

**EMC E20-814**

**Symmetrix Solutions Expert Exam for Storage  
Administrators  
Version: 4.0**

**QUESTION NO: 1**

A company's administrator has implemented Symmetrix Access Control. The motherboard in the UNIX host with ADMIN privileges was replaced. After this change, the administrator was unable to issue any Symmetrix Management commands.

What is the next step the administrator should take?

- A. Regenerate the Unique ID
- B. Reboot the UNIX host
- C. Reset the Access Control database
- D. Reinstall Solutions Enabler

**Answer: A**

**Explanation:**

**QUESTION NO: 2**

All applications running on an EMC Symmetrix VMAX array are experiencing poor performance. The environment is characterized by:

- Dissimilar workloads
- Inefficient resource utilization
- Service levels not being met

What can be done to guarantee service levels of business critical applications?

- A. Implement dynamic cache partitioning
- B. Balance throughput across ports
- C. Re-map devices to evenly map the workload
- D. Provision new storage for applications

**Answer: A**

**Explanation:**

**QUESTION NO: 3**

SRDF/EDP is running in Adaptive Copy Disk mode from the source (R1) site to the secondary (R21) site. Which SRDF mode is permitted between the R21 and the R2 sites?

- A. Adaptive Copy Write Pending

- B. Adaptive Copy Disk
- C. Synchronous
- D. Semi-synchronous

**Answer: A**

**Explanation:**

#### QUESTION NO: 4

A company has activated a consistent clone replica of an Oracle database using hot backup mode on February 26th. The Oracle instance continues to run until March 6th. On March 7th, the company realizes that an application problem occurred on February 28th.

What is the most recent point to which the database can be recovered?

- A. February 26th
- B. February 28th
- C. March 6th
- D. March 7th

**Answer: B**

**Explanation:**

#### QUESTION NO: 5

A company uses VMware ESXi servers and EMC Symmetrix VMAX storage arrays. The storage administrators use the VMware vSphere client on their Microsoft Windows desktops to manage the environment. They would like to use the EMC Virtual Storage Integrator Path Management plug-in.

Which path management activities will this plug-in allow?

- A. Set multi-pathing policy for all Symmetrix devices
- B. Set multi-pathing policy for individual Symmetrix devices
- C. Change the multi-pathing ownership of all Symmetrix devices from NMP to PowerPath/VE
- D. Change the multi-pathing ownership of individual Symmetrix devices from NMP to PowerPath/VE

**Answer: A**

**Explanation:**

**QUESTION NO: 6**

A company has a vSphere environment consisting of eight ESXi hosts. Each host is running EMC PowerPath/VE and is connected to multiple FA ports on their Symmetrix. PowerPath/VE will not claim the disk devices presented by their storage array even though the devices are seen by the hosts.

What is the most likely solution?

- A. Configure and register the PowerPath/VE license file
- B. Check LUN masking on the array
- C. Change the PowerPath/VE failover policy to Symopt
- D. Uninstall and reinstall PowerPath/VE

**Answer: A**

**Explanation:**

**QUESTION NO: 7**

An Oracle ASM disk group consists of two 50 GB LUNs and is currently in use. The Oracle database requires more storage space and has two 100 GB LUNs available.

What is the recommended way to organize ASM disk groups to make use of additional space?

- A. Create a new disk group containing two 100 GB LUNs
- B. Extend the current disk group to include the two 100 GB LUNs
- C. Create two new disk groups containing one 100 GB LUN each
- D. Double the disk group size by extending with one 100 GB LUN

**Answer: A**

**Explanation:**

**QUESTION NO: 8**

A company is planning to migrate their Oracle database to EMC Symmetrix VMAX to support decision support system applications. They would like design guidelines to overcome the existing performance bottlenecks.

What is the key design guideline?

- A. Redo logs and archive logs on separate spindles with RAID 5 protection
- B. Redo logs and archive logs on the same spindles RAID 5 protection
- C. Redo logs and archive logs on the same spindles with RAID 1 protection
- D. Redo logs and archive logs on separate spindles with RAID 1 protection

**Answer: D**

**Explanation:**

#### QUESTION NO: 9

A company uses EMC Symmetrix VMAX storage for their VMware vSphere environment. They intend to use SRDF/S for disaster recovery.

What is a consideration when mounting datastores on the remote site after a failover?

- A. Keep the existing signature on the replica datastore
- B. Assign a new signature to the replica datastore
- C. Replica datastore must be mounted as read only
- D. Original datastore must be unmounted before the replica datastore can be mounted

**Answer: A**

**Explanation:**

#### QUESTION NO: 10

Storage administrators for an EMC Symmetrix VMAX need to increase allocated storage for Microsoft Exchange LUNs without interrupting its operation. Performing a virtual LUN migration causes a critical nightly clone operation to run for hours instead of minutes. This impacts later dependent jobs, preventing production operations from completing.

How can this impact to the nightly process be minimized?

- A. Set a QoS value of 8 for MIR Copy Pace
- B. Set a QoS value of 0 for MIR Copy Pace
- C. Set SPC value of 1 on the Exchange LUNs
- D. Set SPC value of 8 on the clone LUNs

**Answer: A**

**Explanation:**

**QUESTION NO: 11**

A company intends to manage their EMC Symmetrix VMAX array with Solutions Enabler installed on a VMware Virtual Machine (VM). The VM will be hosted on an ESXi server.

What is the requirement with regards to Symmetrix gatekeeper (GK) devices?

- A. VM should have access to GKs presented as RDMs in Physical Compatibility mode
- B. VM should have access to GKs presented as RDMs in Virtual Compatibility mode
- C. ESXi should have PowerPath/VE installed and access to GKs over multiple paths
- D. ESXi should have access to GKs and the NMP path selection policy should be set to Round Robin

**Answer: A**

**Explanation:**

**QUESTION NO: 12**

A customer is using Replication Manager using Microsoft Volume Shadow Service (VSS) to backup their Exchange 2010 environment hosted on a Symmetrix VMAX storage array. To improve performance of backup and maintenance tasks, which allocation unit size should be used to format the Exchange database and log volumes?

- A. 32K
- B. 64K
- C. 4096
- D. 8192

**Answer: B**

**Explanation:**

**QUESTION NO: 13**

You are planning a cold migration of a virtual machine from one VMFS datastore to another. VAAI hardware acceleration is enabled and both datastores are on the same EMC Symmetrix array.

The virtual machine has RDMs attached to it.

When you perform the cold migration, the virtual disks move to their new location. However, it appears that the RDMs have been converted into virtual disks.

How do you migrate RDM data located on a Symmetrix array?

- A. VMAX Virtual LUN Migration must be used
- B. Migrate the virtual machine using Storage vMotion
- C. Add the new RDM to the guest and manually move data
- D. RDM must be presented in Virtual Compatibility mode

**Answer: A**

**Explanation:**

#### QUESTION NO: 14

A company has implemented Microsoft Exchange Server 2010 in an SRDF environment with replicas being taken at the disaster recovery (DR) site. During testing of this solution, they have failed over Exchange operations to the DR site. The Exchange mailbox server appears to come online, but user mailboxes are inaccessible. The Exchange Management Console shows all mailboxes marked with a small red "x" over the mailbox icons.

Which course of action will resolve this issue?

- A. Ensure the Exchange mailbox server at the DR site can communicate with an Active Directory Domain Controller
- B. Recover the database from the clone copies available at the DR site
- C. Ensure that the World Wide Web service on the Exchange server at the DR site has started successfully
- D. Recover the database from the remote clone copies available at the primary site

**Answer: A**

**Explanation:**

#### QUESTION NO: 15

Some applications running on an EMC Symmetrix VMAX array are experiencing poor performance.

A performance analysis reveals the following:

- Write response time is impacted
- Heat Map shows low front-end utilization
- Heat Map shows high back-end utilization

What is the potential problem?

- A. Logical volume write pending limit has been reached
- B. System-wide write pending limit has been reached
- C. Flexible dynamic cache partitioning has been implemented
- D. Static dynamic cache partitioning has been implemented

**Answer: A**

**Explanation:**

#### QUESTION NO: 16

A company intends to manage their EMC Symmetrix VMAX array with the Symmetrix Management Console Virtual Appliance (SMCvAPP) deployed on an ESXi server. What is the requirement with regards to Symmetrix gatekeeper (GK) devices?

- A. SMCvAPP should have access to GKs, presented as RDMs in Physical Compatibility mode
- B. SMCvAPP should have access to GKs, presented as RDMs in Virtual Compatibility mode
- C. ESXi should have PowerPath/VE installed and access to GKs over multiple paths
- D. ESXi should have access to GKs and the NMP path selection policy should be set to Round Robin

**Answer: A**

**Explanation:**

#### QUESTION NO: 17

A company has a SAN environment with VMFS5 hosts attached to an EMC Symmetrix VMAX experiencing poor performance. They observed that the file system subblock size is misaligned.

What is the correct alignment?

- A. 8 KB
- B. 16 KB



- C. 32 KB
- D. 64 KB

**Answer: A**

**Explanation:**

#### **QUESTION NO: 18**

When using Performance Manager to analyze an application, you notice that the application has a high amount of reads but a very low read hits. The workload is mostly random.

Which kind of application does this profile most likely represent?

- A. Email
- B. Video Streaming
- C. Data Warehouse
- D. OLTP

**Answer: A**

**Explanation:**

#### **QUESTION NO: 19**

A host with an OLTP workload is configured with five standard devices on an EMC Symmetrix VMAX. In the host LVM, the storage is configured into a concatenated logical volume. The back-end storage consists of Fibre Channel disk drives. The host has two HBAs zoned to two FAs.

The workload hits a ceiling at around 66% of the peak workload requirements with high random reads. At peak times:

- Disk director % utilization is low
- Host port % utilization is low
- Disk I/O per second is low
- Current write pending count is high

What is a likely solution to this problem?

- A. Add striped metavolumes
- B. Add standard devices to the existing LVM volume
- C. Add more HBAs to the host

D. Add more FAs to the storage devices

**Answer: A**

**Explanation:**

**QUESTION NO: 20**

A company needs to comply with data-at-rest security on a server currently in use and connected to an EMC Symmetrix VMAX.

Which security feature will satisfy this requirement?

- A. PowerPath Encryption
- B. Access Control
- C. RSA enVision
- D. IPsec

**Answer: A**

**Explanation:**

**QUESTION NO: 21**

A company has tasked you with connecting their new ESXi hosts to their EMC VMAX array and will be using Native Multi-Pathing (NMP). You have decided to stay with the default NMP policy for this project.

On an ESXi host, what is the default NMP policy when connecting to an Active/Active array such as Symmetrix?

- A. Fixed
- B. MRU
- C. Round Robin
- D. Symopt

**Answer: A**

**Explanation:**