MEF Software-Defined Wide Area Network (SD-WAN) Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. What capabilities does the overlay SD-WAN fabric provide?

A. Application-aware routing, policy enforcement, encryption, and tunnel management across underlays.

B. Only hardware cabling and physical wiring.

C. Only firewalling at the network edge with no routing.

D. Only monitoring without any policy control.

2. Which protocol provides single-hop link failure detection within 50 ms?

A. BGP

B. RIP

C. BFD

D. IPv4

3. Which metric measures the percentage of time that the service is usable?

A. Frame Delay(FD)

B. Frame Loss Ratio(FLR)

C. Availability

D. Inter-frame Delay Variation(IFDV)

4. Which term would you consult to see the IP prefixes reserved by the service provider?

A. SWVC List of Policies

B. SWVC Reserved Prefixes

C. SWVC Endpoint List

D. SWVC List of Application Groups

5. Which tool is used to determine reachability and round-trip time using ICMP echo requests?

A. TRACERT

B. NSLOOKUP

C. FTP

D. PING

6. The SD-WAN UNI Maximum L2 Frame size must be at least 1522 bytes.

A. True

B. False

C. Not specified

D. Unknown

7. Which protocol determines routing paths by computing shortest-path trees and exchanging link-state information?

A. BGP

B. OSPF

C. RIP

D. EIGRP

8. What is the type that is an integer greater than or equal to 1522?

A. SWVC End Point Map

B. SD-WAN UNI Maximum L2 Frame size

C. Cantata

D. Legato

9. Explain MEF's notion of service level agreement (SLA) in SD-WAN.

A. An SLA is a list of hardware requirements for devices.

B. An SLA defines performance targets (latency, jitter, packet loss, uptime) for applications or services across the SD-WAN fabric, with telemetry used to measure and enforce compliance.

C. An SLA is a human-manual report of outages.

D. An SLA defines pricing for services.

10. Which protocol is commonly used as a southbound protocol between a software-defined network controller and network devices?

A. OpenFlow

B. SNMP

C. Protobuf

D. SSH

Answers

1. A
2. C
3. C
4. B
5. D
6. A
7. B
8. B
9. B
10. A

Explanations

1. What capabilities does the overlay SD-WAN fabric provide?

A. Application-aware routing, policy enforcement, encryption, and tunnel management across underlays.

B. Only hardware cabling and physical wiring.

C. Only firewalling at the network edge with no routing.

D. Only monitoring without any policy control.

The overlay SD-WAN fabric exists to orchestrate traffic across diverse underlying networks by bringing control, security, and intelligence together in one space. It enables application-aware routing, meaning the network can recognize different applications and steer their traffic along the best paths based on real-time conditions and policy. It enforces policies consistently across all sites—branches, data centers, and cloud connections—so security rules, QoS, and access controls apply everywhere, not just at a single edge. It also provides encryption to protect data as it traverses any path, ensuring confidentiality across the entire fabric. Finally, it manages tunnels between sites, creating and maintaining secure connections across the various underlays and automatically adjusting as networks change or failover is needed. The other options describe only parts of the picture (physical cabling, edge firewalling with no routing, or monitoring without policy), but they don't capture how the overlay fabric combines routing decisions, policy enforcement, security, and tunnel management across multiple transport networks.

2. Which protocol provides single-hop link failure detection within 50 ms?

A. BGP

B. RIP

C. BFD

D. IPv4

Fast detection of a failed link between two directly connected devices is what Bidirectional Forwarding Detection is designed for. BFD is a lightweight protocol that two endpoints run on the same link, exchanging small control packets at a very short interval and using a configurable detection time. If packets stop arriving, the session is considered down quickly—often in the low milliseconds range—so the forwarding plane can trigger fast reroute or failover. This rapid, single-hop failure detection is exactly what you need for quick reaction in SD-WAN scenarios. In contrast, BGP relies on a TCP session between neighbors with its own keepalive/hold timers, which are typically much longer and geared toward routing convergence rather than ultra-fast link failure detection. RIP uses periodic updates (classic implementations around 30 seconds), so failure detection can take many seconds. IPv4 itself is just the addressing protocol and does not define a rapid link-failure detection mechanism. Therefore, the fastest, single-hop link failure detection within about 50 ms is provided by Bidirectional Forwarding Detection.

3. Which metric measures the percentage of time that the service is usable?

A. Frame Delay(FD)

B. Frame Loss Ratio(FLR)

C. Availability

D. Inter-frame Delay Variation(IFDV)

Availability is the metric that captures whether the service is usable over time. It expresses the percentage of total monitoring time during which the service is up and reachable, reflecting uptime and any periods of downtime. It's typically calculated as (uptime / total time) × 100, so even brief outages reduce the percentage. Frame Delay measures latency, Frame Loss Ratio tracks how many frames are lost, and Inter-frame Delay Variation looks at jitter; these reflect quality and performance rather than overall uptime. So availability best quantifies the fraction of time the service remains usable.

4. Which term would you consult to see the IP prefixes reserved by the service provider?

A. SWVC List of Policies

B. SWVC Reserved Prefixes

C. SWVC Endpoint List

D. SWVC List of Application Groups

In SD-WAN planning, you need to know which IP prefixes the service provider has set aside so you don't allocate addresses that could clash with the provider's own infrastructure. The term to consult is SWVC Reserved Prefixes. This collection lists the IP blocks the provider reserves for their own use, management, or backbone routing, helping you choose customer prefixes that won't overlap with those ranges. When designing your overlay addressing, you'll select from outside these reserved ranges to maintain clean, conflict-free routing. Other items you might encounter—policies, endpoint inventories, and application groupings—address rules, devices, or traffic categories, not reserved address blocks, so they don't serve this purpose.

5. Which tool is used to determine reachability and round-trip time using ICMP echo requests?

A. TRACERT

B. NSLOOKUP

C. FTP

D. PING

Ping is the tool designed for this purpose. It sends an ICMP Echo Request to a destination and waits for an ICMP Echo Reply. If a reply comes back, the host is reachable; the time between sending the request and receiving the reply is the round-trip time, which gives you a quick measure of latency to that endpoint. This simple, end-to-end test is exactly what ICMP echo requests are for. Other tools differ in their primary use: tracing the path to a destination (which shows per-hop RTT and route details) or performing unrelated tasks like DNS lookups or file transfers, so they aren't as suited to measuring end-to-end reachability and latency with ICMP echo.

6. The SD-WAN UNI Maximum L2 Frame size must be at least 1522 bytes.

A. True

B. False

C. Not specified

D. Unknown

The important idea is how Ethernet frame size changes when VLAN tagging is added. A standard Ethernet frame can carry up to 1500 bytes of payload, plus 14 bytes for the header and 4 bytes for the FCS, totaling 1518 bytes. When a single VLAN tag (802.1Q) is added, that tag adds 4 bytes, so the maximum frame size becomes 1522 bytes. In SD-WAN UNI deployments, customer traffic is often VLAN-tagged as it traverses the WAN, so the UNI must support frames up to at least 1522 bytes to avoid fragmentation or drops. That makes the statement true. Frames with additional tagging (like QinQ) could be larger, but 1522 is the baseline the UNI must handle.

7. Which protocol determines routing paths by computing shortest-path trees and exchanging link-state information?

A. BGP

B. OSPF

C. RIP

D. EIGRP

Determining routing paths by computing a shortest-path tree from a complete view of the network is the hallmark of a link-state routing approach. In a link-state protocol, every router disseminates its local link information to all other routers in the same area, building a common, up-to-date map of the network—the link-state database. Each router then runs a shortest-path algorithm (Dijkstra's SPF) on that map to derive the best path to every destination, based on a cost metric such as link speed. This yields fast convergence and scalable hierarchical design when the network is divided into areas. OSPF embodies this approach: it floods link-state advertisements to construct the topology database, and every router uses the SPF algorithm to compute the shortest-path tree to all destinations. This combination of a complete topology view and SPF-based routing is what keeps OSPF efficient and scalable in large networks. In contrast, BGP operates as a path-vector protocol driven by policies and AS-path attributes rather than a shared topology and SPF; it doesn't build a network-wide shortest-path tree. RIP uses a distance-vector method, exchanging hop counts and relying on Bellman-Ford, which doesn't construct a full SPF-based map. EIGRP is a hybrid protocol that uses its own distance-vector-like updates and the DUAL algorithm, not a full link-state SPF computation with a flooded topology database.

8. What is the type that is an integer greater than or equal to 1522?

A. SWVC End Point Map

B. SD-WAN UNI Maximum L2 Frame size

C. Cantata

D. Legato

The key idea is the maximum L2 frame size at the SD-WAN UNI. Ethernet frames have a size limit, and when VLAN tagging is used, the maximum frame size becomes 1522 bytes (1518 bytes for the untagged framePlus 4 bytes for the VLAN tag). In MEF SD-WAN terms, the parameter that is defined as an integer representing this limit at the UNI is the SD-WAN UNI Maximum L2 Frame size. Since 1522 (or larger) is the typical bound for VLAN-tagged Ethernet frames, this is the type that fits the description. The other terms refer to different concepts (endpoint mapping or other vendor terms) and do not describe the frame-size limit.

9. Explain MEF's notion of service level agreement (SLA) in SD-WAN.

A. An SLA is a list of hardware requirements for devices.

B. An SLA defines performance targets (latency, jitter, packet loss, uptime) for applications or services across the SD-WAN fabric, with telemetry used to measure and enforce compliance.

C. An SLA is a human-manual report of outages.

D. An SLA defines pricing for services.

In MEF SD-WAN, an SLA defines the expected performance for applications across the network and specifies how that performance will be measured and enforced. It sets targets such as latency, jitter, packet loss, and uptime for particular applications or services, and it clarifies the scope and the measurement methods used to verify compliance. Telemetry—automated collection of performance data from the network—provides the evidence to compare actual performance against the targets and to trigger remediation if thresholds are breached. This continuous, measurable assurance is what keeps service quality predictable across the SD-WAN fabric, even as traffic moves across different paths or links. Other options describe hardware lists, manual outage reports, or pricing, which do not capture the ongoing measurement and enforcement aspect that an SLA provides.

10. Which protocol is commonly used as a southbound protocol between a software-defined network controller and network devices?

A. OpenFlow

B. SNMP

C. Protobuf

D. SSH

In SDN, the controller must program the forwarding behavior of switches, which requires a dedicated channel for control messages to the data plane. OpenFlow is the prototypical southbound protocol for this purpose. It defines the specific messages the controller sends to switches to install, modify, or remove flow entries, request switch state, and coordinate actions like where to forward packets. This standardized, centralized control of how traffic is handled across the network is what enables the SDN paradigm. SNMP focuses on monitoring and managing devices rather than live flow-table programming, so it doesn't provide the necessary control primitives. Protobuf is a data-serialization format used by some APIs, not a protocol designed for controlling switches. SSH is for secure remote login and execution, not for directing how switches forward traffic.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://mefsdwan.examzify.com

We wish you the very best on your exam journey. You've got this!