# VNX Solutions Expert Exam for Implementation Engineers

1. A customer is asking you for help. They are creating a script that will collect data from the array

emperatures, and input power on the DAE and SPS.
A. navicli -h spa environment -list -array -power
B. navicli -h spa environment -list -all
C. This information cannot be gathered via CLI
D. navicli -h spa getcontrol -all
Answer(s): B
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2. A customer currently has a RP/SE single cluster system. They want to add an additional VNX array for replication. The business requires replication from the existing VNX to the new one.  A. Zone the new VNX FC ports to the existing RPA ports. Create new Consistency Groups using

D. Purchase an additional RP/SE license for the new VNX.Add the VNX to the existing cluster using

Deployment Manager.

Answer(s): B

observe intermittent performance degradation due to momentary data hot spots caused by bursty transaction rates. What recommendation would you make to help alleviate these hot spots?	
A. Modify the ASM rebalance power priority	
B. Enable Fast VP on the ASM LUNs	
C. Disable ASM storage management	
D. Enable Fast Cache on the ASM LUNs	
Answer(s): D	
<b>4.</b> A customer wants to create a file system for a highly sequential application. They plan to use the EMC VNX AVM feature to create the file system, using the clarsas_archive pool in a RAID 5 (4+1) configuration. They want to know how much data is being written to each dvol in the pool entry. Which property would they examine?	
A. stripe depth	
B. queue depth	
C. stripe length	
D. block size	
Answer(s): A	
<b>5.</b> A customer uses VNX Snapshot for quality assurance testing throughout many phases of development. The customer notices that when project development ends and they delete all the snapshots, SP utilization seems to increase for a long time.	
A. Keep at least one snapshot of the thick LUN.	
B. Rename the snapshots prior to deleting them.	

3. A customer has an Oracle ASM database on an EMC VNX with FAST Suite enabled. They

C. Unmount the Primary LUN before deleting the snapshots.
D. Defragment the LUN after removing all the snapshots.
Answer(s): A
<b>6.</b> A customer plans to use Incremental SAN Copy (ISC) to migrate data between two EMC VNX They attempt to create a SAN Copy session from a source LUN, but are unable to create the session. Which is the most likely cause for this SAN Copy session behavior?
A. The source LUN is already being replicated to a destination LUN.
B. The source LUN is a SnapView snapshot LUN.
C. The SAN Copy session is not running on a MirrorView port.
D. The source and destination LUNs are not the same RAID type.
Answer(s): B
<b>7.</b> A customer plans to migrate their virtualized server environment to a new VNX array. They are concerned their storage pool configuration could be compromised by their varied server workloa profiles. What vSphere v5.0 feature would you discuss with the customer to address their concern?
A. Clustered Datastore Affinity
B. Raw Device Mapping
C. Native Multipathing
D. PowerPath/VE
Answer(s): A
8. An EMC VNX with FAST Suite will be used as block storage for a mail environment with four

Exchange 2010 servers. The Exchange servers will serve as mailbox and archive mailbox

A. Database pool LUNs should be thick provisioned; log pool LUNs should be thin provisioned.
B. All pools should be provisioned as thick pool LUNs only.
C. All pools should be provisioned as thin pool LUNs only.
D. Database pool LUNs should be thin provisioned; log pool LUNs should be thick provisioned.
Answer(s): B
<b>9.</b> A Storage Administrator with a VNX Unified solution is using the CLI to monitor a highly specification view of daily storage performance. They must type long commands to examine the desired statistical information. You have been asked to accelerate this task.
A. Create user-defined statGroups
B. Collect statistics from log files
C. Use Unisphere Statistics for File
D. Use Celerra Monitor Tool
Answer(s): A
<b>10.</b> A customer is testing their new MirrorView/A configuration between two EMC VNX. What will be the state of a newly created mirror after it is added to a previously synchronized Consistency Group?
A. Synchronized
B. Consistent
C. Out-of-sync
D. Quasi-consistent

servers. The VNX has the following disks in two DAEs:

# Answer(s): D

- **11.** You have been working with a customer of a Unified VNX. The customer is storing a very large number of files in a single file system that originally was 12 TB in size. File level deduplication was turned on for this file system, using fast file compression. This resulted in a compression rate of 33%.
  - A. The Data Mover is too heavily utilized for the deduplication job to run.
  - B. The maximum size of the file system has been met, so deduplication cannot run on the last 4 TB of files.
  - C. Only the new 4 TB of data is compressed, using deep compression.
  - D. Deduplication will first take place 30 days after last access of the file.

# Answer(s): C

- **12.** A Storage Administrator would like to use Manual Volume Management to create file systems for their Oracle database log files.
  - A. disk > slice > stripe > meta
  - B. disk > stripe > slice > meta
  - C. disk > meta
  - D. disk > stripe > meta

#### Answer(s): C

**13.** A customer plans to move a performance-sensitive application to a new EMC VNX with all SAS drives. The application will reside on an NFS export, and the customer requires the file system provide consistent performance. The customer also needs to create additional CIFS shares, which do not share the same performance requirement.

- A. Place four dvols in a user-defined pool for the NFS-exported file systems and let AVM manage the CIFS file systems with system-defined pools.
- B. Place four dvols in a system-defined pool for the NFS-exported file systems and let AVM manage the CIFS file systems with user-defined pools.
- C. Place five dvols in a system-defined mapped pool for the NFS-exported file systems and let AVM manage the CIFS file systems with user-defined pools.
- D. Place five dvols in a user-defined mapped pool for the NFS-exported file systems and let AVM manage CIFS file systems with system-defined pools.

## Answer(s): A

- **14.** A customer configures replication between two Data Movers for their VDM environment. The primary Data Mover has one 1 Gb copper ethernet port and the destination Data Mover has one 10 Gb optical network port. The customer reports replication is not performing as expected and requests your assistance. What is the most likely cause of this replication issue?
  - A. The interface media do not match between Data Movers.
  - B. The interface names do not match on both Data Movers.
  - C. The interface on the Data Movers has a duplex mismatch.
  - D. The interface speeds do not match on both Data Movers.

### Answer(s): C

**15.** You configure an EMC VNX for iSCSI-attached Linux hosts. The customer's application generates small, random I/O and the data is frequently re-accessed. The customer has a limited number of flash drives available. Which VNX performance feature would you recommend?

A. FAST Cache
B. FAST VP
C. SNiiFFER
D. MPFS
Answer(s): A
<b>16.</b> You receive a call from a customer asking why they are not getting optimal performance on their new Block pool LUNs that they created last week.
A. Make sure to use thin LUNs
B. Move LUNs to a new pool and select the highest tier
C. Move LUNs to a new pool and select the lowest tier
D. Move to classic LUNs
Answer(s): D
17. Click on the calculator in the upper left-hand corner.
A. 1 TB
B. 200 GB
C. 500 GB
D. 100 GB
Answer(s): C

18. What is the default file system type when creating a File System on a VNX?

A. ckpt
B. mgfs
C. uxfs
D. rawfs
Answer(s): A
<b>19.</b> You are implementing a VDI solution provided by the project Solutions Architect at a customer site. After application testing, the Storage Administrator states that the solution is spread across more disks than anticipated.
A. Best practice for VDI solutions is to use RAID 6, and this was not done.
B. The original request was for thin provisioning, but VDI environments require thick provisioning.
C. The design accounts for excessive boot I/O in case of an HA event.
D. Best practice for VDI solutions is to use RAID 1/0, and this was not done.
Answer(s): C
<b>20.</b> A customer placed their application data on a thin LUN created from an existing pool. The thin LUN is reaching capacity and cannot be expanded due to capacity constraints on the pool.
A. Migrate the data to a new LUN on the same pool
B. Compress the thin LUN
C. Migrate the data to a new LUN on a new pool
D. Defragment the thin LUN

# Answer(s): B