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# Description of QoE metrics

## Netflow

| Metric                       | Description  | Values                               |
|------------------------------|--|--------------------------------------|
| Octet delta                  | Traffic difference (bytes) at the beginning and end of the specified period  |                                      |
| Fragmented packets delta     | Difference of IP packets divided into parts/fragments at the beginning and at the end of the specified period  |                                      |
| RTT                          | Round-trip time is the time taken to send the signal plus the time it takes to confirm that the signal has been received.<br>This round-trip time therefore consists of the time it takes to transmit a signal between two points within a single flow.<br>All network activity within a source/destination socket (source IP:port /destination IP:port) is taken as a flow in DPI |                                      |
| Source AS                    | AS host number   |                                      |
| Destination AS               | Subscriber's AS number   |                                      |
| Post nat source IPv4-address | An IP address converted from private to public by NAT to communicate with external devices and access the Internet   |                                      |
| Post nat source port         | A port converted by NAT from private to public for communicating with external devices and accessing the Internet  |                                      |
| Vchannel/Bridge              | Vchannel — vChannel number.<br>Bridge — number of the bridge through which the traffic goes  |                                      |
| Service class                | Traffic classes cs0 — cs7. For more details see <a href="#">Traffic distribution by class for the tariff plan</a>  | 0 — cs0<br>1 — cs1<br>...<br>7 — cs7 |

| Metric  | Description       | Values  |
|---|-------------------|---|
| Receiver IP-interface index and Sender IP-interface index | Traffic direction | <p>1 — to whom traffic is directed;<br/>2 — where the traffic comes from.<br/>Example:<br/>The first option is outbound traffic;<br/>The second option is inbound traffic.</p>  |

## Clickstream



All Clickstream metrics are defined for HTTP traffic only.  
Metrics for HTTPS traffic cannot be defined because it is encrypted.

| Metric         | Description  | Values  |
|----------------|--|---|
| Path           | The address to which the subscriber went   |   |
| Referer        | The resource from which the request came.<br>Used for redirection: the address from which the user went to the redirection page is memorized |   |
| User agent     | Allows you to understand from which device the request was made  |   |
| Method         | Server request method  | 0 — undefined<br>1 — GET<br>2 — POST<br>3 — PUT<br>4 — DELETE |
| Result code    | The HTTP code that the server returned   | 200 — OK<br>403 — Forbidden                                   |
| Content length | How many bytes of information the server returned in response to the request   |   |
| Content type   | Content-Type in HTTP, used to define the MIME type of a resource   |   |
| Locked         | Bitmask, contains an indication that the resource has been blocked or redirected   | 0x3 for HTTP<br>0x1 for the rest                              |

| Metric    | Description | Values   |
|-----------|-------------|--|
| Host type |             | 1 for HTTP<br>2 — CNAME<br>3 — SNI<br>4 — QUIC |

## DNS Flow

| Metric                   | Description  |
|--------------------------|--|
| Host                     | DNS host domain name from the DNS response   |
| Host category            | Category of the involved host, determined automatically  |
| Total                    | Number of records from the raw log, grouped into a single entry in the aggregated log  |
| Sessions                 | Number of internet sessions of the subscriber in the aggregated log  |
| Hosts                    | Number of hosts in the aggregated log  |
| Host categories          | Number of host categories in the aggregated log  |
| DNS hosts IPs            | Number of unique IP addresses of DNS hosts   |
| Logins                   | Number of logins in the aggregated log   |
| Subscribers              | Number of subscribers in the aggregated log  |
| Channels                 | Number of vChannels in the aggregated log  |
| Time                     | Time of session start  |
| Session ID               | Session ID   |
| Login                    | Subscriber login   |
| Source IPv4-address      | Information about the source of the request. The source can be either a subscriber or a host                                     |
| Source IPv6-address      |  |
| Source port              |  |
| Destination IPv4-address | Information about the recipient of the request. The recipient can be either a subscriber or a host                               |
| Destination IPv6-address |  |
| Destination port         |  |
| DNS transport            | Protocol used for transmitting DNS requests  |
| DNS host IP              | IP address of the DNS host   |
| DNS host port            | Port used by the DNS host  |
| Subscriber               | IP address of the subscriber   |
| Subscriber port          | Port used by the subscriber  |
| Rrclass                  | Resource class (RR Class) in the DNS request   |
| DNS type                 | Indicates the function of the server in processing and storing DNS requests in the domain name system:<br><br>1 - A<br>5 - CNAME |
| TTL                      | The acceptable time for storing this resource record in the cache of a non-responsive DNS server                                 |
| DNS data                 | RDATA encoded in base64. For example, it is possible to find out which IPs belong to the host                                    |
| VLAN ID                  | Unique identifier of the virtual local area network  |
| Post VLAN ID             | VLAN ID after route change   |
| DPI ID                   | Number of DPI, taken from GUI: Administrator → Equipment   |

| <b>Metric</b>   | <b>Description</b>   |
|-----------------|--|
| Vchannel/Bridge | Channel — number of vChannel.<br>Bridge — number of the bridge through which traffic flows |
| MPLS labels     | Labels for routing packets in MPLS networks  |