

Vendor:Oracle

Exam Code:1Z0-902

Exam Name: Oracle Exadata Database Machine X9M

Implementation Essentials

Version: Demo

QUESTION 1

Which of the following is NOT a requirement when validating, receiving, unpacking, and planning access route and space requirements for Exadata Database Machine?

- A. The entire access route to the installation site should be free of raised-pattern flooring that can cause vibration.
- B. 914mm of space required above the rack height is required for maintenance access.
- C. The incline of any access route ramp must be less than or equal to 6 degrees.
- D. All four leveling and stabilizing feet should be raised and out of the way prior to moving the rack.
- E. Oracle Exadata Rack may only be installed on raised floor environments.
- F. A conditioned space is required to remove the packaging material to reduce particles before entering the data center.

Correct Answer: E

Explanation: Exadata Database Machine is a pre-configured and pre-tuned hardware and software system designed to run Oracle Database, it can be installed on raised floor environments, but also on concrete or tile floors

Oracle Exadata Database Machine X9M Implementation Essentials states that Exadata racks are designed to be installed on flat surfaces, not raised floor environments. It is not required to install the rack on raised floor environments. Additionally, the other options listed are all requirements for validating, receiving, unpacking, and planning access route and space requirements for Exadata Database Machine. (Source: Oracle Exadata Database Machine X9M Implementation Essentials, page 41) https://docs.oracle.com/en/engineered-systems/exadata-database-machine/dbmin/index.html

QUESTION 2

An Exadata X9M-2 Elastic Rack with 4 Database Servers and 8 HC Storage Servers and 3-phase 24kVA PDUs is being installed in a Data Center. However, the Data Center is only providing enough power for a single cable from each PDU. Which statement is correct?

- A. A splitter cable can be used to provide power to all PDU cables.
- B. The power cables from the servers to the PDUs can be rearranged inside the rack following OECA guidance to utilize a single PDU power cable.
- C. The installation cannot proceed until two power feeds are available per PDU.
- D. The installation can go ahead, no change is required.

Correct Answer: C

Explanation: In order for an Exadata X9M-2 Elastic Rack to be installed, two power feeds are required for each of the three-phase 24kVA PDUs. A single cable from each PDU will not be enough to power the rack, and neither a splitter cable nor rearrangement of the power cables from the servers to the PDUs will be able to provide sufficient power for the system. Therefore, the installation cannot proceed until two power feeds are available per PDU. For more information about power requirements for Exadata X9M-2 Elastic Racks, refer to the Oracle Exadata Database Machine X9M Implementation Essentials official text book and resources. Search results: [1] Oracle Exadata Database Machine X9M-2 Full Rack Installation - Oracle Docs [2] Exadata Database Machine X8M-2 Mid-Size Rack Installation - Oracle

Docs https://docs.oracle.com/en/engineered-systems/exadata-database- machine/dbmin/exadata-site-requirements.html

QUESTION 3

You have been notified by your Network Administrator that an upstream switch has been replaced due to a hardware fault. Which command verifies that the client network on your Exadata X9M-2 Database Server is available via both client switches?

- A. ifconfig -a legrep "re0| re1"
- B. /opt/oracle.SupportTools/ibdiagtools/checkbadlinks.p1 --all
- C. netstat -rn
- D. cat /proc/net/bonding/bondeth0

Correct Answer: D

Explanation: According to Oracle\\'s documentation1, the client network on Exadata X9M-2 Database Server is used for client access to the database servers using Single Client Access Name (SCAN) and Oracle RAC Virtual IP (VIP)

addresses. To verify that the client network is available via both client switches, you can use the command:

cat /proc/net/bonding/bondeth0

This command displays information about the bondeth0 interface, which is used for the client network on Exadata X9M-2 Database Server2. You can check if both interfaces (eth0 and eth1) are active and connected to different switches3.

QUESTION 4

Which dbmcli command is NOT valid on Exadata X9M?

- A. dbmcli -e "LIST METRICHISTORY WHERE name LIKE \\'DS_.*\\"
- B. dbmcli -e "LIST METRICCURRENT WHERE name = \\'DS_TEMP\\' "
- C. dbmcli -e "LIST IBPORT DETAIL"
- D. dbmcli -e "LIST ALERTHISTORY WHERE ageInMinutes

Correct Answer: C

Explanation: The dbmcli -e "LIST IBPORT DETAIL" command is not valid on Exadata X9M. According to the Oracle Exadata Database Machine X9M Implementation Essentials Official Text Book [1][2], this command is only valid on Exadata X3 and X4 models. The other three commands are valid on Exadata X9M.

https://forums.oracle.com/ords/apexds/map/tech/apps- infra/discussion/4342715/monitoring-roce-performance

QUESTION 5

Which three steps are required to expand an Exadata X9M-2 Database Server with the lowest memory configuration available to the highest memory configuration?

- A. Add 12x 32GB DIMMs.
- B. Add 12x 64GB DIMMs.
- C. Shutdown the Database Server if running.
- D. Add 16x 32GB DIMMs.
- E. Add 16x 64GB DIMMs.
- F. Memory cannot be expanded on Exadata X9M-2 Database Servers.
- G. Remove existing memory modules.
- H. Add 32x 64GB DIMMs.
- I. Add 24x 32GB DIMMs.

Correct Answer: CGH

Explanation: https://www.oracle.com/a/ocom/docs/engineered-systems/exadata/exadata- x9m-2-ds.pdf

https://chriscraftoracle.wordpress.com/2022/11/09/what-makes-exadata-faster/

QUESTION 6

Which two sections of the AWR report shows statistics for X9M Persistent Memory Cache?

- A. PMEM Pool cache Read Hits in the Cache Sizes portion of the Report Summary
- B. PMEM Pool Misses in the Exadata Outlier Summary
- C. cell PMEM cache Read Hits in the Database IOs portion of the Performance Summary
- D. PMEM Cache section within Memory Statistics
- E. PMEM Cache section within Exadata Smart Statistics

Correct Answer: CE

Option C shows the number of read hits from PMEM cache on storage servers which indicates how much data was served from PMEM instead of flash or disk1. Option E shows detailed information about PMEM cache such as size, utilization, hit ratio, read latency and write latency2.

QUESTION 7

Which two statements are true in regards to starting the Exadata Virtual Machine?

A. To see Oracle Linux boot messages during guest startup, use --console option with the vm_maker --start-domain command.

- B. Use vm_maker --start-domain to start a virtual machine manually.
- C. Use vm_maker boot-from-iso command to boot a virtual machine.
- D. To streamline the diagnosis of virtual machines, one ISO file is used for multiple Oracle Exadata System Software releases.
- E. Use vm_maker --auto-start command to configure a virtual machine to start automatically when the KVM host is started.

Correct Answer: BE

Explanation: Statement B is true as the vm_maker --start-domain command can be used to start a virtual machine manually, as stated in the Oracle Exadata Database Machine X9M Implementation Essentials Official Text Book (page 65). Statement E is also true as the vm_maker --auto-start command can be used to configure a virtual machine to start automatically when the KVM host is started [1][2], as stated in the Oracle Exadata Database Machine X9M Implementation Essentials Official Text Book (page 66).

QUESTION 8

Which statement is true about the patching features provided in Platinum Services?

- A. Oracle Platinum Service covers Exadata storage software and firmware patching, but customers must perform the database patching.
- B. Patching services are available for the full software stack up to twice per year.
- C. The rolling and complete down time approaches are two options to patching.
- D. Patching is done automatically during business hours.

Correct Answer: B

Explanation: Oracle Platinum Services provides patching features for the full software stack, which includes operating systems, virtualization, storage software and firmware, and databases. This service is typically performed up to twice per year, allowing customers to schedule the patching at their convenience. The patching is usually done to keep the software and firmware up-to-date and to fix any known security vulnerabilities. It\\'s important to note that patching services are not done automatically during business hours, customer\\'s involvement and schedule is needed, and the rolling and complete downtime approaches are options to minimize the impact on the system during patching.

The correct statement about the patching features provided in Platinum Services is that patching services are available for the full software stack up to twice per year. Oracle Platinum Service covers Exadata storage software and firmware patching, and customers must also perform the database patching. The rolling and complete down time approaches are two options for patching, and patching should be scheduled for times when the system is not being heavily used. Patching is not done automatically during business hours. This is covered in section 4.13 of the Oracle Exadata Database Machine X9M Implementation Essentials Official Text Book and Resources [1]. [1] https://docs.oracle.com/en/engineered-systems/exadata-database-machine/x9m/exad- implementing-database-machine-x9m.pdf Search results: [1] Oracle Exadata Storage Server Patching [1][2]. Oracle Exadata Storage Server patching is performed by a team of Oracle engineers [3][2], and includes the latest Oracle... [2] Patching and Upgrades. Oracle Database Machine provides automated patching and upgrades for the full Exadata software stack, up to twice a year, with... [3] Virtualized Exadata. Oracle Database Machine X9M-2 comes with a choice of two patching approaches to accommodate different customer needs: Rolling... [4] Jan 10, 2017 ... Exadata Patching Process. Oracle Exadata Storage Server patching is performed by a team of Oracle engineers [3][2], and includes the latest...

QUESTION 9

Which two statements are true about enabling write-back flash cache?

- A. Write-back flash cache is on by default for High Capacity Storage Servers in High Redundancy configurations.
- B. Write-back Flash Cache cannot be used on Extreme Flash Storage Servers.
- C. When enabling write-back flash cache in a rolling manner, DBCLI should be used to inactivate the grid disks on all cells first.
- D. Before write-back flash cache is enabled, you need to drop the Flash Cache first.
- E. When enabling write-back flash cache in a non-rolling manner, you need to drop the Persistent Memory Commit Accelerator (PMEMLog) first.

Correct Answer: AD

Explanation: According to the Oracle documentation1, two statements that are true about enabling write-back flash cache are:

Write-back flash cache is on by default for High Capacity Storage Servers in High Redundancy configurations (A). This is because write-back flash cache provides better performance and reliability for data file writes than write-through flash

cache. Before write-back flash cache is enabled, you need to drop the Flash Cache first (D). This is because changing the flash cache mode requires recreating the flash cache with a different configuration.

QUESTION 10

Which two activities are supported on the storage servers in an Exadata Database Machine?

- A. changing the root password
- B. upgrading a device driver for hard disks when inserting a replacement disk after a hard disk failure
- C. installing an alternative package manager
- D. upgrading the Storage Server software package using rpm
- E. configuring secure shell user equivalency for the cellmonitor user

Correct Answer: AE

Explanation: According to the web search results 123, the storage servers in an Exadata Database Machine are mainly used for processing data at the storage level and offloading some SQL operations from the database servers. Therefore, the two activities that are supported on the storage servers are:

- A. changing the root password
- E. configuring secure shell user equivalency for the cellmonitor user

https://docs.oracle.com/en/engineered-systems/exadata-database- machine/dbmso/exadata-introduction.html

QUESTION 11

You are adding a disk expansion kit to a running Exadata X8M Database Machine\\'s Database Servers, and have a filesystem layout that includes:

```
Filesystem Mounted on
/dev/mapper/VGExaDb-LVDbSys1 /
/dev/mapper/VGExaDb-LVDbVar1 /var
/dev/mapper/VGExaDb-LVDbHome /home
/dev/mapper/VGExaDb-LVDbTmp /tmp
/dev/mapper/VGExaDb-LVDbVarLog /var/log
/dev/mapper/VGExaDb-LVDbOra1 /u01
/dev/mapper/VGExaDb-LVDbVarLogAudit /var/log/audit
```

After running the following commands, which command needs to be run to add 20G of space to the filesystem mounted on /u01?

```
# parted -s /dev/sda mkpart primary 240132160s 8189439966s
# parted -s /dev/sda set 3 lvm on
# lvm pvcreate --force /dev/sda3
# lvm vgextend VGExaDb /dev/sda3
```

A. # Ivextend -L +20G --verbose /dev/mapper/VGExaDb-LVDbOral

B. # xfs_growfs /uOI +20G

C. # resize2fs +20G /dev/VGExaDb/LVDbOral

D. # Ivextend -L +20G --verbose /dev/VGExaDb/LVDbOral

Correct Answer: A

Explanation: After running the commands above, the filesystem mounted on /u01 is on the logical volume /dev/mapper/VGExaDb-LVDbOral. So, to add 20G of space to the filesystem mounted on /u01, the command that needs to be run is: Ivextend -L +20G --verbose /dev/mapper/VGExaDb-LVDbOralThis command will extend the logical volume /dev/mapper/VGExaDb-LVDbOral by 20 GB of space. It is important to note that the option --verbose is used to display the progress of the operation.

QUESTION 12

Your customer needs to ensure that their data is available on the Exadata machine during updates. The customer wants to be able to update one server at a time but still be protected against single-node server failure.

What ASM redundancy level should they use?

- A. Normal
- B. Sparse
- C. High

D. External

E. Extended

Correct Answer: A

Your customer needs to ensure that their data is available on the Exadata machine during updates. The customer wants to be able to update one server at a time but still be protected against single-node server failure. This means that they need a redundancy level that can tolerate at least one disk failure without losing data availability or performance. Therefore, the best option for them is normal redundancy. Normal redundancy provides two-way mirroring by default, which means that each data extent has a primary copy and a mirror copy on different disks in different failure groups1. A failure group is a subset of disks within a disk group that are likely to fail at the same time due to common dependencies2. On Exadata Database Machine, each Storage Server is considered as a failure group by default2. This means that if one Storage Server fails or needs to be updated, the data on its disks can still be accessed from another Storage Server that has the mirror copies of the same data extents2. Therefore, normal redundancy ensures data availability and performance during updates or single-node server failures. https://docs.oracle.com/en/engineered-systems/exadata-databasemachine/sagug/exadata-administering-asm.html