

OCI Database Migration Service Tutorial – Online Migration from AWS RDS to Oracle Autonomous AI Database Serverless in AWS using GoldenGate Container Image

Aimed for scenarios where your application must remain online, your source database has a direct connection to OCI.

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Purpose statement

This document walks you through the steps to get started using Oracle Cloud Infrastructure (OCI) Database Migration service (DMS). You will provision a Virtual Cloud Network (VCN), an AWS RDS for Oracle Database (source) , and an Oracle Autonomous AI Database Serverless on Oracle AI Database@AWS (target) instance to perform an online database migration using DMS. In this tutorial the replication will be performed using Oracle GoldenGate for Multicloud Container Image, this will be deployed on an EC2 instance.

With DMS we make it quick and easy for you to migrate databases from on-premises, Oracle, or third-party cloud into Oracle databases on OCI.

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Introduction to OCI Database Migration service – DMS

OCI Database Migration service (DMS) provides a high performant, self-service experience to achieve migrations, which include:

- Homogeneous migration of data from Oracle databases into OCI.
- Enterprise-level logical online and offline migrations with minimal downtime into OCI targets.
- Data replication based on industry leading GoldenGate.

DMS Documentation:

Please review the documentation [here](#).

Prerequisites for this guide

- There is an existing AWS RDS for Oracle instance with Oracle Enterprise Edition, version 19 was selected for this exercise. The following [link](#) contains more information on how to create one.
 - Database archiving mode set to ARCHIVELOG, this happens automatically when automated backups are enabled by setting the backup retention period to a value greater than 0.
 - Set the instance as Publicly accessible.
 - The architecture selected for this exercise is Non-CDB. Learn more about RDS for Oracle architecture at the following [link](#).
 - Amazon S3 integration is enabled, the database can transfer files between RDS for Oracle DB instance and an Amazon S3 bucket. To learn more, check the following [link](#).
- Complete the [onboarding](#) process within your AWS account. To begin onboard, contact your Oracle representative and request a Private Offer. After you agree on pricing, terms and conditions, you complete the purchase through AWS Marketplace. After the purchase is complete, you link your AWS account with an OCI tenancy. This is called multicloud linking.
- After you complete onboarding, you can begin provisioning the Oracle AI Database@AWS system.
- Provision an [ODB network](#) and [Autonomous AI Database Serverless](#).
- Complete the [ODB Peering Connection](#) step with an existing VPC, this VPC will be used with the EC2 and RDS instances.
- Review DMS port requirements [here](#).

Task 0 – Understand New DMS Concepts

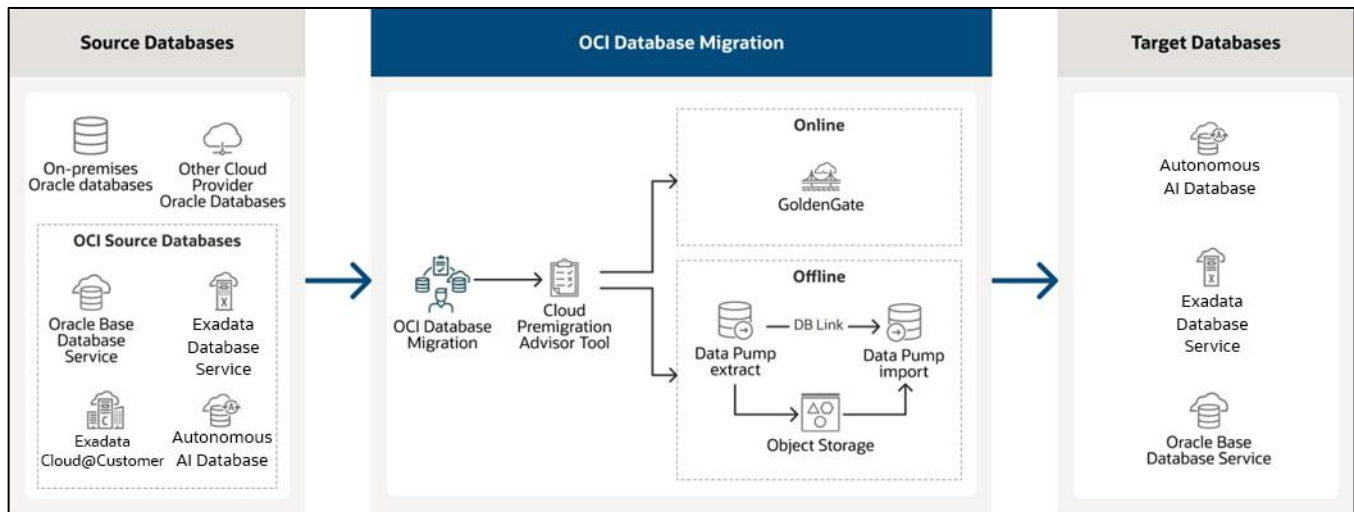
DMS provides a fully managed approach to migrating databases from various locations into OCI-hosted databases.

Migrations can be either one of the following modes:

- **Offline:** The Migration makes a point-in-time copy of the source to the target database. Any changes to the source database during migration are not copied, requiring any applications to stay **offline** for the duration of the migration.
- **Online:** The Migration makes a point-in-time copy and replicates all subsequent changes from the source to the target database. This allows applications to stay **online** during the migration and then be switched over from source to target database.

DMS supports both offline and online mode. For Oracle migrations the source databases can be located on-premises, in 3rd party clouds, or on Oracle OCI. The supported targets can be Oracle Autonomous AI Database dedicated Exadata infrastructure or serverless, Oracle Base Database Service and Exadata Database Service on dedicated infrastructure.

The DMS service runs as a managed cloud service separate from the user's tenancy and resources. The service operates as a multi-tenant service in a DMS Service Tenancy and communicates with the user's resources using Private Endpoints (PEs). PEs are managed by DMS and are transparent to the user.



DMS Simplified Topology

Compartment: A compartment is a collection of related resources (such as cloud networks, compute instances, or block volumes) that can be accessed only by those groups that have been given permission by an administrator in your organization. For example, one compartment could contain all the servers and storage volumes that make up the production version of your company's Human Resources system. Only users with permission to that compartment can manage those servers and volumes.

Data region: A geographical region that's associated with one or more data centers. When you sign up for an Oracle Cloud account, you select a default data region, where your services will be hosted.

DMS Control Plane: Used by DMS end user to manage Migration and Database Connection objects. The control plane is exposed through the DMS Console UI as well as the Rest API.

DMS Data Plane: Managed by DMS Control Plane and transparent to the user. The GGS Data Plane manages ongoing migration jobs and communicates with the user's databases and GoldenGate instance using PEs. The DMS data plane does not store any customer data, as data flows through GoldenGate and Data Pump directly within the user's tenancy.

Assessment: Uses the metadata provided by the customer to:

- Recommend the best migration type.

- Identify incompatible objects between source and target and provides relevant information about the issue, impact, and recommended action. Some checks provide a fix-up script and allows the customer to provide acceptance on the same.
- Prepares the source and target databases.
- Optionally, allows single table migration testing to validate end to end configuration.

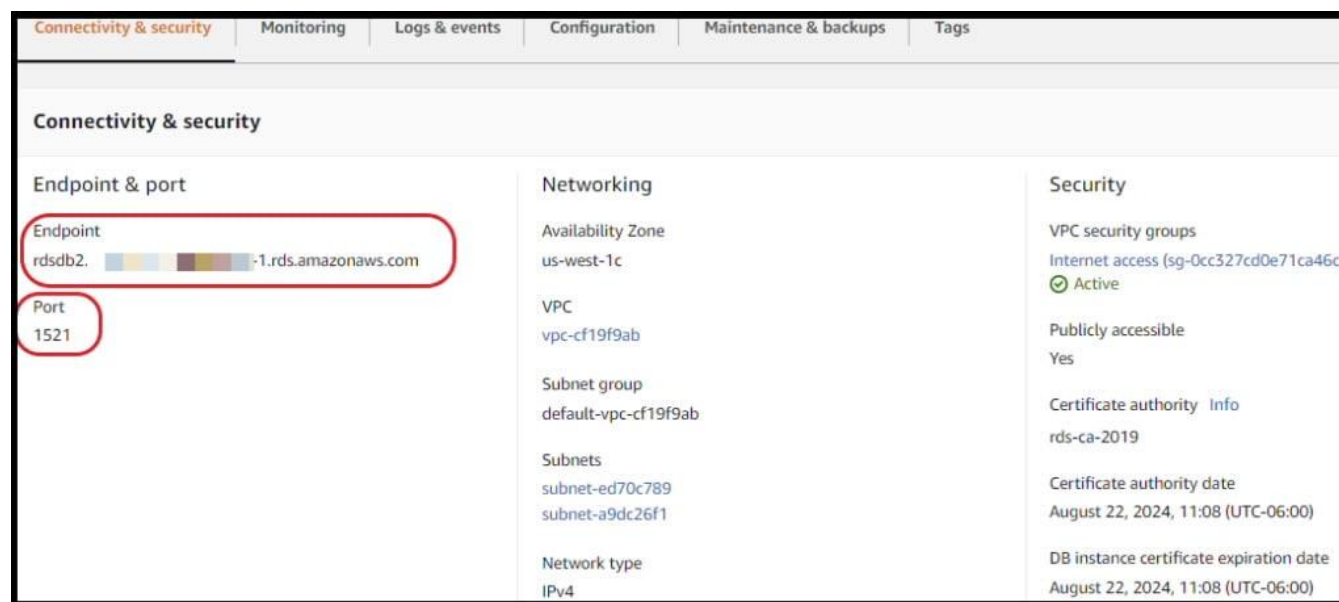
Migration: Contains metadata for migrating one database. It contains information about source, target, and migration methods and is the central object for users to run migrations. After creating a migration, a user can validate the correctness of the environment and then run the migration to perform the copy of database data and schema metadata from source to target.

Database Connection: A **Database Connection** represents information about a source or target database, such as connection and authentication credentials. DMS uses the OCI Vault to store credentials. A **Database Connection** is reusable across multiple Migrations.

Task 1 - Identify the AWS RDS instance details

Locate the endpoint (DNS name) and port number for the RDS DB instance.

Navigation: Amazon RDS homepage>Databases>Your DB> **Connectivity & security tab:**

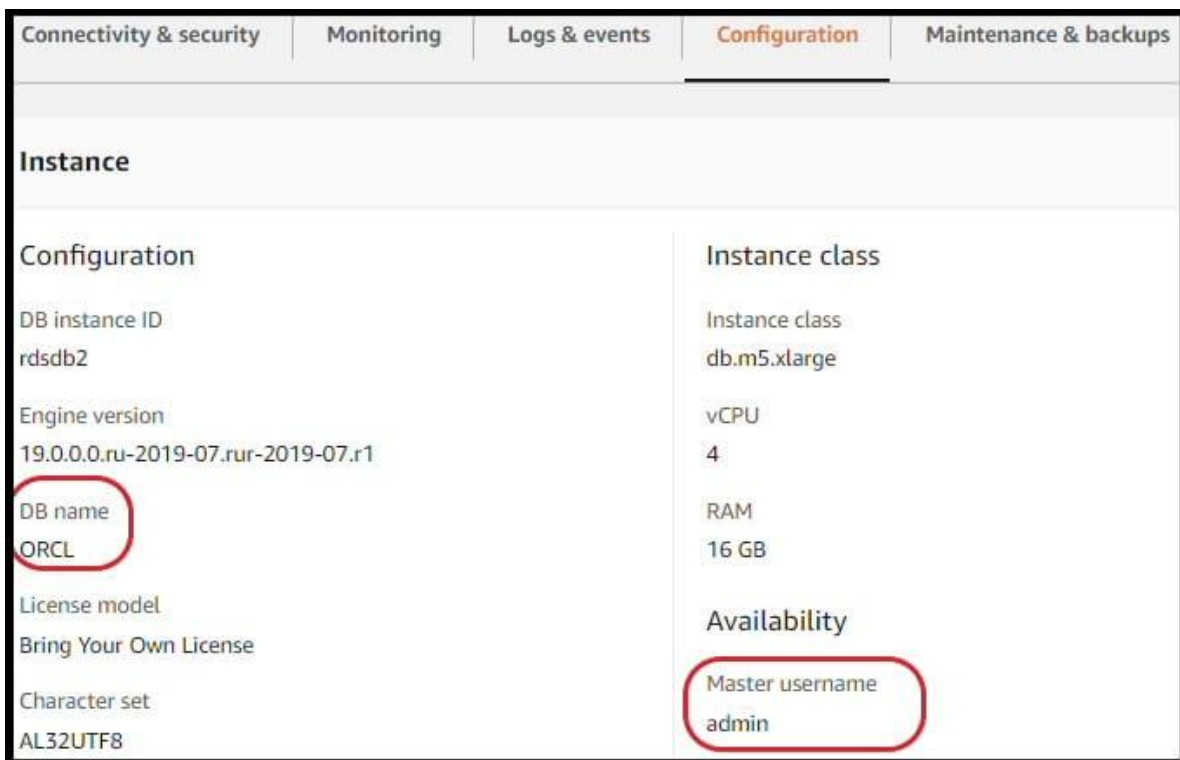


* OCI Database Migration needs an IP address, the following command nslookup + RDS Private Endpoint should show a similar response as the following, take note of the IP address:

```
nslookup .us-east-1.rds.amazonaws.com
Name: .us-east-1.rds.amazonaws.com
Address 1: 44.152.184.ec2-44-152-184.compute-1.amazonaws.com
```

In the **Configuration** tab, locate the following information:

- **DB name** (not the DB instance ID)
- **Master username**



Navigate to the AWS Console Home>S3>**buckets**:

Identify the bucket **Name** and **Region**.

Task 2 - Prepare the AWS RDS Oracle Database

This task prepares required user accounts and settings for migration in the source database. It assumes default settings in the database. If you changed the default settings, further settings might be necessary.

The following parameters need to be set with the **Parameter groups** functionality:

- STREAMS_POOL_SIZE=2147483648
- ENABLE_GOLDENGATE_REPLICATION=TRUE
- GLOBAL_NAMES=FALSE

To see how Parameter groups work please refer to the following [link](#).

The next step will prepare the source database. It will create or unlock GGADMIN user in the PDB and will provide all the required grants, this user will be provided during **source database connection creation**:

- 1) Download the preparation script from database creation connection screen.
- 2) Locate the file and run it dms-userprep-analyze.sql
 - Provide a password for the GGADMIN user.

You should see an output like this, this example ran in SQL Developer.

```
-- Privilege CREATE ANY SEQUENCE already granted TO DMSROLE
-- Privilege CREATE ANY TRIGGER already granted TO DMSROLE
-- Privilege CREATE ANY TYPE already granted TO DMSROLE
-- Privilege CREATE ANY VIEW already granted TO DMSROLE
-- Privilege ALTER ANY TABLE already granted TO DMSROLE
-- Privilege ALTER ANY INDEX already granted TO DMSROLE
-- Privilege ALTER ANY CLUSTER already granted TO DMSROLE
-- Privilege ALTER ANY INDEXTYPE already granted TO DMSROLE
-- Privilege ALTER ANY OPERATOR already granted TO DMSROLE
-- Privilege ALTER ANY PROCEDURE already granted TO DMSROLE
-- Privilege ALTER ANY SEQUENCE already granted TO DMSROLE
-- Privilege ALTER ANY TRIGGER already granted TO DMSROLE
-- Privilege ALTER ANY TYPE already granted TO DMSROLE
-- Privilege CREATE DATABASE LINK already granted TO DMSROLE
-- Privilege ALTER SYSTEM already granted TO DMSROLE
-- Privilege ALTER DATABASE already granted TO DMSROLE
GRANT DMSROLE TO GGADMIN;
-- Privilege SELECT ON V_$SESSION already granted TO GGADMIN
-- Privilege SELECT ON V_$TRANSACTION already granted TO GGADMIN
-- Privilege SELECT ON V_$DATABASE already granted TO GGADMIN
--
--
-- Execution finished. See summary below.
--
--#####
--      Execution Summary
--#####
-- Total attempted: 1
-- Succeeded      : 1
-- Skipped        : 0
-- Failed         : 0
-- End of execution summary

PL/SQL procedure successfully completed.
```

The next steps add a user HR01 with a sample table and data. If your database already contains data for migration, you can skip these steps.

Create the script file create_hr01.sql with the following content:

```
DROP USER HR01 CASCADE;
CREATE USER HR01 IDENTIFIED BY HR##hr01123;
GRANT CONNECT,RESOURCE,CREATE TABLE,CREATE SEQUENCE to HR01;
GRANT CREATE ANY PROCEDURE to HR01;
ALTER USER HR01 quota unlimited on users;
CREATE TABLE HR01.EMPL (col1 number, col2 varchar2(9), col3
varchar2(100), col4 timestamp);
ALTER TABLE HR01.EMPL ADD CONSTRAINT EMPL_i1 PRIMARY KEY (col1,col2);
```

Create the script file data_hr01.sql with the following content:

```
SET ECHO OFF;
SET HEADING OFF;
SET FEEDBACK OFF;
SET SERVEROUTPUT ON;
DECLARE
    SCN      HR01.EMPL.COL1%TYPE;
    RND1     HR01.EMPL.COL2%TYPE;
    RND2     HR01.EMPL.COL3%TYPE;
    RND3     HR01.EMPL.COL4%TYPE;
    ROWSNUM  NUMBER;
```

```

        DBNAME VARCHAR2(60);
        i        INTEGER;
BEGIN
    i := 0;
    LOOP
        SELECT COUNT(*) INTO ROWSNUM FROM HR01.EMPL;
        SELECT DBMS_RANDOM.STRING('P', 9) INTO RND1 FROM DUAL;
        SELECT DBMS_RANDOM.STRING('P', 10) INTO RND2 FROM DUAL;
        SELECT TO_DATE(TRUNC (DBMS_RANDOM.VALUE (2451545, 5373484)), 'J')
        INTO RND3 FROM DUAL;
        INSERT INTO HR01.EMPL(col1, col2, col3, col4) VALUES (ROWSNUM, RND1,
        RND2, RND3);
        COMMIT;
        DBMS_OUTPUT.PUT_LINE('Number of rows = ' || ROWSNUM);
        IF ( i >= 1000 ) THEN
            EXIT;
        END IF;
        i := i + 1;
    END LOOP;
END;
/

```

Enter the following commands:

```
sqlplus sys/ <db password>@ <db private ip>/ <db pdb service> as sysdba
```

In SQL Plus enter the following commands:

```

SQL> @create_hr01.sql
DROP USER HR01 CASCADE    (You can ignore this error)
*
ERROR at line 1:
ORA-01918: user 'HR01' does not exist

SQL> @data_hr01.sql
Number of rows = 0
[...]
Number of rows = 1000

SQL> CREATE JAVA SOURCE NAMED "Welcome" AS
public class Welcome {
    public static String welcome() {
        return "Welcome World"; /*This will allow to test the assessment*/
    }
};
/

SQL> quit

```

Your source DB now has a user HR01 with a table EMPL that has 1000 rows.

Task 3 – Create an Oracle Autonomous AI Database Serverless on Oracle AI Database@AWS as Target

The following task is optional since an Autonomous AI Database Serverless should already be present.

1. On the AWS search for Oracle Autonomous AI Database Click on Create
2. Enter the display name: TargetATP
3. Enter the display name: TargetATP
4. Workload type: Transaction process
5. For this testing we are leaving the default values on the configuration tab: Data Warehouse as workload type and database version 19c.
6. Provide a password for the admin user
7. On the Networking access: Private endpoint access only
8. Select your previously created ODB network (refer to the prerequisites section of this guide)
9. Review and click "Create autonomous AI database."

Task 4 – Prepare Target

The next steps will connect to the target Oracle Autonomous AI Database Serverless instance, enable, and prepare the standard GGADMIN user. **The preparation script needs to be downloaded** and placed wherever accessible.

You need to download the wallet, modify the sqlnet.ora so that it points to the wallet location, this step is not covered in this guide.

Make sure that your Autonomous AI Database mTLS authentication option is marked as 'Not required', you can check this in the **network** details of your Autonomous AI Database:

Click Database connection/ Connection settings section and select TLS from the TLS authentication list of values, then copy the connection string for one of the TNS names.

There are different approaches to connect to the database, if you have an instance in the same VCN then you can SSH into that machine, use it as a jump host and connect to your target, once connected we should be able to run SQL commands:

```
ssh -i <private_key_file> opc@<dbnode_public_ip>
sudo su - oracle
```

```
export TNS_ADMIN=/home/oracle/<Directory where you placed the wallet>
```

Now connect to sqlplus:

```
sqlplus admin/ <ATP password>@ ATP connection string
```

In SQL Plus enter the following commands:

```
SQL> @ dms-userprep-analyze.sql
SQL> PL/SQL procedure successfully completed.
SQL> quit
```

For connection instructions on the AWS side, you can review the next [link](#). Once connected you can open the above-mentioned script and execute it.

Task 5 – Install GoldenGate on an EC2 instance

Navigate to: EC2>Instances>Launch an instance

- Give a name and select Quick start Red Hat and Instance type t2.large.
- Create a Key pair.
- Select a VPC peered with the OBD network.
- The security group should
- Configure storage, select 40 GiB and click Launch instance

Go to [Oracle Container Registry \(OCR\)](#).

Navigate to [goldengate-oracle-multicloud-migrations](#).

Sign in using your Oracle Account to accept the license agreement for the Oracle container you have selected.

The deployment must be named Marketplace as this is required by DMS workflow.

This guide uses Podman and the connection to the EC2 instance is through SSH:

Runtime selection: Oracle recommends running the container in non-root mode and notes that Oracle Enterprise Linux uses Docker-compatible Podman to manage OCI containers. This guide applies the same rootless approach on RHEL: Podman does not require a permanent daemon, can run as ec2-user, and provides equivalent pull, run, exec, logs, port, volume, and environment-variable operations. The GoldenGate image does not change; only the runtime that executes it changes.

Install Podman

```
sudo dnf install -y podman unzip bind-utils

echo 'net.ipv4.ip_unprivileged_port_start=443' | \
  sudo tee /etc/sysctl.d/99-podman-rootless-ports.conf

sudo sysctl --system
podman version
```

Authenticate and download the image

Replace REPLACE_WITH_ORACLE_EMAIL. The password is entered without being displayed and is not written to shell history.

```
read -s -p "Oracle Container Registry password: " OCR_PASSWORD
echo
printf '%s' "$OCR_PASSWORD" | podman login \
  container-registry.oracle.com \
  --username "REPLACE_WITH_ORACLE_EMAIL" \
  --password-stdin
unset OCR_PASSWORD

podman pull \
  container-registry.oracle.com/goldengate/goldengate-oracle-multicloud-
  migrations:23.26.2.0.2
```

Create volumes and the Marketplace deployment

```
podman volume create ogg-marketplace-u02
podman volume create ogg-marketplace-u03
```

```
read -s -p "New password for oggadmin: " OGG_ADMIN_PASSWORD
echo
```

```
podman run -d \
  --name ogg-dms \
  --restart unless-stopped \
  -p 443:8443 \
  -e OGG_ADMIN=oggadmin \
  -e OGG_ADMIN_PWD="$OGG_ADMIN_PASSWORD" \
  -e OGG_DEPLOYMENT=Marketplace \
  -v ogg-marketplace-u02:/u02 \
  -v ogg-marketplace-u03:/u03 \
  container-registry.oracle.com/goldengate/goldengate-oracle-multicloud-
migrations:23.26.2.0.2
```

```
unset OGG_ADMIN_PASSWORD
```

The oggadmin password must comply with the image policy: 8 to 30 characters, including an uppercase letter, lowercase letter, number, and supported special character.

Keep the container running without SSH

```
sudo loginctl enable-linger ec2-user
loginctl show-user ec2-user -p Linger
podman start ogg-dms
sleep 60
podman ps
```

Expected result: Linger=yes and the container is healthy. Close the SSH session and verify again to demonstrate persistence.

Install the ADB-S wallet

Download and extract the target database wallet. Transfer the files to /home/ec2-user with WinSCP or SCP. Do not include passwords in commands or in this document.

```
podman exec --user 0 ogg-dms mkdir -p /u02/Deployment/etc/adb
```

```
for FILE in cwallet.sso ewallet.p12 ewallet.pem keystore.jks \
ojdbc.properties sqlnet.ora tnsnames.ora truststore.jks README; do
  if [ -f "/home/ec2-user/$FILE" ]; then
    podman cp "/home/ec2-user/$FILE" \
      "ogg-dms:/u02/Deployment/etc/adb/$FILE"
  fi
done
```

```
podman exec --user 0 ogg-dms \
sed -i 's#?/network/admin#/u02/Deployment/etc/adb#g' \
/u02/Deployment/etc/adb/sqlnet.ora
```

```
podman exec --user 0 ogg-dms \
chown -R ogg:ogg /u02/Deployment/etc/adb
```

```
podman exec --user 0 ogg-dms chmod 700 /u02/Deployment/etc/adb
podman exec --user 0 ogg-dms \
find /u02/Deployment/etc/adb -type f -exec chmod 600 {} \;
```

Recommended validation sequence

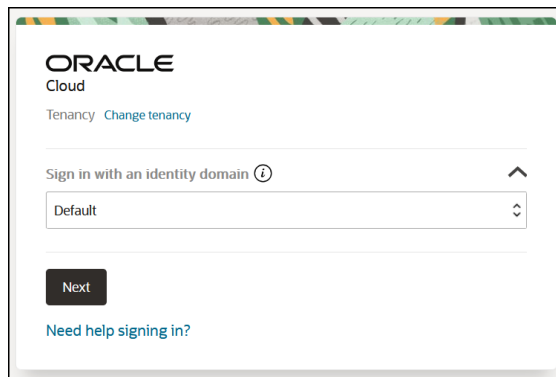
1. Confirm the VPC, subnet, route table, AZ ID, and rules before launching EC2.
2. From EC2, resolve the ADB-S hostname and connect to TCP 1522.
3. From EC2, connect to TCP 1521 on the RDS endpoint.
4. Install Podman, download the image, and create the Marketplace deployment.
5. Confirm GoldenGate is healthy and HTTPS 443 works from an authorized client.
6. Repeat DNS and port tests from the container.
7. Load the wallet and test SQL*Plus from the container.

Visit [Oracle Container Registry \(OCR\)](#) for instructions on how to use this image

Task 6 – Sign in to OCI portal

- On the AWS portal search for Oracle Database@AWS dashboard > Click your Autonomous AI Database Serverless.
- Navigate to OCI resources tab and click again in your database link name.
- Log in using your OCI credentials.
- In the OCI console title bar change region if applicable.

The screenshot displays the Oracle Database@AWS console interface. The left sidebar shows a navigation menu with categories like 'Exadata Database Service on Dedicated Infrastructure', 'Autonomous Database Service on Exascale Infrastructure', and 'Autonomous Databases'. The main content area is titled 'TargetATP' and includes tabs for 'Summary' and 'OCI resources'. The 'OCI resources' tab is active, showing details for the database name 'TargetATP' and its resource anchor name 'default-oci-resource-anchor'. Below this, there are sections for 'Resource allocation' (ECPU count: 2, Storage: 1024 GB) and 'Maintenance' (Patch level: Regular, Next maintenance: Aug 23, 2026, 14:00:00 GMT-06:00). The interface is clean and professional, with a blue header and a white background.



Task 7 – Have the Administrator Set Required Permissions

The following permissions need to be set in OCI to have access to the necessary objects unless you have administrative privileges. The following permissions assume that the user is part of group DMS_LA and all resources are created in a compartment called DMS_LA. Have your tenancy administrator set these permissions. Review the following documentation on [Required Policies](#) if required

PERMISSIONS REQUIRED BY DMS TO USE DATABASES, VAULTS, AND NETWORKING

- Allow group DMS_LA to manage virtual-network-family in compartment DMS_LA
- Allow group DMS_LA to manage vaults in compartment DMS_LA
- Allow group DMS_LA to manage keys in compartment DMS_LA
- Allow group DMS_LA to manage database-family in compartment DMS_LA
- Allow group DMS_LA to manage autonomous-database-family in compartment DMS_LA
- Allow group DMS_LA to manage object-family in compartment DMS_LA
- Allow group DMS_LA to manage secret-family in compartment DMS_LA
- Allow group DMS_LA to manage goldengate-connections in compartment DMS_LA
- Allow group DMS_LA to manage odms-connection in compartment DMS_LA
- Allow group DMS_LA to manage odms-migration in compartment DMS_LA
- Allow group DMS_LA to manage odms-job in compartment DMS_LA
- Allow group DMS_LA to manage manage odms-assessment in compartment DMS_LA

Task 8 – Create Vault

The following task is optional if a Vault is already present.

In the OCI Console Menu, go to **Identity & Security > Vault**.

Pick a compartment on the left-hand side **Compartment** list.

Press Create Vault.

In the **Create Vault** dialog, enter a Name such as **DMS_Vault**.

Close the dialog by pressing **Create Vault**.

Wait until the state of the new vault is **Active**.

Click on the new vault and press **Create Key** in the **Master Encryption Keys** list.

In the **Create Key** dialog, enter a Name such as **DMS_Key**.

Close the dialog by pressing **Create Key**.

Task 9 - Create a database connection for the RDS source database

Database connection resources enable networking and connectivity for the source and target databases.

In the OCI Console Menu, go to Migration & Disaster Recovery> Database Migration > Database Connections.

Press Create connection.

In the page Database Details, fill in the following entries, otherwise leave defaults:

- Name: **RDS**
- Type: **Amazon RDS for Oracle**
- Vault: **DMS_Vault**
- Encryption Key: **DMS_Key**
- Database connection string: Provide the RDS public IP, port, and the database name, i.e:
 - a. 44.X.152.184:1521/ORCL
- Initial load database username: **ggadmin**
- Initial load database password: **<password>**
- Don't check create private endpoint option.

Press **Create**

The screenshot shows the 'Create connection' dialog in the OCI Console. The dialog is divided into several sections: 'Name' (RDS), 'Description' (empty), 'Compartment' (dropdown), 'Type' (Amazon RDS for Oracle), 'Vault details' (Vault in compartment: DMS_Vault, Encryption key in compartment: DMS_Key), 'Connection details' (Database connection string: .184:1521/ORCL), 'Initial load database username' (ggadmin), 'Initial load database password' (masked), 'Use different credentials for replication' (checkbox), 'Database wallet' (Drop a file or select a file), 'Network connectivity' (Create private endpoint to access this database: checkbox), and 'Advanced options' (expandable). The 'Create' button is at the bottom right.

Once your newly created connection is in Active state, test it by clicking “Actions >Test connection” :

Test connection

Diagnostic tests passed, connection to your database was successful.

Close

Task 10 – Create Database Connection for Target

In the OCI Console Menu, go to Migration & Disaster Recovery > Database Migration > Database Connections. Press Create connection.

On the section Database Details, fill in the following entries, otherwise leave defaults:

- Name: **TargetATP**
- Type: **Oracle Autonomous AI Database**
- Vault: **DMS_Vault**
- Encryption Key: **DMS_Key**

Select the Autonomous AI Database name in your compartment i.e: **TargetATP**

- Initial load database username: **GGADMIN**
- Initial load database password: **<Admin password>**
- Network connectivity: **Create** private endpoint to access this database
- Subnet: Select your previously created private subnet ODB network.
 - Make sure the selected subnet allows connections through port 1522.

Press **Create**

Create connection

Name

Required

Description

Compartment

Type

Oracle Autonomous AI Database

Vault details

Vault in compartment

Vault

DMS_Vault

Encryption key in compartment

Encryption key

DMS_Key

Connection details

Enter connection details for Oracle Autonomous AI Database.

Autonomous AI Database in compartment

Autonomous AI Database

TargetATP

Initial load database username

ggadmin

Initial load database password

••••••••••••••••

🗪

Use different credentials for replication

☐

Network connectivity

Create private endpoint to access this database

☒

Private endpoints enable connection to databases with private IPs. Check this box if your database has a private IP address. [Learn more](#)

Subnet in compartment

Subnet

private subnet-VCN_DMS (in VCN_DMS VCN)

Cancel

Create

Test your connection as in the previous task.

Task 11 – Create Assessment

In the OCI Console Menu, go to Migration & Disaster Recovery> Database Migration > Assessments.

Press **Create Assessment** and provide the following details:

- Name: DMS Assessment
- Source database: Select **RDS**
- Target database: Select **TargetATP**

Migration options (leave defaults)

- Data size for migration: Less than 1 GB
- DDL changes expected: No

Click create to create and run the assessment.

Click Confirm in step 1. Determine recommended migration method.

- Select online migration and click confirm.

Click Run in step 2, Analyze compatibility.

- Click on the link of *Checks require review*
- Review and Approve the Java Objects and Java Sources check, this will enable the JAVAVM on your target database, changes will be applied during “Prepare target database step”.

Review issues

Name	Java Objects
Status	Pending approval
Issue	Java objects will not migrate by default.
Impact	When the JAVAVM feature is not enabled on the target system, any applications relying on Java objects will fail.
Action	Approve fixup execution on target instance database
Objects	1

Objects to review

OWNER	OBJECT_NAME	OBJECT_TYPE	STATUS
H_J_S_31	Welcome	JAVA CLASS	INVALID

Page 1 of 1 (1 - 1 of 1 total items)
Items per page 10

Cancel
Previous issue
Next issue
Approve

If your database is missing settings this step will identify them, resolve any Manual action required ones following the onscreen instructions i.e :

OGG Replication Not Enabled : ALTER SYSTEM SET ENABLE_GOLDENGATE_REPLICATION=TRUE SCOPE=BOTH;

OGG Minimal Supplemental Logging Not Enabled: ALTER DATABASE ADD SUPPLEMENTAL LOG DATA;

Then click Run again the step 2, once fixed the step should complete.

Click Configure on step 3, Complete migration configuration.

- Choose a name for the Migration i.e DMS Migration
- Select **Data Pump via Amazon Simple Storage Service** as transfer medium
- Source Data Pump settings - Amazon S3 bucket:
 - Name
 - Region
 - Key id
 - Access key
 - * These values are obtained from the AWS side.

- Export directory object name, i.e: dumpdir
- Click configure.

Configure Migration

Create a migration and specify how the migration should run, select the source and target databases, and then configure the data transport settings. [Learn more.](#)

Target database connection Primary instance

Transfer medium for initial load

Data Pump via Amazon Simple Storage Service
 Use Data Pump to temporarily store the exported database in an S3 bucket.

Data Pump via database link
 Use a direct SQL*Net connection between the source and the target databases.

Job mode
Schema

Source Data Pump settings

Amazon S3 bucket

Name
 Required

Region
 Required

Key ID
 Required

Access key
 Required

Export directory object name
 Required

Cancel **Configure**

OCI DMS takes care of the GoldenGate deployment and orchestration in OCI, the following steps are only required if the GoldenGate instance needs to be deployed in AWS. This will provide the customer with full access and control of GoldenGate, the extract and replicat will remain on the AWS customer side.

Navigate to Advanced options>Replication> GoldenGate instance:

- Enable “Use Marketplace GoldenGate instance”
- Populate GoldenGate hub URL i.e : https://3.91.245.180
- GoldenGate administrator username:oggadmin
- GoldenGate administrator password
- Select the previously created Vault and Encryption key

GoldenGate instance

Use Marketplace GoldenGate instance



You must use 'Marketplace' for your GoldenGate deployment name, when using this advanced option.

GoldenGate instance OCID

GoldenGate hub URL

GoldenGate administrator username
oggadmin

GoldenGate administrator password
●●●●●●●●●●●●●●●●



Vault in compartment



Vault



Encryption key in compartment



Encryption key



Click Configure.

In the next step "Prepare source database, no review is expected, if you get some review them, follow the instructions and proceed.

- Click Review checks in step 5, Prepare target database.
- Check the "I have reviewed the SQL script and am aware of the changes it will apply to my database"
- Click Run SQL, this should enable the JAVAVM in your target.
- Your target database needs to be restarted to take effect:
 - Oracle AI Database>Autonomous AI Database> Select your database> Mora actions menu> Click restart
- Go back to the Assessment and click Recheck on step 5, Prepare target database, the step should complete this time.

5. Prepare target database

Java Objects Approved Review

Java Sources Approved Review

Preparation script

▲ Review script

The following script prepares and will make changes to your database. Ensure that you review it completely before running it. After running the script the database needs to be restarted.

SQL script

Copy

```
5 --
6 -- Fixup Script Execution Context Notes:
7 --     Execute this Fixup on the Target Instance
8 --     The instance must be restarted after applying this Fixup
9 --
10 -- Action:
11 --     Enable the JAVAVM feature on the target system by executing this SQL
12 --     and then restart your instance
13 --
14 -- BEGIN
```

☒ I have reviewed the SQL script and am aware of the changes it will apply to my database

Run SQL

Download SQL

Close

- Go to step 7, Create Migration and click the Create migration button.
 - You should see the following banner at the top, click view details to go to the migration object.

▲ Information

The assessment has created the migration. Go to the migration details to view the migration progress.

[View details](#)

Task 12 – Run Migration

From the Progress tab, click Start to initiate the actual data movement workflow. Select the phase Monitor replication Lag in the require user input after list, this will cause the replication to run continuously until the migration is resumed.

Press Start to begin the Migration.

Start migration

Are you sure you want to start migration **DMS Migration**?

Require user input after a phase before proceeding

☒

Phase to pause after
Monitor replication lag

Cancel
Start

The progress tab will display all the phases and their status, phases are updated as the migration progresses.

DMS Migration

Waiting

Start

More actions

Migration

Status information

Migration paused at phase "Monitor replication lag" (Phase 8 of 10) and waiting for user to resume.

Details

Progress

Migration history

Selected objects

Monitoring

Work requests

Tags

Progress

Search and Filter

Search

Resume

Name	Status	Duration	
Validate	Completed	45 s	...
Prepare	Completed	2 m 8 s	...
Export initial load	Completed	1 m 20 s	...
Upload data	Completed	31 s	...
Import initial load	Completed	40 s	...
Post initial load	Completed	2 s	...
Prepare replication target	Completed	2 m 5 s	...
Monitor replication lag	Completed	1 s	...
Switchover	Pending	—	...
Cleanup	Pending	—	...

When the migration has reached the state to wait for user input, the migration changes to Waiting state. This is the point where a migration user would stop the source application so that no more transactions are applied to the source DB. You can now click the **Resume** button to complete the replication.

Resume

Are you sure you want to resume job-20260816043709

Require user input after a phase before proceeding

☐

Phase to pause after
Switchover

CancelResume

In the Resume migration dialog, disable “Require user input after a phase before proceeding” and press **Resume**. The Switchover phase will gracefully stop replication and signal the target application to initiate transactions to the target DB, then it will complete the Cleanup phase. The migration status will change to **Succeeded** when finished.

DMS Migration

Succeeded

Migration

DetailsProgressMigration historySelected objectsMonitoringWork requestsTags

Progress

Your migration is now completed!

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