Exadata Database Service

User-Managed Maintenance Tasks

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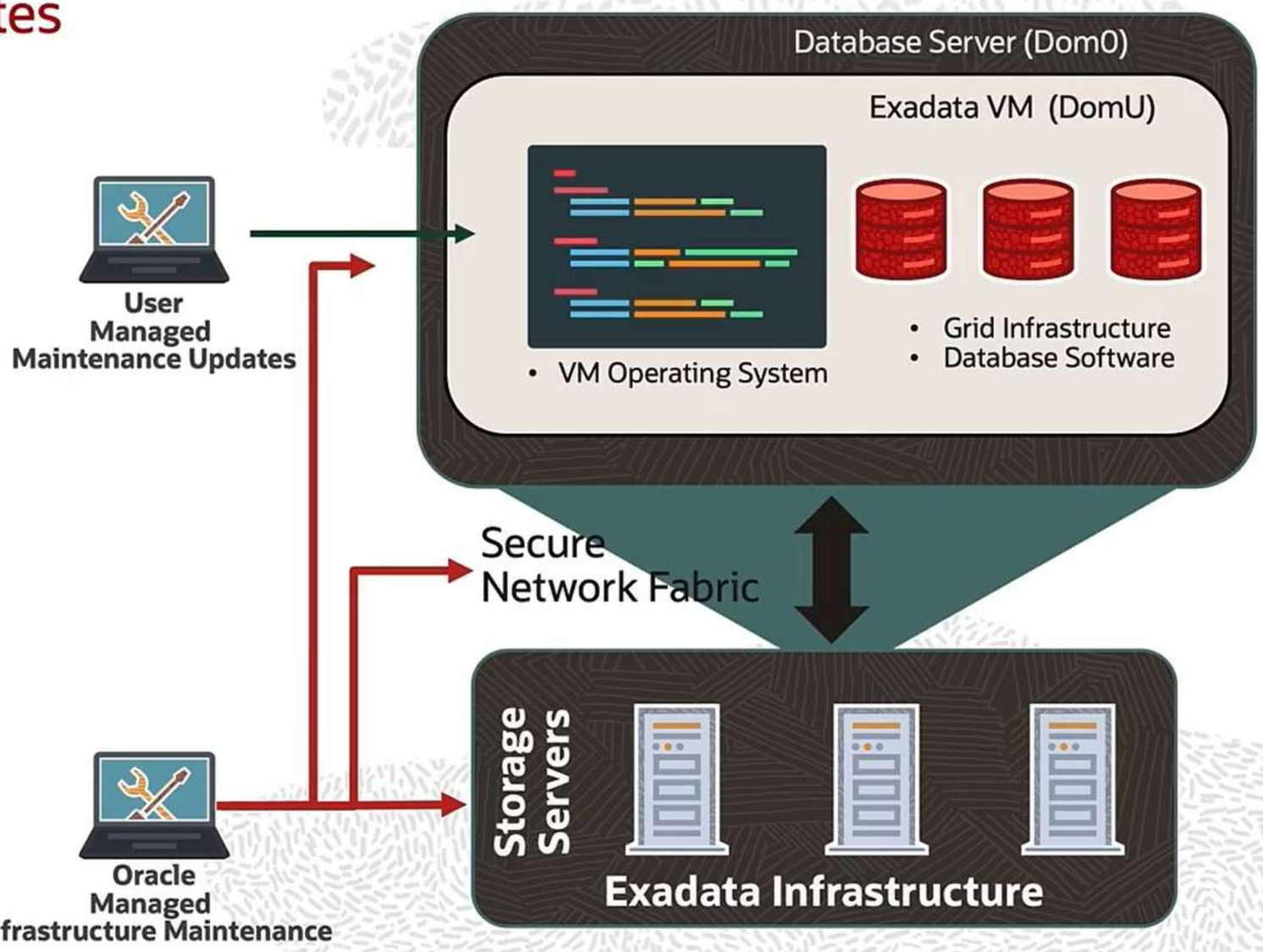
Customer Responsibility

Exadata Database Service

Managing Maintenance Updates

- **User-Managed Maintenance Updates**
  - Patch Database Home Software
  - Patch Oracle Grid Infrastructure (GI)
  - Update Operating System of the VM

- **Oracle-Managed Infrastructure Maintenance Updates**
  - Apply Quarterly Infrastructure Updates to:
    - Physical Compute and root VM on Database Server
    - Exadata Storage Servers
    - Internal Network Switches
    - Power Distribution Units (PDU)
    - ILOM Interfaces
    - All Firmware & BIOS



Exadata Database Service

Prerequisites & Best Practices for Applying Updates & Patches

- Back up your databases before you apply any updates to the DB Home
- Move the database to a new DB Home if possible instead of updating the DB Home
- Update Grid Infrastructure before updating or creating a DB Home
- Before you apply any update, run the precheck operation
- Ensure all servers and database instances are up and running
  - Ensure /u01 (**GI Home directory**) has 15GB of free space before a Grid Infrastructure update
  - Ensure /u02 (**DB Home directory**) has 15GB free space before a DB Home update
- Use the OCI Management Interfaces to perform the update & patching operations

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Finding Available Updates & Patches, & Viewing Update History

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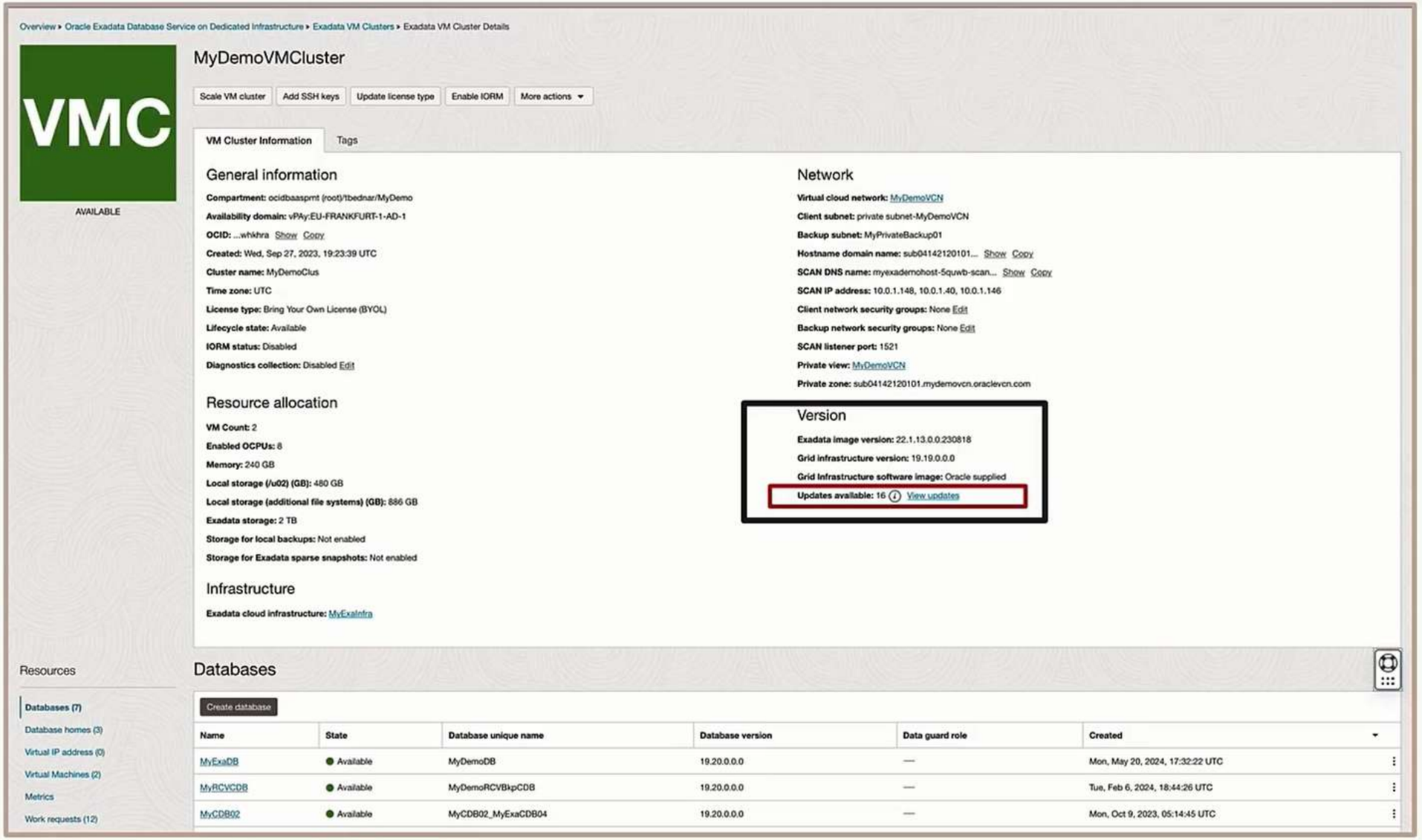
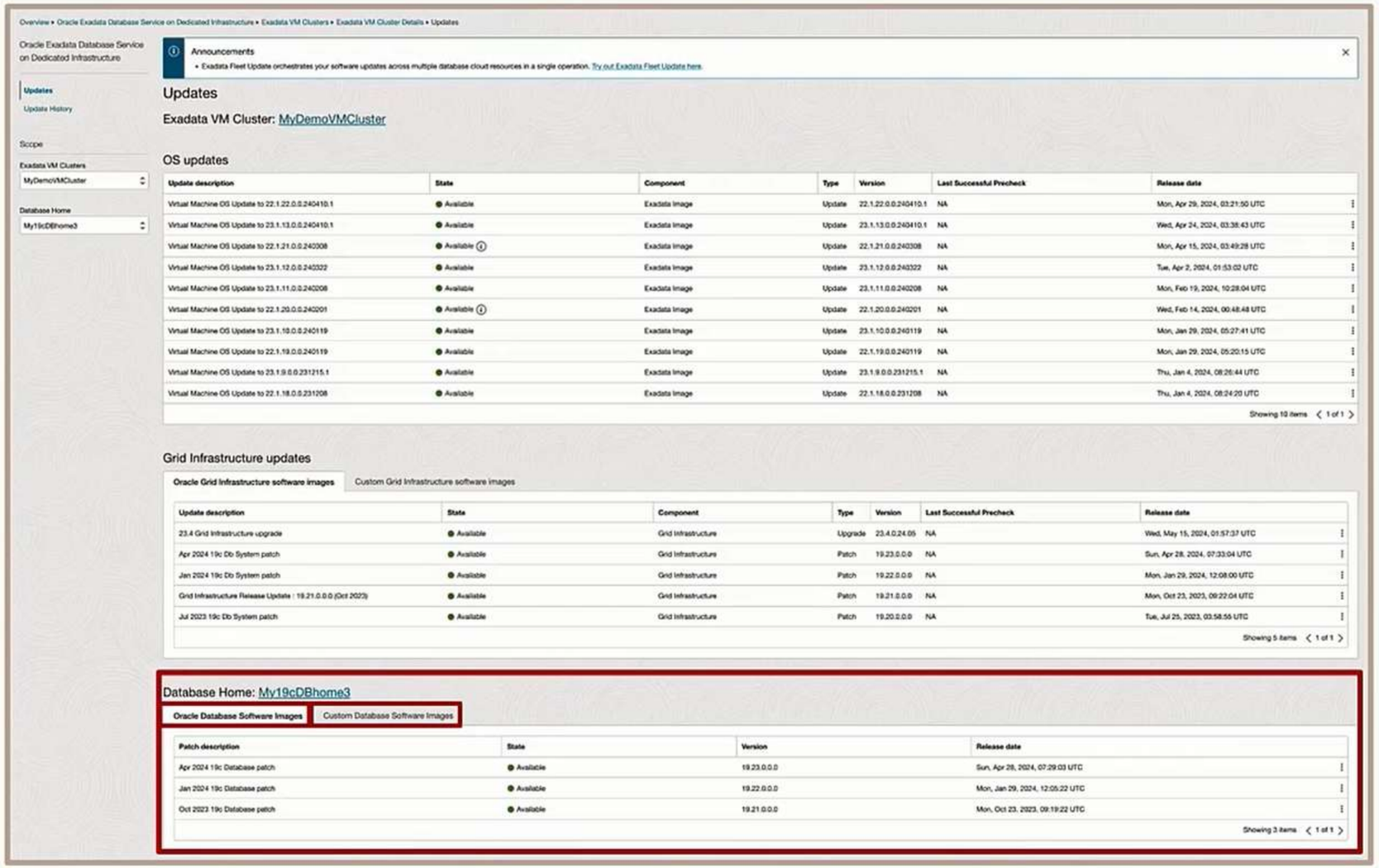
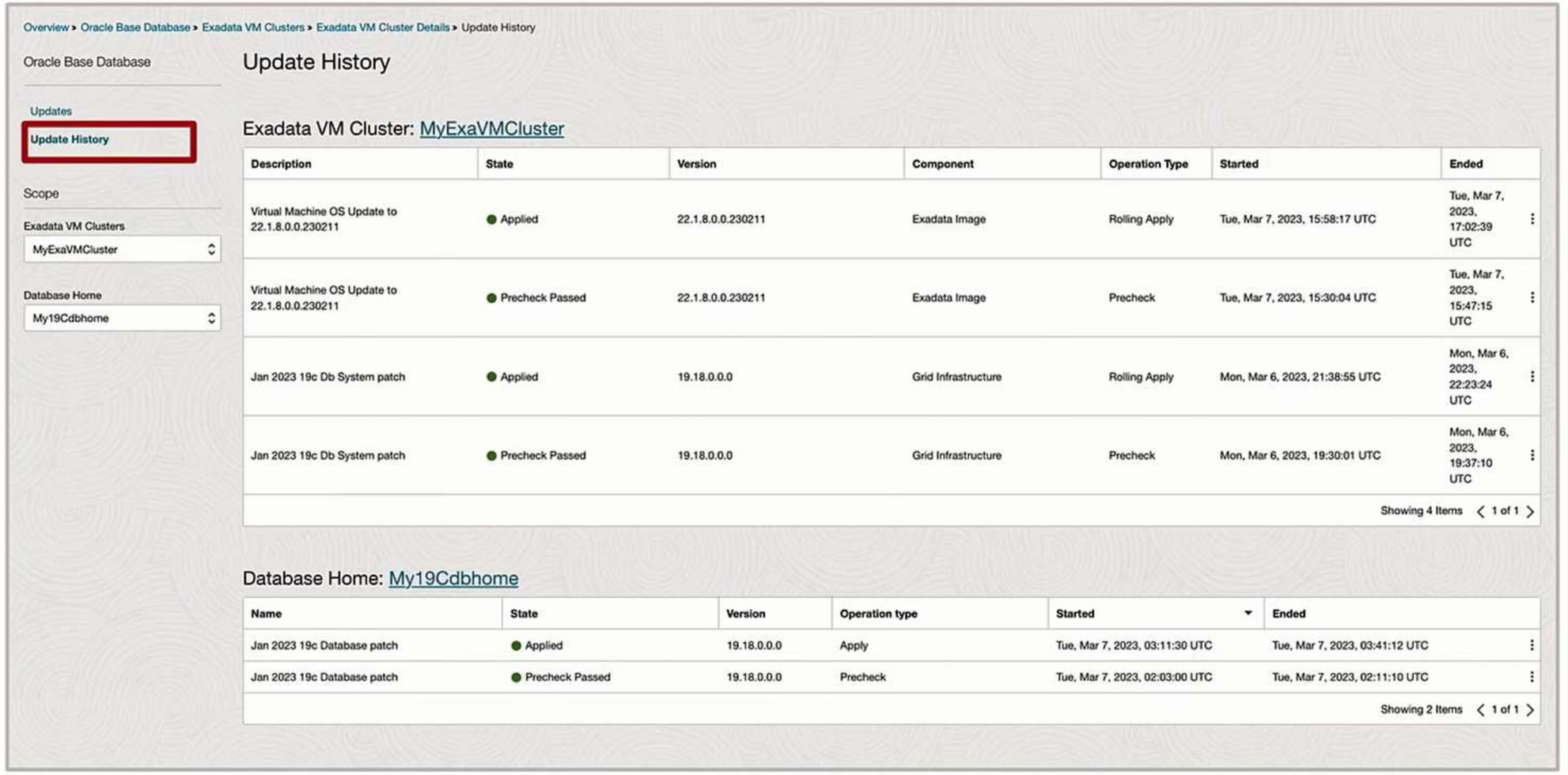
Find Current Patch Levels



Find Available Updates & Patches



View Update & Patch History



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Guest VM OS Image Updates

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Exadata VM OS Image Update

Exadata Image contains the virtual machine OS (Oracle Linux) updates

- Provides **precheck** function to ensure virtual machine update readiness
- Option to rollback in case any issues are encountered during the update process
- Minor & Major version updates to OS image version can be done from the UI and REST APIs
- To maintain secure systems, only the 4 latest Exadata Image minor version updates are available in the console

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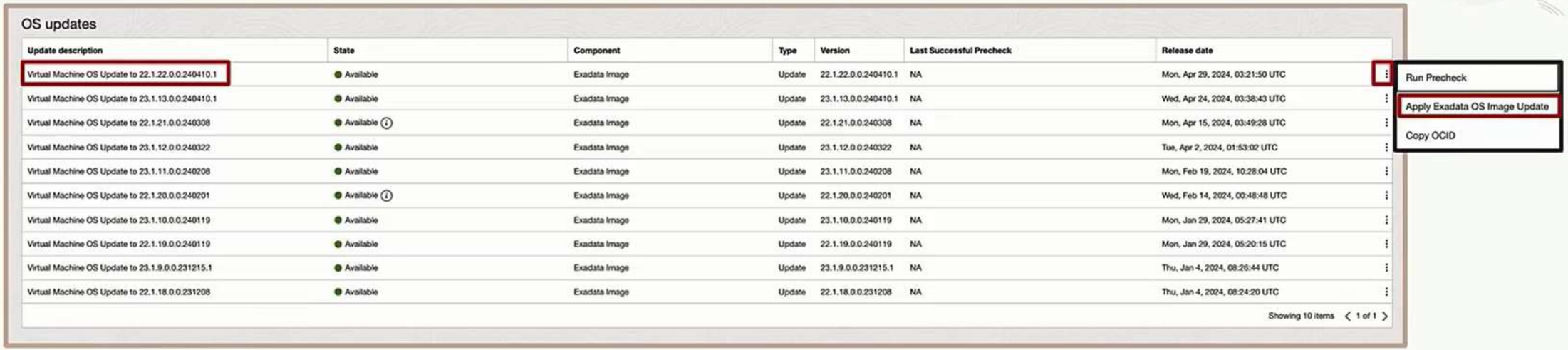
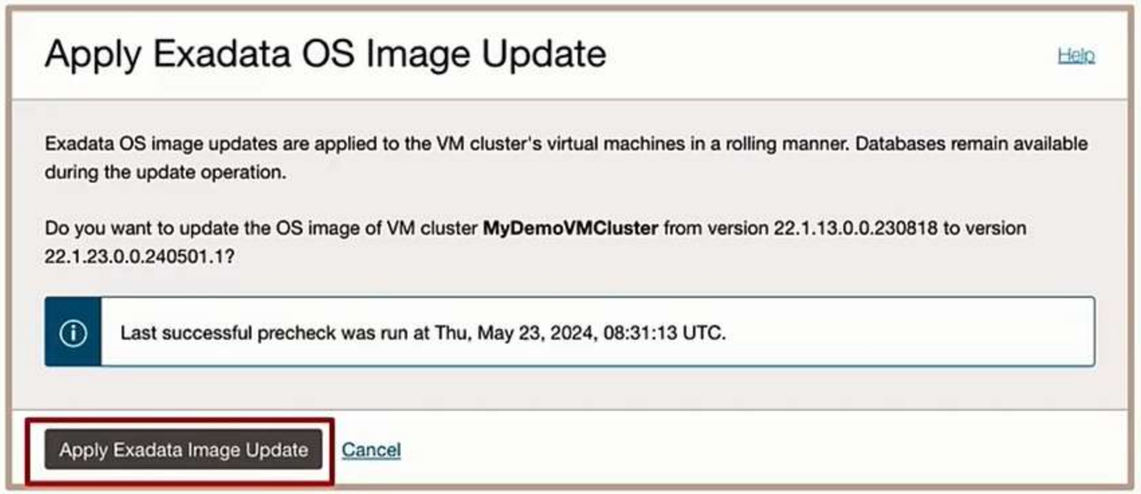
Exadata VM OS Image Update



Update Update Exadata VM OS Image:

- Update OS Image using OCI Console or REST APIs
- Choose desired OS Image version
- Run **Precheck for update** prior to maintenance window to validate system readiness



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Patch Grid Infrastructure Software

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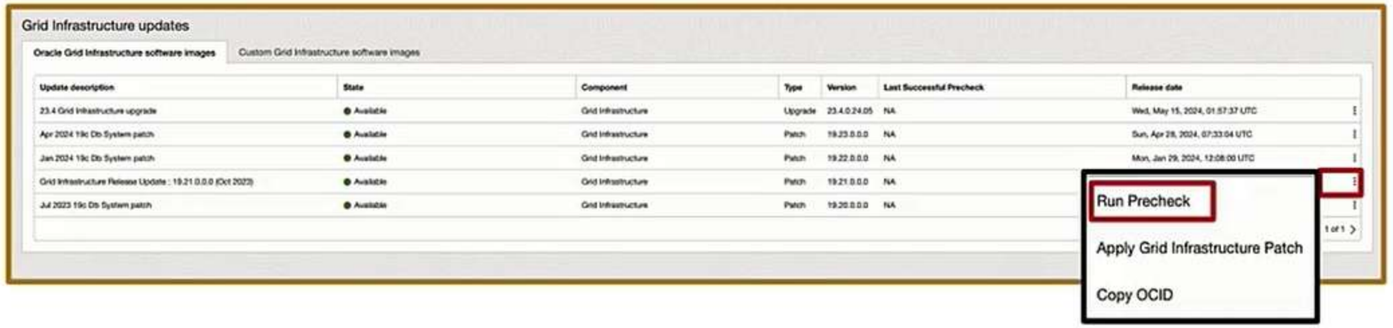
Grid Infrastructure (GI) Patching

Update Grid Infrastructure (GI):

- Update GI using OCI Console or REST APIs
- Choose desired Grid Infrastructure version
- Run **Precheck for update** prior to maintenance window to validate system readiness



GI Update is performed in a rolling fashion

- Database instances in the virtual machine undergoing a GI update will not be available