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Exam : E20-329

Title : Technology Architect Backup and Recovery Solutions Design Exam

Version : V14.02



Exam A**QUESTION 1**

An EMC Avamar customer's Gen-1 system with 4 TB of GSAN capacity has reached read-only threshold. The customer indicates that the deduplicated backup data accounts for approximately 3.5 TB. What is the most likely cause for the read-only threshold being reached?

- A. Deduplication rate is less than expected, accounting for the remaining GSAN capacity
- B. Combination of system overhead, logs, and checkpoints account for the remaining GSAN capacity
- C. RAIN overhead accounts for the remaining available GSAN capacity
- D. Checkpoints and logs account for the remaining GSAN capacity

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

A customer has an operational EMC NetWorker environment using an Avamar deduplication node. They want to protect the Avamar deduplication node using replication. The customer has approached EMC for advice on what considerations they should take into account. What is a consideration in this environment?

- A. NetWorker automatically configures all replication targets associated with a given deduplication node
- B. Scheduled replications of a NetWorker deduplication node must be set up in Avamar
- C. Recovery from the replications node must be performed from Avamar Administrator
- D. Scheduled replications of a NetWorker deduplication node must be set up in NetWorker

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 3

The EMC account team has been asked to design a NetWorker backup solution with the following requirements.

(1). One copy of backup data needs to be stored locally. (2). An additional copy of backup data needs to be stored on tape at an offsite location. What should be done to satisfy the new regulations with minimal impact to the current backup performance?

- A. Clone to tape and send the clone copy to the remote location

- B. Back up the data concurrently to the remote and local locations
- C. Archive the backup data to the remote location
- D. Archive the data to the remote location before being backed up locally

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4

An organization is backing up a combination of databases, e-mail, and file system data types in their data center to a Data Domain appliance using a single backup server. The backup system administrator creates separate subdirectories for each of the three data types under the default share. What benefit is provided by this approach?

- A. Analyze compression with moregranularity
- B. Simplify backup device configuration
- C. Enhance performance of the database backup
- D. Improve file system cleaning performance

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 5

A customer has a new Avamar server with four 2 TB data nodes. This server is backing up two Avamar clients. The first client has 8 GB of RAM and two file systems. The first file system has 3 million files consuming 75 TB. The second file system contains 5 million files consuming 1 TB of space. The second

client has 10 GB of RAM and one file system containing 4 million files consuming 1.2 TB of space. Both clients will belong to the same backup group. How long will the steady-state backup group be expected to run?

- A. 5 hours
- B. 6 hours
- C. 7 hours

D. 8 Hours

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

An EMC NetWorker customer wants to use the deduplication option. The requirement for a database server in their environment is to perform deduplication backups for file system data and NetWorker tape backups for database data. They want to allow a maximum of two parallel streams for file system backups and a maximum of four streams for database backups.

How can this be accomplished?

Exhibit A

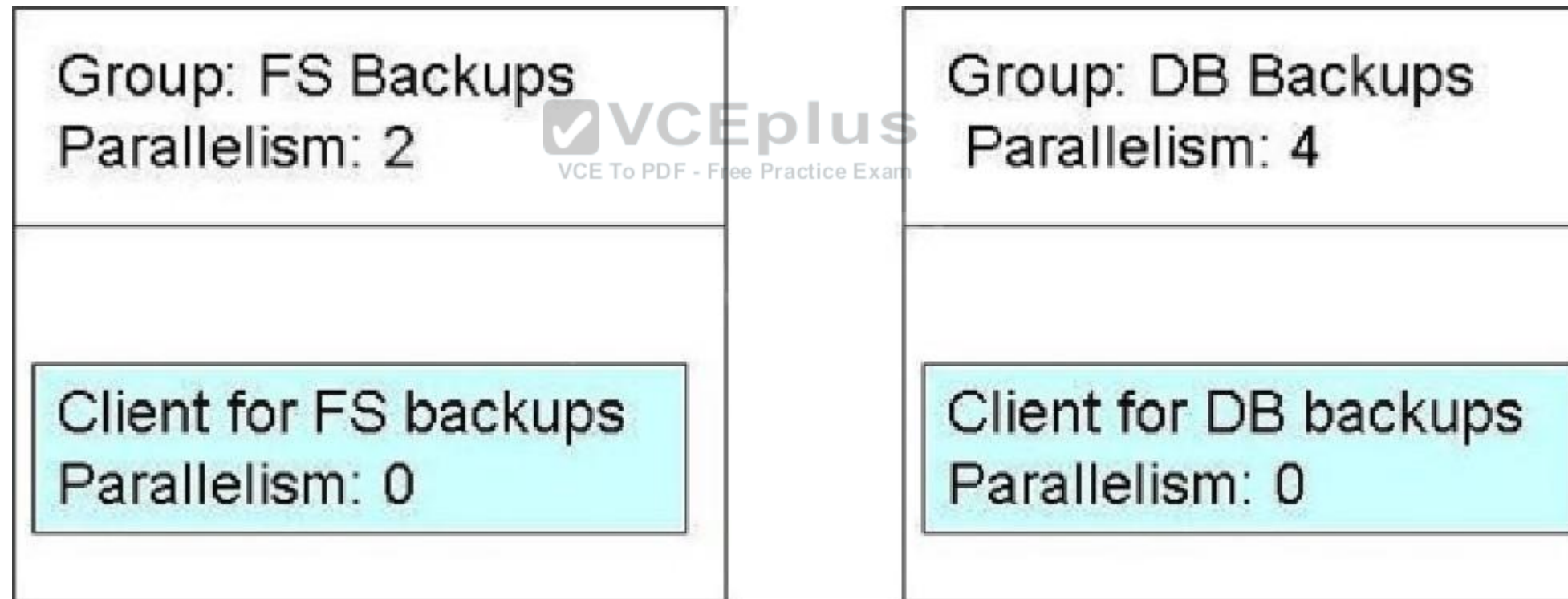


Exhibit B

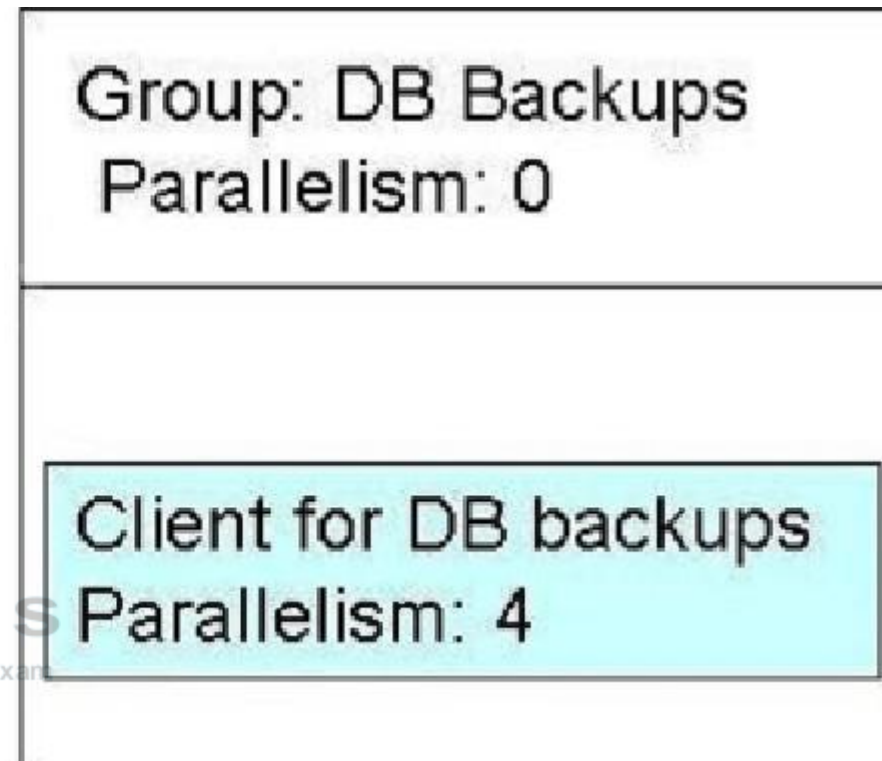
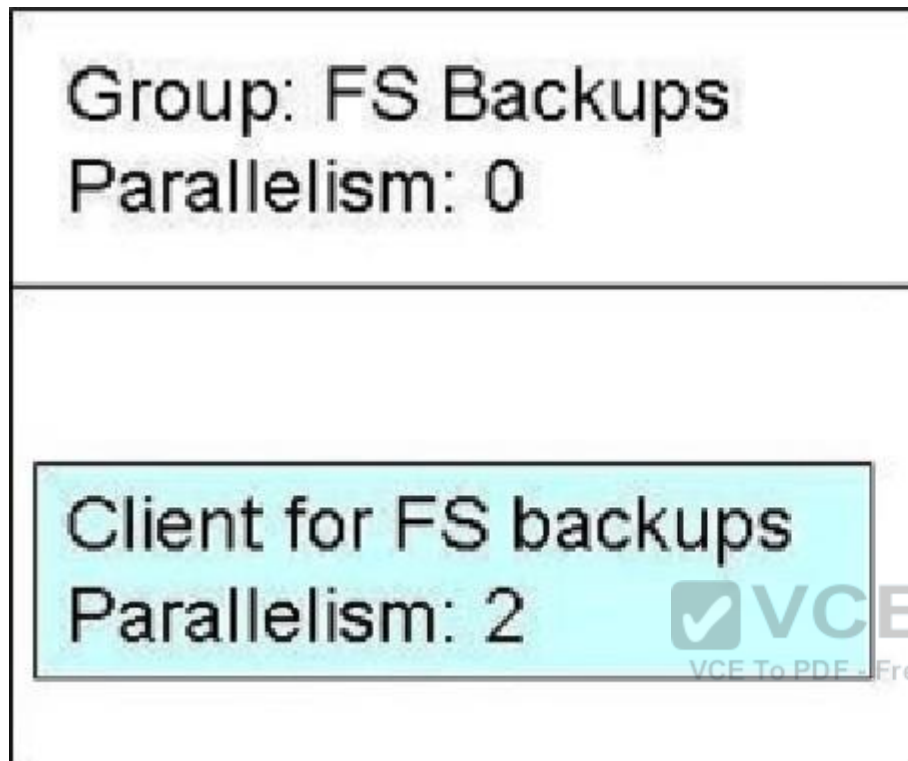


Exhibit C

Group: Backup
Parallelism: 0

Client for FS backups
Parallelism: 2

Client for DB backups
Parallelism: 4

Exhibit D



Group: Backup
Parallelism: 4

Client for FS backups
Parallelism: 2

Client for DB backups
Parallelism: 4

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: C

Section: (none)

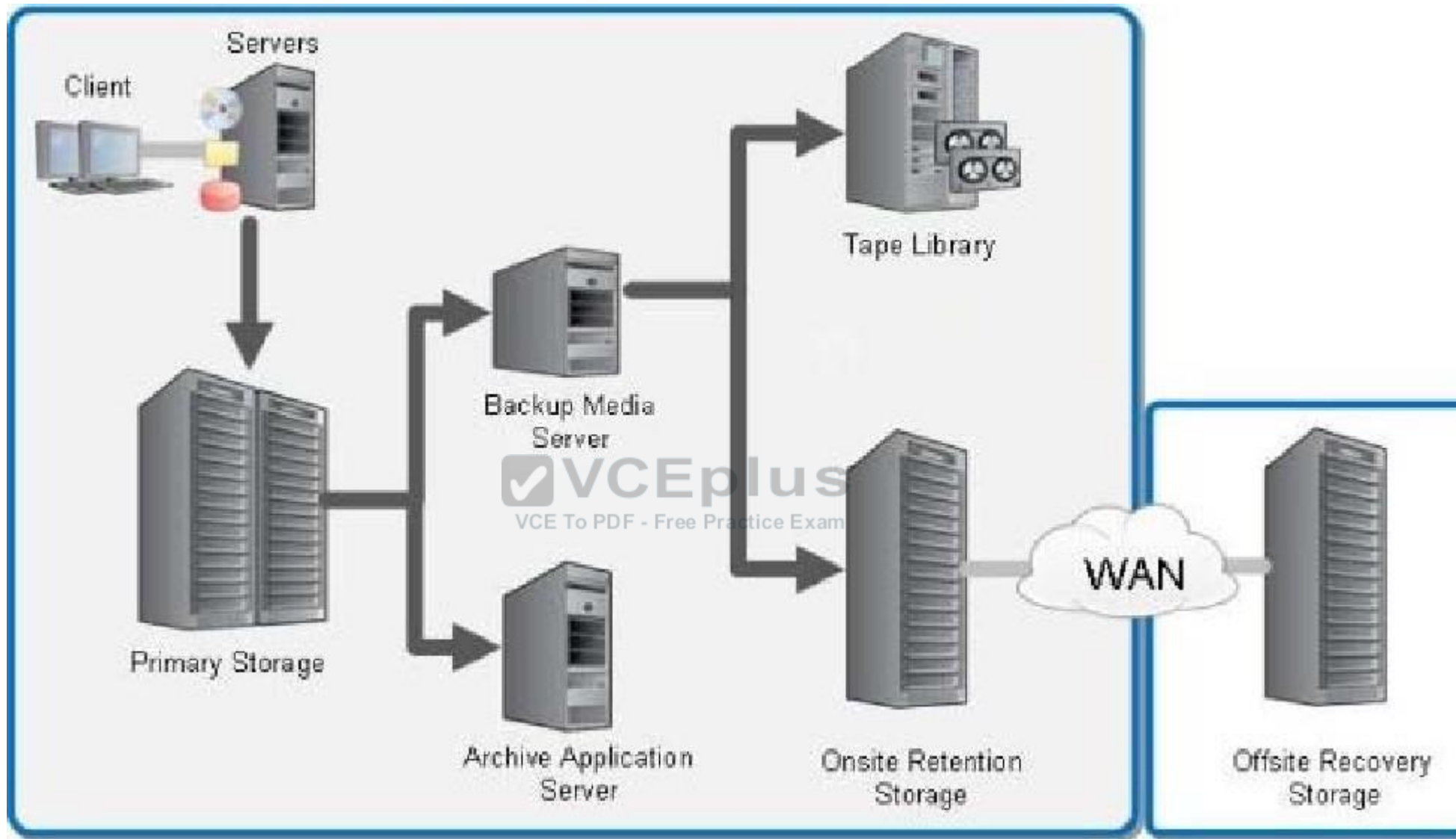
Explanation

Explanation/Reference:

QUESTION 7

As illustrated in the exhibit, a customer has a backup environment that includes clients and server managed by a backup media server. Data is written to a primary storage device and archived to an application server. The customer has onsite retention storage, which is replicated to a disaster recovery site. In addition, archive-to-tape is required.

Which components would you replace when initiating a Data Domain solution?



- A. onsite retention storage and offsite disaster recovery storage
- B. Backup media server and clients
- C. Primary storage and onsite retention storage
- D. Backup media server and archive application server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 8

A customer has a Data Domain appliance that has reached 90% of maximum capacity. The customer does not want to purchase any additional storage. What will increase the average available capacity of the Data Domain appliance?

- A. Decrease the backup retention period
- B. Increase the snapshot expiration period
- C. Increase the number of streams
- D. Decrease the cleaning frequency

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 9

A customer is piloting a Data Domain appliance and notices that performance in the writing of backups is not optimal. Based on the System Show Performance metrics represented in the exhibit, which operation will provide the most improved performance?

===== SYSTEM SHOW PERFORMANCE =====

		-----Throughput (MB/s)-----		---Utilization---						Compression		-----Cache Miss-----				--Streams--		-State--	---Utilization----				
Read	Write	Repl	Network	Repl	Pre-comp	proc	recv	send	idle	gcomp	lcomp	thra	unus	ovhd	data	meta	rd/wr/rw/bx	'CD/VMS'	CPU	disk			
		---in/out---		---in/out---																		avg/max -max-	
0.2	17.0	0.02f	0.74	0.00f	67.95	99%	0%	0%	0%	6.4	1.6	5%	27%	72%	7%	0%	52f2f 0f14	--V--	18%/ 21%	[0] 7%			
0.3	18.3	0.04f	1.46	0.00f	88.07	99%	0%	0%	0%	6.8	1.6	2%	24%	59%	3%	0%	52f3f 0f15	C-V--	21%/ 23%	[0] 5%			
0.2	14.1	0.12f	3.49	0.00f	153.47	99%	0%	0%	0%	5.7	1.6	1%	18%	54%	1%	0%	52f3f 0f13	C-V--	40%/ 43%	[0] 16%			
0.2	13.3	0.02f	0.68	0.00f	56.35	99%	0%	0%	0%	5.3	1.5	1%	8%	53%	2%	0%	52f3f 0f10	C-V--	37%/ 39%	[0] 15%			
0.2	12.5	0.03f	2.40	0.00f	79.23	99%	0%	0%	0%	5.4	1.5	3%	29%	62%	3%	1%	52f4f 0f10	C-V--	32%/ 34%	[0] 18%			
0.2	14.4	0.04f	3.55	0.00f	89.55	99%	0%	0%	0%	6.1	1.6	1%	18%	54%	1%	0%	52f4f 0f14	C-V--	39%/ 41%	[0] 15%			
0.2	14.2	0.02f	0.72	0.00f	58.74	98%	0%	0%	1%	5.9	1.5	1%	11%	52%	2%	0%	53f3f 0f13	C----	38%/ 40%	[0] 14%			
5.1	83.7	0.02f	0.76	0.00f	62.90	98%	0%	0%	1%	11.9	1.4	0%	11%	51%	1%	0%	52f3f 0f17	C----	61%/ 63%	[0] 14%			
6.8	99.8	0.12f	3.69	0.00f	150.16	92%	0%	0%	7%	7.9	1.5	2%	37%	59%	1%	0%	52f3f 0f16	C-V--	67%/ 70%	[0] 18%			

- A. Reduce the read streams
- B. Suspend verification
- C. Disable cleaning
- D. Disable replication



Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10

A customer is using Data Protection Advisor (DPA) to monitor their backup environment. What is a benefit of using remote Collectors?

- A. Reduces the amount of information being transferred to the DPA server
- B. Collects system-related statistics for a given host
- C. Improves the collection performance of backup statistics
- D. Provides more complete backup reports

Correct Answer: B

Section: (none)

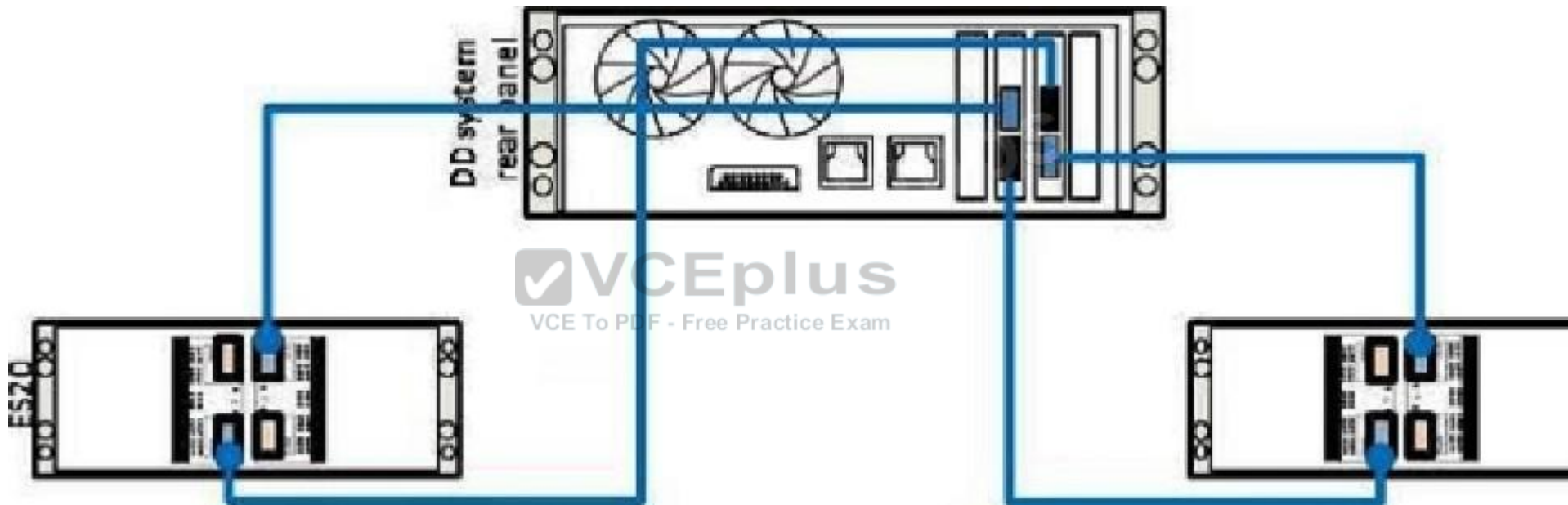
Explanation

Explanation/Reference:

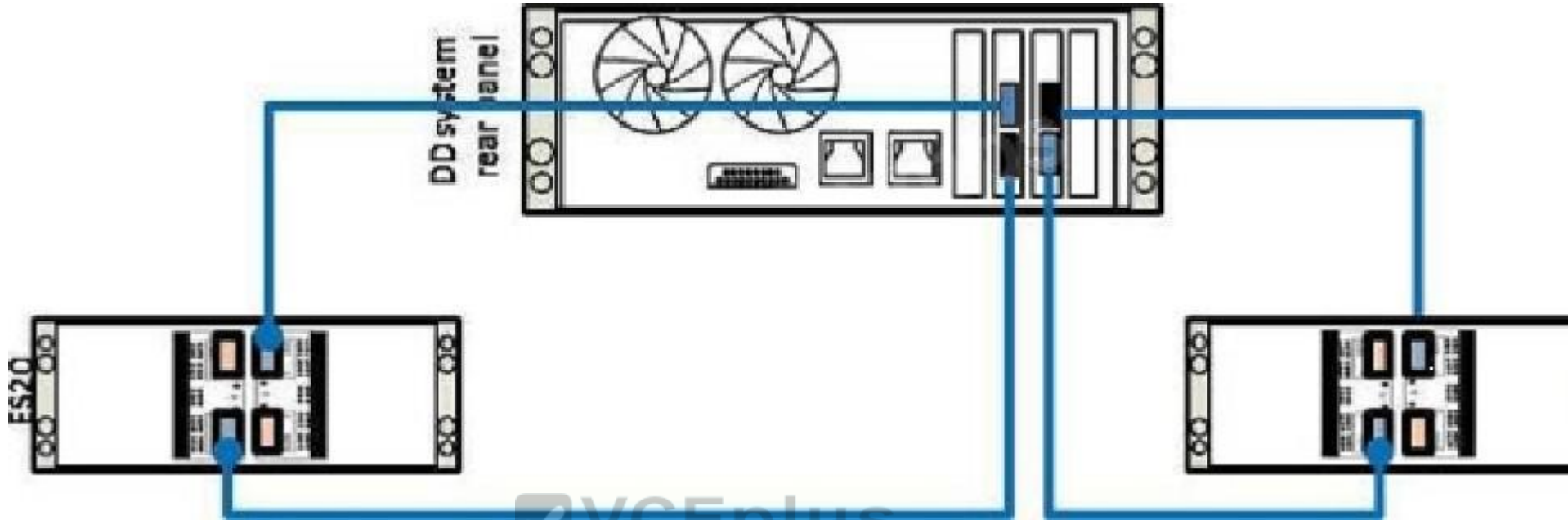
QUESTION 11

A customer is implementing a Data Domain system with two expansion shelves. They require that access to the data can be reached even when a single path fails. The customer does not want the HBA card to be the single point of failure.

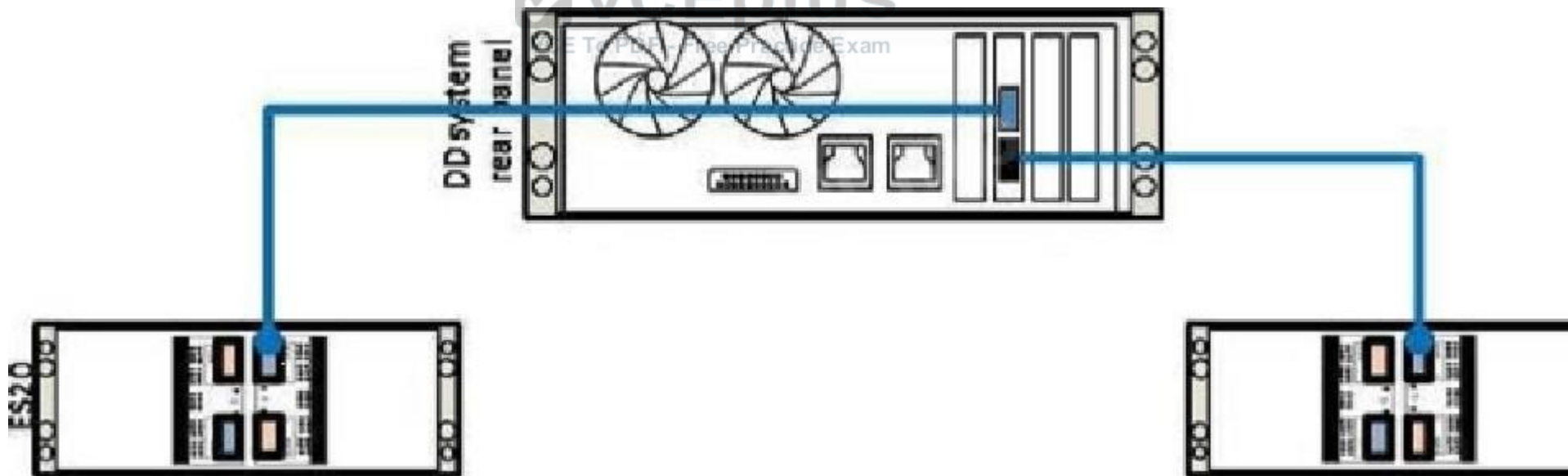
A.



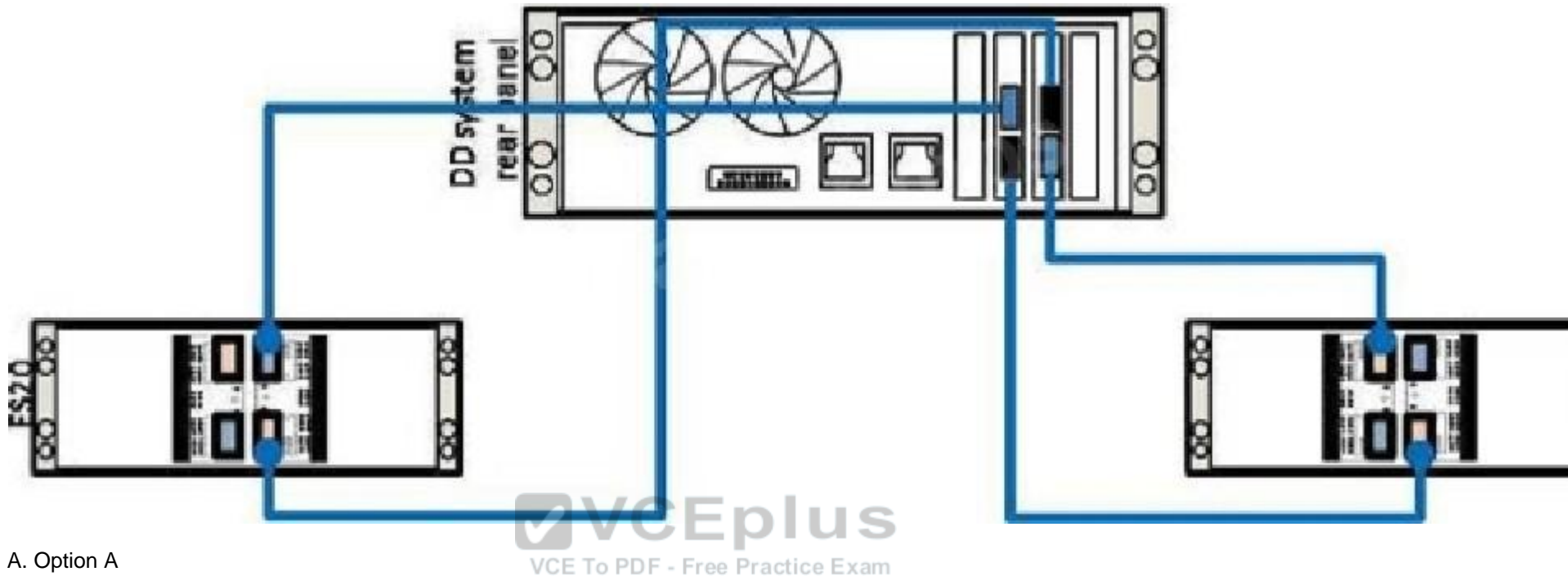
B.



C.



D.



- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 12

The EMC account team has been asked to redesign a NetWorker backup solution. The existing backup environment consists of one NetWorker server and one storage node to back up approximately 80 clients. Over time, the amount of data increased, resulting in daily backups taking more than 24 hours to complete. Analysis has determined that the tape infrastructure and the network are not the bottleneck. What would you recommend to improve the backup performance with minimal costs?

- A. Add a storage node and balance the clients across the storage nodes
- B. Add an EMC NetWorker server and balance the clients across the EMC NetWorker servers

- C. Configure the existing storage node as a dedicated storage node
- D. Change the backup schedules so that they start at different times during the day

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 13

Which critical network elements are assessed by the Network Assessment Tool?

- A. Tracert, Ping, and Packet Loss
- B. Latency, Latency Jitter and Packet Loss
- C. Latency, Load, and Latency Jitter
- D. Latency, Latency Jitter, and Tracert

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:



QUESTION 14

An EMC NetWorker customer performs all backups to physical. The customer backs up file systems, application servers, VMware guests multiple 10 TB database, and a large 20 TB NetApp filer. They have a primary and disaster recovery data center with an OC-12 circuit between the two sites. The customer's physical tape libraries are approaching end of support life and they are looking to replace them with deduplication technology. In addition, they want to improve NDMP backup times for their 20 TB NetApp filer. Which recommendation will address the customer's requirements?

- A. NetWorker deduplication for NDMP backups, databases, and application servers Data Domain for file systems and VMware
- B. NetWorker deduplication for file systems, VMware, and NDMP Data Domain for databases and application servers
- C. NetWorker deduplication for file systems, application servers, and VMware Avamar for NDMP Data Domain for databases
- D. NetWorker deduplication for NDMP Avamar for VMware Data Domain for databases, application servers, and file systems

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 15**

A customer has approached you to advise them on how their backup environment will integrate into their new iSCSI application server deployment. Which network characteristic would have the greatest impact on their backup environment?

- A. Dynamic DNS
- B. LDAP authentication domain
- C. Traffic segmentation
- D. IP version level

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 16**

A customer has a database server with 300 GB of Oracle database data. Using the default hash cache setting, what is the total amount of physical RAM required on the client?

- A. 250 MB
- B. 384 MB
- C. 3 GB
- D. 6 GB

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 17**

What is a key consideration when assessing a nested mount file system and an NDMP Volume Based Backup (VBB) backup strategy?

- A. Multithreaded PAX format for enhanced backup performance is supported
- B. Directory Direct Access Recovery (DDAR) for fast recovery is supported

- C. Selectively backing up a subset of the file system is unsupported
- D. Individual file recovery without the destructive restore flag is unsupported

Correct Answer: C

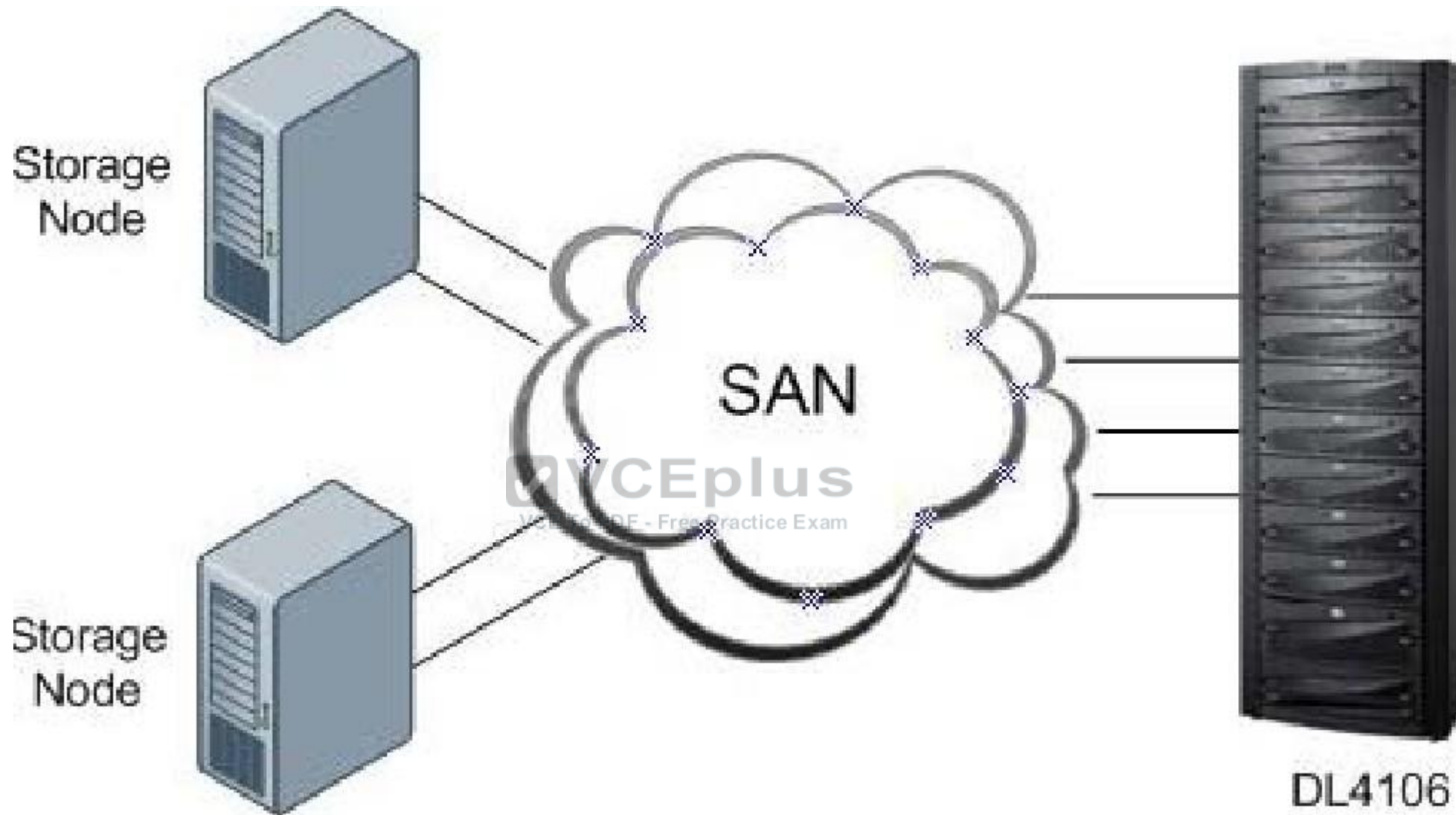
Section: (none)

Explanation

Explanation/Reference:

QUESTION 18

An EMC NetWorker customer is considering using an EMC Disk Library as a target as shown in the exhibit. Two storage nodes need to access the same pool of virtual tapes. In addition, the customer wants to load balance the usage of virtual tape drives across the available connections. Based on EMC best practices, which satisfies these requirements?



- A. Assign each host initiator port a different set of virtual tape drives from the same virtual library
- B. Configure each host initiator with a different virtual tape library, pointing to a common pool of virtual tapes
- C. Assign all virtual drives to all host initiator ports and use Power Path
- D. configure all virtual tape drives on all initiators and enable Active Engine Failover

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 19

A customer has two files that have been locked and backed up to Data Domain appliance with the following parameters:

- File1=atime=20 years
- File1=atime=5 years

The Data Domain global retention periods are configured as follows:

- Min=2 years
- Max=10 years

The administrator changes the Data Domain maximum retention period to 4 years.

After how many years can File 2 be deleted?

- A. 2
- B. 4
- C. 5
- D. 10



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 20

An EMC NetWorker customer has an Oracle database client. To achieve acceptable backup performance, they have configured the backup to use four RMAN channels. The customer wants to benefit from adding Avamar deduplication for this backup. What is a consideration before proposing this design change?

- A. Data from each RMAN channel must be sent to a separate deduplication node
- B. Less than six RMAN channels in a deduplicated backup will perform poorly
- C. More than two RMAN channels in a deduplicated backup will cause the backup to fail
- D. Separate cache files are recommended for each RMAN channel

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:****QUESTION 21**

A customer has asked you to design a backup solution that has a NAS device with several terabytes of encrypted data spread across three different file systems. Which backup option should be avoided in this environment?

- A. Multiplexing
- B. NDMP
- C. Hot or online backup
- D. Deduplication

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:****QUESTION 22**

What are the key concerns when discussing the implementation of a Celerra two-way NDMP backup design utilizing the SnapSure feature?

- A. Rate of data change, network bandwidth to the backup server, and the second primary Data Mover I/O load
- B. Backup server I/O rate, network bandwidth, and amount of source data
- C. Network bandwidth between both primary Data Movers, backup server I/O rate, and Data Mover II/O loads
- D. Amount of source data, rate of data change, and Data Mover I/O load

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:****QUESTION 23**

An EMC NetWorker customer is experiencing poor backup performance. Your analysis determines that significant host resources are used to manage low-level network handshaking operations during backup.

Based on EMC recommendations, what can you do to alleviate the handshake issue?

- A. Upgrade the network driver
- B. Upgrade the LAN
- C. Install a TCP offload engine card
- D. Install a second network interface card

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 24

A customer has purchased Data Protection Advisor (DPA) to provide a single enterprise report on backup compliance across their 24 geographically disperse locations.

How many DPA servers should be installed?

- A. Twenty- four one at each location
- B. One in the primary data center
- C. Five deployed regionally to balance the load
- D. Two in the primary data center for redundancy



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 25

A customer requires a backup host to be located at their primary data center and a tape library at their disaster recovery data center. The distance between the two data centers is 500 kilometers. What is the recommended connectivity solution between the data center and the tape library to address the customer's requirement?

- A. Fibre Channel-to-IP bridge or router
- B. Fibre Channel inter-switch link
- C. Dedicated Fibre Channel link
- D. Fibre Channel Arbitrated Loop

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 26

Which environment will yield the optimal data deduplication for backup purposes?

- A. An advertising organization where multimedia files are backed up and store indefinitely
- B. Database environment where large transaction logs are backup up on a daily basis and for one month
- C. Hospital environment where compliance requires patient information (CAT scans, MRI, x-rays) to be backed up, stored, and accessible for up to 10 years
- D. Virtualized environment where OS images are stored in a SAN environment and backed up and retained for 3-6 months

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 27

You have been asked to design a new backup solution for a customer to satisfy operational backup requirements. After an initial analysis you decide to implement a two-tier solution. The first tier is disk; the second tier is tape. A retention period needs to be defined for the first tier that will determine when backup data will be moved to the second tier.

What is an important piece of information you need to consider when determining this retention period?

- A. Available bandwidth
- B. Recovery point objective
- C. Frequency of restore requests
- D. Type of backup

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 28

An EMC Avamar customer has a heavily utilized ESX system CPU utilization is a concern. Each guest system, all of which are Linux must be backed up with file granularity. The customer has both Avamar and NetWorker available and is looking to EMC for guidance. What is considered the most suitable approach to meet these requirements?

- A. Install the Avamar agent directly on each system
- B. Install the NetWorker agent directly on each guest system
- C. Use Avamar VCB to offload the ESX server
- D. Use NetWorker VCB to offload the ESX server

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 29

An EMC NetWorker customer is considering using the deduplication feature with Avamar. What is a requirement when performing backups to a deduplication node?

- A. Deduplication backup metadata must be stored on tape
- B. NetWorker client host can only perform deduplication backups
- C. Deduplication node must be RAIN protected
- D. First backup to a deduplication node must be a Full backup

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 30

A customer has recently added a Celerra to their environment and has asked you to assess their current data protection methodology. They currently have an EMC NetWorker environment using an EMC Disk Library (EDL) as the primary backup location before they move the virtual tapes to physical tapes. However, the rate of change of the data on the Celerra is too high for their RPO using the EDL for single file recovery if their backups are performed only at the end of the business day. What would you incorporate to lessen the impact of their once-a-day backup schedule on the Celerra data with minimal impact to their backup administration processes?

- A. Implement Snap Sure to make point-in-time copies of the file systems more frequently to recover individual files when requested and perform full system backups at the end of the day
- B. Configure a local tape device on the primary Data Mover and use NDMP incrementally back up the file system more frequently than the once-a-day full backup
- C. Replicate the source data to a remote target using Replicator and use the target data as both file recovery and backup source
- D. Create an internal SVTLU on the primary Data Mover and use NDMP2D to incrementally back up the file system more frequently than the once-a-day full backup

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 31

You are designing a backup solution for an EMC NetWorker customer. Based on EMC best practices, how many CPU cycles are needed by the storage node when backing up clients over the network to local tape drives at a rate of 100 MB/s?

- A. 0.2 Hz
- B. 0.5 Hz
- C. 1.2 GHz
- D. 2.4 GHz



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 32

A customer plans to integrate an EMC Disk Library (EDL) with NetWorker. The customer has purchased an Embedded Storage Node License to clone virtual tapes from the EDL to a physical tape library.

What should be included in the design document design to ensure the Embedded Storage Node reads the data from virtual tape during a clone operation?

- A. VTL Auto-changer resource needs the Embedded Storage Node defined as the Read Host Name
- B. Client resource of the Embedded Storage Node needs the Embedded Storage Node defined as the Clone Storage Node

- C. Client resource of the NetWorker server needs the Embedded Storage Node defined as the Clone Storage Node
- D. Each backup client resource needs the Embedded Storage Node defined as the Clone Storage Node

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 33

A customer is considering the use of offsite physical tape vaulting rotation for compliance purposes. What is a key concern to discuss with the customer?

- A. Additional resources needed during the backup window for the production data
- B. Amount of tape media is twice as large as the actual production data size
- C. Inefficient tape media utilization when adhering to time-regulated timetables
- D. Media retention is always three times the length of the RPO value

Correct Answer: C

Section: (none)

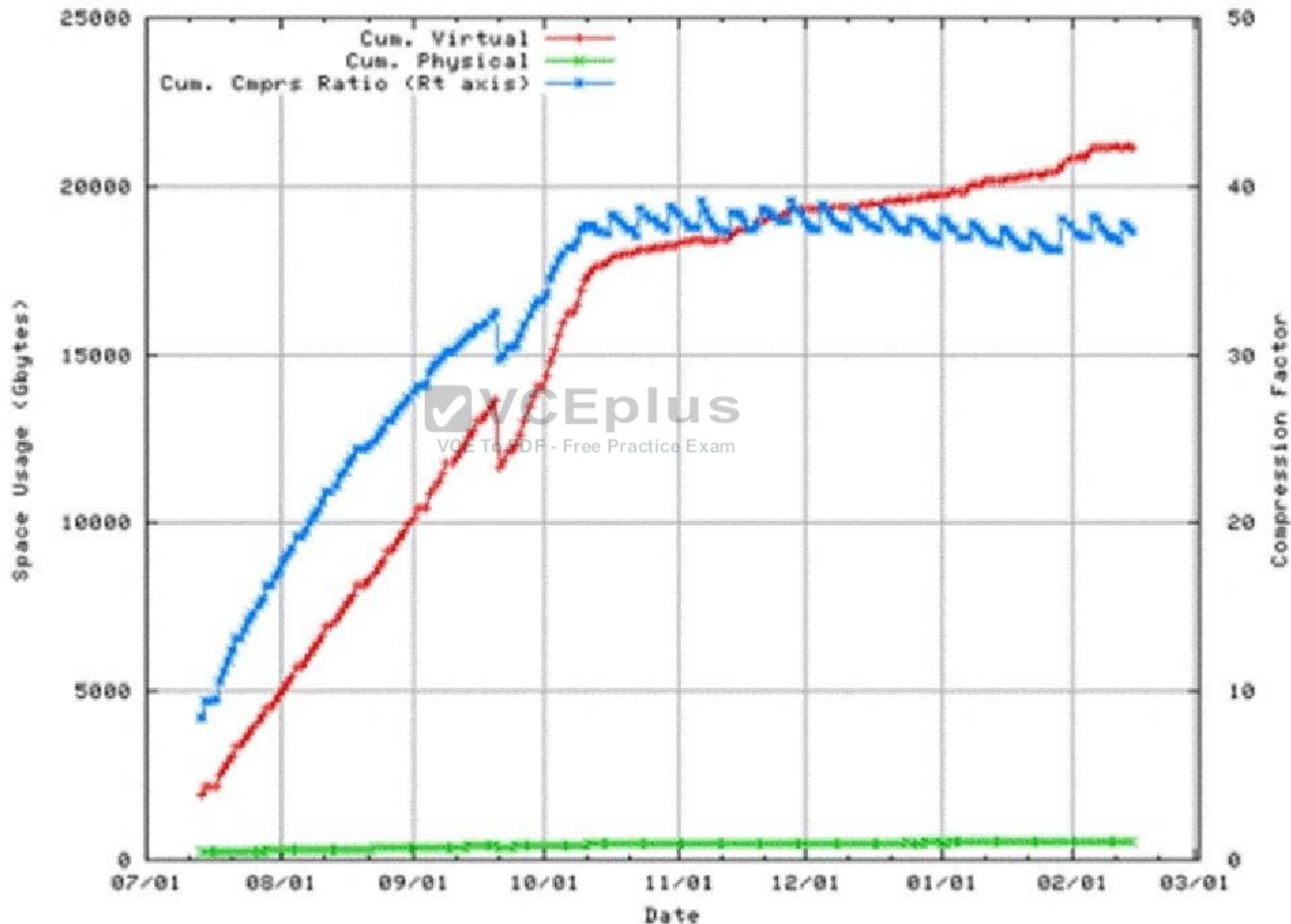
Explanation



Explanation/Reference:

QUESTION 34

While running a three-month pilot using a Data Domain appliance, a customer produces the space utilization graph shown in the exhibit. What does the "saw tooth" line for the compression ratio represent?



- A. Expiration of data
- B. Sanitization of data
- C. Retention of data
- D. Reclamation of data space

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 35

You are designing an EMC NetWorker deduplication solution for a customer. When performing a restore of a backup containing multiple save sets from a deduplication node. What is the maximum number of save sets that can be recovered concurrently?

- A. 1
- B. 2
- C. 4
- D. 6



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 36

An existing EMC customer notices that garbage collection is not running in Avamar because the capacity limit has reached. At which capacity limit does garbage collection stop running?

- A. 85%
- B. 90%
- C. 95%
- D. 100%

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 37

A customer is piloting a Data Domain system.

Based on the Data Domain statistics represented in the exhibit, which type of data is being backed up?

```
sysadmin@ddsys# system show stats view cifs interval 2
```

```
07/16 09:27:06
```

```
INTERVAL: 2 secs
```

```
"-" indicates that system is busy and unable to get recent data.
```

CPU		State	CIFS	NFS							Net		Disk			NVRAM		
aqqr	aqqr										aqqr	aqqr				aqqr	a	
busy	max		ops/s	cps/s	load	data in	data out	wait in	wait out		in	out	read	write	busy	read	wr	
%	%	CDEVMSFI			%	MB/s	MB/s	ms/MB	ms/MB		MB/s	MB/s	KiB/s	KiB/s	%	KiB/s	Ki	
5	5		153	42	0	0	0	1239.22	1079.09	5.71	0.16	0	8179	3	0			
5	5		164	38	0	0	0	3465.93	4212.40	5.37	0.14	0	18	2	0			
4	4		150	33	0	0	0	3783.72	4347.16	4.65	0.12	0	22	3	0			
6	6		139	36	0	0	0	3251.53	4201.64	4.64	0.12	0	19	2	0			
5	5		137	34	0	0	0	4137.64	4254.32	5.05	0.13	0	20	3	0			
5	5		136	35	0	0	0	3586.14	4244.58	5.11	0.13	0	19	3	0			
4	4		144	34	0	0	0	3435.31	3904.66	4.44	0.11	0	14	1	0			

- A. New unique data
- B. Block data
- C. Encrypted data
- D. Redundant data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 38

You are recommending a NetWorker deduplication solution with Avamar for a current EMC NetWorker customer. The customer is planning to back up

eight of their existing clients to the Avamar deduplication node.

What is an EMC best practice when performing deduplication backups for these clients?

- A. Set the first backup level to Full
- B. Remove all client-side NetWorker directives
- C. Set the client parallelism value to 8
- D. Add the Avamar server name to each client's server file

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 39

A customer has been using Avamar to leverage deduplication for VMware. They have been performing guest-level backups and now want to perform. vmdk backups for disaster recovery.

What is a requirement to perform VCB backups?

- A. Proxy host with Microsoft Windows 2003 SP1 or 64-bit Red Hat Linux
- B. Guests with VCB and Virtual Center server software installed
- C. ESX server with Fibre Channel SAN storage hosting VMFS or RDMS
- D. Guests with the Avamar client and the Avamar VCB Interoperability Module

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 40

A customer has an existing environment that uses a Data Domain appliance as a disk backup target. The customer now wants to implement a disaster recovery site using an existing T1 Internet connection.

Consider the following:

- 100 GB of data has been backed up on the primary Data Domain appliance
- Retention policy is set for 6 months

What is a best practice implementation for this environment?

- A. Run a snapshot command over the LAN and then ship the Data Domain appliance onsite

- B. Configure and seed replication over the LAN and then ship the Data Domain appliance onsite
- C. Ship the Data Domain appliance onsite, and then run a fastcopy command over the WAN
- D. Ship the Data Domain appliance onsite, and then configure and seed replication over the WAN

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 41

The EMC account team has been asked to design a NetWorker backup solution for a Microsoft SharePoint server. The customer's environment consists of a Microsoft SharePoint Server 2007 distributed farm deployment on a CLARiiON disk array with EMC VSS Provider and an EMC Disk Library. The customer wants to leverage a Microsoft VSS framework to provide disaster recovery of the SharePoint Server 2007 distributed farm environment. What is an important design consideration?

- A. Individual SharePoint web application can be restored
- B. Individual SharePoint content database cannot be restored
- C. Recovery operation can be initiated from any SharePoint web front-end server
- D. Rollback recovery is unsupported

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 42

In a Microsoft Windows environment, how fast does a split have to occur for VSS to work?

- A. Within 2 seconds
- B. Within 5 seconds
- C. Within 10 seconds
- D. Within 15 seconds

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 43**

A customer wants to know why their backup performance to the Avamar multinode flgrid has

decreased. Initially they were seeing an ingestion rate of around 5 to 7 GB/hr/node. Recently they estimated that it has slowed to around 3 to 5 GB/hr/node. What is a probable cause for the decrease in the average ingestion rate?

- A. HFS check has not been completing successfully
- B. A large number of backups have been expired, causing new stripes to be created
- C. New stripes are no longer being created and steady-state has been achieved
- D. Garbage collection is not running, causing stripes to fill and new stripes to be created

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 44**

An EMC NetWorker customer has three backup servers with four storage nodes reporting to each of the backup servers. All servers run Microsoft Windows. A dual-engine EMC Disk Library with Active Engine Failover is being proposed for this environment with embedded storage nodes for to physical tape.

What is a consideration for this solution?

- A. Active Engine Failover is unsupported in a Windows environment
- B. Multiple instances of the embedded storage node will need to be configured
- C. Each embedded storage node can only serve a single data zone
- D. NetWorker servers must be configured as read storage nodes for the cloning operation

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 45

A customer is planning a new database rollout using Oracle and wants to perform online backups. Initial tests with NetWorker have shown that the backups cannot be completed within the backup window of 6 hours. You have analyzed your backup environment and there are adequate resources to meet this stringent backup window.

What is one of the first things to check in NetWorker or RMAN to increase performance without adding cost and complexity?

- A. Adjust the maximum number of files in a backup set to be less than the number of open files
- B. Adjust RMAN channels to have multiple streams per tape device
- C. Adjust RMAN multiplexing to be less than the tape multiplexing setting
- D. Adjust RMAN multiplexing to be equal to or greater than the tape multiplexing setting

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 46

A customer with an existing VMware infrastructure is interested in Avamar as a potential backup solution. The customer needs to back up 10 virtual machines with a total of 2.9 TB of data. The daily change rate is 6 GB per day.

Which solution would you recommend?

- A. Avamar Data Transport
- B. Avamar Virtual Edition
- C. Physical Avamar server
- D. Virtual Avamar multinode server

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 47

A customer has requested assistance with several backup and recovery challenges. You use the EMC backup scripts to perform the data collection. Which type of data is collected using the backup quick scripts?

- A. Backup failure rates
- B. Expired backup data

- C. Capacity and health of the backup environment
- D. CPU, networker, and network utilization

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 48

A customer has Oracle 9i running on a Microsoft Windows server. They want to deploy hot backups because the database cannot be shut down. What is a design consideration for backups when using the Avamar plug-in for Oracle?

- A. Use of exclude/include lists in a dataset is supported
- B. Backups initiated through Avamar Administrator are always Full backups
- C. File system backup should include the entire root directory for each Oracle instance
- D. Full and incremental backups are initiated through Avamar Administrator

Correct Answer: B

Section: (none)

Explanation



Explanation/Reference:

QUESTION 49

An EMC Avamar customer wants to start backing up their VMware environment. The customer's goal is to have image-level backup while having a low impact on the ESX server. In addition, they want the ability to perform file-level restores of their Microsoft Windows clients. Which backup method will meet the customer's needs?

- A. VMware Consolidated Backup
- B. Avamar agent on each guest OS
- C. AcCelerrator Node
- D. Avamar agent on the ESX server console

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 50**

A single-engine EMC Disk Library (EDL) is being proposed with Remote Copy functionality replicate data to a remote EDL. One of the EDLs will have four network connections while the other one will have two network connections. How many ports will be used in each EDL during a replication session?

- A. 1
- B. 2
- C. 3
- D. 4

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 51**

A customer has acquired multiple companies with a combination of IBM Tivoli Storage Manager, EMC NetWorker, and IBM iSeries BRMS backups to physical tape in their data center. They have a data center 15 miles away that plan to use for disaster recovery. Dark fiber between the two sites exists. The customer has asked EMC to help improve their backup performance and reliability. They also want to eliminate the need to move physical tapes offsite each day. Which recommendation satisfies the customer's requirements?

- A. Install Data Domain and Data Protection Advisor at the data center and replicate to Data Domain over FC at the disaster recovery site
- B. Install an EMC Disk Library (EDL) at the data center with Data Protection Advisor and use Remote Copy replication to EDL at the disaster recovery site over IP
- C. Install Data Domain at the data center with OST and replicate to Data Domain over IP at the disaster recovery site
- D. install an EMC Disk Library (EDL) and Data Protection Advisor at the data center with a backup application vaulting to the EDL at the disaster recovery site over FC

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 52**

An Avamar customer is using replication between two data centers. There is a T1 line between the data centers and it is dedicated to Avamar replication. The customer is concerned that Avamar replication is only getting throughput of 1.1 megabits per second during replication. What should be changed in the design and implementation of this solution?

- A. Turn off replication encryption
- B. Obtain more bandwidth
- C. Add the --throttle flag during replication
- D. Use the --all nodes flag during replication

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 53

A Symantec Backup Exec customer purchased an EMC Disk Library (EDL) last year and performs 1.5 TB of nightly backups. Backup Exec is used to copy EDL virtual tapes to physical tapes to satisfy offsite requirements. The daily backup and tape copying workload is becoming a challenge for their Backup Exec server. The customer is exploring EDL-to-EDL replication to a second a second site seven miles away to eliminate physical tape and reduce the Backup Exec server workload. Which EDL relocation option meets the customer's requirements?

- A. Remote Copy over an IP connection
- B. Consolidated Media Management over extended Fibre Channel
- C. Tape Caching over extended Fibre Channel
- D. Auto Archive over an IP connection

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 54

A data center consisting of six Microsoft Windows file servers must be backed up. Each file server contains 750,000 files and approximately 150 GB of data. The file servers have been tested simultaneously. Each file server can read data from the network and write it to disk at the rate of 75 GB per hour. The data center has a 10 Gigabit Ethernet backbone. What is the minimum number of Avamar 2 TB data nodes that should be ordered to perform a recovery of all six file servers and achieve a recovery time objective of 8 hours?

- A. 1

- B. 3
- C. 5
- D. 7

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 55

The EMC account team has been asked to design a Network backup solution for a VMware ESX3.5 environment with the following requirements:

- (1). Reduce workload on the ESX server during backups
- (2). Eliminate backup traffic from the LAN by moving data directly from the SAN
- (3). Support file-level backups for virtual machines running Microsoft Windows
- What is a recommended backup solution?
- A. VMware service console backup
 - B. VMware vStorage API backup
 - C. VMware Consolidated Backup
 - D. VMware guest backup



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 56

A customer is considering implementing an EMC Disk Library with Active Engine Failover (AEF). Front-end ports 1, 3, and 4 from Engine A will be connected to the SAN. On Engine B, front-end ports 7, 8, and 11 will be connected to the SAN.

To ensure proper AEF functionality, what is the total number of front-end ports from both engines that need to be connected to the SAN?

- A. 3
- B. 6
- C. 8
- D. 12

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 57

A customer has a current EMC NetWorker LAN backup environment. The environment is using a local EMC Disk Library (EDL) with replication to a remote disaster recovery site. They want to introduce a four Data Mover Celerra into their environment for consolidated Windows user collaborative data on CIFS shares.

Which backup deployment would you suggest that has the least disruptive hardware impact to the customer's current backup procedure?

- A. Implement a dedicated network link between two primary Data Movers on the Celerra and use NDMP three-way backup to back up to directly attached tape devices
- B. Utilize the Celerra NDMP2D feature on a second primary Data Mover and use NDMP-to-Disk backup to save the first primary Data Mover data to internally configured virtual tapes
- C. Implement a segmented dedicated backup network infrastructure and LAN backup the Celerra data to their existing backup servers
- D. Directly attach an EDL, through Fibre Channel, to the production Data Mover and use NDMP to back up the production Data Mover data to the EDL

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 58

A NetWorker customer has a single data zone with three storage nodes backing up 250 clients. A dual-engine EMC Disk Library is being proposed as the backup-to-disk solution. What is the minimum number of virtual tape libraries required?

- A. 1
- B. 2
- C. 3
- D. 4

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 59**

You are proposing Data Protection Advisor (DPA) to provide a single reporting interface in a multi-vendor backup environment. The environment consists of IBM Tivoli Storage Manager (TSM), Symantec Net Backup, NetWorker, and Avamar. Each application manages 200 clients. What needs to be considered with regards to DPA licensing?

- A. Avamar requires a separate capacity-based license
- B. Avamar requires a client-based license and a capacity-based license
- C. TSM client count cannot be combined with other applications
- D. Client licenses for all backup applications can be combined

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 60**

An existing EMC NetWorker customer has recently undertaken an LDAP authentication network infrastructure reconfiguration to ensure an improved validation response time. The reconfiguration does not involve the addition of any physical network hardware to the infrastructure. However, they have now approached you to assist with an increased latency they are experiencing on their network. What is the most likely cause of their increased latency after the reconfiguration?

- A. LDAP authentication has added packet latency required for the NIS authentication
- B. LDAP authentication has reduced the available bandwidth for the backup data stream
- C. End-to-end duplex setting for their backup data has become mismatched
- D. End-to-end backup data path now has additional hop counts added to the packets

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 61**

A customer has an existing EMC NetWorker backup group consisting of one file server. The file server has dual quad-core 2.9-GHz CPUs, 16 GB of RAM, and a single file system with a total of 6 TB of data. Due to a recent loss of backup tapes during shipment, the customer needs to encrypt the

backups. The customer wants to prevent any possibility of backup data being intercepted during the transmission of backup data from the client to the NetWorker storage node. In addition, they want to minimize the change to their file server hardware and minimize operational changes. Which method meets the customer's requirements?

- A. AES encryption directive
- B. Inline encryption device
- C. Tape drive hardware encryption
- D. Layer-2 encryption device

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 62

An EMC customer has a 2 TB single-node Avamar server at a local site. The server is replicating to another 2 TB single-node Avamar at a remote site. The customer wants to add at least 1 TB of capacity for future growth. Which solution would you recommended?

- A. Add a 1x3 RAIN Avamar server using 1 TB nodes at the local site and move the local 2 TB single-node Avamar server to the remote site.
- B. Add one 2 TB single node at the local site replicating to a new 2 TB single-node Avamar server at the remote site.
- C. Convert both the single node at the local and remote sites to a 1x2 Avamar server by ordering two 1 TB nodes and two utility nodes.
- D. Add a 1x3 RAIN Avamar server using 1 TB nodes at the remote site and move the remote site 2 TB single-node Avamar server to the local site.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 63

A customer has purchased an EMC Disk Library (EDL) to reduce backup times to fit within their available backup window. What is an important design consideration to achieve this objective?

- A. Zone each backup server to a dedicated EDL FC port to eliminate bandwidth contention.
- B. Configure the maximum number of front-end FC ports and many concurrent backup streams.

- C. Configure the maximum number of virtual tape drives per library to improve performance.
- D. Configure the minimum number of virtual tapes to reduce VTL emulation overhead.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 64

An EMC Avamar customer has a 750 GB Oracle server and a file server to back up. What is a consideration when designing an Avamar Virtual Edition (AVE) solution?

- A. Average size of the file system and the database.
- B. Ratio between the largest file and the largest tablespace.
- C. Ratio between the size of the file system and the database.
- D. Average size of the largest file and the largest tablespace.

Correct Answer: C

Section: (none)

Explanation



Explanation/Reference:

QUESTION 65

An EMC NetWorker customer is performing all backups to physical tape. This includes weekly 10 TB backups of static medical imaging data stored on a Dell NAS requiring 8 months retention. Their current tape libraries are approaching end of support life. The customer has asked EMC for a recommendation that will improve operational backup and restore reliability for their image data with a minimum amount of change. What will meet the customer's requirements?

- A. EMC Disk Library
- B. Deduplication Node
- C. Avamar
- D. Data Domain

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 66**

A customer has a DMZ and needs to connect to the NetWorker Management Console through the firewall. Three service ports are required for connections between the Console server and a Console client.

When configuring the ports, which process uses a port value that cannot be changed?

- A. dbsrv9
- B. nsrd
- C. gstd
- D. gstdclsh

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 67**

The EMC account team has been asked to design a NetWorker backup solution for a Microsoft Exchange server. The customer's environment consists of a Microsoft Exchange Server 2007 Cluster Continuous Replication (CCR) deployment on a CLARiiON disk array with EMC VSS Provider and an EMC Disk Library. The customer wants to leverage the Microsoft VSS framework to protect the Exchange Server 2007 CCR environment.

What needs to be considered when designing a backup solution?

- A. Microsoft Exchange Server 2007 system path and transaction logs must reside on separate directories.
- B. Exchange server can only be backed up through a Proxy Node.
- C. Microsoft Exchange Server 2007 database and transaction logs must reside on the same volume.
- D. Exchange server can be backed up from the Exchange Server 2007 CCR passive node.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 68**

A customer is considering an EMC Avamar backup solution, they have asked whether the backup data stored inside the Avamar server can be protected

with encryption.

What are the "encryption-at-res" considerations?

- A. Can only be set at installation and impacts available capacity
- B. Can be set at anytime and impacts available capacity
- C. Can only be set at installation time and has no performance penalty
- D. Can be changed at anytime and has no performance penalty

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 69

You are designing a backup solution for an EMC NetWorker customer. Based on EMC best practices, how many CPU cycles are needed by the storage node when backing up clients over the network to local tape drives at a rate of 100 MB/s?

- A. 0.2 GHz
- B. 0.5 GHz
- C. 1.2 GHz
- D. 2.4 GHz



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 70

A potential EMC customer has a T1 circuit between their production data centre and their disaster recovery data centre that are 2,000 miles apart. They currently backup their Linux systems to physical tape using HP Data Protector. They backup an average of 20 TB each night. The customer wants a backup solution that improves backup and restore reliability, reduces overall costs, and eliminates physical tape. What is the recommended solution?

- A. Data Domain with replication over IP
- B. EMC Disk Library with Remote Copy over IP
- C. EMC Disk Library with Consolidated Media Management over FC

D. Data Domain with OST and replication over IP

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 71

A long-term EMC SRDF customer wants to make their backups tapeless. The customer has asked for your recommendation on the bandwidth required for replication of 10 TB of daily backup data that is

currently going to tape nightly. Bandwidth is provided by two OC-3 circuits between the source and target data center locations. Which information is needed to architect a solution for the customer?

- A. Available bandwidth, latency, and throughput objective
- B. Total bandwidth, trace route, and hops
- C. Circuit distance, line condition, and transmission rate
- D. Total bandwidth, latency, and compression rate



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 72

A customer has asked you to assess their current backup environment. The environment is currently using an offsite physical tape vaulting rotation for compliance purposes. What is a key concern that you should discuss with the customer?

- A. Recovery data is at least one backup cycle behind the production site in the event of a disaster
- B. Media retention period consideration is three times the length of the RPO value
- C. Need for additional resources during the backup window for the production data
- D. Amount of tape media is consistently double the size of the actual production data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 73**

You are designing a Data Protection Advisor (DPA) solution to support a NAS environment. The environment consists of a Celerra, a NetApp file server, a backup infrastructure of 185 NetWorker clients, and 300 Symantec NetBackup clients. What are the appropriate DPA licensing requirements?

- A. Backup option for 500 clients and one file server option for each NAS system B. Backup option for 185 NetWorker and 300 NetBackup clients, and 1 Celerra, and 1 NetApp client
- B. Backup option for 500 clients and a single file server option for the NAS systems
- C. Backup option for required client count, a Celerra file server, and a NetApp file server option

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 74**

A customer is considering an EMC Avamar backup solution. They want to know whether Avamar can provide the security benefit of data encryption between the clients and the Avamar server. What are the "in-flight encryption" considerations?

- A. Can be changed at any time and has no performance penalty
- B. Can only be set at installation time and has no performance penalty
- C. Can be changed at any time and has a significant performance penalty
- D. Can only be set at installation and has a significant performance penalty

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 75**

An EMC Avamar customer has a heavily utilized ESX system where CPU utilization is a concern. Each guest system, all of which are Linux, must be backed up with file granularity. The customer has both Avamar and NetWorker available and is looking to EMC for guidance. What is considered the

most suitable approach to meet these requirements?

- A. Install the Avamar agent directly on each guest system
- B. Install the NetWorker agent directly on each guest system
- C. Use Avamar VCB to offload the ESX server
- D. Use NetWorker VCB to offload the ESX server

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 76

A customer wants to deploy encryption-at-rest for Avamar. When sizing a new solution, which key encryption-at-rest factor(s) should be considered?

- A. Consumes more system resources
- B. Does not require significant system resources
- C. Consumes more resources and requires 35% more disk capacity
- D. Requires 50% more disk capacity

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 77

A potential Avamar customer has 4 TB of data to back up, which is spread across many clients. All clients are in the same data center as the Avamar server with Gigabit Ethernet connecting all hosts. The customer has a requirement to perform their initial backups within 80 hours. What is the minimum number of 2 TB data nodes needed to satisfy this requirement?

- A. 3
- B. 6
- C. 10
- D. 16

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 78

A customer wants to back up VMware using Avamar to leverage deduplication. They have been and want to continue performing VCB backups. Where will the Avamar client and the Avamar VCB Interoperability Module be installed?

- A. Backup proxy server
- B. ESX server and backup proxy server
- C. Virtual machines guest operating system
- D. Virtual machines and backup proxy server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 79

An EMC Avamar customer wants to start backing up their VMware environment. The customer's goal is to obtain the highest level of data deduplication support for file system and application backups. In addition, they do not want to have to train their administrators on a new backup method. Which method of VMware backup will meet the customer's needs?

- A. Install an Avamar agent on each guest OS
- B. Install the Avamar agent on the ESX server console
- C. Use a snapshot mounted to a proxy server over the SAN
- D. Use VMware Consolidated Backup

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 80

A new EMC Avamar customer wants advice on setting up their groups and schedules. The customer has a mixed environment and is migrating from a

traditional tape backup solution with a mixed retention policy.
Which follows EMC best practices for setting up groups and policies?

- A. Minimize the number of groups, combine different OSs in datasets, and implement advanced retention.
- B. Group clients by OS, make unique datasets for each OS, and create unique retention policies for Monthly, Daily, Weekly, and Yearly.
- C. Enable the default group and use the group for all policies. Every client is added to this group upon activation.
- D. Create a unique group for each dataset, schedule, and retention.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 81

An EMC Avamar customer has a file server with 3 million files. Using the default cache setting, how much of the physical RAM is required on the client for the Avamar file cache?

- A. 133 MB
- B. 512 MB
- C. 1.5 GB
- D. 4 GB



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 82

An existing Avamar customer wants to add a new large client to their Avamar system. This is a moderately full Avamar single-node server running in steady-state. What is the estimated time to ingest the customer's large file system if the size, after deduplication, is 10 GB?

- A. 10 - 20 minutes
- B. 30 minutes
- C. 1 hour
- D. 2 - 4 hours

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 83

A new Avamar customer is concerned with data security since all backup data is stored on disk. To minimize the customer's concerns, you have recommended the encryption-at-rest feature.

What is a consideration when using this feature?

- A. Must be enabled at install time and results in noticeable performance reduction
- B. Can be enabled anytime and requires additional GSAN capacity
- C. Must be enabled on a per-client basis and has no impact on performance
- D. Must be enabled on a per node basis and requires the use of the consolidate option for backups

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 84

An EMC NetWorker customer is currently performing all backups to physical tape. This includes multiple 7 TB databases with 2 weeks retention. Their current tape libraries are approaching end of support life. The customer has asked for an EMC recommendation that will improve operational backup and restore reliability.

What will meet the customer's requirements?

- A. EMC Disk Library
- B. Data Domain
- C. Avamar
- D. Deduplication Node

Correct Answer: A

Section: (none)

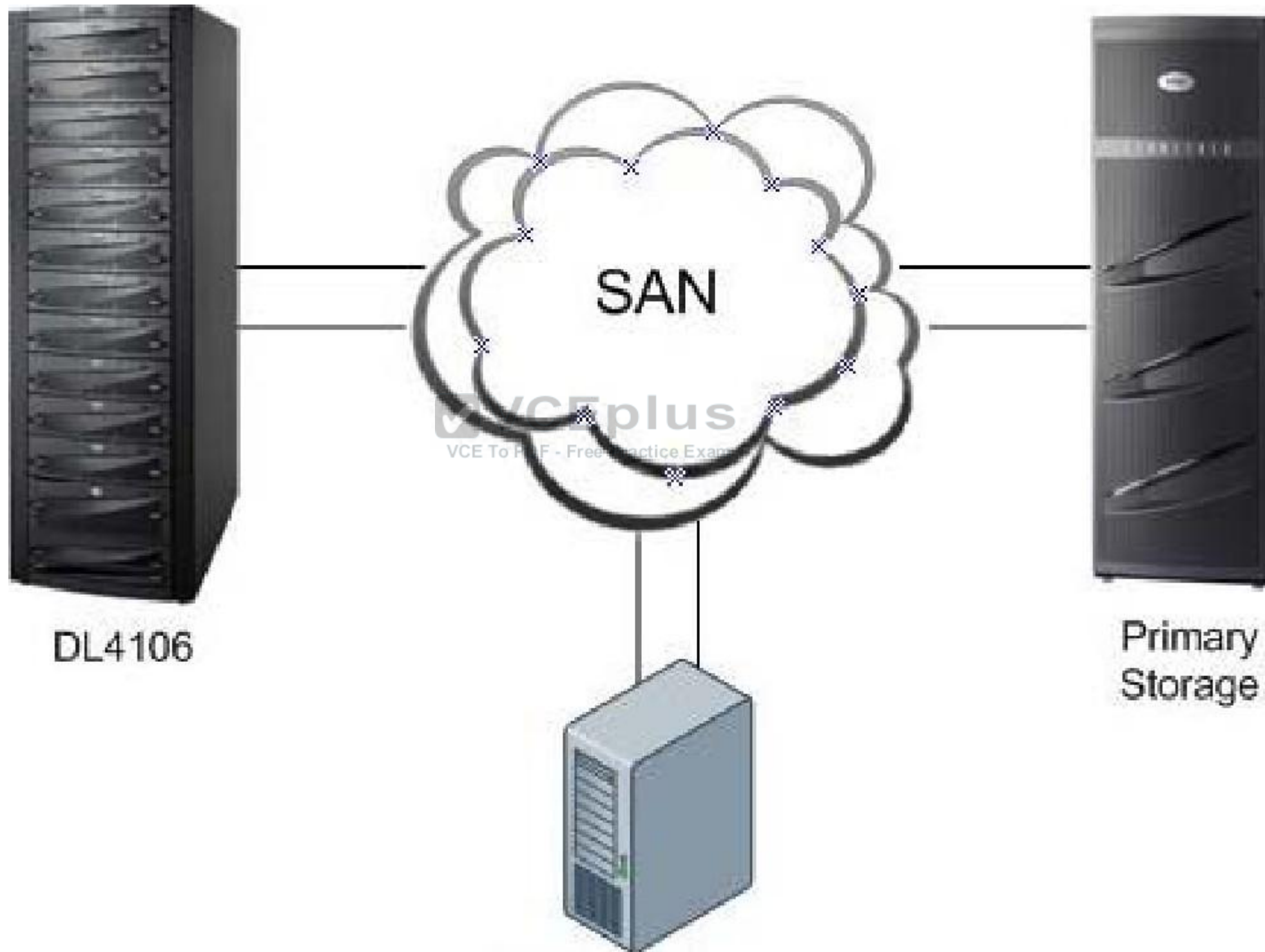
Explanation

Explanation/Reference:

QUESTION 85

An EMC NetWorker customer is planning on directing the backups of a database server to the single-engine EMC Disk Library (EDL) as shown in the exhibit. The data to be backed up is accessed by the host through a redundant connection and resides on primary storage.





Based on EMC best practice, what needs to be adjusted in the solution?

- A. Add a separate HBA to the dedicated storage node for EDL traffic
- B. Replace the dedicated storage node with a standard storage node
- C. Add a proxy host
- D. Implement a second single-engine EDL for redundancy

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 86

A customer is interested in implementing two DL4000 systems. One system is located at a central site. The second is at a remote site as a target for Remote Copy operations. Policies will be configured to replicate certain tapes to the target. Which process is necessary to make the virtual tapes available on the target?

- A. Promote the replica resources to virtual tapes and move them into a VTL
- B. Move the replicated virtual tapes from the virtual vault to a VTL
- C. Remove the replication setting on the target virtual tapes to make them write enabled
- D. Import the replicated virtual tapes on the target

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 87

A potential EMC customer has a T1 circuit between their production data center and their disaster recovery data center that are 2,000 miles apart. They currently back up their Linux systems to physical tape using HP Data Protector. They back up an average of 20 TB each night. The customer wants a

backup solution that improves backup and restore reliability, reduces overall costs, and eliminates physical tape. What is a recommended solution?

- A. Data Domain with replication over IP

- B. EMC Disk Library with Consolidated Media Management over FC
- C. EMC Disk Library with Remote Copy over IP
- D. Data Domain with OST and replication over IP

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 88

A customer uses EMC NetWorker on HP-UX to back up 20 TB per day to physical tape. They currently restore 10 TB of database data twice a week. The customer needs a new backup solution that will reduce backup and restore times and is highly available. What is a recommended EMC solution?

- A. Dual-engine EMC Disk Library appliance without AEF
- B. Dual-engine Data Domain appliance with OST
- C. Dual-engine EMC Disk Library appliance with AEF
- D. Dual-engine Data Domain appliance without OST



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 89

A customer is interested in using a Remote Copy policy to replicate data between two single-engine EMC Disk Library (EDL) systems. The customer is concerned about the readiness of replicated tapes in case of a failure on the source system. What can be done to minimize the exposure on the target?

- A. Use small virtual tapes
- B. Implement a TCP network accelerator
- C. Use jumbo frames
- D. Increase the number of EDL ports connected to the IP network

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 90**

An EMC customer is evaluating a single-engine EMC Disk Library (EDL) system. They placed the EDL on their test infrastructure and performed 15 simultaneous backup jobs. The customer is concerned that the overall performance numbers are substantially lower than the published numbers. Each job is sent to a separate virtual tape at an average rate of 18 MB/s. The EDL is connected to the SAN through two FC ports at 4 GB/s. There are a total of 15 LUNs for virtual tape storage. The infrastructure has been certified to sustain performance in excess of the EDL's capability. What would you recommend to improve the overall performance?

- A. Increase the number of simultaneous streams to at least 22
- B. Disable Remote Copy
- C. Increase the number of FC port connections to 4 and redistribute the tape drive assignment
- D. Disable Capacity on Demand

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 91**

A Symantec NetBackup customer is planning to add a second data center. They would like to leverage deduplication technology to improve backup operations and disaster recovery with a minimum amount of

change to their existing backup environment.

The customer's primary design goals are:

- (1).Improve backup performance
 - (2).Electronic vaulting for disaster recovery
 - (3).Maintain NetBackup as their primary tool for backup control and visibility
- What should be included with a high-end Data Domain appliance?

- A. NetBackup OST
- B. 8 GB Fibre Channel
- C. iSCSI over 10 GB Ethernet
- D. CIFS protocol over 10 GB Ethernet

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 92

A customer has two files that have been locked and backed up to the Data Domain appliance with the following parameters:

- File1 = atime = 20 years
- File2 = atime = 5 years

The Data Domain global retention periods are configured as follows:

- Min = 2 years
- Max = 10 years

The administrator changes the Data Domain maximum retention period to 4 years.

After how many years can File2 be deleted?

- A. 2
- B. 4
- C. 5
- D. 10

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 93

A customer performs weekly full backups and daily incremental backups. A typical full backup is 5 TB. There is usually a 20% daily change rate in data.

A full backup completes in 10 hours while an incremental backup completes in 4 hours.

Based on best practices, what is the minimum Data Domain throughput required?

- A. 292 333 GB/hr
- B. 450 550 GB/hr
- C. 585 666 GB/hr
- D. 1170 1332 GB/hr

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 94**

The EMC account team has been asked to design a NetWorker backup solution. The customer's environment consists of a Microsoft Exchange Server 2007 Cluster Continuous Replication (CCR) deployment on a CLARiiON disk array with EMC VSS Provider and an EMC Disk Library. The customer wants to leverage the Microsoft VSS framework to back up their Exchange server from the Exchange Server 2007 CCR passive node. What needs to be considered when designing this backup solution?

- A. Backup from the Exchange Server 2007 CCR passive node will fail after Exchange Server 2007 CCR role change
- B. NetWorker Module for Exchange needs to be installed on both the Exchange Server 2007 CCR active node and passive node
- C. Exchange Server 2007 database and transaction logs must reside on the same volume
- D. Exchange Server 2007 system path and transaction logs must reside on separate directories

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 95**

The EMC account team has been asked to design a NetWorker backup solution for a Microsoft Exchange server. The customer's environment consists of a Microsoft Exchange Server 2007 Cluster Continuous Replication (CCR) deployment on a CLARiiON disk array with EMC VSS Provider and an EMC Disk Library.

The customer wants to leverage the Microsoft VSS framework to protect the Exchange Server 2007 CCR environment. What needs to be considered when designing a backup solution?

- A. Exchange server can be backed up from the Exchange Server 2007 CCR passive node
- B. Exchange server can only be backed up through a Proxy Node
- C. Microsoft Exchange Server 2007 database and transaction logs must reside on the same volume
- D. Microsoft Exchange Server 2007 system path and transaction logs must reside on separate directories

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 96

An EMC NetWorker customer is considering implementing NetWorker AES encryption to secure backups on one of their application servers. What is a concern when using AES?

- A. Increased CPU utilization on the backup client
- B. Tape must be used as a destination device
- C. Backup data cannot be multiplexed
- D. Increased CPU utilization on the backup server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 97

The EMC account team has been asked to design a new EMC NetWorker backup solution for Microsoft Exchange Server 2007. The customer's environment consists of Microsoft Exchange Server 2007 hosted on an EMC CLARiiON disk array with EMC VSS Provider and an EMC Disk Library. Your design needs to include a server-less backup solution for the Microsoft Exchange Server 2007 environment by leveraging the Microsoft VSS framework.

What is a recommended approach to meet the customer's requirements?

- A. NetWorker Module for Microsoft Applications
- B. NetWorker PowerSnap Module
- C. NetWorker Module for Microsoft Exchange Server
- D. NetWorker VSS Client for Microsoft Windows

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 98

A customer has had a failure of the primary deduplication node and needs EMC NetWorker to recover the data from the replication node. What will enable recovery from the replication target node?

- A. Replication node is specified in the replication node field of the client resource

- B. NetWorker deduplication node is configured as a dedicated replication target
- C. Replication between deduplication nodes is controlled by the NetWorker server
- D. Replication process and restore of replicated data require native Avamar for recovery

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 99

You are adding an Avamar deduplication node to a customer's EMC NetWorker environment. Clients currently back up to tape and perform full backups on Sunday and incrementals on all other days. In the new solution, these clients will back up to the deduplication node. The speed of recovery is important to the customer.

Which changes may be required to the backup schedule?

- A. Perform Full on Sunday and Level 1 backups on all other days of each week
- B. No changes are required to the backup schedule
- C. Perform initial Full backup and Level 1 backups forever
- D. Perform Full backups every day

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 100

You are redesigning an EMC NetWorker customer's backup solution. Currently some of the file system clients are backing up to an Avamar deduplication node. The customer wants to back up these clients to a new Avamar deduplication node.

What is an implication of this decision?

- A. New instance of each client must be created on the NetWorker server
- B. New full deduplication backup of each client is required
- C. Clients must first be retired on the old deduplication node
- D. All previously backed up data must first be replicated to the new deduplication node

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 101

An EMC NetWorker customer performs daily full LAN backups of a busy application server to physical tape. The application server uses the compressasm directive to reduce LAN backup traffic. While the backup completes within the required backup window, the customer notices that the application is performing poorly.

What can be done to improve application performance while maintaining minimum network traffic?

- A. Disable software compression
- B. Increase the max sessions on the tape drive
- C. Install a dedicated storage node on the backup client
- D. Replace the physical library with an EMC Disk Library

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 102

In an EMC NetWorker environment, a firewall is configured to allow communication over ports 9000 and 9001 from the DMZ. The NetWorker Management Console can be accessed from the DMZ but database queries cannot be performed.

Which port needs to be opened on the firewall?

- A. 111
- B. 2638
- C. 7937
- D. 7938

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 103

Based on EMC best practices, when sizing a NetWorker storage node, how many CPU MHz are recommended for each MB/s of data backed up?

- A. 5
- B. 10
- C. 12
- D. 24

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 104

A customer uses EMC NetWorker with a deduplication node. The deduplication node is physically located in a remote office connected by a slow link. The customer is using an AFTD to store the save set containing the deduplicated backup metadata. What is the NetWorker behavior if the deduplication node is unavailable?

- A. Perform a non-deduplication backup sending all backup data to the defined device
- B. Fail the backup, indicating the deduplication node is unavailable
- C. Perform a non-deduplication backup sending all data to the default pool
- D. Attempt to contact the deduplication node for a maximum of one hour before failing the backup

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 105

An EMC NetWorker customer is considering backup options for their VMware environment. What is an advantage of using the VMware Console Backup option?

- A. File-level restore granularity
- B. No proxy server is required
- C. No load on the ESX server during backups
- D. Application backup data is crash-consistent

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 106

An EMC customer has been using NetWorker backup and has recently added an Avamar system for file system backups. The customer wants to move all backups to the Avamar system to take advantage of deduplication. They are currently backing up Sybase and SAP with NetWorker. What is your recommendation to meet these requirements?

- A. Configure Avamar as a deduplication Storage Node in NetWorker to administer all backups
- B. Utilize native database tools to back up to flat files, then use Avamar to back up the resulting files
- C. Use pre- and post-processing scripts to shut down the databases and perform a cold backup with Avamar
- D. Use snapshots to mount the databases to a proxy server for backups

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 107

An EMC NetWorker customer has been using an EMC Disk Library (EDL) for over 4 years. The EDL has reached its capacity limits. The customer is in the process of virtualizing as many physical servers as possible to reclaim data center floor space. They are backing up numerous 8 TB databases. The

customer is interested in replacing the EDL. The replacement must maintain a single point of backup administration and reduce backup times for their growing virtualized environment.

What is the recommended solution?

- A. Add a deduplication Storage Node to NetWorker for VMware backups and replace the EDL with Data Domain for large databases
- B. Add an Avamar Data Store for VMware backups with Data Domain under NetWorker for physical servers and large databases
- C. Add Data Domain for deduplication under NetWorker to replace the EDL for VMware and Avamar for database backups
- D. Add Data Domain under NetWorker to replace the EDL for VMware and a deduplication Storage Node for database backups

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 108**

The EMC account team has been asked to design a NetWorker backup solution for a VMware ESX environment with the following requirements: (1).Supports online backup of their Microsoft Exchange server running on the virtual machine. (2).Supports file-level backup and recovery for all virtual machines running Microsoft Windows.
What is a recommended backup solution?

- A. VMware guest backup
- B. VMware Consolidated Backup
- C. VMware service console backup
- D. NetWorker PowerSnap backup

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 109**

A customer is piloting a Data Domain system.

SSH Session# system show stats 2

10/29 12:34:26

INTERVAL: 2 secs

CPU busy	FS ops/s	FS proc	Net in	MB/s out	Disk read	KiB/s write	Disk busy	NVRAM KiB/s	Rep1 KB/s
10%	119	7%	17951	436	234	7532	2%	17816	
9%	121	7%	17651	413	232	6543	1%	17455	
10%	120	7%	17831	424	234	3405	2%	17663	
8%	121	7%	18269	455	231	3345	3%	18111	
9%	105	7%	17829	433	123	8345	5%	17654	
10%	90	7%	17440	422	123	3453	2%	17322	

Based on the Data Domain statistics represented in the exhibit, which type of data is being backed up?

- A. Redundant data
- B. New data
- C. Encrypted data
- D. Block data

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 110

A data center company is using two EMC NetWorker servers (NetWorker_A and NetWorker_B). Each server has three storage nodes to protect 650

server applications and data. The total amount of data being backed up is 100 TB. NetWorker_A server protects 60 TB and NetWorker_B server protects 40 TB. To minimize cost and ease licensing management for NetWorker, the company decided to switch from a traditional licensing model to a capacity licensing model. How many licenses are needed to support the company's requirements?

- A. 2 Source Capacity Datazone Enabler and Source Capacity 10 TB tier 4 licenses
- B. 2 Source Capacity Datazone Enabler and Source Capacity 10 TB tier 3 licenses
- C. 2 Base license and 10 Source Capacity TB tier 3 licenses
- D. 2 Source Capacity Datazone Enabler and 650 Standard Client Connection licenses

Correct Answer:

Section: (none)

Explanation

Explanation/Reference:

Answer: DReference: <http://slyvonne.blogspot.com/2012/04/emc-networker-capacitylicensing.html> (question no.1 and 2)

QUESTION 111

A customer has a large VMware environment that they are currently backing up using the EMC Avamar client option at the guest level. Performance has never been an issue. As the customer adds more guests, how can they avoid performance issues?

- A. Create a production network for Avamar client backups
- B. Run full backups on the ESX host
- C. Limit simultaneous backups of guests on a single ESX host
- D. Configure SHA-5 on the ESX host

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 112

A customer has asked you to design an EMC Avamar and Data Domain integrated solution for their environment. As you review the design for the Microsoft Exchange portion of the solution, the customer would like you to explain the backup process. How would you respond?

- A. Avamar instructs the Exchange server to send both backup data and metadata to the Data Domain appliance
- B. Work order is received from the Avamar server backup data is sent to the Data Domain appliance, and then metadata is sent to the Avamar
- C. Exchange API, using a plug-in, sends all data directly to the Data Domain appliance

D. Work order is sent from the Avamar Management Console to the Exchange server, and then data and metadata are sent to the Avamar system

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 113

You are designing an EMC NetWorker deduplication solution using EMC Avamar for a customer. When performing a backup containing multiple save sets to a deduplication node, what is the recommended maximum number of save sets that can be backed up concurrently?

- A. 2
- B. 4
- C. 6
- D. 8

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:



QUESTION 114

A customer is using Data Protection Advisor (DPA) to perform system monitoring of both Microsoft Windows and Solaris clients. When deciding where to place the Collector(s) in the environment, what is a consideration?

- A. The Collector installed on the DPA server host can monitor all hosts in the environment.
- B. A Collector installed on one of the Windows hosts can monitor other Windows hosts.
- C. A Collector must be installed on each Windows host.
- D. One Collector is required to monitor Windows hosts and one Collector is required to monitor Solaris hosts.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 115

A customer has data at several remote offices that need to be backed up over a secure Internet connection to their data center. However, bandwidth is constrained. A major portion of their backup data will be file system data. In addition, they have a 6 TB database in the primary data center with a 6% change rate that needs to be backed up.

Which EMC backup solution will work best for this customer?

- A. Avamar with AVE
- B. Avamar-Data Domain integration
- C. NetWorker with Data Domain VTL
- D. NetWorker with VTL

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 116

A customer is concerned about data remaining on their new EMC Avamar system after an individual backup is deleted. The secureddelete function has been run after the backup was deleted. To ensure the process is complete, what else should be done?

- A. Run garbage collection on the Avamar server
- B. Roll back any checkpoints that contain the data and execute secureddelete
- C. First execution of the secureddelete function will remove all data
- D. Administrators should modify the user account to prevent access

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 117

You are having a preliminary discussion with a prospective customer. The customer would like to know the deduplication rates that are typically when running initial EMC Avamar backups for file system and database data.

Which information should be provided to the customer?

- A. File System = 20% Database = 80%
- B. File System = 50% Database = 50%

- C. File System = 70% Database = 35%
- D. File System = 80% Database = 20%

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

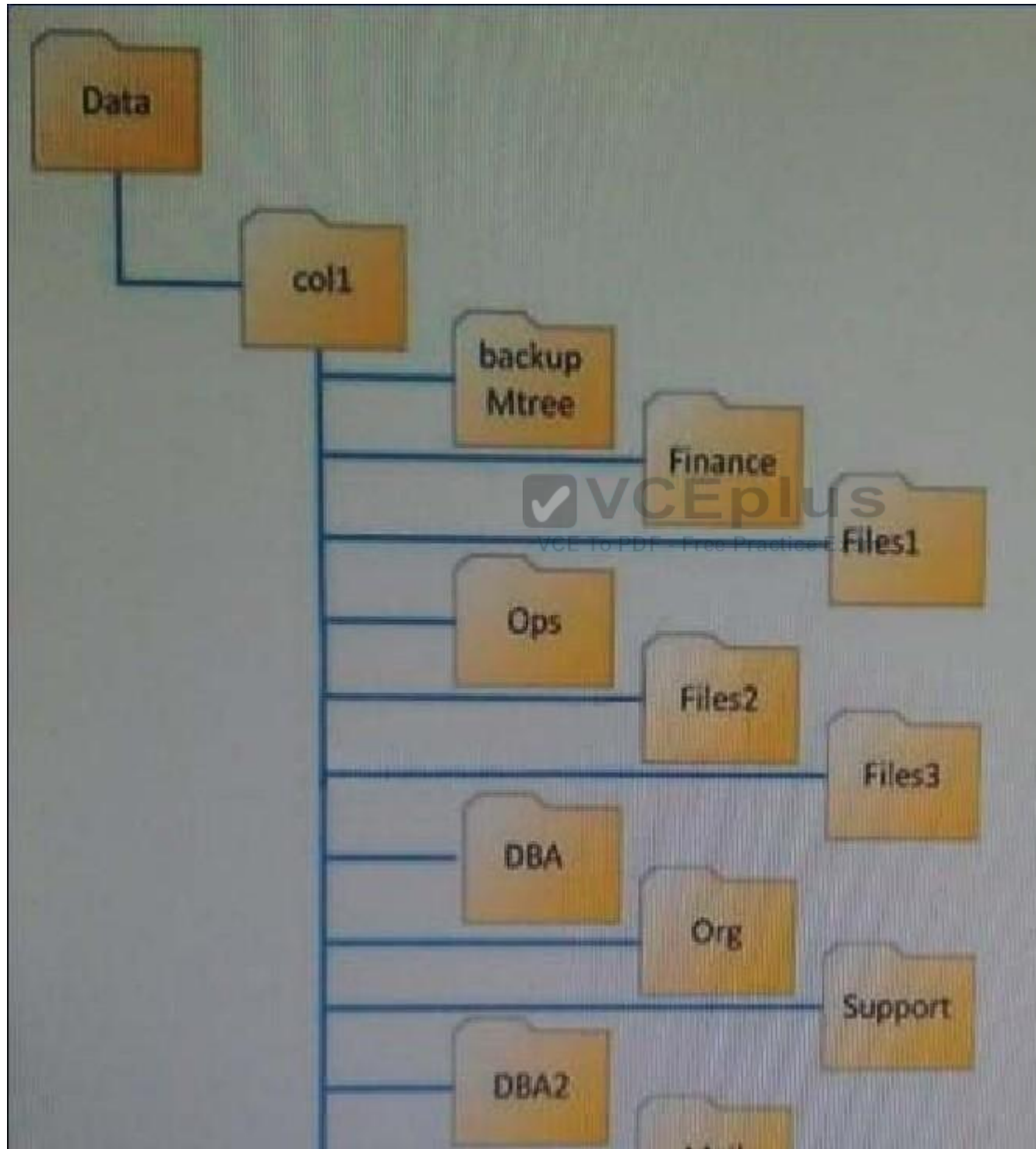
Explanation:

Reference: <http://www.scribd.com/doc/98863458/Avamar-Admin-Student-Guide-VerG-MR-1CP-AVAM635-NOPRINT-2010-03-31> (page 58)

QUESTION 118

As shown in the exhibit, a customer has configured EMC Data Domain for management. They have

noticed performance issues when using the configuration. How many Mtrees should be removed to improve the performance?



- A. 1
- B. 2
- C. 3
- D. 4

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 119

A customer performs weekly full backups and daily incremental backups. A typical full backup is 5 TB. A full backup completes in 10 hours v incremental backup completes in 4 hours. Based on best practices, what is the minimum EMC Data Domain throughput required?

- A. 292 - 333 GB/hr
- B. 340 - 440 GB/hr
- C. 585 - 666 GB/hr
- D. 1170-1332 GB/hr



Correct Answer: C

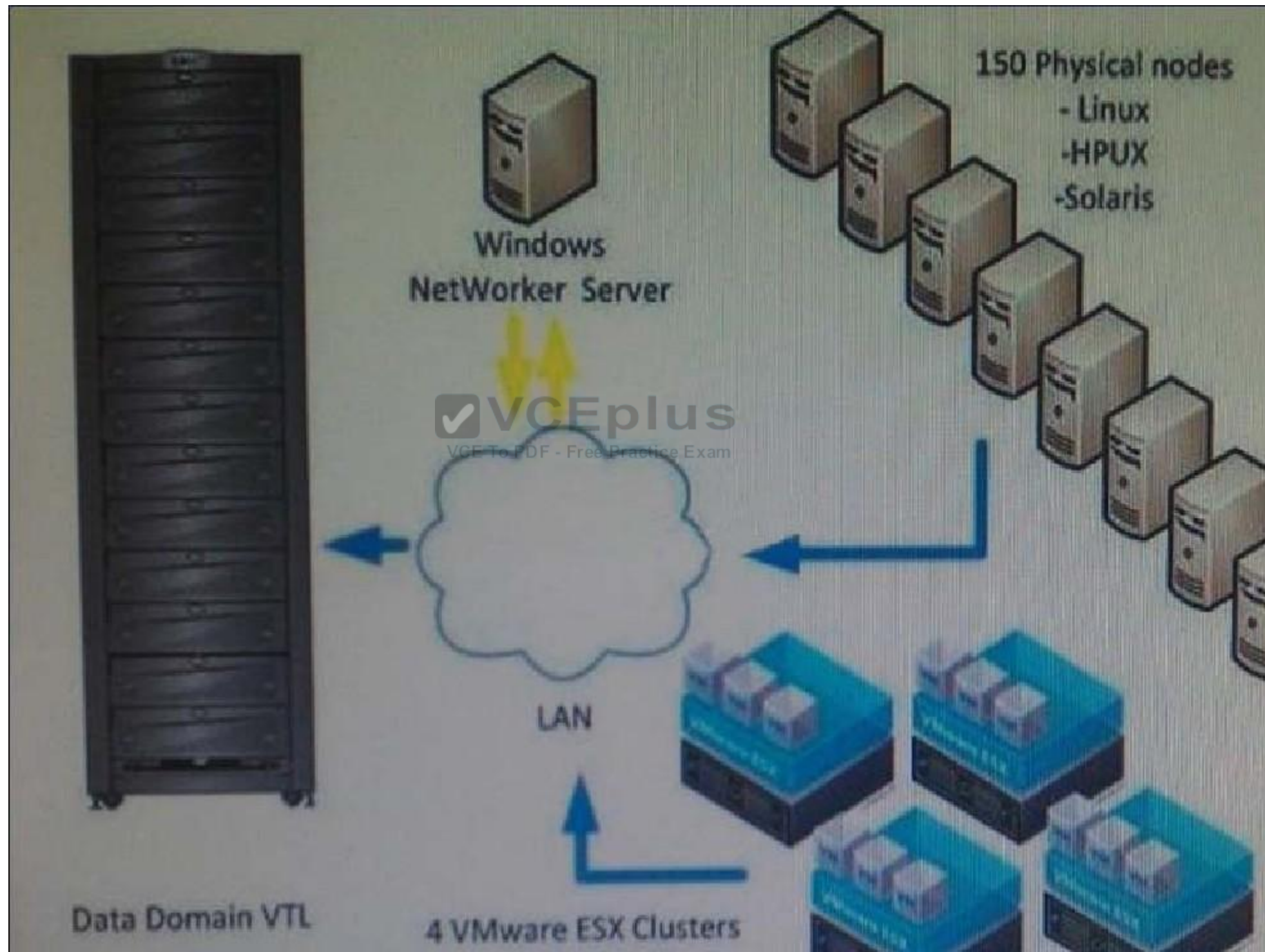
Section: (none)

Explanation

Explanation/Reference:

QUESTION 120

A customer is running the backup and recovery configuration shown in the exhibit. They added a new VMware cluster with 100 virtual machines. They are now experiencing slow backups at certain times. What should the customer have done prior to making changes to the configuration?



- A. Increase EMC NetWorker server memory
- B. Capture baseline performance of the backup environment
- C. Configure alert notification of the backup environment
- D. Add network cards to the EMC NetWorker server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 121

A customer is interested in using Data Protection Adviser (DPA) for monitoring TimeFinder replication on their Symmetric arrays. After discussing the Recoverability Analysis features within DPA, they are interested in a proof of concept.

Which operating system and database requirements should be provided to the customer for the DPA server?

- A. Linux server running Oracle or iAnywhere
- B. UNIX or Linux server running iAnywhere
- C. Windows server running Oracle
- D. Windows server running iAnywhere or SQL



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 122

You are designing a Data Protection Advisor (DPA) solution for a customer. As a part of the engagement, you are required to configure the DPA stores. What is the minimum size you would recommend for configuring the stores?

- A. Config: 150 MB DataminE. 5 MB Illuminator: 1 MB
- B. Config: 150 MB DataminE. 5 GB Illuminator: 1 GB
- C. Config: 150 GB DataminE. 5 MB Illuminator: 1 GB
- D. Config: 150 GB DataminE. 5 GB Illuminator: 1 GB

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Reference: https://docs.google.com/viewer?a=v&q=cache:7SUo-g7FmUsJ:ftp://ftp.legato.com/pub/eval/DPA/5.7/Docs/EMCDataProtectionAdvisor_InstallationGuide_57.pdf+&hl=en&pid=bl&srcid=ADGEESh4MqXF1XvJhZBg7Nx0HO3l6PbUI-IGE_IFvJ6yJ702chONNNCffeuRrb5k4dg-HuUeDrUOzEQu1AHMzCtt2A4BpG1HIYcOwqDxfu5f8lLqME8yKLjT3QQMv9Qo7UCJMRPI_cYD&sig=AHIEtbSERGylbGmh3yShdw0uz6BRA9Vidg&pli=1 (page 28, see table 7)

QUESTION 123

A customer wants to know why their backup performance to an EMC Avamar multi-node server has decreased. Initially they were seeing an ingest rate of approximately 5 to 7 GB/hr/node. Recently they estimated that the ingest rate has slowed to around 3 to 5 GB/hr/node. What is a probable cause for the decrease in the average ingest rate?

- A. Garbage collection is not running causing new stripes to be created
- B. HFS check has found errors and has not been completing successfully
- C. A large number of backups have expired causing new, relatively empty stripes to be created
- D. Stripes contain more data and steady state has been achieved

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 124

You are designing a backup solution for an EMC NetWorker customer. Given a conservative estimate, how many CPU cycles are needed by the storage node when backing up clients over the network to local tape drives at a rate of 100 MB/s?

- A. 0.2 GHz
- B. 0.5 GHz
- C. 1 GHz
- D. 2 GHz

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Reference: http://nsrd.info/documentation/nw76/76_performance_tuning.pdf (page 13, CPU requirements, first paragraph)

QUESTION 125

A customer's environment consists of the following:

- Linux servers with an Oracle database
 - Microsoft Windows with SQL
 - Full weekly backups for Oracle with a one-month retention period
 - Dairy incremental with a two-week retention
 - Full weekly backups for SQL with two retention periods
- You collect the information in order to determine the capacity needed for an EMC Data Domain solution. Which calculation will show the best trade-off between retention and compression?

- A. Calculations with the compression rate for the database
- B. Calculations with longer retention times
- C. Calculations across a range of retention times
- D. Calculations with minimal compression rates

Correct Answer: A

Section: (none)

Explanation



Explanation/Reference:

QUESTION 126

An EMC NetWorker customer is experiencing poor backup performance. Your analysis determines that significant host resources are used to manage low-level network handshaking operations during backup.

Based on EMC recommendations, what can be done to alleviate the handshake issue?

- A. Install 3 TCP offload engine card
- B. Install a second network interface card
- C. Upgrade the LAN
- D. Upgrade the network driver

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 127

A customer has a new EMC Avamar server with four 3.9 TB data nodes. This server is backing up two Avamar clients. The first client has 10 GB of RAM and two file systems. The first file system has 2 million files consuming .75 TB. The second file system contains 3 million files consuming 1 TB of space. The second client has 8 GB of RAM and one file system containing 4 million files is consuming 1.2 TB of space. Both clients will belong to the same backup group. How long will the steady state backup group be expected to run?

- A. 4 hours
- B. 5 hours
- C. 6 hours
- D. 9 hours

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 128

A customer is planning a new database rollout using Oracle and wants to perform online backups. Initial tests with EMC NetWorker have shown that the backups cannot be completed within the backup window of six hours. You have analyzed the backup environment and there are adequate resources to

meet this backup window.

What is one of the first things to check in NetWorker or RMAN to increase performance without adding cost and complexity?

- A. Number of streams should match the number of target devices to be written to concurrently
- B. All large system tables are excluded from the daily backups
- C. RMAN multiplexing setting is equal to NetWorker multiplexing
- D. Maximum number of files in a saveset is greater than the maximum number of open files

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 129

You are redesigning an EMC NetWorker customer's backup solution. Currently all file system clients are backing up to an EMC Avamar deduplication

node The customer wants to add another Avamar server and back up some of the larger clients to the new Avamar deduplication node. What is the impact of this decision?

- A. New initial full backups of these clients must be run
- B. Existing backups on the old deduplication node for these clients must be expired
- C. Previously backed up data for these clients must be replicated to the new deduplication node
- D. New NetWorker client resources must be created

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 130

When sizing an EMC Avamar or Data Domain solution, what are important challenges that should be taken into consideration?

- A. Data types, change rate, and growth rate
- B. Hardware type, change rate, and backup policy
- C. Data frequency type, and backup and restore policies
- D. Industry growth rate and deduplication ratio

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 131

A customer is considering EMC Avamar for backing up servers in their remote offices. Currently they are facing WAN capacity issues and the backup of their Microsoft Exchange server at the primary site is critical.

Which type of Avamar solution is suitable for the customer's environment?

- A. Single-node Avamar server at the primary
- B. Multi-node Avamar server for the remote offices
- C. AVE at each remote office location
- D. Centralized Avamar servers

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 132

An EMC Data Domain customer has ordered three expansion shelves to increase the active tier storage capacity for backup. After successfully installing the new expansion shelves, the Data Domain GUI is partially showing the new extra capacity.

What is the reason for this issue?

- A. One Active tier and one Archive tier licenses are needed
- B. Data Domain needs to be reconfigured to recognize the new capacity
- C. Only one Expansion Storage license was not installed
- D. Only one Shelf Capacity license was installed

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 133

The EMC account team has been asked to design an EMC NetWorker backup solution for a VMware ESX environment with the following requirements:
(1).Online backup of the Microsoft Exchange server running on a virtual machine (2).File-level backup and recovery for all virtual machines running Microsoft Windows.

Which backup solution addresses both requirements?

- A. vCenter backup
- B. Proxy backup
- C. Guest backup
- D. Image backup

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 134

An EMC Data Domain customer is planning to implement a replication solution in order to have their production environment protected at a remote site. The bandwidth for their SRDF replica is 40 Mbps which they are planning to share with the Data Domain replica.

Filesys Compression					

From: 2013-07-09 11:00 To: 2013-07-16 11:00					
	Pre-Comp (GiB)	Post-Comp (GiB)	Global-Comp Factor	Local-Comp Factor	Total-Comp Factor (Reduction %)
-----	-----	-----	-----	-----	-----
Currently Used:	505616.3	18200.5	-	-	27.8x (96.4)
Written:*					
Last 7 days	46268.3	1415.3	18.2x	1.8x	32.7x (96.9)
Last 24 hrs	5903.4	176.0	18.2x	1.8x	33.5x (97.0)
-----	-----	-----	-----	-----	-----

Based on the exhibit and given an 8-hour replication window, which information will determine the bandwidth requirements?

- A. Post-Comp in the last 24 hours
- B. Pre-Comp in the last 7 days
- C. Currently used Post-Comp
- D. Post-Comp in the last 7 days

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 135**

An existing EMC Avamar customer wants to add a new file system client to their Avamar system. This is a moderately full Avamar single-node server running in steady state. What is the estimated time to backup this file server of 3 million files?

- A. Less than 1 hour
- B. 1-2 hours
- C. 3-4 hours
- D. 5-6 hours

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 136**

You are discussing various EMC assessments to a customer. They want to know the basic difference between Data Deduplication Assessments (DDAA) and Data Deduplication Assessments (DDAB) assessments. How would you respond to the customer's inquiry?

- A. DDA A scans and reports on the file structure. DDAB reports, in detail, on the files themselves
- B. DDA. reports on and evaluates the contents of the file for deduplication DDAB reports commonality and characteristics of the files.
- C. DDA A runs a simulated backup of the share and reports on the characteristics. DDAB examines the contents of the file to determine the ability to deduplicate.
- D. DDAA is a single pass scan DDAB is a multiple pass scan of the file system or database.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:**QUESTION 137**

At a customer meeting, you discover that the backup administrator is new to the position. What can be used to determine the health of their backup environment?

- A. Asset Management and Planning Appliance
- B. Data Deduplication Assessment
- C. EMC Backup Assessment
- D. File System Assessment

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 138

An existing customer has an EMC Data Domain system that is the same model as that used in the Data Domain Archiver. The customer has decided to retain a portion of their backups for five years. They would like to upgrade their Data Domain system to an Archiver. Because the customer manages their existing Data Domain system, they would like to perform the installation themselves. How would you advise the customer?

- A. An upgrade to a Data Domain Archiver is not supported in the field
- B. A license must be purchased to expand the active tier above 146 TB
- C. Customer can convert a regular file system to an archive system
- D. An archive limitation of three years for all archive unit exists

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 139

A company purchased an EMC Avamar and Data Domain integrated solution six months ago. Their environment contains file system, Microsoft Exchange, and Microsoft SharePoint data. They are now ready to purchase a replication solution to support their disaster recovery strategy. Which design supports their environment?

- A. Avamar primary server and Data Domain primary system replicating to a secondary Data Domain.
- B. Avamar primary server replicating internal data to the primary Data Domain system. Data Domain replicating to a secondary Data Domain.
- C. Avamar primary server replicating to an Avamar secondary server. Data Domain primary system replicating to a secondary Data Domain.
- D. Data Domain system replicating both Avamar and Data Domain to secondary systems.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 140

An EMC NetWorker customer has an Oracle database client. To achieve acceptable backup performance, they have configured the backup to use multiple RMAN channels. The customer wants to add EMC Avamar deduplication for this backup. What is a consideration before proposing this design change?

- A. Data from each RMAN channel must be sent to a separate deduplication node
- B. More than 2 RMAN channels in a deduplicated backup will cause the backup to fail
- C. Less than 4 RMAN channels in a deduplicated backup will perform poorly
- D. Multiple cache files are created on the client when using multiple channels

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 141

A new customer is using EMC NetWorker to manage backup and recovery within their environment. They would like to have all backup data go to Advanced File Type devices and be spread across the four devices that they are currently using. The customer wants to use an additional device for new streams once there are eight running on a single device. Backups should not queue if another device is unavailable. Which parameter should be set?

- A. Pool Parallelism
- B. Savegroup Parallelism
- C. Max Sessions
- D. Target Sessions

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 142

You are meeting with a customer regarding an EMC Avamar and Data Domain integrated solution. The customer states that they would like their backup window to be 24 hours.

What is a consideration?

- A. Maintenance windows
- B. Multiplexing of backups
- C. Number of storage nodes
- D. Proprietary network infrastructure

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 143

A customer wants to change their backup and recovery strategy for their VMware Windows environment. They do not need to use encryption for the backup of the virtual machines. The customer plans to implement Avamar full image backups. Over 80% of restore requests are for single files.

As a result of the restore, which item is unavailable?

- A. ACL
- B. VMDK
- C. Proxy
- D. File

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 144

A company has a business model where they purchase small companies and let them run

independently. Storage, backup and recovery, and server technology implementations vary between the companies. The company has determined that

they must initiate a backup and recovery strategy that will allow for recovery of any of the small companies in case of a complete site failure. In addition, they want to start to use a single standard model in an effort to move forward towards standardization across the entire enterprise. A backup and recovery audit has found that the companies all use a basic method of backup and recovery consisting of enterprise backup software backing up to a tape library for all critical corporate data. The company wants to replicate backup sets from each site to their corporate location. Which EMC solution should be used to minimize impact on the environment while minimizing cost?

- A. Install Avamar as the backup technology at each site and replicate to a central Avamar for recovery
- B. Install Data Domain as a VTL for each site and replicate to a central Data Domain for recovery
- C. Install Data Domain as a VTL with NetWorker for each site and replicate to a central Data Domain for recovery
- D. Install NetWorker at each site and configure NetWorker Archiver to a central Data Domain for recovery

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 145

A customer is piloting an EMC Data Domain system.

SSH Session# system show stats 2

10/29 12:34:26

INTERVAL: 2 secs

CPU busy	FS ops/s	FS proc	Net in	MB/s out	Disk read	KiB/s write	Disk busy	NVRAM KiB/s	Rep1 KB/s
10%	119	7%	17951	436	234	7532	2%	17816	
9%	121	7%	17651	413	232	6543	1%	17455	
10%	120	7%	17831	424	234	3405	2%	17663	
8%	121	7%	18269	455	231	3345	3%	18111	
9%	105	7%	17829	433	123	8345	5%	17654	
10%	90	7%	17440	422	123	3453	2%	17322	

Based on the Data Domain statistics shown in the exhibit, which type of data is being backed up?

- A. New data
- B. DD Boost backups
- C. Redundant data
- D. Replicated data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 146

An EMC NetWorker customer has been using an EMC Disk Library (EDL) for over four years. The EDL has reached its capacity limits. The customer is

in the process of virtualizing as many physical servers as possible to reclaim data center floor space. They are backing up numerous 8 TB databases. The customer is interested in replacing the EDL and is concerned about the amount of backup traffic over the network. The replacement must maintain a single point of backup administration and reduce backup times for their growing virtualized environment. What is the recommended solution?

- A. Replace the EDL with Data Domain using DD Boost
- B. Add a deduplication storage node to NetWorker for VMware backups and replace the EDL with Data Domain for large databases
- C. Add an Avamar server for VMware backups and use NetWorker with DD Boost to back up the physical servers and large databases to a Data Domain
- D. Add a deduplication storage node to NetWorker for database backups and replace the EDL with Data Domain for VMware and physical servers

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 147

During final design conversations with an EMC Avamar customer, they indicate that they have certain data that needs to be carefully secured during transit. This data is typically transferred at different times and in different groups. Which type of encryption would address the customer's concern?

- A. Blowfish encryption enabled at the group policy level
- B. AES-256 encryption automatically enabled for all backups
- C. AES-256 encryption set at the time of the backup operation
- D. AES-128 encryption set at the time of server installation

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

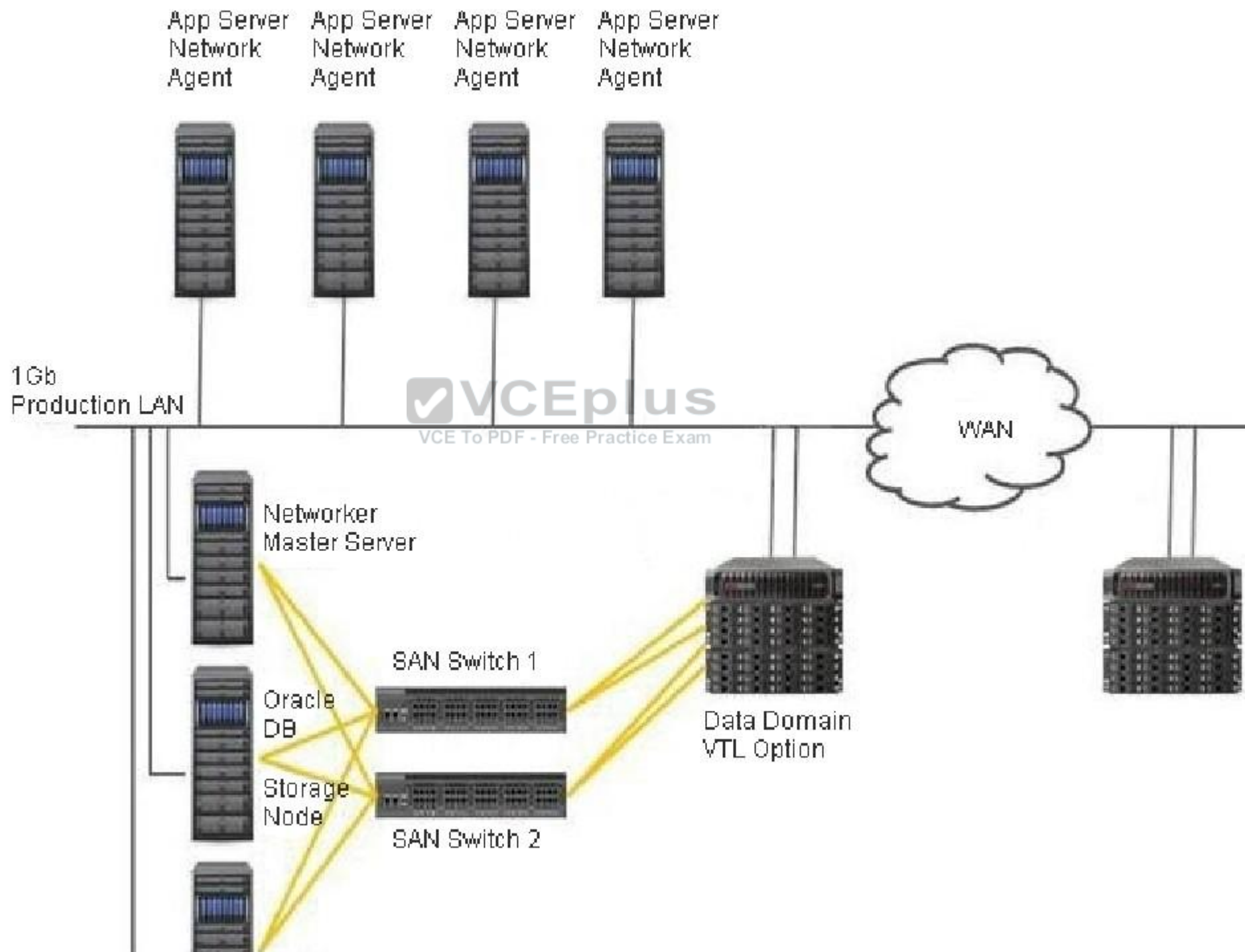
Explanation:

Reference: <http://cloud.croc.ru/en/services/baas.php> (expand details; see 5th bulleted point and 3rd sub bulleted point)

QUESTION 148

Refer to the Exhibit.





A customer is planning to have a disaster recovery solution for their backup environment. As part of Phase 1, they want a replica for their EMC Data Domain system. Due to some budget restrictions, they need to have a low investment solution. What is the recommended minimum configuration needed for the replica?

- A. Replication on both Data Domain systems
- B. Replication and VTL on both Data Domain systems
- C. Optimized duplication on both Data Domain systems
- D. DD Boost and replication on both Data Domain systems

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 149

An existing EMC NetWorker customer has been backing up their VMware environment using VMDKs to a CIFS-attached EMC Data Domain system. Recently, they have added another 80 TB to their primary VM storage. While their deduplication rates have exceeded expectations, they are starting to overrun their backup window. Which solution compliments their existing infrastructure?

- A. Introduce a VTL configuration to the Data Domain system and transfer data over Fibre Channel
- B. Add additional NetWorker storage nodes into the backup environment
- C. Switch the NetWorker VMDK configuration to a NetWorker guest client configuration
- D. Use Change Block Tracking on the VMware side and introduce DD Boost into the NetWorker and Data Domain configuration

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 150

An EMC Avamar customer is in the testing phase of their new solution. They have backed up several clients and are now doing some restore tests. They have found that the restore time is not consistent. The restore time decreases if more than one attempt at the same restore is performed. Why is the customer seeing these results?

- A. Backup jobs are running

- B. Restore data is in memory
- C. Garbage collection is running
- D. Restore data is on faster disks

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 151

A new EMC Avamar customer wants advice on setting up their groups and schedules. They are migrating from a traditional tape backup solution with a mixed retention policy. Both Microsoft Windows and Solaris clients will be backed up. What follows EMC best practices for setting up groups and policies?

- A. Minimize the number of groups by including the different operating systems in the same dataset and using advanced retention
- B. Create a unique group for each dataset, schedule, and retention policy
- C. Enable the default group and use that group for all backups as every client is added to this group upon activation
- D. Use a separate group and dataset for each operating system type and create unique retention policies for Monthly, Daily, Weekly, and Yearly backups

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 152

An EMC NetWorker customer is backing up all clients using EMC Avamar deduplication. They have a requirement for backup redundancy for disaster recovery. What is recommended to provide this protection?

- A. Replicate backup data in Avamar, clone deduplication metadata in NetWorker
- B. Replicate backup data and deduplication metadata in Avamar
- C. Replicate deduplication metadata in Avamar, clone backup data in NetWorker
- D. Clone backup data and deduplication metadata in NetWorker

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 153

A customer wants to improve the performance of their EMC Data Domain system. After checking their weekly reports, they notice that on the same day each week, file system performance is impacted. At first the customer thought the performance issue was caused by full backups that run on Friday. However, the performance issue is occurring on Tuesday.

What is a possible reason for this behavior?

- A. Cleaning throttle is set to 90
- B. Directory replication is running
- C. File system is in a disabled state
- D. Full database backups are running

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:



QUESTION 154

An existing EMC NetWorker customer is evaluating options for upgrades within their backup solution. The customer is interested in replacing their current tape-based infrastructure with a backup-to-disk product. The customer currently uses EMC VNX arrays for their SAN storage. The solution needs the ability to retain certain backups for long periods of time due to compliance reasons as well as minimize the amount of power and rack space required. In addition, all backups must go offsite on a daily basis. Finally, the customer wants the ability to use a new 10 GigE infrastructure they are planning to deploy within their data center. They want to minimize the amount of disruption to their current daily procedures in order to avoid re-training existing staff.

Which storage solution can be integrated with NetWorker to satisfy these requirements?

- A. LUNs from the VNX
- B. DD Archiver appliance with VTL
- C. Avamar server
- D. DD Archiver appliance with DD Boost

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:**QUESTION 155**

An EMC NetWorker customer is considering backup options for their VMware environment. The environment consists of Microsoft Windows file servers and an Oracle database server running on Solaris. What is an advantage of using the VMware image backup operation?

- A. Application backup data is crash-consistent
- B. File-level restore granularity available for all systems
- C. Low load on the ESX server during backups
- D. No proxy server required for the backup environment

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 156**

A large EMC NetWorker customer is gathering installation requirements for a new NetWorker installation. Based on best practices, where should the NetWorker indexes be located to provide the most flexibility?

- A. Separate internal disk from the O/S
- B. Protected NAS share
- C. SAN volume
- D. Large SCSI-attached disk

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 157**

A customer has been using lz Local Compression when backing up their data to an EMC Data Domain system. An audit of their storage content shows that they can effectively use gz compression for their data.

What should be considered before changing the Local Compression type?

- A. Overall system performance will improve with the new compression
- B. Existing data will not be recompressed; only new data will be gz compressed
- C. New compression on the old data will not take effect until the next system cleaning
- D. Changes must be made at the beginning of a 20-hour backup window

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 158

You are designing a Data Protection Advisor (DPA) solution to support an environment consisting of:

- 2 VNX-File
- 1 NetApp File Server
- 185 EMC NetWorker clients
- 300 Symantec NetBackup clients

What are the appropriate DPA licensing requirements?

- A. Backup option for 185 NetWorker clients
Backup option for 300 NetBackup clients
2 File Server options for VNX-File
1 File Server option for NetApp
- B. Backup option for 485 clients
Backup option for VNX-File
Backup option for NetApp
- C. Backup option for 500 clients
1 File Server option for VNX-File
1 File Server option for NetApp File Server
- D. Backup option for the amount of managed backup capacity
1 File Server option for the NAS systems



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 159

A Symantec NetBackup customer is planning to add a second data center. They would like to leverage deduplication technology to improve backup operations and disaster recovery with a minimum amount of change to their existing backup environment.

The customer's primary design goals are:

- (1). Improve backup performance
 - (2). Electronic vaulting for disaster recovery
 - (3). Maintain NetBackup as their primary tool for backup control and visibility
- What should be included with a high-end Data Domain appliance?

- A. NetBackup OST
- B. 8 GB Fibre Channel
- C. iSCSI over 10 GB Ethernet
- D. CIFS protocol over 10 GB Ethernet

Correct Answer: B

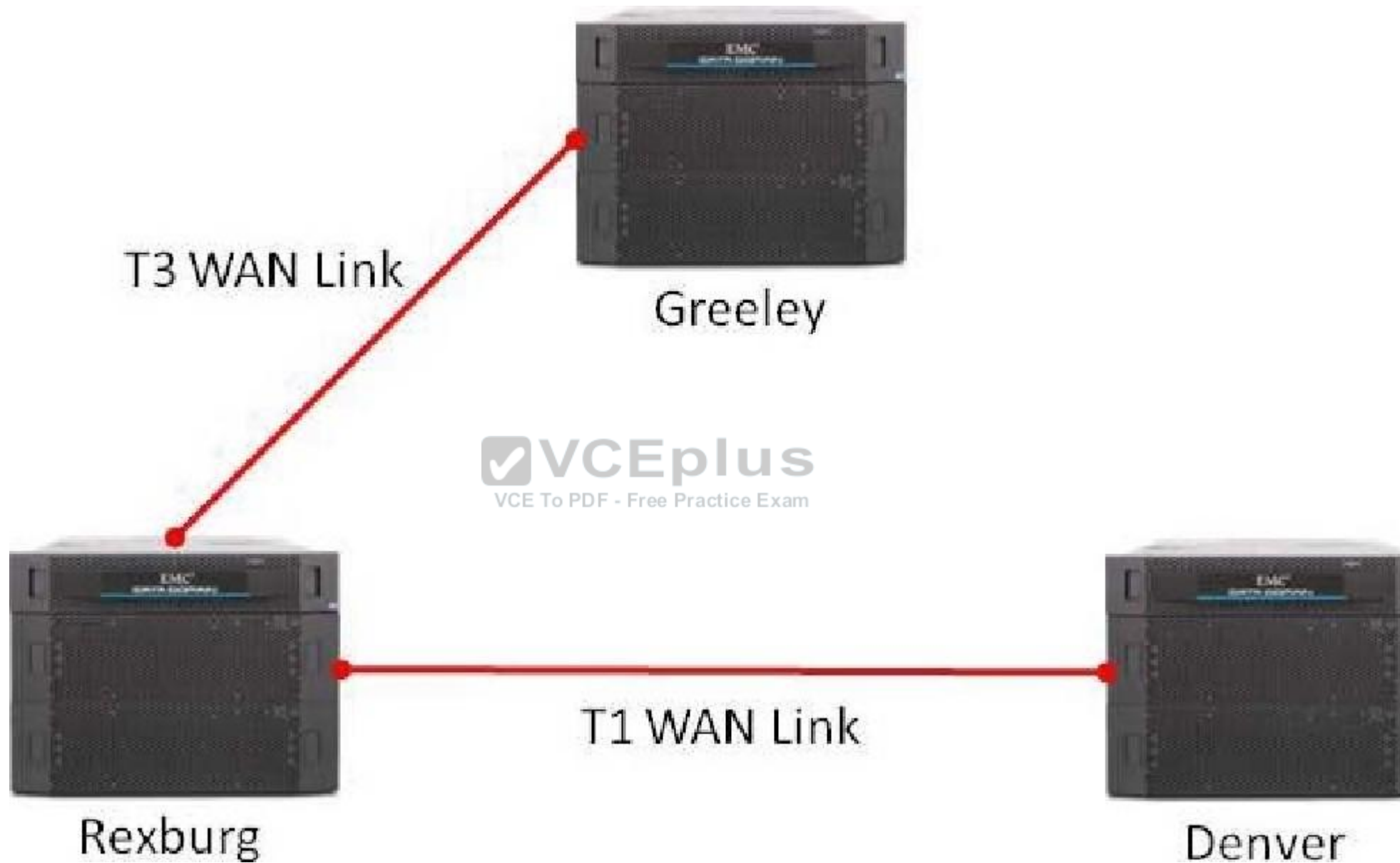
Section: (none)

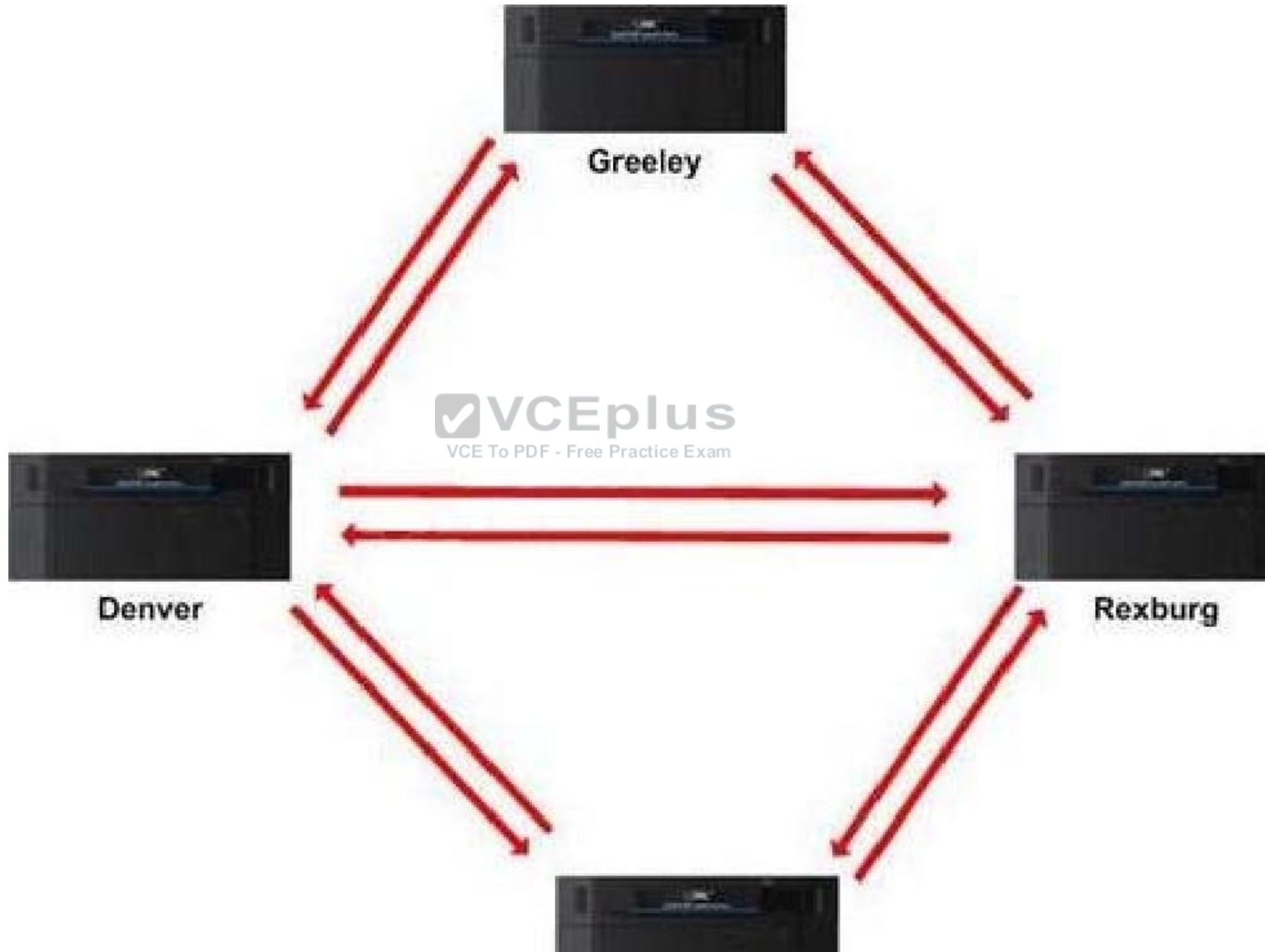
Explanation

Explanation/Reference:

QUESTION 160

Refer to the Exhibit.





A large mining company wants to implement replication using EMC Data Domain systems in multiple cities. How should the customer's design requirements be addressed?

- A. Bi-directional replication can be used at two or more sites concurrently
- B. Bi-directional replication should be established between Greeley and Pueblo
- C. Replication between Denver and Rexburg should be in one direction only
- D. Replication between Denver and Rexburg is not supported

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 161

Refer to Scenario.

An enterprise customer would like to better address business continuity at all branch offices. Their corporate data center resides in Chicago, Illinois and they would like all branch office data centers to use Chicago as the destination for replicating backups.

Each branch office has a mixture of databases, e-mail, and other data that need full backups on Friday evenings and daily incremental backups. Based on their new Chief Technology Officer's experience with deduplication, they are installing EMC Data Domain devices at all sites to take advantage of the lower bandwidth requirements for backup replications.

The backup requirements for the branch offices are:

New York, Denver, and Houston = 100 GB full, 20% daily incremental SCO, Seattle, and Kansas City = 20 GB full, 20% dairy incremental The backup window for all branch offices is 15 hours on Friday evenings. What is the throughput required between Seattle and Chicago to enable these replications?

- A. 1.33 GB/hour
- B. 2.67 GB/hour
- C. 26.7 GB/hour
- D. 13.33 GB/hour

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 162

Refer to Scenario.

An enterprise customer would like to better address business continuity at all branch offices. Their corporate data center resides in Chicago, Illinois and they would like all branch office data centers to use Chicago as the destination for replicating backups.

Each branch office has a mixture of databases, e-mail, and other data that need full backups on Friday evenings and daily incremental backups. Based on their new Chief Technology Officer's experience with deduplication, they are installing EMC Data Domain devices at all sites to take advantage of the lower bandwidth requirements for backup replications.

The backup requirements for the branch offices are:

New York, Denver, and Houston = 100 GB full, 20% daily incremental SCO, Seattle, and Kansas City = 20 GB full, 20% dairy incremental The San Francisco branch office has an existing VTL infrastructure. Which type of replication is recommended for their backups?

- A. Collection
- B. Pool
- C. Directory
- D. MTree

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 163

Refer to Scenario.

Production Site Configuration



ESX Production Clusters
30% Windows, 70% Linux



VMAX Storage
Primary
Mixed FAST-VP



HPUX Database Clusters



SRDF
2 RE 1 GB links



WAN
(shared capacity LAN/SAN)



SRDF
2 RE 1 GB links



EMC Networker
Server



Tape Library
LTO media



VMAX Storage
DR Target
SATA/EFD FAST-VP



ESX Disaster Recovery Cluster



HPUX Recovery Cluster

Standard Site Configuration

The Chief Technical Officer (CTO) of a large company has directed their IT management staff to examine corporate wide operations and find ways to limit the cost of operations. The corporate directives have prompted adoption of company policies that include the use of virtualization for all new servers and as many services as possible. The company is subject to government regulations concerning data retention policies for confidential data. Data has to be retained for seven years. An audit of the backup and recovery environment is performed. The exhibit shows a typical site and how it is connected to the disaster recovery environment. Data in the primary site is configured on VMAX storage using FAST-VP to support multiple work load types on a single storage array. Data is protected by SRDF/A to a remote VMAX which acts as a target for multiple sites. The remote copy of the data is snapped and copied to tape. Retention is accomplished to governmental standards by offsite storage of tape in a remote protected facility.

The company has noted that it has the following requirements in any proposed architecture for the backup and recovery environment:

- Reduced power consumption
- Reduced floor space consumption
- Reduced storage capacity consumption
- Lower WAN bandwidth utilization
- Shorten RPO
- Decrease RTO
- Increase security
- Lower Total Cost of Ownership (TCO)

To satisfy the stated requirements, the customer wants to use a virtual appliance to limit power and space consumption in their smaller locations.

To replace the current SRDF/A replication model, which EMC technology should be recommended?

- A. Data Domain
- B. NetWorker NDMP
- C. Avamar AVE
- D. NetWorker Archiver



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

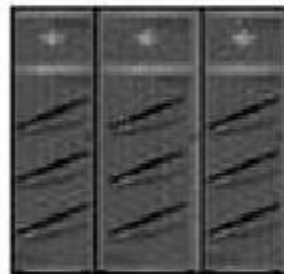
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Refer to Scenario.

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Primary
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HPUX Database Clusters



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- Reduced floor space consumption
- Reduced storage capacity consumption
- Lower WAN bandwidth utilization
- Shorten RPO
- Decrease RTO

- Increase security

- Lower Total Cost of Ownership (TCO)

The company has been unable to achieve the RTO required by their Service Level Agreement to their major clients.

If they want to limit TCO, which EMC solution should be proposed?

- A. Avamar
- B. NetWorker and Avamar
- C. NetWorker and Data Domain
- D. Data Domain

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

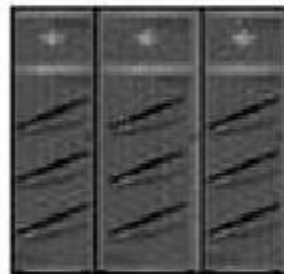
QUESTION 165

Refer to Scenario.

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ESX Disaster Recovery Cluster



HPUX Recovery Cluster

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- Reduced power consumption
- Reduced floor space consumption
- Reduced storage capacity consumption
- Lower WAN bandwidth utilization -Shorten RPO
- Decrease RTO -Increase security
- Lower Total Cost of Ownership (TCO)

The company wants to replace their SRDF/A technology with an EMC solution that can satisfy all of the requirements stated by the CTO. Which technology should be used to replace replication SRDF?

- A. RecoverPoint
- B. NetWorker
- C. Avamar
- D. Data Domain

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 166

Refer to Scenario.

A customer is looking to modernize their backup infrastructure. The current environment consists of a single centralized data center and several remote sites. The centralized data center hosts all core services and applications. The remote office primarily consists of sales personnel with 4000 use-North America, 500 in Europe, and 300 in Asia using file servers. The current backup environment at the primary site uses CommVault backing up to a Fibre Channel tape library that contains four ITO-4 tape drives. Currently they are backing up a number of file servers as well as several databases that have average change rates of 7% daily Remote office backups are currently performed by having users copy files to regional file servers that are then backed up to tape. In the past few months, the customer has experienced problems with getting backups to finish within their defined windows as well as issues with the tape library hardware. They now have concerns about gaps in their backup coverage as well as the reliability of the tape media. In addition, an internal audit shows a large amount of user-generated data is unprotected on remote user laptops. The customer is looking for a common platform to standardize their backups. They want a solution which allows for a centralized infrastructure so -they do not need to rely on remote resources to address hardware and software issues. The other goal is to move away from tape to a more reliable disk-based solution.

The customer is impressed by the performance of Avamar file system backups. However, they have concerns about its ability to handle the backups of their databases.

Which solution should be recommended?

- A. Continue to backup the databases to tape
- B. Configure a standalone Data Domain appliance
- C. Integrate a Data Domain appliance with Avamar
- D. Add more storage nodes to the Avamar system

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 167

Refer to Scenario.

A customer is looking to modernize their backup infrastructure. The current environment consists of a single centralized data center and several remote sites. The centralized data center hosts all core

services and applications. The remote office primarily consists of sales personnel with 4000 users in North America, 500 in Europe, and 300 in Asia using file servers. The current backup environment at the primary site uses CommVault backing up to a Fibre Channel tape library that contains four ITO-4 tape drives. Currently they are backing up a number of file servers as well as several databases that have average change rates of 7% daily. Remote office backups are currently performed by having users copy files to regional file servers that are then backed up to tape. In the past few months, the customer has experienced problems with getting backups to finish within their defined windows as well as issues with the tape library hardware. They now have concerns about gaps in their backup coverage as well as the reliability of the tape media. In addition, an internal audit shows a large amount of user-generated data is unprotected on remote user laptops. The customer is looking for a common platform to standardize their backups. They want a solution which allows for a centralized infrastructure so they do not need to rely on remote resources to address hardware and software issues. The other goal is to move away from tape to a more reliable disk-based solution.

The customer is interested in Avamar to backup all their worldwide remote users. Based on best practices, which EMC solution will satisfy the customer's requirements?

- A. Deploy a single Avamar system at the primary location to back up all clients
- B. Deploy Avamar systems into each major geographical location, including Asia, Europe, and North America
- C. Deploy Avamar single-node systems at the remote sites and an Avamar system at the primary location as a replication target
- D. Deploy three Avamar grids to the primary location, each grid will be dedicated to a specific region

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:****QUESTION 168**

Refer to Scenario.

A customer is looking to modernize their backup infrastructure. The current environment consists of a single centralized data center and several remote sites. The centralized data center hosts all core services and applications. The remote office primarily consists of sales personnel with 4000 use-North America, 500 in Europe, and 300 in Asia using file servers. The current backup environment at the primary site uses CommVault backing up to a Fibre Channel tape library that contains four ITO-4 tape drives. Currently they are backing up a number of file servers as well as several databases that have average change rates of 7% daily Remote office backups are currently performed by having users copy files to regional file servers that are then backed up to tape. In the past few months, the customer has experienced problems with getting backups to finish within their defined windows as well as issues with the tape library hardware. They now have concerns about gaps in their backup coverage as well as the reliability of the tape media. In addition, an internal audit shows a large amount of user-generated data is unprotected on remote user laptops. The customer is looking for a common platform to standardize their backups. They want a solution which allows for a centralized infrastructure so -they do not need to rely on remote resources to address hardware and software issues. The other goal is to move away from tape to a more reliable disk-based solution.

The customer is evaluating EMC Avamar as a possible solution to backup their remote users. They are estimating that each machine will take approximately 10 minutes to backup. They would like all backups to complete in 8 hours.

What is the minimum number of storage nodes needed to support the necessary connections to complete the backups of the North American system in the defined window?

- A. 3
- B. 4
- C. 5
- D. 6

Correct Answer: B

Section: (none)

Explanation**Explanation/Reference:****QUESTION 169**

A customer has an existing EMC Data Domain system that backs up their web services data. Their business is growing and they would like to expand storage by adding two ES30 hard drive shelves to their existing ES20 shelf set.

Which option can be used for increasing capacity?

- A. Install a separate shelf set for the ES30 shelves

- B. Add only one additional ES30 shelf to the shelf set
- C. Use Infiniband style cables between the ES20 and ES30 shelves in the shelf set
- D. Install one additional ES20 to allow the additional two ES30 shelves to the existing shelf set

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 170

A customer has been using EMC Avamar to leverage deduplication for VMware. They have been performing guest-level backups and now want to also perform VMware image backups for disaster recovery. In order to use image backups, what is recommended in the environment?

- A. SAN-attached Data Store
- B. Image proxy Windows host
- C. Avamar client agent running on the vCenter server
- D. Avamar client running on each guest



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 171

An EMC NetWorker customer is considering capacity-based licensing. What can be used to determine the capacity size they would need to license?

- A. Asset Management and Planning appliance
- B. NetWorker License Conformance Report
- C. NetWorker Management Console Status reports
- D. Combined capacity of all NetWorker devices

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 172**

In an EMC Data Domain environment, what is considered a valid Archiver replication type?

- A. Archiver-to-Archiver Directory
- B. Appliance-to-Archiver Collection
- C. GDA-to-Archiver Collection
- D. GDA-to-Archiver Directory

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 173**

A customer wants to implement a Data Protection Advisor solution in their Microsoft Windows backup

environment. After the proof of concept installation, you discover that performance of the iAnywhere database is degraded. What is the most likely reason?

- A. More than 250 clients
- B. O/S environment is unsupported
- C. Exceeds the number of databases
- D. TCP ports are disabled

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 174**

A customer has decided on EMC Avamar as a solution. They are interested in the replication features to accommodate multiple off-site locations. The customer wants to know the longest time they can run replication.

According to EMC best practices, what is the maximum time to recommend to the customer?

- A. 6 Hours
- B. 8 Hours
- C. 12 Hours
- D. 16 Hours

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 175

An EMC Avamar customer is receiving capacity warning messages from their system. They recently deleted several clients including their backup data. The deleted client data is 2 TB in size. After garbage collection completed, the customer saw less space collected than they had anticipated. What would cause this behavior?

- A. Chunks are used for other backups
- B. HFS check still needs to run
- C. Partials have been removed
- D. HFS check failed



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 176

A new EMC NetWorker customer has decided to use the traditional licensing model even though they have a large number of licenses that they will need to load. Which option is available to quickly install these licenses?

- A. Download an nsradmin file from Powerlink and import the file
- B. Download a text file of license keys and import through the NetWorker Management Console
- C. Check for licenses automatically with the License Conformance Reporter
- D. Copy and paste the licenses from the automatically generated e-mail

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 177

An EMC NetWorker customer has recently added an Avamar system for file system backups. They want to move all backups to the Avamar system to take advantage of deduplication. They are currently backing up Sybase and SAP with NetWorker.

Which recommendation will meet these requirements?

- A. Configure Avamar as a deduplication storage node in NetWorker and use deduplication for all backups
- B. Use native database tools to back up to flat files, and then use Avamar to back up the resulting files
- C. Use pre- and post-processing scripts to shut down the databases and perform a cold backup with Avamar
- D. Use Avamar instead of NetWorker for all backups

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 178

A customer has recently purchased Data Protection Advisor (DPA) to monitor their EMC NetWorker backup environment. They are currently monitoring the NetWorker servers and storage nodes. Which other devices can be monitored without additional DPA licenses?

- A. Physical or virtual tape libraries, IP and Fibre Channel switches, and databases on backup clients
- B. NAS devices and performance data on backup clients
- C. IP switches, Fibre Channel switches, tape libraries, and NAS devices
- D. Physical or virtual tape libraries and IP or Fibre Channel switches only

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 179

The EMC account team has been asked to redesign an EMC NetWorker backup solution. The existing backup environment consists of one NetWorker

server and one storage node to back up approximately 80 clients. Over time, the amount of data increased, resulting in daily backups taking more than 24 hours to complete.

What should be recommended to improve the backup performance with minimal costs?

- A. Convert several of the large clients into dedicated storage nodes
- B. Add a NetWorker server and balance the clients across the two servers
- C. Assign different NetWorker schedule resources to the backups to start at different times during the day
- D. Configure the existing storage node as a dedicated storage node

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 180

An EMC Avamar customer has Oracle 11g running on a Microsoft Windows server. They want to deploy hot backups. What is a design consideration for hot backups when using the Avamar plug-in for Oracle?

- A. Incremental backups are supported using RMAN BCT
- B. Backups initiated with Avamar Administrator must be full-level backups
- C. Use of exclude/include lists in a dataset is supported
- D. Restores must be to the original database location

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 181

A customer has informed you that they would like to purchase an EMC Avamar solution. They plan to implement enhanced security by encrypting all backup data that is stored on the Avamar server. During the final sizing of this solution, what should be taken into consideration?

- A. System resources may be impacted by as much as 33%
- B. System capacity may be increased by a maximum of 5%
- C. Server performance will decrease by 43%
- D. Backup windows should be modified by 10%

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 182

An existing EMC Avamar customer wants to start backing up their VMware environment. The

customer requires the ability to perform file level restores of their Microsoft Windows clients and is concerned about any potential negative impact of backups on the ESX server. In addition, there is a short backup window so it is important that backups complete as fast as possible. Which backup method will meet the customer's needs?

- A. VMware image backup with an Avamar agent on a proxy host
- B. VMware image backup with an Avamar agent on the ESX server
- C. VMware guest backup using an Avamar agent on each virtual machine
- D. VMware guest backup using an Avamar agent on the vCenter server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 183

A customer has asked you to design an EMC Avamar and Data Domain integrated solution for their environment. As you review the design for the Microsoft Exchange portion of the solution, the customer would like you to explain the backup process. How would you respond?

- A. Work order is received from the Avamar server, backup data is sent to the Data Domain appliance, and then metadata is sent to the Avamar server
- B. Avamar instructs the Exchange server to send both backup data and metadata to the Data Domain appliance
- C. Work order is sent from the Avamar Management Console to the Exchange server, and then data and metadata are sent to the Avamar system
- D. Exchange API, using a plug-in, sends all data directly to the Data Domain appliance

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 184**

A customer wants to back up VMware using EMC Avamar to leverage deduplication. They want to use the VMware Image Backup option. Which component of the backup environment requires the Avamar client agent?

- A. VMware image proxy
- B. ESX server
- C. vCenter server
- D. Client virtual machines

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 185**

A new customer wants to use EMC NetWorker to protect the servers in their environment. One of their requirements is that NetWorker be configured with the NetWorker server clustered for high availability. What is required for the NetWorker server to be used in this configuration?

- A. NetWorker Power Edition license
- B. NetWorker Cluster Client licenses
- C. A separate NetWorker Network Edition license for each physical node that makes up the cluster
- D. An additional storage node license for each physical node that makes up the NetWorker server cluster

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 186**

A customer has decided on EMC Avamar as a solution. They are trying to decide on the amount of nodes to purchase. They want maximum storage capacity.

What is a recommended maximum number of data nodes for an initial Avamar server configuration?

- A. 7
- B. 8
- C. 14
- D. 16

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 187

Which features will have a negative impact on the performance of an EMC Data Domain system?

- A. Cleaning, gz Compression, 25 MTrees, and encryption
- B. Network collisions, replication, cleaning, and encryption
- C. Encryption, replication, cleaning, and Mtrees
- D. Global deduplication, replication, DD Boost, and 25 Mtrees

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 188

A new EMC Avamar customer is concerned with data security since all backup data is stored on disk. To minimize the customer's concerns, you have recommended the encryption-at-rest feature.

What is a consideration when using this feature?

- A. Must be enabled at Avamar server installation time and has an impact on server resources
- B. Specified at the time of each backup operation or in a group definition
- C. Must be enabled when each client is installed and cannot be changed
- D. Uses an Avamar proprietary encryption method which requires an encryption key

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 189

A customer has a new EMC Avamar server with four 3.9 TB data nodes. This server is backing up two Avamar clients. The first client has 8 GB of RAM and two file systems. The first file system has 3 million files consuming .75 TB. The second file system contains 5 million files consuming 1 TB of space. The second client has 10 GB of RAM and one file system containing 4 million files is consuming 1.2 TB of space. Both clients will belong to the same backup group. How long will the steady state backup group be expected to run?

- A. 5 hours
- B. 6 hours
- C. 8 hours
- D. 12 hours

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 190

A customer's backup solution is reaching the end of warranty. The customer has installed an Avamar solution for their file server and ESX servers. They want to move all the backups to this environment. Deduplication for the databases is critical and they want to maintain the EMC Data Domain VTL. In order to integrate Data Domain into the Avamar installation, which hardware and software options need to be installed on the Data Domain system?

- A. DD Boost and two 1 Gb NIC cards
- B. OST Plug-in and 10 Gb NIC card
- C. DD Boost and one 10 Gb NIC card
- D. OST Plug-in, DD Boost, and 1 Gb NIC card

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 191

Your customer has been a long time Avamar Virtual Environment (AVE) customer. They have older AVE installations along with newer installations. They notice that older configurations are not receiving the same performance as the newer configurations. The customer points out that both configurations have fairly high I/O requirements but use different disk pools. They understand performance is affected by RAID levels and would like your recommendation.

Based on best practice, which RAID level is recommended for virtual machines with high disk usage?

- A. RAID 0 or RAID 1
- B. RAID 1 or RAID 10
- C. RAID 3
- D. RAID 5 or RAID 6

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 192

A customer currently has a multi-node EMC Avamar solution with eight active storage nodes. They are currently at 85% GSAN capacity and receiving capacity warning messages. The customer would like to purchase additional capacity for the system.

What is a best practice for adding capacity?

- A. Add two nodes
- B. Add one node
- C. No nodes can be added. Add a new Avamar system.
- D. No nodes can be added. Migrate to a larger system.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 193

A customer has difficulty keeping up with their restore requests on their existing backup solution. Currently each restore requires the backup team to engage and manually process each restore request. The customer wants the clients to be able to restore and browse their own data using only their account credentials.

Which EMC solution meets the customer's requirements?

- A. Avamar DTLT
- B. NetWorker with VTL
- C. NetWorker with Data Domain Boost
- D. VMware Guest Backups

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 194

A customer has an Avamar system that has reached 100% of maximum capacity. The environment consists of a 16 active data node system. What can be done to decrease the utilized capacity?

- A. Move clients to a new system with larger data nodes
- B. Decrease retention times on backups
- C. Add additional nodes to the current system
- D. Increase the size of the existing nodes



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 195

You have suggested to a customer that a Data Deduplication Assessment A (DDA:A) would help them evaluate deduplication in their environment. What would you recommend after the completion of the DDA: A scan?

- A. Schedule and run a File System Assessment
- B. Map drives for the DDA: B scan
- C. Rerun the DDA: A scan within one week of the first scan
- D. Perform the DDA: A backup script

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 196

An EMC Avamar customer is unable to successfully complete a nightly backup of a large file server within their defined backup window. The server is a single quad core system with 2 GBs of RAM. The file system data is being stored on a RAID 5 SAN disk. Currently, the server has 7 million files totaling 1 TB of data spread across three volumes. The Avamar agent was installed and configured using the default settings.

What should be recommended to increase the performance of the nightly backup?

- A. Increase the size of the local file cache
- B. Migrate the data volumes to RAID 1/0 disks
- C. Increase the speed of the network connection
- D. Increase the size of the local hash cache

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 197

A customer is considering an EMC Avamar backup solution. They want to know whether Avamar can provide the security benefit of data encryption between the clients and the Avamar server.

What are the in-flight encryption considerations?

- A. Encryption strength can be specified when configuring a backup group
- B. An encryption option must be selected at installation time and impacts server resources
- C. Some type of encryption, either medium or high, must be specified for each backup
- D. Encryption must be selected at installation time and is the same for all clients

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 198

An existing EMC Data Domain customer is evaluating new backup software and hardware for their environment. Their current environment consists of a single data center along with several remote sites. The customer is interested in consolidating all backup hardware into their primary data center while still being able to do remote backups. In addition, they want the ability to perform backups directly to tape for certain applications in order to send the tapes offsite for long-term retention. The customer plans to keep their current Data Domain system as part of any new configuration. However, they want to look at options to optimize performance without adding additional infrastructure. The final requirement is that the entire solution be managed from a single unified interface in order to configure and track backup jobs.

Which EMC solutions can address these requirements?

- A. NetWorker with DD Boost and an integrated Avamar system
- B. NetWorker with DD Boost along with remote storage nodes
- C. Avamar with an integrated Data Domain system
- D. NetWorker with DD VTL and an integrated Avamar system

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 199**

A customer is currently running Data Protection Advisor. Over time, concerns have been expressed about performance degradation. After a complete review, you discovered that performance was being impacted due to data gathered by Collectors being maintained with configuration data. What is the most likely reason for keeping these two types of data separate?

- A. Dynamic nature and large size
- B. Static nature and large size
- C. Dynamic nature and small size
- D. Static nature and small size

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 200

An EMC Data Domain customer has ordered two expansion shelves to increase the active tier storage capacity for backup. After successfully installing the new expansion shelves, the Data Domain GUI does not display the increased capacity.

What is the reason for this issue?

- A. Shelf Capacity licenses were not installed
- B. Disk drives need to be reconfigured
- C. Expansion Storage license was not installed
- D. Active tier and Archive tier licenses are needed

Correct Answer:

Section: (none)

Explanation

Explanation/Reference:

Answer: ATopic 3, Volume C

QUESTION 201

A customer has an EMC Data Domain appliance that has reached 90% of maximum capacity. The customer does not want to purchase any additional storage. What will increase the average available capacity of the Data Domain appliance?

- A. Decrease the backup retention period
- B. Decrease the cleaning frequency
- C. Increase the snapshot expiration period
- D. Increase the number of streams



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 202

A potential customer is evaluating an EMC Avamar system as a backup solution. After initial sizing, they added a requirement to encrypt all backup data on the Avamar system. The original sizing documents indicated that the customer required 54 TB of storage capacity. What is the total amount of storage required to support the performance impact of the encryption?

- A. 54 TB
- B. 64 TB
- C. 72 TB
- D. 81 TB

Correct Answer: D

Section: (none)

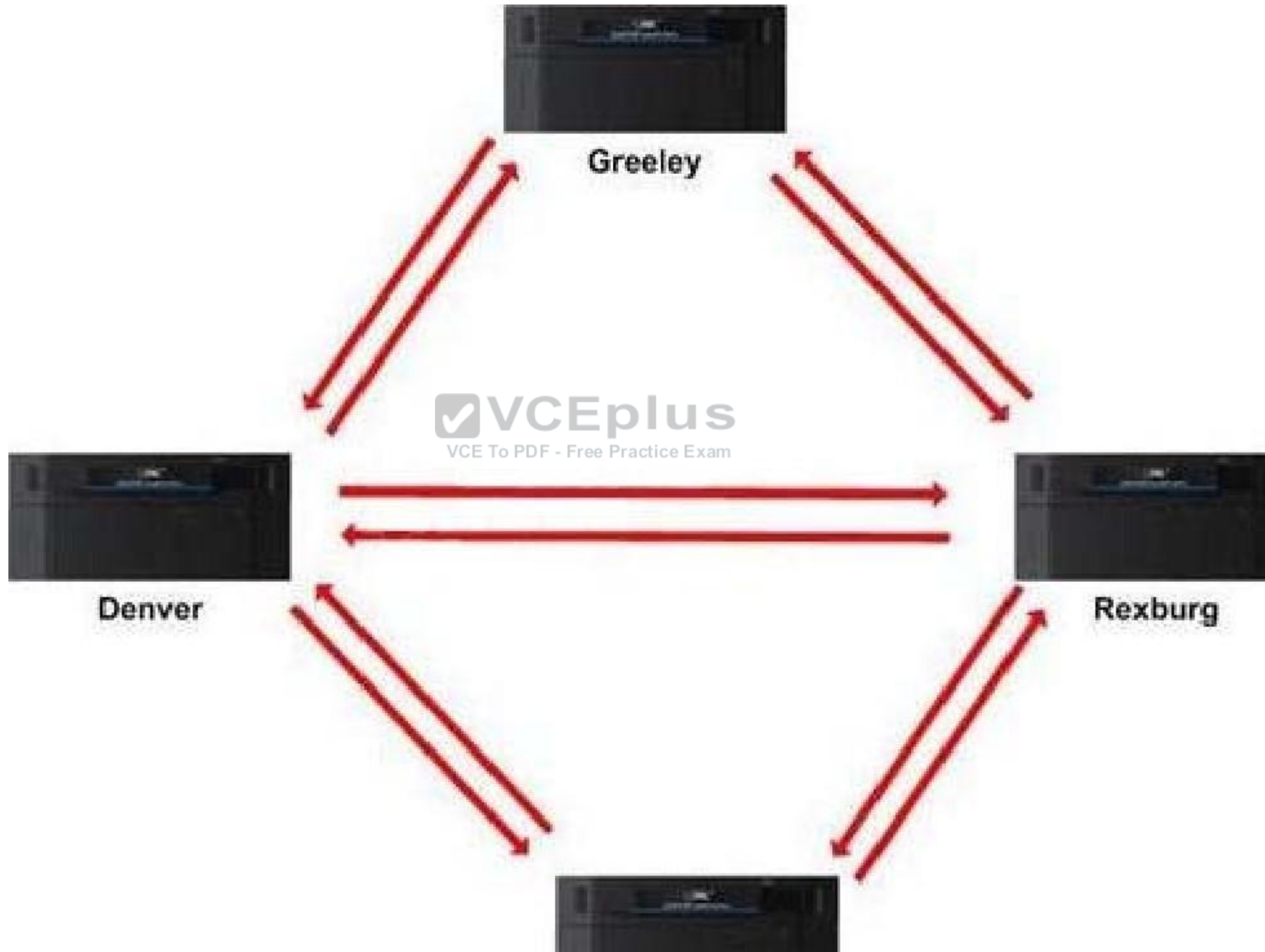
Explanation

Explanation/Reference:

QUESTION 203

Refer to the Exhibit.





A large mining company wants to implement collection replication using EMC Data Domain systems in multiple cities. They want to replicate data at the Rexburg site to and from the Denver site. In addition, the company wants to replicate data at the Rexburg site to and from the Greeley site. How should the customer's design requirements be addressed?

- A. Bi-directional replication can be used at two or more sites concurrently
- B. Replication between Denver and Rexburg should be in one direction only
- C. Replication between Denver and Rexburg is not supported
- D. Bi-directional replication should be established between Greeley and Pueblo

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 204

Refer to Scenario

EMC NetWorker, using a VADP proxy, is backing up 12 virtual machines concurrently. What is the total recommended additional RAM needed on the proxy?

- A. 6 GB
- B. 8 GB
- C. 10 GB
- D. 12 GB

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 205

Refer to Scenario

When using EMC NetWorker and DD Boost, what are the recommended maximum concurrent backups for the VADP proxy server?

- A. 40
- B. 50

- C. 100
- D. 160

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

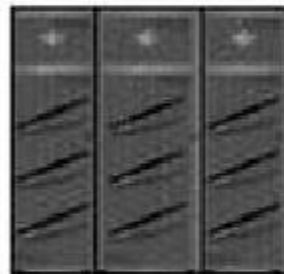
QUESTION 206

Refer to Scenario.

Production Site Configuration



ESX Production Clusters
30% Windows, 70% Linux



VMAX Storage
Primary
Mixed FAST-VP



HPUX Database Clusters



SRDF
2 RE 1 GB links



WAN
(shared capacity LAN/SAN)



SRDF
2 RE 1 GB links



EMC Networker
Server



Tape Library
LTO media



VMAX Storage
DR Target
SATA/EFD FAST-VP



ESX Disaster Recovery Cluster



HPUX Recovery Cluster

Standard Site Configuration

The company wants to replace their SRDF/A technology with an EMC solution that can satisfy all of the requirements stated by the CTO. Which technology should be used to replace replication SRDF?

- A. Data Domain
- B. Avamar
- C. NetWorker
- D. RecoverPoint

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 207

You have been asked to perform an assessment of a customer's environment. The customer has given you complete access to their IT staff and environment. Which stage of the assessment do you first need to question key IT personnel?

- A. Interview Phase
- B. Environmental Analysis
- C. Cross Check Phase
- D. Solution Design



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 208

You have been asked to perform an assessment of a customer's environment. The customer has given you complete access to their IT staff and environment. Which stage of the assessment are tools deployed to capture information about their systems?

- A. Environmental Analysis
- B. Interview Phase
- C. Cross Check Phase
- D. Solution Design

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 209

A long time customer recently performed a data center technology refresh which includes EMC NetWorker and Data Domain. They would like you to perform a BRS Assessment.

What will the BRS Assessment provide to the customer?

- A. Capacity, configuration, and health analysis
- B. In-depth file analysis
- C. Deduplication ratio of a scanned saveset
- D. onfiguration information of site collections, sites, and lists

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 210

A customer wants to perform an EMC NetWorker Assessment on one data zone. What does the customer need to install for the quick scripts to execute on a Microsoft Windows platform?

- A. No additional software is required
- B. JAVA Runtime Environment
- C. Perl Scripts
- D. MySQL database

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 211

You are performing a Data Deduplication Assessment for a customer. Which tool is used to test and tune network connections?

- A. iperf
- B. DDA:A
- C. DDA:B
- D. DPA

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 212

A customer wants to determine how much data can be transmitted in their network.

The network environment includes the following:

LAN speed = 4 Gb

Bandwidth = 50 Mbps

RTT = 50 ms

What is the customer's bandwidth delay product (BDP)?

- A. 2000 bytes
- B. 76 Kb
- C. 305 Kb
- D. 5 MB

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 213

An customer recently implemented an EMC Data Domain system as the backup target for NetWorker

using DD Boost. When reviewing the Data Domain Storage Unit Details report, you notice that the data drive for a particular client was not deduplicating well but the OS drive was. What is the most likely cause for the deduplication issue?

- A. Scientific data
- B. Small files
- C. Compression was not enabled on the client
- D. Low Bandwidth Optimization was not enabled

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 214

A customer is currently using EMC Data Protection Advisor (DPA) 5.8 SP1. They want to upgrade to DPA 6.0 and retain their data and configuration information. What does the customer need to understand about the upgrade?

- A. Analysis rules and datamine maintenance plans cannot be migrated
- B. DPA migration tool will perform the upgrade
- C. All data and configuration information will be migrated using the DPA migration tool
- D. DPA 5.8 services will be stopped during the migration

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 215

A customer is planning to upgrade to EMC Data Protection Advisor (DPA) 6.0. Their environment currently has DPA 5.6 collectors installed on several critical servers. The customer does not want these servers to be modified in any way for the next 12 months. What should the customer be told about the upgrade?

- A. DPA 6.0 supports DPA 6.0 agents, DPA 5.5, and newer collectors
- B. DPA 6.0 supports only DPA 6.0 agents
- C. DPA migration tool is used to collect data from older collectors
- D. A proxy on the DPA application server receives data from older collectors

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 216**

A customer is currently using EMC Data Protection Advisor (DPA) 5.8 and would like to begin using DPA 6.0. What is the next activity that must occur?

- A. Perform a migration rather than an upgrade
- B. Use the DPA 6.0 Installer to upgrade in-place
- C. Uninstall DPA 5.8 and then install DPA 6.0
- D. Use the DPA migration tool to perform the upgrade

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 217**

A customer wants to use EMC Data Protection Advisor (DPA) to report on their NetWorker backup environment. The customer requires that no additional software be installed on the NetWorker server. What is minimum NetWorker software requirement when collecting NetWorker data using a DPA proxy?

- A. NetWorker client is required on the proxy agent
- B. NetWorker storage node is required on the DPA application server
- C. NetWorker server is required on the proxy agent
- D. NetWorker storage node is required on the proxy agent

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 218**

A new EMC Data Domain customer has a requirement to store the maximum amount of backup data on their Data Domain system. They are deciding on the type of local compression to use for their backups.

When planning the Data Domain design, what should the customer know about the compression types?

- A. gz compression uses the least amount of space and the most CPU cycles
- B. gzfast compression uses less space and twice as much CPU cycles as gz
- C. gz compression uses 30% to 40% less storage space on average than lz
- D. lz compression uses the least amount of space and the most CPU cycles

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 219

In an EMC Data Domain environment, what is a supported Extended Retention replication configuration?

- A. Collection replication from the active tier to the Retention Unit
- B. MTree replication directly to the Retention Unit on the target
- C. Collection replication from the GDA to the Retention Unit
- D. Directory replication from the GDA to the Retention Unit

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 220

While designing an EMC Data Domain solution, you need to determine the required amount of storage capacity.

The following information was gathered from the customer:

- 2 TB full backup @ 5x compression
- 10% daily data change rate
- 4 incremental/week @ 10x compression
- 1x full per week @ 25x compression
- Retention period = 4 weeks with no data growth

What is the minimum amount of storage needed to support this solution?

- A. 850 GB
- B. 900 GB

- C. 1040 GB
- D. 1200 GB

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 221

You are sizing an EMC Data Domain system for a new customer. The customer has provided their capacity and performance requirements for the system.

When selecting a Data Domain model to meet their requirements, according to best practices, which buffer size should be used?

- A. 5% - 10%
- B. 10% - 15%
- C. 15% - 25%
- D. 20% - 30%

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 222

A customer has two data centers and each data center has an identical EMC Data Domain system. The customer needs a replication strategy that meets the following objectives:

- User name and passwords are unique
- /data/col1/backup are identical
- Data Domain destination directory is read only
- Ownership and permissions remain identical

Which type of Data Domain replication should be configured?

- A. Directory
- B. Collection
- C. MTree
- D. Pool

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 223

A customer would like assistance with the design of an EMC Data Domain environment. Based on best practices, what should the customer know about Data Domain MTrees?

- A. Supports a maximum of 14 simultaneously active MTrees Pre-configured for NFS export /backup Supports compression
- B. Supports a maximum of 100 simultaneously active MTrees Pre-configured for NFS export /backup Implements data integrity
- C. Supports a maximum of 14 MTrees Pre-configured for CIFS export \backup Implements data integrity
- D. Supports a maximum of 100 MTrees Pre-configured for CIFS export \backup Supports compression

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 224

An existing EMC NetWorker customer is planning to integrate EMC Data Domain systems into their backup infrastructure.

They would like to:

- Backup their Microsoft Windows client data using CIFS to a Data Domain system
 - Take weekly Data Domain system snapshots of Windows client backup data
 - Backup their Linux client data using NFS to a Data Domain system
 - Take daily Data Domain system snapshots of Linux client backup data
- Based on EMC best practice, what should be considered when designing the Data Domain file system layout?

- A. Create a separate MTree for CIFS and NFS client data
- B. Create an MTree named "data" and create separate sub-directories for CIFS and NFS client data
- C. Under /backup MTree, create separate sub-directories for CIFS and NFS client data
- D. Create separate storage units for CIFS and NFS client data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 225**

A customer has an environment that consists of 50 clients, EMC NetWorker, and a Data Domain system. The customer wants the ability to obtain individual client deduplication ratios. What must be done to ensure there is no performance loss on the Data Domain system?

- A. Ensure a maximum of 14 MTrees are actively engaged
- B. Ensure 50 or more MTrees are created and actively engaged
- C. Ensure a maximum of 14 NetWorker devices are actively engaged
- D. Ensure less than 100 NetWorker devices are created

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 226**

While designing an EMC Data Domain solution for a customer, you want to determine the amount of storage capacity needed.

You have discovered the following information:

- 2 TB full backup @ 5x compression
- 10% daily data change rate
- 4 incremental/week @ 10x compression
- 1x full per week @ 25x compression
- Retention period = 4 weeks with no data growth

What is the burn rate (in GB)?

- A. 150
- B. 160
- C. 175
- D. 200

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 227

A customer wants an EMC Avamar solution that provides 8 TB of deduplicated data protection. In addition, they need to protect a VNX system and export data to tape. They anticipate data growth of another 6 TB in the next year.

Which Avamar components should be used to architect the solution, in as few nodes as possible, while meeting sizing best practices?

- A. Avamar multi-node server, and an NDMP Accelerator and Media Access nodes
- B. NetWorker deduplication server and tape export, and an NDMP Accelerator node
- C. vamar integrated with Data Domain and a Data Domain VTL license
- D. Avamar Business Edition server, and an NDMP Accelerator and Media Access nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 228

A customer has 6,000 desktops and laptops with 1 TB of data, an average backup time of 10 minutes each, and 10 TB of database data.

The customer wants a solution that addresses the following requirements:

- Deduplication in the shortest backup window with the fewest components
- Least performance impact on the database servers

Which Avamar solution is recommended?

- A. Two Avamar 2.0 TB 5-node servers integrated with a Data Domain system
- B. NetWorker with multiple deduplication nodes
- C. One Avamar 7.8 TB 3-node server integrated with a Data Domain system
- D. NetWorker with integrated deduplication nodes and a Data Domain system

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 229

An existing EMC Avamar customer wants to add a new database client to their Avamar system. This is a moderately full Avamar single-node server running in steady state.

What is the estimated time to backup this database of 500 GB?

- A. Less than 1 hour
- B. 1 - 2 hours
- C. 4 - 6 hours
- D. 8 - 10 hours

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 230

You are assigned to upgrade an existing EMC NetWorker server. You ask the customer to run the `nsrlc v servername` command and send you the output.

What information is received?

- A. Available licenses by type and client
- B. Available licenses by type and expiration date
- C. Number of licenses by client only
- D. Number of unassigned licenses



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 231

An EMC NetWorker customer is considering implementing deduplication into their existing environment.

Which design consideration has the most positive impact on the deduplication ratio?

- A. Longer retention period
- B. Data change rate between 25% - 30%
- C. Scientific and big data
- D. Monthly full and daily incremental backups

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 232

You are designing a backup solution for an EMC NetWorker customer. Given a conservative estimate, how many CPU cycles are needed by the storage node when backing up clients over the network to local tape drives at a rate of 100 MB/s?

- A. 250 MHz
- B. 500 MHz
- C. 1000 MHz
- D. 2000 MHz

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 233

An EMC NetWorker customer's environment consists of four VMware ESXi hosts with 20 virtual machines on each ESXi host. One of the ESXi hosts will be used for backing up NMM clients and one of the ESXi hosts will be used for backing up NMDA clients. How many Virtual Edition Client Connection licenses are required?

- A. 2
- B. 4
- C. 20
- D. 80

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 234

An EMC NetWorker customer wants to use Data Domain Boost to take advantage of less LAN traffic traversing the network. However, after performing a backup, the LAN administrator noticed that the same amount of data is being transmitted from the storage node to the Data Domain as it is from the client to the storage node.

What needs to be enabled to take advantage of DD Boost on the storage node?

- A. Distributed Segment Processing on the Data Domain
- B. Distributed Segment Processing on the storage node
- C. DD Boost on the storage node
- D. DD Boost license on the NetWorker server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 235

In a customer's backup environment, EMC Avamar is integrated as a deduplication node with NetWorker. The customer wants to run multiple simultaneous backups from the same client. What is the recommended maximum number of simultaneous streams?

- A. 1
- B. 2
- C. 4
- D. 6

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 236

You have been asked to redesign an EMC NetWorker environment using Data Domain with DD Boost. When considering the memory requirements for the Data Domain devices, the DD Boost client has 4 GB of RAM using one stream.

What is the minimum memory requirement for each single stream?

- A. 6 MB
- B. 12 MB

- C. 18 MB
- D. 24 MB

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 237

When performing an NDMP backup with EMC NetWorker, how is file history processed by the NetWorker server?

- A. B-Tree is processed at the end of the backup. Indexes are generated and committed at the end of the backup.
- B. B-Tree is processed during the backup. Indexes are generated and committed during the backup.
- C. B-Tree is processed at the end of the backup. Indexes are generated during the backup.
- D. B-Tree is processed during the backup. Indexes are generated and committed at the end of the backup.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 238

An EMC NetWorker backup environment has 300 clients distributed among three subnets. All clients send their backup to the NetWorker server. The customer is experiencing poor performance during backups.

Which modification to the existing environment will improve the backup performance at minimal cost?

- A. Convert an existing client with the most data to back up to a storage node in each subnet
- B. Install a new host to act as a storage node in each subnet
- C. Convert an existing client with the least data to back up to a storage node in each subnet
- D. Convert all large clients into dedicated storage nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 239

A potential customer is looking for a backup solution that meets the following requirements:

- Backup their NAS data using a backup server directly to tape
- Backup their Oracle database using RMAN to a deduplication system
- Backup data on disk should be protected from accidental deletes or overwrite
- Centralized monitoring tool for management and reporting Which EMC products should be recommended to meet these requirements?

- A. NetWorker for backing up NAS data to physical tapes. Data Domain to backup Oracle RMAN and prevention from accidental deletes. Data Protection Advisor for centralized monitoring.
- B. Avamar to backup Oracle RMAN and prevention from accidental deletes. NetWorker for backing up NAS data to physical tapes. DPA for centralized monitoring.
- C. Avamar to backup Oracle RMAN and prevention from accidental deletes. Data Domain for backing up NAS data to physical tapes. Data Domain Management Center for centralized monitoring.
- D. NetWorker for backing up NAS data to physical tapes. Avamar to backup Oracle RMAN and prevention from accidental deletes. Data Domain Management Center for centralized monitoring.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 240**

A customer with 20,000 desktop/laptop (DT/LT) clients has expanded their custom set of includes/excludes for their Avamar DT/LT solution to cover all non-business files in their environment. Upon implementation of these datasets, they find that backups are not completing in the expected time frame. They need advice on managing their backups to fit the backup window. Based on best practices, what should be recommended?

- A. Minimize the number of includes/excludes and utilize the #USERDOCS# flag
- B. Increase the hash cache on all clients for faster processing of includes/excludes
- C. Move clients with the most includes/excludes into their own dataset and run this group first
- D. Move the includes/excludes to an Avamar flag file on each client for faster processing

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 241

A customer has 20,000 desktop/laptop (DT/LT) clients and six new Avamar 1x16 servers. They are having difficulty with initial backups and backups not completing during the backup window. Based on best practices, which recommendation can be provided to address these issues?

- A. Bring new clients online in batches of 160 per Avamar server and take advantage of partial backups.
- B. Implement overtime on all new clients and migrate clients with incomplete backups to dedicated servers.
- C. Bring new clients online in batches of 1600 per Avamar server and implement overtime on clients that fail to backup the first time.
- D. Automate the entire operation with the Avamar Installation Manager features.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 242

A customer is planning to consolidate their backup environment using EMC NetWorker and Data Domain with replication. The customer's WAN is managed by a third-party and firewall exceptions must be requested in advance. Which protocol and port number does Data Domain use for replication?

- A. Data Domain proprietary protocol, port 2051
- B. Secure File Transfer protocol, port 22
- C. Secure File Transfer protocol, port 2051
- D. Secure Shell protocol, port 22

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 243

After a backup assessment, you determined that customer data deduplicates well. After deduplication, the data consists of 100 laptops and desktops with .5 TB, a file server with 5 million files in 1 TB, and several database servers with 5 TB. The customer requires deduplication with the shortest possible backup window.

Which solution should be architected with as few components as possible?

- A. Avamar 7.8 TB single-node integrated with a Data Domain system
- B. NetWorker with a deduplication node
- C. NetWorker with a deduplication node and a Data Domain system
- D. Avamar 7.8 TB single-node server only

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 244

A customer has a large central office and 50 remote offices connected over minimal WAN connections. Most of the remote offices have large file servers of 2 million files each and several have large databases of 2 TB or more each.

They have asked for a single deduplication solution with the following requirements:

- Minimum amount of components
- Least impact on clients and servers
- Supports all data replicated back to the central office
- Provides a backup window of 8 hours or less

Which recommended solution meets the customer's requirements?

- A. Avamar servers in the central office. AVE at file server remote offices. AVE integrated with Data Domain systems at database remote offices.
- B. NetWorker integrated with Avamar at the central office. NetWorker at file server and database remote offices.
- C. NetWorker at the central office and the remote offices. Data Domain at database remote offices.
- D. Large Avamar servers in the central office. NetWorker integrated with Avamar at file server and database remote offices.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 245

A customer would like to add their many desktop/laptop clients to their EMC NetWorker backup environment.

Their requirements for the desktop/laptop clients are:

- Clients must be able to restore their own data
- Deduplicated backup storage used for backups

Based on EMC best practice, which solution is recommended?

- A. Deduplication node
- B. DD Boost
- C. CIFS share on Data Domain
- D. NFS mount on Data Domain

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 246

An EMC NetWorker customer is considering using a Data Domain system for backup storage. They are planning to configure separate AFTD devices for each source of backup data. They want to manage Data Domain quotas separately for each device. When designing the Data Domain configuration, which file structure is recommended?

- A. Separate MTree under /data/col1 for each AFTD
- B. One MTree under /data/col1 with an individual sub-directory for each AFTD
- C. DD Boost device for each AFTD
- D. Separate MTree under /data/col1/backup for each AFTD

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 247

A university is using EMC NetWorker for backup of their local environment. They have planned to expand this backup environment to include various campuses located across different regions. In addition, they want to use the existing LAN infrastructure for backup and the backup jobs must be completed within the defined backup window. Backups will be stored at the university's central location. Which solution meets the requirements while keeping the expansion cost at a minimum?

- A. Use Avamar and integrate with NetWorker
- B. Use Data Domain VTL and integrate with NetWorker
- C. Install a storage node at each campus

D. Use the NetWorker Multi-Tenancy feature

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 248

A web-based service customer is using EMC NetWorker to backup their environment. The environment consists of various departments located across different buildings in the same campus with a dedicated backup infrastructure. All backups are sent to a central location. They are experiencing issues in which the 2 TB database backup jobs are not completing within the backup window. They want a replication solution that will have minimal impact on the NetWorker server and lower TCO. What should be recommended to resolve the issue and implement an efficient replication plan?

- A. Integrate Data Domain into NetWorker
- B. Deploy Avamar and integrate into NetWorker
- C. Convert all large clients to storage nodes
- D. Use the NetWorker Multi-Tenancy feature

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 249

A customer has an EMC Avamar integrated Data Domain backup environment with replication. Avamar uses the Data Domain devices as a backup target. The Data Domain then replicates the backup data to another Data Domain device located offsite. How should the customer restore data located on the offsite Data Domain device?

- A. Data can be restored the same way as restoring from a replicated Avamar server
- B. Data would be restored to the local Data Domain device first
- C. Data would be restored by accessing the offsite device directly
- D. Data can be restored directly from the replicated Avamar server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 250**

An EMC Avamar customer is running a backup that is being directed to a Data Domain system. Although the backup completed successfully, the customer decides to delete the backup. When does data, from expired backups, move from /cur to /DELETED?

- A. Next time the Avamar system runs garbage collection
- B. Immediately after expiration on the Avamar system
- C. Manually deleted on the Data Domain system by the administrator
- D. Next time the Data Domain file system cleaning operation runs

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 251**

A customer who is using a third-party product wants to move to an enterprise product with the following requirements:

- Less than 100 clients but three clients have a dense file system with over 4 million files.
 - Requirements dictate backups go to tape for storage at the disaster recovery site weekly. -Reduce the backup time of dense clients.
- Which EMC products will address the requirements and proposed design?

- A. NetWorker with two DSNs and Data Domain as DD Boost devices
- B. NetWorker with two DD Boost devices and Data Domain
- C. Data Domain, Replication Manager, and Avamar Extended Retention
- D. Avamar, AVE at the remote offices, and Avamar Extended Retention

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 252**

A customer wants to backup 45,000 desktops/laptops across 38 remote sites worldwide. They want a solution using deduplication at the source client. The customer currently has three large data centers that will be performing backups of 8500 servers per data center. Additionally, all backups must be replicated to a single disaster recovery (DR) site. Their current environment uses tape for backup. The Chief Information Officer (CIO) requires that the

tape be used at the disaster recovery site so that they stay compliant with their 10-year regulations. The customer must also use encryption at rest. Which solution meets these requirements?

- A. Avamar, AVE at the remote offices, and Avamar Extended Retention at the DR site
- B. Data Domain, Replication Manager, and Avamar Extended Retention at the DR site
- C. NetWorker, Recovery Manager, AVE, and Avamar Extended Retention at the DR site
- D. AVE, SnapImage, Data Domain, and Networker at the DR site

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 253

You are designing an EMC Avamar integrated Data Domain solution. The solution will include multiple Data Domain devices with replication. Which requirement for an Avamar integrated Data Domain solution must be enabled?

- A. SNMP
- B. Encryption
- C. ESRS
- D. Email Home



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 254

You are designing an EMC Avamar integrated Data Domain solution. The solution will include multiple Data Domain devices with replication. If Avamar uses 6 TB of capacity and Data Domain uses 12 TB, which capacity licenses must be purchased?

- A. 6 TB Avamar capacity license and 12 TB Data Domain capacity license
- B. 6 TB Avamar capacity license and 18 TB Data Domain capacity license
- C. 12 TB Data Domain capacity license and 12 TB Avamar capacity license
- D. 18 TB Avamar capacity license and 12 TB Data Domain capacity license

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 255

You are designing an EMC Avamar solution for a customer with many applications and server types. What is directly supported by Avamar?

- A. Microsoft software shadow copy
- B. Microsoft Windows small business server
- C. Microsoft Exchange and SharePoint on the same machine
- D. Hardware copy providers

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 256

A customer's backup environment consists of an EMC Avamar 6.1 integrated Data Domain solution. A large portion of the backup data comes from Microsoft Exchange servers. The Avamar backups use the Data Domain device as a backup target. Where are the Microsoft Exchange logs file sent?

- A. Avamar server
- B. Data Domain
- C. Avamar and Data Domain at the same time
- D. Avamar and then moved to Data Domain

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 257

Scenario 2:

A customer is currently using third-party backup software for Oracle backups and writing backups to third-party physical tape libraries and a VTL. Backups sent to the VTL are then vaulted to tape and transported daily from the primary data center to the third-party facility. They are experiencing high backup job failures with backup success rates of approximately 65%. In addition, their time to disaster recovery readiness for backups is greater than 24 hours. The retention period for database backups from disk-based backup is 4 weeks. The customer is looking for a solution that will meet the following requirements:

- Oracle DBA to manage backups through Oracle RMAN
- Backup their file system data using EMC backup software
- Perform monthly full backups directly to physical tapes for offsite storage

- Reduce the backup window to the possible maximum
- Increase the time to disaster recovery readiness.
- Increase the retention period for database backups from disk-based backup to 6 weeks
- No additional WAN bandwidth requirements
- Low TCO solution
- Free up the Fiber Channel switch infrastructure
- Increase operational efficiency

Refer to Scenario.

Which EMC solution will meet the customer's requirements?

- A. Data Domain and NetWorker
- B. Avamar and Data Domain
- C. Avamar
- D. Data Domain



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 258**Scenario**

A customer is currently using third-party backup software for Oracle backups and writing backups to third-party physical tape libraries and a VTL. Backups sent to the VTL are then vaulted to tape and transported daily from the primary data center to the third-party facility. They are experiencing high backup job failures with backup success rates of approximately 65%. In addition, their time to disaster recovery readiness for backups is greater than 24 hours. The retention period for database backups from disk-based backup is 4 weeks. The customer is looking for a solution that will meet the following requirements:

- Oracle DBA to manage backups through Oracle RMAN
- Backup their file system data using EMC backup software
- Perform monthly full backups directly to physical tapes for offsite storage

- Reduce the backup window to the possible maximum
- Increase the time to disaster recovery readiness.
- Increase the retention period for database backups from disk-based backup to 6 weeks
- No additional WAN bandwidth requirements
- Low TCO solution
- Free up the Fiber Channel switch infrastructure
- Increase operational efficiency

Refer to Scenario.

The customer is considering using an EMC Data Domain system. They would like to know which Data Domain protocol will meet their requirements. What should be recommended?

- A. DD Boost
- B. NDMP
- C. AFTD
- D. VTL

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 259

Scenario

A customer is currently using third-party backup software for Oracle backups and writing backups to third-party physical tape libraries and a VTL. Backups sent to the VTL are then vaulted to tape and transported daily from the primary data center to the third-party facility. They are experiencing high backup job failures with backup success rates of approximately 65%. In addition, their time to disaster recovery readiness for backups is greater than 24 hours. The retention period for database backups from disk-based backup is 4 weeks. The customer is looking for a solution that will meet the following requirements:

- Oracle DBA to manage backups through Oracle RMAN
- Backup their file system data using EMC backup software
- Perform monthly full backups directly to physical tapes for offsite storage
- Reduce the backup window to the possible maximum
- Increase the time to disaster recovery readiness.
- Increase the retention period for database backups from disk-based backup to 6 weeks
- No additional WAN bandwidth requirements
- Low TCO solution
- Free up the Fiber Channel switch infrastructure
- Increase operational efficiency

Refer to Scenario.

The customer is considering using an EMC Data Domain system. They would like to have a copy of the Oracle RMAN backups at their primary and disaster recovery sites. Which Data Domain licenses are required for this solution while meeting the customer's requirements?

- A. DD Boost and Replication
- B. VTL and Replication
- C. Gateway and Replication
- D. Global Deduplication and Replication

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 260

Scenario

A customer is looking to perform a data center refresh. They want to standardize their backup infrastructure by using EMC NetWorker, Avamar, and Data Domain in an integrated environment. The environment consists of:

- A primary data center - NetWorker server, Data Domain, and Avamar
- A disaster recovery (DR) data center - Data Domain only
- 220 remote sites
- Each remote site consists of approximately 30 clients and 1 storage node
- LAN speed at and between all sites is 1 GB

The company's Chief Technology Officer (CTO) has indicated that data must be backed up locally. Then, the data must be copied offsite to the primary data center and DR data center. The entire solution must be managed from a single unified interface in order to configure and track backup jobs. The company is subject to government regulations concerning data retention policies for confidential data. Data has to be retained for seven years on tape at the DR data center. The LAN administrator has indicated that the least amount of traffic should traverse the network. Based upon this requirement, what is the recommended solution?

- A. Client Direct to Data Domain
- B. Client Direct to Avamar
- C. Traditional backup
- D. VADP backup using NBD transport mode

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 261

Scenario

A customer is looking to perform a data center refresh. They want to standardize their backup infrastructure by using EMC NetWorker, Avamar, and Data Domain in an integrated environment.

The environment consists of:

- A primary data center - NetWorker server, Data Domain, and Avamar
- A disaster recovery (DR) data center - Data Domain only
- 220 remote sites
- Each remote site consists of approximately 30 clients and 1 storage node
- LAN speed at and between all sites is 1 GB

The company's Chief Technology Officer (CTO) has indicated that data must be backed up locally. Then, the data must be copied offsite to the primary data center and DR data center. The entire solution must be managed from a single unified interface in order to configure and track backup jobs. The company is subject to government regulations concerning data retention policies for confidential data. Data has to be retained for seven years on tape at the DR data center. Assume each remote site has 30 clients, three devices per remote storage node, and NetWorker Power Edition are used.

At a minimum, how many datazones will be needed?

- A. 1
- B. 2
- C. 3
- D. 4

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 262**

Scenario

A customer is looking to perform a data center refresh. They want to standardize their backup infrastructure by using EMC NetWorker, Avamar, and Data Domain in an integrated environment.

The environment consists of:

- A primary data center - NetWorker server, Data Domain, and Avamar
- A disaster recovery (DR) data center - Data Domain only
- 220 remote sites
- Each remote site consists of approximately 30 clients and 1 storage node
- LAN speed at and between all sites is 1 GB

The company's Chief Technology Officer (CTO) has indicated that data must be backed up locally. Then, the data must be copied offsite to the primary data center and DR data center. The entire solution must be managed from a single unified interface in order to configure and track backup jobs. The company is subject to government regulations concerning data retention policies for confidential data. Data has to be retained for seven years on tape at the DR data center. In order for the backup administrator to copy the savesets from the remote Data Domain to the primary data center Data Domain,

which replication method should be used?

- A. Clone Controlled
- B. Directory
- C. Root-to-Root
- D. WAAS

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 263

Scenario

A customer is looking to perform a data center refresh. They want to standardize their backup infrastructure by using EMC NetWorker, Avamar, and Data Domain in an integrated environment.

The environment consists of:

- A primary data center - NetWorker server, Data Domain, and Avamar
- A disaster recovery (DR) data center - Data Domain only
- 220 remote sites
- Each remote site consists of approximately 30 clients and 1 storage node
- LAN speed at and between all sites is 1 GB

The company's Chief Technology Officer (CTO) has indicated that data must be backed up locally. Then, the data must be copied offsite to the primary data center and DR data center. The entire solution must be managed from a single unified interface in order to configure and track backup jobs. The company is subject to government regulations concerning data retention policies for confidential data. Data has to be retained for seven years on tape at the DR data center. Which application interface is used as the unified interface to configure and track backup jobs?

- A. NetWorker Management Console
- B. Data Domain Enterprise Manager
- C. Avamar Enterprise Manager
- D. Data Protection Advisor

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 264

Scenario

A customer is looking to perform a data center refresh. They want to standardize their backup infrastructure by using EMC NetWorker, Avamar, and Data Domain in an integrated environment.

The environment consists of:

- A primary data center - NetWorker server, Data Domain, and Avamar
- A disaster recovery (DR) data center - Data Domain only
- 220 remote sites
- Each remote site consists of approximately 30 clients and 1 storage node
- LAN speed at and between all sites is 1 GB

The company's Chief Technology Officer (CTO) has indicated that data must be backed up locally. Then, the data must be copied offsite to the primary data center and DR data center. The entire solution must be managed from a single unified interface in order to configure and track backup jobs. The company is subject to government regulations concerning data retention policies for confidential data. Data has to be retained for seven years on tape at the DR data center. In order to copy SSIDs saved to the Avamar server to the Data Domain located in the disaster recovery data center, which method should be used?

- A. Traditional cloning
- B. Clone Controlled replication
- C. Root-to-Root replication
- D. Container replication

Correct Answer: A

Section: (none)

Explanation



Explanation/Reference:

QUESTION 265

Scenario

A customer is looking to perform a data center refresh. They want to standardize their backup infrastructure by using EMC NetWorker, Avamar, and Data Domain in an integrated environment.

The environment consists of:

- A primary data center - NetWorker server, Data Domain, and Avamar
- A disaster recovery (DR) data center - Data Domain only
- 220 remote sites
- Each remote site consists of approximately 30 clients and 1 storage node
- LAN speed at and between all sites is 1 GB

The company's Chief Technology Officer (CTO) has indicated that data must be backed up locally. Then, the data must be copied offsite to the primary data center and DR data center. The entire solution must be managed from a single unified interface in order to configure and track backup jobs. The company is subject to government regulations concerning data retention policies for confidential data. Data has to be retained for seven years on tape at the DR data center. Each remote storage nodes' device will have a target session of 12 and a max target session of 60. By default, what is the maximum nsrmmd count per device?

- A. 5
- B. 9
- C. 12
- D. 60

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 266

Scenario

A customer with a fully virtualized environment has four ESX 4.1 servers in a cluster with a SAN solution for storage.

Each ESX server is hosting 40 virtual machines and all virtual machines have the same local disk configurations:

Disk1 = 50 GB

Disk2 = 100 GB

Disk3 = 256 GB

In addition, the environment includes a NAS filer. The average time to fully backup all virtual machines on one ESX server using EMC DD Boost is three hours.

The customer is interested in implementing an EMC NetWorker solution with Data Domain as a backup device. The backup server, storage nodes, and proxies are SAN-attached.

Refer to Scenario.

Using a VADP proxy, EMC NetWorker is backing up 12 virtual machines concurrently in SAN transport mode.

What is the total recommended RAM needed on the proxy?

- A. 6 GB
- B. 8 GB
- C. 10 GB
- D. 12 GB

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 267

Scenario

A customer with a fully virtualized environment has four ESX 4.1 servers in a cluster with a SAN solution for storage. Each ESX server is hosting 40 virtual machines and all virtual machines have the same local disk configurations:

Disk1 = 50 GB

Disk2 = 100 GB

Disk3 = 256 GB

In addition, the environment includes a NAS filer. The average time to fully backup all virtual machines on one ESX server using EMC DD Boost is three hours.

The customer is interested in implementing an EMC NetWorker solution with Data Domain as a backup device. The backup server, storage nodes, and proxies are SAN-attached.

Refer to Scenario.

When configuring VADP backups in EMC NetWorker to protect the ESX environment, what is the minimum number of virtual CPUs recommended for virtual proxy's using the 'hotadd' transport mode?

- A. 2
- B. 3
- C. 4
- D. 6

Correct Answer: C

Section: (none)

Explanation



Explanation/Reference:

QUESTION 268**Scenario**

A customer with a fully virtualized environment has four ESX 4.1 servers in a cluster with a SAN solution for storage. Each ESX server is hosting 40 virtual machines and all virtual machines have the same local disk configurations:

Disk1 = 50 GB

Disk2 = 100 GB

Disk3 = 256 GB

In addition, the environment includes a NAS filer. The average time to fully backup all virtual machines on one ESX server using EMC DD Boost is three hours.

The customer is interested in implementing an EMC NetWorker solution with Data Domain as a backup device. The backup server, storage nodes, and proxies are SAN-attached.

Refer to Scenario.

When using VADP backups with EMC NetWorker, which transport mode is recommended for virtual machines with IDE virtual disks?

- A. NBD
- B. Hotadd

- C. SAN
- D. RDM

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 269

Scenario:

The Chief Technical Officer (CTO) of a large company has directed their IT management staff to examine corporate-wide operations and find ways to limit the cost of operations. The corporate directives have prompted the adoption of company policies that include the use of virtualization for all new servers and as many services as possible. The company is subject to government regulations concerning data retention policies for confidential data. Data must be retained for seven years. An audit of the backup and recovery environment is performed. The exhibit shows a typical site and how it is connected to the disaster recovery environment. Data in the primary site is configured on VMAX storage using FAST-VP to support multiple work load types on a single storage array. Data is protected by SRDF/A to a remote VMAX which acts as a target for multiple sites. The remote copy of the data is snapped and copied to tape. Retention is accomplished to governmental standards by offsite storage of tape in a remote protected facility.

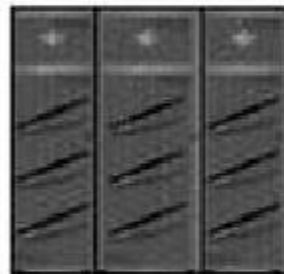
The company has indicated that it has the following requirements in any proposed architecture for the backup and recovery environment:

- Reduced power consumption
- Reduced floor space consumption
- Reduced storage capacity consumption
- Lower WAN bandwidth utilization
- Shorten RPO
- Decrease RTO
- Increase security
- Lower total cost of ownership (TCO)

Production Site Configuration



ESX Production Clusters
30% Windows, 70% Linux



VMAX Storage
Primary
Mixed FAST-VP



HPUX Database Clusters



SRDF
2 RE 1 GB links



WAN
(shared capacity LAN/SAN)



SRDF
2 RE 1 GB links



EMC Networker
Server



Tape Library
LTO media



VMAX Storage
DR Target
SATA/EFD FAST-VP



ESX Disaster Recovery Cluster



HPUX Recovery Cluster

Standard Site Configuration

Refer to Scenario and the exhibit.

To satisfy the stated requirements, the customer wants to use a virtual appliance to limit power and space consumption in their smaller locations.

To replace the current SRDF/A replication model, which EMC technology should be recommended?

- A. Avamar Virtual Edition
- B. Data Domain
- C. NetWorker NDMP
- D. File Management Appliance VE

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 270

An EMC NetWorker customer uses AFTDs connected to a Data Domain CIFS share. They want to configure clone controlled replication within NetWorker from one Data Domain to another. Which Data Domain license is necessary to meet the customer's criteria?

- A. Replication
- B. CIFS
- C. DD Boost
- D. DD Extended Retention

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 271

A customer has an EMC Avamar server with four 3.9 TB data nodes and is backing up two large clients in the same backup group.

The first client has:

- 8 GB of RAM
- File system #1 with 3 million files consuming 0.75 TB of space
- File system #2 with 5 million files consuming 1.00 TB of space

The second client has:

- 10 GB of RAM
- 1 file system containing 4 million files consuming 1.20 TB of space

How long will the steady state backup group be expected to run?

- A. 5 hours
- B. 6 hours
- C. 8 hours
- D. 12 hours

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 272

An EMC Avamar customer has added a new file system client to their moderately full Avamar single-node server. The single-node server is running in steady state and the initial backup is complete. What is the estimated time to backup this file server of 3 million files each night?

- A. Less than 1 hour
- B. 1 - 2 hours
- C. 3 - 4 hours
- D. 5 - 6 hours



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 273

A customer currently has a multi-node EMC Avamar server with eight active storage nodes. They are currently at 85% GSAN capacity and receiving capacity warning messages. The customer would like to purchase four additional nodes for the system. What is a best practice for adding capacity?

- A. Add two nodes at a time.
- B. Add one node at a time.
- C. No more nodes can be added. Add a new Avamar system.
- D. No more nodes can be added. Migrate to a larger Avamar system.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 274

A data center company is using two EMC NetWorker servers (NetWorker_A and NetWorker_B). Each server has three storage nodes to protect 650 server applications and data. The total amount of data being backed up is 100 TB. NetWorker_A server protects 60 TB and NetWorker_B server protects 40 TB. To minimize cost and simplify licensing management for NetWorker, the company decided to switch from a traditional licensing model to a capacity licensing model. How many licenses are needed to support the company's requirements?

- A. 2 Source Capacity Datazone Enablers and 10 Tiered Capacity Entitlement license 10 TB Enablers
- B. 2 Source Capacity Datazone Enablers and 650 Standard Client Connection licenses
- C. 2 Base licenses and 10 Tiered Capacity Entitlement license 10 TB Enablers
- D. 2 Source Capacity Datazone Enablers; one for 60 TB and one for 40 TB

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 275

A customer has data at several remote offices that needs to be backed up over a secure WAN connection to their data center. However, bandwidth is constrained. A major portion of their backup data will be file system data. In addition, they have a 6 TB database in the primary data center with a 6% change rate that needs to be backed up.

Which EMC backup solution is recommended for this customer?

- A. NetWorker with Avamar integration
- B. NetWorker with Data Domain and CIFS
- C. NetWorker with Data Domain and DD Boost
- D. Avamar server with Avamar Virtual Edition

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 276

Scenario

A customer is looking to modernize their backup infrastructure. The current environment consists of a single centralized data center and several remote sites. The centralized data center hosts all core services and applications. The remote office primarily consists of sales personnel with 4000 users in North America, 500 in Europe, and 300 in Asia using file servers. The current backup environment at the primary site uses CommVault backing up to a Fibre Channel tape library that contains four LTO-4 tape drives. Currently they are backing up a number of file servers as well as several databases that have average change rates of 7% daily. Remote office backups are currently performed by having users copy files to regional file servers that are then backed up to tape. In the past few months, the customer has experienced problems with getting backups to finish within their defined windows as well as issues with the tape library hardware. They now have concerns about gaps in

their backup coverage as well as the reliability of the tape media. In addition, an internal audit shows a large amount of user-generated data is unprotected on remote user laptops. The customer is looking for a common platform to standardize their backups. They want a solution which allows for a centralized infrastructure so that they do not need to rely on remote resources to address hardware and software issues. The other goal is to move away from tape to a more reliable disk-based solution.

Refer to Scenario.

The customer has concerns about Avamar's ability to handle the backups of their databases.

Which recommendation should be made?

- A. Integrate a Data Domain appliance with Avamar
- B. Add additional storage nodes to the Avamar system
- C. Implement image backups using change block tracking
- D. Increase file cache sizes on database clients

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 277

Scenario

A customer with a fully virtualized environment has four ESX 4.1 servers in a cluster with a SAN solution for storage. Each ESX server is hosting 40 virtual machines and all virtual machines have the same local disk configurations:

- Disk1 = 50 GB
- Disk2 = 100 GB
- Disk3 = 256 GB

In addition, the environment includes a NAS filer. The average time to fully backup all virtual machines on one ESX server using EMC DD Boost is three hours.

The customer is interested in implementing an EMC NetWorker solution with Data Domain as a backup device. The backup server, storage nodes, and proxies are SAN-attached.

Refer to Scenario.

When using EMC NetWorker and DD Boost, what is the maximum number of concurrent backups per VADP proxy server?

- A. 40
- B. 50
- C. 100
- D. 160

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 278

A customer recently implemented an EMC Data Domain system as the backup target for NetWorker using DD Boost. When reviewing the Data Domain Storage Unit Details report, you notice that the data drive for a particular client was not deduplicating well but the OS drive was. What is the most likely cause of the deduplication issue?

- A. There was a great deal of scientific data.
- B. There were many small files in the dataset.
- C. Compression was not enabled on the client.
- D. Low Bandwidth Optimization was not enabled.



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 279

Which sizing tool is used to determine the sizing solutions for Avamar and Data Domain?

- A. EBSS
- B. PAT
- C. Workbench
- D. Mitrend

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 280

You are reviewing potential backup opportunities in a customer environment that is currently using Backup Exec. Which assessment tool will help to provide information about their current backup and restore success rates?

- A. Quick Scripts
- B. GAP Analysis
- C. FSA
- D. EBSS

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:



QUESTION 281

You have been asked to perform an assessment of a customer's backup environment. You want to measure the current network bandwidth before determining any changes to the backup design. Which tool should you use?

- A. iperf
- B. netscan
- C. ipstat
- D. netstat

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 282

What is a reason for implementing EMC Data Protection Advisor (DPA) in a DPA clustered architecture?

- A. Restrict customer access to specific DPA application nodes
- B. Use virtual machines for all DPA application servers
- C. Power up a standby DPA application server automatically
- D. Enable replication between DPA application servers

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 283

You are designing an EMC Data Protection Advisor (DPA) installation.
What is the minimum recommended size for a DPA cluster?

- A. 2 active application nodes only
- B. 2 active application nodes and an application standby node
- C. 3 active application nodes only
- D. 3 active application nodes and 2 datastore nodes

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 284

You are designing an EMC Data Protection Advisor (DPA) solution for a large NetWorker customer using both DPA clustering and replication.
What is a consideration when determining the server layout for application and datastore servers in this virtual environment?

- A. Install the master and slave datastores on different physical hosts
- B. Implement the master application and datastore servers on the same virtual host
- C. Connect a DPA datastore to each cluster VLAN in the solution
- D. Configure a spare server to have both standby datastore and application roles

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 285

You are designing an EMC Data Protection Advisor (DPA) solution for a large NetWorker customer using both DPA clustering and replication. What is a consideration when determining the server layout for application and datastore servers?

- A. Implement DPA clustering in a virtualized environment
- B. Use clusters containing both application and datastore servers
- C. Connect a DPA datastore to each cluster VLAN in the solution
- D. Configure DPA replication between master and secondary application servers

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 286

A customer has recently purchased EMC Data Protection Advisor (DPA) for backups to monitor their NetWorker backup environment. They are currently monitoring the NetWorker servers and storage nodes. What else can be monitored without the need for additional DPA licenses?

- A. Physical and virtual tape libraries
- B. VMware server status
- C. Replication technologies
- D. VMware configuration data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 287

An EMC Data Domain customer wants to use the Extended Retention software option with their new Data Domain system. When sizing for the archive tier, what is the maximum number of future years that should be considered?

- A. 1
- B. 3
- C. 5
- D. 7

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 288

An existing EMC Data Domain customer currently has one Data Domain system at their headquarters (HQ) data center. They would like to mirror all data from the HQ Data Domain system to a Data Domain system at their disaster recovery site using collection replication. When proposing a solution, what should the customer be told about collection replication?

- A. Username and passwords are replicated from the source system.
- B. Logs and messages are replicated from the source system.
- C. Performance statistics are replicated from the source system.
- D. Bi-directional collection replication can be set up between the two systems.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 289

A customer has a requirement to size active tier storage beyond the entry capacity of their Data Domain controller. Which license will meet the customer's requirements?

- A. Shelf Capacity
- B. Extended Retention
- C. Gateway Expanded Storage Level 2
- D. Gateway Expanded Storage Level 3

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 290

You are designing an EMC Data Domain solution and need to determine the required amount of storage capacity. The following information was gathered from the customer:

- 2 TB full backup @ 5x compression
- 10% daily data change rate
- 4 incremental/week @ 10x compression
- 1x full per week @ 25x compression
- Retention period = 4 weeks with no data growth

What is the minimum amount of storage needed to support this solution?

- A. 850 GB
- B. 900 GB
- C. 1040 GB
- D. 1200 GB

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 291

Your customer is looking for a new EMC Data Domain backup solution. They require a solution that provides the ability to operate at no more than 75-85% of its rated capacity. In addition, 1.2 TB per hour throughput is required.

What should be considered when selecting a Data Domain system to meet the performance requirements?

- A. Max Throughput and Max Capacity
- B. Max Throughput and Amount of Data
- C. Number of Clients and Amount of Data
- D. Max Capacity and Amount of Data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 292

Which set of features would have a negative impact on the performance of an EMC Data Domain system?

- A. Cleaning, 'gz' compression, 35 active MTrees, and encryption
- B. Network aggregation, replication, cleaning, and encryption
- C. Encryption, replication, cleaning, and local compression disabled
- D. Global deduplication, replication, DD Boost, and 5 active MTrees

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 293

A customer requires support for 60 MTrees on a single Data Domain System. At most, 50% of the MTrees will be active at the same time. Which Data Domain system fulfills the customer's requirements?

- A. DD7200
- B. DD2500
- C. DD870
- D. DD160

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 294

A customer's Data Domain DD2500 system has 32 active MTrees. They notice performance issues when using the configuration. What is the minimum number of MTrees that should be removed from active use to improve performance?

- A. 14
- B. 16

- C. 18
- D. 20

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 295

A customer wants to know why their backup performance to an EMC Avamar multi-node server has decreased. Initially they were seeing an ingest rate of approximately 5 to 7 GB/hr/node. Recently they estimated that the ingest rate has slowed to around 3 to 5 GB/hr/node. What is a probable cause for the decrease in the average ingest rate?

- A. Stripes contain more data, and steady state has been achieved.
- B. HFS check has found errors and has not been completing successfully.
- C. A large number of backups have expired, causing new stripes to be created.
- D. Garbage collection is not running, causing new stripes to be created.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 296

A backup administrator has been performing image level backups of their Hyper-V virtual machines to their Avamar server. They need to recover a single file to one of their Linux virtual machines. What must they do to recover this file?

- A. Restore the file to a Windows machine, then transfer it to the Linux VM
- B. Install the GLR plug-in onto the Linux VM and restore directly to it
- C. Use VADP to restore the file directly to the Linux VM
- D. Use Desktop/Laptop on the Linux VM and restore the file directly to it

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 297**

You are having a conversation with an EMC Avamar customer regarding the final design. They indicate that they have certain data that needs to be carefully secured during transit. This data is typically transferred at different times and in different groups. Which type of encryption would address the customer's concern?

- A. AES-256 encryption set at the time of the backup operation
- B. AES-128 encryption set at the time of server installation
- C. Blowfish encryption enabled at the group policy level
- D. AES-256 encryption automatically enabled for all backups

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 298**

A backup administrator has added a large database server with a low change rate to their Avamar server as a new backup client. The database server is located remotely and the network connection is not consistent. The server backup continuously runs into overtime and fails due to network issues. As a result, the initial backup has not completed. The backup administrator asks you for advice on how to ensure successful backups. What should you tell the backup administrator?

- A. Disable overtime for the client
- B. Continue from partial backups
- C. Perform incremental backups
- D. Copy cache files from a similar database server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 299**

A customer is performing backups of their desktop/laptop clients to an Avamar server. They plan to add a secure Oracle database server as a new

backup client. They are concerned about the security of the database data since no data is being encrypted when it is stored on the Avamar. What is a consideration of enabling encryption at rest?

- A. The amount of storage capacity will be reduced.
- B. Only new clients will have encrypted data.
- C. The desktop/laptop backups will become inaccessible.
- D. Data encryption is not available for Oracle data.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 300

A customer has a multi-node EMC Avamar server with eight active storage nodes. They are currently at 85% GSAN capacity and receiving capacity warning messages. The customer would like to purchase four additional nodes for the system. What is a best practice for adding capacity?

- A. Add two nodes at a time to the existing server
- B. Add one node at a time to the existing server
- C. Migrate capacity to a different server if available
- D. Acquire a new server with sufficient capacity

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 301

An EMC NetWorker customer is using the NetWorker Workgroup Edition. They want to purchase an Autochanger license. What is the maximum number of slots allowed with this edition?

- A. 8
- B. 16
- C. 32
- D. 64

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 302

You are asked to design an EMC NetWorker backup solution for a customer's data center with multiple database applications and a large amount of clients and data. The NetWorker backup server needs to be configured and set up properly for the customer environment. What is a design consideration for the NetWorker backup server?

- A. RAID 10 is recommended for the NetWorker server if the NetWorker server exceeds 100 parallel sessions.
- B. RAID 5 is recommended for the NetWorker server if the NetWorker server exceeds 100 parallel sessions.
- C. Set NetWorker server Parallelism to the total number of Max Sessions on all devices.
- D. Create multiple NetWorker groups with a maximum of 100 clients per group and enforce Group Parallelism.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 303

You are asked to design an EMC NetWorker backup solution for a customer's data center with multiple database applications and a large amount of clients and data. The NetWorker backup server needs to be sized and configured properly for the customer environment. What is a design consideration for the NetWorker backup server?

- A. Assign large clients to a separate NetWorker group and start the group first.
- B. Assign large clients to a separate NetWorker group and start the group last.
- C. Set NetWorker server Parallelism to the total number of Max Sessions on all devices.
- D. Create multiple NetWorker groups with up to 100 clients per group and disable Group Parallelism.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 304

A customer is deploying an Oracle database and wants to perform online backups of the Oracle database with EMC NetWorker. Due to the nature of their database application, no Oracle datafiles are striped across disk storage. What is a design consideration when configuring RMAN backup?

- A. RMAN multiplexing should be increased from the default value.
- B. RMAN multiplexing should be decreased from the default value.
- C. Value of FILESPERSET should be set larger than the value of MAXOPENFILES.
- D. Value of MAXOPENFILES should match the number of target devices.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 305

A customer is deploying a Microsoft SQL database and wants to perform online backups of the SQL database with EMC NetWorker. Their SQL database full backups cannot be completed within the backup window. After checking their backup environment, you find that there are adequate resources to meet their backup window. What could you do with NetWorker or SQL to increase performance without adding cost and complexity?

- A. Use stripes with SQL database backups
- B. Enable SQL filegroup backups
- C. Increase the value of FILESPERSET
- D. Increase the value of MAXOPENFILES

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 306

An EMC NetWorker client is backed up as a guest in a virtual environment. This backup activity indirectly impacts other virtual machines (VMs) on the same ESX server that uses shared resources. What will reduce this impact?

- A. Define backup policies to limit concurrent jobs on the ESX server
- B. Reduce the frequency of incremental backups
- C. Create a group to back up a selection of VMs on the same ESX server
- D. Convert the client to a dedicated storage node

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 307

An EMC NetWorker customer is currently backing up data to four Advanced File Type devices. The customer wants to use an additional device for new streams once there are eight running on a single device. Backups should not queue if another device is unavailable. Which parameter should be set?

- A. Target Sessions
- B. Client Parallelism
- C. Max Sessions
- D. Pool Parallelism



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 308

Which technology is used to send data directly from the backup client to the Data Domain system?

- A. DD Boost
- B. DD Replicator
- C. CIFS
- D. NFS

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 309**

A national health care company has a MEDITECH environment. They need a backup solution that enables them to retain files to meet HIPAA requirements. Also, they do not want to upgrade their existing clients and servers. Right now, they are considering a NetWorker / Data Domain solution. What should you consider when making a proposal?

- A. The Data Domain retention lock feature would not be supported.
- B. DD Boost clients require 8 GB of RAM.
- C. Four concurrent save streams provide optimal performance.
- D. Client Direct devices must always restore from the storage node.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 310**

Which technology is directly supported with Data Domain integration?

- A. VMware image backup
- B. BAAN
- C. PeopleSoft
- D. PostgreSQL database

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 311**

You are designing an Avamar and Data Domain integration. What should the customer know about manually deleting backups from Avamar?

- A. Backup is automatically deleted from the Data Domain.
- B. Backup must be manually deleted from the Data Domain first.

- C. Backup remains on the Data Domain and must be manually deleted.
- D. Backup must be replicated before it can be deleted from the Data Domain.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 312

An EMC Avamar customer is running a backup that is being written to a Data Domain system. The Data Domain cleaning runs at 8 M. on Tuesday mornings. Avamar maintenance runs daily at 6 M. A backup has completed successfully; however, it is no longer needed. The customer manually deletes the backup on Wednesday afternoon.

When is the first opportunity for space to be reclaimed on the Data Domain system?

- A. At the next Data Domain file system cleaning
- B. Immediately on the Data Domain system
- C. At the next scheduled Avamar garbage collection
- D. When manually deleted from the Data Domain system

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 313

A customer wants to back up 45,000 desktops/laptops across 38 remote sites worldwide. They want a solution using deduplication at the source client. The customer currently has three large data centers that will be performing backups of 8500 servers per data center. Additionally, all backups must be replicated to a single disaster recovery (DR) site. Their current environment uses tape for backup. The Chief Information Officer (CIO) requires that the tape be used at the disaster recovery site so that they stay compliant with their 10 year regulations. The customer must also use encryption at rest. Which solution meets these requirements?

- A. Avamar and AVE at the remote offices; Avamar Extended Retention at the DR site
- B. Data Domain, Replication Manager, and Avamar Extended Retention at the DR site
- C. NetWorker, Recovery Manager, AVE, and Avamar Extended Retention at the DR site
- D. AVE, SnapImage, Data Domain, and Networker at the DR site

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 314

You are designing a new backup solution for a customer where there are eight remote sites and one central site. At the present time, all sites have separate backup environments. The customer wants all backups to be consolidated using one backup product. They require that all backups be replicated many-to-one back to the central site with minimal impact on the WAN. They also want their desktop/laptop clients to perform their own backups and restores. Monitoring of all sites is required using Data Protection Advisor. Which EMC solution will meet the requirements?

- A. Avamar
- B. NetWorker
- C. Replication Manager
- D. Data Domain

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 315

A customer with 20,000 desktop/laptop (DT/LT) clients needs your guidance. They would like to determine what data to back up to their EMC Avamar DT/LT solution and what to exclude. They have the ability to recover any DT/LT OS with their in-house tools. Based on best practices, what should be recommended?

- A. Back up only user files/folders with the flag #USERDOCS#, and skip OS and non-business files
- B. Back up the entire OS to take advantage of deduplication and Bare Metal Recovery
- C. Back up user files/folders with the system-state flag and skip all music/video files
- D. Back up the OS on a shorter retention time period and user files/folders on a longer retention time

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 316

You are asked to design an EMC NetWorker backup solution for a large Microsoft Exchange 2010 DAG environment.

Their backup requirements are:

- Leverage Microsoft VSS to create consistent snapshots of Exchange mailbox database
- Keep the last two snapshots on the disk array for instant recovery
- Use NetWorker to schedule and manage the snapshots and roll the last snapshot over to a Data Domain system

What is a design consideration?

- A. Exchange mailbox database and transaction logs need to be backed up at the same time
- B. Using NetWorker wizard to create client resources for all Exchange 2010 DAG members
- C. NetWorker save set should be set to 'All' to back up all Exchange 2010 DAG members
- D. Using an EMC VSS hardware provider for the rollover operation

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 317**

An EMC customer has deployed a NetWorker backup solution for their Exchange 2010 environment. The Exchange 2010 environment consists of the following:

- 4 mailbox databases, where each mailbox database is approximately 500 GB in size
- Each Exchange transaction log is approximately 50 GB in size The NetWorker backup server is configured as:
- Leverage Microsoft VSS
- Perform incremental backups of the Exchange data once every 4 hours every business day
- Roll over all the snapshots to a Data Domain system

Today (Tuesday), the Exchange DBA adds a new mailbox database (approximately 10 GB in size) to the Exchange server.

What is the approximate size of the backup set being rolled over by the next NetWorker backup?

- A. 10 GB
- B. 60 GB
- C. 510 GB
- D. 2210 GB

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 318**

A company has a large Oracle database and is using NetWorker Module for Databases and Applications for its backup. In this backup environment all the servers are impacted due to the huge volume of backup data.

Which solution would minimize the impact on the backup environment?

- A. Back up only changed data instead of daily full backup
- B. Include all database objects along with system tables
- C. Use Microsoft VSS to create snapshots
- D. Use Replication Manager along with the NMDA

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 319**

A customer wants to perform a data center refresh. They want to standardize their backup infrastructure by using EMC NetWorker and Data Domain in an integrated environment.

The environment consists of:

A primary data center with NetWorker and Data Domain

220 remote sites; each remote site consists of 30 clients and one storage node with three devices per storage node.

Each remote storage node device will have a target session of 12 and a max target session of 60. By default, what is the maximum nsrmmd count per device?

- A. 5
- B. 9
- C. 12
- D. 60

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 320

An existing EMC NetWorker customer has been using VMDKs to back up their VMware environment to a CIFS-attached Data Domain system. Recently, they have added 80 TB to their primary VM storage. While their deduplication rates have exceeded expectations, they are starting to exceed their backup window.

Which solution is recommended to integrate with their existing infrastructure?

- A. Change the NetWorker and Data Domain configuration to use DD Boost
- B. Introduce a VTL configuration to the Data Domain system and transfer data over Fibre Channel.
- C. Switch the NetWorker VMDK configuration to a NetWorker guest client configuration.
- D. Add a NetWorker dedicated storage node into the backup environment.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 321

An existing EMC NetWorker customer is evaluating options for upgrades within their backup solution. The customer is interested in replacing their current tape-based infrastructure with a backup-to-disk product. The customer currently uses EMC VNX arrays for their SAN storage. The solution needs to be able to retain certain backups for long periods of time due to compliance reasons, as well as to minimize the amount of power and rack space required. In addition, all backups must go offsite on a daily basis. Finally, the customer wants to be able to use a new 10 GigE infrastructure they are planning to deploy within their data center. They want to minimize the amount of disruption to their current daily procedures in order to avoid re-training existing staff.

Which storage solution can be integrated with NetWorker to satisfy these requirements?

- A. Data Domain Boost to Data Domain device with Extended Retention
- B. Avamar and Data Domain with Data Domain I/O license
- C. Data Domain VTL and Data Domain device with Extended Retention
- D. Data Domain and VNX with Data Domain I/O license

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 322

An EMC Data Domain customer is evaluating new backup software and hardware for their environment. Their current environment consists of a single

data center along with several remote sites.

Their requirements are:

- Consolidate all backup hardware into their primary data center while still being able to perform remote backups.
- Continue to perform backups directly to tape for certain applications in order to send the tapes offsite for long-term retention.
- Keep their current Data Domain system as part of any new configuration.
- Optimize network performance without adding more hardware infrastructure.
- Manage the entire solution from a single unified interface.

Which solution addresses these requirements?

- A. NetWorker with Data Domain Boost only
- B. NetWorker with Data Domain Boost and storage nodes at the remote sites
- C. Avamar with an integrated Data Domain system
- D. NetWorker with Data Domain VTL and an integrated Avamar system

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 323

You are having a preliminary discussion with a prospective customer. The customer would like to know the deduplication rates that are typically seen when running initial EMC Avamar backups for file system and database data.

Which information should be provided to the customer?

- A. File system = 20%; database = 80%
- B. File system = 50%; database = 50%
- C. File system = 70%; database = 35%
- D. File system = 80%; database = 20%

Correct Answer: A

Section: (none)

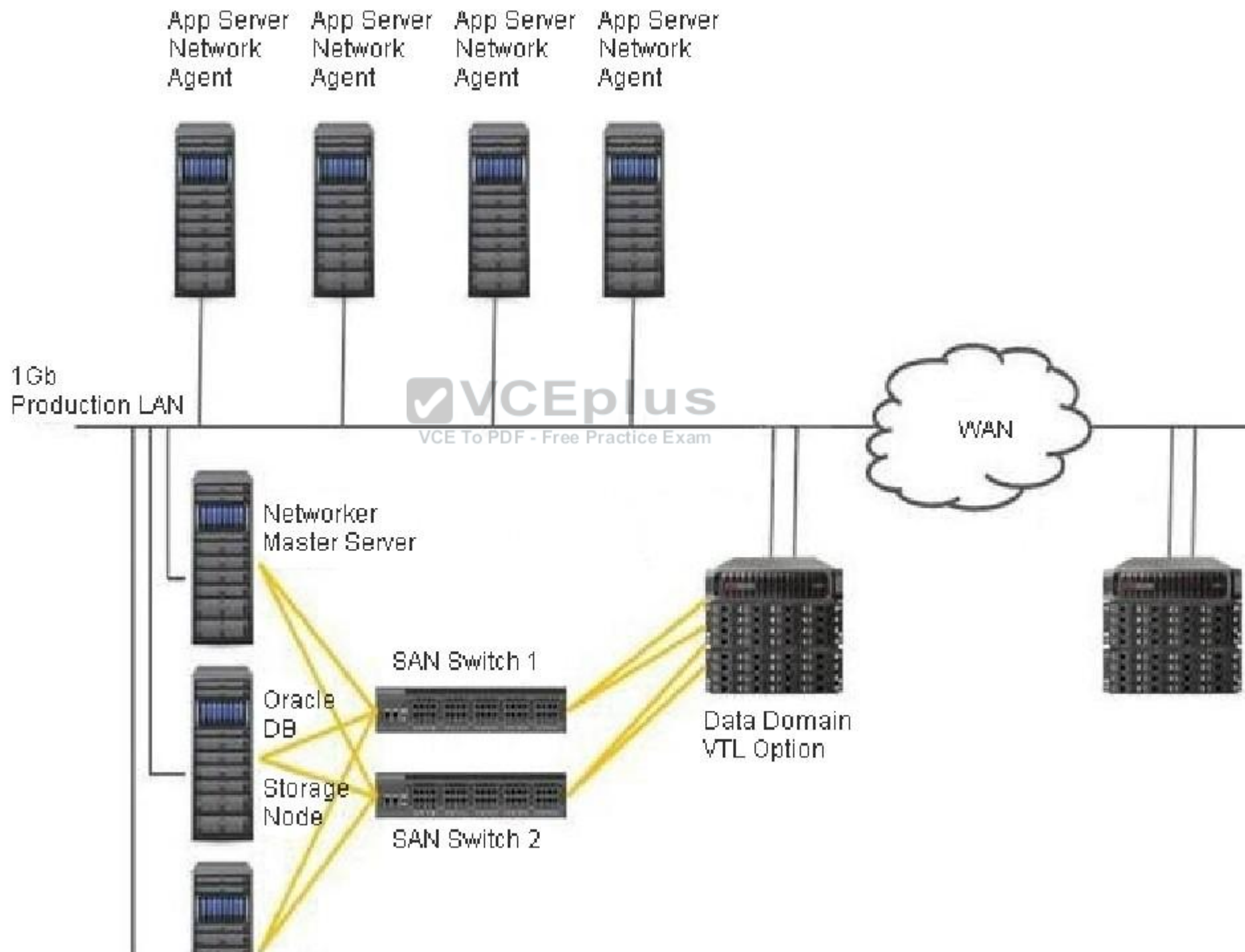
Explanation

Explanation/Reference:

QUESTION 324

Refer to the exhibit.





A customer is planning a disaster recovery (DR) solution for their backup environment. They expect to use Networker client direct backups for their App Servers and want to have a replica of their EMC Data Domain system using Networker clone controlled replication. What licenses are required on the Data Domain replication target to ensure a successful DR solution?

- A. DD Boost and Replication license
- B. Replication and Retention Lock license
- C. VTL and DD Boost license
- D. Replication and VTL license

Correct Answer: A

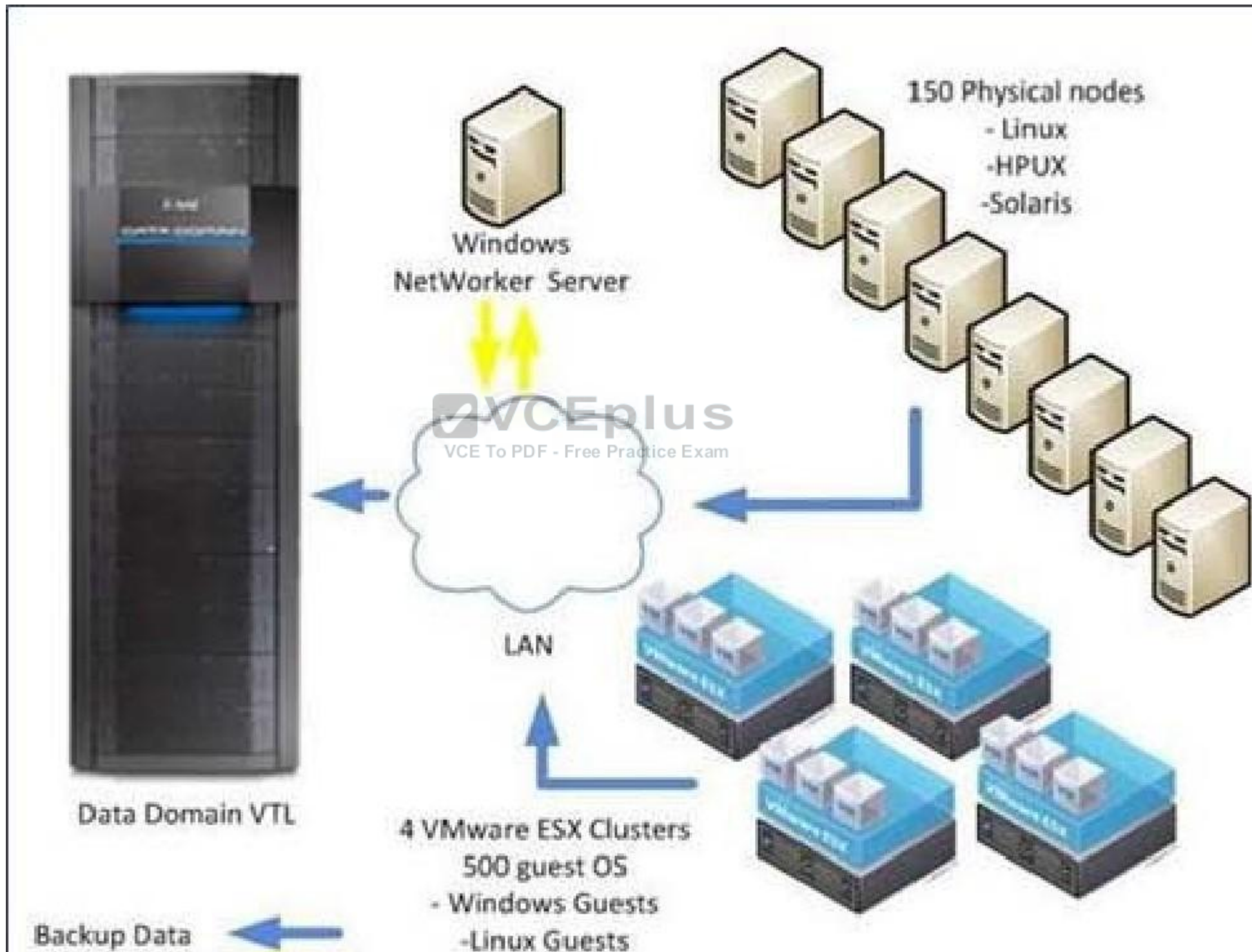
Section: (none)

Explanation

Explanation/Reference:

QUESTION 325

Refer to the exhibit.



An EMC Data Domain customer is running the backup and recovery configuration shown in the exhibit. They plan to increase their capacity use by 25% each year. The expected life of the configuration is four years. What should be done first to validate the design of the system?

- A. Capture baseline performance of the EMC NetWorker server
- B. Configure Email Home for the EMC Data Domain VTL
- C. Capture baseline performance of client servers
- D. Configure network monitor

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 326

A customer wants to perform an EMC NetWorker Assessment on one data zone. What is required?

- A. Mitrend Quick Scripts
- B. Workbench Gap Analysis
- C. Workbench FSA Scan
- D. NetWorker Management Console

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference: