

Quality of Service attributes for Diameter

draft-ietf-dime-qos-attributes-08.txt

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Overview

- Main changes from version 7 to 8
- Changes to be incorporated in the next version
- Issues

Main changes

- ETH option
 - ETH-Option ::= < AVP Header: XXX >
 - { ETH-Proto-Type }
 - * [VLAN-ID-Range]
 - * [ETH-Priority-Range]
 - * [AVP]

Main changes

- VLAN-ID-Range
 - VLAN-ID-Range ::= < AVP Header: XXX >
 - [S-VID-Start]
 - [S-VID-End]
 - [C-VID-Start]
 - [C-VID-End]
 - * [AVP]
 - C-VID (single VLAN-ID (IEEE802.1Q))
 - S-VID (Combination of customer and service VLAN-IDs (IEEE802.1ad))

Main changes - II

- Time-Of-Day-Condition
 - Time-Of-Day-Condition ::= < AVP Header: XXX >
 - [Time-Of-Day-Start]
 - [Time-Of-Day-End]
 - [Day-Of-Week-Mask]
 - [Day-Of-Month-Mask]
 - [Month-Of-Year-Mask]
 - [Absolute-Start-Time]
 - [Absolute-End-Time]
 - [Timezone-Flag]
 - * [AVP]

Main changes - II

- For e.g. For example, a time window for 9am to 5pm (local time) from Monday to Friday would be expressed as:
 - Time-Of-Day-Condition = {
Time-Of-Day-Start = 32400;
Time-Of-Day-End = 61200;
Day-Of-Week-Mask =
(MONDAY | TUESDAY | WEDNESDAY | THURSDAY
| FRIDAY);
Timezone-Flag = LOCAL; }

Changes in Next version

- Extended-QoS-Filter-Rule
 - Extended-QoS-Filter-Rule ::= < AVP Header:
XXX >
 - { QoS-Semantics }
 - [**QoS-Profile-Template**]
 - [QoS-Parameters]
 - [QoS-Rule-Precedence]
 - [**Excess-Treatment**]
 - [Classifier]
 - * [**Time-Of-Day-Condition**]
 - * [AVP]

Changes in Next version - I

- Merge [QoS-Profile-Template] and [Vendor-Specific-QoS-Profile-Template] (vendor id = 0 for IETF)
 - QoS-Profile-Template ::= < AVP Header: XXX >
 - { Vendor-Id }
 - { QoS-Profile-Id }
 - * [AVP]
 - Vendor-Id = 0 (=> IETF)
 - QoS-Profile-Id = 0 (=> default values for QoS parameters)

Changes in Next version - II

- ICMP-Type ::= < AVP Header: XXX >
 [IP-version]
 { ICMP-Type-Number }
 * [ICMP-Code]
 [Negated]
- **[IP-version] = since types may overlap**
- ICMPv6 [<http://tools.ietf.org/html/rfc4443>],
- ICMPv4 [<http://tools.ietf.org/html/rfc792>]

Changes in Next version - III

- Shift the Excess-Treatment-Action (originally Excess parameter) from QoS-parameters to this document

Issues - I

- Shift the Excess-Treatment-Action (originally Excess parameter) from QoS-parameters to this document
 - Excess-Treatment ::= < AVP Header: XXX >
 - { Excess-Treatment-Action }
 - [QoS-Profile-Template]
 - [QoS-Parameters]
 - * [AVP]

Issues - I

- Excess-Treatment-Action
 - The Excess-Treatment-Action AVP (AVP Code TBD) is of type Enumerated and lists the actions on out-of- profile traffic.
 - 0: drop
 - 1: shape
 - 2: remark
 - 3: no metering or policing is permitted

Other Issues

- IPV6(IP-OPTION)
- Traffic classifiers currently address only TCP, UDP and not SCTP, DCCP etc.

Thank you

Questions ?

Extra slide

- Time-Of-Day-Start AVP (type Unsigned32, 0 to 86400, default = midnight)
- Day-Of-Week-Mask AVP (type Unsigned32) [similar for Day-Of-Month-Mask AVP, Month-Of-Year-Mask AVP]
 - 0 | SUNDAY
 - 1 | MONDAY
 - 2 | TUESDAY
 - 3 | WEDNESDAY
 - 4 | THURSDAY
 - 5 | FRIDAY
 - 6 | SATURDAY