

QoE Tab

Configuring Quality of Experience models has its own dedicated tab in Qosium Scope. GQoSM and PSQA models can be selected and parameterized in this tab.

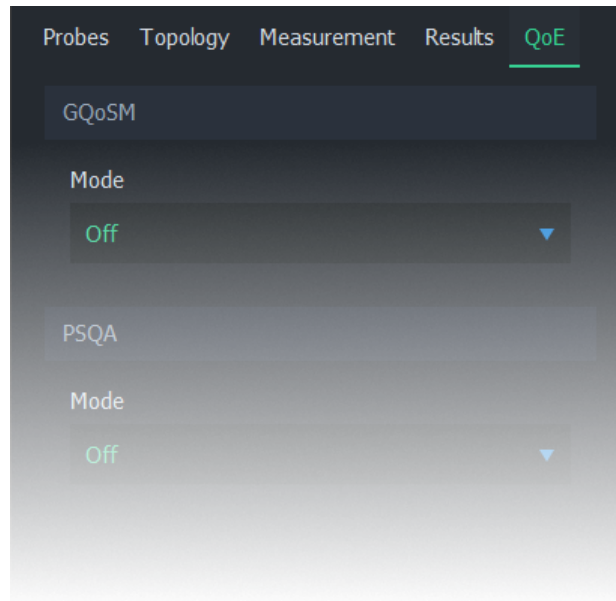
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1. Overview

This tab consists of the following settings groups:

- GQoSM
- PSQA
- **Sample Averaging** - Visible when advanced settings are enabled



2. GQoSM

Setting this option from *Off* to **Manual** enables GQoSM samples in *average results*.

The model can use up to 4 QoS parameters in QoE calculation: **Delay**, **jitter**, **packet loss**, and **connection break length**. Each of these parameters can be enabled/disabled individually. Each parameter has 2 adjustments: **Bad performance limit** and **form factor**. For more information on how to configure this model, see [Quality of Experience](#).

The screenshot displays the GQoSM configuration window. It features a 'Mode' dropdown set to 'Manual'. Below this, there are four sections, each with a toggle switch and associated parameters:

- Delay:** Toggle is on (green). Parameters: Bad perf. limit (1000,00 ms), Form factor (0,30).
- Jitter:** Toggle is on (green). Parameters: Bad perf. limit (50,00 ms), Form factor (0,30).
- Packet Loss:** Toggle is on (green). Parameters: Bad perf. limit (3,000 %), Form factor (0,30).
- Connection Break Length:** Toggle is off (blue). Parameters: Bad perf. limit (5 pkts), Form factor (0,00).

Each parameter is shown in a text box with up and down arrow icons for adjustment.

3. PSQA

Pseudo-Subjective Quality Assessment (PSQA) uses a trained feed-forward neural network for determining quality. For more information on how to configure this model, see [Quality of Experience](#).

The available options depend on the current

- **Off** - The model is not calculated
- **VoIP Listening** - A model for voice over IP for one-way listening
- **VoIP Conversational** - A model for voice over IP for a two-way conversation
- **Streaming Video (H.264) AV** - A model for streaming video
- **Streaming Video (H.264) AV MLP** - A model for streaming video

3.1. VoIP Listening

This listening model is applicable when the targeted traffic consists of a one-direction VoIP flow. The model has a few parameters:

- **Codec** - The codec of the VoIP stream
- **FEC mode** - The Forward Error Correction mode
- **Packetization interval** - The duration of audio each packet contains



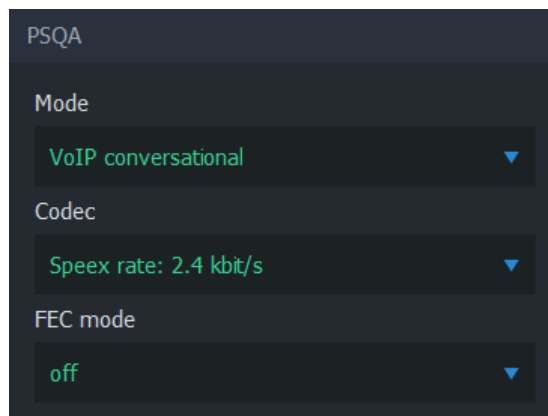
The screenshot shows a dark-themed configuration window titled "PSQA". It contains four settings, each with a label and a dropdown menu:

- Mode**: The dropdown menu is open, showing "VoIP listening" in green text.
- Codec**: The dropdown menu is open, showing "PCM" in green text.
- FEC mode**: The dropdown menu is open, showing "off" in green text.
- Packetization interval**: The dropdown menu is open, showing "20 ms" in green text.

3.2. VoIP Conversational

This conversational model is applicable when the targeted traffic consists of a two-direction VoIP conversation flow. The model has a few parameters:

- **Codec** - The codec of the VoIP stream
- **FEC mode** - The Forward Error Correction mode



The screenshot shows a dark-themed configuration window titled "PSQA". It contains three settings, each with a label and a dropdown menu:

- Mode**: The dropdown menu is open, showing "VoIP conversational" in green text.
- Codec**: The dropdown menu is open, showing "Speex rate: 2.4 kbit/s" in green text.
- FEC mode**: The dropdown menu is open, showing "off" in green text.

3.3. Streaming Video (H.264) AV

This streaming video model is applicable when the targeted traffic consists of a video stream. The model has a few parameters:

- **Resolution** - The resolution of the video frame
- **Motion level** - The amount of motion in the video content



PSQA

Mode

Streaming video (H.264) AV ▼

Resolution

480p (SD video) ▼

Motion level

Low (e.g. news) ▼

3.4. Streaming Video (H.264) AV MLP

This streaming video model is applicable when the targeted traffic consists of a video stream. The model has a few parameters:

- **Resolution** - The resolution of the video frame
- **Motion level** - The amount of motion in the video content
- **Error concealment** - Whether the codec is attempting to conceal errors or not
- **Calculated movement quantity**



PSQA

Mode

Streaming video (H.264) AV MLP ▼

Resolution

480p (SD video) ▼

Motion level

Low (e.g. news) ▼

Error concealment

Not used ▼

Calculated movement quantity

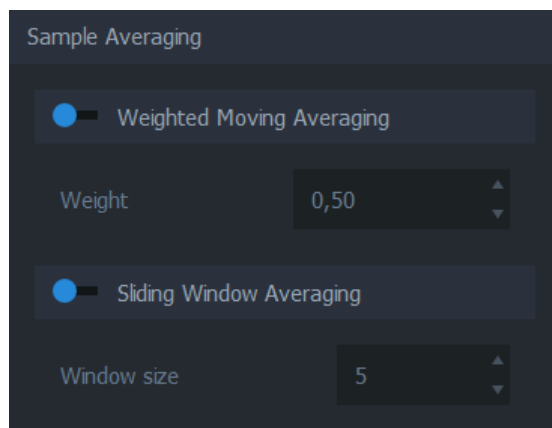
0,00 % ▲▼

4. Sample Averaging



Visible when advanced settings are enabled

Sample averaging settings can be adjusted to pre-average QoE samples. This reduces sporadic fluctuations in the results when using small [averaging interval](#), or when the quality model yields low scores for brief deterioration of network conditions not visible in the end-application.



4.1. Weighted Moving Averaging

When enabled, the average is calculated by using the weighted moving average algorithm. See [Wikipedia article on weighted moving average](#).

4.2. Sliding Window Averaging

When enabled, the average is calculated from a fixed number of most recent samples. The number can be adjusted manually.