

Pantheon Report

Generated at 2017-08-16 23:26:59 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

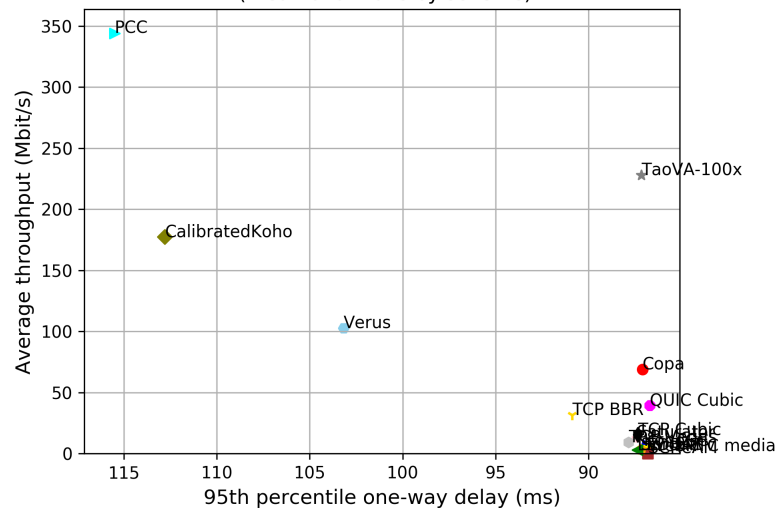
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

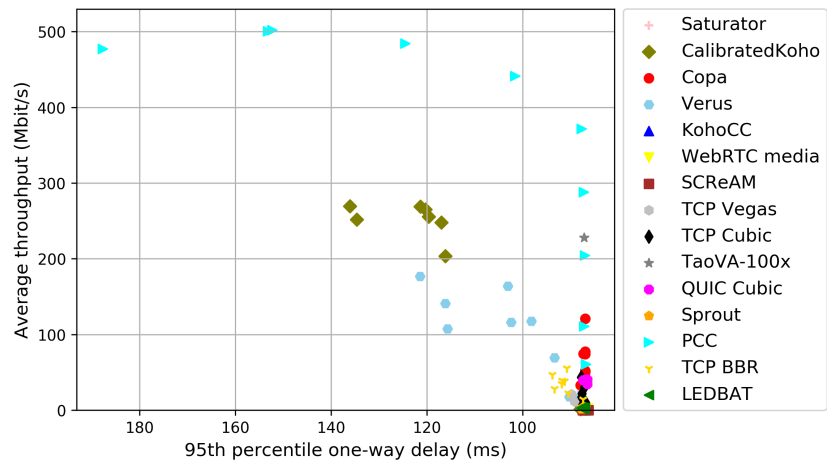
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 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 Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE Iowa Ethernet to GCE Sydney 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	9	31.49	90.89	19.38
CalibratedKoho	10	177.36	112.79	21.90
Copa	7	68.95	87.10	1.30
TCP Cubic	10	15.51	87.35	1.89
KohoCC	10	6.61	87.03	1.24
LEDBAT	10	2.86	87.38	0.75
PCC	10	344.11	115.50	4.32
QUIC Cubic	8	39.33	86.71	0.00
Saturator	4	13.20	87.42	1.56
SCReAM	10	0.22	86.82	0.00
Sprout	9	3.18	87.19	2.61
TaoVA-100x	1	227.83	87.15	2.12
TCP Vegas	10	9.18	87.85	1.74
Verus	9	102.83	103.18	32.65
WebRTC media	10	2.21	86.80	0.02

Run 1: Statistics of TCP BBR

Start at: 2017-08-16 20:23:08

End at: 2017-08-16 20:23:38

Below is generated by plot.py at 2017-08-16 23:12:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.86 Mbit/s

95th percentile per-packet one-way delay: 91.808 ms

Loss rate: 9.59%

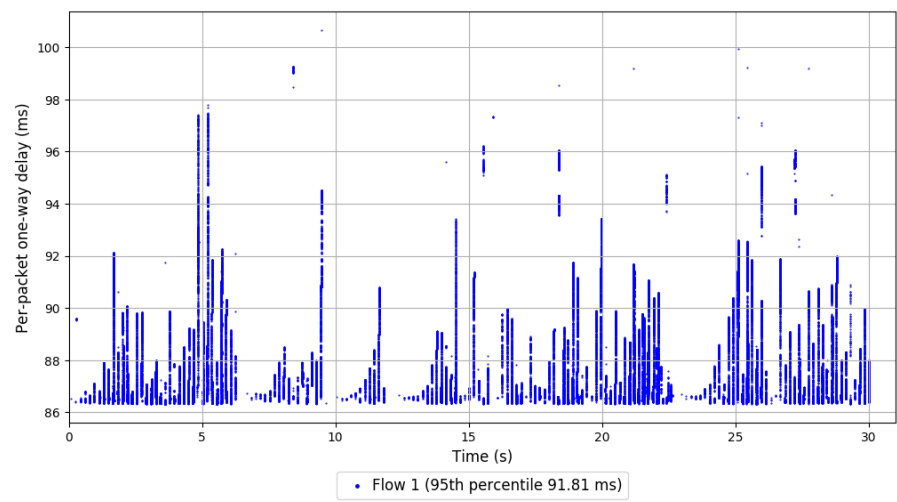
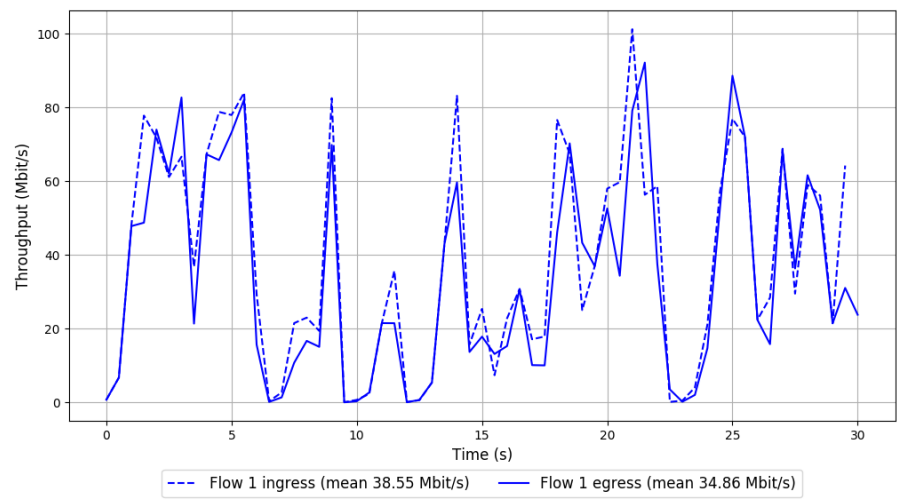
-- Flow 1:

Average throughput: 34.86 Mbit/s

95th percentile per-packet one-way delay: 91.808 ms

Loss rate: 9.59%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-16 20:33:55

End at: 2017-08-16 20:34:25

Below is generated by plot.py at 2017-08-16 23:12:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.49 Mbit/s

95th percentile per-packet one-way delay: 91.203 ms

Loss rate: 10.98%

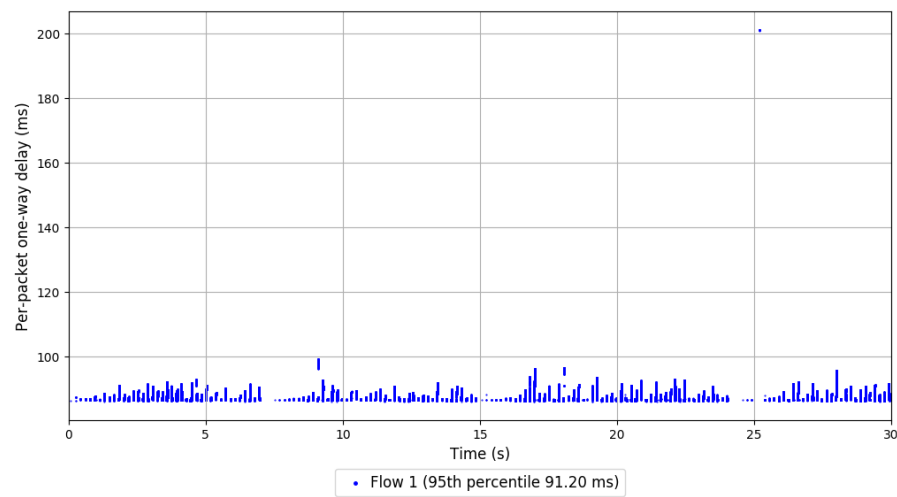
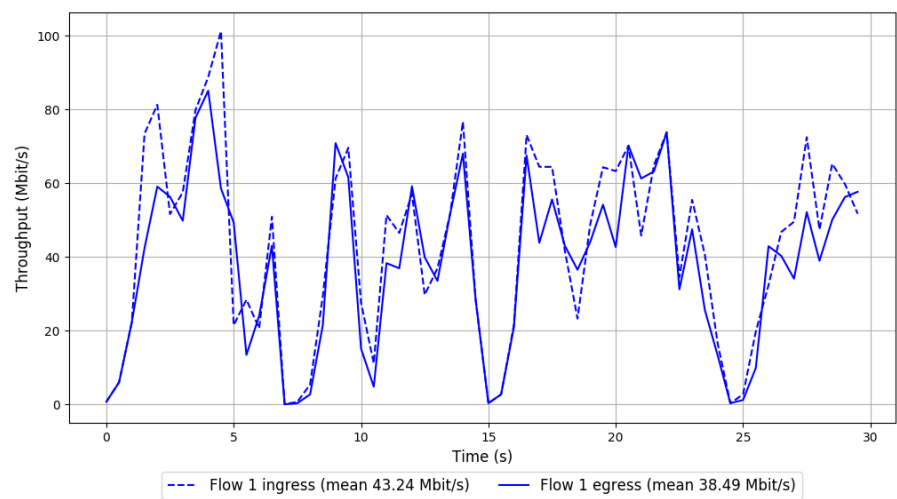
-- Flow 1:

Average throughput: 38.49 Mbit/s

95th percentile per-packet one-way delay: 91.203 ms

Loss rate: 10.98%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-16 20:45:14

End at: 2017-08-16 20:45:44

Below is generated by plot.py at 2017-08-16 23:12:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 87.721 ms

Loss rate: 33.01%

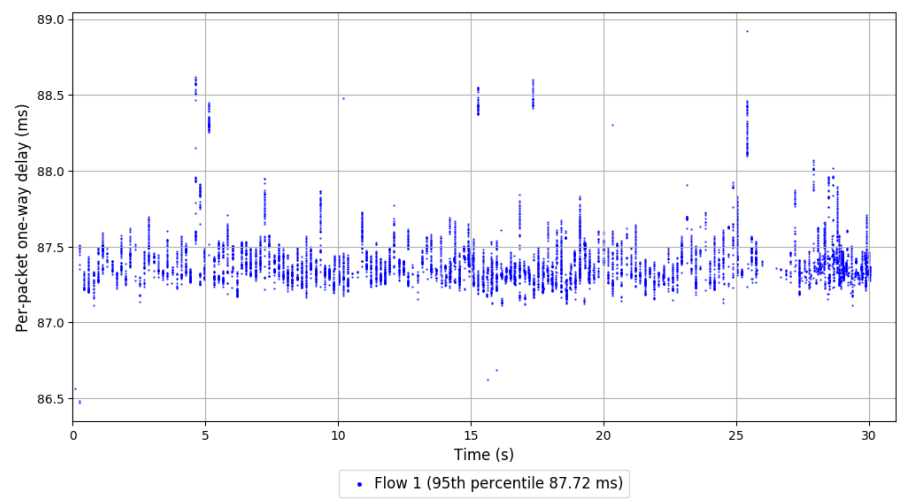
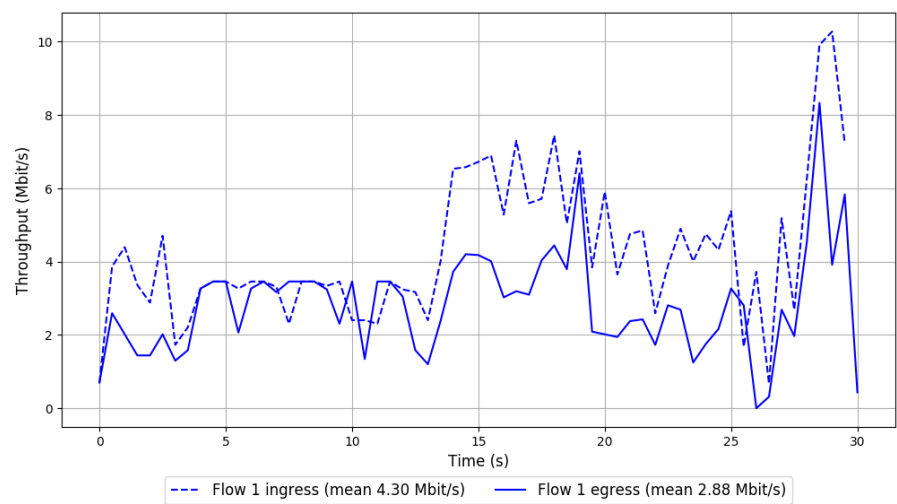
-- Flow 1:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 87.721 ms

Loss rate: 33.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-16 20:56:58

End at: 2017-08-16 20:57:28

Below is generated by plot.py at 2017-08-16 23:12:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.39 Mbit/s

95th percentile per-packet one-way delay: 87.368 ms

Loss rate: 38.23%

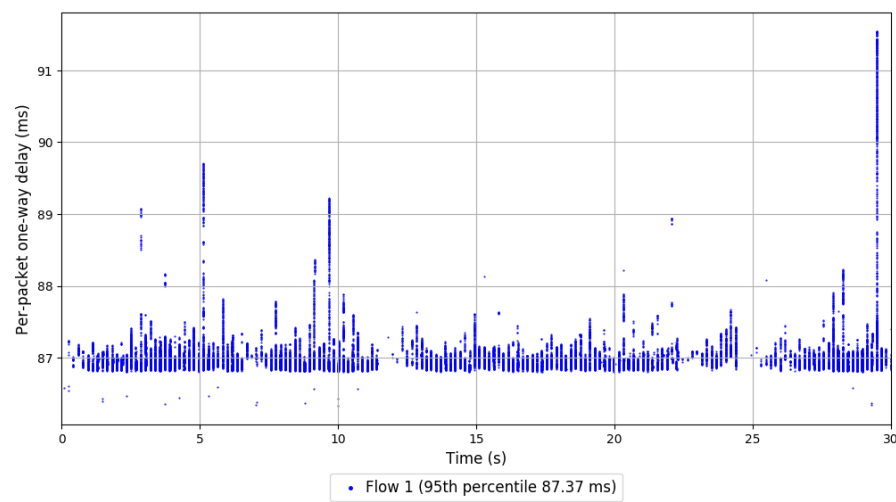
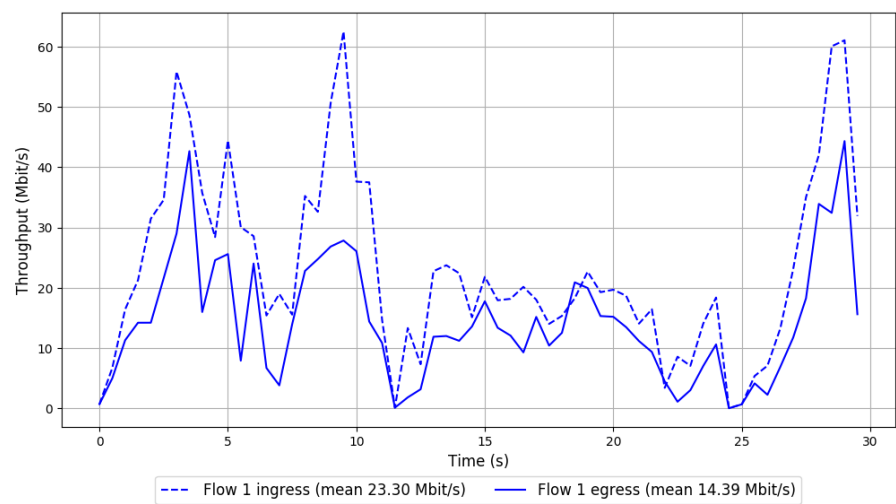
-- Flow 1:

Average throughput: 14.39 Mbit/s

95th percentile per-packet one-way delay: 87.368 ms

Loss rate: 38.23%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-16 21:07:44

End at: 2017-08-16 21:08:14

Below is generated by plot.py at 2017-08-16 23:12:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.33 Mbit/s

95th percentile per-packet one-way delay: 93.295 ms

Loss rate: 25.44%

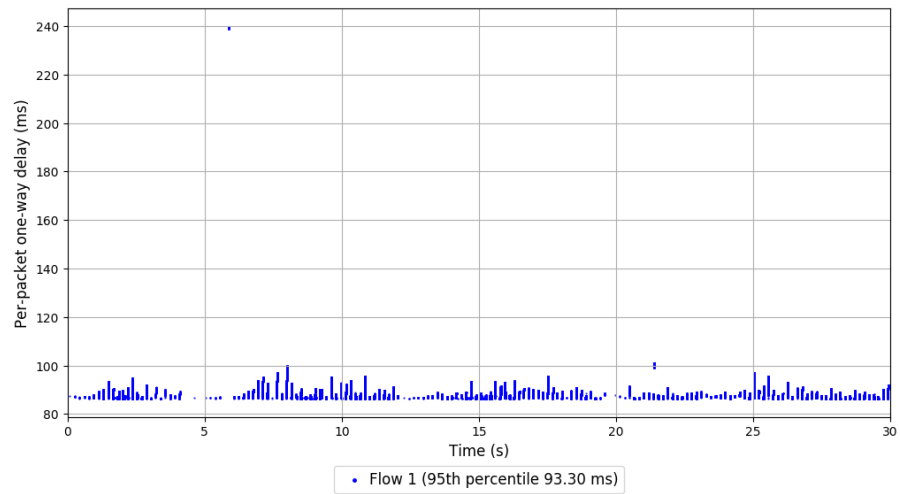
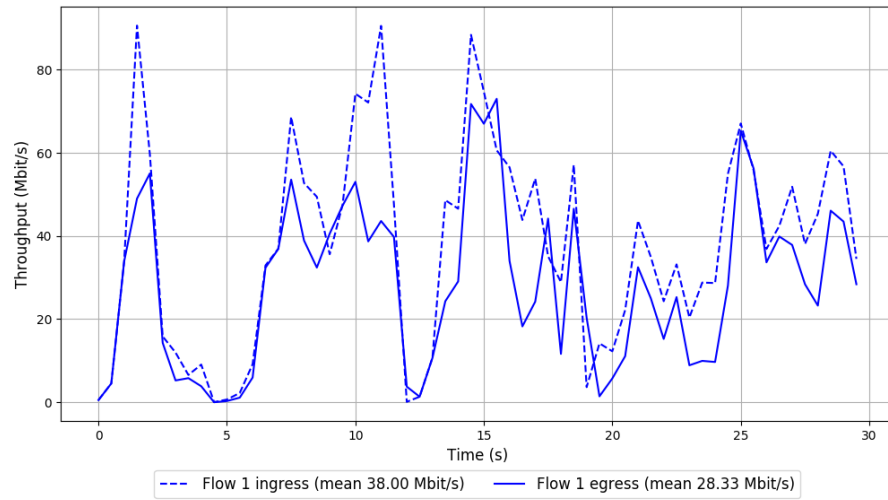
-- Flow 1:

Average throughput: 28.33 Mbit/s

95th percentile per-packet one-way delay: 93.295 ms

Loss rate: 25.44%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-16 21:18:26

End at: 2017-08-16 21:18:56

Below is generated by plot.py at 2017-08-16 23:12:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.63 Mbit/s

95th percentile per-packet one-way delay: 90.416 ms

Loss rate: 26.94%

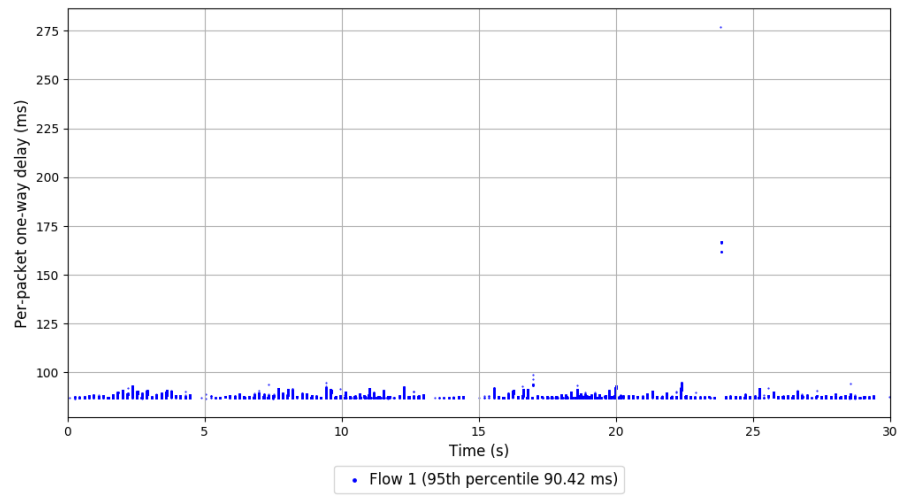
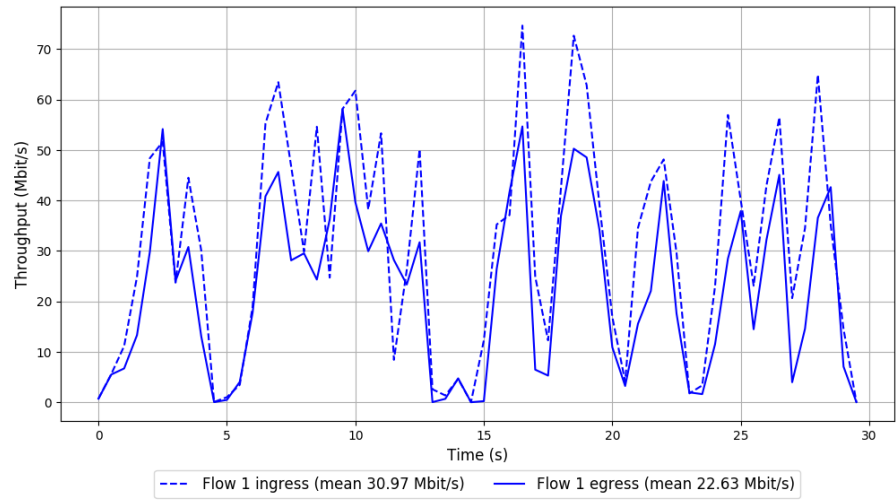
-- Flow 1:

Average throughput: 22.63 Mbit/s

95th percentile per-packet one-way delay: 90.416 ms

Loss rate: 26.94%

Run 6: Report of TCP BBR — Data Link

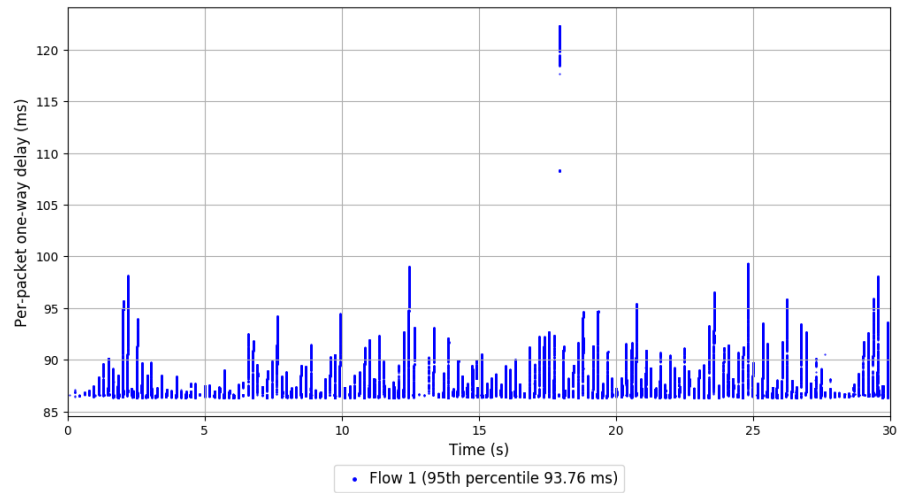
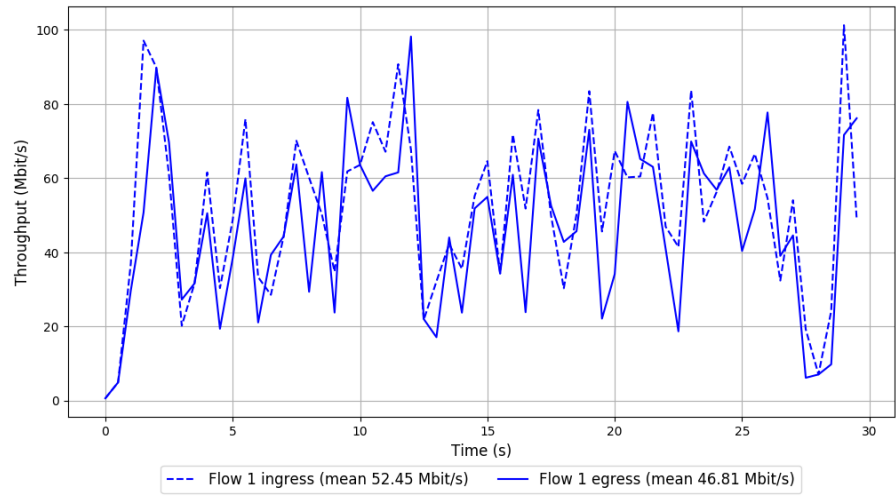


```
Run 7: Statistics of TCP BBR

Start at: 2017-08-16 21:30:19
End at: 2017-08-16 21:30:49

# Below is generated by plot.py at 2017-08-16 23:12:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.81 Mbit/s
95th percentile per-packet one-way delay: 93.756 ms
Loss rate: 10.74%
-- Flow 1:
Average throughput: 46.81 Mbit/s
95th percentile per-packet one-way delay: 93.756 ms
Loss rate: 10.74%
```

Run 7: Report of TCP BBR — Data Link

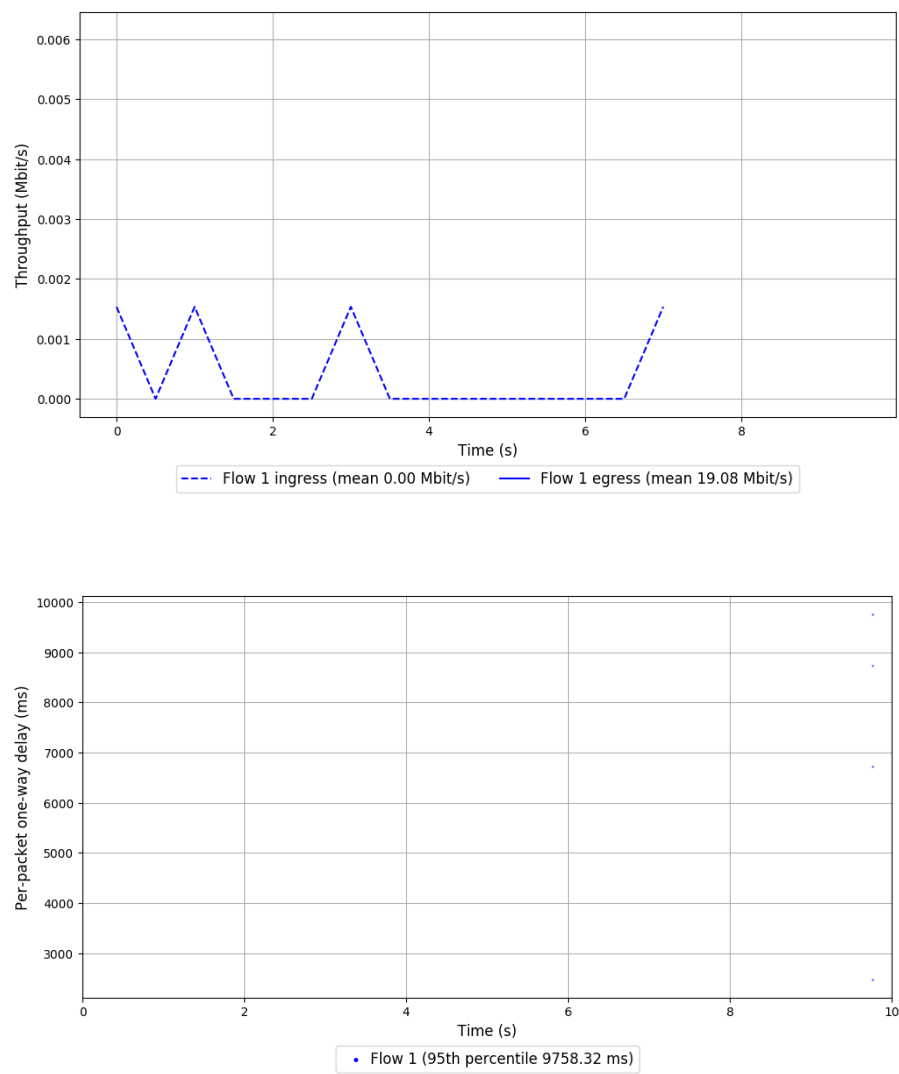


Run 8: Statistics of TCP BBR

Start at: 2017-08-16 21:41:31

End at: 2017-08-16 21:42:01

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-16 21:52:35

End at: 2017-08-16 21:53:05

Below is generated by plot.py at 2017-08-16 23:12:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.65 Mbit/s

95th percentile per-packet one-way delay: 90.714 ms

Loss rate: 3.83%

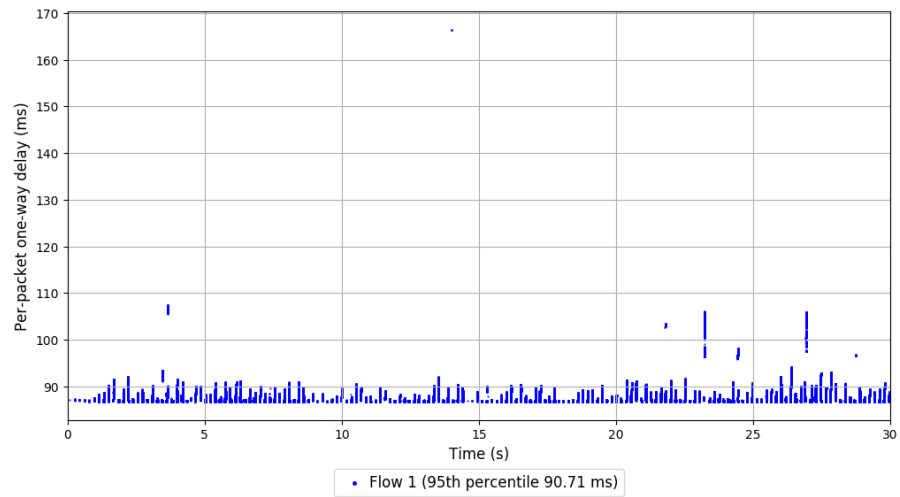
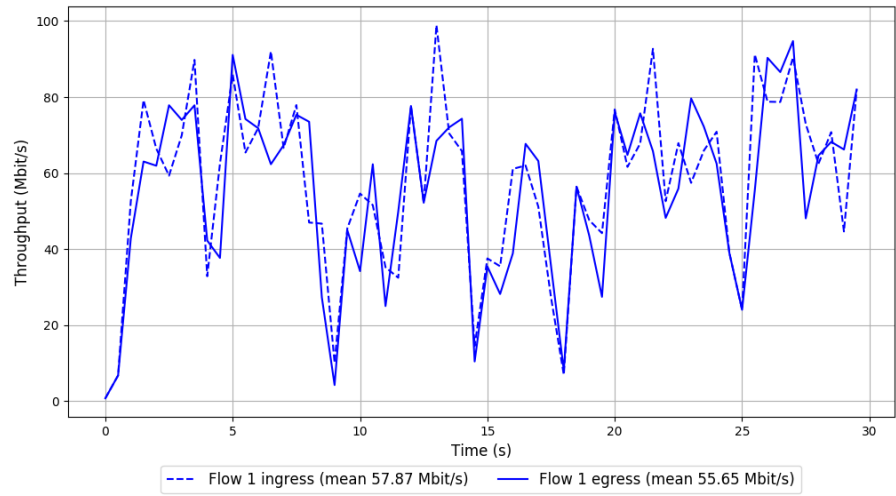
-- Flow 1:

Average throughput: 55.65 Mbit/s

95th percentile per-packet one-way delay: 90.714 ms

Loss rate: 3.83%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-16 22:03:22

End at: 2017-08-16 22:03:52

Below is generated by plot.py at 2017-08-16 23:12:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.34 Mbit/s

95th percentile per-packet one-way delay: 91.721 ms

Loss rate: 15.69%

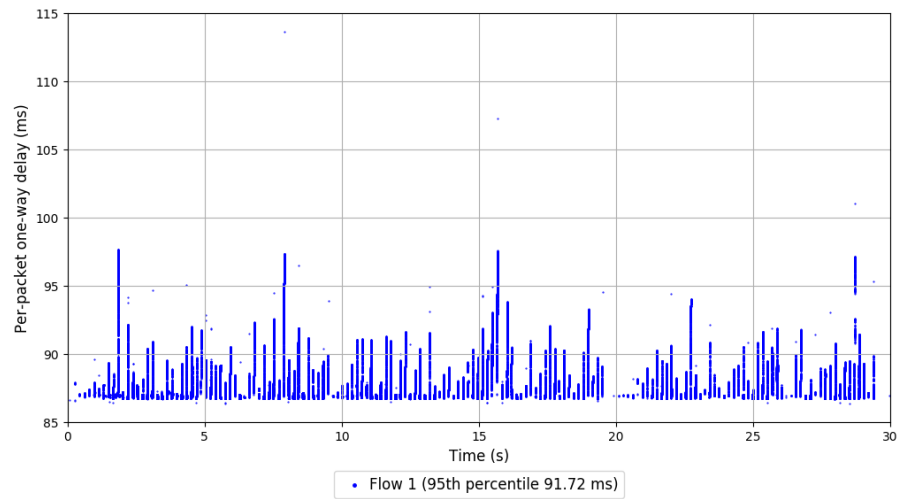
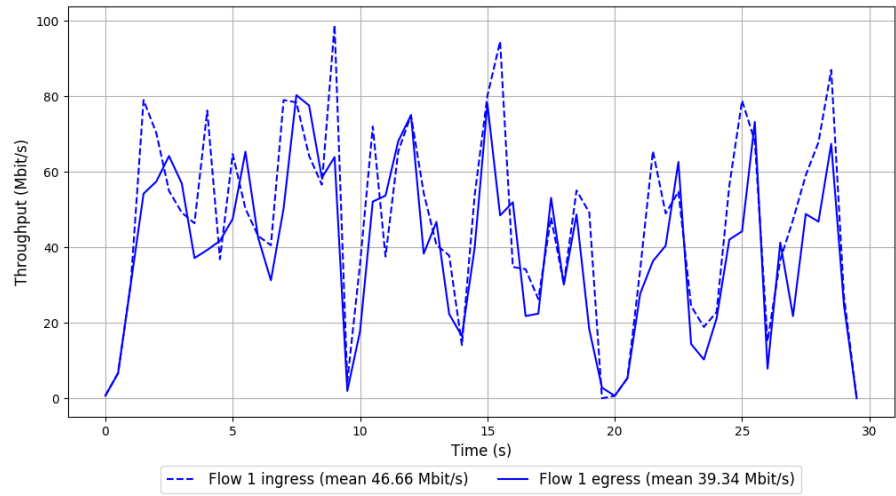
-- Flow 1:

Average throughput: 39.34 Mbit/s

95th percentile per-packet one-way delay: 91.721 ms

Loss rate: 15.69%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-16 20:25:10

End at: 2017-08-16 20:25:40

Below is generated by plot.py at 2017-08-16 23:13:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.78 Mbit/s

95th percentile per-packet one-way delay: 119.638 ms

Loss rate: 1.92%

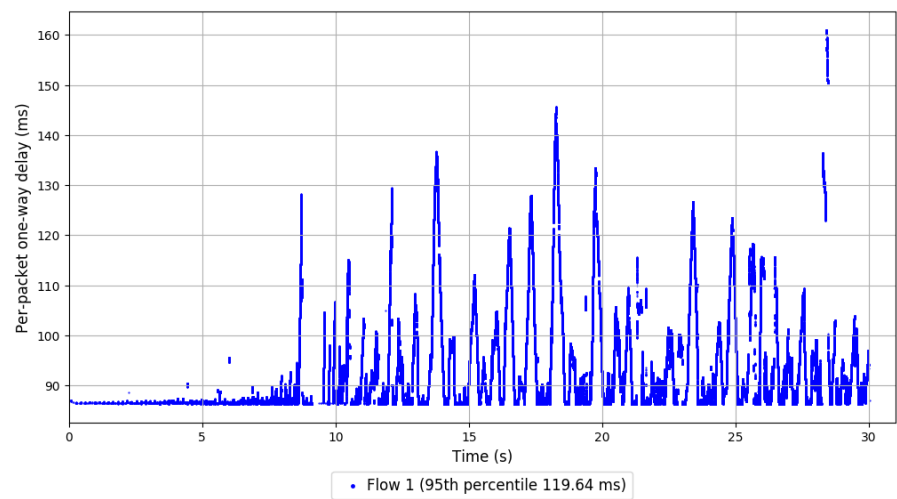
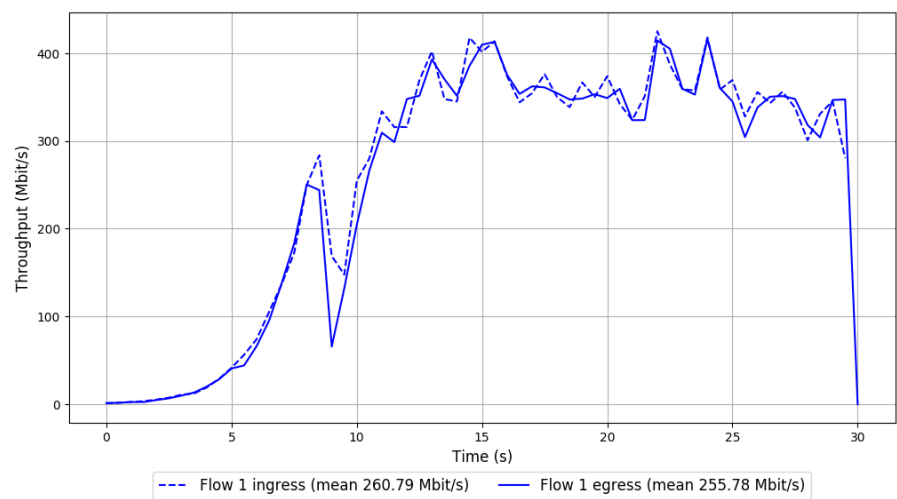
-- Flow 1:

Average throughput: 255.78 Mbit/s

95th percentile per-packet one-way delay: 119.638 ms

Loss rate: 1.92%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-16 20:35:56

End at: 2017-08-16 20:36:26

Below is generated by plot.py at 2017-08-16 23:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 265.28 Mbit/s

95th percentile per-packet one-way delay: 120.305 ms

Loss rate: 1.35%

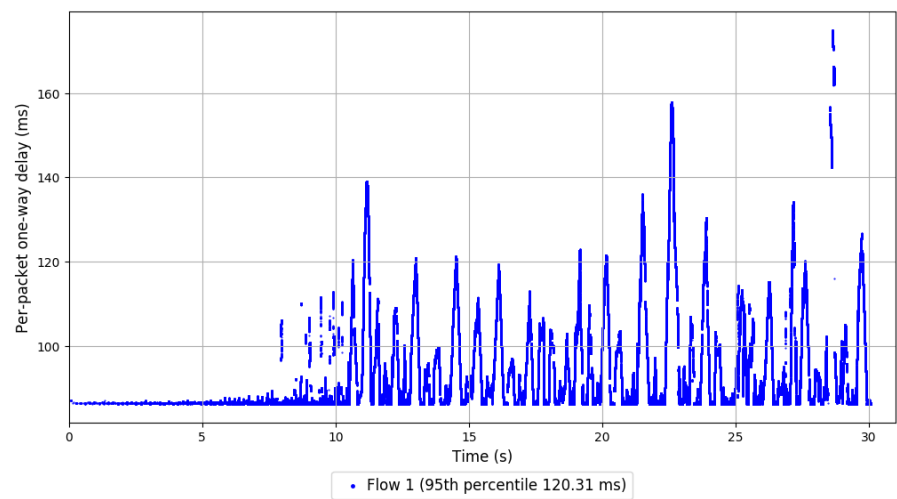
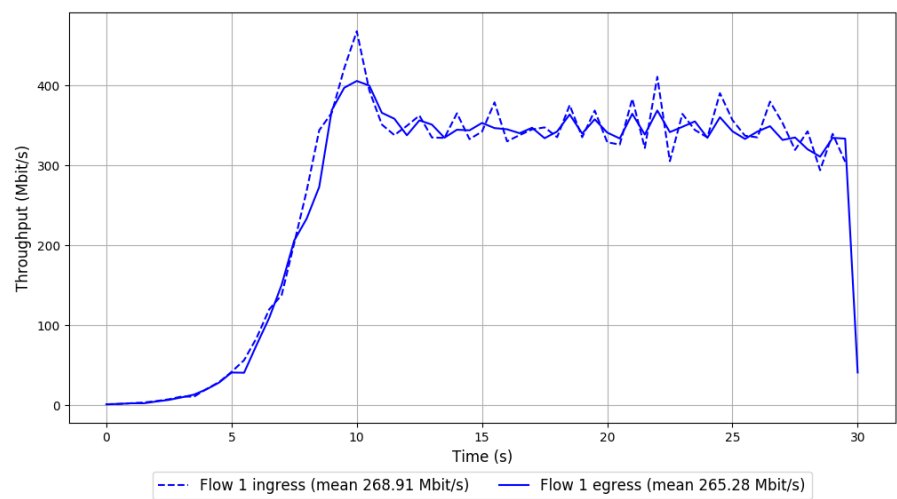
-- Flow 1:

Average throughput: 265.28 Mbit/s

95th percentile per-packet one-way delay: 120.305 ms

Loss rate: 1.35%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-16 20:47:11

End at: 2017-08-16 20:47:41

Below is generated by plot.py at 2017-08-16 23:14:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 269.68 Mbit/s

95th percentile per-packet one-way delay: 136.050 ms

Loss rate: 0.30%

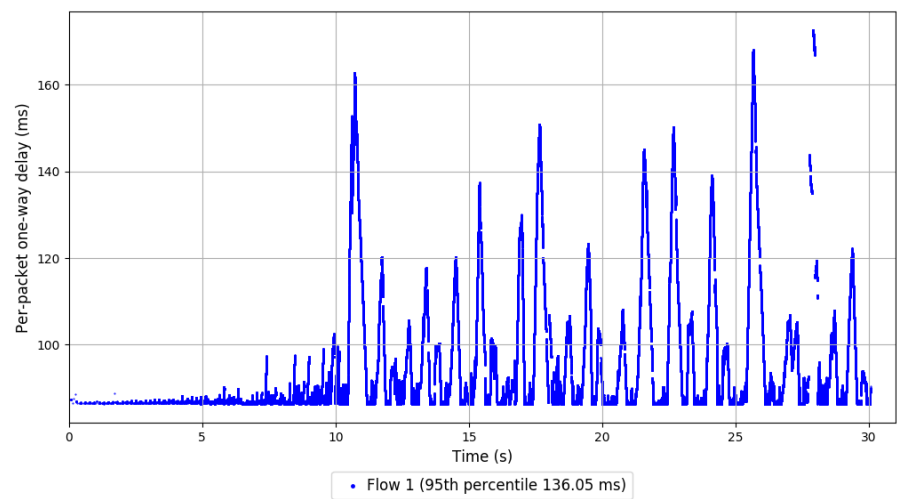
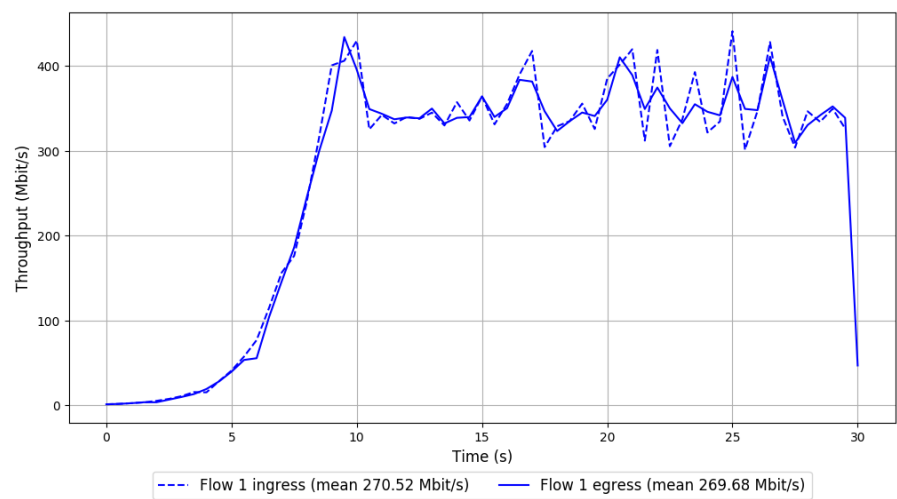
-- Flow 1:

Average throughput: 269.68 Mbit/s

95th percentile per-packet one-way delay: 136.050 ms

Loss rate: 0.30%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-16 20:58:57

End at: 2017-08-16 20:59:27

Below is generated by plot.py at 2017-08-16 23:14:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 203.57 Mbit/s

95th percentile per-packet one-way delay: 116.142 ms

Loss rate: 6.45%

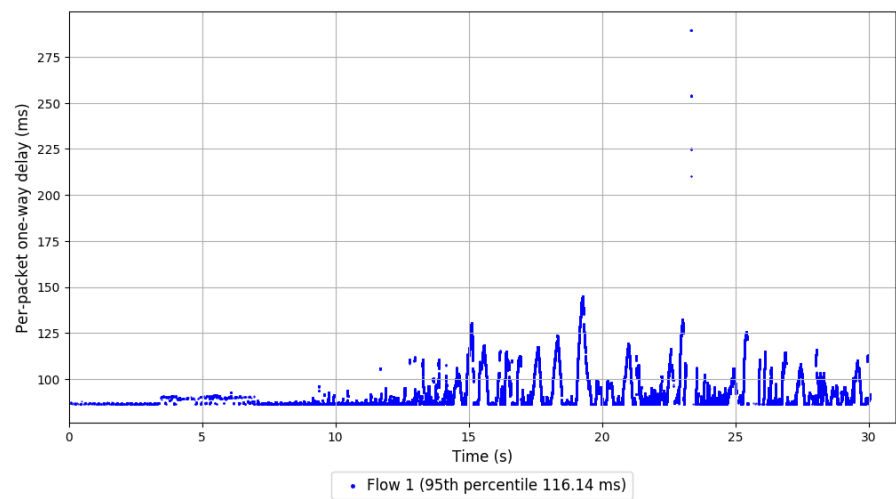
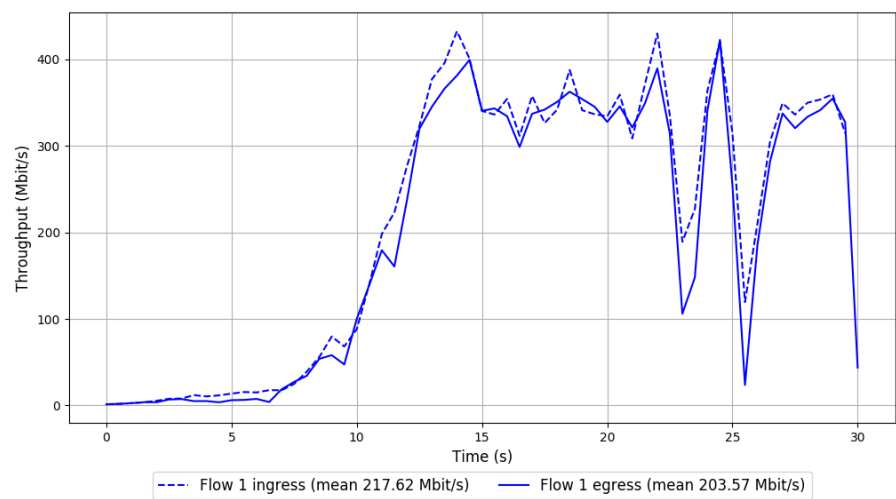
-- Flow 1:

Average throughput: 203.57 Mbit/s

95th percentile per-packet one-way delay: 116.142 ms

Loss rate: 6.45%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-16 21:09:46

End at: 2017-08-16 21:10:16

Below is generated by plot.py at 2017-08-16 23:14:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 87.847 ms

Loss rate: 67.81%

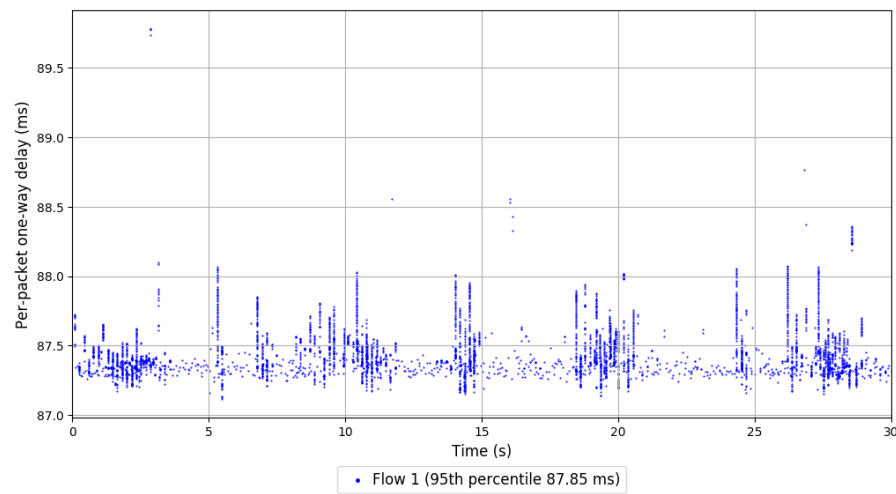
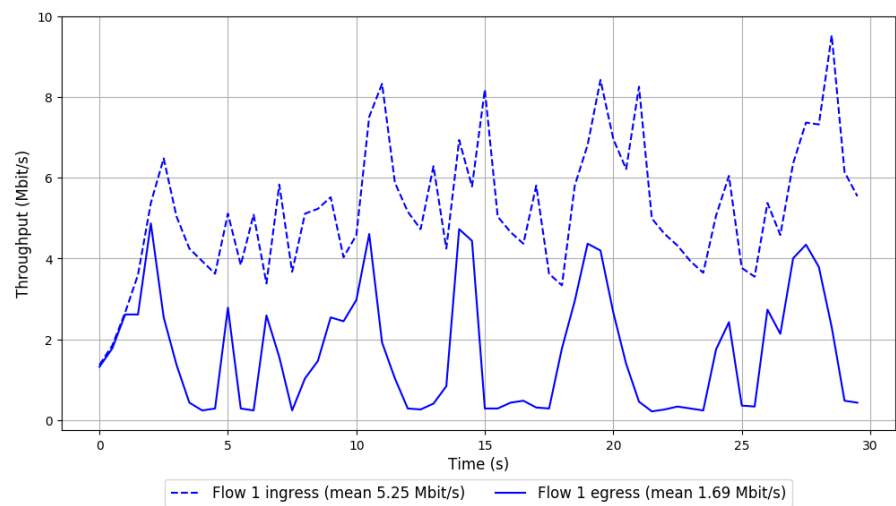
-- Flow 1:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 87.847 ms

Loss rate: 67.81%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-16 21:20:27

End at: 2017-08-16 21:20:57

Below is generated by plot.py at 2017-08-16 23:15:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 269.06 Mbit/s

95th percentile per-packet one-way delay: 121.335 ms

Loss rate: 2.12%

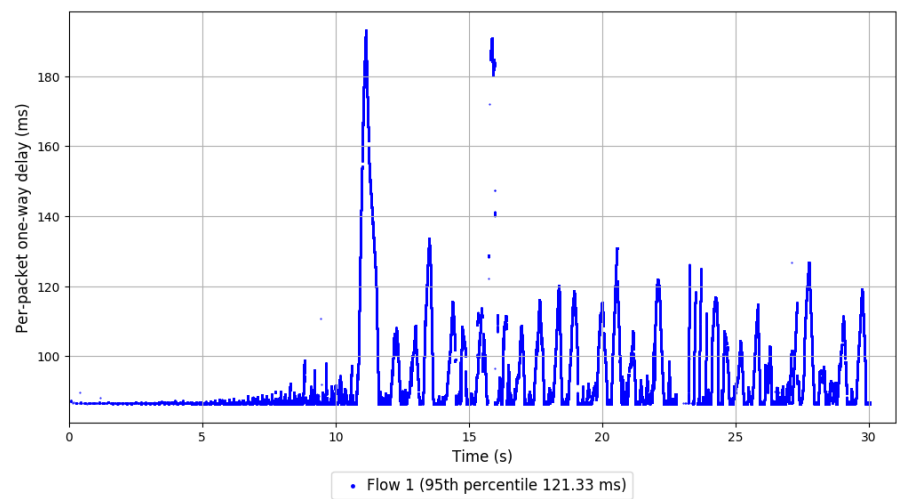
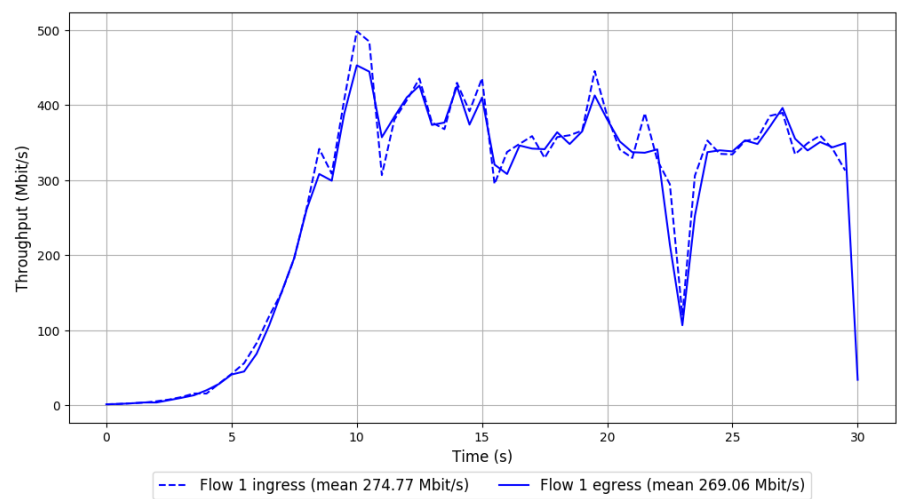
-- Flow 1:

Average throughput: 269.06 Mbit/s

95th percentile per-packet one-way delay: 121.335 ms

Loss rate: 2.12%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-16 21:32:24

End at: 2017-08-16 21:32:54

Below is generated by plot.py at 2017-08-16 23:15:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 251.80 Mbit/s

95th percentile per-packet one-way delay: 134.632 ms

Loss rate: 2.78%

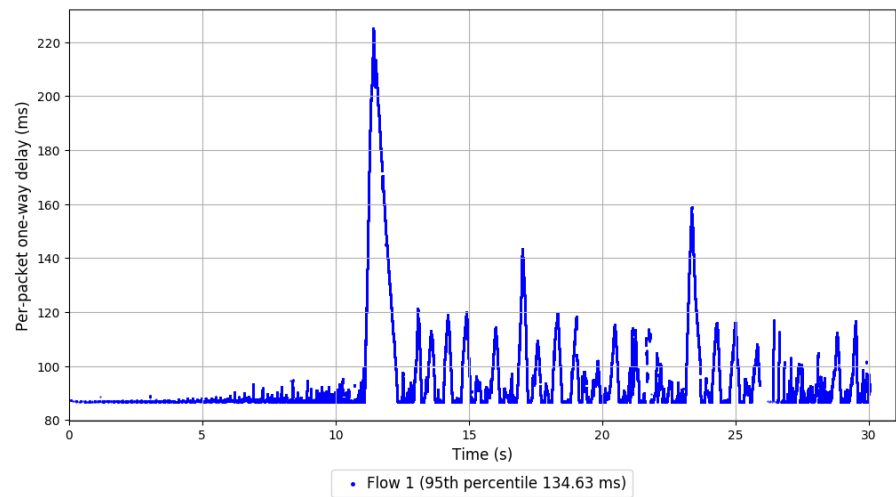
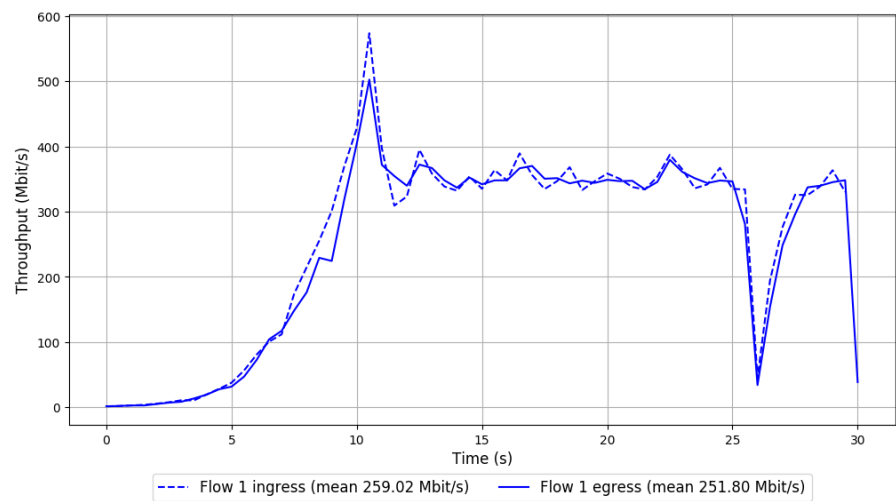
-- Flow 1:

Average throughput: 251.80 Mbit/s

95th percentile per-packet one-way delay: 134.632 ms

Loss rate: 2.78%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-16 21:43:29

End at: 2017-08-16 21:43:59

Below is generated by plot.py at 2017-08-16 23:15:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 248.14 Mbit/s

95th percentile per-packet one-way delay: 116.982 ms

Loss rate: 2.83%

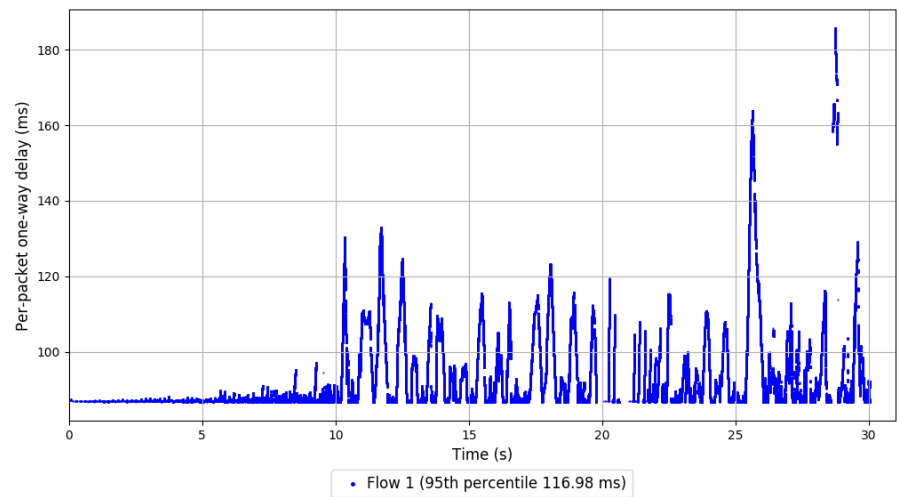
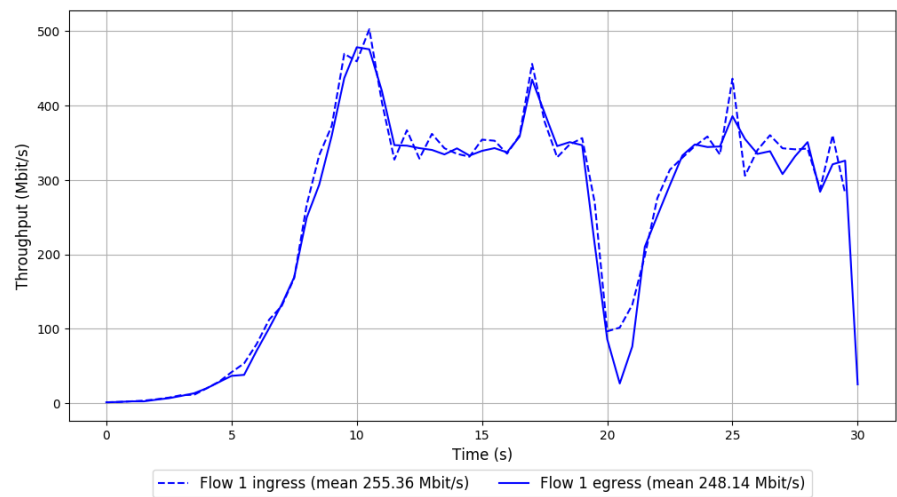
-- Flow 1:

Average throughput: 248.14 Mbit/s

95th percentile per-packet one-way delay: 116.982 ms

Loss rate: 2.83%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-16 21:54:43

End at: 2017-08-16 21:55:13

Below is generated by plot.py at 2017-08-16 23:15:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 87.771 ms

Loss rate: 65.14%

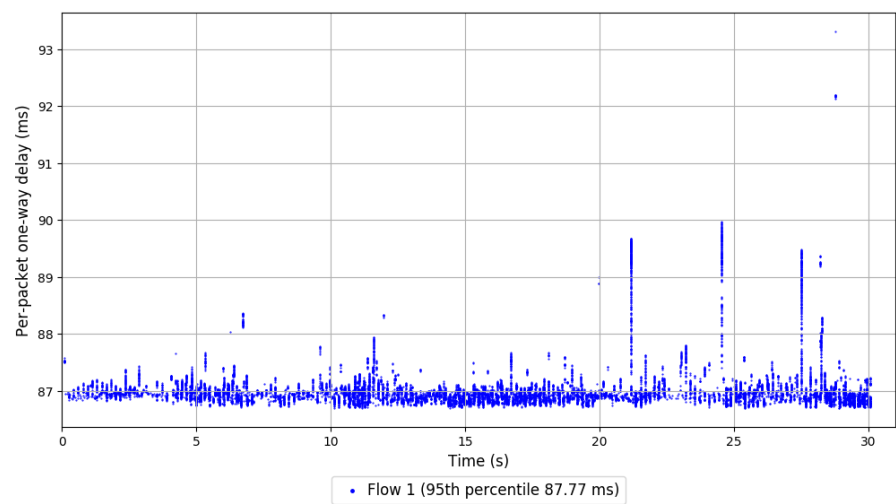
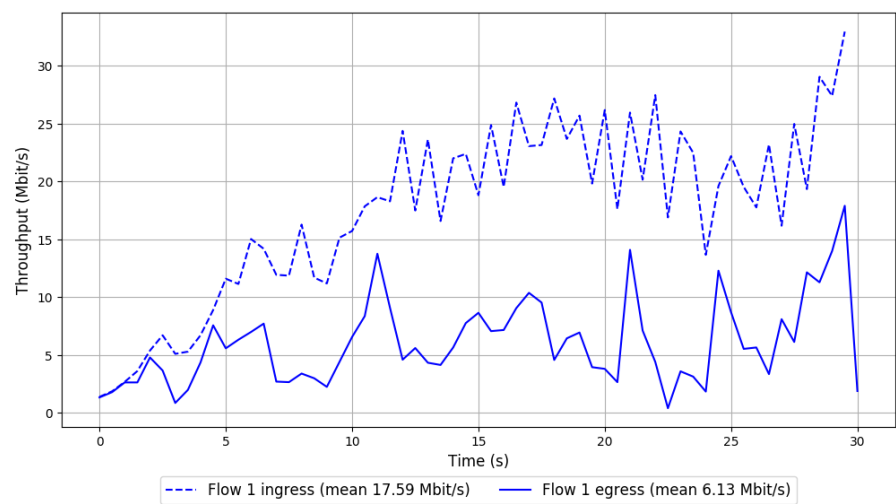
-- Flow 1:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 87.771 ms

Loss rate: 65.14%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-16 22:05:24

End at: 2017-08-16 22:05:54

Below is generated by plot.py at 2017-08-16 23:15:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 87.242 ms

Loss rate: 68.35%

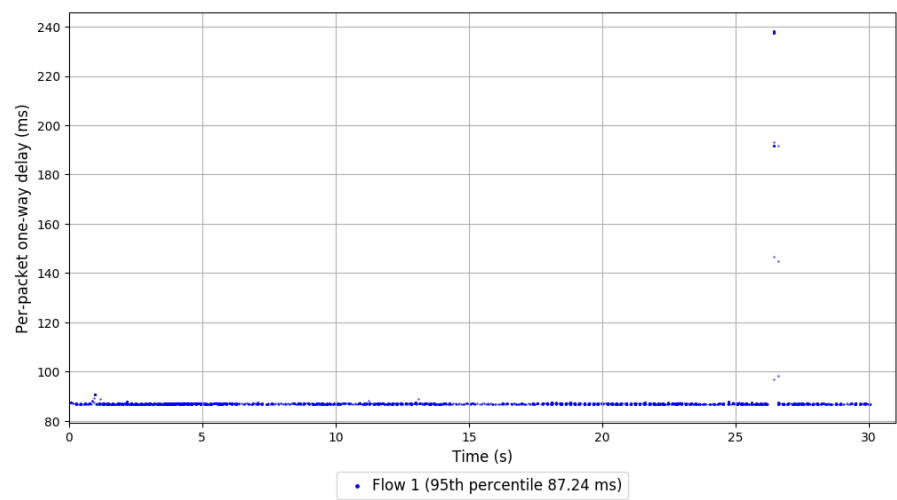
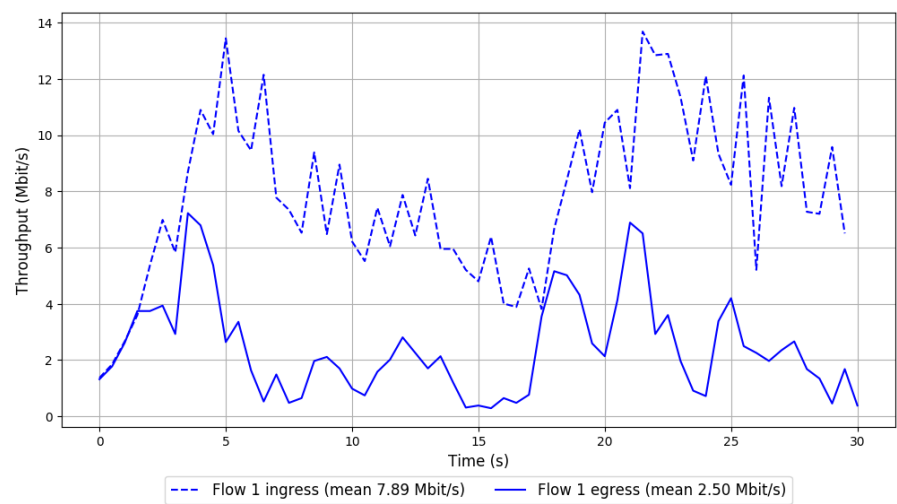
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 87.242 ms

Loss rate: 68.35%

Run 10: Report of CalibratedKoho — Data Link

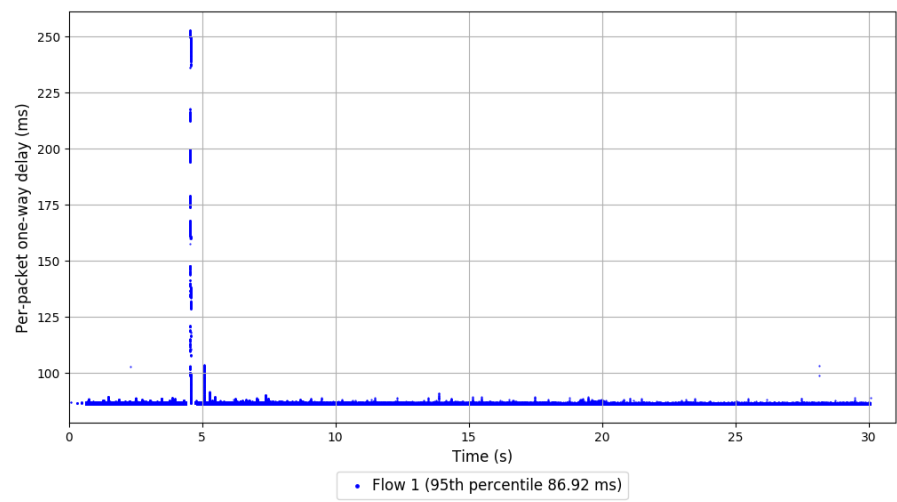
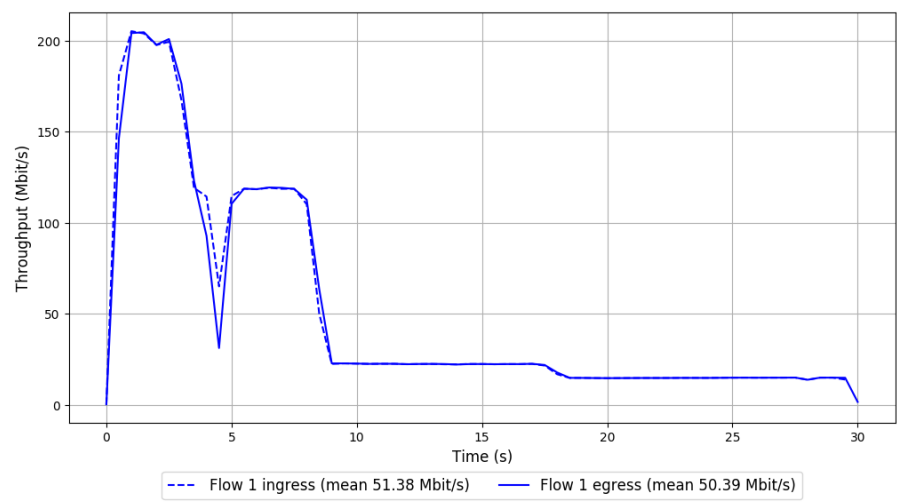


```
Run 1: Statistics of Copa

Start at: 2017-08-16 20:30:15
End at: 2017-08-16 20:30:45

# Below is generated by plot.py at 2017-08-16 23:15:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.39 Mbit/s
95th percentile per-packet one-way delay: 86.919 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 50.39 Mbit/s
95th percentile per-packet one-way delay: 86.919 ms
Loss rate: 1.92%
```


Run 1: Report of Copa — Data Link

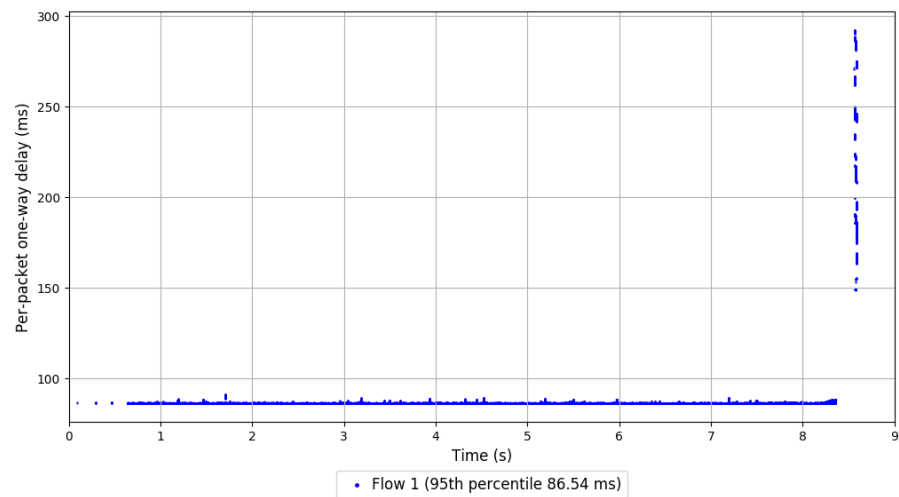
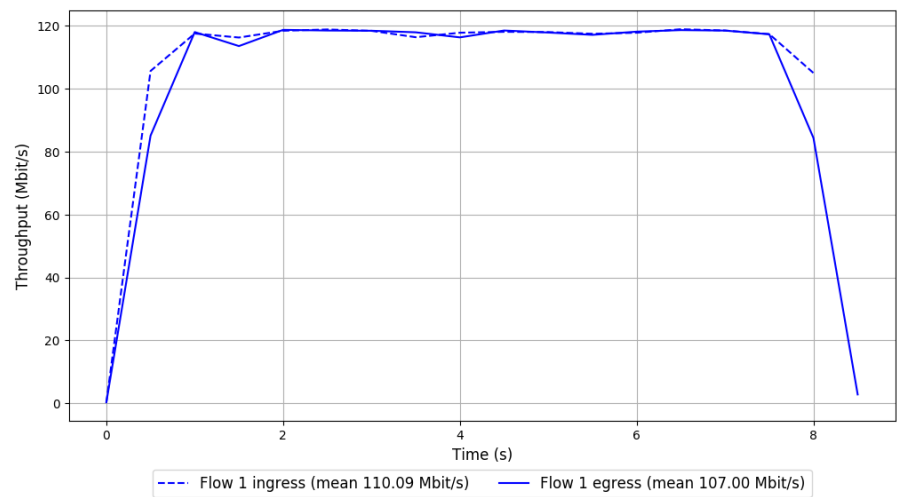


Run 2: Statistics of Copa

Start at: 2017-08-16 20:41:41

End at: 2017-08-16 20:42:11

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-16 20:52:38

End at: 2017-08-16 20:53:08

Below is generated by plot.py at 2017-08-16 23:16:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.02 Mbit/s

95th percentile per-packet one-way delay: 86.915 ms

Loss rate: 0.35%

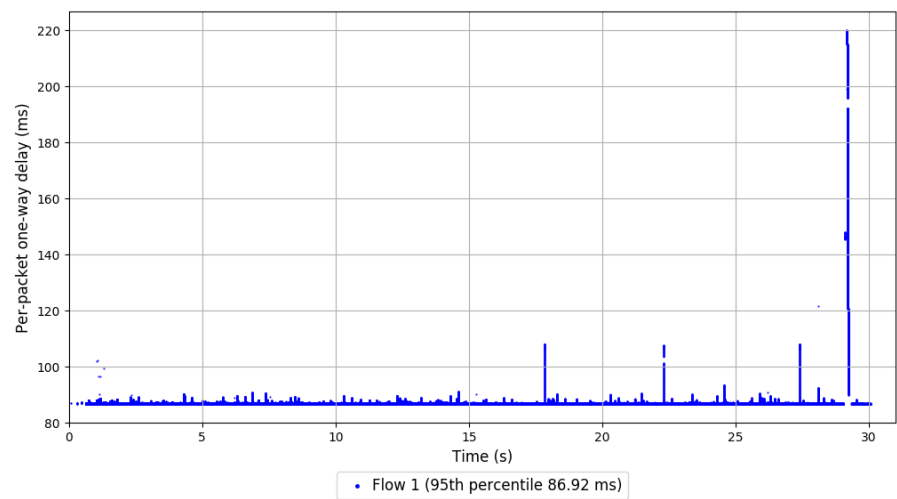
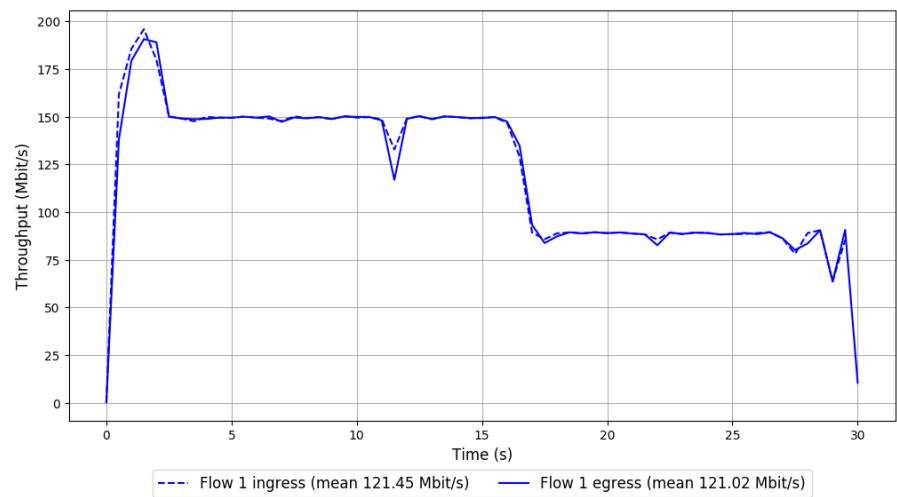
-- Flow 1:

Average throughput: 121.02 Mbit/s

95th percentile per-packet one-way delay: 86.915 ms

Loss rate: 0.35%

Run 3: Report of Copa — Data Link

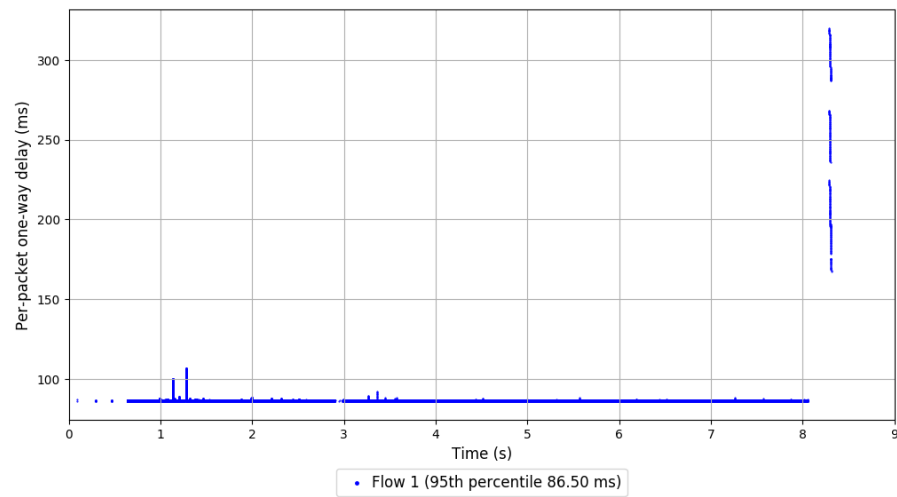
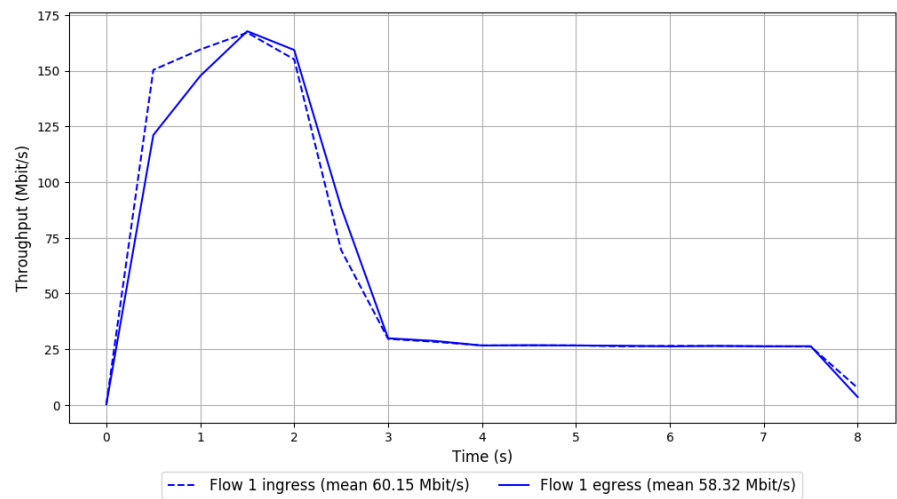


Run 4: Statistics of Copa

Start at: 2017-08-16 21:04:11

End at: 2017-08-16 21:04:41

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-16 21:14:50

End at: 2017-08-16 21:15:20

Below is generated by plot.py at 2017-08-16 23:16:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.75 Mbit/s

95th percentile per-packet one-way delay: 87.271 ms

Loss rate: 0.58%

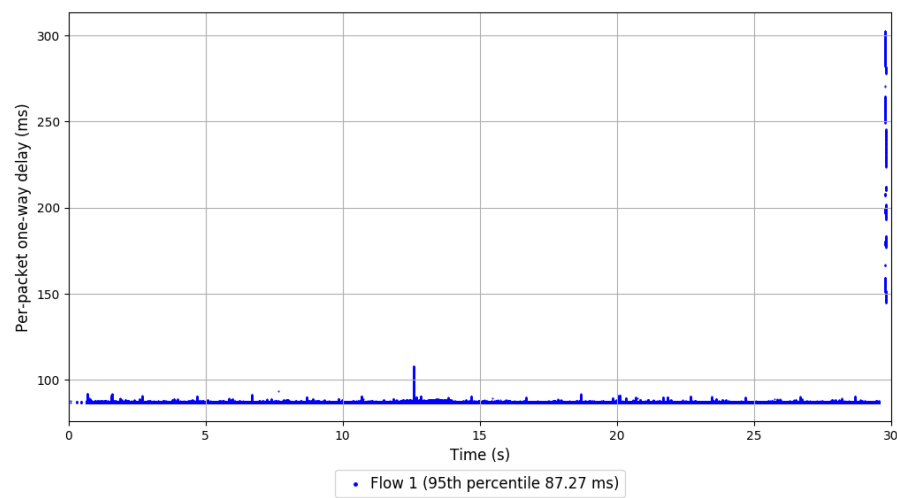
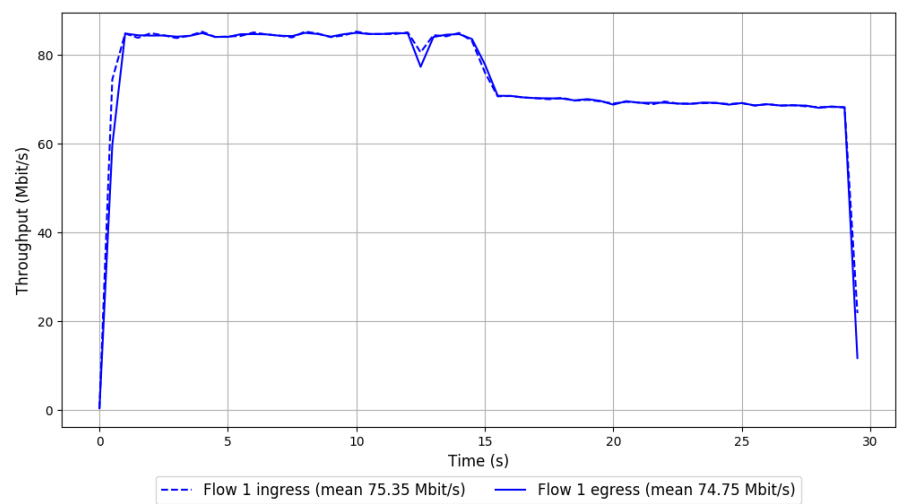
-- Flow 1:

Average throughput: 74.75 Mbit/s

95th percentile per-packet one-way delay: 87.271 ms

Loss rate: 0.58%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-16 21:26:18

End at: 2017-08-16 21:26:48

Below is generated by plot.py at 2017-08-16 23:16:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.85 Mbit/s

95th percentile per-packet one-way delay: 87.904 ms

Loss rate: 4.00%

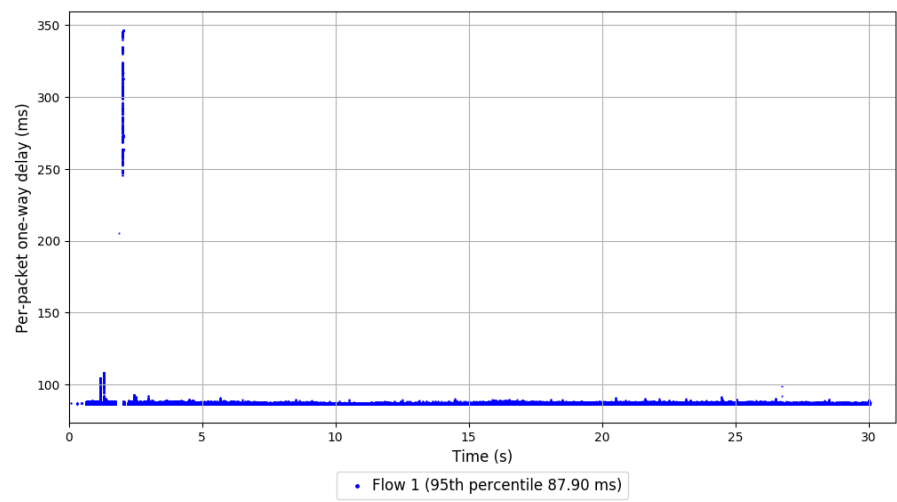
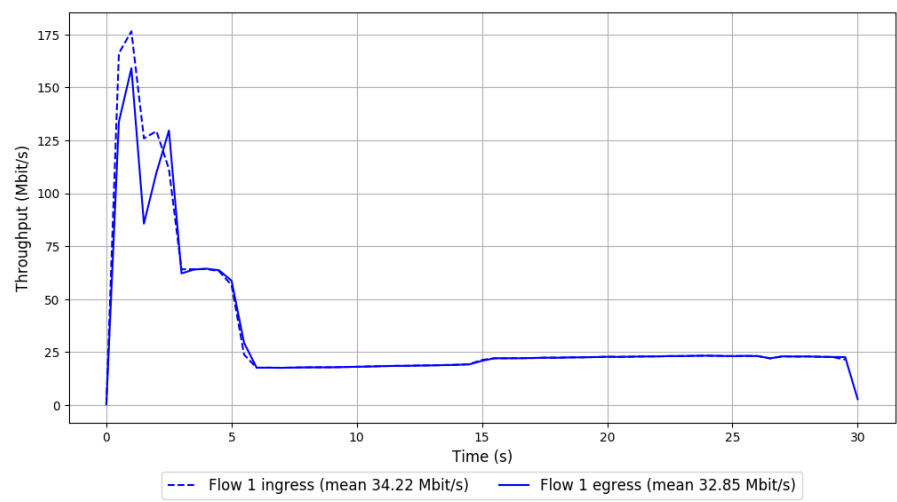
-- Flow 1:

Average throughput: 32.85 Mbit/s

95th percentile per-packet one-way delay: 87.904 ms

Loss rate: 4.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-16 21:37:52

End at: 2017-08-16 21:38:22

Below is generated by plot.py at 2017-08-16 23:16:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.13 Mbit/s

95th percentile per-packet one-way delay: 86.915 ms

Loss rate: 0.75%

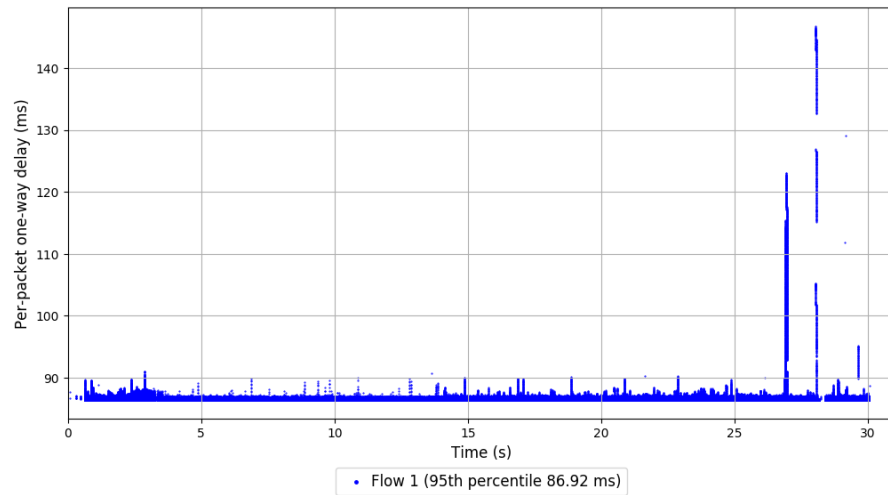
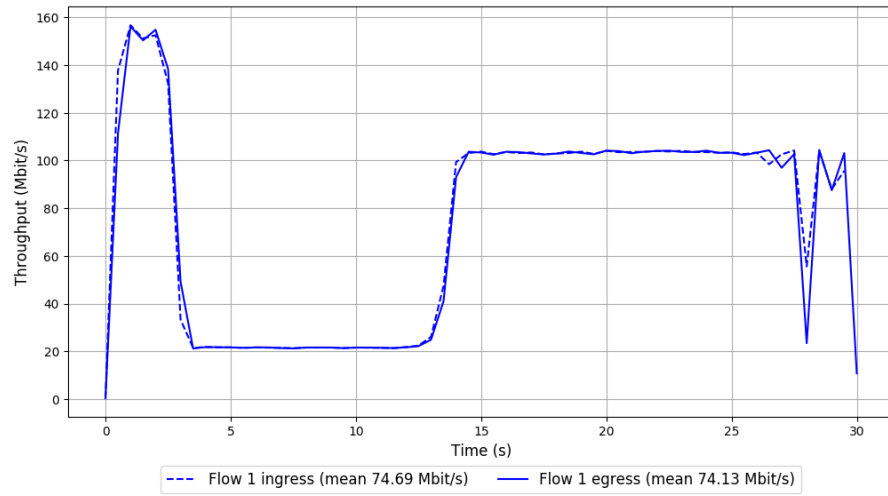
-- Flow 1:

Average throughput: 74.13 Mbit/s

95th percentile per-packet one-way delay: 86.915 ms

Loss rate: 0.75%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-16 21:48:37

End at: 2017-08-16 21:49:07

Below is generated by plot.py at 2017-08-16 23:16:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.35 Mbit/s

95th percentile per-packet one-way delay: 86.892 ms

Loss rate: 0.89%

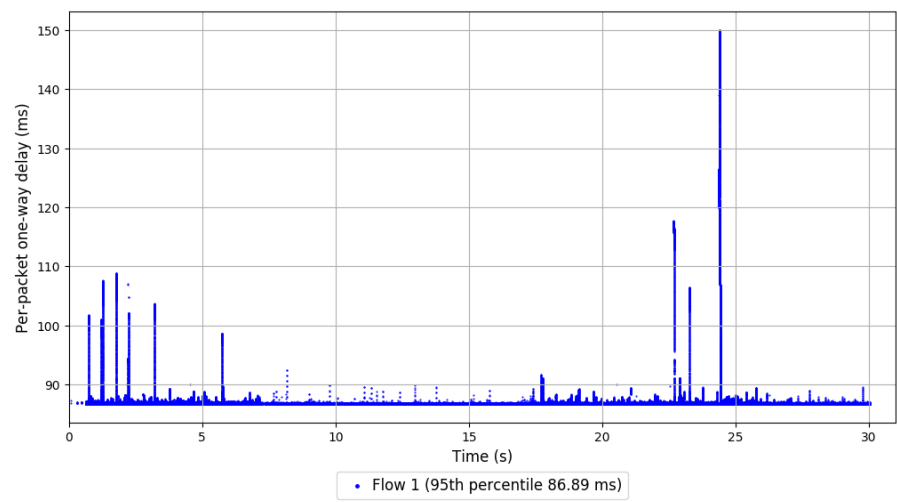
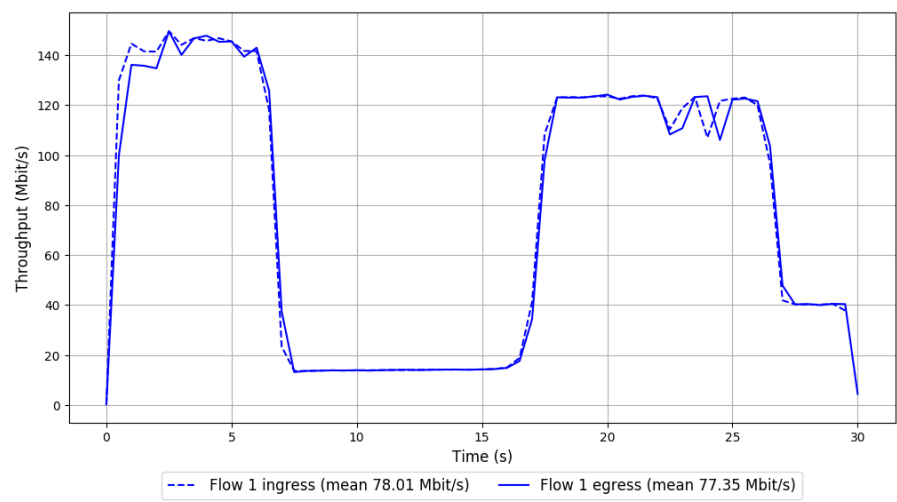
-- Flow 1:

Average throughput: 77.35 Mbit/s

95th percentile per-packet one-way delay: 86.892 ms

Loss rate: 0.89%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-16 21:59:51

End at: 2017-08-16 22:00:21

Below is generated by plot.py at 2017-08-16 23:17:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.18 Mbit/s

95th percentile per-packet one-way delay: 86.860 ms

Loss rate: 0.63%

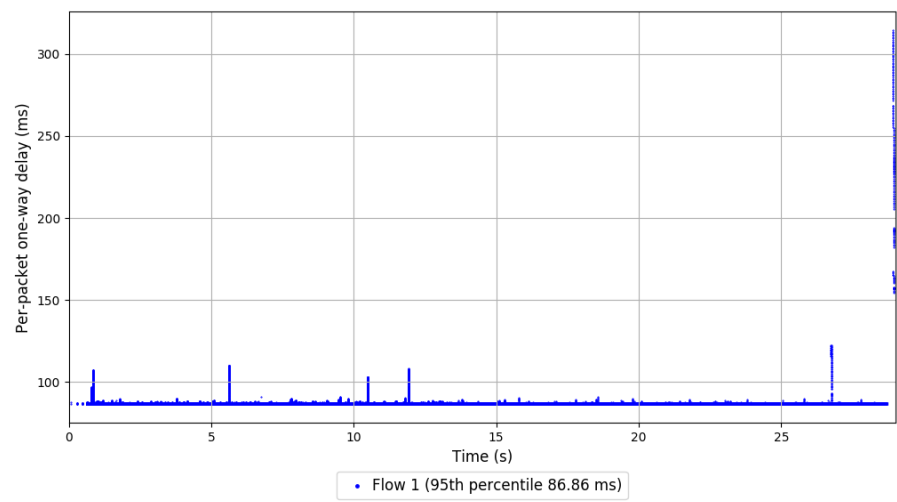
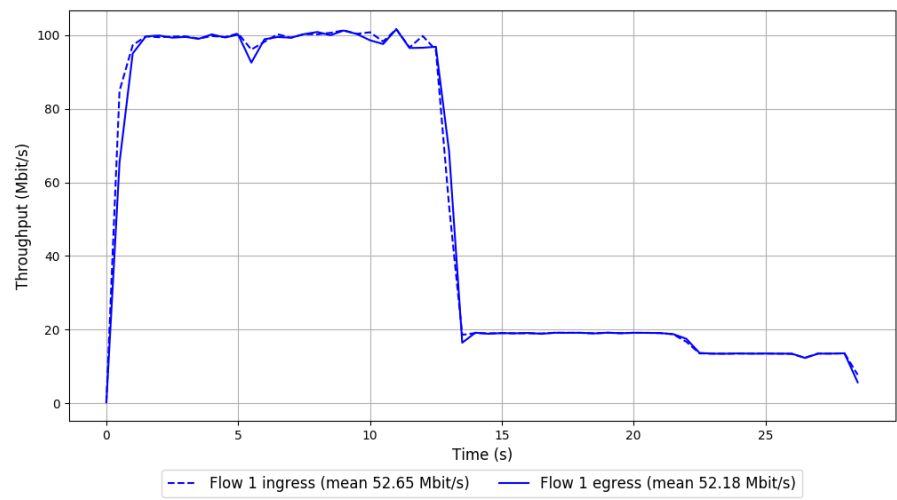
-- Flow 1:

Average throughput: 52.18 Mbit/s

95th percentile per-packet one-way delay: 86.860 ms

Loss rate: 0.63%

Run 9: Report of Copa — Data Link

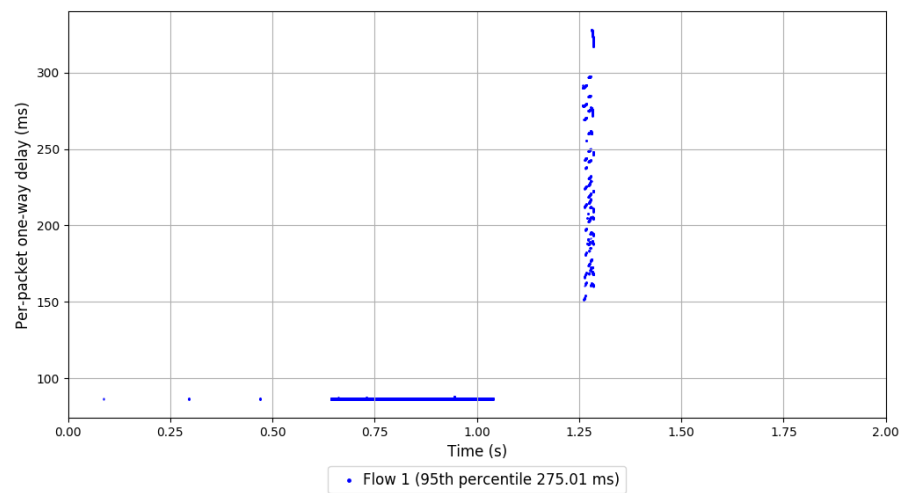
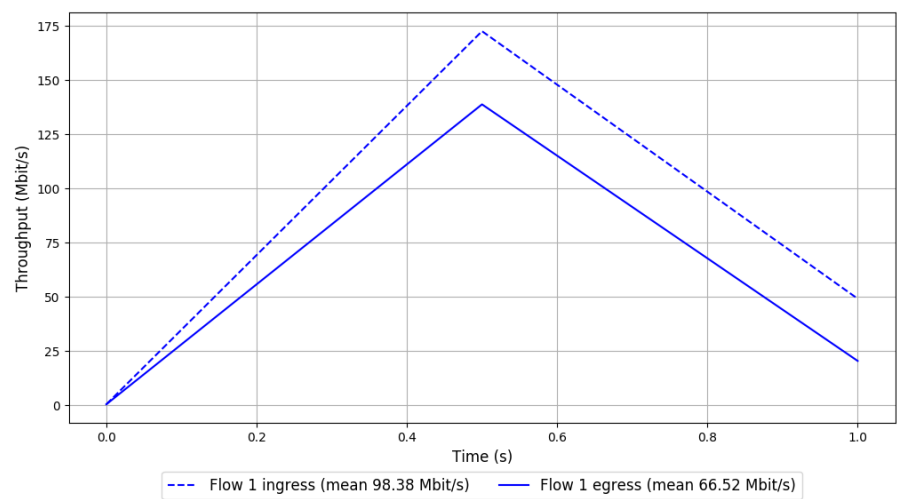


Run 10: Statistics of Copa

Start at: 2017-08-16 22:10:48

End at: 2017-08-16 22:11:18

Run 10: Report of Copa — Data Link

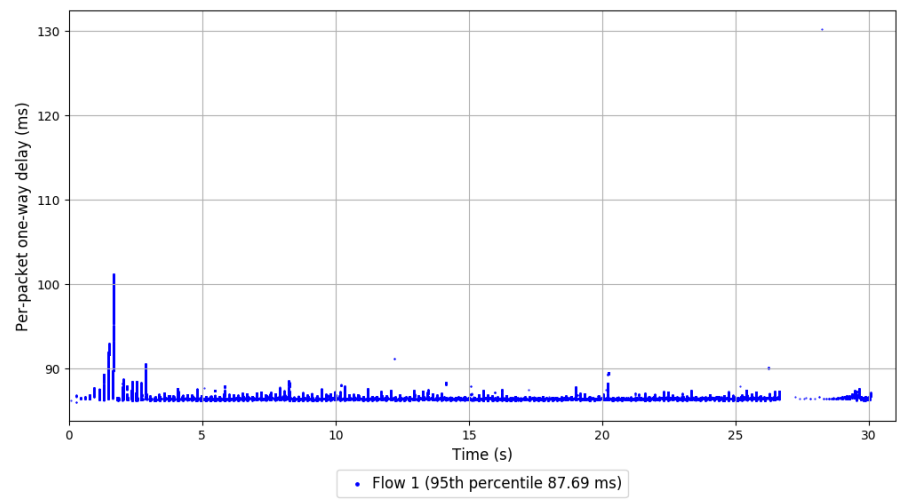
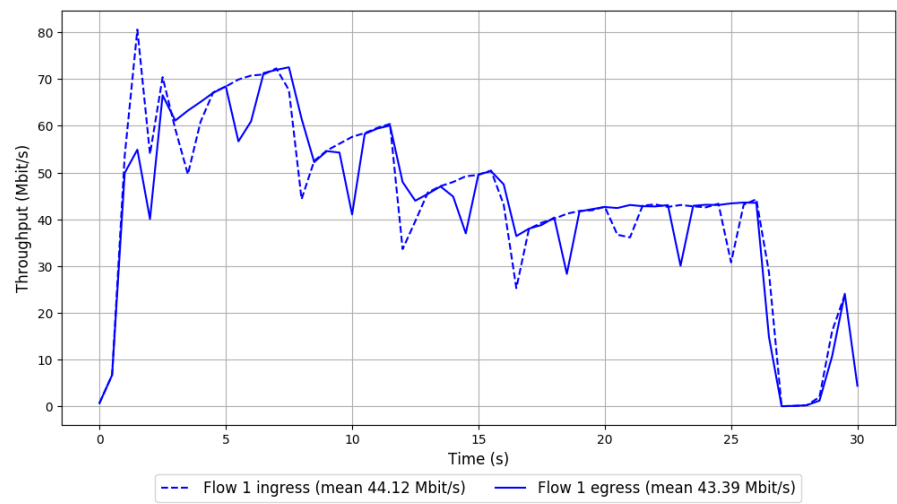


```
Run 1: Statistics of TCP Cubic

Start at: 2017-08-16 20:28:52
End at: 2017-08-16 20:29:22

# Below is generated by plot.py at 2017-08-16 23:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.39 Mbit/s
95th percentile per-packet one-way delay: 87.691 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 43.39 Mbit/s
95th percentile per-packet one-way delay: 87.691 ms
Loss rate: 1.72%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-16 20:40:20

End at: 2017-08-16 20:40:50

Below is generated by plot.py at 2017-08-16 23:17:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 87.136 ms

Loss rate: 2.00%

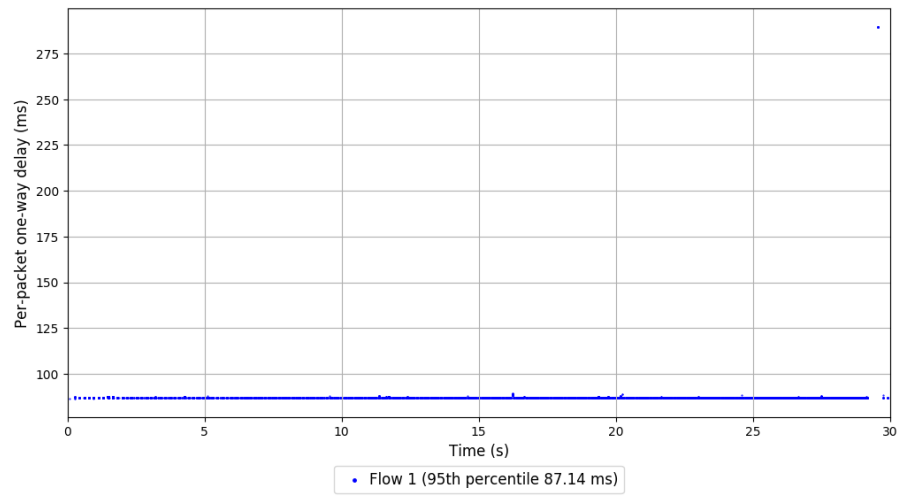
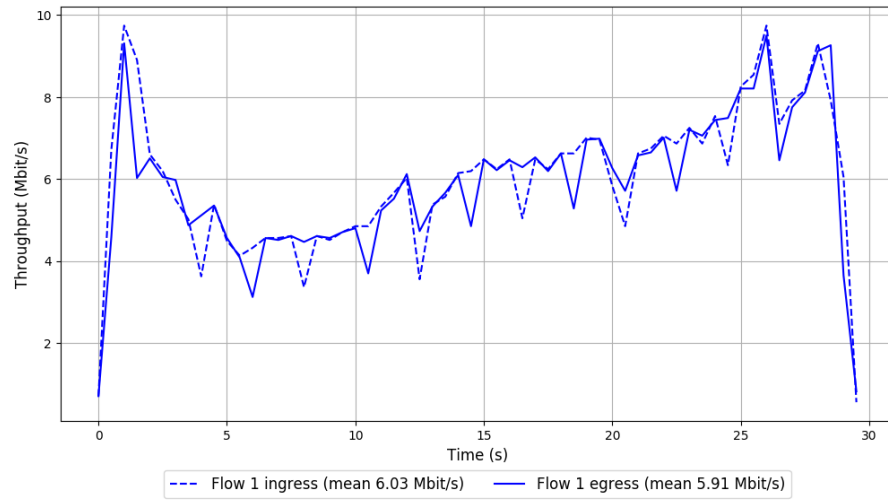
-- Flow 1:

Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 87.136 ms

Loss rate: 2.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-16 20:51:19

End at: 2017-08-16 20:51:49

Below is generated by plot.py at 2017-08-16 23:17:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.41 Mbit/s

95th percentile per-packet one-way delay: 87.502 ms

Loss rate: 1.48%

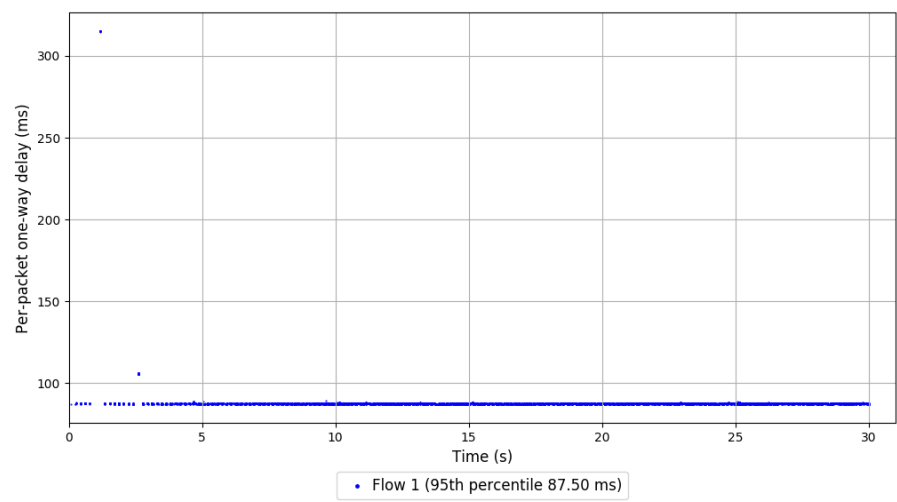
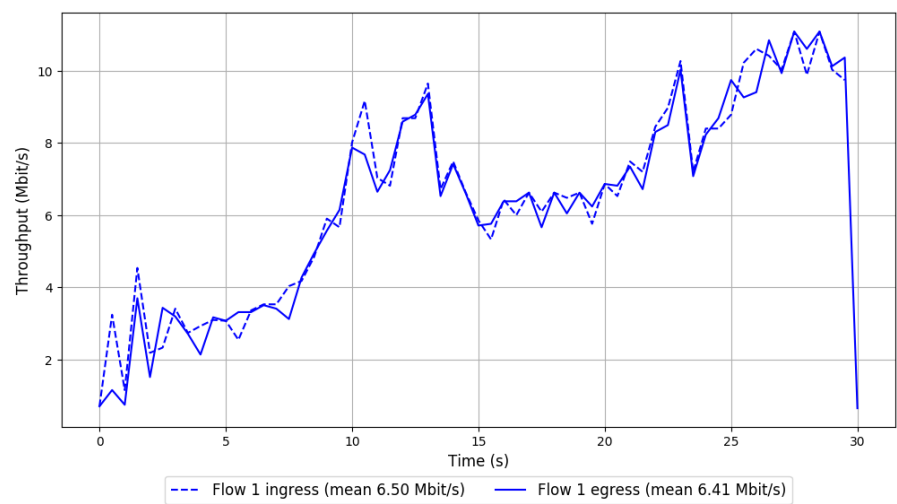
-- Flow 1:

Average throughput: 6.41 Mbit/s

95th percentile per-packet one-way delay: 87.502 ms

Loss rate: 1.48%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-16 21:02:49

End at: 2017-08-16 21:03:19

Below is generated by plot.py at 2017-08-16 23:17:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.52 Mbit/s

95th percentile per-packet one-way delay: 87.023 ms

Loss rate: 1.02%

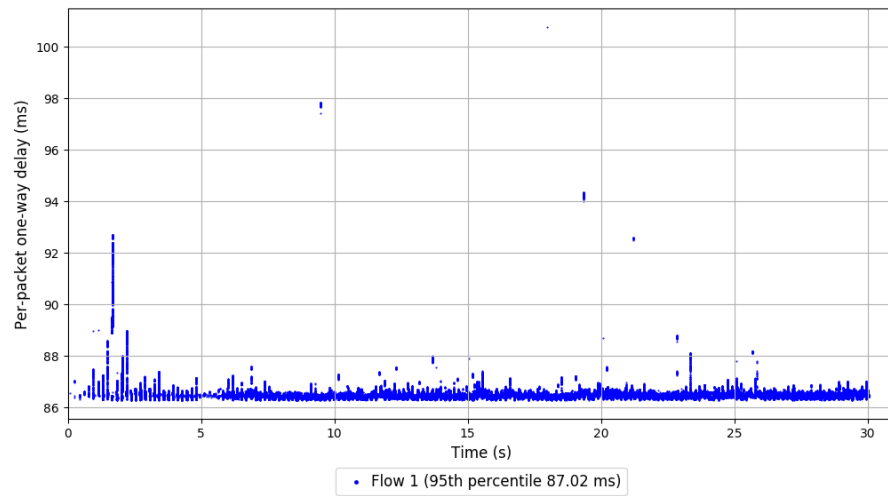
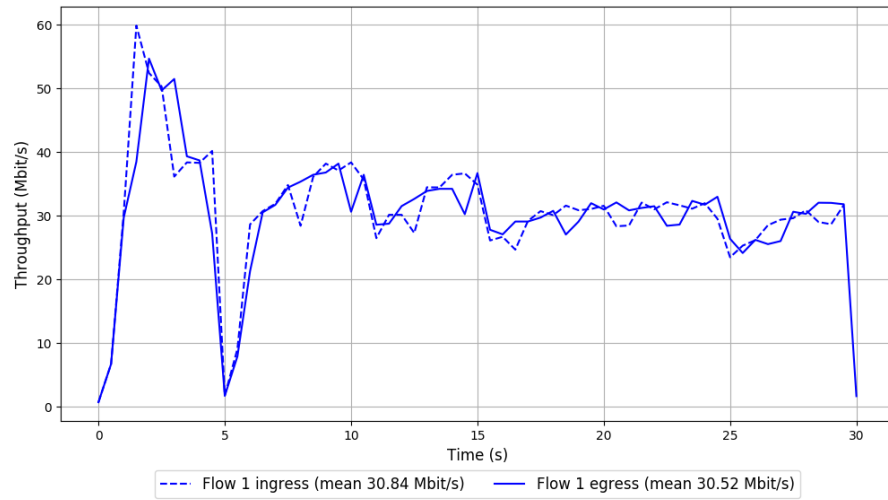
-- Flow 1:

Average throughput: 30.52 Mbit/s

95th percentile per-packet one-way delay: 87.023 ms

Loss rate: 1.02%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-16 21:13:30

End at: 2017-08-16 21:14:00

Below is generated by plot.py at 2017-08-16 23:17:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 86.853 ms

Loss rate: 1.43%

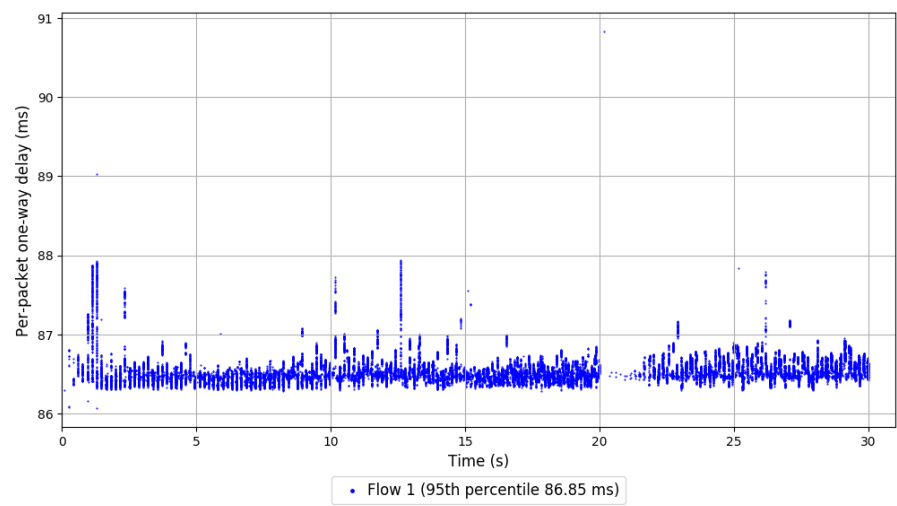
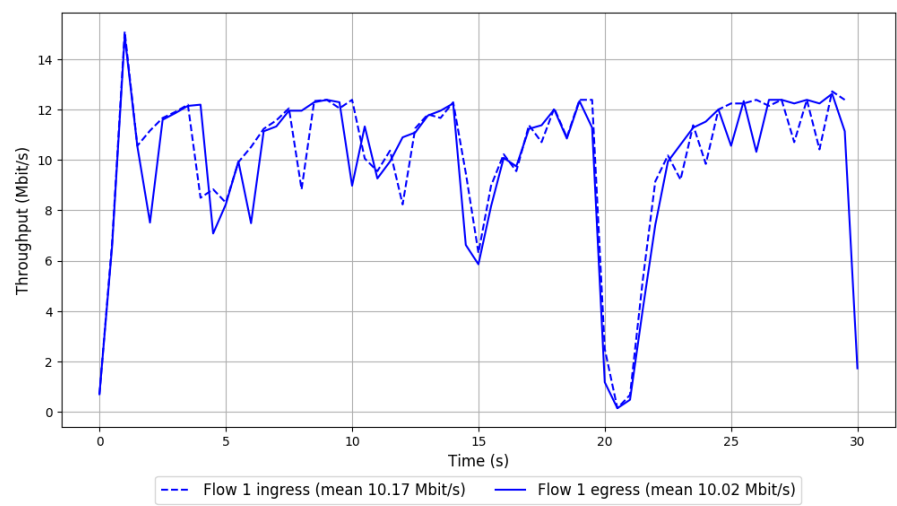
-- Flow 1:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 86.853 ms

Loss rate: 1.43%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-16 21:24:58

End at: 2017-08-16 21:25:28

Below is generated by plot.py at 2017-08-16 23:17:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 87.502 ms

Loss rate: 2.81%

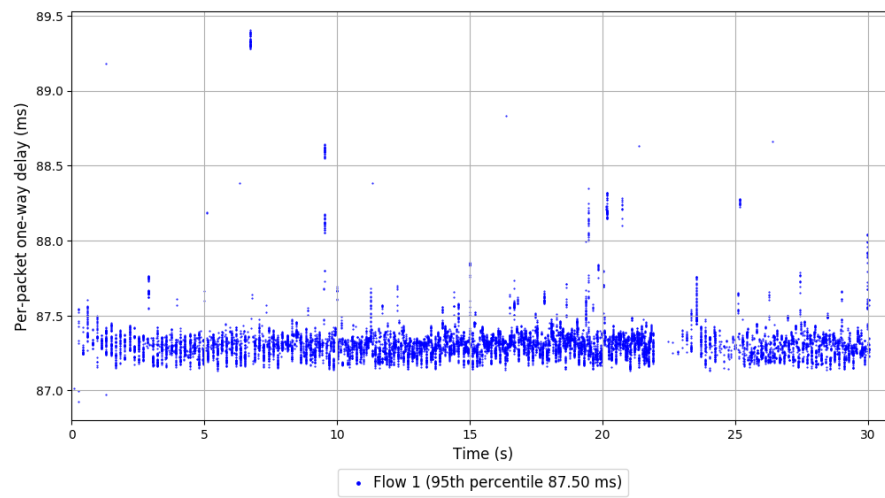
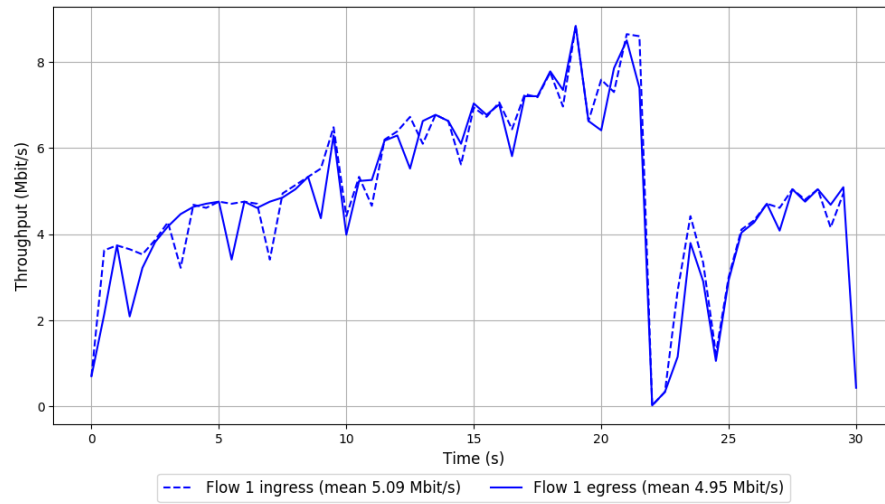
-- Flow 1:

Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 87.502 ms

Loss rate: 2.81%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-16 21:36:31

End at: 2017-08-16 21:37:01

Below is generated by plot.py at 2017-08-16 23:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.40 Mbit/s

95th percentile per-packet one-way delay: 87.641 ms

Loss rate: 2.21%

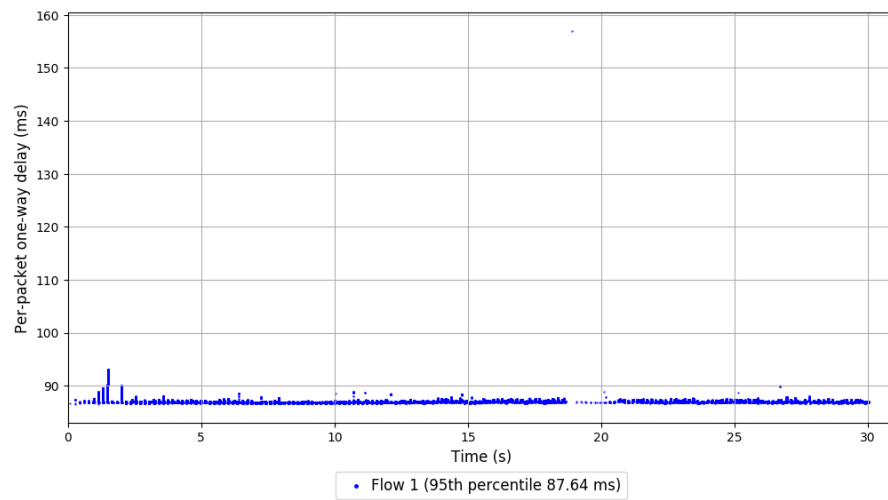
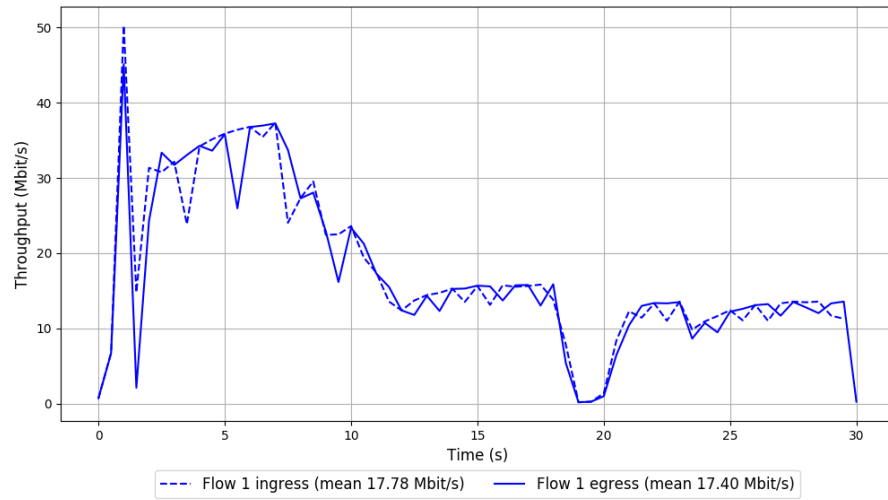
-- Flow 1:

Average throughput: 17.40 Mbit/s

95th percentile per-packet one-way delay: 87.641 ms

Loss rate: 2.21%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-16 21:47:17

End at: 2017-08-16 21:47:47

Below is generated by plot.py at 2017-08-16 23:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 87.428 ms

Loss rate: 2.25%

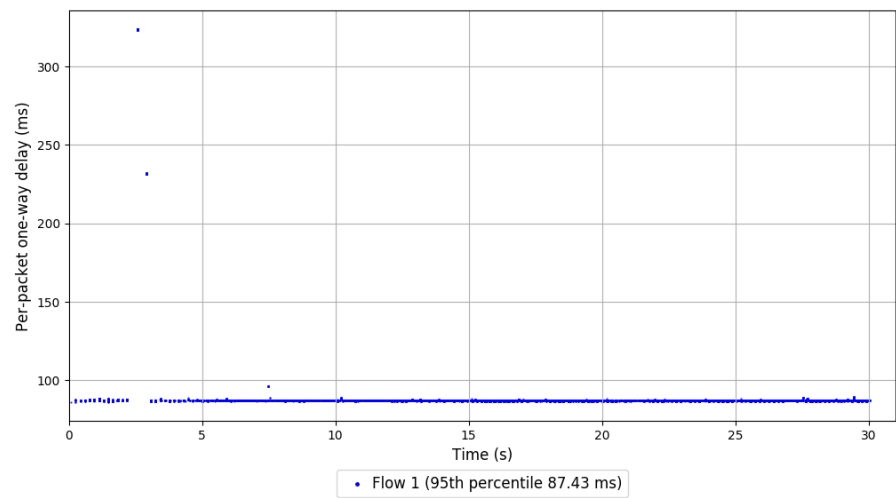
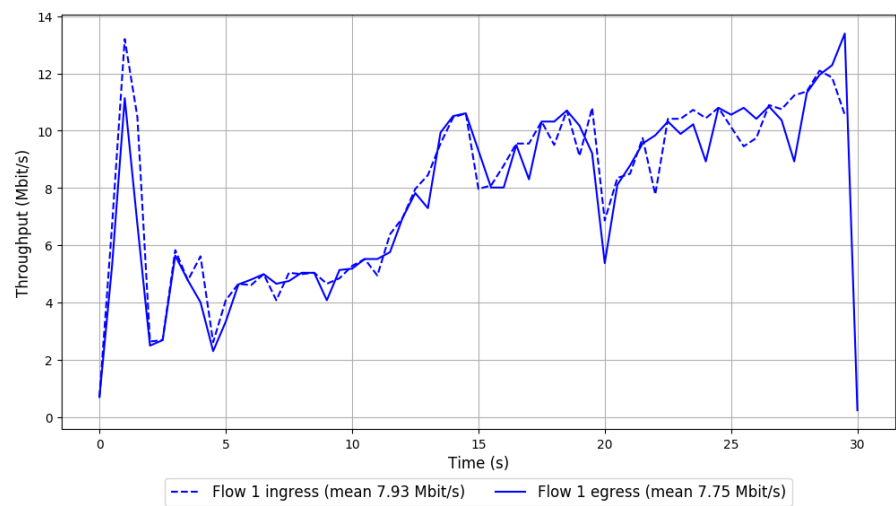
-- Flow 1:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 87.428 ms

Loss rate: 2.25%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-16 21:58:31

End at: 2017-08-16 21:59:01

Below is generated by plot.py at 2017-08-16 23:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.78 Mbit/s

95th percentile per-packet one-way delay: 87.145 ms

Loss rate: 2.38%

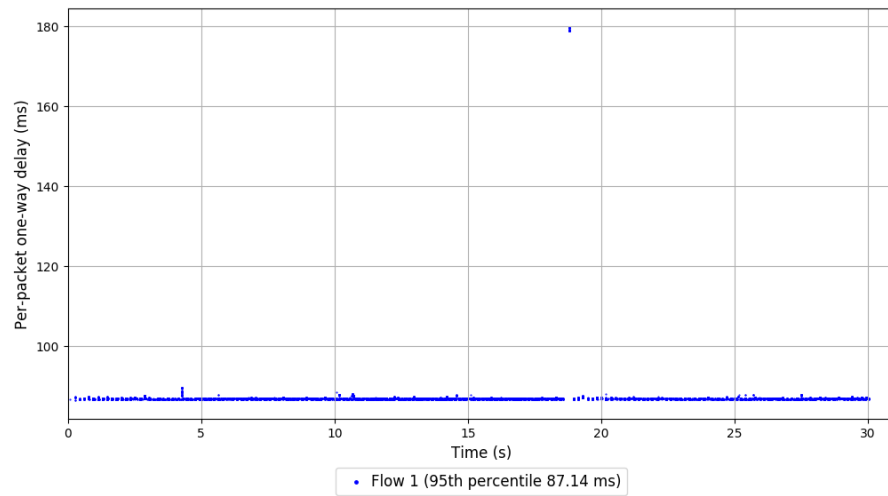
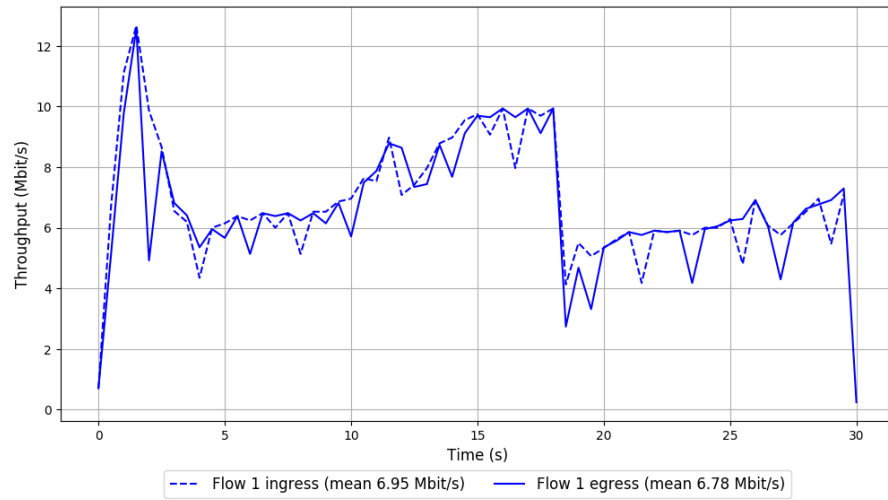
-- Flow 1:

Average throughput: 6.78 Mbit/s

95th percentile per-packet one-way delay: 87.145 ms

Loss rate: 2.38%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-16 22:09:25

End at: 2017-08-16 22:09:55

Below is generated by plot.py at 2017-08-16 23:17:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.92 Mbit/s

95th percentile per-packet one-way delay: 87.565 ms

Loss rate: 1.63%

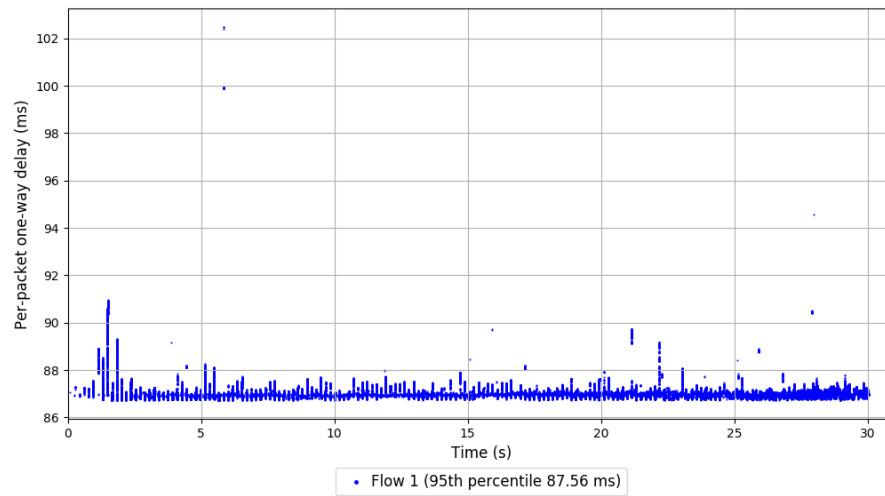
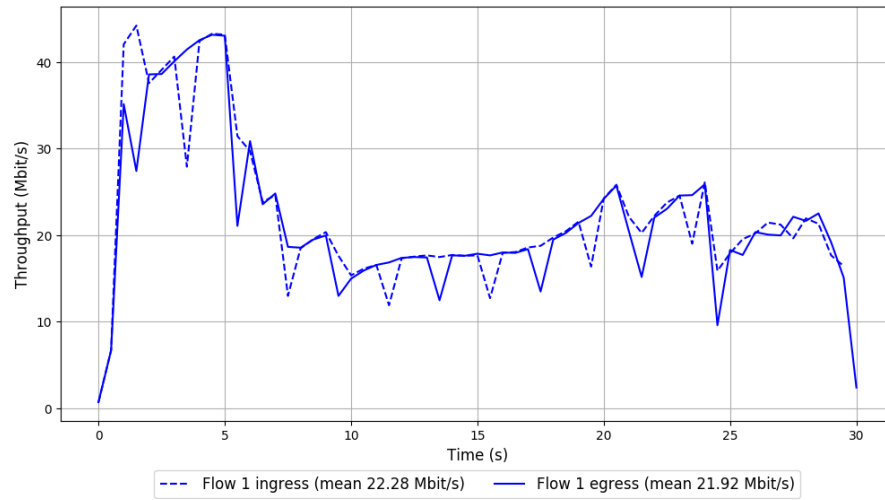
-- Flow 1:

Average throughput: 21.92 Mbit/s

95th percentile per-packet one-way delay: 87.565 ms

Loss rate: 1.63%

Run 10: Report of TCP Cubic — Data Link

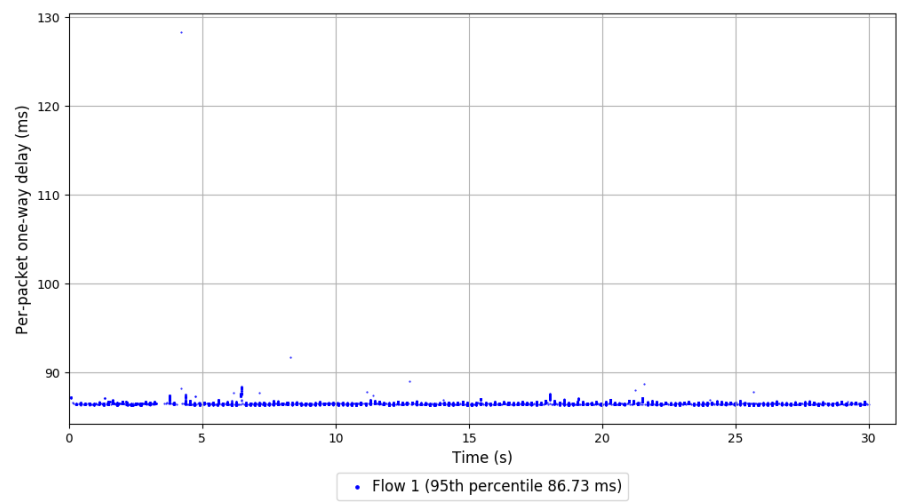
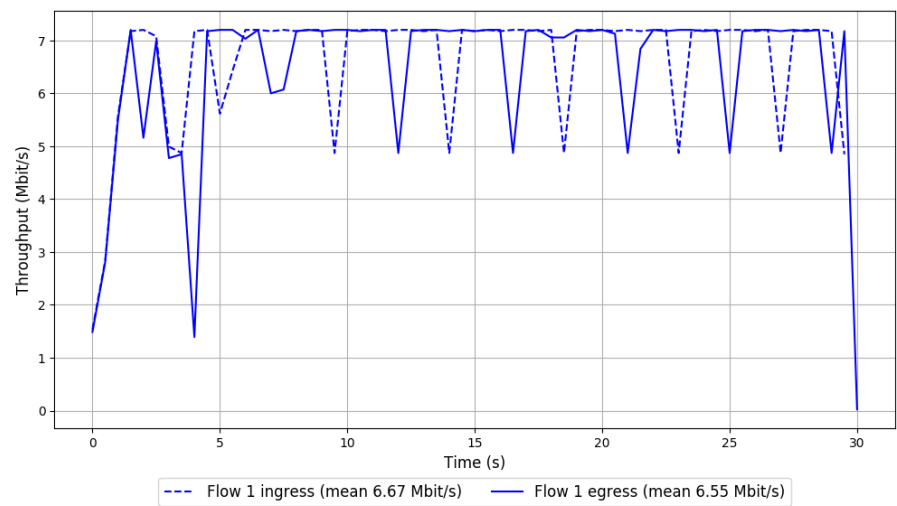


```
Run 1: Statistics of KohoCC

Start at: 2017-08-16 20:20:16
End at: 2017-08-16 20:20:46

# Below is generated by plot.py at 2017-08-16 23:17:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 86.730 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 86.730 ms
Loss rate: 1.69%
```


Run 1: Report of KohoCC — Data Link

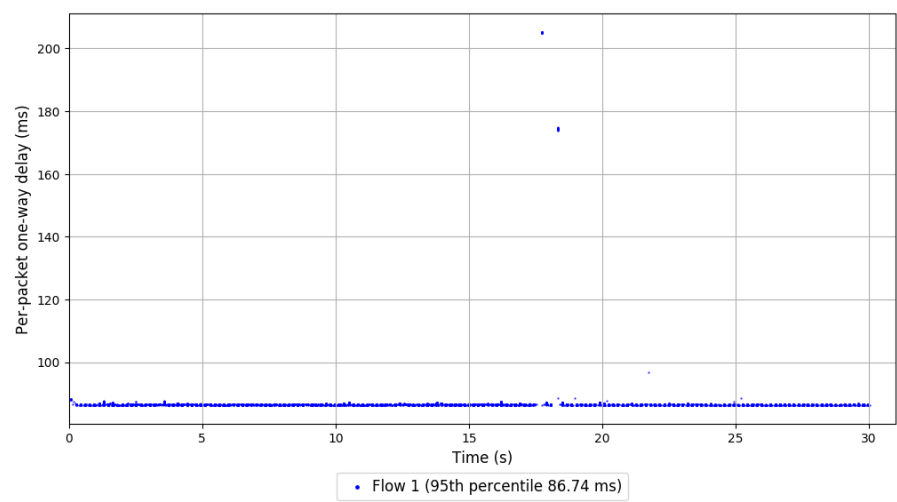
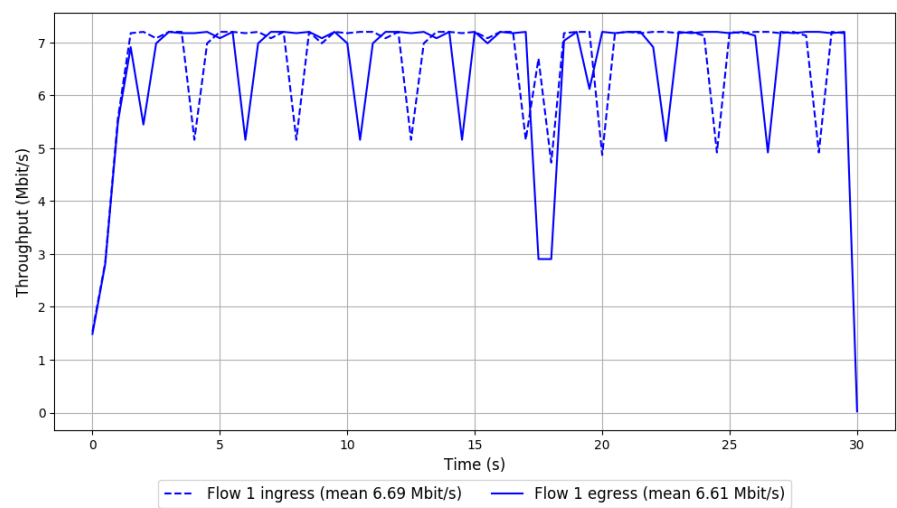


```
Run 2: Statistics of KohoCC

Start at: 2017-08-16 20:31:02
End at: 2017-08-16 20:31:32

# Below is generated by plot.py at 2017-08-16 23:17:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 86.738 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 86.738 ms
Loss rate: 1.23%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-16 20:42:25

End at: 2017-08-16 20:42:55

Below is generated by plot.py at 2017-08-16 23:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 86.740 ms

Loss rate: 1.08%

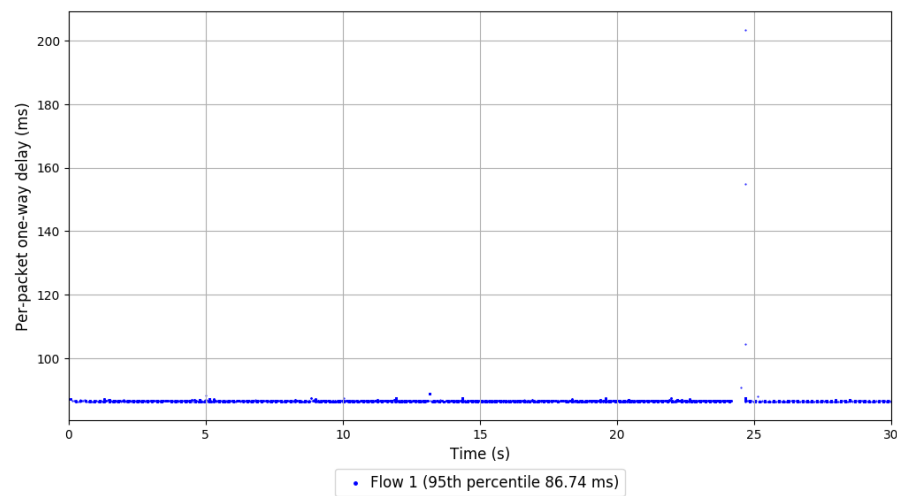
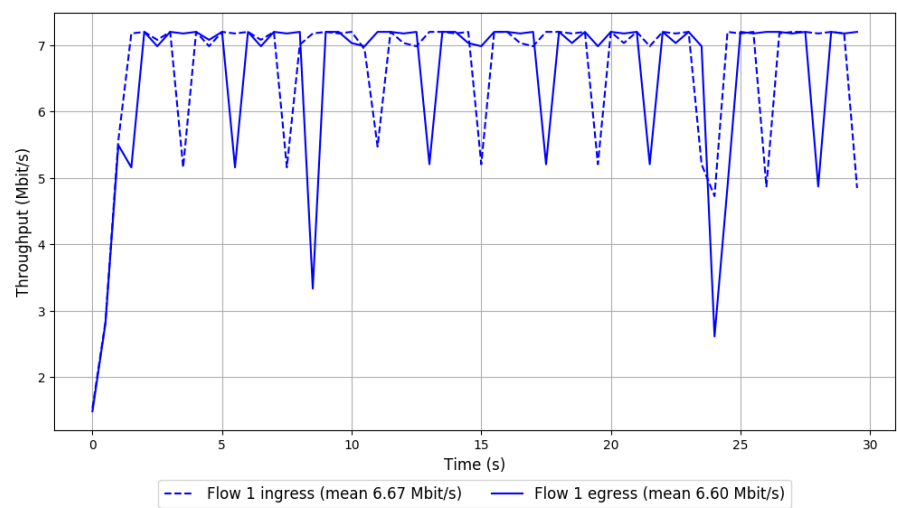
-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 86.740 ms

Loss rate: 1.08%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-16 20:53:34

End at: 2017-08-16 20:54:04

Below is generated by plot.py at 2017-08-16 23:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 87.195 ms

Loss rate: 1.39%

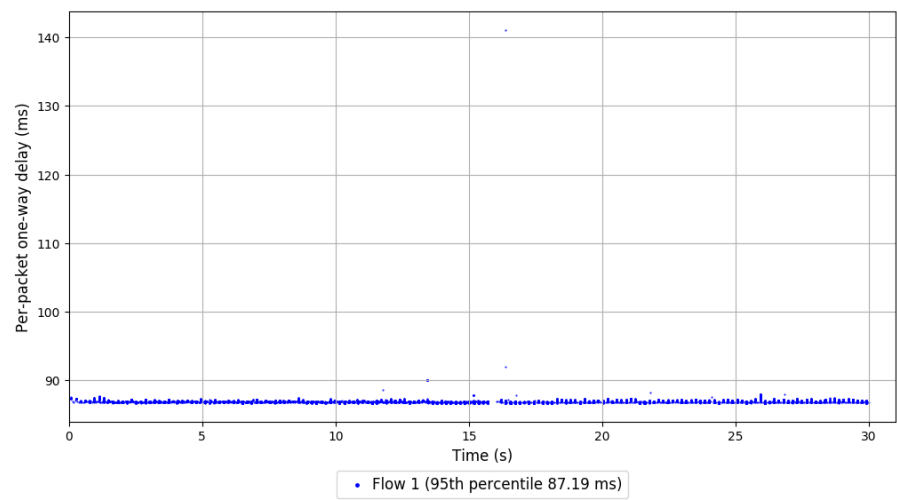
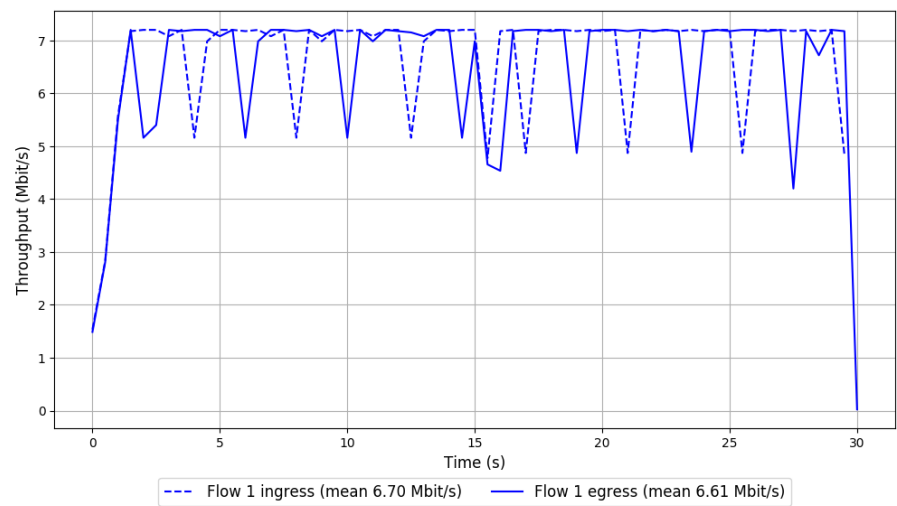
-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 87.195 ms

Loss rate: 1.39%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-16 21:04:53

End at: 2017-08-16 21:05:23

Below is generated by plot.py at 2017-08-16 23:17:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 86.901 ms

Loss rate: 0.89%

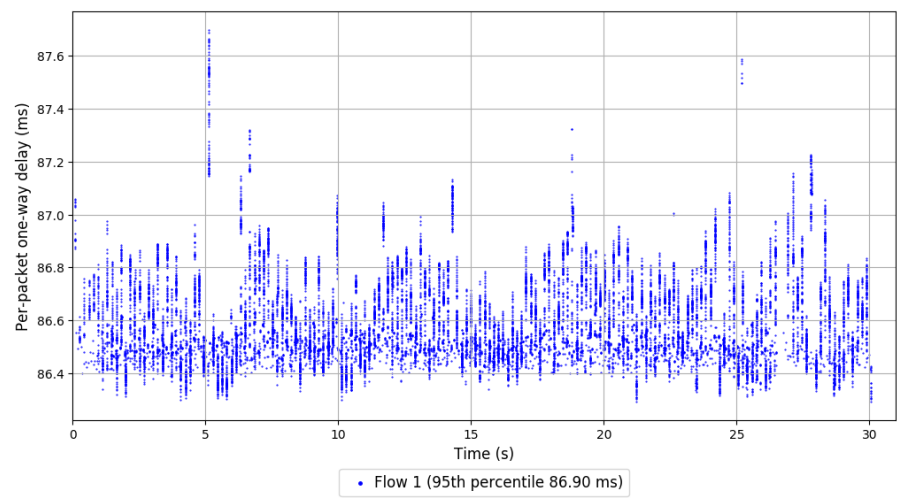
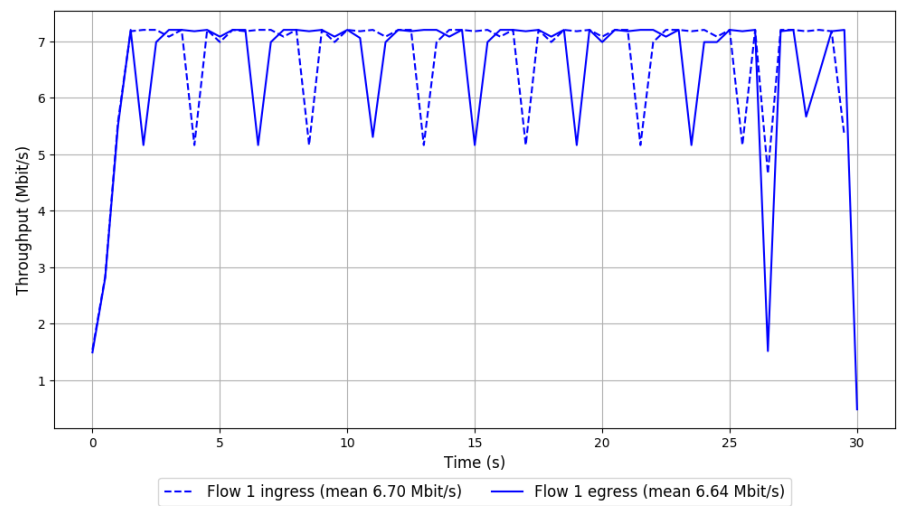
-- Flow 1:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 86.901 ms

Loss rate: 0.89%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-16 21:15:40

End at: 2017-08-16 21:16:10

Below is generated by plot.py at 2017-08-16 23:17:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 87.153 ms

Loss rate: 1.40%

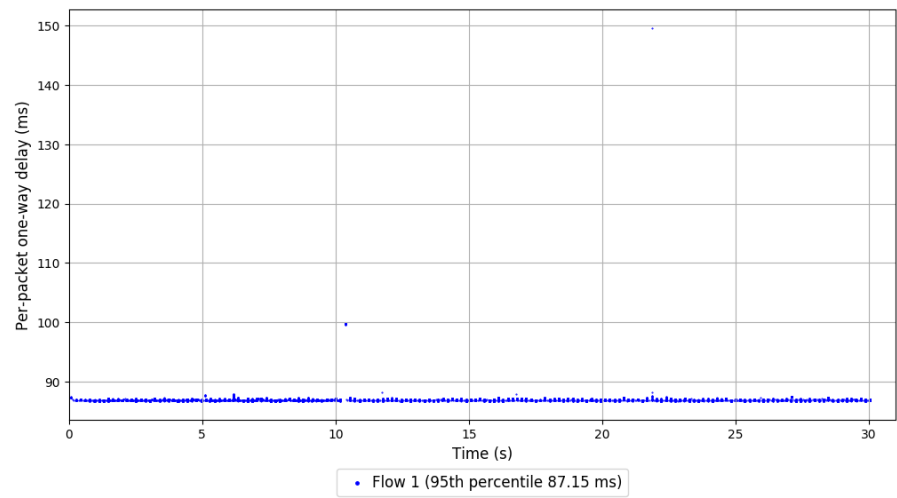
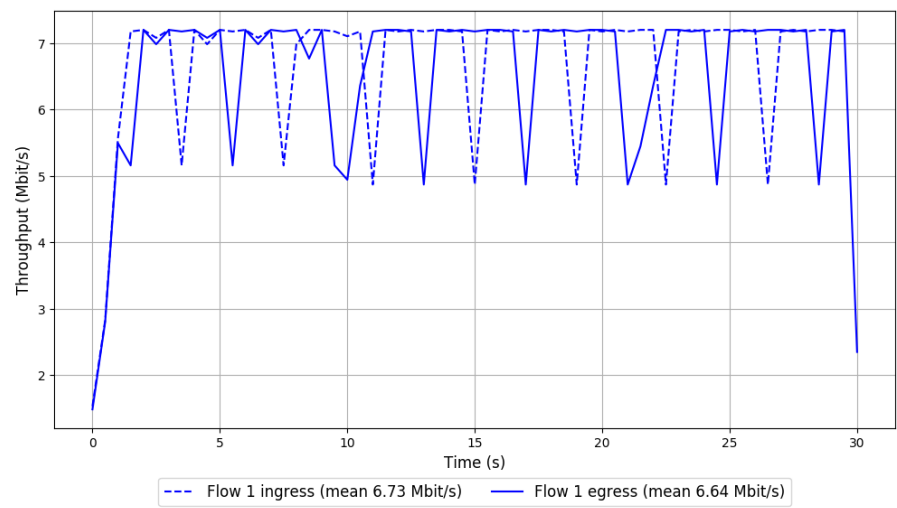
-- Flow 1:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 87.153 ms

Loss rate: 1.40%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-16 21:27:04

End at: 2017-08-16 21:27:34

Below is generated by plot.py at 2017-08-16 23:17:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 87.001 ms

Loss rate: 1.26%

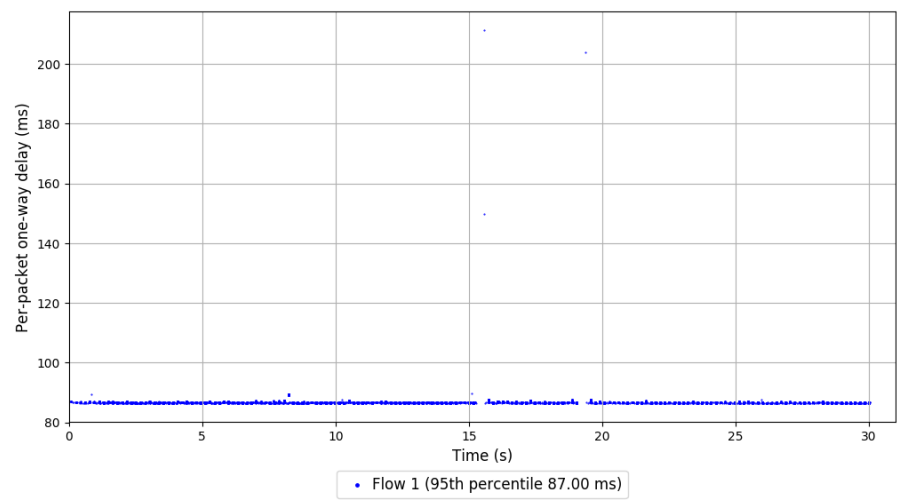
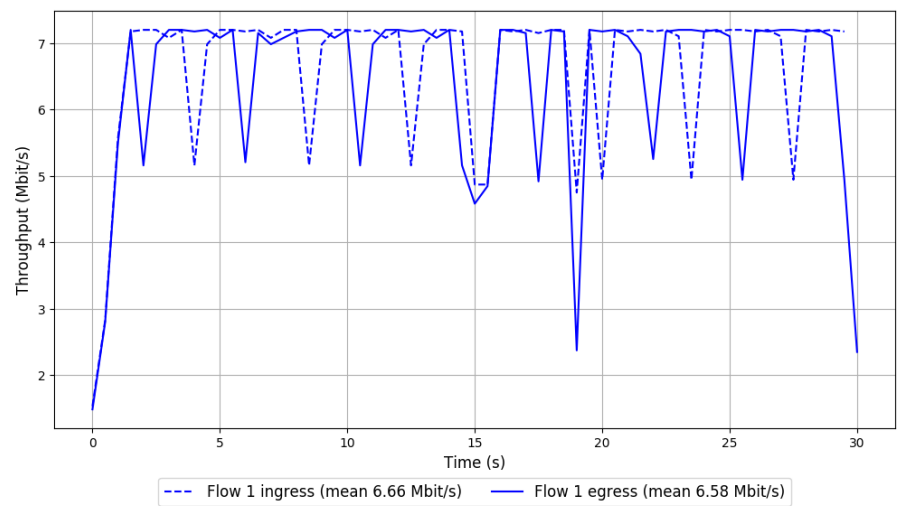
-- Flow 1:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 87.001 ms

Loss rate: 1.26%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-16 21:38:39

End at: 2017-08-16 21:39:09

Below is generated by plot.py at 2017-08-16 23:17:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 87.416 ms

Loss rate: 1.14%

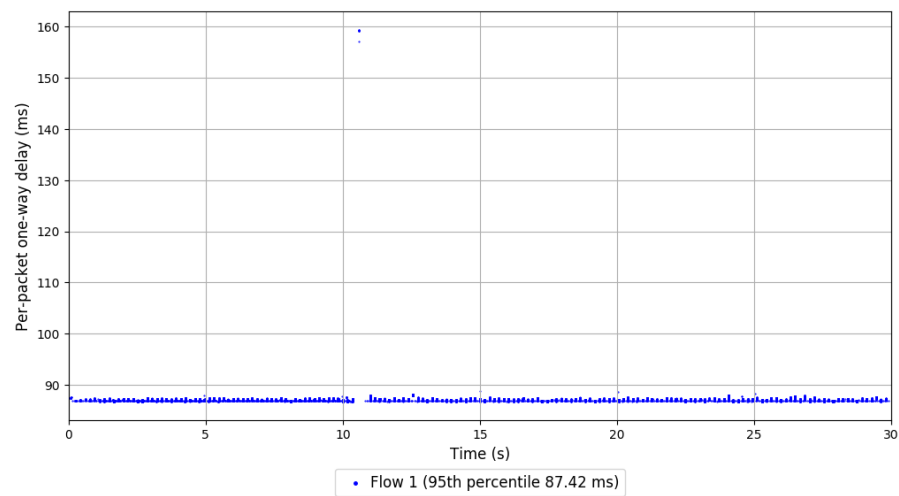
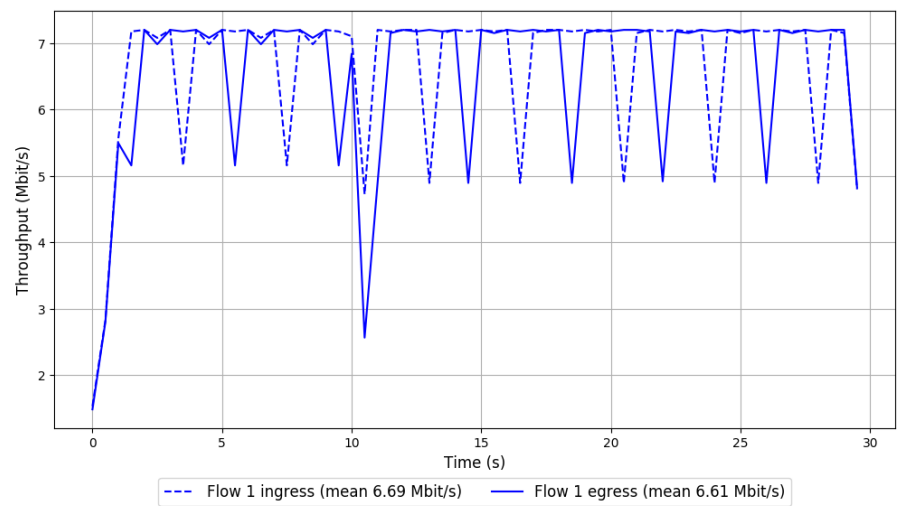
-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 87.416 ms

Loss rate: 1.14%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-16 21:49:27

End at: 2017-08-16 21:49:57

Below is generated by plot.py at 2017-08-16 23:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 87.150 ms

Loss rate: 2.29%

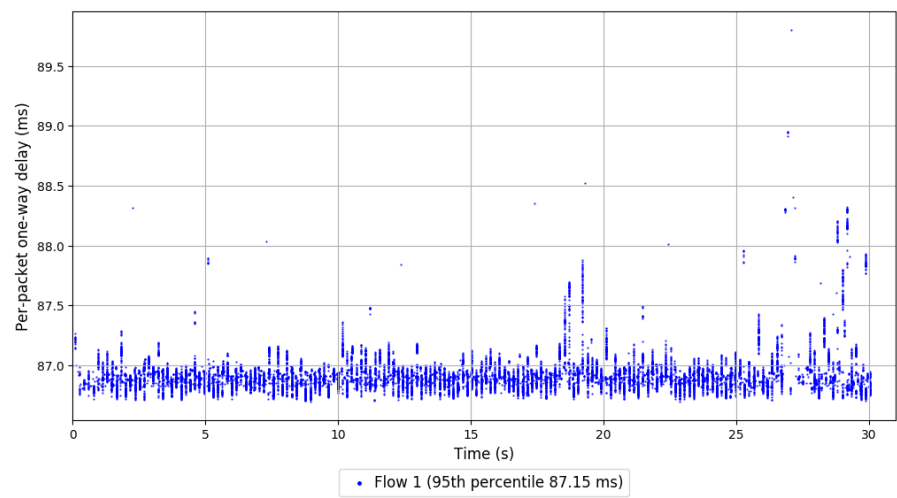
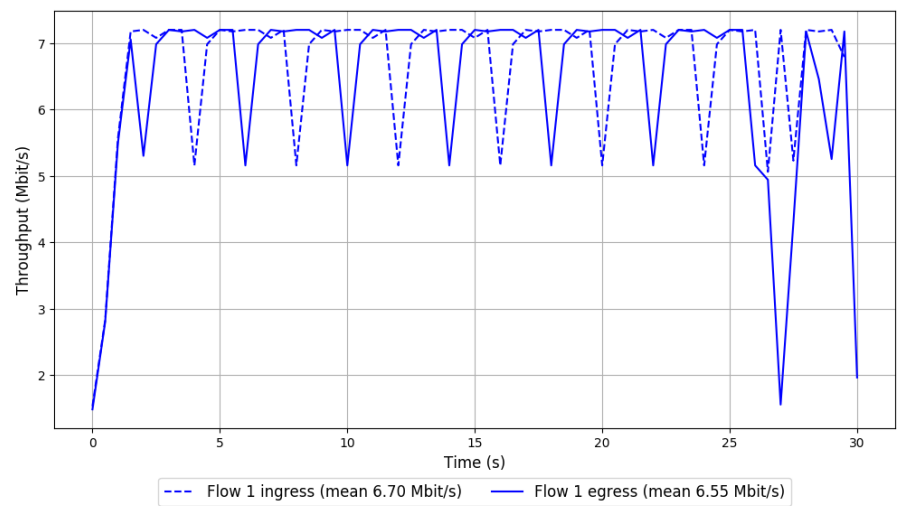
-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 87.150 ms

Loss rate: 2.29%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-16 22:00:37

End at: 2017-08-16 22:01:07

Below is generated by plot.py at 2017-08-16 23:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.74 Mbit/s

95th percentile per-packet one-way delay: 87.315 ms

Loss rate: 0.00%

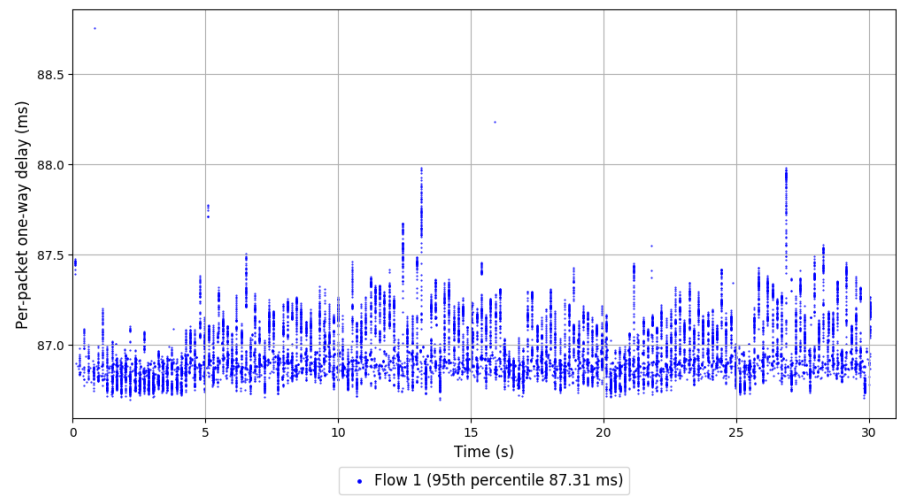
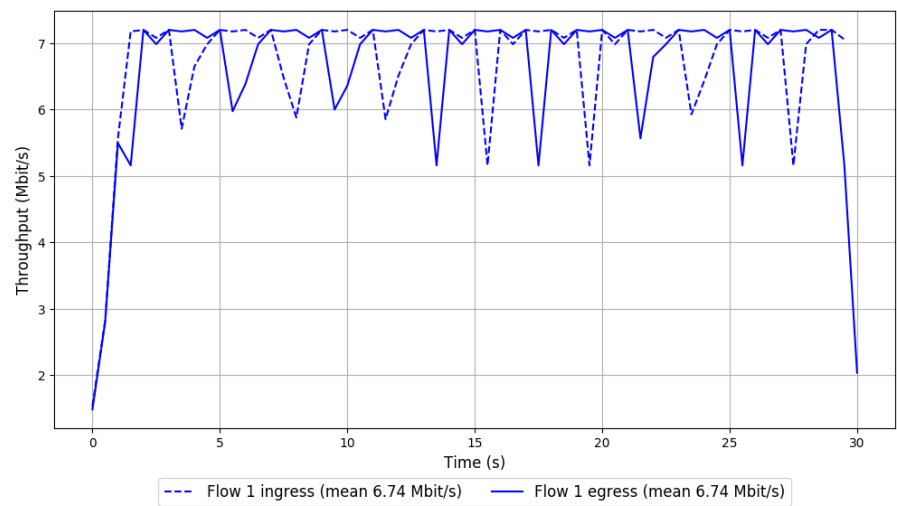
-- Flow 1:

Average throughput: 6.74 Mbit/s

95th percentile per-packet one-way delay: 87.315 ms

Loss rate: 0.00%

Run 10: Report of KohoCC — Data Link

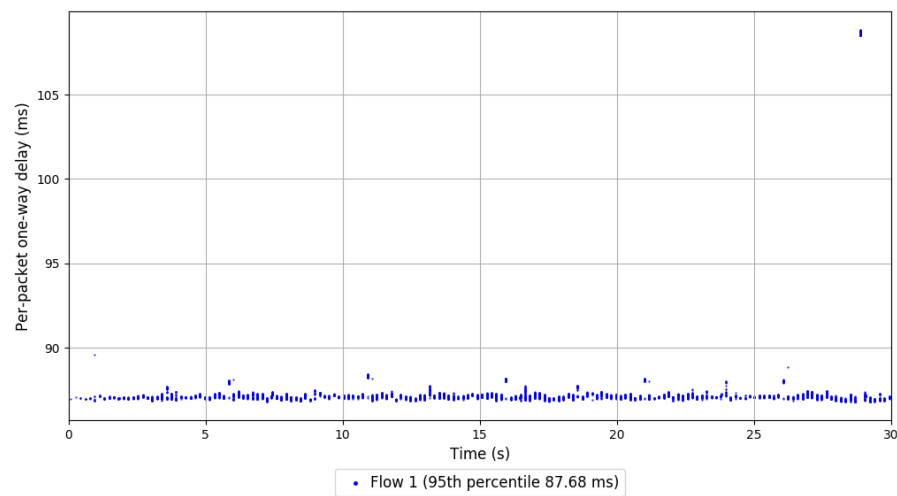
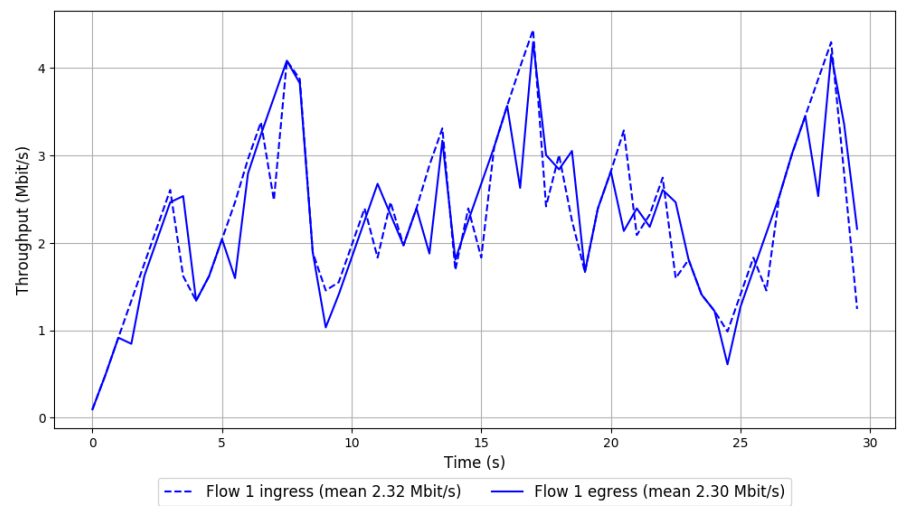


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-16 20:26:51
End at: 2017-08-16 20:27:21

# Below is generated by plot.py at 2017-08-16 23:17:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 87.680 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 87.680 ms
Loss rate: 0.78%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-16 20:37:46

End at: 2017-08-16 20:38:16

Below is generated by plot.py at 2017-08-16 23:17:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 87.127 ms

Loss rate: 1.19%

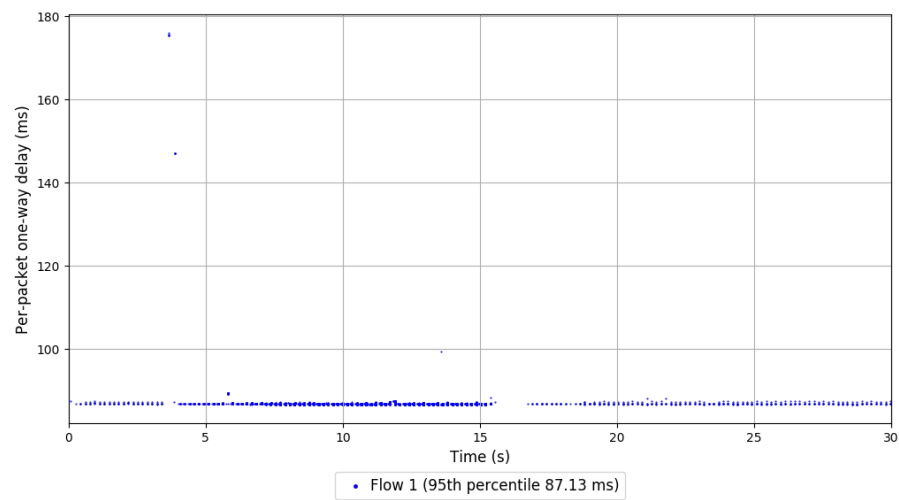
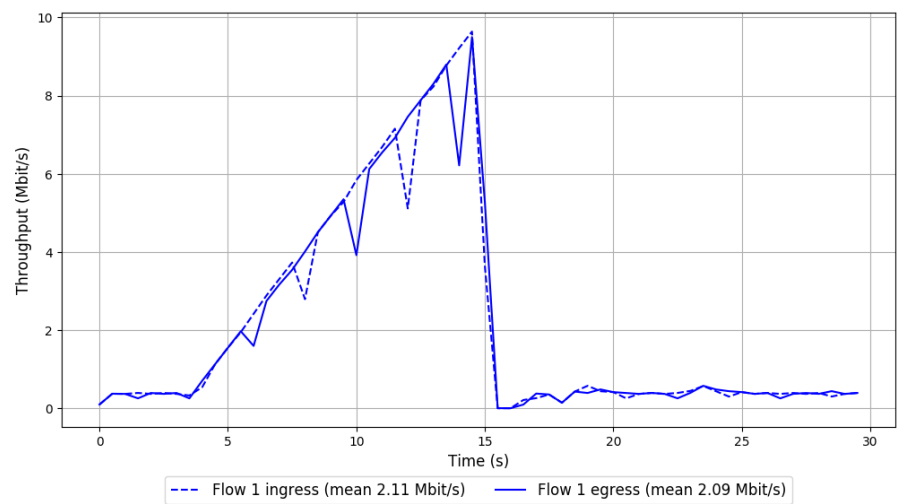
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 87.127 ms

Loss rate: 1.19%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-16 20:49:06

End at: 2017-08-16 20:49:36

Below is generated by plot.py at 2017-08-16 23:17:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 87.437 ms

Loss rate: 0.23%

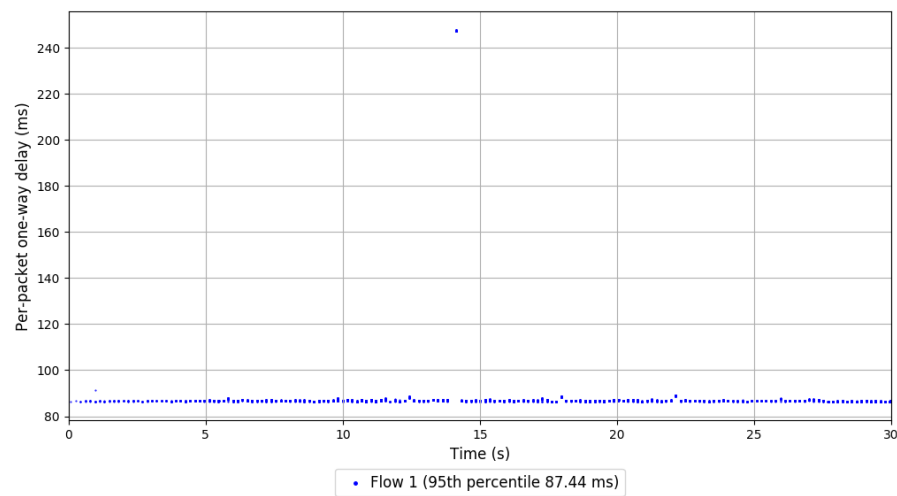
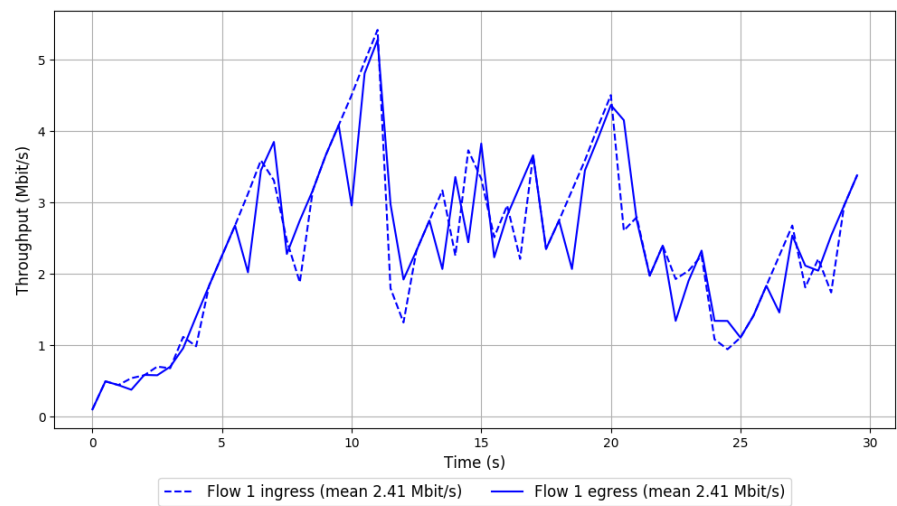
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 87.437 ms

Loss rate: 0.23%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-16 21:00:36

End at: 2017-08-16 21:01:06

Below is generated by plot.py at 2017-08-16 23:17:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 87.075 ms

Loss rate: 0.85%

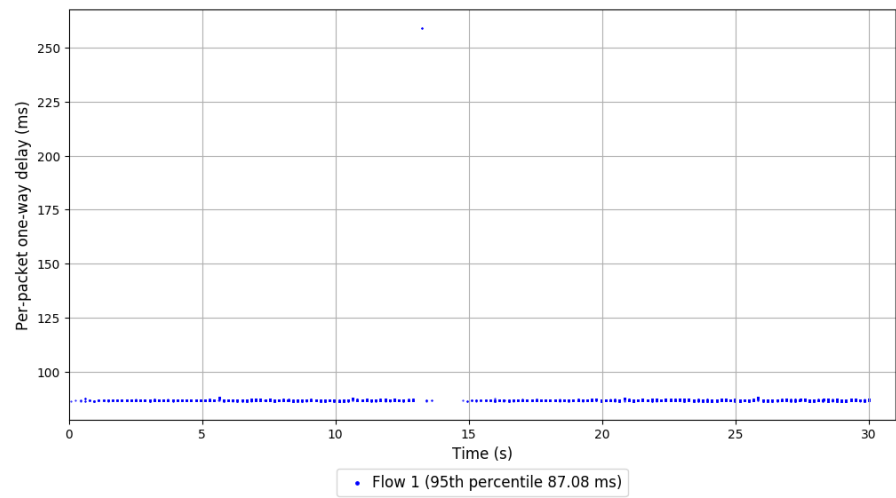
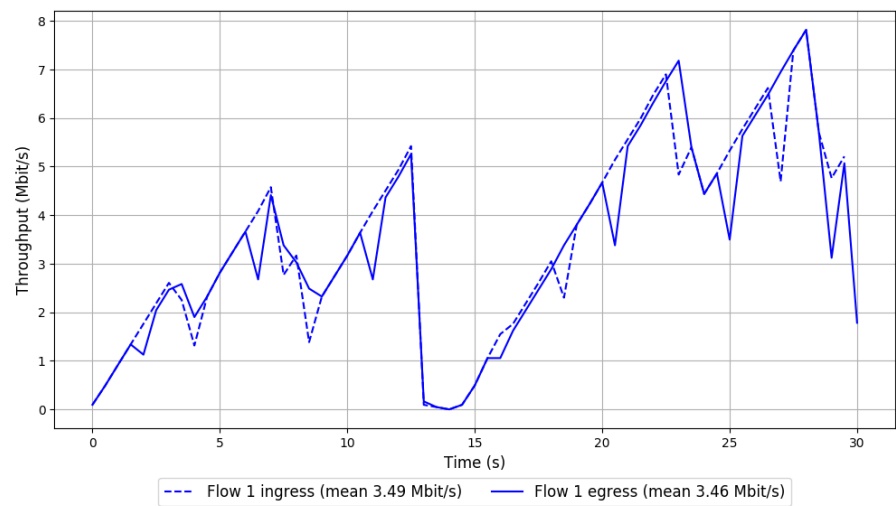
-- Flow 1:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 87.075 ms

Loss rate: 0.85%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-16 21:11:05

End at: 2017-08-16 21:11:35

Below is generated by plot.py at 2017-08-16 23:17:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 86.968 ms

Loss rate: 0.84%

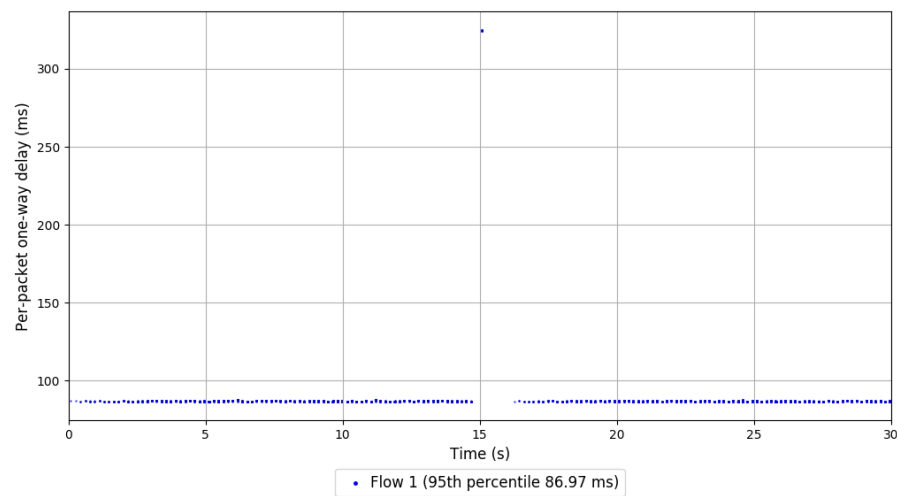
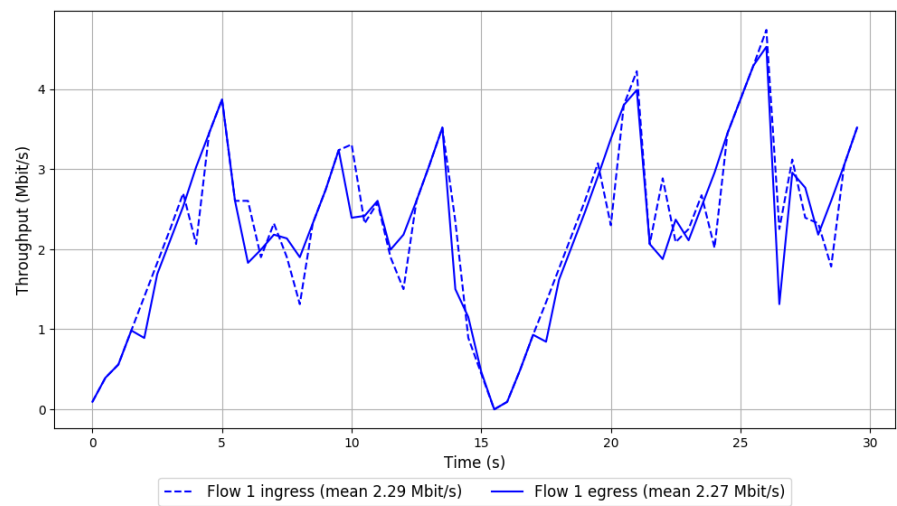
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 86.968 ms

Loss rate: 0.84%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-16 21:22:10

End at: 2017-08-16 21:22:40

Below is generated by plot.py at 2017-08-16 23:17:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 87.477 ms

Loss rate: 1.31%

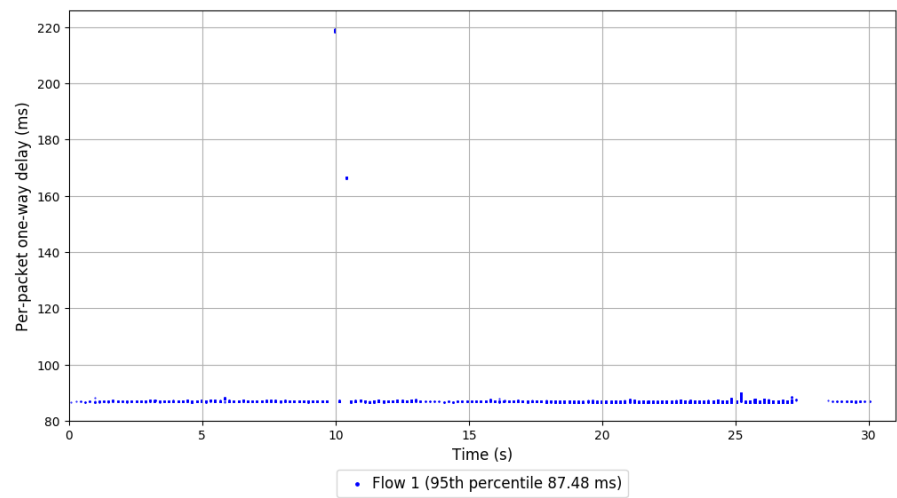
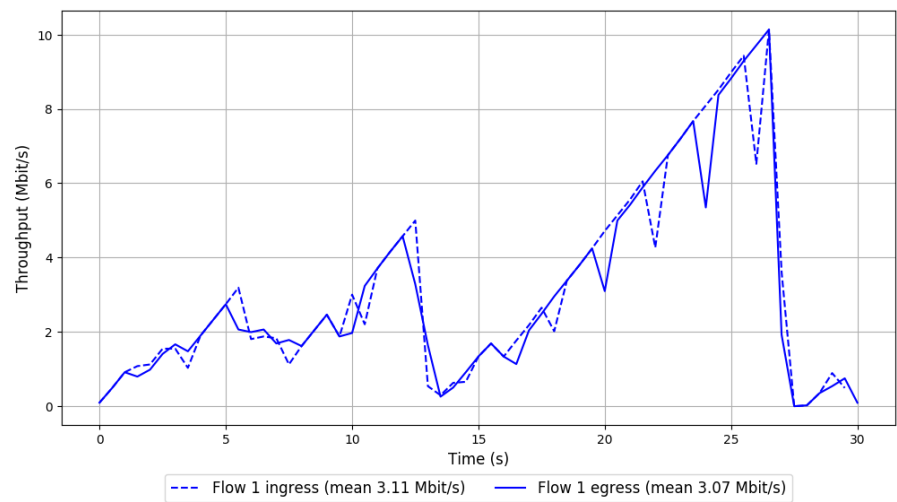
-- Flow 1:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 87.477 ms

Loss rate: 1.31%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-16 21:34:06

End at: 2017-08-16 21:34:36

Below is generated by plot.py at 2017-08-16 23:17:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 87.441 ms

Loss rate: 1.35%

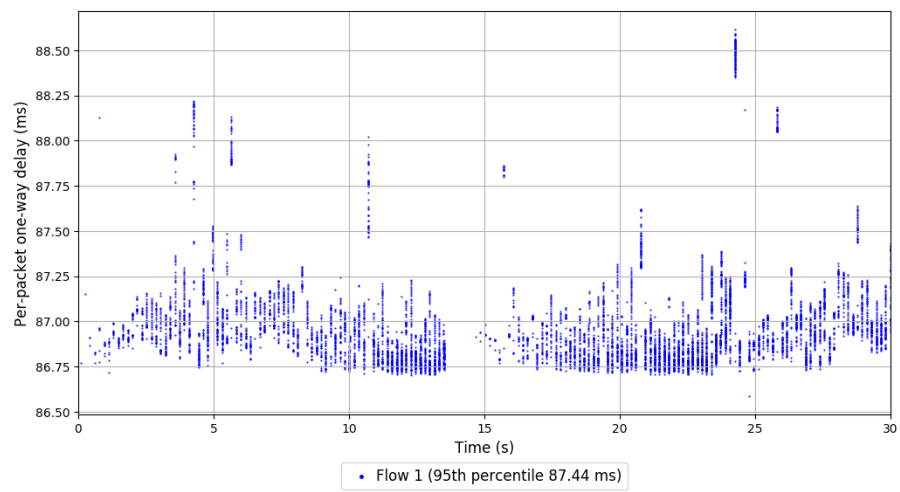
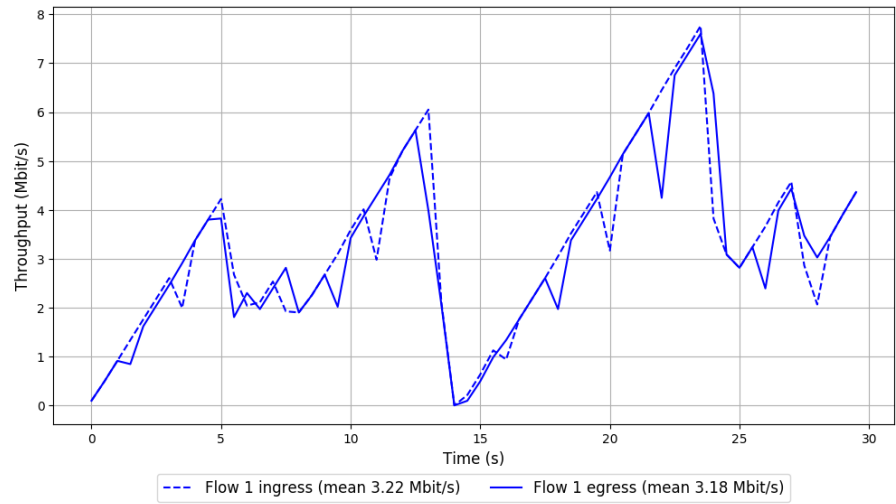
-- Flow 1:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 87.441 ms

Loss rate: 1.35%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-16 21:45:10

End at: 2017-08-16 21:45:40

Below is generated by plot.py at 2017-08-16 23:17:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 87.675 ms

Loss rate: 0.00%

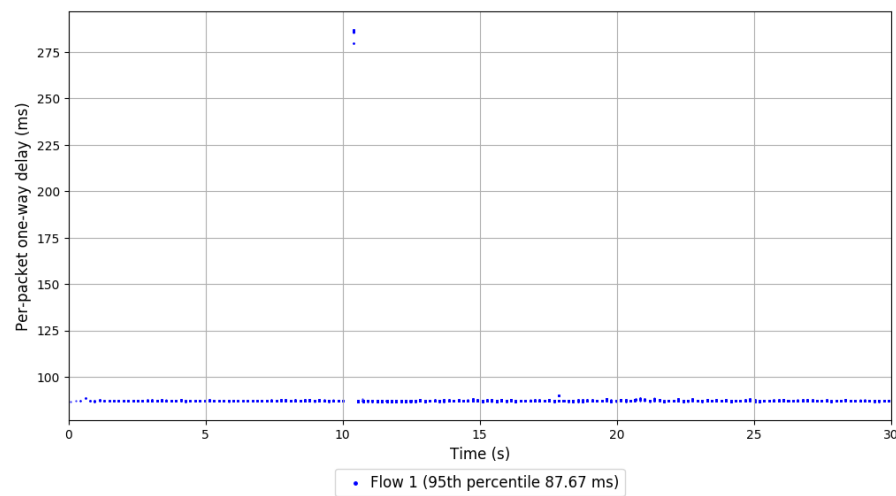
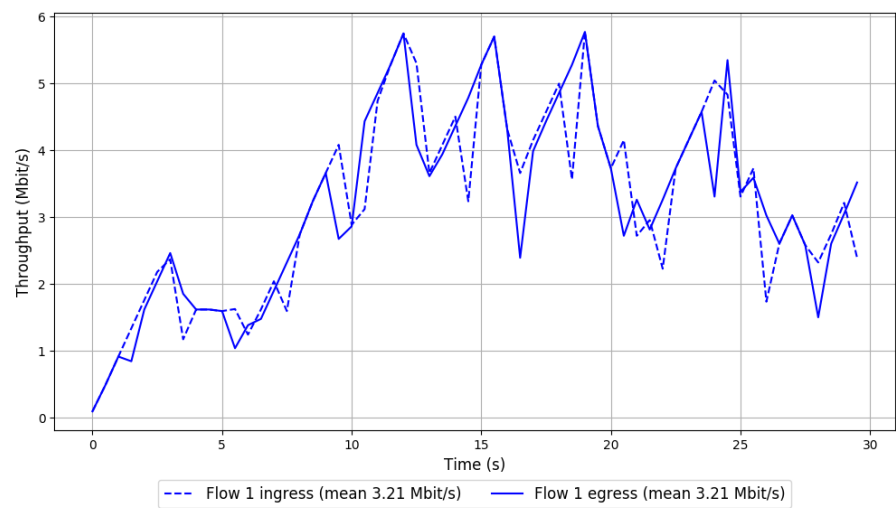
-- Flow 1:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 87.675 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-16 21:56:03

End at: 2017-08-16 21:56:33

Below is generated by plot.py at 2017-08-16 23:17:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 87.365 ms

Loss rate: 0.56%

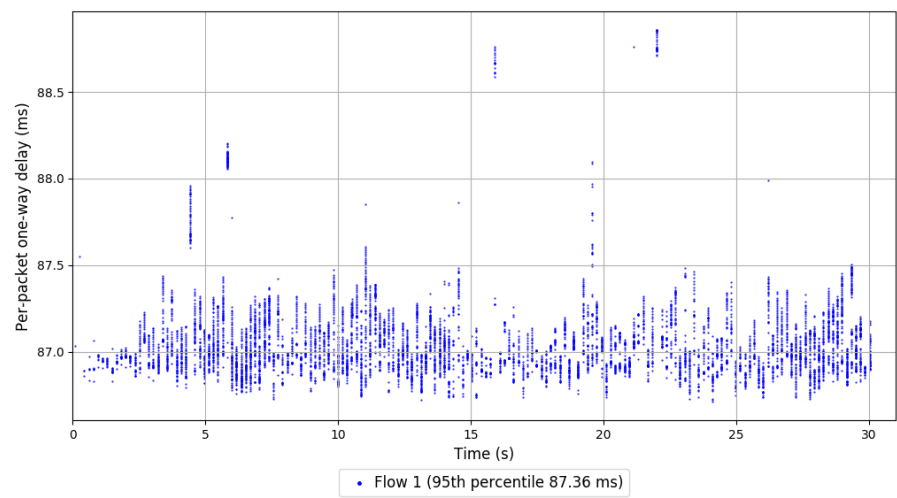
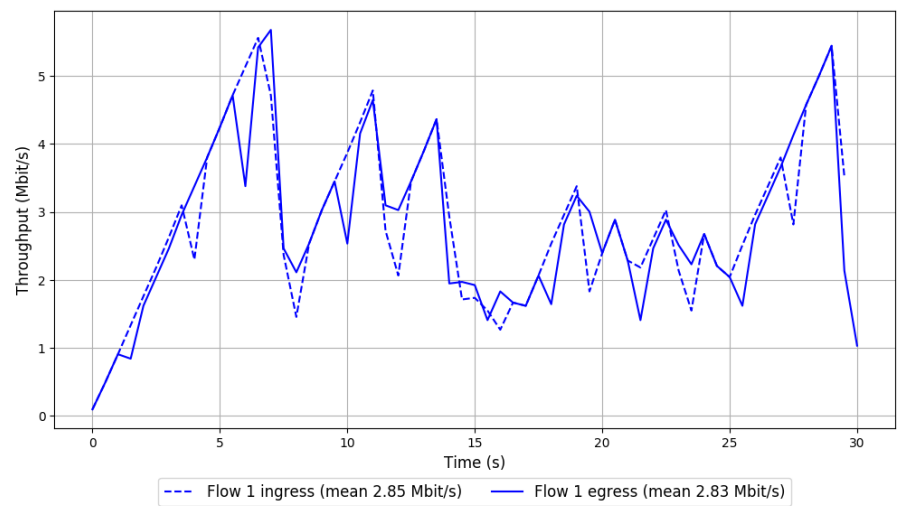
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 87.365 ms

Loss rate: 0.56%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-16 22:06:43

End at: 2017-08-16 22:07:13

Below is generated by plot.py at 2017-08-16 23:17:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 87.543 ms

Loss rate: 0.37%

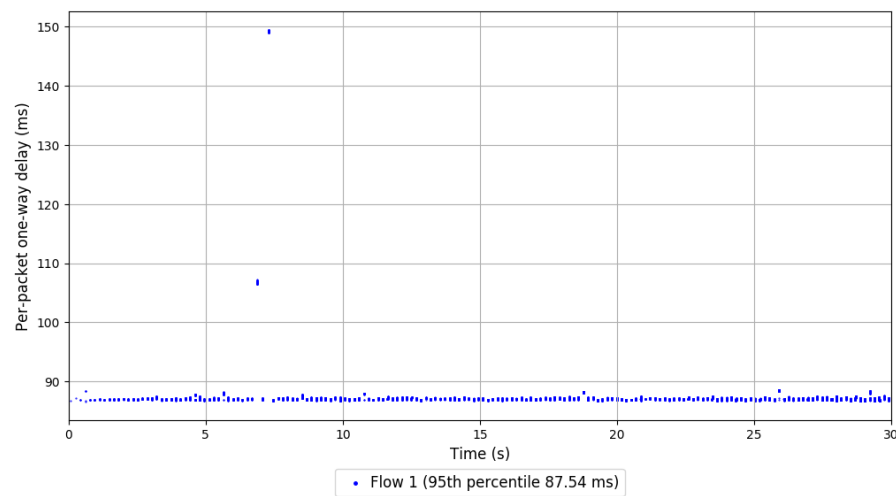
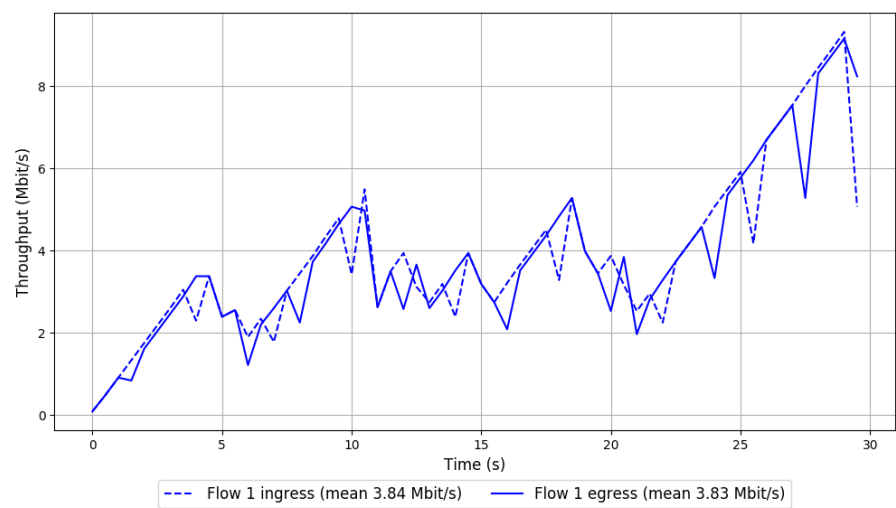
-- Flow 1:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 87.543 ms

Loss rate: 0.37%

Run 10: Report of LEDBAT — Data Link

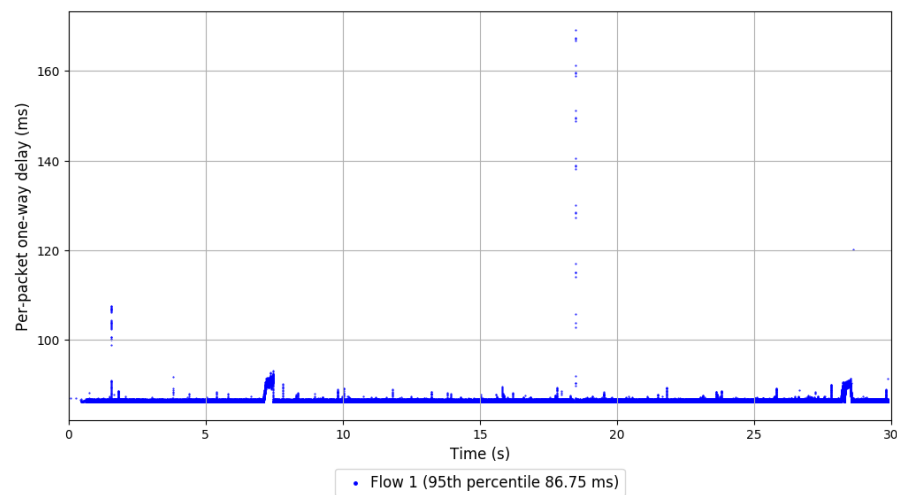
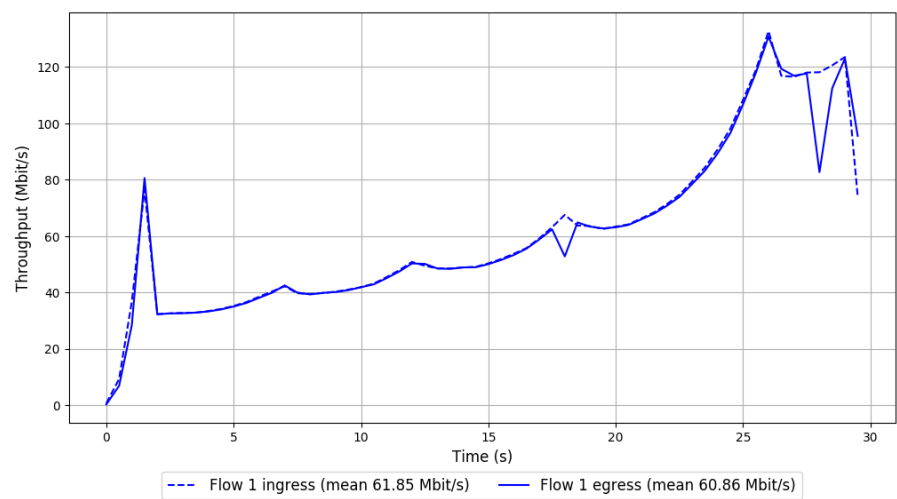


```
Run 1: Statistics of PCC

Start at: 2017-08-16 20:27:31
End at: 2017-08-16 20:28:01

# Below is generated by plot.py at 2017-08-16 23:17:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.86 Mbit/s
95th percentile per-packet one-way delay: 86.750 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 60.86 Mbit/s
95th percentile per-packet one-way delay: 86.750 ms
Loss rate: 1.59%
```


Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-16 20:38:26

End at: 2017-08-16 20:38:56

Below is generated by plot.py at 2017-08-16 23:18:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 371.66 Mbit/s

95th percentile per-packet one-way delay: 87.664 ms

Loss rate: 14.12%

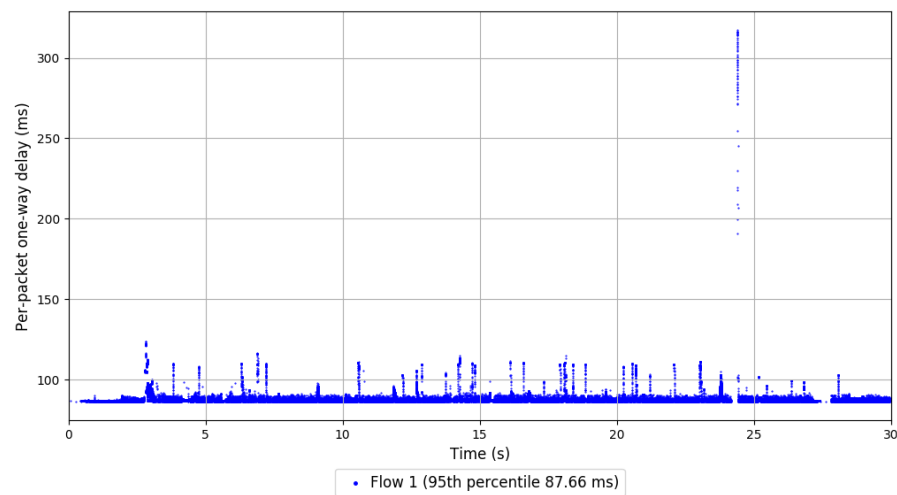
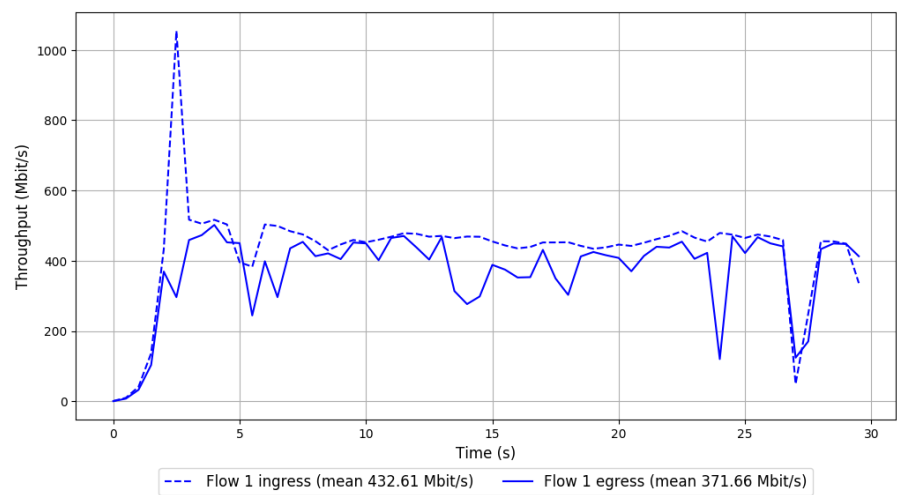
-- Flow 1:

Average throughput: 371.66 Mbit/s

95th percentile per-packet one-way delay: 87.664 ms

Loss rate: 14.12%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-16 20:49:45

End at: 2017-08-16 20:50:15

Below is generated by plot.py at 2017-08-16 23:18:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 204.58 Mbit/s

95th percentile per-packet one-way delay: 86.966 ms

Loss rate: 3.16%

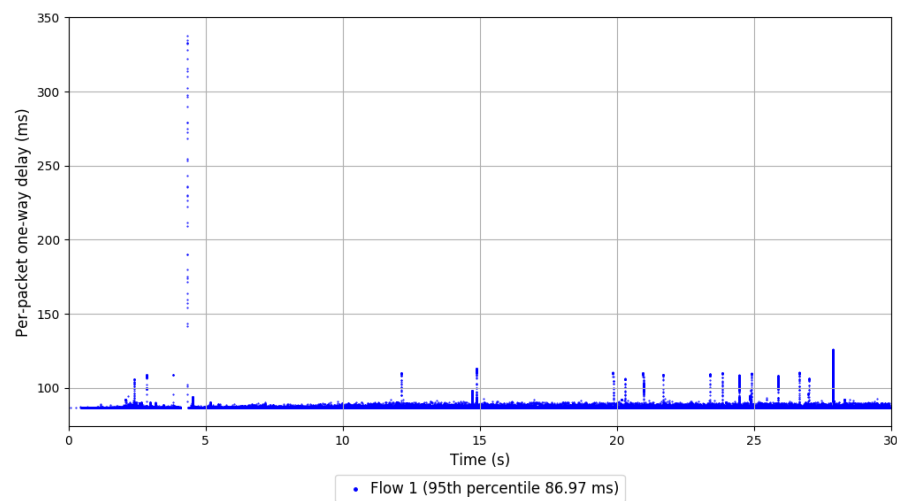
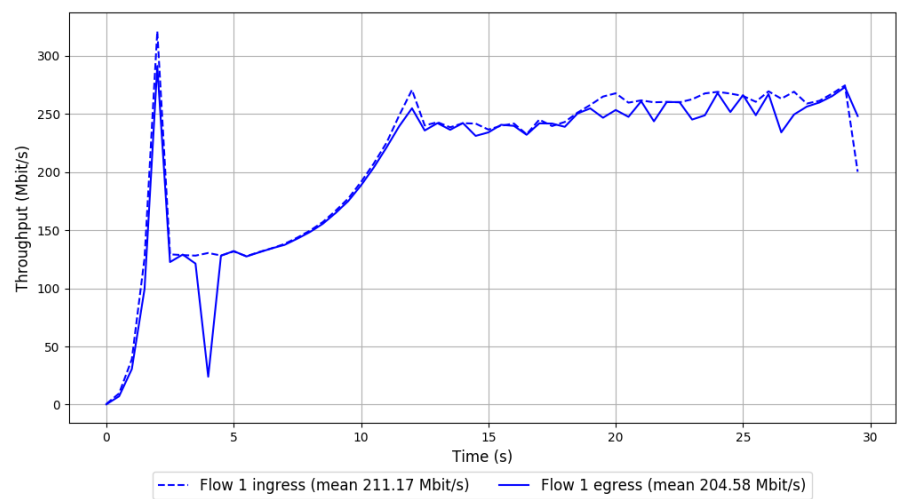
-- Flow 1:

Average throughput: 204.58 Mbit/s

95th percentile per-packet one-way delay: 86.966 ms

Loss rate: 3.16%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-16 21:01:16

End at: 2017-08-16 21:01:46

Below is generated by plot.py at 2017-08-16 23:19:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 288.05 Mbit/s

95th percentile per-packet one-way delay: 87.163 ms

Loss rate: 3.70%

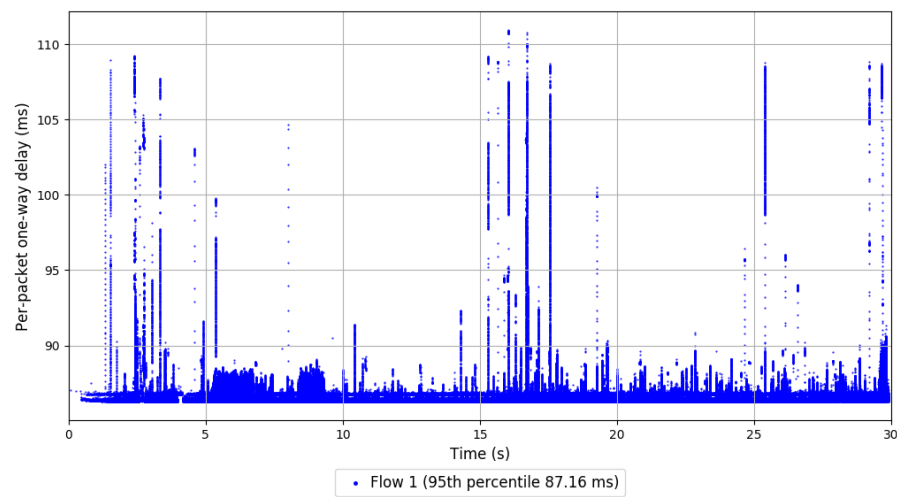
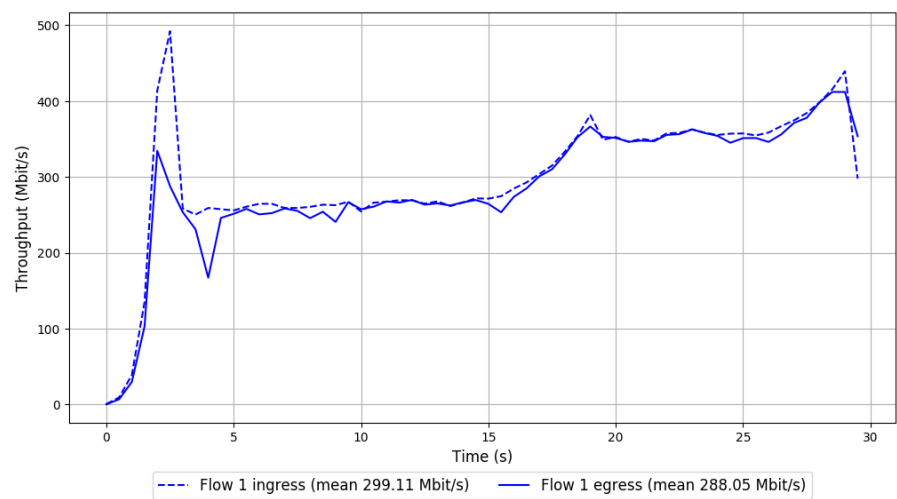
-- Flow 1:

Average throughput: 288.05 Mbit/s

95th percentile per-packet one-way delay: 87.163 ms

Loss rate: 3.70%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-16 21:11:44

End at: 2017-08-16 21:12:14

Below is generated by plot.py at 2017-08-16 23:20:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 484.33 Mbit/s

95th percentile per-packet one-way delay: 124.535 ms

Loss rate: 3.98%

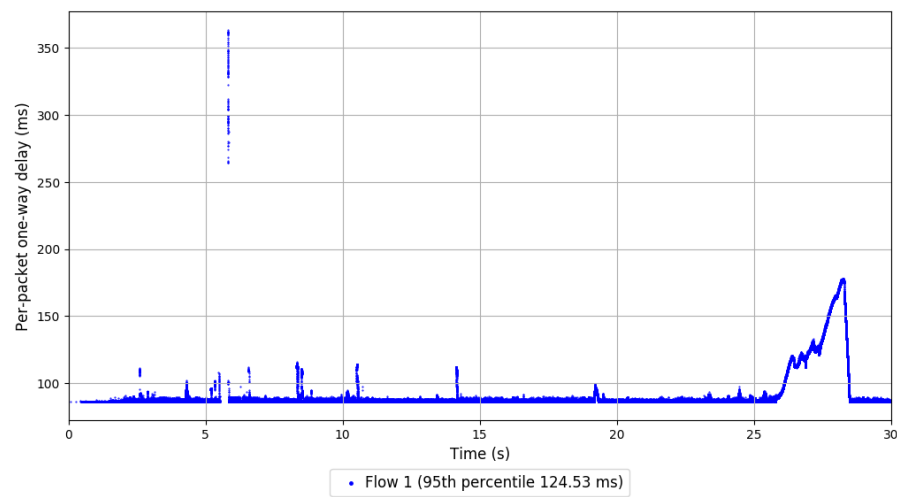
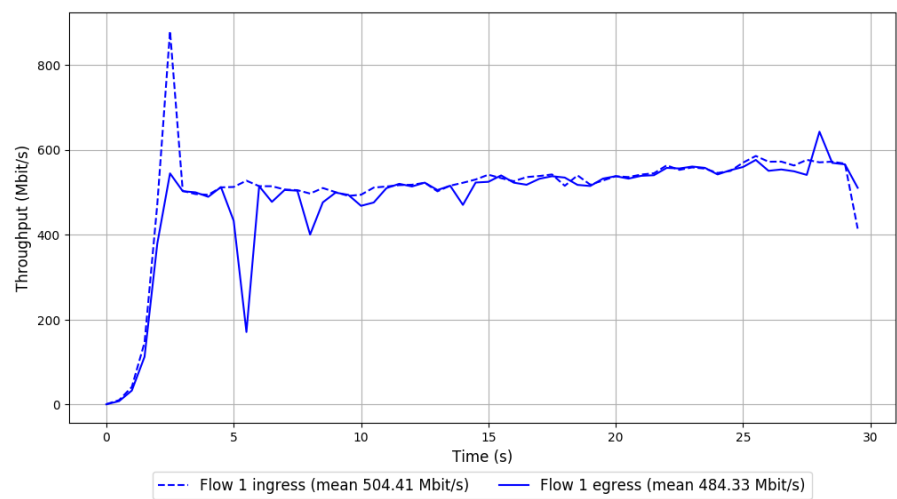
-- Flow 1:

Average throughput: 484.33 Mbit/s

95th percentile per-packet one-way delay: 124.535 ms

Loss rate: 3.98%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-16 21:22:49

End at: 2017-08-16 21:23:19

Below is generated by plot.py at 2017-08-16 23:20:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 500.49 Mbit/s

95th percentile per-packet one-way delay: 153.205 ms

Loss rate: 1.55%

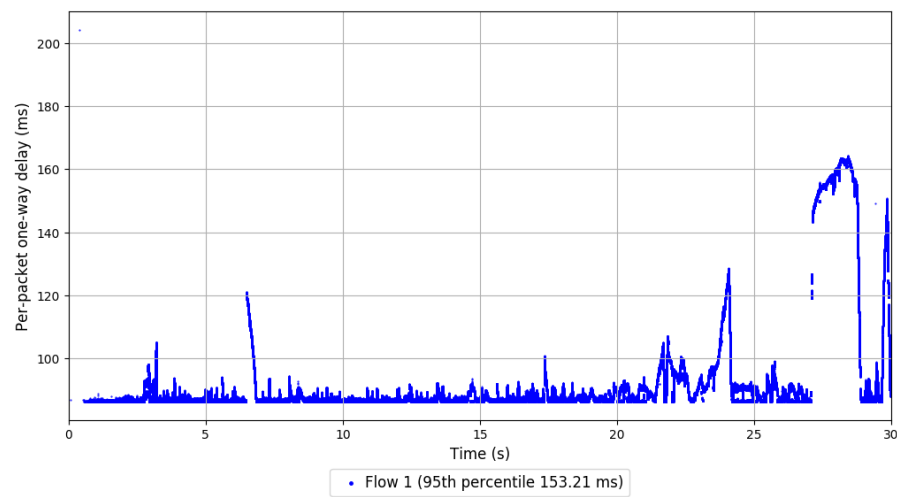
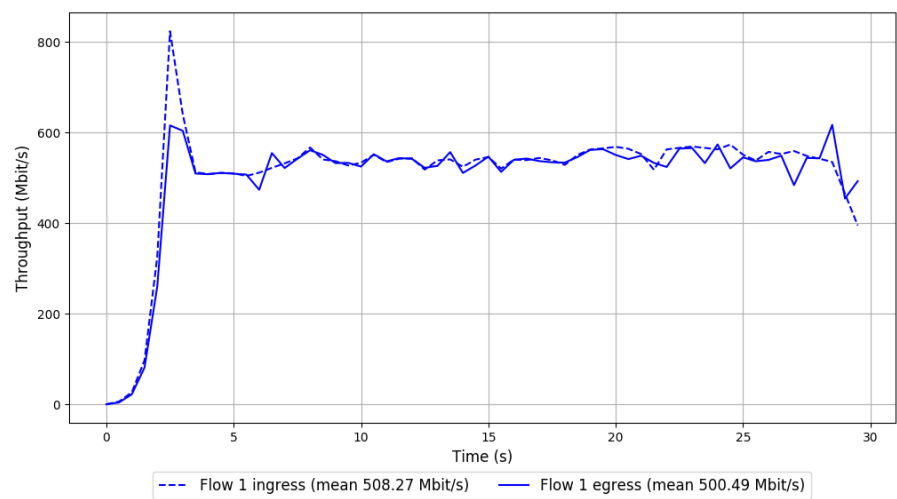
-- Flow 1:

Average throughput: 500.49 Mbit/s

95th percentile per-packet one-way delay: 153.205 ms

Loss rate: 1.55%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-16 21:34:46

End at: 2017-08-16 21:35:16

Below is generated by plot.py at 2017-08-16 23:21:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 477.17 Mbit/s

95th percentile per-packet one-way delay: 187.732 ms

Loss rate: 5.78%

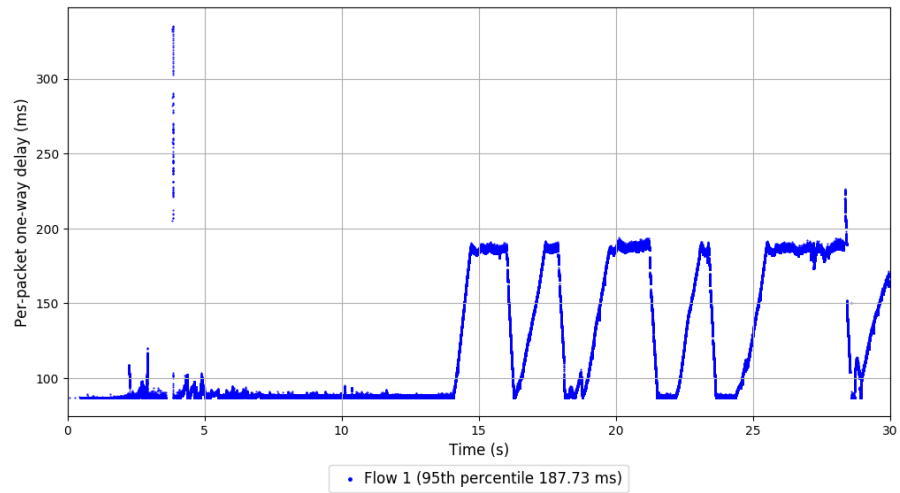
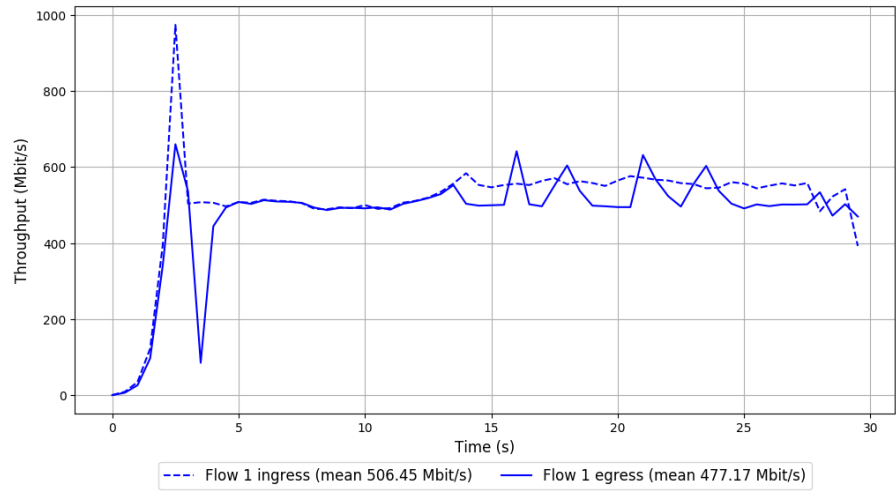
-- Flow 1:

Average throughput: 477.17 Mbit/s

95th percentile per-packet one-way delay: 187.732 ms

Loss rate: 5.78%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-16 21:45:49

End at: 2017-08-16 21:46:19

Below is generated by plot.py at 2017-08-16 23:21:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.70 Mbit/s

95th percentile per-packet one-way delay: 87.098 ms

Loss rate: 1.51%

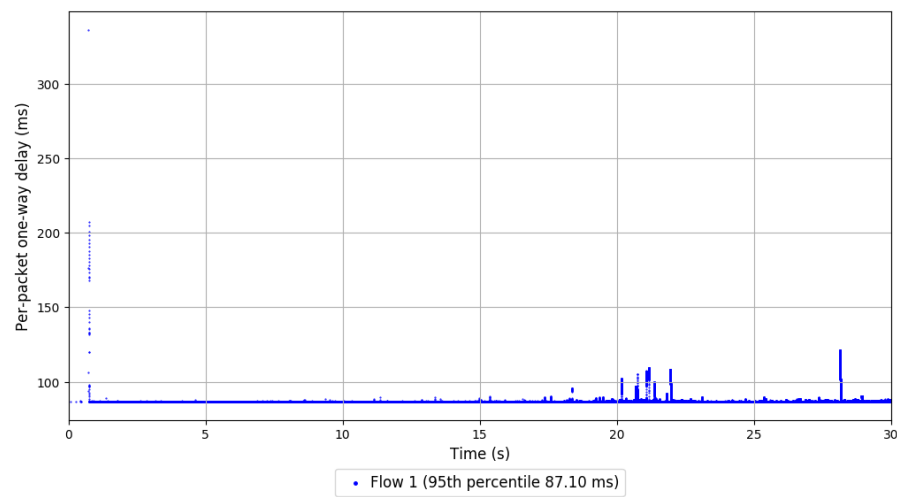
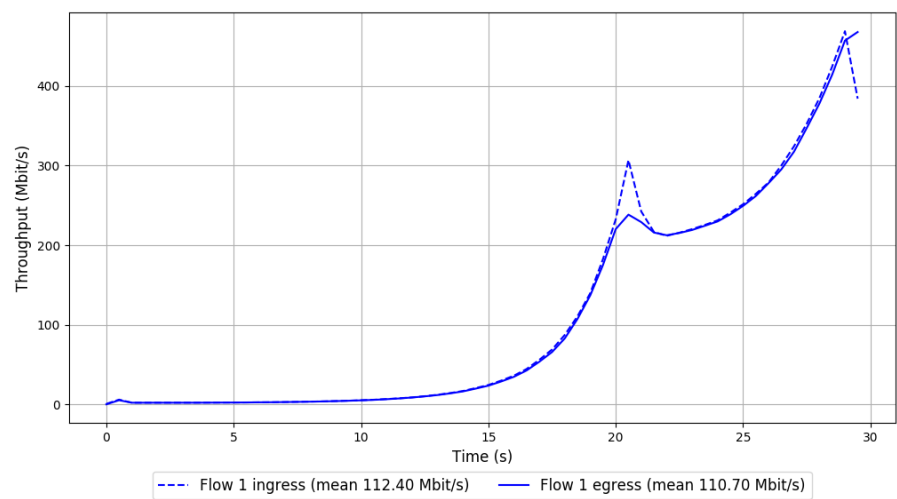
-- Flow 1:

Average throughput: 110.70 Mbit/s

95th percentile per-packet one-way delay: 87.098 ms

Loss rate: 1.51%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-16 21:56:42

End at: 2017-08-16 21:57:12

Below is generated by plot.py at 2017-08-16 23:22:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 441.32 Mbit/s

95th percentile per-packet one-way delay: 101.529 ms

Loss rate: 6.25%

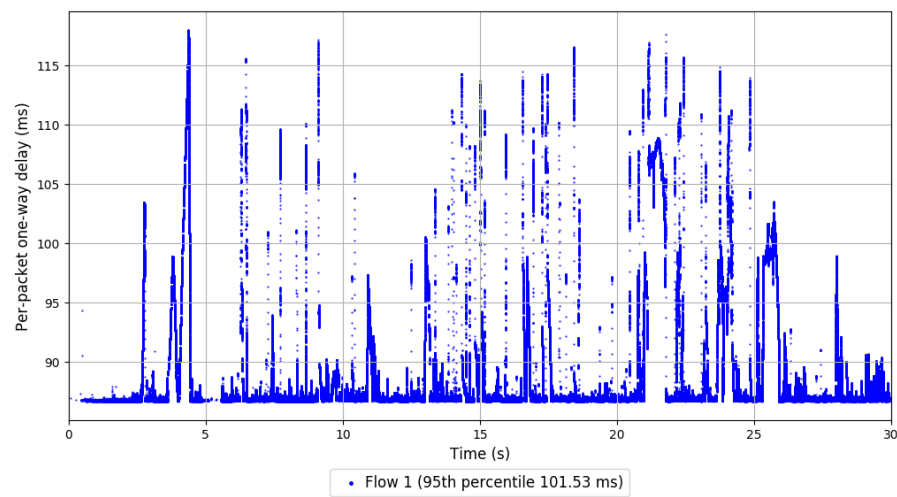
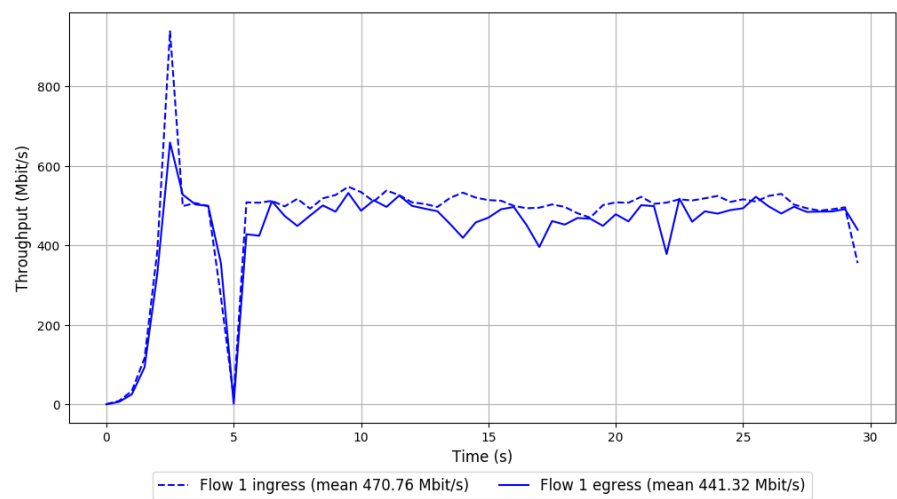
-- Flow 1:

Average throughput: 441.32 Mbit/s

95th percentile per-packet one-way delay: 101.529 ms

Loss rate: 6.25%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-16 22:07:23

End at: 2017-08-16 22:07:53

Below is generated by plot.py at 2017-08-16 23:22:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 501.89 Mbit/s

95th percentile per-packet one-way delay: 152.321 ms

Loss rate: 1.52%

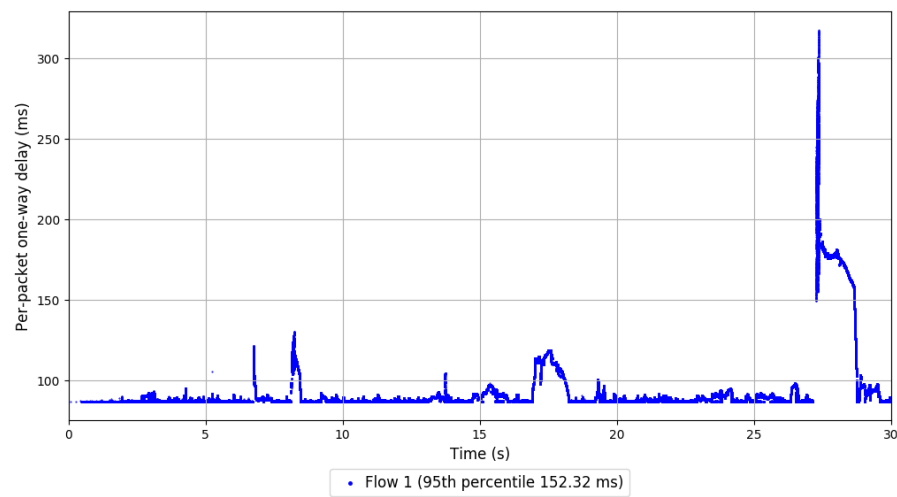
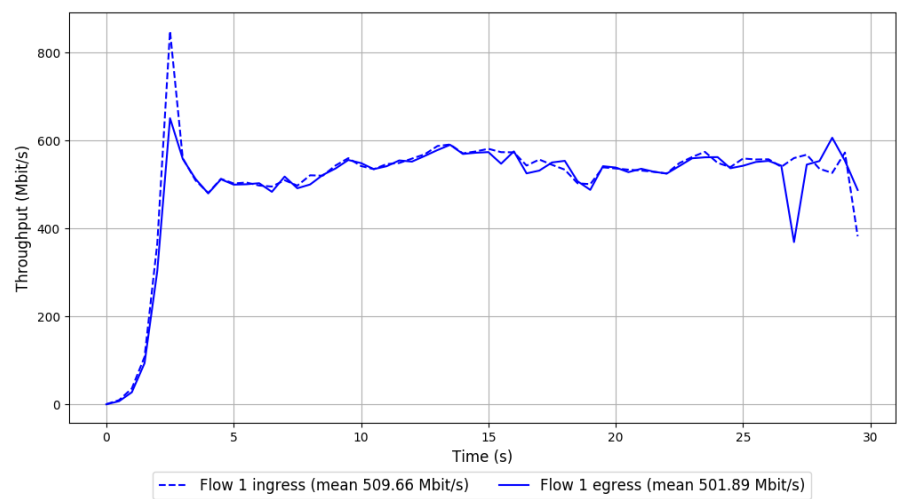
-- Flow 1:

Average throughput: 501.89 Mbit/s

95th percentile per-packet one-way delay: 152.321 ms

Loss rate: 1.52%

Run 10: Report of PCC — Data Link

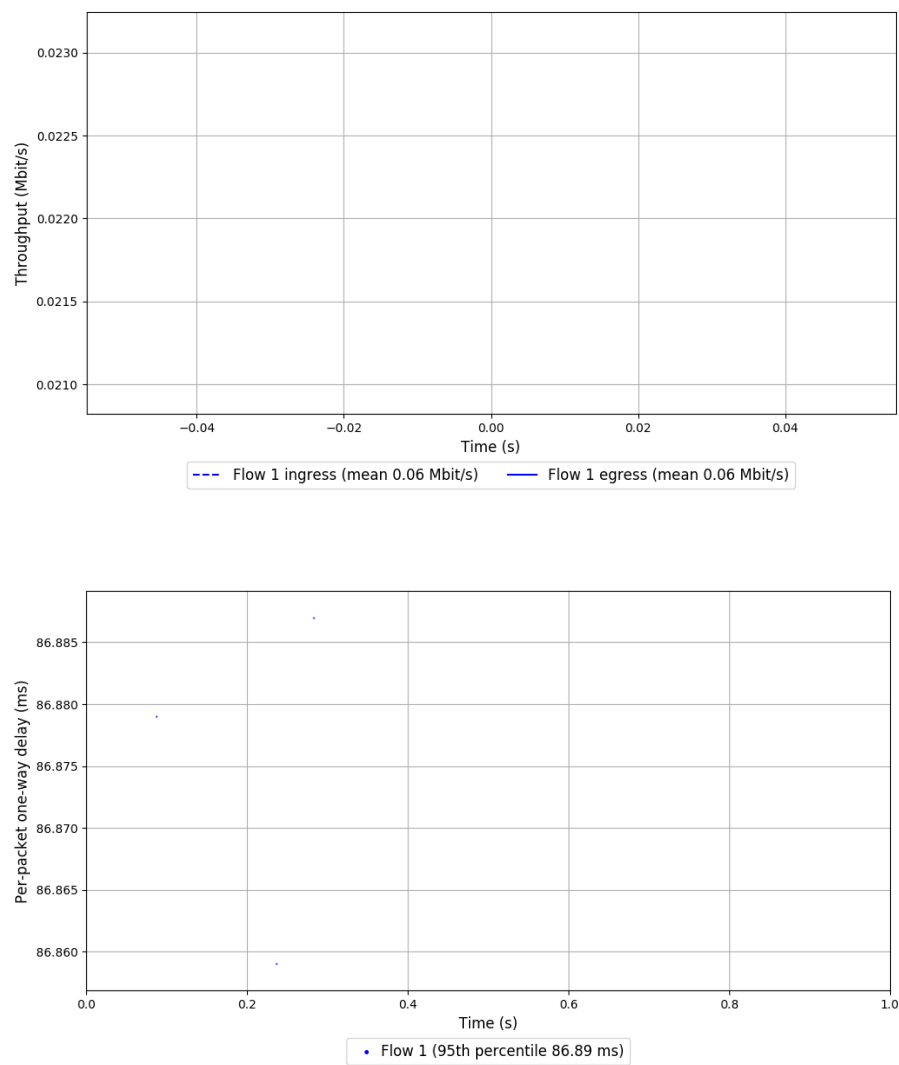


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-16 20:28:13

End at: 2017-08-16 20:28:43

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-16 20:39:38

End at: 2017-08-16 20:40:08

Below is generated by plot.py at 2017-08-16 23:22:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.48 Mbit/s

95th percentile per-packet one-way delay: 86.426 ms

Loss rate: 0.00%

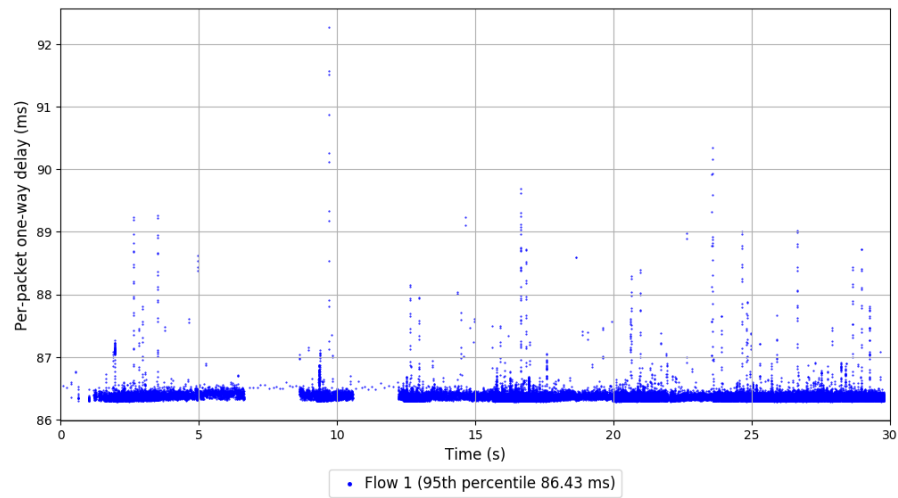
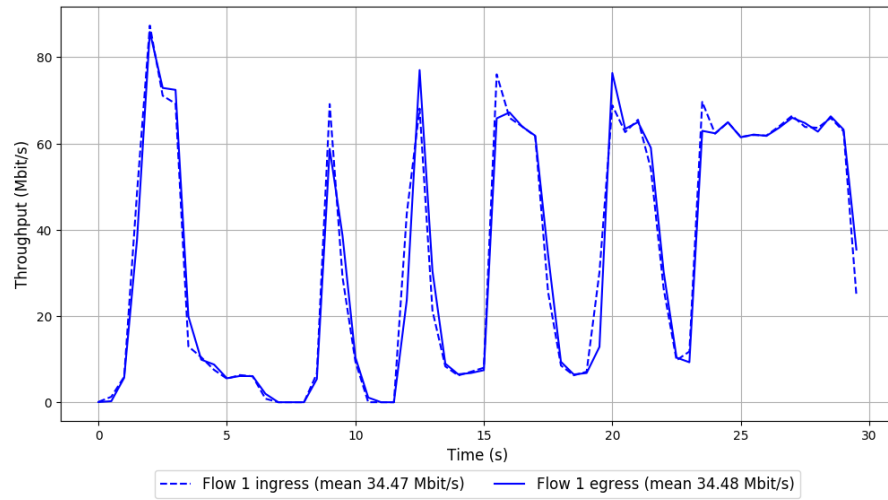
-- Flow 1:

Average throughput: 34.48 Mbit/s

95th percentile per-packet one-way delay: 86.426 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-16 20:50:36

End at: 2017-08-16 20:51:06

Below is generated by plot.py at 2017-08-16 23:22:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.47 Mbit/s

95th percentile per-packet one-way delay: 86.788 ms

Loss rate: 0.00%

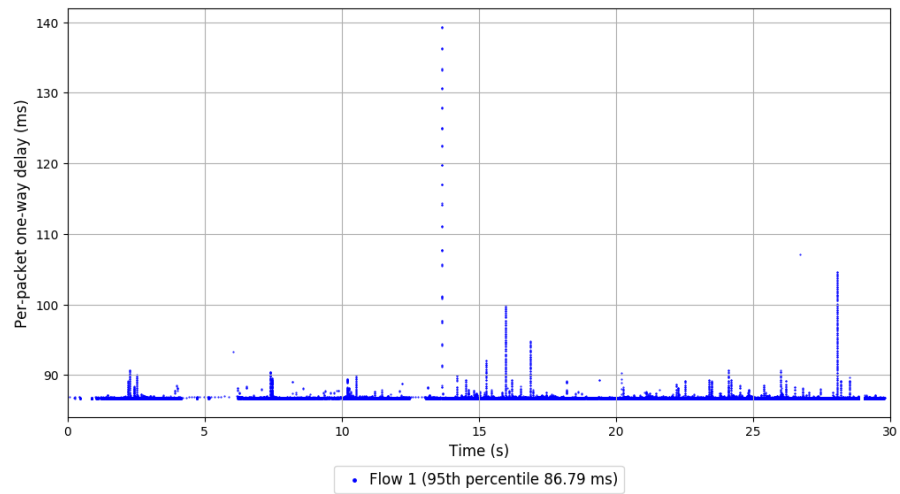
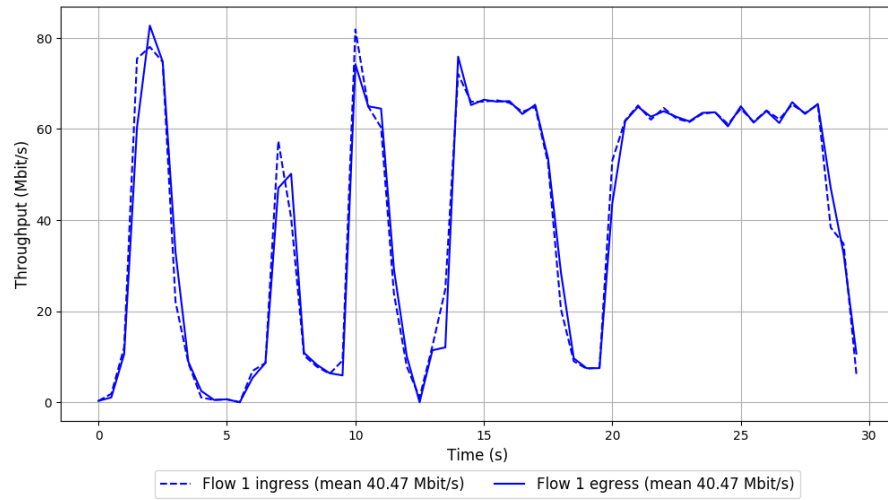
-- Flow 1:

Average throughput: 40.47 Mbit/s

95th percentile per-packet one-way delay: 86.788 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-16 21:02:07

End at: 2017-08-16 21:02:37

Below is generated by plot.py at 2017-08-16 23:22:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.35 Mbit/s

95th percentile per-packet one-way delay: 86.738 ms

Loss rate: 0.00%

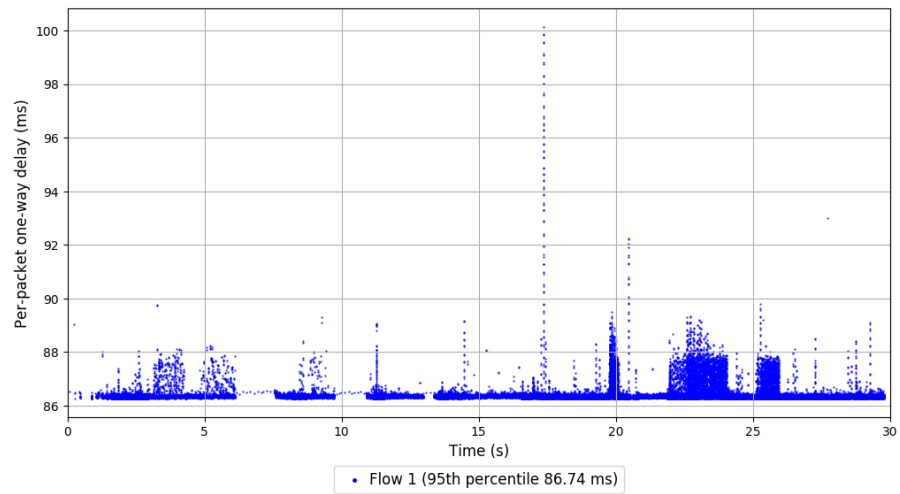
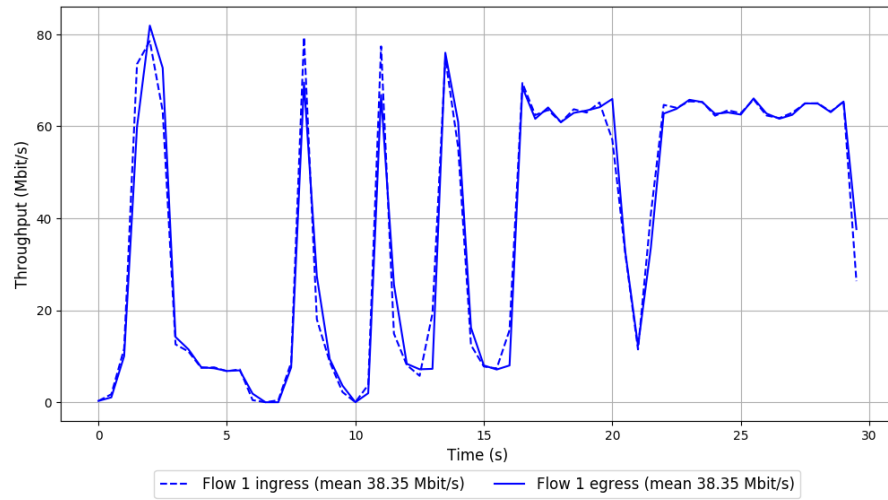
-- Flow 1:

Average throughput: 38.35 Mbit/s

95th percentile per-packet one-way delay: 86.738 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-16 21:12:47

End at: 2017-08-16 21:13:17

Below is generated by plot.py at 2017-08-16 23:22:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 87.314 ms

Loss rate: 0.00%

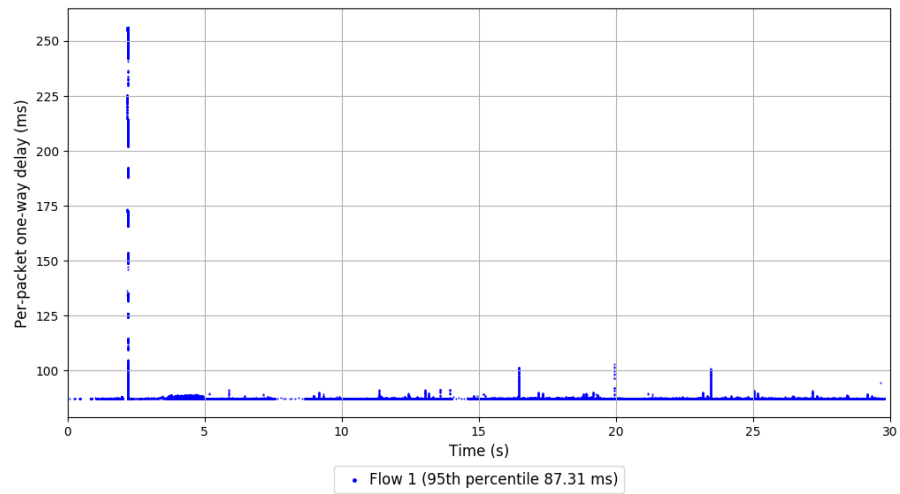
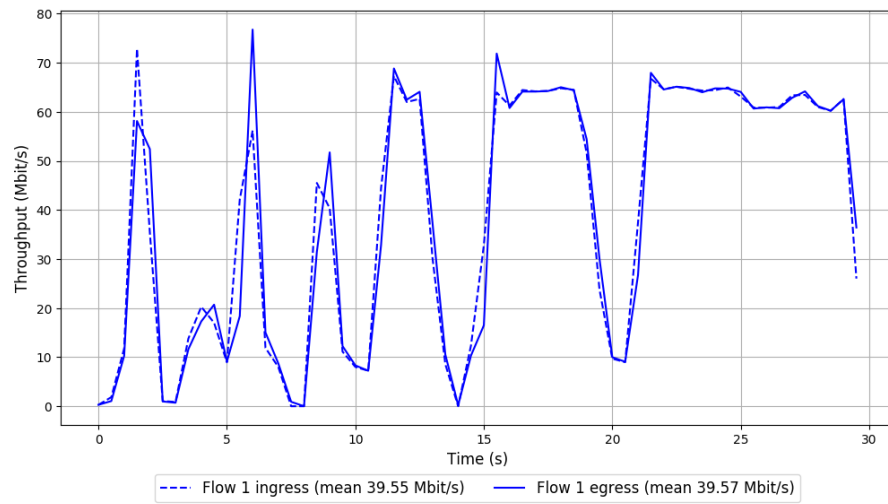
-- Flow 1:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 87.314 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-16 21:24:13

End at: 2017-08-16 21:24:43

Below is generated by plot.py at 2017-08-16 23:22:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.04 Mbit/s

95th percentile per-packet one-way delay: 86.511 ms

Loss rate: 0.00%

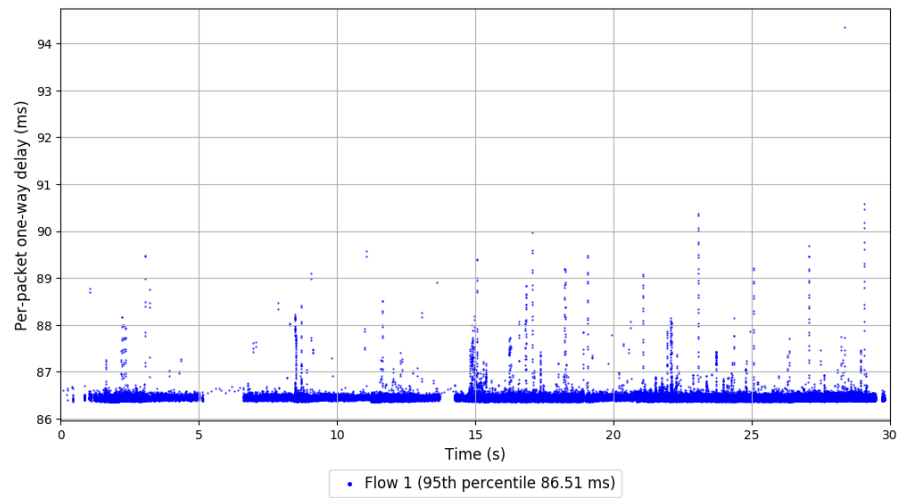
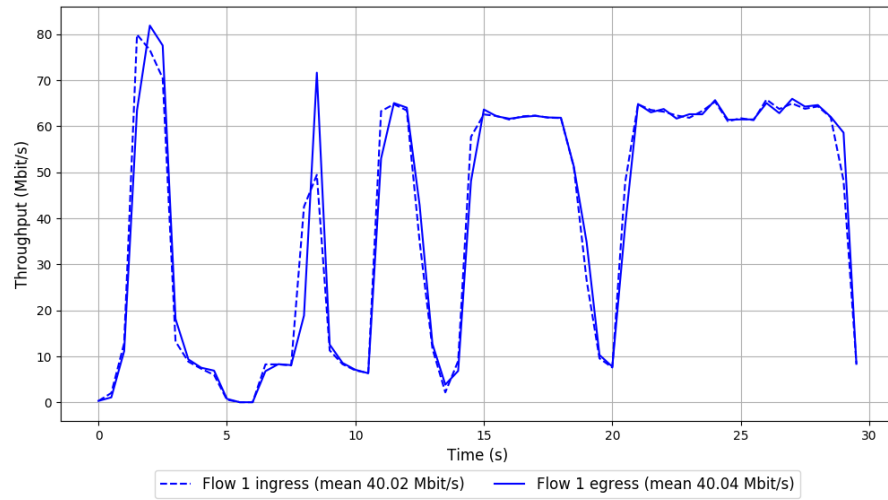
-- Flow 1:

Average throughput: 40.04 Mbit/s

95th percentile per-packet one-way delay: 86.511 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-16 21:35:49

End at: 2017-08-16 21:36:19

Below is generated by plot.py at 2017-08-16 23:22:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.61 Mbit/s

95th percentile per-packet one-way delay: 86.896 ms

Loss rate: 0.00%

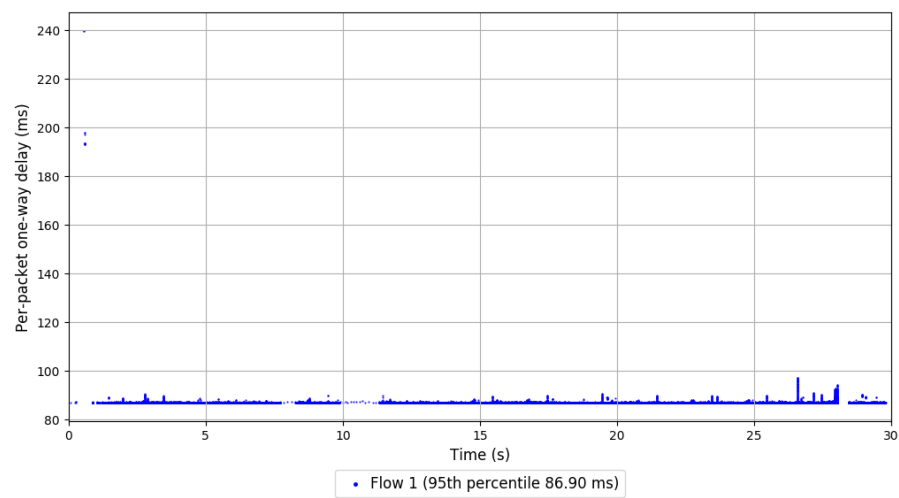
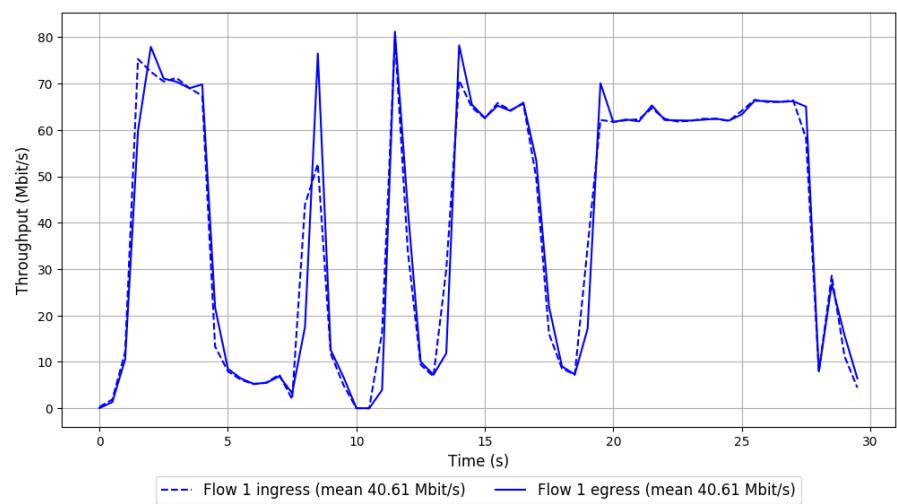
-- Flow 1:

Average throughput: 40.61 Mbit/s

95th percentile per-packet one-way delay: 86.896 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-16 21:46:35

End at: 2017-08-16 21:47:05

Below is generated by plot.py at 2017-08-16 23:23:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.34 Mbit/s

95th percentile per-packet one-way delay: 86.529 ms

Loss rate: 0.00%

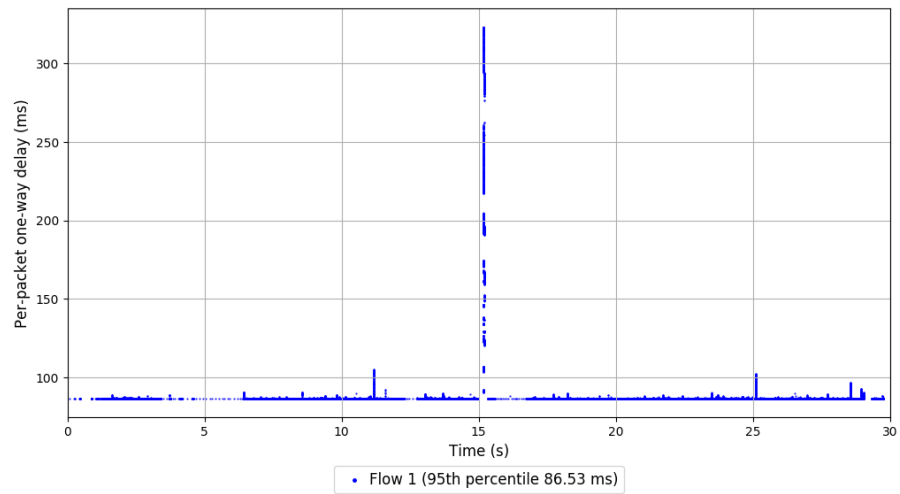
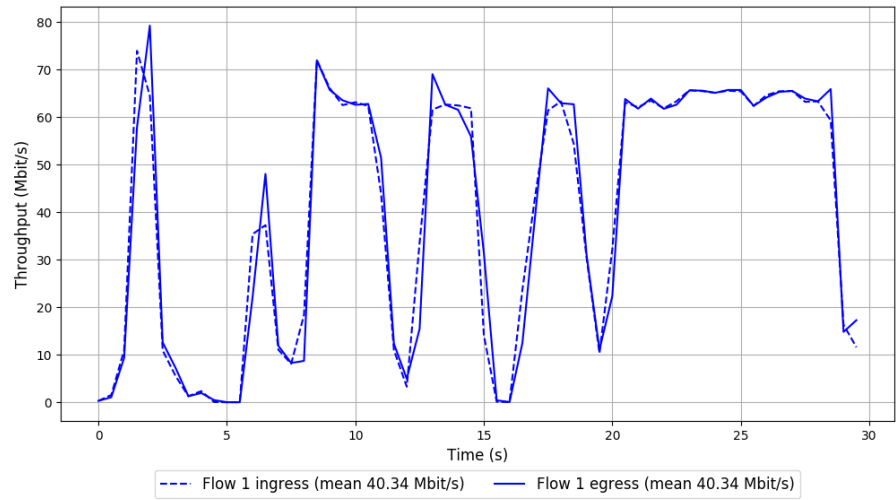
-- Flow 1:

Average throughput: 40.34 Mbit/s

95th percentile per-packet one-way delay: 86.529 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-16 21:57:49

End at: 2017-08-16 21:58:19

Below is generated by plot.py at 2017-08-16 23:23:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.74 Mbit/s

95th percentile per-packet one-way delay: 86.452 ms

Loss rate: 0.00%

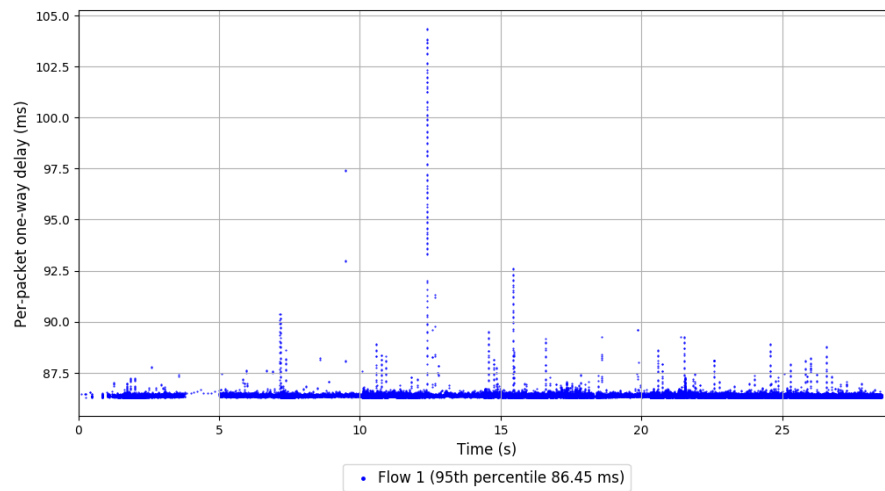
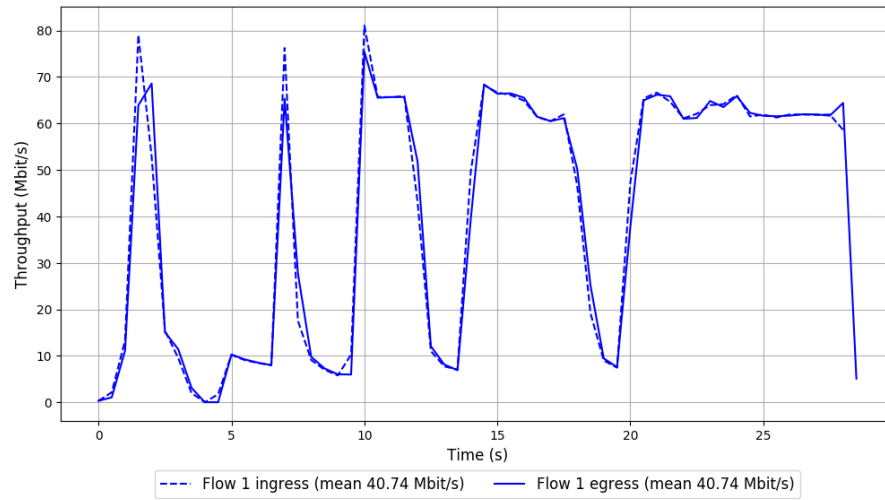
-- Flow 1:

Average throughput: 40.74 Mbit/s

95th percentile per-packet one-way delay: 86.452 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

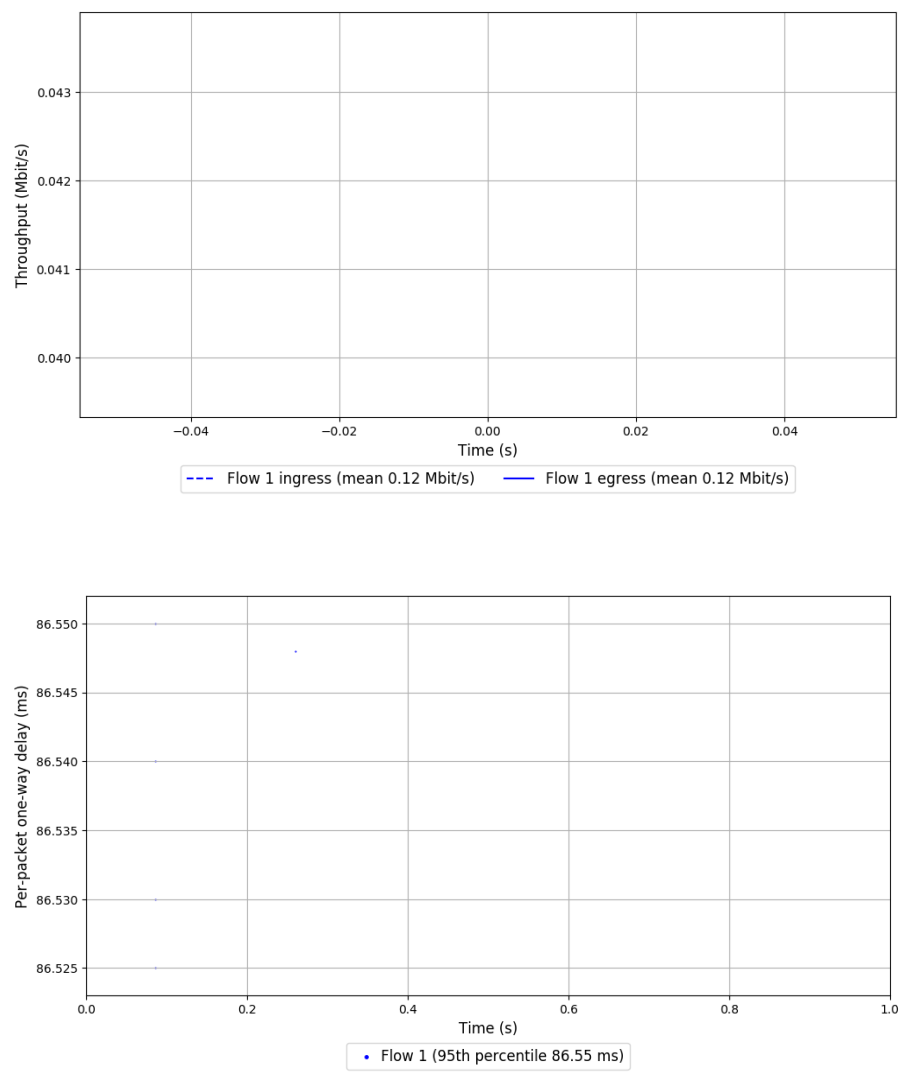


Run 10: Statistics of QUIC Cubic

Start at: 2017-08-16 22:08:46

End at: 2017-08-16 22:09:16

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of Saturator

Start at: 2017-08-16 20:23:50

End at: 2017-08-16 20:24:20

Below is generated by plot.py at 2017-08-16 23:23:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 87.331 ms

Loss rate: 2.11%

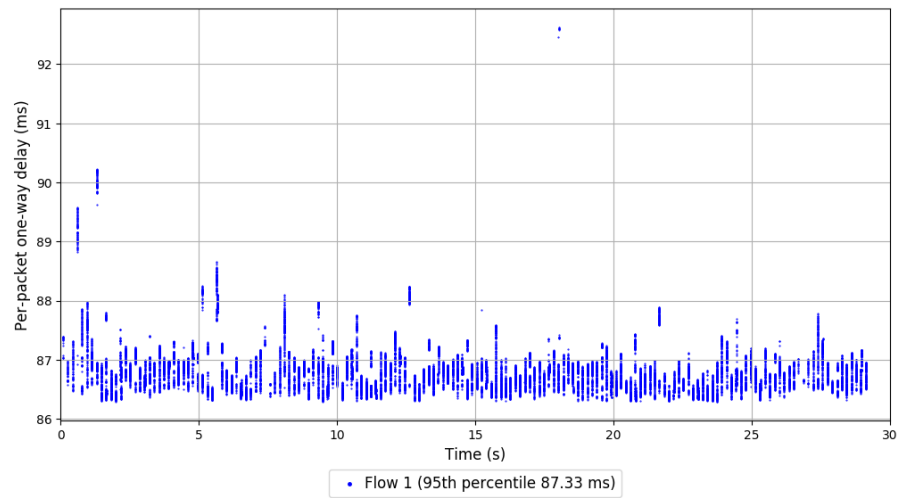
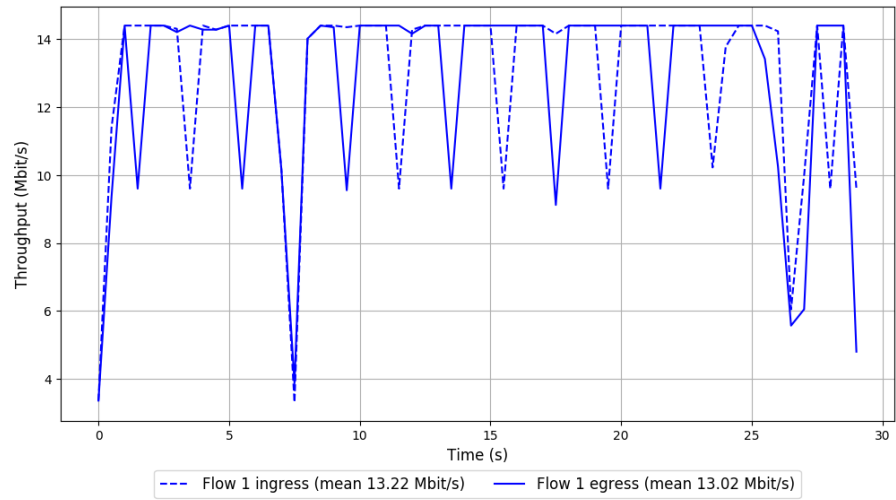
-- Flow 1:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 87.331 ms

Loss rate: 2.11%

Run 1: Report of Saturator — Data Link

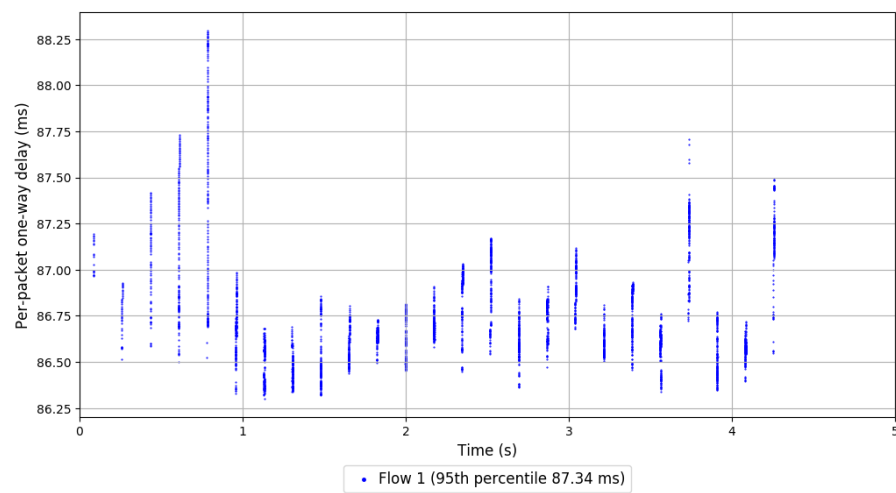
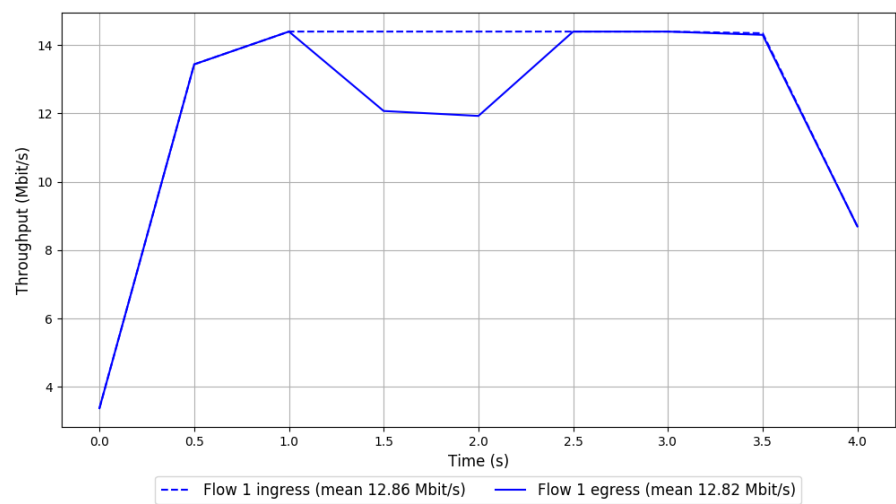


Run 2: Statistics of Saturator

Start at: 2017-08-16 20:34:38

End at: 2017-08-16 20:35:08

Run 2: Report of Saturator — Data Link

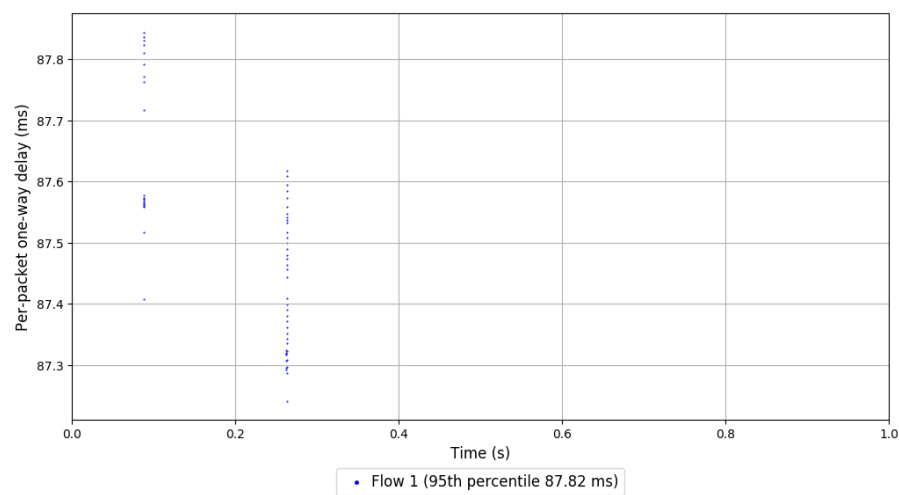
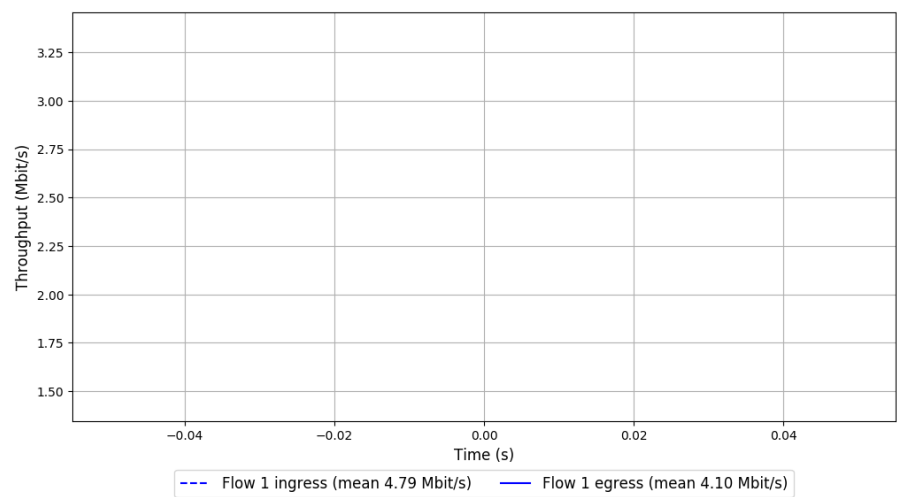


Run 3: Statistics of Saturator

Start at: 2017-08-16 20:45:53

End at: 2017-08-16 20:46:23

Run 3: Report of Saturator — Data Link

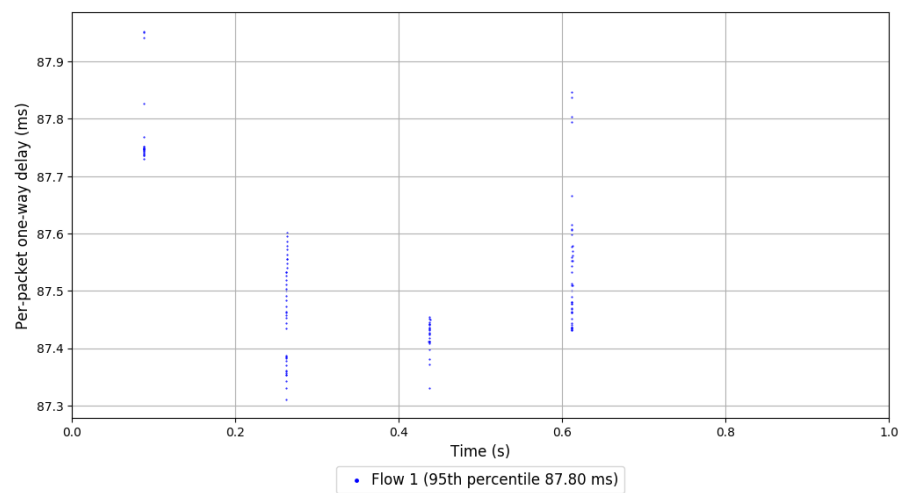
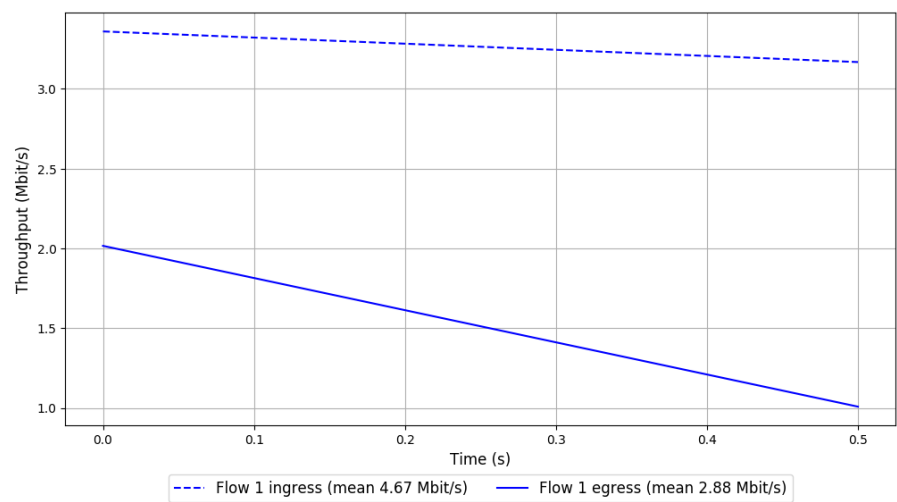


Run 4: Statistics of Saturator

Start at: 2017-08-16 20:57:39

End at: 2017-08-16 20:58:09

Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: 2017-08-16 21:08:26

End at: 2017-08-16 21:08:56

Below is generated by plot.py at 2017-08-16 23:23:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 87.276 ms

Loss rate: 1.58%

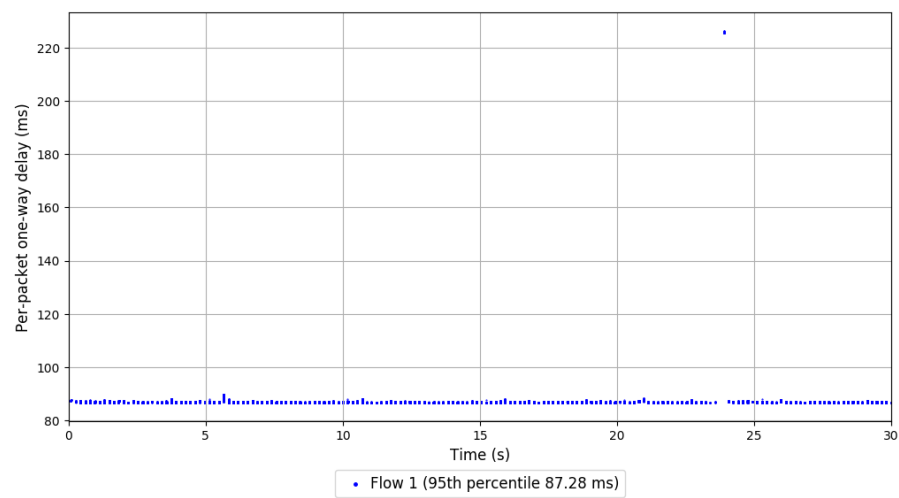
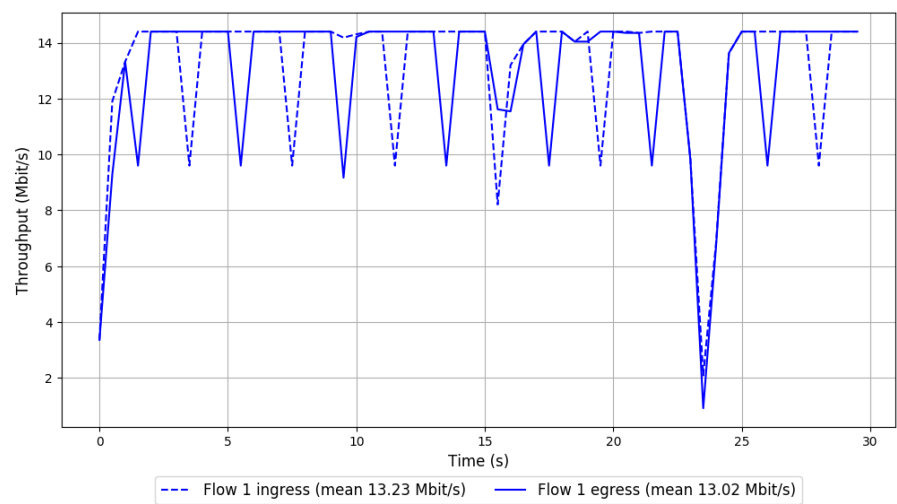
-- Flow 1:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 87.276 ms

Loss rate: 1.58%

Run 5: Report of Saturator — Data Link

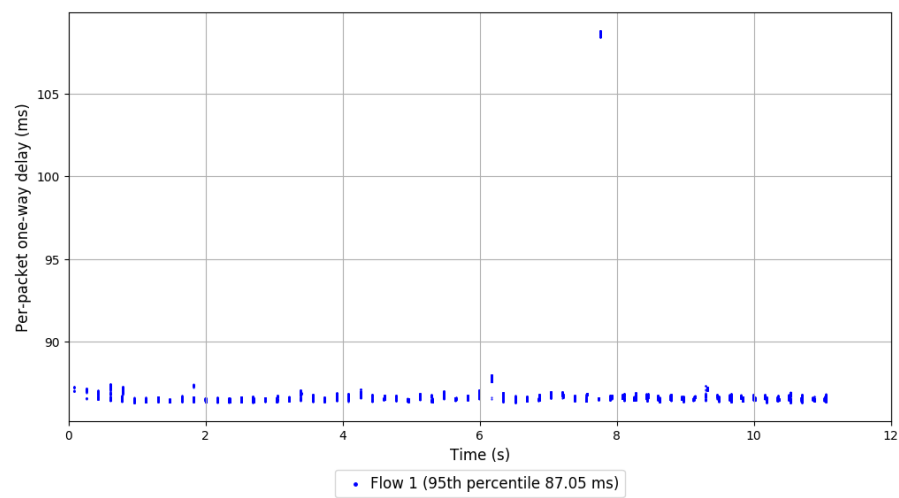
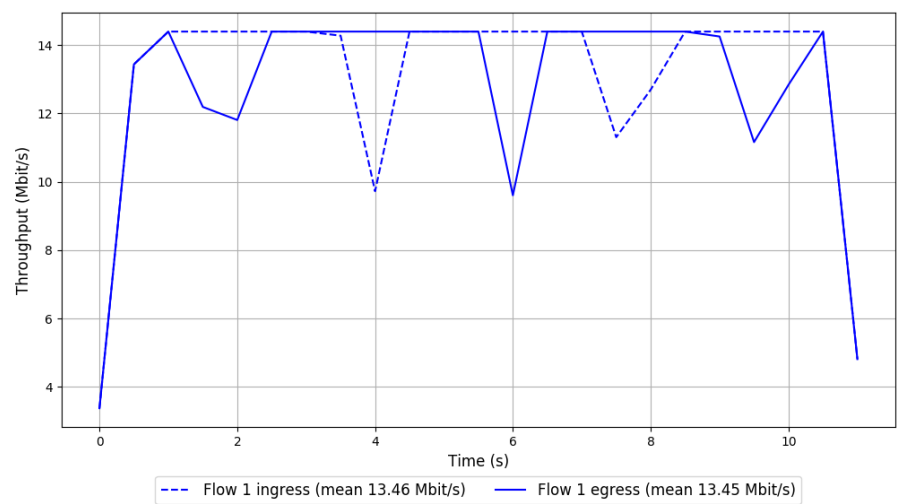


Run 6: Statistics of Saturator

Start at: 2017-08-16 21:19:08

End at: 2017-08-16 21:19:38

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-16 21:31:04

End at: 2017-08-16 21:31:34

Below is generated by plot.py at 2017-08-16 23:23:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 87.489 ms

Loss rate: 0.95%

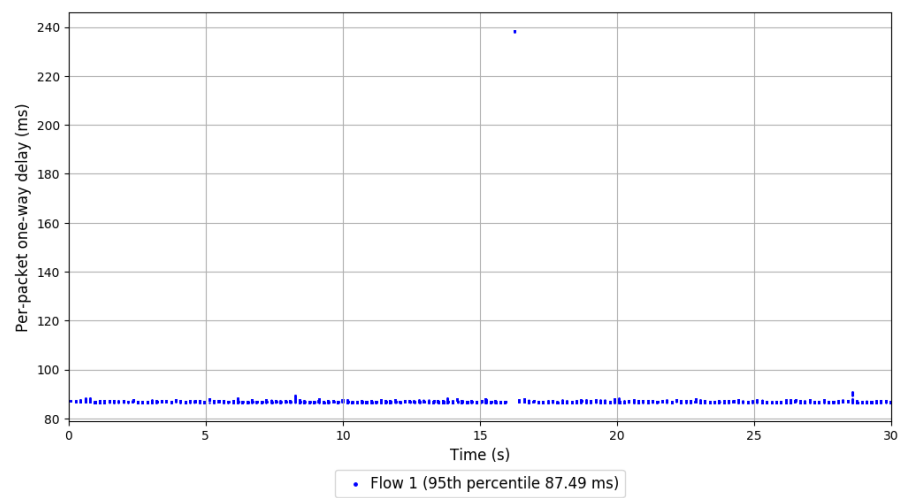
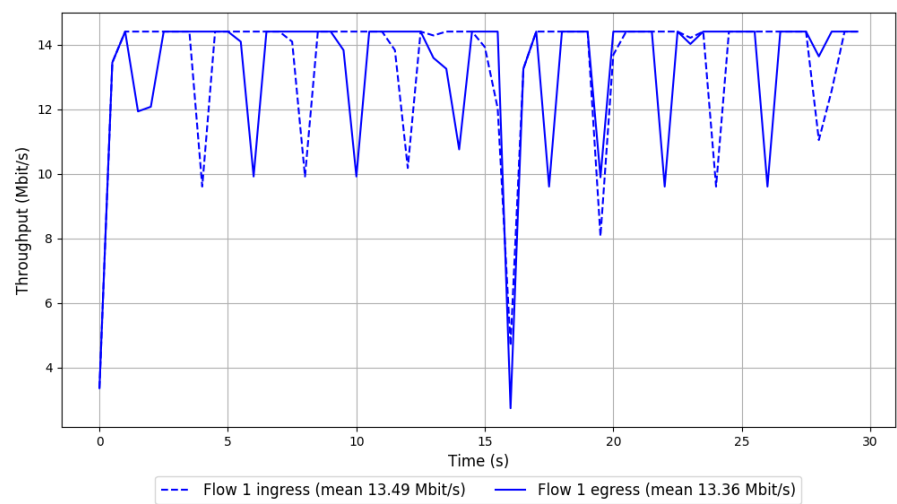
-- Flow 1:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 87.489 ms

Loss rate: 0.95%

Run 7: Report of Saturator — Data Link

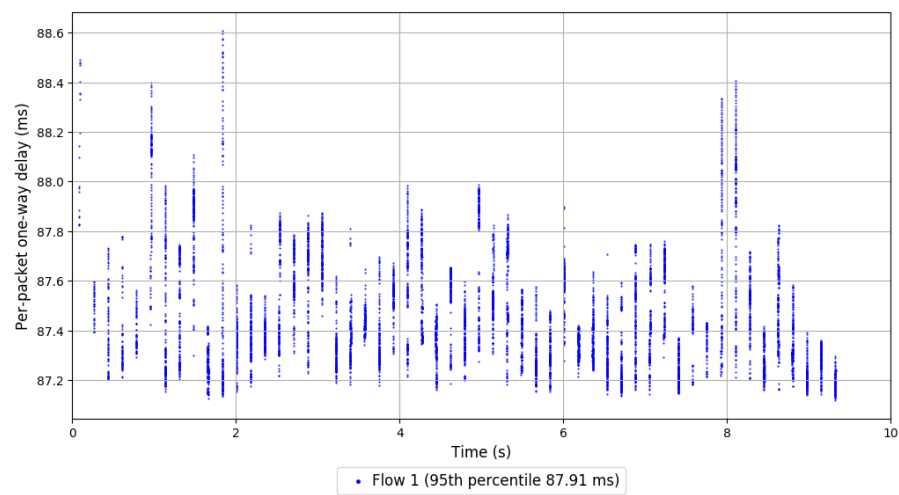
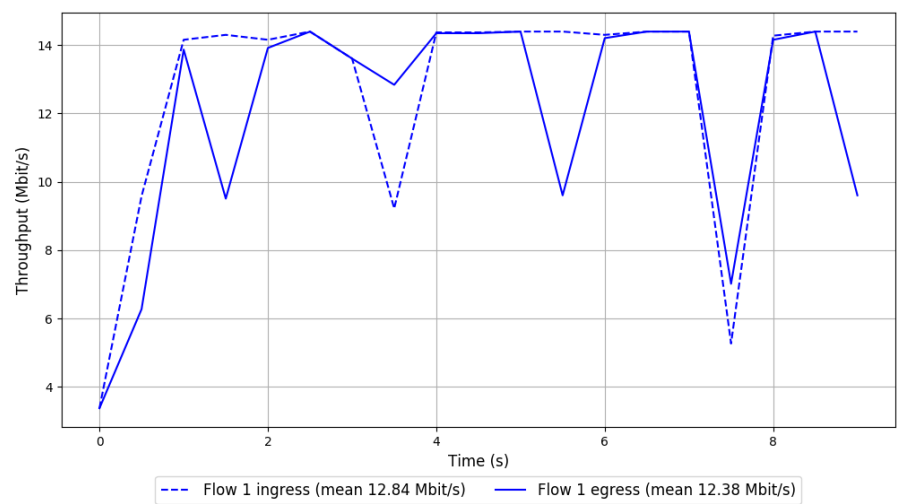


Run 8: Statistics of Saturator

Start at: 2017-08-16 21:42:10

End at: 2017-08-16 21:42:40

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: 2017-08-16 21:53:23

End at: 2017-08-16 21:53:53

Below is generated by plot.py at 2017-08-16 23:23:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.38 Mbit/s

95th percentile per-packet one-way delay: 87.579 ms

Loss rate: 1.62%

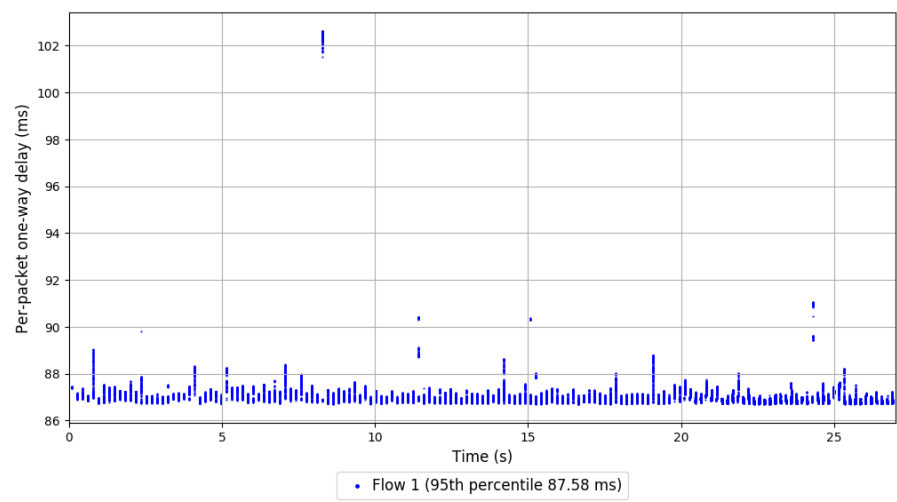
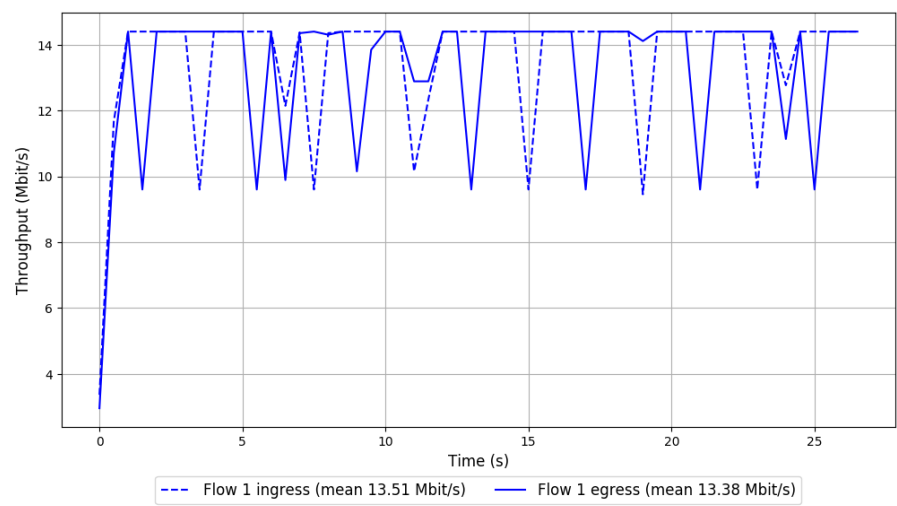
-- Flow 1:

Average throughput: 13.38 Mbit/s

95th percentile per-packet one-way delay: 87.579 ms

Loss rate: 1.62%

Run 9: Report of Saturator — Data Link

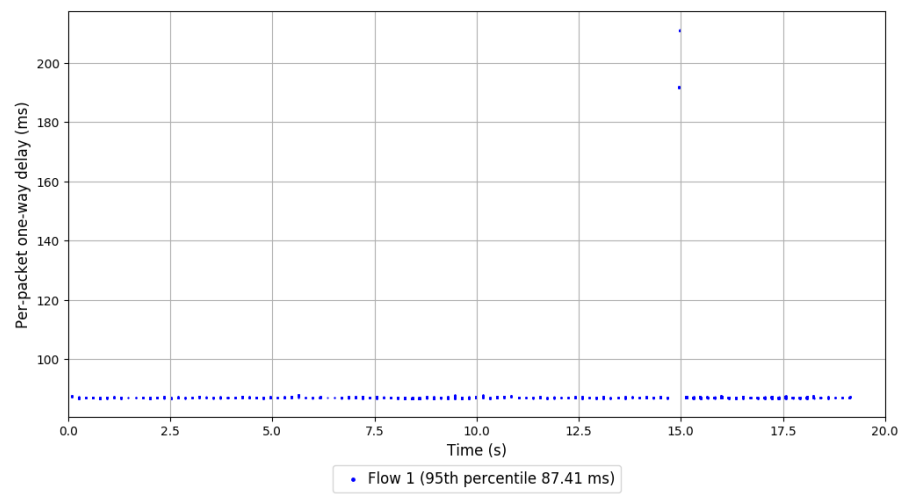
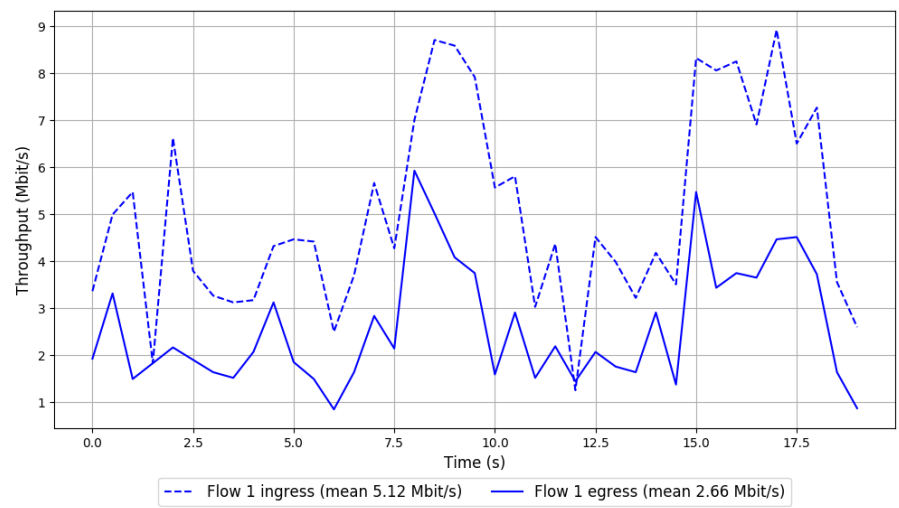


Run 10: Statistics of Saturator

Start at: 2017-08-16 22:04:05

End at: 2017-08-16 22:04:35

Run 10: Report of Saturator — Data Link

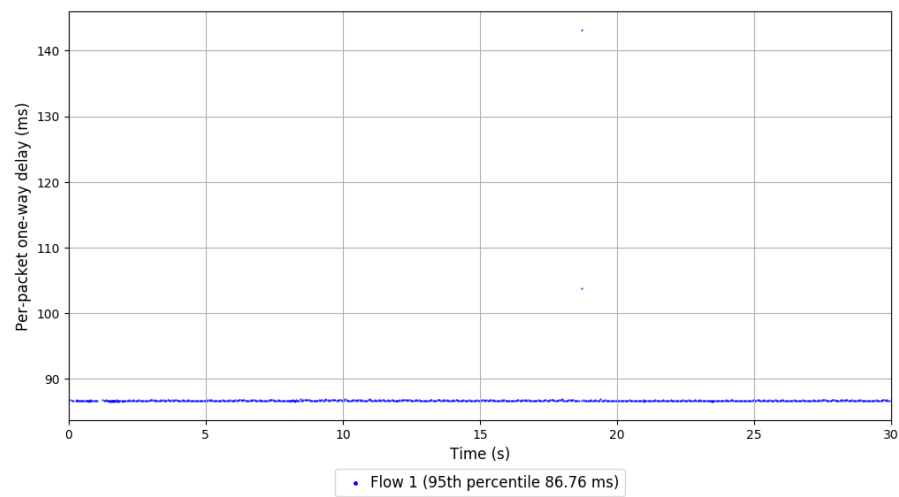
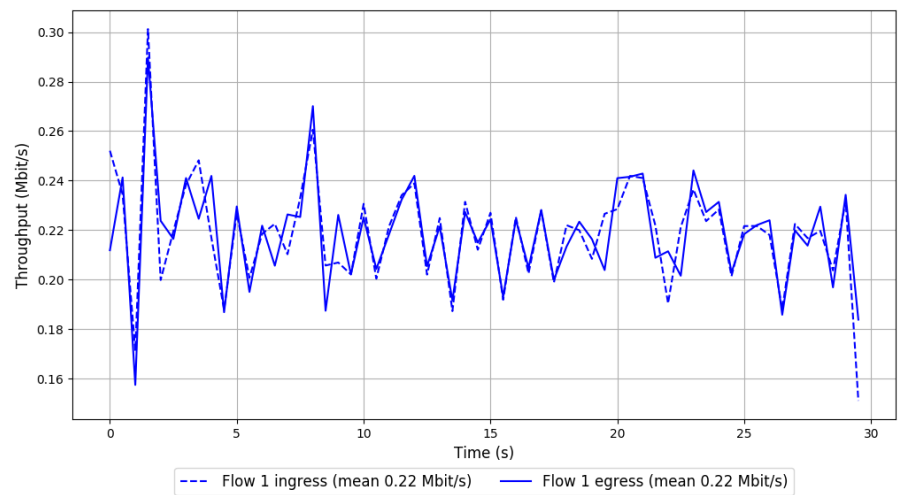


```
Run 1: Statistics of SCReAM

Start at: 2017-08-16 20:24:31
End at: 2017-08-16 20:25:01

# Below is generated by plot.py at 2017-08-16 23:23:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.760 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.760 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

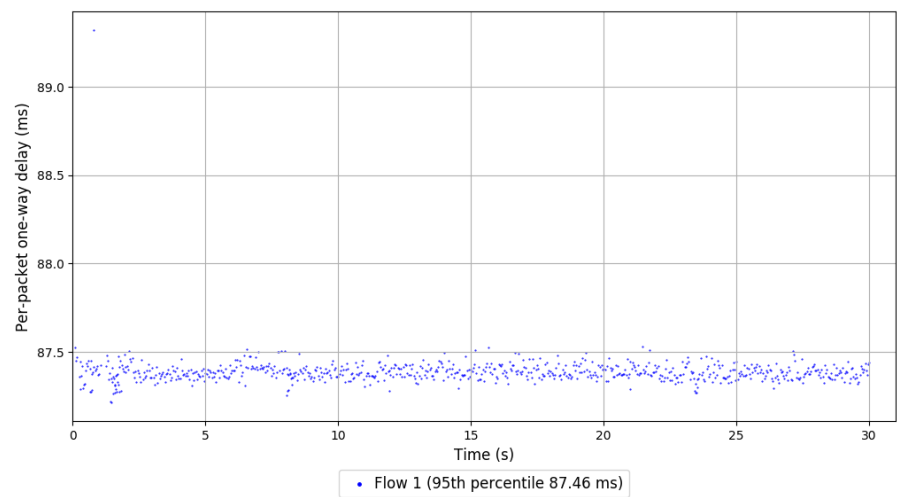
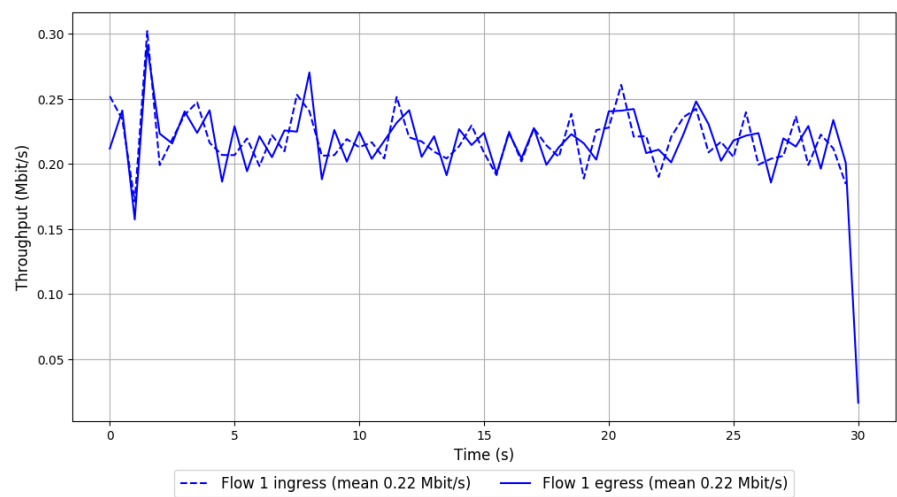


```
Run 2: Statistics of SCReAM

Start at: 2017-08-16 20:35:17
End at: 2017-08-16 20:35:47

# Below is generated by plot.py at 2017-08-16 23:23:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.463 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.463 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-16 20:46:32

End at: 2017-08-16 20:47:02

Below is generated by plot.py at 2017-08-16 23:23:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 86.717 ms

Loss rate: 0.00%

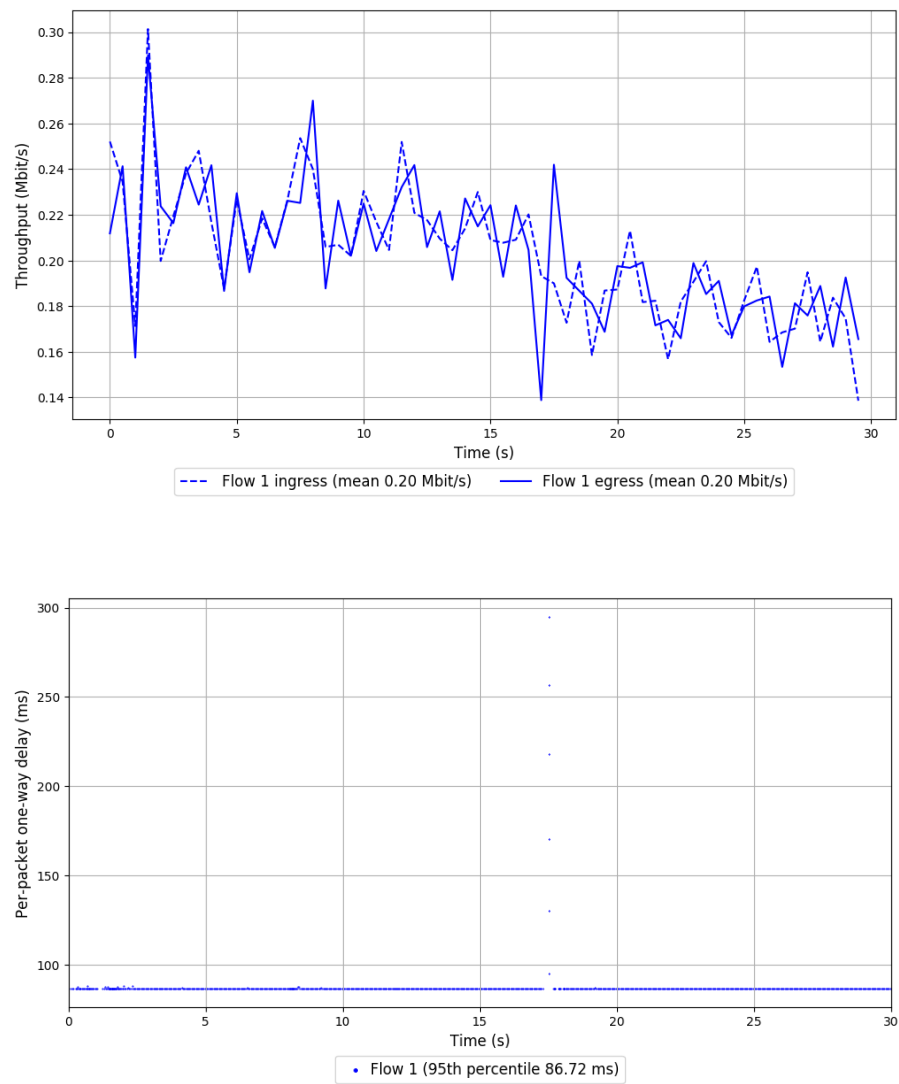
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 86.717 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-16 20:58:18

End at: 2017-08-16 20:58:48

Below is generated by plot.py at 2017-08-16 23:23:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 86.267 ms

Loss rate: 0.00%

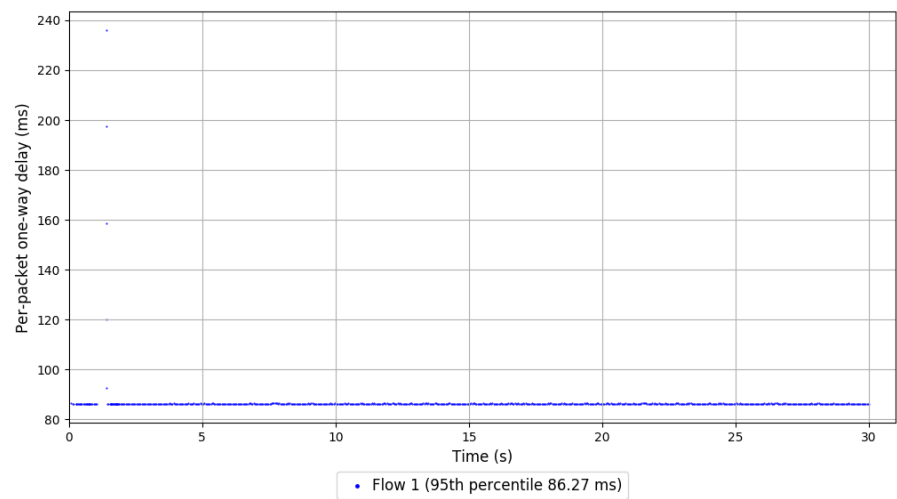
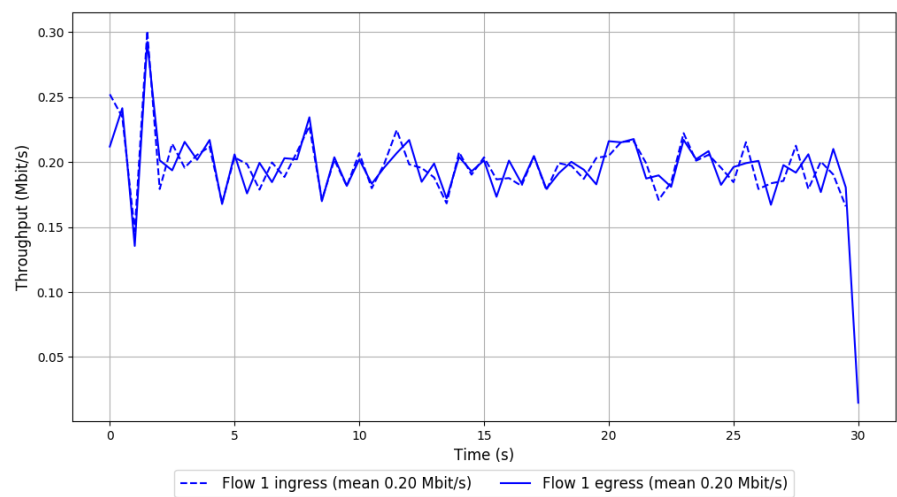
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 86.267 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-16 21:09:07

End at: 2017-08-16 21:09:37

Below is generated by plot.py at 2017-08-16 23:23:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.216 ms

Loss rate: 0.00%

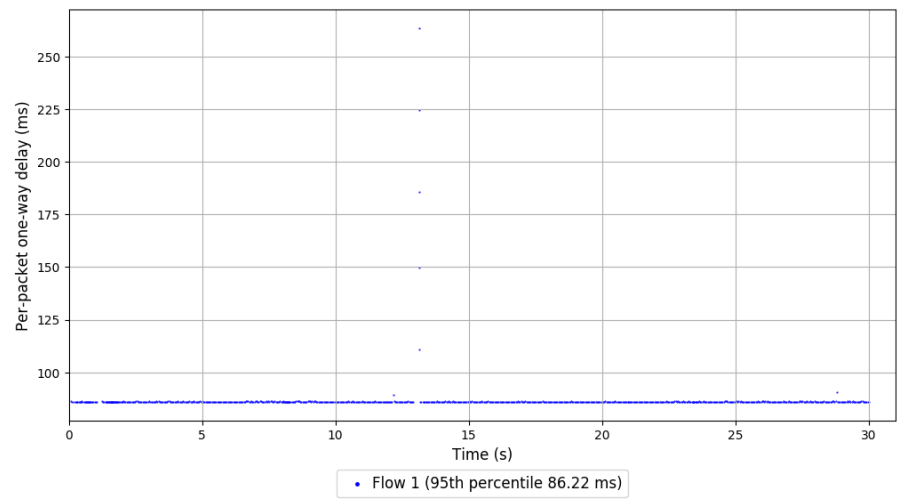
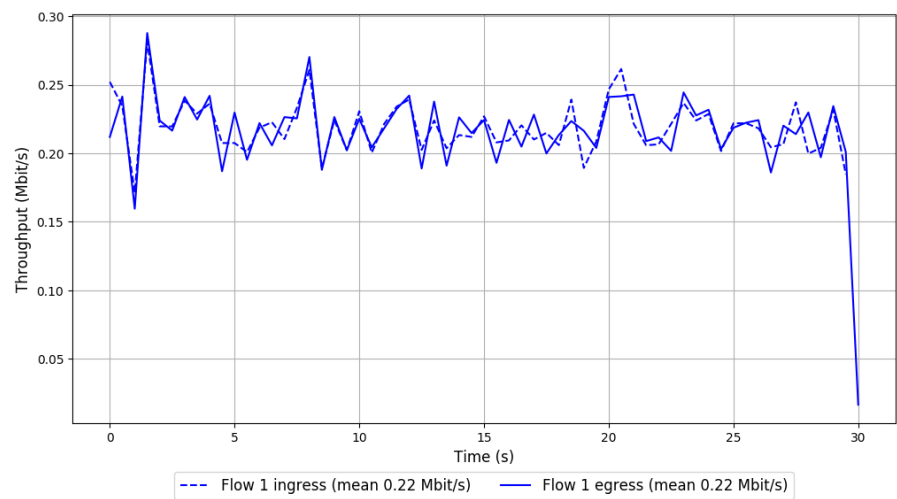
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.216 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-16 21:19:48

End at: 2017-08-16 21:20:18

Below is generated by plot.py at 2017-08-16 23:23:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.000 ms

Loss rate: 0.00%

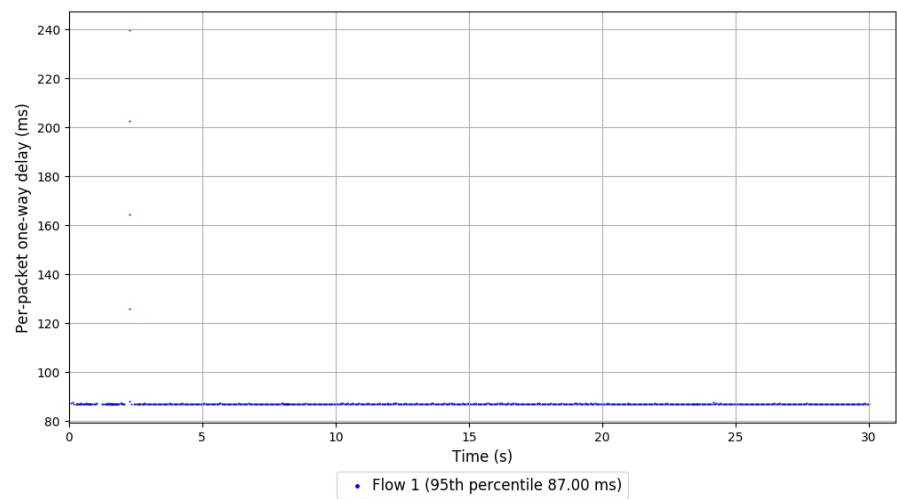
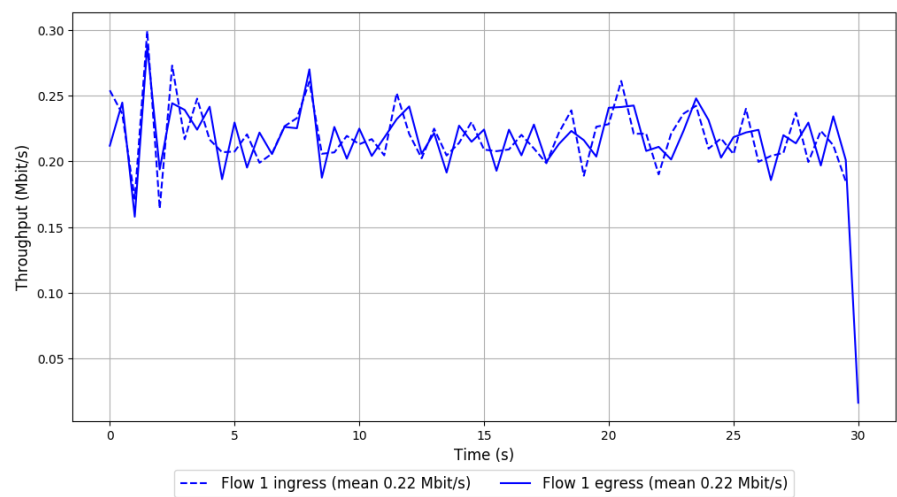
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.000 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-16 21:31:45

End at: 2017-08-16 21:32:15

Below is generated by plot.py at 2017-08-16 23:23:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.038 ms

Loss rate: 0.00%

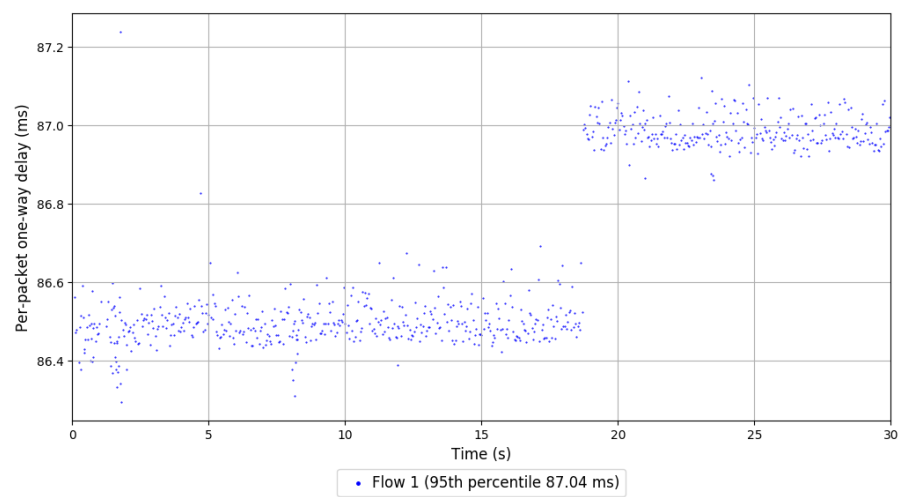
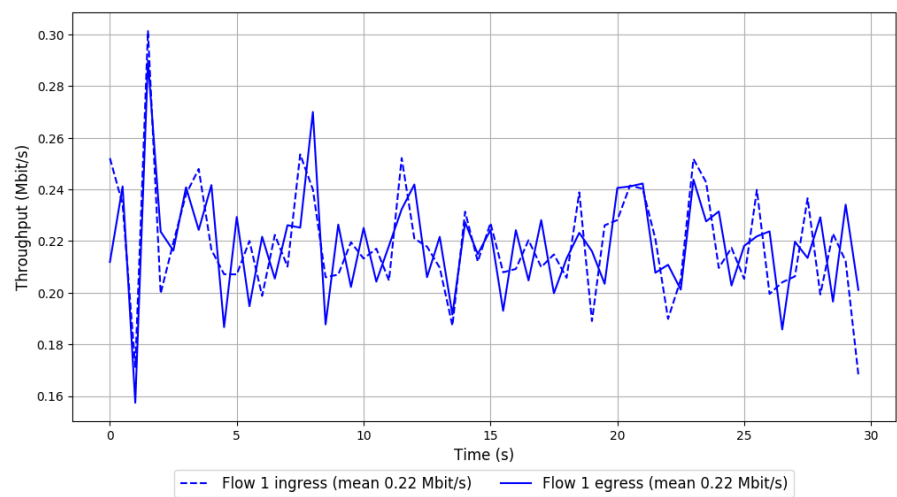
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.038 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-16 21:42:50

End at: 2017-08-16 21:43:20

Below is generated by plot.py at 2017-08-16 23:23:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.016 ms

Loss rate: 0.00%

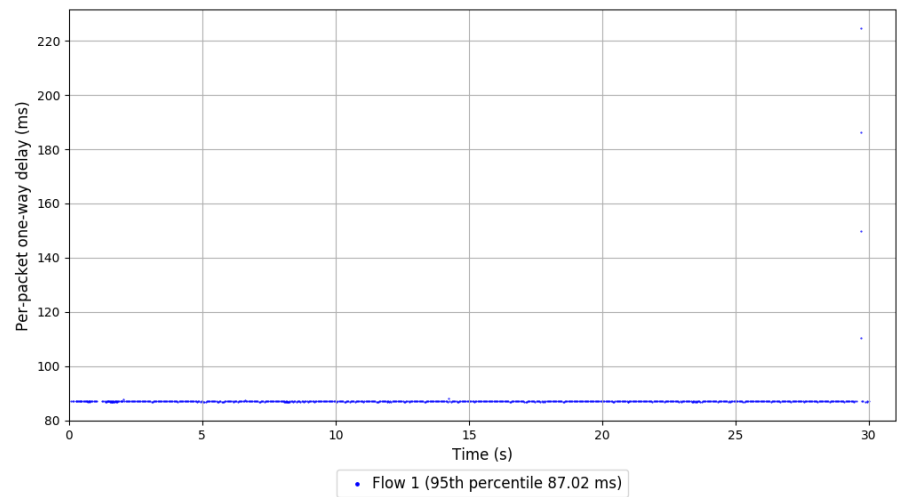
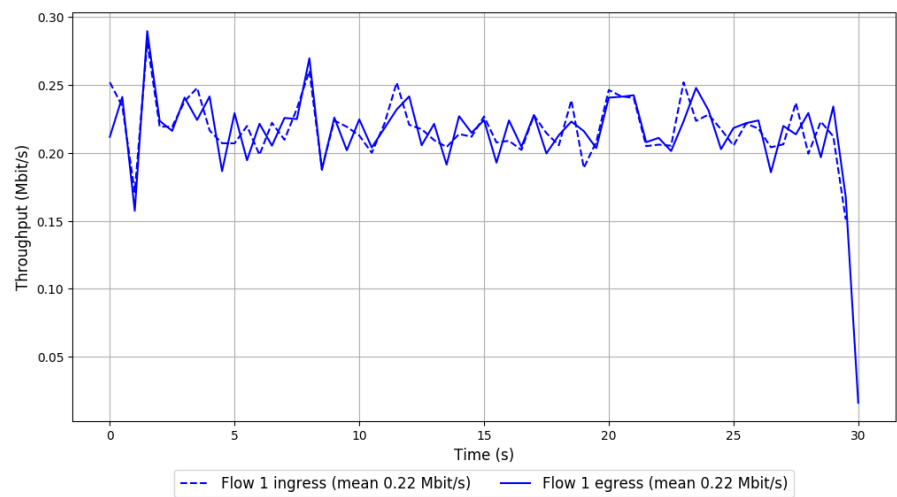
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.016 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-16 21:54:04

End at: 2017-08-16 21:54:34

Below is generated by plot.py at 2017-08-16 23:23:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.636 ms

Loss rate: 0.00%

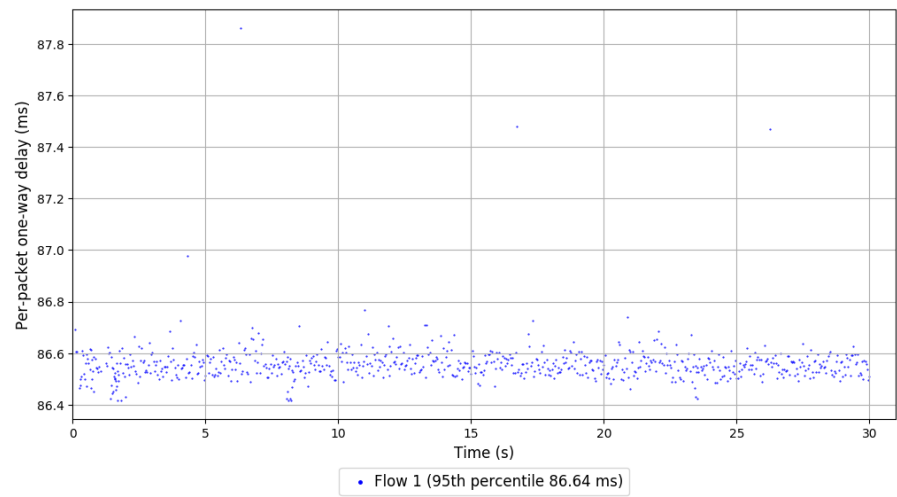
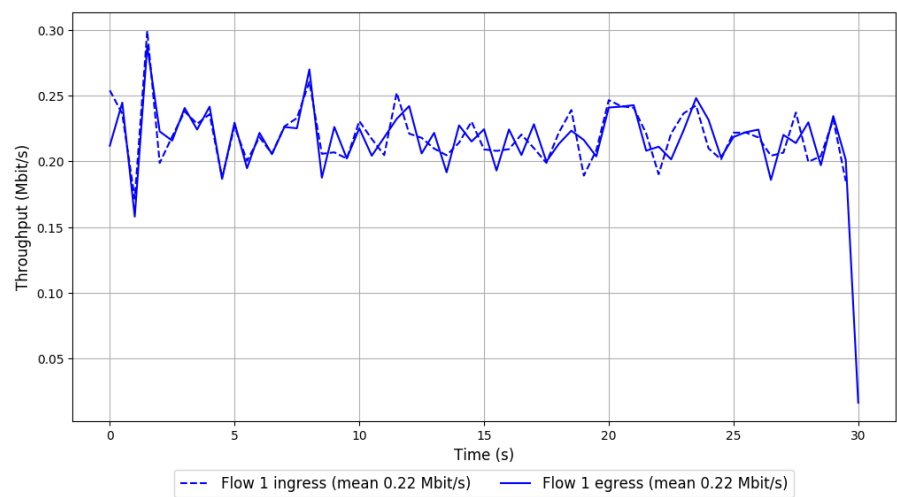
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.636 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-08-16 22:04:44

End at: 2017-08-16 22:05:14

Below is generated by plot.py at 2017-08-16 23:23:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.070 ms

Loss rate: 0.00%

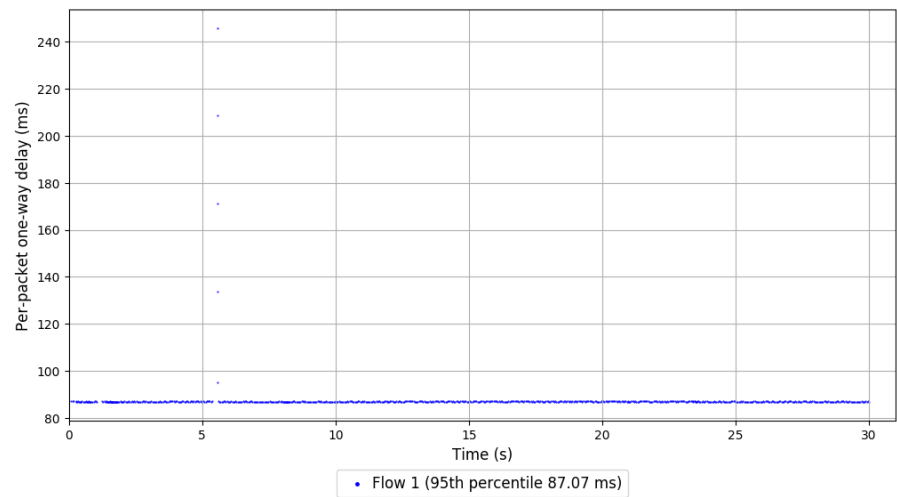
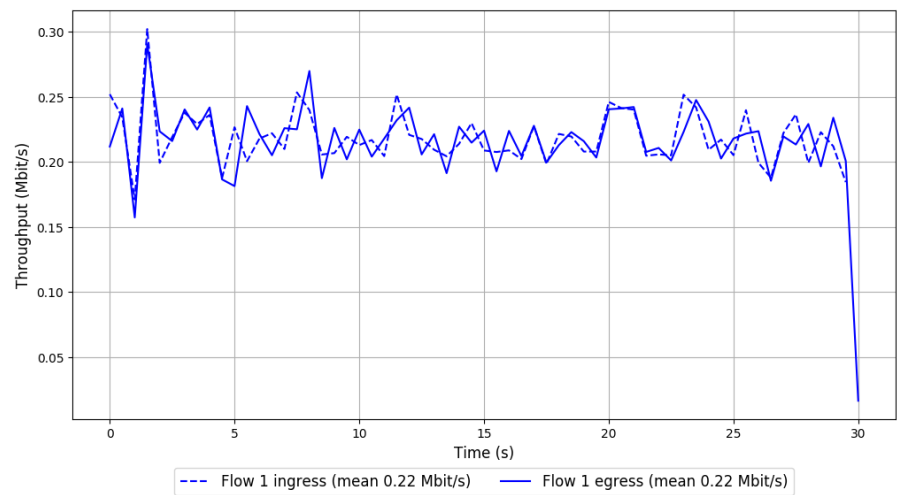
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.070 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

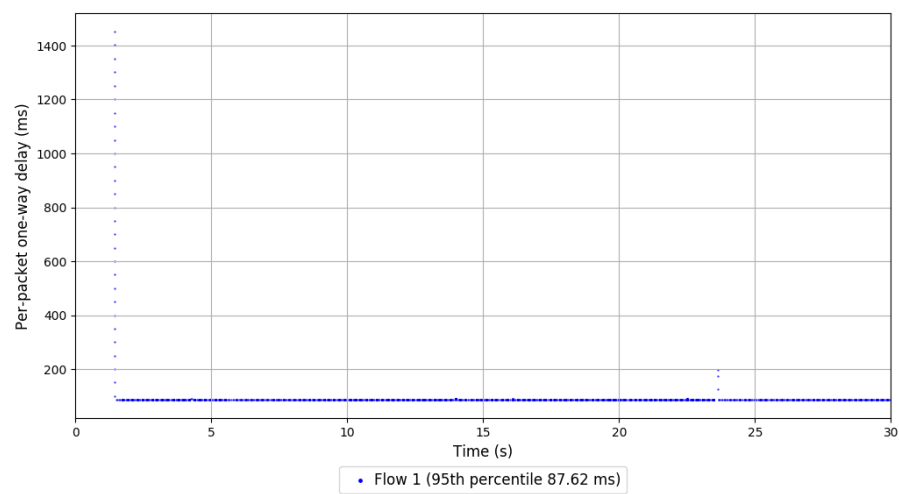
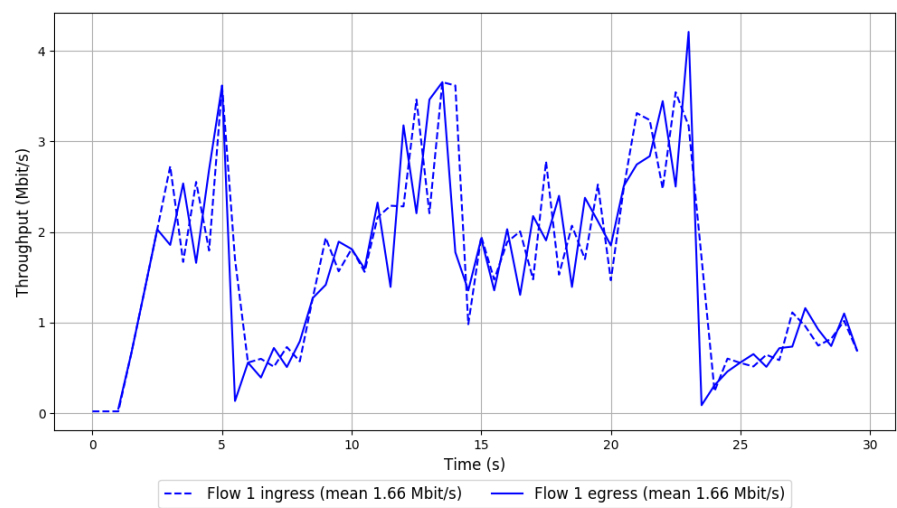


```
Run 1: Statistics of Sprout

Start at: 2017-08-16 20:20:56
End at: 2017-08-16 20:21:26

# Below is generated by plot.py at 2017-08-16 23:23:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 87.625 ms
Loss rate: 4.64%
-- Flow 1:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 87.625 ms
Loss rate: 4.64%
```


Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-16 20:31:42

End at: 2017-08-16 20:32:12

Below is generated by plot.py at 2017-08-16 23:23:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 87.296 ms

Loss rate: 1.91%

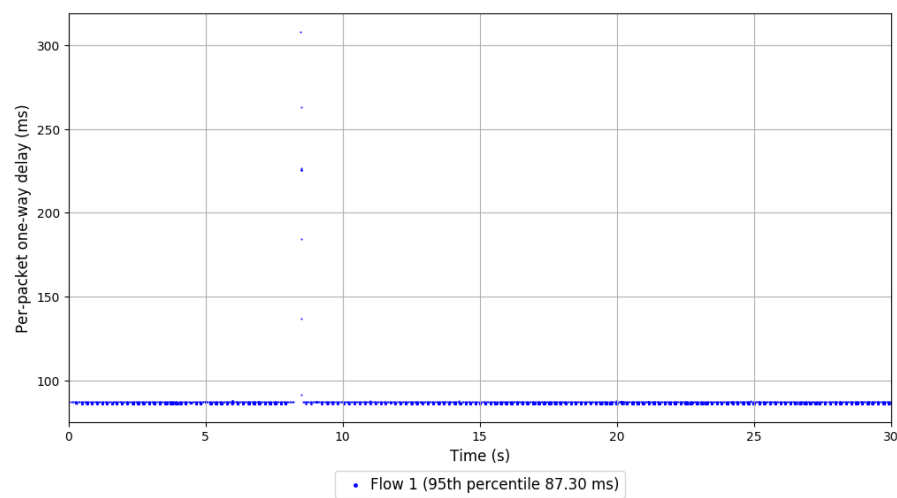
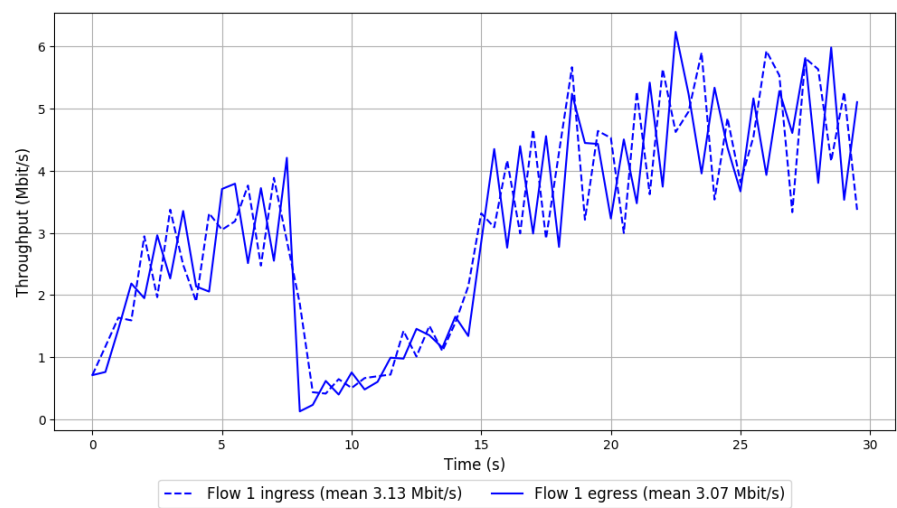
-- Flow 1:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 87.296 ms

Loss rate: 1.91%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-16 20:43:06

End at: 2017-08-16 20:43:36

Below is generated by plot.py at 2017-08-16 23:23:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 86.935 ms

Loss rate: 2.64%

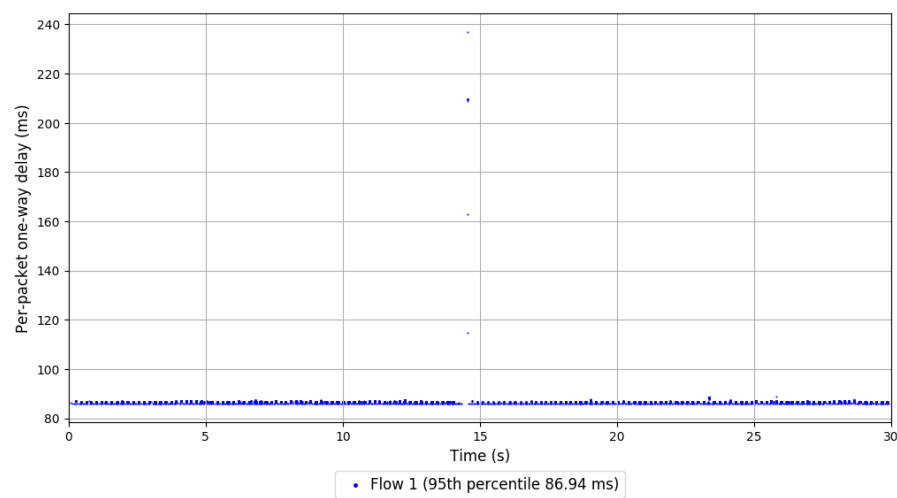
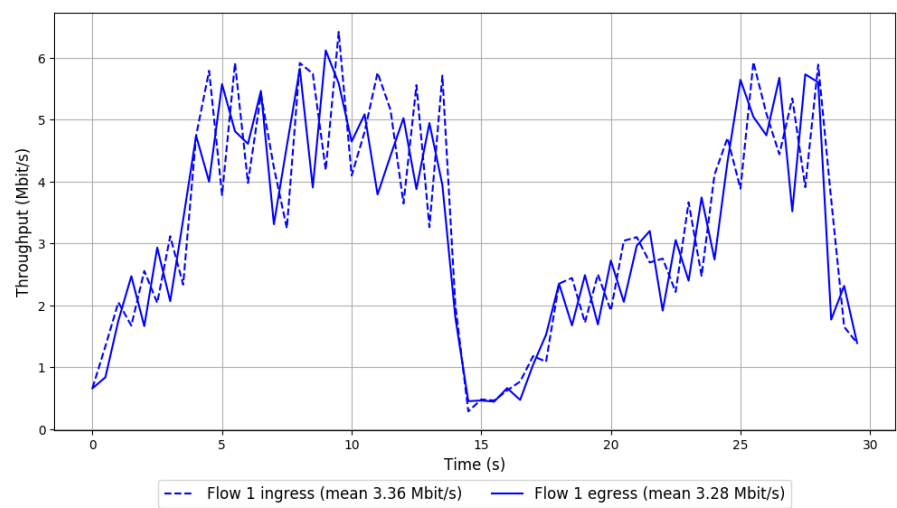
-- Flow 1:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 86.935 ms

Loss rate: 2.64%

Run 3: Report of Sprout — Data Link

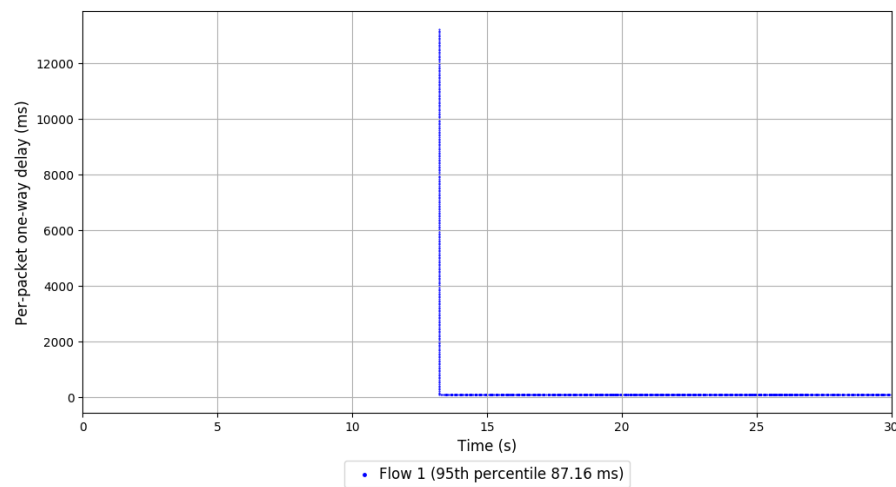
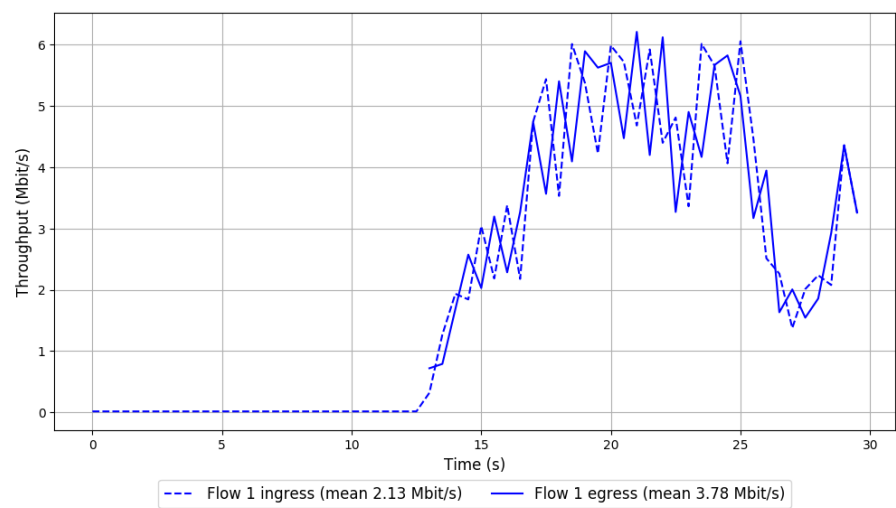


Run 4: Statistics of Sprout

Start at: 2017-08-16 20:54:13

End at: 2017-08-16 20:54:43

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-16 21:05:33

End at: 2017-08-16 21:06:03

Below is generated by plot.py at 2017-08-16 23:23:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 86.809 ms

Loss rate: 0.70%

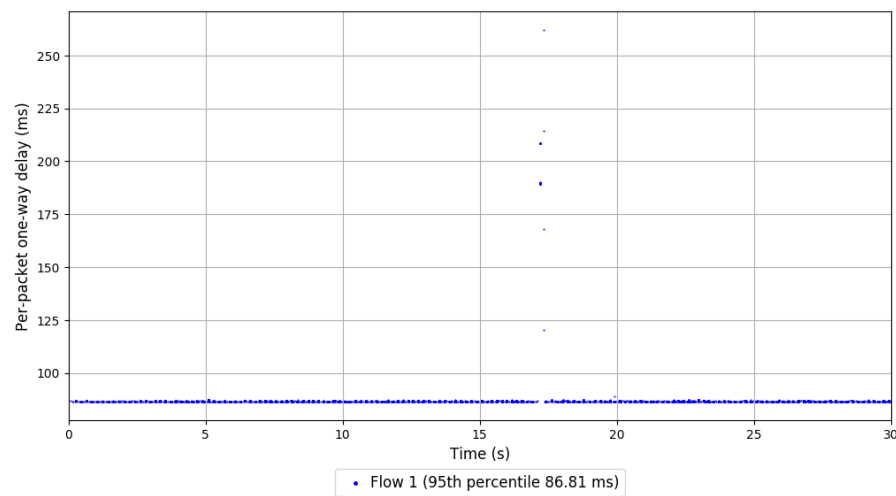
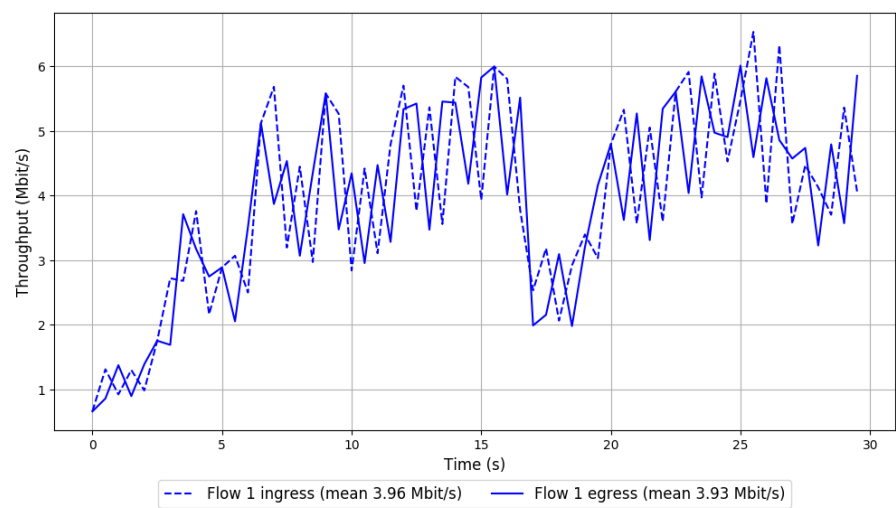
-- Flow 1:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 86.809 ms

Loss rate: 0.70%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-16 21:16:19

End at: 2017-08-16 21:16:49

Below is generated by plot.py at 2017-08-16 23:23:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 87.290 ms

Loss rate: 3.83%

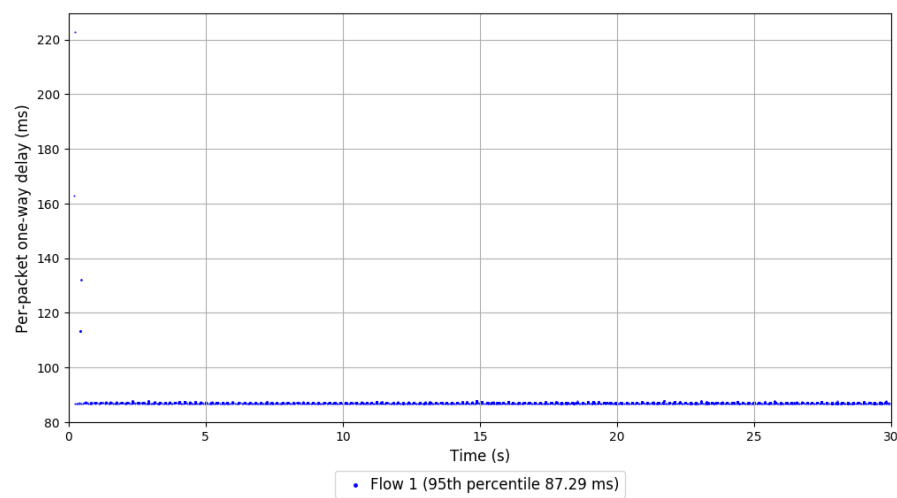
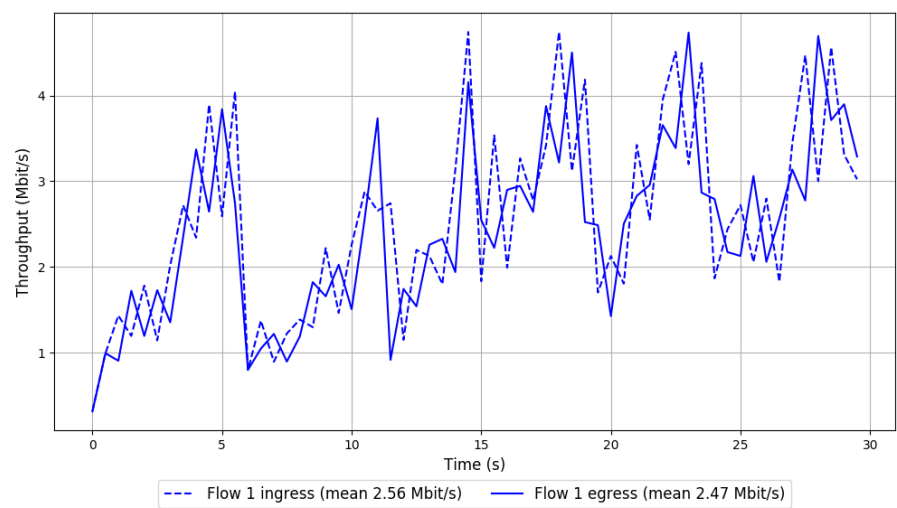
-- Flow 1:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 87.290 ms

Loss rate: 3.83%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-16 21:27:44

End at: 2017-08-16 21:28:15

Below is generated by plot.py at 2017-08-16 23:23:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 86.971 ms

Loss rate: 2.46%

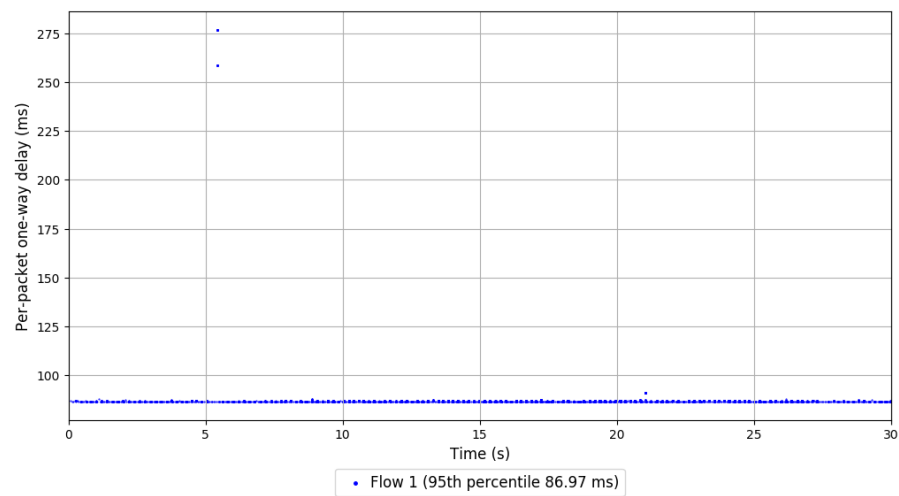
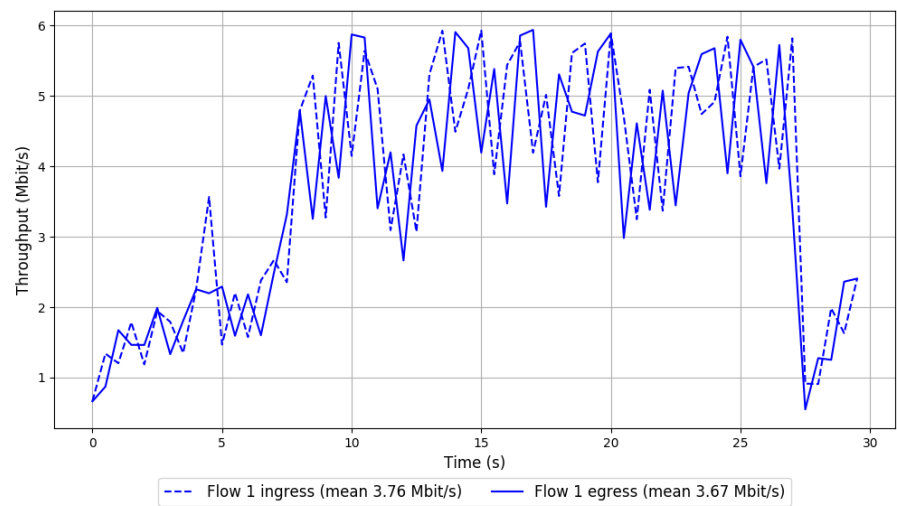
-- Flow 1:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 86.971 ms

Loss rate: 2.46%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-16 21:39:19

End at: 2017-08-16 21:39:49

Below is generated by plot.py at 2017-08-16 23:23:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 87.331 ms

Loss rate: 0.58%

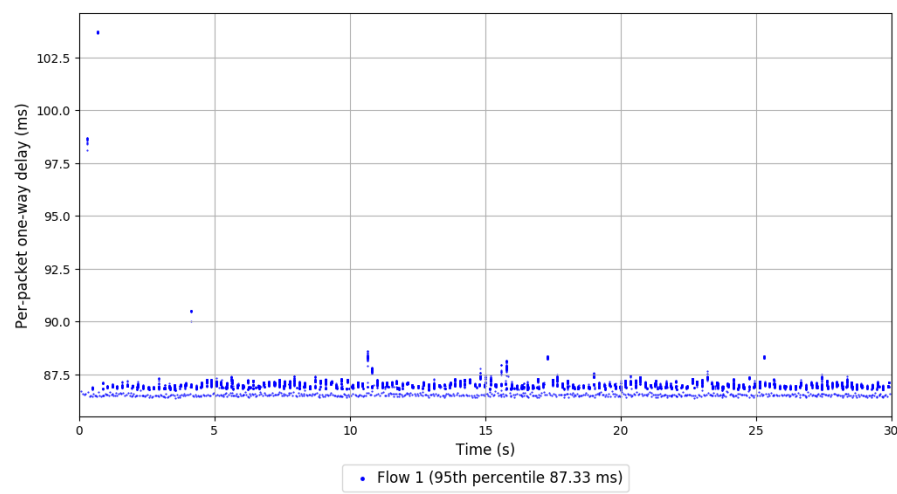
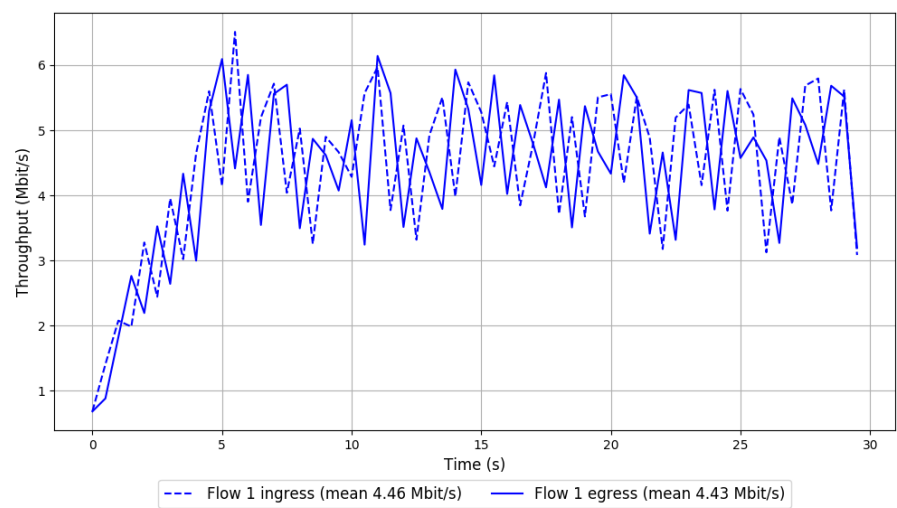
-- Flow 1:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 87.331 ms

Loss rate: 0.58%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-16 21:50:07

End at: 2017-08-16 21:50:37

Below is generated by plot.py at 2017-08-16 23:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.111 ms

Loss rate: 6.74%

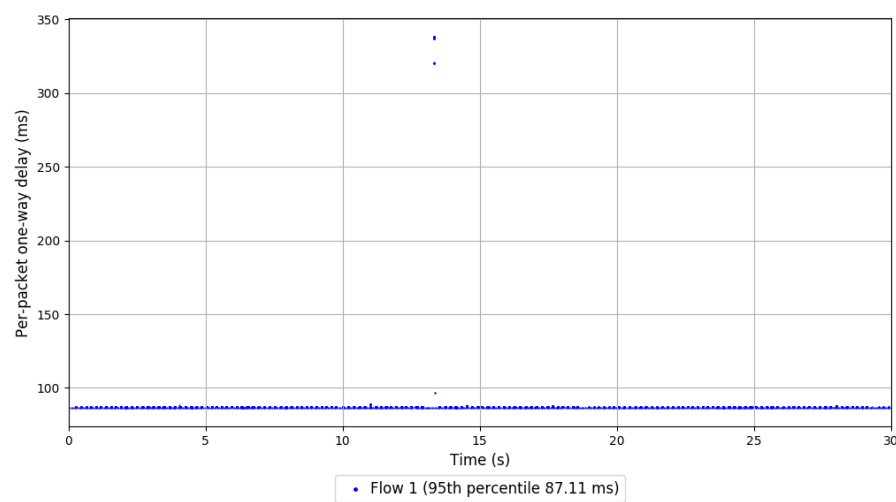
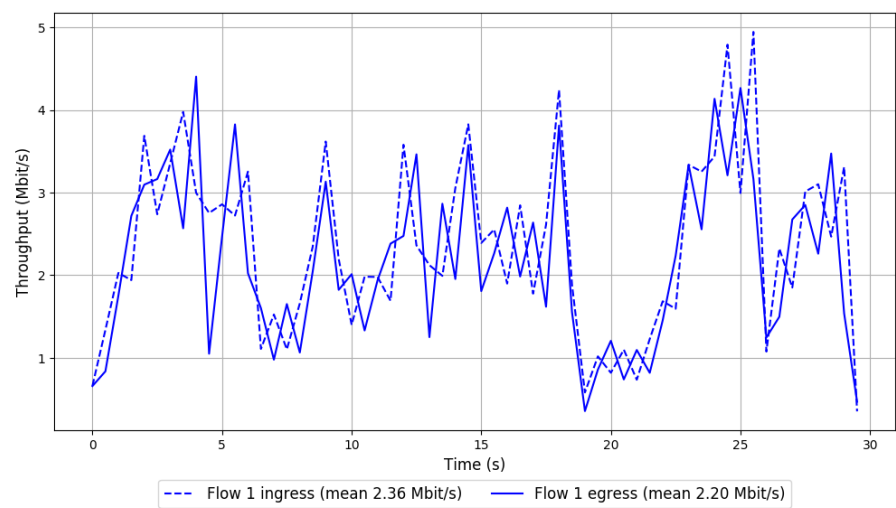
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.111 ms

Loss rate: 6.74%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-16 22:01:17

End at: 2017-08-16 22:01:47

Below is generated by plot.py at 2017-08-16 23:23:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 87.342 ms

Loss rate: 0.00%

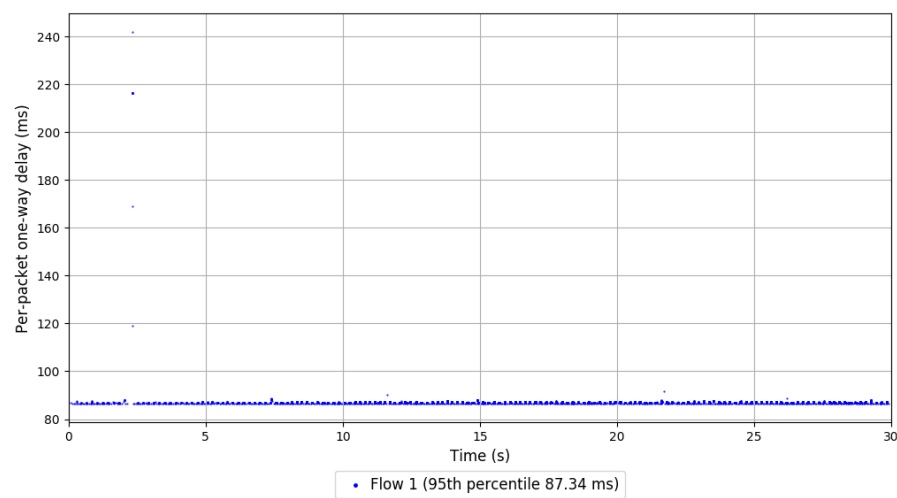
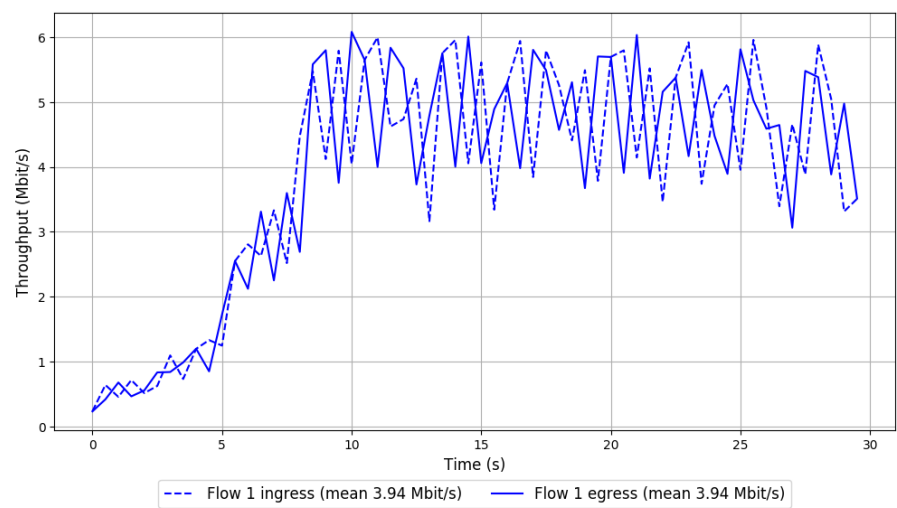
-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 87.342 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

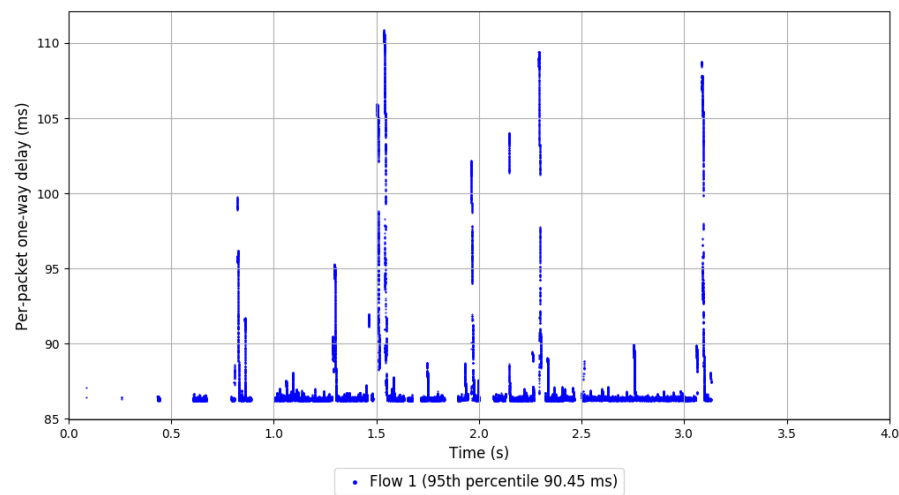
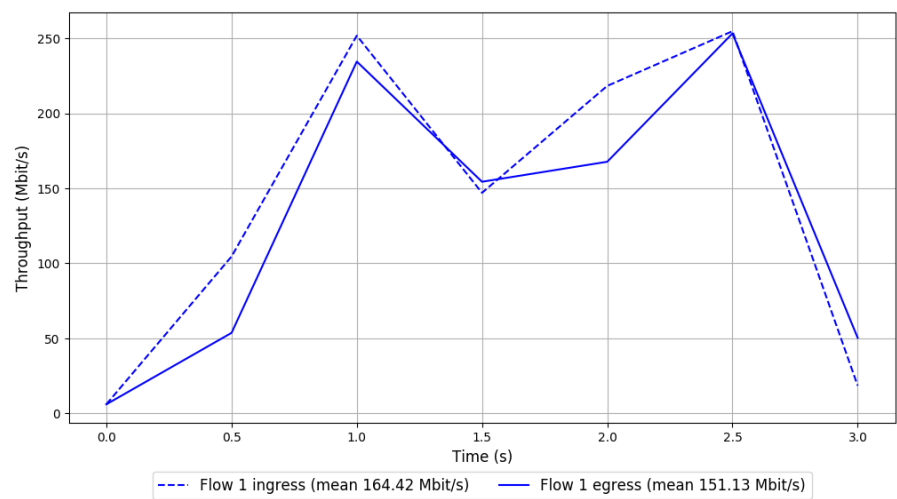


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-16 20:22:26

End at: 2017-08-16 20:22:56

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

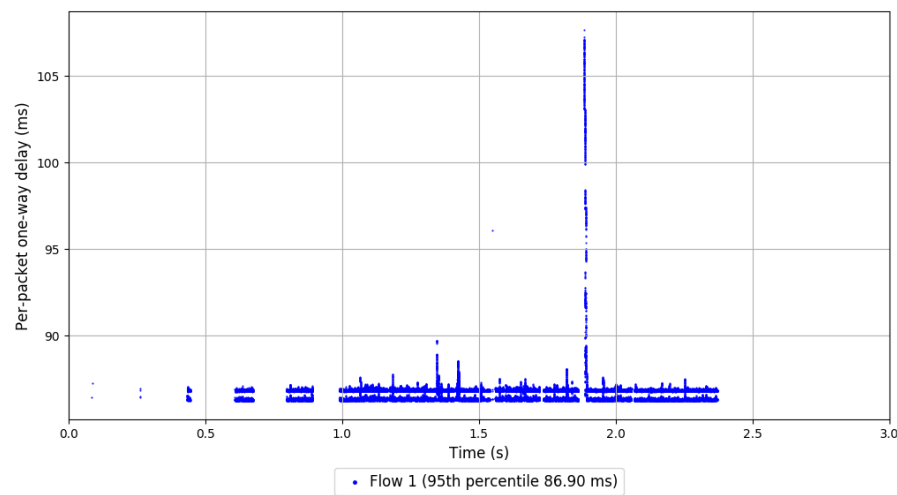
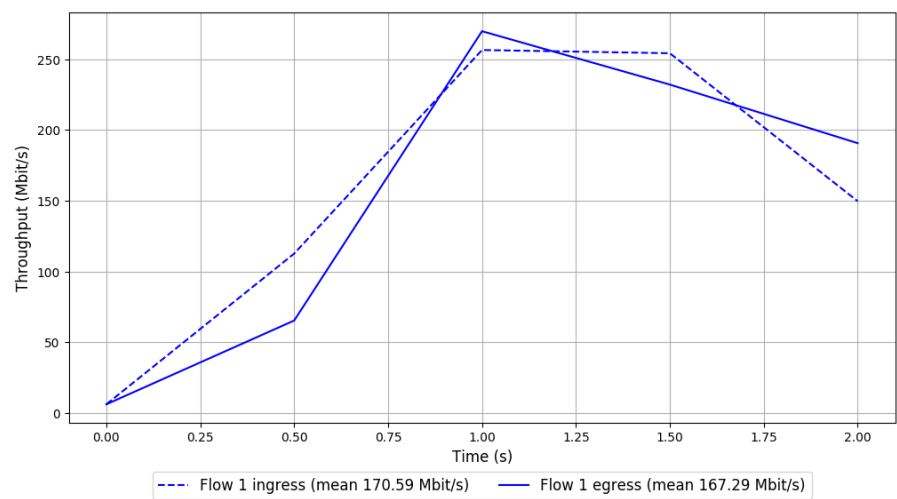


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-16 20:33:13

End at: 2017-08-16 20:33:43

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

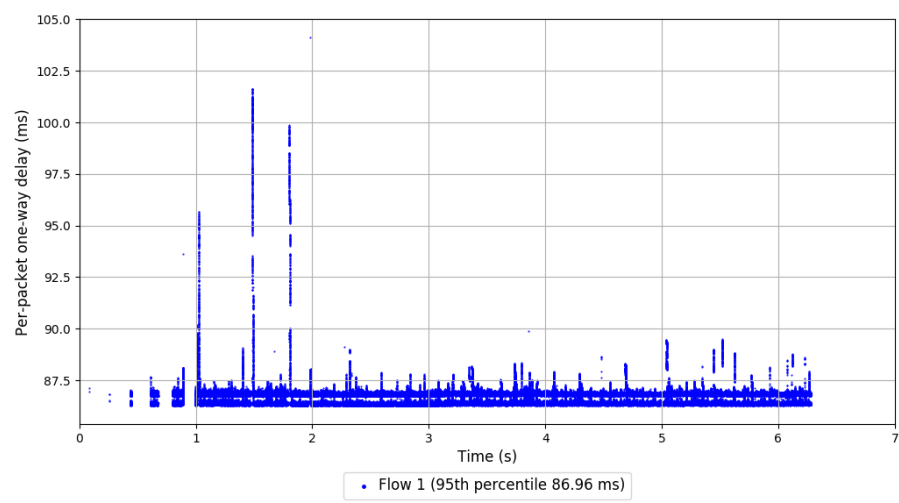
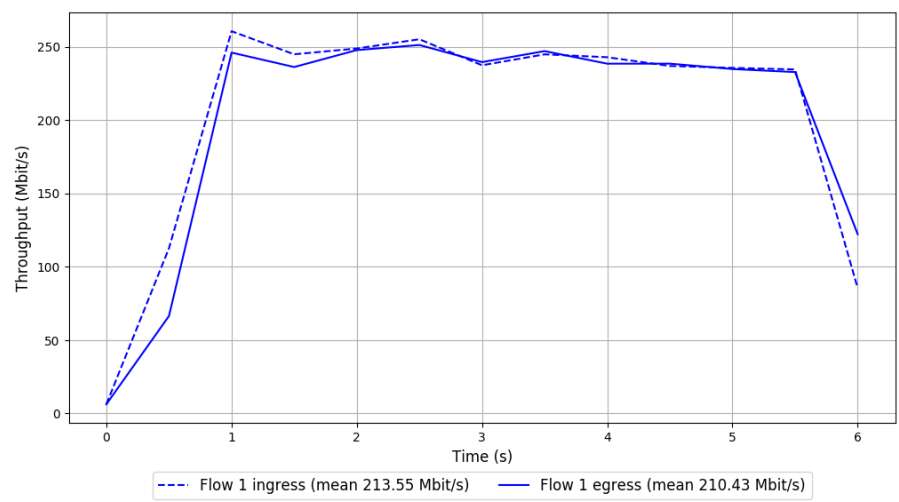


Run 3: Statistics of TaoVA-100x

Start at: 2017-08-16 20:44:28

End at: 2017-08-16 20:44:58

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-08-16 20:55:45

End at: 2017-08-16 20:56:15

Below is generated by plot.py at 2017-08-16 23:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.83 Mbit/s

95th percentile per-packet one-way delay: 87.152 ms

Loss rate: 2.12%

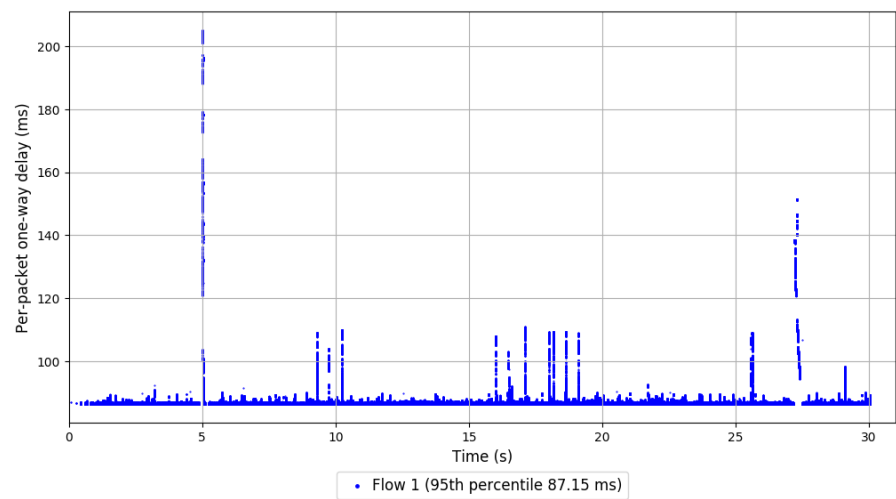
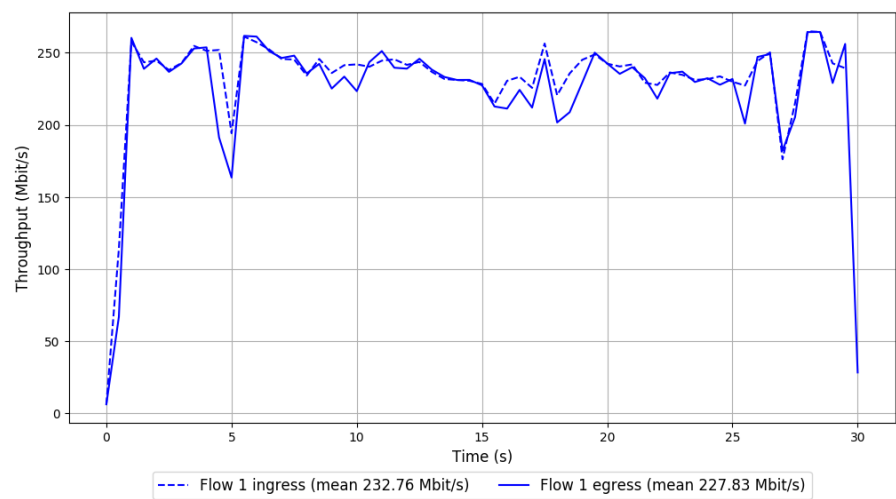
-- Flow 1:

Average throughput: 227.83 Mbit/s

95th percentile per-packet one-way delay: 87.152 ms

Loss rate: 2.12%

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

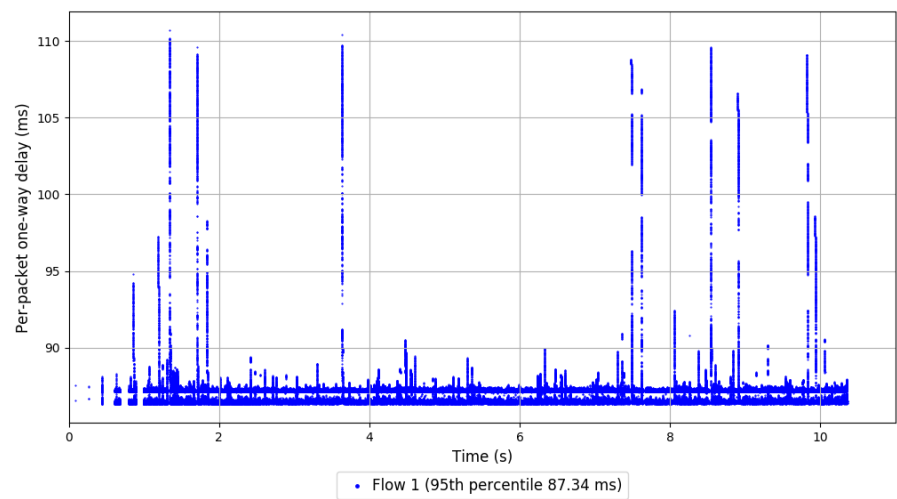
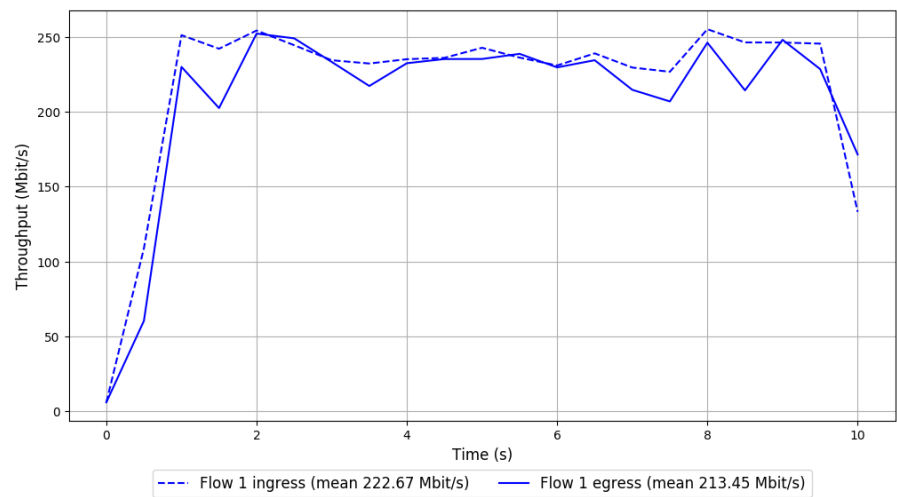


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-16 21:06:55

End at: 2017-08-16 21:07:25

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

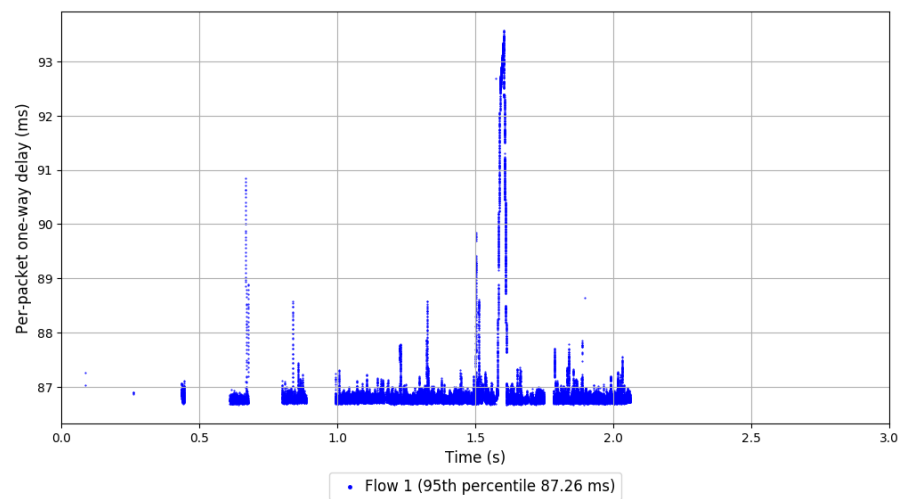
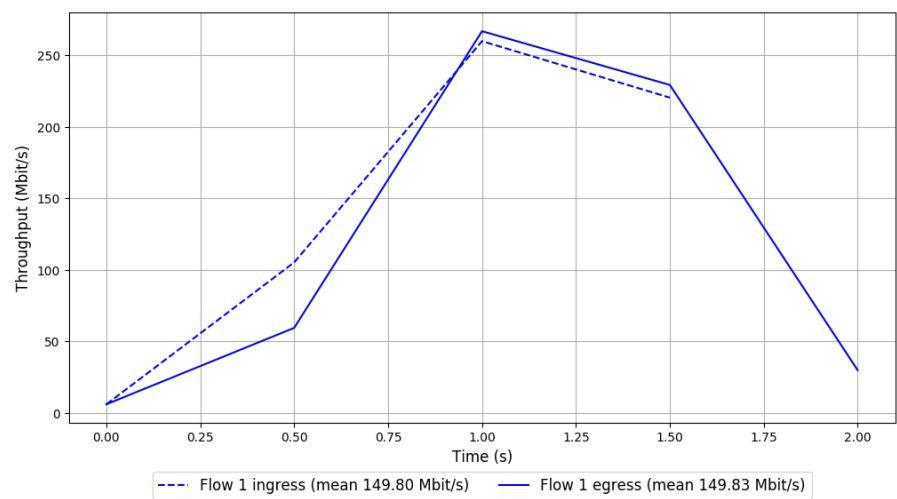


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-16 21:17:45

End at: 2017-08-16 21:18:15

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

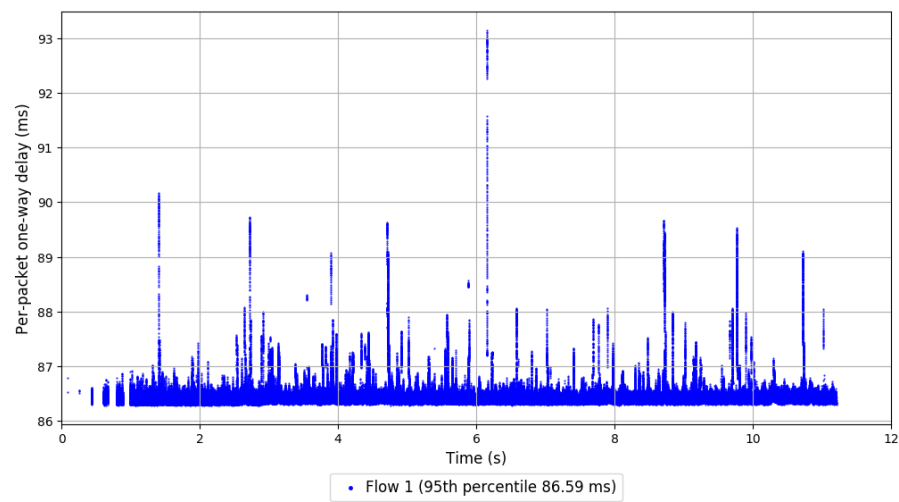
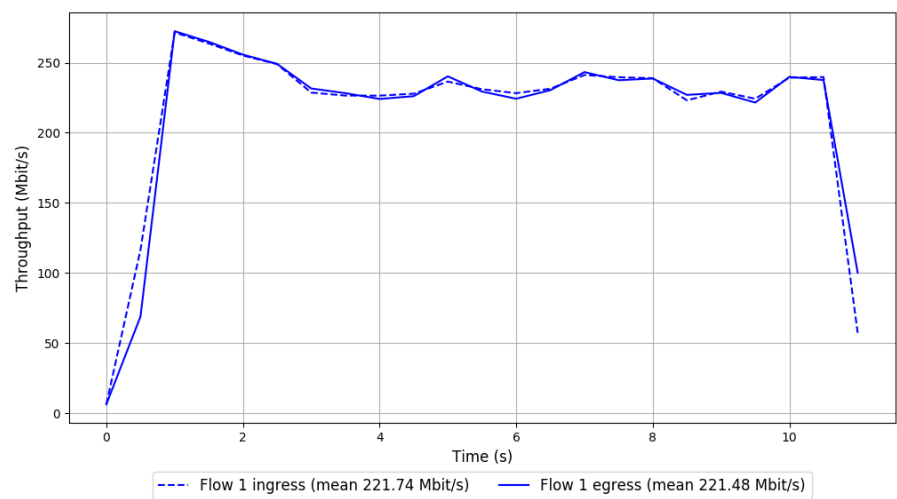


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-16 21:29:26

End at: 2017-08-16 21:29:56

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

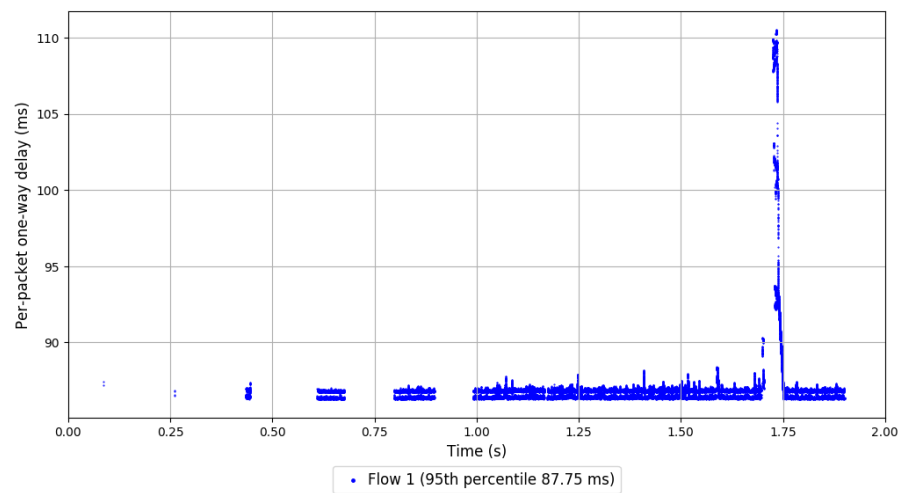
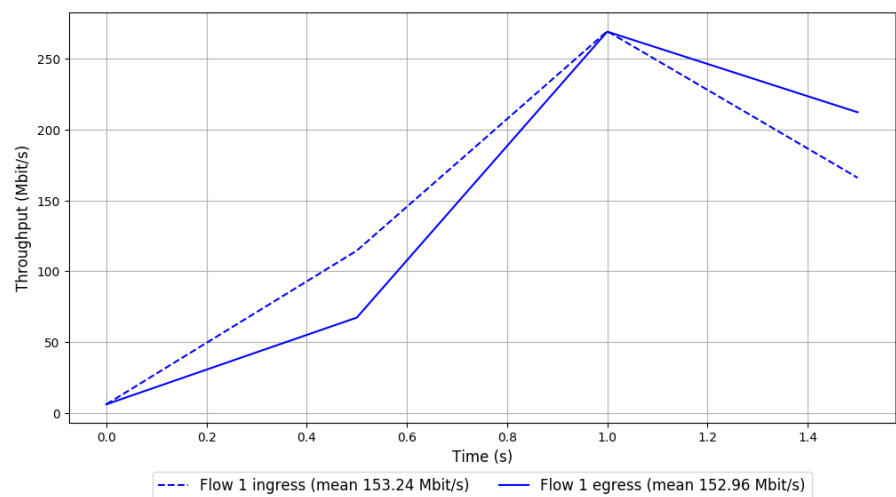


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-16 21:40:50

End at: 2017-08-16 21:41:20

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

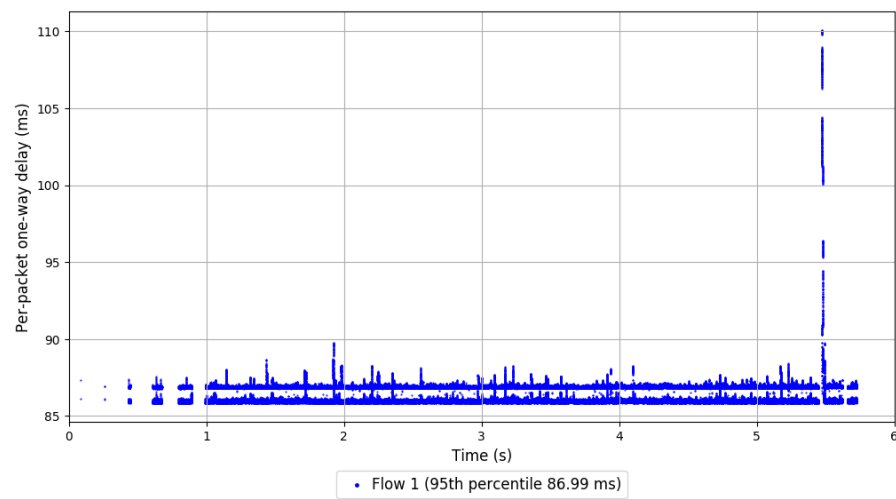
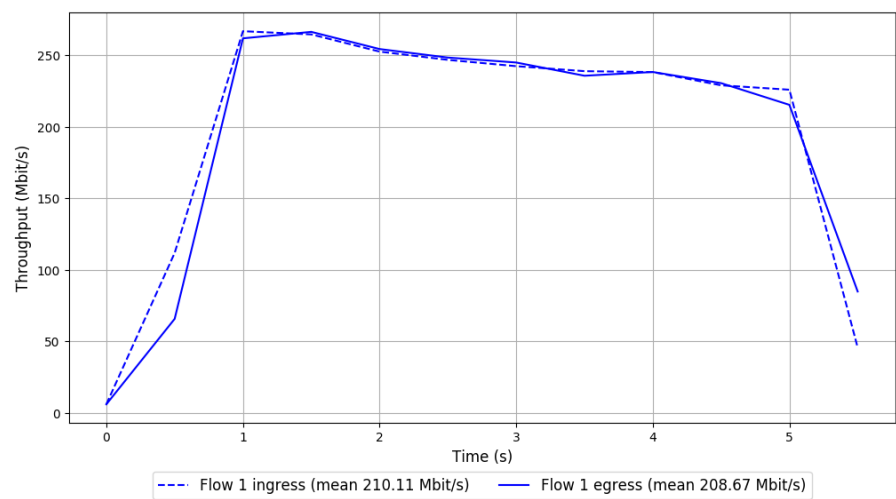


Run 9: Statistics of TaoVA-100x

Start at: 2017-08-16 21:51:47

End at: 2017-08-16 21:52:17

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

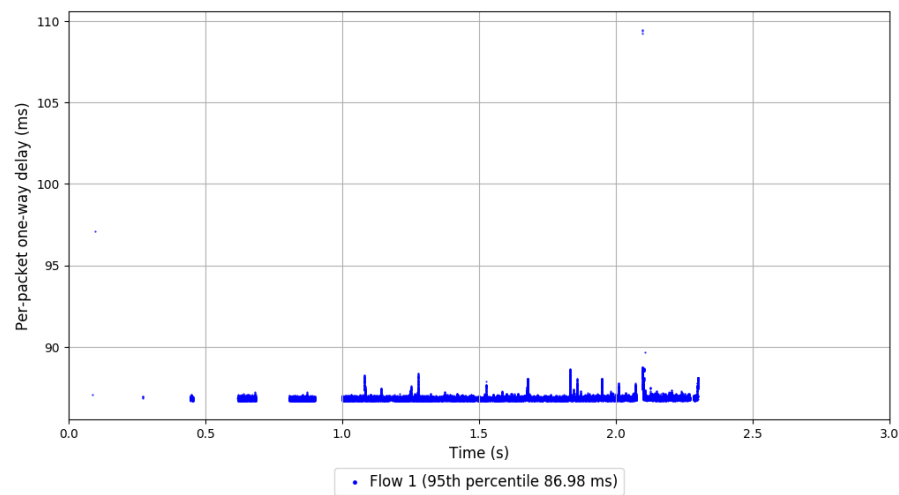
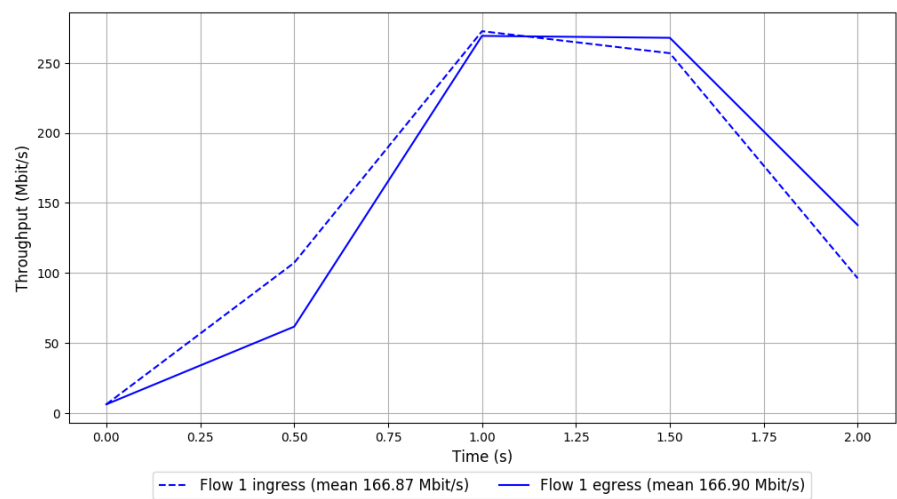


Run 10: Statistics of TaoVA-100x

Start at: 2017-08-16 22:02:41

End at: 2017-08-16 22:03:11

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-16 20:29:35

End at: 2017-08-16 20:30:05

Below is generated by plot.py at 2017-08-16 23:25:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 87.193 ms

Loss rate: 1.44%

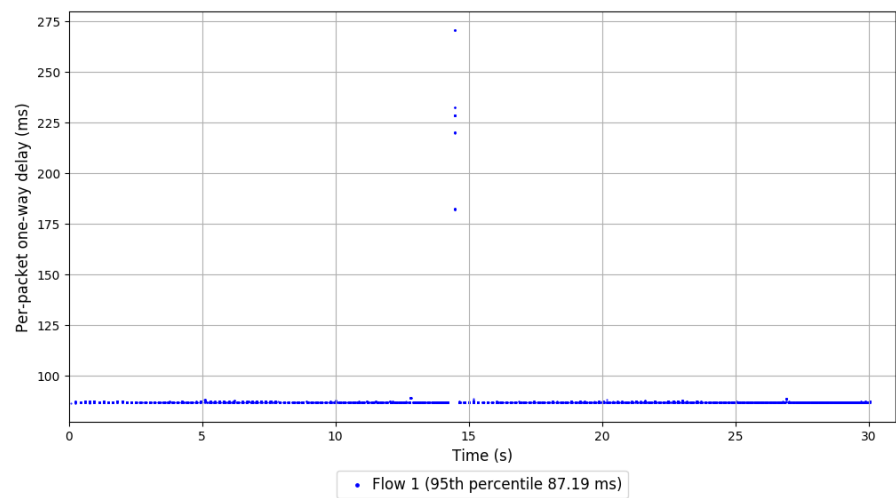
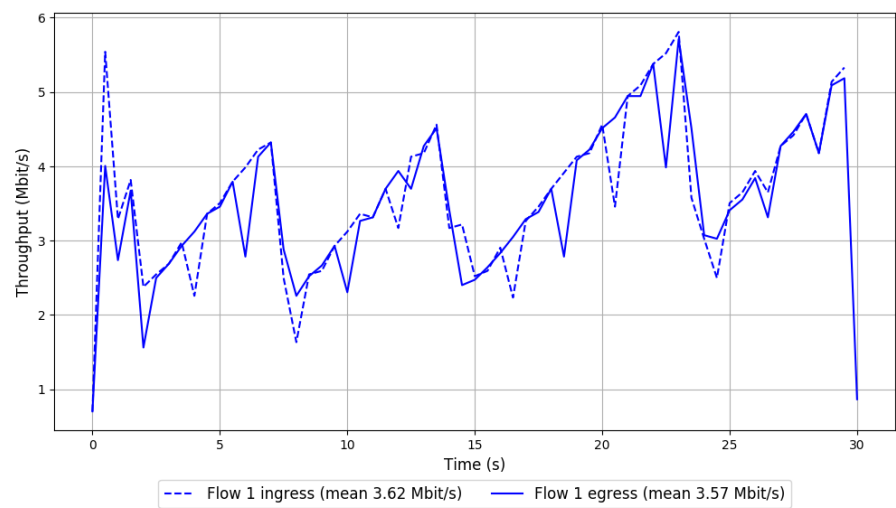
-- Flow 1:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 87.193 ms

Loss rate: 1.44%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-16 20:41:00

End at: 2017-08-16 20:41:30

Below is generated by plot.py at 2017-08-16 23:25:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.82 Mbit/s

95th percentile per-packet one-way delay: 87.667 ms

Loss rate: 1.22%

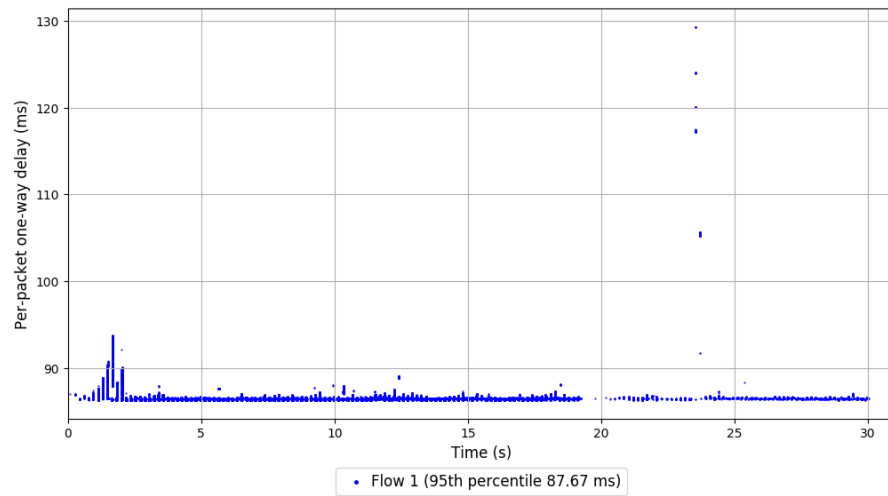
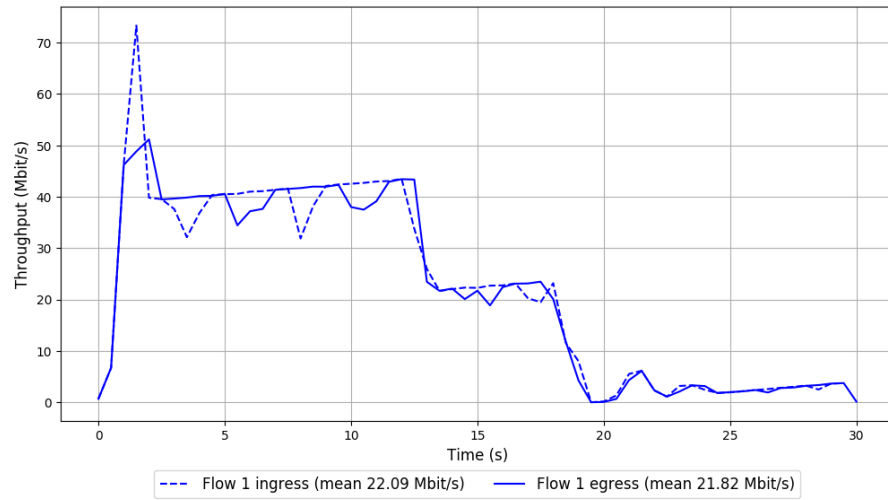
-- Flow 1:

Average throughput: 21.82 Mbit/s

95th percentile per-packet one-way delay: 87.667 ms

Loss rate: 1.22%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-16 20:51:59

End at: 2017-08-16 20:52:29

Below is generated by plot.py at 2017-08-16 23:25:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 87.144 ms

Loss rate: 1.29%

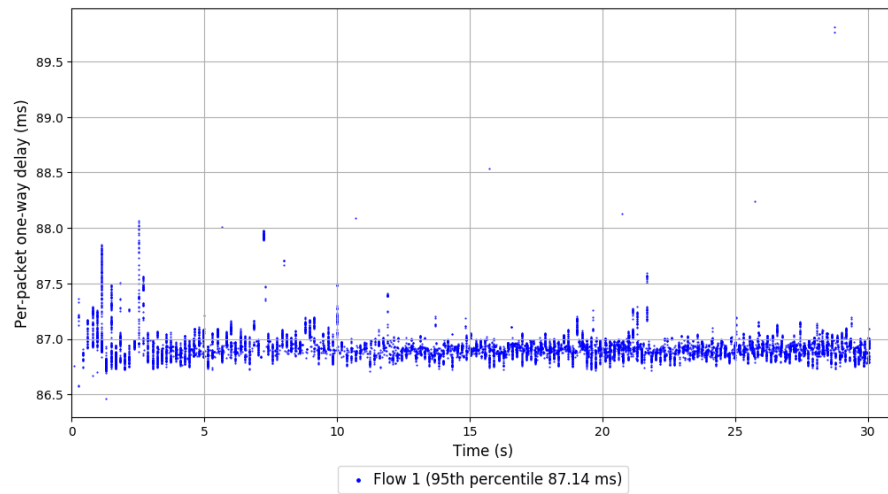
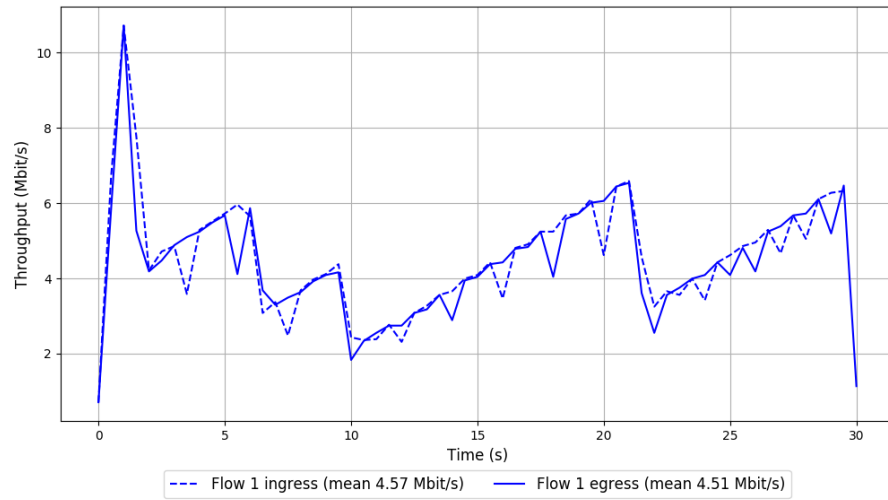
-- Flow 1:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 87.144 ms

Loss rate: 1.29%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-16 21:03:31

End at: 2017-08-16 21:04:01

Below is generated by plot.py at 2017-08-16 23:25:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.05 Mbit/s

95th percentile per-packet one-way delay: 89.798 ms

Loss rate: 0.56%

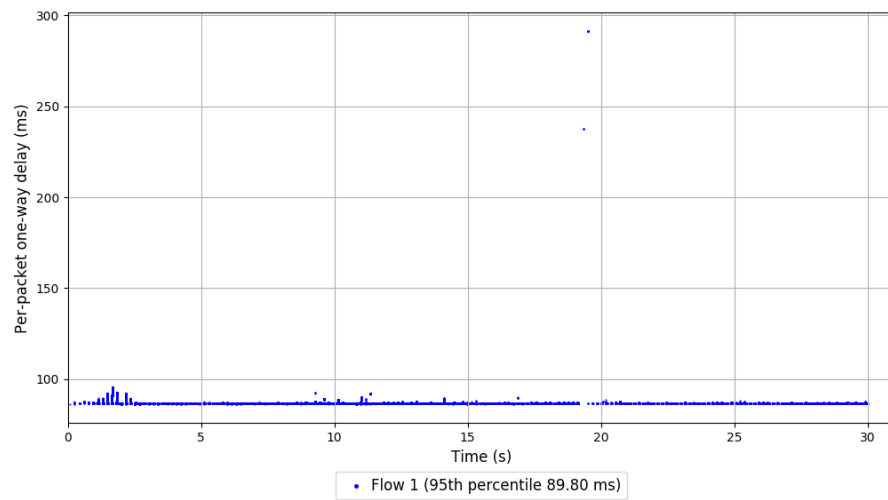
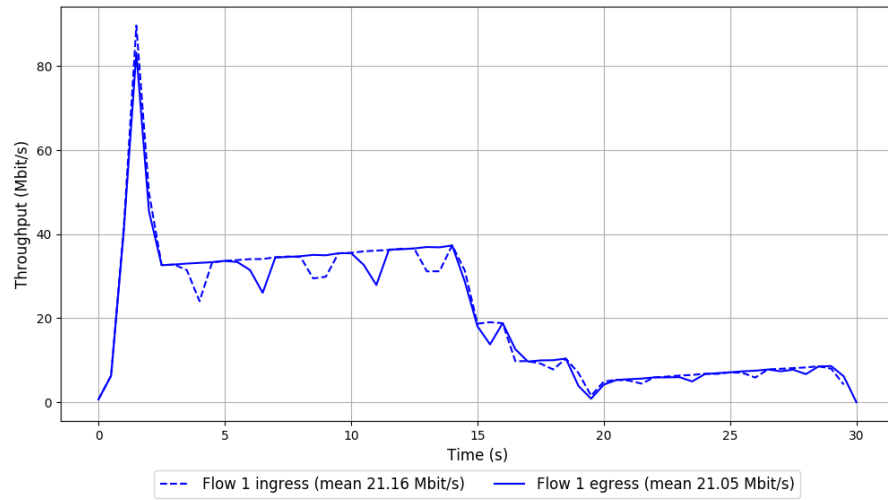
-- Flow 1:

Average throughput: 21.05 Mbit/s

95th percentile per-packet one-way delay: 89.798 ms

Loss rate: 0.56%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-16 21:14:10

End at: 2017-08-16 21:14:40

Below is generated by plot.py at 2017-08-16 23:25:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 87.310 ms

Loss rate: 3.72%

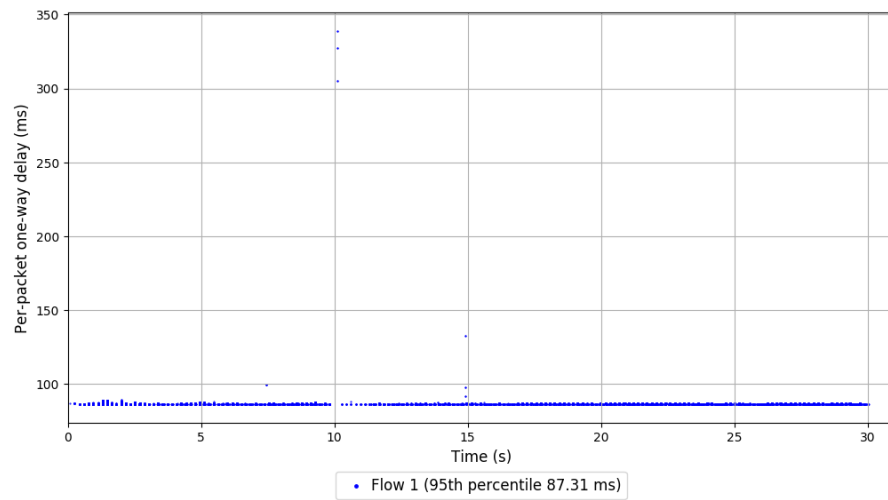
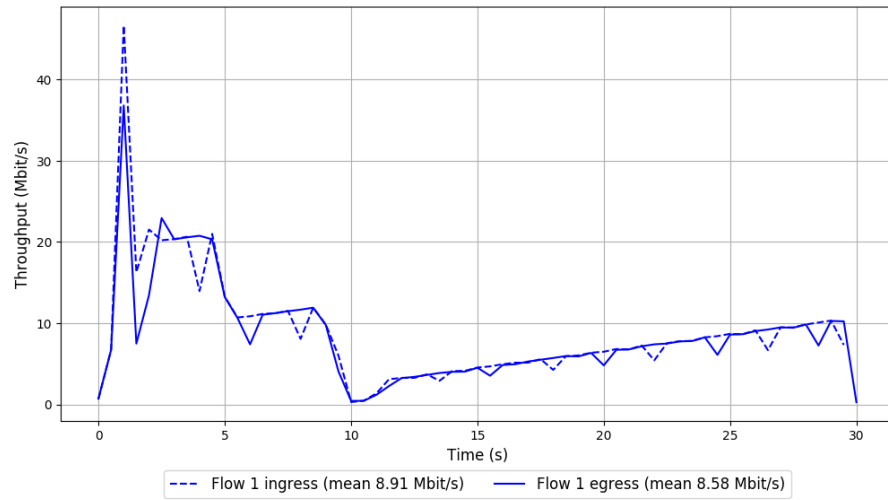
-- Flow 1:

Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 87.310 ms

Loss rate: 3.72%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-16 21:25:38

End at: 2017-08-16 21:26:08

Below is generated by plot.py at 2017-08-16 23:25:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.38 Mbit/s

95th percentile per-packet one-way delay: 89.108 ms

Loss rate: 4.13%

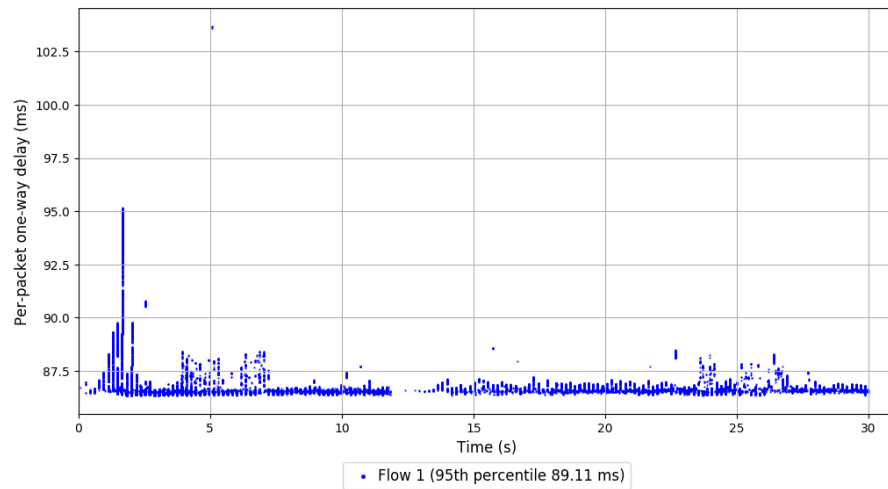
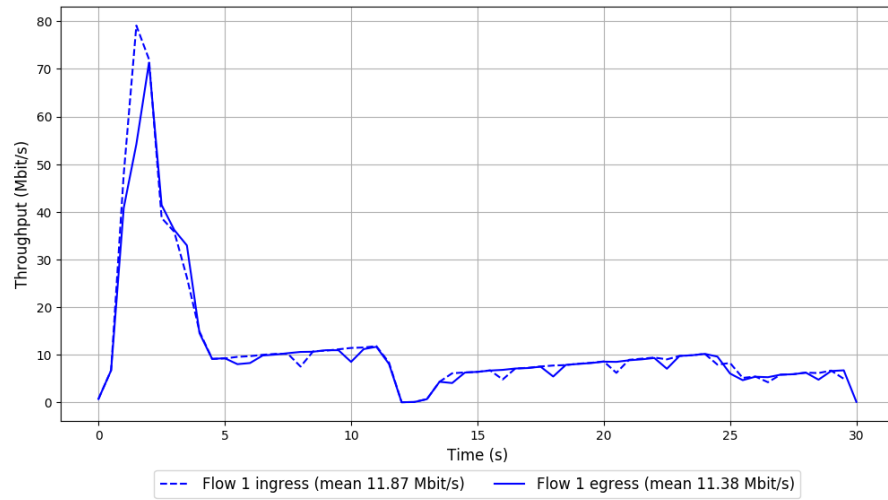
-- Flow 1:

Average throughput: 11.38 Mbit/s

95th percentile per-packet one-way delay: 89.108 ms

Loss rate: 4.13%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-16 21:37:12

End at: 2017-08-16 21:37:42

Below is generated by plot.py at 2017-08-16 23:25:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 87.440 ms

Loss rate: 0.90%

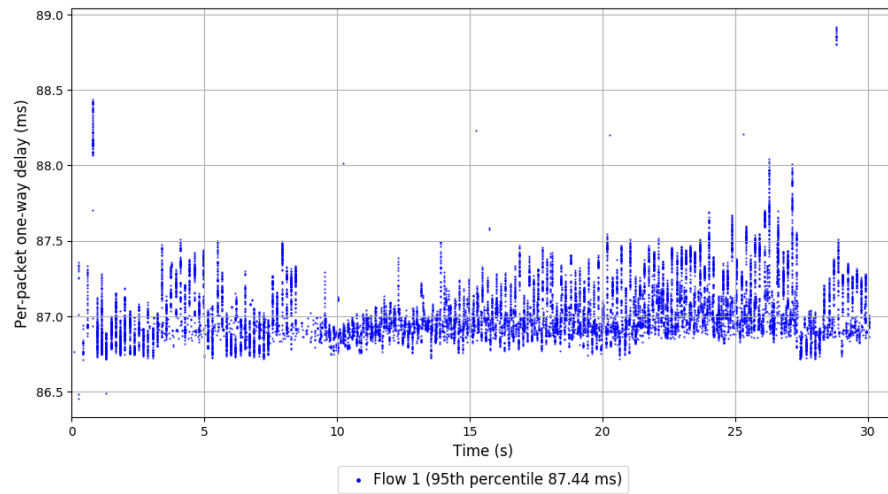
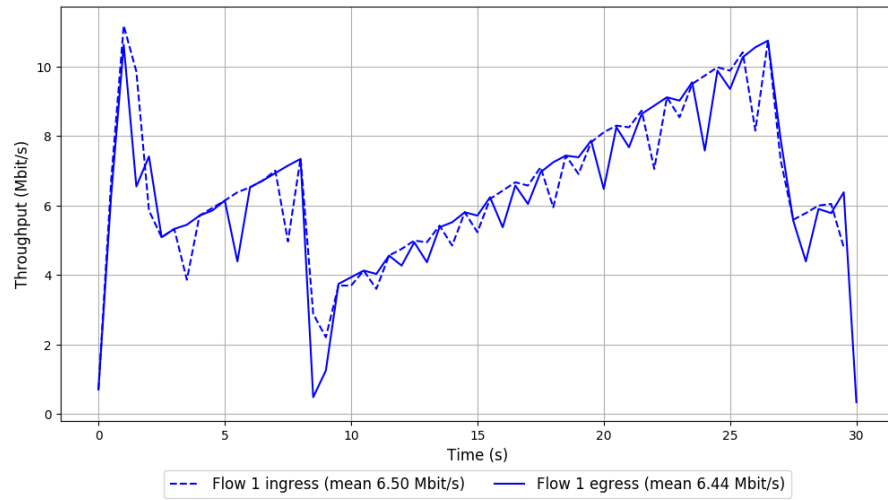
-- Flow 1:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 87.440 ms

Loss rate: 0.90%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-16 21:47:57

End at: 2017-08-16 21:48:27

Below is generated by plot.py at 2017-08-16 23:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 87.693 ms

Loss rate: 2.49%

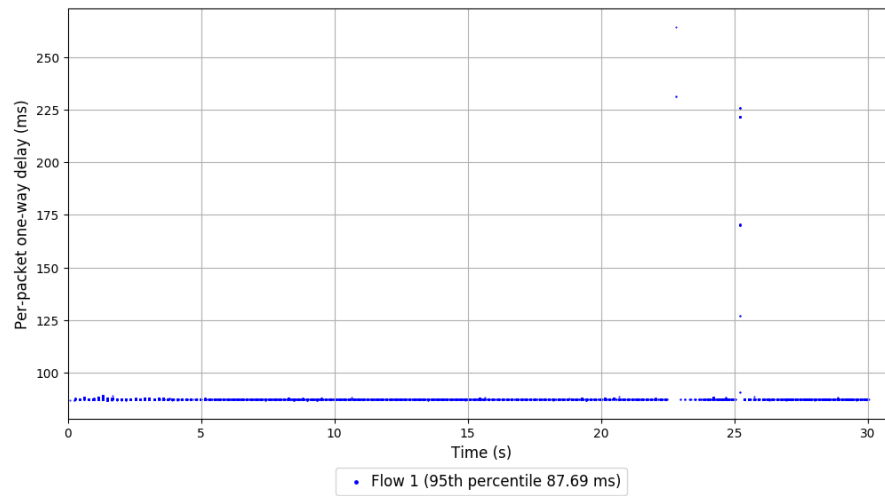
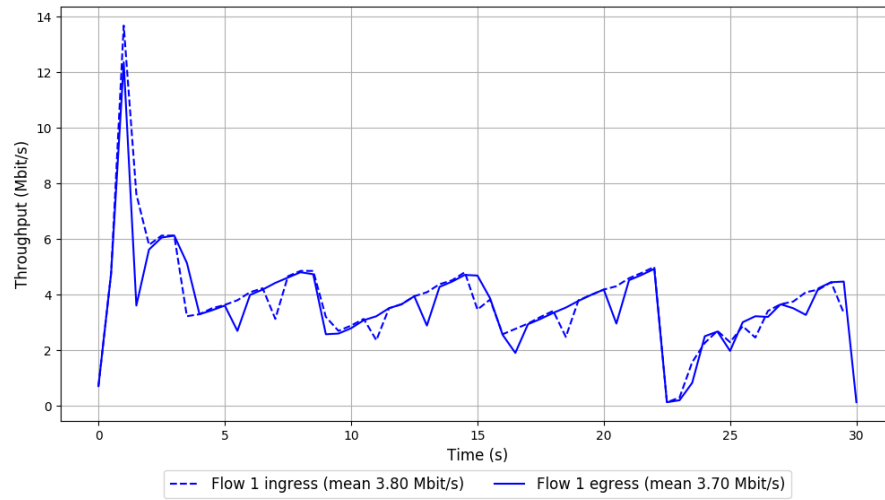
-- Flow 1:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 87.693 ms

Loss rate: 2.49%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-16 21:59:11

End at: 2017-08-16 21:59:41

Below is generated by plot.py at 2017-08-16 23:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.12 Mbit/s

95th percentile per-packet one-way delay: 87.410 ms

Loss rate: 0.99%

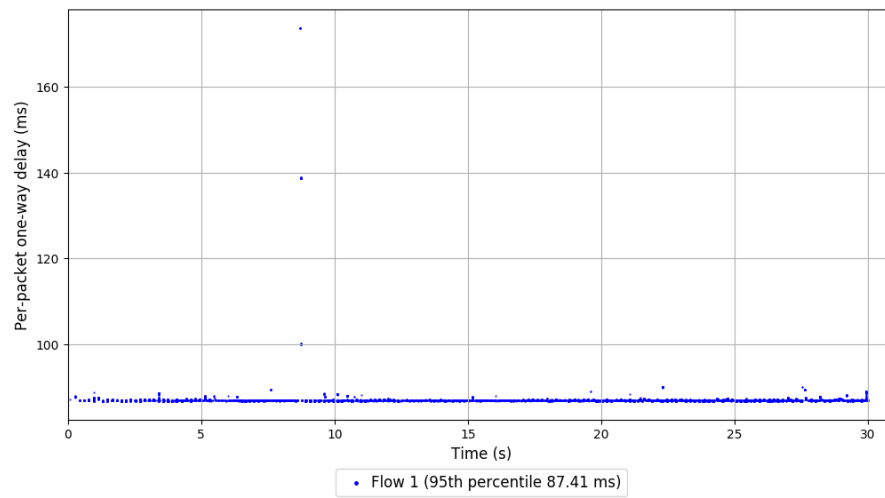
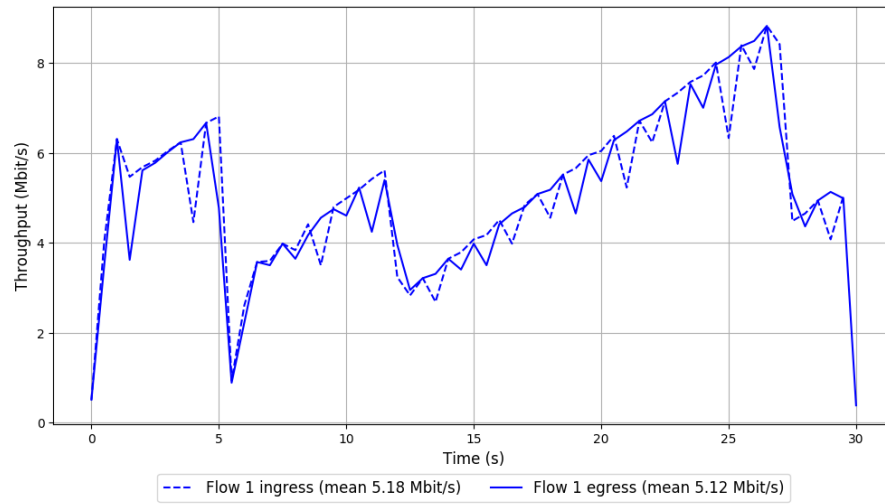
-- Flow 1:

Average throughput: 5.12 Mbit/s

95th percentile per-packet one-way delay: 87.410 ms

Loss rate: 0.99%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-16 22:10:08

End at: 2017-08-16 22:10:38

Below is generated by plot.py at 2017-08-16 23:25:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.60 Mbit/s

95th percentile per-packet one-way delay: 87.733 ms

Loss rate: 0.71%

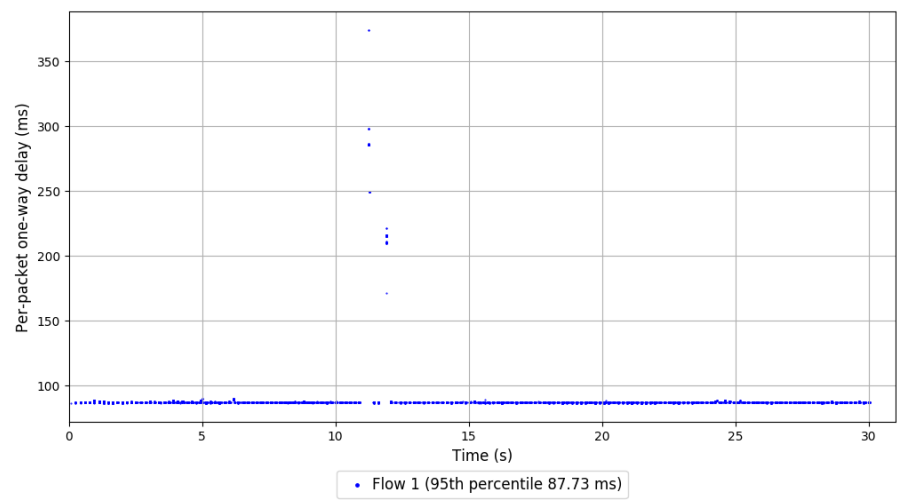
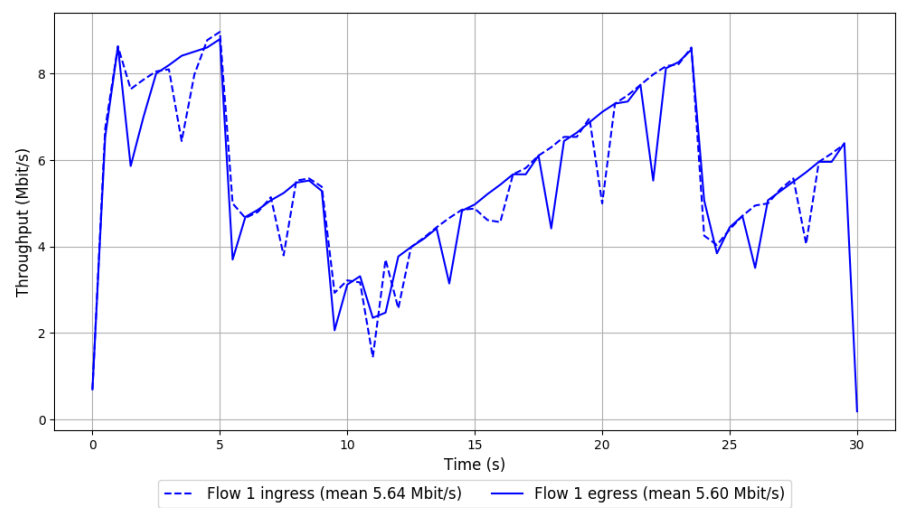
-- Flow 1:

Average throughput: 5.60 Mbit/s

95th percentile per-packet one-way delay: 87.733 ms

Loss rate: 0.71%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-16 20:21:35

End at: 2017-08-16 20:22:05

Below is generated by plot.py at 2017-08-16 23:25:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.95 Mbit/s

95th percentile per-packet one-way delay: 102.413 ms

Loss rate: 36.37%

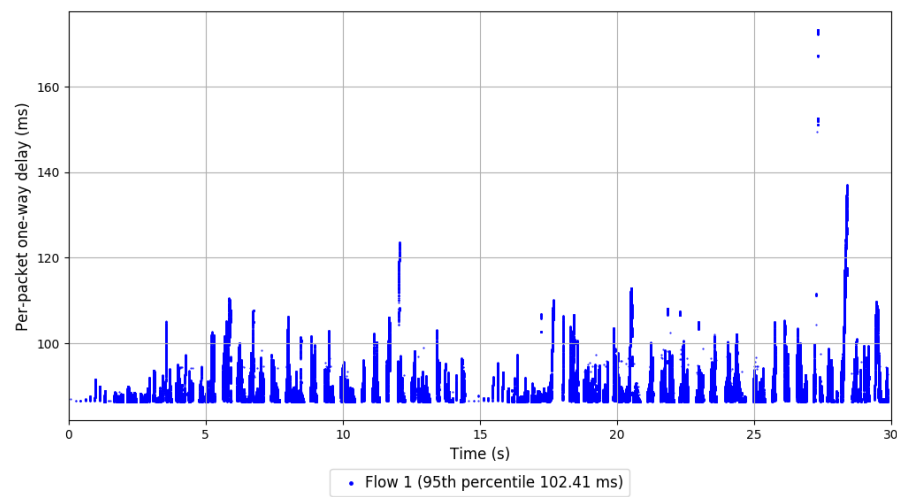
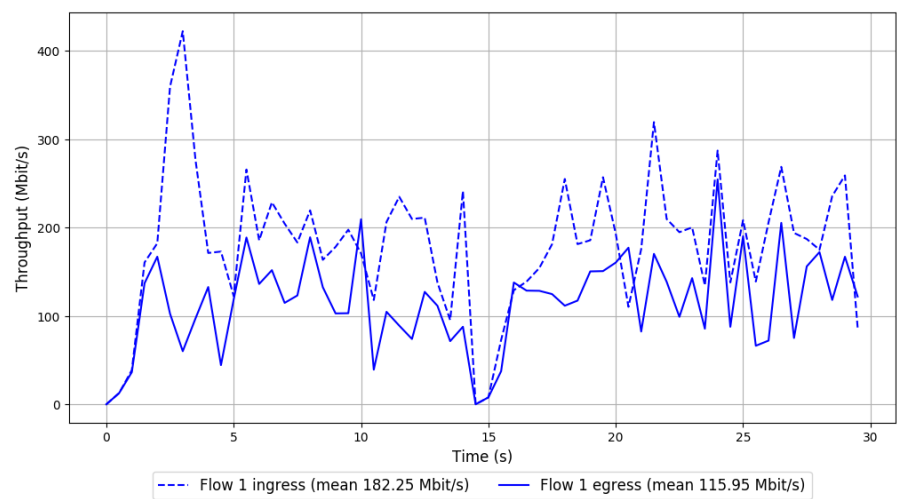
-- Flow 1:

Average throughput: 115.95 Mbit/s

95th percentile per-packet one-way delay: 102.413 ms

Loss rate: 36.37%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-16 20:32:21

End at: 2017-08-16 20:32:51

Below is generated by plot.py at 2017-08-16 23:25:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.59 Mbit/s

95th percentile per-packet one-way delay: 115.642 ms

Loss rate: 18.78%

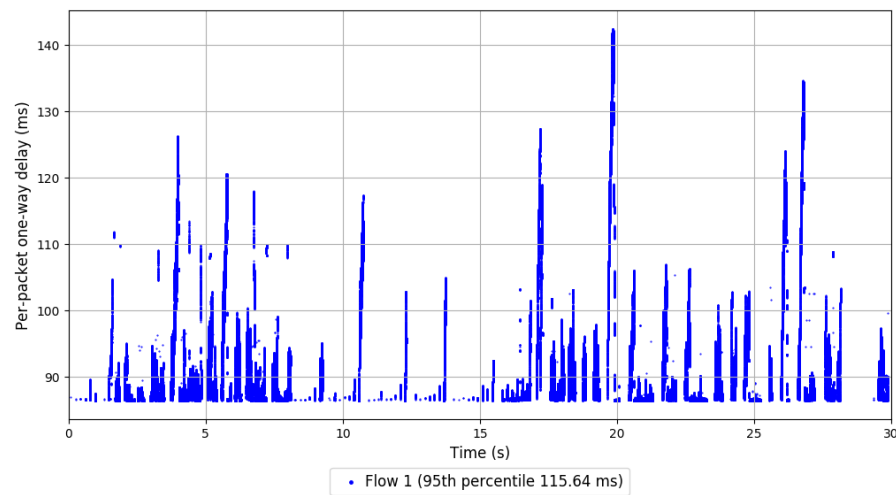
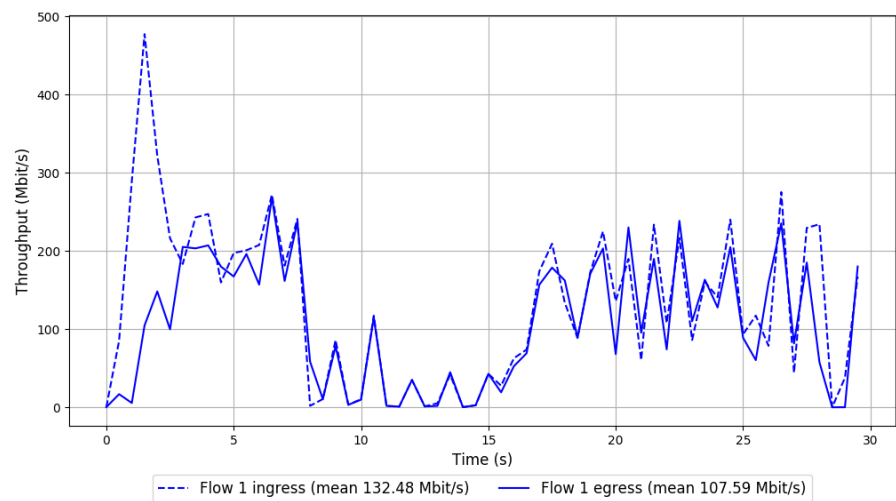
-- Flow 1:

Average throughput: 107.59 Mbit/s

95th percentile per-packet one-way delay: 115.642 ms

Loss rate: 18.78%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-16 20:43:45

End at: 2017-08-16 20:44:15

Below is generated by plot.py at 2017-08-16 23:25:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.86 Mbit/s

95th percentile per-packet one-way delay: 88.334 ms

Loss rate: 88.50%

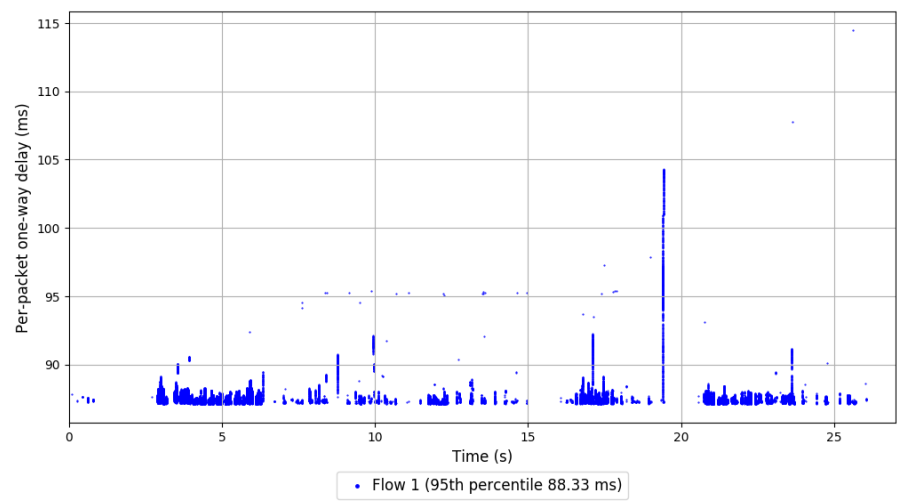
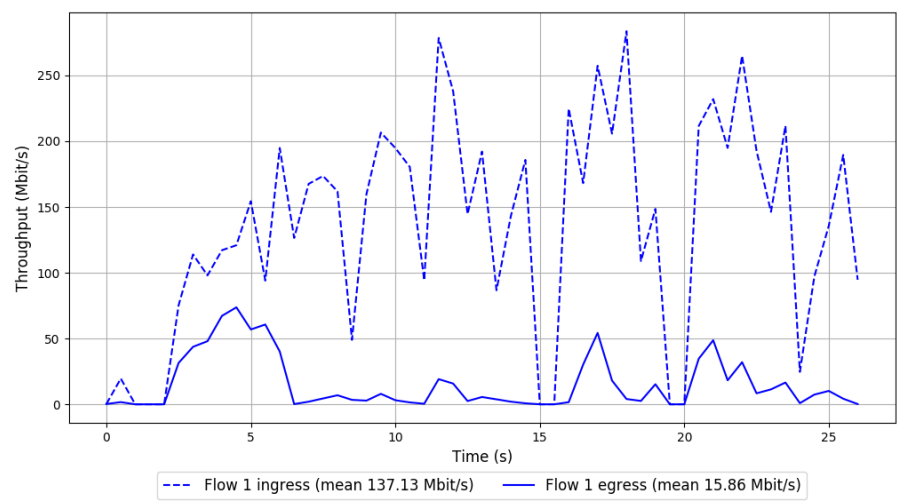
-- Flow 1:

Average throughput: 15.86 Mbit/s

95th percentile per-packet one-way delay: 88.334 ms

Loss rate: 88.50%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-16 20:54:53

End at: 2017-08-16 20:55:23

Below is generated by plot.py at 2017-08-16 23:25:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.60 Mbit/s

95th percentile per-packet one-way delay: 98.144 ms

Loss rate: 23.41%

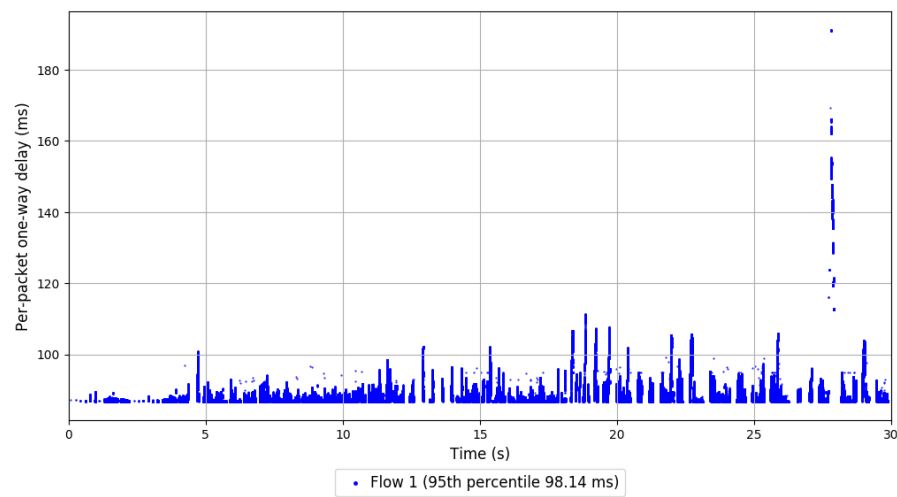
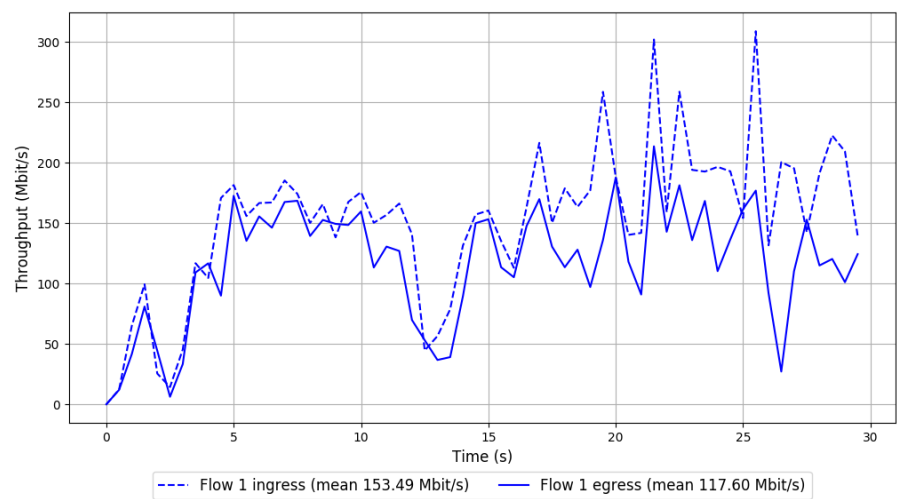
-- Flow 1:

Average throughput: 117.60 Mbit/s

95th percentile per-packet one-way delay: 98.144 ms

Loss rate: 23.41%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-16 21:06:12

End at: 2017-08-16 21:06:42

Below is generated by plot.py at 2017-08-16 23:25:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.70 Mbit/s

95th percentile per-packet one-way delay: 90.221 ms

Loss rate: 87.12%

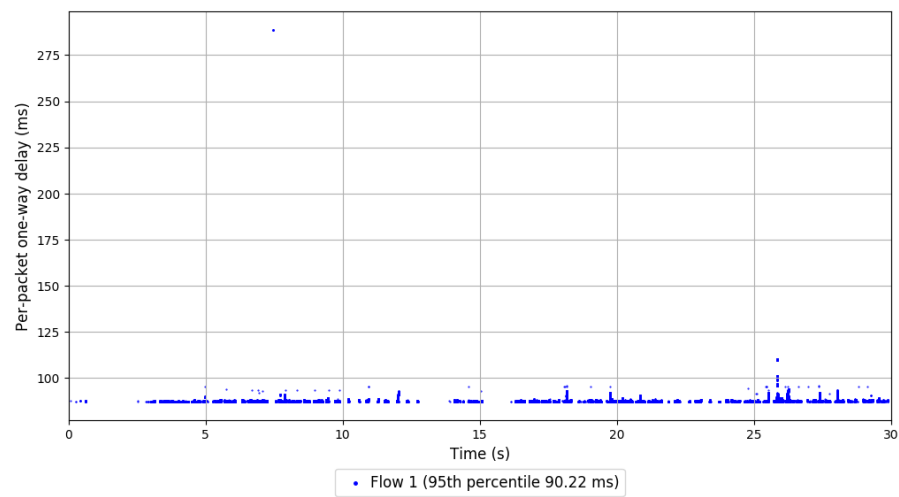
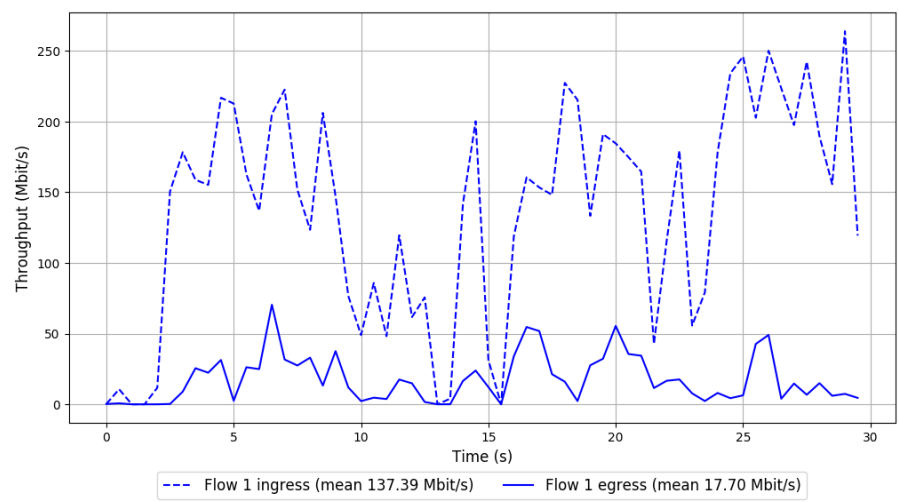
-- Flow 1:

Average throughput: 17.70 Mbit/s

95th percentile per-packet one-way delay: 90.221 ms

Loss rate: 87.12%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-16 21:16:59

End at: 2017-08-16 21:17:29

Below is generated by plot.py at 2017-08-16 23:26:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 93.287 ms

Loss rate: 3.51%

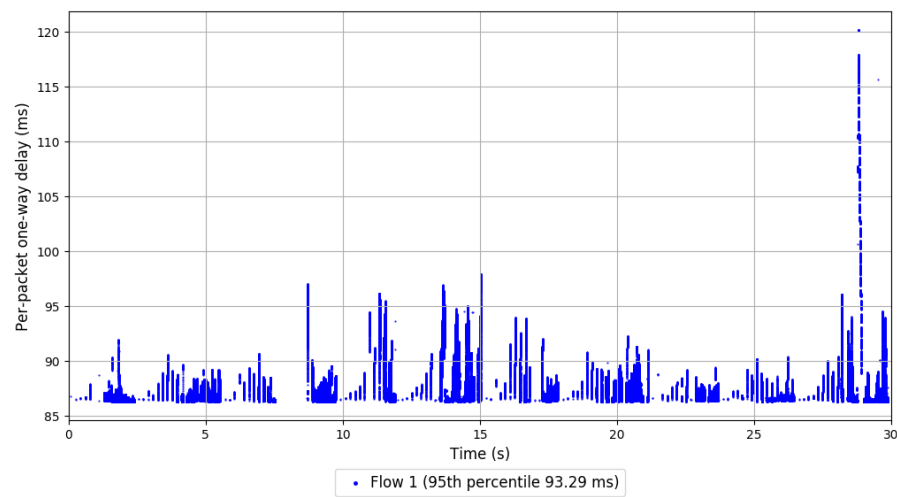
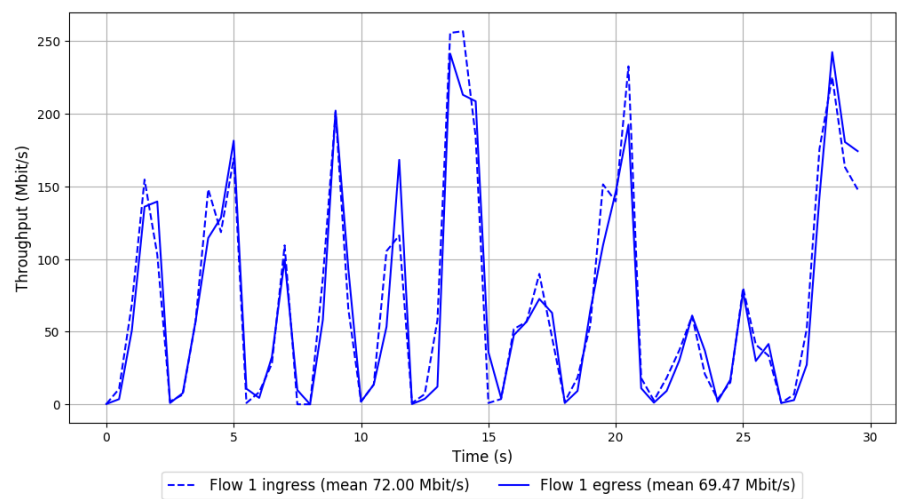
-- Flow 1:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 93.287 ms

Loss rate: 3.51%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-16 21:28:24

End at: 2017-08-16 21:28:54

Below is generated by plot.py at 2017-08-16 23:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.65 Mbit/s

95th percentile per-packet one-way delay: 121.413 ms

Loss rate: 3.40%

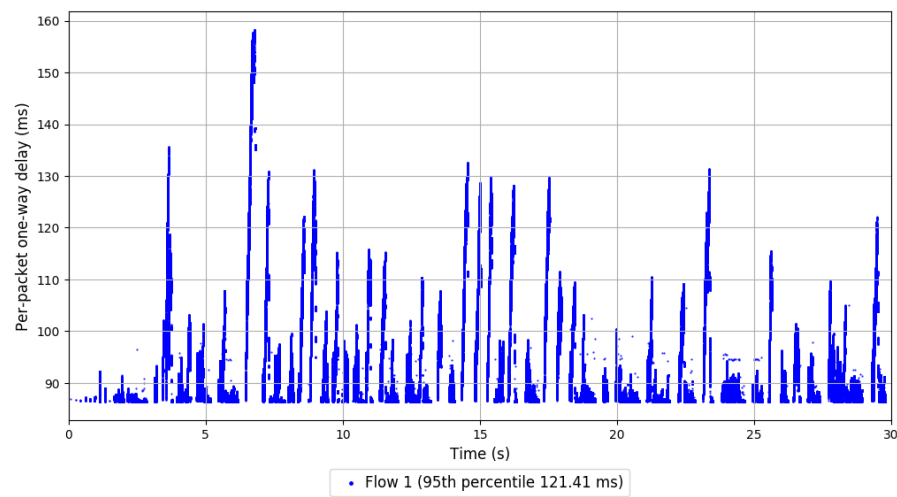
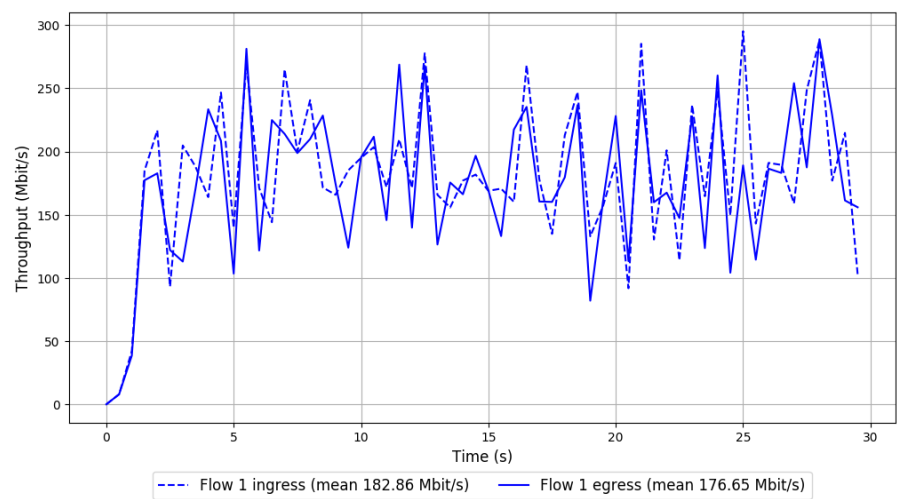
-- Flow 1:

Average throughput: 176.65 Mbit/s

95th percentile per-packet one-way delay: 121.413 ms

Loss rate: 3.40%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-16 21:39:59

End at: 2017-08-16 21:40:29

Below is generated by plot.py at 2017-08-16 23:26:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.78 Mbit/s

95th percentile per-packet one-way delay: 116.112 ms

Loss rate: 20.28%

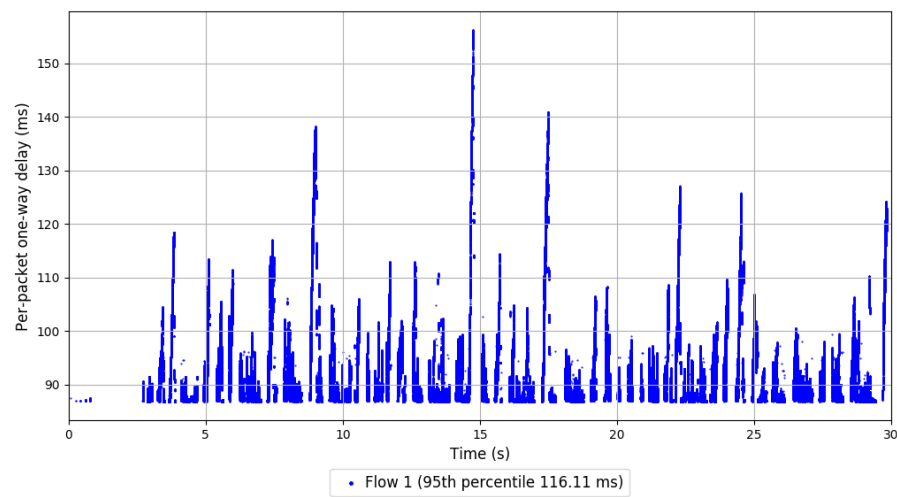
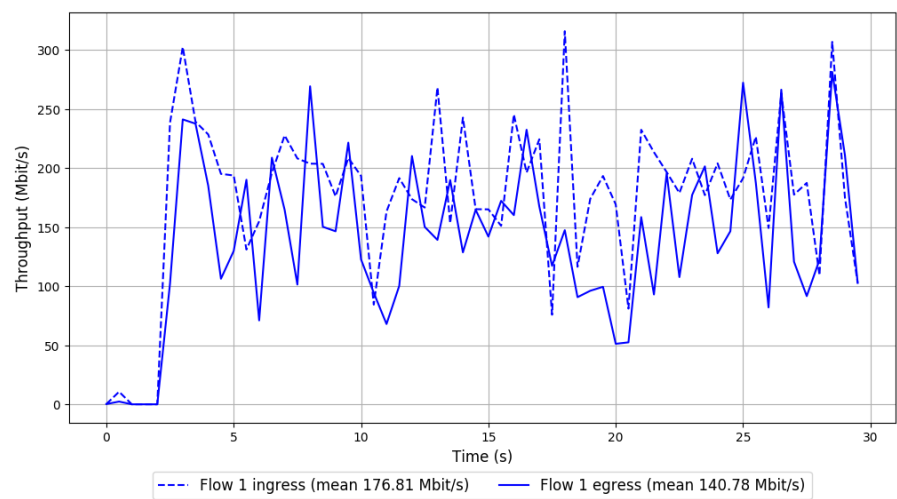
-- Flow 1:

Average throughput: 140.78 Mbit/s

95th percentile per-packet one-way delay: 116.112 ms

Loss rate: 20.28%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-16 21:50:46

End at: 2017-08-16 21:51:16

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.89 Mbit/s

95th percentile per-packet one-way delay: 103.091 ms

Loss rate: 12.52%

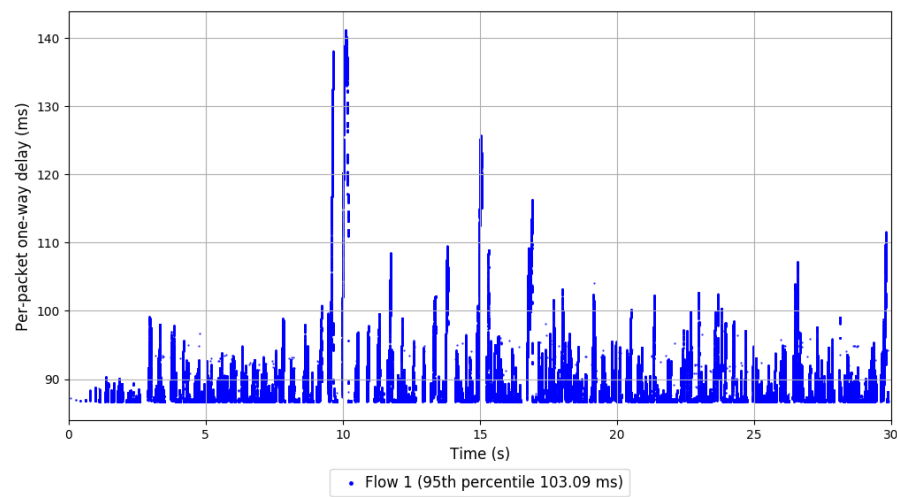
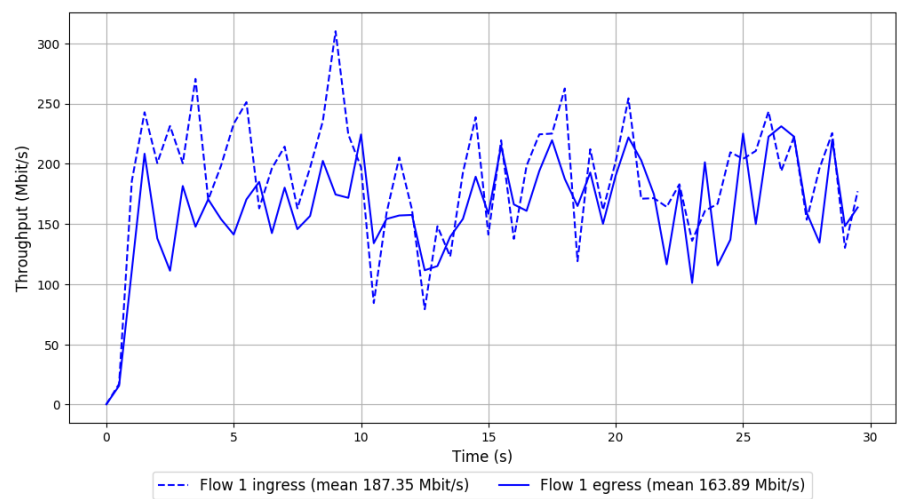
-- Flow 1:

Average throughput: 163.89 Mbit/s

95th percentile per-packet one-way delay: 103.091 ms

Loss rate: 12.52%

Run 9: Report of Verus — Data Link

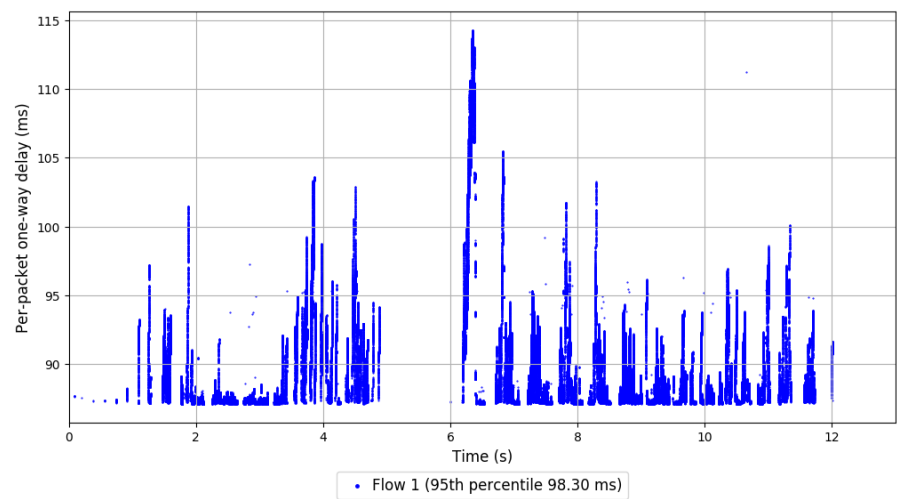
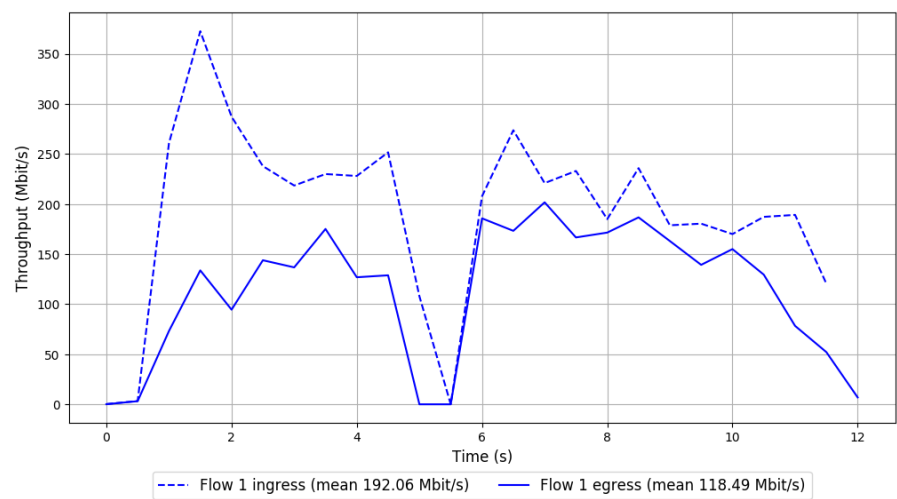


Run 10: Statistics of Verus

Start at: 2017-08-16 22:01:57

End at: 2017-08-16 22:02:27

Run 10: Report of Verus — Data Link

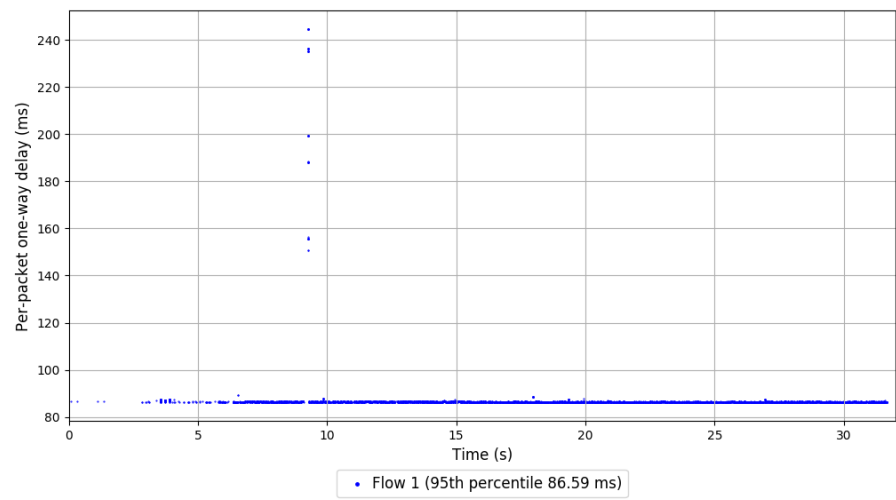
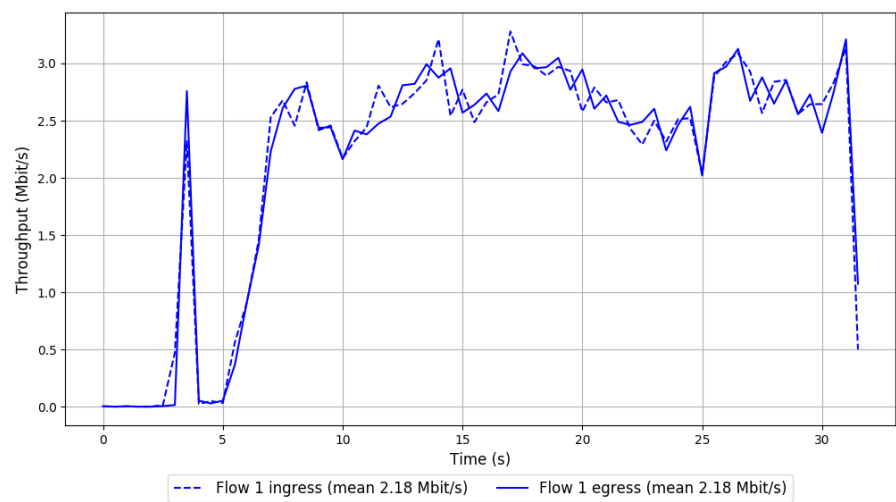


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-16 20:26:12
End at: 2017-08-16 20:26:42

# Below is generated by plot.py at 2017-08-16 23:26:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 86.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 86.594 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-16 20:37:07

End at: 2017-08-16 20:37:37

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 86.312 ms

Loss rate: 0.22%

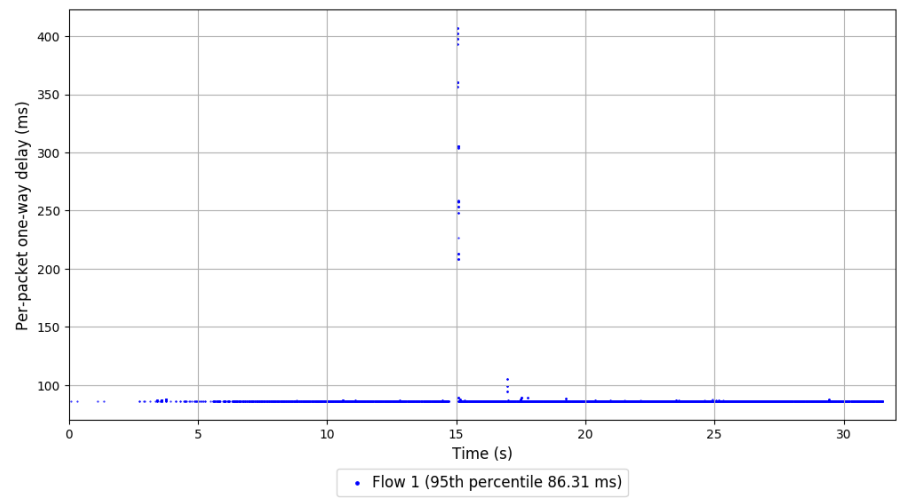
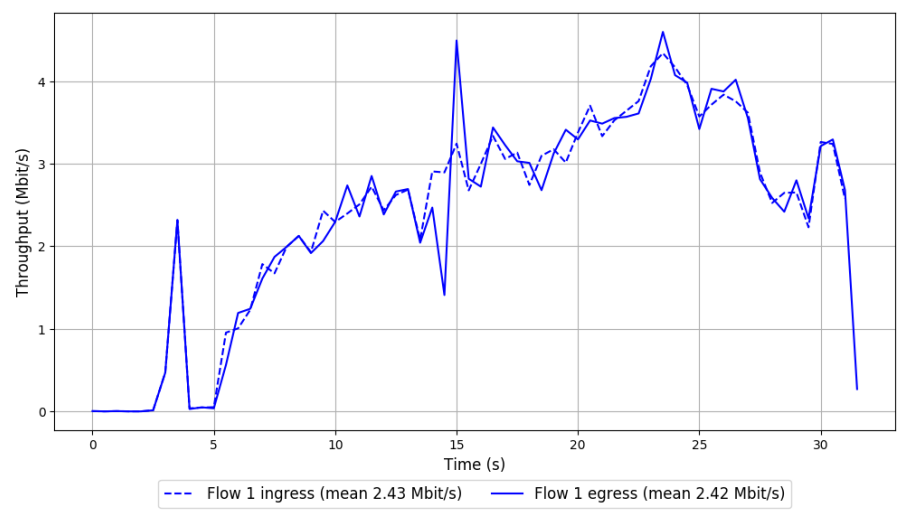
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 86.312 ms

Loss rate: 0.22%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-16 20:48:26

End at: 2017-08-16 20:48:56

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 87.007 ms

Loss rate: 0.00%

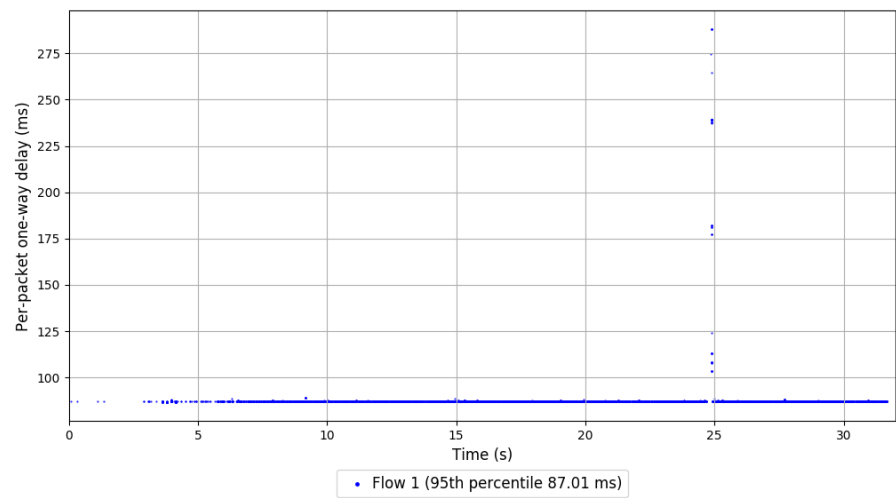
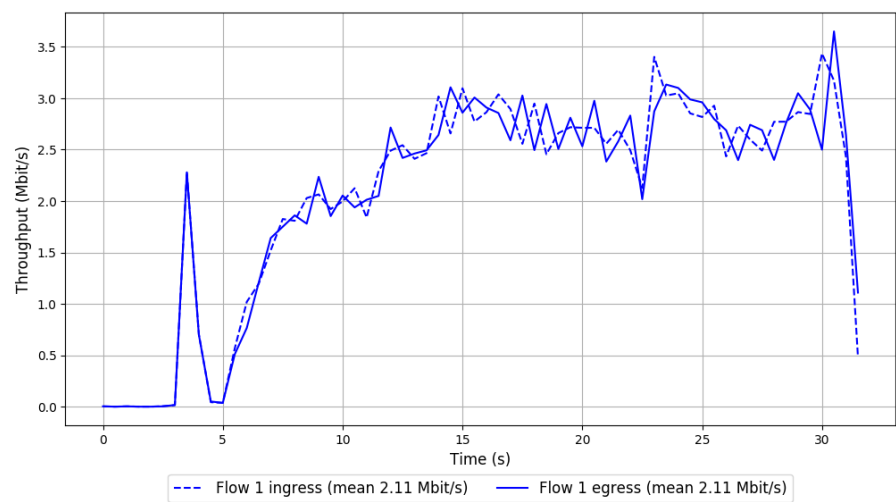
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 87.007 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-16 20:59:57

End at: 2017-08-16 21:00:27

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 86.986 ms

Loss rate: 0.00%

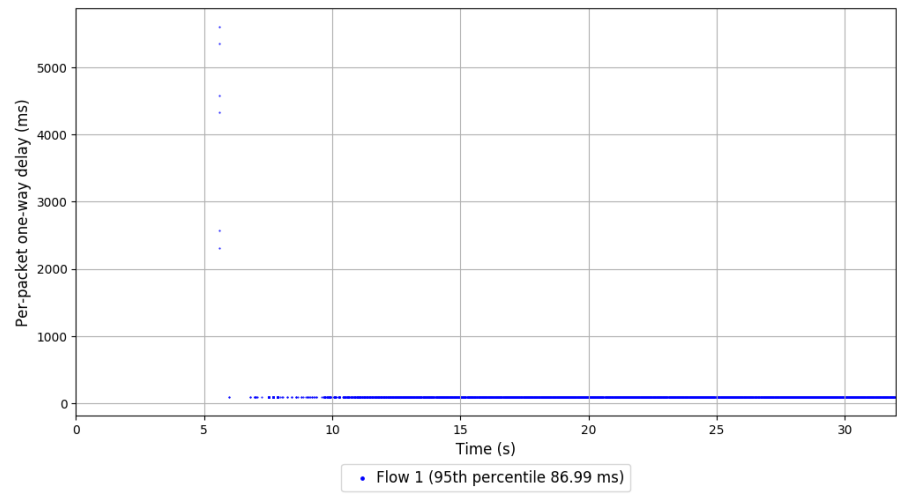
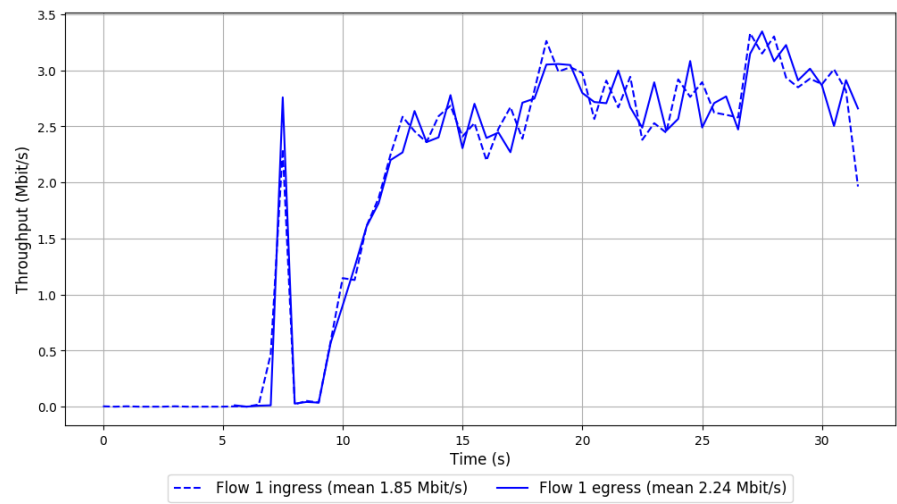
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 86.986 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-16 21:10:25

End at: 2017-08-16 21:10:55

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 87.102 ms

Loss rate: 0.00%

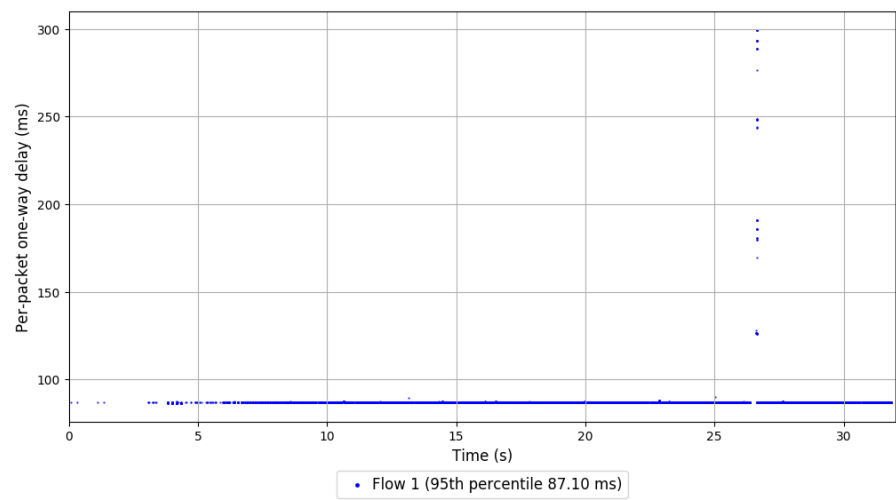
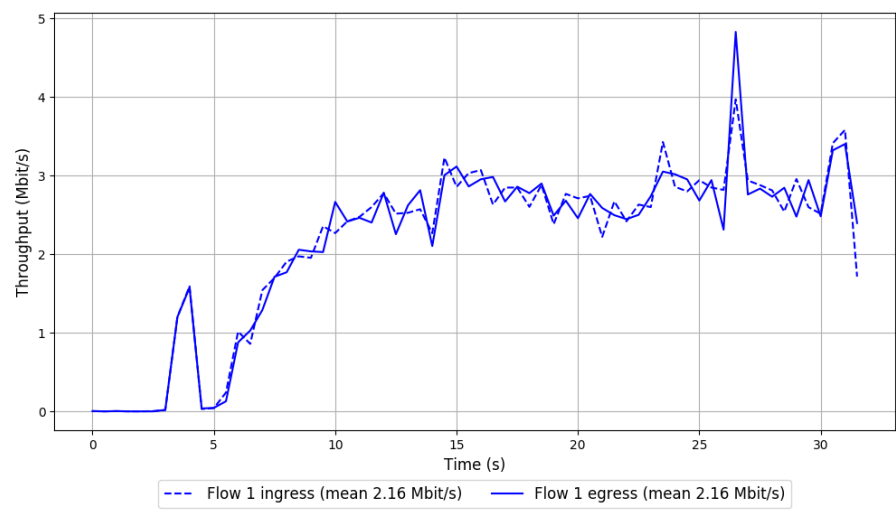
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 87.102 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-16 21:21:30

End at: 2017-08-16 21:22:00

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 86.666 ms

Loss rate: 0.00%

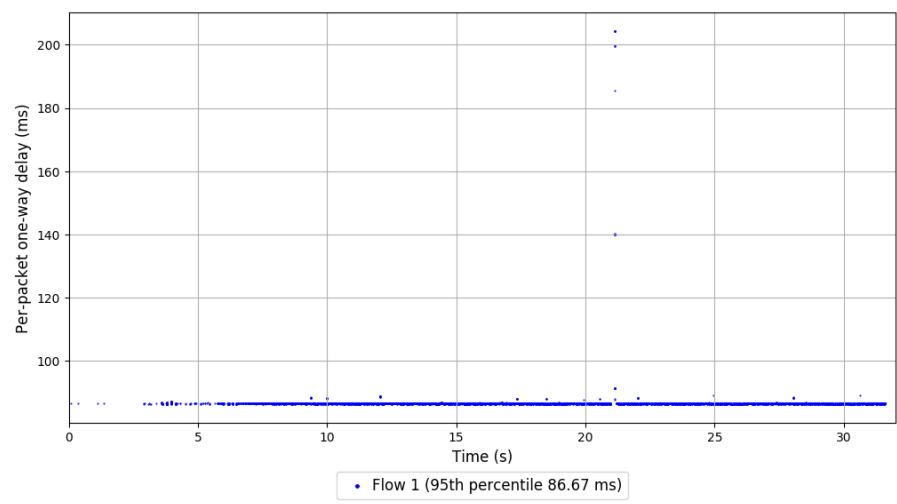
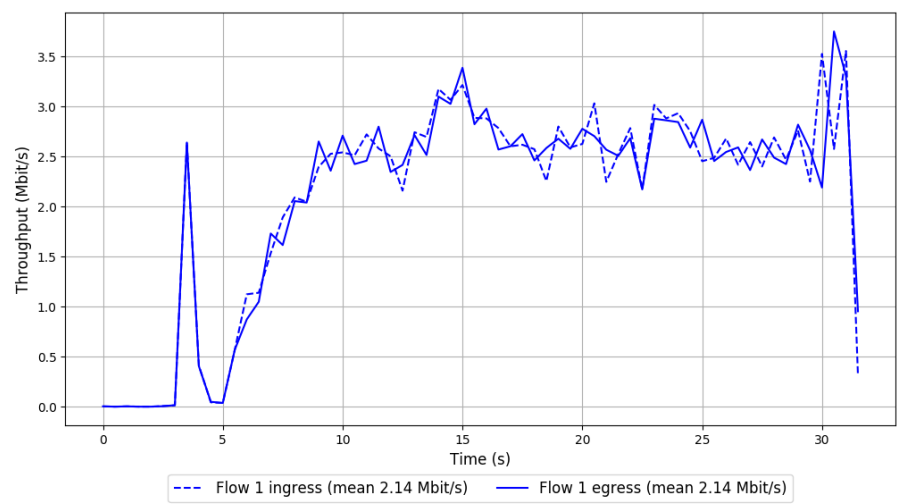
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 86.666 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-16 21:33:27

End at: 2017-08-16 21:33:57

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 86.803 ms

Loss rate: 0.00%

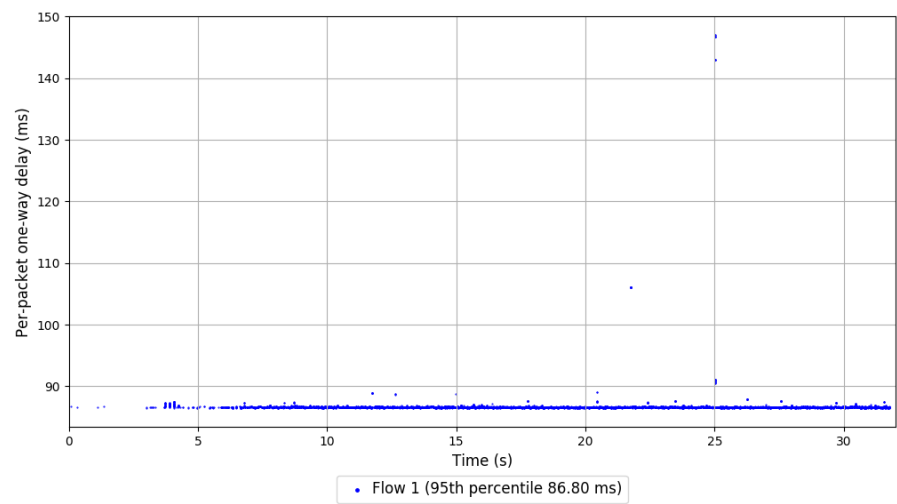
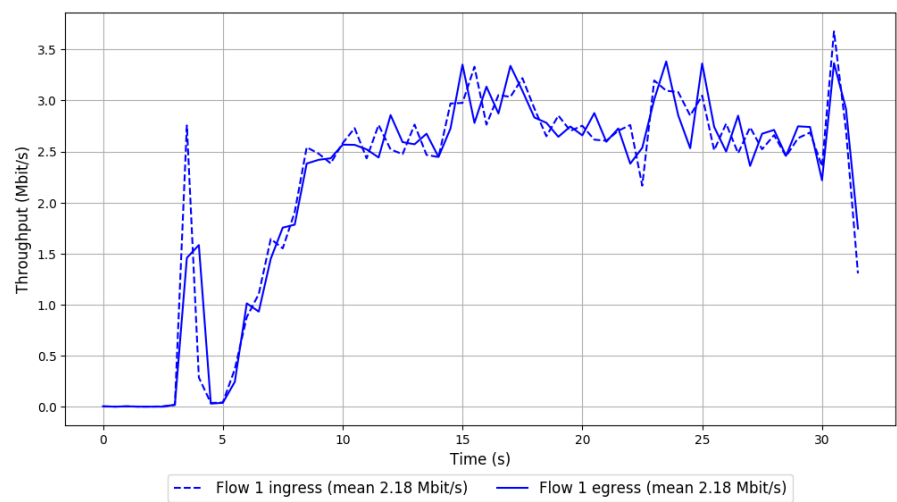
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 86.803 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-16 21:44:30

End at: 2017-08-16 21:45:00

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 0.00%

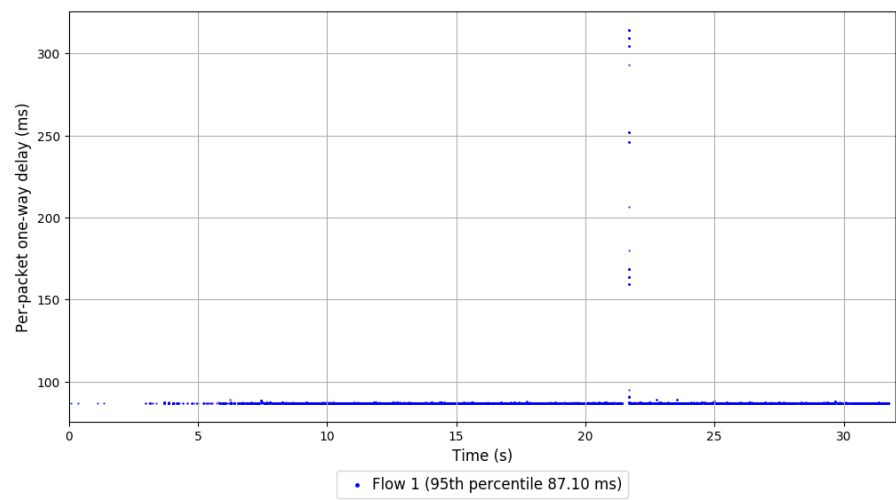
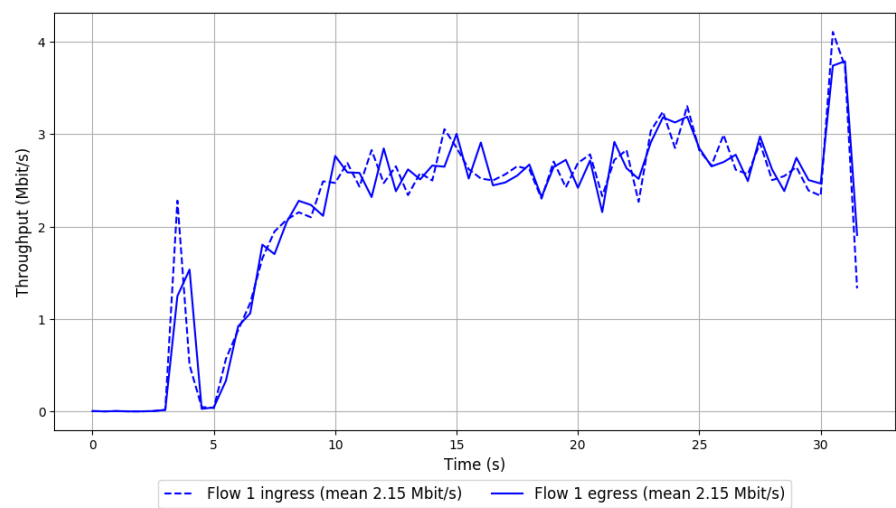
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-16 21:55:23

End at: 2017-08-16 21:55:53

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 86.737 ms

Loss rate: 0.00%

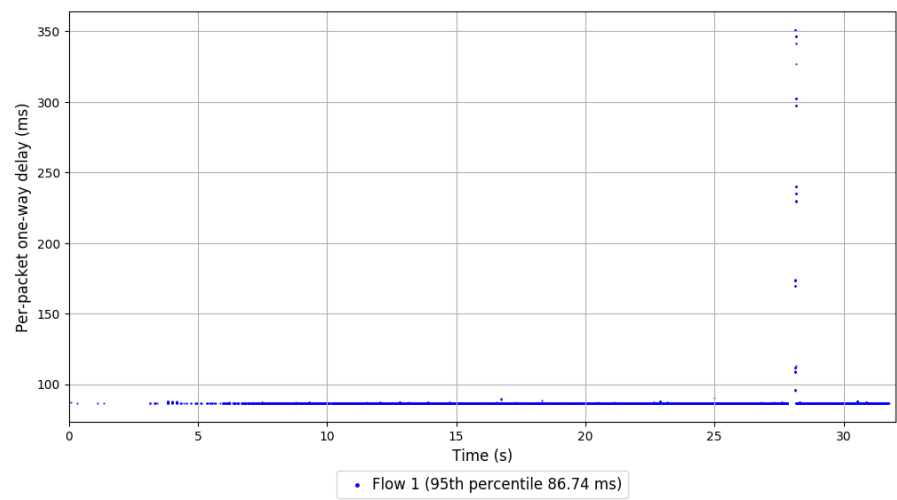
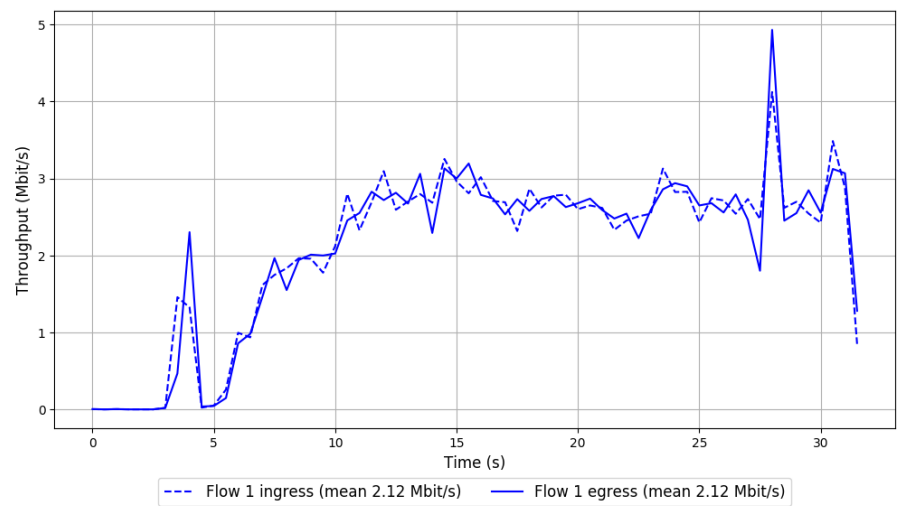
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 86.737 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-16 22:06:03

End at: 2017-08-16 22:06:33

Below is generated by plot.py at 2017-08-16 23:26:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 86.689 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 86.689 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

