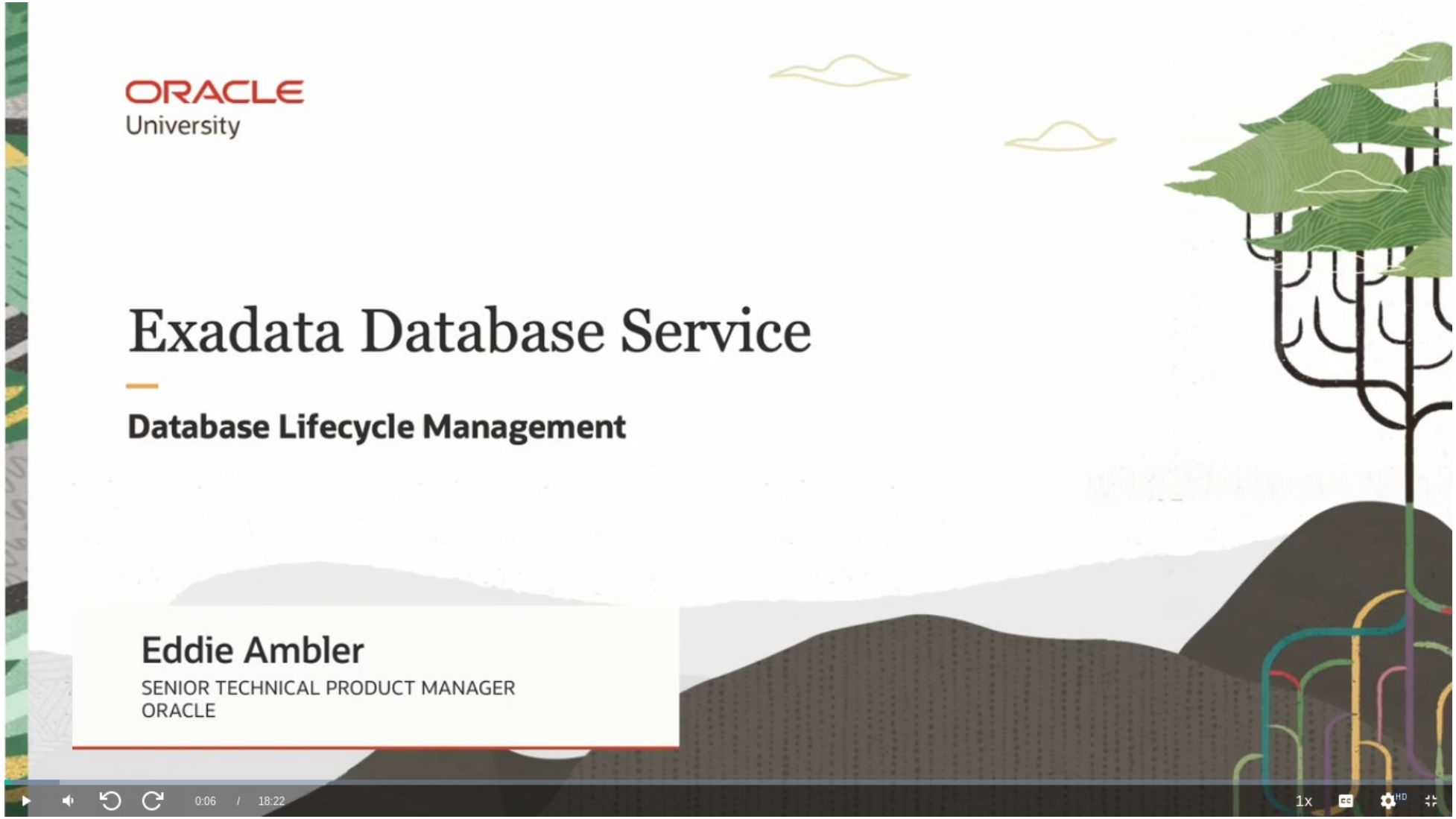
ORACLE
University
Exadata Database Service
Database Lifecycle Management
Eddie Ambler
SENIOR TECHNICAL PRODUCT MANAGER
ORACLE
0:06 / 18:22
1x
HD

Objectives

After completing this lesson, you should be able to:

- Create Custom Database & Grid Infrastructure Software Images
- Create Database Home
- Create Database
- Perform PDB Management
- Enable Data Guard
- Perform User-Managed Maintenance Updates

0:58 / 18:22 1x


Exadata Database Service
Create Custom Software Image
1:06 / 18:22
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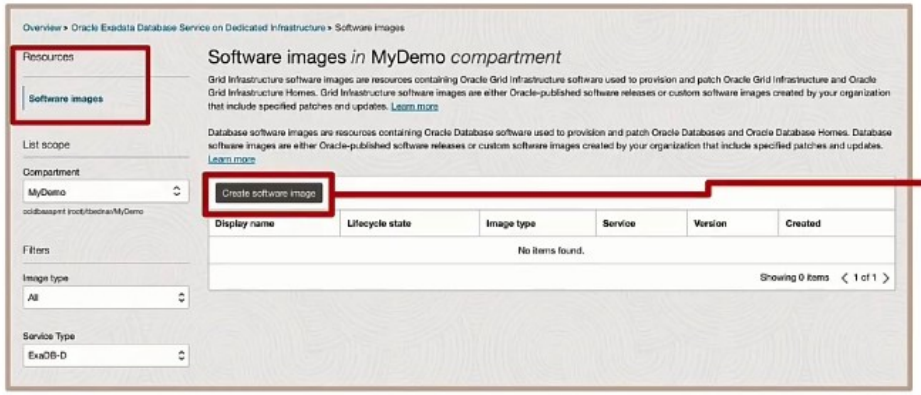
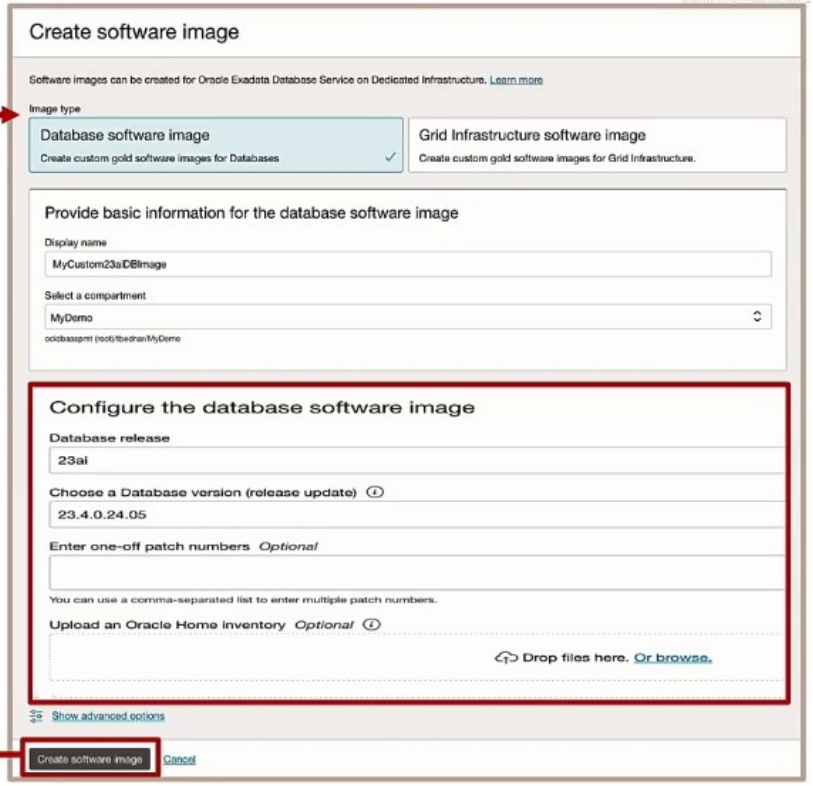
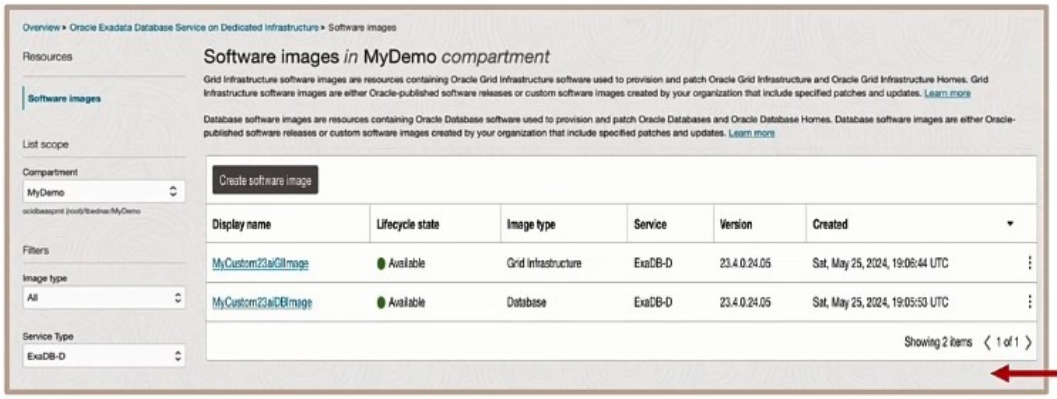
Create Custom Database & Grid Infrastructure Images







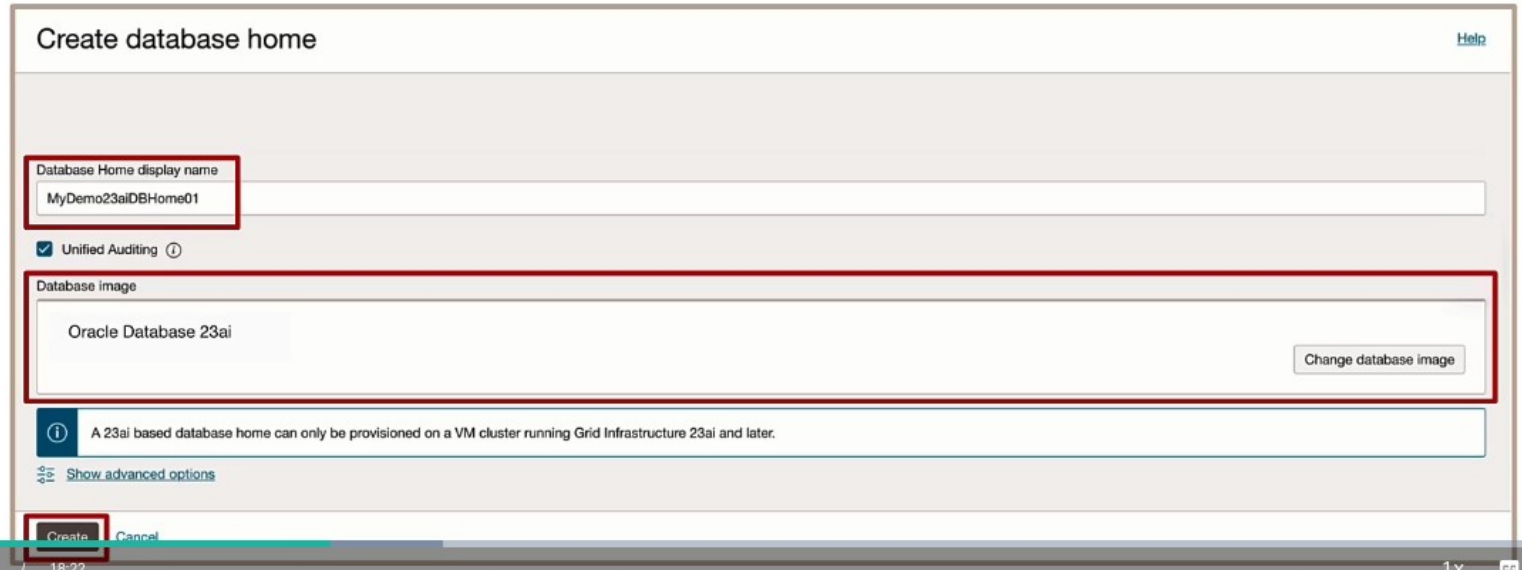
4:35 / 18:22
1x


Exadata Database Service
Create Database Home
4:56 / 18:22
1x

Create Database Home

Create a Database Home

- Provide the **Database Home display name**
- Select the **Database Image Version** to use
  - Select from **Oracle Provided or Custom** Database Software Images
- Click on **Create button** to proceed



5:53 / 18:22 1x


Exadata Database Service
Create Database
5:58 / 18:22
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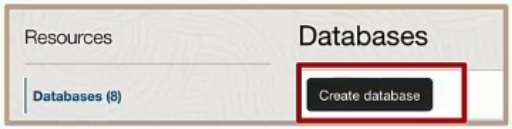
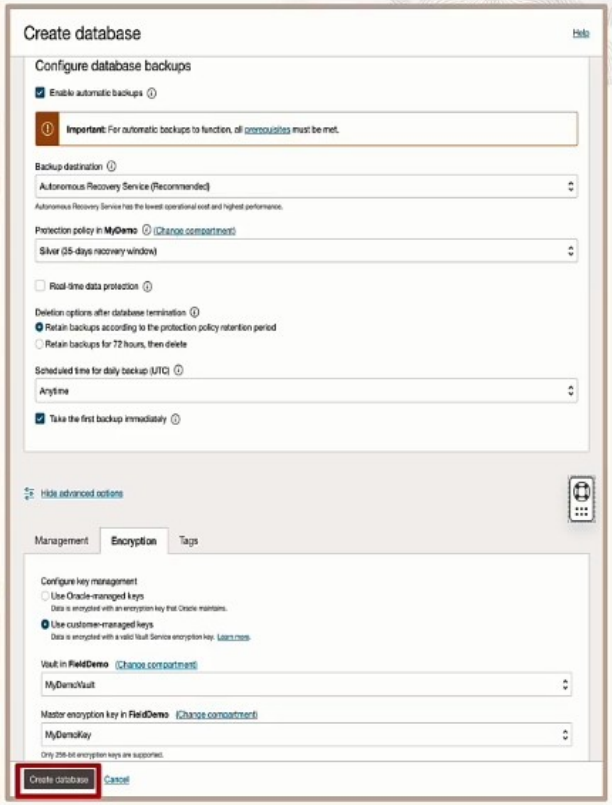
Create Database



Create a Database

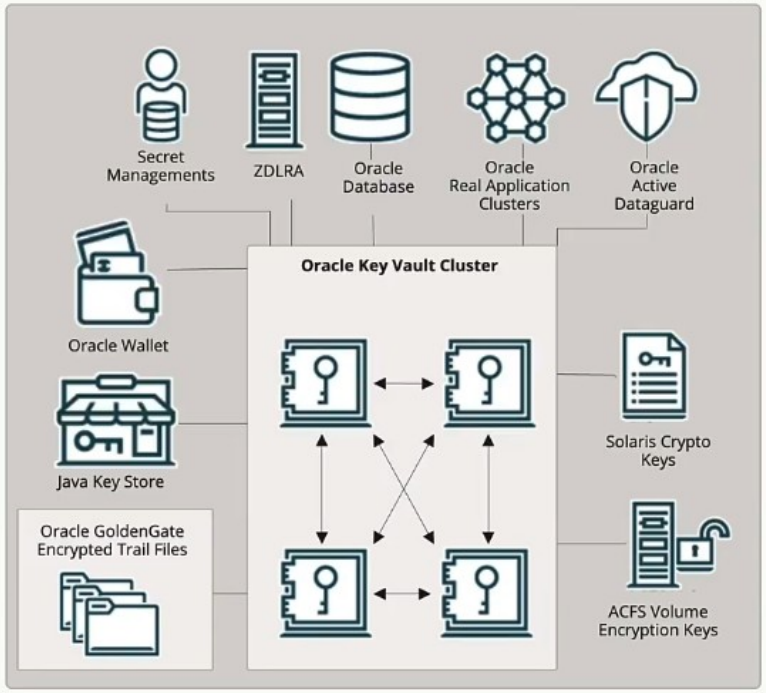
- Provide the **Database name**
- Specify **Database Home** to use
- Create **Admin Credentials**
- Configure **Database Backup** details
- Select **Encryption Key Management**
- Click on **Create Database** button



7:28 / 18:22 1x

Oracle Key Vault Integration for Exadata Cloud@Customer

- You can Integrate your on-premises Oracle Key Vault (OKV) with Exadata Cloud@Customer to secure your critical data on-premises.
- Oracle Key Vault integration enables you to take complete control of your encryption keys and store them securely on an external, centralized key management device.
- OKV is optimized for Oracle wallets, Java keystores, and Oracle Advanced Security Transparent Data Encryption (TDE) master keys.
- OKV also provides a REST interface for clients to auto-enroll endpoints and setup wallets and keys.




Exadata Database Service
Pluggable Database Management
8:23 / 18:22
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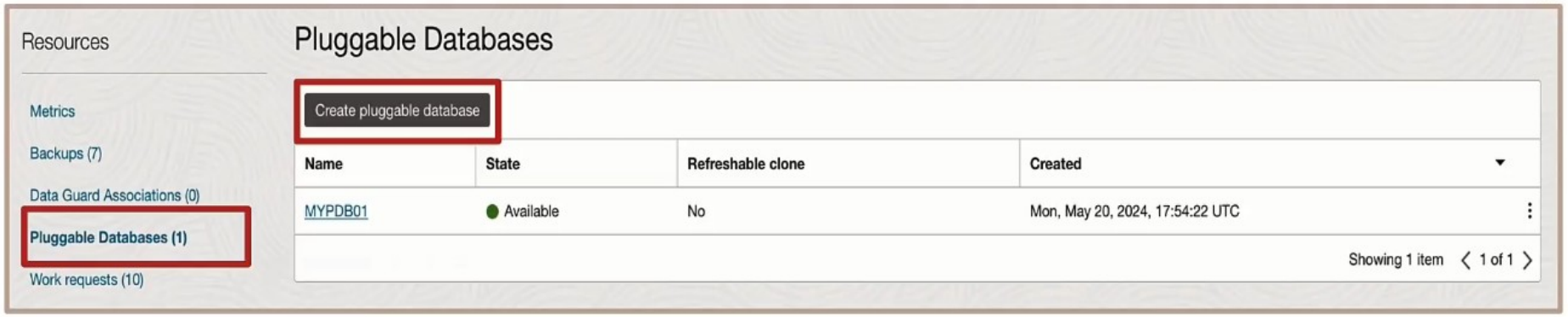
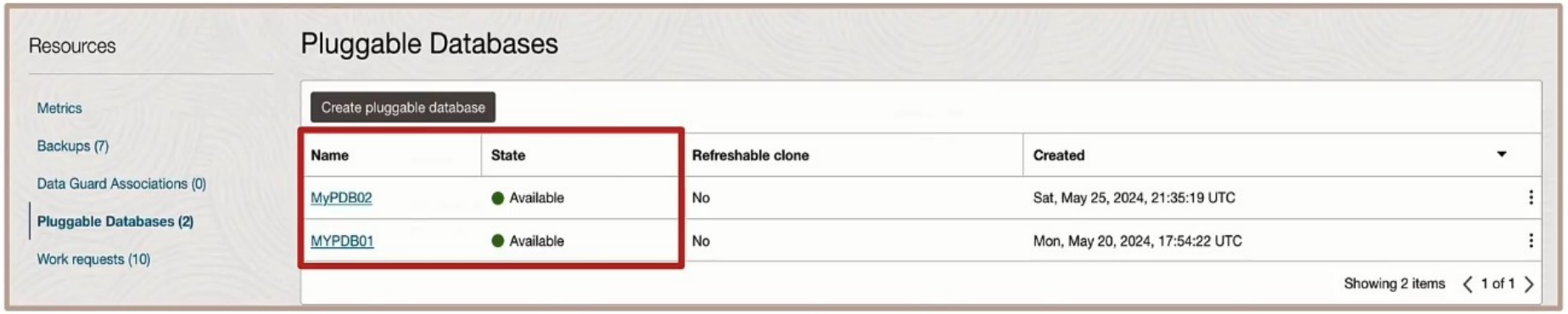
Pluggable Database Lifecycle Management

- **Create additional PDBs** within the same container database (CDB)



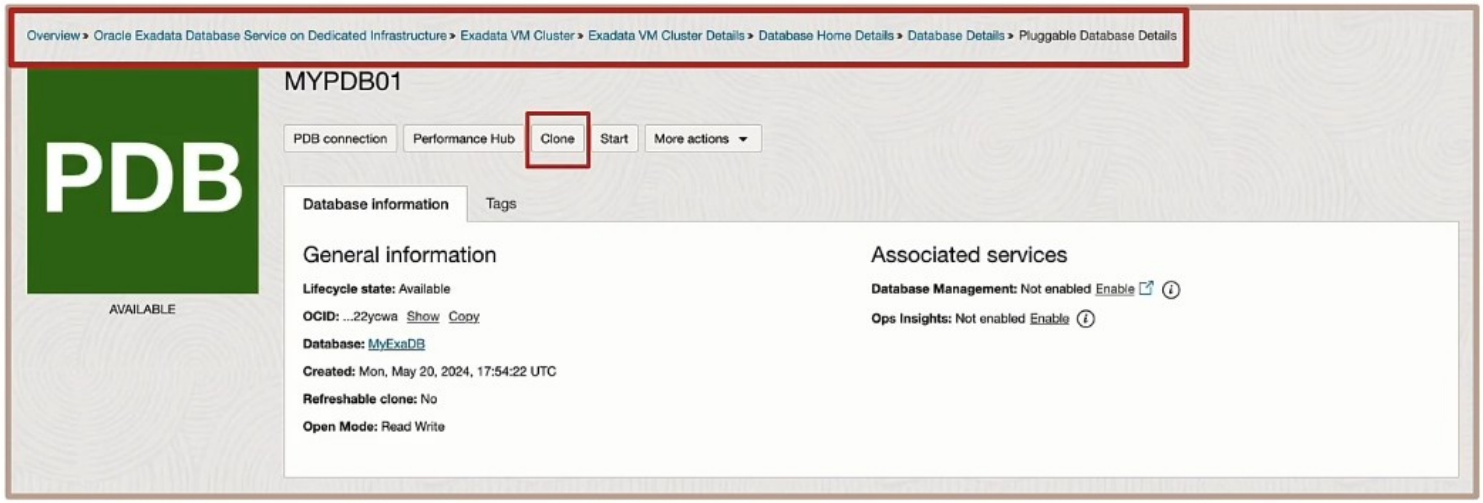


9:32 / 18:22 1x

Pluggable Database Lifecycle Management

From the the ***Pluggable Database Details page*** you can perform the following:

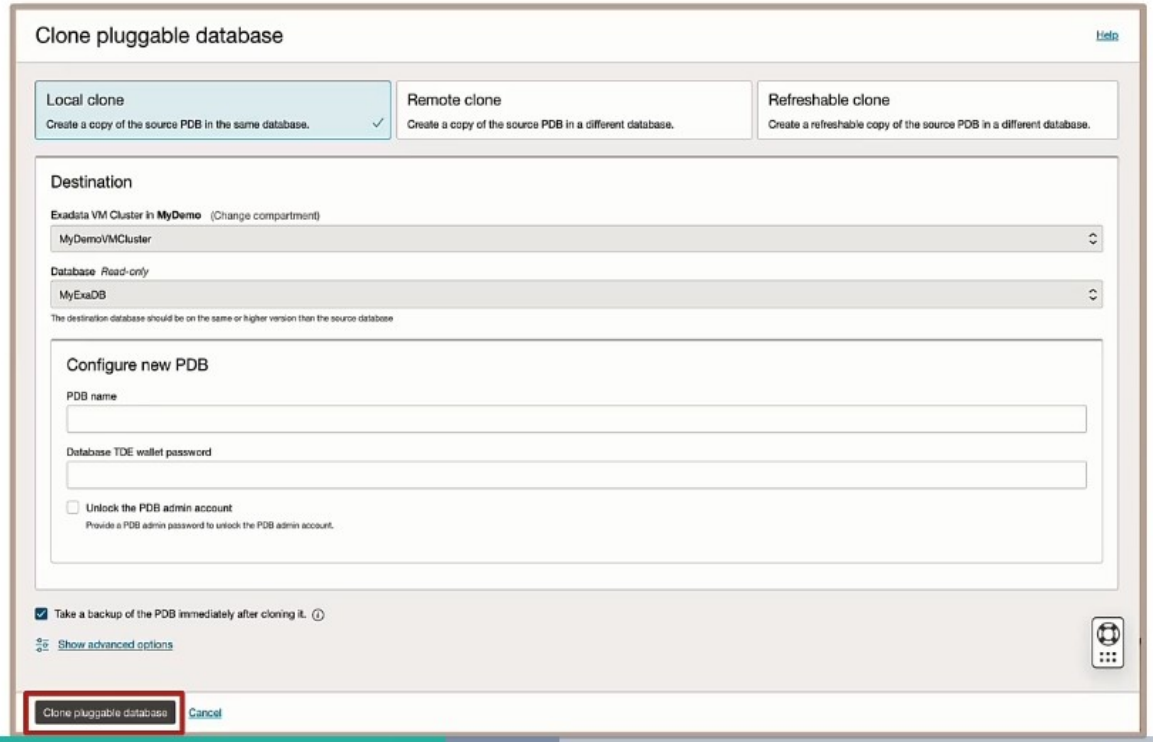
- **Connect to individual PDBs** using either Easy Connect or Long Connect strings
- **Open Performance Hub**
- **Clone PDB**



Pluggable Database Lifecycle Management

From the the ***Clone Pluggable Database page*** you can perform the following:

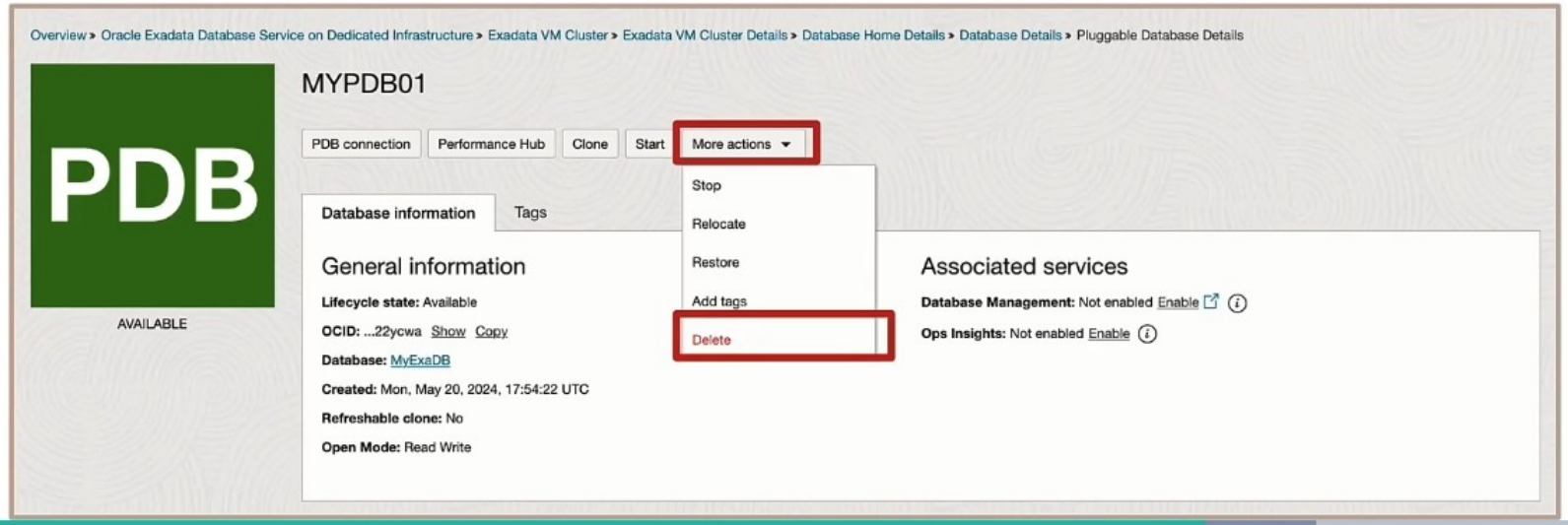
- **Clone the Source PDB**
  1) ***Into same CDB***
  2) ***Into another existing CDB***
  3) ***As Refreshable Clone***



Pluggable Database Lifecycle Management

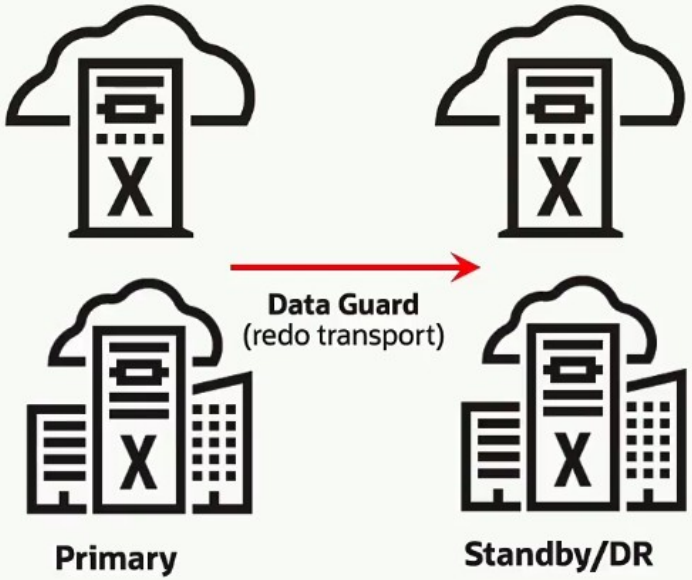
From the **More Actions Tab** you can perform the following:

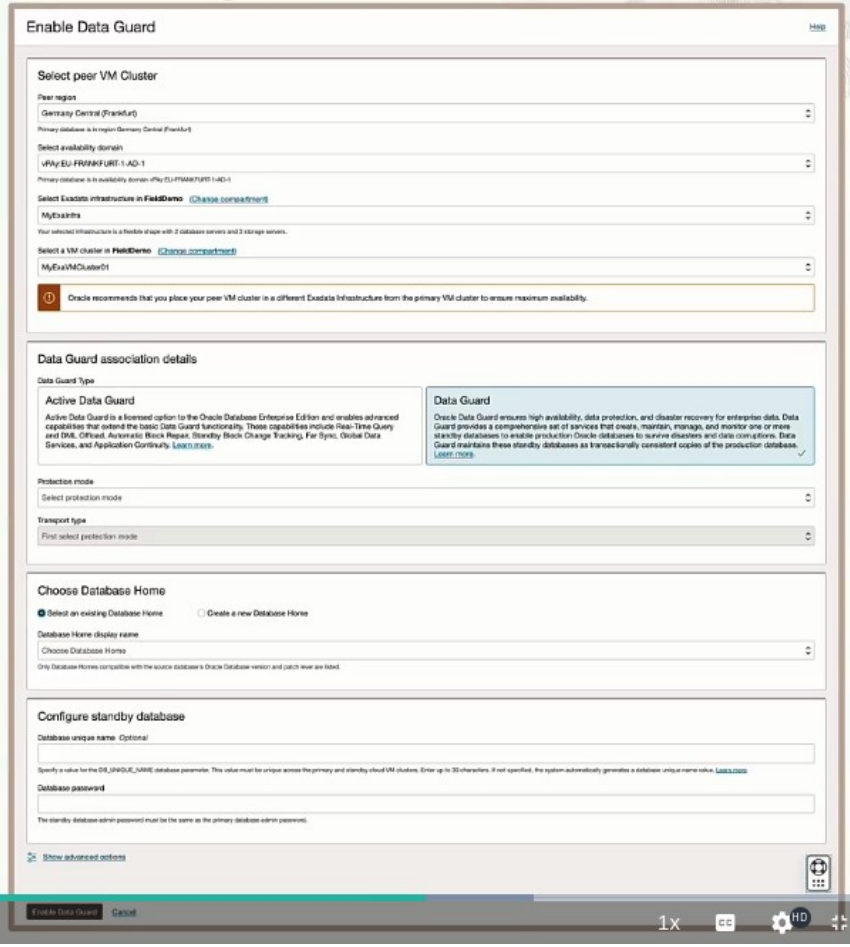
- ***Start and Stop a PDB***
- ***Relocate and Restore a PDB***
- ***Delete a PDB***



13:13 / 18:22 1x

Enable Disaster Recovery & Local HA using Data Guard





Data Guard / Active Data Guard Replication

- Real-time, database-optimized disaster recovery
- Zero data loss (RPO), near-zero recovery time (RTO)
- Cloud automation for Create/Delete/Switchover/Failover/Reinstate
- Asynchronous or synchronous replication

14:11 / 18:22
1x

Role Transitions: Switchover and Failover

Oracle Data Guard supports two role-transition operations:

- **Switchover**
  - Planned role reversal
  - Reduces downtime for OS or hardware maintenance/upgrade & database patching
- **Failover**
  - Unplanned role reversal
  - Emergency use
  - Invoked from Standby that will become the new Primary database
  - Can enable automatic failover by manually configuring *fast-start failover*

16:45 / 18:22 1x

Data Guard Requirements

- Both DB Systems must be in the same compartment
- If your primary and standby databases are in the same region, then both must use the same virtual cloud network (VCN)
- If your primary and standby databases are in different regions, then you must peer the virtual cloud networks (VCNs) for each database
- The database versions must be the same
- Each database in a Data Guard association must have a unique name `DB_UNIQUE_NAME` value; the primary and standby database can use the same database name `DB_NAME` value
- Configure the security list ingress and egress rules for the subnets of both DB systems in the Oracle Data Guard association to enable TCP traffic to move between the applicable ports; ensure that the rules you create are stateful (the default)
- The minimum requirement for Oracle Data Guard to work is to enable egress for TCP traffic only for the SCAN listener port, which has a default of 1521

18:08 / 18:22 1x