Vendor:HP

Exam Code:HP2-Z31

Exam Name: Creating HP Software-defined Networks

Version: Demo

QUESTION 1

An administrator wants to navigate to the HP VAN SDN Controller graphical user interface to view options such as the OpenFlow Topology, Alerts, and installed applications. Which URL is correct for release 2.0 of the HP VAN SDN Controller configured with IP address 192.168.56.7?

A. https://192.168.56.7:8443/api

B. https://192.168.56.7:8080/sdn/ui

C. https://192.168.56.7:8443/sdn/ui

D. http://192.168.56.7:8443/sdn/ui

Correct Answer: C

Start the SDN Graphical User Interface

1.

Use the Google Chrome browser to access the controller\\'s GUI at the controller IP address:

https://:8443/sdn/ui

For example:

https://127.0.0.1:8443/sdn/ui

2.

Enter user name and password credentials, then click Login.

The default user name is "sdn".

The default password is "skyline".

The main controller GUI screen then appears:

Reference: HP VAN SDN Controller Administrator Guide

QUESTION 2

What are advantages of using the HP Network Protector SDN application in a BYOD Network for Malware protection? (Select two.)

A. To provide updates to filtered host lists

B. To provide centralized management of client based firewall

C. To provide full HIPS functionality for BYOD devices

D. To provide security at the network core to provide prevention before connection

Correct Answer: CD

You can set general policies for all the hosts in the network to manage and mitigate malicious traffic and host name requests. General policies enable the application to detect changes in network traffic patterns. The general policies prevent the host from acting like a botnet and being controlled by external malicious computers.

When network traffic from a host exceeds the policy limits, you can configure application to perform one of the following actions:

Block

Block and notify

Quarantine

Quarantine and Notify

Note: HIPS Short for host-based intrusion prevention system, HIPS is an IPS or intrusion prevention system designed for security over host-based systems where intrusions and infections are dealt with at the individual workstation level to provide a more effective level of security. Reference: HP Network Protector SDN Application Administrator Guide

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QUESTION 3

What are challenges when selecting traffic from UCandC soft devices for marking, in order to apply the appropriate prioritization? (Select two.)

A. UCandC traffic uses dynamic port numbers.

B. UCandC traffic is not peer-to-peer

C. UCandC traffic is routable.

D. UCandC traffic uses well-known port numbers.

E. UCandC traffic can share a port, mac, and VLAN combination with non-UCandC traffic.

Correct Answer: CD

C: UCandC signaling can be routed through centralized UCandC infrastructure components and that all

interactions.

D (not A): UCandC signaling traffic is identified using the well know transport and port numbers used by the

UCandC signaling protocol.

Reference: Automating QoS (page 7, bullet # 2)
http://johnacook.files.wordpress.com/2014/03/2014_02_27_use_case.pdf

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QUESTION 4

Which environmental component is used to handle authentication requests to the HP VAN SDN Controller?

A. Zookeeper

B. Cassandra

C. Neutron

D. Keystone

Correct Answer: D

The SDN controller uses Openstack Keystone as an identity management for managing users, generating tokens, as well as token validation.

Reference: HP VAN SDN Controller Administrator Guide

QUESTION 5

What is an advantage of using the HP Network Optimizer SDN application with UCandC applications rather than just the SDN applications?

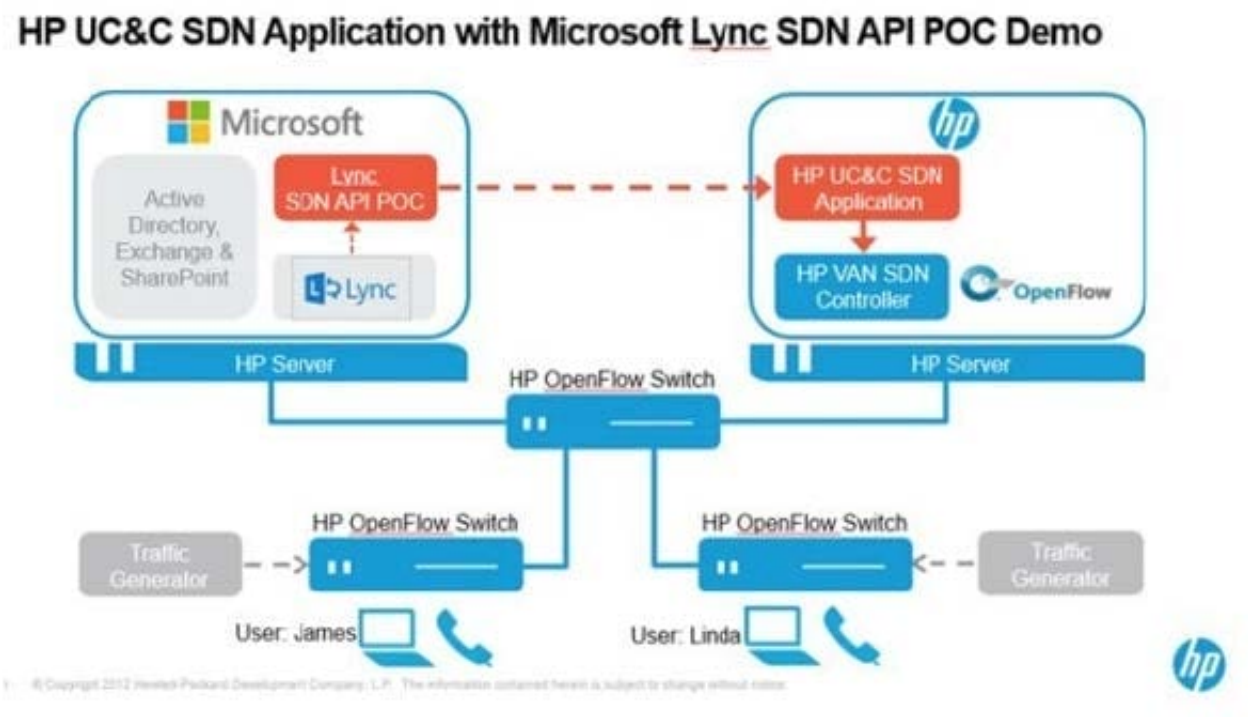
A. It enables the QoS trust boundary to be shifted to the switch.

B. It enables the UCandC Client to select the UCandC application server optimally located for them.

C. It removes the need for queuing.

D. It enables QoS verification for BYOD.

Correct Answer: D



The first capability that\\'s implemented is the ability of the Lync server (or any communications server, potentially) to dynamically provide to the network controller the IP addresses/ports of the paired endpoints of a real time flow. This enables the network to mark, without deep packet inspection, those flows with a CoS/QoS tag that will give them the proper treatment in the network. This becomes a positive identification of "authorized" real-time flows; any device/flow trying to use that tagging that is not "authorized" through the API can automatically be re-tagged to a best effort service class.

This technique has a number of critical advantages over current techniques. When compared to the typical VLAN, it enables positive tagging of a variety of devices, including BYOD and potentially other systems that might have multiple traffic types (e.g., a PC running a soft client or a tablet).

In addition, when compared to deep packet inspection at each access element, it reduces cost as well as eliminating the errors and complexity that encryption of the packet stream can introduce.

Reference: HP and Microsoft Demo OpenFlow-Lync Applications-optimized Network

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QUESTION 6

Refer to the exhibit.

Flows for Data Path ID: 00:0a:00:9c:02:d8:18:00

Summary | Ports | Flows | Groups

Table ID	Priority	Packets	Bytes	Matches	Actions/Instructions
0	0	0	0		goto_table: 100
100	0	157693	0		goto_table: 200
100	29999	721	0	in_port: 4 eth_dst: 00:0c:29:24:53:3e eth_src: 00:0c:29:15:20:e6 eth_type: arp	apply_actions: output: 2
100	29999	723	0	in_port: 2 eth_dst: 00:0c:29:15:20:e6 eth_src: 00:0c:29:24:53:3e eth_type: arp	apply_actions: output: 4
100	29999	28740	0	in_port: 2 eth_dst: 00:0c:29:15:20:e6 eth_src: 00:0c:29:24:53:3e eth_type: ipv4	apply_actions: output: 4
100	29999	28739	0	in_port: 4 eth_dst: 00:0c:29:24:53:3e eth_src: 00:0c:29:15:20:e6 eth_type: ipv4	apply_actions: output: 2
200	0	154712	9982515		apply_actions: output: 4294967293

Which version of OpenFlow has the switch shown in the exhibit with DPID 00 0a:00 9c 02:d8

18:00

negotiated to use with the HP VAN SDN Controller version 2.0?

A.

1.0.0

B.

1.3.0

C.

1.5.0

D.

1.6.0

Correct Answer: B

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The HP VAN controller supports the following:

Versions 1.0 and 1.3 of OpenFlow on HPN ProVision and Comware switches

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Openflow 1.3.1: Support for multiple flow tables is introduced

Reference: Open Flow 1.3.1 Support: Controller View

QUESTION 7

Which services does HP IMC SDN Manager provide? (Select two.)

A. Managing switch listeners

B. Updating Topology Service discovery protocol

C. Managing OpenFlow enabled SDN resources

D. Creating and maintaining flow policies

E. Managing and maintaining application awareness

Correct Answer: CD

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HP VAN SDN Manager provides the following: / Consistent management experience across SDN and traditional networks / Configuration, monitoring, and policy management for a software-defined network / OpenFlow switch management for quick troubleshooting and deployment

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SDN management HP Provides a complete SDN management solution that: / Delivers network agility through rapid provisioning and automation of network policy enforcement and enabling SDN deployments. / Accelerates application deployment through rapid provisioning of server connectivity. / Enables service agility and velocity from access to core through network resource provisioning. / Provides comprehensive management of all SDN layers.

Reference: Mock RFI for Enterprise SDN Solutions

QUESTION 8

An SDN developer wants to develop a new OpenFlow proactive application using the HP VAN SDN Controller. The controller is configured with IP address 192.168.56.7 and is using release 2.0. The developer is unsure of the REST APIs available on the controller.

To which URL should you recommend the developer navigate?

A. https://192.168.56.7:8443/api

B. https://192.168.56.7:8443/sdn/ui

C. http://192.168.56.7:8443/api

D. http://192.168.56.7:8443/sdn/ui

Correct Answer: A

{base uri}/{api}

This is an unauthenticated API

Use https not http.

Example:

https://15.255.121.2:8443/api

Response codes

· Normal: OK (200)

· Error: Not Found (404), Service Unavailable (503) Reference: HP VAN SDN Controller 2.2 REST AP

QUESTION 9

What is a key advantage of implementing malware protection by using the HP Network Protector SDN application?

A. To provide central management of antivirus software

B. To provide rule-based access control

C. To provide VLAN assignment without supplicant

D. To provide clientless operation

Correct Answer: B

About VLAN group policies Policies are a collection of filters or rules that provide a method for setting up security configuration options for VLAN groups. You can create customized policies for each VLAN group based on the requirements and the threat type for each group.

You can customize the policies for the groups by setting the reputation scores. You can set up policies for each group to protect your network from the following threat types: Botnet, Malware, etc

Reference: HP Network Protector SDN Application Administrator Guide

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QUESTION 10

Which statement best describes software-defined networking (SDN)?

A. SDN allows software to leverage the network infrastructure, enabling a centralized and policy-based approach to network provisioning and traffic forwarding.

B. SDN allows administrators to share software, policies, templates, and applications between multiple virtual machines that are running on the same network.

C. SDN is another name for OpenFlow, a protocol that lets switches handle traffic with OpenFlow tables rather than MAC forwarding tables and routing tables.

D. SDN lets IT developers manage physical infrastructure devices directly without pre-defined templates or intermediary devices.

Correct Answer: A

The HP VAN SDN Controller is a Java-based OpenFlow controller enabling SDN solutions such as network controllers for the data center, public cloud, private cloud, and campus edge networks. This includes providing an open platform for developing experimental and special- purpose network control protocols using a built-in OpenFlow controller. The HP VAN SDN Controller is a platform for developing SDN applications and deploying SDN applications. The controller can be characterized as providing a Base Control Platform, a Distributed Platform for High-Availability and Scalability, and an Extensible Platform.

Reference: HP VAN SDN Controller Administrator Guide

QUESTION 11

An administrator wants to increase the number of log files held by the HP VAN SDN Controller. What would the administrator need to do to change this?

A. Modify the /opt/sdn/virgo/configuration/serviceability.xml configuration file.

B. Log in to the Virgo console and change the logging settings.

C. Adjust the logging setting via the Support Logs web interface.

D. Modify the /opt/sdn/virgo/bin/dmk.sh script.

Correct Answer: C

The Support Logs function automatically maintains an internal record of events of interest from the operations of an active SDN controller.

Configure the Support Log for Queue Size The default queue size is 100 lines. To configure a different queue size, change the value for the max.display.rows key in the adm.log.impl.LogManager Configurations component.

Reference: HP VAN SDN Controller Administrator Guide

QUESTION 12

A controller is able to register for asynchronous messages from an OpenFlow switch, but when the controller attempts a flow_mod. the OpenFlow command is rejected. Which mode is the controller in from the switch point of view?

A. Leader

B. Slave

C. Master

D. Equal

Correct Answer: B