

Exam : D-PST-MN-A-01

**Title : Dell PowerStore
Maintenance Achievement
v2**

Version : DEMO

1.A Dell Customer Success Engineer is guiding a customer through a remote diagnosis of a PowerStore T-series base enclosure. The management network is currently unreachable, forcing the engineer to rely entirely on the customer's physical observations.

Physical LED Observation Log:

- Base Enclosure Front Power LED: Solid Green
- Base Enclosure Front Fault LED: Solid Amber
- Base Enclosure Rear Node A Fault LED: Solid Amber
- Base Enclosure Rear Node B Fault LED: Unlit

Which TWO conclusions must the engineer draw from these physical LED indicators regarding the cluster's state? (Choose 2.)

- A. The solid green Power LED on the front bezel indicates that the cluster's high availability software has successfully bypassed the Node A fault and restored full performance.
- B. The base enclosure front Fault LED illuminates amber to indicate that the entire chassis requires a complete physical replacement due to a midplane short.
- C. The unlit Fault LED on Node B proves that it is currently powered off and safe to physically extract from the midplane without executing a shutdown command.
- D. Node A has encountered a critical boot error, an unrecoverable hardware fault, or has dropped into Service Mode, which explains the loss of the primary management network.
- E. The base enclosure front Fault LED aggregates internal component health; it illuminates amber specifically because Node A is broadcasting a localized critical fault state.

Answer: D, E

2.A Dell Customer Success Engineer is guiding a local technician through a hot-swap replacement of PSU 0 on Node A.

Current Environment Status:

- Facility Feed B (PDU-B) is currently offline for scheduled data center maintenance.
- Node A is operating solely on Facility Feed A (PDU-A).
- Node A PSU 0 (cabled to PDU-A) has thrown a critical hardware fault (Solid Amber LED).
- Node A PSU 1 is seated in the chassis but its AC Status LED is unlit (due to PDU-B being down).

The technician wants to immediately pull the faulty PSU 0 to silence the alarms. Based on the interaction between the hot-swap procedure and dual-circuit fault tolerance, which THREE statements describe the reality of the situation? (Select all that apply.)

- A. The technician should proceed with the hot-swap immediately since PSU 1 remains installed and provides passive grounding.
- B. The unlit AC Status LED on PSU 1 serves as definitive physical evidence, per hardware documentation, that Facility Feed B is inactive and Node A relies exclusively on Feed A.
- C. Installing a temporary Y-splitter cable on PSU 0 allows safe extraction despite the facility outage, though this method is unsupported by Dell.
- D. PowerStore Manager generates critical alerts explicitly indicating Node A's power redundancy is lost due to offline Facility Feed B and the faulted PSU 0 status.
- E. Hot-swapping PSU 0 is prohibited; removal severs the node's sole active power path, triggering an immediate system crash.

Answer: B, D, E

3.What is the primary objective of verifying the physical and logical health status of a PowerStore node immediately following a maintenance event?

- A. To revert the appliance's management and service network interface IP configurations to factory defaults to eliminate transient network conflicts that may occur after maintenance procedures.
- B. To force internal NVMe solid-state drives to undergo a destructive low-level format and rebuild parity information from scratch prior to reintegration into the storage pool.
- C. To ensure the node passed Power-On Self-Test (POST), completed OS initialization, and reached 'Normal' state before processing host I/O.
- D. To initiate automatic deployment of the latest PowerStoreOS health validation package across all cluster nodes to verify firmware compatibility and system integrity following maintenance activities.

Answer: C

4.A Dell Customer Success Engineer is investigating a situation where a customer experienced a silent drive failure. A drive in the base enclosure faulted, but the operations team did not receive their expected proactive email notification.

Customer Statement: "We checked the UI on Monday and saw the drive was dead. We rely on SMTP for alerts. Because we didn't get an email, we thought the PowerStore OS had completely locked up and failed to log the event."

Engineer's UI Investigation:

- 1. Monitoring > Alerts: Drive Fault alert is present and Unacknowledged.
- 2. Monitoring > Events: Drive Fault event is logged precisely at Friday 23:45:00.
- 3. Settings > Networking > SMTP: Configuration appears valid.

Based on the architectural decoupling of the internal event engine from external notification services, which THREE conclusions must the engineer explain to correct the customer's misunderstanding? (Select all that apply.)

- A. The failure lies strictly in the outbound notification transmission layer (SMTP), not in the internal storage telemetry or hardware monitoring sub-systems.
- B. To prevent future missed notifications, the customer must manually acknowledge every 'Info' event in the UI, as excessive unacknowledged minor events will pause the SMTP queue.
- C. The internal Event History is an immutable ledger; the fact that the event is logged confirms the node did not "lock up" but successfully processed the state change locally.
- D. The presence of the unacknowledged alert and the precise event log timestamp proves that the PowerStoreOS core event engine functioned flawlessly and accurately detected the hardware failure.
- E. If the SMTP service fails to transmit an email (e.g., due to an external firewall block or mail server rejection), the PowerStore system automatically deletes the alert from the UI to maintain synchronization with the mail queue.

Answer: A, C, D

5.A Dell Systems Support Analyst is reviewing an automated support bundle. The customer reported a transient outage where host block access dropped for 45 seconds before automatically recovering.

Event Log Correlation:

- [14:00:00] Event 0x00305101: Component failure detected (Node B BBU).
- [14:00:01] Event 0x00402001: FC Link Port 0 Down (Node B).
- [14:00:01] Event 0x00402001: FC Link Port 1 Down (Node B).

[14:00:05] Event 0x00109005: Multi-pathing degraded.

[14:00:45] Event 0x00109010: Paths restored via Node A Active/Optimized transition.

Based on the fusion of event code analysis and high-availability architecture, which TWO conclusions guide the appropriate remediation strategy? (Choose 2.)

- A. The analyst must execute the `svc_network_restart` script to forcefully reset the FC Link ports on Node B before replacing any hardware.
- B. The 45-second disruption represents the expected timeout and MPIO convergence period as host software recognized the Node B paths were dead and shifted I/O exclusively to Node A.
- C. The host outage was caused because the customer failed to configure their Fibre Channel SAN zoning correctly prior to the Node B BBU failure.
- D. The analyst must dispatch a certified Dell Field Service Engineer to perform an invasive FRU replacement of the internal Battery Backup Unit (BBU) inside Node B.
- E. The primary root cause is a failure of the Fibre Channel I/O module on Node B; the BBU alert is a secondary symptom caused by the sudden drop in optical voltage.

Answer: B, D