

**HP HP0-S45 : Practice Test**

Passing Score: 680  
Time Limit: 120 min



**Exam Code: HP0-S45**

**Title : Delta - Integrating HP ProLiant Server Solutions**

**Sections**

1. I&O&T Managed Services Traversing the Core



**Exam A****QUESTION 1**

An integrator needs to install Windows Server 2012 R2 on 6 HP ProLiant BL460C Gen9 servers. The servers will be part of an SQL cluster and must be configured identically. The integrator needs to use Intelligent Provisioning to complete this task.

What does Intelligent Provisioning use to allow the integrator to create deployment settings profiles to make this process more efficient?

- A. iLO Federation Management
- B. HP Smart Storage Administrator
- C. HPSSACLI Utility
- D. HP Insight Remote Support

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

B

Explanation:

Two common tasks that enterprise data center administrators face is the ability to quickly deploy new bare-metal servers, and efficiently update firmware and software on these same servers. The amount of time required to perform these tasks, especially in large data centers, can be lengthy. To help address customer challenges HP is introducing iLO Federation, a new enabling technology that will lead to significantly faster performance, greater scalability, and simpler operation across all facets of server management.

iLO Federation Management integrates with Intelligent Provisioning.

Incorrect Answers:

B: The HPE Smart Storage Administrator (HPE SSA) utilities provide high-availability configuration, management, and diagnostic capabilities for all Smart Array products. It:

- Supports online array capacity expansion, logical drive extension, assignment of online spares, and RAID or stripe size migration
- Suggests the optimum configuration for an unconfigured system
- Provides different operating modes, enabling faster configuration or greater control over the configuration options
- Displays on-screen tips for individual steps of a configuration procedure

D: Insight Remote Support (RS) is a software solution that enables reactive and proactive remote support to improve the availability of supported servers, storage systems, and other devices in your data center.

References:

<http://h20195.www2.hp.com/v2/getpdf.aspx/4AA5-4727ENW.pdf?ver=2.0>

**QUESTION 2**

Under which circumstance will a server Integrator need to access the HP Unified Extensible Firmware Interface (UEFI)?

- A. to run reports on the health status and error conditions on multiple servers
- B. to add a server to an iLO Federation management group
- C. to download an HP Service Pack for ProLiant (SPP)
- D. to configure PXE boot options

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### **Configure UEFI with standard boot methods for enhanced flexibility**

—UEFI supports preboot execution environment (PXE) boot for IPv6 networks allowing a unified network stack to PXE boot from any network controller while maintaining backward compatibility and continued support for IPv4 PXE. UEFI allows PXE multicast boot support for image deployment to multiple servers at the same time. Servers with an Embedded User Partition (a general purpose disk partition on nonvolatile flash memory, which is embedded on the

**Explanation:**

The Unified Extensible Firmware Interface (UEFI) supports PXE boot for IPv6 networks allowing a unified network stack to PXE boot from any network controller while maintaining backward compatibility and continues to support IPv4 PXE. New System Utilities BIOS/Platform Configuration (RBSU) IPv6 DHCP Unique Identifier menu that allows user to select how the UEFI BIOS will use the DHCP Unique Identifier (DUID) for IPv6 PXE Boot.

References: <http://www8.hp.com/us/en/products/server-software/product-detail.html?oid=6935826>

#### **QUESTION 3**

How should the server integrator use HP OneView to standardize settings for HP BladeSystem Enclosure interconnect modules?

- A. Define the settings in a logical interconnect group for an enclosure group.
- B. Install Virtual Connect Manager (VCM) into HP OneView and copy the settings from VCM.
- C. Create and deploy an HF> OS build plan for the interconnect modules.
- D. Use the Template view to create a template for the interconnect modules.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

Before transitioning existing infrastructure from being managed by Virtual Connect Manager (VCM) to HP OneView management requires inventory and evaluating the current environment. Once the inventory has been completed, you can evaluate when and how the environment should transition to HP OneView management.

References: Transitioning a Virtual Connect configuration to HP OneView  
<http://h20195.www2.hp.com/v2/getpdf.aspx/4AA5-0351ENW.pdf?ver=Rev%203>

#### **QUESTION 4**

A customer needs to deploy a legacy operating system on an HP DL380 Gen9 Server. The integrator sets the BIOS to support Legacy BIOS Boot Mode. When the integrator attempts to install the operating system, the embedded controller and disk drives are not available for configuration.

What should the integrator do to resolve this issue?

- A. Update the firmware of the system BIOS.
- B. Install a Smart SAS HBA Controller 240ar.
- C. Replace the failed system board.
- D. Update the firmware on the embedded disk controller.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

The HP Smart HBA H240ar Controller is a valid option for a ProLiant Gen9 DL380 server, and this controller supports Legacy BIOS Boot Mode.

#### QUESTION 5

While creating a baseline for the Gen9 blades in a new c7000 BladeSystem Enclosure in an active/active configuration, the integrator determines that one blade has an NIC teaming setting of fail over.

What will be the outcome of this setting in an active/active high availability configuration?

- A. East/West bandwidth will be reduced for this server.
- B. Network bandwidth will not be redundant for this server.
- C. North/South bandwidth will be reduced for this server.
- D. Downstream bandwidth will not be affected.

**Correct Answer: C**

**Section: (none)**

**Explanation**



**Explanation/Reference:**

Explanation:

Server-to-server traffic (east/west) in the enclosure will be reduced.

Note: An active/active configuration is an Ethernet network configuration that allows active traffic on the same VLAN on multiple interconnect modules. The NICs on all the servers in the enclosure have their NICs connected to adjacent HP Virtual Connect modules. All uplinks are active to forward network traffic.

References: [http://h17007.www1.hp.com/docs/enterprise/servers/oneviewhelp/cic/en/content/s\\_ls-active-active-standby-about-fusion.html](http://h17007.www1.hp.com/docs/enterprise/servers/oneviewhelp/cic/en/content/s_ls-active-active-standby-about-fusion.html)

#### QUESTION 6

Which pre-boot environment allows an Integrator to update firmware with a fwupdate command?

- A. Rom Based Setup Utility (RBSU)
- B. HP SSA CLI
- C. HP Intelligent Provisioning
- D. HP UEFI Embedded Shell

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

fwupdate invokes an HP UEFI Shell utility used to update System BIOS firmware.

References: <http://h10032.www1.hp.com/ctg/Manual/c03886471>

HP UEFI Shell User Guide for HP ProLiant DL580 Gen8 Servers, page 16

### QUESTION 7

Through HP OneView, an integrator determines that an HP ProLiant Gen9 server is experiencing errors during its boot process. As the next troubleshooting step, the integrator needs to investigate the issues in more detail without going to the server's physical location.

How can the integrator achieve the goal?

- A. Search for beep codes in the error messages and use HP troubleshooting documentation to interpret those codes.
- B. Use HP insight control server provisioning (ICsp) to deploy a remote testing and diagnostics tool to the server.
- C. Boot the server from an iLO Remote Console and then launch HP intelligent Provisioning and HP insight Diagnostics.
- D. Run diagnostics remotely from the HP OneView console and watch for POST messages on the HP OneView screen.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 8

Power was lost to an HP ProLiant DL380 Gen3 Server The system ROM is now corrupted and the server can no longer boot.

What should the integrator do first to this problem?

- A. Relocate the redundant ROM chip to the primary ROM chip.
- B. Replace the system board.
- C. Remove the system board battery for 60 seconds.

D. Set the system maintenance switch positions S1,S5, and S6 to on.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## System ROMpaq Recovery Procedure

A corrupted system ROM requires the ROM BIOS to be recreated by using the ROM Flash Utility. This can be accomplished only when the system is in the disaster recovery mode. Set the configuration switches, 1, 4, 5, 6 on the system maintenance switch block to 'on' to enable the disaster recovery mode.

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**WARNING: Before enabling the ROMPaq disaster recovery mode, refer to the HP Servers Troubleshooting Guide for complete instructions on disaster recovery.**

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Explanation:

If the system ROM on a HP ProLiant DL380 server is corrupted, the system automatically switches to the redundant ROM in most cases. If the system does not automatically switch to the redundant ROM, perform the following steps:

1. Power down the server.
2. Remove the server from the rack, if necessary.
3. Remove the access panel.
4. Change positions 1, 5, and 6 of the system maintenance switch to on.
5. Install the access panel.
6. Install the server into the rack.
7. Power up the server.
8. After the system beeps, repeat steps 1 through 3.
9. Change positions 1, 5, and 6 of system maintenance switch to off.
10. Repeat steps 5 and 6.

If both the current and backup versions of the ROM are corrupt, return the system board for a service replacement.

References: <http://community.hpe.com/t5/ProLiant-Servers-ML-DL-SL/Firmware-update-interrupted-on-HP-DL380-G6-uh-oh/td-p/6247481>

### QUESTION 9

A customer has added a storage blade to their current c7000 Bladesystem Enclosure, however the external storage is not visible from the adjacent HP ProLiant BL460c Gen9 server blade.

What should the integrator do in order for me ProLiant BL460c Gen9 server blade to recognize me adjacent storage?

- A. Install the 12GB SAS Expander Card.
- B. Reboot me BL460c Gen9 blade server.
- C. Add an HP Smart Storage Battery to the existing array controller.
- D. Upgrade the firmware on the Smart Array H244br.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

HP Smart Storage Battery provides a simple way to add additional controllers. Wired once, you can add up to 24 devices in a ML/DL Gen9 server and 3 devices in a BL460c Gen9 server with no need to route multiple cables.

Incorrect Answers:

A: The HP 12G SAS Expander Card provides internal storage expansion within the HP ProLiant Gen9 Server by allowing support for more than 8 internal hard disk drives when connected to a Gen9 supported Smart Array or Smart HBA controller.

References: HP Smart Storage for HP ProLiant Gen9, page 6

[http://www.hp.com/hpinfo/newsroom/press\\_kits/2014/ComputeEra/HP\\_SmartStorage\\_ProLiantGen9\\_DataSheet.pdf](http://www.hp.com/hpinfo/newsroom/press_kits/2014/ComputeEra/HP_SmartStorage_ProLiantGen9_DataSheet.pdf)

#### **QUESTION 10**

A customer is planning where to locate their servers in the data center and how to manage and monitor power consumption. They have purchased HP iPDU units for the cabinets where HP ProLiant Gen9 servers will be installed.

Which guideline must the integrator follow when installing the new iPDUs?

- A. HP Intelligent Series Racks are required to use HP Location Discovery Services.
- B. HP Location Discovery Services is required for Remote Monitored PDUs.
- C. The iPDU display must be mounted on the outside of the front cabinet door.
- D. HP Flexible Slot Platinum Supplies must be installed to use HP Power Discovery Services.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**Explanation:**

HP Power Discovery Services (PDS) combines the HP Intelligent Power Distribution Unit (iPDU) and HP Flex Slot Platinum Plus power supplies with HP Insight Control software to create an automated, energy-aware network between IT systems and facilities.

References: QuickSpecs HP Flexible Slot Power Supplies, page 3  
<http://www8.hp.com/h20195/v2/getpdf.aspx/c04346217.pdf?ver=1.0>

**QUESTION 11**

A server integrator has selected Virtual Connect Flex-10/10D modules as interconnect modules for HP BladeSystem Enclosures Blade servers will use Fibre Channel over Ethernet (FCoE) for their remote storage The integrator is now discussing the upstream connectivity requirements with LAN and SAN administrators.

Which solution should the integrator choose to connect to the Virtual Connect modules?

- A. SAN switches that support FCoE tunneling
- B. Ethernet switches that support FCoE
- C. SAN switches that support N-Port ID Virtualization (NPIV)
- D. Ethernet switches that support 8 Gbps Ethernet

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## Dual-hop FCoE support in Virtual Connect

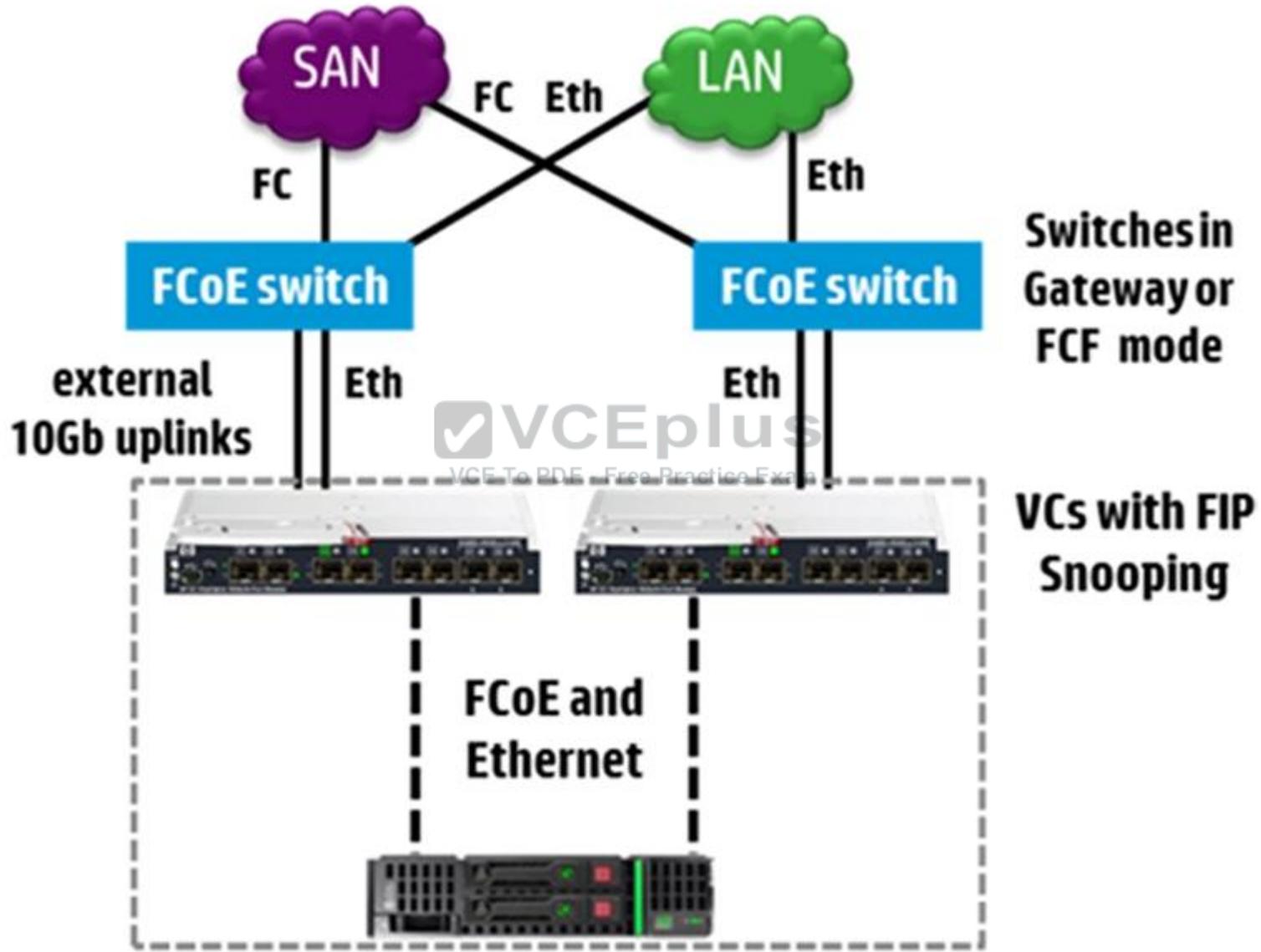


Figure 3-19. Virtual Connect dual-hop support

Explanation:

Since VC 4.01, Virtual Connect provides the ability to pass FCoE to an external FCoE capable network switch.

References: FC Cookbook for HP Virtual Connect, page 12

[http://h20628.www2.hp.com/km-ext/kmcsdirect/emr\\_na-c01702940-16.pdf](http://h20628.www2.hp.com/km-ext/kmcsdirect/emr_na-c01702940-16.pdf)

### QUESTION 12

A customer with ProLiant Gen9 based servers needs to add external storage to some of the servers.

Which component should the integrator recommend?

- A. 12GB SAS Expander Card
- B. HP Smart Array P841
- C. HP Smart Array P440ar
- D. HP IO Accelerator

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



### QUESTION 13

Which HP software-defined platform automates management of HP servers, storage, and other HP converged Infrastructure using RESTful API?

- A. HP OneView
- B. HP Virtual Connect Manager
- C. HP integrated Lights Out (iL04)
- D. HP Smart Update Manager (SUM)

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

HP RESTful API is a management interface that server management tools can use to perform configuration, inventory, and monitoring of an HP Gen9 server via HP iLO 4 v2.00.

References: Solution brief, Simple IT works better, HP RESTful Interface Tool  
<http://www8.hp.com/h20195/v2/getpdf.aspx/4AA5-4027ENW.pdf>

**QUESTION 14**

What is required to successfully move from HP SIM to HP OneView?

- A. Data Migration Tool to migrate data from HP SIM to HP OneView
- B. SQL database instance for HP OneView
- C. ESXi server or Hyper-V host for HP OneView deployment
- D. Server with CentOS 6.x for HP OneView deployment

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Explanation:

HP OneView is a virtual appliance running on the following supported hypervisor hosts.

- VMware vSphere ESXi
- Microsoft Hyper-V

References: HP OneView 2.0 Installation Guide, page 5

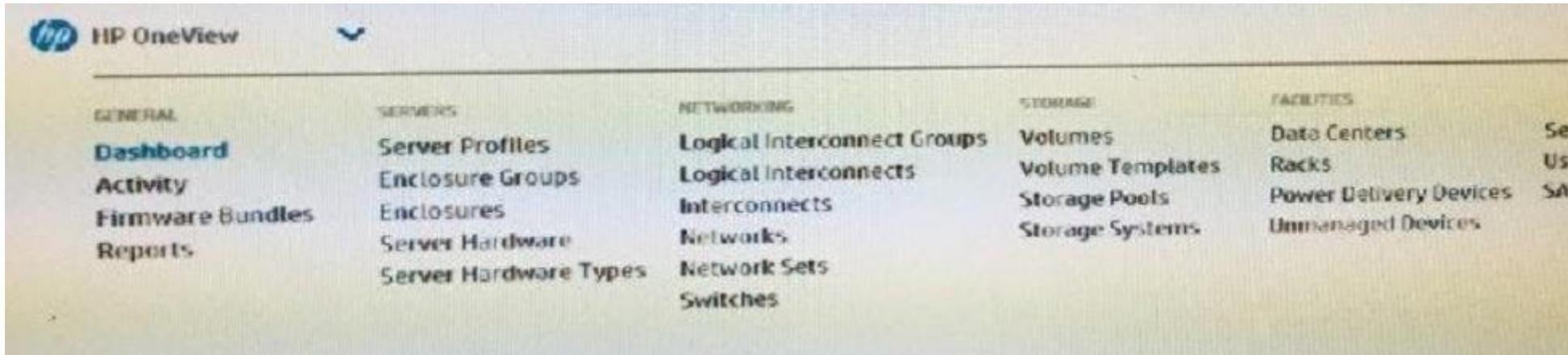
[http://h20565.www2.hpe.com/hpsc/doc/public/display?sp4ts.oid=5410258&docId=emr\\_na-c04764735&docLocale=en\\_US](http://h20565.www2.hpe.com/hpsc/doc/public/display?sp4ts.oid=5410258&docId=emr_na-c04764735&docLocale=en_US)

**QUESTION 15**

**HOTSPOT**

An administrator needs to provide access to HP OneView for a specific user group from Active Directory.

Click the menu option that will allow the administrator to integrate HP OneView with Active Directory.



- A. Activity
- B. Users and Groups
- C. Unmanaged Devices
- D. Data Centers

**Correct Answer:** B  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

## HP OneView main menu

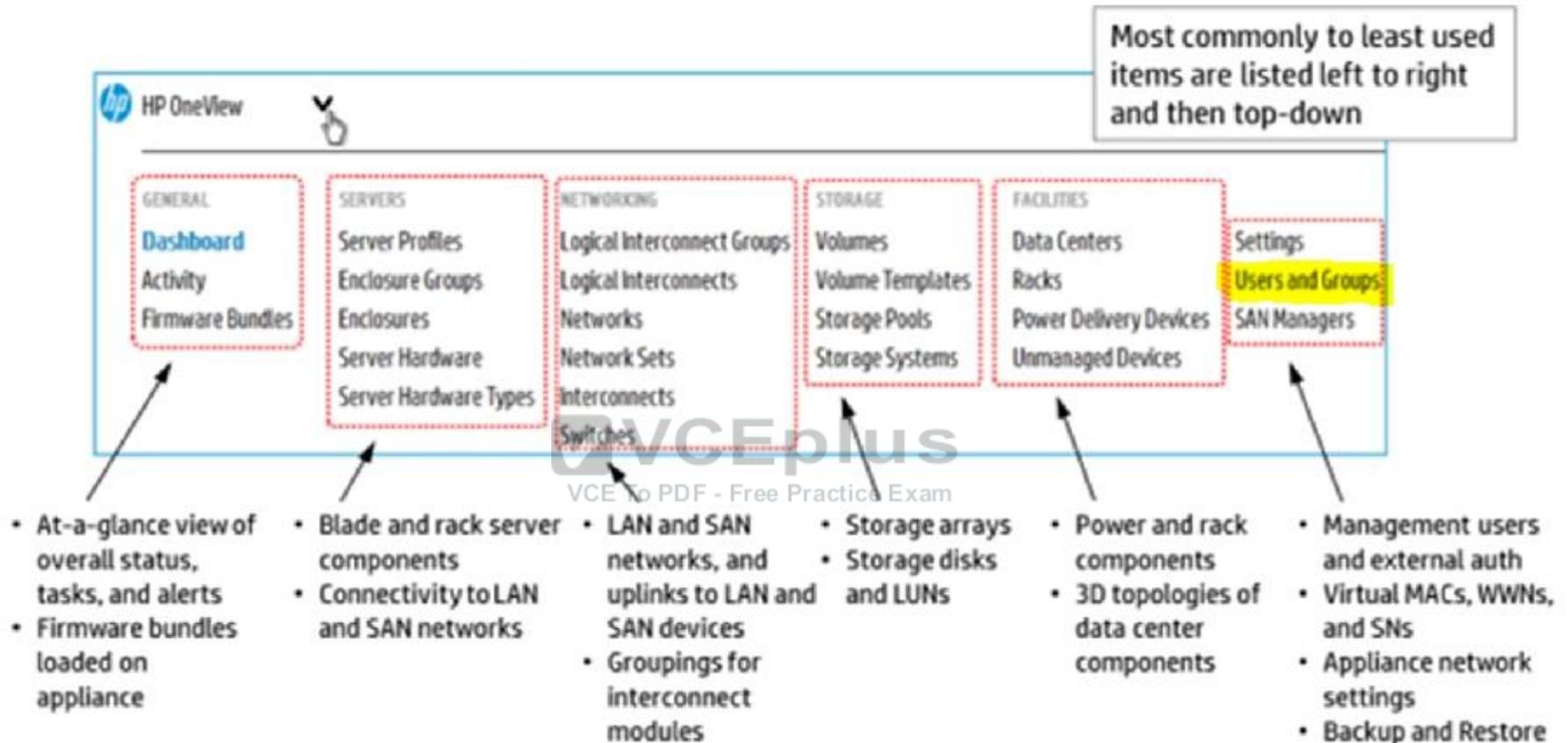


Figure 4-54. HP OneView main menu

- **Settings**—Enables you to perform activities including managing virtual addresses and identifiers (MAC addresses, WWNs, and serial numbers), and configuring networking settings for the HP OneView appliance, manage backups, and add licenses. The **Users and Group** option allows you to configure management users. The SAN Managers option is used to configure SAN switches through which fabric-attached storage arrays are to be accessed.

**QUESTION 16**

A server integrator needs to install the maximum amount of memory in a new BL460c Gen9 server

Which type of memory should the integrator install?

- A. RDIMM Single-rank (128GB)
- B. RDIMM Dual-rank (16GB)
- C. LRDIMM Quad-rank (32GB) Non Ecc
- D. LRDIMM Quad-rank (32GB)



**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

There exists the HP 32GB (1x32GB) Quad Rank x4 DDR4-2133 CAS-15-15-15 Load Reduced Memory (LRDIMM) Kit 726722-B21, which can be used on the BL460 Gen9 server.

It supports the HP enhanced memory error protection.

Note: ProLiant BL400c Server Blades, HPE ProLiant BL460c Gen9 Server Blade

Maximum (LRDIMM) 2TB (16 x 128GB) up to 2400MT/s at 1.2V

Maximum (RDIMM) 512GB (16 x 32GB) up to 2133MT/s at 1.2V

Memory, maximum: 2 TB  
Using 128 GB DIMMs, planned release in June 2016.

Incorrect Answers:

A: RDIMM does not support the 128GB memory type.

C: HP enhanced memory error protection with HP Advanced Memory Error Detection Technology.

This innovation monitors several memory parameters and seeks out specific defects that either cause performance degradation or significantly increase the probability of a non-recoverable memory condition. By improving the prediction of critical memory error conditions, this technology prevents unnecessary DIMM replacement and increases server uptime.

References: QuickSpecs, HP DDR4 SmartMemory

<http://www8.hp.com/h20195/v2/getpdf.aspx/c04355083.pdf?ver=4>

QuickSpecs HPE ProLiant BL460c Gen9 Server Blade, page 31

<http://www8.hp.com/h20195/v2/GetPDF.aspx/c04380273.pdf>

#### QUESTION 17

A customer has an HP ProLiant DL380 Gen9 server with one processor that has a large RAID 5 SAS Array configured on a P440ar storage controller with a hot spare. During the rebuild process, a second SAS drive failed.

What should the integrator do to help prevent this problem from reoccurring?

- A. Configure a higher Rebuild.
- B. Priority Install a second hot spare disk drive.
- C. Install more memory in the server.
- D. Use the integrated B140i controller.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 18

A system integrator installed an operating system on an HP ProLiant Gen9 Server.

Which operating system can be used with UEFI Boot Mode?

- A. VMware ESXi 5.5
- B. Windows Server 2008 32-bit

- C. Citrix XenServer 6.0
- D. Windows Server 2003 64-bit

**Correct Answer:** A  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

#### QUESTION 19

A customer is using a 3PAR StoreServ storage system attached directly to a BladeSystem Enclosure through Virtual Connect FlexFabric-20/40 FS modules. The customer needs to simplify the process of creating and attaching volumes for server administrators.

Which tasks should the system integrator perform in HP OneView? (Select two.)

- A. Import Fibre Channel networks from the 3PAR StoreServe storage system.
- B. Create Fibre Channel networks and set the Fabric type to Direct Attach.
- C. Add the storage administrator role to server administrators' user accounts.
- D. Create a storage domain.
- E. Add storage pools



**Correct Answer:** CE  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

Automated Storage Provisioning

HP OneView provides automated, policy-driven provisioning of storage resources. It is fully integrated with server profiles so that you can manage your new or existing HP 3PAR storage infrastructure. With HP OneView you can view and manage your storage system and storage pools. You add existing volumes and create new volumes, and you can create volume templates to provision multiple volumes with the same configuration.

Adding storage to the appliance is simple: First, add a storage system and storage pools to the appliance. Then, create or add volumes, associate them with networks, and attach them to server profiles.

References: [http://h17007.www1.hp.com/docs/enterprise/servers/oneviewhelp/oneviewRESTAPI/content/s\\_cicug-intro-functions-provision-fusion.html](http://h17007.www1.hp.com/docs/enterprise/servers/oneviewhelp/oneviewRESTAPI/content/s_cicug-intro-functions-provision-fusion.html)

#### QUESTION 20

HOTSPOT

Refer to the exhibit.

A customer has an HP bl460 Gen9 server in bay 9 that is using more network bandwidth than expected. The server is installed in an HP C7000 BladeSystem Enclosure that has a pair of HP Flexfabric 10Gb/24-Port modules in an Active/Active configuration managed by HP OneView. The server integrator is investigating the bandwidth issue by viewing the downlink bandwidth to bay 9 the current utilization is 0 Kb/s as shown.

Click the area that the integrator should select next to further investigate the Day 9 downlink bandwidth utilization.

The screenshot displays a network management interface. On the left, a tree view shows a list of interconnects: 'C7000-Bottom, interconnect 1' (selected) and 'C7000-Bottom, interconnect 2'. The main panel shows the configuration for 'C7000-Bottom, interconnect 1'.

### General >

Logical interconnect	C7000-Bottom-L1
Interconnect power	On
State	Configured
Firmware baseline	not set

### Uplink ports >

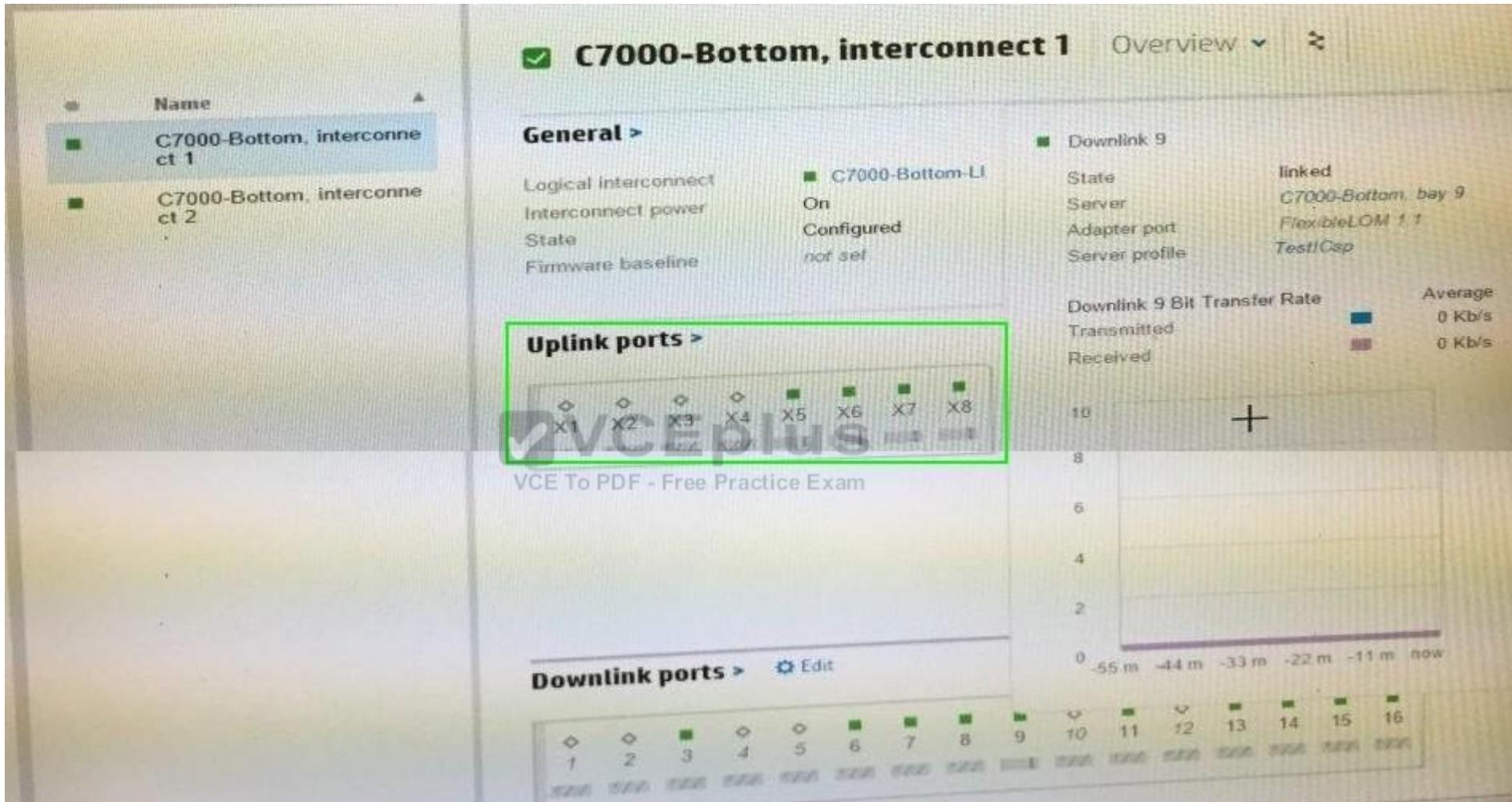
Port	State
X1	Down
X2	Down
X3	Down
X4	Down
X5	Up
X6	Up
X7	Up
X8	Up

### Downlink ports > Edit

Port	State
1	Down
2	Down
3	Up
4	Down
5	Down
6	Up
7	Up
8	Up
9	Down
10	Down
11	Up
12	Down
13	Up

On the right side, there is a section for 'Downlink 9' with a 'State' dropdown set to 'Server'. Below this is a 'Downlink 9 Bit Trans' graph showing 'Transmitted' and 'Received' data. The graph has a y-axis from 0 to 10 and an x-axis with labels -55 m, -44 m, and -33.

A. done



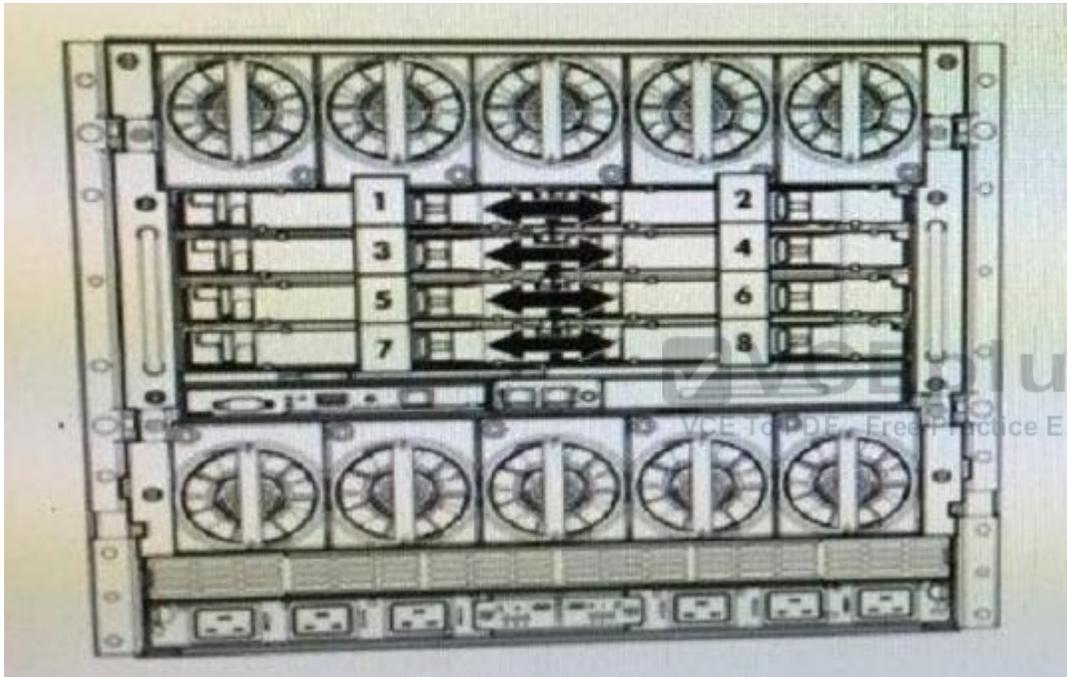
Uplink ports

**Correct Answer:** A  
**Section:** (none)  
**Explanation**

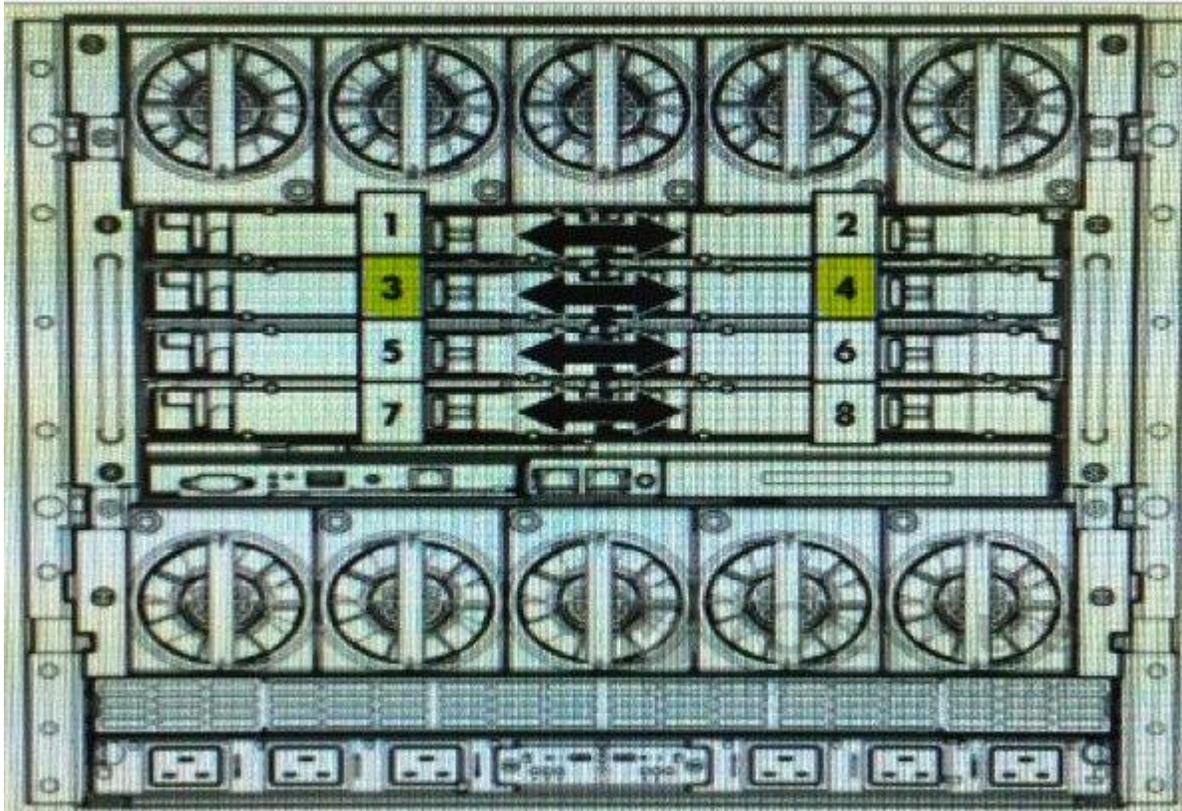
**Explanation/Reference:**

**QUESTION 21**  
HOTSPOT

A server integrator has installed NICs in mezzanine 1 on HP ProLiant Gen9 BL servers in an HP c7000 BladeSystem Enclosure. Next, the integrator needs to install interconnect modules for these new ports. Click me two bays in which the administrator should install the modules.



A. done



**BladeSystem c7000 interconnect bay mapping**

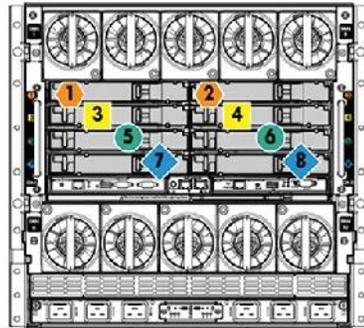


Figure 3-7. BladeSystem c7000 interconnect bay mapping

Figure 3-7 shows the numbering of the BladeSystem c7000 interconnect bays. Table 3-2 shows to which ProLiant BL460c Gen9 server component each interconnect bay is connected.

Table 3-2. Interconnect bay connections

Server blade signal	Interconnect bay	Interconnect bay labels
FlexibleLOM	1 and 2	Orange circle
Mezzanine 1	3 and 4	Yellow square
Mezzanine 2	5 and 6	Green circle
	7 and 8	Blue diamond

**Correct Answer: A**  
**Section: (none)**  
**Explanation**

**Explanation/Reference:**

**QUESTION 22**

A customer needs eight SAS drives installed in a RAID 10 configuration in their new HP ProLiant DL380 Gen9 server using the Dynamic Smart Array B140i Controller embedded into the system. The drives are installed properly in the bays. When the integrator attempts to configure the array, the drives do not appear in the configuration utility.

What is the likely cause of the problem?

- A. A maximum six SAS drives are supported.
- B. SAS drives are not supported
- C. Only RAID 0, RAID 1 and RAID 5 are supported.
- D. The Smart Array firmware was not updated to support SAS drives.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

Up to 10 SATA drives is supported, but no SAS supported.

Incorrect Answers:

C: RAID 0, 1, 1+0, and RAID 5 are supported by the B140i.

References: QuickSpecs HP Dynamic Smart Array Controller, page 2

<http://www8.hp.com/h20195/v2/GetPDF.aspx/c04390743.pdf>

#### **QUESTION 23**

Which statement describes how integrators use HP OneView to manage firmware on managed enclosures and servers?

- A. They receive HP OneView alerts for firmware updates, but they must install a separate HP Smart update manager solution to handle the updates.
- B. They use HP OneView to view firmware versions on managed components, but they must install a separate HP smart Update Manager solution to handle the updates.
- C. They use HP OneView to launch HP Smart storage administrator (SSA), which they then use to upgrade firmware.
- D. They define a firmware baseline, and OneView updates managed components to this baseline.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 24**

How do HP Intelligent Power Distribution Units (iPDUs) help server integrators?

- A. They provide backup power for servers, helping to prevent costly network outages and unplanned downtime.
- B. They integrate power with cooling components, based on American Society of Heating.

Refrigeration and Air-Conditioning Engineers (ASHRAE) standards.

- C. They dynamically distribute power to different servers in the rack based on policies defined by integrators.
- D. They track power consumption with high accuracy and forward me data to HP OneView, where integrators can View it.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## HP iPDUs

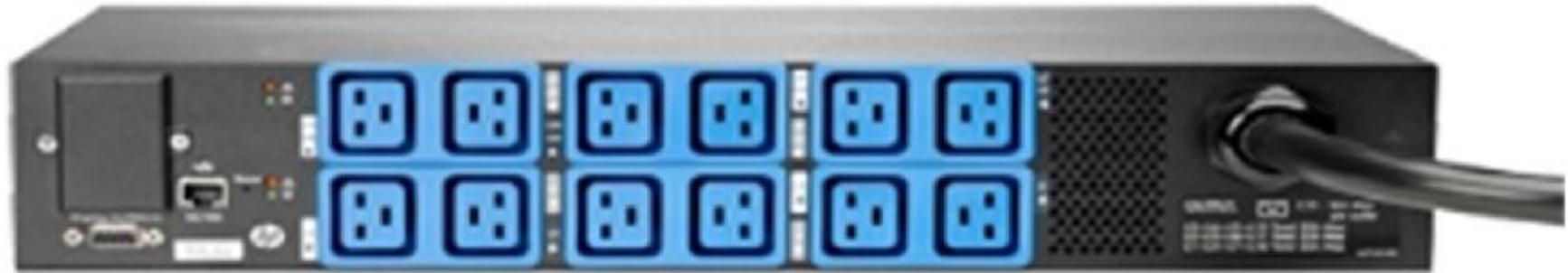


Figure 1-34. HP iPDU

Intelligent Power Discovery Services combine an HP iPDU (Figure 1-34) and HP Common Slot (CS) Platinum/Platinum Plus power supply with HP Insight Control software to create an automated, energy-aware network between IT systems and facilities.

Intelligent Power Discovery Services with iPDUs automatically track power usage and document configurations to increase system uptime and reduce the risk of outages. Intelligent Power Discovery provides automated server discovery on a network through power line communication technology that is embedded in CS Platinum Power Supplies. Power line communication allows the power supply to communicate with the iPDU. This communication helps:

- Automatically discover the server when it is plugged into a power source
- Map the server to the individual outlet on the iPDU

The key element of Power Discovery Services is the iPDU, which is a power distribution unit with full remote outlet control, outlet-by-outlet power tracking, and automated documentation of power configuration. The iPDU records server ID information by outlet and forwards it to Insight Control, eliminating human errors that can cause power outages.

**Explanation:**

HP OneView collects and reports processor utilization and power and temperature history for your data center hardware. The appliance monitors power, automatically detects and reports power delivery errors, and provides precise power requirement information for HP ProLiant Gen8 servers and HP BladeSystem enclosures that you can use for planning rack and power usage.

Power Discovery Services enable automatic discovery and visualization of the power delivery topology for your data center. HP iPDUs enable the appliance to map the rack power topology automatically. The appliance detects wiring errors—such as lack of redundancy—and updates electrical inventory automatically when new servers are installed. The appliance also supports per-outlet power control for remote power cycling of each iPDU outlet.

References: [http://h17007.www1.hp.com/docs/enterprise/servers/oneviewhelp/oneviewRESTAPI/content/s\\_cicug-intro-functions-respond-fusion.html](http://h17007.www1.hp.com/docs/enterprise/servers/oneviewhelp/oneviewRESTAPI/content/s_cicug-intro-functions-respond-fusion.html)

**QUESTION 25**

An integrator is installing an HP ProLiant BL460C Gen9 server into device bay 13 of an HP C7000 BladeSystem enclosure. The integrator needs to access the UEFI System Utilities on the new server, but is unable to do so because the iLOM Integrated Remote Console is not accessible.

Where can the integrator confirm the IP address of the (L04 interface for this blade?

- A. in Network Access in the Onboard Administrator
- B. in the 1LO4 Web interface using the BladeSystem c 7000 Insight Display
- C. in Enclosure Bay IP Addressing in the Onboard Administrator
- D. in Enclosure TCP/IP Settings in the Onboard Administrator

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**Explanation:**

The command SHOW SERVER LIST is a blade management command.

- It displays a brief description of all server blades to which the current user has access
- It displays by default IPv4 information; to display IPv6 information, enter the IPV6 keyword

**Example:**

```
OA-0018FE27577F> SHOW SERVER LIST
```

```
Bay iLO Name          iLO IP Address  Status  Power  UID
Partner
-----
-----
  1 [Absent]
    .
    .
    .
 10 ILOMXQ1281CDZ      111.222.33.444  OK      On     Off
 11 [Absent]
    .
    .
    .
Totals: 1 server blades installed, 0 powered on.
```

```
OA-0018FE27577F> SHOW SERVER LIST IPV6
```

```
Bay iLO Name          iLO IP Address
Type
```



References: HP BladeSystem Onboard Administrator Command Line Interface, User Guide Page 177  
<http://www.hp.com/ctg/Manual/c00702815.pdf>

### QUESTION 26

Which is an appropriate use of the HP OneView Dashboard?

- A. to locate a server using a topology map of managed data center components
- B. to determine whether any servers or enclosures have a warning or critical health status
- C. to launch the integrated Lights Out (iLO) interface for an individual managed server
- D. to check the power utilization of an individual managed server or rack

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

### QUESTION 27

Which internal drive components does HP Secure Encryption protect?

- A. HP ProLiant <3en9 Solid State Disks (SSD) mat uses SAS but not an SDD that uses SATA
- B. HP ProLiant Gen9 Solid state Disks (SSD) mat uses SAS or SAT A but not an HDD
- C. HP ProLiant Gen9 disks managed through an HP Smart Array p-series controller
- D. HP ProLiant Gen9 Solid State Disks (SSD) or Hard Drive Disks (HDD) that uses SAS but not an SSD or HDD that uses SATA

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

## HP Secure Encryption

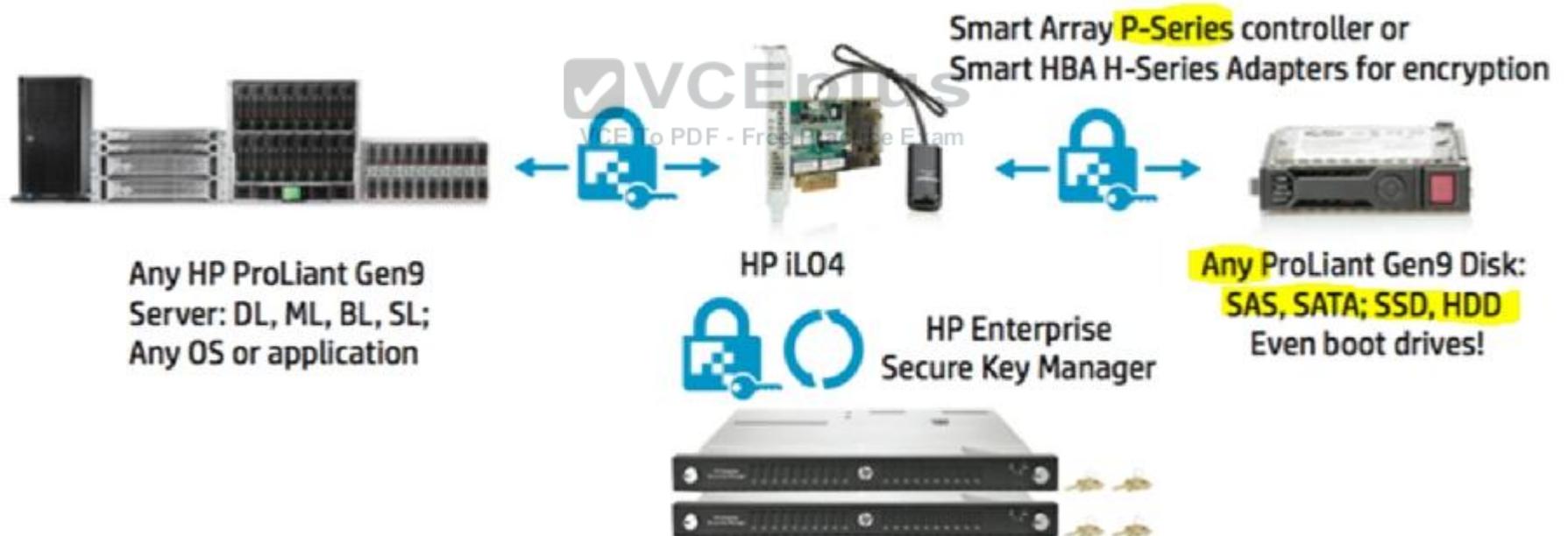


Figure 1-33. HP Secure Encryption

**QUESTION 28**

An integrator needs to install an operating system on an HP ProLiant Gen9-series server using the HP Dynamic Smart Array B140i Controller.

What should the integrator do?

- A. enable Legacy BIOS mode
- B. use HP Service Pack for ProLiant
- C. use HP Smart Update Manager
- D. enable UEFI mode

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## DESCRIPTION

HP Dynamic Smart Array B140i Controller configured in HP servers **requires a proprietary HP device driver**. HP recommends using the HP B140i driver because it provides RAID set compatibility with other Smart Array controllers, enables the use of familiar HP configuration, monitoring, and management software, and enables upgrading directly to a traditional Smart Array Controller if desired.

The HP Dynamic Smart Array Controller **driver** is also available in HP Service Pack for ProLiant (SPP) at the following URL:

[www.hp.com/go/spp/download](http://www.hp.com/go/spp/download)

## QUESTION 29

What should the integrator use to back up HP OneView?

- A. hypervisor provided Fault Tolerance on the HP OneView appliance virtual machine
- B. the HP OneView interface to generate and download a backup file
- C. HP Data Protector to back up the HP OneView appliance configuration
- D. hypervisor-provided capabilities to snapshot the HP OneView appliance virtual machine

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

HP OneView provides the ability to save your configuration settings and management data to a backup file and enables you to use that backup to restore a corrupted appliance in the event of a catastrophic failure.

The backup process involves creating a backup file and then downloading that file so that you can store it to a safe and secure (off-appliance) location for future use.

References: [http://h17007.www1.hp.com/docs/enterprise/servers/oneviewhelp/cic/en/content/s\\_backup-about-atlas.html](http://h17007.www1.hp.com/docs/enterprise/servers/oneviewhelp/cic/en/content/s_backup-about-atlas.html)

### QUESTION 30

An integrator needs to deploy images to multiple HP ProLiant DL380 Gen9 servers at the same time with multicast PXE. Which feature should the integrator enable?

- A. BIOS mode
- B. UEFI mode
- C. HP Intelligent Provisioning
- D. HP Insight Online

**Correct Answer:** B

**Section:** (none)

**Explanation**



**Explanation/Reference:**

Explanation:

UEFI allows a server to multicast a single boot image to multiple units simultaneously.

Note: The UEFI enhanced networking API allows for a rich network authentication (log-on) in a pre-boot environment. UEFI includes IPv4 and IPv6 networking stacks and provides PXE booting with the longer IPv6 addresses.

References: Technical white paper, UEFI, successor to legacy BIOS With HP ProLiant Gen9 Servers, page 3  
<http://www8.hp.com/h20195/V2/getpdf.aspx/4AA5-1111ENW.pdf?ver=2.0>

### QUESTION 31

An integrator is preparing for 3n HP OneView installation. Which software component needs to be installed at the customer site before the integrator can perform the installation?

- A. an ICsp appliance deployed and ready for integration with HP OneView
- B. a server with Windows 2008 R2 installed
- C. Insight control, ready to be upgraded to HP OneView

D. supported hypervisor for HP OneView deployment

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 32

A customer has an HP ProLiant DL380 Gen9 server with a Smart Array P440ar controller. The customer needs to add another internal drive cage and create a RAID set using all internal drives. Which HP component should the integrator install in the HP ProLiant DL380 Gen9 server?

- A. HP Smart SAS HBA H240ar Controller
- B. HP PCIe Workload Accelerator
- C. HP Smart Storage Battery
- D. HP SAS Expander

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**



### QUESTION 33

An integrator is installing an HP ProLiant DL380 Gen9 server with an H240ar controller installed. The integrator needs to install a total of 24 SFF Drives.

Which additional task must the integrator perform to meet the requirements?

- A. Add an HP 12 GB SAS Expander Card cabled to the H240ar and cabled to two SFF backplanes.
- B. Add an SFF cable and an SFF backplane to the H240ar.
- C. Add two more H240ar controllers with 8 SFF drives attached to each controller.
- D. Add a rear drive cage backplane and cable it to the H240ar.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 34**

What is a benefit of advanced memory protection on HP ProLiant BL460c Gen9 servers?

- A. It helps to eliminate unplanned downtime by using advanced error checking, demand scrubbing, and patrol scrubbing.
- B. It helps to reduce latency for communications between a server and remote storage on the network.
- C. It helps to ensure compliance with regulatory standards by using HP Smart Encryption to encrypt all data at rest.
- D. It helps to prevent lost data during a power outage by backing up data to a non-volatile storage medium.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

HPE Advanced Memory Error Detection Technology

Uncorrectable memory errors can cause applications and operating systems to crash, so they are costly in terms of downtime and repairs. The best way to prevent unnecessary DIMM replacements is to filter out superfluous errors and identify critical errors that can lead to a shutdown.

You can no longer rely on simple error event counts on systems containing up to 14 trillion memory transistors. With HPE Advanced Memory Error Detection Technology, we re-invented a precision system that pinpoints errors that cause downtime. HPE Advanced Memory Error Detection Technology seeks out specific defects that either cause performance degradation or significantly increase the probability of an uncorrectable (non-recoverable) memory condition. By improving the prediction of non-recoverable memory events, this technology prevents unnecessary DIMM replacements and increases server uptime.

References: Technologies in HPE ProLiant Gen9 c-Class server blades, page 9

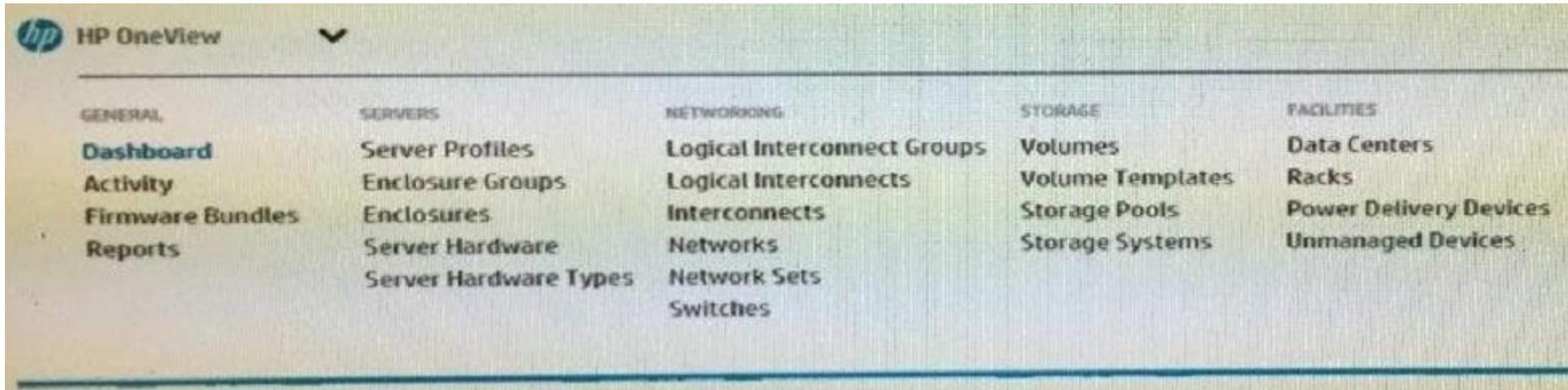
<http://www8.hp.com/h20195/v2/getpdf.aspx/4AA5-4485ENW.pdf?ver=Rev%203>

**QUESTION 35**

HOTSPOT

A customer needs the integrator to add a network to HP OneView. The customer provides the integrator with the VLAN ID and uplink port number.

Click the menu option the Integrator should select to configure the network uplink and allow the configuration to be reused on new enclosures.



- A. Networks
- B. Networks Sets
- C. Logical Interconnect Groups
- D. Server Profiles

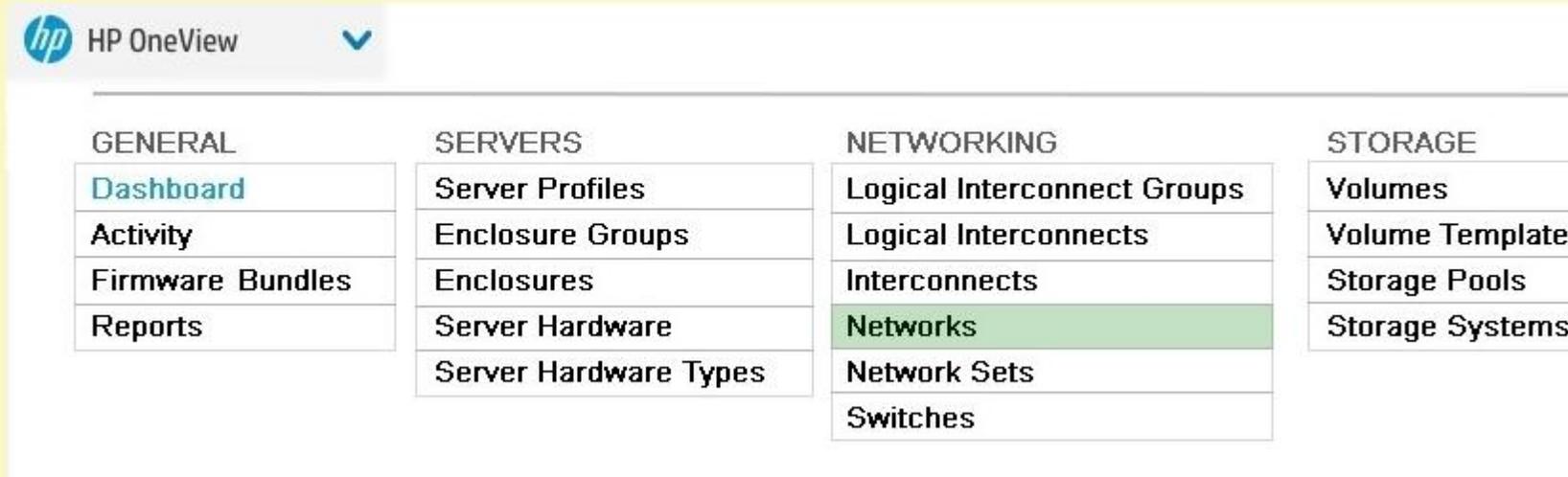
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Answer:



Explanation:

Creating Ethernet Networks

1. Select the Top Level Menu, and select Network



2. Once on the Networks screen, click the +Create Network button on the far left.

3. In the new window, provide the Name, select Ethernet as the Type, provide the VLAN ID, and bandwidth settings. Smart Link will automatically be selected by default. Private Network will mimic PVLAN behavior in that all assigned Network Connections will all be in an isolated network.

Etc.

References: Technical Whitepaper, HP OneView Deployment and Management Guide, page 25  
[http://h20628.www2.hp.com/km-ext/kmcsdirect/emr\\_na-c04532272-3.pdf](http://h20628.www2.hp.com/km-ext/kmcsdirect/emr_na-c04532272-3.pdf)

**QUESTION 36**

A server integrator has made a change to the Hyper-Threading configuration in the BIOS on a single HP BL460c Gen9 Server Blade in the VMware environment.

Which tool should the integrator use to efficiently apply the updated BIOS configuration to all of the other servers in the environment?

- A. HP Insight Control Remote Support
- B. HP OneView for VMware vCenter
- C. HP Insight Control server provisioning
- D. HP intelligent Provisioning

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 37**

An administrator deployed HP OneView to the ESXi server managed by the vCenter Server. During the initial configuration, the administrator configured the wrong IP address and is unable to access the web interface.

What should the integrator do to solve this problem?

- A. Log in to the HP OneView using SSH client, login in using root account and one time password, then change management IP address.
- B. Log in to the appliance using service IP address 169.254.1.1 and change management IP address.
- C. Log in to the ESXi server hosting HP OneView appliance using vSphere Web Client and change management IP address on the vSwitch.
- D. Log in to the vCenter server, open appliance local console, and change management IP address.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **Note**

SAS is not supported with the Dynamic Smart Array B140i.

---

**QUESTION 38**

A customer has an HP ProLiant DL380 Gen9 server and needs to order a power supply (PSU) model to meet the following requirements:

- It must be a redundant PSU solution
- The PSU must be able to handle a total load of 650 Watt, even in the event of a utility failure to one of the two utility power feeds

Which PSU solutions should the integrator recommend to meet the customer's requirements? (Select two.)

- A. two 1400 Watt Flexible Slot Platinum Plus Power Supply Units per HP ProLiant DL380 Gen9 server
- B. two 800 Watt Flexible Slot Platinum Power Supply Units per HP ProLiant DL380 Gen9 server
- C. two 750 Watt common Slot Platinum Power Supply Units per HR ProLiant DL380 Gen9 server
- D. two 1200 Watt Common Slot Platinum Power Supply Units per HP ProLiant DL380 Gen9 server
- E. two 500 Watt Flexible Slot Platinum Power Supply units per HP ProLiant DL380 Gen9 server

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**Power Supply**

HPE 500W Flex Slot Platinum Hot Plug Power Supply

NOTE: Available in 94% efficiency.

HPE 800W Flex Slot Platinum Hot Plug Power Supply

NOTE: Available in 94% and 96% efficiency.

NOTE: Also available in -48VDC and 227VAC/380VDC power inputs.

HPE 1400W Flex Slot Platinum Plus Hot Plug Power Supply

NOTE: Available in 94% efficiency.

HPE Flexible Slot Battery Backup Unit Kits

NOTE: Flex Slot Battery Backup provides 750W output and 500W in paralleled configuration.

HPE Flexible Slot (Flex Slot) Power Supplies share a common electrical and physical design that allows for hot plug, tool-less installation into HPE ProLiant Gen9 Performance Servers. Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

All pre-configured servers ship with a standard 6-foot IEC C-13/C-14 jumper cord (A0K02A). This jumper cord is also included with each standard AC power supply option kit. If a different power cord is required, please check the [ProLiant Power Cables](#) web page.

To review the power requirements for your selected system, please use the HPE Power Advisor Tool located at <http://www.hp.com/go/hppoweradvisor>.

Power specifications and technical content for all HPE Server power supplies can be found at <http://www.hp.com/go/proliant/powersupply>.

**QUESTION 39**

An integrator is installing HP ProLiant DL380 Gen9 rack based servers into a customer's existing racks. The integrator verifies with the customer that the ambient temperature readings from the back of the racks vary from 107° F (42° C) to 118° F (48° C)-

What should the integrator do to accommodate the ProLiant Gen9 servers?

- A. Ask the customer to add more airflow vents near each of the racks that will hold the ProLiant Gen9 servers.
- B. Confirm that the additional ProLiant Gen9 servers can be accommodated on these racks, based on the temperature readings provided.

- C. Inform the customer that the maximum inlet temperature of the ProLiant Gen9 servers should not exceed 113° f (45° C).
- D. Confirm that the data center has the proper airflow vent supply behind the rear of each rack.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Explanation:

System Inlet Temperature, Standard Operating Support: 10° to 35°C (50° to 95°F).

Extended Ambient Operating Support:

For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F).

For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F).

References: QuickSpecs HPE ProLiant DL380 Generation9 (Gen9), page 66

<http://www8.hp.com/h20195/v2/getpdf.aspx/c04346247.pdf>

#### **QUESTION 40**

A company needs a solution for monitoring and diagnosing issues with devices in its data center. The company has the following requirements for the solution:

- It monitors its HP ProLiant Gen6 and Gen9 servers.
- It monitors its HP storage and networking devices.
- It is simple- to set up.

Why should the integrator choose HP Insight Online with HP Insight Remote Support rather than HP insight Online alone as the solution?

- A. it does not require the installation of a local hosting device
- B. it is required to monitor Gen9 servers
- C. it supports storage and networking devices
- D. it is required for mixed Gen8 and Gen9 deployments

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Explanation:

Insight Remote Support software supports most HP servers, storage, network devices.

Incorrect Answers:

A: Insight Online direct connect does not require software installation or on-site console.

References: <http://www8.hp.com/us/en/products/servers/solutions.html?compURI=1487547#.V2krRmh96Uk>

#### QUESTION 41

A customer has two HP c7000 BladeSystem Enclosures equipped with Virtual Connect FlexFabric 10Gb/24-Port interconnect modules and is managing this environment with HP OneView. Both enclosures are members of one enclosure group. The integrator needs to add a new enclosure to the Infrastructure and configure Virtual Connect modules identically to the current enclosures as follows:

- Identical uplink ports to carry ethernet and Fibre Channel traffic
- Identical networks and VLAN IDs
- Identical IGMP settings
- The new enclosure will be equipped with Virtual Connect FlexFabric-20/40 F8 interconned modules

Which approach should the integrator take?

- A. Create a new logical interconnect group for the new enclosure and synchronize it with the current enclosure group.
- B. Add a new enclosure group and a new logical interconnect group for the new enclosure, then configure uplinks and IGMP settings identically to the original logical interconnect group.
- C. Add a new enclosure to the current enclosure group and update the logical interconnect configuration from the current logical interconnect group.
- D. Add a new enclosure to the current enclosure group.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Explanation:

Note:

- An enclosure is a physical structure that can contain server blades, infrastructure hardware, and interconnects. The enclosure provides the hardware connections between the interconnect downlinks and the installed server blades.
- When you add an enclosure to be managed, you specify an enclosure group. Enclosure groups enable you to maintain configuration consistency among enclosures. Each enclosure group is associated with a logical interconnect group. The logical interconnect group enables creation and configuration of logical interconnects. Each enclosure is associated with a logical interconnect. That provides the configuration of all interconnects in the enclosure.

References: [http://h17007.www1.hp.com/docs/enterprise/servers/oneview1.2/cic/en/content/s\\_enc-about-fusion.html](http://h17007.www1.hp.com/docs/enterprise/servers/oneview1.2/cic/en/content/s_enc-about-fusion.html)

**QUESTION 42**

A customer has a DL380 Gen9 Server using a Smart SAS HBA controller H240ar. The customer needs to add two SFF disk drives to the rear of the server.

Which component is required?

- A. HP Smart Storage Battery
- B. HP 12Gb SAS Expander Card
- C. HP Smart Array device driver
- D. HP Flexible Smart Array Controller P440ar

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 43**

A customer is using HP ROM Configuration Utility (HPRCU) to script the BIOS configuration of their Gen8 servers. The customer is now moving to Gen9 servers configured with UEFI.

Which tool should the integrator recommend for scripting the configuration?

- A. HP Smart Update Manager (SUM)
- B. HP RESTful Interface Tool
- C. HP ROM Configuration utility (HPRCU)
- D. HP Insight Remote Support

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## HP RESTful Interface Tool

```

C:\windows\system32>hprest
hprest : HP RESTful Interface Tool version 1.0.0
Copyright (c) 2014 Hewlett Packard Development Company L.P.
-----
hprest > help
Usage: hprest [GLOBAL OPTIONS] [COMMAND] [ARGUMENTS] [COMMAND OPTIONS]

Options:
  -h, --help                show this help message and exit
  -c FILE, --config=FILE    use the provided config file instead of the default
                             one
  --cache-dir=PATH          use the provided directory as the location to cache
                             data (default:
                             C:\Users\garcjack\AppData\Roaming\hprest)

GLOBAL OPTIONS:
  -v, --verbose            display verbose information
  -d, --debug              display debug information
  --nocache                system won't cache any data
  --nologo                 don't show copyright and logo

COMMANDS
  login                    - connects to server, establish session, and
                             data from iLO
  logout                   - ends session and disconnects from server
  list                     - displays all properties of currently selected
  
```

Figure 4-51. HP RESTful Interface Tool

The HP RESTful Interface Tool (Figure 4-51) simplifies server configuration by using industry-recognized REST APIs, enabling you to script provisioning beginning on ProLiant Gen8 (running iLO 4) and ProLiant Gen9 servers. The RESTful Interface Tool offers a single command-line interface to configure various server components, plus document-allowed server configurations and dependencies. The HP REST API for UEFI can be used to configure settings through this CLI.

The RESTful Interface Tool is key to enabling software-defined computing for the new style of IT. Benefits include:

- **Easy customization**—A single command line to simplify customizing workflows and scripts by standardizing a set of commands that interacts with all server components
- **Reduced travel costs**—Capability to remotely manage servers
- **Reduced deployment complexity**—Enablement of any of the three modes: interactive

**QUESTION 44**

A customer needs to implement HP OneView to manage a data center based on Gen9 servers running Windows OpenStack, and VMware.

Which other component can the integrator implement in this environment?

- A. HP Helion CloudSystem for Windows and VMware deployment
- B. Insight Control server provisioning for OpenStack virtual machine deployment
- C. Microsoft System Center plugin for further integration
- D. HP Virtual Connect Enterprise Manager for profile management

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

HPE Helion CloudSystem is a hybrid cloud solution that delivers automation, orchestration, and control.

Move traditional apps to the cloud and build cloud native apps with rapid infrastructure provisioning, management across multiple cloud providers, and tools for developers.

HPE Helion CloudSystem supports multi-hypervisor environments: Red Hat KVM, VMware, Hyper-V, Integrity VM

HP Helion CloudSystem support the latest releases of HPE OneView and ProLiant Gen9 servers.

HPE Helion CloudSystem Foundation supports Infrastructure as a Service (IaaS) based on OpenStack technology and Platform as a Service (PaaS) based on Cloud Foundry™ technology.

References: <http://www8.hp.com/us/en/cloud/helion-cloudsystem.html>

**QUESTION 45**

A customer with HP ProLiant DL360 Gen9 servers needs to combine Fibre Channel over Ethernet (FCoE) with their LAN traffic over a single 10Gbe connection.

Which FlexFabric adapter meets the customer's needs?

- A. HP FlexFabric 20GB 2-port 630FLB Adapter
- B. HP FlexFabric 10GB 2-port 556FLR-SFP+ Adapter
- C. HP FlexFabric 650M 2-port Adapter
- D. HP FlexFabric 20GB 2-port 650FLB Adapter

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

The 556FLR-SFP+ Adapter supports convergence of FCoE or RoCE with LAN traffic on a single 10 GbE Ethernet wire.

The HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter is the industry's first product to converge FCoE or RoCE with LAN traffic on a single Ethernet fabric, reducing the complexity for managing multiple traffic in the data center.

Incorrect Answers:

A: The HP FlexFabric 20Gb 2-port 630FLB Adapter for HP ProLiant Gen8 Blades servers gives you twice the bandwidth of 10 Gb adapters for virtualized and converged data centers. This new FlexibleLOM Adapter improves Ethernet, FCoE and iSCSI speed increasing workload performance and scalability.

Each FlexFabric 20Gb adapter replaces a 10Gb Nic and 8Gb FC HBA simplifying I/O hardware by 50% and reducing costs by 60%.

References: [http://www8.hp.com/lamerica\\_nsc\\_carib/en/products/iss-adapters/product-detail.html?oid=7128598](http://www8.hp.com/lamerica_nsc_carib/en/products/iss-adapters/product-detail.html?oid=7128598)

#### **QUESTION 46**

An integrator needs to upgrade the BIOS and Smart Array controller firmware on an HP ProLiant Gen9 series server. The server has no operating system installed and the customer site has no Internet access. The integrator already downloaded the individual firmware components before going on site.

Which statement accurately reflects the status of the integrator's task?

- A. It can be completed as the HP ProLiant Gen9 series server provides the firmware update function in HP UEFI System Utilities.
- B. It can be completed as the HP ProLiant Gen9 series server provides the Intelligent Provisioning function in HP UEFI System Utilities.
- C. It can be completed as the HP ProLiant Gen9 series server provides the firmware update function in HP RBSU System Utility.
- D. It can be completed as the HP ProLiant Gen9 series server provides the Intelligent Provisioning function in HP RBSU System Utility.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

The Unified Extensible Firmware Interface (UEFI) includes the UEFI Shell, a command line interface (CLI) application that allows scripting, file

manipulation, obtaining system information, and running other UEFI applications plus more than ten HP specific commands for easier configuration. UEFI Shell is based on the UEFI Shell Specification 2.1, with improvements for server configuration, hardware inventory, firmware updates, deployment, and Secure Boot key management.

References: <http://www8.hp.com/us/en/products/server-software/product-detail.html?oid=6935826>

#### QUESTION 47

A customer needs their HP ProLiant DL380. Gen9 server to automatically report hardware failures to the HP Support Center.

Which tool should an integrator select to enable automatic reporting?

- A. HP OneView
- B. Intelligent Provisioning
- C. UEFI
- D. Insight online

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**



Explanation:

Insight Online is a feature in the HP Support Center where you can view all your devices remotely monitored by HP anywhere, anytime. It provides a personalized dashboard for simplified tracking of IT operations and support information, including a mobile dashboard for monitoring while you are on the go

References: <http://www8.hp.com/us/en/products/servers/solutions.html?compURI=1487547#tab=TAB1>

#### QUESTION 48

An integrator needs to add an HP c7000 BladeSystem Enclosure to HP OneView Which information should the integrator collect for this purpose?

- A. ILO IP address and credentials for each blade server in the enclosure
- B. IP address and credentials for the Virtual Connect Enterprise Manager (VCEM) that currently manages the enclosure
- C. Onboard Administrator IP address and login credentials
- D. IP address and credentials for each virtual machine (VM) installed on each blade server in the enclosure

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Explanation:

The OneView Add enclosure screen includes:

- Onboard Administrator (OA): IP address or host name
- User name: The OA user name with administrative privileges, such as Administrator.
- Password: The OA password.

References: [http://h17007.www1.hp.com/docs/enterprise/servers/oneview1.2/cic/en/content/s\\_enclosure-properties.html#s\\_enclosures-add-screen-details](http://h17007.www1.hp.com/docs/enterprise/servers/oneview1.2/cic/en/content/s_enclosure-properties.html#s_enclosures-add-screen-details)

**QUESTION 49**

A company is upgrading its data center to HP ProLiant Gen9 servers. An integrator is investigating whether this upgrade will allow them to decrease cooling costs by operating IT Equipment inlet air temperature close to 104° F (40° C).

Under which circumstance should the integrator plan to keep the IT Equipment inlet air temperature below 95° F (35° C)?

- A. The company wants to use HP Intelligent Power Distribution Units (IPDUs) with the Gen9 servers.
- B. The company is not upgrading all servers at once, and data center rooms will contain a mix of Gen9 and older servers.
- C. The company needs the Gen9 servers to comply with American Society of Heating, Refrigeration and air-conditioning engineers (ASHRAE) standards.
- D. The company does not want to invest in the advanced licensing required to obtain the higher operating temperatures.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Explanation:

The ASHRAE guidelines for data center operation suggest thermal ranges of operation for IT equipment that are commonly accepted by many data center administrators and facility managers.

Table. 2011 ASHRAE thermal guidelines for data centers

Class	IT equipment type	Recommended operating range	Allowable operating range	Maximum dew point	Environmental control
A1	Enterprise servers, storage products	18 <sup>o</sup> to 27 <sup>o</sup> C [1]	15 to 32 <sup>o</sup> C [2]	17 <sup>o</sup> C	Tightly controlled
A2	Volume servers, storage products, personal computers, workstations	Same as above	10 to 35 <sup>o</sup> C [2]	21 <sup>o</sup> C	Some control
A3	Volume servers, storage products, personal computers, workstations	Same as above	5 to 40 <sup>o</sup> C [3]	24 <sup>o</sup> C	Some control
A4	Volume servers, storage products, personal computers, workstations	Same as above	5 to 45 <sup>o</sup> C [4]	24 <sup>o</sup> C	Some control

References: Applying 2011 ASHRAE data center guidelines to HP ProLiant-based facilities, page 3  
<http://h10032.www1.hp.com/ctg/Manual/c03499263.pdf>