

Vendor: Cisco

Exam Code: 300-620

Exam Name: Implementing Cisco Application Centric

Infrastructure (DCACI)

**Version: DEMO** 

### **QUESTION 1**

Where are STP BPDUSs flooded in Cisco ACI fabric?

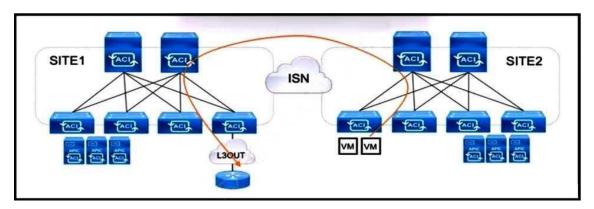
- A. in the access encapsulation VLAN part of different VLAN pools
- B. in the bridge domain VLAN
- C. in the native VLAN ID
- D. in the VNID that is assigned to the FD VLAN

# Answer: B Explanation:

STP BPDUs are flooded in the bridge domain VLAN in Cisco ACI fabric.

#### **QUESTION 2**

Refer to the exhibit. An engineer is configuring a production Multi-Site solution to provide connectivity from EPGs from a specific site to networks reachable through a remote site L3OUT. All required schema and template objects are already defined. Which additional configuration must be implemented in the Multi-Site Orchestrator to support the cross-site connectivity?



- A. Configure a routable TEP pool for SITE1.
- B. Enable CloudSec for intersite traffic encryption.
- C. Add a new stretched external EPG to the existing L3OUT.
- D. Implement a policy-based redirect using a service graph.

### Answer: C Explanation:

In order to provide connectivity from EPGs from a specific site to networks reachable through a remote site L3OUT, a new stretched external EPG must be added to the existing L3OUT.

### **QUESTION 3**

A customer is deploying a new application across two ACI pods that is sensitive to latency and jitter. The application sets the DSCP values of packets to AF31 and CS6, respectively. Which configuration changes must be made on the APIC to support the new application and prevent packets from being delayed or dropped between pods?

- A. disable DSCP mapping on the IPN devices
- B. disable DSCP translation policy
- C. align the ACI QoS levels and IPN QoS policies
- D. align the custom QoS policy on the EPG site in the customer tenant

# Answer: C Explanation:

This will ensure that the Quality of Service (QoS) levels and policies within the ACI fabric and the IPN devices match, preventing packets from being delayed or dropped between pods. Additionally, it is important to align the DSCP values of the packets with the configured QoS levels to ensure that the application's requirements for latency and jitter are met.

#### **QUESTION 4**

The engineer notices frequent MAC and IP address moves between different leaf switch ports. Which action prevents this problem from occurring?

- Disable enforce subnet check.
- B. Enable endpoint loop protection.
- C. Enable rogue endpoint control.
- D. Disable IP bridge domain enforcement.

### Answer: B Explanation:

enabling endpoint loop protection can prevent frequent MAC and IP address moves between different leaf switch ports.

#### **QUESTION 5**

An engineer is troubleshooting fabric discovery in a newly deployed Cisco ACI fabric and analyzes this output:

An engineer is troubleshooting fabric discovery in a newly deployed Cisco ACI fabric and analyzes this output:

LEAF101# show ip int brief vrf overlay-1 (...output truncated for brevity...)

IP Interface Status for VRF "overlay-1"(4)

Interface Address Interface Status

lo1023 10.233.44.32/32 protocol-up/link-up/admin-up

LEAF101# show vian extended

VLAN	Name	Encap	Ports
*******	***************************************		
8	infra:default	vxlan-38802518,	Eth1/1, Eth1/2, Eth1/47 vlan-3600

Which ACI fabric address is assigned to interface lo1023?

- A. Dynamic tunnel endpoint
- B. Physical tunnel endpoint
- C. Fabric tunnel endpoint
- D. VXLAN tunnel endpoint

### Answer: C Explanation:

In addition to loopback 0 interfaces, ACI creates loopback 1023 interfaces on all leaf switches. A loopback 1023 interface is used for assignment of a single fabricwide pervasive IP address called a fabric tunnel endpoint (FTEP) address.

The FTEP address represents the entire fabric and is used to encapsulate traffic in VXLAN to an AVS or AVE virtual switch, if present.

#### **QUESTION 6**

What is the effect of enabling the disable Remote EP learn feature?

- A. It disables remote IP endpoint learning on all leaf nodes in the fabric.
- B. It disables remote IP endpoint learning on leaf switches that do not have L3Outs.
- C. It limits learning of compute leaf endpoints on border leaves.
- D. It prevents border leaf switches from receiving routes through peering with external routers.

# Answer: C Explanation:

https://community.cisco.com/t5/application-centric/aci-disable-remote-ep-learn/td-p/4062054 When you enable this feature, it clears all the remote endpoints from the border leaf only. https://www.cisco.com/c/en/us/solutions/collateral/data-center-virtualization/application-centric-infrastructure/white-paper-c11-739989.html#DisableRemoteEPLearnonborderleaf When this feature is enabled, remote IP endpoint learning at the VRF instance is disabled on border leaf switches.

However, border leaf may still learn remote IP endpoints from IP multicast routing packets

#### **QUESTION 7**

Drag and Drop Question

An engineer must configure VMM domain integration on a Cisco UCS B-Series server that is connected to a Cisco ACI fabric. Drag and drop the products used to create VMM domain from the bottom into the sequence in which they should be implemented at the top. Products are used more than once.

On the On the On the On the	interface, create a dynamic VLAN pool. interface, create a VMware vCenter domain. interface, create a vCenter/vShield controller. user interface, verify that the VMware vDS is created.
APIC	vCenter UCS Manager

#### Answer:

On the	APIC	interface, create a dynamic VLAN pool.		
On the	APIC	interface, create a VMware vCenter domain.		
On the	vCenter	interface, create a vCenter/vShield controller.		
On the	vCenter	user interface, verify that the VMware vDS is created.		
APIC vCenter UCS Manager				

### **Explanation:**

- 1. Create a dynamic VLAN pool. From the APIC user interface, choose Fabric > Access Policies > Pools > VLAN > Create VLAN Pool.
- 2. From the APIC user interface, choose Virtual Networking > VMM Domains > VMware > Create vCenter Domain.
- 3. On the vCenter interface, create a vShield contoller(vShield is a third party produt and we do here an simple OVA deployment. We use vCenter to install a VM)
- 4. On the vCenter interface, verify that the VMware DVS is created

#### Reference:

https://www.cisco.com/c/en/us/support/docs/cloud-systems-management/application-policy-infrastructure-controller-apic/118965-config-vmm-aci-ucs-00.html https://vshield.pro/dedicated-servers

#### **QUESTION 8**

An engineer must ensure that Cisco ACI flushes the appropriate endpoints when a topology change notification message is received in an MST domain.

Which three steps are required to accomplish this goal? (Choose three.)

- A. Enable the BPDU interface controls under the spanning tree interface policy.
- B. Configure a new STP interface policy.
- C. Bind the spanning tree policy to the switch policy group.
- D. Associate the STP interface policy to the appropriate interface policy group.
- E. Create a new region policy under the spanning tree policy.
- F. Map VLAN range to MAT instance number.

### Answer: CEF Explanation:

Create a new region policy under the spanning tree policy.

Map VLAN range to MST instance number.

Bind the spanning tree policy to the switch policy group.

These steps allow the ACI system to understand MST BPDUs. ACI can now flush the appropriate endpoints when a TCN message is received in an MST domain.

### **QUESTION 9**

An engineer created two interface protocol policies called Pol\_CDP40275332 and Pol\_LLDP46783451.

The policies must be used together in a single policy. Which ACI object must be used?

- A. interface policy group
- B. switch policy group
- C. switch profile
- D. interface profile

### Answer: A Explanation:

LLDP and CDP can be used on the same interface.

A CDP policy will be created like this:

Fabric > Access Policies > Policies > Interface > CDP Interface > <create Your policy > A LLDP policy will be created like this:

Fabric > Access Policies > Policies > Interface > LLDP Interface > <create Your policy>

Both policies are independent to each other and can be applied within an Interface Policy Group

Fabric > Access Policies > Interfaces > Leaf Interfaces > Policy Group > Leaf Access Port > < Your policy here > > < set a CDP and a LLDP policy within Your interface policy group>

An interface profile will be used to create an interface selector.

The interface selector has physical ports and also calls Your interface policy group.

Reference: https://sandboxapicdc.cisco.com

### **QUESTION 10**

An organization has encountered many STP-related issues in the past due to failed hardware components. They are in the process of long-term migration to a newly deployed ACI fabric. Senior engineers are worried that spanning-tree loops in the existing network may be extended to the ACI fabric. Which feature must be enabled on the ACI leaf ports to protect the fabric from spanning-tree loops?

- A. BPDU Guard
- B. per-VLAN MCP
- C. Storm Control
- D. BPDU Filter

### Answer: B Explanation:

A Layer 2 loop does not impact the stability of an ACI fabric because ACI can broadcast traffic at line rate with little need to process the individual packets.

Layer 2 loops, however, can impact the ability of endpoints to process important traffic. For this reason, mechanisms are needed to detect loops resulting from miscabling and misconfiguration.

One of the protocols ACI uses to detect such externally generated Layer 2 loops is MisCabling Protocol (MCP).

MCP is disabled in ACI by default. To enable MCP, you must first enable MCP globally and then ensure that it is also enabled at the interface policy level.

As part of the global enablement of MCP, you define a key that ACI includes in MCP packets sent out on access ports.

If ACI later receives an MCP packet with the same key on any other port, it knows that there is a Layer 2 loop in the topology.

In response, ACI can either attempt to mitigate the loop by disabling the port on which the MCP protocol data unit was received or

it can generate a system message to notify administrators of the issue.

#### Reference:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/aci/apic/sw/4-x/aci-fundamentals/Cisco-ACI-Fundamentals-401/Cisco-ACI-Fundamentals-401\_chapter\_0101.html#concept\_706016DC62404574B77A5A4B3AD3C905

### **QUESTION 11**

An engineer must implement management policy and data plane separation in the Cisco ACI fabric. Which ACI object must be created in Cisco APIC to accomplish this goal?

- A. Application profile
- B. Tenant
- C. Contract
- D. Bridge domain

# Answer: B Explanation:

An ACI tenant is a secure and exclusive virtual computing environment that forms a unit of isolation from a policy perspective but does not represent a private network.

If you investigate further into use cases for tenants in the real world, you will find that tenants are often deployed in order to achieve these two technical controls:

- Administrative separation
- Configuration fault isolation

#### **QUESTION 12**

An engineer is implementing a Cisco ACI environment that consists of more than 20 servers. Two of the servers support only Cisco Discovery Protocol with no order link discovery protocol. The engineer wants the servers to be discovered automatically by the Cisco ACI fabric when connected. Which action must be taken to meet this requirement?

- A. Create an override policy that enables Cisco Discovery Protocol after LLDP is enabled in the default policy group.
- B. Configure a higher order interface policy that enables Cisco Discovery Protocol for the interface on the desired leaf switch.
- C. Configure a lower order policy group that enables Cisco Discovery Protocol for the interface on the desired leaf switch.
- D. Create an interface profile for the interface that disables LLDP on the desired switch that is referenced by the interface policy group.

### Answer: A Explanation:

A leaf interface override policy allows interfaces that have interface policy group assignments to apply an alternate interface policy group.

Imagine that a group of ports have been configured on Node 101, using a specific interface policy group.

One of the interfaces connects to a firewall, and security policies dictate that LLDP and CDP toward the firewall need to be disabled on all firewall-facing interfaces.

It might be impossible to modify the interface policy group associated with the port because it might be part of a port block.

In this case, a leaf interface override can be used to assign an alternative interface policy group to the port of interest.

#### **QUESTION 13**

An engineer must deploy Cisco ACI across 10 geographically separated data centers. Which ACI site deployment feature enables the engineer to control which bridge domains contain Layer 2 flooding?

- A. GOLF
- B. Multi-Site
- C. Multi-Pod
- D. Stretched Fabric

### Answer: B Explanation:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/aci/aci\_multisite/sw/2x/fundamentals/Cisco-ACI-Multi-Site-Fundamentals-Guide-211/Cisco-ACI-Multi-Site-Fundamentals-Guide-211\_chapter\_011.html#id\_51188

From the web page, we see that multi-site has control over:

Stretched Bridge Domain with Layer 2 Broadcast Extension. Stretched Bridge Domain with no Layer 2 Broadcast Extension.

#### **QUESTION 14**

A Solutions Architect is asked to design two data centers based on Cisco ACI technology that can extend L2/L3, VXLAN, and network policy across locations. ACI Multi-Pod has been selected. Which two requirements must be considered in this design? (Choose two.)

- A. ACI underlay protocols, i.e. COOP, IS-IS and MP-BGP, spans across pods. Create QoS policies to make sure those protocols have higher priority.
- B. A single APIC Cluster is required in a Multi-Pod design. It is important to place the APIC Controllers in different locations in order to maximize redundancy and reliability.
- C. ACI Multi-Pod requires an IP Network supporting PIM-Bidir.
- D. ACI Multi-Pod does not support Firewall Clusters across Pods. Firewall Clusters should always be local.
- E. Multi-Pod requires multiple APIC Controller Clusters, one per pod. Make sure those clusters can communicate to each other through a highly available connection.

### Answer: BC Explanation:

Multipod is with only a single APIC cluster - multisite requires multiple clusters.

"The entire network hence runs as a single large fabric from an operational perspective; however, ACI Multi-Pod introduces specific enhancements to isolate as much as possible the failure domains between Pods, contributing to increase the overall design resiliency. This is achieved by running separate instances of fabric control planes (IS-IS, COOP, MP-BGP) across Pods." https://www.cisco.com/c/en/us/solutions/collateral/data-center-virtualization/application-centric-infrastructure/white-paper-c11-737855.html

#### **QUESTION 15**

What happens to the traffic flow when the Cisco ACI fabric has a stale endpoint entry for the destination endpoint?

- A. The leaf switch does not learn the source endpoint through data plane learning.
- B. The leaf switch drops the traffic that is destined to the endpoint.
- C. The leaf switch floods the traffic to the endpoint throughout the fabric.
- D. The leaf switch sends the traffic to the wrong destination leaf.

### Answer: D Explanation:

Because of this stale remote endpoint, any traffic from LEAF1 toward IP2 will fail, because LEAF1 sends packets to the wrong leaf.

This stale remote endpoint on LEAF1 needs to be manually cleared to resume communication.

The command syntax to manually clear a particular remote IP endpoint is shown here:

LEAF1# clear system internal epm endpoint key vrf <vrf-name> ip <ip-address>

https://www.cisco.com/c/en/us/solutions/collateral/data-center-virtualization/application-centric-infrastructure/white-paper-c11-739989.html

### **Thank You for Trying Our Product**

### **Lead2pass Certification Exam Features:**

- ★ More than 99,900 Satisfied Customers Worldwide.
- ★ Average 99.9% Success Rate.
- ★ Free Update to match latest and real exam scenarios.
- ★ Instant Download Access! No Setup required.
- ★ Questions & Answers are downloadable in PDF format and VCE test engine format.



- ★ Multi-Platform capabilities Windows, Laptop, Mac, Android, iPhone, iPod, iPad.
- ★ 100% Guaranteed Success or 100% Money Back Guarantee.
- ★ Fast, helpful support 24x7.

View list of all certification exams: <a href="http://www.lead2pass.com/all-products.html">http://www.lead2pass.com/all-products.html</a>

























10% Discount Coupon Code: ASTR14