



**HUAWEI**

**Exam Questions H19-301\_V3.0**

HCSA-Presales-IP Network Certification V3.0

#### NEW QUESTION 1

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 2

Huawei iMaster NCE is a network automation and intelligence platform. Except for AI, which functions does Huawei iMaster NCE integrate?

- A. Management
- B. Routing
- C. Analysis
- D. Control

**Answer:** ACD

#### Explanation:

Huawei iMaster NCE (Network Cloud Engine) is an intelligent network automation platform that integrates management, analysis, and control capabilities, but it does not handle routing functions directly.

(A) Management – True: iMaster NCE provides centralized network lifecycle management, including configuration, monitoring, and automation.

(B) Routing – False: Routing is handled by network devices like routers and switches, not by iMaster NCE itself.

(C) Analysis – True: The platform incorporates big data analytics to provide network insights, fault prediction, and performance optimization.

(D) Control – True: iMaster NCE serves as an SDN controller, managing network policies, path selection, and automation.

Reference: HCSA-Presales-IP Network Official Study Guide, iMaster NCE Overview Section

#### NEW QUESTION 3

Which of the following methods can be used to protect network security in Huawei WLAN products and solutions?

- A. WIDS/WIPS air interface attack defense
- B. Wired tunnel hardware encryption: DTLS and IPsec
- C. WPA3 encryption
- D. Authorization: Free mobility and unified authorization

**Answer:** ACD

#### Explanation:

Huawei WLAN solutions include multiple security mechanisms to protect wireless networks from threats:

A (WIDS/WIPS air interface attack defense): Wireless Intrusion Detection/Prevention System (WIDS/WIPS) detects and mitigates rogue APs and other air interface threats. C (WPA3 encryption): Latest Wi-Fi security standard providing stronger encryption and protection against brute-force attacks.

D (Authorization: Free mobility and unified authorization): Ensures that users maintain consistent access policies regardless of location, improving security and compliance. Reference: HCSA-Presales-IP Network Official Documentation – WLAN Security Features

#### NEW QUESTION 4

A local area network (LAN) connects computers, servers, and network devices in a geographic area, generally within several thousand square meters. A typical LAN can be a company's office network, an Internet cafe's network, or a home network.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

A Local Area Network (LAN) connects devices within a limited geographic area such as an office, campus, or home.

LANs typically include: Switches

Routers Access Points

Computers, printers, and other end devices

LANs operate using Ethernet or Wi-Fi and provide high-speed communication and resource sharing within the network.

Unlike WANs (Wide Area Networks), LANs do not rely on carrier-leased connections and cover smaller areas.

Reference: HCSA-Presales-IP Network Official Documentation – LAN and Network Fundamentals

#### NEW QUESTION 5

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:**

Understanding Overlay Topologies in SD-WAN:

In Huawei's SD-WAN solution, overlay networks are created on top of the physical underlay network. These overlays can be customized based on specific services or applications.

Service Independence:

Different service topologies (e.g., voice, video, data) are independent of each other, allowing granular control over traffic paths, QoS policies, and security settings.

Conclusion: The statement is TRUE because overlay topologies in Huawei's SD-WAN solution are service-specific and operate independently.

References:

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

Huawei SD-WAN Solution Brochure.

**NEW QUESTION 6**

SRv6 can traverse all types of private lines for traffic optimization. Huawei NetEngine AR821 E can support SRv6.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Understanding SRv6 Capabilities:

SRv6 (Segment Routing over IPv6) is a next-generation networking technology that enables flexible traffic engineering and seamless traversal across different types of private lines.

Huawei NetEngine AR821 E Support for SRv6:

The NetEngine AR821 E router supports SRv6, making it suitable for SD-WAN and WAN deployments where traffic optimization and path control are critical.

Conclusion: The statement is TRUE because SRv6 can traverse all types of private lines, and the NetEngine AR821 E supports SRv6.

References:

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

**NEW QUESTION 7**

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 8**

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 9**

Which of the following security zones are preset on a firewall by default?

- A. DMZ
- B. Local
- C. Untrust
- D. Trust

**Answer:** ABCD

**Explanation:**

Huawei firewalls come preconfigured with several default security zones, each serving a specific purpose:

DMZ (Demilitarized Zone): A buffer zone between the internal network and external networks, often used to host public-facing servers like web servers.

Local: Represents the firewall itself. Traffic destined for the firewall (e.g., management traffic) is associated with this zone.

Untrust: Represents external, untrusted networks such as the Internet. Security policies typically restrict traffic from this zone.

Trust: Represents internal, trusted networks. Traffic within this zone is generally considered safe.

These zones form the foundation of firewall security policies, allowing administrators to control traffic flows between different parts of the network.

References:

HCSA-Presales-IP Network Study Guide, Section: "Firewall Security Zones and Policies." Huawei Firewall Product Documentation, Default Security Zones.

**NEW QUESTION 10**

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 10**

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 12**

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 16**

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 17

Which of the following public cloud platforms is not supported by Huawei virtual router AR1000V?

- A. Amazon Web Services (AWS)
- B. Alibaba Cloud
- C. Baidu Cloud
- D. Tencent Cloud

**Answer:** C

#### Explanation:

The AR1000V is a virtual router designed for deployment in public and private cloud environments. It supports integration with major cloud platforms, including: Amazon Web Services (AWS): Fully supported for hybrid cloud and SD-WAN deployments. Alibaba Cloud: Supported for seamless connectivity in Alibaba's cloud ecosystem.

Tencent Cloud: Supported for enterprise-grade cloud networking.

However, Baidu Cloud is not officially supported by the AR1000V, making it the correct answer. This limitation may be due to compatibility or strategic partnerships with other cloud providers.

References:

HCSA-Presales-IP Network Study Guide, Section: "AR1000V Cloud Platform Compatibility."

Huawei AR1000V Product Documentation, Supported Cloud Platforms.

#### NEW QUESTION 18

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 19

Which of the following switches does not support two power modules?

- A. S5735-L
- B. S5732-H
- C. S5731-S24P4X
- D. S5736-S24T4XC

**Answer:** A

#### Explanation:

The Huawei CloudEngine S5735-L series switches are entry-level switches designed for small to medium-sized networks. These switches do not support dual power modules , as they are intended for environments where redundancy is not a primary requirement.

In contrast:

The S5732-H, S5731-S24P4X, and S5736-S24T4XC switches all support dual power modules, providing redundancy and ensuring stable operation in more demanding environments.

Thus, the switch that does not support two power modules is the S5735-L .

References: Huawei CloudEngine S5735-L Series Switch Hardware Guide, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 20

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 21

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-Fabric is an AI-powered SDN controller for data center networks, offering automated rollback functions to prevent misconfigurations.

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

(B) Service-Level Rollback (True): Enables rollback of individual network services without affecting other operations.

(C) Network-Wide Rollback (True): Provides a full network rollback to 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 24

Which of the following statements are true?

- A. The CloudEngine S5731-S supports VXLAN and can be used for VXLAN deployment across core and access layers.
- B. The CloudEngine S6730-H24X6C/S6730-H48X6C supports six 100GE ports, which can be auto-negotiated to 40GE ports.
- C. The CloudEngine S5731-H supports native AC and can be used as the core of a small-sized network.
- D. The CloudEngine S8706 switch supports four independent service slots and two main control board slots with service ports.

**Answer:** BC

#### Explanation:

Let us analyze each statement in detail:

The CloudEngine S5731-S supports VXLAN and can be used for VXLAN deployment across core and access layers : This statement is false . The CloudEngine S5731-S series does not support VXLAN. VXLAN capabilities are typically found in higher-end switches like the S5731-H or S6730-H series.

The CloudEngine S6730-H24X6C/S6730-H48X6C supports six 100GE ports, which can be auto-negotiated to 40GE ports : This statement is true . The S6730-H series switches support six 100GE ports that can be auto-negotiated to 40GE ports, providing flexibility for high-speed connectivity.

The CloudEngine S5731-H supports native AC and can be used as the core of a small-sized network : This statement is true . The S5731-H series supports native Access Controller (AC) functionality, enabling it to act as the core switch in small-sized networks while managing wireless APs.

The CloudEngine S8706 switch supports four independent service slots and two main control board slots with service ports : This statement is false . The S8706 switch supports six independent service slots and two main control board slots. The description provided in the statement is incorrect.

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

Huawei CloudEngine Switch Series Product Documentation, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 25

In Huawei's SD-WAN solution, the RR is a key node and does not participate in service traffic forwarding. However, if the RR fails, service traffic on the entire network will be interrupted. Therefore, the RR is typically deployed in redundancy mode.

- A. TRUE
- B. FALSE

**Answer:** B

#### Explanation:

In Huawei's SD-WAN solution, the Route Reflector (RR) plays a critical role in distributing routing information across the network. However, the RR does not directly participate in service traffic forwarding. Its primary function is to facilitate efficient route exchange between SD-WAN nodes.

If the RR fails, it may temporarily disrupt the distribution of routing updates, but it will not interrupt service traffic on the entire network. Service traffic continues to flow through established paths until the RR is restored or redundancy mechanisms take effect.

To ensure high availability, the RR is often deployed in redundancy mode, but the claim that its failure will interrupt all service traffic is FALSE .

References:

Huawei SD-WAN Solution Architecture, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 30

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 31

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 34

Which of the following methods can be used to integrate IoT modules or functions into Huawei IoT APs?

- A. USB interface
- B. Built-in IoT chip
- C. PCIe interface
- D. PoE out port

**Answer:** ABC

#### Explanation:

Comprehensive and Detailed in Depth Explanation: Huawei IoT APs support multiple methods for integrating IoT modules or functionalities:

Option A: The USB interface allows external IoT modules to be connected to the AP, enabling flexible expansion.

Option B: Some Huawei IoT APs come with built-in IoT chips, providing native support for IoT protocols like RFID and Bluetooth.

Option C: The PCIe interface is another method for integrating IoT modules, offering high- speed connectivity for advanced IoT applications.

Option D: The PoE out port is used to power external devices but does not directly integrate IoT functionality.

These integration methods ensure that Huawei IoT APs can adapt to various IoT use cases, such as asset tracking, environmental monitoring, and smart building management. References:

Huawei HCSA-Presales-IP Network Documentation: IoT Integration in WLAN APs Huawei AirEngine Series Product Specifications

#### NEW QUESTION 38

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 42

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 47**

The data center autonomous driving network standard promoted by both industry and Huawei falls into six levels. The highest level is L5: full autonomous network.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Autonomous Driving Network (ADN) Levels:

The ADN standard defines six levels (L0 to L5), ranging from manual operations (L0) to fully autonomous operations (L5).

Highest Level (L5):

AtL5, the network achieves full autonomy, capable of self-configuration, self-optimization, and self-healing without human intervention.

Conclusion:The statement is TRUE because the highest level of the ADN standard is indeed L5: full autonomous network.

References:

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

**NEW QUESTION 52**

Which protocol is used inHuawei's SD-WAN solutiontoencrypt user data?

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

**Answer:** A

**Explanation:**

IPsec (Internet Protocol Security)is theprimary encryption protocolused inHuawei's SD- WAN solutionforsecuring site-to-site and remote access connections. Why not other options?

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

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

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

**NEW QUESTION 54**

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'sSD-WAN solutionsupports 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 58**

Which of the following switches does not support two power modules?



- A. S5736-S24T4XC
- B. S5732-H
- C. S5731-S24P4X
- D. S5735-L

**Answer:** D

**Explanation:**

Power Module Support in Huawei Switches:

Many Huawei switches are designed with dual power module slots to ensure redundancy and reliability. However, some lower-end models may not support this feature.

Analysis of Each Switch:

S5736-S24T4XC: This switch supports dual power modules for redundancy. S5732-H: This switch also supports dual power modules.

S5731-S24P4X: This switch supports dual power modules.

S5735-L: This switch is a lower-end model and does not support dual power modules, making it less suitable for environments requiring high reliability.

Conclusion: The S5735-L series switch does not support two power modules. References:

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

**NEW QUESTION 63**

Huawei CloudEngine 12700E is modular design whose fan modules support hot swapping. Installation or removal of a fan module does not affect other fans.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

The Huawei CloudEngine 12700E series switches are designed with modularity and high reliability in mind. One of their key features is the ability to perform hot swapping of components, including fan modules. Hot swapping allows users to install or remove fan modules without shutting down the switch or affecting the operation of other fan modules. This ensures continuous cooling and minimizes downtime during maintenance.

The statement is therefore TRUE, as it accurately reflects the capabilities of the CloudEngine 12700E series.

References:

Huawei CloudEngine 12700E Series Switch Hardware Guide, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 66**

Huawei's hybrid optical-electrical cables 2.0 support ultra-long-distance transmission and power supply. The PoE+ power supply distance can be extended to 600 meters.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Huawei's Hybrid Optical-Electrical Cables 2.0 provide both data transmission and power supply in a single cable, enabling:

Ultra-long PoE+ power supply up to 600 meters, significantly extending traditional PoE+ limits (~100m).

Reduces the need for additional power outlets, simplifying deployment in large-scale campuses and outdoor scenarios.

Supports Wi-Fi 6 APs, cameras, and IoT devices over long distances.

Reference: HCSA-Presales-IP Network Official Study Guide, Hybrid Optical-Electrical Cables Section

**NEW QUESTION 69**

In order to increase the redundancy of leaf switches, we can use stack or M-LAG technology. However, Huawei CloudEngine 6881 cannot support M-LAG.

- A. TRUE
- B. FALSE

**Answer:** B

**Explanation:**

The Huawei CloudEngine 6881 is a high-performance data center switch that supports both stacking and M-LAG (Multichassis Link Aggregation Group) technologies. M-LAG is a key feature for increasing redundancy and reliability in leaf-spine architectures by enabling two switches to act as a single logical device for link aggregation.

The claim that the CE6881 does not support M-LAG is FALSE, as this model fully supports M-LAG to enhance network availability and fault tolerance.

References:

Huawei CloudEngine 6881 Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 72**

In Huawei's SD-WAN solution, to reduce the impact of packet loss on user services, you are advised to enable Forward Error Correction (FEC) for all traffic.

- A. TRUE
- B. FALSE

**Answer:** B

**Explanation:**

While Forward Error Correction (FEC) is a valuable feature in Huawei's SD-WAN solution for mitigating packet loss, it is not recommended to enable FEC for all traffic. FEC introduces additional overhead by transmitting redundant data, which can consume bandwidth and degrade performance for non-critical traffic. Instead, FEC should be selectively enabled for sensitive applications (e.g., real-time voice and video) where packet loss has a significant impact. This approach balances

performance and resource utilization effectively. References:  
HCSA-Presales-IP Network Study Guide, Section: "SD-WAN Packet Loss Mitigation Techniques."  
Huawei SD-WAN Solution Documentation, FEC Configuration Guidelines.

#### NEW QUESTION 77

Huawei AirEngine 5761-21 and AirEngine 6761-21T each have a 2.5GE uplink port.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

Both the AirEngine 5761-21 and AirEngine 6761-21T are part of Huawei's Wi-Fi 6 access point lineup and are equipped with 2.5GE uplink ports. These ports provide higher bandwidth capabilities compared to standard Gigabit Ethernet (GE) ports, making them suitable for environments with high data throughput requirements. The inclusion of 2.5GE uplink ports ensures that these APs can handle modern applications like HD video streaming, IoT devices, and cloud-based services without bottlenecks.

References:

HCSA-Presales-IP Network Study Guide, Section: "AirEngine Series Features and Specifications."  
Huawei AirEngine Product Documentation, Uplink Port Details.

#### NEW QUESTION 82

Which of the following are the four highlights ("EASY") of Huawei's CloudFabric Easy Solution?

- A. EasY-Maintenance
- B. Expandability
- C. Simplification
- D. Easy Sales
- E. Automation

**Answer:** ACE

#### Explanation:

Huawei's CloudFabric Easy Solution is designed to simplify data center network deployment and operations. The "EASY" framework highlights the following four key aspects:

EasY-Maintenance : The solution emphasizes simplified operations and maintenance (O&M) through automation and intelligent tools. For example, it leverages AI-powered analytics to predict and resolve issues proactively.

Simplification : CloudFabric Easy focuses on reducing complexity in network design, deployment, and management. It achieves this by integrating advanced technologies like intent-driven networking (IDN) and zero-touch provisioning (ZTP).

Automation : Automation is a cornerstone of the solution, enabling tasks like configuration, provisioning, and troubleshooting to be performed automatically. This minimizes human intervention and reduces the risk of errors.

While "expandability" and "easy sales" are important considerations in network design and marketing, they are not part of the official "EASY" highlights of the CloudFabric Easy Solution.

References:

Huawei CloudFabric Easy Solution Overview, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 83

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 84

Which of the following are the four highlights ("EASY") of Huawei's CloudFabric Easy Solution? (Select All that Apply)

- A. EasY-Maintenance
- B. Expandability
- C. Simplification
- D. Easy Sales
- E. Automation

**Answer:** ACE

#### Explanation:

Overview of Huawei CloudFabric Easy Solution:

Huawei CloudFabric Easy Solution is designed to simplify data center networking through automation, ease of use, and scalability. Its key highlights are summarized under the acronym "EASY."

Explanation of Each Highlight:

EasY-Maintenance:The solution simplifies network operations and maintenance, reducing complexity and operational costs.

Expandability:While expandability is important, it is not one of the four "EASY" highlights explicitly mentioned in the official documentation.

Simplification:The solution focuses on simplifying network deployment, configuration, and management.

Easy Sales:This is not part of the "EASY" highlights. The term refers to technical benefits rather than sales processes.

Automation:The solution leverages automation to streamline tasks such as provisioning, monitoring, and troubleshooting.

Conclusion:The four highlights of Huawei CloudFabric Easy Solution are EasY- Maintenance, Simplification, and Automation.

References:

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

Huawei CloudFabric Solution Brochure.

#### NEW QUESTION 86

Which option is the product having a wired side and a wireless side? On the wired side, APs connect to the campus network using Ethernet. On the wireless side, APs connect to downstream wireless terminals using the 802.11 protocol.

- A. LAN
- B. WAN
- C. WLAN
- D. MAN

**Answer:** C

#### Explanation:

AWLAN (Wireless Local Area Network) is a network that connects wireless devices (Wi-Fi terminals) via access points (APs) using the 802.11 protocol.

(A) LAN – False: A LAN is a broader concept that includes both wired and wireless networks.

(B) WAN – False: A WAN connects geographically distant networks, not local wireless devices.

(C) WLAN – True: APs connect to the wired network via Ethernet and provide wireless connectivity to devices.

(D) MAN – False: A MAN (Metropolitan Area Network) spans a city or large area, not limited to wireless connectivity.

Reference: HCSA-Presales-IP Network Official Study Guide, WLAN Fundamentals Section

#### NEW QUESTION 87

Huawei datacom portfolio comprises "Four Engines" products + Integrated management, control, and analysis platform. Which one is not belong to Huawei datacom "Four Engines"?

- A. AREngine
- B. NetEngine
- C. CloudEngine
- D. AirEngine

**Answer:** A

#### Explanation:

Huawei's datacom portfolio includes the "Four Engines," which represent key product lines for different networking domains:

NetEngine: High-performance routers for enterprise WAN and data center interconnects. CloudEngine: Data center switches designed for high-density, low-latency environments. AirEngine: Wireless access points (APs) for Wi-Fi 6 and beyond.

HiSecEngine: Security products, including firewalls and intrusion prevention systems. The option AREngine does not belong to the "Four Engines" lineup. It appears to be unrelated to Huawei's official datacom product categories.

References:

HCSA-Presales-IP Network Study Guide, Section: "Huawei Datacom Portfolio Overview." Huawei Product Catalog, Four Engines Framework.

#### NEW QUESTION 91

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

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

**Answer:** ABCD

#### Explanation:

The evolution of data centers has progressed through several distinct phases, driven by advancements in technology and changing business requirements. Below is an analysis of each phase:

Centralized : Early data centers were centralized, with all resources (servers, storage, and networking) located in a single physical location. This model was simple but lacked scalability and flexibility.

Multi-site and multi-cloud : Modern data centers often span multiple physical locations and integrate with public, private, and hybrid clouds. This phase emphasizes distributed architectures and cloud-native applications.

Distributed : As workloads grew, data centers evolved into distributed models, where resources are spread across multiple sites to improve redundancy, scalability, and performance.

Virtualization : Virtualization technologies enabled the abstraction of physical resources, allowing multiple virtual machines (VMs) or containers to run on a single physical server. This phase significantly improved resource utilization and flexibility.

All four options represent key phases in the evolution of data centers. References:

Huawei Data Center Network Evolution White Paper, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 93

Huawei CE6863E-48S6CQ supports hardware-based BFD, minimum packet sending interval of 3.3s.

- A. TRUE

B. FALSE

**Answer:** B

**Explanation:**

The Huawei CE6863E-48S6CQ switch supports hardware-based Bidirectional Forwarding Detection (BFD), which enables rapid fault detection in the network. However, the claim that the minimum packet sending interval is 3.3 seconds is incorrect.

Hardware-based BFD typically supports much shorter intervals, often in the range of milliseconds (e.g., 3.3 ms, not 3.3 seconds). This ensures fast detection of link failures and minimizes downtime.

Thus, the statement is FALSE due to the incorrect interval value. References:

Huawei CloudEngine CE6863E-48S6CQ Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 97**

MACsec is an important feature to ensure security and reliability. Which of the following routers can support MACsec? (Select All that Apply)

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

**Answer:** AC

**Explanation:**

Understanding MACsec:

MACsec (Media Access Control Security) provides Layer 2 encryption to secure data transmission between network devices, ensuring confidentiality and integrity.

Analysis of Each Model:

NetEngine 8000 M6: This model supports MACsec, making it suitable for secure WAN and DCI deployments.

NetEngine 8000 MIC: This model does not support MACsec.

NetEngine 8000 F1A: This model supports MACsec, enabling secure communication in high-performance networks.

NetEngine 8000 MIA: This model does not support MACsec.

Conclusion: The correct models supporting MACsec are Options A (NetEngine 8000 M6) and C (NetEngine 8000 F1A).

References:

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

Huawei NetEngine 8000 Series Product Documentation.

**NEW QUESTION 101**

An enterprise WAN mainly implements cross-region interconnection. Which of the following interconnections are implemented on the enterprise WAN?

- A. Enterprise headquarters and branches
- B. Carrier networks and enterprise networks
- C. Enterprise campus networks and data centers
- D. Enterprise office networks and enterprise production networks

**Answer:** ACD

**Explanation:**

An enterprise WAN (Wide Area Network) is designed to connect geographically dispersed locations within an organization. The primary interconnections include:

Option A: Enterprise headquarters and branches are commonly interconnected via WAN to enable centralized management and resource sharing.

Option B: Carrier networks and enterprise networks are not part of the enterprise WAN itself but represent external connectivity provided by service providers.

Option C: Enterprise campus networks and data centers are interconnected to ensure seamless access to centralized resources and applications.

Option D: Enterprise office networks and production networks are interconnected to facilitate collaboration and operational efficiency.

These interconnections form the backbone of an enterprise WAN, enabling cross-region communication and resource sharing.

References:

Huawei HCSA-Presales-IP Network Documentation: Enterprise WAN Architecture Huawei Enterprise Networking Solutions Overview

**NEW QUESTION 104**

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

**Answer:** ABCE

**Explanation:**

Huawei's CloudWAN 3.0 solution introduces several innovative features to modernize wide-area networks (WANs):

One-click fast scheduling: Simplifies resource allocation and improves efficiency using SDN and intelligent algorithms.

One-fiber multipurpose transport: Enables multiple services (e.g., Internet, private lines) to share a single fiber, reducing costs.

One-network wide connection: Provides seamless connectivity across diverse locations and devices.

One-hop cloud access: Ensures direct and efficient access to cloud services, reducing latency.

The option "One-click maintenance" is not explicitly highlighted as a key feature of CloudWAN 3.0. While maintenance tools exist, they are not marketed as a core highlight of this solution.

References:

HCSA-Presales-IP Network Study Guide, Section: "CloudWAN 3.0 Key Features." Huawei CloudWAN Solution Documentation, Intelligent Cloud-Network Era.

**NEW QUESTION 109**



The major difference between Huawei S5731-H and S5731-S switches in software features is the VXLAN function.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

The S5731-H and S5731-S are part of Huawei's CloudEngine S series switches, but they differ in their software capabilities. Specifically:  
S5731-H: Supports advanced features like VXLAN (Virtual Extensible LAN), which enables network virtualization and scalable overlay networks.  
S5731-S: Lacks VXLAN support, making it suitable for simpler deployments without virtualization requirements.  
This distinction is critical when selecting switches for environments that require advanced virtualization and cloud integration.  
References:  
HCSA-Presales-IP Network Study Guide, Section: "Huawei Campus Switch Models and Features."  
Huawei CloudEngine S5731 Series Product Documentation.

**NEW QUESTION 113**

Huawei CloudEngine S12700E is Huawei's high-end campus modular switch. Which of the following are Huawei CloudEngine S12700E highlight features?

- A. Ultra-large buffer and HQoS scheduling, delivering optimal user experience of key applications
- B. Powerful slot forwarding capability, building Wi-Fi 6 high-speed channels
- C. Control and switching separation, on-demand configuration, and flexible capacity expansion
- D. Redundancy design for key components, ensuring 99.999% reliability

**Answer:** ABCD

**Explanation:**

The Huawei CloudEngine S12700E series is a high-end modular switch designed for enterprise campus networks. Below are the explanations for each highlighted feature:  
Ultra-large buffer and HQoS scheduling, delivering optimal user experience of key applications : The S12700E series features a large buffer and advanced Hierarchical Quality of Service (HQoS) scheduling, ensuring smooth performance for critical applications even under heavy traffic conditions.  
Powerful slot forwarding capability, building Wi-Fi 6 high-speed channels : The switch supports high-speed forwarding capabilities, making it ideal for supporting Wi-Fi 6 networks and handling the increased bandwidth demands of modern applications.  
Control and switching separation, on-demand configuration, and flexible capacity expansion : The S12700E adopts a control-switching separation architecture, allowing users to configure resources on demand and expand capacity flexibly as needed.  
Redundancy design for key components, ensuring 99.999% reliability : The switch includes redundant power supplies, fans, and control boards, ensuring high availability and reliability for mission-critical environments.  
All four options are valid highlight features of the CloudEngine S12700E series. References:  
Huawei CloudEngine S12700E Series Switch Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 115**

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 120**

Which of the following are dynamic routing protocols? (Select All that Apply)

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

**Answer:** ABCD

**Explanation:**

Dynamic Routing Protocols Overview:  
Dynamic routing protocols enable routers to exchange routing information dynamically, allowing them to adapt to changes in the network topology automatically.  
Explanation of Each Protocol:  
OSPF (Open Shortest Path First): A link-state routing protocol that uses the Dijkstra algorithm to calculate the shortest path to destinations. It is widely used in enterprise networks.  
IS-IS (Intermediate System to Intermediate System): Another link-state routing protocol, similar to OSPF, but primarily used in service provider networks.  
RIP (Routing Information Protocol): A distance-vector routing protocol that uses hop count as its metric. It is simple but less scalable compared to OSPF and IS-IS.  
BGP (Border Gateway Protocol): A path-vector routing protocol used for inter-domain routing (e.g., between autonomous systems). It is the backbone of the Internet.  
Conclusion: All four options (OSPF, IS-IS, RIP, and BGP) are dynamic routing protocols. References:  
HCSA-Presales-IP Network V3.0 Training Material, Chapter 2: IP Routing Protocols. Huawei Enterprise Networking Product Documentation.

#### NEW QUESTION 121

What are the common Huawei WLAN networking modes?

- A. Independent Fat AP networking
- B. Cloud management networking
- C. WAC + Fit AP networking
- D. AC-free self-networking of the leader AP

**Answer:** ABCD

#### Explanation:

Huawei WLAN solutions support multiple networking modes to adapt to different enterprise requirements:

- (A) Independent Fat AP Networking (True): Each AP operates independently without a Wireless Access Controller (WAC). Suitable for small-scale networks.
  - (B) Cloud Management Networking (True): Uses Huawei CloudCampus to manage APs remotely via iMaster NCE-Campus. Ideal for large, multi-branch enterprises.
  - (C) WAC + Fit AP Networking (True): Centralized WAC (Wireless Access Controller) manages Fit APs, optimizing performance and security.
  - (D) AC-Free Self-Networking of the Leader AP (True): A leader AP acts as a mini-controller, managing other APs without a WAC. Used in small to medium networks.
- Reference: HCSA-Presales-IP Network Official Study Guide, WLAN Networking Modes

#### NEW QUESTION 124

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