ACTIVE'. The main area has a title 'MyMigration' with a sub-section 'Migration Information'. A callout box at the top right of this section says: 'Migration requires validation before it can be started. Select the Validate action button to initiate validation process.' Below this, a red box highlights the 'Validate' button, which is being clicked by a cursor. Other buttons in the row include 'Start', 'Clone', 'Move Resource', and 'More Actions'. To the right of the migration information is a large orange circular icon with 'JOB' in white, labeled 'IN PROGRESS'. A modal window titled 'job-20210331030633' is open, showing 'Validation in progress at phase "Validate Target" (Phase 1 of 5.)'. It includes buttons for 'Resume', 'Abort', 'Download Log', 'Add Tags', and 'Delete'. Below the modal are tabs for 'Job Information' and 'Tags', with job details like OCID, Type: Evaluation, and Created: Wed, Mar 31, 2021, 03:06:33 UTC. At the bottom, there are sections for 'Resources' (Metrics, Phases, Unsupported Objects) and 'Phases' (a table with columns Name, Status, Duration, showing 'Validate Target' as Started and 'Validate Source' as Pending). A watermark of a brain is visible in the background.

Migration requires validation before it can be started. Select the Validate action button to initiate validation process.

## MyMigration

Validate Start Clone Move Resource More Actions ▾

Migration Information

OCID: ...lgaxuq Show Copy  
Compartment: ggsstage ( ...  
Created: Wed, Mar 31, 2021, 03:06:33 UTC  
Encryption Vault: DMS V...  
Encryption Key: DMS Ke...

IN PROGRESS

Validation in progress at phase "Validate Target" (Phase 1 of 5.)

job-20210331030633

Resume Abort Download Log Add Tags Delete

Job Information Tags

OCID: ...jdwsna Show Copy Type: Evaluation  
Created: Wed, Mar 31, 2021, 03:06:33 UTC

### Resources

Metrics Phases Unsupported Objects

### Phases

Name	Status	Duration
Validate Target	Started	3 s
Validate Source	Pending	1 s



# Step 5: Start Migration

Initiate the migration job to move database into the cloud



Migration validation completed and can be started from the Start action button.

## MyMigration

Validate Start Clone Move Resource More Actions ▾

**Migration Information**

OCID: ...lgaxuq Show Copy  
Compartment: ggsstage (root)  
Created: Wed, Mar 31, 2021  
Encryption Vault: DMS\_Vault  
Encryption Key: DMS\_Key

**JOB** IN PROGRESS

Migration in progress at phase "Prepare" (Phase 2 of 10).

job-20210331031753

Resume Abort Download Log Add Tags Delete

Job Information Tags

OCID: ...2jxcka Show Copy Type: Migration  
Created: Wed, Mar 31, 2021, 03:17:53 UTC

### Resources

Metrics Jobs Excluded Objects

### Jobs

Name	State
job-20210331031341	Succeeded

### Resources

Metrics Phases Unsupported Objects

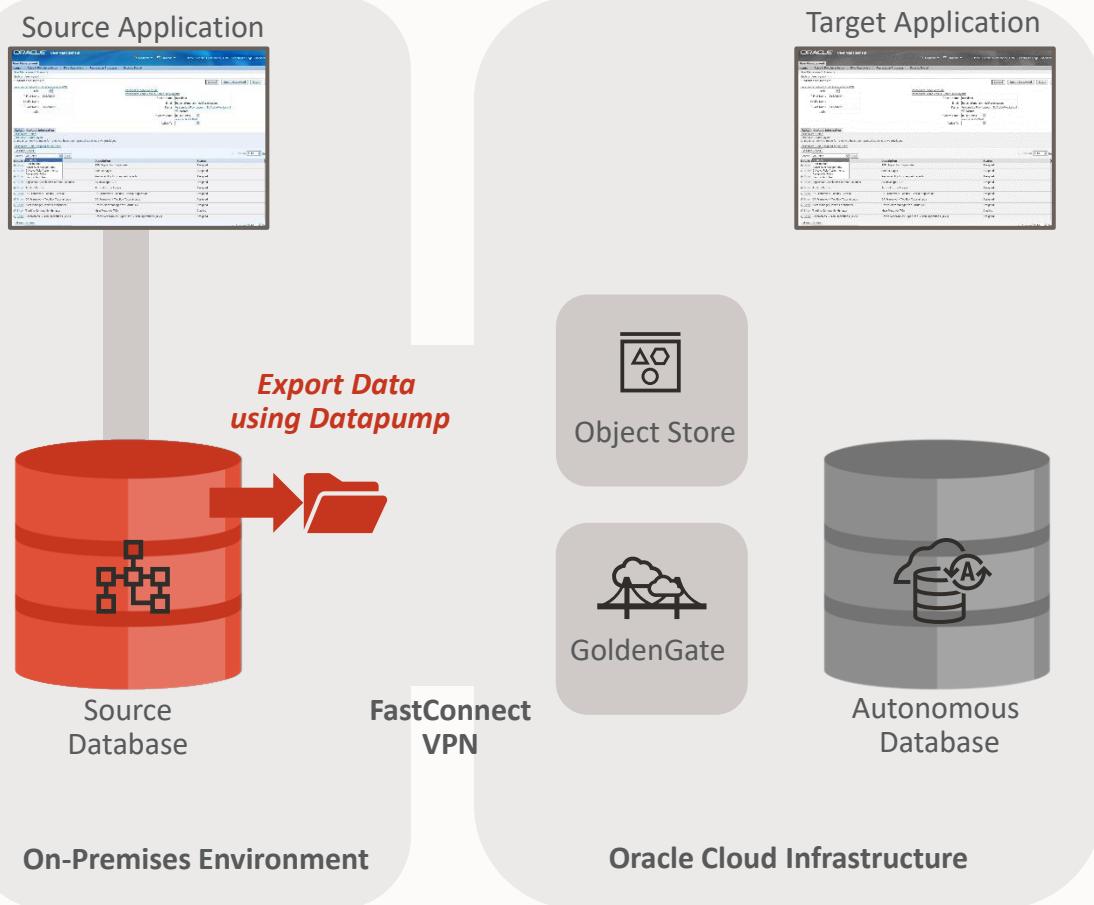
### Phases

Name	Status	Duration
Validate	Completed	1 m 11 s
Prepare	Started	55 s

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# Start Migration – Export Initial Load

Current DB state is exported to files using datapump



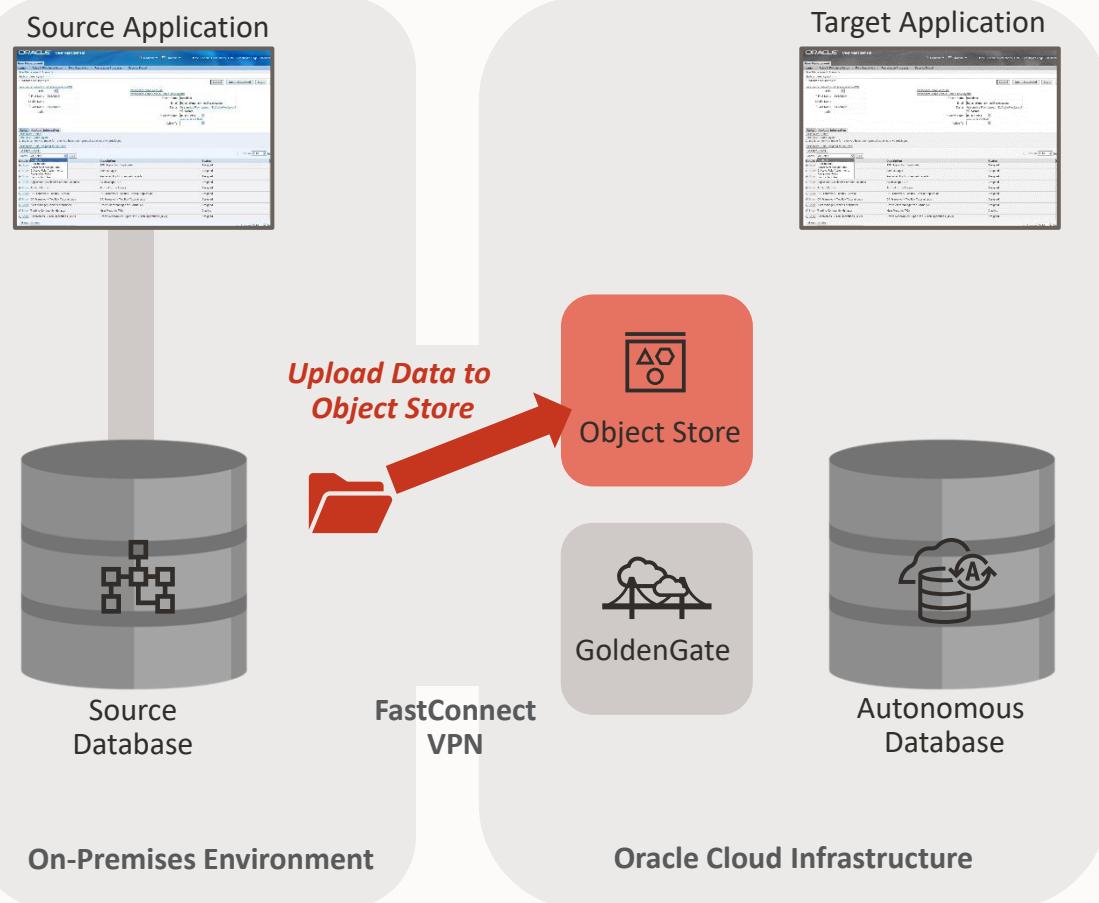
## Phases

Name	Status	Duration
Validate	Completed	1 m 11 s
Prepare	Completed	2 m 43 s
Export Initial Load	Started <div style="width: 66%;">66%</div>	3 m 38 s
Upload Data	Pending	—
Import Initial Load	Pending	—
Post Initial Load	Pending	—
Prepare Replication Target	Pending	—
Monitor Replication Lag	Pending	—
Switchover	Pending	—
Cleanup	Pending	—

Showing 10 Items < 1 of 1 >

# Start Migration – Upload Data

Datapump export is uploaded to Object Store



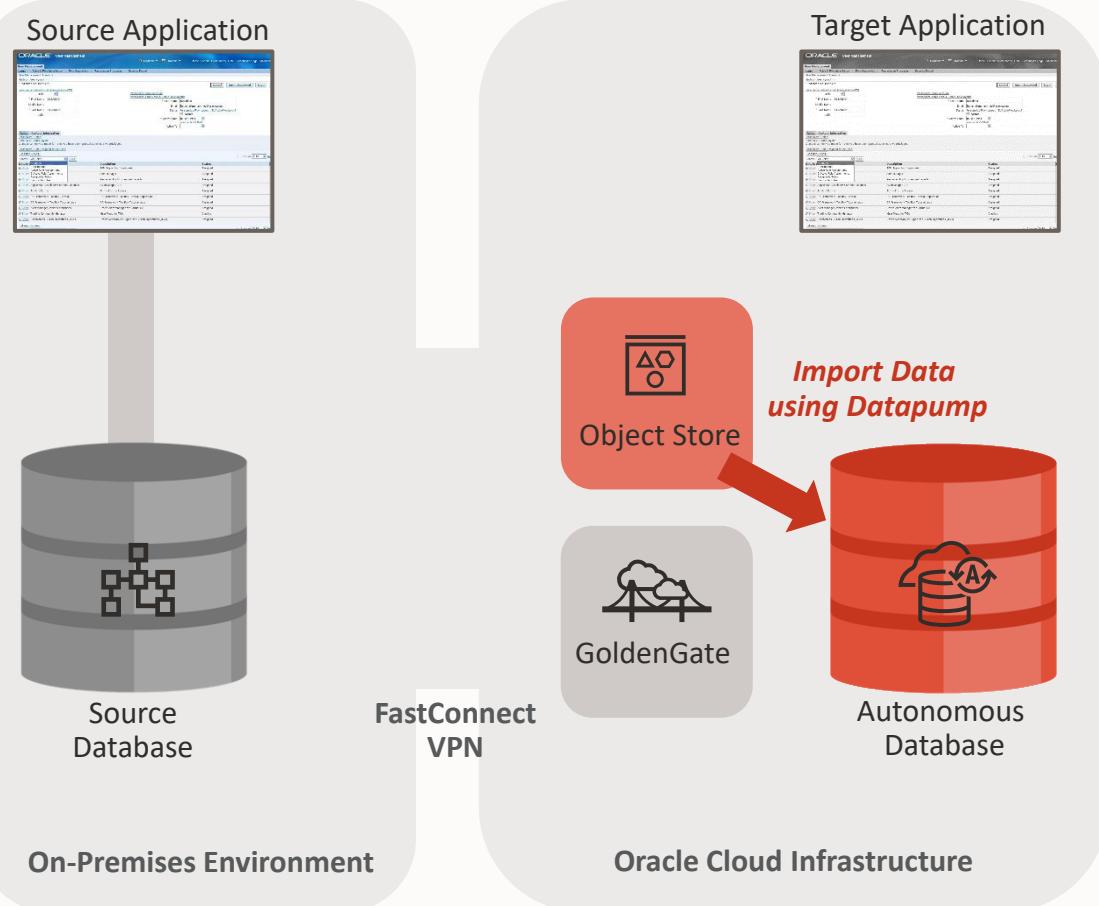
## Phases

Name	Status	Duration
Validate	Completed	1 m 11 s
Prepare	Completed	2 m 43 s
Export Initial Load	Completed	9 m 30 s
Upload Data	Started	26 s
Import Initial Load	Pending	—
Post Initial Load	Pending	—
Prepare Replication Target	Pending	—
Monitor Replication Lag	Pending	—
Switchover	Pending	—
Cleanup	Pending	—

Showing 10 Items < 1 of 1 >

# Start Migration – Import Initial Load

Exported dump files are imported to ADB



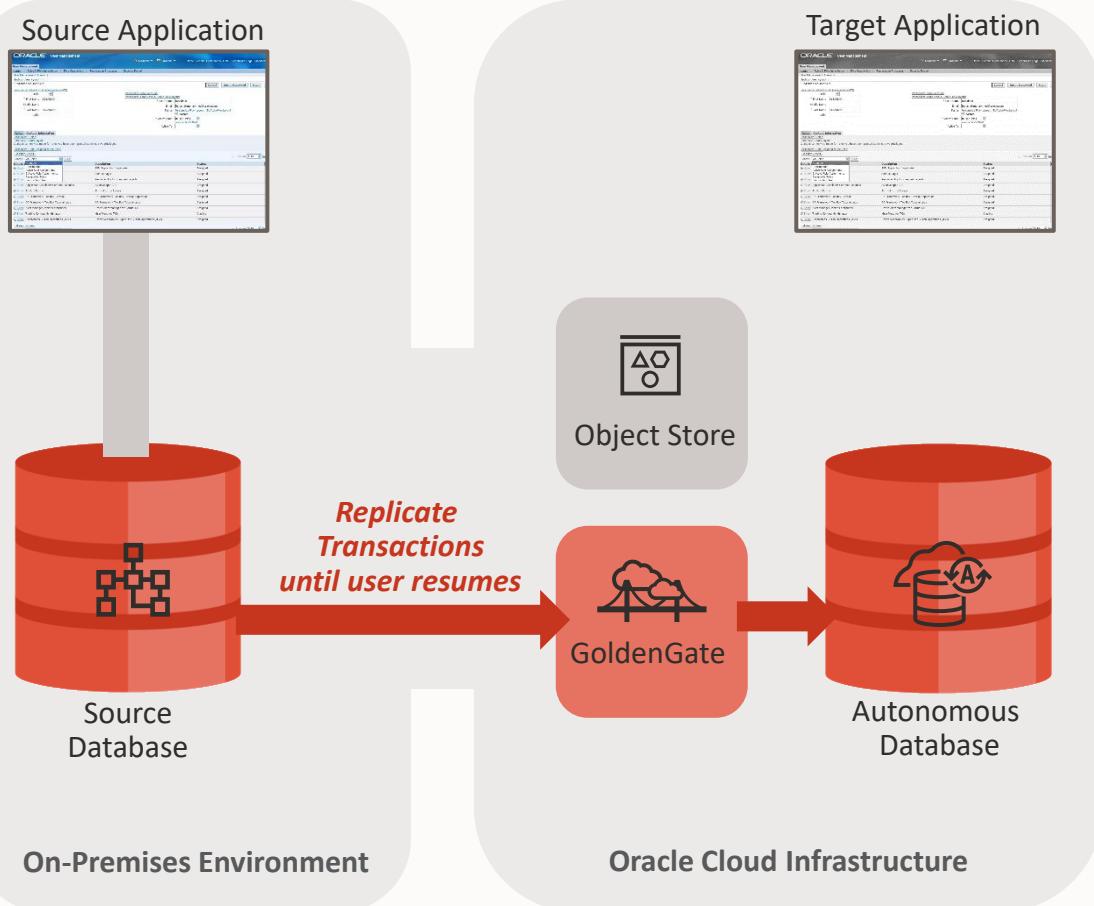
## Phases

Name	Status	Duration
Validate	Completed	1 m 11 s
Prepare	Completed	2 m 43 s
Export Initial Load	Completed	9 m 30 s
Upload Data	Completed	1 m 13 s
Import Initial Load	Started 50%	3 m 30 s
Post Initial Load	Pending	—
Prepare Replication Target	Pending	—
Monitor Replication Lag	Pending	—
Switchover	Pending	—
Cleanup	Pending	—

Showing 10 Items < 1 of 1 >

# Start Migration – Replication

DB transactions are replicated using GoldenGate until user resumes the next phase



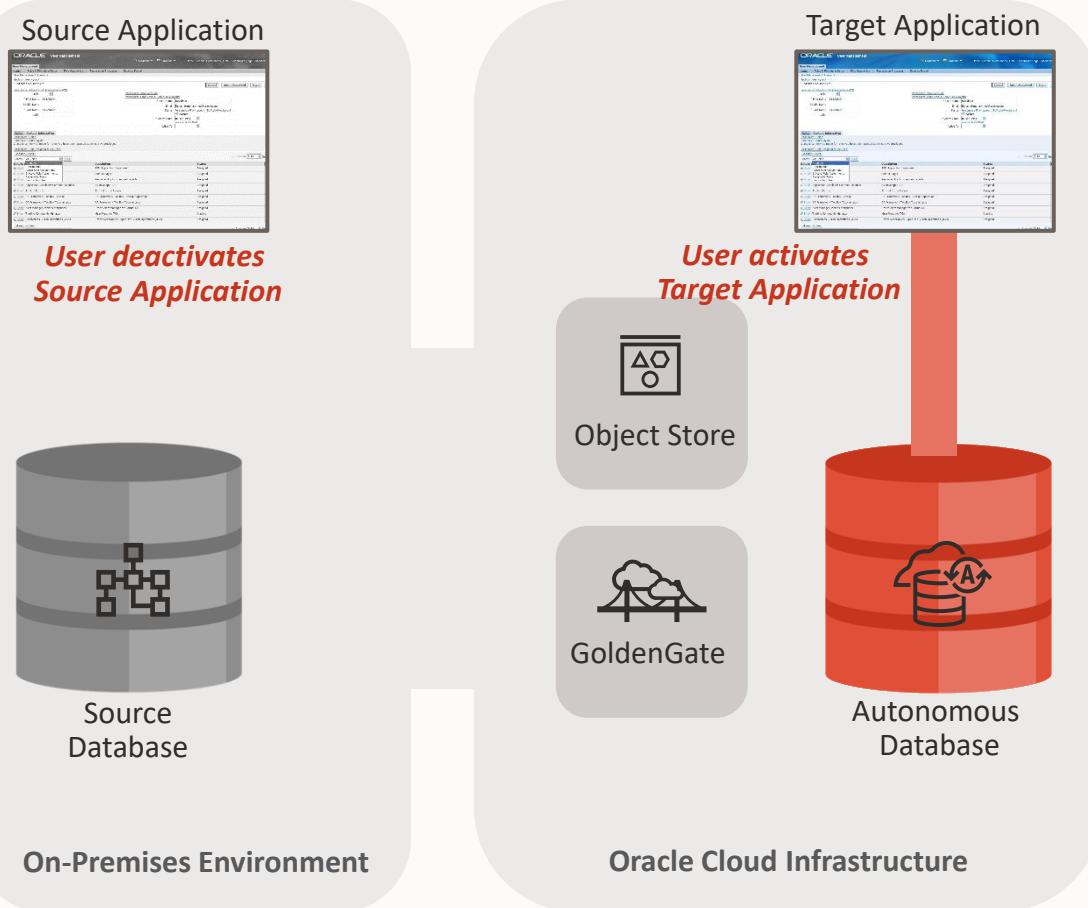
## Phases

Name	Status	Duration
Validate	● Completed	1 m 11 s
Prepare	● Completed	2 m 43 s
Export Initial Load	● Completed	9 m 30 s
Upload Data	● Completed	1 m 13 s
Import Initial Load	● Completed	5 m 33 s
Post Initial Load	● Completed	3 s
Prepare Replication Target	● Completed	2 m 11 s
Monitor Replication Lag	● Completed	2 s
Switchover	● Pending	—
Cleanup	● Pending	—

Showing 10 Items < 1 of 1 >

# Start Migration – Switchover

Wait until last transaction is replicated to let user switch over applications



## Phases

Name	Status	Duration
Validate	● Completed	1 m 11 s
Prepare	● Completed	2 m 43 s
Export Initial Load	● Completed	9 m 30 s
Upload Data	● Completed	1 m 13 s
Import Initial Load	● Completed	5 m 33 s
Post Initial Load	● Completed	3 s
Prepare Replication Target	● Completed	2 m 11 s
Monitor Replication Lag	● Completed	2 s
Switchover	● Completed	1 m 26 s
Cleanup	● Pending	—

Showing 10 Items < 1 of 1 >

# Migration Succeeded

### job-20210331031753

Resume Abort Download Log Add Tags Delete

Job Information Tags

OCID: ...2jxcka Show Copy Type: Migration  
Created: Wed, Mar 31, 2021, 03:17:53 UTC

Resources Phases

Metrics Phases Unsupported Objects

Name	Status	Duration
Validate	Completed	1 m 11 s
Prepare	Completed	2 m 43 s
Export Initial Load	Completed	9 m 30 s
Upload Data	Completed	1 m 13 s
Import Initial Load	Completed	5 m 33 s
Post Initial Load	Completed	3 s
Prepare Replication Target	Completed	2 m 11 s
Monitor Replication Lag	Completed	2 s
Switchover	Completed	1 m 26 s
Cleanup	Completed	39 s

Showing 10 Items < 1 of 1 >



# Resources





SCAN ME

# Exadata Cloud at Customer X9M Data Sheet

## Oracle Exadata Cloud@Customer X9M

Run the world's most advanced database services - Oracle Autonomous Database and Oracle Exadata Database Service - on the most powerful, available, and secure database cloud platform, in your data center

**EXADATA CLOUD@CUSTOMER**

[Click Here](#)



# Oracle Cloud Migration Advisor



SCAN ME



Select your source

**ORACLE**  
Database 11g

**ORACLE**  
Database 12c

**ORACLE**  
Database 18c

**19c ORACLE**  
Database

**aws**

[Click Here](#)

# Exadata Cloud at Customer X10M Data Sheet

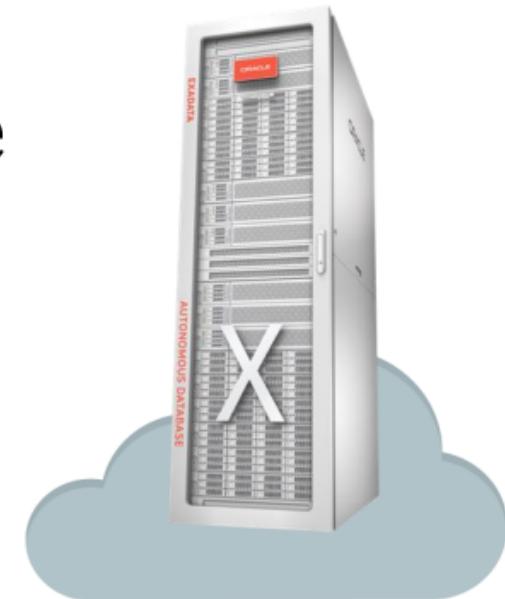


**ORACLE**

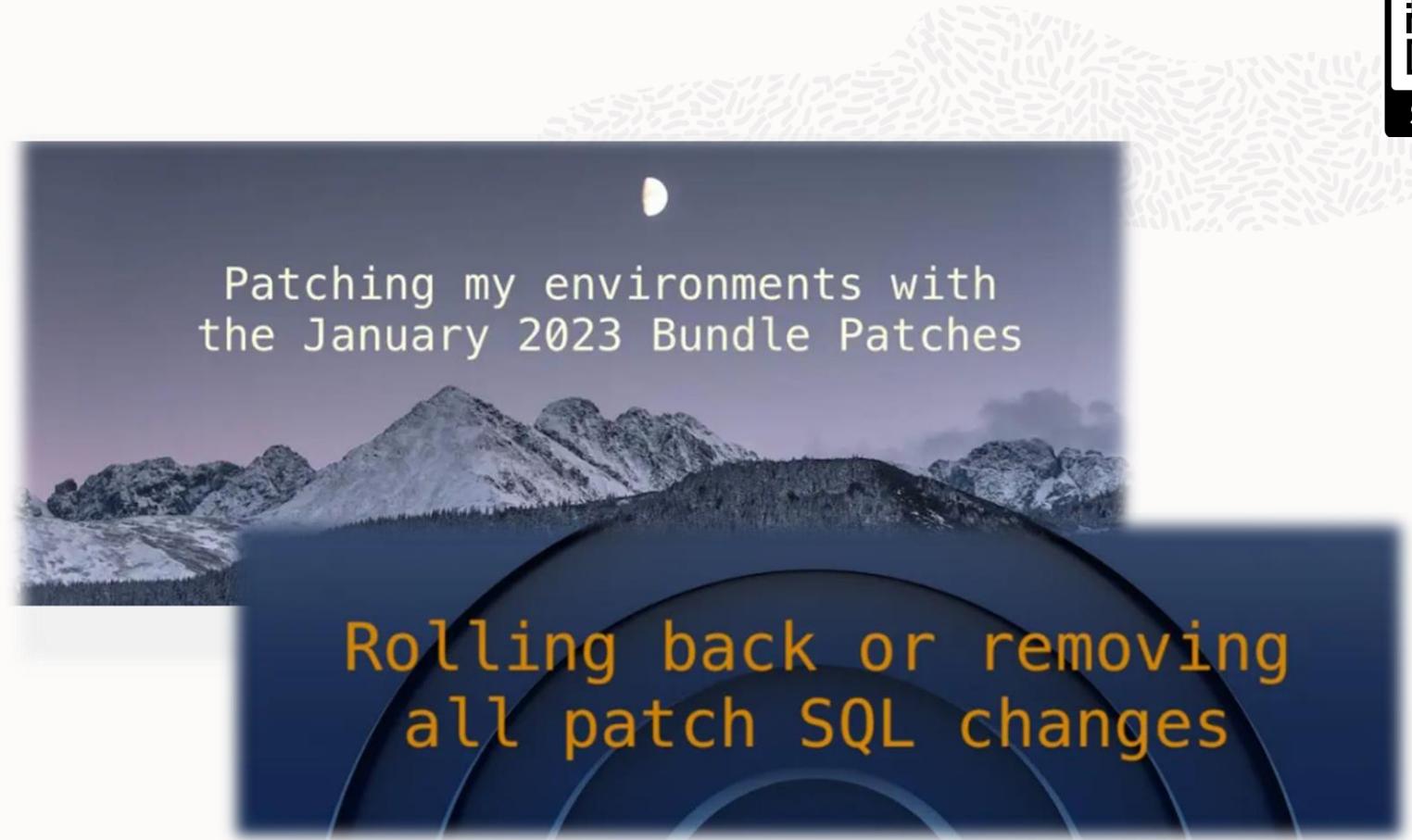
## Oracle Exadata Database Service on Cloud@Customer X10M

Run Oracle's most powerful, available, and flexible cloud database service – Oracle Exadata Database Service – in your data center on Exadata Cloud@Customer

**Exadata Database Service**



[Click Here](#)



A large, semi-transparent rectangular overlay containing text and graphics. The background of the overlay shows a scenic view of snow-capped mountains under a cloudy sky. At the top left, there is a small white circular icon. In the center, the text "Patching my environments with the January 2023 Bundle Patches" is displayed in white. At the bottom, the text "Rolling back or removing all patch SQL changes" is displayed in orange. The entire overlay has a dark blue gradient background.

Patching my environments with  
the January 2023 Bundle Patches

Rolling back or removing  
all patch SQL changes

[Click Here](#)



# Databases Are Fun

## Slides

[Main slide deck](#)



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Email Address

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SCAN ME

The screenshot shows the homepage of the website. At the top, there is a navigation bar with links: Home, About, OCM Preparation, Developed Tools, Upgrade Team, Database changelog, and English. To the left of the main content area is a cartoon character of a man with blonde hair and a blue shirt. The main title "DBA - Rodrigo Jorge - Oracle Tips and Guides" is displayed in large blue text, followed by the subtitle "Blog about Databases, Security and High Availability". Below the title, there is a large blue banner with the word "Webinars" in white. A smaller box contains the text "Generate APEX application checksum in PL/SQL". To the right of the banner is a "ABOUT" section featuring a portrait of the author, Rodrigo Jorge.

This post is also available in: Português

## Generate APEX application checksum in PL/SQL

In Oracle APEX, generating the application checksum is useful to compare if the application you have is an exact copy of the application running somewhere else. To create this checksum, you ...

Web Seminar	Duration	Released	Slides
Episode 1 Release and Patching Strategy	105 minutes	Feb 4, 2021	

[Click Here](#)

# Exadata Cloud Oracle on Architecture Center



Help Center Architecture Center exadata cloud at customer

## Oracle Architecture Center

Design, develop, and implement your cloud, hybrid, and on-premises workloads with guidance from Oracle architects, developers, and other experts versed in Oracle technologies and solutions.

Contact a Cloud Expert

Try our free hands-on labs and tutorials

Oracle Help Center Learn

### Architecture Center content:

- Reference Architectures
- Solution Playbooks
- Built & Deployed

Learn more

Reference Architecture

Deploy a containerized Jenkins CI/CD pipeline by using Terraform on Oracle Cloud Infrastructure

Built & Deployed

Tharseo IT: Migrate Ellucian Banner ERP to Oracle Cloud using FastConnect and Rackware

Automation Available

Click here



SCAN ME

# Exadata Cloud on Oracle Live Labs

## Oracle Autonomous Database Dedicated for Fleet Administrators



As fleet administrator, set up your dedicated ADB platform in the OCI and on Exadata Cloud@Customer.

⌚ 7 hrs

5463 Views

## Oracle Exadata Platform Performance Features



Get hands-on with Oracle Exadata, Exadata Database Service on Cloud@Customer, and Exadata Database (..)

⌚ 1 hr, 20 mins

717 Views

## Get Started with Oracle Exadata Database Service on Cloud@Customer



Explore getting started with Oracle Exadata Database Service on Cloud@Customer.

⌚ 1 hr

[Click Here](#)



# Stay Connected with the Latin America Partner Community!

Information, collaboration and training all in a single spot.

The [\*\*LAD Partner Community\*\*](#) is a space dedicated to our partners in Latin America, where you can find information and stay up to date on what OPN has to offer.

In the Community, you will find all the information that we communicate to our ecosystem by email.

- Explore [\*\*Categories\*\*](#): organized by grouping publications on a same topic;
- Access the [\*\*Recent Discussions\*\*](#) tab to check the latest posts published;
- Take part in [\*\*Groups\*\*](#) and interact with Oracle Experts and other partners;
- Recordings.

**Important:** An Oracle SSO account is required to access the Community and other OPN resources. If you don't have this account yet, access [this link](#) or the QR code below.

Access the Community:



Create your SSO account:





**Thank You 😊**

**Questions / Feedback / Training Suggestions**

[alexandre.af.fagundes@oracle.com](mailto:alexandre.af.fagundes@oracle.com)

[marcel.lamarca@oracle.com](mailto:marcel.lamarca@oracle.com)

**Ask for help 😊**

ORACLE

