

Pantheon Report

Generated at 2017-11-21 07:47:41 (UTC).

Data path: GCE Iowa Ethernet (*local*) → GCE London Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

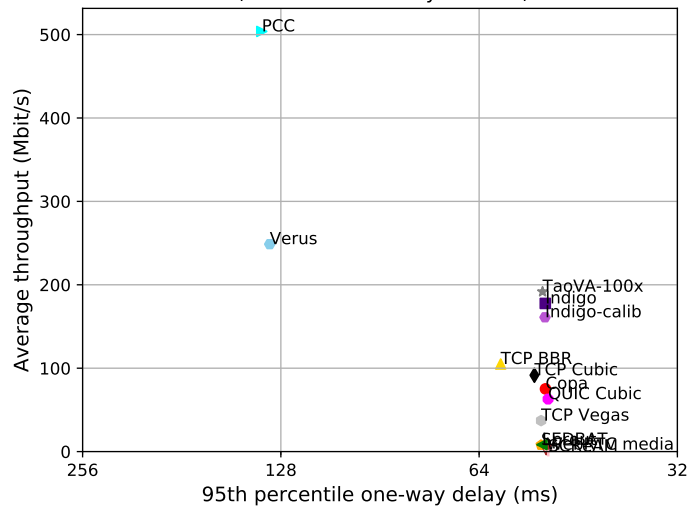
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

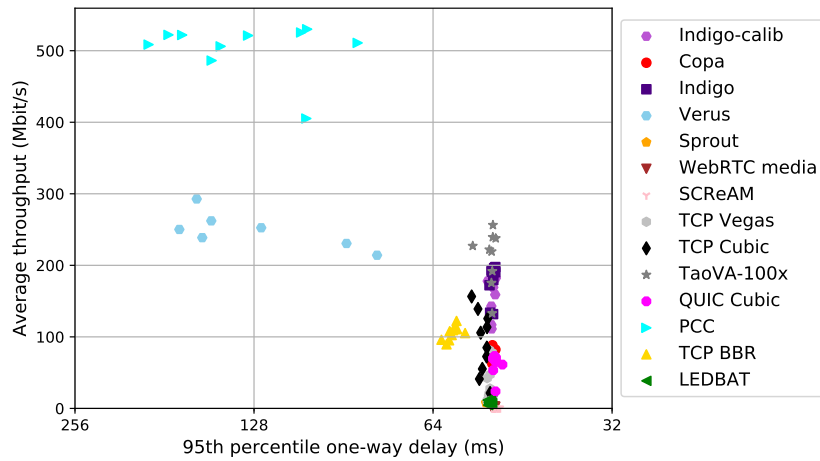
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  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
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Iowa Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE Iowa Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme



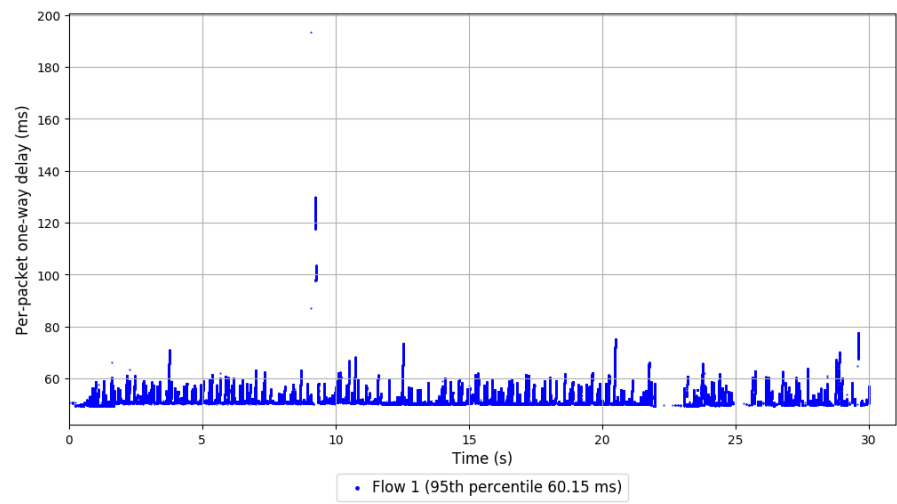
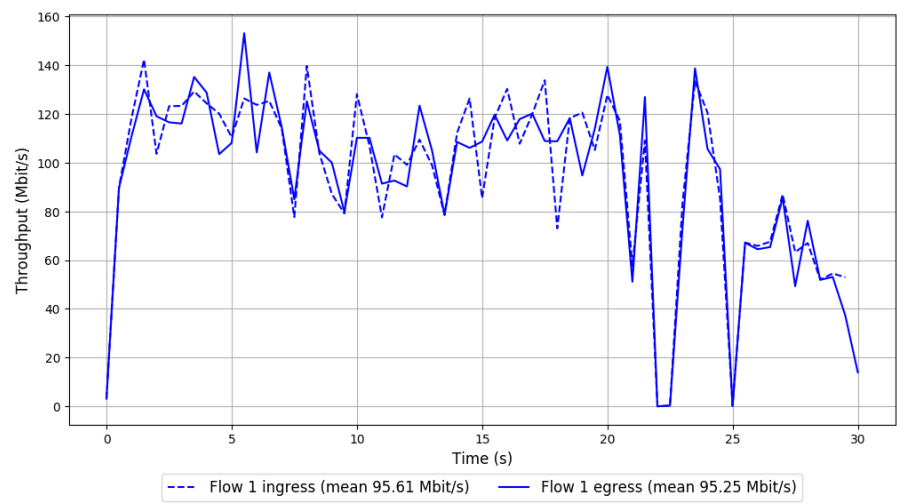
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	105.03	59.36	0.29
TCP Cubic	10	91.58	52.75	0.11
LEDBAT	10	8.28	51.38	0.16
PCC	10	503.78	136.82	0.44
QUIC Cubic	10	62.95	50.29	0.00
SCReAM	10	0.22	50.26	0.00
WebRTC media	8	2.32	50.62	0.01
Sprout	10	7.87	51.54	0.28
TaoVA-100x	10	191.69	51.27	0.01
TCP Vegas	9	37.12	51.53	0.15
Verus	7	248.71	133.08	0.45
Copa	9	75.19	50.75	0.02
Indigo	10	177.65	50.78	0.04
Indigo-calib	10	161.06	50.83	0.08

```
Run 1: Statistics of TCP BBR

Start at: 2017-11-21 04:30:03
End at: 2017-11-21 04:30:33

# Below is generated by plot.py at 2017-11-21 07:04:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 60.149 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 60.149 ms
Loss rate: 0.36%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-21 04:40:19

End at: 2017-11-21 04:40:49

Below is generated by plot.py at 2017-11-21 07:04:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.98 Mbit/s

95th percentile per-packet one-way delay: 61.947 ms

Loss rate: 0.52%

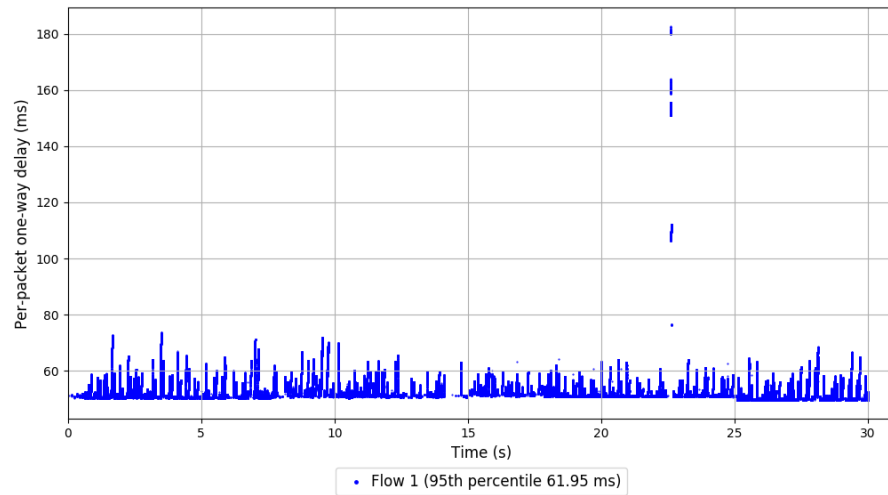
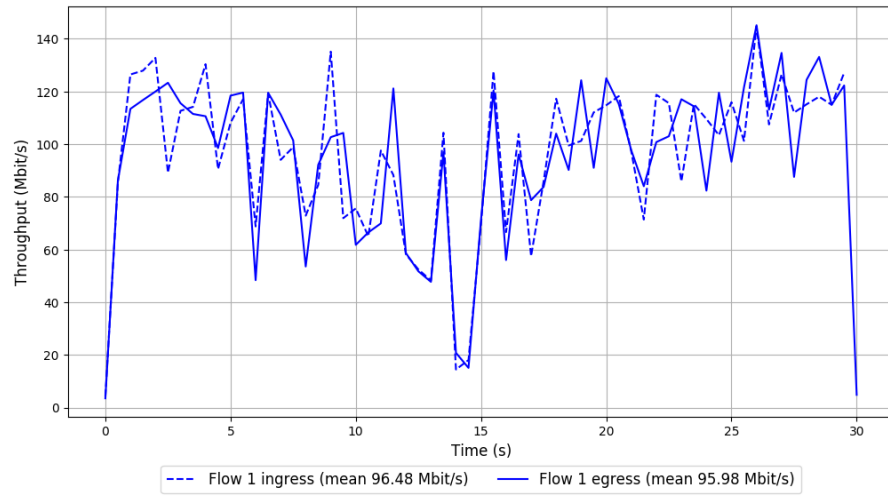
-- Flow 1:

Average throughput: 95.98 Mbit/s

95th percentile per-packet one-way delay: 61.947 ms

Loss rate: 0.52%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-21 04:50:52

End at: 2017-11-21 04:51:22

Below is generated by plot.py at 2017-11-21 07:05:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.96 Mbit/s

95th percentile per-packet one-way delay: 60.003 ms

Loss rate: 0.01%

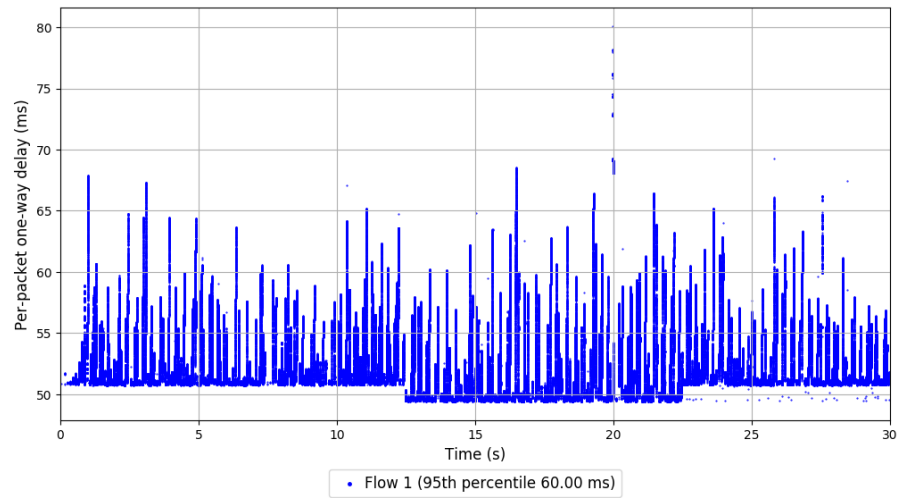
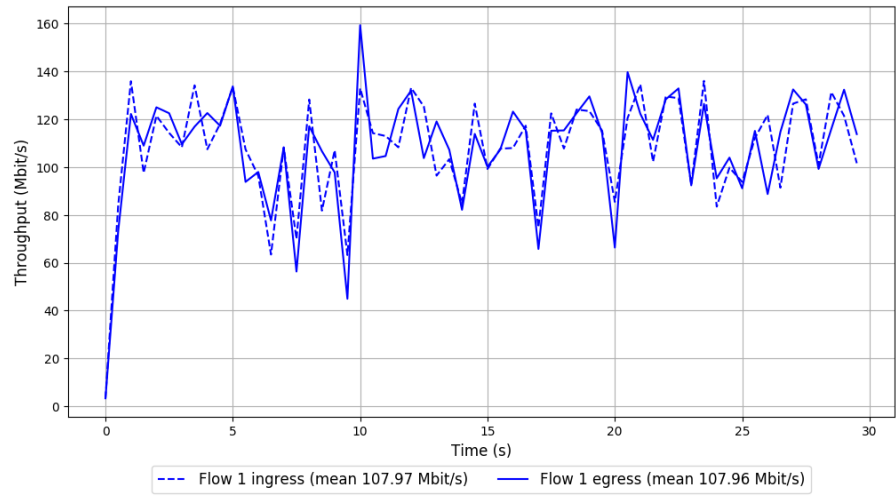
-- Flow 1:

Average throughput: 107.96 Mbit/s

95th percentile per-packet one-way delay: 60.003 ms

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-21 05:01:06

End at: 2017-11-21 05:01:36

Below is generated by plot.py at 2017-11-21 07:05:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.31 Mbit/s

95th percentile per-packet one-way delay: 56.528 ms

Loss rate: 0.03%

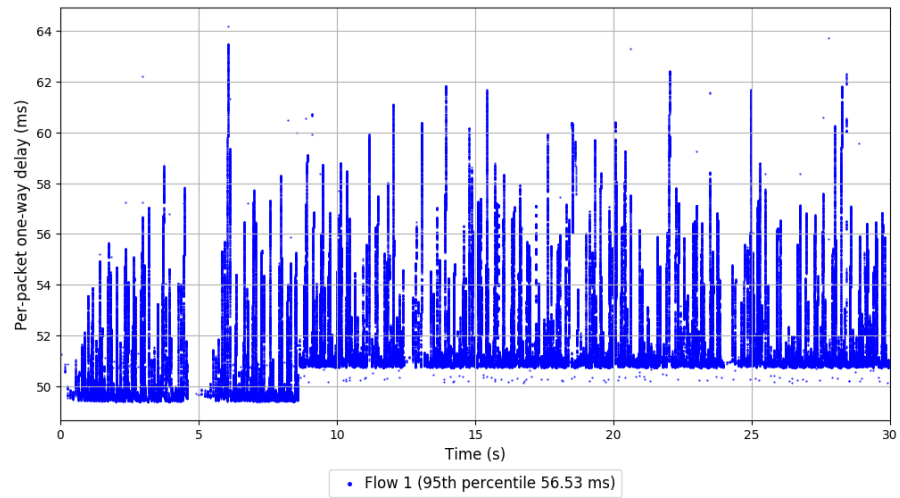
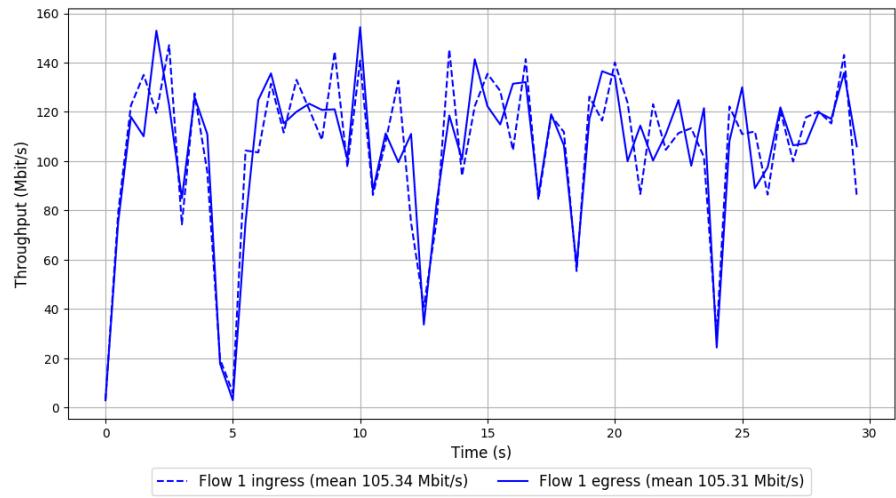
-- Flow 1:

Average throughput: 105.31 Mbit/s

95th percentile per-packet one-way delay: 56.528 ms

Loss rate: 0.03%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-21 05:11:29

End at: 2017-11-21 05:11:59

Below is generated by plot.py at 2017-11-21 07:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.14 Mbit/s

95th percentile per-packet one-way delay: 58.667 ms

Loss rate: 0.01%

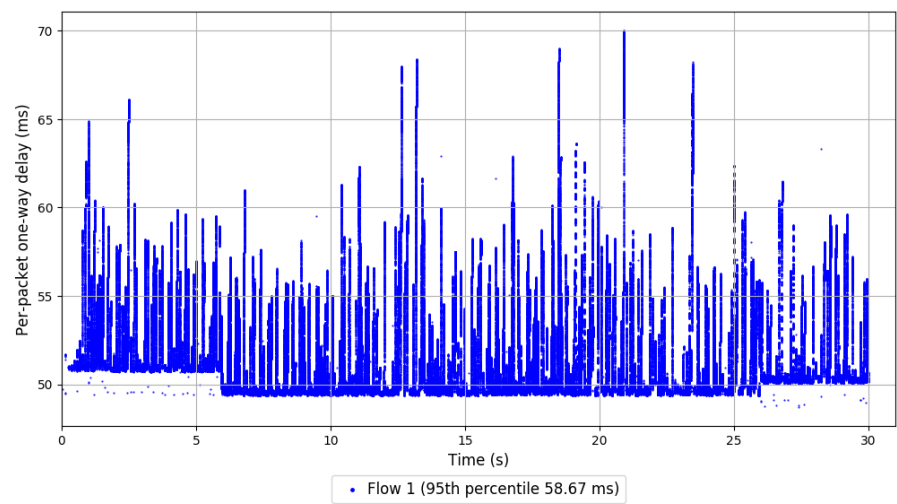
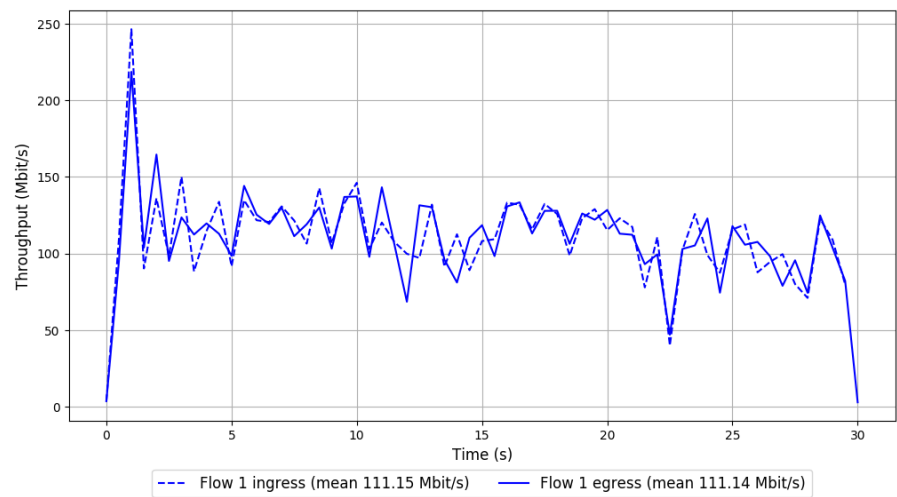
-- Flow 1:

Average throughput: 111.14 Mbit/s

95th percentile per-packet one-way delay: 58.667 ms

Loss rate: 0.01%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-21 05:21:43

End at: 2017-11-21 05:22:13

Below is generated by plot.py at 2017-11-21 07:05:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.87 Mbit/s

95th percentile per-packet one-way delay: 58.305 ms

Loss rate: 0.21%

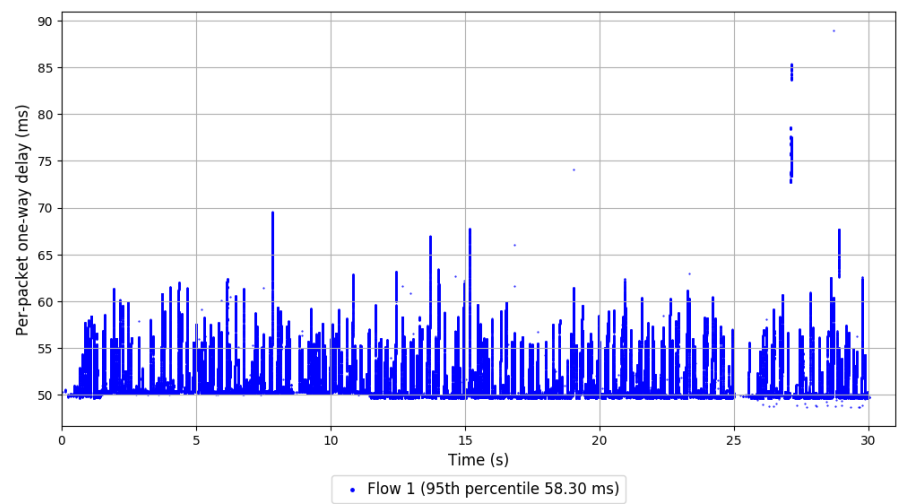
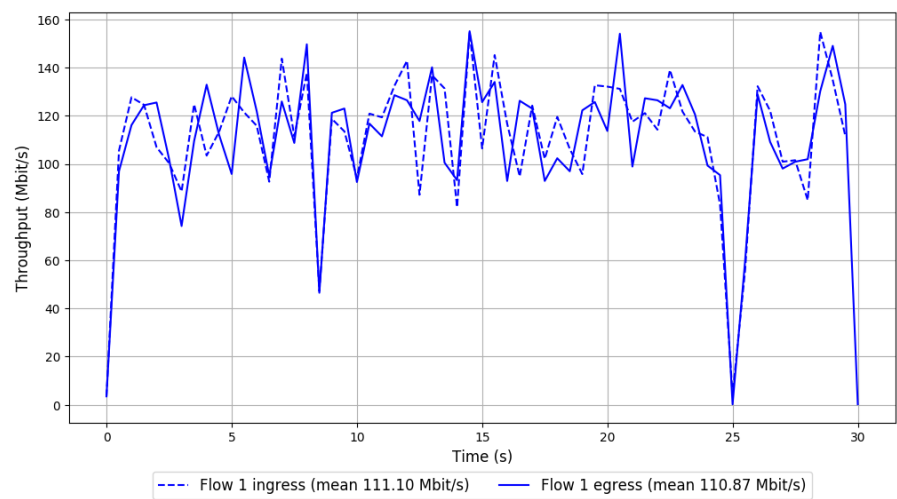
-- Flow 1:

Average throughput: 110.87 Mbit/s

95th percentile per-packet one-way delay: 58.305 ms

Loss rate: 0.21%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-21 05:31:54

End at: 2017-11-21 05:32:24

Below is generated by plot.py at 2017-11-21 07:05:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.56 Mbit/s

95th percentile per-packet one-way delay: 60.748 ms

Loss rate: 0.99%

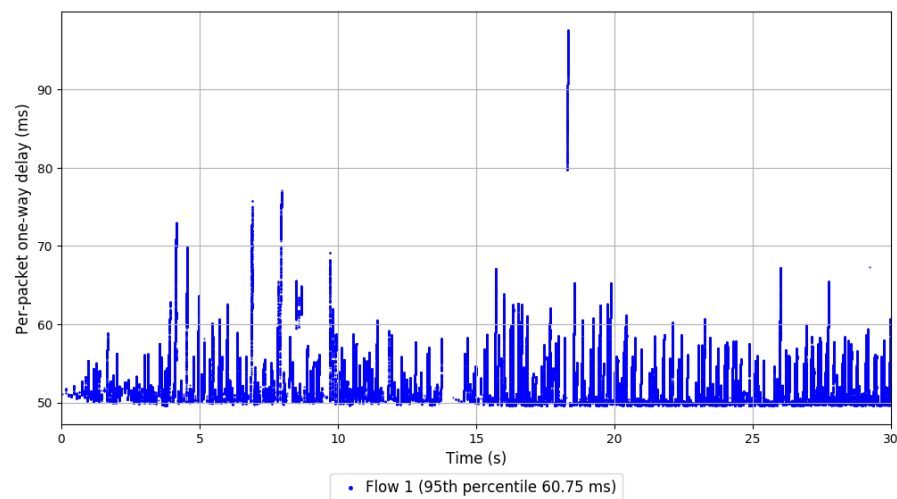
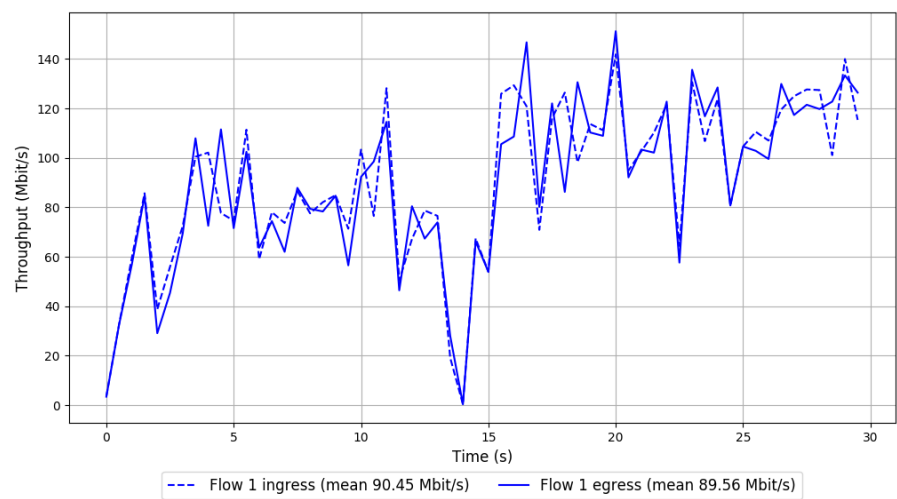
-- Flow 1:

Average throughput: 89.56 Mbit/s

95th percentile per-packet one-way delay: 60.748 ms

Loss rate: 0.99%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-21 05:42:19

End at: 2017-11-21 05:42:49

Below is generated by plot.py at 2017-11-21 07:05:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.36 Mbit/s

95th percentile per-packet one-way delay: 59.234 ms

Loss rate: 0.31%

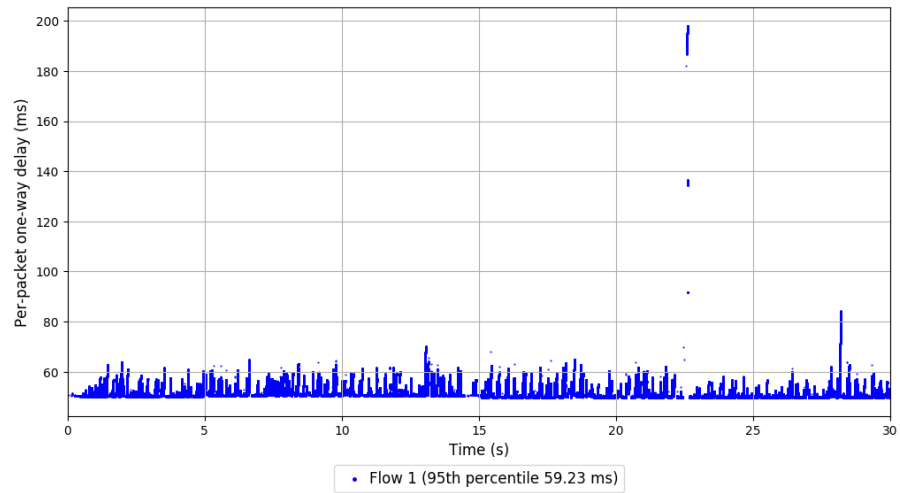
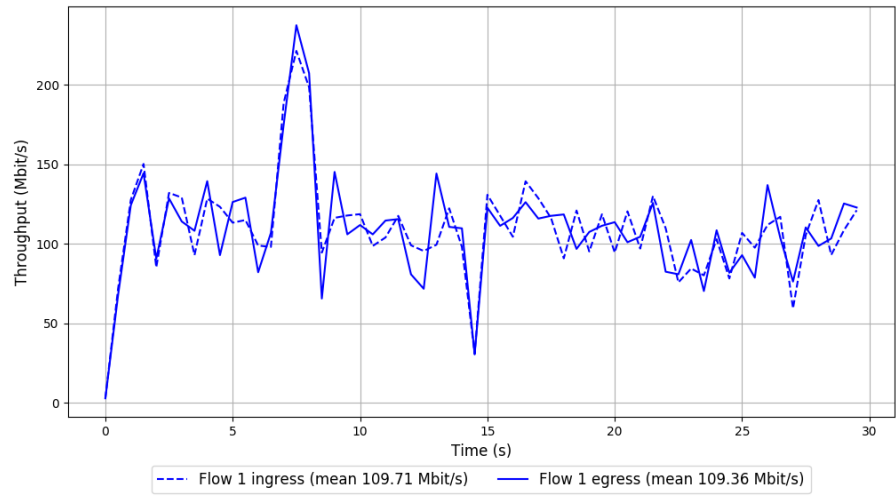
-- Flow 1:

Average throughput: 109.36 Mbit/s

95th percentile per-packet one-way delay: 59.234 ms

Loss rate: 0.31%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-21 05:52:44

End at: 2017-11-21 05:53:14

Below is generated by plot.py at 2017-11-21 07:07:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.31 Mbit/s

95th percentile per-packet one-way delay: 58.440 ms

Loss rate: 0.37%

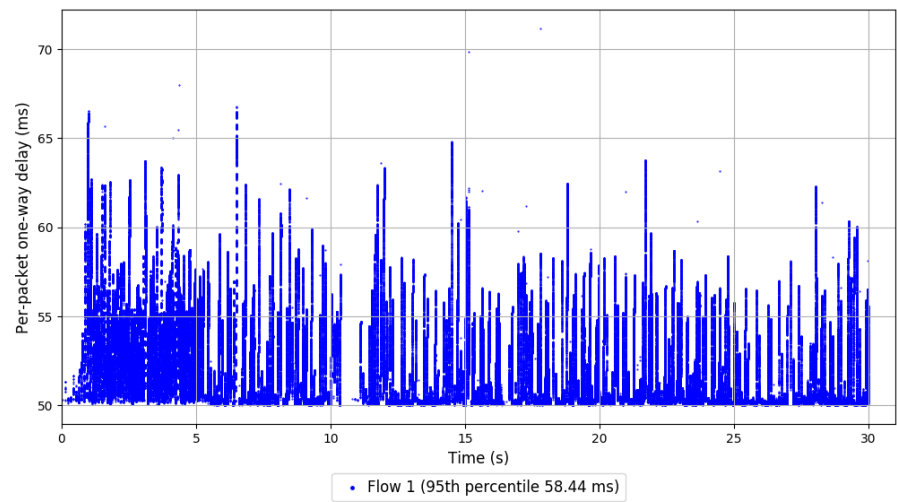
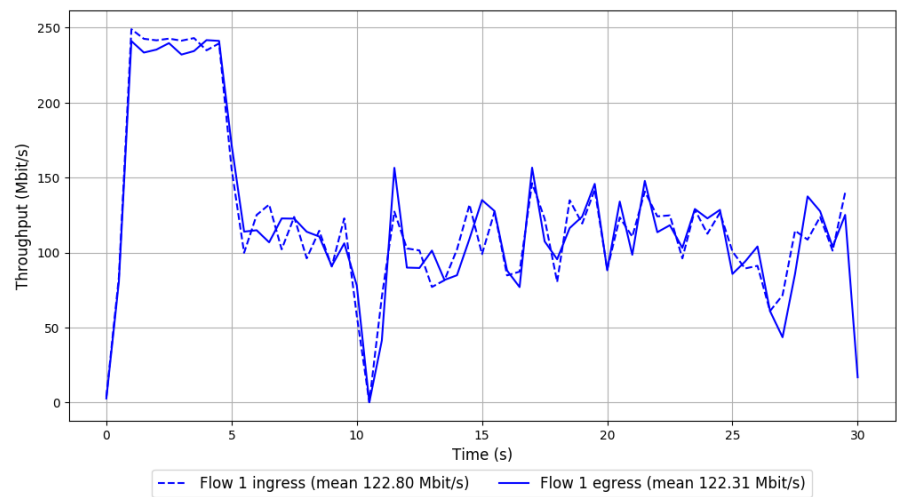
-- Flow 1:

Average throughput: 122.31 Mbit/s

95th percentile per-packet one-way delay: 58.440 ms

Loss rate: 0.37%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-21 06:03:03

End at: 2017-11-21 06:03:33

Below is generated by plot.py at 2017-11-21 07:07:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.54 Mbit/s

95th percentile per-packet one-way delay: 59.549 ms

Loss rate: 0.13%

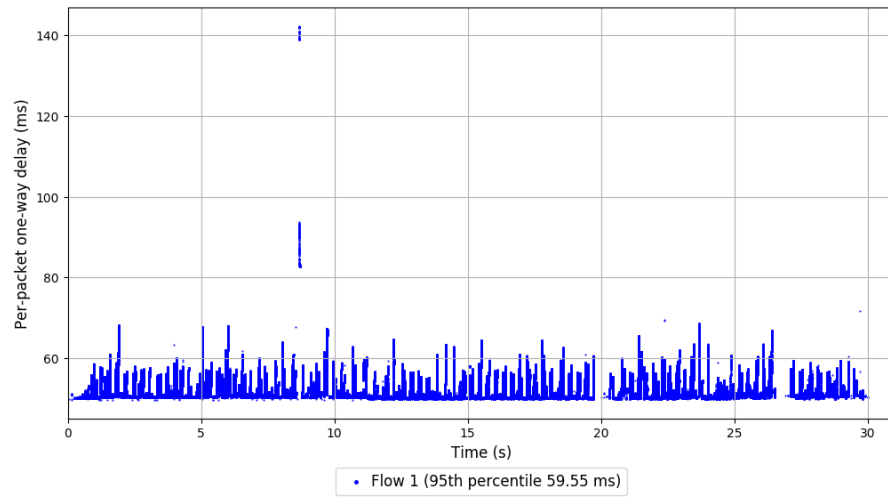
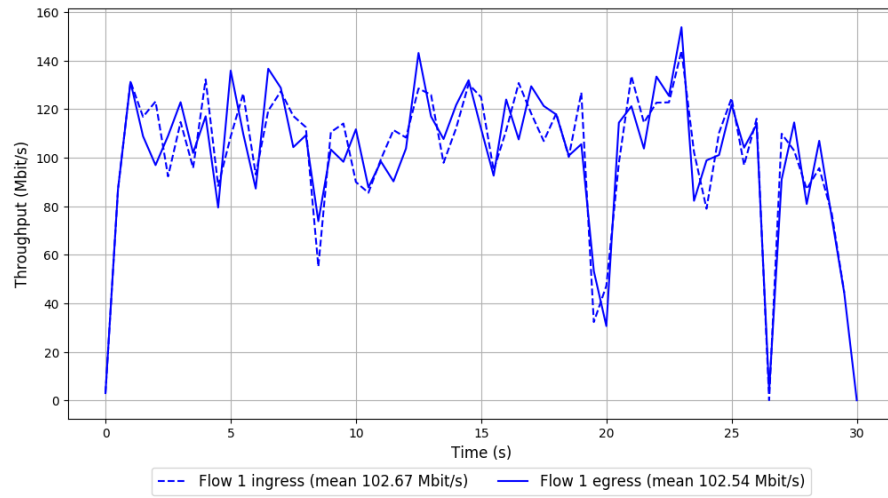
-- Flow 1:

Average throughput: 102.54 Mbit/s

95th percentile per-packet one-way delay: 59.549 ms

Loss rate: 0.13%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-21 04:28:24

End at: 2017-11-21 04:28:54

Below is generated by plot.py at 2017-11-21 07:07:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 51.971 ms

Loss rate: 0.01%

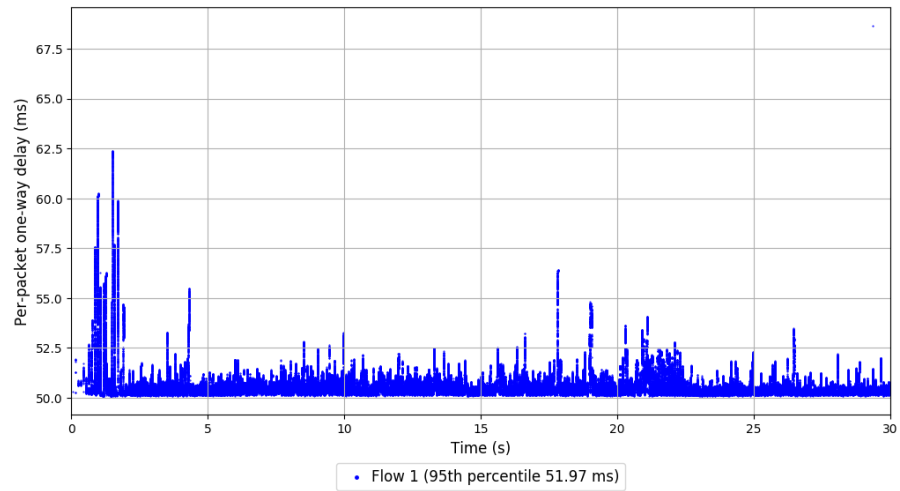
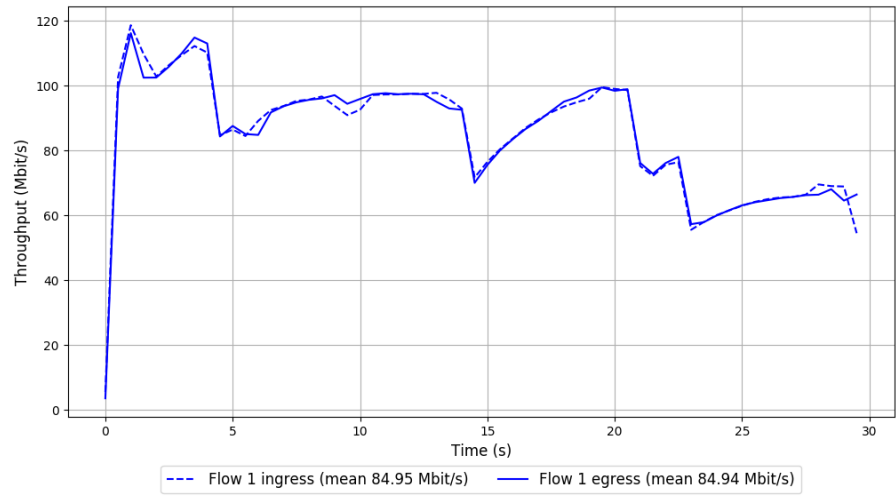
-- Flow 1:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 51.971 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-21 04:38:43

End at: 2017-11-21 04:39:13

Below is generated by plot.py at 2017-11-21 07:07:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.13 Mbit/s

95th percentile per-packet one-way delay: 53.495 ms

Loss rate: 0.04%

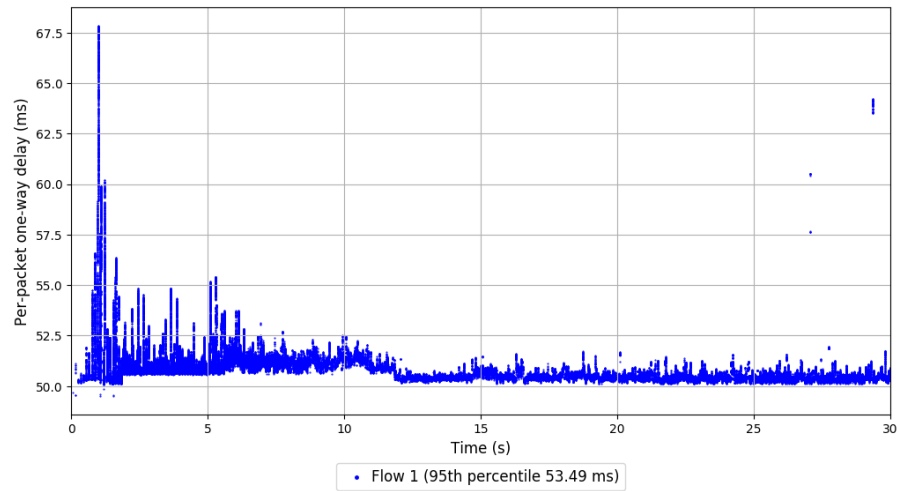
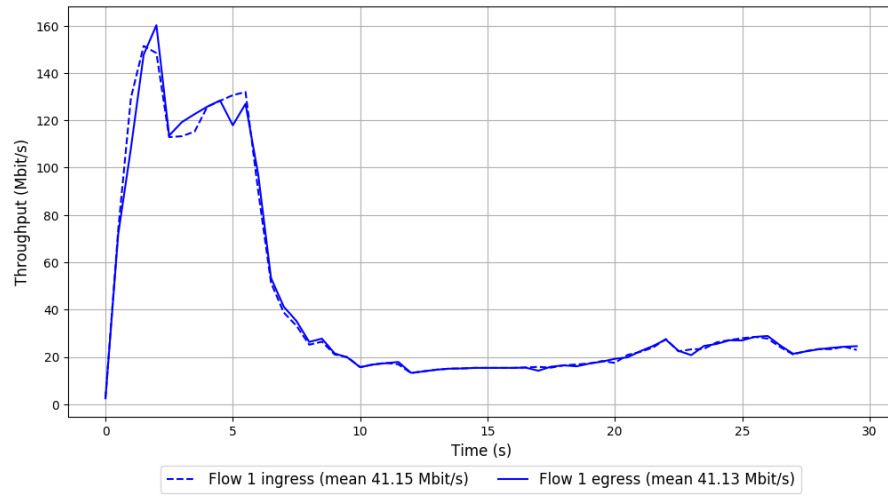
-- Flow 1:

Average throughput: 41.13 Mbit/s

95th percentile per-packet one-way delay: 53.495 ms

Loss rate: 0.04%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-21 04:49:11

End at: 2017-11-21 04:49:41

Below is generated by plot.py at 2017-11-21 07:08:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.47 Mbit/s

95th percentile per-packet one-way delay: 55.118 ms

Loss rate: 0.00%

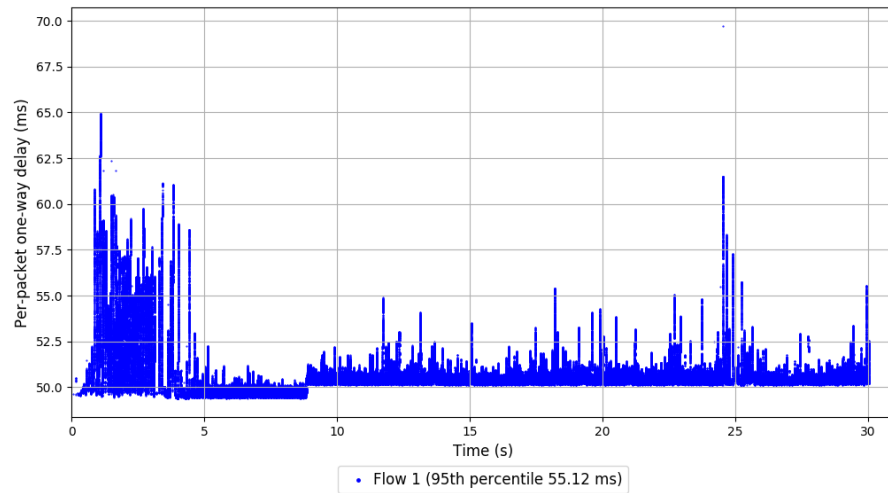
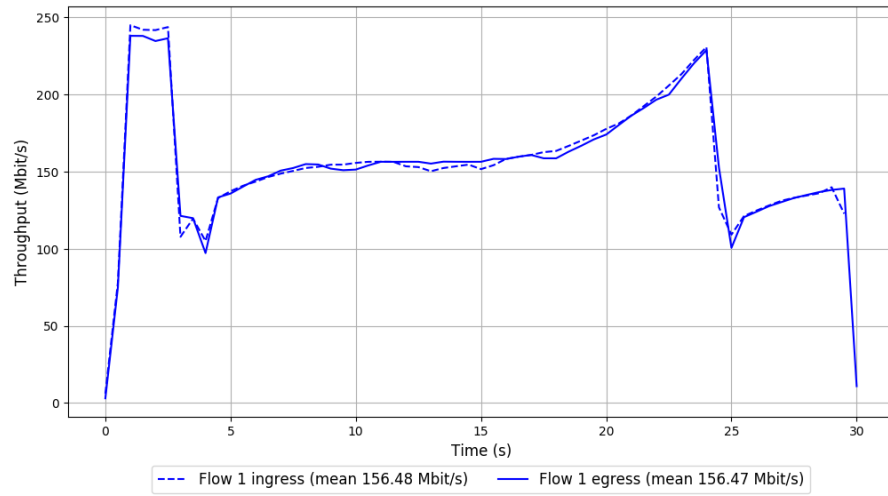
-- Flow 1:

Average throughput: 156.47 Mbit/s

95th percentile per-packet one-way delay: 55.118 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-21 04:59:26

End at: 2017-11-21 04:59:56

Below is generated by plot.py at 2017-11-21 07:08:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.77 Mbit/s

95th percentile per-packet one-way delay: 53.222 ms

Loss rate: 0.01%

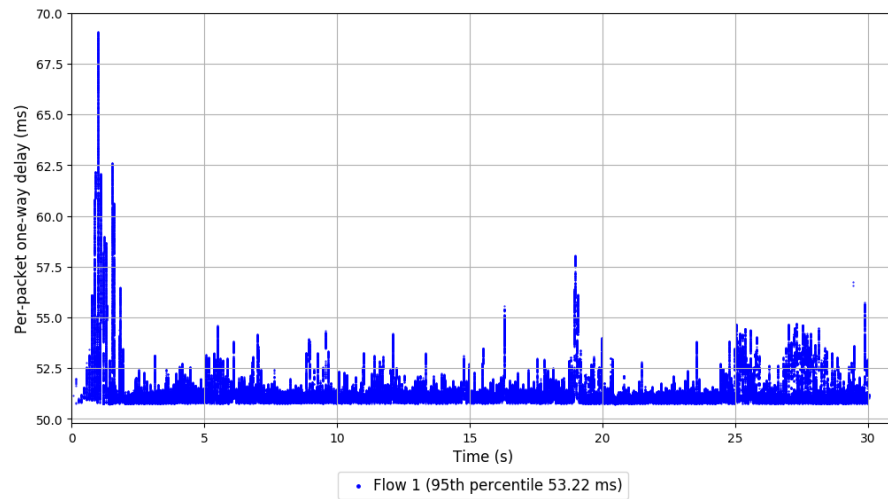
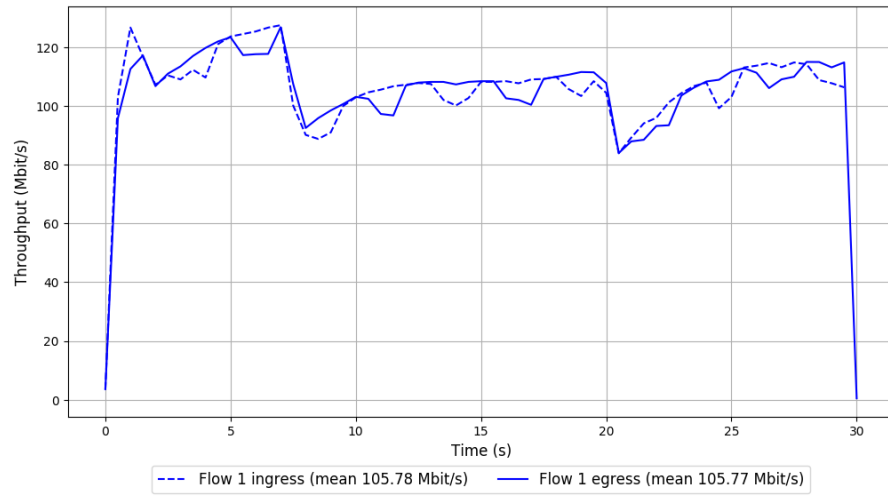
-- Flow 1:

Average throughput: 105.77 Mbit/s

95th percentile per-packet one-way delay: 53.222 ms

Loss rate: 0.01%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-21 05:09:49

End at: 2017-11-21 05:10:19

Below is generated by plot.py at 2017-11-21 07:08:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.63 Mbit/s

95th percentile per-packet one-way delay: 51.925 ms

Loss rate: 0.00%

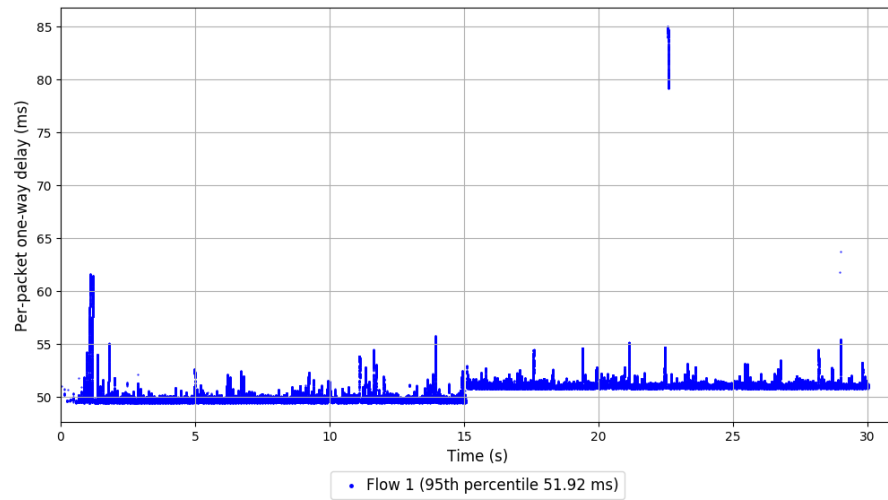
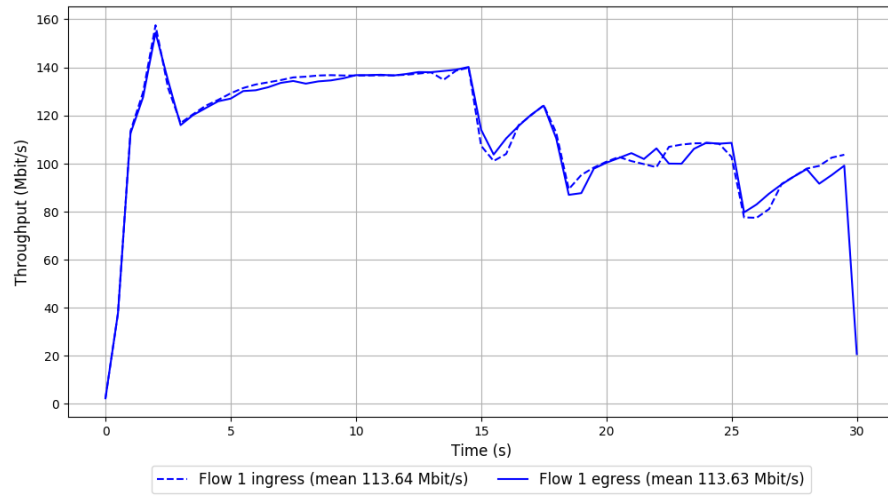
-- Flow 1:

Average throughput: 113.63 Mbit/s

95th percentile per-packet one-way delay: 51.925 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-21 05:20:06

End at: 2017-11-21 05:20:36

Below is generated by plot.py at 2017-11-21 07:08:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.56 Mbit/s

95th percentile per-packet one-way delay: 52.014 ms

Loss rate: 0.03%

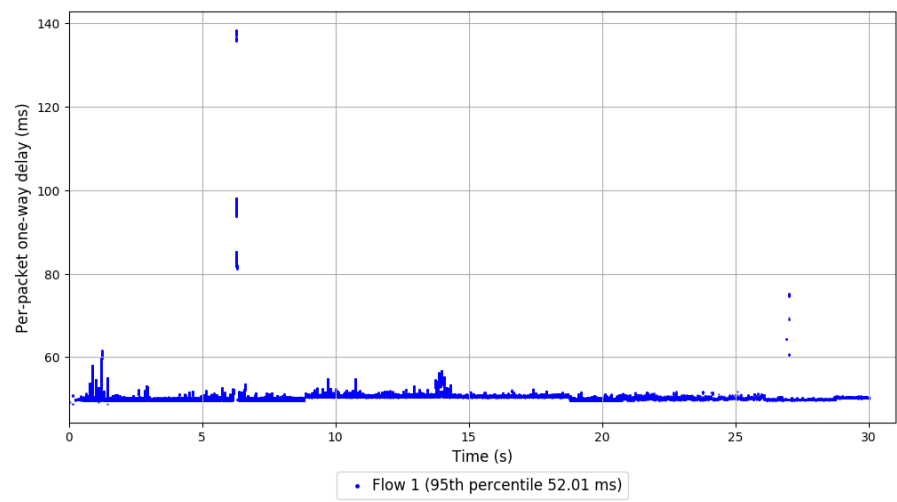
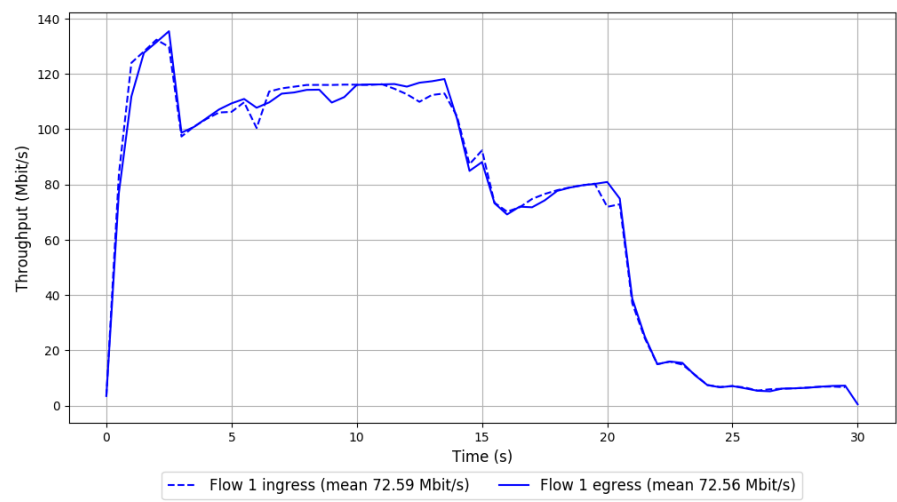
-- Flow 1:

Average throughput: 72.56 Mbit/s

95th percentile per-packet one-way delay: 52.014 ms

Loss rate: 0.03%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-21 05:30:11

End at: 2017-11-21 05:30:41

Below is generated by plot.py at 2017-11-21 07:08:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.21 Mbit/s

95th percentile per-packet one-way delay: 52.883 ms

Loss rate: 0.25%

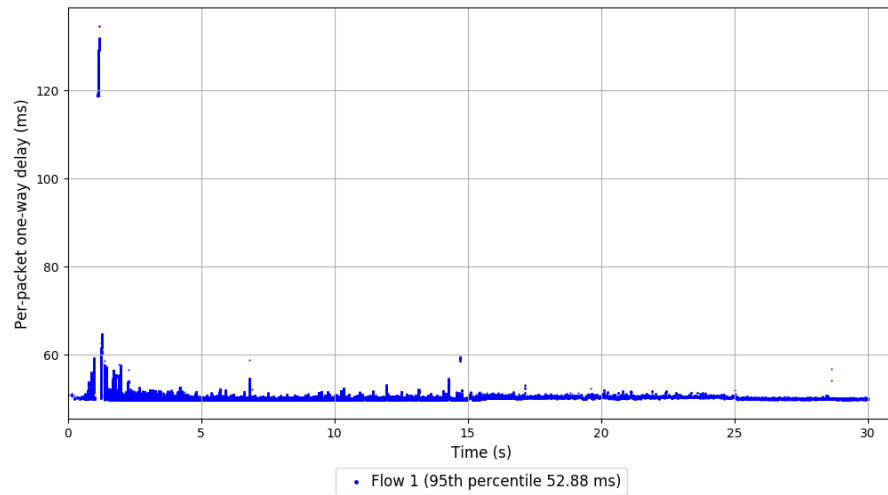
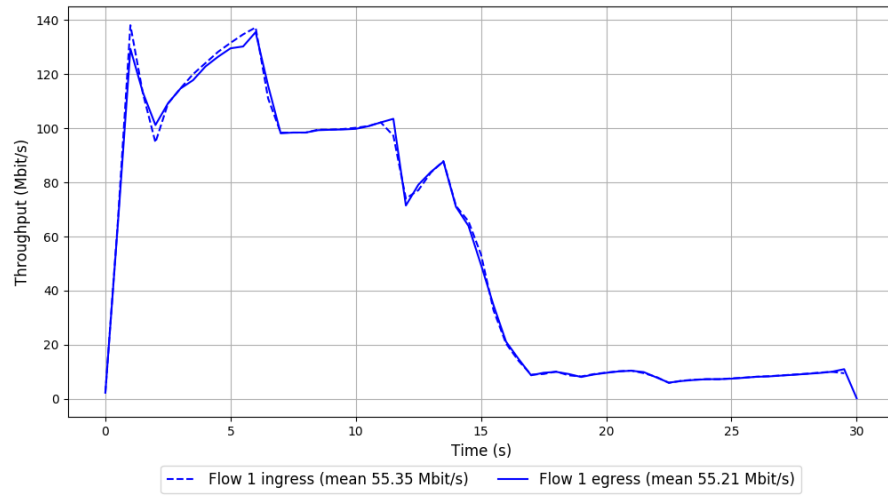
-- Flow 1:

Average throughput: 55.21 Mbit/s

95th percentile per-packet one-way delay: 52.883 ms

Loss rate: 0.25%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-21 05:40:37

End at: 2017-11-21 05:41:07

Below is generated by plot.py at 2017-11-21 07:08:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 125.55 Mbit/s

95th percentile per-packet one-way delay: 51.793 ms

Loss rate: 0.00%

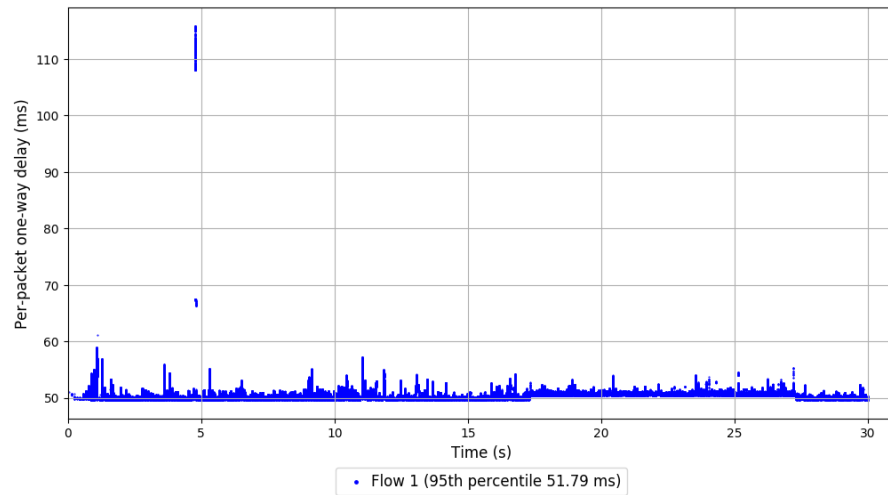
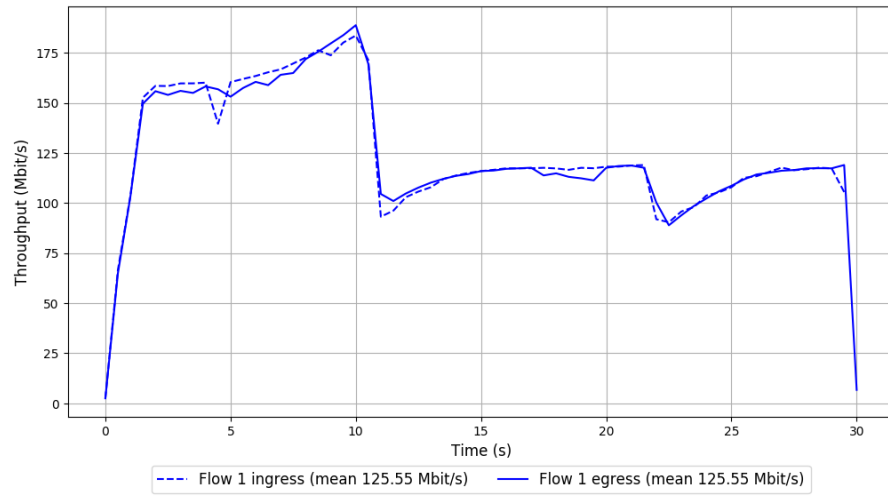
-- Flow 1:

Average throughput: 125.55 Mbit/s

95th percentile per-packet one-way delay: 51.793 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-21 05:51:03

End at: 2017-11-21 05:51:33

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.02 Mbit/s

95th percentile per-packet one-way delay: 53.781 ms

Loss rate: 0.00%

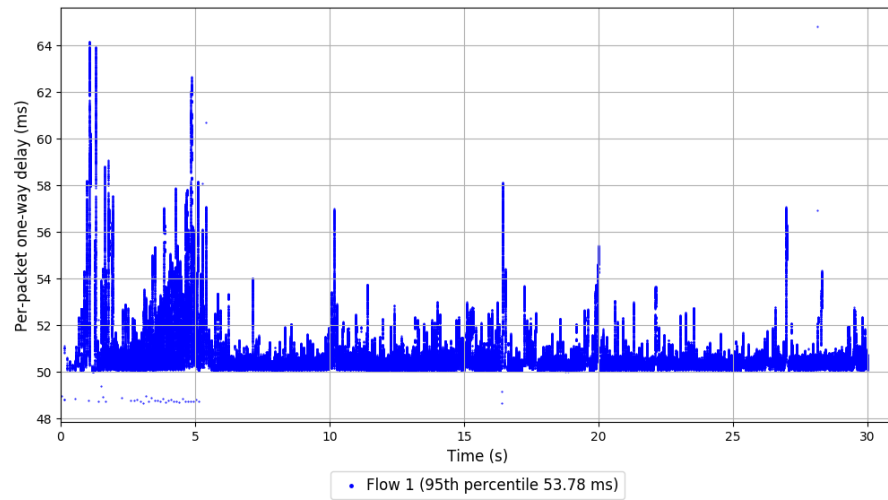
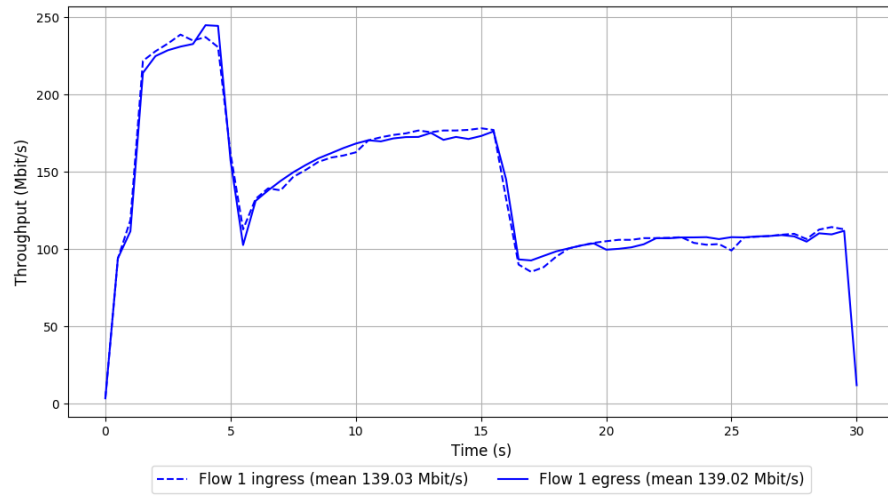
-- Flow 1:

Average throughput: 139.02 Mbit/s

95th percentile per-packet one-way delay: 53.781 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-21 06:01:28

End at: 2017-11-21 06:01:58

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.52 Mbit/s

95th percentile per-packet one-way delay: 51.318 ms

Loss rate: 0.72%

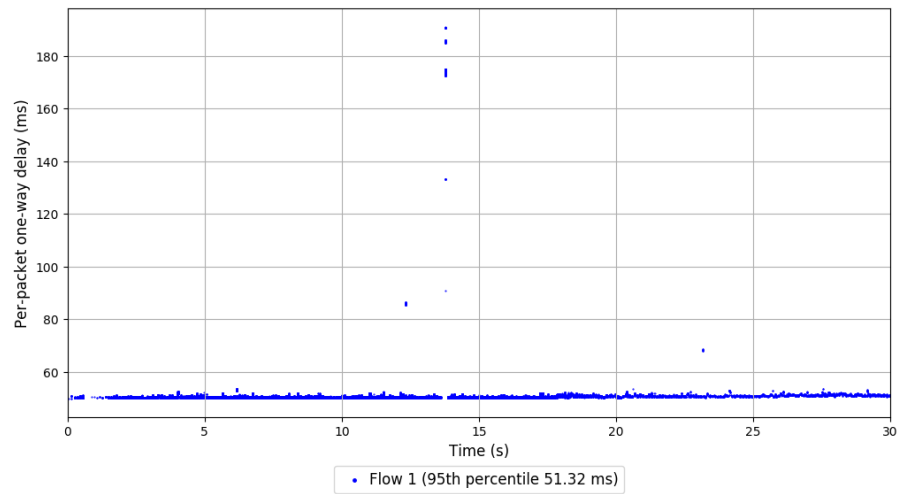
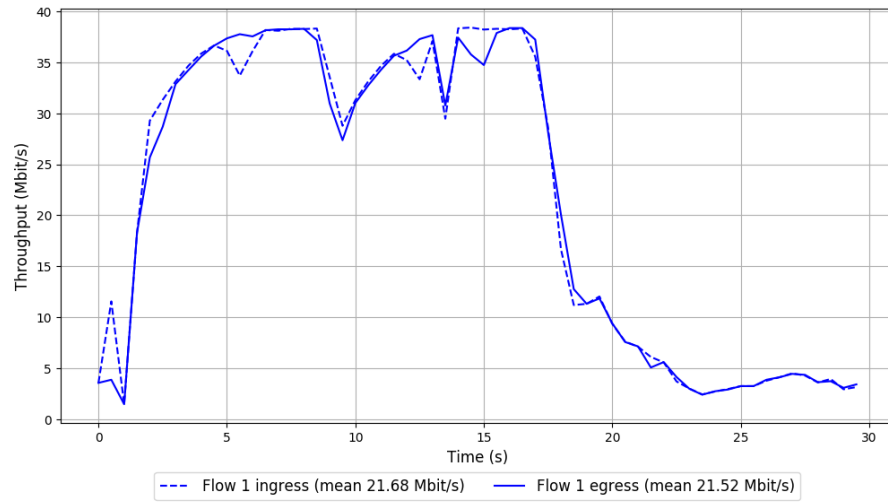
-- Flow 1:

Average throughput: 21.52 Mbit/s

95th percentile per-packet one-way delay: 51.318 ms

Loss rate: 0.72%

Run 10: Report of TCP Cubic — Data Link

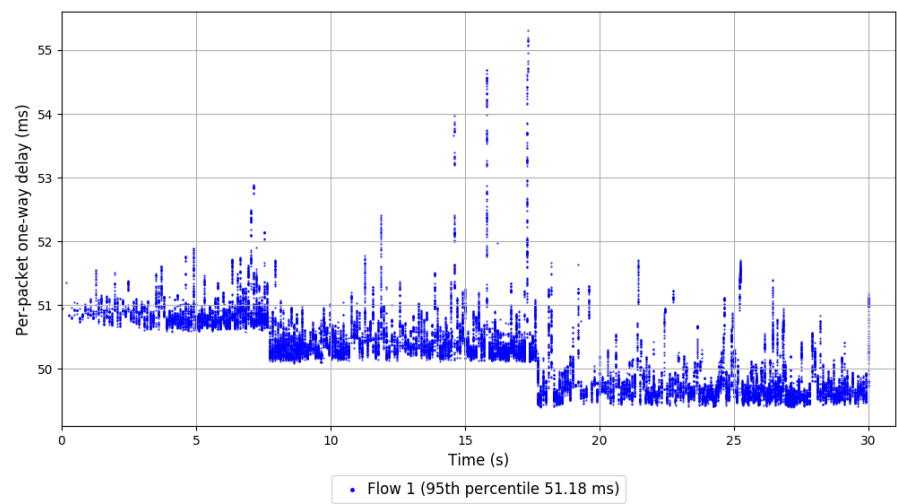
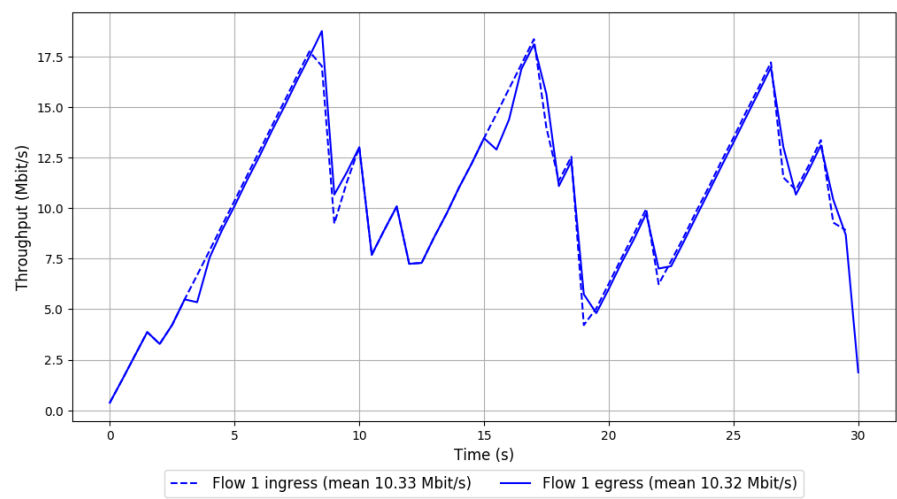


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-21 04:30:47
End at: 2017-11-21 04:31:17

# Below is generated by plot.py at 2017-11-21 07:08:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.32 Mbit/s
95th percentile per-packet one-way delay: 51.177 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 10.32 Mbit/s
95th percentile per-packet one-way delay: 51.177 ms
Loss rate: 0.03%
```


Run 1: Report of LEDBAT — Data Link

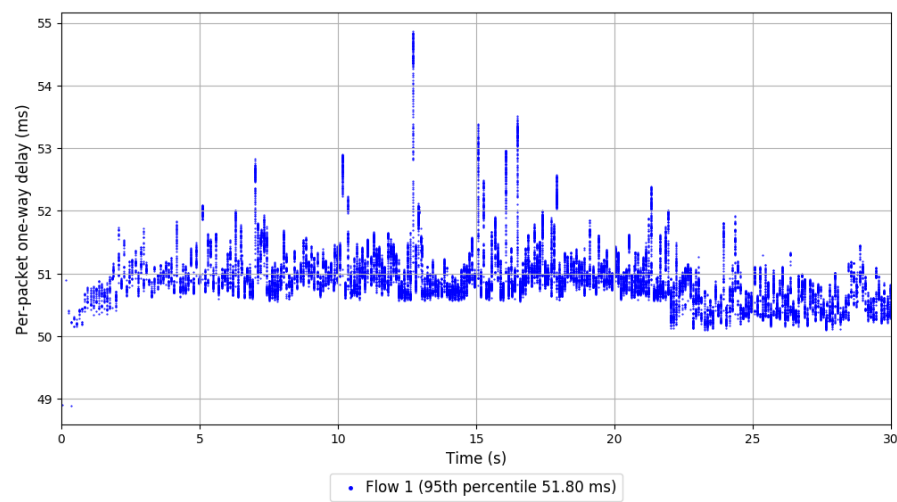
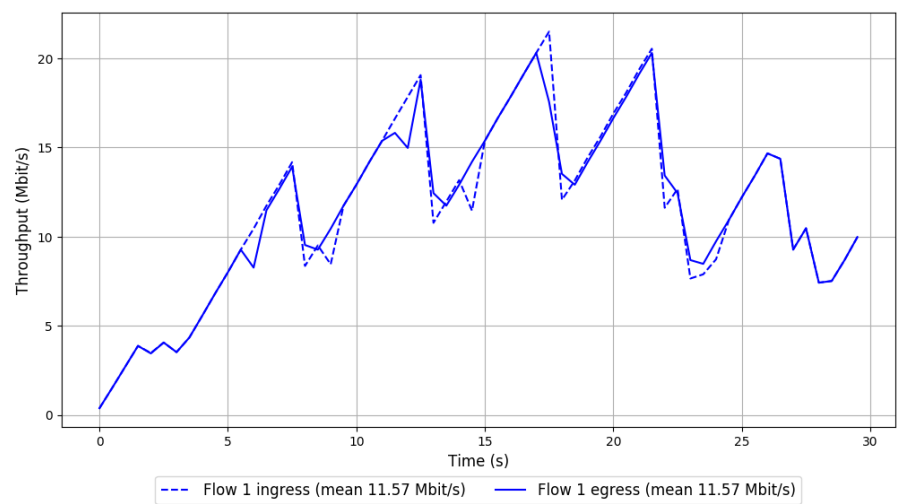


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-21 04:41:02
End at: 2017-11-21 04:41:33

# Below is generated by plot.py at 2017-11-21 07:08:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 51.805 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 51.805 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-21 04:51:36

End at: 2017-11-21 04:52:06

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.51 Mbit/s

95th percentile per-packet one-way delay: 51.600 ms

Loss rate: 0.02%

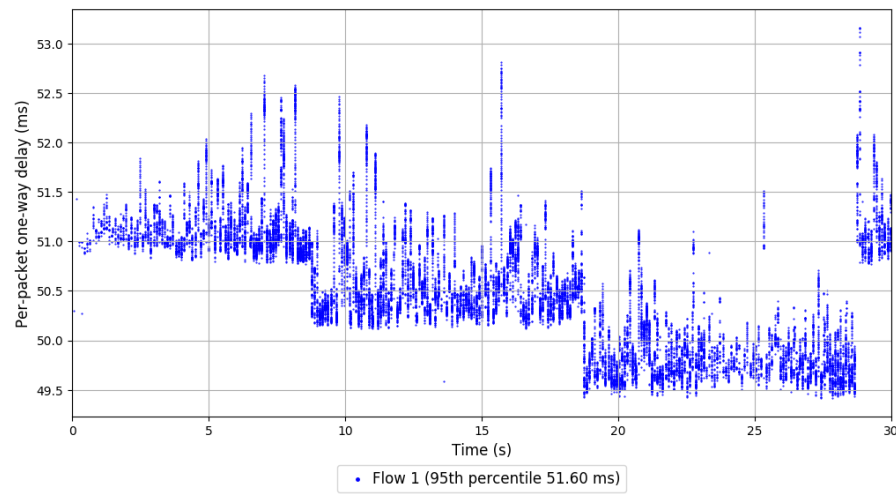
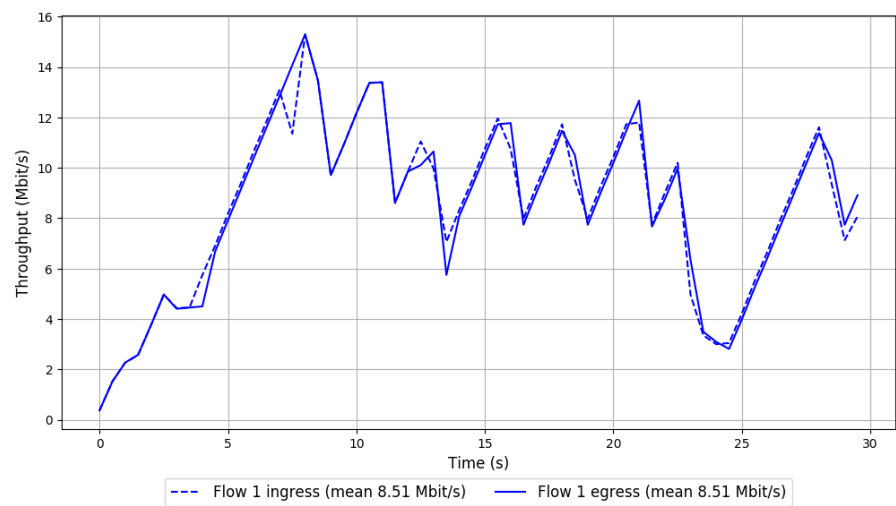
-- Flow 1:

Average throughput: 8.51 Mbit/s

95th percentile per-packet one-way delay: 51.600 ms

Loss rate: 0.02%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-21 05:01:52

End at: 2017-11-21 05:02:22

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 51.706 ms

Loss rate: 0.47%

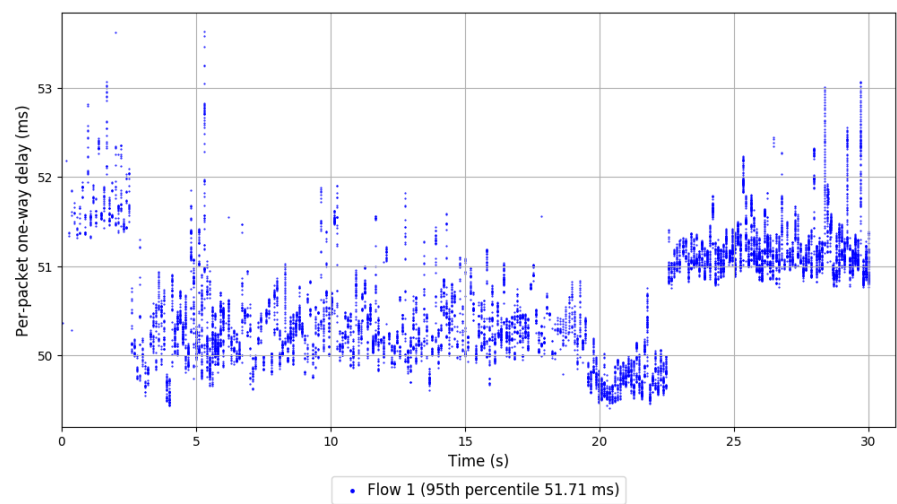
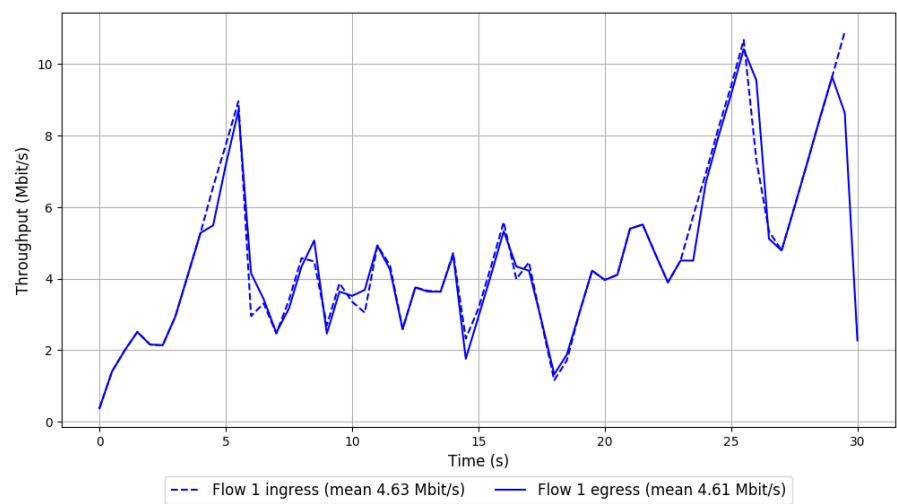
-- Flow 1:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 51.706 ms

Loss rate: 0.47%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-21 05:12:14

End at: 2017-11-21 05:12:44

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 51.573 ms

Loss rate: 0.65%

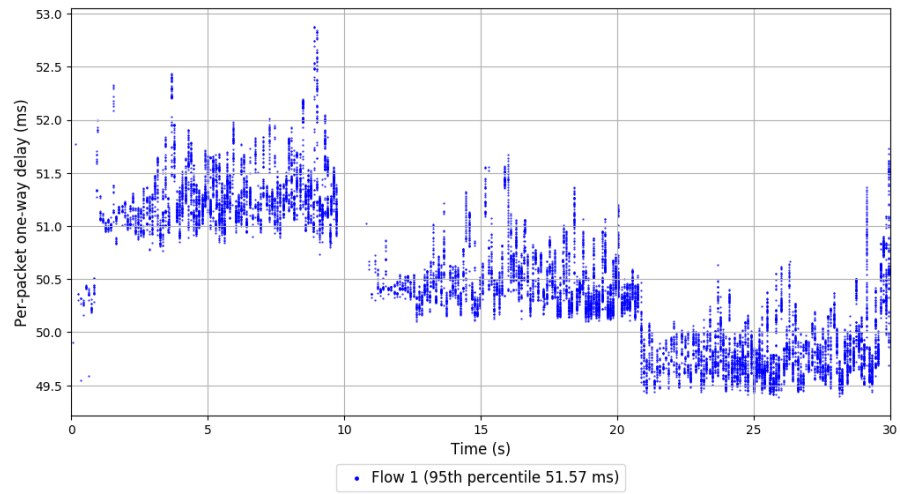
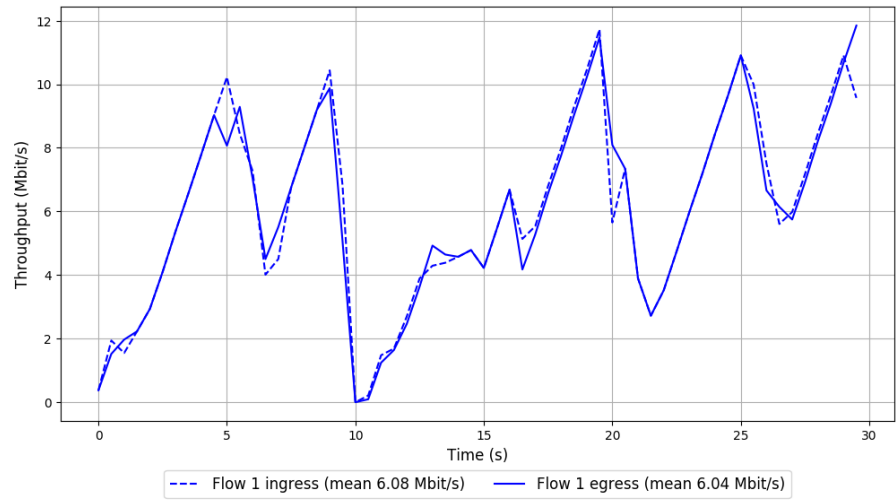
-- Flow 1:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 51.573 ms

Loss rate: 0.65%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-21 05:22:27

End at: 2017-11-21 05:22:57

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 50.890 ms

Loss rate: 0.10%

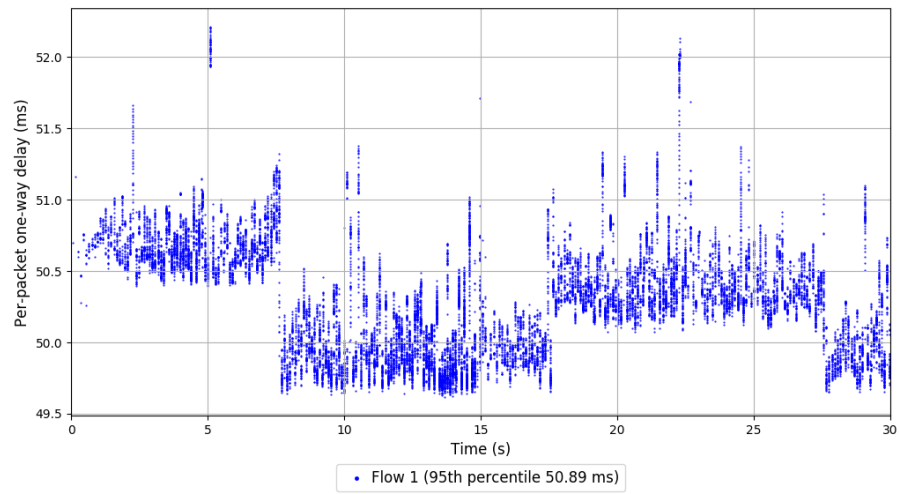
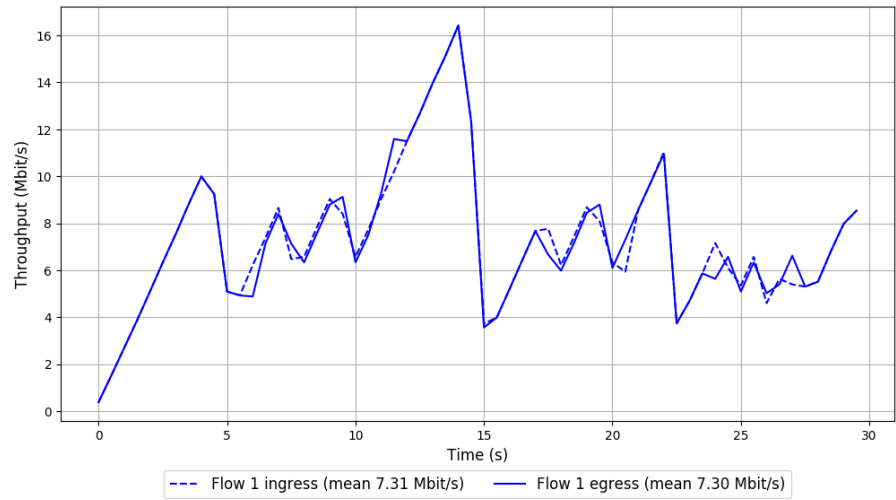
-- Flow 1:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 50.890 ms

Loss rate: 0.10%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-21 05:32:36

End at: 2017-11-21 05:33:06

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.90 Mbit/s

95th percentile per-packet one-way delay: 51.199 ms

Loss rate: 0.23%

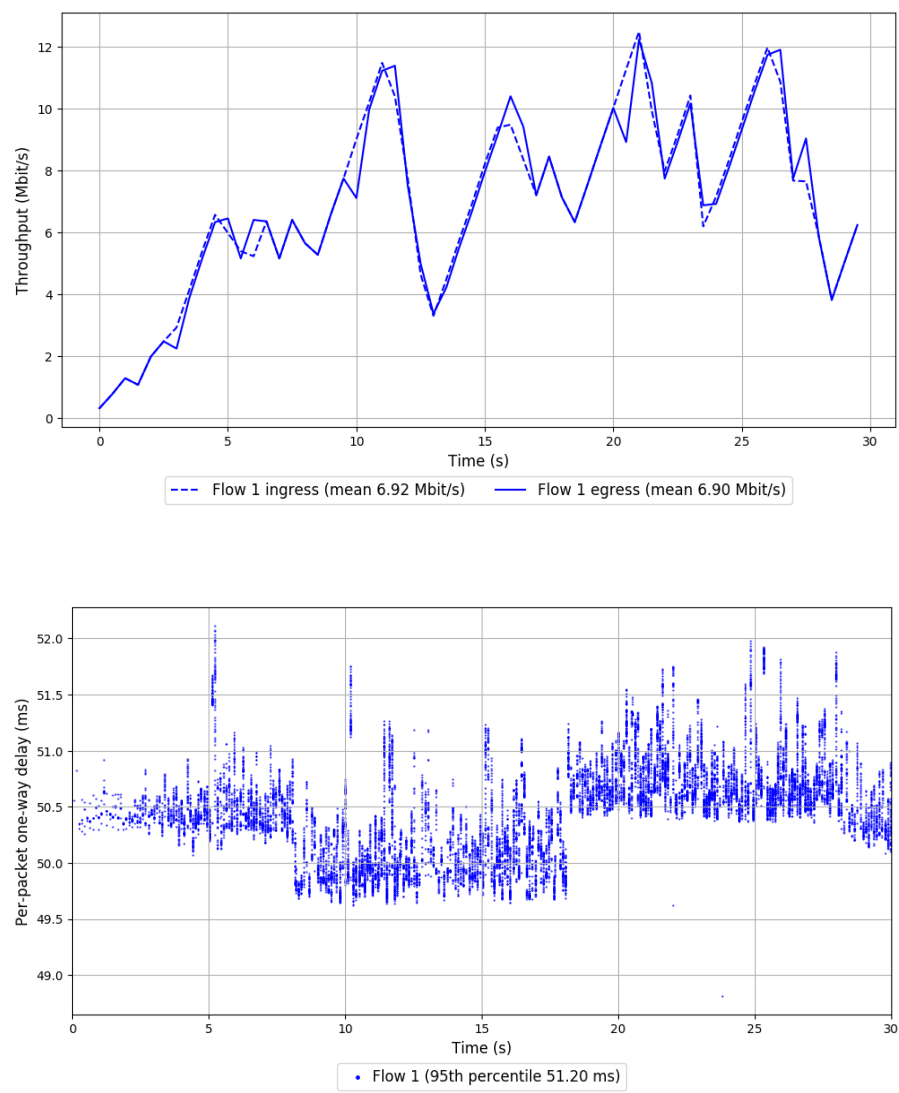
-- Flow 1:

Average throughput: 6.90 Mbit/s

95th percentile per-packet one-way delay: 51.199 ms

Loss rate: 0.23%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-21 05:43:05

End at: 2017-11-21 05:43:35

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.17 Mbit/s

95th percentile per-packet one-way delay: 51.465 ms

Loss rate: 0.03%

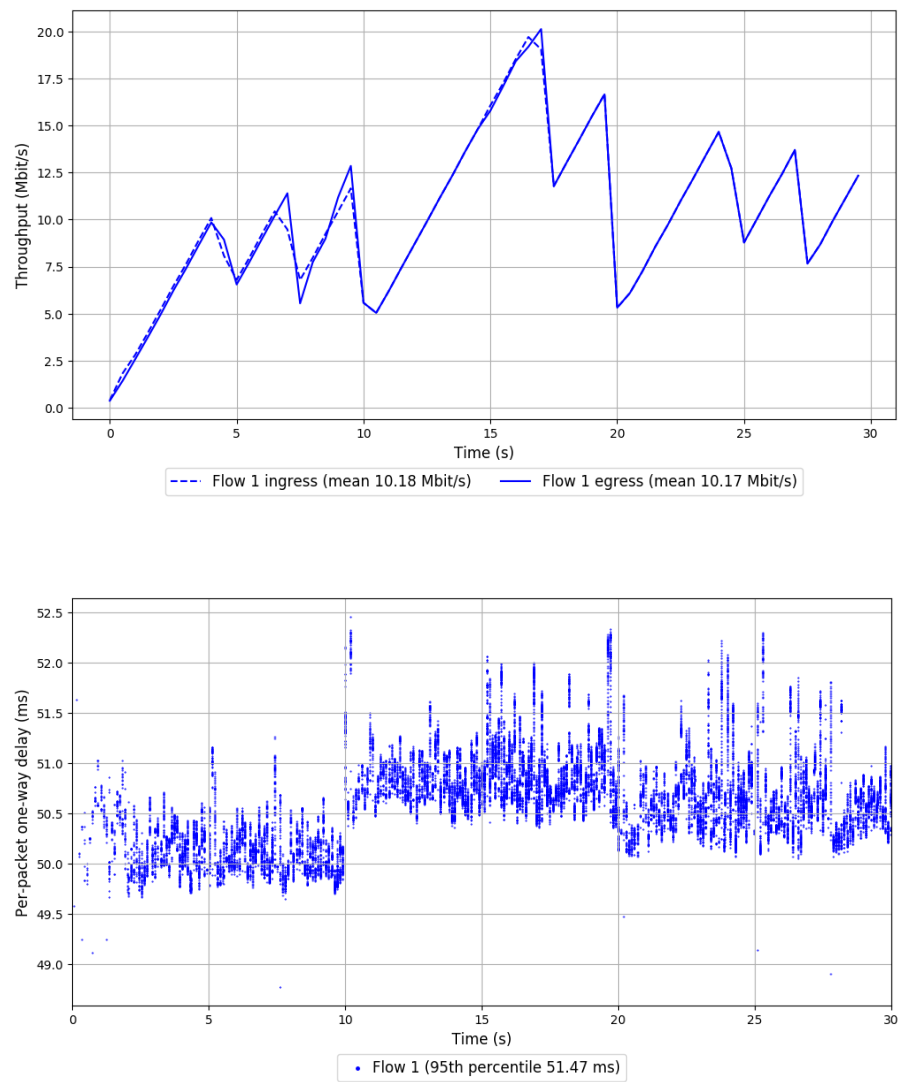
-- Flow 1:

Average throughput: 10.17 Mbit/s

95th percentile per-packet one-way delay: 51.465 ms

Loss rate: 0.03%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-21 05:53:28

End at: 2017-11-21 05:53:58

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.37 Mbit/s

95th percentile per-packet one-way delay: 51.228 ms

Loss rate: 0.03%

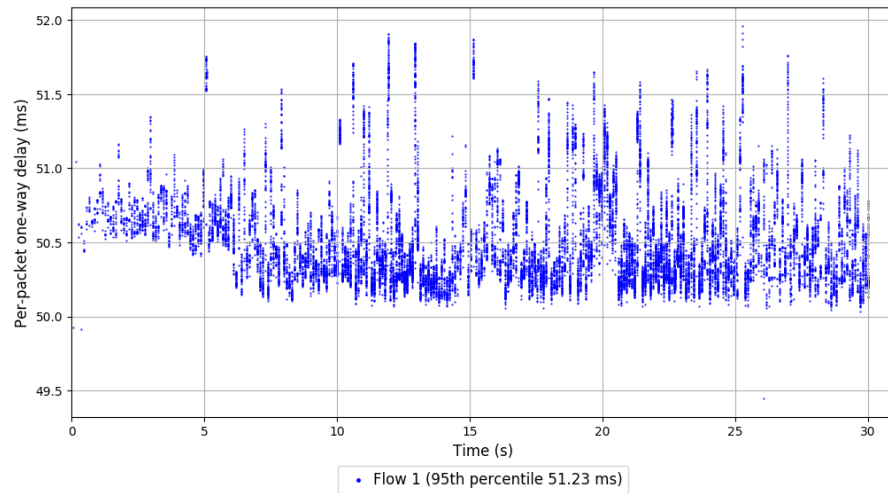
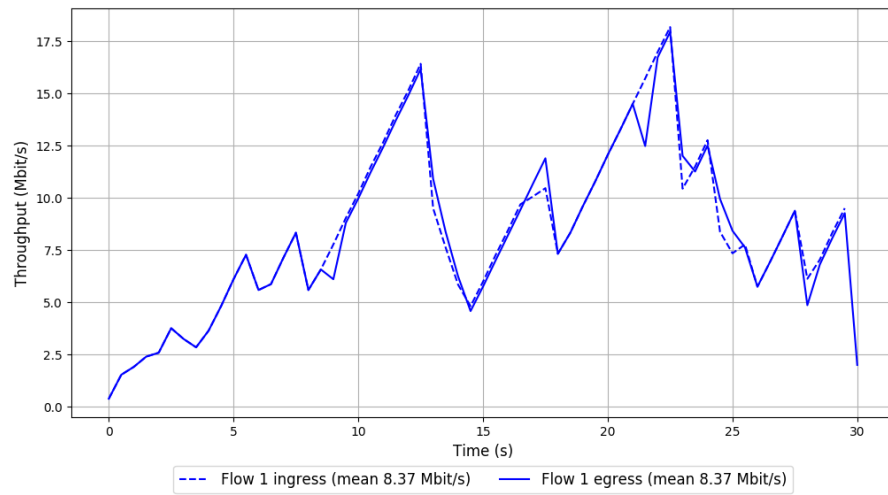
-- Flow 1:

Average throughput: 8.37 Mbit/s

95th percentile per-packet one-way delay: 51.228 ms

Loss rate: 0.03%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-21 06:03:47

End at: 2017-11-21 06:04:17

Below is generated by plot.py at 2017-11-21 07:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.02 Mbit/s

95th percentile per-packet one-way delay: 51.194 ms

Loss rate: 0.05%

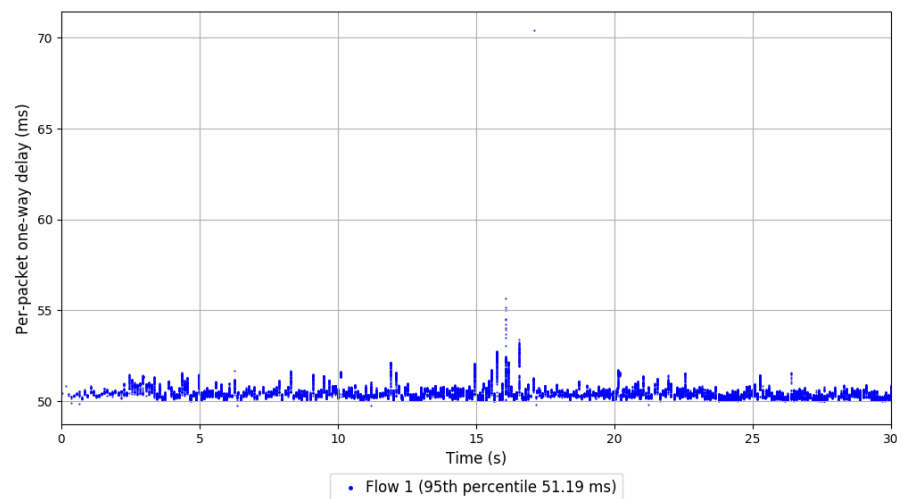
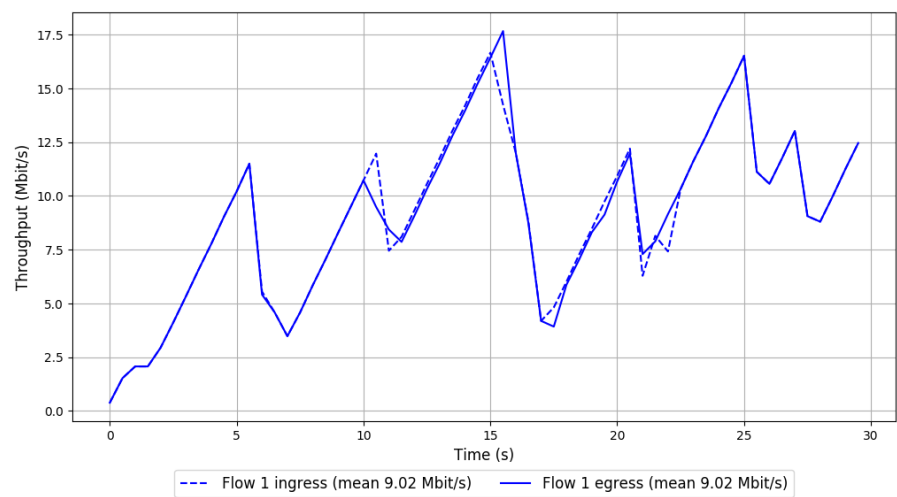
-- Flow 1:

Average throughput: 9.02 Mbit/s

95th percentile per-packet one-way delay: 51.194 ms

Loss rate: 0.05%

Run 10: Report of LEDBAT — Data Link

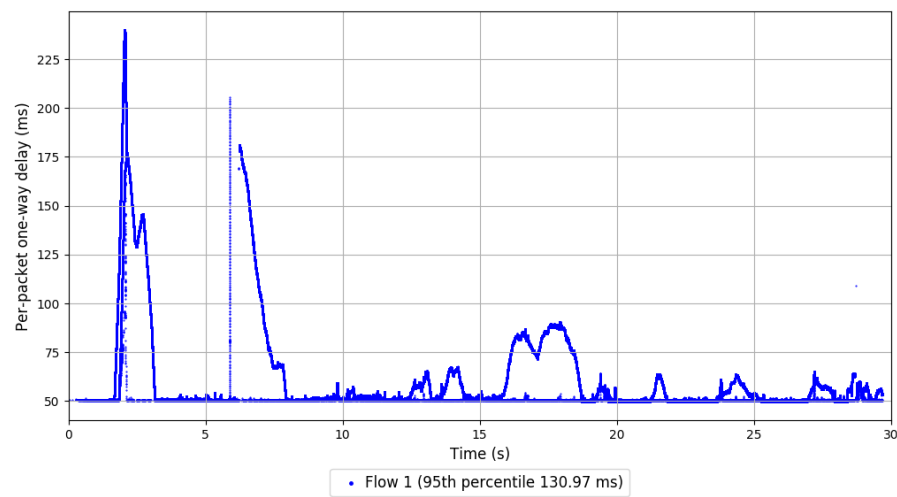
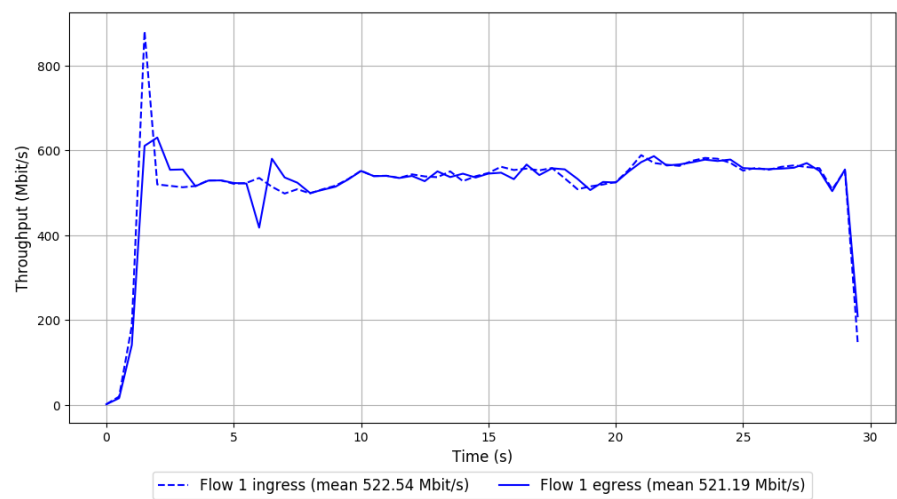


```
Run 1: Statistics of PCC

Start at: 2017-11-21 04:29:05
End at: 2017-11-21 04:29:35

# Below is generated by plot.py at 2017-11-21 07:17:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 521.19 Mbit/s
95th percentile per-packet one-way delay: 130.966 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 521.19 Mbit/s
95th percentile per-packet one-way delay: 130.966 ms
Loss rate: 0.26%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-21 04:39:22

End at: 2017-11-21 04:39:52

Below is generated by plot.py at 2017-11-21 07:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 530.02 Mbit/s

95th percentile per-packet one-way delay: 104.184 ms

Loss rate: 0.30%

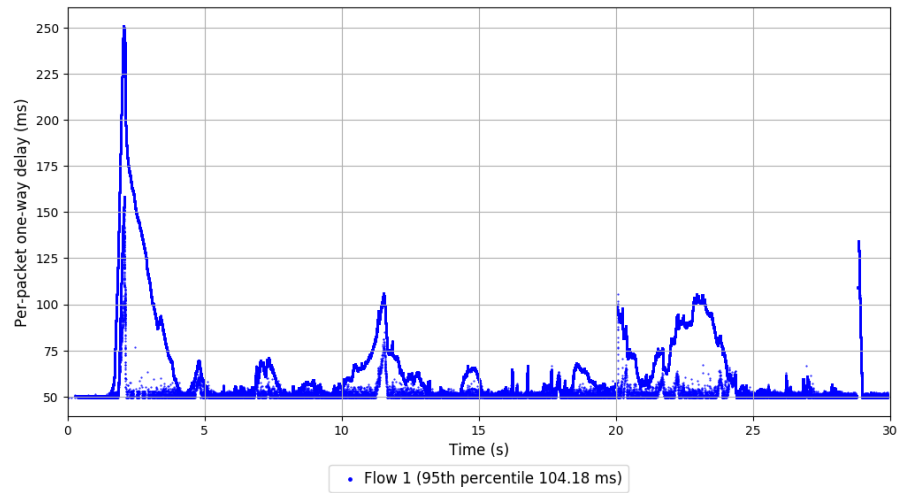
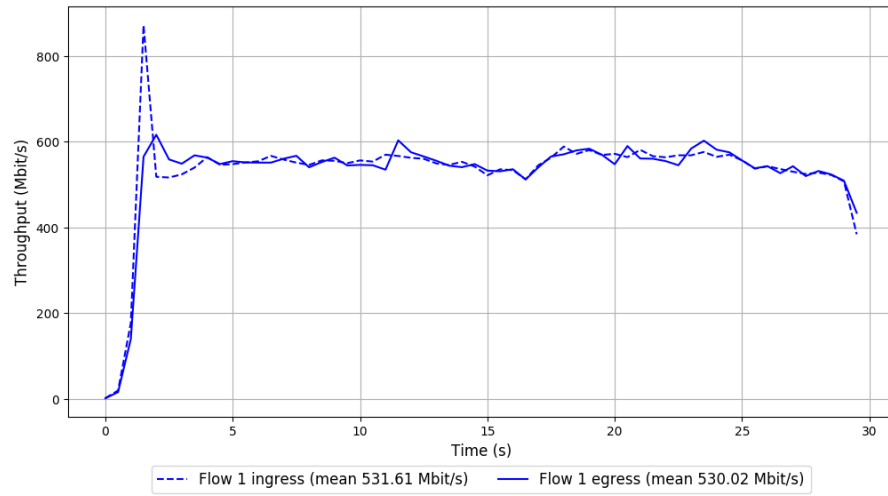
-- Flow 1:

Average throughput: 530.02 Mbit/s

95th percentile per-packet one-way delay: 104.184 ms

Loss rate: 0.30%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-21 04:49:56

End at: 2017-11-21 04:50:26

Below is generated by plot.py at 2017-11-21 07:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 486.25 Mbit/s

95th percentile per-packet one-way delay: 150.805 ms

Loss rate: 0.10%

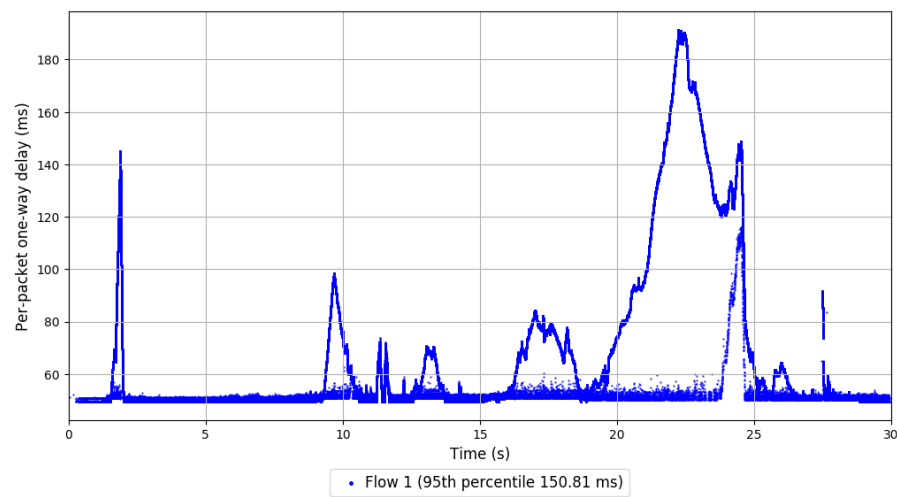
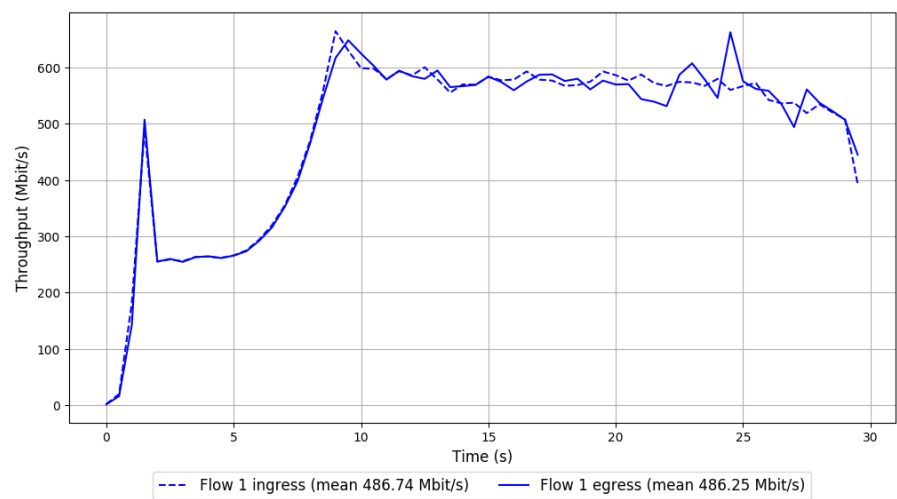
-- Flow 1:

Average throughput: 486.25 Mbit/s

95th percentile per-packet one-way delay: 150.805 ms

Loss rate: 0.10%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-21 05:00:08

End at: 2017-11-21 05:00:38

Below is generated by plot.py at 2017-11-21 07:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 405.22 Mbit/s

95th percentile per-packet one-way delay: 104.520 ms

Loss rate: 0.56%

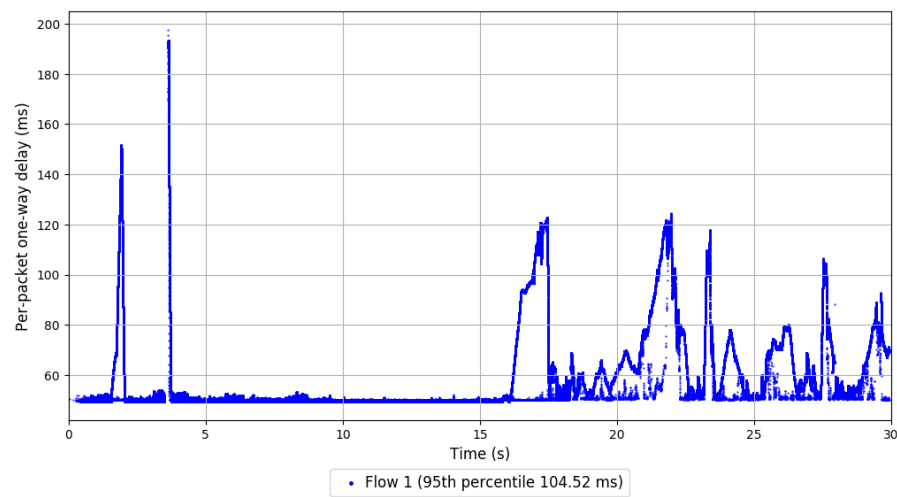
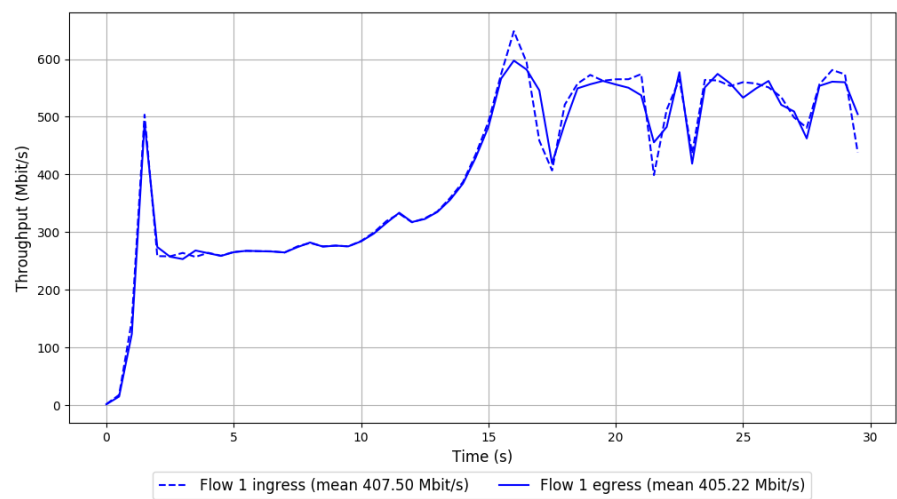
-- Flow 1:

Average throughput: 405.22 Mbit/s

95th percentile per-packet one-way delay: 104.520 ms

Loss rate: 0.56%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-21 05:10:32

End at: 2017-11-21 05:11:02

Below is generated by plot.py at 2017-11-21 07:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 508.55 Mbit/s

95th percentile per-packet one-way delay: 192.498 ms

Loss rate: 1.76%

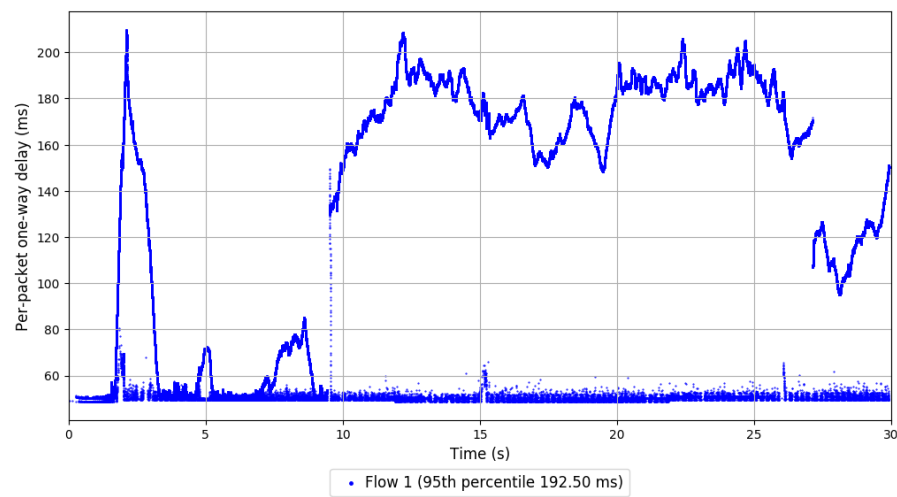
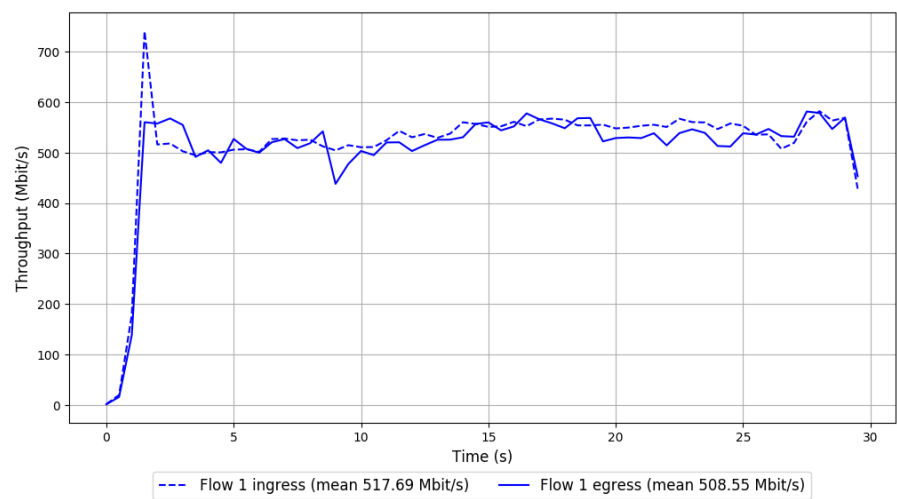
-- Flow 1:

Average throughput: 508.55 Mbit/s

95th percentile per-packet one-way delay: 192.498 ms

Loss rate: 1.76%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-21 05:20:47

End at: 2017-11-21 05:21:17

Below is generated by plot.py at 2017-11-21 07:17:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 506.09 Mbit/s

95th percentile per-packet one-way delay: 145.639 ms

Loss rate: 0.34%

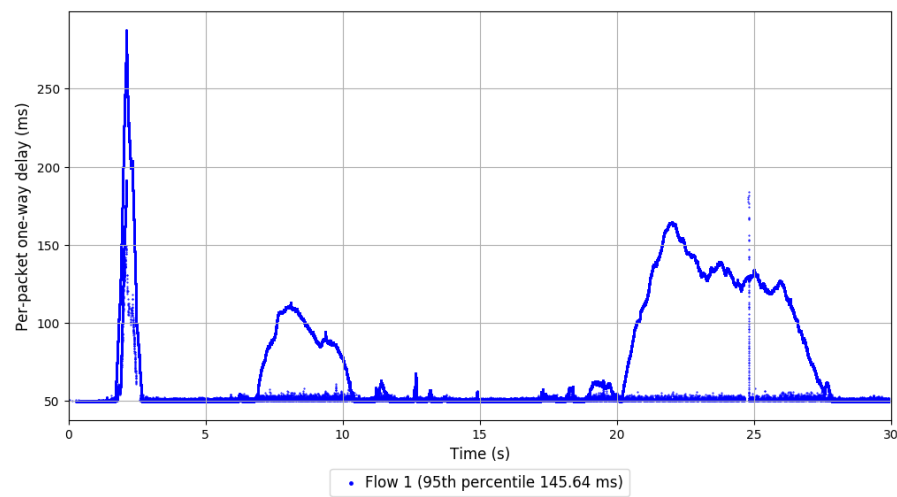
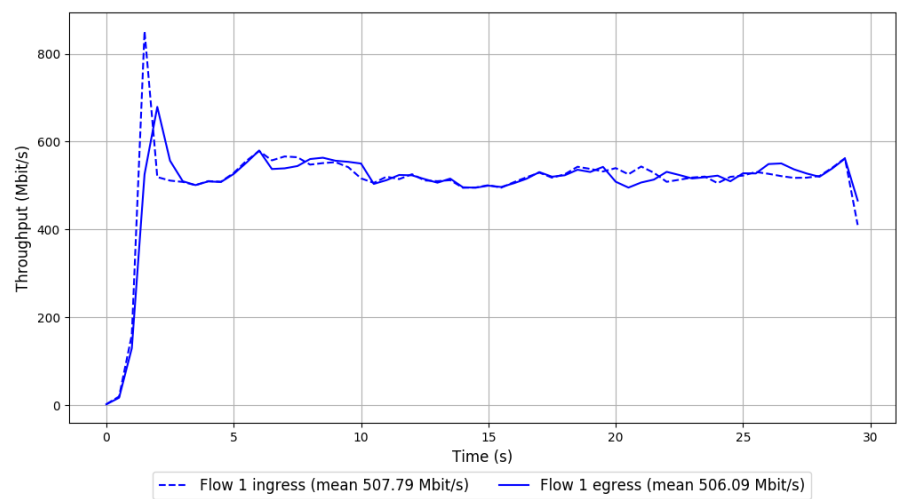
-- Flow 1:

Average throughput: 506.09 Mbit/s

95th percentile per-packet one-way delay: 145.639 ms

Loss rate: 0.34%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-21 05:30:51

End at: 2017-11-21 05:31:21

Below is generated by plot.py at 2017-11-21 07:18:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 510.91 Mbit/s

95th percentile per-packet one-way delay: 85.679 ms

Loss rate: 0.01%

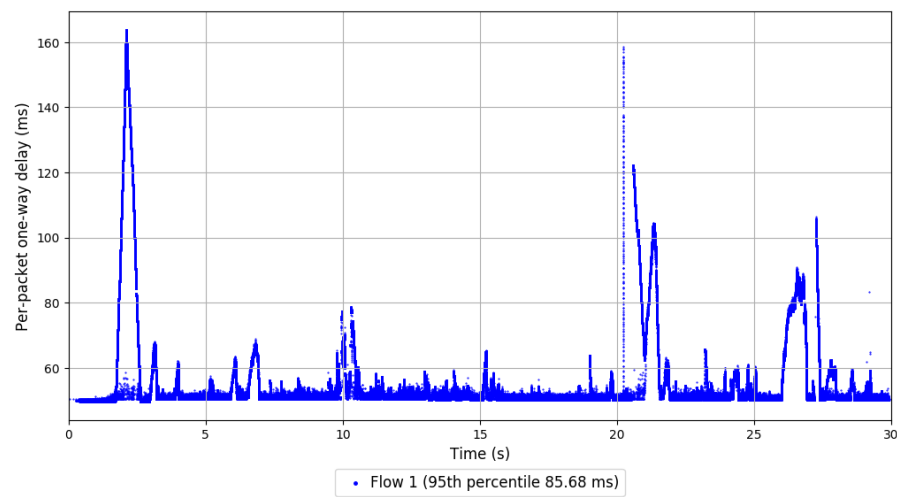
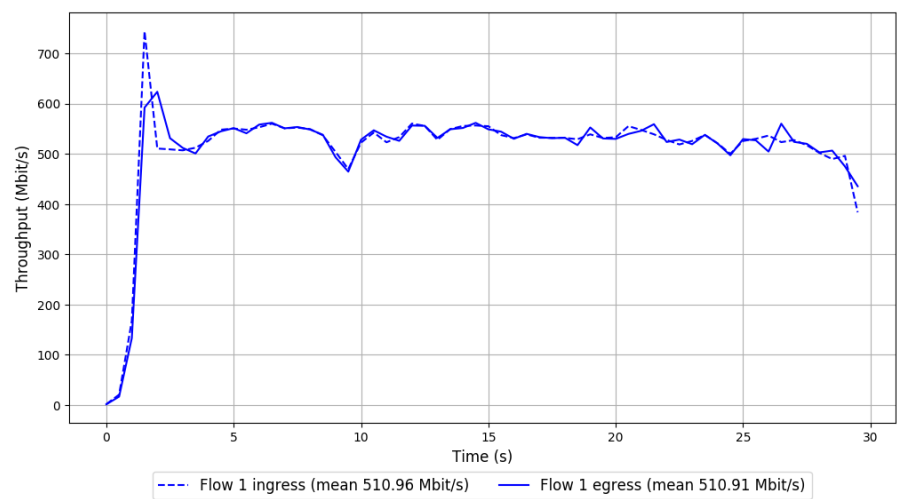
-- Flow 1:

Average throughput: 510.91 Mbit/s

95th percentile per-packet one-way delay: 85.679 ms

Loss rate: 0.01%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-21 05:41:21

End at: 2017-11-21 05:41:51

Below is generated by plot.py at 2017-11-21 07:19:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 522.12 Mbit/s

95th percentile per-packet one-way delay: 178.233 ms

Loss rate: 0.40%

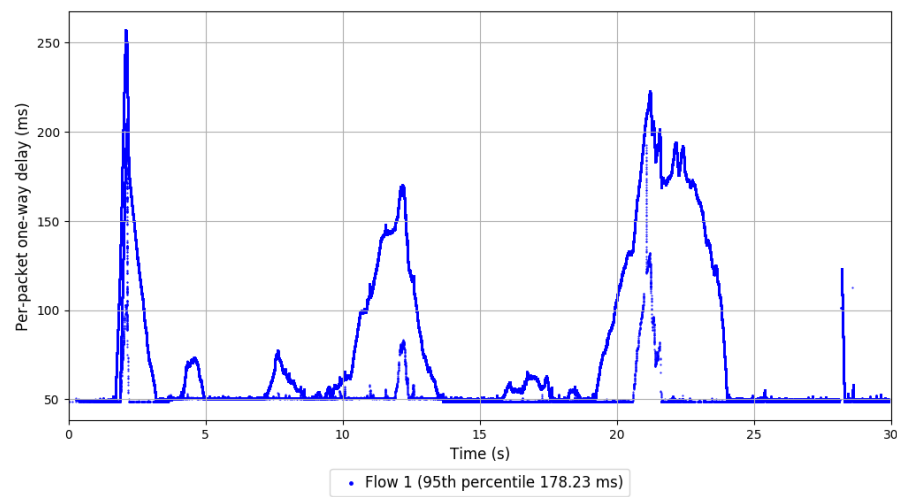
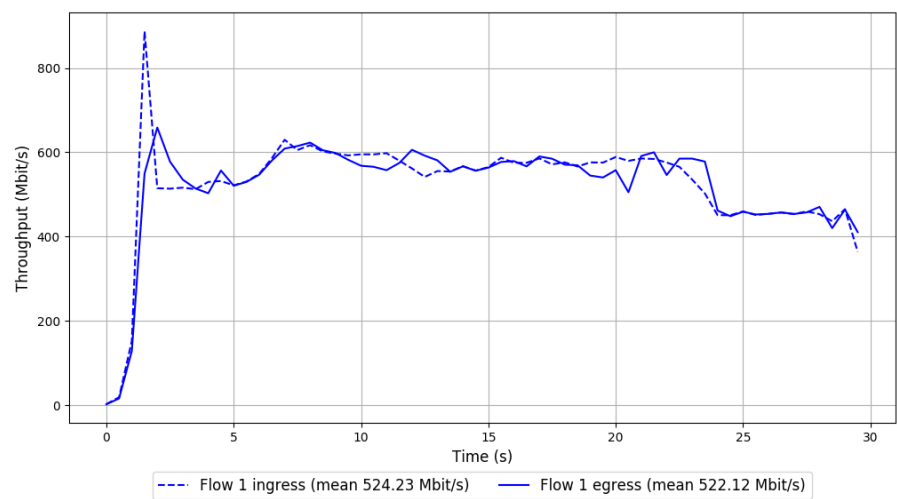
-- Flow 1:

Average throughput: 522.12 Mbit/s

95th percentile per-packet one-way delay: 178.233 ms

Loss rate: 0.40%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-21 05:51:47

End at: 2017-11-21 05:52:17

Below is generated by plot.py at 2017-11-21 07:26:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 525.48 Mbit/s

95th percentile per-packet one-way delay: 106.656 ms

Loss rate: 0.25%

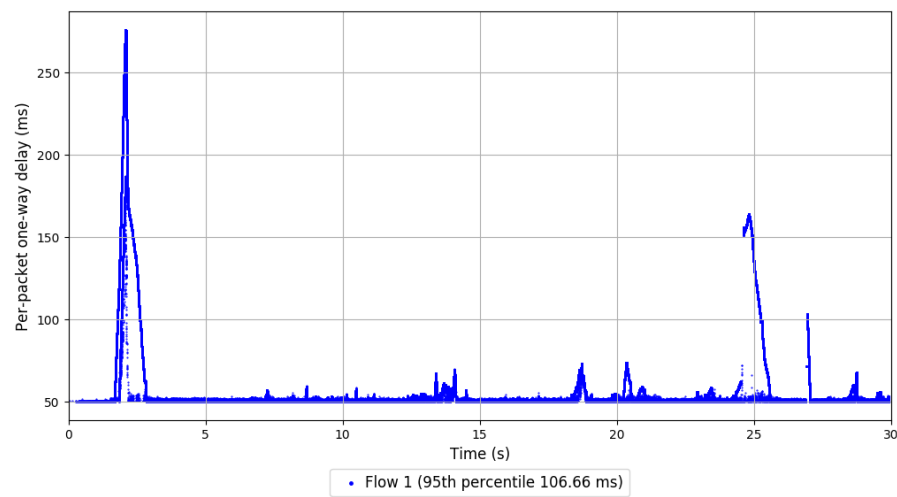
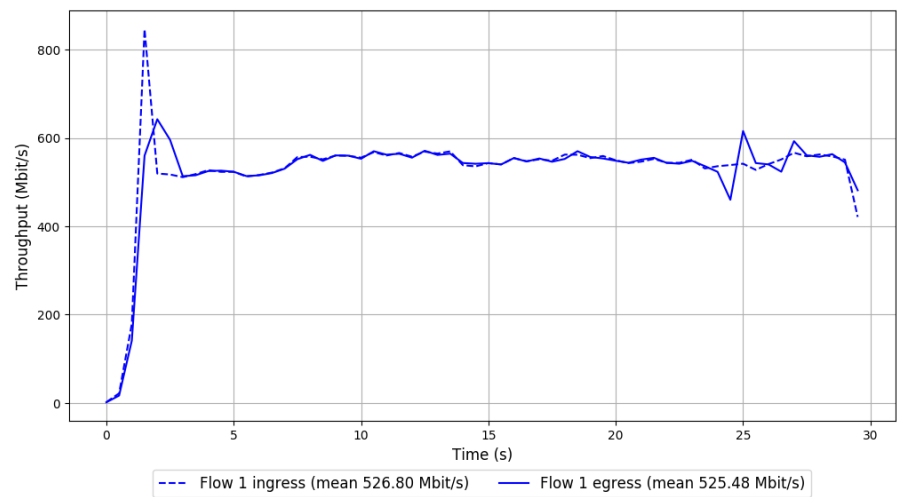
-- Flow 1:

Average throughput: 525.48 Mbit/s

95th percentile per-packet one-way delay: 106.656 ms

Loss rate: 0.25%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-21 06:02:06

End at: 2017-11-21 06:02:36

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 521.95 Mbit/s

95th percentile per-packet one-way delay: 169.035 ms

Loss rate: 0.42%

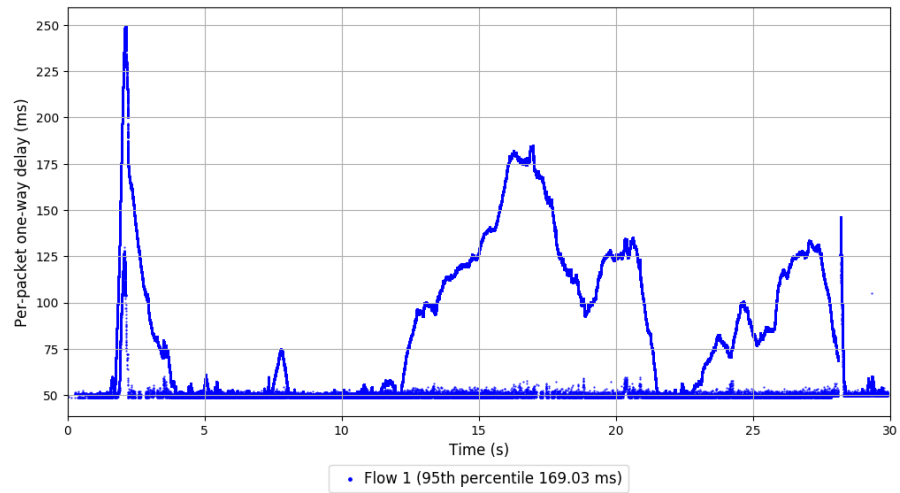
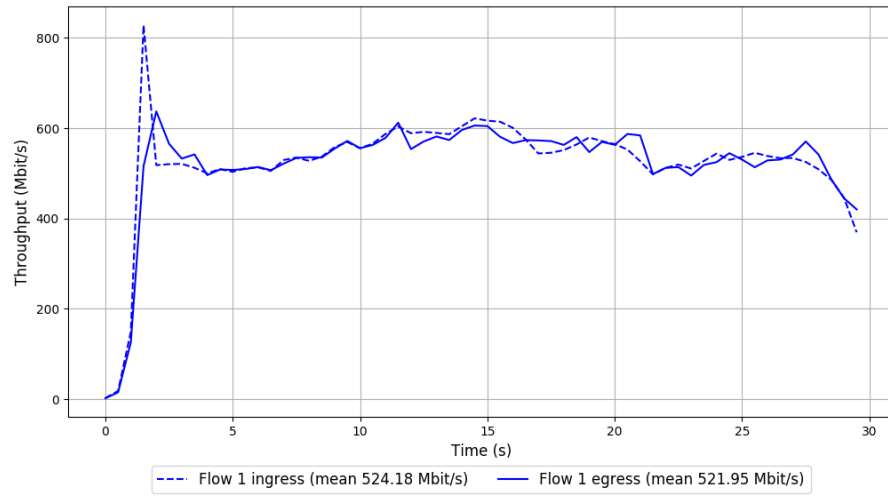
-- Flow 1:

Average throughput: 521.95 Mbit/s

95th percentile per-packet one-way delay: 169.035 ms

Loss rate: 0.42%

Run 10: Report of PCC — Data Link

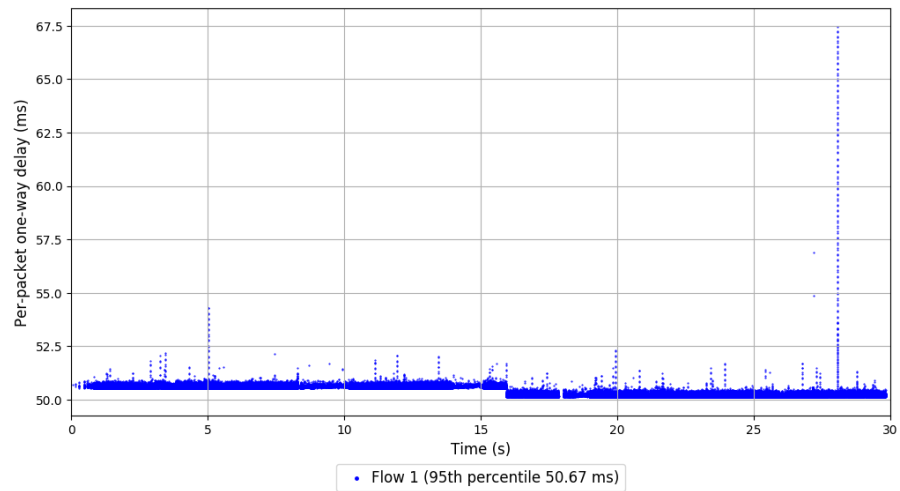
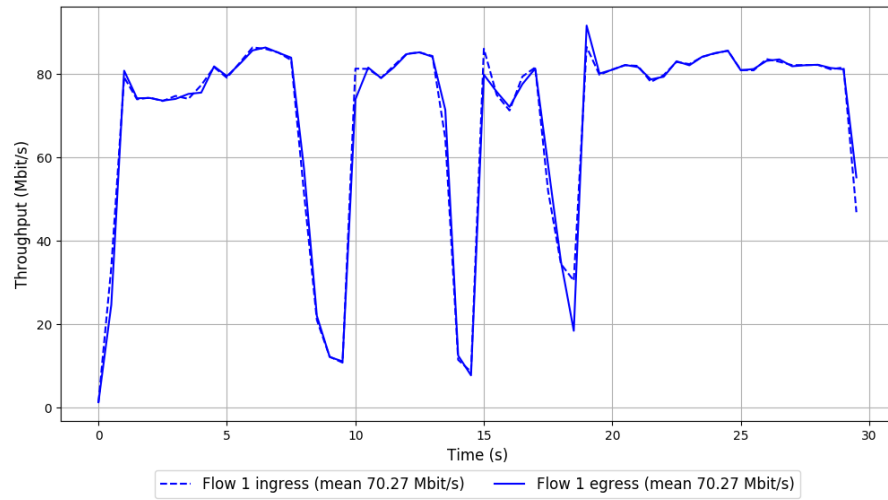


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-21 04:26:28
End at: 2017-11-21 04:26:58

# Below is generated by plot.py at 2017-11-21 07:27:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.27 Mbit/s
95th percentile per-packet one-way delay: 50.670 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.27 Mbit/s
95th percentile per-packet one-way delay: 50.670 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-21 04:36:48

End at: 2017-11-21 04:37:18

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.09 Mbit/s

95th percentile per-packet one-way delay: 50.359 ms

Loss rate: 0.00%

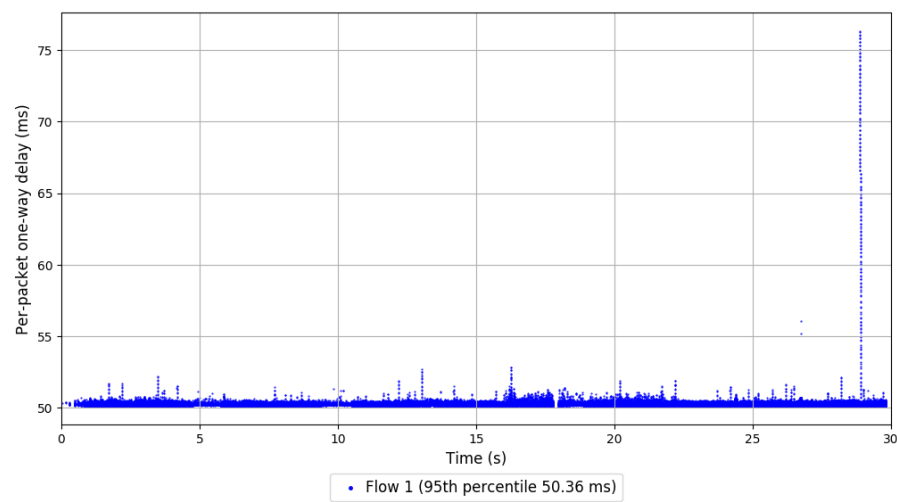
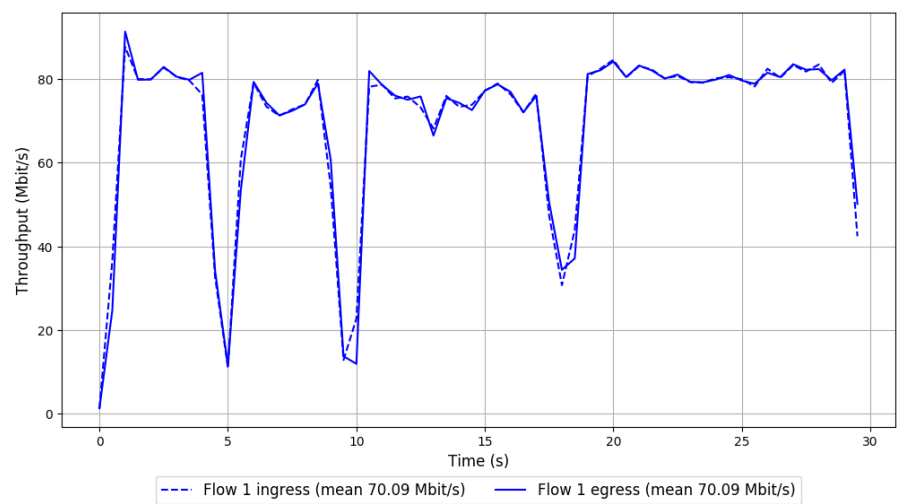
-- Flow 1:

Average throughput: 70.09 Mbit/s

95th percentile per-packet one-way delay: 50.359 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-21 04:47:16

End at: 2017-11-21 04:47:46

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.37 Mbit/s

95th percentile per-packet one-way delay: 50.738 ms

Loss rate: 0.00%

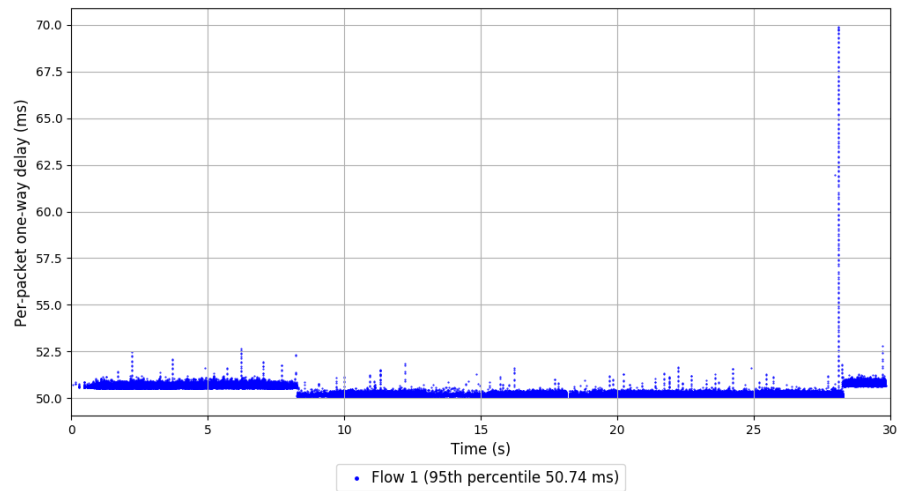
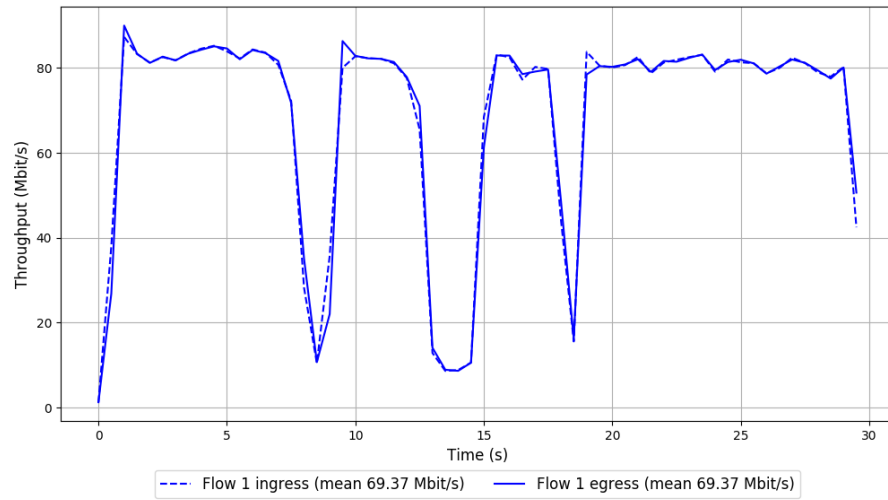
-- Flow 1:

Average throughput: 69.37 Mbit/s

95th percentile per-packet one-way delay: 50.738 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-21 04:57:31

End at: 2017-11-21 04:58:01

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.26 Mbit/s

95th percentile per-packet one-way delay: 48.927 ms

Loss rate: 0.00%

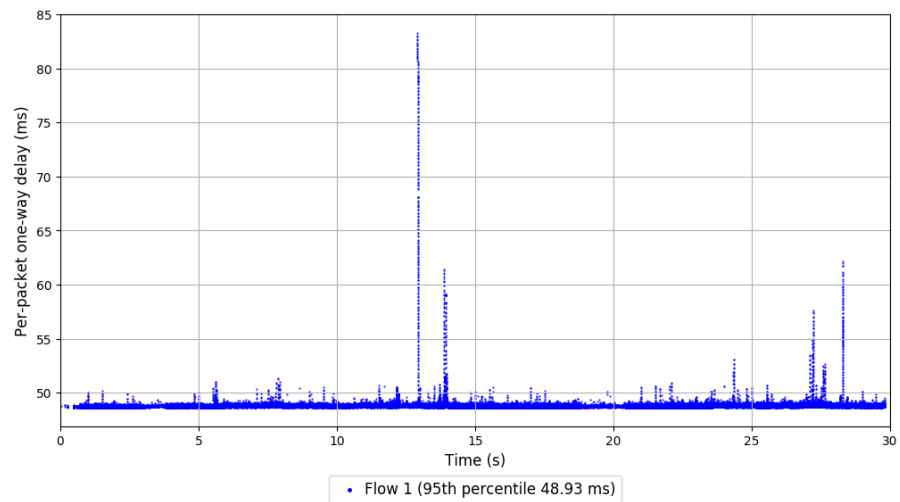
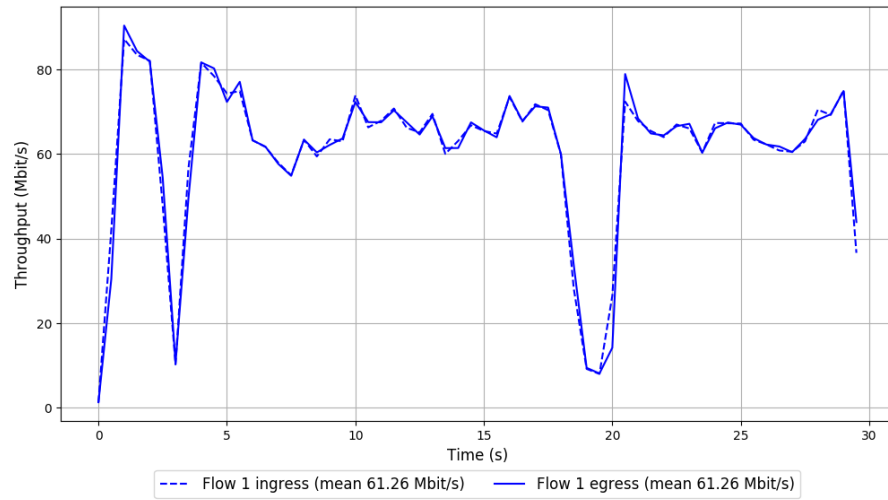
-- Flow 1:

Average throughput: 61.26 Mbit/s

95th percentile per-packet one-way delay: 48.927 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-21 05:07:55

End at: 2017-11-21 05:08:25

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.65 Mbit/s

95th percentile per-packet one-way delay: 50.158 ms

Loss rate: 0.00%

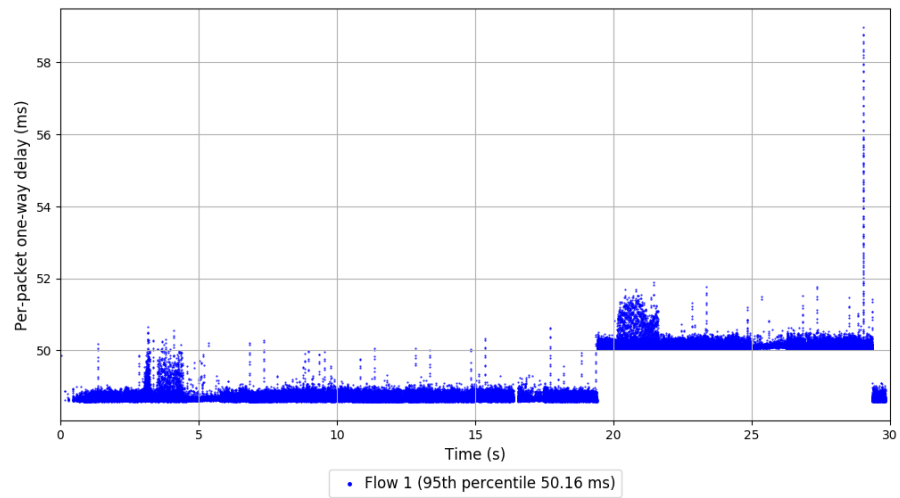
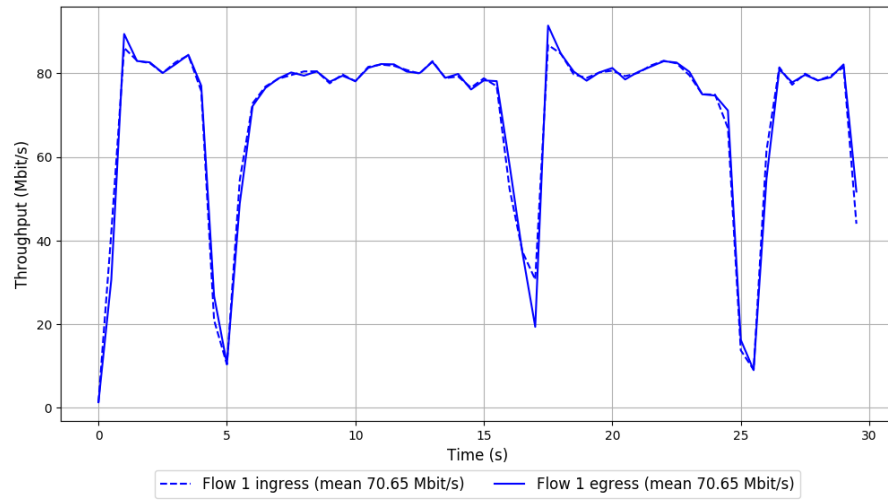
-- Flow 1:

Average throughput: 70.65 Mbit/s

95th percentile per-packet one-way delay: 50.158 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-21 05:18:12

End at: 2017-11-21 05:18:42

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.42 Mbit/s

95th percentile per-packet one-way delay: 50.705 ms

Loss rate: 0.01%

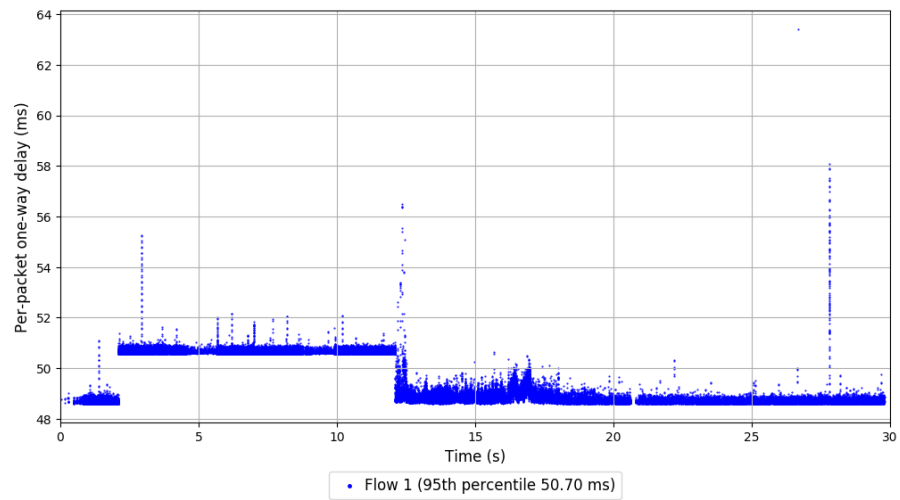
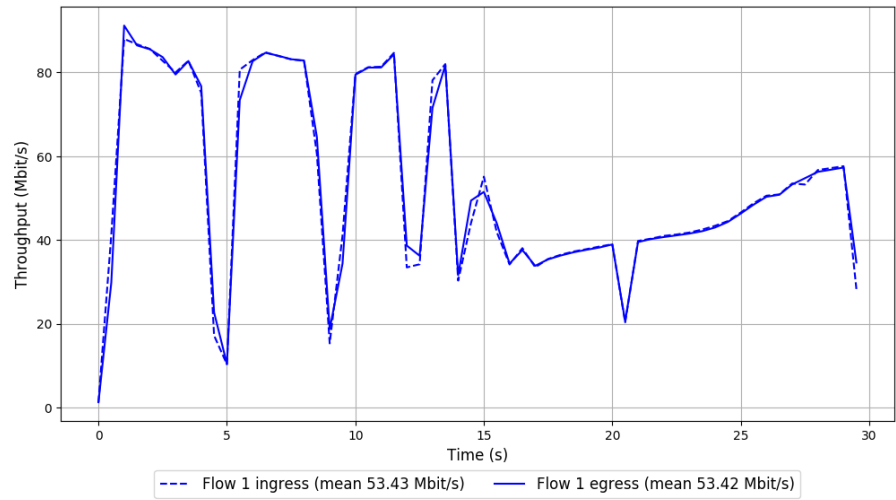
-- Flow 1:

Average throughput: 53.42 Mbit/s

95th percentile per-packet one-way delay: 50.705 ms

Loss rate: 0.01%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-21 05:28:19

End at: 2017-11-21 05:28:49

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.81 Mbit/s

95th percentile per-packet one-way delay: 50.256 ms

Loss rate: 0.02%

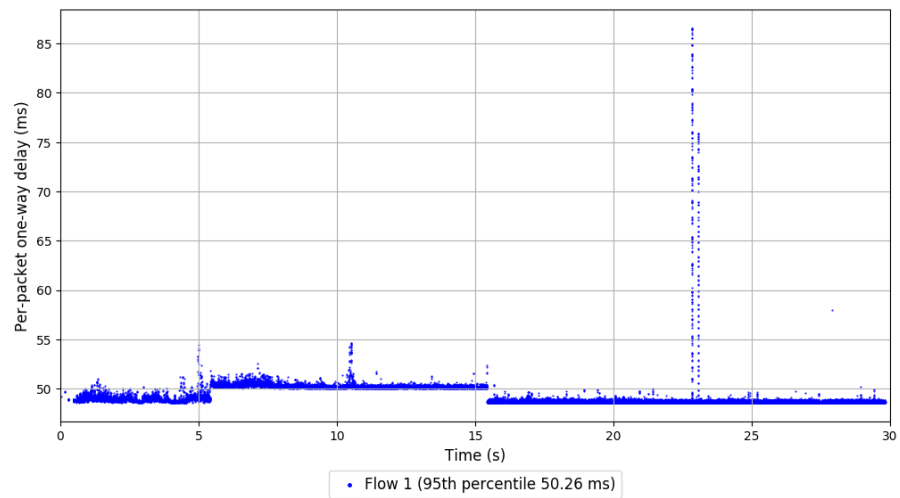
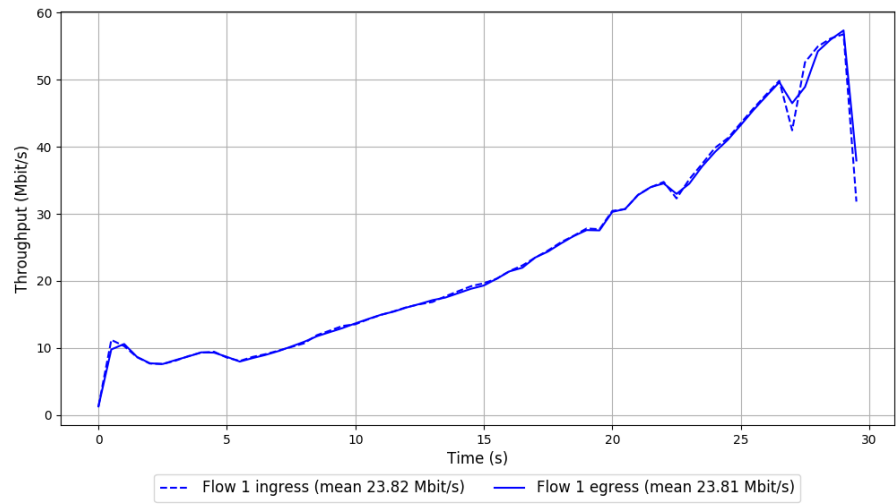
-- Flow 1:

Average throughput: 23.81 Mbit/s

95th percentile per-packet one-way delay: 50.256 ms

Loss rate: 0.02%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-21 05:38:42

End at: 2017-11-21 05:39:12

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.44 Mbit/s

95th percentile per-packet one-way delay: 50.528 ms

Loss rate: 0.00%

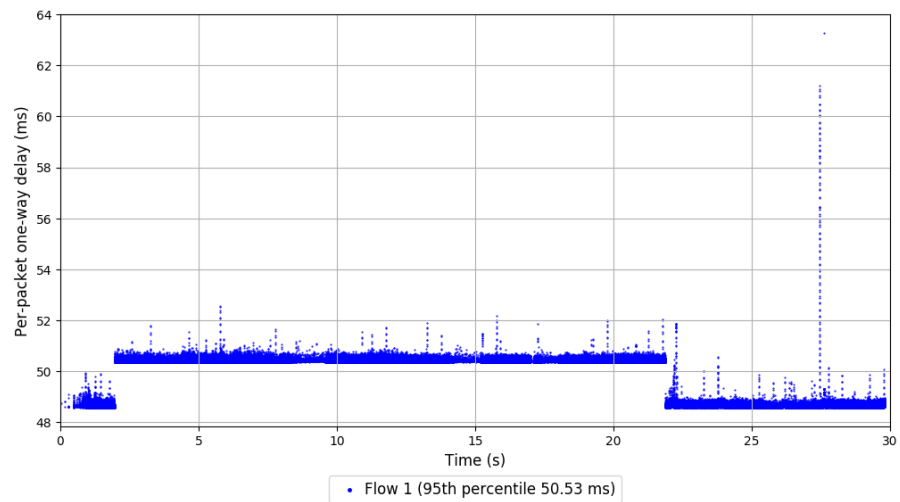
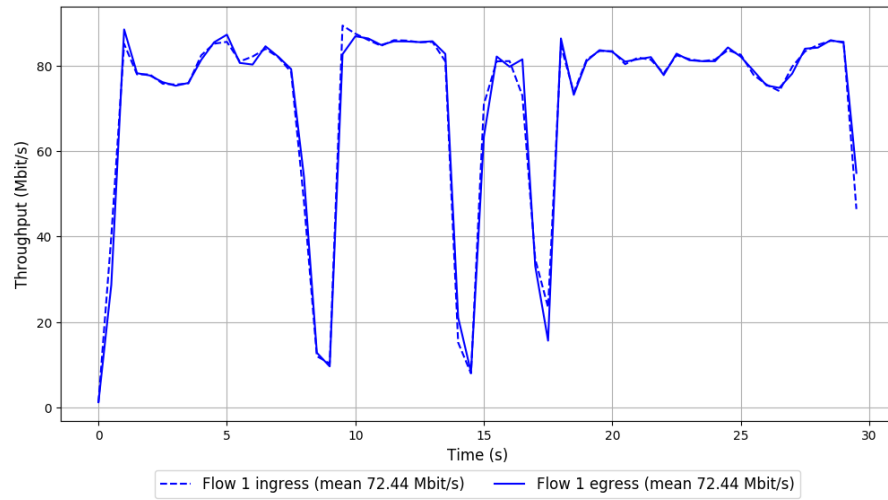
-- Flow 1:

Average throughput: 72.44 Mbit/s

95th percentile per-packet one-way delay: 50.528 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-21 05:49:08

End at: 2017-11-21 05:49:38

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.20 Mbit/s

95th percentile per-packet one-way delay: 50.410 ms

Loss rate: 0.00%

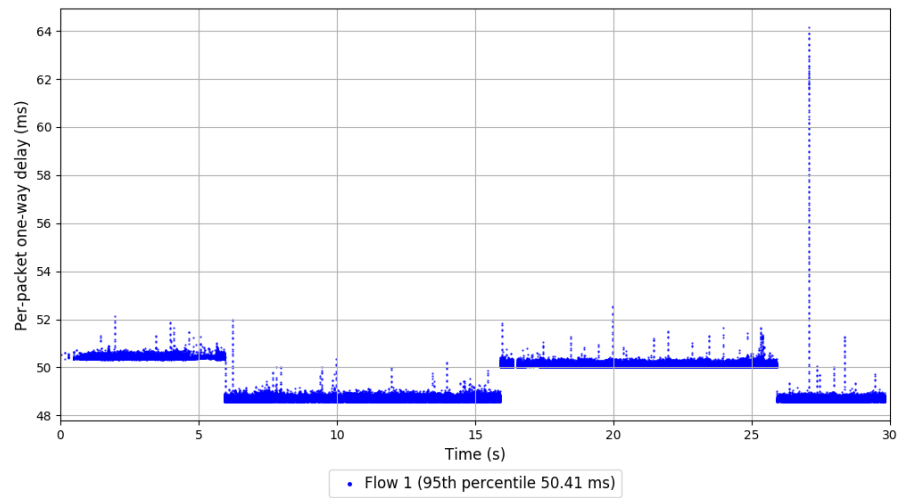
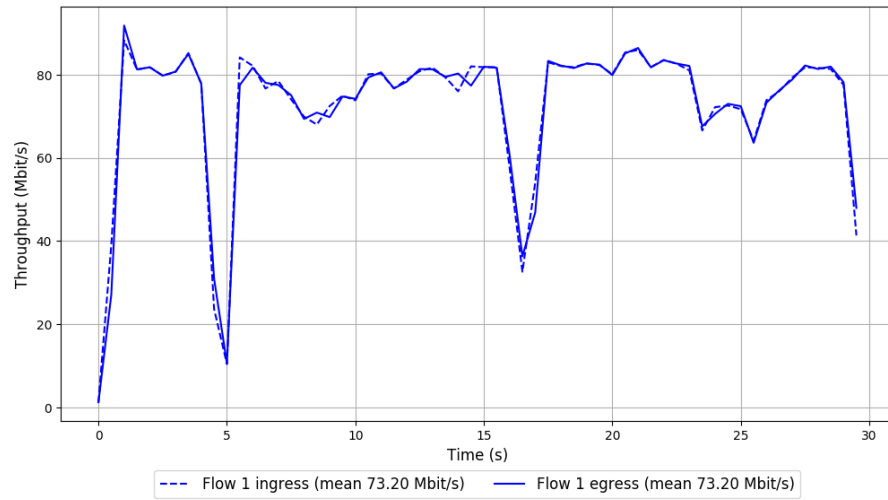
-- Flow 1:

Average throughput: 73.20 Mbit/s

95th percentile per-packet one-way delay: 50.410 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

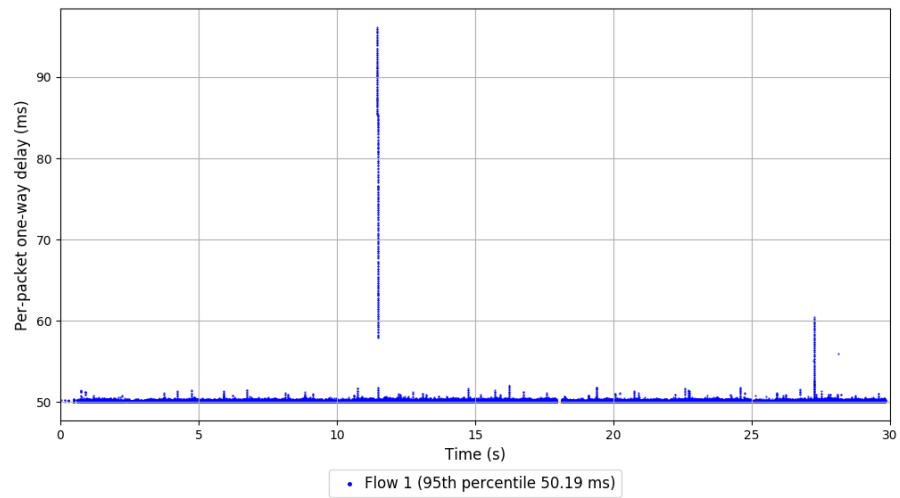
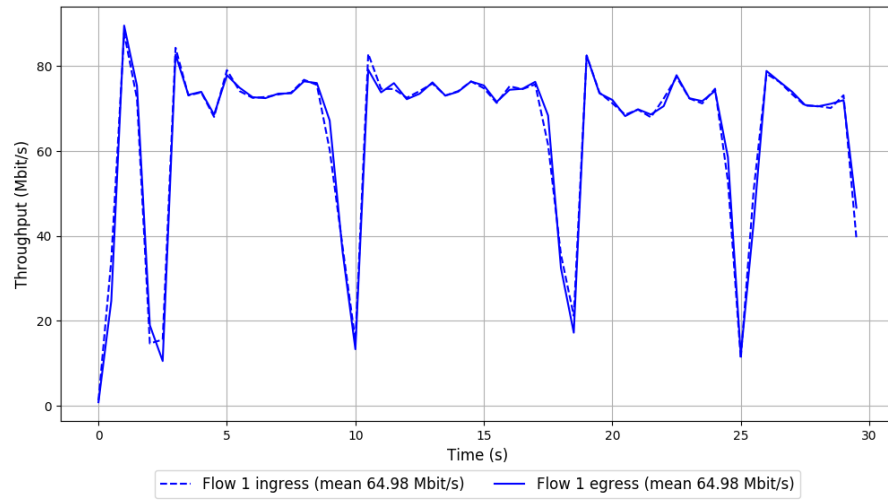


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-21 05:59:33
End at: 2017-11-21 06:00:03

# Below is generated by plot.py at 2017-11-21 07:27:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.98 Mbit/s
95th percentile per-packet one-way delay: 50.189 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.98 Mbit/s
95th percentile per-packet one-way delay: 50.189 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

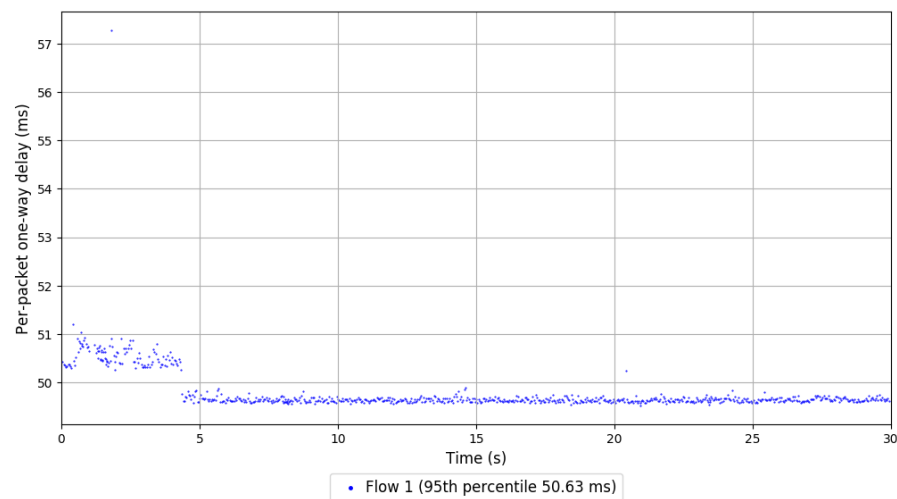
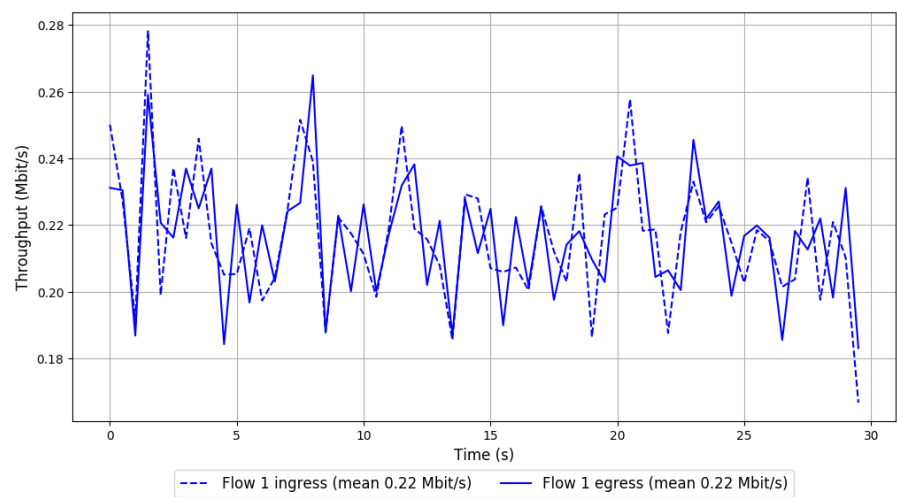


```
Run 1: Statistics of SCReAM

Start at: 2017-11-21 04:27:10
End at: 2017-11-21 04:27:40

# Below is generated by plot.py at 2017-11-21 07:27:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.633 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.633 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2017-11-21 04:37:29

End at: 2017-11-21 04:37:59

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.418 ms

Loss rate: 0.00%

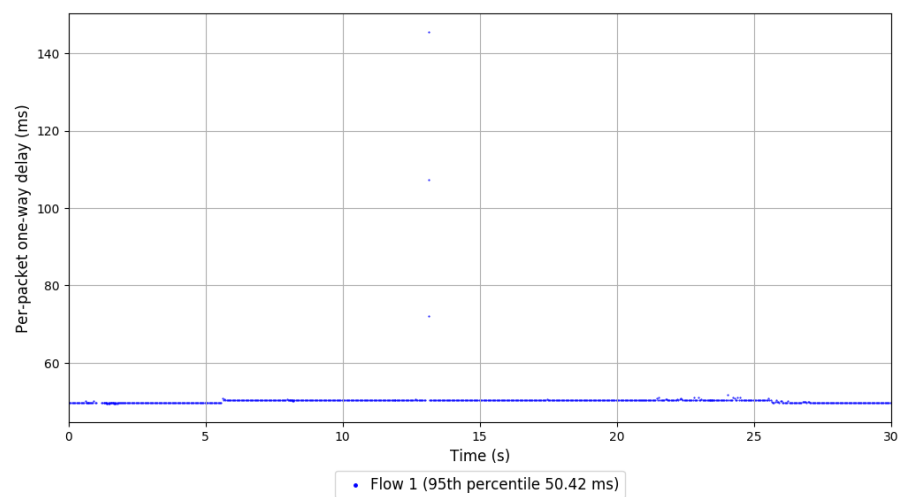
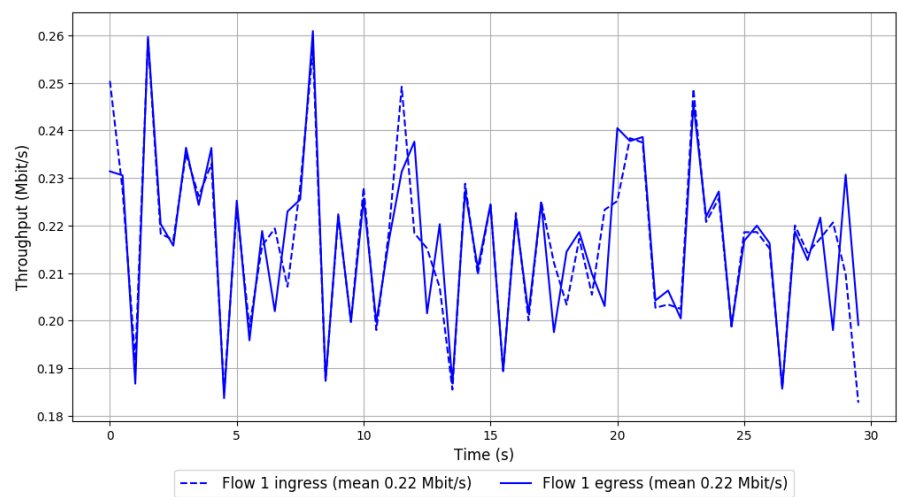
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.418 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-21 04:47:57

End at: 2017-11-21 04:48:27

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.376 ms

Loss rate: 0.00%

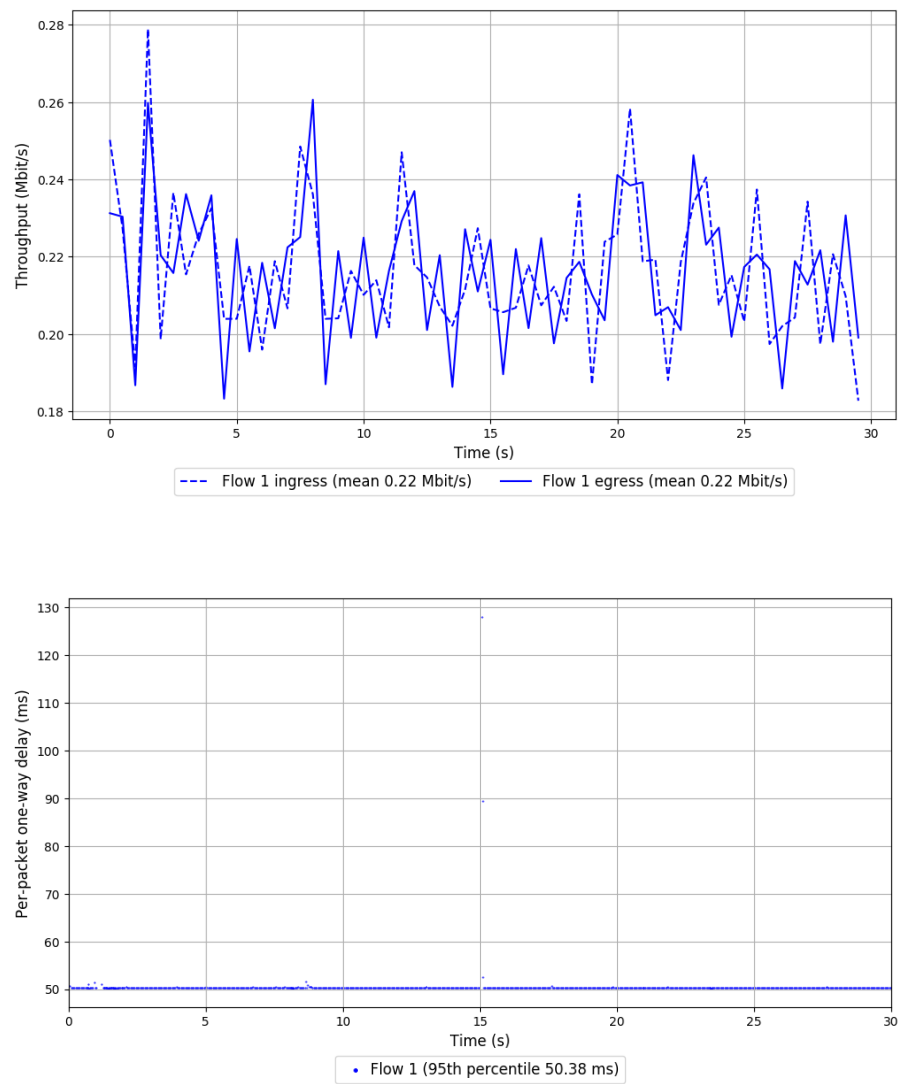
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.376 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-21 04:58:12

End at: 2017-11-21 04:58:42

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 0.00%

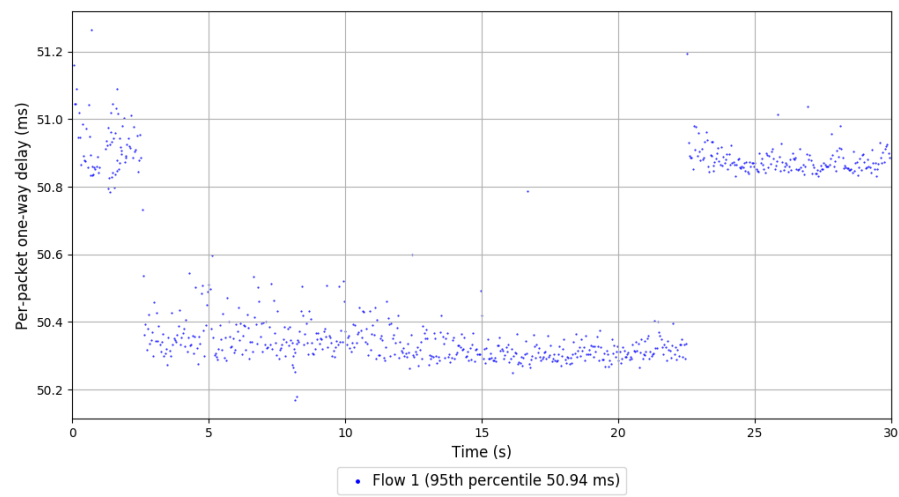
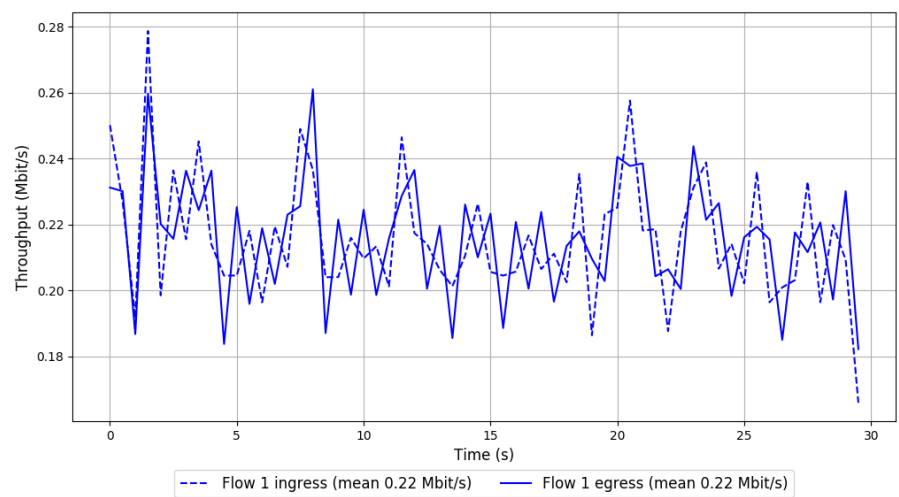
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-21 05:08:36

End at: 2017-11-21 05:09:06

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.334 ms

Loss rate: 0.00%

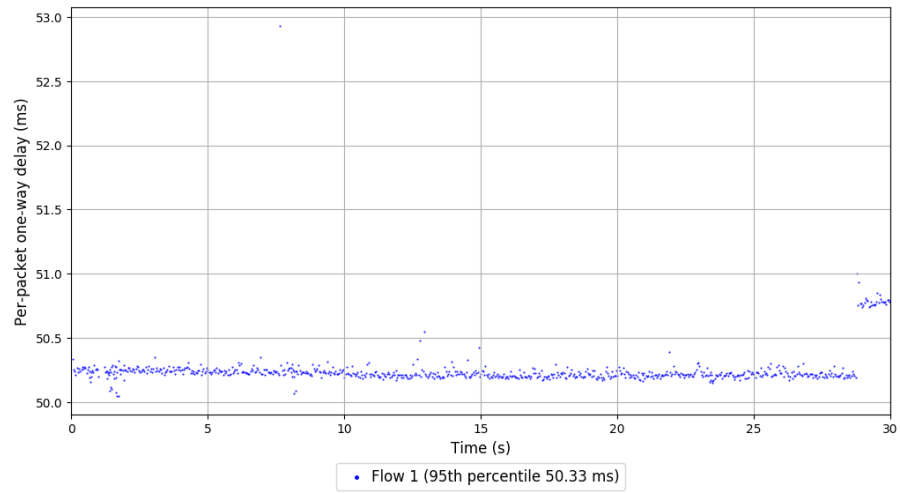
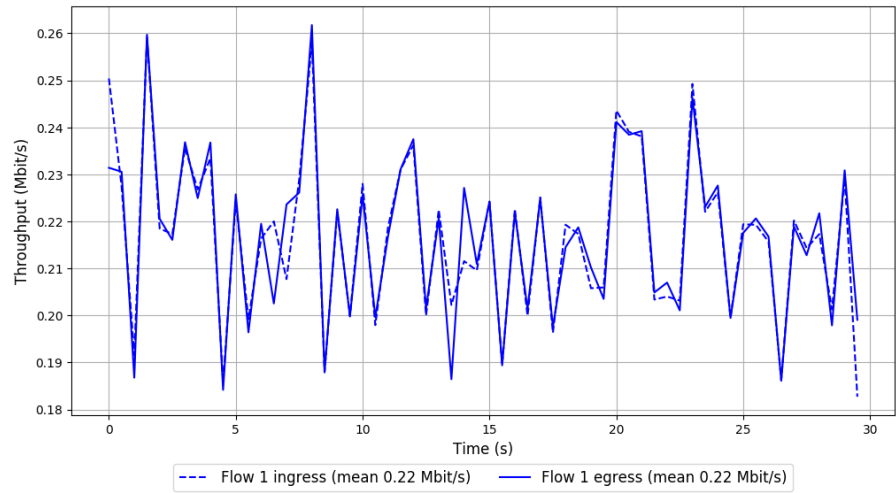
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.334 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-21 05:18:52

End at: 2017-11-21 05:19:22

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.645 ms

Loss rate: 0.00%

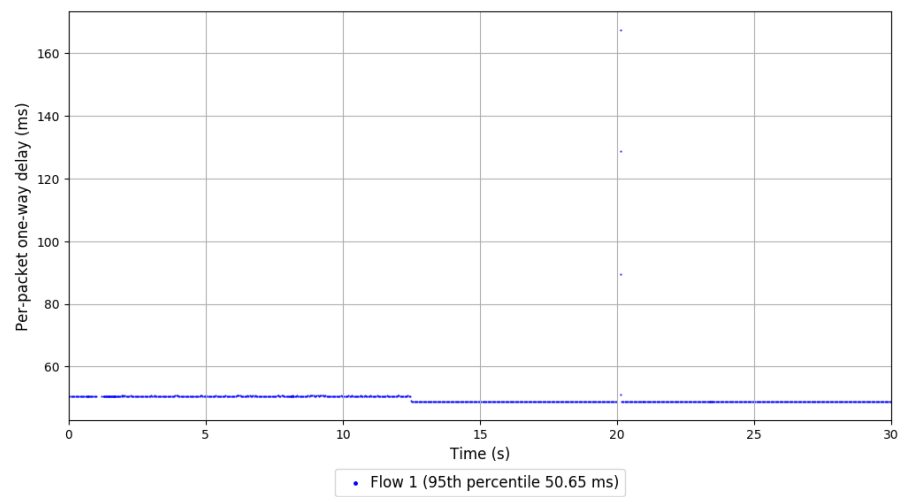
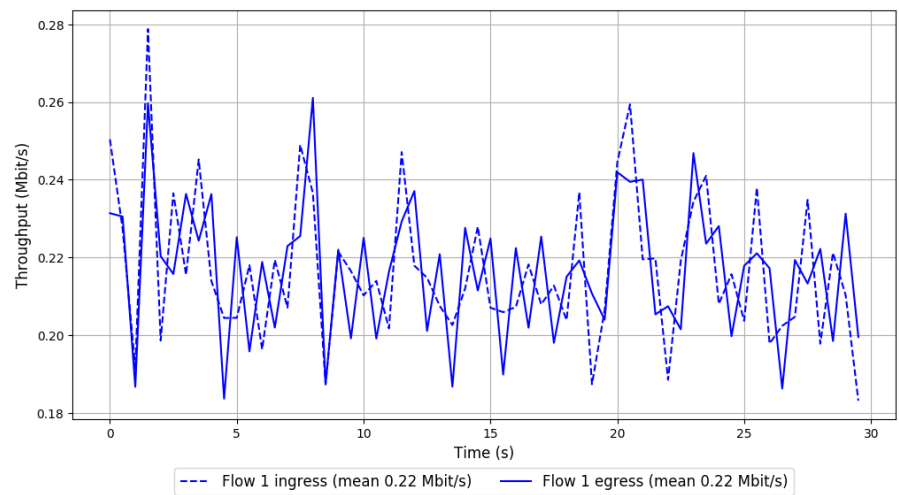
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.645 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-21 05:28:57

End at: 2017-11-21 05:29:27

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.369 ms

Loss rate: 0.00%

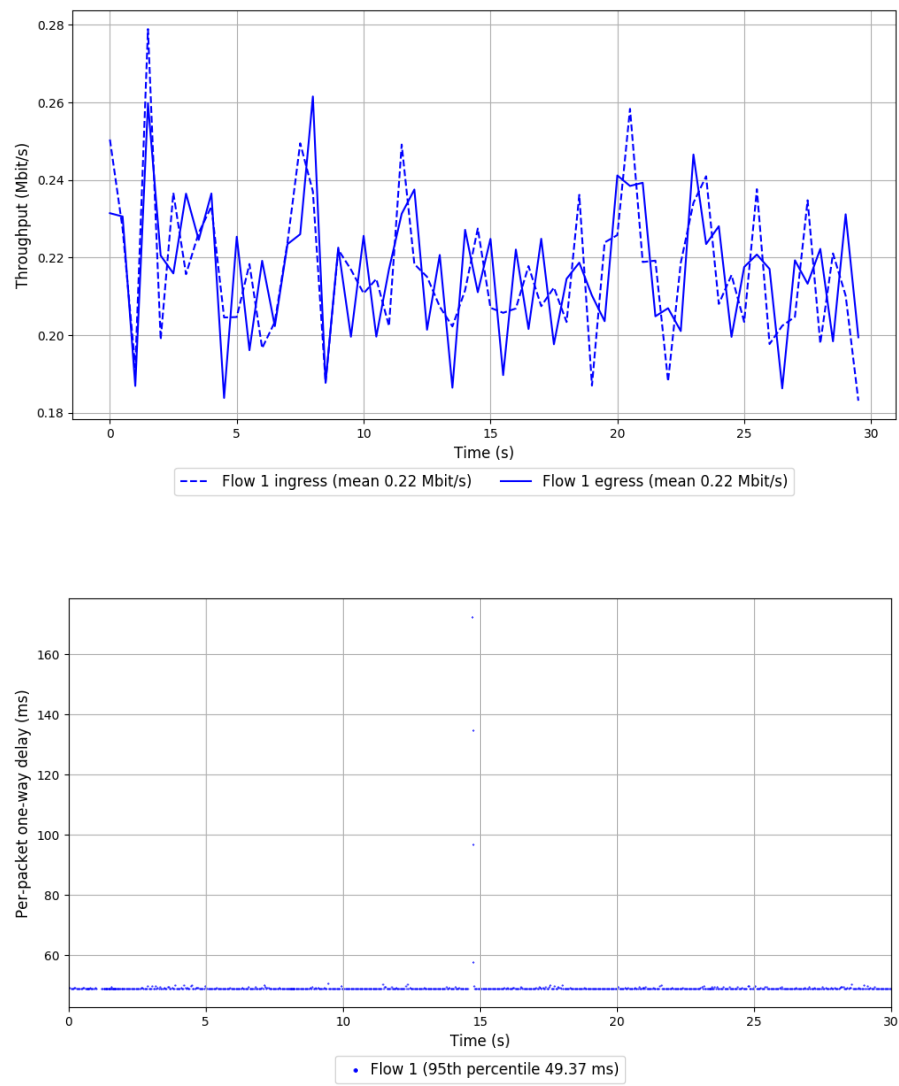
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.369 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-21 05:39:23

End at: 2017-11-21 05:39:53

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.901 ms

Loss rate: 0.00%

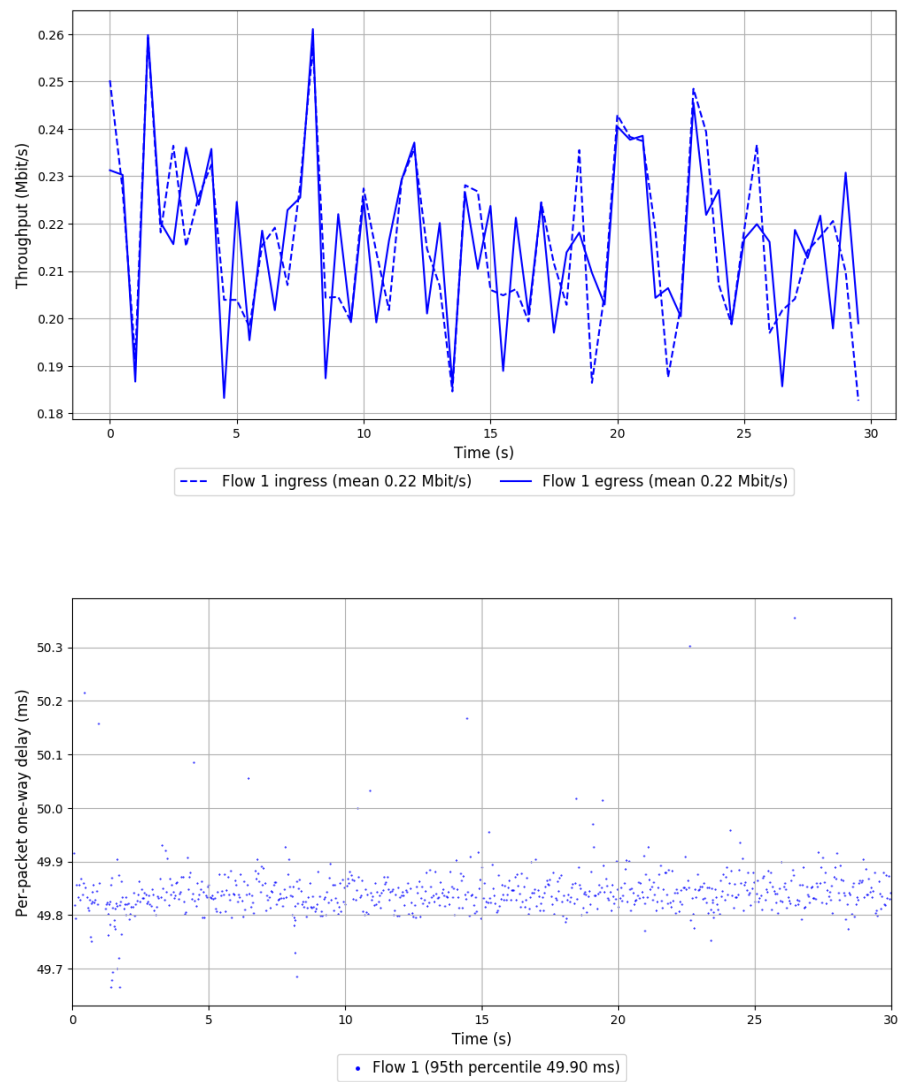
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.901 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-21 05:49:49

End at: 2017-11-21 05:50:19

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.299 ms

Loss rate: 0.00%

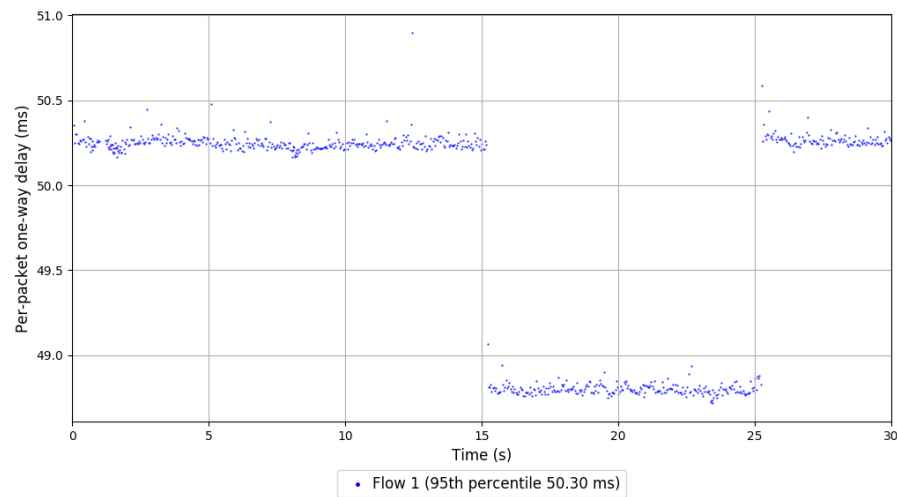
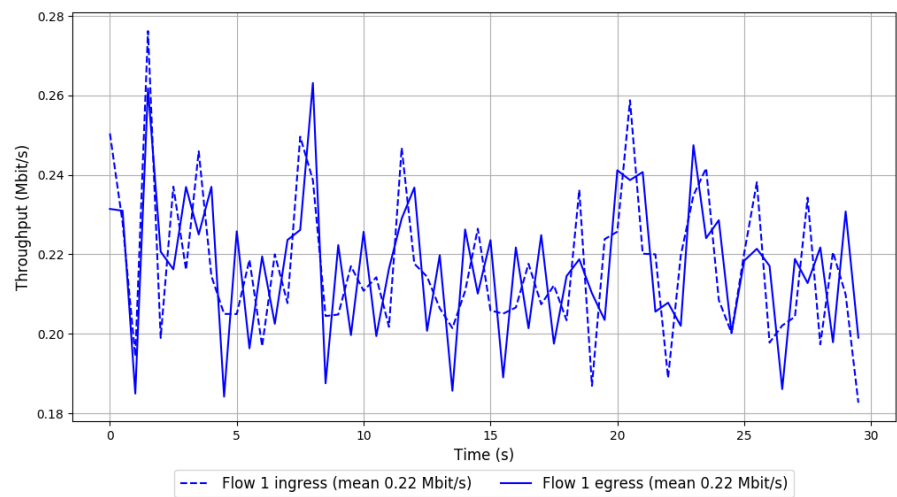
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.299 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-21 06:00:14

End at: 2017-11-21 06:00:44

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.691 ms

Loss rate: 0.00%

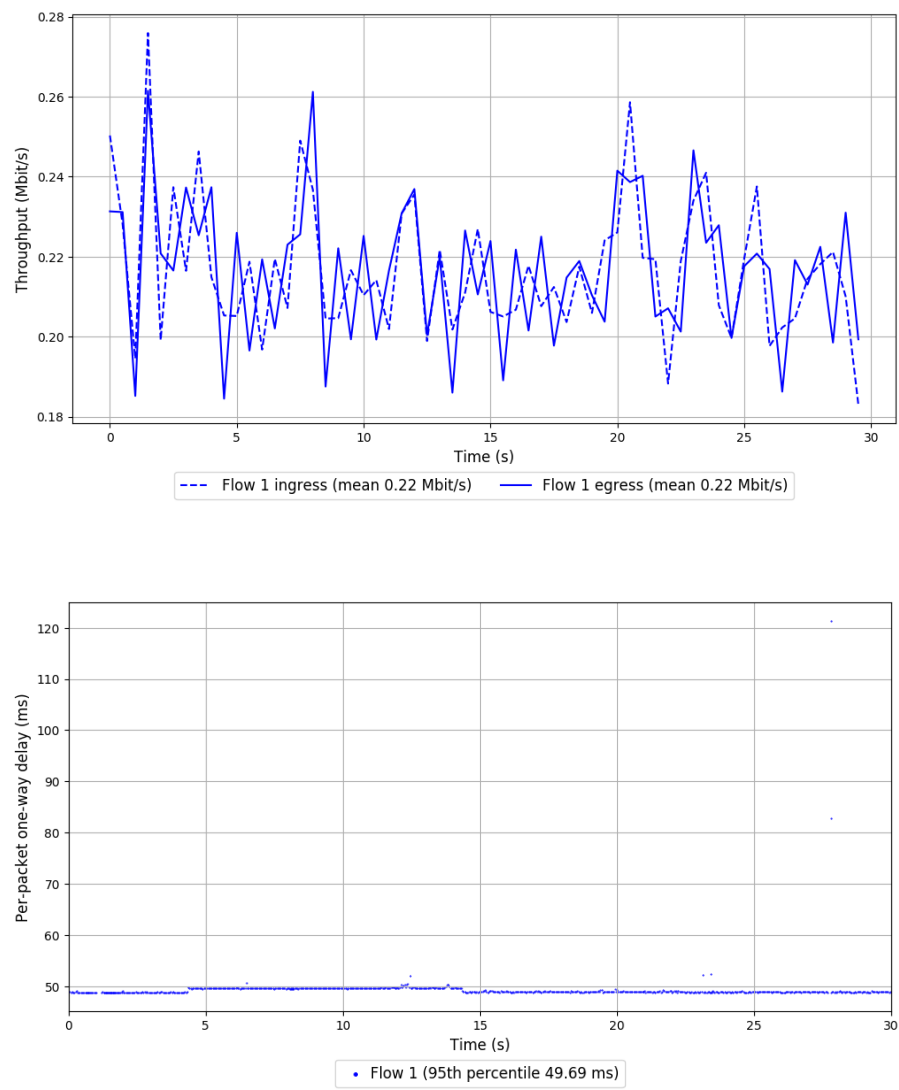
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.691 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

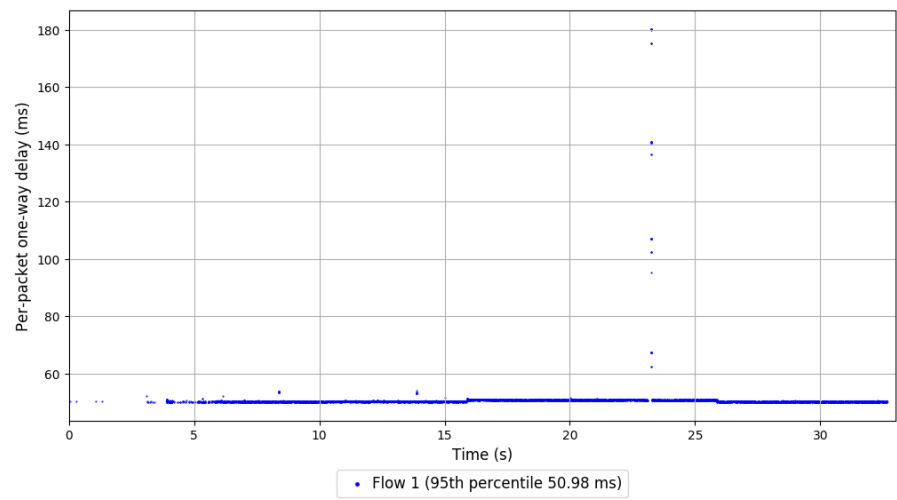
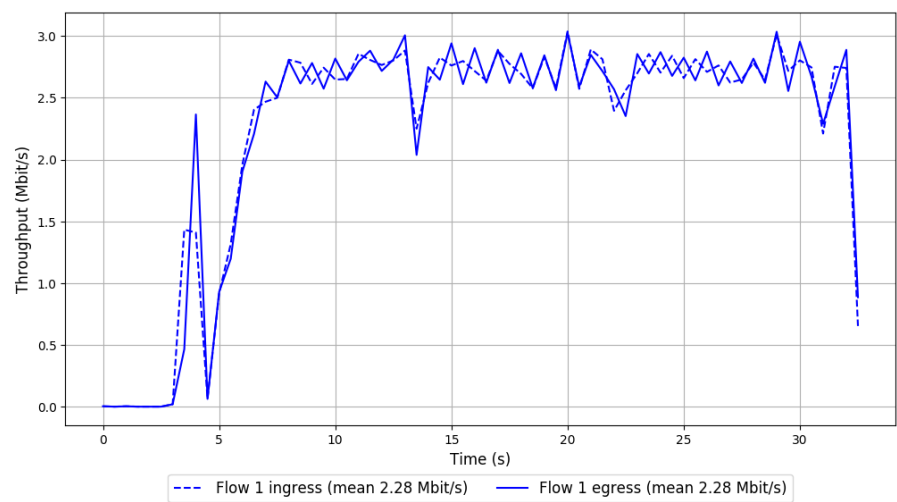


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-21 04:33:51
End at: 2017-11-21 04:34:21

# Below is generated by plot.py at 2017-11-21 07:27:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.979 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.979 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-21 04:44:13

End at: 2017-11-21 04:44:43

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 51.033 ms

Loss rate: 0.00%

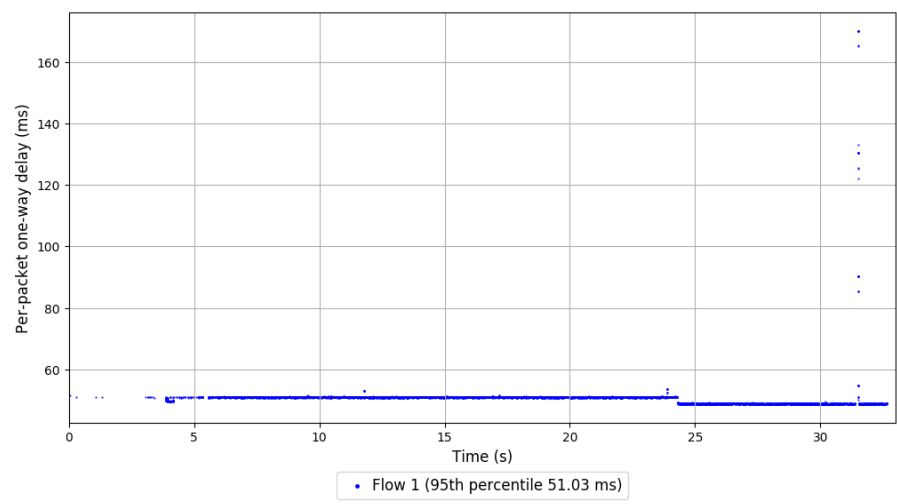
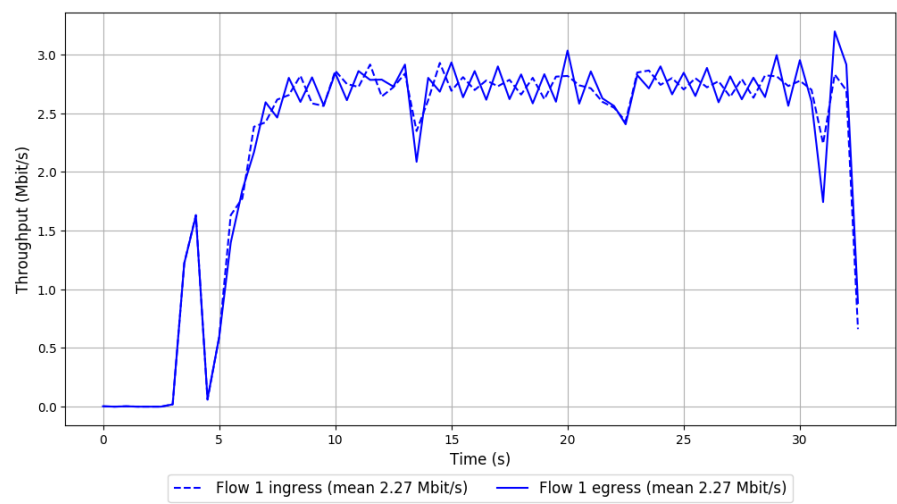
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 51.033 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-21 04:54:35

End at: 2017-11-21 04:55:05

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 50.363 ms

Loss rate: 0.05%

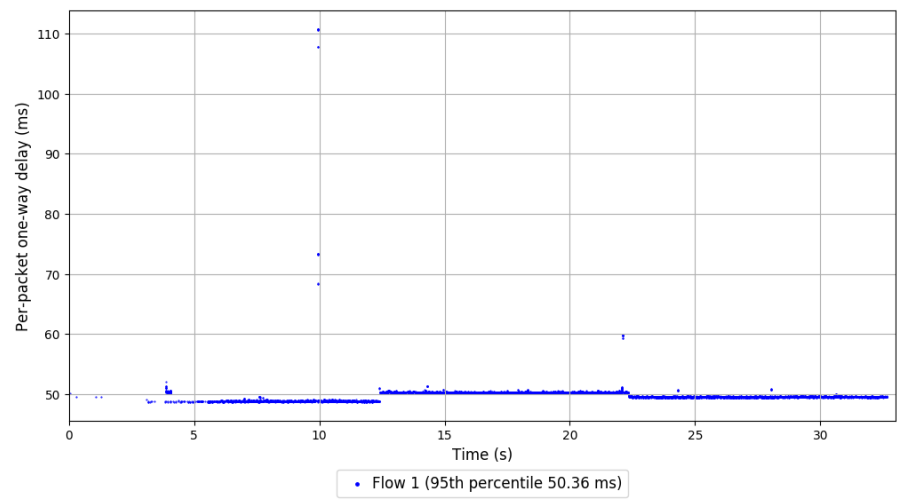
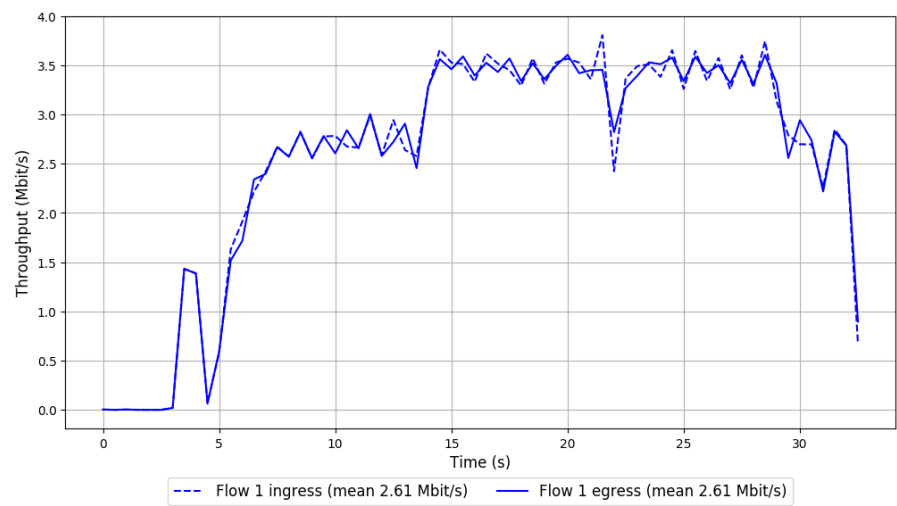
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 50.363 ms

Loss rate: 0.05%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-21 05:04:59

End at: 2017-11-21 05:05:29

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.361 ms

Loss rate: 0.00%

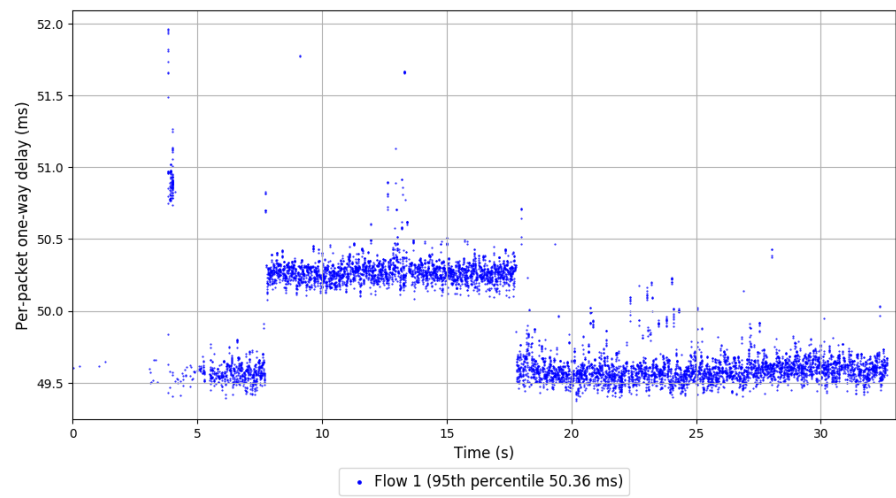
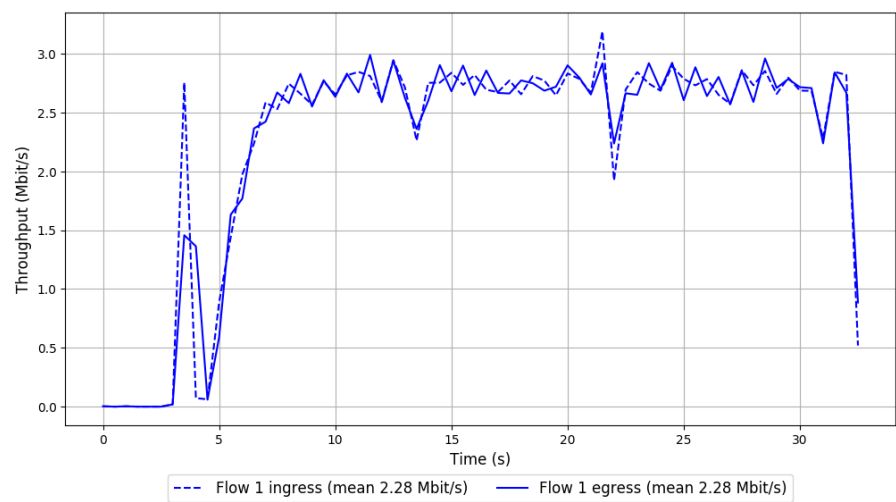
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.361 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link

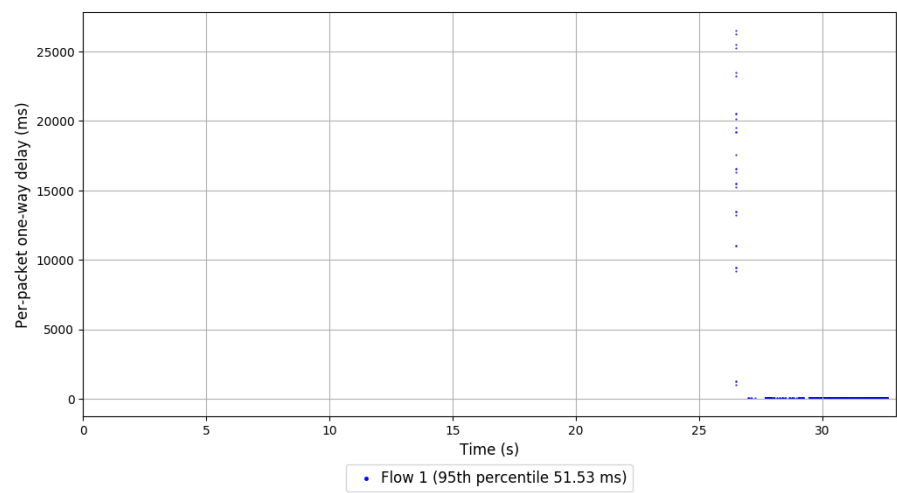
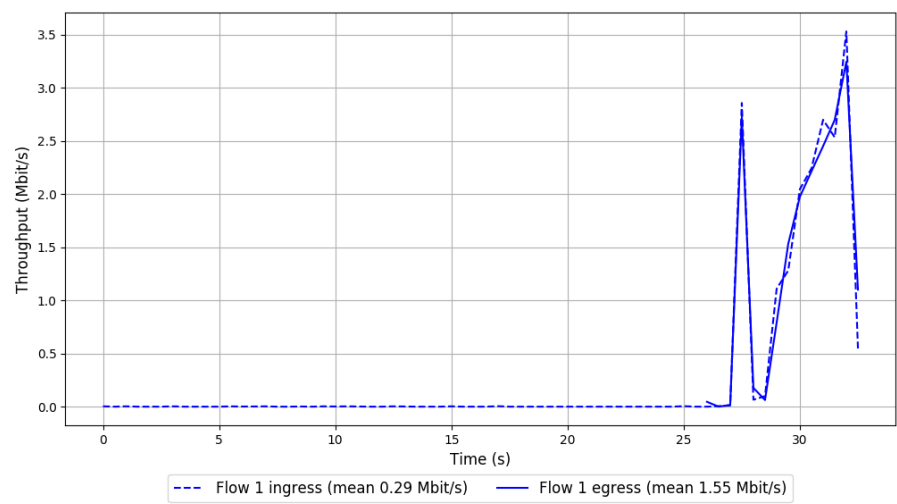


Run 5: Statistics of WebRTC media

Start at: 2017-11-21 05:15:17

End at: 2017-11-21 05:15:47

Run 5: Report of WebRTC media — Data Link

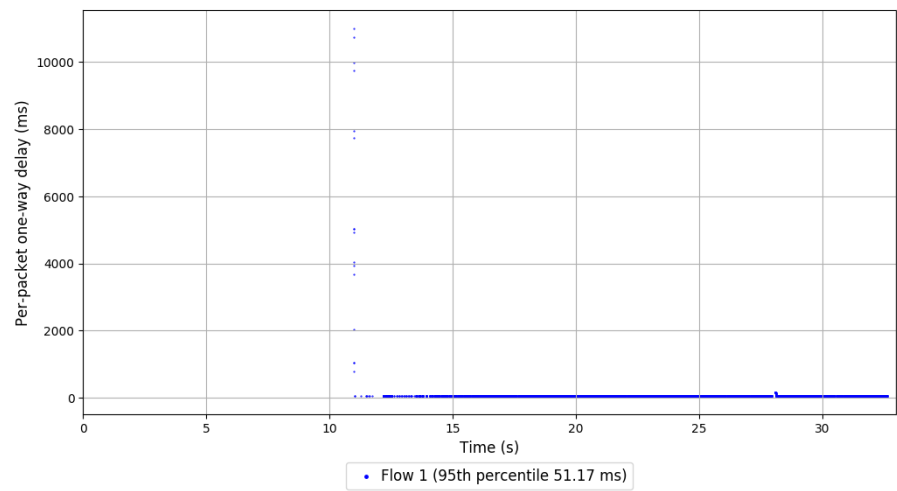
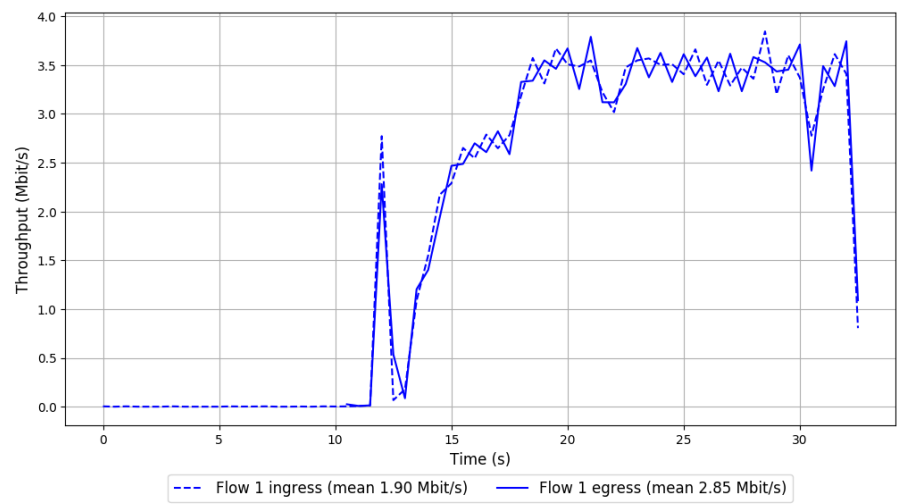


Run 6: Statistics of WebRTC media

Start at: 2017-11-21 05:25:17

End at: 2017-11-21 05:25:47

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-21 05:35:42

End at: 2017-11-21 05:36:12

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.653 ms

Loss rate: 0.00%

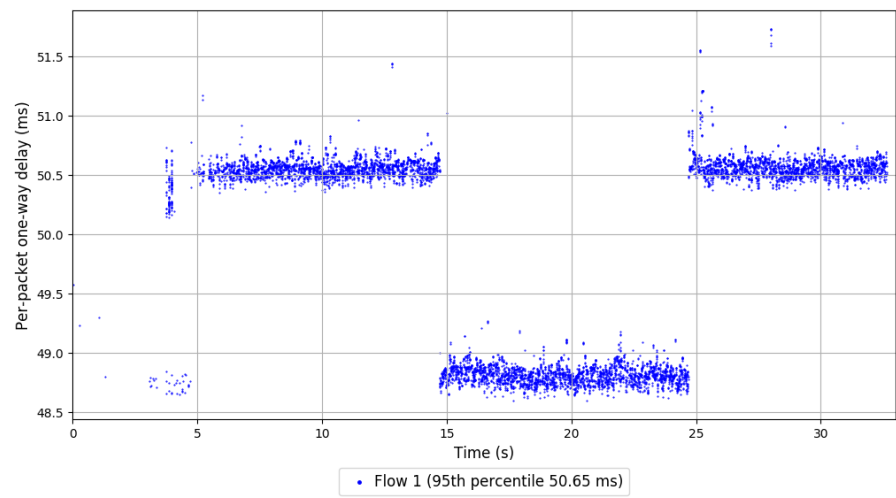
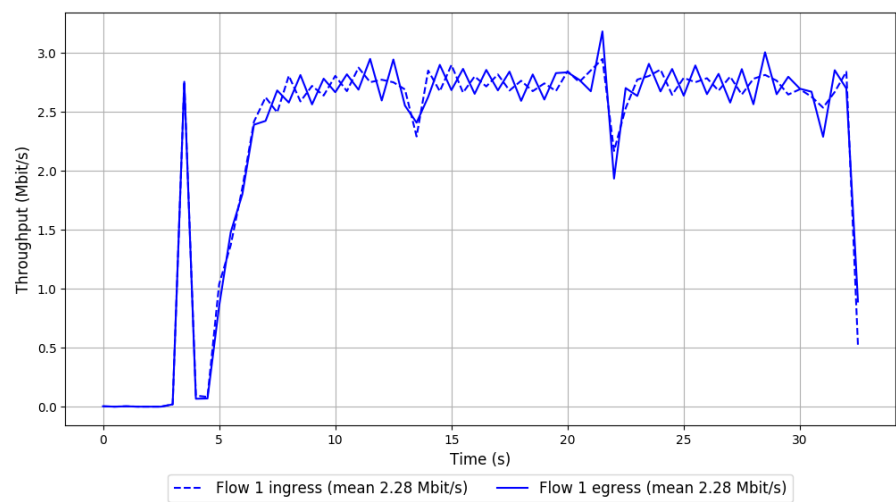
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.653 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-21 05:46:11

End at: 2017-11-21 05:46:41

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 50.619 ms

Loss rate: 0.00%

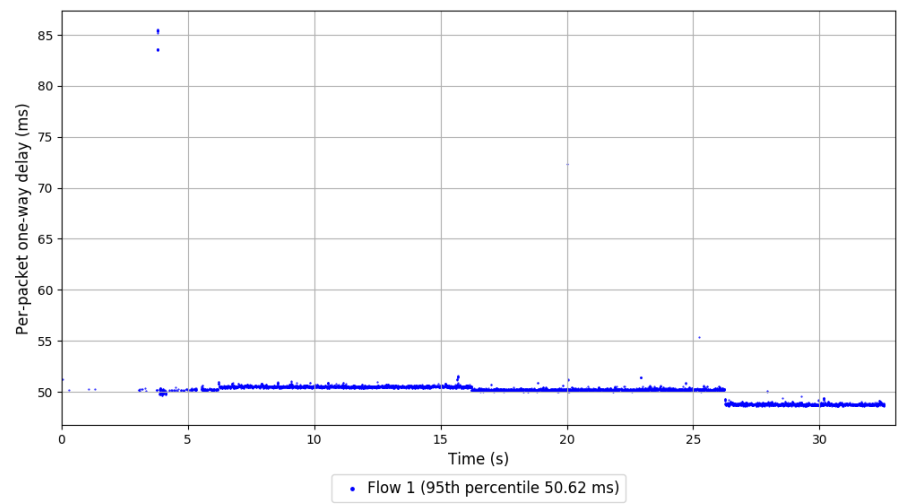
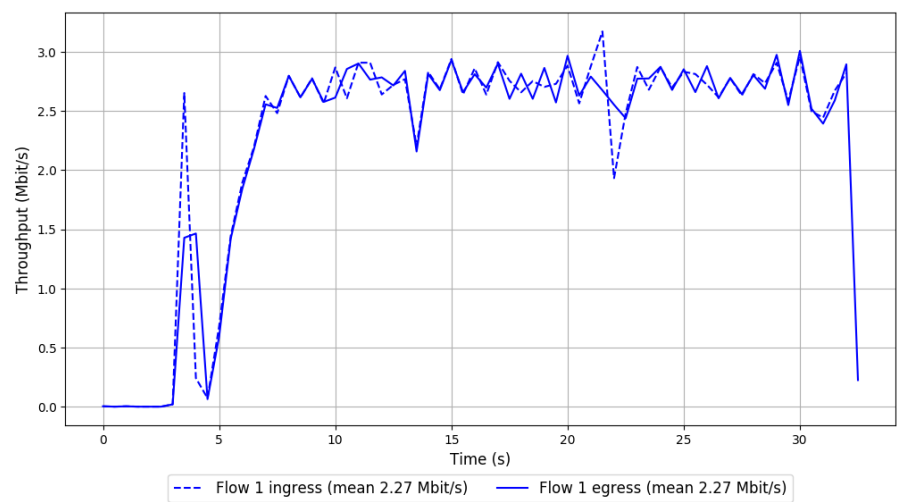
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 50.619 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-21 05:56:34

End at: 2017-11-21 05:57:04

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.643 ms

Loss rate: 0.00%

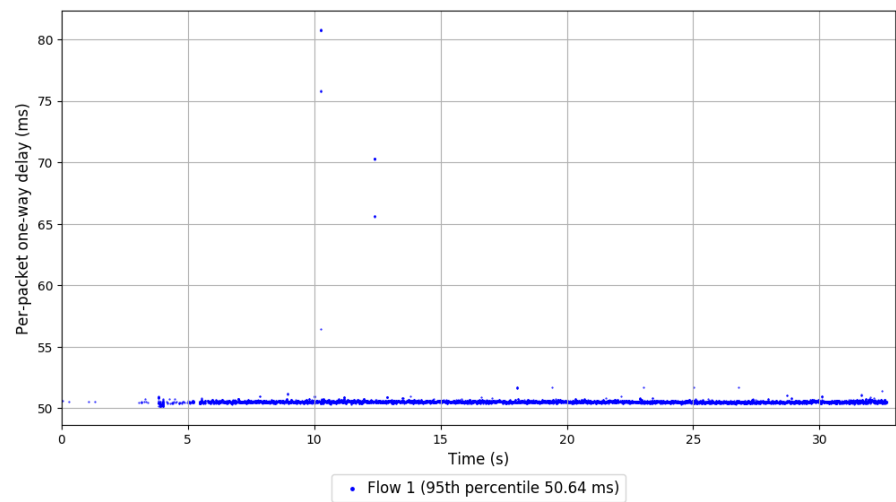
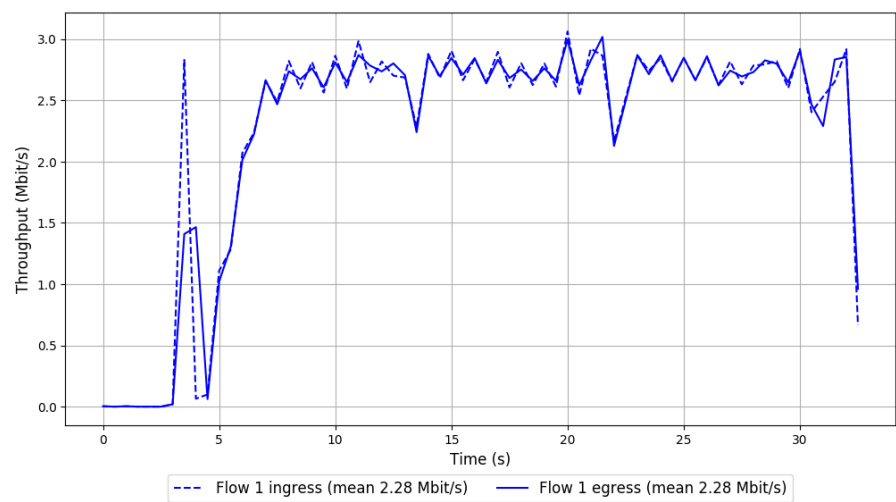
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.643 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-21 06:06:55

End at: 2017-11-21 06:07:25

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.299 ms

Loss rate: 0.00%

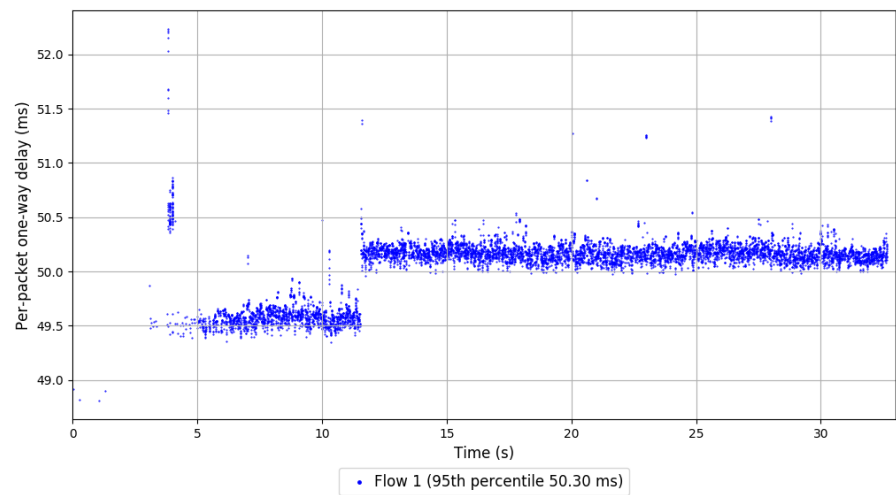
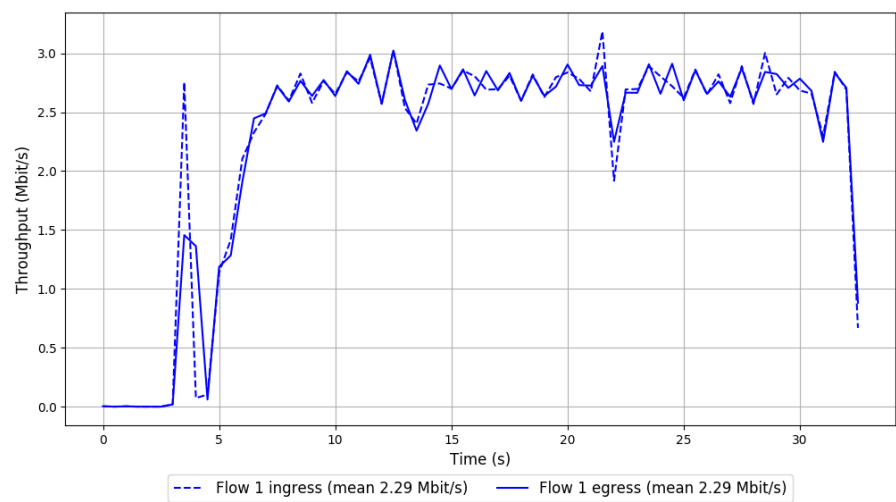
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.299 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-21 04:27:47

End at: 2017-11-21 04:28:17

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 52.110 ms

Loss rate: 0.25%

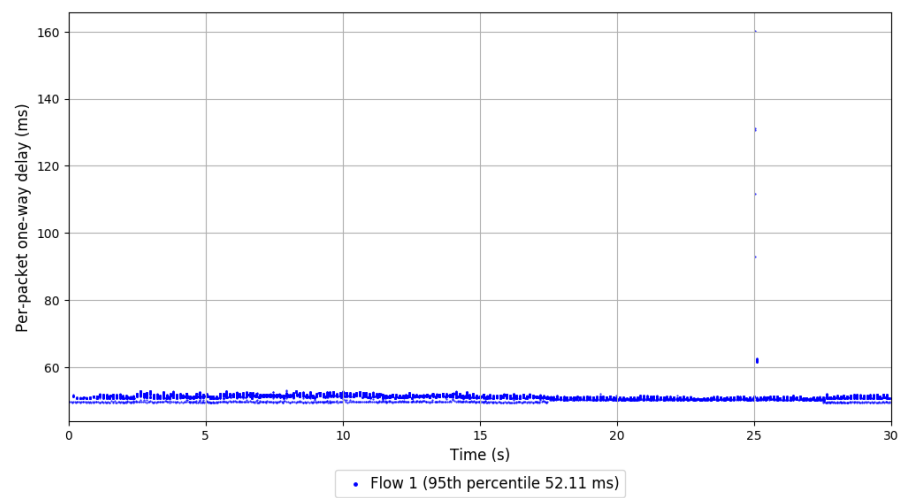
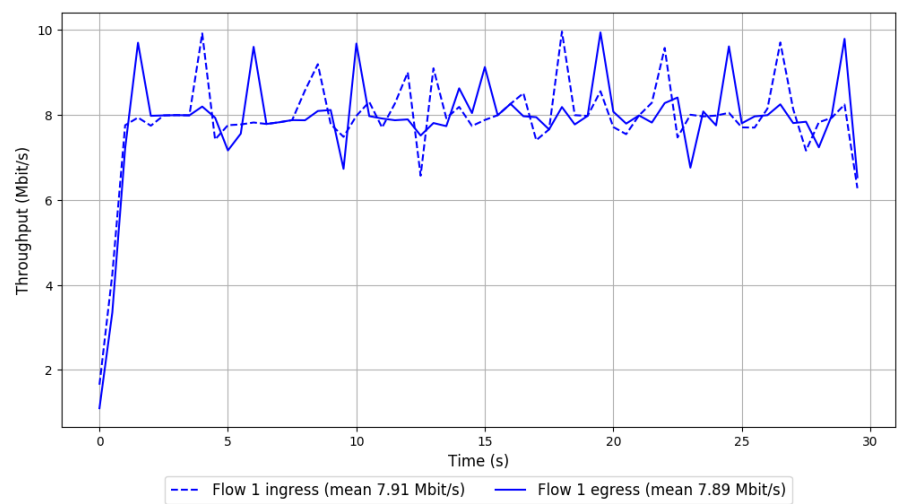
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 52.110 ms

Loss rate: 0.25%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-21 04:38:05

End at: 2017-11-21 04:38:35

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.617 ms

Loss rate: 0.06%

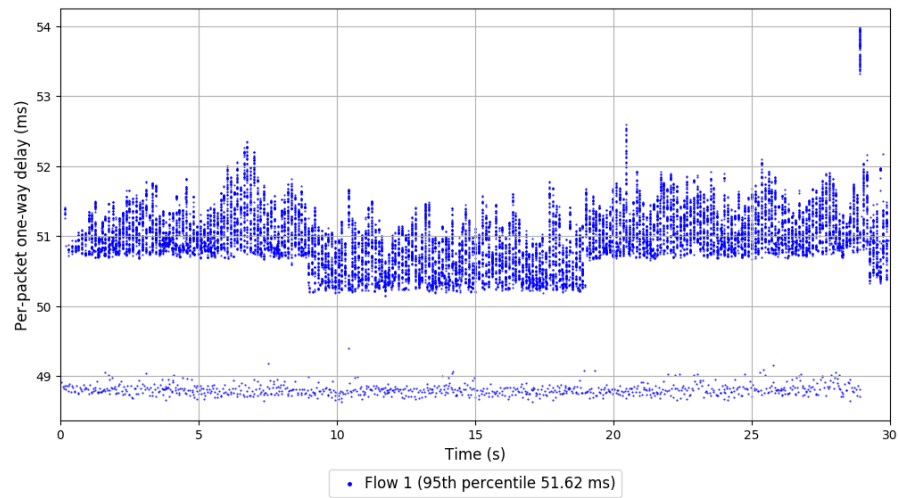
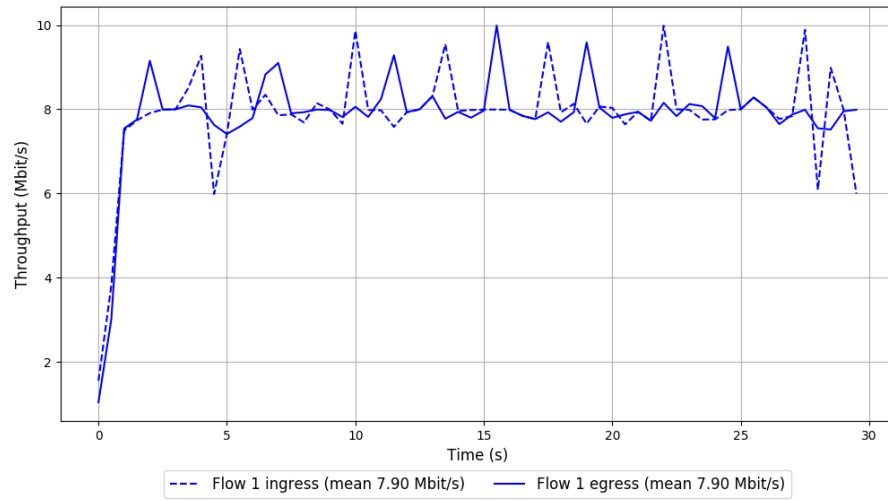
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.617 ms

Loss rate: 0.06%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-21 04:48:33

End at: 2017-11-21 04:49:03

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 0.44%

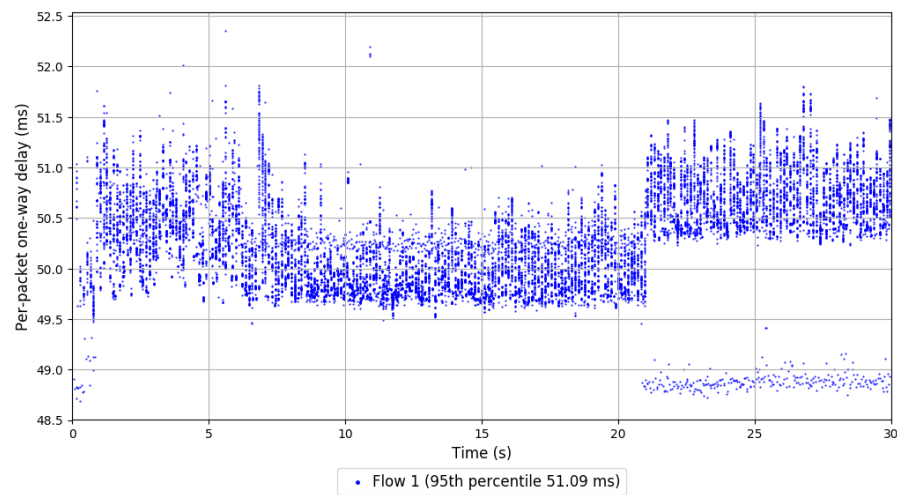
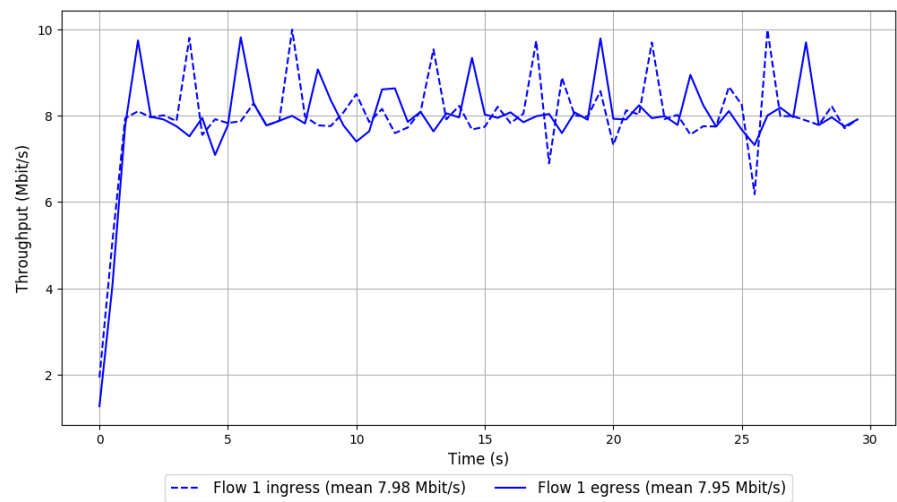
-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 0.44%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-21 04:58:48

End at: 2017-11-21 04:59:18

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 51.718 ms

Loss rate: 0.24%

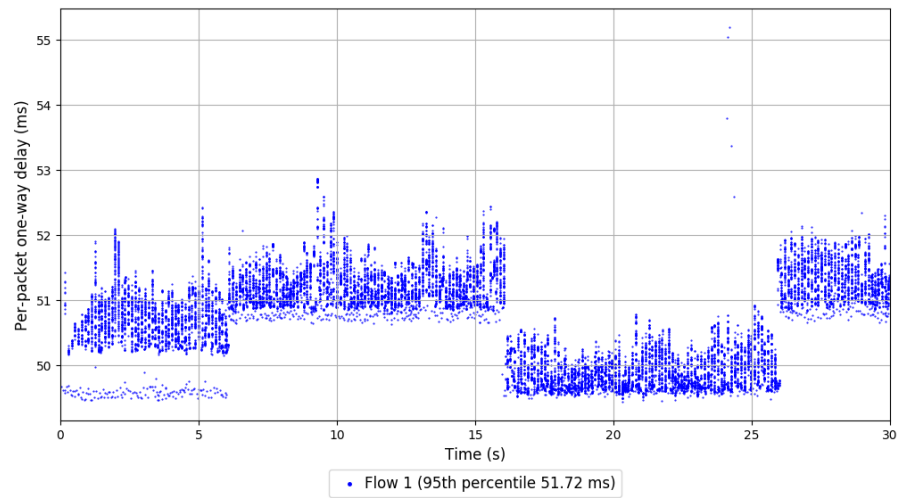
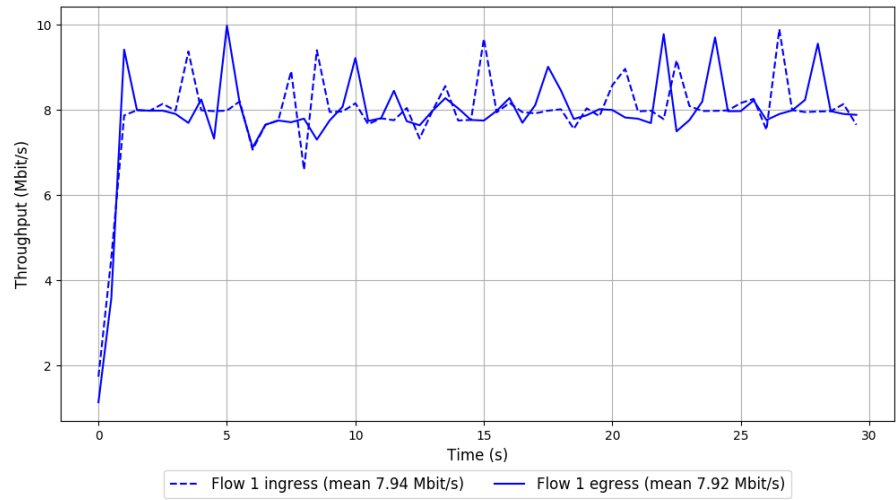
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 51.718 ms

Loss rate: 0.24%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-21 05:09:12

End at: 2017-11-21 05:09:42

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 52.135 ms

Loss rate: 0.15%

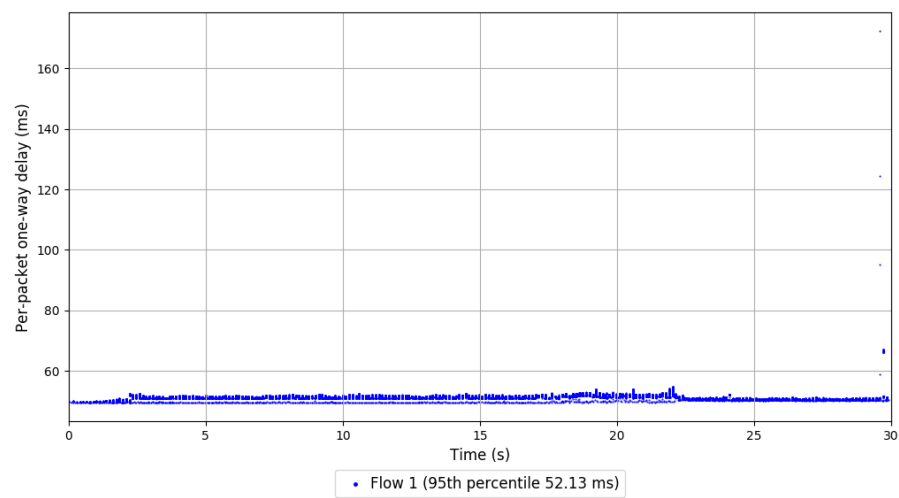
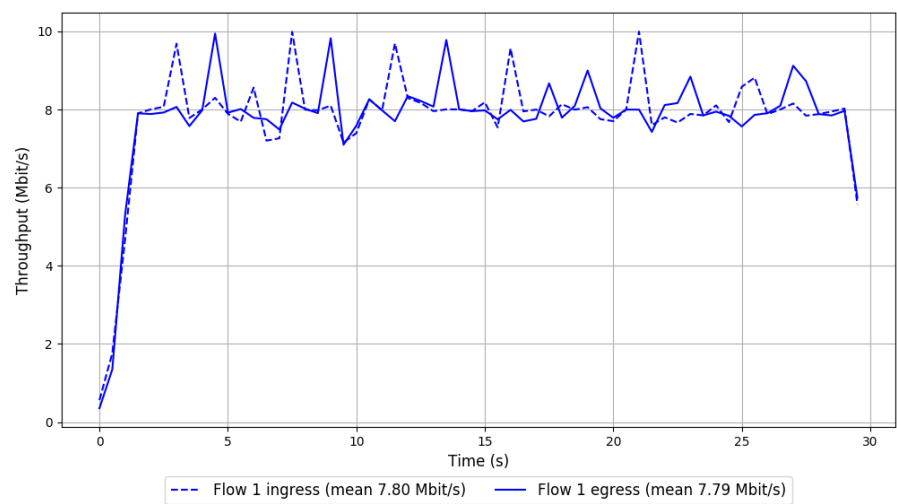
-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 52.135 ms

Loss rate: 0.15%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-21 05:19:28

End at: 2017-11-21 05:19:58

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 51.231 ms

Loss rate: 0.36%

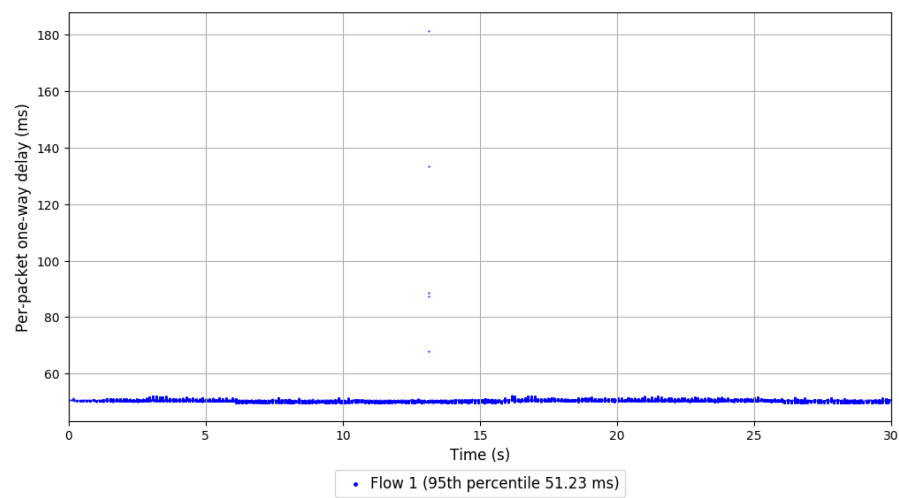
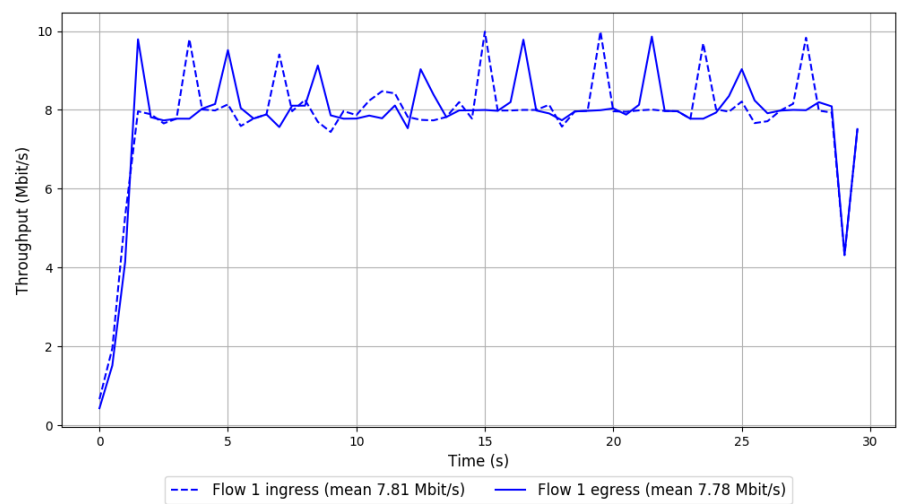
-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 51.231 ms

Loss rate: 0.36%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-21 05:29:34

End at: 2017-11-21 05:30:04

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 51.039 ms

Loss rate: 0.40%

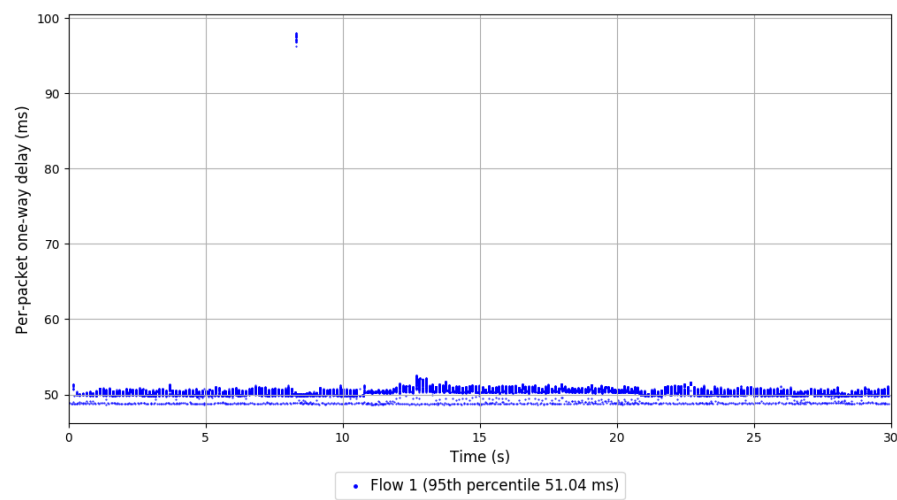
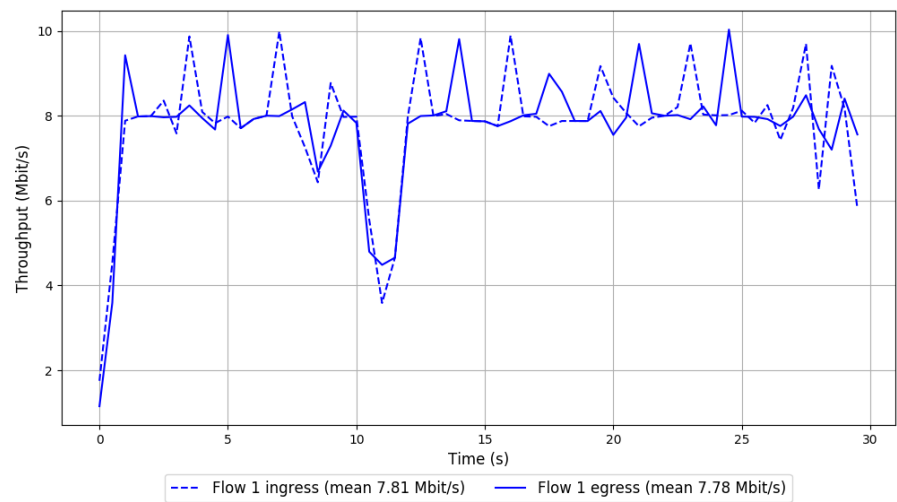
-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 51.039 ms

Loss rate: 0.40%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-21 05:40:00

End at: 2017-11-21 05:40:30

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.520 ms

Loss rate: 0.11%

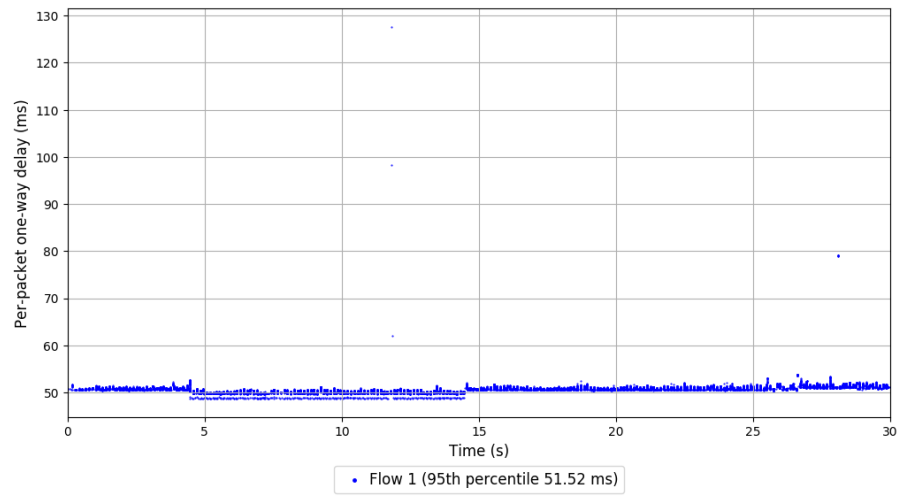
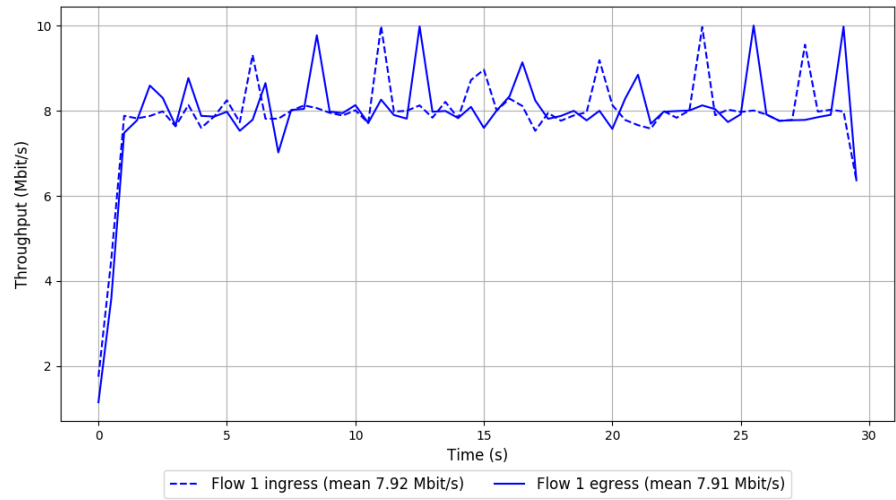
-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.520 ms

Loss rate: 0.11%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-21 05:50:26

End at: 2017-11-21 05:50:56

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.651 ms

Loss rate: 0.36%

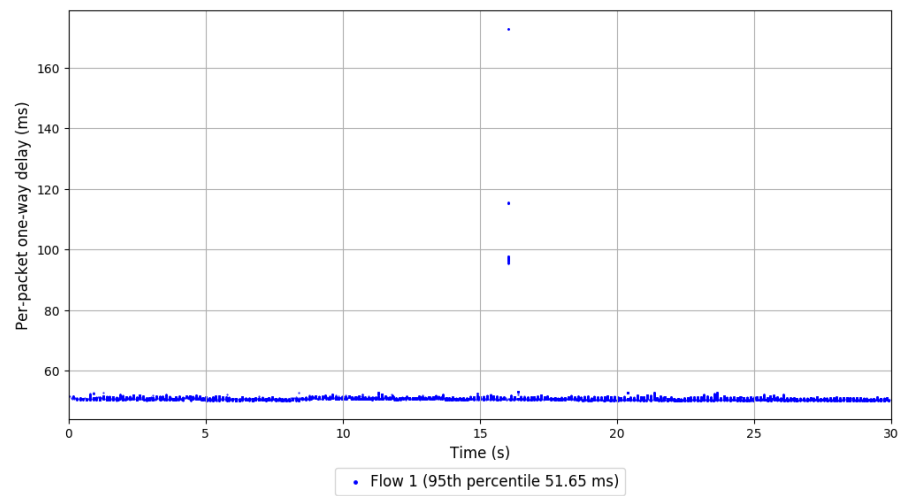
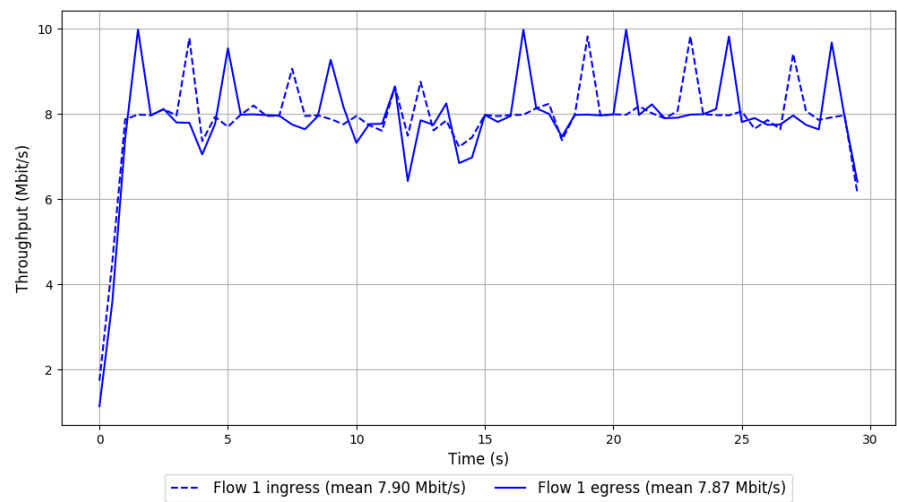
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.651 ms

Loss rate: 0.36%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-21 06:00:51

End at: 2017-11-21 06:01:21

Below is generated by plot.py at 2017-11-21 07:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.294 ms

Loss rate: 0.43%

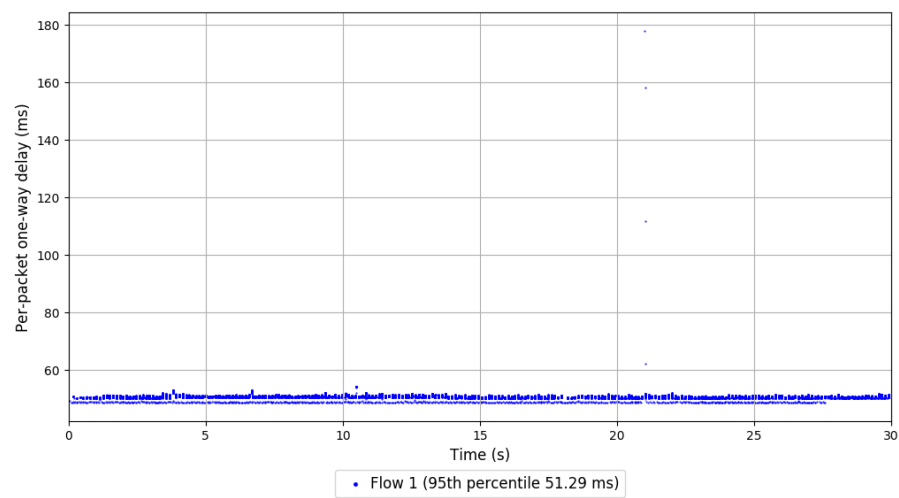
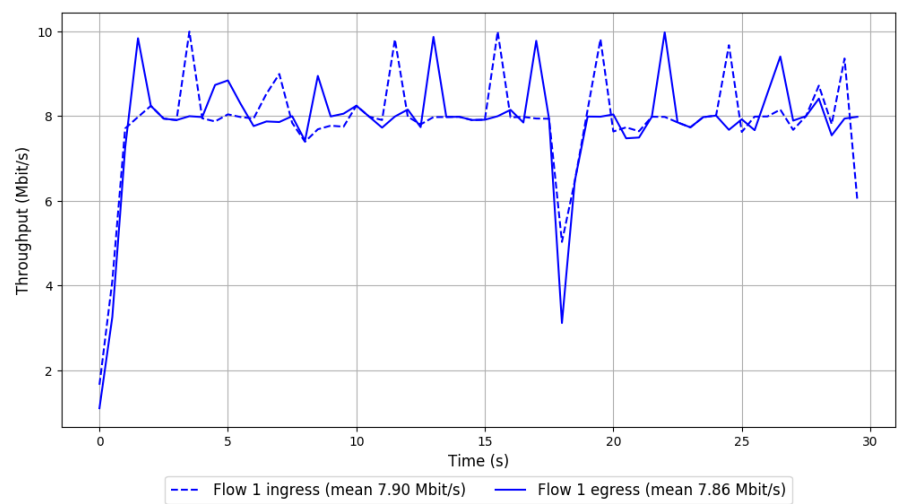
-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.294 ms

Loss rate: 0.43%

Run 10: Report of Sprout — Data Link

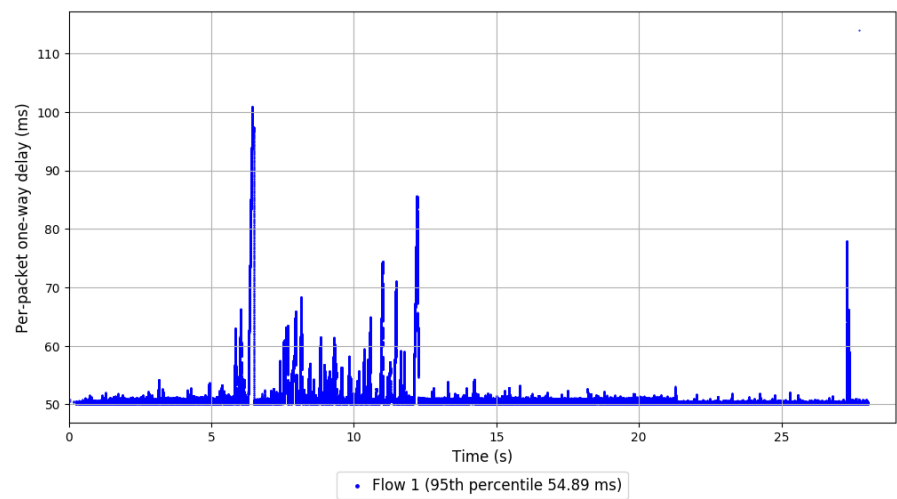
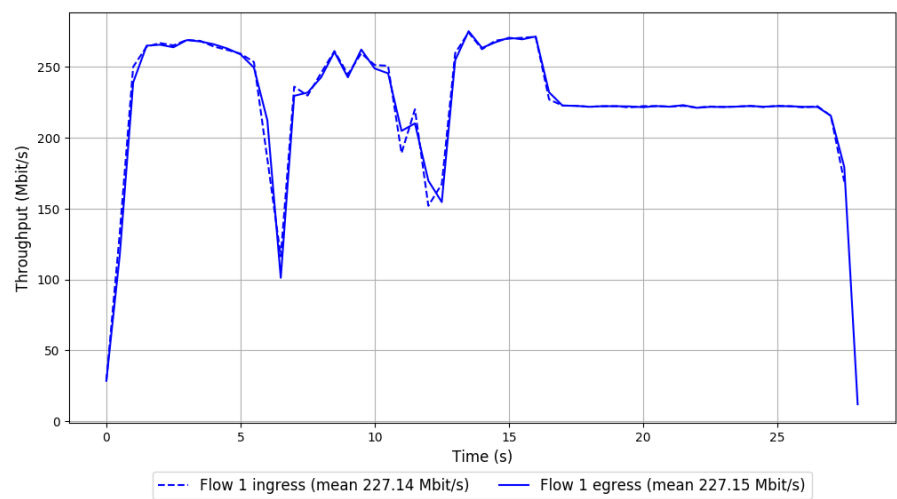


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-21 04:32:11
End at: 2017-11-21 04:32:41

# Below is generated by plot.py at 2017-11-21 07:28:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.15 Mbit/s
95th percentile per-packet one-way delay: 54.888 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.15 Mbit/s
95th percentile per-packet one-way delay: 54.888 ms
Loss rate: 0.00%
```


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

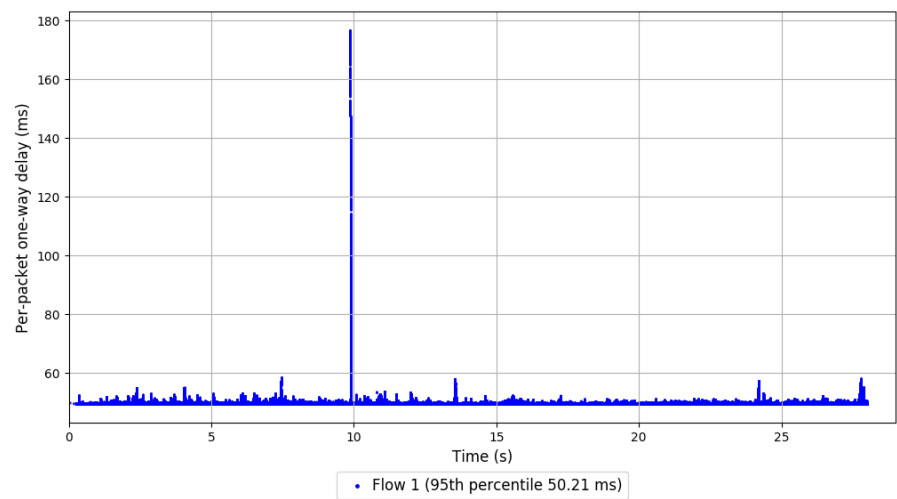
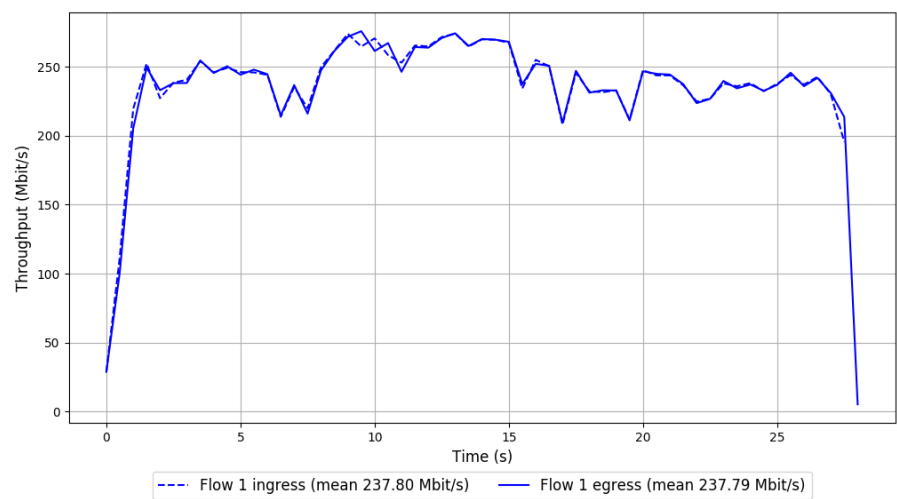


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-21 04:42:30
End at: 2017-11-21 04:43:00

# Below is generated by plot.py at 2017-11-21 07:28:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 237.79 Mbit/s
95th percentile per-packet one-way delay: 50.214 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 237.79 Mbit/s
95th percentile per-packet one-way delay: 50.214 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-21 04:53:03

End at: 2017-11-21 04:53:33

Below is generated by plot.py at 2017-11-21 07:28:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 132.94 Mbit/s

95th percentile per-packet one-way delay: 50.916 ms

Loss rate: 0.00%

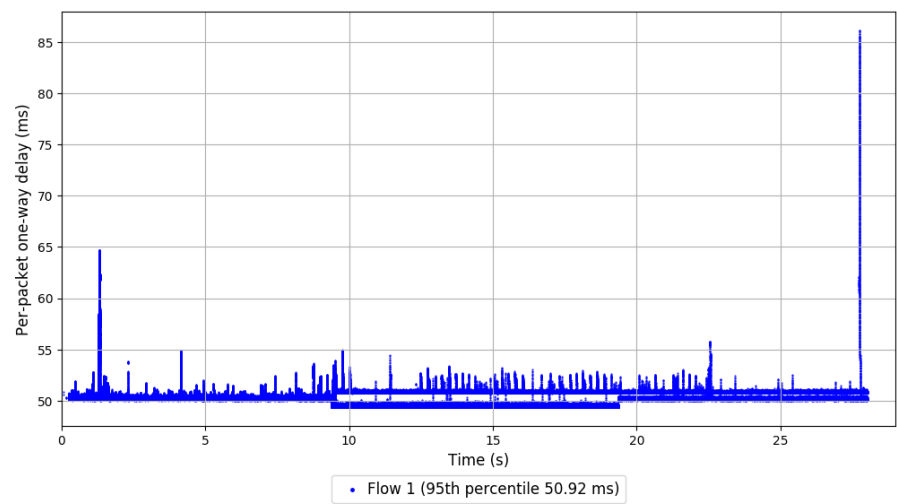
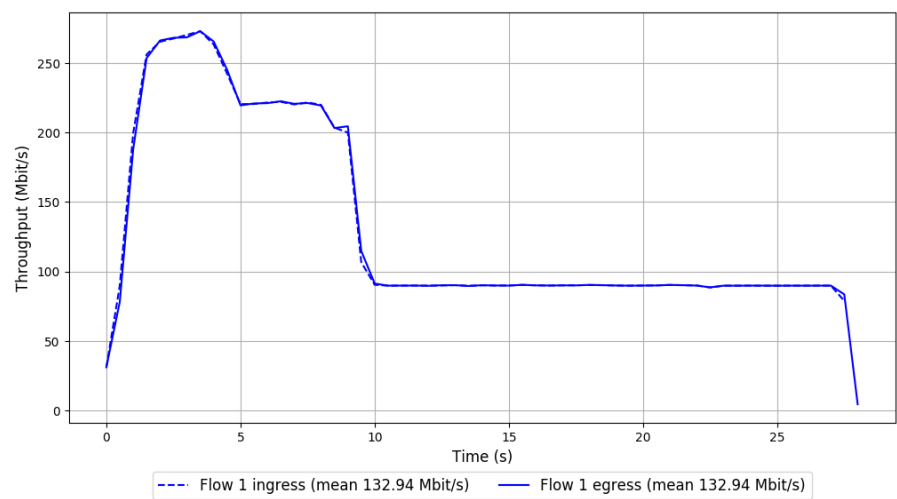
-- Flow 1:

Average throughput: 132.94 Mbit/s

95th percentile per-packet one-way delay: 50.916 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-21 05:03:19

End at: 2017-11-21 05:03:49

Below is generated by plot.py at 2017-11-21 07:28:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.31 Mbit/s

95th percentile per-packet one-way delay: 51.019 ms

Loss rate: 0.00%

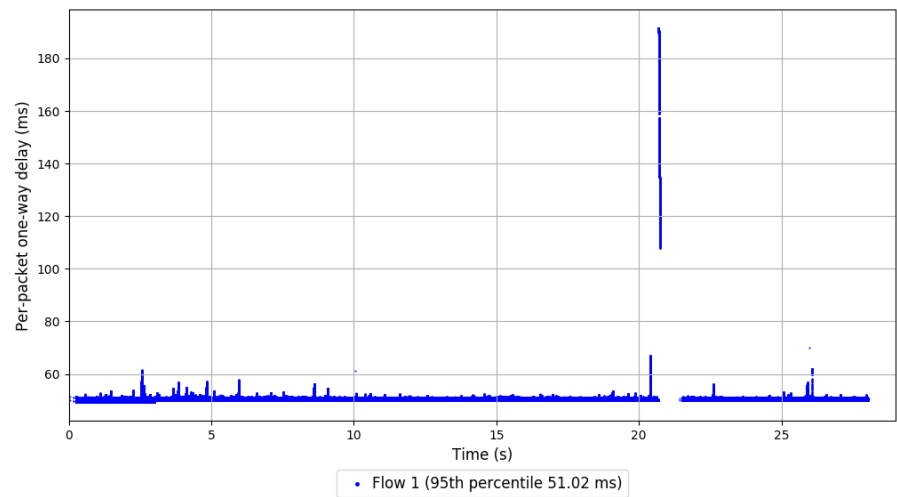
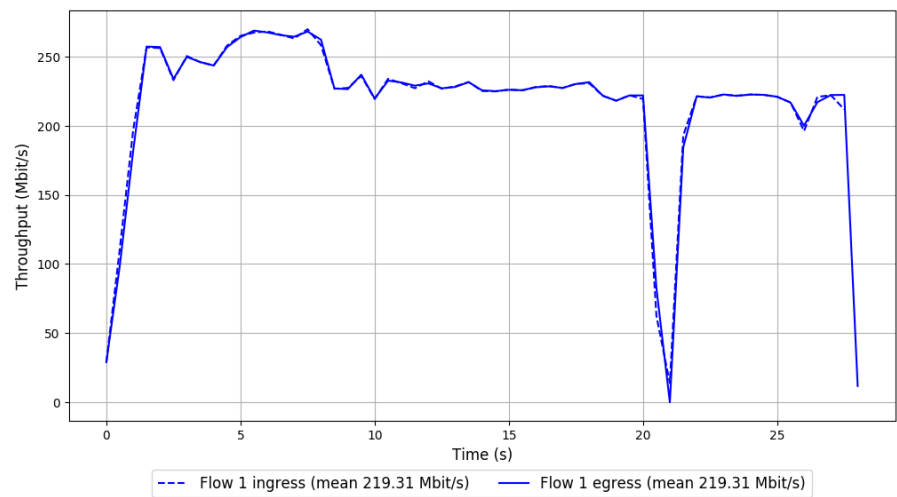
-- Flow 1:

Average throughput: 219.31 Mbit/s

95th percentile per-packet one-way delay: 51.019 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-21 05:13:40

End at: 2017-11-21 05:14:10

Below is generated by plot.py at 2017-11-21 07:28:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 175.46 Mbit/s

95th percentile per-packet one-way delay: 51.051 ms

Loss rate: 0.00%

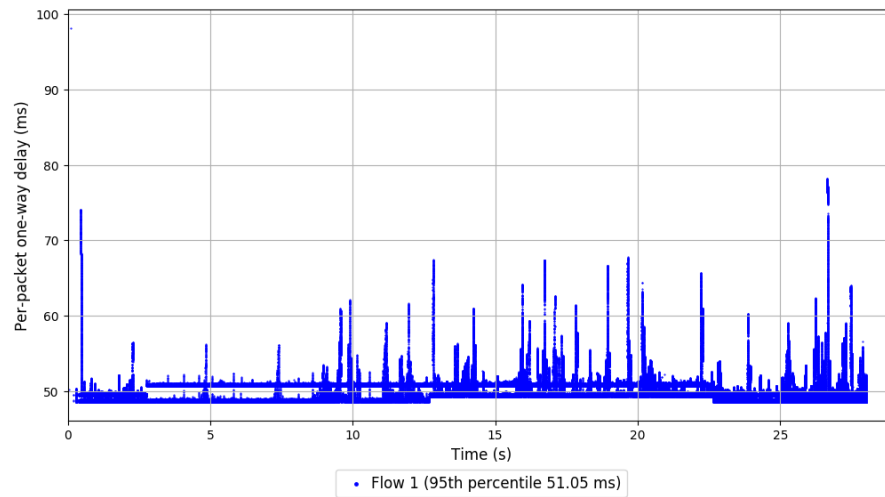
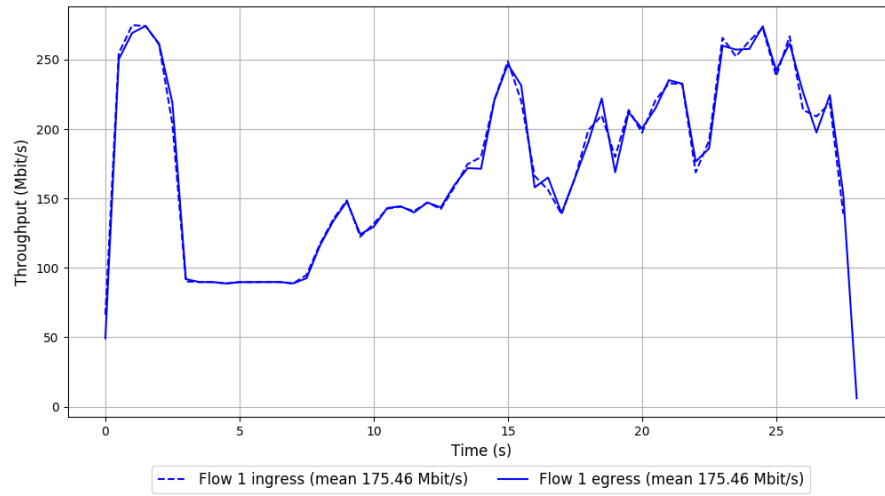
-- Flow 1:

Average throughput: 175.46 Mbit/s

95th percentile per-packet one-way delay: 51.051 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-21 05:23:54

End at: 2017-11-21 05:24:24

Below is generated by plot.py at 2017-11-21 07:28:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.63 Mbit/s

95th percentile per-packet one-way delay: 50.776 ms

Loss rate: 0.01%

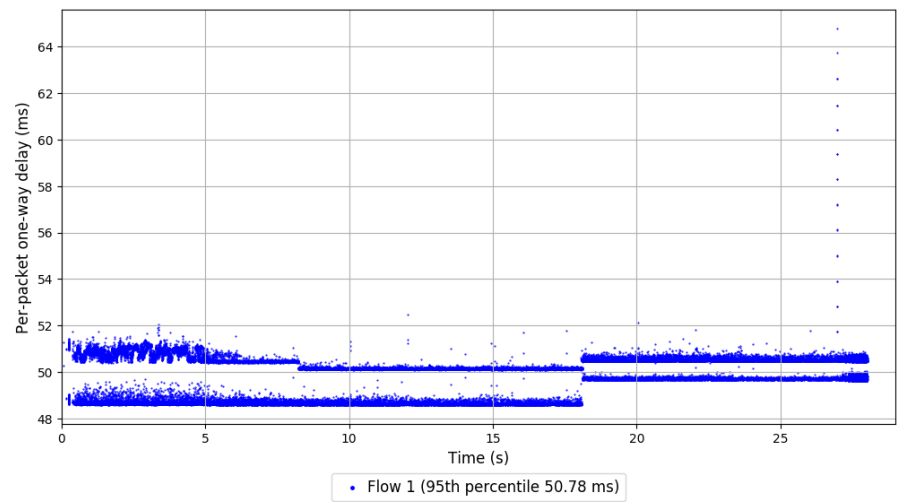
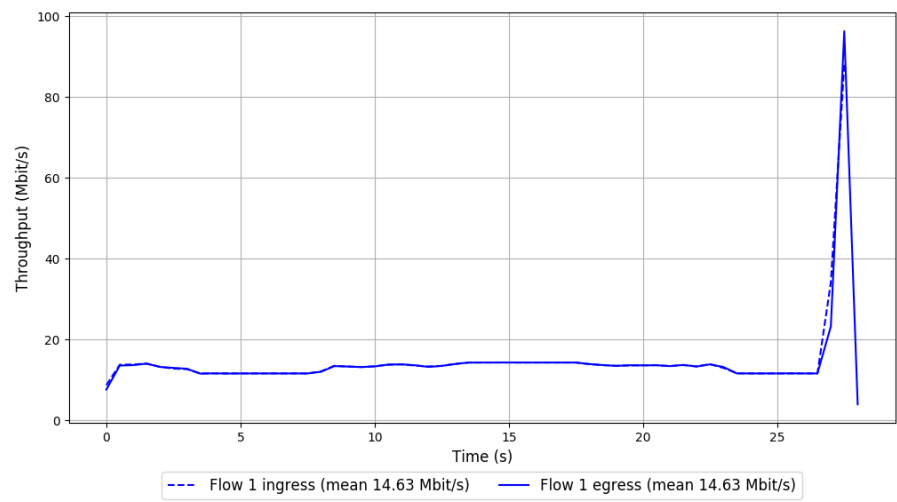
-- Flow 1:

Average throughput: 14.63 Mbit/s

95th percentile per-packet one-way delay: 50.776 ms

Loss rate: 0.01%

Run 6: Report of TaoVA-100x — Data Link



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-21 05:34:04

End at: 2017-11-21 05:34:34

Below is generated by plot.py at 2017-11-21 07:30:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.34 Mbit/s

95th percentile per-packet one-way delay: 50.754 ms

Loss rate: 0.00%

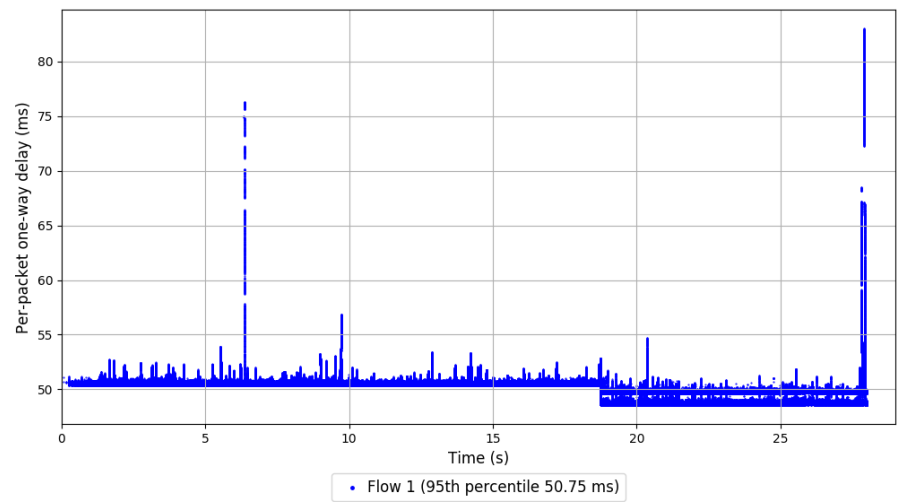
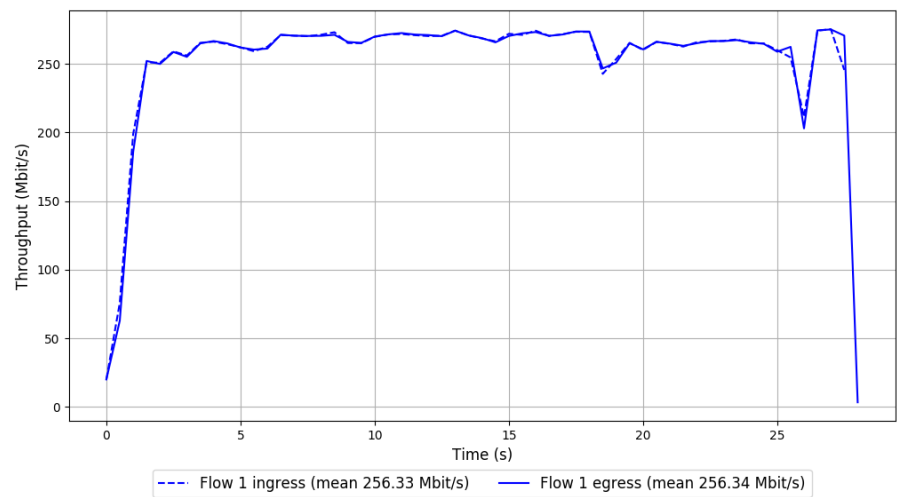
-- Flow 1:

Average throughput: 256.34 Mbit/s

95th percentile per-packet one-way delay: 50.754 ms

Loss rate: 0.00%

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-21 05:44:32

End at: 2017-11-21 05:45:02

Below is generated by plot.py at 2017-11-21 07:31:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.88 Mbit/s

95th percentile per-packet one-way delay: 50.881 ms

Loss rate: 0.00%

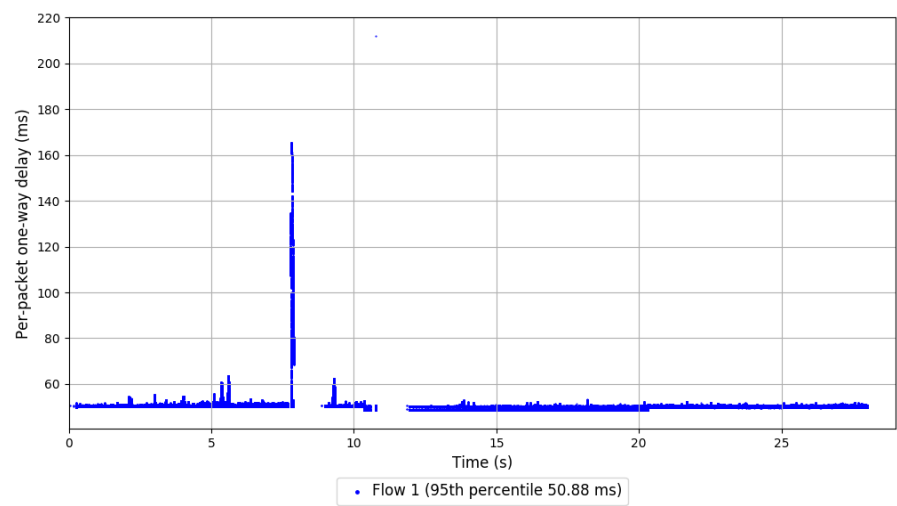
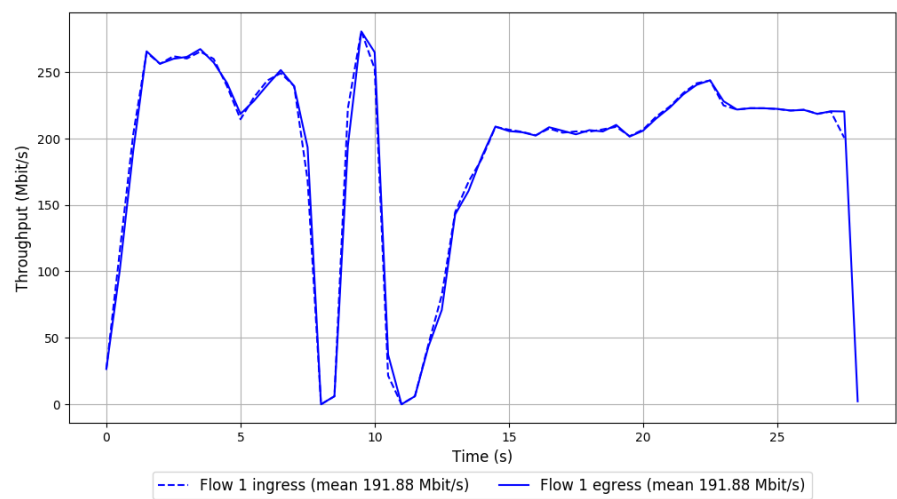
-- Flow 1:

Average throughput: 191.88 Mbit/s

95th percentile per-packet one-way delay: 50.881 ms

Loss rate: 0.00%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-21 05:54:52

End at: 2017-11-21 05:55:22

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 239.44 Mbit/s

95th percentile per-packet one-way delay: 50.777 ms

Loss rate: 0.00%

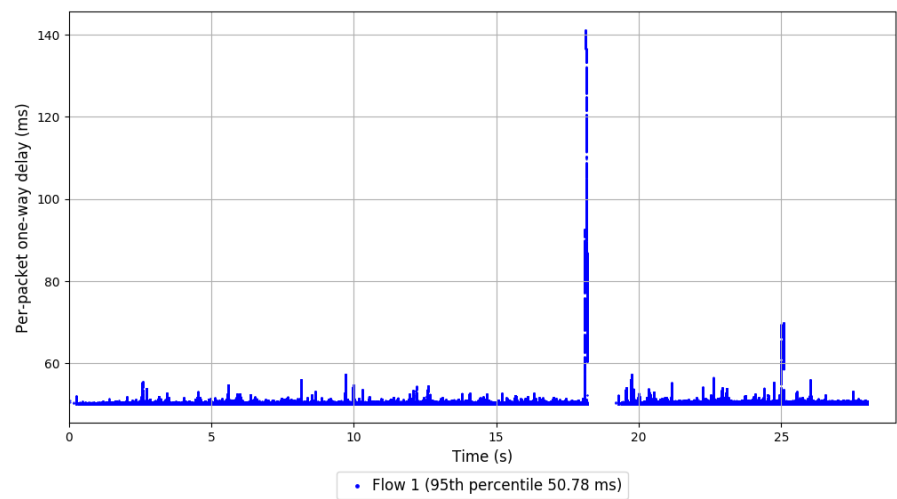
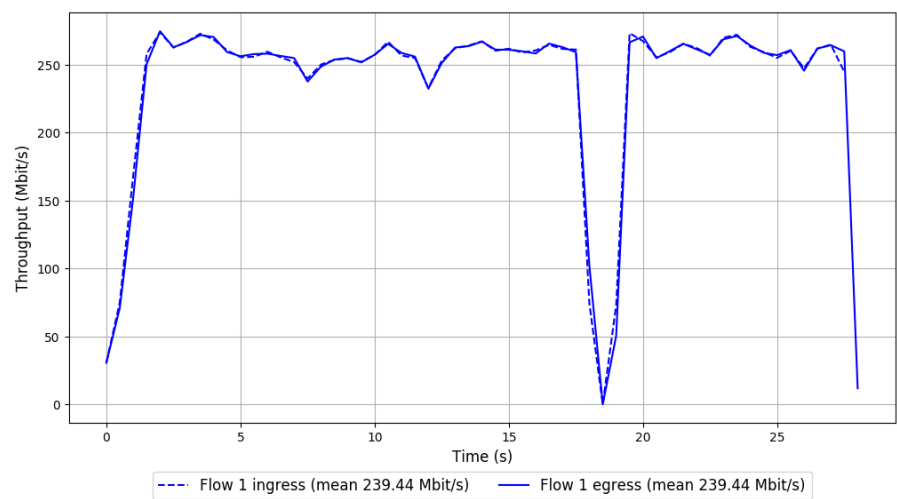
-- Flow 1:

Average throughput: 239.44 Mbit/s

95th percentile per-packet one-way delay: 50.777 ms

Loss rate: 0.00%

Run 9: Report of TaoVA-100x — Data Link

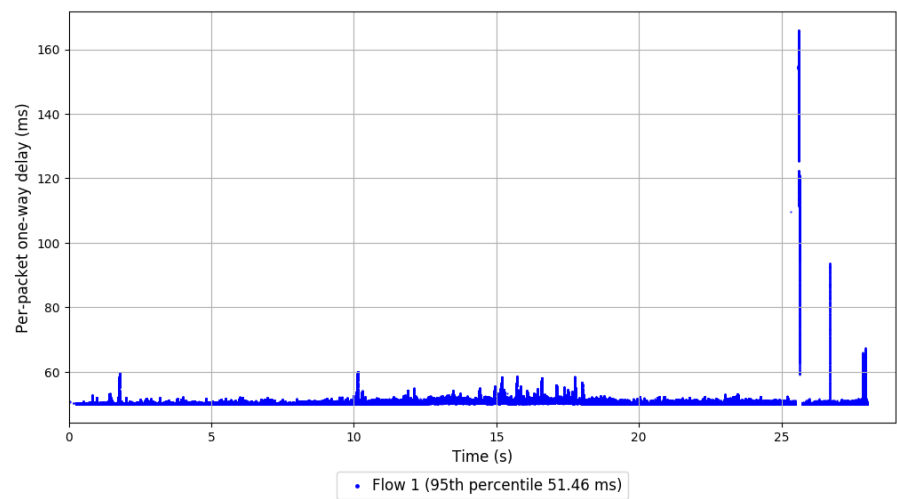
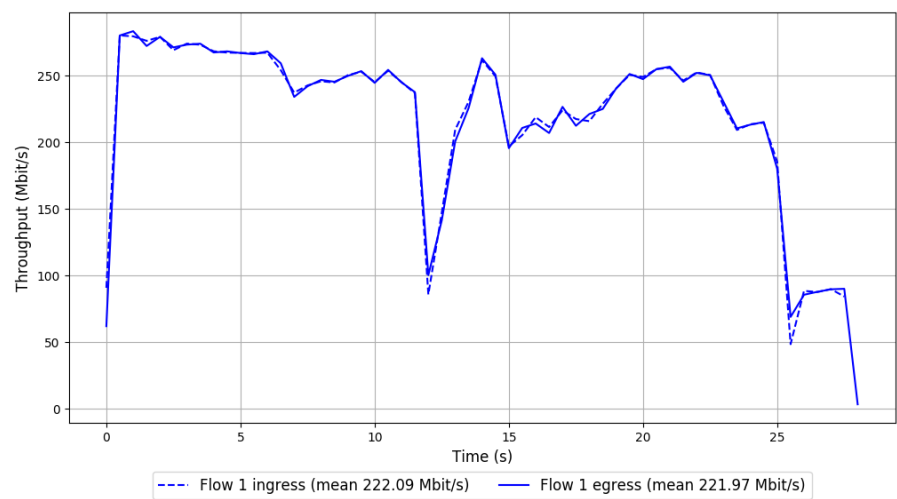


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-21 06:05:14
End at: 2017-11-21 06:05:44

# Below is generated by plot.py at 2017-11-21 07:34:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.97 Mbit/s
95th percentile per-packet one-way delay: 51.461 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 221.97 Mbit/s
95th percentile per-packet one-way delay: 51.461 ms
Loss rate: 0.06%
```

Run 10: Report of TaoVA-100x — Data Link

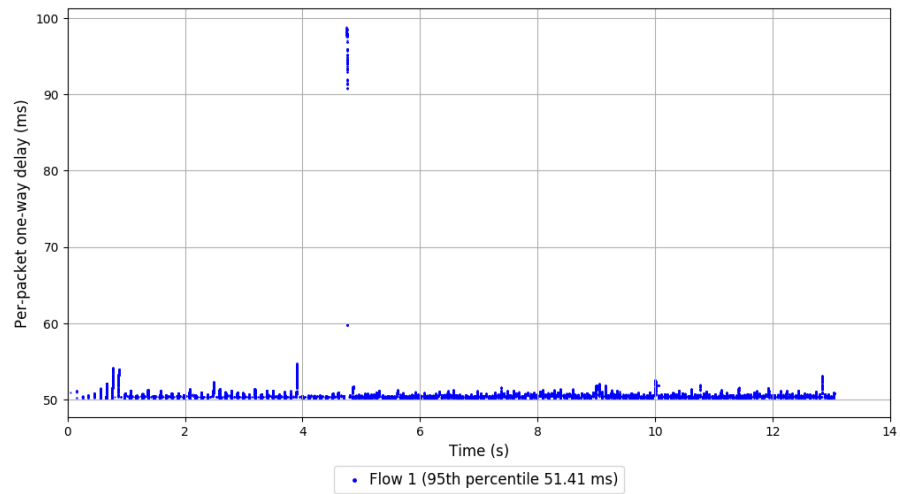
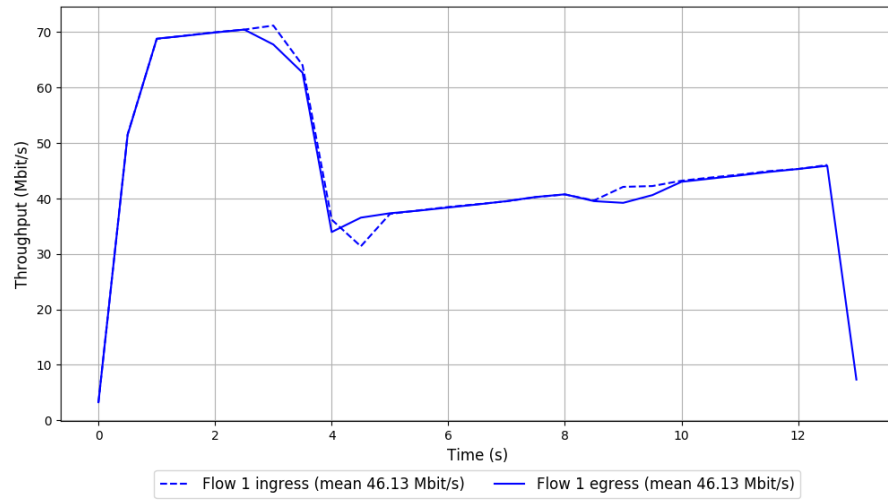


Run 1: Statistics of TCP Vegas

Start at: 2017-11-21 04:25:50

End at: 2017-11-21 04:26:20

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-21 04:36:09

End at: 2017-11-21 04:36:39

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.27 Mbit/s

95th percentile per-packet one-way delay: 51.327 ms

Loss rate: 0.18%

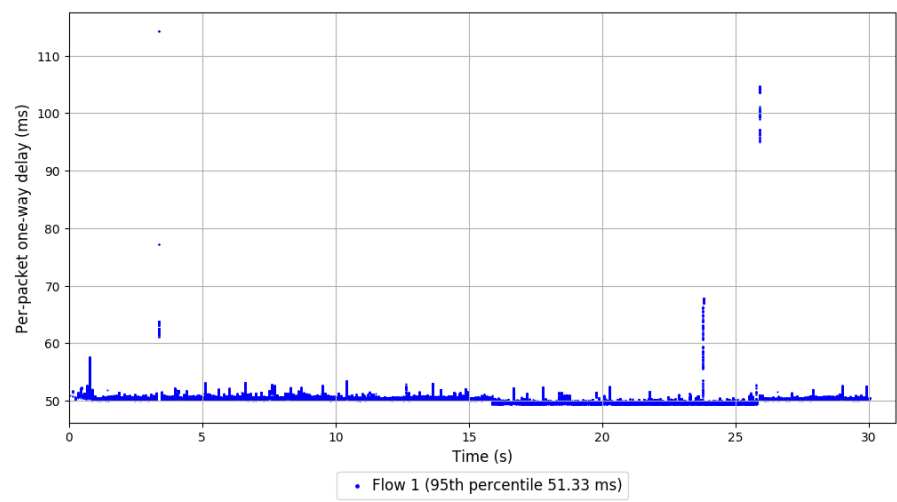
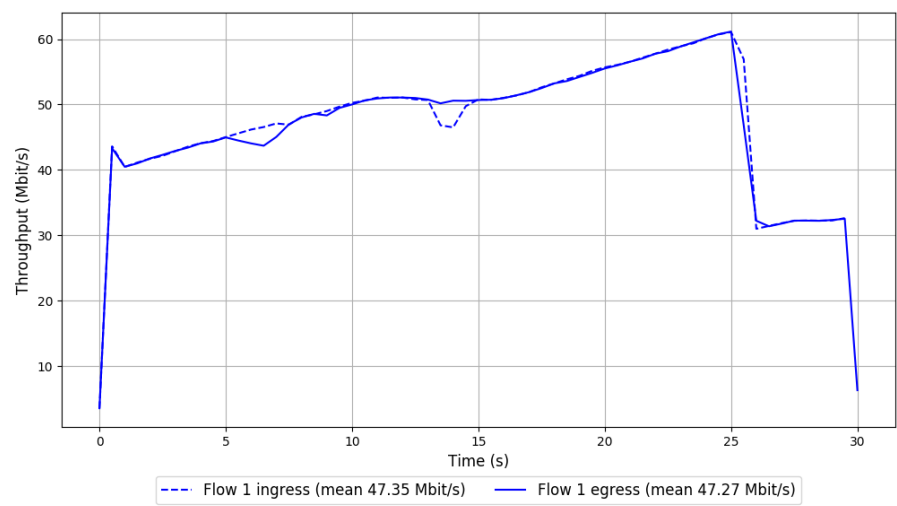
-- Flow 1:

Average throughput: 47.27 Mbit/s

95th percentile per-packet one-way delay: 51.327 ms

Loss rate: 0.18%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-21 04:46:38

End at: 2017-11-21 04:47:08

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 51.864 ms

Loss rate: 0.17%

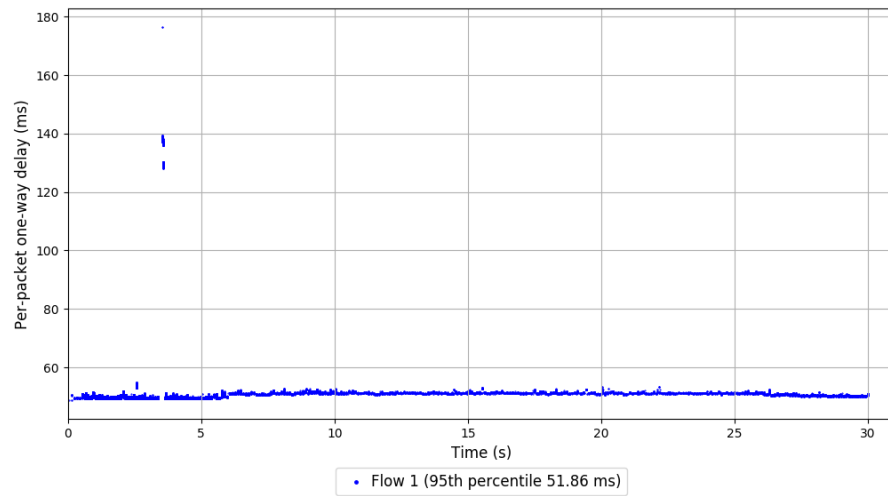
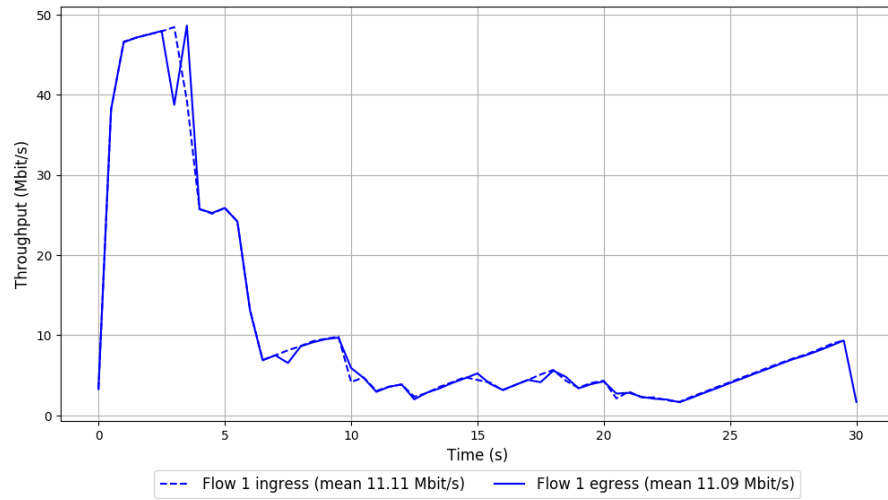
-- Flow 1:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 51.864 ms

Loss rate: 0.17%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-21 04:56:53

End at: 2017-11-21 04:57:23

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.87 Mbit/s

95th percentile per-packet one-way delay: 51.843 ms

Loss rate: 0.09%

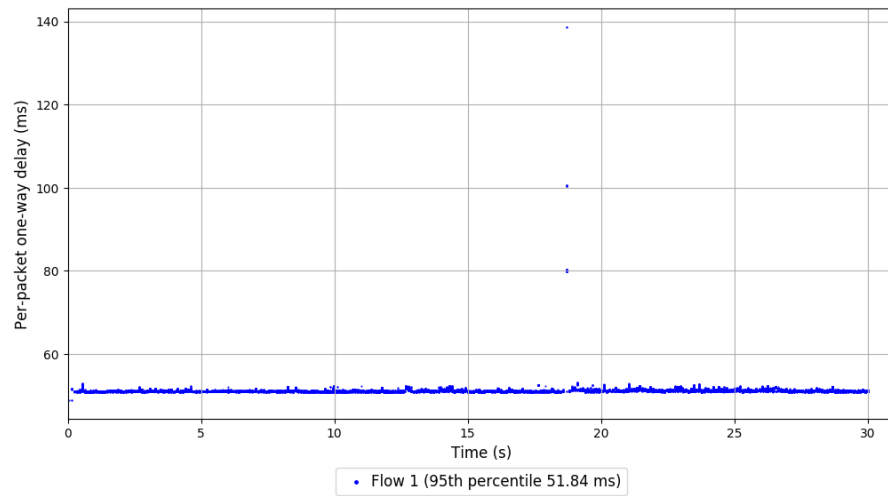
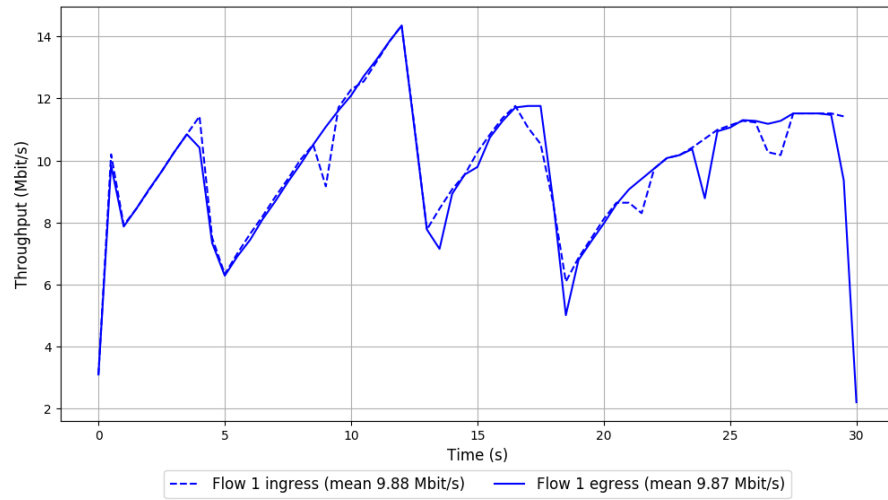
-- Flow 1:

Average throughput: 9.87 Mbit/s

95th percentile per-packet one-way delay: 51.843 ms

Loss rate: 0.09%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-21 05:07:16

End at: 2017-11-21 05:07:46

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.31 Mbit/s

95th percentile per-packet one-way delay: 51.904 ms

Loss rate: 0.01%

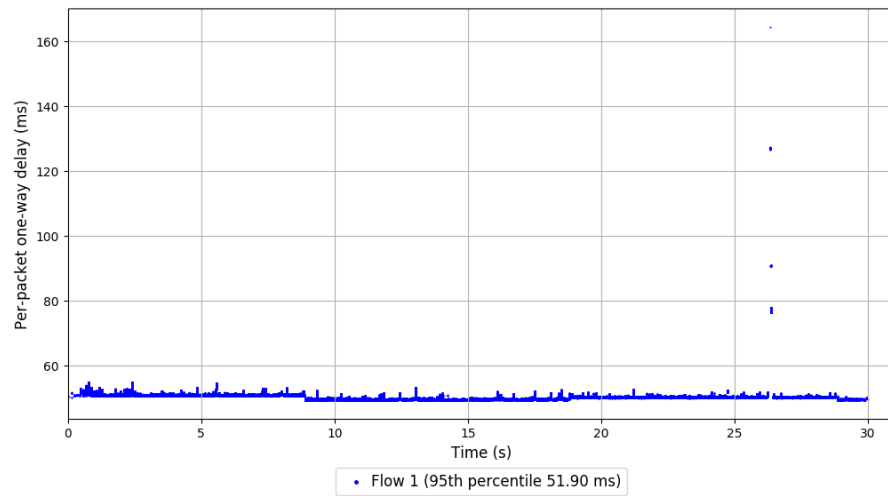
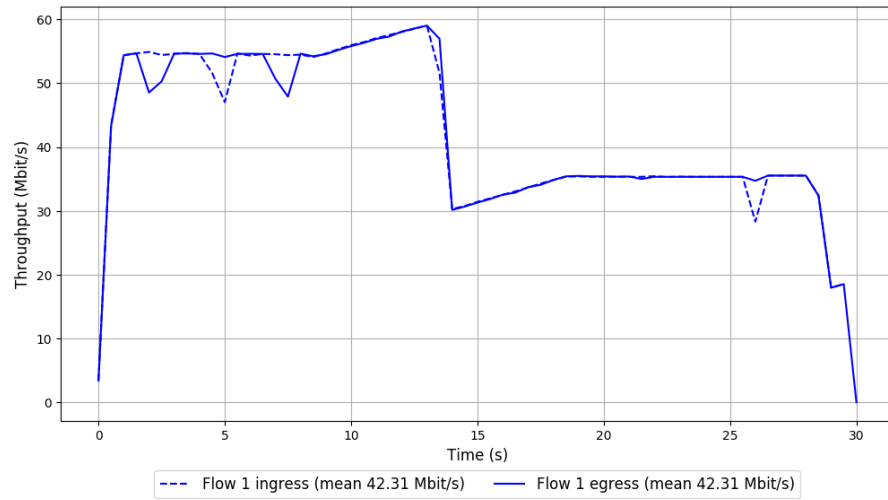
-- Flow 1:

Average throughput: 42.31 Mbit/s

95th percentile per-packet one-way delay: 51.904 ms

Loss rate: 0.01%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-21 05:17:34

End at: 2017-11-21 05:18:04

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.98 Mbit/s

95th percentile per-packet one-way delay: 51.528 ms

Loss rate: 0.62%

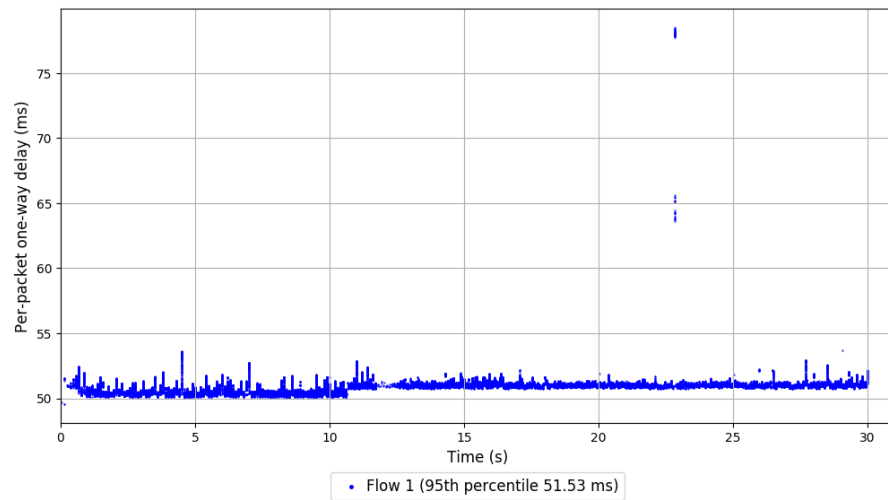
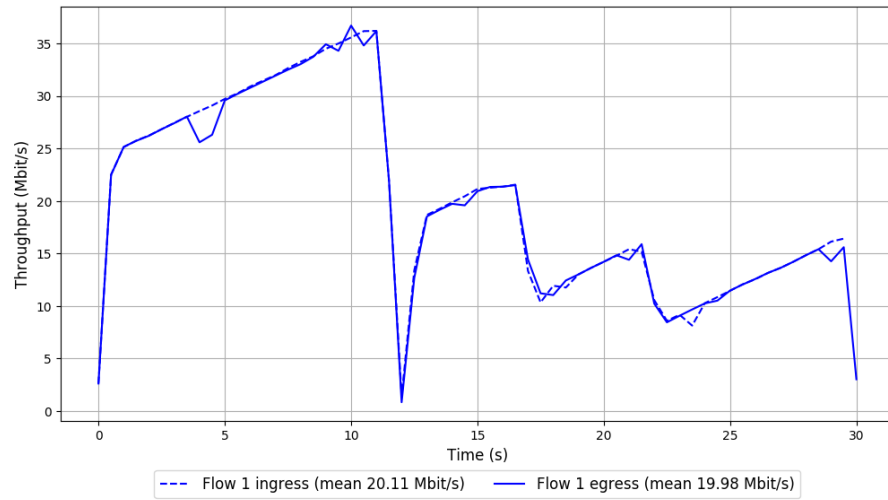
-- Flow 1:

Average throughput: 19.98 Mbit/s

95th percentile per-packet one-way delay: 51.528 ms

Loss rate: 0.62%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-21 05:27:40

End at: 2017-11-21 05:28:10

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.70 Mbit/s

95th percentile per-packet one-way delay: 51.328 ms

Loss rate: 0.02%

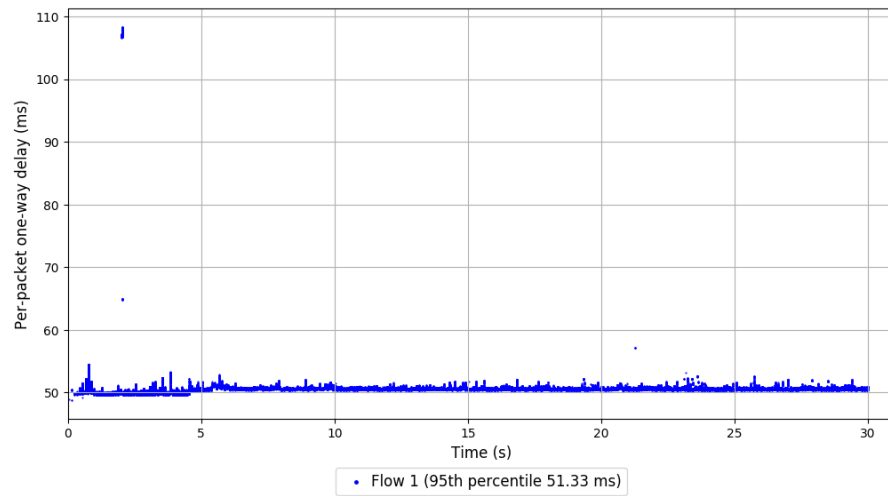
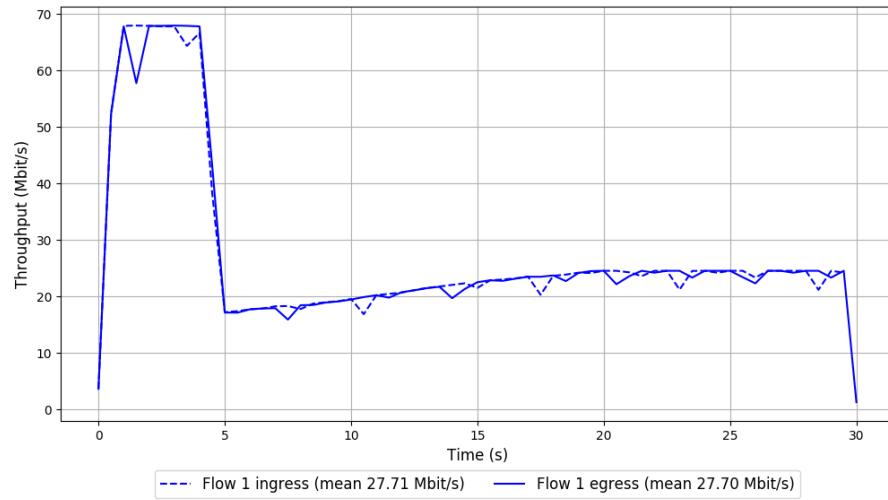
-- Flow 1:

Average throughput: 27.70 Mbit/s

95th percentile per-packet one-way delay: 51.328 ms

Loss rate: 0.02%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-21 05:38:01

End at: 2017-11-21 05:38:31

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.91 Mbit/s

95th percentile per-packet one-way delay: 50.901 ms

Loss rate: 0.00%

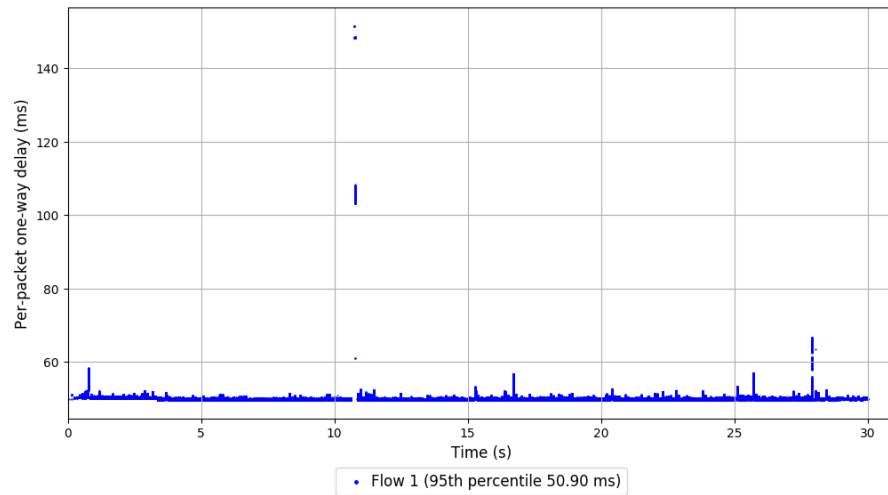
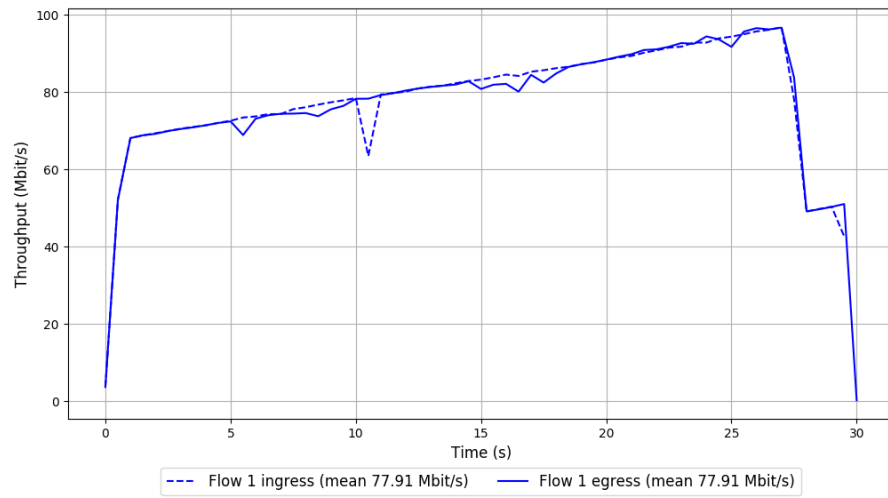
-- Flow 1:

Average throughput: 77.91 Mbit/s

95th percentile per-packet one-way delay: 50.901 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-21 05:48:30

End at: 2017-11-21 05:49:00

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.23 Mbit/s

95th percentile per-packet one-way delay: 51.635 ms

Loss rate: 0.25%

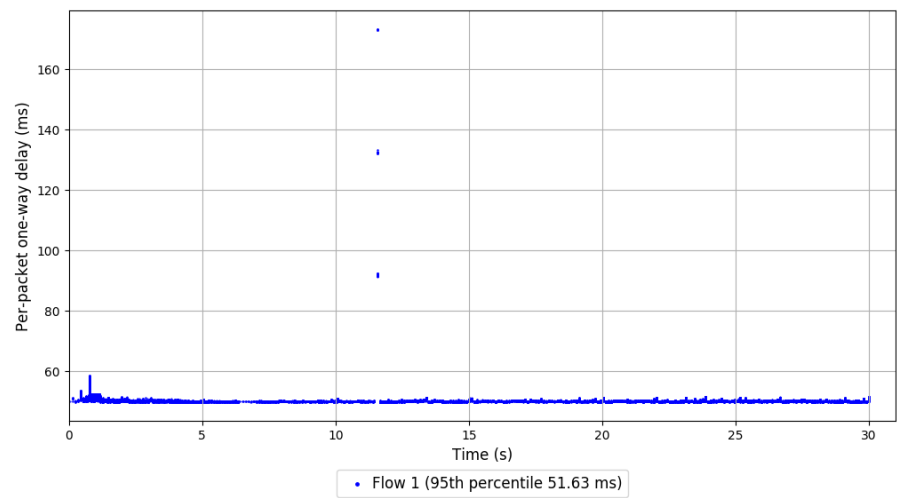
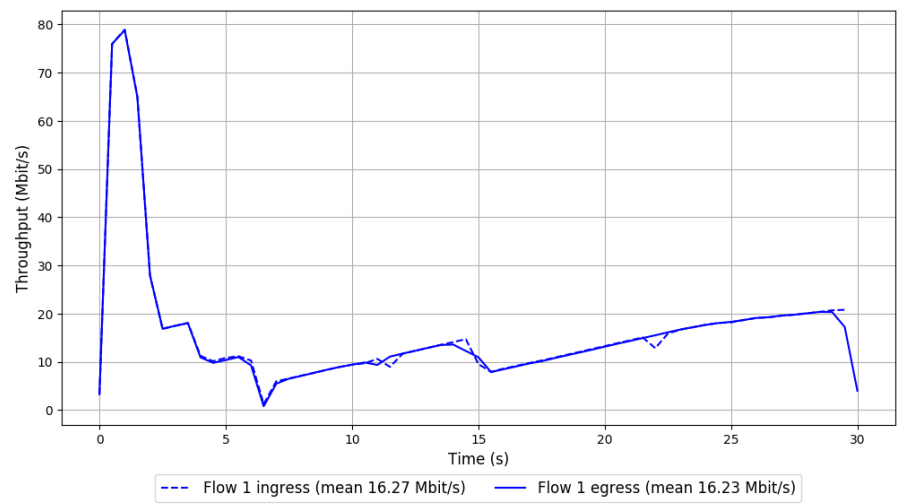
-- Flow 1:

Average throughput: 16.23 Mbit/s

95th percentile per-packet one-way delay: 51.635 ms

Loss rate: 0.25%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-21 05:58:52

End at: 2017-11-21 05:59:22

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 51.482 ms

Loss rate: 0.00%

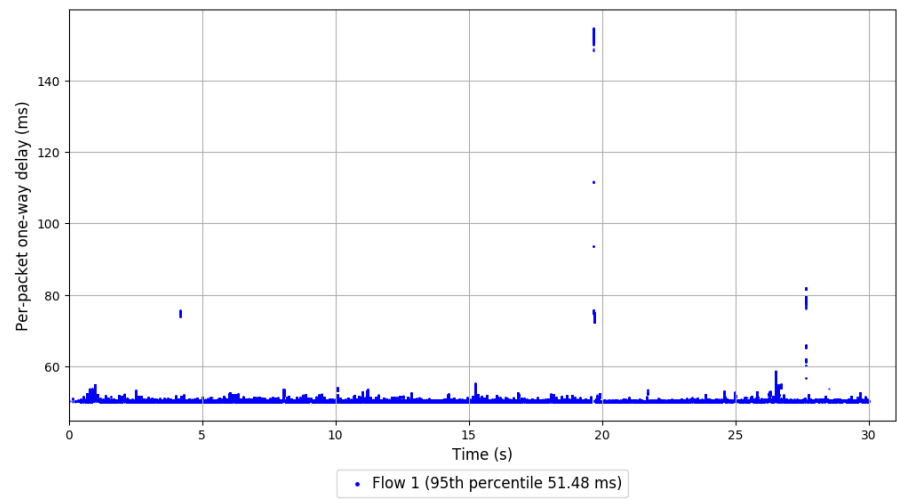
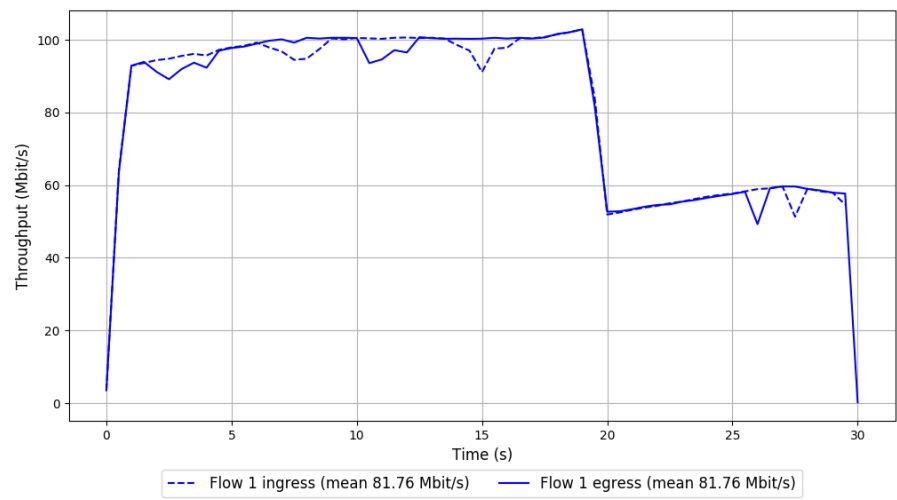
-- Flow 1:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 51.482 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-21 04:24:57

End at: 2017-11-21 04:25:27

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 238.70 Mbit/s

95th percentile per-packet one-way delay: 156.405 ms

Loss rate: 0.22%

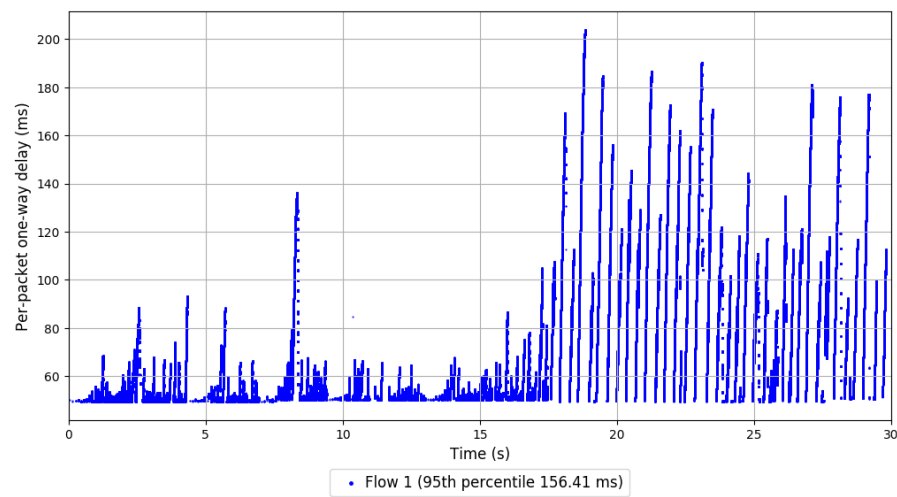
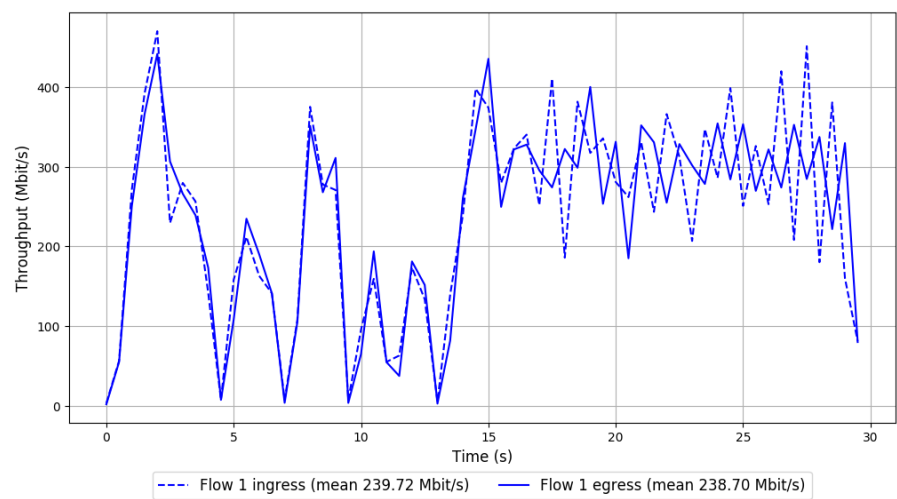
-- Flow 1:

Average throughput: 238.70 Mbit/s

95th percentile per-packet one-way delay: 156.405 ms

Loss rate: 0.22%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-21 04:35:17

End at: 2017-11-21 04:35:47

Below is generated by plot.py at 2017-11-21 07:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.12 Mbit/s

95th percentile per-packet one-way delay: 79.490 ms

Loss rate: 0.41%

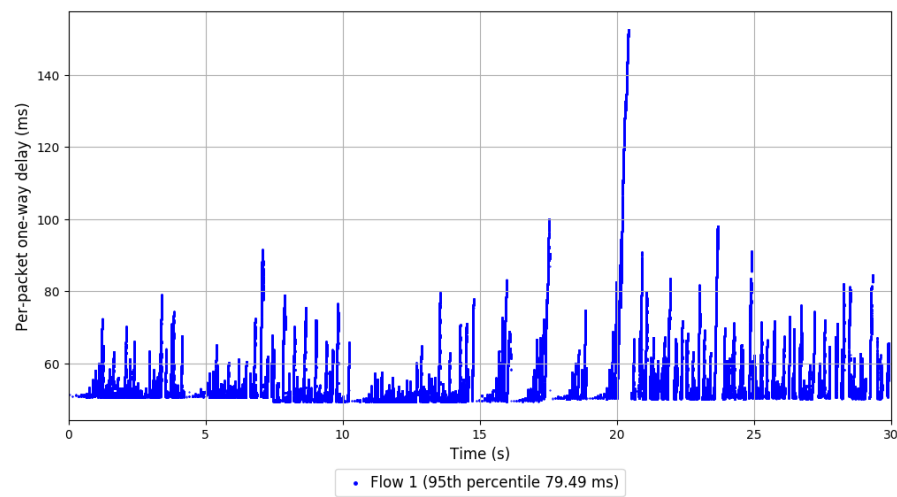
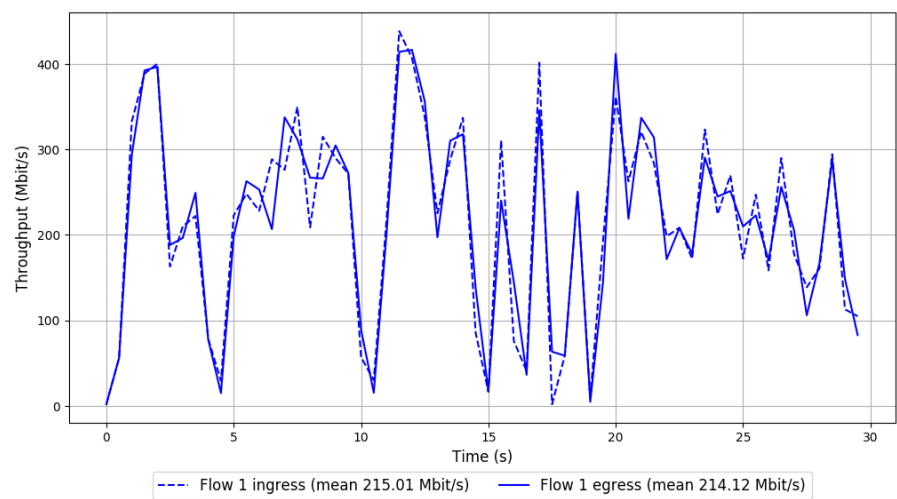
-- Flow 1:

Average throughput: 214.12 Mbit/s

95th percentile per-packet one-way delay: 79.490 ms

Loss rate: 0.41%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-21 04:45:40

End at: 2017-11-21 04:46:10

Below is generated by plot.py at 2017-11-21 07:34:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.15 Mbit/s

95th percentile per-packet one-way delay: 170.901 ms

Loss rate: 0.31%

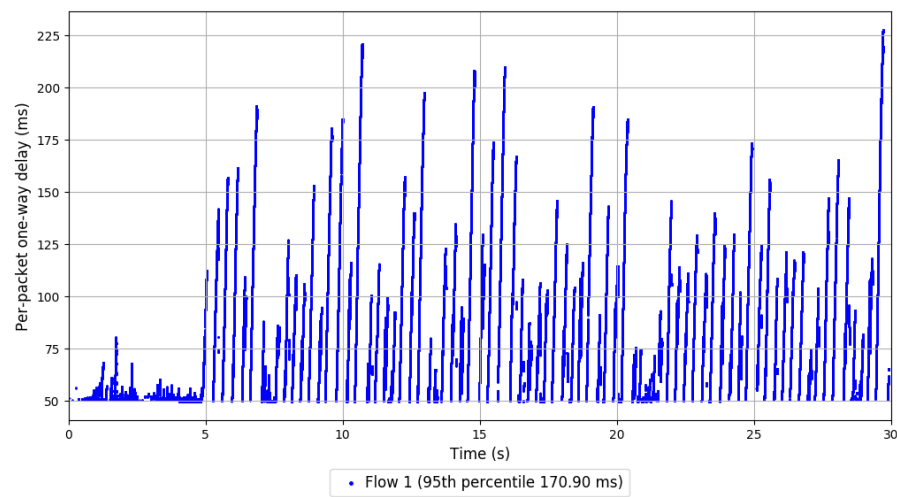
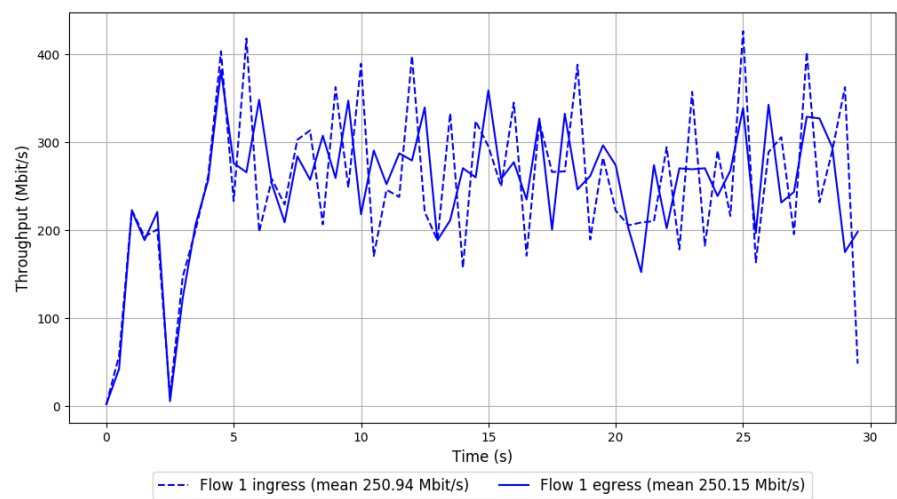
-- Flow 1:

Average throughput: 250.15 Mbit/s

95th percentile per-packet one-way delay: 170.901 ms

Loss rate: 0.31%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-21 04:55:59

End at: 2017-11-21 04:56:29

Below is generated by plot.py at 2017-11-21 07:35:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.53 Mbit/s

95th percentile per-packet one-way delay: 124.479 ms

Loss rate: 0.22%

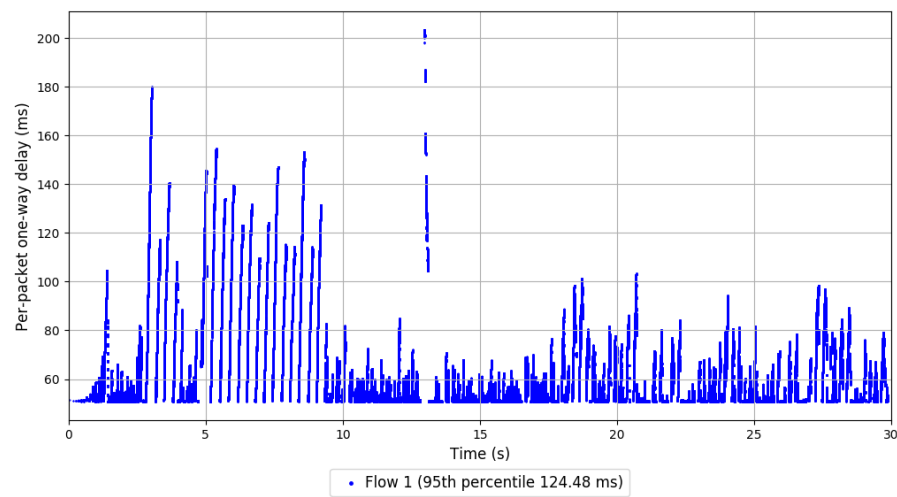
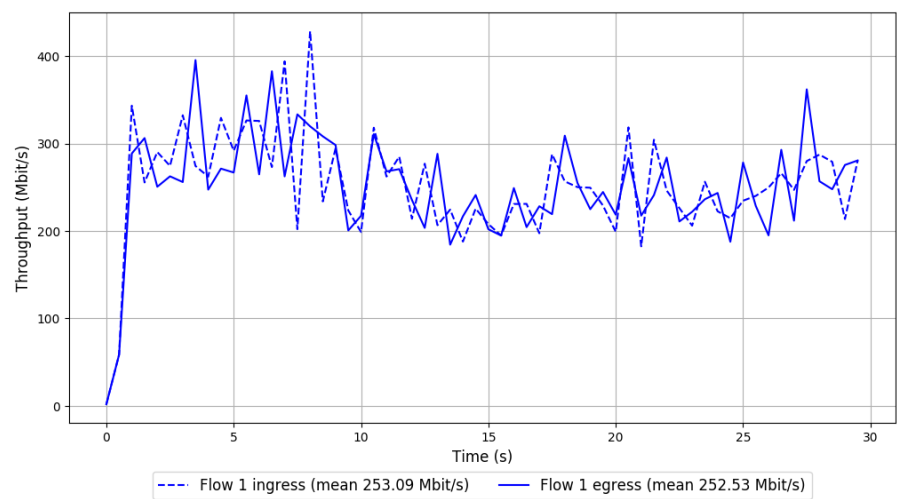
-- Flow 1:

Average throughput: 252.53 Mbit/s

95th percentile per-packet one-way delay: 124.479 ms

Loss rate: 0.22%

Run 4: Report of Verus — Data Link

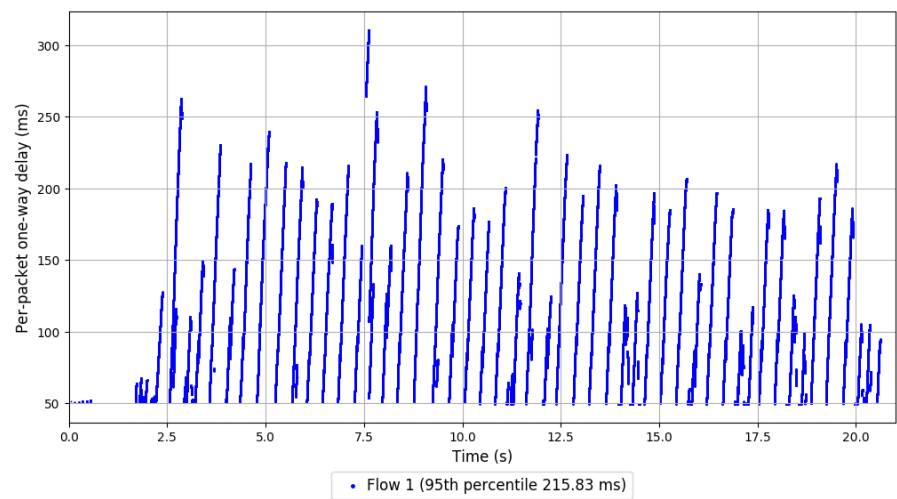
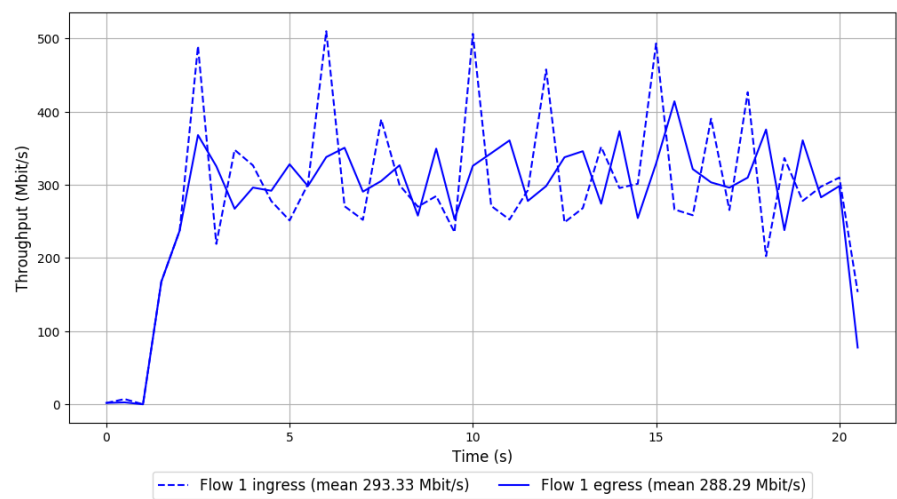


Run 5: Statistics of Verus

Start at: 2017-11-21 05:06:25

End at: 2017-11-21 05:06:55

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-21 05:16:41

End at: 2017-11-21 05:17:11

Below is generated by plot.py at 2017-11-21 07:35:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.57 Mbit/s

95th percentile per-packet one-way delay: 89.468 ms

Loss rate: 1.41%

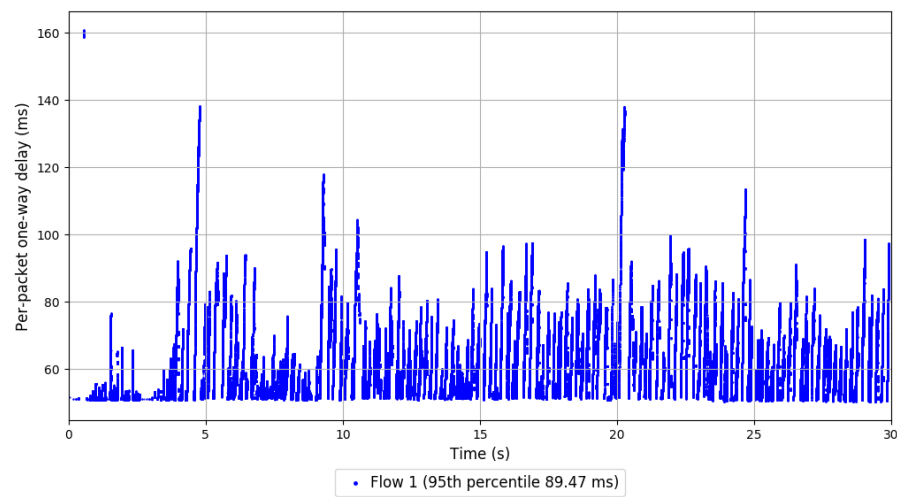
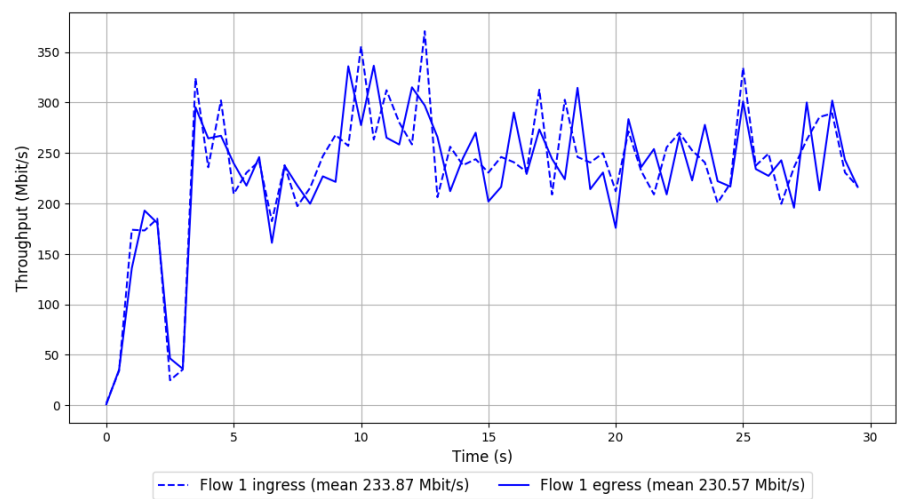
-- Flow 1:

Average throughput: 230.57 Mbit/s

95th percentile per-packet one-way delay: 89.468 ms

Loss rate: 1.41%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-21 05:26:43

End at: 2017-11-21 05:27:13

Below is generated by plot.py at 2017-11-21 07:38:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 292.76 Mbit/s

95th percentile per-packet one-way delay: 159.801 ms

Loss rate: 0.10%

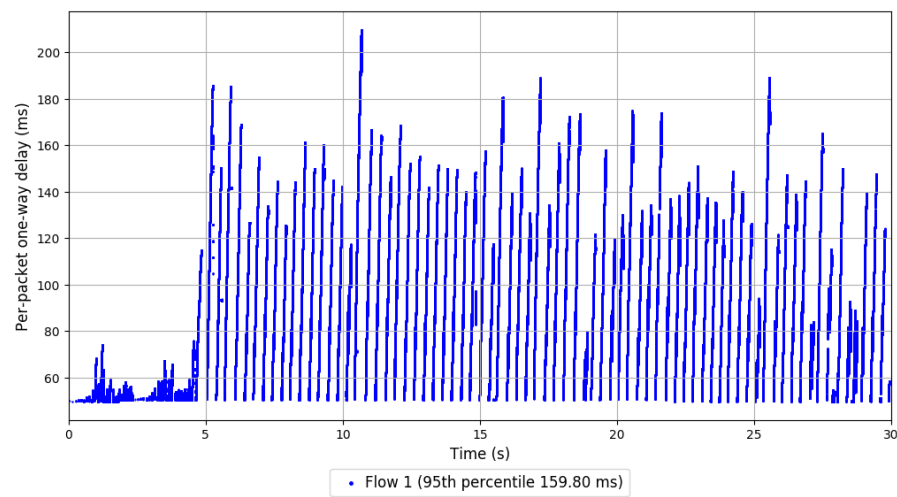
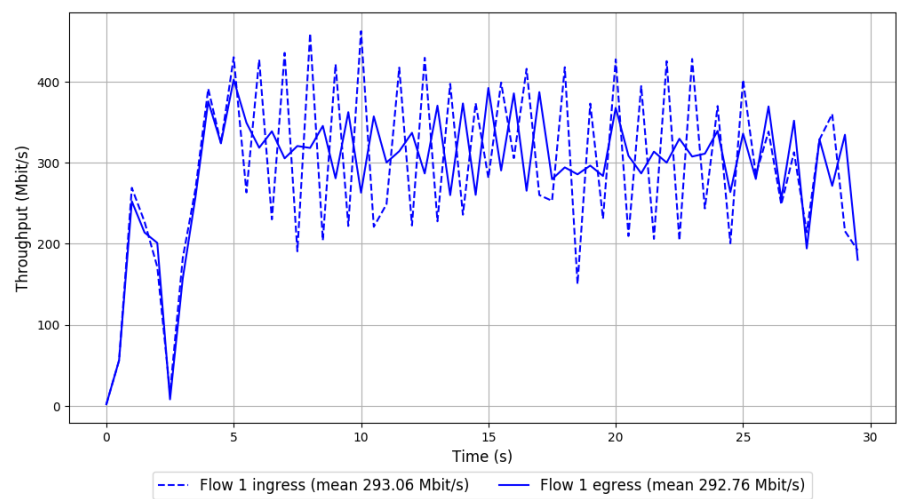
-- Flow 1:

Average throughput: 292.76 Mbit/s

95th percentile per-packet one-way delay: 159.801 ms

Loss rate: 0.10%

Run 7: Report of Verus — Data Link

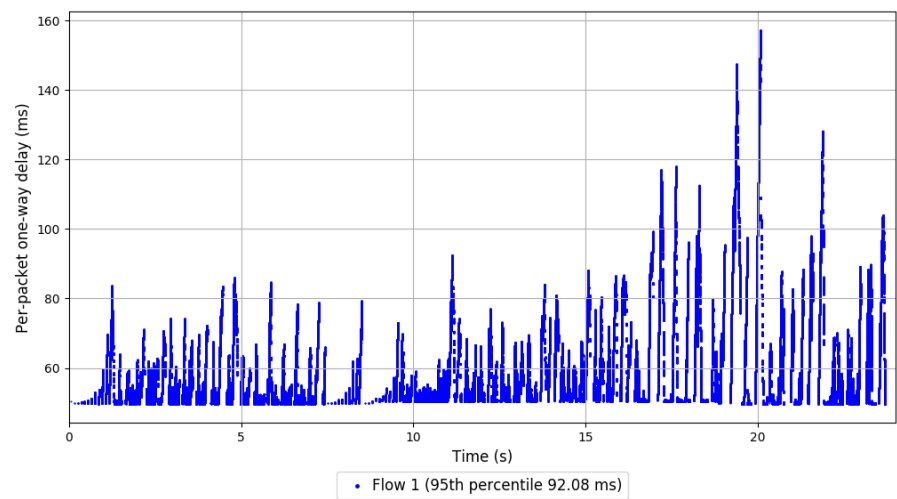
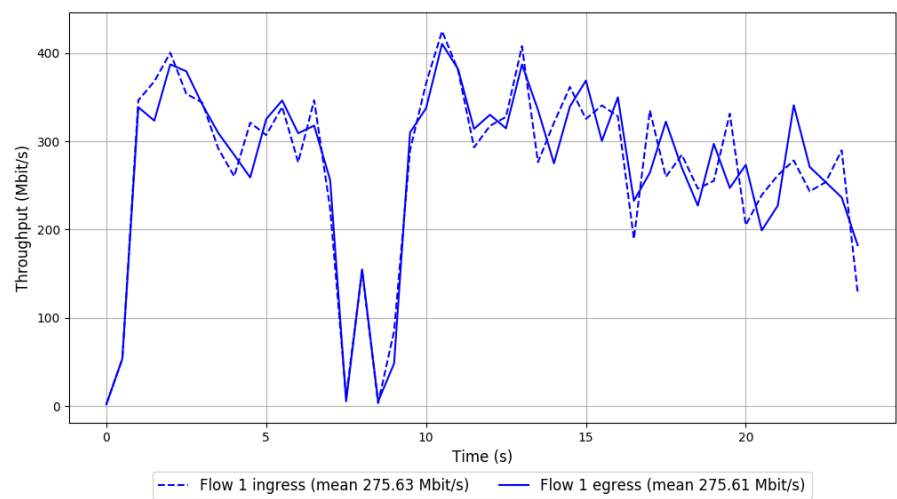


Run 8: Statistics of Verus

Start at: 2017-11-21 05:37:09

End at: 2017-11-21 05:37:39

Run 8: Report of Verus — Data Link

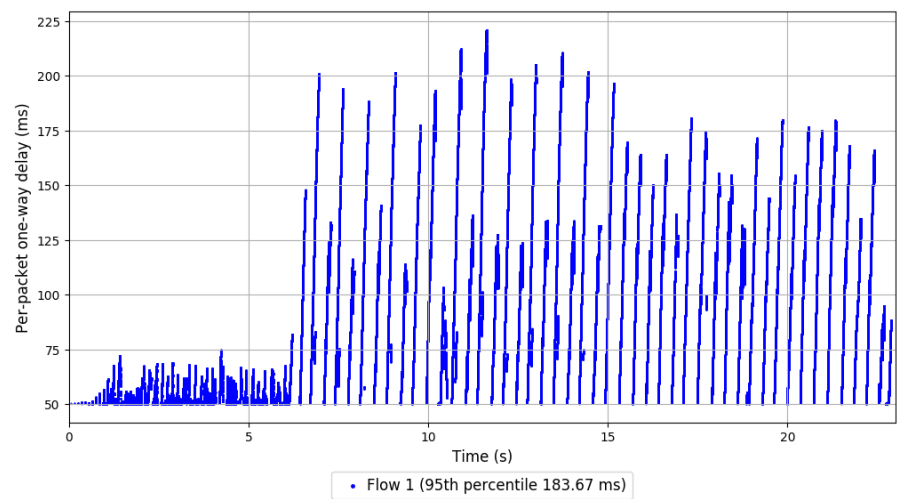
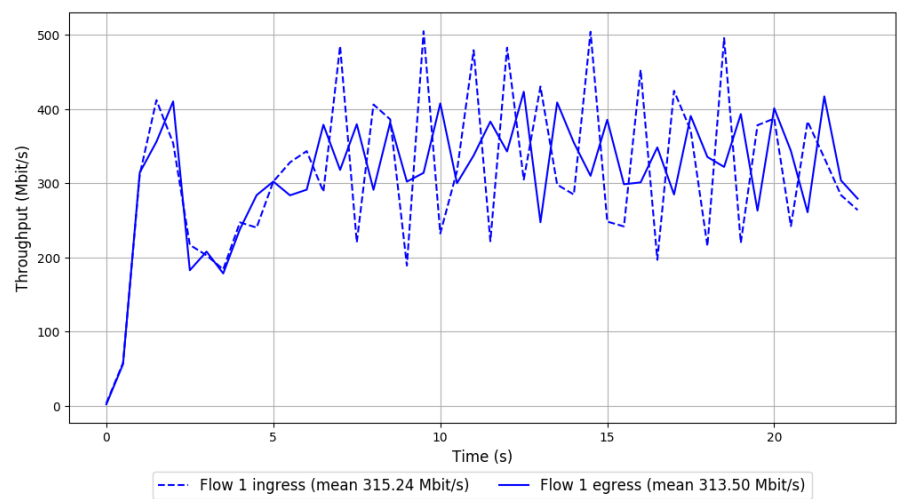


Run 9: Statistics of Verus

Start at: 2017-11-21 05:47:37

End at: 2017-11-21 05:48:07

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-21 05:57:57

End at: 2017-11-21 05:58:27

Below is generated by plot.py at 2017-11-21 07:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 262.17 Mbit/s

95th percentile per-packet one-way delay: 151.034 ms

Loss rate: 0.47%

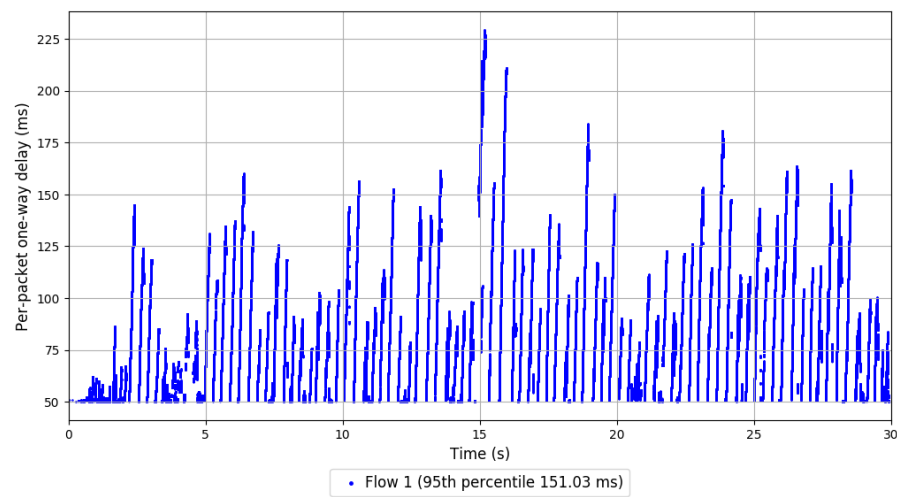
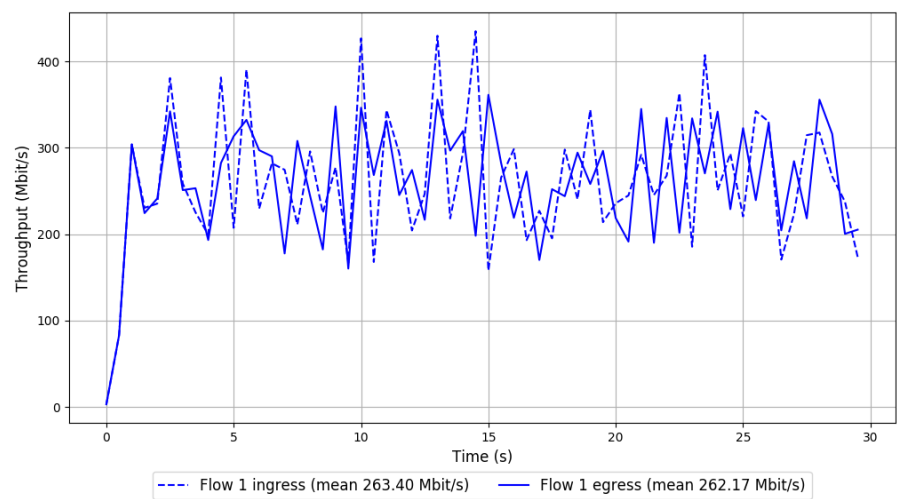
-- Flow 1:

Average throughput: 262.17 Mbit/s

95th percentile per-packet one-way delay: 151.034 ms

Loss rate: 0.47%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-21 04:33:08

End at: 2017-11-21 04:33:38

Below is generated by plot.py at 2017-11-21 07:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.79 Mbit/s

95th percentile per-packet one-way delay: 51.152 ms

Loss rate: 0.01%

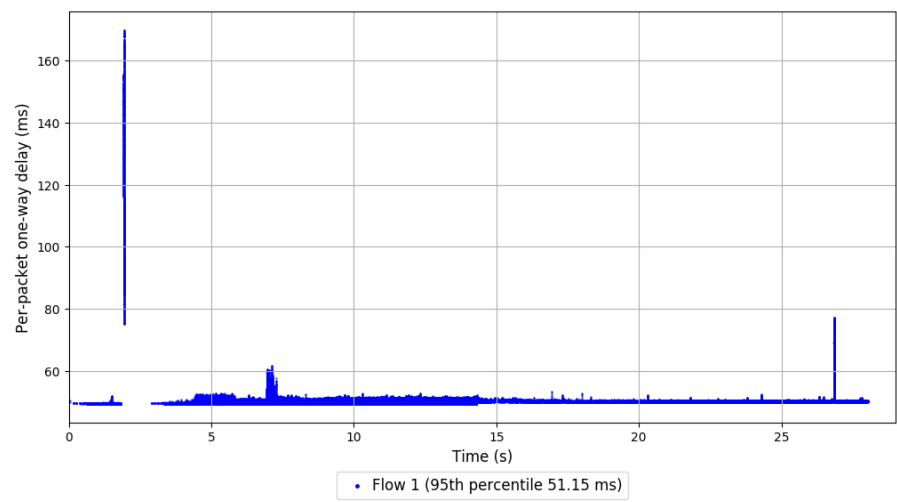
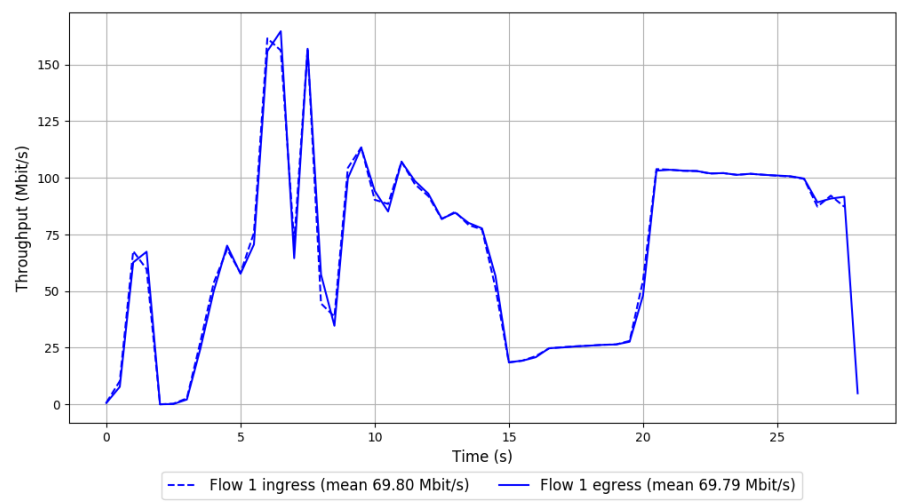
-- Flow 1:

Average throughput: 69.79 Mbit/s

95th percentile per-packet one-way delay: 51.152 ms

Loss rate: 0.01%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-21 04:43:29

End at: 2017-11-21 04:43:59

Below is generated by plot.py at 2017-11-21 07:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.94 Mbit/s

95th percentile per-packet one-way delay: 50.860 ms

Loss rate: 0.00%

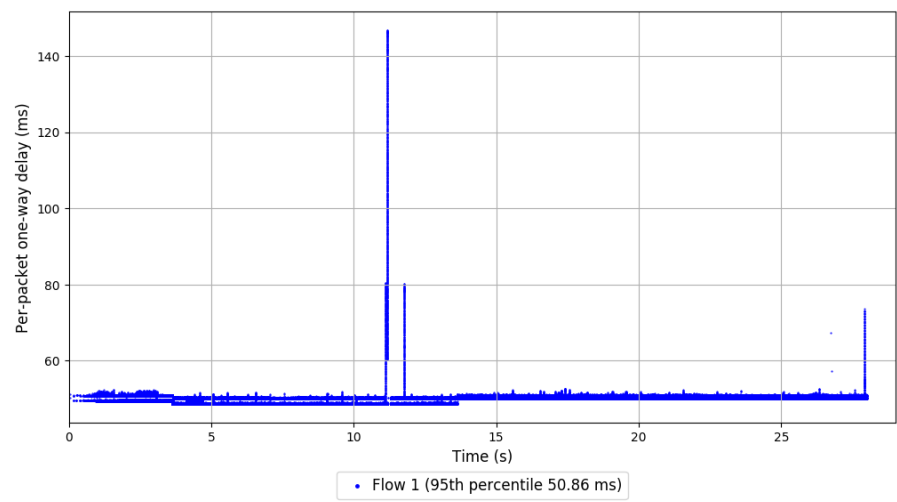
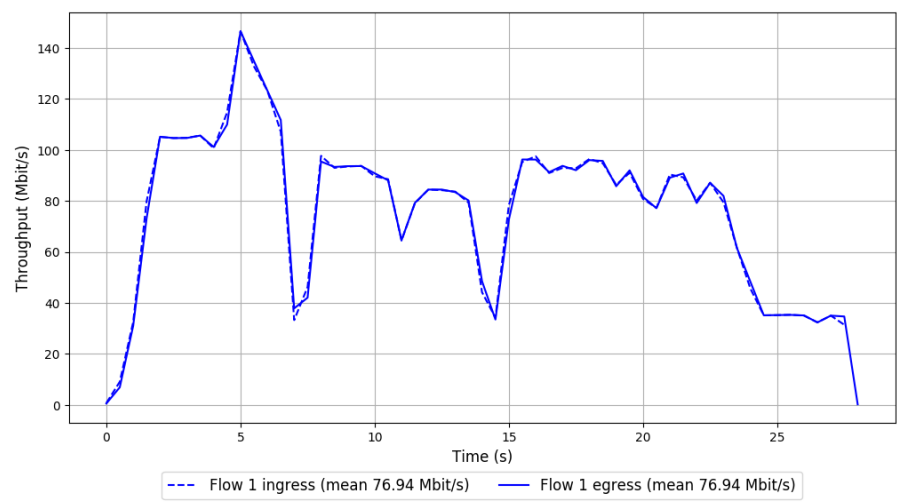
-- Flow 1:

Average throughput: 76.94 Mbit/s

95th percentile per-packet one-way delay: 50.860 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-21 04:53:52

End at: 2017-11-21 04:54:22

Below is generated by plot.py at 2017-11-21 07:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.77 Mbit/s

95th percentile per-packet one-way delay: 50.837 ms

Loss rate: 0.02%

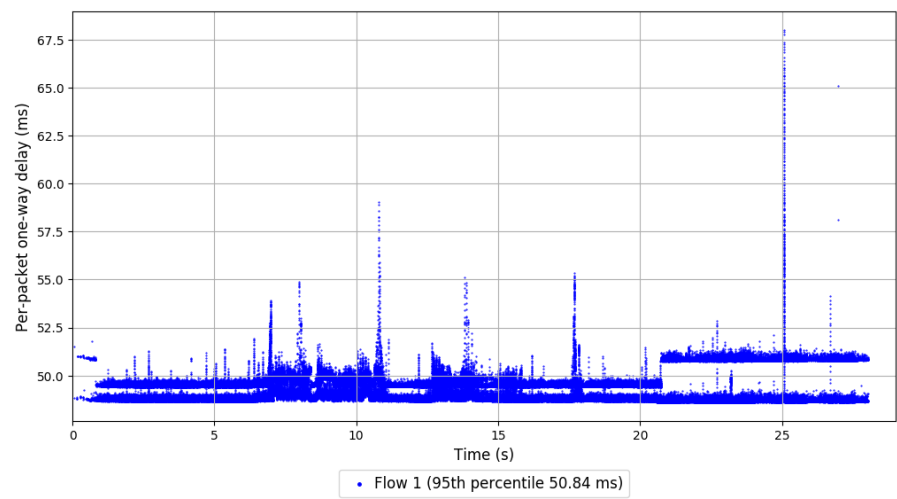
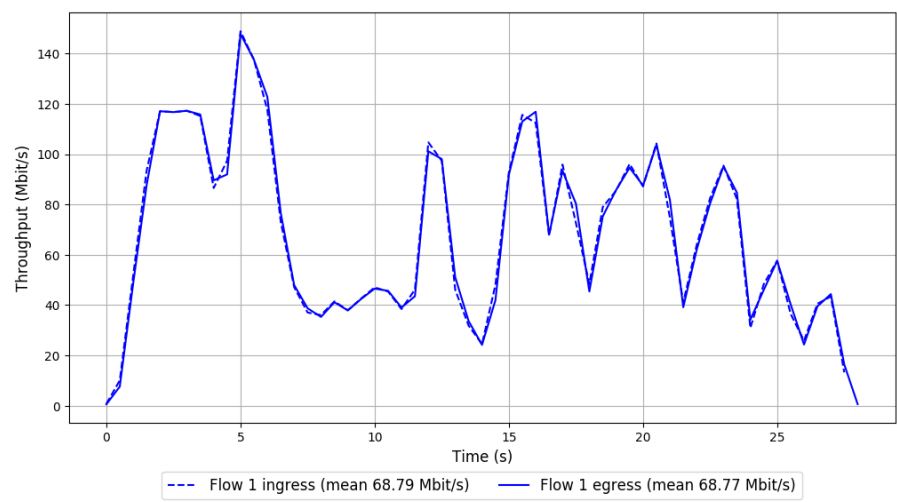
-- Flow 1:

Average throughput: 68.77 Mbit/s

95th percentile per-packet one-way delay: 50.837 ms

Loss rate: 0.02%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-21 05:04:15

End at: 2017-11-21 05:04:45

Below is generated by plot.py at 2017-11-21 07:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 50.810 ms

Loss rate: 0.00%

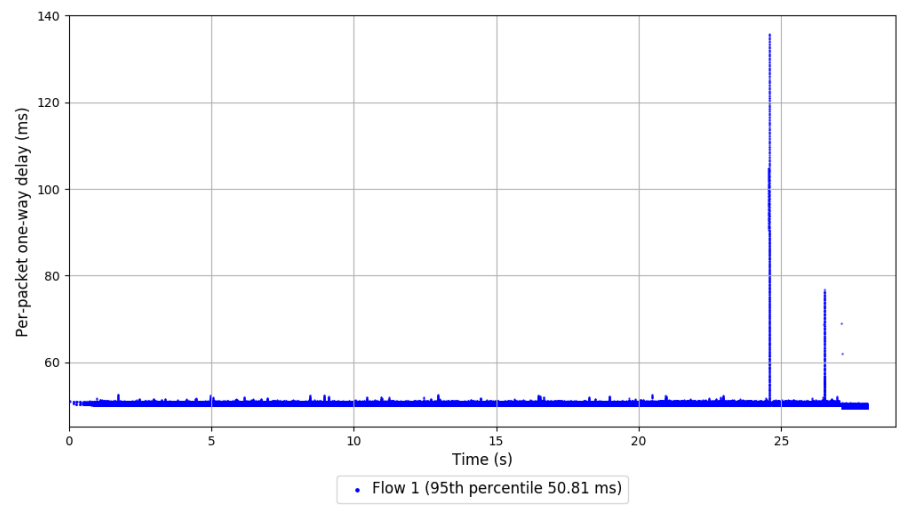
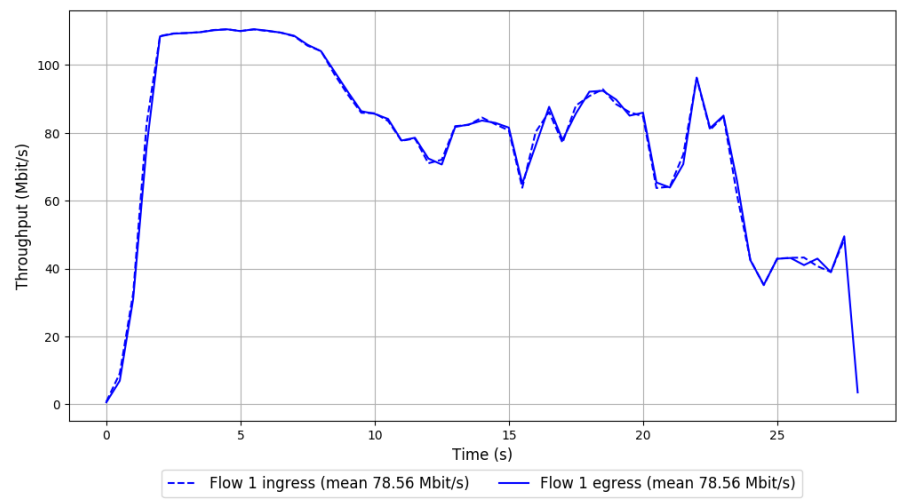
-- Flow 1:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 50.810 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-21 05:14:32

End at: 2017-11-21 05:15:02

Below is generated by plot.py at 2017-11-21 07:39:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.30 Mbit/s

95th percentile per-packet one-way delay: 50.856 ms

Loss rate: 0.00%

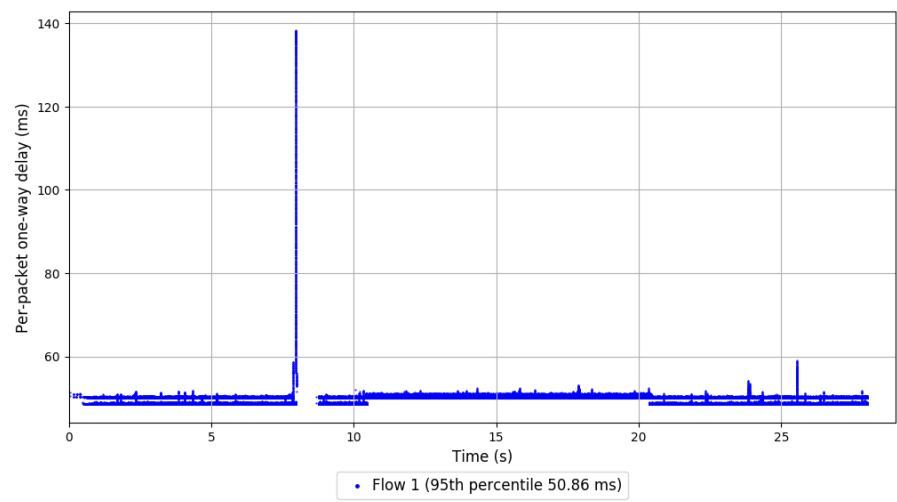
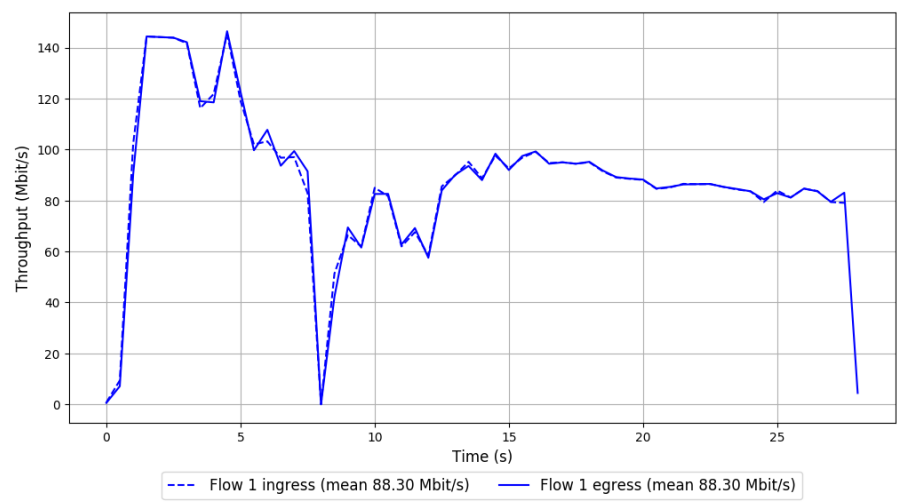
-- Flow 1:

Average throughput: 88.30 Mbit/s

95th percentile per-packet one-way delay: 50.856 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-21 05:24:33

End at: 2017-11-21 05:25:03

Below is generated by plot.py at 2017-11-21 07:39:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.73 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.00%

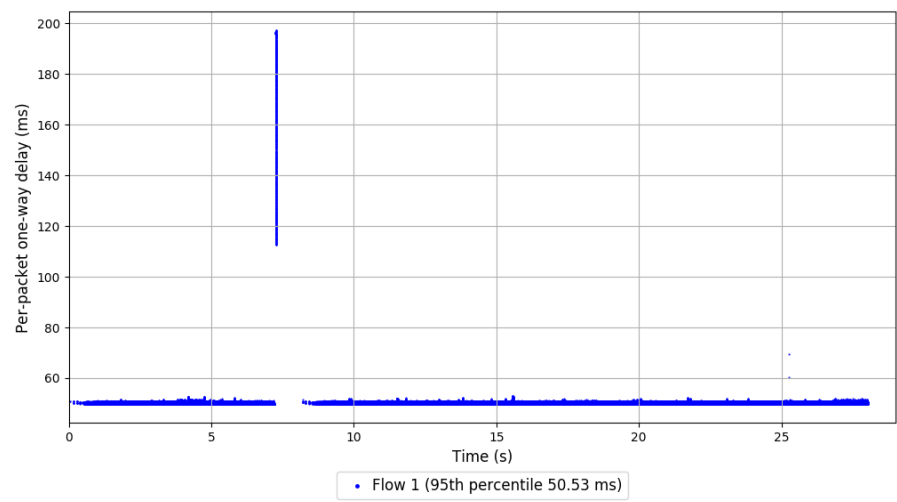
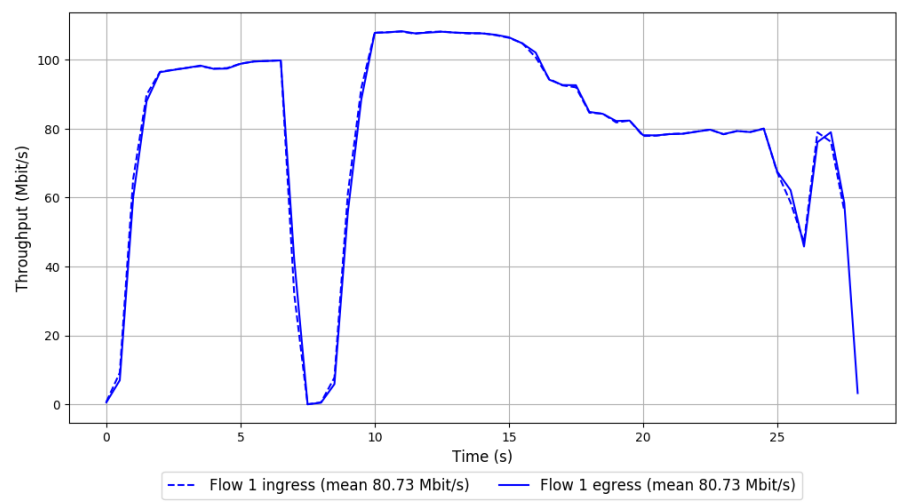
-- Flow 1:

Average throughput: 80.73 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link

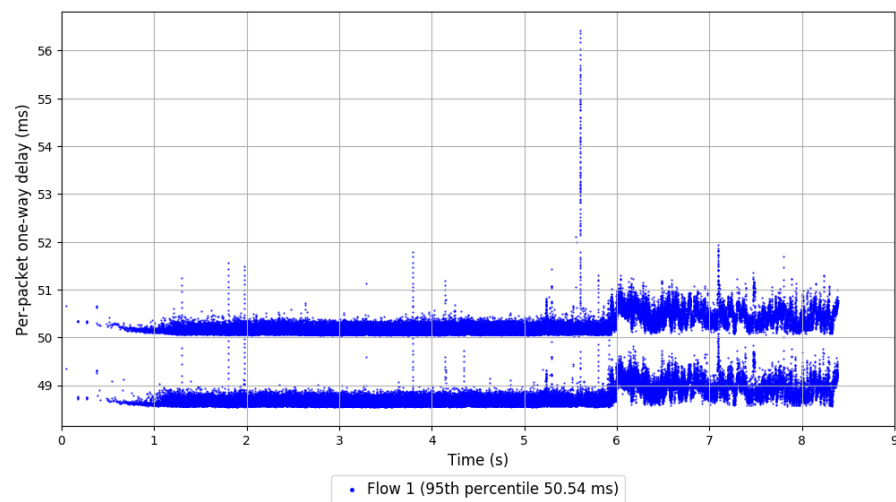
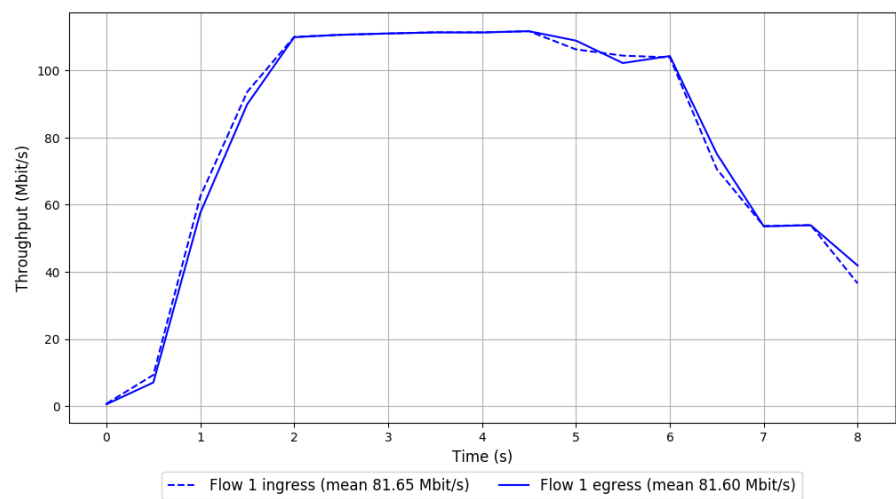


Run 7: Statistics of Copa

Start at: 2017-11-21 05:35:03

End at: 2017-11-21 05:35:33

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-21 05:45:26

End at: 2017-11-21 05:45:56

Below is generated by plot.py at 2017-11-21 07:39:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.75 Mbit/s

95th percentile per-packet one-way delay: 50.898 ms

Loss rate: 0.12%

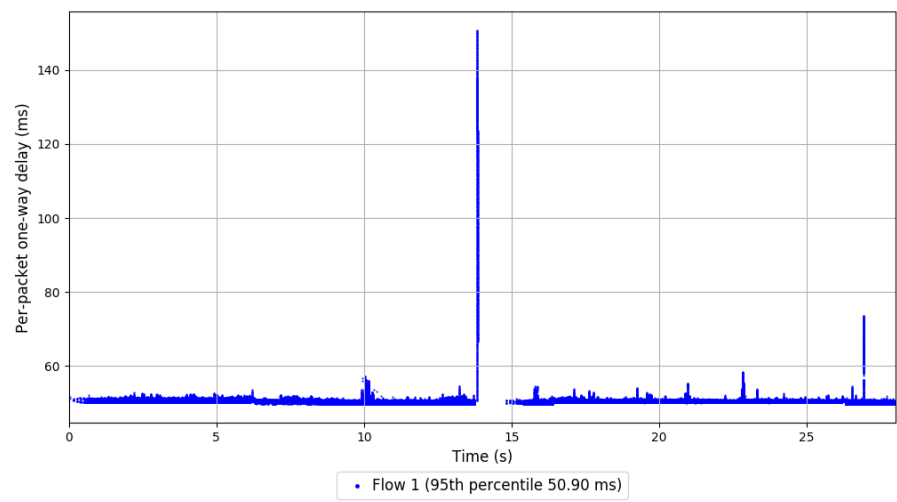
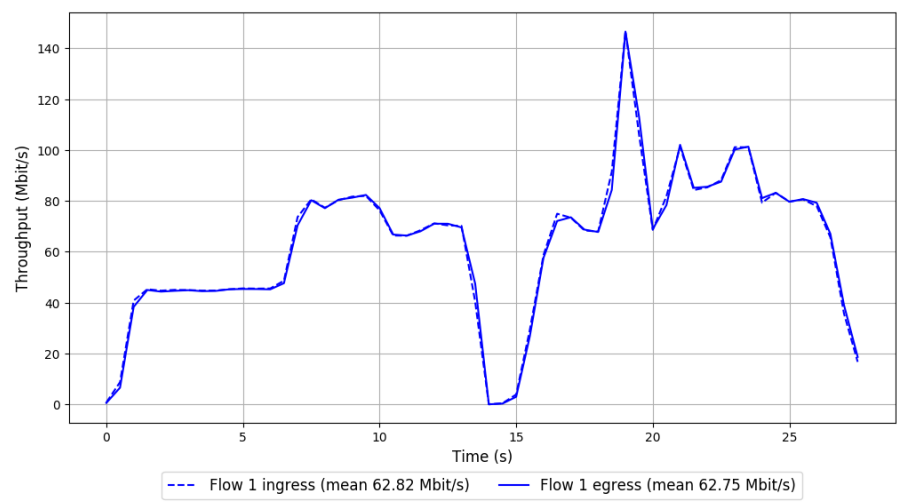
-- Flow 1:

Average throughput: 62.75 Mbit/s

95th percentile per-packet one-way delay: 50.898 ms

Loss rate: 0.12%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-21 05:55:51

End at: 2017-11-21 05:56:21

Below is generated by plot.py at 2017-11-21 07:40:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.64 Mbit/s

95th percentile per-packet one-way delay: 50.502 ms

Loss rate: 0.00%

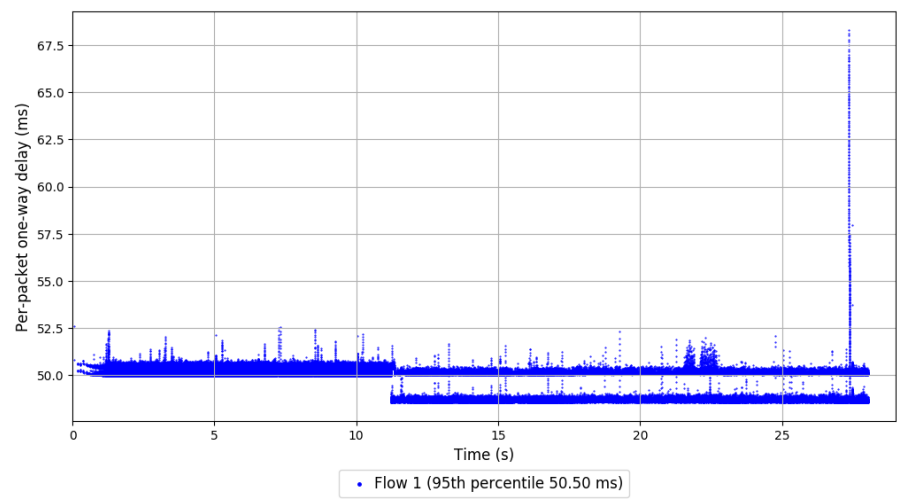
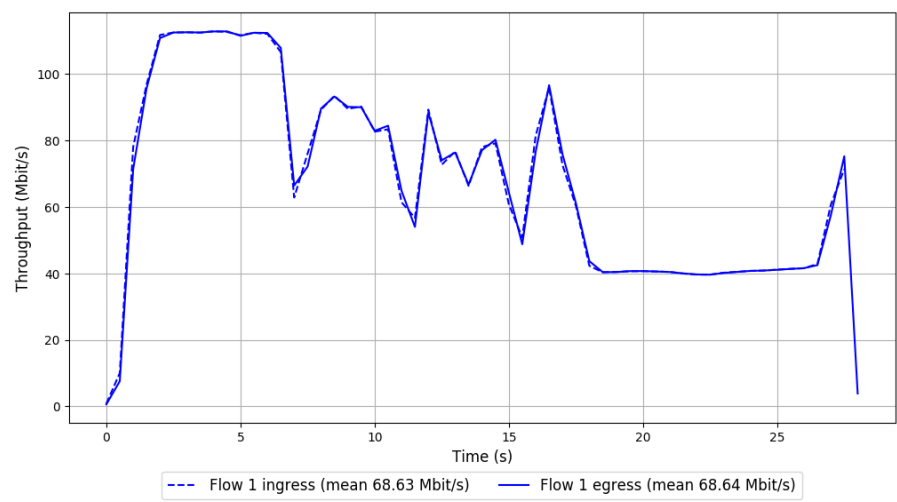
-- Flow 1:

Average throughput: 68.64 Mbit/s

95th percentile per-packet one-way delay: 50.502 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-21 06:06:11

End at: 2017-11-21 06:06:41

Below is generated by plot.py at 2017-11-21 07:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.27 Mbit/s

95th percentile per-packet one-way delay: 50.270 ms

Loss rate: 0.00%

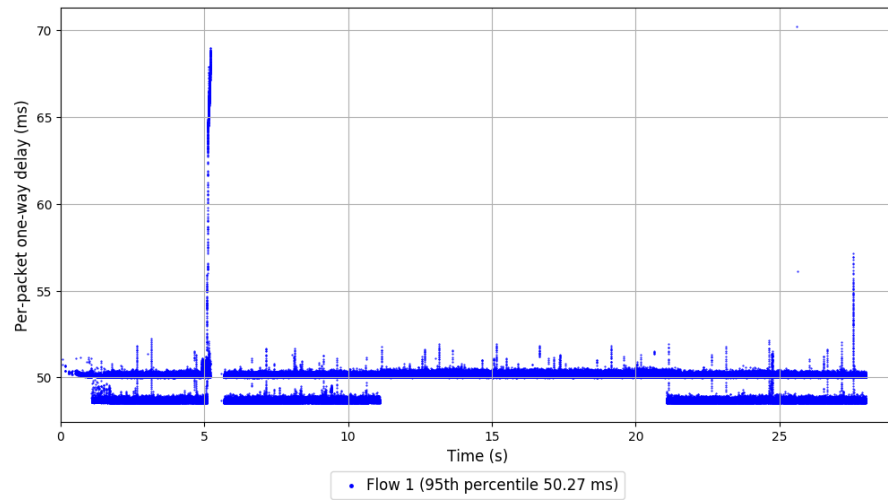
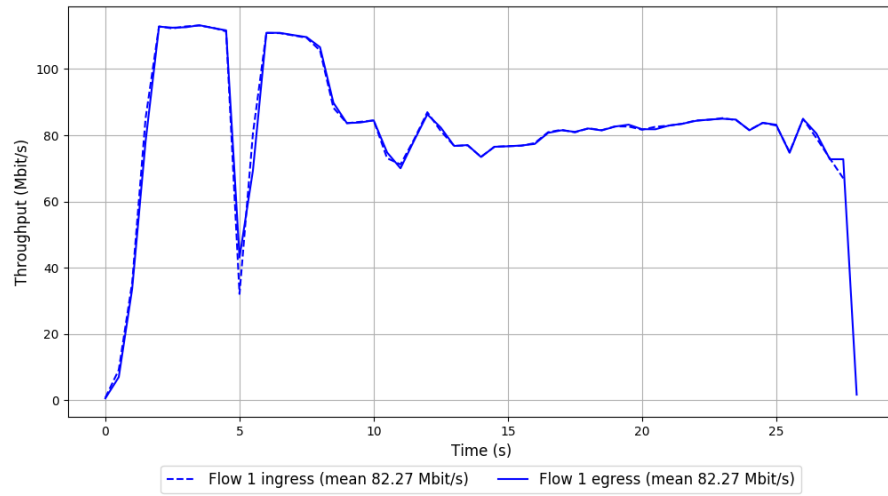
-- Flow 1:

Average throughput: 82.27 Mbit/s

95th percentile per-packet one-way delay: 50.270 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

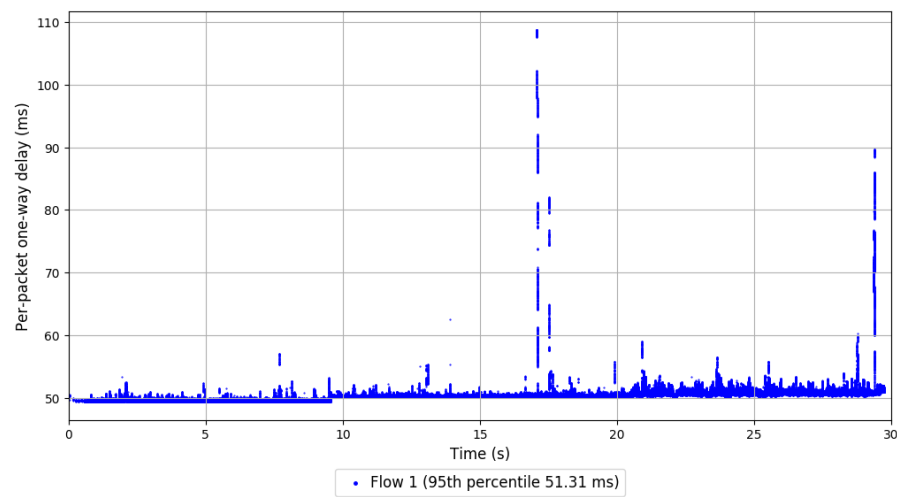
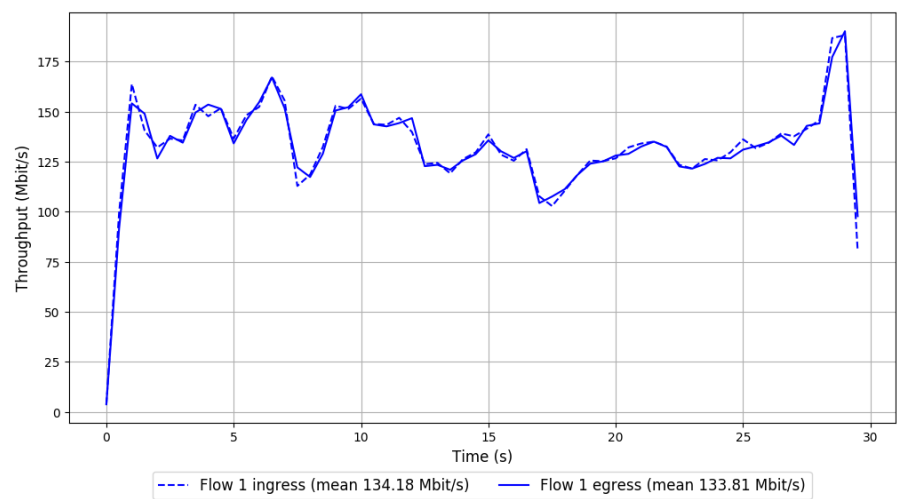


```
Run 1: Statistics of Indigo

Start at: 2017-11-21 04:31:25
End at: 2017-11-21 04:31:55

# Below is generated by plot.py at 2017-11-21 07:41:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 133.81 Mbit/s
95th percentile per-packet one-way delay: 51.308 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 133.81 Mbit/s
95th percentile per-packet one-way delay: 51.308 ms
Loss rate: 0.27%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-21 04:41:40

End at: 2017-11-21 04:42:10

Below is generated by plot.py at 2017-11-21 07:42:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.43 Mbit/s

95th percentile per-packet one-way delay: 50.682 ms

Loss rate: 0.00%

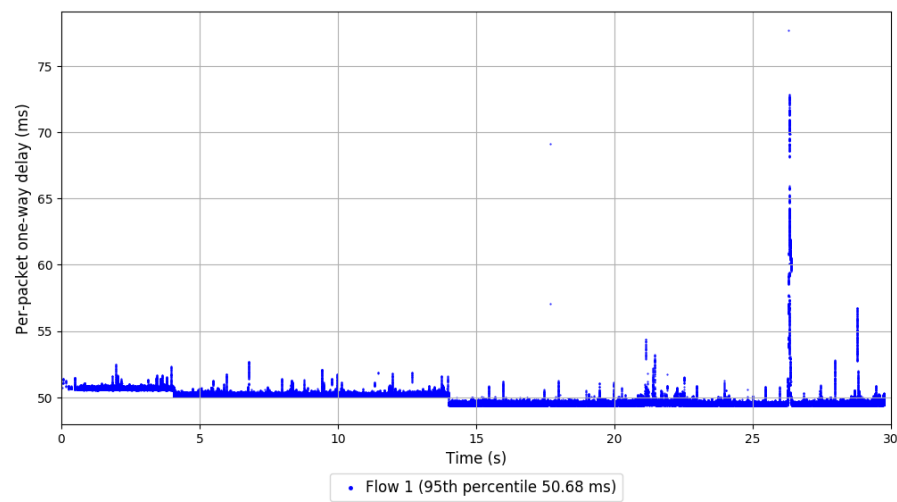
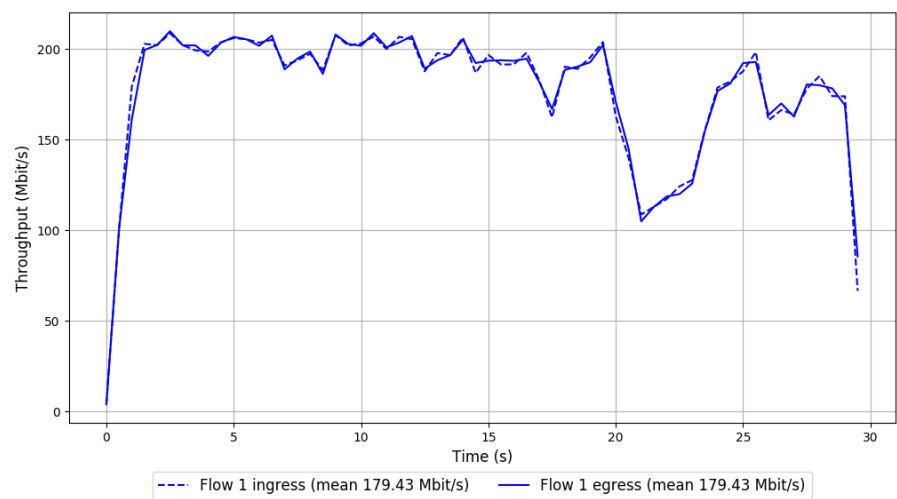
-- Flow 1:

Average throughput: 179.43 Mbit/s

95th percentile per-packet one-way delay: 50.682 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-21 04:52:13

End at: 2017-11-21 04:52:43

Below is generated by plot.py at 2017-11-21 07:42:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.46 Mbit/s

95th percentile per-packet one-way delay: 50.290 ms

Loss rate: 0.00%

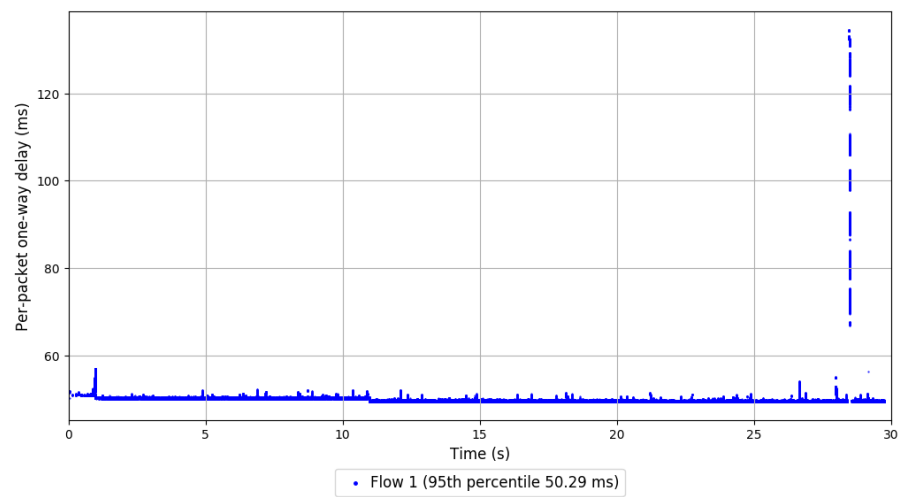
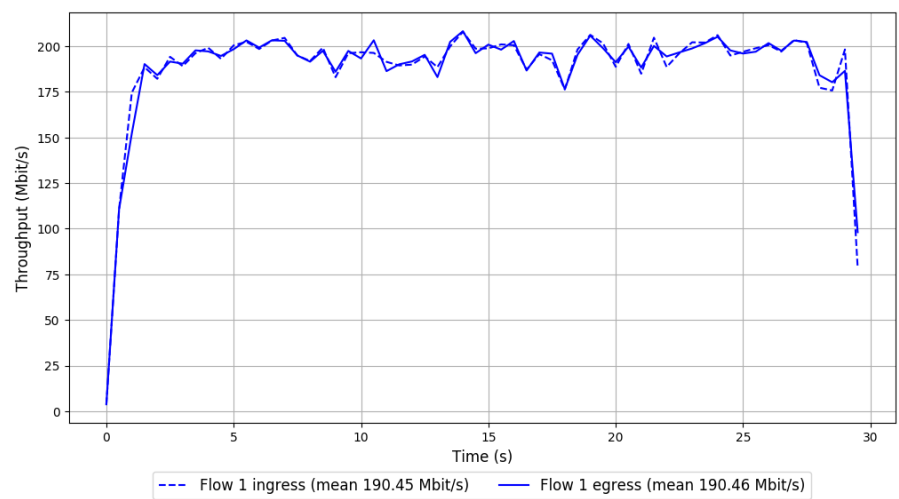
-- Flow 1:

Average throughput: 190.46 Mbit/s

95th percentile per-packet one-way delay: 50.290 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-21 05:02:29

End at: 2017-11-21 05:02:59

Below is generated by plot.py at 2017-11-21 07:43:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.13 Mbit/s

95th percentile per-packet one-way delay: 51.001 ms

Loss rate: 0.00%

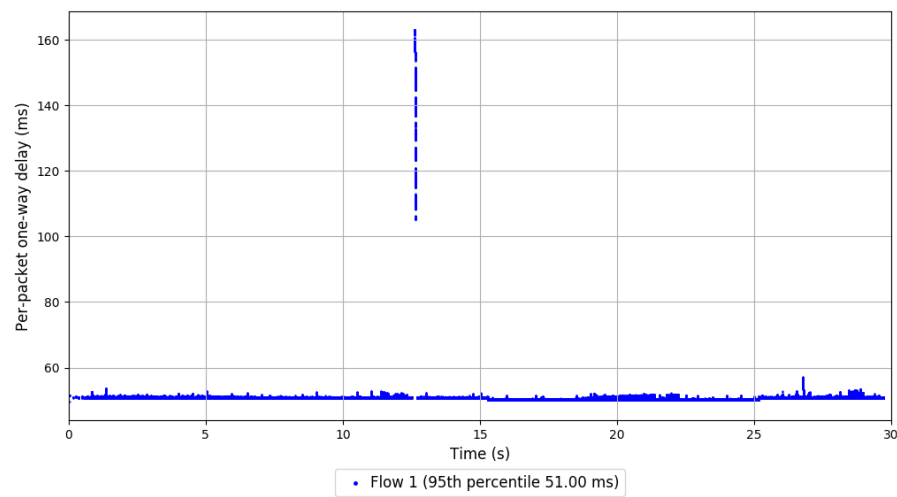
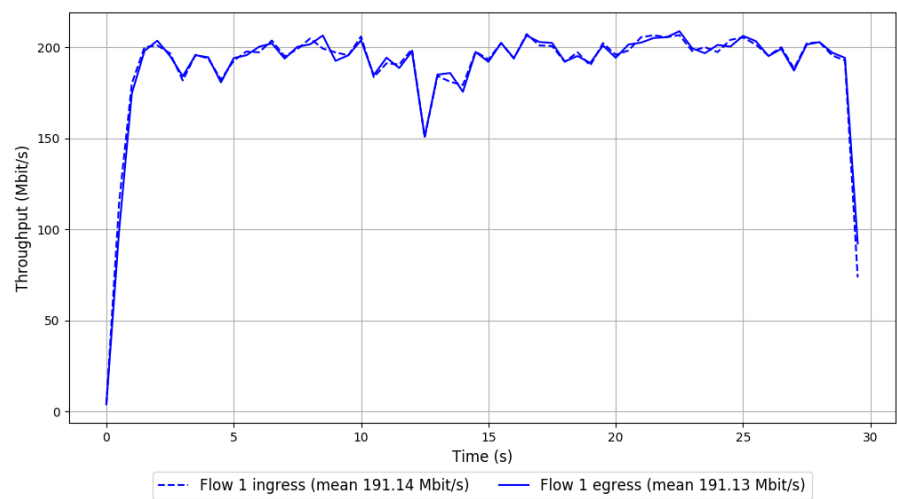
-- Flow 1:

Average throughput: 191.13 Mbit/s

95th percentile per-packet one-way delay: 51.001 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-21 05:12:51

End at: 2017-11-21 05:13:21

Below is generated by plot.py at 2017-11-21 07:43:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.17 Mbit/s

95th percentile per-packet one-way delay: 51.434 ms

Loss rate: 0.05%

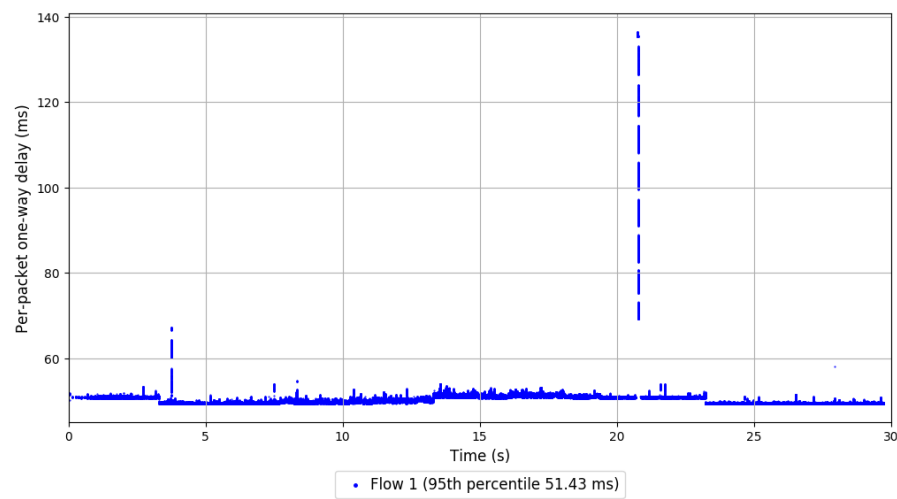
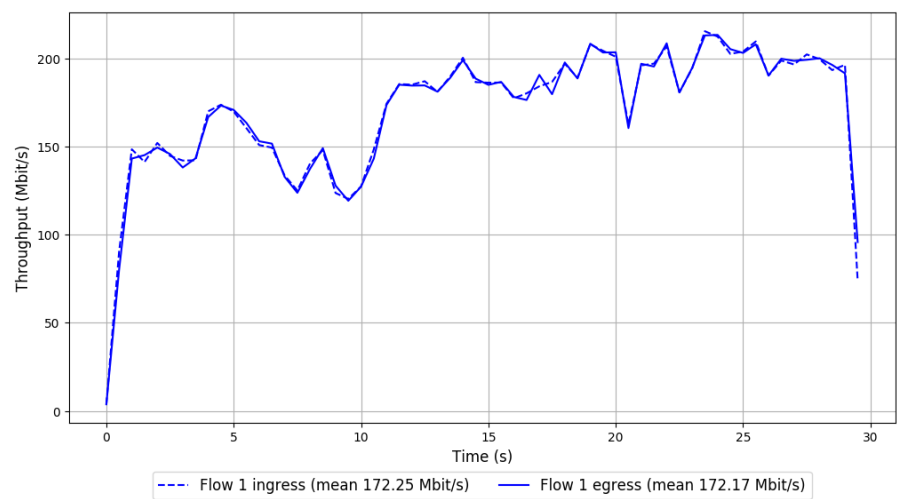
-- Flow 1:

Average throughput: 172.17 Mbit/s

95th percentile per-packet one-way delay: 51.434 ms

Loss rate: 0.05%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-21 05:23:04

End at: 2017-11-21 05:23:34

Below is generated by plot.py at 2017-11-21 07:43:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.59 Mbit/s

95th percentile per-packet one-way delay: 50.292 ms

Loss rate: 0.00%

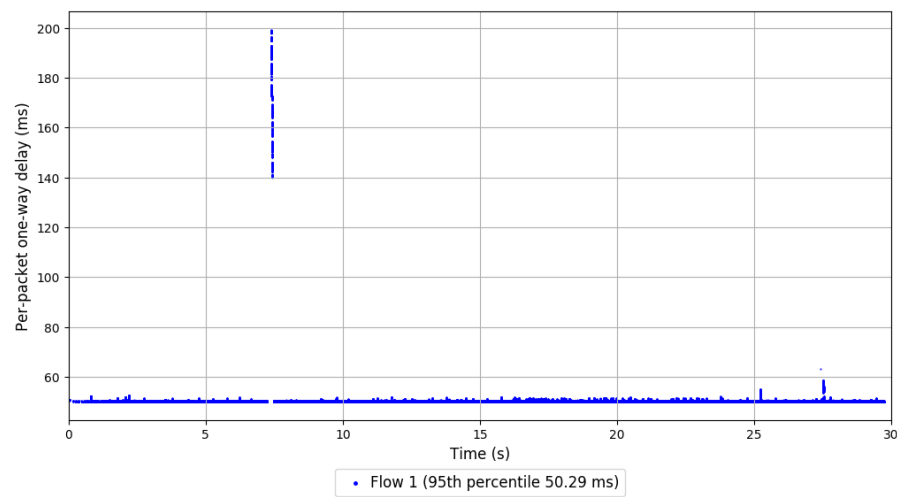
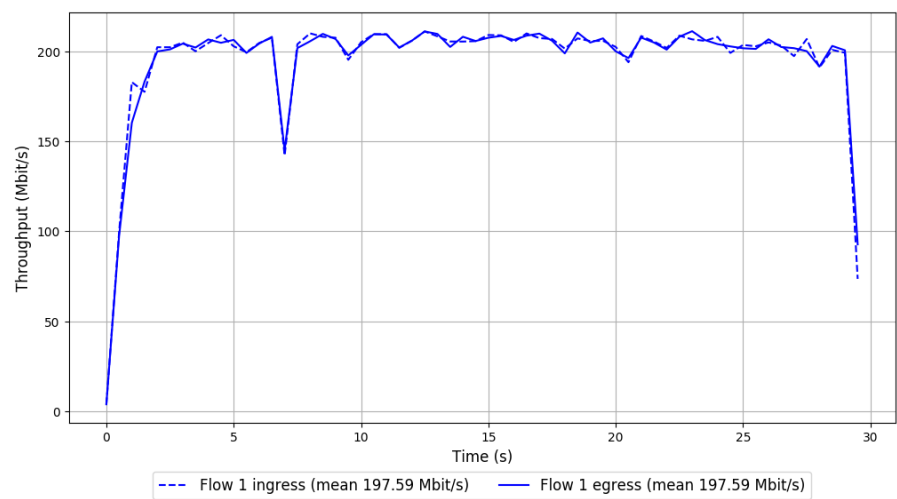
-- Flow 1:

Average throughput: 197.59 Mbit/s

95th percentile per-packet one-way delay: 50.292 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-21 05:33:14

End at: 2017-11-21 05:33:44

Below is generated by plot.py at 2017-11-21 07:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.22 Mbit/s

95th percentile per-packet one-way delay: 51.012 ms

Loss rate: 0.01%

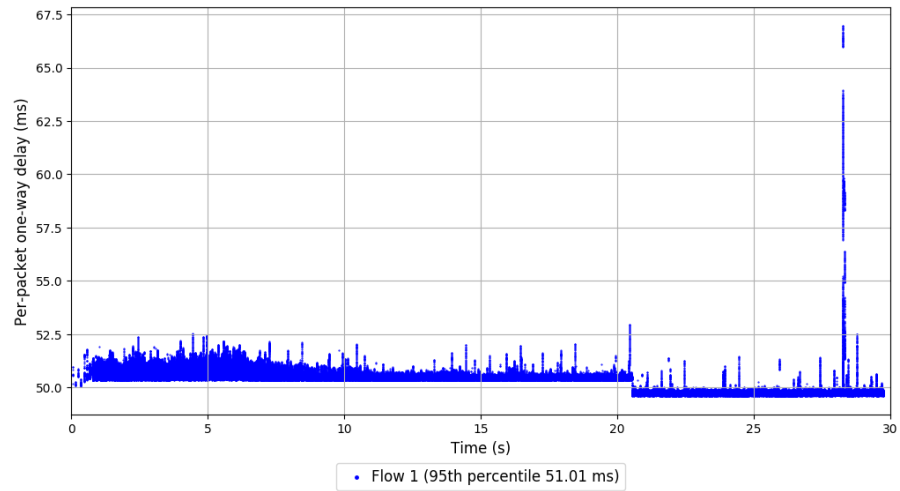
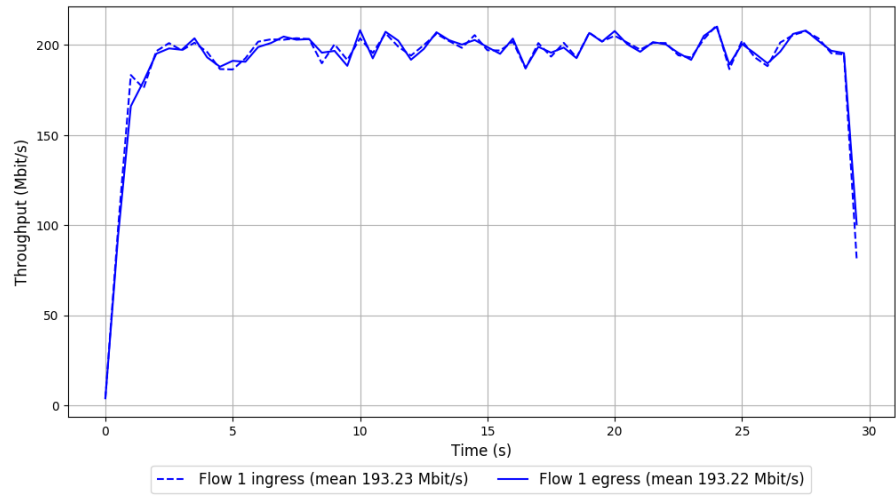
-- Flow 1:

Average throughput: 193.22 Mbit/s

95th percentile per-packet one-way delay: 51.012 ms

Loss rate: 0.01%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-21 05:43:42

End at: 2017-11-21 05:44:12

Below is generated by plot.py at 2017-11-21 07:44:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.22 Mbit/s

95th percentile per-packet one-way delay: 50.520 ms

Loss rate: 0.00%

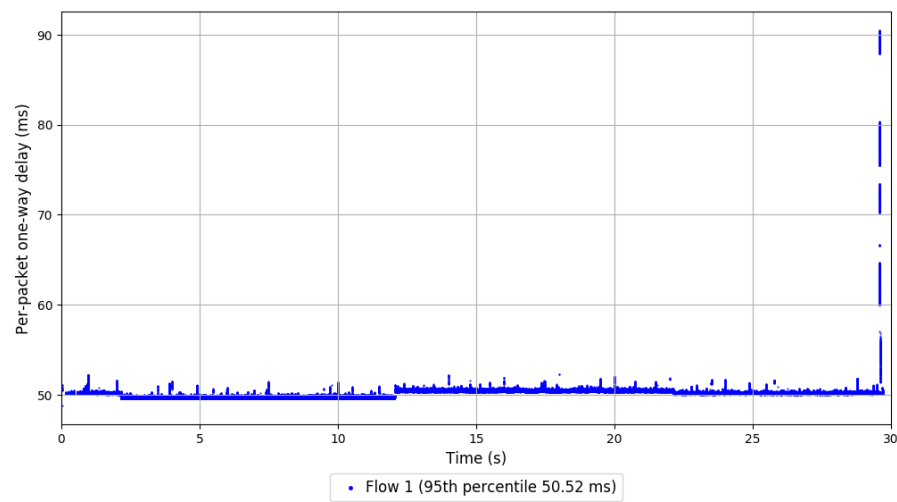
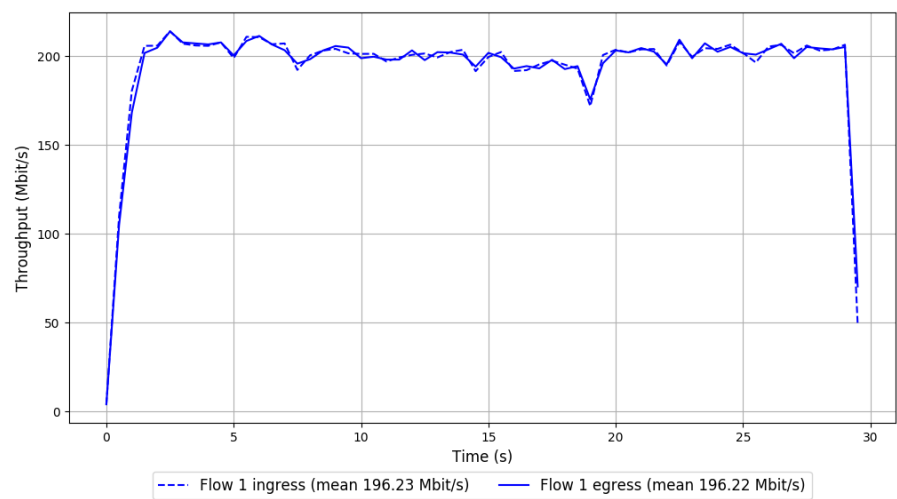
-- Flow 1:

Average throughput: 196.22 Mbit/s

95th percentile per-packet one-way delay: 50.520 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-21 05:54:06

End at: 2017-11-21 05:54:36

Below is generated by plot.py at 2017-11-21 07:44:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.80 Mbit/s

95th percentile per-packet one-way delay: 50.725 ms

Loss rate: 0.02%

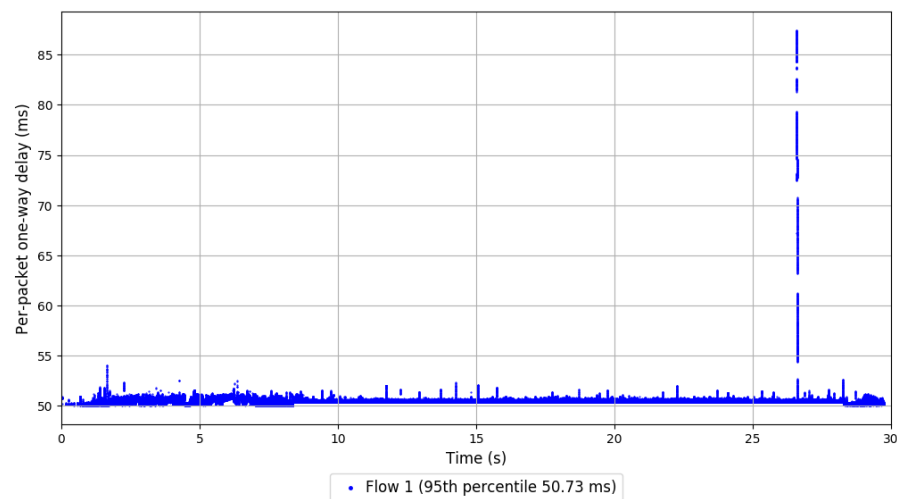
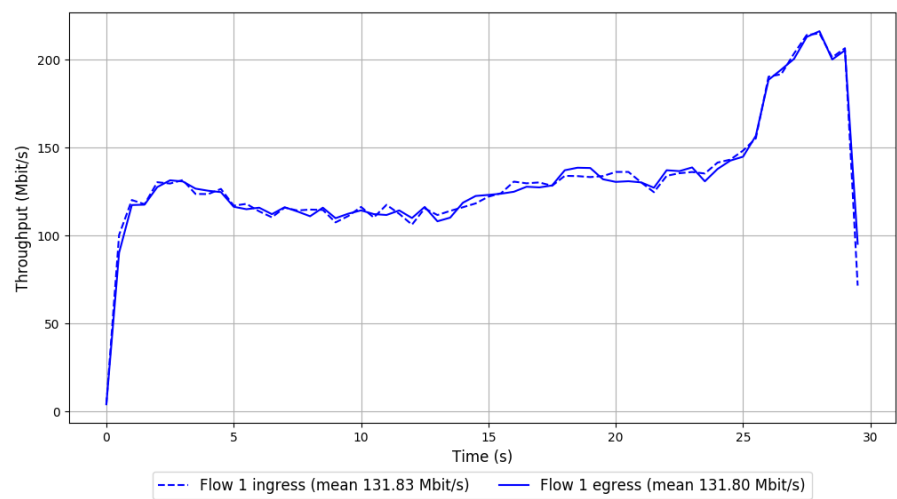
-- Flow 1:

Average throughput: 131.80 Mbit/s

95th percentile per-packet one-way delay: 50.725 ms

Loss rate: 0.02%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-21 06:04:24

End at: 2017-11-21 06:04:54

Below is generated by plot.py at 2017-11-21 07:45:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.66 Mbit/s

95th percentile per-packet one-way delay: 50.569 ms

Loss rate: 0.00%

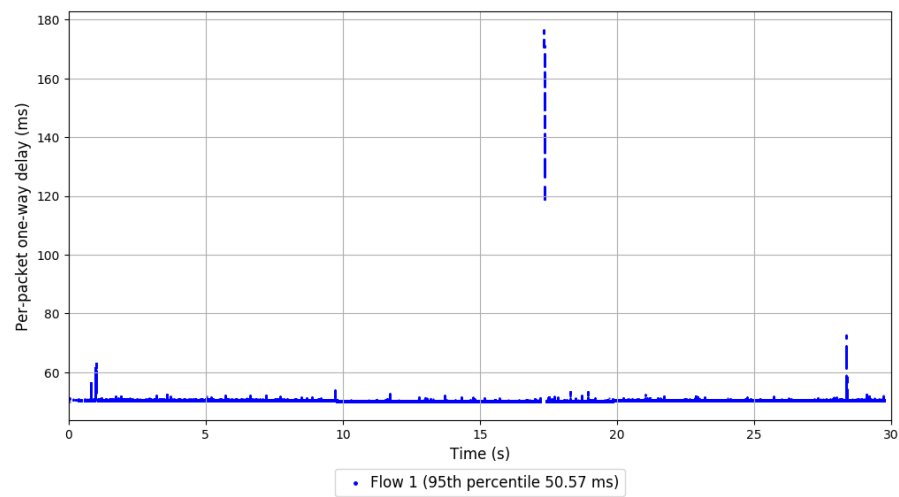
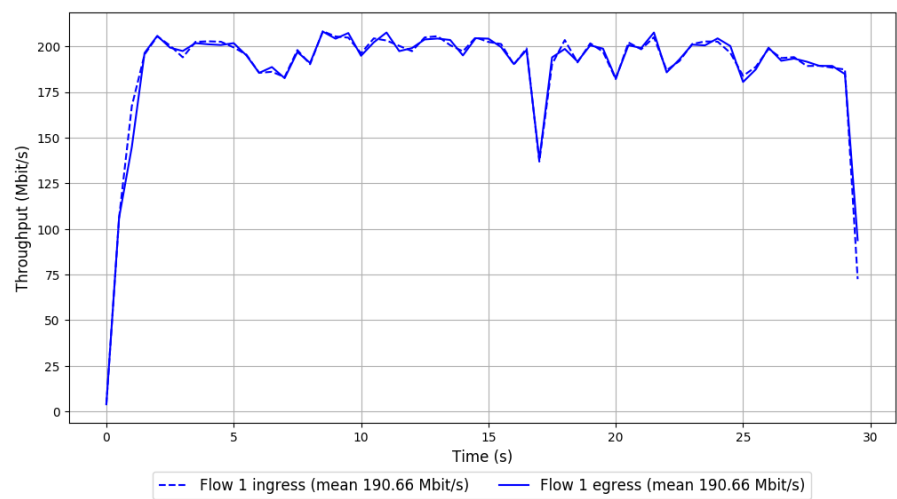
-- Flow 1:

Average throughput: 190.66 Mbit/s

95th percentile per-packet one-way delay: 50.569 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

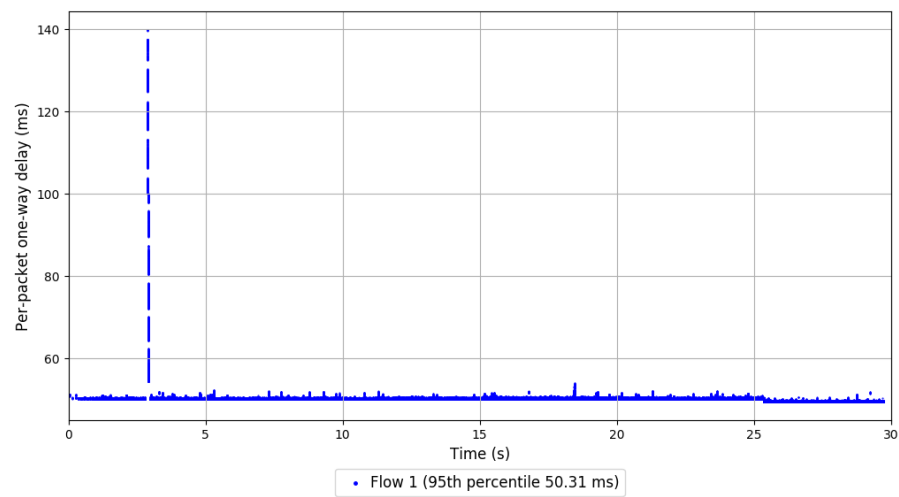
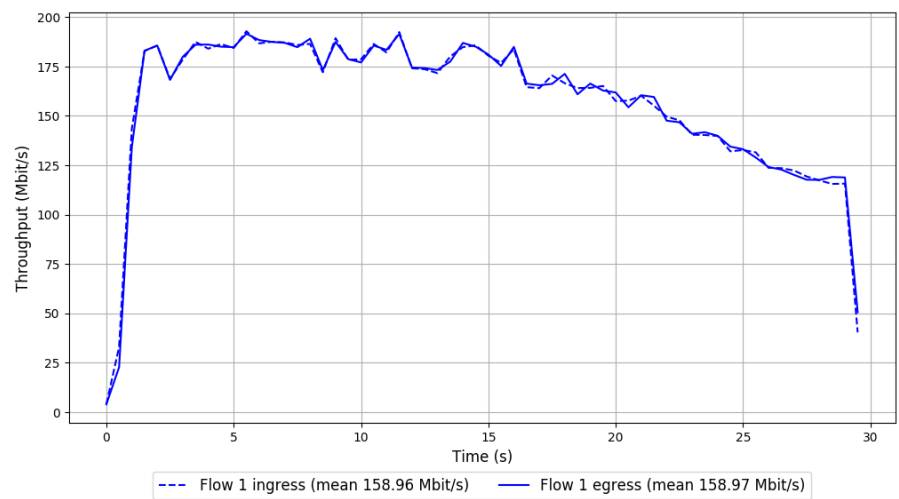


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-21 04:24:09
End at: 2017-11-21 04:24:39

# Below is generated by plot.py at 2017-11-21 07:45:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 158.97 Mbit/s
95th percentile per-packet one-way delay: 50.309 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 158.97 Mbit/s
95th percentile per-packet one-way delay: 50.309 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

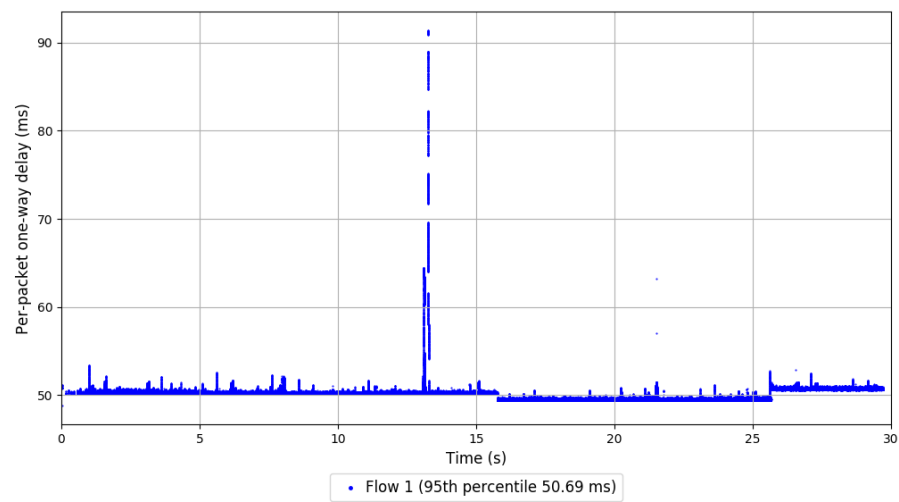
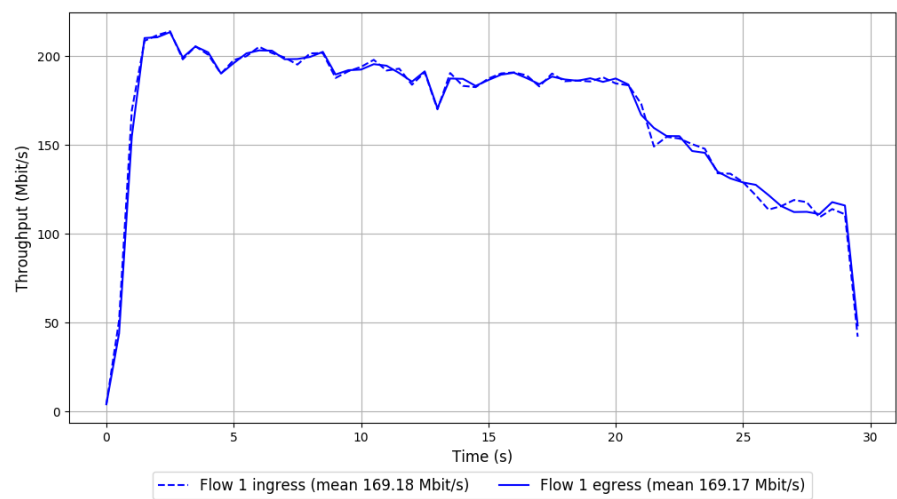


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-21 04:34:28
End at: 2017-11-21 04:34:59

# Below is generated by plot.py at 2017-11-21 07:45:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.17 Mbit/s
95th percentile per-packet one-way delay: 50.690 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 169.17 Mbit/s
95th percentile per-packet one-way delay: 50.690 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

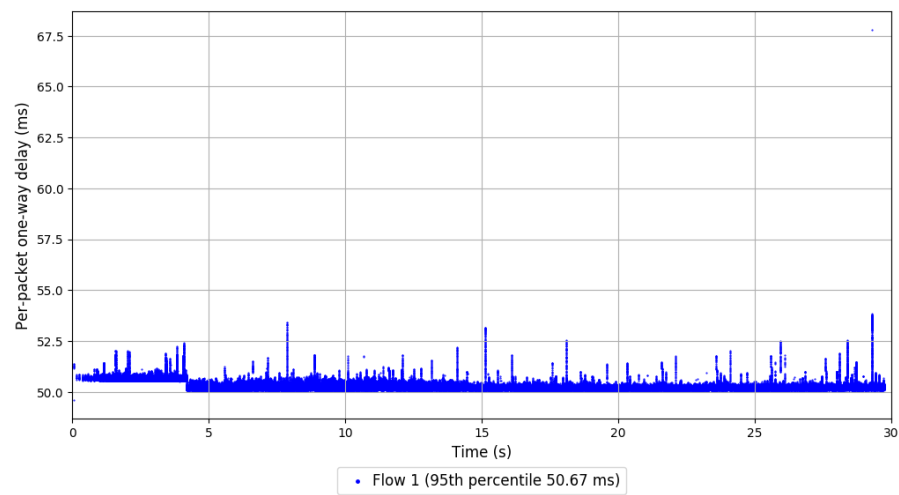
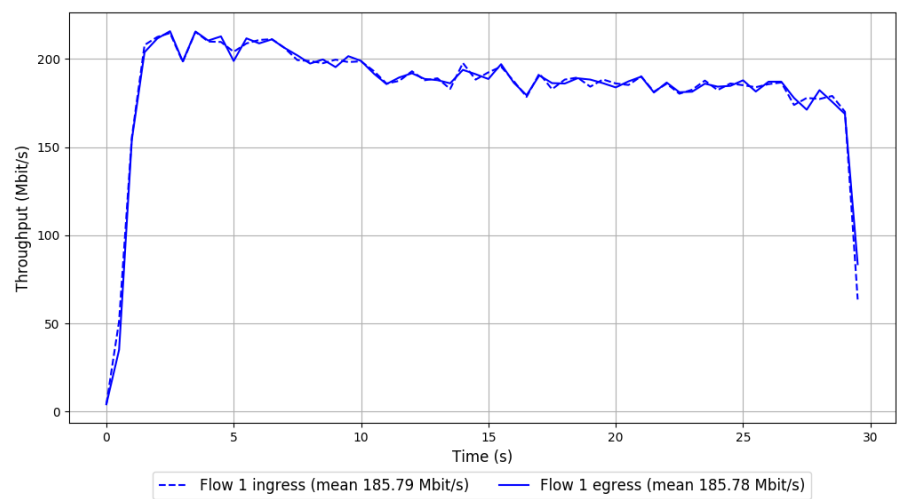


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-21 04:44:50
End at: 2017-11-21 04:45:20

# Below is generated by plot.py at 2017-11-21 07:46:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.78 Mbit/s
95th percentile per-packet one-way delay: 50.672 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.78 Mbit/s
95th percentile per-packet one-way delay: 50.672 ms
Loss rate: 0.00%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-21 04:55:12

End at: 2017-11-21 04:55:42

Below is generated by plot.py at 2017-11-21 07:46:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 142.95 Mbit/s

95th percentile per-packet one-way delay: 51.072 ms

Loss rate: 0.18%

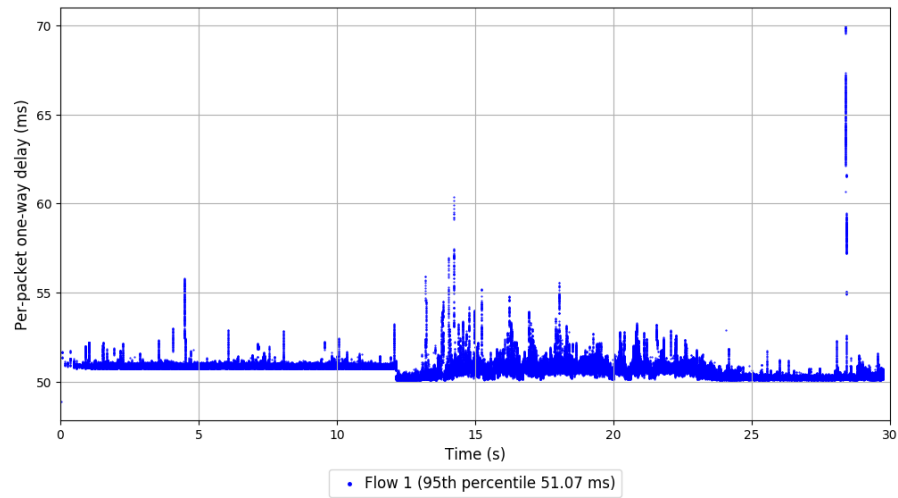
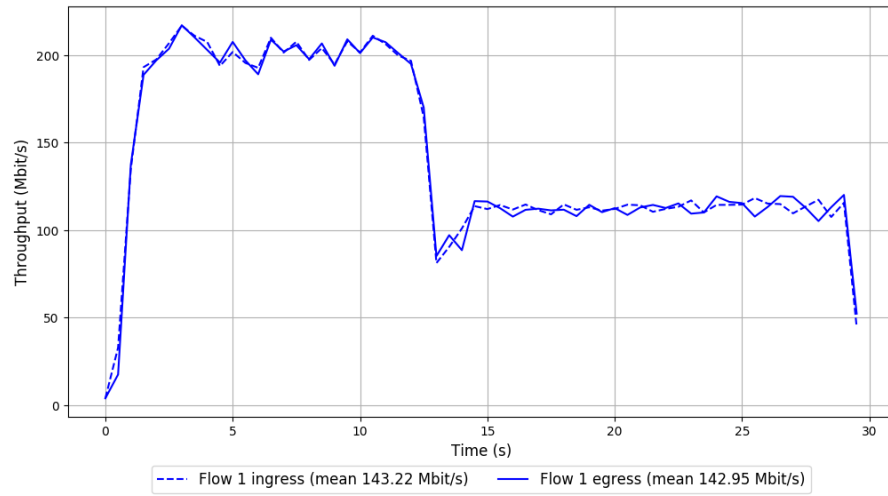
-- Flow 1:

Average throughput: 142.95 Mbit/s

95th percentile per-packet one-way delay: 51.072 ms

Loss rate: 0.18%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-21 05:05:36

End at: 2017-11-21 05:06:06

Below is generated by plot.py at 2017-11-21 07:46:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.45 Mbit/s

95th percentile per-packet one-way delay: 50.990 ms

Loss rate: 0.17%

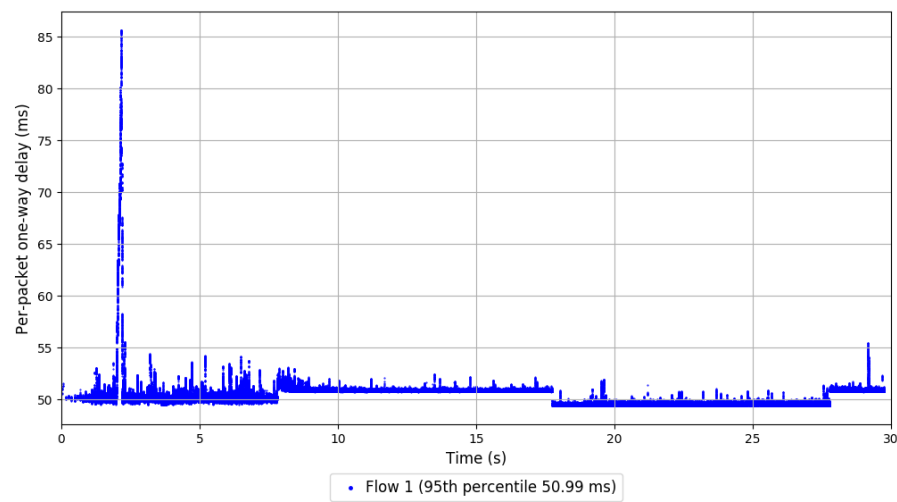
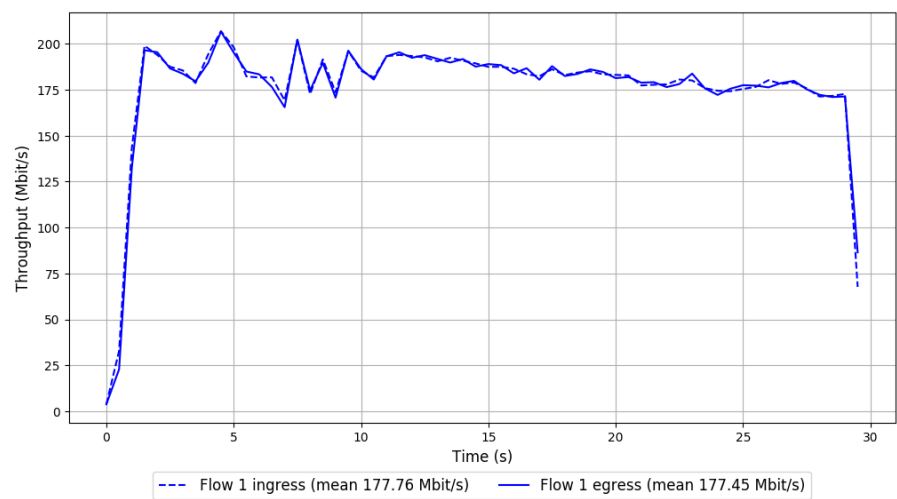
-- Flow 1:

Average throughput: 177.45 Mbit/s

95th percentile per-packet one-way delay: 50.990 ms

Loss rate: 0.17%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-21 05:15:54

End at: 2017-11-21 05:16:24

Below is generated by plot.py at 2017-11-21 07:46:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.14 Mbit/s

95th percentile per-packet one-way delay: 51.012 ms

Loss rate: 0.00%

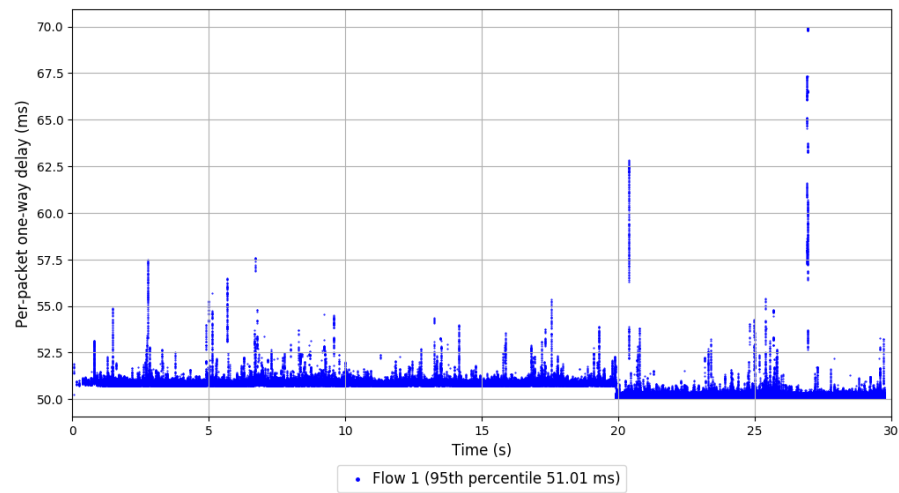
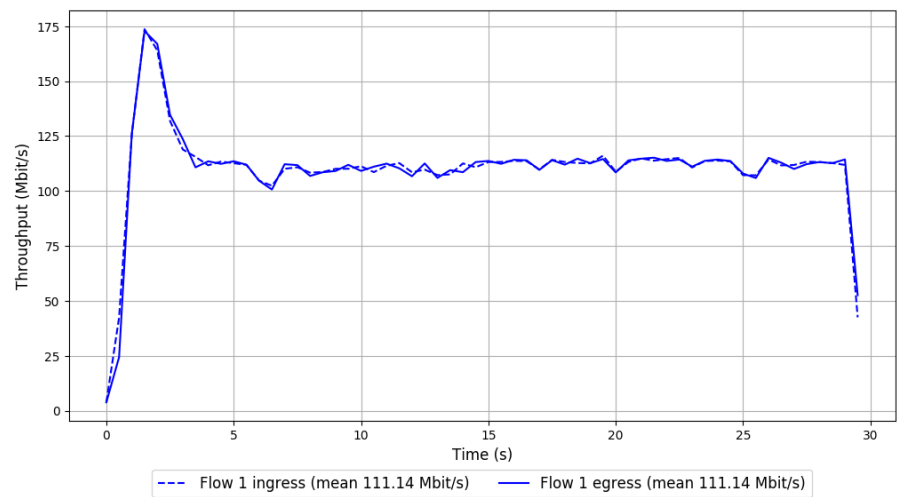
-- Flow 1:

Average throughput: 111.14 Mbit/s

95th percentile per-packet one-way delay: 51.012 ms

Loss rate: 0.00%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-21 05:25:54

End at: 2017-11-21 05:26:24

Below is generated by plot.py at 2017-11-21 07:47:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.27 Mbit/s

95th percentile per-packet one-way delay: 50.184 ms

Loss rate: 0.00%

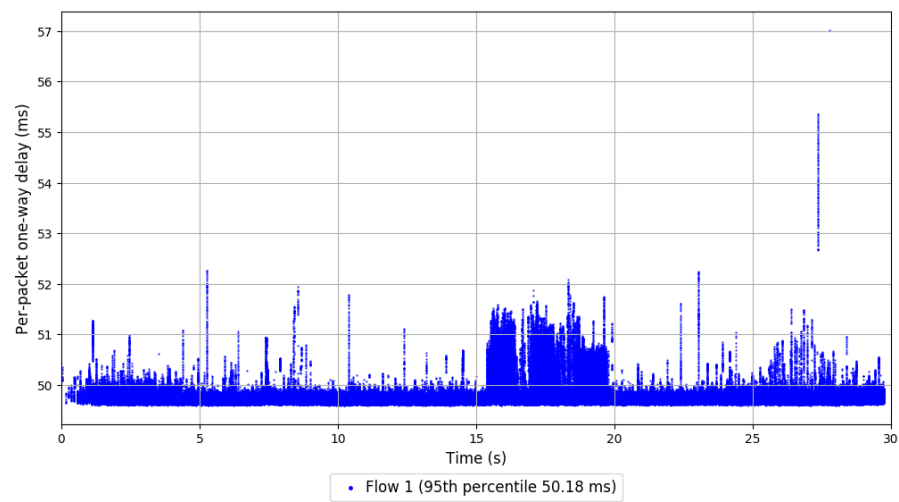
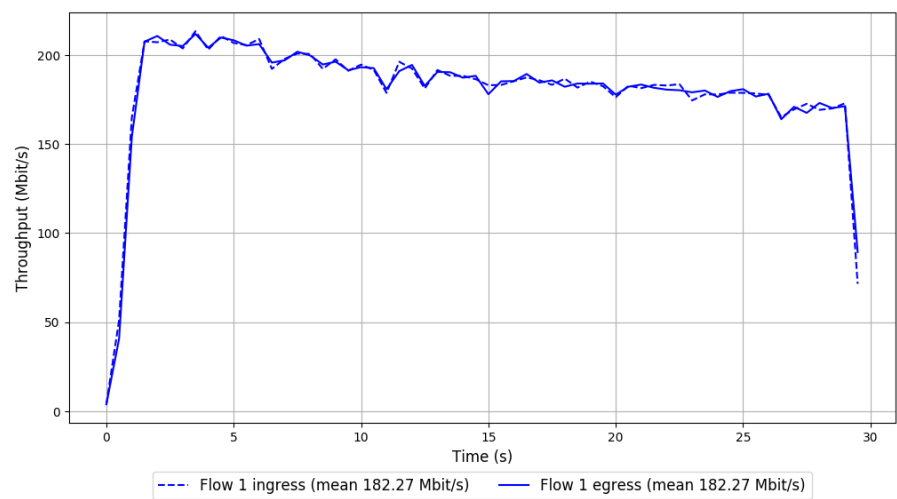
-- Flow 1:

Average throughput: 182.27 Mbit/s

95th percentile per-packet one-way delay: 50.184 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-21 05:36:19

End at: 2017-11-21 05:36:49

Below is generated by plot.py at 2017-11-21 07:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.95 Mbit/s

95th percentile per-packet one-way delay: 50.564 ms

Loss rate: 0.00%

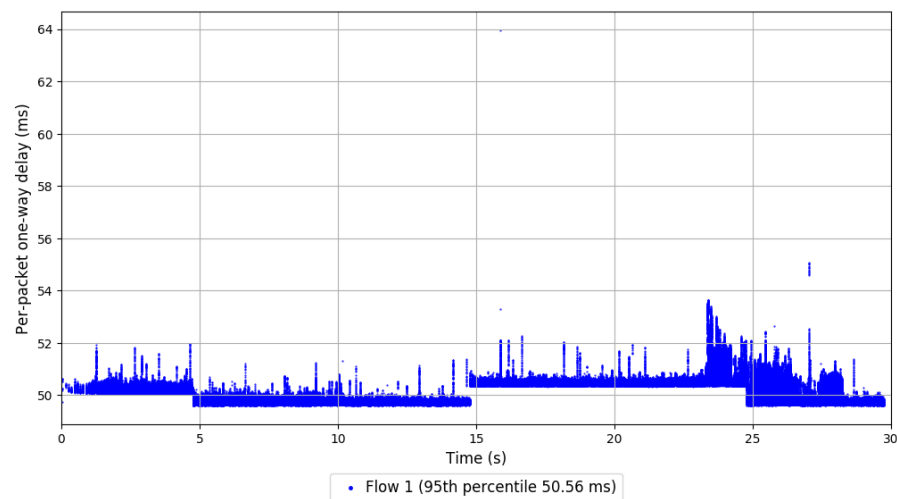
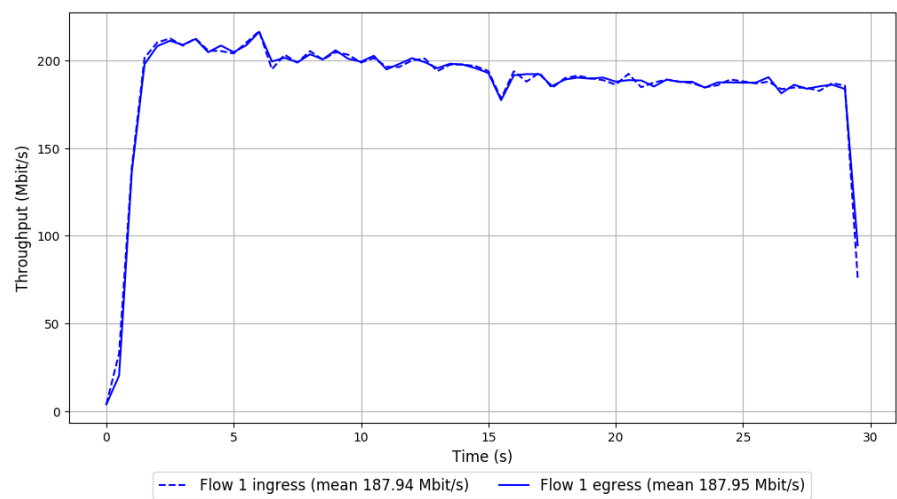
-- Flow 1:

Average throughput: 187.95 Mbit/s

95th percentile per-packet one-way delay: 50.564 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-21 05:46:48

End at: 2017-11-21 05:47:18

Below is generated by plot.py at 2017-11-21 07:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.95 Mbit/s

95th percentile per-packet one-way delay: 51.787 ms

Loss rate: 0.46%

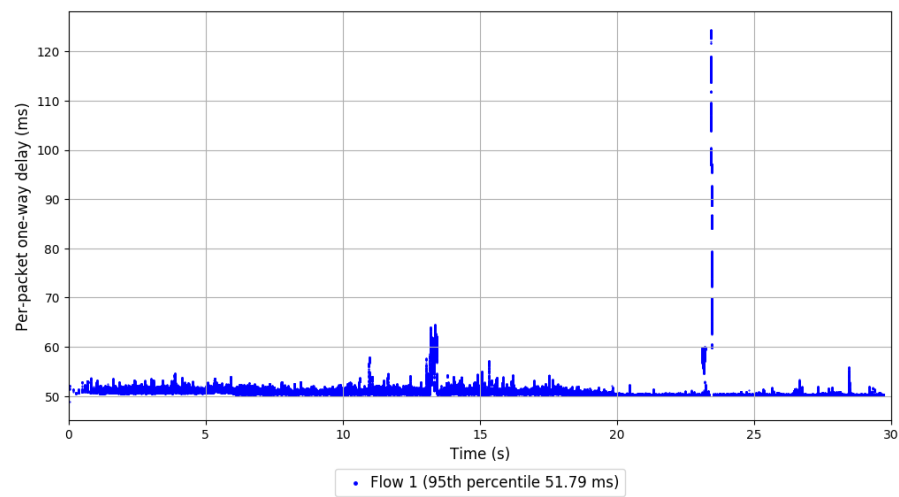
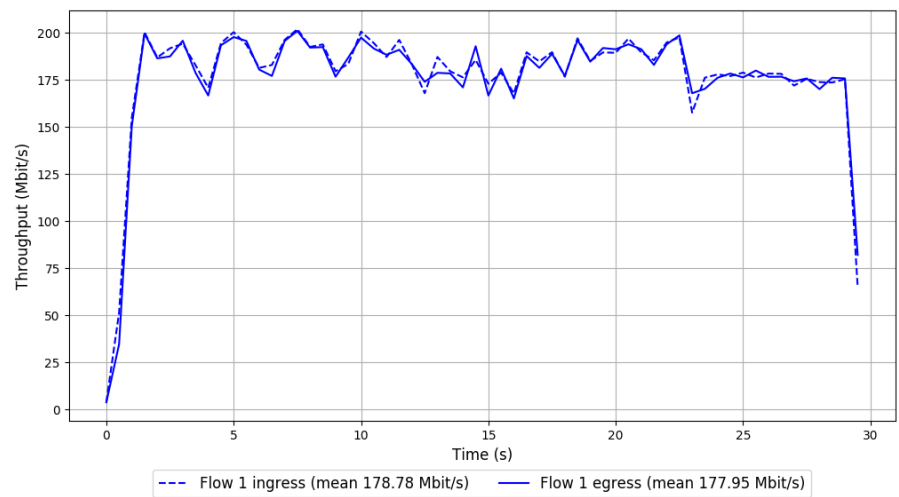
-- Flow 1:

Average throughput: 177.95 Mbit/s

95th percentile per-packet one-way delay: 51.787 ms

Loss rate: 0.46%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-21 05:57:12

End at: 2017-11-21 05:57:42

Below is generated by plot.py at 2017-11-21 07:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.92 Mbit/s

95th percentile per-packet one-way delay: 51.060 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 116.92 Mbit/s

95th percentile per-packet one-way delay: 51.060 ms

Loss rate: 0.02%

Run 10: Report of Indigo-calib — Data Link

