

Pantheon Report

Generated at 2017-12-20 02:35:21 (UTC).

Data path: AWS Brazil 2 Ethernet (*local*) → Colombia Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

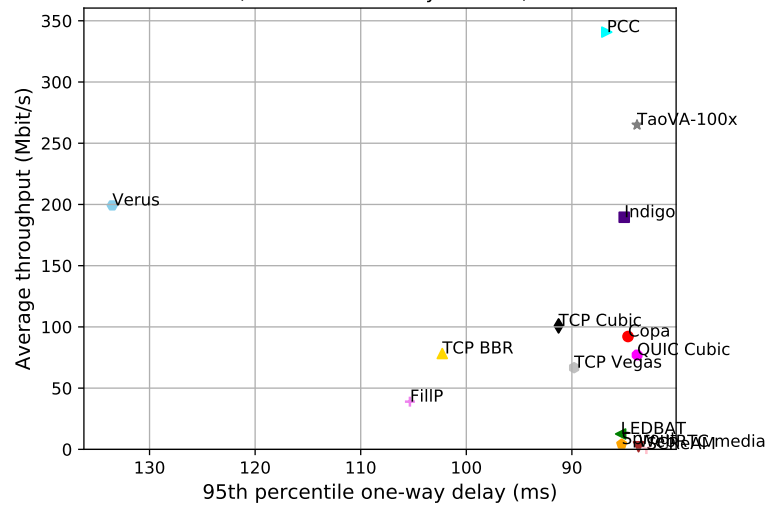
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

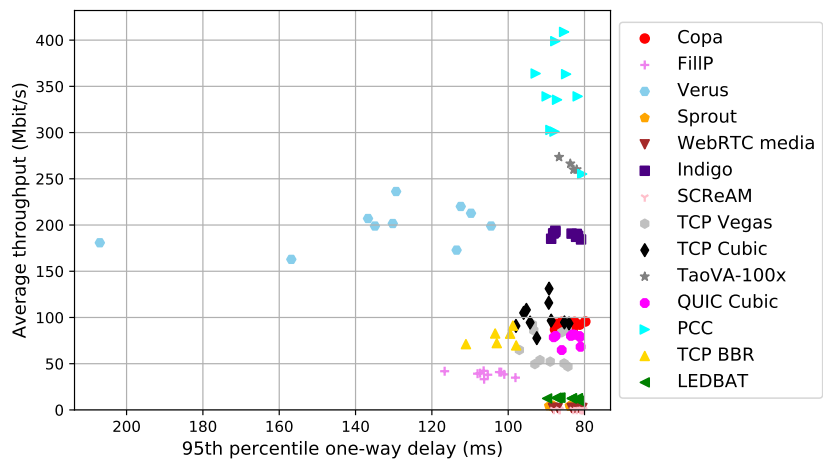
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fixlcp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
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 AWS Brazil 2 Ethernet to Colombia Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS Brazil 2 Ethernet to Colombia 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	6	78.27	102.28	0.06
TCP Cubic	10	100.81	91.26	0.02
LEDBAT	10	12.57	85.38	0.00
PCC	10	340.75	86.69	7.20
QUIC Cubic	9	77.05	83.82	0.00
SCReAM	10	0.22	82.95	0.00
WebRTC media	10	2.09	83.69	0.00
Sprout	10	4.32	85.29	0.00
TaoVA-100x	4	264.98	83.83	0.00
TCP Vegas	10	66.70	89.79	0.01
Verus	10	199.21	133.53	1.11
Copa	9	92.15	84.69	0.00
FillP	10	38.97	105.34	16.65
Indigo	10	189.55	85.04	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-12-19 22:27:09

End at: 2017-12-19 22:27:39

Local clock offset: 3.893 ms

Remote clock offset: 0.481 ms

Below is generated by plot.py at 2017-12-20 02:09:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.17 Mbit/s

95th percentile per-packet one-way delay: 111.073 ms

Loss rate: 0.15%

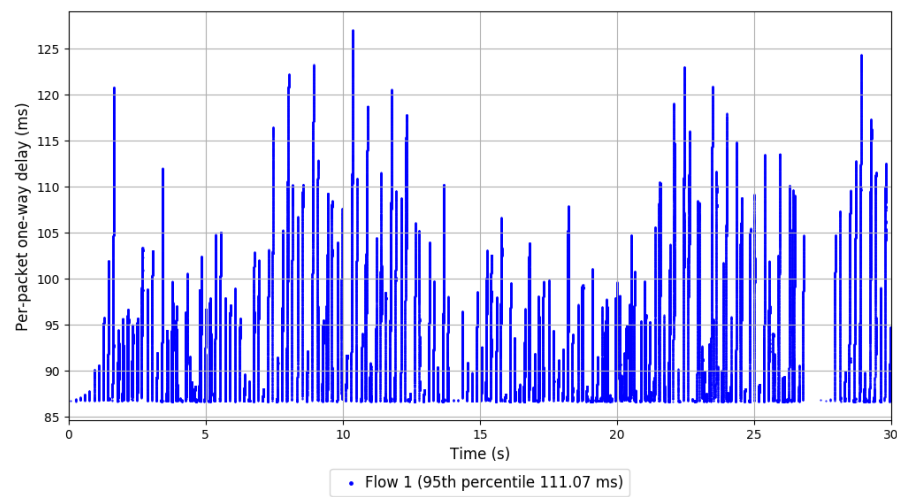
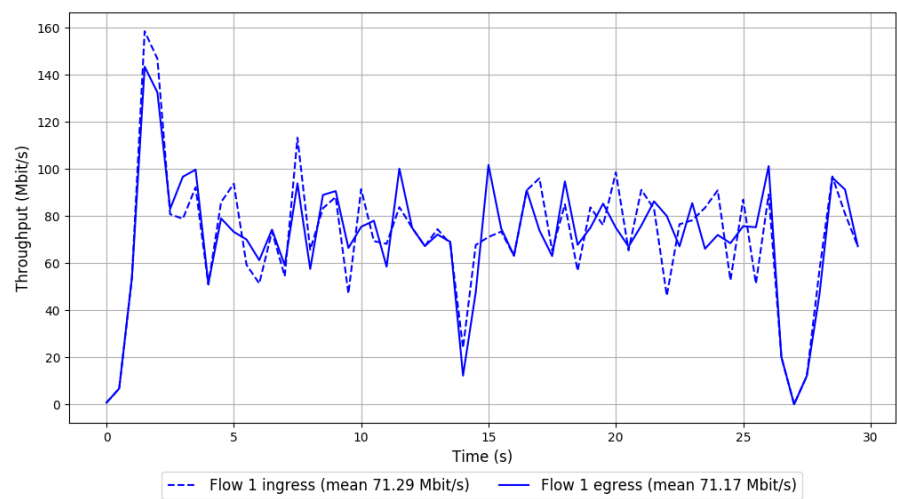
-- Flow 1:

Average throughput: 71.17 Mbit/s

95th percentile per-packet one-way delay: 111.073 ms

Loss rate: 0.15%

Run 1: Report of TCP BBR — Data Link

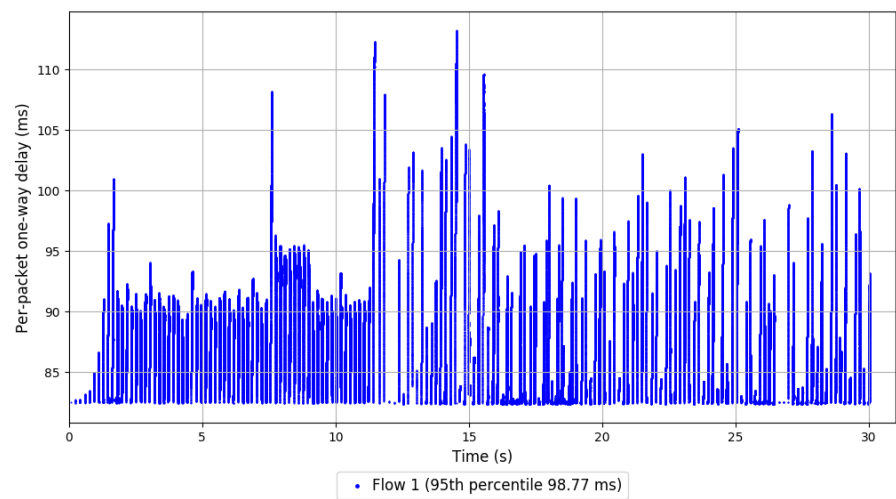
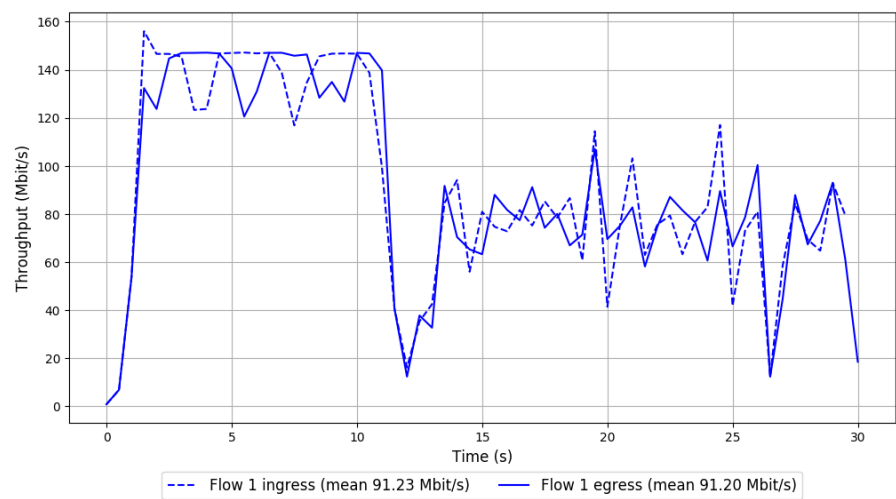


Run 2: Statistics of TCP BBR

Start at: 2017-12-19 22:45:47
End at: 2017-12-19 22:46:17
Local clock offset: 2.431 ms
Remote clock offset: -4.584 ms

Below is generated by plot.py at 2017-12-20 02:09:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 98.768 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 98.768 ms
Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-19 23:04:20

End at: 2017-12-19 23:04:50

Local clock offset: 2.661 ms

Remote clock offset: 0.775 ms

Below is generated by plot.py at 2017-12-20 02:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.70 Mbit/s

95th percentile per-packet one-way delay: 103.412 ms

Loss rate: 0.05%

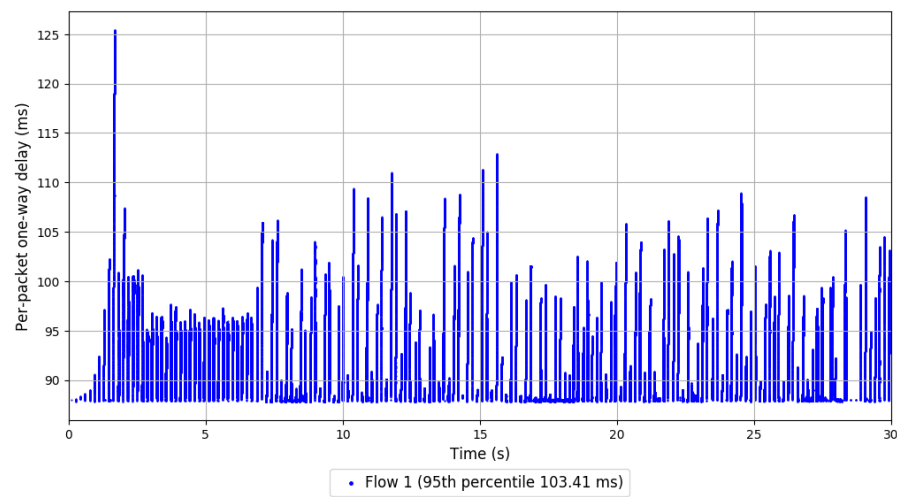
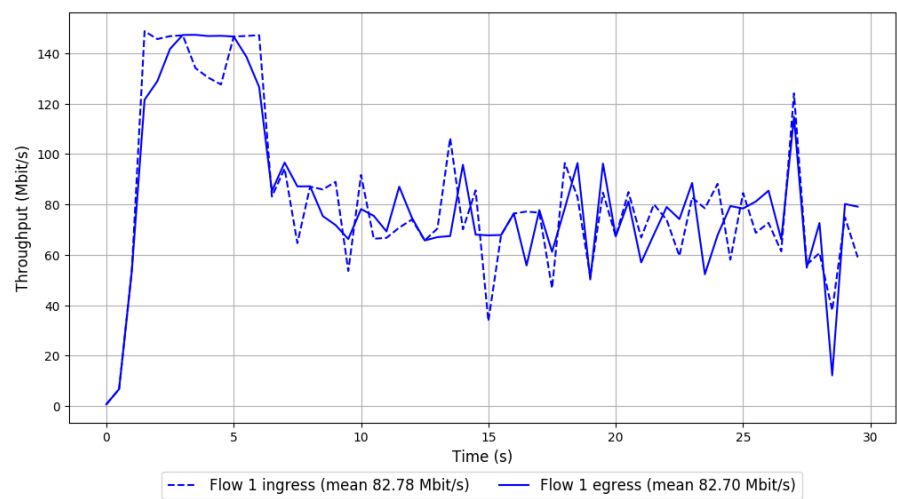
-- Flow 1:

Average throughput: 82.70 Mbit/s

95th percentile per-packet one-way delay: 103.412 ms

Loss rate: 0.05%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-19 23:22:55

End at: 2017-12-19 23:23:25

Local clock offset: 3.781 ms

Remote clock offset: -4.958 ms

Below is generated by plot.py at 2017-12-20 02:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.79 Mbit/s

95th percentile per-packet one-way delay: 97.905 ms

Loss rate: 0.02%

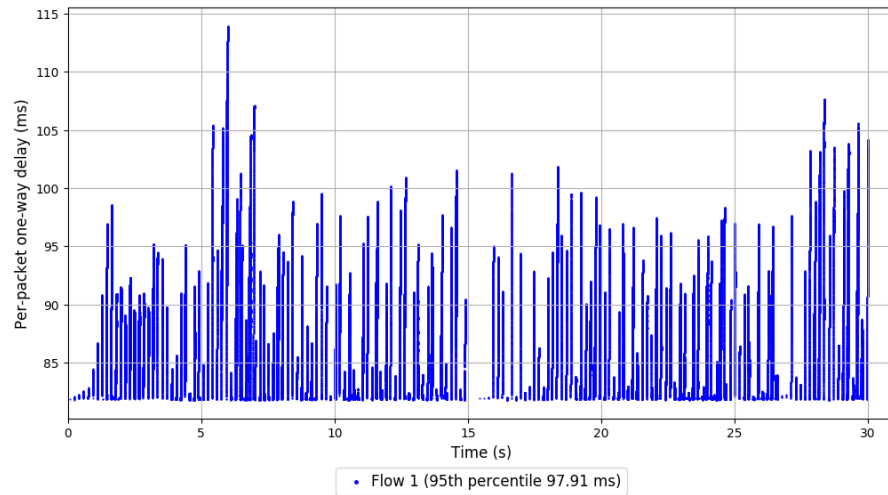
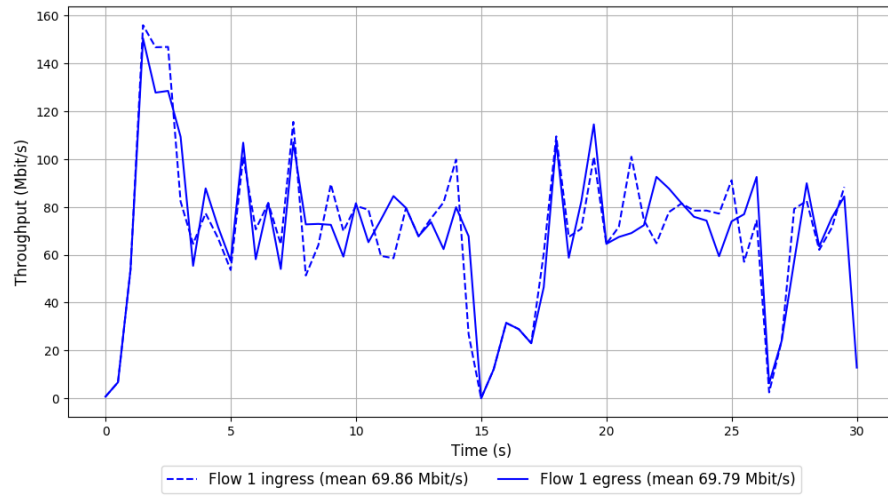
-- Flow 1:

Average throughput: 69.79 Mbit/s

95th percentile per-packet one-way delay: 97.905 ms

Loss rate: 0.02%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

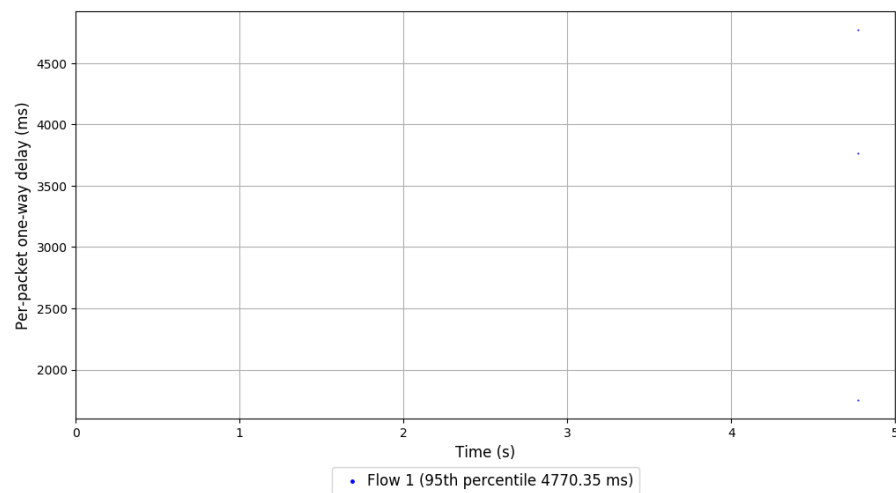
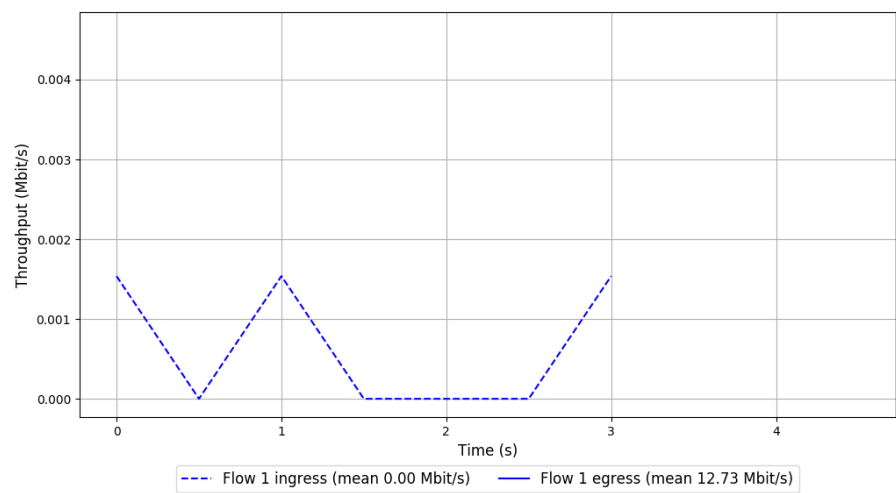
Start at: 2017-12-19 23:41:31

End at: 2017-12-19 23:42:01

Local clock offset: 4.434 ms

Remote clock offset: -0.925 ms

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

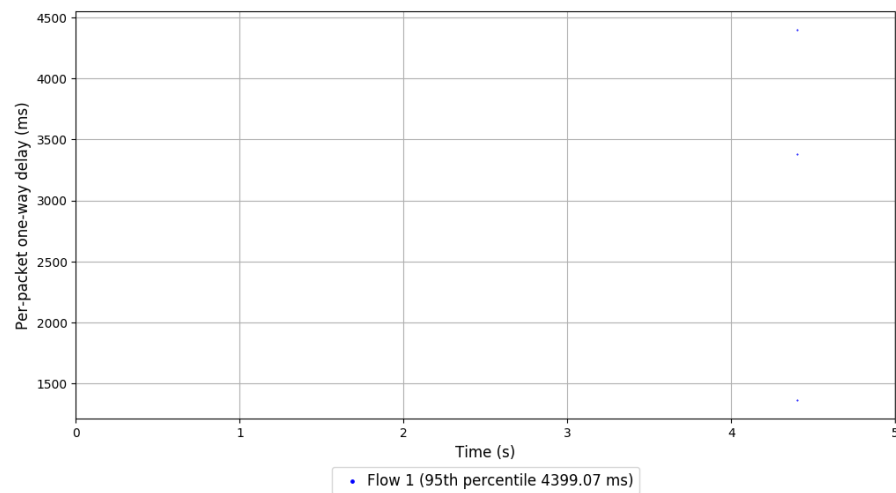
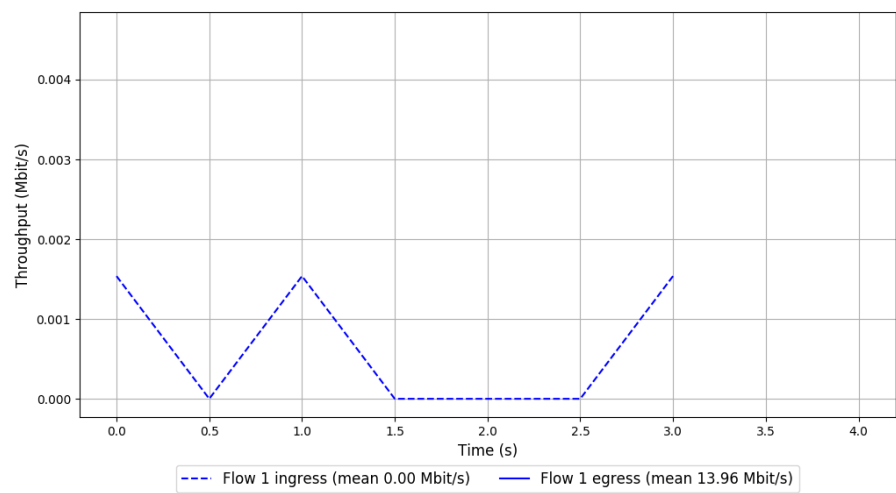
Start at: 2017-12-20 00:00:19

End at: 2017-12-20 00:00:49

Local clock offset: 4.878 ms

Remote clock offset: -6.289 ms

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

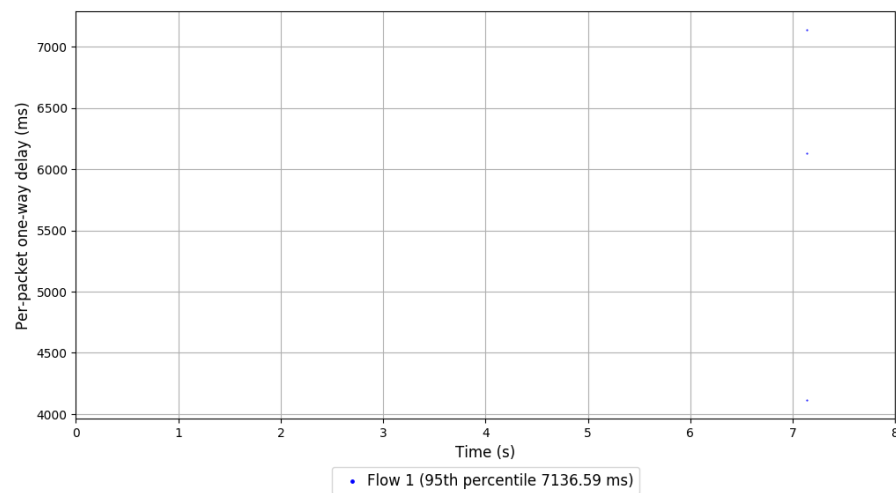
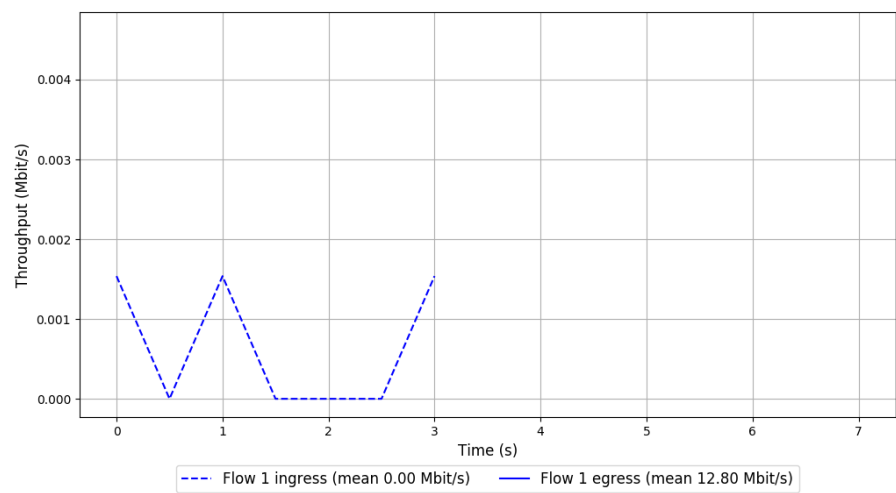
Start at: 2017-12-20 00:19:09

End at: 2017-12-20 00:19:39

Local clock offset: 5.36 ms

Remote clock offset: -5.77 ms

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

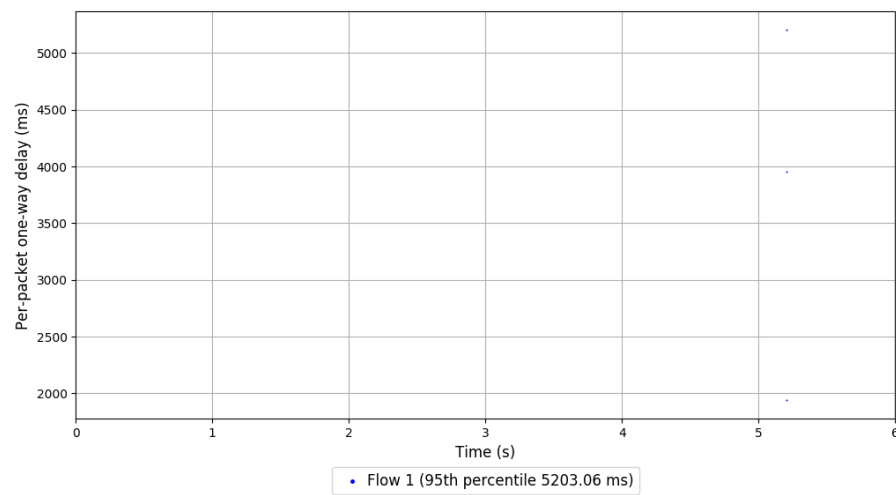
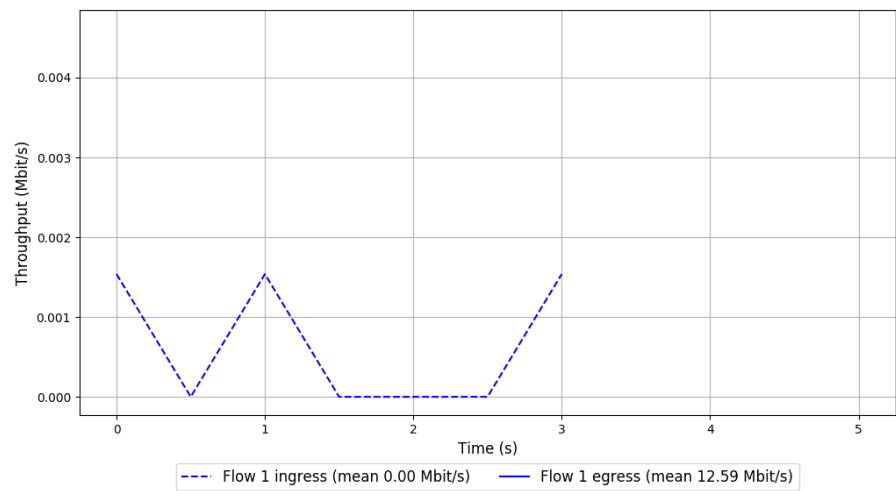
Start at: 2017-12-20 00:38:06

End at: 2017-12-20 00:38:36

Local clock offset: 5.189 ms

Remote clock offset: -5.523 ms

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-20 00:57:06

End at: 2017-12-20 00:57:36

Local clock offset: 5.478 ms

Remote clock offset: 0.098 ms

Below is generated by plot.py at 2017-12-20 02:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.28 Mbit/s

95th percentile per-packet one-way delay: 102.994 ms

Loss rate: 0.13%

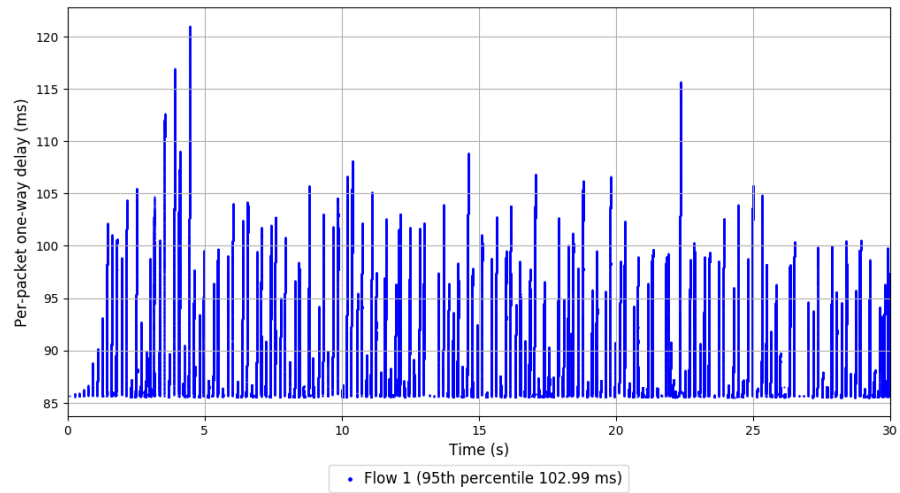
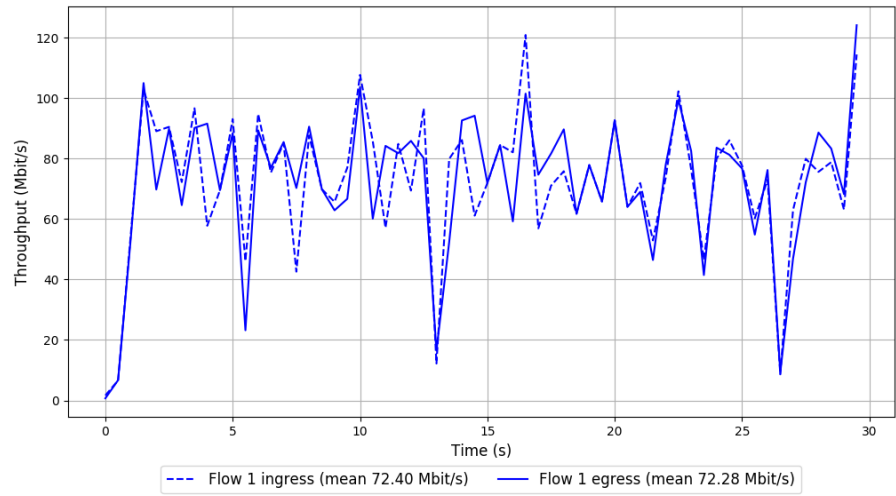
-- Flow 1:

Average throughput: 72.28 Mbit/s

95th percentile per-packet one-way delay: 102.994 ms

Loss rate: 0.13%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 01:15:43

End at: 2017-12-20 01:16:13

Local clock offset: 4.655 ms

Remote clock offset: -5.446 ms

Below is generated by plot.py at 2017-12-20 02:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.48 Mbit/s

95th percentile per-packet one-way delay: 99.500 ms

Loss rate: 0.03%

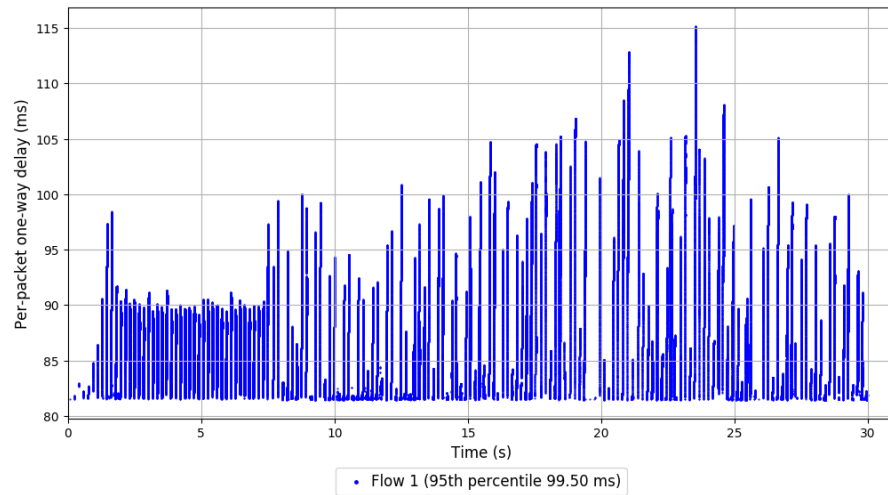
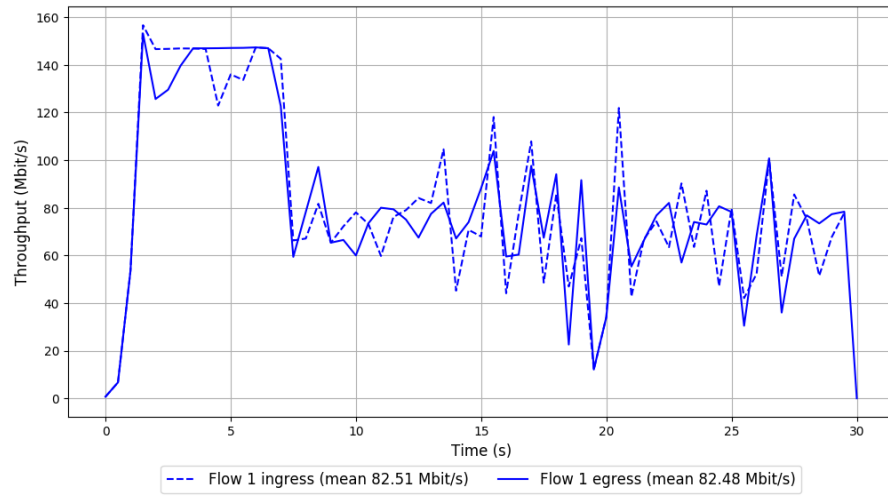
-- Flow 1:

Average throughput: 82.48 Mbit/s

95th percentile per-packet one-way delay: 99.500 ms

Loss rate: 0.03%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-19 22:40:48

End at: 2017-12-19 22:41:18

Local clock offset: 2.877 ms

Remote clock offset: 0.849 ms

Below is generated by plot.py at 2017-12-20 02:09:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.55 Mbit/s

95th percentile per-packet one-way delay: 94.253 ms

Loss rate: 0.02%

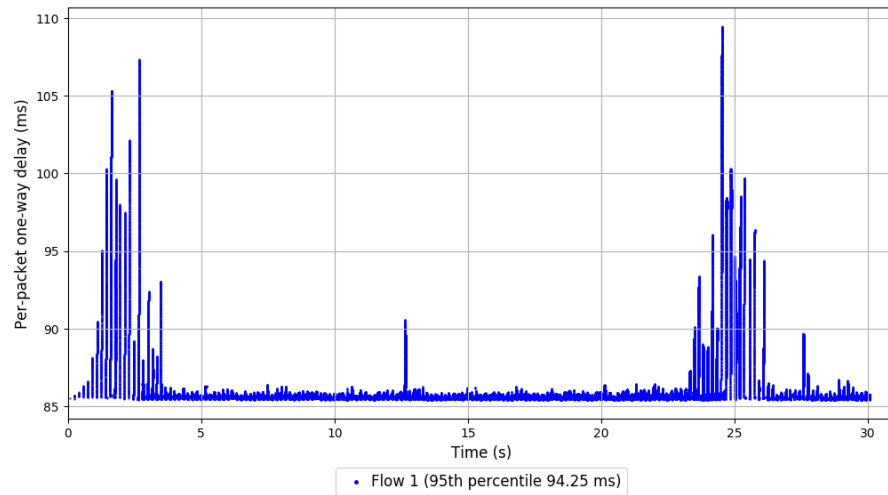
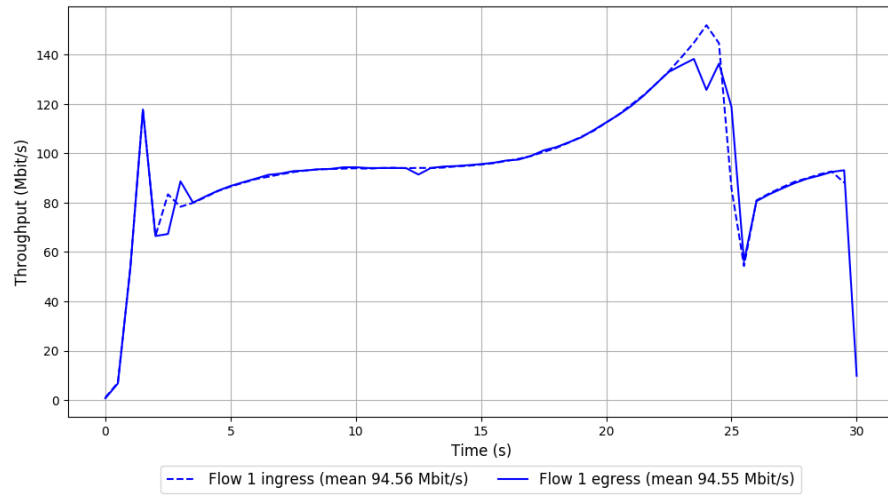
-- Flow 1:

Average throughput: 94.55 Mbit/s

95th percentile per-packet one-way delay: 94.253 ms

Loss rate: 0.02%

Run 1: Report of TCP Cubic — Data Link

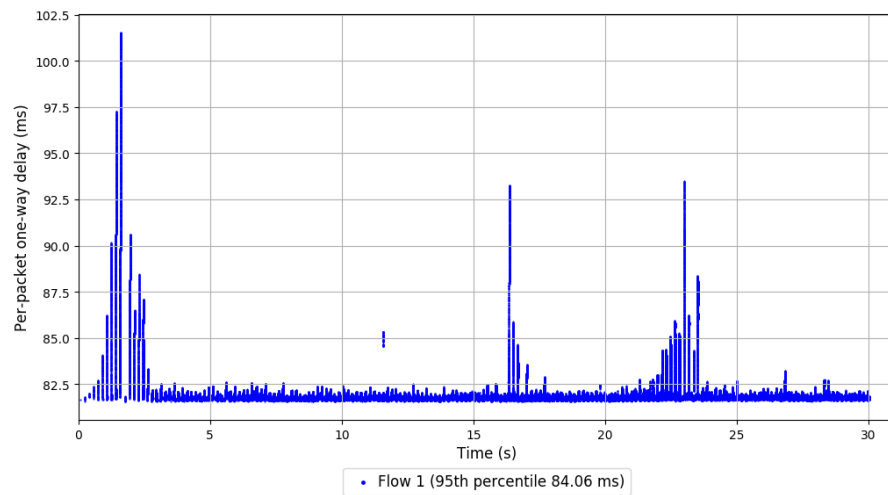
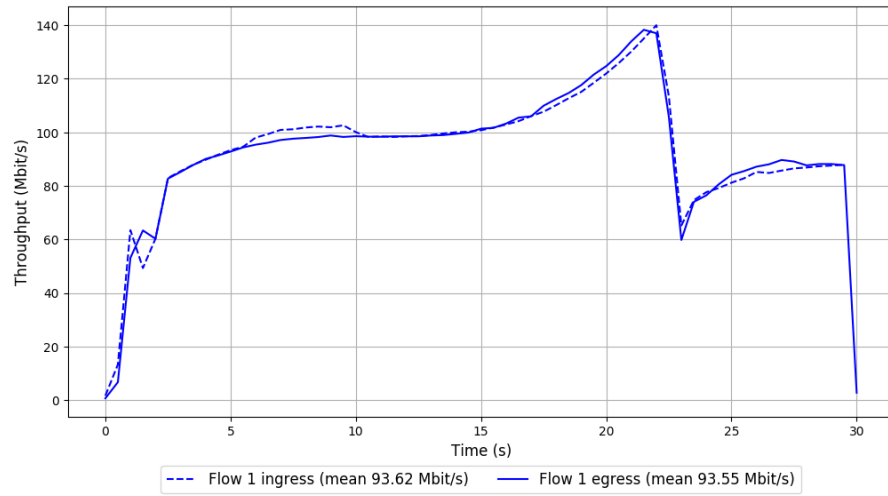


Run 2: Statistics of TCP Cubic

Start at: 2017-12-19 22:59:23
End at: 2017-12-19 22:59:53
Local clock offset: 2.421 ms
Remote clock offset: -3.819 ms

Below is generated by plot.py at 2017-12-20 02:09:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.55 Mbit/s
95th percentile per-packet one-way delay: 84.059 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.55 Mbit/s
95th percentile per-packet one-way delay: 84.059 ms
Loss rate: 0.07%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-19 23:17:59

End at: 2017-12-19 23:18:29

Local clock offset: 3.532 ms

Remote clock offset: 0.463 ms

Below is generated by plot.py at 2017-12-20 02:10:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.87 Mbit/s

95th percentile per-packet one-way delay: 97.967 ms

Loss rate: 0.02%

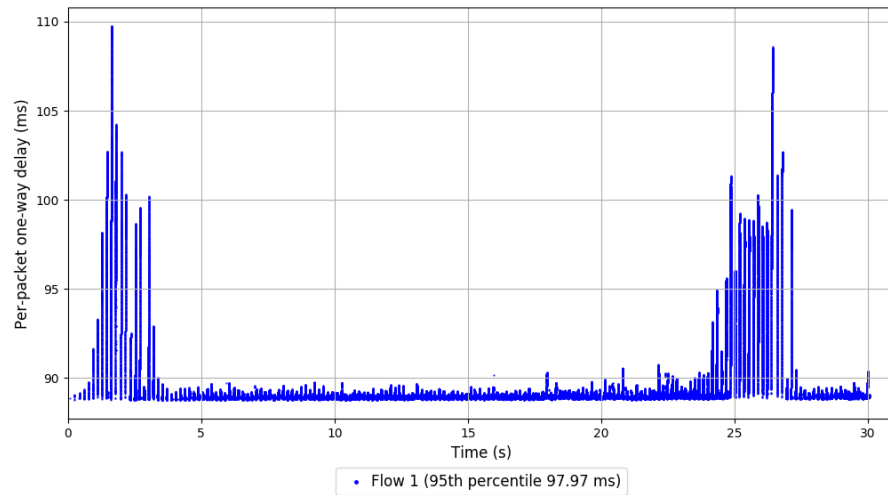
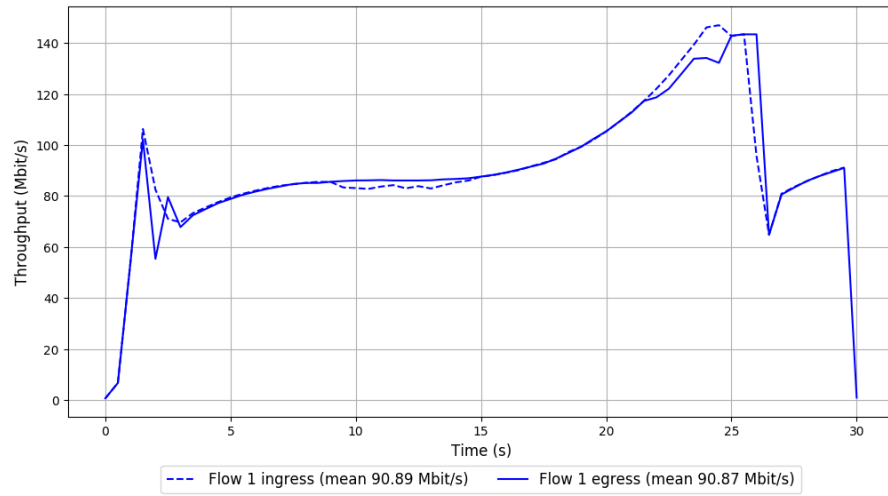
-- Flow 1:

Average throughput: 90.87 Mbit/s

95th percentile per-packet one-way delay: 97.967 ms

Loss rate: 0.02%

Run 3: Report of TCP Cubic — Data Link

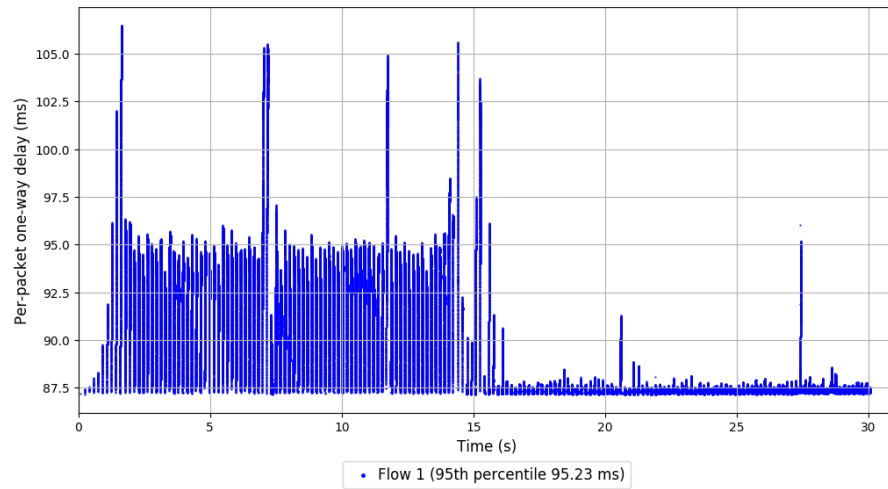
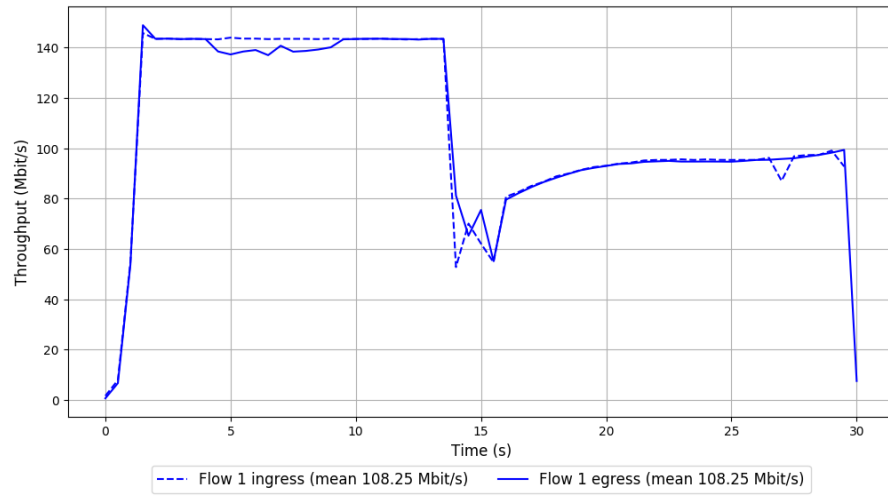


Run 4: Statistics of TCP Cubic

Start at: 2017-12-19 23:36:35
End at: 2017-12-19 23:37:05
Local clock offset: 4.325 ms
Remote clock offset: -0.793 ms

Below is generated by plot.py at 2017-12-20 02:11:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 108.25 Mbit/s
95th percentile per-packet one-way delay: 95.227 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 108.25 Mbit/s
95th percentile per-packet one-way delay: 95.227 ms
Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link

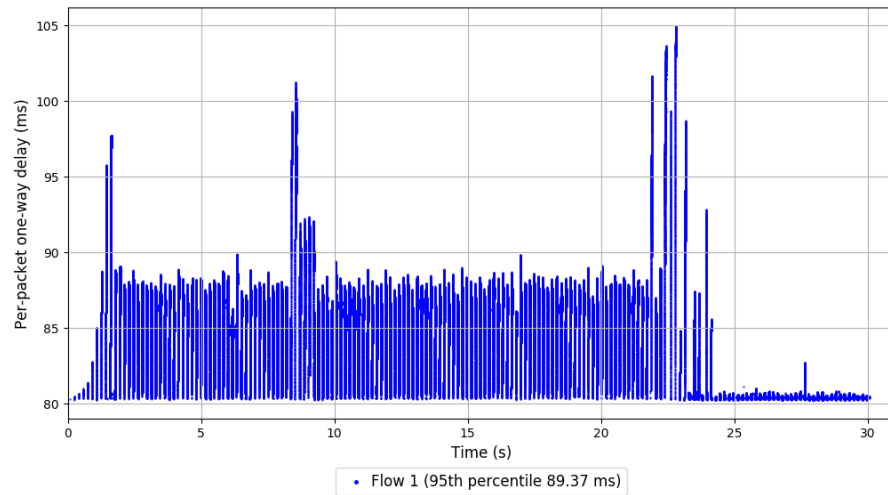
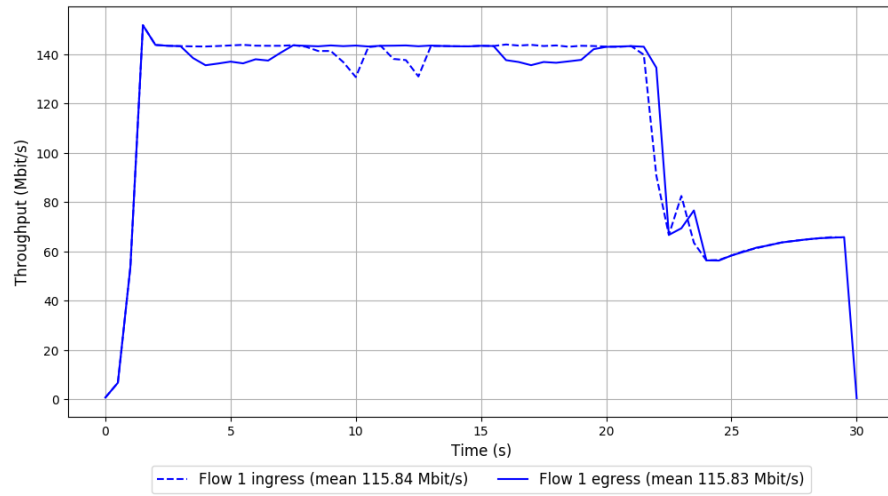


Run 5: Statistics of TCP Cubic

Start at: 2017-12-19 23:55:25
End at: 2017-12-19 23:55:55
Local clock offset: 4.742 ms
Remote clock offset: -6.555 ms

Below is generated by plot.py at 2017-12-20 02:11:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 115.83 Mbit/s
95th percentile per-packet one-way delay: 89.370 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 115.83 Mbit/s
95th percentile per-packet one-way delay: 89.370 ms
Loss rate: 0.01%

Run 5: Report of TCP Cubic — Data Link

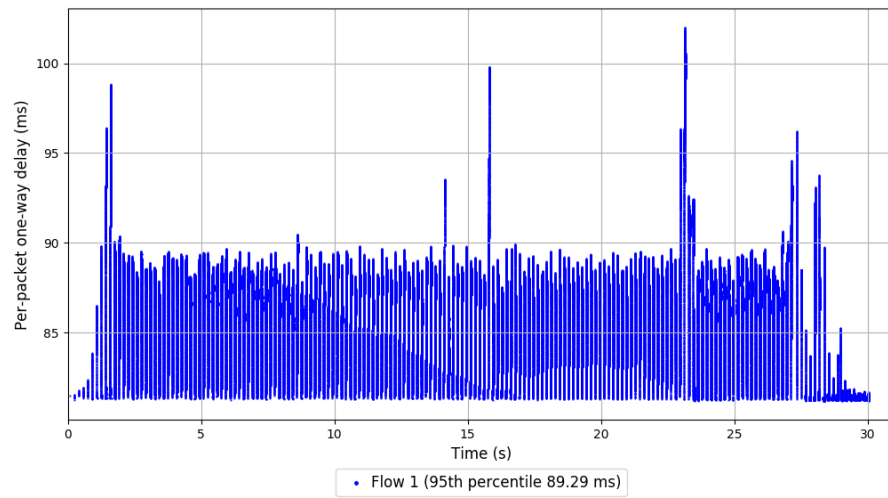
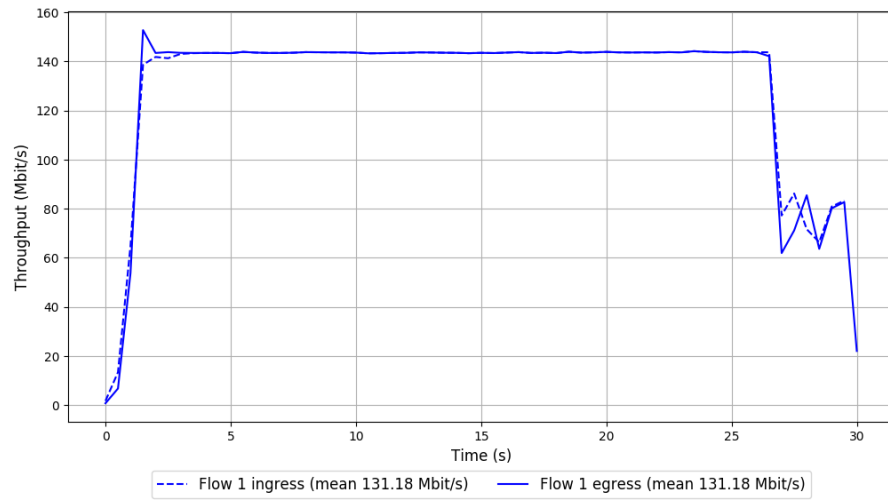


Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 00:14:11
End at: 2017-12-20 00:14:41
Local clock offset: 5.723 ms
Remote clock offset: -5.461 ms

Below is generated by plot.py at 2017-12-20 02:11:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 131.18 Mbit/s
95th percentile per-packet one-way delay: 89.286 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 131.18 Mbit/s
95th percentile per-packet one-way delay: 89.286 ms
Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 00:33:07

End at: 2017-12-20 00:33:37

Local clock offset: 5.217 ms

Remote clock offset: 0.095 ms

Below is generated by plot.py at 2017-12-20 02:11:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.99 Mbit/s

95th percentile per-packet one-way delay: 95.957 ms

Loss rate: 0.01%

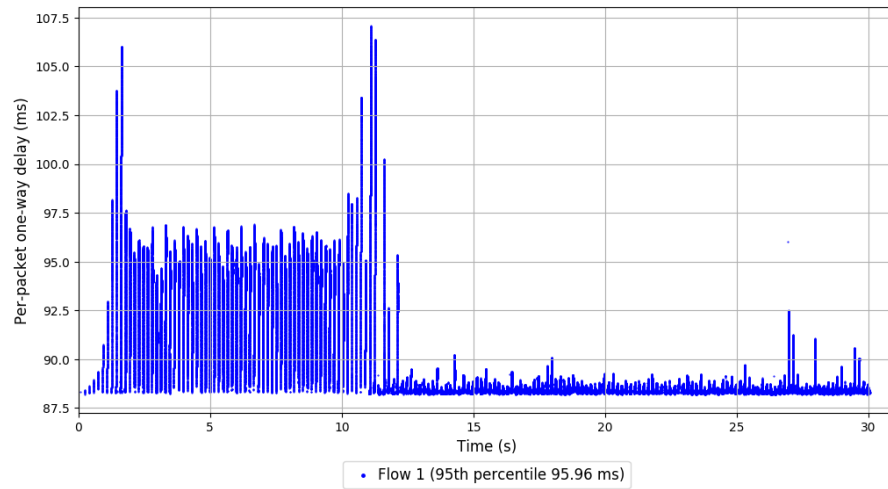
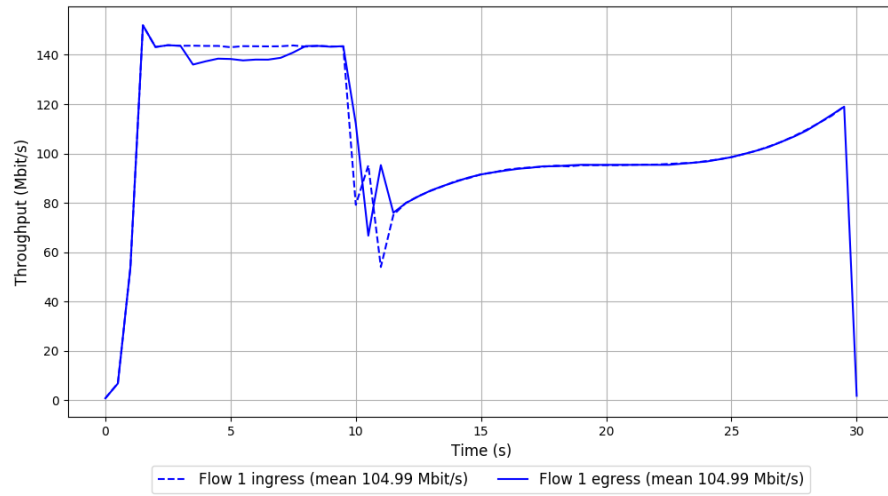
-- Flow 1:

Average throughput: 104.99 Mbit/s

95th percentile per-packet one-way delay: 95.957 ms

Loss rate: 0.01%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 00:51:58

End at: 2017-12-20 00:52:28

Local clock offset: 5.417 ms

Remote clock offset: 0.235 ms

Below is generated by plot.py at 2017-12-20 02:11:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.63 Mbit/s

95th percentile per-packet one-way delay: 92.503 ms

Loss rate: 0.03%

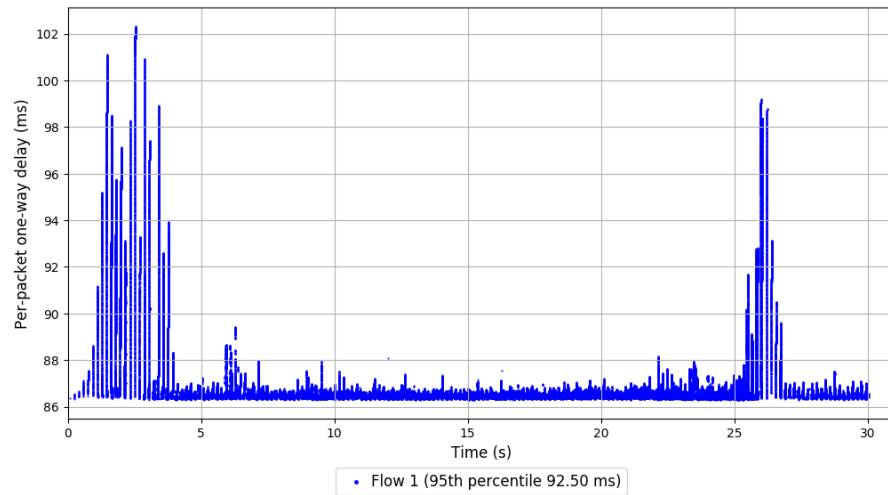
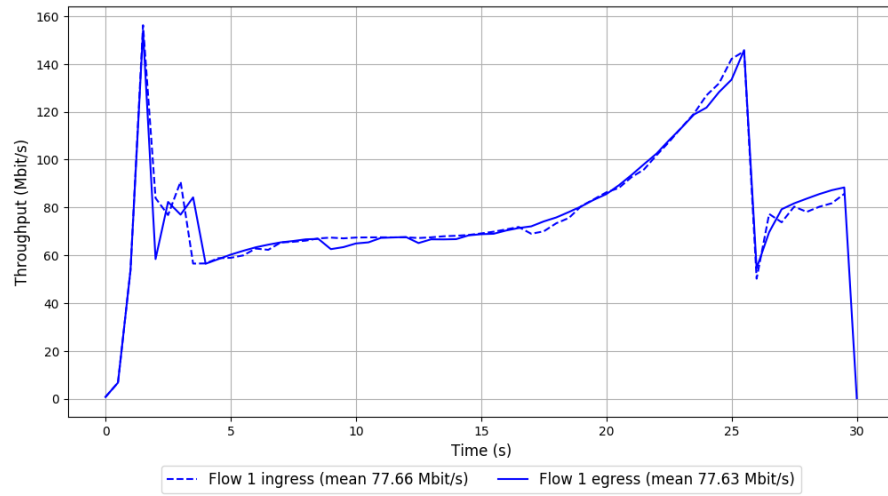
-- Flow 1:

Average throughput: 77.63 Mbit/s

95th percentile per-packet one-way delay: 92.503 ms

Loss rate: 0.03%

Run 8: Report of TCP Cubic — Data Link

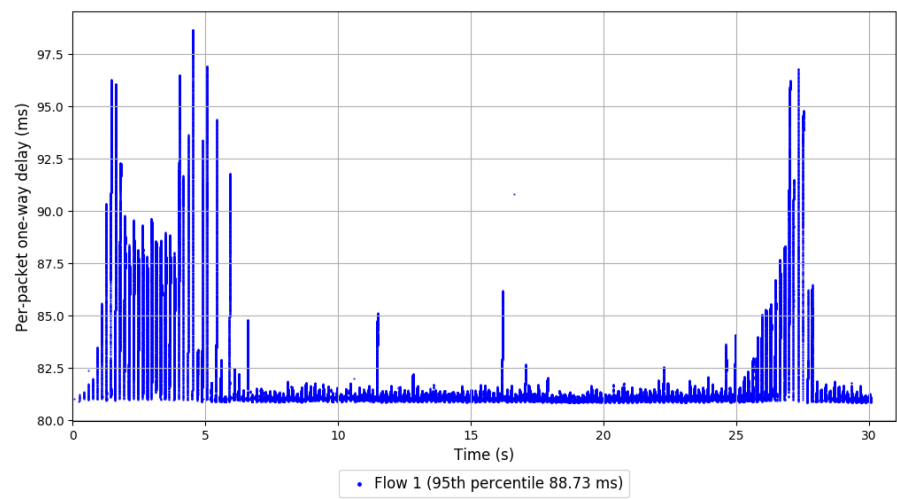
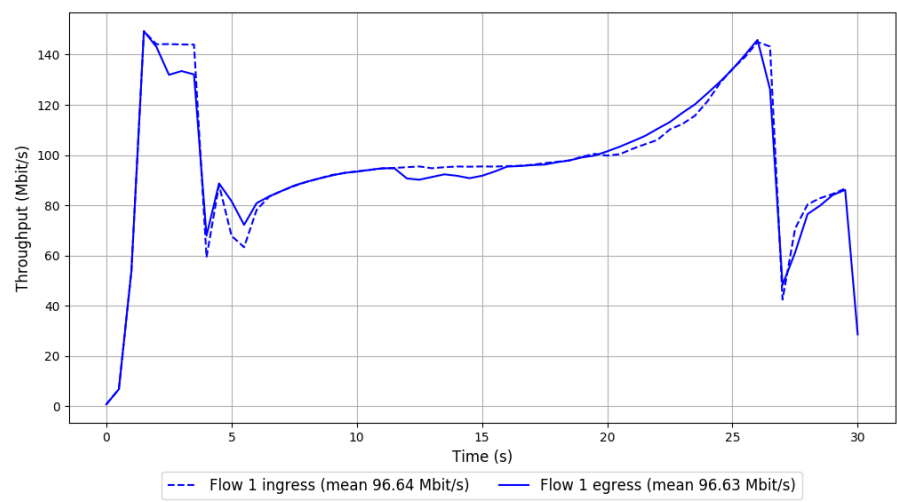


Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 01:10:46
End at: 2017-12-20 01:11:16
Local clock offset: 4.814 ms
Remote clock offset: -4.375 ms

Below is generated by plot.py at 2017-12-20 02:11:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.63 Mbit/s
95th percentile per-packet one-way delay: 88.733 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.63 Mbit/s
95th percentile per-packet one-way delay: 88.733 ms
Loss rate: 0.01%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 01:29:16

End at: 2017-12-20 01:29:47

Local clock offset: 4.164 ms

Remote clock offset: -4.026 ms

Below is generated by plot.py at 2017-12-20 02:11:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.66 Mbit/s

95th percentile per-packet one-way delay: 85.263 ms

Loss rate: 0.02%

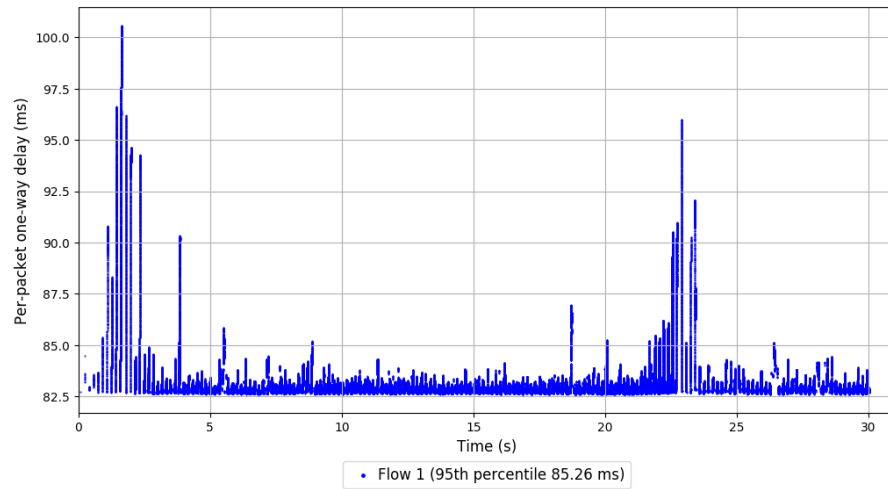
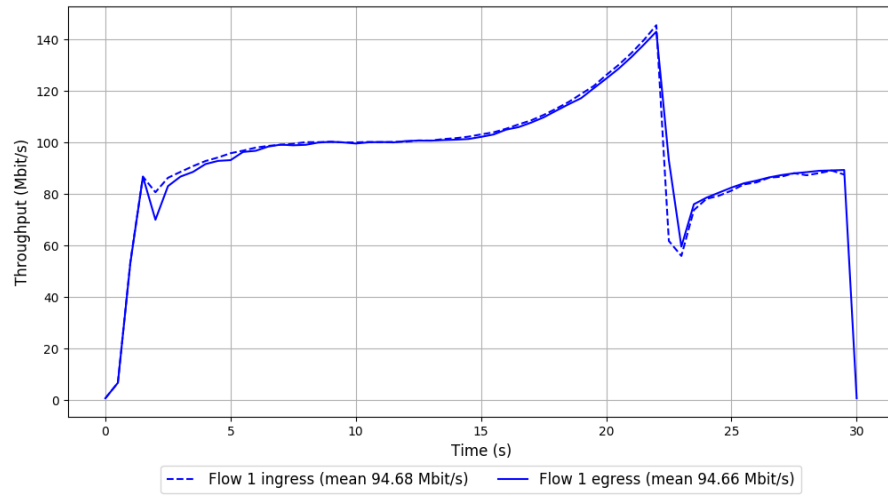
-- Flow 1:

Average throughput: 94.66 Mbit/s

95th percentile per-packet one-way delay: 85.263 ms

Loss rate: 0.02%

Run 10: Report of TCP Cubic — Data Link

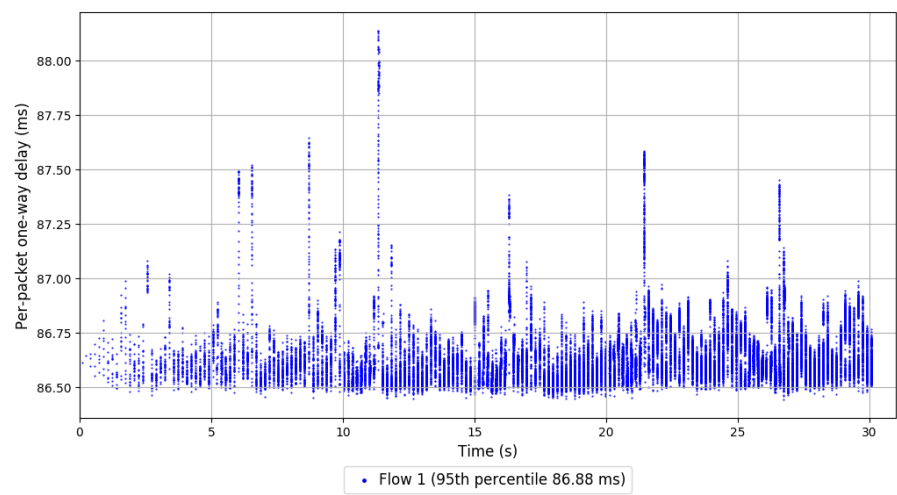
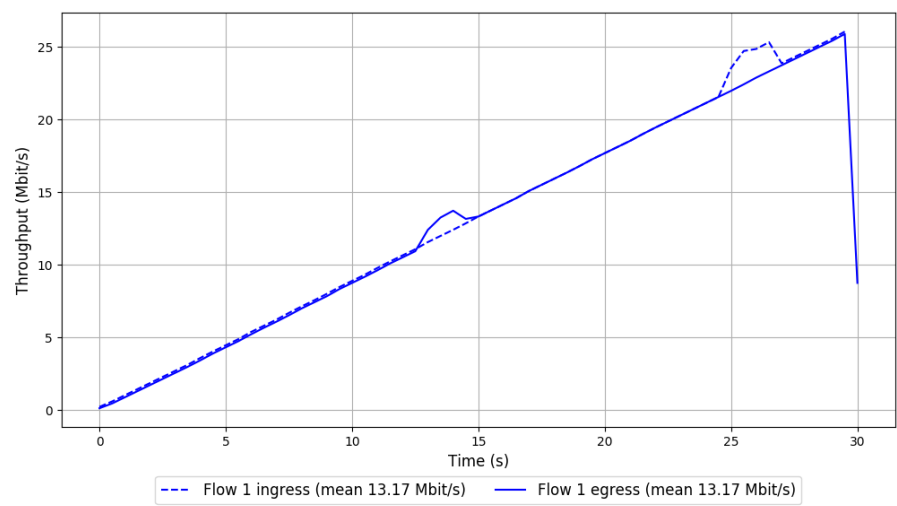


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-19 22:28:23
End at: 2017-12-19 22:28:53
Local clock offset: 3.808 ms
Remote clock offset: 1.589 ms

# Below is generated by plot.py at 2017-12-20 02:11:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.17 Mbit/s
95th percentile per-packet one-way delay: 86.879 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.17 Mbit/s
95th percentile per-packet one-way delay: 86.879 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

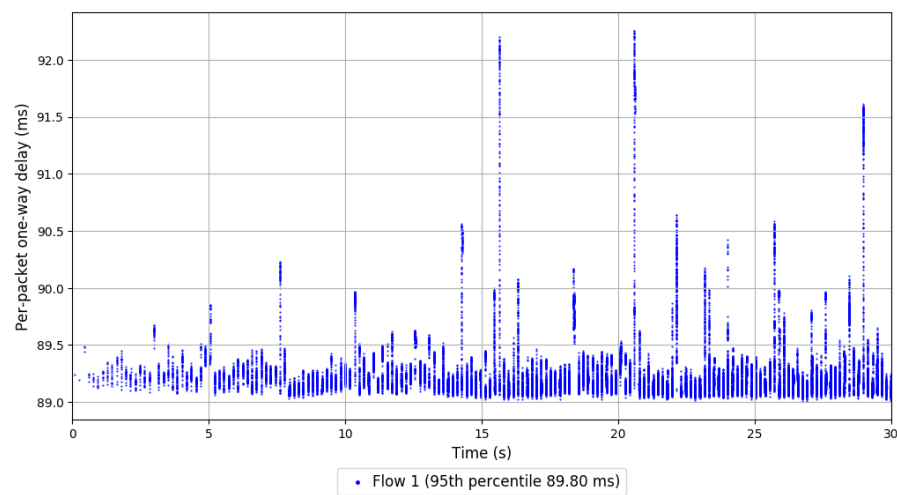
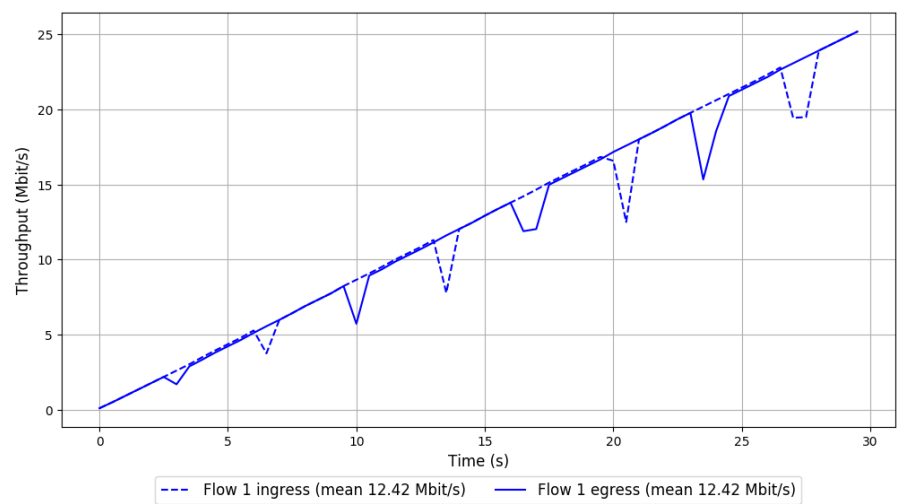


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-19 22:47:02
End at: 2017-12-19 22:47:32
Local clock offset: 2.393 ms
Remote clock offset: 1.759 ms

# Below is generated by plot.py at 2017-12-20 02:11:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 89.804 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 89.804 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-19 23:05:34

End at: 2017-12-19 23:06:04

Local clock offset: 2.654 ms

Remote clock offset: 1.288 ms

Below is generated by plot.py at 2017-12-20 02:11:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.28 Mbit/s

95th percentile per-packet one-way delay: 87.347 ms

Loss rate: 0.00%

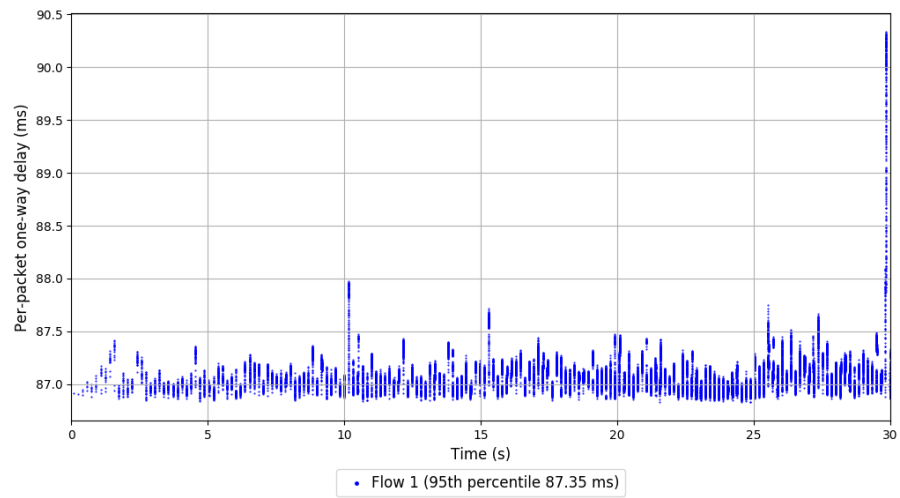
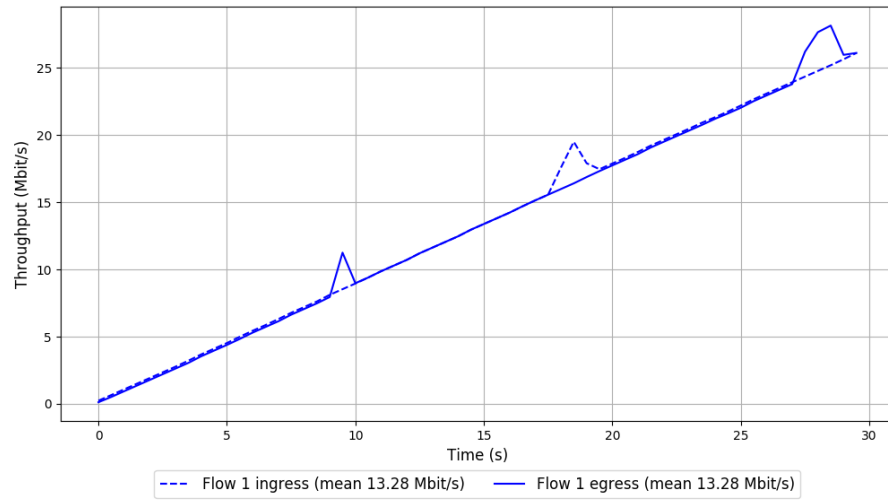
-- Flow 1:

Average throughput: 13.28 Mbit/s

95th percentile per-packet one-way delay: 87.347 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

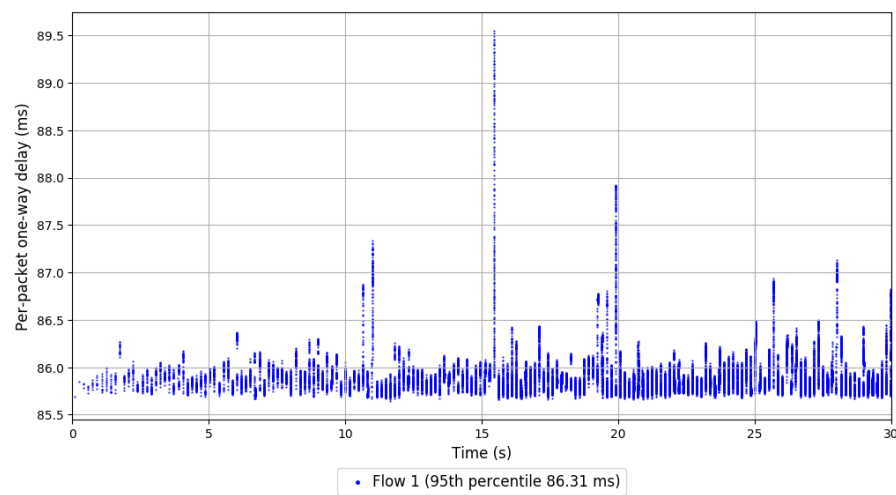
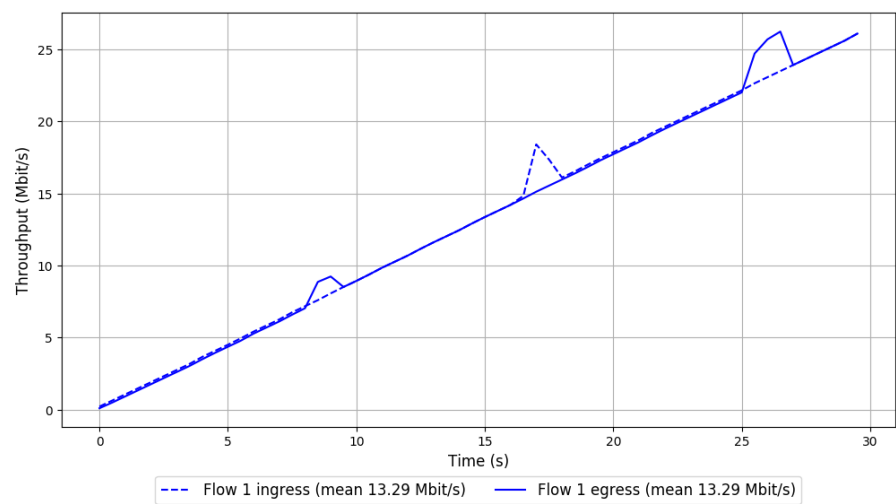


Run 4: Statistics of LEDBAT

Start at: 2017-12-19 23:24:09
End at: 2017-12-19 23:24:39
Local clock offset: 3.804 ms
Remote clock offset: -0.593 ms

Below is generated by plot.py at 2017-12-20 02:11:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.29 Mbit/s
95th percentile per-packet one-way delay: 86.313 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.29 Mbit/s
95th percentile per-packet one-way delay: 86.313 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

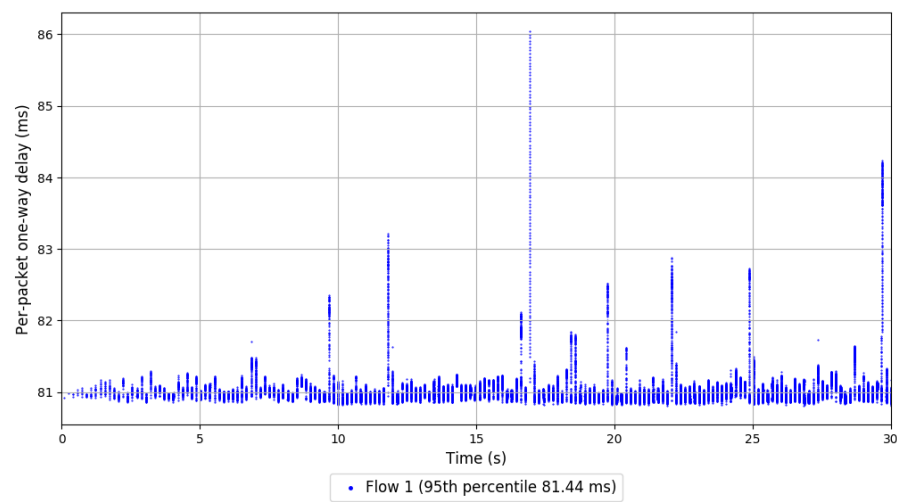
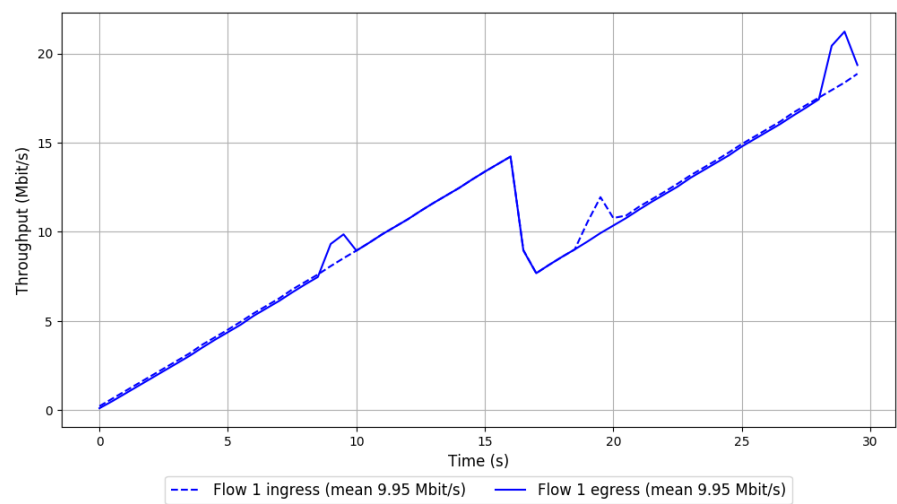


Run 5: Statistics of LEDBAT

Start at: 2017-12-19 23:42:40
End at: 2017-12-19 23:43:10
Local clock offset: 4.444 ms
Remote clock offset: -5.709 ms

Below is generated by plot.py at 2017-12-20 02:11:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 81.437 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 81.437 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

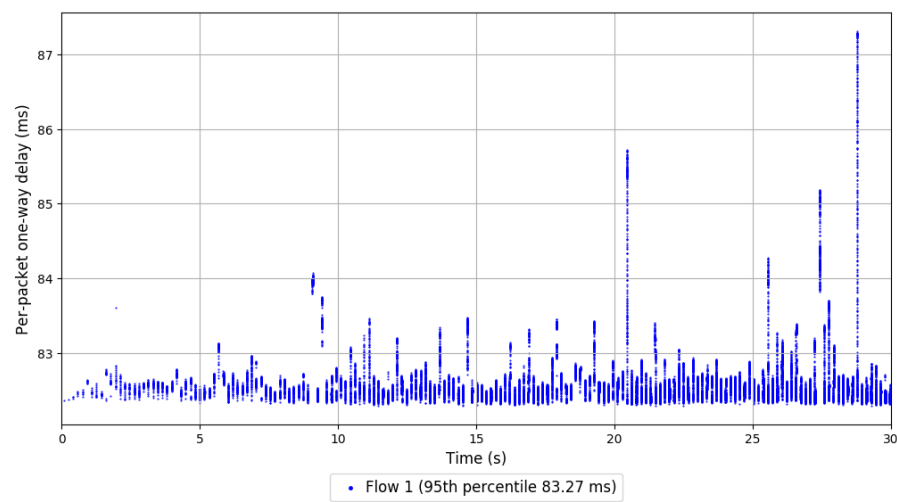
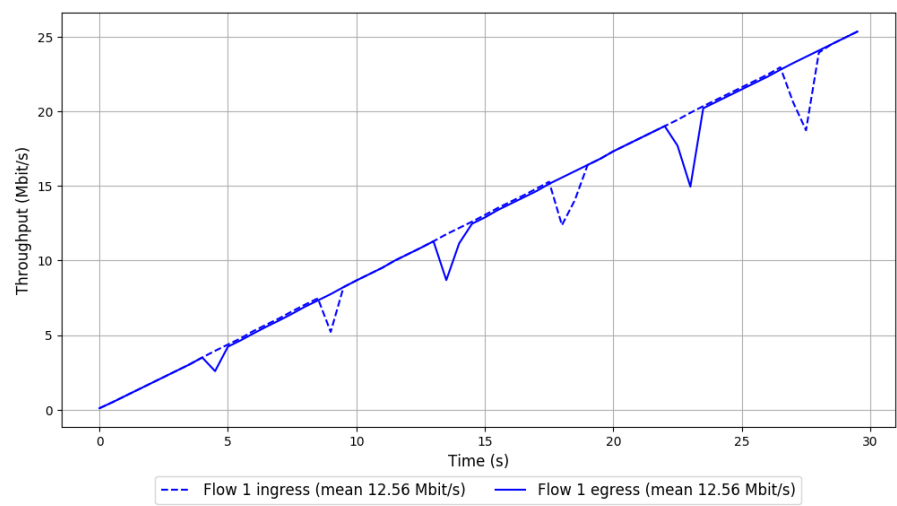


Run 6: Statistics of LEDBAT

Start at: 2017-12-20 00:01:29
End at: 2017-12-20 00:01:59
Local clock offset: 4.996 ms
Remote clock offset: -5.889 ms

Below is generated by plot.py at 2017-12-20 02:11:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 83.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 83.272 ms
Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link

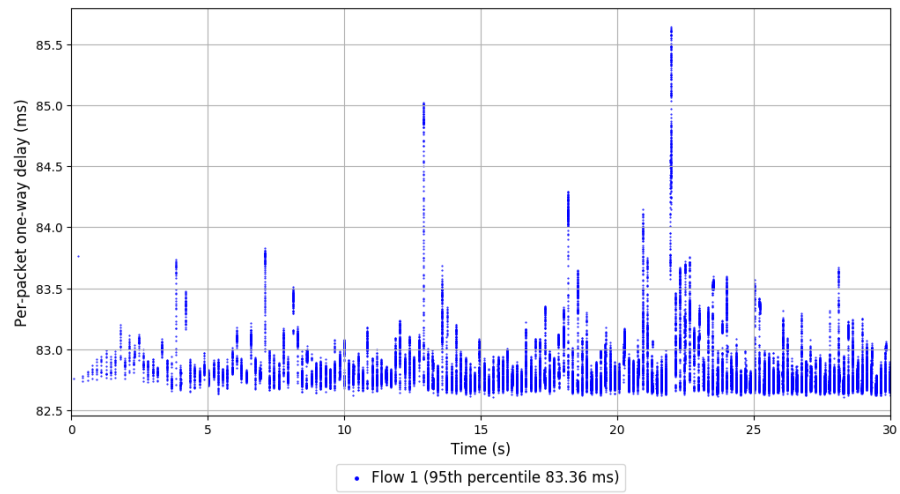
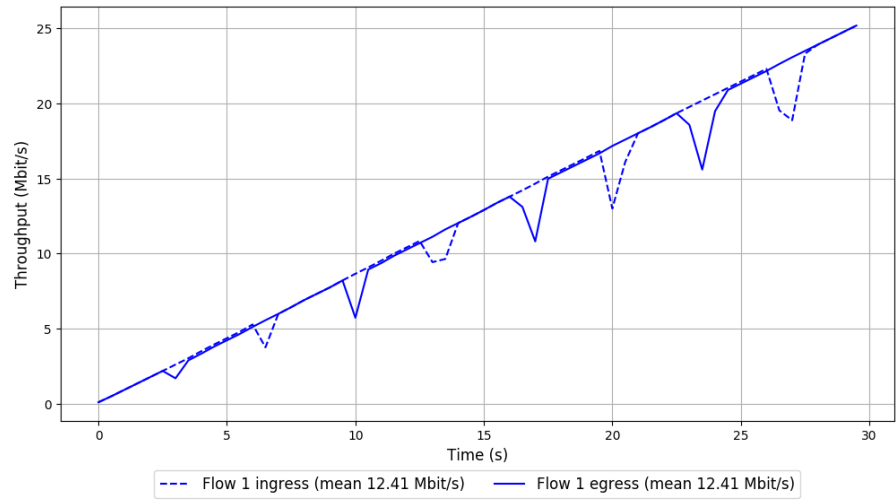


Run 7: Statistics of LEDBAT

Start at: 2017-12-20 00:20:19
End at: 2017-12-20 00:20:49
Local clock offset: 5.308 ms
Remote clock offset: -6.173 ms

Below is generated by plot.py at 2017-12-20 02:11:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 83.357 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 83.357 ms
Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link

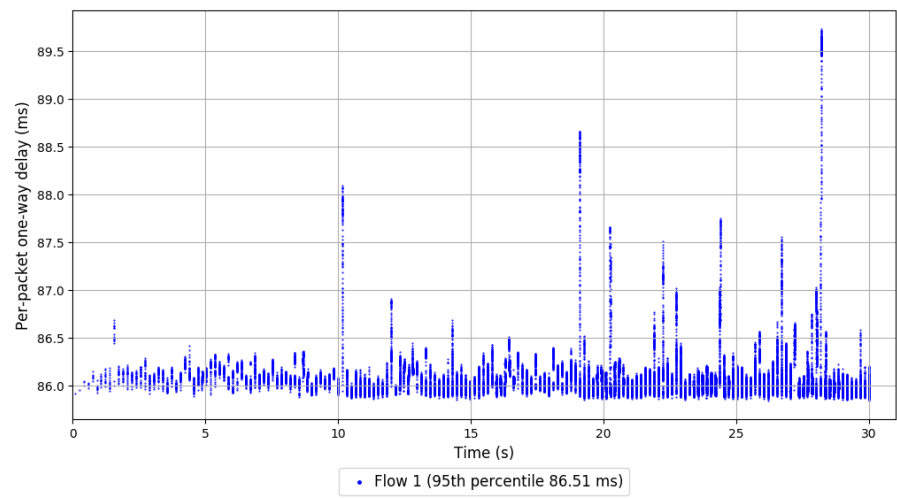
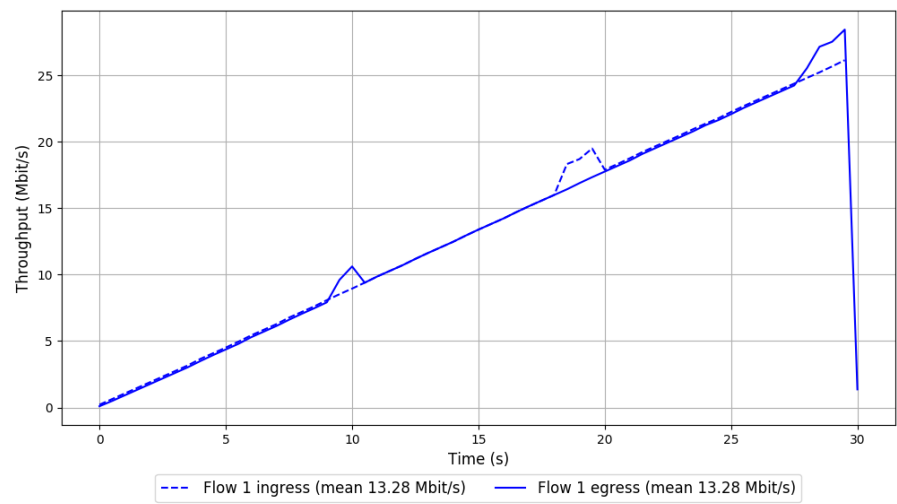


Run 8: Statistics of LEDBAT

Start at: 2017-12-20 00:39:15
End at: 2017-12-20 00:39:45
Local clock offset: 5.244 ms
Remote clock offset: -0.333 ms

Below is generated by plot.py at 2017-12-20 02:11:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 86.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 86.509 ms
Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link

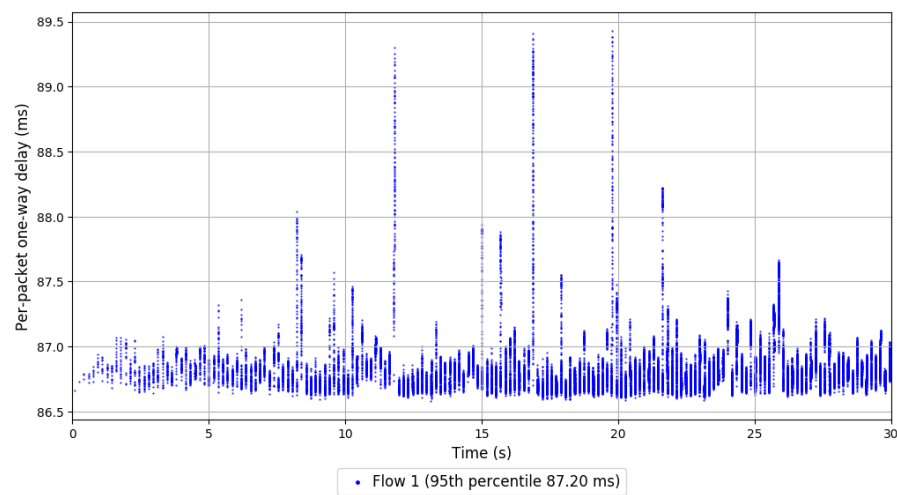
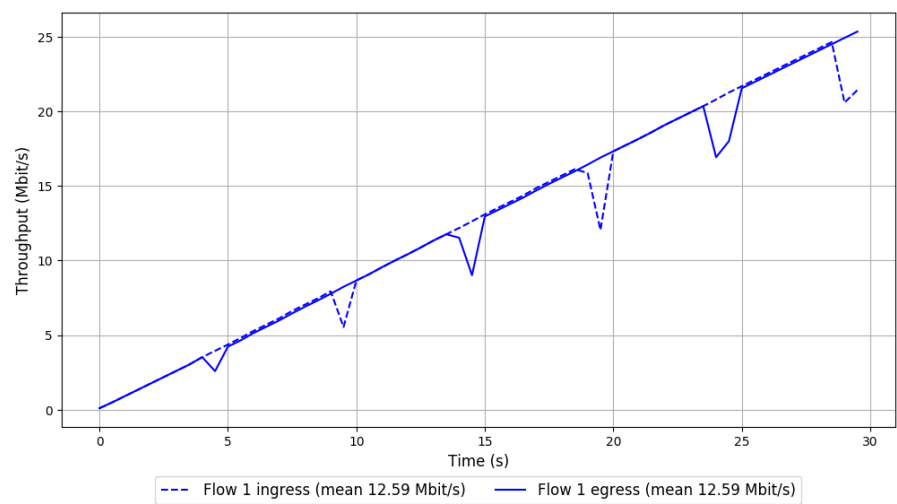


Run 9: Statistics of LEDBAT

Start at: 2017-12-20 00:58:20
End at: 2017-12-20 00:58:50
Local clock offset: 5.357 ms
Remote clock offset: -0.335 ms

Below is generated by plot.py at 2017-12-20 02:11:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 87.201 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 87.201 ms
Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-20 01:16:57

End at: 2017-12-20 01:17:28

Local clock offset: 4.629 ms

Remote clock offset: -4.54 ms

Below is generated by plot.py at 2017-12-20 02:11:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 81.729 ms

Loss rate: 0.00%

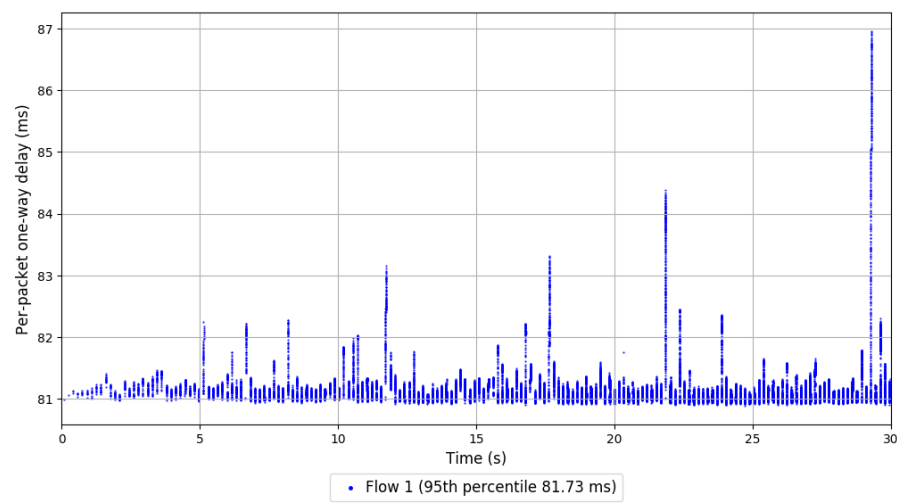
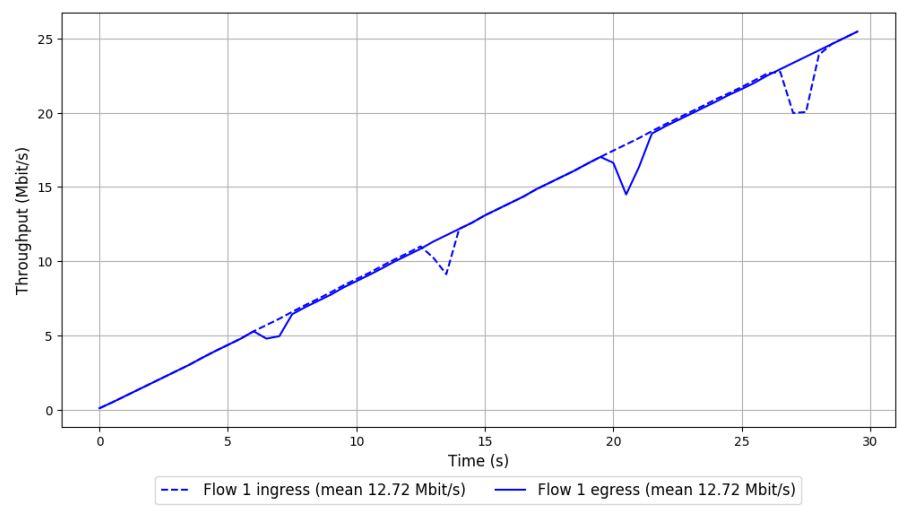
-- Flow 1:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 81.729 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

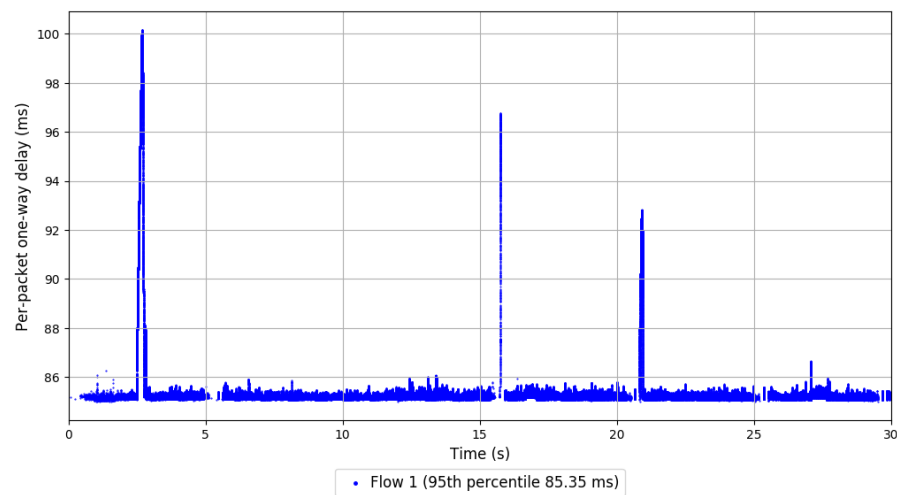
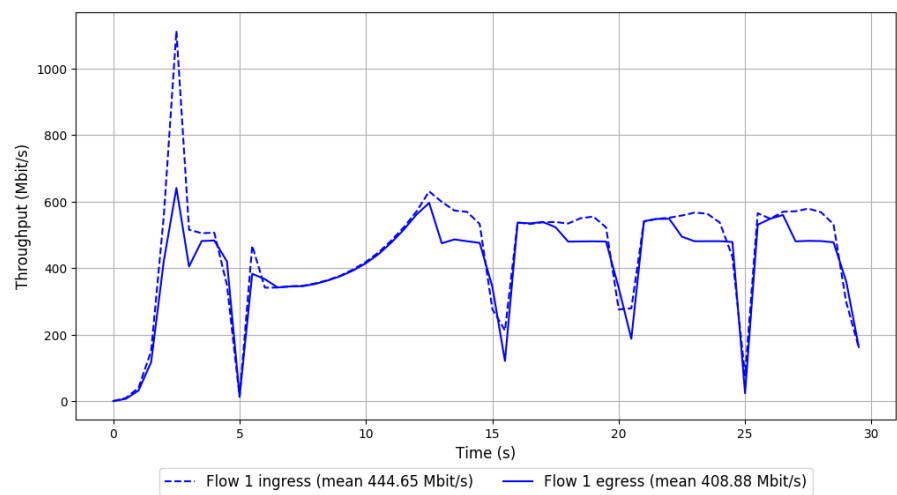


```
Run 1: Statistics of PCC

Start at: 2017-12-19 22:42:02
End at: 2017-12-19 22:42:32
Local clock offset: 2.747 ms
Remote clock offset: 0.288 ms

# Below is generated by plot.py at 2017-12-20 02:17:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 408.88 Mbit/s
95th percentile per-packet one-way delay: 85.348 ms
Loss rate: 8.05%
-- Flow 1:
Average throughput: 408.88 Mbit/s
95th percentile per-packet one-way delay: 85.348 ms
Loss rate: 8.05%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-19 23:00:37

End at: 2017-12-19 23:01:07

Local clock offset: 2.471 ms

Remote clock offset: 0.617 ms

Below is generated by plot.py at 2017-12-20 02:17:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 339.12 Mbit/s

95th percentile per-packet one-way delay: 89.923 ms

Loss rate: 7.38%

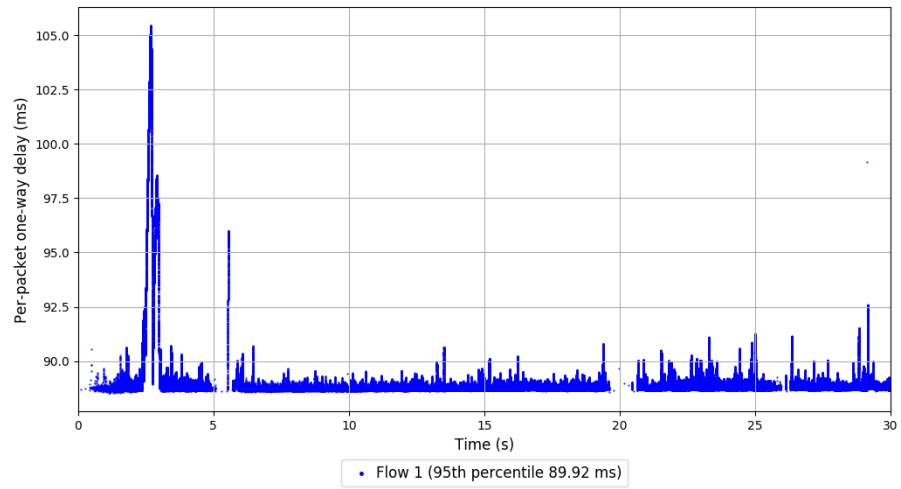
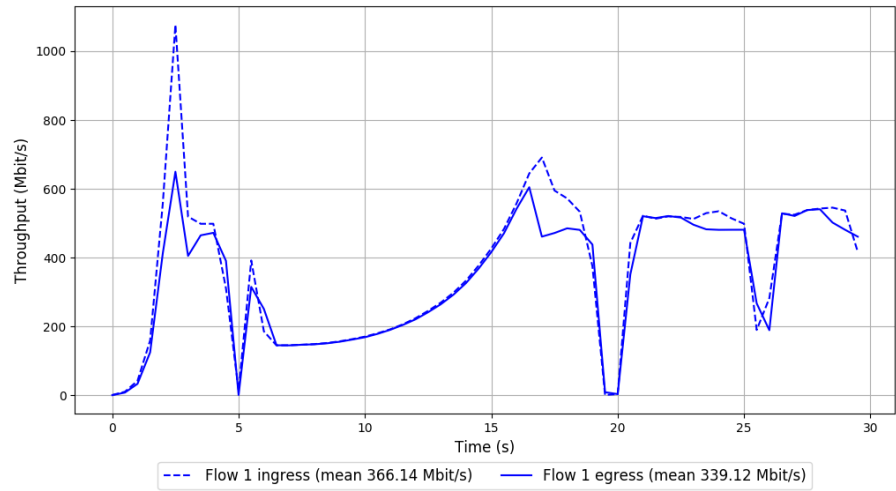
-- Flow 1:

Average throughput: 339.12 Mbit/s

95th percentile per-packet one-way delay: 89.923 ms

Loss rate: 7.38%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-19 23:19:14

End at: 2017-12-19 23:19:44

Local clock offset: 3.618 ms

Remote clock offset: 0.009 ms

Below is generated by plot.py at 2017-12-20 02:17:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 302.84 Mbit/s

95th percentile per-packet one-way delay: 88.933 ms

Loss rate: 7.38%

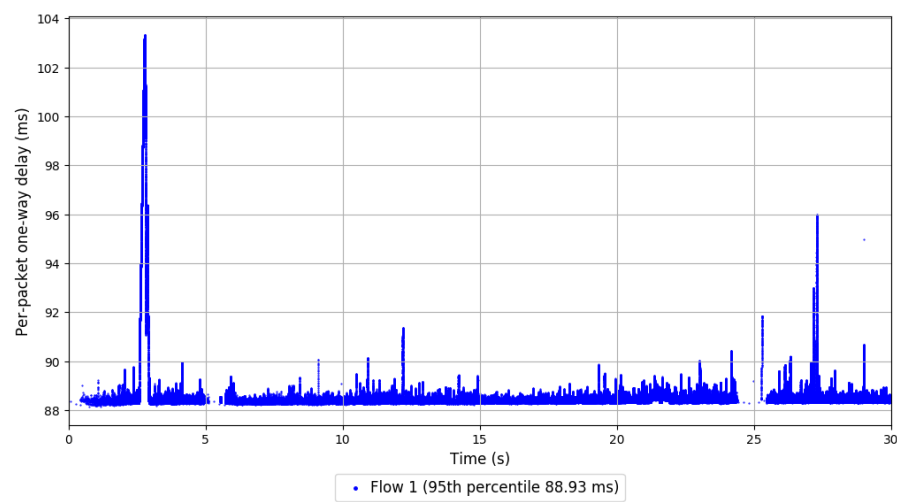
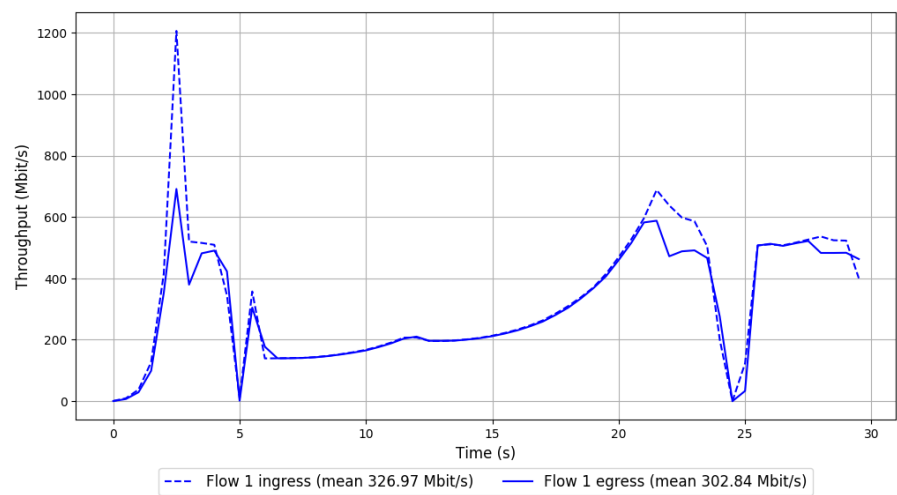
-- Flow 1:

Average throughput: 302.84 Mbit/s

95th percentile per-packet one-way delay: 88.933 ms

Loss rate: 7.38%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-19 23:37:50

End at: 2017-12-19 23:38:20

Local clock offset: 4.384 ms

Remote clock offset: 0.817 ms

Below is generated by plot.py at 2017-12-20 02:17:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 301.03 Mbit/s

95th percentile per-packet one-way delay: 87.857 ms

Loss rate: 6.19%

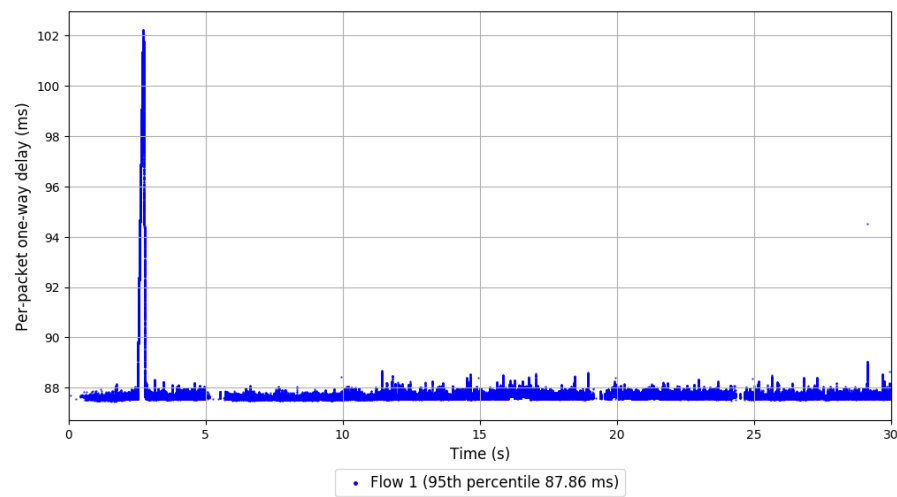
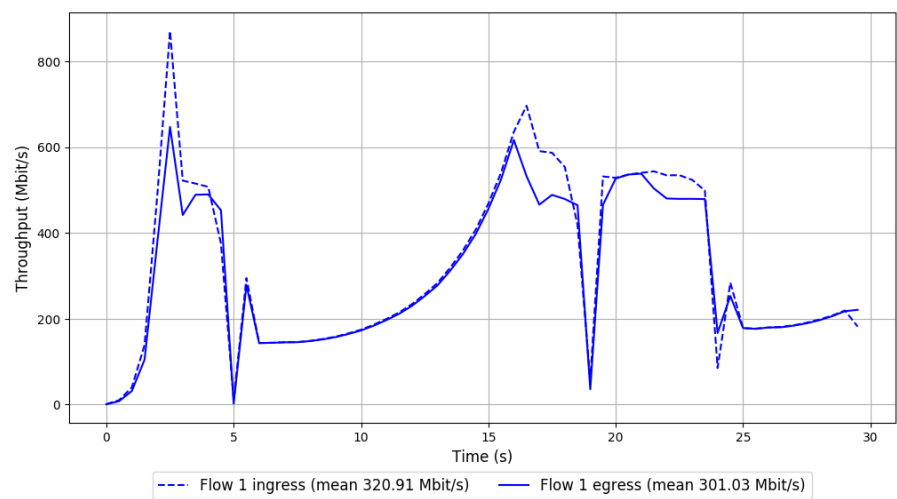
-- Flow 1:

Average throughput: 301.03 Mbit/s

95th percentile per-packet one-way delay: 87.857 ms

Loss rate: 6.19%

Run 4: Report of PCC — Data Link

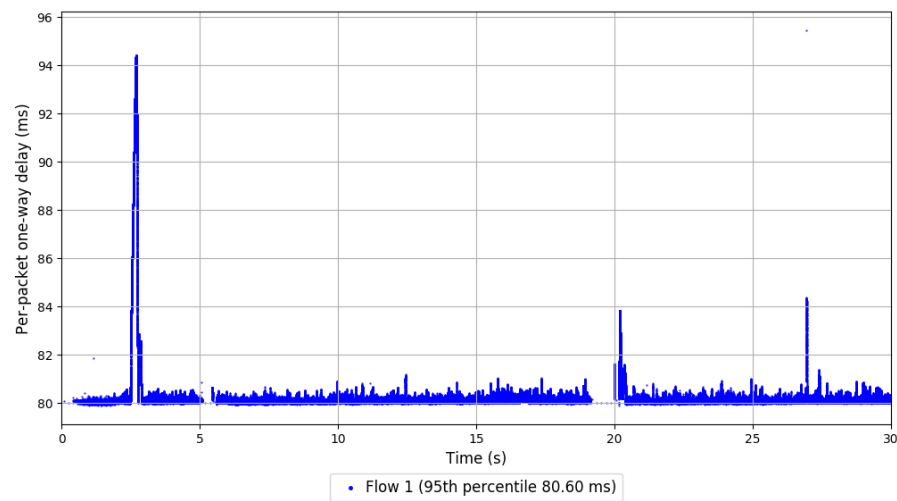
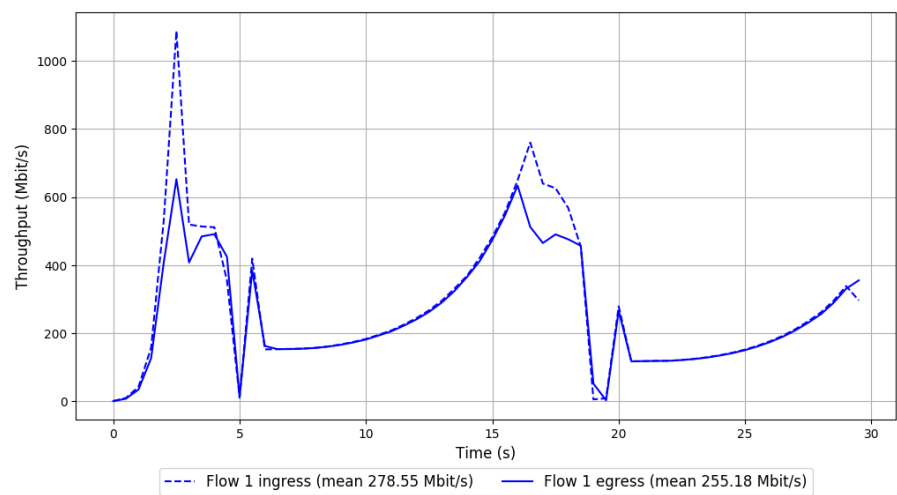


Run 5: Statistics of PCC

Start at: 2017-12-19 23:56:40
End at: 2017-12-19 23:57:10
Local clock offset: 4.706 ms
Remote clock offset: -6.523 ms

Below is generated by plot.py at 2017-12-20 02:17:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 255.18 Mbit/s
95th percentile per-packet one-way delay: 80.599 ms
Loss rate: 8.39%
-- Flow 1:
Average throughput: 255.18 Mbit/s
95th percentile per-packet one-way delay: 80.599 ms
Loss rate: 8.39%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-20 00:15:27

End at: 2017-12-20 00:15:57

Local clock offset: 5.618 ms

Remote clock offset: 0.292 ms

Below is generated by plot.py at 2017-12-20 02:17:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 335.47 Mbit/s

95th percentile per-packet one-way delay: 87.196 ms

Loss rate: 6.45%

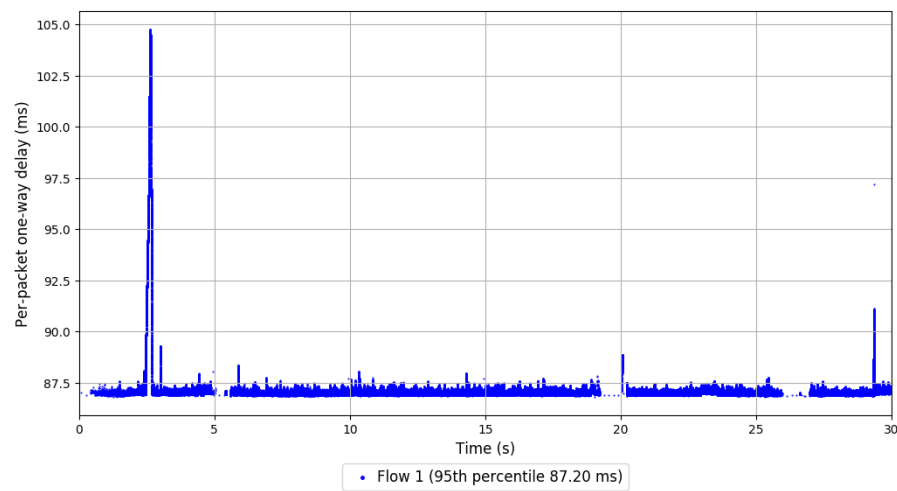
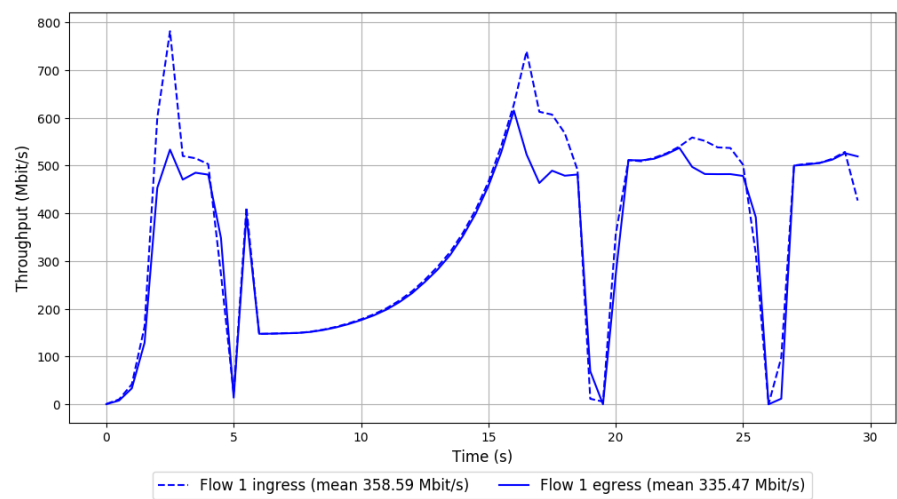
-- Flow 1:

Average throughput: 335.47 Mbit/s

95th percentile per-packet one-way delay: 87.196 ms

Loss rate: 6.45%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-20 00:34:22

End at: 2017-12-20 00:34:52

Local clock offset: 5.174 ms

Remote clock offset: 0.552 ms

Below is generated by plot.py at 2017-12-20 02:17:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 398.86 Mbit/s

95th percentile per-packet one-way delay: 87.655 ms

Loss rate: 5.94%

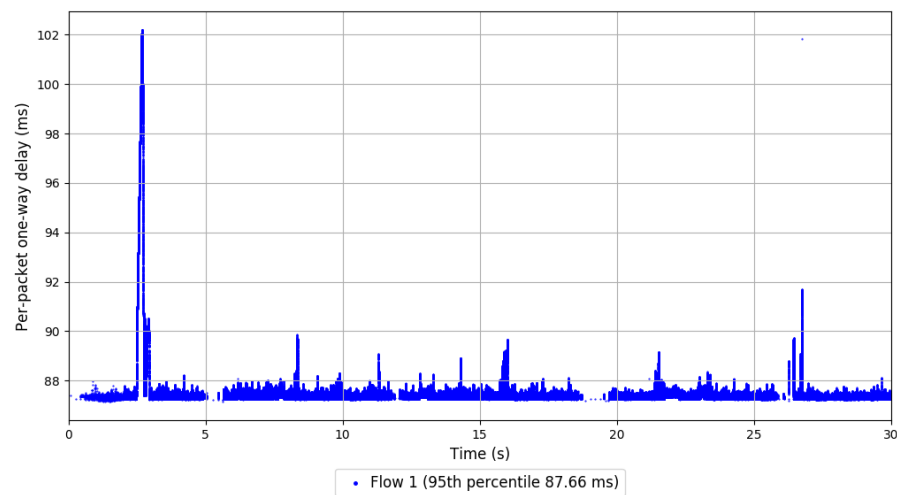
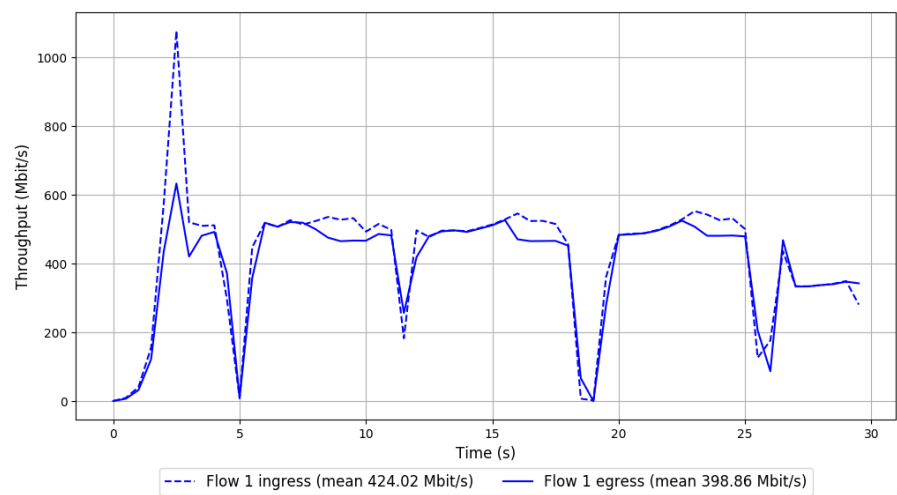
-- Flow 1:

Average throughput: 398.86 Mbit/s

95th percentile per-packet one-way delay: 87.655 ms

Loss rate: 5.94%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 00:53:12

End at: 2017-12-20 00:53:42

Local clock offset: 5.44 ms

Remote clock offset: -4.52 ms

Below is generated by plot.py at 2017-12-20 02:17:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 339.15 Mbit/s

95th percentile per-packet one-way delay: 81.793 ms

Loss rate: 6.84%

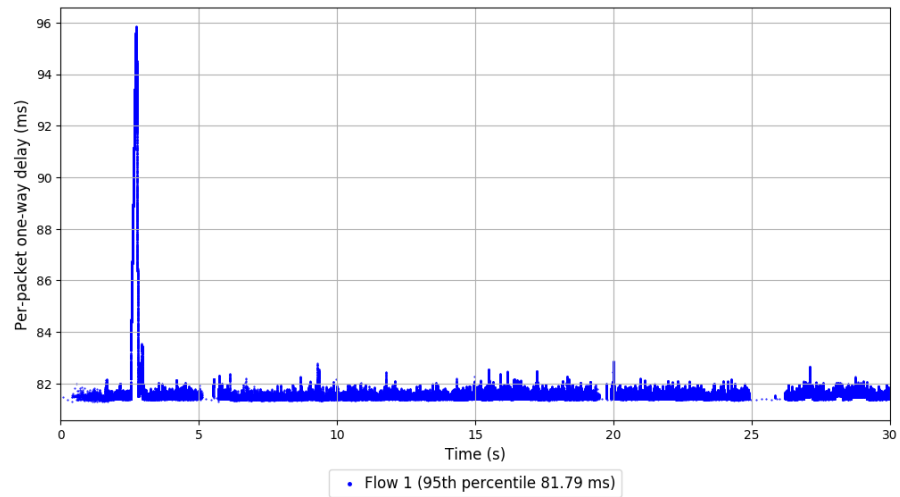
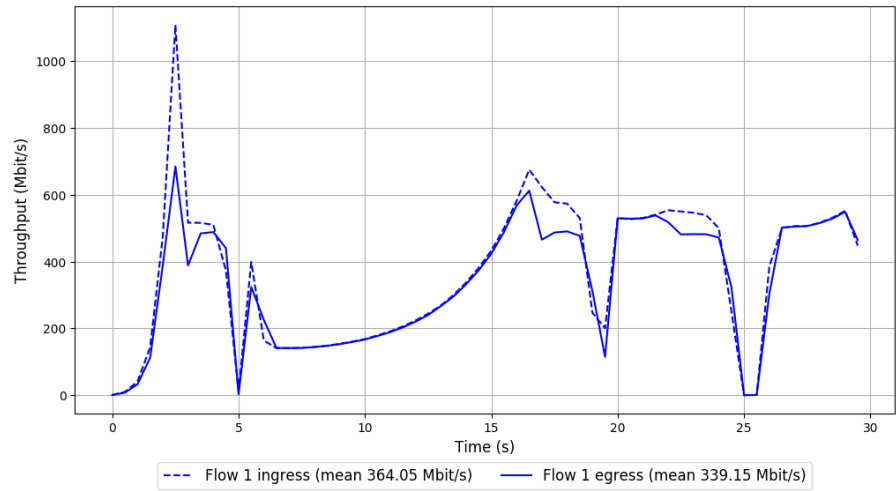
-- Flow 1:

Average throughput: 339.15 Mbit/s

95th percentile per-packet one-way delay: 81.793 ms

Loss rate: 6.84%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 01:12:00

End at: 2017-12-20 01:12:30

Local clock offset: 4.833 ms

Remote clock offset: 0.561 ms

Below is generated by plot.py at 2017-12-20 02:20:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 363.86 Mbit/s

95th percentile per-packet one-way delay: 92.799 ms

Loss rate: 7.84%

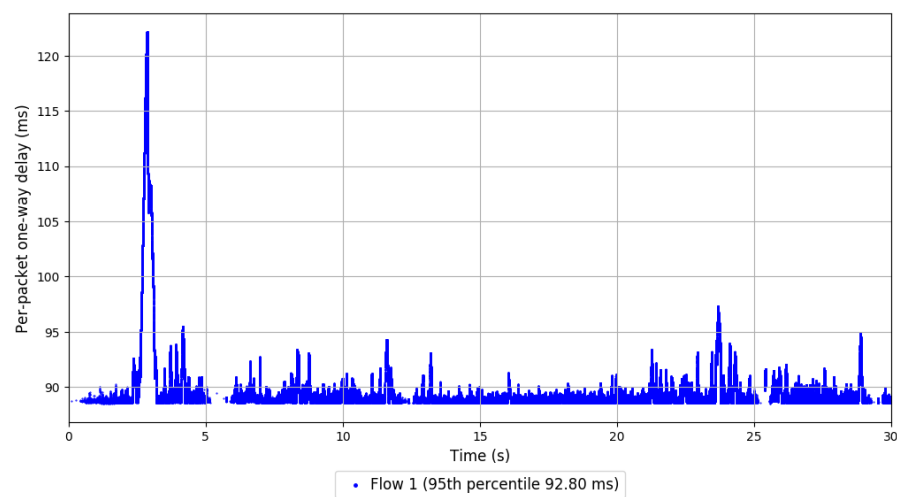
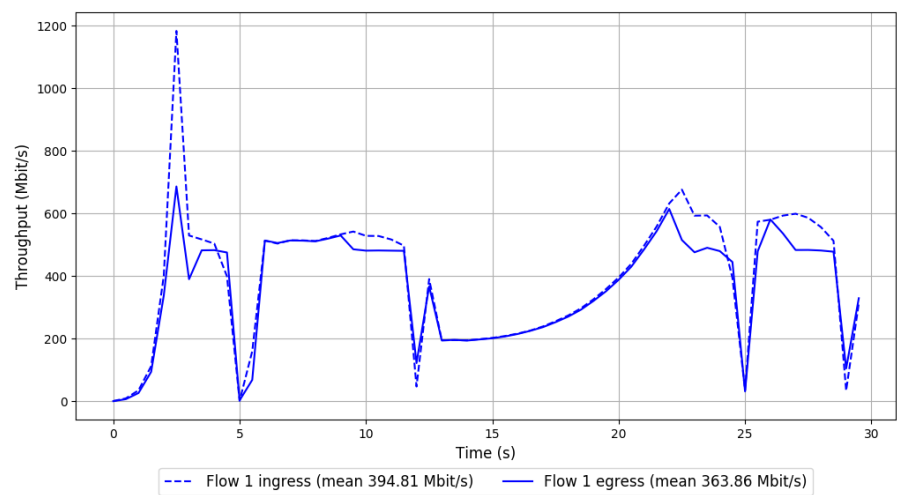
-- Flow 1:

Average throughput: 363.86 Mbit/s

95th percentile per-packet one-way delay: 92.799 ms

Loss rate: 7.84%

Run 9: Report of PCC — Data Link

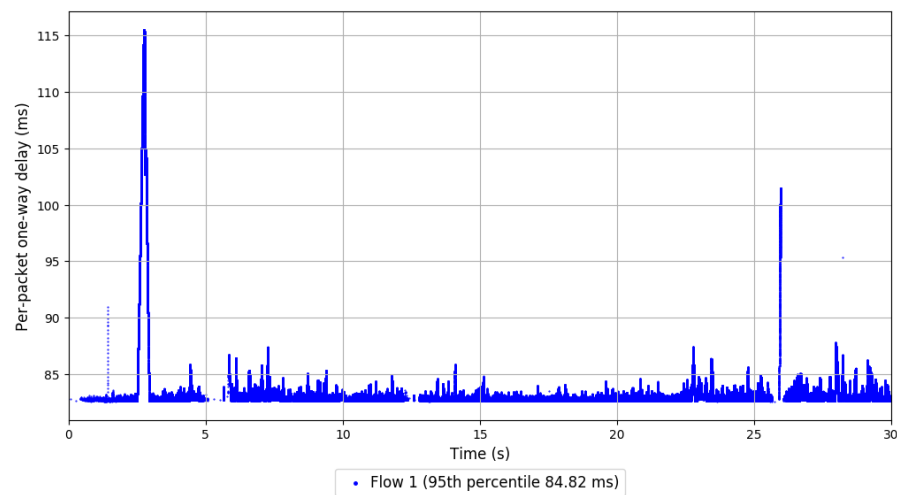
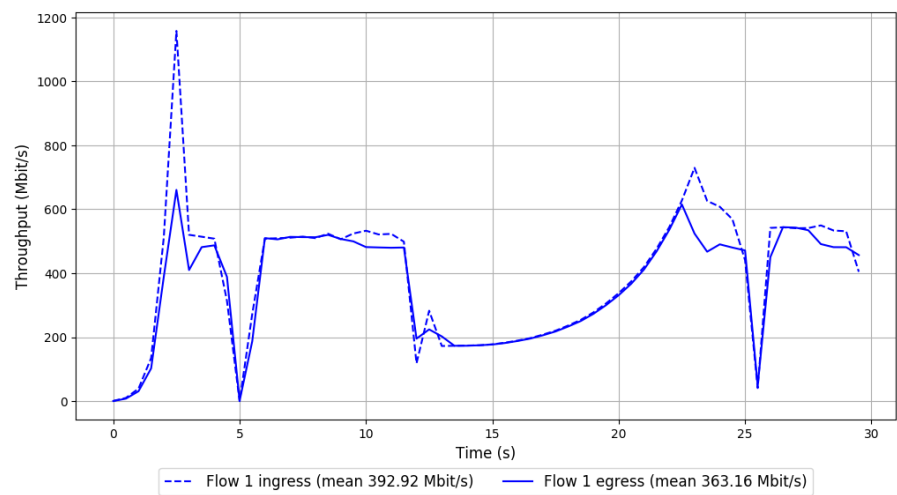


Run 10: Statistics of PCC

Start at: 2017-12-20 01:30:31
End at: 2017-12-20 01:31:01
Local clock offset: 4.119 ms
Remote clock offset: -3.674 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 363.16 Mbit/s
95th percentile per-packet one-way delay: 84.824 ms
Loss rate: 7.57%
-- Flow 1:
Average throughput: 363.16 Mbit/s
95th percentile per-packet one-way delay: 84.824 ms
Loss rate: 7.57%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

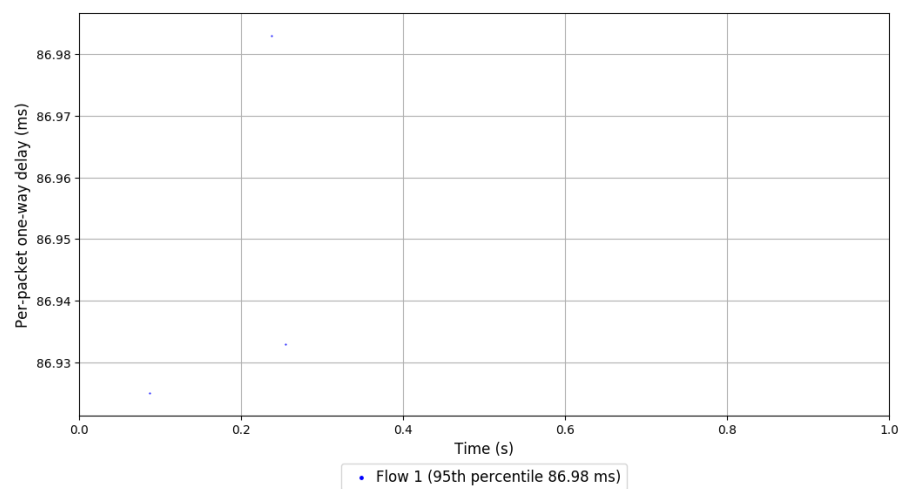
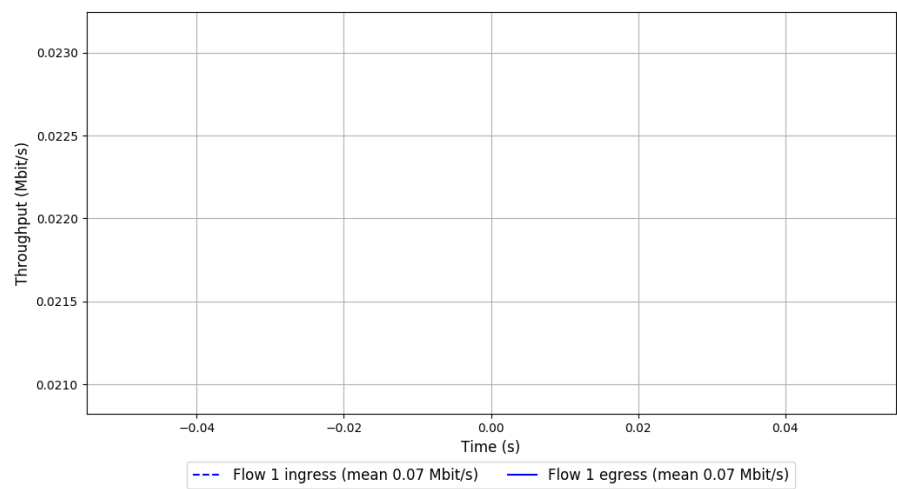
Start at: 2017-12-19 22:34:45

End at: 2017-12-19 22:35:15

Local clock offset: 3.583 ms

Remote clock offset: 2.58 ms

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-19 22:53:17

End at: 2017-12-19 22:53:47

Local clock offset: 2.254 ms

Remote clock offset: 0.739 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.76 Mbit/s

95th percentile per-packet one-way delay: 85.977 ms

Loss rate: 0.00%

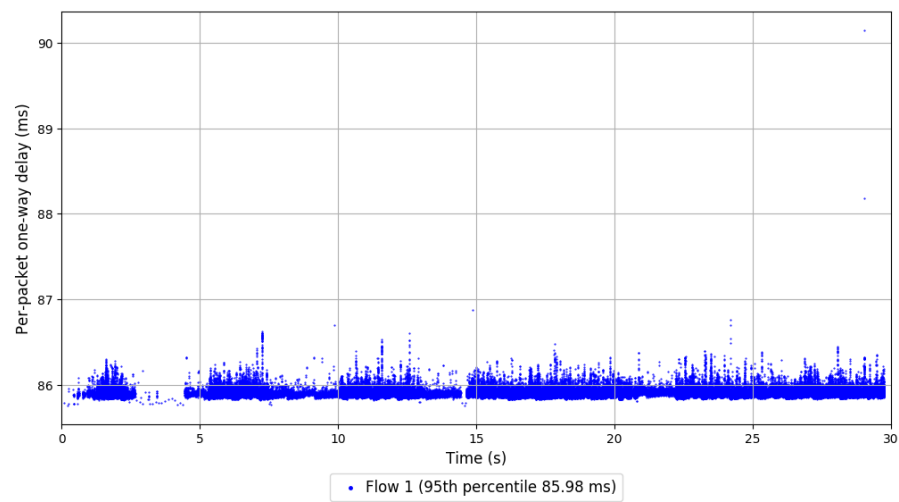
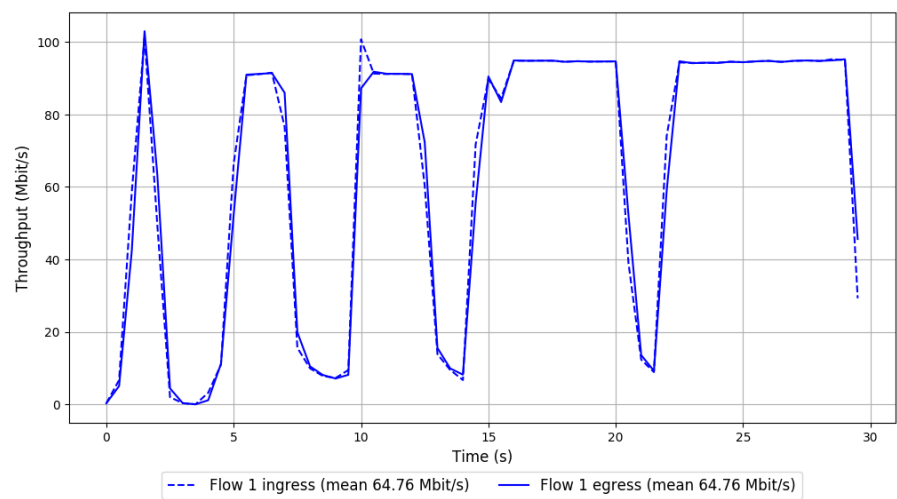
-- Flow 1:

Average throughput: 64.76 Mbit/s

95th percentile per-packet one-way delay: 85.977 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-19 23:11:47

End at: 2017-12-19 23:12:17

Local clock offset: 3.089 ms

Remote clock offset: -4.185 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.94 Mbit/s

95th percentile per-packet one-way delay: 81.340 ms

Loss rate: 0.00%

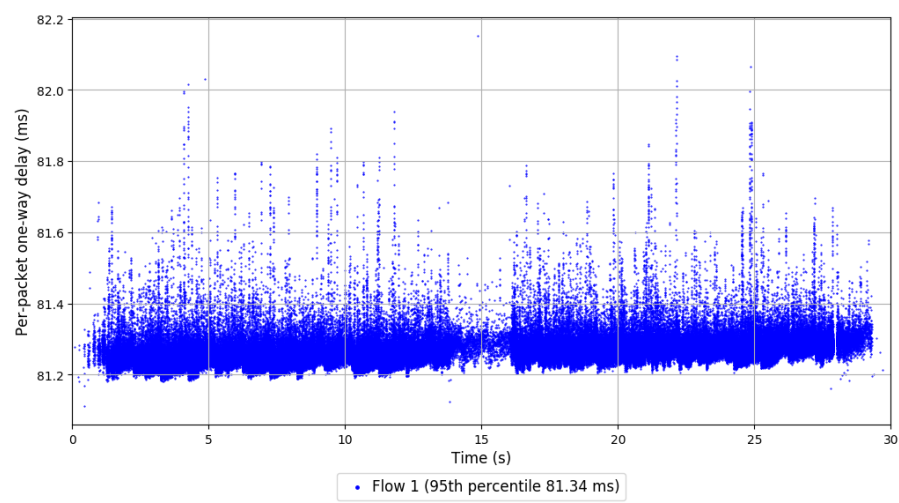
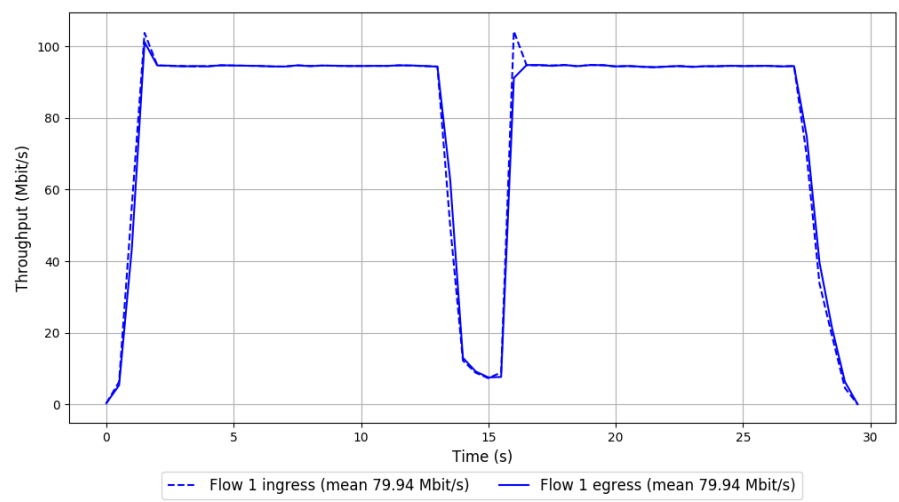
-- Flow 1:

Average throughput: 79.94 Mbit/s

95th percentile per-packet one-way delay: 81.340 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-19 23:30:28

End at: 2017-12-19 23:30:58

Local clock offset: 3.975 ms

Remote clock offset: -5.957 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.88 Mbit/s

95th percentile per-packet one-way delay: 81.171 ms

Loss rate: 0.00%

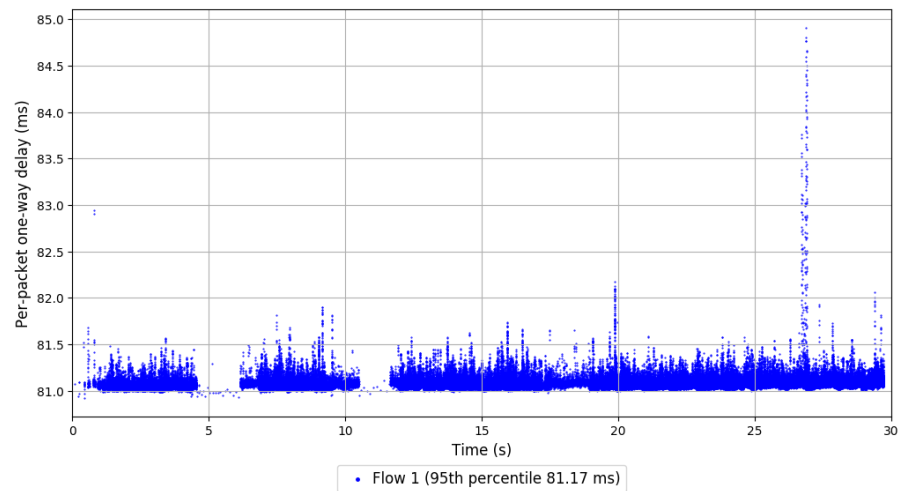
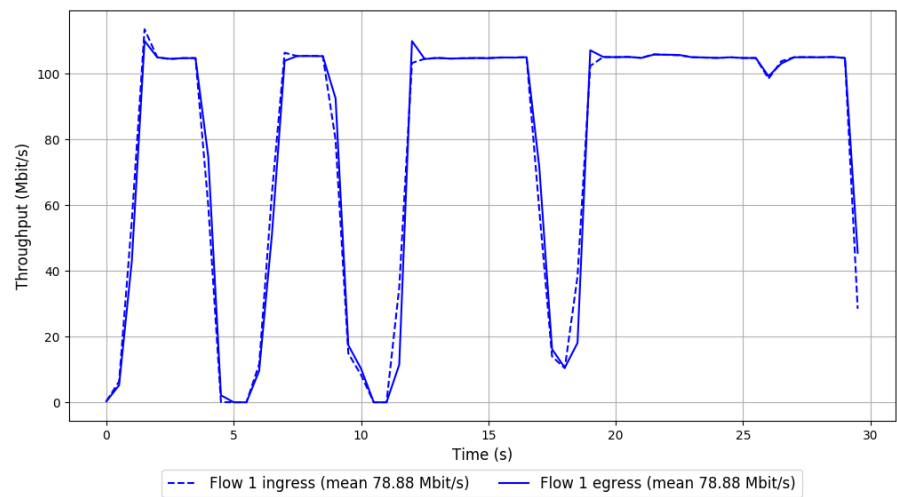
-- Flow 1:

Average throughput: 78.88 Mbit/s

95th percentile per-packet one-way delay: 81.171 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-19 23:49:16

End at: 2017-12-19 23:49:46

Local clock offset: 4.546 ms

Remote clock offset: -0.892 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.06 Mbit/s

95th percentile per-packet one-way delay: 87.588 ms

Loss rate: 0.00%

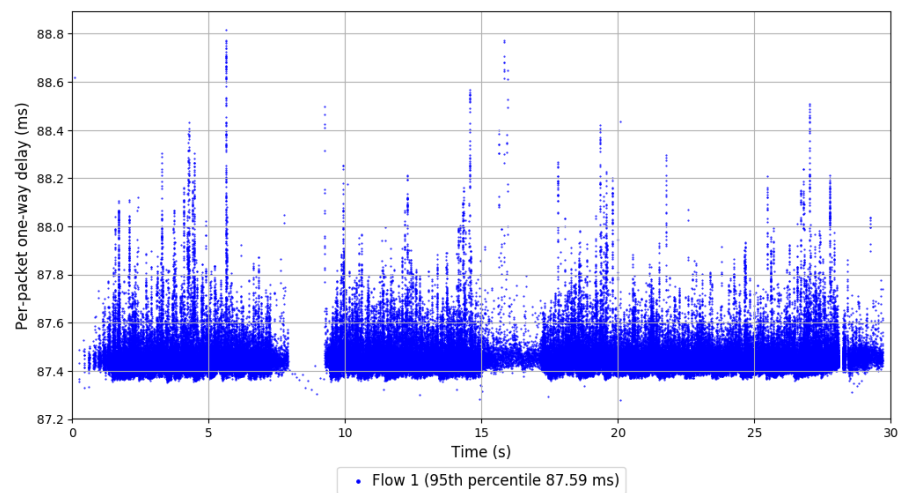
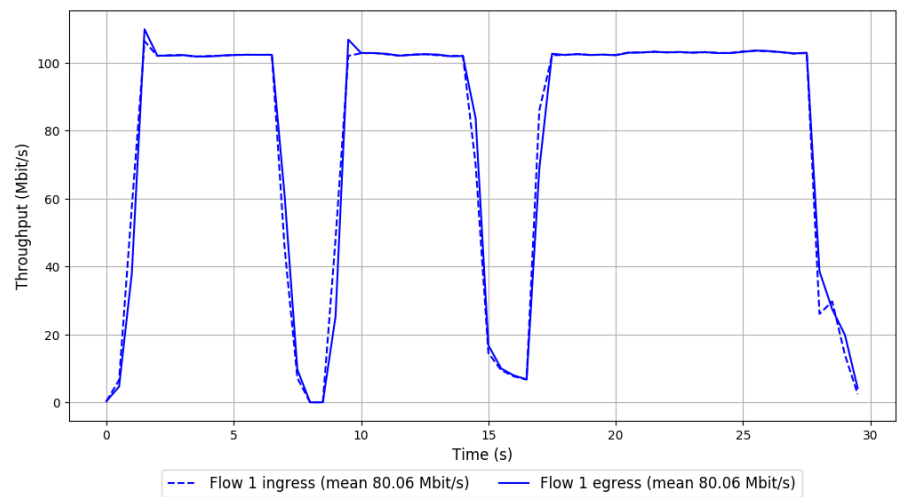
-- Flow 1:

Average throughput: 80.06 Mbit/s

95th percentile per-packet one-way delay: 87.588 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 00:08:05

End at: 2017-12-20 00:08:35

Local clock offset: 5.377 ms

Remote clock offset: -5.531 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.24 Mbit/s

95th percentile per-packet one-way delay: 81.035 ms

Loss rate: 0.00%

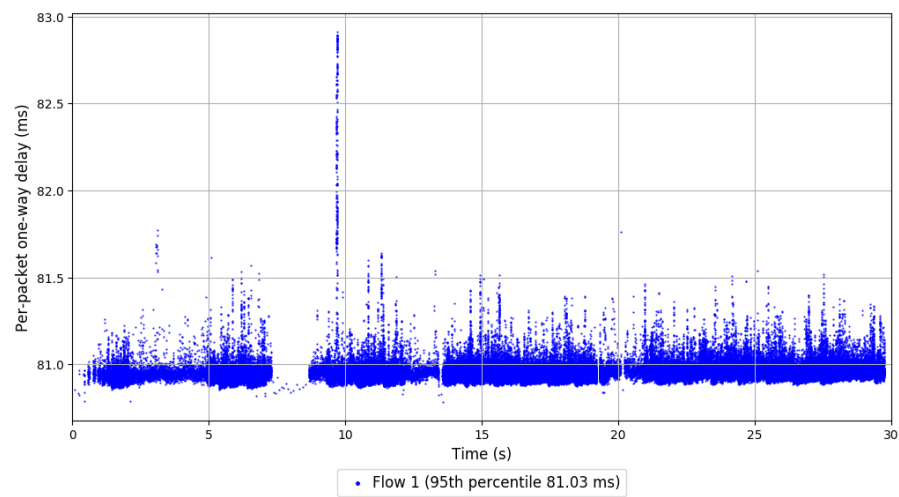
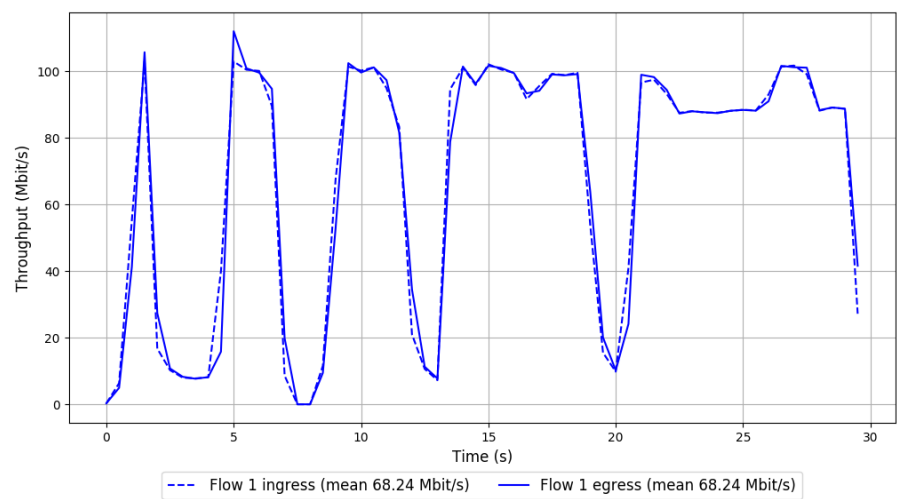
-- Flow 1:

Average throughput: 68.24 Mbit/s

95th percentile per-packet one-way delay: 81.035 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 00:26:58

End at: 2017-12-20 00:27:28

Local clock offset: 5.236 ms

Remote clock offset: -5.552 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.27 Mbit/s

95th percentile per-packet one-way delay: 82.562 ms

Loss rate: 0.00%

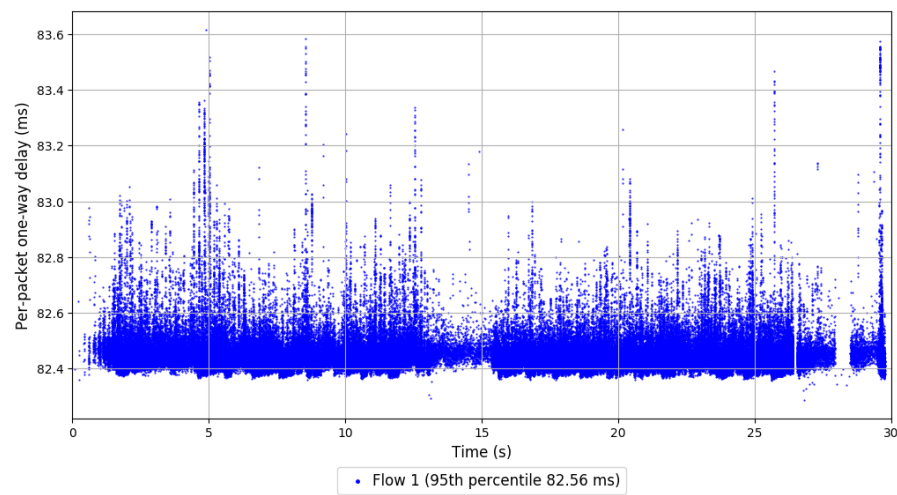
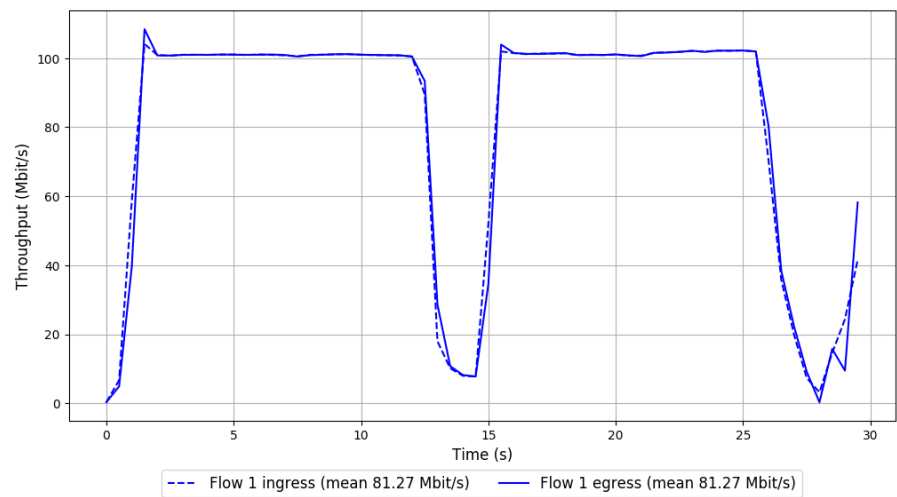
-- Flow 1:

Average throughput: 81.27 Mbit/s

95th percentile per-packet one-way delay: 82.562 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 00:45:51

End at: 2017-12-20 00:46:21

Local clock offset: 5.328 ms

Remote clock offset: -5.895 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.66 Mbit/s

95th percentile per-packet one-way delay: 83.104 ms

Loss rate: 0.00%

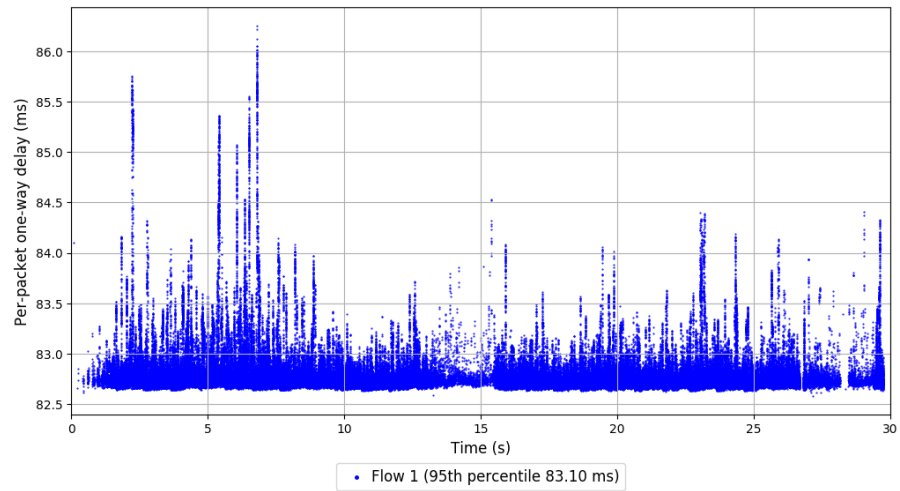
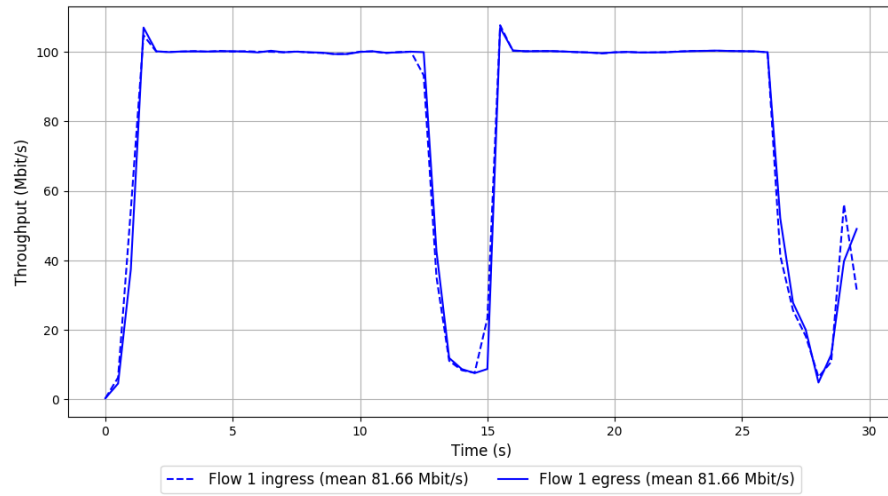
-- Flow 1:

Average throughput: 81.66 Mbit/s

95th percentile per-packet one-way delay: 83.104 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 01:04:37

End at: 2017-12-20 01:05:07

Local clock offset: 5.16 ms

Remote clock offset: -0.105 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.61 Mbit/s

95th percentile per-packet one-way delay: 88.066 ms

Loss rate: 0.01%

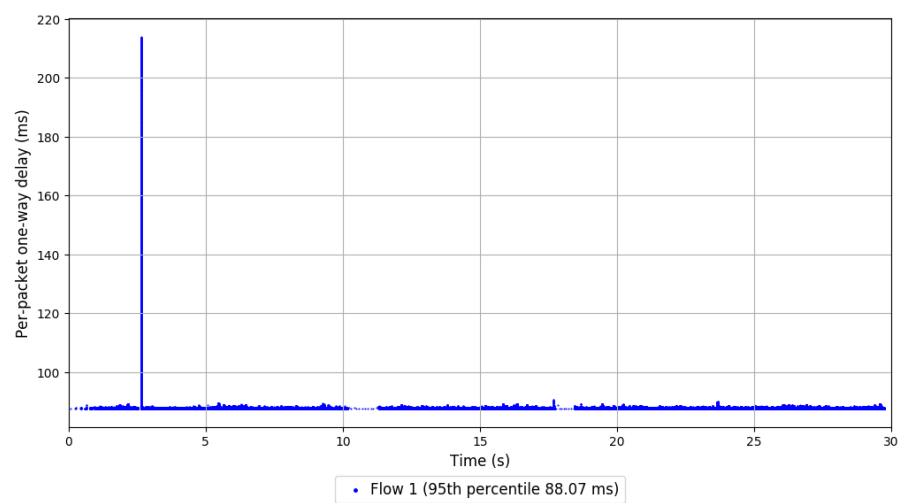
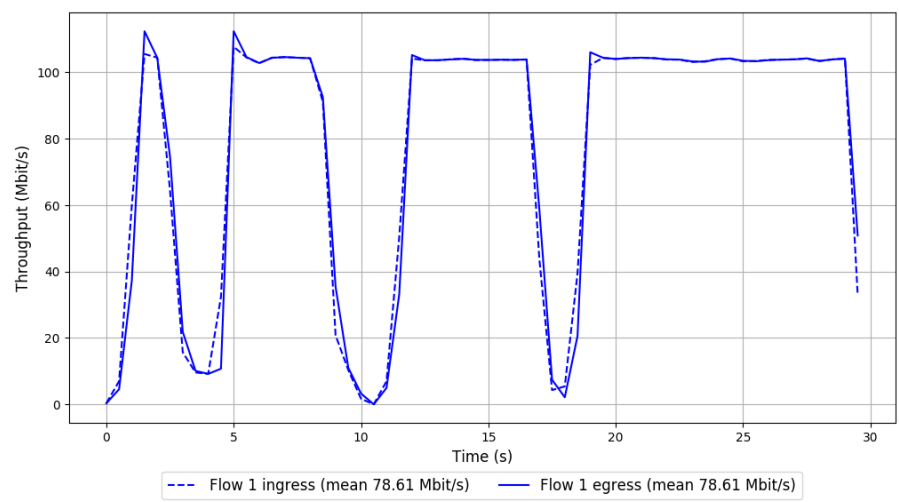
-- Flow 1:

Average throughput: 78.61 Mbit/s

95th percentile per-packet one-way delay: 88.066 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 01:23:10

End at: 2017-12-20 01:23:40

Local clock offset: 4.355 ms

Remote clock offset: -3.769 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.07 Mbit/s

95th percentile per-packet one-way delay: 83.558 ms

Loss rate: 0.00%

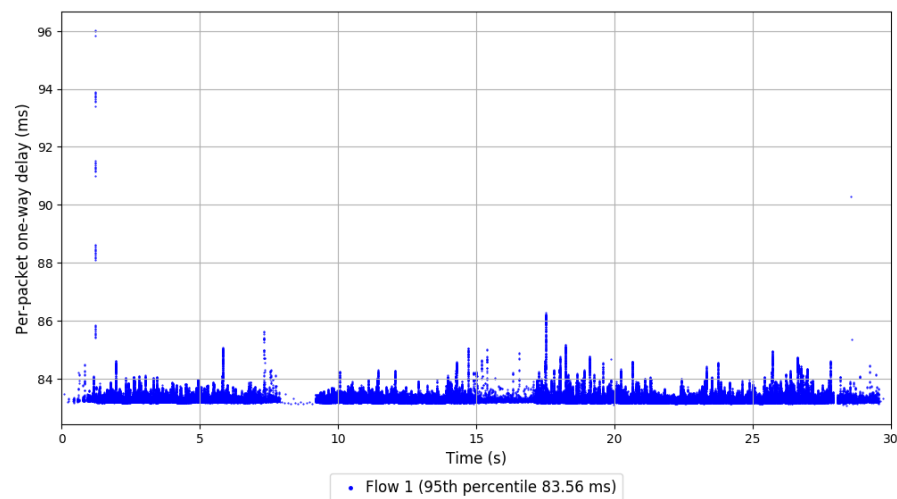
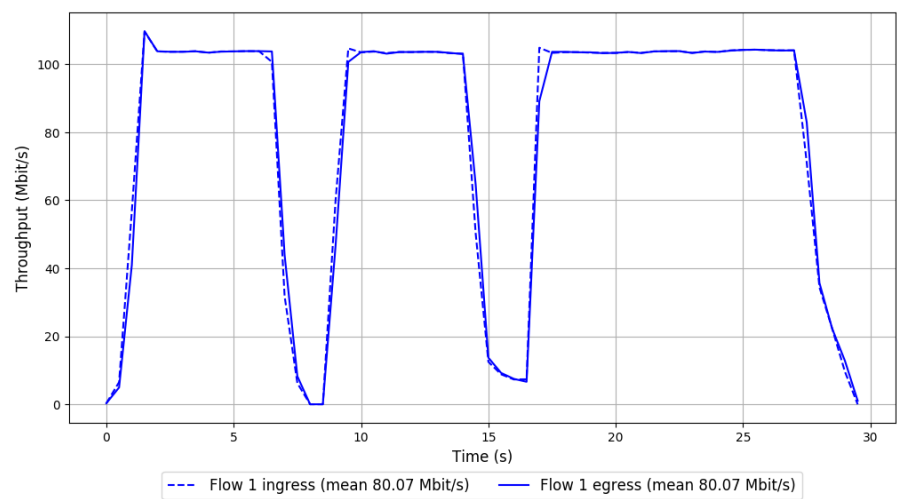
-- Flow 1:

Average throughput: 80.07 Mbit/s

95th percentile per-packet one-way delay: 83.558 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

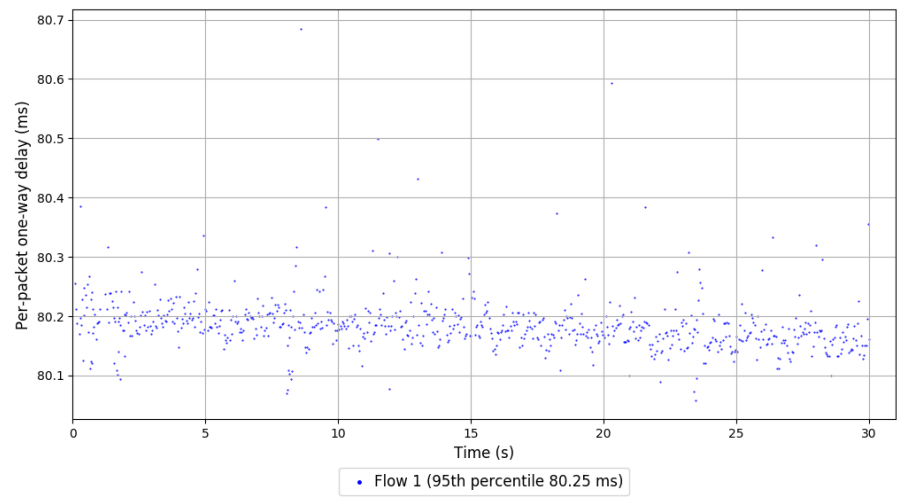
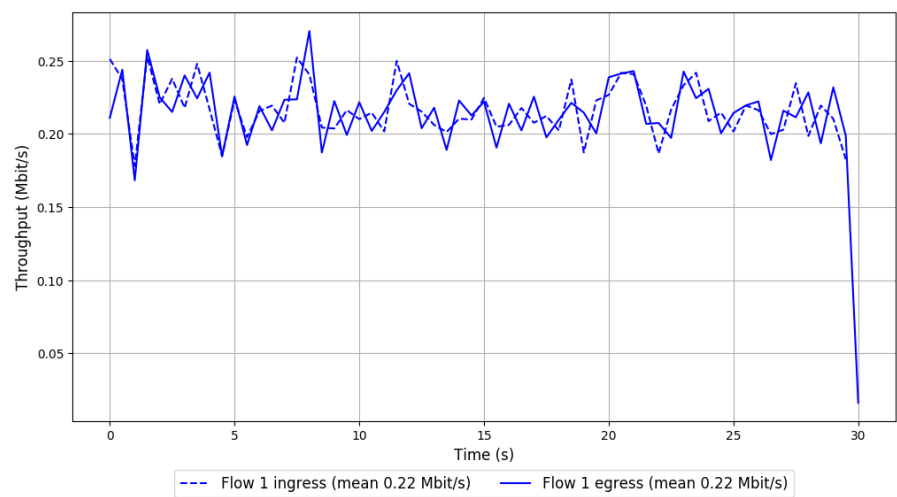


```
Run 1: Statistics of SCReAM

Start at: 2017-12-19 22:38:25
End at: 2017-12-19 22:38:55
Local clock offset: 3.189 ms
Remote clock offset: -4.415 ms

# Below is generated by plot.py at 2017-12-20 02:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.248 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.248 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

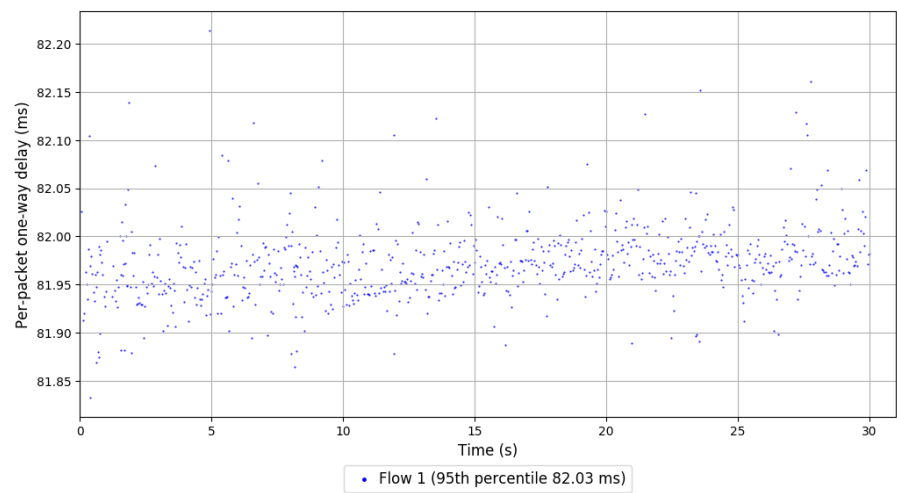
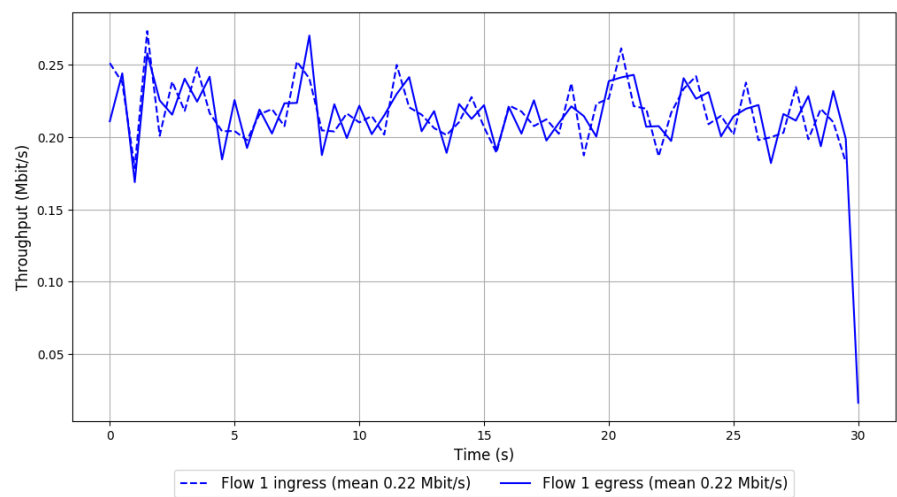


Run 2: Statistics of SCReAM

Start at: 2017-12-19 22:57:01
End at: 2017-12-19 22:57:31
Local clock offset: 2.261 ms
Remote clock offset: -4.109 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.033 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

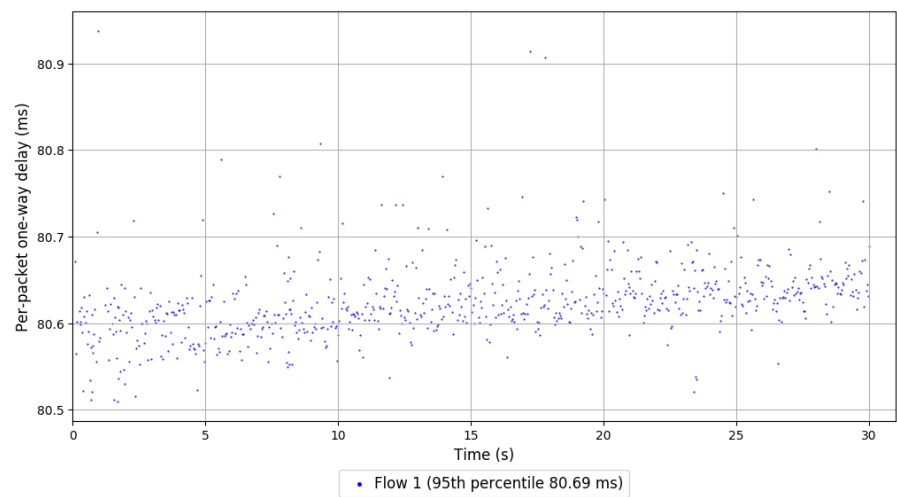
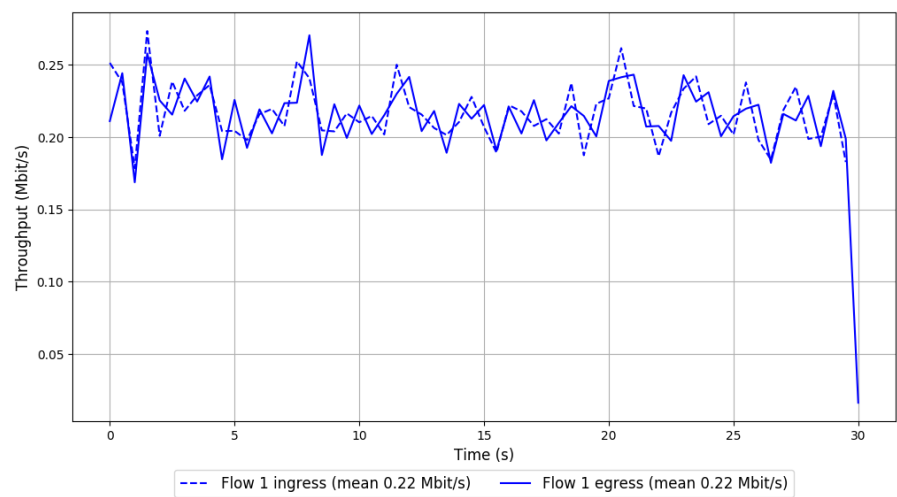


Run 3: Statistics of SCReAM

Start at: 2017-12-19 23:15:37
End at: 2017-12-19 23:16:07
Local clock offset: 3.263 ms
Remote clock offset: -5.219 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.694 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.694 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

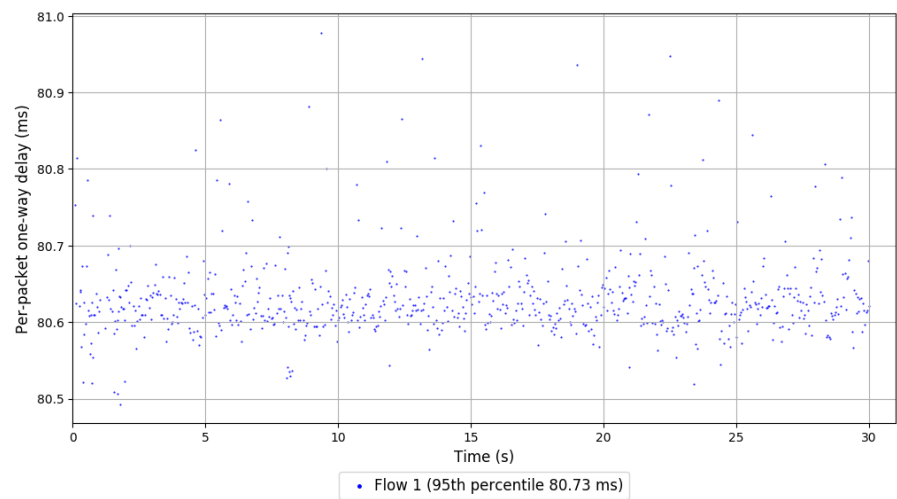
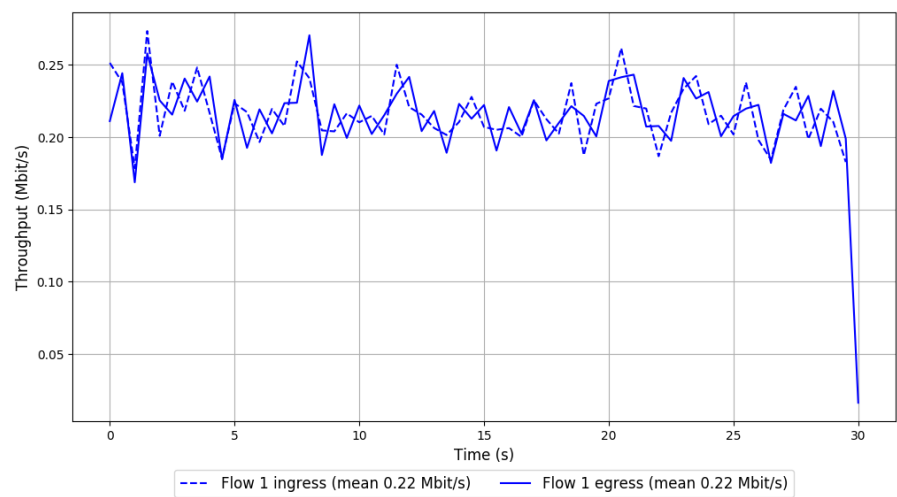


Run 4: Statistics of SCReAM

Start at: 2017-12-19 23:34:13
End at: 2017-12-19 23:34:43
Local clock offset: 4.201 ms
Remote clock offset: -5.596 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.732 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.732 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

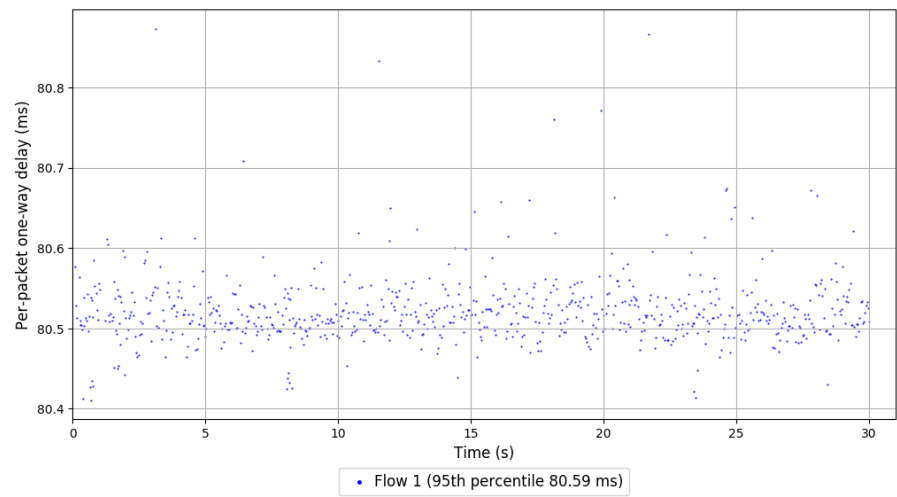
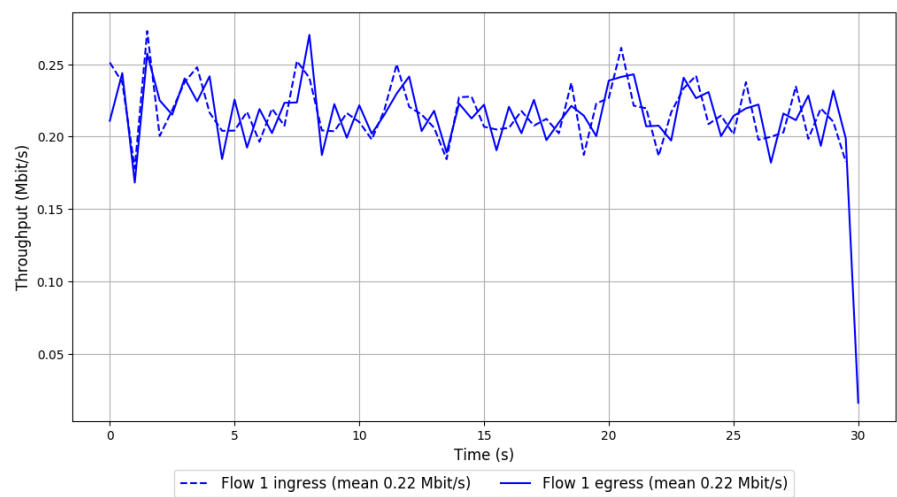


Run 5: Statistics of SCReAM

Start at: 2017-12-19 23:53:01
End at: 2017-12-19 23:53:31
Local clock offset: 4.568 ms
Remote clock offset: -5.701 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.589 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.589 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

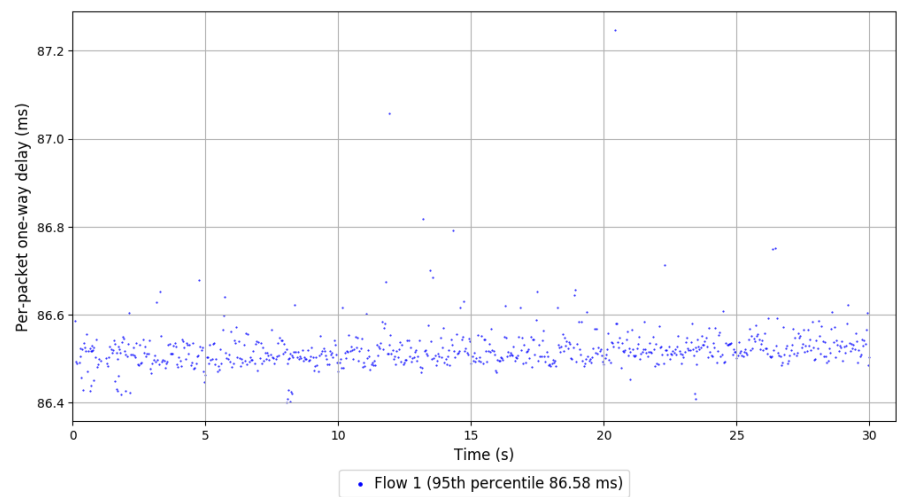
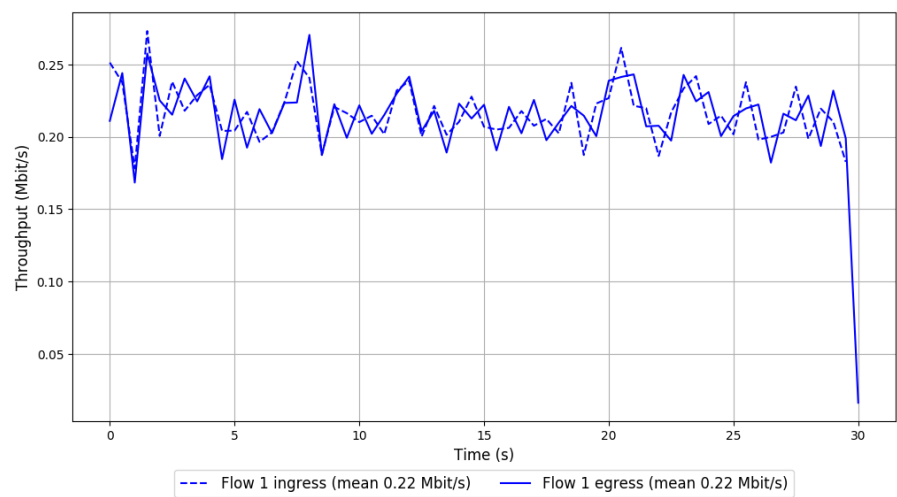


```
Run 6: Statistics of SCReAM

Start at: 2017-12-20 00:11:50
End at: 2017-12-20 00:12:20
Local clock offset: 5.624 ms
Remote clock offset: 0.234 ms

# Below is generated by plot.py at 2017-12-20 02:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.584 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.584 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link

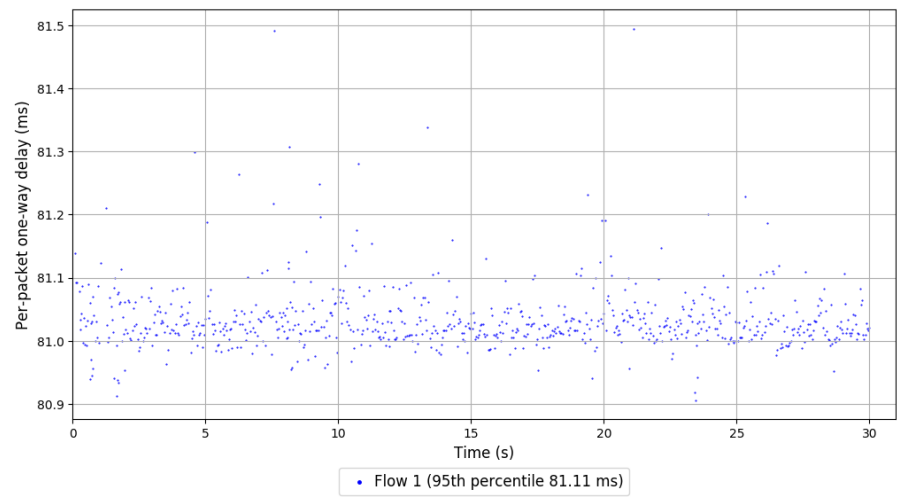
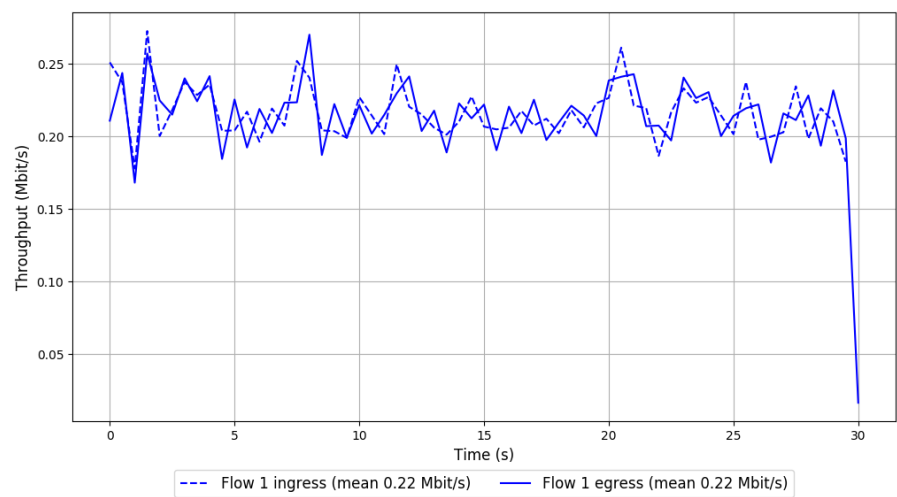


Run 7: Statistics of SCReAM

Start at: 2017-12-20 00:30:43
End at: 2017-12-20 00:31:13
Local clock offset: 5.217 ms
Remote clock offset: -5.271 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.110 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.110 ms
Loss rate: 0.00%

Run 7: Report of SReAM — Data Link

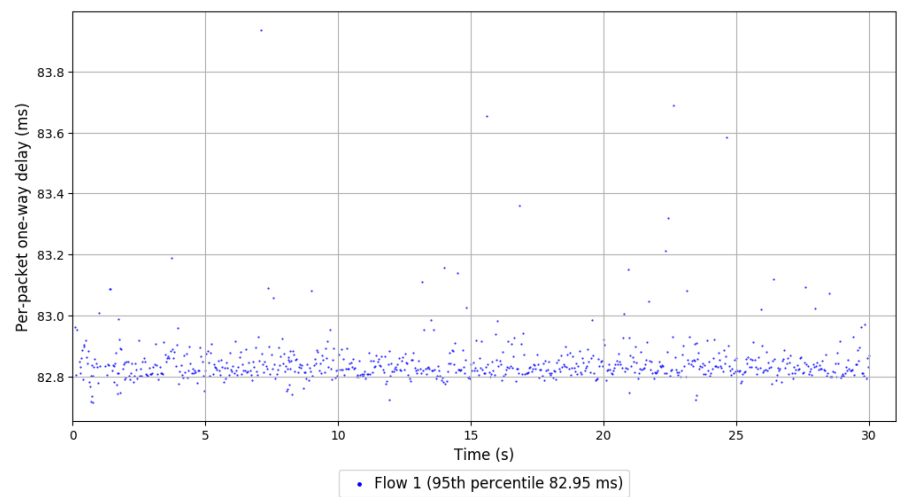
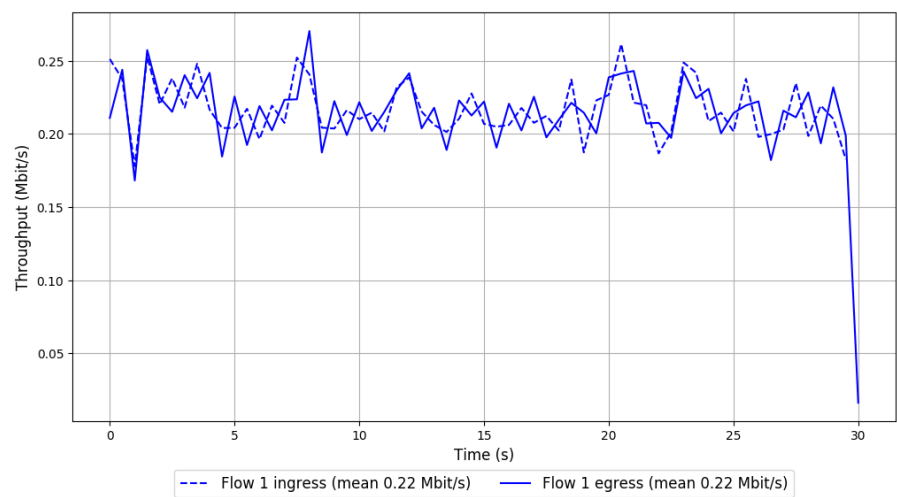


Run 8: Statistics of SCReAM

Start at: 2017-12-20 00:49:36
End at: 2017-12-20 00:50:06
Local clock offset: 5.385 ms
Remote clock offset: -4.965 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.953 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.953 ms
Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-20 01:08:22

End at: 2017-12-20 01:08:52

Local clock offset: 5.005 ms

Remote clock offset: 0.874 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.481 ms

Loss rate: 0.00%

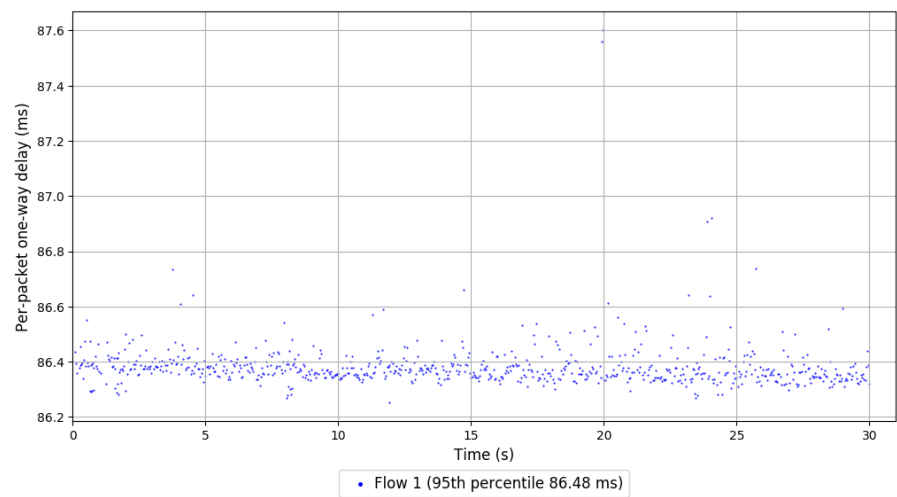
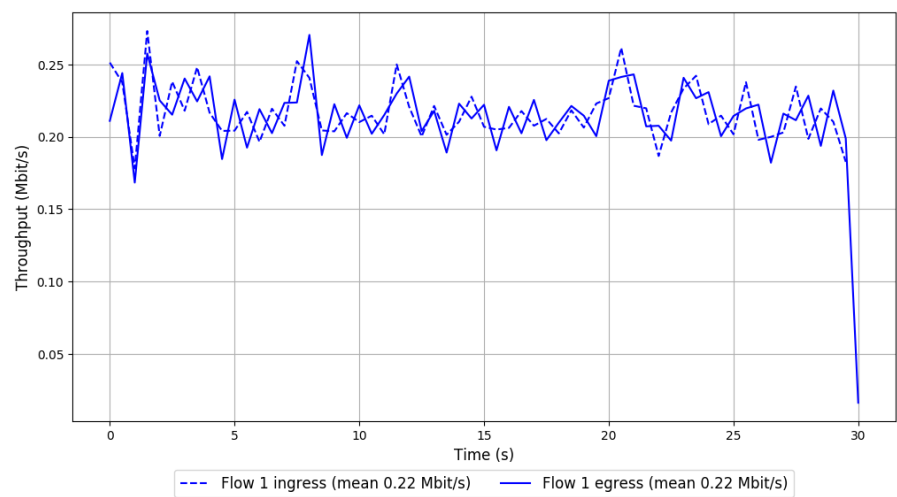
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.481 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-20 01:26:55

End at: 2017-12-20 01:27:25

Local clock offset: 4.235 ms

Remote clock offset: 1.084 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.034 ms

Loss rate: 0.00%

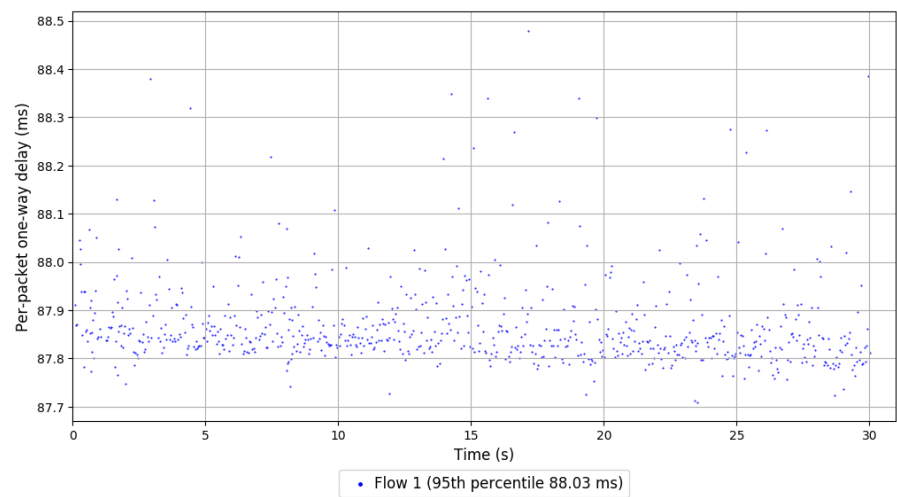
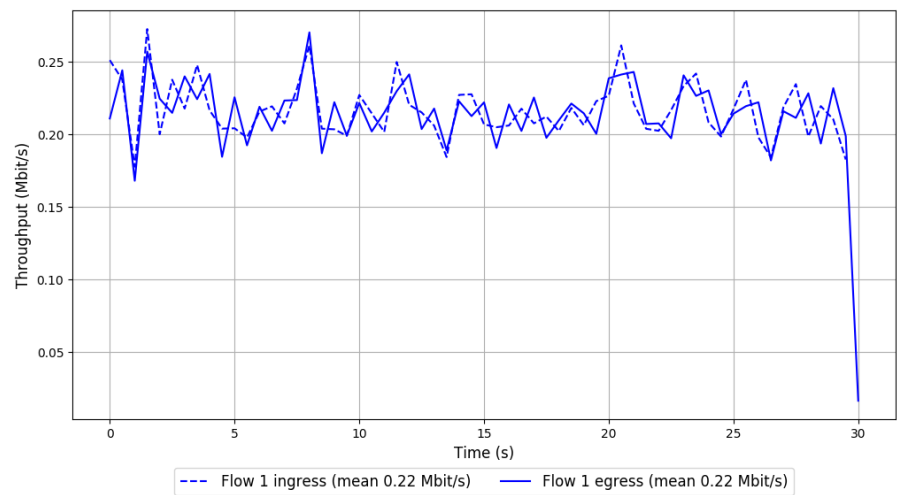
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.034 ms

Loss rate: 0.00%

Run 10: Report of SCReAM — Data Link

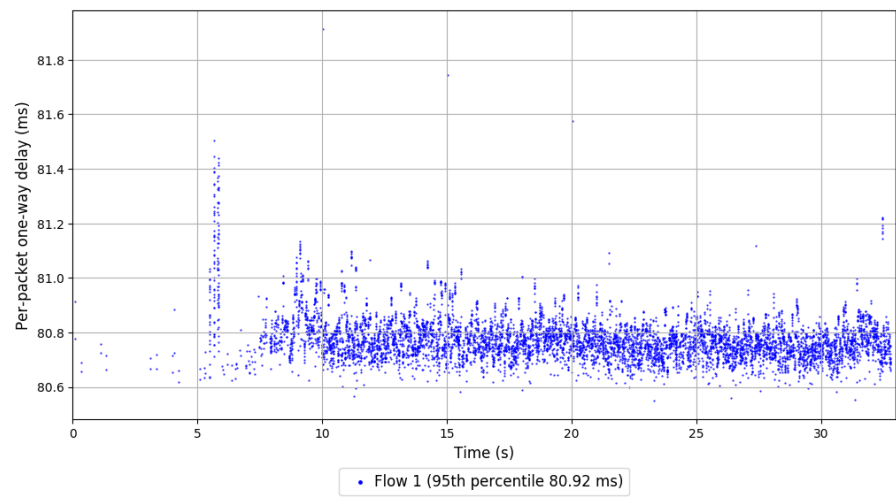
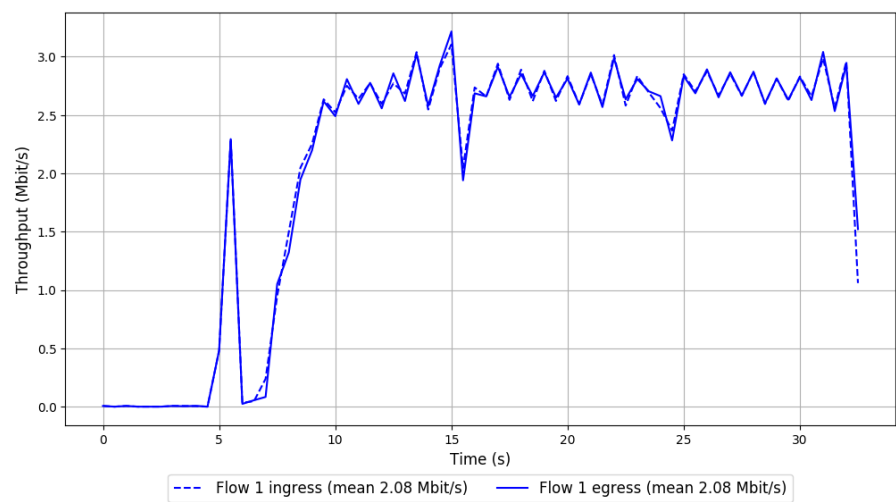


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-19 22:37:15
End at: 2017-12-19 22:37:45
Local clock offset: 3.25 ms
Remote clock offset: -4.32 ms

# Below is generated by plot.py at 2017-12-20 02:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 80.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 80.916 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

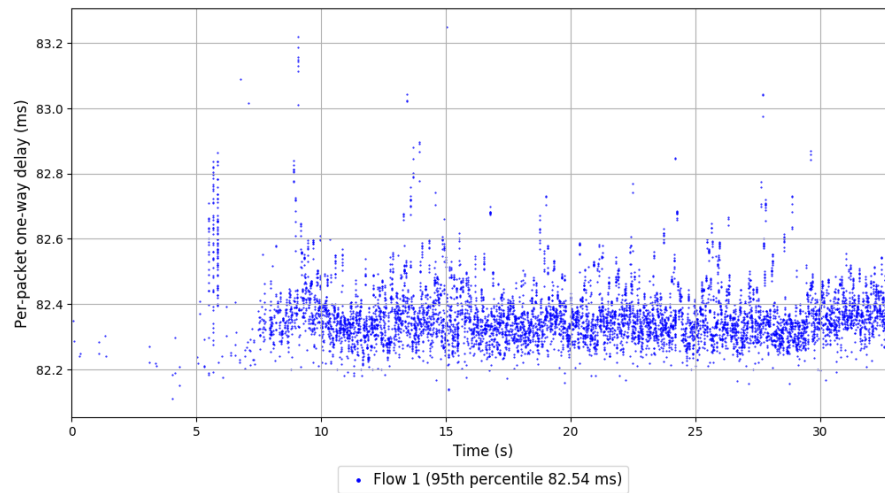
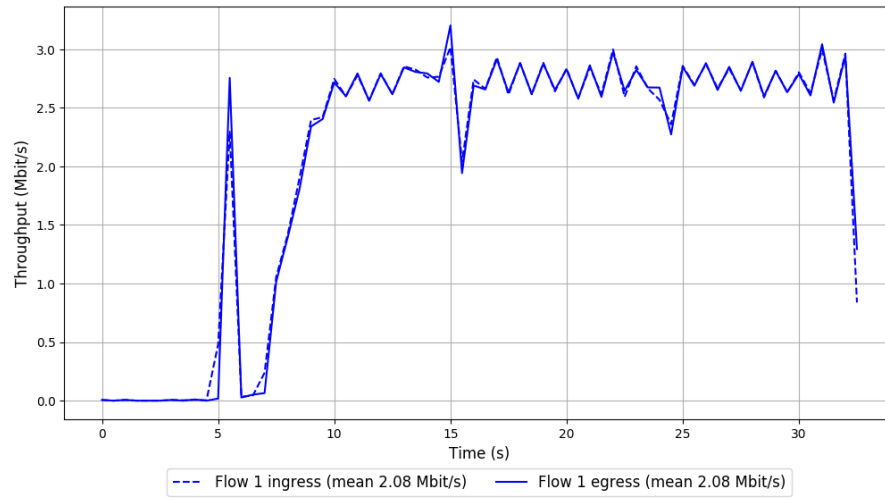


Run 2: Statistics of WebRTC media

Start at: 2017-12-19 22:55:51
End at: 2017-12-19 22:56:22
Local clock offset: 2.317 ms
Remote clock offset: -4.627 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 82.539 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 82.539 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-19 23:14:22

End at: 2017-12-19 23:14:52

Local clock offset: 3.209 ms

Remote clock offset: -4.73 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 83.361 ms

Loss rate: 0.00%

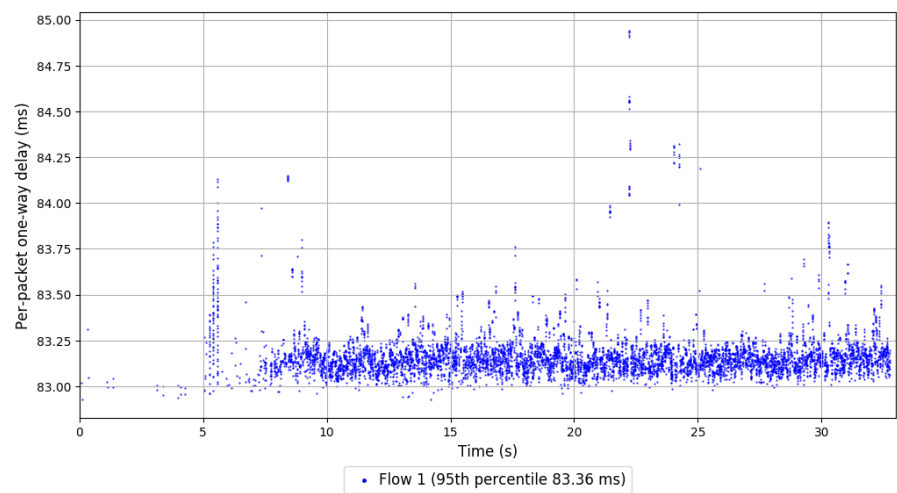
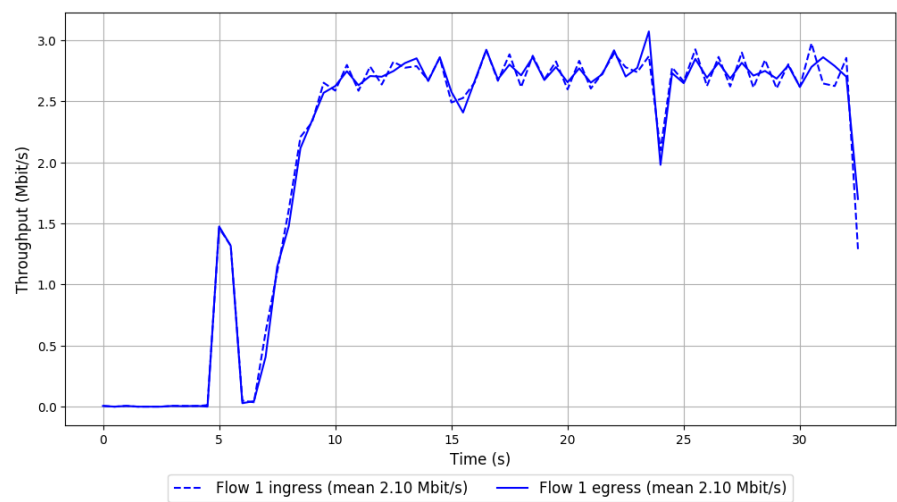
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 83.361 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

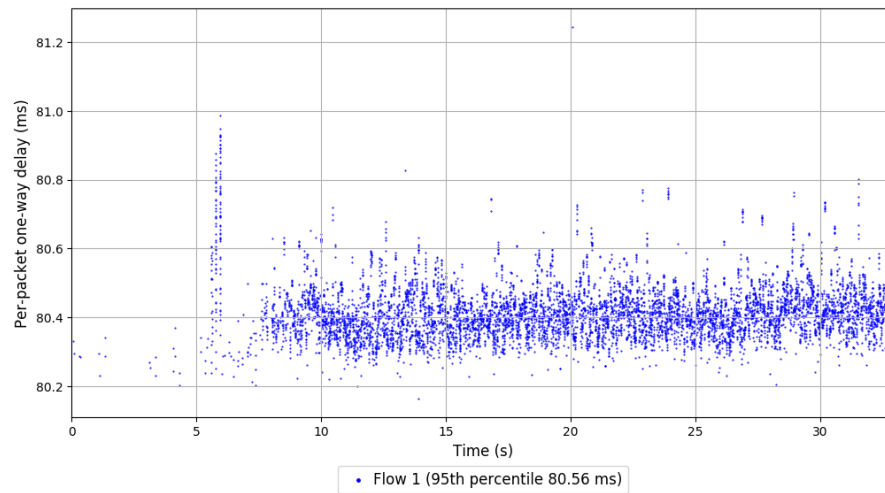
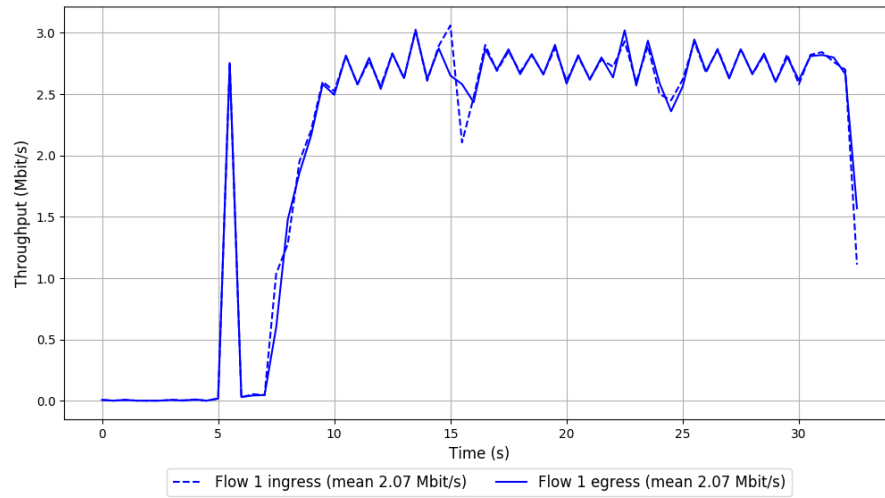


Run 4: Statistics of WebRTC media

Start at: 2017-12-19 23:33:03
End at: 2017-12-19 23:33:33
Local clock offset: 4.083 ms
Remote clock offset: -6.038 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 80.555 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 80.555 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link

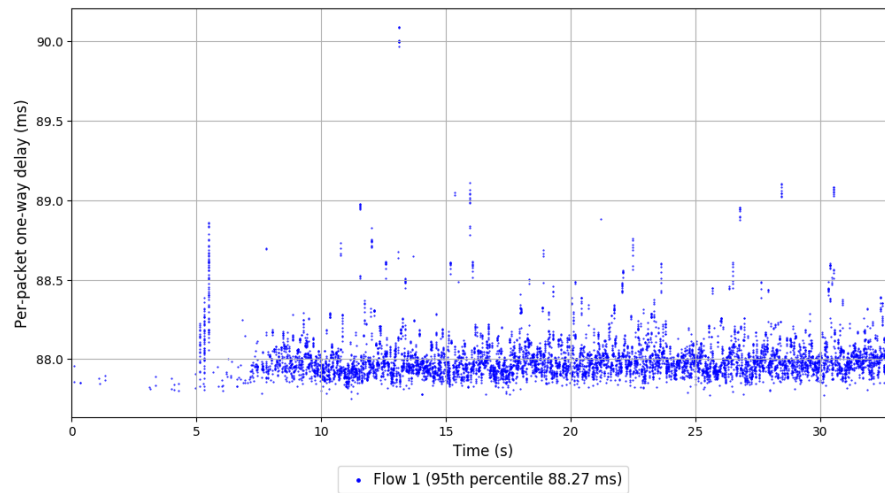
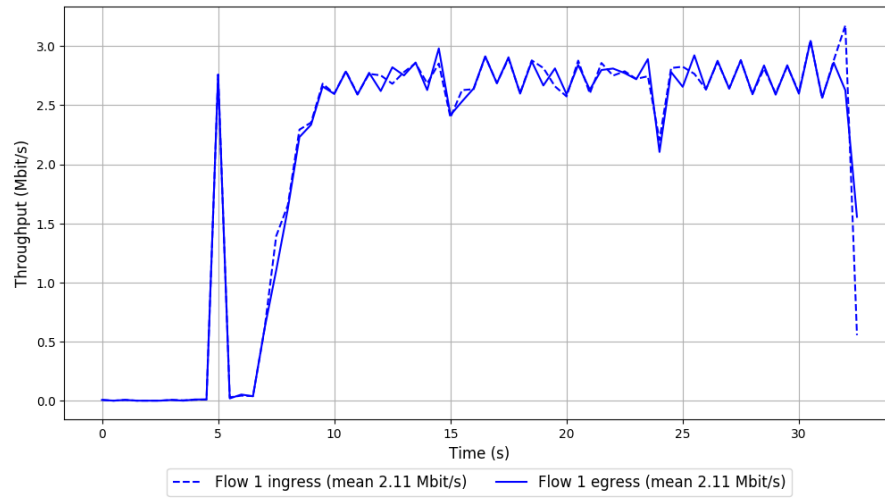


Run 5: Statistics of WebRTC media

Start at: 2017-12-19 23:51:52
End at: 2017-12-19 23:52:22
Local clock offset: 4.553 ms
Remote clock offset: -0.501 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 88.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 88.267 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

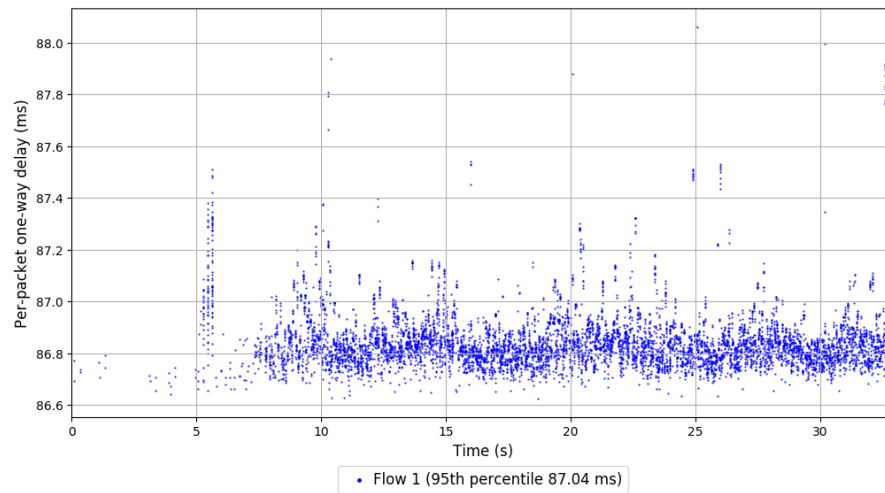
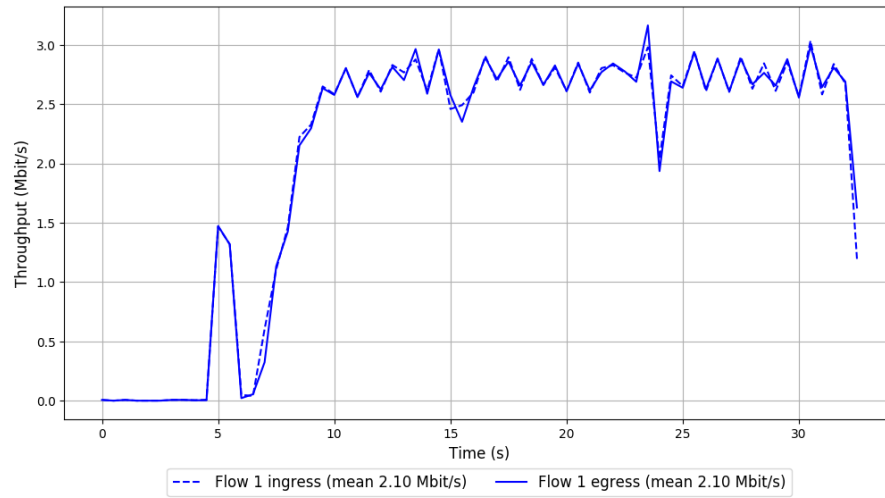


Run 6: Statistics of WebRTC media

Start at: 2017-12-20 00:10:40
End at: 2017-12-20 00:11:10
Local clock offset: 5.455 ms
Remote clock offset: -1.569 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 87.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 87.040 ms
Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

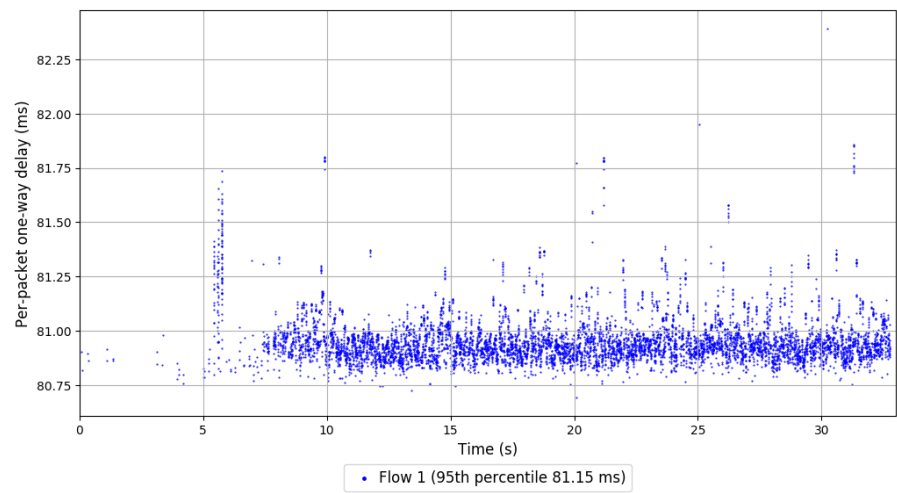
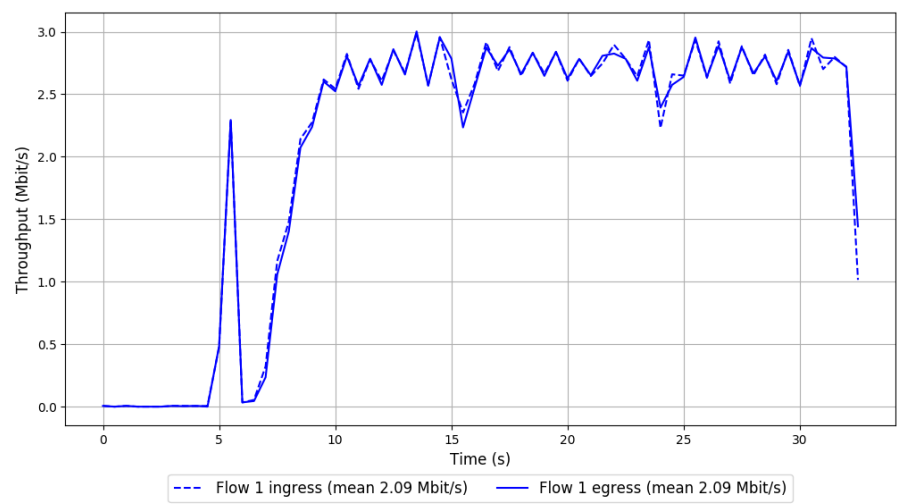


Run 7: Statistics of WebRTC media

Start at: 2017-12-20 00:29:34
End at: 2017-12-20 00:30:04
Local clock offset: 5.218 ms
Remote clock offset: -5.637 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 81.147 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 81.147 ms
Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link

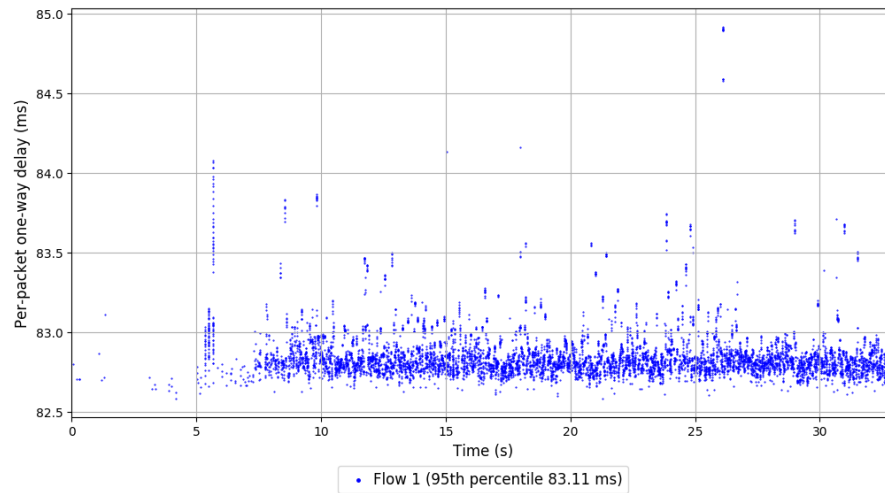
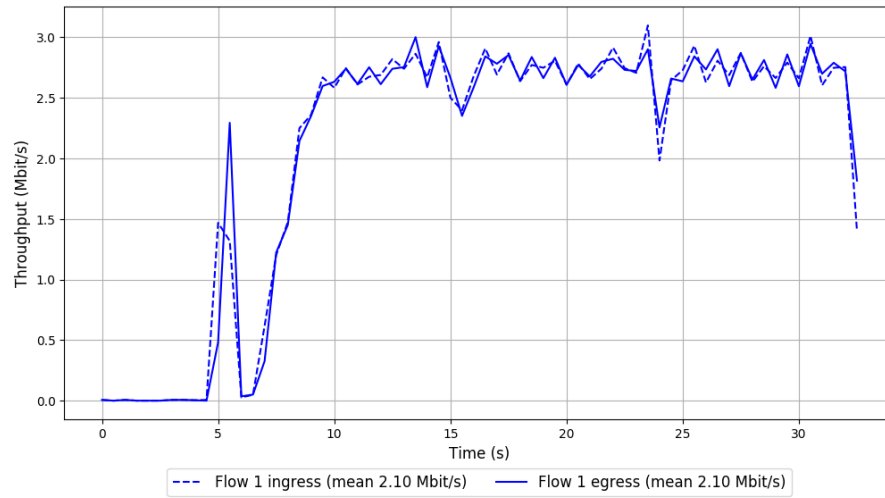


Run 8: Statistics of WebRTC media

Start at: 2017-12-20 00:48:27
End at: 2017-12-20 00:48:57
Local clock offset: 5.355 ms
Remote clock offset: -4.954 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 83.106 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 83.106 ms
Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link

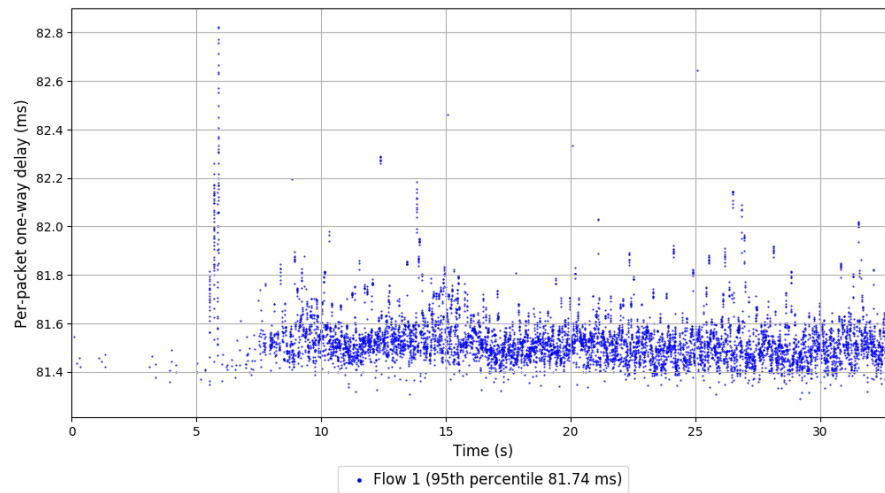
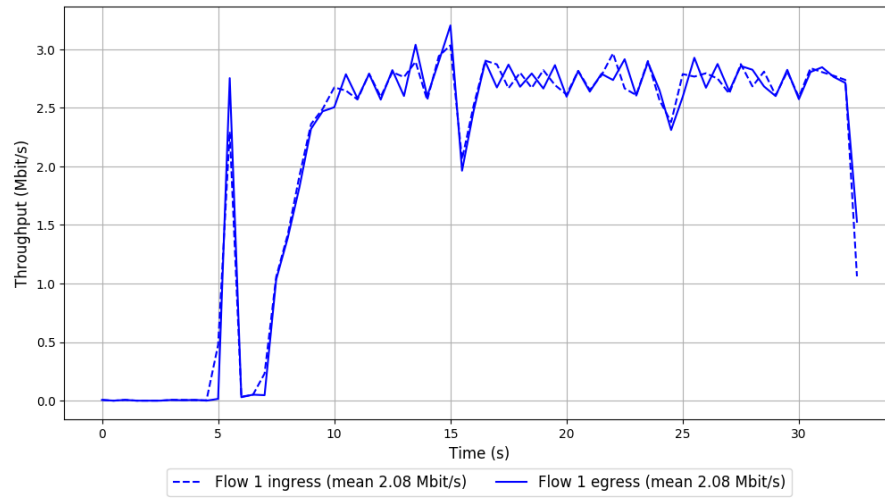


Run 9: Statistics of WebRTC media

Start at: 2017-12-20 01:07:13
End at: 2017-12-20 01:07:43
Local clock offset: 5.046 ms
Remote clock offset: -4.525 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 81.742 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 81.742 ms
Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-20 01:25:45

End at: 2017-12-20 01:26:15

Local clock offset: 4.287 ms

Remote clock offset: 1.044 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 88.209 ms

Loss rate: 0.00%

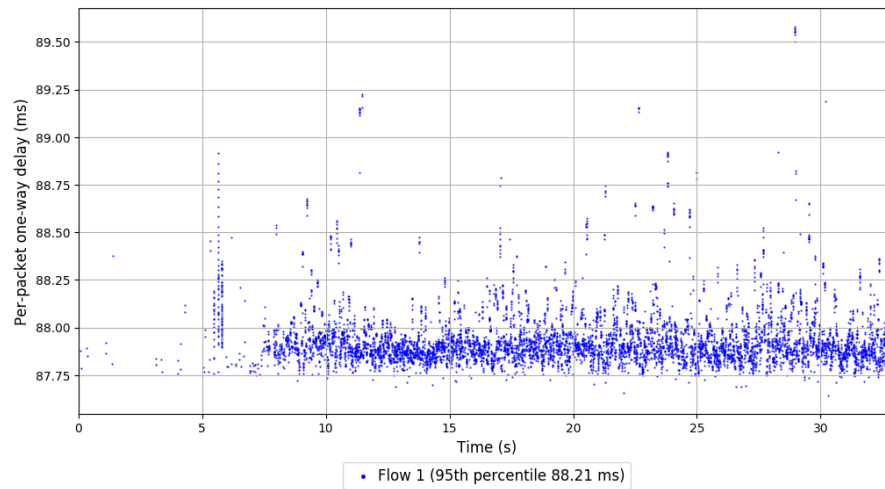
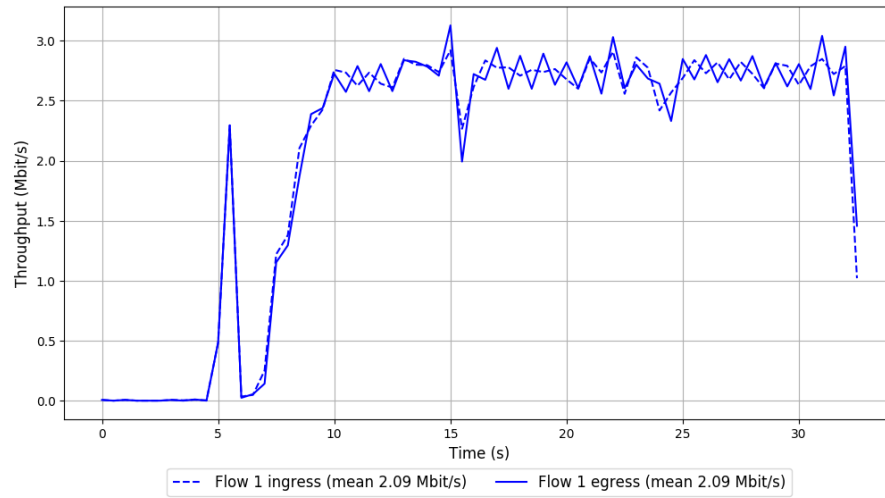
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 88.209 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

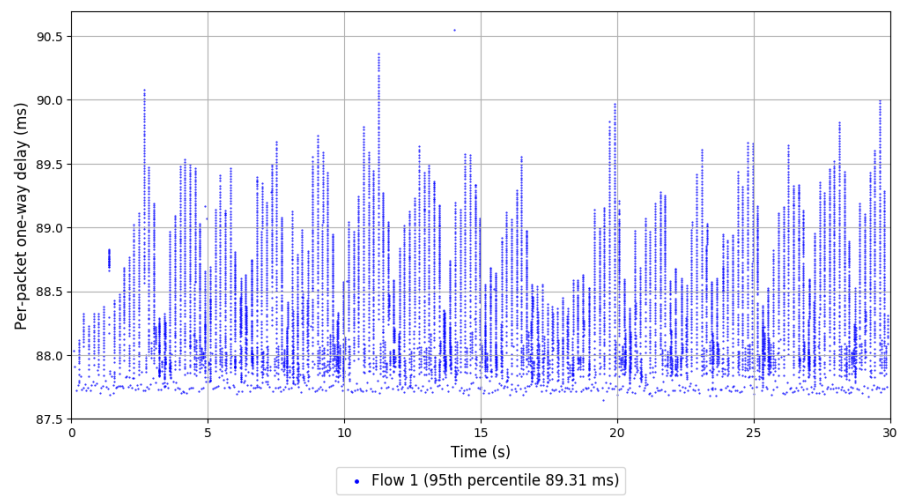
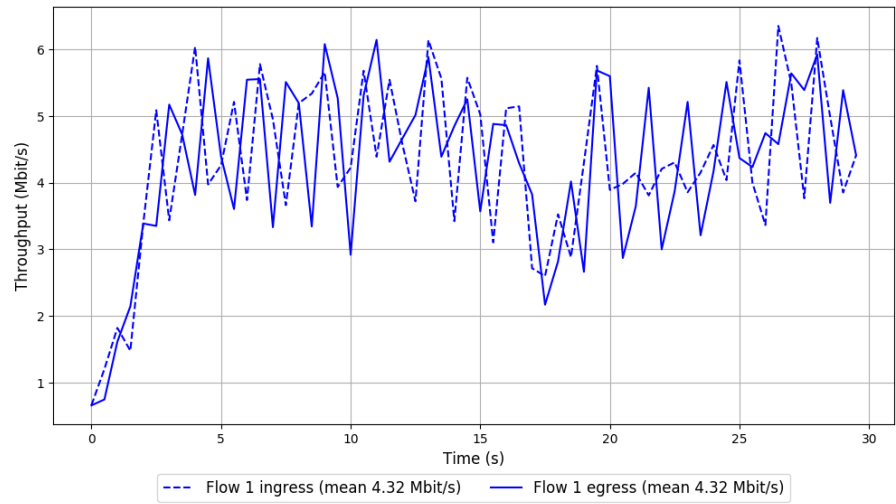


```
Run 1: Statistics of Sprout

Start at: 2017-12-19 22:44:36
End at: 2017-12-19 22:45:06
Local clock offset: 2.502 ms
Remote clock offset: 1.575 ms

# Below is generated by plot.py at 2017-12-20 02:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 89.314 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 89.314 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

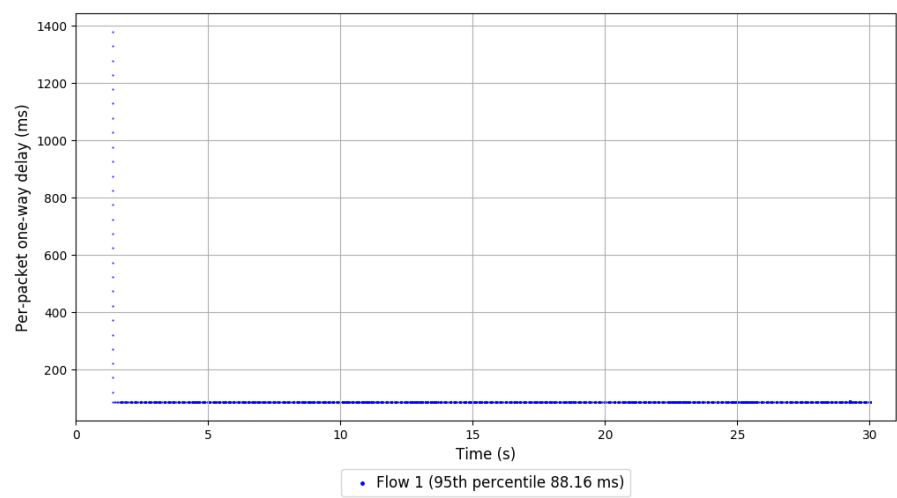
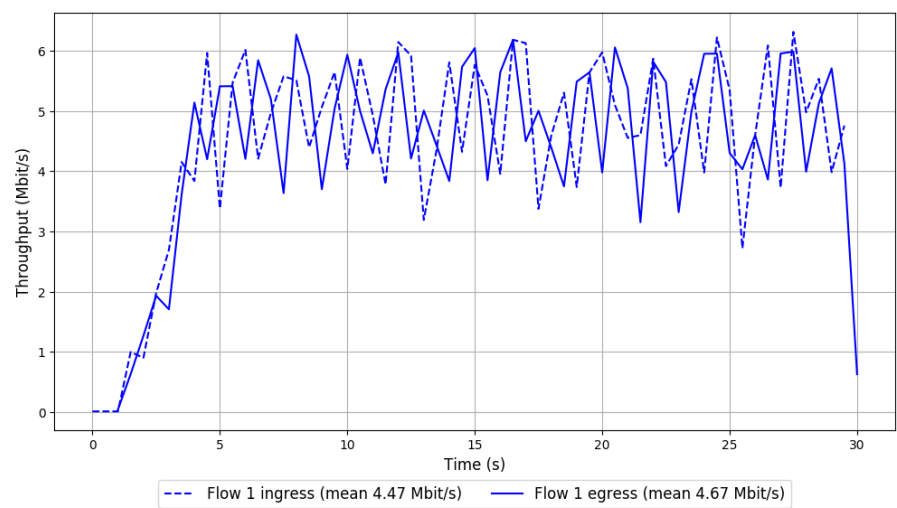


Run 2: Statistics of Sprout

Start at: 2017-12-19 23:03:09
End at: 2017-12-19 23:03:39
Local clock offset: 2.523 ms
Remote clock offset: -0.252 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 88.158 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 88.158 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

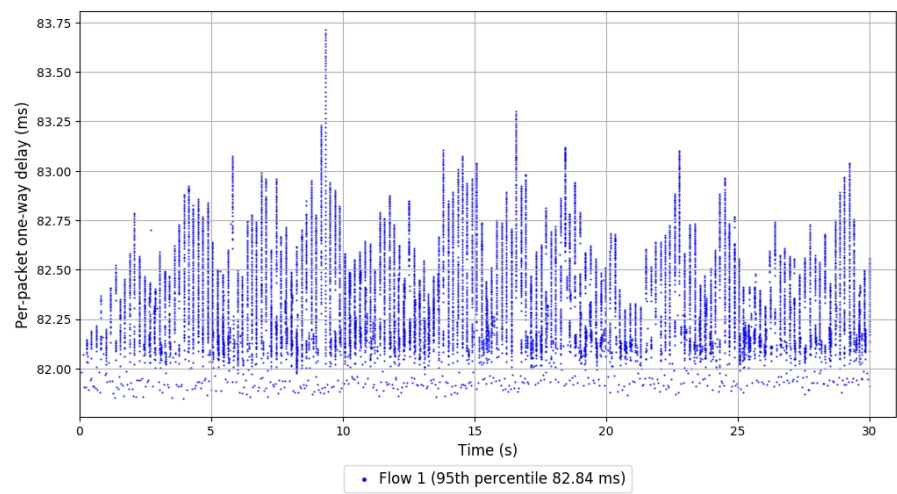
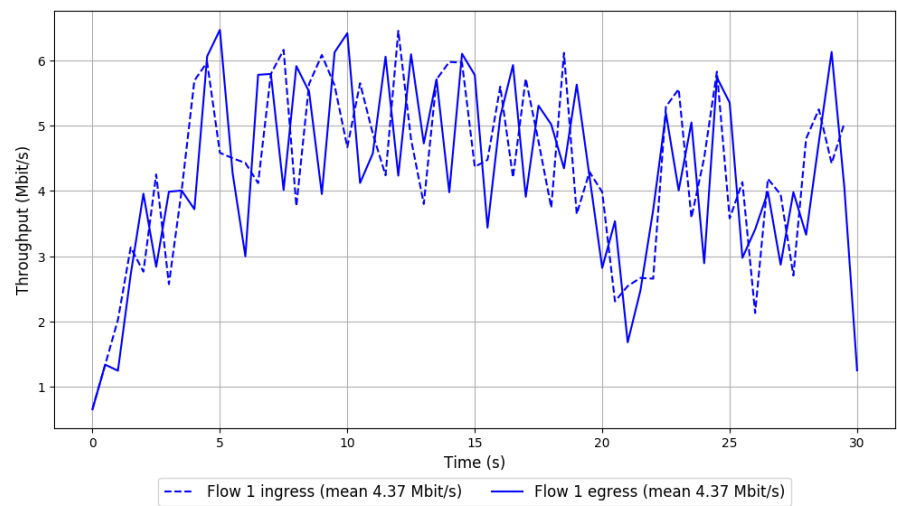


Run 3: Statistics of Sprout

Start at: 2017-12-19 23:21:45
End at: 2017-12-19 23:22:15
Local clock offset: 3.756 ms
Remote clock offset: -5.719 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 82.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 82.844 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

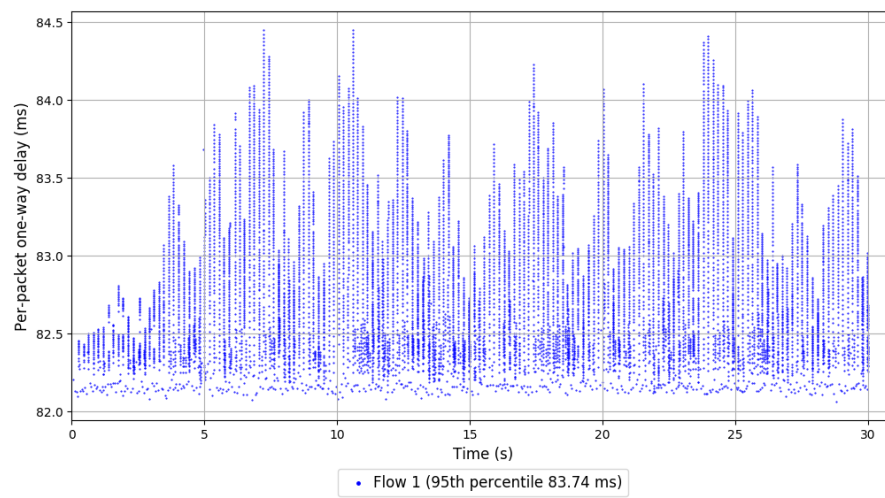
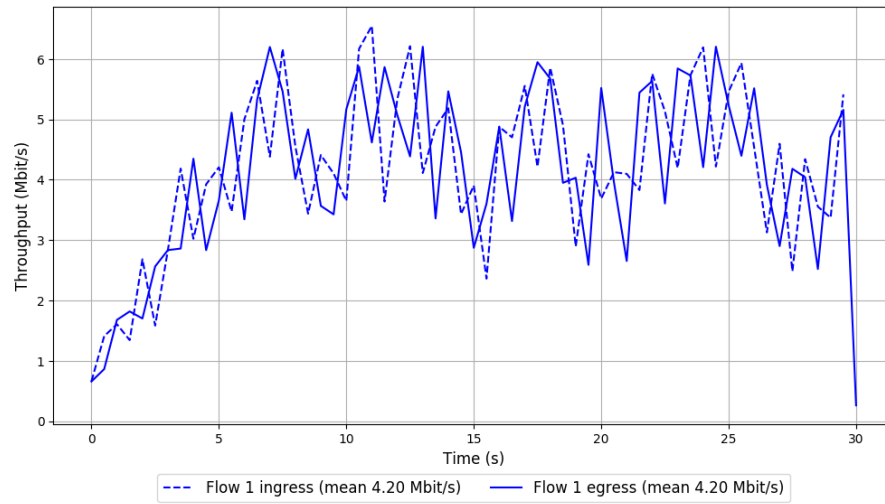


Run 4: Statistics of Sprout

Start at: 2017-12-19 23:40:20
End at: 2017-12-19 23:40:50
Local clock offset: 4.452 ms
Remote clock offset: -6.032 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 83.743 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 83.743 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

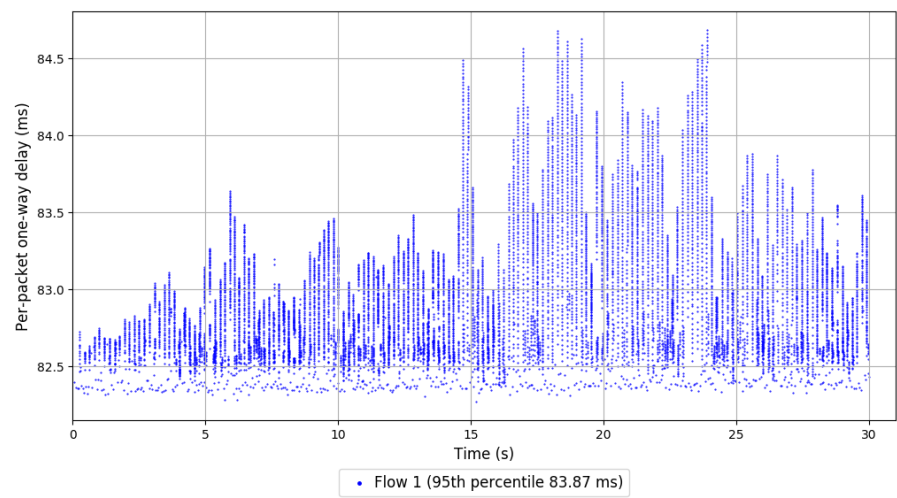
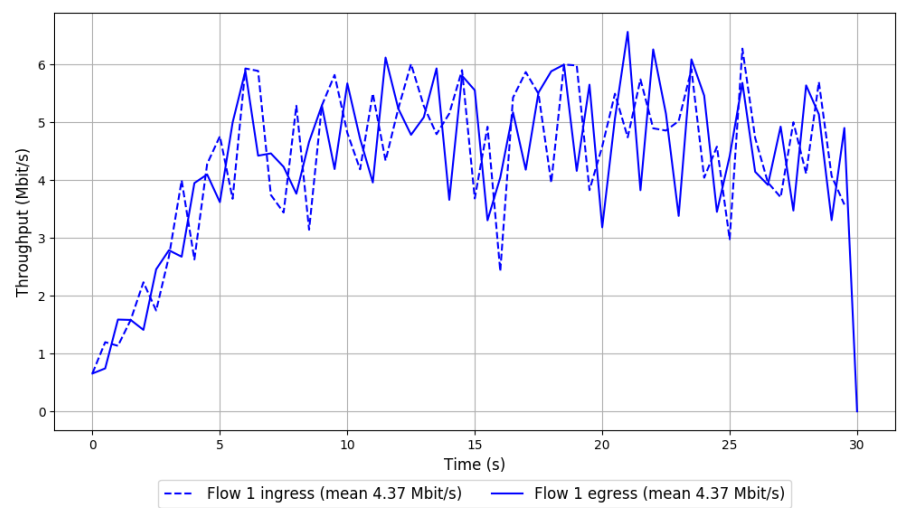


Run 5: Statistics of Sprout

Start at: 2017-12-19 23:59:09
End at: 2017-12-19 23:59:39
Local clock offset: 4.882 ms
Remote clock offset: -6.217 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 83.873 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 83.873 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

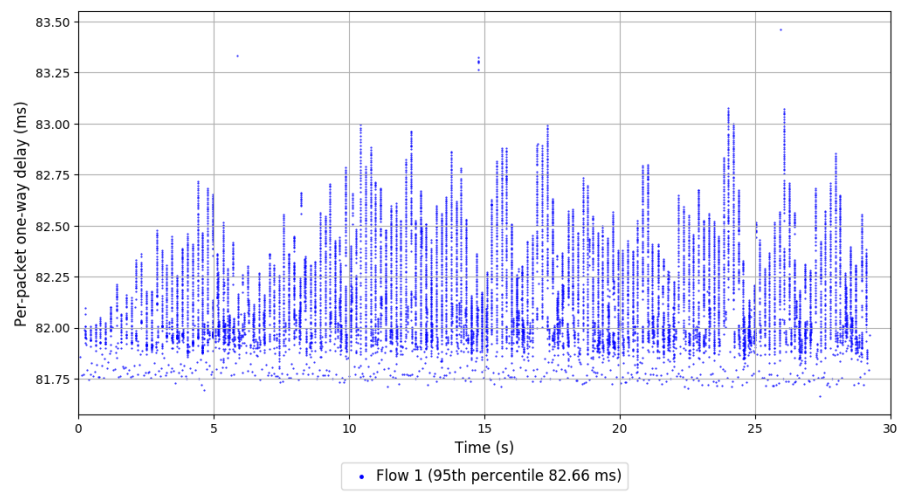
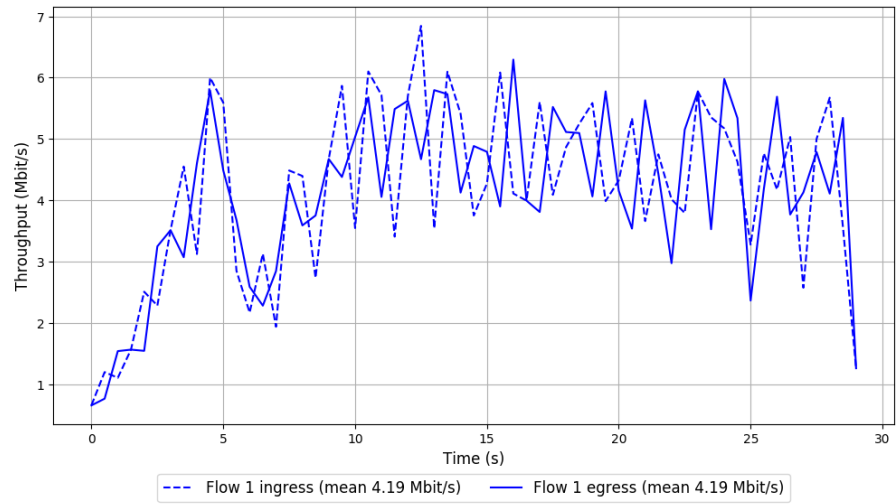


Run 6: Statistics of Sprout

Start at: 2017-12-20 00:17:59
End at: 2017-12-20 00:18:29
Local clock offset: 5.388 ms
Remote clock offset: -6.624 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 82.657 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 82.657 ms
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

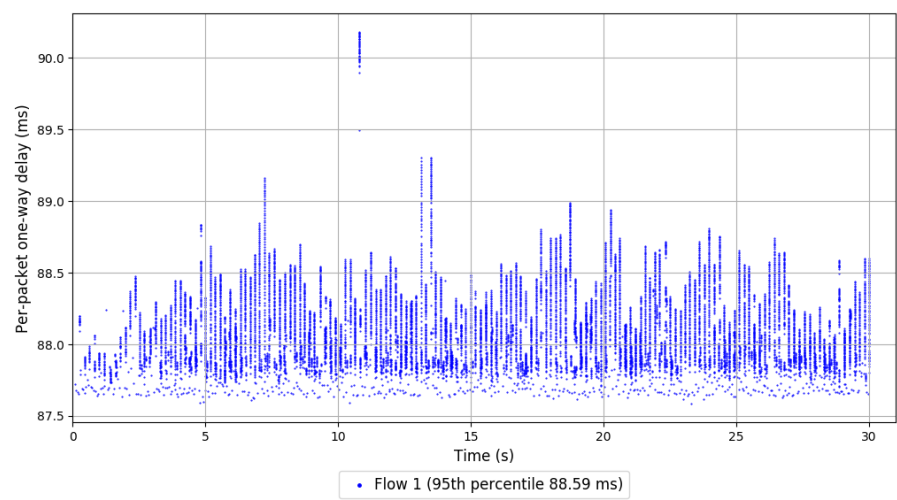
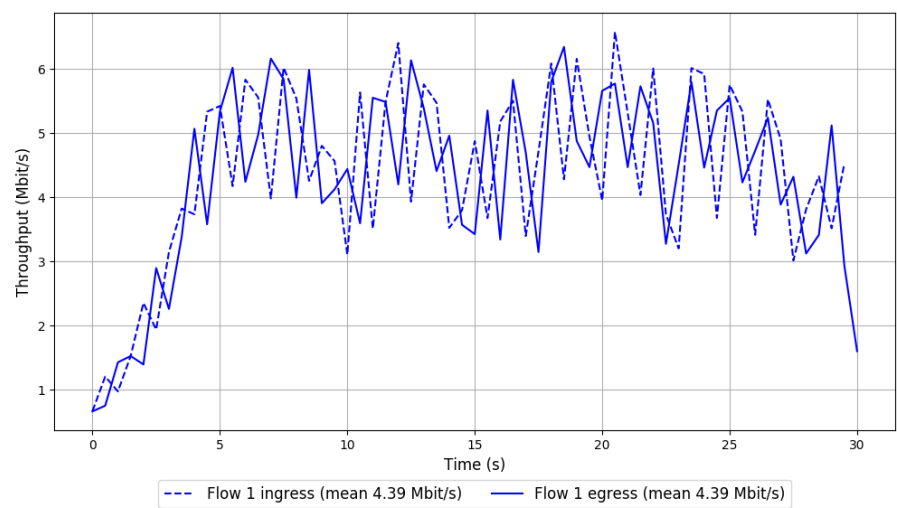


Run 7: Statistics of Sprout

Start at: 2017-12-20 00:36:55
End at: 2017-12-20 00:37:25
Local clock offset: 5.245 ms
Remote clock offset: -0.223 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 88.590 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 88.590 ms
Loss rate: 0.00%

Run 7: Report of Sprout — Data Link

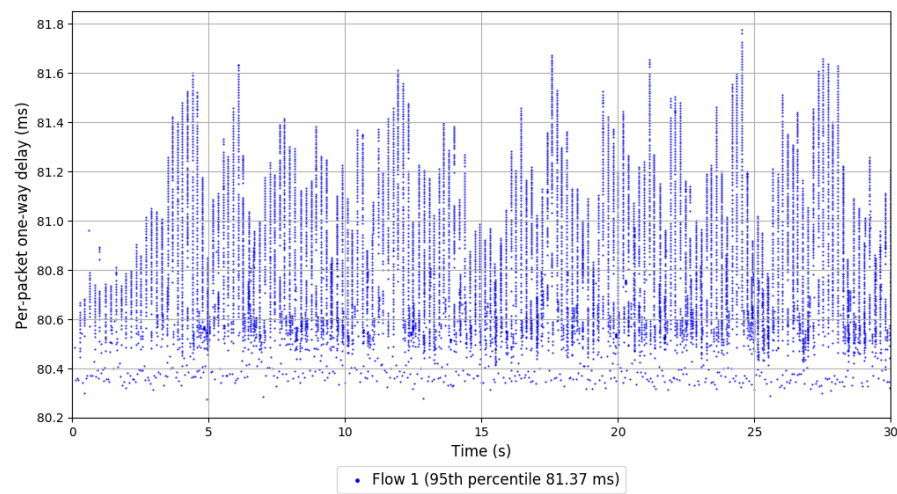
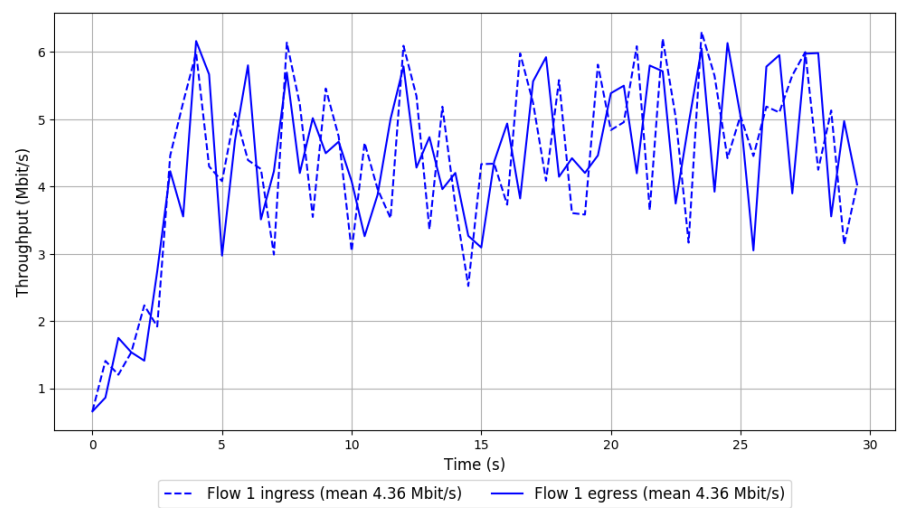


Run 8: Statistics of Sprout

Start at: 2017-12-20 00:55:55
End at: 2017-12-20 00:56:25
Local clock offset: 5.515 ms
Remote clock offset: -5.648 ms

Below is generated by plot.py at 2017-12-20 02:21:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 81.368 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 81.368 ms
Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-20 01:14:32

End at: 2017-12-20 01:15:02

Local clock offset: 4.731 ms

Remote clock offset: 1.426 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 88.425 ms

Loss rate: 0.00%

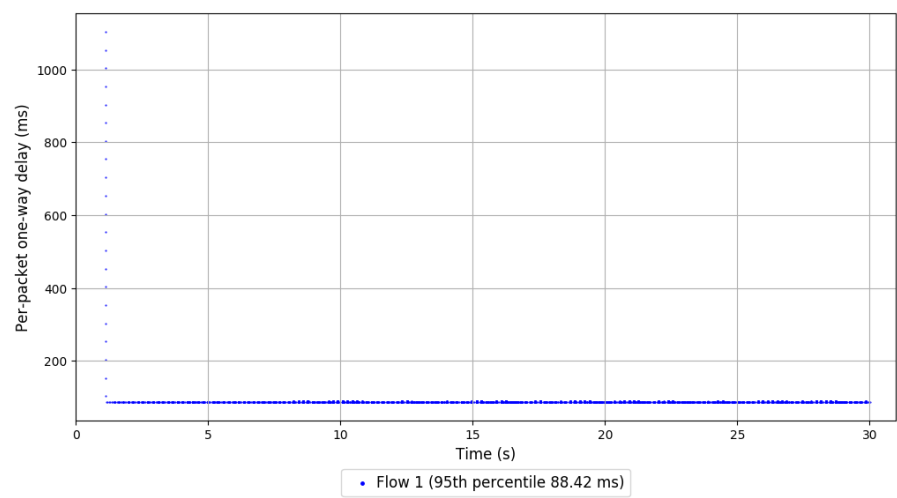
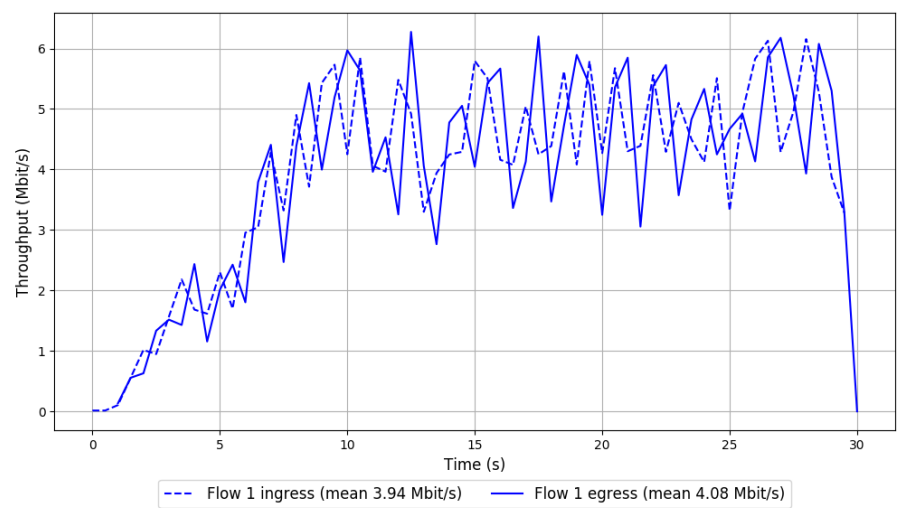
-- Flow 1:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 88.425 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-20 01:33:03

End at: 2017-12-20 01:33:33

Local clock offset: 4.037 ms

Remote clock offset: -4.437 ms

Below is generated by plot.py at 2017-12-20 02:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 83.881 ms

Loss rate: 0.00%

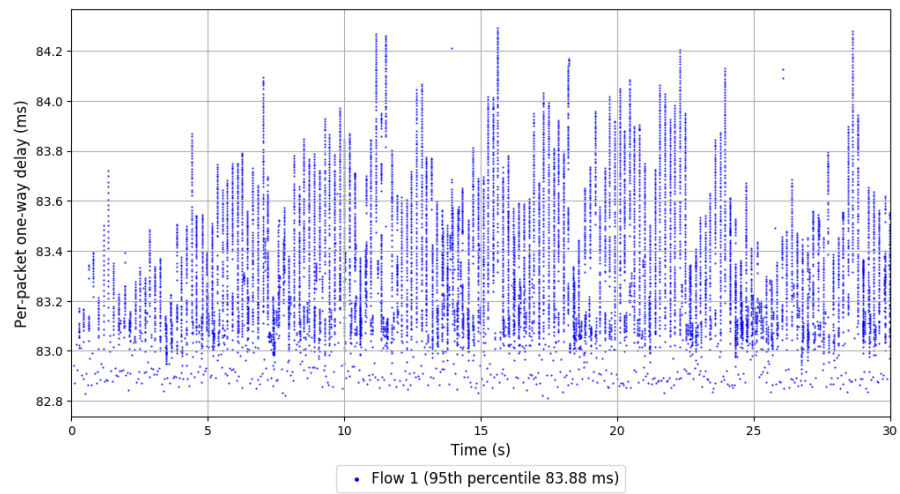
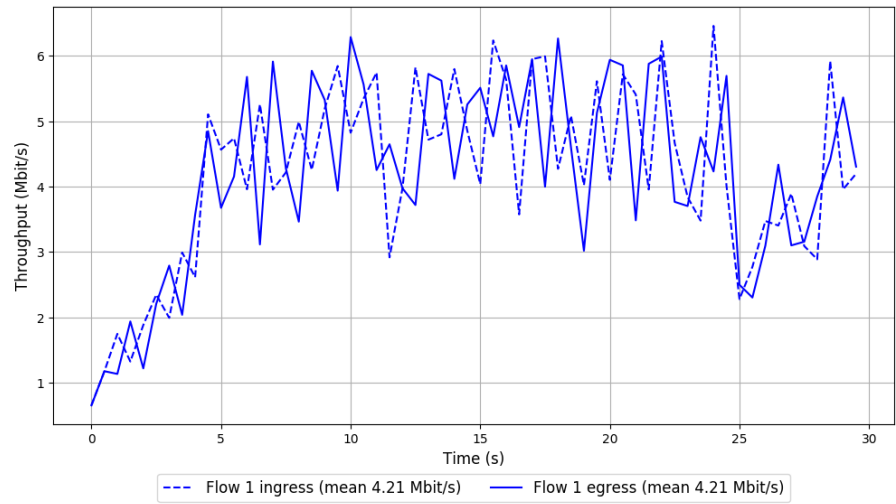
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 83.881 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

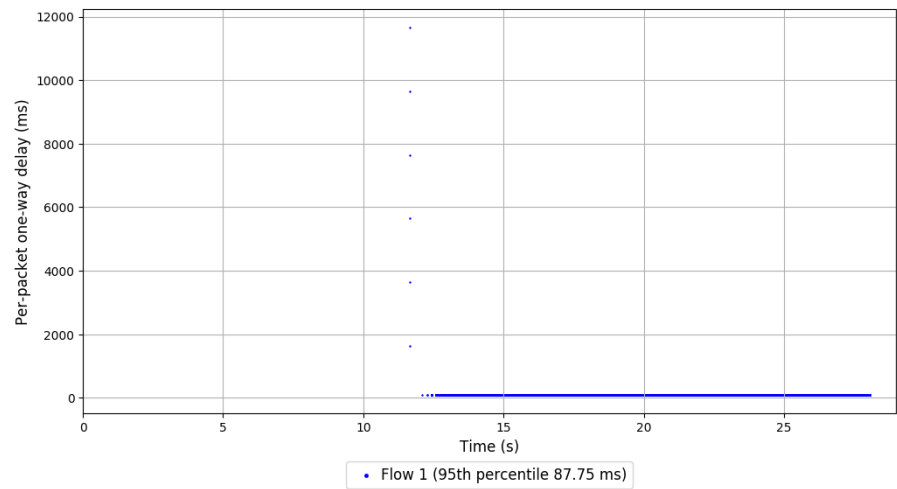
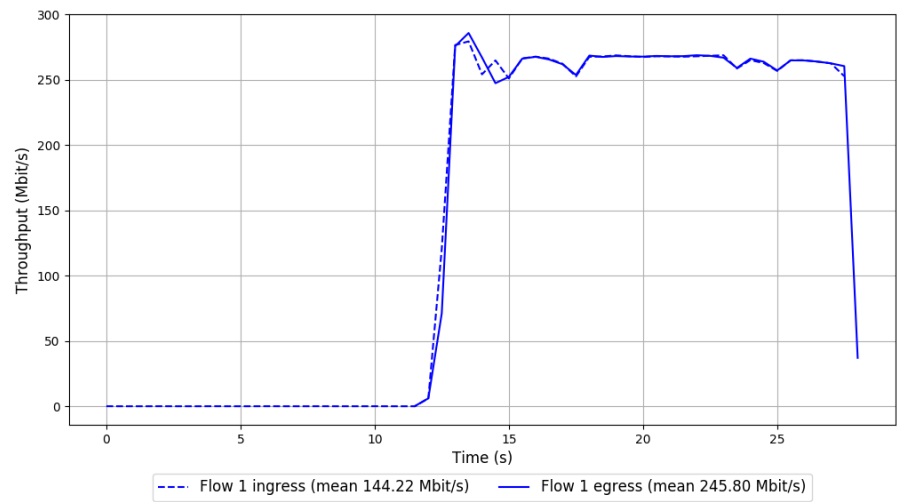
Start at: 2017-12-19 22:32:02

End at: 2017-12-19 22:32:32

Local clock offset: 3.678 ms

Remote clock offset: 1.456 ms

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



Run 2: Statistics of TaoVA-100x

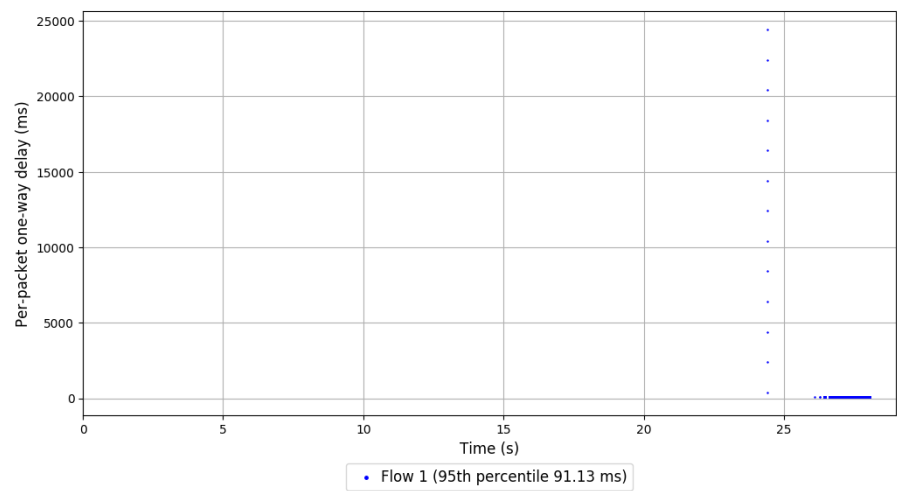
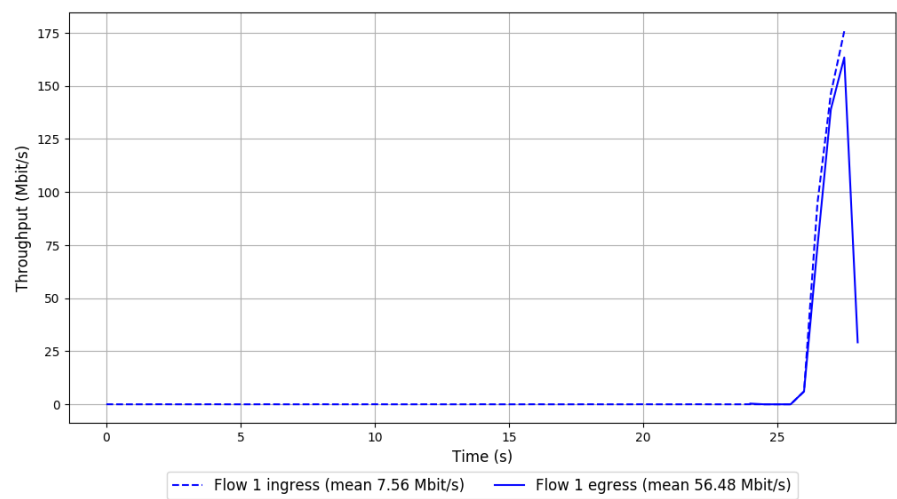
Start at: 2017-12-19 22:50:44

End at: 2017-12-19 22:51:14

Local clock offset: 2.251 ms

Remote clock offset: -5.105 ms

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



Run 3: Statistics of TaoVA-100x

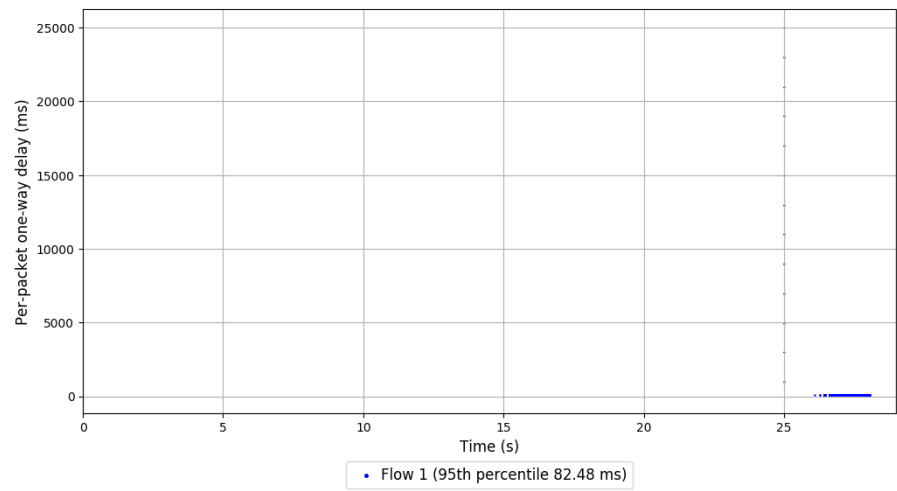
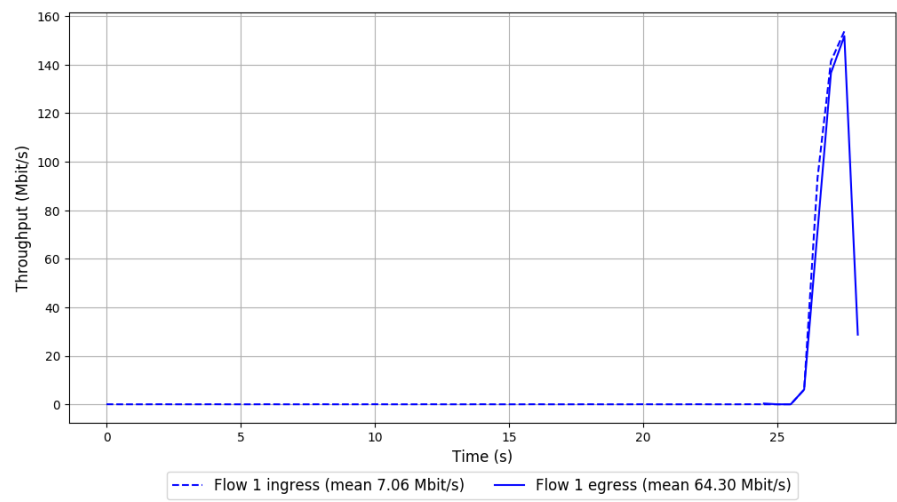
Start at: 2017-12-19 23:09:16

End at: 2017-12-19 23:09:46

Local clock offset: 2.933 ms

Remote clock offset: -5.391 ms

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



Run 4: Statistics of TaoVA-100x

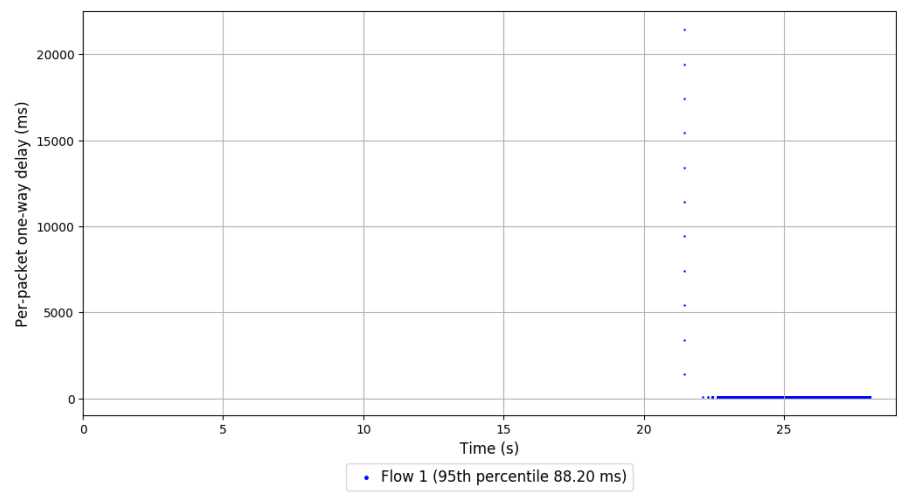
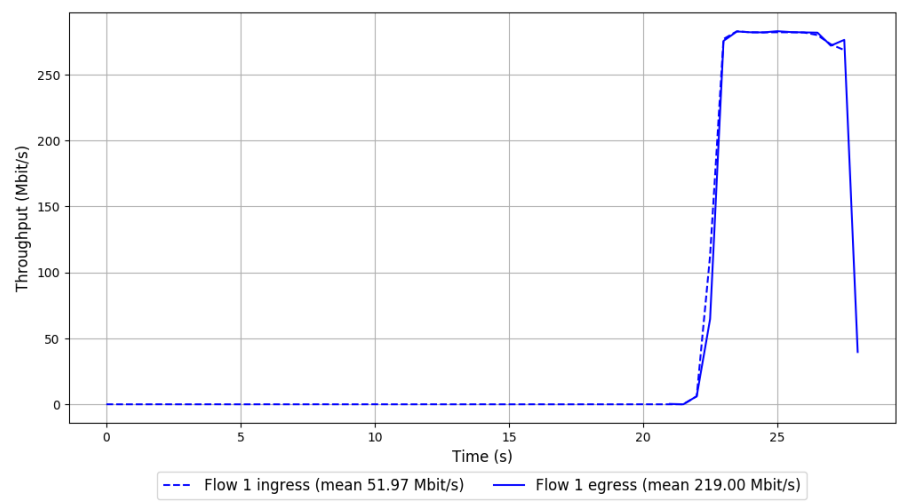
Start at: 2017-12-19 23:27:51

End at: 2017-12-19 23:28:21

Local clock offset: 3.854 ms

Remote clock offset: -0.669 ms

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-19 23:46:22

End at: 2017-12-19 23:46:52

Local clock offset: 4.411 ms

Remote clock offset: -5.637 ms

Below is generated by plot.py at 2017-12-20 02:25:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 259.94 Mbit/s

95th percentile per-packet one-way delay: 82.872 ms

Loss rate: 0.00%

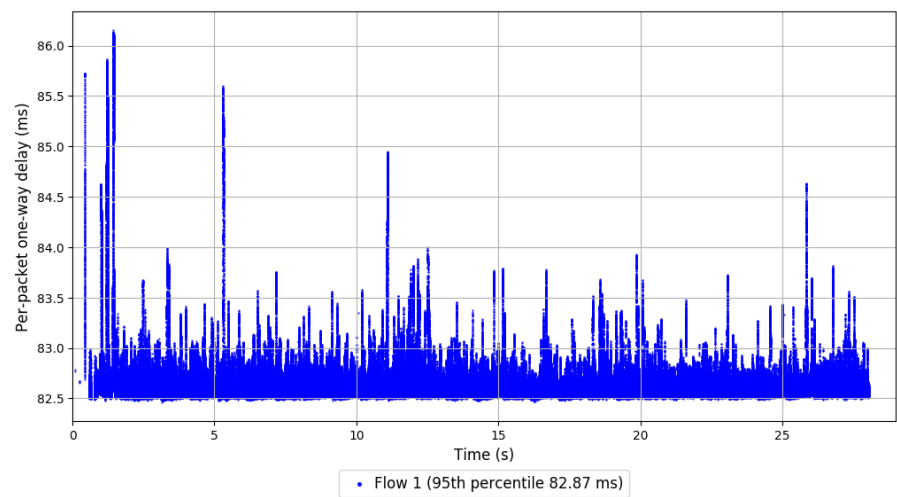
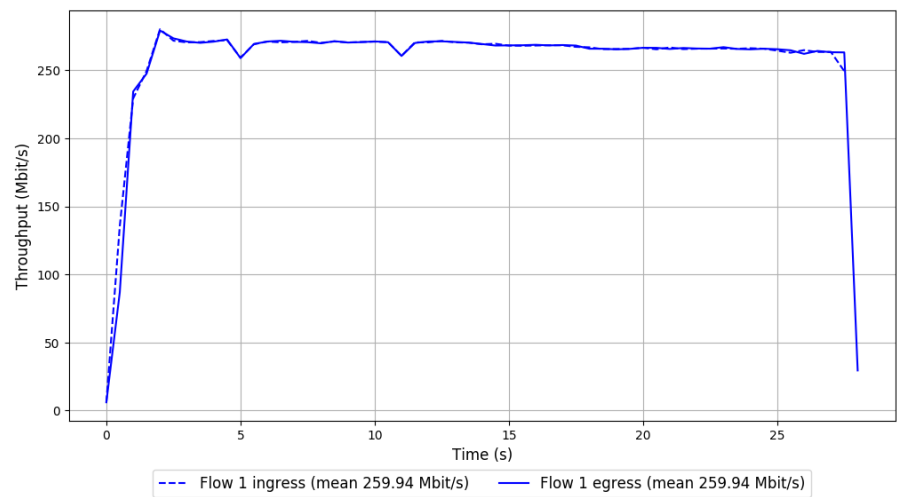
-- Flow 1:

Average throughput: 259.94 Mbit/s

95th percentile per-packet one-way delay: 82.872 ms

Loss rate: 0.00%

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

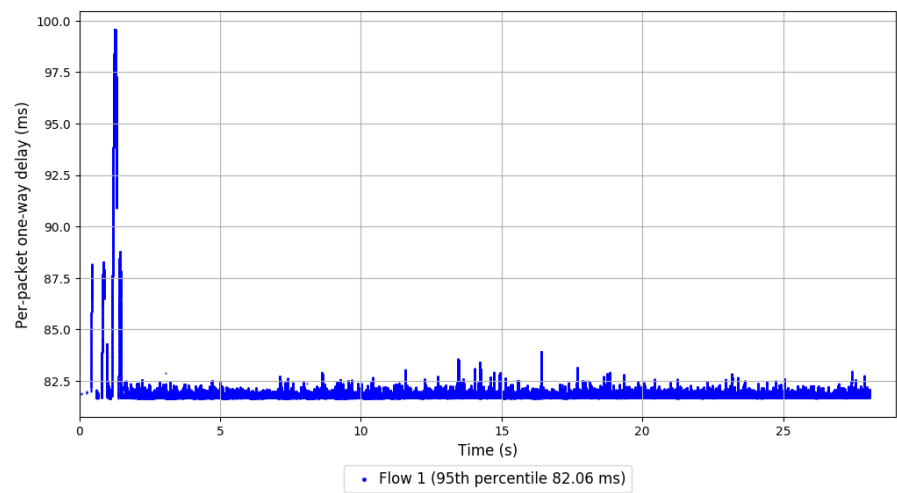
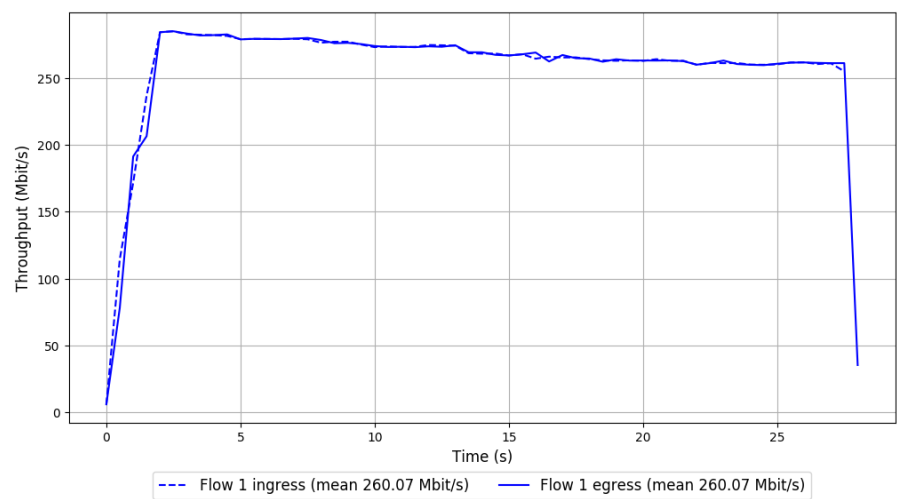


Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 00:05:11
End at: 2017-12-20 00:05:41
Local clock offset: 5.225 ms
Remote clock offset: -6.239 ms

Below is generated by plot.py at 2017-12-20 02:25:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 260.07 Mbit/s
95th percentile per-packet one-way delay: 82.058 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 260.07 Mbit/s
95th percentile per-packet one-way delay: 82.058 ms
Loss rate: 0.00%

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

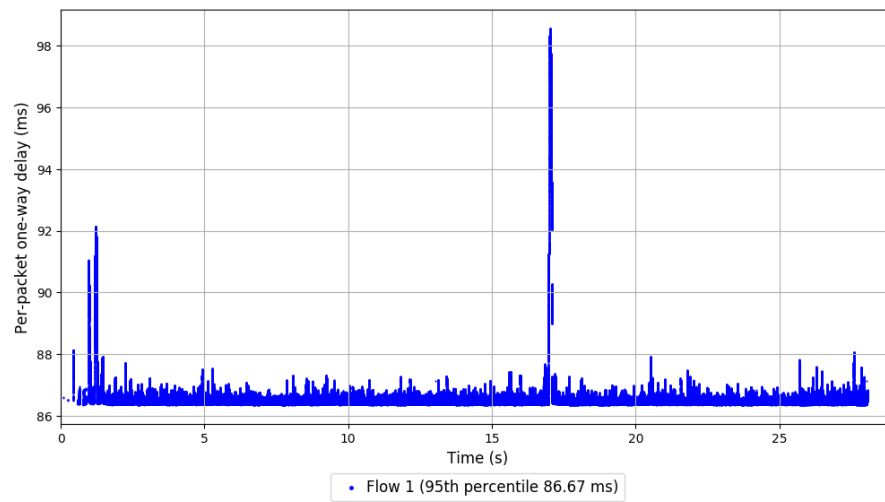
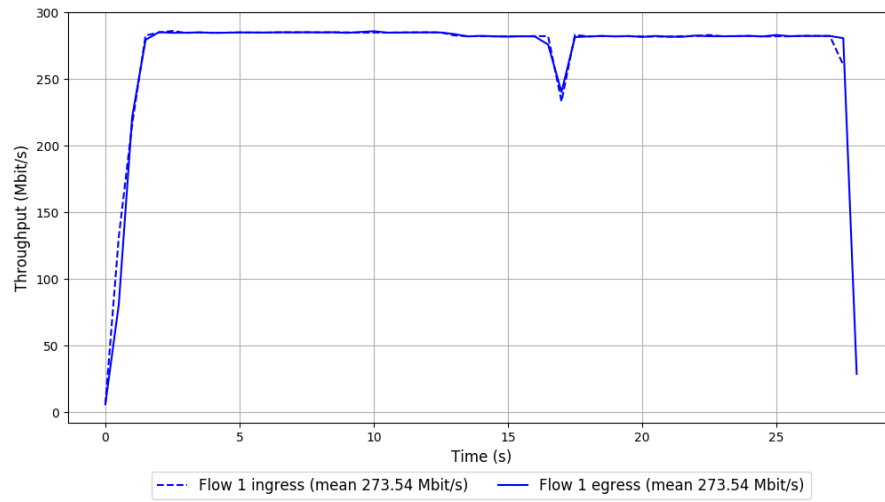


Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 00:24:01
End at: 2017-12-20 00:24:31
Local clock offset: 5.262 ms
Remote clock offset: -1.651 ms

Below is generated by plot.py at 2017-12-20 02:25:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 273.54 Mbit/s
95th percentile per-packet one-way delay: 86.672 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 273.54 Mbit/s
95th percentile per-packet one-way delay: 86.672 ms
Loss rate: 0.00%

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

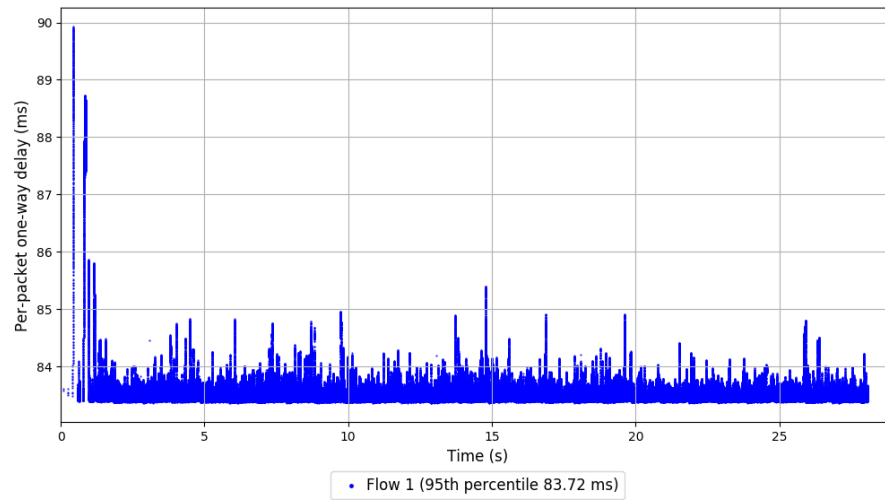
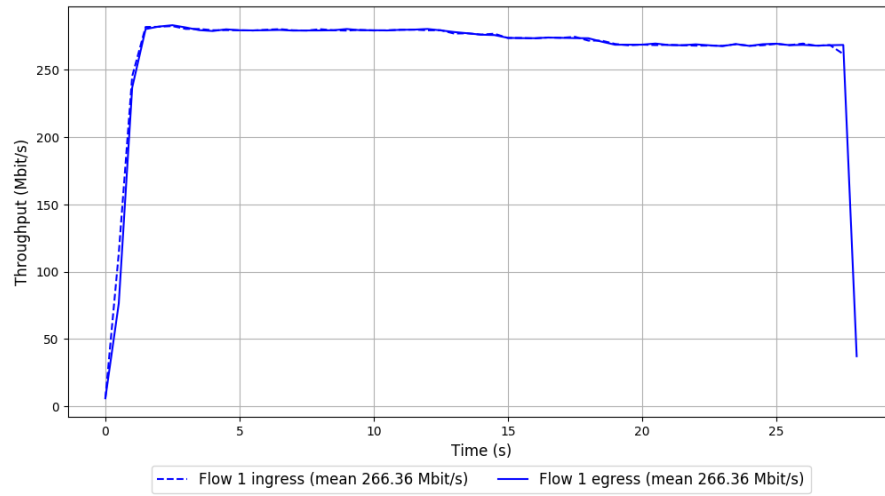


Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 00:42:57
End at: 2017-12-20 00:43:27
Local clock offset: 5.288 ms
Remote clock offset: -5.194 ms

Below is generated by plot.py at 2017-12-20 02:25:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 266.36 Mbit/s
95th percentile per-packet one-way delay: 83.721 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 266.36 Mbit/s
95th percentile per-packet one-way delay: 83.721 ms
Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

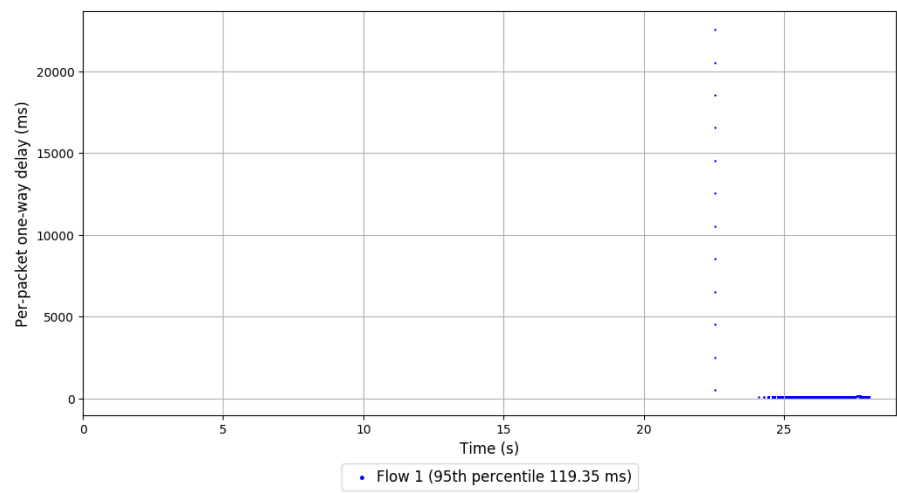
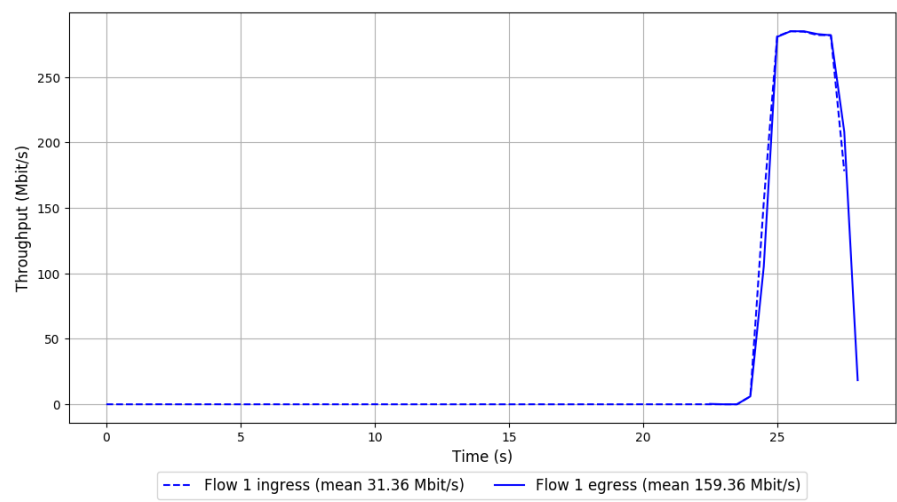
Start at: 2017-12-20 01:02:02

End at: 2017-12-20 01:02:33

Local clock offset: 5.252 ms

Remote clock offset: -0.114 ms

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



Run 10: Statistics of TaoVA-100x

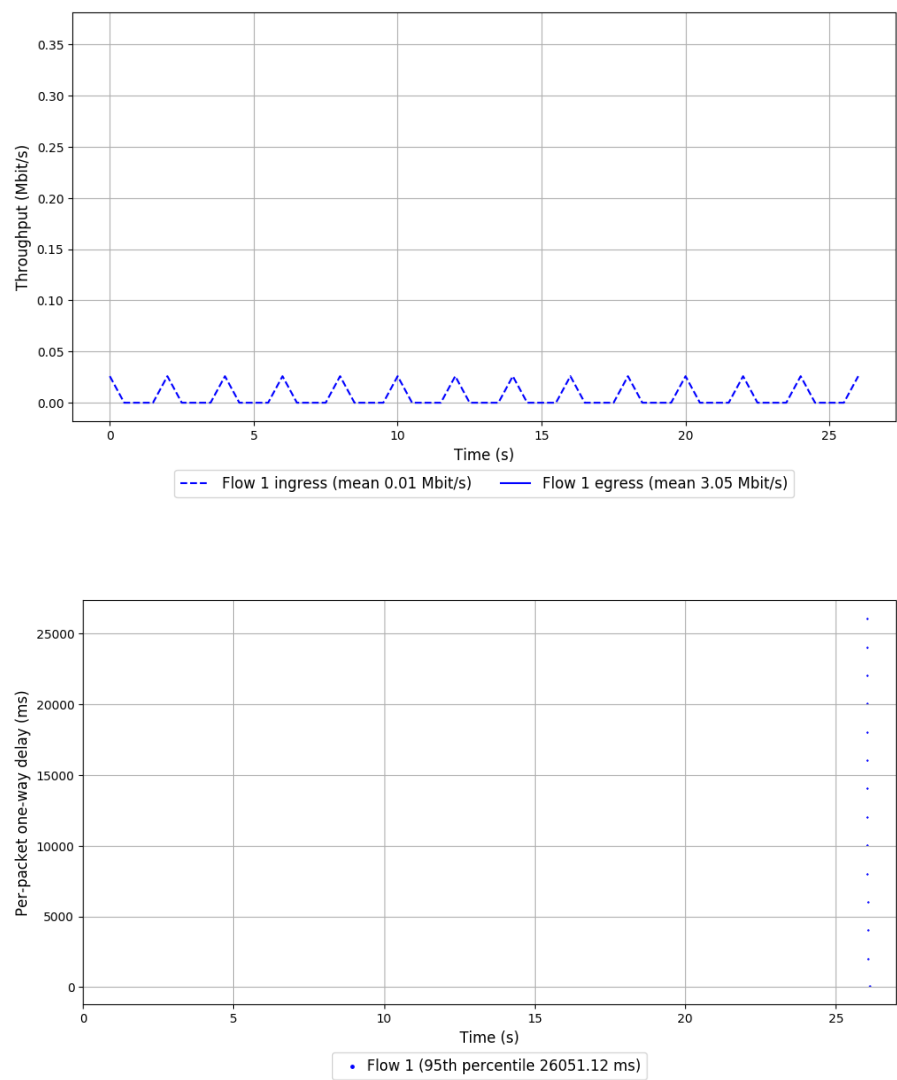
Start at: 2017-12-20 01:20:39

End at: 2017-12-20 01:21:10

Local clock offset: 4.472 ms

Remote clock offset: -4.224 ms

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-19 22:39:34

End at: 2017-12-19 22:40:04

Local clock offset: 3.024 ms

Remote clock offset: -3.595 ms

Below is generated by plot.py at 2017-12-20 02:25:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.68 Mbit/s

95th percentile per-packet one-way delay: 84.549 ms

Loss rate: 0.00%

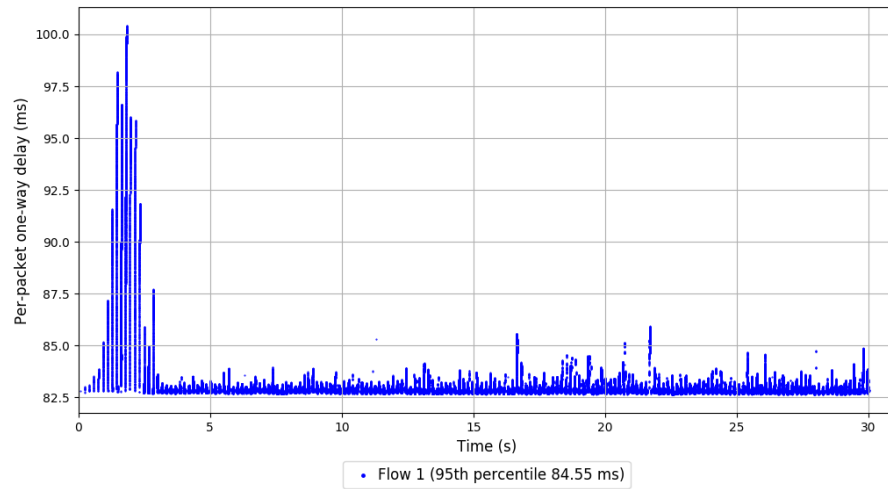
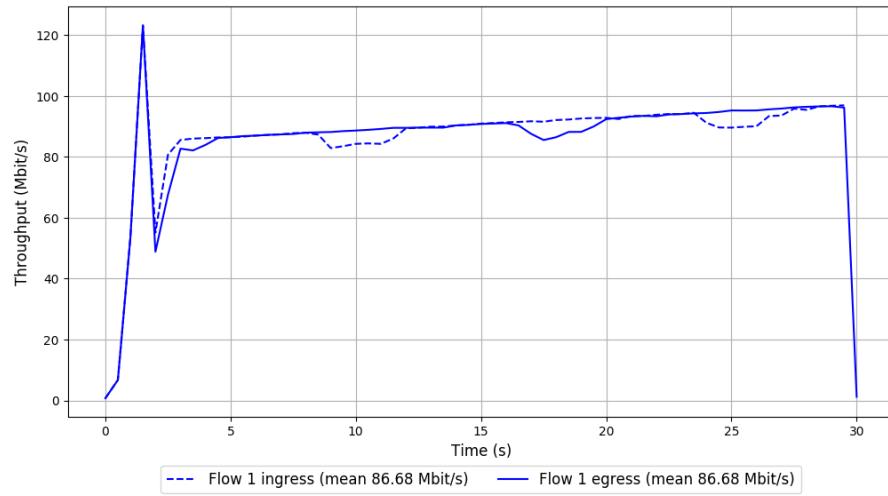
-- Flow 1:

Average throughput: 86.68 Mbit/s

95th percentile per-packet one-way delay: 84.549 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-19 22:58:11

End at: 2017-12-19 22:58:41

Local clock offset: 2.38 ms

Remote clock offset: -4.2 ms

Below is generated by plot.py at 2017-12-20 02:25:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 84.347 ms

Loss rate: 0.06%

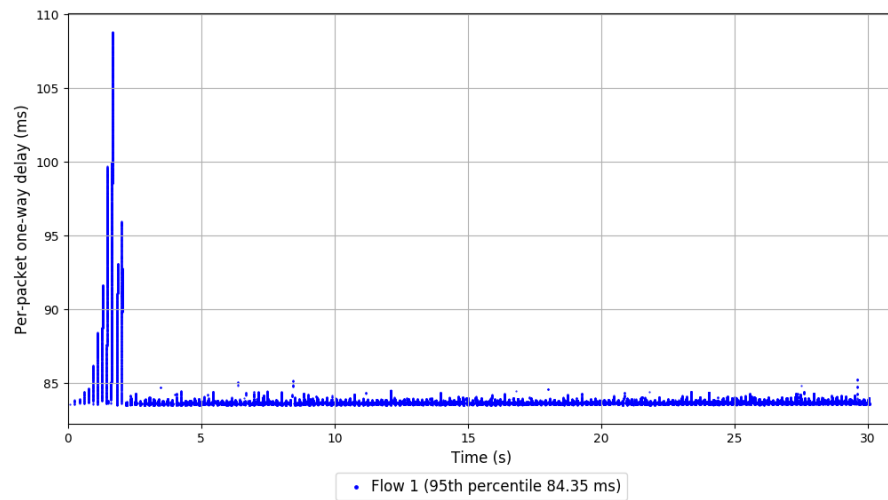
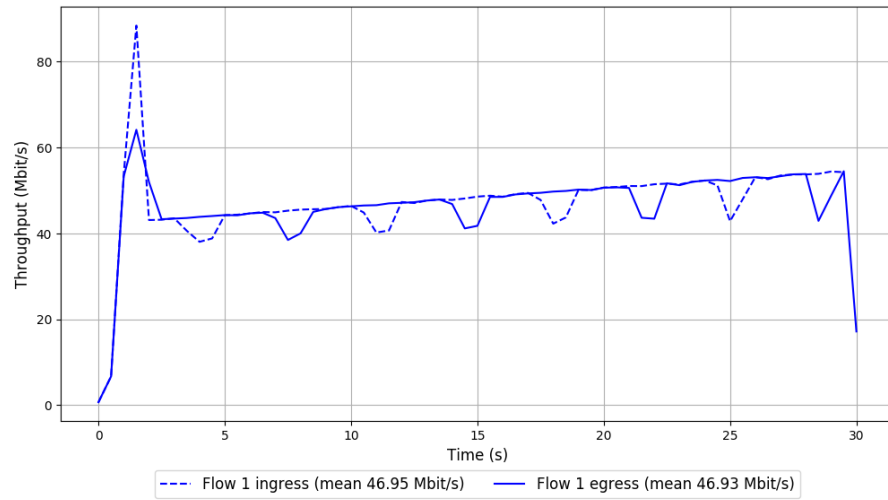
-- Flow 1:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 84.347 ms

Loss rate: 0.06%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-19 23:16:46

End at: 2017-12-19 23:17:16

Local clock offset: 3.42 ms

Remote clock offset: 1.278 ms

Below is generated by plot.py at 2017-12-20 02:25:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.86 Mbit/s

95th percentile per-packet one-way delay: 97.073 ms

Loss rate: 0.00%

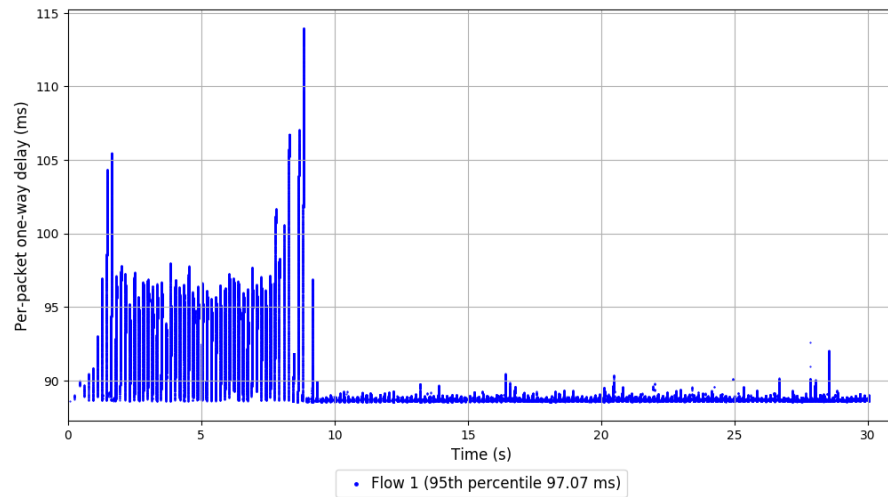
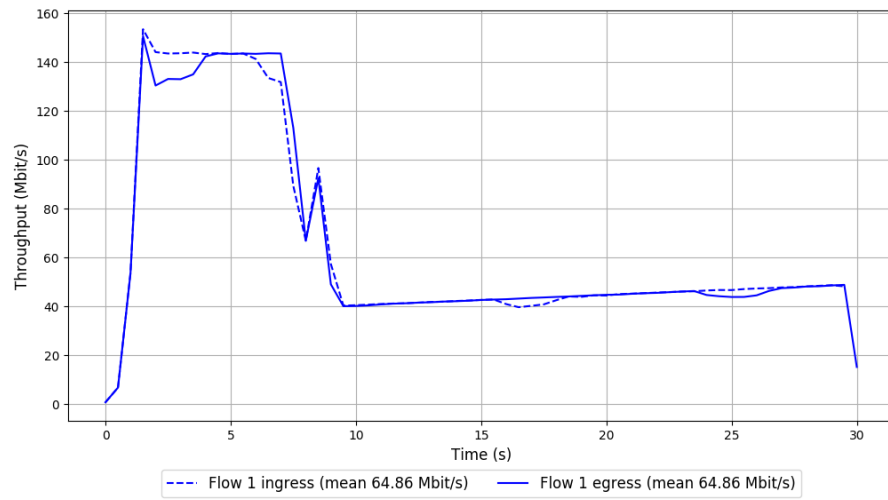
-- Flow 1:

Average throughput: 64.86 Mbit/s

95th percentile per-packet one-way delay: 97.073 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link

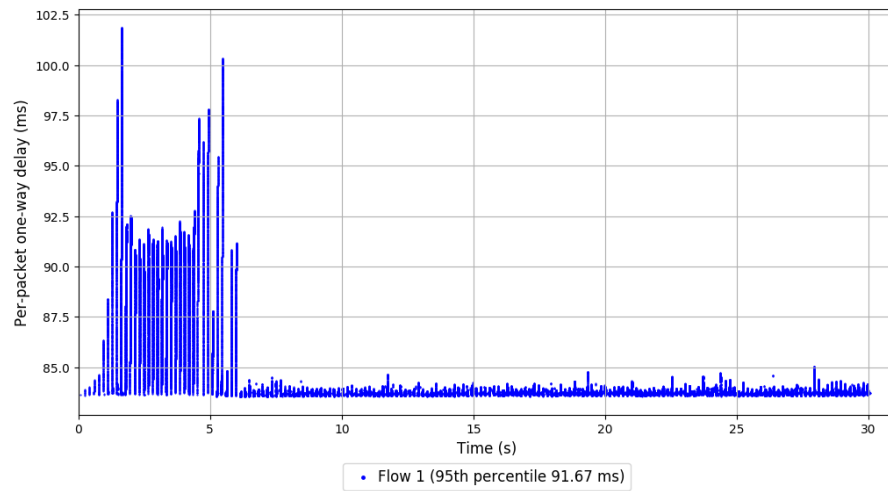
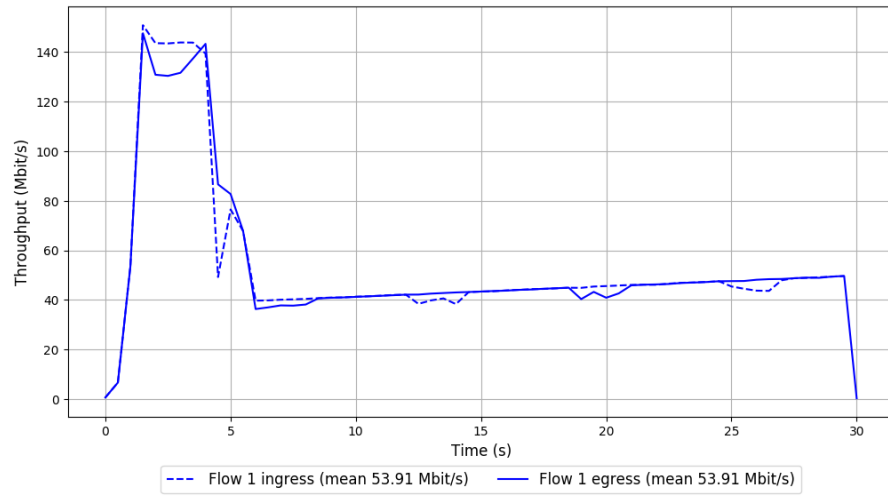


Run 4: Statistics of TCP Vegas

Start at: 2017-12-19 23:35:23
End at: 2017-12-19 23:35:53
Local clock offset: 4.208 ms
Remote clock offset: -4.852 ms

Below is generated by plot.py at 2017-12-20 02:25:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 53.91 Mbit/s
95th percentile per-packet one-way delay: 91.667 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.91 Mbit/s
95th percentile per-packet one-way delay: 91.667 ms
Loss rate: 0.01%

Run 4: Report of TCP Vegas — Data Link

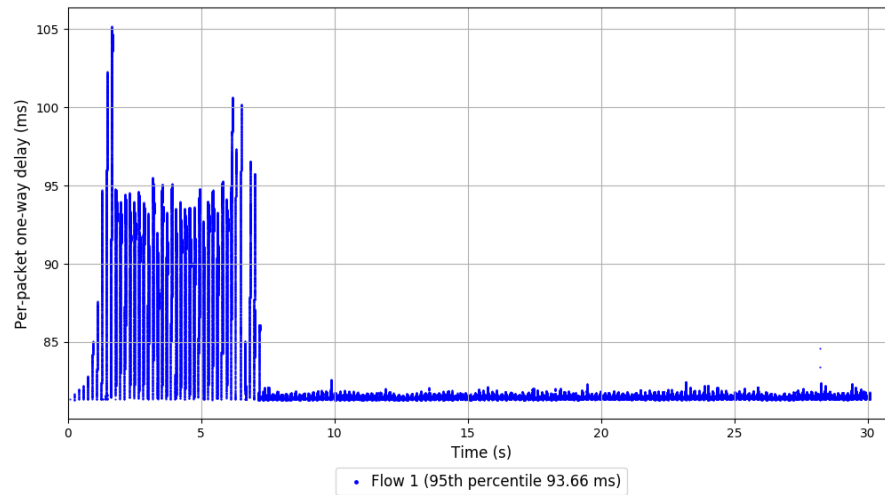
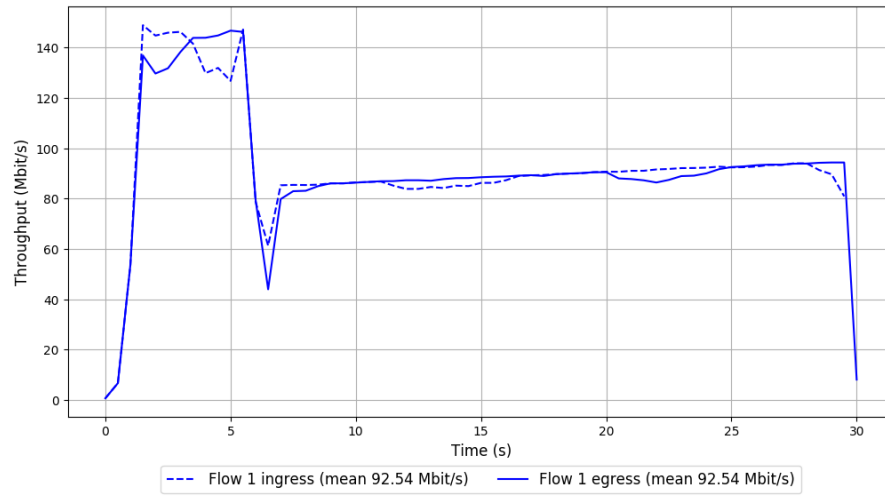


Run 5: Statistics of TCP Vegas

Start at: 2017-12-19 23:54:11
End at: 2017-12-19 23:54:41
Local clock offset: 4.633 ms
Remote clock offset: -5.398 ms

Below is generated by plot.py at 2017-12-20 02:25:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.54 Mbit/s
95th percentile per-packet one-way delay: 93.656 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.54 Mbit/s
95th percentile per-packet one-way delay: 93.656 ms
Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link

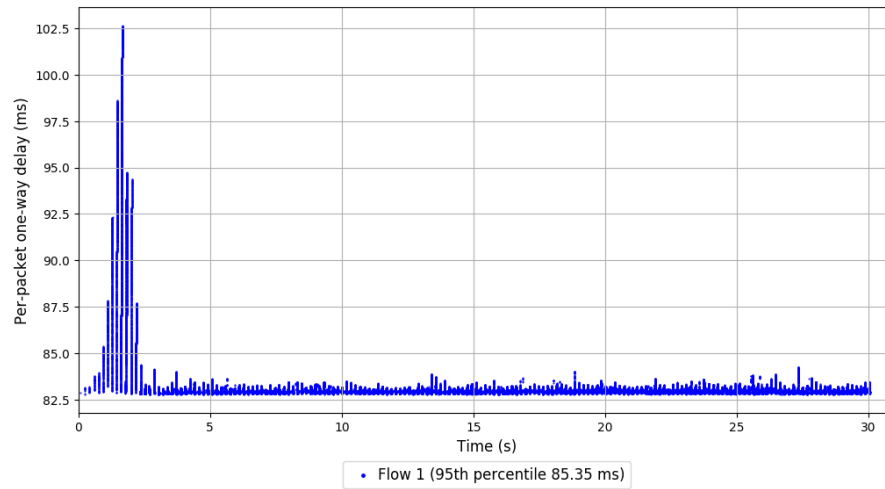
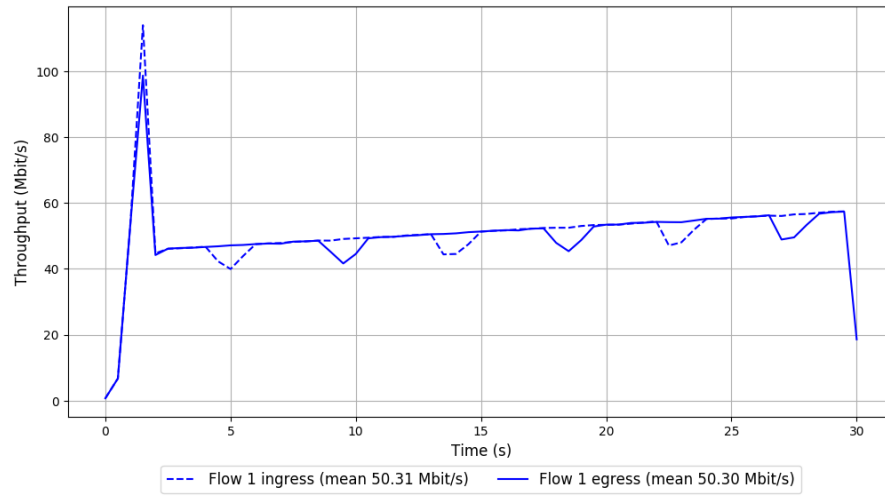


Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 00:12:59
End at: 2017-12-20 00:13:29
Local clock offset: 5.683 ms
Remote clock offset: -5.411 ms

Below is generated by plot.py at 2017-12-20 02:25:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 85.353 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 85.353 ms
Loss rate: 0.02%

Run 6: Report of TCP Vegas — Data Link

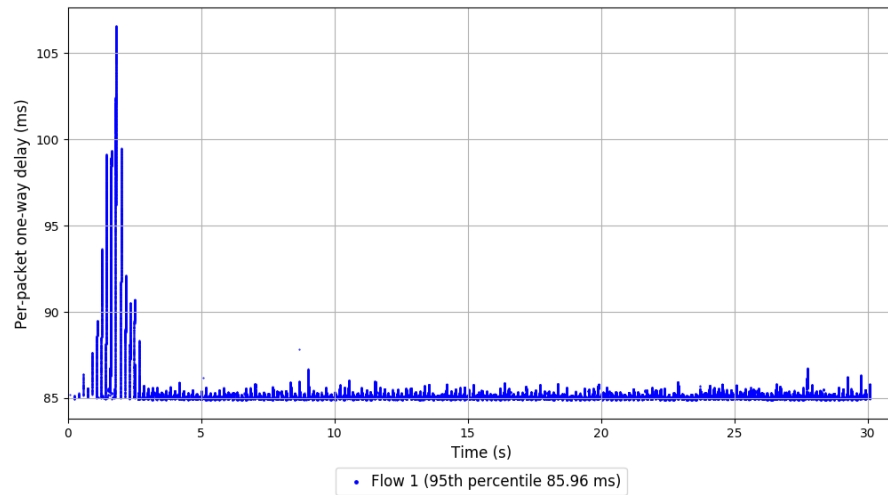
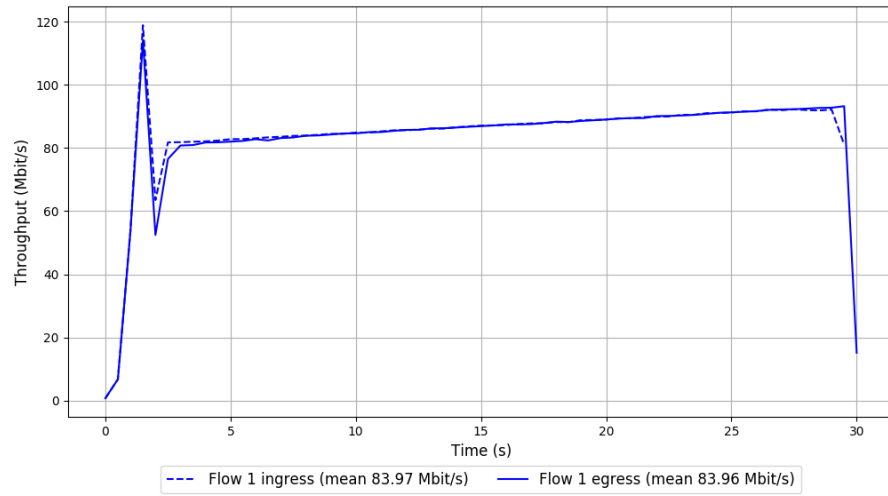


Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 00:31:53
End at: 2017-12-20 00:32:23
Local clock offset: 5.215 ms
Remote clock offset: -1.548 ms

Below is generated by plot.py at 2017-12-20 02:25:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 83.96 Mbit/s
95th percentile per-packet one-way delay: 85.958 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 83.96 Mbit/s
95th percentile per-packet one-way delay: 85.958 ms
Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link

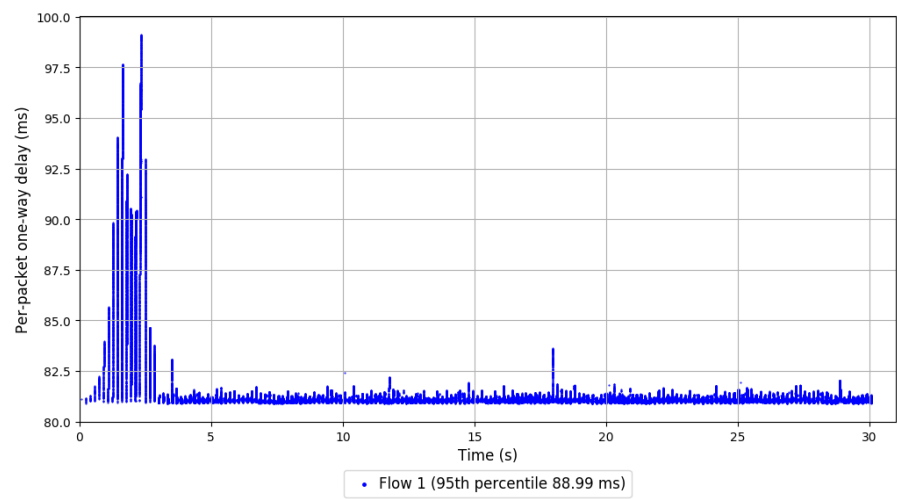
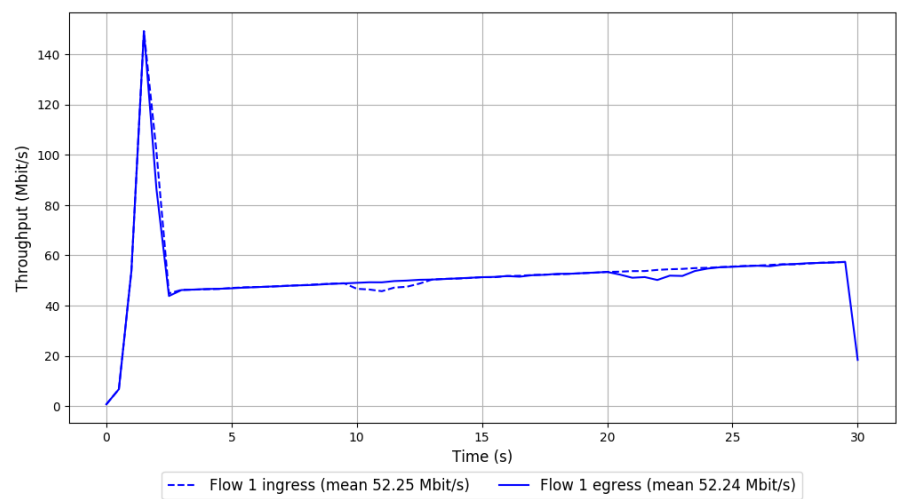


Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 00:50:46
End at: 2017-12-20 00:51:16
Local clock offset: 5.379 ms
Remote clock offset: -4.91 ms

Below is generated by plot.py at 2017-12-20 02:25:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 52.24 Mbit/s
95th percentile per-packet one-way delay: 88.989 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.24 Mbit/s
95th percentile per-packet one-way delay: 88.989 ms
Loss rate: 0.02%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 01:09:32

End at: 2017-12-20 01:10:02

Local clock offset: 4.951 ms

Remote clock offset: 0.46 ms

Below is generated by plot.py at 2017-12-20 02:25:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.99 Mbit/s

95th percentile per-packet one-way delay: 93.292 ms

Loss rate: 0.00%

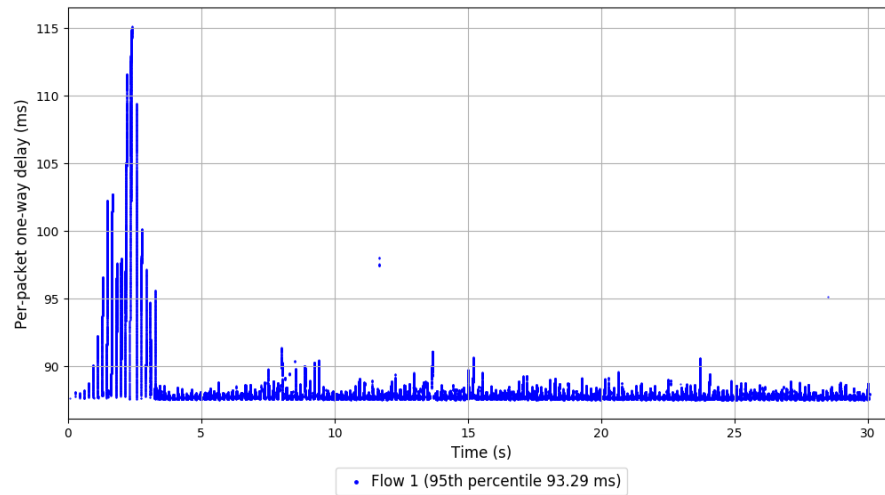
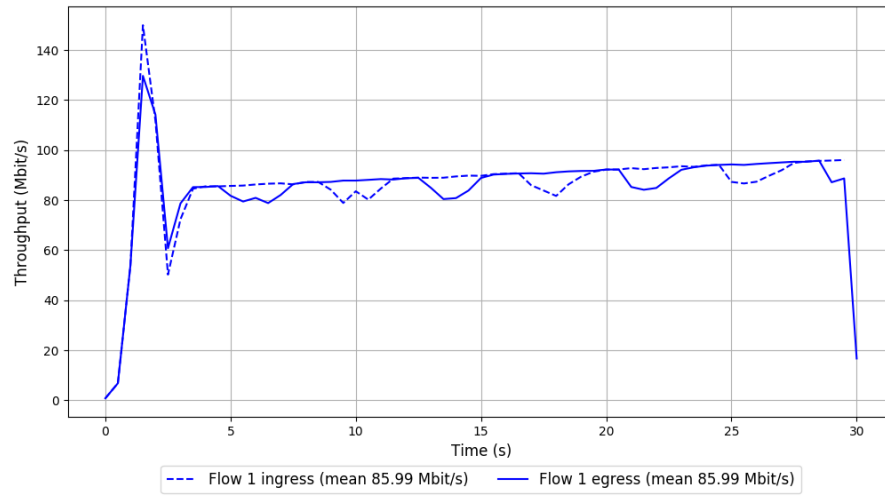
-- Flow 1:

Average throughput: 85.99 Mbit/s

95th percentile per-packet one-way delay: 93.292 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 01:28:04

End at: 2017-12-20 01:28:34

Local clock offset: 4.193 ms

Remote clock offset: 0.738 ms

Below is generated by plot.py at 2017-12-20 02:25:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.56 Mbit/s

95th percentile per-packet one-way delay: 93.006 ms

Loss rate: 0.01%

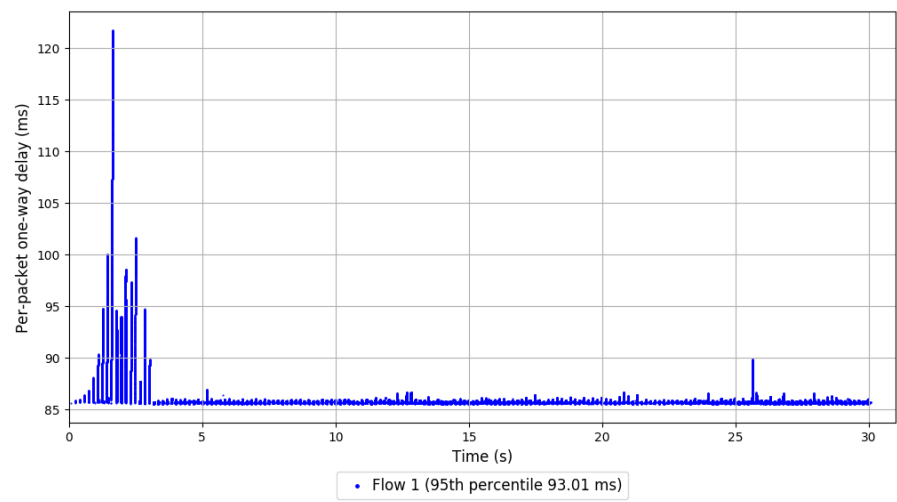
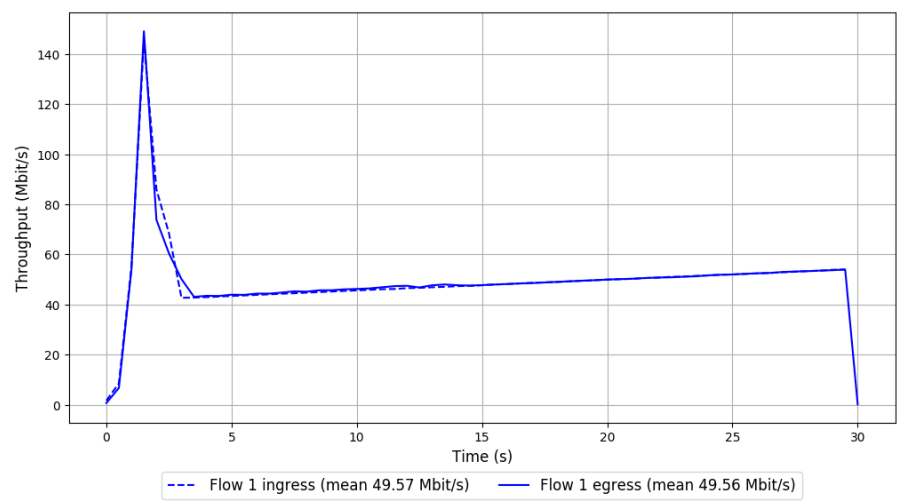
-- Flow 1:

Average throughput: 49.56 Mbit/s

95th percentile per-packet one-way delay: 93.006 ms

Loss rate: 0.01%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-19 22:33:24

End at: 2017-12-19 22:33:54

Local clock offset: 3.647 ms

Remote clock offset: 1.474 ms

Below is generated by plot.py at 2017-12-20 02:26:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.86 Mbit/s

95th percentile per-packet one-way delay: 113.517 ms

Loss rate: 0.15%

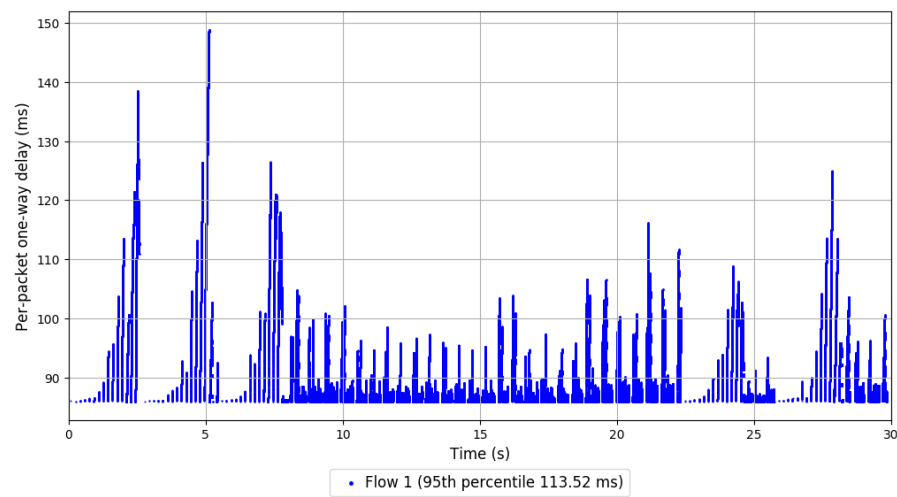
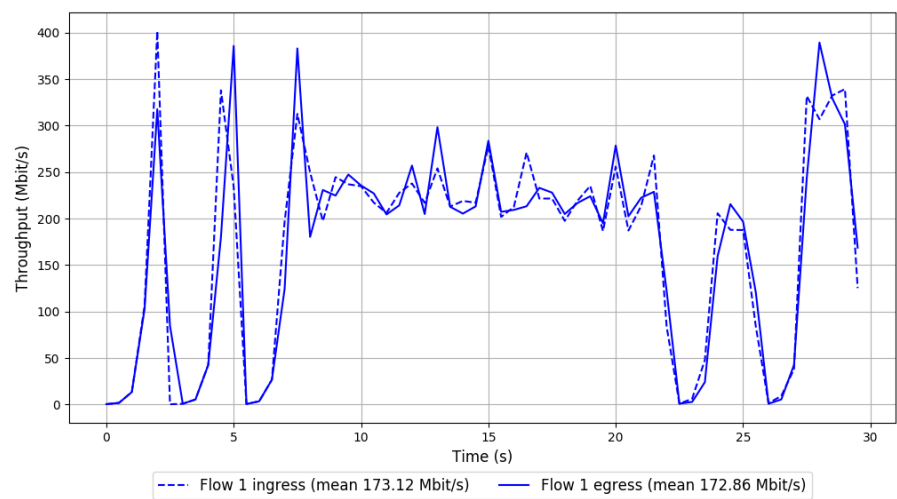
-- Flow 1:

Average throughput: 172.86 Mbit/s

95th percentile per-packet one-way delay: 113.517 ms

Loss rate: 0.15%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-19 22:51:54

End at: 2017-12-19 22:52:25

Local clock offset: 2.263 ms

Remote clock offset: 1.145 ms

Below is generated by plot.py at 2017-12-20 02:26:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.91 Mbit/s

95th percentile per-packet one-way delay: 134.924 ms

Loss rate: 0.40%

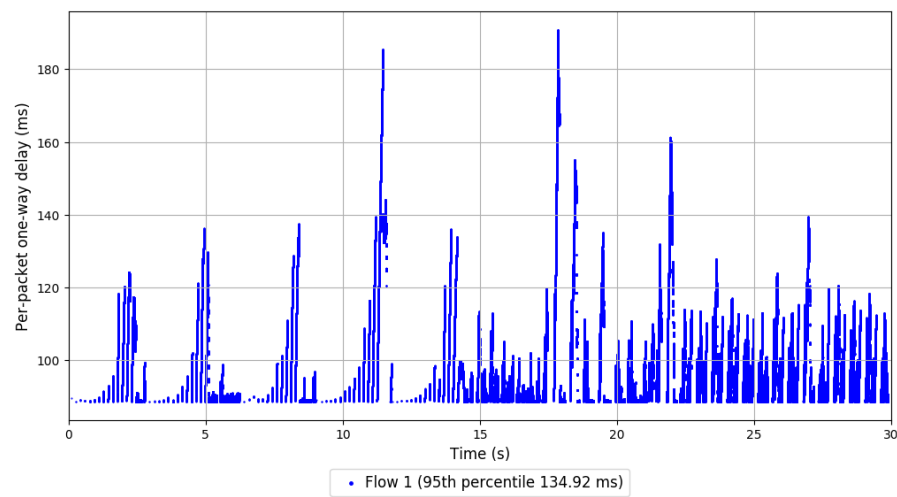
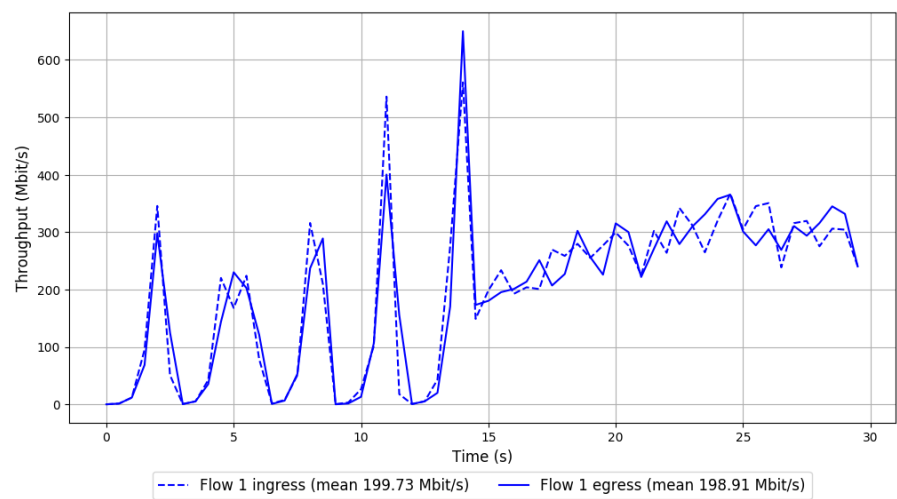
-- Flow 1:

Average throughput: 198.91 Mbit/s

95th percentile per-packet one-way delay: 134.924 ms

Loss rate: 0.40%

Run 2: Report of Verus — Data Link

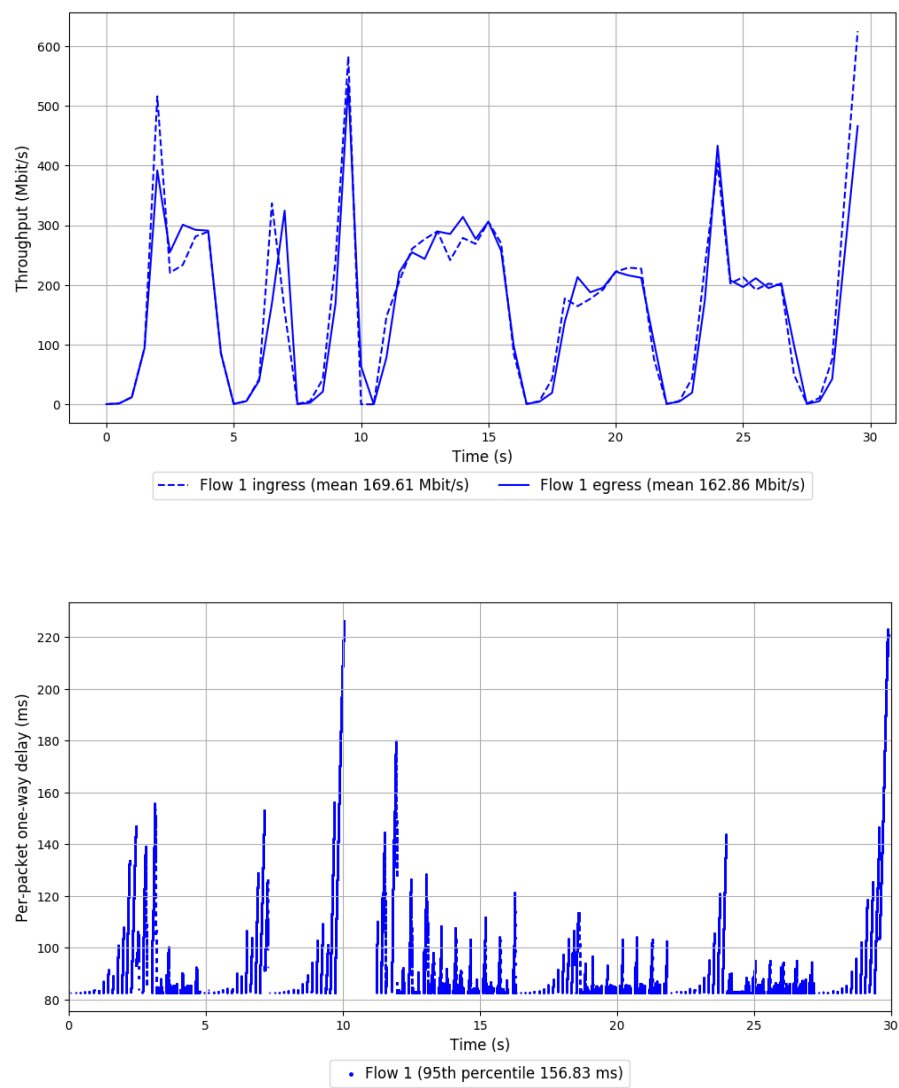


Run 3: Statistics of Verus

Start at: 2017-12-19 23:10:26
End at: 2017-12-19 23:10:56
Local clock offset: 2.977 ms
Remote clock offset: -4.644 ms

Below is generated by plot.py at 2017-12-20 02:26:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 162.86 Mbit/s
95th percentile per-packet one-way delay: 156.833 ms
Loss rate: 3.90%
-- Flow 1:
Average throughput: 162.86 Mbit/s
95th percentile per-packet one-way delay: 156.833 ms
Loss rate: 3.90%

Run 3: Report of Verus — Data Link

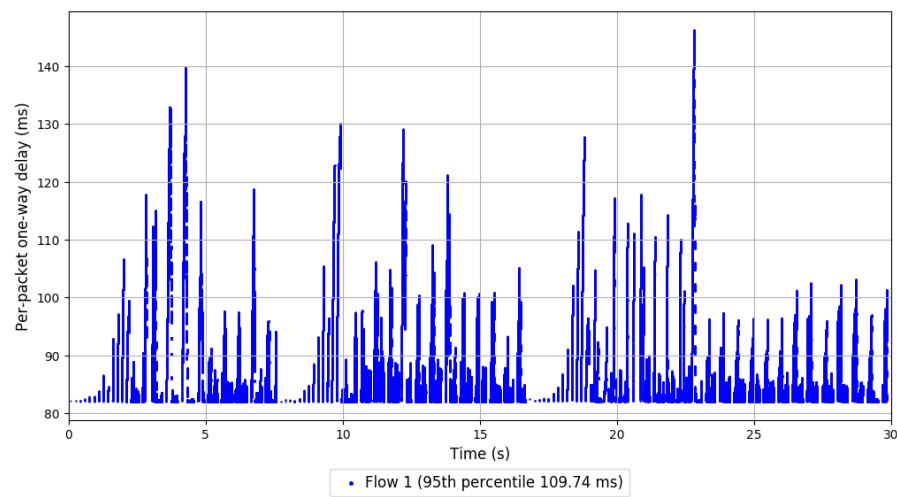
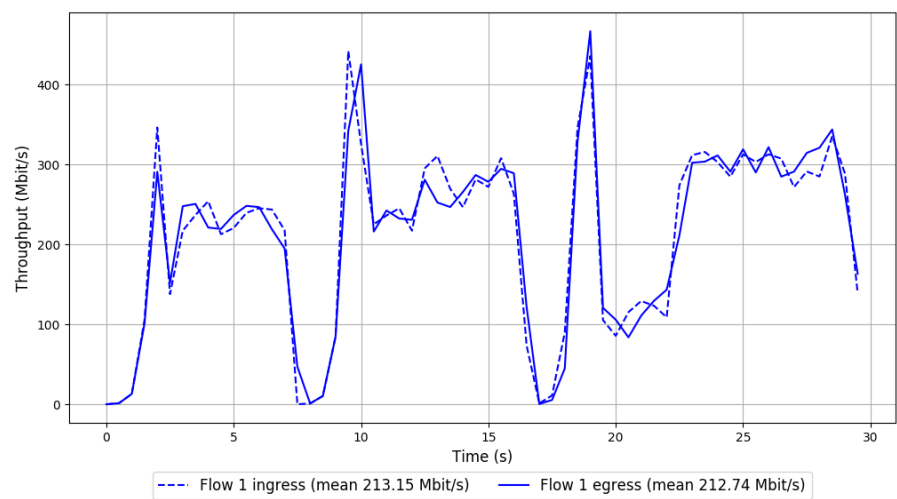


Run 4: Statistics of Verus

Start at: 2017-12-19 23:29:05
End at: 2017-12-19 23:29:35
Local clock offset: 3.977 ms
Remote clock offset: -4.784 ms

Below is generated by plot.py at 2017-12-20 02:27:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 212.74 Mbit/s
95th percentile per-packet one-way delay: 109.744 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 212.74 Mbit/s
95th percentile per-packet one-way delay: 109.744 ms
Loss rate: 0.19%

Run 4: Report of Verus — Data Link

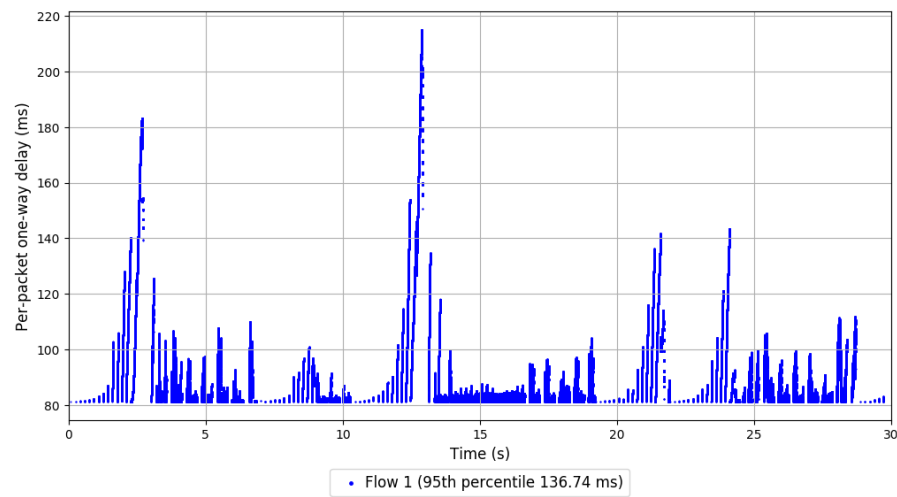
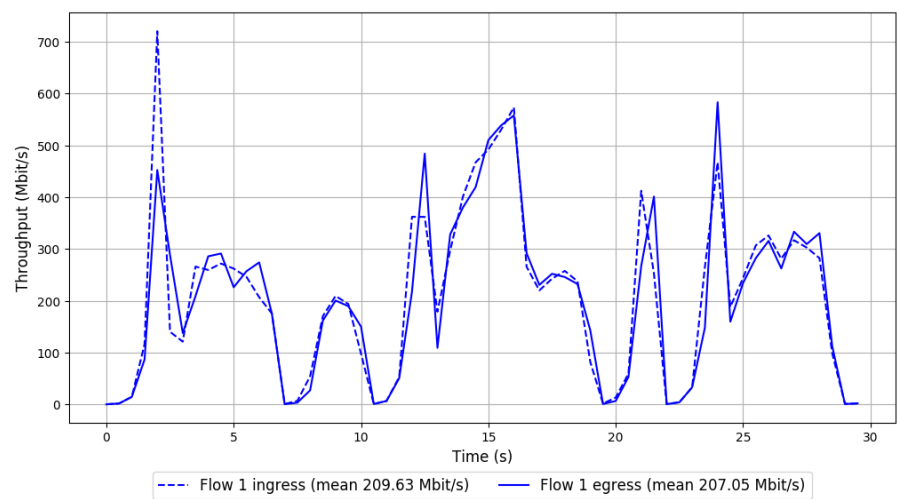


Run 5: Statistics of Verus

Start at: 2017-12-19 23:47:53
End at: 2017-12-19 23:48:23
Local clock offset: 4.523 ms
Remote clock offset: -6.541 ms

Below is generated by plot.py at 2017-12-20 02:28:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 207.05 Mbit/s
95th percentile per-packet one-way delay: 136.735 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 207.05 Mbit/s
95th percentile per-packet one-way delay: 136.735 ms
Loss rate: 1.23%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-20 00:06:41

End at: 2017-12-20 00:07:11

Local clock offset: 5.211 ms

Remote clock offset: 0.16 ms

Below is generated by plot.py at 2017-12-20 02:28:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.08 Mbit/s

95th percentile per-packet one-way delay: 112.429 ms

Loss rate: 0.28%

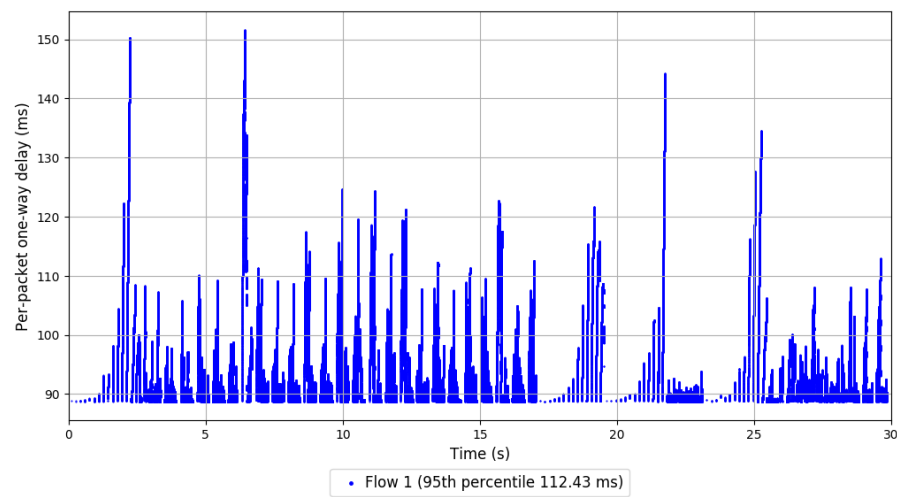
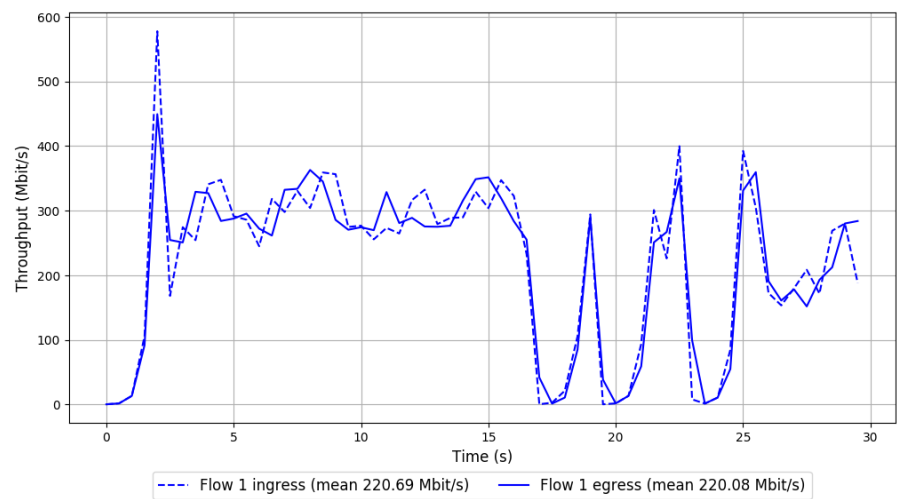
-- Flow 1:

Average throughput: 220.08 Mbit/s

95th percentile per-packet one-way delay: 112.429 ms

Loss rate: 0.28%

Run 6: Report of Verus — Data Link

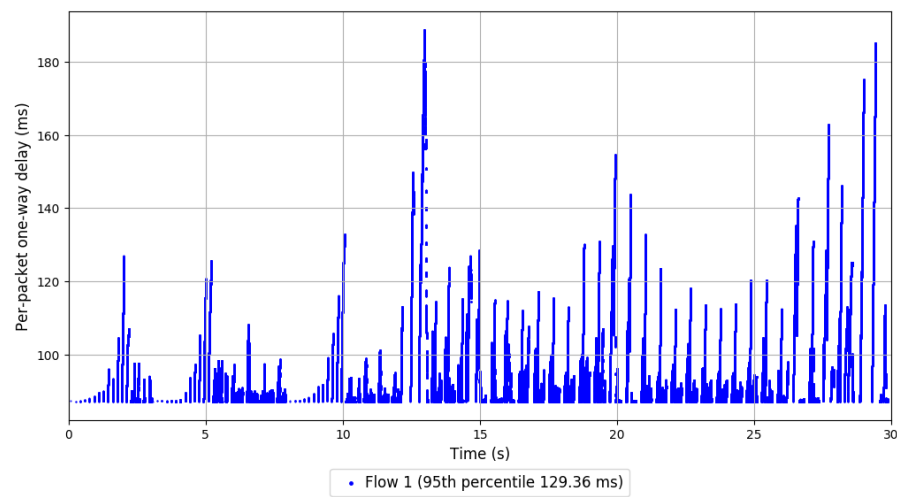
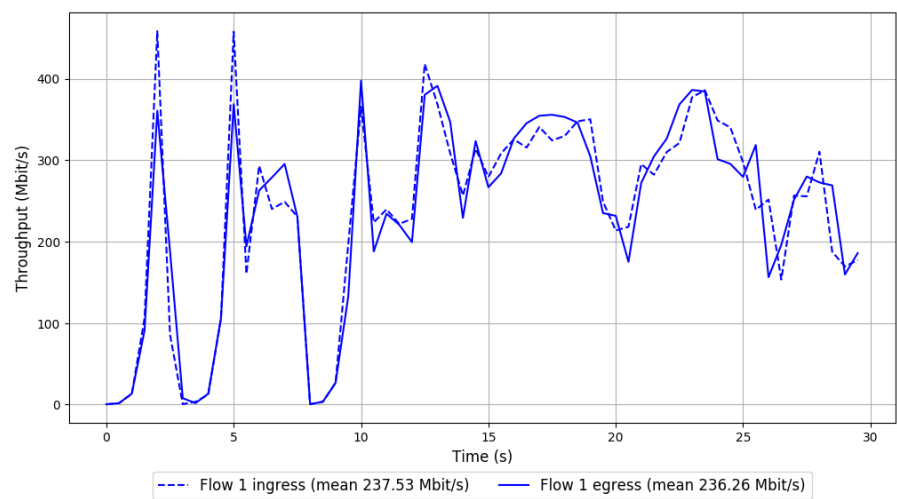


Run 7: Statistics of Verus

Start at: 2017-12-20 00:25:33
End at: 2017-12-20 00:26:03
Local clock offset: 5.253 ms
Remote clock offset: -0.897 ms

Below is generated by plot.py at 2017-12-20 02:29:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 236.26 Mbit/s
95th percentile per-packet one-way delay: 129.364 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 236.26 Mbit/s
95th percentile per-packet one-way delay: 129.364 ms
Loss rate: 0.53%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-20 00:44:29

End at: 2017-12-20 00:44:59

Local clock offset: 5.29 ms

Remote clock offset: -5.65 ms

Below is generated by plot.py at 2017-12-20 02:29:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.94 Mbit/s

95th percentile per-packet one-way delay: 104.486 ms

Loss rate: 0.02%

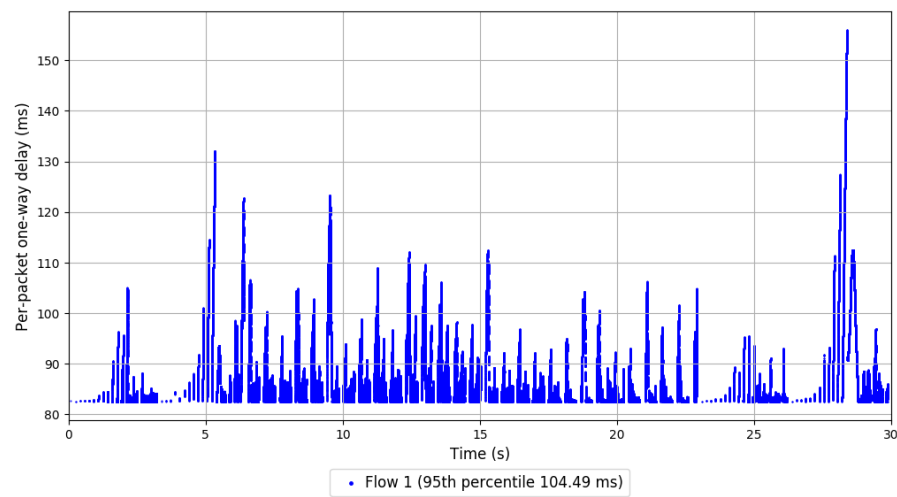
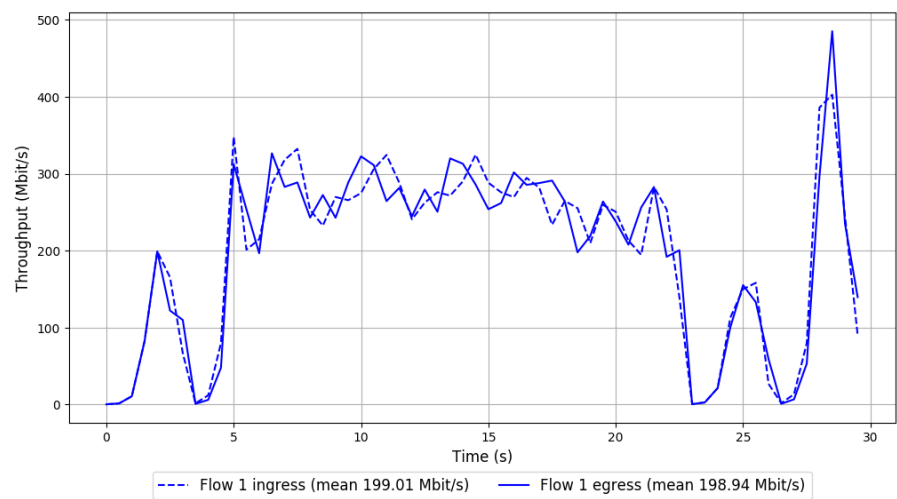
-- Flow 1:

Average throughput: 198.94 Mbit/s

95th percentile per-packet one-way delay: 104.486 ms

Loss rate: 0.02%

Run 8: Report of Verus — Data Link

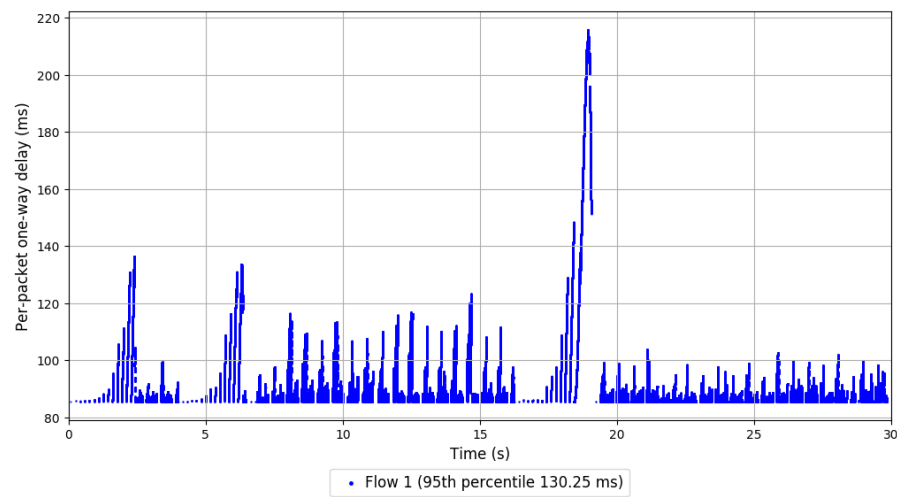
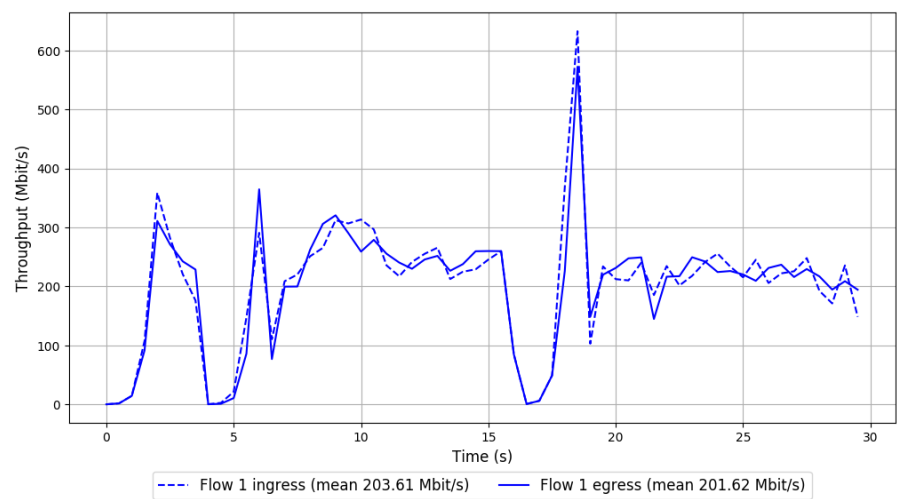


Run 9: Statistics of Verus

Start at: 2017-12-20 01:03:15
End at: 2017-12-20 01:03:45
Local clock offset: 5.153 ms
Remote clock offset: -0.134 ms

Below is generated by plot.py at 2017-12-20 02:29:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 201.62 Mbit/s
95th percentile per-packet one-way delay: 130.246 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 201.62 Mbit/s
95th percentile per-packet one-way delay: 130.246 ms
Loss rate: 0.98%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 01:21:49

End at: 2017-12-20 01:22:19

Local clock offset: 4.336 ms

Remote clock offset: 0.626 ms

Below is generated by plot.py at 2017-12-20 02:29:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.81 Mbit/s

95th percentile per-packet one-way delay: 207.011 ms

Loss rate: 3.39%

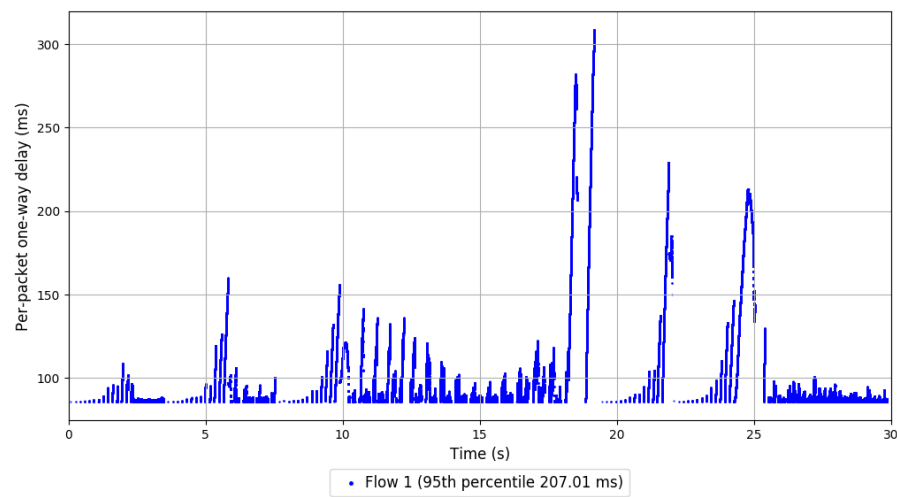
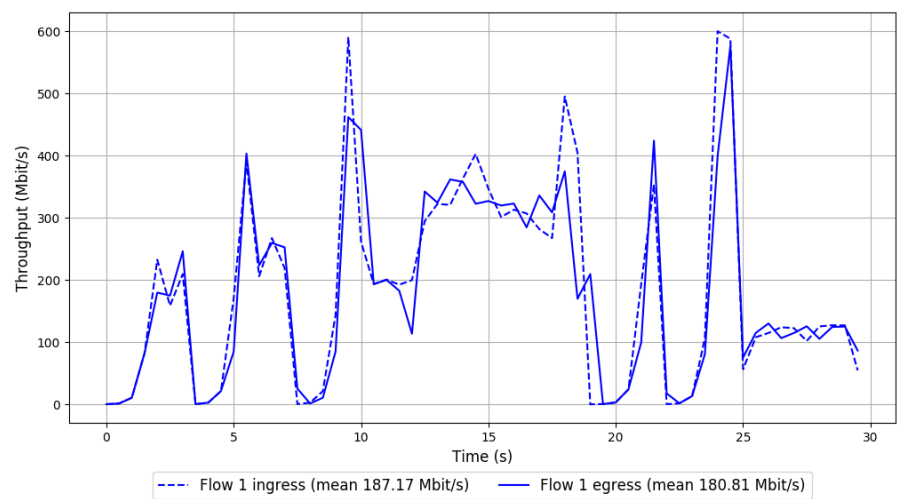
-- Flow 1:

Average throughput: 180.81 Mbit/s

95th percentile per-packet one-way delay: 207.011 ms

Loss rate: 3.39%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

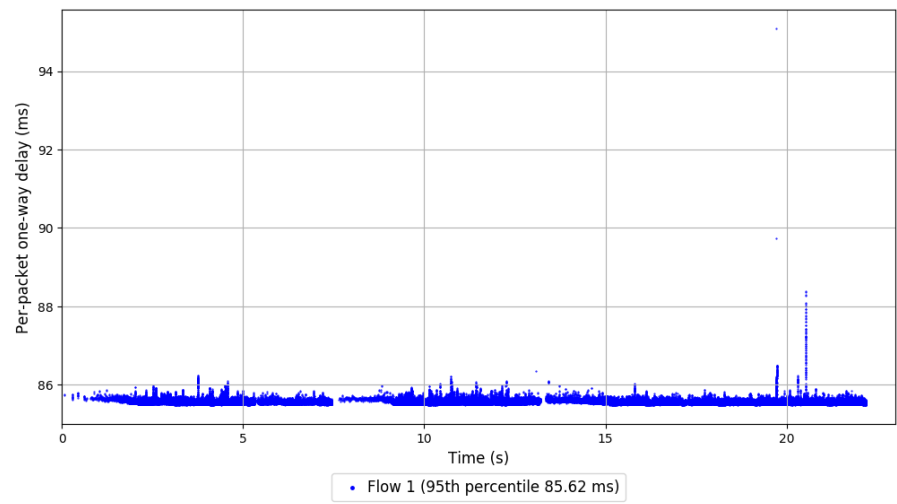
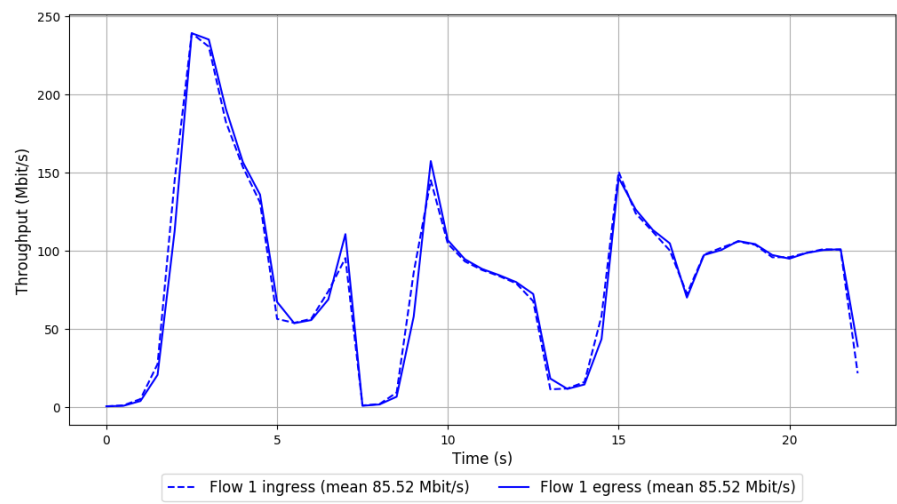
Start at: 2017-12-19 22:29:33

End at: 2017-12-19 22:30:03

Local clock offset: 3.706 ms

Remote clock offset: 1.249 ms

Run 1: Report of Copa — Data Link

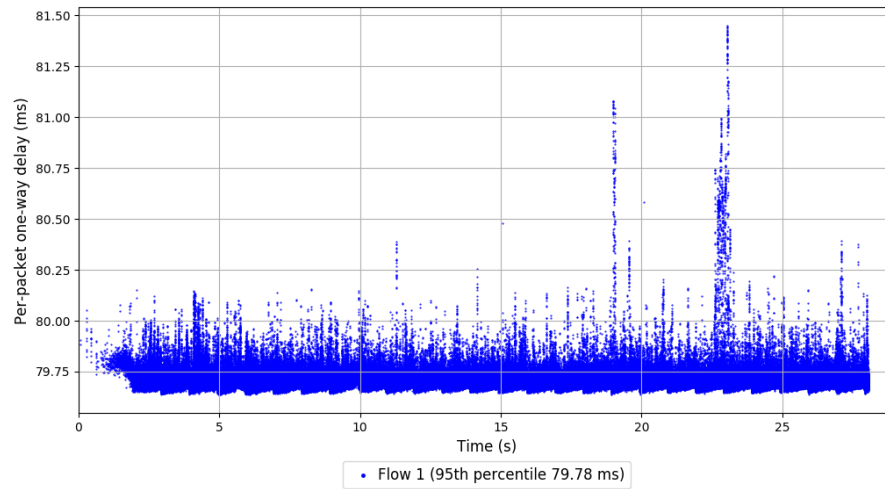
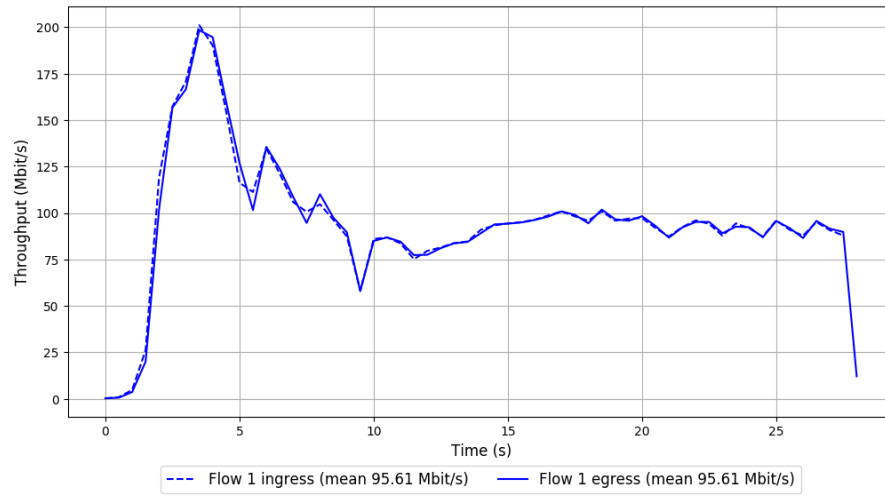


Run 2: Statistics of Copa

Start at: 2017-12-19 22:48:12
End at: 2017-12-19 22:48:42
Local clock offset: 2.327 ms
Remote clock offset: -5.148 ms

Below is generated by plot.py at 2017-12-20 02:29:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 79.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 79.785 ms
Loss rate: 0.00%

Run 2: Report of Copa — Data Link

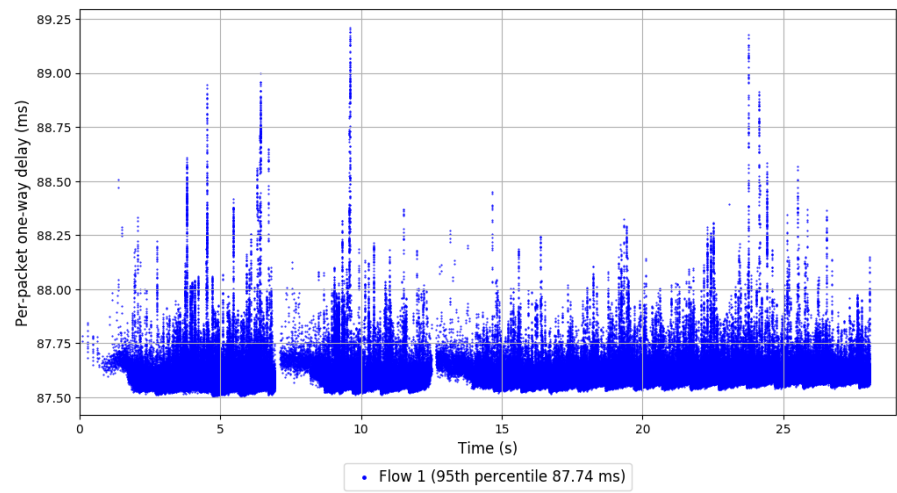
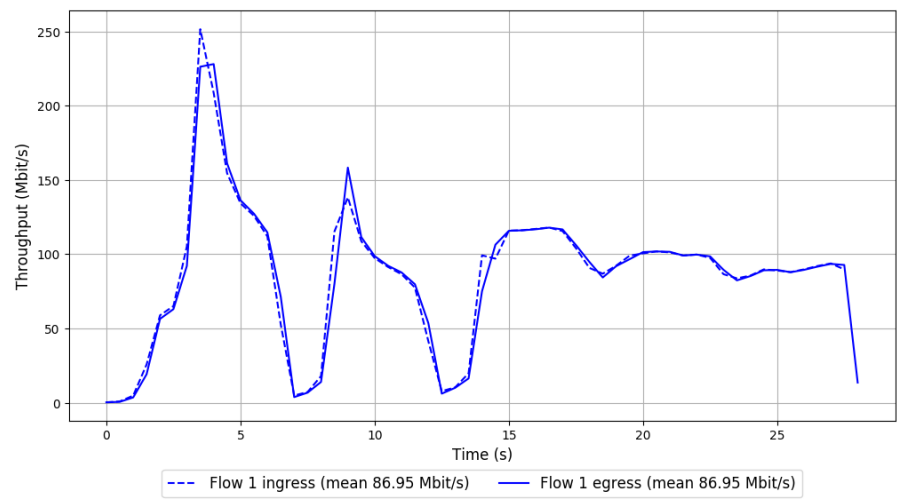


Run 3: Statistics of Copa

Start at: 2017-12-19 23:06:45
End at: 2017-12-19 23:07:15
Local clock offset: 2.73 ms
Remote clock offset: -0.033 ms

Below is generated by plot.py at 2017-12-20 02:30:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.95 Mbit/s
95th percentile per-packet one-way delay: 87.736 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.95 Mbit/s
95th percentile per-packet one-way delay: 87.736 ms
Loss rate: 0.00%

Run 3: Report of Copa — Data Link

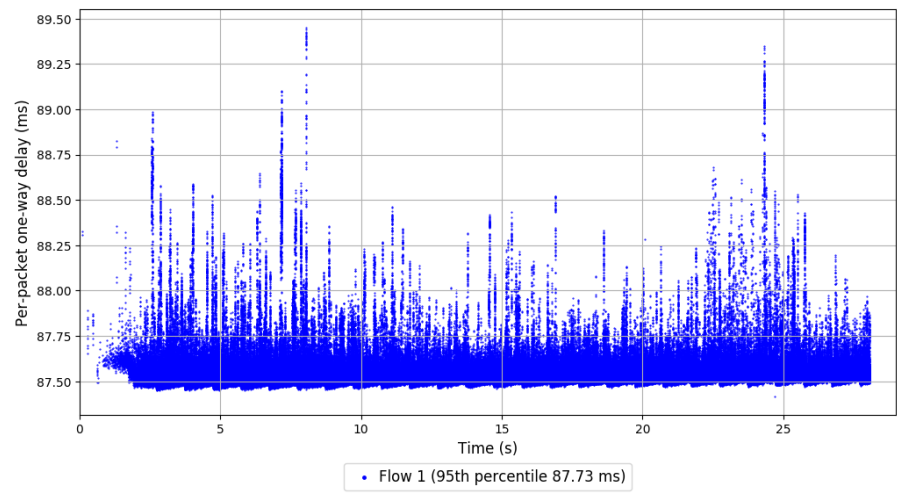
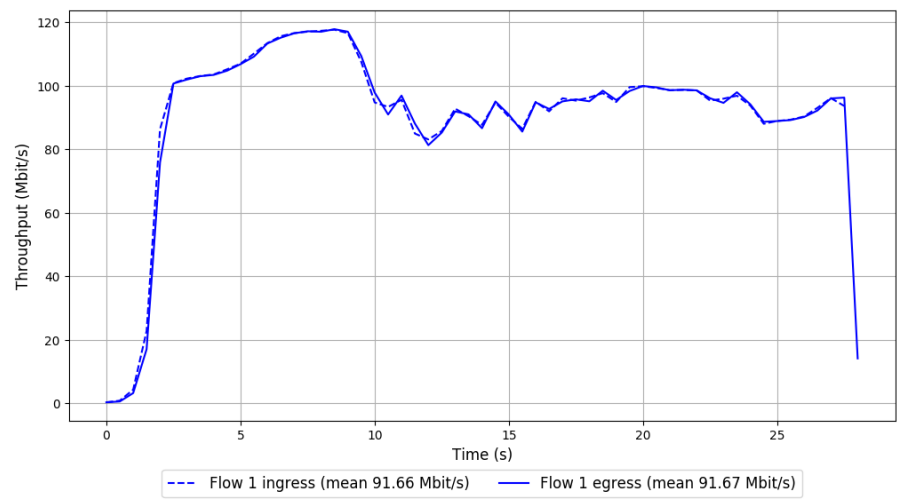


Run 4: Statistics of Copa

Start at: 2017-12-19 23:25:20
End at: 2017-12-19 23:25:50
Local clock offset: 3.802 ms
Remote clock offset: -1.017 ms

Below is generated by plot.py at 2017-12-20 02:30:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.67 Mbit/s
95th percentile per-packet one-way delay: 87.728 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.67 Mbit/s
95th percentile per-packet one-way delay: 87.728 ms
Loss rate: 0.00%

Run 4: Report of Copa — Data Link

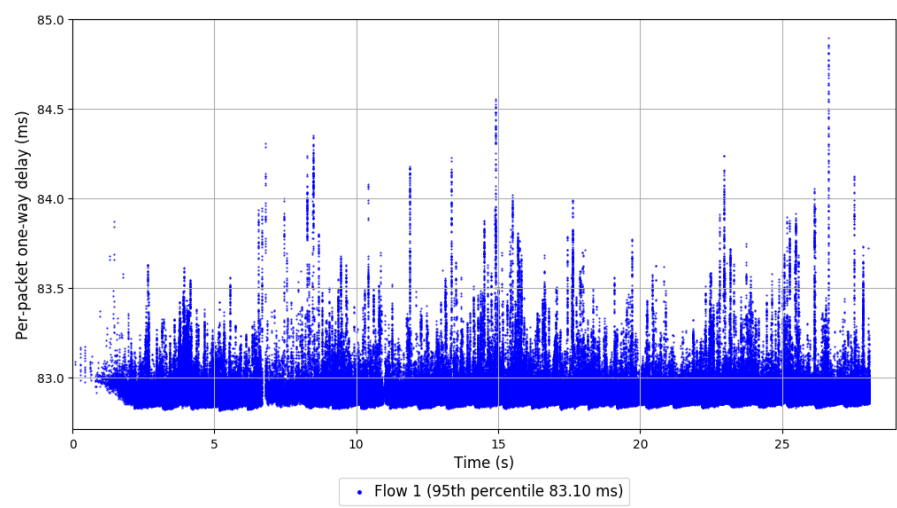
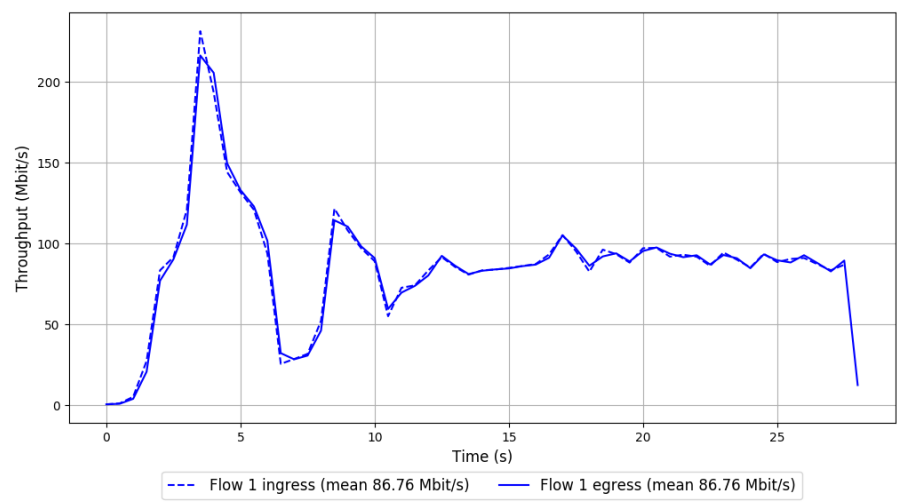


Run 5: Statistics of Copa

Start at: 2017-12-19 23:43:50
End at: 2017-12-19 23:44:21
Local clock offset: 4.455 ms
Remote clock offset: -4.849 ms

Below is generated by plot.py at 2017-12-20 02:30:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.76 Mbit/s
95th percentile per-packet one-way delay: 83.102 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.76 Mbit/s
95th percentile per-packet one-way delay: 83.102 ms
Loss rate: 0.00%

Run 5: Report of Copa — Data Link

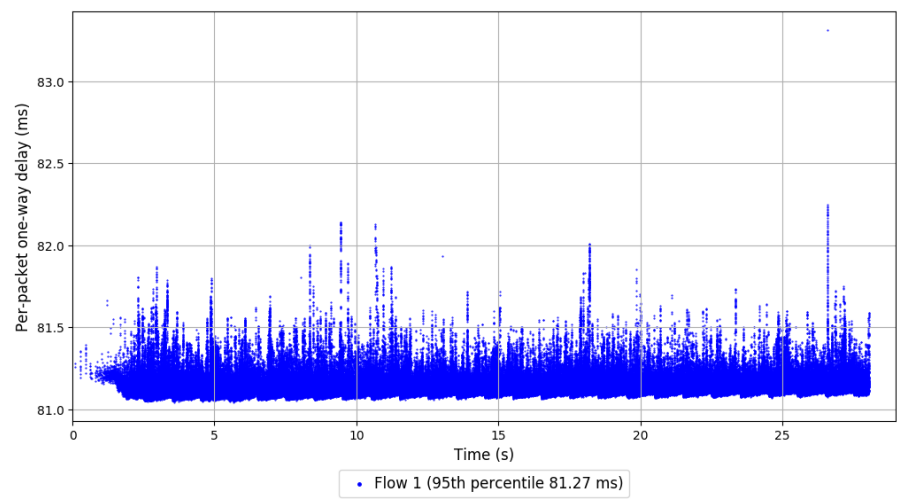
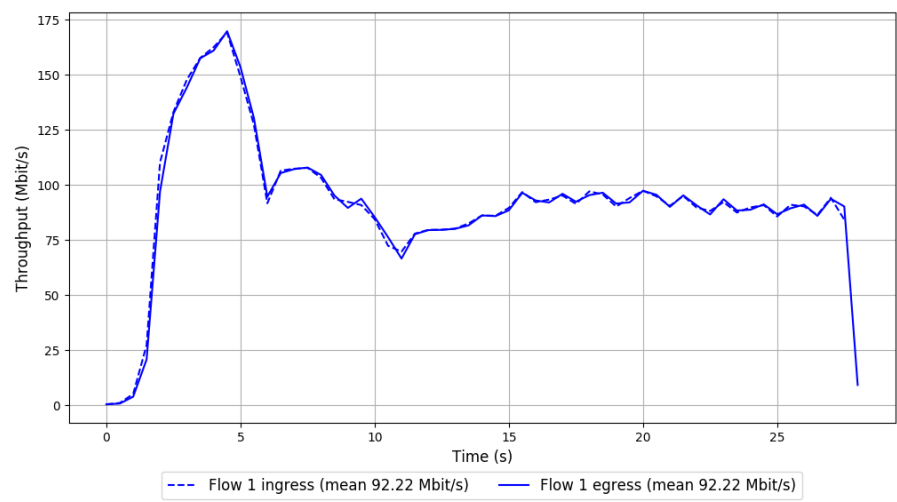


Run 6: Statistics of Copa

Start at: 2017-12-20 00:02:39
End at: 2017-12-20 00:03:09
Local clock offset: 5.055 ms
Remote clock offset: -5.104 ms

Below is generated by plot.py at 2017-12-20 02:31:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.22 Mbit/s
95th percentile per-packet one-way delay: 81.271 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.22 Mbit/s
95th percentile per-packet one-way delay: 81.271 ms
Loss rate: 0.00%

Run 6: Report of Copa — Data Link

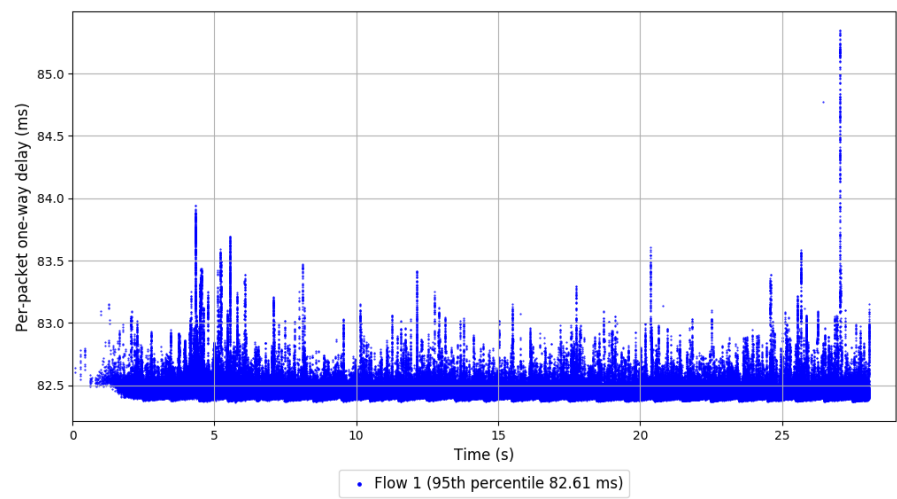
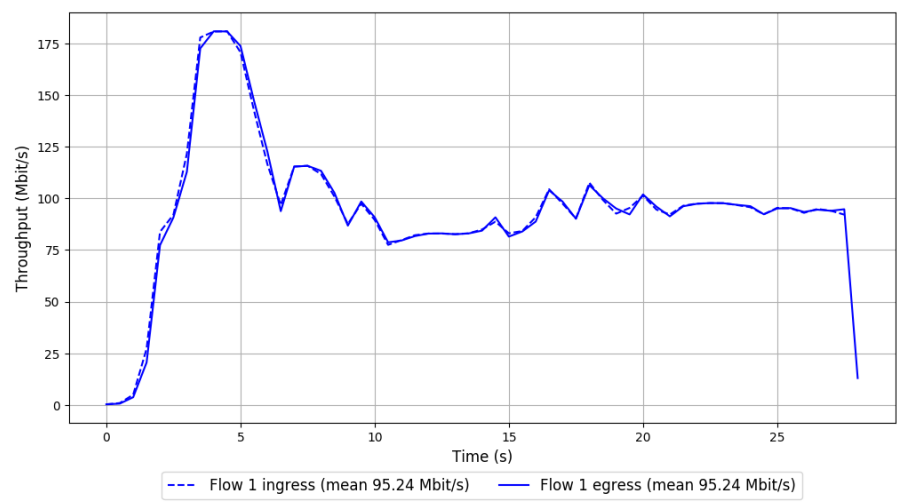


Run 7: Statistics of Copa

Start at: 2017-12-20 00:21:29
End at: 2017-12-20 00:21:59
Local clock offset: 5.268 ms
Remote clock offset: -5.697 ms

Below is generated by plot.py at 2017-12-20 02:31:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 82.615 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 82.615 ms
Loss rate: 0.00%

Run 7: Report of Copa — Data Link

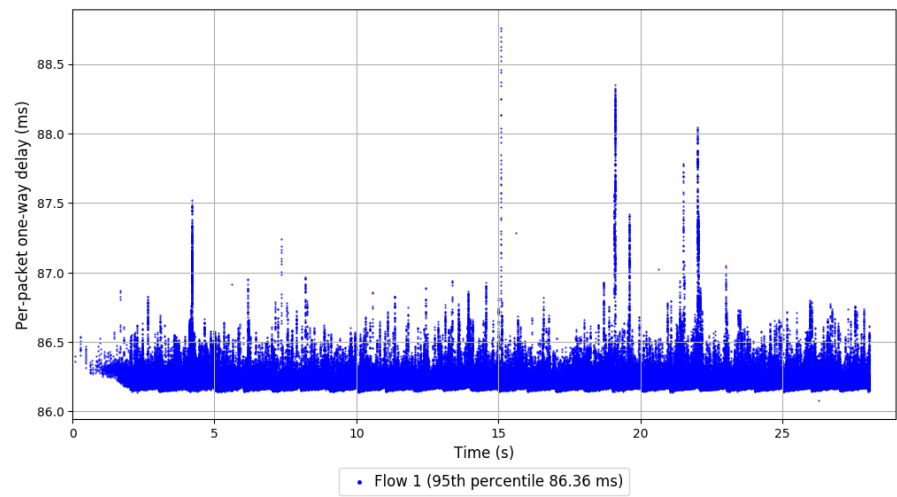
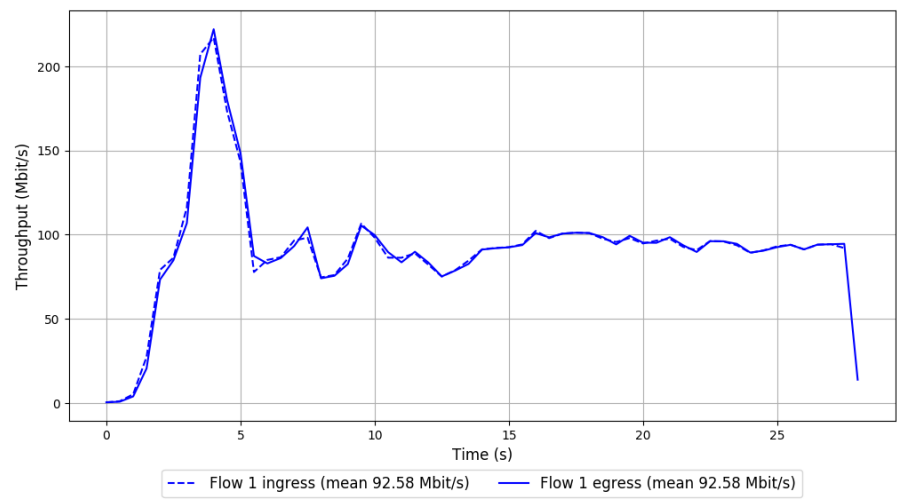


Run 8: Statistics of Copa

Start at: 2017-12-20 00:40:26
End at: 2017-12-20 00:40:56
Local clock offset: 5.27 ms
Remote clock offset: -0.332 ms

Below is generated by plot.py at 2017-12-20 02:31:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.58 Mbit/s
95th percentile per-packet one-way delay: 86.363 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.58 Mbit/s
95th percentile per-packet one-way delay: 86.363 ms
Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-20 00:59:31

End at: 2017-12-20 01:00:01

Local clock offset: 5.375 ms

Remote clock offset: 0.141 ms

Below is generated by plot.py at 2017-12-20 02:31:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.22 Mbit/s

95th percentile per-packet one-way delay: 86.012 ms

Loss rate: 0.00%

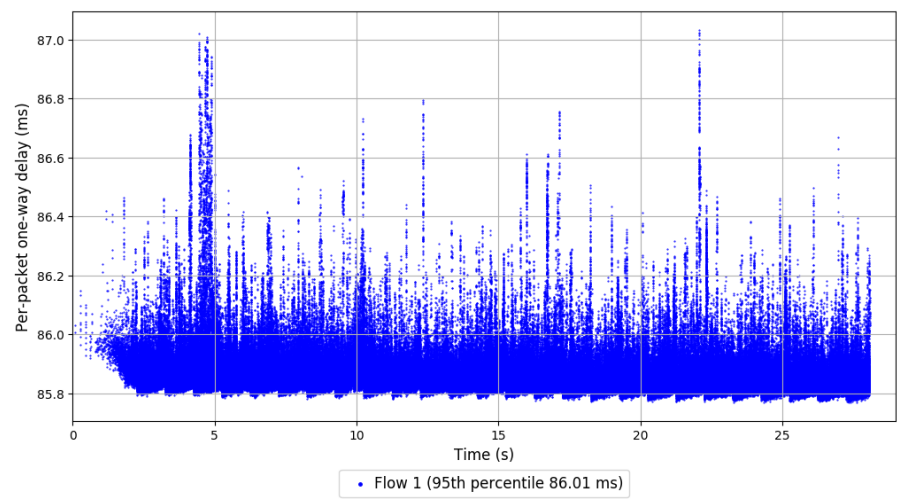
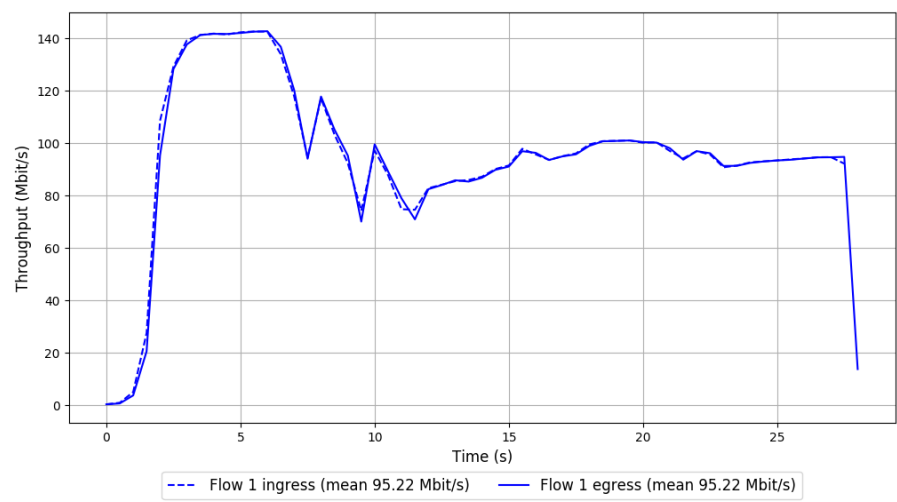
-- Flow 1:

Average throughput: 95.22 Mbit/s

95th percentile per-packet one-way delay: 86.012 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 01:18:08

End at: 2017-12-20 01:18:38

Local clock offset: 4.58 ms

Remote clock offset: 0.349 ms

Below is generated by plot.py at 2017-12-20 02:32:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 87.559 ms

Loss rate: 0.01%

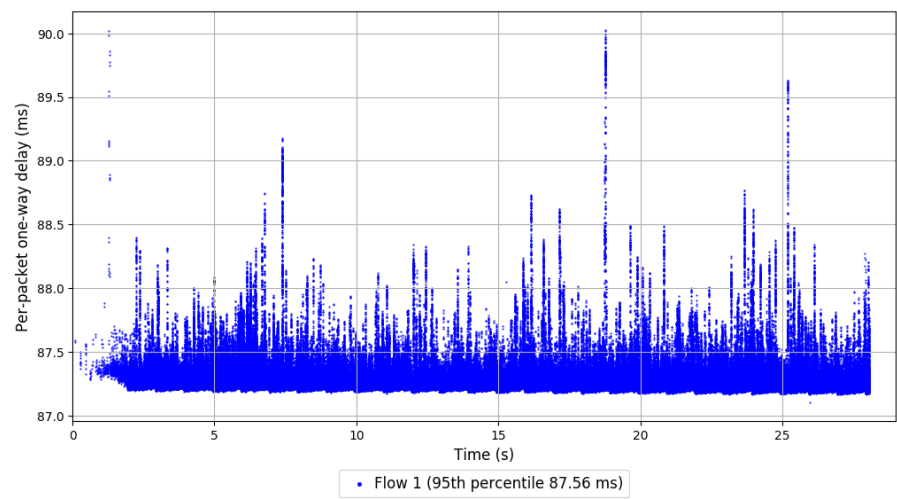
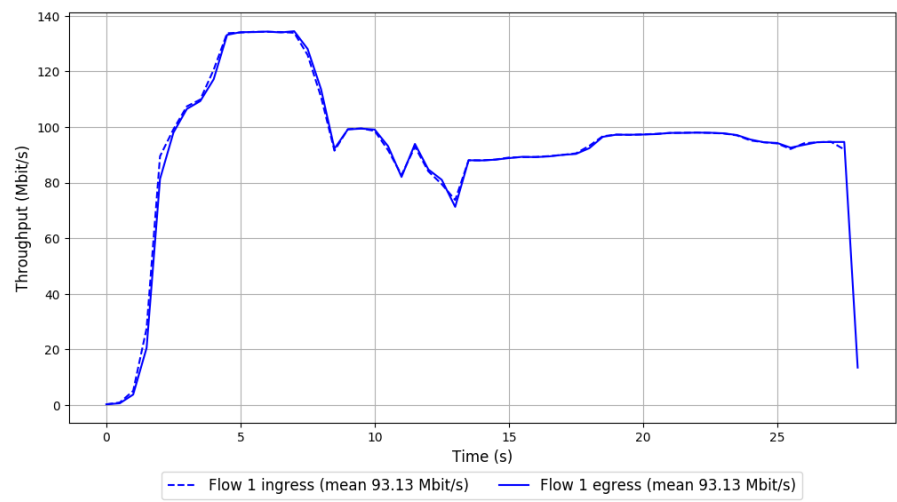
-- Flow 1:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 87.559 ms

Loss rate: 0.01%

Run 10: Report of Copa — Data Link

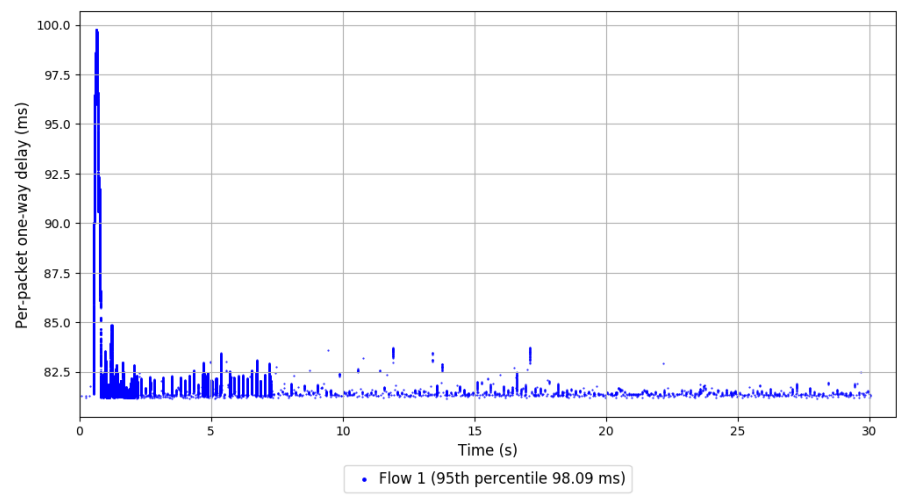
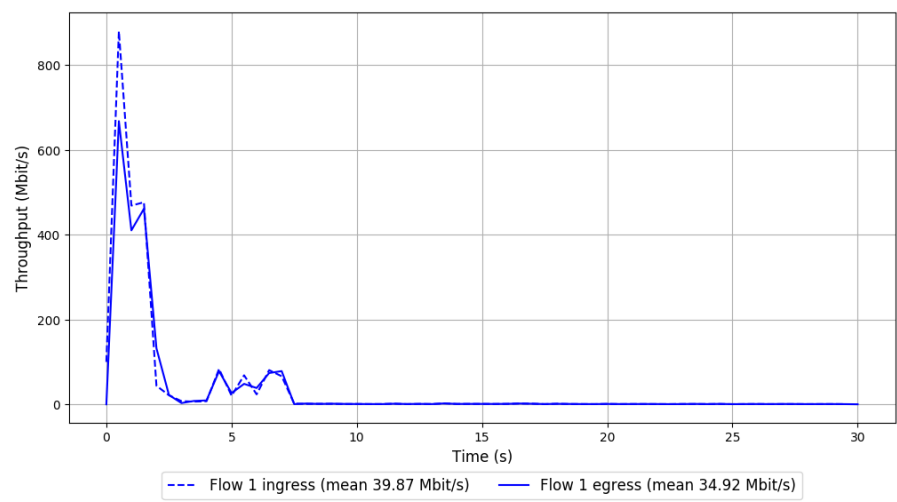


Run 1: Statistics of FillP

Start at: 2017-12-19 22:30:49
End at: 2017-12-19 22:31:19
Local clock offset: 3.711 ms
Remote clock offset: -4.501 ms

Below is generated by plot.py at 2017-12-20 02:32:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 34.92 Mbit/s
95th percentile per-packet one-way delay: 98.095 ms
Loss rate: 12.41%
-- Flow 1:
Average throughput: 34.92 Mbit/s
95th percentile per-packet one-way delay: 98.095 ms
Loss rate: 12.41%

Run 1: Report of FillP — Data Link

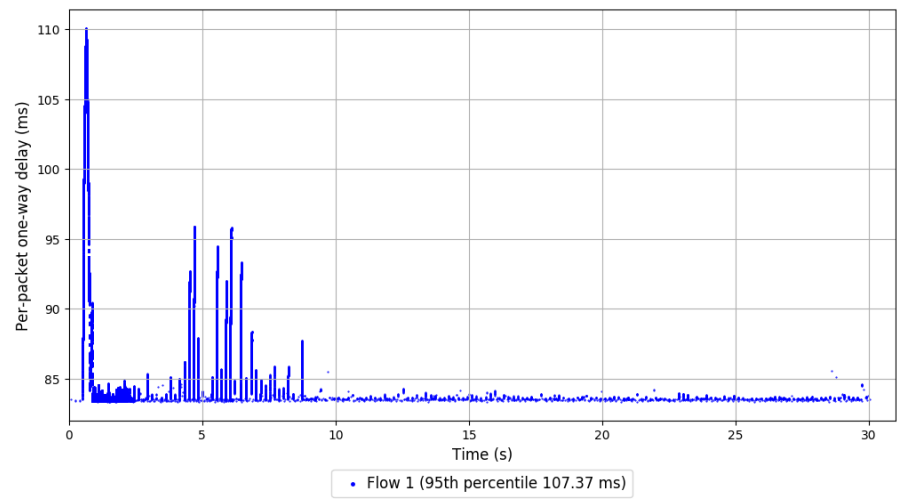
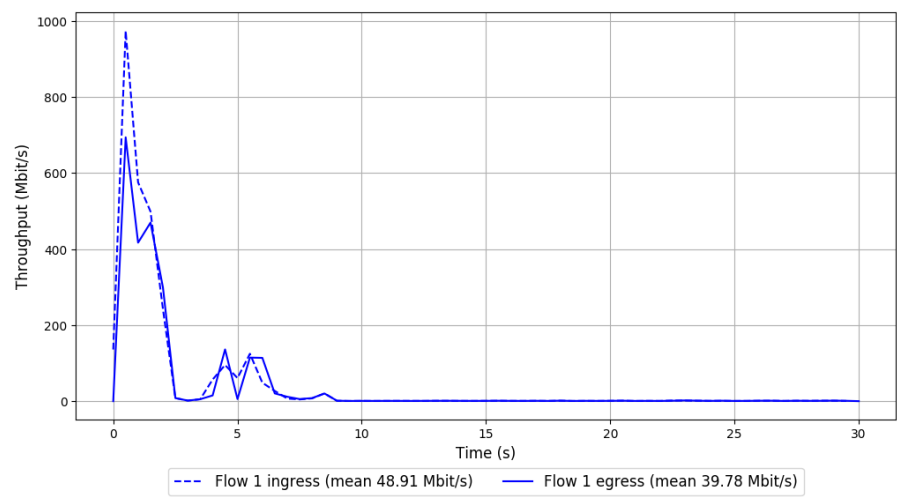


Run 2: Statistics of FillP

Start at: 2017-12-19 22:49:31
End at: 2017-12-19 22:50:01
Local clock offset: 2.269 ms
Remote clock offset: -4.035 ms

Below is generated by plot.py at 2017-12-20 02:32:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 107.372 ms
Loss rate: 18.68%
-- Flow 1:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 107.372 ms
Loss rate: 18.68%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-19 23:08:02

End at: 2017-12-19 23:08:33

Local clock offset: 2.864 ms

Remote clock offset: -5.29 ms

Below is generated by plot.py at 2017-12-20 02:32:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.87 Mbit/s

95th percentile per-packet one-way delay: 101.839 ms

Loss rate: 17.47%

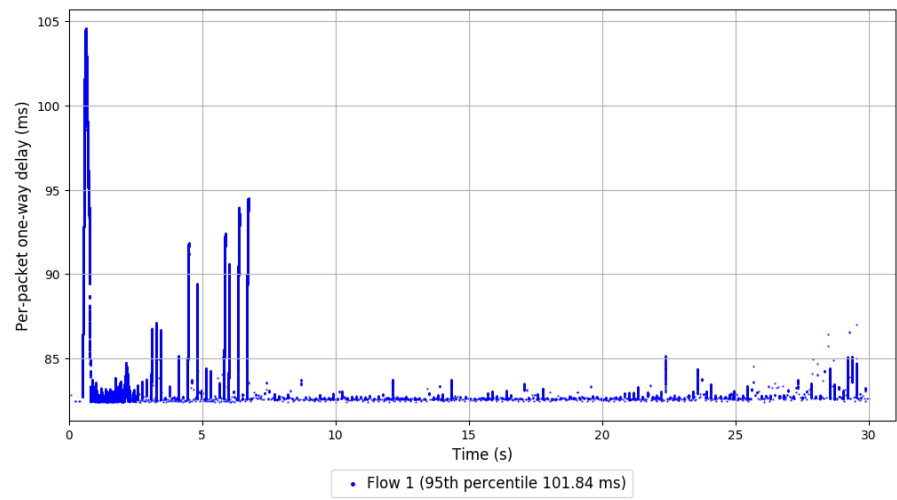
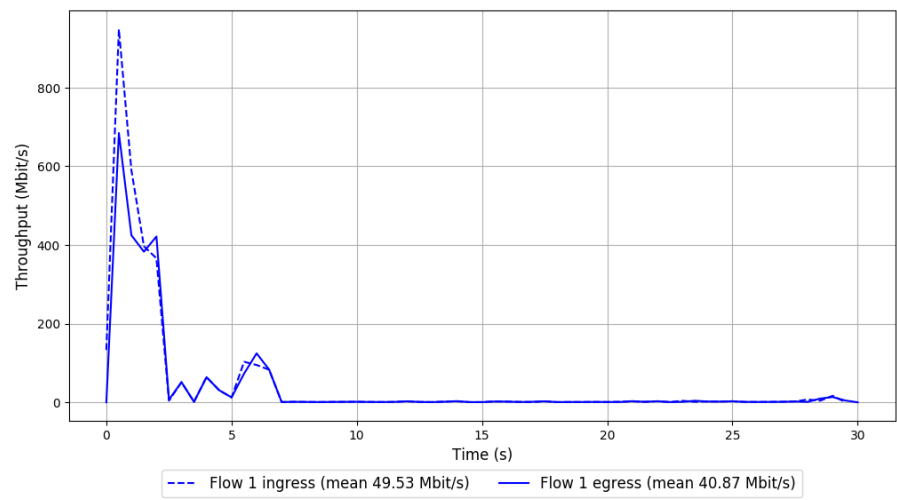
-- Flow 1:

Average throughput: 40.87 Mbit/s

95th percentile per-packet one-way delay: 101.839 ms

Loss rate: 17.47%

Run 3: Report of FillP — Data Link

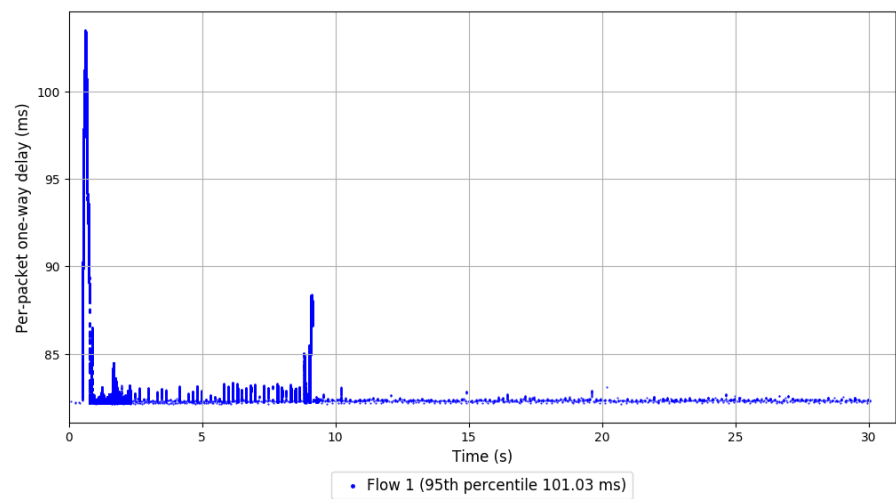
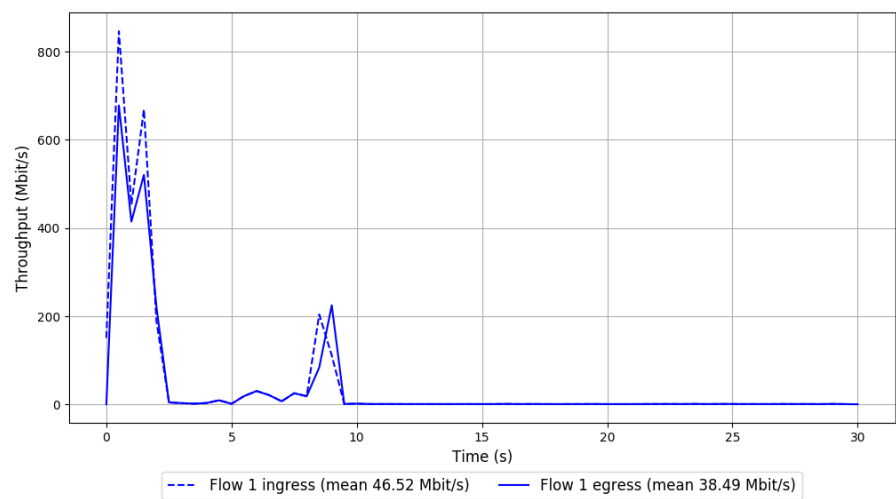


Run 4: Statistics of FillP

Start at: 2017-12-19 23:26:38
End at: 2017-12-19 23:27:08
Local clock offset: 3.874 ms
Remote clock offset: -4.594 ms

Below is generated by plot.py at 2017-12-20 02:32:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 101.028 ms
Loss rate: 17.26%
-- Flow 1:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 101.028 ms
Loss rate: 17.26%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-19 23:45:08

End at: 2017-12-19 23:45:38

Local clock offset: 4.451 ms

Remote clock offset: -0.42 ms

Below is generated by plot.py at 2017-12-20 02:32:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.21 Mbit/s

95th percentile per-packet one-way delay: 108.026 ms

Loss rate: 17.54%

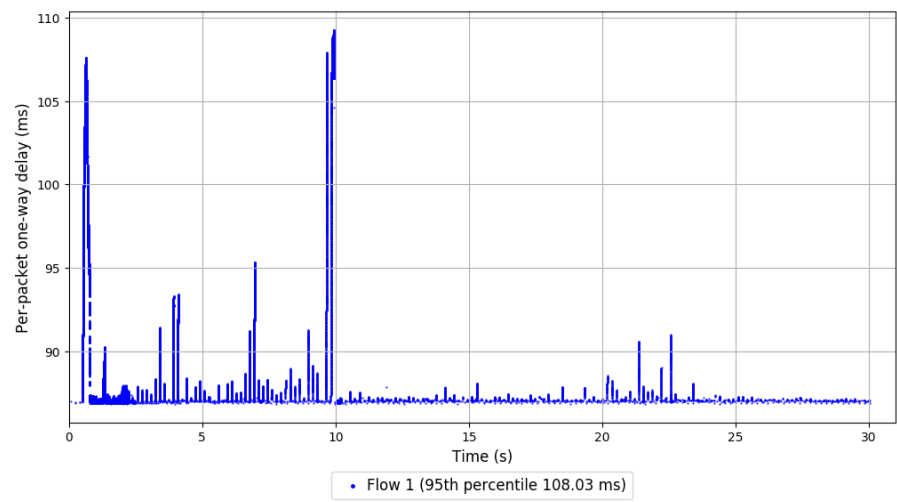
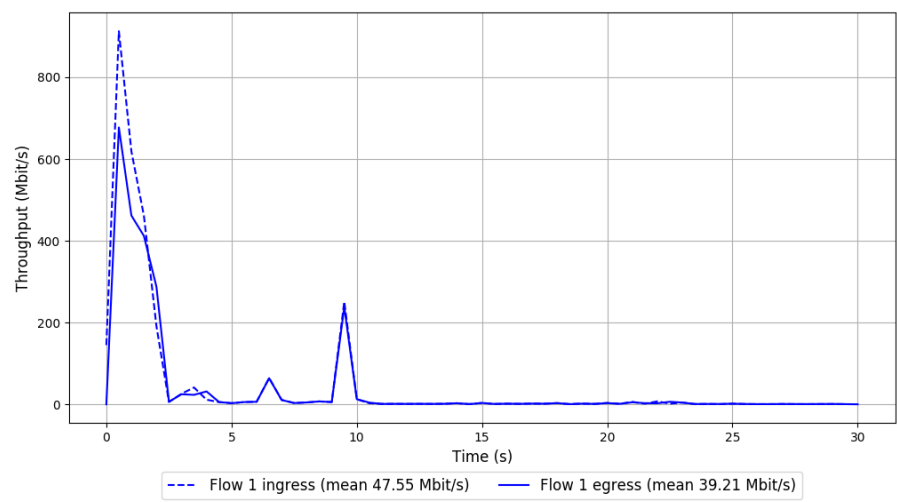
-- Flow 1:

Average throughput: 39.21 Mbit/s

95th percentile per-packet one-way delay: 108.026 ms

Loss rate: 17.54%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-20 00:03:57

End at: 2017-12-20 00:04:28

Local clock offset: 5.132 ms

Remote clock offset: 0.203 ms

Below is generated by plot.py at 2017-12-20 02:32:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.87 Mbit/s

95th percentile per-packet one-way delay: 116.651 ms

Loss rate: 17.28%

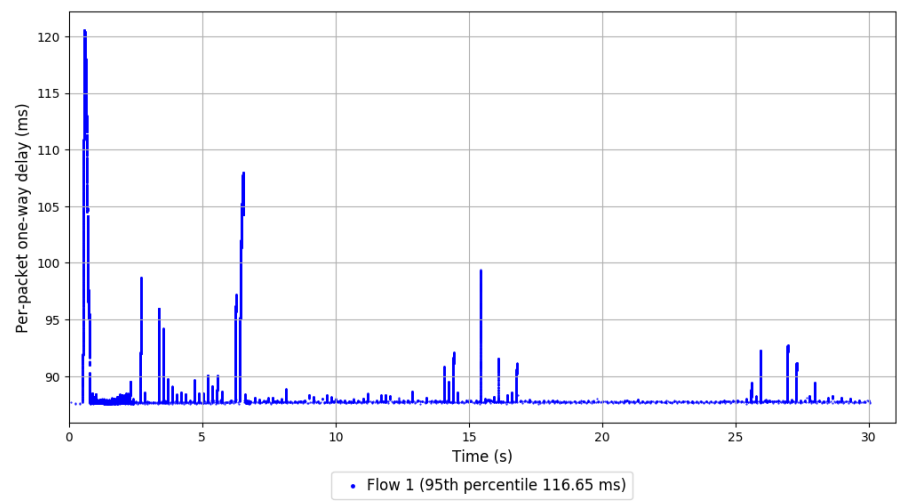
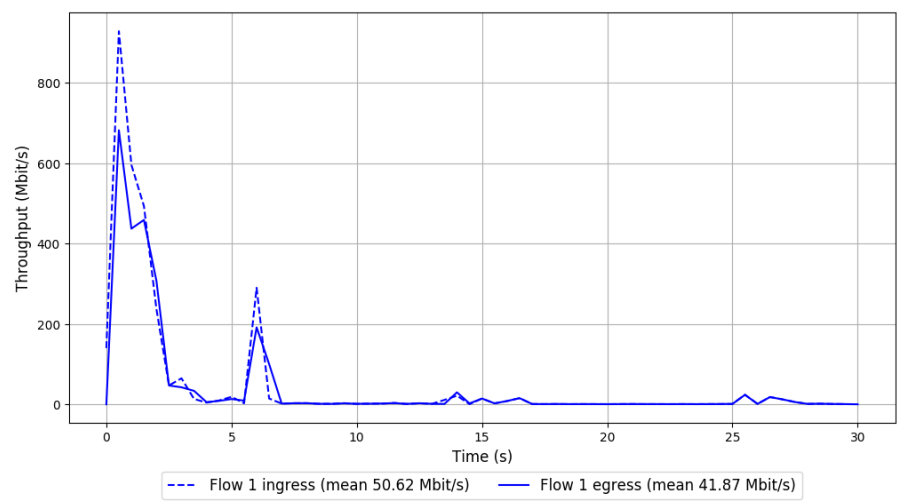
-- Flow 1:

Average throughput: 41.87 Mbit/s

95th percentile per-packet one-way delay: 116.651 ms

Loss rate: 17.28%

Run 6: Report of FillP — Data Link

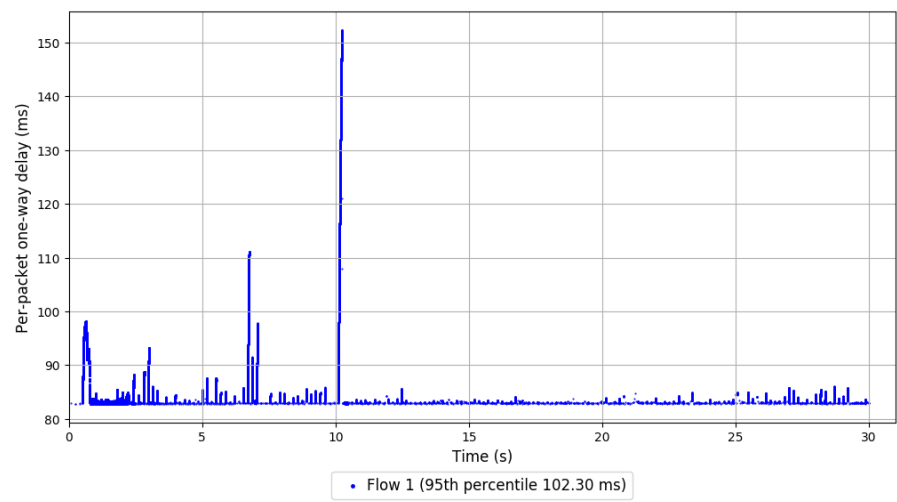
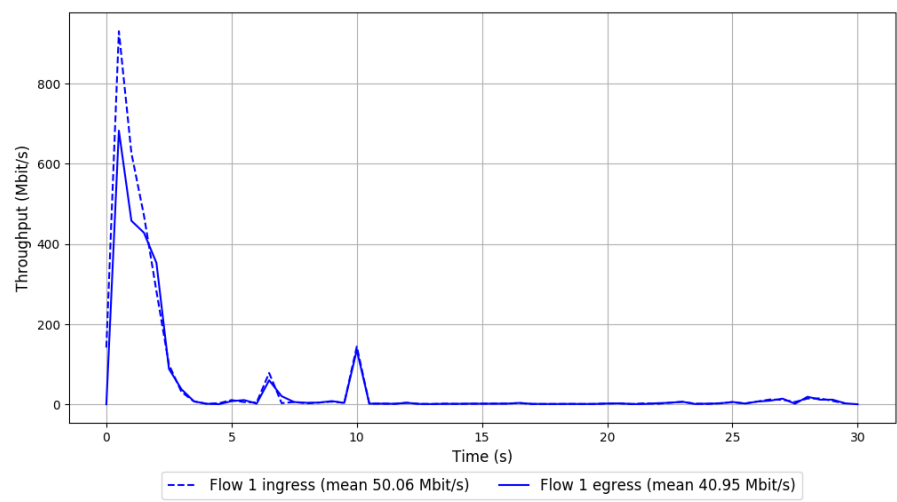


Run 7: Statistics of FillP

Start at: 2017-12-20 00:22:48
End at: 2017-12-20 00:23:18
Local clock offset: 5.196 ms
Remote clock offset: -5.299 ms

Below is generated by plot.py at 2017-12-20 02:32:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 102.300 ms
Loss rate: 18.19%
-- Flow 1:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 102.300 ms
Loss rate: 18.19%

Run 7: Report of FillP — Data Link

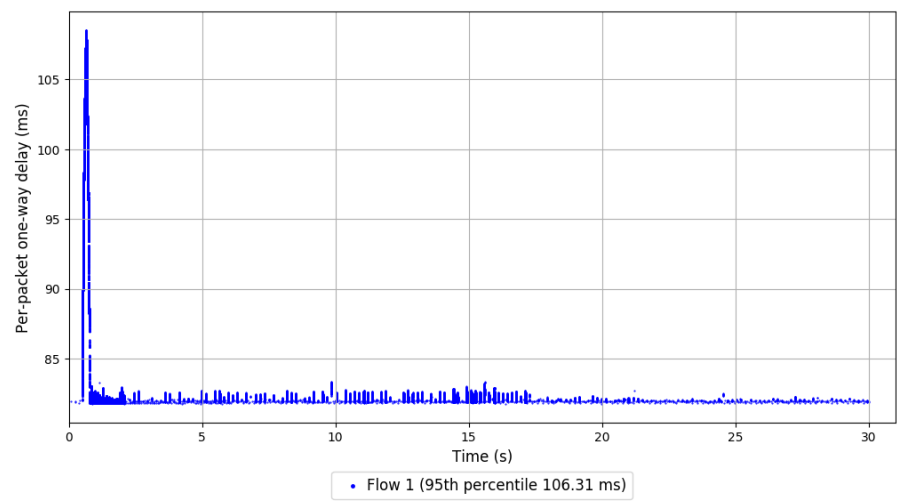
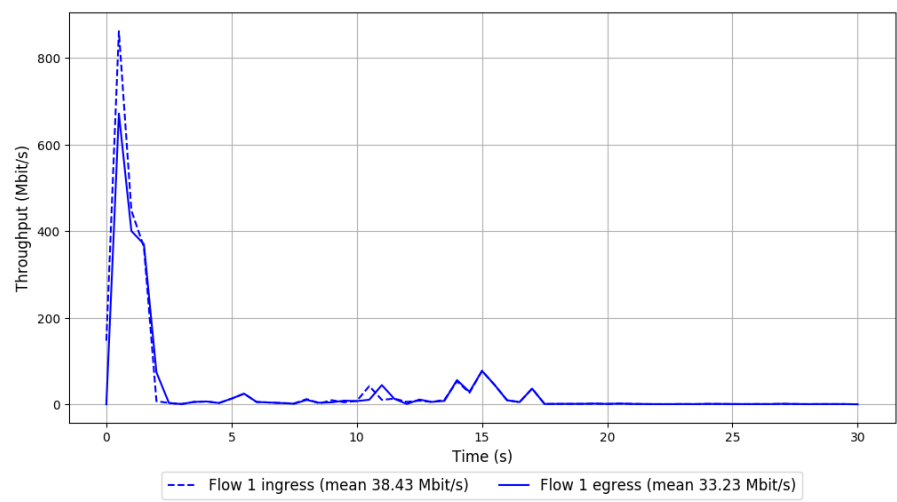


Run 8: Statistics of FillP

Start at: 2017-12-20 00:41:44
End at: 2017-12-20 00:42:14
Local clock offset: 5.274 ms
Remote clock offset: -4.766 ms

Below is generated by plot.py at 2017-12-20 02:32:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 106.306 ms
Loss rate: 13.52%
-- Flow 1:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 106.306 ms
Loss rate: 13.52%

Run 8: Report of FillP — Data Link

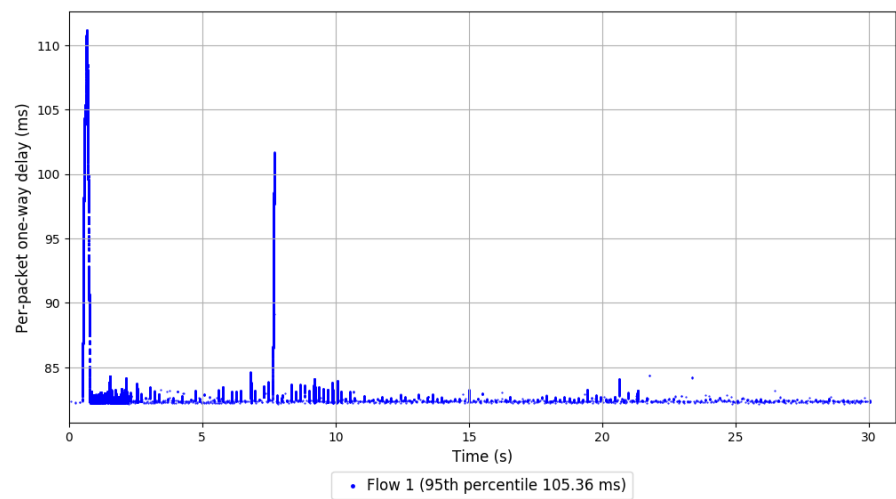
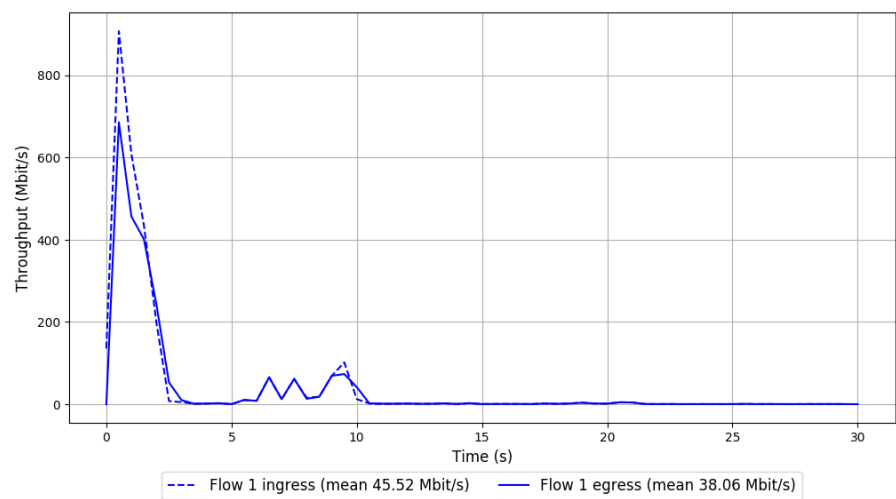


Run 9: Statistics of FillP

Start at: 2017-12-20 01:00:49
End at: 2017-12-20 01:01:19
Local clock offset: 5.314 ms
Remote clock offset: -5.852 ms

Below is generated by plot.py at 2017-12-20 02:32:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 38.06 Mbit/s
95th percentile per-packet one-way delay: 105.356 ms
Loss rate: 16.40%
-- Flow 1:
Average throughput: 38.06 Mbit/s
95th percentile per-packet one-way delay: 105.356 ms
Loss rate: 16.40%

Run 9: Report of FillP — Data Link

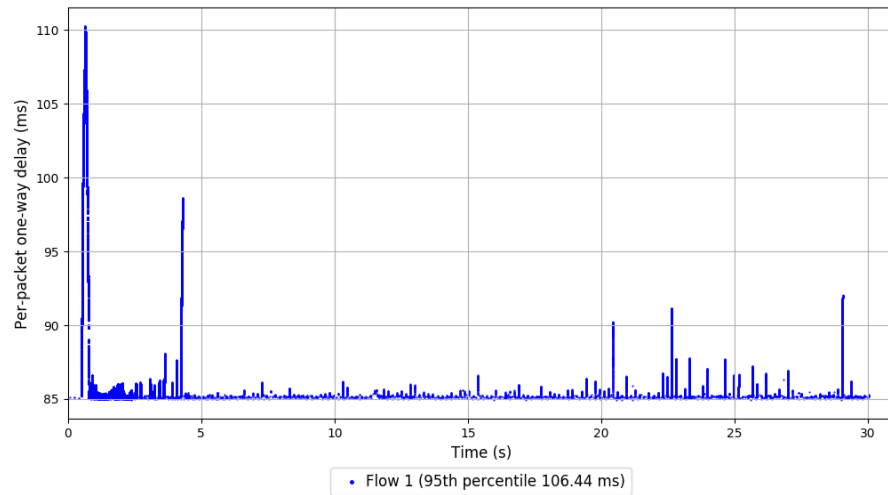
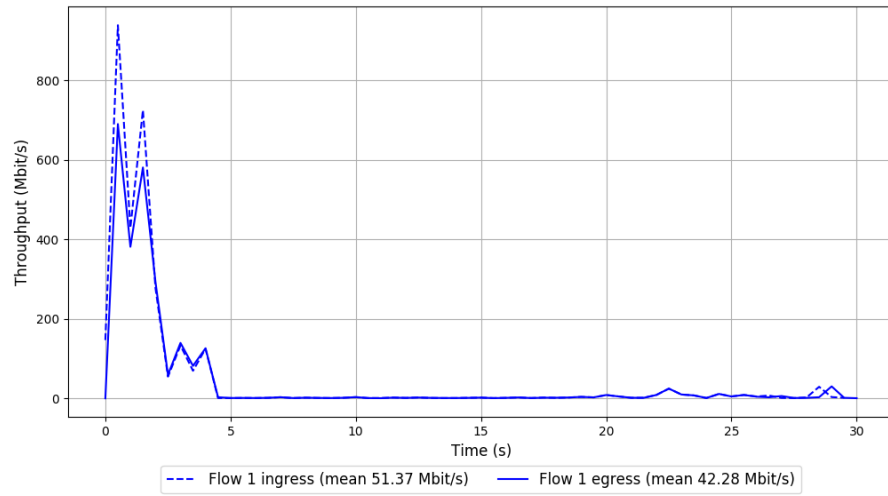


Run 10: Statistics of FillP

Start at: 2017-12-20 01:19:26
End at: 2017-12-20 01:19:56
Local clock offset: 4.518 ms
Remote clock offset: -0.468 ms

Below is generated by plot.py at 2017-12-20 02:32:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 42.28 Mbit/s
95th percentile per-packet one-way delay: 106.435 ms
Loss rate: 17.70%
-- Flow 1:
Average throughput: 42.28 Mbit/s
95th percentile per-packet one-way delay: 106.435 ms
Loss rate: 17.70%

Run 10: Report of FillP — Data Link

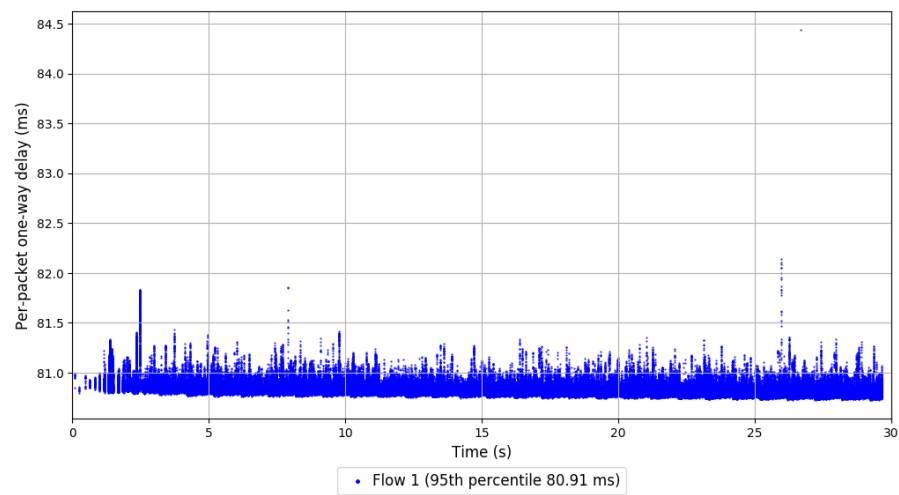
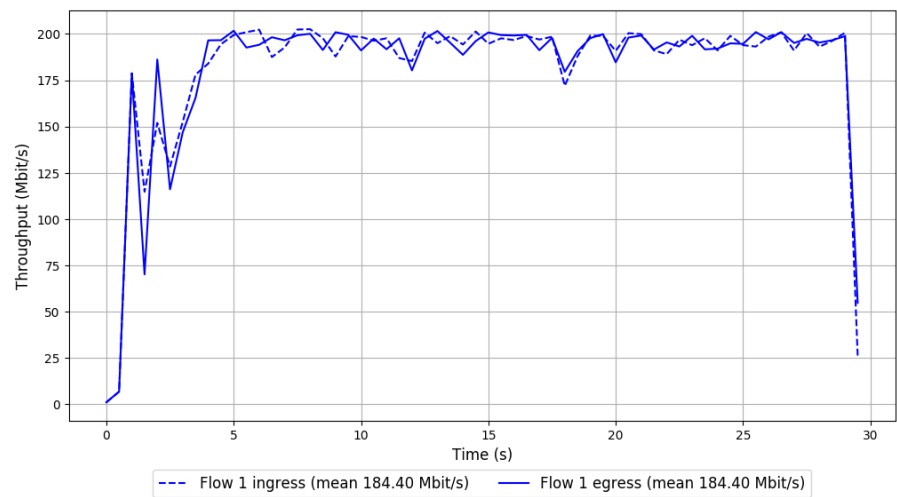


```
Run 1: Statistics of Indigo

Start at: 2017-12-19 22:35:54
End at: 2017-12-19 22:36:24
Local clock offset: 3.501 ms
Remote clock offset: -3.503 ms

# Below is generated by plot.py at 2017-12-20 02:34:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.40 Mbit/s
95th percentile per-packet one-way delay: 80.913 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.40 Mbit/s
95th percentile per-packet one-way delay: 80.913 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-19 22:54:30

End at: 2017-12-19 22:55:00

Local clock offset: 2.273 ms

Remote clock offset: -4.1 ms

Below is generated by plot.py at 2017-12-20 02:34:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.28 Mbit/s

95th percentile per-packet one-way delay: 81.676 ms

Loss rate: 0.00%

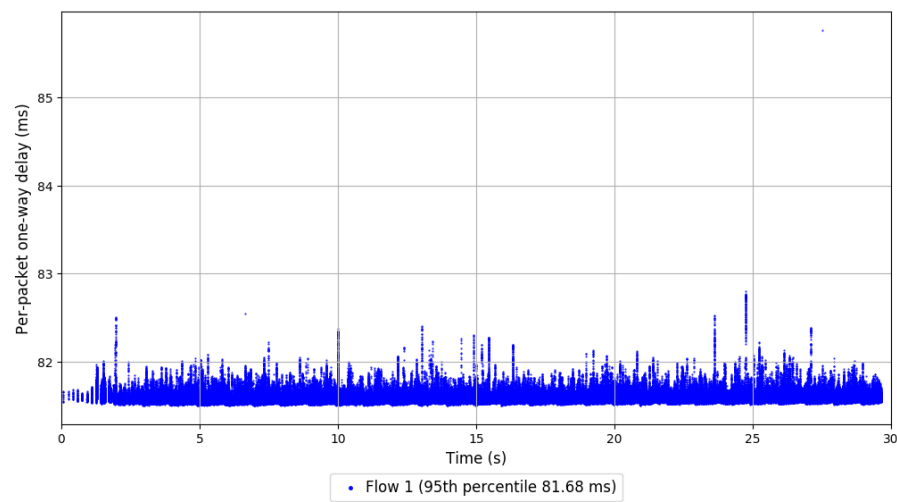
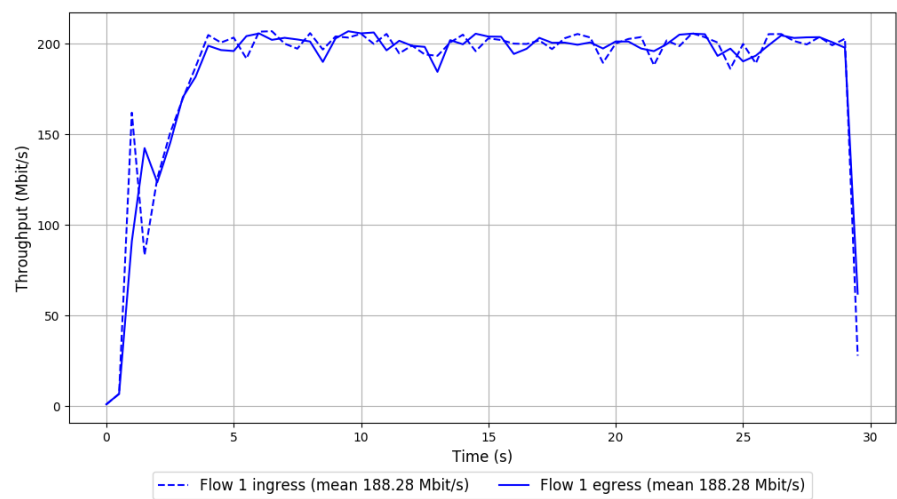
-- Flow 1:

Average throughput: 188.28 Mbit/s

95th percentile per-packet one-way delay: 81.676 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-19 23:13:01

End at: 2017-12-19 23:13:31

Local clock offset: 3.164 ms

Remote clock offset: 0.98 ms

Below is generated by plot.py at 2017-12-20 02:34:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.16 Mbit/s

95th percentile per-packet one-way delay: 88.740 ms

Loss rate: 0.00%

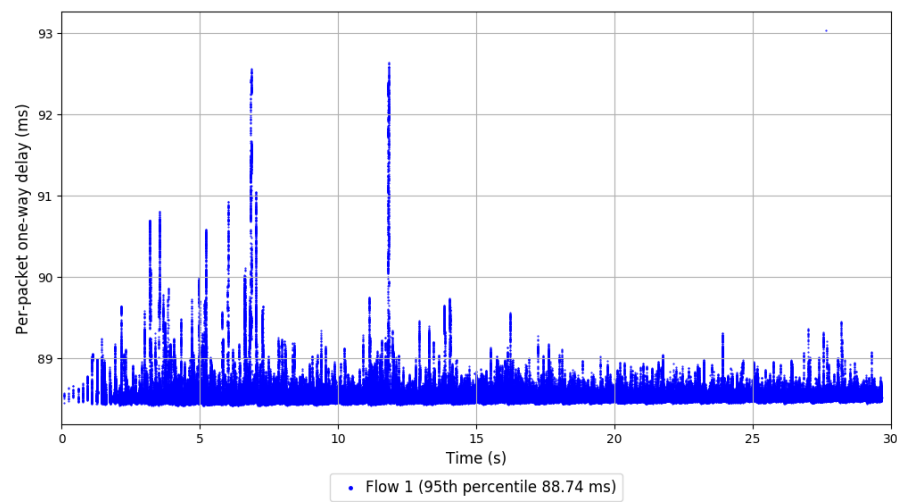
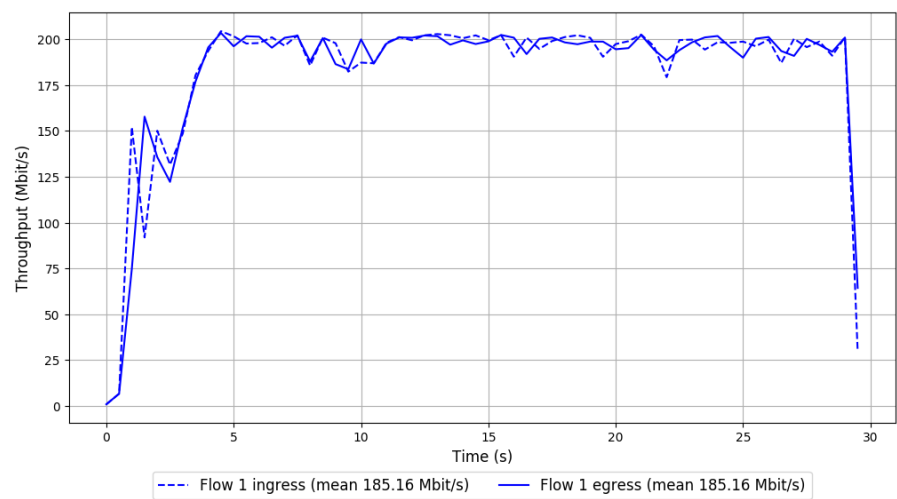
-- Flow 1:

Average throughput: 185.16 Mbit/s

95th percentile per-packet one-way delay: 88.740 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

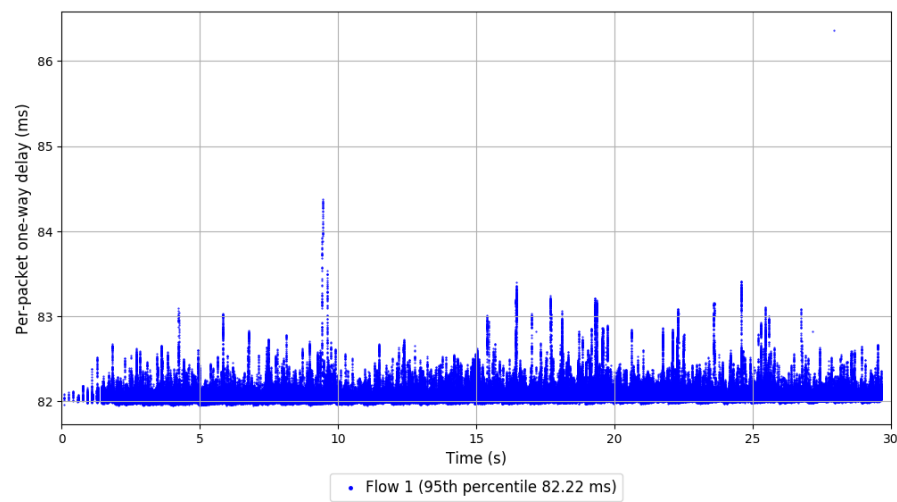
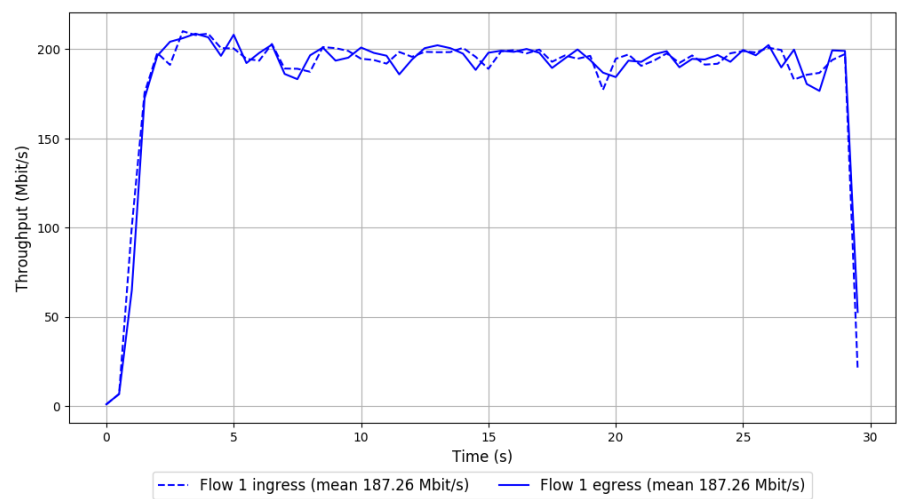


Run 4: Statistics of Indigo

Start at: 2017-12-19 23:31:42
End at: 2017-12-19 23:32:12
Local clock offset: 4.026 ms
Remote clock offset: -5.981 ms

Below is generated by plot.py at 2017-12-20 02:34:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 187.26 Mbit/s
95th percentile per-packet one-way delay: 82.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.26 Mbit/s
95th percentile per-packet one-way delay: 82.218 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

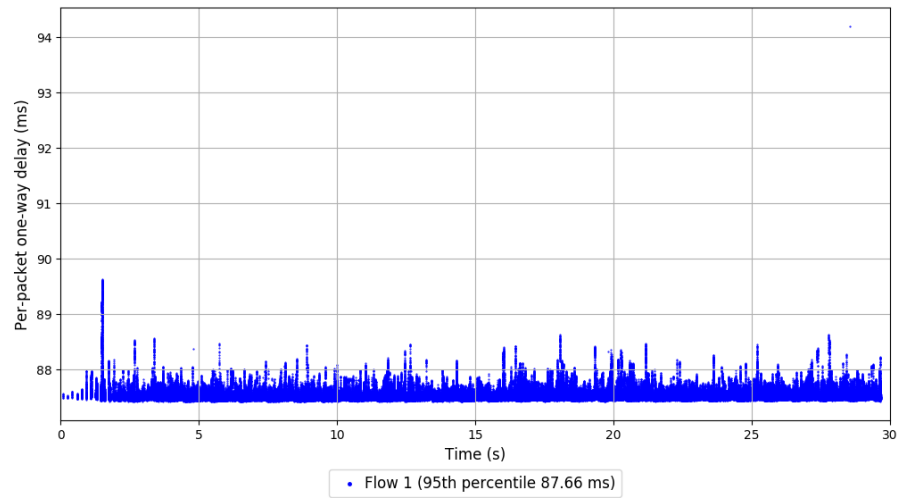
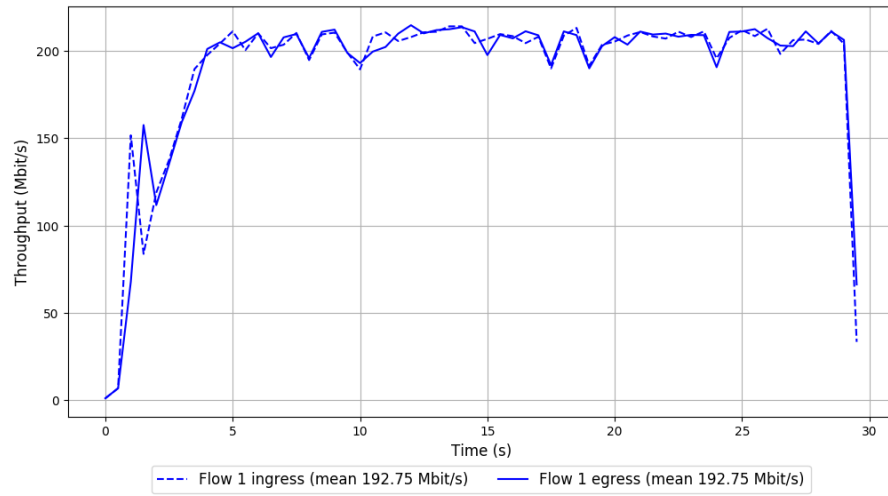


Run 5: Statistics of Indigo

Start at: 2017-12-19 23:50:30
End at: 2017-12-19 23:51:00
Local clock offset: 4.574 ms
Remote clock offset: -0.835 ms

Below is generated by plot.py at 2017-12-20 02:34:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 192.75 Mbit/s
95th percentile per-packet one-way delay: 87.656 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 192.75 Mbit/s
95th percentile per-packet one-way delay: 87.656 ms
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link

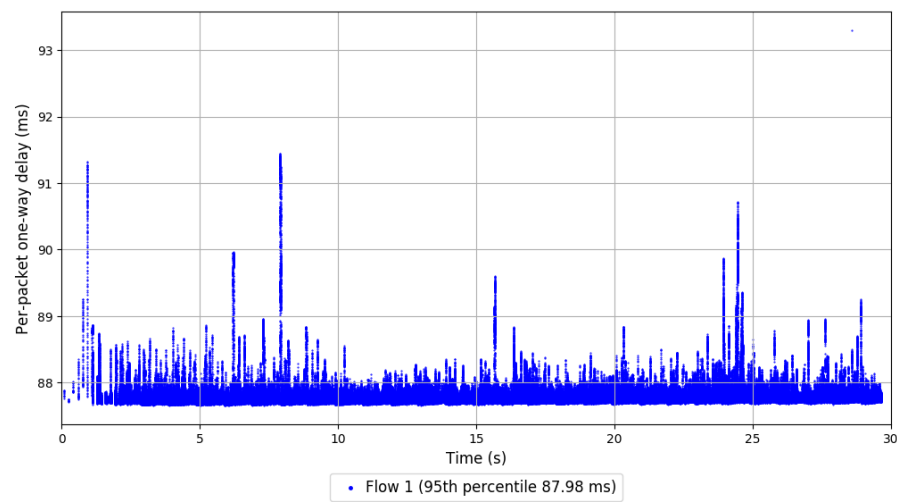
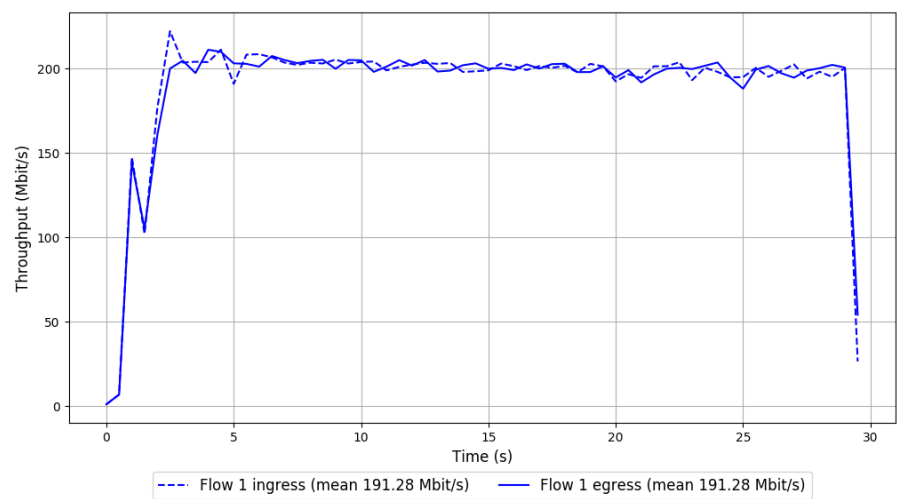


Run 6: Statistics of Indigo

Start at: 2017-12-20 00:09:18
End at: 2017-12-20 00:09:49
Local clock offset: 5.448 ms
Remote clock offset: -0.295 ms

Below is generated by plot.py at 2017-12-20 02:34:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 191.28 Mbit/s
95th percentile per-packet one-way delay: 87.979 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 191.28 Mbit/s
95th percentile per-packet one-way delay: 87.979 ms
Loss rate: 0.00%

Run 6: Report of Indigo — Data Link

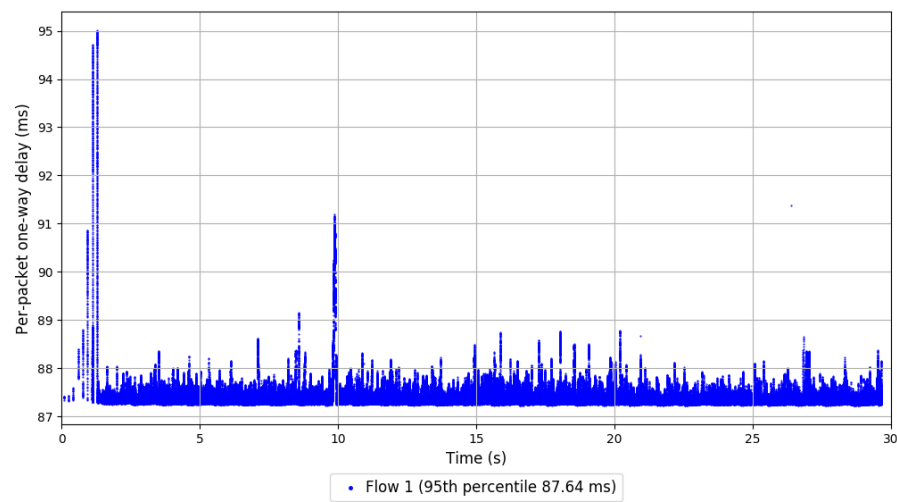
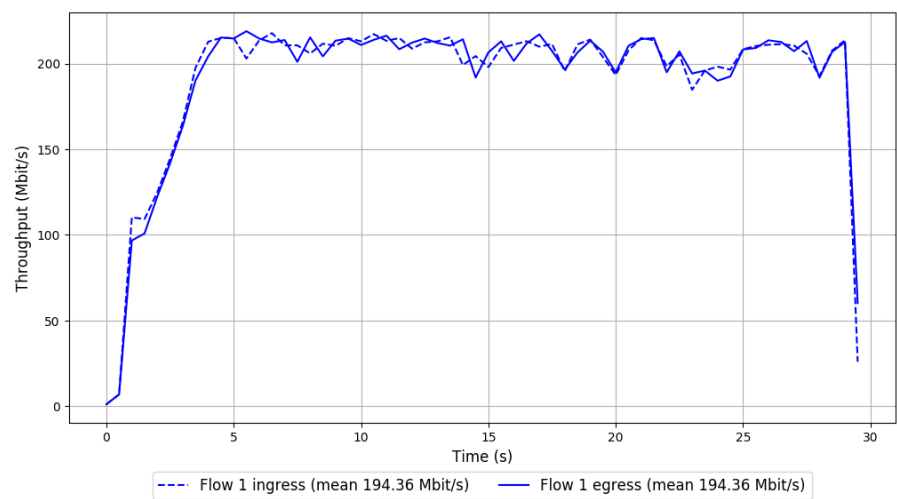


Run 7: Statistics of Indigo

Start at: 2017-12-20 00:28:12
End at: 2017-12-20 00:28:42
Local clock offset: 5.221 ms
Remote clock offset: -0.758 ms

Below is generated by plot.py at 2017-12-20 02:35:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 194.36 Mbit/s
95th percentile per-packet one-way delay: 87.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 194.36 Mbit/s
95th percentile per-packet one-way delay: 87.636 ms
Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 00:47:05

End at: 2017-12-20 00:47:35

Local clock offset: 5.35 ms

Remote clock offset: 0.135 ms

Below is generated by plot.py at 2017-12-20 02:35:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.92 Mbit/s

95th percentile per-packet one-way delay: 88.219 ms

Loss rate: 0.00%

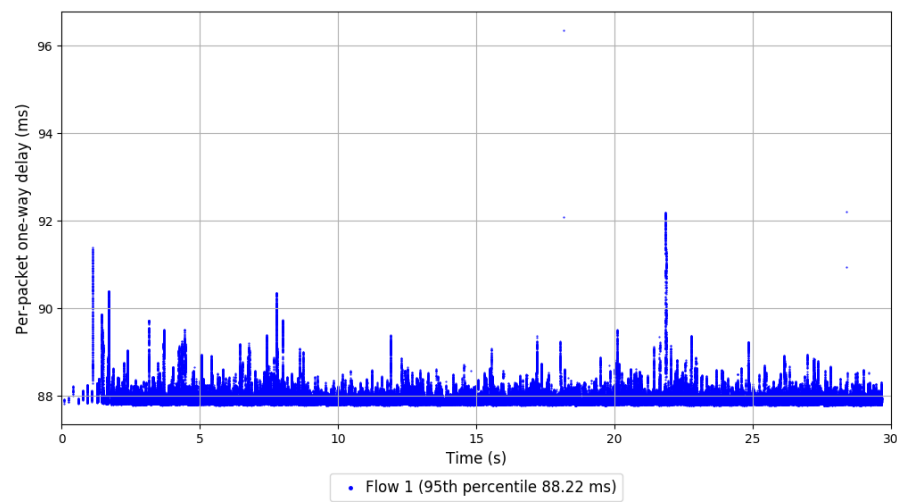
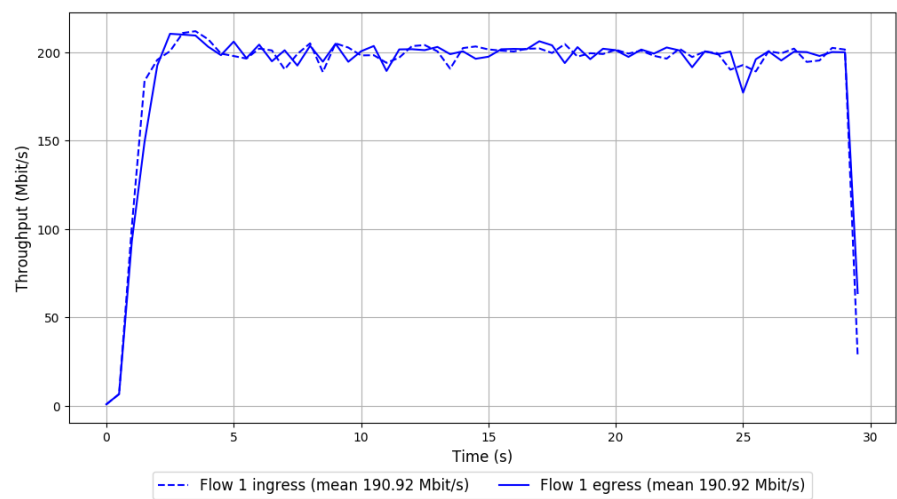
-- Flow 1:

Average throughput: 190.92 Mbit/s

95th percentile per-packet one-way delay: 88.219 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-20 01:05:51

End at: 2017-12-20 01:06:21

Local clock offset: 5.12 ms

Remote clock offset: -5.45 ms

Below is generated by plot.py at 2017-12-20 02:35:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.39 Mbit/s

95th percentile per-packet one-way delay: 82.020 ms

Loss rate: 0.01%

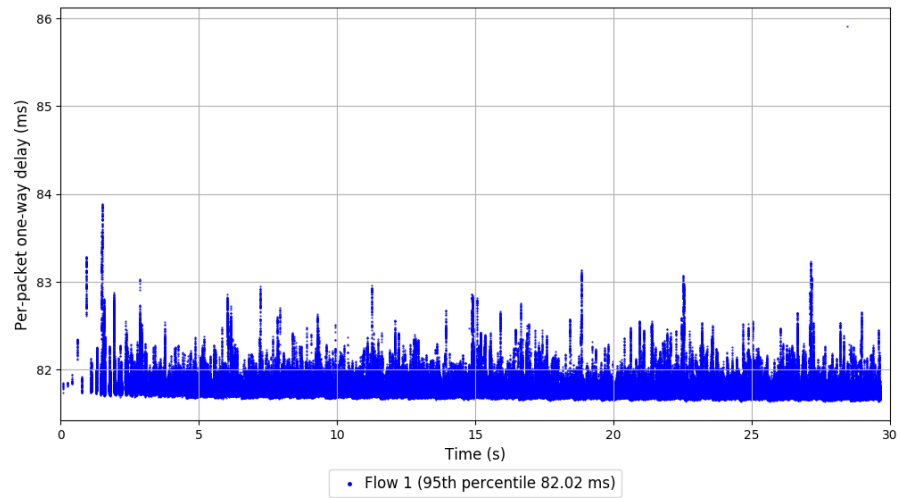
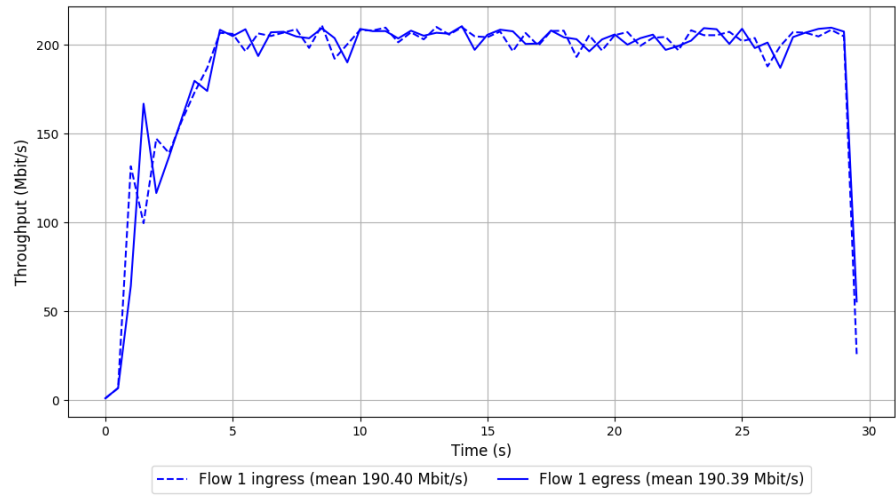
-- Flow 1:

Average throughput: 190.39 Mbit/s

95th percentile per-packet one-way delay: 82.020 ms

Loss rate: 0.01%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-20 01:24:23

End at: 2017-12-20 01:24:54

Local clock offset: 4.337 ms

Remote clock offset: -3.747 ms

Below is generated by plot.py at 2017-12-20 02:35:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.72 Mbit/s

95th percentile per-packet one-way delay: 83.390 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 190.72 Mbit/s

95th percentile per-packet one-way delay: 83.390 ms

Loss rate: 0.01%

Run 10: Report of Indigo — Data Link

