

# Congestion Control Testing

IETF 120 Hackathon

July 20-21

Vancouver, Canada

# Hackathon Plan

## High-level

Congestion control proposals in CCWG, TSVWG, ICCRG

Testing: Simulation, Testbeds, AB testing, ...

Hack on tooling or test cases

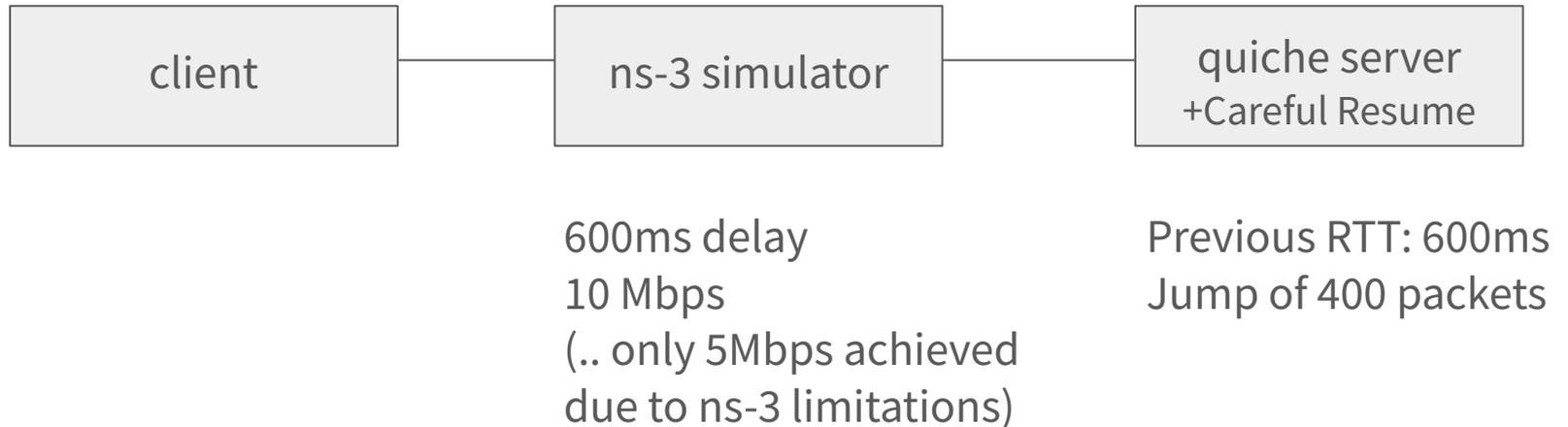
Hack on the congestion control algorithm implementation itself

## At IETF 120

Test [draft-ietf-tsvwg-careful-resume](#)

# What got done: Setup

## Careful Resume Interop



# What got done: Results

	quiche	aioquic	kwic	mvfst	ngtcp	picoquic	quic-go	chrome	lsquic	neqo	msquic
Jump happens?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sends Unvalidated Packets	773	191	212	200	191	201	270	95	181	210	138
Validates CWND	SR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Final CWND	320,323	310,740	258,213	255,655	438,278	469,988	503,106	154,197	411,908	492,626	225,801

# What we learned

## Careful Resume

All clients worked and benefited from Careful Resume

Different receiver behavior → Different Congestion Windows

## Getting more people involved

Clear and concise: What is congestion control and why does it matter

Reach out to potential participants, e.g., academics

# Thank You

## Team members:

- Gorry Fairhurst
- Ana Custura (remote)
- Mihail Yanev (remote)
- Reese Enhardt

## References:

- [draft-ietf-tsvwg-careful-resume](#)
- [50333bis: Proposed BCP on Specifying New Congestion Control Algorithms](#)
- [Internet Congestion Control Working Group \(ICCRG\)](#)
- [Congestion Control Working Group \(CCWG\)](#)