

Oracle

Exam 1z0-581

Pillar Axiom 600 Storage System Certified Implementation Specialist

Version: 7.2

[Total Questions: 84]

Question No: 1

The storage administrator is viewing the Axiom storage systems and would like to create a volume for the SAN host. Which GUI component is used to manage this task?

- A. AxiomONE MaxMan
- B. AxiomONE Storage Services Manager
- C. AxiomONE Storage Manager
- D. AxiomONE QoS Manager

Answer: A

Explanation: Java-based GUI for multi-system management. This client application, called

AxiomONE MaxMan, allows for the management of multiple Pillar Axiom systems through a single interface.

Pillar Axiom MaxMan enables you to easily access powerful data protection capabilities that

generate full copies of data with volume copy and backup features. You can also use a rich set

of space-efficient data protection tools with copy-on-write clone functionality for SAN as well

as NAS environments. It also enables centralized management of storage infrastructure by integrating with leading management framework software such as Oracle Enterprise Manager

Question No: 2

The storage administrator is creating a volume and wants to protect it from a full Brick failure. Identify the protection level needed to accomplish this configuration.

- A. Standard Redundancy
- B. RAID10
- C. Double Redundancy
- **D.** assigning the volume to a Storage Domain

Answer: C

Explanation: When a factory-fresh, single-SATA Brick system is first powered up, Persistence (which is the

Pillar Axiom data store containing many system settings) will be configured on that Brick. Persistence will be doubly-redundant with both instances residing on the same Brick (on two

data LUNs). If additional Bricks are added later, Persistence will not be migrated to locate the

different copies on separate Bricks for higher protection against single-Brick failure.

Reference: Pillar Axiom 300, 500, and 600. Release notes, Persistence Vulnerability in Single-SATA Brick Systems

Question No: 3

The development team needs a volume that contains data from the production system for testing. Identify the best Pillar Axiom storage system method that can solve this challenge.

- A. Copy LUN
- B. Clone LUN
- **C.** Snapshot
- D. Clone Volume

Answer: B

Explanation: For SAN, the Pillar Axiom storage system provides snapshot backup and restore capability at the LUN level.

You can provide data protection for a LUN by cloning the volume. You can clone a LUN manually or create a schedule by which the system automatically creates a Clone LUN on a predefined basis.

Question No: 4

The storage administrator is creating a LUN. Which organizational units can the LUN be assigned to?

- A. Storage Class
- **B.** Typical Access
- **C.** Volume Group
- **D.** Storage Domain

E. Clone LUN Group

Answer: C

Explanation: Volume groups are organizational units that can contain any grouping of

logical

volumes and nested volume groups

Note: A LUN is defined as:

A logical volume within a storage area network (SAN). Administrators assign storage resources and Quality of Service (QoS) attributes to each logical unit (LUN).

Reference: Pillar Axiom Administrator's Guide

Question No: 5

From which three sources can the system information be collected and placed into the bundle?

- A. Slammer hardware components
- **B.** Brick hardware components
- C. Client hosts with APM
- D. AxiomONE Storage Manager
- E. SAN Switch

Answer: A,B,C

Explanation: System information can be collected from the following sources and placed into

the system log bundle:

- * Slammer hardware components
- * Brick hardware components
- * Client hosts
- * Pilot hardware component

Note: To help diagnose a situation that might exist, the Oracle Pillar Customer Support might request that you collect into a single bundle certain logs and other diagnostic information and then send the bundle to Pillar Customer Support for

analysis.

Reference: Pillar Axiom Administrator's Guide, About System Log Bundles

Question No: 6

By using which Pillar Axiom feature can you allocate system resources and handle data flow according to its business priority?

- A. Quality of Service
- **B.** Thin Provisioning
- C. Storage Domains
- D. Storage Profiles

Answer: A

Explanation: QoS policies are available for the following properties:

- * Processing queue priority and data access efficiency, known as priority
- * Preferred storage media, known as Storage Class
- * Number of mirror copies, known as redundancy
- * Performance optimization, known as a combination of access bias and I/O bias

Reference: Pillar Axiom Administrator's Guide, About Quality of Service

Question No:7

Why does it matter if the source power for a PDU is 115v, 208v, or 230v?

- **A.** The Bricks, Slammers, and Pilots will draw different amperes depending on the input to the PDU.
- **B.** The Bricks and Slammers will draw different amperes depending on the input to the PDU but the Pilot will not draw much to make a difference.
- C. The Bricks and Pilots will draw the same amperes and not enough to make a difference

but the Slammers will draw different amperes depending on the input to the PDU. **D.** It does not matter because the Bricks, Slammers, and Pilots will draw the same amperes.

Answer: A

Explanation: The Pillar Axiom 600 system components must be plugged into the PDUs such

that they do not exceed the amperage rating of any outlet group. If you exceed the amperage rating, the circuit breakers trip.

Except where indicated, the maximum rated amperage of the outlet banks remains the same regardless of the electrical service voltage. Therefore, components draw about half the amperage at 230V than at 115V, and you can plug more components into each power distribution unit (PDU).

The table below lists the maximum electrical requirements of the Pillar Axiom 600 components.

Each component has redundant power cords plugged into different PDUs on separate circuits.

Table Pillar Axiom 600 electrical requirements

| Component | Amps. at 115 volts | Amps. at 208 volts | Amps. at 230 volts | Power (watts) |
|---------------------------------------|-----------------------|-----------------------|-----------------------|------------------|
| Slammer (for both CUs combined) | 4.82A | 2.82A | 2.55A | 586W |
| SATA Brick | 2.12A | 1.30A | 1.18A | 264W |
| FC Brick | 2.76A | 1.58A | 1.43A | 260W |
| SSD Brick | 1.22A | .97A | 0.88A | 146W |
| Pilot (for each CU) | 1.45A | 0.66A | 0.60A | 143W |

Reference: Pillar Axiom 600 Hardware installation Guide, Component Power Usage

Question No:8

Identify the information required during the installation of the Axiom VSS plug-in. Select all that apply.

- A. User Name
- **B.** Password
- C. System Serial Number
- D. VSS Provider Name
- E. Port Number

Answer: A,B,C

Explanation: Download and Install the VSS Provider Plug-In Download the Pillar Axiom VSS Provider plug-in from the Pillar Axiom Storage Services Manager for installation on your SAN host.

Prerequisites:

- * The SAN host must have TCP/IP connectivity, over Ethernet, to the Pilot management controller.
- * For the VSS Provider to create volume shadow copies, the SAN host must have Fibre Channel connectivity to the Slammer storage controller.
- * During the installation, you need the system serial number, user name, and password.

Note: The Microsoft Volume Shadow Copy Service (VSS) Provider plug-in enables the use of VSS-enabled backup applications with the Pillar Axiom 600 system. VSS enables data protection and management services through a standard set of configuration and monitoring capabilities. These capabilities include creating, manipulating, and restoring snapshots without shutting down applications or essential services.

Reference: Pillar Axiom Administrator's GuideDownload and Install the VSS Provider Plug-In

Question No:9

Indentify what must be required in order to receive alerts and email notifications from the Axiom storage system.

- A. Email server
- **B.** SNMP host
- C. Call Home enabled
- D. Primary Administrator created

Answer: A

Explanation: You must designate one or more recipients to receive an event notification and

define an email server to receive the notifications.

Note: This email server is also used to send CallHome notifications to the Oracle Pillar Customer Support.

Note: An event notification, when enabled, is defined as follows: A Simple Mail Transfer Protocol (SMTP) email message that notifies recipients of specified system events. System events include informational, warning, or critical events such as the creation of a logical volume or the occurrence of a hardware or software problem. Event notifications are optional and supplement normal event logging and CallHome notification. (Formerly called an alert).

Reference: Pillar Axiom Administrator's Guide, About Managing Event Notifications

Question No: 10

The storage administrator needs to download the CLI for scripting purposes. Identify where administrator should go to download the CLI.

- A. the HTML from the Pilot:
- **B.** the customer FTP site
- **C.** the Support tab in the AxiomONE GUI
- **D.** the customer support center
- **E.** the customer support portal

Answer: C

Explanation: To run the Pillar Axiom CLI, you must first download the software. Perform this task on the workstation from which you will manage the Pillar Axiom storage system.

- 1 Log in to the graphical user interface (GUI).
- 2 Click the Support icon in the top context pane.
- 3 Click the command line interface (CLI) link in the left navigation pane.
- 4 Choose a download option from the Actions drop-down list for your

workstation environment.

5 Follow the prompts to download the software.

6 Extract the software to a folder on your local workstation.

Note: The Pillar Axiom CLI is the commandline interface for configuring and monitoring a Pillar Axiom system. The Pillar Axiom CLI provides the same capabilities as the Pillar Axiom GUI, allowing configuration and management of the Pillar Axiom system performed from command line or through custom scripts.

Reference: Pillar Axiom, CLI Reference Guide for axiomcli, Download the Pillar Axiom CLI Software

Question No: 11

The storage administrator is looking for a specific event in the event log. Identify three event severities that can be filtered.

- A. Informational
- **B.** Critical
- C. Error
- **D.** Warning
- E. Normal

Answer: A,B,D

Explanation: The Pillar Axiom system generates events and classifies them by severity:

Critical: Access to data is compromised.

Warning: Administrator action is required to prevent a soft error

from becoming a hard error or critical event.

Informational: A configuration change has been detected or another

non-error event has occurred.

Reference: Pillar Axiom Administrator's Guide, Pillar Axiom event severities

Question No: 12

Which three Axiom storage system resources can the storage administrator monitor?

- A. Running Tasks
- B. Storage Usage
- C. System Alerts
- D. SAN Host Performance
- E. SAN Switch Tasks
- F. Power Usage

Answer: A,B,C

Explanation: The Simple Network Management Protocol (SNMP) management information

base (MIB) is self-documenting and lists Pillar Axiom system resources that you can monitor

Some of the Pillar Axiom resources that a system administrator can monitor are listed below.

- * Running Tasks
- * System Alerts.
- * Storage Usage

Monitoring short and long term trends in capacity usage helps the system administrator avoid getting an System Alerts warning that, for example, Clone LUNs are being deleted to free up capacity. Because you can over allocate logical volumes when taking advantage of the thin provisioning feature, such volumes need to be monitored and may require additional physical storage.

- * CallHome or Manual Log Collection.
- * Software Versions
- * System Configuration
- * Traps
- * Scheduled Tasks

Querying this resource allows the administrator to determine which tasks are scheduled and when they are scheduled. Knowing this information can be useful in determining whether some traps or events can be expected.

Reference: Pillar Axiom Administrator's Guide, System Components That Can Be Monitored

Question No: 13

Data Protection Manager gives you the capability to schedule backups of the application data on regular basis. Identify the name for the scheduled backups.

- A. checkpoints
- **B.** consistency groups
- C. point-in-time backups
- D. application-aware backup

Answer: D

Explanation: The Pillar Axiom Data Protection Manager (DPM) is an application that manages applicationaware backup and recovery for the Pillar Axiom 600 system.

Reference: Pillar Axiom Data Protection Manager, User's Guide

Question No: 14

The storage administrator would like to modify one of the system profiles. How can the storage administrator do this?

- A. by selecting "Manage Standard Storage Profiles" and modifying the system profile
- **B.** by selecting "Manage Advanced Storage Profiles" and modifying the system profile
- C. by selecting "Manage Standard Storage Profiles" and duplicating the system profile
- **D.** by selecting "Manage Advanced Storage Profiles" and duplicating the system profile

Answer: D

Explanation: Manage Storage Profiles Dialog

Navigation: Storage > Storage Profiles > Actions > Manage Storage Profiles Allows you to manage a set of Quality of Service (QoS) settings that can be used for creating new logical volumes. You can create your own profile or duplicate an existing profile and then modify the duplicate to satisfy your needs.

Manage Advanced Storage Profiles (expert users only)
Provides access to the full set of QoS properties when creating a custom
Storage Profile.

Reference: Pillar Axiom Data Protection Manager, User's GuideManage Storage Profiles Dialog

Question No: 15

Identify what the default trending charts provide.

- **A.** Default trending charts provide a quick overview of the most commonly referred to characteristics of the selected LUN over the last few hours.
- **B.** Default trending charts provide a quick overview of the most commonly referred to characteristics of the selected LUN over the last 24 hours.
- **C.** Default trending charts provide a detailed overview of the most commonly referred to characteristics of the selected LUN over the last few hours.
- **D.** Default trending charts provide a detailed overview of the most commonly referred to characteristics of the selected LUN over the last 24 hours.

Answer: A

Explanation: Default trending charts provide a quick overview of the most commonly referred

to characteristics of the selected LUN over the last few hours.

A Reference: Pillar Axiom Data Protection Manager, User's Guide, About LUN Statistics Trending Charts

Question No: 16

The storage administrator is cabling the Axiom with copper FC cables. The power cords are being connected. Identify the best practice for installing the power cords.

- **A.** Keep the copper cables and power cords separated to minimize EMI.
- **B.** Be sure to run the copper cables and power cords parallel with each other if they must cross.
- **C.** Be sure to run the copper cables and power cords perpendicular with each other if they must cross.
- **D.** The copper cables and power cords can be bundled together.

Answer: C

Reference: Pillar Axiom 600 Hardware installation Guide, Connect Power Cables

Question No: 17

The storage administrator is cabling the Axiom with copper FC cables. The power cords are being connected- Identify the best practice for installing the power cords.

- A. Keep the copper cables and power cords separated to minimize EMI.
- **B.** Be sure to run the copper cables and power cords parallel with each other if they must cross.
- **C.** Be sure to run the copper cables and power cords perpendicular with each other if they must
- **D.** The copper tables and power cords can be bundled together.

Answer: A

Explanation: Dress all power cables to the opposite side of the rack from any data cables.

Reference: Pillar Axiom 600 Hardware installation Guide, Connect Power Cables

Question No: 18

Identify the quality of service settings that will create a RAID10 volume.

- **A.** Access Bias = Random
- **B.** Access Bias = Sequential
- C. I/O Bias = Write
- **D.** I/O Bias = Read
- E. Access Bias = Write

Answer: A,C

Explanation: The other combination are either not valid or give RAID 5.

See table below.

Effects of access and I/O bias

| Access blas | I/O blas | Read-ahead in the Slammer | RAID configuration in the Brick | |
|------------------|----------|---------------------------|---|--|
| Sequential | Read | Aggressive | RAID 5 Reads large extents of the data into memory. | |
| | Write | Conservative | RAID 5 Writes data in write-back mode to physical storage in full-stripe extents. | |
| Mixed and random | Read | None | RAID 5 Combines multiple block writes into a single-stripe write, when possible. Retains data in the cache for a longer | |
| Random | Write | None | Distributed RAID | |

Note: The combination of the access bias and I/O bias QoS properties of a logical volume can have varying effects on certain performance characteristics of that volume.

These performance characteristics can be effected by the access and I/O biases:

- * The amount of reading ahead performed by Slammers for the volume
- * The RAID configuration of the volume in the Bricks

Reference: Pillar Axiom Administrator's Guide, Effects of Access Bias and I/O Bias

Question No: 19

Which VSS Provider CLI tool is used to configure additional systems?

- A. pcli.exe
- B. axiomocli.exe
- C. registerAxim.exe
- D. vssadmin.exe

Answer: C

Explanation: The VSS Provider installer allows you to configure a single Pillar Axiom system.

To configure additional systems or remove systems, use the registerAxiom.exe command line tool.

Reference: Pillar Axiom Administrator's Guide, Download and Install the VSS Provider Plug-In

Question No: 20

Identify three hardware components contained in a Slammer.

- A. Control Unit
- **B.** Network Interface Module
- C. Private Interconnect Module
- D. RAID Controller
- E. ES Module

Answer: A,B,C

Explanation: A: A Slammer is a 4U, clustered storage subsystem that is the front end to a Pillar Axiom storage system. Slammer storage controllers contain two control units that act in active-active mode to provide data and state mirroring.

A, B, C: From the picture below you see the Network interface module, the CU leds, and the Private Connect Module.

Reference: Reference: Pillar Axiom 600 Hardware installation Guide, Verify the Back Status LEDs

Question No: 21

Which identification mode is used to flash the LEDs on the component being replaced?

- A. Identify
- **B.** Reverse Identify
- C. Replace Component
- D. View Details

Answer: A

Explanation: To identify physically the Brick you intend to rename, select Actions > Identify and, use the Identify dialog to flash the LEDs on the front and back of the selected Brick.

Reference: Pillar Axiom 600 Hardware installation Guide, Rename the Bricks

Question No: 22

Identify the tasks of the Administrator 2 role.

- A. shutting down the Axiom
- B. modifying global settings
- C. creating volumes
- **D.** updating software

Answer: C

Explanation: Administrator 1 A login account that has the authority to perform all administration, configuration, and recovery tasks.

Administrator 2 A login account that has the authority to perform all administrative and configuration tasks, except:

- * Create, modify, or delete administrator accounts and File Servers.
- * Modify systemwide settings such as Simple Network Management Protocol (SNMP) (not B)
- *Modify software or hardware configurations (not D)
- * Shut down the system (not A)

Reference: Pillar Axiom Administrator's Guide, Create Administrator Account Dialog