

Pantheon Report

Generated at 2018-01-09 06:34:41 (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.

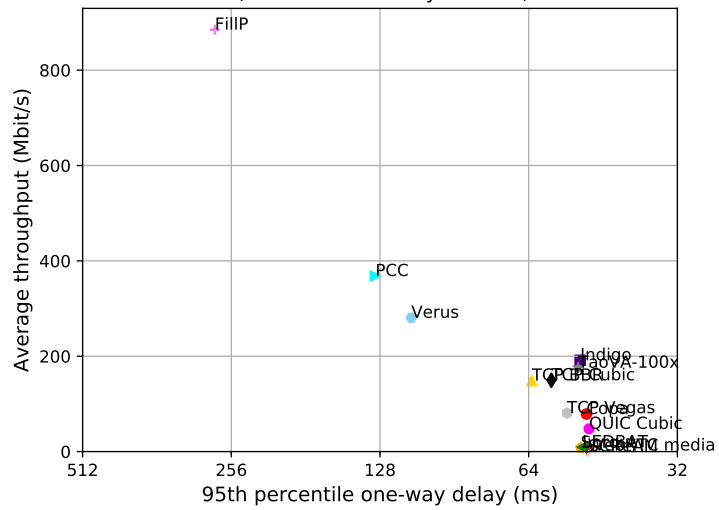
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

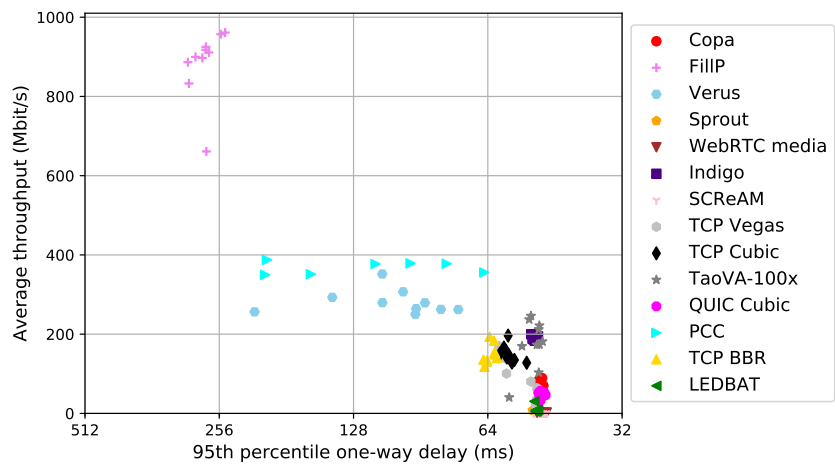
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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	148.99	63.07	0.14
TCP Cubic	10	149.58	57.57	0.18
LEDBAT	10	9.28	49.86	0.68
PCC	7	368.28	130.78	0.18
QUIC Cubic	10	47.72	48.32	0.00
SCReAM	10	0.22	48.48	0.01
WebRTC media	10	2.28	48.61	0.00
Sprout	10	7.91	50.23	0.23
TaoVA-100x	10	175.89	50.83	0.02
TCP Vegas	10	80.63	53.52	0.45
Verus	10	280.64	110.62	1.11
Copa	9	78.77	48.89	0.02
FillP	10	884.98	276.39	5.56
Indigo	10	191.51	50.35	0.10

Run 1: Statistics of TCP BBR

Start at: 2018-01-09 02:46:35

End at: 2018-01-09 02:47:05

Below is generated by plot.py at 2018-01-09 05:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.49 Mbit/s

95th percentile per-packet one-way delay: 63.403 ms

Loss rate: 0.07%

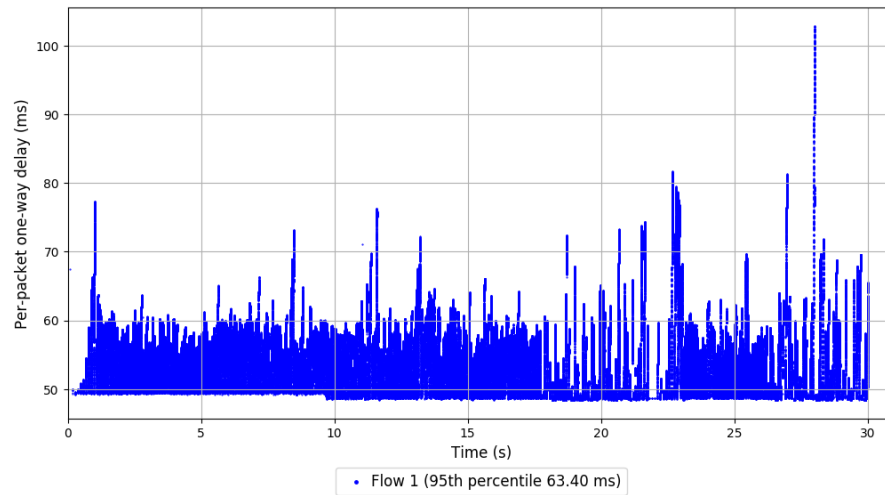
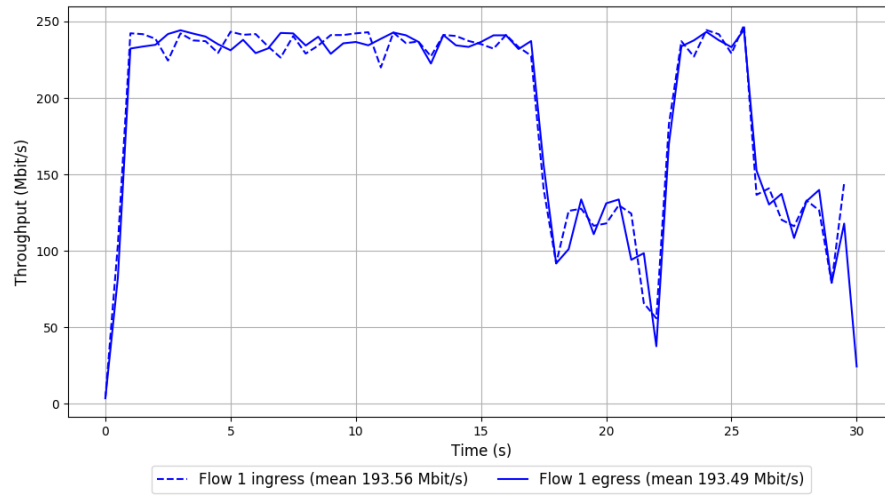
-- Flow 1:

Average throughput: 193.49 Mbit/s

95th percentile per-packet one-way delay: 63.403 ms

Loss rate: 0.07%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-09 02:58:17

End at: 2018-01-09 02:58:47

Below is generated by plot.py at 2018-01-09 05:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.58 Mbit/s

95th percentile per-packet one-way delay: 65.068 ms

Loss rate: 0.54%

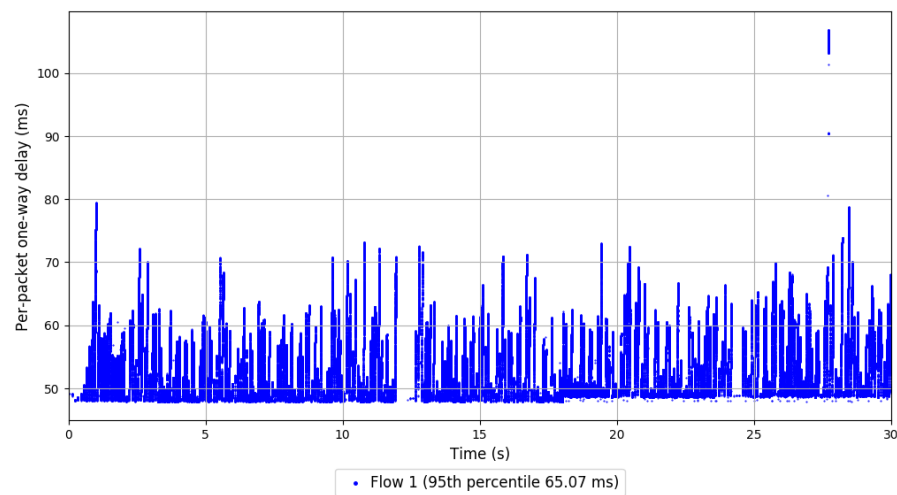
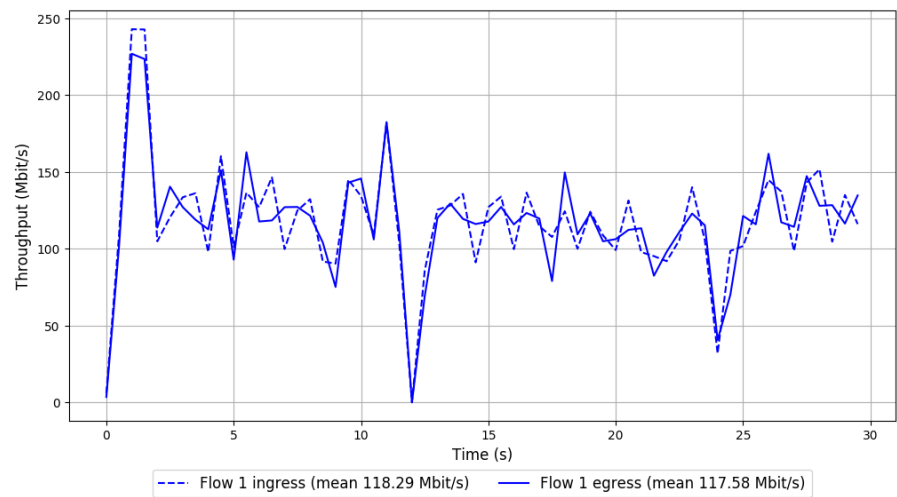
-- Flow 1:

Average throughput: 117.58 Mbit/s

95th percentile per-packet one-way delay: 65.068 ms

Loss rate: 0.54%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-09 03:09:53

End at: 2018-01-09 03:10:23

Below is generated by plot.py at 2018-01-09 05:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.17 Mbit/s

95th percentile per-packet one-way delay: 61.564 ms

Loss rate: 0.23%

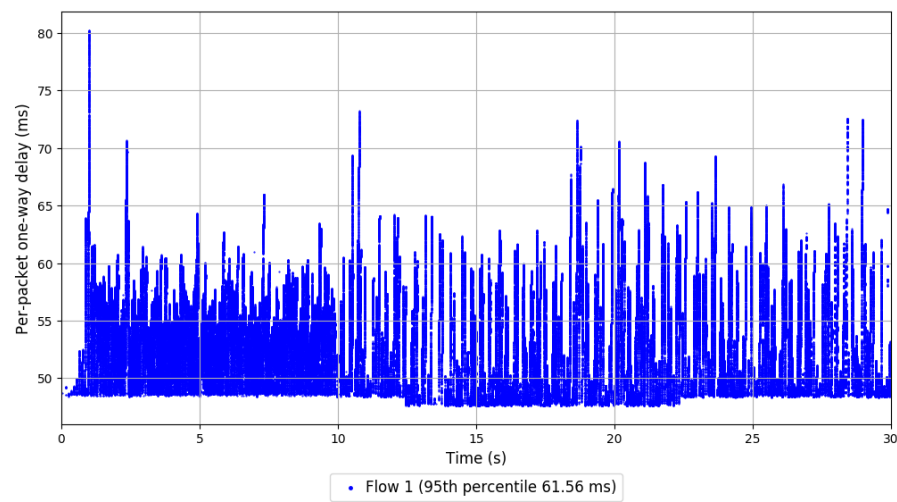
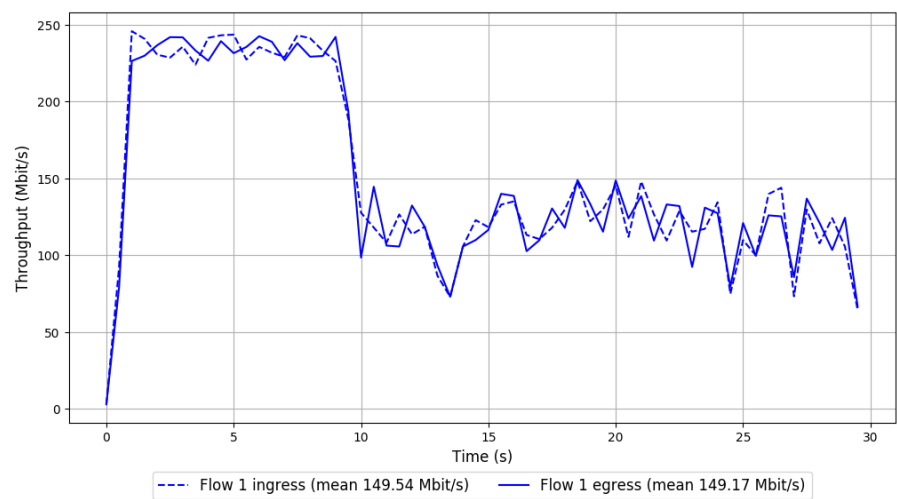
-- Flow 1:

Average throughput: 149.17 Mbit/s

95th percentile per-packet one-way delay: 61.564 ms

Loss rate: 0.23%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-09 03:21:26

End at: 2018-01-09 03:21:56

Below is generated by plot.py at 2018-01-09 05:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 133.65 Mbit/s

95th percentile per-packet one-way delay: 64.232 ms

Loss rate: 0.01%

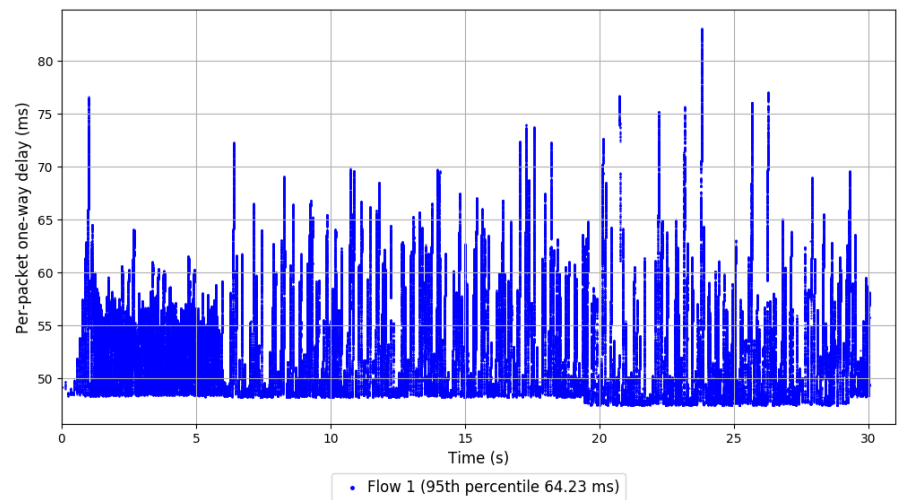
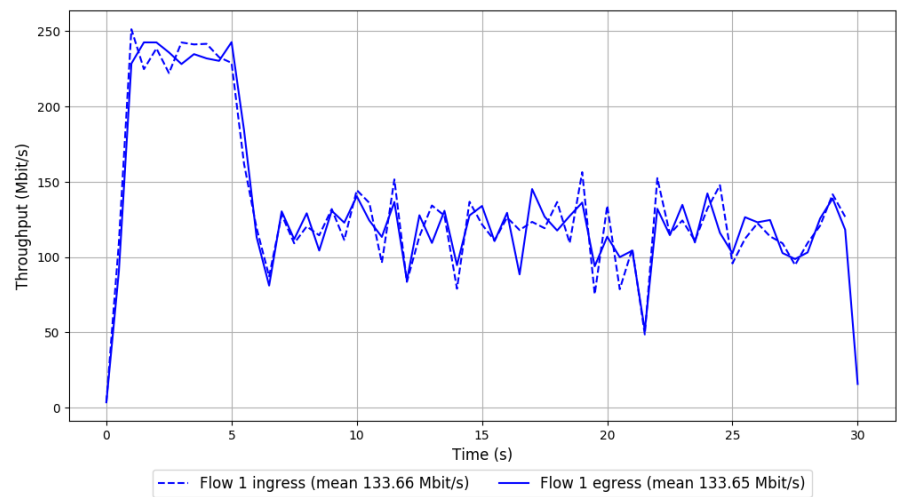
-- Flow 1:

Average throughput: 133.65 Mbit/s

95th percentile per-packet one-way delay: 64.232 ms

Loss rate: 0.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-09 03:33:00

End at: 2018-01-09 03:33:30

Below is generated by plot.py at 2018-01-09 05:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.15 Mbit/s

95th percentile per-packet one-way delay: 61.824 ms

Loss rate: 0.00%

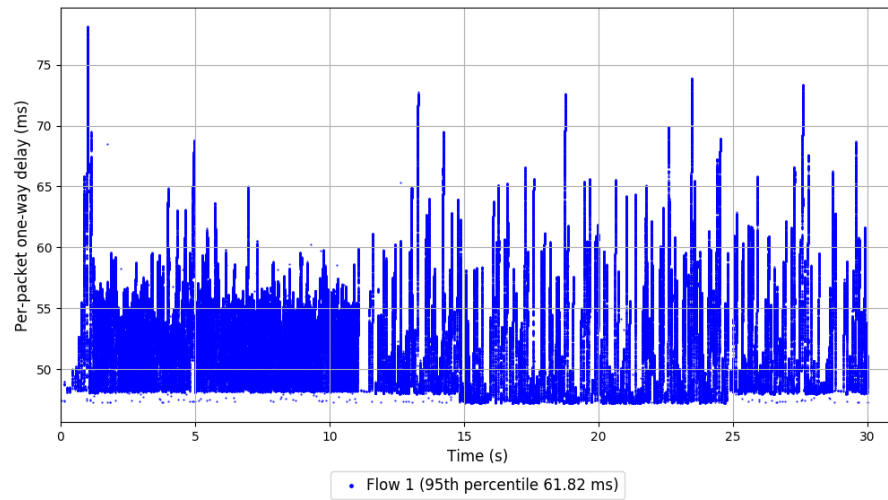
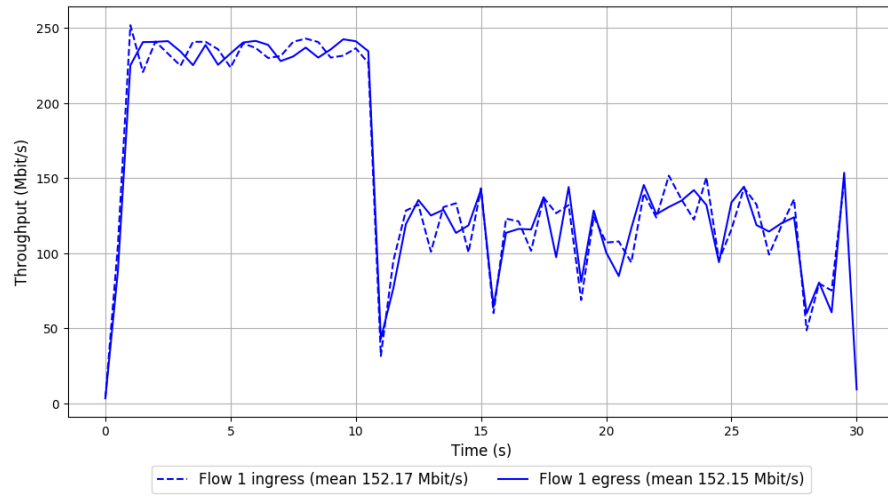
-- Flow 1:

Average throughput: 152.15 Mbit/s

95th percentile per-packet one-way delay: 61.824 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-09 03:44:27

End at: 2018-01-09 03:44:57

Below is generated by plot.py at 2018-01-09 05:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.36 Mbit/s

95th percentile per-packet one-way delay: 61.940 ms

Loss rate: 0.08%

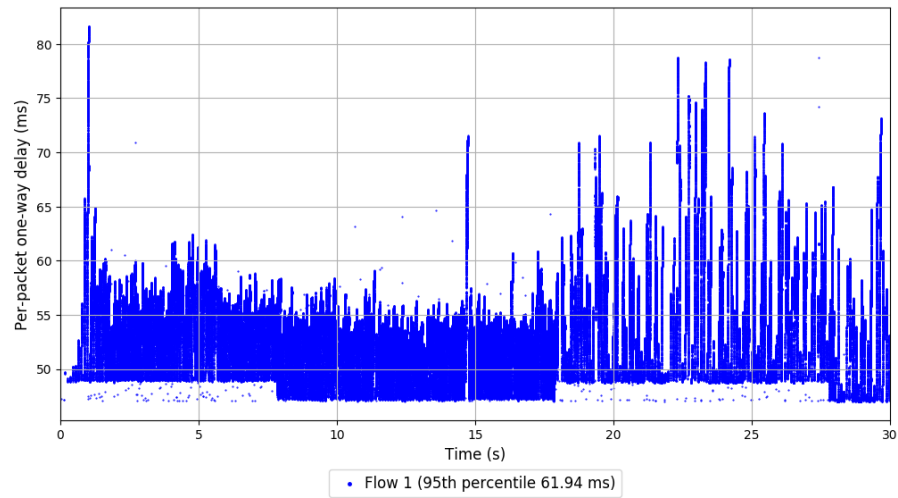
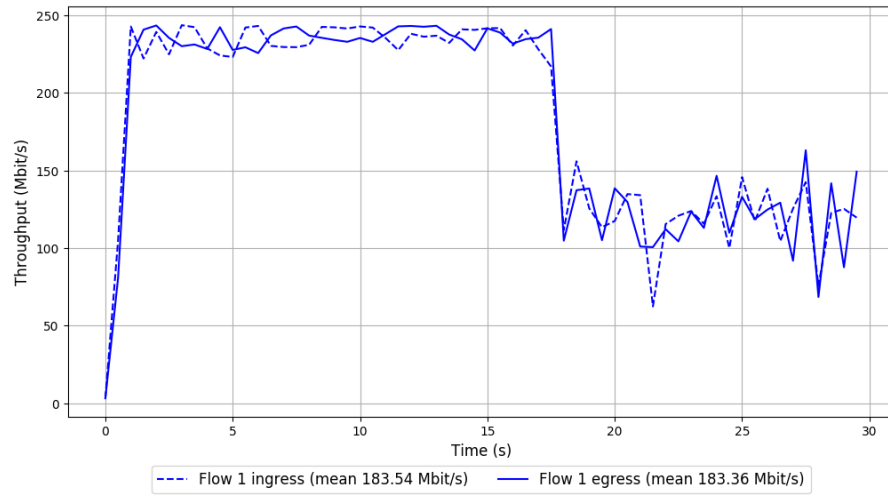
-- Flow 1:

Average throughput: 183.36 Mbit/s

95th percentile per-packet one-way delay: 61.940 ms

Loss rate: 0.08%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-09 03:55:42

End at: 2018-01-09 03:56:12

Below is generated by plot.py at 2018-01-09 05:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.60 Mbit/s

95th percentile per-packet one-way delay: 61.752 ms

Loss rate: 0.00%

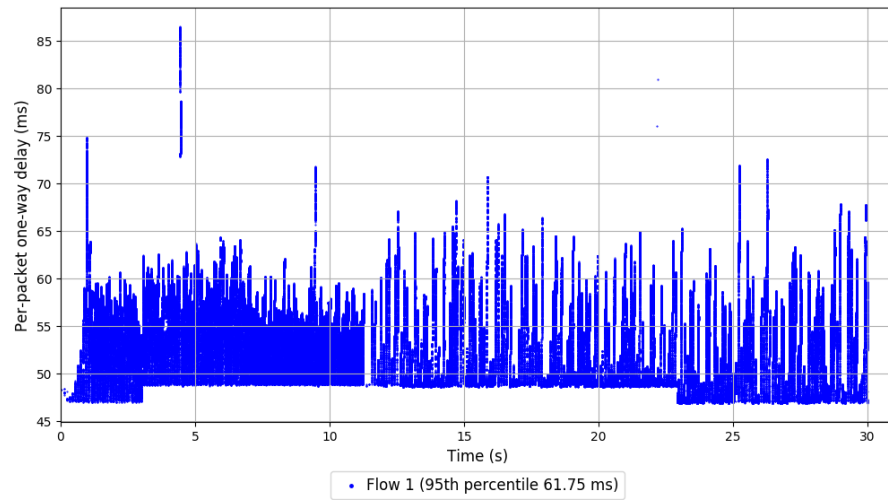
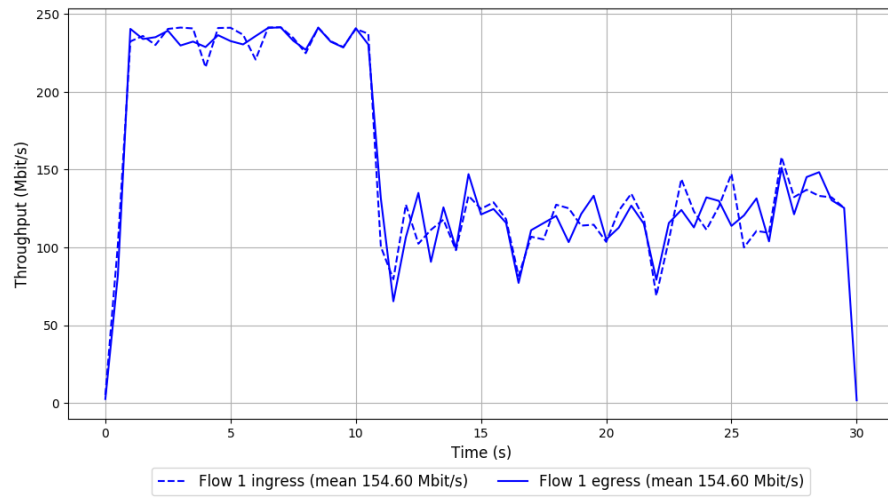
-- Flow 1:

Average throughput: 154.60 Mbit/s

95th percentile per-packet one-way delay: 61.752 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-09 04:06:39

End at: 2018-01-09 04:07:09

Below is generated by plot.py at 2018-01-09 05:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.68 Mbit/s

95th percentile per-packet one-way delay: 64.426 ms

Loss rate: 0.00%

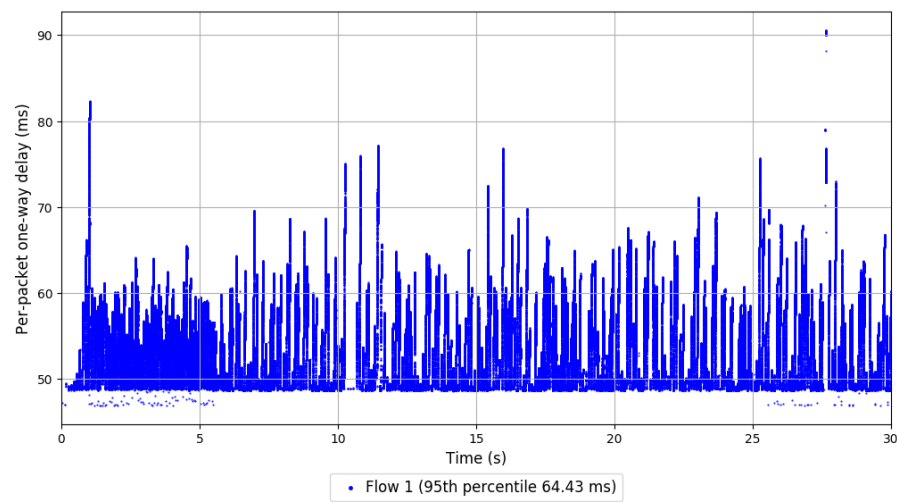
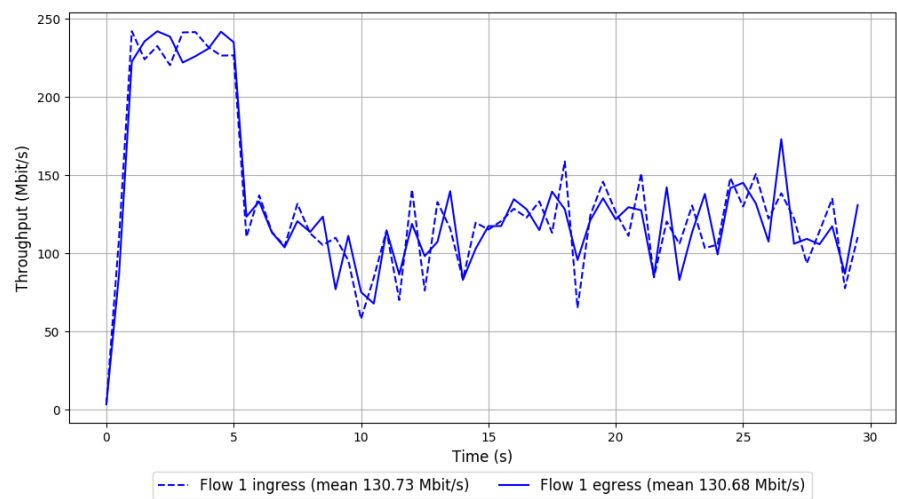
-- Flow 1:

Average throughput: 130.68 Mbit/s

95th percentile per-packet one-way delay: 64.426 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-09 04:18:14

End at: 2018-01-09 04:18:44

Below is generated by plot.py at 2018-01-09 05:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.38 Mbit/s

95th percentile per-packet one-way delay: 65.452 ms

Loss rate: 0.47%

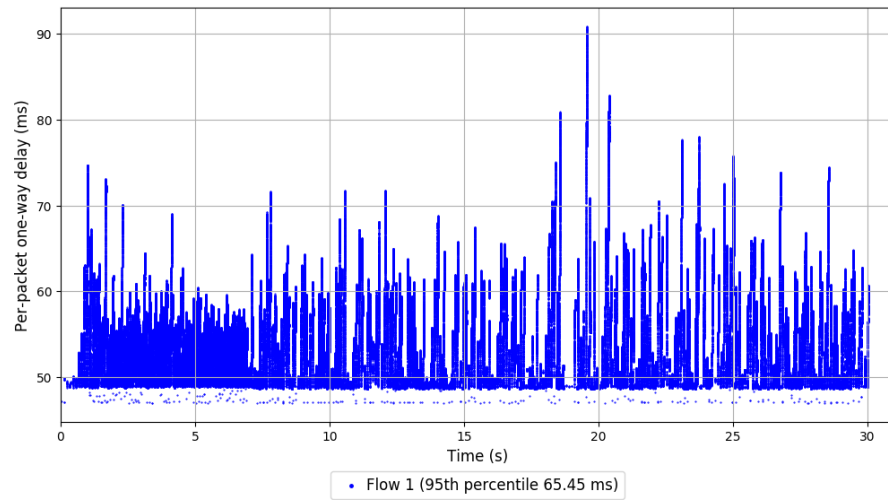
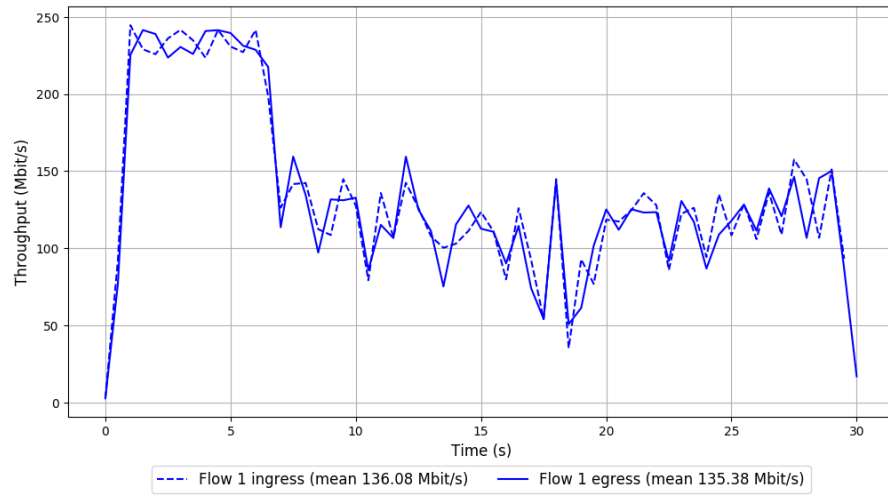
-- Flow 1:

Average throughput: 135.38 Mbit/s

95th percentile per-packet one-way delay: 65.452 ms

Loss rate: 0.47%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-09 04:29:25

End at: 2018-01-09 04:29:55

Below is generated by plot.py at 2018-01-09 05:49:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.80 Mbit/s

95th percentile per-packet one-way delay: 61.062 ms

Loss rate: 0.00%

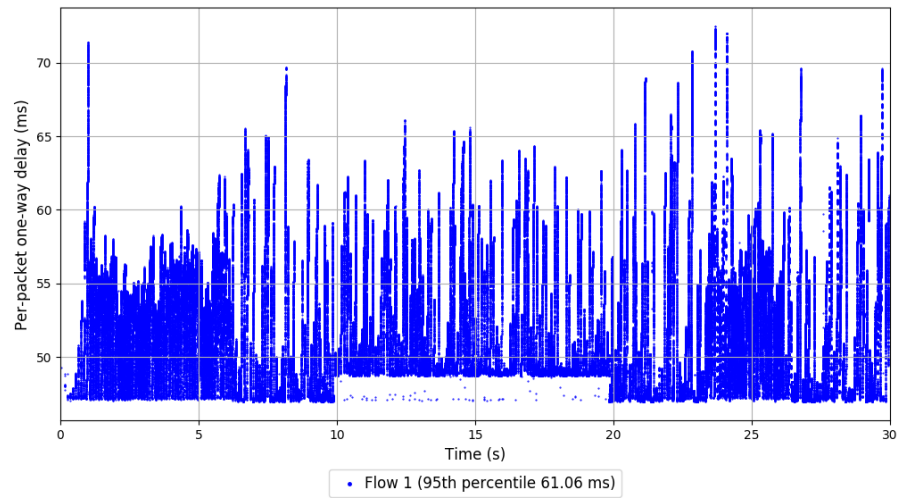
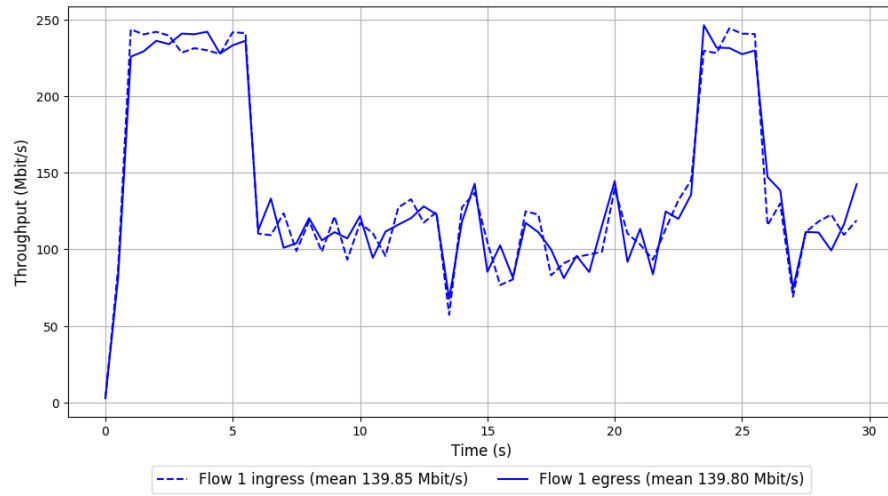
-- Flow 1:

Average throughput: 139.80 Mbit/s

95th percentile per-packet one-way delay: 61.062 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-09 02:45:51

End at: 2018-01-09 02:46:21

Below is generated by plot.py at 2018-01-09 05:49:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.19 Mbit/s

95th percentile per-packet one-way delay: 58.315 ms

Loss rate: 0.29%

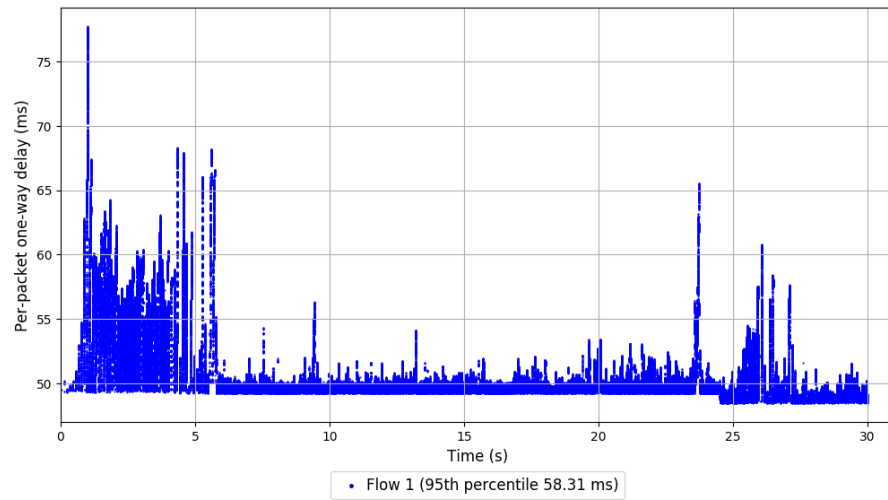
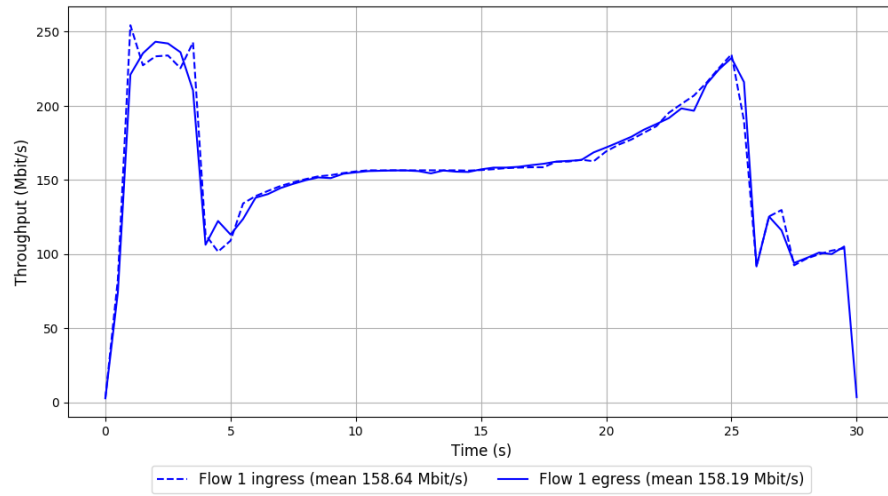
-- Flow 1:

Average throughput: 158.19 Mbit/s

95th percentile per-packet one-way delay: 58.315 ms

Loss rate: 0.29%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-09 02:57:30

End at: 2018-01-09 02:58:01

Below is generated by plot.py at 2018-01-09 05:50:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.32 Mbit/s

95th percentile per-packet one-way delay: 57.620 ms

Loss rate: 0.26%

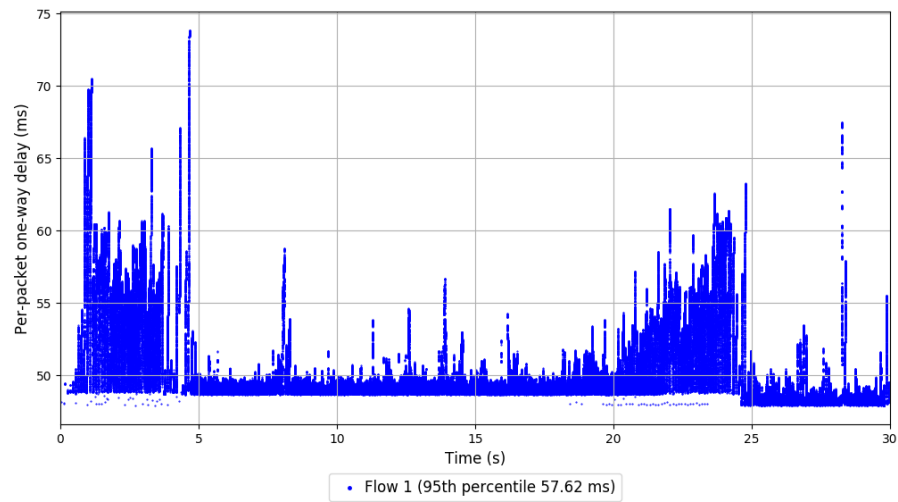
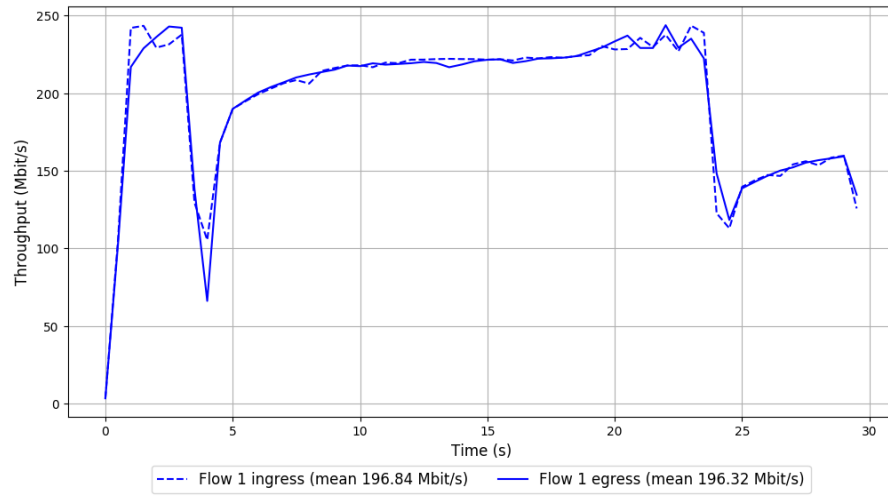
-- Flow 1:

Average throughput: 196.32 Mbit/s

95th percentile per-packet one-way delay: 57.620 ms

Loss rate: 0.26%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-09 03:09:09

End at: 2018-01-09 03:09:39

Below is generated by plot.py at 2018-01-09 05:50:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 134.94 Mbit/s

95th percentile per-packet one-way delay: 55.787 ms

Loss rate: 0.22%

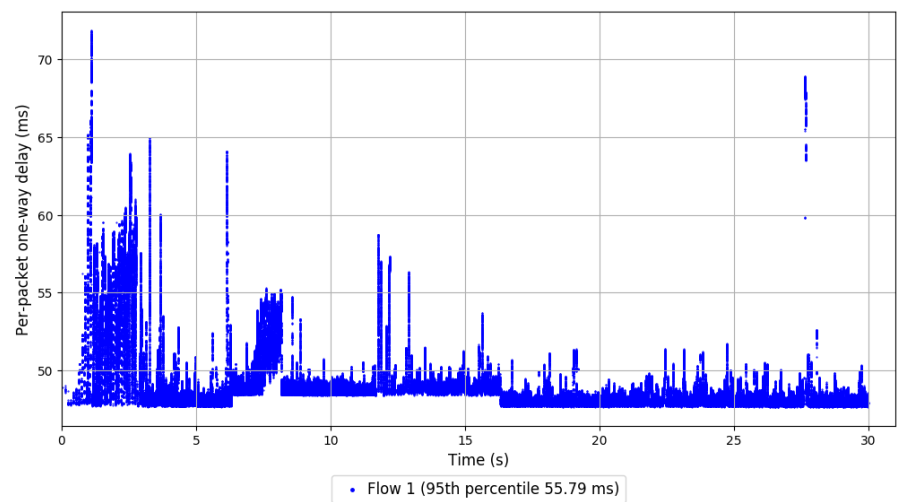
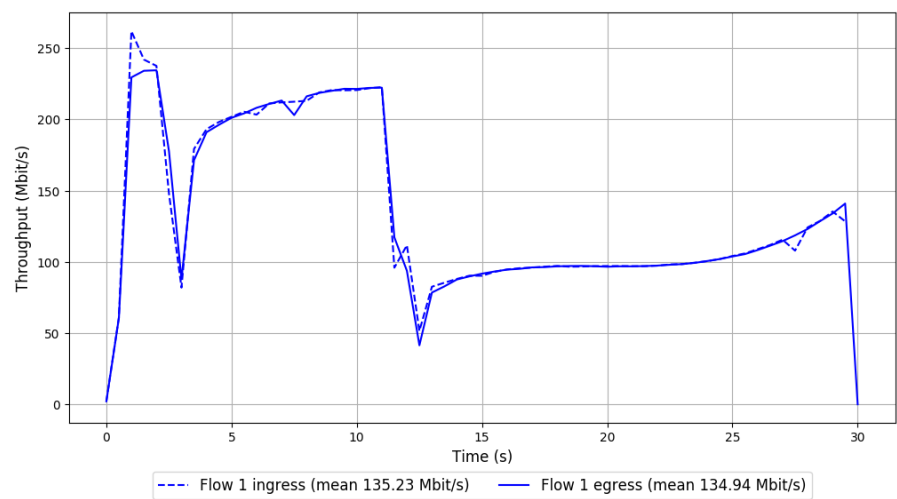
-- Flow 1:

Average throughput: 134.94 Mbit/s

95th percentile per-packet one-way delay: 55.787 ms

Loss rate: 0.22%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-09 03:20:42

End at: 2018-01-09 03:21:12

Below is generated by plot.py at 2018-01-09 05:50:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 144.47 Mbit/s

95th percentile per-packet one-way delay: 60.543 ms

Loss rate: 0.08%

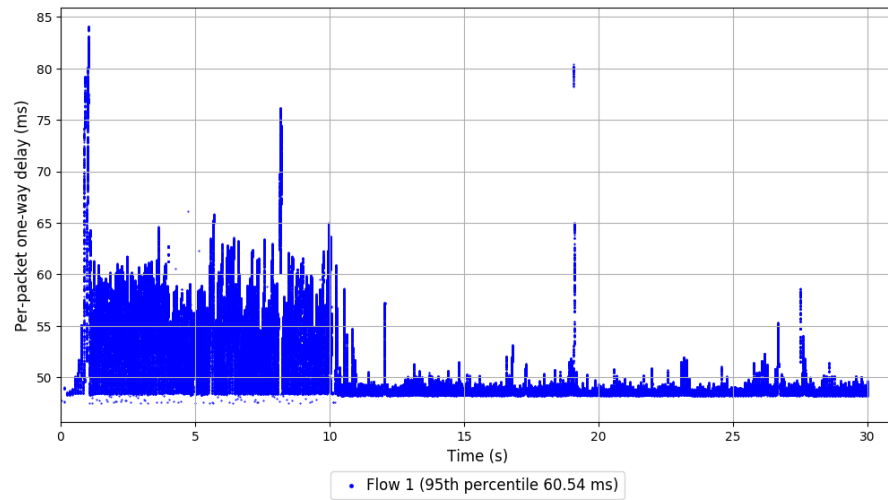
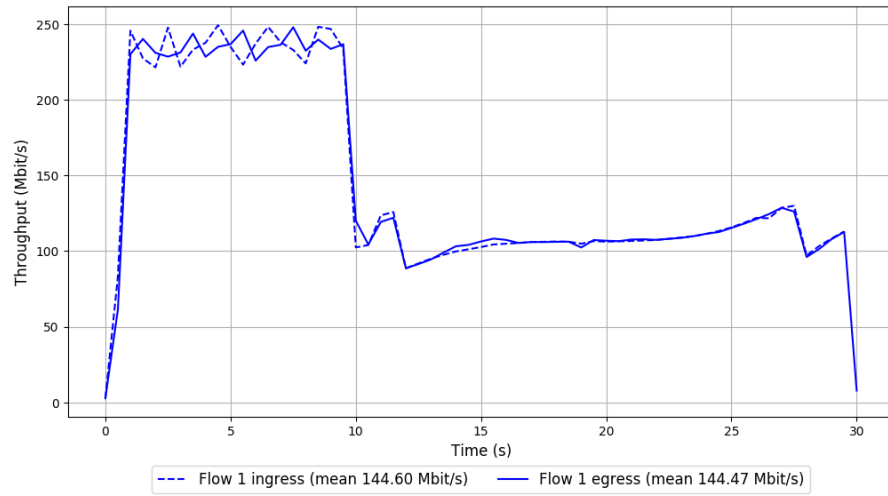
-- Flow 1:

Average throughput: 144.47 Mbit/s

95th percentile per-packet one-way delay: 60.543 ms

Loss rate: 0.08%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-09 03:32:16

End at: 2018-01-09 03:32:46

Below is generated by plot.py at 2018-01-09 05:50:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.99 Mbit/s

95th percentile per-packet one-way delay: 58.003 ms

Loss rate: 0.14%

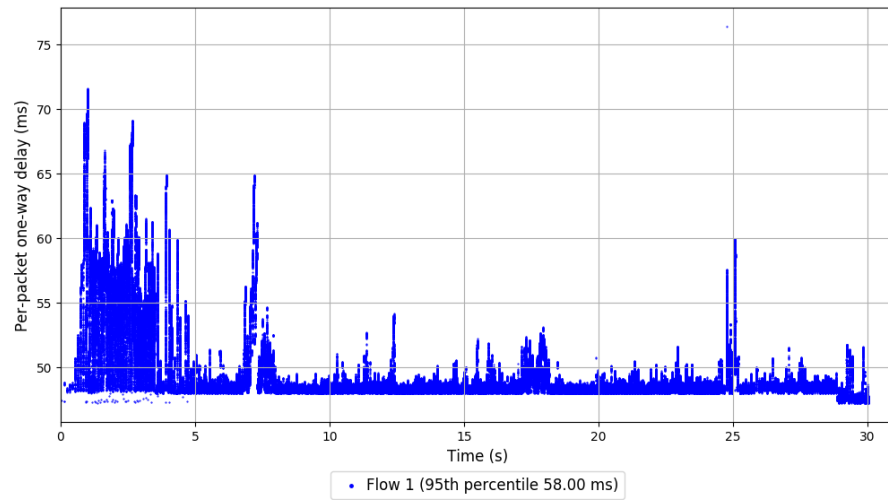
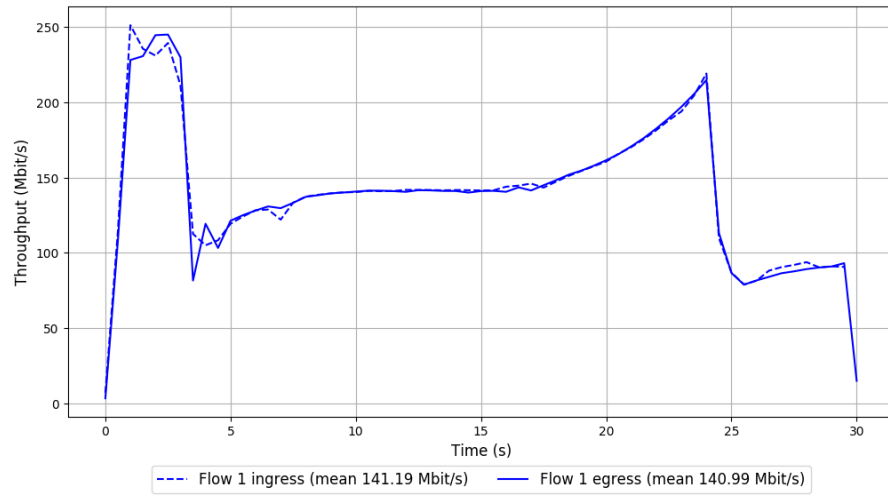
-- Flow 1:

Average throughput: 140.99 Mbit/s

95th percentile per-packet one-way delay: 58.003 ms

Loss rate: 0.14%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-09 03:43:44

End at: 2018-01-09 03:44:14

Below is generated by plot.py at 2018-01-09 05:50:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 127.82 Mbit/s

95th percentile per-packet one-way delay: 52.362 ms

Loss rate: 0.09%

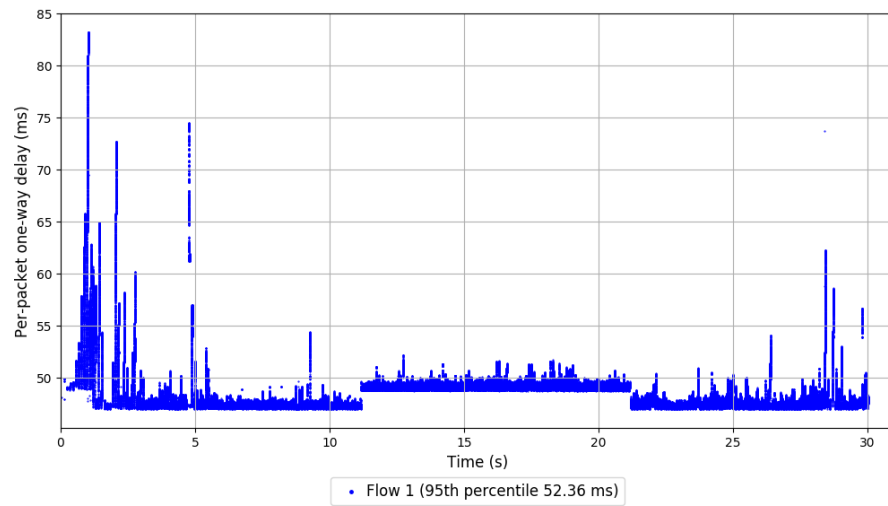
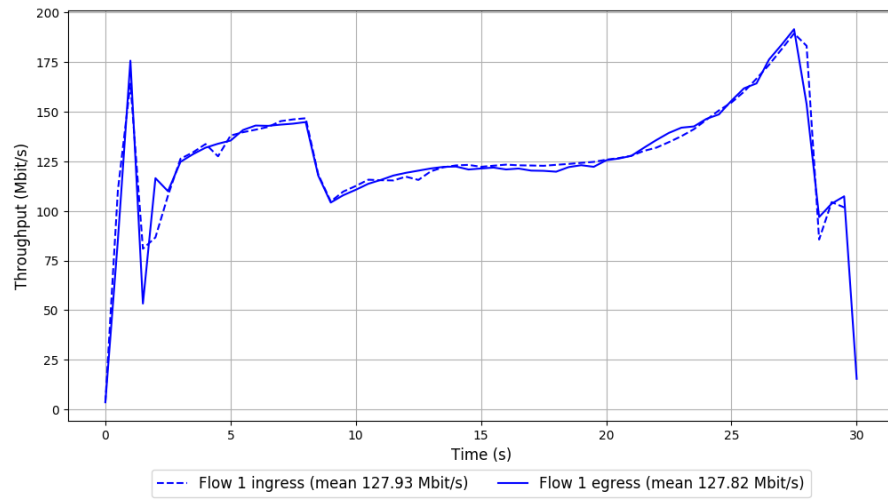
-- Flow 1:

Average throughput: 127.82 Mbit/s

95th percentile per-packet one-way delay: 52.362 ms

Loss rate: 0.09%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-09 03:54:59

End at: 2018-01-09 03:55:29

Below is generated by plot.py at 2018-01-09 05:51:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.17 Mbit/s

95th percentile per-packet one-way delay: 56.514 ms

Loss rate: 0.51%

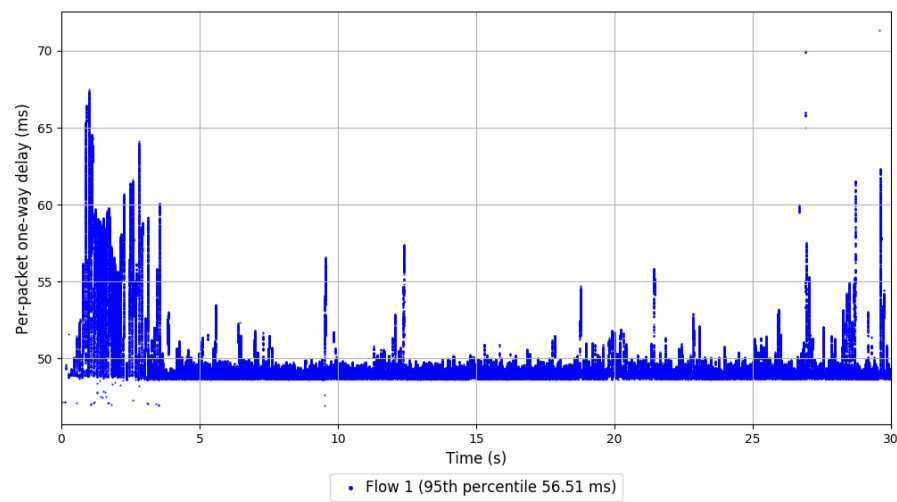
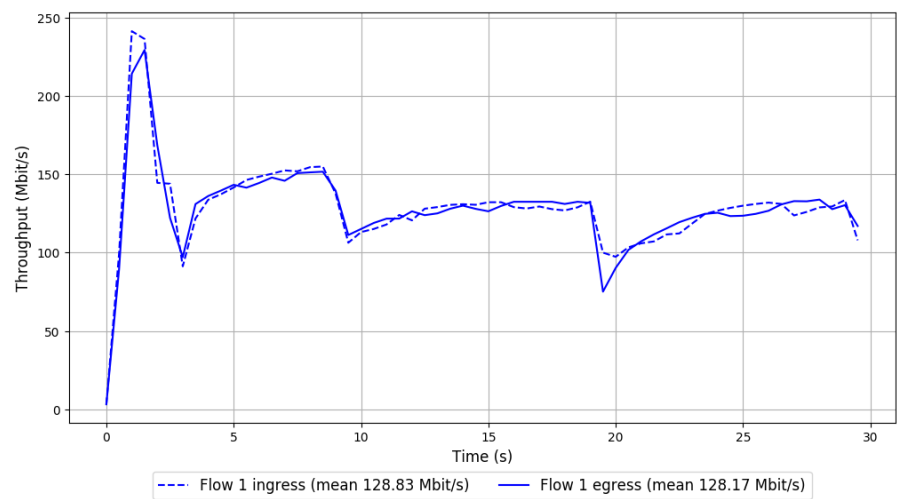
-- Flow 1:

Average throughput: 128.17 Mbit/s

95th percentile per-packet one-way delay: 56.514 ms

Loss rate: 0.51%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-09 04:05:55

End at: 2018-01-09 04:06:25

Below is generated by plot.py at 2018-01-09 05:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.41 Mbit/s

95th percentile per-packet one-way delay: 60.169 ms

Loss rate: 0.04%

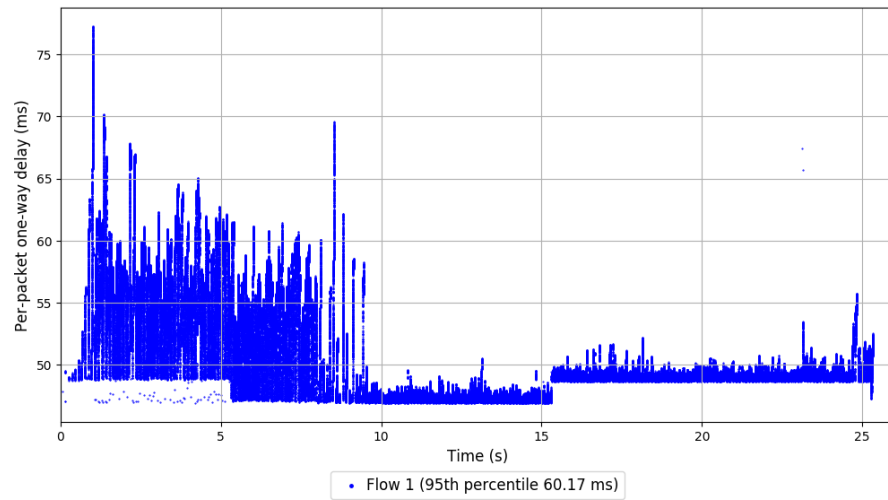
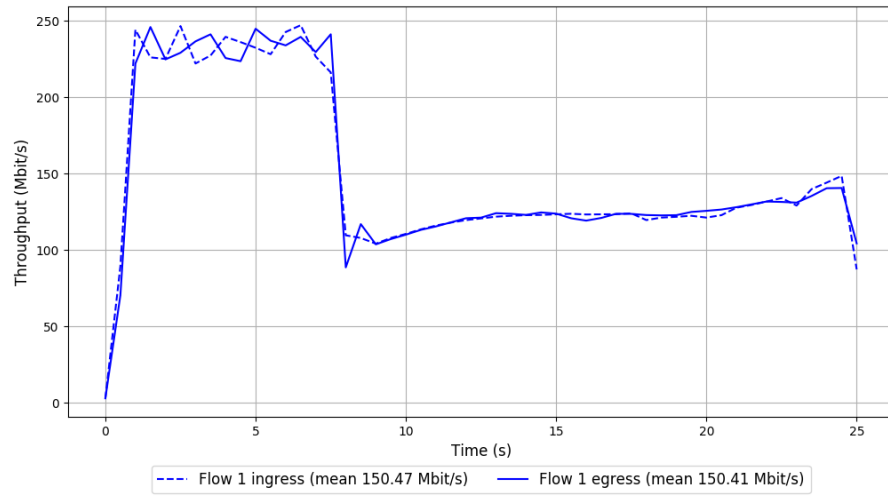
-- Flow 1:

Average throughput: 150.41 Mbit/s

95th percentile per-packet one-way delay: 60.169 ms

Loss rate: 0.04%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-09 04:17:29

End at: 2018-01-09 04:17:59

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.11 Mbit/s

95th percentile per-packet one-way delay: 58.897 ms

Loss rate: 0.00%

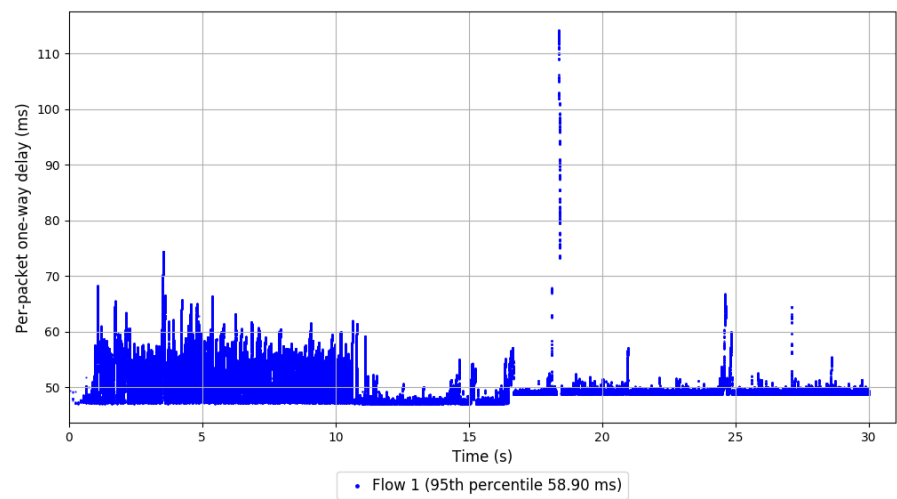
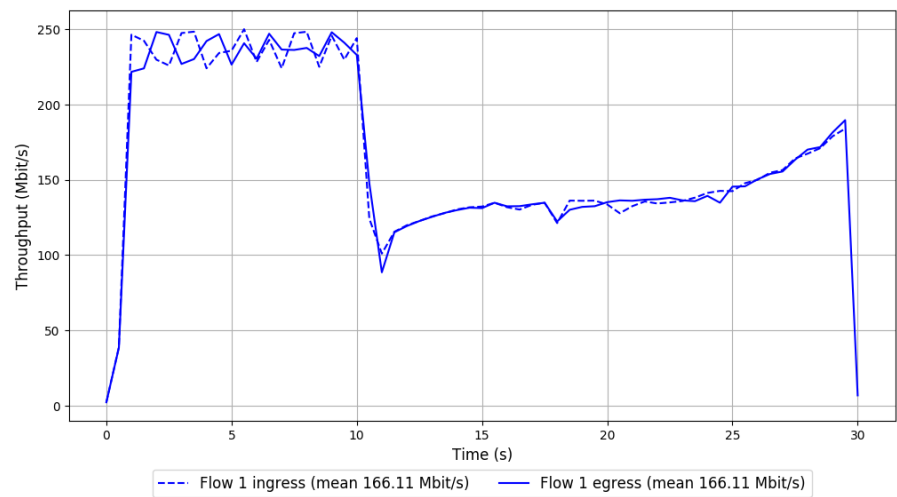
-- Flow 1:

Average throughput: 166.11 Mbit/s

95th percentile per-packet one-way delay: 58.897 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-09 04:28:41

End at: 2018-01-09 04:29:11

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.35 Mbit/s

95th percentile per-packet one-way delay: 57.505 ms

Loss rate: 0.14%

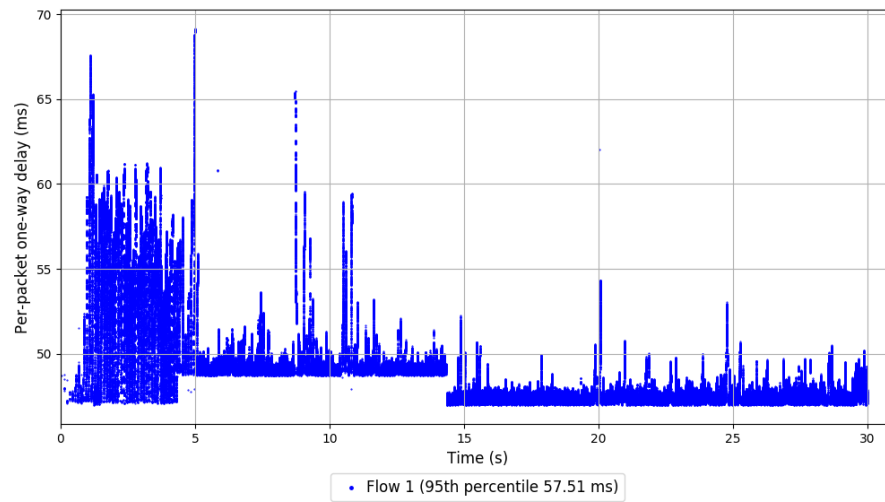
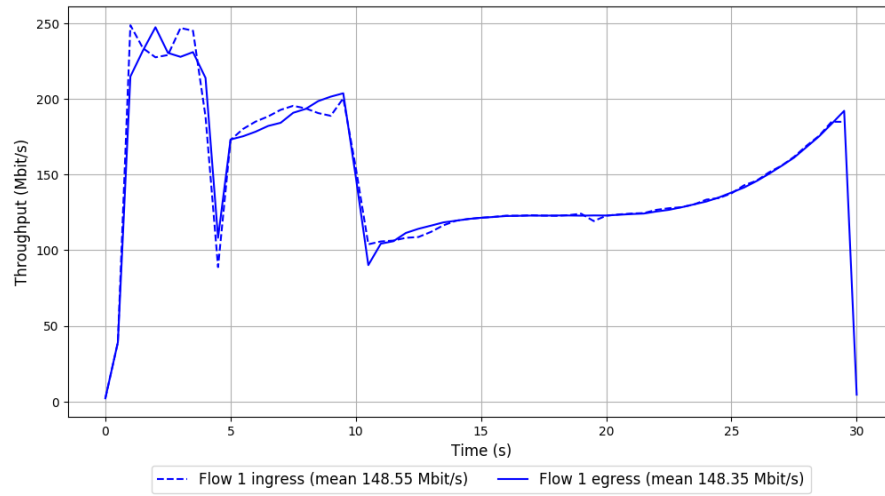
-- Flow 1:

Average throughput: 148.35 Mbit/s

95th percentile per-packet one-way delay: 57.505 ms

Loss rate: 0.14%

Run 10: Report of TCP Cubic — Data Link

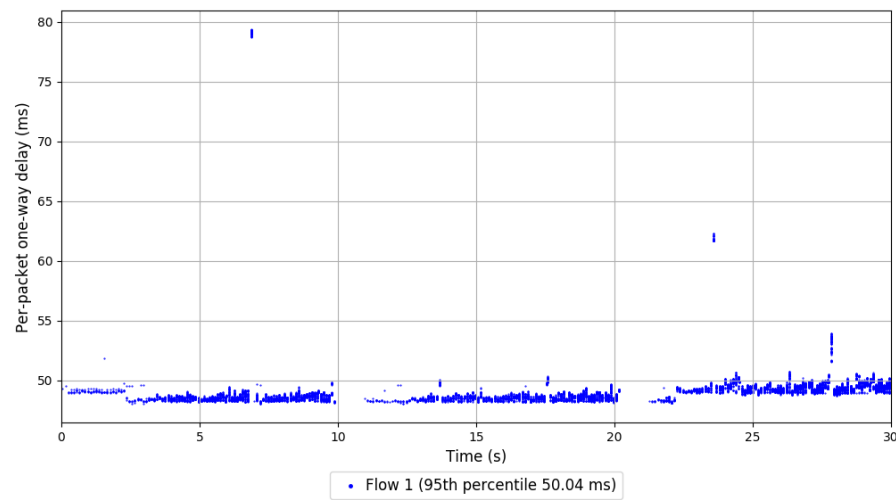
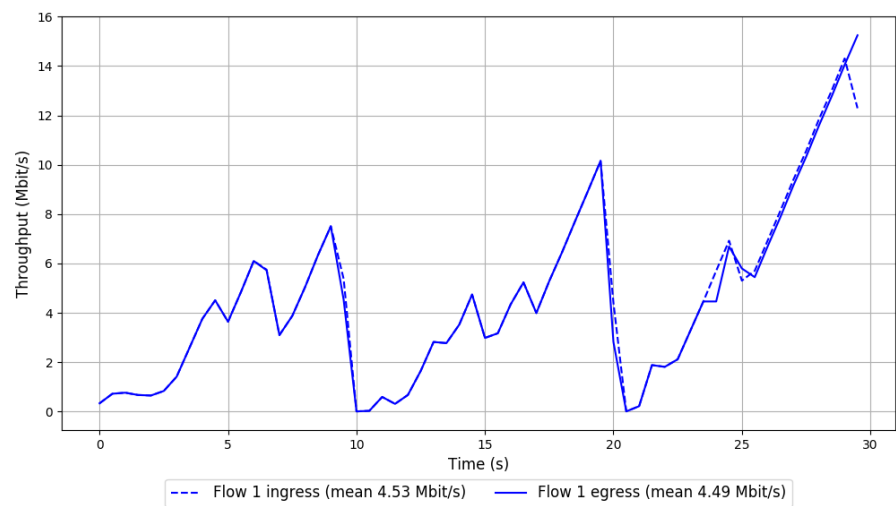


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-09 02:55:53
End at: 2018-01-09 02:56:23

# Below is generated by plot.py at 2018-01-09 05:52:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 50.037 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 50.037 ms
Loss rate: 0.91%
```

Run 1: Report of LEDBAT — Data Link

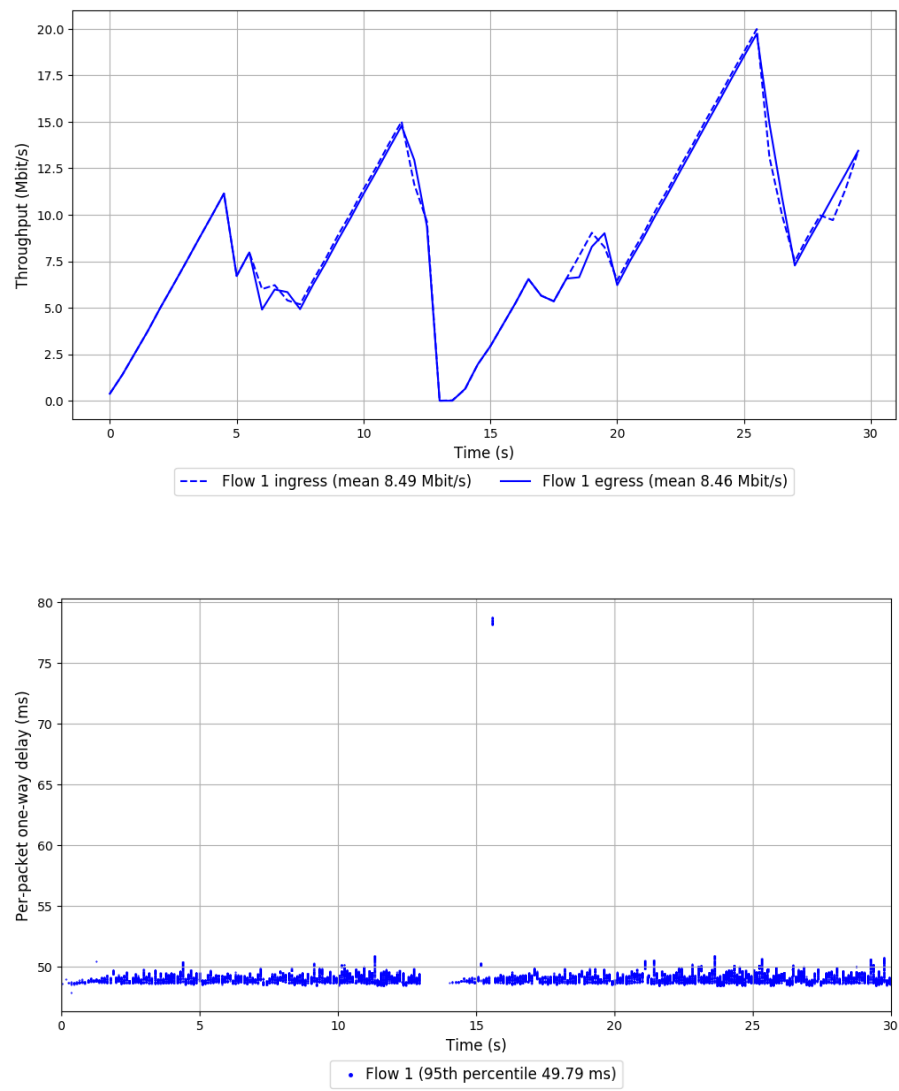


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-09 03:07:38
End at: 2018-01-09 03:08:08

# Below is generated by plot.py at 2018-01-09 05:52:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 49.788 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 49.788 ms
Loss rate: 0.40%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-09 03:19:09

End at: 2018-01-09 03:19:39

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.50 Mbit/s

95th percentile per-packet one-way delay: 50.327 ms

Loss rate: 0.00%

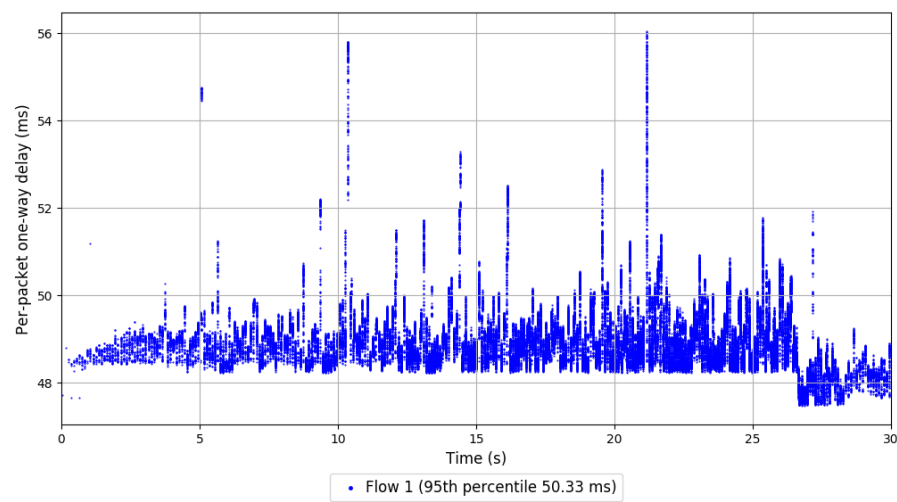
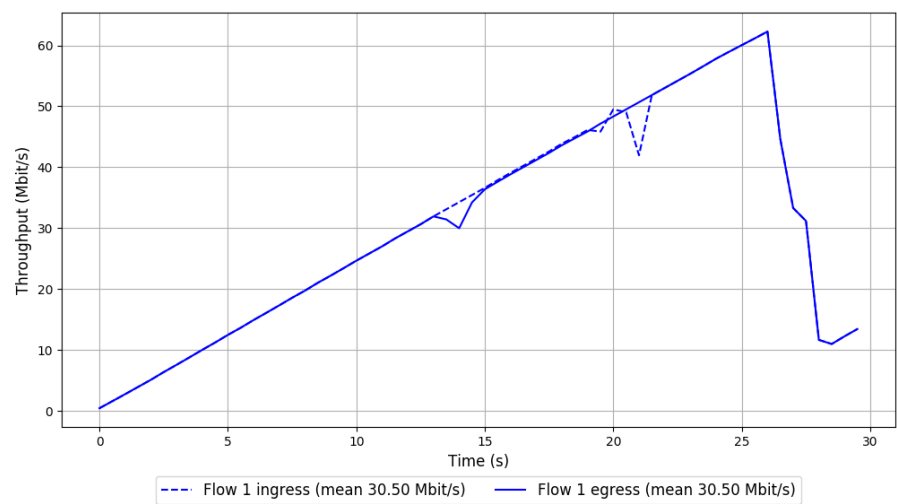
-- Flow 1:

Average throughput: 30.50 Mbit/s

95th percentile per-packet one-way delay: 50.327 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-09 03:30:43

End at: 2018-01-09 03:31:13

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.40 Mbit/s

95th percentile per-packet one-way delay: 49.342 ms

Loss rate: 0.00%

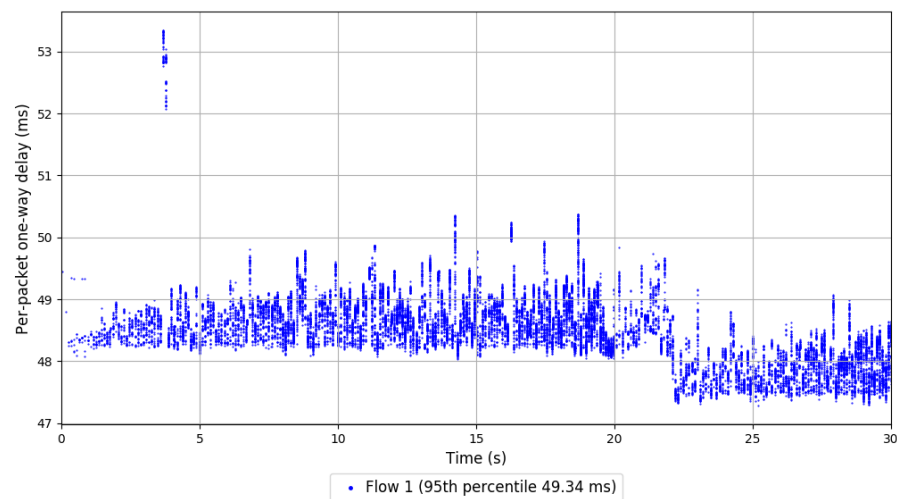
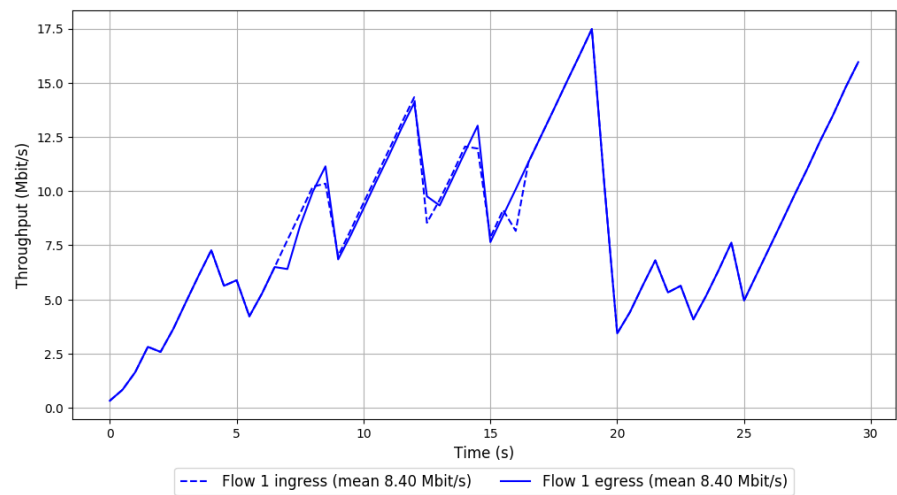
-- Flow 1:

Average throughput: 8.40 Mbit/s

95th percentile per-packet one-way delay: 49.342 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-09 03:42:13

End at: 2018-01-09 03:42:43

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 50.008 ms

Loss rate: 0.77%

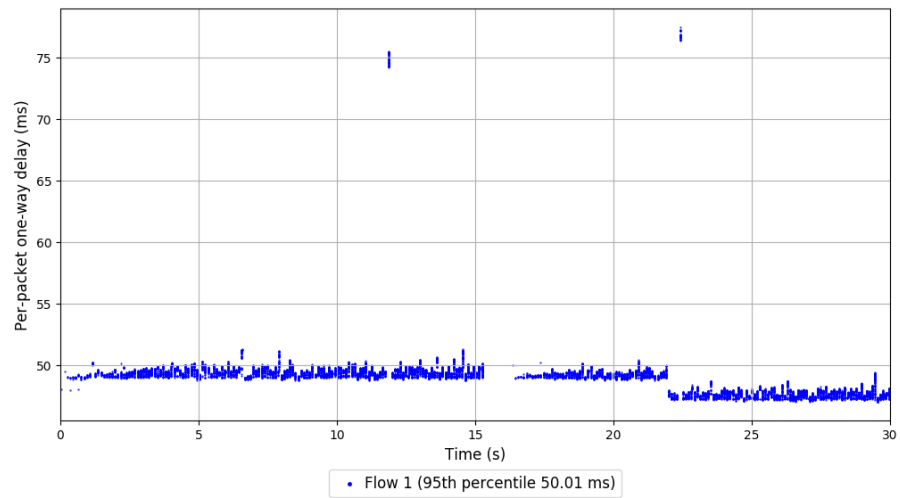
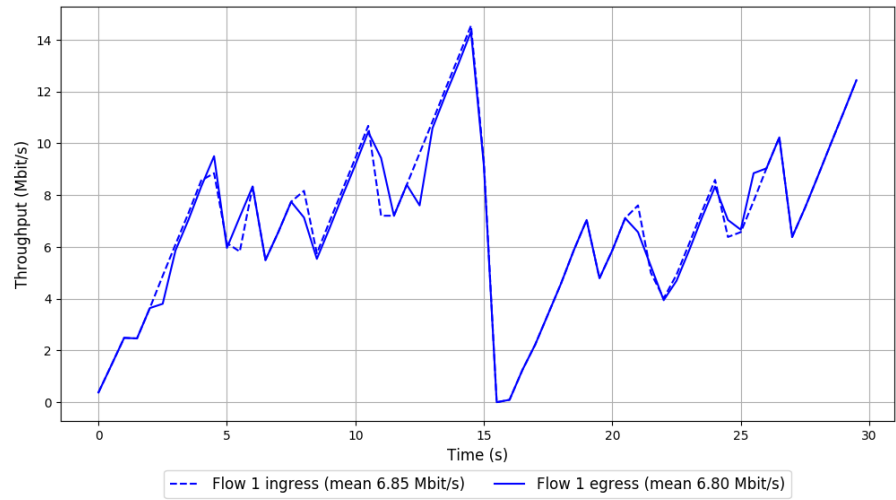
-- Flow 1:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 50.008 ms

Loss rate: 0.77%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-09 03:53:26

End at: 2018-01-09 03:53:56

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 49.718 ms

Loss rate: 1.40%

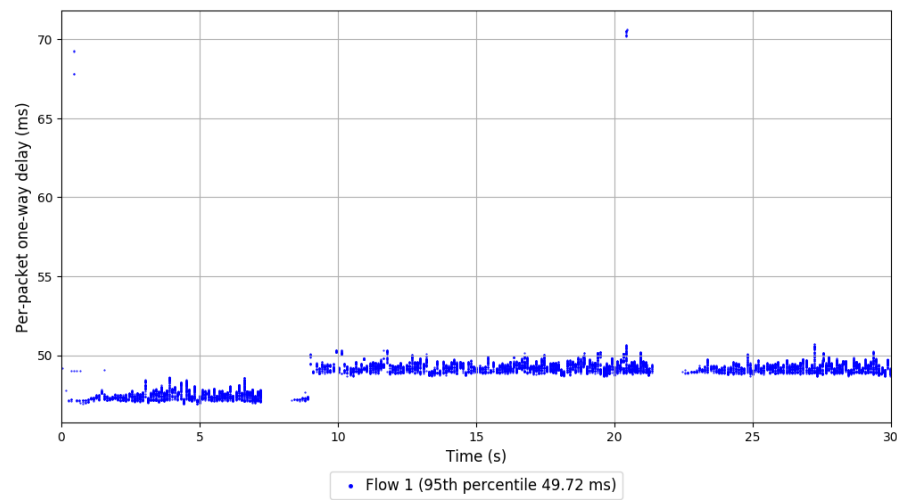
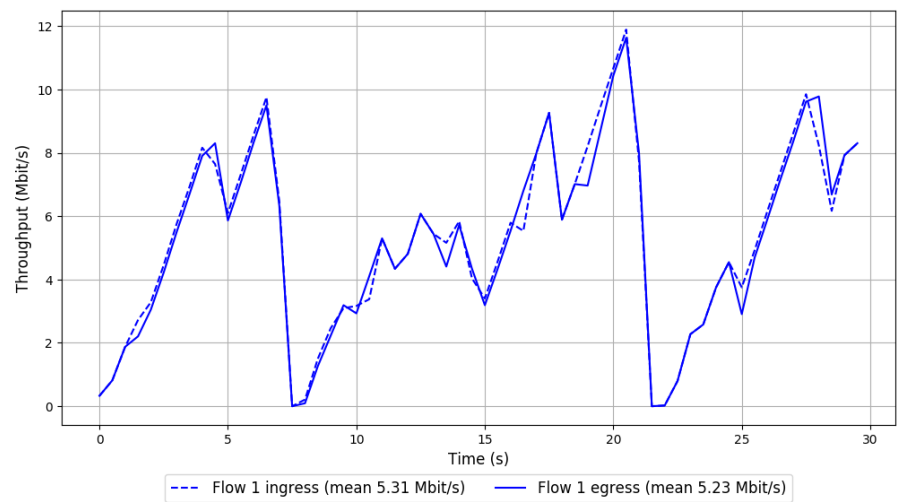
-- Flow 1:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 49.718 ms

Loss rate: 1.40%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-09 04:04:22

End at: 2018-01-09 04:04:52

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 49.957 ms

Loss rate: 1.16%

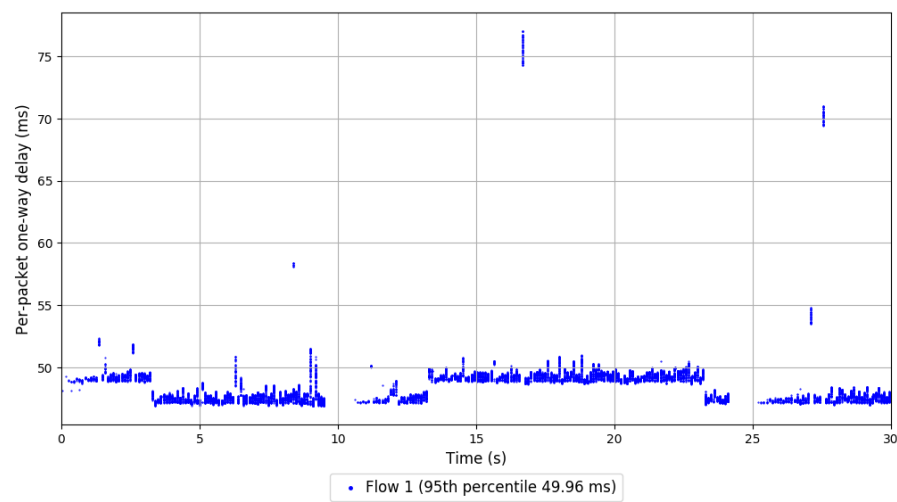
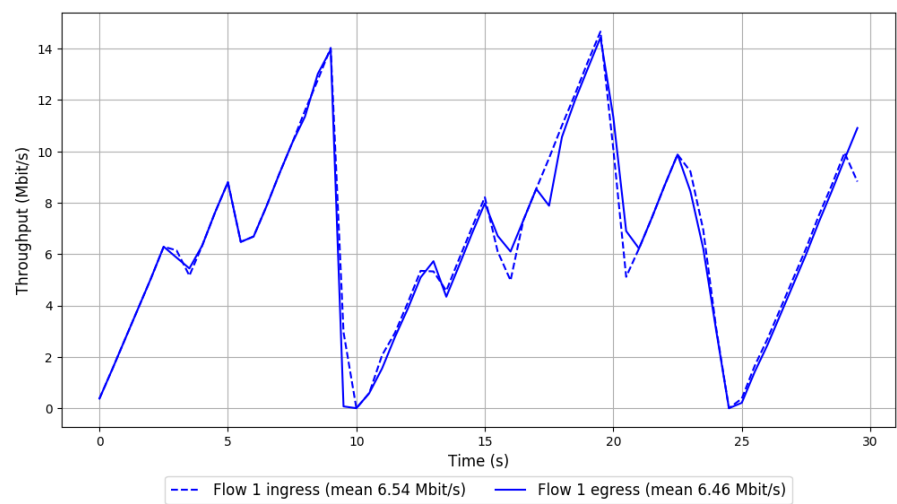
-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 49.957 ms

Loss rate: 1.16%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-09 04:15:57

End at: 2018-01-09 04:16:27

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.61 Mbit/s

95th percentile per-packet one-way delay: 49.703 ms

Loss rate: 0.35%

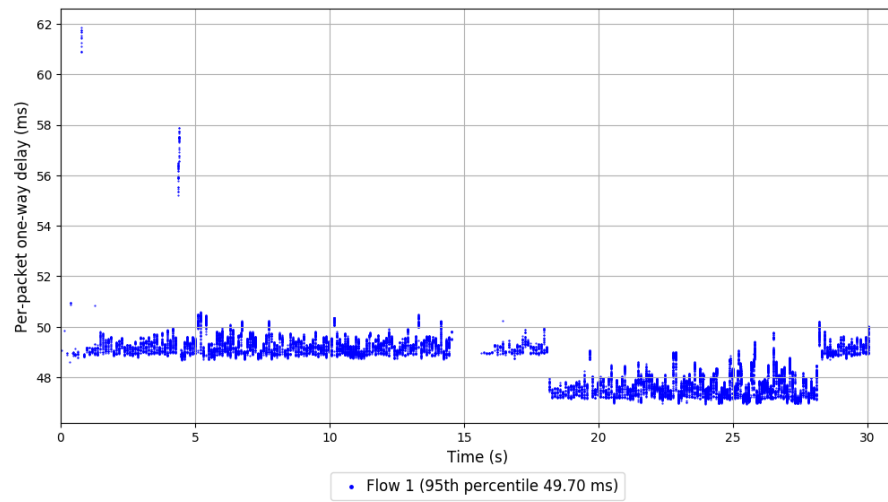
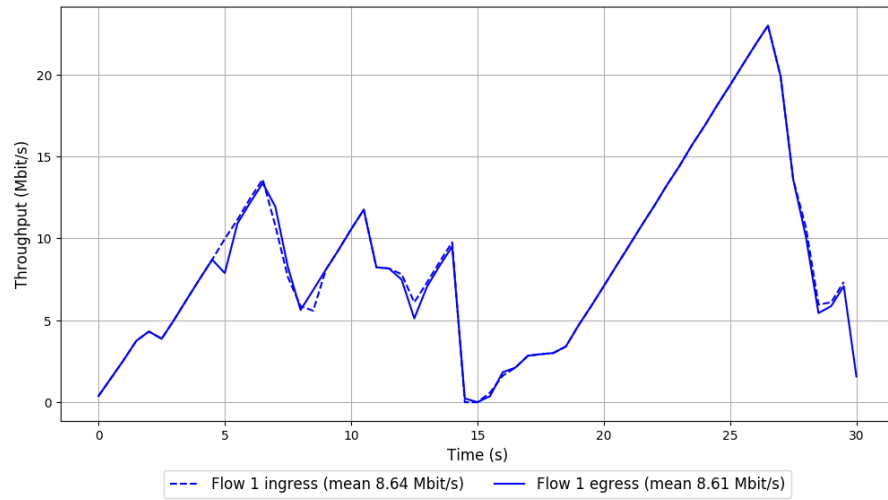
-- Flow 1:

Average throughput: 8.61 Mbit/s

95th percentile per-packet one-way delay: 49.703 ms

Loss rate: 0.35%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-09 04:27:06

End at: 2018-01-09 04:27:36

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 49.955 ms

Loss rate: 0.56%

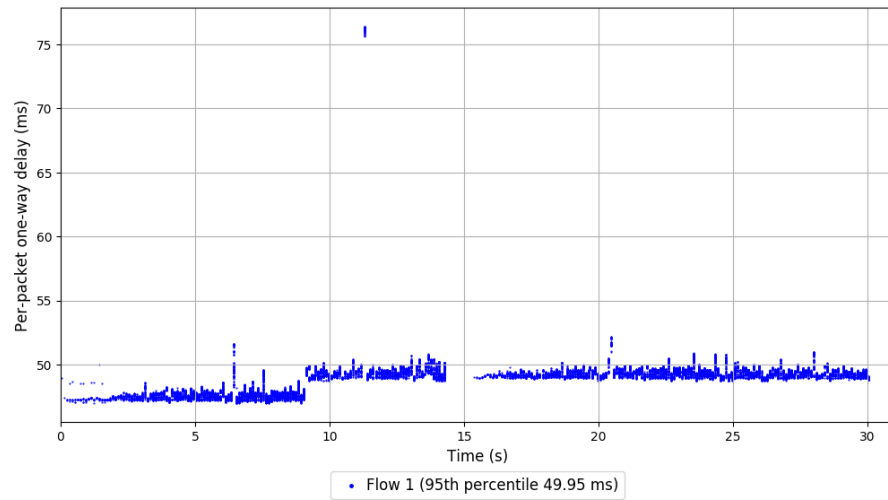
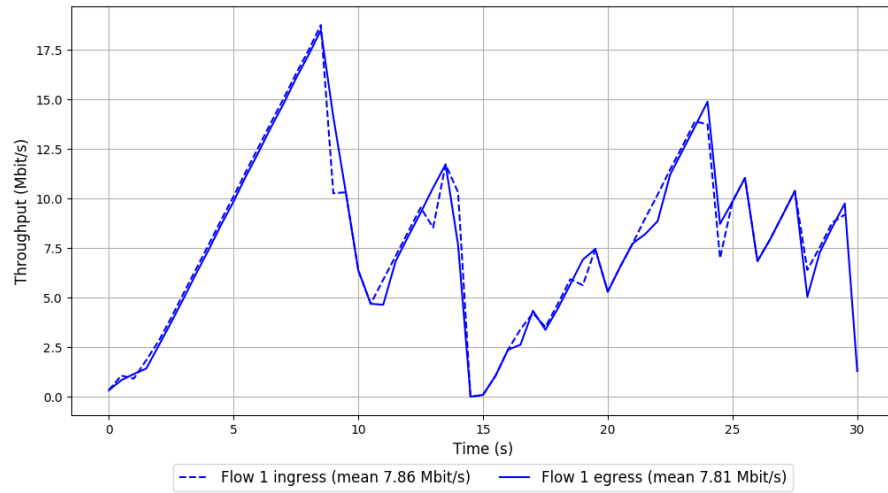
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 49.955 ms

Loss rate: 0.56%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-09 04:38:39

End at: 2018-01-09 04:39:09

Below is generated by plot.py at 2018-01-09 05:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 49.808 ms

Loss rate: 1.23%

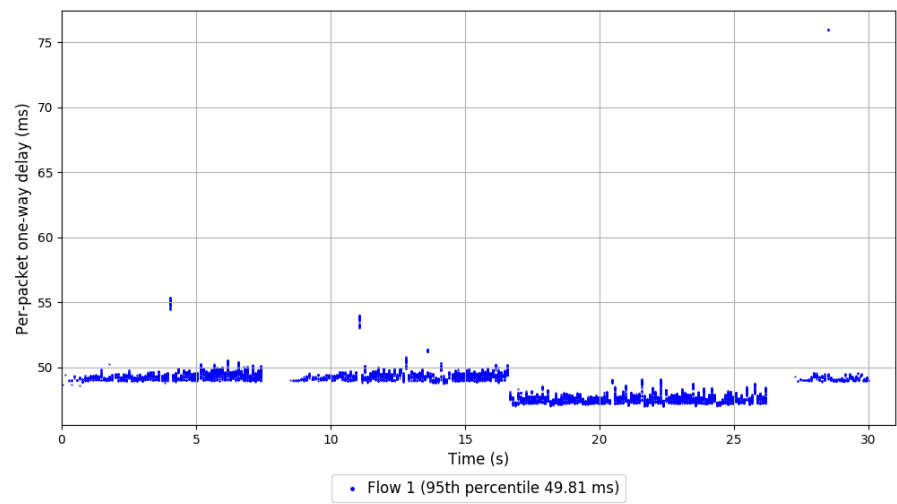
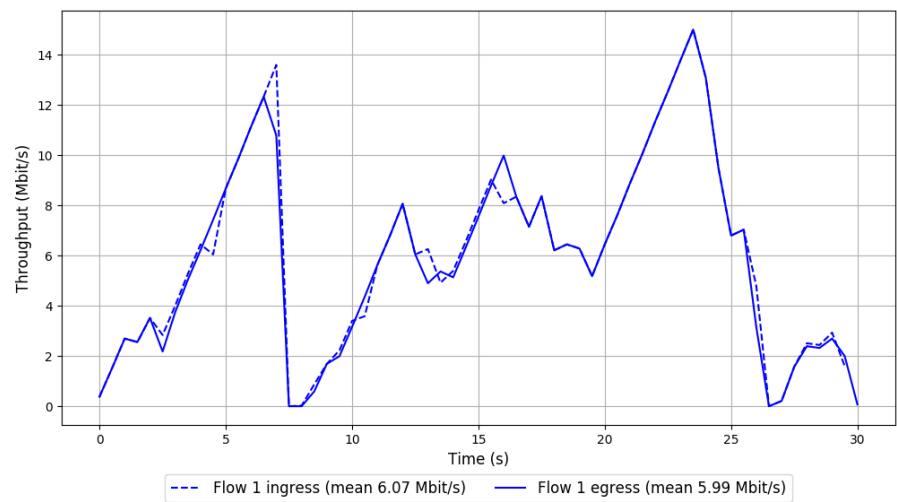
-- Flow 1:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 49.808 ms

Loss rate: 1.23%

Run 10: Report of LEDBAT — Data Link

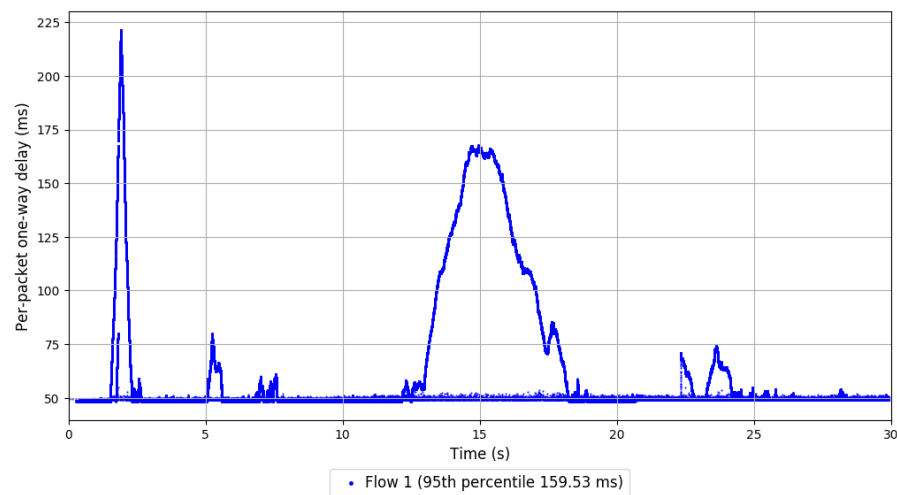
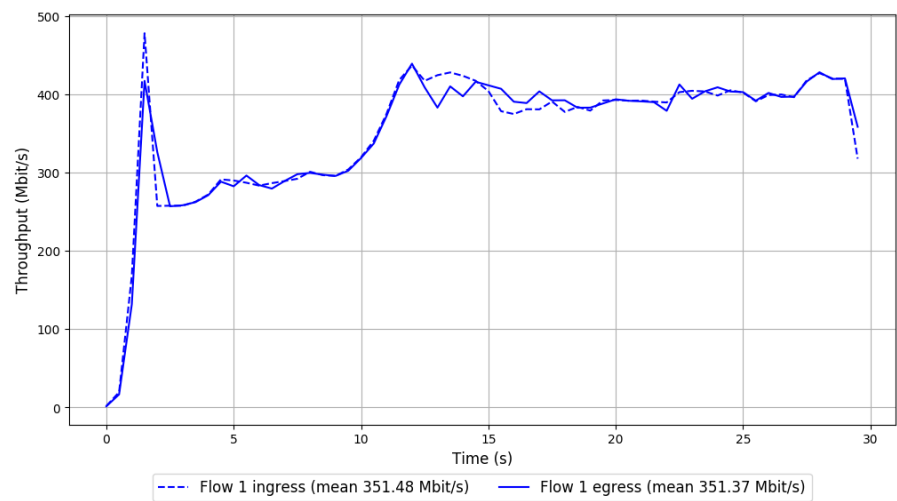


```
Run 1: Statistics of PCC

Start at: 2018-01-09 02:51:24
End at: 2018-01-09 02:51:54

# Below is generated by plot.py at 2018-01-09 05:56:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 351.37 Mbit/s
95th percentile per-packet one-way delay: 159.535 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 351.37 Mbit/s
95th percentile per-packet one-way delay: 159.535 ms
Loss rate: 0.03%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-09 03:03:00

End at: 2018-01-09 03:03:30

Below is generated by plot.py at 2018-01-09 05:56:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 376.94 Mbit/s

95th percentile per-packet one-way delay: 114.220 ms

Loss rate: 0.10%

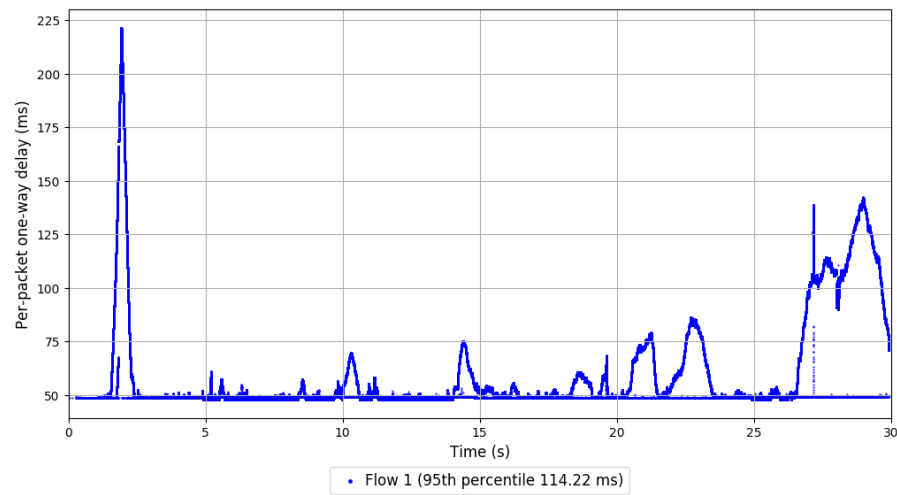
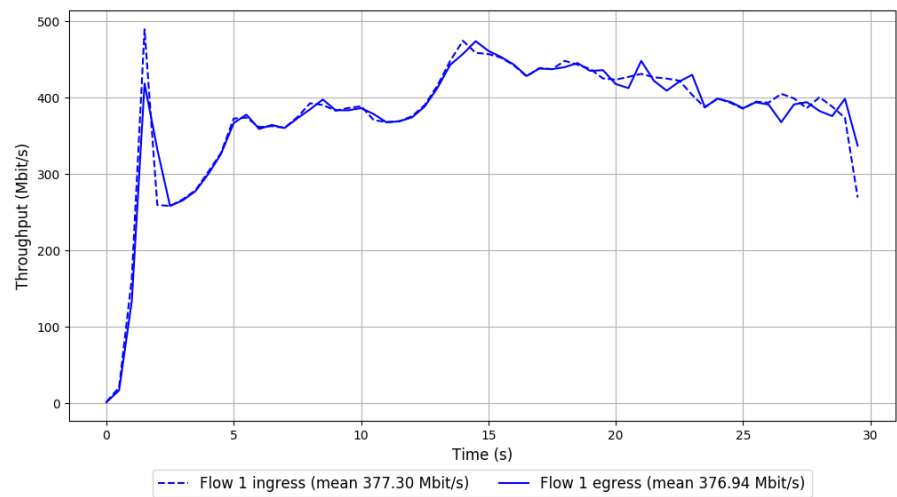
-- Flow 1:

Average throughput: 376.94 Mbit/s

95th percentile per-packet one-way delay: 114.220 ms

Loss rate: 0.10%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-09 03:14:38

End at: 2018-01-09 03:15:08

Below is generated by plot.py at 2018-01-09 05:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 387.54 Mbit/s

95th percentile per-packet one-way delay: 200.105 ms

Loss rate: 0.38%

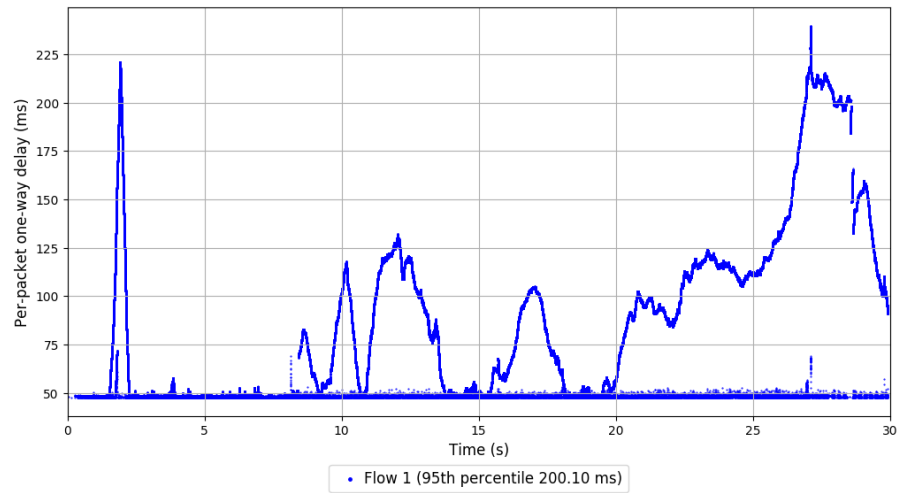
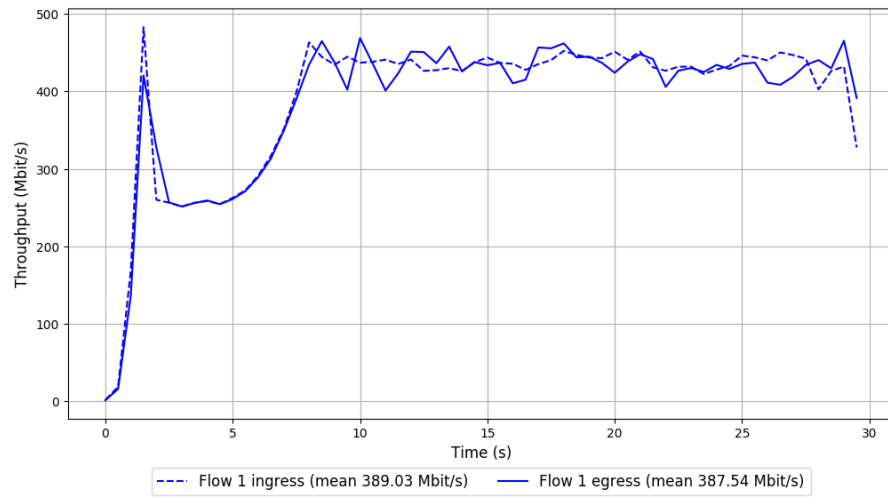
-- Flow 1:

Average throughput: 387.54 Mbit/s

95th percentile per-packet one-way delay: 200.105 ms

Loss rate: 0.38%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-09 03:26:12

End at: 2018-01-09 03:26:42

Below is generated by plot.py at 2018-01-09 05:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 378.78 Mbit/s

95th percentile per-packet one-way delay: 95.369 ms

Loss rate: 0.12%

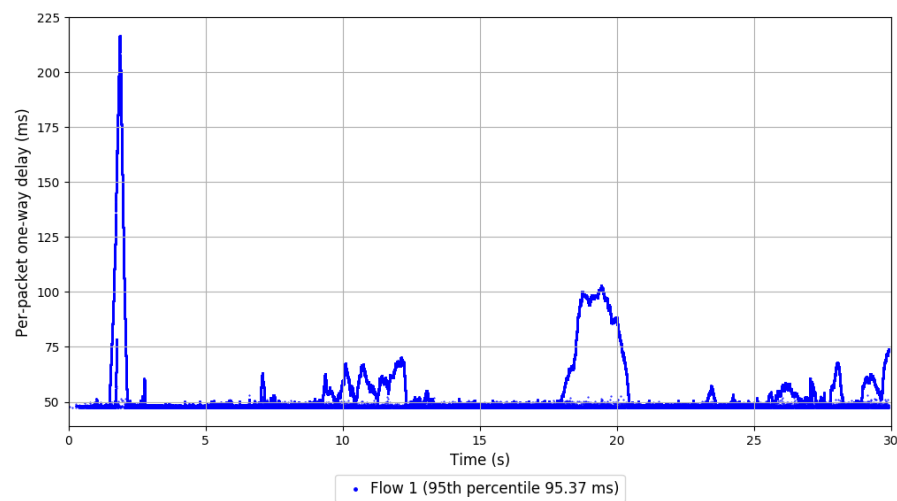
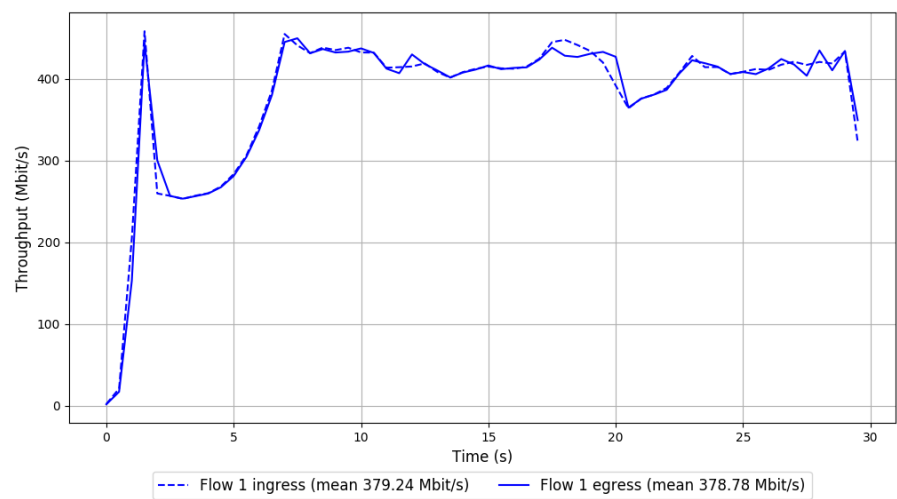
-- Flow 1:

Average throughput: 378.78 Mbit/s

95th percentile per-packet one-way delay: 95.369 ms

Loss rate: 0.12%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-09 03:37:41

End at: 2018-01-09 03:38:11

Below is generated by plot.py at 2018-01-09 05:56:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 355.85 Mbit/s

95th percentile per-packet one-way delay: 65.171 ms

Loss rate: 0.03%

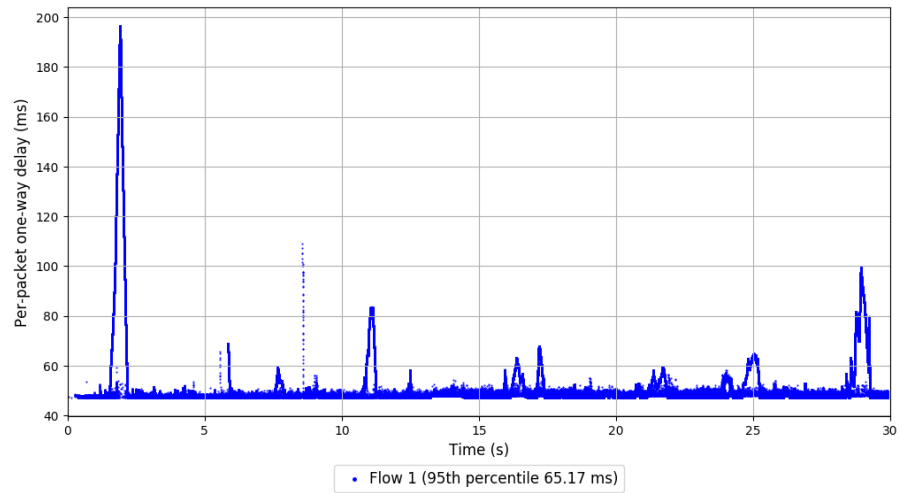
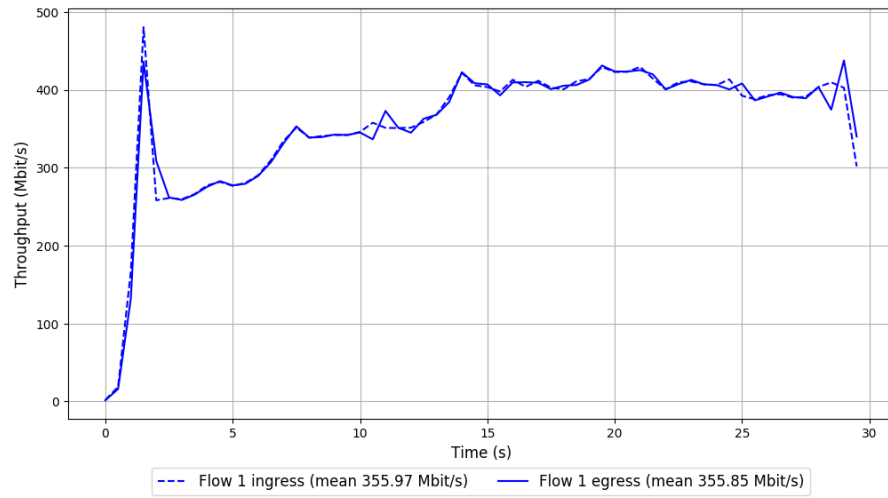
-- Flow 1:

Average throughput: 355.85 Mbit/s

95th percentile per-packet one-way delay: 65.171 ms

Loss rate: 0.03%

Run 5: Report of PCC — Data Link

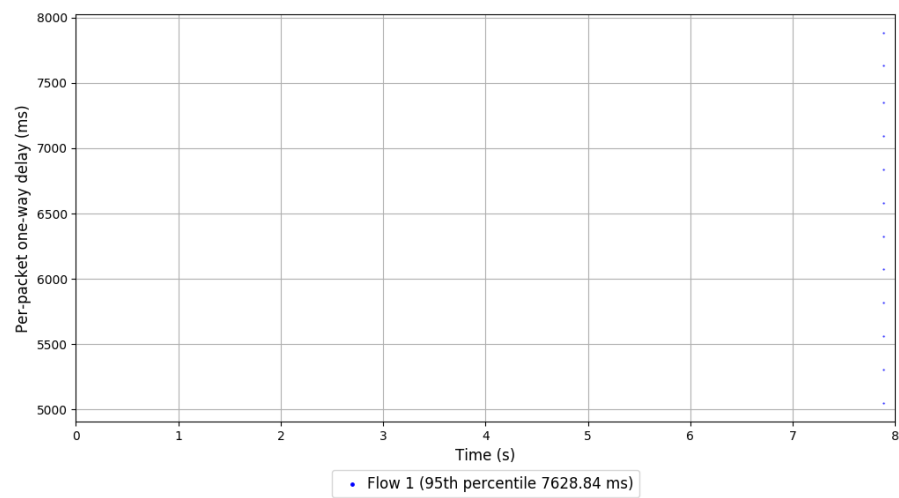
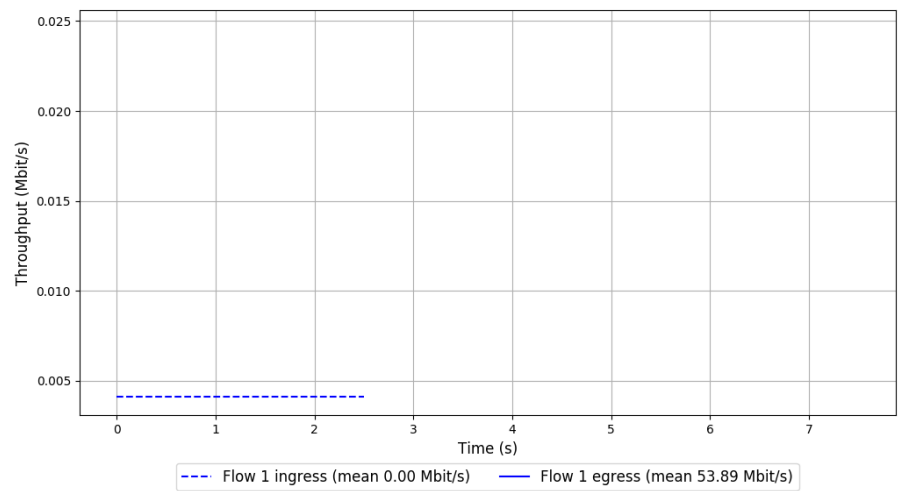


Run 6: Statistics of PCC

Start at: 2018-01-09 03:49:12

End at: 2018-01-09 03:49:42

Run 6: Report of PCC — Data Link

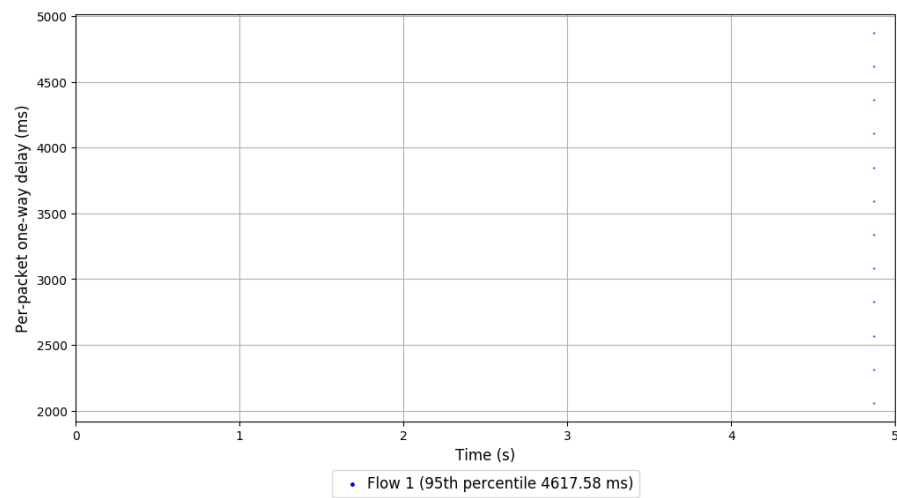
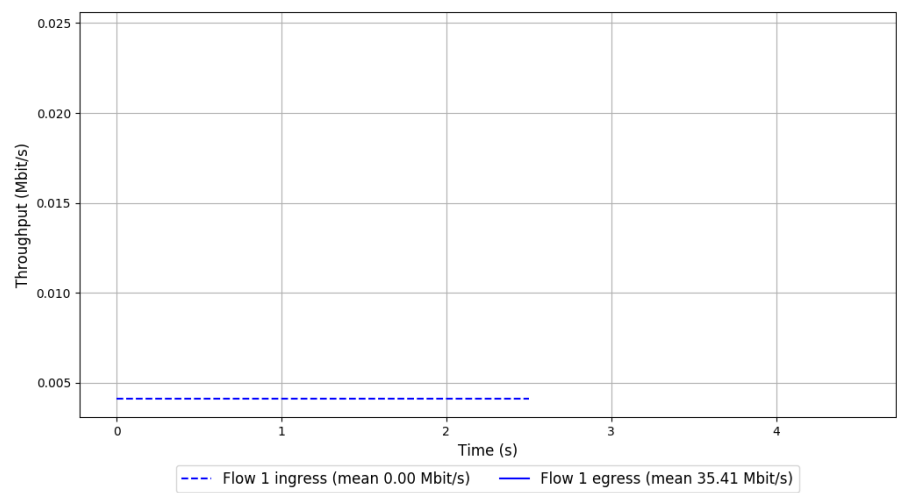


Run 7: Statistics of PCC

Start at: 2018-01-09 04:00:16

End at: 2018-01-09 04:00:46

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-09 04:11:26

End at: 2018-01-09 04:11:56

Below is generated by plot.py at 2018-01-09 05:57:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 377.62 Mbit/s

95th percentile per-packet one-way delay: 79.126 ms

Loss rate: 0.12%

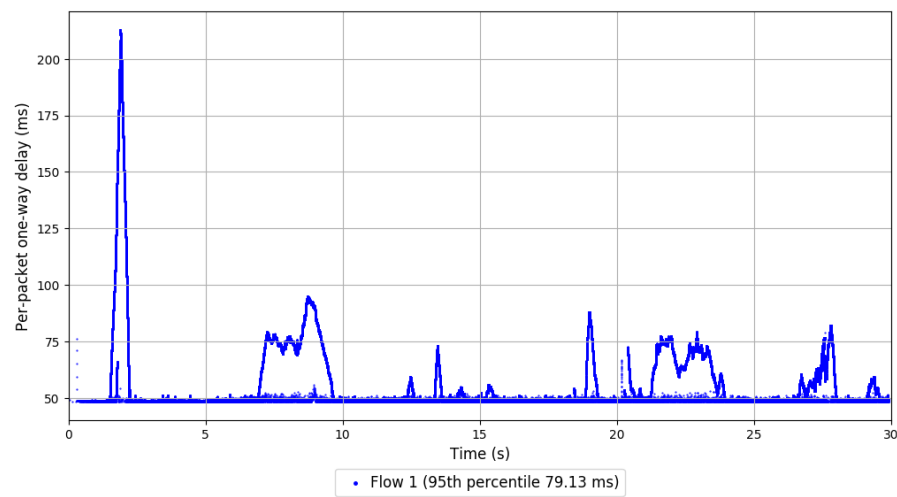
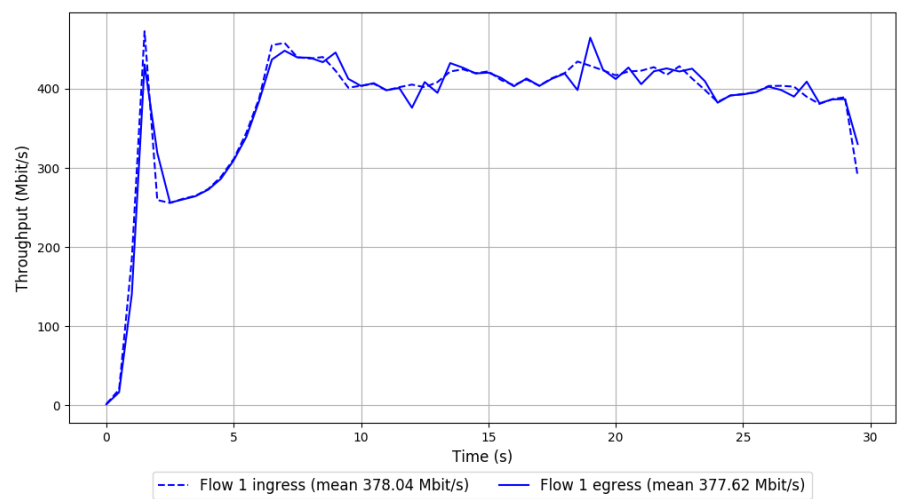
-- Flow 1:

Average throughput: 377.62 Mbit/s

95th percentile per-packet one-way delay: 79.126 ms

Loss rate: 0.12%

Run 8: Report of PCC — Data Link

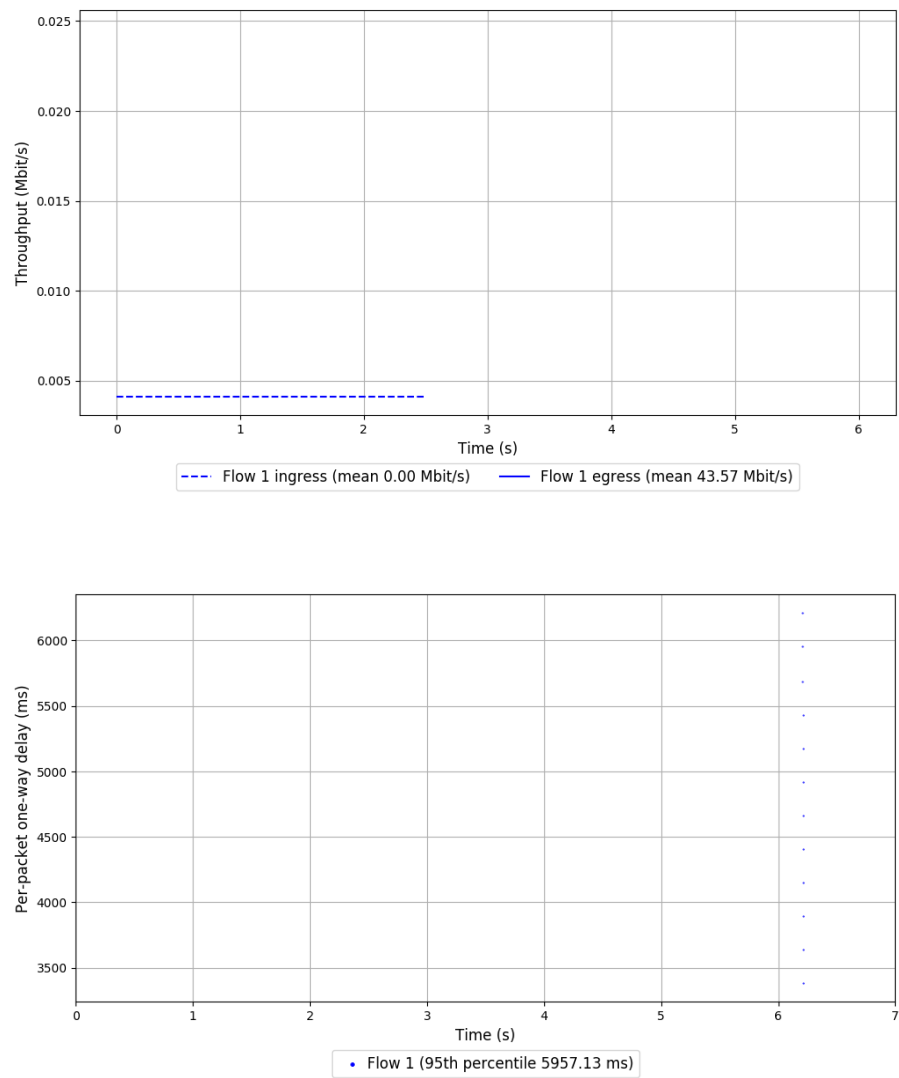


Run 9: Statistics of PCC

Start at: 2018-01-09 04:22:55

End at: 2018-01-09 04:23:25

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-09 04:34:05

End at: 2018-01-09 04:34:35

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 349.88 Mbit/s

95th percentile per-packet one-way delay: 201.931 ms

Loss rate: 0.51%

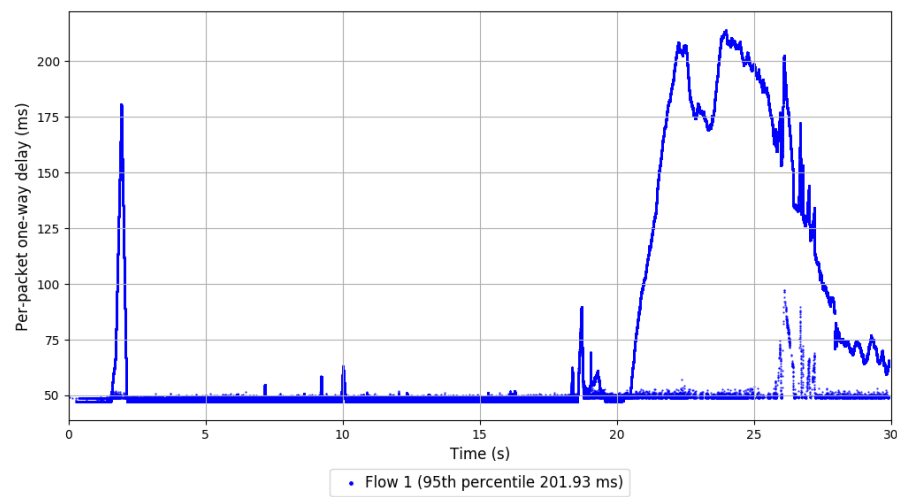
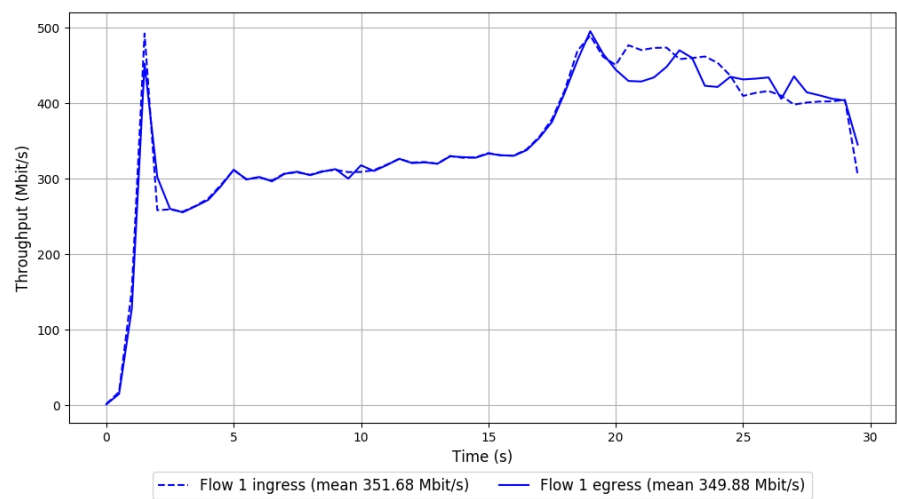
-- Flow 1:

Average throughput: 349.88 Mbit/s

95th percentile per-packet one-way delay: 201.931 ms

Loss rate: 0.51%

Run 10: Report of PCC — Data Link

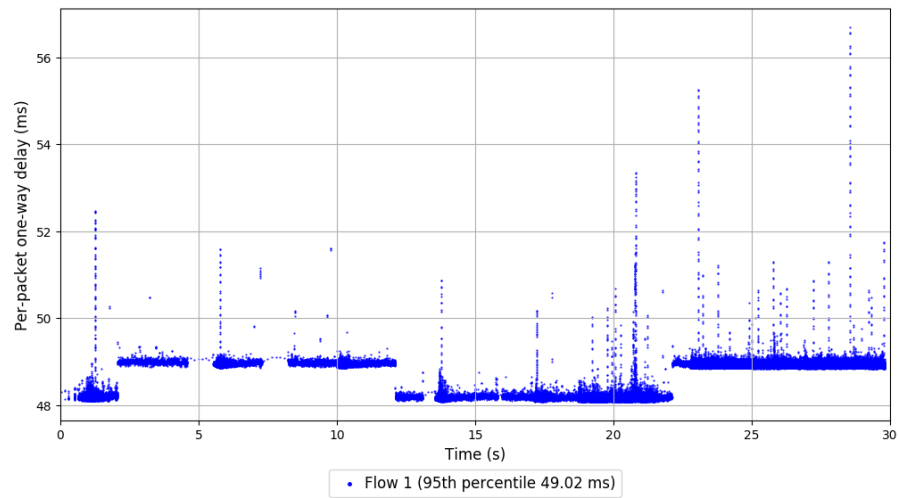
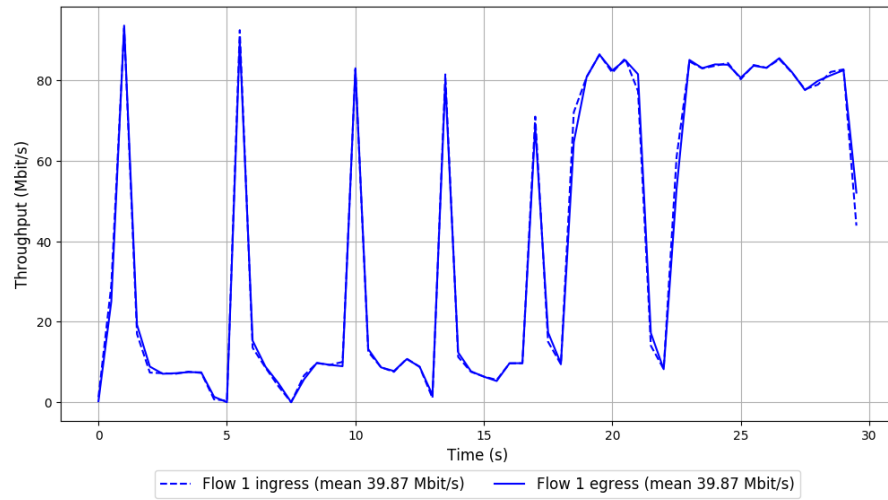


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-09 02:52:53
End at: 2018-01-09 02:53:23

# Below is generated by plot.py at 2018-01-09 05:57:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 49.019 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 49.019 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-09 03:04:34

End at: 2018-01-09 03:05:04

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.99 Mbit/s

95th percentile per-packet one-way delay: 48.835 ms

Loss rate: 0.00%

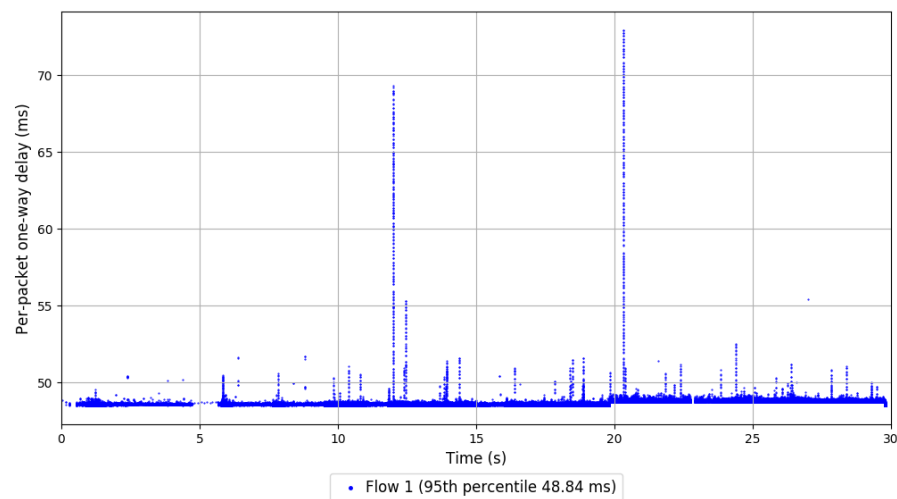
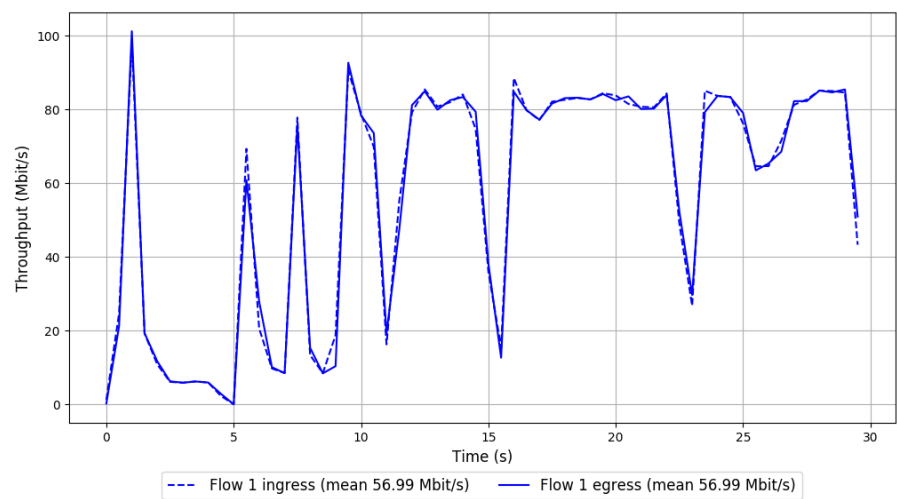
-- Flow 1:

Average throughput: 56.99 Mbit/s

95th percentile per-packet one-way delay: 48.835 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-09 03:16:12

End at: 2018-01-09 03:16:42

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.18 Mbit/s

95th percentile per-packet one-way delay: 47.662 ms

Loss rate: 0.00%

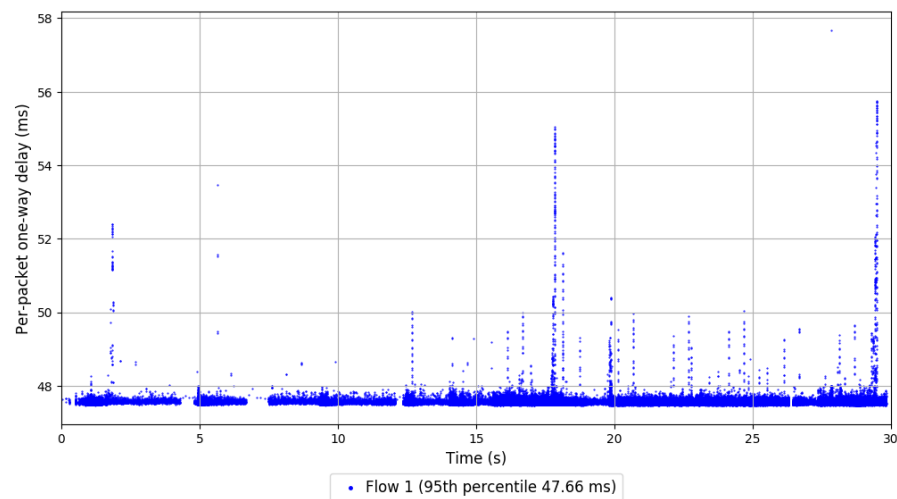
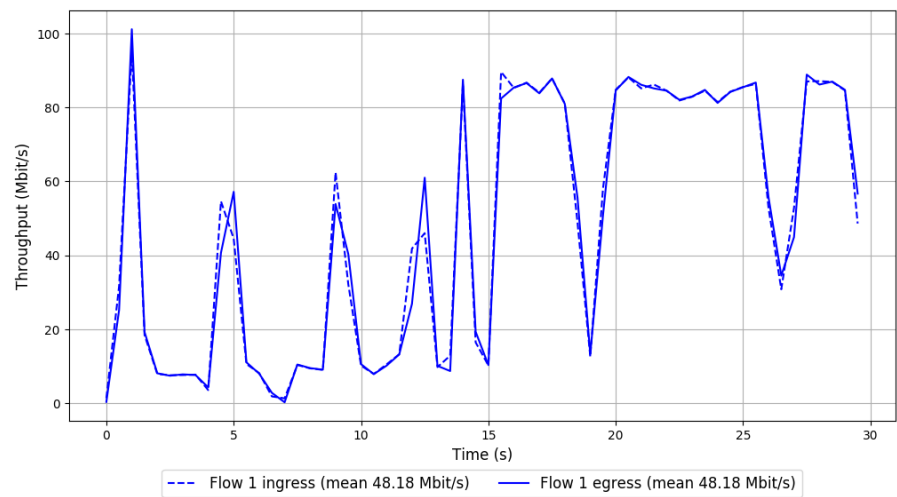
-- Flow 1:

Average throughput: 48.18 Mbit/s

95th percentile per-packet one-way delay: 47.662 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-09 03:27:46

End at: 2018-01-09 03:28:16

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.39 Mbit/s

95th percentile per-packet one-way delay: 47.476 ms

Loss rate: 0.00%

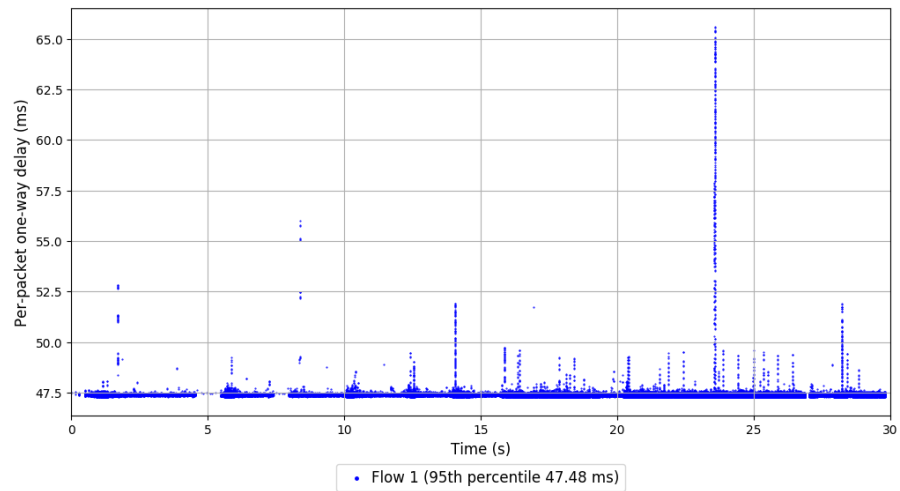
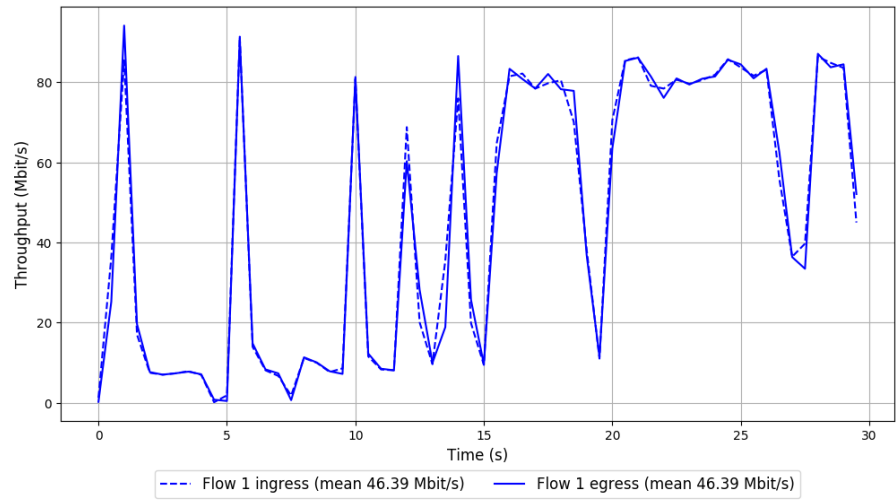
-- Flow 1:

Average throughput: 46.39 Mbit/s

95th percentile per-packet one-way delay: 47.476 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-09 03:39:13

End at: 2018-01-09 03:39:43

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.56 Mbit/s

95th percentile per-packet one-way delay: 48.715 ms

Loss rate: 0.03%

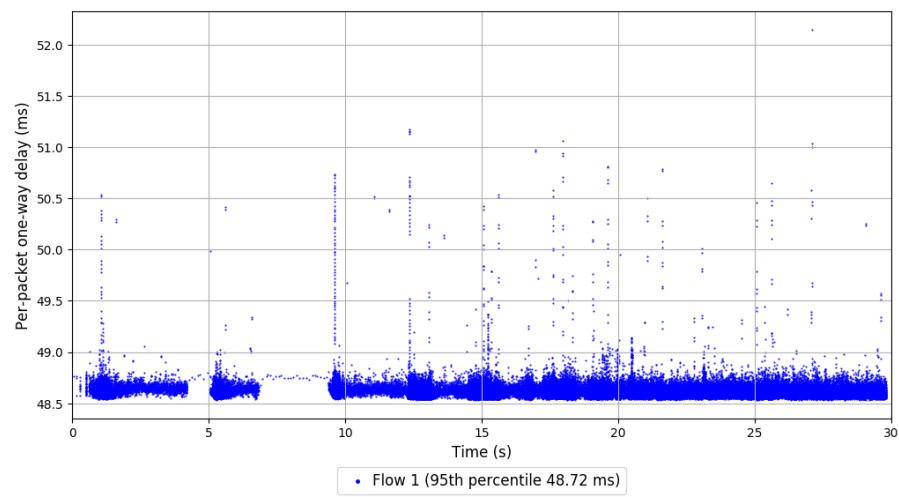
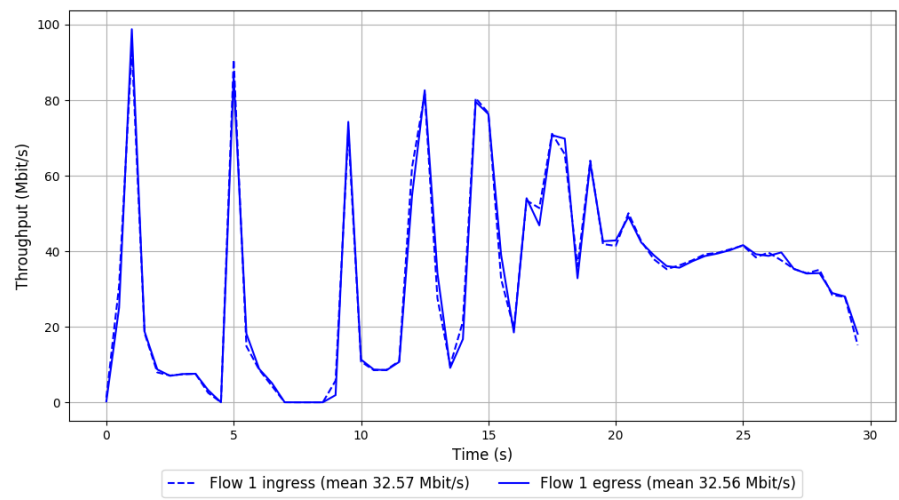
-- Flow 1:

Average throughput: 32.56 Mbit/s

95th percentile per-packet one-way delay: 48.715 ms

Loss rate: 0.03%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-09 03:50:30

End at: 2018-01-09 03:51:00

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.81 Mbit/s

95th percentile per-packet one-way delay: 47.792 ms

Loss rate: 0.00%

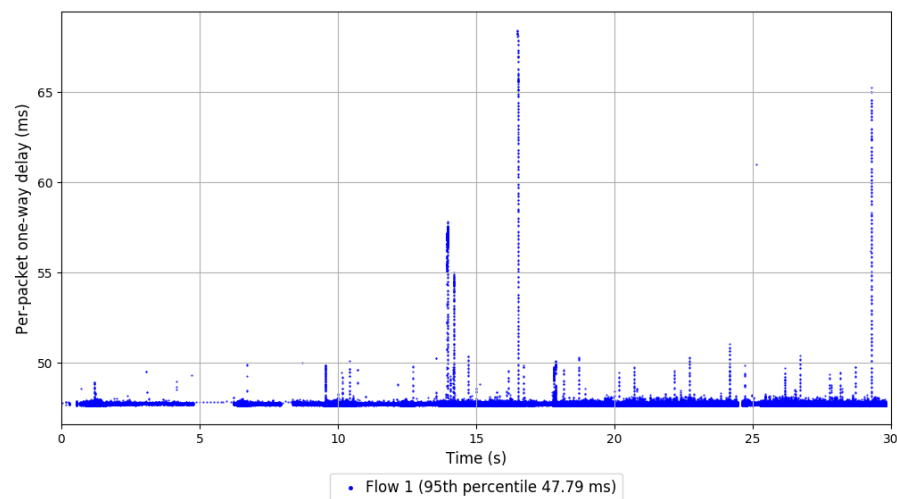
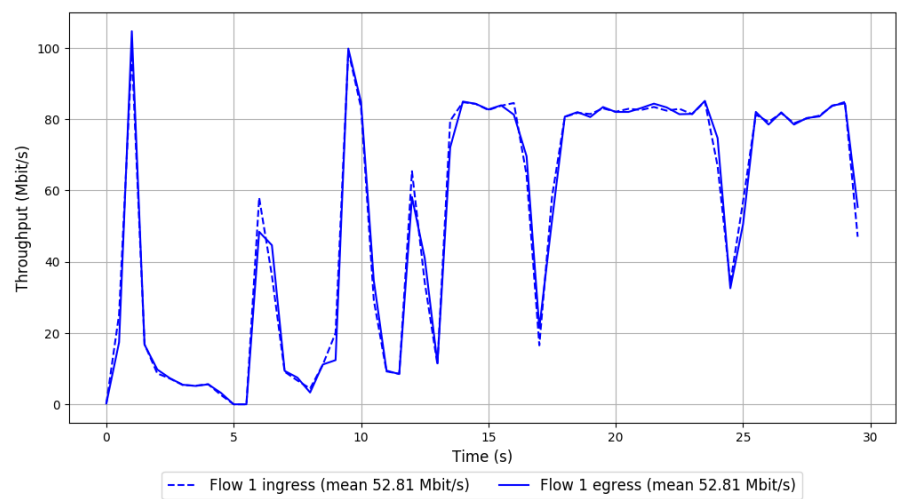
-- Flow 1:

Average throughput: 52.81 Mbit/s

95th percentile per-packet one-way delay: 47.792 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-09 04:01:37

End at: 2018-01-09 04:02:07

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.49 Mbit/s

95th percentile per-packet one-way delay: 48.492 ms

Loss rate: 0.00%

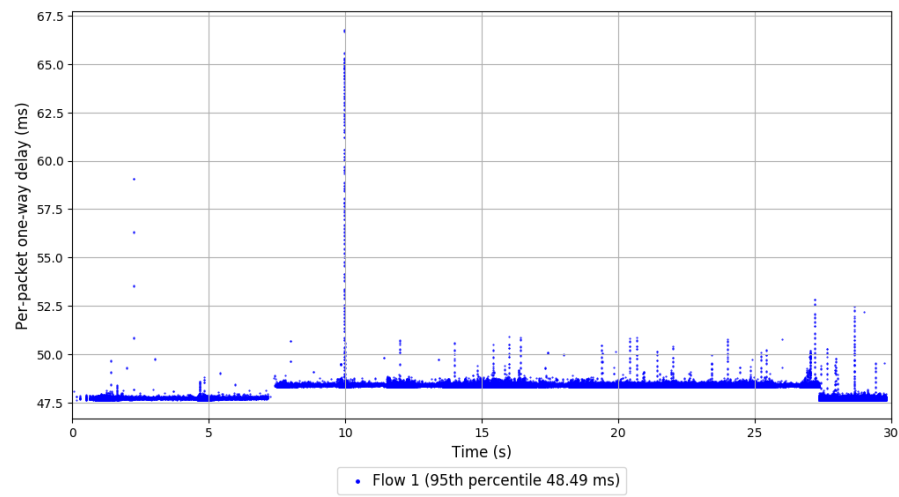
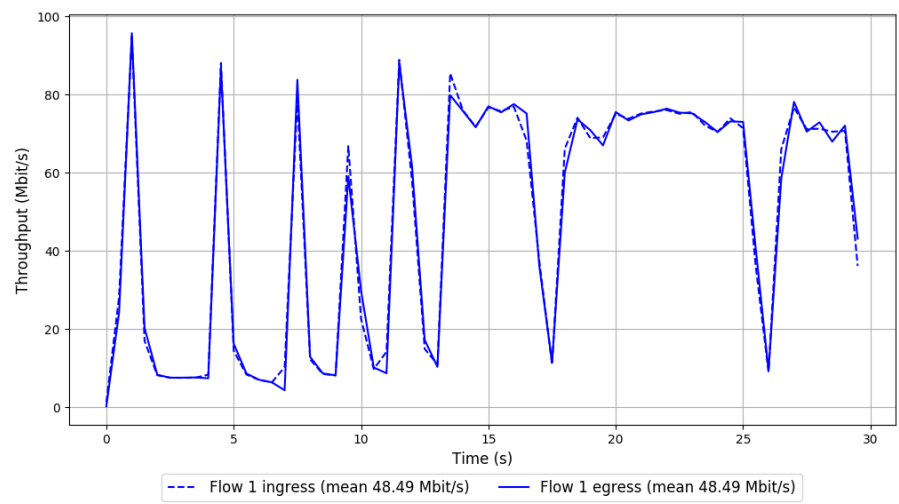
-- Flow 1:

Average throughput: 48.49 Mbit/s

95th percentile per-packet one-way delay: 48.492 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-09 04:13:01

End at: 2018-01-09 04:13:31

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.09 Mbit/s

95th percentile per-packet one-way delay: 48.108 ms

Loss rate: 0.00%

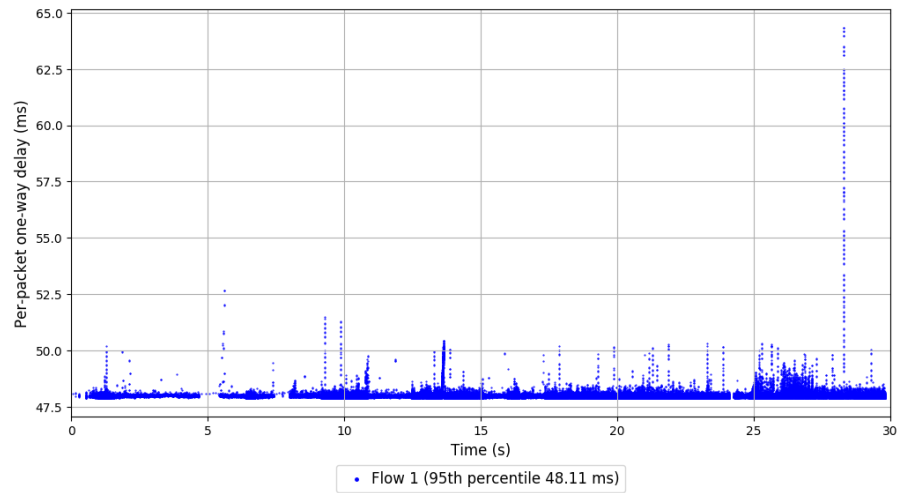
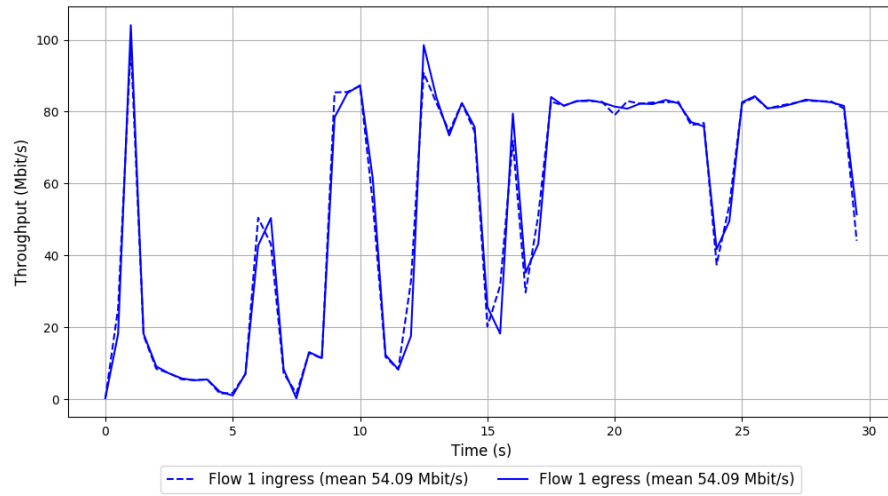
-- Flow 1:

Average throughput: 54.09 Mbit/s

95th percentile per-packet one-way delay: 48.108 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-09 04:24:16

End at: 2018-01-09 04:24:46

Below is generated by plot.py at 2018-01-09 05:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.07 Mbit/s

95th percentile per-packet one-way delay: 47.870 ms

Loss rate: 0.00%

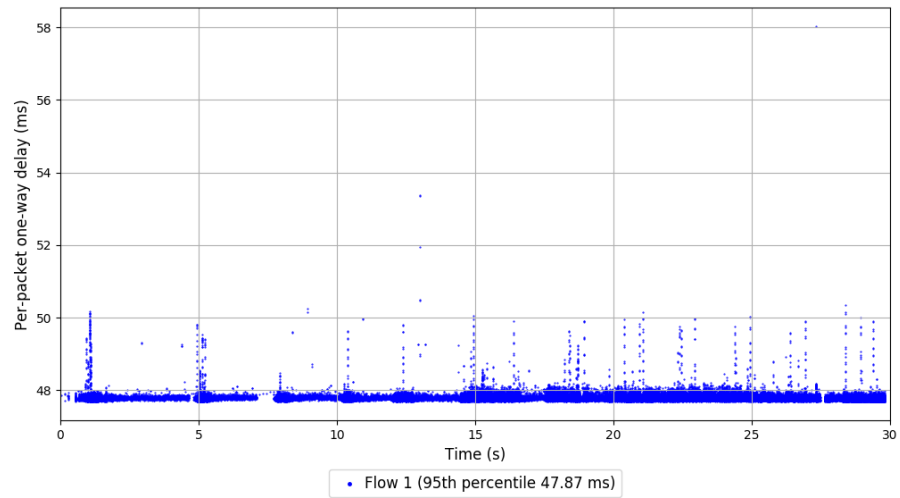
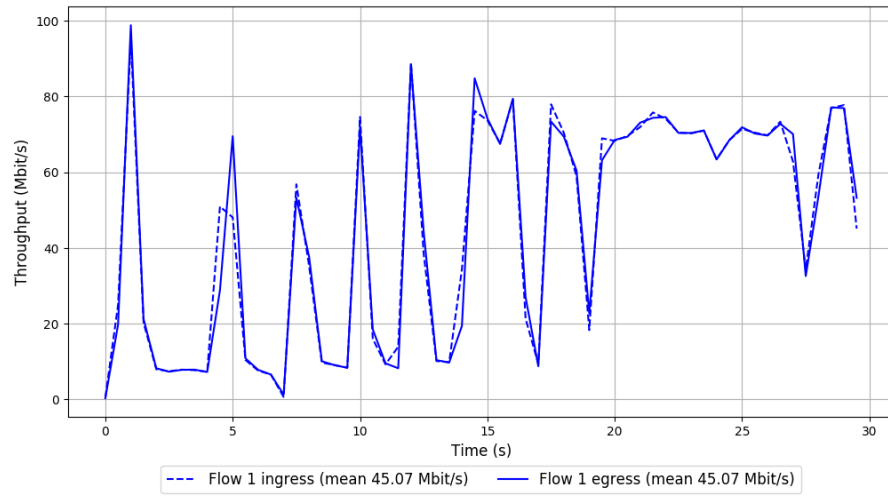
-- Flow 1:

Average throughput: 45.07 Mbit/s

95th percentile per-packet one-way delay: 47.870 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

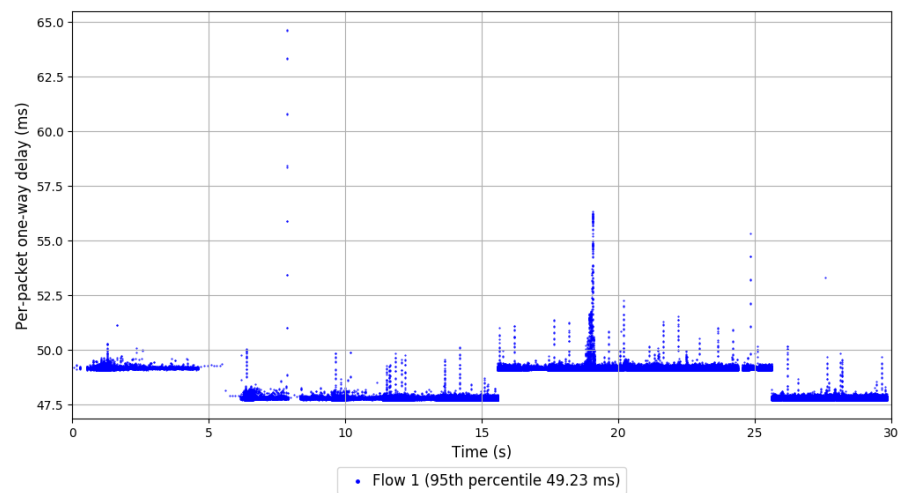
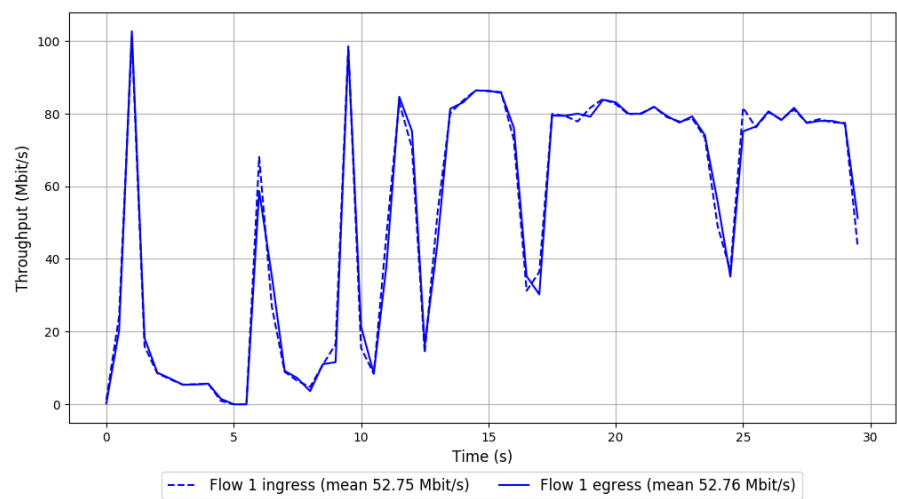


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-09 04:35:38
End at: 2018-01-09 04:36:08

# Below is generated by plot.py at 2018-01-09 05:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.76 Mbit/s
95th percentile per-packet one-way delay: 49.235 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.76 Mbit/s
95th percentile per-packet one-way delay: 49.235 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

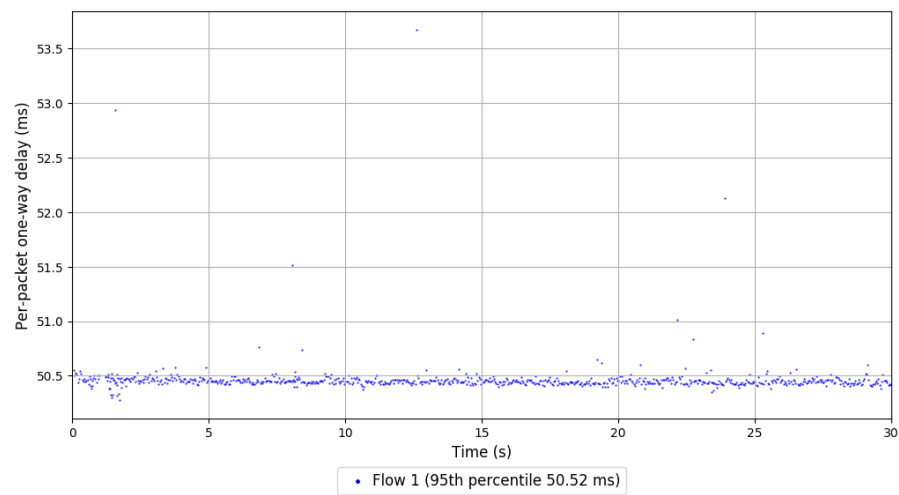
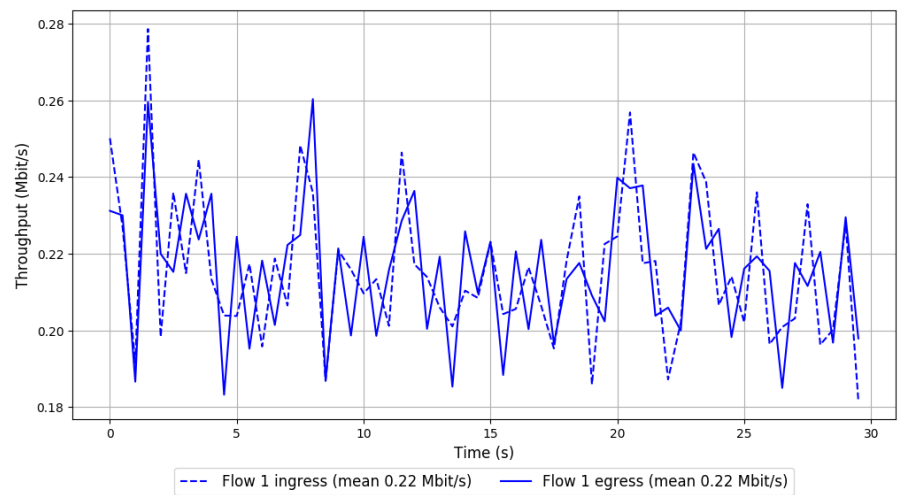


```
Run 1: Statistics of SCReAM

Start at: 2018-01-09 02:49:34
End at: 2018-01-09 02:50:04

# Below is generated by plot.py at 2018-01-09 05:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.516 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.516 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

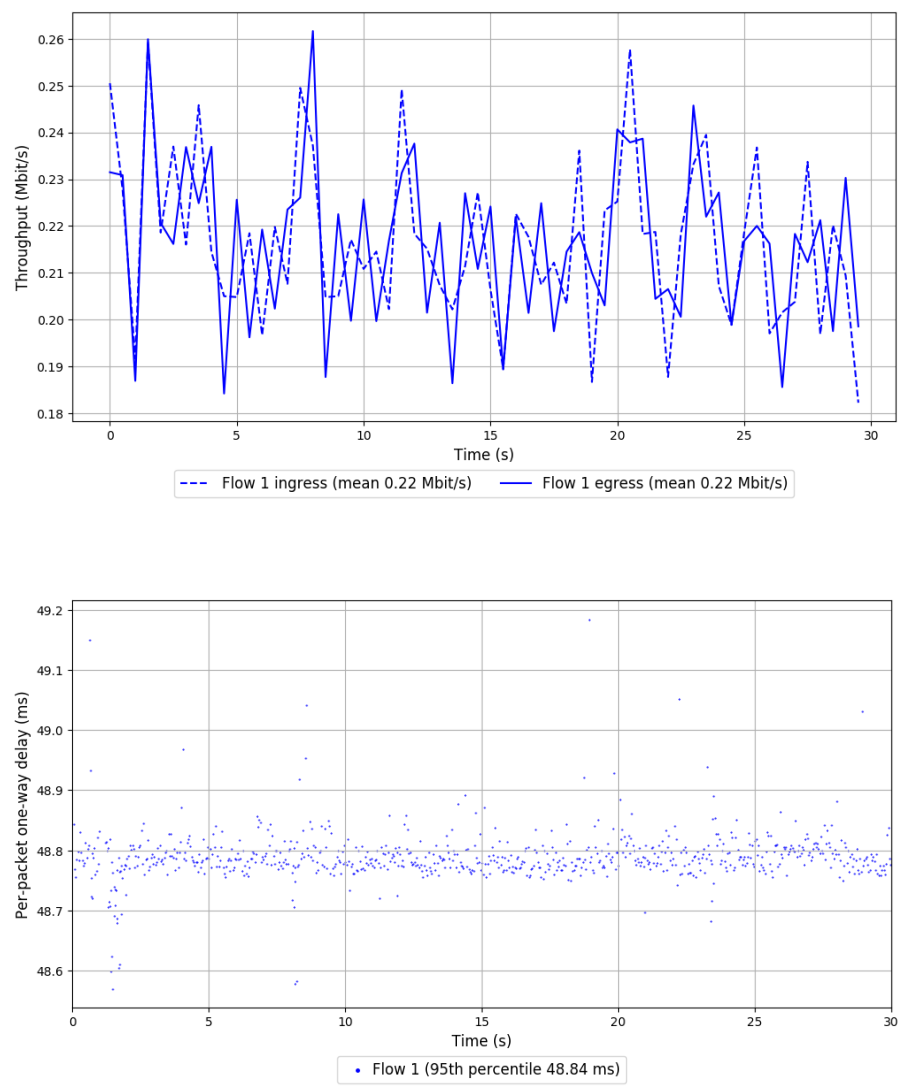


```
Run 2: Statistics of SCReAM

Start at: 2018-01-09 03:01:05
End at: 2018-01-09 03:01:35

# Below is generated by plot.py at 2018-01-09 05:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.842 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.842 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-09 03:12:48

End at: 2018-01-09 03:13:18

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.929 ms

Loss rate: 0.00%

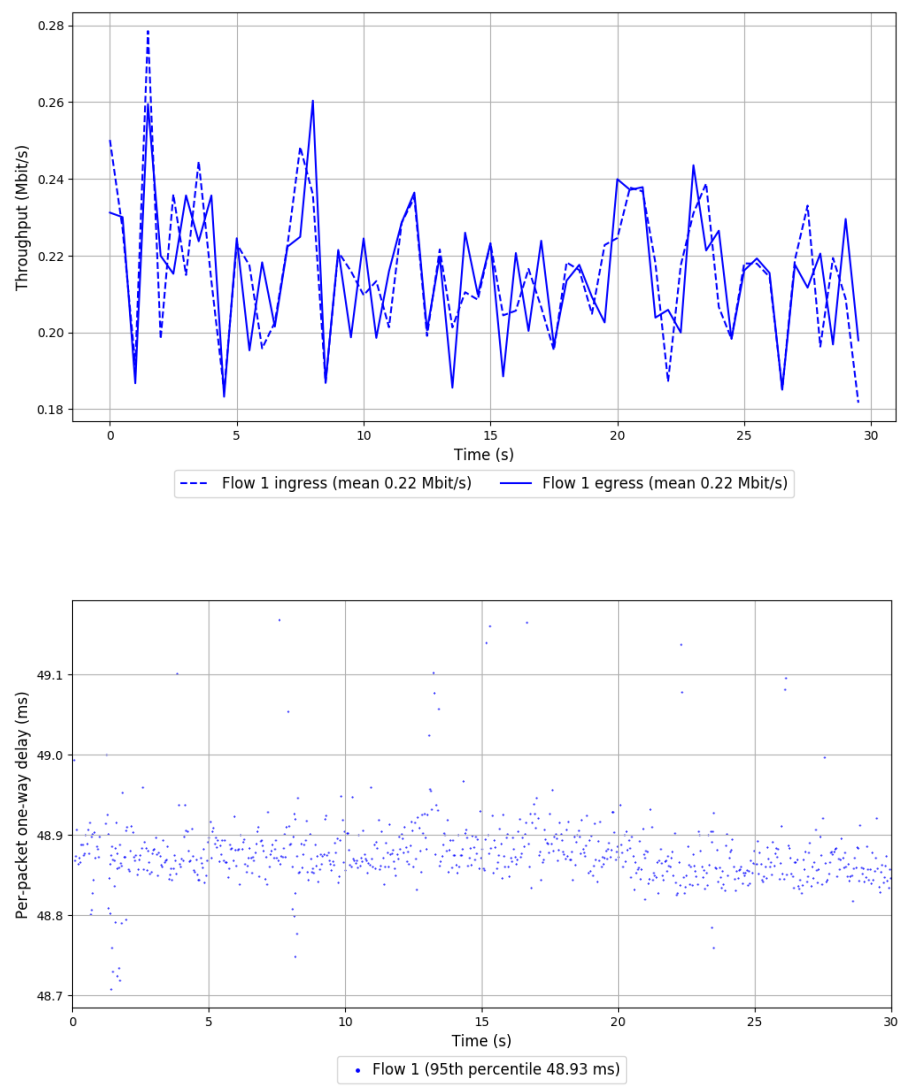
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.929 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

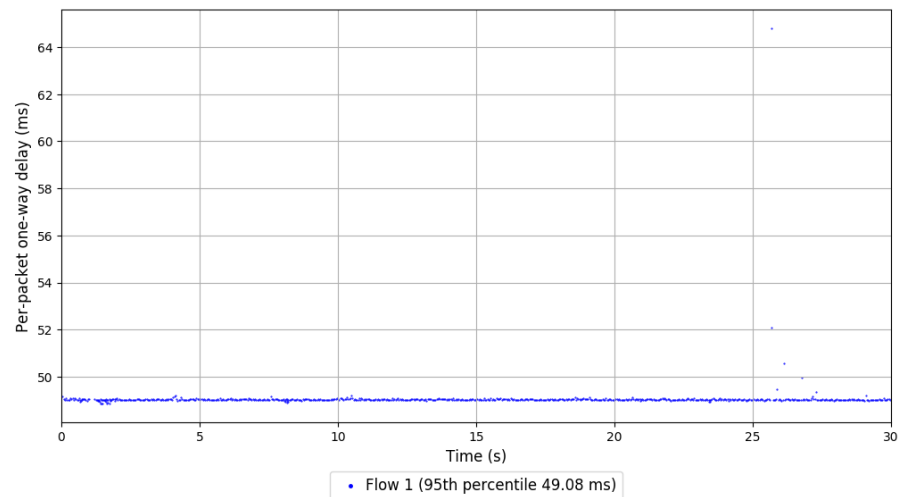
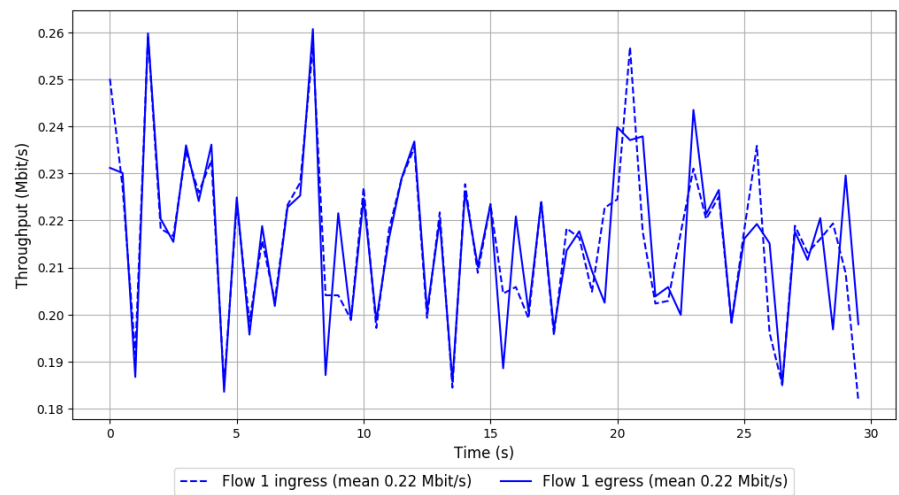


```
Run 4: Statistics of SCReAM

Start at: 2018-01-09 03:24:20
End at: 2018-01-09 03:24:50

# Below is generated by plot.py at 2018-01-09 05:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.079 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-09 03:35:49

End at: 2018-01-09 03:36:19

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.466 ms

Loss rate: 0.00%

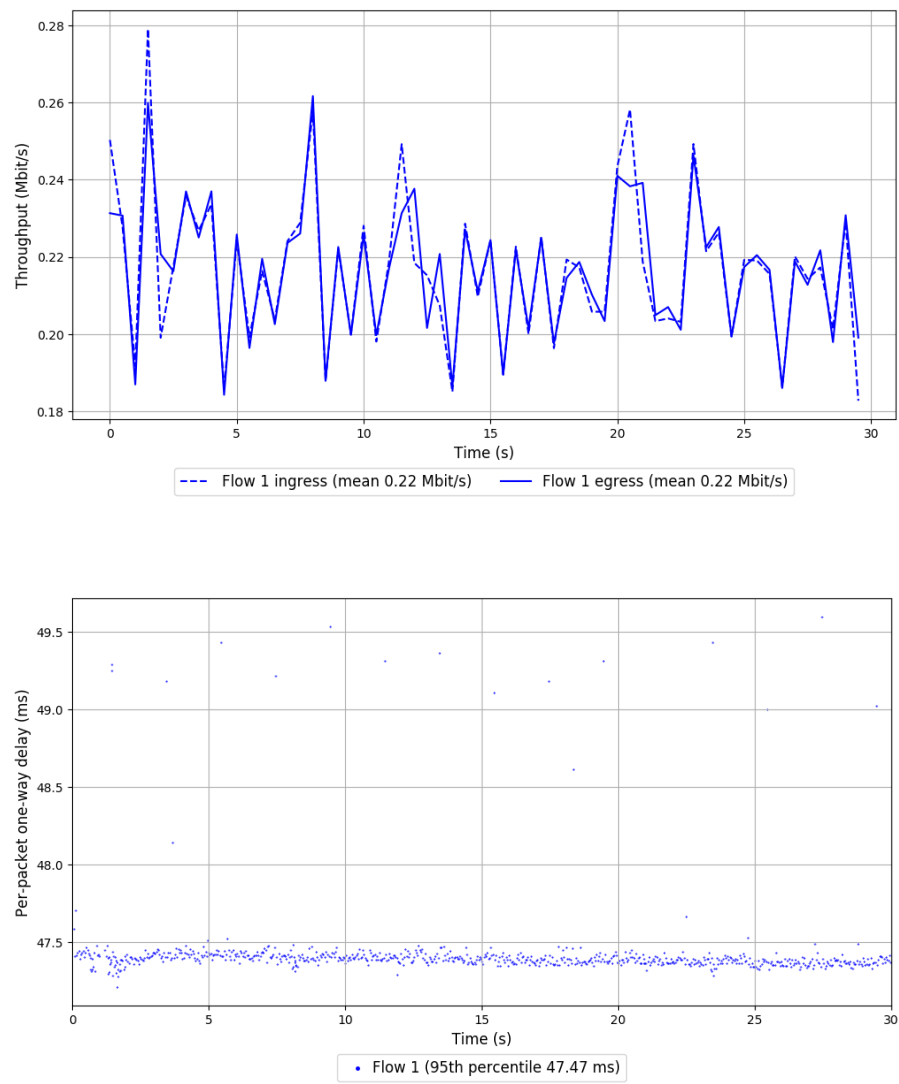
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.466 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-09 03:47:20

End at: 2018-01-09 03:47:50

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.337 ms

Loss rate: 0.13%

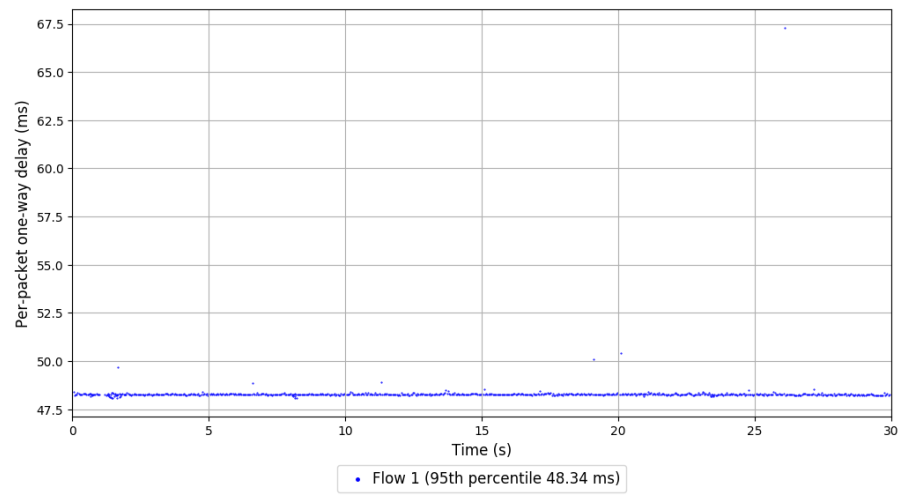
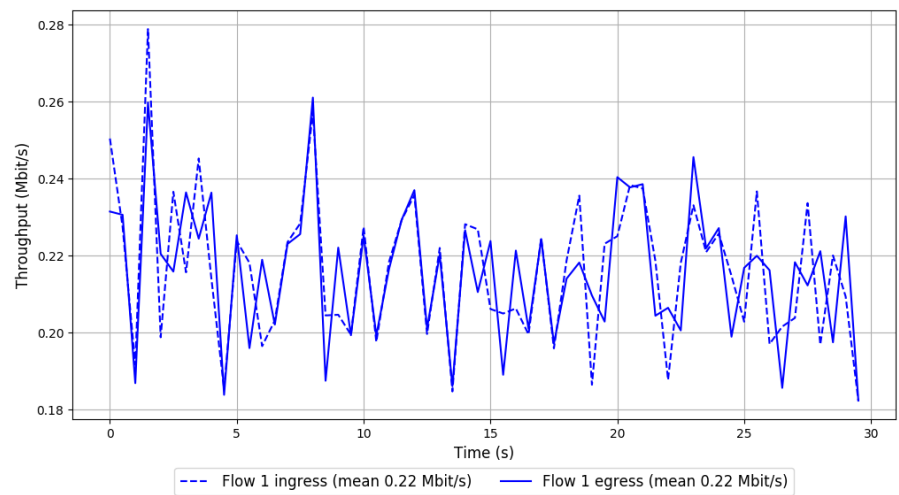
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.337 ms

Loss rate: 0.13%

Run 6: Report of SReAM — Data Link

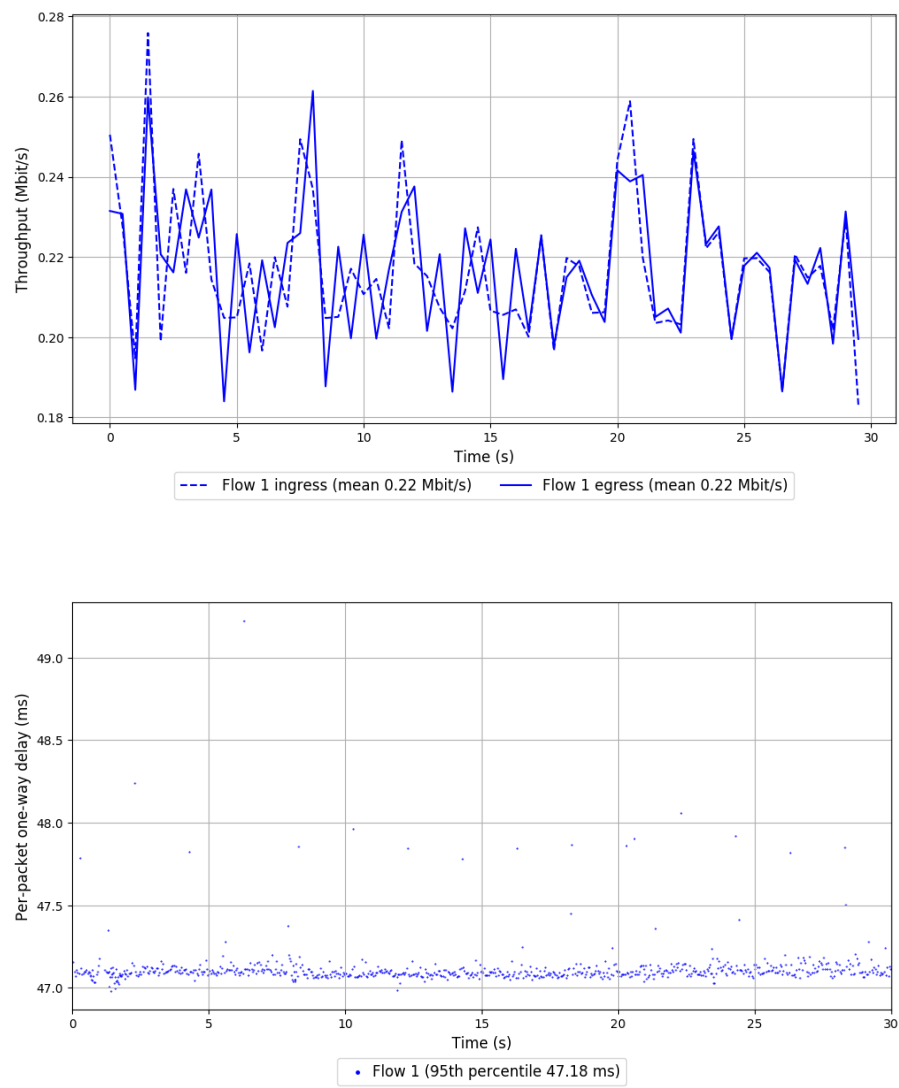


```
Run 7: Statistics of SCReAM

Start at: 2018-01-09 03:58:34
End at: 2018-01-09 03:59:04

# Below is generated by plot.py at 2018-01-09 05:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.181 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.181 ms
Loss rate: 0.00%
```

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-09 04:09:31

End at: 2018-01-09 04:10:01

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.570 ms

Loss rate: 0.00%

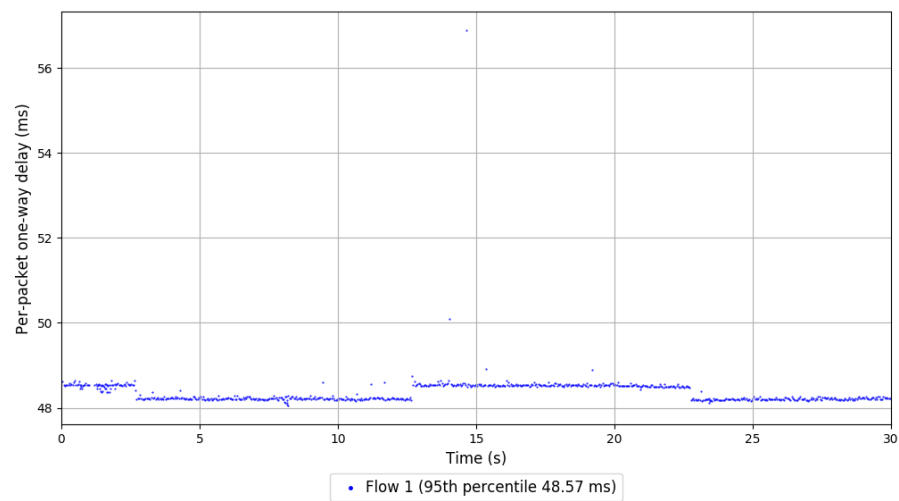
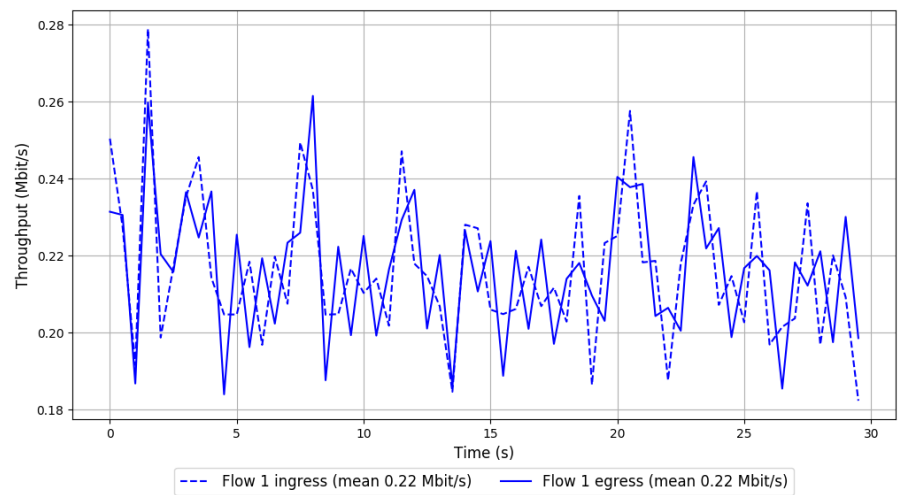
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.570 ms

Loss rate: 0.00%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-09 04:21:03

End at: 2018-01-09 04:21:33

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.958 ms

Loss rate: 0.00%

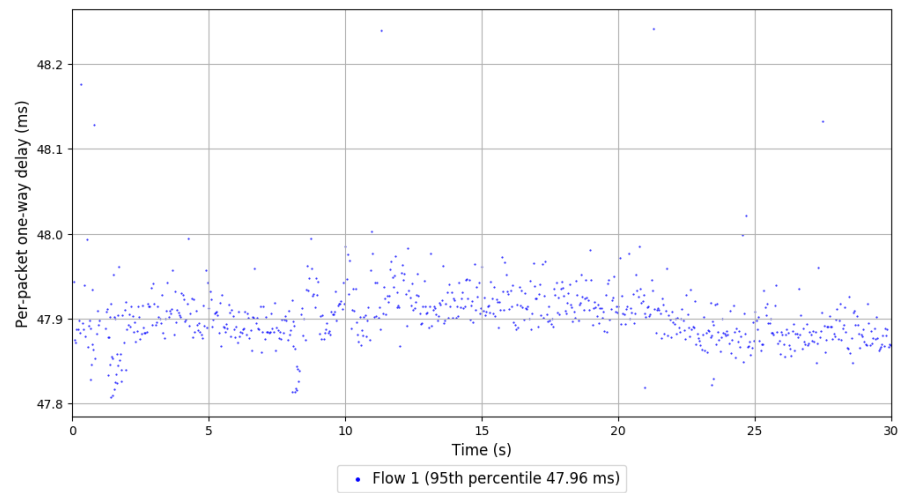
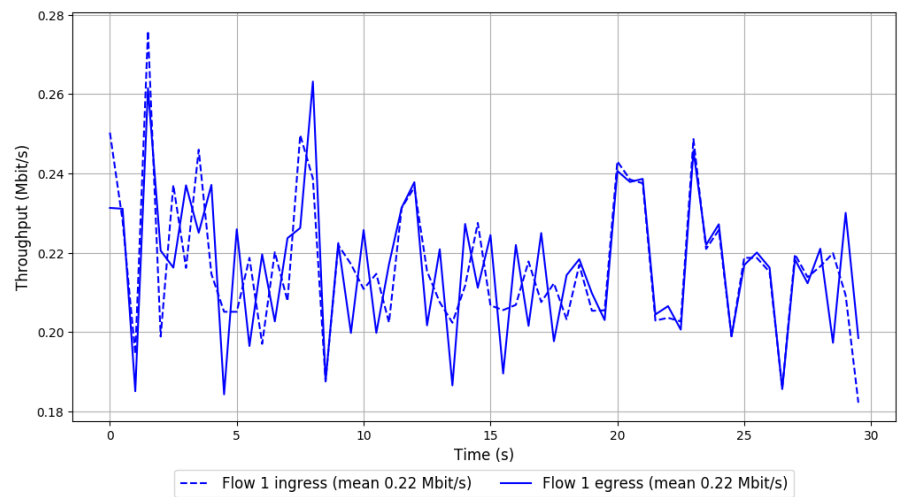
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.958 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

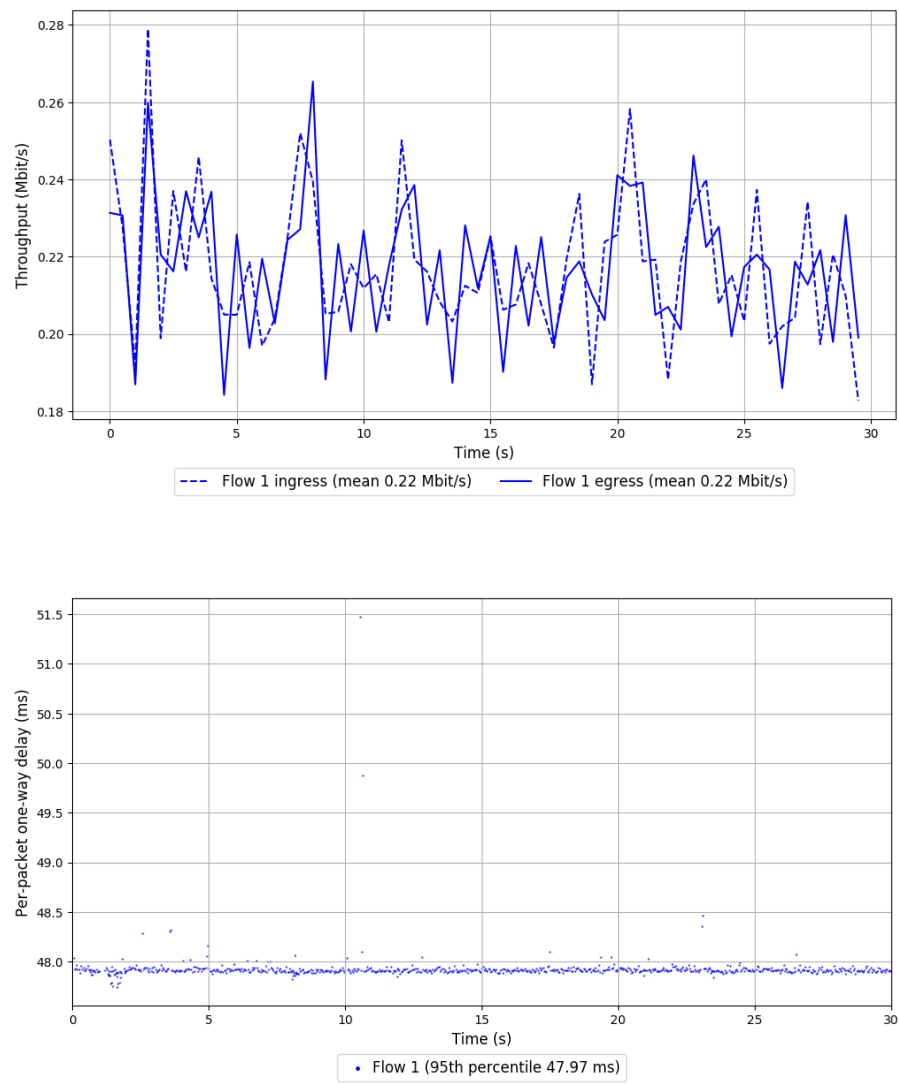


```
Run 10: Statistics of SReAM

Start at: 2018-01-09 04:32:14
End at: 2018-01-09 04:32:44

# Below is generated by plot.py at 2018-01-09 05:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.965 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.965 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

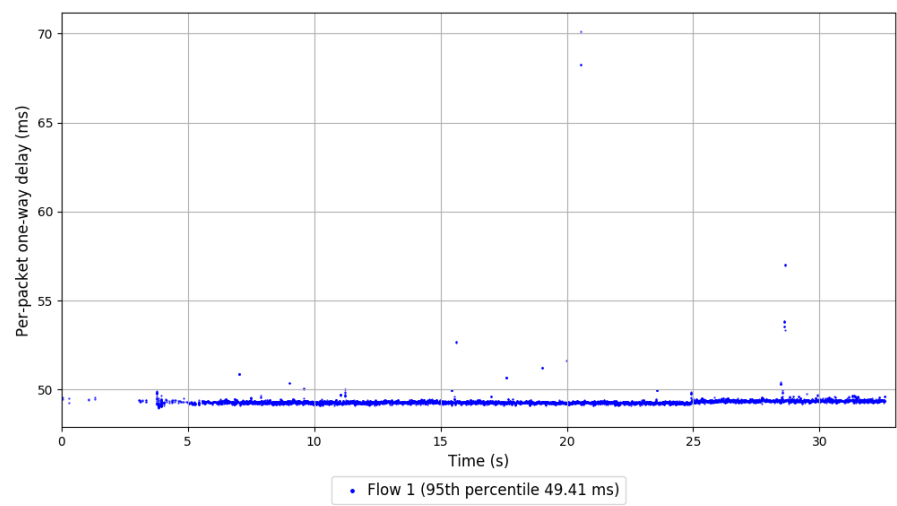
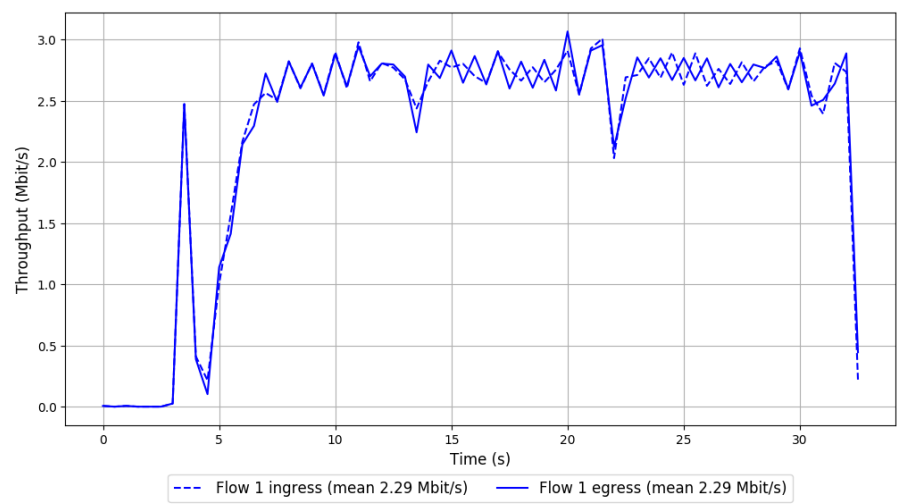


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-09 02:53:32
End at: 2018-01-09 02:54:02

# Below is generated by plot.py at 2018-01-09 05:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 49.412 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 49.412 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-09 03:05:14

End at: 2018-01-09 03:05:44

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 48.987 ms

Loss rate: 0.00%

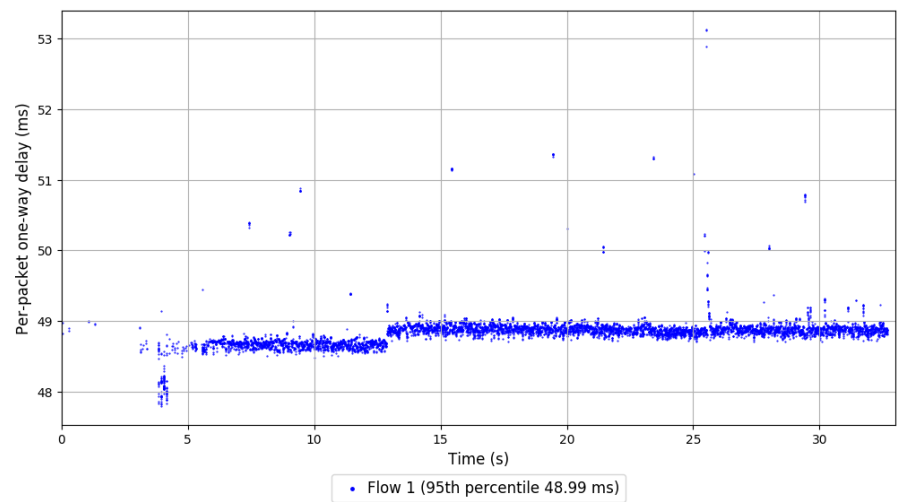
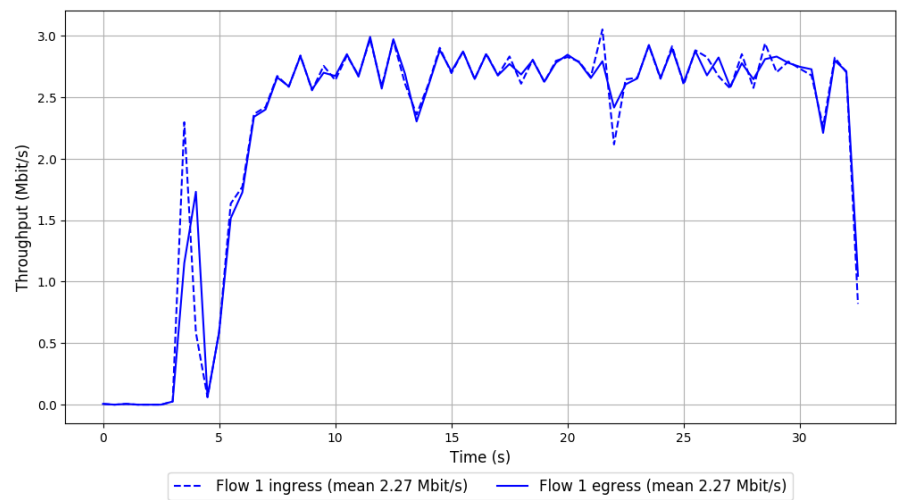
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 48.987 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-09 03:16:51

End at: 2018-01-09 03:17:21

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 49.704 ms

Loss rate: 0.00%

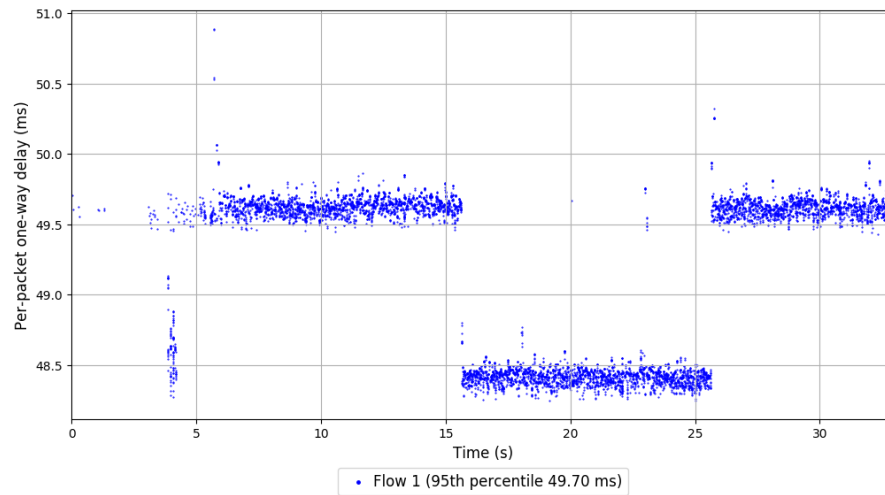
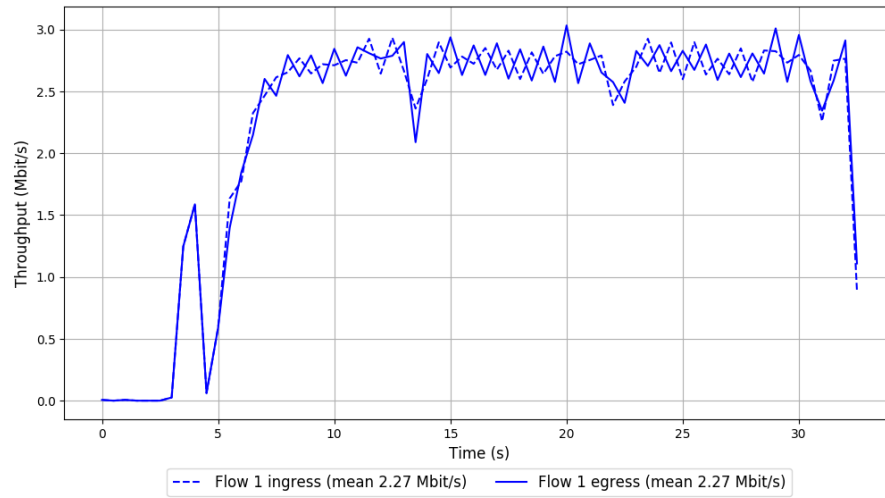
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 49.704 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-09 03:28:25

End at: 2018-01-09 03:28:55

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 47.605 ms

Loss rate: 0.00%

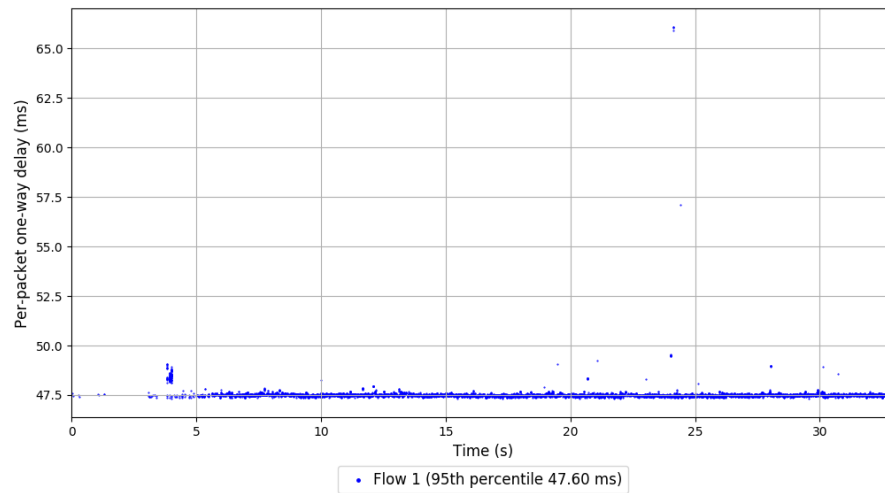
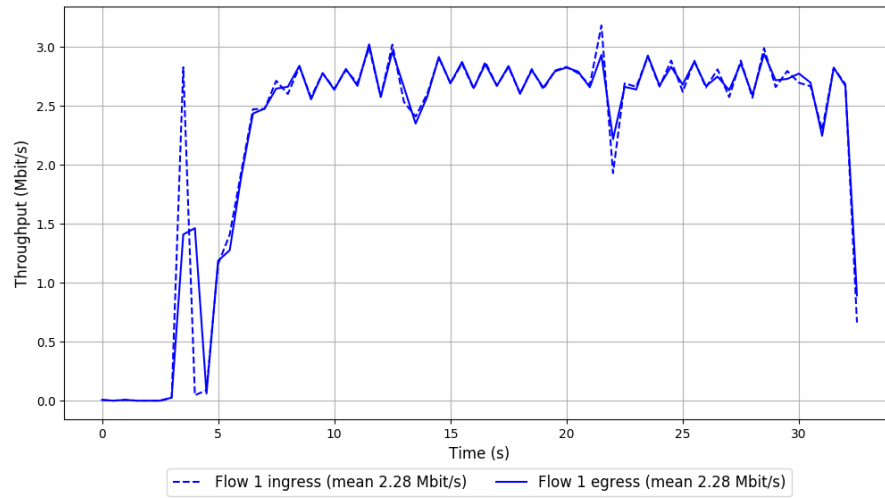
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 47.605 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-09 03:39:52

End at: 2018-01-09 03:40:22

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.106 ms

Loss rate: 0.00%

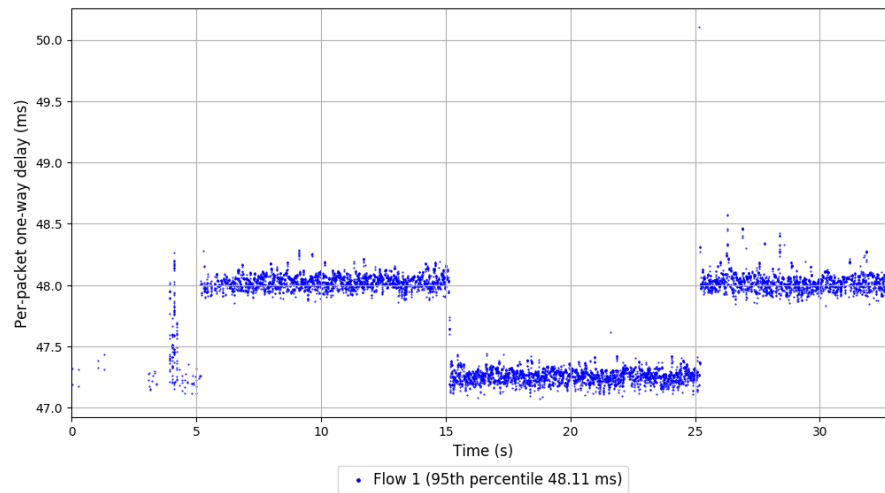
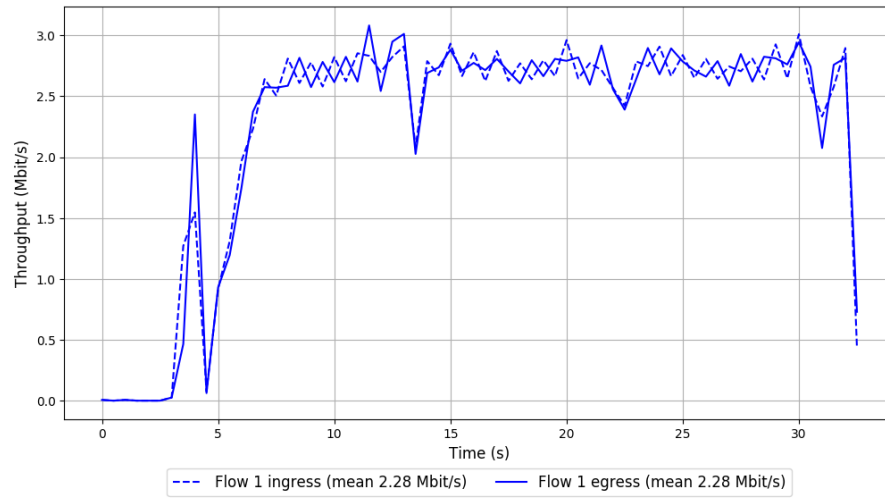
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.106 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-09 03:51:09

End at: 2018-01-09 03:51:39

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 47.212 ms

Loss rate: 0.00%

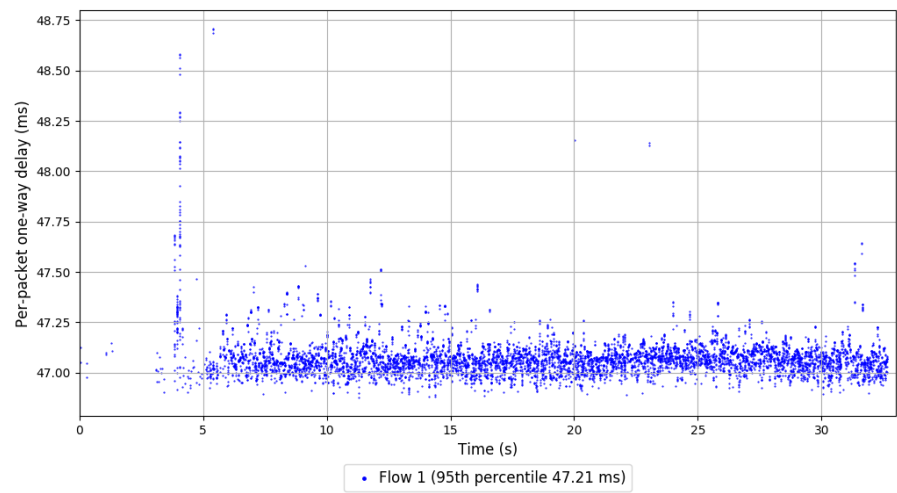
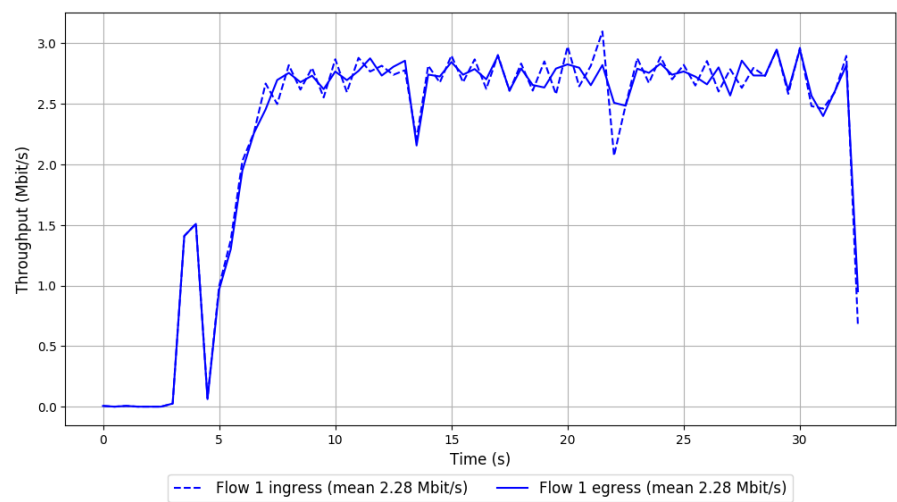
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 47.212 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-09 04:02:16

End at: 2018-01-09 04:02:46

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.916 ms

Loss rate: 0.00%

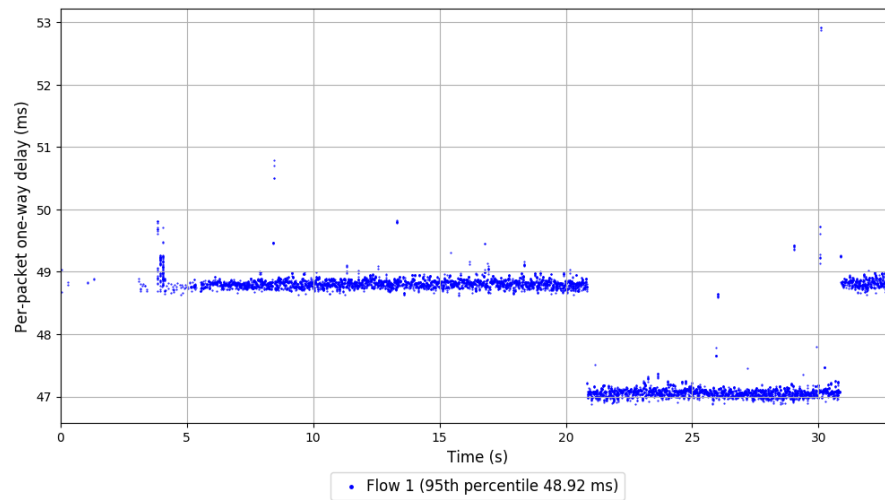
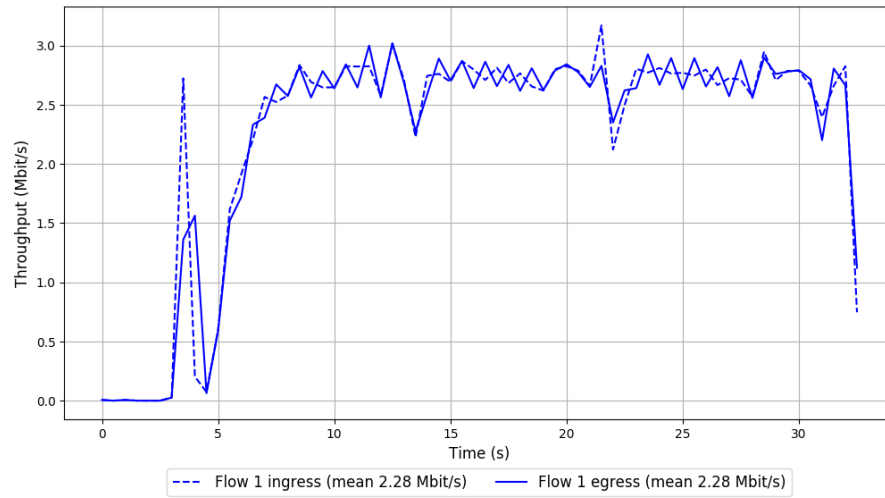
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.916 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-09 04:13:40

End at: 2018-01-09 04:14:10

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 48.708 ms

Loss rate: 0.00%

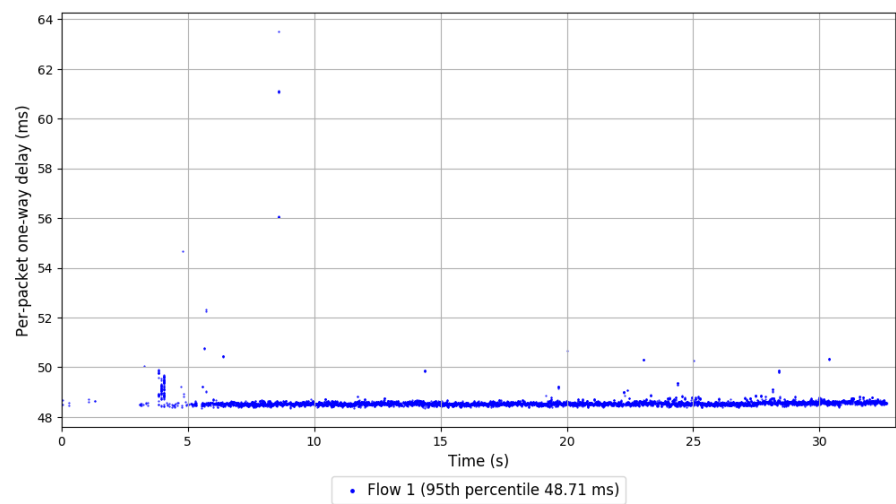
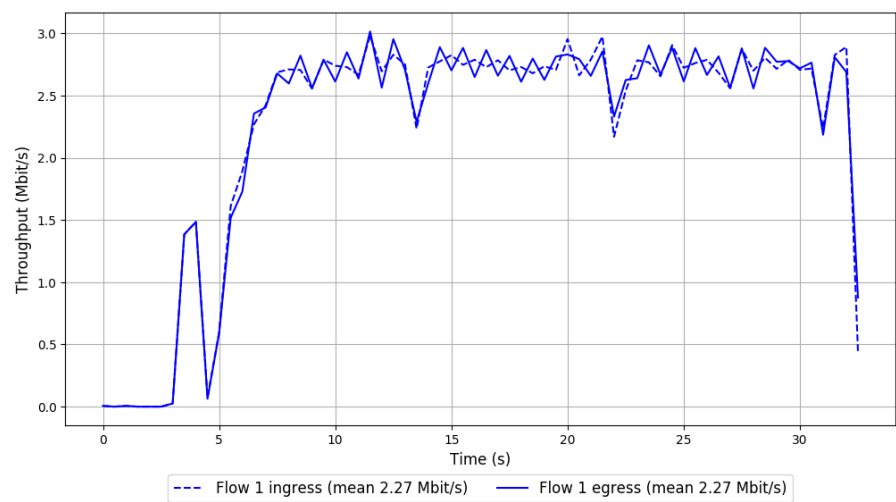
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 48.708 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-09 04:24:55

End at: 2018-01-09 04:25:25

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.736 ms

Loss rate: 0.00%

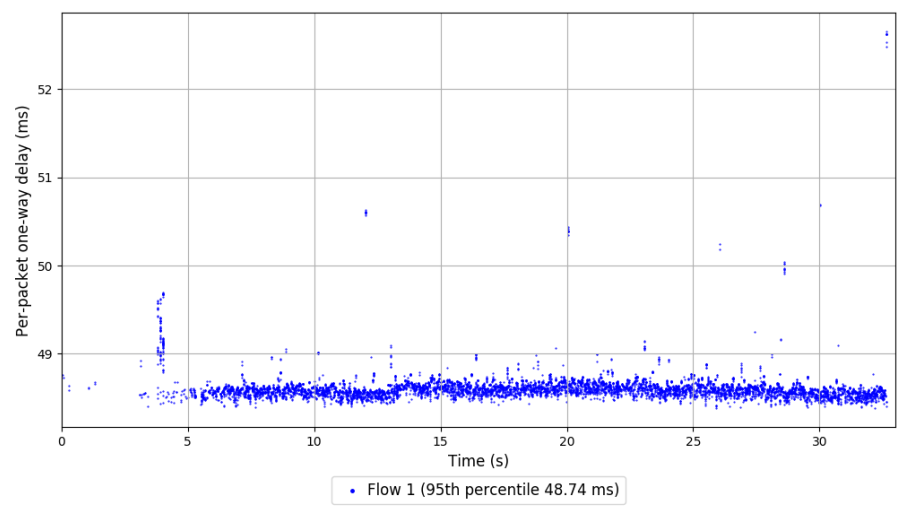
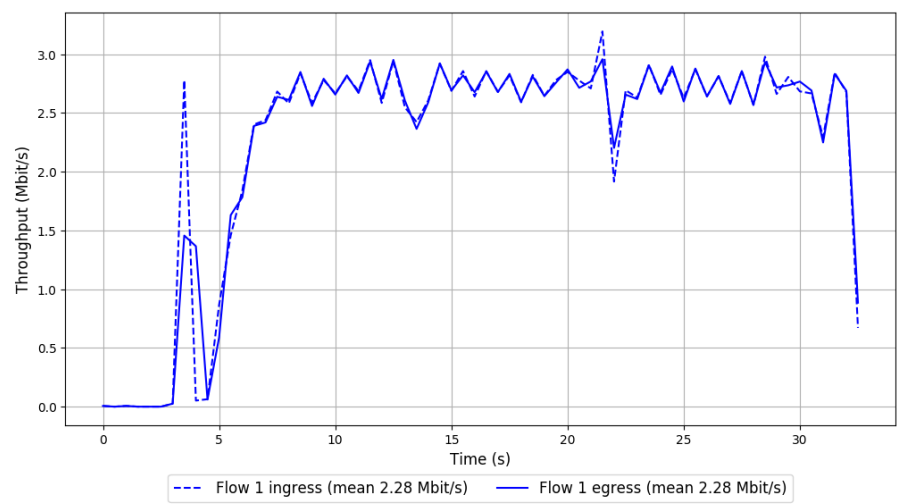
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.736 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-09 04:36:18

End at: 2018-01-09 04:36:48

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.670 ms

Loss rate: 0.00%

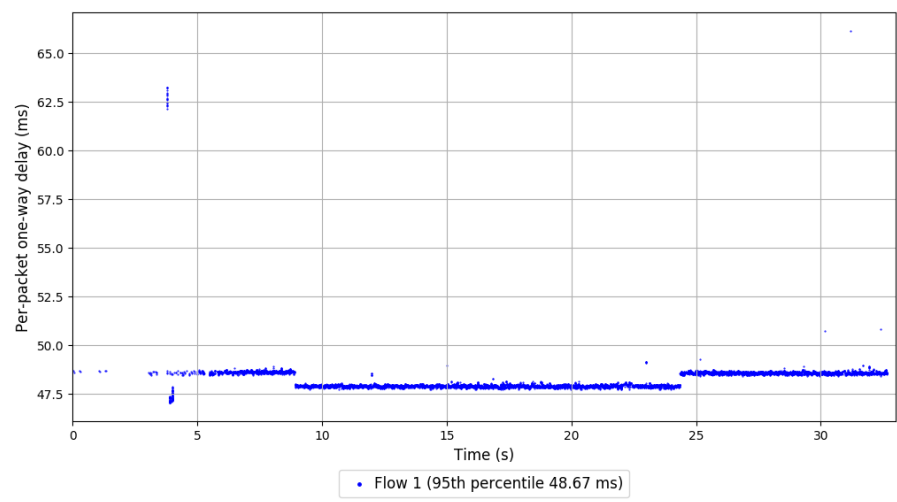
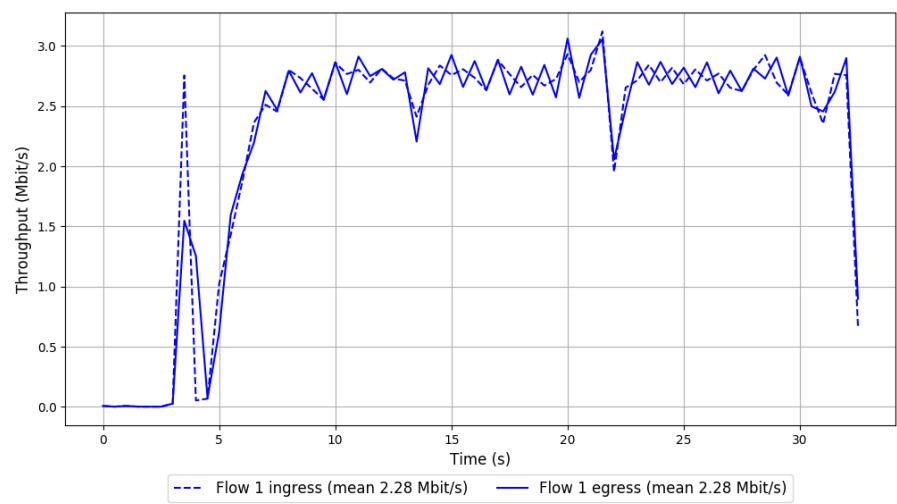
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.670 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

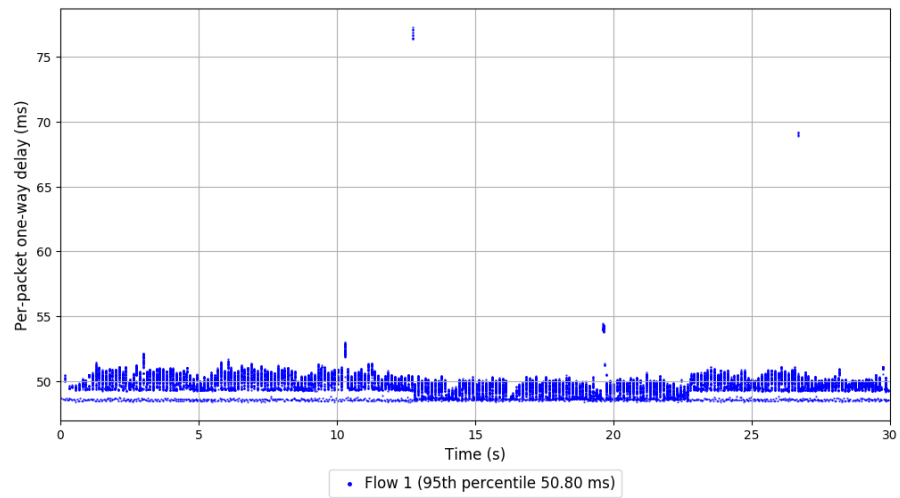
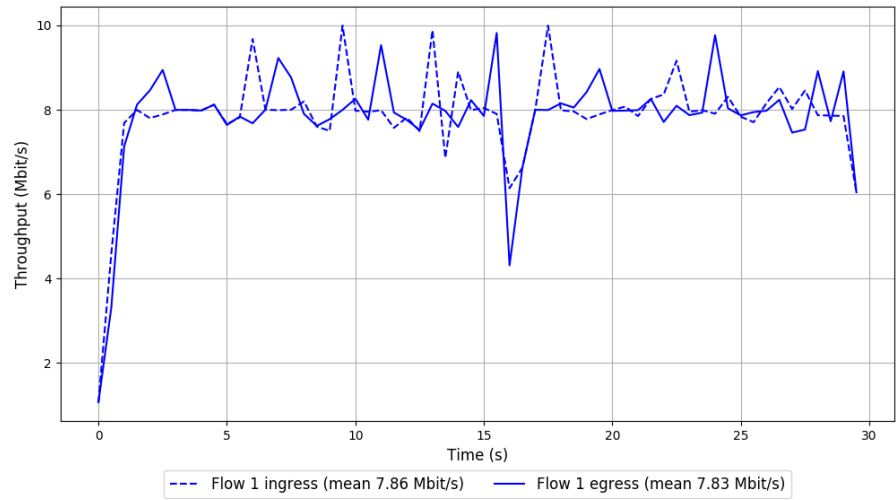


```
Run 1: Statistics of Sprout

Start at: 2018-01-09 02:47:22
End at: 2018-01-09 02:47:52

# Below is generated by plot.py at 2018-01-09 05:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 50.804 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 50.804 ms
Loss rate: 0.39%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-09 02:59:01

End at: 2018-01-09 02:59:31

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 50.312 ms

Loss rate: 0.00%

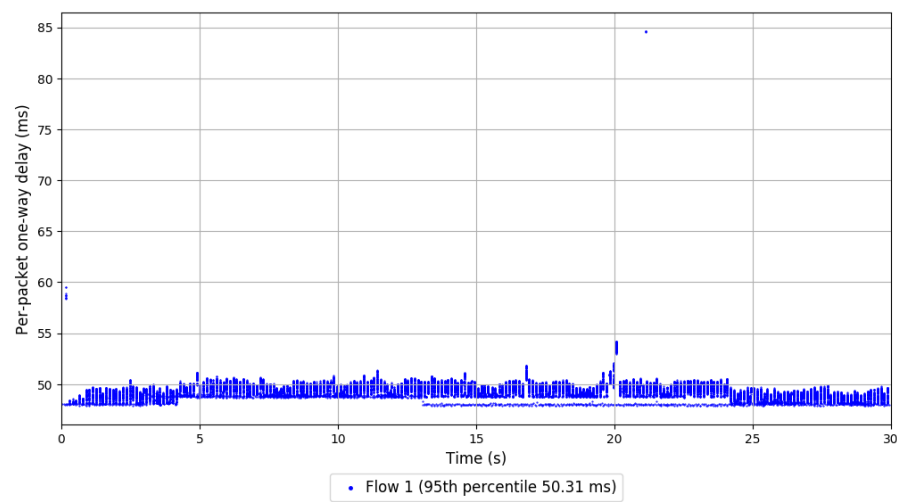
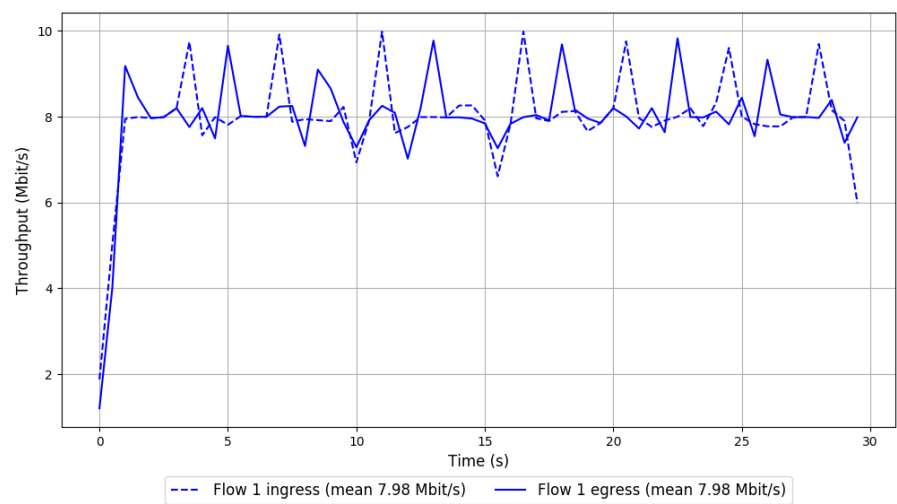
-- Flow 1:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 50.312 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-09 03:10:38

End at: 2018-01-09 03:11:08

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 50.163 ms

Loss rate: 0.43%

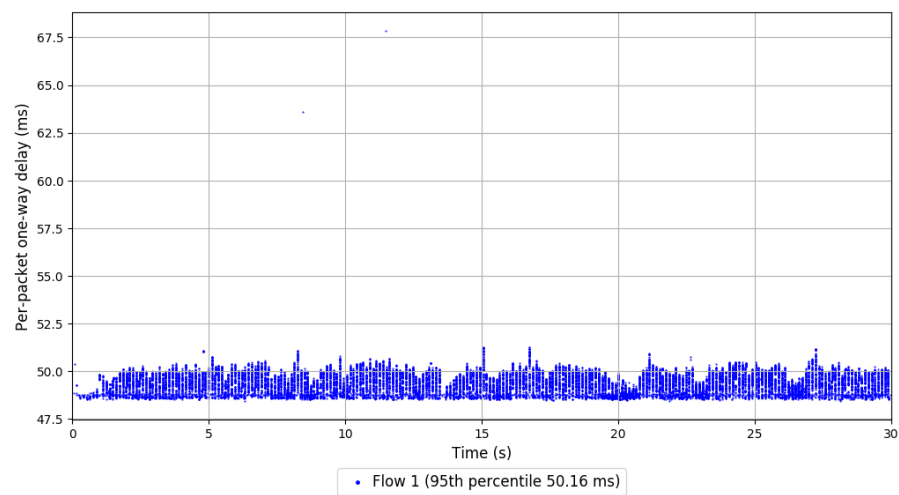
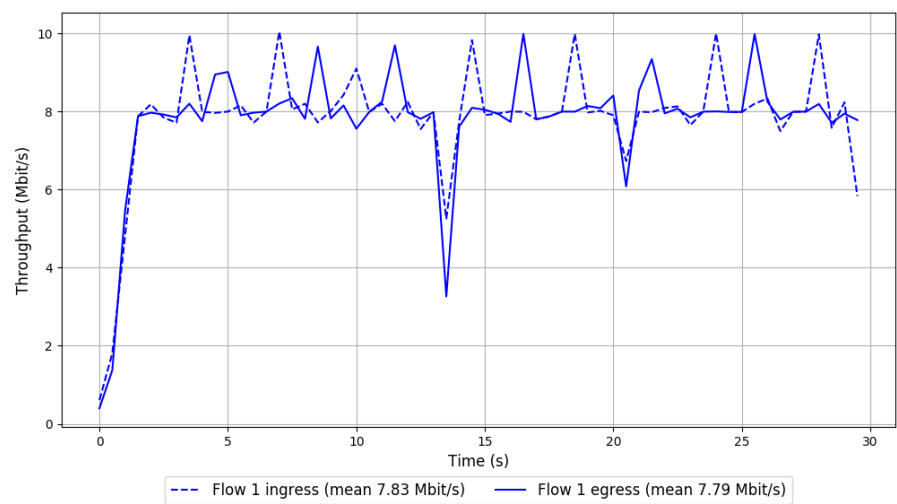
-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 50.163 ms

Loss rate: 0.43%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-09 03:22:11

End at: 2018-01-09 03:22:41

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 50.042 ms

Loss rate: 0.00%

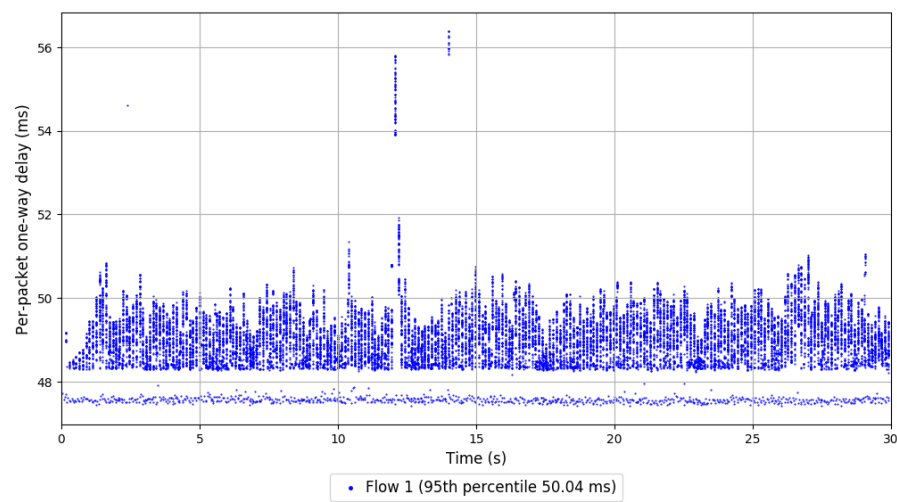
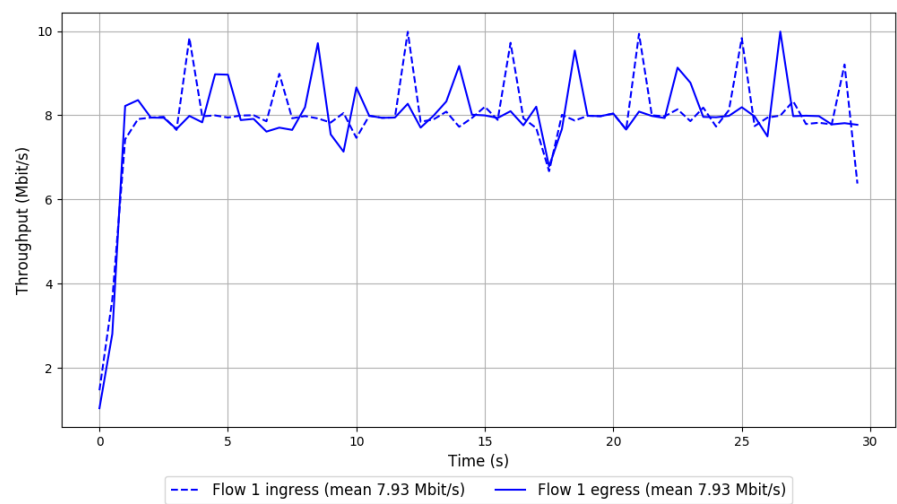
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 50.042 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-09 03:33:46

End at: 2018-01-09 03:34:16

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 49.517 ms

Loss rate: 0.42%

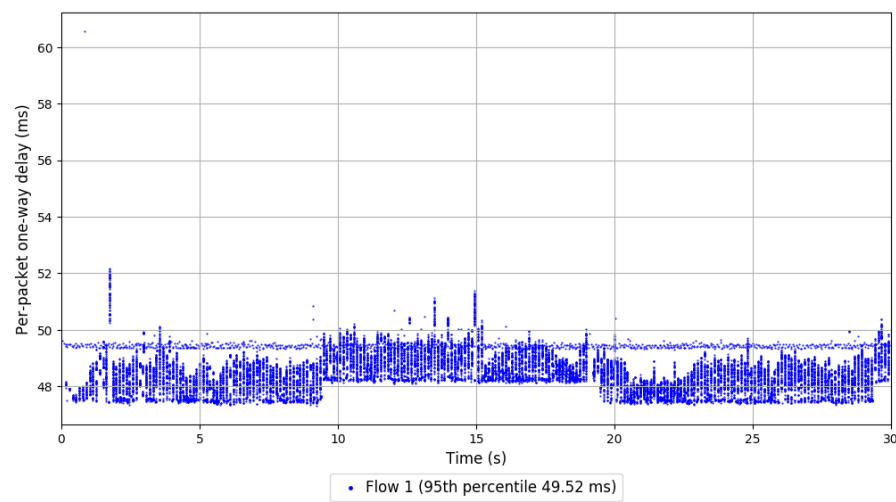
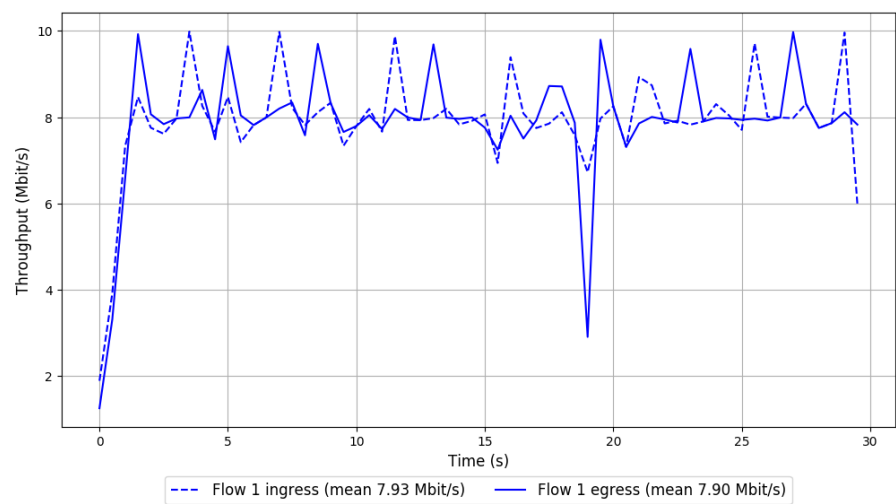
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 49.517 ms

Loss rate: 0.42%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-09 03:45:14

End at: 2018-01-09 03:45:44

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 50.310 ms

Loss rate: 0.83%

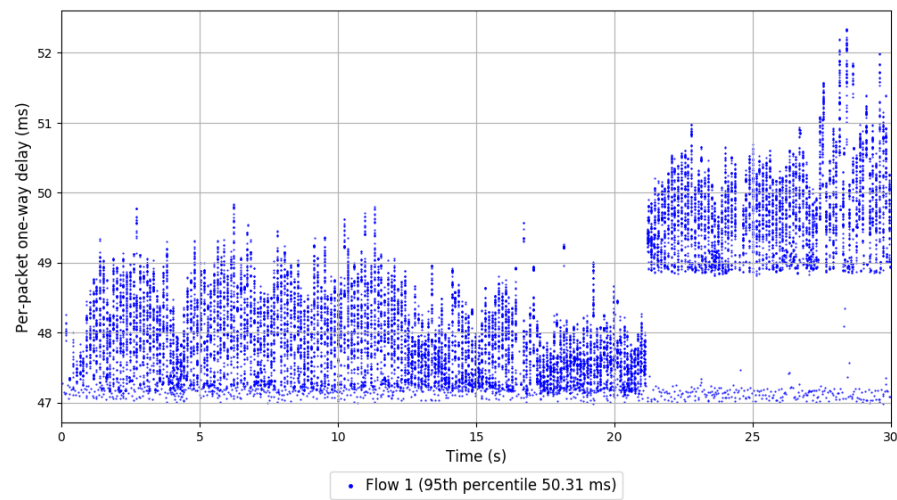
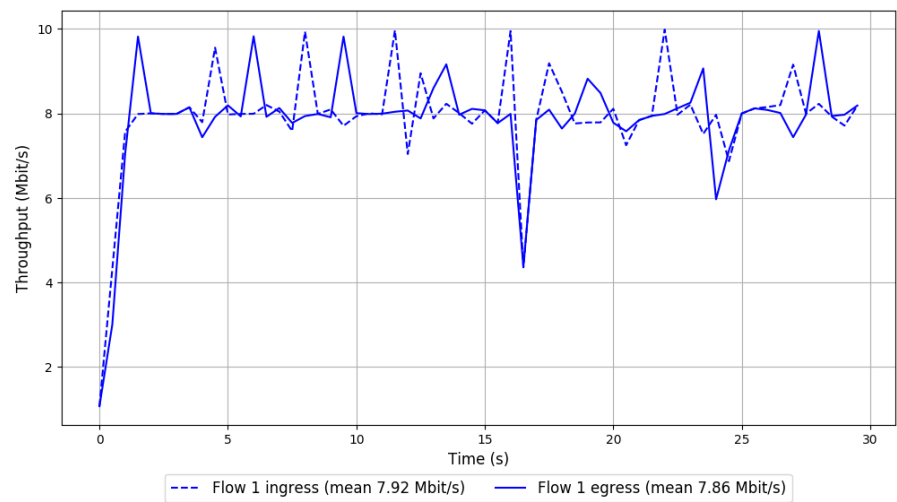
-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 50.310 ms

Loss rate: 0.83%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-09 03:56:28

End at: 2018-01-09 03:56:58

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.97 Mbit/s

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

Loss rate: 0.00%

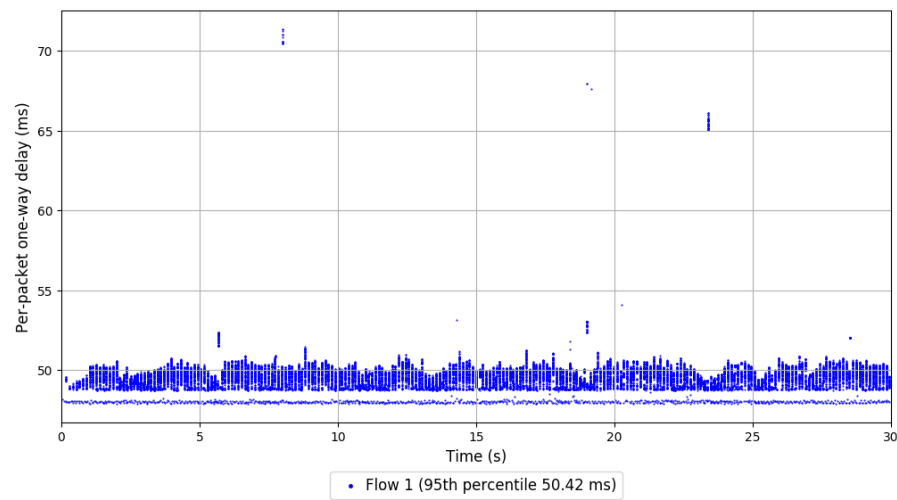
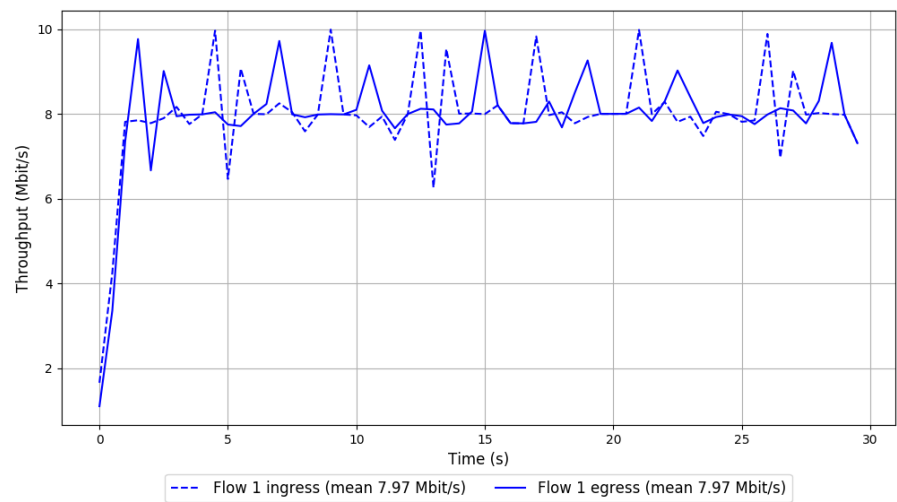
-- Flow 1:

Average throughput: 7.97 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-09 04:07:23

End at: 2018-01-09 04:07:53

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 50.057 ms

Loss rate: 0.00%

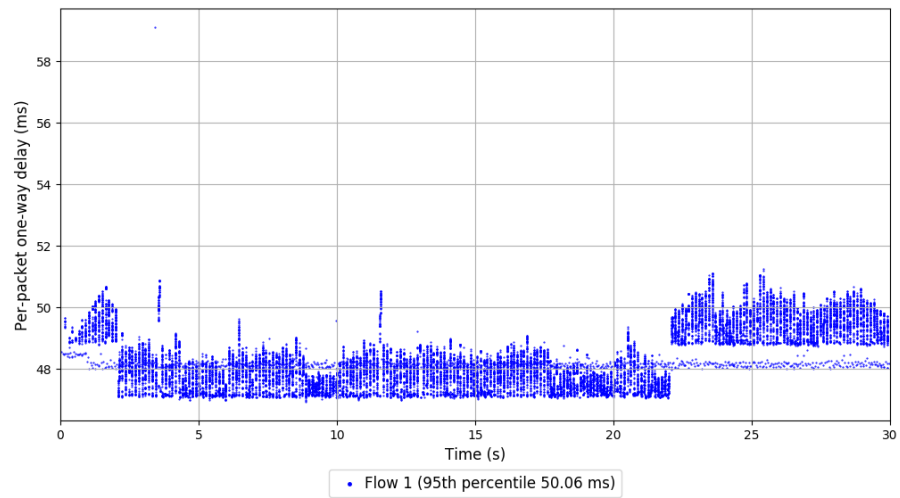
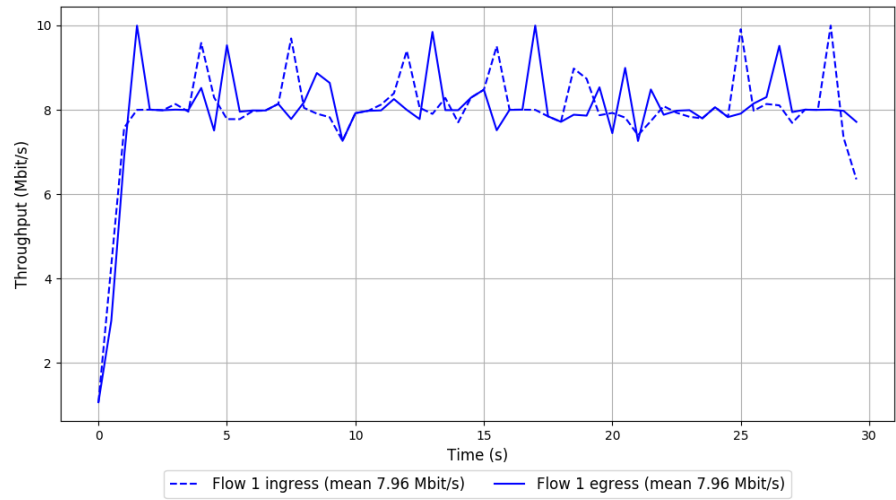
-- Flow 1:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 50.057 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-09 04:18:59

End at: 2018-01-09 04:19:29

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 50.172 ms

Loss rate: 0.00%

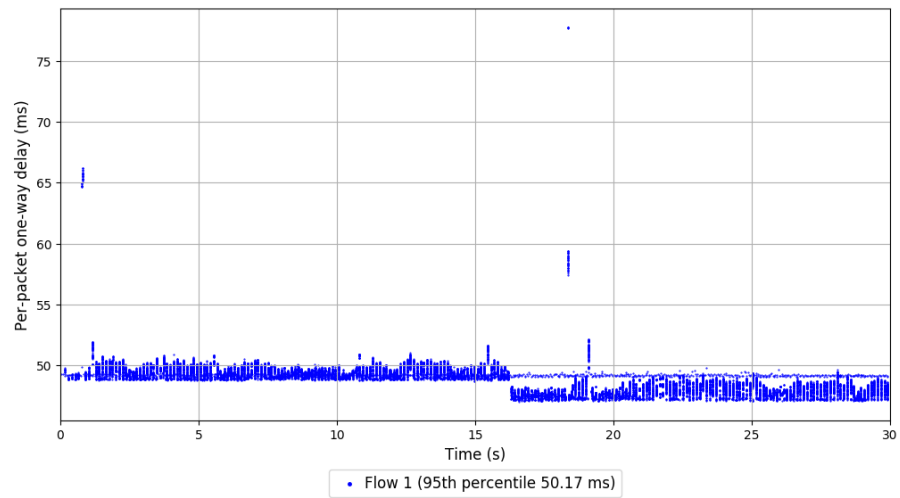
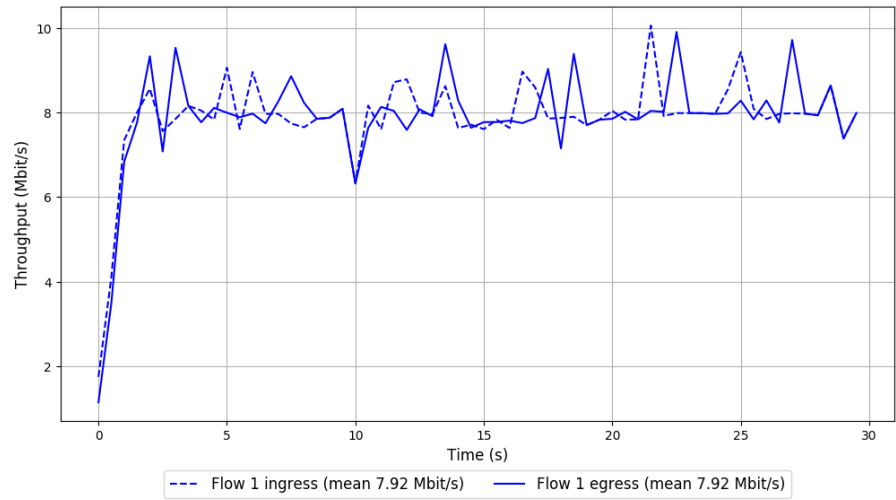
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 50.172 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-09 04:30:10

End at: 2018-01-09 04:30:40

Below is generated by plot.py at 2018-01-09 05:58:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 0.24%

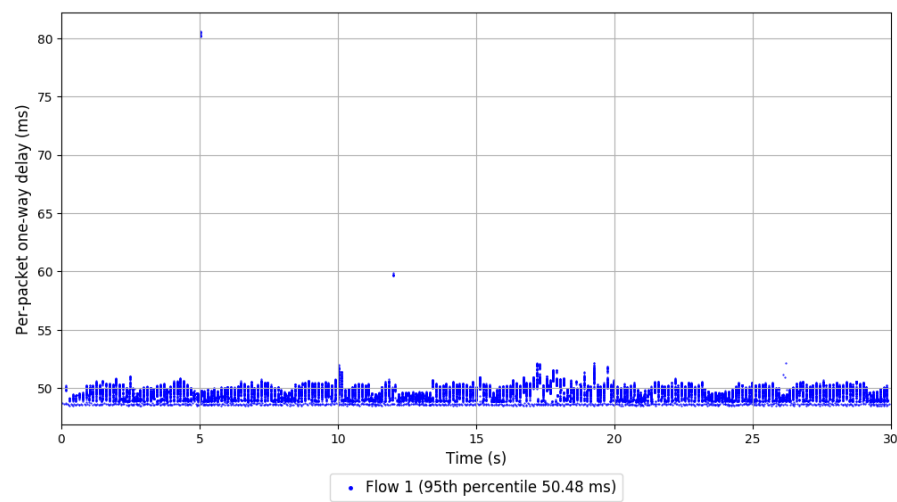
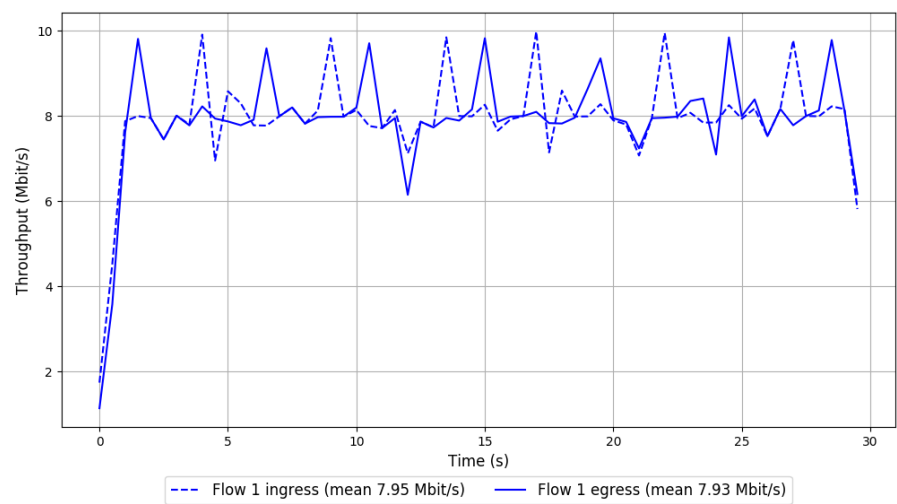
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 0.24%

Run 10: Report of Sprout — Data Link

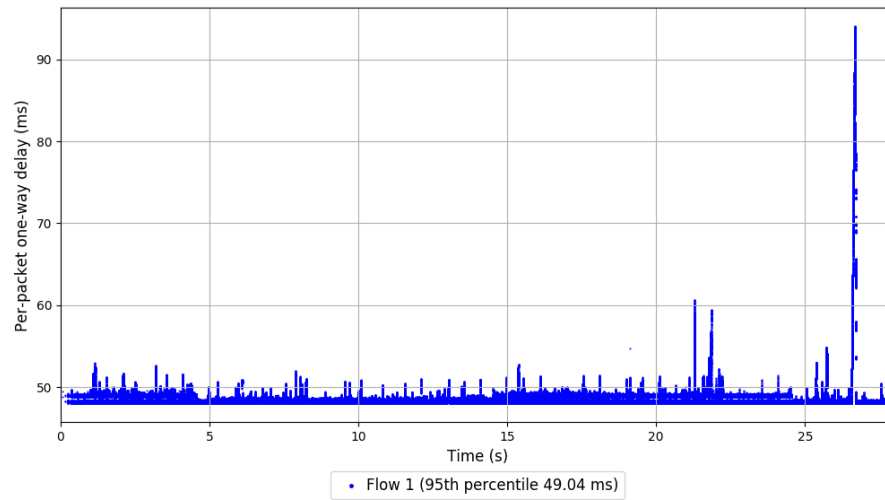
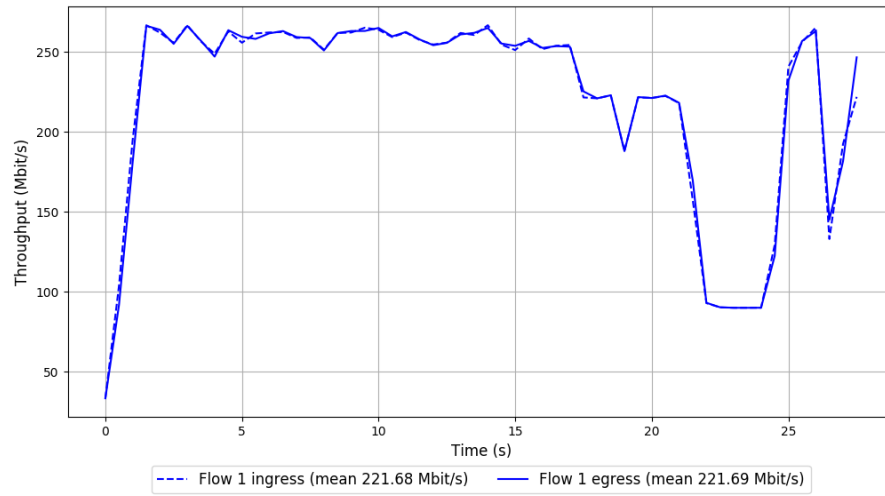


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-09 02:54:09
End at: 2018-01-09 02:54:39

# Below is generated by plot.py at 2018-01-09 06:03:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.69 Mbit/s
95th percentile per-packet one-way delay: 49.041 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.69 Mbit/s
95th percentile per-packet one-way delay: 49.041 ms
Loss rate: 0.00%
```

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

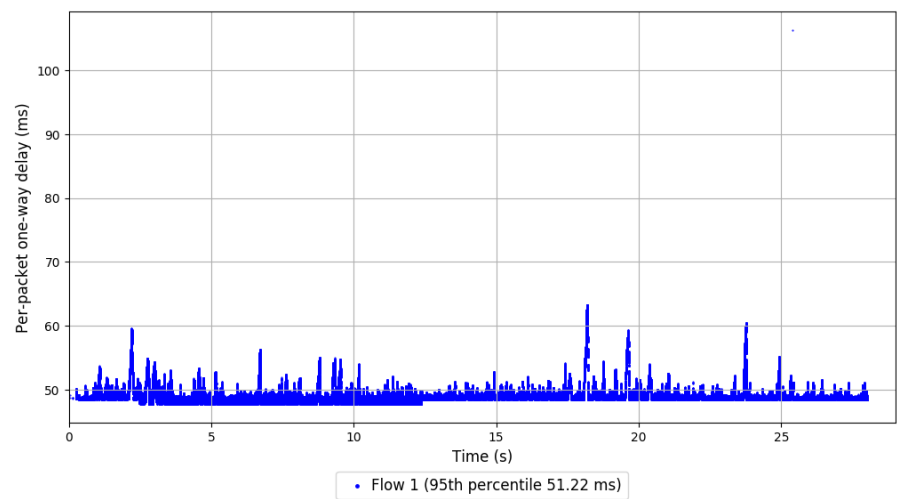
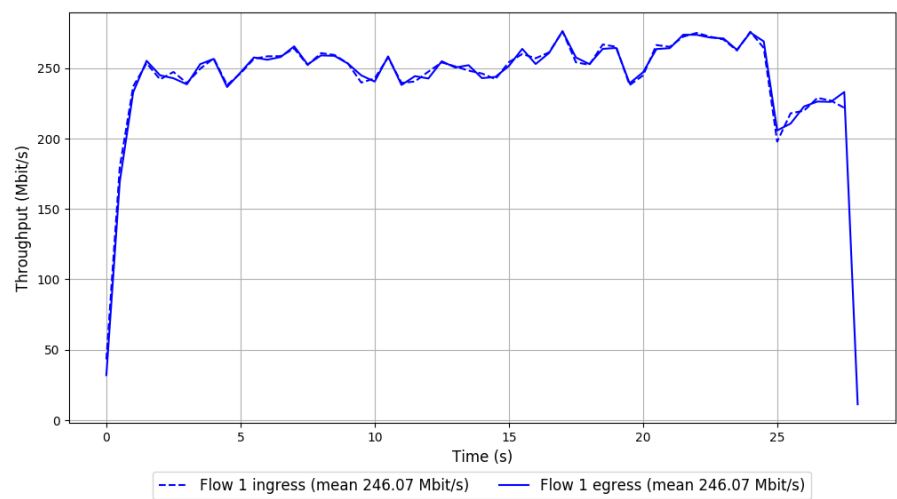


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-09 03:05:51
End at: 2018-01-09 03:06:21

# Below is generated by plot.py at 2018-01-09 06:04:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.07 Mbit/s
95th percentile per-packet one-way delay: 51.224 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 246.07 Mbit/s
95th percentile per-packet one-way delay: 51.224 ms
Loss rate: 0.00%
```

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

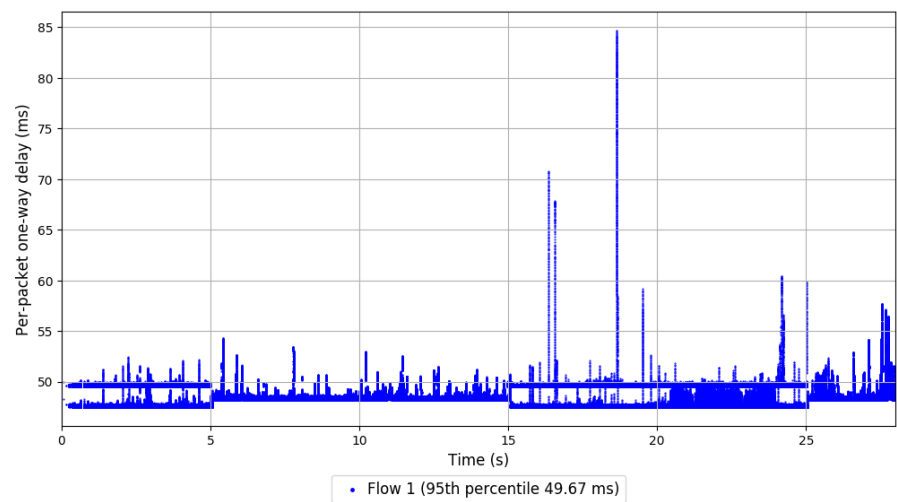
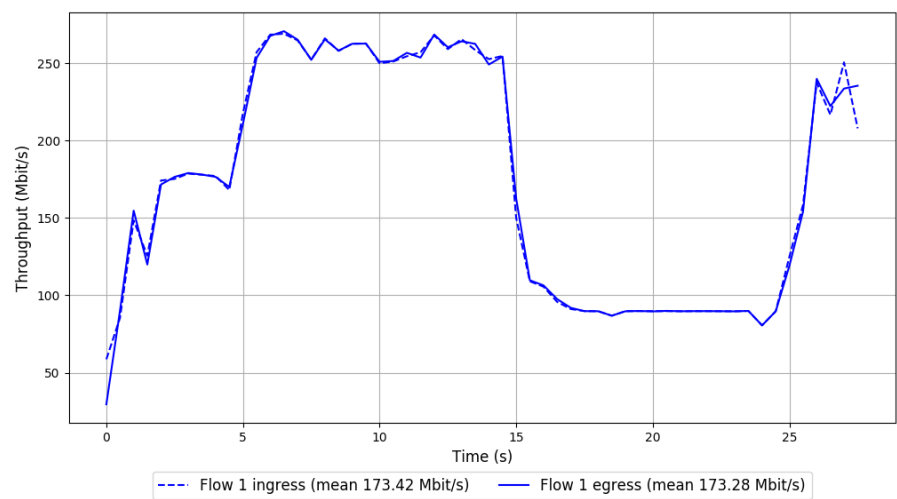


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-09 03:17:28
End at: 2018-01-09 03:17:58

# Below is generated by plot.py at 2018-01-09 06:04:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 173.28 Mbit/s
95th percentile per-packet one-way delay: 49.672 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 173.28 Mbit/s
95th percentile per-packet one-way delay: 49.672 ms
Loss rate: 0.08%
```

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

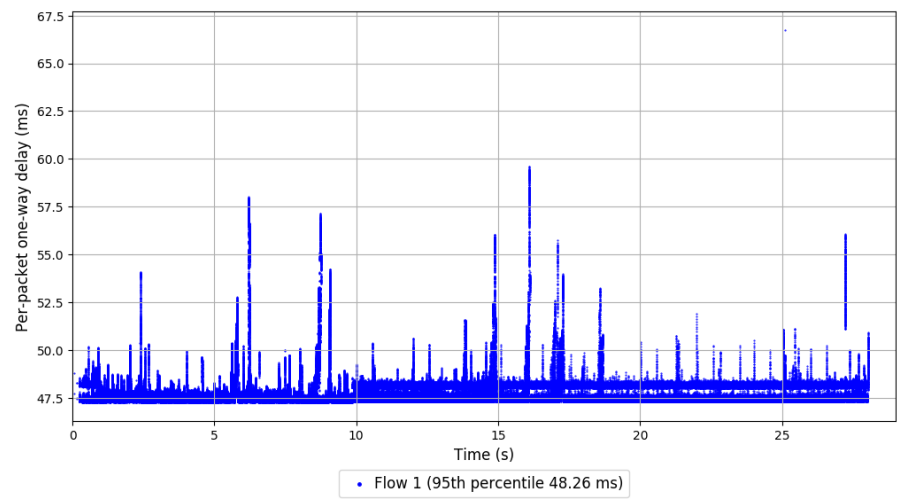
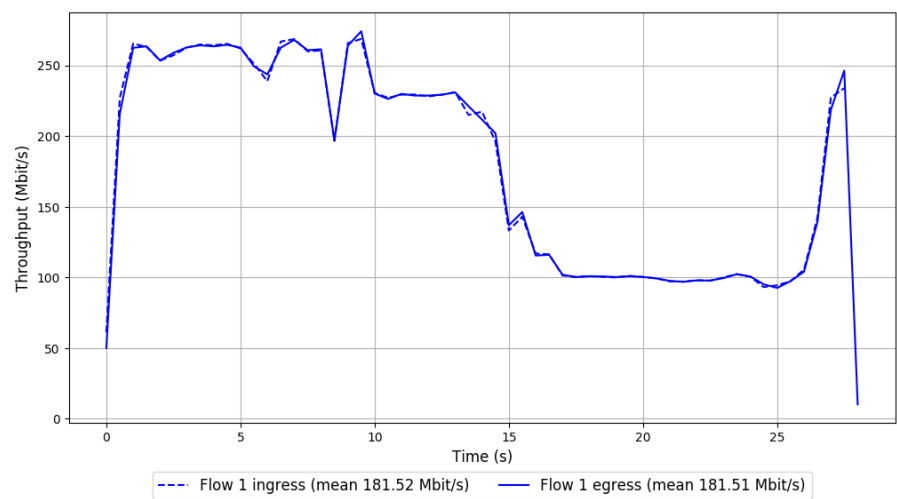


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-09 03:29:02
End at: 2018-01-09 03:29:32

# Below is generated by plot.py at 2018-01-09 06:04:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.51 Mbit/s
95th percentile per-packet one-way delay: 48.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.51 Mbit/s
95th percentile per-packet one-way delay: 48.264 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-09 03:40:28

End at: 2018-01-09 03:40:58

Below is generated by plot.py at 2018-01-09 06:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.08 Mbit/s

95th percentile per-packet one-way delay: 51.690 ms

Loss rate: 0.09%

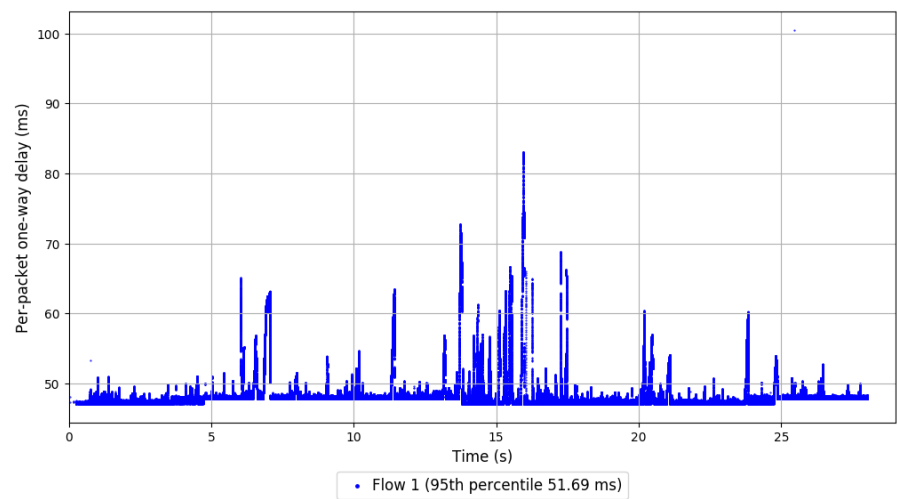
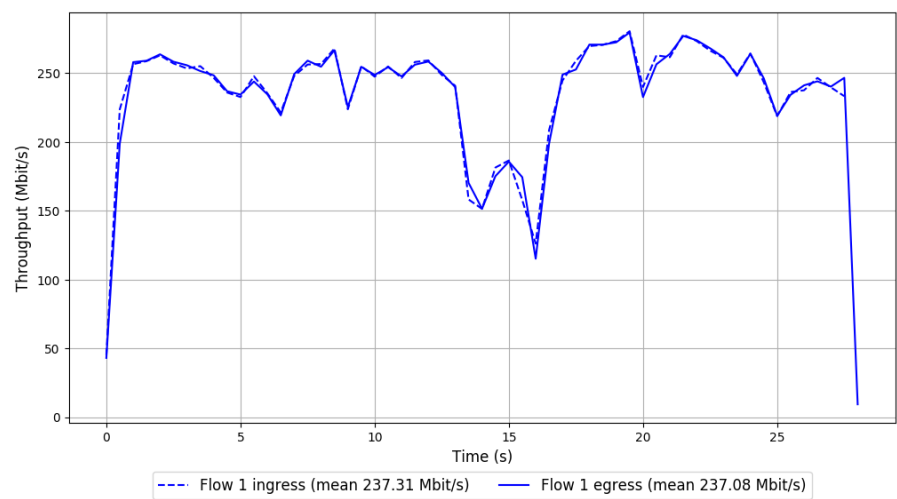
-- Flow 1:

Average throughput: 237.08 Mbit/s

95th percentile per-packet one-way delay: 51.690 ms

Loss rate: 0.09%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-09 03:51:46

End at: 2018-01-09 03:52:16

Below is generated by plot.py at 2018-01-09 06:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.82 Mbit/s

95th percentile per-packet one-way delay: 49.018 ms

Loss rate: 0.00%

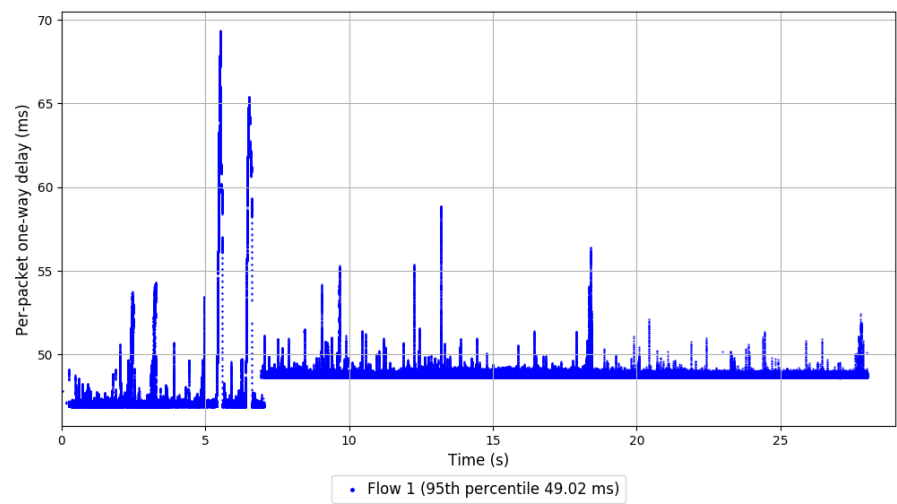
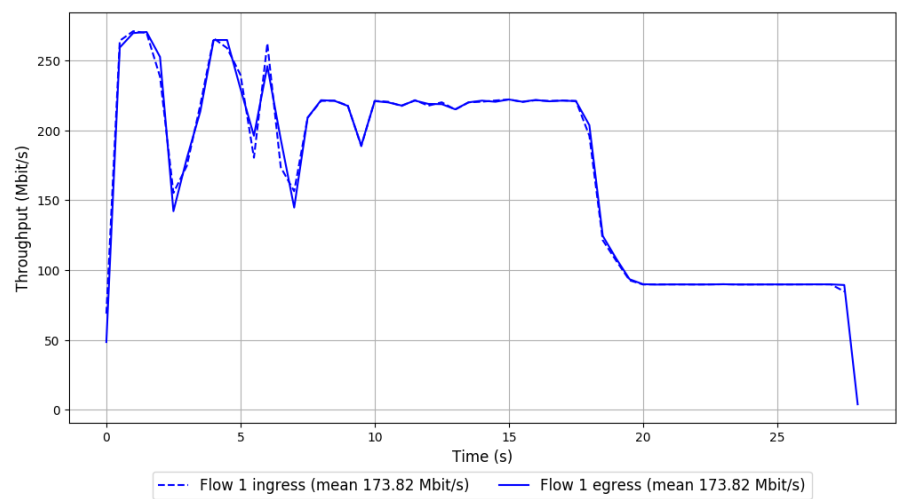
-- Flow 1:

Average throughput: 173.82 Mbit/s

95th percentile per-packet one-way delay: 49.018 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-09 04:02:53

End at: 2018-01-09 04:03:23

Below is generated by plot.py at 2018-01-09 06:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.38 Mbit/s

95th percentile per-packet one-way delay: 57.318 ms

Loss rate: 0.00%

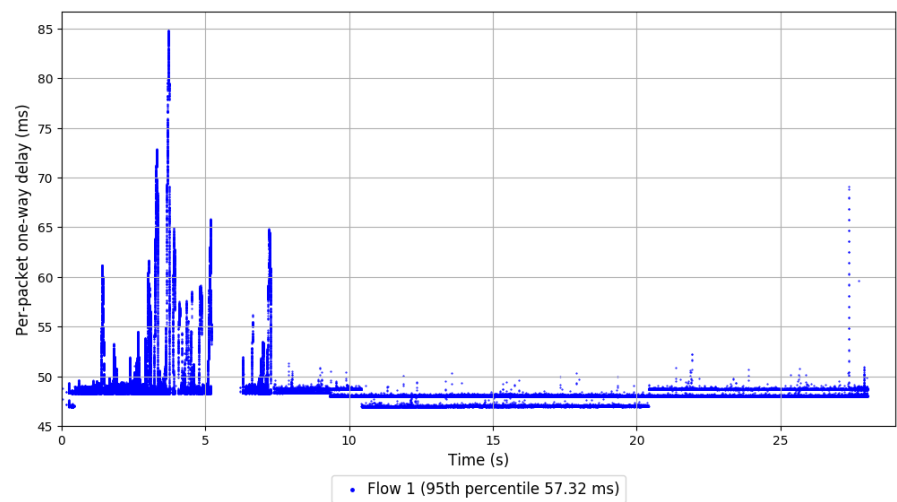
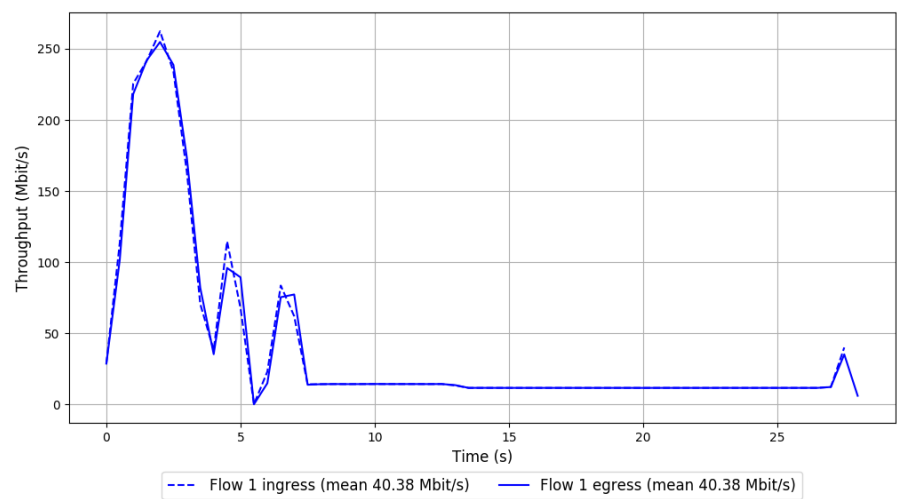
-- Flow 1:

Average throughput: 40.38 Mbit/s

95th percentile per-packet one-way delay: 57.318 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-09 04:14:17

End at: 2018-01-09 04:14:47

Below is generated by plot.py at 2018-01-09 06:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.75 Mbit/s

95th percentile per-packet one-way delay: 53.649 ms

Loss rate: 0.00%

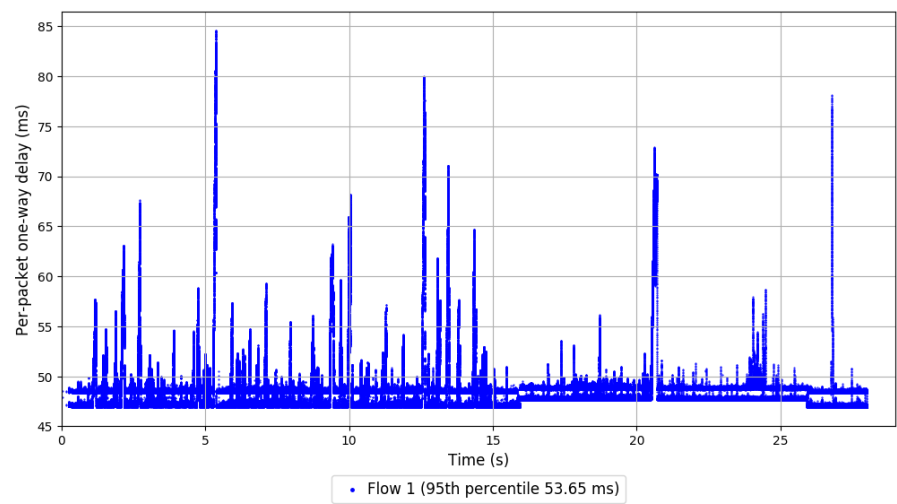
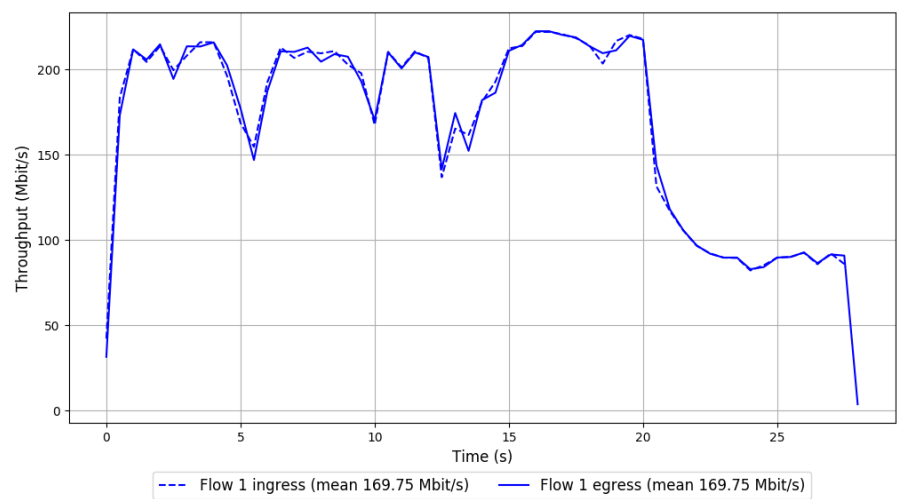
-- Flow 1:

Average throughput: 169.75 Mbit/s

95th percentile per-packet one-way delay: 53.649 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-09 04:25:32

End at: 2018-01-09 04:26:02

Below is generated by plot.py at 2018-01-09 06:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.17 Mbit/s

95th percentile per-packet one-way delay: 49.209 ms

Loss rate: 0.00%

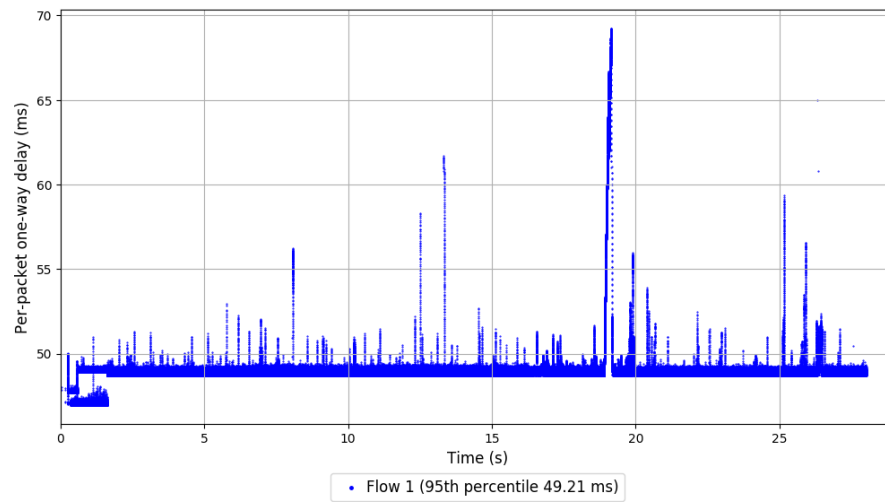
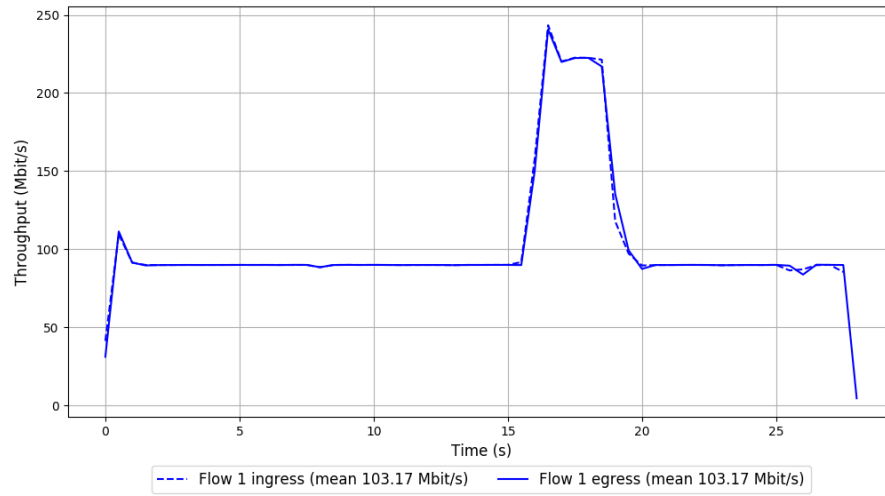
-- Flow 1:

Average throughput: 103.17 Mbit/s

95th percentile per-packet one-way delay: 49.209 ms

Loss rate: 0.00%

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

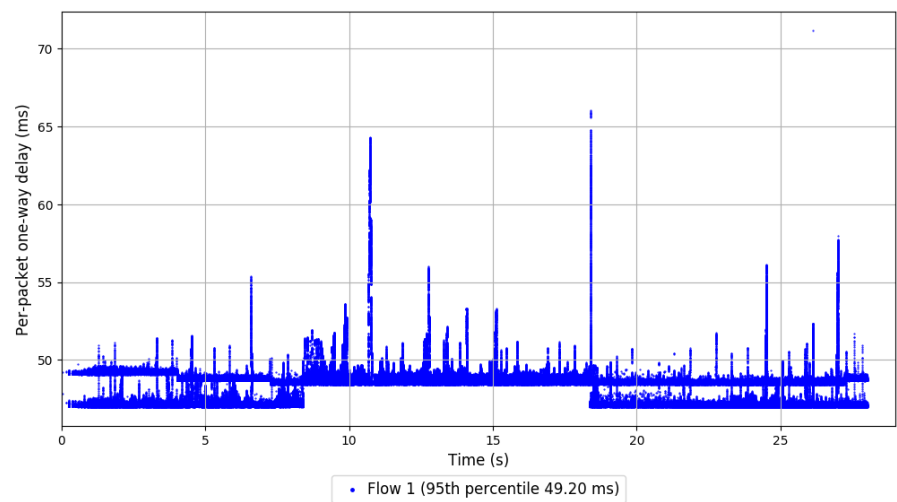
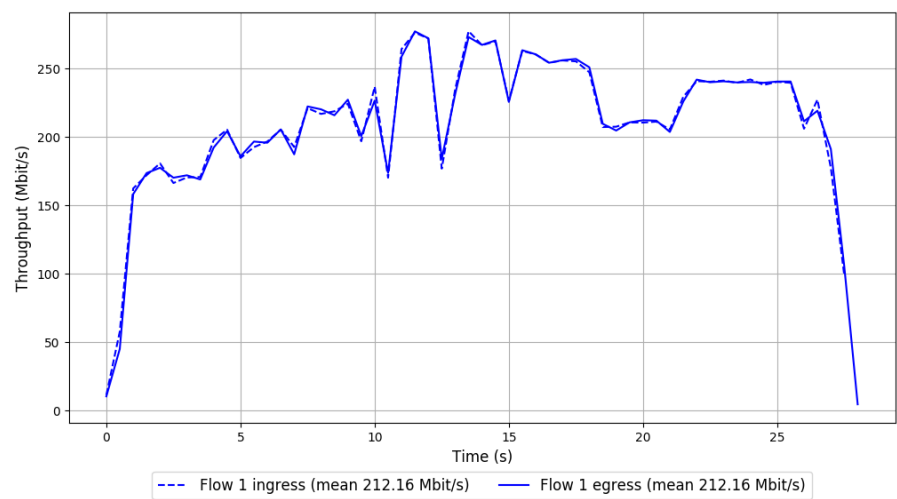


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-09 04:36:55
End at: 2018-01-09 04:37:25

# Below is generated by plot.py at 2018-01-09 06:07:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.16 Mbit/s
95th percentile per-packet one-way delay: 49.195 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 212.16 Mbit/s
95th percentile per-packet one-way delay: 49.195 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-09 02:48:49

End at: 2018-01-09 02:49:19

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.00 Mbit/s

95th percentile per-packet one-way delay: 60.399 ms

Loss rate: 0.24%

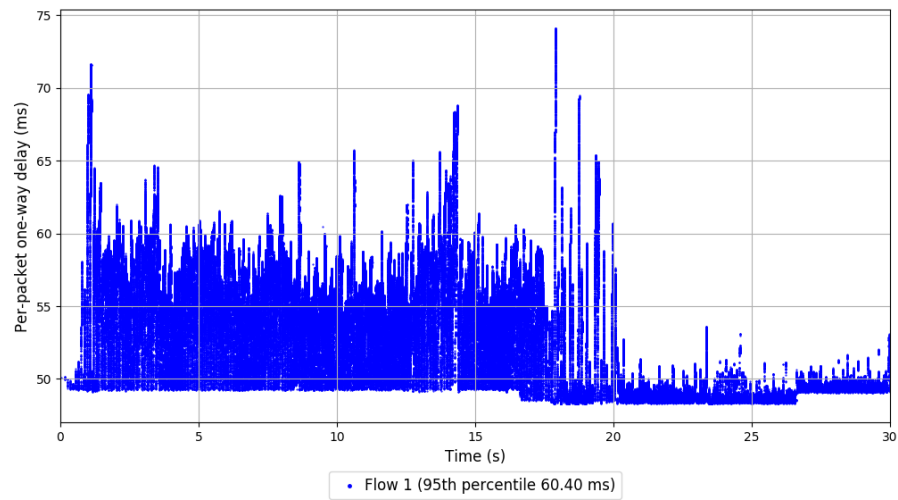
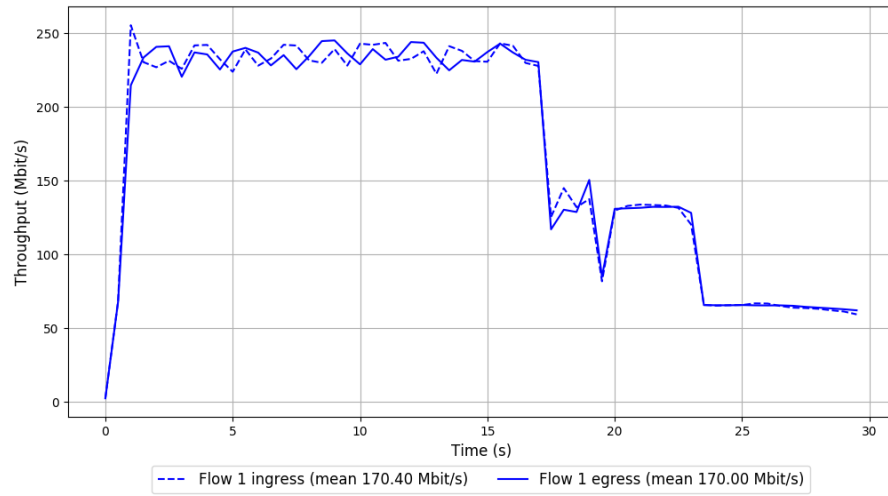
-- Flow 1:

Average throughput: 170.00 Mbit/s

95th percentile per-packet one-way delay: 60.399 ms

Loss rate: 0.24%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-09 03:00:27

End at: 2018-01-09 03:00:57

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.27 Mbit/s

95th percentile per-packet one-way delay: 49.745 ms

Loss rate: 1.43%

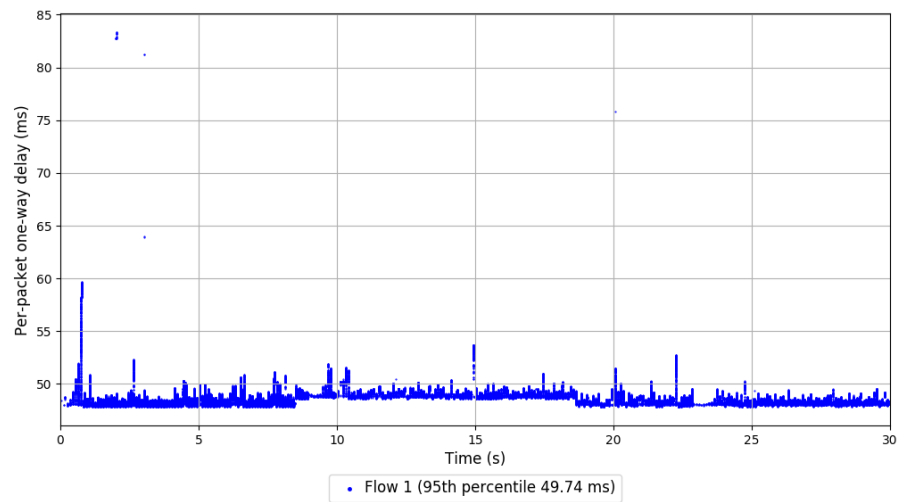
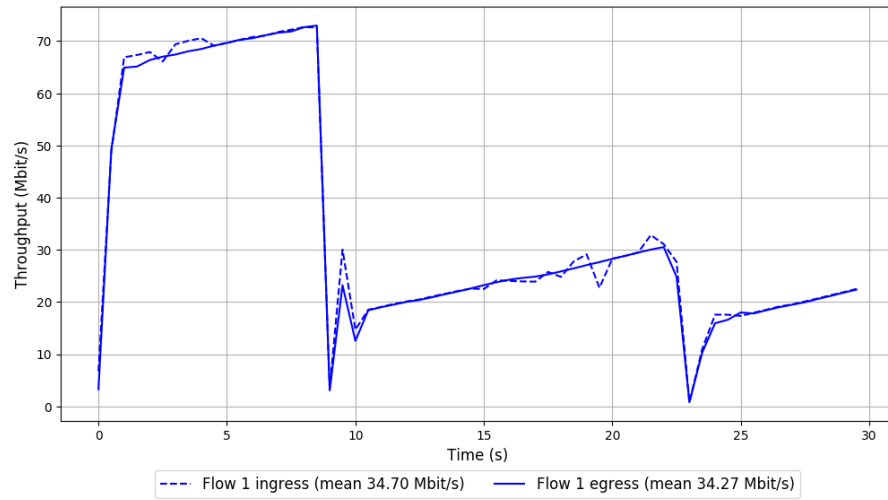
-- Flow 1:

Average throughput: 34.27 Mbit/s

95th percentile per-packet one-way delay: 49.745 ms

Loss rate: 1.43%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-09 03:12:04

End at: 2018-01-09 03:12:34

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.72 Mbit/s

95th percentile per-packet one-way delay: 58.598 ms

Loss rate: 0.22%

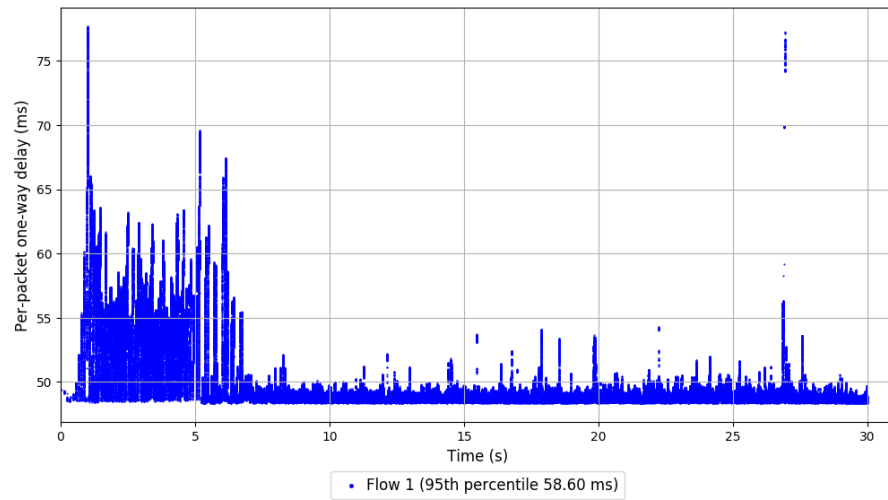
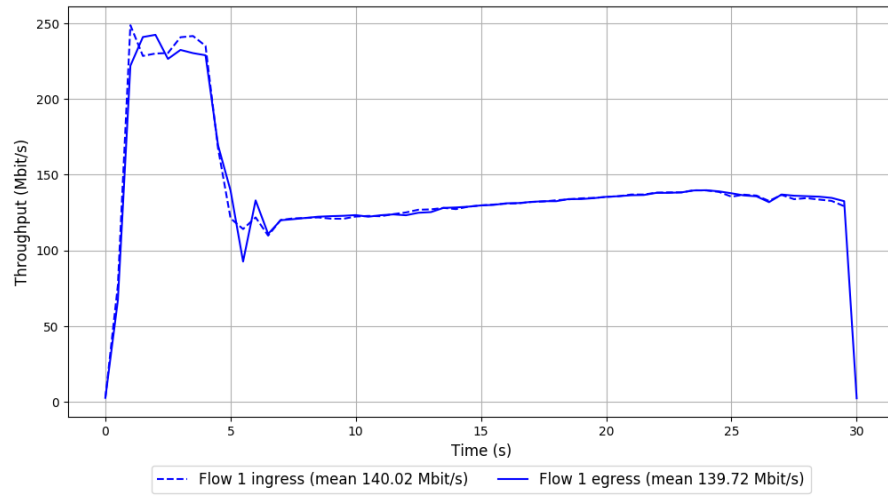
-- Flow 1:

Average throughput: 139.72 Mbit/s

95th percentile per-packet one-way delay: 58.598 ms

Loss rate: 0.22%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-09 03:23:36

End at: 2018-01-09 03:24:06

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 145.27 Mbit/s

95th percentile per-packet one-way delay: 58.261 ms

Loss rate: 0.00%

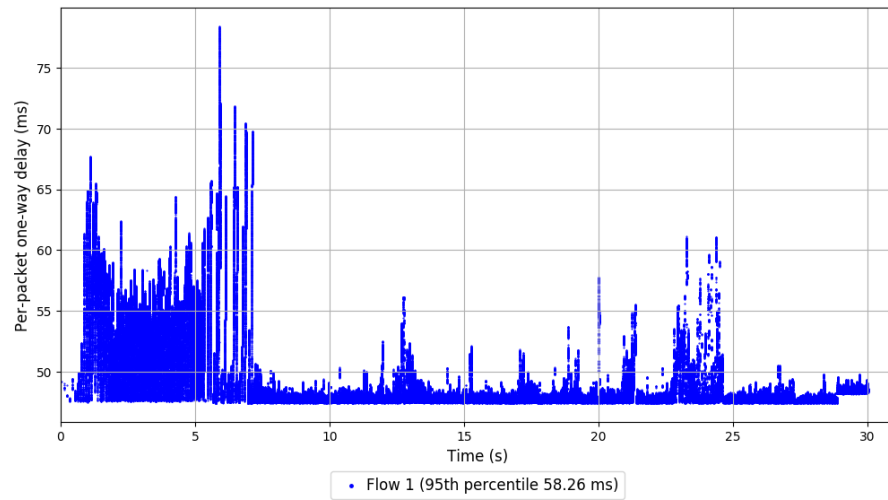
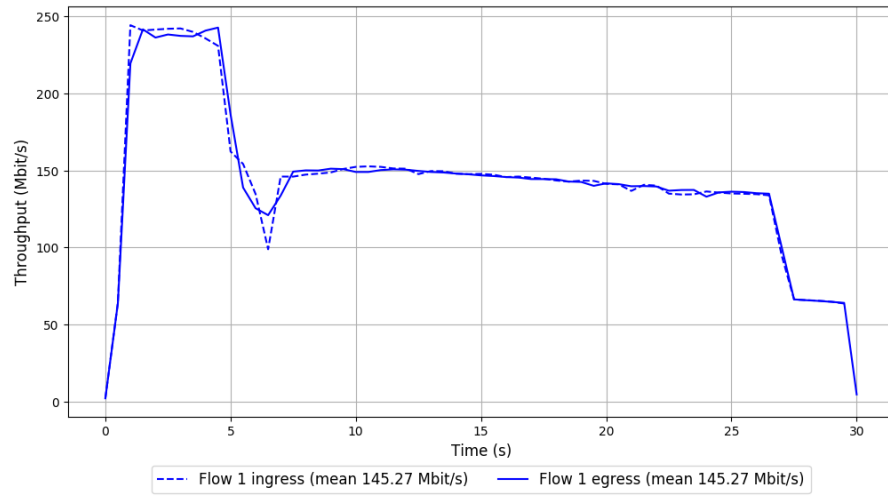
-- Flow 1:

Average throughput: 145.27 Mbit/s

95th percentile per-packet one-way delay: 58.261 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-09 03:35:11

End at: 2018-01-09 03:35:41

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.27 Mbit/s

95th percentile per-packet one-way delay: 49.310 ms

Loss rate: 0.77%

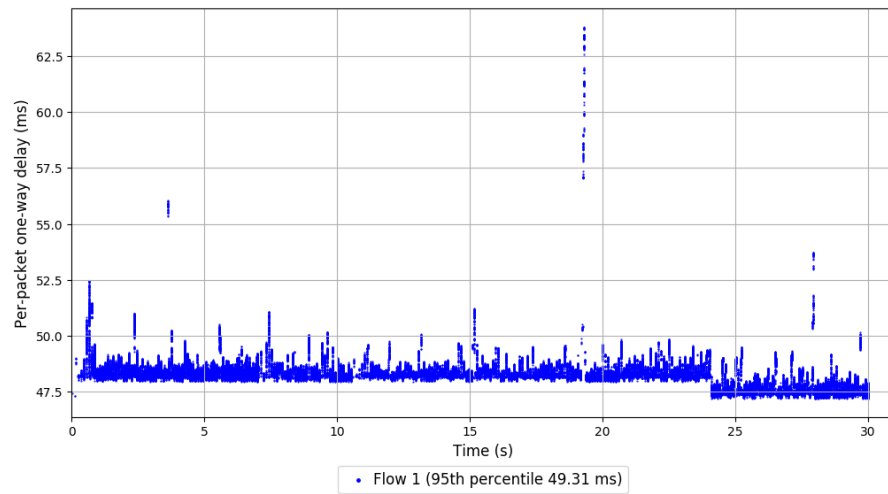
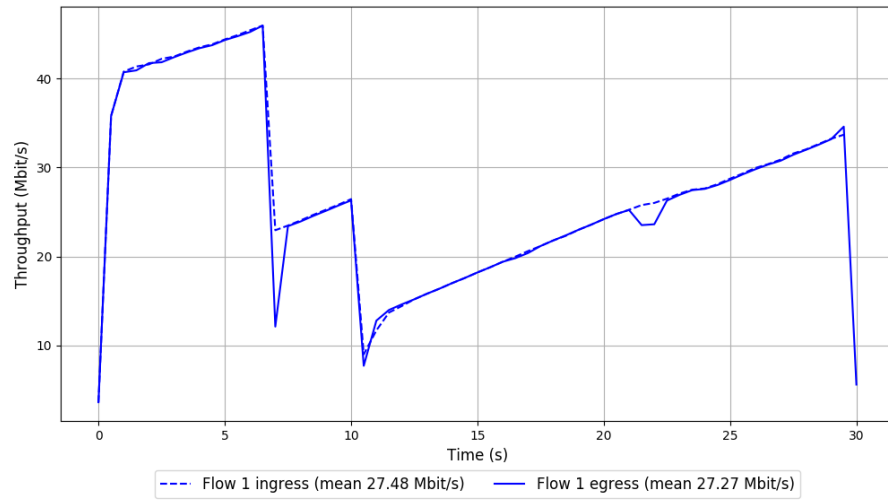
-- Flow 1:

Average throughput: 27.27 Mbit/s

95th percentile per-packet one-way delay: 49.310 ms

Loss rate: 0.77%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-09 03:46:40

End at: 2018-01-09 03:47:10

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.11 Mbit/s

95th percentile per-packet one-way delay: 49.672 ms

Loss rate: 0.00%

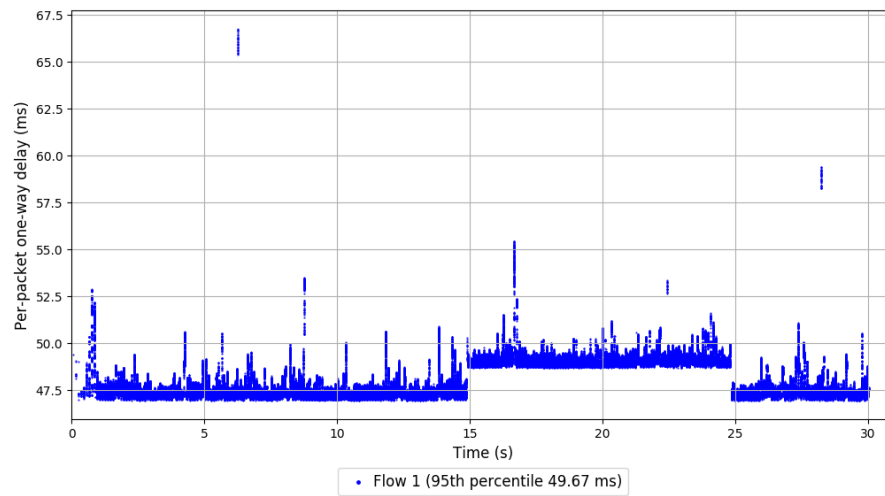
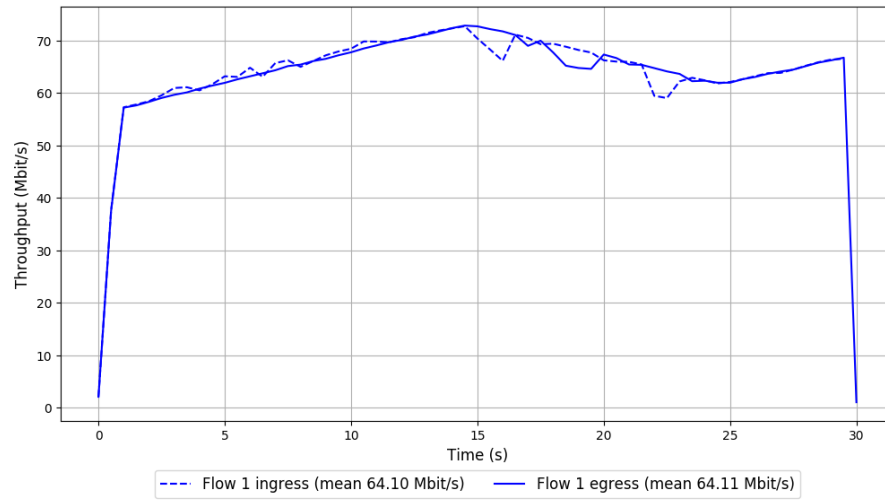
-- Flow 1:

Average throughput: 64.11 Mbit/s

95th percentile per-packet one-way delay: 49.672 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-09 03:57:53

End at: 2018-01-09 03:58:23

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.38 Mbit/s

95th percentile per-packet one-way delay: 51.242 ms

Loss rate: 0.21%

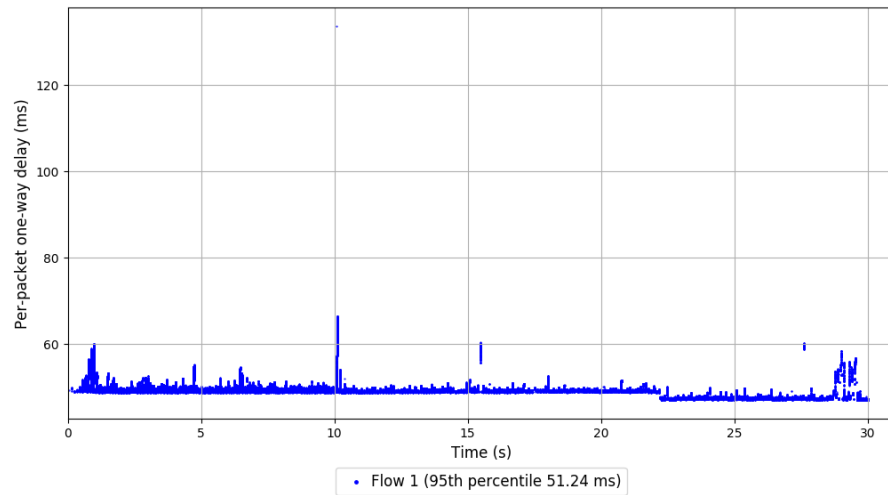
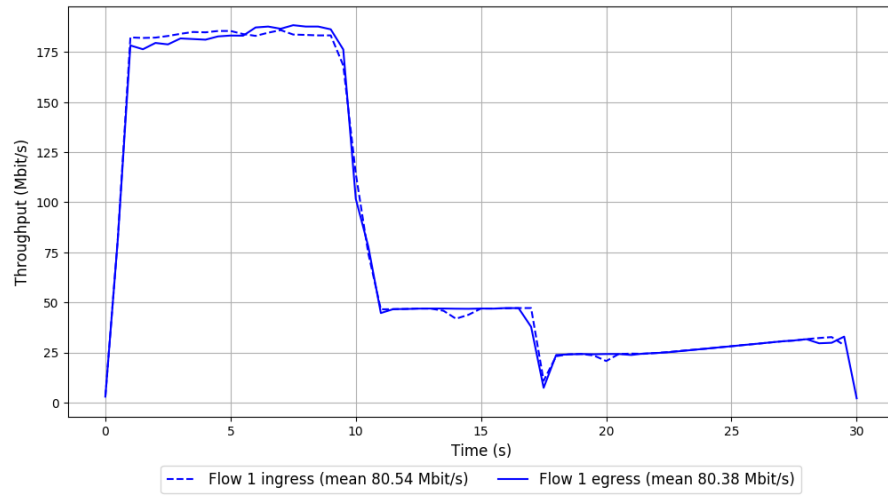
-- Flow 1:

Average throughput: 80.38 Mbit/s

95th percentile per-packet one-way delay: 51.242 ms

Loss rate: 0.21%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-09 04:08:49

End at: 2018-01-09 04:09:19

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.59 Mbit/s

95th percentile per-packet one-way delay: 58.104 ms

Loss rate: 0.29%

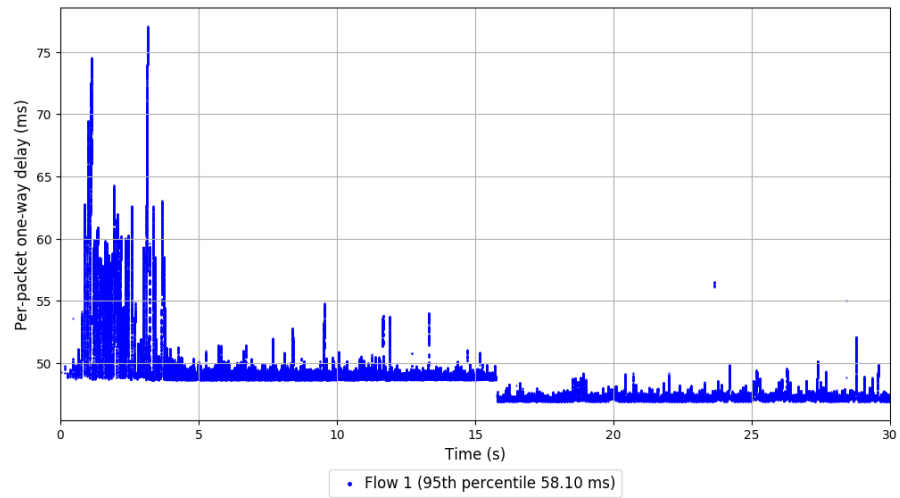
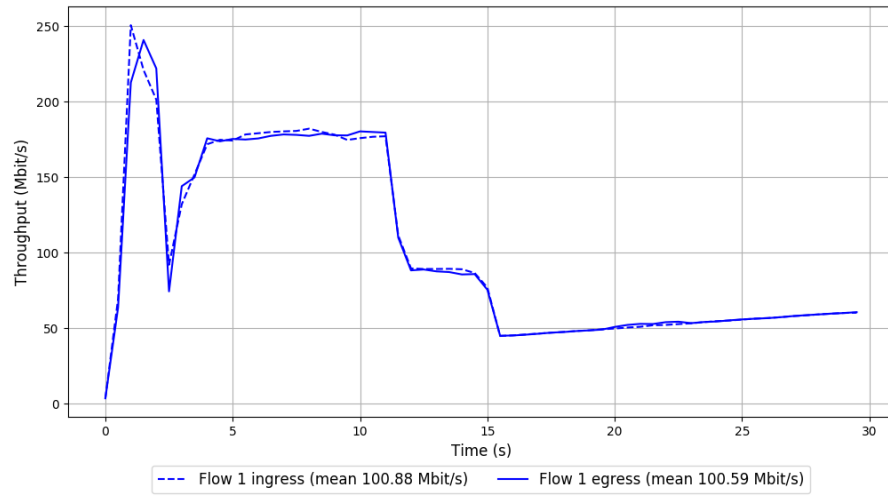
-- Flow 1:

Average throughput: 100.59 Mbit/s

95th percentile per-packet one-way delay: 58.104 ms

Loss rate: 0.29%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-09 04:20:25

End at: 2018-01-09 04:20:55

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.96 Mbit/s

95th percentile per-packet one-way delay: 49.861 ms

Loss rate: 0.34%

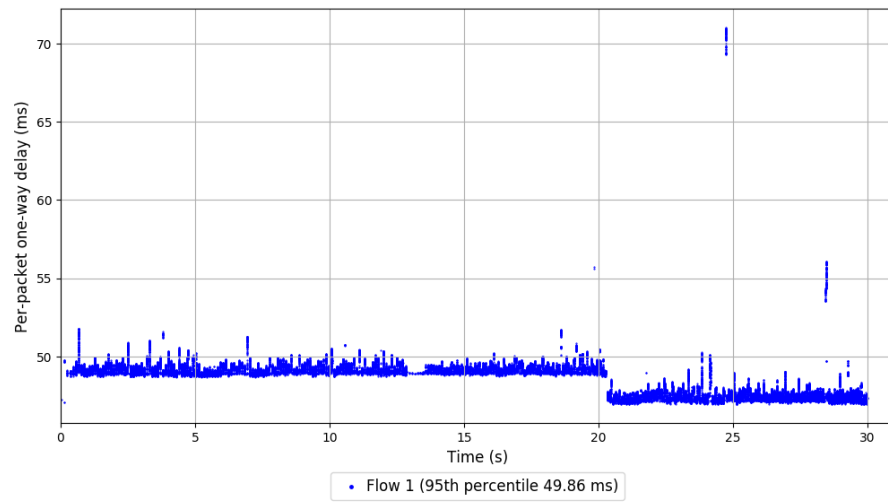
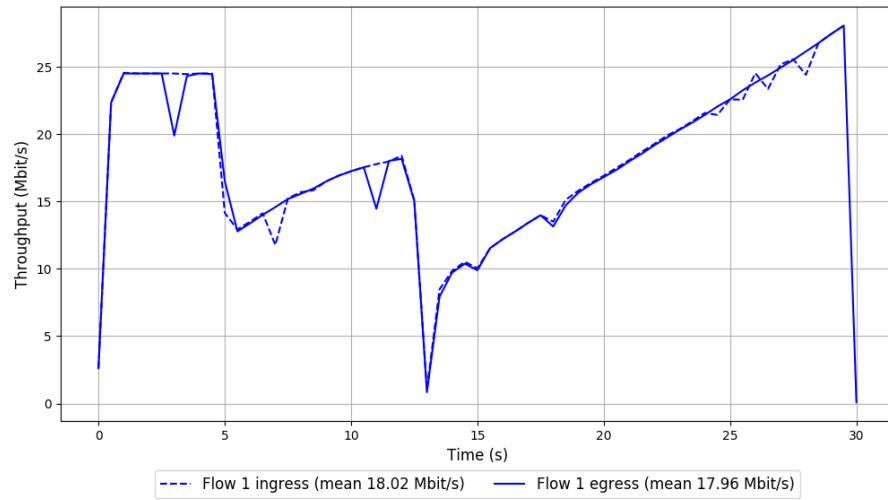
-- Flow 1:

Average throughput: 17.96 Mbit/s

95th percentile per-packet one-way delay: 49.861 ms

Loss rate: 0.34%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-09 04:31:36

End at: 2018-01-09 04:32:06

Below is generated by plot.py at 2018-01-09 06:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.76 Mbit/s

95th percentile per-packet one-way delay: 50.020 ms

Loss rate: 1.05%

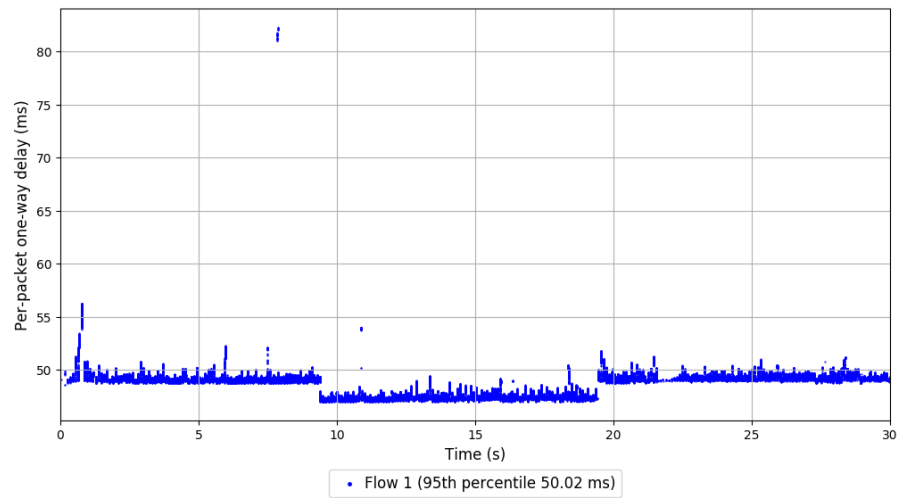
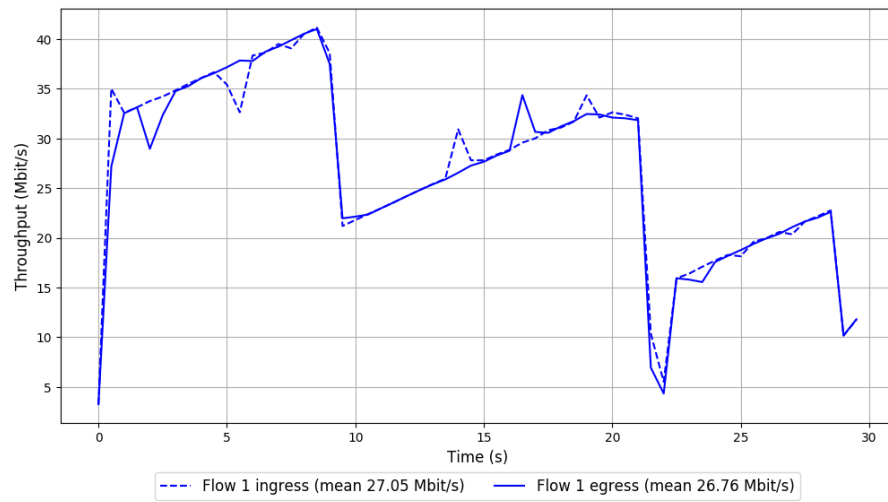
-- Flow 1:

Average throughput: 26.76 Mbit/s

95th percentile per-packet one-way delay: 50.020 ms

Loss rate: 1.05%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-09 02:56:30

End at: 2018-01-09 02:57:00

Below is generated by plot.py at 2018-01-09 06:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 351.94 Mbit/s

95th percentile per-packet one-way delay: 110.363 ms

Loss rate: 0.53%

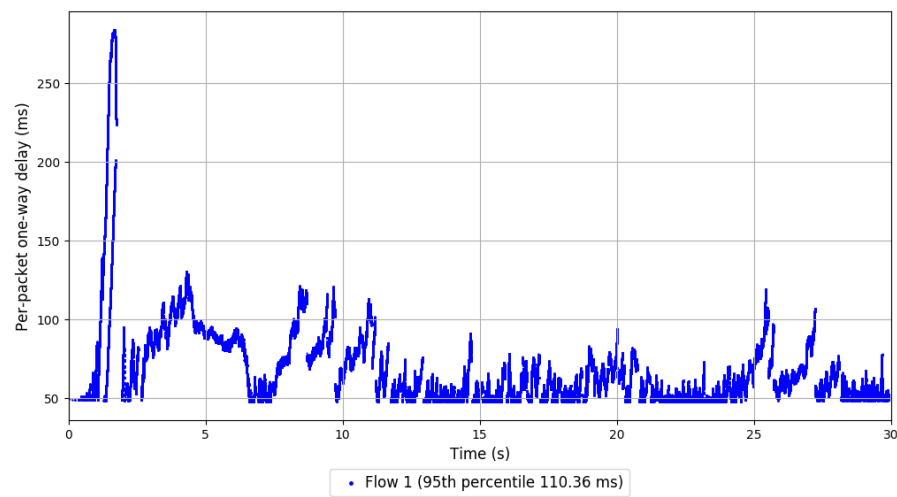
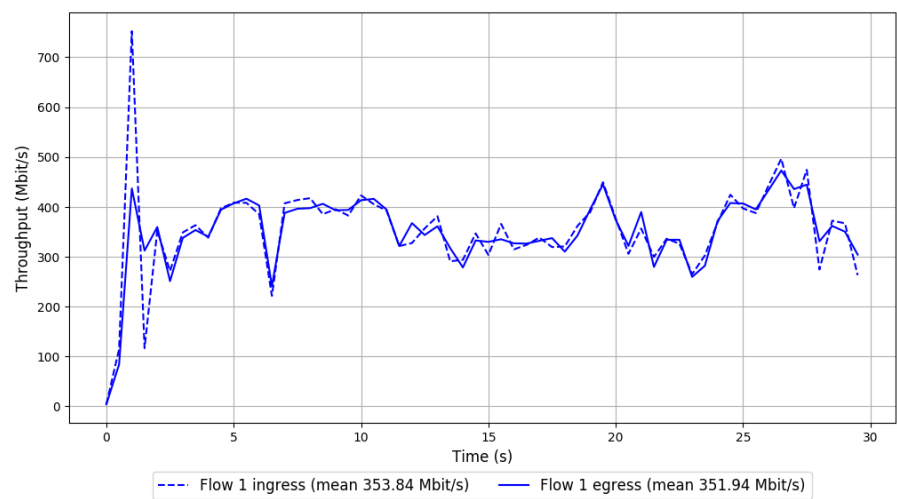
-- Flow 1:

Average throughput: 351.94 Mbit/s

95th percentile per-packet one-way delay: 110.363 ms

Loss rate: 0.53%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-09 03:08:15

End at: 2018-01-09 03:08:45

Below is generated by plot.py at 2018-01-09 06:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.32 Mbit/s

95th percentile per-packet one-way delay: 213.326 ms

Loss rate: 3.54%

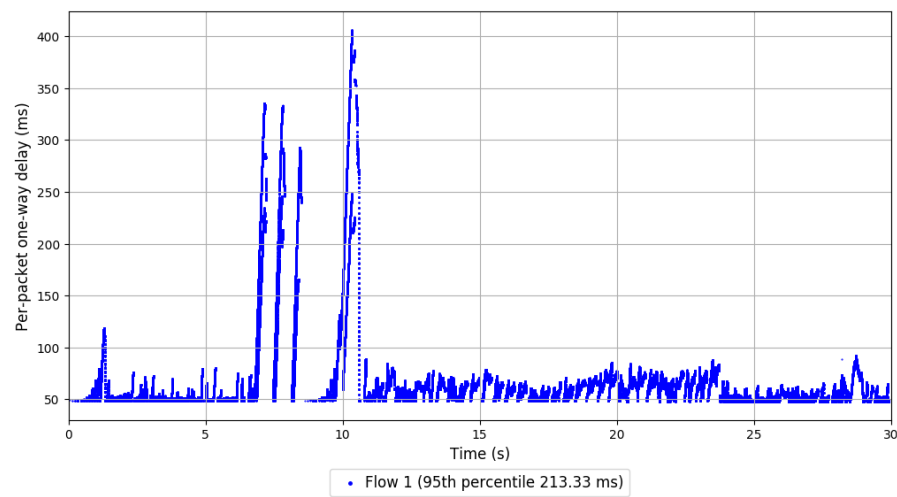
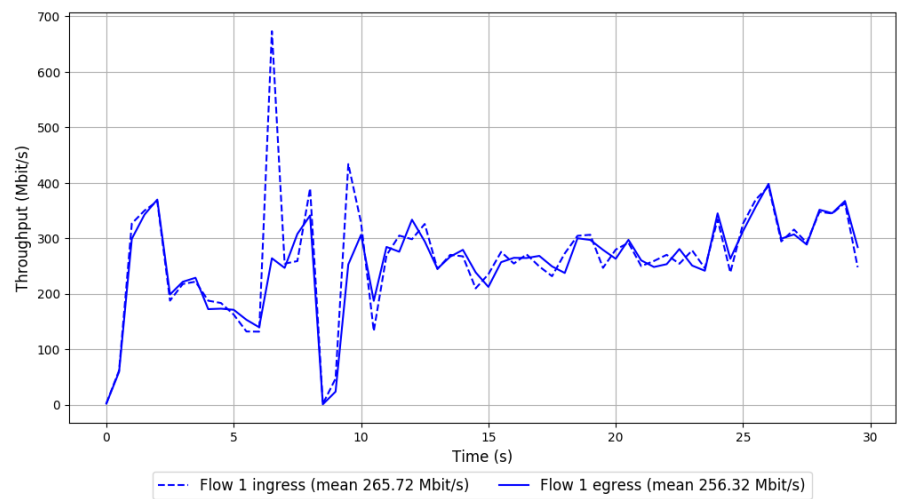
-- Flow 1:

Average throughput: 256.32 Mbit/s

95th percentile per-packet one-way delay: 213.326 ms

Loss rate: 3.54%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-09 03:19:47

End at: 2018-01-09 03:20:17

Below is generated by plot.py at 2018-01-09 06:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 262.18 Mbit/s

95th percentile per-packet one-way delay: 74.539 ms

Loss rate: 0.38%

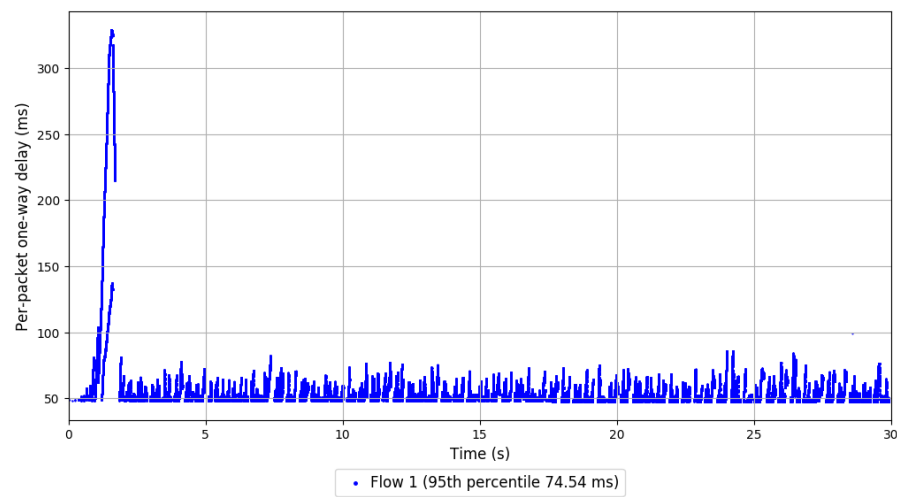
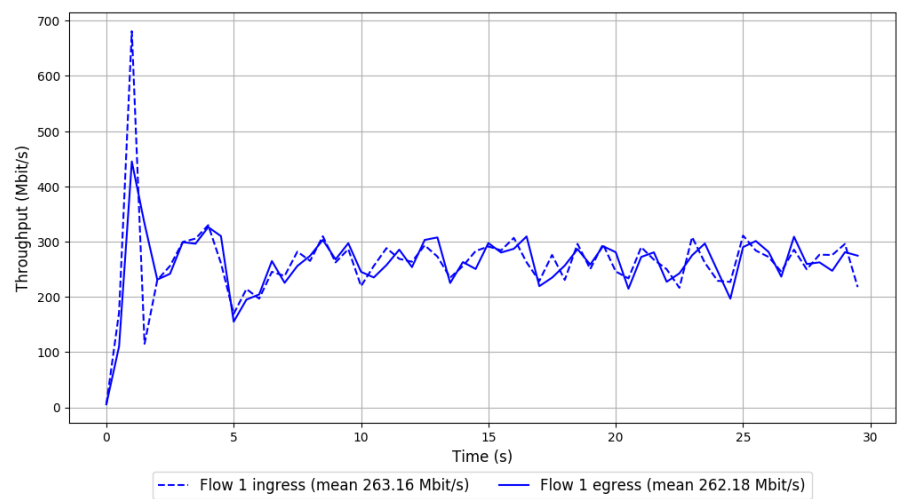
-- Flow 1:

Average throughput: 262.18 Mbit/s

95th percentile per-packet one-way delay: 74.539 ms

Loss rate: 0.38%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-09 03:31:21

End at: 2018-01-09 03:31:51

Below is generated by plot.py at 2018-01-09 06:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 279.56 Mbit/s

95th percentile per-packet one-way delay: 110.252 ms

Loss rate: 1.56%

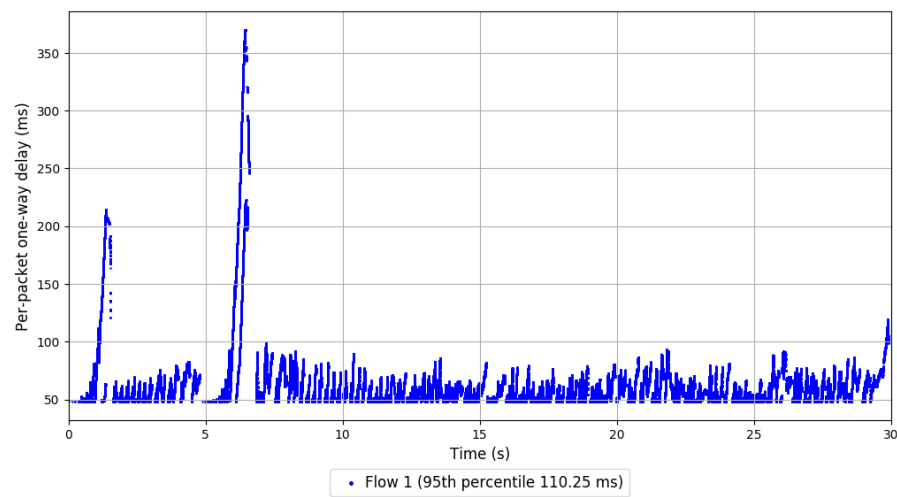
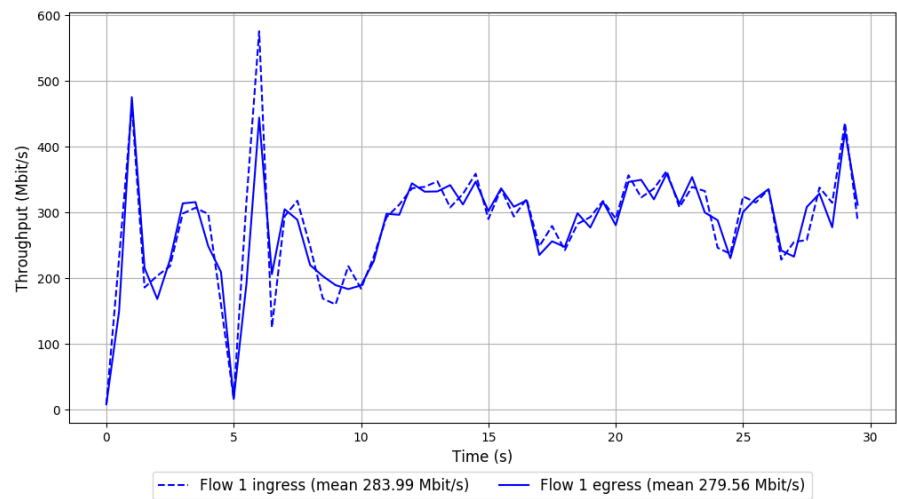
-- Flow 1:

Average throughput: 279.56 Mbit/s

95th percentile per-packet one-way delay: 110.252 ms

Loss rate: 1.56%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-09 03:42:50

End at: 2018-01-09 03:43:20

Below is generated by plot.py at 2018-01-09 06:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.31 Mbit/s

95th percentile per-packet one-way delay: 93.028 ms

Loss rate: 1.14%

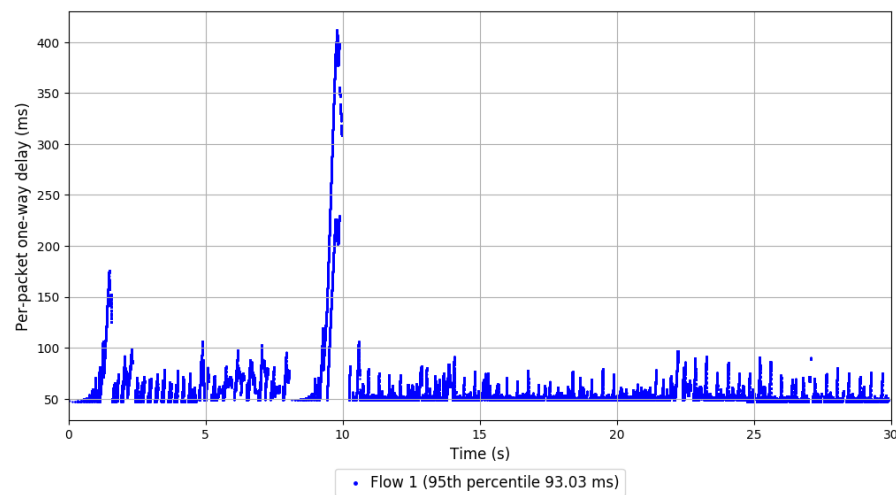
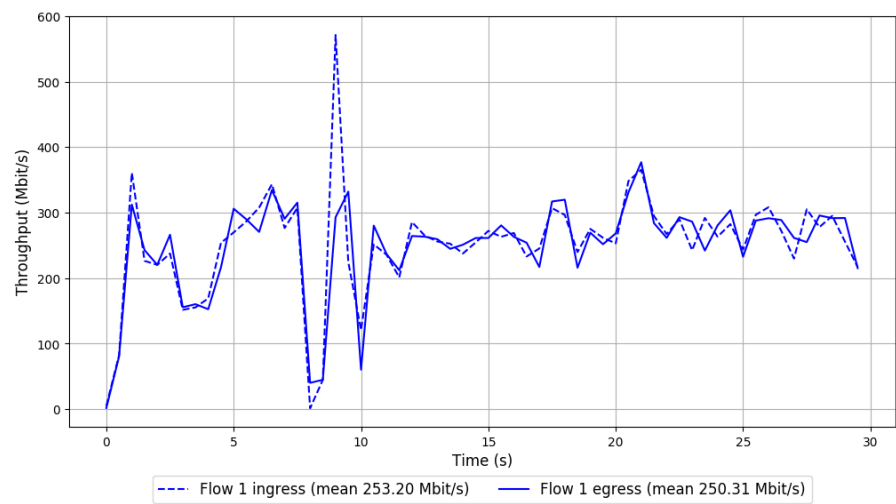
-- Flow 1:

Average throughput: 250.31 Mbit/s

95th percentile per-packet one-way delay: 93.028 ms

Loss rate: 1.14%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-09 03:54:03

End at: 2018-01-09 03:54:33

Below is generated by plot.py at 2018-01-09 06:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 279.15 Mbit/s

95th percentile per-packet one-way delay: 88.530 ms

Loss rate: 1.09%

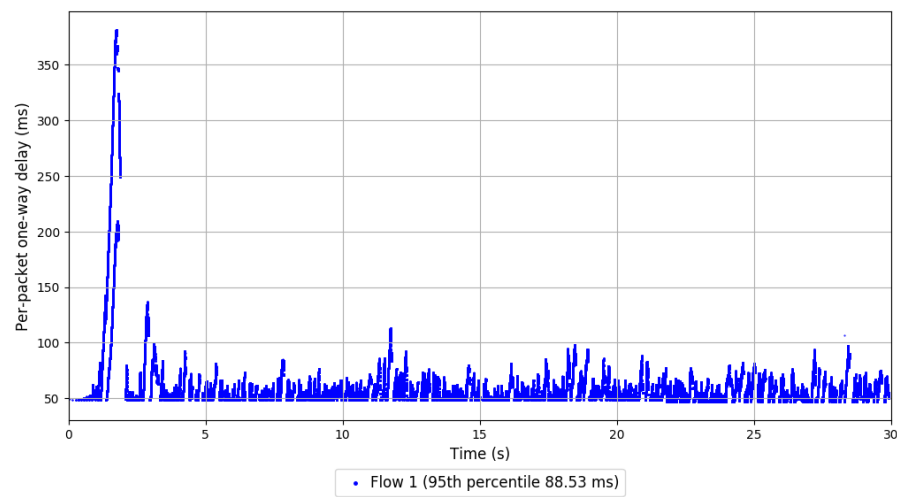
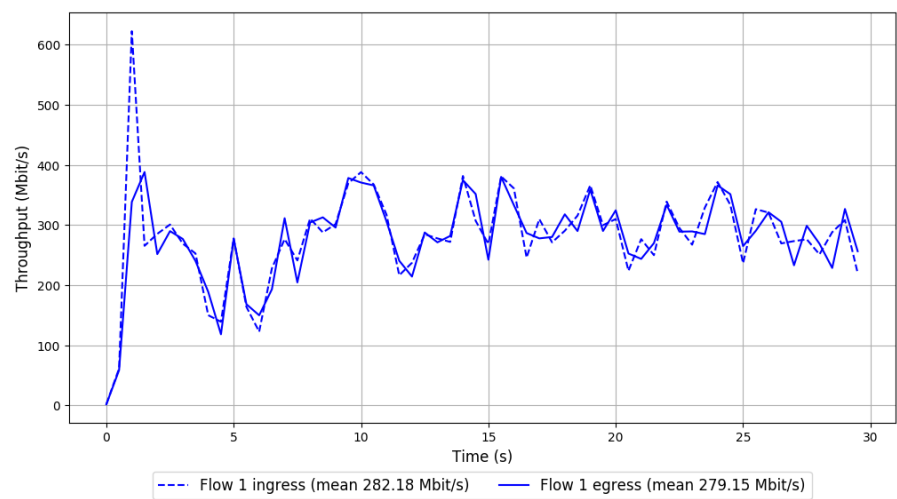
-- Flow 1:

Average throughput: 279.15 Mbit/s

95th percentile per-packet one-way delay: 88.530 ms

Loss rate: 1.09%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-09 04:04:59

End at: 2018-01-09 04:05:29

Below is generated by plot.py at 2018-01-09 06:10:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 292.94 Mbit/s

95th percentile per-packet one-way delay: 142.831 ms

Loss rate: 0.30%

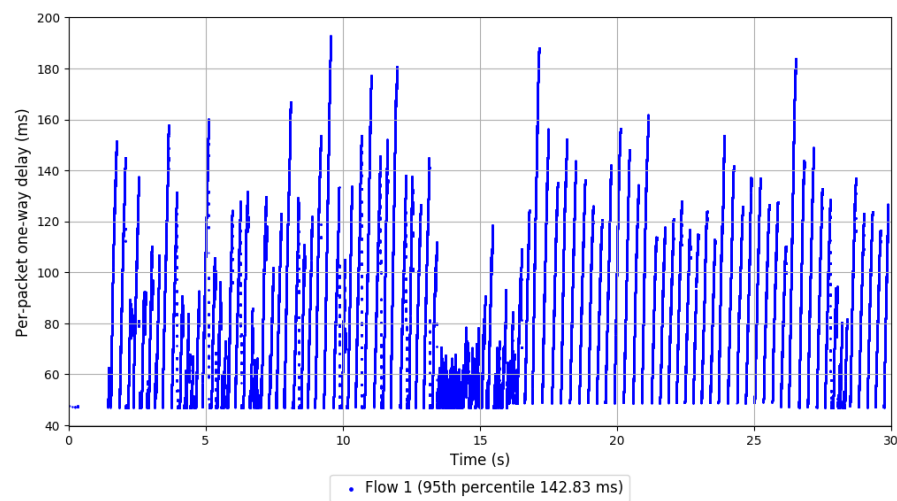
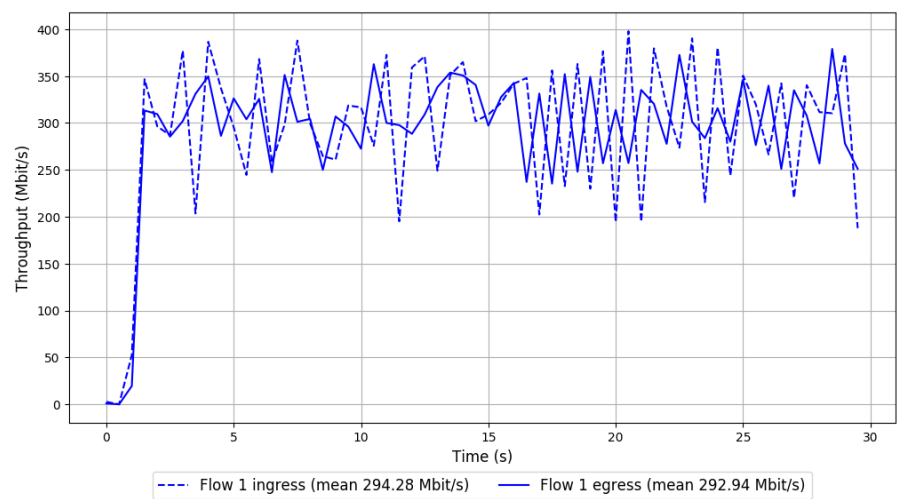
-- Flow 1:

Average throughput: 292.94 Mbit/s

95th percentile per-packet one-way delay: 142.831 ms

Loss rate: 0.30%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-09 04:16:34

End at: 2018-01-09 04:17:04

Below is generated by plot.py at 2018-01-09 06:12:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 264.52 Mbit/s

95th percentile per-packet one-way delay: 92.677 ms

Loss rate: 1.21%

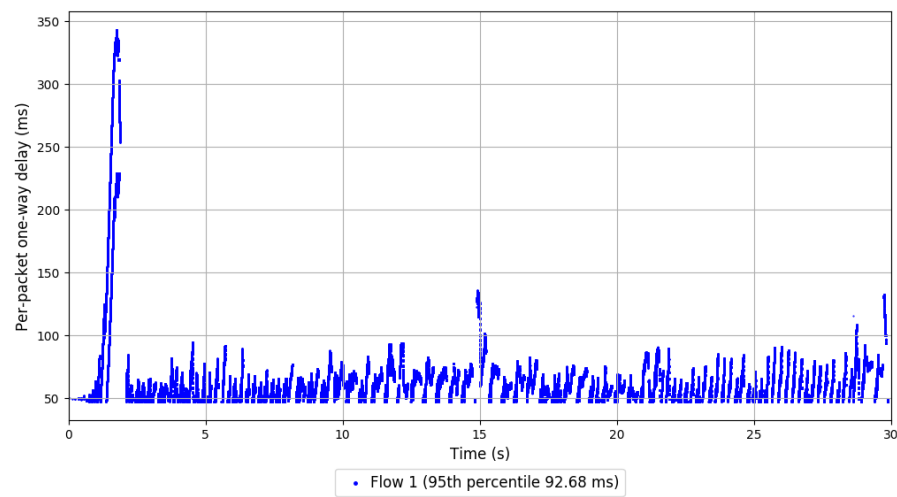
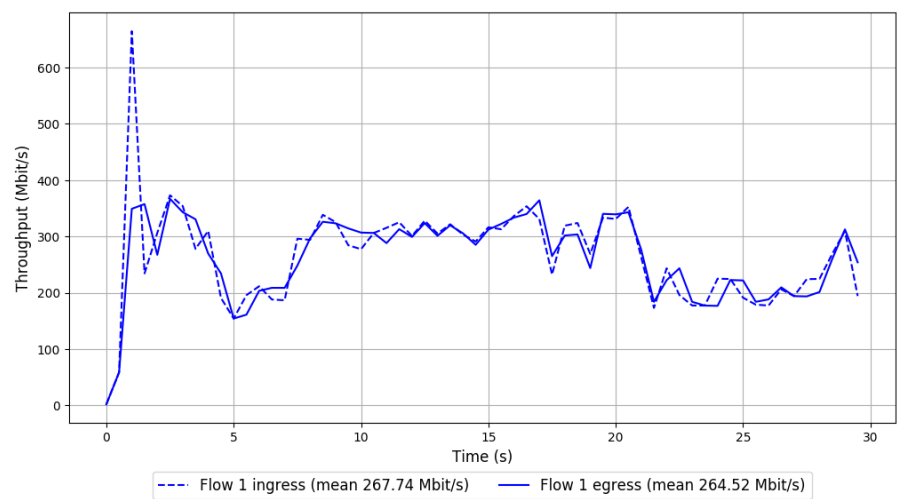
-- Flow 1:

Average throughput: 264.52 Mbit/s

95th percentile per-packet one-way delay: 92.677 ms

Loss rate: 1.21%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-09 04:27:44

End at: 2018-01-09 04:28:14

Below is generated by plot.py at 2018-01-09 06:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 306.92 Mbit/s

95th percentile per-packet one-way delay: 99.099 ms

Loss rate: 0.17%

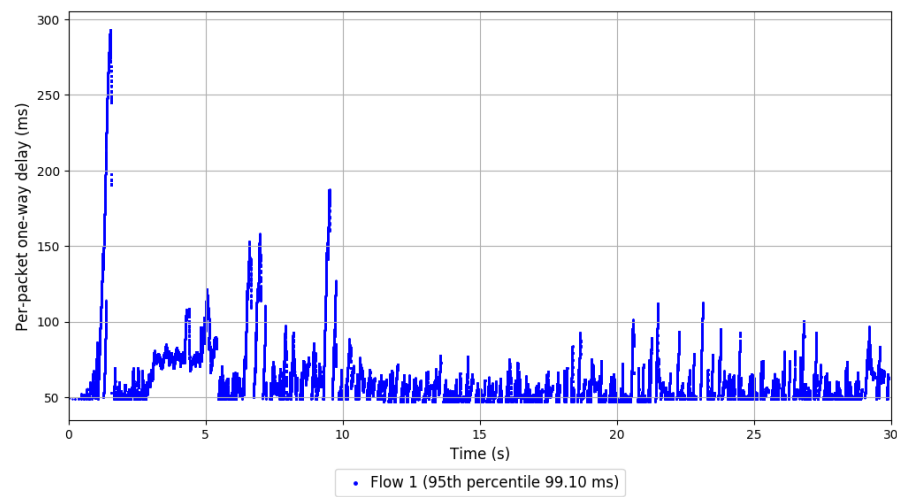
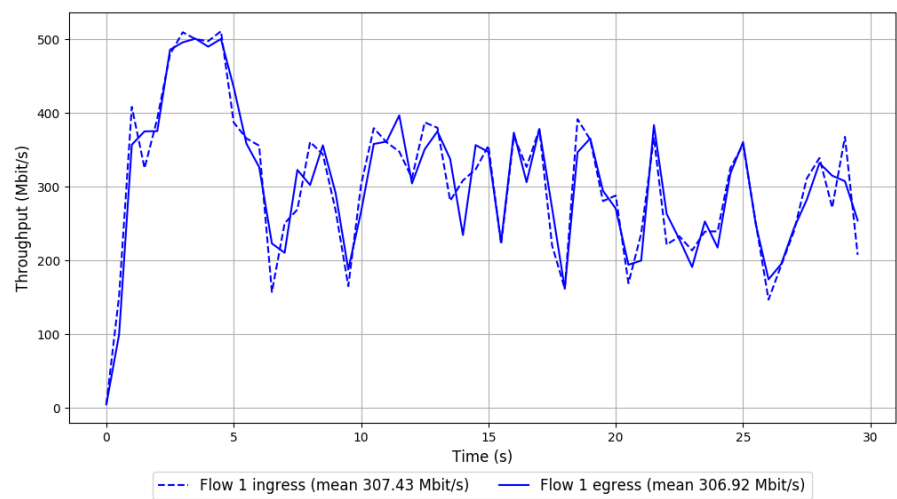
-- Flow 1:

Average throughput: 306.92 Mbit/s

95th percentile per-packet one-way delay: 99.099 ms

Loss rate: 0.17%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-09 04:39:16

End at: 2018-01-09 04:39:46

Below is generated by plot.py at 2018-01-09 06:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 262.53 Mbit/s

95th percentile per-packet one-way delay: 81.532 ms

Loss rate: 1.21%

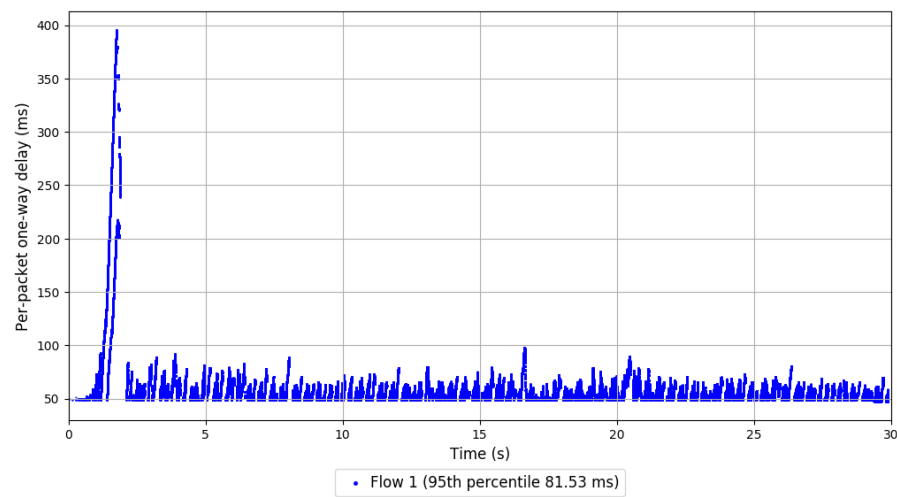
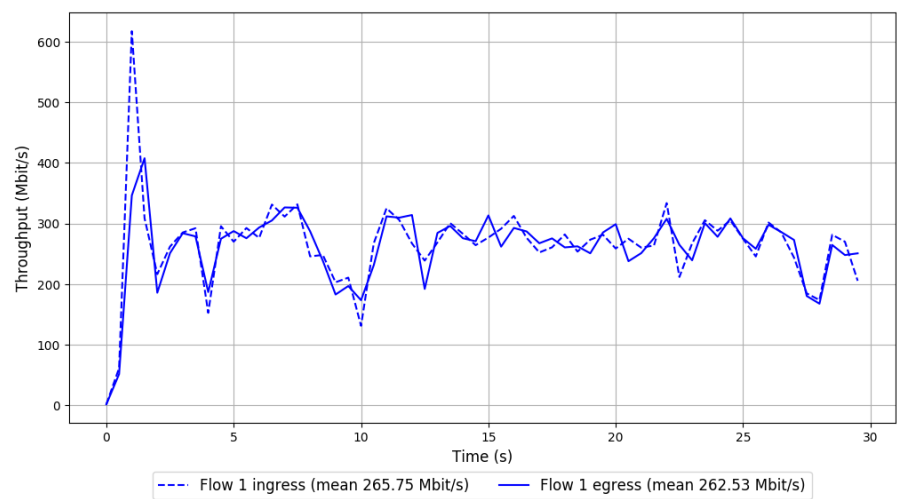
-- Flow 1:

Average throughput: 262.53 Mbit/s

95th percentile per-packet one-way delay: 81.532 ms

Loss rate: 1.21%

Run 10: Report of Verus — Data Link

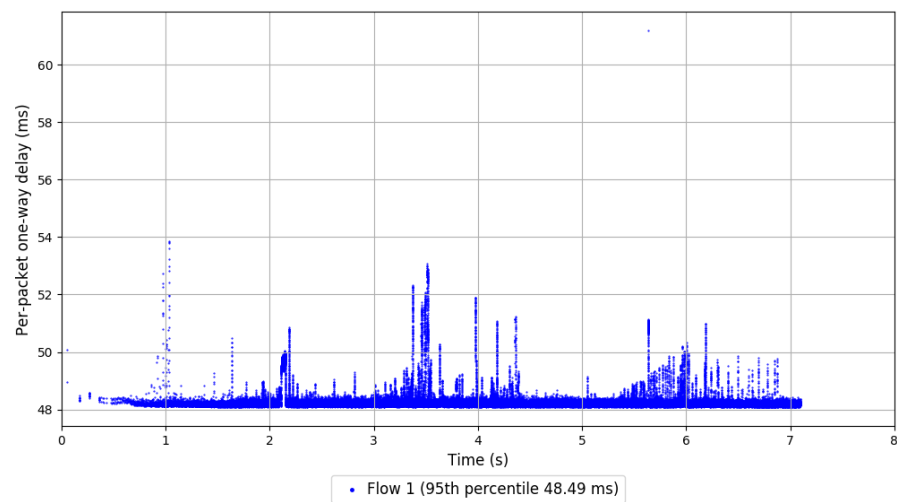
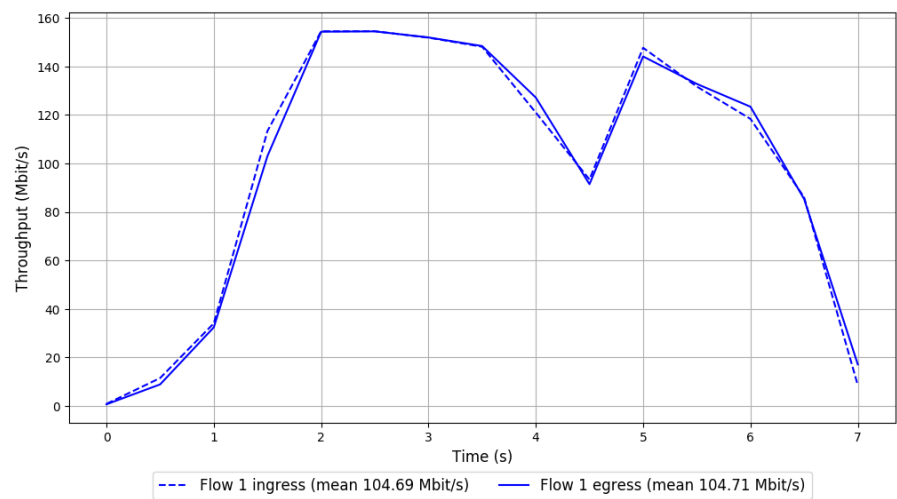


Run 1: Statistics of Copa

Start at: 2018-01-09 02:52:14

End at: 2018-01-09 02:52:44

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-09 03:03:50

End at: 2018-01-09 03:04:21

Below is generated by plot.py at 2018-01-09 06:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.54 Mbit/s

95th percentile per-packet one-way delay: 48.734 ms

Loss rate: 0.00%

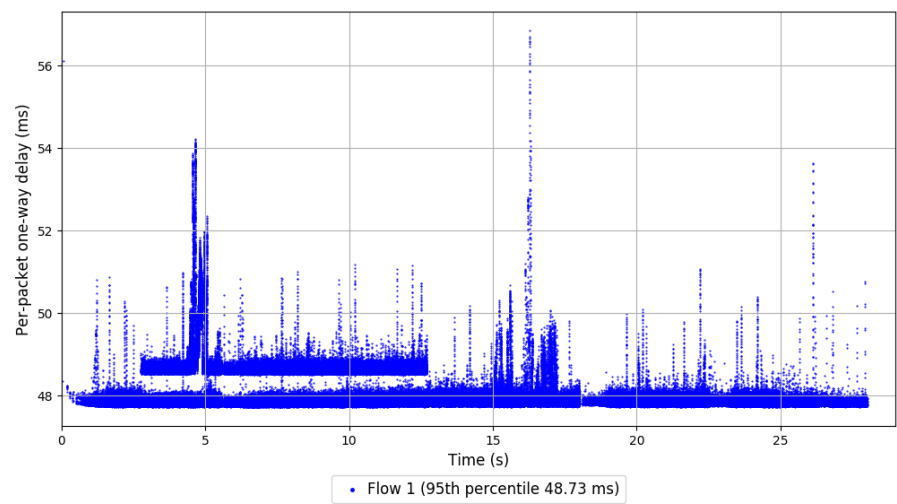
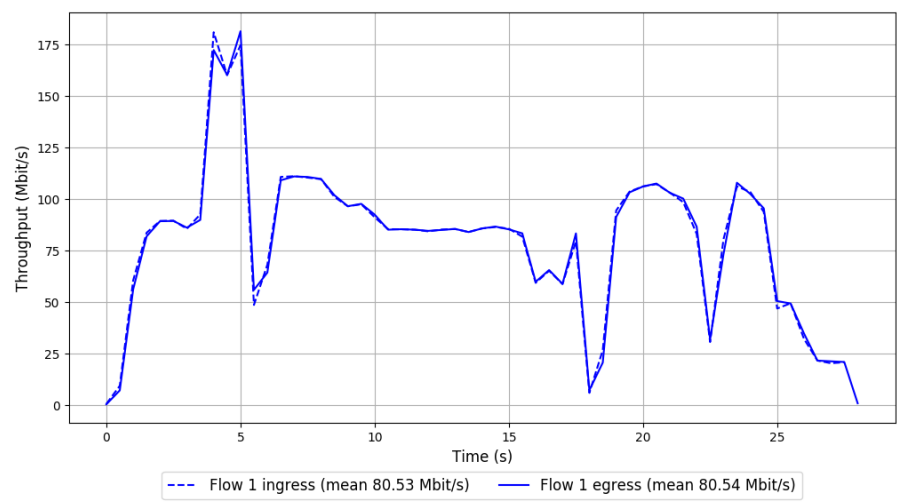
-- Flow 1:

Average throughput: 80.54 Mbit/s

95th percentile per-packet one-way delay: 48.734 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-09 03:15:28

End at: 2018-01-09 03:15:58

Below is generated by plot.py at 2018-01-09 06:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.27 Mbit/s

95th percentile per-packet one-way delay: 49.726 ms

Loss rate: 0.00%

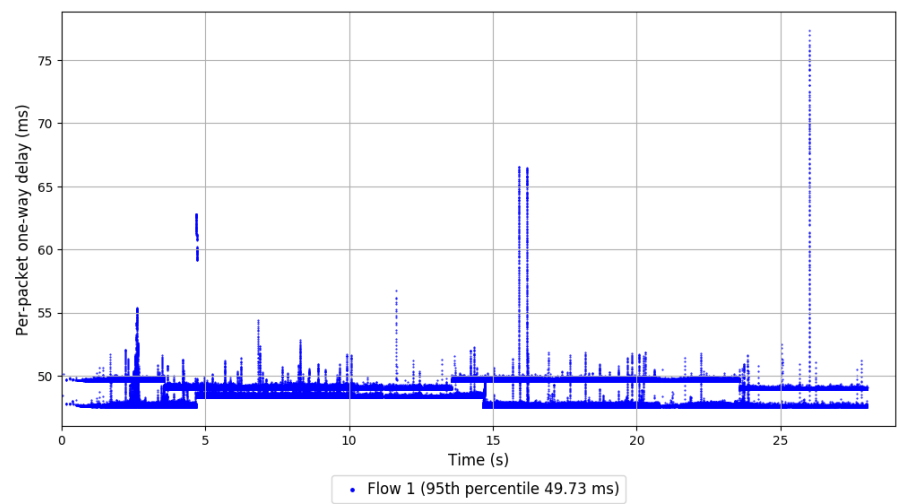
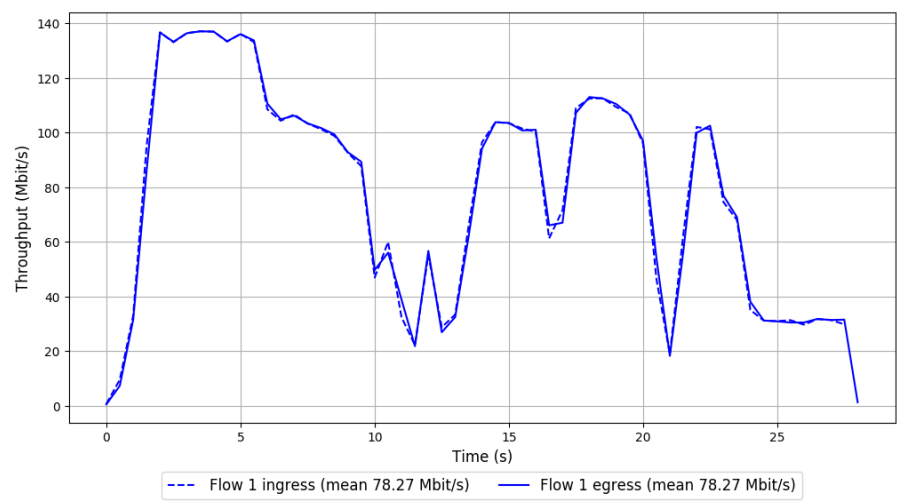
-- Flow 1:

Average throughput: 78.27 Mbit/s

95th percentile per-packet one-way delay: 49.726 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-09 03:27:02

End at: 2018-01-09 03:27:32

Below is generated by plot.py at 2018-01-09 06:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.16 Mbit/s

95th percentile per-packet one-way delay: 48.356 ms

Loss rate: 0.00%

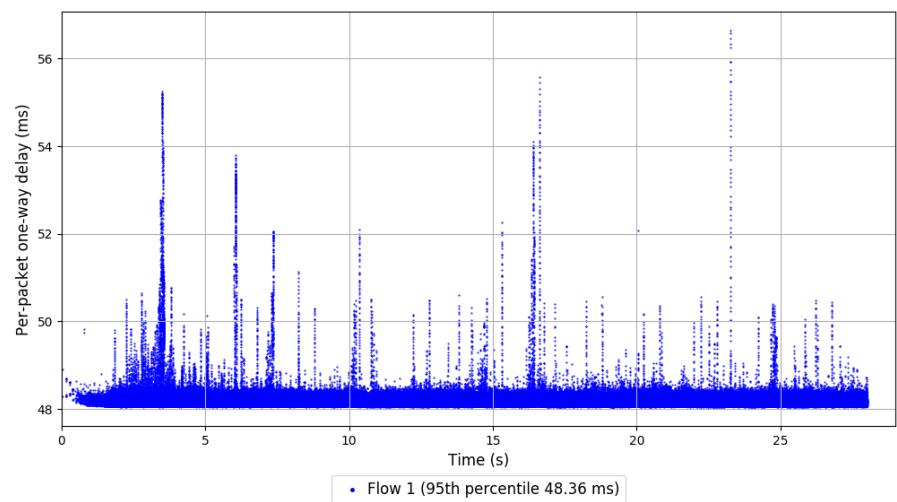
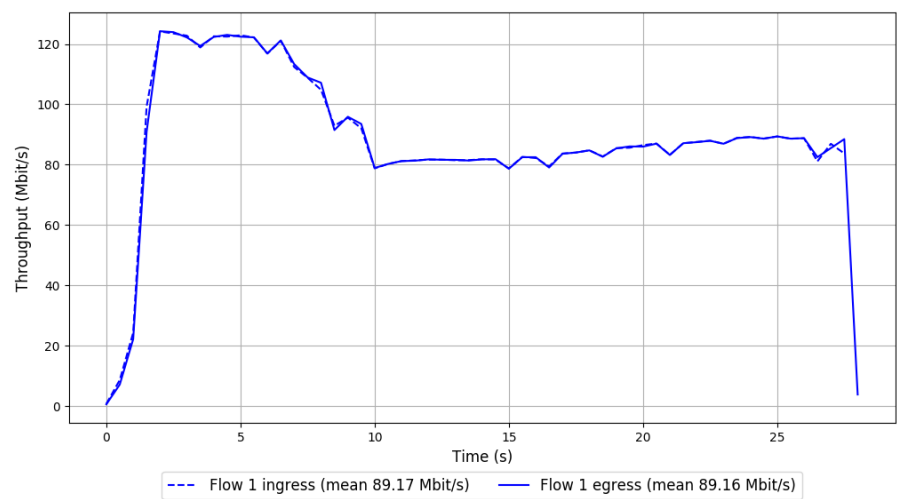
-- Flow 1:

Average throughput: 89.16 Mbit/s

95th percentile per-packet one-way delay: 48.356 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-09 03:38:30

End at: 2018-01-09 03:39:00

Below is generated by plot.py at 2018-01-09 06:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.91 Mbit/s

95th percentile per-packet one-way delay: 48.037 ms

Loss rate: 0.00%

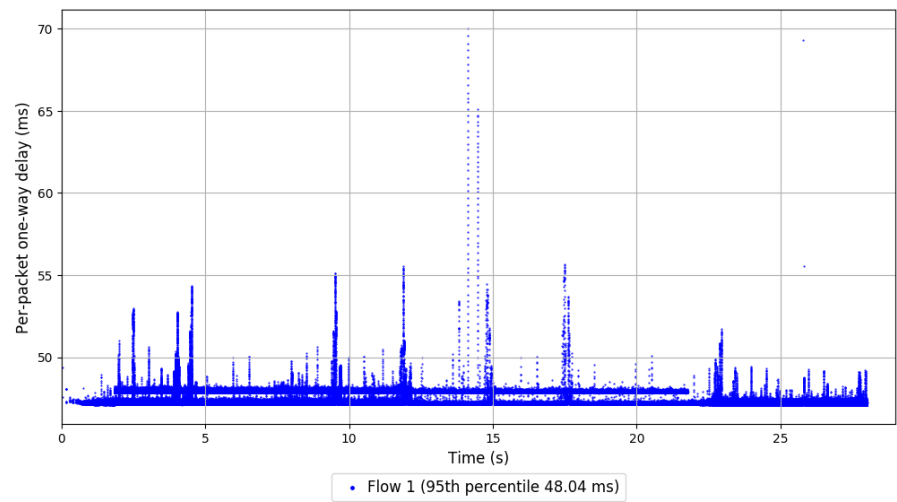
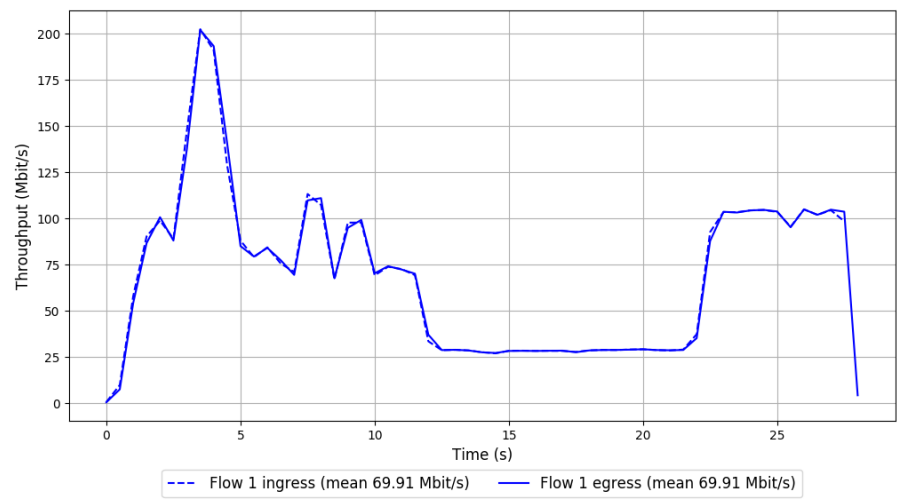
-- Flow 1:

Average throughput: 69.91 Mbit/s

95th percentile per-packet one-way delay: 48.037 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-09 03:49:48

End at: 2018-01-09 03:50:18

Below is generated by plot.py at 2018-01-09 06:13:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.66 Mbit/s

95th percentile per-packet one-way delay: 49.215 ms

Loss rate: 0.00%

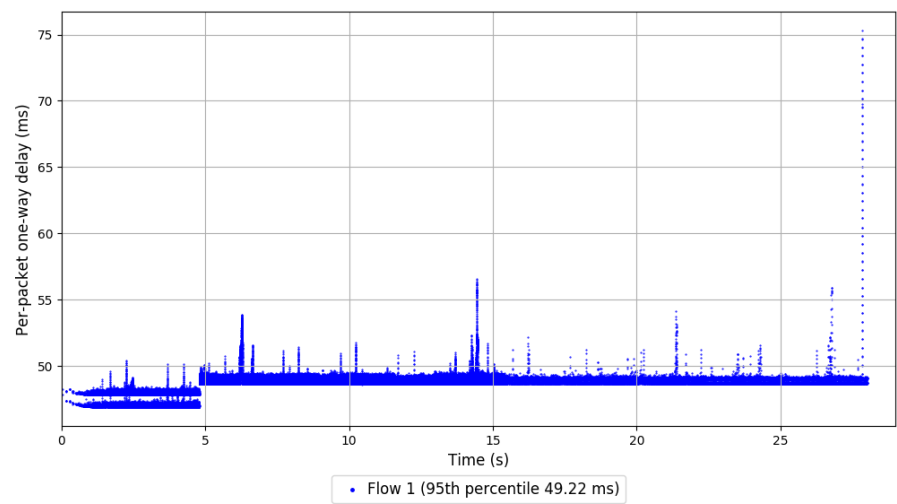
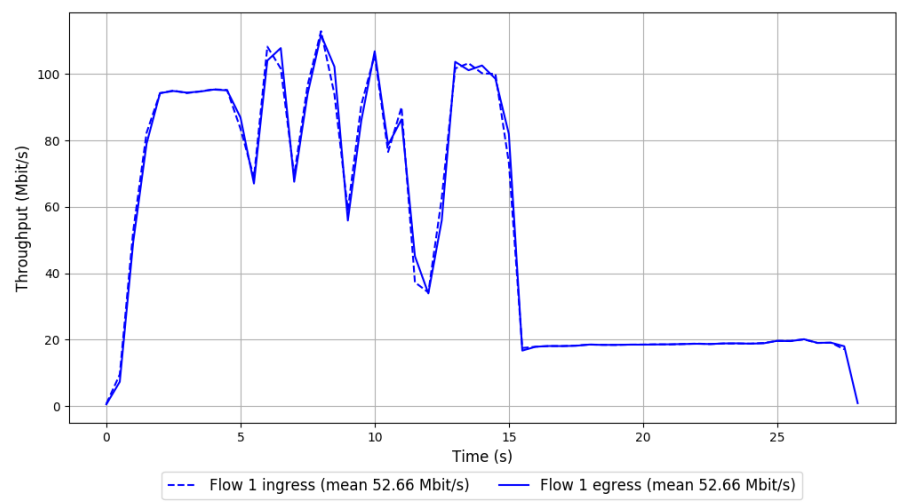
-- Flow 1:

Average throughput: 52.66 Mbit/s

95th percentile per-packet one-way delay: 49.215 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-09 04:00:53

End at: 2018-01-09 04:01:23

Below is generated by plot.py at 2018-01-09 06:13:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.46 Mbit/s

95th percentile per-packet one-way delay: 49.333 ms

Loss rate: 0.00%

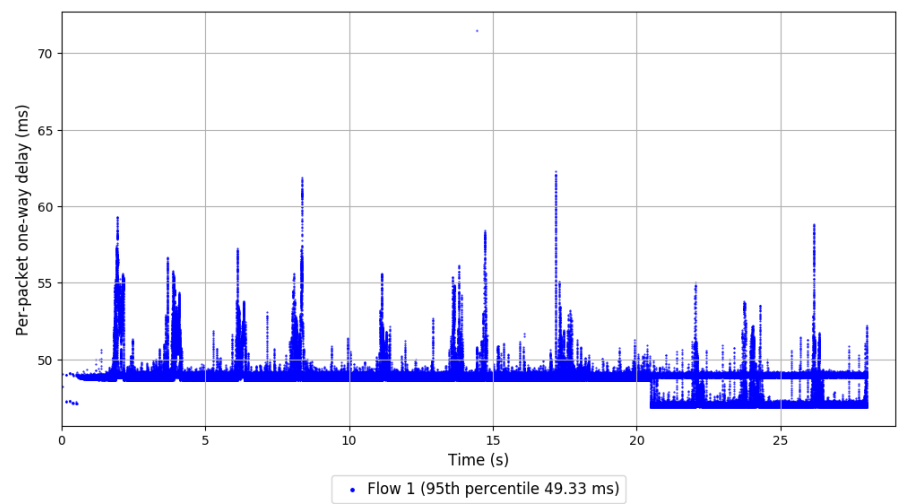
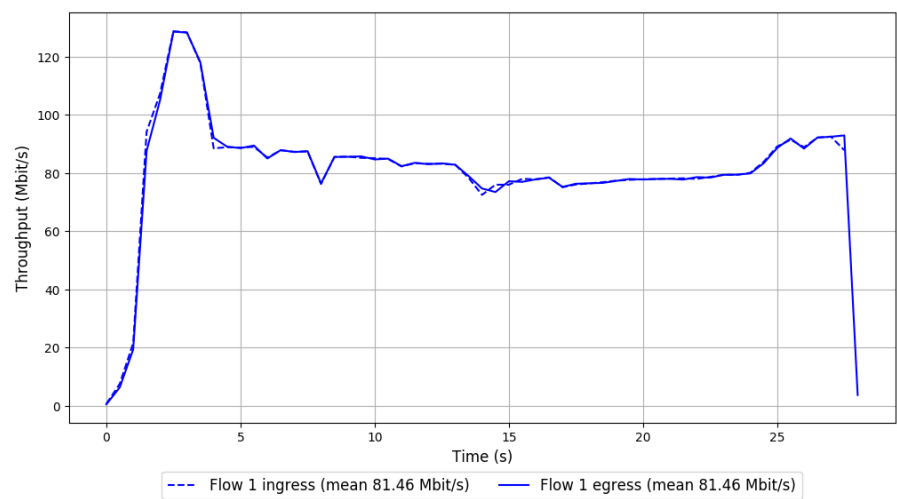
-- Flow 1:

Average throughput: 81.46 Mbit/s

95th percentile per-packet one-way delay: 49.333 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-09 04:12:16

End at: 2018-01-09 04:12:46

Below is generated by plot.py at 2018-01-09 06:13:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.17 Mbit/s

95th percentile per-packet one-way delay: 48.867 ms

Loss rate: 0.00%

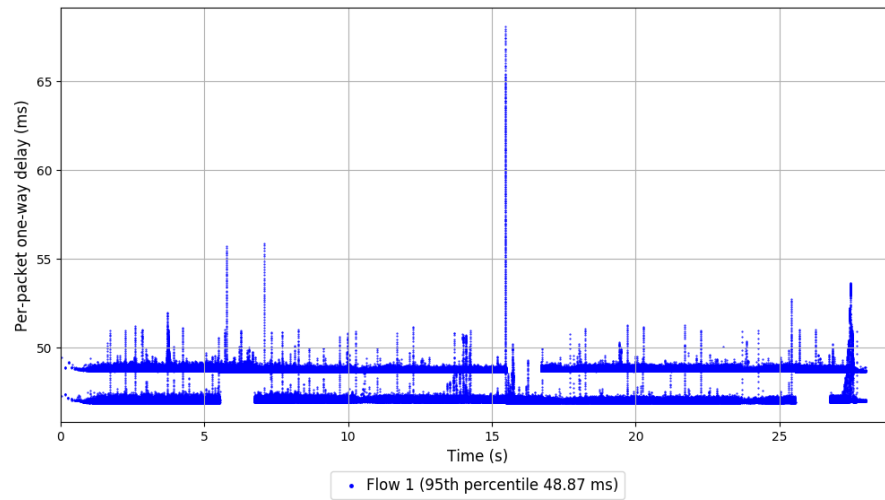
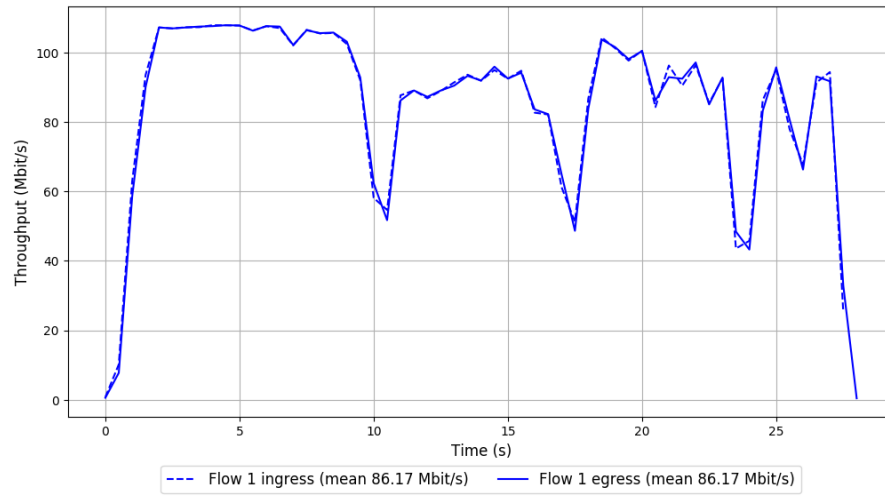
-- Flow 1:

Average throughput: 86.17 Mbit/s

95th percentile per-packet one-way delay: 48.867 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-09 04:23:31

End at: 2018-01-09 04:24:02

Below is generated by plot.py at 2018-01-09 06:14:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 48.846 ms

Loss rate: 0.10%

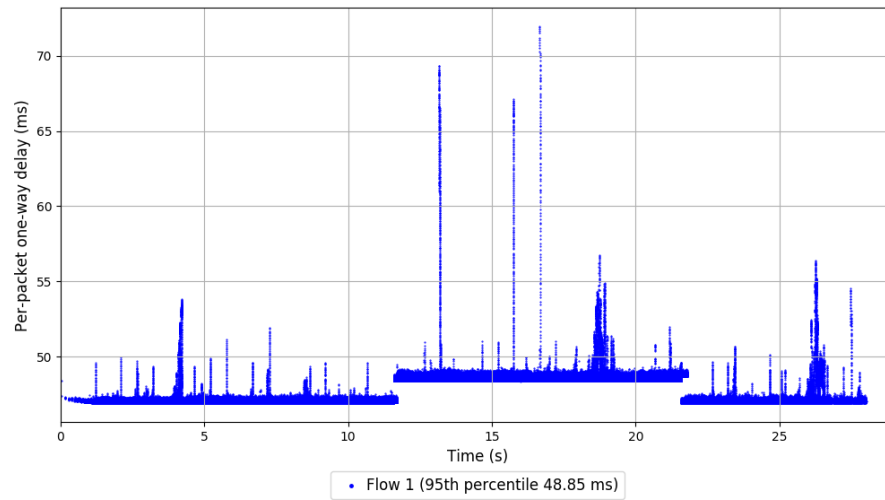
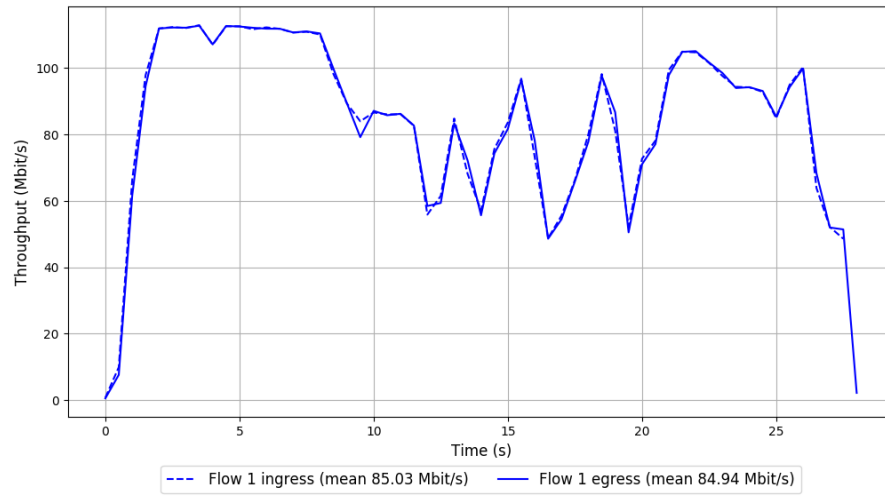
-- Flow 1:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 48.846 ms

Loss rate: 0.10%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-09 04:34:54

End at: 2018-01-09 04:35:24

Below is generated by plot.py at 2018-01-09 06:14:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.82 Mbit/s

95th percentile per-packet one-way delay: 48.934 ms

Loss rate: 0.09%

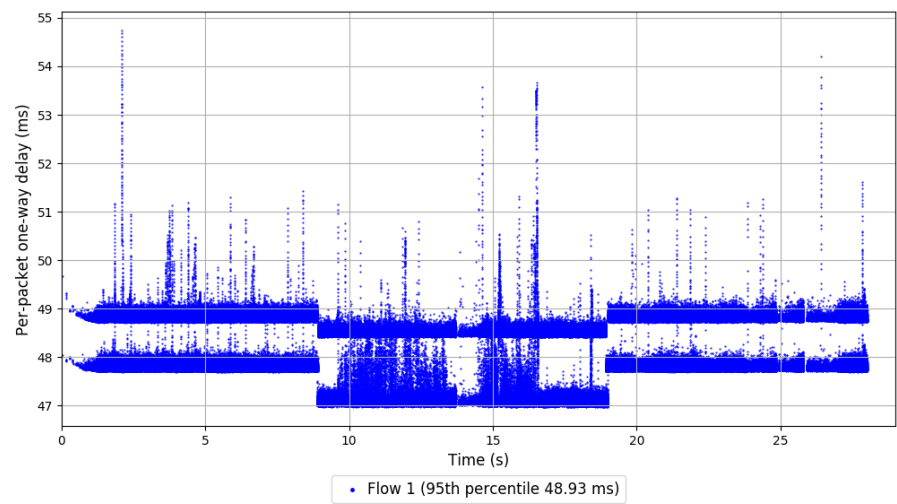
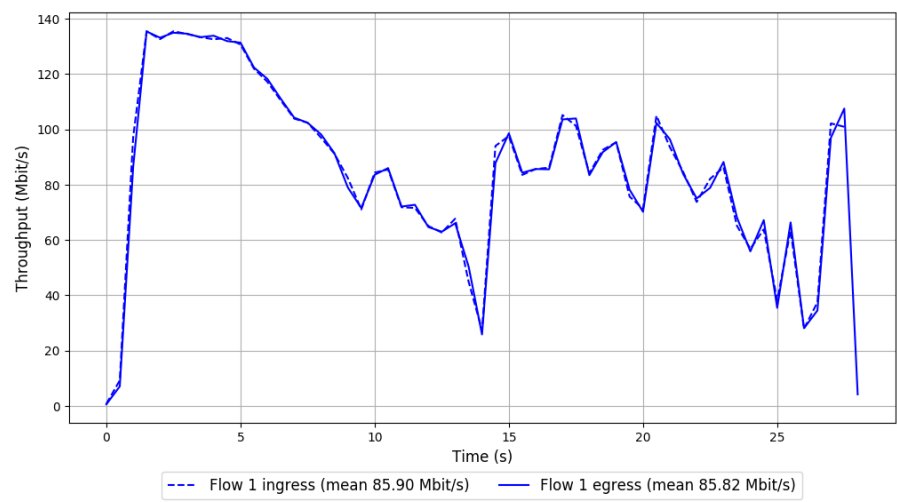
-- Flow 1:

Average throughput: 85.82 Mbit/s

95th percentile per-packet one-way delay: 48.934 ms

Loss rate: 0.09%

Run 10: Report of Copa — Data Link

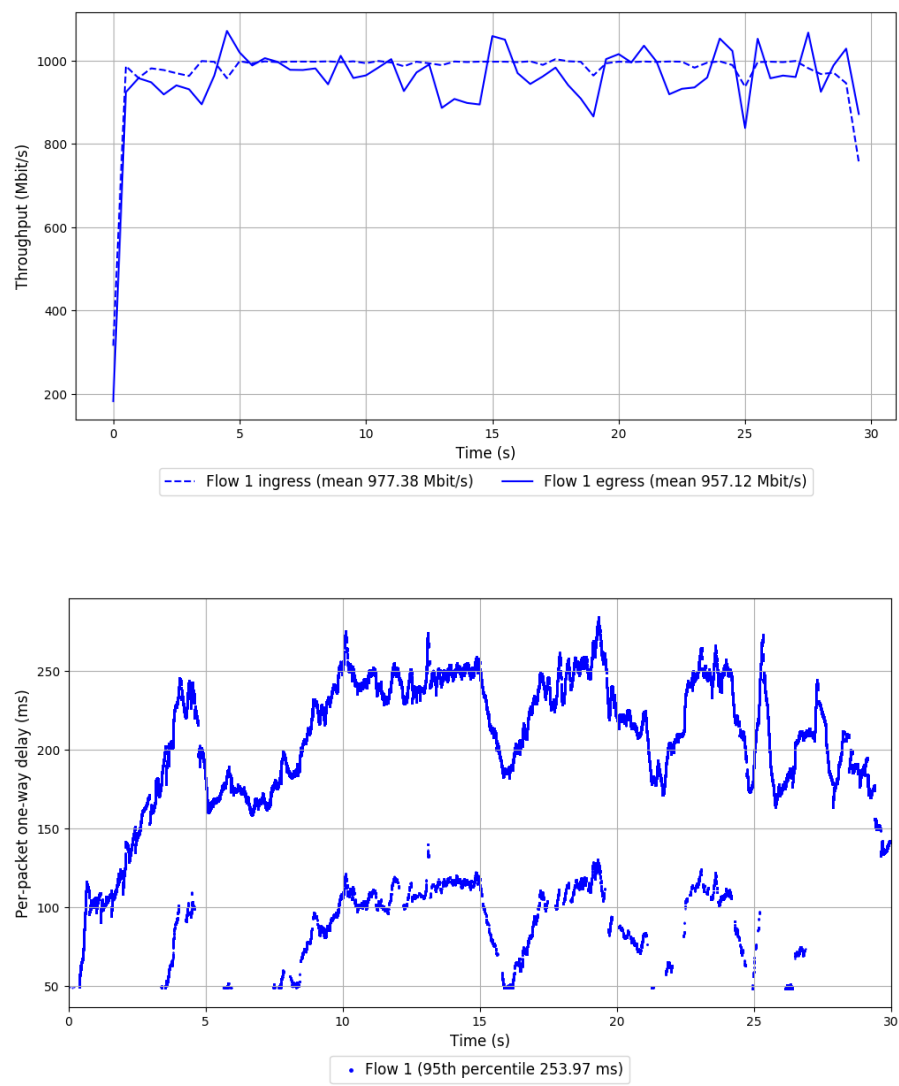


```
Run 1: Statistics of FillP

Start at: 2018-01-09 02:50:11
End at: 2018-01-09 02:50:41

# Below is generated by plot.py at 2018-01-09 06:27:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 957.12 Mbit/s
95th percentile per-packet one-way delay: 253.973 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 957.12 Mbit/s
95th percentile per-packet one-way delay: 253.973 ms
Loss rate: 2.10%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-09 03:01:42

End at: 2018-01-09 03:02:12

Below is generated by plot.py at 2018-01-09 06:27:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 886.37 Mbit/s

95th percentile per-packet one-way delay: 300.947 ms

Loss rate: 7.32%

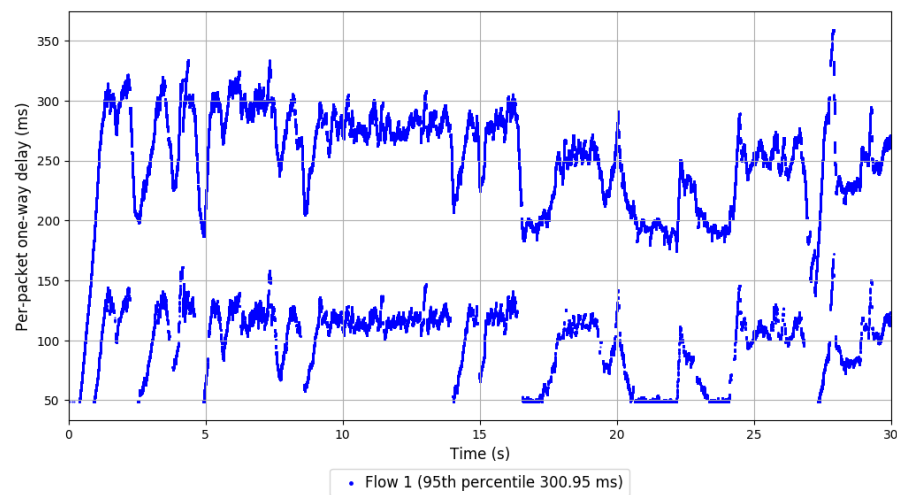
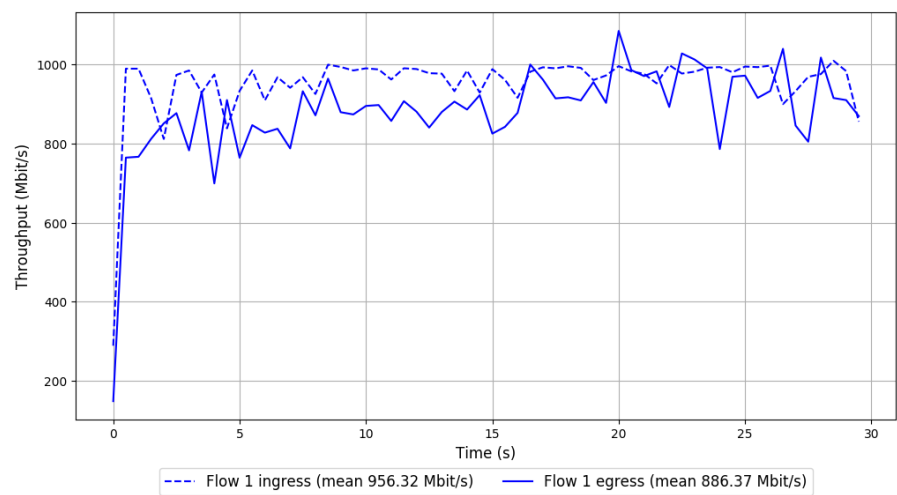
-- Flow 1:

Average throughput: 886.37 Mbit/s

95th percentile per-packet one-way delay: 300.947 ms

Loss rate: 7.32%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-09 03:13:25

End at: 2018-01-09 03:13:55

Below is generated by plot.py at 2018-01-09 06:28:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 897.15 Mbit/s

95th percentile per-packet one-way delay: 279.400 ms

Loss rate: 6.29%

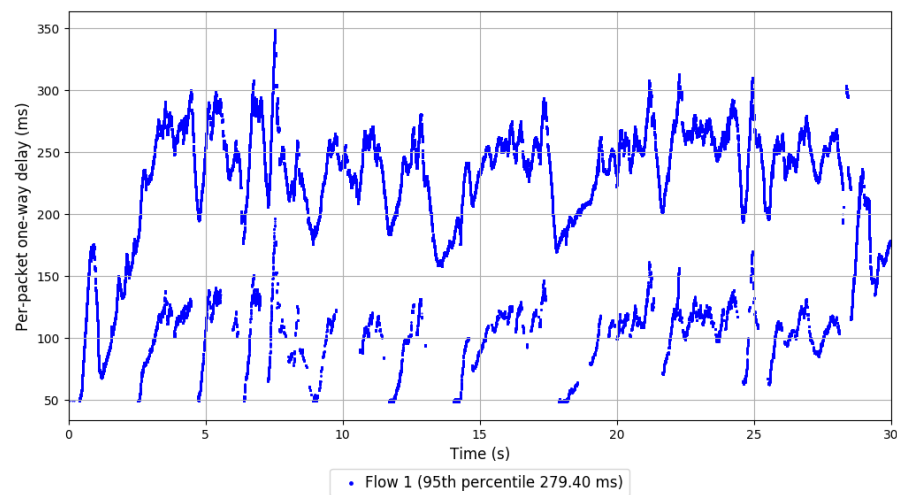
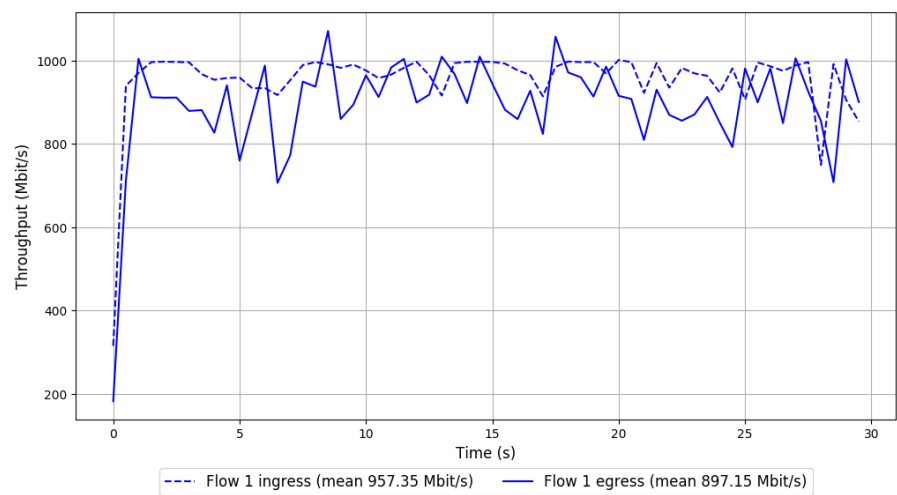
-- Flow 1:

Average throughput: 897.15 Mbit/s

95th percentile per-packet one-way delay: 279.400 ms

Loss rate: 6.29%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-09 03:24:57

End at: 2018-01-09 03:25:27

Below is generated by plot.py at 2018-01-09 06:28:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 911.01 Mbit/s

95th percentile per-packet one-way delay: 270.101 ms

Loss rate: 5.54%

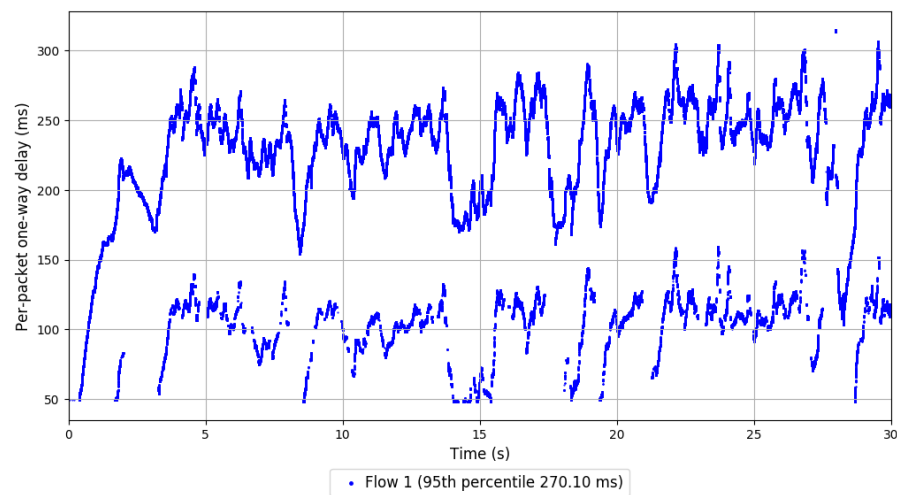
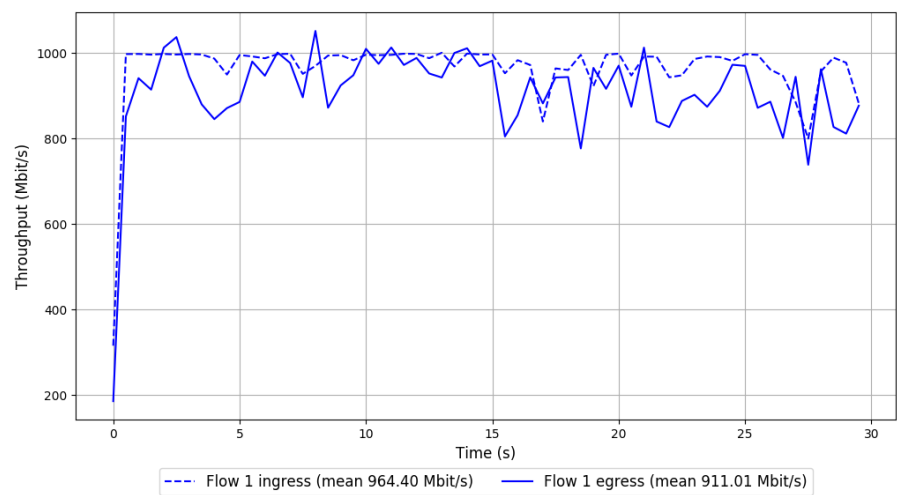
-- Flow 1:

Average throughput: 911.01 Mbit/s

95th percentile per-packet one-way delay: 270.101 ms

Loss rate: 5.54%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-09 03:36:26

End at: 2018-01-09 03:36:56

Below is generated by plot.py at 2018-01-09 06:28:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 832.84 Mbit/s

95th percentile per-packet one-way delay: 299.449 ms

Loss rate: 10.28%

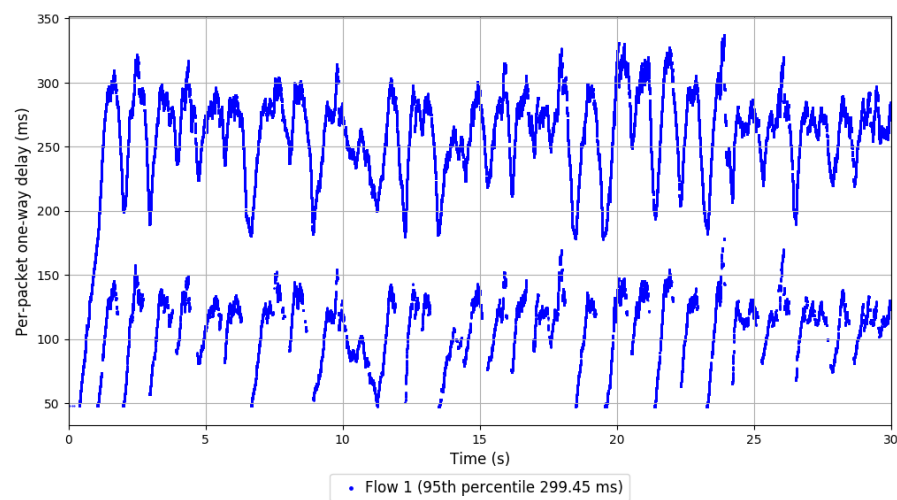
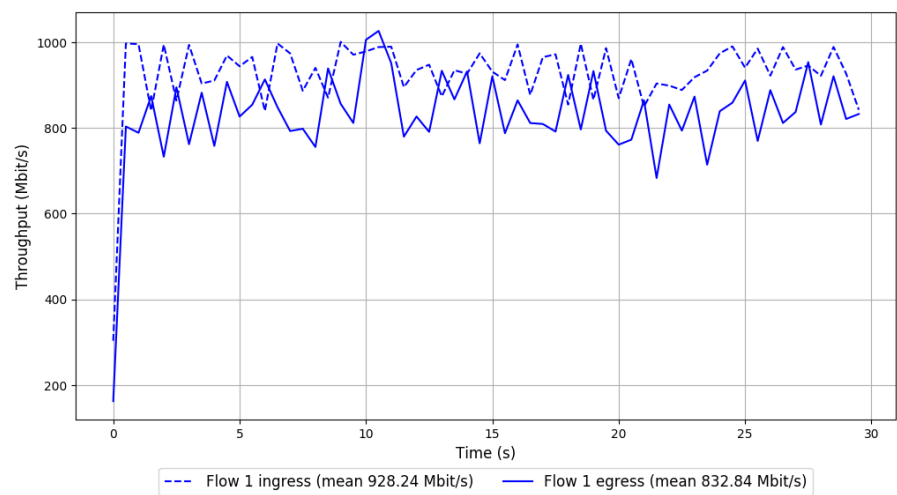
-- Flow 1:

Average throughput: 832.84 Mbit/s

95th percentile per-packet one-way delay: 299.449 ms

Loss rate: 10.28%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-09 03:47:57

End at: 2018-01-09 03:48:27

Below is generated by plot.py at 2018-01-09 06:28:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 925.15 Mbit/s

95th percentile per-packet one-way delay: 274.246 ms

Loss rate: 3.89%

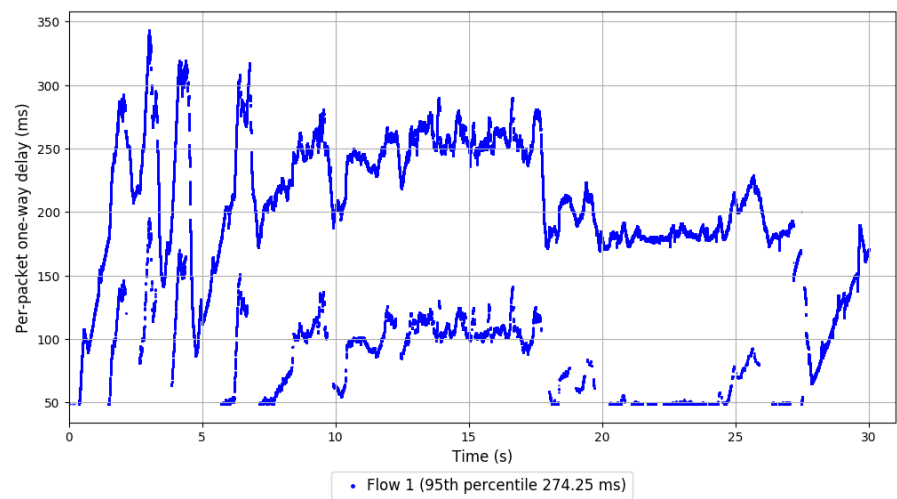
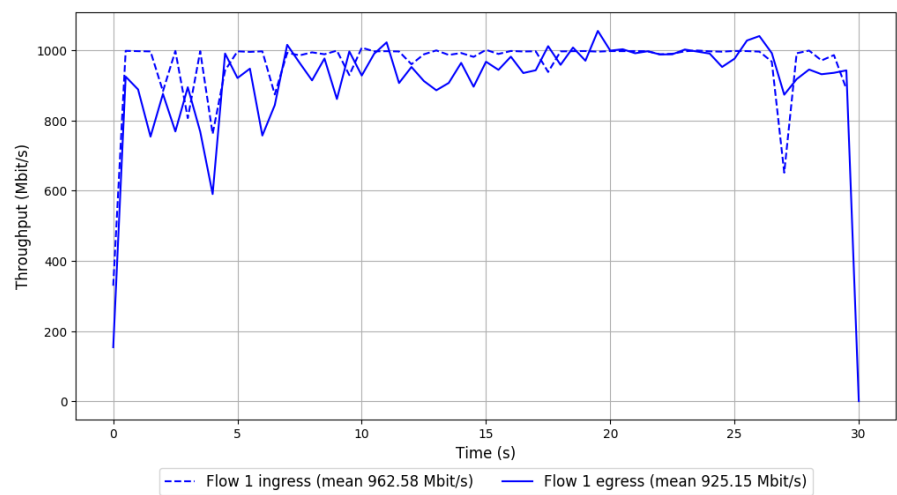
-- Flow 1:

Average throughput: 925.15 Mbit/s

95th percentile per-packet one-way delay: 274.246 ms

Loss rate: 3.89%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-09 03:59:11

End at: 2018-01-09 03:59:41

Below is generated by plot.py at 2018-01-09 06:28:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 661.27 Mbit/s

95th percentile per-packet one-way delay: 273.648 ms

Loss rate: 6.62%

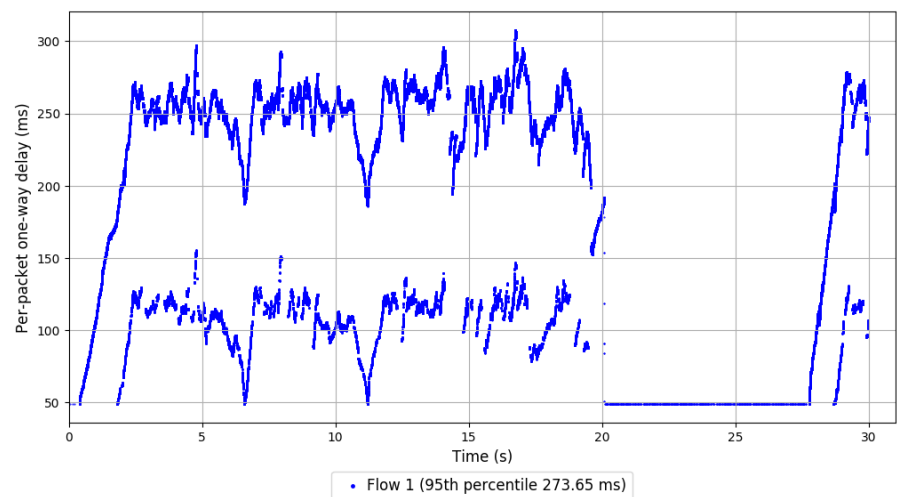
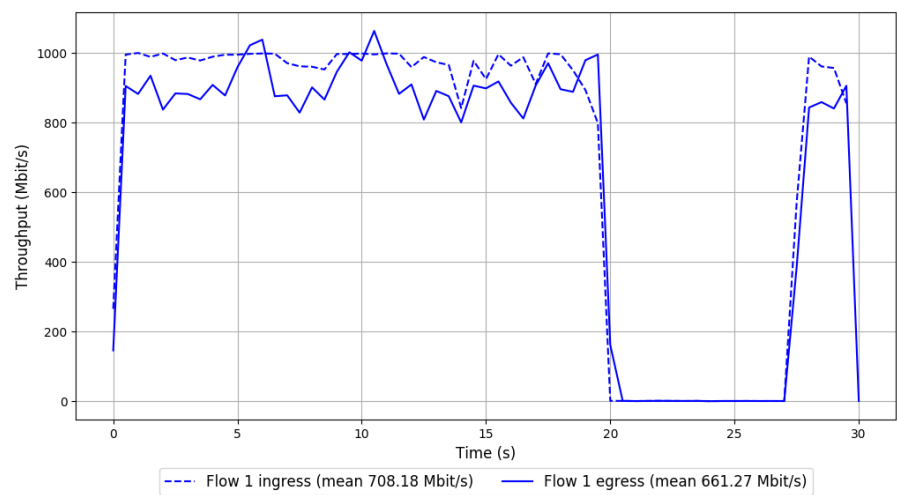
-- Flow 1:

Average throughput: 661.27 Mbit/s

95th percentile per-packet one-way delay: 273.648 ms

Loss rate: 6.62%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-09 04:10:08

End at: 2018-01-09 04:10:38

Below is generated by plot.py at 2018-01-09 06:29:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 899.74 Mbit/s

95th percentile per-packet one-way delay: 289.415 ms

Loss rate: 6.80%

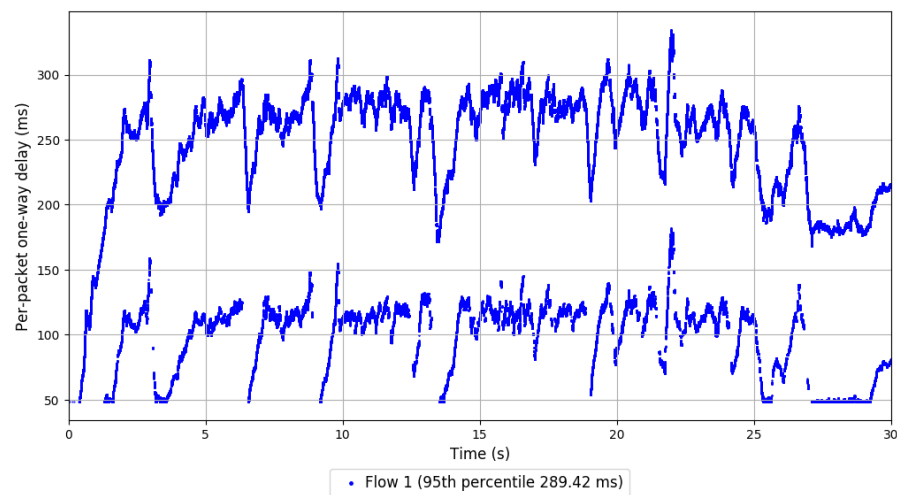
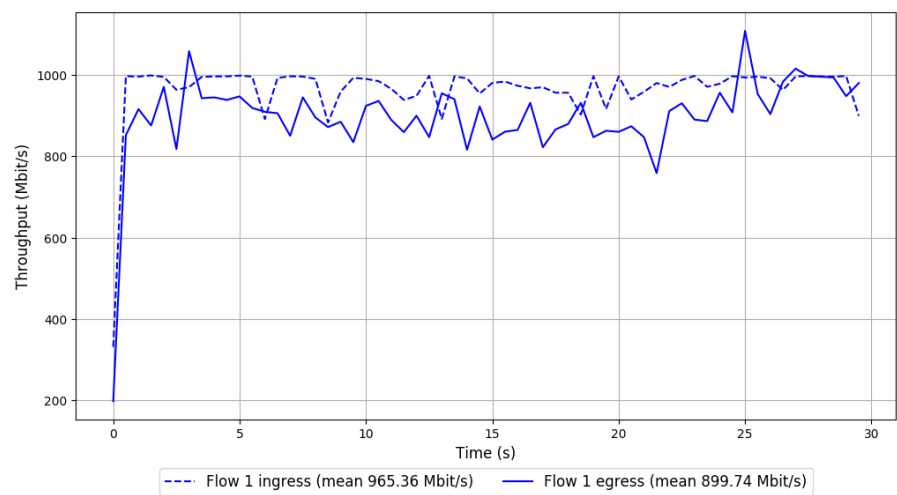
-- Flow 1:

Average throughput: 899.74 Mbit/s

95th percentile per-packet one-way delay: 289.415 ms

Loss rate: 6.80%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-09 04:21:40

End at: 2018-01-09 04:22:10

Below is generated by plot.py at 2018-01-09 06:34:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 917.87 Mbit/s

95th percentile per-packet one-way delay: 274.359 ms

Loss rate: 5.13%

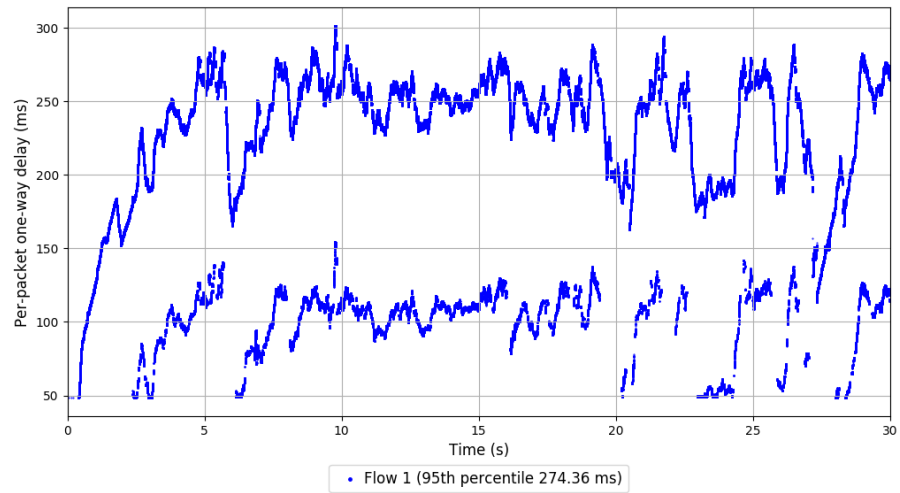
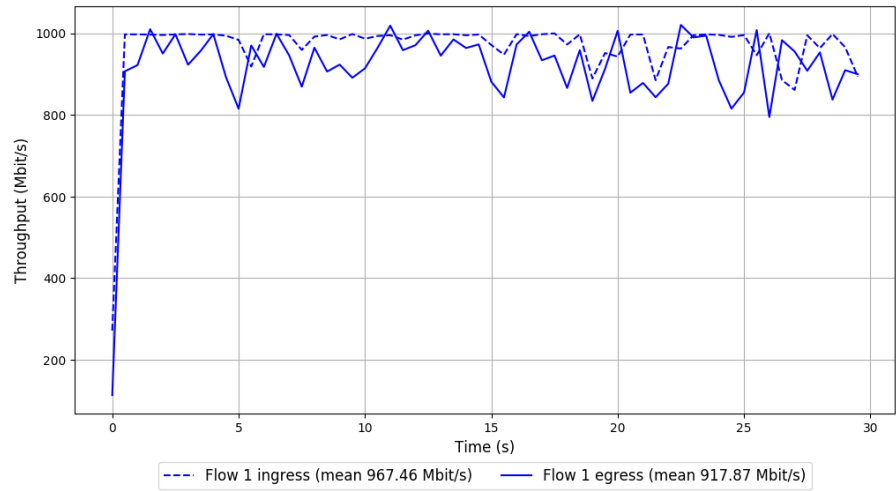
-- Flow 1:

Average throughput: 917.87 Mbit/s

95th percentile per-packet one-way delay: 274.359 ms

Loss rate: 5.13%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-09 04:32:51

End at: 2018-01-09 04:33:21

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 961.30 Mbit/s

95th percentile per-packet one-way delay: 248.372 ms

Loss rate: 1.59%

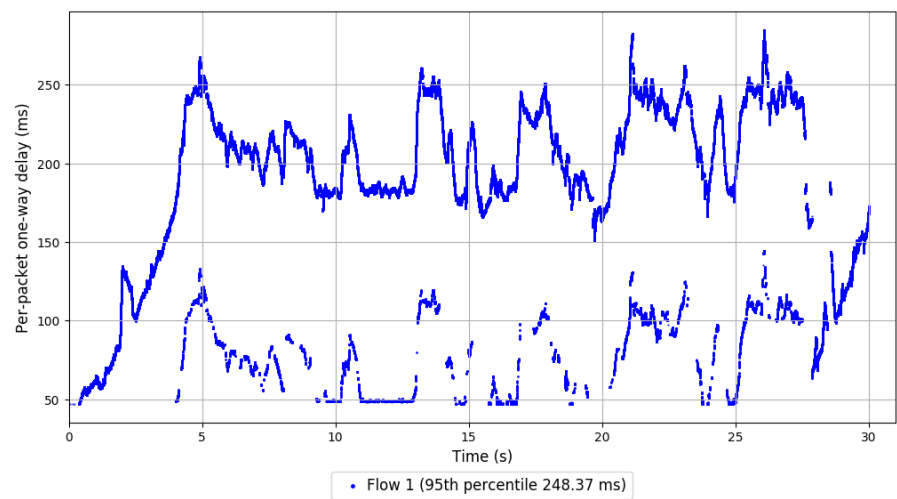
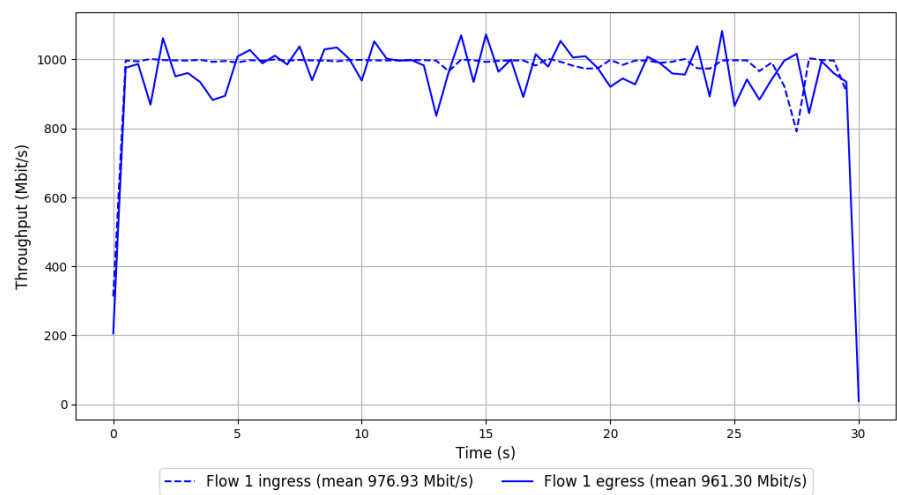
-- Flow 1:

Average throughput: 961.30 Mbit/s

95th percentile per-packet one-way delay: 248.372 ms

Loss rate: 1.59%

Run 10: Report of FillP — Data Link

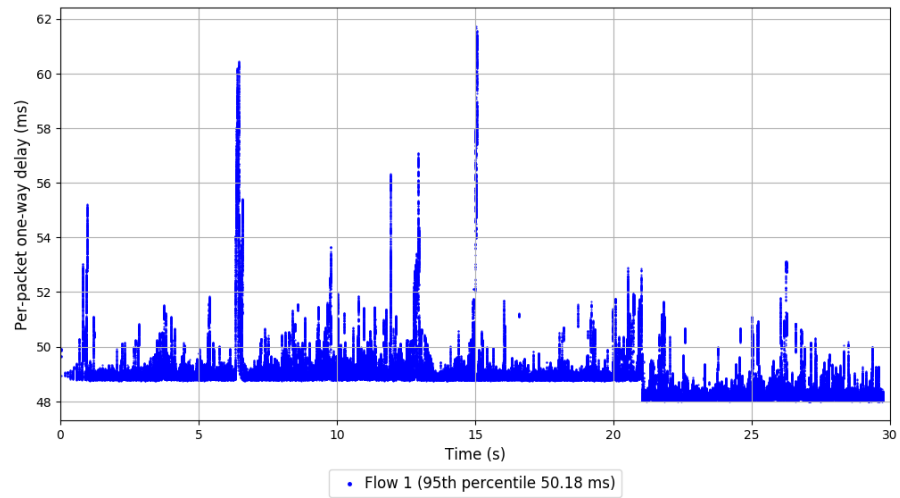
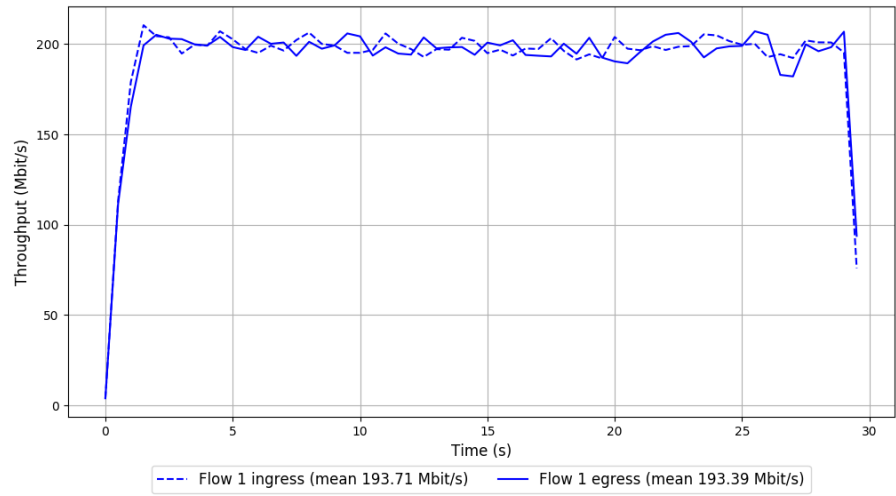


```
Run 1: Statistics of Indigo

Start at: 2018-01-09 02:55:04
End at: 2018-01-09 02:55:34

# Below is generated by plot.py at 2018-01-09 06:34:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.39 Mbit/s
95th percentile per-packet one-way delay: 50.177 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 193.39 Mbit/s
95th percentile per-packet one-way delay: 50.177 ms
Loss rate: 0.17%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-09 03:06:48

End at: 2018-01-09 03:07:18

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.07 Mbit/s

95th percentile per-packet one-way delay: 49.595 ms

Loss rate: 0.03%

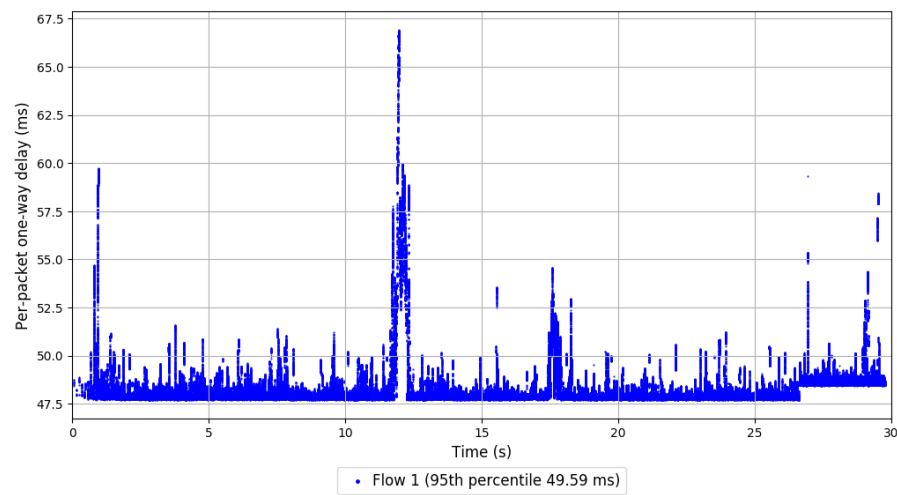
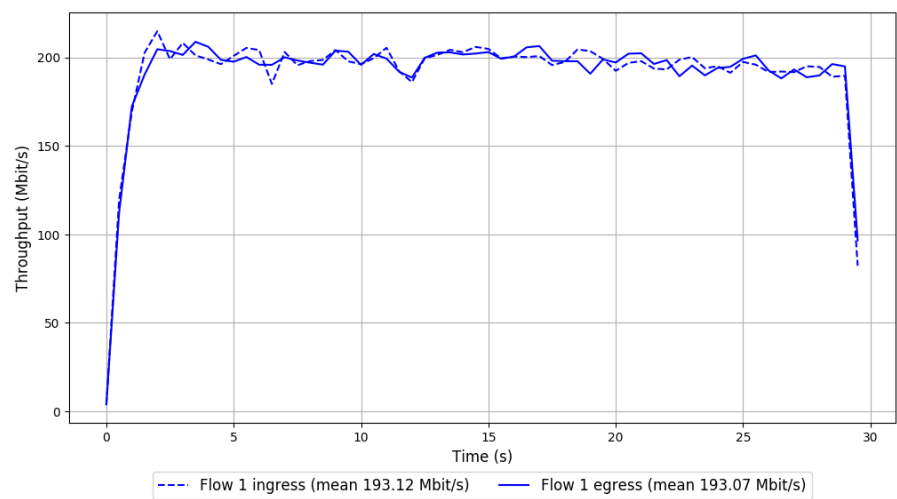
-- Flow 1:

Average throughput: 193.07 Mbit/s

95th percentile per-packet one-way delay: 49.595 ms

Loss rate: 0.03%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-09 03:18:19

End at: 2018-01-09 03:18:49

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.84 Mbit/s

95th percentile per-packet one-way delay: 51.145 ms

Loss rate: 0.27%

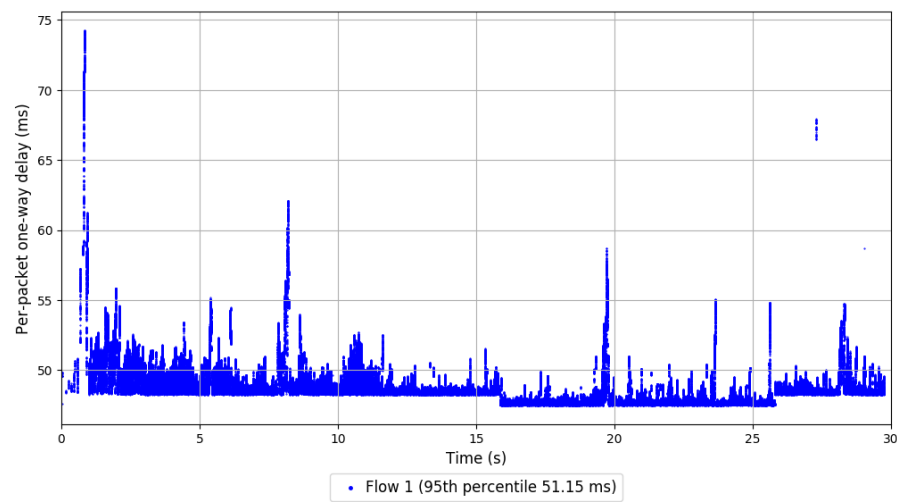
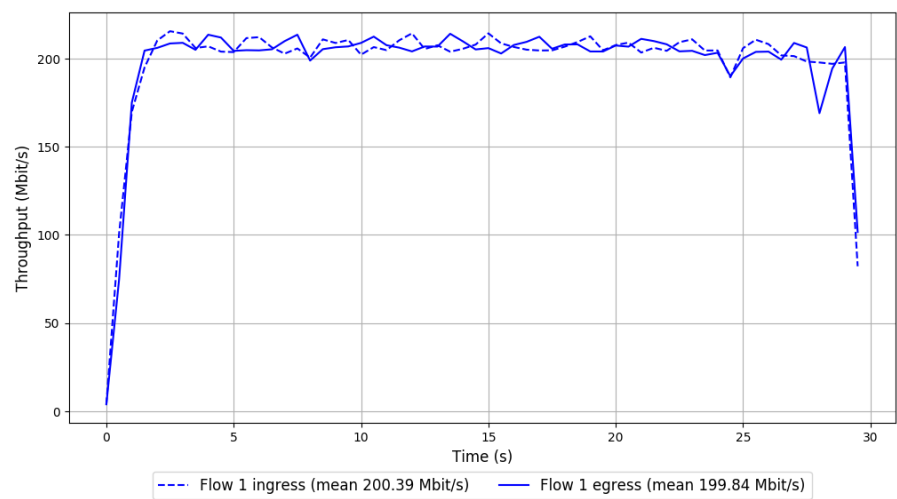
-- Flow 1:

Average throughput: 199.84 Mbit/s

95th percentile per-packet one-way delay: 51.145 ms

Loss rate: 0.27%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-09 03:29:54

End at: 2018-01-09 03:30:24

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.04 Mbit/s

95th percentile per-packet one-way delay: 50.303 ms

Loss rate: 0.00%

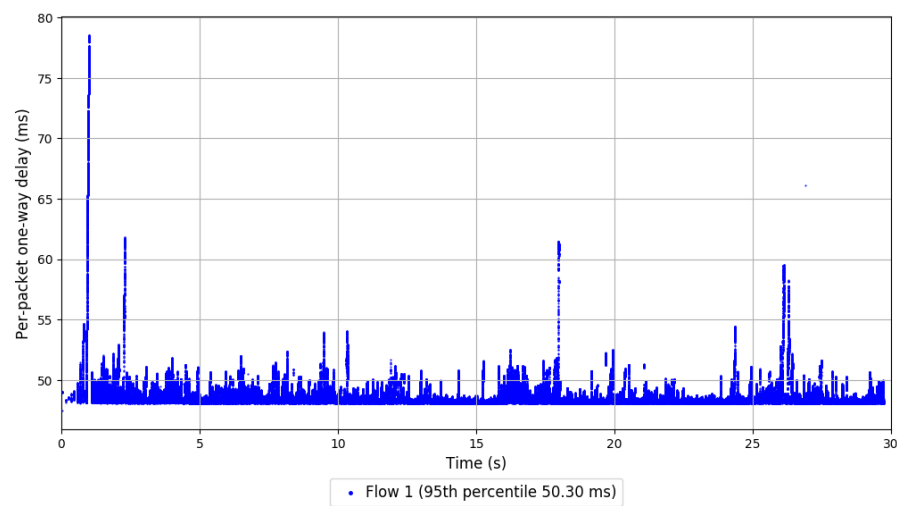
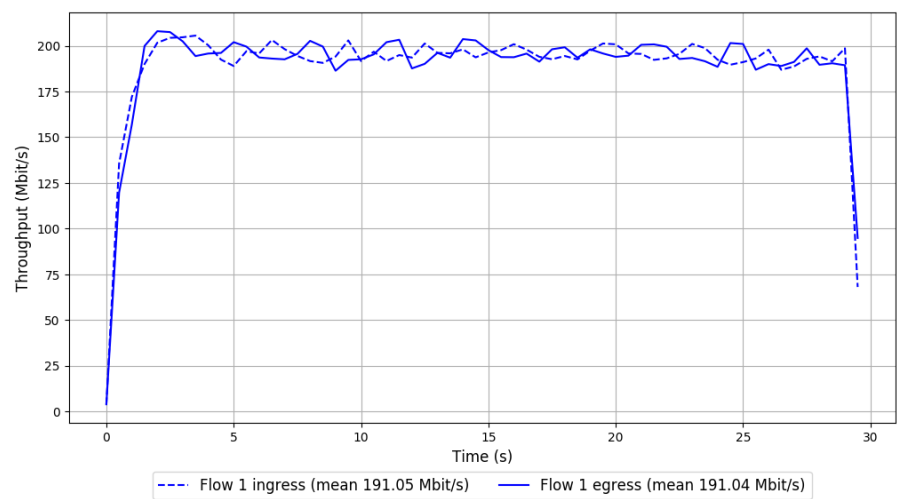
-- Flow 1:

Average throughput: 191.04 Mbit/s

95th percentile per-packet one-way delay: 50.303 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-09 03:41:25

End at: 2018-01-09 03:41:55

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.58 Mbit/s

95th percentile per-packet one-way delay: 50.207 ms

Loss rate: 0.04%

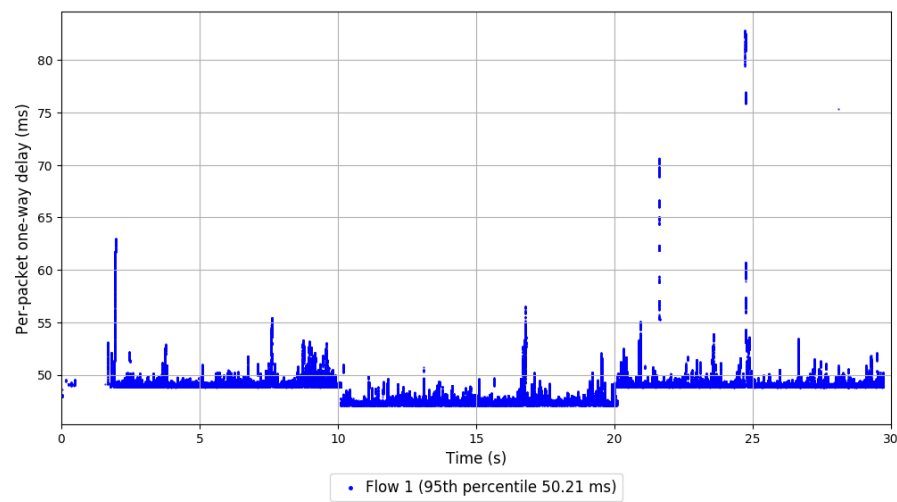
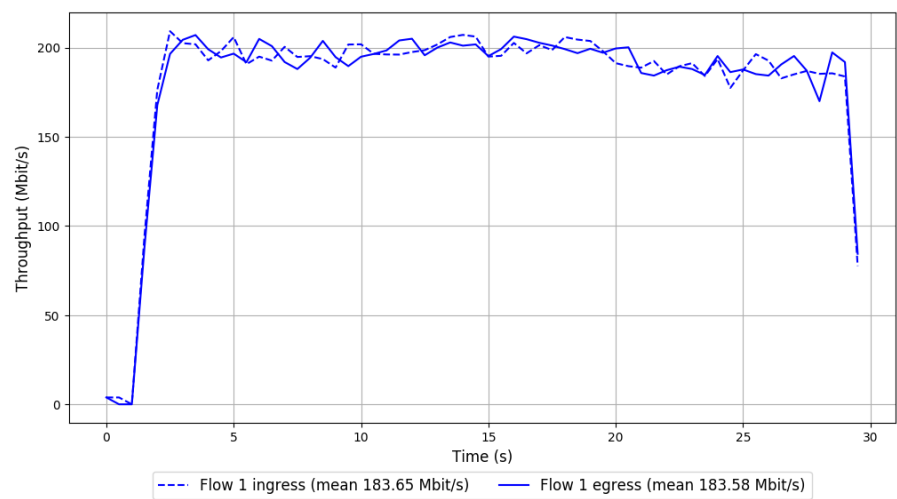
-- Flow 1:

Average throughput: 183.58 Mbit/s

95th percentile per-packet one-way delay: 50.207 ms

Loss rate: 0.04%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-09 03:52:37

End at: 2018-01-09 03:53:07

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.89 Mbit/s

95th percentile per-packet one-way delay: 50.539 ms

Loss rate: 0.27%

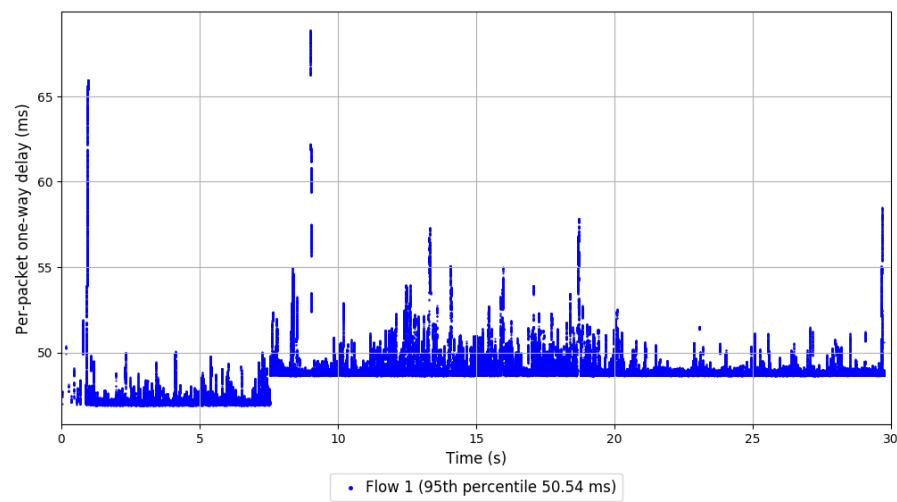
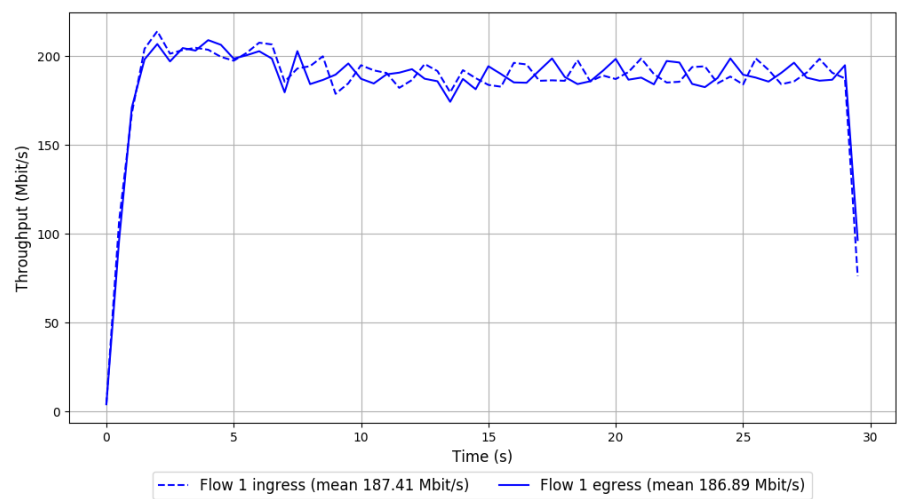
-- Flow 1:

Average throughput: 186.89 Mbit/s

95th percentile per-packet one-way delay: 50.539 ms

Loss rate: 0.27%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-09 04:03:33

End at: 2018-01-09 04:04:03

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.66 Mbit/s

95th percentile per-packet one-way delay: 50.717 ms

Loss rate: 0.00%

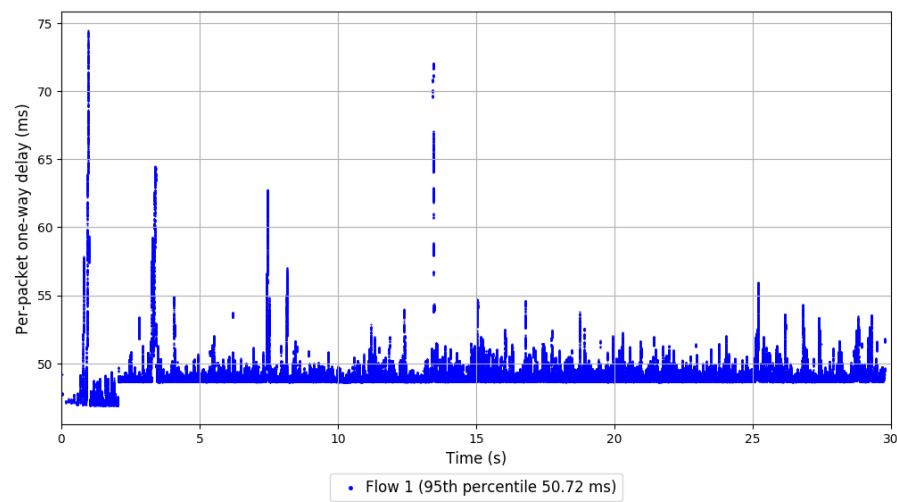
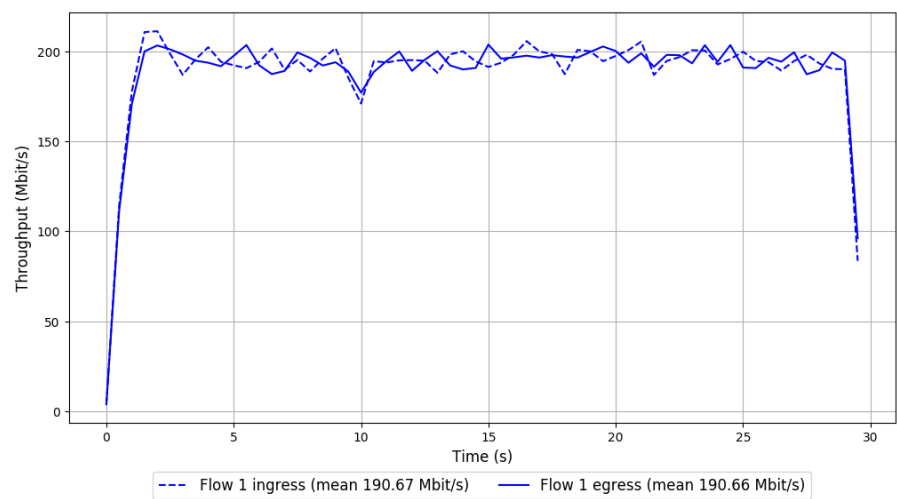
-- Flow 1:

Average throughput: 190.66 Mbit/s

95th percentile per-packet one-way delay: 50.717 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-09 04:15:08

End at: 2018-01-09 04:15:38

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.74 Mbit/s

95th percentile per-packet one-way delay: 50.610 ms

Loss rate: 0.00%

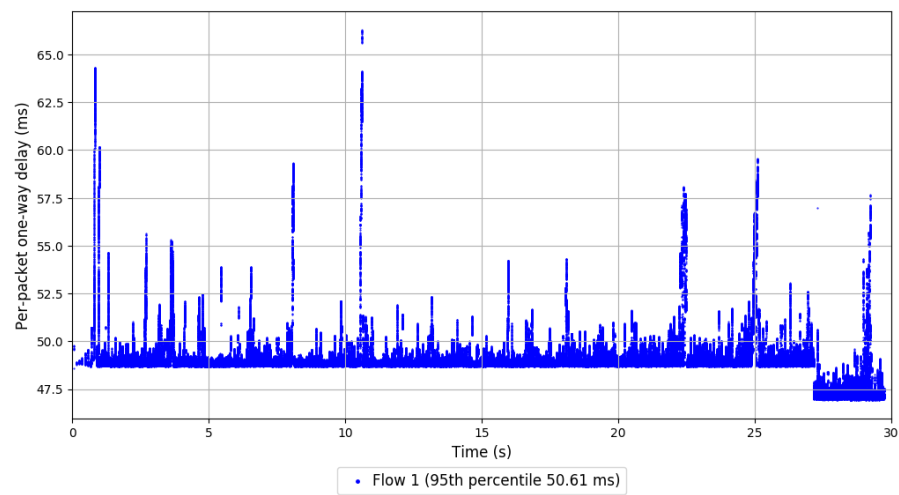
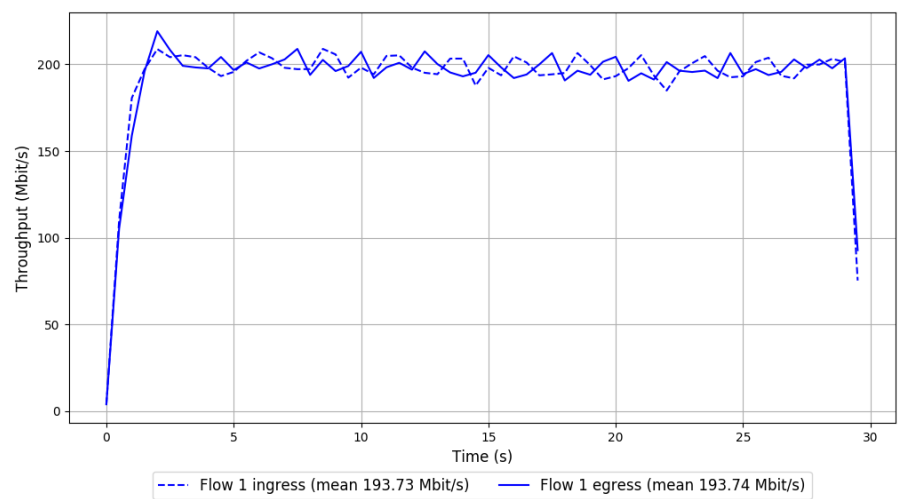
-- Flow 1:

Average throughput: 193.74 Mbit/s

95th percentile per-packet one-way delay: 50.610 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-09 04:26:17

End at: 2018-01-09 04:26:47

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.44 Mbit/s

95th percentile per-packet one-way delay: 50.781 ms

Loss rate: 0.11%

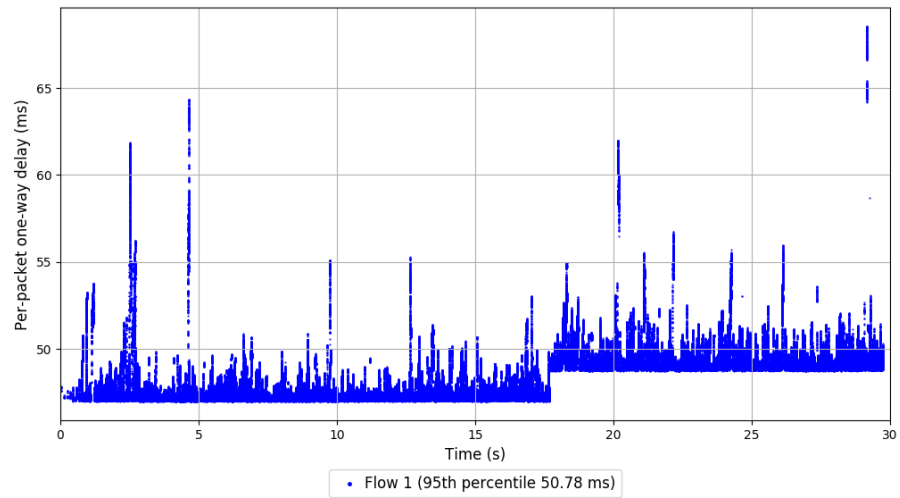
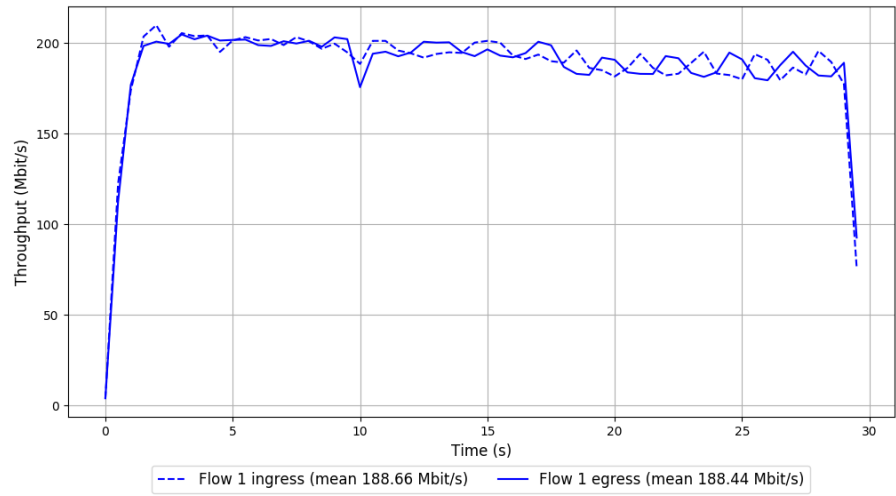
-- Flow 1:

Average throughput: 188.44 Mbit/s

95th percentile per-packet one-way delay: 50.781 ms

Loss rate: 0.11%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-09 04:37:49

End at: 2018-01-09 04:38:19

Below is generated by plot.py at 2018-01-09 06:34:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.48 Mbit/s

95th percentile per-packet one-way delay: 49.392 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 194.48 Mbit/s

95th percentile per-packet one-way delay: 49.392 ms

Loss rate: 0.12%

Run 10: Report of Indigo — Data Link

