

HUAWEI

Exam Questions H19-301_V3.0

HCSA-Presales-IP Network Certification V3.0



NEW QUESTION 1

What are the functions provided by the multi-DC controller for enterprises' distributed multi- DC and multi-cloud service scenarios?

- A. Hybrid cloud simulation and verification
- B. Intelligent O&M
- C. Three-layer network visibility
- D. Uniform orchestration

Answer: BCD

Explanation:

Huawei's multi-DC controller enables distributed multi-cloud and multi-data center management with key capabilities:

(A) Hybrid Cloud Simulation and Verification (False): Huawei's solution does not include full simulation capabilities but offers real-time monitoring.

(B) Intelligent O&M (True): Uses AI-driven analytics to provide predictive maintenance and fault diagnosis.

(C) Three-Layer Network Visibility (True): Provides end-to-end visibility at the infrastructure, network, and service layers.

(D) Uniform Orchestration (True): Automates network resource allocation across multiple data centers.

Reference: HCSA-Presales-IP Network Official Study Guide, Multi-DC Controller Features

NEW QUESTION 2

A Layer 2 switch provides only the Layer 2 switching function. In addition to this function, a Layer 3 switch supports routing and forwarding through a Layer 3 interface, such as a VLANIF interface.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

Layer 2 Switches operate at the Data Link Layer (Layer 2) and forward packets based on MAC addresses.

Layer 3 Switches provide both Layer 2 switching and Layer 3 routing capabilities, allowing IP-based communication between VLANs via VLANIF interfaces (VLAN Interfaces).

VLANIF interfaces act as virtual interfaces assigned to VLANs, enabling inter-VLAN communication without an external router.

Reference: HCSA-Presales-IP Network Official Documentation – Layer 2 vs. Layer 3 Switches

NEW QUESTION 3

Typical transport layer protocols include TCP and UDP. Which of the following is not a characteristic of TCP?

- A. Connectionless
- B. Flow control and window mechanism
- C. Connection-oriented
- D. Reliable transmission

Answer: A

Explanation:

TCP (Transmission Control Protocol) is a connection-oriented protocol with several key characteristics:

Connectionless : This is not a characteristic of TCP. TCP establishes a connection before transmitting data using a three-way handshake.

Flow control and window mechanism : TCP uses flow control and sliding window mechanisms to manage data transmission rates and prevent buffer overflow.

Connection-oriented : TCP establishes, maintains, and terminates connections between endpoints.

Reliable transmission : TCP ensures reliable delivery of data through acknowledgments, retransmissions, and error detection.

UDP, not TCP, is a connectionless protocol. Therefore, the correct answer is A . References:

Huawei Transport Layer Protocols Overview, HCSA-Presales-IP Network Documentation.

NEW QUESTION 4

DCs can be classified based on the number of standard racks. Which type is a DC with 3000-10000 racks classified to?

- A. Ultra-large DC
- B. Small DC
- C. Large DC
- D. Midsize DC

Answer: A

Explanation:

Classification of Data Centers (DCs):

Data centers are classified into categories such as small, midsize, large, and ultra-large based on the number of standard racks they house.

Rack Classification Criteria: Small DC: Less than 500 racks. Midsize DC: 500-1000 racks. Large DC: 1000-3000 racks.

Ultra-large DC: 3000-10000 racks.

Conclusion: A data center with 3000-10000 racks falls under the ultra-large DC category. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Solutions. Huawei Data Center Network Documentation.

NEW QUESTION 5

The Adaptive Security Engine (ASE) is used to dynamically allocate CPU resources to service modules, maximizing resource utilization. In addition, component-based function delivery is available.

- A. TRUE

B. FALSE

Answer: A

Explanation:

Huawei's Adaptive Security Engine (ASE) is a key feature in its security products, such as firewalls. ASE dynamically allocates CPU resources to different service modules (e.g., firewall, intrusion prevention, antivirus) based on real-time traffic demands. This ensures optimal resource utilization and performance. Additionally, ASE supports component-based function delivery, allowing administrators to enable or disable specific security features as needed. This flexibility enhances scalability and reduces unnecessary resource consumption.

The statement accurately describes the functionality of ASE, making it TRUE. References:

HCSA-Presales-IP Network Study Guide, Section: "Adaptive Security Engine Features." Huawei Security Product Documentation, ASE Overview.

NEW QUESTION 6

What are the three types of resources connected to the data center network?

- A. Storage
- B. High-performance computing
- C. General-purpose computing

Answer: ABC

Explanation:

In a data center network, three primary types of resources are connected: Storage: Includes storage arrays and systems that provide data persistence and retrieval capabilities.

High-performance computing (HPC): Supports compute-intensive workloads like scientific simulations and AI training.

General-purpose computing: Handles everyday workloads such as web hosting, application servers, and virtual machines.

These resources are interconnected through the data center network, enabling seamless communication and resource sharing. Each type serves a distinct purpose, catering to different application requirements.

References:

HCSA-Presales-IP Network Study Guide, Section: "Data Center Network Resources." Huawei Data Center Network Solution Documentation, Resource Types.

NEW QUESTION 7

Huawei's CloudFabric 3.0 solution supports network-wide intelligent O&M. What percentage of potential faults can this solution proactively predict?

- A. 90%
- B. 70%
- C. 100%
- D. 80%

Answer: A

Explanation:

Huawei's CloudFabric 3.0 is a data center network solution that leverages AI and machine learning to enable intelligent operations and maintenance (O&M). One of its key features is the ability to predict potential faults before they impact the network. According to Huawei's official documentation, CloudFabric 3.0 can proactively predict 90% of potential faults, significantly reducing downtime and improving network reliability. This predictive capability is achieved through advanced analytics, real-time monitoring, and AI-driven insights, which help identify anomalies and performance degradation trends early.

References:

HCSA-Presales-IP Network Study Guide, Section: "CloudFabric 3.0 Intelligent O&M Features."

Huawei CloudFabric Solution Documentation, Fault Prediction Capabilities.

NEW QUESTION 8

Huawei Cloud Engine S12700E is front-to-back airflow design, improving the heat dissipation efficiency of the rack.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

Airflow Design in Data Center Switches:

Airflow design is critical for efficient heat dissipation in data center switches. Front-to-back airflow ensures that cool air enters from the front and hot air exits from the back, aligning with typical data center cooling systems.

Huawei Cloud Engine S12700E:

The S12700E series switches are designed with front-to-back airflow to improve heat dissipation efficiency. This design minimizes overheating risks and ensures stable operation in high-density environments.

Conclusion: The statement is TRUE because the S12700E series uses a front-to-back airflow design.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Core Switch Product Portfolio.

Huawei Cloud Engine S12700E Product Documentation.

NEW QUESTION 9

What is the maximum packet loss rate allowed by A-FEC while ensuring smooth video playback in Huawei's SD-WAN solution?

- A. 0.4
- B. 0.2
- C. 0.1
- D. 0.3

Answer: A

Explanation:

Understanding A-FEC (Adaptive Forward Error Correction):

A-FEC is a technology used in Huawei's SD-WAN solution to ensure smooth video playback even in the presence of packet loss. It adds redundant data to compensate for lost packets.

Maximum Packet Loss Rate:

A-FEC can tolerate up to 40% packet loss (0.4) while maintaining smooth video playback. This ensures high-quality video streaming even in challenging network conditions. Conclusion: The correct answer is Option A, as the maximum packet loss rate allowed by A-FEC is 0.4.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: SD-WAN Solutions. Huawei SD-WAN Solution Brochure.

NEW QUESTION 10

Which protocol does iMaster NCE use to deliver configurations to devices?

- A. NETCONF
- B. Telemetry
- C. SDN
- D. RESTful

Answer: A

Explanation:

iMaster NCE (Network Cloud Engine) uses NETCONF (Network Configuration Protocol) to deliver configurations to network devices. NETCONF is an XML-based protocol that provides a standardized way to configure and manage network devices programmatically. Telemetry : Used for collecting operational data from devices, not for configuration delivery. SDN : Refers to a broader concept of software-defined networking, not a specific protocol. RESTful : Used for API interactions but not for device configuration.

Thus, the correct answer is A, as NETCONF is the primary protocol used by iMaster NCE for configuration delivery.

References:

Huawei iMaster NCE Protocol Guide, HCSA-Presales-IP Network Documentation.

NEW QUESTION 10

By default, the USG6000E-B supports hardware bypass. If hardware bypass is required, you do not need to purchase an external bypass device.

- A. TRUE
- B. FALSE

Answer: B

Explanation:

The USG6000E-B firewall does not support hardware bypass by default. If hardware bypass functionality is required, an external bypass device must be purchased and configured. Hardware bypass ensures network continuity in case of a firewall failure by physically rerouting traffic around the device. Since this feature is not included by default in the USG6000E-B, additional hardware is necessary to achieve it.

References:

HCSA-Presales-IP Network Study Guide, Section: "USG6000E-B Hardware Bypass." Huawei USG6000E Series Product Documentation, Bypass Configuration.

NEW QUESTION 15

Which of the following series of switches are multi-GE switches? (Select All that Apply)

- A. S5731-H
- B. S5736-S
- C. S6730-H
- D. S5732-H

Answer: ACD

Explanation:

Understanding Multi-GE Switches:

Multi-GE switches support ports with speeds higher than 1 Gbps but lower than 10 Gbps, such as 2.5 Gbps or 5 Gbps. These switches are ideal for high-density Wi-Fi 6 deployments and other bandwidth-intensive applications.

Analysis of Each Series:

S5731-H: This series includes multi-GE ports, making it suitable for high-speed access and aggregation scenarios.

S5736-S: This series does not include multi-GE ports; it primarily supports standard 1 Gbps and 10 Gbps interfaces.

S6730-H: This series supports multi-GE ports and is designed for high-performance campus networks.

S5732-H: This series includes multi-GE ports and is optimized for enterprise campus and branch networks.

Conclusion: The S5731-H, S6730-H, and S5732-H series switches are multi-GE switches. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio. Huawei Campus Switch Product Documentation.

NEW QUESTION 17

SecoManager is a security controller developed by Huawei for various security scenarios. Based on different scenarios, SecoManager has several deployment modes. Which of the following is not a SecoManager deployment mode?

- A. Integrated deployment with iMaster NCE-IP
- B. Integrated deployment with iMaster NCE-Fabric
- C. Integrated deployment with iMaster NCE-Campus
- D. Independent deployment

Answer: C

Explanation:

Understanding SecoManager Deployment Modes:

SecoManager is a security controller that integrates with Huawei's iMaster NCE platforms to manage security policies across networks.

Analysis of Each Mode:

Integrated deployment with iMaster NCE-IP: Supported for managing security in IP/MPLS networks.

Integrated deployment with iMaster NCE-Fabric: Supported for data center and cloud fabric security management.

Integrated deployment with iMaster NCE-Campus: Not supported because SecoManager focuses on specialized security scenarios, while iMaster NCE-Campus manages campus networks.

Independent deployment: Supported for standalone security management. Conclusion: The correct answer is Option C, as integrated deployment with iMaster NCE-Campus is not a valid SecoManager deployment mode.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 11: Security Solutions. Huawei SecoManager Product Documentation.

NEW QUESTION 19

A router forwards packets based on its routing table. To implement route-based packet forwarding, a router needs to obtain routes. Which of the following are common types of routes that a router can obtain?

- A. Dynamic route
- B. Blackhole route
- C. Direct route
- D. Static route

Answer: ACD

Explanation:

A router forwards packets based on its routing table, which contains different types of routes. Common types of routes include:

Dynamic route: Learned from routing protocols like OSPF, BGP, and RIP.

Direct route: Automatically generated when an interface is assigned an IP address. Static route: Manually configured by administrators to forward traffic to a specific destination.

A blackhole route (B) is not commonly used for forwarding but is instead a special type of route that discards traffic, preventing loops or attacks.

Reference: HCSA-Presales-IP Network Official Documentation – Routing Basics and Types of Routes

NEW QUESTION 20

The maximum SD-WAN forwarding performance of the AR8140 is 20 Gbit/s.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

The Huawei AR8140 is a high-performance SD-WAN router designed for large enterprises. It supports:

Maximum SD-WAN forwarding performance of 20 Gbit/s.

Multiple WAN interfaces, including 5G, LTE, MPLS, and Internet links. Advanced traffic steering for cloud and SaaS applications.

Reference: HCSA-Presales-IP Network Official Study Guide, Huawei AR8140 Specifications

NEW QUESTION 22

WLAN is a wireless local area network constructed using wireless technologies, including Wi-Fi, infrared, Bluetooth, and ZigBee.

- A. TRUE
- B. FALSE

Answer: B

Explanation:

A WLAN (Wireless Local Area Network) is specifically defined as a network that uses radio frequency (RF) technologies, primarily Wi-Fi, to provide wireless connectivity. While technologies like infrared, Bluetooth, and ZigBee are wireless communication methods, they are not part of the WLAN definition.

Wi-Fi: Operates in the 2.4 GHz and 5 GHz frequency bands and is the primary technology used in WLANs.

Infrared: Uses light waves for short-range communication and is not part of WLAN standards.

Bluetooth: Designed for short-range personal area networks (PANs), not LANs. ZigBee: Used for low-power, low-data-rate IoT applications, not WLANs.

Thus, the statement is FALSE, as WLANs are exclusively based on RF technologies like Wi-Fi.

References:

IEEE 802.11 WLAN Standards, HCSA-Presales-IP Network Documentation.

NEW QUESTION 27

What is the meaning of "one-click fast scheduling, cloud-network coordinated scheduling"?

- A. SRv6-based service provisioning within minutes, enabling agile service rollout
- B. Industry-unique hop-by-hop measurement technology, real-time visualization of network-wide status, troubleshooting within minutes
- C. SDN + intelligent cloud-map algorithm, improving the utilization of cloud-network resources by 30%
- D. Hierarchical slicing, 1000+ slices (10x the industry average)

Answer: A

Explanation:

"One-click fast scheduling, cloud-network coordinated scheduling" refers to the ability to provision services quickly and efficiently using advanced technologies like SRv6 (Segment Routing over IPv6). This feature enables agile service rollout by automating the configuration and deployment of network services across cloud and WAN environments. With SRv6, services can be provisioned within minutes, significantly reducing the time required for manual configuration and ensuring rapid adaptation to changing business needs.

The other options describe different features of Huawei's solutions but do not directly align with the concept of "one-click fast scheduling." For example:

Option B refers to network diagnostics and troubleshooting capabilities.

Option C highlights resource optimization through SDN and intelligent algorithms. Option D focuses on network slicing, which is a separate feature for enhancing network flexibility.

Thus, the correct answer is A , as it directly addresses the concept of fast and coordinated scheduling in cloud-network environments.

References:

Huawei CloudWAN 3.0 Solution White Paper, HCSA-Presales-IP Network Documentation.

NEW QUESTION 30

Which of the following are involved in the evolution phases for a typical data center?

- A. Virtualization
- B. Centralized
- C. Multi-site and multi-cloud
- D. Distributed

Answer: ABCD

Explanation:

The evolution of atypical data center involves several key phases, each addressing specific technological and operational advancements:

Virtualization: The first major phase, where physical resources are abstracted into virtual machines (VMs) to improve resource utilization and flexibility.

Centralized: Early data centers were centralized, with all resources located in a single facility for easier management.

Multi-site and multi-cloud: Modern data centers extend across multiple locations and integrate with public/private clouds for scalability and redundancy.

Distributed: Distributed architectures enable edge computing and decentralized processing, reducing latency and improving performance for geographically dispersed users.

These phases reflect the progression from traditional, hardware-centric designs to modern, software-defined, and cloud-integrated infrastructures.

References:

HCSA-Presales-IP Network Study Guide, Section: "Data Center Evolution Phases." Huawei Data Center Solution Documentation, Evolution Trends.

NEW QUESTION 33

What is the maximum forwarding rate supported by Huawei AC6805?

- A. 120 Gbps
- B. 60 Gbps
- C. 40 Gbps
- D. 100 Gbps

Answer: A

Explanation:

The Huawei AC6805 is a high-performance wireless access controller designed for large-scale enterprise networks. It supports up to 120 Gbps of forwarding capacity, enabling it to handle high-density Wi-Fi deployments and demanding applications like video streaming and IoT.

The other options (60 Gbps, 40 Gbps, and 100 Gbps) do not match the specifications of the AC6805. While lower-end models in the AC series may have reduced forwarding rates, the AC6805 is specifically designed to deliver exceptional performance for large-scale networks.

Thus, the correct answer is A . References:

Huawei AC6805 Wireless Access Controller Product Documentation, HCSA-Presales-IP Network Documentation.

NEW QUESTION 38

Which method does Huawei's campus network free mobility solution use to achieve a consistent experience across the entire network?

- A. IP address-based policy control
- B. User-based policy control
- C. MAC address-based policy control
- D. Terminal-based policy control

Answer: B

Explanation:

Huawei's Free Mobility solution provides consistent network access using User-Based Policy Control.

(B) True – User-Based Policy Control:

Ensures that user policies (VLAN, QoS, security) remain consistent across the network. Users can move freely across different subnets while maintaining the same network access privileges.

Other options:

(A) IP Address-Based Control (False): Users' IP addresses may change, disrupting policy continuity.

(C) MAC Address-Based Control (False): MAC addresses are device-specific, limiting user mobility.

(D) Terminal-Based Control (False): Controls access per device, not per user. Reference: HCSA-Presales-IP Network Official Study Guide, Campus Network Mobility Section

NEW QUESTION 40

As one of the important advantages of Huawei L3 autonomous driving solution, quick intelligent O&M improves network performance. Which options are the capabilities of Huawei intelligent O&M to improve network performance?

- A. Intelligent HQoS
- B. Intelligent network optimization
- C. Real-time experience visualization
- D. Precise fault analysis

Answer: ABCD

Explanation:

Huawei's L3 autonomous driving solution leverages AI and automation to enhance network performance through intelligent O&M. Below is an explanation of each capability: Intelligent HQoS : Hierarchical Quality of Service (HQoS) ensures optimal resource allocation for critical applications. Intelligent HQoS dynamically adjusts policies based on real-time traffic conditions, improving application performance and user experience. Intelligent network optimization : AI-driven algorithms analyze network traffic patterns and optimize routing, bandwidth allocation, and load balancing to maximize efficiency and reduce latency. Real-time experience visualization : Visualization tools provide real-time insights into network performance and user experience. This enables administrators to quickly identify bottlenecks and take corrective actions. Precise fault analysis : Advanced diagnostics and AI-powered analytics pinpoint the root cause of network issues with high accuracy, enabling faster troubleshooting and resolution. All four options represent key capabilities of Huawei's intelligent O&M solution. References: Huawei Autonomous Driving Network Solution White Paper, HCSA-Presales-IP Network Documentation.

NEW QUESTION 44

SecoManager is a security controller developed by Huawei for a variety of security scenarios. Which are the features of SecoManager?

- A. Identification of the real attack source IP addresses of botnets based on machinelearning, enhancing defense against CC attacks
- B. Policy redundancy analysis
- C. High-performance collection, query, and storage of session logs and threat logs
- D. Unified management of multiple security devices, including firewalls, IPS devices, and anti-DDoS devices

Answer: ACD

Explanation:

SecoManager is Huawei's security controller, designed to provide centralized management and intelligent orchestration for various security devices. Below is an analysis of each option:

Identification of the real attack source IP addresses of botnets based on machine learning, enhancing defense against CC attacks : SecoManager uses AI and machine learning to analyze traffic patterns and identify malicious activities, such as botnet attacks and CC (Challenge Collapsar) attacks.

Policy redundancy analysis : This is not a feature of SecoManager. While it provides policy management, redundancy analysis is typically handled by other tools or controllers.

High-performance collection, query, and storage of session logs and threat logs : SecoManager collects and analyzes logs from security devices, enabling administrators to monitor threats and troubleshoot issues efficiently.

Unified management of multiple security devices, including firewalls, IPS devices, and anti- DDoS devices : SecoManager integrates with various security devices, providing a single platform for configuration, monitoring, and policy enforcement.

Thus, the correct answers are A , C , and D . References:

Huawei SecoManager Solution Overview, HCSA-Presales-IP Network Documentation.

NEW QUESTION 45

What rollback functions does iMaster NCE-Fabric provide?

- A. Tenant-level rollback
- B. Service-level rollback
- C. Network-wide rollback
- D. Application-level rollback

Answer: ABC

Explanation:

Huawei iMaster NCE-Fabricis anAI-powered SDN controllerfordata center networks, offeringautomated rollback functionsto prevent misconfigurations.

(A) Tenant-Level Rollback (True):Allows rollback oftenant-specific configurations, ensuring isolation between network tenants.

(B) Service-Level Rollback (True):Enables rollback of individualnetwork serviceswithout affecting other operations.

(C) Network-Wide Rollback (True):Provides afull network rollbackto a previous stable state.

(D) Application-Level Rollback (False):Not a feature of iMaster NCE-Fabric; applications operate independently of network configuration rollback.

Reference:HCSA-Presales-IP Network Official Study Guide, iMaster NCE-Fabric Rollback Functions

NEW QUESTION 50

Which of the following are Layer 2 Ethernet interfaces on a switch?

- A. Hybrid
- B. Trunk
- C. Agg
- D. Access
- E. Core

Answer: ABD

Explanation:

In Huawei switches, Layer 2 Ethernet interfaces are used to forward data at the data link layer (Layer 2) of the OSI model. These interfaces are essential for VLAN segmentation and communication within a local area network (LAN). The three main types of Layer 2 Ethernet interfaces are:

Hybrid:A hybrid interface can carry traffic from multiple VLANs and is highly flexible. It allows both tagged and untagged traffic, making it suitable for complex network designs.

Trunk:A trunk interface is used to carry traffic from multiple VLANs between switches or other network devices. It typically tags VLAN traffic using IEEE 802.1Q encapsulation. Access:An access interface is associated with a single VLAN and is used to connect end devices like PCs or IP phones. It carries untagged traffic by default.

The options "Agg" (likely referring to aggregation) and "Core" are not Layer 2 interface types but rather refer to higher-level concepts like link aggregation or core network architecture.

References:

HCSA-Presales-IP Network Study Guide, Section: "Switching Basics and VLAN Configuration."

Huawei Switch Product Documentation, VLAN Interface Types.

NEW QUESTION 53

Which of the following deployment modes are supported by AR routers? (Select All that Apply)

- A. USB-based deployment
- B. DHCP option-based deployment
- C. DCN deployment
- D. Email-based deployment

Answer: ABCD

Explanation:

Deployment Modes for AR Routers:

Huawei AR routers support multiple deployment methods to simplify configuration and provisioning in various scenarios.

Explanation of Each Mode:

USB-based deployment: Configuration files can be loaded onto the router using a USB drive, enabling zero-touch provisioning.

DHCP option-based deployment: The router obtains its configuration from a DHCP server, which provides necessary parameters such as IP addresses and configuration file URLs. DCN deployment: Devices are automatically discovered and configured through the Data Communication Network (DCN), reducing manual intervention.

Email-based deployment: Configuration files or scripts can be sent to the router via email, allowing remote provisioning.

Conclusion: All four options are valid deployment modes for AR routers. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Deployment. Huawei AR Router Product Documentation.

NEW QUESTION 55

Huawei NetEngine AR6100 series routers are mainly used in small- and medium-sized branches.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

The Huawei NetEngine AR6100 series is a line of enterprise-class SD-WAN routers designed for:

Small- and medium-sized branch offices, offering cost-effective connectivity.

Supports SD-WAN features for intelligent traffic steering, application acceleration, and cloud access.

Integrates security functions, including firewalls, IPS, and VPNs, for branch security. Reference: HCSA-Presales-IP Network Official Study Guide, Huawei NetEngine AR Series

Overview

NEW QUESTION 60

Among the core values of the hyper-converged data center network solution, which of the following improvements is the result of full-lifecycle automation?

- A. TTM reduced by 90%
- B. Proactive prediction of 90% of faults
- C. Storage performance improved by 90%
- D. 100% unleashing of computing power

Answer: A

Explanation:

Hyper-Converged Data Center Network Solution:

Huawei's hyper-converged data center network solution emphasizes automation, intelligence, and efficiency across the entire lifecycle of network operations.

Impact of Full-Lifecycle Automation:

TTM (Time to Market): Full-lifecycle automation significantly reduces the time required to deploy and manage services, resulting in a 90% reduction in TTM.

Proactive fault prediction: While automation enhances fault detection, proactive prediction of 90% of faults is primarily driven by AI and analytics, not just automation.

Storage performance: Improvements in storage performance are typically achieved through hardware optimization, not automation.

Unleashing computing power: This is related to resource utilization and orchestration, not directly to full-lifecycle automation.

Conclusion: The improvement attributed to full-lifecycle automation is Option A, as TTM is reduced by 90%.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Solutions. Huawei Hyper-Converged Data Center Brochure.

NEW QUESTION 63

After data arrives at the physical layer, the digital signals are converted into optical, electrical, or electromagnetic wave signals depending on the physical media.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

The physical layer (Layer 1) of the OSI model is responsible for transmitting raw bitstreams over a physical medium. When data reaches this layer, it is converted into signals compatible with the transmission medium being used. For example:

Optical signals are used in fiber-optic cables.

Electrical signals are used in copper cables (e.g., Ethernet).

Electromagnetic waves are used in wireless communication (e.g., Wi-Fi or radio waves). This conversion ensures that data can be transmitted efficiently across different types of media. The statement is therefore correct.

References:

HCSA-Presales-IP Network Study Guide, Section: "OSI Model and Physical Layer Functions."

Huawei Transmission Technologies Documentation.

NEW QUESTION 64

Which of the following are the hardware characteristics of the S8700? (Select All that Apply)

- A. Ultra-high PoE++ output capability, supporting ultra-long-distance high-performance PoE transmission.
- B. The main control boards work in 1:1 backup mod
- C. When a main control board is removed and then installed, no packet loss occurs and the performance does not deteriorate.
- D. Service subcards are integrated on the main control board panel, separating the forwarding plane from the control plane and enriching port combinations.
- E. Cards with ultra-high-density GE optical/GE electrical/10GE optical ports.

Answer: ABD

Explanation:

Overview of the S8700 Switch:

The S8700 series is part of Huawei's high-end campus core switches, designed for large-scale enterprise networks. It offers advanced hardware features to meet demanding requirements.

Analysis of Each Option:

Option A: The S8700 supports ultra-high PoE++ output capability, enabling long-distance power delivery for devices such as Wi-Fi access points and IP cameras.

Option B: The main control boards in the S8700 operate in 1:1 backup mode, ensuring seamless failover without packet loss or performance degradation.

Option C: This statement is incorrect. Service subcards are not integrated on the main control board panel; they are separate components that enhance flexibility.

Option D: The S8700 supports ultra-high-density cards with GE optical, GE electrical, and 10GE optical ports, providing versatile connectivity options.

Conclusion: The correct hardware characteristics are Options A, B, and D. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Core Switch Product Portfolio.

Huawei S8700 Series Switch Product Documentation.

NEW QUESTION 69

What is the meaning of "one-click fast scheduling, cloud-network coordinated scheduling"?

- A. SDN + intelligent cloud-map algorithm, improving the utilization of cloud-network resources by 30%
- B. Hierarchical slicing, 1000+ slices (10x the industry average)
- C. Industry-unique hop-by-hop measurement technology, real-time visualization of network-wide status, troubleshooting within minutes
- D. SRv6-based service provisioning within minutes, enabling agile service rollout

Answer: A

Explanation:

"One-click fast scheduling, cloud-network coordinated scheduling" refers to Huawei's ability to optimize resource allocation across cloud and network infrastructures using SDN (Software-Defined Networking) and an intelligent cloud-map algorithm. This approach improves the utilization of cloud-network resources by up to 30%, ensuring efficient and dynamic resource management. The feature is part of Huawei's broader efforts to integrate cloud and network operations, enabling faster service deployment and better resource efficiency. Other options describe related but distinct features, such as hierarchical slicing or SRv6-based provisioning.

References:

HCSA-Presales-IP Network Study Guide, Section: "Cloud-Network Coordination and SDN." Huawei CloudFabric Solution Documentation, Resource Scheduling and Optimization.

NEW QUESTION 71

Remote office is an important requirement for enterprise staff on business trips. Which function can USG firewalls use to meet customers' remote office requirements?

- A. SSL VPN
- B. IPS
- C. AntiVirus
- D. IPsecVPN

Answer: A

Explanation:

Remote Office Requirements:

Remote office solutions enable secure access to corporate resources for employees working outside the office.

Firewall Functions for Remote Access:

SSL VPN: Provides secure remote access over HTTPS, allowing users to connect to internal applications without requiring additional client software.

IPS (Intrusion Prevention System): Protects against network attacks but does not provide remote access.

AntiVirus: Focuses on detecting and blocking malware, not remote access. IPsecVPN: While IPsecVPN can provide remote access, it typically requires more complex configurations compared to SSL VPN.

Conclusion: The correct answer is Option A, as SSL VPN is the most user-friendly and widely used function for remote office requirements.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 11: Security Solutions. Huawei USG Firewall Product Documentation.

NEW QUESTION 76

Among the core values of the hyper-converged data center network solution, which of the following improvements is the result of full-lifecycle automation?

- A. 100% unleashing of computing power
- B. TTM reduced by 90%
- C. Proactive prediction of 90% of faults
- D. Storage performance improved by 90%

Answer: B

Explanation:

Hyper-converged data center network solutions emphasize automation across the entire lifecycle, from deployment to operations. Below is an analysis of each option:

100% unleashing of computing power : While automation can optimize resource allocation, achieving 100% utilization of computing power is not directly tied to full-lifecycle automation.

TTM reduced by 90% : Full-lifecycle automation streamlines processes such as provisioning, configuration, and scaling, significantly reducing Time-to-Market

(TTM). This is a direct benefit of automation.

Proactive prediction of 90% of faults : Proactive fault prediction is typically achieved through AI-driven analytics, not solely through automation.

Storage performance improved by 90% : Improvements in storage performance are more closely related to advancements in hardware (e.g., NVMe over Fabrics) and software optimizations, rather than automation.

Thus, the correct answer is B , as full-lifecycle automation primarily reduces TTM. References:

Huawei Hyper-Converged Data Center Network Solution Overview, HCSA-Presales-IP Network Documentation.

NEW QUESTION 77

Which of the following controllers supports unified LAN-WAN management?

- A. iMaster NCE-Fabric
- B. iMaster NCE-WAN
- C. iMaster NCE-Campus
- D. iMaster NCE-IP

Answer: C

Explanation:

Overview of Huawei Controllers:

Huawei offers a range of controllers under the iMaster NCE series, each designed for specific use cases.

Analysis of Each Controller:

iMaster NCE-Fabric:Focuses on data center network automation and management. It does not support unified LAN-WAN management.

iMaster NCE-WAN:Specializes in WAN management, particularly for SD-WAN solutions. It does not manage LANs.

iMaster NCE-Campus:Designed for campus networks, this controller supportsunified LAN- WAN management, enabling centralized control of both wired and wireless networks. iMaster NCE-IP:Focuses on traditional IP/MPLS network management and does not support unified LAN-WAN management.

Conclusion:The correct answer is Option C, as iMaster NCE-Campus supports unified LAN-WAN management.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: Network Management Solutions.

Huawei iMaster NCE Product Documentation.

NEW QUESTION 78

Transportation industry is one of the key industries Huawei CloudWAN solution and products focus on. Which is not the railway services and market opportunities for routers?

- A. Integrated information network
- B. Vehicle-ground communication network
- C. Interconnection load balancing between backbone clouds
- D. Railway signal bearer network

Answer: C

Explanation:

Huawei's CloudWAN solutions target various railway services and market opportunities. Below is an analysis of each option:

Integrated information network : This refers to the unified network infrastructure that integrates multiple railway systems, such as passenger information, ticketing, and security. It is a key focus area for Huawei routers.

Vehicle-ground communication network : This involves communication between trains and ground stations, enabling real-time monitoring, diagnostics, and control. It is a critical railway service supported by Huawei routers.

Interconnection load balancing between backbone clouds : This is more relevant to cloud data center interconnections rather than railway-specific services. It is not a primary focus for railway services.

Railway signal bearer network : This refers to the network that carries signaling and control information for safe train operations. It is a core railway service supported by Huawei routers.

Thus, the correct answer is C , as interconnection load balancing between backbone clouds is not directly related to railway services.

References:

Huawei CloudWAN Solution for Transportation Industry, HCSA-Presales-IP Network Documentation.

NEW QUESTION 79

Which of the following statements are TRUE about MPLS?

- A. MPLS is a tunneling technology that provides connection-oriented switching for the network layer based on IP routing and control protocol
- B. It provides good QoS guarantee.
- C. MPLS labels, instead of IP routes, are looked up for forwarding packets, which greatly improves forwarding efficiency.
- D. MPLS forwarding is connectionless and cannot provide good end-to-end QoS guarantee.
- E. Labels used in MPLS forwarding can be manually configured or dynamically allocated using the Label Distribution Protocol (LDP).

Answer: ABD

Explanation:

MPLS (Multiprotocol Label Switching) is a tunneling technology that enables fast, efficient data forwarding based on labels rather than traditional IP routing. It providesconnection-orientedforwarding using label-switched paths (LSPs), ensuring reliableQuality of Service (QoS).

(A) True– MPLS is connection-oriented and enhances QoS by predefining LSPs through traffic engineering.

(B) True– MPLS useslabel switching, eliminating the need for IP lookups at each hop, significantly improving forwarding efficiency.

(C) False– MPLS is not connectionless; rather, it establishes virtual circuits (LSPs) for traffic. It providesend-to-end QoSSthrough traffic prioritization.

(D) True– Labels in MPLS can be eithermanually assignedordynamically allocatedusing protocols likeLDP (Label Distribution Protocol)orRSVP-TE.

Reference:HCSA-Presales-IP Network Official Study Guide, MPLS & QoS Chapter

NEW QUESTION 83

What are the basic roles of devices in the typical MPLS VPN technical architecture? (Select All that Apply)

- A. PE

- B. Aggregation
- C. P
- D. Core
- E. CE

Answer: ACE

Explanation:

MPLS VPN Architecture Overview:

MPLS (Multiprotocol Label Switching) VPN is a widely used technology for creating virtual private networks over a shared infrastructure. It involves specific roles for devices in the network.

Explanation of Each Role:

PE (Provider Edge): These devices sit at the edge of the service provider's network and connect to customer sites. They are responsible for assigning labels and managing VPN routes.

P (Provider): These devices are located in the core of the service provider's network. They perform label switching but do not participate in VPN-specific functions.

CE (Customer Edge): These devices belong to the customer and connect to the PE devices. They are unaware of the MPLS network and simply forward traffic to the PE. Aggregation and Core: These terms are not specific to MPLS VPN architecture. "Aggregation" refers to a general networking concept, and "Core" is too broad to describe a specific role in MPLS VPNs.

Conclusion: The correct roles in MPLS VPN architecture are PE, P, and CE. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: MPLS and VPN Technologies.

Huawei MPLS Solution Guide.

NEW QUESTION 85

Which of the following statements is FALSE about geographic redundancy of controllers in Huawei's SD-WAN solution?

- A. The northbound and southbound interfaces or platforms of the controllers use the same domain name or IP address
- B. Tenants and devices use this domain name or IP address to access the active controller cluster
- C. After an active/standby switchover, traffic is automatically switched to the new active cluster.
- D. Geographic redundancy supports disaster recovery backup between two clusters
- E. The number of nodes in the active cluster must be the same as that in the standby cluster.
- F. Huawei SD-WAN controller active/standby solution supports only one active cluster and one standby cluster.
- G. The active and standby clusters run at the same time and can both provide services properly
- H. Data is synchronized between the two clusters in real time to ensure data consistency.

Answer: D

Explanation:

Geographic Redundancy in SD-WAN Controllers:

Huawei's SD-WAN solution provides geographic redundancy to ensure high availability and disaster recovery.

Analysis of Each Statement:

Option A: This is correct. The active and standby clusters share the same domain name or IP address, enabling seamless failover during an active/standby switchover.

Option B: This is correct. Geographic redundancy requires the active and standby clusters to have the same number of nodes to ensure balanced performance.

Option C: This is correct. Huawei's SD-WAN solution supports only one active cluster and one standby cluster for geographic redundancy.

Option D: This is incorrect. While the active and standby clusters synchronize data in real time, only the active cluster provides services. The standby cluster remains idle until a failover occurs.

Conclusion: The FALSE statement is Option D. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: SD-WAN Solutions.

Huawei SD-WAN Controller Documentation.

NEW QUESTION 90

Which of the following IT transformations drive data center networks towards all-Ethernet?

- A. PCIe is replaced.
- B. Storage media evolves from HDDs to SSDs.
- C. The IT architecture evolves from centralized to distributed.
- D. The deployment mode evolves from single-cloud mode to multiple deployment modes such as multi-cloud mode.

Answer: BC

Explanation:

The transition to all-Ethernet data center networks is driven by several IT transformations. Below is an analysis of each option:

PCIe is replaced : PCIe is a local bus standard used for high-speed device connections within servers. Its replacement does not directly contribute to the shift toward all-Ethernet networks.

Storage media evolves from HDDs to SSDs : The adoption of SSDs increases storage performance and reduces latency, making Ethernet-based storage protocols like NVMe over Fabrics (NVMe-oF) viable alternatives to traditional Fibre Channel.

The IT architecture evolves from centralized to distributed : Distributed architectures require scalable and flexible networking solutions, which Ethernet-based networks are well-suited to provide.

The deployment mode evolves from single-cloud mode to multiple deployment modes such as multi-cloud mode : While multi-cloud deployments influence network design, they do not directly drive the shift to all-Ethernet networks.

Thus, the correct answers are B and C. References:

Huawei All-Ethernet Data Center Network Solution Overview, HCSA-Presales-IP Network Documentation.

NEW QUESTION 95

Huawei's CloudWAN 3.0 solution propels WANs into the intelligent cloud-network era.

Which of the following are the key highlights of CloudWAN 3.0? (Select All that Apply)

- A. One-network wide connection
- B. One-click maintenance
- C. One-hop cloud access

- D. One-click fast scheduling
- E. One-fiber multipurpose transport

Answer: ABCDE

Explanation:

Overview of Huawei CloudWAN 3.0:

Huawei CloudWAN 3.0 is designed to address the challenges of modern WANs by integrating intelligence, automation, and cloud-native capabilities. It aims to simplify operations, improve efficiency, and enable seamless cloud connectivity. Explanation of Each Highlight:

One-network wide connection: Provides unified connectivity across various domains, including branches, data centers, and clouds.

One-click maintenance: Simplifies network operations through automated tools, reducing manual intervention and improving efficiency.

One-hop cloud access: Enables direct and secure access to cloud services with minimal latency, enhancing user experience.

One-click fast scheduling: Allows dynamic resource allocation and traffic optimization through AI-driven scheduling.

One-fiber multipurpose transport: Supports multiple services over a single fiber, improving bandwidth utilization and reducing costs.

Conclusion: All the listed options are key highlights of Huawei CloudWAN 3.0. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: WAN Solutions. Huawei CloudWAN Solution Brochure.

NEW QUESTION 98

MACsec (Media Access Control Security) is an important feature to ensure security and reliability. Which of the following features does MACsec provide?

- A. Service data encryption
- B. Data frame integrity check
- C. Replay protection
- D. Data source authenticity verification

Answer: ABCD

Explanation:

MACsec (Media Access Control Security) is a Layer 2 security protocol that provides end-to-end encryption for Ethernet frames. It ensures confidentiality, integrity, and authenticity of data on wired networks.

A (Service data encryption): Encrypts Ethernet frames to protect against eavesdropping. B (Data frame integrity check): Prevents data tampering and corruption.

C (Replay protection): Detects and prevents replay attacks by using unique sequence numbers.

D (Data source authenticity verification): Ensures that received data is from a legitimate source by using cryptographic authentication.

Reference: HCSA-Presales-IP Network Official Documentation – MACsec Features & Security Benefits

NEW QUESTION 100

Which of the following statements are TRUE about network service quality?

- A. Bandwidth, also called throughput, refers to the maximum number of data bits transmitted between two ends within a specified period (1 second) or the average rate at which specific data flows are transmitted between two network nodes.
- B. Bandwidth is expressed in bit/s.
- C. Latency refers to the time required to transmit a packet from the transmit end to the receive end.
- D. The packet loss rate refers to the percentage of total sent packets that are lost during transmission.
- E. Jitter, also called latency variation, refers to the difference in latencies of packets in the same flow.

Answer: ABCD

Explanation:

Network service quality is determined by several key metrics. Below is an analysis of each option:

Bandwidth : Bandwidth measures the maximum data transfer rate of a network link, expressed in bits per second (bit/s). It represents the capacity of the link to transmit data between two nodes.

Latency : Latency is the time it takes for a packet to travel from the source to the destination. Lower latency improves real-time communication and application performance. Packet loss rate : This metric indicates the percentage of packets that fail to reach their destination due to network congestion, errors, or other issues. High packet loss degrades user experience.

Jitter : Jitter refers to variations in packet arrival times, which can disrupt real-time applications like voice and video. Consistent latency is critical for smooth performance.

All four options are correct and accurately describe key aspects of network service quality. References:

Huawei Network Quality Metrics Guide, HCSA-Presales-IP Network Documentation.

NEW QUESTION 103

Which of the following are factors affecting the wireless rate (throughput) of a Wi-Fi AP?

- A. CPU performance
- B. Spatial stream
- C. Frequency bandwidth
- D. SNR

Answer: ABCD

Explanation:

The wireless rate (throughput) of a Wi-Fi AP is influenced by several factors. Below is an analysis of each option:

CPU performance : The AP's CPU processes data packets and manages wireless communication. Higher CPU performance enables faster packet processing and better throughput.

Spatial stream : Wi-Fi uses multiple spatial streams (MIMO) to transmit data simultaneously. More spatial streams increase the data rate and improve throughput.

Frequency bandwidth : The bandwidth of the frequency channel determines how much data can be transmitted at once. For example, 160 MHz channels provide higher throughput than 20 MHz channels.

SNR (Signal-to-Noise Ratio) : A higher SNR indicates a stronger signal relative to noise, resulting in better data transmission quality and higher throughput. Poor SNR leads to retransmissions and reduced performance.

All four factors significantly impact the wireless rate of a Wi-Fi AP. References:

Huawei Wi-Fi 6 Technology White Paper, HCSA-Presales-IP Network Documentation.

NEW QUESTION 107

Which protocol is used in Huawei's SD-WAN solution to encrypt user data?

- A. IPsec
- B. DTLS
- C. SSL
- D. SSH

Answer: A

Explanation:

IPsec (Internet Protocol Security) is the primary encryption protocol used in Huawei's SD-WAN solution for securing site-to-site and remote access connections. Why not other options?

DTLS (Datagram Transport Layer Security) is mainly used for VPNs but is not the primary encryption method in SD-WAN.

SSL (Secure Sockets Layer) is used for web-based encryption but not for SD-WAN tunnels. SSH (Secure Shell) is used for remote device management, not for encrypting SD-WAN traffic.

Reference: HCSA-Presales-IP Network Official Documentation – SD-WAN Security & Encryption

NEW QUESTION 112

OSPF routers exchange link status information instead of directly exchanging routes.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

OSPF (Open Shortest Path First) is a link-state routing protocol. Instead of directly exchanging routes, OSPF routers share link-state advertisements (LSAs) that describe the state of their links (e.g., connected networks and costs). Each router uses this information to build a complete topology map of the network and calculate the shortest path to each destination using the SPF (Shortest Path First) algorithm.

The statement accurately describes how OSPF operates, making it TRUE. References:

Huawei OSPF Protocol Guide, HCSA-Presales-IP Network Documentation.

NEW QUESTION 116

Which of the following networking models are supported in Huawei's SD-WAN solution?

- A. Hub-spoke networking
- B. Hierarchical networking
- C. Partial-mesh networking
- D. Full-mesh networking
- E. Intelligent HQoS

Answer: ABCD

Explanation:

Huawei's SD-WAN solution supports multiple networking models to meet diverse enterprise requirements:

Hub-spoke networking: Centralizes traffic through a hub site, ideal for security and policy enforcement.

Hierarchical networking: Organizes sites into tiers (e.g., regional hubs and branches), enabling scalable architectures.

Partial-mesh networking: Connects critical sites directly while routing other traffic through hubs, balancing performance and cost.

Full-mesh networking: Provides direct connections between all sites, ensuring optimal performance for latency-sensitive applications.

Intelligent HQoS is not a networking model but rather a feature that enhances Quality of Service (QoS) across any of these models.

References:

HCSA-Presales-IP Network Study Guide, Section: "SD-WAN Networking Models." Huawei SD-WAN Solution Documentation, Supported Architectures.

NEW QUESTION 117

Which of the following statements is TRUE about AirEngine products?

- A. The AirEngine 5762-12 supports a maximum device rate of 1.775 Gbps.
- B. The AirEngine 6761-21 supports a device rate of 3.55 Gbps.
- C. The AirEngine 5762-12SW does not support the leader AP feature.
- D. The AirEngine 5761-11 has 2.5GE ports.

Answer: B

Explanation:

Huawei's AirEngine series includes a range of Wi-Fi 6 APs with varying capabilities: AirEngine 5762-12: Supports a maximum device rate of 2.975 Gbps, not 1.775 Gbps, making option A incorrect.

AirEngine 6761-21: Supports a maximum device rate of 3.55 Gbps, making option B correct. AirEngine 5762-12SW: Does support the leader AP feature, making option C incorrect. AirEngine 5761-11: Does not have 2.5GE ports, making option D incorrect.

The AirEngine 6761-21 stands out for its high performance, making it suitable for demanding environments like large enterprises and campuses.

References:

HCSA-Presales-IP Network Study Guide, Section: "AirEngine Series Performance Metrics." Huawei AirEngine Product Documentation, Device Rate Specifications.

NEW QUESTION 118

On a large-scale network consisting of multiple ASs, which protocol is required to exchange routes between these ASs?

- A. Static routing
- B. BGP
- C. IS-IS
- D. OSPF

Answer: B

Explanation:

To exchange routes between Autonomous Systems (ASs), BGP (Border Gateway Protocol) is used. BGP is specifically designed for inter-AS routing and supports scalable and policy-based route distribution across large networks.

Static routing : Requires manual configuration and is not scalable for large networks.

IS-IS and OSPF : These are Interior Gateway Protocols (IGPs) used for intra-AS routing, not inter-AS routing.

Thus, the correct answer is B , as BGP is the standard protocol for inter-AS route exchange.

References:

Huawei BGP Protocol Overview, HCSA-Presales-IP Network Documentation.

NEW QUESTION 121

Forwarding performance is an important metric for core routers. How much is the highest forwarding performance of Huawei core router NetEngine 40E X16A/X8A service processing unit?

- A. 1 Tbit/s
- B. 2 Tbit/s
- C. 800 Gbit/s
- D. 480 Gbit/s

Answer: B

Explanation:

The Huawei NetEngine 40E X16A/X8A is a high-performance core router used in carrier-grade networks.

Maximum forwarding performance: 2 Tbit/s per service processing unit. Supports high-density 100GE and 400GE interfaces.

Provides intelligent traffic scheduling, high reliability, and scalable architecture. Reference: HCSA-Presales-IP Network Official Study Guide, NetEngine 40E X16A/X8A Specifications

NEW QUESTION 123

Huawei S5731-L remote unit (RU) switches support multiple types of uplink ports, including optical, electrical, and hybrid optical-electrical ports. An RU to be connected to the central switch can be flexibly selected based on the distance between them.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

Overview of S5731-L Remote Units (RUs):

The S5731-L series includes remote units (RUs) designed for distributed campus networks. These RUs connect to a central switch via uplink ports.

Uplink Port Flexibility:

The RUs support optical, electrical, and hybrid optical-electrical ports, allowing flexible selection based on the distance between the RU and the central switch.

Optical ports are used for long-distance connections, while electrical ports are suitable for shorter distances. Hybrid ports combine both options for maximum versatility. Conclusion: The statement is TRUE because the S5731-L RUs support multiple uplink port types for flexible deployment.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio. Huawei Campus Switch Product Documentation.

NEW QUESTION 127

Government industry is one of the key industries Huawei CloudWAN solution and products focus on. Which are government WAN scenarios and market opportunities for routers?

- A. Asset management network
- B. Dedicated networks for cities
- C. National broadband network
- D. Dedicated networks for provinces
- E. Dedicated networks for ministries (e.g., Ministry of the Interior (MOI), Ministry of Education (MOE), Ministry of Finance (MOF), Ministry of Defense (MOD))

Answer: BCDE

Explanation:

Huawei's CloudWAN solution targets several key government WAN scenarios and market opportunities:

Dedicated networks for cities: Provides connectivity for smart city initiatives, including public safety, transportation, and utilities.

National broadband network: Supports nationwide broadband infrastructure for government services and citizens.

Dedicated networks for provinces: Enables regional connectivity for provincial governments and agencies.

Dedicated networks for ministries: Serves specific government departments like MOI, MOE, MOF, and MOD, ensuring secure and reliable communication.

Asset management network is not a typical WAN scenario but rather a subset of IoT or enterprise applications, making it irrelevant in this context.

References:

HCSA-Presales-IP Network Study Guide, Section: "Government WAN Scenarios and Opportunities."

Huawei CloudWAN Solution Documentation, Government Use Cases.

NEW QUESTION 128

Which of the following statements are TRUE about Huawei's wireless backhaul solution for rail transportation? (Select All that Apply)

- A. The handover delay can be as low as 30 ms.

- B. Highly reliable active-active links are available.
- C. The solution can be used to carry the train control signal system.
- D. Backhaul is unavailable when a train is traveling at 160 km/h.

Answer: ABC

Explanation:

Overview of Huawei's Wireless Backhaul Solution:

Huawei's wireless backhaul solution for rail transportation ensures reliable communication for train control systems, passenger services, and other applications.

Analysis of Each Statement:

Option A: The handover delay in Huawei's solution can indeed be as low as 30 ms, ensuring seamless connectivity during train movement.

Option B: The solution supports highly reliable active-active links, providing redundancy and fault tolerance.

Option C: The solution is designed to carry critical systems like train control signals, ensuring safety and efficiency.

Option D: This is incorrect because Huawei's solution supports backhaul even at speeds of 160 km/h or higher, making it suitable for high-speed rail networks.

Conclusion: The correct statements are Options A, B, and C. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 10: Rail Transportation Solutions.

Huawei Rail Transportation Solution Brochure.

NEW QUESTION 133

MACsec is an important feature to ensure security and reliability. Which of the following routers can support MACsec?

- A. NetEngine 8000 MIA
- B. NetEngine 8000 F1A
- C. NetEngine 8000 MIC
- D. NetEngine 8000 M6

Answer: ABD

Explanation:

MACsec (Media Access Control Security) is a Layer 2 encryption protocol that ensures secure communication between devices in a network. It provides data confidentiality, integrity, and replay protection at the Ethernet layer. Below is an analysis of each option: NetEngine 8000 MIA : This model supports MACsec, making it suitable for secure WAN and data center interconnections.

NetEngine 8000 F1A : This model also supports MACsec, enabling secure high-speed connections.

NetEngine 8000 MIC : The MIC series does not support MACsec, as it is primarily designed for modular interfaces without encryption capabilities.

NetEngine 8000 M6 : This model supports MACsec, ensuring secure communication for enterprise networks.

Thus, the correct answers are A, B, and D. References:

Huawei NetEngine 8000 Series Router Product Documentation, HCSA-Presales-IP Network Documentation.

NEW QUESTION 136

Enterprise networks, no matter campus networks or DCNs, are facing a lot of potential attacks. What are the common types of attack methods we are facing?

- A. Remote code execution
- B. Cross-site attacks
- C. Command line injection
- D. Brute-force attacks

Answer: ABCD

Explanation:

Enterprise networks are vulnerable to a variety of cyberattacks, including:

Remote code execution: Attackers exploit vulnerabilities to execute malicious code on target systems, potentially gaining full control.

Cross-site attacks: Includes Cross-Site Scripting (XSS) and Cross-Site Request Forgery (CSRF), where attackers manipulate web applications to steal data or perform unauthorized actions.

Command line injection: Attackers inject malicious commands into input fields, compromising system integrity.

Brute-force attacks: Attackers attempt to guess passwords or encryption keys through repeated trial-and-error attempts.

These attack methods highlight the importance of implementing robust security measures, such as firewalls, intrusion detection/prevention systems, and regular patching. References:

HCSA-Presales-IP Network Study Guide, Section: "Common Cyberattack Methods." Huawei Security Solution Documentation, Threat Landscape Overview.

NEW QUESTION 141

Compared with non-Huawei switches that use subcards to expand uplink ports, Huawei S6730-H24X6C / S6730-H48X6C supports six 100GE uplink ports and has higher reliability, which is an advantage in project response.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

Huawei's S6730-H24X6C and S6730-H48X6C switches are part of the CloudEngine S series and are designed for high-performance campus networks. These models support six fixed 100GE uplink ports, eliminating the need for additional subcards to expand uplink capacity. This design offers several advantages:

Higher reliability: Fixed ports reduce points of failure compared to modular subcards. Simplified deployment: No need for additional hardware or configuration.

Better performance: Optimized for high-speed connectivity and scalability.

Non-Huawei switches that rely on subcards may face limitations in terms of reliability and flexibility, making Huawei's fixed-port design a competitive advantage.

References:

HCSA-Presales-IP Network Study Guide, Section: "Huawei Campus Switch Portfolio." Huawei CloudEngine S6730 Series Product Documentation.

NEW QUESTION 142

In Huawei's SD-WAN solution, overlay topologies can be planned based on services. Different service topologies are independent of each other.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

Huawei's SD-WAN solution allows for the creation of overlay topologies tailored to specific services. These topologies are logically independent, meaning they can be customized and optimized for different types of traffic (e.g., voice, video, data) without interfering with one another. This independence ensures that each service topology can meet its unique requirements, such as latency, bandwidth, and security, while maintaining overall network efficiency.

References:

HCSA-Presales-IP Network Study Guide, Section: "SD-WAN Overlay Topologies." Huawei SD-WAN Solution Documentation, Service-Based Topology Planning.

NEW QUESTION 145

On a network where SNMP is used for network management, each managed device needs to run an agent process. Which protocol message do the management process and agent process communicate with each other through?

- A. NETCONF
- B. HTTP
- C. YANG
- D. SNMP

Answer: D

Explanation:

SNMP (Simple Network Management Protocol) is a widely used protocol for managing and monitoring network devices. In an SNMP-based network:

Each managed device runs an agent process that collects and stores management information.

The management process (typically running on a Network Management System, or NMS)

communicates with the agent using SNMP messages.

SNMP defines several types of messages, such as GET, SET, and TRAP, which allow the NMS to query or modify device configurations and receive notifications from the agent. Other options like NETCONF, HTTP, and YANG are unrelated to SNMP communication. References:

HCSA-Presales-IP Network Study Guide, Section: "Network Management Protocols and SNMP."

Huawei Network Management Documentation, SNMP Overview.

NEW QUESTION 146

Huawei's CloudWAN 3.0 solution propels WANs into the intelligent cloud-network era. Which of the following are the key highlights of CloudWAN 3.0?

- A. One-click maintenance
- B. One-network wide connection
- C. One-fiber multipurpose transport
- D. One-click fast scheduling
- E. One-hop cloud access

Answer: BCE

Explanation:

Huawei's CloudWAN 3.0 solution is a next-generation WAN architecture designed to address the challenges of digital transformation and cloud adoption. The key highlights of this solution include:

One-network wide connection : CloudWAN 3.0 enables seamless connectivity across multiple sites, integrating various access technologies (e.g., MPLS, SD-WAN, and PON) into a unified network. This ensures efficient resource utilization and simplifies network management.

One-fiber multipurpose transport : This feature allows a single fiber to carry multiple services, such as Internet, voice, video, and private line services. It significantly reduces infrastructure costs and improves operational efficiency.

One-hop cloud access : CloudWAN 3.0 provides direct, low-latency access to cloud services through optimized routing. This enhances user experience and supports real-time

applications like video conferencing and online collaboration.

While "one-click maintenance" and "one-click fast scheduling" are valuable features in network management, they are not explicitly highlighted as part of the CloudWAN 3.0 solution in official Huawei documentation.

References:

Huawei CloudWAN 3.0 Solution White Paper, HCSA-Presales-IP Network Documentation.

NEW QUESTION 151

What are the differentiators of Huawei CloudFabric 3.0 data center network solution? (Select All that Apply)

- A. Full-lifecycle automation
- B. Network-wide intelligent O&M
- C. All-wireless access
- D. All-Ethernet storage and HPC network

Answer: ABD

Explanation:

Overview of Huawei CloudFabric 3.0:

Huawei CloudFabric 3.0 is a next-generation data center network solution that emphasizes automation, intelligence, and unified connectivity for diverse workloads.

Analysis of Each Differentiator:

Full-lifecycle automation: CloudFabric 3.0 provides end-to-end automation for provisioning, configuration, and management, reducing operational complexity.

Network-wide intelligent O&M: AI-driven tools enable proactive fault detection, analysis, and resolution, improving network reliability.

All-wireless access: This is incorrect. CloudFabric 3.0 focuses on wired Ethernet networks rather than all-wireless access.

All-Ethernet storage and HPC network: CloudFabric 3.0 supports unified Ethernet-based connectivity for storage, high-performance computing (HPC), and other workloads, simplifying infrastructure.

Conclusion: The correct differentiators are Options A, B, and D. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Solutions. Huawei CloudFabric 3.0 Solution Brochure.

NEW QUESTION 152

Which of the following statements is TRUE about Huawei's IoT Wi-Fi 6 APs?

- A. Currently, IoT expansion is only available for RFID and Bluetooth protocols.
- B. IoT expansion can be implemented through PCIe cards or USB ports.
- C. Radios used by IoT and Wi-Fi do not transmit on the same channel, so there is no need to consider interference between IoT and Wi-Fi signals.
- D. The outdoor Wi-Fi 6 AP AirEngine 5761R-11 supports IoT expansion.

Answer: BD

Explanation:

Huawei's IoT-enabled Wi-Fi 6 APs integrate wireless networking with IoT capabilities, enabling converged solutions for various industries. Let us evaluate each statement: Currently, IoT expansion is only available for RFID and Bluetooth protocols : This is false . While RFID and Bluetooth are common IoT protocols, Huawei's IoT-enabled APs support additional protocols like Zigbee and LoRa, depending on the model.

IoT expansion can be implemented through PCIe cards or USB ports : This is true . Huawei APs support IoT expansion modules that can be connected via PCIe cards or USB ports, enabling flexible integration of IoT functionalities.

Radios used by IoT and Wi-Fi do not transmit on the same channel, so there is no need to consider interference between IoT and Wi-Fi signals : This is false . Depending on the frequency bands used, IoT and Wi-Fi signals may interfere with each other. Proper planning and configuration are required to minimize interference.

The outdoor Wi-Fi 6 AP AirEngine 5761R-11 supports IoT expansion : This is true . The AirEngine 5761R-11 is an outdoor AP that supports IoT expansion, making it suitable for scenarios like smart cities and industrial IoT.

Thus, the correct answers are B and D .

References:

Huawei IoT Wi-Fi 6 AP Product Documentation, HCSA-Presales-IP Network Documentation.

NEW QUESTION 157

Which of the following statements is TRUE about Huawei AirEngine 5762-12?

- A. It supports a device rate of 2.975 Gbps.
- B. It has one USB port.
- C. It does not support the leader AP feature.
- D. It has two GE uplink ports.

Answer: D

Explanation:

Huawei AirEngine 5762-12 is a Wi-Fi 6 AP designed for enterprise networks. Key specifications:

Supports a maximum device rate of 5.95 Gbps (not 2.975 Gbps) Does not include a USB port

Supports the leader AP feature for intelligent network management

Equipped with two GE (Gigabit Ethernet) uplink ports, ensuring high-speed connectivity and redundancy.

Reference: HCSA-Presales-IP Network Official Documentation – AirEngine 5762-12 Datasheet

NEW QUESTION 160

All Huawei NetEngine routers support IPsec, VXLAN, MACsec, and FlexE.

- A. TRUE
- B. FALSE

Answer: B

Explanation:

Features Supported by Huawei NetEngine Routers:

Huawei NetEngine routers are designed for various use cases, including WAN, data center interconnect (DCI), and enterprise networking. However, not all models support every advanced feature.

Analysis of Features:

IPsec: Most NetEngine routers support IPsec for secure communication over public networks.

VXLAN: VXLAN support is limited to specific models optimized for data center or cloud environments.

MACsec: MACsec is supported only on certain high-end models for Layer 2 encryption. FlexE: FlexE is a feature available only on select high-end NetEngine routers designed for 5G transport and DCI.

Conclusion: The statement is FALSE because not all NetEngine routers support all four features (IPsec, VXLAN, MACsec, and FlexE).

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Product Portfolio. Huawei NetEngine Router Product Documentation.

NEW QUESTION 162

The USG6000F series firewalls are 1U high, use redundant fan and power modules, and support a maximum throughput of 160 Gbps.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

The USG6000F series firewalls are compact, high-performance devices designed for enterprise and carrier networks. Key specifications include:

Form factor: 1U height, making them suitable for space-constrained environments. Redundancy: Equipped with redundant fans and power modules to ensure high availability. Throughput: Supports a maximum throughput of 160 Gbps, enabling efficient handling of large traffic volumes.

These features make the USG6000F series ideal for scenarios requiring both performance and reliability.

References:

HCSA-Presales-IP Network Study Guide, Section: "USG6000F Series Specifications." Huawei USG6000F Series Product Documentation, Technical Details.

NEW QUESTION 167

Huawei NetEngine 8000 series' access routers can work at a temperature ranging from - 40??C to +65??C and can be installed in outdoor cabinets.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

Environmental Tolerance of Huawei NetEngine 8000 Series:

The Huawei NetEngine 8000 series is designed for robust performance in challenging environments, including extreme temperatures.

Temperature Range and Outdoor Installation:

These routers are certified to operate in temperatures ranging from -40??C to +65??C, making them suitable for deployment in outdoor cabinets or harsh conditions.

Conclusion:The statement is TRUE because the NetEngine 8000 series supports the specified temperature range and can be installed in outdoor cabinets.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Product Portfolio. Huawei NetEngine 8000 Series Product Documentation.

NEW QUESTION 171

Huawei's data center autonomous driving network can locate faults within 1 minute, analyze faults within 3 minutes, and rectify faults within 5 minutes.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

Fault Management in Autonomous Driving Networks:

Huawei's autonomous driving network leverages AI and machine learning to achieve rapid fault detection, analysis, and resolution.

Fault Management Metrics:

Locate faults within 1 minute:AI-driven tools quickly identify the root cause of issues. Analyze faults within 3 minutes:Advanced analytics provide detailed insights into the nature and impact of faults.

Rectify faults within 5 minutes:Automated remediation workflows resolve issues promptly, minimizing downtime.

Conclusion:The statement is TRUE because Huawei's autonomous driving network meets these fault management metrics.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Solutions. Huawei Autonomous Driving Network White Paper.

NEW QUESTION 176

Which of the following statements is FALSE about RR in Huawei's SD-WAN solution?

- A. It can implement communication between SD-WAN networks and legacy MPLS networks.
- B. It can be deployed on a physical AR router or software AR1000V vCPE.
- C. It can be deployed independently or co-deployed with the CPE at a site.
- D. It distributes VPN routes and tunnel information between CPEs based on VPN topology policies.

Answer: A

Explanation:

Understanding the Role of RR (Route Reflector):

In Huawei's SD-WAN solution, the Route Reflector (RR) plays a critical role in distributing routing information and ensuring efficient communication between CPEs (Customer Premises Equipment).

Analysis of Each Statement:

Option A:This is FALSE. The RR in Huawei's SD-WAN solution doesnot directly implement communicationbetween SD-WAN networks and legacy MPLS networks. Instead, it focuses on distributing VPN routes and tunnel information within the SD-WAN overlay network. Communication with legacy MPLS networks typically requires additional integration mechanisms.

Option B:This is correct. The RR can be deployed on a physical AR router or as a virtualized instance (AR1000V vCPE).

Option C:This is correct. The RR can be deployed independently or co-located witha CPE at a site, depending on the network design.

Option D:This is correct. The RR distributes VPN routes and tunnel information between CPEs based on predefined VPN topology policies.

Conclusion:The FALSE statement is Option A. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: SD-WAN Solutions. Huawei SD-WAN Solution Documentation.

NEW QUESTION 177

The path that IP packets pass through on an MPLS network is called a label switched path (LSP). An LSP is a bidirectional path that specifies the transmission direction of data flows.

- A. TRUE
- B. FALSE

Answer: B

Explanation:

Comprehensive and Detailed in Depth Explanation:An MPLS (Multiprotocol Label Switching) network uses Label Switched Paths (LSPs) to forward packets.

However, an LSP is unidirectional , not bidirectional. This means that the path is established in one direction only, from the ingress Label Edge Router (LER) to the egress LER. For bidirectional communication, two separate LSPs are required—one for each direction. This concept is critical in understanding MPLS architecture, as it ensures efficient packet forwarding based on labels rather than IP addresses. The unidirectional nature of LSPs allows for better traffic engineering and control over data flow in MPLS networks. References:

Huawei HCSA-Presales-IP Network Documentation: MPLS Fundamentals

RFC 3031: Multiprotocol Label Switching Architecture

NEW QUESTION 178

Wide area network (WAN) covers a large geographical area, ranging from dozens of kilometers to thousands of kilometers. It can connect multiple cities or even countries and provide long-distance communication to form an international large-scale network.

- A. TRUE
- B. FALSE

Answer: A

Explanation:

A Wide Area Network (WAN) is designed to span large geographical areas, such as cities, regions, or even countries. WANs enable long-distance communication and are typically used to connect multiple Local Area Networks (LANs) or Metropolitan Area Networks (MANs). They rely on technologies like MPLS, SD-WAN, and leased lines to provide connectivity over vast distances.

The description provided in the question accurately reflects the characteristics and purpose of a WAN. Therefore, the statement is TRUE .

References:

Huawei WAN Solution Overview, HCSA-Presales-IP Network Documentation.

NEW QUESTION 179

Which of the following statements is TRUE about AirEngine products?

- A. The AirEngine 5762-12 supports a maximum device rate of 1.775 Gbps.
- B. The AirEngine 5762-12SW does not support the leader AP feature.
- C. The AirEngine 5761-11 has 2.5GE ports.
- D. The AirEngine 6761-21 supports a device rate of 3.55 Gbps.

Answer: C

Explanation:

Overview of AirEngine Products:

Huawei's AirEngine series includes Wi-Fi 6 access points (APs) designed for high-density and high-performance wireless networks.

Analysis of Each Statement:

Option A: The AirEngine 5762-12 supports a maximum device rate of 2.976 Gbps, not 1.775 Gbps.

Option B: The AirEngine 5762-12SW does support the leader AP feature, which simplifies network management.

Option C: The AirEngine 5761-11 has 2.5GE ports, making it suitable for high-bandwidth applications.

Option D: The AirEngine 6761-21 supports a device rate of 5.375 Gbps, not 3.55 Gbps. Conclusion: The correct statement is Option C.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions. Huawei AirEngine Product Documentation.

NEW QUESTION 181

Which of the following statements are TRUE about fixed ports and cards of AR routers?

- A. LAN ports can be switched to WAN ports using the `undo portswitch` command.
- B. On some models, WAN ports can be switched to LAN ports.
- C. Layer 2 cards configured with VLANIF interfaces support simple Layer 3 forwarding, but do not support NAT, MPLS, IPsec, and HQoS.
- D. All Layer 2 cards support LAN/WAN switching.

Answer: ABC

Explanation:

Huawei's AR routers offer flexible configurations for fixed ports and modular cards, enabling them to adapt to various networking scenarios. Key points include:

LAN-to-WAN switching: LAN ports can be converted to WAN ports using the `undo portswitch` command, allowing greater flexibility in network design.

WAN-to-LAN switching: Some AR router models support converting WAN ports to LAN ports, depending on the hardware and software capabilities.

Layer 2 card limitations: Layer 2 cards configured with VLANIF interfaces can perform basic Layer 3 forwarding but lack advanced features like NAT, MPLS, IPsec, and HQoS.

The claim that all Layer 2 cards support LAN/WAN switching is incorrect. Only specific models and configurations support this functionality, making option D false.

References:

HCSA-Presales-IP Network Study Guide, Section: "AR Router Port and Card Configurations."

Huawei AR Router Product Documentation, Port Switching and Layer 2 Card Features.

NEW QUESTION 184

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