



Nutanix Certified Systems Engineer Core Exam

Welcome!

Today you will be taking the **Nutanix Certified Systems Engineer Core** exam.

The time you have to complete this exam is: **120 minutes**

The number of items in this exam is: **75**

The passing score for this exam is: **3000**

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1.-

An HA event occurs, which causes a SQL virtual machine to restart on a different node.

What impact will this action have on **Data Locality**?

- ☐ All VM data will be simultaneously migrated as part of the VM migration.
- ☒ VM data will remain as originally written and reads will occur across the network.
- ☐ Active VM data will be localized.
- ☐ Data on adjacent nodes will be localized.

2.-

A customer intends to build out their VDI environment over a period of 18 months. They require a consistent user experience as their numbers grow.

What element of the Nutanix WebScale architecture would a systems engineer discuss with them?

- ☐ Nutanix can run on multiple hardware vendor platforms
- ☐ All intelligence in software
- ☒ Linear performance with predictable scaling
- ☐ No single point of failure

3.-

When discussing node failures, a customer raises the concern that if a node that hosts 100TB of data goes offline, rebuilding data must take an extended period of time.

Which feature of the Nutanix solution should the systems engineer point out to address this issue?

- ☐ Use of redundant hypervisor boot-drives
- ☒ Distribution of rebuild tasks across all nodes
- ☐ Support for all-flash or NVMe platforms
- ☐ Leveraging a replication-factor of 3

4.-

One of a prospective customer's security analysts asks about Nutanix's security functionality. The security analyst asks if Nutanix has any feature or capability that reduces the effort required to assess the security within the Nutanix infrastructure.

Which benefit does Nutanix SCMA provide to this prospect?

- ☐ Automatically updates/patches cluster components to the latest code levels
- ☒ Automates security compliance checking and remediation
- ☐ Notifies the customer of newly discovered/announced vulnerabilities
- ☐ Enables One-Click remediation of non-compliant security settings

5.-

Which functionality allows workloads to continue to run on the host when an AOS upgrade occurs?

- ☐ High Availability
- ☐ Acropolis Dynamic Scheduler
- ☒ CVM Autopathing
- ☐ Autonomous Extent Store

6.-

What are two key Nutanix value propositions? (Choose two.)

- ☐ Rapid time to value
- ☐ Highest performance across all workload types
- ☒ One-Click Infrastructure Management
- ☒ Lowest initial cost than a comparable competitive HCI or 3-tier solution

7.-

A customer previously purchased a Nutanix solution of nine NX-3060-G7 nodes. The customer asks for help to increase the resiliency of their environment after power outages to individual racks in their datacenter.

Their current solution consists of two NX-3460-G7 blocks and a single NX-3160-G7 block placed in a single rack.

What should the systems engineer recommend to this customer?

- ☐ Move one node from each NX-3460 blocks over to the NX-3160 blocks. Enable Block Awareness.
- ☐ Buy one additional node and place it into the NX-3160 block. Spread the blocks over three racks. Enable Rack Awareness.
- ☐ Buy three additional NX-3060 upgrade nodes and place them into the NX-3160 block. Enable Rack Awareness.
- ☒ Move one node from each NX-3460 into the NX-3160 block. Spread the blocks over three racks and enable Rack Awareness.

8.-

A prospect customer's expected workload consists of the following:

- 110 vCPUs
- 512Gb RAM
- 500TB Storage

They need a solution to help decrease storage costs. The majority of their storage requirements come from an imaging application that stores scanned JPEG images.

Which two Nutanix capabilities should be leveraged? (Choose two.)

- ☒ Erasure Coding
- ☒ Storage-Only Nodes
- ☐ Capacity Tier Deduplication
- ☐ Compression

9.-

A prospective customer uses both Oracle and Microsoft products for critical applications. The prospect prefers an all flash array over HCI, because they have made a recent, significant investment in physical servers for their Oracle environment to save on licensing costs.

Which feature should be discussed to address this objection?

- ☒ Volumes
- ☐ VM Flash Mode
- ☐ Hyper-V support
- ☐ AHV

10.-

A prospective customer wants to refresh their current on-premises infrastructure that consists of 4 ESXi hosts, each with 20 cores and 512GB of RAM, and 1.2PB of usable SAN storage. They have recently renewed their ESXi licensing, and all data must remain within their physical network.

They are concerned that a hyperconverged solution will not meet their storage requirements without requiring a significant increase in the number of required ESXi hosts and licenses.

Which Nutanix capability should the systems engineer review with the customer?

- ☒ Position storage-only nodes.
- ☐ Use Volumes to provide storage.
- ☐ Build Clusters on a public cloud.
- ☐ Replace the hypervisor with AHV.

11.-

Which tool could be used to perform a sizing discovery in a general server virtualization environment running both VMware ESXi and Nutanix AHV?

- ☐ RVTools
- ☐ MAP
- ☒ Collector
- ☐ AWR

12.-

In the event of a primary datacenter failure, a customer wants to power on virtual machines in a secondary datacenter with an RPO and RTO of no more than 15 minutes. Upon further discussions with the customer, the systems engineer (SE) finds that round trip latency between the 2 sites can reach up to 6ms.

Which Nutanix feature should the SE recommend?

- ☐ Fault Tolerance FT1
- ☒ NearSync
- ☐ Rack Awareness
- ☐ Metro Availability

13.-

A systems engineer sizes an environment based on the customer's requirement of N+2 resiliency for the entire cluster.

In which two ways could the configuration be changed to meet the customer's requirements? (Choose two.)

- ☒ Increase the RAM capacity per Node
- ☐ Increase the SSD capacity per Node
- ☒ Increase the number of Nodes
- ☐ Increase the CPU capacity per Node

14.-

A systems engineer is creating a workload for a Sizer Scenario that requires Disaster Recovery (DR) resources with a Recovery Point Objective (RPO) of 6 hours. The "Protect VMs and other Entities" setting is set to Yes. Async is selected for the RPO.

Which two other options must be enabled to have Sizer create a DR cluster? (Choose two.)

- ☒ Disaster Recovery
- ☐ NearSync
- ☒ Remote SnapShot
- ☐ Backup

15.-

A healthcare prospect looking to refresh their infrastructure with Nutanix has an initiative to migrate 5 petabytes of unstructured, archived patient data.

Which Nutanix product should be the focus of the discussion?

- ☐ Mine
- ☐ Volumes
- ☒ Objects
- ☐ Files

16.-

Refer to the exhibit:

Model Type

☒ Data Center Models ⓘ

☐ Robo Models ⓘ

☐ Velocity Models ⓘ

Cluster Type

☐ Homogeneous ⓘ

☒ Mixed ⓘ

Failover

☐ Aggressive (N+0) ⓘ

☒ Standard (N+1) ⓘ

☐ Conservative (N+2) ⓘ

Storage

☐ Any ⓘ

☒ All Flash ⓘ

☐ Hybrid ⓘ

☒ Limit Max Node Count Per Cluster ⓘ

☐ Max Budget Per Cluster ⓘ

Data Center Models 14 / 14 selected

☒ All Models

☒ NX-1065-G7

☒ NX-1065-G7-Mine

☒ NX-1075S-G7

☒ NX-3055G-G6

☒ NX-3055G-G7

Using the Sizing Options shown, which two configurations are possible configurations that Sizer could provide in Automatic mode? (Choose two.)

- ☒ 6x NX-3060-G7 (6x 1920GB SSDs per node)
- ☒ 3x NX-3060-G7 (2x 1920GB SSDs per node) + 3x NX-1075S-G7 (4x 3.84TB SSDs per node)
- ☐ 4x NX-1075S-G7 (4x 3.84TB SSDs per node) + 4x NX-8035-G7 (6x 3.84TB SSD per node)
- ☐ 6x NX-8055-G7 (2 x 7.68TB SSD + 10x 6TB HDD per node)

17.-

What are two things that the ADS service does for VMs within AHV? (Choose two.)

- ☒ Balance VMs throughout the Cluster when the VM is first powered on
- ☒ Invoke workload movement if there is contention of resources
- ☐ Re-balance powered-on VMs evenly throughout the cluster
- ☐ Invoke workload movement when there is no contention of resource

18.-

A prospective customer asks about failure handling. They have heard all HCI is the same and want to know what happens if 2 nodes fail within 1 hour of each other.

If there is capacity in the cluster, how will this failure scenario be handled?

- ☐ Every block of data is written to every node in a Nutanix cluster.
- ☐ The Nutanix RAID array will leverage the hot spare.
- ☒ Nutanix begins rebuilds immediately on a failure.
- ☐ Nutanix waits 60 minutes to recover from failures: data loss may occur.

19.-

When reviewing Nutanix cluster upgrades, a customer engineer is concerned that their VM will be forced to repeatedly migrate between nodes.

Which Nutanix feature allows VMs to remain on a host during an AOS upgrade?

- ☐ RF3
- ☒ CVM Autopathing
- ☐ Shadow Clones
- ☐ Data Locality

20.-

A customer asks for a quote for a hybrid cluster to run general purpose VMs and an ERP application. The customer has a VSAN ReadyNode quote already and is looking for a comparable Nutanix solution. They share the following bill of materials:

- 3 Hosts
- 2x E5-2640v4 CPUs
- 512GB RAM
- 1 x 480GB SSD
- 2 x 8TB HDD
- 2 x 1GB NIC

What are two reasons to avoid sizing to match a competitor's bill of materials? (Choose two.)

- ☒ There is no visibility to the actual customer requirements.
- ☐ Nutanix Collector is better at capturing the metrics needed.
- ☐ Sizing data from the competitor was shared.
- ☒ The assumptions made in the competitor's sizing cannot be determined.

21.-

A systems engineer is sizing a configuration for a cluster that needs to tolerate up to 2 simultaneous disk failures across different nodes.

What is the minimum number of nodes required?

- ☐ 3
- ☐ 4
- ☒ 5
- ☐ 6

22.-

An 8-node hybrid cluster is configured with a Fault Tolerance level of 2 (RF3). All nodes are identical.

Which simultaneous failures will result in VM data being unavailable?

- ☐ Single SSD failure on one node and a single SSD failure on another node.
- ☒ SSD failures on two nodes and a CVM powered off on another.
- ☐ CVM being powered off on one node and two HDD failures on another node.
- ☐ Two HDD failures on one node and a single SSD failure on another node.

23.-

A prospective customer wants to migrate database workloads to Nutanix. They are currently running these workloads on a 3-tier vSphere architecture made up of 5 hosts connected to a hybrid SAN over 10G iSCSI. The hosts each have 256G RAM and 2 Broadwell 2.8 Ghz 12 core processors. The largest database VM is configured with 64G of memory. Some databases are fairly old and single threaded. Current performance is deemed acceptable.

Which configuration component is most important to maintain the customer experience on a new Nutanix cluster and minimize costs?

- ☒ Make sure the cluster uses similar speed processors regardless of generation.
- ☐ Make sure the cluster is all flash to speed up data access.
- ☐ Make sure the cluster uses 25G nics to speed up the network.
- ☐ Make sure the cluster uses 512G per host to protect NUMA boundaries.

24.-

What is an important consideration when using RVTools output for sizing a solution?

- ☐ No information on the physical hosts is collected.
- ☐ Only powered on VMs are included in the data.
- ☒ It is a point in time snapshot of the environment.
- ☐ It only captures provisioned storage.

25.-

A prospective customer's migration to their new SAN started six months ago and is still not complete. The VP of IT states the previous migration to the existing SAN took almost eight months to complete.

How should the systems engineer describe Nutanix hardware refreshes to this prospective customer?

- ☐ With AHV, vMotion between clusters occurs faster than on a SAN-based cluster.
- ☒ New nodes can be added to an existing cluster, and then the old nodes can be removed.
- ☐ Manual hardware refreshes take time, and the systems engineer understands the customer's current situation.
- ☐ Setting an AHV node's EVC mode is a very fast process that will shorten the upgrade time.

26.-

A customer is running AHV in their Nutanix cluster and wants to provide their users with the ability to restore individual files from snapshots.

What is the minimum level of licensing that must be applied to the Nutanix cluster?

- ☐ Pro with the **Advanced Replication SKU**
- ☐ Ultimate
- ☐ Starter
- ☒ Pro

27.-

During an initial discussion, a prospective customer indicates they are strongly considering VSAN for their HCI initiative. The prospect's workloads are mostly read-intensive and they have over 1PB of archival data. The prospect expects to save on costs using storage efficiencies that their existing platform does not support.

Which two Nutanix differentiators should the systems engineer discuss? (Choose two.)

- ☐ CVM Autopathing
- ☐ Volume Group Load Balancing
- ☒ Compression on Hybrid Nodes
- ☒ Data Locality

28.-

A customer's database administrator is concerned about restoring data locality for their VMs after they migrate during an AHV upgrade.

Which feature that addresses the issue should the systems engineer highlight?

- ☒ AHV's built-in scheduler automatically restores data locality.
- ☐ All VM data is moved from the source to the destination node with the VM.
- ☐ Mirroring the database on two VMs eliminates the need for data locality.
- ☐ Shadow clones mitigate the need for data locality.

29.-

Which AOS feature provides enhanced read performance specifically for virtual desktop environments?

- ☐ Copy on First Write
- ☒ Shadow Clones
- ☐ Data Locality
- ☐ Time Stream

30.-

When creating a multi-cluster scenario in Sizer, what does the Summary Failover Capacity indicator (N+0, N+1) display?

- ☒ The indicator shows the worst resiliency level of any cluster in the scenario.
- ☐ The indicator shows the best resiliency level of any cluster in the scenario.
- ☐ N+0, if the CPU utilization for all clusters falls below N+1 resiliency.
- ☐ N+0, if the RAM utilization for all clusters falls below N+1 resiliency.

31.-

An online retailer currently supports over 200 separate PostgreSQL database instances, often with more than 10 copies of each individual database. Their Database Administrators have scripted much of the deployment process for creating dev/test copies, but their infrastructure team struggles to keep up with storage capacity demands.

Which Nutanix product should the systems engineer position?

- ☐ Calm
- ☐ Karbon
- ☒ Era
- ☐ Beam

32.-

Refer to the exhibit:

	A	B	C	D	E	F	G	H	I
1	VM	Powerstate	CPU	Memory GB	Provisioned MB	In Use MB	Datacenter	Cluster	Host
2	srv01	poweredOn	2	2	49,403	40,961	PrimaryDC	General	pdcesxi1.domain.local
3	srv02	poweredOn	2	2	55,439	18,148	PrimaryDC	General	pdcesxi1.domain.local
4	srv03	poweredOn	4	2	53,385	34,392	PrimaryDC	General	pdcesxi2.domain.local
5	srv04	poweredOn	4	2	78,010	64,664	PrimaryDC	General	pdcesxi1.domain.local
6	srv05	poweredOn	2	4	55,427	55,427	PrimaryDC	General	pdcesxi2.domain.local
7	srv06	poweredOn	2	4	139,667	108,955	PrimaryDC	General	pdcesxi1.domain.local
8	srv07	poweredOn	2	16	159,913	159,913	PrimaryDC	General	pdcesxi1.domain.local
9	srv08	poweredOn	2	16	45,205	45,205	PrimaryDC	General	pdcesxi1.domain.local
10	srv09	poweredOn	8	16	67,749	67,749	PrimaryDC	General	pdcesxi2.domain.local
11	srv10	poweredOn	4	16	119,509	12,700	PrimaryDC	General	pdcesxi2.domain.local
12		Total	32	80	823,707	608,114			
13									
14	Host	Datacenter	Cluster	# CPU	Cores per CPU	Speed MHz	Memory GB		
15	pdcesxi1.domain.local	PrimaryDC	Prod	2	4	2,399	128		
16	pdcesxi2.domain.local	PrimaryDC	Prod	2	4	2,399	128		

A prospective customer provides the data shown captured from their existing environment using RVTools. The prospect has additional historical CPU utilization data that indicates peak CPU utilization never exceeds 50% on either physical host, but they want to keep their current vCPU:pCore ratio.

Based on the data provided, which vCPU:pCore ratio should be used for the Raw Input workload in Sizer?

- ☐ 2:1
- ☐ 3:1
- ☒ 4:1
- ☐ 5:1

33.-

Based on their current workload, a customer requests the systems engineer to create a solution that does not exceed 80% CPU utilization when a node is placed in maintenance mode (N+0).

When creating the Sizer Scenario in Automatic Mode, how can the systems engineer accomplish this?

- ☐ Modify the solution by adding compute only nodes to the cluster.
- ☐ Use Customize to increase the CPU Core count until the CPU utilization is 80%.
- ☒ Customize the CPU threshold in the scenario's sizing options.
- ☐ Select a higher-end processor when defining the workload.

34.-

A systems engineer needs to size a new project that requires offsite backup using Veeam. The prospect requires an RPO of 24 hours, and the ability to restore from the past 7 days of backups. The prospect's data change rate is 1%.

How should the SE configure Sizer for this scenario?

☒ Backup ⓘ

☐ No

☒ Yes

Recovery Point Objective ⓘ

24 Min 0 hours - Max 100 hours

Number of Backup Cycles ⓘ Min 1 - Max 100

1

Full Backups per Cycle ⓘ Min 1 - Max 10

1

Incremental Backups per Cycle ⓘ Min 1 - Max 50

6

Retention in Days ⓘ

7

35.-

A prospective customer is evaluating solutions to support a project. The systems engineer proposes a hybrid model as recommended by Sizer. The prospect is concerned about the performance of a hybrid configuration and is evaluating an all flash array.

Which two Nutanix features should be discussed to address the concerns of the prospective customer? (Choose two.)

☐ Data Locality

☒ Automatic Data Tiering

☐ Acropolis Dynamic Scheduler

☒ AHV Turbo Mode

36.-

Over what period of time does the Nutanix Collector provide performance data?

☐ User definable at collection

☐ Previous 7 days

☐ Previous 24 hours

☒ Point in time at collection

37.-

Which two items are considered by Sizer when calculating the required cluster resources with only the **Raw Input** workload type for a multi-VM workload? (Choose two.)

- ☐ The vCPU:upCore ratio applied for specific VMs
- ☐ Large VM NUMA requirements
- ☒ The vCPU:upCore ratio applied to all VMs
- ☒ The required RAM for the CVM

38.-

Which function does the **Curator** service perform?

- ☐ Starts and stops other cluster services
- ☐ Stores cluster configuration
- ☒ Distributes storage optimization tasks
- ☐ Schedules snapshots

39.-

An existing customer wants to upgrade their non-AHV hypervisor to the most recent version. The customer needs to confirm that the hypervisor is supported on their AOS version.

Where on the Support Portal is this information located?

- ☐ Field Advisories
- ☐ Upgrade Paths
- ☒ Compatibility Matrix
- ☐ EOL Information

40.-

A prospective customer indicates a requirement to replicate data offsite for a production workload.

Which two questions should the systems engineer ask about the prospect's requirement? (Choose two.)

- ☒ How much data needs to be replicated?
- ☐ What OS will be deployed on the server VMs?
- ☒ What are the retention requirements?
- ☐ What compression ratio does your application require?

41.-

A prospective customer has a requirement for Data-at-Rest-Encryption for all their data.

Which two license options are available to address this requirement? (Choose two.)

- ☒ Pro with the **Encryption SKU**
- ☐ Starter with the **Encryption SKU**
- ☒ Ultimate
- ☐ Pro

42.-

Refer to the exhibit:

	A	B	M	N	Q	AF	AG
	VM	Powerstate	CPUs	Memory	Disks	Provisioned MB	In Use MB
10	VM03	poweredOff	2	4,096	1	46,056	14,457
11	VM02	poweredOff	2	4,096	1	47,390	15,727
12	VM146	poweredOn	2	4,096	2	16,549	16,549
14	VM120	poweredOn	1	4,096	1	45,241	18,477
15	VM51	poweredOff	6	16,384	1	37,669	20,483
16	VM142	poweredOff	4	16,384	1	37,217	20,488
17	VM37	poweredOff	4	16,384	1	37,219	20,489
18	VM122	poweredOn	2	4,032	1	33,862	21,678
19	VM61	poweredOn	2	2,048	1	22,638	22,638
20	VM112	poweredOn	4	16,384	1	38,739	26,262
21	VM09	poweredOn	2	4,032	1	32,797	26,934
22	VM01	poweredOff	2	4,096	1	39,013	30,088
23	VM62	poweredOn	2	2,048	1	52,387	32,676
24	VM134	poweredOn	2	4,096	1	45,249	33,697
25	VM144	poweredOn	1	2,048	1	34,980	34,980
26	VM143	poweredOn	4	8,192	1	49,340	35,286
27	VM111	poweredOn	4	16,384	1	42,337	36,003

What information can be gathered about the configuration of the VM storage?

- ☒ Majority of VMs are Thin Provisioned.
- ☐ Total disk usage is high.
- ☐ Storage capacity is a problem.
- ☐ VMs have many disks.

43.-

Refer to the exhibit.

The screenshot shows the Nutanix Sizer interface. At the top, there are tabs for 'Workloads' and 'Solution'. Below these are 'Sizing Options' (Automatic, Homogeneous, Any) and 'License' (Pre, Production, 3 Years). The 'Hardware Support' section shows 'Production, 36 Months (3 Years)'. The 'Sizing Summary' section displays four circular progress indicators for CPU (45%), RAM (68%), HDD (64%), and SSD (68%) usage. Below this is a 'Hardware Summary' table with columns for Cluster, Model, Quantity, Cores, RAM (GB), HDD (TB), and SSD (TB). The table shows 3 nodes of model NX-8055-G7 with 16 cores, 256 GB RAM, 80 TB HDD, and 768 TB SSD.

A systems engineer is creating a configuration in Sizer for a customer that is building an app for use as an ebooks repository. The app requires the following two workloads:

- 50 generic web server VMs, each with 2 vCPUs on a 4:1 vCPU:CPU ratio, 8 GB of RAM, and 100GB of storage each
- A fileserver workload with 80TB of usable storage available, which contains mostly PDFs and pre-compressed data

Any reduction in performance of the web servers must be avoided. After entering the workloads with default options, the Sizer outputs the configuration shown in the exhibit.

Which adjustment does the systems engineer need to make to the scenario to meet the performance requirements?

- ☒ Switch to manual sizing and increase the RAM of the node configuration to 384 GB.
- ☐ Switch to manual and change the CPUs of the node configuration to a dual 10 core model.
- ☐ Increase the RAM of the webserver workload to 10 GB per VM.
- ☐ Increase the vCPU:CPU ratio of the Webserver workload to 6:1.

44.-

A customer needs to increase availability in their Nutanix environment by enabling rack awareness. The current configuration consists of:

- 1 RF2 cluster consisting of 7 identical NX-3170 1U nodes
- All storage efficiencies are disabled
- All nodes are in a single rack

Which two changes should the systems engineer propose to meet the customer requirements? (Choose two.)

- ☒ Distribute nodes across 3 separate racks.
- ☒ Add 2 additional NX-3170 1U nodes.
- ☐ Distribute nodes across 2 separate racks.
- ☐ Add 1 additional NX-3170 1U node.

45.-

Refer to the exhibit:

	A	B	M	O	AF	AG
1	VM	Powerstate	CPUs	Memory (GB)	Provisioned MB	In Use MB
2	VM01	poweredOff	2	4	39,013	30,088
3	VM02	poweredOn	2	4	47,390	15,727
4	VM03	poweredOff	2	4	46,056	14,457
5	VM04	poweredOn	4	8	109,856	81,921
6	VM05	poweredOn	4	8	49,343	49,343
7	VM06	poweredOn	4	8	49,343	49,343
8	VM07	poweredOn	8	16	1,065,132	1,065,132
9	VM08	poweredOn	2	4	161,312	161,312
10	VM09	poweredOff	2	4	32,797	26,934
11	VM10	poweredOn	1	4	45,244	45,244

A prospective customer provides RVTools data from their existing environment and only wants to size for those VMs in use. When entering a Raw Input workload into Sizer, what amount of RAM should be used for the workload?

- ☐ 42 GB
- ☐ 48 GB
- ☒ 52 GB
- ☐ 64 GB

46.-

Refer to the exhibit.

Automatic **Manual** B

Model Type

- ☒ Data Center Models C
- ☐ Robo Models
- ☐ Velocity Models

Data Center Models 14 / 14 selected

- ☒ All Models
- ☒ NX-1065-G7
- ☒ NX-1065-G7 Mine
- ☒ NX-1075S-G6
- ☒ NX-1075S-G7
- ☒ NX-3055G-G6
- ☒ NX-3055G-G7

Solution Options

- ☐ Flow
- ☐ Prism Pro
- ☐ Files
- ☐ Calm

Cluster Type

- ☒ Homogeneous A
- ☐ Mixed

Replication

- ☐ Aggressive (N+0)
- ☒ Standard (N+1)
- ☐ Conservative (N+2)

Storage

- ☒ Any
- ☐ All Flash
- ☐ Hybrid

Threshold D

CPU

RAM

HDD

SSD

☐ Limit Max Node Count Per Cluster

☐ Max Budget Per Cluster

In Sizer, in which two ways can a systems engineer accommodate a specific number of physical host-based software licenses that a customer has available for a project? (Choose two.)

- ☐ A
- ☒ B
- ☐ C
- ☒ D

47.-

A prospective customer is concerned about having a single-pane-of-glass manage their infrastructure because it also provides a single-point-of-failure.

How does the Nutanix Prism architecture address this concern?

- ☐ Prism uses Linked Mode for HA.
- ☒ Prism runs on every CVM.
- ☐ Prism is deployed in a 3-node HA configuration.
- ☐ Prism is protected by RF2.

48.-

A systems engineer provides a demo to a prospective customer who wants to be more hands on with Nutanix.

Which two resources can the customer leverage without support from a systems engineer or Nutanix? (Choose two.)

- ☒ Community Edition (CE)
- ☒ Test Drive
- ☐ Foundation
- ☐ Hosted POC (HPOC)

49.-

How long must data be 'write-cold' before Erasure Coding can begin optimization?

- ☐ 1 hour
- ☐ 6 hours
- ☐ 1 day
- ☒ 7 days

50.-

A prospective customer is concerned about the suitability and design of using Nutanix for an upcoming Avaya IP Office migration.

Which type of document should the systems engineer (SE) provide?

- ☐ Best Practice Guide
- ☐ Knowledge Base Article
- ☐ Field Advisory
- ☒ Reference Architecture

51.-

A customer needs to image nodes that are either bare metal or require a different hypervisor.

Which Nutanix tool should be used?

- ☐ Prism Central
- ☐ Move
- ☒ Foundation
- ☐ Era

52.-

When using Nutanix Sizer, which solution does the Automatic sizing option provide?

- ☐ A solution that meets provided requirements, plus a default 25% growth capacity
- ☐ The highest performance solution that meets the provided requirements
- ☐ A solution that balances cost and performance, plus a default 25% growth capacity
- ☒ The lowest cost solution that meets the provided requirements

53.-

A customer wants to decrease costs and increase efficiency by eliminating NAS silos and adopting a cloud-like mindset.

Which Nutanix product meets these requirements?

- ☒ Nutanix Files
- ☐ Nutanix Calm
- ☐ Nutanix Xi Frame
- ☐ Nutanix Beam

54.-

A customer needs a tool packaged as a VM that uses realistic workloads paired with real-world test scenarios for HCI environments. The goal is to benchmark performance during typical workflows and failure events.

Which Nutanix tool meets these requirements?

- ☒ X-Ray
- ☐ Foundation
- ☐ Cluster Check
- ☐ Move

55.-

Refer to the exhibit:

Hardware Summary

Cluster	Model	Quantity	Cores	RAM	HDD / SSD NVMe	SSD
Cluster-1	NX-3060-G6	26	32 Cores	512 GB		3.84 TB

Sizing Summary

Quantity	26	CPU 85% Usage	RAM 86% Usage	HDD 0% Usage	SSD 74% Usage
Typical Power (kWh)	11.9				
Rack Space	14				

Sizing Details

Workload Name	Workload Type	VMs	Cores	RAM (TiB)	HDD (TiB)	SSD (TiB)
Customer Care	VDI	5,000.00	685.71	10.06	11.51	12.90
Total		5,000.00	685.71	10.06	11.51	12.90

A customer needs to deploy 5000 virtual desktops on Nutanix. The requirements call for an active/active deployment, such that an entire site can be made unavailable due to maintenance or disaster without impacting desktop availability.

What is the minimum number of nodes necessary to meet the customer's requirements?

☐ 13
☐ 26
☒ 52
☐ 104

56.-

What is the main function of Oplog?

☐ A persistent write buffer to coalesce all writes before destaging to the extent store
☐ A memory cache to coalesce bursts of random writes before destaging to the extent store
☒ A persistent write buffer to coalesce bursts of random writes before destaging to the extent store
☐ A memory cache to coalesce all writes before destaging to the extent store

57.-

A customer is evaluating Nutanix to replace their existing 200TB filer. The filer is used to store archived images. To achieve maximum storage density, RF2 and Erasure Coding are proposed.

What is the minimum number of nodes required to support the maximum Erasure Coding stripe size of 4/1 (data/parity)?

- ☒ 4 Nodes
- ☐ 5 Nodes
- ☐ 6 Nodes
- ☐ 7 Nodes

58.-

A systems engineer (SE) is gathering requirements to size a hybrid cluster to replace a prospect's existing IT test and development environment. The prospective customer has indicated the cluster contains no business critical applications and has provided the aggregate vCPU and RAM requirements of the existing cluster.

Which two additional items does the SE require to size the cluster? (Choose two.)

- ☒ Storage Capacity
- ☒ Working Data Set
- ☐ Existing Drive Count
- ☐ Virtual Switch Configuration

59.-

A systems engineer is building a solution for a federal government prospect that requires FIPS 140-2 Level 2 encryption for data at rest.

Which two items are required to deliver a solution that meets the encryption standard? (Choose two.)

- ☐ Nutanix Software Encryption
- ☒ Self-Encrypting Drives
- ☒ A supported Key Management Server
- ☐ Nutanix Prism Pro Licensing

60.-

An IT Manager is struggling to keep up with the ever-increasing demands from the business to provide services more quickly. The main problem relates to the existing architecture and a mix of vendors who are slow to release updates to their products.

Which core facet of WebScale architecture should the Nutanix systems engineer discuss?

- ☐ Continuous innovation
- ☐ Rich analytics
- ☒ One-Click upgrades
- ☐ Enterprise class features

61.-

Which CVM service is responsible for providing storage to the hypervisor?

- ☐ Zookeeper
- ☐ Genesis
- ☐ Curator
- ☒ Stargate

62.-

In addition to the total number of physical CPU cores, which hardware component is used to calculate the cost of Capacity Based Licensing for a Nutanix Cluster?

- ☒ RAW SSD storage (in TiB)
- ☐ RAW total storage (in TiB)
- ☐ RAW HDD storage (in TiB)
- ☐ RAM (in TiB)

63.-

Which two collection tool outputs can be imported into Nutanix Sizer? (Choose two.)

- ☒ Collector
- ☐ MAP
- ☐ Live Optics
- ☒ RVTools

64.-

A customer performs a 1-click, non-disruptive upgrade on a 3-node Nutanix cluster. While the CVM on Node A is rebooting, a VM on Node A overwrites an existing block of data.

How does Nutanix AOS ensure data integrity during the upgrade?

- ☒ AOS writes two copies across the remaining nodes to maintain resiliency.
- ☐ AOS leverages Erasure Coding to maintain resiliency.
- ☐ AOS marks the replica as read only and waits until the original replica is back online to prevent corruption.
- ☐ AOS only overwrites the available copy and waits until the original copy is back online before restoring resiliency.

65.-

Compared to a 3-tier architecture, which two benefits does Nutanix bring to an organization? (Choose two.)

- ☐ IT complexity with outdated infrastructure, processes, and skill sets in silos
- ☒ Ability to avoid generational infrastructure silos using modern life cycle management
- ☒ Elimination of siloed storage with file, block, and object storage in a single platform
- ☐ Tedious sizing of compute and storage requirements

66.-

A customer plans to migrate a business critical, high transaction application to Nutanix. Currently the application is running on a physical server with 256GB of RAM and 12 CPU cores at > 80% utilization.

To run the VM on a single NUMA node, which processor configuration should the systems engineer recommend for this workload?

- ☐ (2) CPUs (8 Cores each @ 2.1GHz), 16 Cores total
- ☐ (2) CPUs (16 Cores each @ 2.8GHz), 32 Cores total
- ☒ (2) CPUs (10 Cores each @ 3.4GHz), 20 Cores total
- ☐ (2) CPUs (8 Cores each @ 1.8GHz), 16 Cores total

67.-

A customer's current AHV cluster for mixed server workloads consists of 7 NX-3060-G6 nodes with Intel Skylake processors spread across two blocks. Growing demand for resources requires the customer to order three additional NX-3060-G7 nodes with Intel Cascade Lake processors.

Which supported approach allows the customer the most efficient use of their additional resources?

- ☐ Expand the cluster by fully populating the existing blocks with the three additional nodes.
- ☐ Expand the cluster by fully populating the existing blocks, and adding a new block populated with two nodes.
- ☐ Create a new cluster using a new block populated by the three additional nodes.
- ☒ Expand the existing cluster by adding a new block populated with the three additional nodes.

68.-

A customer wants to evaluate the performance impact of failing a node while running workloads on the cluster.

Which tool should a systems engineer use to accomplish this task?

- ☐ Move
- ☐ Sizer
- ☐ demo.nutanix.com
- ☒ X-Ray

69.-

A systems engineer is building a private cloud for internal developers that should include self-service and life cycle management for both Kubernetes containers and SQL databases.

Which additional license feature must be purchased to provide this capability?

- ☐ Nutanix Beam
- ☒ Nutanix Era
- ☐ Nutanix Flow
- ☐ Prism Pro

70.-

Refer to the exhibit.

vInfo	vCPU	vMemory	vDisk	vPartition	vNetwork	vFloppy	vCD	vSnapshot	vTools	vCluster	vRP	vHost
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Within an RVtools output, which tab provides actual utilization information on thick provisioned disks?

☒ vPartition

☐ vDisk

☐ vCluster

☐ vInfo

71.-

An SE needs to leverage **Change Block Tracking** when using Xtract to migrate VMs from ESXi to AHV.

Which two source VM requirements should the SE verify? (Choose two.)

☒ Minimum guest OS version

☐ VMware Tools installed

☐ Virtual Hardware version

☒ Nutanix Guest Tools installed

72.-

A prospect is conducting a Nutanix POC process that will measure the time to recover from a power loss, the impact of running multiple workloads on the same cluster, and peak storage performance. The POC results will be presented to the CIO.

How can this be achieved with the least room for error?

☐ Use X-Ray to generate a single workload and VDbench for the secondary workload.

☒ Use X-Ray with the included scenarios and deliver the X-Ray PDF report.

☐ Use IOMeter and manually power off the nodes. Use the IOMeter UI to generate a report.

☐ Use HCI Bench, manually power off the nodes during testing, and export Prism Analysis data.

73.-

A prospect is seeking a Nutanix solution for a mission critical application that needs to sustain two simultaneous node outages and prefers that the cluster be able to fully rebuild both data and metadata in the event of hardware issues.

What is the minimum number of nodes required for the cluster?

- ☐ 4
- ☐ 5
- ☒ 6
- ☐ 7

74.-

A prospect facing an upcoming VMware ELA renewal has a management directive to move to the public cloud due to perceived cost savings. Their virtualization team is currently struggling with refactoring applications for AWS. As a result, the virtualization team is pushing to evaluate VxRail and renew their VMware ELA.

Which two aspects of Nutanix should the SE highlight? (Choose two.)

- ☒ Multi-hypervisor Support
- ☐ Nutanix Calm
- ☒ Multi-cluster Management
- ☐ Nutanix AHV

75.-

When planning an Oracle database deployment on Nutanix, which best practice should the SE consider?

- ☐ Creating one storage container per database
- ☐ Ensuring deduplication is enabled
- ☐ Choosing nodes with more cores and lower clock speed
- ☒ Choosing nodes with higher clock speed and fewer cores

Knowledge Area	Nutanix Certified Systems Engineer: Core
Test Area	Nutanix Certified Systems Engineer: Core
Type	Certification
Number of questions	75
Date	2020-09-26 15:35
Duration	119:16
Vendor	Nutanix

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Congratulations, you have passed this exam!

	Your score
Total result	4895
Result by Category	
Solution Mapping	100%
Sizing	84%
Product Knowledge	95%
Differentiation	78%