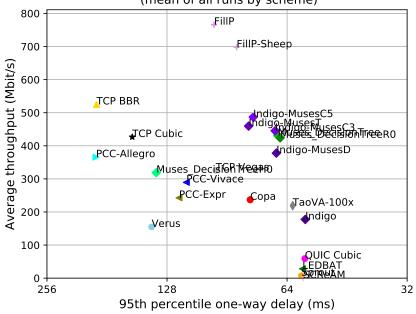
# Pantheon Report

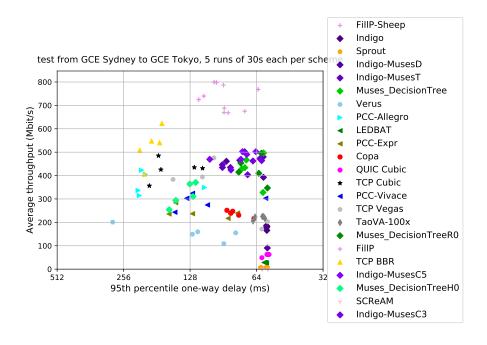
Generated at 2020-02-19 03:01:03 (UTC).

```
Data path: GCE Sydney on ens4 (local) \rightarrowGCE Tokyo on ens4 (remote).
   Repeated the test of 24 congestion control schemes 5 times.
  Each test lasted for 30 seconds running 1 flow.
   NTP offsets were measured against time.google.com and have been applied
to correct the timestamps in logs.
System info:
Linux 5.0.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
Git summary:
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
 M tools/plot.py
```

 $\label{third_party/vivace 0} \mbox{ 2baf86211435ae071a32f96b7d8c504587f5d7f4} \\ \mbox{third_party/webrtc 0} \mbox{ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851}$ 

test from GCE Sydney to GCE Tokyo, 5 runs of 30s each per scheme (mean of all runs by scheme)





		mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
scheme	# runs	flow 1	flow 1	flow 1
TCP BBR	5	524.98	192.28	3.54
Copa	5	236.95	79.19	0.01
TCP Cubic	5	426.60	156.43	0.14
$\operatorname{FillP}$	5	766.00	97.55	0.22
FillP-Sheep	5	697.58	85.65	0.03
$\operatorname{Indigo}$	4	177.44	57.62	0.00
Indigo-MusesC3	5	445.26	68.57	0.01
Indigo-MusesC5	5	486.67	77.82	0.04
Indigo-MusesD	5	377.87	68.08	0.01
Indigo-MusesT	5	459.46	79.92	0.01
LEDBAT	5	28.17	58.59	0.00
$Muses\_DecisionTree$	5	430.79	67.51	0.00
$Muses\_DecisionTreeH0$	5	318.64	136.16	0.29
$Muses\_DecisionTreeR0$	5	424.05	66.61	0.02
PCC-Allegro	5	365.64	192.84	3.44
PCC-Expr	5	242.69	119.43	0.37
QUIC Cubic	4	59.19	57.76	0.00
$\operatorname{SCReAM}$	5	0.22	58.34	0.00
Sprout	5	7.38	58.95	0.00
TaoVA-100x	5	219.05	61.95	0.00
TCP Vegas	5	325.59	96.60	0.17
Verus	5	154.84	139.91	1.84
PCC-Vivace	5	289.53	114.49	0.00
WebRTC media	0	N/A	N/A	N/A

### Run 1: Statistics of TCP BBR

Start at: 2020-02-18 21:43:57 End at: 2020-02-18 21:44:27 Local clock offset: -0.049 ms Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2020-02-19 00:51:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 540.42 Mbit/s

95th percentile per-packet one-way delay: 175.867  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 2.57%

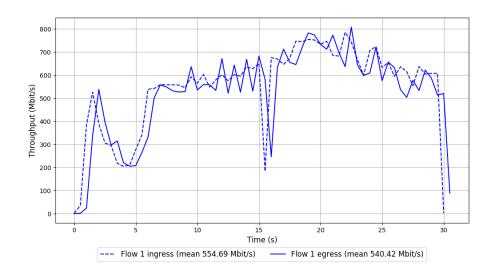
-- Flow 1:

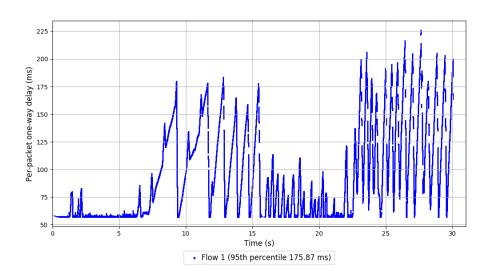
Average throughput: 540.42 Mbit/s

95th percentile per-packet one-way delay: 175.867 ms

Loss rate: 2.57%

Run 1: Report of TCP BBR — Data Link





### Run 2: Statistics of TCP BBR

Start at: 2020-02-18 22:17:53 End at: 2020-02-18 22:18:23 Local clock offset: -0.16 ms Remote clock offset: -0.338 ms

# Below is generated by plot.py at 2020-02-19 00:51:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 507.95 Mbit/s

95th percentile per-packet one-way delay: 216.419 ms

Loss rate: 8.97%

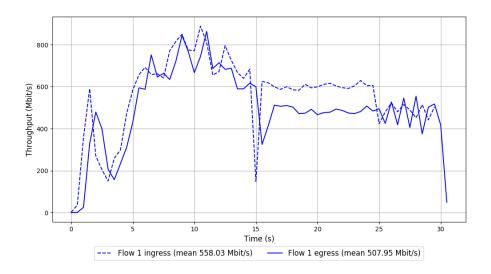
-- Flow 1:

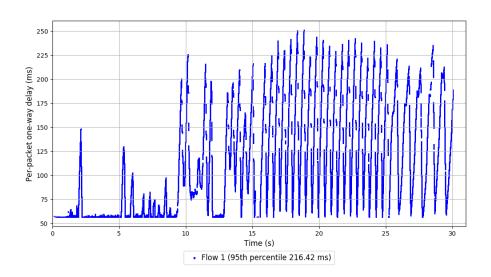
Average throughput: 507.95 Mbit/s

95th percentile per-packet one-way delay: 216.419 ms

Loss rate: 8.97%

Run 2: Report of TCP BBR — Data Link





### Run 3: Statistics of TCP BBR

Start at: 2020-02-18 22:52:03 End at: 2020-02-18 22:52:33 Local clock offset: -0.191 ms Remote clock offset: -0.293 ms

# Below is generated by plot.py at 2020-02-19 00:52:10

# Datalink statistics
-- Total of 1 flow:

Average throughput: 547.62 Mbit/s

95th percentile per-packet one-way delay: 191.275 ms

Loss rate: 3.03%

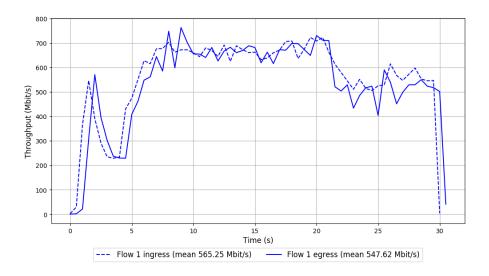
-- Flow 1:

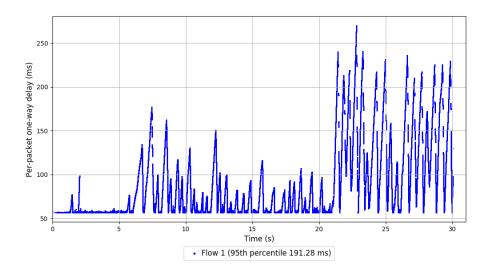
Average throughput: 547.62 Mbit/s

95th percentile per-packet one-way delay: 191.275 ms

Loss rate: 3.03%

Run 3: Report of TCP BBR — Data Link





### Run 4: Statistics of TCP BBR

Start at: 2020-02-18 23:26:37 End at: 2020-02-18 23:27:07 Local clock offset: -0.317 ms Remote clock offset: 0.212 ms

# Below is generated by plot.py at 2020-02-19 00:53:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 622.80 Mbit/s

95th percentile per-packet one-way delay: 171.675 ms

Loss rate: 2.04%

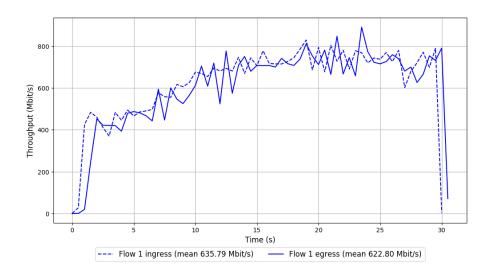
-- Flow 1:

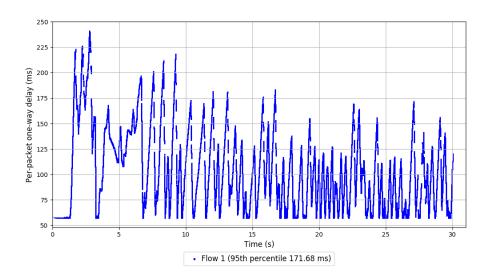
Average throughput: 622.80 Mbit/s

95th percentile per-packet one-way delay: 171.675 ms

Loss rate: 2.04%

Run 4: Report of TCP BBR — Data Link





### Run 5: Statistics of TCP BBR

Start at: 2020-02-19 00:01:04 End at: 2020-02-19 00:01:34 Local clock offset: -0.391 ms Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2020-02-19 00:53:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 406.13 Mbit/s

95th percentile per-packet one-way delay: 206.157  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 1.07%

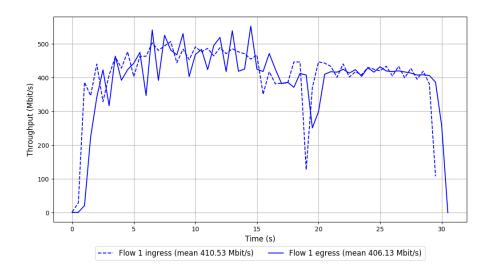
-- Flow 1:

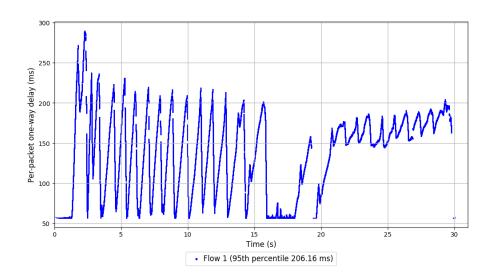
Average throughput: 406.13 Mbit/s

95th percentile per-packet one-way delay: 206.157 ms

Loss rate: 1.07%

Run 5: Report of TCP BBR — Data Link





# Run 1: Statistics of Copa

Start at: 2020-02-18 21:54:18 End at: 2020-02-18 21:54:48 Local clock offset: -0.084 ms Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2020-02-19 00:53:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 230.56 Mbit/s

95th percentile per-packet one-way delay:  $77.114~\mathrm{ms}$ 

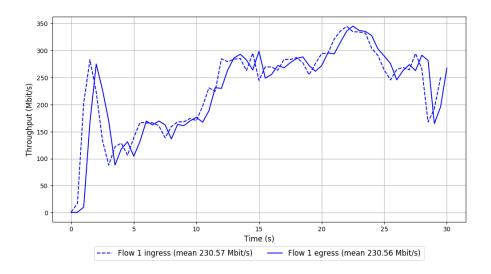
Loss rate: 0.00%

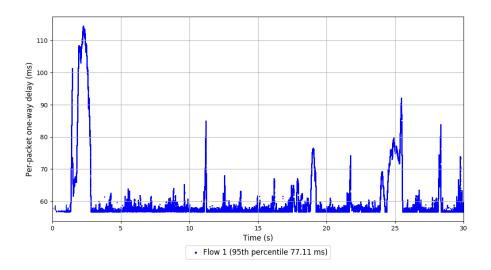
-- Flow 1:

Average throughput: 230.56 Mbit/s

95th percentile per-packet one-way delay: 77.114 ms

Run 1: Report of Copa — Data Link





# Run 2: Statistics of Copa

Start at: 2020-02-18 22:28:15 End at: 2020-02-18 22:28:45 Local clock offset: 0.15 ms Remote clock offset: -0.504 ms

# Below is generated by plot.py at 2020-02-19 00:53:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 251.50 Mbit/s

95th percentile per-packet one-way delay: 87.188  $\ensuremath{\mathsf{ms}}$ 

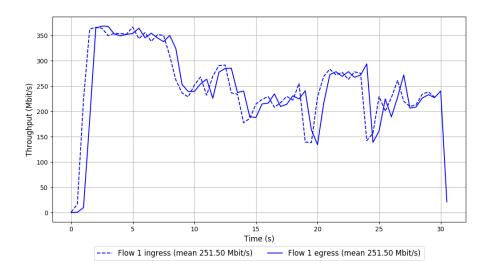
Loss rate: 0.00%

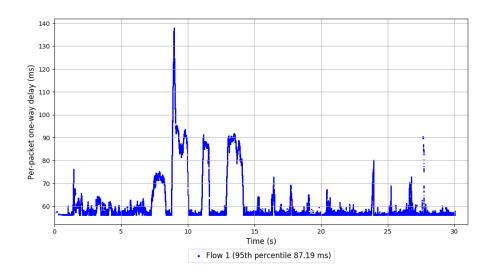
-- Flow 1:

Average throughput: 251.50 Mbit/s

95th percentile per-packet one-way delay: 87.188 ms

Run 2: Report of Copa — Data Link





# Run 3: Statistics of Copa

Start at: 2020-02-18 23:02:40 End at: 2020-02-18 23:03:10 Local clock offset: -0.66 ms Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2020-02-19 00:53:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 238.85 Mbit/s

95th percentile per-packet one-way delay: 83.797  ${\tt ms}$ 

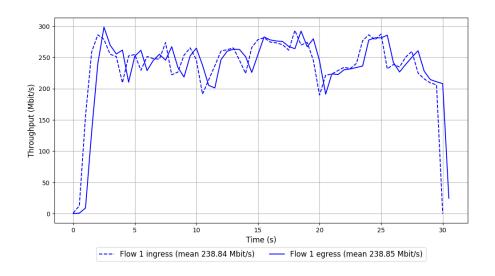
Loss rate: 0.00%

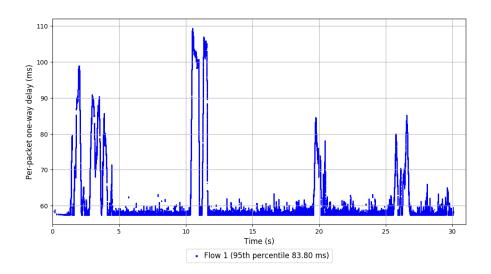
-- Flow 1:

Average throughput: 238.85 Mbit/s

95th percentile per-packet one-way delay: 83.797 ms

Run 3: Report of Copa — Data Link





# Run 4: Statistics of Copa

Start at: 2020-02-18 23:37:26 End at: 2020-02-18 23:37:56 Local clock offset: -0.298 ms Remote clock offset: -0.199 ms

# Below is generated by plot.py at 2020-02-19 01:00:43

# Datalink statistics
-- Total of 1 flow:

Average throughput: 247.37 Mbit/s

95th percentile per-packet one-way delay: 82.112 ms

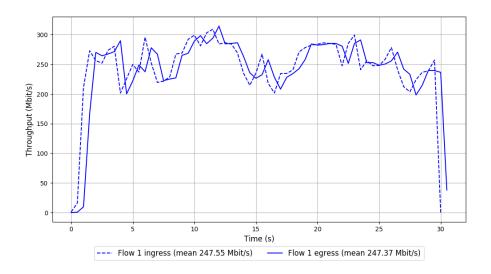
Loss rate: 0.07%

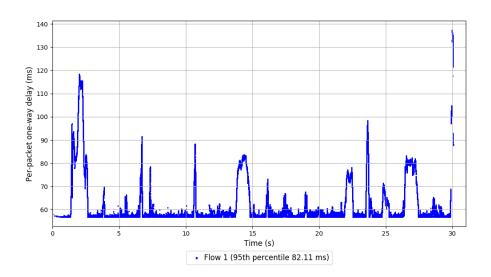
-- Flow 1:

Average throughput: 247.37 Mbit/s

95th percentile per-packet one-way delay: 82.112 ms

Run 4: Report of Copa — Data Link





# Run 5: Statistics of Copa

Start at: 2020-02-19 00:11:11 End at: 2020-02-19 00:11:41 Local clock offset: -0.43 ms Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2020-02-19 01:00:43

# Datalink statistics
-- Total of 1 flow:

Average throughput: 216.48 Mbit/s

95th percentile per-packet one-way delay: 65.757 ms

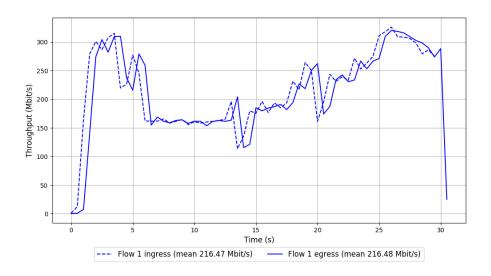
Loss rate: 0.00%

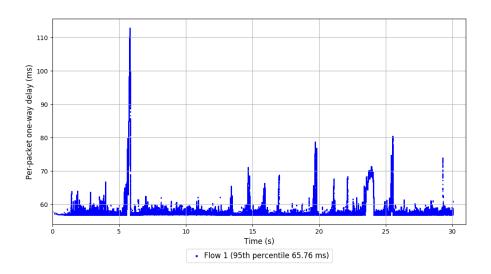
-- Flow 1:

Average throughput: 216.48 Mbit/s

95th percentile per-packet one-way delay: 65.757 ms

Run 5: Report of Copa — Data Link





### Run 1: Statistics of TCP Cubic

Start at: 2020-02-18 21:42:27 End at: 2020-02-18 21:42:57 Local clock offset: 0.313 ms Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2020-02-19 01:00:55

# Datalink statistics
-- Total of 1 flow:

Average throughput: 425.55 Mbit/s

95th percentile per-packet one-way delay: 173.557 ms

Loss rate: 0.14%

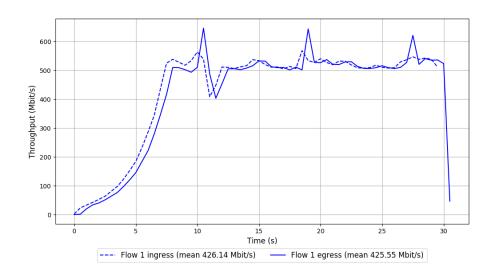
-- Flow 1:

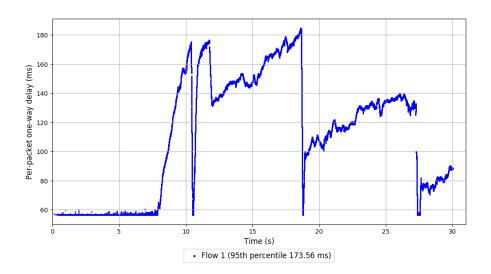
Average throughput: 425.55 Mbit/s

95th percentile per-packet one-way delay: 173.557 ms

Loss rate: 0.14%

Run 1: Report of TCP Cubic — Data Link





### Run 2: Statistics of TCP Cubic

Start at: 2020-02-18 22:16:26 End at: 2020-02-18 22:16:56 Local clock offset: -0.158 ms Remote clock offset: 0.132 ms

# Below is generated by plot.py at 2020-02-19 01:00:55

# Datalink statistics
-- Total of 1 flow:

Average throughput: 356.44 Mbit/s

95th percentile per-packet one-way delay: 195.772 ms

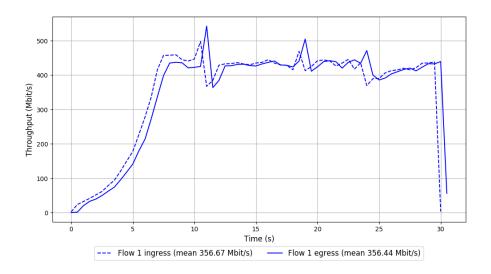
Loss rate: 0.06%

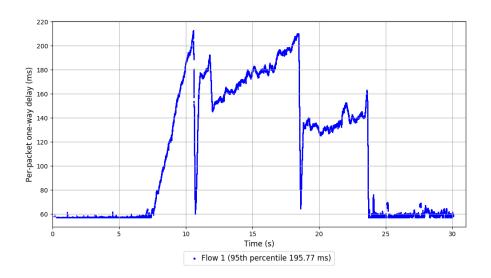
-- Flow 1:

Average throughput: 356.44 Mbit/s

95th percentile per-packet one-way delay: 195.772 ms

Run 2: Report of TCP Cubic — Data Link





### Run 3: Statistics of TCP Cubic

Start at: 2020-02-18 22:50:30 End at: 2020-02-18 22:51:00 Local clock offset: -0.214 ms Remote clock offset: -0.72 ms

# Below is generated by plot.py at 2020-02-19 01:03:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 484.89 Mbit/s

95th percentile per-packet one-way delay: 177.949 ms

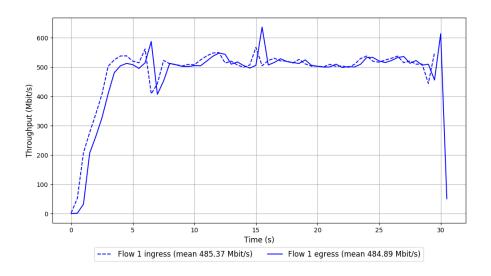
Loss rate: 0.10%

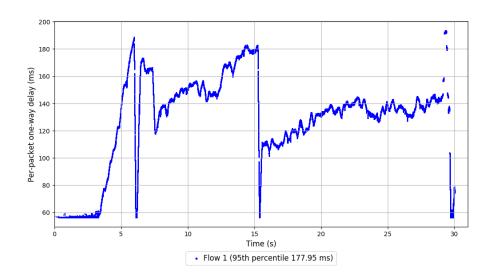
-- Flow 1:

Average throughput: 484.89 Mbit/s

95th percentile per-packet one-way delay: 177.949 ms

Run 3: Report of TCP Cubic — Data Link





### Run 4: Statistics of TCP Cubic

Start at: 2020-02-18 23:25:07 End at: 2020-02-18 23:25:37 Local clock offset: 0.038 ms Remote clock offset: -0.842 ms

# Below is generated by plot.py at 2020-02-19 01:03:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 434.99 Mbit/s

95th percentile per-packet one-way delay: 122.467 ms

Loss rate: 0.23%

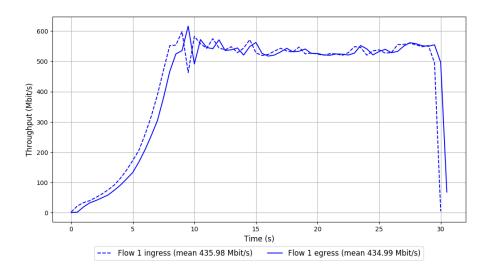
-- Flow 1:

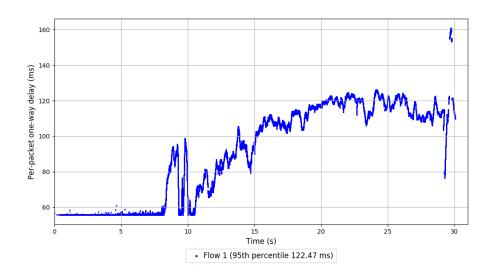
Average throughput: 434.99 Mbit/s

95th percentile per-packet one-way delay: 122.467 ms

Loss rate: 0.23%

Run 4: Report of TCP Cubic — Data Link





### Run 5: Statistics of TCP Cubic

Start at: 2020-02-18 23:59:34 End at: 2020-02-19 00:00:04 Local clock offset: -0.044 ms Remote clock offset: 0.461 ms

# Below is generated by plot.py at 2020-02-19 01:03:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 431.13 Mbit/s

95th percentile per-packet one-way delay: 112.396 ms

Loss rate: 0.18%

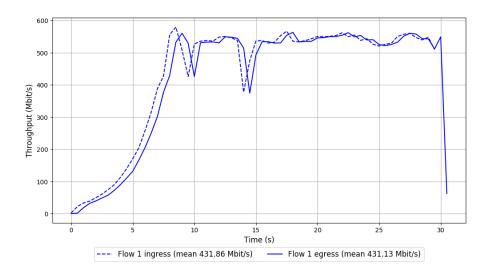
-- Flow 1:

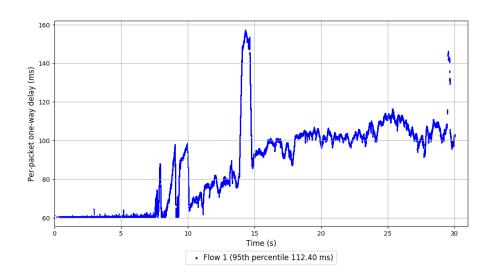
Average throughput: 431.13 Mbit/s

95th percentile per-packet one-way delay: 112.396 ms

Loss rate: 0.18%

Run 5: Report of TCP Cubic — Data Link





### Run 1: Statistics of FillP

Start at: 2020-02-18 21:45:30 End at: 2020-02-18 21:46:00 Local clock offset: -0.07 ms Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2020-02-19 01:19:02

# Datalink statistics
-- Total of 1 flow:

Average throughput: 799.31 Mbit/s

95th percentile per-packet one-way delay: 99.593  $\ensuremath{\mathtt{ms}}$ 

Loss rate: 0.21%

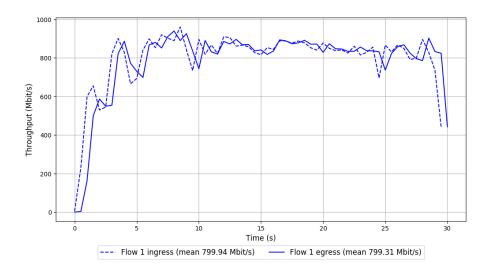
-- Flow 1:

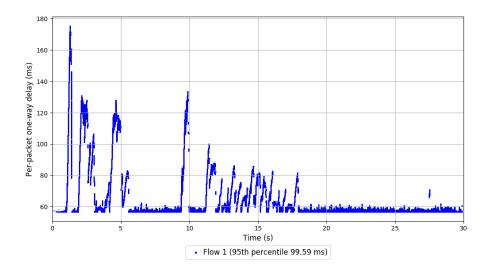
Average throughput: 799.31 Mbit/s

95th percentile per-packet one-way delay: 99.593 ms

Loss rate: 0.21%

Run 1: Report of FillP — Data Link





### Run 2: Statistics of FillP

Start at: 2020-02-18 22:19:24 End at: 2020-02-18 22:19:54 Local clock offset: -0.13 ms Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2020-02-19 01:22:49

# Datalink statistics
-- Total of 1 flow:

Average throughput: 739.82 Mbit/s

95th percentile per-packet one-way delay: 110.944 ms

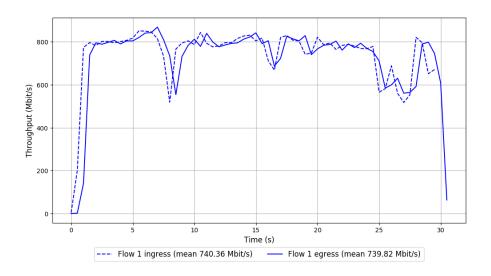
Loss rate: 0.08%

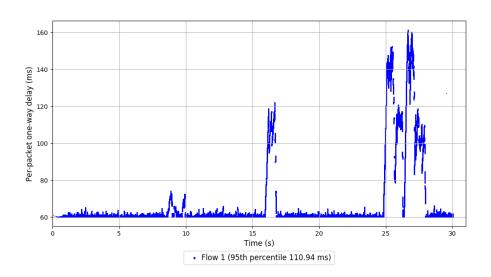
-- Flow 1:

Average throughput: 739.82 Mbit/s

95th percentile per-packet one-way delay: 110.944 ms

Run 2: Report of FillP — Data Link





### Run 3: Statistics of FillP

Start at: 2020-02-18 22:53:36 End at: 2020-02-18 22:54:06 Local clock offset: -0.22 ms Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2020-02-19 01:23:54

# Datalink statistics
-- Total of 1 flow:

Average throughput: 768.10 Mbit/s

95th percentile per-packet one-way delay: 62.961 ms

Loss rate: 0.16%

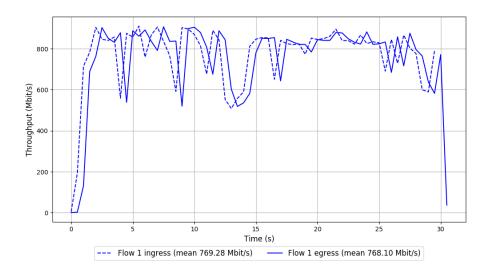
-- Flow 1:

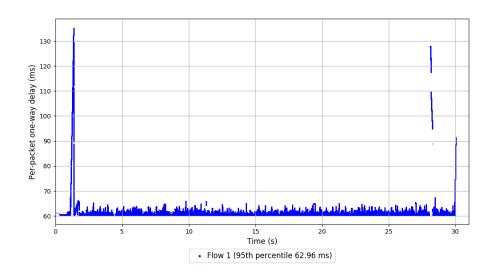
Average throughput: 768.10 Mbit/s

95th percentile per-packet one-way delay: 62.961 ms

Loss rate: 0.16%

Run 3: Report of FillP — Data Link





### Run 4: Statistics of FillP

Start at: 2020-02-18 23:28:13 End at: 2020-02-18 23:28:43 Local clock offset: -0.336 ms Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2020-02-19 01:25:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 797.80 Mbit/s

95th percentile per-packet one-way delay: 97.240 ms

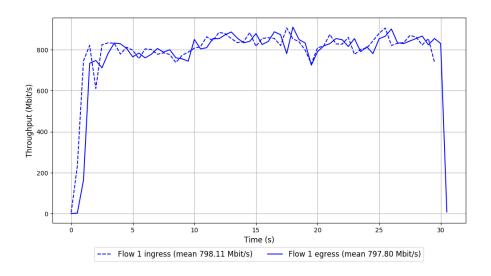
Loss rate: 0.04%

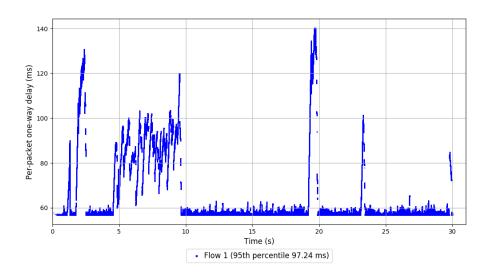
-- Flow 1:

Average throughput: 797.80 Mbit/s

95th percentile per-packet one-way delay: 97.240 ms

Run 4: Report of FillP — Data Link





### Run 5: Statistics of FillP

Start at: 2020-02-19 00:02:32 End at: 2020-02-19 00:03:02 Local clock offset: -0.726 ms Remote clock offset: 0.202 ms

# Below is generated by plot.py at 2020-02-19 01:25:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 724.99 Mbit/s

95th percentile per-packet one-way delay:  $116.991 \ \mathrm{ms}$ 

Loss rate: 0.62%

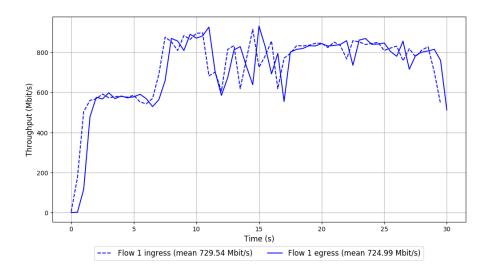
-- Flow 1:

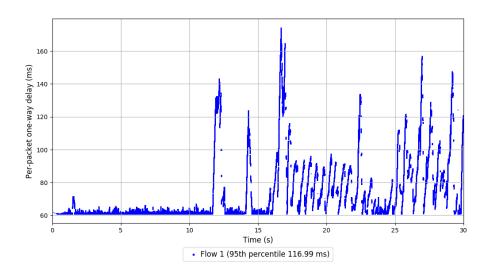
Average throughput: 724.99 Mbit/s

95th percentile per-packet one-way delay: 116.991 ms

Loss rate: 0.62%

Run 5: Report of FillP — Data Link





## Run 1: Statistics of FillP-Sheep

Start at: 2020-02-18 21:55:49 End at: 2020-02-18 21:56:19 Local clock offset: -0.11 ms Remote clock offset: 1.2 ms

# Below is generated by plot.py at 2020-02-19 01:25:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 675.17 Mbit/s

95th percentile per-packet one-way delay:  $72.407~\mathrm{ms}$ 

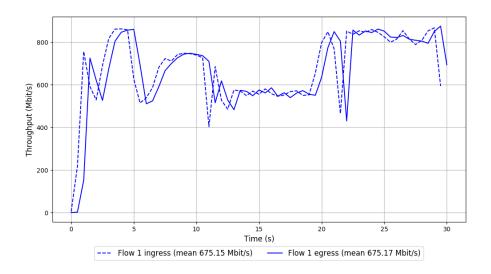
Loss rate: 0.00%

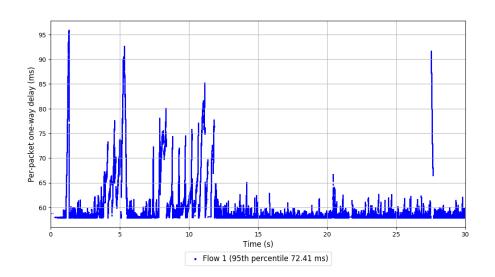
-- Flow 1:

Average throughput: 675.17 Mbit/s

95th percentile per-packet one-way delay: 72.407 ms

Run 1: Report of FillP-Sheep — Data Link





## Run 2: Statistics of FillP-Sheep

Start at: 2020-02-18 22:29:47 End at: 2020-02-18 22:30:17 Local clock offset: -0.163 ms Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2020-02-19 01:25:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 669.44 Mbit/s

95th percentile per-packet one-way delay: 89.852 ms

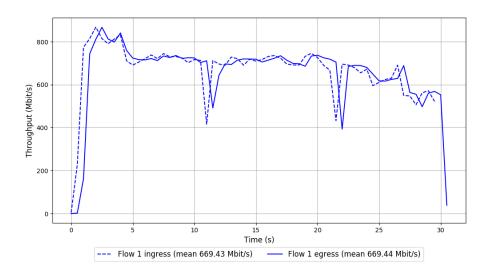
Loss rate: 0.00%

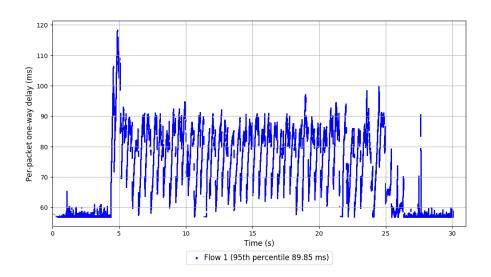
-- Flow 1:

Average throughput: 669.44 Mbit/s

95th percentile per-packet one-way delay: 89.852 ms

Run 2: Report of FillP-Sheep — Data Link





## Run 3: Statistics of FillP-Sheep

Start at: 2020-02-18 23:04:11 End at: 2020-02-18 23:04:41 Local clock offset: -0.282 ms Remote clock offset: -0.629 ms

# Below is generated by plot.py at 2020-02-19 01:25:29

# Datalink statistics
-- Total of 1 flow:

Average throughput: 668.44 Mbit/s

95th percentile per-packet one-way delay: 86.017 ms

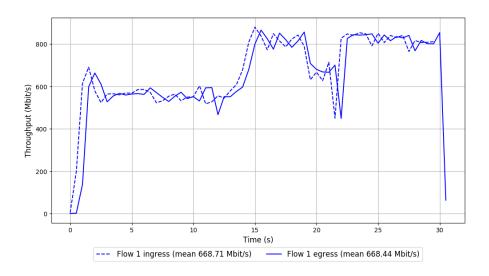
Loss rate: 0.05%

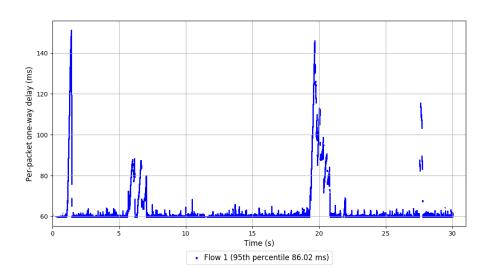
-- Flow 1:

Average throughput: 668.44 Mbit/s

95th percentile per-packet one-way delay: 86.017 ms

Run 3: Report of FillP-Sheep — Data Link





## Run 4: Statistics of FillP-Sheep

Start at: 2020-02-18 23:38:57 End at: 2020-02-18 23:39:27 Local clock offset: -0.695 ms Remote clock offset: 0.562 ms

# Below is generated by plot.py at 2020-02-19 01:43:06

# Datalink statistics
-- Total of 1 flow:

Average throughput: 786.69 Mbit/s

95th percentile per-packet one-way delay: 90.403  $\ensuremath{\mathrm{ms}}$ 

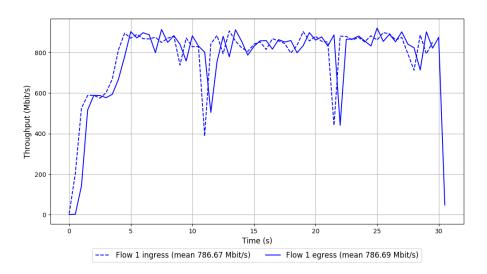
Loss rate: 0.00%

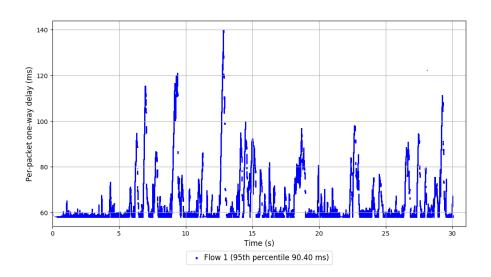
-- Flow 1:

Average throughput: 786.69 Mbit/s

95th percentile per-packet one-way delay: 90.403 ms

Run 4: Report of FillP-Sheep — Data Link





## Run 5: Statistics of FillP-Sheep

Start at: 2020-02-19 00:12:39 End at: 2020-02-19 00:13:09 Local clock offset: -0.068 ms Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 688.16 Mbit/s

95th percentile per-packet one-way delay:  $89.594~\mathrm{ms}$ 

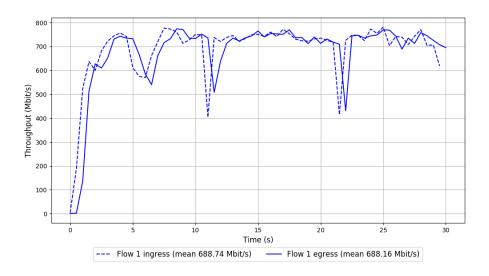
Loss rate: 0.09%

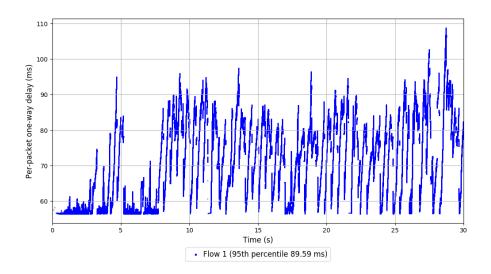
-- Flow 1:

Average throughput: 688.16 Mbit/s

95th percentile per-packet one-way delay: 89.594 ms

Run 5: Report of FillP-Sheep — Data Link

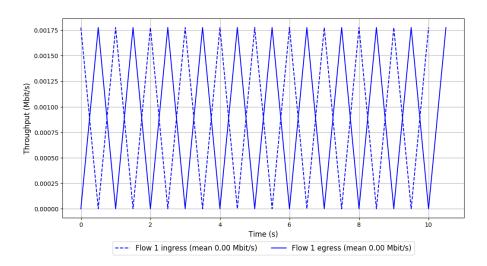


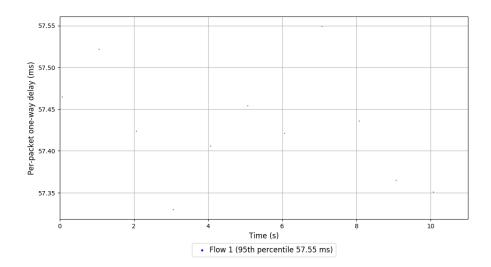


# Run 1: Statistics of Indigo

Start at: 2020-02-18 21:41:19 End at: 2020-02-18 21:41:49 Local clock offset: -0.049 ms Remote clock offset: -0.137 ms

Run 1: Report of Indigo — Data Link





## Run 2: Statistics of Indigo

Start at: 2020-02-18 22:15:03 End at: 2020-02-18 22:15:33 Local clock offset: -0.154 ms Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 165.61 Mbit/s

95th percentile per-packet one-way delay:  $57.512~\mathrm{ms}$ 

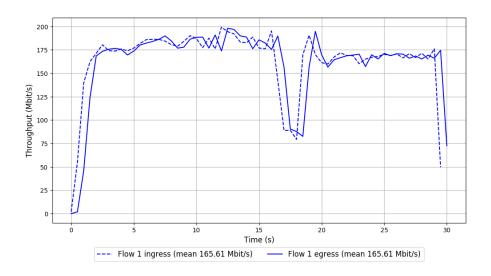
Loss rate: 0.00%

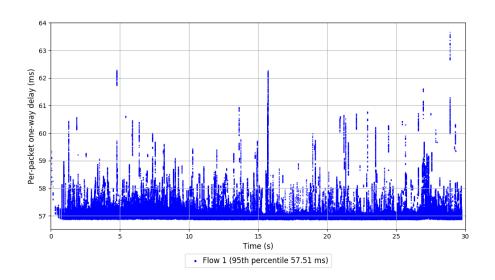
-- Flow 1:

Average throughput: 165.61 Mbit/s

95th percentile per-packet one-way delay: 57.512 ms

Run 2: Report of Indigo — Data Link





## Run 3: Statistics of Indigo

Start at: 2020-02-18 22:49:05 End at: 2020-02-18 22:49:35 Local clock offset: -0.266 ms Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 185.82 Mbit/s

95th percentile per-packet one-way delay:  $57.694~\mathrm{ms}$ 

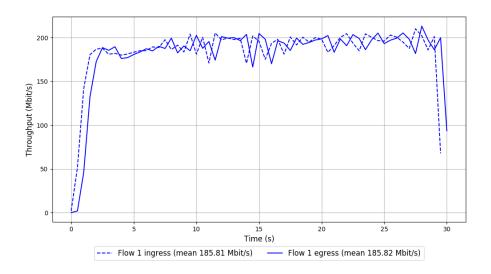
Loss rate: 0.00%

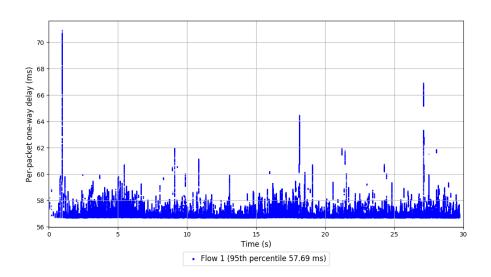
-- Flow 1:

Average throughput: 185.82 Mbit/s

95th percentile per-packet one-way delay: 57.694 ms

Run 3: Report of Indigo — Data Link





## Run 4: Statistics of Indigo

Start at: 2020-02-18 23:23:42 End at: 2020-02-18 23:24:12 Local clock offset: -0.653 ms Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 176.85 Mbit/s

95th percentile per-packet one-way delay:  $57.840~\mathrm{ms}$ 

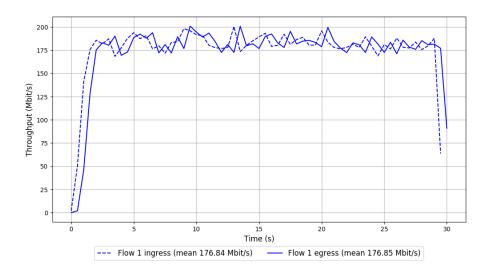
Loss rate: 0.00%

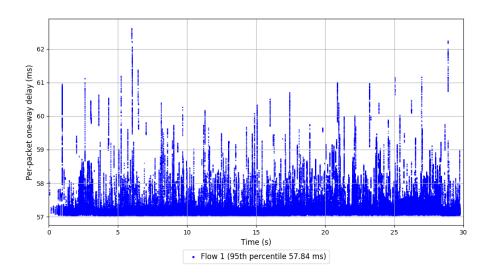
-- Flow 1:

Average throughput: 176.85 Mbit/s

95th percentile per-packet one-way delay: 57.840 ms

Run 4: Report of Indigo — Data Link





## Run 5: Statistics of Indigo

Start at: 2020-02-18 23:58:09 End at: 2020-02-18 23:58:39 Local clock offset: -0.027 ms Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 181.50 Mbit/s

95th percentile per-packet one-way delay:  $57.426~\mathrm{ms}$ 

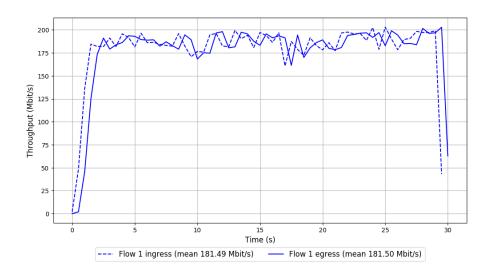
Loss rate: 0.00%

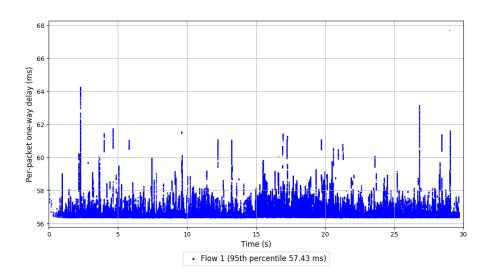
-- Flow 1:

Average throughput: 181.50 Mbit/s

95th percentile per-packet one-way delay: 57.426 ms

Run 5: Report of Indigo — Data Link





## Run 1: Statistics of Indigo-MusesC3

Start at: 2020-02-18 22:05:39 End at: 2020-02-18 22:06:09 Local clock offset: -0.465 ms Remote clock offset: 0.779 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 463.84 Mbit/s

95th percentile per-packet one-way delay:  $60.713~\mathrm{ms}$ 

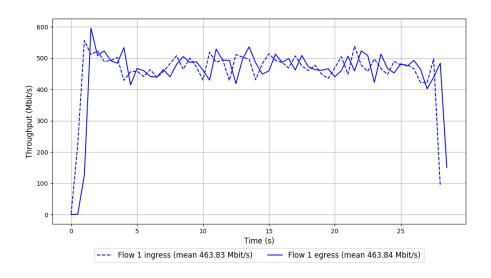
Loss rate: 0.00%

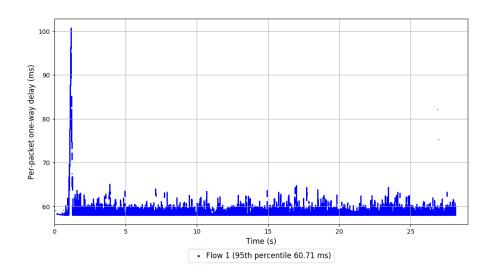
-- Flow 1:

Average throughput: 463.84 Mbit/s

95th percentile per-packet one-way delay: 60.713 ms

Run 1: Report of Indigo-MusesC3 — Data Link





## Run 2: Statistics of Indigo-MusesC3

Start at: 2020-02-18 22:39:35 End at: 2020-02-18 22:40:05 Local clock offset: -0.569 ms Remote clock offset: -0.334 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 462.37 Mbit/s

95th percentile per-packet one-way delay: 66.477 ms

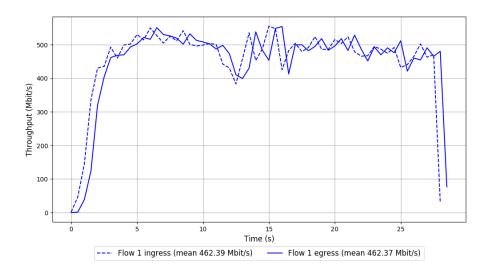
Loss rate: 0.02%

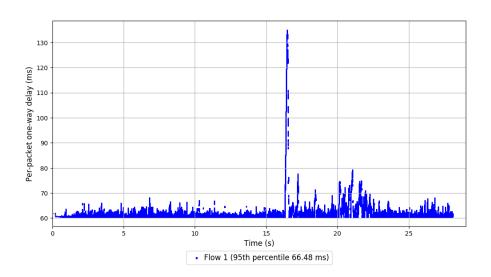
-- Flow 1:

Average throughput: 462.37 Mbit/s

95th percentile per-packet one-way delay: 66.477 ms

Run 2: Report of Indigo-MusesC3 — Data Link





## Run 3: Statistics of Indigo-MusesC3

Start at: 2020-02-18 23:14:14 End at: 2020-02-18 23:14:44 Local clock offset: -0.296 ms Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 423.96 Mbit/s

95th percentile per-packet one-way delay: 83.555  $\ensuremath{\mathtt{ms}}$ 

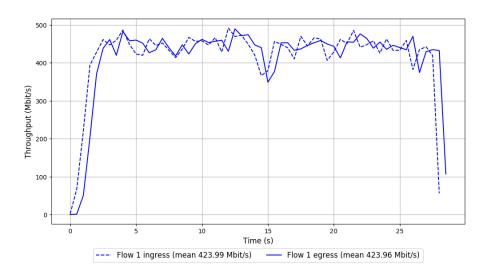
Loss rate: 0.01%

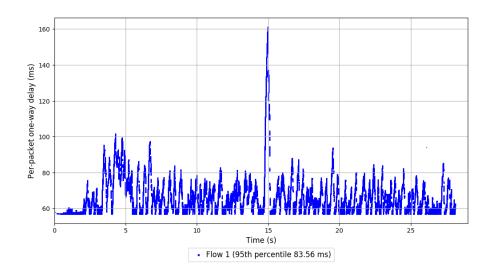
-- Flow 1:

Average throughput: 423.96 Mbit/s

95th percentile per-packet one-way delay: 83.555 ms

Run 3: Report of Indigo-MusesC3 — Data Link





## Run 4: Statistics of Indigo-MusesC3

Start at: 2020-02-18 23:48:49 End at: 2020-02-18 23:49:19 Local clock offset: -0.046 ms Remote clock offset: -0.222 ms

# Below is generated by plot.py at 2020-02-19 01:43:58

# Datalink statistics
-- Total of 1 flow:

Average throughput: 403.68 Mbit/s

95th percentile per-packet one-way delay:  $70.268~\mathrm{ms}$ 

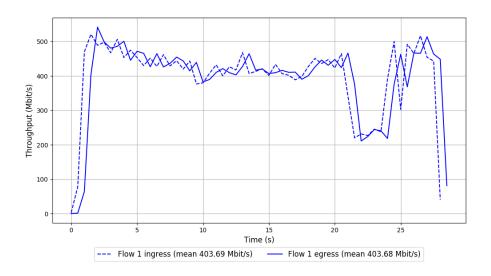
Loss rate: 0.00%

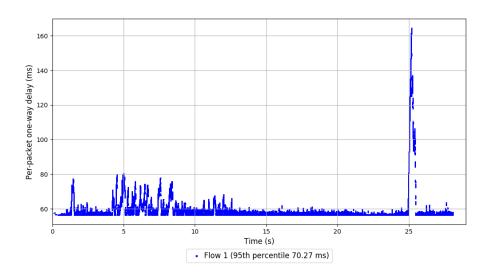
-- Flow 1:

Average throughput: 403.68 Mbit/s

95th percentile per-packet one-way delay: 70.268 ms

Run 4: Report of Indigo-MusesC3 — Data Link





# Run 5: Statistics of Indigo-MusesC3

Start at: 2020-02-19 00:22:27 End at: 2020-02-19 00:22:58 Local clock offset: -0.48 ms Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2020-02-19 01:45:13

# Datalink statistics
-- Total of 1 flow:

Average throughput: 472.44 Mbit/s

95th percentile per-packet one-way delay: 61.829 ms

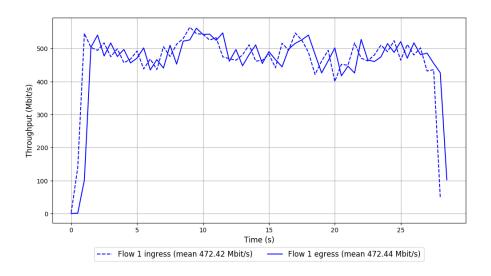
Loss rate: 0.00%

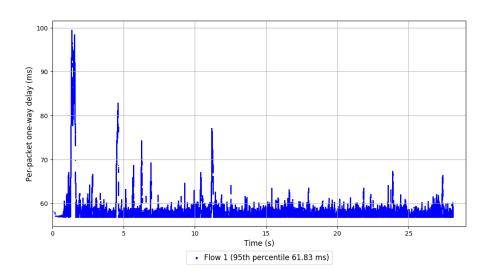
-- Flow 1:

Average throughput: 472.44 Mbit/s

95th percentile per-packet one-way delay: 61.829 ms

Run 5: Report of Indigo-MusesC3 — Data Link





# Run 1: Statistics of Indigo-MusesC5

Start at: 2020-02-18 21:52:47 End at: 2020-02-18 21:53:17 Local clock offset: -0.078 ms Remote clock offset: 0.678 ms

# Below is generated by plot.py at 2020-02-19 01:45:54

# Datalink statistics
-- Total of 1 flow:

Average throughput: 490.14 Mbit/s

95th percentile per-packet one-way delay: 70.884 ms

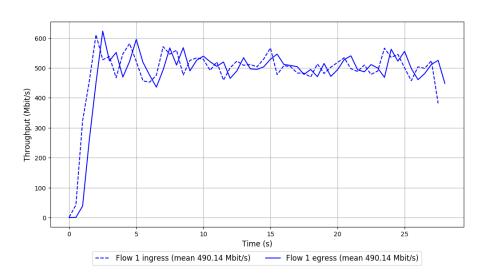
Loss rate: 0.00%

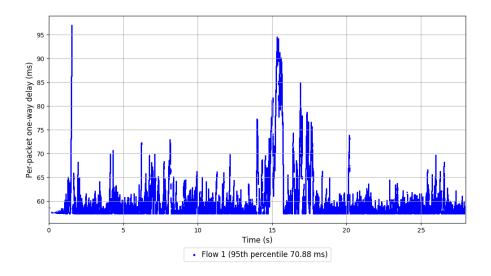
-- Flow 1:

Average throughput: 490.14 Mbit/s

95th percentile per-packet one-way delay: 70.884 ms

Run 1: Report of Indigo-MusesC5 — Data Link





# Run 2: Statistics of Indigo-MusesC5

Start at: 2020-02-18 22:26:45 End at: 2020-02-18 22:27:15 Local clock offset: 0.166 ms Remote clock offset: -1.36 ms

# Below is generated by plot.py at 2020-02-19 01:47:49

# Datalink statistics
-- Total of 1 flow:

Average throughput: 469.52 Mbit/s

95th percentile per-packet one-way delay:  $75.394~\mathrm{ms}$ 

Loss rate: 0.13%

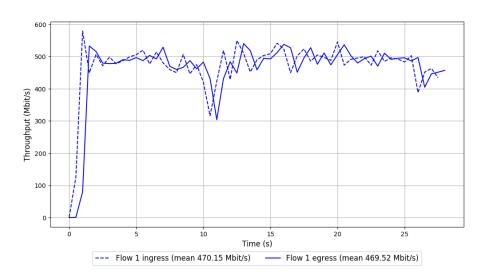
-- Flow 1:

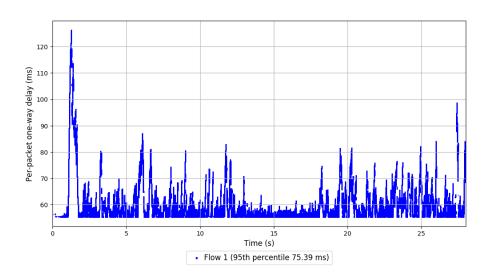
Average throughput: 469.52 Mbit/s

95th percentile per-packet one-way delay: 75.394 ms

Loss rate: 0.13%

Run 2: Report of Indigo-MusesC5 — Data Link





## Run 3: Statistics of Indigo-MusesC5

Start at: 2020-02-18 23:01:08 End at: 2020-02-18 23:01:38 Local clock offset: 0.087 ms Remote clock offset: -0.176 ms

# Below is generated by plot.py at 2020-02-19 01:49:10

# Datalink statistics
-- Total of 1 flow:

Average throughput: 502.06 Mbit/s

95th percentile per-packet one-way delay:  $64.451~\mathrm{ms}$ 

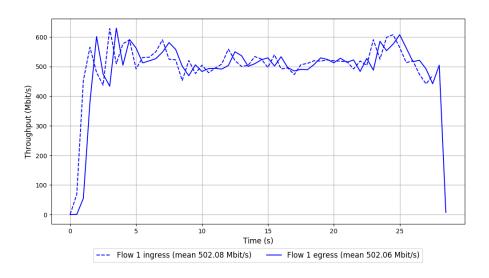
Loss rate: 0.02%

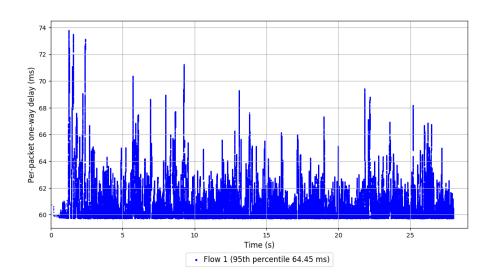
-- Flow 1:

Average throughput: 502.06 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Run 3: Report of Indigo-MusesC5 — Data Link





## Run 4: Statistics of Indigo-MusesC5

Start at: 2020-02-18 23:35:54 End at: 2020-02-18 23:36:24 Local clock offset: -0.366 ms Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2020-02-19 01:54:36

# Datalink statistics
-- Total of 1 flow:

Average throughput: 502.22 Mbit/s

95th percentile per-packet one-way delay:  $74.080~\mathrm{ms}$ 

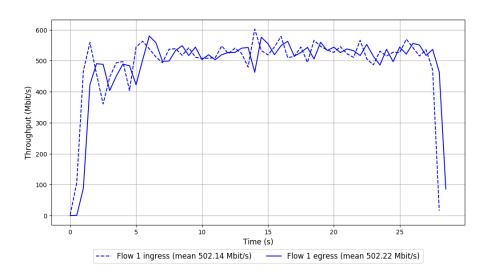
Loss rate: 0.00%

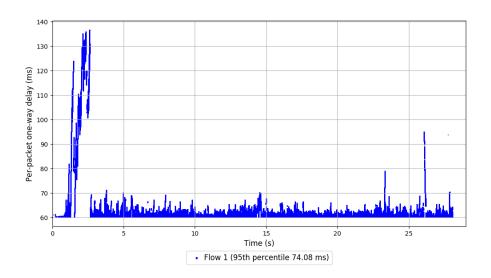
-- Flow 1:

Average throughput: 502.22 Mbit/s

95th percentile per-packet one-way delay: 74.080 ms

Run 4: Report of Indigo-MusesC5 — Data Link





## Run 5: Statistics of Indigo-MusesC5

Start at: 2020-02-19 00:09:41 End at: 2020-02-19 00:10:11 Local clock offset: -0.719 ms Remote clock offset: -0.572 ms

# Below is generated by plot.py at 2020-02-19 01:54:39

# Datalink statistics
-- Total of 1 flow:

Average throughput: 469.43 Mbit/s

95th percentile per-packet one-way delay: 104.287 ms

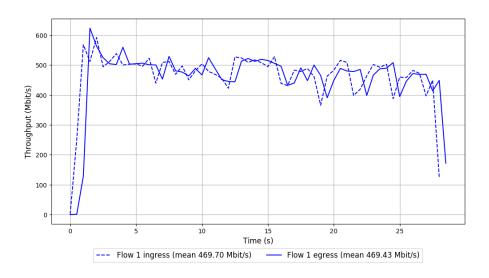
Loss rate: 0.07%

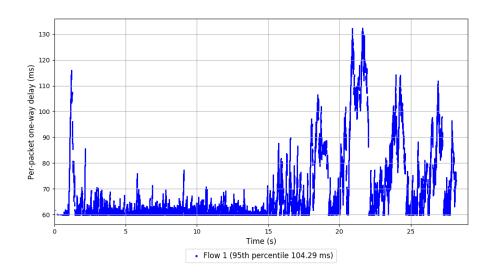
-- Flow 1:

Average throughput: 469.43 Mbit/s

95th percentile per-packet one-way delay: 104.287 ms

Run 5: Report of Indigo-MusesC5 — Data Link





## Run 1: Statistics of Indigo-MusesD

Start at: 2020-02-18 21:48:39 End at: 2020-02-18 21:49:09 Local clock offset: 0.266 ms Remote clock offset: 0.324 ms

# Below is generated by plot.py at 2020-02-19 01:54:39

# Datalink statistics
-- Total of 1 flow:

Average throughput: 90.42 Mbit/s

95th percentile per-packet one-way delay:  $57.197~\mathrm{ms}$ 

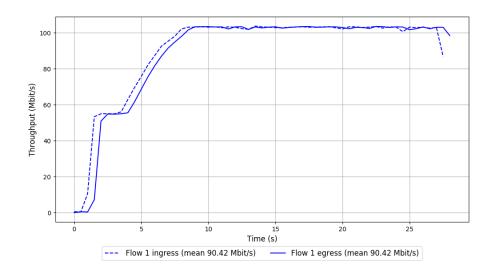
Loss rate: 0.00%

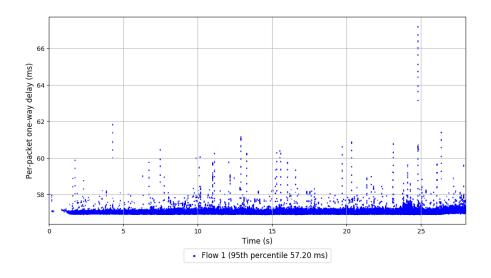
-- Flow 1:

Average throughput: 90.42 Mbit/s

95th percentile per-packet one-way delay: 57.197 ms

Run 1: Report of Indigo-MusesD — Data Link





## Run 2: Statistics of Indigo-MusesD

Start at: 2020-02-18 22:22:21 End at: 2020-02-18 22:22:51 Local clock offset: -0.506 ms Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2020-02-19 01:55:51

# Datalink statistics
-- Total of 1 flow:

Average throughput: 480.03 Mbit/s

95th percentile per-packet one-way delay: 59.729 ms

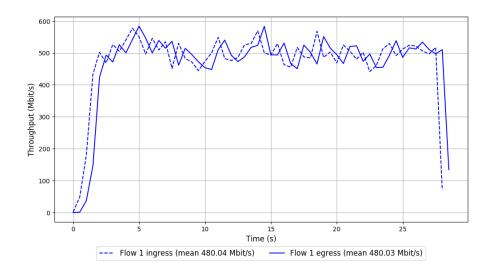
Loss rate: 0.00%

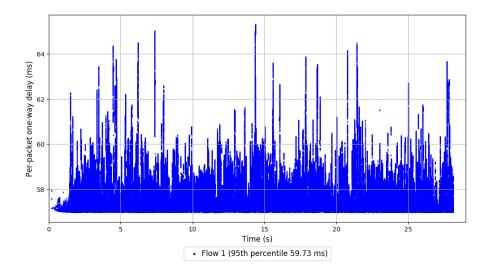
-- Flow 1:

Average throughput: 480.03 Mbit/s

95th percentile per-packet one-way delay: 59.729 ms

Run 2: Report of Indigo-MusesD — Data Link





## Run 3: Statistics of Indigo-MusesD

Start at: 2020-02-18 22:56:46 End at: 2020-02-18 22:57:16 Local clock offset: -0.605 ms Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2020-02-19 01:55:51

# Datalink statistics
-- Total of 1 flow:

Average throughput: 392.46 Mbit/s

95th percentile per-packet one-way delay: 59.563 ms

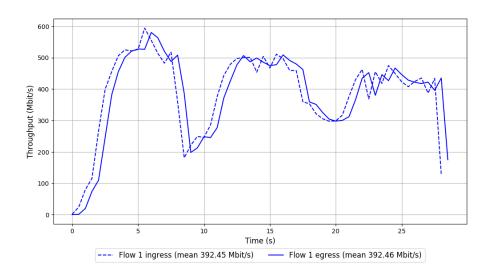
Loss rate: 0.00%

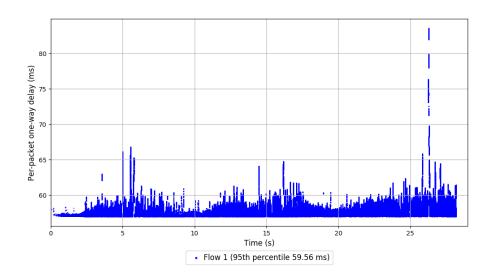
-- Flow 1:

Average throughput: 392.46 Mbit/s

95th percentile per-packet one-way delay: 59.563 ms

Run 3: Report of Indigo-MusesD — Data Link





## Run 4: Statistics of Indigo-MusesD

Start at: 2020-02-18 23:31:27 End at: 2020-02-18 23:31:57 Local clock offset: -0.676 ms Remote clock offset: 0.161 ms

# Below is generated by plot.py at 2020-02-19 01:56:34

# Datalink statistics
-- Total of 1 flow:

Average throughput: 461.17 Mbit/s

95th percentile per-packet one-way delay:  $87.646~\mathrm{ms}$ 

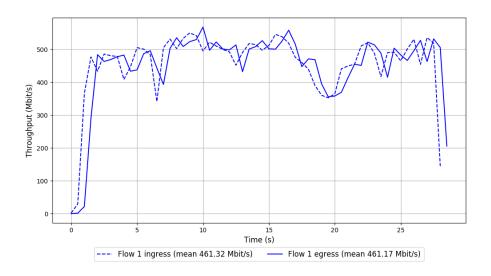
Loss rate: 0.03%

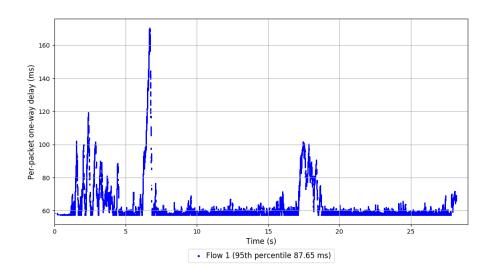
-- Flow 1:

Average throughput: 461.17 Mbit/s

95th percentile per-packet one-way delay: 87.646 ms

Run 4: Report of Indigo-MusesD — Data Link





## Run 5: Statistics of Indigo-MusesD

Start at: 2020-02-19 00:05:28 End at: 2020-02-19 00:05:58 Local clock offset: -0.402 ms Remote clock offset: -0.303 ms

# Below is generated by plot.py at 2020-02-19 01:57:04

# Datalink statistics
-- Total of 1 flow:

Average throughput: 465.29 Mbit/s

95th percentile per-packet one-way delay: 76.255 ms

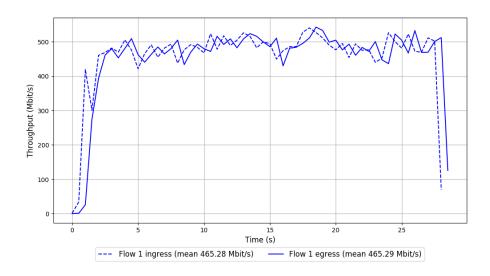
Loss rate: 0.00%

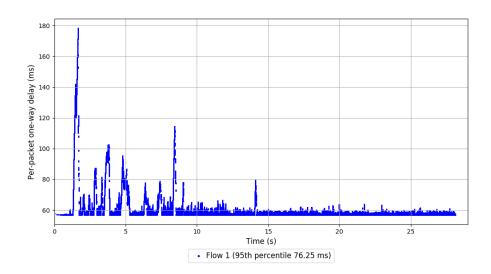
-- Flow 1:

Average throughput: 465.29 Mbit/s

95th percentile per-packet one-way delay: 76.255 ms

Run 5: Report of Indigo-MusesD — Data Link





## Run 1: Statistics of Indigo-MusesT

Start at: 2020-02-18 22:09:45 End at: 2020-02-18 22:10:15 Local clock offset: -0.154 ms Remote clock offset: -0.312 ms

# Below is generated by plot.py at 2020-02-19 01:58:39

# Datalink statistics
-- Total of 1 flow:

Average throughput: 434.67 Mbit/s

95th percentile per-packet one-way delay: 91.353  $\ensuremath{\mathtt{ms}}$ 

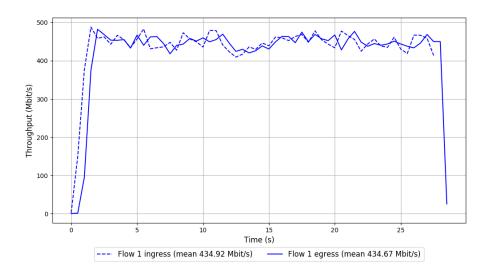
Loss rate: 0.06%

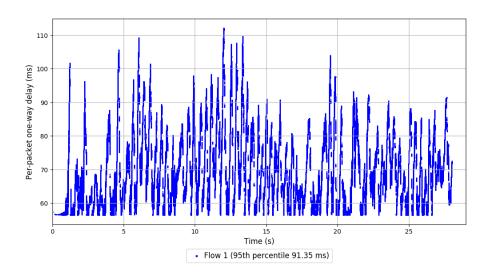
-- Flow 1:

Average throughput: 434.67 Mbit/s

95th percentile per-packet one-way delay: 91.353 ms

Run 1: Report of Indigo-MusesT — Data Link





## Run 2: Statistics of Indigo-MusesT

Start at: 2020-02-18 22:43:44 End at: 2020-02-18 22:44:14 Local clock offset: -0.232 ms Remote clock offset: -0.402 ms

# Below is generated by plot.py at 2020-02-19 02:00:59

# Datalink statistics
-- Total of 1 flow:

Average throughput: 480.23 Mbit/s

95th percentile per-packet one-way delay:  $60.244~\mathrm{ms}$ 

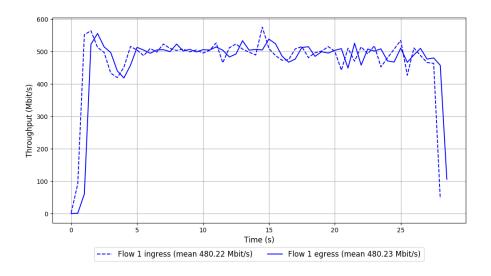
Loss rate: 0.00%

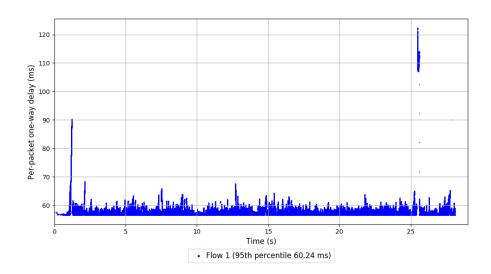
-- Flow 1:

Average throughput: 480.23 Mbit/s

95th percentile per-packet one-way delay: 60.244 ms

Run 2: Report of Indigo-MusesT — Data Link





## Run 3: Statistics of Indigo-MusesT

Start at: 2020-02-18 23:18:19 End at: 2020-02-18 23:18:50 Local clock offset: -0.312 ms Remote clock offset: -0.499 ms

# Below is generated by plot.py at 2020-02-19 02:06:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 501.58 Mbit/s

95th percentile per-packet one-way delay:  $72.456~\mathrm{ms}$ 

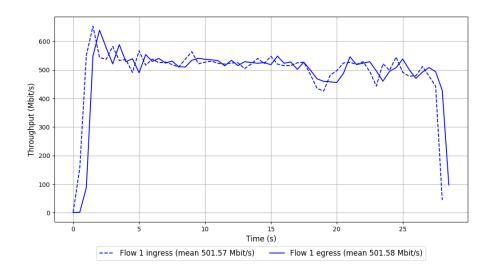
Loss rate: 0.00%

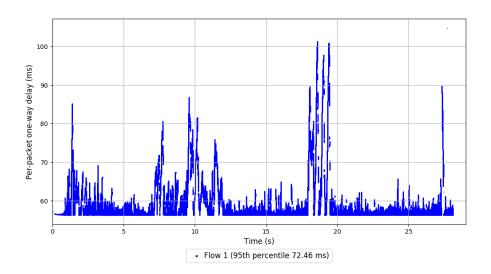
-- Flow 1:

Average throughput: 501.58 Mbit/s

95th percentile per-packet one-way delay: 72.456 ms

Run 3: Report of Indigo-MusesT — Data Link





## Run 4: Statistics of Indigo-MusesT

Start at: 2020-02-18 23:52:49 End at: 2020-02-18 23:53:19 Local clock offset: -0.787 ms Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2020-02-19 02:06:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 446.25 Mbit/s

95th percentile per-packet one-way delay: 91.468 ms

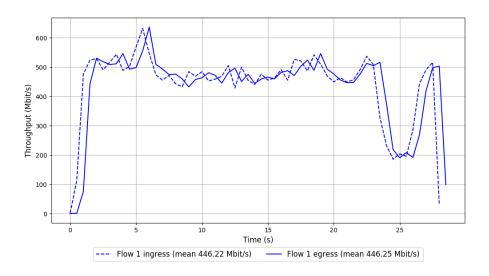
Loss rate: 0.00%

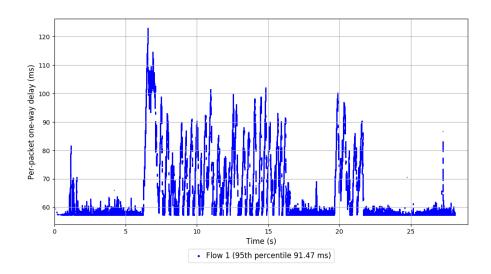
-- Flow 1:

Average throughput: 446.25 Mbit/s

95th percentile per-packet one-way delay: 91.468 ms

Run 4: Report of Indigo-MusesT — Data Link





## Run 5: Statistics of Indigo-MusesT

Start at: 2020-02-19 00:26:35 End at: 2020-02-19 00:27:05 Local clock offset: -0.464 ms Remote clock offset: 0.819 ms

# Below is generated by plot.py at 2020-02-19 02:06:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 434.59 Mbit/s

95th percentile per-packet one-way delay: 84.066 ms

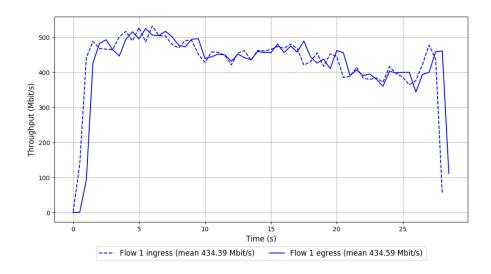
Loss rate: 0.00%

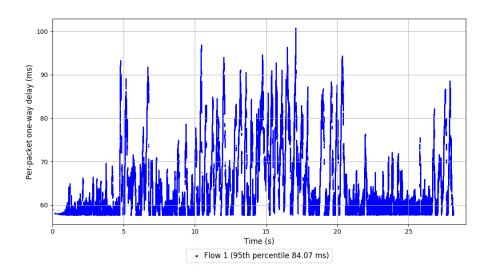
-- Flow 1:

Average throughput: 434.59 Mbit/s

95th percentile per-packet one-way delay: 84.066 ms

Run 5: Report of Indigo-MusesT — Data Link





### Run 1: Statistics of LEDBAT

Start at: 2020-02-18 22:01:26 End at: 2020-02-18 22:01:56 Local clock offset: -0.114 ms Remote clock offset: 0.208 ms

# Below is generated by plot.py at 2020-02-19 02:06:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 58.571 ms

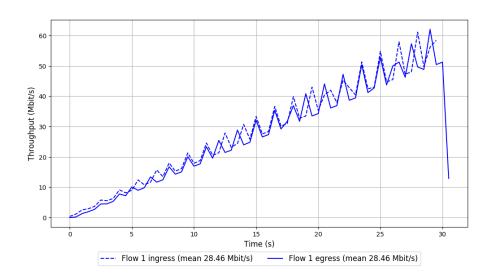
Loss rate: 0.00%

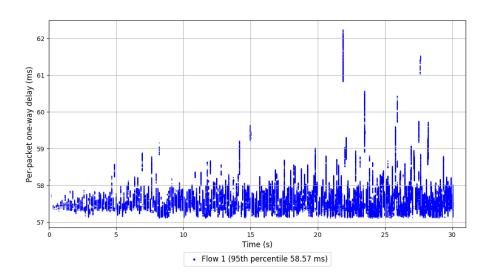
-- Flow 1:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 58.571 ms

Run 1: Report of LEDBAT — Data Link





### Run 2: Statistics of LEDBAT

Start at: 2020-02-18 22:35:19 End at: 2020-02-18 22:35:49 Local clock offset: -0.351 ms Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2020-02-19 02:06:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 58.579 ms

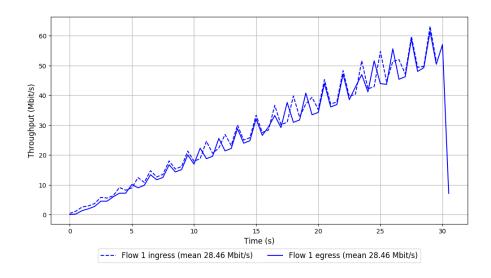
Loss rate: 0.00%

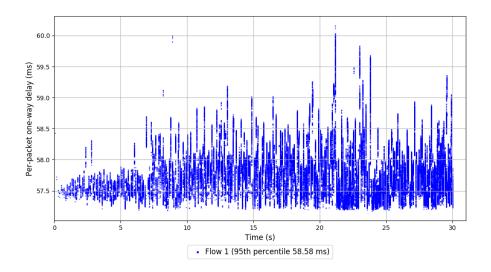
-- Flow 1:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 58.579 ms

Run 2: Report of LEDBAT — Data Link





# Run 3: Statistics of LEDBAT

Start at: 2020-02-18 23:09:57 End at: 2020-02-18 23:10:27 Local clock offset: 0.073 ms Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2020-02-19 02:06:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 27.00 Mbit/s

95th percentile per-packet one-way delay: 57.701 ms

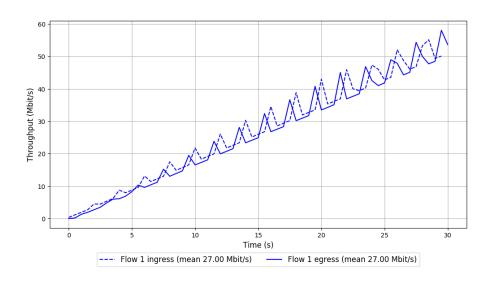
Loss rate: 0.00%

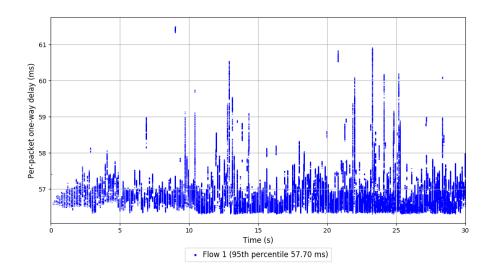
-- Flow 1:

Average throughput: 27.00 Mbit/s

95th percentile per-packet one-way delay: 57.701 ms

Run 3: Report of LEDBAT — Data Link





# Run 4: Statistics of LEDBAT

Start at: 2020-02-18 23:44:37 End at: 2020-02-18 23:45:07 Local clock offset: -0.356 ms Remote clock offset: 0.102 ms

# Below is generated by plot.py at 2020-02-19 02:06:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 59.209 ms

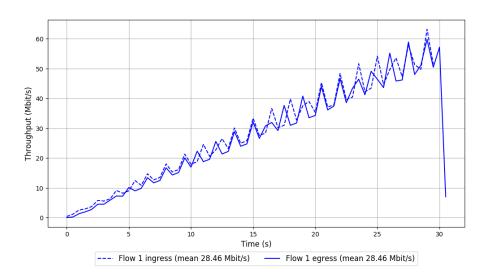
Loss rate: 0.00%

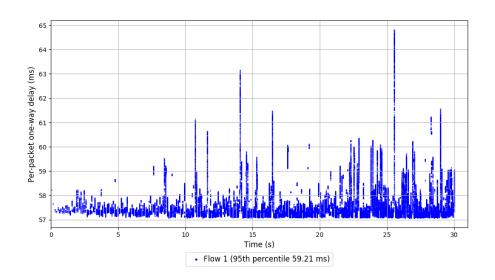
-- Flow 1:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 59.209 ms

Run 4: Report of LEDBAT — Data Link





# Run 5: Statistics of LEDBAT

Start at: 2020-02-19 00:18:19 End at: 2020-02-19 00:18:49 Local clock offset: -0.44 ms Remote clock offset: -0.407 ms

# Below is generated by plot.py at 2020-02-19 02:06:12

# Datalink statistics
-- Total of 1 flow:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 58.877 ms

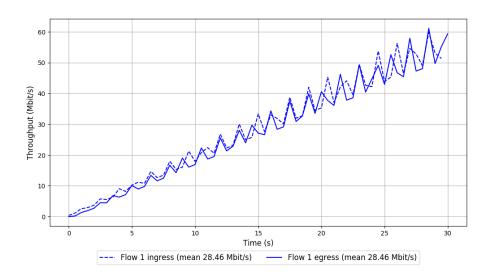
Loss rate: 0.00%

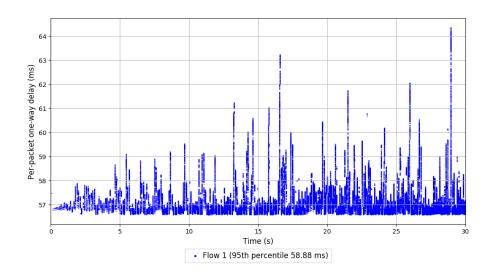
-- Flow 1:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 58.877 ms

Run 5: Report of LEDBAT — Data Link





# Run 1: Statistics of Muses\\_DecisionTree

Start at: 2020-02-18 21:49:52 End at: 2020-02-18 21:50:22 Local clock offset: -0.427 ms Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2020-02-19 02:11:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 496.83 Mbit/s

95th percentile per-packet one-way delay: 59.501 ms

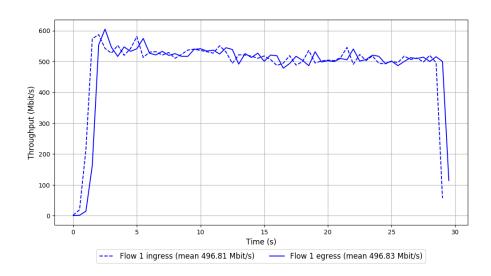
Loss rate: 0.00%

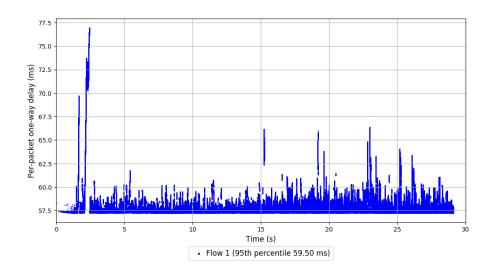
-- Flow 1:

Average throughput: 496.83 Mbit/s

95th percentile per-packet one-way delay: 59.501 ms

Run 1: Report of Muses\_DecisionTree — Data Link





# Run 2: Statistics of Muses\\_DecisionTree

Start at: 2020-02-18 22:23:52 End at: 2020-02-18 22:24:22 Local clock offset: -0.163 ms Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2020-02-19 02:11:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 428.64 Mbit/s

95th percentile per-packet one-way delay: 74.632 ms

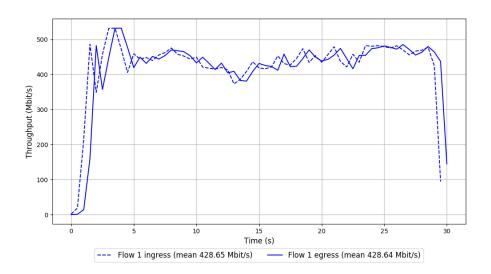
Loss rate: 0.01%

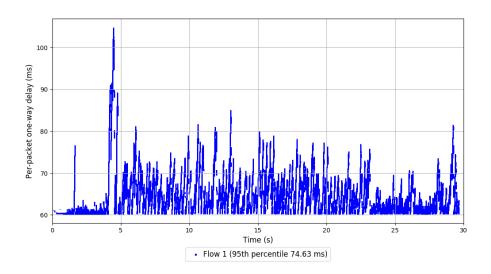
-- Flow 1:

Average throughput: 428.64 Mbit/s

95th percentile per-packet one-way delay: 74.632 ms

Run 2: Report of Muses\_DecisionTree — Data Link





# Run 3: Statistics of Muses\\_DecisionTree

Start at: 2020-02-18 22:58:12 End at: 2020-02-18 22:58:42 Local clock offset: 0.064 ms Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2020-02-19 02:11:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 466.81 Mbit/s

95th percentile per-packet one-way delay: 71.221 ms

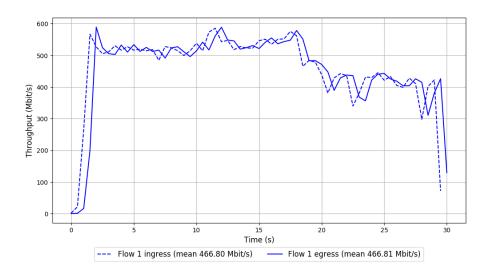
Loss rate: 0.00%

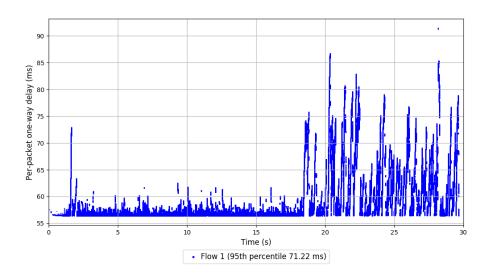
-- Flow 1:

Average throughput: 466.81 Mbit/s

95th percentile per-packet one-way delay: 71.221 ms

Run 3: Report of Muses\_DecisionTree — Data Link





# Run 4: Statistics of Muses\\_DecisionTree

Start at: 2020-02-18 23:32:57 End at: 2020-02-18 23:33:27 Local clock offset: -0.317 ms Remote clock offset: 0.55 ms

# Below is generated by plot.py at 2020-02-19 02:11:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 433.90 Mbit/s

95th percentile per-packet one-way delay: 72.330 ms

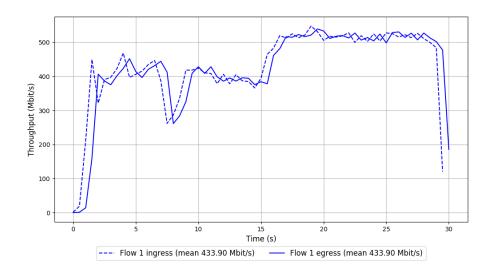
Loss rate: 0.00%

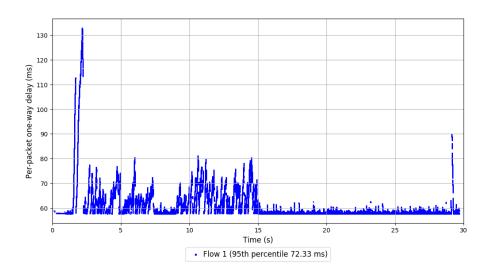
-- Flow 1:

Average throughput: 433.90 Mbit/s

95th percentile per-packet one-way delay: 72.330 ms

Run 4: Report of Muses\_DecisionTree — Data Link





# Run 5: Statistics of Muses\\_DecisionTree

Start at: 2020-02-19 00:06:58 End at: 2020-02-19 00:07:28 Local clock offset: -0.404 ms Remote clock offset: -1.29 ms

# Below is generated by plot.py at 2020-02-19 02:11:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 327.79 Mbit/s

95th percentile per-packet one-way delay: 59.853 ms

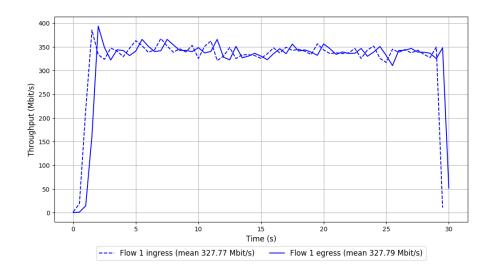
Loss rate: 0.01%

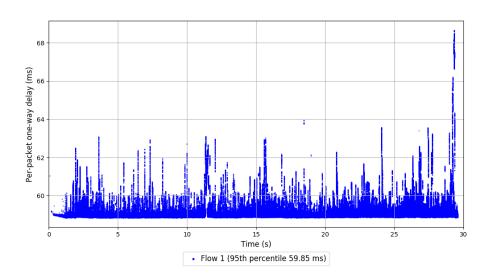
-- Flow 1:

Average throughput: 327.79 Mbit/s

95th percentile per-packet one-way delay: 59.853 ms

Run 5: Report of Muses\_DecisionTree — Data Link





# Run 1: Statistics of Muses\\_DecisionTreeHO

Start at: 2020-02-18 21:58:55 End at: 2020-02-18 21:59:25 Local clock offset: -0.452 ms Remote clock offset: -0.164 ms

# Below is generated by plot.py at 2020-02-19 02:12:55

# Datalink statistics
-- Total of 1 flow:

Average throughput: 310.45 Mbit/s

95th percentile per-packet one-way delay: 124.047 ms

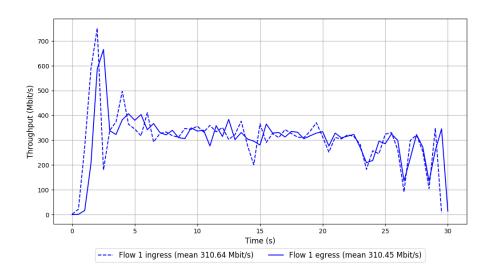
Loss rate: 0.06%

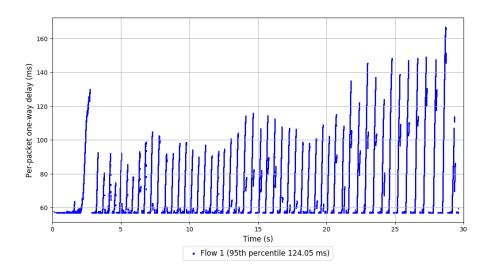
-- Flow 1:

Average throughput: 310.45 Mbit/s

95th percentile per-packet one-way delay: 124.047 ms

Run 1: Report of Muses\_DecisionTreeH0 — Data Link





# Run 2: Statistics of Muses\\_DecisionTreeHO

Start at: 2020-02-18 22:32:50 End at: 2020-02-18 22:33:20 Local clock offset: 0.141 ms Remote clock offset: -0.719 ms

# Below is generated by plot.py at 2020-02-19 02:12:55

# Datalink statistics
-- Total of 1 flow:

Average throughput: 254.04 Mbit/s

95th percentile per-packet one-way delay: 159.109 ms

Loss rate: 0.48%

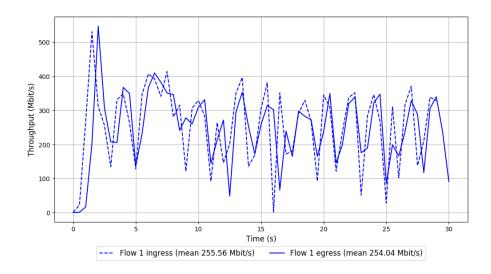
-- Flow 1:

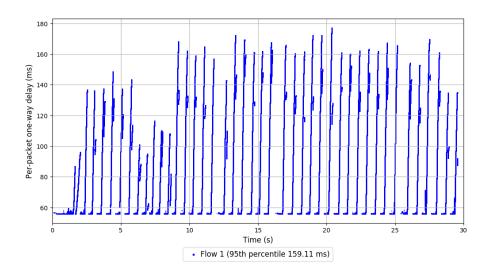
Average throughput: 254.04 Mbit/s

95th percentile per-packet one-way delay: 159.109 ms

Loss rate: 0.48%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link





# Run 3: Statistics of Muses\\_DecisionTreeHO

Start at: 2020-02-18 23:07:21 End at: 2020-02-18 23:07:51 Local clock offset: -0.277 ms Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2020-02-19 02:15:21

# Datalink statistics
-- Total of 1 flow:

Average throughput: 370.70 Mbit/s

95th percentile per-packet one-way delay: 120.797 ms

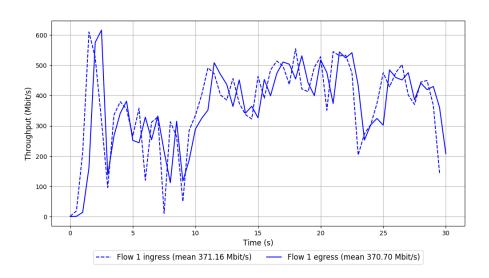
Loss rate: 0.12%

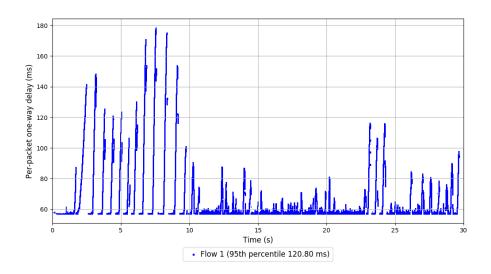
-- Flow 1:

Average throughput: 370.70 Mbit/s

95th percentile per-packet one-way delay: 120.797 ms

Run 3: Report of Muses\_DecisionTreeH0 — Data Link





# Run 4: Statistics of Muses\\_DecisionTreeHO

Start at: 2020-02-18 23:42:06 End at: 2020-02-18 23:42:36 Local clock offset: 0.002 ms Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2020-02-19 02:16:28

# Datalink statistics
-- Total of 1 flow:

Average throughput: 294.17 Mbit/s

95th percentile per-packet one-way delay: 148.477 ms

Loss rate: 0.77%

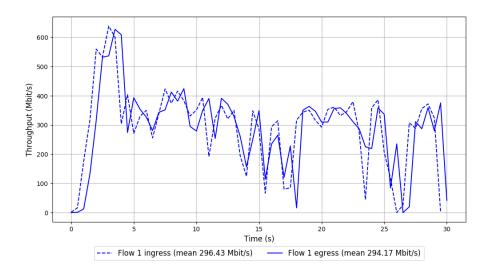
-- Flow 1:

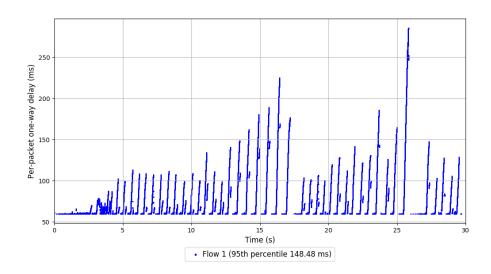
Average throughput: 294.17 Mbit/s

95th percentile per-packet one-way delay: 148.477 ms

Loss rate: 0.77%

Run 4: Report of Muses\_DecisionTreeH0 — Data Link





# Run 5: Statistics of Muses\\_DecisionTreeHO

Start at: 2020-02-19 00:15:45 End at: 2020-02-19 00:16:15 Local clock offset: -0.465 ms Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2020-02-19 02:18:55

# Datalink statistics
-- Total of 1 flow:

Average throughput: 363.86 Mbit/s

95th percentile per-packet one-way delay: 128.353 ms

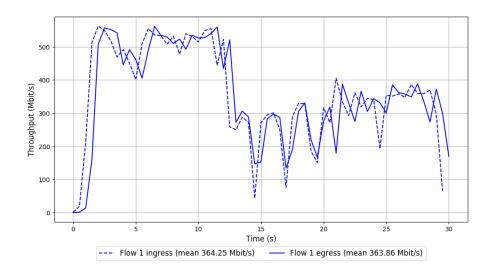
Loss rate: 0.00%

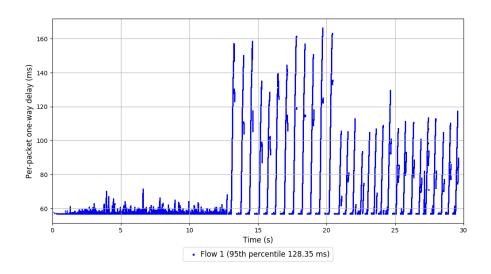
-- Flow 1:

Average throughput: 363.86 Mbit/s

95th percentile per-packet one-way delay: 128.353 ms

Run 5: Report of Muses\_DecisionTreeH0 — Data Link





# Run 1: Statistics of Muses\\_DecisionTreeRO

Start at: 2020-02-18 21:57:24 End at: 2020-02-18 21:57:54 Local clock offset: 0.204 ms Remote clock offset: -0.633 ms

# Below is generated by plot.py at 2020-02-19 02:22:05

# Datalink statistics
-- Total of 1 flow:

Average throughput: 453.64 Mbit/s

95th percentile per-packet one-way delay: 75.404 ms

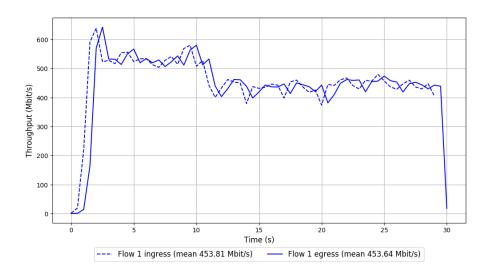
Loss rate: 0.04%

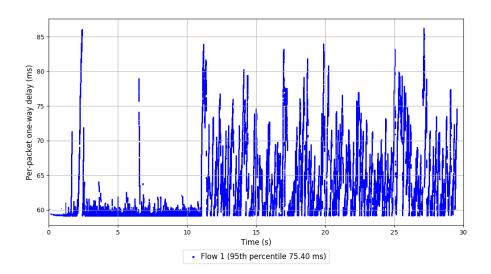
-- Flow 1:

Average throughput: 453.64 Mbit/s

95th percentile per-packet one-way delay: 75.404 ms

Run 1: Report of Muses\_DecisionTreeR0 — Data Link





# Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2020-02-18 22:31:24 End at: 2020-02-18 22:31:54 Local clock offset: 0.151 ms Remote clock offset: 0.134 ms

# Below is generated by plot.py at 2020-02-19 02:22:05

# Datalink statistics
-- Total of 1 flow:

Average throughput: 346.95 Mbit/s

95th percentile per-packet one-way delay: 57.147 ms

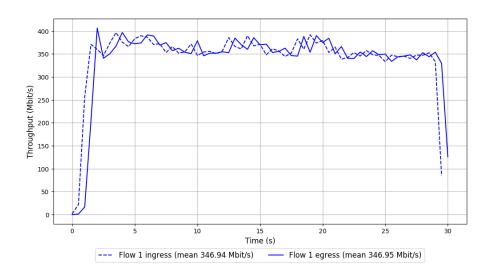
Loss rate: 0.00%

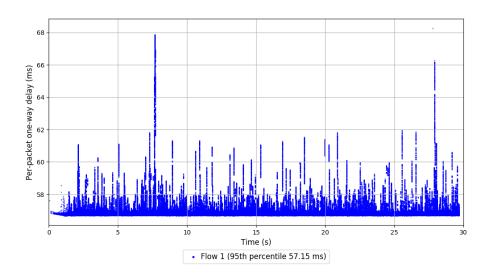
-- Flow 1:

Average throughput: 346.95 Mbit/s

95th percentile per-packet one-way delay: 57.147 ms

Run 2: Report of Muses\_DecisionTreeR0 — Data Link





# Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2020-02-18 23:05:48 End at: 2020-02-18 23:06:18 Local clock offset: -0.275 ms Remote clock offset: -0.23 ms

# Below is generated by plot.py at 2020-02-19 02:23:13

# Datalink statistics
-- Total of 1 flow:

Average throughput: 495.36 Mbit/s

95th percentile per-packet one-way delay: 60.909 ms

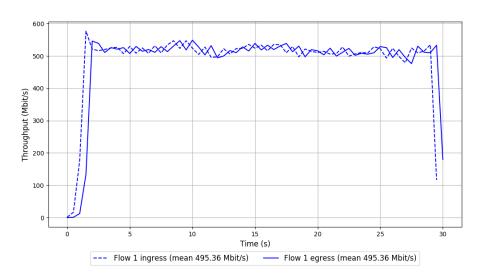
Loss rate: 0.01%

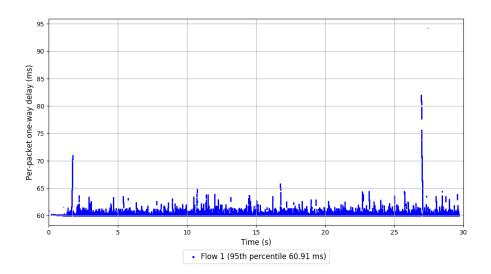
-- Flow 1:

Average throughput: 495.36 Mbit/s

95th percentile per-packet one-way delay: 60.909 ms

Run 3: Report of Muses\_DecisionTreeR0 — Data Link





# Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2020-02-18 23:40:38 End at: 2020-02-18 23:41:08 Local clock offset: -0.674 ms Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2020-02-19 02:23:13

# Datalink statistics
-- Total of 1 flow:

Average throughput: 409.63 Mbit/s

95th percentile per-packet one-way delay: 62.539 ms

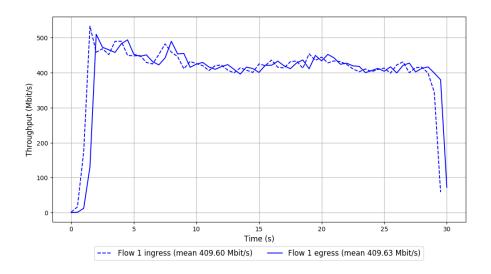
Loss rate: 0.01%

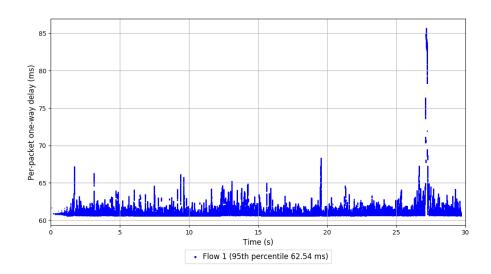
-- Flow 1:

Average throughput: 409.63 Mbit/s

95th percentile per-packet one-way delay: 62.539 ms

Run 4: Report of Muses\_DecisionTreeR0 — Data Link





# Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2020-02-19 00:14:16 End at: 2020-02-19 00:14:46 Local clock offset: -0.409 ms Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2020-02-19 02:23:16

# Datalink statistics
-- Total of 1 flow:

Average throughput: 414.65 Mbit/s

95th percentile per-packet one-way delay: 77.072 ms

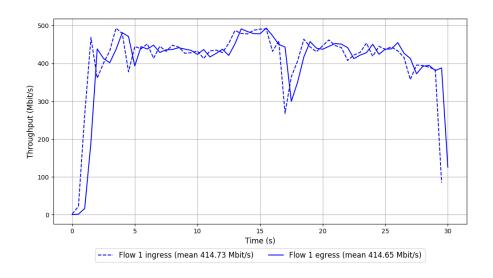
Loss rate: 0.02%

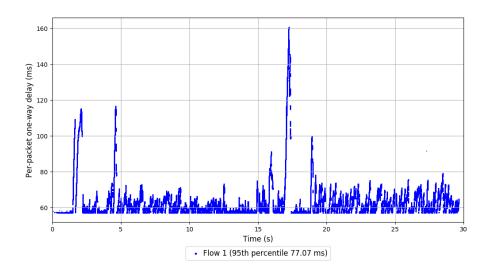
-- Flow 1:

Average throughput: 414.65 Mbit/s

95th percentile per-packet one-way delay: 77.072 ms

Run 5: Report of Muses\_DecisionTreeR0 — Data Link





# Run 1: Statistics of PCC-Allegro

Start at: 2020-02-18 22:04:06 End at: 2020-02-18 22:04:36 Local clock offset: -0.182 ms Remote clock offset: -0.373 ms

# Below is generated by plot.py at 2020-02-19 02:32:55

# Datalink statistics
-- Total of 1 flow:

Average throughput: 349.02 Mbit/s

95th percentile per-packet one-way delay: 110.110 ms

Loss rate: 1.45%

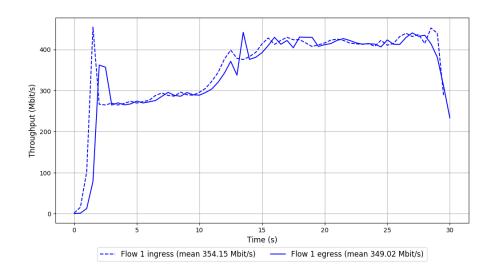
-- Flow 1:

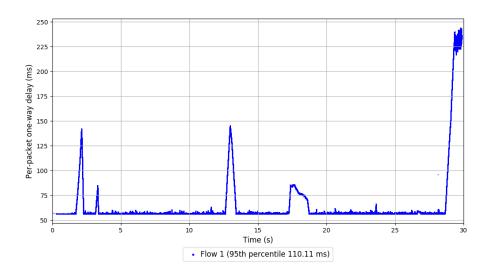
Average throughput: 349.02 Mbit/s

95th percentile per-packet one-way delay: 110.110 ms

Loss rate: 1.45%

Run 1: Report of PCC-Allegro — Data Link





# Run 2: Statistics of PCC-Allegro

Start at: 2020-02-18 22:37:59 End at: 2020-02-18 22:38:29 Local clock offset: 0.122 ms Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2020-02-19 02:36:59

# Datalink statistics
-- Total of 1 flow:

Average throughput: 405.23 Mbit/s

95th percentile per-packet one-way delay: 204.163 ms

Loss rate: 4.03%

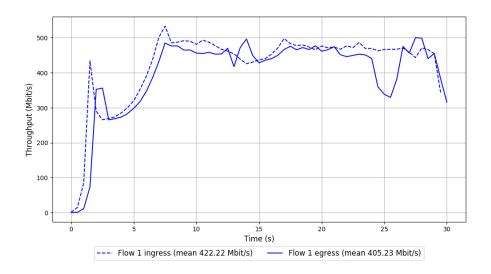
-- Flow 1:

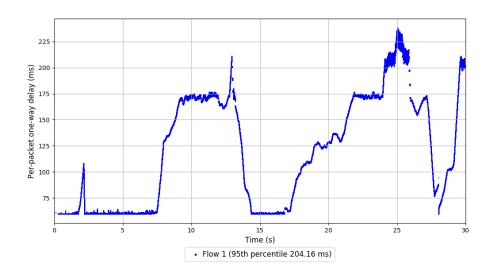
Average throughput: 405.23 Mbit/s

95th percentile per-packet one-way delay: 204.163 ms

Loss rate: 4.03%

Run 2: Report of PCC-Allegro — Data Link





# Run 3: Statistics of PCC-Allegro

Start at: 2020-02-18 23:12:37 End at: 2020-02-18 23:13:07 Local clock offset: -0.605 ms Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2020-02-19 02:39:46

# Datalink statistics
-- Total of 1 flow:

Average throughput: 422.74 Mbit/s

95th percentile per-packet one-way delay: 212.496 ms

Loss rate: 6.91%

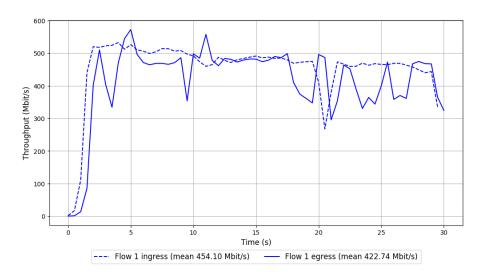
-- Flow 1:

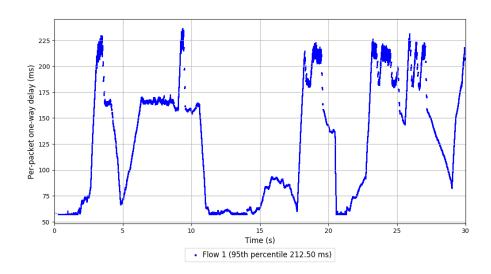
Average throughput: 422.74 Mbit/s

95th percentile per-packet one-way delay: 212.496 ms

Loss rate: 6.91%

Run 3: Report of PCC-Allegro — Data Link





# Run 4: Statistics of PCC-Allegro

Start at: 2020-02-18 23:47:18 End at: 2020-02-18 23:47:48 Local clock offset: -0.728 ms Remote clock offset: 0.698 ms

# Below is generated by plot.py at 2020-02-19 02:39:46

# Datalink statistics
-- Total of 1 flow:

Average throughput: 336.48 Mbit/s

95th percentile per-packet one-way delay: 220.110 ms

Loss rate: 3.88%

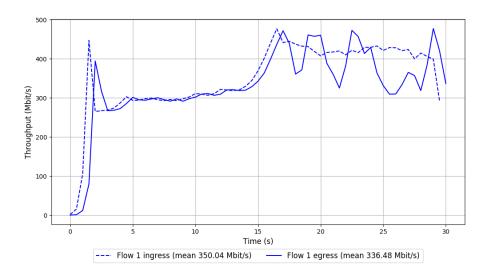
-- Flow 1:

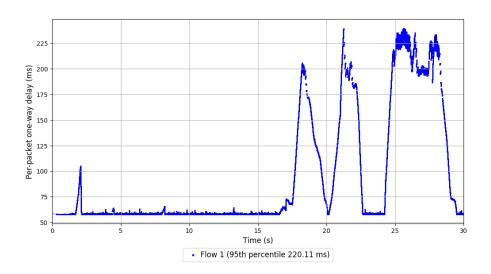
Average throughput: 336.48 Mbit/s

95th percentile per-packet one-way delay: 220.110 ms

Loss rate: 3.88%

Run 4: Report of PCC-Allegro — Data Link





# Run 5: Statistics of PCC-Allegro

Start at: 2020-02-19 00:20:58 End at: 2020-02-19 00:21:28 Local clock offset: -0.794 ms Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2020-02-19 02:39:46

# Datalink statistics
-- Total of 1 flow:

Average throughput: 314.75 Mbit/s

95th percentile per-packet one-way delay: 217.310 ms

Loss rate: 0.92%

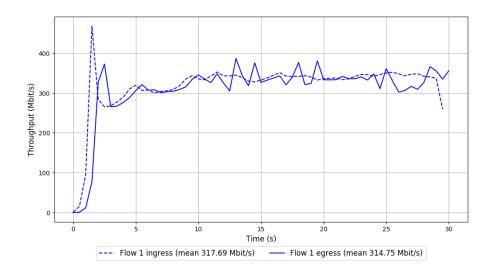
-- Flow 1:

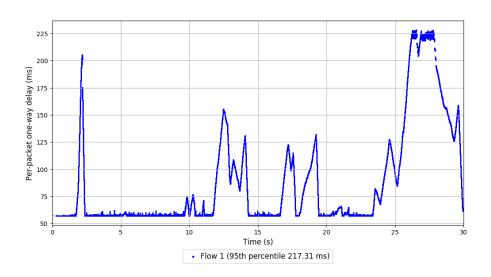
Average throughput: 314.75 Mbit/s

95th percentile per-packet one-way delay: 217.310 ms

Loss rate: 0.92%

Run 5: Report of PCC-Allegro — Data Link





# Run 1: Statistics of PCC-Expr

Start at: 2020-02-18 21:38:37 End at: 2020-02-18 21:39:07 Local clock offset: -0.386 ms Remote clock offset: -0.245 ms

# Below is generated by plot.py at 2020-02-19 02:39:46

# Datalink statistics
-- Total of 1 flow:

Average throughput: 284.01 Mbit/s

95th percentile per-packet one-way delay: 148.753 ms

Loss rate: 1.01%

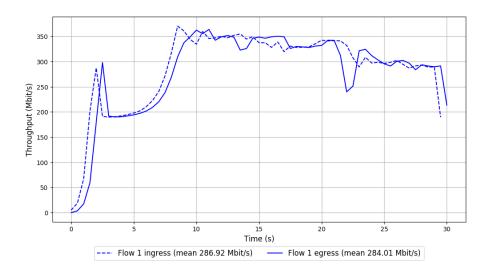
-- Flow 1:

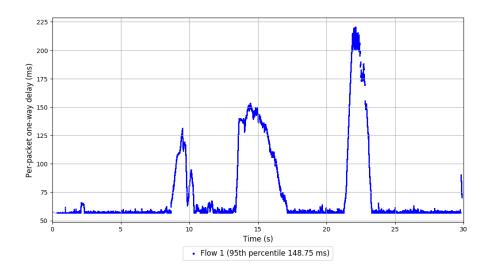
Average throughput: 284.01 Mbit/s

95th percentile per-packet one-way delay: 148.753 ms

Loss rate: 1.01%

Run 1: Report of PCC-Expr — Data Link





# Run 2: Statistics of PCC-Expr

Start at: 2020-02-18 22:12:23 End at: 2020-02-18 22:12:53 Local clock offset: -0.264 ms Remote clock offset: -0.6 ms

# Below is generated by plot.py at 2020-02-19 02:39:46

# Datalink statistics
-- Total of 1 flow:

Average throughput: 217.05 Mbit/s

95th percentile per-packet one-way delay:  $86.156~\mathrm{ms}$ 

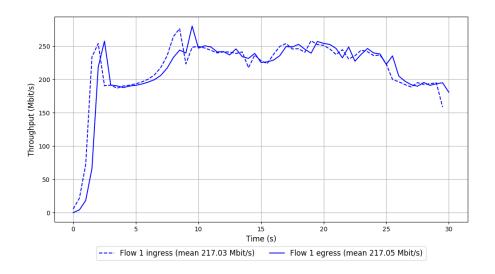
Loss rate: 0.00%

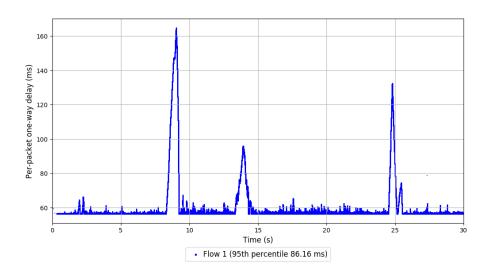
-- Flow 1:

Average throughput: 217.05 Mbit/s

95th percentile per-packet one-way delay: 86.156 ms

Run 2: Report of PCC-Expr — Data Link





# Run 3: Statistics of PCC-Expr

Start at: 2020-02-18 22:46:24 End at: 2020-02-18 22:46:54 Local clock offset: 0.172 ms Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2020-02-19 02:39:46

# Datalink statistics
-- Total of 1 flow:

Average throughput: 239.75 Mbit/s

95th percentile per-packet one-way delay: 77.987 ms

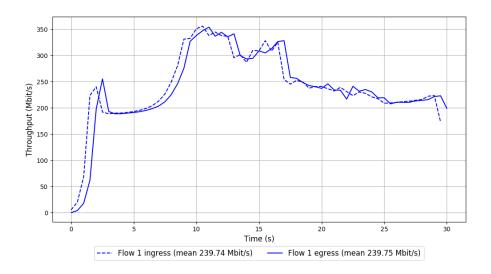
Loss rate: 0.00%

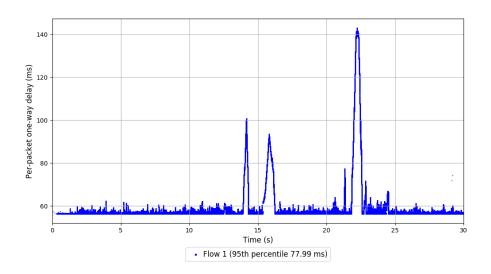
-- Flow 1:

Average throughput: 239.75 Mbit/s

95th percentile per-packet one-way delay: 77.987 ms

Run 3: Report of PCC-Expr — Data Link





# Run 4: Statistics of PCC-Expr

Start at: 2020-02-18 23:21:01 End at: 2020-02-18 23:21:31 Local clock offset: -0.308 ms Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2020-02-19 02:43:23

# Datalink statistics
-- Total of 1 flow:

Average throughput: 236.92 Mbit/s

95th percentile per-packet one-way delay: 124.830 ms

Loss rate: 0.32%

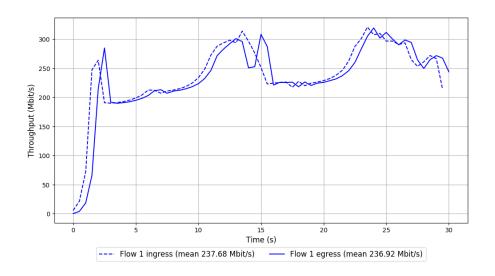
-- Flow 1:

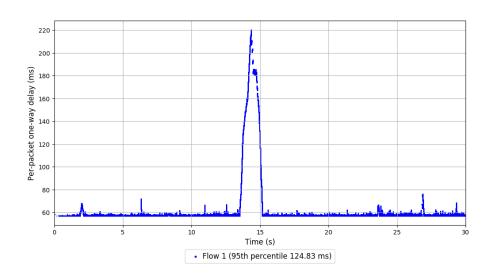
Average throughput: 236.92 Mbit/s

95th percentile per-packet one-way delay: 124.830 ms

Loss rate: 0.32%

Run 4: Report of PCC-Expr — Data Link





# Run 5: Statistics of PCC-Expr

Start at: 2020-02-18 23:55:27 End at: 2020-02-18 23:55:57 Local clock offset: -0.357 ms Remote clock offset: 0.637 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 235.71 Mbit/s

95th percentile per-packet one-way delay: 159.440 ms

Loss rate: 0.51%

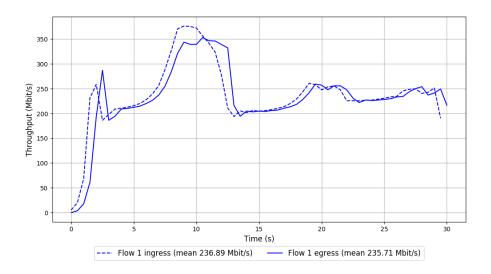
-- Flow 1:

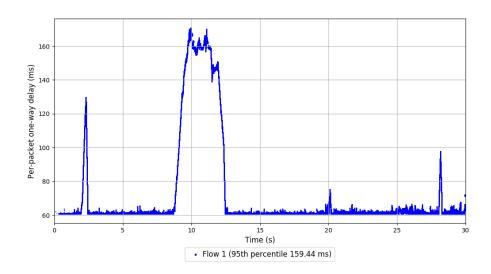
Average throughput: 235.71 Mbit/s

95th percentile per-packet one-way delay: 159.440 ms

Loss rate: 0.51%

Run 5: Report of PCC-Expr — Data Link

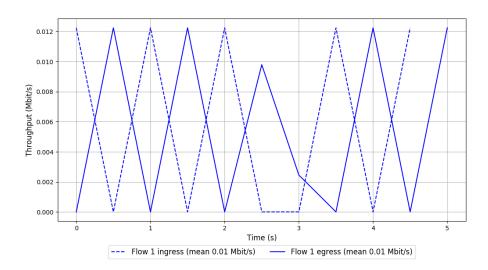


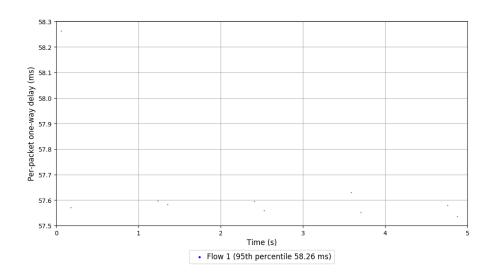


Run 1: Statistics of QUIC Cubic

Start at: 2020-02-18 21:40:11 End at: 2020-02-18 21:40:41 Local clock offset: -0.397 ms Remote clock offset: 0.029 ms

Run 1: Report of QUIC Cubic — Data Link





# Run 2: Statistics of QUIC Cubic

Start at: 2020-02-18 22:13:51 End at: 2020-02-18 22:14:21 Local clock offset: 0.199 ms Remote clock offset: -0.48 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 56.196 ms

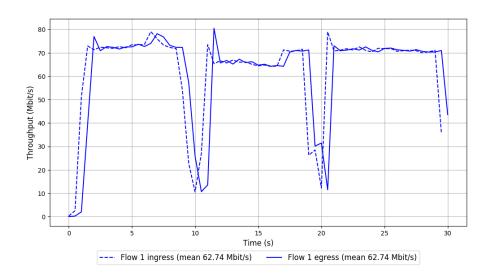
Loss rate: 0.00%

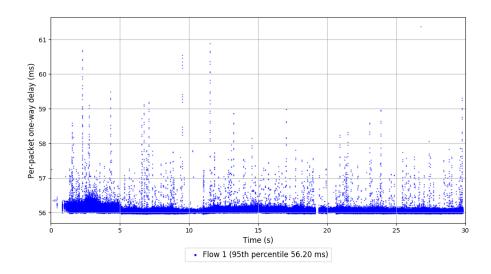
-- Flow 1:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 56.196 ms

Run 2: Report of QUIC Cubic — Data Link





# Run 3: Statistics of QUIC Cubic

Start at: 2020-02-18 22:47:54 End at: 2020-02-18 22:48:24 Local clock offset: -0.692 ms Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 48.94 Mbit/s

95th percentile per-packet one-way delay: 60.545 ms

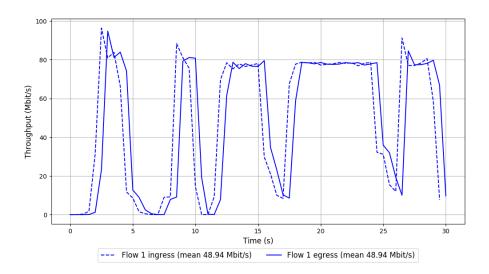
Loss rate: 0.00%

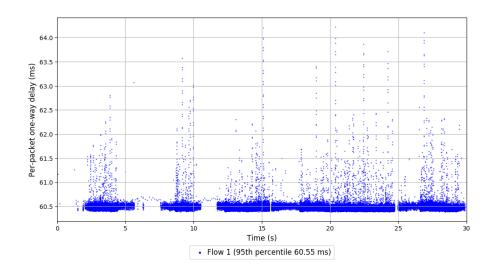
-- Flow 1:

Average throughput: 48.94 Mbit/s

95th percentile per-packet one-way delay:  $60.545~\mathrm{ms}$ 

Run 3: Report of QUIC Cubic — Data Link





# Run 4: Statistics of QUIC Cubic

Start at: 2020-02-18 23:22:30 End at: 2020-02-18 23:23:00 Local clock offset: -0.264 ms Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 62.51 Mbit/s

95th percentile per-packet one-way delay: 56.869 ms

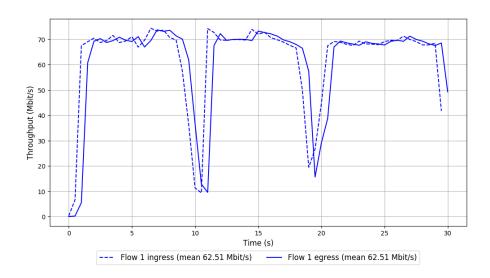
Loss rate: 0.00%

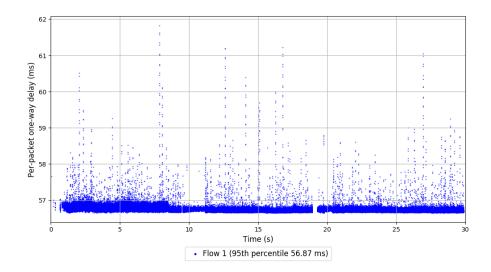
-- Flow 1:

Average throughput: 62.51 Mbit/s

95th percentile per-packet one-way delay: 56.869 ms

Run 4: Report of QUIC Cubic — Data Link





# Run 5: Statistics of QUIC Cubic

Start at: 2020-02-18 23:56:57 End at: 2020-02-18 23:57:27 Local clock offset: -0.711 ms Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 62.58 Mbit/s

95th percentile per-packet one-way delay: 57.446 ms

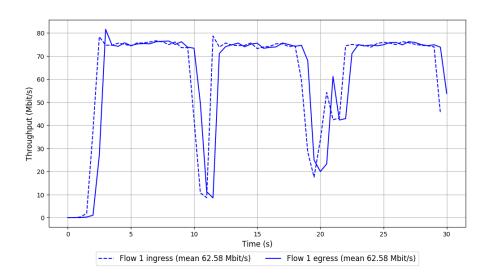
Loss rate: 0.00%

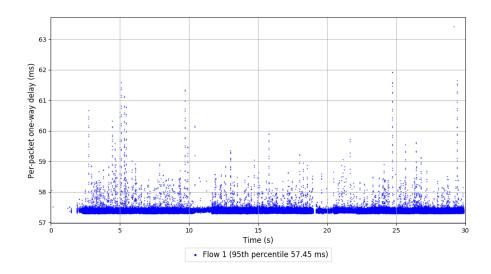
-- Flow 1:

Average throughput: 62.58 Mbit/s

95th percentile per-packet one-way delay: 57.446 ms

Run 5: Report of QUIC Cubic — Data Link





#### Run 1: Statistics of SCReAM

Start at: 2020-02-18 22:08:37 End at: 2020-02-18 22:09:07 Local clock offset: -0.125 ms Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.738 ms

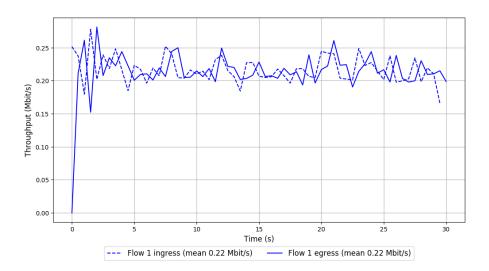
Loss rate: 0.00%

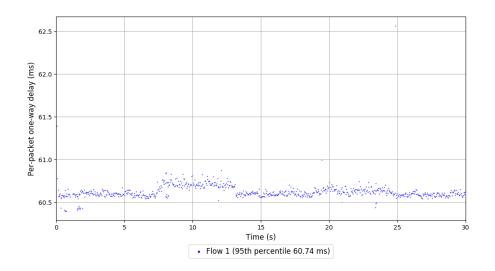
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.738 ms

Run 1: Report of SCReAM — Data Link





#### Run 2: Statistics of SCReAM

Start at: 2020-02-18 22:42:35 End at: 2020-02-18 22:43:05 Local clock offset: 0.155 ms Remote clock offset: -0.146 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.195 ms

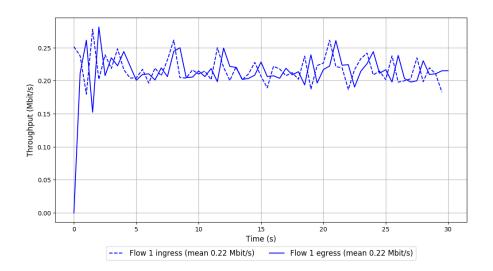
Loss rate: 0.00%

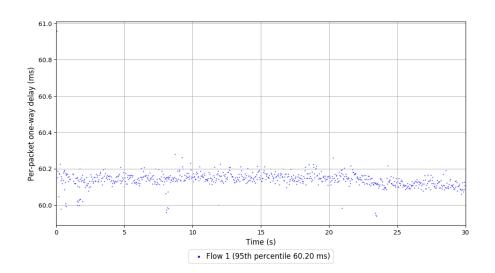
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.195 ms

Run 2: Report of SCReAM — Data Link





#### Run 3: Statistics of SCReAM

Start at: 2020-02-18 23:17:11 End at: 2020-02-18 23:17:41 Local clock offset: -0.659 ms Remote clock offset: -0.878 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 56.822 ms

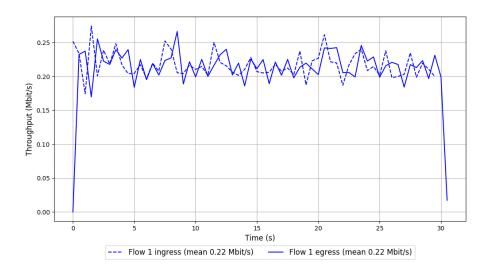
Loss rate: 0.00%

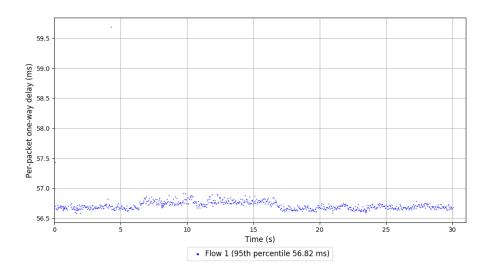
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 56.822 ms

Run 3: Report of SCReAM — Data Link





## Run 4: Statistics of SCReAM

Start at: 2020-02-18 23:51:41 End at: 2020-02-18 23:52:11 Local clock offset: -0.373 ms Remote clock offset: -0.221 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.151 ms

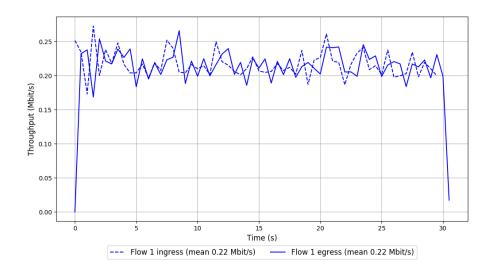
Loss rate: 0.00%

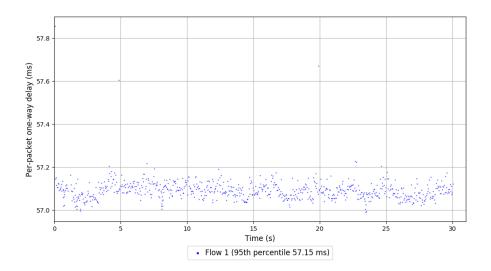
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.151 ms

Run 4: Report of SCReAM — Data Link





## Run 5: Statistics of SCReAM

Start at: 2020-02-19 00:25:27 End at: 2020-02-19 00:25:57 Local clock offset: -0.789 ms Remote clock offset: -0.739 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 56.778 ms

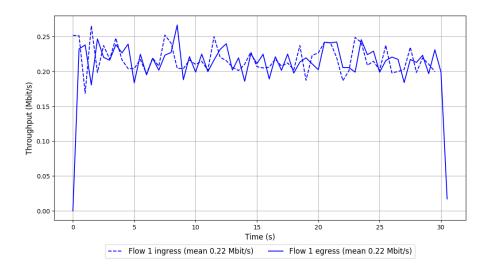
Loss rate: 0.00%

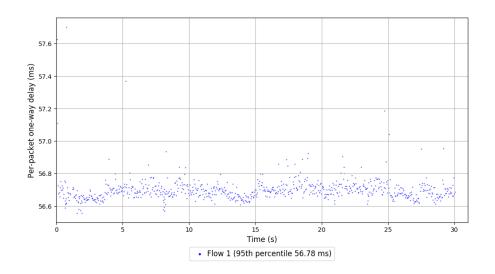
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 56.778 ms

Run 5: Report of SCReAM — Data Link





# Run 1: Statistics of Sprout

Start at: 2020-02-18 21:37:27 End at: 2020-02-18 21:37:57 Local clock offset: -0.014 ms Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 57.042 ms

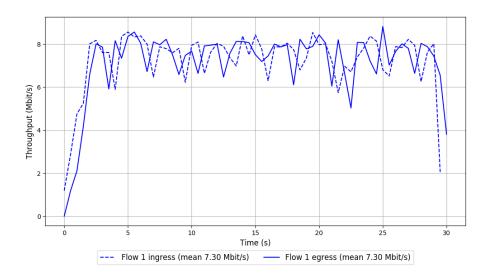
Loss rate: 0.00%

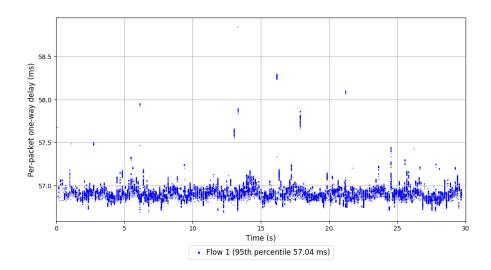
-- Flow 1:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 57.042 ms

Run 1: Report of Sprout — Data Link





# Run 2: Statistics of Sprout

Start at: 2020-02-18 22:11:14 End at: 2020-02-18 22:11:44 Local clock offset: -0.116 ms Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 57.487 ms

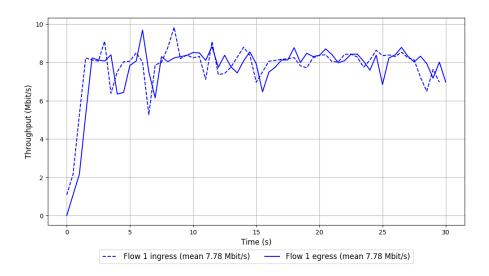
Loss rate: 0.00%

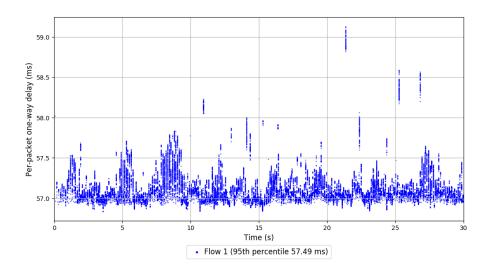
-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 57.487 ms

Run 2: Report of Sprout — Data Link





# Run 3: Statistics of Sprout

Start at: 2020-02-18 22:45:15 End at: 2020-02-18 22:45:45 Local clock offset: -0.208 ms Remote clock offset: -0.745 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 60.800 ms

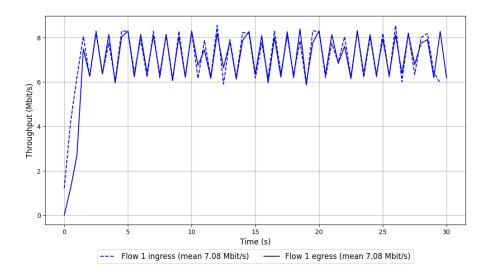
Loss rate: 0.00%

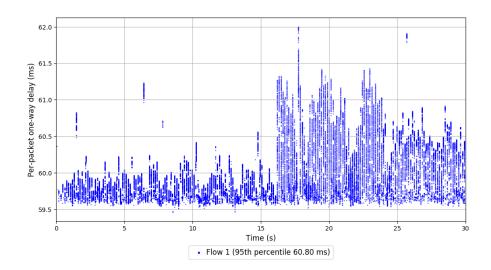
-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 60.800 ms

Run 3: Report of Sprout — Data Link





# Run 4: Statistics of Sprout

Start at: 2020-02-18 23:19:52 End at: 2020-02-18 23:20:22 Local clock offset: -0.631 ms Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 57.965 ms

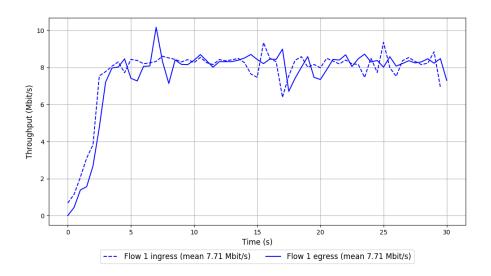
Loss rate: 0.00%

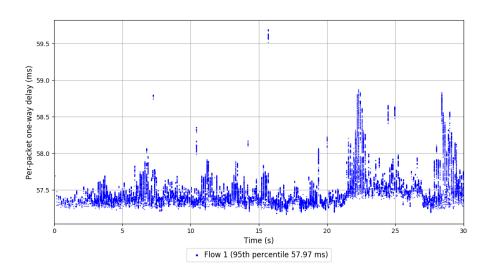
-- Flow 1:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 57.965 ms

Run 4: Report of Sprout — Data Link





# Run 5: Statistics of Sprout

Start at: 2020-02-18 23:54:18 End at: 2020-02-18 23:54:48 Local clock offset: -0.403 ms Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2020-02-19 02:44:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay:  $61.472~\mathrm{ms}$ 

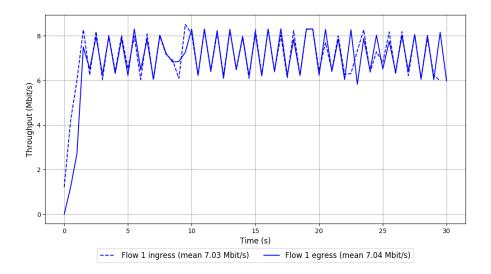
Loss rate: 0.00%

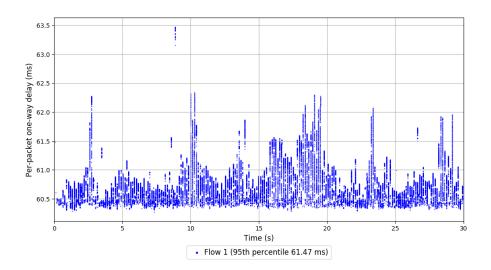
-- Flow 1:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 61.472 ms

Run 5: Report of Sprout — Data Link





## Run 1: Statistics of TaoVA-100x

Start at: 2020-02-18 22:02:38 End at: 2020-02-18 22:03:08 Local clock offset: 0.181 ms Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2020-02-19 02:48:40

# Datalink statistics
-- Total of 1 flow:

Average throughput: 216.88 Mbit/s

95th percentile per-packet one-way delay: 58.668 ms

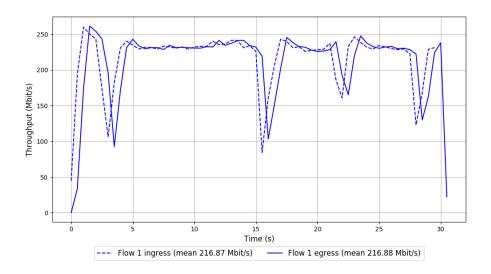
Loss rate: 0.00%

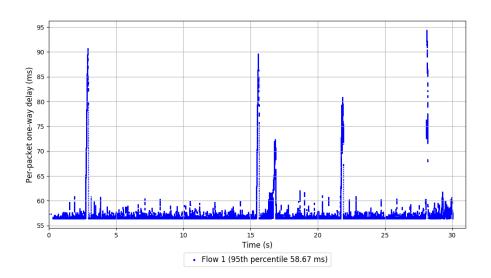
-- Flow 1:

Average throughput: 216.88 Mbit/s

95th percentile per-packet one-way delay: 58.668 ms

Run 1: Report of TaoVA-100x — Data Link





## Run 2: Statistics of TaoVA-100x

Start at: 2020-02-18 22:36:30 End at: 2020-02-18 22:37:00 Local clock offset: 0.142 ms Remote clock offset: 0.533 ms

# Below is generated by plot.py at 2020-02-19 02:49:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 225.08 Mbit/s

95th percentile per-packet one-way delay: 60.263 ms

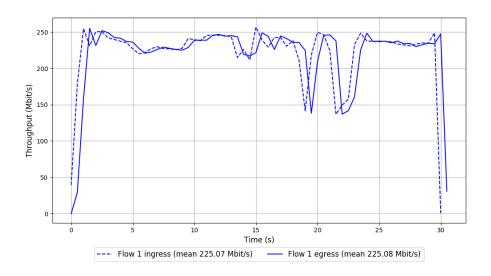
Loss rate: 0.00%

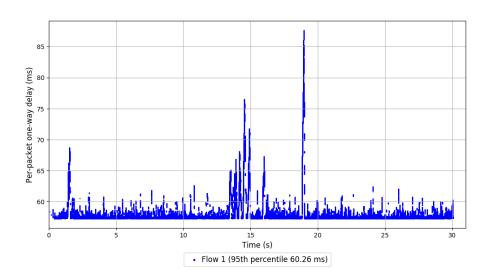
-- Flow 1:

Average throughput: 225.08 Mbit/s

95th percentile per-packet one-way delay: 60.263 ms

Run 2: Report of TaoVA-100x — Data Link





## Run 3: Statistics of TaoVA-100x

Start at: 2020-02-18 23:11:08 End at: 2020-02-18 23:11:38 Local clock offset: 0.071 ms Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2020-02-19 02:49:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 223.01 Mbit/s

95th percentile per-packet one-way delay: 64.959 ms

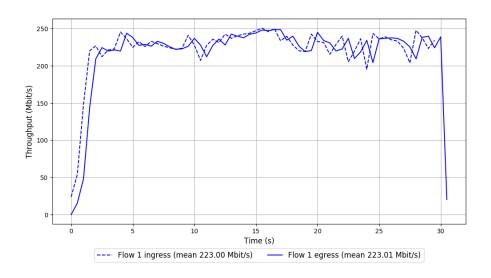
Loss rate: 0.01%

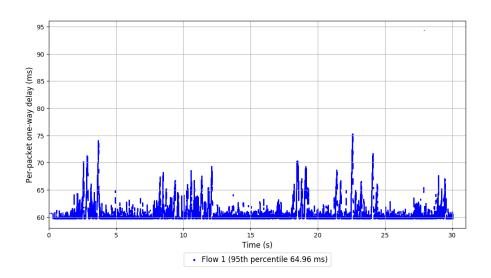
-- Flow 1:

Average throughput: 223.01 Mbit/s

95th percentile per-packet one-way delay: 64.959 ms

Run 3: Report of TaoVA-100x — Data Link





## Run 4: Statistics of TaoVA-100x

Start at: 2020-02-18 23:45:49 End at: 2020-02-18 23:46:19 Local clock offset: -0.689 ms Remote clock offset: -0.316 ms

# Below is generated by plot.py at 2020-02-19 02:49:18

# Datalink statistics
-- Total of 1 flow:

Average throughput: 224.47 Mbit/s

95th percentile per-packet one-way delay: 59.488 ms

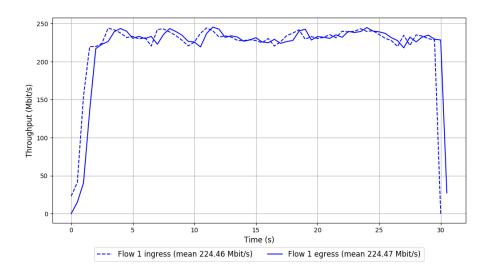
Loss rate: 0.00%

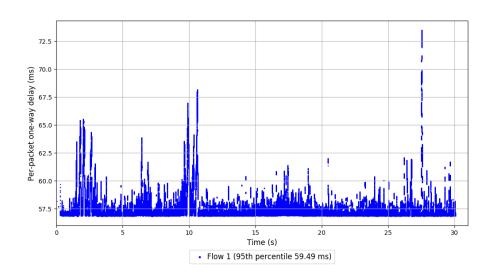
-- Flow 1:

Average throughput: 224.47 Mbit/s

95th percentile per-packet one-way delay: 59.488 ms

Run 4: Report of TaoVA-100x — Data Link





## Run 5: Statistics of TaoVA-100x

Start at: 2020-02-19 00:19:30 End at: 2020-02-19 00:20:00 Local clock offset: -0.438 ms Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2020-02-19 02:49:18

# Datalink statistics
-- Total of 1 flow:

Average throughput: 205.80 Mbit/s

95th percentile per-packet one-way delay: 66.384 ms

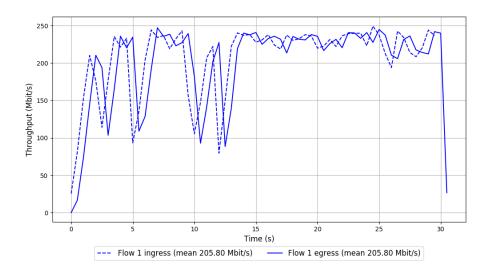
Loss rate: 0.00%

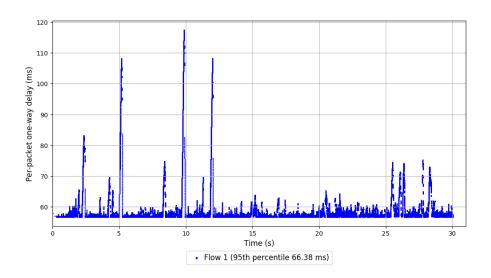
-- Flow 1:

Average throughput: 205.80 Mbit/s

95th percentile per-packet one-way delay: 66.384 ms

Run 5: Report of TaoVA-100x — Data Link





# Run 1: Statistics of TCP Vegas

Start at: 2020-02-18 21:47:12 End at: 2020-02-18 21:47:42 Local clock offset: -0.095 ms Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2020-02-19 02:49:51

# Datalink statistics
-- Total of 1 flow:

Average throughput: 383.60 Mbit/s

95th percentile per-packet one-way delay: 152.925 ms

Loss rate: 0.59%

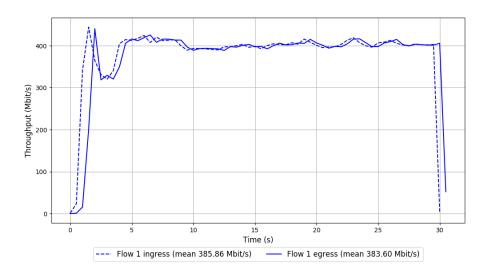
-- Flow 1:

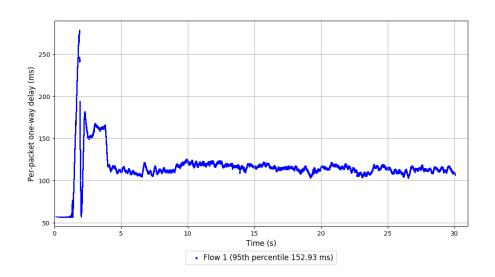
Average throughput: 383.60 Mbit/s

95th percentile per-packet one-way delay: 152.925 ms

Loss rate: 0.59%

Run 1: Report of TCP Vegas — Data Link





# Run 2: Statistics of TCP Vegas

Start at: 2020-02-18 22:21:03 End at: 2020-02-18 22:21:33 Local clock offset: -0.148 ms Remote clock offset: -0.373 ms

# Below is generated by plot.py at 2020-02-19 02:49:51

# Datalink statistics
-- Total of 1 flow:

Average throughput: 203.07 Mbit/s

95th percentile per-packet one-way delay: 57.106 ms

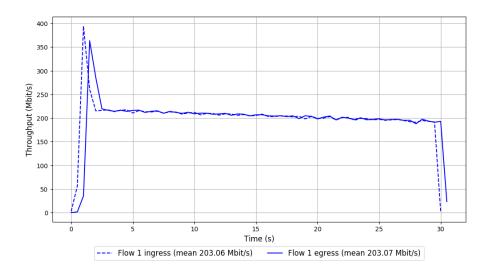
Loss rate: 0.00%

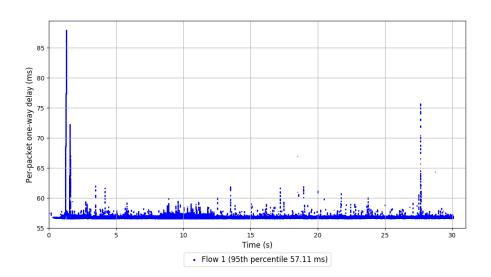
-- Flow 1:

Average throughput: 203.07 Mbit/s

95th percentile per-packet one-way delay: 57.106 ms

Run 2: Report of TCP Vegas — Data Link





# Run 3: Statistics of TCP Vegas

Start at: 2020-02-18 22:55:17 End at: 2020-02-18 22:55:47 Local clock offset: -0.253 ms Remote clock offset: 0.153 ms

# Below is generated by plot.py at 2020-02-19 02:55:24

# Datalink statistics
-- Total of 1 flow:

Average throughput: 394.18 Mbit/s

95th percentile per-packet one-way delay: 112.529 ms

Loss rate: 0.24%

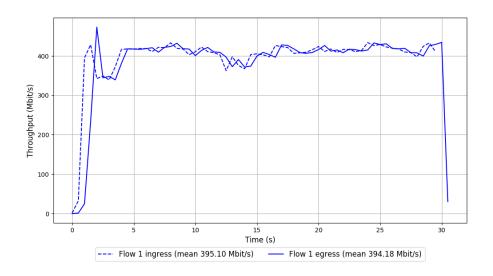
-- Flow 1:

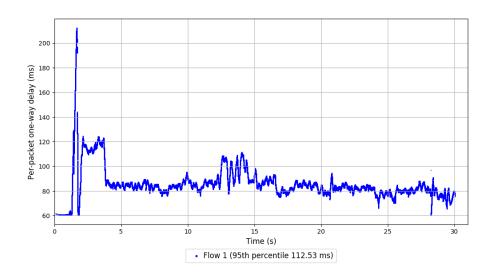
Average throughput: 394.18 Mbit/s

95th percentile per-packet one-way delay: 112.529 ms

Loss rate: 0.24%

Run 3: Report of TCP Vegas — Data Link





# Run 4: Statistics of TCP Vegas

Start at: 2020-02-18 23:29:54 End at: 2020-02-18 23:30:25 Local clock offset: 0.042 ms Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2020-02-19 02:59:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 475.66 Mbit/s

95th percentile per-packet one-way delay: 99.802 ms

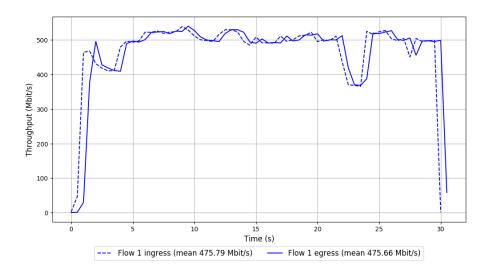
Loss rate: 0.03%

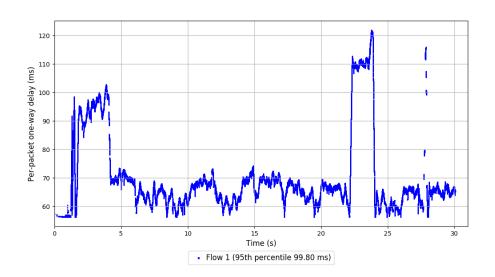
-- Flow 1:

Average throughput: 475.66 Mbit/s

95th percentile per-packet one-way delay: 99.802 ms

Run 4: Report of TCP Vegas — Data Link





# Run 5: Statistics of TCP Vegas

Start at: 2020-02-19 00:04:11 End at: 2020-02-19 00:04:41 Local clock offset: -0.395 ms Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2020-02-19 02:59:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 171.45 Mbit/s

95th percentile per-packet one-way delay: 60.614 ms

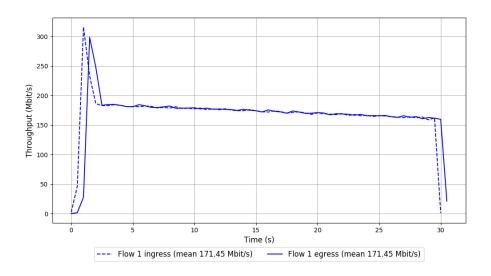
Loss rate: 0.01%

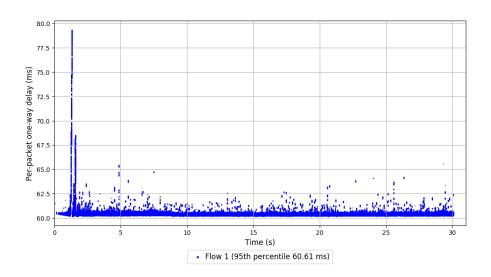
-- Flow 1:

Average throughput: 171.45 Mbit/s

95th percentile per-packet one-way delay: 60.614 ms

Run 5: Report of TCP Vegas — Data Link





## Run 1: Statistics of Verus

Start at: 2020-02-18 21:51:24 End at: 2020-02-18 21:51:54 Local clock offset: -0.093 ms Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2020-02-19 02:59:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 155.31 Mbit/s

95th percentile per-packet one-way delay: 79.584 ms

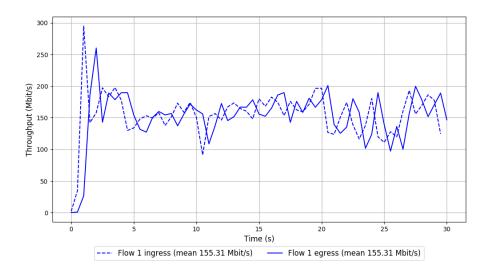
Loss rate: 0.00%

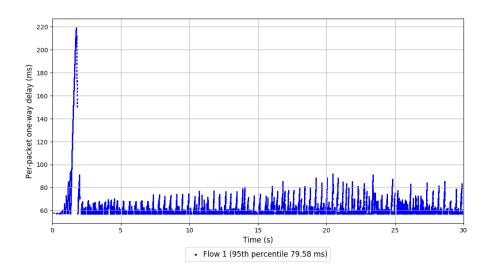
-- Flow 1:

Average throughput: 155.31 Mbit/s

95th percentile per-packet one-way delay: 79.584 ms

Run 1: Report of Verus — Data Link





## Run 2: Statistics of Verus

Start at: 2020-02-18 22:25:22 End at: 2020-02-18 22:25:52 Local clock offset: -0.181 ms Remote clock offset: 0.819 ms

# Below is generated by plot.py at 2020-02-19 02:59:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 149.21 Mbit/s

95th percentile per-packet one-way delay: 124.909 ms

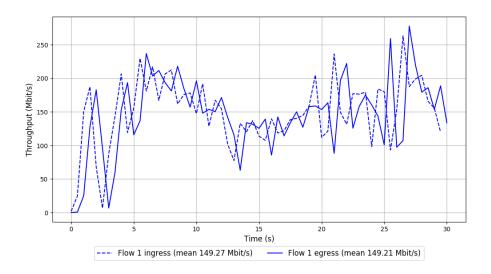
Loss rate: 0.04%

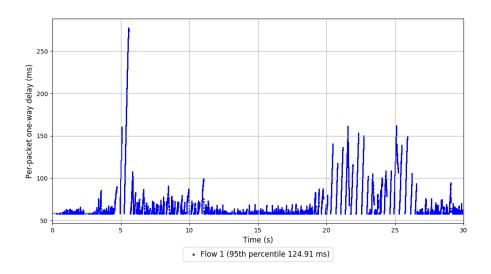
-- Flow 1:

Average throughput: 149.21 Mbit/s

95th percentile per-packet one-way delay: 124.909 ms

Run 2: Report of Verus — Data Link





## Run 3: Statistics of Verus

Start at: 2020-02-18 22:59:44 End at: 2020-02-18 23:00:14 Local clock offset: -0.605 ms Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2020-02-19 02:59:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 159.64 Mbit/s

95th percentile per-packet one-way delay: 118.243 ms

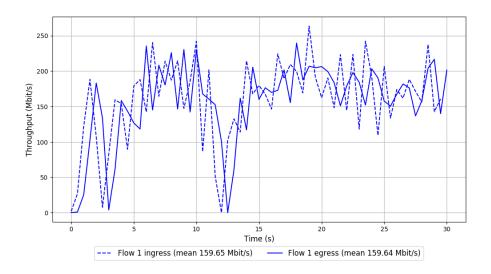
Loss rate: 0.00%

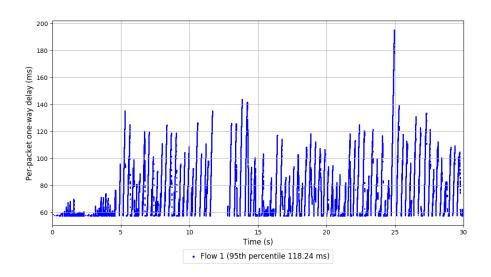
-- Flow 1:

Average throughput: 159.64 Mbit/s

95th percentile per-packet one-way delay: 118.243 ms

Run 3: Report of Verus — Data Link





## Run 4: Statistics of Verus

Start at: 2020-02-18 23:34:27 End at: 2020-02-18 23:34:57 Local clock offset: -0.681 ms Remote clock offset: -0.708 ms

# Below is generated by plot.py at 2020-02-19 02:59:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 200.99 Mbit/s

95th percentile per-packet one-way delay: 286.777 ms

Loss rate: 9.18%

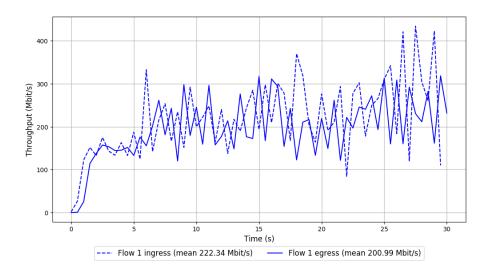
-- Flow 1:

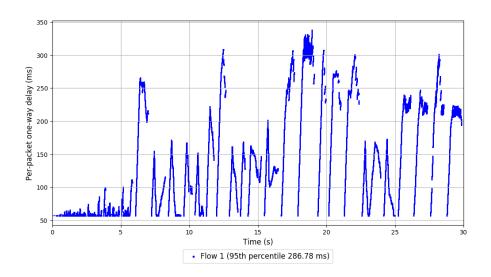
Average throughput: 200.99 Mbit/s

95th percentile per-packet one-way delay: 286.777 ms

Loss rate: 9.18%

Run 4: Report of Verus — Data Link





## Run 5: Statistics of Verus

Start at: 2020-02-19 00:08:22 End at: 2020-02-19 00:08:52 Local clock offset: -0.026 ms Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2020-02-19 02:59:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 109.04 Mbit/s

95th percentile per-packet one-way delay: 90.035 ms

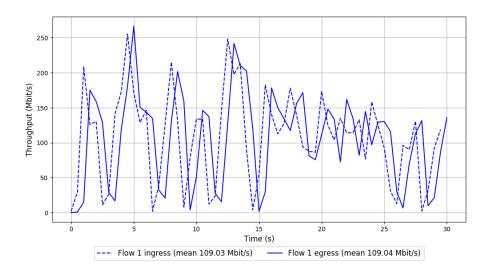
Loss rate: 0.00%

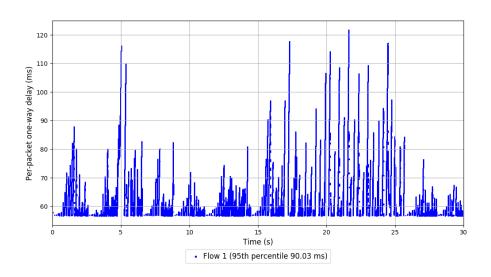
-- Flow 1:

Average throughput: 109.04 Mbit/s

95th percentile per-packet one-way delay: 90.035 ms

Run 5: Report of Verus — Data Link





## Run 1: Statistics of PCC-Vivace

Start at: 2020-02-18 22:07:09 End at: 2020-02-18 22:07:39 Local clock offset: -0.484 ms Remote clock offset: -0.197 ms

# Below is generated by plot.py at 2020-02-19 02:59:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 274.51 Mbit/s

95th percentile per-packet one-way delay: 106.816 ms

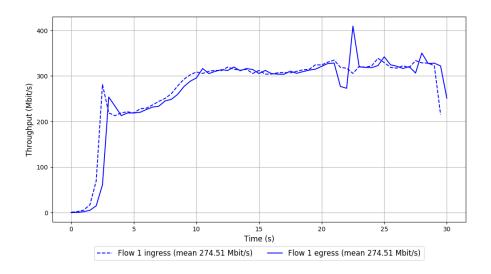
Loss rate: 0.00%

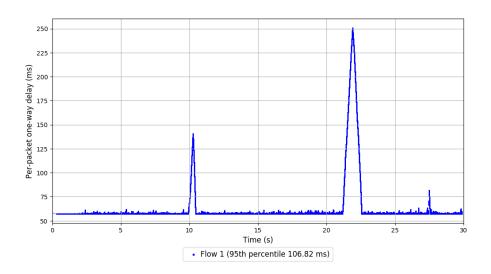
-- Flow 1:

Average throughput: 274.51 Mbit/s

95th percentile per-packet one-way delay: 106.816 ms

Run 1: Report of PCC-Vivace — Data Link





## Run 2: Statistics of PCC-Vivace

Start at: 2020-02-18 22:41:05 End at: 2020-02-18 22:41:35 Local clock offset: -0.23 ms Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2020-02-19 03:00:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 324.14 Mbit/s

95th percentile per-packet one-way delay: 124.846 ms

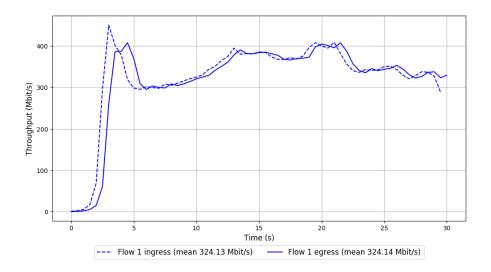
Loss rate: 0.00%

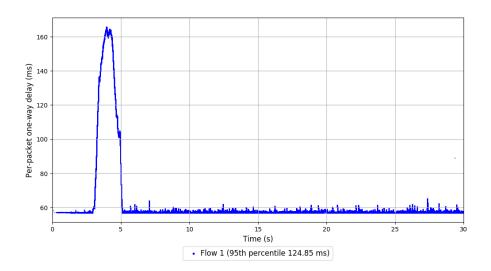
-- Flow 1:

Average throughput: 324.14 Mbit/s

95th percentile per-packet one-way delay: 124.846 ms

Run 2: Report of PCC-Vivace — Data Link





## Run 3: Statistics of PCC-Vivace

Start at: 2020-02-18 23:15:42 End at: 2020-02-18 23:16:12 Local clock offset: -0.296 ms Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2020-02-19 03:00:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 302.75 Mbit/s

95th percentile per-packet one-way delay: 132.555 ms

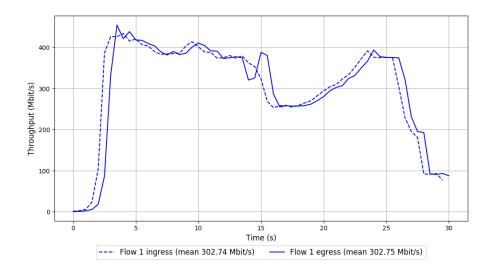
Loss rate: 0.00%

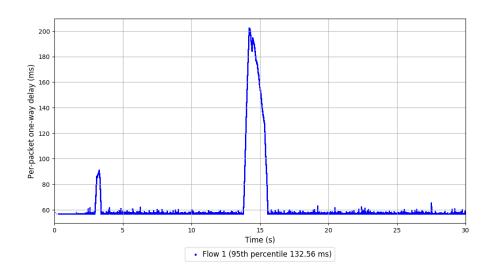
-- Flow 1:

Average throughput: 302.75 Mbit/s

95th percentile per-packet one-way delay: 132.555 ms

Run 3: Report of PCC-Vivace — Data Link





## Run 4: Statistics of PCC-Vivace

Start at: 2020-02-18 23:50:16 End at: 2020-02-18 23:50:46 Local clock offset: -0.391 ms Remote clock offset: -0.453 ms

# Below is generated by plot.py at 2020-02-19 03:00:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 243.26 Mbit/s

95th percentile per-packet one-way delay: 150.034 ms

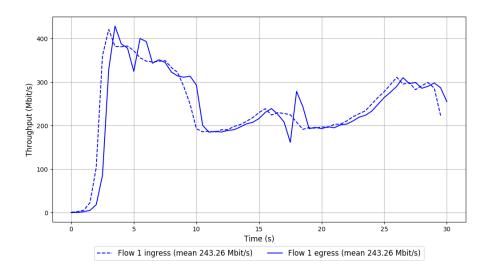
Loss rate: 0.00%

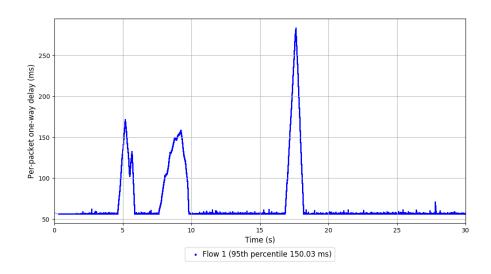
-- Flow 1:

Average throughput: 243.26 Mbit/s

95th percentile per-packet one-way delay: 150.034 ms

Run 4: Report of PCC-Vivace — Data Link





## Run 5: Statistics of PCC-Vivace

Start at: 2020-02-19 00:23:58 End at: 2020-02-19 00:24:28 Local clock offset: -0.464 ms Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2020-02-19 03:00:59

# Datalink statistics
-- Total of 1 flow:

Average throughput: 302.98 Mbit/s

95th percentile per-packet one-way delay: 58.207 ms

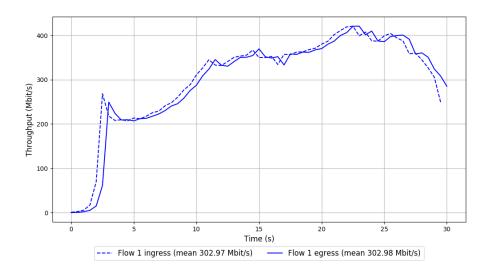
Loss rate: 0.00%

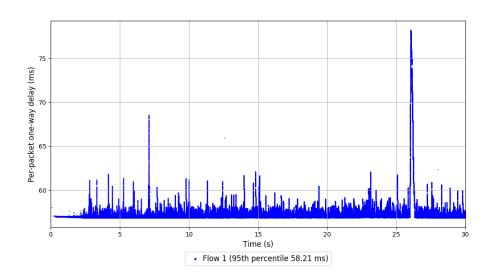
-- Flow 1:

Average throughput: 302.98 Mbit/s

95th percentile per-packet one-way delay: 58.207 ms

Run 5: Report of PCC-Vivace — Data Link

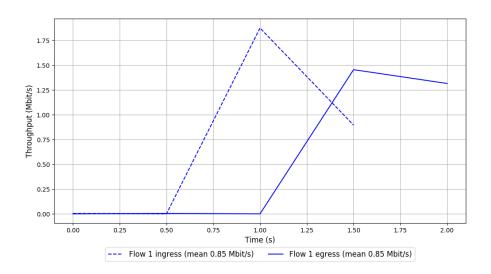


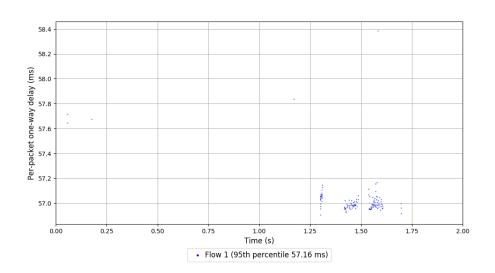


# Run 1: Statistics of WebRTC media

Start at: 2020-02-18 22:00:18 End at: 2020-02-18 22:00:48 Local clock offset: 0.206 ms Remote clock offset: 0.204 ms

Run 1: Report of WebRTC media — Data Link

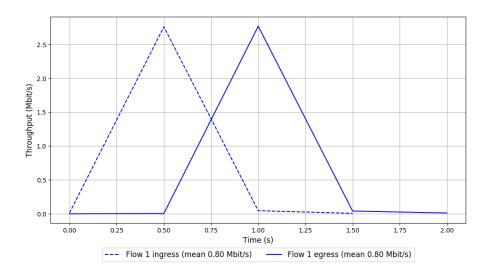


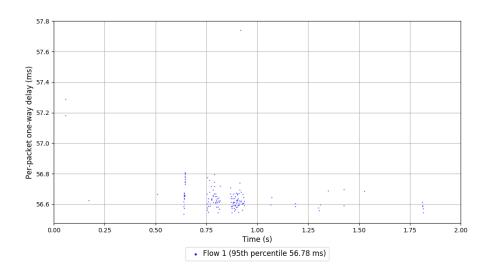


Run 2: Statistics of WebRTC media

Start at: 2020-02-18 22:34:11 End at: 2020-02-18 22:34:41 Local clock offset: 0.113 ms Remote clock offset: 0.035 ms

Run 2: Report of WebRTC media — Data Link

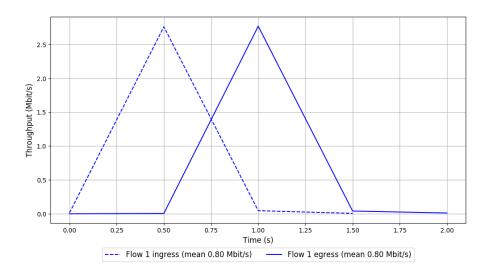


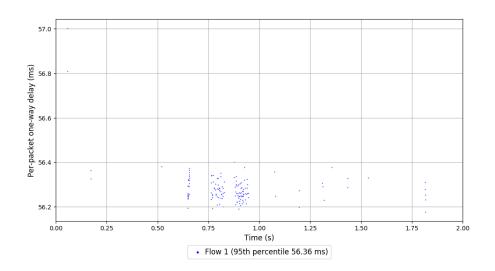


Run 3: Statistics of WebRTC media

Start at: 2020-02-18 23:08:48 End at: 2020-02-18 23:09:18 Local clock offset: -0.275 ms Remote clock offset: -0.654 ms

Run 3: Report of WebRTC media — Data Link

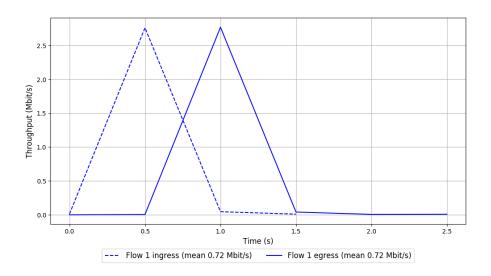


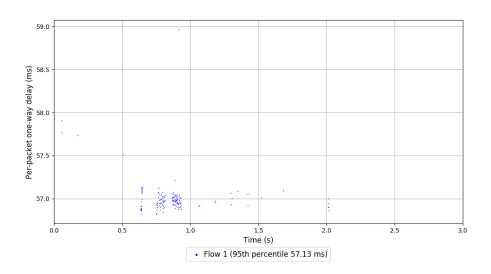


Run 4: Statistics of WebRTC media

Start at: 2020-02-18 23:43:29 End at: 2020-02-18 23:43:59 Local clock offset: -0.324 ms Remote clock offset: -0.002 ms

Run 4: Report of WebRTC media — Data Link





Run 5: Statistics of WebRTC media

Start at: 2020-02-19 00:17:11 End at: 2020-02-19 00:17:41 Local clock offset: -0.107 ms Remote clock offset: -0.188 ms

Run 5: Report of WebRTC media — Data Link

