Exam Code: 090-091

Exam Name: UNIXWARE 7 NONSTOP CLUSTERS

CERTIFICATION EXAM V1.0a0

Vendor: SCO

Version: DEMO

Part: A

1: Which statement best describes how SSI is implemented in filesystems on UnixWare 7 NonStop Clusters?

A.Through the cluster filesystem (CFS), which provides a global view of all filesystems in a single file tree and allows them to be protected for failover.

B.Through a modified version of NFS sharing mounts in a special, transparent, inter-node manner.

C.Through a modified version of RFS sharing mounts in a special, transparent, inter-node manner.

D.Not at all.

Correct Answers: A

2: You should choose CNM as your protected storage method when:

A.You want the fastest possible disk I/O performance

B.You want the lowest-possible window of vulnerability when a node fails

C.You are willing and able to accept the slower write performance and greater window of vulnerability to reduce the price of the cluster

D.You dont care about the price of the cluster

Correct Answers: C

3: In UnixWare 7 NonStop Clusters, which resources do NOT need to be protected to prevent unavailability of the cluster in the event the resource fails?

A.Filesystems, except the boot (/stand) filesystem for each node

B.Shared memory

C.Semaphores

D.Video monitors

Correct Answers: D

4: In clustering, a protected resource is one that:

A.Has special circuits that keep if from being damaged during a voltage surge

B.Is monitored by special hardware such that if it should fail, support engineers will be notified immediately that it needs to be replaced

C.Is monitored by special software to insure that it is not over-used

D.Is redundant in a cluster to avoid a single point of failure (SPF) and is automatically pressed into service by the cluster in the event the primary component fails

Correct Answers: D

5: The key to reliability and availability in a cluster is:

A.Having lots of spare parts on hand so that if something fails, it can be quickly replaced, causing minimal down time.

B.Having a hardware design that avoids any single point of failure, and a fault-tolerant operating system that knows how to press redundant hardware into service automatically.

C.Staffing the computer system with knowledgeable technicians 24x7.

D.Using the right monolithic computer system.

Correct Answers: B

6: What is the maximum distance you can run long-wave FDDI cables without any signal modification?

A.2 kilometers

B.10 kilometers

C.2 miles

D.10 miles

Correct Answers: A

7: Which statement best describes the term N+1 failover configuration for nodes?

A.All resources but one are pressed into service. Loss of a single resource causes failover to another resource, preserving performance.

B.All resources but one are always pressed into service. Loss of a second resource causes the cluster to become unavailable.

C.N+1 is a hardware-specific concept that indicates how to configure disks in a node.

D.N+1 is a software-specific concept that indicates how to configure daemon failover on a node.

Correct Answers: A

8: Which statement best defines a node within a cluster?

A.A complete computer (RAM, CPU, disk(s)), connected to the other nodes in the cluster by way of a server area network (SAN)

B.The SAN cards placed in each machine in a cluster

C.The LAN cards placed in each machine in a cluster

D.A computer connected to the other nodes in the cluster by way of a LAN, which contains only CPUs, RAM, LAN, and SAN cards, no other peripherals

Correct Answers: A

9: Which of the following licenses apply on a cluster-wide basis, as opposed to per-node?

A.CPUs

B.RAM

C.Users

D.Departmental/Enterprise

Correct Answers: C

10: During installation of UnixWare 7 on node 1, you should:

A.Defer configuration of any networking cards

B.Defer configuration of all but the first networking card

C.Configure all networking cards

D.Configure any networking card being used for LAN activity but no networking card used for SAN activity

Correct Answers: A

11: Which statement most accurately describes the use of KVM switches in a cluster?

A.KVM switches obviate the need for multiple keyboards, video units (monitors), and mice.

However, there is no way to currently configure multiple KVMs into a single cluster. This is acceptable because failure of the KVM switch does not bring the cluster down.

B.KVM switches obviate the need for multiple keyboards, video units (monitors), and mice. Be sure to install duplicate video cards and keyboard and mice controllers in your nodes and to purchase dual KVM switches to insure redundancy.

C.KVM switches obviate the need for multiple keyboards, video units (monitors), and mice. However, if the KVM switch breaks, you will not be able to use the console for the cluster, which effectively brings the cluster down.

D.KVM switches are use for Kilowatt Voltage Monitoring. They are installed between the wall outlets and the UPSes to insure that the cluster does not trip circuit breakers in the facility.

Correct Answers: A

12: During installation of UnixWare 7 on node 1, which package must have the installation option set to FULL that is marked NONE or PARTIAL by default?

A.Auditing

B.NetWare

C.SMP

D.ODM

Correct Answers: D

13: In a Cross-Node Mirroring (CNM) installation, the root filesystem

A.Exists only on node 1

B.Exists on the current and all potential root nodes, with reads serviced from whichever node originates the read system call and writes serviced by both nodes simultaneously

C.Exists on the current and all potential root nodes, with reads and writes serviced from whichever node originates the read or write system call

D.Exists on the current and all potential root nodes, with reads serviced by whichever node is the current root node and writes being mirrored on all potential root nodes

Correct Answers: D

14: A cluster using external shared storage for the root filesystem must also have:

A.A separate internal physical disk in each node containing a boot and swap slice

B.A boot and swap slice on the same external shared disk as the root filesystem

C.A separate internal physical disk in each node containing a swap slice, and a boot slice on the same external shared disk as the root filesystem

D.A separate internal physical disk in each node containing a boot and swap slice which are mirrored to node-specific slices on the same external shared disk as the root filesystem

Correct Answers: A

15: Which statement best describes how to place UPSes when multiple racks are used?

A.Centrally locate one UPS in each rack so that power cables can reach all components easily.

B.Place two UPSes in each rack. Do not run power cables between racks, only signal cables.

C.Place two UPSes in the same rack as the disk drives, as they take the most power. Run power cables from this rack to the components in the other rack.

D.Place one UPS in each rack and have it only power devices in its rack. Do not run power cables between racks, only signal cables.
Correct Answers: B

16: When deciding between tower and rack configurations, which of the following considerations favor a rack installation?
A.Minimizing costs
B.Minimizing floor space needed for equipment
C.Minimizing cooling requirements
D.None of the above
Correct Answers: B

17: Which statement best describes how a rack should be loaded?
A.The heavier the component, the lower it should be in the rack.
B.The heavier the component, the higher it should be in the rack.
C.The more heat a component generates, the lower it should be in the rack
D.Do not place components that generate significant heat in a rack
Correct Answers: A

18: Which component is NOT required in a node?
A.SAN card
B.Keyboard controller
C.LAN card
D.HBA (SCSI or IDE) for local disks
Correct Answers: C

19: Which statement best describes the condition known as split brain and the measures required to prevent it from occurring?
A.Split brain occurs when two nodes perform the same task in parallel and come up with a different result. The way to avoid split brain condition is to add a third node to the cluster, performing the same task, serving as a tie-breaker. That is, whichever solution gets two votes, wins.
B.Split brain occurs when two nodes each try to serve the same CVIP from their own LAN cards. The way to prevent a split brain condition is to place a split brain avoidance node on the LAN which will tell a node when it should serve the CVIP.
C.Split brain occurs when two nodes each think they should be the root node at the same time. In the case of CNM, this causes filesystem corruption. In the case of external storage, this can cause ping-pong panics. The way to prevent a split brain condition is to install a serial cable between the two potential root nodes and configure split brain avoidance during the UnixWare 7 NonStop Clusters installation procedure. Alternately, you can use a SAN configuration that can detect the different between a node with a bad SAN connection and a node that is not functioning at all.
D.Split brain is when two processes are migrated by the load-balancing daemon and the processes start to ping-pong between nodes because of incorrectly configured load-balancing metrics. The way to prevent a split brain condition is to configure load balancing metrics properly.

Correct Answers: C

20: To install UnixWare 7 NonStop Clusters, you must:

A.Install UnixWare 7 and UnixWare 7 NonStop Clusters (NSC) software on node 1, and then perform the UnixWare 7 NonStop Clusters dependent node installation procedure on each additional node.

B.Install UnixWare 7 on all nodes, then install UnixWare 7 NonStop Clusters (NSC) software on all nodes.

C.Install UnixWare 7 NonStop Clusters (NSC) software on all nodes; you do not need to install UnixWare 7 on any node because it is automatically installed as part of the UnixWare 7 NonStop Clusters installation procedure.

D.Install UnixWare 7 NonStop Clusters (NSC) software on node 1, which will prompt for the installation of UnixWare 7 on that node, then perform a cluster-node install on each additional node.

Correct Answers: A