Number: E20-591
Passing Score: 800
Time Limit: 120 min
File Version: 1.0

Exam A

QUESTION 1
An administrator wants to back up an EMC Celerra with Avamar using a single NDMP accelerator node. Based on EMC best practices, what is the maximum number of files that can be backed up per backup job?

A. 5 million
B. 10 million
C. 15 million
D. 20 million

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 2
Where is deduplicated data stored on a Data Domain system?

A. SATA drives
B. NVRAM
C. SCSI drives
D. PATA Drives

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 3
A customer's environment currently has a backup window that exceeds the replication window. Which Data Domain characteristic will solve this issue?

A. Post-processdeduplication
B. Variable-length segment size
C. Fix-length segment size
D. Inline deduplication

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 4
If Data Domain is a target for backups, which environment will yield the highest deduplication compression ratio?

A. Hospital where compliance requires patient information (CAT scans, MRI, X-Rays) to be backed up and archived for 10 years
B. Virtualized environment where OS images are stored in a SAN environment backed up and stored for up to 3-6 months
C. Financial institution where compliance requires e-mails and documents are backed up and stored for up to 7 years
D. Database environment where transaction logs are backed up daily and stored for 1 month

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 5
Where is most duplicate data on the Data Domain system discovered?

A. Segment Locality
B. Meta Logs
C. Fingerprints
D. Summary Vector

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 6
Which Data Domain feature is used to selectively replicate data written to the Data Domain Virtual
Tape Library (DD-VTL) by the backup software?

A. Tape Import/Export
B. Access Groups
C. Tape Pools
D. Virtual Vault

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 7
A customer has an existing environment where a tape library is the target for backups. The tapes are then shipped offsite where they are stored and can be used for disaster recovery. The customer wants to eliminate the tape library and any truck delivery but still have copies sent offsite. They want to keep their backup process in place. What is the most efficient type of Data Domain replication that meets this requirement?

A. Container
B. Directory
C. Pool
D. Collection

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 8
What is the key benefit to implementing Symantec's NetBackup OST with Data Domain systems?

A. Replication of data segments are inline
B. Media server is aware of all Data Domain systems
C. Data is ingested and replicated simultaneously
D. Data Domain system initiates and controls replication

Correct Answer: B
Section: (none)

Explanation

Explanation/Reference:

QUESTION 9
A company has numerous UNIX servers that are being backed up to the Data Domain system as a disk target. Which transport protocol should be configured on the Data Domain system?

A. Fibre Channel
B. NFS
C. NDMP
D. CIFS

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10
Which capability is provided by the Data Domain Data Invulnerability Architecture (DIA)?

A. Verification
B. Encryption
C. Deduplication
D. Replication

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 11
Which Avamar node is dedicated to providing internal Avamar server processes and services?

A. Spare

B. Storage
C. Utility
D. Accelerator

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 12
An Avamar customer has just deployed a VMware environment. The customer wants to ensure they receive the highest level of deduplication within the environment. Which type of backup should be performed?

A. Guest
B. VCB proxy host
C. VADP
D. ESX Console

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 13
On an Avamar server using default settings, what is the maximum allowable operating system capacity utilization after which HFS check will not run?

A. 65%
B. 85%
C. 90%
D. 95%

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 14
Due to a bottleneck on the LAN, a potential EMC customer is unable to meet their current SLA on backups. Which Avamar characteristic addresses the customer's issue?

A. Backing up to locally-attached disk

B. Prefetching the data

C. Bandwidth throttling

D. Transferring only unique, sub-file data

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 15
An Avamar administrator wants to run multiple backups from their Celerra through their single NDMP accelerator node. Based on EMC best practices, what is the recommended maximum number of backup jobs that the administrator can run at once, assuming there is enough RAM?

A. 2

B. 4

C. 8

D. 16

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 16
When does the Avamar server run garbage collection?

A. During the morning and evening cron jobs

B. During the blackout window

C. During the maintenance window

D. During the morning cron job

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 17
What is the RAID level on an Avamar NDMP accelerator node?

A. 0
B. 1
C. 5
D. 6

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 18
What is the access mode of the EMC Avamar server during the garbage collect activity?

A. Read/write throughout garbage collection
B. Read/write at the beginning and read-only at the end of garbage collection
C. Read-only at the beginning and read/write during garbage collection
D. Read-only throughout garbage collection

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 19
Using the EMC Avamar sizing tool, you have determined that a customer requires four 2 TB data nodes. Since the customer is protecting only 5 TB of

A. Backup catalog and file indices
B. Backup schedules and client configuration
C. RAID, RAIN, and checkpoints
D. Replication configuration information

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 20
An EMC Avamar customer is expanding their backup environment to include their many virtual machines in addition to their physical file servers. Which Avamar deployment provides the least amount of change to their existing backup procedures?

A. Deploy agents to the guest VMs
B. Deploy agents to the ESX console
C. Use VMware Consolidated Backup
D. Leverage storage-based snapshot backups

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 21
A customer, using Avamar version 4, wants to use VMware Consolidated Backup (VCB) to back up their version 3.x ESX servers. Which operating system(s) can they run on their proxy server?

A. Microsoft Windows 2003 and Red HatEnterprise Linux 4
B. Microsoft Windows 2003
C. Microsoft Windows 2003 and Windows 2008
D. Red HatEnterprise Linux 4

Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:

QUESTION 22
What is the default port used by the Avamar avtar process on the client for unencrypted communication with a storage node on the Avamar server?

A. 5555
B. 7778
C. 27000
D. 28001

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 23
Which Avamar feature provides the benefit of less network traffic than traditional backup applications?

A. Target-based deduplication
B. Source-based deduplication
C. Inline deduplication
D. Post-process deduplication

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 24
What is an Avamar checkpoint?

A. An integrity hardware check of theAvamar grid

B. A read-only snapshot of the Avamar storage node(s) to synchronize with replicated nodes
C. A full copy of backup data
D. A read-only snapshot of the Avamar server taken to enable server rollbacks

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 25
In an EMC Avamar system, which operation is allowed with standard replication?

A. Validation of backups to clients within the REPLICATE domain
B. Restores to clients within the REPLICATE domain
C. Deletion of client backups within the REPLICATE domain
D. Redirected restores to clients within the REPLICATE domain

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 26
In an EMC Avamar backup, what is the role of sticky-byte factoring?

A. Determines which chunks are sent to the Avamar server
B. Consistently creates 24 KB chunks
C. Determines which files to chunk
D. Consistently produces the same chunk result on unchanged data

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 27
You are asked to propose a serverless backup solution for the following environment:

* Oracle database running on HP-UX 11i and all datafiles reside on an EMC Symmetrix disk array.
* EMC TimeFinder/Mirror is used to create a copy of the Oracle data.
* Mirror copy of the Oracle data is backed up by a Sun Solaris 10 server.

Which EMC product would you recommend to support this environment?

A. RecoverPoint

B. Avamar

C. Data Domain

D. NetWorker

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Not sure about this one. Neither Avamar nor NetWorker are serverless, and RecoverPoint is not discussed as an option in any of the exam training.
Data Domain can be a target for the Oracle backup server.

QUESTION 28
An EMC customer is implementing an EMC Disk Library (EDL) as the primary target for backups using NetBackup. After a predefined period of time, data needs to be moved from the EDL to physical tape. Data movement to physical tape and recovery from physical tape should occur without manual intervention. Which feature satisfies these requirements?

A. Path-to-Tape

B. Remote Copy

C. Consolidated Media Management

D. Auto Archive

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 29
What is a key advantage of implementing an EMC Disk Library?

A. Significant reduction in time spent during backups
B. Cost-effective for remote offices
C. Efficient disk utilization through the use of integrated deduplication technologies
D. Simplified deployment as no infrastructure changes are required

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 30
An EMC NetWorker customer is implementing an EMC Disk Library with the Embedded Storage Node feature on both engines. Active Engine Failover is also configured. In case of a failover, which component from the failed engine will be missing on the surviving engine?

A. Remote Copy Policy configuration
B. Fibre Channel WWNs
C. Embedded Storage Node
D. SAN client configuration

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Not validated.

QUESTION 31
A customer is planning to implement an EMC Disk Library with Active Engine Failover in their switched fabric environment. What is a requirement?

A. Redundant target WWNs
B. NPIV support on the switch
C. Spoofed WWNs for all initiators
D. Minimum of twoGigE ports configured for LACP

Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:

QUESTION 32
An EMC Disk Library customer is considering using Remote Copy between two engines. A policy will be configured to copy data when 50 MB of data is sent to the virtual tape. How does the data transfer occur?

A. Whole content of the virtual tape is sent to the target once the first 50 MB is stored in the buffer
B. Incremental data is sent to the target engine when the virtual tape is unmounted and 50 MB of new data has been written
C. Incremental data is sent immediately to the target engine as soon as 50 MB of new data is received by the virtual tape during the backup process
D. Incremental data is sent to the target in 50 MB increments whenever the virtual tape is idle

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 33
Which technology is used in an EMC Disk Library to provide tolerance against a double drive failure?

A. RAIN
B. RAID 6
C. Remote Copy
D. Active Engine Failover

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 34
Which EMC NetWorker feature is used to perform a backup based on an event?

A. Application modules

B. Directives
C. Scheduled backups
D. Probe-based backups

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 35
An EMC customer has an EMC NetWorker server running on a Microsoft Windows host and two storage nodes running on Solaris hosts. Data Protection Advisor (DPA) will be installed on a separate Windows host. The customer requires that system performance information be collected from the backup server and all storage nodes.

A Collector will be installed on the DPA server by default. At a minimum, how many additional
Collectors need to be deployed?

A. 0
B. 1
C. 2
D. 3

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
One for each storage node and one for the Networker server.

QUESTION 36
An EMC NetWorker customer has added the following application to their environment:

Microsoft Exchange Server 2007 residing on an EMC CLARiiON disk array.
A Microsoft Volume Shadow Copy Service hardware provider is used to create point-in-time copies of production data.

What is a requirement to perform serverless backups?

A. NetWorker storage node software needs to be installed on the Exchange server
B. NetWorker Module for Microsoft Applications needs to be installed on the proxy server

C. NetWorker Module for Exchange and NetWorker VSS Client for Microsoft Windows

D. NetWorker Module for Exchange needs to be installed on the NetWorker server

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 37
An EMC NetWorker customer needs to improve the RTO for all backups retained onsite. Most of the backup jobs consist of images and other scientific data. The customer requires daily tape out for long-term offsite retention. Which product addresses these challenges?

A. EMC Disk Library

B. NetWorker deduplication node

C. Avamar

D. Data Domain

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 38
An EMC NetWorker customer wants to start performing client backups to a deduplication node. What is a requirement when scheduling these backups using NetWorker?

A. First backup must be a full backup

B. Database backups must be full backups

C. All backups must be full backups

D. Schedule must not include any incremental backups

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 39
The backup window of a customer using tape as a target for the current backup solution has increased over the allowed time. The customer needs to reduce the backup window by adding an intermediary process to a faster device before going to tape. What is that process?

A. Archiving
B. Rotation
C. Consolidation
D. Staging

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 40
In an EMC NetWorker backup environment, where do the metadata and backup policies reside?

A. Storage node
B. Backup server
C. Dedicated storage node
D. Backup client

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 41
You are backing up two different NAS servers, each with direct-attached tape drives. Backup Client X has 10 files of 100 MB each. Backup Client Y has 1,000 files of 1 MB each. What will happen under identical backup infrastructures?

A. Clients X and Y will generate the same amount of backup catalog entries
B. Clients X and Y will not increase the size of the catalog entries
C. Client X will generate more backup catalog entries

D. Client Y will generate more backup catalog entries

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 42
A customer is using EMC NetWorker to back up already compressed files to a device with compression enabled. What is a possible impact?

A. Files increase in size
B. Generates more metadata
C. Files are decompressed
D. Files decrease in size

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 43
A host has a file system with files changing every day. Full backups are performed every Sunday. The backup window during weekdays is limited. Full file system recovery should be accomplished in the shortest amount of time.
Which type of backup should be performed every weekday to meet these requirements?

A. Raw
B. Block level
C. Differential
D. Incremental

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 44
A customer is using NetWorker with a tape library to perform full backups at the end of the month and daily incrementals. The restore process takes a long time as tapes must unload and reload. The customer needs to achieve a faster recovery. What will help achieve the right RTO?

A. Dedicated backup LAN
B. Virtual tape library
C. Faster tape drive
D. Faster backup server hardware

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 45
A customer has a critical 700 GB application that is CPU and disk intensive. The backup window for this application is one hour. Which backup method would you recommend for this application?

A. LAN-free backup
B. Serverless backup
C. LAN-based backup
D. Direct-attached backup

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 46
How is the communication between a Data Protection Advisor Collector and the Server performed?

A. Standard HTML over SSL
B. Encapsulated IP frames over FC
C. Proprietary messages over SSH tunneling
D. Encrypted XML over TCP ports

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 47
You are asked to propose a backup solution with the following requirements:

* A Microsoft Volume Shadow Copy Service hardware provider is used to create a snapshot of production data.
* Rapid recovery of file systems and individual files from a snapshot.

Which EMC product would you recommend to support this environment?

A. Data Domain
B. Home Base
C. Avamar
D. NetWorker

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 48
Given an RPO, which factors must be considered when designing an EMC NetWorker backup solution?

A. Server parallelism and target sessions
B. Amount of backup data and backup devices
C. Retention period and backup level
D. Multiplexing and client parallelism

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 49
A customer has two sites with 50 clients at each site. The customer wants the backup to occur locally on tape media at each site and would like to have a single EMC NetWorker datazone for the entire environment. A NetWorker server has already been deployed at one site. Which NetWorker component should be deployed at the second site?

A. Dedicated storage node
B. Deduplication node
C. Storage node
D. NetWorker server

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 50
In an EMC NetWorker datazone, which component stores the online databases that track backups and volumes?

A. Management Console Server
B. Server
C. Storage node
D. Media server

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 51
To consolidate backup servers, which component plays an important role in EMC NetWorker backup planning?

A. Proxy server
B. Storage node
C. Management host

D. Virtual tape library

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 52
A customer requires the ability to recover data while backups are being written to the same media. Which EMC NetWorker device type supports this operation?

A. Advanced File
B. File
C. Virtual Tape Library
D. Tape

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

QUESTION 53
What is a key advantage of Data Protection Advisor?

A. Automatically rebalances the backup load across storage nodes
B. Reduces the amount of metadata tracked in the backup software's database
C. Optimizes client storage allocation
D. Provides reporting for multiple backup products in the same interface

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 54

By default, which database is automatically deployed on the Data Protection Advisor server?

A. MSDE
B. PostgreSQL
C. MySQL
D. Anywhere

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 55
An EMC NetWorker customer wants to passphrase-protect the data backup stream from a specific client. Which directive should be configured for the client?

A. Access control
B. AES
C. Audit capability
D. Secure communications

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 56
In an EMC NetWorker environment, where is information about backup data such as owner, size, permissions, and access time stored?

A. Client File Index
B. GST Database
C. Resource Database
D. Media Database

Correct Answer: A
Section: (none)

Explanation

Explanation/Reference:

QUESTION 57
Which EMC NetWorker policy is configured to define the length of time that records are retained in the Client File Index?

A. Retention
B. Backup
C. Staging
D. Browse

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 58
An EMC NetWorker administrator needs to perform a recovery of data from a failed client to a new client. Which type of recovery should be performed?

A. Disaster
B. Server
C. Directed
D. Save set

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 59
In an EMC NetWorker environment, a full backup is performed every Monday and an incremental backup the rest of the week. Which backup dataset is suitable for this backup schedule?

A. Database log files

B. Database control files
C. Files with unchanged content and an unchanged timestamp
D. Files with unchanged content with the timestamp updated daily

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 60
Which operating systems can be used to install a Data Protection Advisor server?

A. Windows, Linux, and HP-UX
B. Solaris, Windows, and AIX
C. Solaris, Linux, and HP-UX
D. Solaris, Windows, and Linux

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 61
In a Data Protection Advisor environment, what is monitored by Predictive Analysis Engine rules?

A. Tape drive shoe shining statistics
B. Apple MAC clients
C. HomeBase server uptime
D. Missed service levels

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 62
A customer plans to deploy deduplication in an EMC NetWorker environment. For data backed up to the deduplication node, where is the metadata in the form of hashids sent?

A. Storage node
B. Client File Index
C. Utility node
D. Deduplication client

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 63
If multiple backup streams are written to a backup device at the same time, which feature is being used?

A. Server parallelism
B. Twinning
C. Multiplexing
D. Client parallelism

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 64
An EMC NetWorker customer is implementing a SAN backup solution by configuring four dedicated storage nodes. The customer plans to use a physical library with two drives. To support this environment, which feature must be used?

A. DBO
B. Parallelism
C. DDS
D. Multiplexing

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
DDS - "Dynamic Drive Sharing"

QUESTION 65
A customer is using the NetWorker Module for Microsoft Applications (NMM) to protect the following environment:

* Microsoft Exchange Server 2007 using Cluster Continuous Replication (CCR) that resides on an
EMC CLARiiON disk array.
* A Microsoft Volume Shadow Copy Service hardware provider is used to create point-in-time copies of production data.

What is a characteristic of an NMM backup operation?

A. NMM needs to be reconfigured after an Exchange CCR role change
B. NMM can back up to a device on the Exchange CCR passive node
C. NMM automatically recognizes the passive node after an Exchange CCR role change
D. NMM synchronizes the Exchange CCR passive node before the backup operation

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference: