# Table of Contents

# 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. This round-trip time therefore consists of the time it takes to transmit a signal between two points within a single flow. 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. Bridge — number of the bridge through which the traffic goes | |
| Service class | Traffic classes cs0 — cs7. For more details see Traffic distribution by class for the tariff plan | 0 — cs0<br>1 — cs1<br>...<br>7 — cs7 |

| Metric | Description | Values |
|---|---|---|
| Receiver IP-interface index and Sender IP-interface index | Traffic direction | 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.<br><br>erface index    Sender IP-i<br><br>Q Filter<br><br>2<br><br>1 |

# Clickstream

> **note**
> 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 | Information about the source of the request. The source can be either a subscriber or a host |
| Source port | Information about the source of the request. The source can be either a subscriber or a host |
| Destination IPv4-address | Information about the recipient of the request. The recipient can be either a subscriber or a host |
| Destination IPv6-address | Information about the recipient of the request. The recipient can be either a subscriber or a host |
| Destination port | Information about the recipient of the request. The recipient can be either a subscriber or a host |
| DNS transport | Protocol used for transmitting DNS requests |
| DNS host IP | DNS host domain name from the DNS response |
| DNS host port | IP address of the DNS host |
| Subscriber | Port used by the DNS host |
| Subscriber port | IP address of the subscriber |
| Rrclass | Port used by the subscriber |
| DNS type | Resource class (RR Class) in the DNS request |
| TTL | Indicates the function of the server in processing and storing DNS requests in the domain name system:<br><br>1 - A<br>5 - CNAME |
| DNS data | The acceptable time for storing this resource record in the cache of a non-responsive DNS server |
| VLAN ID | RDATA encoded in base64. For example, it is possible to find out which IPs belong to the host |
| Post VLAN ID | Unique identifier of the virtual local area network |
| DPI ID | VLAN ID after route change |
| Vchannel/Bridge | Number of DPI, taken from GUI: Administrator → Equipment |

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