CERTTREE

QUESTION & ANSWER

Exam   :   **500-220**

Title   :   Engineering Cisco Meraki
             Solutions v1.0

Version   :   DEMO

1.DRAG DROP

Drag and drop the descriptions from the left onto the corresponding MX operation mode on the right.

The MX appliance acts as a layer 2 bridge

This mode is the default mode of operation

DHCP services can be configured on the MX appliance

VLANs cannot be configured

This mode is generally also the default gateway for devices on the LAN

This mode is not recommended at the network perimeter

No address translation is provided

Client traffic to the internet has the source IP rewritten to match the WAN IP of the appliance

Routed mode

Passthrough mode

Answer:

The MX appliance acts as a layer 2 bridge	**Routed mode**
This mode is the default mode of operation	This mode is the default mode of operation
DHCP services can be configured on the MX appliance	This mode is generally also the default gateway for devices on the LAN
VLANs cannot be configured	Client traffic to the internet has the source IP rewritten to match the WAN IP of the appliance
This mode is generally also the default gateway for devices on the LAN	DHCP services can be configured on the MX appliance
This mode is not recommended at the network perimeter	**Passthrough mode**
No address translation is provided	The MX appliance acts as a layer 2 bridge
Client traffic to the internet has the source IP rewritten to match the WAN IP of the appliance	VLANs cannot be configured
	No address translation is provided
	This mode is not recommended at the network perimeter

Explanation:

Routed Mode:

This mode is the default mode of operation

This mode is generally also the default gateway for devices on the LAN

Client traffic to the internet has the source IP rewritten to match the WAN IP of the appliance

DHCP services can be configured on the MX appliance

Passthrough Mode:

The MX appliance acts as a layer 2 bridge

VLANs cannot be configured

No address translation is provided

This mode is not recommended at the network perimeter

This question is related to the topic of MX Addressing and VLANs in the Cisco Meraki documentation. You can find more information about this topic in the MX Addressing and VLANs article or the General MX Best Practices page.

2.When an SSID is configured with Sign-On Splash page enabled, which two settings must be configured for unauthenticated clients to have full network access and not be allow listed? (Choose two.)

A. Controller disconnection behavior

B. Captive Portal strength

C. Simultaneous logins

D. Firewall & traffic shaping

E. RADIUS for splash page settings

Answer: AD

Explanation:

When configuring an SSID with a Sign-On Splash page, to ensure that unauthenticated clients do not have full network access and are not added to the allow list (also known as a whitelist), you would need to adjust settings that relate to client access and network security post-authentication. The two settings that are relevant in this context are:

Controller disconnection behavior

This setting determines what happens if the connection between the access point and the controller (in this case, the Meraki cloud) is lost. If set to restrict access, unauthenticated clients would not be able to access the network if the AP cannot verify their status with the controller.

Firewall & traffic shaping

By configuring firewall and traffic shaping rules, you can restrict network access for unauthenticated clients. Even if they bypass the splash page, they wouldn't be able to access the network fully without proper authentication if the rules are set to block or limit traffic.

3.Refer to the exhibit.

Uplink selection

Global preferences

Primary uplink	WAN 1 ▾
Load balancing	○ Enabled Traffic will be spread across both uplinks in the proportions specified above. Management traffic to the Meraki cloud will use the primary uplink. ⦿ Disabled All Internet traffic will use the primary uplink unless overridden by an uplink preference or if the primary uplink fails.
Active-Active AutoVPN	⦿ Enabled Create VPN tunnels over all of the available uplinks (primary and secondary). ○ Disabled Do not create VPN tunnels over the secondary uplink unless the primary uplink fails.

Flow preferences

Internet traffic	There are no uplink preferences for Internet traffic configured on this network. Add a preference

SD-WAN policies

VPN traffic	**Uplink selection policy**	**Traffic filters**	**Actions**
	Use the uplink that's best for VoIP traffic.	All VoIP & video conferencing	+ ✕
	Prefer WAN 2. Fail over if poor performance for "Conf"	WebEx	+ ✕
	Add a preference		

Custom performance classes ○	**Name**	**Maximum latency (ms)**	**Maximum jitter (ms)**	**Maximum loss (%)**	**Actions**
	Conf	200	50	5	✕
	Create a new custom performance class				

Assuming this MX has established a full tunnel with its VPN peer, how will the MX route the WebEx traffic?

A. WebEx traffic will prefer WAN 2 as long as it meets the thresholds in the "Conf" performance class.

B. WebEx traffic will prefer WAN 1 as it is the primary uplink.

C. WebEx traffic will prefer WAN 2 as long as it is up.

D. WebEx traffic will be load-balanced between both active WAN links.

Answer: A

Explanation:

Assuming this MX has established a full tunnel with its VPN peer, the MX will route the WebEx traffic based on the SD-WAN policy configured in the exhibit. The SD-WAN policy has two performance classes: Conf and Default. The Conf performance class matches the traffic with destination port 9000, which is used by WebEx for VoIP and video RTP3. The Conf performance class has a preferred uplink of WAN 2 and a failover uplink of WAN 1. It also has thresholds for latency, jitter, and loss that determine when to switch from the preferred uplink to the failover uplink. Therefore, the WebEx traffic will prefer WAN 2 as long as it meets the thresholds in the Conf performance class. If WAN 2 exceeds the thresholds or goes down, the WebEx traffic will switch to WAN 1 as the failover uplink.

4.For which two reasons can an organization become "Out of License"? (Choose two.)

A. licenses that are in the wrong network

B. more hardware devices than device licenses

C. expired device license

D. licenses that do not match the serial numbers in the organization

E. MR licenses that do not match the MR models in the organization

Answer: BC

Explanation:

More hardware devices than device licenses: An organization needs to have enough device licenses to cover all the hardware devices in its network. A device license is consumed by each device that is added to the network. If the number of devices exceeds the number of licenses, the organization will be out of license and will lose access to some features and support until it purchases more licenses or removes some devices4.

Expired device license: A device license has an expiration date that depends on the license term purchased by the organization. If a device license expires, it will no longer be valid and will not count towards the license limit. The organization will need to renew the expired license or purchase a new one to avoid being out of license4.

Reference:

https://documentation.meraki.com/General_Administration/Licensing/Meraki_Licensing_FAQs

5.Refer to the exhibit.

Which two actions are required to optimize load balancing asymmetrically with a 4:1 ratio between links? (Choose two.)

A. Change the primary uplink to "none".

B. Add an internet traffic preference that defines the load-balancing ratio as 4:1.

C. Enable load balancing.

D. Set the speed of the cellular uplink to zero.

E. Change the assigned speeds of WAN 1 and WAN 2 so that the ratio is 4:1.

Answer: CE

Explanation:

To clarify, to optimize load balancing asymmetrically with a 4:1 ratio between links, two actions that are required are:

Enable load balancing: This option allows the MX to use both of its uplinks for load balancing. When load balancing is enabled under Security & SD-WAN > Configure > SD-WAN & Traffic shaping, traffic flows will be distributed between the two uplinks proportional to the WAN 1 and WAN 2 bandwidths specified under Uplink configuration1.

Change the assigned speeds of WAN 1 and WAN 2 so that the ratio is 4:1: The assigned speed of a WAN link is a value that indicates the bandwidth available on that link. By changing the assigned speeds

of WAN 1 and WAN 2 so that they reflect the desired load-balancing ratio, the administrator can ensure that the MX uses both links efficiently and proportionally1. For example, if WAN 1 has a bandwidth of 100 Mbps and WAN 2 has a bandwidth of 25 Mbps, then setting their assigned speeds to 100 Mbps and 25 Mbps respectively will achieve a 4:1 load-balancing ratio.