Oracle

Exam 1z0-414

Oracle ZFS Storage ZS3 Implementation Essentials

Version: 6.0

[Total Questions: 75]

Question No : 1

Which client is used to authenticate as local users when using the Active Directory Service in the workgroup mode?

A. NIS
B. NIS+
C. SMB
D. UNIX

Answer: C

Explanation: his document focuses on the process of creating and sharing filesystems in both domain and workgroup mode, joining a domain, mounting SMB shares within the domain, and managing object rights

Reference:http://www.oracle.com/technetwork/server-storage/sun-unified-storage/documentation/mswindows-integration-063012-1690774.pdf

Question No : 2

A storage administrator is configuring replication for a share. Identify the two required fields that must be specified.

A. The target system
B. The target storage pool
C. The compression ratio
D. A replication group
E. Maximum Bandwidth

Answer: A,B

Question No : 3

Which three functions does the Oracle Intelligent Storage Protocol (OISP) perform?

A. Assess the IO requirements of the Oracle Database data

B. Communicate Oracle Database metadata information about its IO patterns with ZFS Storage Appliances
C. Dynamically tune critical IO parameters to maximize query performance
D. Assess the IO requirements of Oracle Database tablespaces

Answer: A,B,D

Question No : 4

Which three RAID levels are not recommended when configuring storage pool for OLTP (random) workload and why?

A. RAID0; good performance but no redundancy
B. RAIDZ2; not very good performance due to low IOPS
C. RAID1; great availability but costly
D. RAIDZ3; bad performance due to lowest IOPS among RAID level

Answer: A,B,D

Question No : 5

Identify two options that can be selected when customizing the Status Dashboard performance graphs.

A. CPU - utilization
B. NFSv4 - ops/sec
C. Power - Avg. Consumption
D. CPU - Average Wait I/O Time
E. ZFS - ops/sec

Answer: B,D

Question No : 6

Which Log Cache profile provides the best performance for workloads with high random I/O such as visualization?

A. Mirrored
B. Striped
C. Double-parity RAID
D. Single-parity RAID

Answer: B

Question No : 7

What should be the difference between the Domain Controller and appliance clocks to cause the ZFS Storage Appliance to not properly join an Active Directory domain?

A. 3 minutes
B. 5 minutes
C. 10 minutes
D. 15 minutes

Answer: B

Explanation: Enable NTP,or ensure that the clocks of the appliance and domain controller are synchronized to within five minutes.

Reference:http://docs.oracle.com/cd/E22471_01/html/820-4167/configuration__services__active_directory.html

Question No : 8

Which two options describe the data services Oracle ZFS Storage Appliances provide?

A. The FTP service allows both anonymous and user-authenticated logins.
B. The iSCSI service supports discovery, management, and configuration using the iSNS protocol.
C. For shadow migrations, in order to properly migrate data, the source file system or directory must be read-only.
D. With remote replication, data is replicated at the project level only.
E. Supports a robust implementation of the SMB (Server Message Block) protocol version 3.

Answer: B,C

Question No : 9

A storage administrator needs to create a user. Which two methods can be used?

A. Edit the/etc/passwd and /etc/shadow files.
B. Using the CLI: Type "configuration users create", set the username, fullname, and initial_password parameters, and then type commit.
C. Using the CLI: Type "configuration users user <newuser>", set the fullname, and initialpassword parameters, and then type commit.
D. Using the BUI: Configuration > Users, add a user via the plus (+) sign next to Users, provide the appropriate information, and then click Add.
E. Import user accounts from Active Directory, LDAP, or NIS.
F. The storage administrator doesn't need to add user accounts.

Answer: A,D

Question No : 10

Which two properties are available when creating alerts based on statistics from Analytics?

A. Threshold
B. Baseline: distance from
C. Reset: limit
D. Timing: for at least

Answer: A,D
Explanation: These are alerts based on the statistics from Analytics in *Oracle ZFS Storage Appliance Analytics Guide* . The following are properties when creating threshold alerts:
Table 9-2 Threshold Alert Properties
Property
Description
Threshold
The threshold statistic is from Analytics in *Oracle ZFS Storage Appliance Analytics Guide* , and is self descriptive (e.g., "Protocol: NFSv4 operations per second")
exceeds/falls below

defines how the threshold value is compared to the current statistic

Timing: for at least

Duration which the current statistic value must exceed/fall below the threshold

only between/only during

These properties may be set so that the threshold is only sent during certain times of day - such as business hours

Repost alert every ... this condition persists.

If enabled, this will re-execute the alert action (such as sending email) every set interval while the threshold breech exists

Also post alert when this condition clears for at least...

Send a followup alert if the threshold breech clears for at least the set interval

The "Add Threshold Alert" dialog has been organized so that it can be read as though it is a paragraph describing the alert. The default reads:

Reference:http://docs.oracle.com/cd/E51475_01/html/E52872/godjf.html

Question No : 11

An administrator wants to add an advanced statistic to a work sheet. How will the administrator make the statistic available?

A. No action is required. Advanced Statistics are enabled by default.
B. Under Configuration > Dashboard > Preferences, select "Make available advanced analytics statistics" and click Apply.
C. Under Status > Dashboard > Preferences, select "Make available advanced analytics statistics" and click Apply.
D. Under Configuration > Preferences, select "Make available advanced analytics statistics" and click Apply.

Answer: A

Explanation: By default, the Statistics available under Analytics are basic and useful to most storage administrators.
Reference:http://www.bergendorf.net/files/7xxx-LAB_v07_p03.pdf

Question No : 12

Identify the proper procedure to power up the ZFS Storage Appliance.

A. Connect cords to power supply 1 and power supply 2, and open a telnet session.
B. Connect cords to power supply 0 and power supply 1, and wait for 2 minutes.
C. Connect cords to power supply 0 and power supply 1, and open a telnet session.
D. Connect cords to power supply 1 and power supply 2, and wait for 2 minutes.

Answer: B

Question No : 13

Which three statements are true about Cluster Configuration of ZFS Storage Appliances?

A. In Cluster environment, only one node at a time can be the owner of each storage pool.
B. To utilize resource of both nodes simultaneously, you need at least two storage pools: one that maps to node1 and another that maps to node2.
C. Read SSD is in head node, so cached data will not fail over to another node. Warm-up time is required after failover in order to cache the data again.
D. In Cluster environment, only one controller can be assigned resources.

Answer: A,B,D

Question No : 14

Which ZFS component improves ZFS throughput and response time for stable write processing (e.g.O_SYNC)?

A. VDEV
B. ZIO
C. ARC
D. DMU
E. ZIL

Answer: A

Question No : 15

What happens when the Thin Provisioning property is set for a LUN?

A. This property allows the volume size to exceed the amount of available space.
B. A share reserves exactly enough space to completely fill the share.
C. Thin provisioning allows the storage administrator to divide the pool capacity into evenly sized LUNs.
D. A ZFS file system is created by setting a quota and reservation to the same value.

Answer: A

Explanation:

By default, a LUN reserves exactly enough space to completely fill the volume. This ensures that clients will not get out-of-space errors at inopportune times. This property allows the volume size to exceed the amount of available space. When set, the LUN will consume only the space that has been written to the LUN. While this allows for thin provisioning of LUNs, most filesystems do not expect to get "out of space" from underlying devices, and if the share runs out of space, it may cause instability and/or data corruption on clients.
Reference:http://docs.oracle.com/cd/E22471_01/html/820-4167/shares__shares__general.html#shares__shares__general__thin_provisioned

Question No : 16

Identify three common practices for implementing an Oracle Database.

A. Aggregate online redo log files, control files, and production data files within a single share.
B. Segregate different databases to different projects.
C. Configure write-optimized SSD-based log devices.
D. Fine-tune share settings for recordsize, compression, checksumming, and security based on the requirements for the database.
E. Configure read-optimized SSD-based log devices.
F. Create a dedicated project for all databases.

Answer: A,B,D

Explanation: • Segregate different databases to different projects
• Store all databases files for a specific database in the same project

• Segregate online redo log files and control files, production data files, temporary files, and recovery files to separate shares within the same project 35 Configuring Sun Storage 7000 Systems for Oracle Databases Sun Microsystems, Inc.

• Segregate production data files to separate shares within the same project if the data files are subject to significantly different workloads or requirements

• Fine-tune share settings for recordsize, compression, checksumming, and security based on the requirements for the share

Reference:

http://www.arrowecs.co.uk/dns_cms/uploadedfiles/dns/Storage_Solutions/SUN/Open_Stor age/Open%20Storage%20and%20Oracle%20Blueprint.pdf

Question No : 17

Which three are good reasons to have multiple pools configured?

A. There is a need to have different RAID levels.
B. There are multiple workload types sharing the same ZFS Storage Appliance.
C. It allows SSDs to be shared across pools.
D. There is a need to separate different storage environments from each other (that is, production, development).
E. There is a need to have multiple pools of the same Raid level.

Answer: B,D,E

Question No : 18

Which devices can be tuned using the synchronous write bias property by selecting values of either latency or throughput?

A. Quantum devices
B. Log devices
C. Block devices
D. Cache devices

Answer: B
Explanation: A setting of Synchronous write bias : Throughput for a dataset allows

synchronous writes to files inother datasets to have lower latency access to SSD log devices.
Reference:https://blogs.oracle.com/roch/entry/synchronous_write_bias_property

Question No : 19

Which is the most effective metric for identifying performance issues?

A. Latency
B. IOPS
C. Throughput
D. Percent utilization
E. Capacity

Answer: A

Explanation: For identifying performance issues, latency is essential. Paraphrasing performance expert Greg Brendan, latency is time spent waiting, and it has a direct impact on performance when caused by a synchronous process within an application request, thus making interpretation straightforward — the higher the latency, the worse the performance. This is in contrast to other metrics used in performance analysis — utilization, IOPS (I/O per second) and throughput — which are better suited for capacity planning and understanding the nature of workloads.

Reference:https://www.loggly.com/blog/average-poor-metric-measuring-application-performance/

Question No : 20

A storage administrator is configuring the ZFS Storage Appliance for applications with large block random read and write I/O and mixed block size of sequential read and write I/O.

What should be the optimal record size?

A. 8 KB