

Question: 1

You are patching your Exadata X6 Database Machine by applying a new image to the Storage Servers in a rolling fashion.

Your ASM environment on the Database Machine has five diskgroups stored on an unpartitioned Exadata storage grid, with redundancy settings as shown:

1. DATA_DBM1 – Normal Redundancy
2. RECO_DBM1 – Normal Redundancy
3. DBFS_DG – Normal Redundancy
4. DATA2_DBM1 – High Redundancy
5. DATA3_DBM1 High Redundancy

Which two diskgroups will not suffer from any data loss throughout the patching process even if there is a single disk failure on one of the cells

- A. DBFS_DG
- B. DATA3_DBM1
- C. DATA2_DBM1
- D. DATA_DBM1
- E. RECO_DBM1

Answer: D,E

Explanation:

HIGH redundancy provides protection against 2 simultaneous disk failures from 2 distinct storage servers or 2 entire storage servers. HIGH redundancy provides redundancy during Exadata storage server rolling upgrades.

References: <http://blog.umairmansoob.com/choosing-high-vs-normal-redundancy-with-exadata/>

Question: 2

Which four statements are true about the configuration of Auto Service Request (ASR) for use with an X5 Database Machine?

- A. ASR Manager software may be installed on one of the database servers in the Database Machine.
- B. ASR can connect to the Internet using Simple Network Management Protocol (SNMP), using a proxy server.
- C. ASR Manager can connect to the Internet directly with HTTPS.
- D. ASR Manager can connect to the Internet with HTTPS using a proxy server.
- E. ASR can connect to the Internet directly using Simple Network Management Protocol (SNMP).
- F. ASR Manager software may be installed on a server that is not part of the Database Machine.

Answer: A,C,D,F

Explanation:

C: If you need to use HTTPS for security purposes, you can set up HTTPS/SSL for the ASR Manager HTTP receiver.

D: As part of the registration process for ASR Manager, you can optionally set the ASR Manager to access the internet through a proxy server.

References: https://docs.oracle.com/cd/E37710_01/install.41/e18475/ch2_asr_manager.htm#ASRUD137

Question: 3

You must replace the battery on the disk controller in three Exadata storage servers and must power off the affected storage servers.

Which two commands must you execute to safely power off the storage servers in an X5 Database Machine?

- A. 'shutdown -h now' on the affected storage servers
- B. CellCLI> LIST GRIDDISK WHERE STATUS != 'inactive'
- C. CellCLI > LIST GRIDDISK ATTRIBUTES name WHERE asmdeactivationoutcome != 'Yes'
- D. 'crsctl stop cluster -all' on one of the database servers
- E. CellCLI> ALTER GRIDDISK ALL INACTIVE

Answer: C,E

Explanation:

C: Step 1:

Run the following command to check if there are other offline disks

```
CellCLI> LIST GRIDDISK ATTRIBUTES name WHERE asmdeactivationoutcome != 'Yes'
```

If any grid disks are returned, then it is not safe to take the storage server offline because proper Oracle ASM disk group redundancy will not be intact.

E: Step 2:

Inactivate all the grid disks when Oracle Exadata Storage Server is safe to take offline using the following command:

```
CellCLI> ALTER GRIDDISK ALL INACTIVE
```

Taking the storage server offline when one or more grid disks are in this state will cause Oracle ASM to dismount the affected disk group, causing the databases to shut down abruptly.

Question: 4

Which two statements are true about the Enterprise Manager plug-in configuration for the X5 Database Machine?

- A. There is one plug-in for Cloud Control.
- B. There are several separate plug-ins for Cloud Control.
- C. Some components of the Database Machine require SNMP trap forwarders.
- D. All components of the Database Machine require SNMP trap forwarders.

Answer: A,C

Question: 5

Which two are benefits of an active/inactive configured InfiniBand network on Exadata Database Machine X5?

- A. Improved performance for Oracle Network traffic
- B. Improved reliability for Cache Fusion RAC network traffic
- C. Improved reliability when executing Distributed Command Line Interface (DCLI) to run CELLCLI commands
- D. Improved performance for ASM rebalance network traffic
- E. Improved performance when executing Distributed Command Line Interface (DCLI) to run CELLCLI commands

Answer: B,C

Explanation:

Active-passive bonding provides reliability through failover.

Question: 6

Identify two valid reasons for executing an X5 Exadata storage server rescue procedure.

- A. Accidental loss of all data from all griddisks in a storage server
- B. Corruption in the /(root) filesystem
- C. Corruption in a normal or high redundancy ASM diskgroup
- D. The failure of both physical disks 0 and 1
- E. Only the failure of physical disk 1
- F. Only the failure of physical disk 0

Answer: B,D

Explanation:

The rescue procedure is necessary when system disks fail, the operating system has a corrupt file system, or there was damage to the boot area. If only one system disk fails, then use CellCLI commands to recover. In the rare event that both system disks fail simultaneously, you must use the Exadata Storage Server rescue functionality provided on the Oracle Exadata Storage Server Software CELLBOOT USB flash drive.

Question: 7

Which three statements are true about the CELLCLI command?

- A. It can execute commands on multiple storage servers in parallel.
- B. It has command-line history.
- C. It requires root privileges to create CELLDISKS and GRIDDISKS.
- D. It can be executed on storage servers.
- E. It can be executed using the DCLI utility.

Answer: B,D,E

Explanation:

The CellCLI utility supports command-line history.

Each Exadata Storage cell can be monitored, configured, and maintained using the cellcli command line interface.

The dcli utility facilitates centralized management across an Oracle Exadata Storage Server Software realm by automating the execution of CellCLI commands on a set of cells and returning the output to the centralized management location where the dcli utility was run.

References: http://docs.oracle.com/cd/E80920_01/SAGUG/exadata-storage-server-cellcli.htm

Question: 8

Because of a motherboard failure on an X6 high-capacity Exadata storage server, you must replace the server chassis with a replacement unit.

Which are three of the components must you move from the original Exadata storage server to the new Exadata storage server?

- A. Redundant power supplies
- B. The host bus channel adaptor
- C. The USB flash drive
- D. The four Sun Flash Accelerator PCIe cards
- E. The 12 physical disks

Answer: A,D,E

Explanation:

Remove the following reusable components:

References: https://docs.oracle.com/cd/E62172_01/html/E63689/goiqw.html#scrolltoc

Question: 9

You issued these commands to all Exadata Storage Servers in an X6 Exadata Database Machine using dcli:

```
alter iormplan objective = off
```

```
alter iormplan active
```

There are no database or category plans defined.

You are suffering I/O performance problems at certain times, which vary by day and week.

DSS and batch workloads perform well, but your OLTP workloads suffer poor response times when running at the same time as these other workloads.

You must ensure that DSS and batch workloads retain relatively high throughput without causing excessive degradation of OLTP performance.

Which statement would you issue to all Exadata Storage Servers to achieve this?

- A. alter iormplan objective = low_latency
- B. alter iormplan objective = high_throughput
- C. alter iormplan objective = balanced
- D. alter iormplan objective = auto

Answer: A

Explanation:

When the objective option is set to basic, the database resource plan maximum utilization limits are not enforced. For stricter plan conformance, and enforcement of maximum utilization limits, the objective option must be set to something other than basic. The supported IORM objectives are auto, low_latency, balanced, and high_throughput.

The objective may also be changed to low_latency in which case the latency for critical I/Os is very good but there is a significant degradation in scan throughput when both workloads are running concurrently.

Question: 10

Which three are true concerning Smart Scans?

- A. The decision to perform a Smart Scan is made by the Optimizer.
- B. Smart Scans are only possible during full table scans or fast full index scans.
- C. Smart Scans are possible on Index Organized Tables (IOTs).
- D. Smart Scans always outperform scans that are not offloaded.
- E. Smart Scans are possible on heap organized tables.
- F. Smart Scans are possible on uncompressed B*Tree indexes.

Answer: A,B,F

Explanation:

B: In order for queries to take advantage of Exadata's Offloading capabilities, the optimizer must decide to execute a statement with a Full Table Scan or a Fast Full Index Scan.

F: Smart Scans can be used for full scanning through B*Tree index segments.

References: Expert Oracle Exadata - K. Osborne, et al., (Apress, 2011) BBS, page 346

Question: 11

You plan to migrate an existing production database supporting online transaction processing (OLTP) workloads to an X6 Exadata Database Machine.

The database currently supports an application requiring fast response times to satisfy stringent business requirements, and most of the application queries use indexed access to tables.

For which two cases would you consider dropping indexes that are not used for constraints after the migration to assure that Smart Scans occur?

-
- A. if Smart Scan performs better than any type of index scan on the corresponding table.
 - B. if Smart only occur instead of index skip scans on the corresponding table.
 - C. if Smart only occur instead of index range scans on the corresponding table.
 - D. if Smart Scans performs equally well to any type of index scan on the corresponding table.

Answer: A,C

Question: 12

Which three are recommended options on an X5 Exadata Database machine, for staging files that will be loaded as external tables?

- A. on an ACFS file system stored in a staging database on the Database Machine
- B. a ZFS over NFS file system mounted on a database server where the external table will be accessed
- C. an Exadata-based ACFS file system on the Database Machine
- D. a DBFS file system stored in a staging database on the Database Machine
- E. on local storage on one or more storage servers that are accessible to the database server where the load will be performed

Answer: A,B,E