

# EMC

## Exam E20-555

### Isilon Solutions and Design Specialist Exam for Technology Architects

Version: 6.2

[ Total Questions: 225 ]

**Question No : 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

**Answer: A**

**Question No : 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

**Answer: B**

**Question No : 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

**Answer: A**

**Question No : 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

**Answer: A**

**Question No : 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

**Answer: A**

**Question No : 6**

How many layers are in the Isilon clustering architecture?

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

**Answer: B**

**Question No : 7**

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

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

**Answer: A**

**Question No : 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

**Answer: A**

**Question No : 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

**Answer: D**

**Question No : 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

**Answer: C**

**Question No : 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

**Answer: A**

**Question No : 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****Answer: A****Question No : 13**

An Isilon customer wants a job to periodically validate 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

**Answer: A****Question No : 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

**Answer: A****Question No : 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

**Answer: A**

**Question No : 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

**Answer: A**

**Question No : 17**

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

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

**Answer: A**

**Question No : 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

**Answer: B**

**Question No : 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

**Answer: B**

**Question No : 20**

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

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

**Answer: D**

**Question No : 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

**Answer: A**

**Question No : 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.

**Answer: A**

**Question No : 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

**Answer: A**

**Question No : 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

**Answer: A**

**Question No : 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