SD-WAN Policy Criteria specification and interaction

Each Service Provider supports a set of Policy Criteria that can include both criteria from the list in Table 3 as well as other criteria defined by the Service Provider (see [R19] and [R20]). For a given SD-WAN Service, the Subscriber and the Service Provider agree (via this Service Attribute) on the criteria that will be used. This may be the entire set of Policy Criteria supported by the Service Provider or a subset.

[R21] Every Policy agreed to between the Subscriber and the Service Provider for a given SD-WAN Service **MUST** include values for the same set of Policy Criteria.

[R22] For an Ingress IP Packet mapped to a given Application Flow, if the Service Provider cannot forward the packet to the egress UNI over an Underlay Connectivity Service (or a sequence of Underlay Connectivity Services) that meets the Policy for that Application Flow, the packet MUST be discarded.

[R21] requires that every Policy in an SD-WAN Service has the same set of Policy Criteria. This ensures that all Policies are deterministic, i.e., it avoids the "don't know" situation. If, for example, the ENCRYPTION Policy Criterion were to be used in Policy A but not in Policy B, then when an IP Packet arrives for an Application Flow that has been assigned Policy B, there is no way to determine whether or not it has to be encrypted. There are no "default" values.

[R22] indicates that two conditions must be met for an IP Packet to be forwarded by the SD-WAN Service:

- A forwarding path exists i.e., a UCS or sequence of UCS is available to carry the IP Packet to its destination UNI, and
- The forwarding path meets the Policy assigned to the Application Flow

A few of the Policy Criteria descriptions in the following section refer to a TVC or UCS as being available or not available. Being "available" in this context means that it meets these two conditions. It is the Service Provider's responsibility to ensure that these conditions are met, but there can be transient and failure situations when they are not met.

It is possible that some Policy Criteria aren't relevant for a particular Policy. In that case the Policy Criterion has a value that indicates that it should not be used to determine how the associated Application Flow is forwarded (this value is usually Either or Any).

Status PUBLISHED

Exam Study Requirement

MEF-SDCP Exam Study Reference

Source(s) and Reference(s)

MEF 70 - SD-WAN Service Attributes and Services Definition

Related and Further Reading

- SWVC End Point Policy Map
- SD-WAN Virtual Connection (SWVC) Service Attributes
- SD-WAN UNI L2 Interface Service Attribute
- SD-WAN Virtual Connection (SWVC) Identifier Service Attribute
- SD-WAN Virtual Connection (SWVC) End Point List Service Attribute
- SD-WAN Virtual Connection (SWVC) Reserved Prefixes Service Attribute
- SD-WAN Virtual Connection (SWVC) Service Uptime Objective Service Attribute
- SD-WAN Virtual Connection (SWVC) List of Policies Service Attribute
- SD-WAN Virtual Connection (SWVC) List of Application Flows Service Attribute
- SD-WAN Virtual Connection (SWVC) End Point Service Attributes
- Defined: SD-WAN Service Attributes
- SD-WAN PUBLIC-PRIVATE Policy Criterion
- SD-WAN Service Attributes
- SD-WAN Virtual Connection (SWVC) Service Attributes
- SD-WAN Policy Criteria specification and interaction
- SD-WAN BILLING-METHOD Policy Criterion
- SD-WAN INTERNET-BREAKOUT Policy Criterion
- SD-WAN BACKUP Policy Criterion
- SWVC End Point Identifier Service Attribute
- Defined: SD-WAN UNI

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