Why your internet is bad!

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UCLouvain
“Can you stop using all the bandwidth? I can't do my call”

—My mother
Typical speedtest

Ping 13.0 ms

Jitter 16.7 ms

Download 16.6 Mbps

Upload 23.6 Mbps
Bufferbloat is the problem!
Bufferbloat is the problem!

Your data
Bufferbloat is the problem!

Your data

Your capacity
Bufferbloat is the problem!
Bufferbloat is the problem!
Bufferbloat is the problem!
One test to rule them all

Ping: 13.0 ms
Jitter: 16.7 ms

Download: 16.6 Mbps
Upload: 23.6 Mbps
One test to rule them all

Ping
13.0 ms

Jitter
16.7 ms

Download
16.6 Mbps

Upload
23.6 Mbps

Responsiveness Under Working Conditions

Download
826 RPM
Factor of latency increase: 5.59

Upload
454 RPM
Factor of latency increase: 10.18
To metrics and beyond!

QUIC have qlog's that provide:
- Accurate latency
- Losses
- Bandwidth
- ...

...
Latency increasing in real world

A lot of bufferbloat

Factor of latency increase for half the people

x7
Latency increasing in real world

A lot of bufferbloat

Packet loss is not the cause

Factor of latency increase for half the people
Latency increasing in real world

A lot of bufferbloat

Factor of latency increase for half the people

Packet loss is not the cause
Thanks!
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