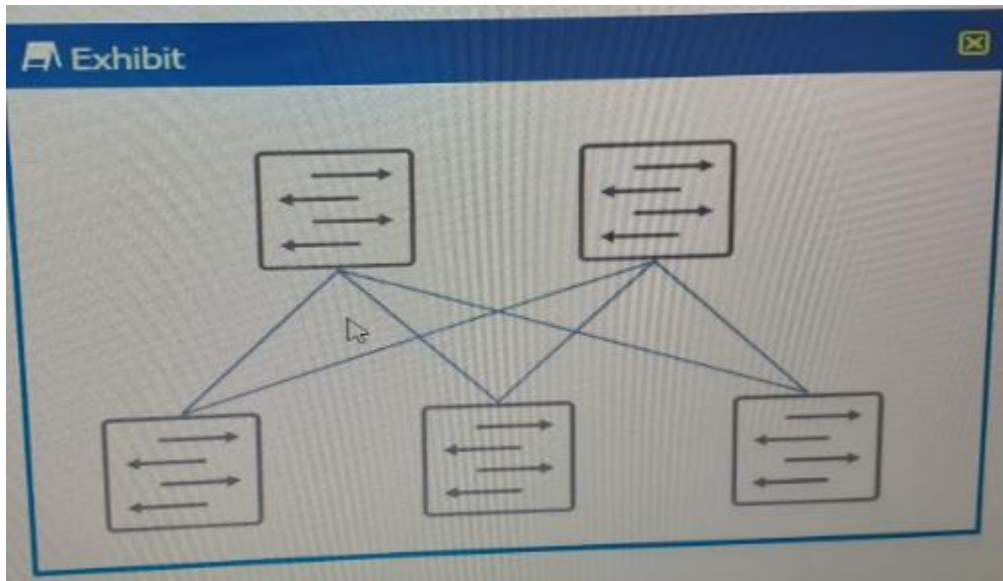


1. Which type of topology is shown in the exhibit



- a. Spine-and-leaf topology
- b. Tree topology
- c. ERP topology
- d. Hub-and-spoke topology

Answer : a

2. Which two capabilities are supported with the cSRX firewall?
(Choose two)

- a. IPS
- b. Routing instances
- c. Layer 2 deployment
- d. Chassis clustering

Answer : a b

3. What are three software suites that contribute to cloud architectures? (Choose three.)

- a. Kubernetes
- b. Ubuntu
- c. VirtualBox
- d. vSphere

e. Openstack

Answer : a d e

4. What are two technologies that a vMX's control plane uses to communicate with the forwarding plane on the same server? (Choose two.)

a. OVSDB

b. SIR-IOV

c. Virito

d. 802.1Q

Answer : B C

5. AppFormix has been deployed in your data center using the Juniper Telemetry interface (JTI) native sensors. However, the underlay devices have not yet been set up to work with the JTI native sensors. Which action is required for the JTI native sensors to work properly?

a. Enable the SSH on the underlay devices

b. Install the AppFormix network agent on the underlay devices

c. Enable the GPB messaging on the underlay devices

d. Enable the NETCONF over SSH on the underlay devices

5. Specify the format to define the structure of the exported data.

i NOTE The only currently supported format is Google protocol buffers (gpb)

```
[edit services analytics export-profile name]
user@host# set format gpb
```

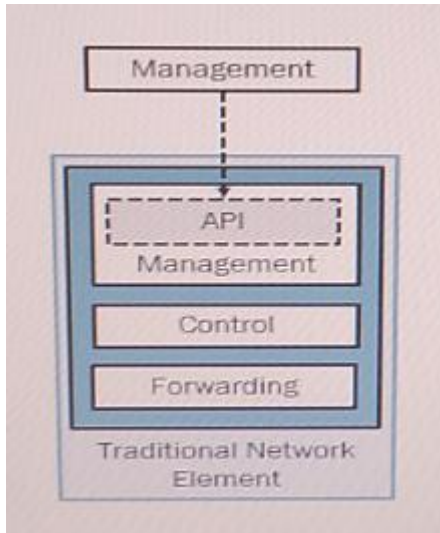
Answer : C

6. Which statement is correct about an overlay network?
- a. An overlay network requires an OSPF area
 - b. An overlay network requires The CLOS architectures
 - c. An overlay network Uses tunneling technologies
 - d. An overlay network Must have switches interconnected in space-leaf implementation

The overlay network provides logical connectivity between tenants hosted on physical devices. Because the overlay network is a logical construct, comprised of tunnels between devices, it can be re-programmed and changed with no physical change to the network. The use of tunneling technologies such as Virtual Extensible LAN (VXLAN), Ethernet VPN (EVPN), and MPLS-over-generic routing encapsulation (MPLSoGRE) allow an administrator, or more commonly software components, to extend multiple Layer 2 domains over a shared underlay without overlap. Because the overlay is a logical topology, defined in software, it can be re-mapped without modifying the physical architecture.

Answer : C

7. Click the Exhibit button. Which type of SDN is shown in the exhibit?



- a. SDN as an overlay
- b. openFlow-based SDN
- c. SDN as an underlay
- d. API-based SDN

Answer : D

8. Which Juniper product is used to remotely provision the NFX250 platform for Network Functions Virtualization?

- a. Contrail security
- b. Contrail services orchestration
- c. Virtual route reflector
- d. Junos Space security Director
- e. //Network service activator (voucher)

Answer : B

Understanding Zero Touch Provisioning

Zero Touch Provisioning (ZTP) allows you to provision and configure an NFX Series device in your network automatically, with minimal manual intervention. ZTP allows you to make configuration changes or software upgrades without logging into the device. NFX Series devices support ZTP with Sky Enterprise, which is a cloud-based network management application. For more information on Sky Enterprise, see [Sky Enterprise Documentation](#).

The initial provisioning process involves the following components:

- NFX Series device—Sends requests to Juniper's Redirect Server.
- Redirect server—Provides authentication and authorization for the devices in a network to access their assigned central servers for the boot images and initial configuration files. The redirect server resides at Juniper Networks.

Connectivity to the redirect server can be through IPv4 or IPv6 network. Depending on the source address, the redirect server redirects the ZTP to the corresponding Central Server with IPv4 or IPv6 address.

The NFX Series device is shipped with a factory default configuration. The factory default configuration includes the URL of the redirect server, that is used to connect to the central servers by using a secure encrypted connection.

- Central server—Manages the network and the NFX Series devices located remotely. The central server is located at a central geographical location. Alternately, you can use [Contrail Service Orchestration \(CSO\)](#) along with Sky Enterprise. CSO deploys the network services and Sky Enterprise manages the devices in the network.

9. What are two protocols used by the NorthStar controller to discover the network topology? (Choose two).
 - a. SNMP
 - b. BGP-LS
 - c. NETCONF
 - d. OSPF-TE
 - e. Answer : B
10. You are deploying a vMX device in your network. Which two virtualized components are required in this scenario? (choose two)
 - a. Virtual chassis fabric
 - b. Virtual forwarding plane
 - c. Virtual chassis port

d. Virtual control plane

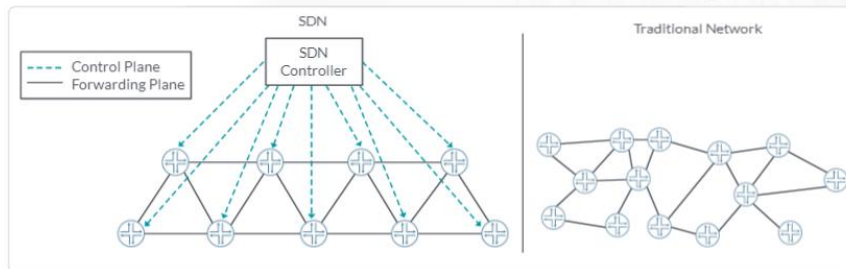
The vMX instance contains two separate virtual machines (VMs), one for the virtual forwarding plane (VFP) and one for the virtual control plane (VCP). The VFP VM runs the virtual Trio forwarding plane software and the VCP VM runs Junos OS.

Answer : BD

11. Which two platforms share the same automation scripts? (Choose two.)
- a. vMX series
 - b. MX series
 - c. Junos space
 - d. Contrail
 - e. Answer : A B
12. Which product is used to perform capacity planning on MPLS WANs
- a. VMware NSRX
 - b. Northstart planner
 - c. Cloud service orchestrator
 - d. Contrail cloud
 - e. Answer : B
13. What are two objectives of SDN? (Choose two).
- a. Physical separation of the control plane from the data plane
 - b. Centralization of the forwarding plane
 - c. Centralization of the control plane
 - d. Centralization of the services plane

SDN Definition

- Defined by the Open Networking Foundation (ONF):
 - "The physical separation of the network control plane from the forwarding plane, and where a control plane controls several devices."



Answer : AC

14. What are two examples of SaaS ? (choose two).
- a. Google Apps
 - b. Amazon web services
 - c. SalesForce
 - d. IBM cloud
 - e. Answer : BC
15. Which two data models are supported for the Junos Telemetry interface (JTI)? (Choose two).
- a. Azure application insights
 - b. OpenConfig
 - c. Native Sensors
 - d. Amazon Kinesis
 - e. Answer :BC
- 16.
17. Which two statement are true about virtualized platforms? (Choose two).
- a. The vSRX must have two vCPUs dedicated th the vCP
 - b. The vMX uses one VM to host the vCP and vFP
 - c. The vMX uses separate VMs to host the vCP and vFP
 - d. The vSRX must have One vCPUs dedicated th the vCP

The vMX instance contains two separate virtual machines (VMs), one for the virtual forwarding plane (VFP) and one for the virtual control plane (VCP). The VFP VM runs the virtual Trio forwarding plane software and the VCP VM runs Junos OS.

Answer :C

18. You are deploying a layer 2 underlay network with 2,000 devices and hosts. Which two statements are correct? (Choose two).
- a. RSTP can be used for loop prevention
 - b. Network routing tables can become very large and unmanageable
 - c. The MAC tables can become very large and unmanageable
 - d. RPF is used for loop prevention
 - e. Answer : A C
19. What are two goals of cloud security automation? (Choose two).
- a. To automate responses to detected security threats
 - b. To transition all security functions to cloud platforms
 - c. To implement all security functions in hardware
 - d. To centrally manage security policies

What are two goals of Software-Defined Secure Network architectures? (Choose two.)

- to centrally manage security policies
- to implement all security functions in software applications
- to transition all security functions to cloud platforms
- to automate responses to detected security threats

Correct

20. Which statement defines a public cloud?
- a. The cloud infrastructure is provisioned for exclusive use by a specific community of consumers from organizations that shared concerns
 - b. The cloud infrastructure is provisioned for exclusive use by a single organization comprising multiple consumers
 - c. The cloud infrastructure is provisioned for open use by the general public.
 - d. The cloud infrastructure is a composition of two or more distinct cloud infrastructure
 - e. Answer : C
21. From where does AppFormix gather performance metrics in a network?
- a. From an agent on a host or system
 - b. From statistics NFVs instantiated in the data path

- c. From RPM probes sent across the network
- d. From a REST API connection

From where does AppFormix gather performance metrics in a network?

- from an agent on a host or system
- from a NETCONF connection
- from RPM probes sent across the network
- from statistics NFVs instantiated in the data path

Correct

22. Which CSO component enables ISPs to set up and manage the virtual network and customers?
- a. Designer tools
 - b. Service and infrastructure Monitor
 - c. Customer Portal
 - d. Administration Portal
 - e. Answer : D
23. You are asked to reduce traffic on an MPLS VFN by automatically moving the traffic to an internet circuit as long as it satisfies the SLA requirements. In this scenario, what would you use to accomplish this task?

- a. NorthStar
- b. AppFormix
- c. Contrai cloud
- d. Contrail SD-WAN
- e. Answer : A

The NorthStar Controller software provides traffic-engineering-based solutions for WAN and edge (data center edge and WAN edge) networks. After the NorthStar Controller has connected to the network and dynamic topology acquisition is performed to provide a real-time routing view of the network topology, you can view the network model from the NorthStar Controller UI. You can then plan, analyze, and assess the impact of network changes you want to make before implementing them.

The Juniper Networks NorthStar Controller is an SDN controller that enables granular visibility and control of IP/MPLS flows in large service provider and enterprise networks. Network operators can use the NorthStar Controller to optimize their network infrastructure through proactive monitoring, planning, and **explicit routing of large traffic loads dynamically based on user-defined constraints.**

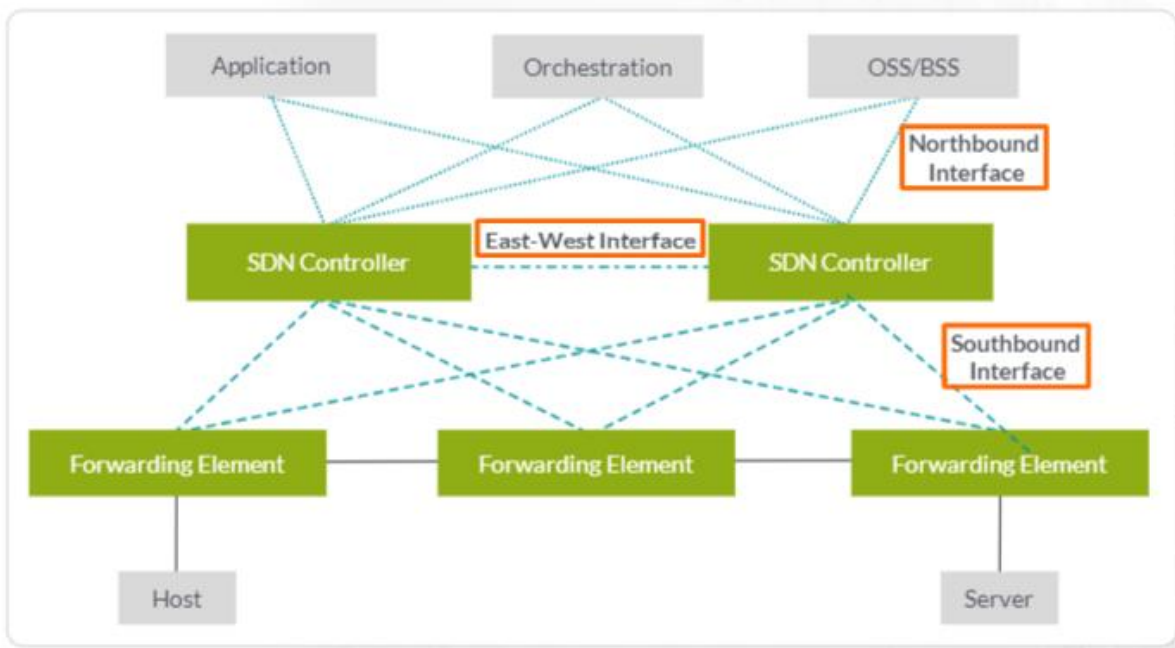
24. What are two examples of public cloud provides? (Choose two)
- a. eBay
 - b. Netflix
 - c. Microsoft Azure
 - d. Amazon Web Services
 - e. Answer : CD
25. Which two Juniper devices are used as a CSO CPE device? (Choose two).

- a. NFX
- b. SRX
- c. MX
- d. QFX
- e. Answer : AB

26. Which interface is used by applications, orchestration systems, and other types of business systems to communicate with an SDN controller?

- a. Controller interface
- b. Northbound interface
- c. East-west interface
- d. Southbound interface
- e. Answer :B

interface to learn more.



27. Which statement describes AppFormix?

- a. AppFormix is a high-performance virtual device that secures virtualized and cloud environments

- b. AppFormix is the SDN automation platform for OpenStack IaaS
- c. AppFormix is responsible for monitoring, Analytics and intent-driven infrastructure optimization
- d. AppFormix is virtualized and full-featured, carrier-grade ideal for NFV environments

Answer : C

28. Which Juniper product provides insight into the underlay and overlay network at the same time?
- a. AppFormix
 - b. Juniper extension Toolkit
 - c. Edge services director
 - d. Security director
 - e. Answer : A

Which Juniper product provides insight into the underlay and overlay network at the same time?

- Security Director
- Juniper Extension Toolkit
- Edge Services Director
- Contrail Analytics

Incorrect

Correct :

> Contrail Analytics

Feedback : Starting with Contrail Release 2.20, you can view a variety of analytics related to underlay and overlay traffic in the Contrail Web user interface.

29. What are two characteristics of Juniper's connected security solution? (Choose two)
- a. Centralized management
 - b. Manual secure policy control
 - c. Dynamic VPN connection
 - d. Enforcement everywhere on the network
 - e. Answer : AD
30. What is an advantage of the Junos Telemetry Interface(JTI) over SNMP?
- a. JTI can push data more frequently
 - b. JTI can pull data more frequently
 - c. JTI always transfer data over HTTP

d. JTI never transfers data over UDP

The Junos Telemetry Interface (JTI) overcomes these limits by relying on a so-called **push** model to deliver data asynchronously, which eliminates polling. A request to send data is sent once by a management station to stream periodic updates. As a result, JTI is highly scalable and can support the monitoring of thousands of objects in a network.

31. Which statement is correct about SDN
- a. SDN simplifies the network by combining the control and forwarding plane into a single controller
 - b. The SDN controller must provide a manual method for configuration
 - c. The configuration and management of an SDN solution should be distributed to the edge of the network
 - d. The SDN controller has a view of the network
 - e. Answer : D
32. Which statement is correct when deploying services inside containers
- a. Services have dedicated processor and memory resources on each server
 - b. Services must not be deployed using the same operating system
 - c. Containers can always be deployed for free
 - d. Containers use fewer resources than VMs
 - e. Answer : D

The advantages of a container outnumber those of a virtual machine, including the fact that containers are more lightweight and use fewer resources than virtual machines. A crucial milestone in the rapid adoption of containers in production environments is the issue of security.

33. Which two pricing models are available from AWS Marketplace for vSRX consumption? (Choose two.)
- a. bring your own license
 - b. pay as you go
 - c. annual subscription
 - d. based on the number of policies
 - e. Answer : AB
34. A customer want to deploy a web site that can scale as needed. Which type of service should the customer purchase in this scenario?
- a. DBaaS
 - b. BGPaaS
 - c. SaaS
 - d. FWaaS
 - e. Answer : C

A customer wants to deploy a website that can scale as needed. Which type of service should the customer purchase in this scenario?

FWaaS

BGPaaS

SaaS

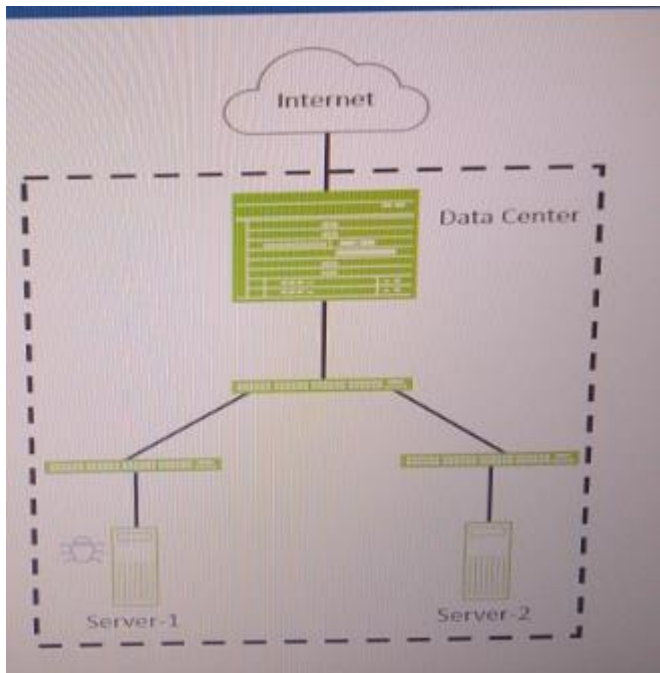
DBaaS

Correct

35. Which protocol is used to communicate LSP and status information between the Northstar controller and label edge routers?
- a. ICCP
 - b. BGP
 - c. OSPF
 - d. PCEP
 - e. Answer : D
36. You are using service chains. In this scenario, which component launches the NFV VM?
- a. Orchestrator
 - b. Compute node
 - c. vRouter
 - d. northstar Controller
 - e. Answer : B
37. which cloud CPE component manages the end-to-end path from the CPE to the central office or to another CPE?

- a. Service orchestration
- b. Virtual network functions
- c. Infrastructure orchestration
- d. Physical telco cloud infrastructure
- e. Answer : A

38. Click the exhibit button. Referring to the exhibit, Server-1 has an infection and is communicating with a command and control server on the internet. You want to ensure that the infection on server-1 does not infect server-2. Which two actions accomplish this task? (Choose two)



- a. Deploy Sky ATP with C&C protection.
 - b. Deploy Sky ATP with anti-malware protection
 - c. Deploy policy enforcer to isolate infected hosts
 - d. Deploy Sky ATP with GeoIP protection
 - e. Answer : BC
39. Which two capabilities are supported with the cSRX firewall? (Choose two)
- a. IPS

- b. Routing instances
- c. Layer 2 deployment
- d. Chassis clustering
- e. Answer : AB

40. You are using the NorthStar controller to manage your WAN. You are required to remove a node from the network for maintenance. You want to compute and provision alternate forwarding paths so that traffic is re-routed around the node being taken offline for maintenance. Which NorthStar controller feature would be used in this scenario?

- a. Maintenance mode
- b. Shared risk link groups
- c. Node diversity
- d. Path diversity
- e. Answer : D

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08 - SDN WAN Solutions

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Path Diversity

- NorthStar benefits
 - Reduce risk from node and link failures
 - NorthStar global view of the network enables path diversity to avoid single points of failure
 - Maintain SLAs during both normal and failure scenarios
 - Eliminate shared risk link groups
 - Implement in both 1:1, 1+1, and/or 1:N protection options
 - Backup and/or multiple active load-balancing paths

Warning! Shared Risk

San Francisco

Denver

Primary Link
Secondary Link

Shared Risk Eliminated

San Francisco

Denver

Primary Link
Secondary Link

41. Which two statements are true about an SDN controller?
(Choose two).
- a. An SDN controller regulates traffic transmission rates in network
 - b. An SDN controller centralizes control and configuration of a network
 - c. An SDN controller stores and manages software images
 - d. An SDN controller automates repetitive tasks in network
 - e. Answer : BD

Correct :

- > An SDN controller centralizes control and configuration of a network.
- > An SDN controller automates repetitive tasks in a network.

Feedback : The Virtual Networking and SDN layer is where central policy, control, and automation of networking above the hardware or fabric layers takes place. Software Defined Networking operates on the network at the virtualized network and services level. An SDN controller has a different role than an orchestration platform. The primary role of an SDN controller is to automate repetitive tasks in a network environment.

42. You are the administrator of an MPLS WAN. Intermittent WAN hardware failures are causing customer traffic to route over newly computed forwarding paths that do not satisfy service level agreements. Which Juniper Networks solution would be used to analyze this problem?
- a. Network Director
 - b. Contrail
 - c. NorthStar Planner
 - d. AppFormix
 - e. Answer : C
43. You need to find a product that will allow for the deployment of security devices to a new tenant edge network in less than one second. Which product accomplishes this task?
- a. NFX

- b. MX
- c. cSRX
- d. vSRX
- e. Answer :C

cSRX Benefits and Uses

The cSRX Container Firewall enables you to quickly introduce new firewall services, deliver customized services to customers, and scale security services based on dynamic needs. The cSRX container differs from VMs in several important ways. It runs with no guest OS overhead, has a notably smaller footprint, and is easier to migrate or download. The cSRX container uses less memory, and its spin-up time measures in subseconds—all leading to higher density at a lower cost. The boot time is reduced from several minutes with a VM-based environment to less than a few seconds for the cSRX container. The cSRX is ideal for public, private, and hybrid cloud environments.

Some of the key benefits of cSRX in a containerized private or public cloud multitenant environment include:

- Stateful firewall protection at the **tenant** edge.
- Faster deployment of containerized firewall services into new sites.

44. Which mechanism allows tenants to interconnect across an overly network?
- a. EBGP connections
 - b. P2P OSPF adjacencies
 - c. Subnets
 - d. Tunnels
 - e. Answer :D

Virtual Overlay Network

The overlay network is a set of tunnels built on top of the underlay network. The tunnels can be terminated on physical devices, such as gateway routers, top-of-rack switches, or even software components (vSwitches of vRouters) running in the hypervisors of virtualization hosts. In the case of Contrail, these overlay tunnels can be MPLS over generic routing encapsulation (GRE), MPLS over User Datagram Protocol (UDP), or Virtual Extensible LAN (VXLAN) tunnels.

As opposed to underlay, the overlay network does contain per-tenant state. In the case of Contrail, vRouters contain a separate forwarding table (a routing instance) per virtual network. That forwarding table contains the IP prefixes (in the case of Layer 3 overlays) or the MAC addresses (in the case of Layer 2 overlays) of the virtual machines (VMs). No single vRouter need contain all IP prefixes or all MAC addresses for all VMs in the entire data center. A vRouter only needs to contain those routing instances for the VMs that are local to the hosting server.

45. Which Junos space application integrates with both VMware vSphere and VMware NSX solutions to automate the movement of VLANs between physical and virtual servers?
- a. Network director
 - b. Policy enforcer
 - c. Connectivity services Director
 - d. Edge services director
 - e. Answer :A

➤ Network Director

Feedback : Juniper provides a single pane-of-glass management solution with Junos Space Network Director, which manages both physical and virtual networking environments while integrating with management tools from VMware. When virtual machines move from one location in the data center to another, Network Director is immediately aware of this change. In this way, a network administrator can now change the VLAN configurations on the virtual and physical switches, greatly simplifying operations and optimization.

46. Which two protocols provide loop prevention in an underlay network? (Choose two)
- a. OSPF
 - b. VPLS
 - c. MSTP
 - d. EVPN
 - e. Answer :AC
47. Which statements are correct about the NFV framework? (Choose two)
- a. A spine and leaf implementation is an example of the NFV framework
 - b. The NFV framework is defined by ANSI
 - c. The NFV framework is defined by ETSI
 - d. The NFV Framework enables horizontally scalable deployments of services

e. Answer : C D

48. Which statement is true regarding on OpenFlow controller—based software defined network?

- a. The control plane of each device in the network is instantiated by the controller.
- b. The forwarding plane of each device in the network is programmed by the controller
- c. The forwarding plan of each device in the network is managed by the device
- d. The SDN controller pushes configuration files to each device in the network using RESTful APIs

e. Answer :B

Correct :

› The forwarding plane of each device in the network is programmed by the controller.

Feedback : In an OpenFlow network, all of the forwarding elements are directly programmable allowing switching decisions to be made centrally. This means forwarding policy no longer needs to be configured on individual devices and the hop-by-hop behavior can be abstracted and configuration can be made based on the desired network state.

49. Devices in your data center have become unwilling participants of botnet attacks. In this scenario, Which security technology should you use to stop this behavior?

- a. IPsec
- b. Policy enforcer
- c. Sky ATP C&C threat protection
- d. Sky ATP GeoIP threat protection

e. Answer :C

Table 1: Sky ATP Components

Component	Operation
Command and control (C&C) cloud feeds	C&C feeds are essentially a list of servers that are known command and control for botnets . The list also includes servers that are known sources for malware downloads. See Command and Control Servers Overview .

50. You want to automate the management of virtualized applications using contrail networking. Which type of SDN is used in this scenario?
- API SDN
 - OpenFlow SDN
 - Ansible automation
 - Overly SDN
 - Answer :A
51. Which protocol is used by the northstar controller to discover existing tunnels in a service provider or large enterprise WAN ?
- SNMP
 - REST
 - PCEP
 - NETCONF
 - Answer : CD
52. What are two characteristics of policy Enforcer? (Choose two)
- Policy Enforcer has its own standalone GUI
 - Policy Enforcer is integrated with security director
 - Policy Enforcer provides telemetry data for a collector device

- d. Policy Enforcer consolidates threat information from multiple sources
- e. Answer : BD

Policy Enforcer provides the following:

- Pervasive Security—Combine security features and intelligence from devices across your network, including switches, routers, firewalls, to create a “secure fabric” that leverages information you can use to create policies that address threats in real-time and into the future. With monitoring capabilities, it can also act as a sensor, providing visibility for intra- and inter-network communications.
- User Intent-Based Policies—Create policies according to logical business structures such as users, user groups, geographical locations, sites, tenants, applications, or threat risks. This allows network devices (switches, routers, firewalls and other security devices) to share information, resources, and when threats are detected, remediation actions within the network.
- Threat Intelligence Aggregation—Gather threat information from multiple locations and devices, both physical and virtual, as well as third party solutions.

Figure 1 illustrates the flow diagram of Policy Enforcement for a typical SD-WAN configuration.

53. Which two statements are correct when using the native sensors model for Juniper telemetry interface with AppFormix? (Choose two).
- a. Telemetry data is exported from the control plane
 - b. Additional software must be installed on the Junos device
 - c. Telemetry data is exported from the data plane
 - d. No additional software must be installed on the Junos device
 - e. Answer : BC

Interface is based a distributed architecture, through which the data generated by configured sensors is exported directly from the data plane, bypassing the control plane, and thus conserving these resources to perform other necessary functions.

You must also download the `.proto` files for all the sensors supported to a streaming server or collector. From a Web browser, navigate to the All Junos Platforms software download URL on the Juniper Networks page: <https://www.juniper.net/support/downloads/>. After you select the name of the Junos OS platform and the release number, go to the Tools section and download the Junos Telemetry Interface Data Model Files package. For more information about configuring a streaming-server, see [streaming-server \(Junos Telemetry Interface\)](#).

54. Which two statement are true regarding private cloud services? (Choose two)
- a. A private cloud can be deployed in a service provider network
 - b. A private cloud cannot connect to a public cloud
 - c. A private cloud must apply encryption to all stored data
 - d. A private cloud has dedicated resources for individual customers
 - e. Answer : AD

Correct :

- > A private cloud has dedicated resources for individual customers.
- > A private cloud can be deployed in a service provider network.

Feedback : Private cloud deployments allocate dedicated resources to an organization that are not shared among multiple tenants. Access to private cloud environments is through private leased connections, or over the Internet through secure VPN access. Unlike a public cloud deployment, only secure, authorized access to the resources is available.

55. You need to control and steer application traffic while maintaining an end-to-end view of the WAN and LAN. Which

juniper cloud product will satisfy the requirements in the scenario?

- a. SKY ATP
- b. Contrail cloud
- c. Sky enterprise
- d. Contrail service orchestration
- e. Answer :B

56. Which two protocols would be used by the northstar controller to provision tunnels on an edge router? (choose two)

- a. TFTP
- b. PCEP
- c. NETCONF
- d. HTTPS
- e. Answer : BC

57. According Juniper networks what is the recommended external routing protocol for the underlay network ?

- a. IS-IS
- b. BGP
- c. EGP
- d. OSPF
- e. Answer : B

Correct :

> BGP

Feedback : The scalability of Layer 3 protocols, especially with regards to BGP, is much higher than Layer 2 technologies, and can scale from tens of thousands to hundreds of thousands of host devices.

58. What are two reason to use a vMX over a physical MX series in your deployment? (Choose two)

- a. A vMX provides more routing features
- b. A vMX has a lower barrier of entry
- c. A vMX accelerates adding new services

d. A vMX increases analytic capabilities

e. Answer : BC

https://www.juniper.net/documentation/en_US/vmx/topics/concept/vmx-overview.html

- Quickly introduce new services
- More easily deliver customized and personalized services to customers
- Scale operations to push IP services closer to customers or to manage network growth when growth forecasts are low or uncertain
- Quickly expand service offerings into new sites

59. Which two statements describe cloud? (choose two)

- a. cloud CPE allows multivendor, open support of software-based functions
- b. cloud CPE requires heavy investment in vendor-specific hardware
- c. cloud CPE encourages administrators to use all-in-one appliances
- d. cloud CPE eliminates the need for investing in expensive hardware
- e. AD

60. Which two benefits does the JUNOS telemetry interface (JTI) provide in an AppFormix architecture? (choose two)

- a. JTI enables you to deploy security policies to vSRX devices
- b. JTI enables you to collect and export data from resources such as firewall filters

- c. JTI uses an SNMP pull model to eliminate additional processing
- d. JTI uses a push model to deliver data asynchronously
- e. Answer : BD

The Junos Telemetry Interface enables you to provision sensors to collect and export data for various system resources, such as physical interfaces and firewall filters. Two data models, each of which uses a different mode of transport, are supported:

The Junos Telemetry Interface (JTI) overcomes these limits by relying on a so-called **push model** to deliver data asynchronously, which eliminates polling. A request to send data is sent once by a management station to stream periodic updates. As a result, JTI is highly scalable and can support the monitoring of thousands of objects in a network.

- 61. You are required to set up zero-day malware detection for you private cloud without sending files off site analysis. What will accomplish this task
 - a. Sky ATP
 - b. UTM
 - c. JATP
 - d. IDP
 - e. Answer : A
- 62. You need to control and steer application traffic while maintaining an end-to-end view of the WAN and LAN. Which juniper cloud product will satisfy the requirements in the scenario?
 - a. SKY ATP
 - b. Contrail cloud
 - c. Sky enterprise
 - d. Contrail service orchestration
 - e. Answer : B
- 63. Which statement about contrail is true?

- a. The contrail controller places a vRouter each virtual host in the network
 - b. The contrail virtual router segments virtual machines on physical hosts into virtual routing and forwarding instances
 - c. The contrail virtual router segments virtual machines on physical hosts into different security zones
 - d. The contrail virtual router establishes IPsec tunnel between other contrail virtual routers on the network
 - e. Answer : AB
64. AppFormix alarm notification are sent to an HTTP server using which format
- a. JSON
 - b. CSV
 - c. XML
 - d. Plain text
 - e. Answer : A

AppFormix alarm notifications are sent to an HTTP server using which format?

XML

JSON

plain text

CSV

Correct

1. Which OpenStack service manage image storage?
 - a. Glance
 - b. Swift
 - c. Nova
 - d. Heat

Correct Answer: A

Reference :

<https://docs.openstack.org/project-deploy-guide/openstack-ansible/ocata/overview-storage-arch.html>

2. You must set up multiple collection points across your network to look for malware and rogue SSH attempts. What will allow you to accomplish this task?
 - a. AppFormix
 - b. NorthStar

- c. networking
 - d. JATP
 - e. Answer : D
3. You are deploying a layer 3 underlay network with 10,000 devices and hosts. Which two statements are correct in this scenario?(choose two.)
- a. Loop prevention is provided by the routing protocol
 - b. Routing table can become very large
 - c. RSTP can be used for loop prevention
 - d. The MAC tables can become very large
 - e. Answer AB

Physical Underlay Network

This is also known as physical or fabric network. The role of the physical underlay network is to provide an IP fabric. Its responsibility is to provide unicast IP connectivity from any physical device such as server, storage device, router, or switch to any other physical device. An ideal underlay network provides uniform low-latency, non-blocking, and high-bandwidth connectivity from any point in the network to any other point in the network.

The underlay physical routers and switches do not contain any individual tenant or state information; they do not contain any MAC addresses, IP address, or policies for end customer devices such as physical servers or virtual machines (VMs). The forwarding tables of the underlay physical routers and switches only contain the IP prefixes or MAC addresses of the physical servers. Gateway routers or switches that connect a virtual network to a physical network are an exception—they do need to contain tenant MAC or IP addresses. They only perform transport and are not aware of edge services.

4. Which type of tunnels are provisioned by the NorthStar controller?
- a. IPsec VPNs
 - b. VPLs
 - c. MPLS LSPs
 - d. GRE over UDP

Correct Answer: C

Reference :

https://www.juniper.net/documentation/en_US/northstar5.1.0/topics/concept/jpmpls-LSP-tunnels-overview.html

5. You want to automate the management of virtualized applications using contrail networking. Which type of SDN is used in this scenario?
- a. API SDN
 - b. OpenFlow SDN
 - c. Ansible automation
 - d. Overly SDN
 - e. Answer : A
6. According Juniper networks what is the recommended external routing protocol for the underlay network ?
- a. IS-IS
 - b. BGP
 - c. EGP
 - d. OSPF
 - e. Answer : B

Correct :

> BGP

Feedback : The scalability of Layer 3 protocols, especially with regards to BGP, is much higher than Layer 2 technologies, and can scale from tens of thousands to hundreds of thousands of host devices.

7. A company requests increased bandwidth during two specific periods each year. Which solution will accomplish the desired result?
- a. NorthStar planner
 - b. NorthStar bandwidth calendaring
 - c. NorthStar maintenance Mode
 - d. Centralized Path computation
 - e. Answer : B

QUESTION 49

A customer is planning a significant upgrade to their network that requires an increase in bandwidth. They want to schedule the increase for a specific date and time.

Which feature within the **NorthStar** Controller allows you to automate this process?

- A. LSP and Link Statistics
- B. Maintenance Mode
- C. Bandwidth Calendaring
- D. NorthStar Planner

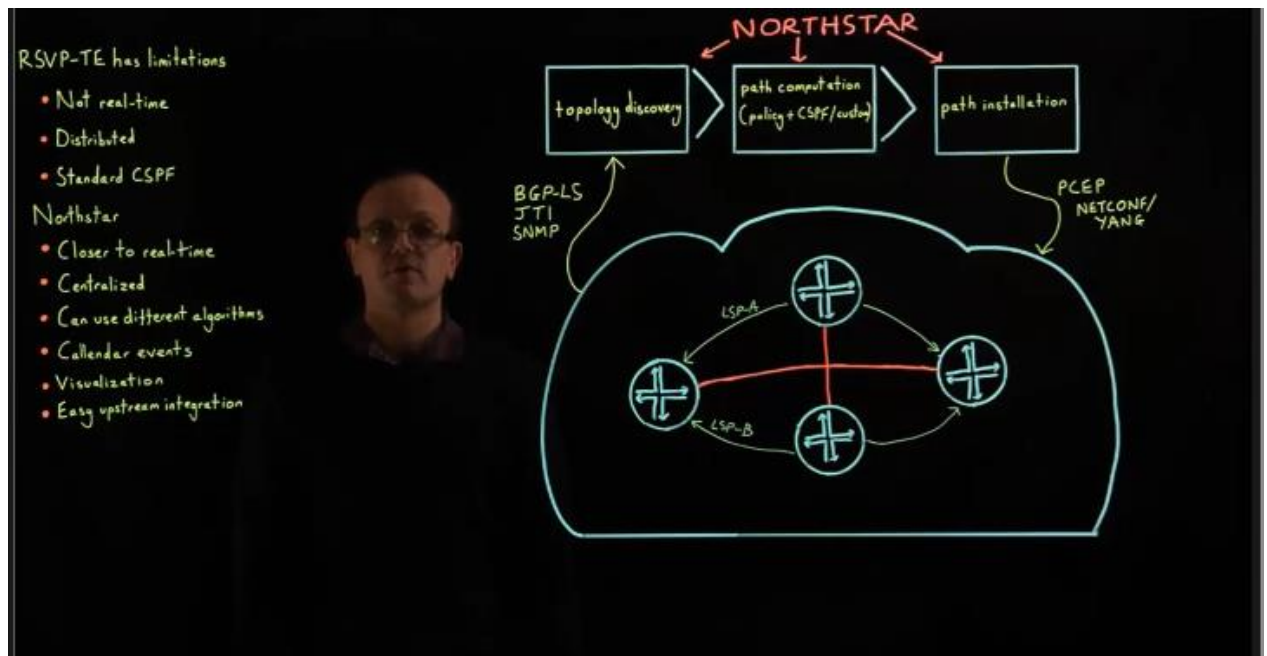
Correct Answer: C

Section: (none)

8. You are using the Juniper connected security solution to protect your network from malware. However you noticed that malware files over 10 MB are not being analyzed. You need the capability of analyzing files greater than 10MB. Which two components would allow you to accomplish this task ? (Choose two).
- a. Network director
 - b. Contrail security
 - c. Sky ATP
 - d. Security director
 - e. Answer : CD
9. Which two statement are true about virtualized platforms? (Choose two).
- a. The vSRX must have two vCPUs dedicated th the vCP
 - b. The vMX uses one VM to host the vCP and vFP
 - c. The vMX uses separate VMs to host the vCP and vFP
 - d. The vSRX must have One vCPUs dedicated th the vCP
 - e. Answer : C

The vMX instance contains two separate virtual machines (VMs), one for the virtual forwarding plane (VFP) and one for the virtual control plane (VCP). The VFP VM runs the virtual Trio forwarding plane software and the VCP VM runs Junos OS.

10. What are two protocols used by the NorthStar controller to discover the network topology? (Choose two).
- SNMP
 - BGP-LS
 - NETCONF
 - OSPF-TE
 - Answer : BD



11. You are using the NorthStar controller to manage your WAN. You are required to remove a node from the network for maintenance. You want to compute and provision alternate forwarding paths so that traffic is re-routed around the node being taken offline for maintenance. Which NorthStar controller feature would be used in this scenario?
- Maintenance mode
 - Shared risk link groups
 - Node diversity
 - Path diversity
 - Answer : D

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EDUCATION SERVICES

Juniper Cloud Fundamentals
08 - SDN WAN Solutions

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Path Diversity

- NorthStar benefits
 - Reduce risk from node and link failures
 - NorthStar global view of the network enables path diversity to avoid single points of failure
 - Maintain SLAs during both normal and failure scenarios
 - Eliminate shared risk link groups
 - Implement in both 1:1, 1+1, and/or 1:N protection options
 - Backup and/or multiple active load-balancing paths

Warning! Shared Risk

San Francisco Denver

Primary Link
Secondary Link

Shared Risk Eliminated

San Francisco Denver

Primary Link
Secondary Link

12. Which two features does the Junos Telemetry interface (JTI) support? (Choose two).
- JTI provides real-time telemetry.
 - JTI does not need a collector to store data
 - JTI requires no configuration
 - JTI can stream in multiple data models
 - Answer : AD

Correct :

- > JTI provides real-time reporting.
- > JTI can stream in multiple message formats.

Feedback : The Junos Telemetry Interface permits streaming of telemetry data to a performance management system enabling network administrators to measure trends in link and node utilization, and troubleshoot such issues as network congestion in real time. The Junos Telemetry Interface supports two ways of exporting data in the Google protocol buffers (gpb) format: Through UDP from so-called native sensors that export data close to the source, such as the line card or network processing unit (NPU). Juniper

13. Which CSO component enables customers to manage sites and services for their organizations ?

- a. Designer tools
- b. Service and infrastructure Monitor
- c. Customer Portal
- d. Administration Portal
- e. Answer : C

> Customer Portal

Feedback : The CSO Customer Portal is an application that you can provide to customers to enable them to manage sites and services for their organizations through a GUI.

14. A customer want to deploy a web site that can scale as needed. Which type of service should the customer purchase in this scenario?
- a. DBaaS
 - b. BGPaaS
 - c. SaaS
 - d. FWaaS
 - e. C

A customer wants to deploy a website that can scale as needed. Which type of service should the customer purchase in this scenario?

FWaaS

BGPaaS

SaaS

DBaaS

Correct

15. What are two Microservices provided by contrail services orchestration? (Choose two).
- a. REST API server
 - b. Fabric Manager
 - c. VIM director
 - d. Security director
 - e. Answer : BD
16. What is and advantage of the Junos Telemetry Interface(JTI) over SNMP?
- a. JTI can push data more frequently
 - b. JTI can pull data more frequently
 - c. JTI always transfer data over HTTP
 - d. JTI never transfers data over UDP
 - e. Answer : A

The Junos Telemetry Interface (JTI) overcomes these limits by relying on a so-called **push** model to deliver data asynchronously, which eliminates polling. A request to send data is sent once by a management station to stream periodic updates. As a result, JTI is highly scalable and can support the monitoring of thousands of objects in a network.

17. You are required to set up zero-day malware detection for your private cloud without sending files off site analysis. What will accomplish this task
 - a. Sky ATP
 - b. UTM
 - c. JATP
 - d. IDP
 - e. Answer :A
18. Which Juniper product provides insight into the underlay and overlay network at the same time?
 - a. AppFormix
 - b. Juniper extension Toolkit
 - c. Edge services director
 - d. Security director
 - e. Answer :A

Which Juniper product provides insight into the underlay and overlay network at the same time?

Security Director

Juniper Extension Toolkit

Edge Services Director

Contrail Analytics

Incorrect

Correct :

> Contrail Analytics

Feedback : Starting with Contrail Release 2.20, you can view a variety of analytics related to underlay and overlay traffic in the Contrail Web user interface.

19. Which mechanism allows tenants to interconnect across an overly network?
- EBGP connections
 - P2P OSPF adjacencies
 - Subnets
 - Tunnels
 - Answer :D

Virtual Overlay Network

The overlay network is a set of tunnels built on top of the underlay network. The tunnels can be terminated on physical devices, such as gateway routers, top-of-rack switches, or even software components (vSwitches of vRouters) running in the hypervisors of virtualization hosts. In the case of Contrail, these overlay tunnels can be MPLS over generic routing encapsulation (GRE), MPLS over User Datagram Protocol (UDP), or Virtual Extensible LAN (VXLAN) tunnels.

As opposed to underlay, the overlay network does contain per-tenant state. In the case of Contrail, vRouters contain a separate forwarding table (a routing instance) per virtual network. That forwarding table contains the IP prefixes (in the case of Layer 3 overlays) or the MAC addresses (in the case of Layer 2 overlays) of the virtual machines (VMs). No single vRouter need contain all IP prefixes or all MAC addresses for all VMs in the entire data center. A vRouter only needs to contain those routing instances for the VMs that are local to the hosting server.

20. You are asked to reduce traffic on an MPLS VFN by automatically moving the traffic to an internet circuit as long as it satisfies the SLA requirements. In this scenario, what would you use to accomplish this task?
- a. NorthStar
 - b. AppFormix
 - c. Contrail cloud
 - d. Contrail SD-WAN
 - e. Answer :A

The NorthStar Controller software provides traffic-engineering-based solutions for WAN and edge (data center edge and WAN edge) networks. After the NorthStar Controller has connected to the network and dynamic topology acquisition is performed to provide a real-time routing view of the network topology, you can view the network model from the NorthStar Controller UI. You can then plan, analyze, and assess the impact of network changes you want to make before implementing them.

The Juniper Networks NorthStar Controller is an SDN controller that enables granular visibility and control of IP/MPLS flows in large service provider and enterprise networks. Network operators can use the NorthStar Controller to optimize their network infrastructure through proactive monitoring, planning, and explicit routing of large traffic loads dynamically based on user-defined constraints.

21. What are two different modes available for the vMX on KVM that are based on CPU and memory availability? (choose two).
- Performance
 - Basic
 - Lite
 - Enhanced
 - Answer : AC

Correct :

- > a little
- > performance

Feedback : vMX can be configured to run in two modes depending on the use case. Lite mode—Needs fewer resources in terms of CPU and memory to run at lower bandwidth. Performance mode—Needs higher resources in terms of CPU and memory to run at higher bandwidth.

22. Which protocol is used to communicate LSP and status information between the Northstar controller and label edge routers?
- ICCP
 - BGP
 - OSPF
 - PCEP
 - Answer : D

How NorthStar Works

- How it works
 - Learns network characteristics
 - Uses BGP with traffic engineering address family
 - Alternatively, can use OSPF or ISIS
 - Uses Path Computation Element Protocol (PCEP)
 - Stateful PCEP session is maintained between Path Computation Element (PCE) (NorthStar) and Path Computation Clients (PCC) (label edge router)
 - Used to communicate LSP configuration and status information
 - Manages MPLS traffic engineering paths
 - Discovery
 - Provisioning
 - Monitoring
 - Modification

23. What is a primary difference between NFV and VNF ?
- a. A VNF defines the network underlay tunnel methodology while NFV is firewall that inspects traffic in the overlay network.
 - b. NFV is the framework that describes how a virtual function should operate while VNF is the virtual function itself
 - c. A VNF operates on a bare metal server while NFV operates on a switch
 - d. NFV identifies the host on which the VNF operates.
 - e. Answer :B

NFV Versus VNF

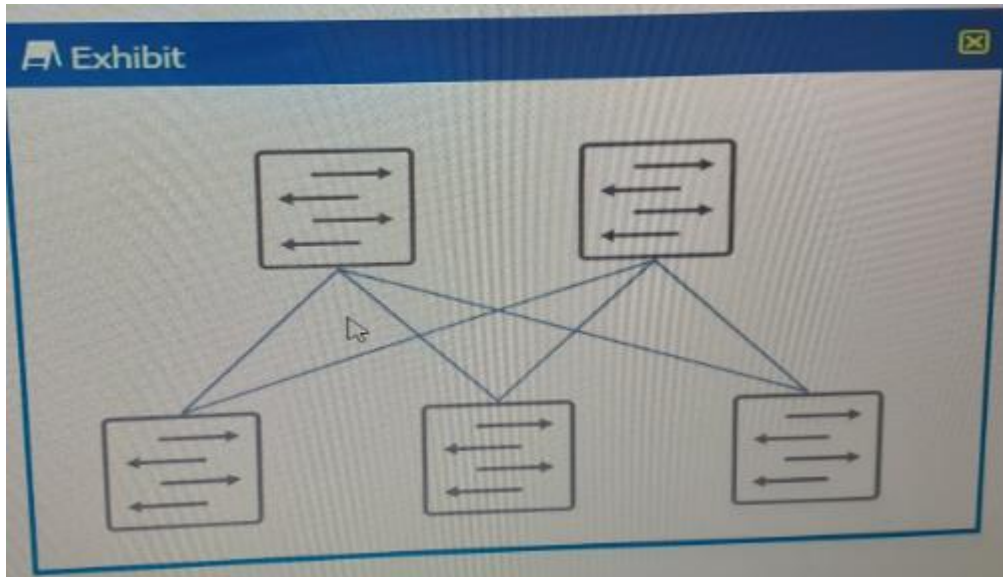
- NFV is a standardized framework defined by ETSI
 - Explains how virtual network functions (VNFs) fit into a complete system including management and orchestration
- VNFs are simply defined as the virtualized function itself

24. Which statement is correct about overlay network?
- a. An overlay network requires an OSPF area

- b. An overlay network uses tunneling technologies
- c. An overlay network requires the CLOS architecture
- d. An overlay network must have switches interconnected in a spine leaf implementation
- e. Answer :B

The overlay network provides logical connectivity between tenants hosted on physical devices. Because the overlay network is a logical construct, comprised of tunnels between devices, it can be re-programmed and changed with no physical change to the network. The use of tunneling technologies such as Virtual Extensible LAN (VXLAN), Ethernet VPN (EVPN), and MPLS-over-generic routing encapsulation (MPLSoGRE) allow an administrator, or more commonly software components, to extend multiple Layer 2 domains over a shared underlay without overlap. Because the overlay is a logical topology, defined in software, it can be re-mapped without modifying the physical architecture.

25. Which type of topology is shown in the exhibit



- a. Spine-and-leaf topology
- b. Tree topology
- c. ERP topology
- d. Hub-and-spoke topology
- e. Answer :A

26. Which statement is correct when deploying services inside containers
- a. Services have dedicated processor and memory resources on each server
 - b. Services must not be deployed using the same operating system
 - c. Containers can always be deployed for free
 - d. Containers use fewer resources than VMs
 - e. Answer :D

The advantages of a container outnumber those of a virtual machine, including the fact that containers are more lightweight and use fewer resources than virtual machines. A crucial milestone in the rapid adoption of containers in production environments is the issue of security.

27. Your company has three connections consisting MPLS, Internet, and wireless connections, respectively. You must separate traffic according to the type of application sending that traffic across the three links. Which product will facilitate this requirement?
- a. Contrail cloud
 - b. Contrail networking
 - c. Contrail SD-WAN

- d. Contrail SD-LAN
- e. Answer :C

28. Which type of API does contrail service orchestration provide when connecting with OSS and BSS applications?

- a. TLS
- b. REST
- c. XMPP
- d. SOAP
- e. Answer :B

Contrail Service Orchestration is a suite of products for designing and deploying network services in the Cloud CPE Centralized Deployment Model. Contrail Service Orchestration provides a RESTful API to connect with service providers' operational support systems (OSS) and business support systems (BSS) applications and is responsible for many management and network orchestration (MANO) activities in the deployment. Contrail Service Orchestration consists of the following components:

29. Which statement is true about NFV containers ?

- a. NFV containers usually provide fewer functions than VM-based NFs
- b. NFV containers require an underlying hypervisor for deployment
- c. NFV containers take longer to instantiate than virtual machines
- d. NFV containers require more memory and storage resources to deploy
- e. Answer :A

Correct :

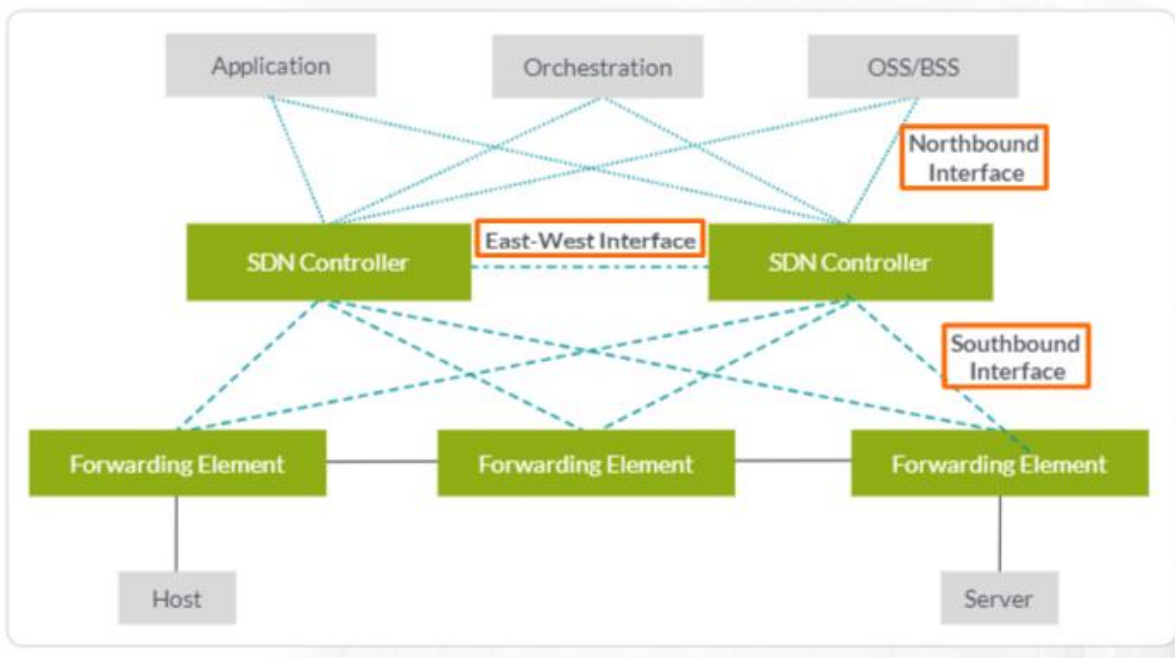
› NFV containers usually provide fewer functions than VM-based VNFs.

Feedback : With container architecture, many services and functions of the original operating system are lost, as the operating system is no longer deployed with the services. The key focus of this software structure is to enable the desired services without the overhead of deploying a platform that provides a suite of services that may not be used. This introduces the concept of microservices. With microservices, resource requirements on the underlying host are greatly reduced, as are deployment times and

30. Which two statements are true about vSRX firewalls? (Choose two).
- a. The vSRX does not use static CPU reservations.
 - b. The host OS can be different from the guest OS.
 - c. The host OS and image OS must match
 - d. The vSRX uses static CPU reservation
 - e. Answer : BD
31. You are the administrator of an MPLS WAN. Intermittent WAN hardware failures are causing customer traffic to route over newly computed forwarding paths that do not satisfy service level agreements. Which Juniper Networks solution would be used to analyze this problem?
- a. Network director
 - b. Contrail
 - c. NorthStar
 - d. AppFormix
 - e. Answer : C
32. Which interface is used by applications, orchestration systems, and other types of business systems to communicate with an SDN controller?
- a. Controller interface
 - b. Northbound interface
 - c. East-west interface
 - d. Southbound interface

e. Answer : B

terface to learn more.



33. AppFormix alarm notification are sent to an HTTP server using which format
- a. JSON
 - b. CSV
 - c. XML
 - d. Plain text
 - e. Answer : A

AppFormix alarm notifications are sent to an HTTP server using which format?

XML

JSON

plain text

CSV

Correct

34. What are two concepts of private cloud? (choose two).
- a. Resources are dedicated to your organization
 - b. Resources are accessed through a private connection
 - c. Non-critical resources are located outside of your organization
 - d. Resources are not secured by firewalls
 - e. Answer : AB

Incorrect


Correct :

- › Resources are dedicated to your organization.
- › Resources are accessed through a private connection.

Feedback : Resources are not shared among multiple tenants, and access to the resources are through a private connection, as opposed to a general public connection.

35. AppFormix has been deployed in your data center using the Juniper Telemetry interface (JTI) native sensors. However, the underlay devices have not yet been set up to work with the JTI native sensors. Which action is required for the JTI native sensors to work properly?
- a. Enable the SSH on the underlay devices
 - b. Install the AppFormix network agent on the underlay devices
 - c. Enable the GPB messaging on the underlay devices
 - d. Enable the NETCONF over SSH on the underlay devices
 - e. Answer : C

5. Specify the format to define the structure of the exported data.

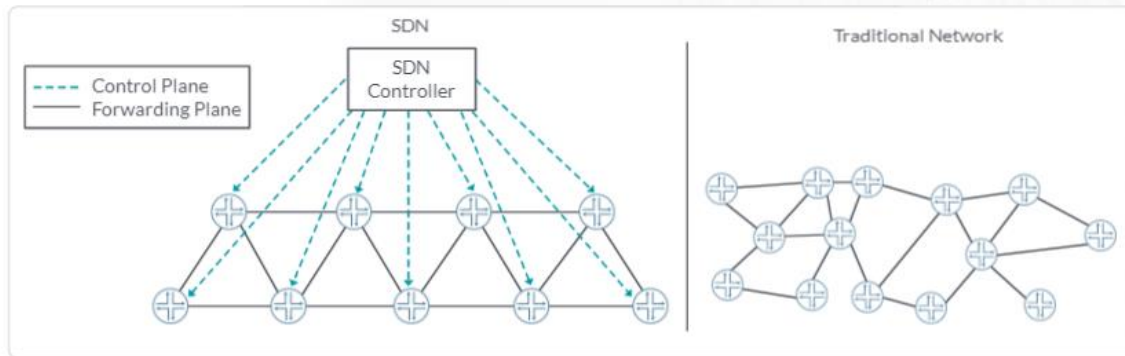
 **NOTE** The only currently supported format is Google protocol buffers (gpb)

```
[edit services analytics export-profile name]
user@host# set format gpb
```

36. What are two objectives of SDN? (Choose two).
- a. Physical separation of the control plane from the data plane
 - b. Centralization of the forwarding plane
 - c. Centralization of the control plane
 - d. Centralization of the services plane
 - e. Answer : AC

SDN Definition

- Defined by the Open Networking Foundation (ONF):
 - "The physical separation of the network control plane from the forwarding plane, and where a control plane controls several devices."



37. What are two characteristics of cloud computing? (Choose two).
- a. Customer-owned equipment.
 - b. Measured service
 - c. Resource pooling
 - d. Unrestricted public access to all resources
 - e. Answer : BC



What are two characteristics of cloud computing? (Choose two.)

Selected Answer

- > measured service
- > resource pooling

38. You are deploying a layer 2 underlay network with 2,000 devices and hosts. Which two statements are correct? (Choose two).
- a. RSTP can be used for loop prevention
 - b. Network routing tables can become very large and unmanageable
 - c. The MAC tables can become very large and unmanageable
 - d. RPF is used for loop prevention
 - e. Answer : AC

Physical Underlay Network

This is also known as physical or fabric network. The role of the physical underlay network is to provide an IP fabric. Its responsibility is to provide unicast IP connectivity from any physical device such as server, storage device, router, or switch to any other physical device. An ideal underlay network provides uniform low-latency, non-blocking, and high-bandwidth connectivity from any point in the network to any other point in the network.

The underlay physical routers and switches do not contain any individual tenant or state information; they do not contain any MAC addresses, IP address, or policies for end customer devices such as physical servers or virtual machines (VMs). The forwarding tables of the underlay physical routers and switches only contain the IP prefixes or MAC addresses of the physical servers. Gateway routers or switches that connect a virtual network to a physical network are an exception—they do need to contain tenant MAC or IP addresses. They only perform transport and are not aware of edge services.

39. Which open source management framework does VMware NSX use to manage VXLANs on Junos device?
- a. OVSDB
 - b. Contrail networking
 - c. OpenFlow
 - d. OpenConfig
 - e. Answer : A

Correct :

> OVSDB

40. Which statement is true about Junos Space security director?
- a. Security director is a standalone management platform
 - b. Security director is a centralized security policy manager
 - c. Security director is an SDN controller

d. Security director is a network orchestrator

e. Answer : B

Which statement is true about Junos Space Security Director?

- Security Director is an SDN controller.
- Security Director is a centralized security policy manager.
- Security Director is a security orchestrator.
- Security Director is a standalone management platform.

Correct

41. You want to secure sensitive data and detect malware in your network. Which component would be used to satisfy this requirement?

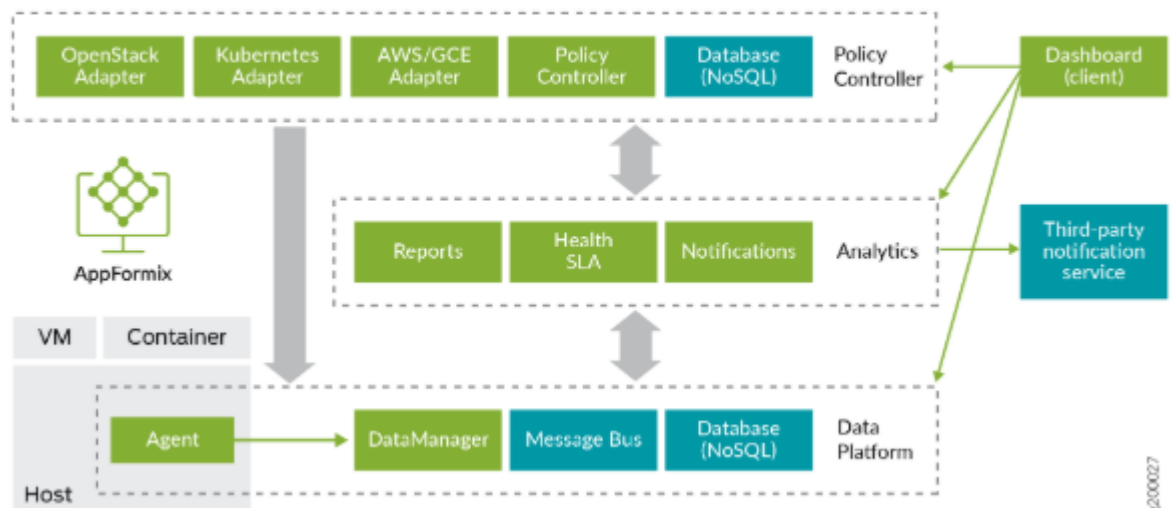
- a. AppFormix
- b. Sky ATP
- c. Network director
- d. Contrail cloud
- e. Answer : B

Analyzing and Detecting Malware

Juniper Sky ATP uses a pipeline approach to analyzing and detecting malware. If an analysis reveals that the file is absolutely malware, it is not necessary to continue the pipeline to further examine the malware. See [Figure 1](#).

42. Which two components are part of the App Formix architecture? (Choose two).
- a. Policy controller
 - b. Compute node
 - c. SDN controller
 - d. Data platform
 - e. Answer : AD

Figure 1: AppFormix Architecture



43. Which organization is responsible for defining cloud computing
- a. IEEE
 - b. ANSI

- c. NIST
- d. IANA
- e. Answer : C



Which organization is responsible for defining cloud computing?

Selected Answer

> NIST

44. Devices in your data center have become unwilling participants of botnet attacks. In this scenario, Which security technology should you use to stop this behavior?
- a. IPsec
 - b. Policy enforcer
 - c. Sky ATP C&C threat protection
 - d. Sky ATP GeolP threat protection
 - e. Answer : C

Table 1: Sky ATP Components

Component	Operation
Command and control (C&C) cloud feeds	C&C feeds are essentially a list of servers that are known command and control for botnets . The list also includes servers that are known sources for malware downloads. See Command and Control Servers Overview .

45. Which two Juniper devices are used as a CSO CPE device? (Choose two).
- a. NFX
 - b. SRX

- c. MX
- d. QFX
- e. Answer : AB

46. Which message type is supported by the Junos Telemetry interface?

- a. GPB
- b. OpenShift
- c. JET
- d. YANG
- e. Answer : A

https://www.juniper.net/documentation/en_US/junos/topics/concept/junos-telemetry-interface-overview.html

- An open and extensible data model defined by Juniper Networks. Data is generated as Google protocol buffers (gpb) structured messages. The files that define each `.proto` message are published on the Juniper Networks web site. Native sensors export data close to the source, such as the line card or network processing unit (NPU), using the User Datagram Protocol (UDP). Because this model features a distributed architecture, it scales easily.

47. Which two statements are true about an SDN controller? (Choose two).

- a. An SDN controller regulates traffic transmission rates in network
- b. An SDN controller centralizes control and configuration of a network
- c. An SDN controller stores and manages software images
- d. An SDN controller automates repetitive tasks in network

e. Answer : BD

Correct :

- › An SDN controller centralizes control and configuration of a network.
- › An SDN controller automates repetitive tasks in a network.

Feedback : The Virtual Networking and SDN layer is where central policy, control, and automation of networking above the hardware or fabric layers takes place. Software Defined Networking operates on the network at the virtualized network and services level. An SDN controller has a different role than an orchestration platform. The primary role of an SDN controller is to automate repetitive tasks in a network environment.

48. What are two characteristics of vMX series devices? (Choose two)

- a. The vMX series uses carrier-grade routing optimized for the x86 environment
- b. The vMX series requires a license for production environment
- c. The vMX series uses a trio ASIC
- d. The vMX series uses containerization technology for rapid service enablement
- e. Answer : AB

- › The vMX Series uses carrier-grade routing optimized for the x86 environment.
- › The vMX Series requires a license for production environments.

Feedback : The vMX Virtual Router is a virtualized MX Series 3D Universal Edge Router that helps network operators of all types improve customer experience and profitability by increasing network and service agility and accelerating time to market for new services, while streamlining their operations environment. The vMX is available as licensed software for x86-based servers and on Amazon Web Services (AWS) and AWS GovCloud, where it can provide secure routing between AWS virtual path connections (VPCs),

49. Which two capabilities are supported with the cSRX firewall? (Choose two)

- a. IPS
- b. Routing instances
- c. Layer 2 deployment
- d. Chassis clustering
- e. Answer : AB

50. Which two statements are correct when using the native sensors model for Juniper Telemetry Interface with AppFormix? (Choose two).
- a. Telemetry data is exported from the control plane
 - b. Additional software must be installed on the Junos device
 - c. Telemetry data is exported from the data plane
 - d. No additional software must be installed on the Junos device
 - e. Answer : BC

Interface is based on a distributed architecture, through which the data generated by configured sensors is exported directly from the data plane, bypassing the control plane, and thus conserving these resources to perform other necessary functions.

You must also download the `.proto` files for all the sensors supported to a streaming server or collector. From a Web browser, navigate to the All Junos Platforms software download URL on the Juniper Networks page: <https://www.juniper.net/support/downloads/>. After you select the name of the Junos OS platform and the release number, go to the Tools section and download the Junos Telemetry Interface Data Model Files package. For more information about configuring a streaming-server, see [streaming-server \(Junos Telemetry Interface\)](#).

51. Which two statements are true about SDN WAN implementations? (Choose two).
- a. SDN WAN uses VXLAN to connect POPs
 - b. SDN WAN uses data center orchestration platforms
 - c. SDN WAN uses a centralized control plane
 - d. SDN WAN uses MPLS tunnels to connect POPs
 - e. Answer : CD



Which two statements are true regarding **SDN WAN** implementations? (Choose two.)

Selected Answer

- > **SDN WAN** uses a centralized control plane.
- > **SDN WAN** uses MPLS tunnels to connect POPs.

52. What information does an underlay network use to route data?

- a. Application name
- b. Customer ID
- c. IP address
- d. Customer name
- e. Answer : C

Correct :

- > IP address

Feedback : The underlay network does not have visibility into the tunneled customer data traffic. The underlay network routes data based on packet IP addressing.

53. You want to prevent a single point of failure in your underlay network. Which two protocols would be used to accomplish this task? (choose two)

- a. LACP
- b. VSTP
- c. MC-LAG
- d. RSTP
- e. Answer : AC

Juniper Networks supports which two alternatives to Layer 2 loop prevention protocols, such as STP, in an underlay network? (Choose two.)

MC-LAG

BGP

LACP

TRILL

Incorrect

Correct :

> MC-LAG

> LACP

Feedback : MC-LAG and LACP provide link and device redundancy without the need for Spanning Tree Protocol (STP)

54. Which two statement describe virtual network functions (VNFs)? (Choose two)
- VNFs are provided at a customer's site or telco cloud
 - VNFs represent the service that monitors and tracks whether the services are performing according to design
 - VNFs represent the infrastructure the comprises the telco underlay network
 - VNFs can be deployed as a software function within a single x86 platform
 - Answer : AC

55. What are two reasons to use a vMX over a physical MX series in your deployment? (Choose two)

- a. A vMX provides more routing features
- b. A vMX has a lower barrier of entry
- c. A vMX accelerates adding new services
- d. A vMX increases analytic capabilities
- e. Answer : BC

https://www.juniper.net/documentation/en_US/vmx/topics/concept/vmx-overview.html

- Quickly introduce new services
- More easily deliver customized and personalized services to customers
- Scale operations to push IP services closer to customers or to manage network growth when growth forecasts are low or uncertain
- Quickly expand service offerings into new sites

56. Which statement is correct about SDN

- a. SDN simplifies the network by combining the control and forwarding plane into a single controller
- b. The SDN controller must provide a manual method for configuration
- c. The configuration and management of an SDN solution should be distributed to the edge of the network
- d. The SDN controller has a centralized view of the network
- e. Answer : D

57. What are two roles of sandboxing in Sky ATP? (choose two)

- a. To test the operation of security rules

- b. To analyze the behavior of potential security threats
- c. To validate the operation of third-party components
- d. To store infected files for further analysis
- e. Answer : BD

Correct :

- › to analyze the behavior of potential security threats
- › to store infected files for further analysis

Feedback : Dynamic analysis sandboxes suspect files and executes them in a real environment where they can run uninterrupted for minutes. During that time, active deception encourages the malware to show itself, and a record of its activity is kept. The file is then fed into the Sky ATP machine-learning algorithms.

58. Which statement is correct about alarms in AppFormix?
- a. Static alarm are compared against fixed thresholds
 - b. Alarm thresholds cannot be changed by the user
 - c. Alarm actions cannot be change by the user
 - d. Static alarms are compared against historical data
 - e. Answer : A
- **Static Threshold**—A **fixed** value that is specified when an alarm is configured. For example `host.cpu.usage above 90%`, where 90% is the static threshold.
59. Which OpenStack component is responsible for user authentication and authorization
- a. Glance
 - b. Nova
 - c. Keystone
 - d. Neutron
 - e. Answer : C
60. Which two product are required when deploying vSRX as a partner security service in VMware NSX? (Choose two)

- a. VMware vROPs
- b. VMware NSX manager
- c. Junos Space Security Director
- d. IDP sensor
- e. Answer : BC

Correct :

- > Junos Space Security Director
- > VMware NSX Manager

Feedback : The vSRX VM is deployed in conjunction with Juniper Networks Junos Space Security Director and VMware NSX Manager.

61. You are deploying a vMX device in your network. Which two virtualized components are required in this scenario? (choose two)
- a. Virtual chassis fabric
 - b. Virtual forwarding plane
 - c. Virtual chassis port
 - d. Virtual control plane
 - e. Answer : BD

The vMX instance contains two separate virtual machines (VMs), one for the virtual forwarding plane (VFP) and one for the virtual control plane (VCP). The VFP VM runs the virtual Trio forwarding plane software and the VCP VM runs Junos OS.

62. What are two characteristics of policy Enforcer? (Choose two)
- a. Policy Enforcer has its own standalone GUI
 - b. Policy Enforcer is integrated with security director
 - c. Policy Enforcer provides telemetry data for a collector device

- d. Policy Enforcer consolidates threat information from multiple sources
- e. Answer : BD

Policy Enforcer provides the following:

- Pervasive Security—Combine security features and intelligence from devices across your network, including switches, routers, firewalls, to create a “secure fabric” that leverages information you can use to create policies that address threats in real-time and into the future. With monitoring capabilities, it can also act as a sensor, providing visibility for intra- and inter-network communications.
- User Intent-Based Policies—Create policies according to logical business structures such as users, user groups, geographical locations, sites, tenants, applications, or threat risks. This allows network devices (switches, routers, firewalls and other security devices) to share information, resources, and when threats are detected, remediation actions within the network.
- Threat Intelligence Aggregation—Gather threat information from multiple locations and devices, both physical and virtual, as well as third party solutions.

Figure 1 illustrates the flow diagram of Policy Enforcer over traditional SDN configuration.

Policy Enforcer, a component of the Junos Space Security Director user interface, integrates with Sky ATP to provide centralized threat management and monitoring to your software-defined secure network, giving you the ability to combine threat intelligence from different solutions and act on that intelligence from one management point.

63. Which two hypervisors does the vMX support? (Choose two)
- a. KVM
 - b. xen
 - c. ESXi
 - d. Hyper V
 - e. Answer : A C

The vMX router is a virtual version of the MX Series 3D Universal Edge Router. Like the MX Series router, the vMX router runs the Junos operating system (Junos OS) and supports Junos OS packet handling and forwarding modeled after the Trio chipset. Configuration and management of vMX routers are the same as for physical MX Series routers, allowing you to add the vMX router to a network without having to update your operations support systems (OSS).

You install vMX software components on an industry-standard x86 server running a [hypervisor](#), either the kernel-based virtual machine (KVM) hypervisor or the VMware ESXi hypervisor.

Correct :

- > ESXi
- > KVM

64. What are two examples of public cloud providers? (Choose two)
- a. eBay
 - b. Netflix
 - c. Microsoft Azure
 - d. Amazon Web Services
 - e. Answer : CD