Analysis

Experiment 1.1 --> 1Mbps - 0ms - 0%

Experiment 1.2 --> 1Mbps - 0ms - 3%

Experiment 1.3 --> 1Mbps - 0ms - 8%

Chart, box and whisker chart

Description automatically generated

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How does low bandwidth and varying levels of packet loss effect?

* Initial Delay = Is long but drastically increases as packet loss does
* Average Buffer Frequency = Only starts to happen when the packet loss is exceptionally high, drastically effects the QoE
* Average Buffer Duration = Generally the same for 1mbps unless high packet loss interferes which decreases it massively.
* Subjective MOS = very low overall due to low bw but gets significantly worse due to buffer events when the packet loss his high.

Experiment 2.1 --> 5Mbps - 0ms - 0%

Experiment 2.2 --> 5Mbps - 0ms - 4%

Experiment 2.3 --> 5Mbps - 0ms - 8%

What does Medium bandwidth and varying levels of packet loss do to:

* Initial Delay = Did not particularly fluctuate much despite varying packet loss, the bw was enough.
* Average Buffer Frequency = Exponentially increased as packet loss reached 8% otherwise it was mostly infrequent. Severely effected QoE.
* Average Buffer Duration = Was similar until packet loss was high, then dramatically dropped.
* Subjective MOS = Generally better quality than 1mbps, however 8% packet loss still tanks the QoE due to increased buffering event frequency.

Experiment 3.1 --> 10Mbps - 0ms - 0%

Experiment 3.2 --> 10Mbps - 0ms - 4%

Experiment 3.3 --> 10Mbps - 0ms - 8%

What does High bandwidth and varying levels of packet loss do to:

* Initial Delay = All the ID’s where low compared to other bandwidths, probably dependant on having enough bw.
* Average Buffer Frequency = Was high with high packet loss, despite that ran better than 5mbps. Still tanked QoE.
* Average Buffer Duration = Same pattern as other bandwidths.
* Subjective MOS = Even better overall than 5mbps however high packet loss remains as the driving contributor for bad QoE alongside low bandwidth.

Subjective opinion – explained with patterns observed from objective data. Back up using cherry picked objective data (have full in appendix). Always tie back to user QoE.