Dell EMC

D-PE-OE-23 Exam

Dell PowerEdge Operate 2023

Questions & Answers
Demo

Version: 5.0

Topic 1, Misc. Questions Set

Question: 1

Exhibit.

A customer notices that an indicator on the left control panel of the PowerEdge Server has turned solid amber.
What does this indicate?

A. PCIe card is present.
B. PCIe card performing a firmware update.
C. PCIe card temperature is normal.
D. PCIe card experiences an error.

Answer: D

Explanation:

Dell PowerEdge servers are equipped with various LED indicators on the left control panel to provide immediate visual feedback about the server's status and component health. These indicators help in quickly identifying and troubleshooting issues without needing to access the system logs immediately.
Analyzing the Visual Indicators (Server Troubleshooting - 32%)
As per the "Server Troubleshooting" section, one of the key skills is to "Analyze the visual indicators on server components - system ID, PSU, and BLINK."
Color Codes and Their Meanings
Solid Green Light: Indicates normal operation.
Blinking Green Light: Indicates activity (such as data transfer).
Solid Amber Light: Indicates a fault or error condition.

Blinking Amber Light: Indicates a critical error or failure.
Application to the PCIe Card Indicator
In this scenario, the customer notices that an indicator on the left control panel has turned solid amber.
Specifically, this indicator is associated with the PCIe card.
Option A: "PCIe card is present."
Presence is usually indicated by a solid green light, not amber.
Option B: "PCIe card performing a firmware update."
Firmware updates are often indicated by blinking lights but typically not solid amber.
Option C: "PCIe card temperature is normal."
Normal temperature conditions would not trigger an amber light; instead, they would maintain a solid
green light.
Option D: "PCIe card experiences an error."
A solid amber light directly correlates with an error condition in the component.
Conclusion
Given the meaning of the solid amber indicator and its association with error conditions in Dell
PowerEdge servers, the correct interpretation is that the PCIe card is experiencing an error.
Dell Operate Reference
Server Components (26%): Understanding server components like PCIe cards is crucial.
Server Troubleshooting (32%): Analyzing visual indicators is a key troubleshooting step.
Analyze the visual indicators on server components: Knowing the significance of LED colors aids in swift
problem identification.

Question: 2

What IP address does an administrator connect to the iDRAC Direct USB port?

A. 169.254.0.3
B. 169.254.0.4
C. 192.168.1.20
D. 192.168.0.20

Answer: A

Explanation:

Understanding the iDRAC Direct USB Port and Its Default IP Address
Server Management and Configuration Tools (14%)
Define the function of the iDRAC, login procedures, licensing, and connection methods
Overview of iDRAC Direct USB Port
The Integrated Dell Remote Access Controller (iDRAC) provides remote management capabilities for Dell
PowerEdge servers. The iDRAC Direct USB port allows administrators to connect directly to the iDRAC
interface using a USB cable, facilitating quick and secure server management without needing network
access.

Default IP Address for iDRAC Direct USB Port
When an administrator connects to the iDRAC Direct USB port, the connection is assigned a default IP address to establish communication between the server and the management station. The default IP address is crucial for accessing the iDRAC web interface via a browser.
The default IP address for the iDRAC Direct USB connection is 169.254.0.3.
Explanation of Options
Option A: 169.254.0.3
Correct Answe r: This is the default IP address assigned to the iDRAC Direct USB port for direct management access.
Option B: 169.254.0.4
Incorrect: This IP address is not the default for the iDRAC Direct USB port.
Option C: 192.168.1.20
Incorrect: While this is a common private IP address, it is not used by default for iDRAC Direct USB connections.
Option D: 192.168.0.20
Incorrect: Similar to Option C, this is a private IP address but not associated with the iDRAC Direct USB port.
Dell Operate Reference
Server Management and Configuration Tools (14%): Understanding different connection methods to iDRAC is essential.
Define the function of the iDRAC, login procedures, licensing, and connection methods: Knowledge of default IP addresses and connection protocols is crucial for effective server management.
Conclusion
Knowing the default IP address for the iDRAC Direct USB port allows administrators to establish a direct connection efficiently, ensuring quick access for configuration and troubleshooting tasks.

Question: 3

Under which heading can the user locate Lifecycle logs in the iDRAC Ul?

A. System
B. System event log
C. Diagnostics
D. Maintenance

Answer: D

Explanation:

ocating Lifecycle Logs in the iDRAC UI
Server Troubleshooting (32%)
Explain the server logs and memory error
Understanding Lifecycle Logs

The Lifecycle Controller logs (Lifecycle Logs) are essential for tracking system events related to hardware configuration, firmware updates, and system health. These logs provide valuable information for troubleshooting and auditing purposes.

Accessing Lifecycle Logs in iDRAC UI

In the iDRAC web interface, administrators can navigate through various sections to access system information and logs.

To locate the Lifecycle Logs:

Log into the iDRAC Web Interface using your administrative credentials.

Navigate to the "Maintenance" Tab:

This section is dedicated to maintenance tasks and logs.

Select "System Event Log" or "Lifecycle Log" under the Maintenance section to view the detailed logs.

Explanation of Options

Option A: System

Incorrect: This section provides system overview and hardware information but does not contain the Lifecycle Logs.

Option B: System Event Log

Incorrect: While this log contains events, the Lifecycle Logs are specifically found under the Maintenance section.

Option C: Diagnostics

Incorrect: This area is used for running diagnostic tests, not for accessing Lifecycle Logs.

Option D: Maintenance

Correct Answe r: The Lifecycle Logs are located under the Maintenance heading in the iDRAC UI.

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Server Troubleshooting (32%): Accessing and interpreting server logs is vital for diagnosing issues.

Explain the server logs and memory error: Understanding where logs are stored helps in efficient troubleshooting.

Server Management and Configuration Tools (14%): Navigating the iDRAC UI is crucial for system administration tasks.

Conclusion

By knowing that the Lifecycle Logs are located under the Maintenance section, administrators can quickly access important system event information necessary for troubleshooting and maintaining server health.

Question: 4

A customer acquired six R750 servers. They must add these servers to their existing R760 iDRAC Group but are encountering errors.
What is the reason for the errors?

A. R750 iDRACs firmware is out of date.
B. R750 iDRACs are not running the same version of firmware.
C. 15G and 16G servers cannot be in the same group.
D. The feature requires iDRAC Enterprise.

Answer: C

Explanation:

Understanding iDRAC Group Management and Compatibility
Server Management and Configuration Tools (14%)
Define the function of the iDRAC, login procedures, licensing, and connection methods
Explain the management interface options - LCC, racadm, OMSA, iSM, OME
System Administration (18%)
Configure BIOS, Storage, virtual media, networking, user access, lockdown mode, and group
management

Scenario Analysis
The customer has acquired six Dell PowerEdge R750 servers and wants to add them to an existing iDRAC
Group that currently contains R760 servers. However, they are encountering errors during this process.
Understanding Dell Server Generations
PowerEdge R750: Part of the 15th Generation (15G) servers.
PowerEdge R760: Part of the 16th Generation (16G) servers.
iDRAC Group Manager Limitations
iDRAC Group Manager allows administrators to manage multiple servers from a single interface.
Important Limitation: Servers of different generations cannot be grouped together in iDRAC Group
Manager.
This is due to differences in firmware, hardware capabilities, and iDRAC features between server
generations.
Impact: Attempting to add 15G servers (R750) to a group containing 16G servers (R760) will result in
errors.
Evaluation of Options
Option A: R750 iDRACs firmware is out of date
Analysis: While outdated firmware can cause issues, it is not the primary reason here. Firmware updates
would not resolve the incompatibility between different server generations.
Option B: R750 iDRACs are not running the same version of firmware
Analysis: Similar to Option A, firmware version mismatches can cause problems but not errors related to
grouping different generations.
Option C: 15G and 16G servers cannot be in the same group
Correct Answe r: This is the primary reason for the errors encountered.

Option D: The feature requires iDRAC Enterprise
Analysis: Since the customer already has an existing iDRAC group with R760 servers, they likely have the
necessary licensing.
Dell Operate Reference
Server Management and Configuration Tools (14%)
Emphasizes understanding iDRAC functionalities and limitations.
System Administration (18%)
Highlights the importance of group management and its constraints.
Conclusion

The errors occur because iDRAC Group Manager does not support grouping servers from different generations. The customer cannot add 15G servers (R750) to a group that contains 16G servers (R760).

Question: 5

A system board has been replaced on a Dell PowerEdge 16G server. What data can Easy Restore recover?

A. Service Tag
B. HBA configuration
C. PERC configuration
D. Lifecycle controller log

Answer: A

Explanation:

Understanding Easy Restore Functionality
Server Troubleshooting (32%)
Explain Easy Restore, diagnostic utilities, and hardware diagnostic options

What is Easy Restore?
Easy Restore is a feature in Dell PowerEdge servers that automatically restores system-specific information after a system board replacement.
Purpose: Minimizes downtime and simplifies recovery by retaining critical system identity information.
Data Restored by Easy Restore
Service Tag: The unique identifier (serial number) of the server.
System Configuration Settings: Includes BIOS settings and other non-volatile configurations.
Data NOT Restored by Easy Restore
Option B: HBA Configuration
Host Bus Adapter settings are not restored automatically.
Option C: PERC Configuration
RAID configurations need to be backed up and restored separately.
Option D: Lifecycle Controller Log
Logs are stored on the system board and do not transfer after replacement.
Evaluation of Options
Option A: Service Tag
Correct Answe r: Easy Restore recovers the Service Tag, preserving the server's identity.

Option B: HBA Configuration
Analysis: Requires manual configuration or restoration from a backup.
Option C: PERC Configuration
Analysis: RAID settings are critical but need separate backup and restoration procedures.
Option D: Lifecycle Controller Log

Analysis: Logs are not preserved after system board replacement.

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Server Troubleshooting (32%)

Highlights the importance of understanding what Easy Restore can and cannot recover.

Conclusion

After replacing the system board on a Dell PowerEdge 16G server, Easy Restore will recover the Service Tag, ensuring the server maintains its unique identity within the network and management systems.