QoE Tab

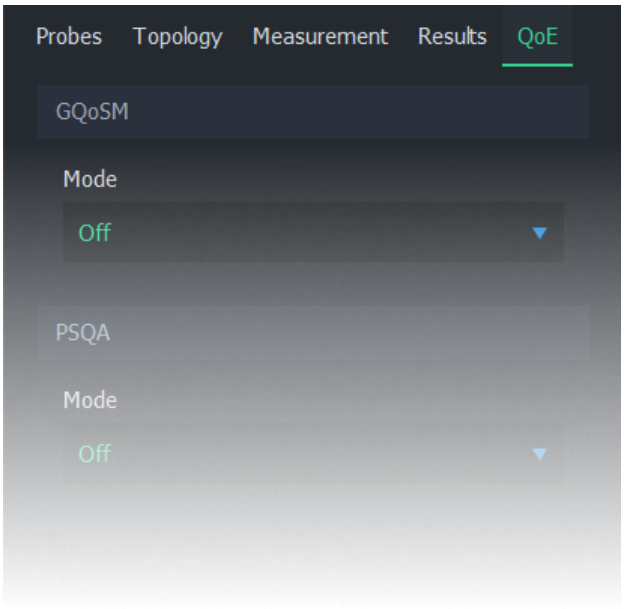
Configuring Quality of Experience models has its own dedicated tab in Qosium Scope. GQoSM and PSQA models can be selected and parameterized in this tab.

Table of Contents

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.

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

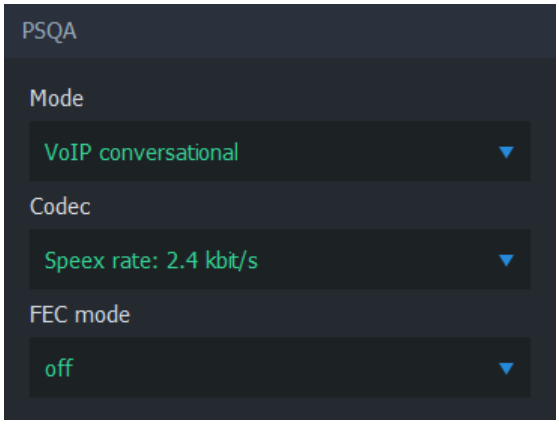
This listening model is applicable when the targeted traffic consists of a one-direction VoIP flow. The model has a few parameters:

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

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



3.3. Streaming Video (H.264) AV

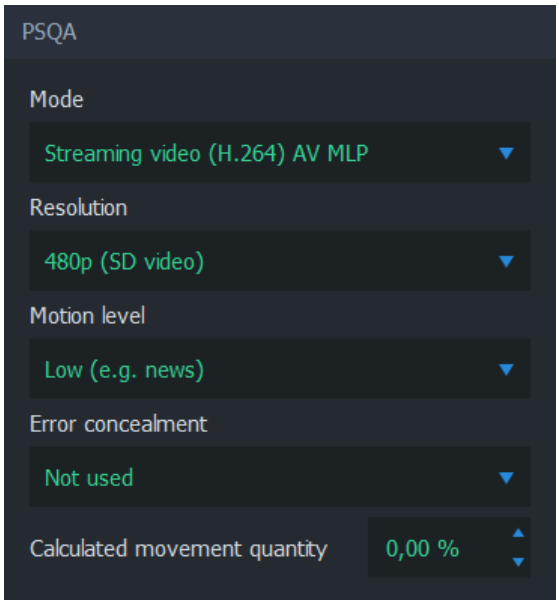
This streaming video model is applicable when the targeted traffic consists of a video stream. The model has a few parameters:

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

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**



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.