



Exadata Database Service

User-Managed Maintenance Tasks

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Customer Responsibility

Exadata Database Service



oracle.com is now full screen

Exit Full Screen (Esc)

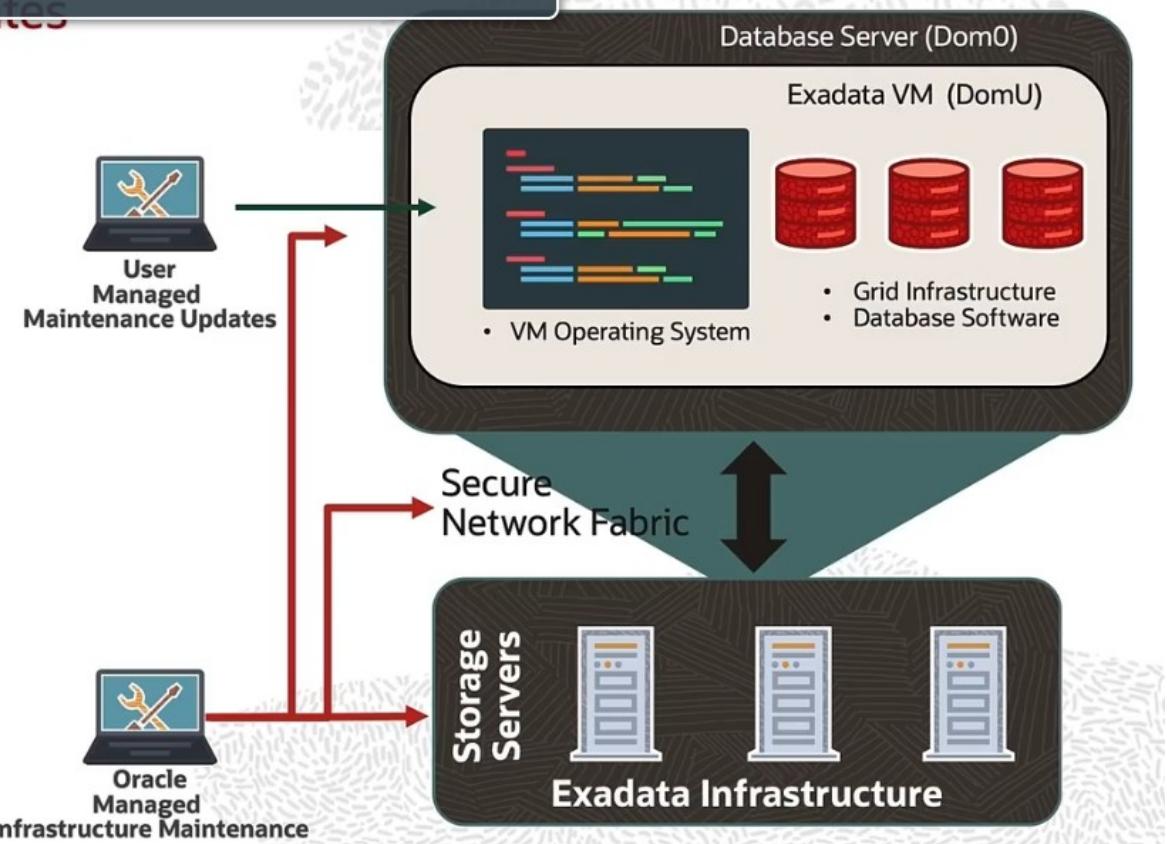
Managing Maintenance Updates

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

Exadata Database Service

**Finding Available Updates & Patches,
& Viewing Update History**



Find Current Patch Levels

The screenshot shows the Oracle Exadata Database Service on Dedicated Infrastructure interface. The main title is "MyDemoVMCluster". The top navigation bar includes "Overview", "Oracle Exadata Database Service on Dedicated Infrastructure", "Exadata VM Clusters", and "Exadata VM Cluster Details". Below the title, there's a green "AVAILABLE" status indicator with the letters "VMC". The main content area is divided into several sections:

- General information:** Compartment: ocibasapmt [root@lbednar/MyDemo]. Availability domain: vAvy-EU-FRANKFURT-1-AD-1. OCID: ...whkhr. Created: Wed, Sep 27, 2023, 19:23:39 UTC. Cluster name: MyDemoClus. Time zone: UTC. License type: Bring Your Own License (BYOL). Lifecycle state: Available. IORM status: Disabled. Diagnostics collection: Disabled.
- Resource allocation:** VM Count: 2. Enabled OCPUs: 8. Memory: 240 GB. Local storage (Vv02) (GB): 480 GB. Local storage (additional file systems) (GB): 886 GB. Exadata storage: 2 TB. Storage for local backups: Not enabled. Storage for Exadata sparse snapshots: Not enabled.
- Infrastructure:** Exadata cloud infrastructure: MyExaltra.
- Databases:** A table showing three databases:

Name	State	Database unique name	Database version	Data guard role	Created
MyExaDB	Available	MyDemoDB	19.20.0.0	—	Mon, May 20, 2024, 17:32:22 UTC
MyRCvCDB	Available	MyDemoRCvBipCDB	19.20.0.0	—	Tue, Feb 6, 2024, 18:44:26 UTC
MyCDB02	Available	MyCDB02_MyExaCDB04	19.20.0.0	—	Mon, Oct 9, 2023, 05:14:45 UTC
- Network:** Virtual cloud network: MyDemoVCN. Client subnet: private subnet-MyDemoVCN. Backup subnet: MyPrivateBackup01. Hostname domain name: sub04142120101... Show Copy. SCAN DNS name: myxademihost-Squib-scan... Show Copy. SCAN IP address: 10.0.1.148, 10.0.1.49, 10.0.1.146. Client network security groups: None Edit. Backup network security groups: None Edit. SCAN listener port: 1521. Private view: MyDemoVCN. Private zone: sub04142120101.mydemovcn.oraclevcn.com
- Version:** Exadata image version: 22.1.13.0.0.230818. Grid Infrastructure version: 19.19.0.0. Grid Infrastructure software image: Oracle supplied. Updates available: 16 (View updates)

At the bottom, there are various navigation icons and a toolbar with settings like 1x, HD, and zoom controls.

Find Available Updates & Patches

Overview > Oracle Exadata Database Service on Dedicated Infrastructure > Available VM Clusters > Available VM Cluster Details > Updates

Oracle Exadata Database Service on Dedicated Infrastructure

Updates

Exadata VM Cluster: MyDemoVMCluster

Scope

Available VM Clusters
MyDemoVMCluster

Database Home
My19cDBhome3

Announcements

Exadata Fleet Update orchestrates your software updates across multiple database cloud resources in a single operation. Try out Exadata Fleet Update here.

Updates

Update History

OS updates

Update description	State	Component	Type	Version	Last Successful Precheck	Release date
Virtual Machine OS Update to 22.1.22.0.0.240418.1	● Available	Exadata Image	Update	22.1.22.0.0.240418.1	N/A	Mon, Apr 29, 2024, 03:21:50 UTC
Virtual Machine OS Update to 23.1.1.0.0.240418.1	● Available	Exadata Image	Update	23.1.1.0.0.240418.1	N/A	Tue, Apr 30, 2024, 03:38:43 UTC
Virtual Machine OS Update to 22.1.21.0.0.240208	● Available	Exadata Image	Update	22.1.21.0.0.240208	N/A	Mon, Apr 15, 2024, 03:49:28 UTC
Virtual Machine OS Update to 23.1.1.0.0.240322	● Available	Exadata Image	Update	23.1.1.0.0.240322	N/A	Tue, Apr 2, 2024, 03:53:03 UTC
Virtual Machine OS Update to 23.1.1.1.0.0.240208	● Available	Exadata Image	Update	23.1.1.1.0.0.240208	N/A	Mon, Feb 13, 2024, 03:28:54 UTC
Virtual Machine OS Update to 22.1.20.0.0.240301	● Available	Exadata Image	Update	22.1.20.0.0.240301	N/A	Tue, Feb 14, 2024, 03:48:48 UTC
Virtual Machine OS Update to 23.1.1.1.0.0.240119	● Available	Exadata Image	Update	23.1.1.1.0.0.240119	N/A	Mon, Apr 29, 2024, 03:27:41 UTC
Virtual Machine OS Update to 22.1.19.0.0.240119	● Available	Exadata Image	Update	22.1.19.0.0.240119	N/A	Mon, Apr 29, 2024, 03:29:15 UTC
Virtual Machine OS Update to 23.1.0.8.0.201215.1	● Available	Exadata Image	Update	23.1.0.8.0.201215.1	N/A	Thu, Jan 4, 2024, 08:20:44 UTC
Virtual Machine OS Update to 22.1.18.0.0.231208	● Available	Exadata Image	Update	22.1.18.0.0.231208	N/A	Thu, Jan 4, 2024, 08:20:29 UTC

Showing 18 items < 1 of 1 >

Grid Infrastructure updates

Oracle Grid Infrastructure software Images Custom Grid Infrastructure software Images

Update description	State	Component	Type	Version	Last Successful Precheck	Release date
23.4 Grid Infrastructure Upgrade	● Available	Grid Infrastructure	Upgrade	23.4.0.2.95	N/A	Wed, May 16, 2024, 01:57:37 UTC
Apr 2024 18c DB System patch	● Available	Grid Infrastructure	Patch	18.23.8.0.8	N/A	Wed, Apr 24, 2024, 03:33:04 UTC
Jan 2024 18c DB System patch	● Available	Grid Infrastructure	Patch	18.22.8.0.8	N/A	Mon, Jan 29, 2024, 12:08:00 UTC
Grid Infrastructure Release Update - 18.21.0.0.0 (04-2023)	● Available	Grid Infrastructure	Patch	18.21.0.0.8	N/A	Mon, Oct 23, 2023, 09:22:04 UTC
Jul 2023 18c DB System patch	● Available	Grid Infrastructure	Patch	18.20.8.0.8	N/A	Tue, Jul 25, 2023, 01:58:59 UTC

Showing 5 items < 1 of 1 >

Database Home: My19cDBhome3

Oracle Database Software Images Custom Database Software Images

Patch description	State	Version	Release date
Apr 2024 18c Database patch	● Available	18.23.8.0.8	Sun, Apr 28, 2024, 07:28:03 UTC
Jan 2024 18c Database patch	● Available	18.22.8.0.8	Mon, Jan 29, 2024, 12:08:22 UTC
Oct 2023 18c Database patch	● Available	18.21.0.0.8	Mon, Oct 23, 2023, 09:19:22 UTC

Showing 3 items < 1 of 1 >

View Update & Patch History

Overview > Oracle Base Database > Exadata VM Clusters > Exadata VM Cluster Details > Update History

Oracle Base Database

Update History

Updates **Update History**

Scope

Exadata VM Clusters
MyExaVMCluster

Database Home
My19Cdbhome

Exadata VM Cluster: MyExaVMCluster

Description	State	Version	Component	Operation Type	Started	Ended
Virtual Machine OS Update to 22.1.8.0.0.230211	Applied	22.1.8.0.0.230211	Exadata Image	Rolling Apply	Tue, Mar 7, 2023, 15:58:17 UTC	Tue, Mar 7, 2023, 17:02:39 UTC
Virtual Machine OS Update to 22.1.8.0.0.230211	Precheck Passed	22.1.8.0.0.230211	Exadata Image	Precheck	Tue, Mar 7, 2023, 15:30:04 UTC	Tue, Mar 7, 2023, 15:47:15 UTC
Jan 2023 19c Db System patch	Applied	19.18.0.0.0	Grid Infrastructure	Rolling Apply	Mon, Mar 6, 2023, 22:38:55 UTC	Mon, Mar 6, 2023, 22:38:24 UTC
Jan 2023 19c Db System patch	Precheck Passed	19.18.0.0.0	Grid Infrastructure	Precheck	Mon, Mar 6, 2023, 19:30:01 UTC	Mon, Mar 6, 2023, 19:37:10 UTC

Showing 4 items < 1 of 1 >

Database Home: My19Cdbhome

Name	State	Version	Operation type	Started	Ended
Jan 2023 19c Database patch	Applied	19.18.0.0.0	Apply	Tue, Mar 7, 2023, 03:11:30 UTC	Tue, Mar 7, 2023, 03:41:12 UTC
Jan 2023 19c Database patch	Precheck Passed	19.18.0.0.0	Precheck	Tue, Mar 7, 2023, 02:03:00 UTC	Tue, Mar 7, 2023, 02:11:10 UTC

Showing 2 items < 1 of 1 >

Exadata Database Service

Guest VM OS Image Updates

Customer
Responsibility



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

Exadata VM OS Image Update

Update description	Status	Component	Type	Version	Last Successful Precheck	Release date
Virtual Machine OS Update to 22.1.22.0.0.240410.1	Available	Exadata Image	Update	22.1.22.0.0.240410.1	NA	Mon, Apr 29, 2024, 03:21:50 UTC
Virtual Machine OS Update to 23.1.13.0.0.240410.1	Available	Exadata Image	Update	23.1.13.0.0.240410.1	NA	Wed, Apr 24, 2024, 03:38:43 UTC
Virtual Machine OS Update to 22.1.21.0.0.240308	Available	Exadata Image	Update	22.1.21.0.0.240308	NA	Mon, Apr 16, 2024, 03:49:28 UTC
Virtual Machine OS Update to 23.1.12.0.0.240322	Available	Exadata Image	Update	23.1.12.0.0.240322	NA	Tue, Apr 2, 2024, 01:53:02 UTC
Virtual Machine OS Update to 23.1.11.0.0.240208	Available	Exadata Image	Update	23.1.11.0.0.240208	NA	Mon, Feb 19, 2024, 10:28:04 UTC
Virtual Machine OS Update to 22.1.20.0.0.240201	Available	Exadata Image	Update	22.1.20.0.0.240201	NA	Wed, Feb 14, 2024, 09:48:49 UTC
Virtual Machine OS Update to 23.1.10.0.0.240119	Available	Exadata Image	Update	23.1.10.0.0.240119	NA	Mon, Jan 29, 2024, 05:27:41 UTC
Virtual Machine OS Update to 22.1.19.0.0.240119	Available	Exadata Image	Update	22.1.19.0.0.240119	NA	Mon, Jan 29, 2024, 05:20:15 UTC
Virtual Machine OS Update to 23.1.9.0.0.2301215.1	Available	Exadata Image	Update	23.1.9.0.0.2301215.1	NA	Thu, Jan 4, 2024, 08:26:44 UTC
Virtual Machine OS Update to 22.1.18.0.0.2301208	Available	Exadata Image	Update	22.1.18.0.0.2301208	NA	Thu, Jan 4, 2024, 08:24:20 UTC

Run Precheck
Apply Exadata OS Image Update
Copy OCID

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

Apply Exadata OS Image Update

Help

Exadata OS image updates are applied to the VM cluster's virtual machines in a rolling manner. Databases remain available during the update operation.

Do you want to update the OS image of VM cluster **MyDemoVMCluster** from version 22.1.13.0.0.230818 to version 22.1.23.0.0.240501.1?

Last successful precheck was run at Thu, May 23, 2024, 08:31:13 UTC.

Apply Exadata Image Update Cancel

Exadata Database Service

Patch Grid Infrastructure Software

Customer Responsibility



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

The screenshot shows a table titled "Grid Infrastructure updates" with the following data:

Update description	Status	Component	Type	Version	Last Successful Precheck	Release date
Z3-# Grid Infrastructure upgrade	Available	Grid Infrastructure	Upgrade	23.1.0.24.05	N/A	Fri, May 13, 2024, 01:27:27 UTC
Apr 2024 18c Db-System patch	Available	Grid Infrastructure	Patch	19.2.0.0.0	N/A	Sun, Apr 28, 2024, 07:20:44 UTC
Jan 2024 18c Db-System patch	Available	Grid Infrastructure	Patch	19.2.0.0.0	N/A	Mon, Jan 29, 2024, 12:08:00 UTC
Or19 9.2.0.0.0 Patch Update - 19.2.1.0.0 (Jul 2023)	Available	Grid Infrastructure	Patch	19.2.1.0.0	N/A	
Jul 2023 18c Db-System patches	Available	Grid Infrastructure	Patch	19.2.0.0.0	N/A	

Buttons on the right side of the table include "Run Precheck" (highlighted with a red box), "Apply Grid Infrastructure Patch", and "Copy OCID".

GI Update is performed in a rolling fashion

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

