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3V0-42.20

Advanced Design

VMware NSX-T Data Center

VMware

Exam 3V0-42.20

Advanced Design VMware NSX-T Data Center

Version: 4.0

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Question No : 1

Which two protocols are typically used for multicast in a NSX-T Data Center environment? (Choose two.)

A. PIM Full Form
B. PIM Dense Mode
C. IGMPv2
D. PIM Sparse mode
E. IGMPv3

Answer: C,D

Explanation:

The following protocols are used to implement multicast in NSX-T Data Center 3.0>

Internet Group Management Protocol (IMGP)

- IGMPv2

- IGMP Snooping

Protocol-Independent Mutlicast (PIM)

- PIM Sparse Mode (PIM-SM)

- PIM Bootstrap.

Take from NSX-T ICM 3.0 Lecture Manual - Multicas Protocols section.

or

https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.0/administration/GUID-6AAC3360-4F79-4FBF-BCC1-0D8C220B0621.html

Question No : 2

Which is a family of solutions for data center designs that span compute, storage, networking, and management, serving as a blueprint for a customer's Software Defined Data Center (SDDC) implementations? (Choose the best answer.)

A. VMware SDDC Design
B. VMware Validated Design
C. VMware POC Design
D. VMware Cloud Foundation

Answer: B

Question No : 3

An architect is helping an organization with the Conceptual Design of an NSX-T Data Center solution.

This information was gathered by the architect during the Discover Task of the Engagement Lifecycle:

- ✑ Existing hardware will be used in any design proposal.
- ✑ Network bandwidth cannot be expanded.

Which concept of the Discover Task do these items belong to? (Choose the best answer.)

A. constraint
B. requirement
C. risk
D. assumption

Answer: A

Question No : 4

An architect is helping an organization with the Physical Design of an NSX-T Data Center solution.

This information was gathered during a workshop:

- ✑ Some workloads should be moved to a Cloud Provider.
- ✑ Extend network's VLAN or VNI across sites on the same broadcast domain.
- ✑ Enable VM mobility use cases such as migration and disaster recovery without IP address changes.
- ✑ Support 1500 byte MTU between sites.

Which selection should the architect include in their design? (Choose the best answer.)

A. Load Balancer
B. Reflexive NAT

C. SSL VPN
D. L2 VPN

Answer: D

Question No : 5

Which selection is associated with the Review Task of the Engagement Lifecycle? (Choose the best answer.)

A. Gather and document requirements, assumptions, and constraints.
B. Build, deploy, implement, and test the design.
C. Measure performance against customer's objective.
D. Create and document the logical and physical design.

Answer: C
Explanation: https://docs.vmware.com/en/VMware-Validated-Design/6.1/sddc-architecture-and-design-for-the-management-domain/GUID-1117D50C-096D-40B8-84C0-B9D636E322C6.html

Question No : 6

An architect is helping an organization with the Logical Design of an NSX-T Data Center solution.This information was gathered during the Assessment Phase:

- ✎ NSX-T will span across two sites for disaster recovery.
- ✎ Public Load Balancer VIP should be accessible from a secondary site.
- ✎ Distributed Firewall Policies should be available at a secondary site.
- ✎ Routing capabilities should be maintained after failure.
- ✎ NAT capabilities are required.

Which two selections should the architect include in their design? (Choose two.)

A. Use of the same ISPs across sites.
B. Use two separate ISPs across sites.
C. Use MTU to 1550 between sites.

D. Set MTU to 1550 between sites.
E. Use IP sets or groups to configure DFW rules.

Answer: A,E

Explanation:

https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.0/administration/GUID-5D7E3D43-6497-4273-99C1-77613C36AD75.html

Question No : 7

A customer has a requirement to implement a next generation firewall (NGFW) to improve security network introspection. The customer wants to apply the NGFW to all workloads exposed both internally and externally. The customer wants the NGFW to work seamlessly with NSX-T Data Center and vSphere.

Which solution should be recommended to the customer? (Choose the best answer.)

A. Use network introspection only on the external workloads and use NSX DFW for internal workloads.
B. Apply the NGFW on bare metal hosts which will offer better performance of inline network introspection.
C. Apply the NGFW to internal and external workloads for increased protection and use NSX-T Data Center with Federation to set network policies.
D. Use NSX-T Data Center leveraged with NSX Intelligence to protect all workloads at the network inspection level.

Answer: A

Question No : 8

An architect is helping an organization with the Physical Design of an NSX-T Data Center solution.

This information was gathered during a workshop:

  ☞ Any proposed solution must provide low latency.
  ☞ Any proposed solution must provide high throughput.
  ☞ Customer is running stock trading applications.

Which two selections should the architect recommend to meet high-performance workload requirements? (Choose two.)

A. Leverage ESXi as the compute host.
B. Use LACP for all uplink profiles.
C. Leverage KVM as the compute host.
D. Enable enhanced data path mode on the N-VDS.
E. Enable latency sensitivity mode on the N-VDS.

Answer: A,D

Explanation: N-VDS and VDS support the following modes: Standard: Provide forwarding capabilities on both KVM and ESX transport nodes and does not require a specialized hardware. Enhanced Datapath: Available for ESXi transport nodes only and provide Enhanced Network Stack (ENS) targeted for Network Functions Virtualization (NFV) applications that require a faster performance data path.

Question No : 9

An architect is helping an organization with the Physical Design of an NSX-T Data Center solution.

This information was gathered during a workshop:

  ✑ Migrating existing data center to KVM hosts.
  ✑ Redundancy and high availability are required.
  ✑ No component can be a single point of failure.

Which selection should the architect recommend? (Choose the best answer.)

A. Linux Bridge redundancy with Active/Active Mode and multiple pNICs with necessary binding
B. Linux Bridge redundancy with Active/Active Mode and single pNIC with static binding
C. vSS/vDS in Active/Standby Mode with necessary binding
D. vSS/vDS in Active/Active Mode with necessary pNICS and required binding modes

Answer: A

Question No : 10

An architect is helping an organization with the Logical Design of an NSX-T Data Center solution.During discussions about centralized services NAT running on Tier-1 or Tier-0 Gateway, the customer made these requests:

⏣ Services contain stateful services.
⏣ Services should be in high availability mode.

Which two selections should the architect include in their design? (Choose two.)

A. An active/active model should be used.
B. Use Reflexive NAT on the uplink interface.
C. DNAT should be applied on the uplink interface.
D. Mix stateful and stateless NAT rules on the same gateway.
E. The high availability mode supported is only Active-Standby.

Answer: C,E

Explanation:

Stateful services: Require HA mode configured as Active-Standby
Stateless services: Require HA mode configured as Active-Active

You can create different NAT rules:
• Source NAT (SNAT) translates the source IP of the outbound packets to a known public IP address so that the application can communicate with the outside world without using its private IP address. SNAT also tracks the reply.
• Destination NAT (DNAT) enables access to internal private IP addresses from the outside world by translating the destination IP address when inbound communication is initiated. DNAT also takes care of the reply. For both SNAT and DNAT, users can apply NAT rules based on the 5-tuple match criteria.
• Reflexive NAT rules are stateless access control lists (ACLs) that must be defined in both directions. These rules do not track the connection. Reflexive NAT rules are applied when stateful NAT cannot be used. For example, when a Tier-0 gateway is running in active-active equal-cost multipath (ECMP) mode, you cannot configure stateful NAT because asymmetrical paths might cause issues.

Question No : 11

Which three choices are part of a Design Approach when discussing design alternatives and their effects? (Choose three.)

A. backup
B. budget
C. cost
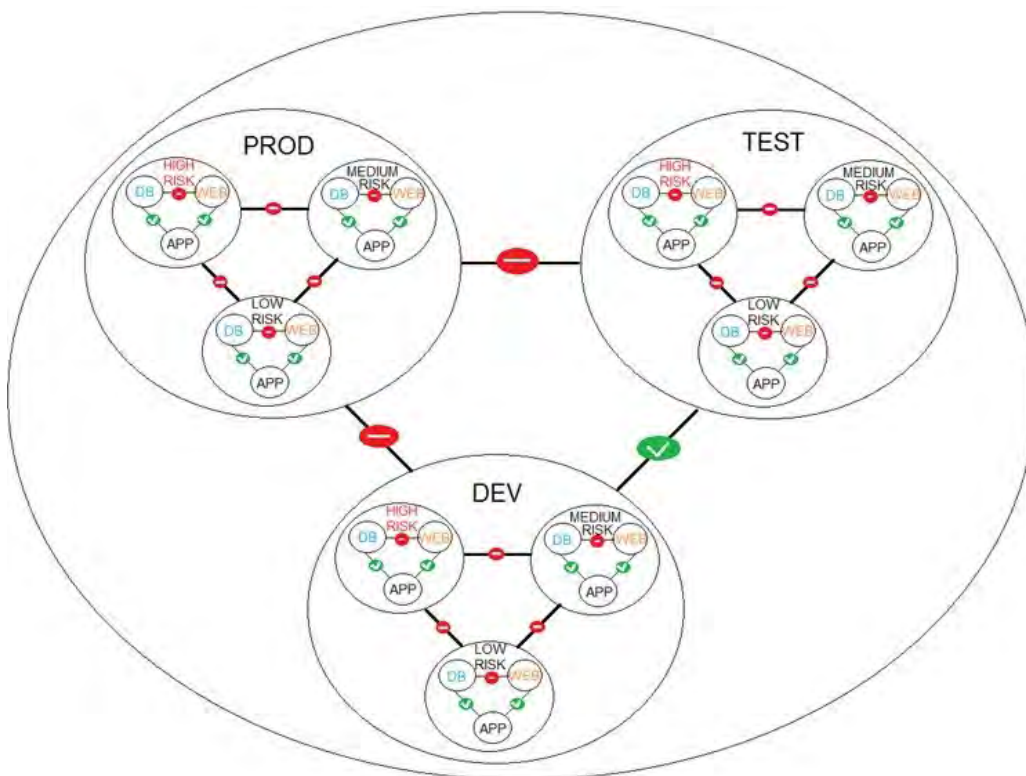**D.** performance
E. knowledge
F. security

Answer: C,D,F

Explanation:

"Design qualifiers ensure that all levels of the engagement are met. Each qualifier affects the other qualifiers. Design qualifiers include: • Availability • Manageability • Performance • Recoverability • Security • Cost"

Question No : 12

Refer to the exhibit.

A financial company is adopting micro-services with the intent of simplifying network security. An NSX-T architect is proposing a NSX-T Data Center micro-segmentation logical design. The architect has created a diagram to share with the customer.

How many security levels will be implemented according to this Logical Design? (Choose the best answer.)

A. 5 levels
B. 3 levels
C. 9 levels
D. 4 levels

Answer: D

Explanation:

Each circle in this design is a "level" starting at the most granular level which is the sub-component of the app (web, db., or app), then risk level (high, med, low) then deployment zone (prod, dev, test), and then finally infrastructure services level.

Question No : 13

Which three IPv6 features are supported in an NSX-T Data Center design? (Choose three.)

A. IPv6 OSPF
B. IPv6 static routing
C. IPv6 switch security
D. IPv6 DNS
E. IPv6 Distributed Firewall
F. IPv6 VXLAN

Answer: B,C,E
Reference: https://blogs.vmware.com/networkvirtualization/2019/02/ipv6-support-in-nsx-t-2-4.html/

Question No : 14

An architect is helping an organization with the Logical Design of an NSX-T Data Center