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Exam Code: E20-555

Exam Name: Isilon Solutions and Design Specialist Exam for Technology Architects



Exam A**QUESTION 1**

A customer has a requirement for a new solution to handle their growing storage requirements. The solution should have the ability to cover storage needs for the next three years. The environment consists of 100 TBs of file system data spread across five file systems. On average, the file systems grow 1 TB a month. In addition, they have a large VMware cluster supporting 200 VMs and a highly transactional database. The customer wants the solution to offer good performance, scalability, manageability, and be cost-effective. The sales team is looking to you to recommend a solution. Which recommendation will meet the customer's requirements?

- A. VNX for DB and VMware workloads, and Isilon for file system data
- B. Isilon scale-out and cluster as required
- C. VNX Unified platform with FAST Cache
- D. VMAX with FAST VP and a NAS Gateway

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

How much space is consumed by a 4 KB file when the file data is written to the Isilon cluster?

- A. 4 KB
- B. 8 KB
- C. 16 KB
- D. 32 KB

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 3

Which type of infrastructure does the Isilon scalable appliance connect to on the front-end?

- A. Ethernet
- B. FICON

- C. Infiniband
- D. Fibre Channel

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4

A customer needs to consolidate 300 TB of home directory servers and shared file systems used by development and test groups. A key requirement is to prevent the systems from consuming all free capacity and impacting home directory content.

Which Isilon node configuration should be proposed?

- A. X-Series with SmartQuotas
- B. NL-Series with SmartQuotas
- C. S-Series with InsightIQ
- D. X-Series with SmartPools

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 5

You are helping a customer create a cost-effective Isilon solution. The customer environment includes

high IOPS-intensive, random access file-based applications. Which Isilon storage node type will meet the customer's needs?

- A. S-Series
- B. NL-Series
- C. X-Series
- D. Performance Accelerator

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

How many layers are in the Isilon clustering architecture?

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 7

Which node type provides CPU, memory, and Fibre Channel connectivity?

- A. Backup Accelerator
- B. Performance Accelerator
- C. X-Series
- D. NL-Series

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 8

Which Isilon OneFS job, that runs manually, is responsible for examining the entire file system for inconsistencies?

- A. IntegrityScan
- B. MediaScan
- C. AutoBalance

D. FlexProtect

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 9

A customer has a supported cluster with the maximum protection level. How many simultaneous node component failures can Isilon OneFS sustain while still allowing full access to the entire file system and dataset?

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 10

A customer wants an N+3 protection level on their cluster. What is the minimum number of nodes they need to achieve that level of protection?

- A. 3
- B. 6
- C. 7
- D. 8

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 11

What does Isilon OneFS use to re-write data when a disk read fails?

- A. Dynamic Sector Repair
- B. NVRAM
- C. Isilon Data Integrity
- D. CRC

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 12

An Isilon customer wants a job to periodically check disk sectors to ensure they can be read. What should be recommended to the customer?

- A. MediaScan
- B. IntegrityScan
- C. Dynamic Sector Repair
- D. Isilon Data Integrity



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 13

An Isilon customer wants a job to periodically validates the checksum of every block in the file system. What should be recommended to the customer?

- A. IntegrityScan
- B. MediaScan
- C. Dynamic Sector Repair
- D. Isilon Data Integrity

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 14**

A company needs the ability to separate administrative rights from data access rights. Which Isilon feature enables this functionality?

- A. RBAC
- B. SmartConnect
- C. SmartLock
- D. SmartQuota

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 15**

Which Isilon OneFS administration methods are enforced by RBAC?

- A. Platform API, command line, and web administration interface
- B. Command line, InsightIQ, and web administration interface
- C. SNMP and web administration interface
- D. Command line, web administration interface, and SNMP

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 16**

Independent of protocol, what does Isilon OneFS use to translate identities?

- A. ID mapping stack
- B. Role-based access control

- C. Access Zone
- D. SmartLock

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 17

Which protocol is integrated with Isilon OneFS to provide on-access file functionality?

- A. ICAP
- B. IANA
- C. HTTPS
- D. REST

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 18

Which impact policies are available on an Isilon cluster?

- A. High, Medium, Low, Default
- B. High, Medium, Low, Paused
- C. High, Medium, Low, Auto
- D. ASAP, High, Medium, Low

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 19

An Isilon storage administrator is concerned about capacity after ingesting 200 TB of file data. They recently added more nodes to the cluster and now want to auto-balance it as soon as possible. The cluster utilization percentages for an average 24-hour period are: -45% during 00:00 - 08:59 -60% during 09:00 - 17:00 -85% during 17:01 - 23:59 The administrator wants to keep cluster utilization at a minimum. Which Impact Policy settings should be used to quickly complete the job without impacting the production workload?

- A. Medium, Low, Low
- B. Medium, Medium, Low
- C. High, Medium, Paused
- D. High, High, Low

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 20

Which Isilon job has a default priority of '1'?

- A. MultiScan
- B. Media Scan
- C. FSAnalyze
- D. FlexProtect



Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 21

A customer is planning an Isilon deployment for use with their Hadoop environment. What is one advantage of using Isilon as the HDFS layer?

- A. Facilitates independent scaling of compute and storage nodes
- B. Provides single protocol access to data
- C. Integrates storage into Hadoop compute for more flexibility
- D. Allows the compute nodes to apply data protection

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 22

A customer has an Isilon cluster that they want to simplify a Hadoop workflow. The workflow analyzes large amounts of log data written to storage using FTP and results are viewed by Microsoft Windows clients? How can this be achieved?

- A. FTP, SMB, and HDFS NameNode and DataNode protocol support on the same file system to enable each workflow step to access data from the same location avoiding data migration.
- B. SyncIQ to migrate the log data between an Isilon cluster and another Hadoop cluster, to retrieve results from the Hadoop cluster, and to store them in an SMB share.
- C. SmartConnect to direct clients to an external Hadoop NameNode and to SMB shares so data ingest, analytics, and results phases are transparently directed.
- D. FTP and SMB protocol support to provide log ingest and Windows clients; SmartPools will stub to HDFS helping to reduce the frequency of external data migration.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 23

A company wants to reduce the footprint in their data center. They recently completed a proof of concept with Hadoop using Direct Attached Storage (DAS) for their Big Data initiative. You have determined that incorporating an Isilon cluster into their Hadoop environment would help in reducing this footprint. Which Hadoop components can be consolidated onto the Isilon cluster to reduce the footprint?

- A. DataNode and NameNode
- B. DataNode and ComputeNode
- C. ComputeNode and NameNode
- D. NameNode and TaskTracker

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 24**

Your customer is moving from a Restaurant/Bar business model to a Restaurant/Casino business model. You are helping architect the upgrade of a current 4-node X200 48 TB Isilon cluster, with 50% utilized for their video surveillance operations. They want to upgrade from 15 FPS (NTSC) in H.264 codec, with a 15 days retention policy to 30 FPS (NTSC) in H.264 codec, with a 30 days retention policy. How many nodes of the same type will you need to add in order to meet the required changes and not exceed 70% raw capacity?

- A. 8 nodes
- B. 4 nodes
- C. 12 nodes
- D. 16 nodes

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:****QUESTION 25**

Your customer is moving from a Restaurant/Bar business model to a Restaurant/Casino business model. You are helping architect the upgrade of a current 4-node X200 48 TB Isilon cluster, with 50% utilized for their video surveillance operations. They want to upgrade from 15 FPS (NTSC) in H.264 codec, with a 15 days retention policy to 30 FPS (NTSC) in H.264 codec with a 30 days retention policy. Which storage capacity would be the best suited to meet the required changes and utilize 65-75% capacity?

- A. 110 TB
- B. 80TB
- C. 140TB
- D. 50TB

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:**

QUESTION 26

You are working with a healthcare company that is interested in replacing all the backend storage for their PACS system. In general, how should the solution be presented to the customer?

- A. VNX for image cache; Isilon NL-Series nodes for image archive
- B. Isilon A-Series nodes for image cache; Isilon NL-Series nodes for image archive
- C. Isilon NL-Series nodes for image cache and image archive
- D. VNX for image cache and image archive

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 27

You meet with the IT Director of a large single site campus. The IT department has recently taken over Physical Security from the facilities department and plans a complete overhaul of the surveillance solution. They are looking to you as a storage architecture expert to provide the correct amount of storage needed. The IT Director asks you what items they need to provide in order to size this solution. What data do you require from the customer?

- A. Resolution CODEC Frames Per Second (fps) Number of Devices Retention Time
- B. Pixel Count CODEC Color Sampling Frames Per Second (fps) Number of Devices Retention Time
- C. Pixel Count CODEC Color Sampling Frames Per Second (fps) Number of Devices Video Management System Evidence Collection Period
- D. Bit rate per camera Camera Manufacturer Video Management System Retention Time

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 28

A four-node Isilon cluster is being used in a Hadoop workflow with a parity protection of N+2:1. The HDFS protocol has been enabled and is being used to access data. How many additional copies of data are written into the Isilon cluster using HDFS?

- A. None
- B. One

- C. Three
- D. Two

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 29

Your customer has a new business unit. They are gathering web log files to be analyzed. They are using Hadoop to do the analysis of the logs. The IT department is centrally storing the log files on a 5-node Isilon cluster. They have enabled the Hadoop cluster to access the files directly on the Isilon storage. The nodes are X400's with two SSD drives in each node and 96GB of RAM.

How many DataNodes does the Isilon cluster have?

- A. Five
- B. One
- C. Three
- D. Two

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 30

A media and entertainment company has asked for help in creating a new Video On Demand (VOD) storage system. The storage would be delivered to 5000 subscribers simultaneously. They would like to store 5000 hours of full length, High Definition (HD) movies. What would be the best price-to-performance nodes for this solution?

- A. X400 with no SSD and 96GB RAM
- B. X200 with no SSD and 48GB RAM
- C. Mixed X400 48GB RAM and NL400 24GB
- D. X400 with 1.6TB SSD and 24GB RAM

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 31**

Your customer has observed a degradation in response time while browsing for media files within the Production Media folder of the Isilon cluster. That directory now contains over five million files. It was confirmed that there are no network or edit station related causes. What changes to the Isilon cluster will best accelerate the browsing performance?

- A. Add Solid State Drives (SSDs) to the nodes
- B. Add A-Series Performance Accelerator nodes
- C. Upgrade node access to 10 Gbps
- D. Upgrade RAM on the nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 32**

While validating the value (VTV) with a large educational customer, they have decided they would like to add a Disaster Recovery (DR) site to their existing Isilon environment. The existing cluster contains six X-Series nodes. They plan to have all workflows replicated to the DR site and both clusters will have identical shares, exports, and user authentication. The customer would like to test DR failover every six months by running their production environment from the DR site.

What would you recommend for the DR solution?

- A. SyncIQ and identical cluster at the DR site
- B. SmartConnect and NL-Series nodes at the primary site
- C. SyncIQ and NL-Series nodes at the DR site
- D. Equal number of S-Series nodes at the primary site

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 33**

A hospital is considering using Isilon to store their archived medical images and Genomic Sequencing data. They currently have 56 TB of PACS images and 24 TB of genomic data, and expect to double their capacity requirements this year. They will replicate to a DR cluster, and plan to use N+2 protection. The production workload needs to be run at either site.

Which minimum cluster configuration, at each site, including software, would meet this customer's environment?

- A. Five X400 (2 TB drives) nodes with SyncIQ.
- B. Four NL400 (3 TB drives) nodes with SyncIQ.
- C. Seven X200 (3 TB drives) nodes with SyncIQ and SnapshotIQ
- D. Five X400 (2 TB drives) nodes with SnapshotIQ.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 34

A hospital is considering using Isilon to store their long-term archive data for their GE PACS application. They currently have two million 17 MB studies. They expect capacity requirements to be 50% compounded growth per year. They plan to use N+2:1 protection, and would like this sized for three years of growth.

Which minimum cluster configuration would meet this customer's environment?

- A. Five NL400 (1 TB drive) nodes
- B. Four NL400 (2 TB drive) nodes
- C. Five X200 (3 TB drive) nodes
- D. Three X400 (3 TB drive) nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 35

Which protocols are supported by Isilon OneFS for file access?

- A. NFS, HDFS, HTTP, SMB
- B. SMB, HTTP, SMTP, HDFS

- C. HDFS, NFS, iSCSI, SNMP
- D. FTP, NFS, SMB, FC

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 36

Which Isilon OneFS protection level allows you to withstand two drive failures but no more than one complete node failure?

- A. N+1
- B. N+2
- C. N+2:1
- D. N+3:1

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 37

An Isilon customer expressed an interest in more effectively managing their storage. Specifically, they would like to plan for future growth. Which tool would allow the customer to forecast capacity requirements?

- A. InsightIQ
- B. Isilon SNMP MIB
- C. SyncIQ
- D. SmartPools

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 38

Which Isilon feature provides the ability to build a cluster using different node types and tiers to meet a customer's business objectives?

- A. SmartPools
- B. SmartQuota
- C. SmartConnect
- D. SnapshotIQ

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 39

At which level can retention periods be applied with Isilon SmartLock?

- A. Directory
- B. Node
- C. File system
- D. Cluster



Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 40

A customer is trying to get Isilon SyncIQ to run on the two clusters they just purchased. However, they are experiencing some problems. They have asked you to explain how the SyncIQ licensing works.

What information can be provided to the customer?

- A. SyncIQ license is required on both the source and target clusters
- B. SyncIQ license is required on the source but not on the target cluster
- C. SyncIQ license is required on target but not on the source cluster
- D. SyncIQ license is included in the OneFS license; no additional license is needed

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 41

Where are file system operations initiated on an Isilon node?

- A. L1
- B. NVRAM
- C. L2
- D. Disk

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 42

For concurrent I/O, how do SmartCache and Endurant Cache differ?

- A. Endurant Cache sends an acknowledgement to the client immediately after mirroring writes in NVRAM
- B. Endurant Cache waits for acknowledgement from all nodes before copying to L2 cache
- C. SmartCache immediately commits the write to NVRAM on the local node and one peer node
- D. SmartCache uses sub-file, granular locking whereas Endurant Cache locks the entire file

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 43

Where is caching for disk blocks staged on an Isilon node?

- A. L2
- B. CPU
- C. L1
- D. RAID

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 44

Where is caching for disk blocks staged on an Isilon node?

- A. L2
- B. CPU
- C. L1
- D. RAID

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 45

What is the relative latency of a cache hit to L1 cache compared to a hit to L2 cache in an Isilon cluster?

- A. 2x
- B. 5x
- C. 10x
- D. 25x

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 46

Where does SmartCache stage its write cache?

- A. SSD
- B. DISK
- C. NVRAM
- D. DRAM

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 47

Which type of data is stored in Endurant Cache of an Isilon node?

- A. Write
- B. Volume
- C. Read
- D. Protection

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 48

What is the overhead impact on the physical capacity when configuring data protection at +2:1 on a 6-node Isilon cluster?

- A. 1/2
- B. 1/4
- C. 1/5
- D. 1/6

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 49

A customer has 10 nodes in a cluster using N+2 protection. What is the minimum number of nodes required to be online and in communication with one another to satisfy quorum?

- A. 4
- B. 5
- C. 6
- D. 7

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 50

In an Isilon cluster for N+2 protection, what is the minimum number of nodes?

- A. 3
- B. 5
- C. 6
- D. 9

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 51

A customer has a 7-node Isilon cluster configured with N+2:1 protection. How many nodes can be offline with the data accessible and fully writeable?

- A. 1
- B. 2
- C. 3
- D. 0; all nodes must be online

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 52

What is the minimum number of connected and available nodes required to maintain quorum in a 25-node Isilon cluster?

- A. 10
- B. 12
- C. 13
- D. 17

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 53

An Isilon customer experienced a node failure. The failure requires that the affected node be permanently removed from the cluster. What will occur in the cluster upon failure of the node?

- A. OneFS will assume it is a temporary failure and the data will not be protected at the appropriate levels.
- B. Cluster will detect the node failure and automatically begin the SmartFail process.
- C. FlexProtect will be activated and data will be protected at the appropriate levels.
- D. Nothing. When data protection levels are set appropriately, OneFS will always protect data without manual interaction.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 54**

A customer experiences a system failure on an Isilon storage node. However, the disk drives in the node are not affected. What is the preferred method for restoring cluster integrity?

- A. Engage EMC support to perform a Disk Tango process to move drives, journal, and boot volumes to a replacement chassis
- B. Allow OneFS to proceed with its automatic SmartFail process to re-protect the failed node
- C. Migrate the disks from the failed node into spare drive bays on other nodes
- D. Initiate a manual SmartFail process on the node as it is not started automatically

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 55**

A customer plans to deploy N+2:1 protection on a 5-node Isilon cluster. How much capacity will be used to store a 320 KiB file?

- A. 320 KiB
- B. 448 KiB
- C. 576 KiB
- D. 640 KiB

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 56**

A customer plans to deploy N+2:1 protection on a 5-node Isilon cluster. How much capacity will be used to store a 1024 KiB file?

- A. 1024 KiB
- B. 1280 KiB
- C. 1792 KiB

D. 1920 KiB

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 57

An Isilon customer's administrator created the nested directory structure, shown in the exhibit, using SmartQuotas. However, a user needs to write an additional 650 GB of data to "/ifs/data/acct/recv". Which steps will enable the user to complete this task?

- A. Directory1 Quota.Increase to 1400 GB User Quota.Increase to 1000 GB on Subdirectory2
- B. User Quota.Decrease to 650 GB on Subdirectory2 Directory1 Quota.Decrease to 1650 GB
- C. User Quota.Decrease to 400 GB on Subdirectory1 Directory1 Quota.Increase to 1650 GB
- D. Directory1 Quota.Increase to 1350 GB User Quota.Decrease to 1000 GB on Subdirectory1

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 58

Your customer uses an existing Isilon cluster consisting of five NL-Series nodes to source broadcast media files for playback and streaming. The customer reports that the playback pauses and stutters regularly. It has been confirmed that there are no network or playback system issues. Which of the choices listed is the appropriate choice to address the playback issues?

- A. Add three or more S-Series Nodes
- B. Upgrade OneFS to the latest version
- C. Enable SmartConnect Advanced
- D. Enable Level 2 Caching

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 59

While configuring Isilon SmartConnect, a customer determined that their workload primarily consists of long-lived NFS and SMB connections. Which load-balancing policy will provide the most efficient client distribution?

- A. Random Selection
- B. CPU Utilization
- C. Network Throughput
- D. Connection Count

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 60

If Isilon SmartConnect is being configured in a customer environment, which records are required for a supported implementation?

- A. A SmartConnect Service IP host record and a zone delegation for the SmartConnect zone delegated to the SSIP
- B. An overloaded host record with each SmartConnect zone member's IP address and an SRV record to provide resolution services
- C. A SmartConnect Service IP host record and a corresponding PTR record for each SmartConnect zone
- D. A SOA record for the SmartConnect Service IP and a corresponding CNAME record for each SmartConnect zone

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 61

A customer currently has 10 HPC nodes. They plan to purchase a 5-node Isilon X400 cluster for an HPC application running on Linux. They will persistent mount the Isilon cluster through NFSv3. Which recommended configuration addresses the customer's requirements for high availability and throughput?

- A. SmartConnect Advanced with Round Robin connection balancing and dynamic addressing
- B. SmartConnect Basic with Round Robin connection balancing and dynamic addressing
- C. SmartConnect Advanced with Network Throughput connection balancing and dynamic addressing

D. SmartConnect Advanced with Round Robin connection balancing and static addressing

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 62

A customer is configuring Isilon SmartConnect. They have determined that their workload primarily consists of short-lived connections, such as HTTP and FTP. Which load-balancing policy provides the most efficient client distribution?

- A. CPU Utilization
- B. Round Robin
- C. Connection Count
- D. Random Selection

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 63

An Isilon customer has an environment supporting a wide range of different workloads. They want to assign clients to performance tiers based on the resources needed.

What can the customer use to meet this requirement?

- A. SmartConnect Zones
- B. Load Balancing
- C. Client Connection Zone
- D. SmartPools Advanced

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 64

If Dynamic IP Address Allocation is being configured in Isilon SmartConnect, which policy setting needs to be determined?

- A. Rebalance
- B. Load Balancing
- C. Static
- D. Dynamic

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 65

An Isilon cluster component has the following characteristics:

-Spans 3 - 40 nodes -Logical grouping of drives -Automatically assigned -Intelligently distributes disks to manage performance

Which cluster component is described?

- A. Disk pool
- B. Node pool
- C. Smart pool
- D. SSD pool



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 66

An Isilon customer has an 8-node cluster of older X-Series nodes. They plan to upgrade the nodes over the next three years in the following stages:

-Stage 1: Add 2 X-Series nodes to meet performance growth -Stage 2: Add 4 NL-Series nodes to meet archive capacity growth -Stage 3: Add 10 New X-Series nodes as a hardware refresh -Stage 4: Remove older X-Series nodes At which point will a SmartPool license be required?

- A. Stage 1
- B. Stage 2

- C. Stage 3
- D. Stage 4

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 67

If business objectives such as value and SLAs are considered, which Isilon license feature provides the ability to manage performance and the cost of data in a cluster?

- A. SmartPools
- B. SmartConnect
- C. SyncIQ
- D. SmartQuota

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 68

An Isilon customer wants the ability to provide low latency I/O for their files due to a workflow involving small, random reads and writes. Which SSD strategy is most effective for this use case?

- A. Data on SSDs
- B. Metadata read acceleration
- C. Metadata read/write acceleration
- D. Avoid SSDs

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 69

By default, which method is used by Isilon OneFS for SSDs?

- A. Metadata read acceleration
- B. Metadata read/write acceleration
- C. Data on SSDs
- D. Avoid SSDs

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 70

A customer has a data retention period of three years. They want a solution in which files cannot be deleted, changed, or modified. Which Isilon SmartLock version should they implement?

- A. Compliance version
- B. Standard version No WORM
- C. Enterprise version
- D. Standard version with WORM

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 71

An Isilon customer implemented a retention period at the directory level. They set individual retention periods on individual files within those directories. Which retention periods will be enforced?

- A. Latest retention period
- B. Earliest retention period
- C. File-level retention

D. Directory-level retention

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 72

An Isilon customer wants to more effectively manage their storage and thereby achieve performance improvements. Which tool will help improve workflow performance on their cluster?

- A. InsightIQ
- B. Isilon SNMP MIB
- C. SyncIQ
- D. SmartPools

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 73

In an Isilon environment, how is InsightIQ installed?

- A. Deployed as a virtual appliance
- B. Installed on a FreeBSD server
- C. Deployed on a Windows 64-bit server
- D. Installed on an Isilon cluster

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 74

On an Isilon cluster, how much space should be reserved for snapshots by default?

- A. 0%
- B. 5%
- C. 10%
- D. 20%

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 75

How does Isilon SnapshotIQ use storage for snapshots?

- A. Through Changed Block Tracking and only changed data blocks are saved
- B. Works on the file level and saves the entire file no matter what has changed
- C. Works with 4 KiB blocks and will always use that amount of storage, no matter what has changed
- D. Through Changed Block Tracking and always uses a 4 KiB block, even if the data changed is less than that amount

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 76

A customer is considering moving their NAS data over to Isilon systems. They want to know if the Isilon systems have any limitations regarding snapshots.

What explanation can be provided?

- A. There is no hard limit on snapshots.
- B. There is a limit of 1024 snapshots per cluster.
- C. There is a limit of 2048 snapshots per cluster.
- D. There is a limit of 2048 snapshots per directory.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 77

A customer created one month of snapshots; one snapshot every 8 hours for 30 days on an Isilon cluster using SnapshotIQ. They are now deleting the snapshots randomly and experiencing overhead to the cluster.

How can the snapshots be removed while avoiding the overhead caused by this process?

- A. Delete the snapshots in order
- B. Use SmartPools to move the snapshot data to a different tier
- C. Snapshots cannot be deleted
- D. Remove the directory

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 78

An Isilon customer wants to have different snapshot policies and schedules on the same directory. Why is this possible on an Isilon cluster?

- A. SnapshotIQ snaps at the directory level rather than the volume level
- B. All snapshots are scheduled through the command line interface
- C. A third-party product is used by SnapshotIQ to create different schedules and policies on a directory
- D. SnapshotIQ snaps at the volume level rather than the directory level

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 79

Using Isilon SnapshotIQ, how many snapshots can be created at the directory level?

- A. 8
- B. 96
- C. 256
- D. 1024

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 80

A customer has an SMB file directory with 375 TB of data on the primary cluster with a protection level of N+3:1. They want to replicate this directory to the secondary cluster. They are interested in the possibility of setting protection levels on the target cluster. Which target directory protection level information can be provided?

- A. Does not need to match the source and is configured separately on the target cluster
- B. Must match the source and is configured separately on the target cluster
- C. Cannot be altered and is controlled by SyncIQ
- D. Can be altered by the command line interface and is controlled by SyncIQ

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 81

A customer created eight SyncIQ policies on a 6-node Isilon cluster. The policies all start at midnight. The customer is experiencing issues where several jobs are paused while others continue to run. This is delaying the overall replication of data. What is the most likely reason for the pausing of some of the SyncIQ jobs?

- A. An Isilon cluster can only have five concurrent SyncIQ jobs running at the same time.
- B. An Isilon cluster can only have one SyncIQ job running at any one time.
- C. SyncIQ only allows one job per node. This cluster can only run six SyncIQ jobs concurrently.
- D. SyncIQ will stagger the start of all SyncIQ jobs. Jobs after the first job are delayed.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 82

A customer has 10 files that are each 10 MB in size. They created two clones of each file on their source cluster. They now want to use SyncIQ to replicate the original files and the cloned files to a target cluster. Excluding protection overhead, how much disk space will the files use on the target cluster?

- A. 100 MB
- B. 200 MB
- C. 300 MB
- D. 600 MB

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 83

Which block size is used by Isilon SyncIQ to transfer data?

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 84

A customer has two data centers (Site A and Site B). There is an Isilon cluster in each data center and they use SyncIQ to replicate data between the two data centers. You have been reviewing their disaster recovery plan and found the following:

-The policies specify that SyncIQ runs a replication job every 2 hours and that the job finishes within 1 hour. -Three additional hours will be needed to get servers and the network redirected to work from Site What is the Recovery Point Objective in this plan?

- A. 2 Hours
- B. 3 Hours
- C. 4 Hours
- D. 5 hours

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 85

A customer has two data centers (Site A and Site B). There is an Isilon cluster in each data center and they use SyncIQ to replicate data between the two data centers. You have reviewed their disaster recovery plan and found the following:

-The policies specify that SyncIQ runs a replication job every 3 hours and that the job finishes within 1 hour. -Three additional hours will be needed to get servers and the network redirected to work from Site

- A. What is the Recovery Point Objective in this plan?
- B. 2 Hours
- C. 3 Hours
- D. 4 Hours
- E. 5 Hours

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 86

An Isilon customer has set up a replication policy between a primary cluster and a secondary cluster. After the initial synchronization of the clusters, the primary cluster starts to display some issues. The customer initiates a failover operation between the two clusters. During the failover, the primary cluster becomes fully operational again. The customer wants to stop the failover operation between the two clusters.

What is the best way to stop the failover operation and continue using the primary cluster?

- A. Initiate a failover revert on the secondary cluster

- B. Initiate a failover revert on the primary cluster
- C. Nothing; this is an automatic process
- D. Delete the primary clusters' snapshot of this data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 87

An Isilon customer created a scheduled SyncIQ policy to replicate data from an Enterprise-mode SmartLock directory. The source cluster is now unusable and the target cluster does not automatically allow writes to the data in the replicated SmartLock directory. What is the reason why the target cluster did not automatically allow writes of the data?

- A. SyncIQ Automated failover is not supported for SmartLock directories; however, manual failover is allowed.
- B. Automated failover and manual failover are not allowed on SmartLock directories on the target cluster.
- C. A SyncIQ job was running while the source cluster became unusable, thereby removing all data on the target directory.
- D. SnapshotIQ was not licensed on the target cluster; the snapshot of the directory is not available for use by SyncIQ.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 88

An Isilon customer has two 5-node clusters; one for production and one for disaster recovery (DR). The customer's workflows are replicated to the DR cluster through SyncIQ on individual schedules. They shut down their production cluster for a scheduled DR test, failed over to the DR cluster, and continue their DR testing.

Assume both clusters have identical shares, exports, and user authentication. Additionally, assume the client applications have been stopped and the DNS re-pointed. Which SyncIQ Policy method should be used to continue production operations?

- A. Revert
- B. Initiate Manual Failback
- C. Initiate Automated Failback
- D. No change is needed

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 89

An Isilon customer has two 5-node clusters; one for production and one for disaster recovery (DR).

The customer's workflows are replicated to the DR cluster through SyncIQ on individual schedules. They have shut down their production cluster for scheduled maintenance, failed over to the DR cluster, and are currently operating from the DR site.

Assume both clusters have identical shares, exports, user authentication. In addition, assume the client applications have been stopped and the DNS re-pointed. What is the easiest SyncIQ Policy method to continue operations on production?

- A. Initiate Automated Failback
- B. Revert
- C. Initiate Manual Failback
- D. No change is needed

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 90

You set up a meeting to gather information on a new project with the IT manager and plan to use a workflow profile assessment (WPA) to document the requirements. Why is it recommended to talk to as many stakeholders as possible?

- A. Helps downstream personnel, such as implementation and delivery, to have a clearer understanding of the requirements.
- B. Completing this document gives sales a list of who the stakeholders are at customer site.
- C. Using workflow profile enables sales to take this information to EMC consulting for review to validate the configuration.
- D. Using the WPA tool will give you the best "big picture" to see things such as block size, de-dupe, file size and volumes.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 91

What key considerations should be kept in mind when designing a 300TB solution?

- A. Workflow management
Defining class of service Time of day services RPO and RTO Data retention and backup
- B. Defining class of service Time of day services ROI and TCO Data retention and backup
- C. SmartPools Smartconnect Snapshots Space for snapshots
- D. Always include 2% SSD SmartPools Smartconnect Snapshots InsightIQ

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 92

You meet a customer for the first time. They explain that their current environment for NAS does not meet their needs. You want to make sure that Isilon is a good fit for their needs.

What would be a good prequalifying question to ask?

- A. What protocols are accessing your NAS?
- B. What application are you using to create directories?
- C. Is your datacenter ISO9001 compliant?
- D. How many users are in your Directory Services?

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 93

You meet a customer for the first time. They explain that their current environment for NAS does not meet their needs. You want to make sure that Isilon is a good fit for their needs.

What would be a good prequalifying question to ask?

- A. What Applications access this storage?

- B. What type of racks are in your datacenter?
- C. Are you using a KVM to access your storage?
- D. How many NICs do your clients have?

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 94

You are reviewing an opportunity with a trusted advisor. You both discover gaps in the initial solution design. Each iterative discussion with the customer helps you define the solution better. The documents produced capture the customer's requirements. What else needs to occur to refine the sizing considerations?

- A. Validate the Workflow Profile Assessment and test the solution against your findings.
- B. Review you assumptions and ask the customer what business issue you're solving.
- C. Provide the CIO with the findings and gain commitment to a Proof of Concept.
- D. Complete your Solution Design Document and forward to EMC consulting.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 95

When conducting high-level interviews with stakeholders of a project, what are the key questions that should be asked?

- A. How much usable storage are you looking for?
What client OS will access this storage?
Which applications will access this storage?
- B. Which backup application is in use today?
What is your change rate?
How many clients will connect to the cluster?
- C. What does your network architecture look like
Do you have existing NAS infrastructure?
Do you have 10Gb or 1Gb
Which applications will access this storage?

- D. Who are the application owners?
How much usable storage is needed?
What applications will be accessing the storage?
How many users are in your Active Directory?

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 96

When designing Isilon solutions, what issues should you pay special attention to?

- A. Avoid being too enthusiastic over the technology Balancing technical and business requirements Provide Options Design to meet customer expectations
- B. Workflow Document Solutions Document Application types Data strategy
- C. Solutions Document Balancing technical and business requirements Providing many options Practical vs. theoretical implementations
- D. Solutions Document Balancing technical and business requirements Downstream hand-off Design to meet customer expectations

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 97

When designing Isilon solutions, which issue should you pay special attention to?

- A. Meet customer expectations
- B. Create a workflow document
- C. Conduct stakeholder interviews
- D. Follow all SSD sizing rules

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 98

Your customer purchased an Isilon cluster with eight X400 nodes for Home Directories. Your follow-up discussions have uncovered an opportunity to expand the cluster to support the Legal Department. As you prepare to complete the Workflow Profile Document, you meet with the customer to discuss data protection.

Which key areas should you address?

- A. Default Cluster Protection Level Additional Directory Level Protections Snapshots and Replication
- B. WORM requirements Network ports for replication Snapshots for user restores
- C. Default Cluster Protection Level Backup Windows and Processes Concurrency of user access
- D. Protocols (SMB, NFS, FTP, HTTP, HDFS) Authentication and Directory Services Performance and Latency Concerns

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 99

You have had several discussions with your customer in the processor design industry. They have stated that they want a Scale-Out NAS platform for their design environment. Their most significant responses were "We have 125 design engineers accessing large diagrams and we need high throughput to support them. Can we also get the highest performance available? We need to stay ahead of our competitors." Other areas you discussed were their data retention policies and workflow after the chip design is completed. They plan to archive the design files but the files must stay on line. What is your initial node recommendation?

- A. S-Series nodes for the active diagrams and NL Series nodes for the archives
- B. A-Series nodes for the active diagrams and X-Series nodes for the archives.
- C. X-Series nodes for the active diagrams and NL 400 nodes for the archives
- D. X-Series nodes with SSD for the active diagrams and NL nodes for the archives

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 100

You have gathered information from your customer about their current NAS environment. They indicated they are having performance and time-out

issues with their clients accessing the storage. Currently over 5000 clients are simultaneously accessing the NAS; however, this will double in the next year. Based on this information, what recommendations for a new Isilon cluster would you give to the customer based on this information?

- A. Create a six node X400 cluster today. As additional clients are added, add additional X400 nodes for them.
- B. Create a seven node X400 cluster today. You will not need to purchase additional nodes as more clients are added.
- C. Create a three node cluster today. As more clients are added, add three additional nodes each time for 1000 clients.
- D. Create a five node X400 cluster today. As more clients are added, add a Performance Accelerator node for every 1000 clients.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 101

A cost-conscious customer is exploring Isilon for their PACS archive. The workflow consists of one hundred cases a day, each including fifty 60MB image files. However, each image will have five-hundred 64kB metadata files associated with it. They currently have six years worth of archived data. They will need to migrate to the new solution and they need to plan for an additional three years of archive capacity. Which solution would you recommend to fit their capacity needs?

- A. 24 NL-Series nodes with N+3 protection policy providing 2597 TiB of useable capacity
- B. 18 NL-Series nodes with N+2:1 protection policy providing 2078 TiB of useable capacity
- C. 24 X-Series nodes with N+3 protection policy providing 2597 TiB of useable capacity
- D. 12 NL-Series nodes with N+2 protection policy providing 1300 TiB of useable capacity

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 102

You are sizing an Isilon cluster for a new customer. Analyzing their workflow you determine that they have a large block random read workload. What is the most important factor to consider when sizing this solution?

- A. Bandwidth
- B. IOPS
- C. Latency

D. Headroom

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 103

A customer is inquiring about expanding their primary cluster consisting of six S-Series nodes in order to improve performance. They have a second cluster with 11 X-Series nodes. Both clusters leverage 1GbE, but the customer recently installed a 10GbE network that can be utilized. They also have multiple Fibre Channel SAN arrays in their environment. They have a variety of workloads on each cluster and are in the process of determining which workloads belong on which cluster. They have discovered that one of the workloads- a SQL database that resides on

the X-Series node cluster - is experiencing timeouts due to latency. The database vendor has suggested limiting latency to 5ms or less to eliminate these timeouts.

How do you advise the customer?

- A. Consider migrating data from Isilon to one of their SAN platforms or proposing a new solution to handle the performance requirements of SQL.
- B. Merge the S-Series nodes and X-Series nodes into one cluster, upgrade the 1GbE to 10GbE, and leverage SmartPools to allow for the cluster to determine where data should reside.
- C. Suggest the customer consider leveraging SSDs in the new nodes they purchase and GNA to boost the performance of each cluster.
- D. Recommend they increase the amount of DRAM in the cluster or consider an Accelerator node in order to increase the amount of cache in their cluster.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 104

You are designing a new Isilon system to store mobile device video clips. The files average 800MB in size and the application team tells you to plan for up to 15,000 new files per day. The product manager for this new service wants enough capacity for the first year and reminds you that response time for storing and retrieving the files is important for customer satisfaction. The files will be accessed frequently for the first 48 hours after creation, and then very infrequently after seven days. You plan to use N+2:1 protection, and will configure a SmartPools policy to move inactive files to an archive tier within the cluster.

Which configuration best fits the project requirements?

- A. 4 x X200 nodes with SSD; 36 x NL400 nodes with 4TB drives
- B. 38 x X400 nodes with 4TB drives and SSD
- C. 4 x S200 nodes with SSD; 45 x NL400 nodes with 3TB drives
- D. 4 x X400 nodes with 1TB drives; 36 x NL400 nodes with 4TB drives

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 105

You have been working with a customer to size a new Isilon cluster for their environment. You recently determined that a cluster with three X400 nodes with 1TB drives and 48 GB RAM would be a perfect starting point for their workflow, but will have extra capacity. The customer just informed you that they have decided to also use the cluster for a small home directory environment and implement SmartQuotas. Which configuration changes should you consider?

- A. Increase the memory and add SSDs to the configuration.
- B. Add an additional X400-Series node to the configuration.
- C. Add three NL-Series nodes with 1 TB drives with 48GB RAM, and use SmartPools.
- D. Add three S-Series nodes with 300GB drives with 48GB RAM, and use SmartPools.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 106

Your customer has an existing Isilon cluster comprised of five NL-Series nodes. They have a new project that will quadruple their current throughput requirements. Upon reviewing reports in InsightIQ, you see that the aggregate external network throughput is peaking at 600MB/s. The customer states that data is

only active for the first 7 days, but they keep it indefinitely. Which recommendation best supports their growth requirements?

- A. Add X-Series nodes to the cluster, and use SmartPools to migrate inactive data to the NL-Series nodes.
- B. Use the Isilon Sizing Tool to determine GNA requirements, and add NL-Series nodes with SSD to the cluster.
- C. Add a VNX Unified array for the new project, and use rsync to migrate data to the Isilon cluster for archiving.

D. Add A-Series nodes to the cluster to boost combined network performance.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 107

A potential customer has about 540TB of NetApp running in ONTAP 7-Mode. They are willing to let you gather some workload data. They have LDAP and Active Directory authentication and primarily Windows Clients. They are very interested in Automated Tiering and Large Scale Archives. They are not certain about the workflows from the Marketing Department. The Content Team will only say they need to acquire 300 TB within 90 days. They do not know the average file size or the number of aggregates they are managing.

Which tools would you use to gather information to do your Isilon sizing?

- A. MiTrend WPA, Autosupport, and PerfCollect
- B. isi status, isi_netlogger, and PerfMon
- C. Wireshark, isi statistics, and iostat
- D. Isilon Insight IQ, OnCommand Insight, and nfsstat

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 108

A potential customer has 540TB Raw capacity of NetApp running in ONTAP 7-Mode. They are willing to let you gather some workload data. Their authentication sources are LDAP and Active Directory. Their users are primarily Windows Clients. They are very interested in Automated Tiering and Large Scale Archives. They are not certain about the workflows from the Marketing Department. The Content Team will only say they need to acquire 300 TB within 90 days. They do not know the average file size or the number of aggregates they are managing.

Which tool(s) would you use next to complete your sizing?

- A. MiTrend WPA, Autosupport, and PerfCollect
- B. Isilon Cluster Sizing Tool
- C. Wireshark, isi statistics, and iostat
- D. Isilon Insight IQ, OnCommand Insight, and nfsstat

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 109

A potential customer uses a solution from an EMC competitor for NFS storage in their main data center. The existing arrays are five years old, and the customer would like to consolidate them into a single new system. The entire workload is generated by eight Linux hosts connected to the arrays that process video files. The customer informs you they are not able to collect performance information from the existing

arrays.

Which tools can capture the workload requirements?

- A. iostat and nfsstat
- B. MiTrends and netmon
- C. netstat and esxtop
- D. Wireshark and sysstat

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 110

You get a call from a customer that has just added 200 user connections to the cluster. They want to know how fast they are writing data with these new users.

What tool would you use to gather this information?

- A. InsightIQ
- B. Network Monitor
- C. Wireshark
- D. Watch4net

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 111

You are called into an opportunity, you would like to get more information on the data skew of the filer. The customer has a supported filer. What assessment tool would you use to generate this information?

- A. Workload Profile
- B. Workflow Profile
- C. InsightIQ
- D. SupportIQ

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 112

A customer has grown 2 PB in the last year. The cluster performs well most times of the day, but occasionally during the day, the customer notices a decrease in performance. You have been told that 'tree-deletes' are taking too long and can only be run on weekends. What would you recommend to speed up the 'tree-deletes'?

- A. Add an SSD node tier for metadata to account for at least 2% of RAW capacity
- B. Use an A100 node for added CPU performance to help with 'tree-deletes.'
- C. Add 20% more nodes to the cluster to help with degraded performance.
- D. Add an SSD tier for metadata, ensuring all nodes have SSDs.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 113

A customer has eight X400 24GB RAM that supports 400 client connections today. The customer plans to add 400 more clients in the next few months. They are looking at adding an A-Series node to the cluster to help with client connections. Before they start adding client connections, what hardware change do you recommend?

- A. Add RAM to offset concurrent client connections

- B. Add an A100 to offset concurrent client connections
- C. Add nodes with SSD to help with connections
- D. Add more network switches to increase the number of connections

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 114

You are asked to size a cluster for a file sharing environment. nfsstat indicates that no more than 10% of the requests are namespace operations (e.g. GETADDR, SETADDR). There will be 10,000 active Linux users, connecting over NFS.

Which cluster configuration would you recommend?

- A. Ten X200 (27 TB) 48 GB RAM, 600 GB SSD, N+2:1
- B. Five X400 (120 TB) 96 GB RAM, 2.4 TB SSD, N+2
- C. Ten X400 (60 TB) 48 GB RAM, 2.4 TB SSD, N+2:1
- D. Eight X200 (36 TB) 24 GB RAM, no SSD, N+2:1



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 115

Your customer's site uses an old X-Series cluster, and they are interested in consolidating their two primary workflows. iostat shows that one of the applications is sensitive to latency, while isi statistics indicates sensitivity to disk response times. There are approximately 1000 users accessing 70 TB of file data.

Which node type would you recommend?

- A. S200
- B. X400
- C. X200
- D. NL400

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 116

A customer is making a decision between Isilon and a competitor's offering. They currently have 100TB of usable capacity and are forecasting 100% growth per year for the next three years, which will require them to lease additional space in their co-located data center. The CFO finds ROI and TCO to be important decision criteria.

Which statement best emphasizes the value of Isilon for this customer?

- A. Isilon's OneFS data protection policies offer substantially lower overhead than competitive RAID based NAS solutions.
- B. An IDC study found that Isilon requires 95% less down time hours per year compared to other competitors.
- C. The competition cannot offer a scale-out NAS so as capacity is added to the array, performance may degrade.
- D. Isilon's OneFS allows administrators to manage much larger amounts of capacity than competitive offerings.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 117

A potential customer requires 4 PB of usable capacity to store media files. The workloads are a combination of streaming video delivery and long term archive of video assets. There is very little space available in the customer's datacenter, so physical density is very important. The customer is concerned about performance impact and potential data loss when using 3 TB or larger drives.

What Isilon capabilities can address the customer's concerns?

- A. Isilon does not perform rebuilds - data re-protection is typically 2x-3x faster than traditional RAID rebuilds.
N+3 and N+4 Protection Levels exceed traditional RAID6 availability.
Data redistribution runs faster with more nodes in the cluster.
- B. N+3 and N+4 Protection Levels exceed traditional RAID6 availability.
Proactive hot sparing eliminates most drive rebuilds.
Endurant Cache reduces the overhead for write operations.
- C. Isilon does not perform rebuilds - data re-protection is typically 2x-3x faster than traditional RAID rebuilds.
Data recovery is consistent, taking the same amount of time regardless of cluster size.
Isilon 'short strokes' 4TB drives to reduce rebuild time.
- D. Isilon nodes have more drives per rack unit so fewer shelves are required.
Proactive hot sparing eliminates most drive rebuilds.

N+3 and N+4 Protection Levels exceed traditional RAID6 availability.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 118

A potential customer requires 800 TB of usable capacity to store medical images for their network of health clinics. The IT department has limited staff and currently manages four storage arrays from other vendors. During a meeting with the Director of IT you learn that the company is considering a solution from a competitor of EMC using two of the existing arrays and two new arrays. Which Isilon capabilities would show a better ROI for the customer?

- A. Isilon has 6%-12% less filesystem overhead than traditional clustered filesystem solutions.
With a single filesystem and virtual capacity for drive and node failures, Isilon utilization is typically 80% or higher.
Isilon utilization is typically 80% or higher due to use of a single filesystem and virtual capacity for drive and node failures.
- B. With a single filesystem and virtual capacity for drive and node failures, Isilon utilization is typically 80% or higher.
OneFS compression results in higher effective capacity within the cluster.
Traditional clustered filesystems require 4%-10% internal overhead compared to Isilon virtual capacity.
- C. Forward Error Correction overhead is 7% lower than traditional RAID.
Isilon has 6%-12% less filesystem overhead than traditional clustered filesystem solutions.
According to an IDC study, Isilon improves IT productivity by nearly 50% compared to traditional competitors.
- D. Isilon has 15%-20% less overhead than traditional clustered filesystems.
According to an IDC study, Isilon utilization is nearly 50% higher than traditional competitors.
Isilon QOS headroom and multiple node pools ensures consistent performance up to 80% utilization.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 119

Your customer's initial use case was Home Directories. They implemented the cluster with four 1Gbps ports and LACP. They are planning to expand their cluster to support their core file services. They plan to upgrade their network infrastructure to 10 GbE to facilitate this. What are two design impacts this change will have?

- A. Maximum performance is obtained by only using a single 10GbE interface per node.
LACP and multiple links may be used to increase redundancy, but will not provide more overall performance to the system

- B. LACP and multiple links may be used to increase redundancy, but will not provide more overall performance to the system. FCoE should be considered for the External Network Ports on the nodes.
- C. Dual 10GbE ports on each node will enable throughput of 20Gbps. Only connect half of the nodes to the network.
- D. Maximum performance is obtained by only using a single 10GbE interface per node. Isilon can support up to 400MB/s per node

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 120

You have 1000 users for an application that reads and writes files averaging between one and four MB in size. Each user requires 24 MB of RAM. You want to add another 1000 users for this application, and in preparation for them, you run the isi statistics command. You discover that the average CPU utilization is 20%; aggregate throughput averages 700 MB/s and the disk QueueD average is 1.5. Your cluster currently has five X200 (12 GB RAM, 1 TB drive) nodes, uses N+2:1 protection and 1 GigE networking. What should you do to accommodate the next 1000 users?

- A. Add five additional X200 (12 GB, 1 TB drive) nodes
- B. Upgrade each X200 node to a total of 24 GB of RAM.
- C. Upgrade two of the 1 GigE NICs to 10 GigE on each node.
- D. Add five A100 (24 GB RAM) accelerator nodes.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 121

Your customer is looking for a storage solution that will be able to store seven million 3 MB files which are written and seldom accessed. Read and write operations are both completed by a web-based application, which requires 1.3 Gbps throughput. The customer's network has not been upgraded in many years, so the network interfaces are 1 Gbps. What would be the best solution for this network configuration?

- A. Use LACP to aggregate the network ports on each node.
- B. Use jumbo frames to compensate for the 1GB Core network.

- C. Aggregate Infiniband (IB) ports across all nodes.
- D. Bond EXT-0 across all nodes.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 122

In your second meeting with the customer you ask the following questions about their current unified SAN and NAS platform. "Are you using an application to map users from NFS Exports to SMB shares? Is each site a separate LDAP or AD Domain?" What functionality are you trying to understand in their environment and what is the comparable feature in Isilon OneFS?

- A. Identity Mapping and Authentication Sources
- B. User Management and AD Authentication
- C. Kerberos Infrastructure and Identity Management
- D. NFS Export Management and OneFS Cluster Management

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 123

You will be meeting with the Corporate Security Team as part of the implementation planning for a new Isilon cluster deployment. The Lead Security Analyst has asked you to discuss the Authentication Sources on your Isilon Cluster. What customer questions regarding Isilon-supported Authentication Sources do you need to be prepared to answer?

- A. What mechanism are you using for NFS authentication?
Do you have multiple AD domain support?
What versions of LDAP are supported?
- B. Are you using File Services for UNIX in your AD environment? Do you support NIS+ for NFS authentication?
Do you support multiple Access Zones connecting to the AD Domain?
- C. What mechanism are you using for NFS authentication?
Do you support Novell Directory Services?
What flavor of LDAP is supported?
- D. Is the cluster x.400 compliant?

What firewall rules are in place to prevent data leakage? Is there a audit trail for access zone configuration changes?

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 124

Your customer has an Isilon cluster with five X400 nodes and four 72NL nodes. A SmartPools policy moves data to the NL nodes after 60 days of inactivity. The customer wants to expand the archive tier by at least 150 TB and would like to manage a single archive pool. Which nodes should be added to the cluster?

- A. Three NL400 nodes with 2TB drives
- B. Three X400 nodes with 1TB drives
- C. Two NL400 nodes with 4TB drives
- D. Two X400 nodes with 3TB drives

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 125

A company currently has multiple file servers to provide home directories for its employees. Each department has a separate file server. Most corporate users are on Windows clients and utilize Active Directory, except for the Engineering department, which uses Linux and NIS for authentication. The company is looking for a solution with minimal administrative overhead and a single namespace for the home directories. What is the recommended solution that will meet this company's requirements?

- A. Configure a single Isilon cluster and utilize Access Zones for authentication to Active Directory and NIS.
- B. Configure two separate clusters, one for Windows clients and the other for Linux.
- C. Utilize SmartPools to create two different FilePools, and separate Windows users from Linux users.
- D. Configure a single cluster, and migrate Linux users to Windows.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 126**

Your customer has several departments that want separate access to the cluster so they can use their individual authentication methods. Two of the departments will use NFS and two will use SMB to access the cluster. What would you recommend?

- A. Create two separate access zones for the SMB clients, and use the System zone for the NFS clients.
- B. Create separate access zones for both the SMB and NFS clients.
- C. Create two separate access zones for the NFS clients, and use the System zone for the SMB clients.
- D. Have all clients access the System zone, and use RBAC to control authentication.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 127**

A company currently has numerous file servers providing home directories for its employees. Some departments have their own file servers. All corporate users authenticate using Active Directory. The engineering department has their own untrusted AD domain for their file servers. The company is looking for a consolidated solution that requires minimal changes to the environment, and that creates a single namespace for the home directories. What is the recommended solution that will meet this company's requirements?

- A. Implement an Isilon cluster and utilize Access Zones.
- B. Configure two separate clusters, one for each AD domain.
- C. Utilize SmartPools to create two pools to separate the domains.
- D. Consolidate onto a single cluster and merge the domains.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 128**

An Isilon customer is reporting less than expected performance from the cluster and poor space utilization. The customer is using three X400 nodes with N+2:1 protection policy to host webserver log data. Upon

further analysis, it is discovered that the web servers write log files 64 KiB in size. The log files are then accessed by an analytics application for reporting.

What should be done to increase write performance of the cluster?

- A. Change the protection scheme to a mirroring policy.
- B. Add A-Series performance accelerator nodes to the cluster.
- C. Add S-Series storage nodes to the cluster.
- D. Add SSDs to the X-Series nodes in the cluster.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 129

A healthcare services provider is implementing an X-Series cluster. Currently they have approximately 200 customers and they are growing at 30% per year. They have 200 TB of storage utilized. Health Insurance Portability and Accountability Act (HIPAA) regulations require they keep all patient data for seven (7) years. They would like to keep all genomic sequencing data stored with N+3 protection, not to exceed 75% utilization. What is the minimum initial configuration you would recommend?

- A. 13 X400 nodes; 1 TB drives
- B. 6 X400 nodes; 4 TB drives
- C. 13 X200 nodes; 3 TB drives
- D. 7 X400 nodes; 1 TB drives

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 130

A large manufacturing company is an existing Isilon customer with a cluster consisting of four NL400 nodes with 4TB drives. The cluster is using N+2:1 protection level and the file system shows that it is 60% utilized. Home directories and file shares comprise 75% of the existing content and the remainder is inactive deep archive. The company has 1,000 employees using Windows and Mac clients participating in a single Active Directory (AD) forest.

During a meeting with the CIO and Director of IT you discuss the company's recent acquisition of an engineering firm that specializes in Computer Aided

Design (CAD). The engineering firm has 400 UNIX workstations that produce technical drawings which are currently stored on another vendor's SAN solution. The all UNIX environment uses NIS for authentication and name resolution. They do not currently use DNS or LDAP. The engineering company has an old storage system that has been experiencing problems and the CIO would like you to migrate the data onto the Isilon cluster. The CIO would like to eliminate all tape and recover the data onto disk. The CIO is concerned about security of the company's intellectual property, especially with the rapid adoption of mobile devices and external cloud content sharing services such as DropBox, Egnyte, and SugarSync. They would like to implement an alternative that provides external file sharing and mobile device synchronization while maintaining security control over the company's data. The Director of IT reports that users are storing non-work related content on the Isilon cluster. They would like to limit the amount of capacity that each user can consume in their home directory and want to ensure you provide the capability to easily visualize which users are over their allotment. The company's Windows users currently leverage Windows Shadow Copy to recover files that have been accidentally deleted. The IT department wants to ensure that Mac and incoming UNIX clients have the same functionality.

The Director of IT also mentions that users are reporting slow response times when browsing their home directories and shared folders. They are concerned that Isilon cannot scale to support their combined requirements.

Based on the meeting with the customer, which Isilon cluster configuration would you recommend?

- A. 4 x X400 nodes with 2 x SSD and 34 x 4TB drives 1 x Additional NL400
- B. 6 x X400 nodes with 36 x 4TB drives 1 x Backup Accelerator
- C. 4 x NL400 nodes with 36 x 4TB drives
- D. 9 x S200 nodes with 2 x SSD and 22 x 900GB SAS

Correct Answer: A

Section: (none)

Explanation



Explanation/Reference:

QUESTION 131

A large manufacturing company is an existing Isilon customer with a cluster consisting of four NL400 nodes with 4TB drives. The cluster is using N+2:1 protection level and the file system shows that it is 60% utilized. Home directories and file shares comprise 75% of the existing content and the remainder is inactive deep archive. The company has 1,000 employees using Windows and Mac clients participating in a single Active Directory (AD) forest.

During a meeting with the CIO and Director of IT you discuss the company's recent acquisition an engineering firm that specializes in Computer Aided Design (CAD). The engineering firm has 400 UNIX workstations that produce technical drawings which are currently stored on another vendor's SAN solution. The all UNIX environment uses NIS for authentication and name resolution. They do not currently use DNS or LDAP. The engineering company has an old storage system that has been experiencing problems and the CIO would like you to migrate the data onto the Isilon cluster. The CIO would like to eliminate all tape and recover the data onto disk. The CIO is concerned about security of the company's intellectual property, especially with the rapid adoption of mobile devices and external cloud content sharing services such as DropBox, Egnyte, and SugarSync. They would like to implement an alternative that provides external file sharing and mobile device synchronization while maintaining security control over the company's data. The Director of IT reports that users are storing non-work related content on the Isilon cluster. They would like to limit the amount of capacity that each user can consume in their home directory and want to ensure you provide the capability to easily visualize which users are over their allotment. The company's Windows users currently leverage Windows Shadow Copy to recover files that have been accidentally deleted. The IT department wants to ensure that Mac and incoming UNIX clients have the same functionality. The Director of IT also mentions that users are reporting slow response times when

browsing their home directories and shared folders. They are concerned that Isilon cannot scale to support their combined requirements. Which Isilon license options are required to meet the customer's needs?

- A. SnapshotIQ SmartQuotas Syncplicity EE InsightIQ SmartPools
- B. SnapshotIQ SmartConnect Advanced SmartQuotas SyncIQ InsightIQ SmartPools
- C. SnapshotIQ SmartQuotas Syncplicity EE SyncIQ InsightIQ SmartPools
- D. SnapshotIQ SmartQuotas SmartLock SyncIQ InsightIQ

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 132

A large manufacturing company is an existing Isilon customer with a cluster consisting of four NL400

nodes with 4TB drives. The cluster is using N+2:1 protection level and the file system shows that it is 60% utilized. Home directories and file shares comprise 75% of the existing content and the remainder is inactive deep archive. The company has 1,000 employees using Windows and Mac clients participating in a single Active Directory (AD) forest.

During a meeting with the CIO and Director of IT you discuss the company's recent acquisition - an engineering firm that specializes in Computer Aided Design (CAD). The engineering firm has 400 UNIX workstations that produce technical drawings which are currently stored on another vendor's SAN solution. The all UNIX environment uses NIS for authentication and name resolution. They do not currently use DNS or LDAP. The engineering company has an old storage system that has been experiencing problems and the CIO would like you to migrate the data onto the Isilon cluster. The CIO would like to eliminate all tape and recover the data onto disk. The CIO is concerned about security of the company's intellectual property, especially with the rapid adoption of mobile devices and external cloud content sharing services such as DropBox, Egnyte, and SugarSync. They would like to implement an alternative that provides external file sharing and mobile device synchronization while maintaining security control over the company's data. The Director of IT reports that users are storing non-work related content on the Isilon cluster. They would like to limit the amount of capacity that each user can consume in their home directory and want to ensure you provide the capability to easily visualize which users are over their allotment. The company's Windows users currently leverage Windows Shadow Copy to recover files that have been accidentally deleted. The IT department wants to ensure that Mac and incoming UNIX clients have the same functionality. The Director of IT also mentions that users are reporting slow response times when browsing their home directories and shared folders. They are concerned that Isilon cannot scale to support their combined requirements. Which configuration changes would you recommend for the Engineering users?

- A. Direct all clients to use the Manufacturing DNS server and connect NFS mounts to the FQDN of the Isilon cluster.
- B. Mount an NFS share to a node on the Isilon cluster, being careful to equally distribute the load across nodes.
- C. Utilize SMB2.1 protocol and mount to the Isilon cluster using the Name Server (NS) record IP.
- D. Create an FQDN for the Isilon cluster in the LMHOSTS file for each engineering system.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 133

A large manufacturing company is an existing Isilon customer with a cluster consisting of four NL400 nodes with 4TB drives. The cluster is using N+2:1 protection level and the file system shows that it is 60% utilized. Home directories and file shares comprise 75% of the existing content and the remainder is inactive deep archive. The company has 1,000 employees using Windows and Mac clients participating in a single Active Directory (AD) forest.

During a meeting with the CIO and Director of IT you discuss the company's recent acquisition an engineering firm that specializes in Computer Aided Design (CAD). The engineering firm has 400 UNIX workstations that produce technical drawings which are currently stored on another vendor's SAN solution. The all UNIX environment uses NIS for authentication and name resolution. They do not currently use DNS or LDAP. The engineering company has an old storage system that has been experiencing problems and the CIO would like you to migrate the data onto the Isilon cluster. The CIO

would like to eliminate all tape and recover the data onto disk. The CIO is concerned about security of the company's intellectual property, especially with the rapid adoption of mobile devices and external cloud content sharing services such as DropBox, Egnyte, and SugarSync. They would like to implement an alternative that provides external file sharing and mobile device synchronization while maintaining security control over the company's data. The Director of IT reports that users are storing non-work related content on the Isilon cluster. They would like to limit the amount of capacity that each user can consume in their home directory and want to ensure you provide the capability to easily visualize which users are over their allotment. The company's Windows users currently leverage Windows Shadow Copy to recover files that have been accidentally deleted. The IT department wants to ensure that Mac and incoming UNIX clients have the same functionality. The Director of IT also mentions that users are reporting slow response times when browsing their home directories and shared folders. They are concerned that Isilon cannot scale to support their combined requirements. What steps would you recommend to the IT Director to allow for collaboration between the engineering company and the manufacturing company?

- A. Set up Access Zones on the Isilon cluster using Active Directory (AD) and NIS authentication.
Create directories and apply user group permissions from AD and NIS for each collaboration team.
- B. Repoint the engineering users to the Active Directory controller Add the users to the appropriate Active Directory security group.
- C. Upload a collaboration user csv file into the cluster with usernames and passwords for the collaboration directory.
- D. Create a new pool for use by the collaboration users.
Set up Access Zones on the Isilon cluster using AD and NIS authentication.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 134

A large manufacturing company is an existing Isilon customer with a cluster consisting of four NL400 nodes with 4TB drives. The cluster is using N+2:1

protection level and the file system shows that it is 60% utilized. Home directories and file shares comprise 75% of the existing content and the remainder is inactive deep archive. The company has 1,000 employees using Windows and Mac clients participating in a single Active Directory (AD) forest.

During a meeting with the CIO and Director of IT you discuss the company's recent acquisition of an engineering firm that specializes in Computer Aided Design (CAD). The engineering firm has 400 UNIX workstations that produce technical drawings which are currently stored on another vendor's SAN solution. The all UNIX environment uses NIS for authentication and name resolution. They do not currently use DNS or LDAP. The engineering company has an old storage system that has been experiencing problems and the CIO would like you to migrate the data onto the Isilon cluster. The CIO would like to eliminate all tape and recover the data onto disk. The CIO is concerned about security of the company's intellectual property, especially with the rapid adoption of mobile devices and external cloud content sharing services such as DropBox, Egnyte, and SugarSync. They would like to implement an alternative that provides external file sharing and mobile device synchronization while maintaining security control over the company's data. The Director of IT reports that users are storing non-work related content on the Isilon cluster. They would

like to limit the amount of capacity that each user can consume in their home directory and want to ensure you provide the capability to easily visualize which users are over their allotment. The company's Windows users currently leverage Windows Shadow Copy to recover files that have been accidentally deleted. The IT department wants to ensure that Mac and incoming UNIX clients have the same functionality. The Director of IT also mentions that users are reporting slow response times when browsing their home directories and shared folders. They are concerned that Isilon cannot scale to support their combined requirements.

The CIO approaches you with a new requirement. They would like to reuse the tape library that was previously used for archiving to now be used to back up some of their data. What do you recommend to the Director of IT as the best architecture to achieve this goal?

- A. Connect the Tape Library via Fibre Channel to the Isilon cluster and use a third party backup software to initiate an NDMP backup to an accelerator.
- B. Implement a Backup Accelerator and use the internal backup software within the Isilon cluster to move data to the tape library.
- C. Use a Backup Accelerator with SyncIQ to push the data to the tape library via the Fibre Channel ports on the accelerator.
- D. Use a third party backup software and have the Isilon cluster convert the data to LTFS so it can be stored to the tape library.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 135

A European Sports TV network is considering Isilon for their Media Edit Storage for their editing workloads. They are also considering Isilon for near-line media archiving. The network receives XDCAM HD footage which is loaded onto their existing Transcoding Storage platform. New footage that needs to be edited will be transferred from their Transcoding Storage platform to the proposed Media Edit Storage platform at the rate of ten simultaneous XDCAM HD files via FTP. Edited files will be transferred back to the Transcoding Storage platform at the rate of ten simultaneous XDCAM HD files via FTP.

The network currently has 15 Final Cut Pro edit stations, 15 Avid edit stations. Proxy software will be used to allow Isilon to act as the storage for the Final Cut Pro and Avid media. Three of those edit stations will be performing content compositing as needed.

The network expects 70 hours of new content per week, and 50 hours of edited content per week. They intend to keep the new and edited content on the proposed Media Edit Storage as a performance tier for 30 days. They would like to retain all new and edited footage proposed Media Edit Storage as a near-line tier for two years.

In addition to the current workloads, the network expects to implement a new Media Asset Management (MAM) solution and has requested the Isilon cluster be capable of supporting 120 MBps read and 120 MBps write to support the MAM requirements. The customer wants to be able to put completed content into a non-editable folder. However, they want to give access to an administrator to delete content if required. What do you recommend to the customer?

- A. SmartLock using Enterprise mode
- B. SmartLock using Compliance mode
- C. WORM using Compliance mode
- D. SyncIQ with read-only mode

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 136

We have been engaged by a research hospital to help upgrade their Isilon installation. They currently have 12 previous generation Isilon nodes with 200TB of capacity and run on a 1Gbps network. They currently have 6 Illumina Hi-Seq Sequencers and an HPC cluster to process data. They would like to expand Isilon to 2PB of active data and 1PB of archive data. They use a third party data and metadata management service (IRODs) to stage data for analysis. The Isilon cluster is mainly used for analysis work with the HPC cluster. The customer has a limited budget. What would be the best price/performance solution for their active data?

- A. 14 X-Series nodes with no SSD drives and 96GB of RAM
- B. 17 X-Series nodes with SSD drives and 48GB of RAM.
- C. 14 NL-Series nodes with 24GB of RAM
- D. 12 X-Series nodes with no SSD drives and 24GB of RAM

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 137

We have been engaged by a research hospital to help upgrade their Isilon installation. They currently have 12 previous generation Isilon nodes with 200TB of capacity and run on a 1Gbps network. They currently have 6 Illumina Hi-Seq Sequencers and an HPC cluster to process data. They would like to expand Isilon to 2PB of active data and 1PB of archive data. They use a third party data and metadata management service (IRODs) to stage data for analysis. The Isilon cluster is mainly used for analysis work with the HPC cluster.

Before making any changes, the customer would like a graphical presentation of their existing array performance to present to management. What is the best tool to gather this information?

- A. InsightIQ
- B. isi_netlogger
- C. tcpdump
- D. netstat

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 138

We have been engaged by a research hospital to help upgrade their Isilon installation. They currently have 12 previous generation Isilon nodes with 200TB of capacity and run on a 1Gbps network. They currently have 6 Illumina Hi-Seq Sequencers and an HPC cluster to process data. They would like to expand Isilon to 2PB of active data and 1PB of archive data. They use a third party data and metadata management service (IRODs) to stage data for analysis. The Isilon cluster is mainly used for analysis work with the HPC cluster.

Currently, the workflows are being limited by the network access to the Isilon cluster. What would result in the fastest possible network throughput?

- A. Move analysis infrastructure to dedicated 10G network.
- B. Add four A-Series accelerator nodes.
- C. Use LACP to aggregate the network connections.
- D. Implement jumbo frames.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 139

We have been engaged by a research hospital to help upgrade their Isilon installation. They currently have 12 previous generation Isilon nodes with 200TB of capacity and run on a 1Gbps network. They currently have 6 Illumina Hi-Seq Sequencers and an HPC cluster to process data. They would like to expand Isilon to 2PB of active data and 1PB of archive data. They use a third party data and metadata management service (IRODs) to stage data for analysis. The Isilon cluster is mainly used for analysis work with the HPC cluster.

-- Exhibit --The customer will add two more Illumina Hi-Seq Sequencers in the next 6 months. Once these are added, what is the total amount of data from all the sequencers they can expect to add per month?

- A. 9.6 TB
- B. 4.8 TB
- C. 1.2 TB
- D. 14.4 TB

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 140

Refer to the exhibit.

Typical Uncompressed Storage Requirements per Imaging Study (Sample)

** Please see Healthcare Terminology document for descriptions on these Modalities

Modality	Images			Storage/MB		
	Average	Low Range	High Range	Average	Low Range	High Range
CT	60	40	300	32	21	157
CT (thin-slice)	500	200	1000	262	105	524
Magnetic Resonance	200	80	1000	26	11	131
Mammography	6	4	8	108	72	144
Ultrasound	30	20	60	18	12	37
Echocardiography	1125	750	1500	346	230	461

A large hospital chain has approached you to redesign their storage infrastructure. The head of IT believes their requirement is for 100 TB of RAW capacity. They want to consolidate their PACS, file shares and home directories onto one cluster and require very fast enumeration of the directories. The following are the notes from meetings with the department heads. Which is the best cluster configuration that meets the customer's requirements?

- A. 4 x X-Series nodes using SynqIQ to 4 x NL-Series nodes
- B. 3 x S-Series nodes using SmartPools and 3 x NL-Series nodes for Archive

- C. 5 x S-Series nodes
- D. 3 x NL-Series nodes using SynqIQ to 3 x NL-Series nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 141

Refer to the exhibit.

Typical Uncompressed Storage Requirements per Imaging Study (Sample)

** Please see Healthcare Terminology document for descriptions on these Modalities

Modality	Images			Storage/MB		
	Average	Low Range	High Range	Average	Low Range	High Range
CT	60	40	300	32	21	157
CT (thin-slice)	500	200	1000	262	105	524
Magnetic Resonance	200	80	1000	26	11	131
Mammography	6	4	8	108	72	144
Ultrasound	30	20	60	18	12	37
Echocardiography	1125	750	1500	346	230	461

A large hospital chain has approached you to redesign their storage infrastructure. The head of IT believes their requirement is for 60 TB of RAW capacity. The following are the notes from meetings with the department heads.

Which is the minimum cluster configuration that meets the customer's requirements?

- A. 3 NL-Series Nodes using SynqIQ to 3 NL-Series Nodes
- B. 3 S-Series Nodes using SmartPools and 3 NL-Series Nodes for Archive
- C. 5 S-Series Nodes
- D. 4 X-Series Nodes using SynqIQ to 4 NL-Series Nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 142

Refer to the exhibit.



Codec / Compression	Resolution	H	V	Pixel Aspect Ratio	Frame Rate	Audio Channels	Color Space	Color Sampling	Mbps	MBps	MBps
DPX 8 Bit	4K	4096	2160	1.9:1	24	8	RGB	4:4:4	6801	850	811
							YUV*	4:4:4	4535	567	541
		3840	2160	16:9	24	8	RGB	4:4:4	6377	797	760
							YUV*	4:4:4	4252	531	507
	2K	2048	1556	2.35:1	24	8	RGB	4:4:4	2456	307	293
		2048	1080	1.89:1	24	8	RGB	4:4:4	1708	213	204
DPX 10 Bit	4K	4096	2160	1.9:1	24	8	RGB	4:4:4	5443	680	649
							YUV*	4:4:4	3402	425	406
		3840	2160	16:9	24	8	RGB	4:4:4	5103	638	608
							YUV*	4:4:4	3190	399	380
	2K	2048	1556	2.35:1	24	8	RGB	4:4:4	1967	246	234
		2048	1080	1.89:1	24	8	RGB	4:4:4	1368	171	163
DNxHD 440 10 Bit	HD	1920	1080	16:9	30	8	RGB	4:4:4	446	56	53
DNxHD 220 10 Bit	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	757	95	90
		3840	2160	16:9	24	8	YCbCr	4:2:2	710	89	85
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	279	35	33
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	196	25	23
	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	229	29	27
					25	8	YCbCr	4:2:2	192	24	23
					60	8	YCbCr	4:2:2	204	26	24
					50	8	YCbCr	4:2:2	172	21	20
DNxHD 145 8 Bit	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	496	62	59
		3840	2160	16:9	24	8	YCbCr	4:2:2	465	58	55
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	185	23	22
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	131	16	16
	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	152	19	18
					25	8	YCbCr	4:2:2	128	16	15
					60	8	YCbCr	4:2:2	136	17	16
					50	8	YCbCr	4:2:2	115	14	14
DV50 8 Bit	SD	720	576	4:3	25	4	YCbCr	4:2:2	62	7.7	7
		720	486	4:3	30	4	YCbCr	4:2:2	63	7.8	7
DV25 8 Bit	SD	720	576	4:3	25	4	YCbCr	4:2:2	33	4.1	4
		720	486	4:3	30	4	YCbCr	4:2:2	34	4.2	4
ProRes 4444 12 bit	4K	4096	2160	1.9:1	24	8	RGB	4:4:4	1275	159	152
		3840	2160	16:9	24	8	RGB	4:4:4	1196	150	143
	2K	2048	1556	2.35:1	24	8	RGB	4:4:4	465	58	55
		2048	1080	1.89:1	24	8	RGB	4:4:4	326	41	39
	HD	1920	1080	16:9	30	8	RGB	4:4:4	380	48	45
					25	8	RGB	4:4:4	319	40	38
					60	8	RGB	4:4:4	381	48	45
					50	8	RGB	4:4:4	319	40	38
	SD	720	576	4:3	25	4	RGB	4:4:4	115	14	14
		720	486	4:3	30	4	RGB	4:4:4	117	15	14
	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	849	106	101
		3840	2160	16:9	24	8	YCbCr	4:2:2	797	100	95
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	312	39	37
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	219	27	26

During a requirements gathering meeting, the customer identified a desire to use a codec for editing content that will take up the least amount of space on their Isilon cluster. The content is 1920x1080 HD. Based on the provided list of codecs, which codec would minimize the storage requirement?

- A. DNxHD 145 8 Bit
- B. DPX 8 Bit
- C. ProRes 444 12 Bit
- D. DNxHD 220 10 Bit

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 143

Refer to the Exhibit.



What is represented by the information shown?

- A. Directory quota cannot exceed 2 TB for both /ifs/data/media and /ifs/data/media/photo.
Directory quota cannot exceed 900 GB for /ifs/data/media/video.
Directory quota can be any size up to 2 TB and each user can only store 75 GB for /ifs/data/media/temp.
- B. Directory quota cannot exceed 2 TB for /ifs/data/media and no quota limit on /ifs/data/media/photo.
Directory quota cannot exceed 900 GB for /ifs/data/media/video.
Directory quota can be any size up to 2 TB and each user can only store 75 GB for /ifs/data/media/temp.
- C. Directory quota cannot exceed 2 TB for both /ifs/data/media and /ifs/data/media/photo.
Directory quota cannot exceed 900 GB for /ifs/data/media/video.
Directory quota can be any size up to 2 TB for /ifs/data/media/temp.
- D. Directory quota cannot exceed 2 TB for both /ifs/data/media and /ifs/data/media/photo.
Directory quota cannot exceed 900 GB for /ifs/data/media/video.

Directory quota can be any size up to 900 GB and each user can only store 75 GB for /ifs/data/media/temp.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 144

Refer to the exhibit.

```
kip-6# isi statistics protocol --nodes all --output timestamp,numops,ops,in,inavg,out,outavg,node,timeavg,proto,clas
```

Timestamp	Numops	Ops	In	InAvg	Out	OutAvg	Node	TimeAvg	Proto	Class	Op
s		N/s	B/s	B	B/s	B		us			

1363109698.4	681	142.8	5.7K	40.0	14K	96.0	6	73.6	nfs3	namespace_read	access
--------------	-----	-------	------	------	-----	------	---	------	------	----------------	--------

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1363109698.4	1	0.2	7.6	36.0	18.5	88.0	6	46.0	nfs3	namespace_read	getattr
1363109698.4	942	197.6	11K	53.9	43K	216.0	6	944.2	nfs3	namespace_read	lookup

1363109698.4	282	59.1	2.8K	48.0	687K	12K	6	12044.8	nfs3	read	read
--------------	-----	------	------	------	------	-----	---	---------	------	------	------

You are analyzing a customer's existing Isilon environment using isi statistics in order to expand the cluster. When examining the protocol subcommand, you see the output as shown in the exhibit.

What does the data tell you about the workload?

- A. It is metadata intensive.
- B. It is mostly sequential reads.
- C. It uses large read requests.
- D. It contains mostly random writes.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 145

Refer to the exhibit.

NFSv3 protocol breakdown

```
[root@centos-20]~# iostat -x 1 -Z60
```

```
nfs v3 client      total:    272191
-----
nfs v3 client      getattr:   12041
```

```
nfs v3 client      lookup:    20276
nfs v3 client      access:   23286
nfs v3 client      read:    10500
```

```
nfs v3 client      write:   158530
nfs v3 client      create:   15852
nfs v3 client      fsstat:   15853
```

```
nfs v3 client      fsstat:   15853
nfs v3 client      commit:  15853
```

Which tool was used to create this output and which line item counts the metadata read operations occurring in the file service?

- A. nfsstat and getattr
- B. iostat and fsstat

- C. tcpdump and nfsstat
- D. isi_netlogger and commit

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 146

Refer to the exhibit.

NFSv3 protocol breakdown

```
[root@centos-20]~# -Z60
```

```
nfs v3 client      total:    272191
-----
nfs v3 client      getattr:  12041
```

```
nfs v3 client      lookup:   20276
nfs v3 client      access:  23286
nfs v3 client      read:    10500
```

```
nfs v3 client      write:   158530
nfs v3 client      create:  15852
nfs v3 client      setattr: 15852
```

```
nfs v3 client      rstatd: 15853  
nfs v3 client      commit: 15853
```

Which tool was used to create this output and what is the most telling characteristic?

- A. nfsstat and write-intensive access
- B. iostat and write-intensive access
- C. Read-intensive access and nfsstat
- D. isi_netlogger and moderate metadata read operations

Correct Answer: A

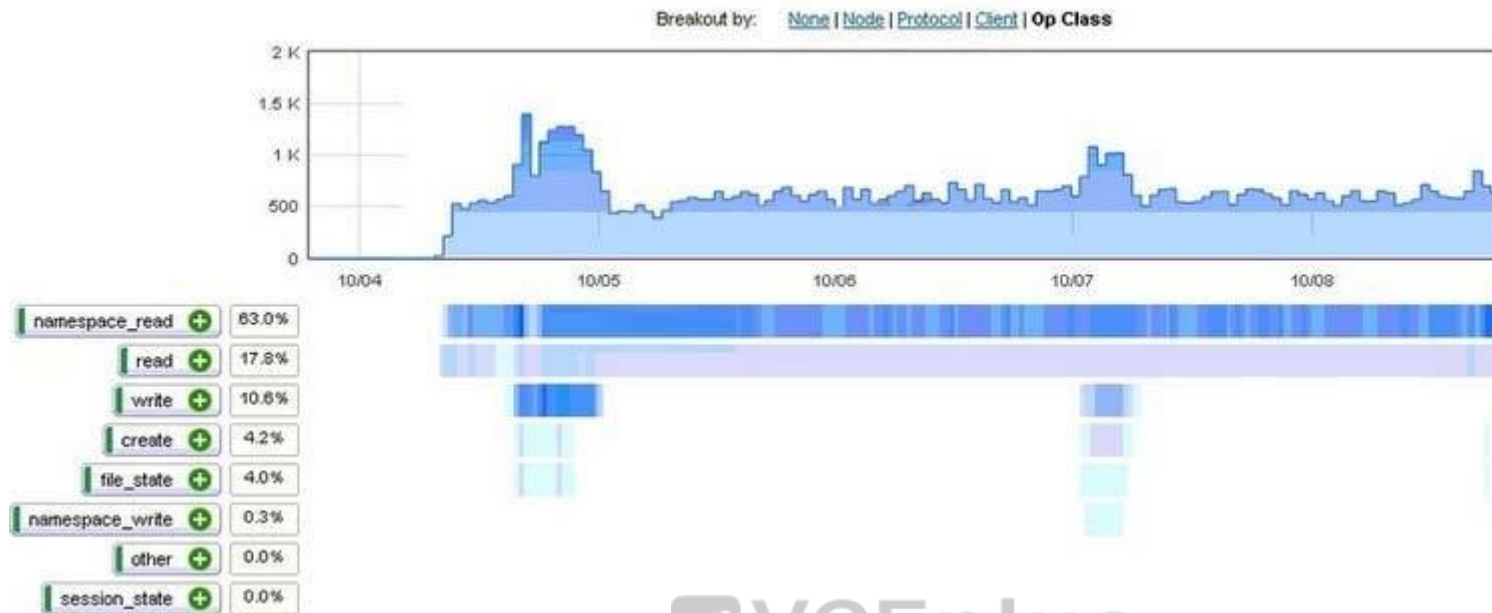
Section: (none)

Explanation

Explanation/Reference:

QUESTION 147

Refer to the exhibit.



A customer calls you and asks if you could come by and interpret their InsightIQ data. You see that namespace reads are 63% of the work load. What would you recommend to help this cluster's namespace performance?

- A. Add SSDs
- B. Add A-Series nodes
- C. Add S-Series nodes
- D. Turn off write cache

Correct Answer: A

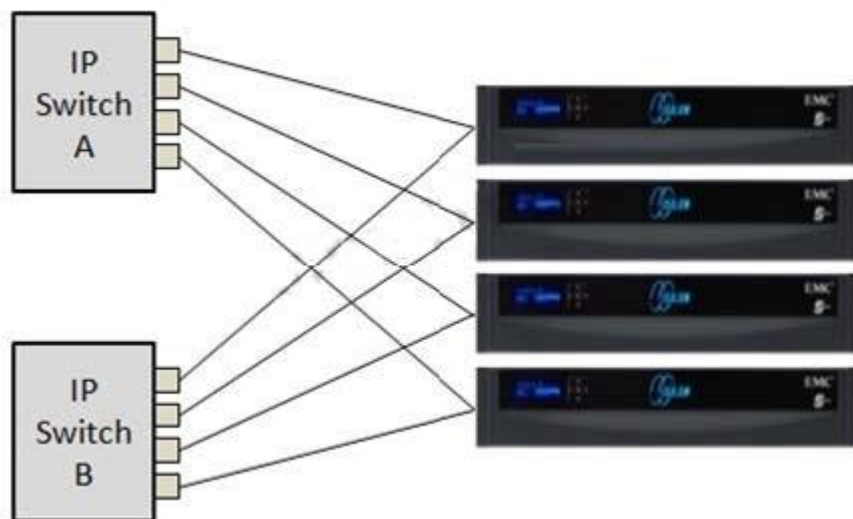
Section: (none)

Explanation

Explanation/Reference:

QUESTION 148

Refer to the exhibit.



You want to add redundancy to your network configuration, rather than performance. You have configured all interfaces into the default SmartConnect zone.

How should you configure the switches and Isilon networking to provide your desired network redundancy?

- A. Configure the switch ports for LACP and use LACP aggregation for subnet0:pool0.
- B. Configure the switch ports as access points and use LACP aggregation for subnet0:pool0.
- C. Configure the switch ports for LACP and use FEC aggregation for subnet0:pool0.
- D. Configure the switch ports as access points, bond ext-0 and ext-1 on all nodes and use Active/Passive aggregation for subnet0:pool0.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 149

Refer to the exhibit.



Your customer has three different clusters. File systems on two of the clusters are at 90% full, and the largest cluster is 10% full. Active data resides on the largest cluster. The customer has five different node types totaling 2PB and 54 nodes. Nodes from left to right are as shown:

- 1.X200
- 2.12000X
- 3.36000X
- 4.NL108
- 5.108NL

They have a Smartpool license and believe that tiering data would help free up needed space. After talking with the customer and explaining the use of SmartPools, how would you recommend optimizing utilization across all of the nodes that the customer owns?

- A. Attach all nodes to a common Infiniband switch.
- B. Go to GUI and put alike nodes in the same pools. Then name them.
- C. Borrow nodes to reconfigure the cluster and migrate the data to new cluster.
- D. Explain to the customer that this will result in data loss.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 150**

A European Sports TV network is considering Isilon for their Media Edit Storage for their editing workloads. They are also considering Isilon for near-line media archiving. The network receives XDCAM HD footage which is loaded onto their existing Transcoding Storage platform. New footage that needs to be edited will be transferred from their Transcoding Storage platform to the proposed Media Edit Storage platform at the rate of ten simultaneous XDCAM HD files via FTP. Edited files will be transferred back to the Transcoding Storage platform at the rate of ten simultaneous XDCAM HD files via FTP.

The network currently has 15 Final Cut Pro edit stations, 15 Avid edit stations. Proxy software will be used to allow Isilon to act as the storage for the Final Cut Pro and Avid media. Three of those edit stations will

be performing content compositing as needed.

The network expects 70 hours of new content per week, and 50 hours of edited content per week. They intend to keep the new and edited content on the proposed Media Edit Storage as a performance tier for 30 days. They would like to retain all new and edited footage proposed Media Edit Storage as a near-line tier for two years.

In addition to the current workloads, the network expects to implement a new Media Asset Management (MAM) solution and has requested the Isilon cluster be capable of supporting 120 MBps read and 120 MBps write to support the MAM requirements.

Refer to the exhibit.

Codec / Compression	Resolution	H	V	Pixel Aspect Ratio	Frame Rate	Audio Channels	Color Space	Color Sampling	Mbps	MBps	MiBps
ProRes 422 HQ 10 bit	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	849	106	101
		3840	2160	16:9	24	8	YCbCr	4:2:2	797	100	95
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	312	39	37
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	219	27	26
	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	256	32	30
					25	8	YCbCr	4:2:2	215	27	26
		1280	720	16:9	60	8	YCbCr	4:2:2	255	32	30
					50	8	YCbCr	4:2:2	214	27	26
	SD	720	576	4:3	25	4	YCbCr	4:2:2	75	9.3	9
		720	486	4:3	30	4	YCbCr	4:2:2	75	9.4	9
ProRes 422 10 bit	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	567	71	68
		3840	2160	16:9	24	8	YCbCr	4:2:2	532	67	63
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	210	26	25
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	149	19	18
	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	173	22	21
					25	8	YCbCr	4:2:2	146	18	17
		1280	720	16:9	60	8	YCbCr	4:2:2	169	21	20
					50	8	YCbCr	4:2:2	143	18	17
	SD	720	576	4:3	25	4	YCbCr	4:2:2	51	6.4	6
		720	486	4:3	30	4	YCbCr	4:2:2	52	6.5	6
Sony HDCAM SR 10 Bit MPEG-4	HD	1920	1080	16:9	30	8	RGB YCbCr	4:4:4 4:2:2	880 440	110 55	105 52
Sony XDCAM HD 8 Bit MPEG-2	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	55	7	7
XAVC 10 Bit H.264	4K	4096	2160	1.9:1	60	8	YCbCr	4:2:2	319	40	38
		3840	2160	16:9	60	8	YCbCr	4:2:2	300	38	36
	2K	2048	1556	2.35:1	60	8	YCbCr	4:2:2	140	18	17
		2048	1080	1.89:1	60	8	YCbCr	4:2:2	100	13	12
	HD	1920	1080	16:9	60	8	YCbCr	4:2:2	100	13	12
					50	8	YCbCr	4:2:2	85	11	10
AVCHD 8 Bit H.264	HD	1920	1080	16:9	30	8	YCbCr	4:2:0	25	3.1	3
					25	8	YCbCr	4:2:0	22	2.8	3
		1280	720	16:9	60	8	YCbCr	4:2:0	19	2.4	2
					50	8	YCbCr	4:2:0	18	2.2	2
Broadcast MPEG-2 8 Bit	HD	1920	1080	16:9	30	2	YCbCr	4:2:0	19	2.4	2
					25	2	YCbCr	4:2:0	16	2.0	2
		1280	720	16:9	60	2	YCbCr	4:2:0	13	1.6	2
					50	2	YCbCr	4:2:0	11	1.4	1
	SD	720	576	4:3	25	2	YCbCr	4:2:0	6	0.7	1
		720	486	4:3	30	2	YCbCr	4:2:0	6	0.7	1

Based on the number of edit stations, and their intended use, what bandwidth requirements should be considered while sizing?

- A. Write Performance: 70 MBps FTP sequential 21 MBps NFS and/or SMB sequential 120 MBps NFS and/or SMB random Read Performance: 70 MBps FTP sequential 210 MBps NFS and/or SMB sequential 120 MBps NFS and/or SMB random
- B. Write Performance: 550 MBps FTP sequential 275 MBps NFS and/or SMB sequential 120 MBps NFS and/or SMB random Read Performance: 550 MBps FTP sequential 1.6 GBps NFS and/or SMB sequential 120 MBps NFS and/or SMB random
- C. Write Performance: 21 MBps FTP sequential 70 MBps NFS and/or SMB sequential 120 MBps NFS and/or SMB random Read Performance: 210 MBps FTP sequential 70 MBps NFS and/or SMB sequential 120 MBps NFS and/or SMB random
- D. Write Performance: 70 MBps FTP sequential 210 MBps NFS and/or SMB sequential 120 MBps NFS and/or SMB random Read Performance: 70 MBps FTP sequential 21 MBps NFS and/or SMB sequential 120 MBps NFS and/or SMB random

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 151

A European Sports TV network is considering Isilon for their Media Edit Storage for their editing workloads. They are also considering Isilon for near-line media archiving. The network receives XDCAM HD footage which is loaded onto their existing Transcoding Storage platform. New footage that needs to be edited will be transferred from their Transcoding Storage platform to the proposed Media Edit Storage platform at the rate of ten simultaneous XDCAM HD files via FTP. Edited files will be transferred back to the Transcoding Storage platform at the rate of ten simultaneous XDCAM HD files via FTP.

The network currently has 15 Final Cut Pro edit stations, 15 Avid edit stations. Proxy software will be used to allow Isilon to act as the storage for the Final Cut Pro and Avid media. Three of those edit stations will be performing content compositing as needed.

The network expects 70 hours of new content per week, and 50 hours of edited content per week. They intend to keep the new and edited content on the proposed Media Edit Storage as a performance tier for 30 days. They would like to retain all new and edited footage proposed Media Edit Storage as a near-line tier for two years.

In addition to the current workloads, the network expects to implement a new Media Asset Management (MAM) solution and has requested the Isilon cluster be capable of supporting 120 MBps read and 120 MBps write to support the MAM requirements.

Refer to the exhibit.

Codec / Compression	Resolution	H	V	Pixel Aspect Ratio	Frame Rate	Audio Channels	Color Space	Color Sampling	Mbps	MBps	MiBps
ProRes 422 HQ 10 bit	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	849	106	101
		3840	2160	16:9	24	8	YCbCr	4:2:2	797	100	95
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	312	39	37
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	219	27	26
	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	256	32	30
					25	8	YCbCr	4:2:2	215	27	26
		1280	720	16:9	60	8	YCbCr	4:2:2	255	32	30
					50	8	YCbCr	4:2:2	214	27	26
	SD	720	576	4:3	25	4	YCbCr	4:2:2	75	9.3	9
		720	486	4:3	30	4	YCbCr	4:2:2	75	9.4	9
ProRes 422 10 bit	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	567	71	68
		3840	2160	16:9	24	8	YCbCr	4:2:2	532	67	63
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	210	26	25
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	149	19	18
	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	173	22	21
					25	8	YCbCr	4:2:2	146	18	17
		1280	720	16:9	60	8	YCbCr	4:2:2	169	21	20
					50	8	YCbCr	4:2:2	143	18	17
	SD	720	576	4:3	25	4	YCbCr	4:2:2	51	6.4	6
		720	486	4:3	30	4	YCbCr	4:2:2	52	6.5	6
Sony HDCAM SR 10 Bit MPEG-4	HD	1920	1080	16:9	30	8	RGB YCbCr	4:4:4 4:2:2	880 440	110 55	105 52
Sony XDCAM HD 8 Bit MPEG-2	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	55	7	7
XAVC 10 Bit H.264	4K	4096	2160	1.9:1	60	8	YCbCr	4:2:2	319	40	38
		3840	2160	16:9	60	8	YCbCr	4:2:2	300	38	36
	2K	2048	1556	2.35:1	60	8	YCbCr	4:2:2	140	18	17
		2048	1080	1.89:1	60	8	YCbCr	4:2:2	100	13	12
	HD	1920	1080	16:9	60	8	YCbCr	4:2:2	100	13	12
					50	8	YCbCr	4:2:2	85	11	10
AVCHD 8 Bit H.264	HD	1920	1080	16:9	30	8	YCbCr	4:2:0	25	3.1	3
					25	8	YCbCr	4:2:0	22	2.8	3
		1280	720	16:9	60	8	YCbCr	4:2:0	19	2.4	2
					50	8	YCbCr	4:2:0	18	2.2	2
Broadcast MPEG-2 8 Bit	HD	1920	1080	16:9	30	2	YCbCr	4:2:0	19	2.4	2
					25	2	YCbCr	4:2:0	16	2.0	2
		1280	720	16:9	60	2	YCbCr	4:2:0	13	1.6	2
					50	2	YCbCr	4:2:0	11	1.4	1
	SD	720	576	4:3	25	2	YCbCr	4:2:0	6	0.7	1
		720	486	4:3	30	2	YCbCr	4:2:0	6	0.7	1

Based on the described use of the cluster, what are the customer's capacity requirements?

- A. 30 days retention: 15 TB; 2 years retention: 360 TB
- B. 30 days retention: 5 TB; 2 years retention: 120 TB
- C. 30 days retention: 1 TB; 2 years retention: 24 TB
- D. 30 days retention: 30 TB; 2 years retention: 720 TB

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 152

A European Sports TV network is considering Isilon for their Media Edit Storage for their editing workloads. They are also considering Isilon for near-line media archiving. The network receives XDCAM HD footage which is loaded onto their existing Transcoding Storage platform. New footage that needs to be edited will be transferred from their Transcoding Storage platform to the proposed Media Edit Storage platform at the rate of ten simultaneous XDCAM HD files via FTP. Edited files will be transferred back to the Transcoding Storage platform at the rate of ten simultaneous XDCAM HD files via FTP.

The network currently has 15 Final Cut Pro edit stations, 15 Avid edit stations. Proxy software will be used

to allow Isilon to act as the storage for the Final Cut Pro and Avid media. Three of those edit stations will be performing content compositing as needed. The network expects 70 hours of new content per week, and 50 hours of edited content per week. They intend to keep the new and edited content on the proposed Media Edit Storage as a performance tier for 30 days. They would like to retain all new and edited footage proposed Media Edit Storage as a near-line tier for two years.

In addition to the current workloads, the network expects to implement a new Media Asset Management (MAM) solution and has requested the Isilon cluster be capable of supporting 120 MBps read and 120 MBps write to support the MAM requirements.

Refer to the exhibit.

Codec / Compression	Resolution	H	V	Pixel Aspect Ratio	Frame Rate	Audio Channels	Color Space	Color Sampling	Mbps	MBps	MiBps
ProRes 422 HQ 10 bit	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	849	106	101
		3840	2160	16:9	24	8	YCbCr	4:2:2	797	100	95
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	312	39	37
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	219	27	26
	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	256	32	30
					25	8	YCbCr	4:2:2	215	27	26
		1280	720	16:9	60	8	YCbCr	4:2:2	255	32	30
					50	8	YCbCr	4:2:2	214	27	26
	SD	720	576	4:3	25	4	YCbCr	4:2:2	75	9.3	9
		720	486	4:3	30	4	YCbCr	4:2:2	75	9.4	9
ProRes 422 10 bit	4K	4096	2160	1.9:1	24	8	YCbCr	4:2:2	567	71	68
		3840	2160	16:9	24	8	YCbCr	4:2:2	532	67	63
	2K	2048	1556	2.35:1	24	8	YCbCr	4:2:2	210	26	25
		2048	1080	1.89:1	24	8	YCbCr	4:2:2	149	19	18
	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	173	22	21
					25	8	YCbCr	4:2:2	146	18	17
		1280	720	16:9	60	8	YCbCr	4:2:2	169	21	20
					50	8	YCbCr	4:2:2	143	18	17
	SD	720	576	4:3	25	4	YCbCr	4:2:2	51	6.4	6
		720	486	4:3	30	4	YCbCr	4:2:2	52	6.5	6
Sony HDCAM SR 10 Bit MPEG-4	HD	1920	1080	16:9	30	8	RGB YCbCr	4:4:4 4:2:2	880 440	110 55	105 52
Sony XDCAM HD 8 Bit MPEG-2	HD	1920	1080	16:9	30	8	YCbCr	4:2:2	55	7	7
XAVC 10 Bit H.264	4K	4096	2160	1.9:1	60	8	YCbCr	4:2:2	319	40	38
		3840	2160	16:9	60	8	YCbCr	4:2:2	300	38	36
	2K	2048	1556	2.35:1	60	8	YCbCr	4:2:2	140	18	17
		2048	1080	1.89:1	60	8	YCbCr	4:2:2	100	13	12
	HD	1920	1080	16:9	60	8	YCbCr	4:2:2	100	13	12
					50	8	YCbCr	4:2:2	85	11	10
AVCHD 8 Bit H.264	HD	1920	1080	16:9	30	8	YCbCr	4:2:0	25	3.1	3
					25	8	YCbCr	4:2:0	22	2.8	3
		1280	720	16:9	60	8	YCbCr	4:2:0	19	2.4	2
					50	8	YCbCr	4:2:0	18	2.2	2
Broadcast MPEG-2 8 Bit	HD	1920	1080	16:9	30	2	YCbCr	4:2:0	19	2.4	2
					25	2	YCbCr	4:2:0	16	2.0	2
		1280	720	16:9	60	2	YCbCr	4:2:0	13	1.6	2
					50	2	YCbCr	4:2:0	11	1.4	1
	SD	720	576	4:3	25	2	YCbCr	4:2:0	6	0.7	1
		720	486	4:3	30	2	YCbCr	4:2:0	6	0.7	1

Based on the described use of the cluster, which node combination is the appropriate choice for the customer's requirements?

- A. 4 x X400 nodes with 4 x NL 400 nodes
- B. 4 x S200 nodes with 4 x NL 400 nodes
- C. 4 x X200 nodes with 4 x NL 400 nodes
- D. 4 x S200 nodes with 5 x NL 400 nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 153

A customer plans to consolidate 200 TB of digital images and video content. Performance is important for recently created files. However, the customer wants any content that has not been accessed within 30 days to be stored in the cluster at a much lower cost because performance is no longer critical. Which Isilon configuration should be recommended?

- A. X-Series nodes, NL-Series nodes, and SmartPools
- B. X-Series nodes and SmartQuotas
- C. S-Series nodes, X-Series nodes, and SmartPools
- D. NL-Series nodes and SmartLock



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 154

If a file is 4 KB in size, how much space is consumed for file data when it is written to the Isilon cluster?

- A. 4 KB
- B. 8 KB
- C. 16 KB
- D. 32 KB

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 155

Which Isilon OneFS job is responsible for examining the entire file system for inconsistencies and runs manually?

- A. IntegrityScan
- B. MediaScan
- C. AutoBalance
- D. FlexProtect

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 156

Which Isilon job periodically checks disk sectors to ensure they can be read?

- A. MediaScan
- B. IntegrityScan
- C. Dynamic Sector Repair
- D. Isilon Data Integrity

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 157

What is the minimum number of nodes in an Isilon cluster for N+2 protection?

- A. 3

- B. 5
- C. 6
- D. 9

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 158

At a minimum, how many connected and available nodes are required to maintain quorum in a 25-node cluster?

- A. 10
- B. 12
- C. 13
- D. 17

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 159

A customer has an SMB file directory with 375 TB of data on the primary cluster with a protection level of N+ 3:1. They want to replicate this directory to the secondary cluster. The customer would like information about the possibility of setting protection levels on the target cluster. What information can be provided to the customer about the protection level for the target directory?

- A. Configured separately on the target cluster and does not need to match the source
- B. Configured separately on the target cluster and must match the source
- C. Controlled by SyncIQ and cannot be altered
- D. Controlled by SyncIQ and can be altered by the CLI

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 160**

Which block size does Isilon SyncIQ use to transfer data?

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 161**

An Isilon customer has two 5-node clusters; one for production and one for disaster recovery (DR). The customer's workflows are replicated to the DR cluster through SyncIQ on individual schedules. They shutdown their production cluster for a scheduled DR test, failed over to the DR cluster, and continue their DR testing.

Assume both clusters have identical shares, exports, and user authentication and that the client applications have been stopped and the DNS re-pointed. What is the correct method to continue production operations?

- A. Revert the SyncIQ Policy
- B. Initiate Manual Failback of the SyncIQ Policy
- C. Initiate Automated Failback of the SyncIQ Policy
- D. No change to the SyncIQ Policy

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 162**

How many file systems are present in a 20-node Isilon X200 cluster?

- A. 1

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 163

Which type(s) of data is predominately associated with home directories and file shares?

- A. E-mail files, PPT, Word documents
- B. Oracle directories
- C. SQL database files
- D. XML data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:



QUESTION 164

Traditional NAS storage architecture deploys simple two-way failover between two controllers in their storage systems, such as highly-available configurations. How is the Isilon architecture different in terms of system resiliency and availability?

- A. Isilon OneFS enables each node to have a designated partner node for simple failover between the pair.
- B. Isilon solutions can enable failover to other nodes with the use of client-side drivers.
- C. Isilon clustered architecture deploys standby failover nodes to ensure the highest available solution.
- D. Isilon OneFS enables each node to be a peer to any other node in an Isilon cluster.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 165

If a client is mounted to the sixth node in a 20-node Isilon cluster, how much memory cache can that client leverage assuming each node has 8 GB of memory cache?

- A. 16 GB
- B. 40 GB
- C. 120 GB
- D. 160 GB

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 166

What is the maximum volume or aggregate size that can be created with an Isilon Scale-Out NAS system?

- A. 16 TB
- B. 100 TB
- C. 2.3 PB
- D. 20 PB

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 167

Which Isilon product is recommended where low-latency and maximum performance is a critical factor?

- A. X-Series
- B. S-Series
- C. SmartQuotas
- D. NL-Series

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 168

Refer to Exhibit below:



What is represented by the information shown in the exhibit?

- A. Directory quota cannot exceed 2 TB for both /ifs/data/media and /ifs/data/media/photo. Directory quota cannot exceed 900 GB for /ifs/data/media/video.
Directory quota can be any size up to 2 TB and each user can only store 75 GB for /ifs/data/media/temp.
- B. Directory quota cannot exceed 2 TB for /ifs/data/media and no quota limit on /ifs/data/media/photo.
Directory quota cannot exceed 900 GB for /ifs/data/media/video.
Directory quota can be any size up to 2 TB and each user can only store 75 GB for /ifs/data/media/temp.
- C. Directory quota cannot exceed 2 TB for both /ifs/data/media and /ifs/data/media/photo.
Directory quota cannot exceed 900 GB for /ifs/data/media/video.
Directory quota can be any size up to 2 TB for /ifs/data/media/temp.
- D. Directory quota cannot exceed 2 TB for both /ifs/data/media and /ifs/data/media/photo.
Directory quota cannot exceed 900 GB for /ifs/data/media/video.
Directory quota can be any size up to 900 GB and each user can only store 75 GB for /ifs/data/media/temp.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 169

What is the smallest unit of manageable storage within Isilon SmartPools?

- A. SSD pool
- B. Node pool
- C. Disk pool
- D. File pool

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 170

When configuring Isilon SmartPools policies, which values are allowed for file pool policy storage destinations?

- A. Disk pools and node pools
- B. Disk pools

- C. SSD pools and tiers
- D. Node pools, tiers, and anywhere

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 171

When working with Isilon file pool policies, which file attribute can be applied as a filter?

- A. Performance
- B. File create date
- C. File type
- D. Permissions

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 172

Which Isilon SmartLock version uses an NTP server to keep track of the set retention periods placed on a directory?

- A. Standard with WORM
- B. Standard No WORM
- C. Enterprise
- D. Compliance

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 173

A customer is able to see some performance metrics in the Isilon OneFS dashboard or by using CLI. Other performance metrics will require InsightIQ. What will require a licensed version of InsightIQ?

- A. Capacity Trending
- B. Cluster Throughput
- C. CPU Usage
- D. Active Client Connections

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 174

In Isilon OneFS, what is the snapshot limit of a directory?

- A. 512
- B. 1024
- C. 2048
- D. No limit



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 175

What is a Shadow Store used for in Isilon OneFS?

- A. Shared data for clones and original files
- B. Changed block data for clones and original files
- C. Changed block data for SyncIQ
- D. Changed blocks for SnapshotIQ

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 176

A customer is considering moving their NAS data over to Isilon systems. They want to know what limitations Isilon has regarding snapshot on the directory level.

What explanation can be provided to the customer?

- A. Limit of 2048 snapshots per directory
- B. No limits on the number of snapshots per directory
- C. Limit of 2048 snapshots per cluster but not on the directory level
- D. Hard limit of 1024 snapshots per directory

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 177

A customer has two data centers (Site A and Site B) and in each data center there is an Isilon cluster. They are replicating data between the sites using SyncIQ. You have been reviewing their disaster recovery plan and found the following:

-The policies specify that SyncIQ runs a replication job every four hours and that the job finishes within one hour. -Three additional hours will be needed to get servers and the network redirected to work from

Site B.

What is the Recovery Point Objective in this plan?

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:**QUESTION 178**

An Isilon customer created a SyncIQ policy to replicate data from a primary cluster to an offsite secondary cluster. The primary cluster becomes unavailable, and the customer has completed a failover onto the secondary cluster.

The primary cluster becomes available again, so the customer would like to fail back data to the primary cluster. The failback process does not replicate data.

What is the most likely reason the failback policy does not replicate data to the primary cluster?

- A. Clusters are not sharing an Infiniband switch
- B. Secondary cluster has modified files on it
- C. Original policy was for synchronization
- D. Policy contains a SmartLock directory

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**QUESTION 179**

When an Isilon SyncIQ replication job completes, how many SnapshotIQ policies can be created on a target cluster directory?

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:**QUESTION 180**

What accurately represents Isilon SyncIQ Automated Failover?

- A. SmartLock directories will automatically failover

- B. Replication relationships will change upon failover
- C. No changes in Identity Management will be needed
- D. Target directories will not need to be shared with clients

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 181

An Isilon customer has two 5-node clusters, one for production and one for disaster recovery (DR). The customer's workflow is a SmartLock workflow and is replicated to the DR cluster through SyncIQ on an individual schedule. The customer needs to shutdown their production cluster for scheduled maintenance.

Assume both clusters have identical shares, exports, user authentication, and that the client applications

have been stopped and the DNS re-pointed. What is the correct method to start operations on the DR cluster?

- A. Initiate Manual Failover of the SyncIQ Policy
- B. Initiate Automated Failover of the SyncIQ Policy
- C. No change to the SyncIQ Policy
- D. Revert the SyncIQ Policy



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 182

You meet a customer for the first time. They explain that their current environment for NAS does not meet their needs. You want to make sure that Isilon is a good fit for their needs.

What would be a good prequalifying question to ask?

- A. Where will the data center be installed?
- B. How many concurrent clients are accessing your NAS?
- C. How many users are in your Directory Services?
- D. Are you currently using a UPS for your main power source?

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 183

You have been invited to meet with the Social Media and Marketing Department and gather requirements for a potential File System Project. They primarily use CIFS and are considering deploying a Hadoop cluster to analyze customer demographic data. The Senior Systems Engineer thinks they will need 2PB of usable capacity.

What would you do to gain an understanding of the customer's environment to qualify and develop the opportunity?

- A. Create a cluster configuration specifying HDFS, NFS, and CIFS protocols; select 19 x X400 nodes with 144TB per node, and Enhanced Support
- B. Request the Windows Systems Administration Team run a PerfMon analysis on the Marketing Servers, consider adding 75 x 3TB drives to your VNX 5500, and contact the DBA Team for their help
- C. Ask them to identify how the current data is accessed, where the data is accessed from, and who is accessing the data
- D. Send the Social Media Team a sizing and features spreadsheet to complete; download the OneFS Architectural White Paper for them, and create a Logical System diagram in Visio

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 184

You have had several meetings with an existing EMC VMAX customer. They have agreed that they would like to review an initial Isilon Solution for unstructured data used by the Product Development Team. All production is managed through a Global Enterprise Resource Planning system based in Germany. They require 600TiB of usable capacity. The File System must be accessible from Windows and Linux High-End Workstations. The files are generally not accessed after 120 days, and they would like automated tiering.

Which questions about architectural integration will impact the solution design?

- A. . What Enterprise Resource Planning platform are they using in manufacturing? . What is their Recovery Point Objective?
. What is their Archival Strategy?
- B. . How many data centers do they have?
. Will their Network Infrastructure support implementing Isilon? . What Enterprise Resource Planning platform are they using in manufacturing?
- C. . How many clients will access the File System?
. Will their VDI clients access the Isilon Cluster?

- . What is the DR plan for the ERP System?
- D. . What non-sizing-specific factors in the customer's environment could impede integration of the Isilon solution?
 - . What applications are they using?
 - . What are your priorities among performance, scalability, or availability?

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 185

Your customer is a major metropolitan newspaper. Your previous discussion centered on their storage requirements, and you asked them some of the Top Ten questions. They responded: "Well, it's not the prettiest or most high-tech solution...we use Secure FTP (SFTP) to upload the stories and images and put them in a workflow that formats them for printing in the newspaper." "What really worries us is the fact that our Storage Array from your competitor is going out of maintenance in 120 days, and they are dropping support for Secure FTP. This isn't even considered in our D/R Plan. Do you have a better solution with Isilon?"

Which top 10 questions led to this information?

- A. How much capacity are you looking for?
 - What applications access this storage?
 - What risks are there in your current infrastructure?
- B. What is your network infrastructure like?
 - How many Storage Fabrics do you have?
 - What is your Disaster Plan for the Newspaper?
- C. What does your infrastructure look like?
 - What applications access this storage?
 - What protocols and version number?
- D. What filesystems, SMB, NFS, or other are you using?
 - What does your infrastructure look like?
 - How do you manage your File Systems?



Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 186

You are sizing an Isilon Cluster for a new customer. Analyzing their workflow, you determine that they have a small block random read workload.

What is the most important factor to consider when sizing this solution?

- A. Headroom
- B. IOPS
- C. Latency
- D. Bandwidth

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 187

Your customer has an existing Isilon cluster with seven X200 nodes. The cluster is used to store home directories and departmental shared folders. They are planning to deploy a new application that generates small block, synchronous writes. Which OneFS 7 capability can help reduce latency for the new workload?

- A. Endurant Cache
- B. L2 Cache
- C. Solid State Drives
- D. Prefetcher



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 188

Refer to the exhibit.



You are analyzing a customer's existing Isilon environment using InsightIQ in order to expand the cluster. When examining the protocol data, you see the output as shown.

What does the data tell you about the workload?

- A. It is mostly sequential reads
- B. It uses large read requests
- C. It is metadata intensive
- D. It contains mostly random writes

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 189

A customer plans to replace an existing array that is supported by the MiTrend Workload Profile Assessment (WPA) service. You receive performance data from the customer and run a WPA report that shows the array has 50TB of usable capacity.

In discussions with the customer, you learn the content is comprised of four million 6MB files and 400 million 64KB files. The customer explains they have a small budget and very limited rack space available in their datacenter. Performance is not a concern because the files are rarely accessed.

Which configuration provides the needed usable capacity using N+2:1 protection, and requires the least amount of rack space?

- A. 3 x NL400 nodes with 2TB Drives

- B. 3 x X400 nodes with 1TB Drives
- C. 5 x X200 nodes with 1TB Drives
- D. 6 x X200 nodes with 1TB Drives

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 190

An existing customer has two NAS systems providing NFS storage in their main datacenter - one is an Isilon cluster and the second is an array from another vendor. Both systems are four years old, and the customer would like to consolidate the storage into a single solution. According to the customer, both systems support identical workloads with similar performance and utilization, and they want the new solution to support 50% performance growth.

Which method can model the workload requirements, and what multiplier will capture the requirements for the new solution?

- A. Use isi statistics protocol, and multiply by 3
- B. Use isi statistics drives, and multiply by 1.5
- C. Use isi statistics query, and multiply by 2
- D. Use isi statistics system, and multiply by 3



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 191

A potential customer is considering replacing a four year old, Linux-based NFS server with 40TB of usable capacity. The existing system supports home directories, an internal website, and a content repository for the customer's content management system. The customer is concerned about performance of any new solution because they expect to double workload in the content management system.

What tools can be used to collect performance data needed to size the new solution?

- A. iostat and nfsstat
- B. Perfmon and sysstat
- C. Isi statistics and Wireshark
- D. Syslog and vmstat

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 192

You are asked to size a cluster for a file sharing environment. nfsstat indicates that 75% of the requests are namespace operations (e.g., GETADDR, SETADDR). There will be 8,000 active Linux users, connecting over NFS. Which cluster configuration would you recommend?

- A. Five X400 (66 TB) 48 GB RAM, 1.2 TB SSD, N+2:1
- B. Eight X200 (27 TB) 12 GB RAM, 600 GB SSD, N+2
- C. Eight X200 (27 TB) 48 GB RAM, 600 GB SSD, N+2:1
- D. Eight X200 (36 TB) 48 GB RAM, no SSD, N+2:1

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 193

A NetApp customer is considering Isilon. They use their filers for UNIX home directories, and would like to see a suggested configuration that would meet their needs.

What would you do to help size this cluster?

- A. Ask for an autosupport file and upload it to MiTrends to generate a workflow profile
- B. Ask them to install InsightIQ and collect data from the filer, then import to SQL for analysis
- C. Ask for the output from nfsstat and upload it to MiTrends to generate a workflow profile
- D. Use tcpdump and upload the output file to MiTrends to generate a protocol analysis

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 194

A potential customer requires 800TB of usable capacity to store medical images for their network of health clinics. The IT department has limited staff and currently manages four storage arrays from other vendors. During a meeting with the Director of IT, you learn that the company is planning to deploy a scale-out NAS solution from a competitor of EMC.

Which factors can demonstrate a lower TCO using Isilon?

- A. An IDC study found that Isilon requires 30% less downtime per year compared to other solutions
- B. Isilon linear scalability eliminates over buying and over provisioning
- C. An IDC study found that Isilon requires 95% less downtime per year compared to other solutions
- D. Isilon uses lower speed NL-SAS drives which reduces overall power and cooling requirements
- E. An IDC study found that Isilon requires 95% less downtime hours per year compared to other competitors
- F. Isilon linear scalability eliminates over buying and over provisioning
- G. An IDC study found that Isilon requires 95% less downtime hours per year compared to other competitors
- H. Isilon linear scalability closely aligns with additional staff requirements as capacity grows

Correct Answer: CF

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 195**

A customer is looking for a NAS solution to support their read-intensive application.

This solution must meet the following requirements:

-1000 users -Aggregate bandwidth of 5 GB/s -500 TB of user data -Typical latency of 5 ms. The files are distributed evenly across 10 directories. Which cluster configuration would best meet these requirements?

- A. Seven X400 (108 TB) nodes with no SSD
- B. Eight NL400 (96 TB) nodes with 1.6 TB SSD
- C. Eight X400 (96 TB) nodes with 1.6 TB SSD
- D. Twenty-five X200 (30 TB) nodes with 800 GB SSD

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 196

Your customer is looking for a storage solution that will be able to store seven million 3 MB files, which are written and seldom accessed. Read and write operations are both completed by a web-based application, which requires 1.3 Gbps throughput. The customer's network has not been upgraded in many years, so

the network interfaces are 1Gbps.

Which cluster configuration would best meet the customer's requirements?

- A. 3 NL400 nodes
- B. 3 X400 nodes
- C. 4 X200 nodes
- D. 5 S200 nodes

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 197

A customer wants to add Unix users to their cluster, and requires that NFS access be fault-tolerant. What would you recommend?

- A. Use NFS v4 and dynamic IP addressing with SmartConnect Basic
- B. Use NFS v4 and dynamic IP addressing with SmartConnect Advanced
- C. Use NFS v3 and dynamic IP addressing with SmartConnect Advanced
- D. Use NFS v3 and dynamic IP addressing with SmartConnect Basic

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 198

Your customer has an Isilon 4-node X400 cluster used for home directory use, and has since updated to OneFS 7.0. The HR and Legal departments have been very strict about using only dedicated file servers that are part of a single, isolated, untrusted Active Directory domain. Their filer has been out of maintenance, and fears are being raised that, due to the age, it may fail at some point. What could the IT department do, to allow the HR and Legal

groups to provide file share services, with minimal impact to their other application permissions?

- A. Recommend a 2nd cluster for the HR/Legal department
- B. Utilize SmartPools to create two pools to separate the domains
- C. Consolidate onto a single cluster and merge the domains
- D. Use Access Zones for each domain

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 199

You are designing a new Isilon cluster that requires backup to tape for all files in the Legal and Accounting shared folders. The customer has sized their IP network to support the application workload, but no additional bandwidth is available.

What should be recommended for the backup solution?

- A. Use an Avamar NDMP accelerator and dedicated 10Gb/s network interfaces
- B. Use Backup Accelerator nodes for 2-way NDMP
- C. Use Backup Accelerator nodes for 3-way NDMP
- D. Use SmartConnect Advanced and 10Gb/s network interfaces with LACP

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 200

A customer's cluster contains three X200 (24 GB RAM, 3 TB drives) nodes, and three X400 (48 GB RAM, 1 TB drives) nodes. All nodes are configured in a single pool. All data is protected at N+2. After upgrading

OneFS to 7.0, the Isilon Web interface indicates that files are not fully protected.

What should be done to correct this situation?

- A. Recreate the original pool using the Isilon Web interface
- B. Add 24 GB RAM to each of the X200 nodes

- C. Recreate the original pool using the command line interface
- D. Add two X200 nodes and two X400 nodes

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 201

An administrator recently installed InsightIQ to gather cluster statistics, and wants to look at file system usage (such as the number of files in a directory). However, currently no file system statistics are displayed in InsightIQ after 24 hours. Use of the cluster is moderate, and occurs 24 hours per day. What job for InsightIQ should the administrator modify to successfully report these statistics?

- A. Change priority to 1 and job impact to High for Collect
- B. Change priority to 4 and job impact to Medium for FSAnalyze
- C. Change priority to 7 and job impact to Medium for SmartPools
- D. Change priority to 3 and job impact to Low for MultiScan

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 202

You have scheduled a meeting with a prospective customer in the Life Sciences vertical market. Which Isilon features should be presented to them?

- A. SmartLock, HDFS, SmartPools and SmartQuotas
- B. SmartPools, HDFS, 10 GigE support and SmartQuotas
- C. SyncIQ, SmartLock, HDFS and SmartConnect
- D. SyncIQ, Antivirus, 10 GigE support and HDFS

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 203

A Media and Entertainment company is considering changing from 2K resolution to 4K resolution. They will continue to use the DNxHD 220 codec. Assuming everything else stays the same, how will this change affect storage?

- A. Storage will be half as large
- B. Storage requirements will not change
- C. Storage will be twice as large
- D. Storage will be four times as large

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 204

Your customer is moving from a Restaurant/Bar business model to a Restaurant/Casino business model. You are helping architect the upgrade of a current 4-node X200 48 TB Isilon cluster, with 65% utilized for their video surveillance operations.

They wish to achieve the following:

Upgrade from 1280 x 720 resolution, with a 15 days retention policy, to 2048 x 1536 resolution with a 30

days retention policy.

What is the minimum number of nodes of the same type will you need to add in order to meet the required changes and not exceed 70% raw capacity?

- A. 6 nodes
- B. 10 nodes
- C. 14 nodes
- D. 18 nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 205

Your customer has a new business unit. They are gathering web log files to be analyzed. They are using Hadoop to do the analysis of the logs. The IT

department is centrally storing the log files on a five node Isilon cluster. They have enabled the Hadoop cluster to access the files directly. The nodes are X400's with two SSD drives in each node and 96GB of RAM.
How many DataNodes does the Isilon Cluster have?

- A. 1
- B. 5
- C. 10
- D. 15

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 206

A telecommunications company has a substantial amount of data. This data is being created by network elements within their environment. The company wants to change the way the network elements Call Detail Records (CDR) are stored and analyzed. The existing infrastructure consolidates all of the CDRs into a table structure, and then ingests them into a large database. Once ingested, a query engine accesses the database and performs analysis on these files. The system is functional; however, since the amount of CDRs generated will increase exponentially over the next year, the company is open to alternatives for storing and analyzing these records.
In evaluating alternatives, the key requirements are to reduce cost, the amount of storage, and the amount of time to analyze the data. The customer would like to use Hadoop to analyze the CDRs. After you have conducted an assessment of the workflow, you have recommended an Isilon Cluster to work within the Hadoop environment.
Which protocols would be the best fit when using Isilon for this customer's Hadoop workflow?

- A. NDMP and SCP
- B. NFS and HDFS
- C. CIFS and FTP
- D. SyncIQ and HTTP

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 207

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In evaluating alternatives, the key requirements are to reduce cost, the amount of storage, and the amount of time to analyze the data. The customer would like to use Hadoop to analyze the CDRs. After you have conducted an assessment of the workflow, you have recommended an Isilon Cluster to work within the Hadoop environment.

What would be the best recommendation to the customer for the workflow of Hadoop with Isilon?

- A. Copy the CDRs from the source to an Isilon cluster with NFS, then use Hadoop to analyze the information directly over HDFS
- B. Write the CDRs directly to an Isilon cluster with an NFS mount, then use Hadoop to analyze the information directly over HDFS
- C. Copy the CDRs from the source to an Isilon cluster with NFS, then ingest the information into Hadoop for analysis
- D. Write the CDRs directly to an Isilon cluster with an NFS mount, then ingest the information into Hadoop with NFS then analyze

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 208

A telecommunications company has a substantial amount of data. This data is being created by network elements within their environment.

The company wants to change the way the network elements Call Detail Records (CDR) are stored and analyzed. The existing infrastructure consolidates all of the CDRs into a table structure, and then ingests them into a large database. Once ingested, a query engine accesses the database and performs analysis on these files. The system is functional; however, since the amount of CDRs generated will increase exponentially over the next year, the company is open to alternatives for storing and analyzing these records.

In evaluating alternatives, the key requirements are to reduce cost, the amount of storage, and the amount of time to analyze the data. The customer would like to use Hadoop to analyze the CDRs. After you have conducted an assessment of the workflow, you have recommended an Isilon Cluster to work within the Hadoop environment.

Considering the customer's requirements, which is the best node type for the Isilon cluster?

- A. NL400 with 48GB RAM and no SSDs per node
- B. X400 with 96GB of RAM and no SSDs per node
- C. X400 with 24GB RAM and 1.6TB of SSD per node
- D. X200 with 24GB of RAM and 1.2TB of SSD per node

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:**QUESTION 209**

Your customer manages a print media environment, consisting of three Isilon clusters, which are out of support. The customer would like to have access to new software releases and feature sets. You have

been asked to perform a full discovery of the customer's environment.
The customer's current Isilon clusters are as follows:

"Cust" (12 x 12000X) serves as upload media storage for different tenants.

"Working" (8 x 12000X + 6 x X200) serves as a working zone for extraction to RAW and printing media from it.

"Archive" (16 x 72NL + Accelerator nodes) is used to store printed content for six months.

The customer operates in a Windows environment using SMB 2.0, two DNS servers per AD forest, three forest domains which are servicing three different environments. All servers are operating on a 1Gb network, three VLANs segregating the DEV/QA/PROD environments. Currently, there is no monitoring in place for performance measurement or optimization.

The requirements for this solution include:

-Better ROI and TCO -Maintain same performance with possible improvements -Renew HW/SW and get inclusive support -Limit migrations -Reduce space, power, cooling consumption -Get new feature sets -If migration required, use Parallel copy (multiple nodes, multiple threads, multiple connections) -Segregate tenant shares from other tenants -Expand up to 1PB of total storage What would you recommend be done to consolidate the three clusters into one?

- A. . Expand the largest and most I/O intensive cluster using SmartFail . Consolidate the remaining two clusters using Multithreaded version of RoboCopy . Modify A-Record and propagate to all DNS servers to point to the new cluster
- B. . Leave the clusters as is .
Upgrade drive sizes to meet the customer requirements
- C. . Expand the largest and most I/O intensive cluster using SmartFail . Consolidate the remaining two clusters using SyncIQ
- D. . Build a new cluster for consolidation
. Use SnapshotIQ to migrate the existing data onto the new consolidated cluster . Spoof DNS to point to the new cluster

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 210

Your customer manages a print media environment, consisting of three Isilon clusters, which are out of support. The customer would like to have access to new software releases and feature sets. You have been asked to perform a full discovery of the customer's environment. The customer's current Isilon clusters are as follows:

"Cust" (12 x 12000X) serves as upload media storage for different tenants.

"Working" (8 x 12000X + 6 x X200) serves as a working zone for extraction to RAW and printing media from it.

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forest domains which are servicing three different environments. All servers are operating on a 1Gb network, three VLANs segregating the DEV/QA/PROD environments. Currently, there is no monitoring in place for performance measurement or optimization.

The requirements for this solution include:

-Better ROI and TCO -Maintain same performance with possible improvements -Renew HW/SW and get inclusive support -Limit migrations -Reduce space, power, cooling consumption -Get new feature sets -If migration required, use Parallel copy (multiple nodes, multiple threads, multiple connections) -Segregate tenant shares from other tenants -Expand up to 1PB of total storage Which licenses need to be defined for the solution to perform optimally?

- A. HDFS, SmartQuotas, SnapshotIQ, InsightIQ
- B. SmartPools, SnapshotIQ, SyncIQ, SmartLock
- C. InsightIQ, SmartPools, SyncIQ, SmartConnect Advanced
- D. SyncIQ, InsightIQ, SmartPools, Platform API

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 211

A customer wants to replace a legacy storage environment used for high definition video editing. Each workstation connecting to the shared storage needs to sustain 650 MB/s of single stream bandwidth. Which node type is recommended?

- A. Performance Accelerator nodes
- B. NL-Series nodes

- C. X-Series nodes
- D. S-Series nodes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 212

Which process is used to protect file system structures against corruption through 32-bit CRC checksums?

- A. Media Scan
- B. Isilon Data Integrity
- C. File System Journal
- D. Dynamic Sector Repair

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:



QUESTION 213

Which level of control does RBAC provide for cluster administration roles?

- A. Object level restrictions
- B. Domain specific restrictions
- C. Activity level restrictions
- D. Activity and object level restrictions

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 214

Which type of antivirus scan is unsupported by Isilon OneFS?

- A. Individual files
- B. Policy scan
- C. MultiScan
- D. On-access

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 215

How many impact policy levels are available when configuring Isilon jobs?

- A. 2
- B. 3
- C. 4
- D. 5



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 216

A customer environment is used for analytics on very large datasets. They are interested in using Isilon storage and Hadoop but are concerned about the costs.

How does Isilon change the scalability of a Hadoop environment?

- A. JobTracker and TaskTracker are offloaded to the Isilon cluster
- B. DataNode and TaskTracker are offloaded to the Isilon cluster
- C. NameNode and DataNode are offloaded to the Isilon cluster
- D. NameNode and JobTracker are offloaded to the Isilon cluster

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 217

Where does Endurant Cache stage its write cache?

- A. SSD
- B. DISK
- C. NVRAM
- D. DRAM

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:



QUESTION 218

When a client requests a file to read from an Isilon cluster, in which order does the read operation access the hardware in a node?

- A. Endurant Cache, L1 cache, disk
- B. L2 cache, L1 cache, disk
- C. Disk, L2 cache, Endurant Cache
- D. L1 cache, L2 cache, disk

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 219

In an Isilon cluster, what is the largest number of nodes that a single file can be striped across?

- A. 10

- B. 20
- C. 30
- D. 40

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 220

What is the smallest unit of data that Isilon OneFS will write to disk?

- A. 4 KB
- B. 8 KB
- C. 16 KB
- D. 128 KB

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 221

Given a 5-node Isilon cluster configured with an N+2 protection level, how many nodes can be offline with the data accessible and fully writeable?

- A. 1
- B. 2
- C. 3
- D. None

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 222

If a customer experiences a node failure while at 90% capacity, what is the fastest way of replacing the node in an Isilon cluster?

- A. Perform Disk Tango
- B. Perform a disk SmartFail
- C. Perform FlexProtect
- D. Perform a node SmartFail

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 223

When using an N+2:1 protection policy on a 7-node Isilon cluster, how much capacity will be used to store a 510 KiB file?

- A. 638 KiB
- B. 640 KiB
- C. 766 KiB
- D. 768 KiB



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 224

If an Isilon customer has an environment that requires usage data for chargeback, for analyzing usage trends and for capacity planning, which type of quota enforcing option should be used?

- A. Advisory
- B. Soft
- C. Hard
- D. Thin

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 225

In an Isilon environment, which event will avoid Dynamic IP Address reallocation?

- A. Client is added to the cluster
- B. Failure of the back-end network
- C. Node reboot
- D. Cluster split

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference: