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Radius attributes

FastPCRF passes the following attributes within the Accounting-Request:

VasExperts-L2-SubsId - L2-subscriber ID.

Framed-IP-Address - (for the IPv4 only) is the subscriber IPv4 address; in case of NAT 1:1, this attribute value can be [configured](#).

Framed-IPv6-Prefix - (for the IPv6 only) IPv6 subscriber subnet prefix.

Framed-IPv6-Address - (for the IPv6 only) IPv6 subscriber address. Only high bits of the IP address are most significant, as specified by the IPv6 prefix. For example, for the prefix 2001:1::/64, the value of this attribute is 2001:1::.

Acct-Session-Id - Radius accounting session identifier.

Acct-Status-Type - the request type:

- [1] start - beginning of the accounting session. Statistics are not transmitted within this request, the only session id is transferred;
- [2] stop - termination of the accounting session. This request contains the final session statistics;
- [3] interim-update - interim statistics.

Acct-Delay-Time - is the timeout in seconds between receiving the last billing netflow statistics from the fastdpi and sending this Accounting-Request. In fact, this is a measure of data "obsolescence".

Class - if during authorization the Access-Accept/Access-Reject contains the Class attribute, then it will be transferred in all the accounting requests.

NAS-Port-Type, NAS-Port, NAS-IP-Address, NAS-Identifier - are formed similarly to the [Access-Request](#).

Statistics (accounting data) are defined in the [RFC-2866](#) and are passed only for Acct-Status-Type= 2 or 3:

- Acct-Input-Packets - the number of packets sent to the subscriber (inet → subs direction)
- Acct-Output-Packets - number of packets from the subscriber (subs → inet direction)
- Acct-Input-Octets - number of bytes sent to the subscriber (inet → subs direction)
- Acct-Output-Octets - number of bytes from the subscriber (subs → inet direction)
- Acct-Input-Gigawords ([RFC-2869](#))
- Acct-Output-Gigawords ([RFC-2869](#))

in addition, statistics on the cs0-cs7 [traffic classes](#) are transmitted in vendor-specific-attributes (VSA). The following VSAs are defined for the vendor-id=43823:

ATTRIBUTE	VasExperts-Acct-Traffic-Class-Name	16	string
ATTRIBUTE	VasExperts-Acct-Traffic-Class-Input-Octets	17	integer64
ATTRIBUTE	VasExperts-Acct-Traffic-Class-Output-Octets	18	integer64
ATTRIBUTE	VasExperts-Acct-Traffic-Class-Input-Packets	19	integer64

ATTRIBUTE VasExperts-Acct-Traffic-Class-Output-Packets 20 integer64

here the VasExperts-Acct-Traffic-Class-Name is the traffic class name, "cs0", "cs1", ..., "cs7", the rest attributes contain statistics for this traffic class. Below is the example of the packet (only the first two traffic statistics are unfolded):

Frame 211: 576 bytes on wire (4608 bits), 576 bytes captured (4608 bits)
Ethernet II, ...

Internet Protocol Version 4, ...

User Datagram Protocol, Src Port: 41754, Dst Port: 1815

RADIUS Protocol

Code: Accounting-Request (4)

Packet identifier: 0xfc (252)

Length: 534

Authenticator: 02495762cbcef01d257fa82eb8f320b3

[The response to this request is in frame 233]

Attribute Value Pairs

AVP: l=6 t=NAS-Port-Type(61): Virtual(5)

AVP: l=6 t=NAS-Port(5): 0

AVP: l=10 t=NAS-Identifier(32): FastPCRF

AVP: l=6 t=Framed-IP-Address(8): 192.168.0.52

AVP: l=6 t=Service-Type(6): Framed(2)

AVP: l=18 t=Acct-Session-Id(44): 3400a8c0311fae6b

AVP: l=6 t=Acct-Authentic(45): RADIUS(1)

AVP: l=6 t=Acct-Status-Type(40): Interim-Update(3)

AVP: l=6 t=Acct-Delay-Time(41): 6

AVP: l=6 t=Acct-Input-Packets(47): 0

AVP: l=6 t=Acct-Output-Packets(48): 1956

AVP: l=6 t=Acct-Input-Octets(42): 0

AVP: l=6 t=Acct-Input-Gigawords(52): 0

AVP: l=6 t=Acct-Output-Octets(43): 2173116

AVP: l=6 t=Acct-Output-Gigawords(53): 0

AVP: l=51 t=Vendor-Specific(26) v=VAS Experts(43823)

AVP Type: 26

AVP Length: 51

VSA: l=5 t=VasExperts-Acct-Traffic-Class-Name(16): cs0

VSA: l=10 t=VasExperts-Acct-Traffic-Class-Input-Octets(17):

0000000000000000

VSA: l=10 t=VasExperts-Acct-Traffic-Class-Output-Octets(18):

00000000002128bc

VSA: l=10 t=VasExperts-Acct-Traffic-Class-Input-Packets(19):

0000000000000000

VSA: l=10 t=VasExperts-Acct-Traffic-Class-Output-Packets(20):

000000000000007a4

AVP: l=51 t=Vendor-Specific(26) v=VAS Experts(43823)

AVP Type: 26

AVP Length: 51

VSA: l=5 t=VasExperts-Acct-Traffic-Class-Name(16): cs1

VSA: l=10 t=VasExperts-Acct-Traffic-Class-Input-Octets(17):

0000000000000000

VSA: l=10 t=VasExperts-Acct-Traffic-Class-Output-Octets(18):

000000000000000000

VSA: l=10 t=VasExperts-Acct-Traffic-Class-Input-Packets(19):

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VSA: l=10 t=VasExperts-Acct-Traffic-Class-Output-Packets(20):

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AVP: l=51 t=Vendor-Specific(26) v=VAS Experts(43823)

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