

200-310 Dumps

Designing for Cisco Internetwork Solutions

<https://www.certleader.com/200-310-dumps.html>



NEW QUESTION 1

What IP address is used for broadcast for 120.20.78.8/30?

- A. 120.20.78.11
- B. 120.20.78.8
- C. 120.20.78.12
- D. 120.20.78.1

Answer: A

NEW QUESTION 2

A small business owner has 200 staff members that occupy two floors of a building. The owner wants to reduce the network infrastructure costs without losing too much network resiliency and scalability. Which action meets these requirements?

- A. Combine access and core layers into one layer and keep all other layers
- B. Combine access and distribution layers into one layer and keep all other layers
- C. Exclude access and distribution layer switches and connect everything to redundant core switches
- D. Combine core and distribution layers into one layer and keep all other layers.

Answer: A

NEW QUESTION 3

Which is part of the Prepare phase of PPDIOO?

- A. Obtain site contact information
- B. Perform network audit
- C. Identify customer requirements
- D. Perform gap analysis

Answer: C

Explanation:

PPDIOO Phase	Description
Prepare	Establishes organization and business requirements, develops a network strategy, and proposes a high-level architecture
Plan	Identifies the network requirements by characterizing and assessing the network, performing a gap analysis
Design	Provides high availability, reliability, security, scalability, and performance
Implement	Installation and configuration of new equipment
Operate	Day-to-day network operations
Optimize	Proactive network management; modifications to the design

Prepare Phase

The Prepare phase establishes organization and business requirements, develops a network strategy, and proposes a high-level conceptual architecture to support the strategy. Technologies that support the architecture are identified. This phase creates a business case to establish a financial justification for a network strategy.

NEW QUESTION 4

Which one of the following is “synchronous link” design?

- A. SSL VPN over serial cable modem
- B. Bonded T1s
- C. Internet VPN
- D. MPLS VPN

Answer: B

Explanation: <https://community.spiceworks.com/topic/325935-mpls-speeds>

NEW QUESTION 5

When is the Cisco FlexConnect design model recommended?

- A. when remote-site APs are centrally managed
- B. when each remote site has its own wireless controller
- C. when each remote site runs VSS
- D. when the remote sites use WAN optimization

Answer: A

NEW QUESTION 6

What phase of Cisco's PPDIIO includes the identification and resolution of issues prior to moving the entire network to production?

- A. Optimize
- B. Operate
- C. Implementation
- D. Design

Answer: A

NEW QUESTION 7

A large company requests a hierarchical design model. What tier should be free of physically connected hosts?

- A. core
- B. access
- C. aggregation
- D. distribution

Answer: A

NEW QUESTION 8

What is the optimal device and location to fulfill these requirements?

- provide early indication of reconnaissance and scanning activities with blocking capabilities
- require fewer interfaces to inspect traffic to the DMZ and internal network

- A. IPS inline outside of the firewall
- B. IPS inline inside the firewall
- C. Cisco IOS IPS on the border router
- D. passive IPS connected to a SPAN port outside of the firewall
- E. passive IPS connected to a SPAN port inside the firewall

Answer: A

NEW QUESTION 9

Which IETF standard technology can be used with data center design to readily scale server virtualization?

- A. Transparent Interconnection of Lots of Links
- B. OTV
- C. vPC
- D. FCoE

Answer: A

NEW QUESTION 10

What tool would you use to capture, segregate and analyse IP traffic?

- A. Protocol Analyser
- B. NetFlow

Answer: B

NEW QUESTION 10

A network engineer needs to create a controller-based, high-density RF design. Which two factors determine the cell size? (Choose two.)

- A. antenna type
- B. ClientLink support
- C. TPC threshold setting
- D. QoS setting
- E. free space path loss

Answer: AC

NEW QUESTION 13

Which two Cisco data center devices can participate in Cisco FabricPath? (Choose two.)

- A. Cisco Nexus 5500 Series Switches
- B. Cisco Nexus 1000V Series Switches
- C. Cisco Nexus 7000 Series Switches
- D. Cisco Nexus 4900 Series Switches
- E. Cisco MDS 9500 Series Multilayer Directors

Answer: AC

NEW QUESTION 14

Drag the security term on the left to the matching description on the right.

ACL	an access control method that is used to forward traffic that is generated from public networks to a specified segment of the corporate network
NAT	includes IOS features that perform network protocol conformance validations
DMZ	performs packet filtering to restrict access on which traffic types are forwarded through the corporate network
firewall	a security option that is used to hide an internal network address before packets are forwarded to another network

Answer:

Explanation:

ACL	DMZ
NAT	firewall
DMZ	ACL
firewall	NAT

NEW QUESTION 18

Which key feature does a modular design approach provide?

- A. performance
- B. manageability
- C. efficiency
- D. fault isolation

Answer: A

NEW QUESTION 19

What kind of servers you should place in DMZ?

- A. WWW
- B. FTP
- C. DHCP
- D. TACACS+
- E. NTP

Answer: AB

NEW QUESTION 22

Which two features are supported by single wireless controller deployments? (Choose two.)

- A. automatic detection and configuration of LWAPPs
- B. LWAPP support across multiple floors and buildings
- C. automatic detection and configuration of RF parameters
- D. Layer 2 and Layer 3 roaming
- E. controller redundancy
- F. mobility groups

Answer: AB

NEW QUESTION 24

Which technology can help prevent attacks from the Internet against a corporate network?

- A. Cisco AnyConnect Secure Mobility Client
- B. Metro Ethernet
- C. Cisco IDS
- D. Cisco IPS

Answer: D

NEW QUESTION 29

In which two modes can you deploy Cisco IPS appliances? (Choose two.)

- A. inline
- B. promiscuous
- C. VTP group
- D. threat mitigation
- E. threat detection

Answer: AB

NEW QUESTION 30

What are two reasons discontinuous IPv4 networks hinder scalability? (Choose two.)

- A. routing table bloat
- B. inability to utilize automatic summarization
- C. insufficient IP addresses
- D. slowed packet forwarding
- E. delayed interface queuing

Answer: AB

NEW QUESTION 32

Which Cisco technology can connect more than two switches so that they behave as on switch?

- A. Ether Channel
- B. Stack Wise
- C. VSS
- D. routing

Answer: B

NEW QUESTION 34

Which item is the fundamental basis of a virtual network?

- A. a VRF instance
- B. a MIB database
- C. a GRE tunnel
- D. redundant hardware

Answer: A

NEW QUESTION 35

While preparing an overview of Internet facing DMZ for a customer, a consultant must identify the functionality to be placed in the DMZ. Which two functionalities are best suited for use in a DMZ? (Choose two.)

- A. enterprise NTP source
- B. DDOS protection
- C. remote access VPN termination
- D. web load balancer
- E. web security appliance

Answer: DE

NEW QUESTION 38

What three design best practices are key functions of the distribution layer? (Choose three.)

- A. fault domain isolation
- B. admission control
- C. access switch aggregation
- D. QoS tagging
- E. address summarization
- F. end user and application isolation

Answer: ACE

NEW QUESTION 40

Traditionally, the DMZ exist between which two locations? (Choose two)

- A. building distribution
- B. building access
- C. corporate network
- D. metro access
- E. Internet

Answer: CE

NEW QUESTION 44

What DNS entry to use for WLC with firmware version 6.0 or later so an Access Point can determine the controller's IP address?

- A. DNS A record with controller's hostname
- B. DHCP option 43
- C. cisco-capwap-controller
- D. cisco-lwapp-controller

Answer: C

NEW QUESTION 48

What is the maximum number of switches in VSS?

- A. 2
- B. 4
- C. 6
- D. 8

Answer: A

NEW QUESTION 50

Which option do you use to provide dynamic utilization of WAN links based on latency?

- A. policy-based routing
- B. equal cost load balancing
- C. unequal cost load balancing
- D. Cisco Performance Routing

Answer: D

NEW QUESTION 53

Which two statements are true regarding a hierarchical network? (Choose two.)

- A. facilitates choosing the type of routing protocols to be used in the network
- B. provides scalability without affecting other layers and functionality
- C. provides better performance as network resources are efficiently utilized
- D. limits redundancy at the distribution layer
- E. complicates manageability because of the added security

Answer: BC

NEW QUESTION 58

An engineer must build an enterprise network that can operate with a limited amount of employees. In which two ways can the engineer use the Cisco Design Lifecycle? (Choose two.)

- A. Amanage
- B. share
- C. learn
- D. operate
- E. build

Answer: AC

NEW QUESTION 60

Refer to exhibit.



Based on the following output from the access switch, which option is the trust boundry for QoS?

```
access# show run interface Gi7/48
Building configuration ...

Current configuration : 358 bytes
!
interface GigabitEthernet 7/48
 description Cubicle ID 1-234-5678
 switchport access vlan 200
 switchport mode access
 switchport voice vlan 204
 load-interval 30
 auto qos voip cisco-phone
 spanning-tree portfast
 service-policy input AutoQos-4.0-Cisco-Phone-Input-Policy
 service-policy output AutoQos-4.0-Output-Policy
end

access#
```

- A. IP phone
- B. access
- C. core
- D. endpoint
- E. distribution

Answer: B

NEW QUESTION 62

What are two benefits of a structured IPv4 addressing scheme? (Choose two.)

- A. reduces routing table size
- B. provides increased security
- C. allows for address translation to be performed
- D. improves manageability and troubleshooting
- E. increases high availability

Answer: AD

NEW QUESTION 67

Which advantage of using Spanning Tree Protocol is true?

- A. utilizes all available uplink bandwidth
- B. allows fast convergence after failure of a link or device
- C. allows dual-homed servers operate in active-active mode
- D. prevents network loops

Answer: D

NEW QUESTION 69

A network engineer is tasked with summarizing the routes to a remote site. What is the optimal route statement to connect to the 192.168.101.0/24 and 192.168.102.0/24 networks across the corporate WAN?

- A. ip route 192.168.100.0 255.255.254.0
- B. ip route 192.168.100.0 255.255.252.0
- C. ip route 192.168.100.0 255.255.255.0
- D. ip route 192.168.101.0 255.255.254.0

Answer: B

NEW QUESTION 70

A customer is questioning the additional infrastructure that is needed to design a three-tiered, hierarchical network. Which feature is a benefit of the distribution layer in a traditional design?

- A. creates access layer resiliency
- B. isolation of faults between the access and core layers
- C. extends the Layer 2 and Layer 3 boundary to the core layer
- D. provides additional security services against unauthorized access

Answer: B

NEW QUESTION 75

What three primary sources of information are needed to perform a network audit? (Choose three.)

- A. existing documentation
- B. new documentation
- C. existing network management software
- D. new network management tools
- E. management personnel
- F. technical personnel

Answer: ACD

NEW QUESTION 80

Which two mechanisms are used by distance vector protocols to prevent routing loops? (Choose two.)

- A. split horizon
- B. route summarization
- C. route poisoning
- D. tuned timers

Answer: AC

NEW QUESTION 82

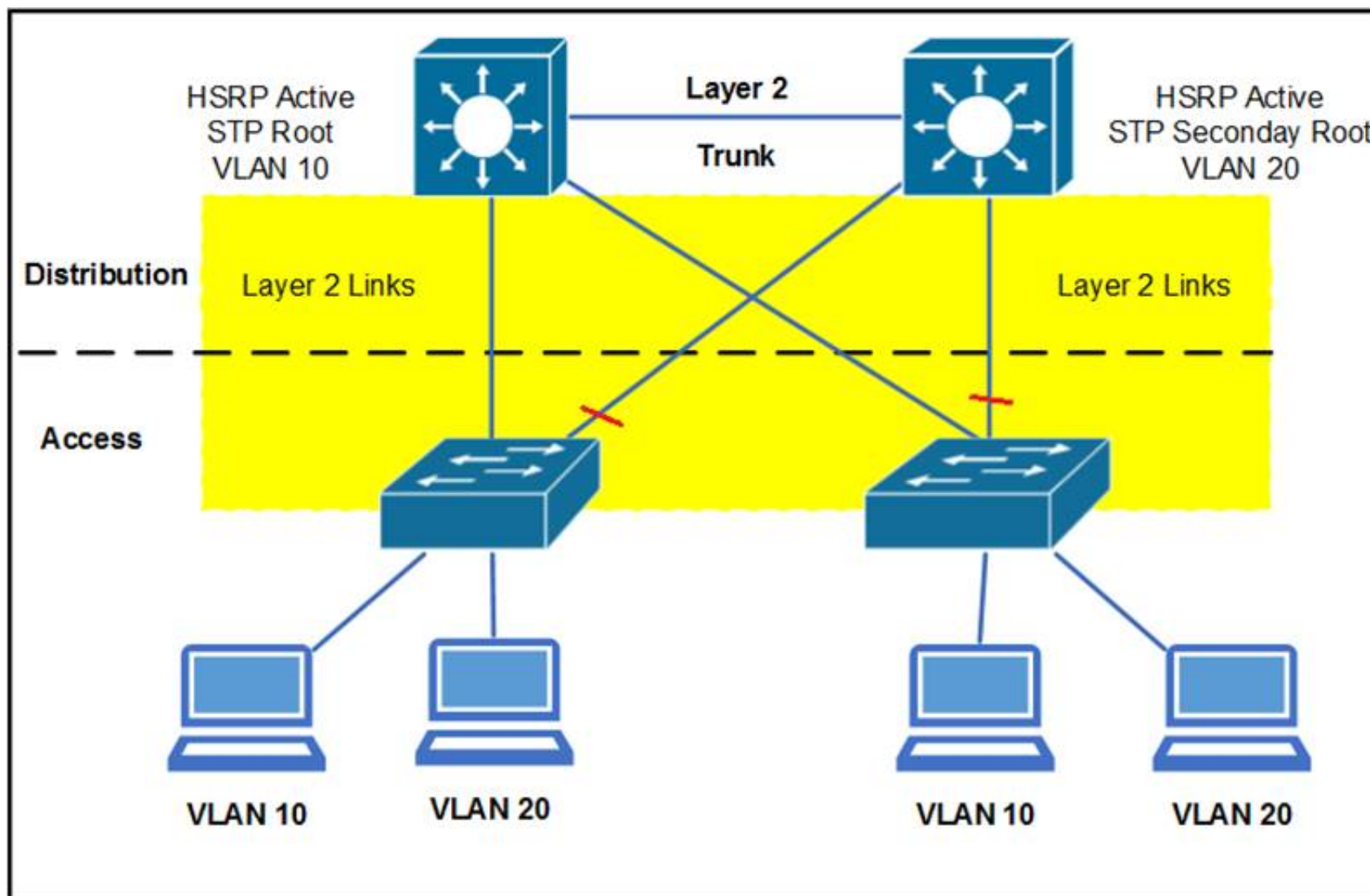
What are the three modes of unicast reverse path forwarding? (Choose three.)

- A. strict
- B. loose
- C. VRF
- D. global
- E. PIM
- F. local

Answer: ABC

NEW QUESTION 83

Refer to the exhibit.



In this suboptimal design of a homogeneous Cisco network, which version of spanning tree provides the fastest convergence?

- A. PVST+
- B. CST
- C. RPVST
- D. VSTP
- E. PVST

Answer: C

NEW QUESTION 85

Which network size can provide six /25 subnets while wasting the smallest number of IP addresses?

- A. 19
- B. 16
- C. 22
- D. 23

Answer: D

NEW QUESTION 88

What is the acceptable amount of one-way network delay for voice and video applications?

- A. 300 bytes
- B. 1 sec
- C. 150 ms
- D. 500 ms

Answer: C

Explanation: Delay Components in VoIP Networks

The ITU's G.114 recommendation specifies that the one-way delay between endpoints should not exceed 150 ms to be acceptable, commercial voice quality. In private networks, somewhat longer delays might be acceptable for economic reasons. The ITU G.114 recommendation specifies that 151-ms to 400-ms one-way delay might be acceptable provided that organizations are aware that the transmission time will affect the quality of user applications. One-way delays of above 400 ms are unacceptable for general network planning purposes.

NEW QUESTION 92

Which mode is used to exclusively look for unauthorized access points?

- A. monitor mode
- B. sniffer mode
- C. rogue detector mode
- D. local mode

Answer: C

NEW QUESTION 96

In which two places is redundancy recommended in an enterprise campus network design? (Choose two.)

- A. building distribution
- B. campus core
- C. building access
- D. e-commerce
- E. Internet connectivity

Answer: AB

NEW QUESTION 98

What type of topology supports WAN redundancy when a balance is required between cost, high availability, and performance?

- A. partial meshed
- B. full meshed
- C. star
- D. ring
- E. hub-and-spoke
- F. bus
- G. point-to-point

Answer: A

NEW QUESTION 100

You are deploying IP Telephony over a WAN. What will be the DSCP value for the voice traffic?

- A. EF
- B. AF41
- C. COS4
- D. BE

Answer: A

NEW QUESTION 101

Which technology should a company use to connect a branch office to headquarters via an Internet connection while maintaining confidentiality and the flexibility to run a routing protocol between the two locations?

- A. GRE over IPsec
- B. IPsec
- C. GRE
- D. SSL VPN

Answer: A

NEW QUESTION 102

Which two benefits are realized by establishing virtualization in a campus network? (Choose Two)

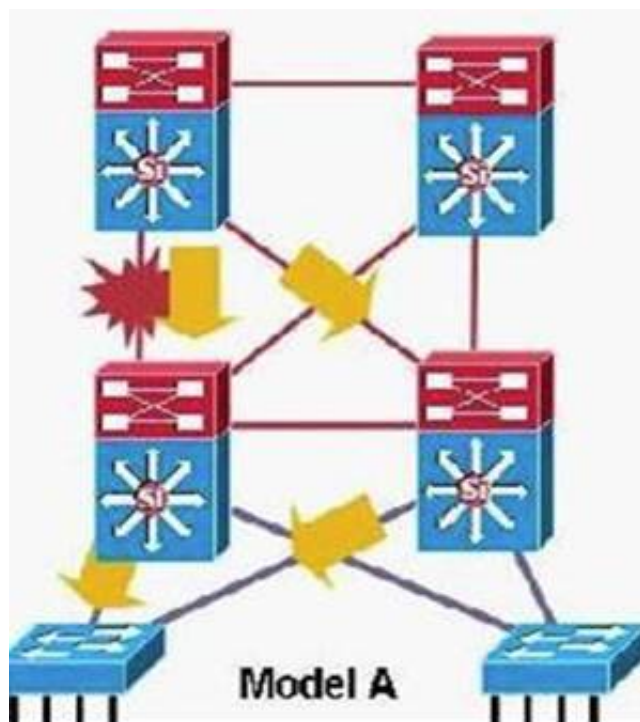
- A. enables path isolation
- B. enhances network agility
- C. consolidates applications
- D. enables unlimited scalability
- E. reduces network bandwidth

Answer: BD

Explanation: https://www.cisco.com/c/en/us/solutions/collateral/enterprise-networks/network-virtualization-solutions/net_bro

NEW QUESTION 103

Refer to the exhibit.



The organization is migrating away from FHRP. VSS has been implemented on a pair of Cisco Catalyst 6500 Series Switches. In order to avoid changes to end hosts, the default gateway is carried over to the SVI on the VSS. Why does the implementation plan require a four-hour wait after removing the FHRP configuration?

- A. The VLAN interface MAC address and the FHRP MAC address are different
- B. It takes four hours for the VLAN interface to come up.
- C. The SVI IP address and the FHRP IP address are different
- D. It takes four hours for the SVI to come up.
- E. The VLAN interface MAC address and the FHRP MAC address are different
- F. It takes four hours for the ARP cache to time out.
- G. The VLAN interface IP address and the FHRP IP address are different
- H. It takes four hours for the VLAN interface to come up.
- I. The VLAN interface IP address and the FHRP IP address are different
- J. It takes four hours for the ARP cache to time out.

Answer: C

NEW QUESTION 108

Which design is the recommended geometric design for routed topologies?

- A. linear
- B. triangular
- C. rectangular
- D. circular

Answer: B

NEW QUESTION 110

Which two considerations are important when designing the access layer? (Choose two)

- A. routing between VLANs
- B. HSRP implementation
- C. load balancing
- D. QoS services
- E. port security

Answer: DE

NEW QUESTION 114

How does the use of multiple areas in a link state routing protocol improve network scalability?

- A. reduces network bandwidth
- B. permits partial table updates
- C. enables route summarization
- D. overcomes router hop limit.

Answer: C

NEW QUESTION 116

Which HSRP parameters must match, to ensure proper functionality?

- A. group parameters
- B. priority parameters
- C. preempt parameters
- D. tracking parameters

Answer: A

NEW QUESTION 118

Which benefit is an advantage of route summarization?

- A. It reduces the size of the routing table.
- B. It causes routes to be updated more frequently.
- C. It lowers the cost metric.
- D. It enables neighbor discovery.

Answer: A

NEW QUESTION 122

What are the three models that are required in the systematic approach of the top-down design methodology? (Choose three.)

- A. logical
- B. physical
- C. layered
- D. network components
- E. technological
- F. protocols
- G. virtual

Answer: ABC

NEW QUESTION 126

An engineer is designing a network that is divided into multiple areas and supports a mixed vendor routing environment. Which interior gateway protocol must be selected?

- A. EIGRP
- B. OSPF
- C. BGP
- D. RIPv2

Answer: A

Explanation: <https://www.cisco.com/c/en/us/products/collateral/switches/catalyst-6800-series-switches/guide-c07-733457.htm>

NEW QUESTION 130

A network engineer is tasked with summarizing the routes to a remote site. What is the optimal route statement to connect to the 192.168.101.0/24 and 192.168.102.0/24 networks across the corporate WAN?

- A. ip route 192.168.100.0 255.255.254.0 10.1.1.1
- B. ip route 192.168.100.0 255.255.252.0 10.1.1.1
- C. ip route 192.168.100.0 255.255.255.0 10.1.1.1
- D. ip route 192.168.101.0 255.255.254.0 10.1.1.1

Answer: B

NEW QUESTION 135

Which type of WAN connection do you use for a low-latency application that is only available across a WAN?

- A. IPsec over the Internet
- B. MPLS VPN
- C. dialup
- D. unencrypted GRE over the Internet

Answer: B

NEW QUESTION 138

Which command is correct for creating a virtual interface on a Cisco wireless controller?

- A. config create interface
- B. tag interface
- C. config interface address
- D. untag interface

Answer: C

NEW QUESTION 139

What are two important aspects to consider when looking at backup circuit options for a branch location? (Choose two)

- A. local exchange carrier diversity
- B. type of dynamic routing protocol
- C. type of core switch
- D. backup MPLS connection
- E. Internet service provider diversity

Answer: BE

NEW QUESTION 143

Cisco Unified Wireless networks support two campus design models Centralized or Local Mode and Cisco FlexConnect Which statement about the Local Mode design model is true?

- A. The wireless LAN controller and access points are co-located.
- B. It is recommended for remote-site deployments.
- C. It is recommended for sites that use less than 50 Aps.
- D. It is recommended for sites with a local WAN distribution layer.

Answer: A

NEW QUESTION 148

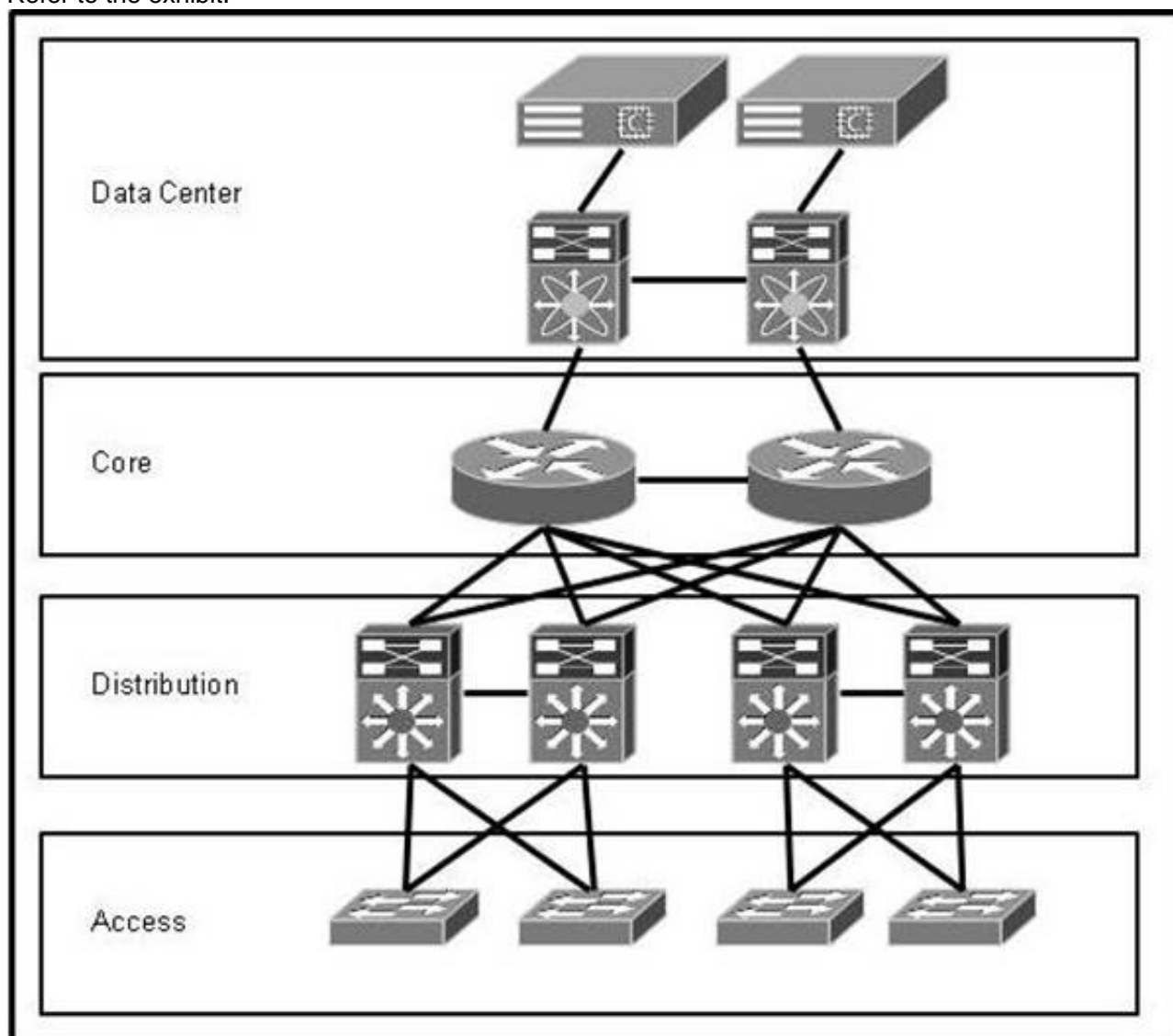
What design requirement is necessary for campus network access layer switching?

- A. high cost per port
- B. high availability
- C. high scalability
- D. high performance

Answer: C

NEW QUESTION 153

Refer to the exhibit.



Where should routes in the routing table be aggregated or summarized?

- A. in the core toward the data center
- B. in the distribution toward the access
- C. in the core toward the distribution
- D. in the distribution toward the core

Answer: D

NEW QUESTION 154

OSPF will be used as the IGP within a campus network. Which two things should you consider before deployment? (Choose two.)

- A. All areas need to connect back to area 0.
- B. The OSPF process number on each router should match.
- C. NSSA areas should be used when an area cannot connect directly to area 0.
- D. Stub areas should be connected together using virtual links.
- E. ECMP may cause undesired results depending on the environment.

Answer: AE

NEW QUESTION 158

What are two benefits of the bottom-up design approach? (Choose two.)

- A. allows a quick response to a design request
- B. facilitates design that is based on previous experience
- C. requires little or no notation of actual organizational requirements for implementation
- D. incorporates organizational requirements
- E. provides a broader overview to the organization and the designer

Answer: AB

NEW QUESTION 160

Which two options should be considered when designing an OSPF network? (Choose two.)

- A. CDP should be incorporated.
- B. Ensure the address space is summarizable.
- C. There is a limit on available AS numbers.
- D. Design STP to mirror the OSPF design.
- E. Configure nonbackbone areas as stub areas.

Answer: BE

NEW QUESTION 162

Which two options best describe the top-down design approach? (Choose two)

- A. The approach begins with the needs of the organization
- B. The design will meet both current and future requirements.
- C. Organizational requirements should not be included.
- D. The design is based on previous experience and allows for a quick solution.
- E. The approach begins with the physical layer of the OSI model.

Answer: AB

Explanation: https://www.cisco.com/c/dam/en_us/training-events/le31/le46/cln/qlm/CCDA/design/top-down-approach-to-net

NEW QUESTION 164

What phase of Cisco's PPDIOO is the final test of the appropriateness of the design?

- A. Operate
- B. Optimize
- C. Design
- D. Implement

Answer: A

NEW QUESTION 166

In which phase of PPDIOO are the network requirements identified?

- A. Design
- B. Plan
- C. Prepare
- D. Implement
- E. Operate
- F. Optimize

Answer: B

Explanation:

PPDIOO Phase	Description
Prepare	Establishes organization and business requirements, develops a network strategy, and proposes a high-level architecture
Plan	Identifies the network requirements by characterizing and assessing the network, performing a gap analysis
Design	Provides high availability, reliability, security, scalability, and performance
Implement	Installation and configuration of new equipment
Operate	Day-to-day network operations
Optimize	Proactive network management; modifications to the design

Plan Phase

The Plan phase identifies the network requirements based on goals, facilities, and user needs. This phase characterizes sites and assesses the network, performs a gap analysis against best-practice architectures, and looks at the operational environment. A project plan is developed to manage the tasks, responsible parties, milestones, and resources to do the design and implementation. The project plan aligns with the scope, cost, and resource parameters established with the original

business requirements. This project plan is followed (and updated) during all phases of the cycle.

NEW QUESTION 168

You want to gather as much detail as possible during a network audit, to include data time stamping across a large number of interfaces, customized according to interface, with a minimal impact on the network devices themselves. Which tool would you use to meet these requirements?

- A. RMON
- B. SNMPv3
- C. NetFlow
- D. Cisco Discovery Protocol

Answer: C

Explanation: NetFlow provides extremely granular and accurate traffic measurements and a high-level collection of aggregated traffic. The output of netflow information is displayed via the show ip cache flow command on routers. The Table shows a description of the fields for NetFlow output.

Table. Netflow Output escription

Field	Description
Bytes	Number of bytes of memory that are used by the NetFlow cache
Active	Number of active flows
Inactive	Number of flow buffers that are allocated in the Netflow cache
Added	Number of flows that have been created since the start of the summary
Exporting flows	IP address and UDP port number of the workstation to which flows are exported
Flows exported	Total number of flows export and the total number of UDP datagrams
Protocol	IP protocol and well-known port number
Total Flows	Number of flows for this protocol since the last time that statistics were cleared
Flows/sec	Average number of flows this protocol per second
Packets/flow	Average number of packets per flow per second
Bytes/pkt	Average number of bytes for this protocol
Packets/sec	Average number of packets for this protocol per second

NEW QUESTION 170

Which two design criteria require VLANs in a proposed solution? (Choose two.)

- A. video streaming on the LAN
- B. security between departments
- C. the segmenting of collision domains
- D. the segmenting of broadcast domains
- E. the use of multivendor equipment
- F. a limited corporate budget

Answer: BD

NEW QUESTION 171

Which tow considerations are important when designing the core layer? (Choose two)

- A. port security
- B. PoE
- C. Access list requirements
- D. low latency
- E. redundancy

Answer: DE

NEW QUESTION 173

Which statement is true concerning the data center distribution (aggregation) layer design?

- A. With Layer 3 at the aggregation layer, the physical loops in the topology must still be managed by STP.
- B. The boundary between Layer 2 and Layer 3 must reside in the multilayer switches, independent of any other devices.
- C. A mix of both Layer 2 and Layer 3 access is the most optimal.
- D. In a small data center, the aggregation layer can connect directly to the campus core, exchanging IP routes and MAC address tables.

Answer: C

NEW QUESTION 177

A remote office has a T1 WAN link to headquarters and a T1 Internet connection. The client requests WAN redundancy to headquarters with similar bandwidth. What two connection types satisfy this requirement? (Choose two.)

- A. Secondary T1 WAN circuit
- B. ISDN BRI
- C. IPSec Tunnel over the Internet
- D. DWDM
- E. POTS Line T1 WAN

Answer: AC

NEW QUESTION 181

Which technology combines two Nexus switches to form a single logical switch, while maintaining control plane separation between the two devices, and requiring independent management of each device?

- A. vPC
- B. Cisco StackWise
- C. MEC
- D. VSS

Answer: D

NEW QUESTION 184

An engineer is designing a new modular network topology. What is one advantage to using a hierarchical design?

- A. It supports unequal cost paths.
- B. It provides additional fault tolerance.
- C. It enables the network to scale.
- D. It manually controls failover.

Answer: D

NEW QUESTION 187

You want to gather as much detail as possible during a network audit with a minimal impact on the network devices themselves. Which tool would you use to include data time stamping across a large number of interfaces while being customized according to each interface?

- A. RMON
- B. SNMPv3
- C. NetFlow
- D. Cisco Discovery Protocol

Answer: C

NEW QUESTION 188

Which statement about modular network design is true?

- A. Each deployed module is identical to the others, simplifying configuration
- B. Each module include access, distribution, and core layers
- C. It is a flexible architecture that simplifies design, management and troubleshooting
- D. It is complex and should be used only in specialized situations

Answer: B

NEW QUESTION 191

Which RFC defines the IPv6 standard?

- A. RFC 1918
- B. RFC 2338
- C. RFC 2460
- D. RFC 2740

Answer: C

NEW QUESTION 196

A company would like to distribute a VM hosting cluster between three data centers with the capability to move VMs between sites. The connectivity between data centers is IP only, and the new design should use the existing WAN. Which Layer 2 tunneling technology should be used?

- A. VPLS
- B. L2TPv3
- C. OTV
- D. AToM

Answer: C

NEW QUESTION 201

In an EAP-enabled WLAN, which component sends the EAP identity request?

- A. WLAN controller
- B. ACS server
- C. access point
- D. wireless client

Answer: A

NEW QUESTION 204

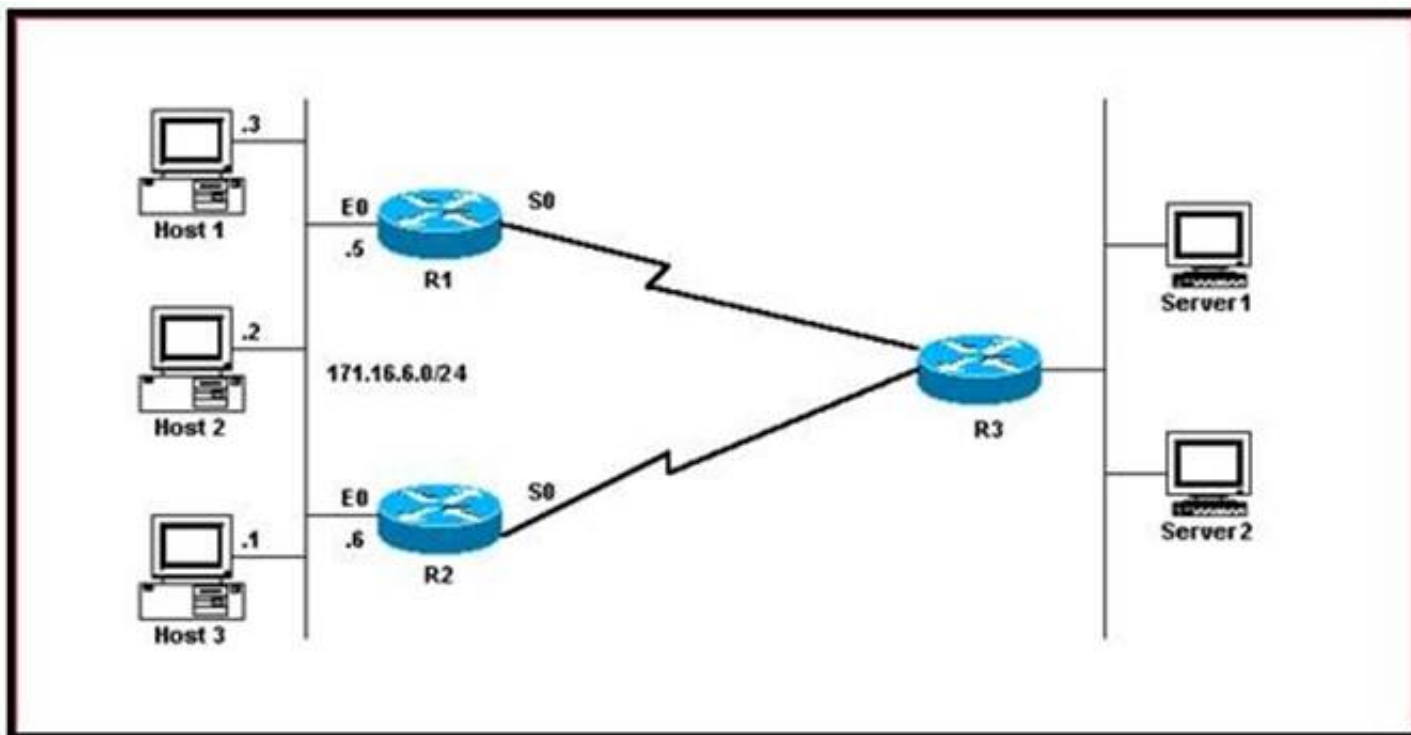
When designing changes to an existing network which two options are documented to understand environmental constraints? (Choose two)

- A. location of existing document
- B. floor and rack space availability
- C. host naming conventions
- D. heating and air conditioning
- E. utilization of network resources

Answer: DE

NEW QUESTION 206

Refer to the exhibit.



Which configuration can be used to implement FHRP protocol and load balancing at the same time?

- A. R1Interface Ethernet0ip address 171.16.6.5 255.255.255.0standby 1 preemptstandby 1 ip 171.16.6.100standby 1 track Serial0standby 2 preemptstandby 2 ip 171.16.6.200standby 2 track serial0standby 2 priority 95!!R2interface Ethernet0ip address 171.16.6.6 255.255.255.0standby 1preemptstandby 1 ip 171.16.6.100standby 1 track Serial0standby 1 priority 95standby 2 preemptstandby2 ip 171.16.6.200standby 2 track serial 0
- B. R1Interface Ethernet0ip address 171.16.6.5 255.255.255.0standby 1 preemptstandby 1 ip 171.16.6.100standby 1 track Serial0standby 1 priority 95!!R2interface Ethernet0ip address 171.16.6.6 255.255.255.0standby 1 preemptstandby 1 ip 171.16.6.100standby 1 track Serial0standby 1 priority 95
- C. R1Interface Ethernet0ip address 171.16.6.5 255.255.255.0standby 1 preemptstandby 1 ip 171.16.6.100standby 1 track Serial0standby 1 priority 95standby 2 preemptstandby 2 ip 171.16.6.200standby 2 track serial 0standby 2 priority 95!!R2interface Ethernet0ip address 171.16.6.6 255.255.255.0standby 1 preemptstandby 1 ip 171.16.6.100standby 1 track Serial0standby 2preemptstandby 2 ip 171.16.6.200standby 2 track serial 0
- D. R1Interface Ethernet0ip address 171.16.6.5 255.255.255.0standby 1 preemptstandby 1 ip 171.16.6.100standby 1 track Serial0standby 1 priority 95!!R2interface Ethernet0ip address 171.16.6.6 255.255.255.0standby 1 preemptstandby 1 ip 171.16.6.100

Answer: A

NEW QUESTION 211

When designing a high availability network, which option can be classified as a fault domain?

- A. single power supply devices in a network design
- B. nonredundant devices in the network design
- C. every tier in the network design
- D. collapsed core in a network design

Answer: C

NEW QUESTION 212

A customer is deploying a centralized communications infrastructure to a small remote construction site that has satellite-based Internet connectivity if the expected latency is about 500 ms, which description of the user experience is true?

- A. minimal delay and conversation overlap
- B. Phones will not complete registration to the centralized cluster

- C. significant delay and conversation overlap
- D. no delay or conversation overlap

Answer: D

NEW QUESTION 216

A startup company wants to deploy the Cisco IP Telephony solution. Which two actions are appropriate design approaches? (Choose two.)

- A. Connect user IP phones to the Ethernet switches of access layer.
- B. Connect IP phones to the Ethernet switches of data center module.
- C. Connect Cisco Unified Communications manager to the Ethernet switches of data center module.
- D. Connect SIP trunks for PSTN connectivity to Ethernet switches of campus core layer.
- E. Connect Cisco Unified Communications Manager to the Ethernet switches of the campus core layer.

Answer: AE

NEW QUESTION 218

Company ABC has intermittent problems registering site IP phones over the WAN with Cisco Unified CallManager at headquarter. The company hires a network consultant to help implement QoS in its network. Which technique should the consultant use to identify traffic and apply alone that travers the network.

- A. policing
- B. NBAR
- C. priority queuing
- D. RSVP

Answer: B

NEW QUESTION 222

What is the VLAN subnet that can handle 60 hosts?

- A. /21
- B. /24
- C. /25
- D. /26

Answer: D

NEW QUESTION 227

An engineer is designing a Cisco Unified Communications deployment for a customer with small sites across the country. Which deployment model keeps the call control at the data center of the primary site?

- A. campus deployments
- B. distributed deployment
- C. multisite deployment model with centralized call processing
- D. cloud hybrid service deployment

Answer: C

NEW QUESTION 228

What is the recommended spanning tree protocol to use for all Layer 2 deployments in a branch office environment?

- A. CST
- B. RSPT
- C. PVST
- D. MISTP
- E. Rapid PVST +

Answer: E

NEW QUESTION 231

For a VLAN that requires 60 hosts, which subnet is the most efficient?

- A. 172.31.17.0/27
- B. 10.0.0.1/20
- C. 192.68.15.0/24
- D. 10.10.10.0/26

Answer: D

NEW QUESTION 236

Which option best describes the high-level design document?

- A. It includes specific information such as hardware models, software versions, IP addressing, and routing protocols.
- B. It contains the test plan to certify that the customer's network is ready for use.
- C. it contains the steps needed to install and configure the network equipment and the steps that verify basic network operation.

D. it includes business and technical requirements and the proposed network architecture.

Answer: D

Explanation: <https://learningnetwork.cisco.com/thread/98302>

"High-level design (HLD) explains the architecture that would be used for developing a software product. The architecture diagram provides an overview of an entire system, identifying the main components that would be developed for the product and their interfaces. The HLD uses possibly nontechnical to mildly technical terms that should be understandable to the administrators of the system

NEW QUESTION 238

Which IP address can be routed to cross the public Internet?

- A. 10.31.1.1
- B. 192.168.32.1
- C. 172.32.1.1
- D. 169.254.32.1

Answer: C

NEW QUESTION 240

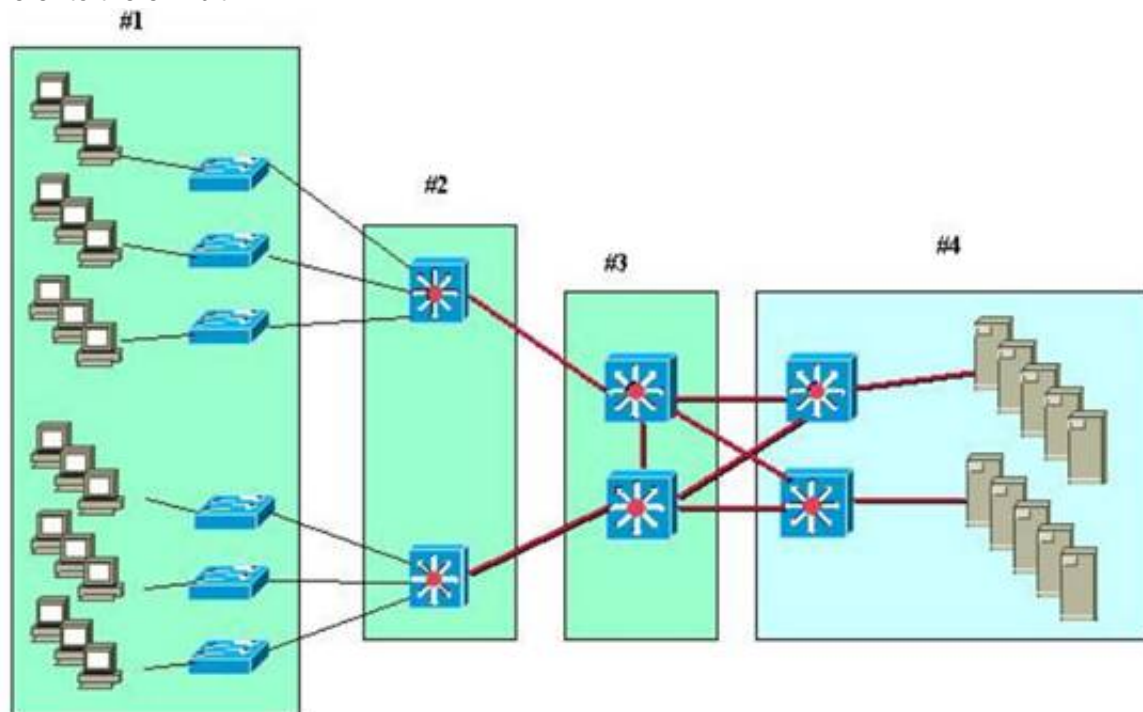
For a VLAN that requires 70 hosts, which subnet is the most efficient?

- A. 10.0.0.1/8
- B. 172.31.17.0/26
- C. 192.168.1.0/25
- D. 192.168.15.0/24

Answer: C

NEW QUESTION 242

Refer to the exhibit.



A standard, Layer 2 campus network design is pictured. Which numbered box represents the distribution layer?

- A. #1
- B. #2
- C. #3
- D. #4

Answer: B

NEW QUESTION 246

Which three options are examples of network logical virtualization? (Choose three.)

- A. virtual PortChannel
- B. virtual machine
- C. Virtual Device Context
- D. Virtual Switching System
- E. virtual device driver

Answer: ACD

NEW QUESTION 251

An engineer wants to ensure that the Spanning Tree topology appears loop free while redundant switches are present. Which Layer 2 technology must be used?

- A. VPC
- B. PaGP

- C. LACP
- D. OTV

Answer: C

NEW QUESTION 252

Which virtualization solution provides redundancy using a pair of switches that appear as one logical switch and removes the need for a First HOP Redundancy Protocol?

- A. VDC
- B. VRRP
- C. vPC
- D. VSS

Answer: D

Explanation: https://www.cisco.com/c/en/us/products/collateral/switches/catalyst-6500-virtual-switching-system-1440/prod_q

NEW QUESTION 257

Which three pieces of information should be documented for each step in a design implementation plan? (Choose three.)

- A. step description
- B. design document references
- C. easy guidelines in case of failure
- D. estimated implementation time
- E. simple implementation guidelines
- F. estimated rollback time in case of failure

Answer: ABD

NEW QUESTION 258

Cisco FabricPath brings the benefits of routing protocols to Layer 2 network Ethernet environments. What are two advantages of using Cisco FabricPath technology? (Choose two.)

- A. Cisco FabricPath provides MAC address scalability with conversational learning.
- B. Loop mitigation is provided by the TTL field in the frame.
- C. Cisco FabricPath technology is supported in all Cisco platforms and can replace legacy Ethernet in all campus networks.
- D. Cisco FabricPath relies on OSPF to support Layer 2 forwarding between switches, which allows load balancing between redundant paths.
- E. Cisco FabricPath is IETF-standard and is not used with Cisco products.

Answer: AB

NEW QUESTION 259

A network engineer has finished designing and implementing a new network. What two protocols would they use to gain insight into the network and determine the components that require optimization? (Choose two.)

- A. CDP
- B. NetFlow
- C. ICMP Echo
- D. NMAP
- E. SNMP

Answer: BE

NEW QUESTION 263

Which option is a benefit of the modular approach to network design?

- A. higher availability
- B. repeatable scalability
- C. increased security
- D. improved resiliency

Answer: B

NEW QUESTION 268

In which module do you place a VPN submodule when designing an enterprise network?

- A. service provider edge
- B. enterprise campus
- C. remote
- D. enterprise edge

Answer: C

NEW QUESTION 269

Which scenario is the best example of a single-homed connected infrastructure?

- A. a data center that is connected to one service provider over an MPLS circuit and another service provicer over an Ethernet connection.
- B. a remote office that is connected to the WAN using a DSL provider and a cable provider.
- C. a small office that uses a DSL link to connect to the WAN.
- D. to corporate office that uses two separate routers to connect to two different service providers.

Answer: C

NEW QUESTION 274

Which statement describes an advantage of the Layer 2 access model over the Layer 3 access model in the data center?

- A. It supports NIC teaming.
- B. It removes STP dependency.
- C. It increases scalability.
- D. It improves convergence time.

Answer: A

NEW QUESTION 276

What query should you make if you want to find all objects of a particular type in an MIT tree?

- A. mid-tree-level
- B. class-level
- C. object-level
- D. tree-level

Answer: B

Explanation: <https://www.cisco.com/c/en/us/solutions/collateral/data-center-virtualization/application-centric-infrastructure/w>

NEW QUESTION 281

An organization needs to implement isolated logical structure due to compliance regulations. What complex access control network virtualization method can it use?

- A. The IT organization creates a quarantine network for end points that do not meet the posture assessment requirements
- B. The IT organization creates a separate guest network for wireless and wired clients
- C. The IT organization acts as a client serving different, isolated departments

Answer: A

NEW QUESTION 283

Which two states are RSTP port states? (Choose two.)

- A. discarding
- B. learning
- C. blocking
- D. listening
- E. disabled

Answer: AB

NEW QUESTION 286

Which Layer in the Cisco Enterprise Archetecture model is highly available, has fast convergence, and should avoid packet manipulation?

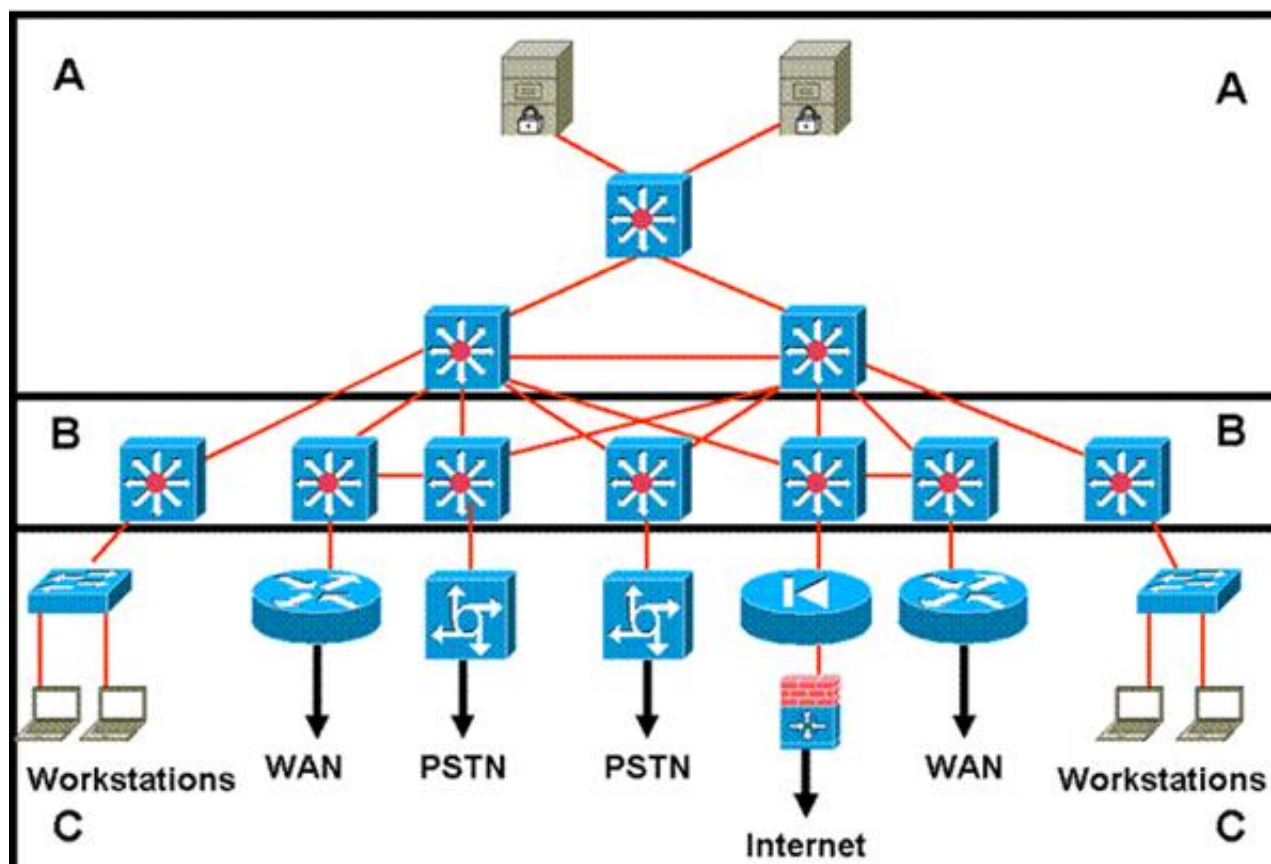
- A. Campus distribution
- B. enterprise data center
- C. enterprise edge
- D. campus access
- E. campus core
- F. remote access VPN

Answer: E

Explanation: <http://www.ciscopress.com/articles/article.asp?p=1315434>

NEW QUESTION 288

Refer to the exhibit.



Which layer is the distribution layer?

- A. Layer A
- B. Layer B
- C. Layer C
- D. Layers A and B form a consolidated core and distribution layer

Answer: B

NEW QUESTION 289

A network engineer is tasked to upgrade and expand a large existing production network. From the IOS CLI, what two protocols can be used to build a topology map of the existing network? (Choose two.)

- A. SNMP
- B. IP SLA
- C. ICMP Echo
- D. LLDP
- E. Traceroute

Answer: DE

NEW QUESTION 293

With deterministic Wireless LAN Controller redundancy design, the different options available to the designer have their own strengths. Which statement is an example of such a strength?

- A. Dynamic load balancing, or salt-and-pepper access point design, avoids the potential impact of oversubscription on aggregate network performance.
- B. N+N redundancy configuration allows logically grouping access points on controllers to minimize intercontroller roaming events.
- C. N+N+1 redundancy configuration has the least impact to system management because all of the controllers are colocated in an NOC or data center.
- D. N+1 redundancy configuration uses Layer 3 intercontroller roaming, maintaining traffic on the same subnet for more efficiency.

Answer: B

NEW QUESTION 298

Which virtualization deployment an engineer will execute to separate to accomplish security policies?

- A. Same corporate Network with NAC capabilities.
- B. Something using VLANs
- C. dont remember

Answer: B

NEW QUESTION 300

An organization is redesigning a 3-tier hierarchical network into a collapsed core. What design issue is a primary concern per Cisco best practices?

- A. services delineation
- B. port density
- C. feature availability
- D. resource utilization

Answer: D

NEW QUESTION 302

Which three sources does a network designer use to collect information for characterizing an existing network? (Choose three.)

- A. staff input
- B. visual inventory
- C. network audit
- D. traffic analysis
- E. server statistics

Answer: ACD

NEW QUESTION 303

What are two important aspects to consider when looking at backup circuit options for a branch location?

- A. local exchange carrier diversity
- B. type of dynamic routing protocol
- C. type of core switch
- D. backup MPLS connection
- E. Internet service provider diversity

Answer: BE

NEW QUESTION 308

Which option is an example of physical device virtualization?

- A. VSS
- B. VPN
- C. VRF
- D. VLAN

Answer: A

NEW QUESTION 310

Which value must you configure on a Microsoft DHCP server so that Cisco wireless Aps can locate the wireless controllers?

- A. the length value
- B. the IP DHCP pool name
- C. a vendor class identifier
- D. the Type suboption code Oxe1

Answer: B

NEW QUESTION 313

You design a network with the following network addresses:

192.168.168.0
192.168.169.0
192.168.170.0
192.168.171.0
192.168.172.0
192.168.173.0
192.168.174.0
192.168.175.0

Which route address is the best summary of these network addresses?

- A. 192.168.0.0/24
- B. 192.168.171.128/3
- C. 192.168.168.0/21
- D. 192.168.175.0/3
- E. 192.168.0.0/16

Answer: C

NEW QUESTION 316

What Cisco product is designed to improve the performance of Windows file and exchange services in remote data centers?

- A. Application Control Engine
- B. Wide Area Application Services
- C. Cisco Application Policy Infrastructure Controller
- D. Cisco Prime Network Services Controller

Answer: B

NEW QUESTION 317

What is the key limitation of using Internet circuits as a backup to a private enterprise WAN?

- A. circuit bandwidth
- B. prioritization
- C. security
- D. operational expense

Answer: B

NEW QUESTION 322

Which network virtualization technique can you implement without disrupting the existing network design and infrastructure?

- A. VRF-Lite
- B. EVN
- C. MPLS
- D. VNET tags

Answer: A

NEW QUESTION 325

Which protocol is best when there are circuit connections with two different ISPs in a multihoming scenario?

- A. SSL
- B. IPsec
- C. BGP
- D. VRRP

Answer: C

NEW QUESTION 329

Which two characteristics are advantages of the top-down approach to network design? (Choose two)

- A. Generally is the fastest approach
- B. The resulting design is optimized for the business requirements of the organization.
- C. The designer can delay testing until the end of the project
- D. The resulting design can meet both current and future requirements
- E. Does not require a thorough initial need analysis

Answer: BE

NEW QUESTION 330

Which tow network services should you host on the DMZ ? (Choose two)

- A. NFS
- B. WWW
- C. TACACS+
- D. DHCP
- E. FTP

Answer: AE

NEW QUESTION 334

Which one of the following represent correct IPv6 Global Unicast address format?

- A. 48bit(Global Prefix)+16bit(Subnet ID)+64bit(Interface ID)
- B. 16bit(Subnet ID)+ 48bit(Global Prefix)+64bit(Interface ID)
- C. 64bit(Interface ID)+16bit(Subnet ID)+ 48bit(Global Prefix)
- D. 64bit(Interface ID)+ 48bit(Global Prefix)+16bit(Subnet ID)

Answer: A

NEW QUESTION 335

High availability is required for a critical remote office of an enterprise. The office has already deployed two redundant WAN connections. Which action can be done to the edge router to improve the availability of the remote office?

- A. Replace the fiber uplinks with copper
- B. Use module line cards
- C. Add dual power suppliers
- D. Upgrade the uplinks from 100MB to 1G.

Answer: B

NEW QUESTION 336

When designing the identity and access control portions for the enterprise campus network, which of these solutions would be the most appropriate solution to consider?

- A. 802.1X
- B. ACLs in the core layer
- C. Cisco Security MARS
- D. NetFlow

Answer: A

Explanation:

Field	Description
Bytes	Number of bytes of memory that are used by the NetFlow cache
Active	Number of active flows
Inactive	Number of flow buffers that are allocated in the Netflow cache
Added	Number of flows that have been created since the start of the summary
Exporting flows	IP address and UDP port number of the workstation to which flows are exported
Flows exported	Total number of flows export and the total number of UDP datagrams
Protocol	IP protocol and well-known port number
Total Flows	Number of flows for this protocol since the last time that statistics were cleared
Flows/sec	Average number of flows this protocol per second
Packets/flow	Average number of packets per flow per second
Bytes/pkt	Average number of bytes for this protocol
Packets/sec	Average number of packets for this protocol per second

NEW QUESTION 337

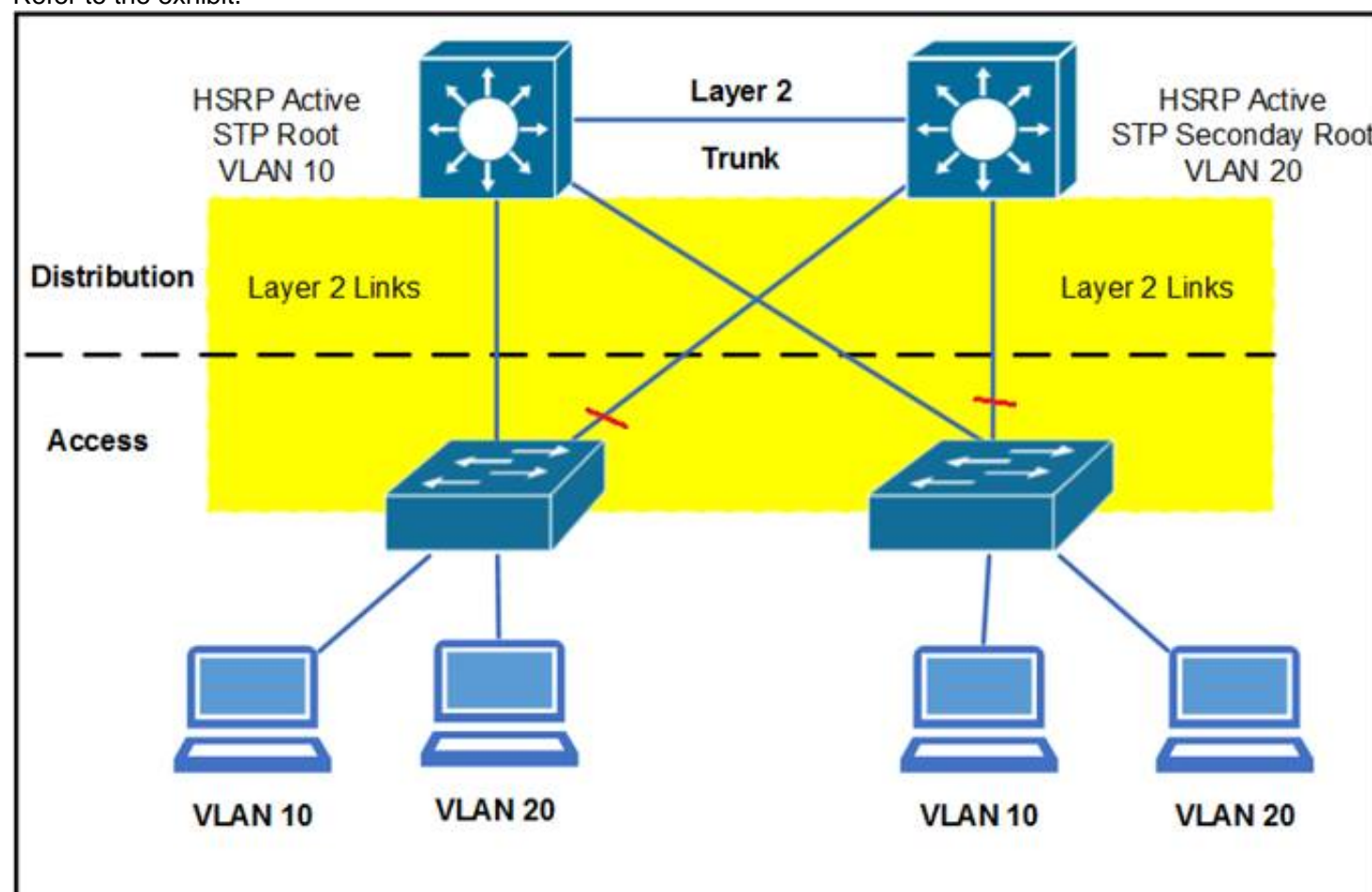
What two configurations are Cisco recommended best practices for user access interfaces? (Choose two.)

- A. VTP transparent mode
- B. BPDUguard
- C. Root Guard
- D. Portfast
- E. Trunk mode

Answer: BD

NEW QUESTION 342

Refer to the exhibit.



The red lines refer to STP blocked ports. What happens if the HSRP active moves to the right distribution, and the STP root remains on the left distribution?

- A. The STP root becomes the gateway.
- B. The interdistribution link is used for transit.
- C. The HSRP standby becomes the gateway.
- D. The interaccess link is used for transit.
- E. Host traffic is unable to reach the HSRP active.

Answer: B

NEW QUESTION 347

An infrastructure is designing a private WAN infrastructure to support an Organization and must support quality of service and multicast functionality to the remote sites. Which WAN technology support this requirement?

- A. MPLS
- B. IPsec VPN
- C. DMVPN
- D. SSL VPN

Answer: A

NEW QUESTION 348

Cisco Identity-Based Networking Services relies heavily on the 802.1X protocol. Which other authentication solution is used hand-in-hand with 802.1X to authenticate users for network access?

- A. RADIUS
- B. LEAP
- C. IPsec
- D. TACACS
- E. ISAKMP

Answer: A

Explanation: Cisco Identity-Based Network Services

The Cisco Identity-Based Network Services solution is a way to authenticate host access based on policy for admission to the network. IBNS supports identity authentication, dynamic provisioning of VLANs on a per-user basis, guest VLANs, and 802.1X with port security.

The 802.1 X protocol is a standards-based protocol for authenticating network clients by permitting or denying access to the network. The 802.1 X protocol operates between the end-user client seeking access and an Ethernet switch or wireless access point (AP) providing the connection to the network. In 802.1 X terminology, clients are called supplicants, and switches and APs are called authenticates. A back-end RADIUS server such as a Cisco Access Control Server (ACS) provides the user account database used to apply authentication and authorization.

With an IBNS solution, the host uses 802.1X and Extensible Authentication Protocol over LANs (EAPoL) to send the credentials and initiate a session to the network. After the host and switch establish LAN connectivity, username and password credentials are requested. The client host then sends the credentials to the switch, which forwards them to the RADIUS ACS.

The RADIUS ACS performs a lookup on the username and password to determine the credentials' validity. If the username and password are correct, an accept message is sent to the switch or AP to allow access to the client host. If the username and password are incorrect, the server sends a message to the switch or AP to block the host port.

Figure 13-4 illustrates the communication flow of two hosts using 802.1X and KAPoL with the switch, AP, and back-end RADIUS server.

NEW QUESTION 353

Which option is an advantage of the bottom-up design model?

- A. focuses on the needs of user communities
- B. includes a thorough analysis of customer requirements
- C. facilitates a quick response to client requests
- D. produces a "big-picture" of the desired outcome

Answer: C

NEW QUESTION 358

Which two Cisco products can be used in a data center to support OTV technology? (Choose two.)

- A. Cisco Nexus 5500 Series Switches
- B. Cisco Nexus 7000 Series Switches
- C. Cisco ASR 1000 Series Routers
- D. Cisco ASR 9000 Series Routers
- E. Cisco Nexus 3000 Series Switches

Answer: BC

NEW QUESTION 361

What will extend a trust boundary (there is switch interface configuration with separate voice VLAN and data VLAN configured where the phone is connected to, also small diagram showing endpoint (host), IP Phone, Access Switch, Distribution Switch, Core Switch and Data Centre Aggregation switch)?

- A. Multiple layers PC
- B. IP Phone
- C. Access Switch
- D. Distribution Switch
- E. Core Switch

Answer: B

NEW QUESTION 362

When designing enterprise networks, which two elements help to achieve IP routing efficiency? (Choose two)

- A. using two different IGP protocols
- B. supernetting
- C. static routing
- D. hierarchical addressing
- E. dynamic IP addressing

Answer: BE

NEW QUESTION 364

When designing IP addressing schemes, which options are two benefits of implementing hierarchical addressing? (Choose two.)

- A. provides an optimized addressing plan
- B. provides real-time troubleshooting
- C. allows the use of overlapping addresses
- D. reduces routing table entries
- E. provides modular convergence

Answer: AD

NEW QUESTION 366

In an enterprise Layer 2 switched network, which protocol must be running to enable link redundancy?

- A. CDP
- B. PaGP
- C. LACP
- D. STP

Answer: D

NEW QUESTION 370

Which statement is true concerning the data center access layer design?

- A. The access layer in the data center is typically built at Layer 3, which allows for better sharing of services across multiple servers.
- B. With Layer 2 access, the default gateway for the servers can be configured at the access or aggregation layer.
- C. A dual-homing NIC requires a VLAN or trunk between the two access switches to support the dual IP addresses on the two server links to two separate switches.
- D. The access layer is normally not required, as dual homing is standard from the servers to the aggregation layer.

Answer: B

NEW QUESTION 374

When designing changes to an existing network, which two options are documented to understand environmental constraint? (Choose two.)

- A. Utilization of network resources
- B. Floor and rack space availability
- C. Host naming conventions
- D. Heating and Air conditioning
- E. Location of existing documentation

Answer: BD

NEW QUESTION 377

You want to gather as much detail as possible during a network audit with a minimal impact on the network devices themselves. Which tool would you use to include data time stamping across a large number of interfaces while being customized according to each interface?

- A. RMON
- B. SNMPv3
- C. NetFlow
- D. Cisco Discovery Protocol

Answer: C

NEW QUESTION 382

Which option can use deep-packet examination to determine the specific nature of an attack?

- A. network IPS
- B. NetFlow collector
- C. stateful firewall
- D. syslog server

Answer: A

NEW QUESTION 383

Which Cisco Wireless LAN Controller interface is used for out-of-band management?

- A. service port
- B. management port
- C. controller port
- D. virtual port

Answer: A

NEW QUESTION 385

What is the primary consideration when choosing a routed network design over a traditional campus network design?

- A. Layer 3 service support at the network edge
- B. the routing protocol choice: open (OSPF) or proprietary (EIGRP)
- C. the routing abilities of the host devices
- D. the need to control the broadcast domains within the campus core

Answer: A

NEW QUESTION 388

Drag the term on the left to the matching deployment scenario on the right.

static NAT	translate a pool of addresses
dynamic NAT	translate from IPv4 to IPv6
NAT overload	translate addresses one-to-one
NAT-PT	translate using different ports

Answer:

Explanation:

static NAT	dynamic NAT
dynamic NAT	NAT-PT
NAT overload	static NAT
NAT-PT	NAT overload

NEW QUESTION 393

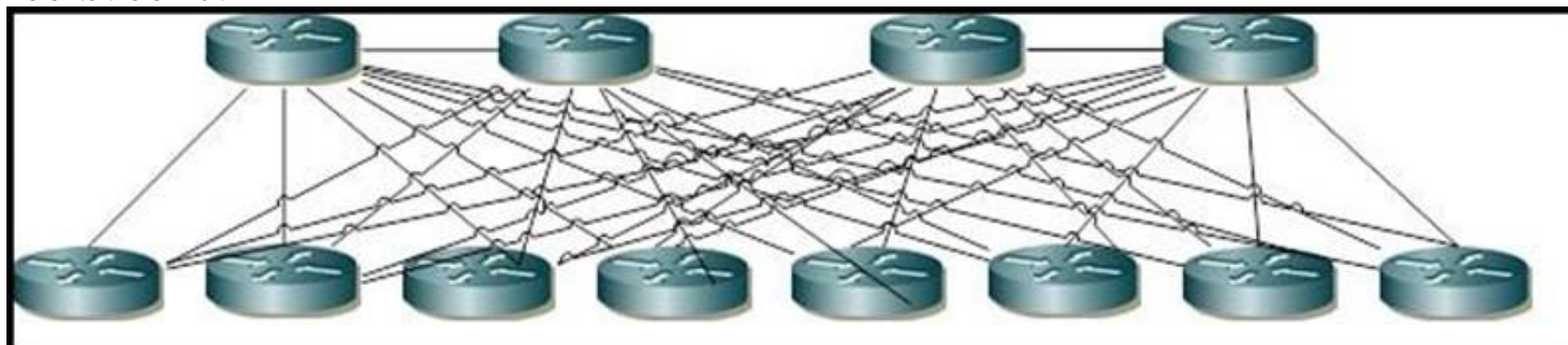
An engineer wants to find all of the objects of a certain type available in the MIT. Which kind of query must be performed?

- A. object-level
- B. tree-level
- C. class-level
- D. subtree-level

Answer: D

NEW QUESTION 395

Refer to the exhibit.



Assuming that a network will grow exponentially for the next 24 months, what is the main limitation that must be addressed?

- A. scalability
- B. serviceability

- C. redundancy
- D. resiliency

Answer: A

NEW QUESTION 400

Which option is used by OSPF to reduce the flooding domain of database updates in a network?

- A. hello packets
- B. virtual links
- C. interface cost
- D. areas

Answer: D

NEW QUESTION 403

Two companies that want to connect with multiple providers vendors, what protocol is the proper one to use

- A. BGP
- B. IS-IS
- C. OSPF
- D. EIGRP

Answer: A

NEW QUESTION 406

.....

Thank You for Trying Our Product

* 100% Pass or Money Back

All our products come with a 90-day Money Back Guarantee.

* One year free update

You can enjoy free update one year. 24x7 online support.

* Trusted by Millions

We currently serve more than 30,000,000 customers.

* Shop Securely

All transactions are protected by VeriSign!

100% Pass Your 200-310 Exam with Our Prep Materials Via below:

<https://www.certleader.com/200-310-dumps.html>