

Pantheon Report

Generated at 2017-12-21 12:36:58 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

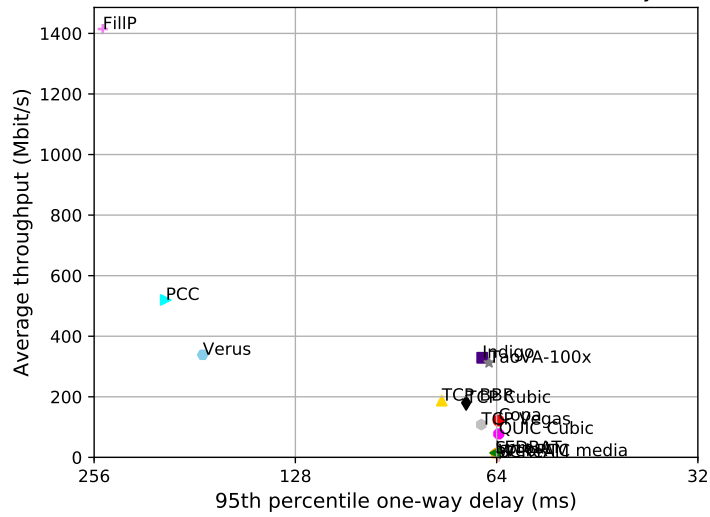
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

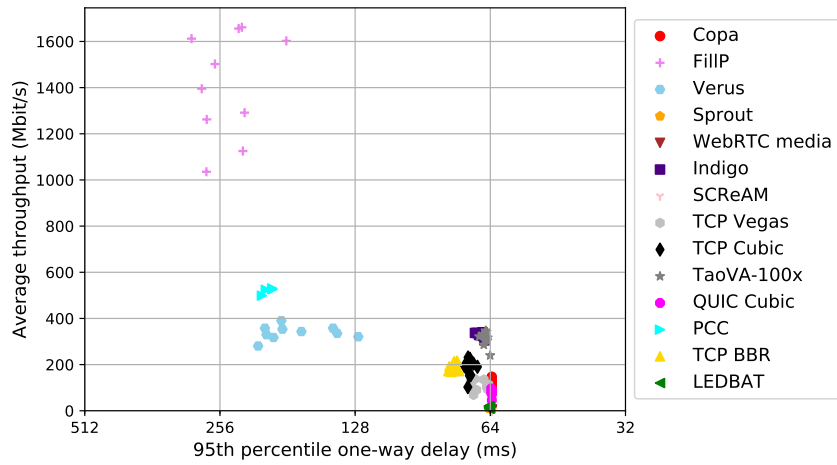
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 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 GCE Iowa Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Iowa Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows



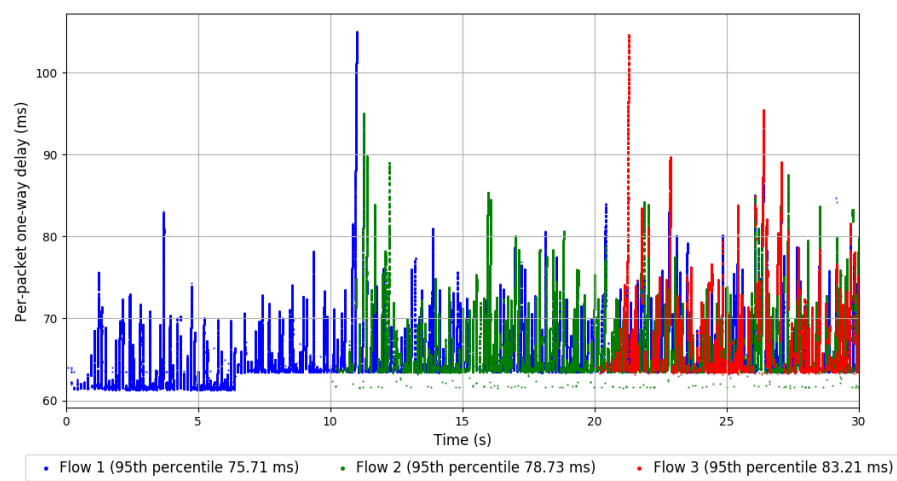
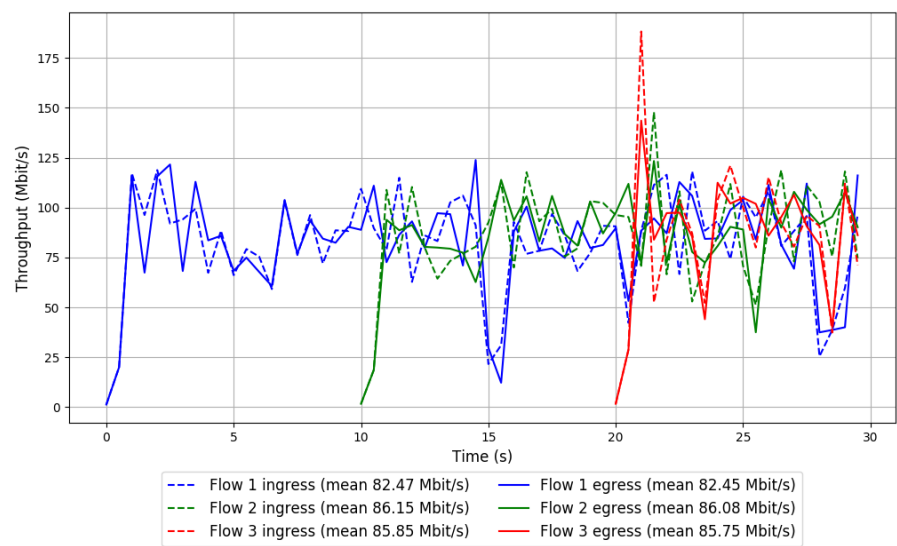
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	9	90.31	91.28	107.55	75.83	77.51	80.19	0.21	0.25	0.01
TCP Cubic	10	89.68	83.33	105.69	69.28	71.53	70.84	0.14	0.13	0.23
LEDBAT	10	7.45	8.59	4.13	64.40	64.33	64.16	0.43	0.20	0.86
PCC	4	483.16	41.90	27.15	200.45	195.80	192.73	1.37	1.04	1.11
QUIC Cubic	10	46.33	39.51	15.17	63.47	63.33	63.62	0.00	0.01	0.01
SCReAM	10	0.22	0.22	0.22	63.59	63.33	63.56	0.01	0.00	0.00
WebRTC media	10	2.20	1.37	0.55	63.60	63.42	63.63	0.01	0.00	0.01
Sprout	10	6.46	6.43	6.10	64.25	64.27	64.15	0.33	0.16	0.16
TaoVA-100x	10	177.08	148.93	140.99	65.22	65.97	66.56	0.06	0.01	0.01
TCP Vegas	10	36.82	76.28	62.35	65.47	67.29	68.73	0.16	0.06	0.05
Verus	10	217.36	129.94	108.63	162.20	176.91	190.71	0.66	1.10	2.37
Copa	10	69.40	56.56	56.11	63.57	63.61	63.55	0.02	0.01	0.00
FillP	10	732.84	615.59	821.71	235.58	236.44	254.10	3.93	5.33	7.76
Indigo	10	174.47	165.35	138.99	66.43	67.37	69.17	0.04	0.03	0.07

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-21 07:18:17
End at: 2017-12-21 07:18:47

# Below is generated by plot.py at 2017-12-21 11:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 167.96 Mbit/s
95th percentile per-packet one-way delay: 78.161 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 82.45 Mbit/s
95th percentile per-packet one-way delay: 75.714 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 86.08 Mbit/s
95th percentile per-packet one-way delay: 78.730 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 85.75 Mbit/s
95th percentile per-packet one-way delay: 83.214 ms
Loss rate: 0.00%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-21 07:32:30

End at: 2017-12-21 07:33:00

Below is generated by plot.py at 2017-12-21 11:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.34 Mbit/s

95th percentile per-packet one-way delay: 75.045 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 90.79 Mbit/s

95th percentile per-packet one-way delay: 74.689 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 77.54 Mbit/s

95th percentile per-packet one-way delay: 75.517 ms

Loss rate: 0.42%

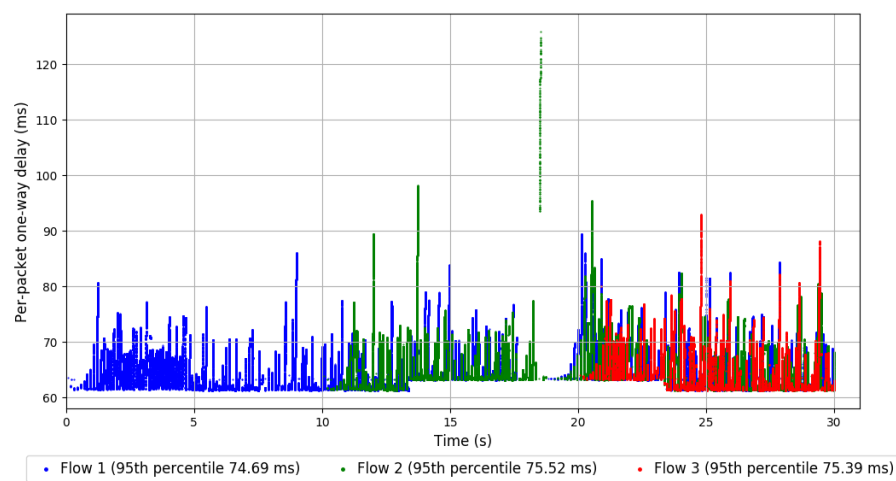
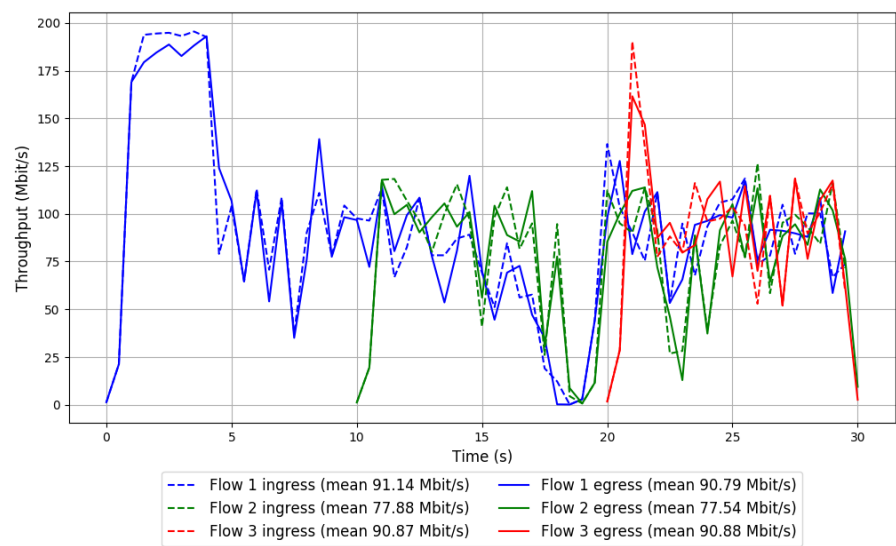
-- Flow 3:

Average throughput: 90.88 Mbit/s

95th percentile per-packet one-way delay: 75.391 ms

Loss rate: 0.02%

Run 2: Report of TCP BBR — Data Link

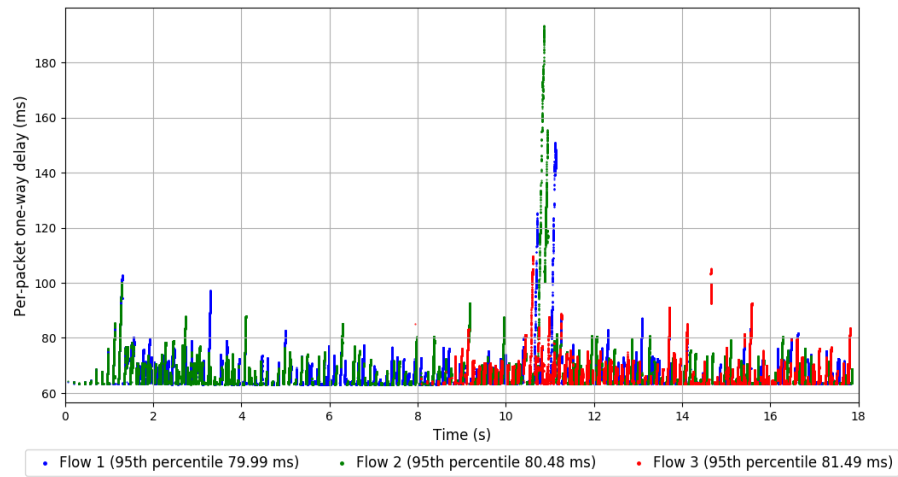
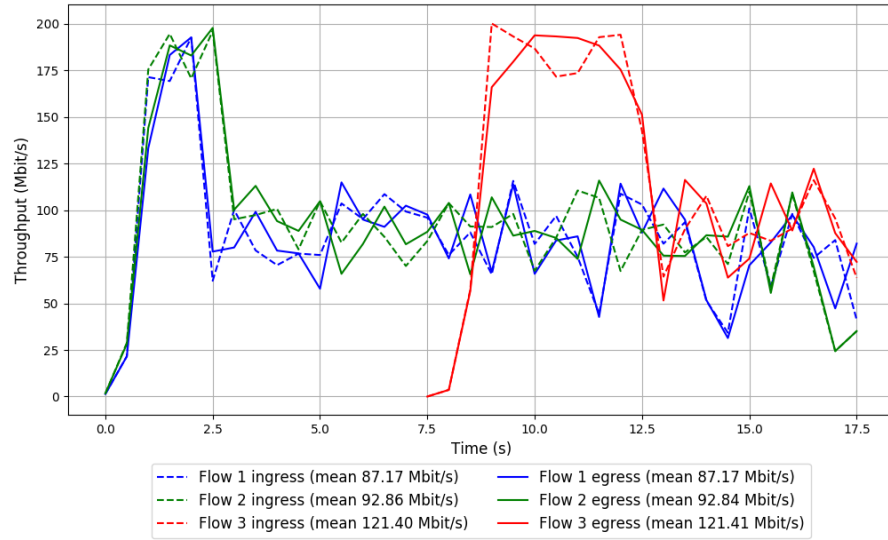


Run 3: Statistics of TCP BBR

Start at: 2017-12-21 07:46:23

End at: 2017-12-21 07:46:53

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-21 08:00:14

End at: 2017-12-21 08:00:44

Below is generated by plot.py at 2017-12-21 11:17:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.18 Mbit/s

95th percentile per-packet one-way delay: 75.893 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 95.84 Mbit/s

95th percentile per-packet one-way delay: 74.581 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 117.03 Mbit/s

95th percentile per-packet one-way delay: 74.982 ms

Loss rate: 0.01%

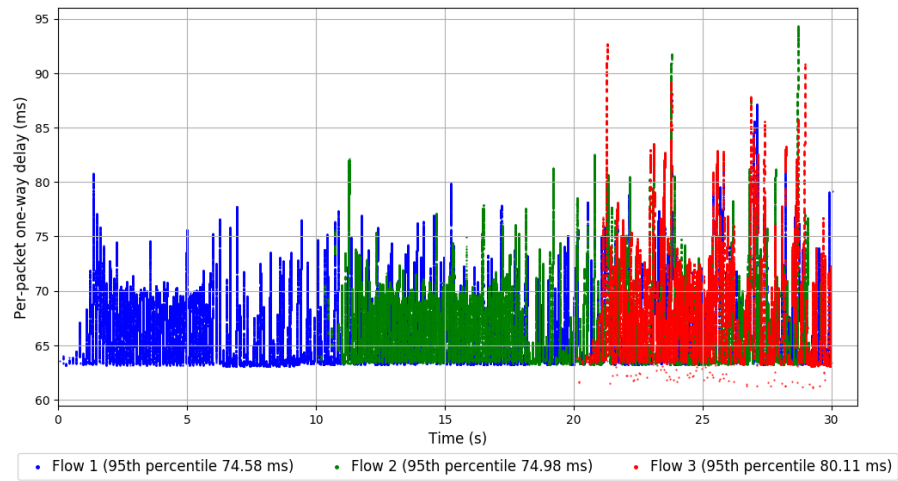
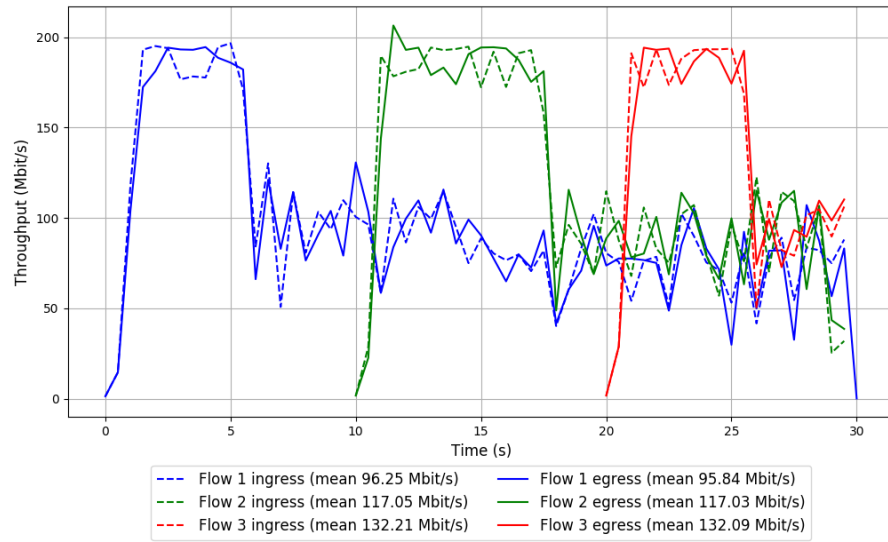
-- Flow 3:

Average throughput: 132.09 Mbit/s

95th percentile per-packet one-way delay: 80.107 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-21 08:14:12

End at: 2017-12-21 08:14:42

Below is generated by plot.py at 2017-12-21 11:17:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 171.50 Mbit/s

95th percentile per-packet one-way delay: 79.380 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 87.38 Mbit/s

95th percentile per-packet one-way delay: 76.398 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 83.71 Mbit/s

95th percentile per-packet one-way delay: 80.708 ms

Loss rate: 0.40%

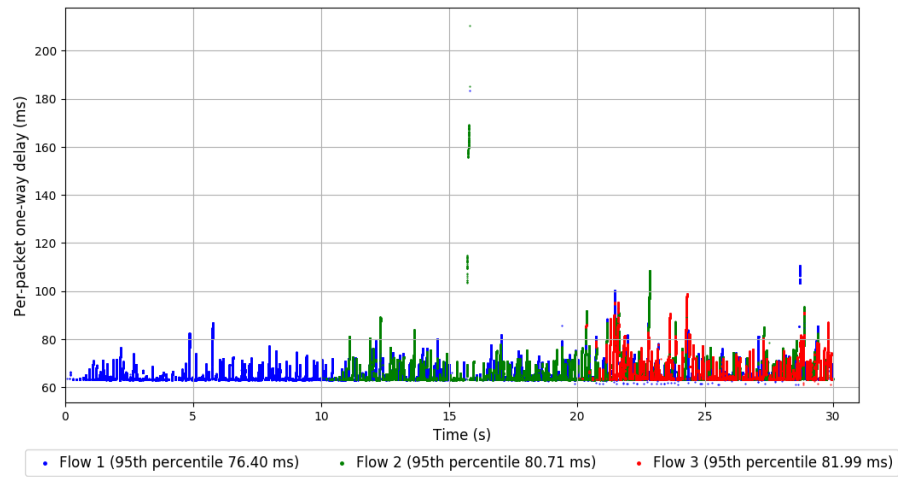
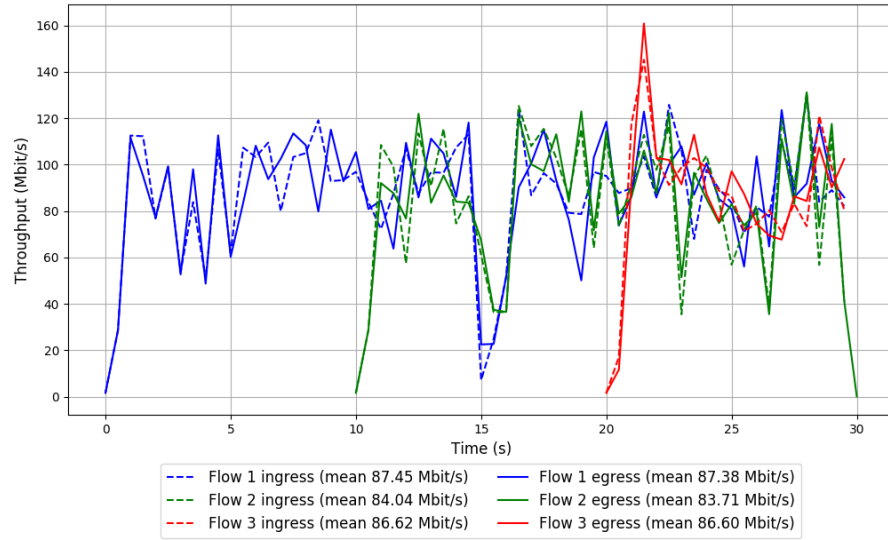
-- Flow 3:

Average throughput: 86.60 Mbit/s

95th percentile per-packet one-way delay: 81.988 ms

Loss rate: 0.03%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-21 08:28:16

End at: 2017-12-21 08:28:46

Below is generated by plot.py at 2017-12-21 11:17:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.86 Mbit/s

95th percentile per-packet one-way delay: 76.852 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 96.13 Mbit/s

95th percentile per-packet one-way delay: 74.343 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 88.19 Mbit/s

95th percentile per-packet one-way delay: 78.084 ms

Loss rate: 0.93%

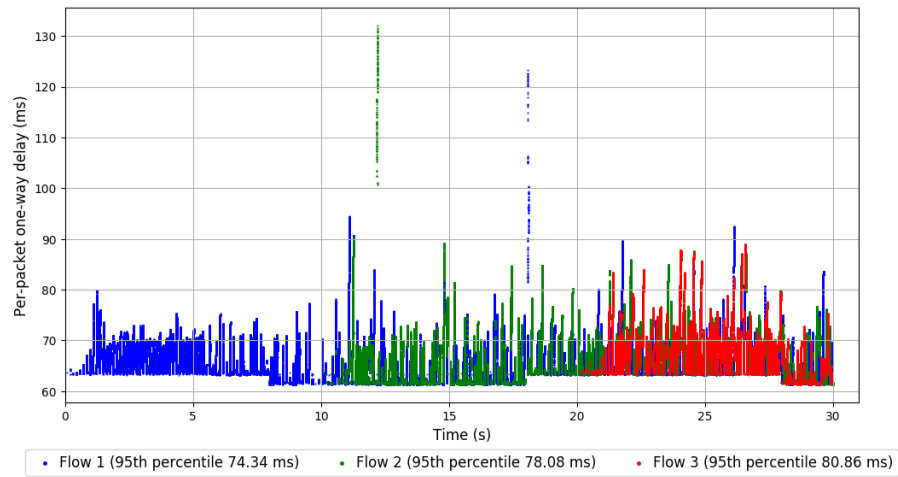
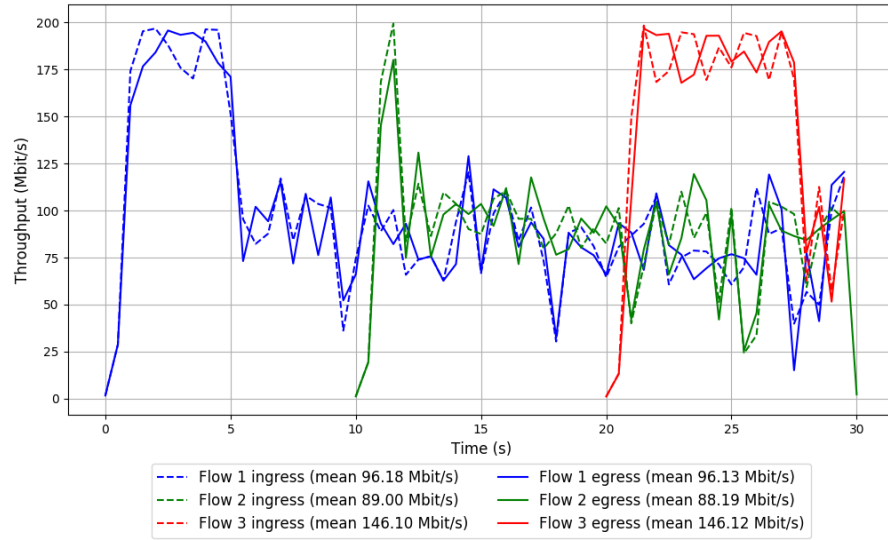
-- Flow 3:

Average throughput: 146.12 Mbit/s

95th percentile per-packet one-way delay: 80.857 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-21 08:42:25

End at: 2017-12-21 08:42:55

Below is generated by plot.py at 2017-12-21 11:17:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 174.31 Mbit/s

95th percentile per-packet one-way delay: 77.763 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 89.96 Mbit/s

95th percentile per-packet one-way delay: 76.627 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 77.563 ms

Loss rate: 0.01%

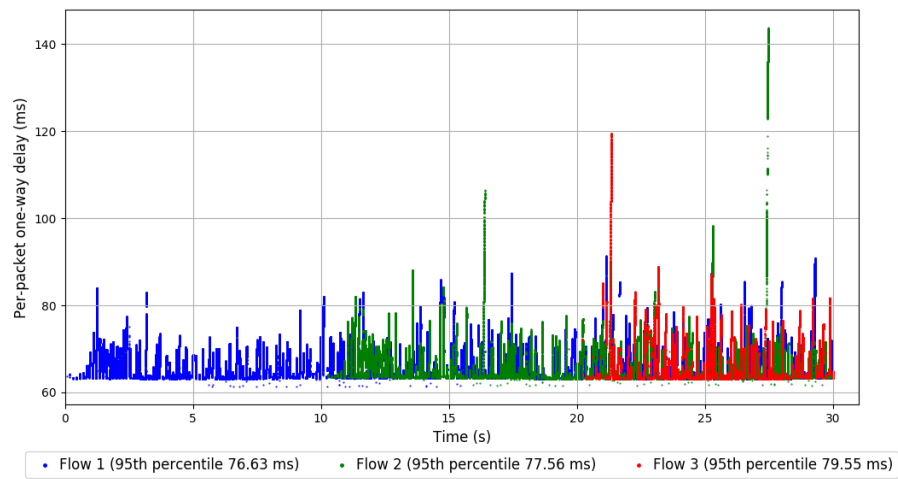
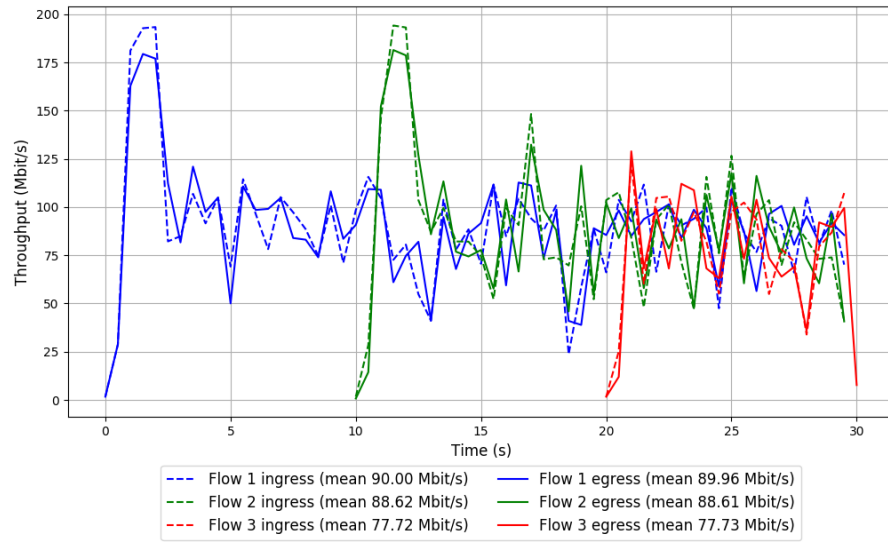
-- Flow 3:

Average throughput: 77.73 Mbit/s

95th percentile per-packet one-way delay: 79.554 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-21 08:56:26

End at: 2017-12-21 08:56:56

Below is generated by plot.py at 2017-12-21 11:17:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.61 Mbit/s

95th percentile per-packet one-way delay: 77.038 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 89.49 Mbit/s

95th percentile per-packet one-way delay: 76.453 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 97.88 Mbit/s

95th percentile per-packet one-way delay: 77.283 ms

Loss rate: 0.45%

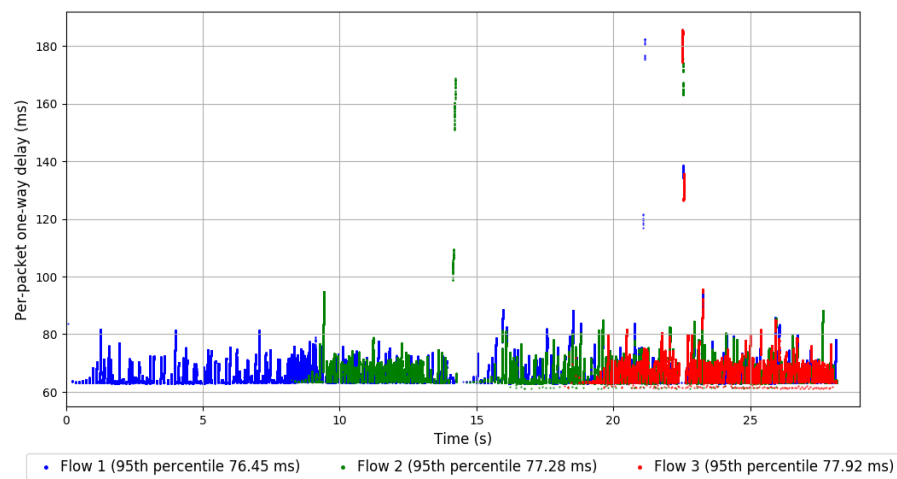
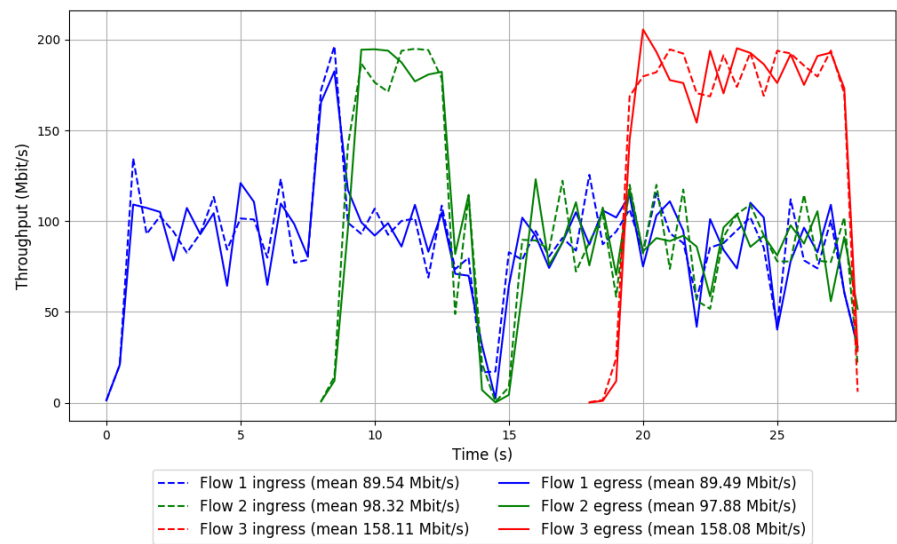
-- Flow 3:

Average throughput: 158.08 Mbit/s

95th percentile per-packet one-way delay: 77.915 ms

Loss rate: 0.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-21 09:10:29

End at: 2017-12-21 09:10:59

Below is generated by plot.py at 2017-12-21 11:18:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.41 Mbit/s

95th percentile per-packet one-way delay: 76.710 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 87.67 Mbit/s

95th percentile per-packet one-way delay: 75.791 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 85.91 Mbit/s

95th percentile per-packet one-way delay: 75.557 ms

Loss rate: 0.00%

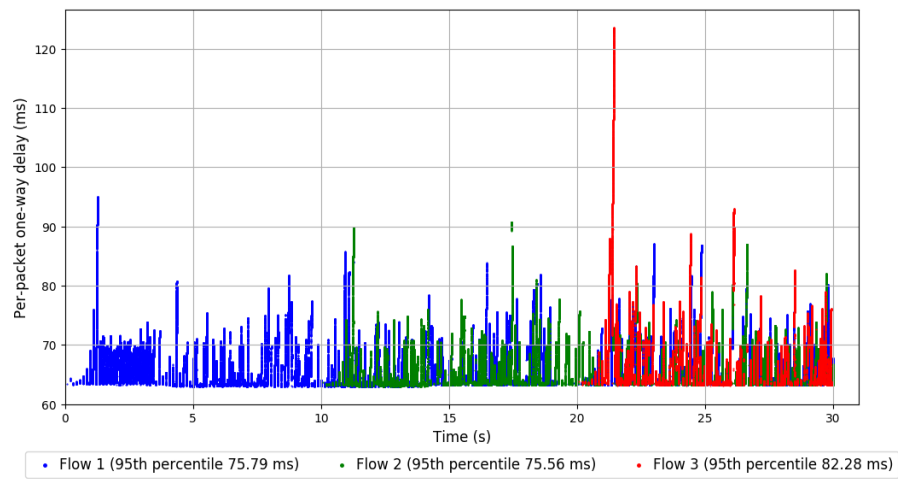
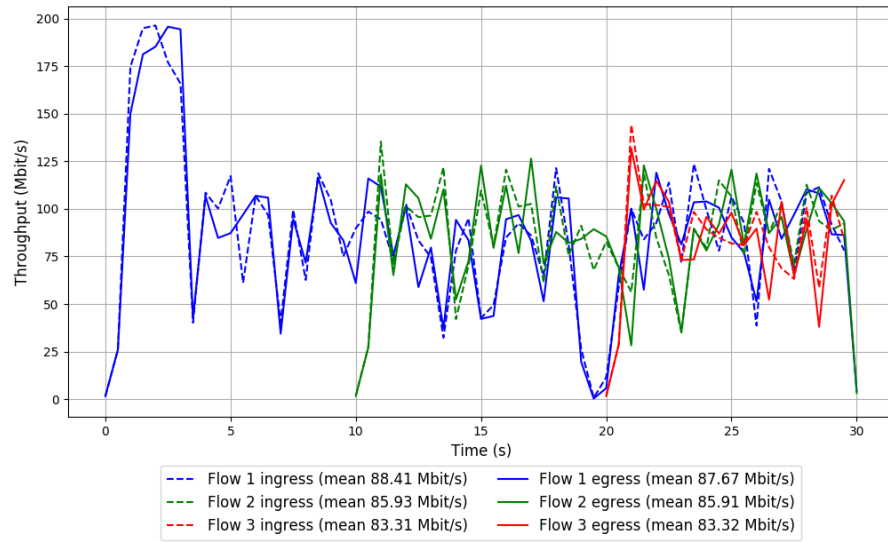
-- Flow 3:

Average throughput: 83.32 Mbit/s

95th percentile per-packet one-way delay: 82.277 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-21 09:24:38

End at: 2017-12-21 09:25:08

Below is generated by plot.py at 2017-12-21 11:19:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.84 Mbit/s

95th percentile per-packet one-way delay: 78.946 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 93.05 Mbit/s

95th percentile per-packet one-way delay: 77.854 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 96.61 Mbit/s

95th percentile per-packet one-way delay: 79.129 ms

Loss rate: 0.01%

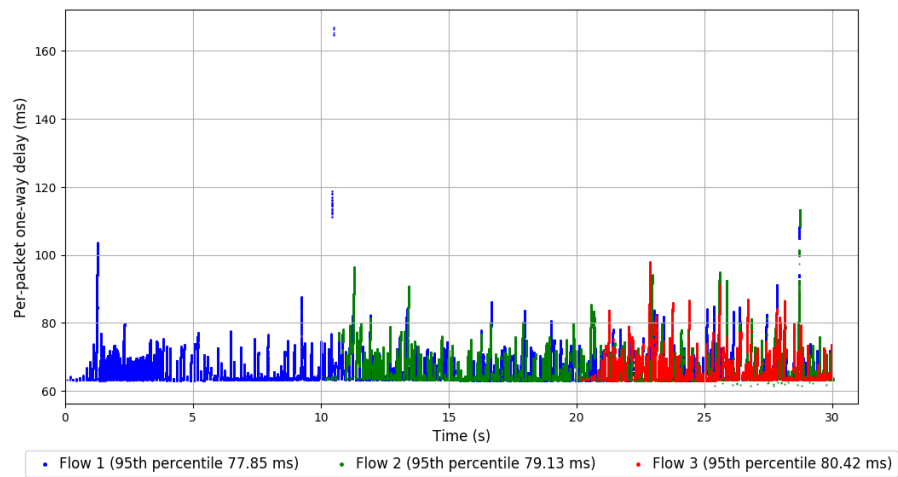
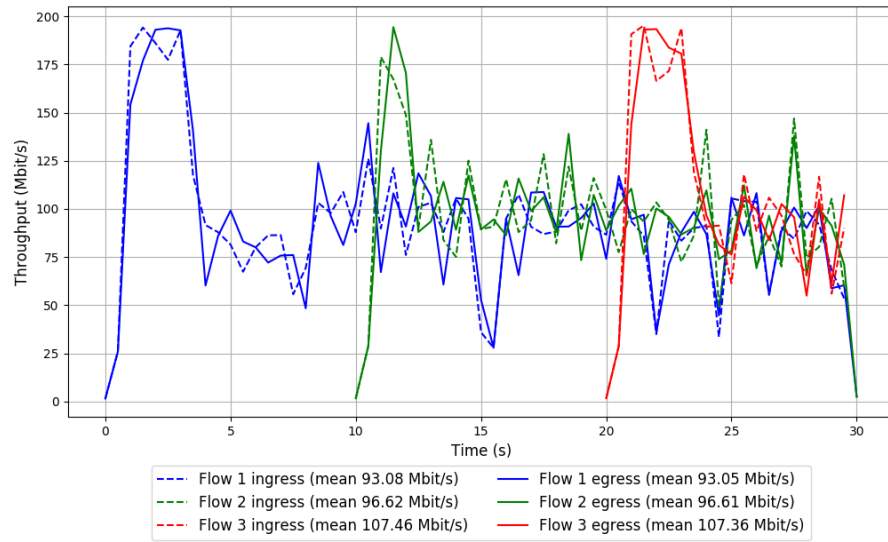
-- Flow 3:

Average throughput: 107.36 Mbit/s

95th percentile per-packet one-way delay: 80.424 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-21 07:14:52

End at: 2017-12-21 07:15:22

Below is generated by plot.py at 2017-12-21 11:19:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.45 Mbit/s

95th percentile per-packet one-way delay: 68.365 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 121.65 Mbit/s

95th percentile per-packet one-way delay: 68.769 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 74.70 Mbit/s

95th percentile per-packet one-way delay: 65.182 ms

Loss rate: 0.03%

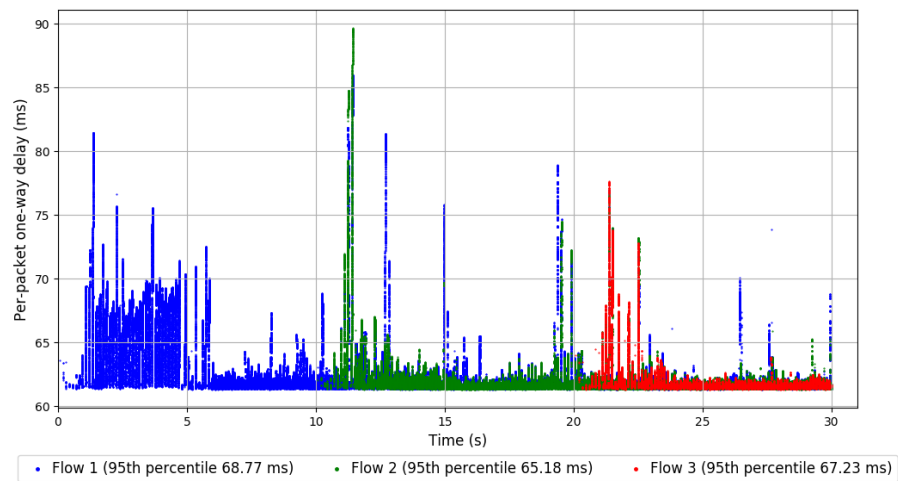
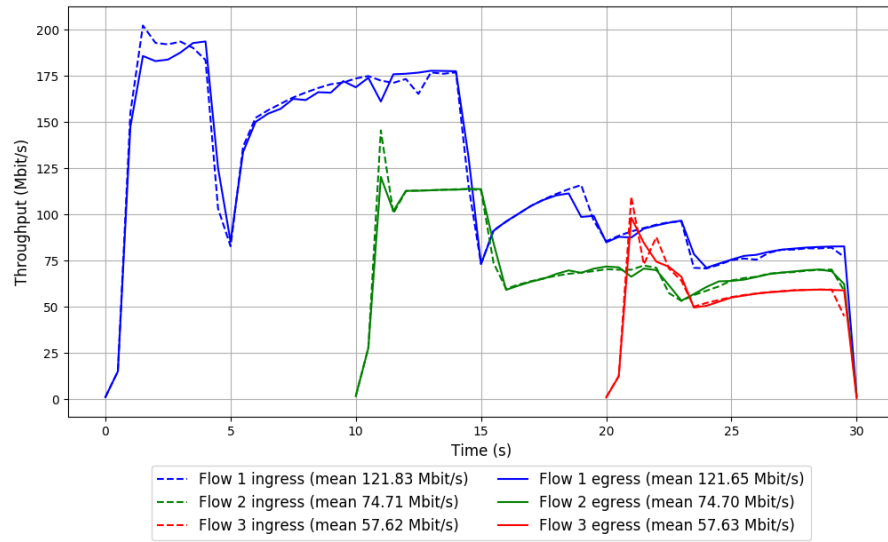
-- Flow 3:

Average throughput: 57.63 Mbit/s

95th percentile per-packet one-way delay: 67.234 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-21 07:29:05

End at: 2017-12-21 07:29:35

Below is generated by plot.py at 2017-12-21 11:19:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.14 Mbit/s

95th percentile per-packet one-way delay: 69.772 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 118.65 Mbit/s

95th percentile per-packet one-way delay: 67.852 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.94 Mbit/s

95th percentile per-packet one-way delay: 68.757 ms

Loss rate: 0.03%

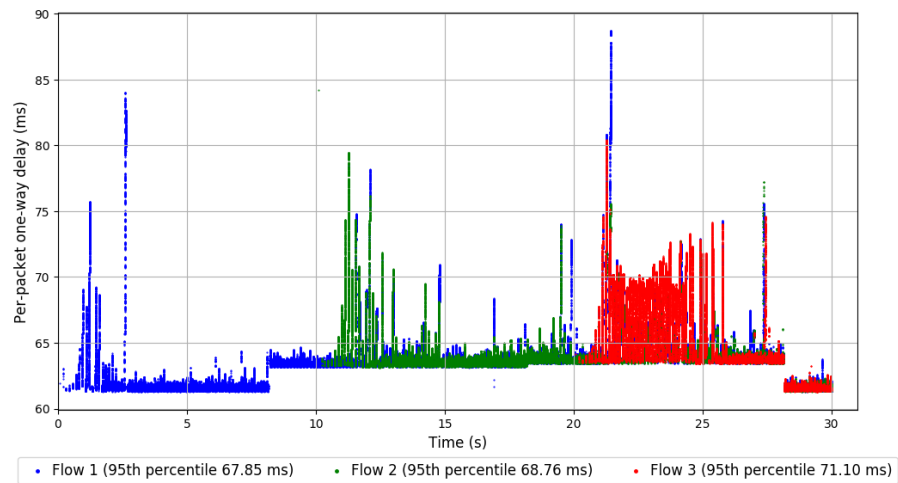
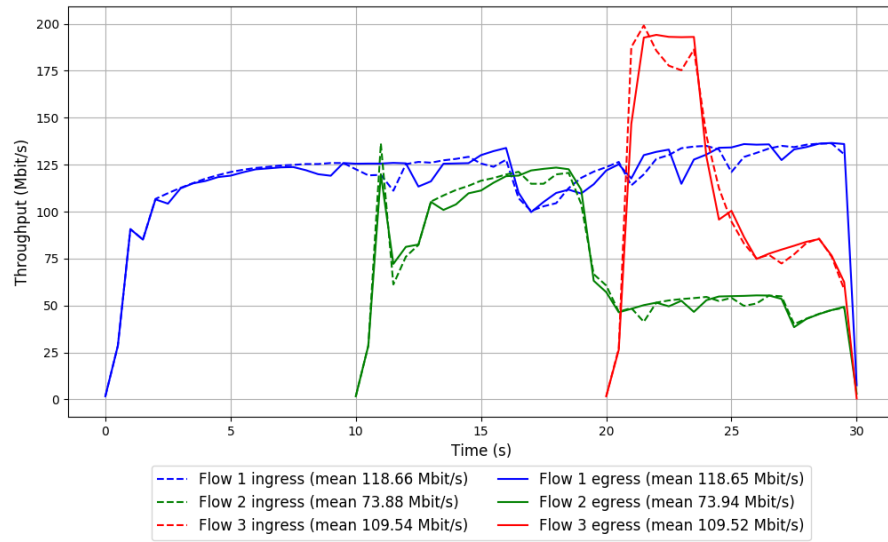
-- Flow 3:

Average throughput: 109.52 Mbit/s

95th percentile per-packet one-way delay: 71.098 ms

Loss rate: 0.05%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-21 07:42:53

End at: 2017-12-21 07:43:23

Below is generated by plot.py at 2017-12-21 11:20:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 230.86 Mbit/s

95th percentile per-packet one-way delay: 71.740 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 96.93 Mbit/s

95th percentile per-packet one-way delay: 70.994 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 115.96 Mbit/s

95th percentile per-packet one-way delay: 70.247 ms

Loss rate: 0.01%

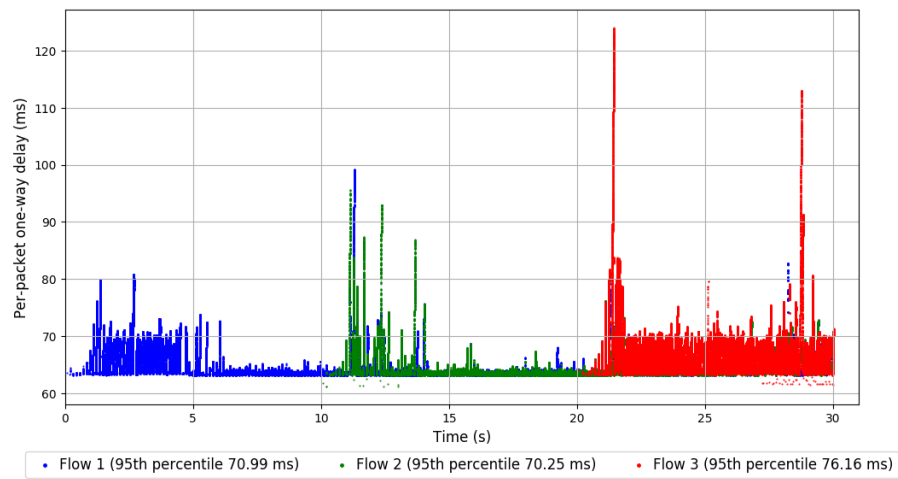
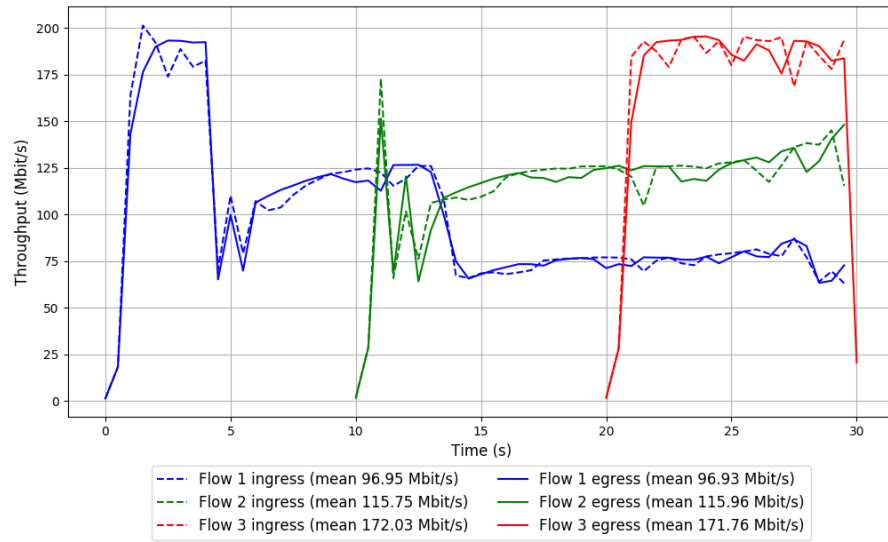
-- Flow 3:

Average throughput: 171.76 Mbit/s

95th percentile per-packet one-way delay: 76.164 ms

Loss rate: 0.11%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-21 07:56:56

End at: 2017-12-21 07:57:26

Below is generated by plot.py at 2017-12-21 11:20:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.61 Mbit/s

95th percentile per-packet one-way delay: 71.073 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 124.99 Mbit/s

95th percentile per-packet one-way delay: 70.656 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 66.48 Mbit/s

95th percentile per-packet one-way delay: 71.696 ms

Loss rate: 0.54%

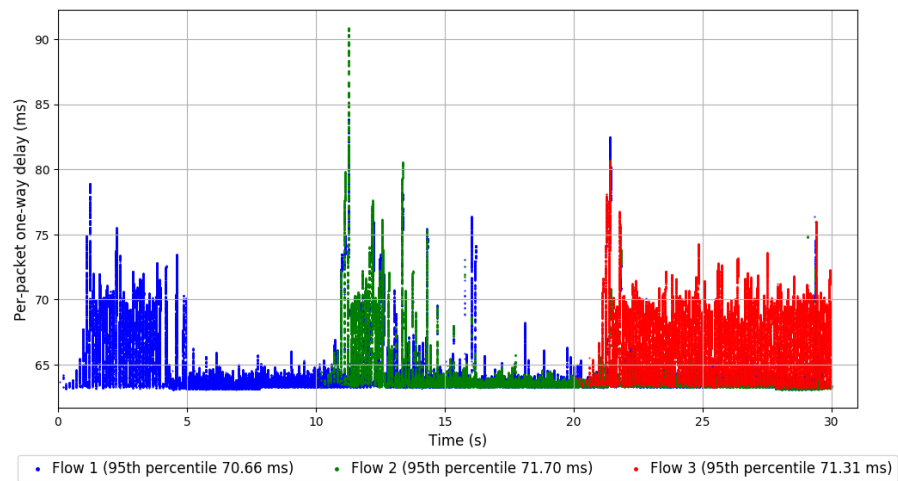
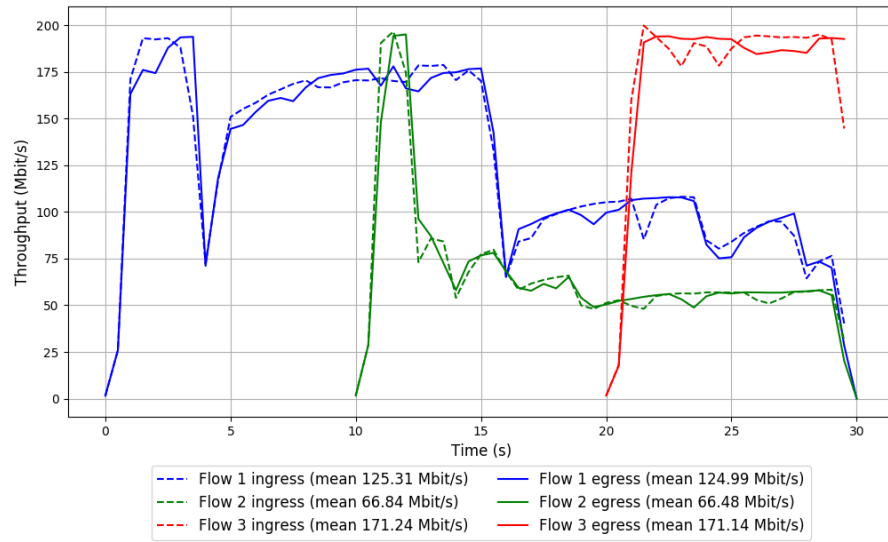
-- Flow 3:

Average throughput: 171.14 Mbit/s

95th percentile per-packet one-way delay: 71.314 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-21 08:10:52

End at: 2017-12-21 08:11:22

Below is generated by plot.py at 2017-12-21 11:20:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.16 Mbit/s

95th percentile per-packet one-way delay: 71.198 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 90.11 Mbit/s

95th percentile per-packet one-way delay: 70.394 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 89.72 Mbit/s

95th percentile per-packet one-way delay: 72.482 ms

Loss rate: 0.02%

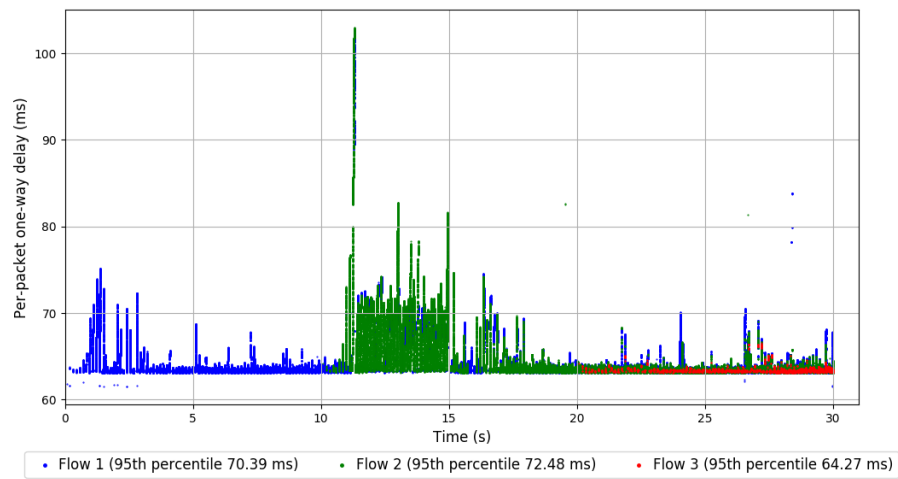
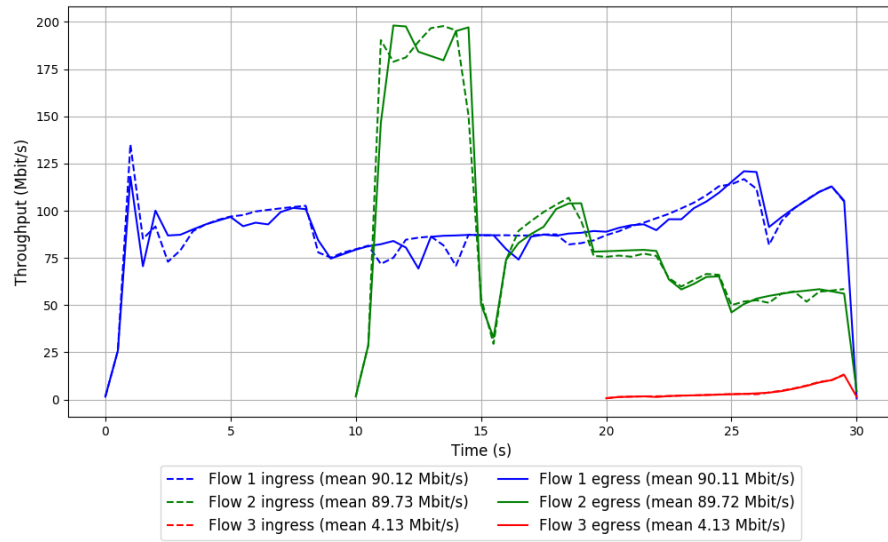
-- Flow 3:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 64.268 ms

Loss rate: 0.06%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-21 08:24:57

End at: 2017-12-21 08:25:27

Below is generated by plot.py at 2017-12-21 11:20:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.56 Mbit/s

95th percentile per-packet one-way delay: 71.815 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 25.28 Mbit/s

95th percentile per-packet one-way delay: 64.712 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 67.17 Mbit/s

95th percentile per-packet one-way delay: 73.982 ms

Loss rate: 0.01%

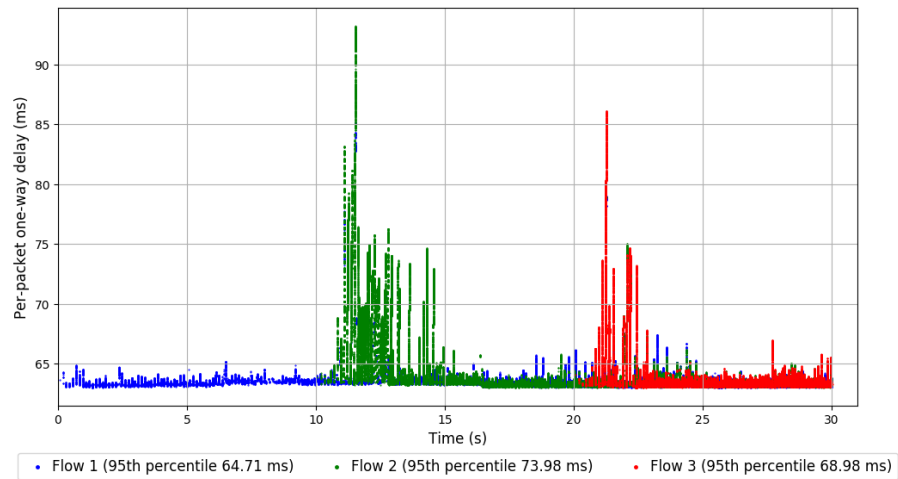
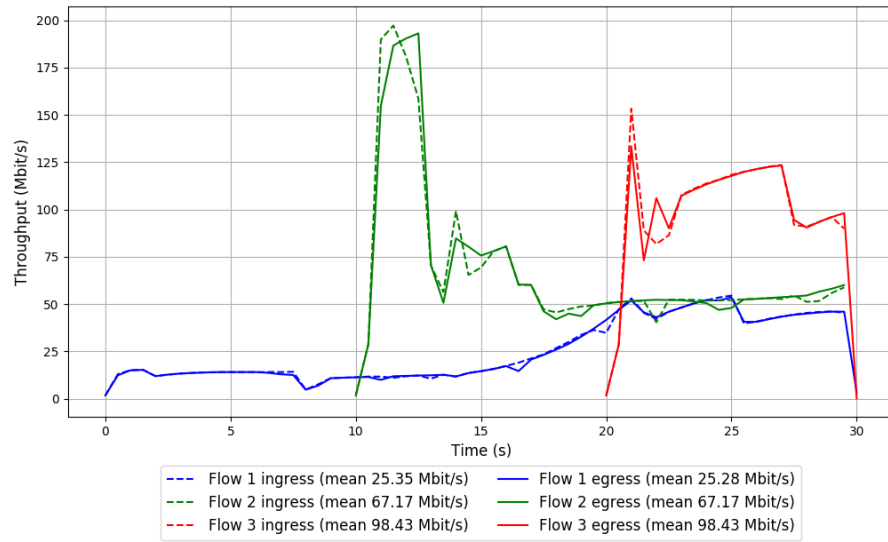
-- Flow 3:

Average throughput: 98.43 Mbit/s

95th percentile per-packet one-way delay: 68.981 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-21 08:39:03

End at: 2017-12-21 08:39:33

Below is generated by plot.py at 2017-12-21 11:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.72 Mbit/s

95th percentile per-packet one-way delay: 70.754 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 60.86 Mbit/s

95th percentile per-packet one-way delay: 69.548 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 95.06 Mbit/s

95th percentile per-packet one-way delay: 71.626 ms

Loss rate: 0.03%

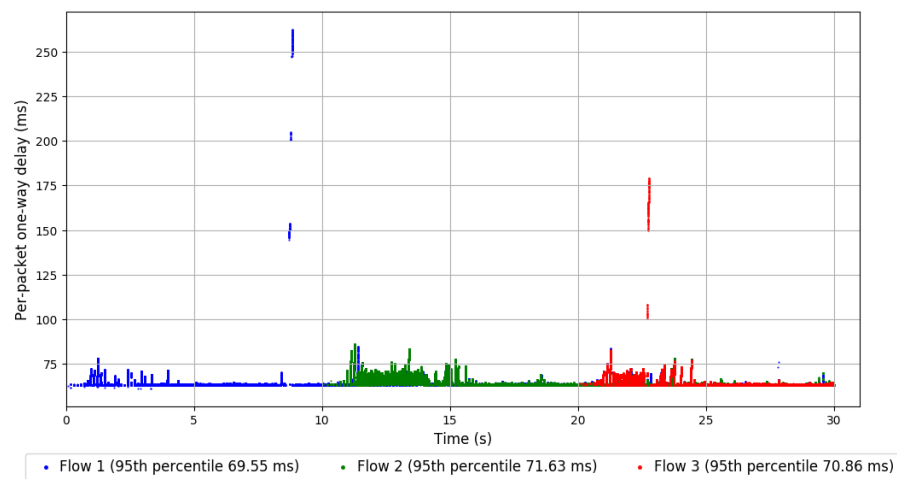
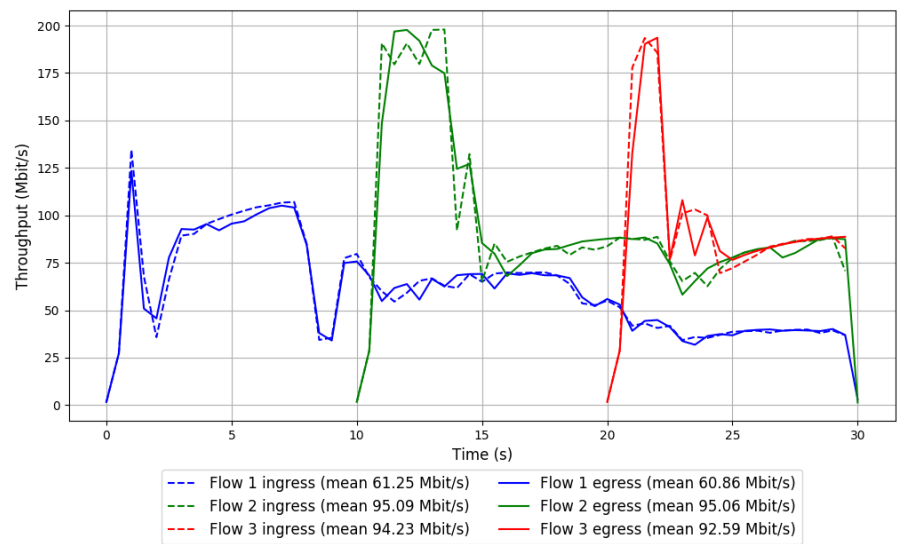
-- Flow 3:

Average throughput: 92.59 Mbit/s

95th percentile per-packet one-way delay: 70.857 ms

Loss rate: 1.76%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-21 08:52:58

End at: 2017-12-21 08:53:28

Below is generated by plot.py at 2017-12-21 11:22:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.56 Mbit/s

95th percentile per-packet one-way delay: 71.720 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 99.45 Mbit/s

95th percentile per-packet one-way delay: 70.687 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 84.97 Mbit/s

95th percentile per-packet one-way delay: 74.364 ms

Loss rate: 0.58%

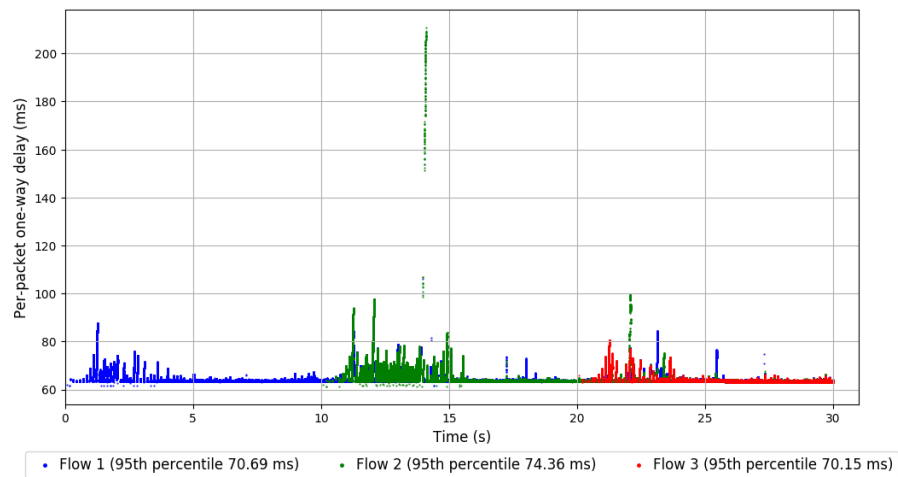
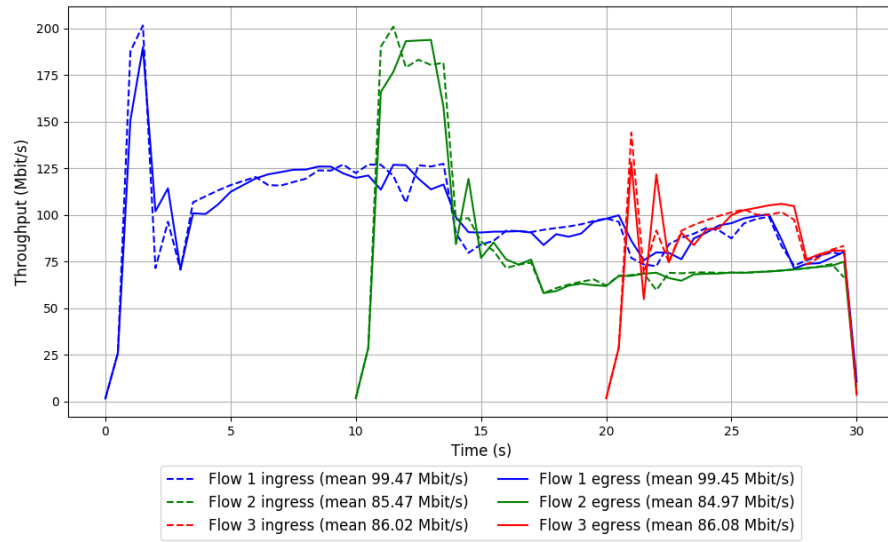
-- Flow 3:

Average throughput: 86.08 Mbit/s

95th percentile per-packet one-way delay: 70.148 ms

Loss rate: 0.01%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-21 09:07:05

End at: 2017-12-21 09:07:35

Below is generated by plot.py at 2017-12-21 11:22:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.82 Mbit/s

95th percentile per-packet one-way delay: 71.322 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 74.86 Mbit/s

95th percentile per-packet one-way delay: 68.292 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 85.09 Mbit/s

95th percentile per-packet one-way delay: 73.259 ms

Loss rate: 0.03%

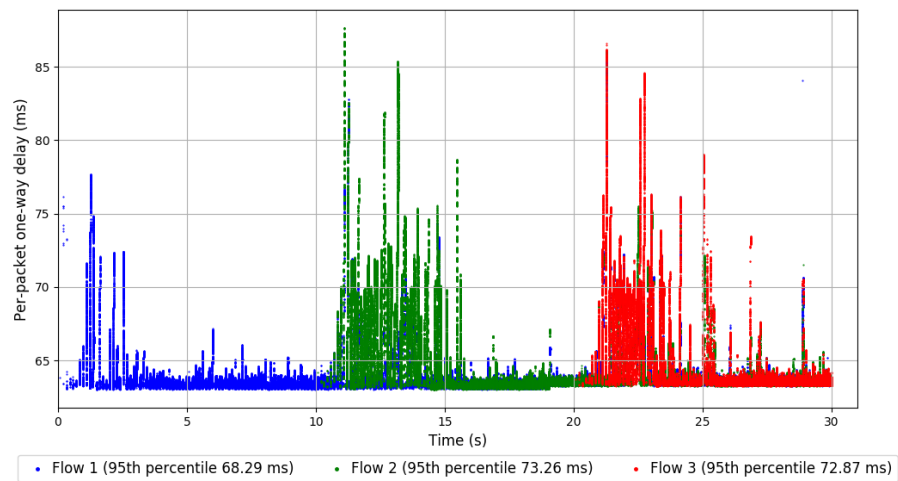
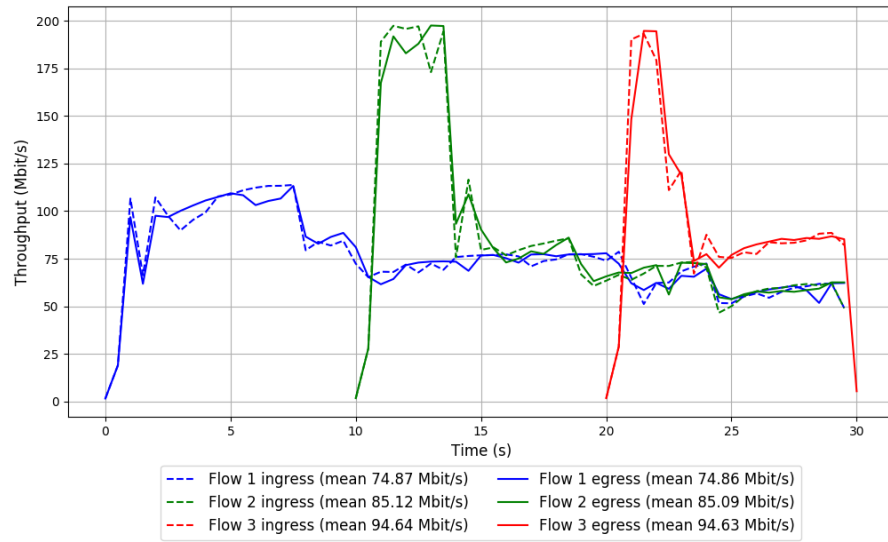
-- Flow 3:

Average throughput: 94.63 Mbit/s

95th percentile per-packet one-way delay: 72.868 ms

Loss rate: 0.01%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

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

End at: 2017-12-21 09:21:42

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.94 Mbit/s

95th percentile per-packet one-way delay: 73.068 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 83.99 Mbit/s

95th percentile per-packet one-way delay: 70.910 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 80.18 Mbit/s

95th percentile per-packet one-way delay: 73.694 ms

Loss rate: 0.02%

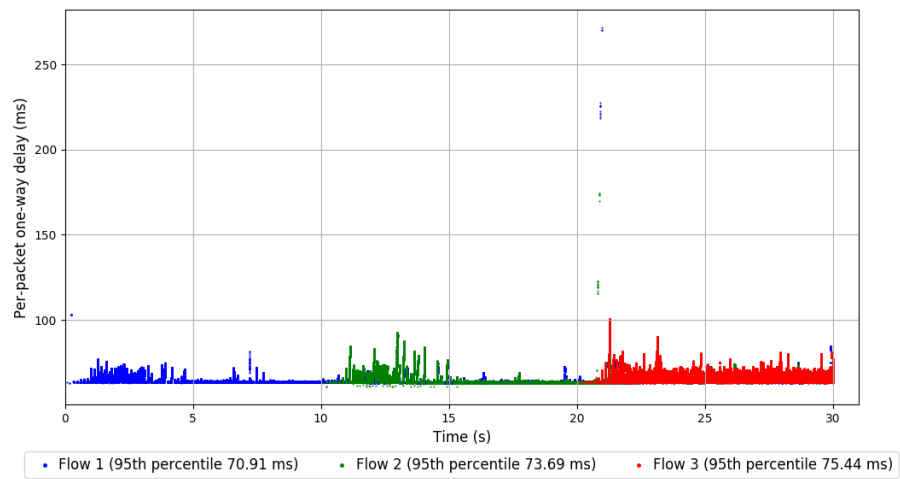
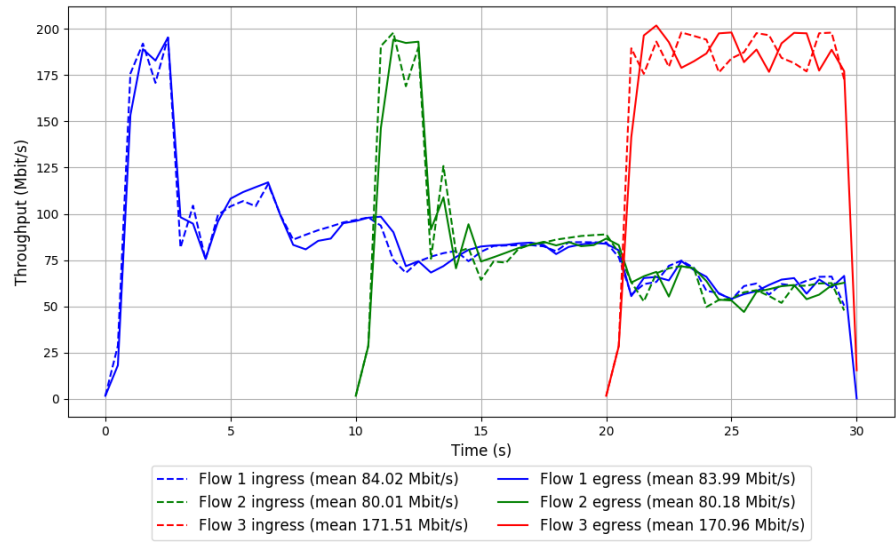
-- Flow 3:

Average throughput: 170.96 Mbit/s

95th percentile per-packet one-way delay: 75.436 ms

Loss rate: 0.28%

Run 10: Report of TCP Cubic — Data Link

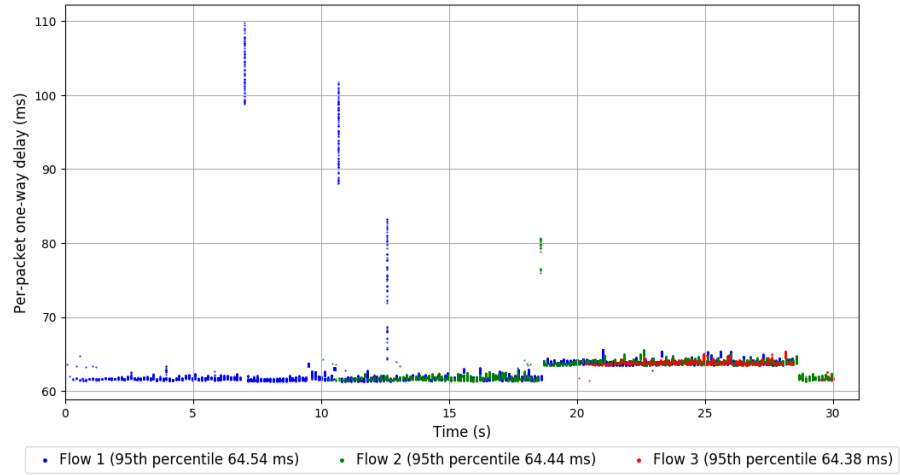
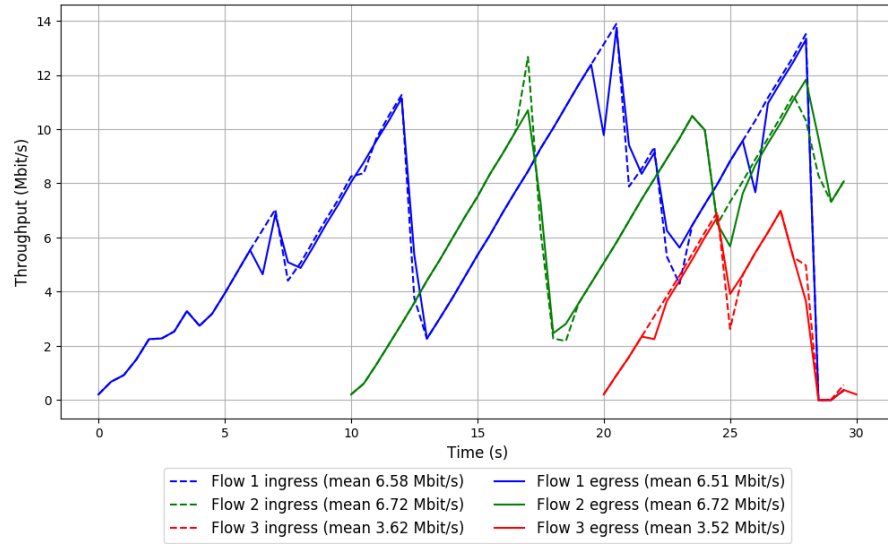


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-21 07:17:35
End at: 2017-12-21 07:18:05

# Below is generated by plot.py at 2017-12-21 11:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.12 Mbit/s
95th percentile per-packet one-way delay: 64.460 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 64.540 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 64.436 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 64.376 ms
Loss rate: 2.55%
```


Run 1: Report of LEDBAT — Data Link

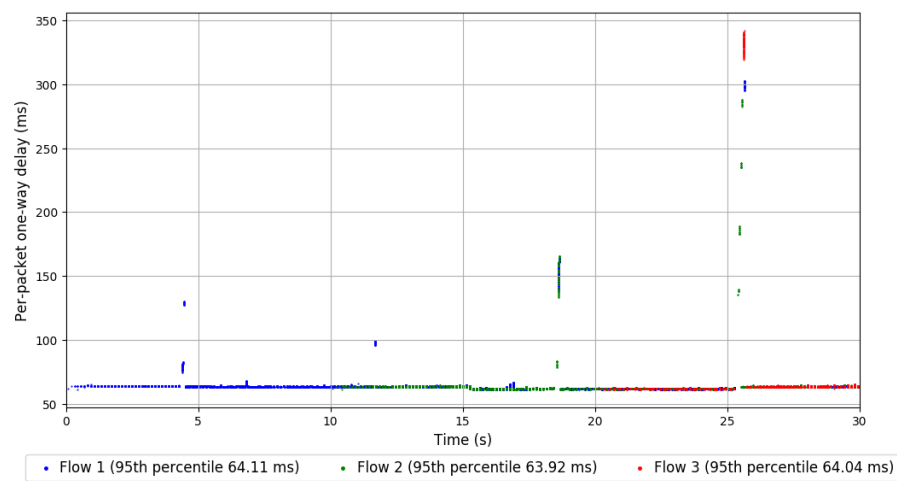
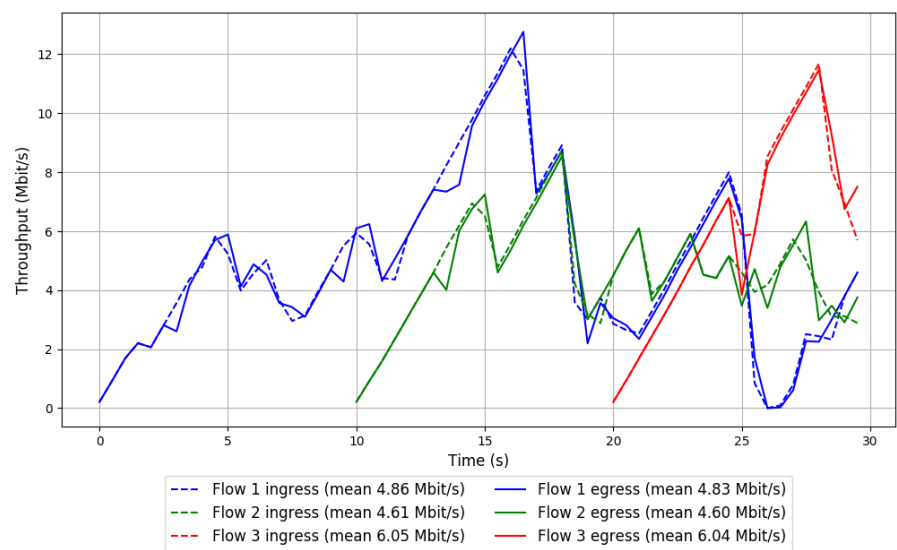


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-21 07:31:48
End at: 2017-12-21 07:32:18

# Below is generated by plot.py at 2017-12-21 11:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.88 Mbit/s
95th percentile per-packet one-way delay: 64.056 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 64.107 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 63.924 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 64.043 ms
Loss rate: 0.18%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-21 07:45:40

End at: 2017-12-21 07:46:11

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.63 Mbit/s

95th percentile per-packet one-way delay: 64.325 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 8.45 Mbit/s

95th percentile per-packet one-way delay: 64.326 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 9.87 Mbit/s

95th percentile per-packet one-way delay: 64.342 ms

Loss rate: 0.11%

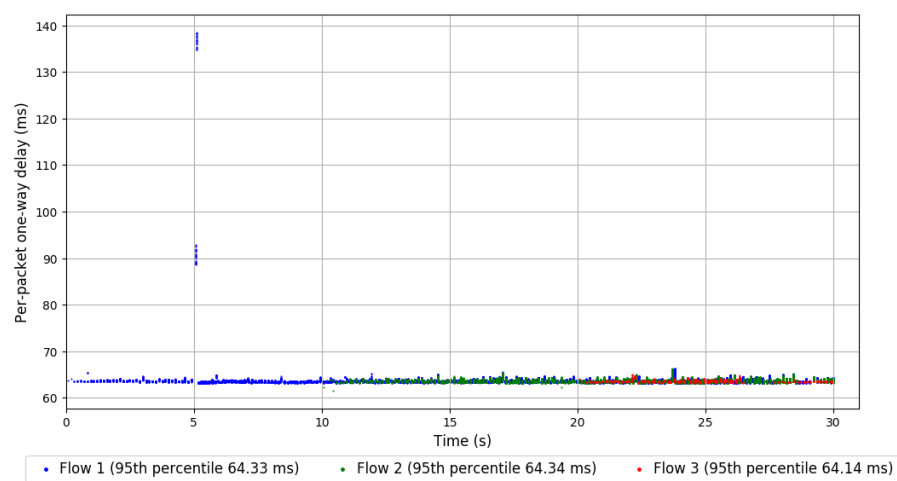
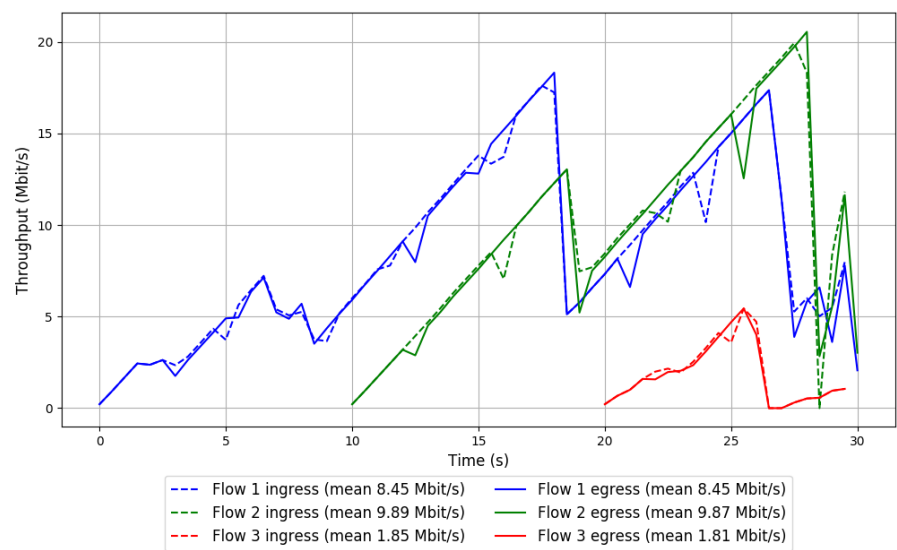
-- Flow 3:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 64.144 ms

Loss rate: 1.92%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-21 07:59:32

End at: 2017-12-21 08:00:02

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.31 Mbit/s

95th percentile per-packet one-way delay: 64.378 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 64.428 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 4.89 Mbit/s

95th percentile per-packet one-way delay: 64.481 ms

Loss rate: 1.44%

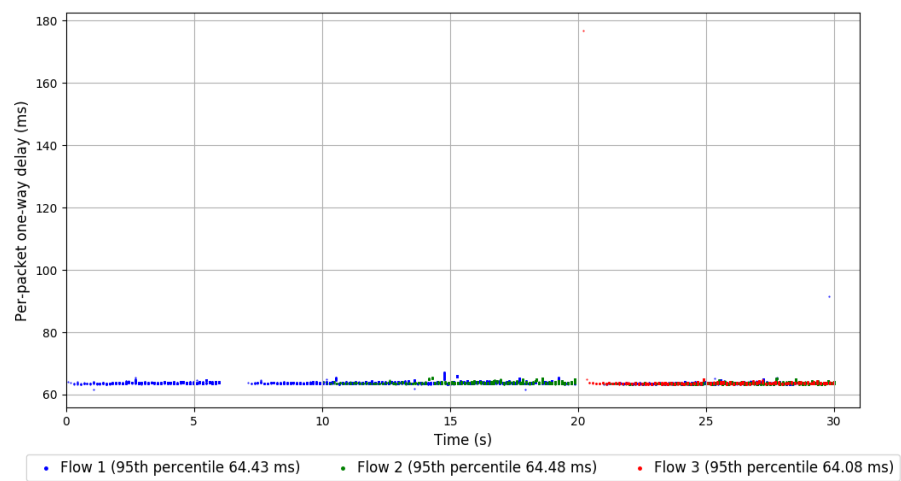
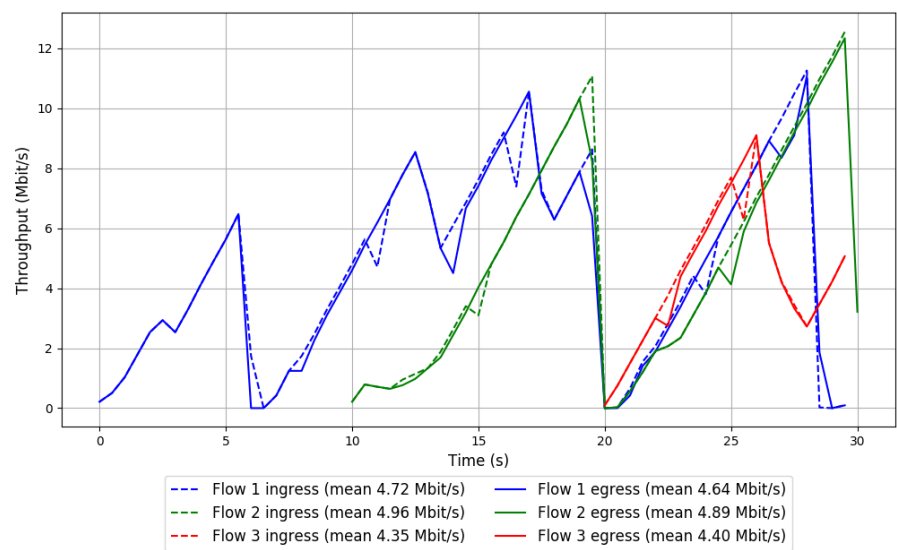
-- Flow 3:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 64.077 ms

Loss rate: 0.16%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-21 08:13:29

End at: 2017-12-21 08:13:59

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.36 Mbit/s

95th percentile per-packet one-way delay: 64.399 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 64.535 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 64.292 ms

Loss rate: 0.01%

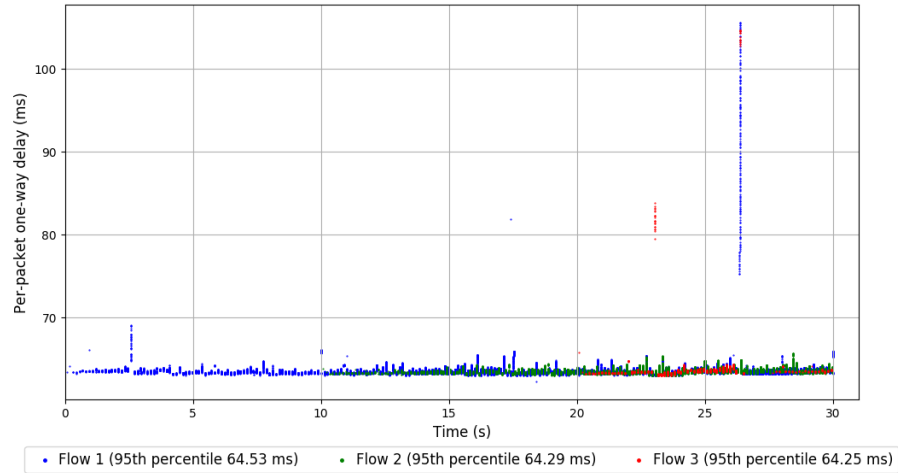
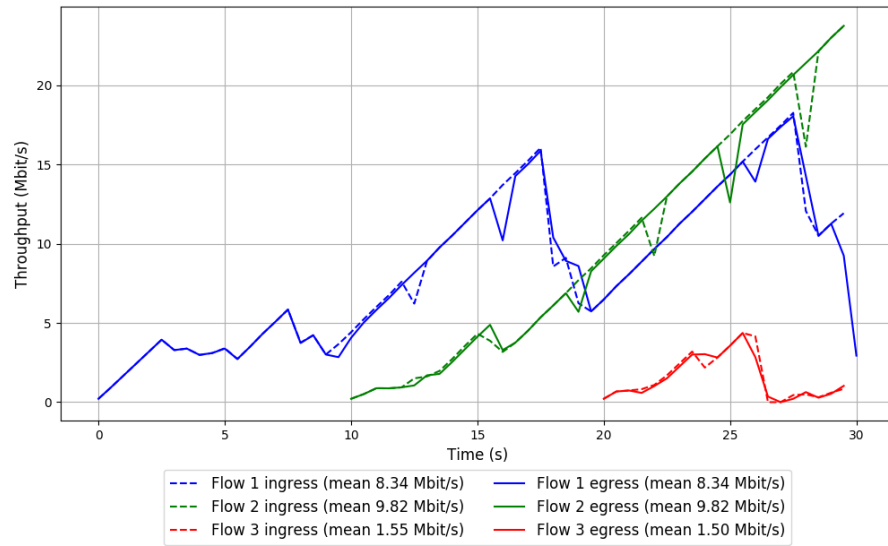
-- Flow 3:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 64.252 ms

Loss rate: 3.22%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-21 08:27:34

End at: 2017-12-21 08:28:04

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.08 Mbit/s

95th percentile per-packet one-way delay: 64.330 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 64.302 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 8.07 Mbit/s

95th percentile per-packet one-way delay: 64.445 ms

Loss rate: 0.04%

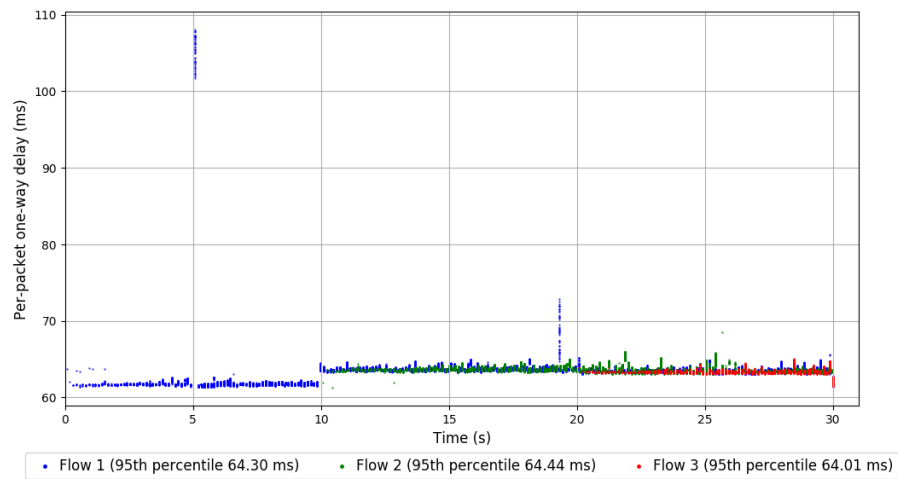
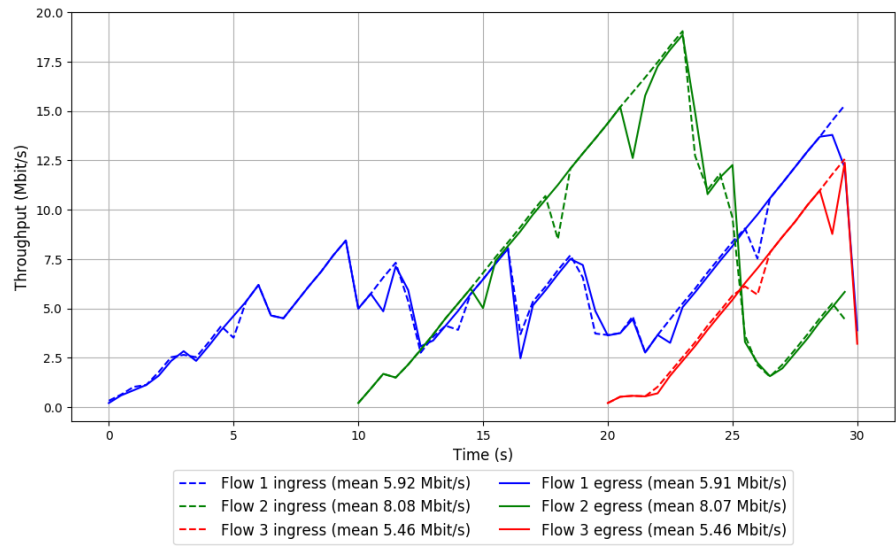
-- Flow 3:

Average throughput: 5.46 Mbit/s

95th percentile per-packet one-way delay: 64.006 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-21 08:41:43

End at: 2017-12-21 08:42:13

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.50 Mbit/s

95th percentile per-packet one-way delay: 64.314 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 8.96 Mbit/s

95th percentile per-packet one-way delay: 64.510 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.002 ms

Loss rate: 0.09%

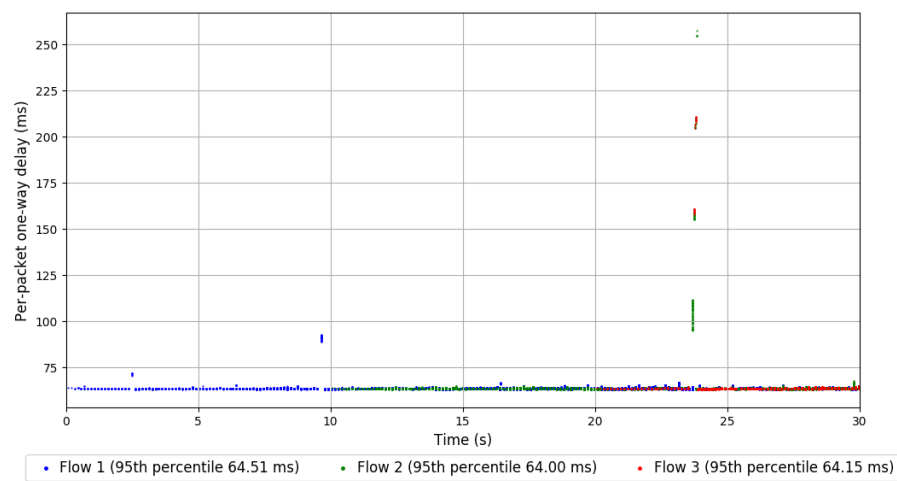
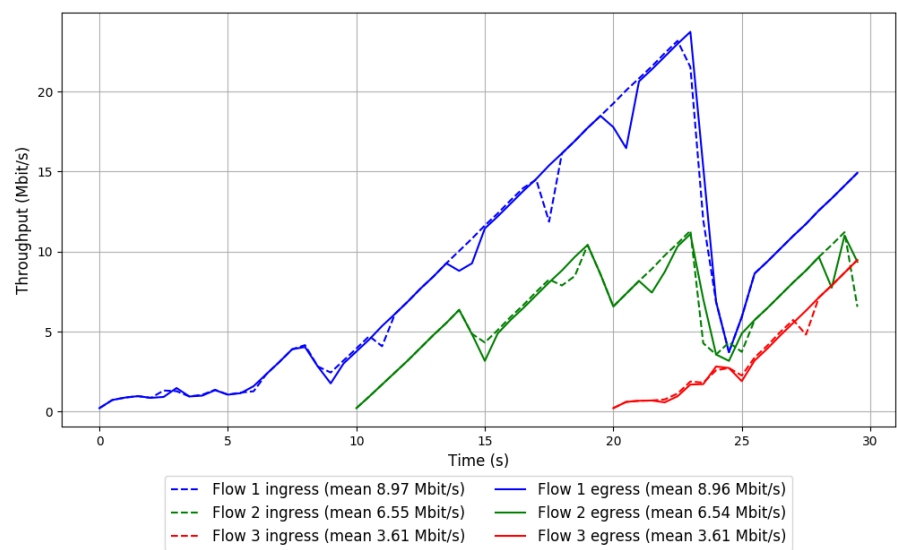
-- Flow 3:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 64.146 ms

Loss rate: 0.03%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-21 08:55:43

End at: 2017-12-21 08:56:13

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.16 Mbit/s

95th percentile per-packet one-way delay: 64.392 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 6.97 Mbit/s

95th percentile per-packet one-way delay: 64.380 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 9.66 Mbit/s

95th percentile per-packet one-way delay: 64.423 ms

Loss rate: 0.01%

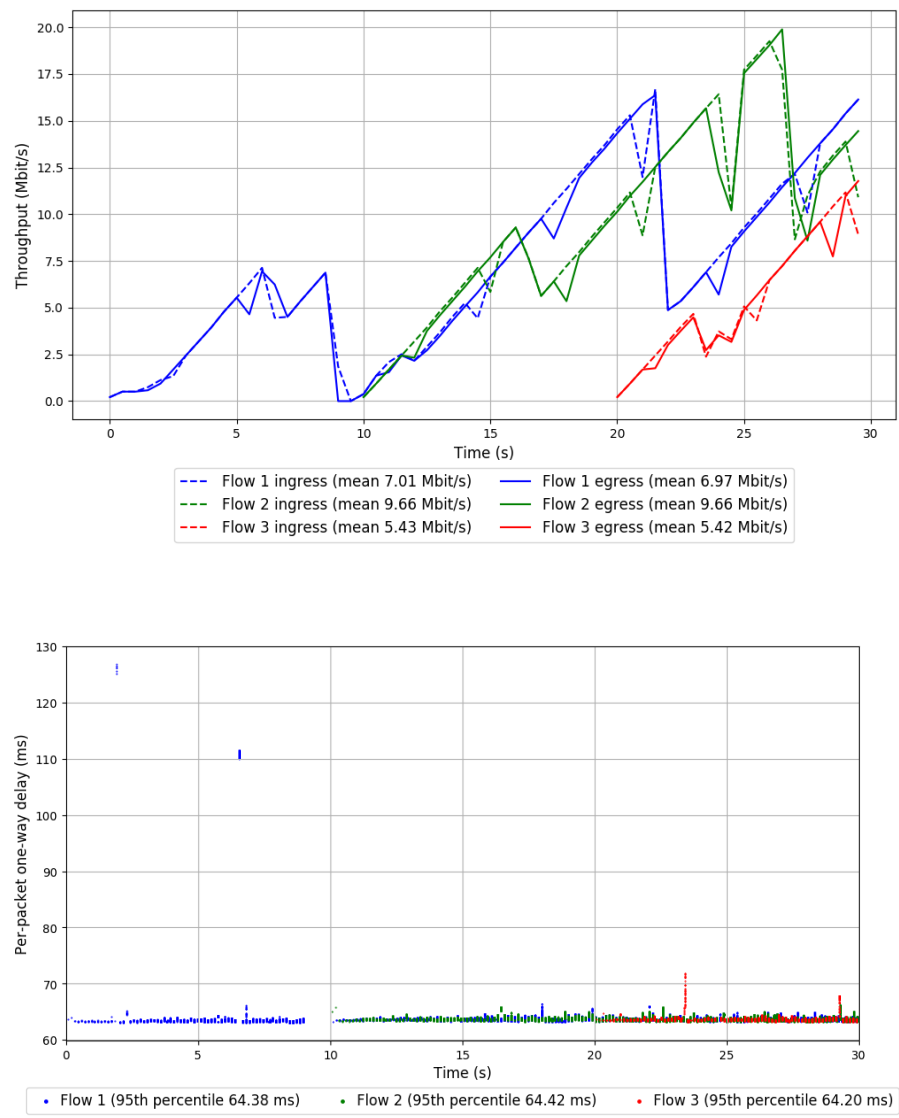
-- Flow 3:

Average throughput: 5.42 Mbit/s

95th percentile per-packet one-way delay: 64.199 ms

Loss rate: 0.11%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-21 09:09:47

End at: 2017-12-21 09:10:17

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.65 Mbit/s

95th percentile per-packet one-way delay: 64.521 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 9.18 Mbit/s

95th percentile per-packet one-way delay: 64.539 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 14.85 Mbit/s

95th percentile per-packet one-way delay: 64.559 ms

Loss rate: 0.00%

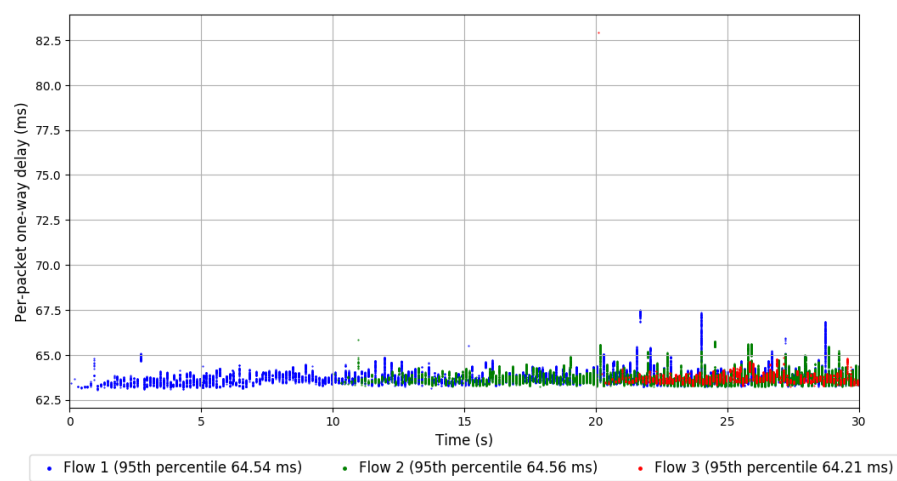
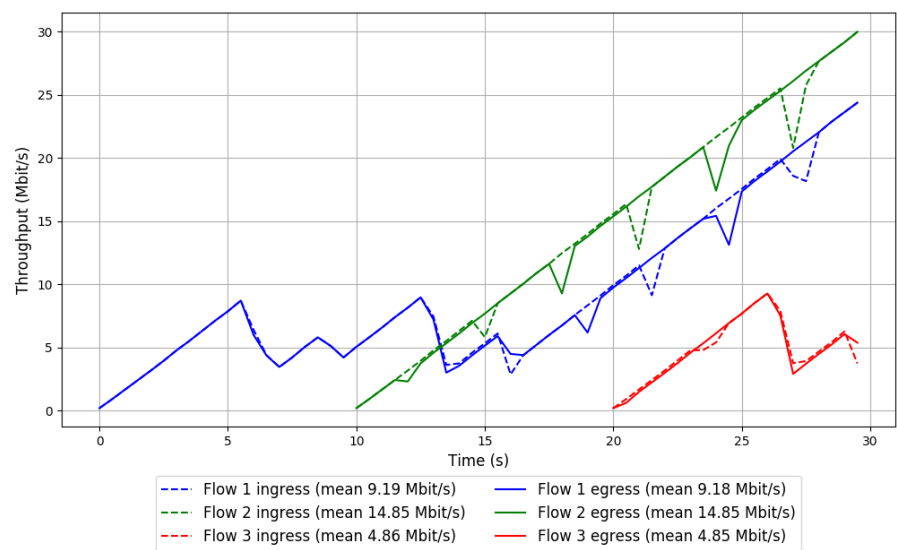
-- Flow 3:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 64.206 ms

Loss rate: 0.37%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-21 09:23:56

End at: 2017-12-21 09:24:26

Below is generated by plot.py at 2017-12-21 11:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.42 Mbit/s

95th percentile per-packet one-way delay: 64.334 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 10.66 Mbit/s

95th percentile per-packet one-way delay: 64.321 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.85 Mbit/s

95th percentile per-packet one-way delay: 64.372 ms

Loss rate: 0.00%

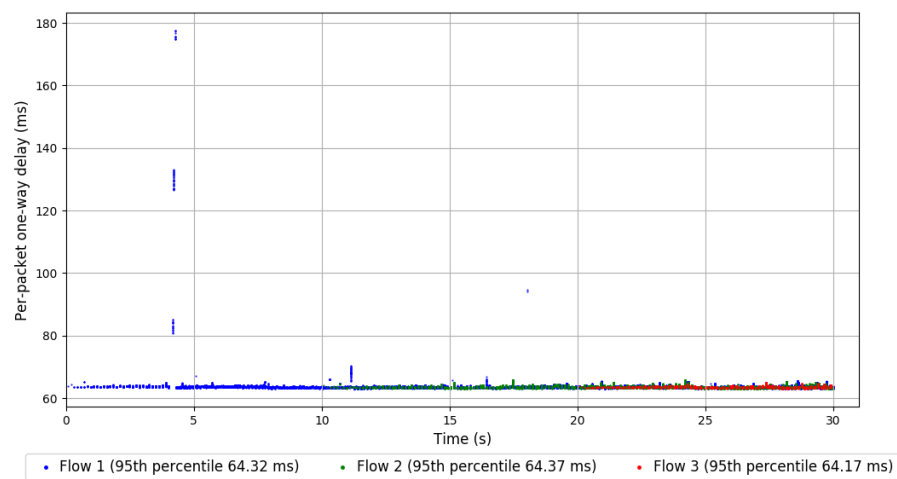
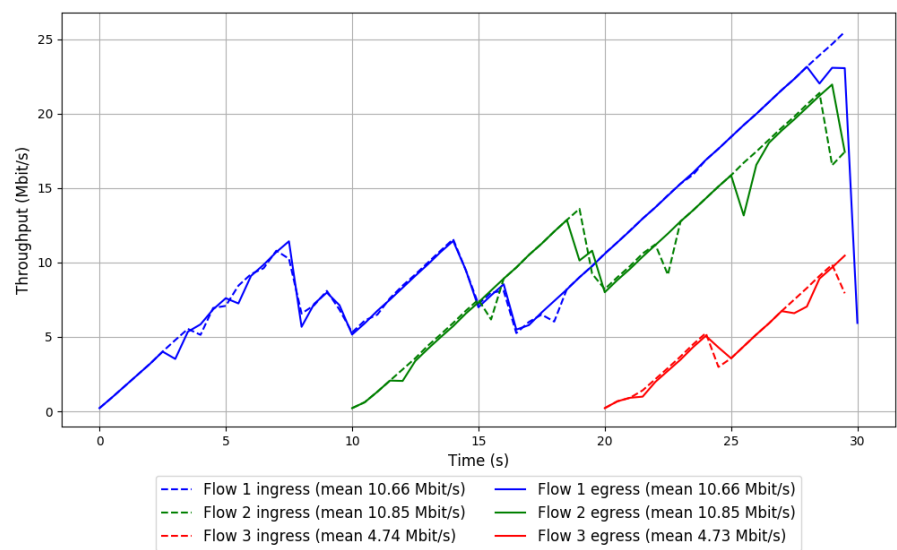
-- Flow 3:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 64.173 ms

Loss rate: 0.08%

Run 10: Report of LEDBAT — Data Link

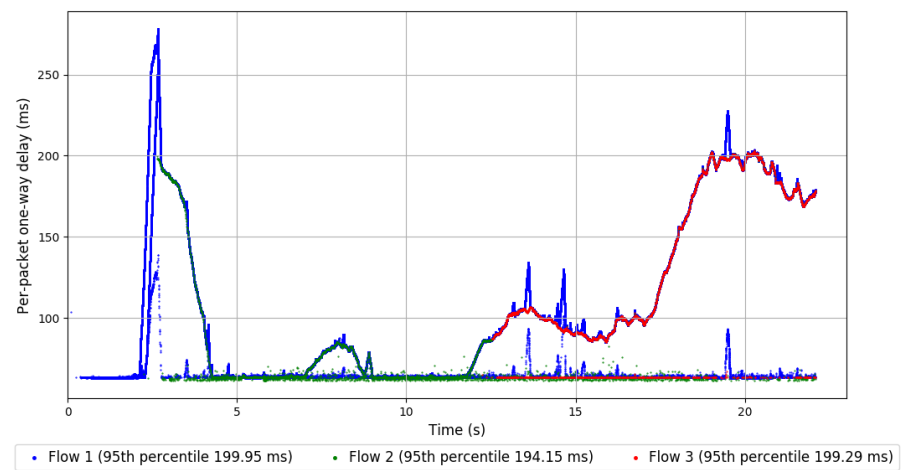
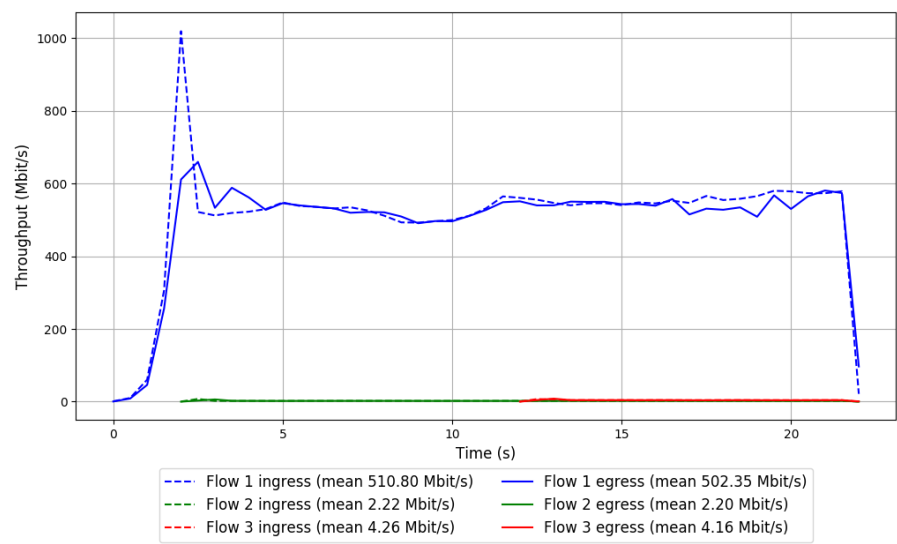


Run 1: Statistics of PCC

Start at: 2017-12-21 07:21:57

End at: 2017-12-21 07:22:27

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-21 07:35:44

End at: 2017-12-21 07:36:14

Below is generated by plot.py at 2017-12-21 11:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 498.74 Mbit/s

95th percentile per-packet one-way delay: 206.406 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 444.55 Mbit/s

95th percentile per-packet one-way delay: 207.147 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 73.74 Mbit/s

95th percentile per-packet one-way delay: 195.436 ms

Loss rate: 0.88%

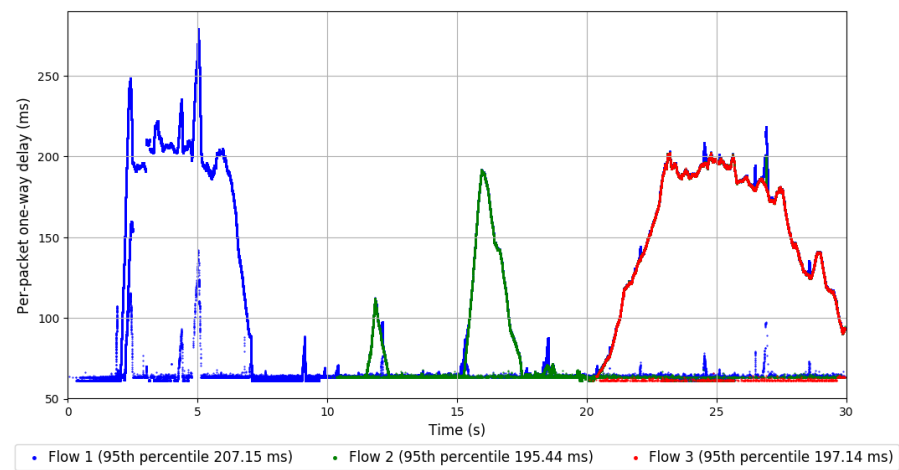
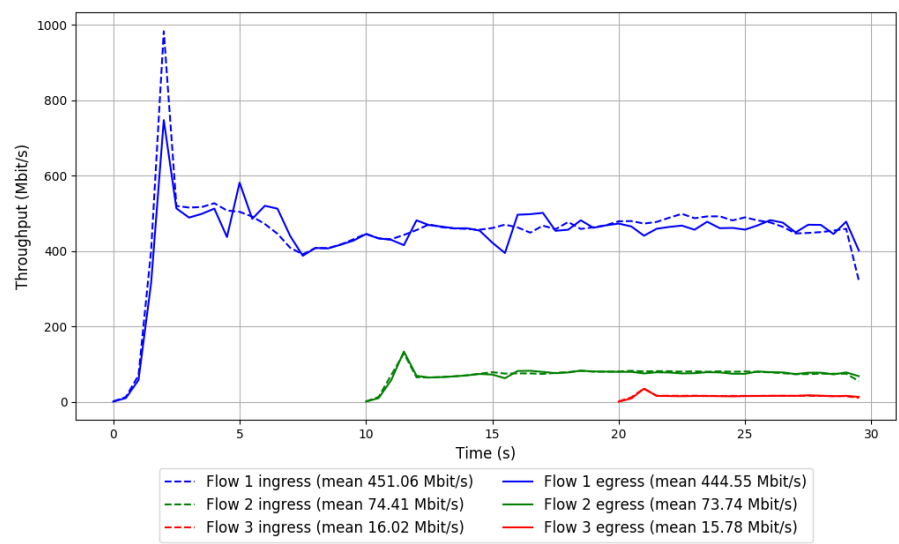
-- Flow 3:

Average throughput: 15.78 Mbit/s

95th percentile per-packet one-way delay: 197.139 ms

Loss rate: 1.48%

Run 2: Report of PCC — Data Link

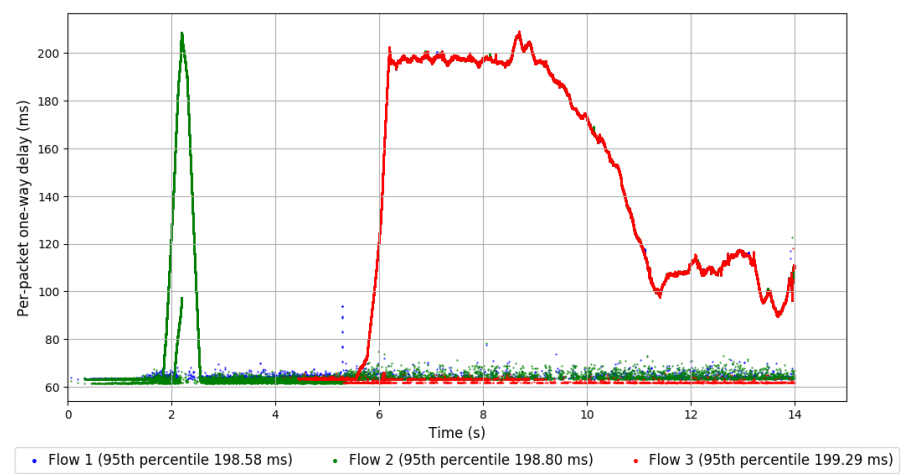
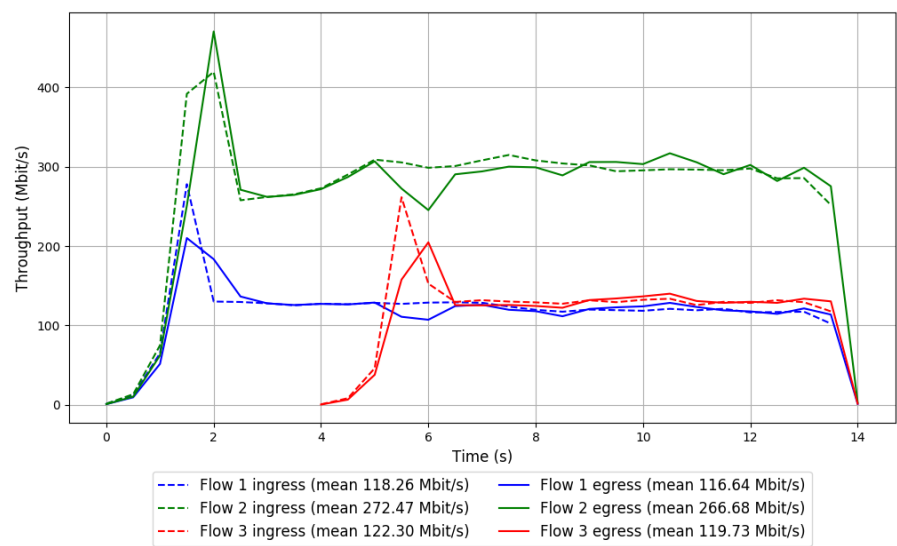


Run 3: Statistics of PCC

Start at: 2017-12-21 07:49:52

End at: 2017-12-21 07:50:22

Run 3: Report of PCC — Data Link

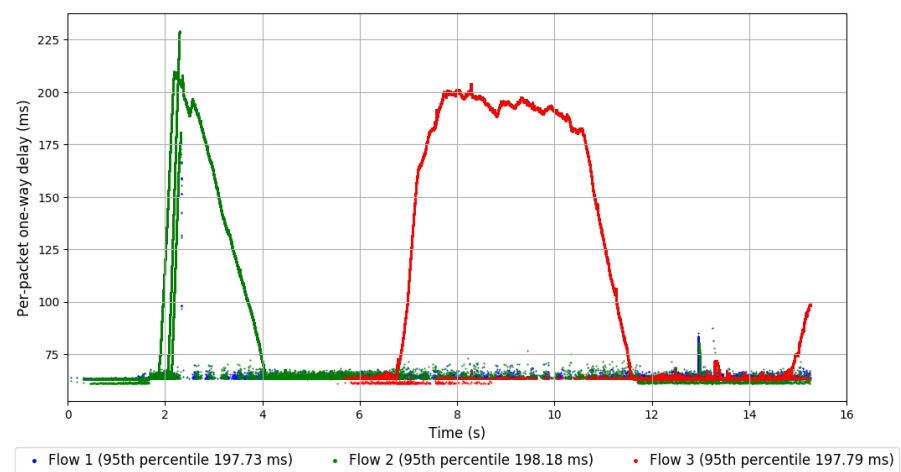
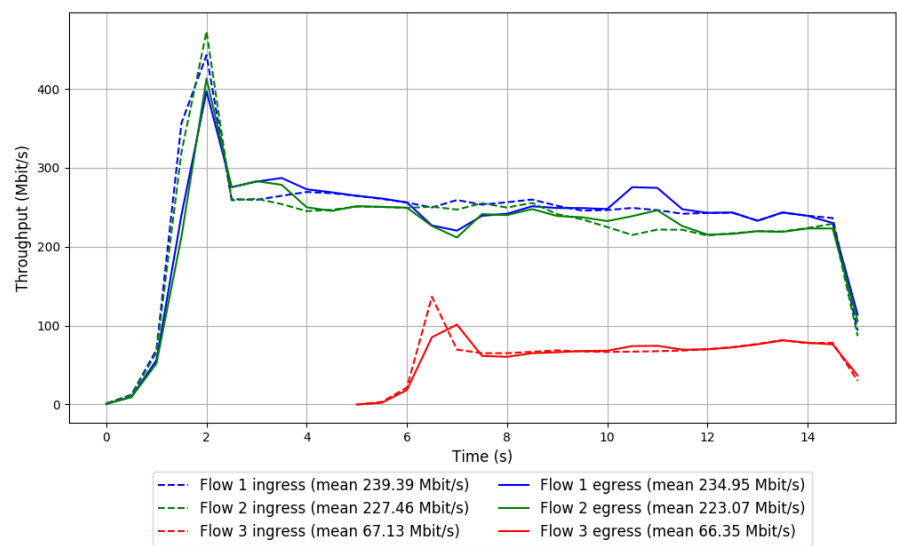


Run 4: Statistics of PCC

Start at: 2017-12-21 08:03:47

End at: 2017-12-21 08:04:17

Run 4: Report of PCC — Data Link

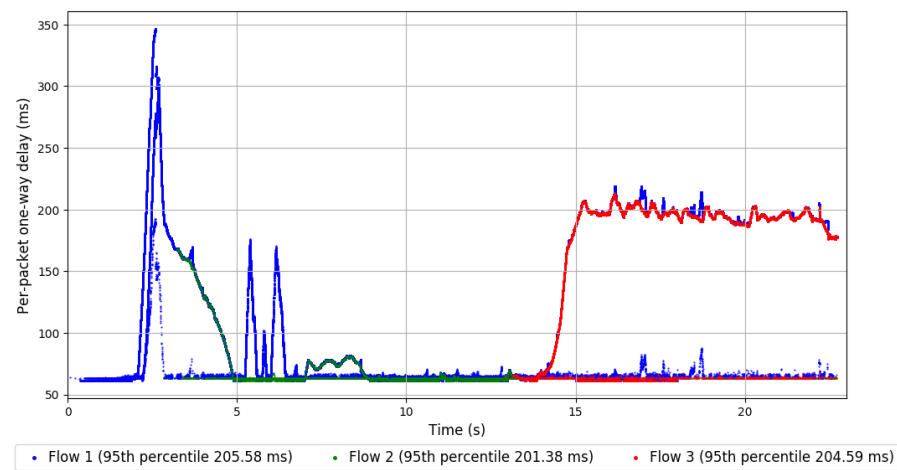
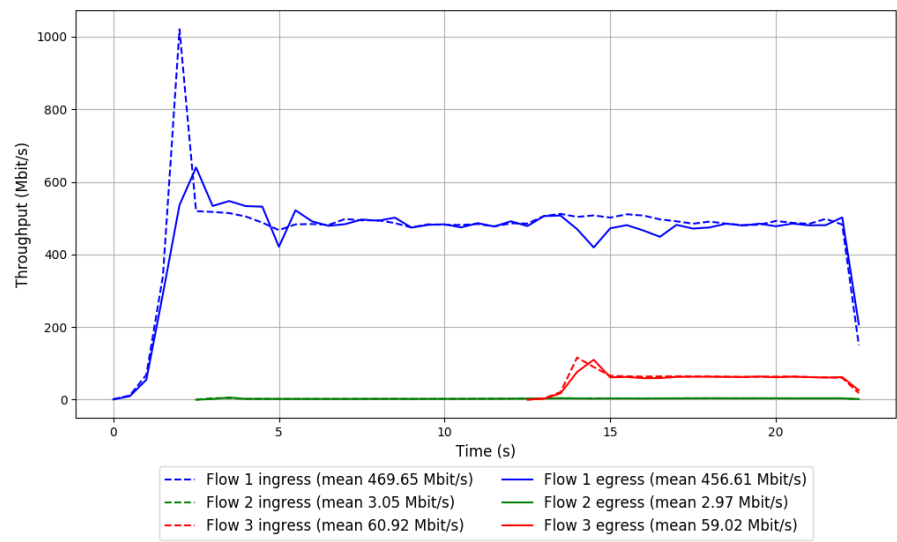


Run 5: Statistics of PCC

Start at: 2017-12-21 08:17:48

End at: 2017-12-21 08:18:18

Run 5: Report of PCC — Data Link

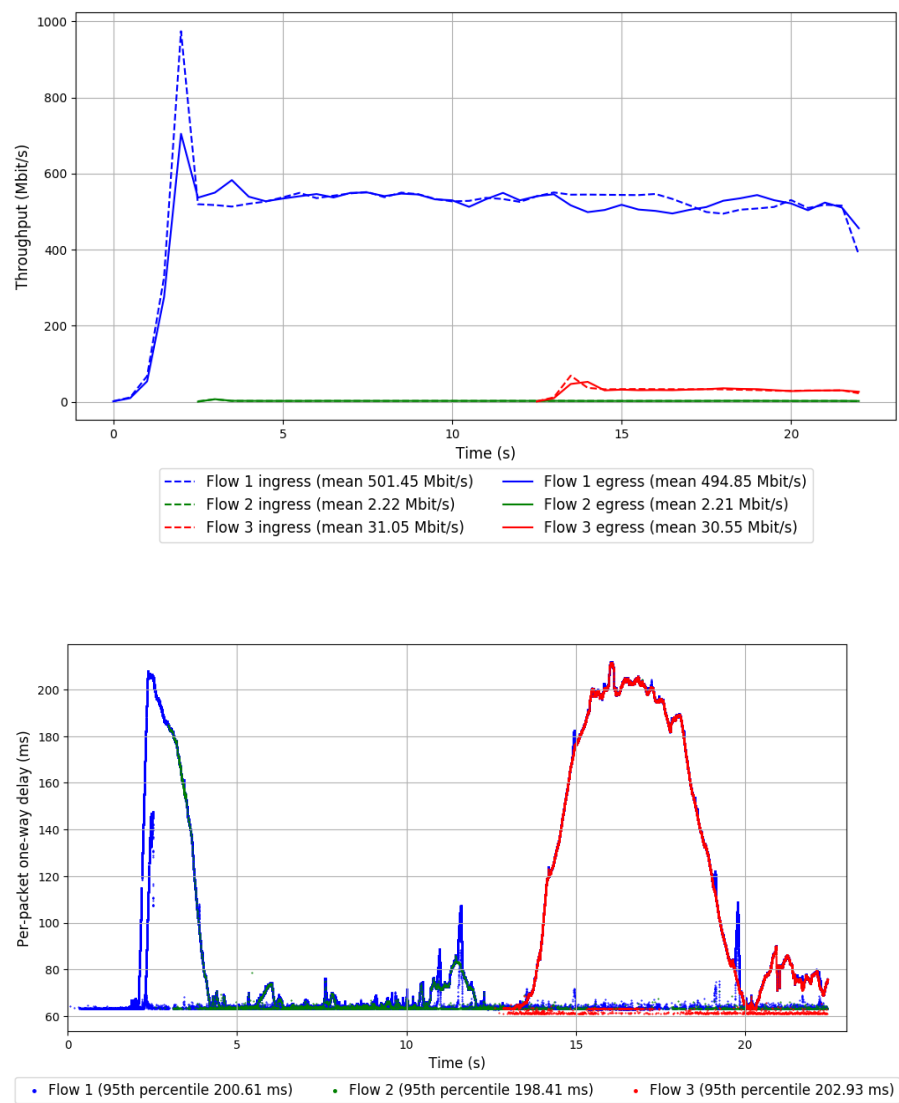


Run 6: Statistics of PCC

Start at: 2017-12-21 08:31:54

End at: 2017-12-21 08:32:24

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-21 08:45:41

End at: 2017-12-21 08:46:11

Below is generated by plot.py at 2017-12-21 11:31:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 524.43 Mbit/s

95th percentile per-packet one-way delay: 202.365 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 485.92 Mbit/s

95th percentile per-packet one-way delay: 202.626 ms

Loss rate: 1.42%

-- Flow 2:

Average throughput: 29.00 Mbit/s

95th percentile per-packet one-way delay: 202.174 ms

Loss rate: 1.10%

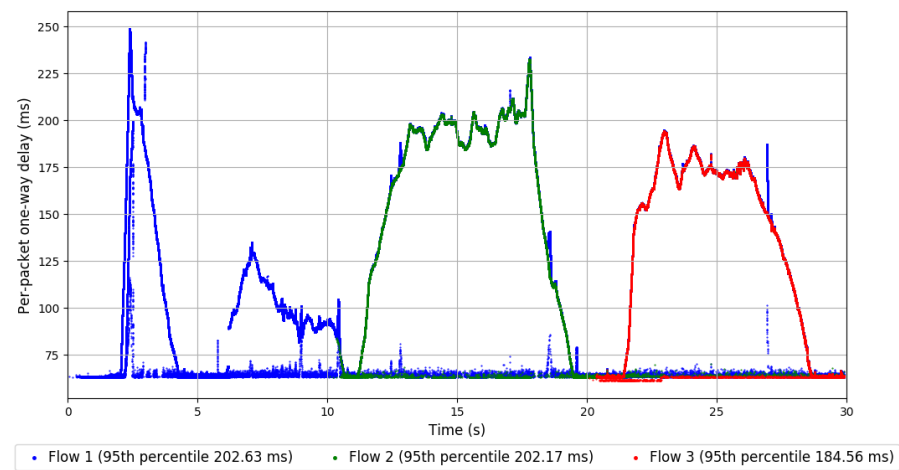
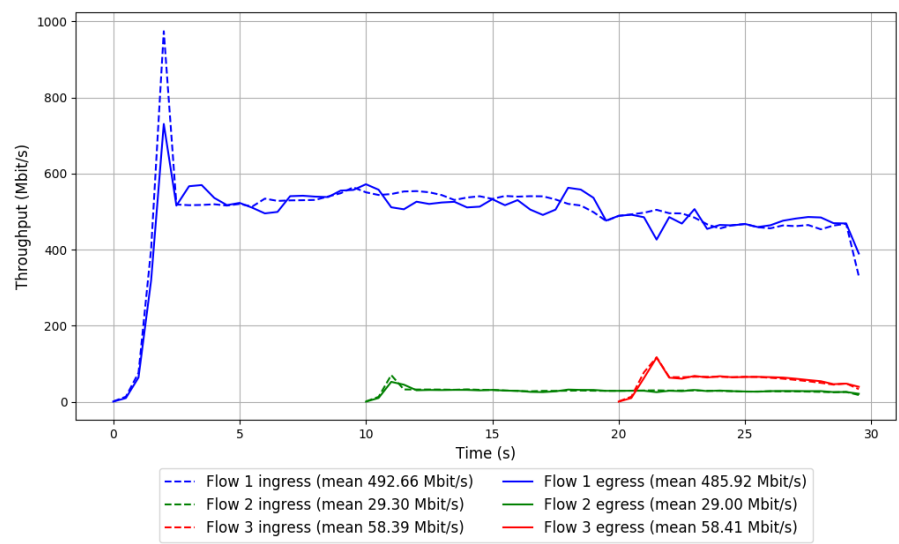
-- Flow 3:

Average throughput: 58.41 Mbit/s

95th percentile per-packet one-way delay: 184.559 ms

Loss rate: 0.11%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-21 08:59:50

End at: 2017-12-21 09:00:20

Below is generated by plot.py at 2017-12-21 11:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.17 Mbit/s

95th percentile per-packet one-way delay: 195.884 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 499.76 Mbit/s

95th percentile per-packet one-way delay: 195.984 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 29.78 Mbit/s

95th percentile per-packet one-way delay: 193.534 ms

Loss rate: 0.81%

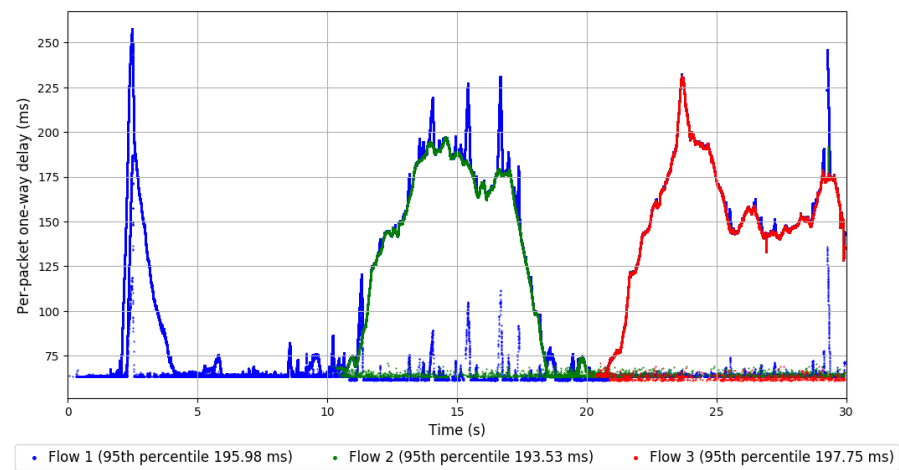
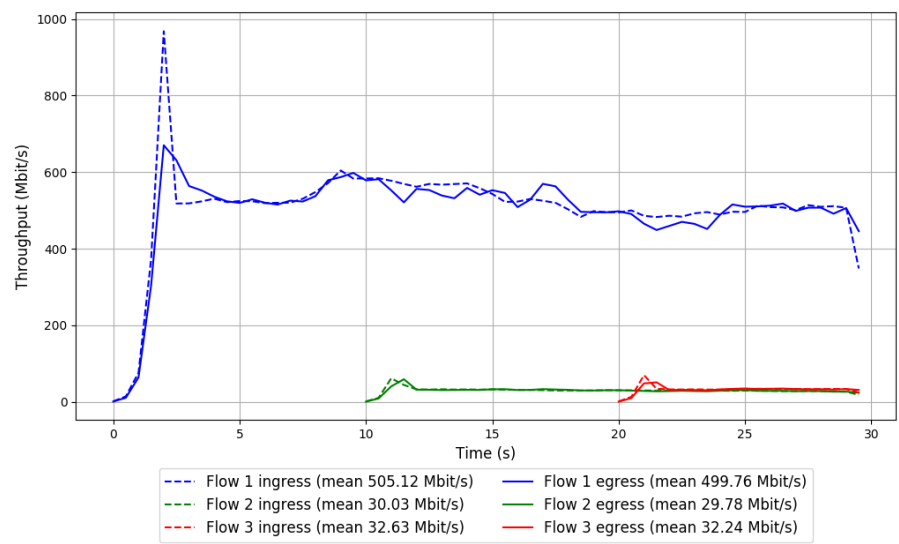
-- Flow 3:

Average throughput: 32.24 Mbit/s

95th percentile per-packet one-way delay: 197.755 ms

Loss rate: 1.18%

Run 8: Report of PCC — Data Link

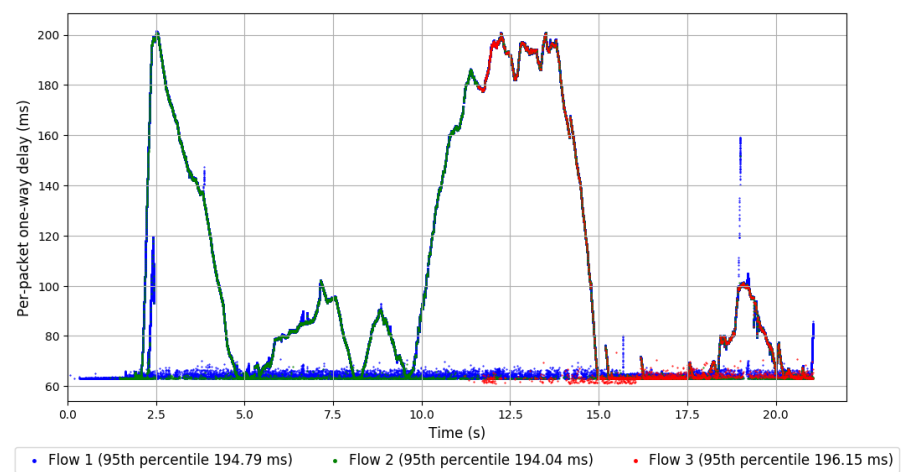
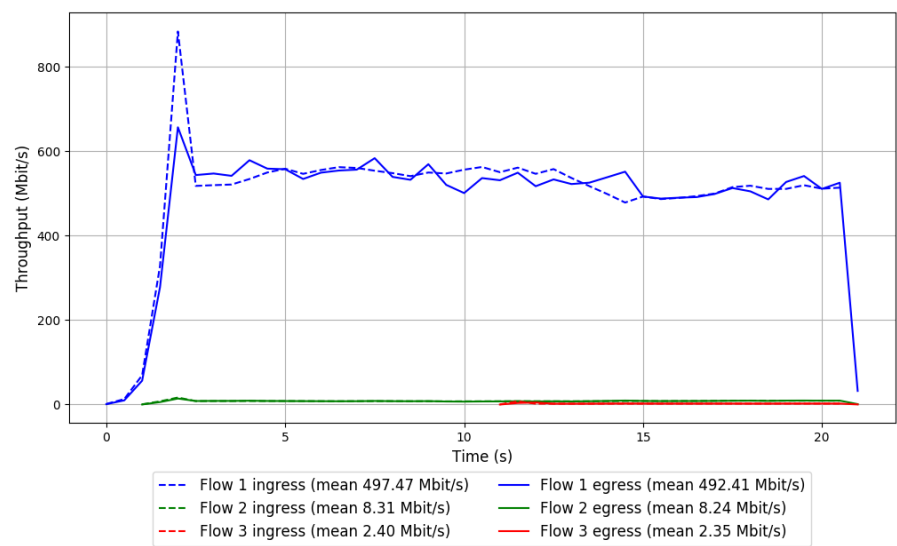


Run 9: Statistics of PCC

Start at: 2017-12-21 09:14:06

End at: 2017-12-21 09:14:36

Run 9: Report of PCC — Data Link

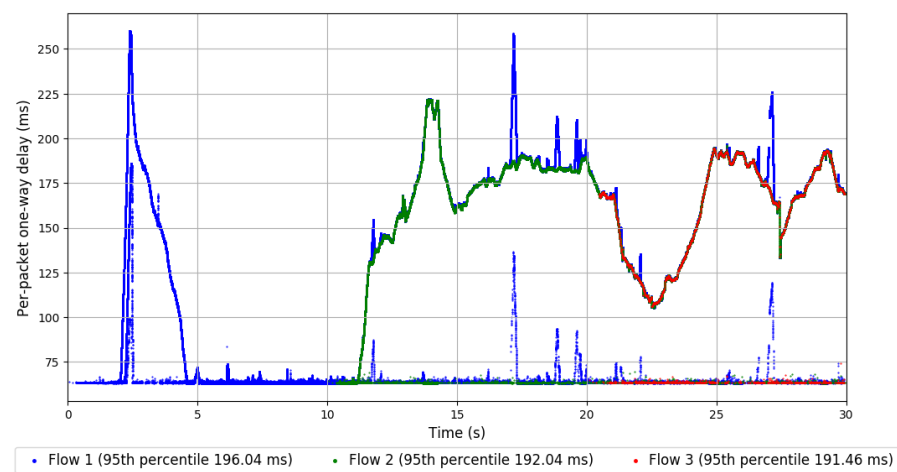
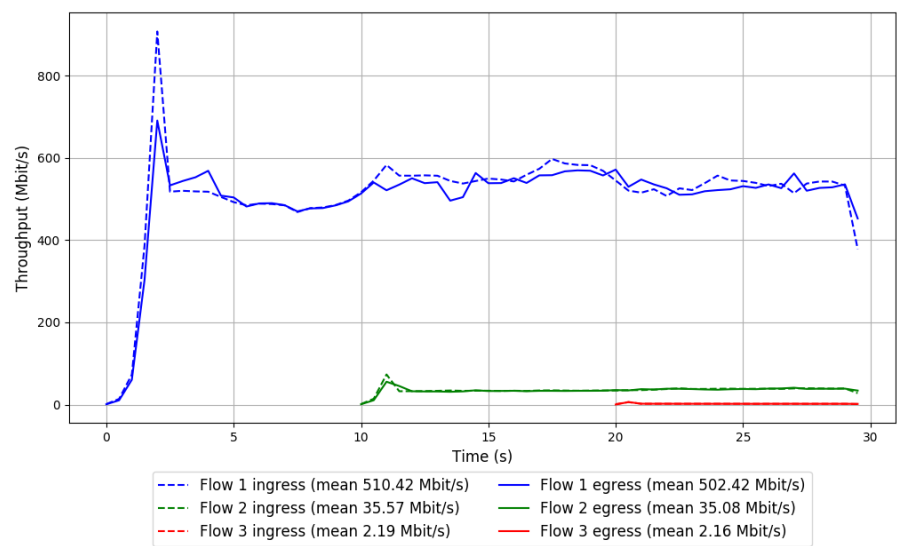


```
Run 10: Statistics of PCC

Start at: 2017-12-21 09:28:00
End at: 2017-12-21 09:28:30

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 526.45 Mbit/s
95th percentile per-packet one-way delay: 195.494 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 502.42 Mbit/s
95th percentile per-packet one-way delay: 196.036 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 192.042 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 191.457 ms
Loss rate: 1.67%
```

Run 10: Report of PCC — Data Link

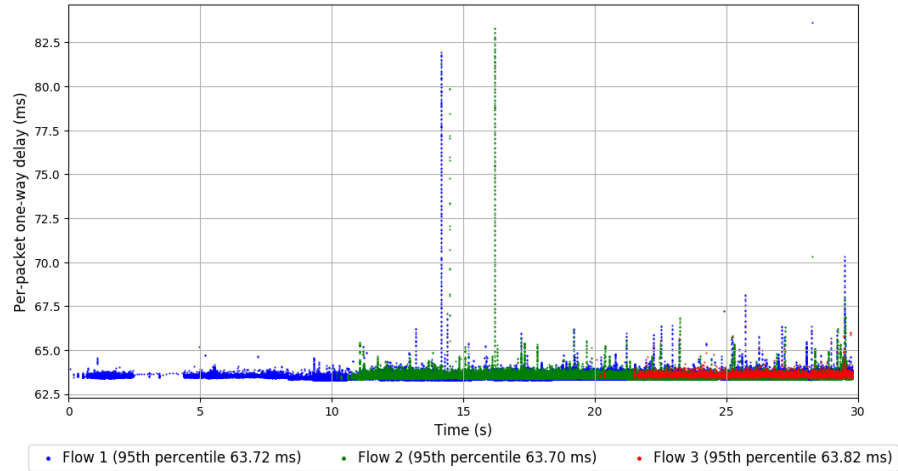
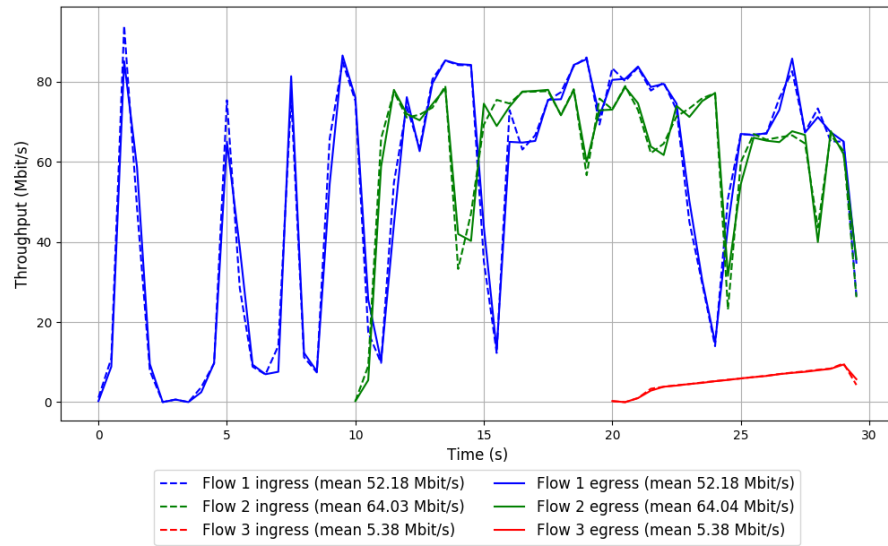


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-21 07:26:32
End at: 2017-12-21 07:27:02

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.41 Mbit/s
95th percentile per-packet one-way delay: 63.716 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.18 Mbit/s
95th percentile per-packet one-way delay: 63.723 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 64.04 Mbit/s
95th percentile per-packet one-way delay: 63.700 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 63.818 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link

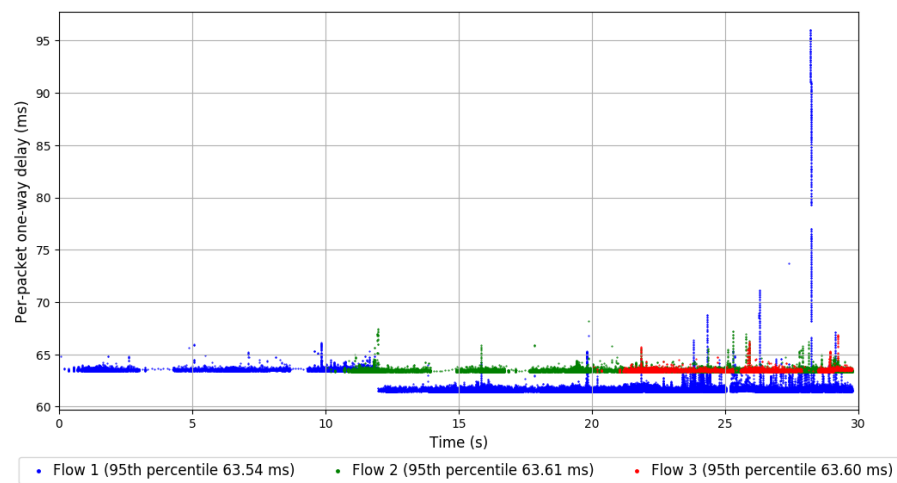
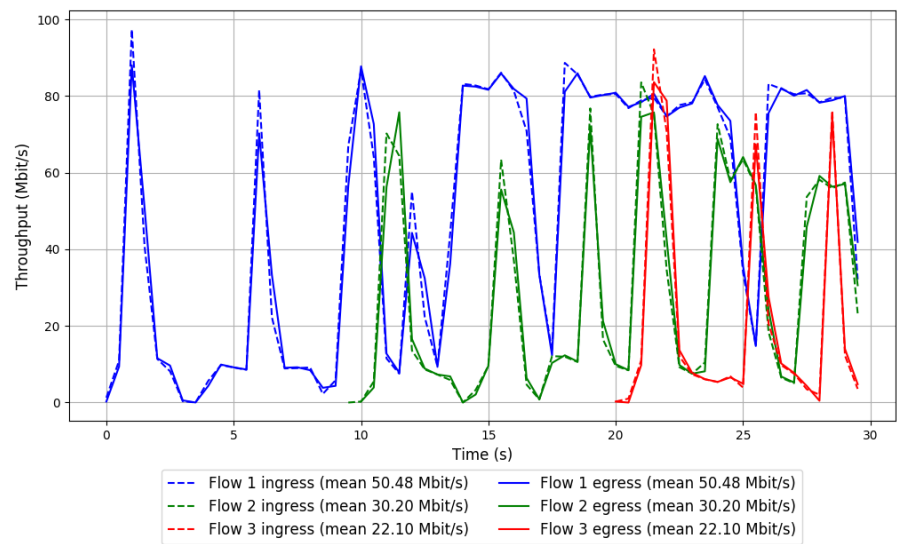


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-21 07:40:21
End at: 2017-12-21 07:40:51

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.72 Mbit/s
95th percentile per-packet one-way delay: 63.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.48 Mbit/s
95th percentile per-packet one-way delay: 63.539 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.20 Mbit/s
95th percentile per-packet one-way delay: 63.606 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.10 Mbit/s
95th percentile per-packet one-way delay: 63.604 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-21 07:54:23

End at: 2017-12-21 07:54:53

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.36 Mbit/s

95th percentile per-packet one-way delay: 63.595 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.26 Mbit/s

95th percentile per-packet one-way delay: 63.537 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 33.86 Mbit/s

95th percentile per-packet one-way delay: 63.654 ms

Loss rate: 0.02%

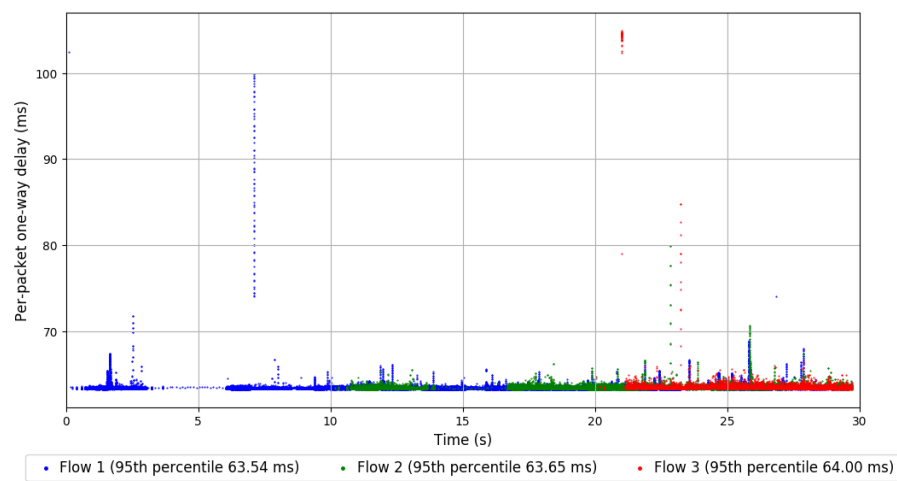
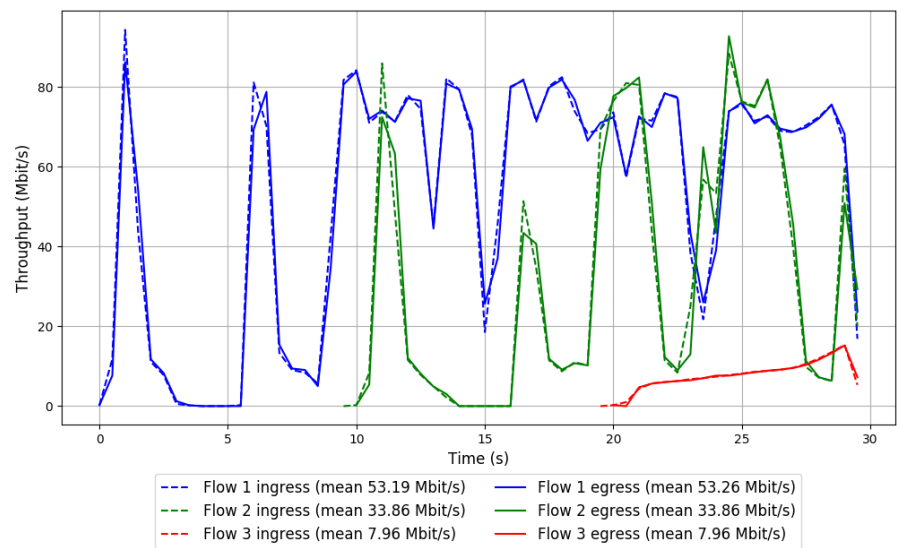
-- Flow 3:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 64.005 ms

Loss rate: 0.06%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-21 08:08:18

End at: 2017-12-21 08:08:48

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.39 Mbit/s

95th percentile per-packet one-way delay: 63.472 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.77 Mbit/s

95th percentile per-packet one-way delay: 63.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.91 Mbit/s

95th percentile per-packet one-way delay: 61.365 ms

Loss rate: 0.00%

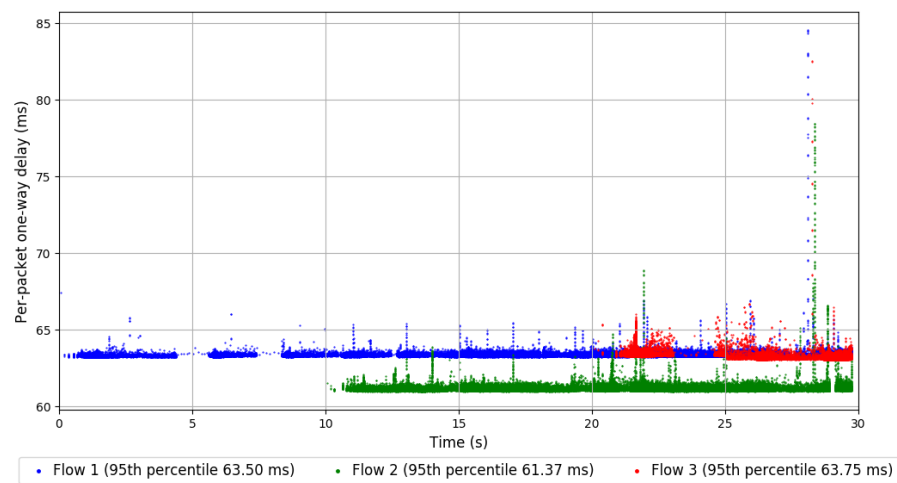
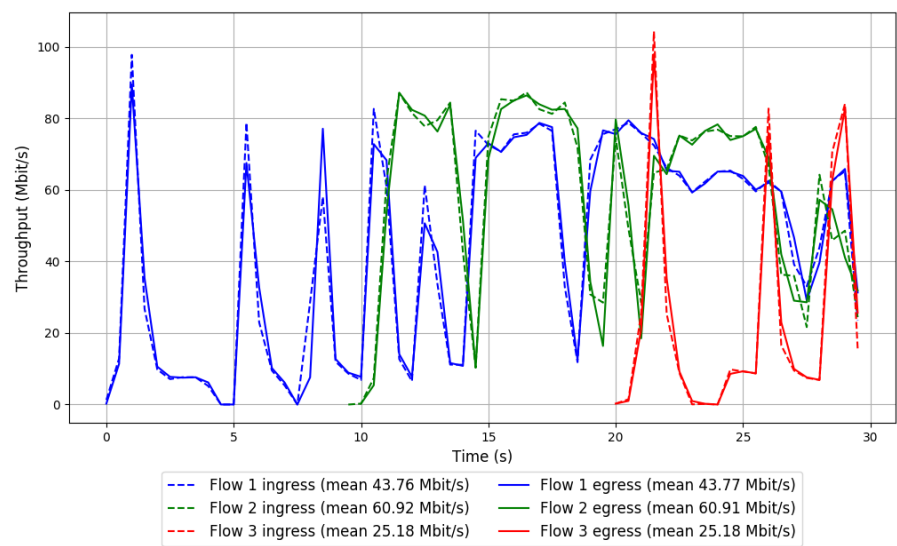
-- Flow 3:

Average throughput: 25.18 Mbit/s

95th percentile per-packet one-way delay: 63.750 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-21 08:22:24

End at: 2017-12-21 08:22:54

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.24 Mbit/s

95th percentile per-packet one-way delay: 63.429 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.06 Mbit/s

95th percentile per-packet one-way delay: 63.415 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.11 Mbit/s

95th percentile per-packet one-way delay: 63.432 ms

Loss rate: 0.00%

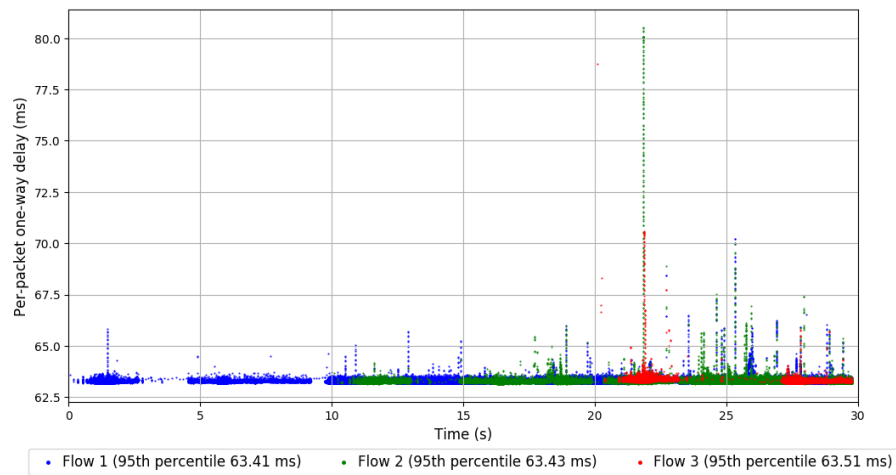
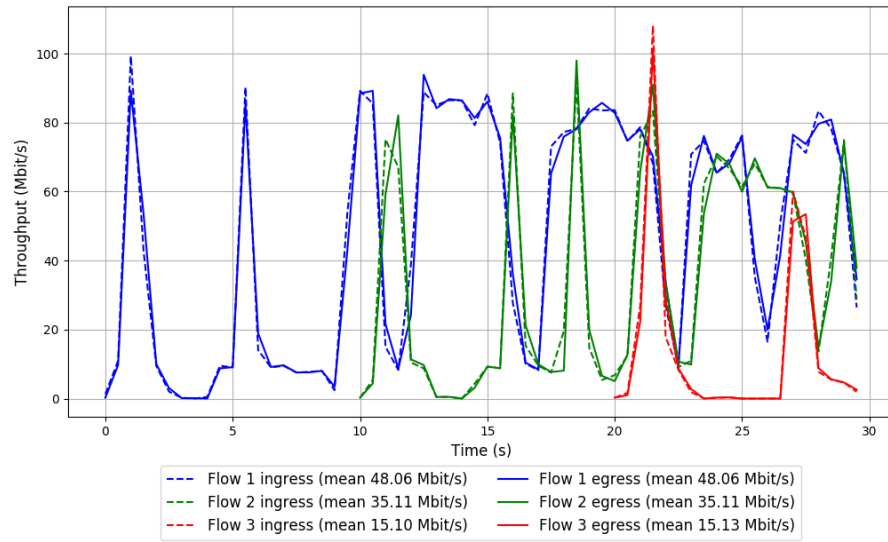
-- Flow 3:

Average throughput: 15.13 Mbit/s

95th percentile per-packet one-way delay: 63.508 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-21 08:36:30

End at: 2017-12-21 08:37:00

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.75 Mbit/s

95th percentile per-packet one-way delay: 63.533 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.88 Mbit/s

95th percentile per-packet one-way delay: 63.537 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.48 Mbit/s

95th percentile per-packet one-way delay: 63.440 ms

Loss rate: 0.00%

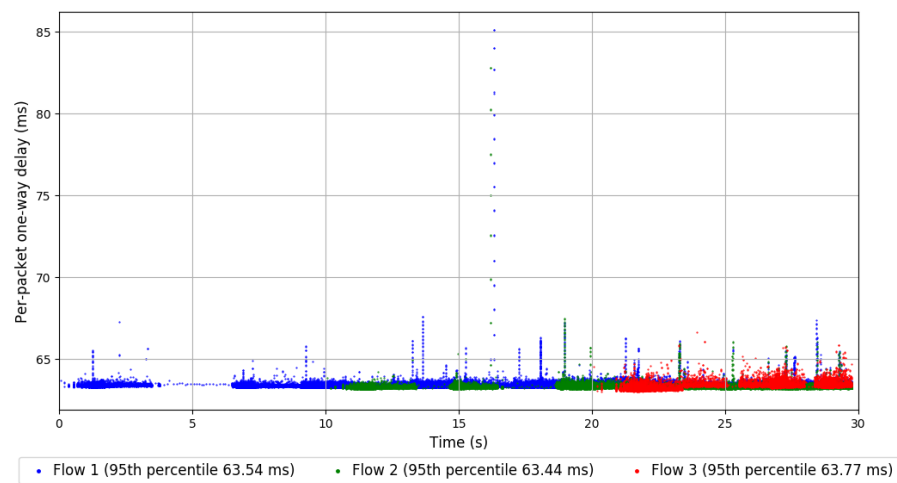
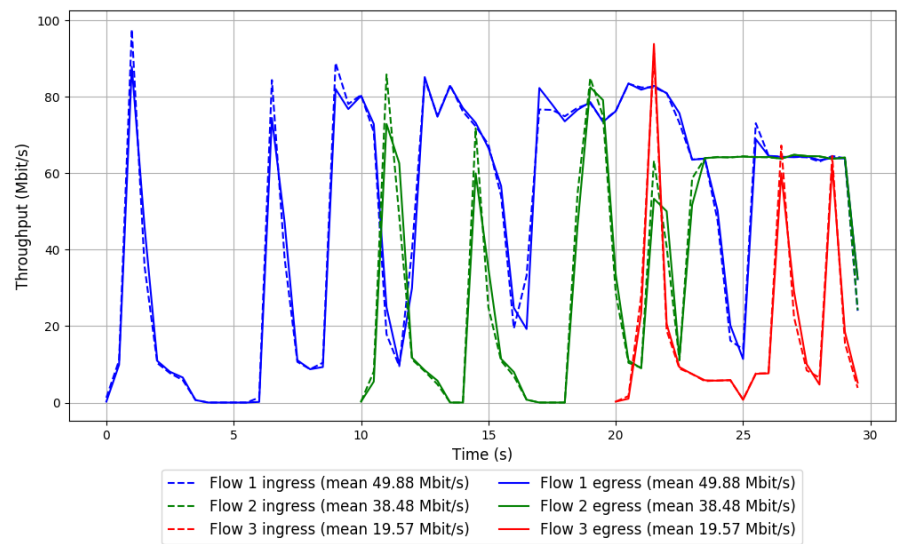
-- Flow 3:

Average throughput: 19.57 Mbit/s

95th percentile per-packet one-way delay: 63.771 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-21 08:50:26

End at: 2017-12-21 08:50:56

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 63.507 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.98 Mbit/s

95th percentile per-packet one-way delay: 63.308 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.13 Mbit/s

95th percentile per-packet one-way delay: 63.675 ms

Loss rate: 0.00%

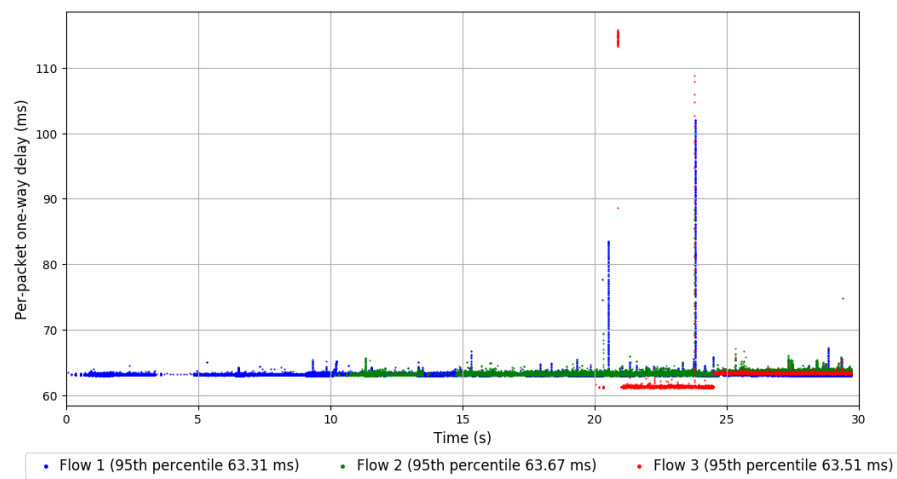
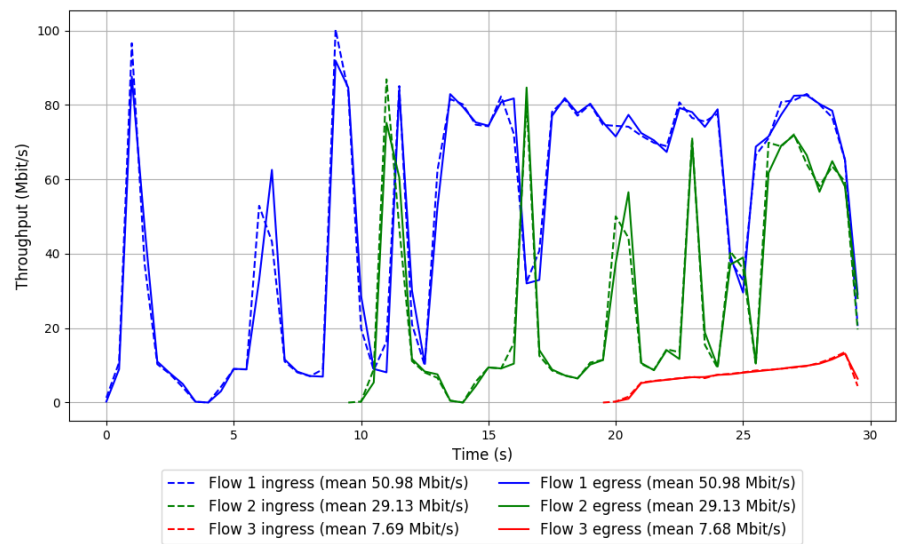
-- Flow 3:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 63.513 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-21 09:04:32

End at: 2017-12-21 09:05:02

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.49 Mbit/s

95th percentile per-packet one-way delay: 63.498 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 46.92 Mbit/s

95th percentile per-packet one-way delay: 63.520 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 34.64 Mbit/s

95th percentile per-packet one-way delay: 63.404 ms

Loss rate: 0.03%

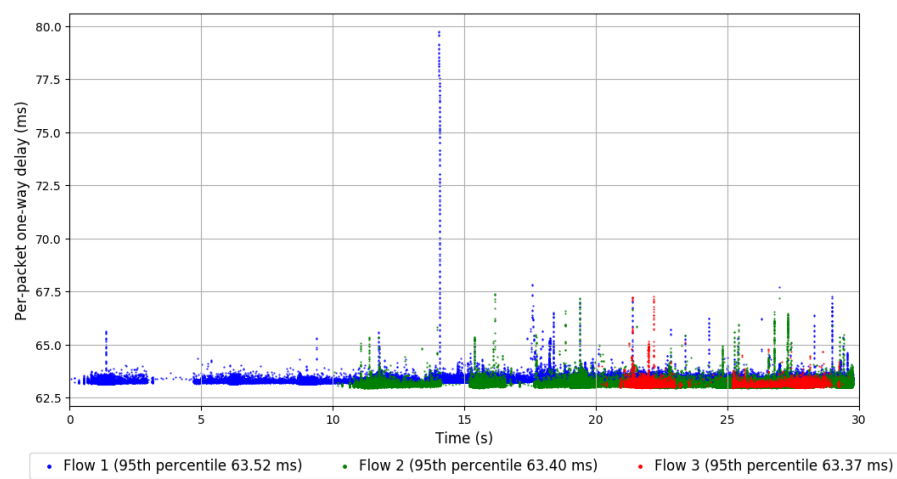
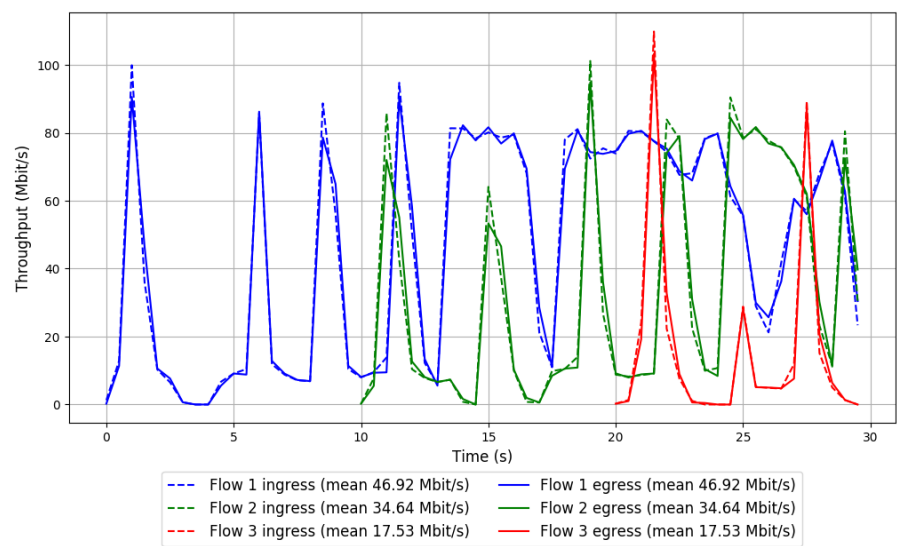
-- Flow 3:

Average throughput: 17.53 Mbit/s

95th percentile per-packet one-way delay: 63.367 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-21 09:18:40

End at: 2017-12-21 09:19:10

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.19 Mbit/s

95th percentile per-packet one-way delay: 63.507 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.85 Mbit/s

95th percentile per-packet one-way delay: 63.120 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.84 Mbit/s

95th percentile per-packet one-way delay: 63.574 ms

Loss rate: 0.00%

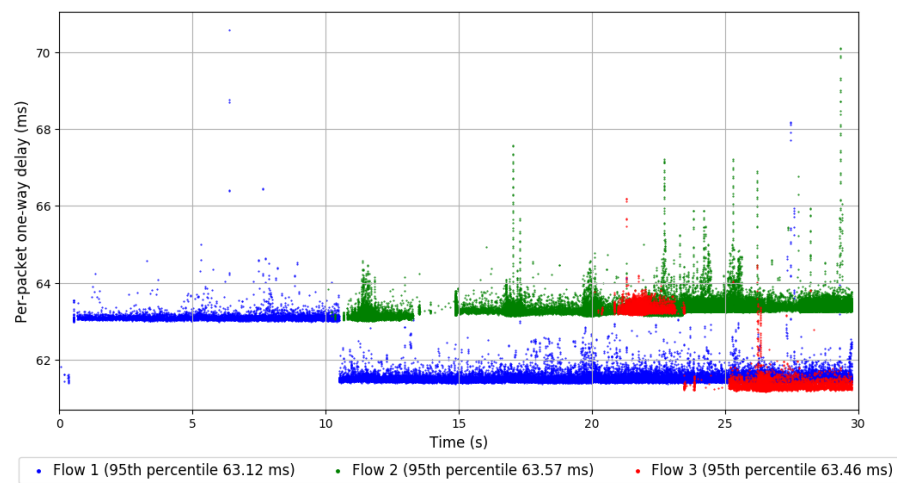
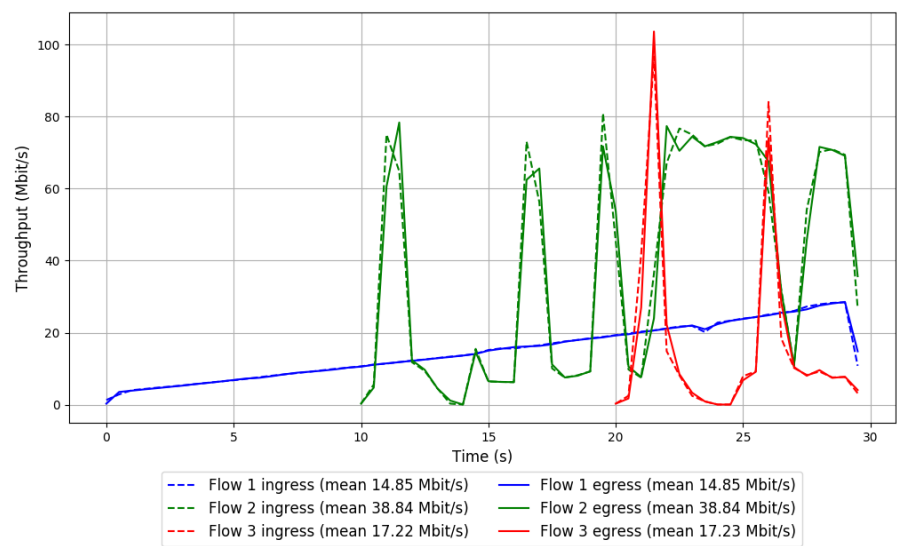
-- Flow 3:

Average throughput: 17.23 Mbit/s

95th percentile per-packet one-way delay: 63.458 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

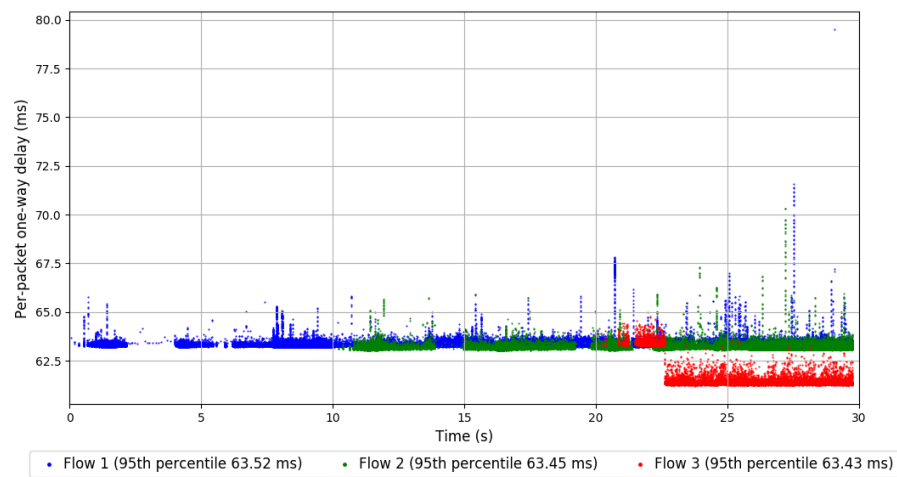
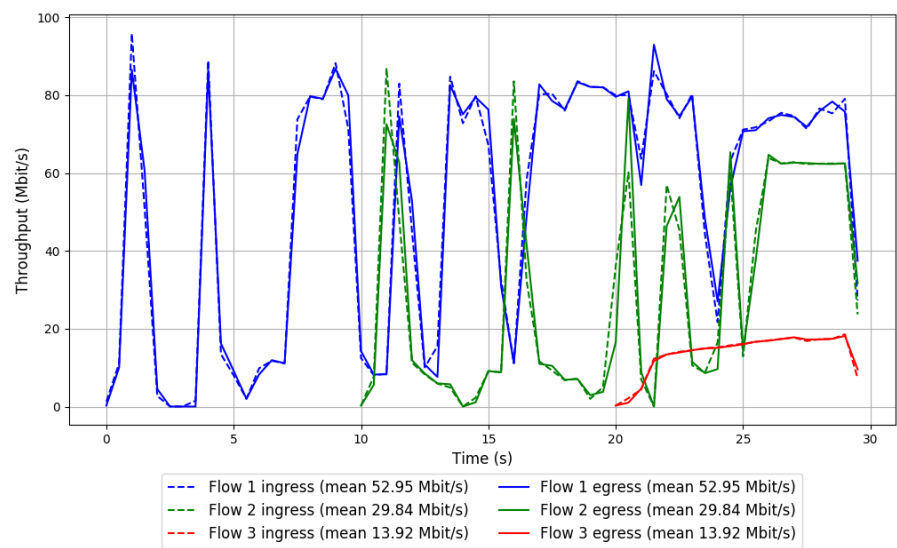


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-21 09:32:48
End at: 2017-12-21 09:33:18

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.24 Mbit/s
95th percentile per-packet one-way delay: 63.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.95 Mbit/s
95th percentile per-packet one-way delay: 63.523 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 63.455 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.92 Mbit/s
95th percentile per-packet one-way delay: 63.434 ms
Loss rate: 0.01%
```

Run 10: Report of QUIC Cubic — Data Link

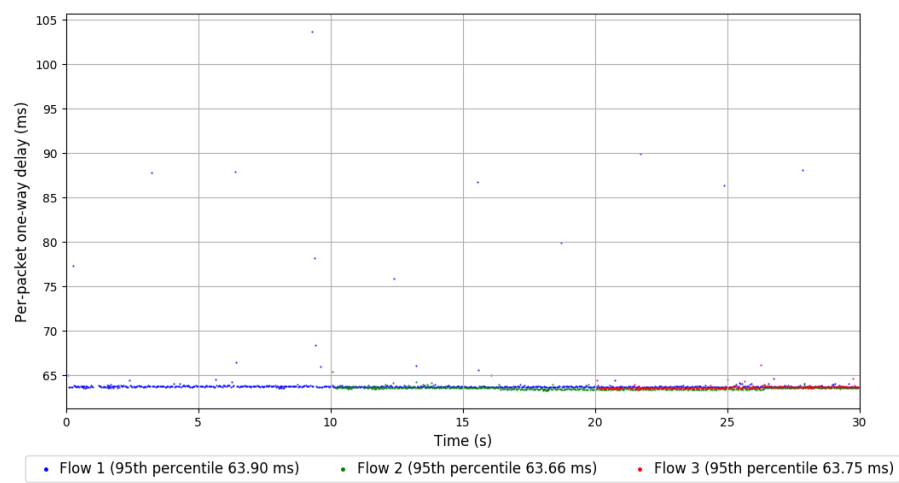
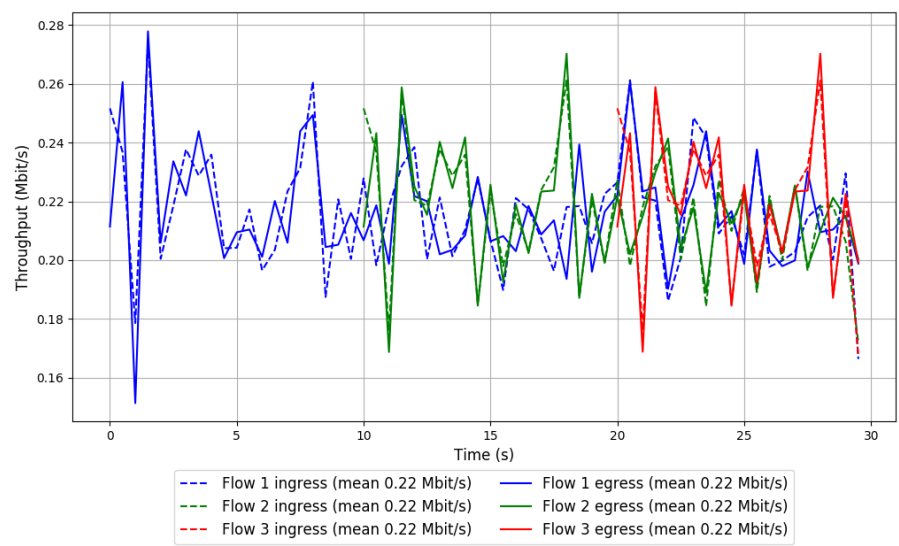


```
Run 1: Statistics of SCReAM

Start at: 2017-12-21 07:16:54
End at: 2017-12-21 07:17:24

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.820 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.899 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.663 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.751 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

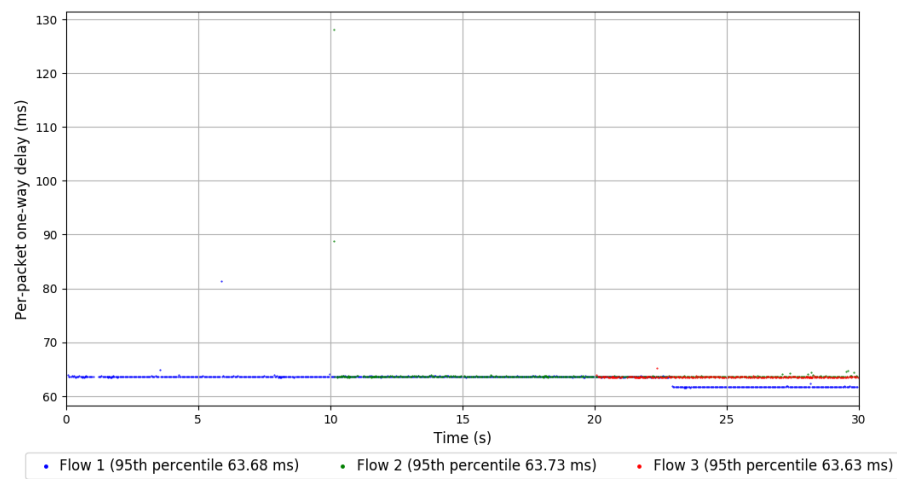
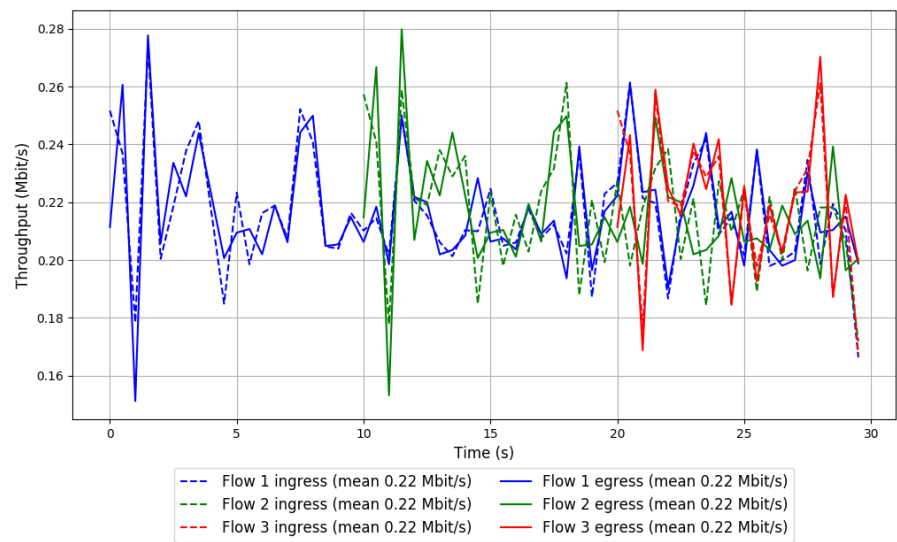


```
Run 2: Statistics of SReAM

Start at: 2017-12-21 07:31:08
End at: 2017-12-21 07:31:38

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.696 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.681 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.729 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.626 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

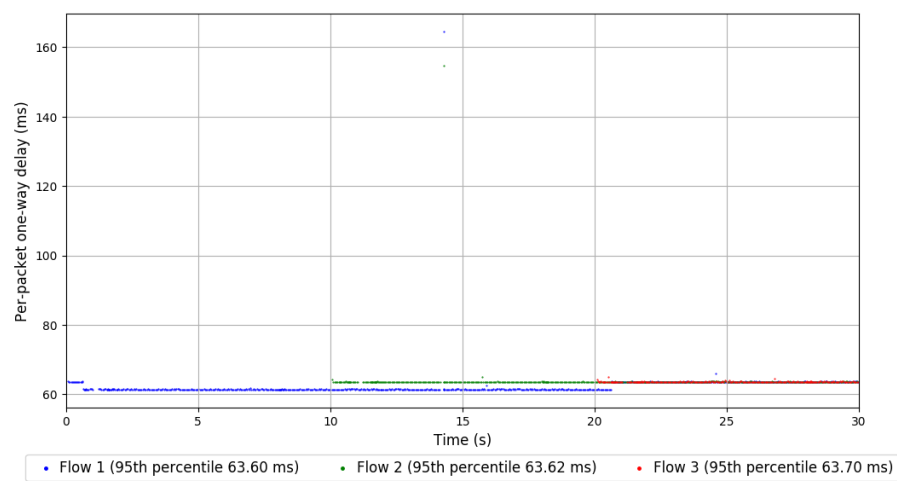
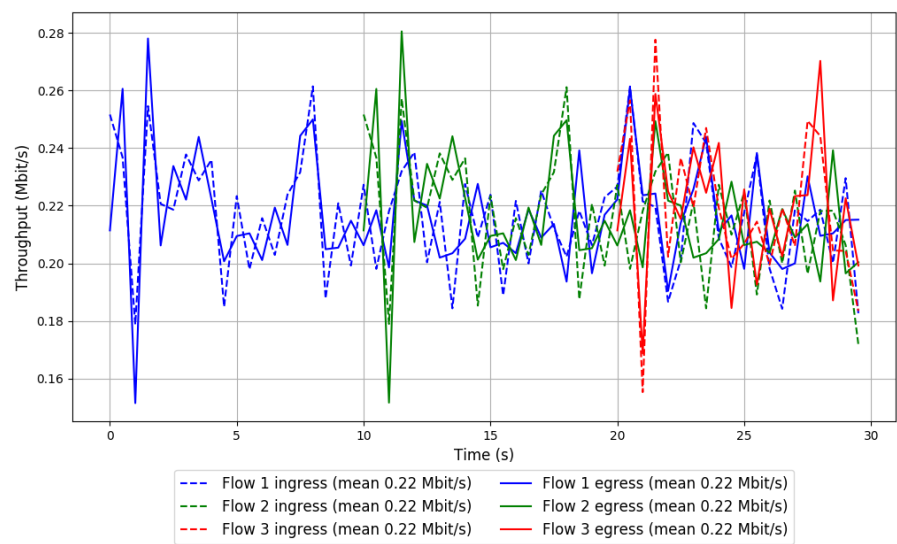


```
Run 3: Statistics of SCReAM

Start at: 2017-12-21 07:45:00
End at: 2017-12-21 07:45:30

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.630 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.603 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.623 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.703 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

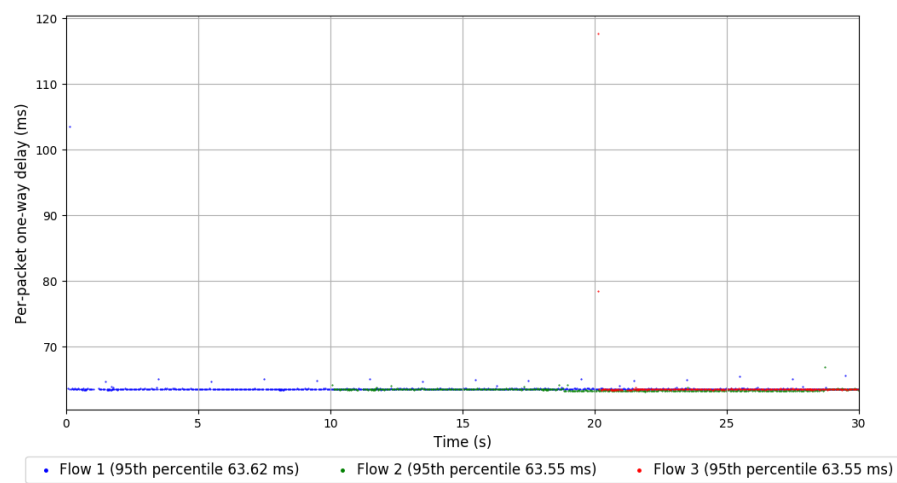
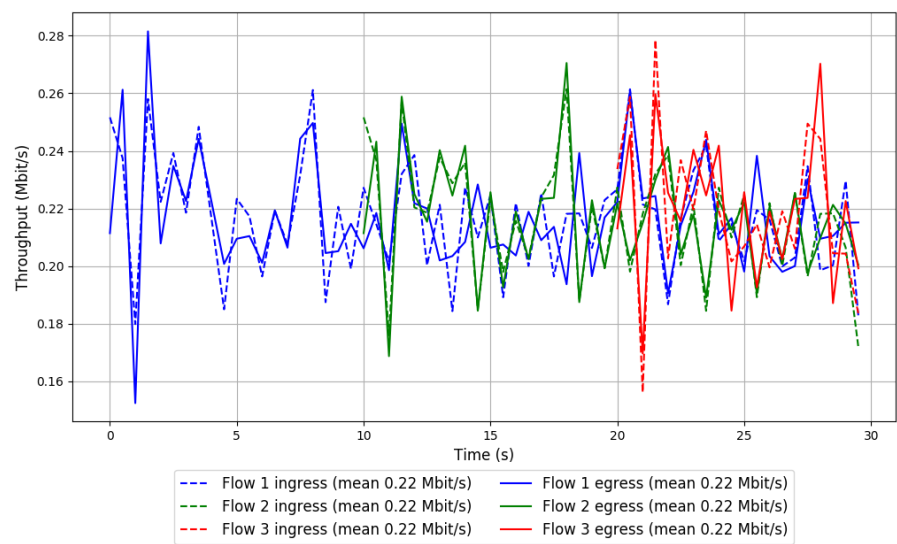


```
Run 4: Statistics of SCReAM

Start at: 2017-12-21 07:58:52
End at: 2017-12-21 07:59:22

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.588 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.548 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.547 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

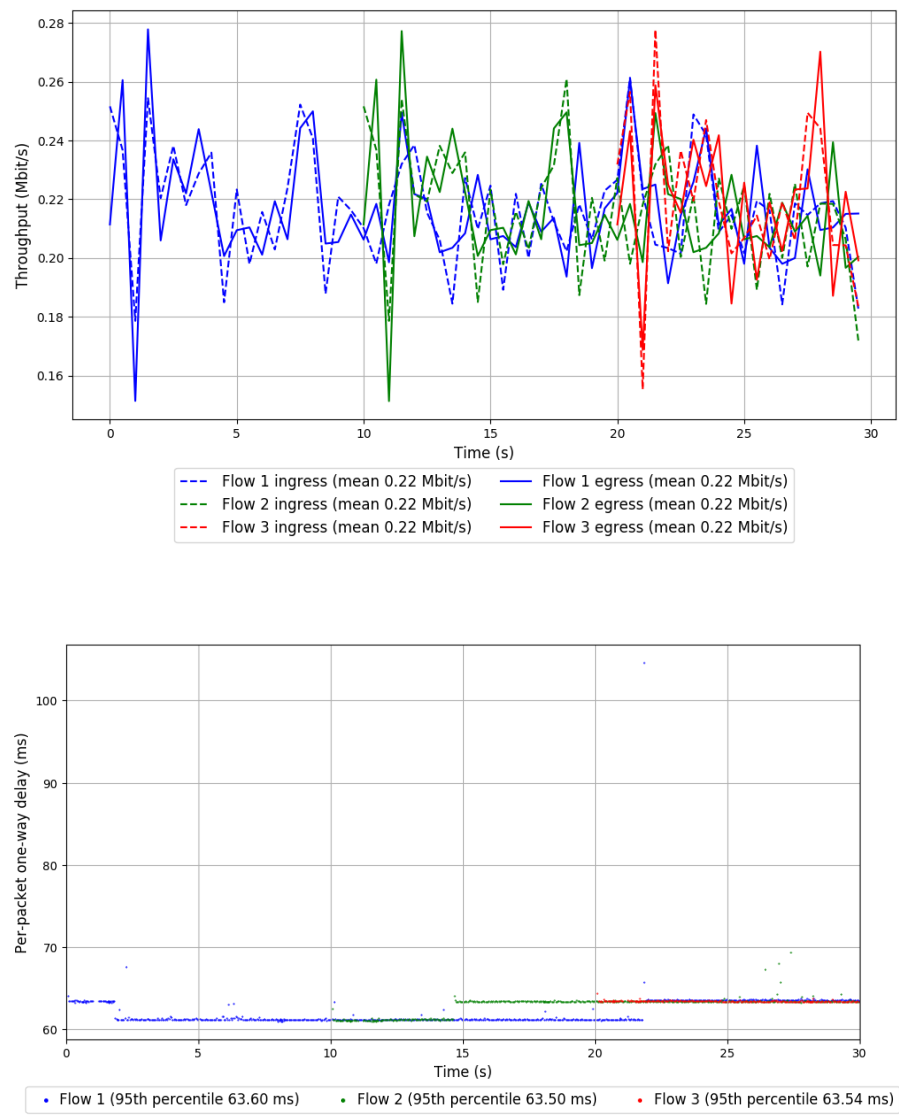


```
Run 5: Statistics of SReAM

Start at: 2017-12-21 08:12:49
End at: 2017-12-21 08:13:19

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.588 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.600 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.498 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.544 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link

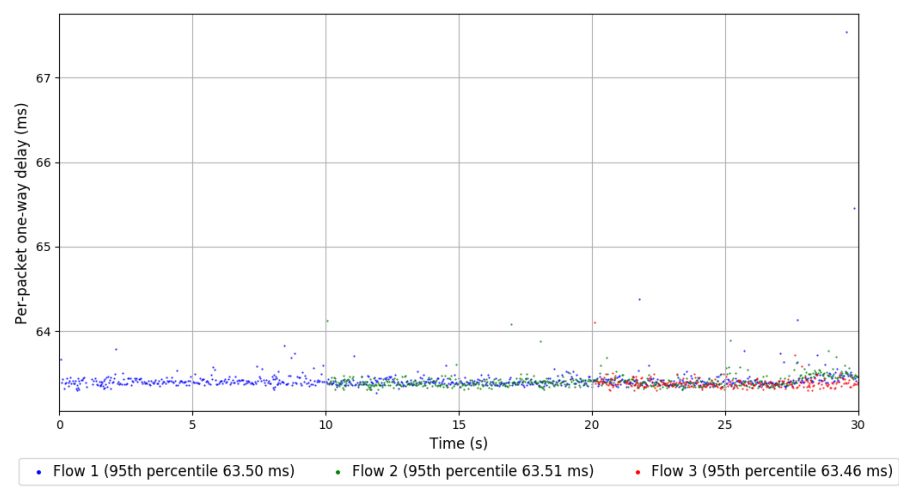
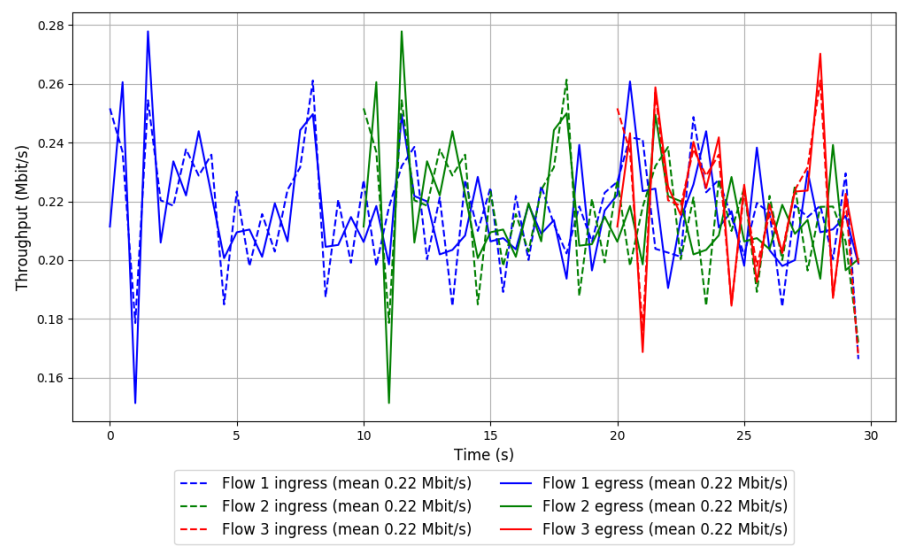


```
Run 6: Statistics of SCReAM

Start at: 2017-12-21 08:26:53
End at: 2017-12-21 08:27:23

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.504 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.507 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.462 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link

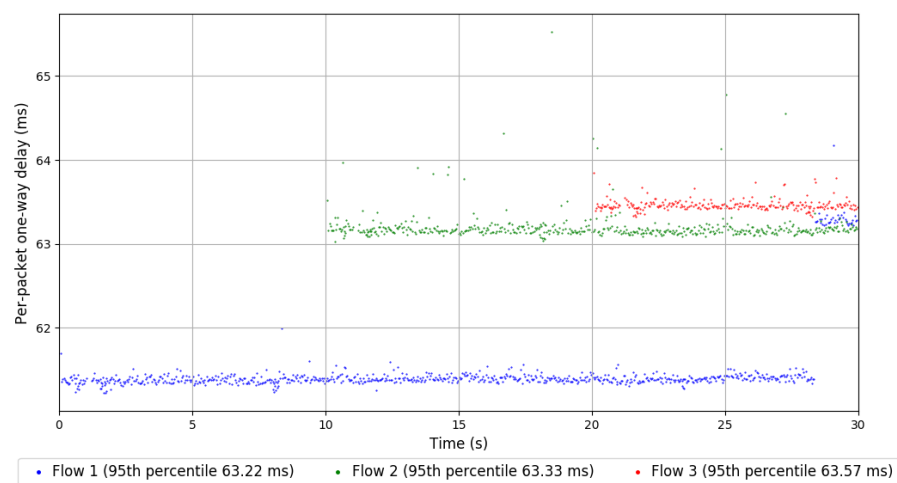
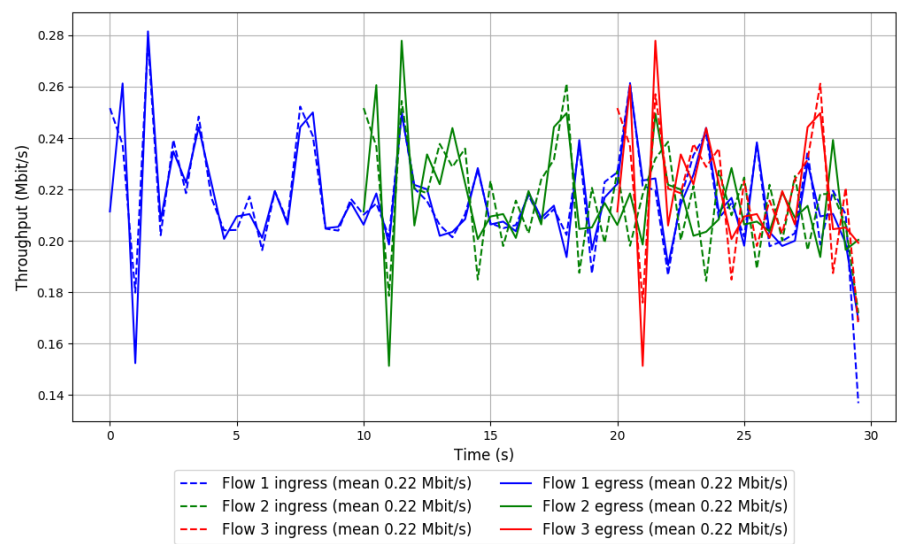


```
Run 7: Statistics of SCReAM

Start at: 2017-12-21 08:41:02
End at: 2017-12-21 08:41:32

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.485 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.217 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.332 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.571 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-12-21 08:55:03

End at: 2017-12-21 08:55:33

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.500 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.542 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.409 ms

Loss rate: 0.00%

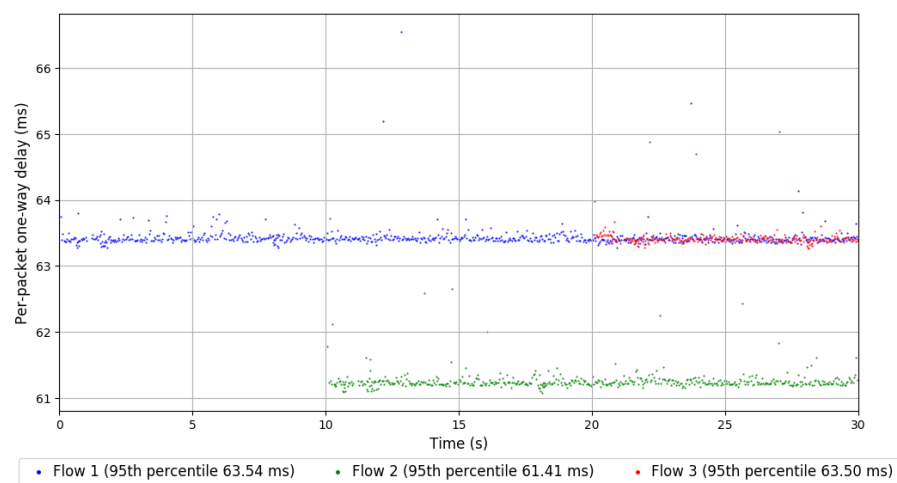
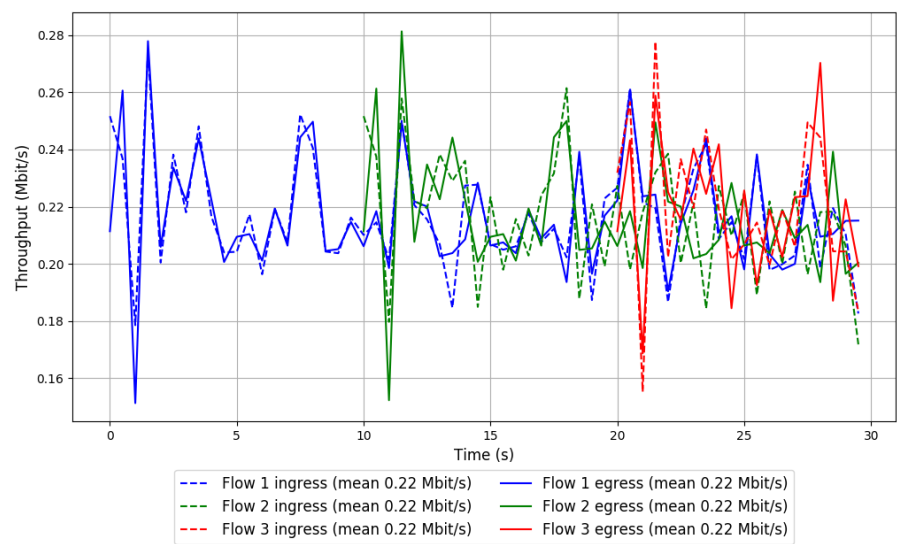
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.499 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

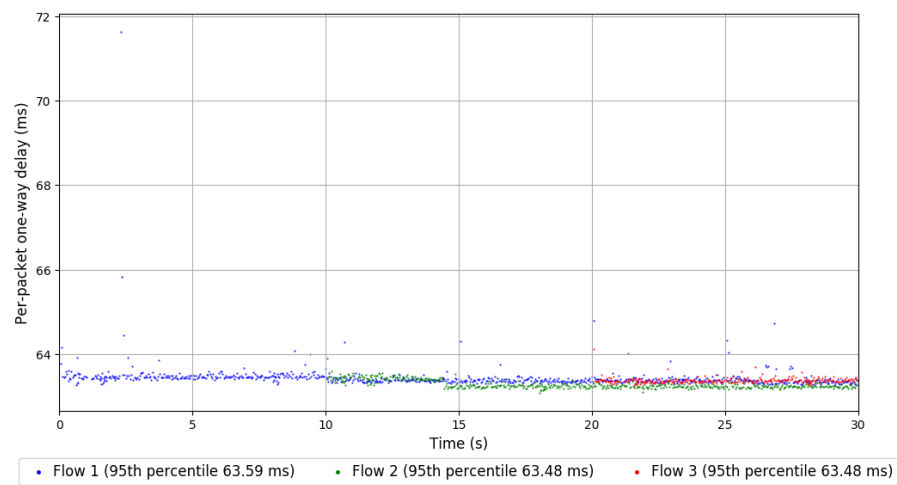
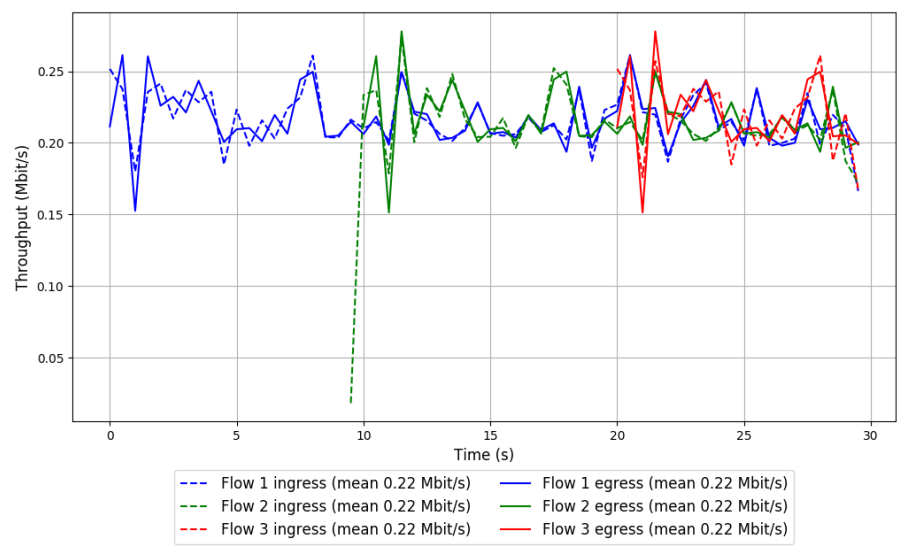


```
Run 9: Statistics of SCReAM

Start at: 2017-12-21 09:09:06
End at: 2017-12-21 09:09:36

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.531 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.587 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.476 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.477 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

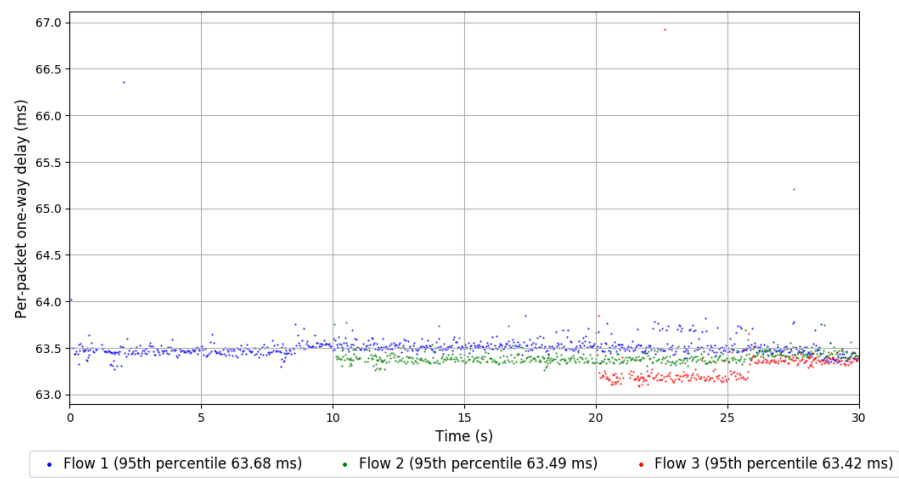
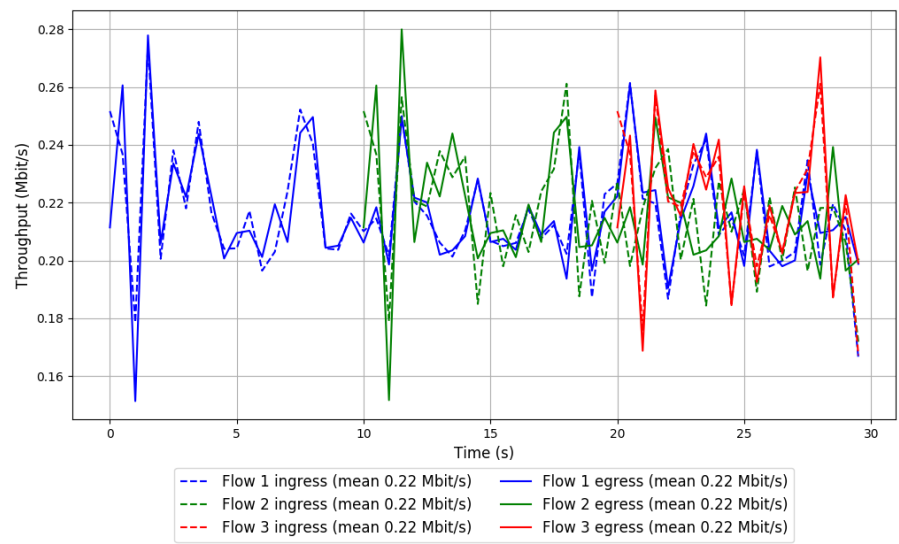


```
Run 10: Statistics of SCReAM

Start at: 2017-12-21 09:23:15
End at: 2017-12-21 09:23:45

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.678 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.490 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.421 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

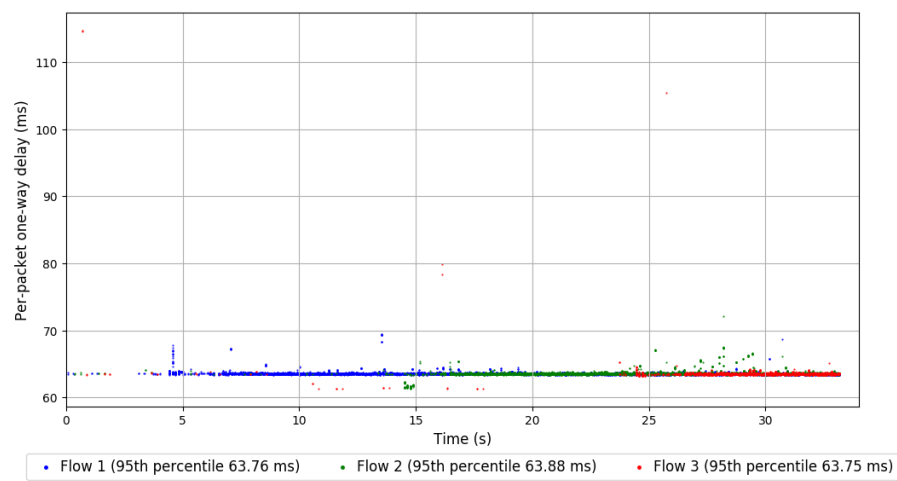
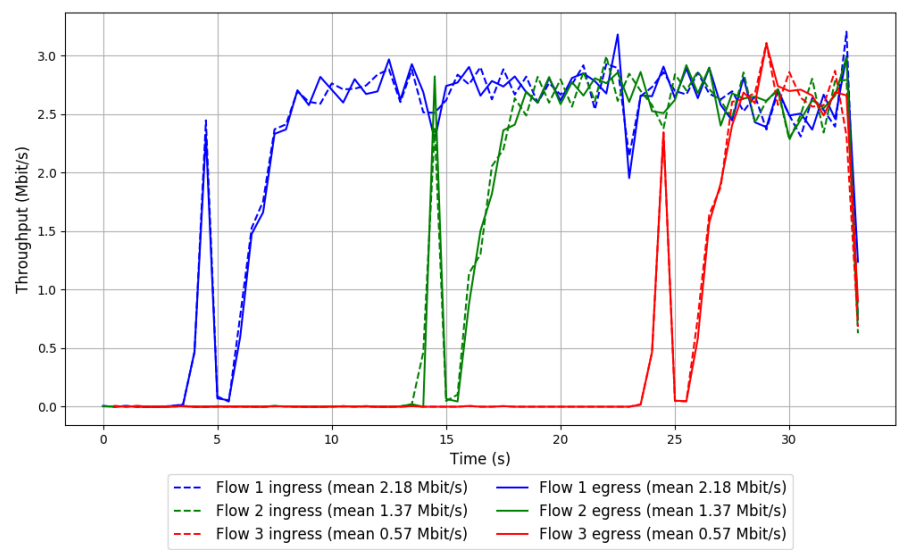


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-21 07:24:44
End at: 2017-12-21 07:25:14

# Below is generated by plot.py at 2017-12-21 11:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 63.787 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 63.759 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 63.882 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 63.751 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-21 07:38:37

End at: 2017-12-21 07:39:07

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 63.760 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.670 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.840 ms

Loss rate: 0.00%

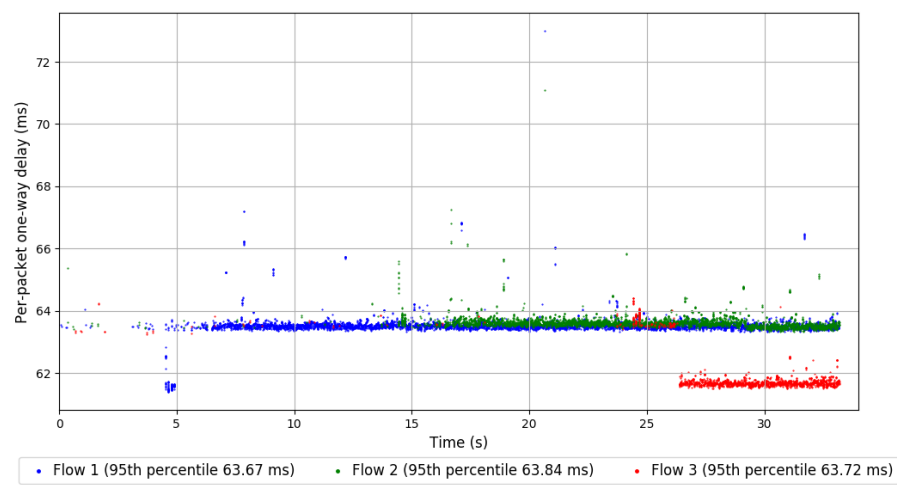
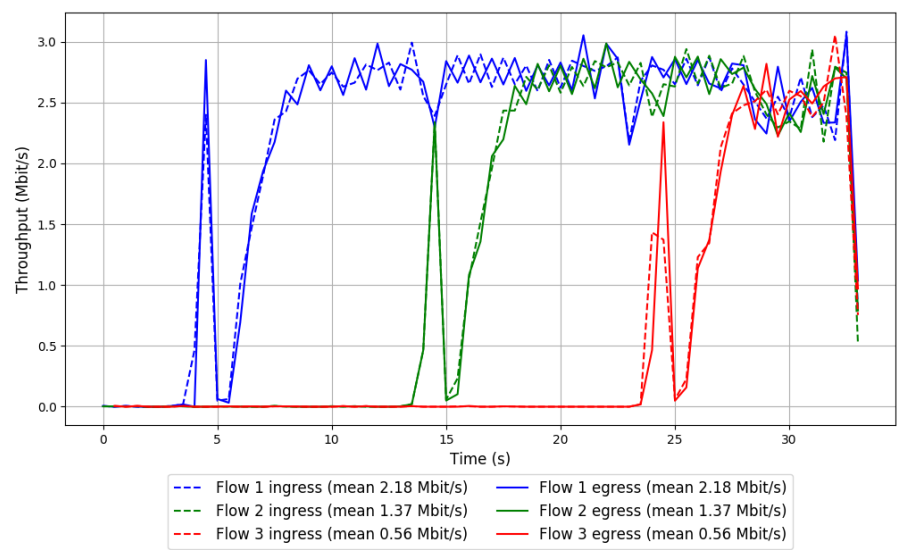
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.718 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-21 07:52:35

End at: 2017-12-21 07:53:05

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 63.573 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.564 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.522 ms

Loss rate: 0.00%

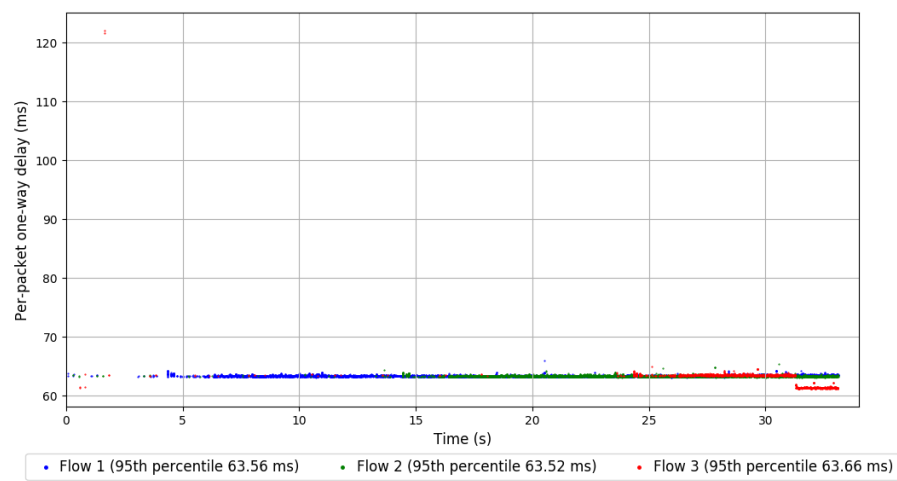
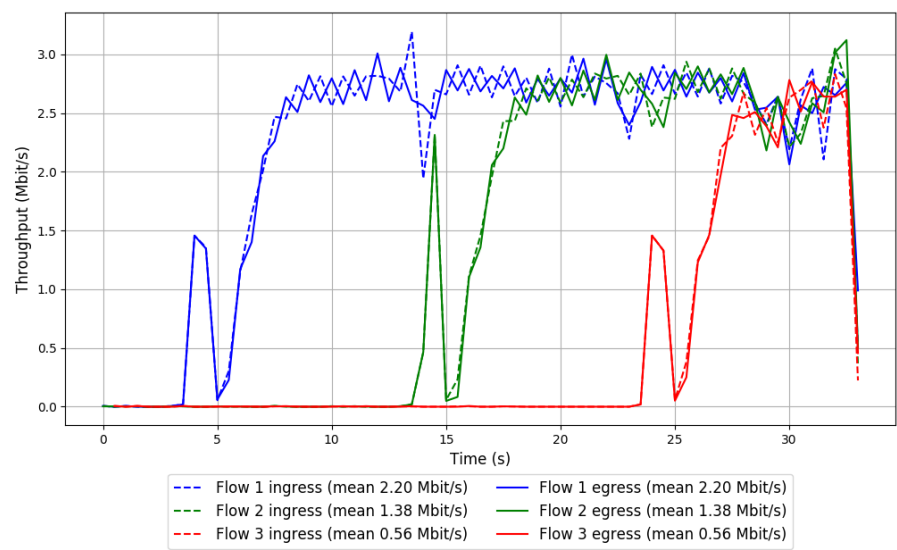
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.656 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-21 08:06:32

End at: 2017-12-21 08:07:02

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 63.599 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.508 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.667 ms

Loss rate: 0.00%

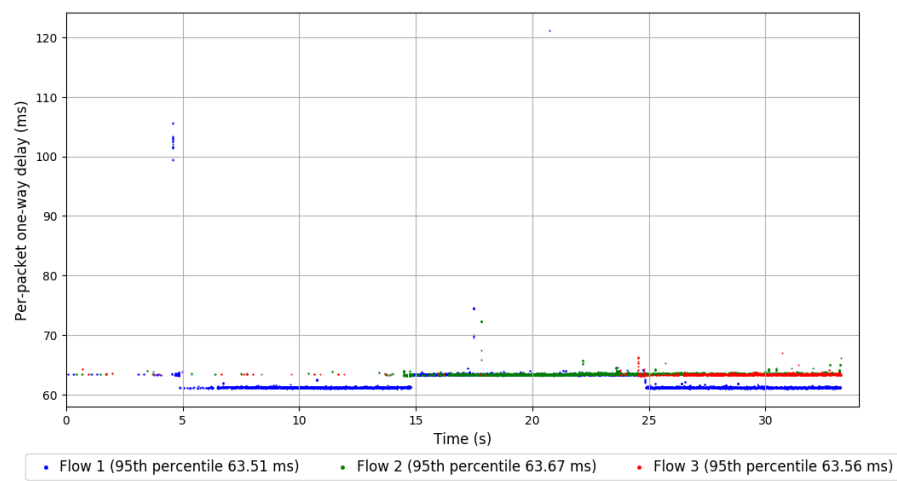
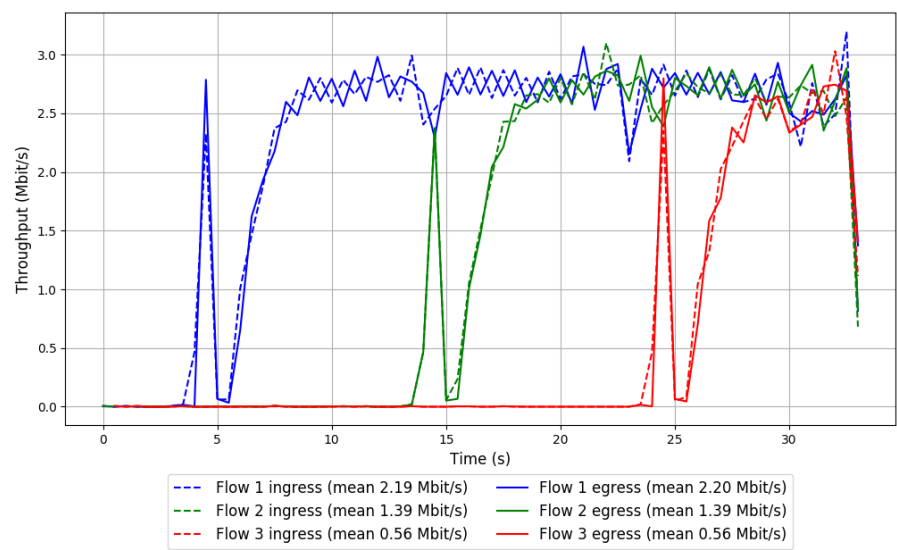
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.560 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-21 08:20:36

End at: 2017-12-21 08:21:06

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 63.584 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.644 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.537 ms

Loss rate: 0.00%

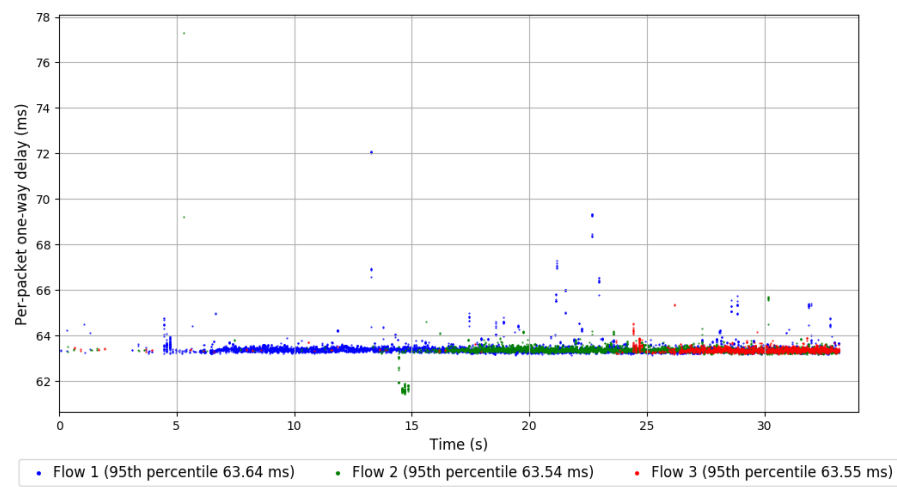
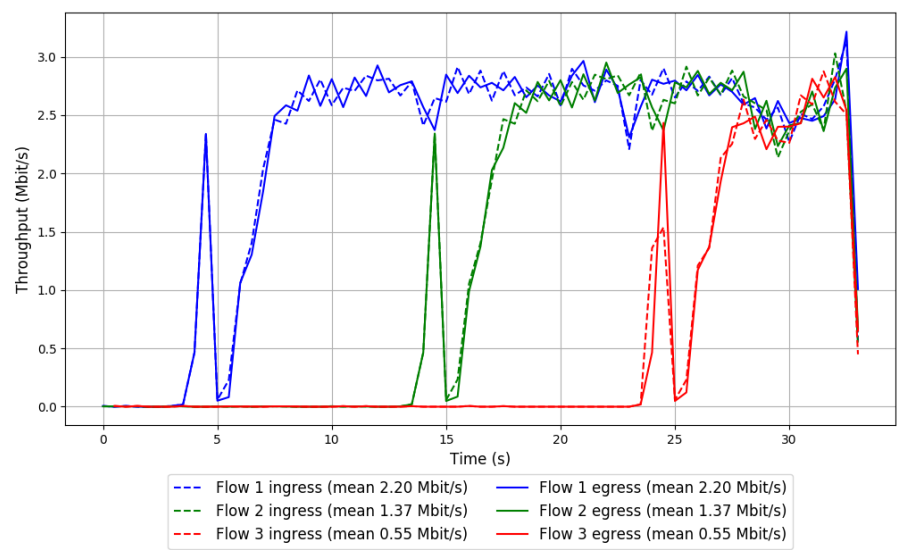
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-21 08:34:42

End at: 2017-12-21 08:35:12

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 63.547 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.567 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 61.515 ms

Loss rate: 0.00%

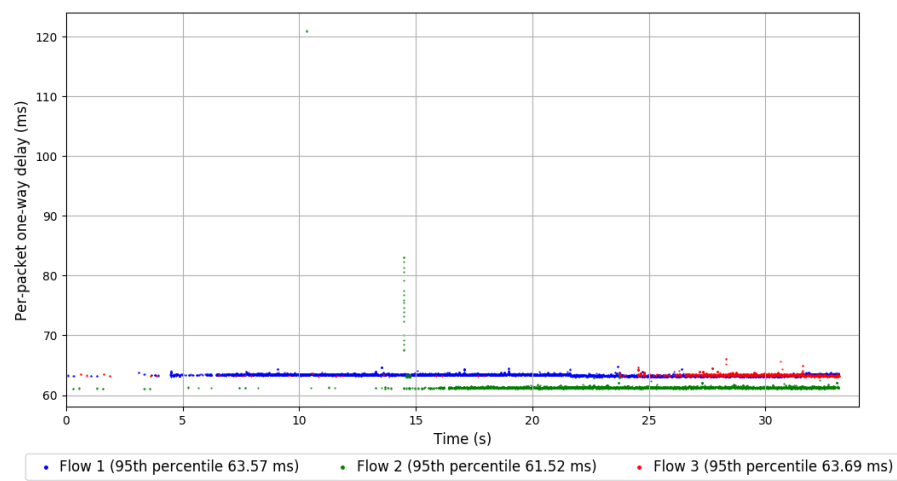
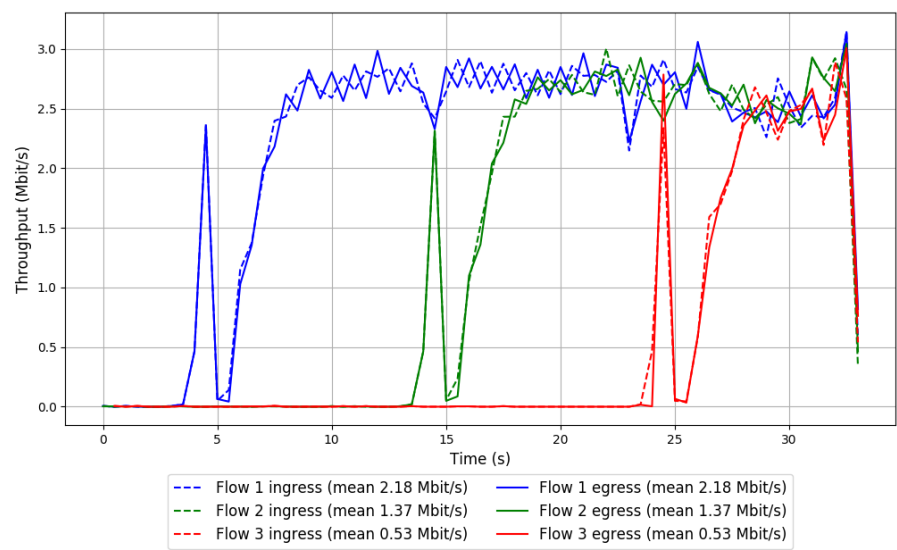
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.685 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-21 08:48:37

End at: 2017-12-21 08:49:07

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 63.580 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 63.597 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.517 ms

Loss rate: 0.00%

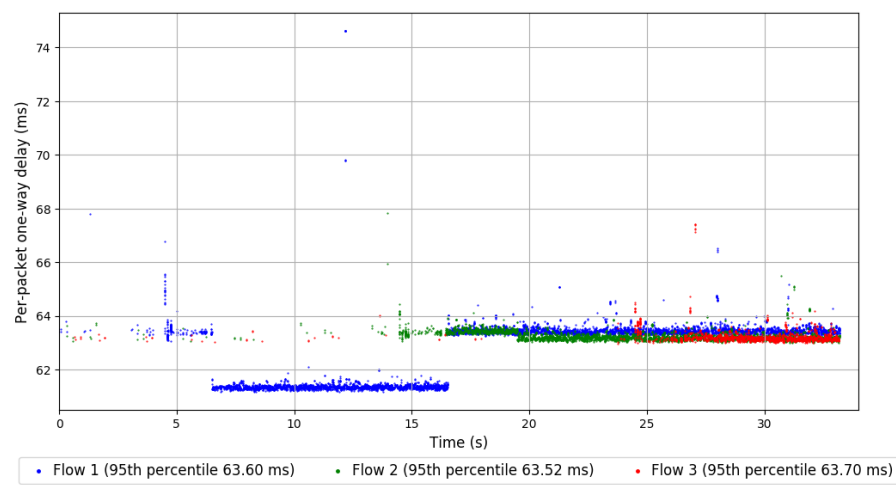
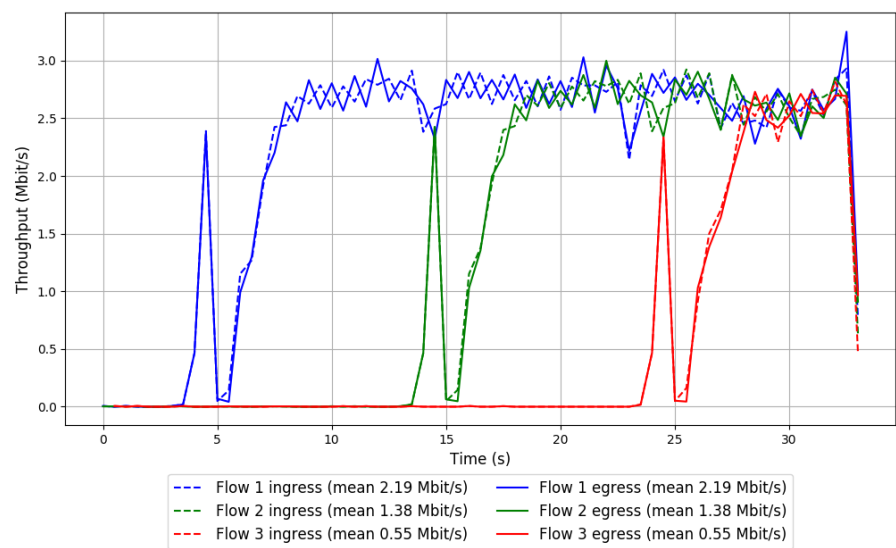
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.697 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-21 09:02:44

End at: 2017-12-21 09:03:14

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 63.600 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.562 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.653 ms

Loss rate: 0.00%

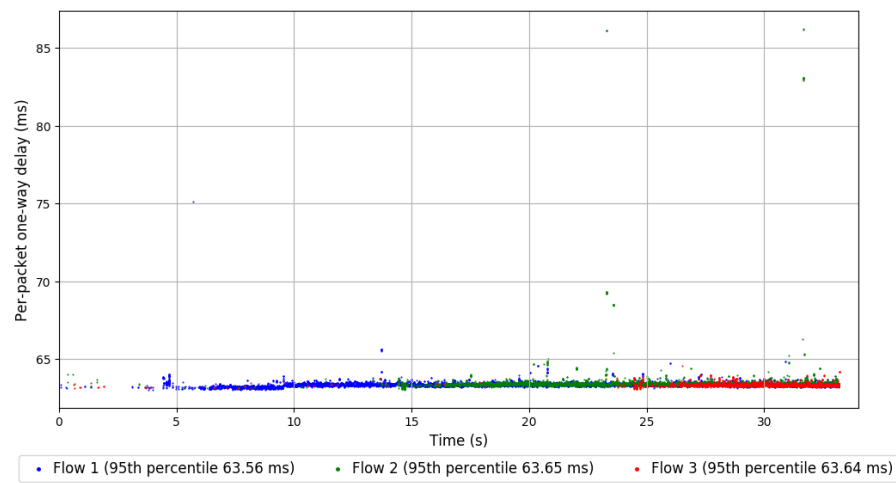
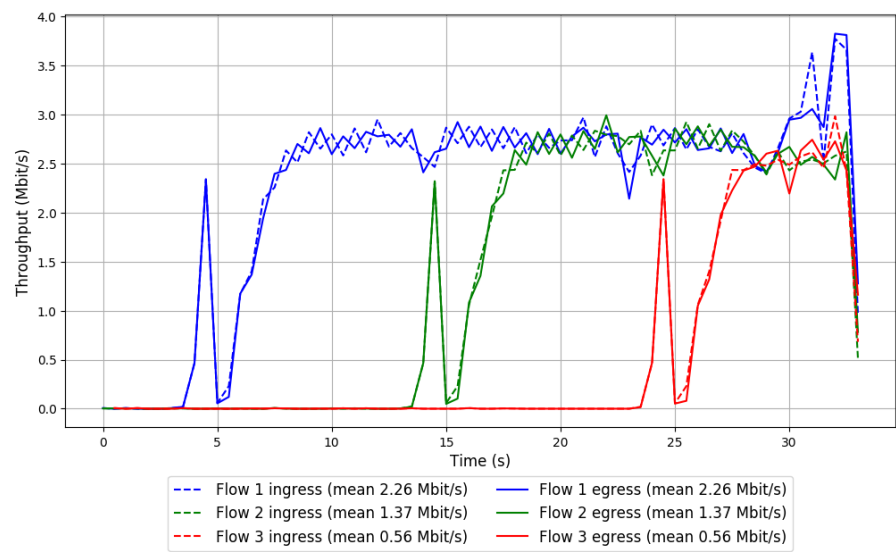
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.640 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-21 09:16:51

End at: 2017-12-21 09:17:21

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 63.670 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.652 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.00%

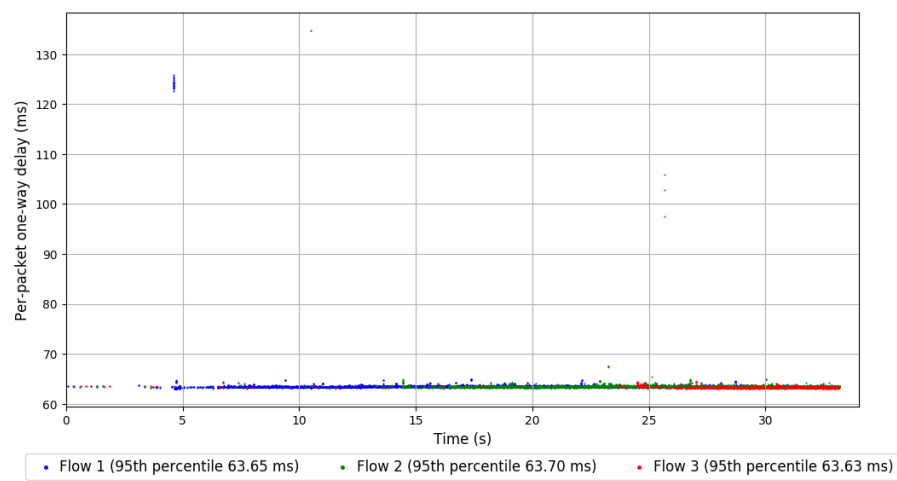
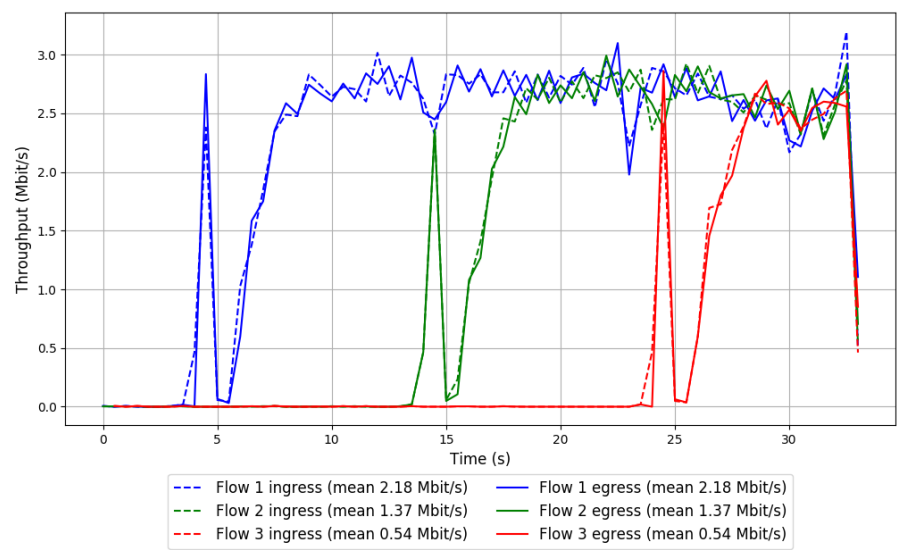
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 63.635 ms

Loss rate: 0.05%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-21 09:31:00

End at: 2017-12-21 09:31:30

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 63.458 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.497 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 63.408 ms

Loss rate: 0.00%

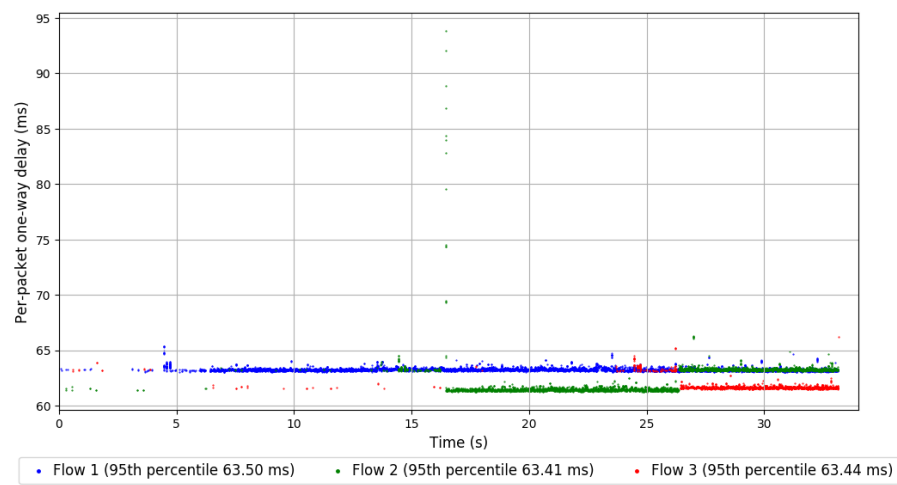
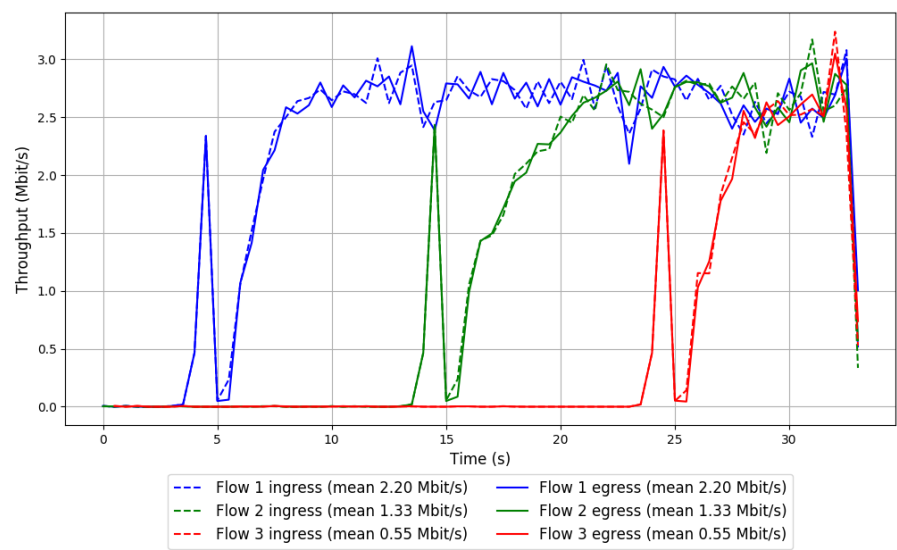
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.443 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-21 07:27:19

End at: 2017-12-21 07:27:49

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.56 Mbit/s

95th percentile per-packet one-way delay: 63.424 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 63.400 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 63.445 ms

Loss rate: 0.10%

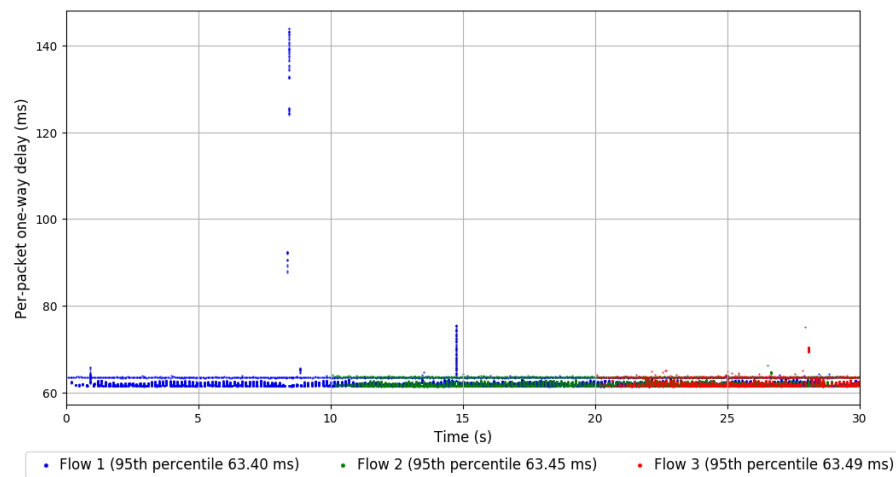
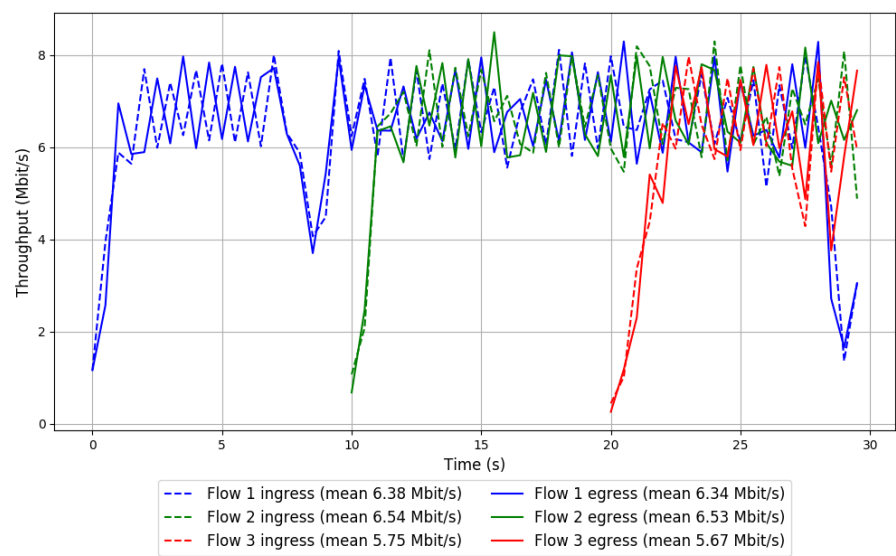
-- Flow 3:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 63.487 ms

Loss rate: 1.50%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-21 07:41:07

End at: 2017-12-21 07:41:37

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.83 Mbit/s

95th percentile per-packet one-way delay: 64.431 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.433 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 64.427 ms

Loss rate: 0.00%

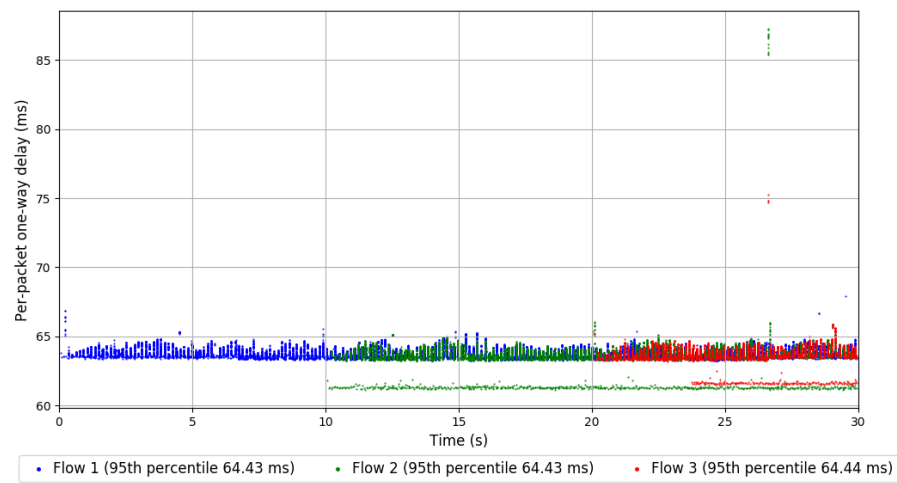
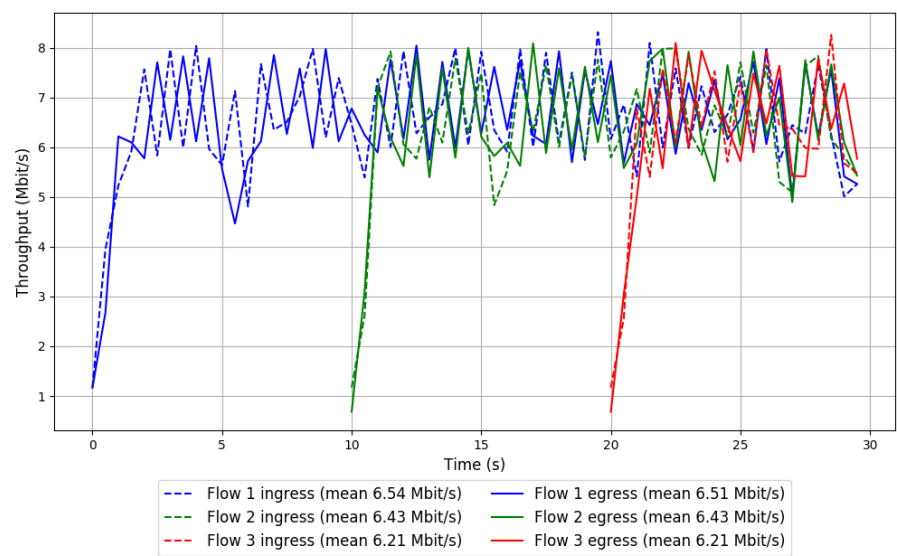
-- Flow 3:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 64.445 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-21 07:55:09

End at: 2017-12-21 07:55:39

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.55 Mbit/s

95th percentile per-packet one-way delay: 64.480 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 64.409 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 64.543 ms

Loss rate: 0.08%

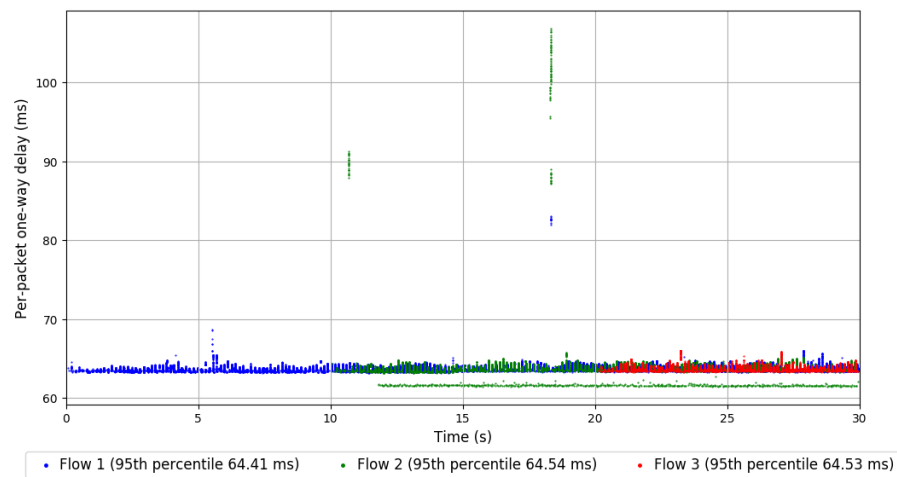
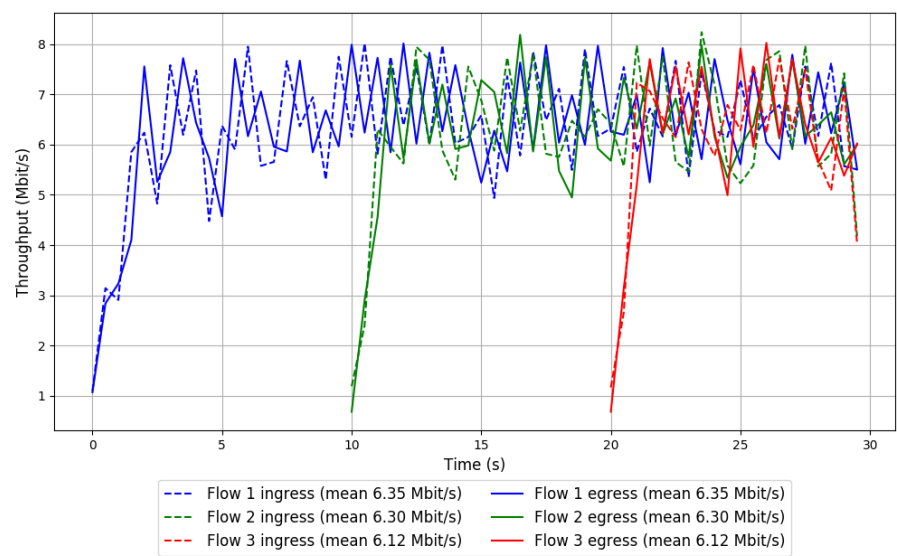
-- Flow 3:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 64.526 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-21 08:09:05

End at: 2017-12-21 08:09:35

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.83 Mbit/s

95th percentile per-packet one-way delay: 64.035 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.076 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.078 ms

Loss rate: 0.00%

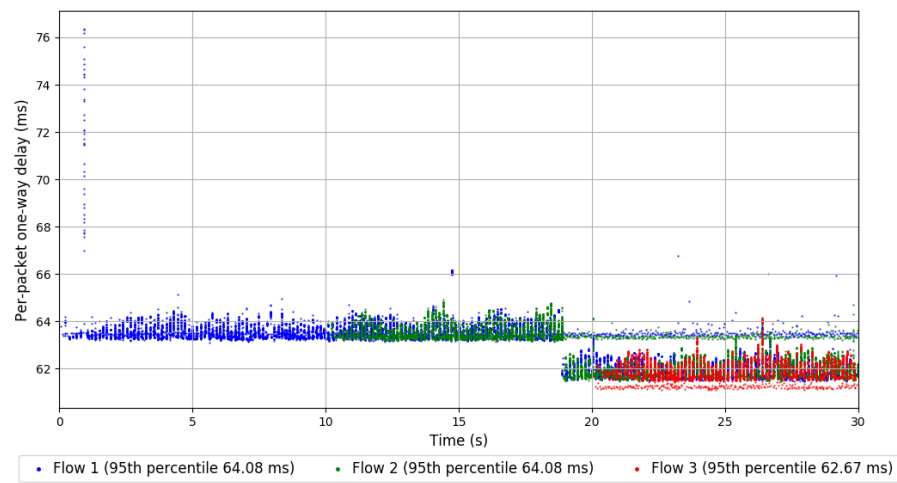
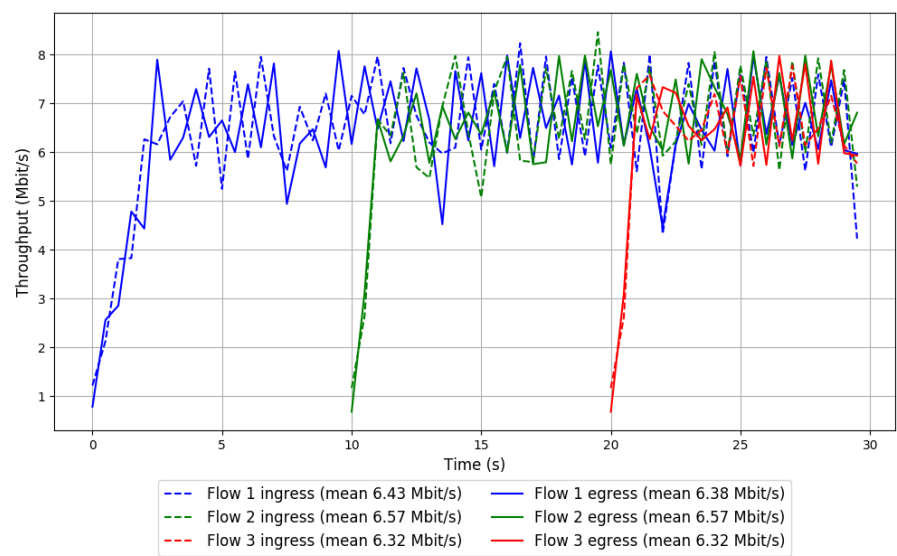
-- Flow 3:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 62.669 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-21 08:23:10

End at: 2017-12-21 08:23:40

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.74 Mbit/s

95th percentile per-packet one-way delay: 64.342 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 64.271 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.436 ms

Loss rate: 0.00%

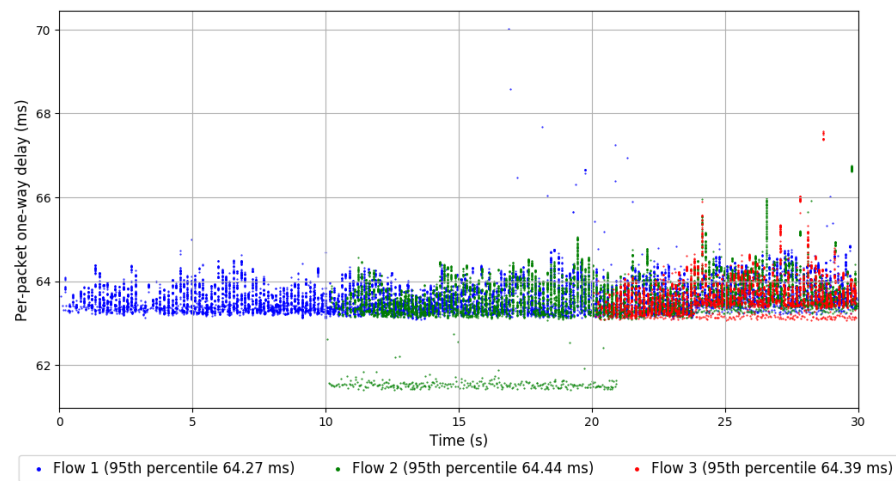
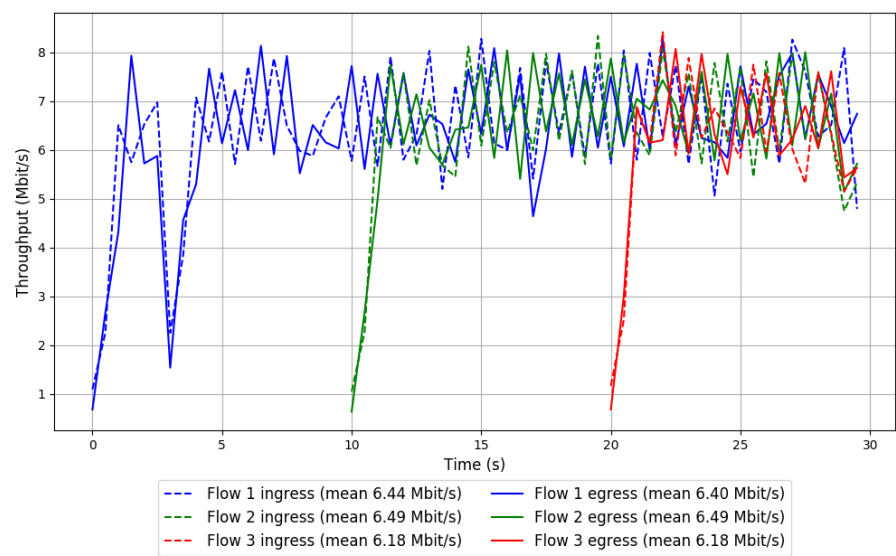
-- Flow 3:

Average throughput: 6.18 Mbit/s

95th percentile per-packet one-way delay: 64.385 ms

Loss rate: 0.02%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

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

End at: 2017-12-21 08:37:46

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.85 Mbit/s

95th percentile per-packet one-way delay: 64.359 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 64.385 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 64.355 ms

Loss rate: 0.00%

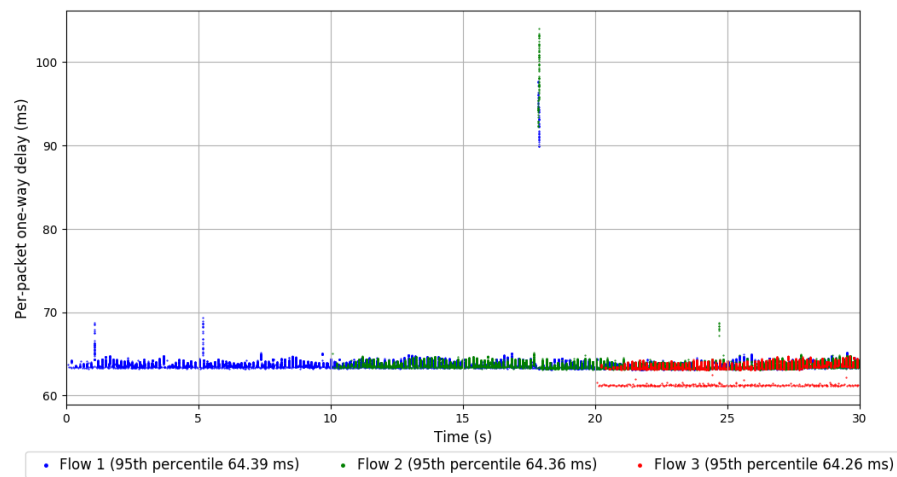
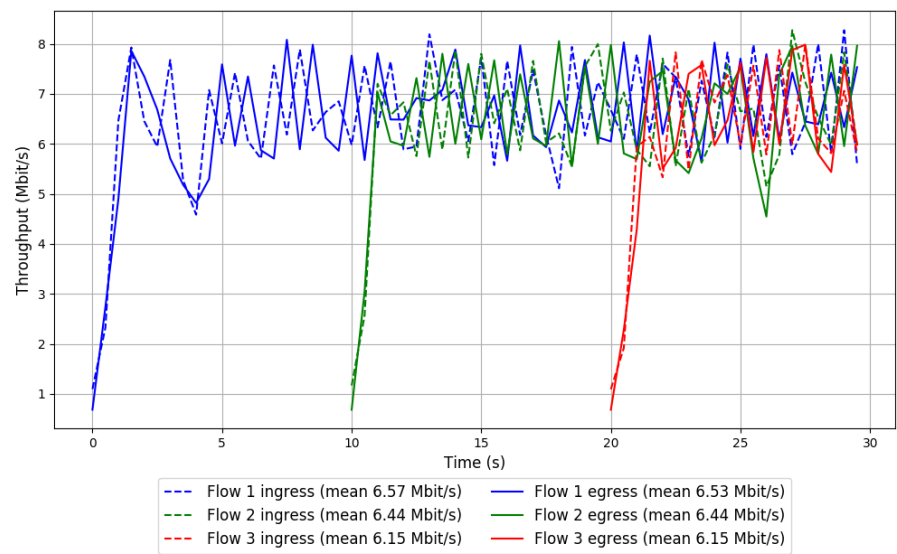
-- Flow 3:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 64.264 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-21 08:51:11

End at: 2017-12-21 08:51:41

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.97 Mbit/s

95th percentile per-packet one-way delay: 64.487 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.39 Mbit/s

95th percentile per-packet one-way delay: 64.530 ms

Loss rate: 0.00%

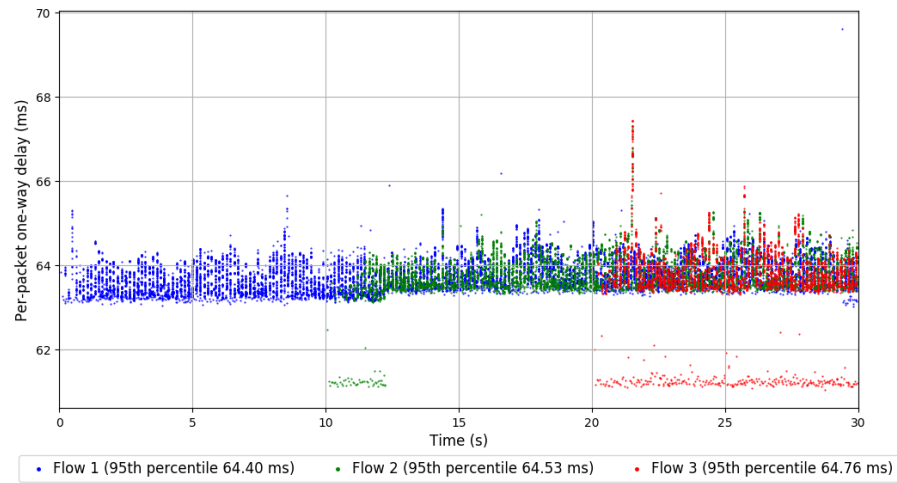
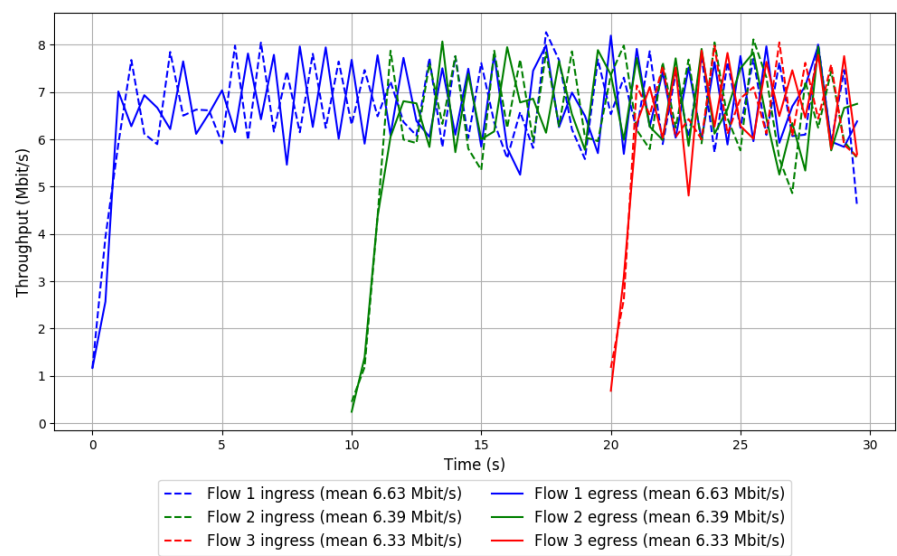
-- Flow 3:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.761 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-21 09:05:17

End at: 2017-12-21 09:05:47

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.83 Mbit/s

95th percentile per-packet one-way delay: 64.308 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.336 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.328 ms

Loss rate: 0.00%

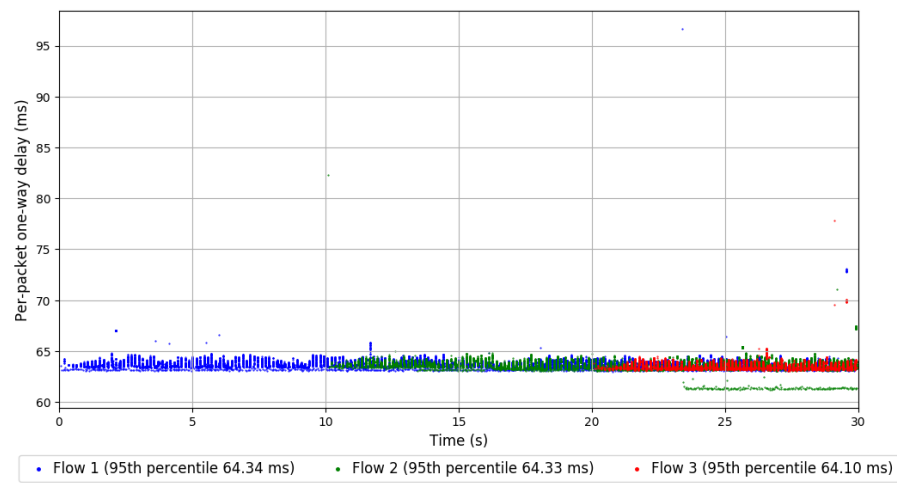
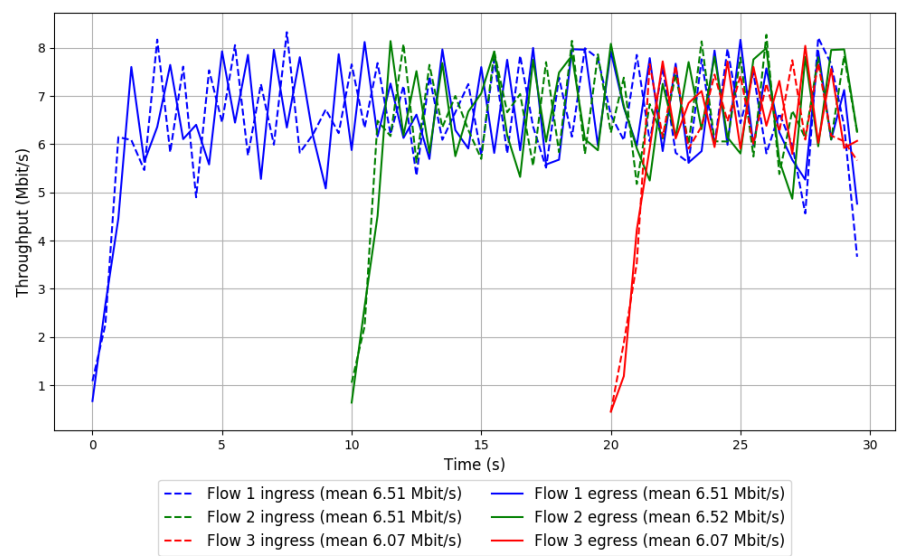
-- Flow 3:

Average throughput: 6.07 Mbit/s

95th percentile per-packet one-way delay: 64.102 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-21 09:19:24

End at: 2017-12-21 09:19:54

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.74 Mbit/s

95th percentile per-packet one-way delay: 64.250 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.267 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 64.211 ms

Loss rate: 0.00%

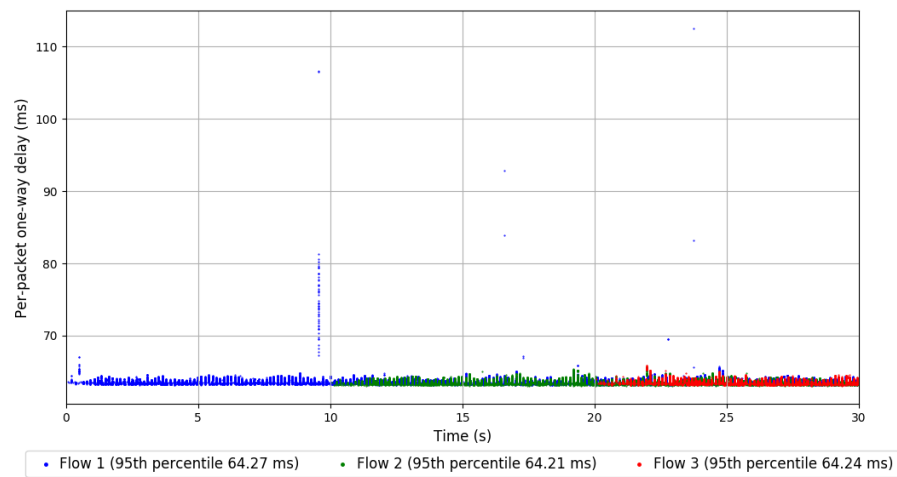
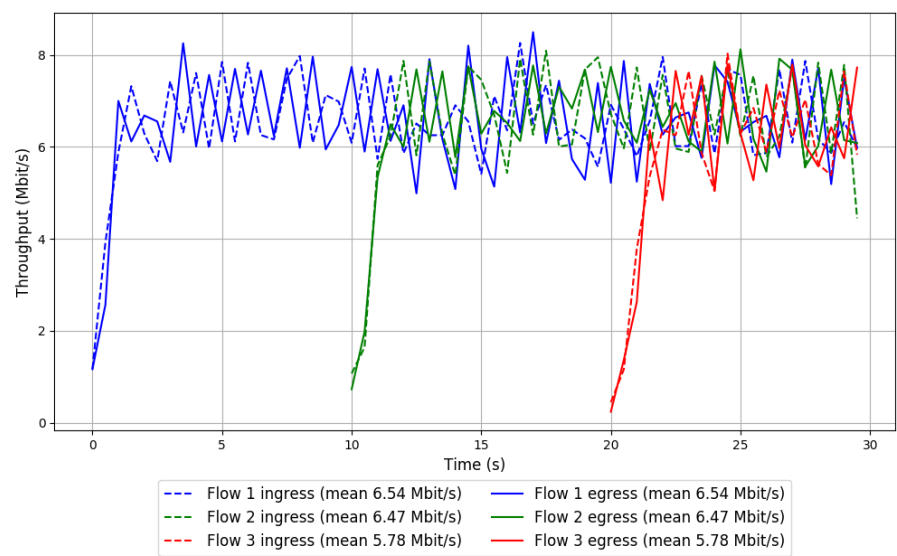
-- Flow 3:

Average throughput: 5.78 Mbit/s

95th percentile per-packet one-way delay: 64.240 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-21 09:33:33

End at: 2017-12-21 09:34:03

Below is generated by plot.py at 2017-12-21 11:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 64.493 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 64.567 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 6.16 Mbit/s

95th percentile per-packet one-way delay: 64.352 ms

Loss rate: 1.44%

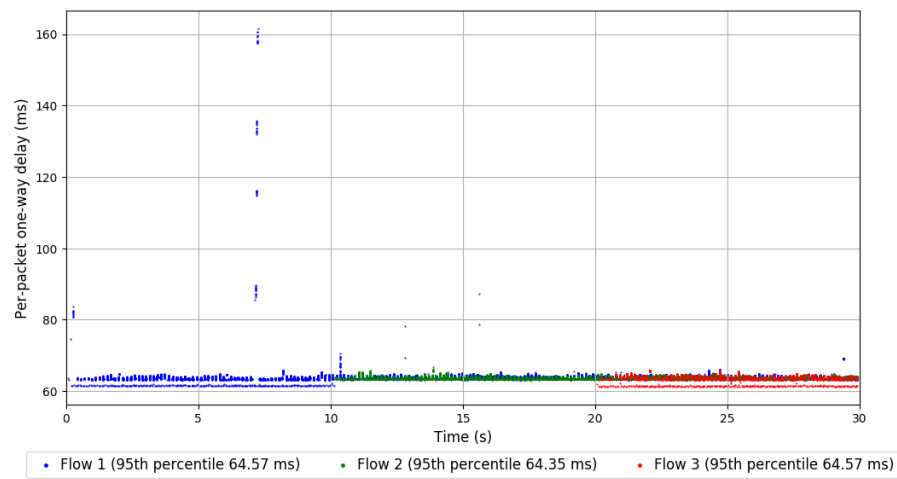
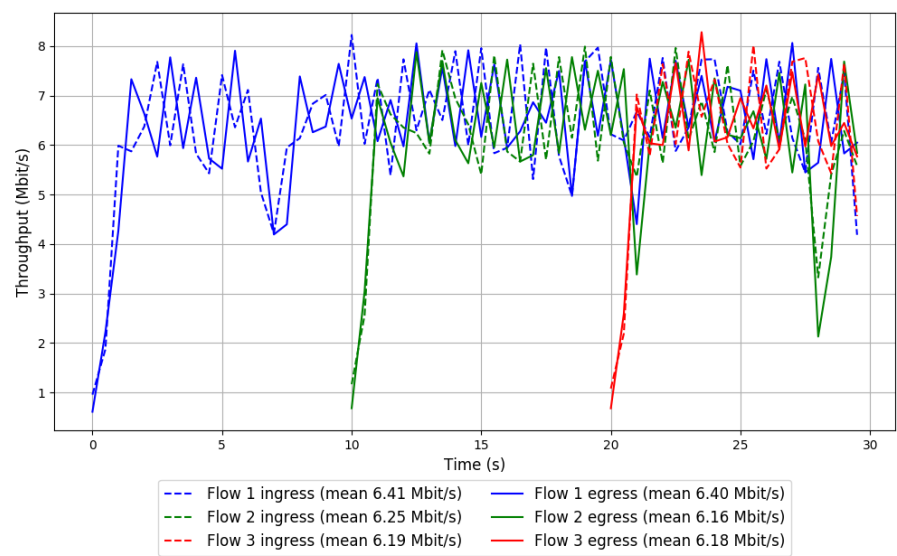
-- Flow 3:

Average throughput: 6.18 Mbit/s

95th percentile per-packet one-way delay: 64.573 ms

Loss rate: 0.08%

Run 10: Report of Sprout — Data Link

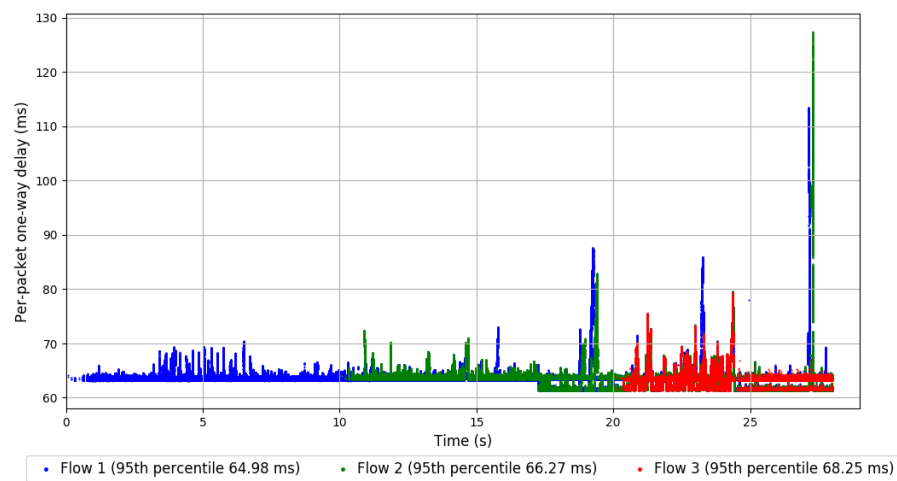
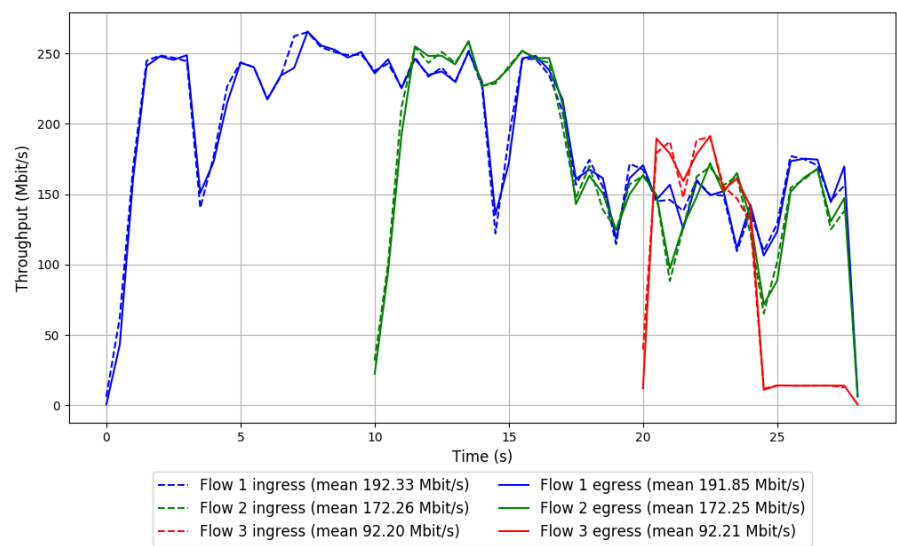


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-21 07:15:44
End at: 2017-12-21 07:16:14

# Below is generated by plot.py at 2017-12-21 11:41:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.53 Mbit/s
95th percentile per-packet one-way delay: 65.772 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 191.85 Mbit/s
95th percentile per-packet one-way delay: 64.977 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 172.25 Mbit/s
95th percentile per-packet one-way delay: 66.270 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 92.21 Mbit/s
95th percentile per-packet one-way delay: 68.254 ms
Loss rate: 0.00%
```


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

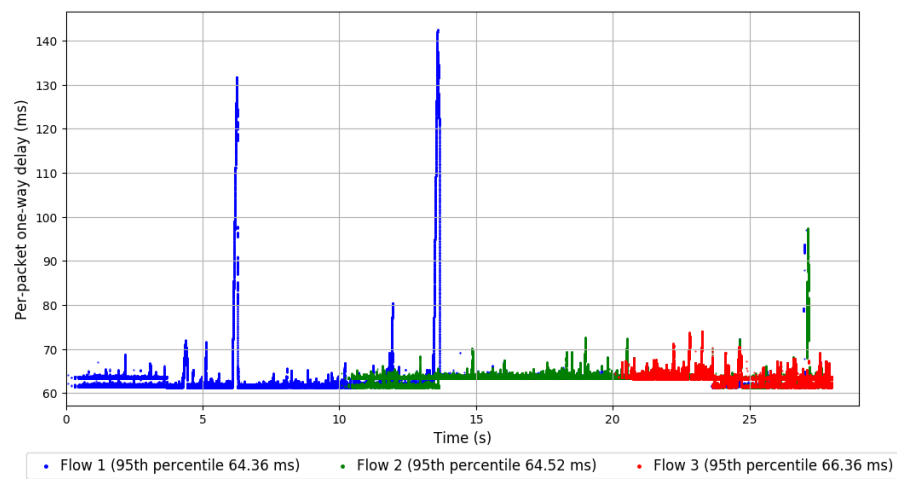
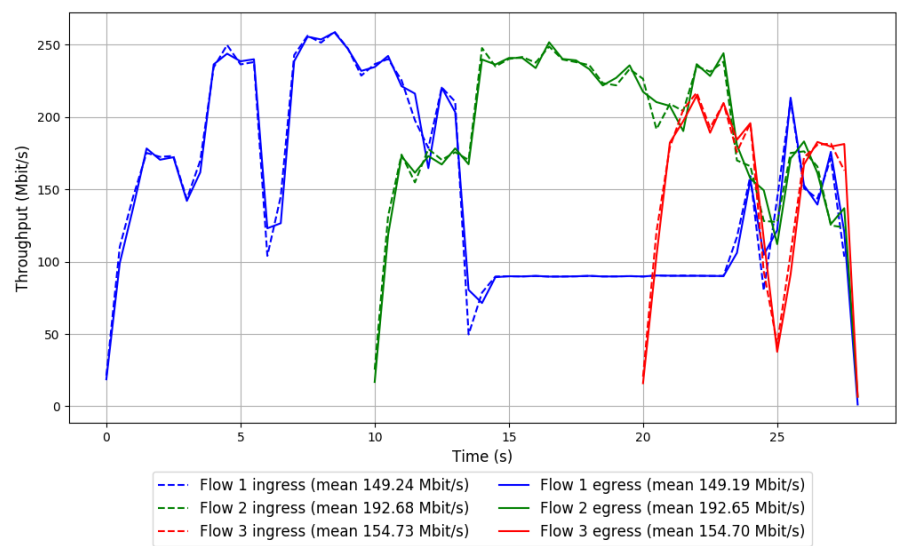


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-21 07:29:58
End at: 2017-12-21 07:30:28

# Below is generated by plot.py at 2017-12-21 11:41:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.70 Mbit/s
95th percentile per-packet one-way delay: 64.922 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 149.19 Mbit/s
95th percentile per-packet one-way delay: 64.361 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 192.65 Mbit/s
95th percentile per-packet one-way delay: 64.516 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 154.70 Mbit/s
95th percentile per-packet one-way delay: 66.363 ms
Loss rate: 0.03%
```

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

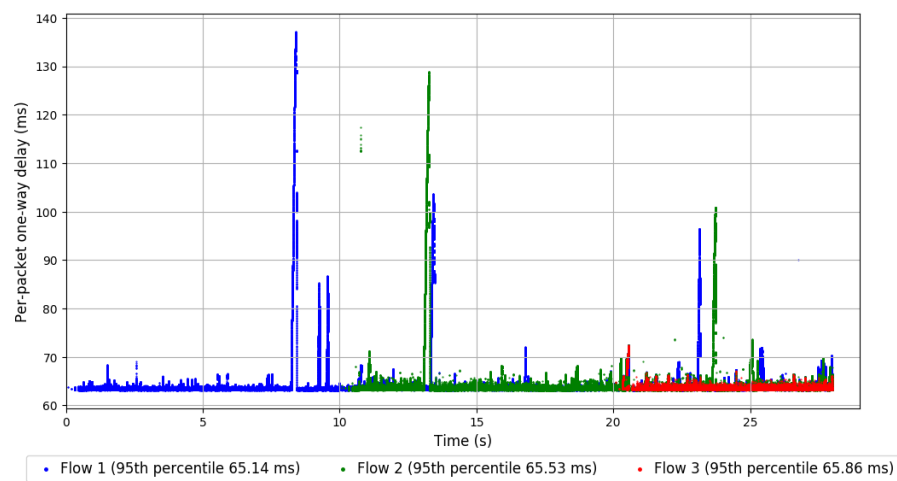
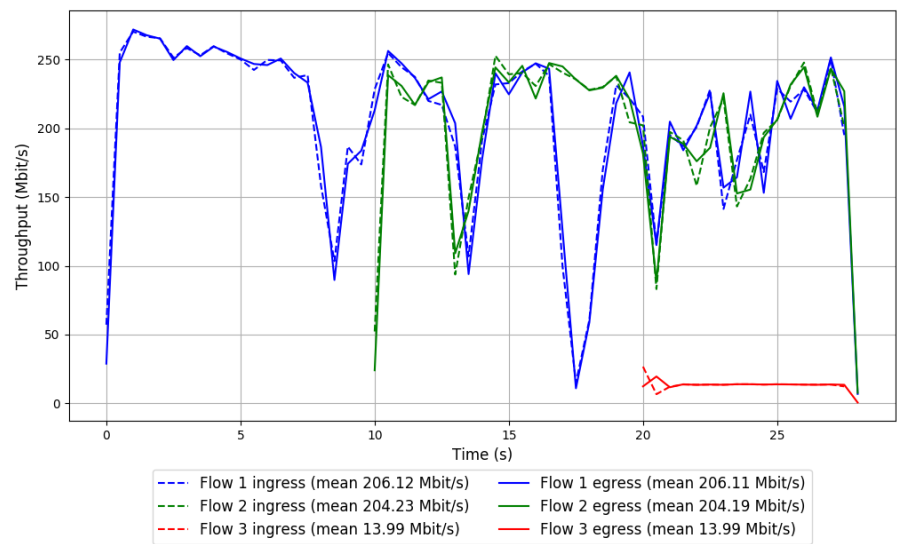


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-21 07:43:48
End at: 2017-12-21 07:44:18

# Below is generated by plot.py at 2017-12-21 11:42:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.16 Mbit/s
95th percentile per-packet one-way delay: 65.301 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 206.11 Mbit/s
95th percentile per-packet one-way delay: 65.142 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 204.19 Mbit/s
95th percentile per-packet one-way delay: 65.532 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 65.855 ms
Loss rate: 0.02%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-21 07:57:49

End at: 2017-12-21 07:58:19

Below is generated by plot.py at 2017-12-21 11:42:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 239.90 Mbit/s

95th percentile per-packet one-way delay: 64.055 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 166.03 Mbit/s

95th percentile per-packet one-way delay: 64.009 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 13.71 Mbit/s

95th percentile per-packet one-way delay: 63.706 ms

Loss rate: 0.01%

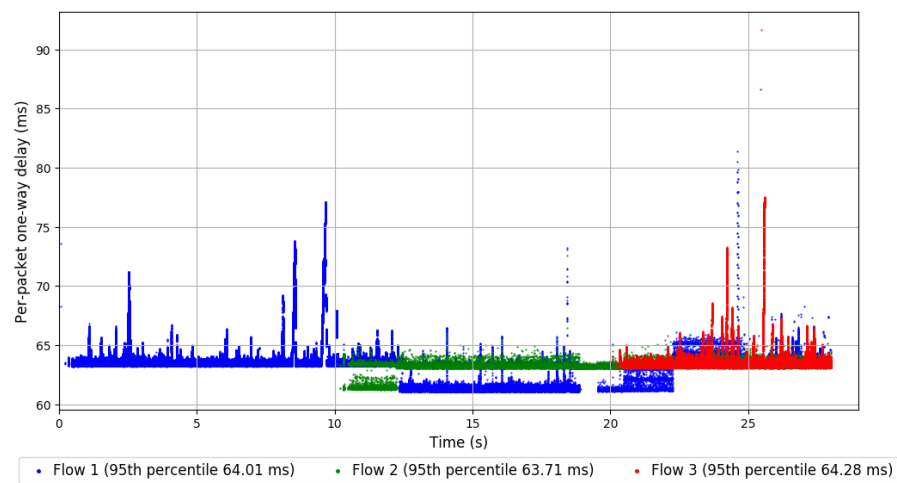
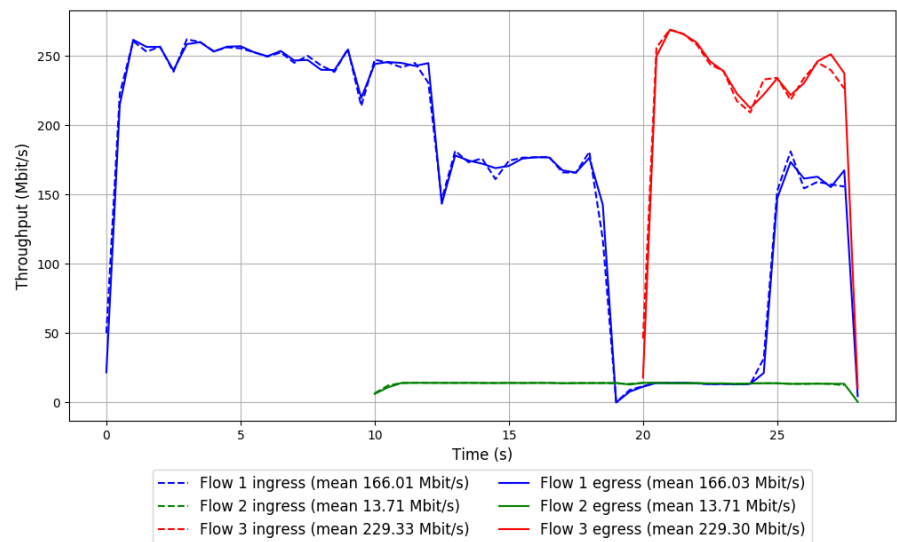
-- Flow 3:

Average throughput: 229.30 Mbit/s

95th percentile per-packet one-way delay: 64.278 ms

Loss rate: 0.02%

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

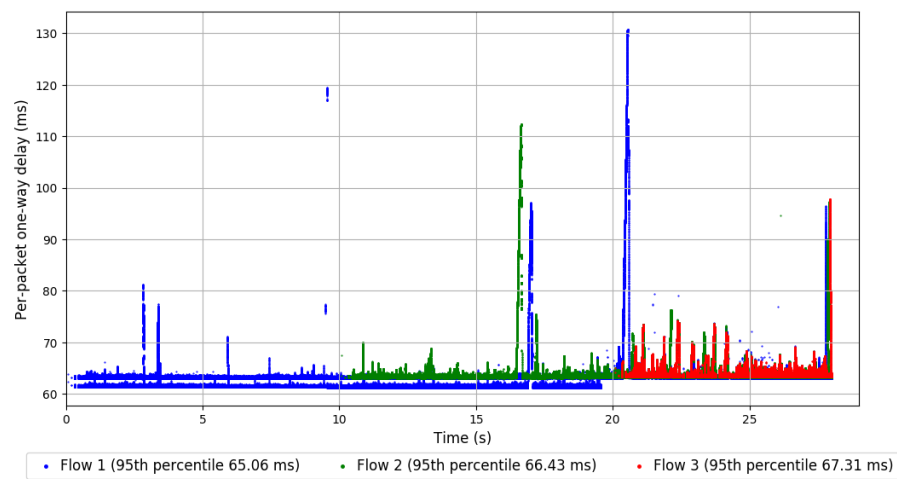
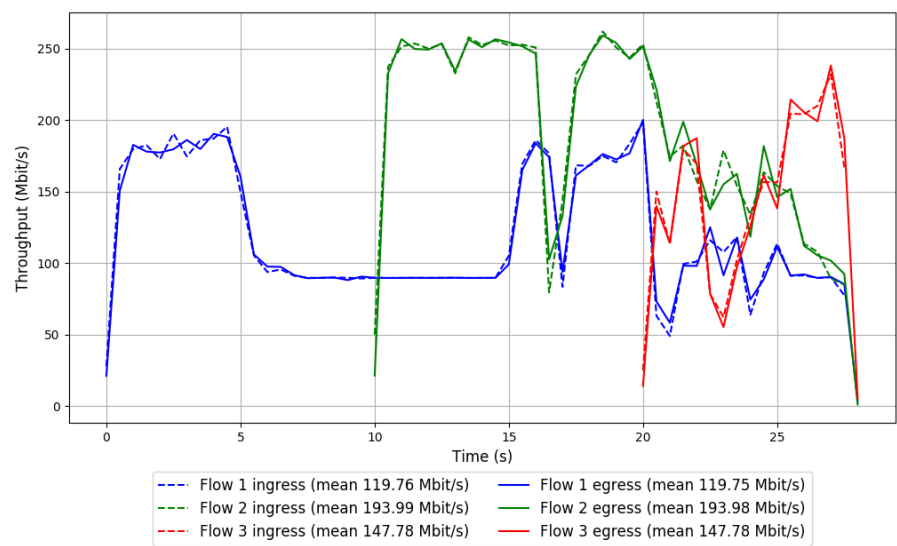


```
Run 5: Statistics of TaoVA-100x

Start at: 2017-12-21 08:11:42
End at: 2017-12-21 08:12:12

# Below is generated by plot.py at 2017-12-21 11:42:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.12 Mbit/s
95th percentile per-packet one-way delay: 66.172 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 119.75 Mbit/s
95th percentile per-packet one-way delay: 65.055 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.98 Mbit/s
95th percentile per-packet one-way delay: 66.428 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 147.78 Mbit/s
95th percentile per-packet one-way delay: 67.309 ms
Loss rate: 0.01%
```


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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-21 08:25:44

End at: 2017-12-21 08:26:14

Below is generated by plot.py at 2017-12-21 11:42:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.03 Mbit/s

95th percentile per-packet one-way delay: 65.808 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 190.17 Mbit/s

95th percentile per-packet one-way delay: 66.207 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 132.02 Mbit/s

95th percentile per-packet one-way delay: 64.335 ms

Loss rate: 0.00%

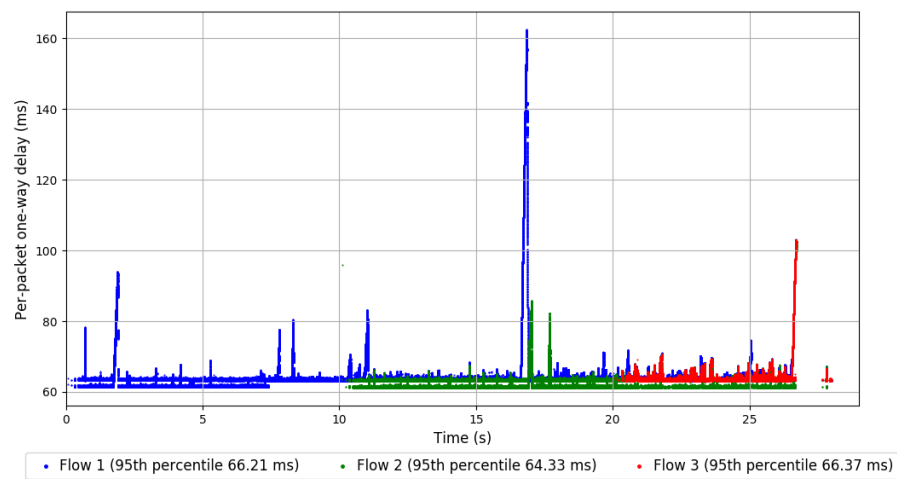
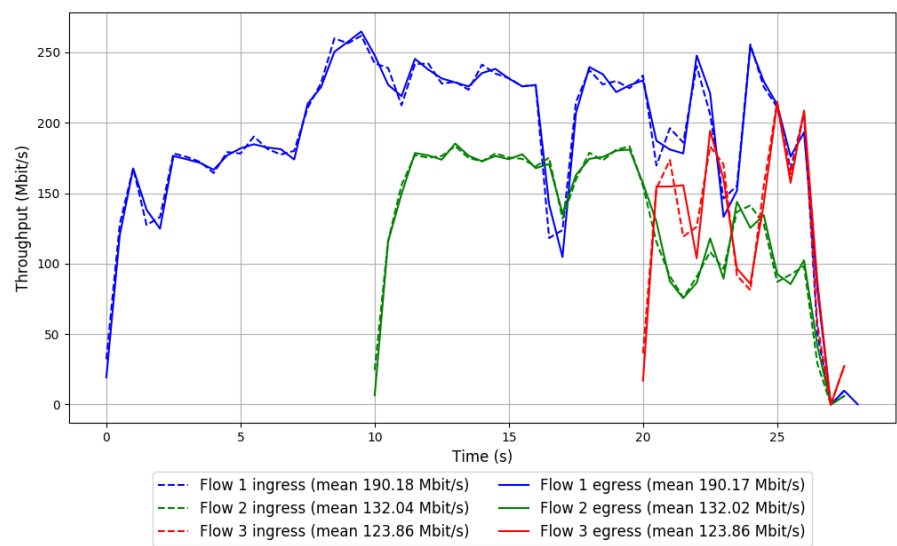
-- Flow 3:

Average throughput: 123.86 Mbit/s

95th percentile per-packet one-way delay: 66.369 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-21 08:39:53

End at: 2017-12-21 08:40:23

Below is generated by plot.py at 2017-12-21 11:42:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.73 Mbit/s

95th percentile per-packet one-way delay: 65.013 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 161.32 Mbit/s

95th percentile per-packet one-way delay: 64.094 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 126.46 Mbit/s

95th percentile per-packet one-way delay: 68.944 ms

Loss rate: 0.01%

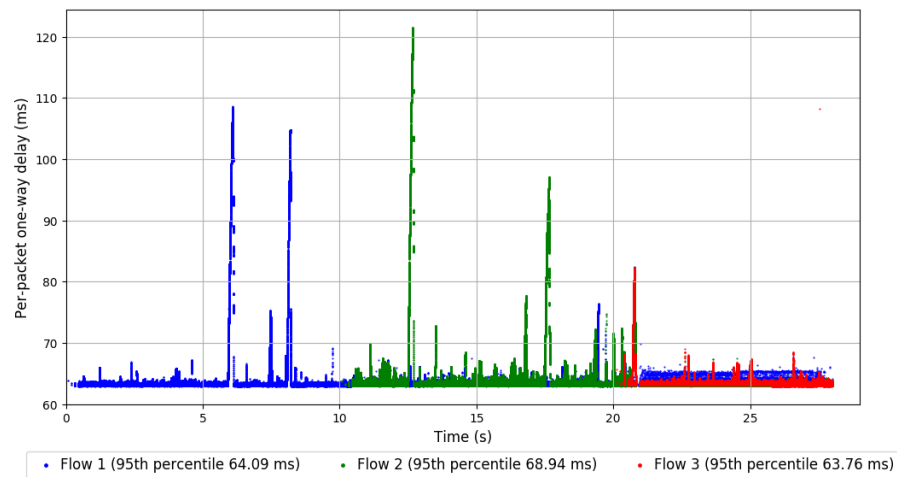
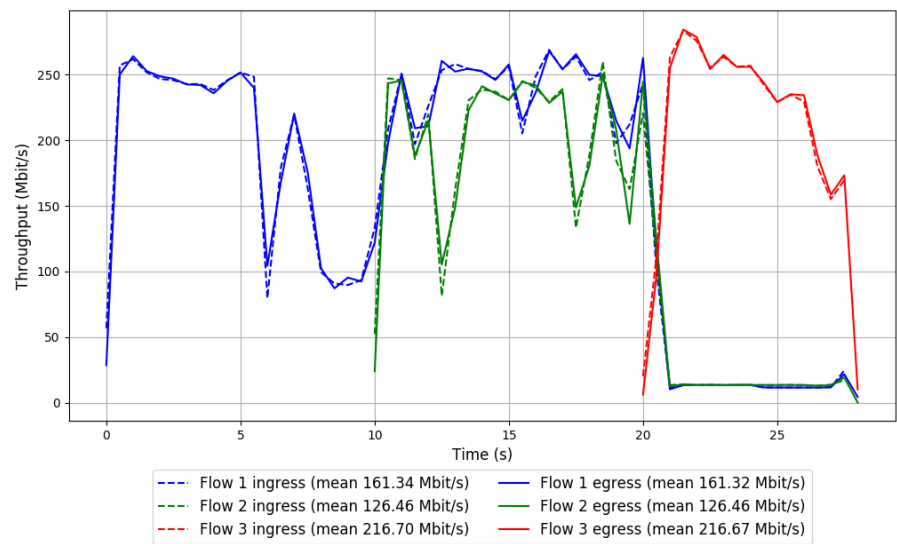
-- Flow 3:

Average throughput: 216.67 Mbit/s

95th percentile per-packet one-way delay: 63.757 ms

Loss rate: 0.01%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-21 08:53:49

End at: 2017-12-21 08:54:19

Below is generated by plot.py at 2017-12-21 11:46:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.21 Mbit/s

95th percentile per-packet one-way delay: 65.520 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 217.58 Mbit/s

95th percentile per-packet one-way delay: 65.515 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 129.09 Mbit/s

95th percentile per-packet one-way delay: 65.063 ms

Loss rate: 0.01%

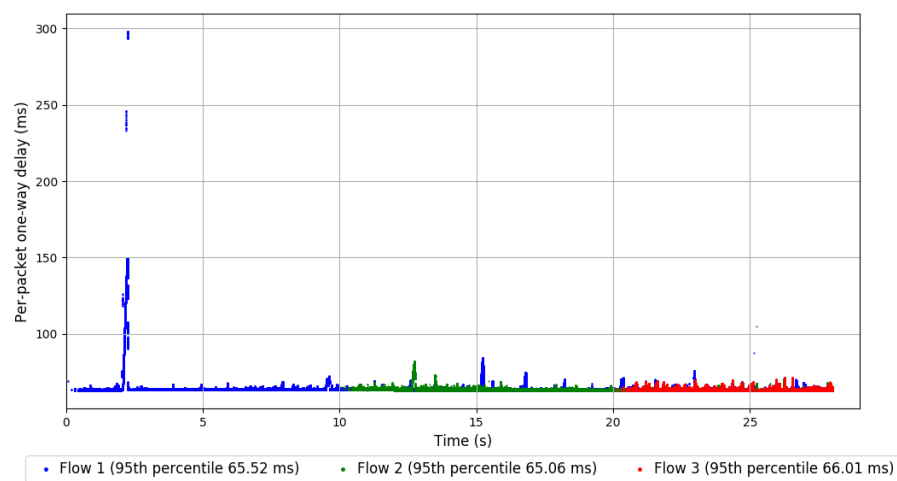
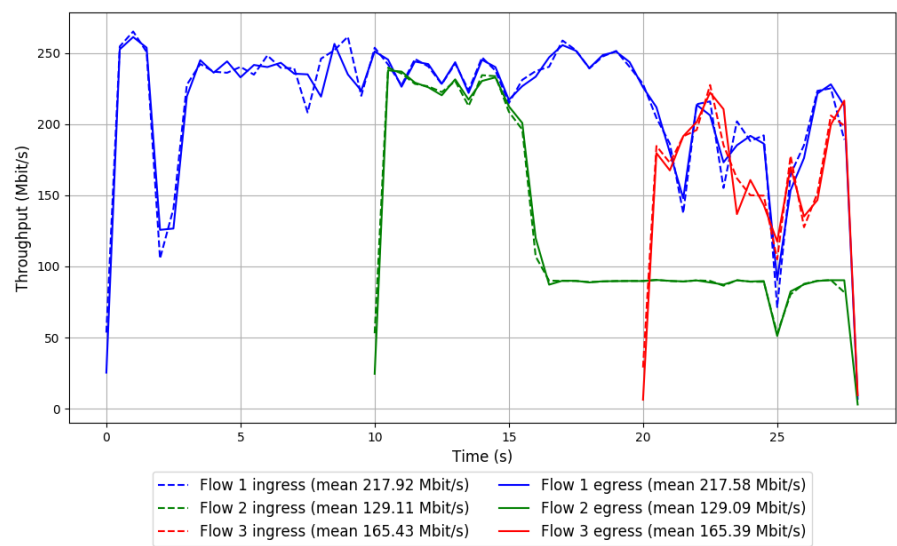
-- Flow 3:

Average throughput: 165.39 Mbit/s

95th percentile per-packet one-way delay: 66.012 ms

Loss rate: 0.02%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-21 09:07:55

End at: 2017-12-21 09:08:25

Below is generated by plot.py at 2017-12-21 11:49:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.84 Mbit/s

95th percentile per-packet one-way delay: 66.668 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 202.03 Mbit/s

95th percentile per-packet one-way delay: 66.686 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 145.22 Mbit/s

95th percentile per-packet one-way delay: 66.478 ms

Loss rate: 0.00%

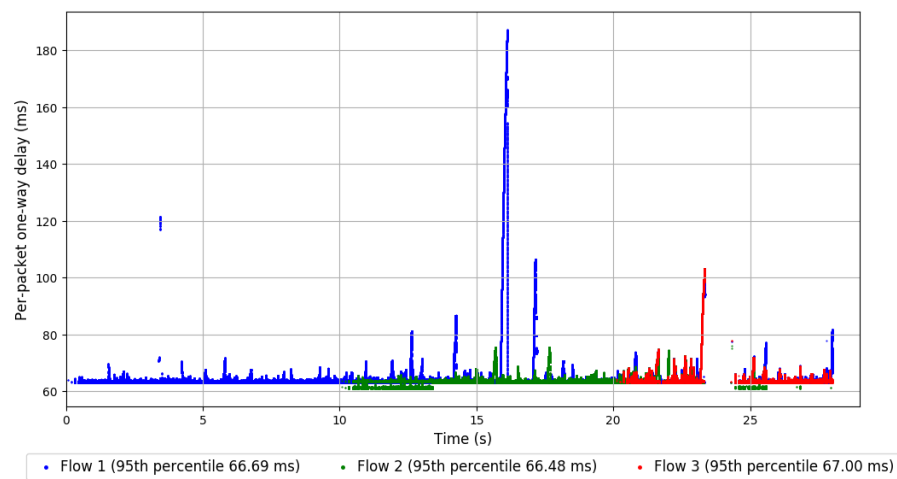
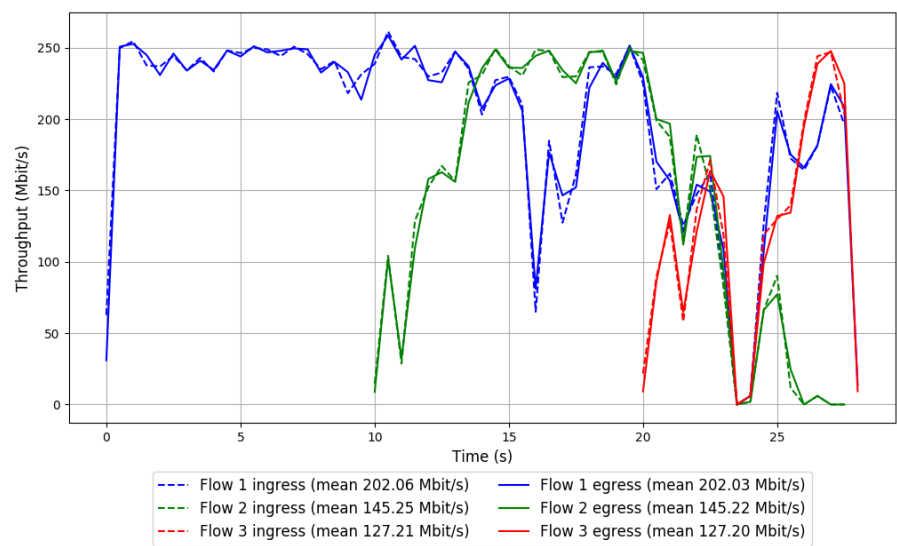
-- Flow 3:

Average throughput: 127.20 Mbit/s

95th percentile per-packet one-way delay: 67.000 ms

Loss rate: 0.01%

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

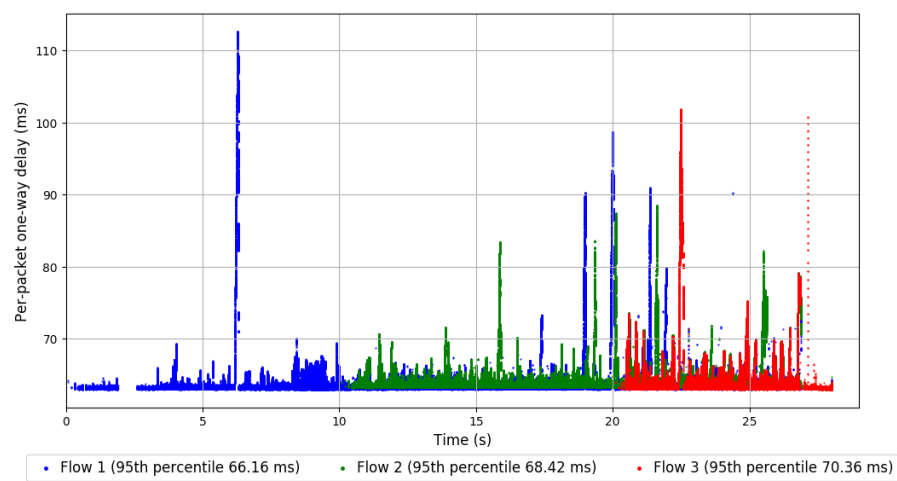
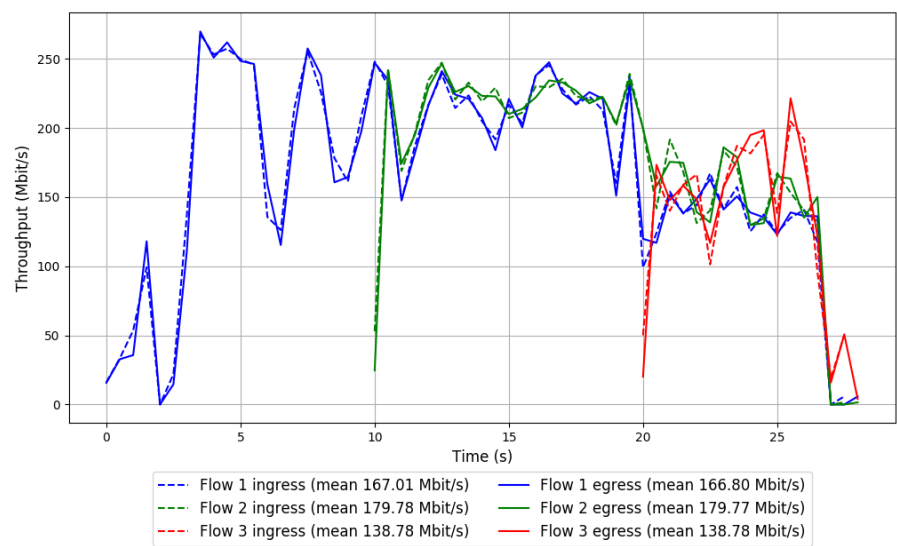


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-21 09:22:04
End at: 2017-12-21 09:22:34

# Below is generated by plot.py at 2017-12-21 11:50:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.63 Mbit/s
95th percentile per-packet one-way delay: 67.746 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 166.80 Mbit/s
95th percentile per-packet one-way delay: 66.160 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 179.77 Mbit/s
95th percentile per-packet one-way delay: 68.415 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 138.78 Mbit/s
95th percentile per-packet one-way delay: 70.360 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-21 07:22:52

End at: 2017-12-21 07:23:22

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.68 Mbit/s

95th percentile per-packet one-way delay: 64.600 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 39.55 Mbit/s

95th percentile per-packet one-way delay: 63.197 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 96.68 Mbit/s

95th percentile per-packet one-way delay: 64.246 ms

Loss rate: 0.27%

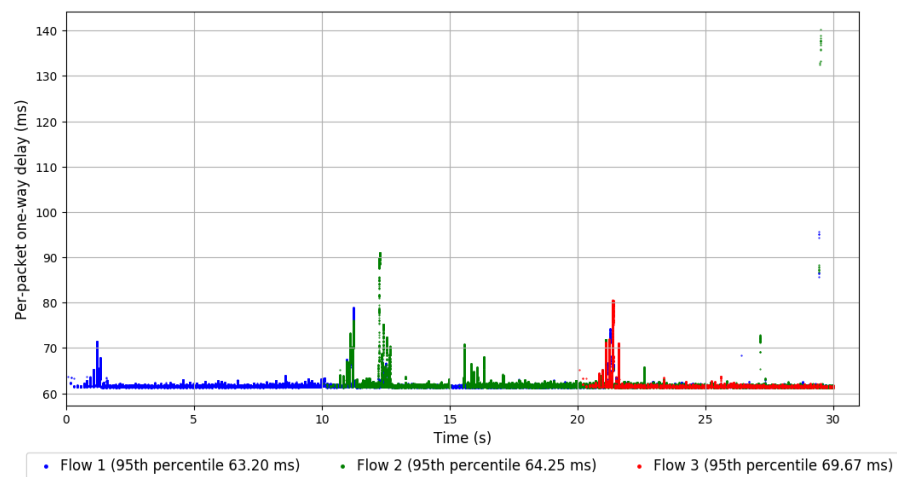
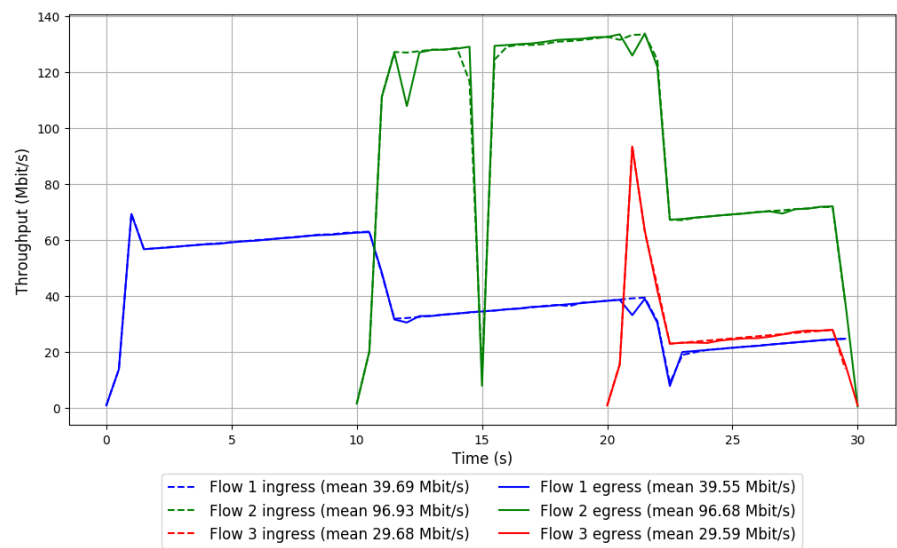
-- Flow 3:

Average throughput: 29.59 Mbit/s

95th percentile per-packet one-way delay: 69.669 ms

Loss rate: 0.36%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-21 07:36:44

End at: 2017-12-21 07:37:14

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.66 Mbit/s

95th percentile per-packet one-way delay: 65.196 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 29.57 Mbit/s

95th percentile per-packet one-way delay: 63.884 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 91.87 Mbit/s

95th percentile per-packet one-way delay: 65.128 ms

Loss rate: 0.01%

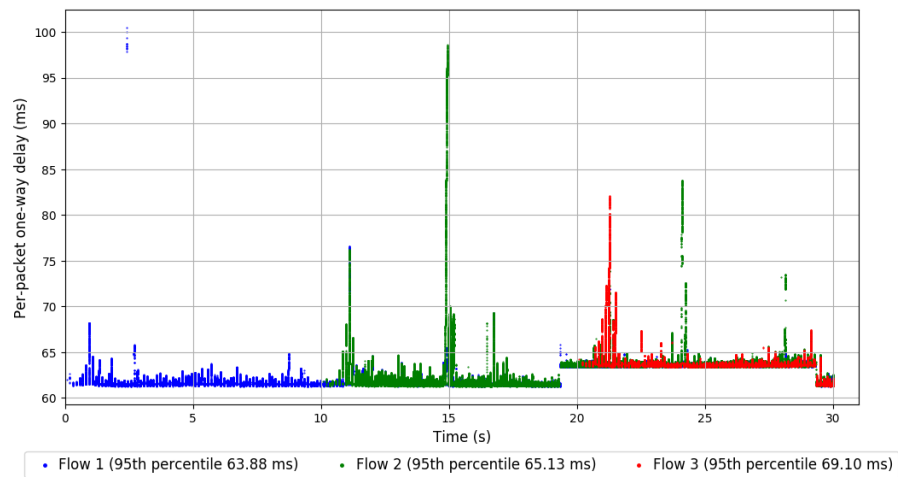
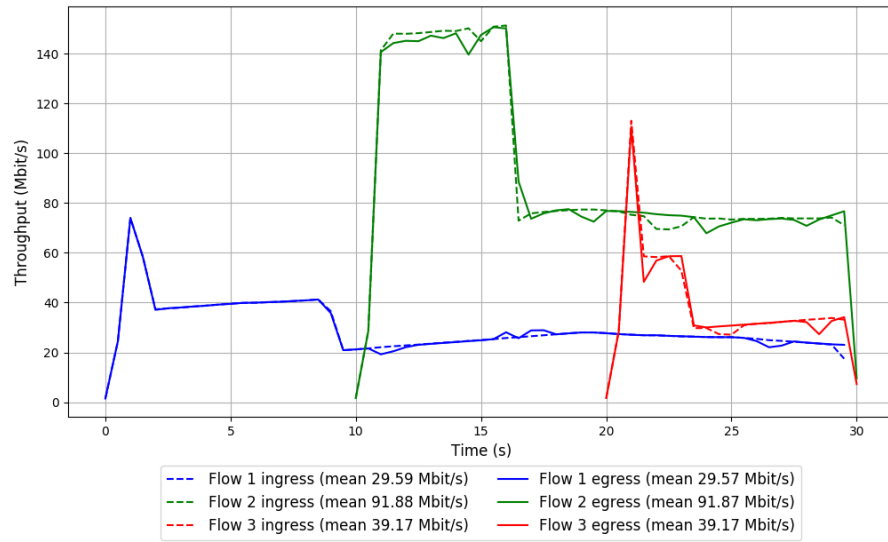
-- Flow 3:

Average throughput: 39.17 Mbit/s

95th percentile per-packet one-way delay: 69.097 ms

Loss rate: 0.01%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-21 07:50:43

End at: 2017-12-21 07:51:13

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.01 Mbit/s

95th percentile per-packet one-way delay: 70.620 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 53.52 Mbit/s

95th percentile per-packet one-way delay: 67.528 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 76.50 Mbit/s

95th percentile per-packet one-way delay: 72.141 ms

Loss rate: 0.29%

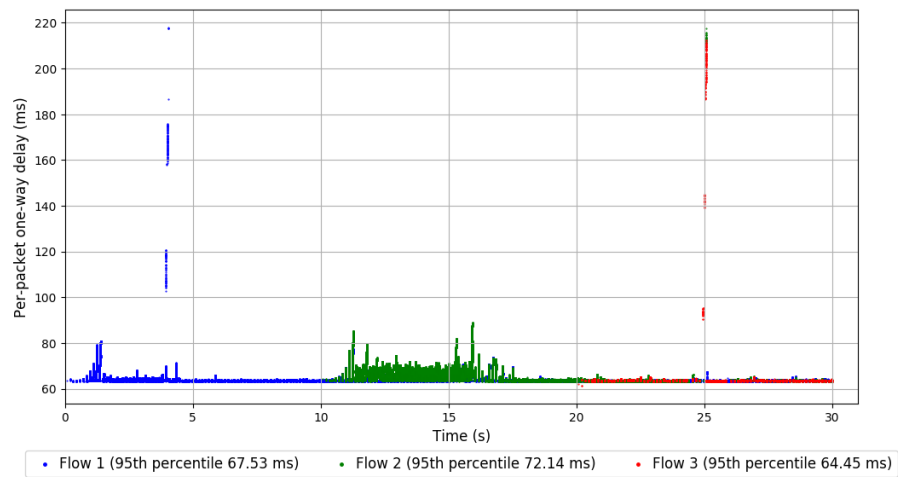
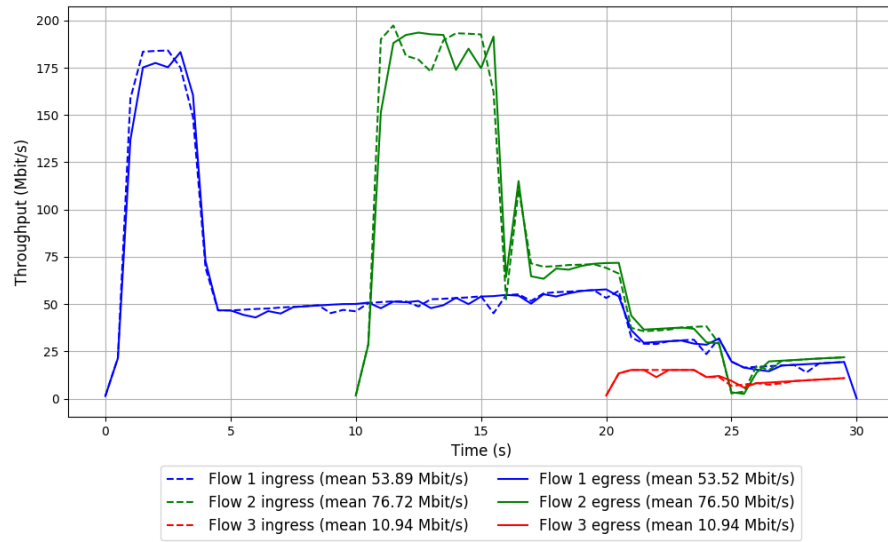
-- Flow 3:

Average throughput: 10.94 Mbit/s

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

Loss rate: 0.02%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-21 08:04:39

End at: 2017-12-21 08:05:09

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.38 Mbit/s

95th percentile per-packet one-way delay: 64.789 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 48.18 Mbit/s

95th percentile per-packet one-way delay: 65.147 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 47.99 Mbit/s

95th percentile per-packet one-way delay: 64.654 ms

Loss rate: 0.01%

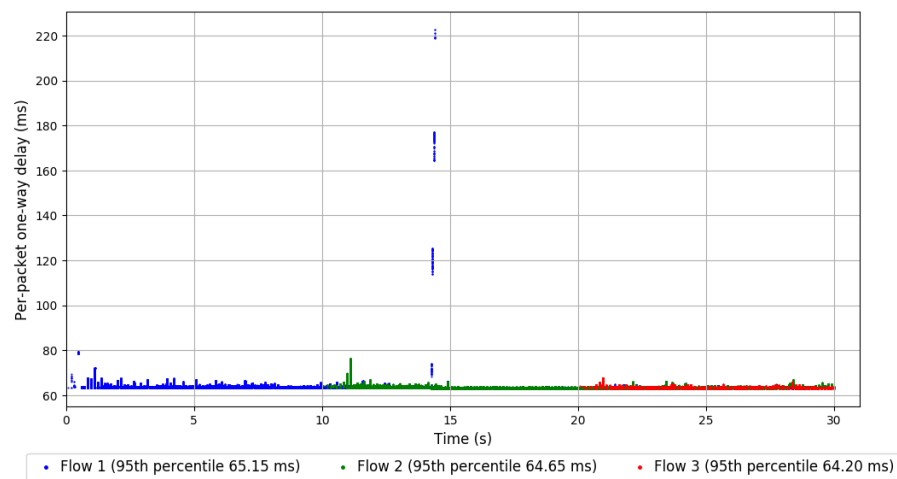
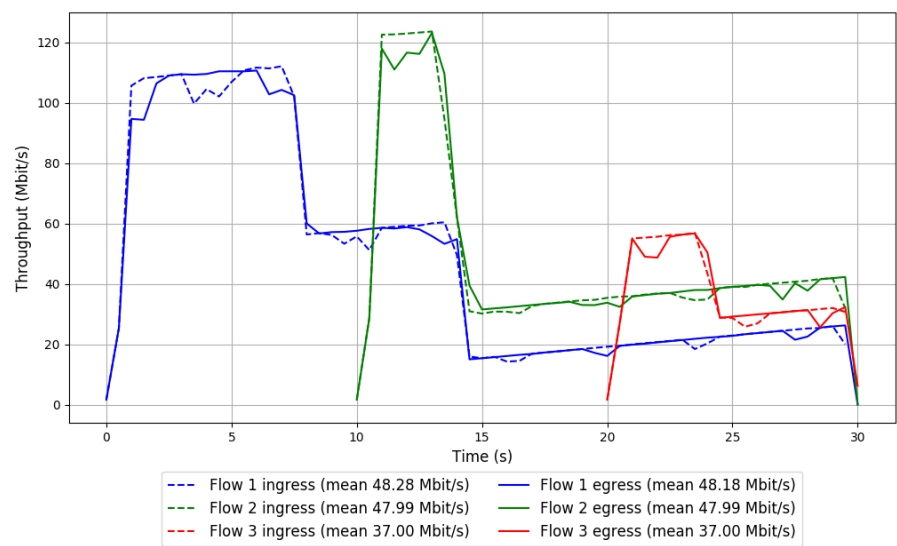
-- Flow 3:

Average throughput: 37.00 Mbit/s

95th percentile per-packet one-way delay: 64.199 ms

Loss rate: 0.01%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-21 08:18:44

End at: 2017-12-21 08:19:14

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.54 Mbit/s

95th percentile per-packet one-way delay: 70.839 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 32.18 Mbit/s

95th percentile per-packet one-way delay: 68.560 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 76.70 Mbit/s

95th percentile per-packet one-way delay: 70.095 ms

Loss rate: 0.01%

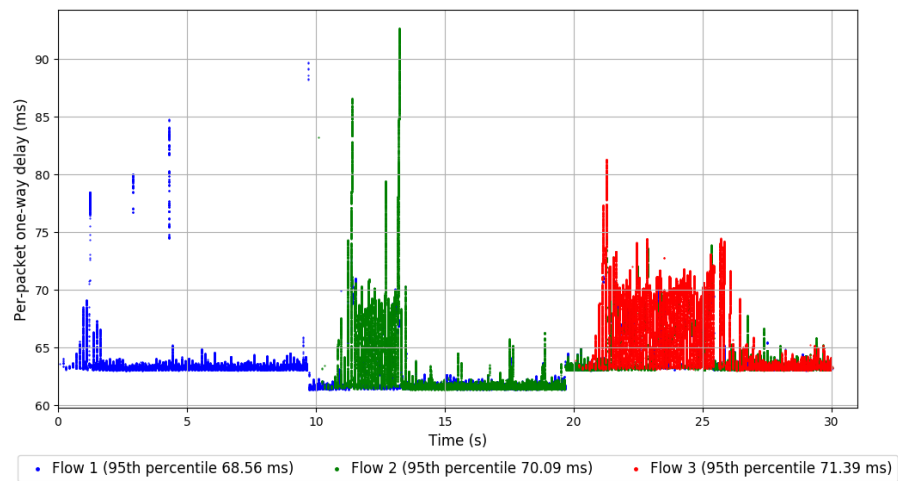
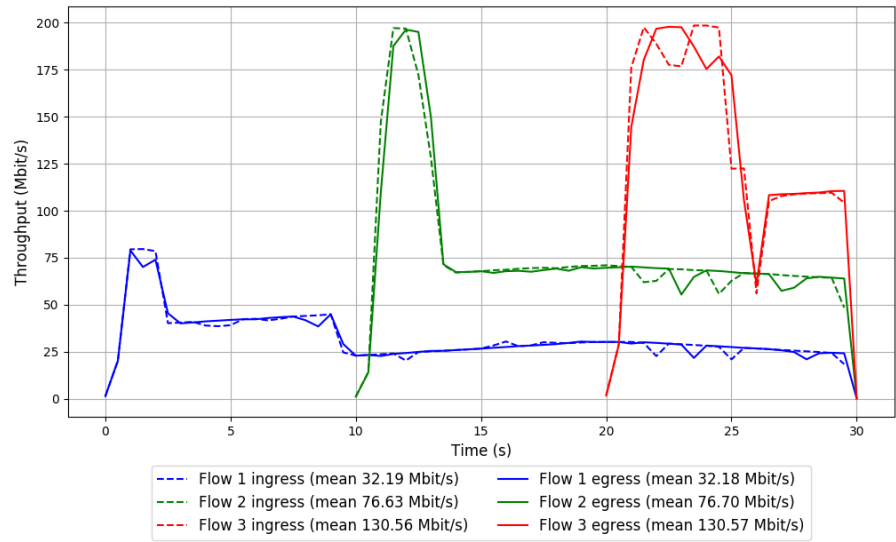
-- Flow 3:

Average throughput: 130.57 Mbit/s

95th percentile per-packet one-way delay: 71.390 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-21 08:32:50

End at: 2017-12-21 08:33:20

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.83 Mbit/s

95th percentile per-packet one-way delay: 69.735 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 34.21 Mbit/s

95th percentile per-packet one-way delay: 66.462 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 19.99 Mbit/s

95th percentile per-packet one-way delay: 66.544 ms

Loss rate: 0.02%

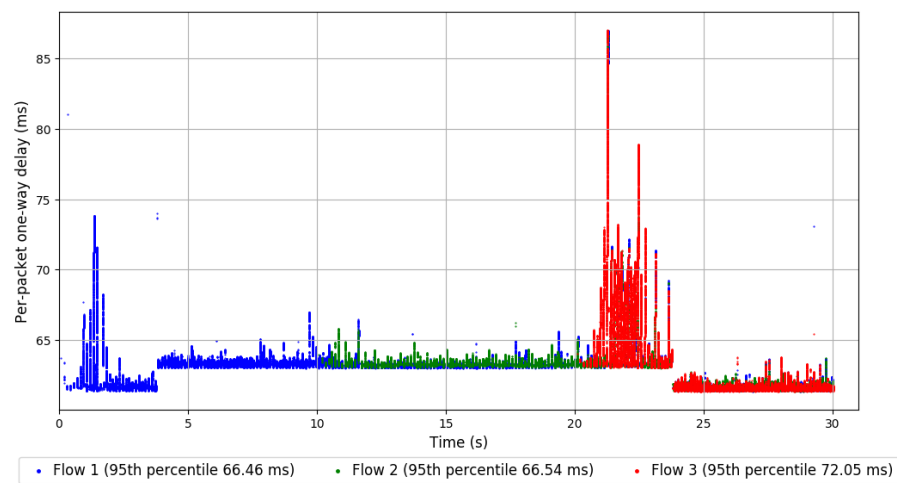
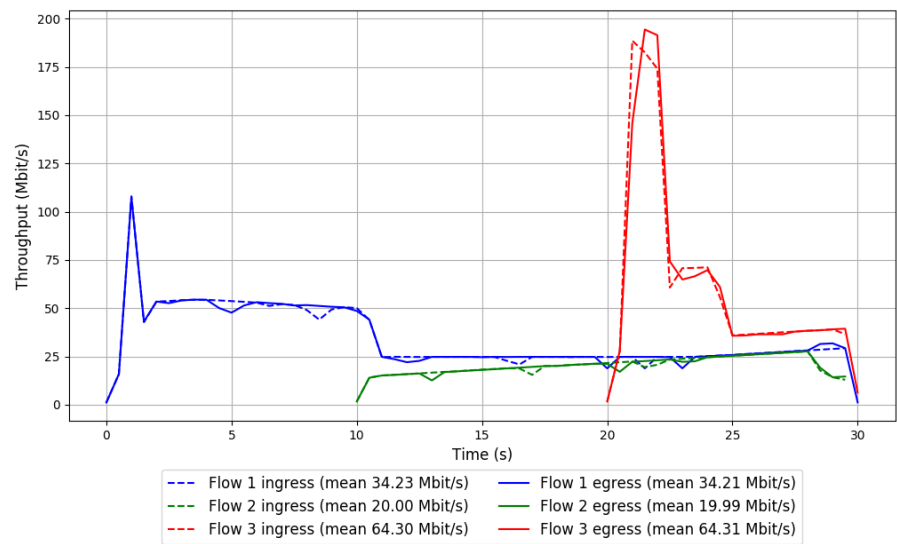
-- Flow 3:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 72.048 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-21 08:46:42

End at: 2017-12-21 08:47:12

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.50 Mbit/s

95th percentile per-packet one-way delay: 64.830 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 34.17 Mbit/s

95th percentile per-packet one-way delay: 65.519 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 74.03 Mbit/s

95th percentile per-packet one-way delay: 64.196 ms

Loss rate: 0.00%

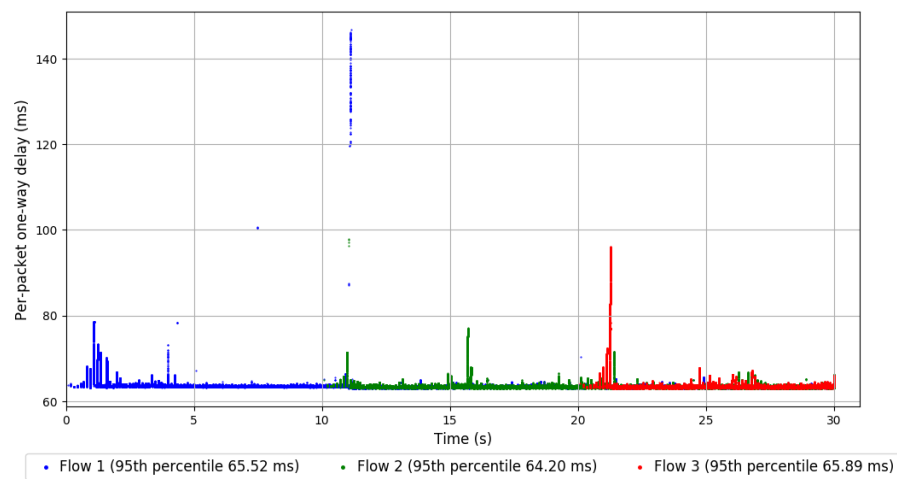
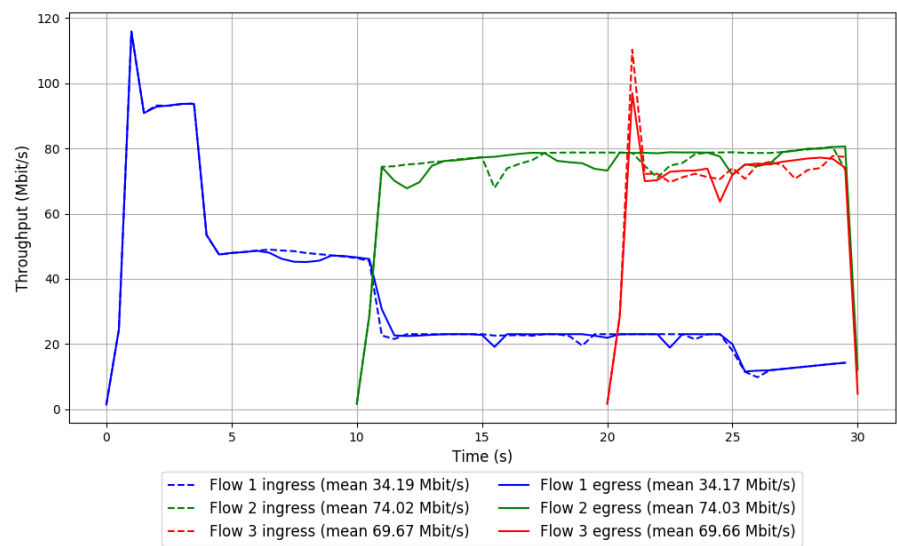
-- Flow 3:

Average throughput: 69.66 Mbit/s

95th percentile per-packet one-way delay: 65.887 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-21 09:00:52

End at: 2017-12-21 09:01:22

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.16 Mbit/s

95th percentile per-packet one-way delay: 68.692 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 46.21 Mbit/s

95th percentile per-packet one-way delay: 64.139 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 38.13 Mbit/s

95th percentile per-packet one-way delay: 71.515 ms

Loss rate: 0.01%

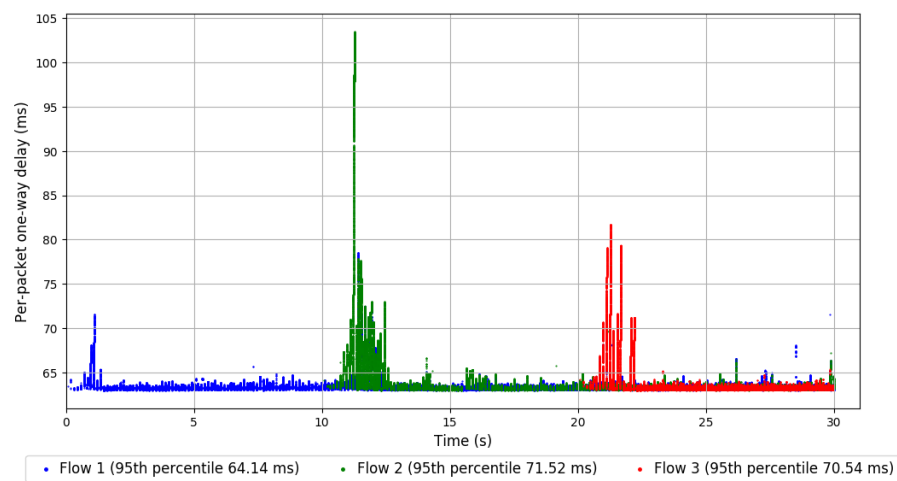
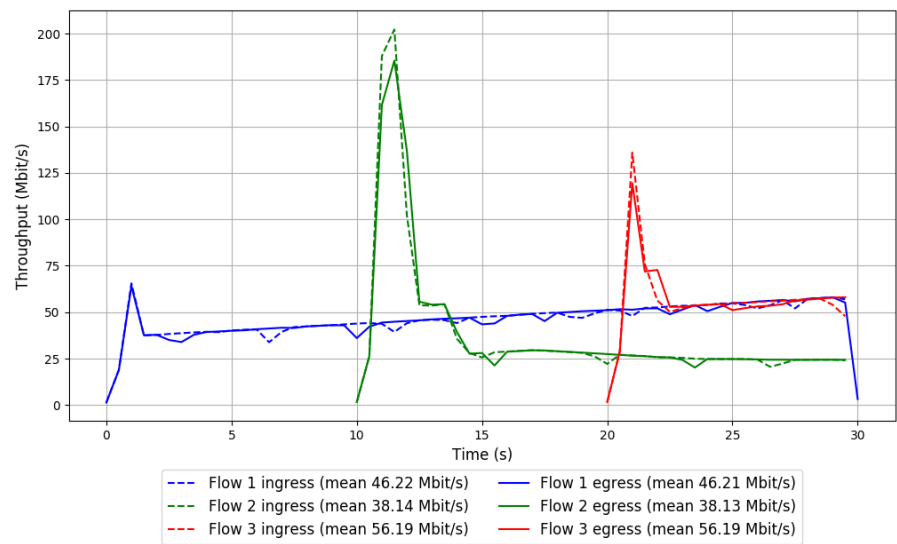
-- Flow 3:

Average throughput: 56.19 Mbit/s

95th percentile per-packet one-way delay: 70.544 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-21 09:15:00

End at: 2017-12-21 09:15:30

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.96 Mbit/s

95th percentile per-packet one-way delay: 66.141 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 20.28 Mbit/s

95th percentile per-packet one-way delay: 64.626 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 121.87 Mbit/s

95th percentile per-packet one-way delay: 66.663 ms

Loss rate: 0.00%

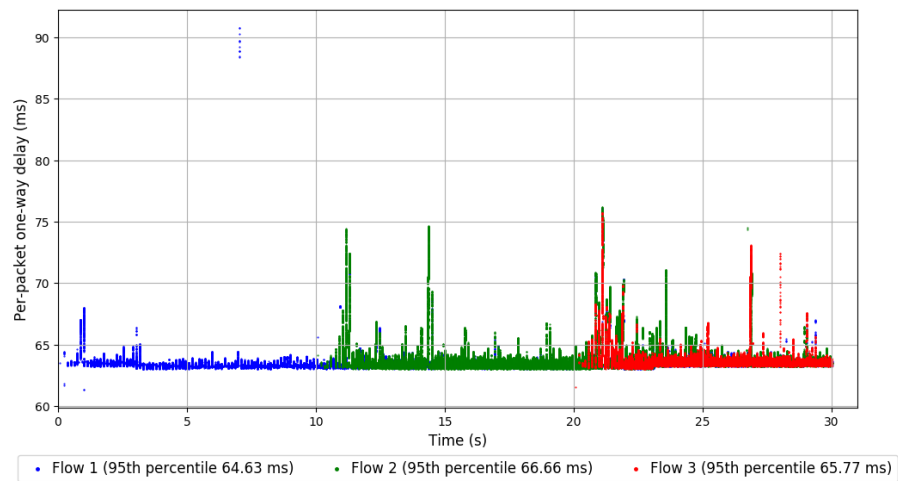
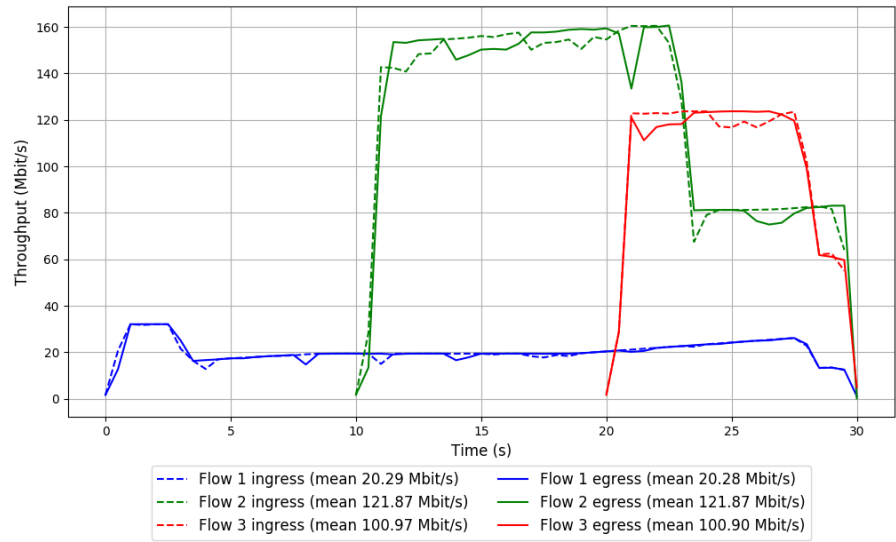
-- Flow 3:

Average throughput: 100.90 Mbit/s

95th percentile per-packet one-way delay: 65.769 ms

Loss rate: 0.04%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-21 09:29:02

End at: 2017-12-21 09:29:32

Below is generated by plot.py at 2017-12-21 11:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.74 Mbit/s

95th percentile per-packet one-way delay: 69.263 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 30.30 Mbit/s

95th percentile per-packet one-way delay: 65.631 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 119.05 Mbit/s

95th percentile per-packet one-way delay: 67.701 ms

Loss rate: 0.01%

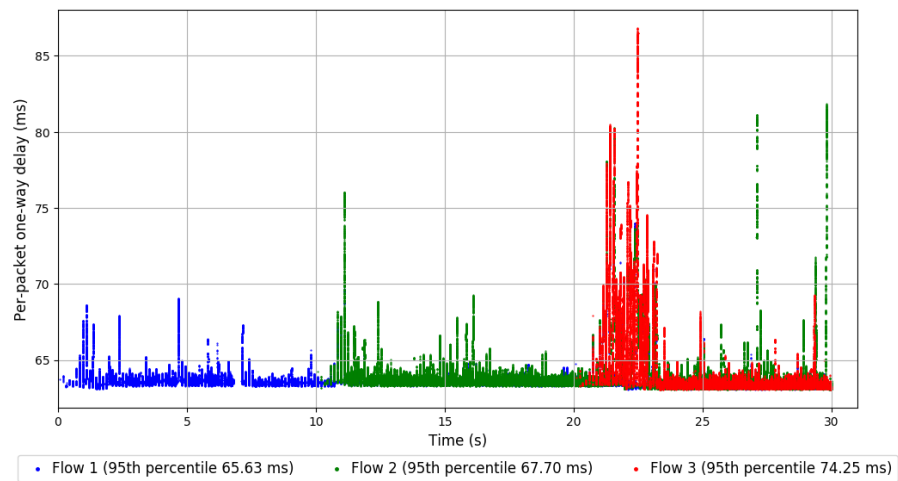
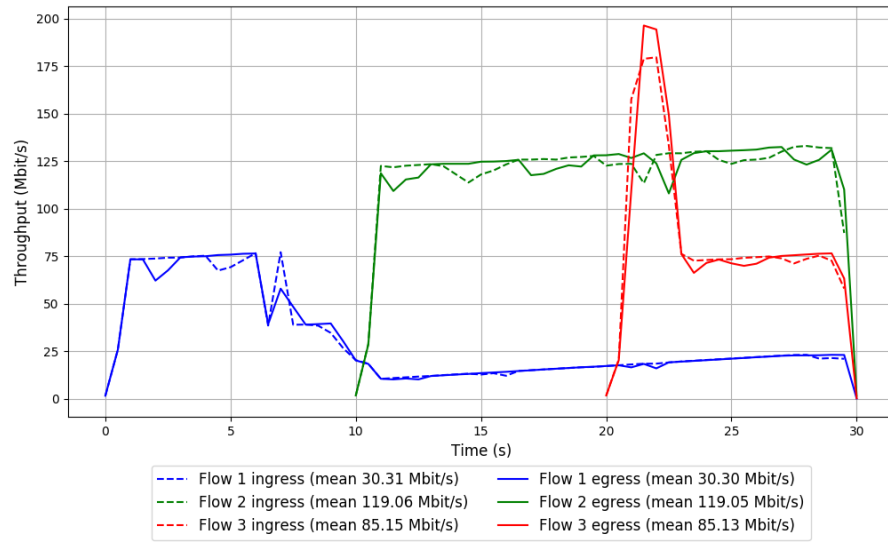
-- Flow 3:

Average throughput: 85.13 Mbit/s

95th percentile per-packet one-way delay: 74.254 ms

Loss rate: 0.02%

Run 10: Report of TCP Vegas — Data Link

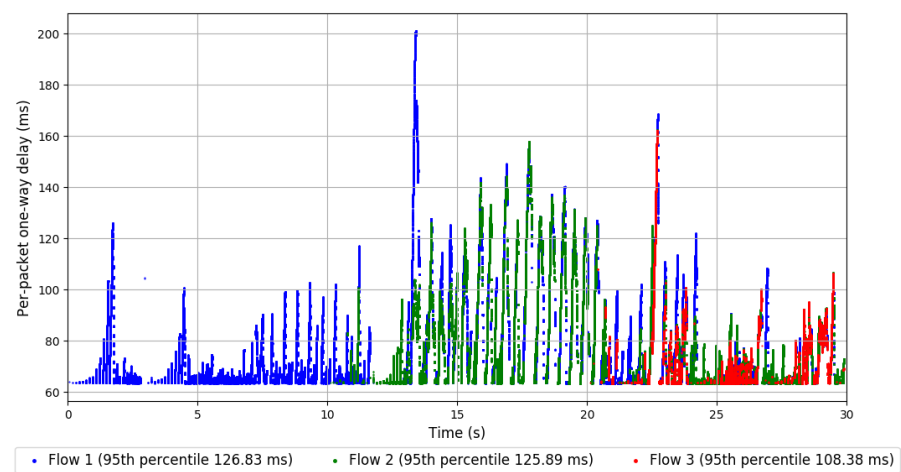
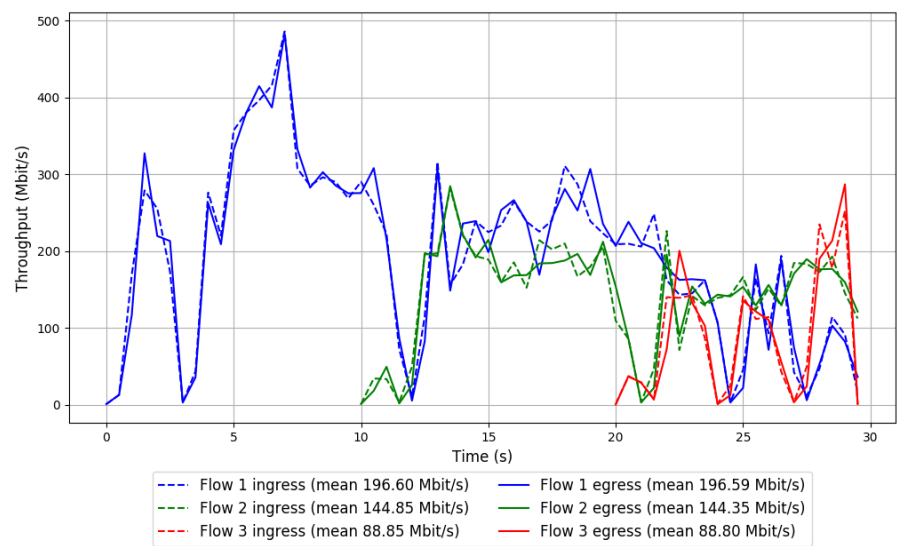


```
Run 1: Statistics of Verus

Start at: 2017-12-21 07:23:39
End at: 2017-12-21 07:24:09

# Below is generated by plot.py at 2017-12-21 11:50:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.69 Mbit/s
95th percentile per-packet one-way delay: 125.941 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 196.59 Mbit/s
95th percentile per-packet one-way delay: 126.829 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 144.35 Mbit/s
95th percentile per-packet one-way delay: 125.892 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 88.80 Mbit/s
95th percentile per-packet one-way delay: 108.377 ms
Loss rate: 0.00%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-21 07:37:31

End at: 2017-12-21 07:38:01

Below is generated by plot.py at 2017-12-21 11:50:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 353.56 Mbit/s

95th percentile per-packet one-way delay: 185.805 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 250.96 Mbit/s

95th percentile per-packet one-way delay: 139.980 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 69.32 Mbit/s

95th percentile per-packet one-way delay: 162.418 ms

Loss rate: 0.49%

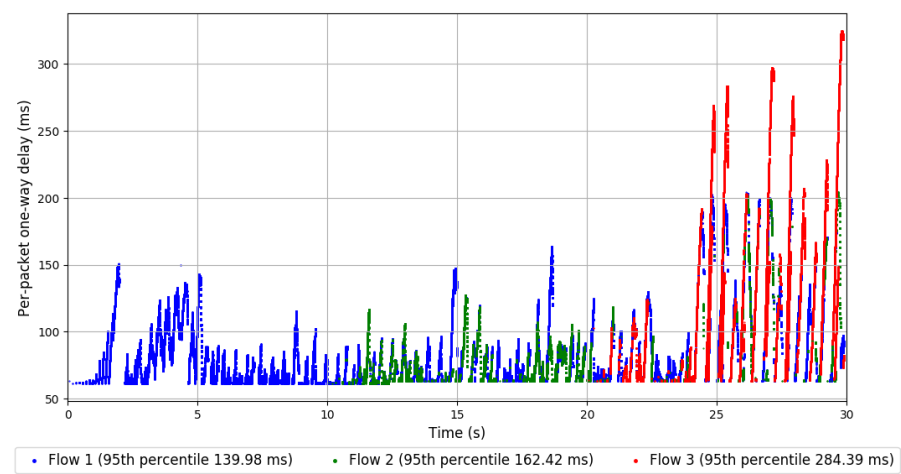
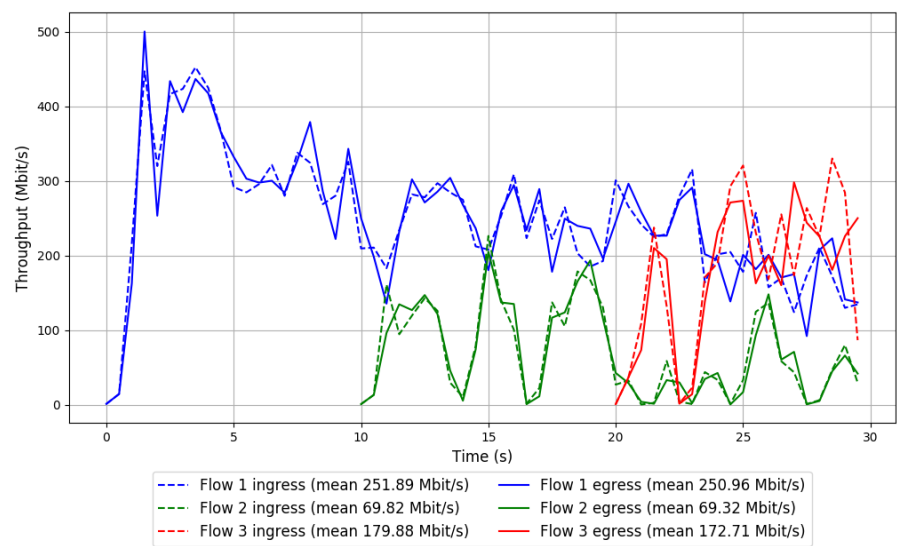
-- Flow 3:

Average throughput: 172.71 Mbit/s

95th percentile per-packet one-way delay: 284.391 ms

Loss rate: 3.96%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-21 07:51:30

End at: 2017-12-21 07:52:00

Below is generated by plot.py at 2017-12-21 11:50:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 329.83 Mbit/s

95th percentile per-packet one-way delay: 201.716 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 235.71 Mbit/s

95th percentile per-packet one-way delay: 217.452 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 98.50 Mbit/s

95th percentile per-packet one-way delay: 178.607 ms

Loss rate: 1.33%

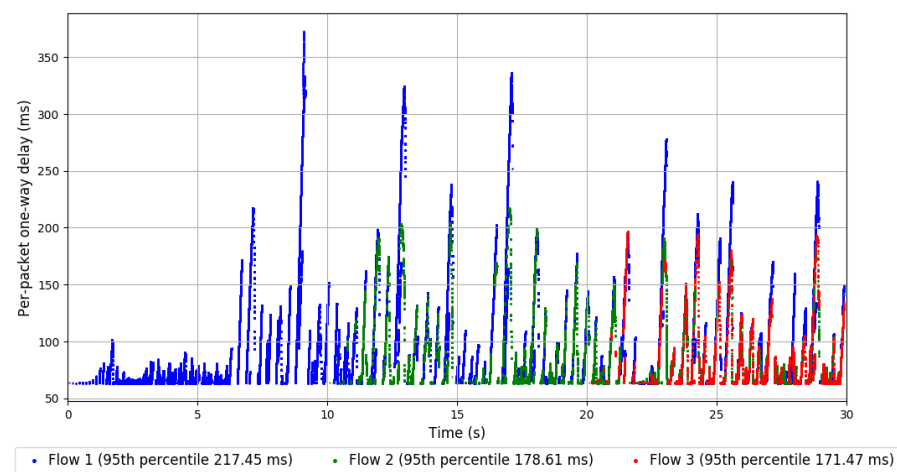
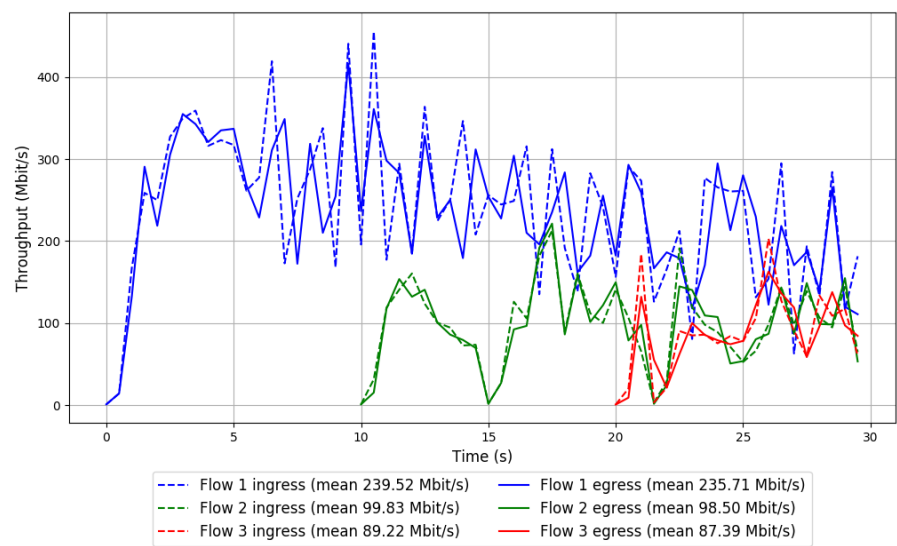
-- Flow 3:

Average throughput: 87.39 Mbit/s

95th percentile per-packet one-way delay: 171.468 ms

Loss rate: 1.36%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-21 08:05:26

End at: 2017-12-21 08:05:56

Below is generated by plot.py at 2017-12-21 11:51:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 343.25 Mbit/s

95th percentile per-packet one-way delay: 168.598 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 241.53 Mbit/s

95th percentile per-packet one-way delay: 155.925 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 85.79 Mbit/s

95th percentile per-packet one-way delay: 173.978 ms

Loss rate: 0.77%

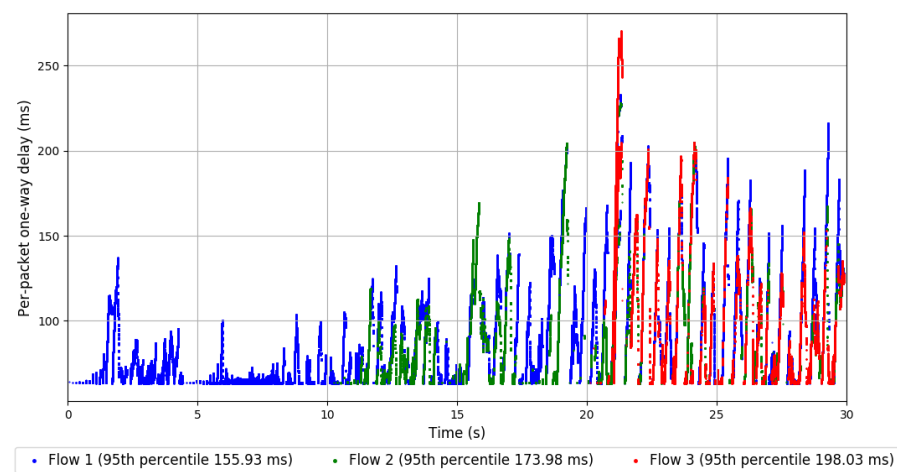
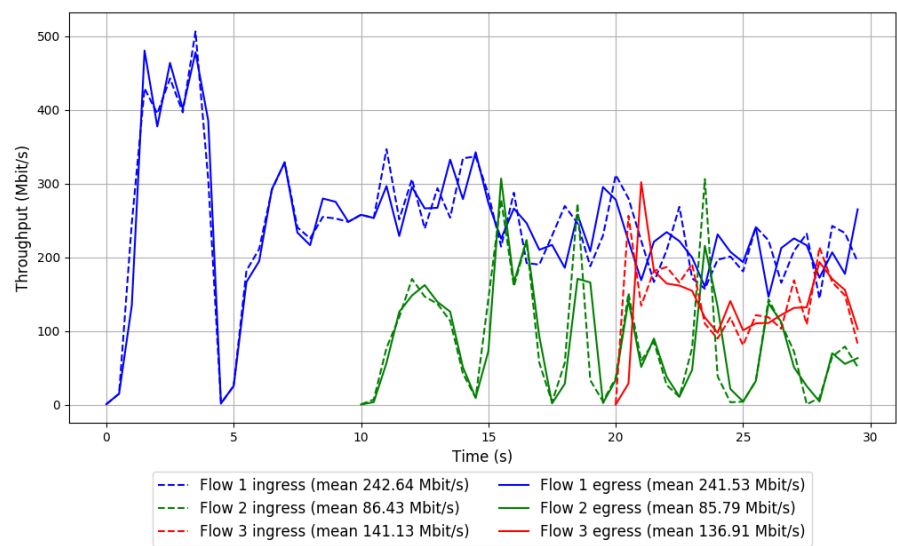
-- Flow 3:

Average throughput: 136.91 Mbit/s

95th percentile per-packet one-way delay: 198.025 ms

Loss rate: 2.43%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-21 08:19:32

End at: 2017-12-21 08:20:02

Below is generated by plot.py at 2017-12-21 11:51:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.42 Mbit/s

95th percentile per-packet one-way delay: 194.551 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 155.53 Mbit/s

95th percentile per-packet one-way delay: 193.116 ms

Loss rate: 1.24%

-- Flow 2:

Average throughput: 188.81 Mbit/s

95th percentile per-packet one-way delay: 203.251 ms

Loss rate: 0.87%

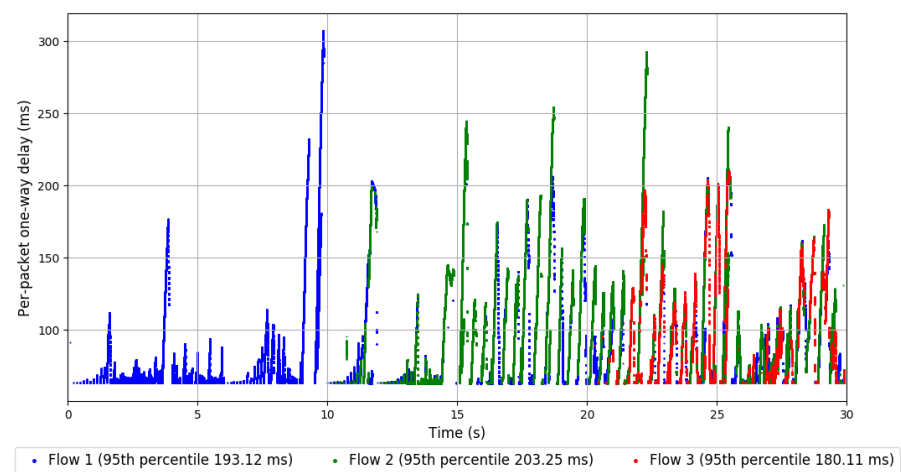
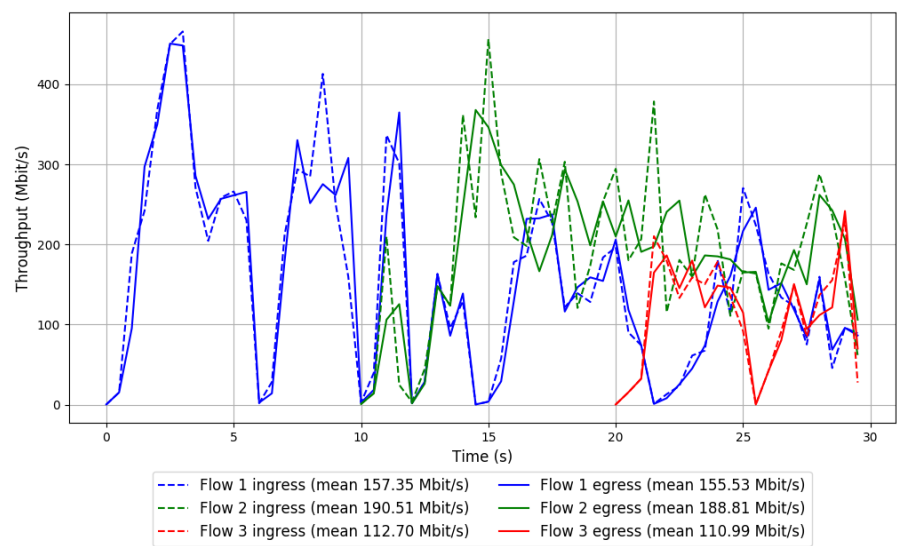
-- Flow 3:

Average throughput: 110.99 Mbit/s

95th percentile per-packet one-way delay: 180.114 ms

Loss rate: 1.56%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-21 08:33:35

End at: 2017-12-21 08:34:05

Below is generated by plot.py at 2017-12-21 11:52:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.76 Mbit/s

95th percentile per-packet one-way delay: 143.347 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 244.17 Mbit/s

95th percentile per-packet one-way delay: 139.740 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 112.87 Mbit/s

95th percentile per-packet one-way delay: 141.659 ms

Loss rate: 0.94%

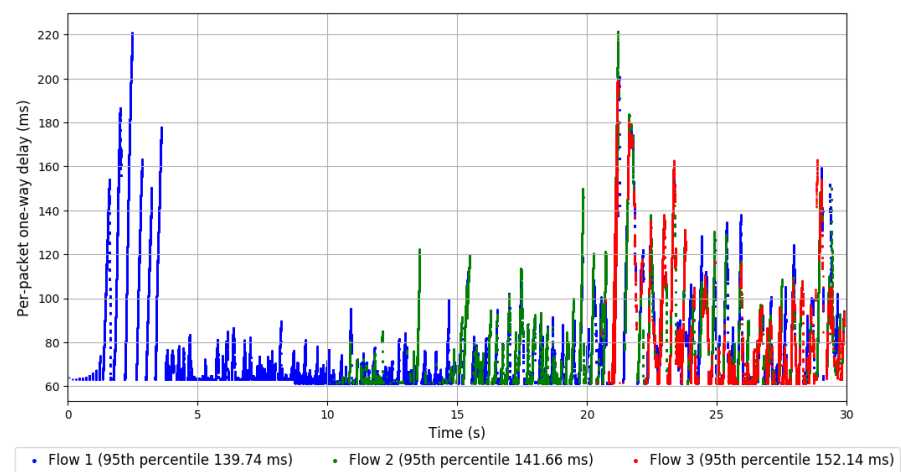
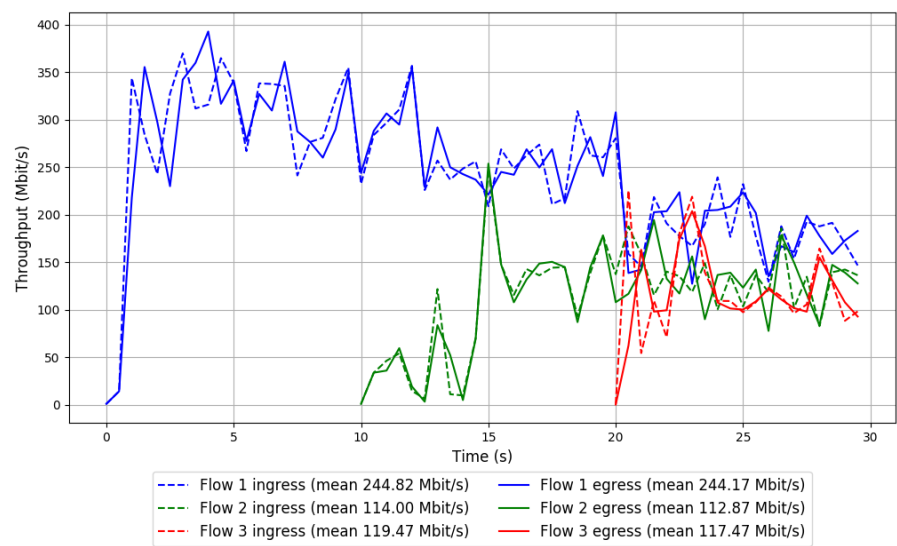
-- Flow 3:

Average throughput: 117.47 Mbit/s

95th percentile per-packet one-way delay: 152.143 ms

Loss rate: 1.61%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-21 08:47:30

End at: 2017-12-21 08:48:00

Below is generated by plot.py at 2017-12-21 11:55:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.70 Mbit/s

95th percentile per-packet one-way delay: 203.298 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 201.46 Mbit/s

95th percentile per-packet one-way delay: 160.661 ms

Loss rate: 1.58%

-- Flow 2:

Average throughput: 198.79 Mbit/s

95th percentile per-packet one-way delay: 215.205 ms

Loss rate: 0.77%

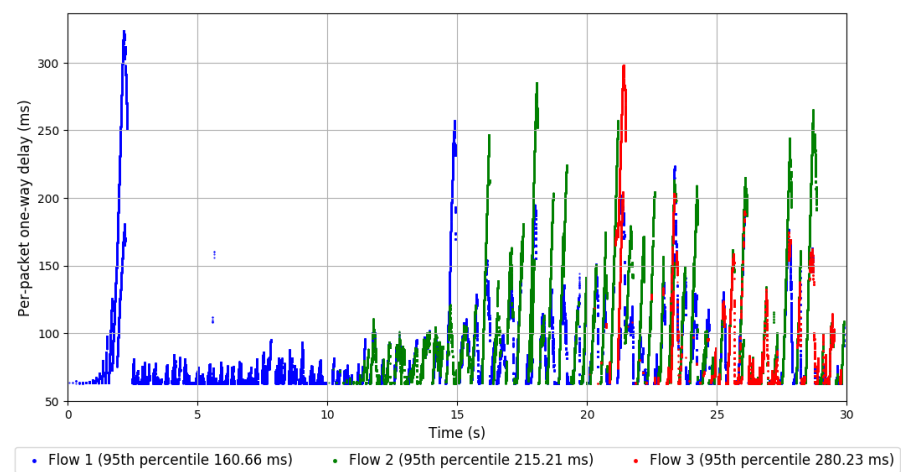
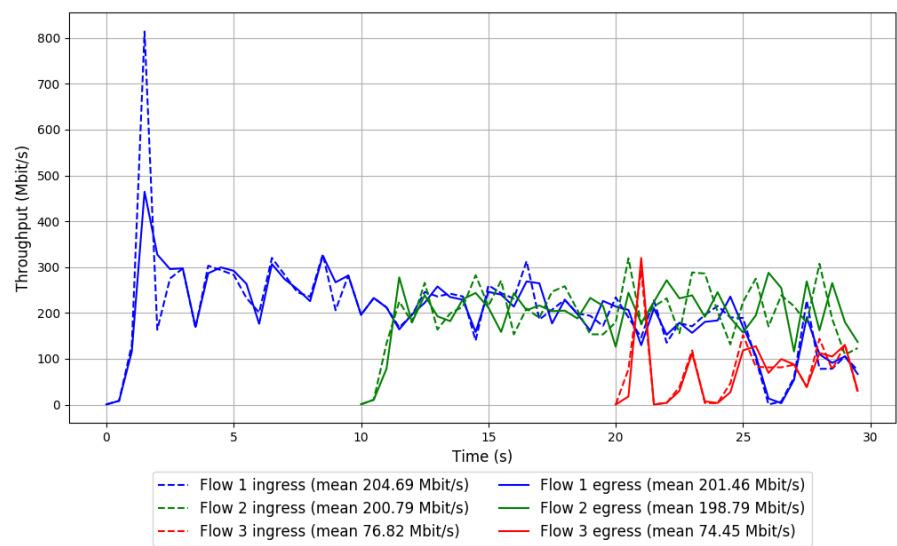
-- Flow 3:

Average throughput: 74.45 Mbit/s

95th percentile per-packet one-way delay: 280.229 ms

Loss rate: 3.05%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-21 09:01:38

End at: 2017-12-21 09:02:08

Below is generated by plot.py at 2017-12-21 11:55:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.25 Mbit/s

95th percentile per-packet one-way delay: 140.347 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 237.64 Mbit/s

95th percentile per-packet one-way delay: 145.224 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 120.02 Mbit/s

95th percentile per-packet one-way delay: 116.226 ms

Loss rate: 0.01%

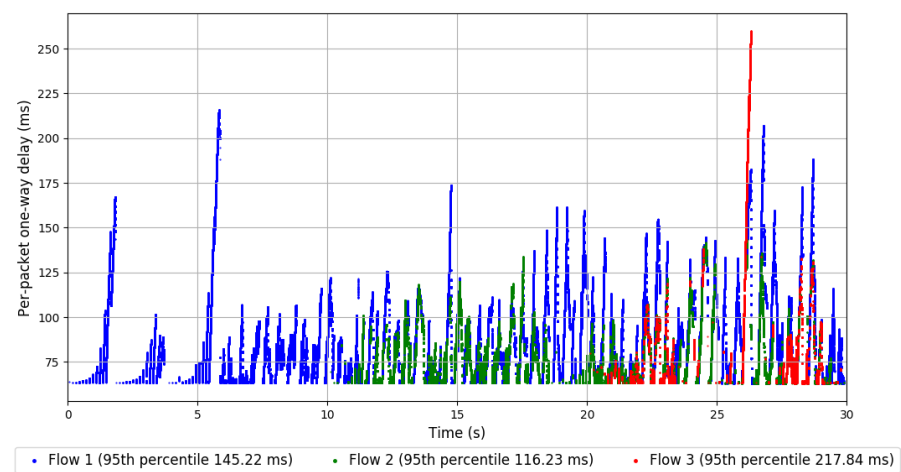
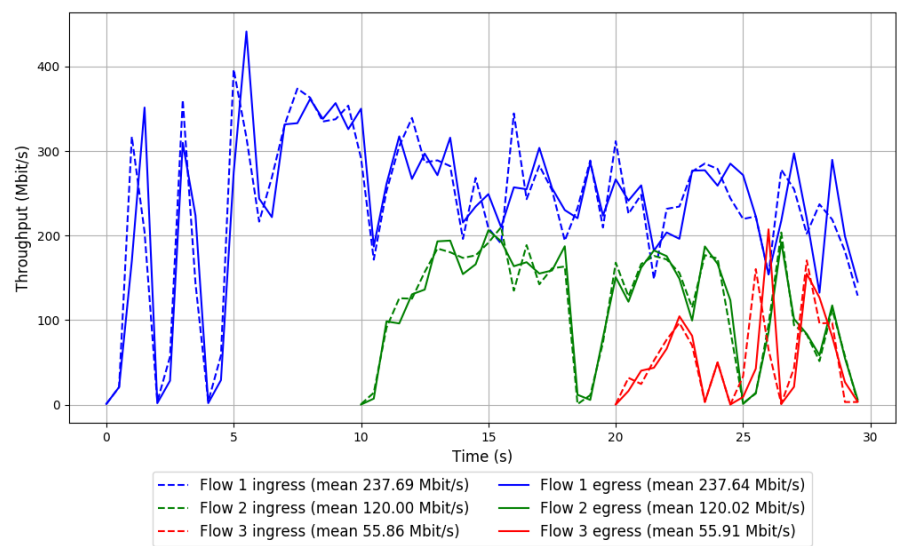
-- Flow 3:

Average throughput: 55.91 Mbit/s

95th percentile per-packet one-way delay: 217.838 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-21 09:15:49

End at: 2017-12-21 09:16:19

Below is generated by plot.py at 2017-12-21 11:55:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.71 Mbit/s

95th percentile per-packet one-way delay: 210.473 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 171.19 Mbit/s

95th percentile per-packet one-way delay: 187.507 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 138.14 Mbit/s

95th percentile per-packet one-way delay: 275.023 ms

Loss rate: 4.18%

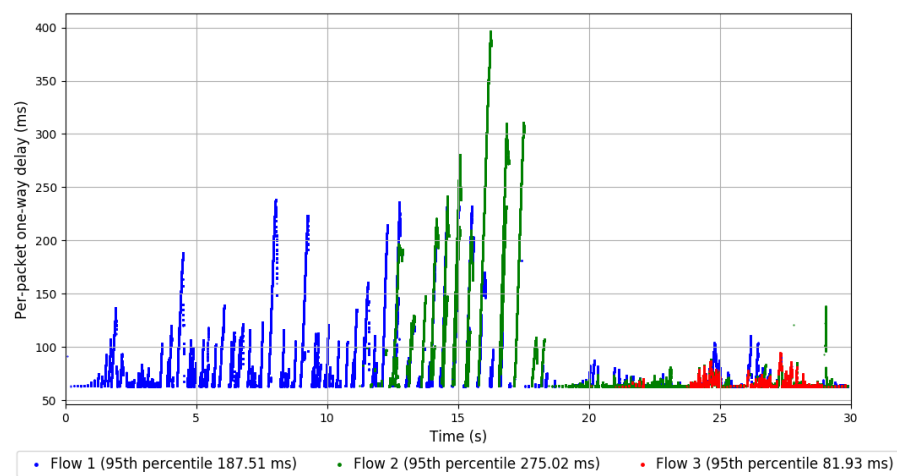
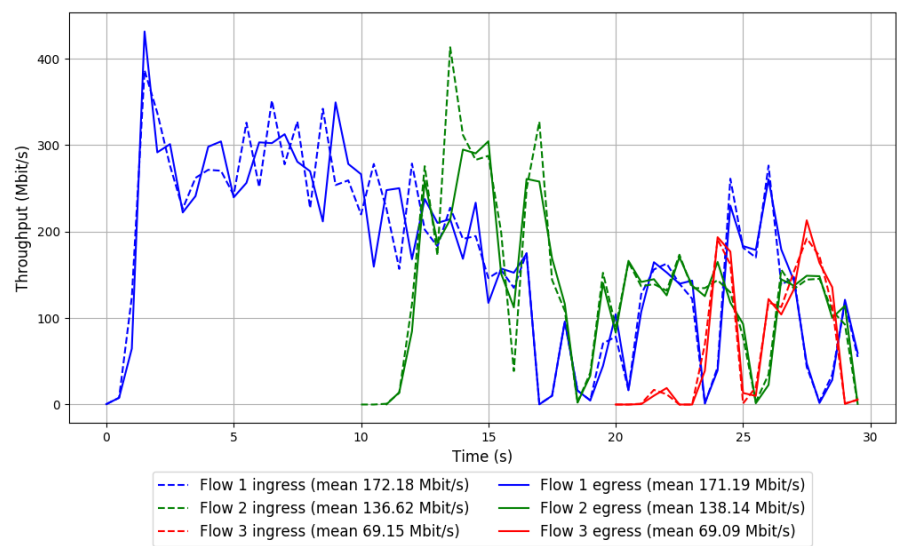
-- Flow 3:

Average throughput: 69.09 Mbit/s

95th percentile per-packet one-way delay: 81.926 ms

Loss rate: 0.07%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-21 09:29:51

End at: 2017-12-21 09:30:21

Below is generated by plot.py at 2017-12-21 11:57:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 390.35 Mbit/s

95th percentile per-packet one-way delay: 186.871 ms

Loss rate: 2.14%

-- Flow 1:

Average throughput: 238.84 Mbit/s

95th percentile per-packet one-way delay: 155.590 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 142.84 Mbit/s

95th percentile per-packet one-way delay: 176.836 ms

Loss rate: 1.33%

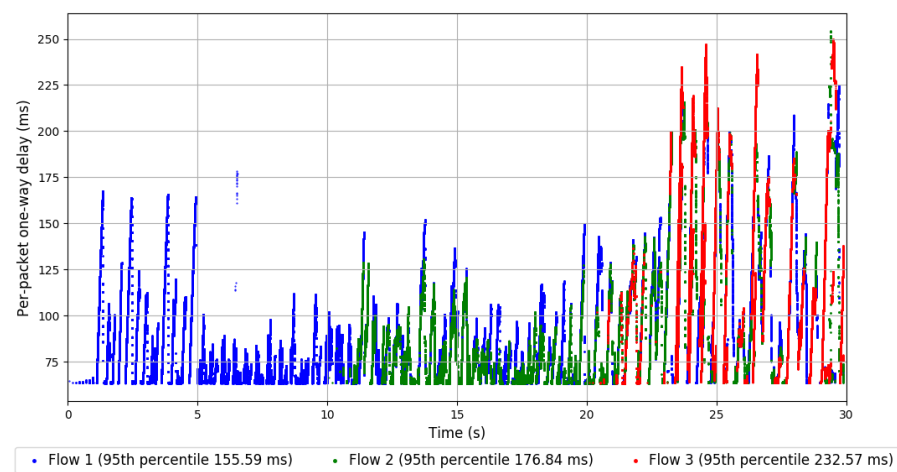
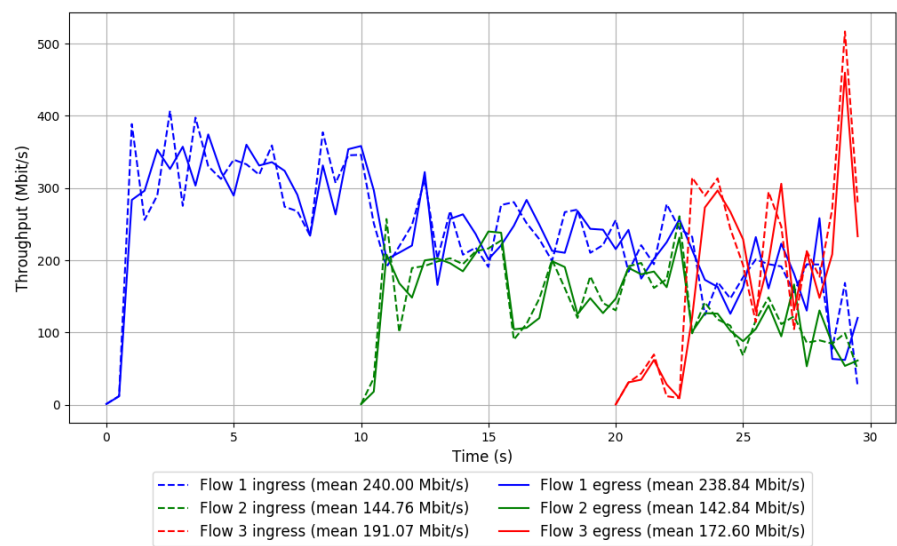
-- Flow 3:

Average throughput: 172.60 Mbit/s

95th percentile per-packet one-way delay: 232.567 ms

Loss rate: 9.67%

Run 10: Report of Verus — Data Link

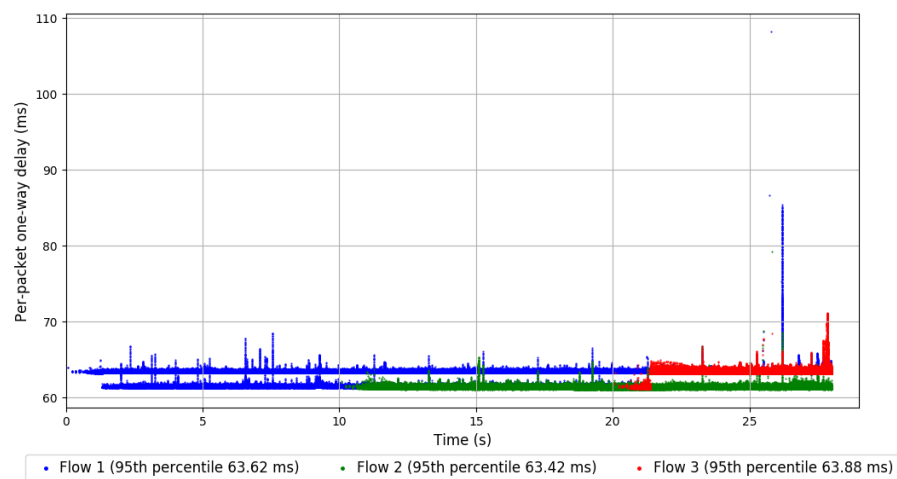
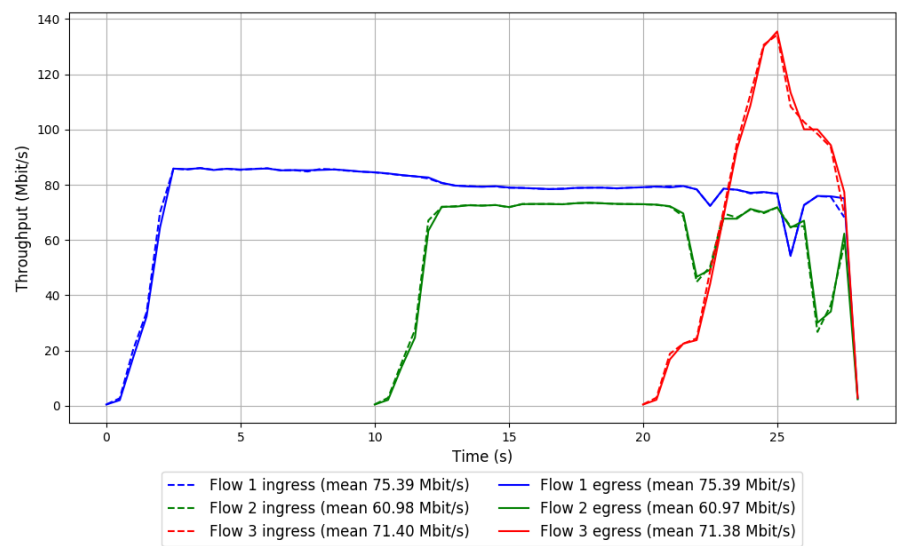


```
Run 1: Statistics of Copa

Start at: 2017-12-21 07:19:10
End at: 2017-12-21 07:19:40

# Below is generated by plot.py at 2017-12-21 11:57:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.80 Mbit/s
95th percentile per-packet one-way delay: 63.658 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.39 Mbit/s
95th percentile per-packet one-way delay: 63.619 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.97 Mbit/s
95th percentile per-packet one-way delay: 63.424 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 71.38 Mbit/s
95th percentile per-packet one-way delay: 63.875 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-21 07:33:23

End at: 2017-12-21 07:33:53

Below is generated by plot.py at 2017-12-21 11:57:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.71 Mbit/s

95th percentile per-packet one-way delay: 63.564 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.93 Mbit/s

95th percentile per-packet one-way delay: 63.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.85 Mbit/s

95th percentile per-packet one-way delay: 63.547 ms

Loss rate: 0.00%

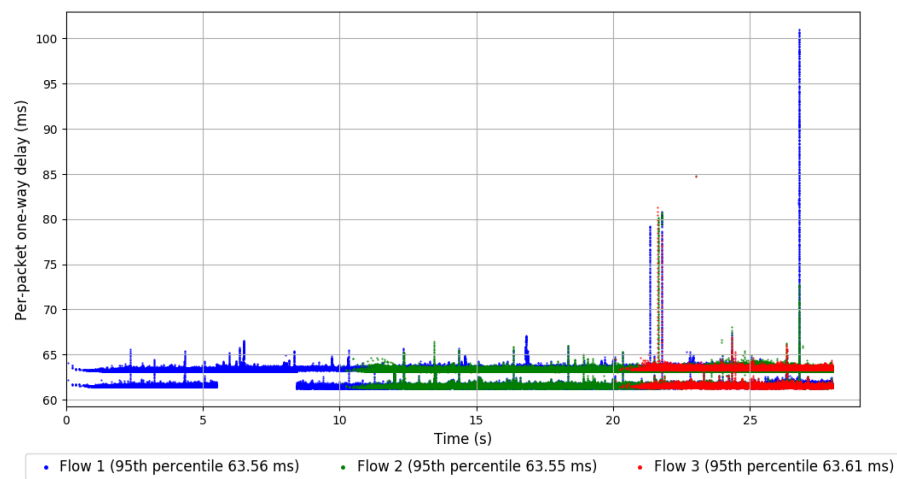
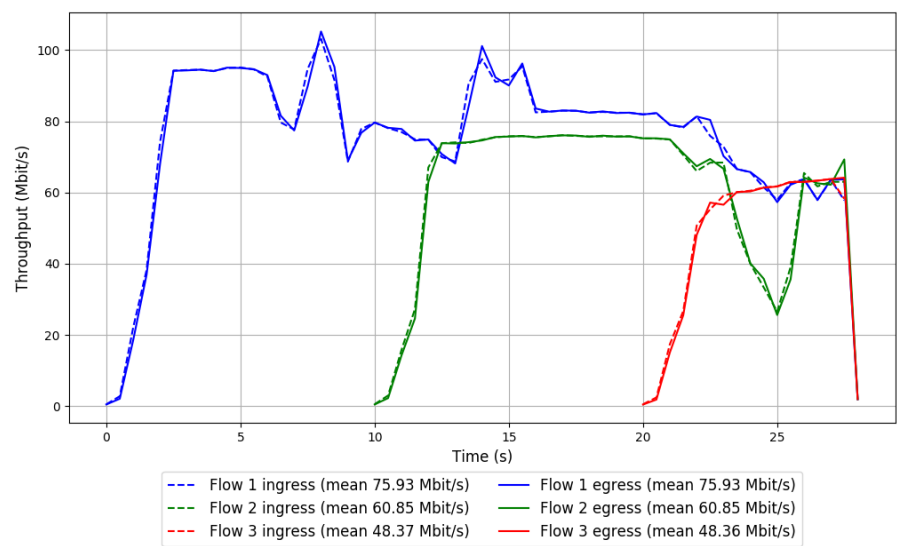
-- Flow 3:

Average throughput: 48.36 Mbit/s

95th percentile per-packet one-way delay: 63.606 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-21 07:47:14

End at: 2017-12-21 07:47:44

Below is generated by plot.py at 2017-12-21 11:57:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.17 Mbit/s

95th percentile per-packet one-way delay: 63.529 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 81.86 Mbit/s

95th percentile per-packet one-way delay: 63.584 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.43 Mbit/s

95th percentile per-packet one-way delay: 63.392 ms

Loss rate: 0.00%

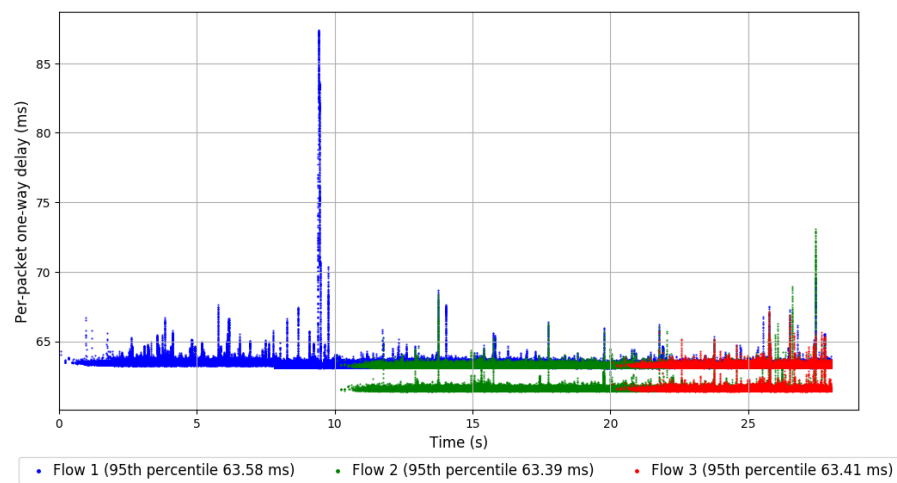
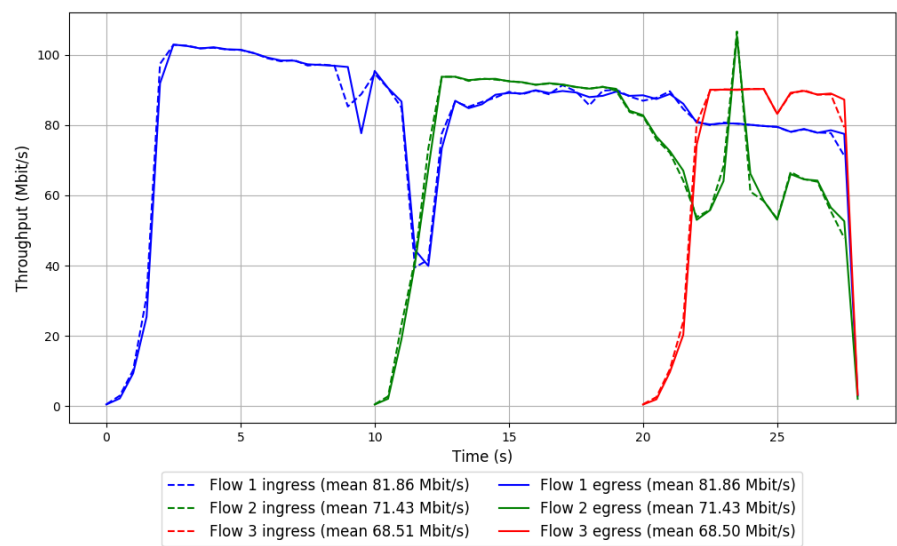
-- Flow 3:

Average throughput: 68.50 Mbit/s

95th percentile per-packet one-way delay: 63.413 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-21 08:01:10

End at: 2017-12-21 08:01:40

Below is generated by plot.py at 2017-12-21 11:57:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.01 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.23 Mbit/s

95th percentile per-packet one-way delay: 63.520 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.43 Mbit/s

95th percentile per-packet one-way delay: 63.618 ms

Loss rate: 0.00%

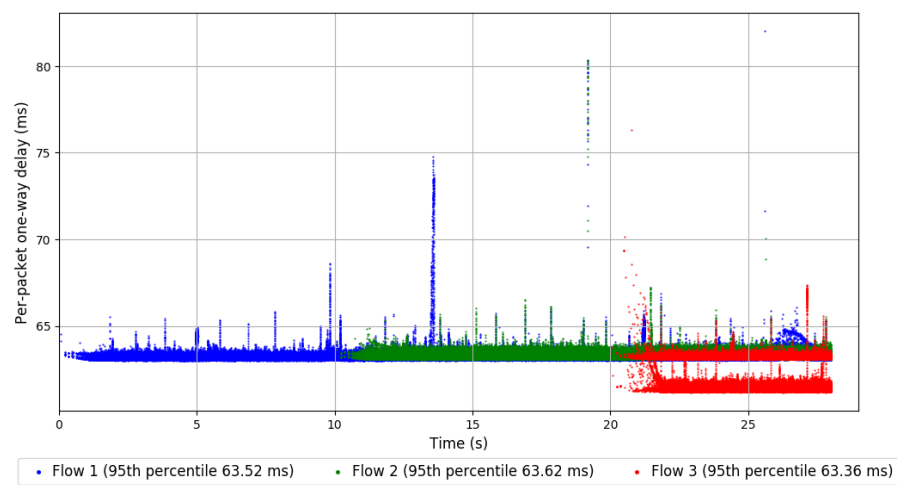
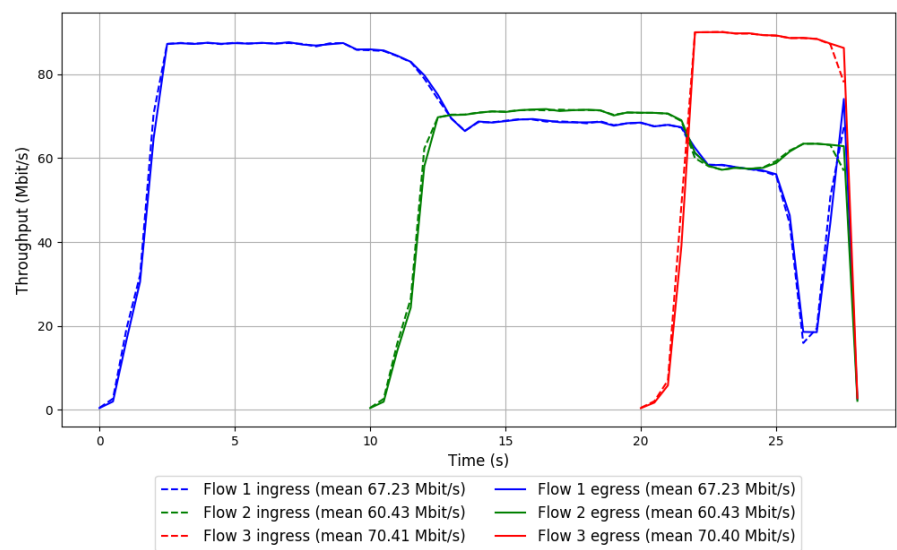
-- Flow 3:

Average throughput: 70.40 Mbit/s

95th percentile per-packet one-way delay: 63.360 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-21 08:15:05

End at: 2017-12-21 08:15:35

Below is generated by plot.py at 2017-12-21 11:57:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.95 Mbit/s

95th percentile per-packet one-way delay: 63.668 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 64.26 Mbit/s

95th percentile per-packet one-way delay: 63.481 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 41.66 Mbit/s

95th percentile per-packet one-way delay: 63.874 ms

Loss rate: 0.12%

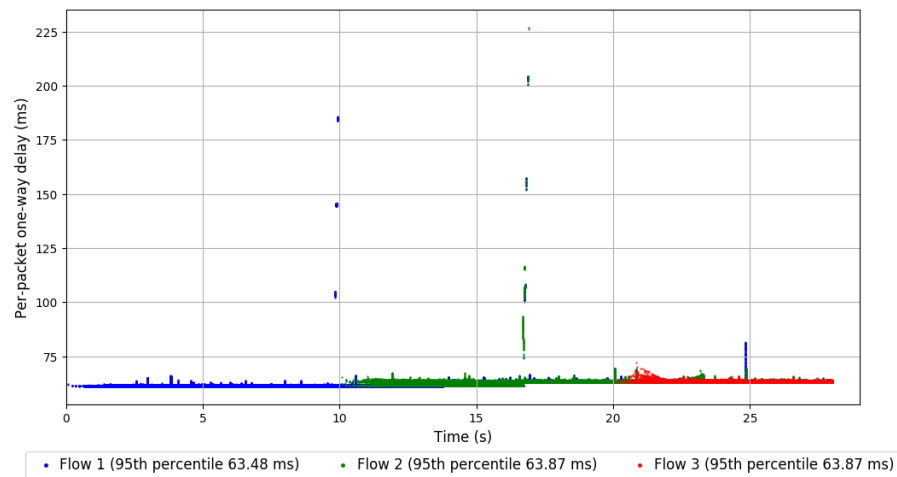
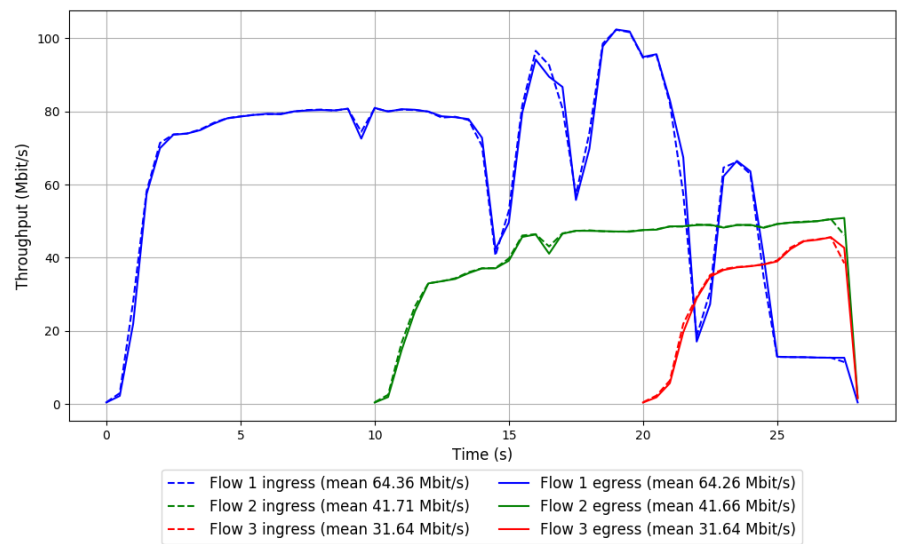
-- Flow 3:

Average throughput: 31.64 Mbit/s

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-21 08:29:10

End at: 2017-12-21 08:29:40

Below is generated by plot.py at 2017-12-21 11:58:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.39 Mbit/s

95th percentile per-packet one-way delay: 63.597 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.99 Mbit/s

95th percentile per-packet one-way delay: 63.455 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.84 Mbit/s

95th percentile per-packet one-way delay: 63.865 ms

Loss rate: 0.00%

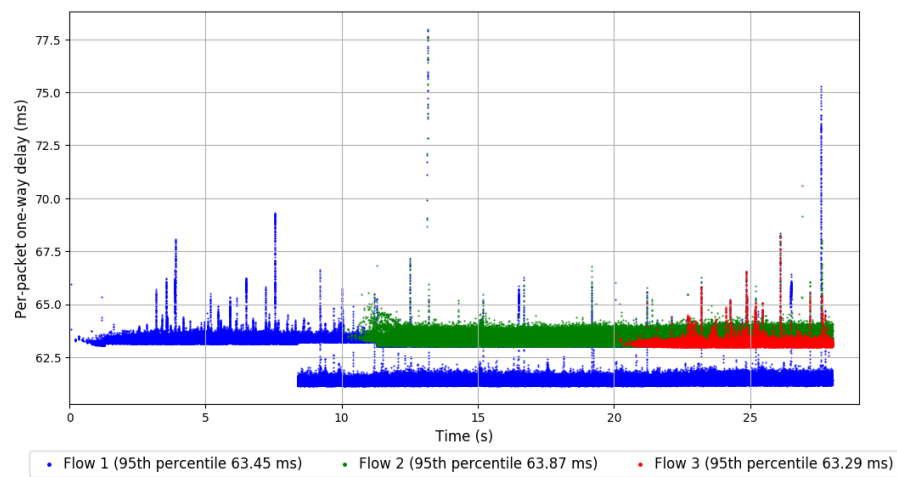
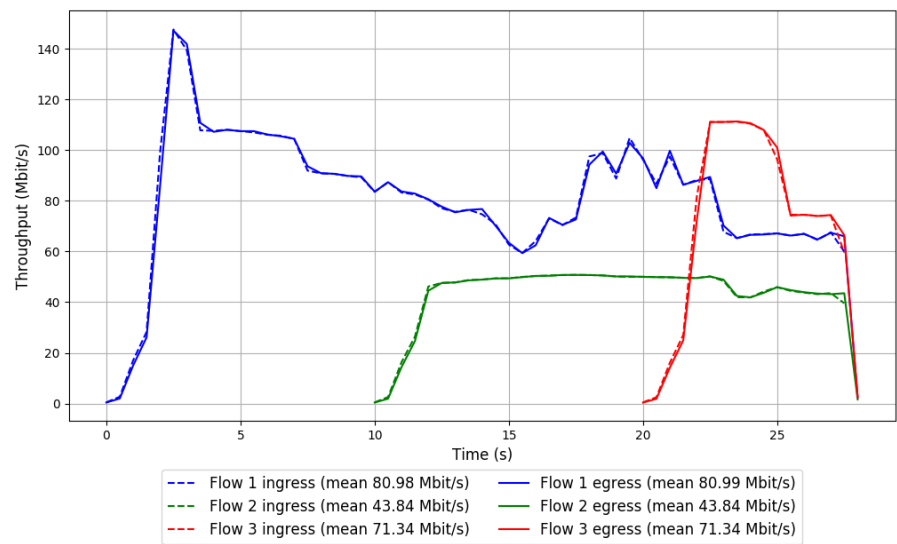
-- Flow 3:

Average throughput: 71.34 Mbit/s

95th percentile per-packet one-way delay: 63.286 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-21 08:43:19

End at: 2017-12-21 08:43:49

Below is generated by plot.py at 2017-12-21 11:58:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.93 Mbit/s

95th percentile per-packet one-way delay: 63.628 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 75.57 Mbit/s

95th percentile per-packet one-way delay: 63.600 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 41.61 Mbit/s

95th percentile per-packet one-way delay: 63.750 ms

Loss rate: 0.00%

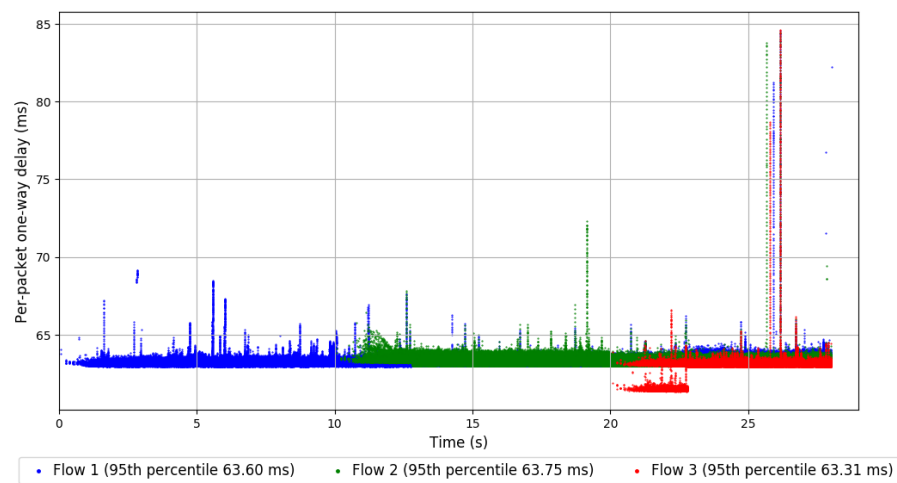
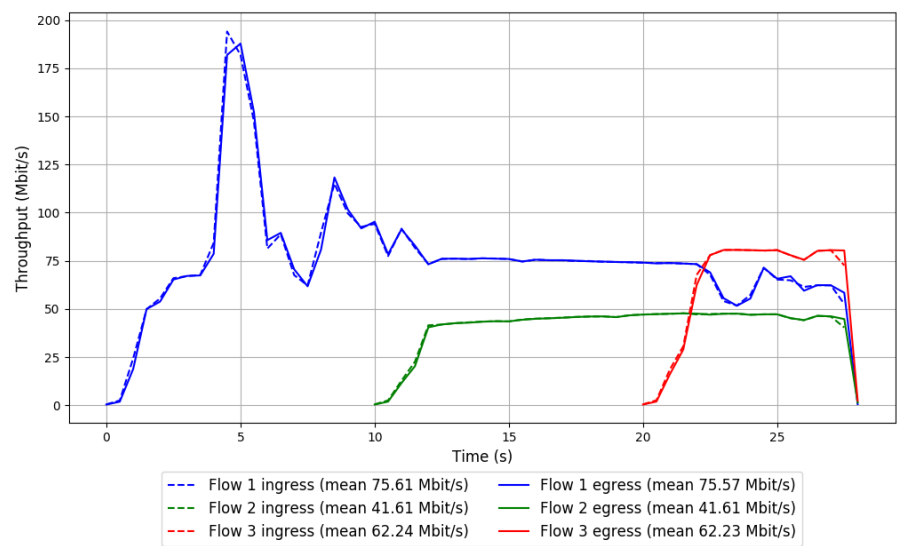
-- Flow 3:

Average throughput: 62.23 Mbit/s

95th percentile per-packet one-way delay: 63.308 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-21 08:57:20

End at: 2017-12-21 08:57:50

Below is generated by plot.py at 2017-12-21 11:59:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.34 Mbit/s

95th percentile per-packet one-way delay: 63.604 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.09 Mbit/s

95th percentile per-packet one-way delay: 63.565 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.10 Mbit/s

95th percentile per-packet one-way delay: 63.553 ms

Loss rate: 0.00%

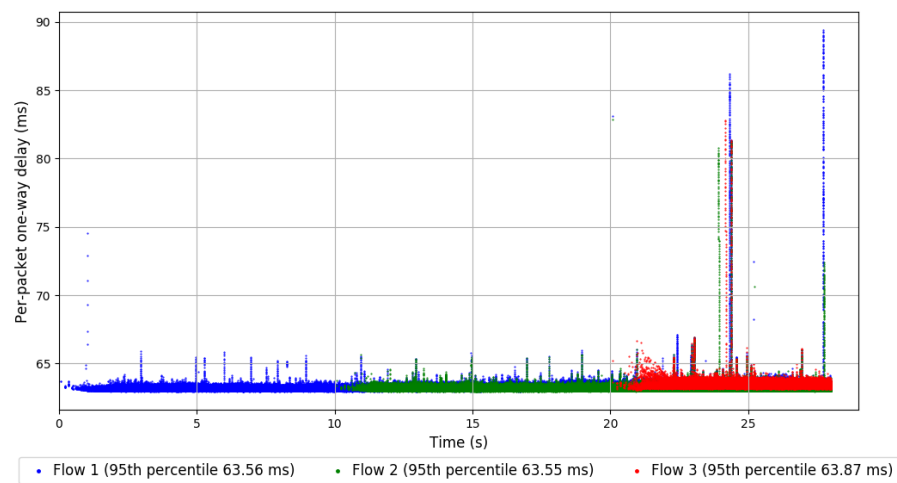
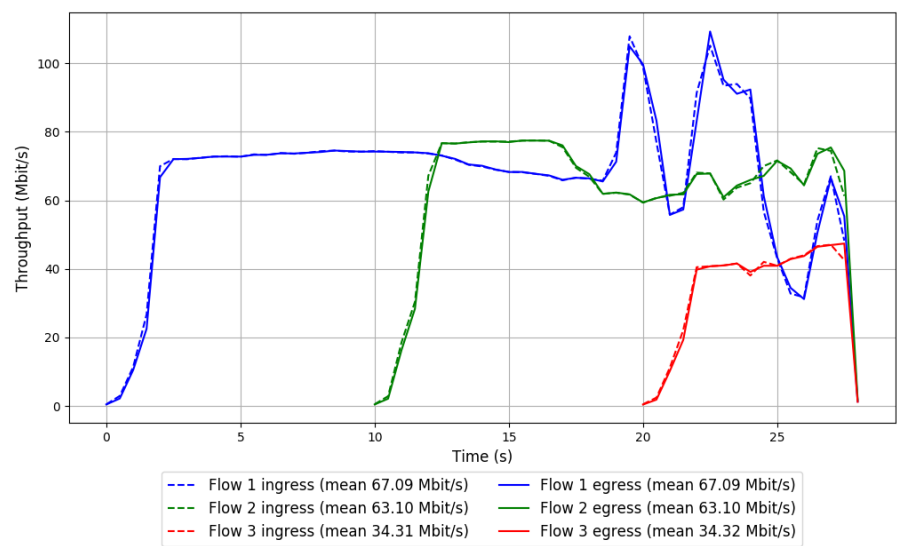
-- Flow 3:

Average throughput: 34.32 Mbit/s

95th percentile per-packet one-way delay: 63.874 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-21 09:11:23

End at: 2017-12-21 09:11:53

Below is generated by plot.py at 2017-12-21 11:59:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.25 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.35 Mbit/s

95th percentile per-packet one-way delay: 63.726 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.61 Mbit/s

95th percentile per-packet one-way delay: 63.607 ms

Loss rate: 0.00%

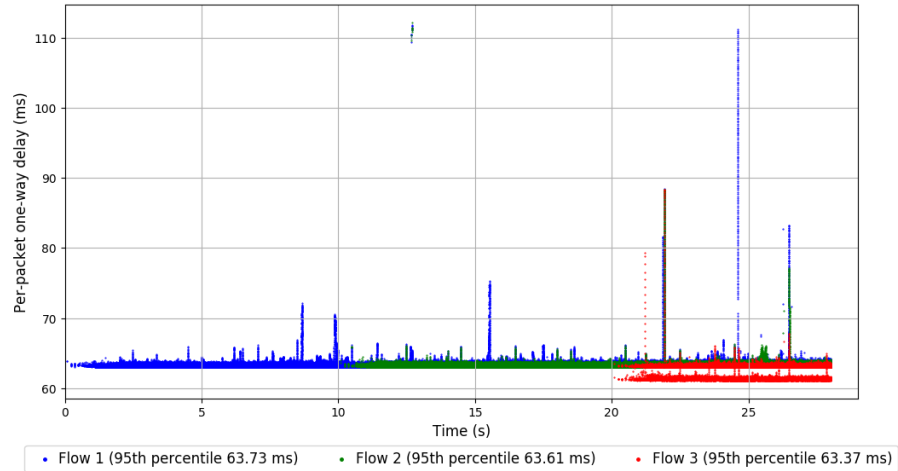
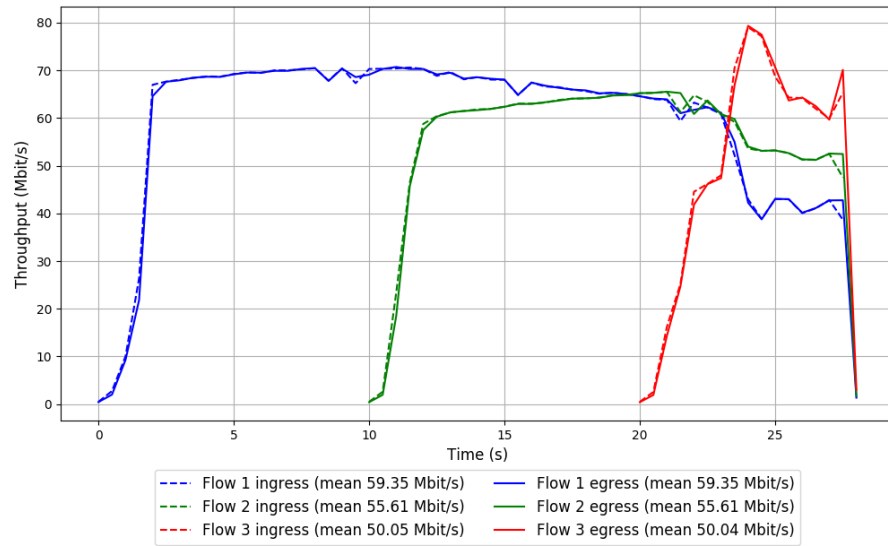
-- Flow 3:

Average throughput: 50.04 Mbit/s

95th percentile per-packet one-way delay: 63.373 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-21 09:25:33

End at: 2017-12-21 09:26:03

Below is generated by plot.py at 2017-12-21 11:59:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.78 Mbit/s

95th percentile per-packet one-way delay: 63.537 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 63.622 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.11 Mbit/s

95th percentile per-packet one-way delay: 63.423 ms

Loss rate: 0.00%

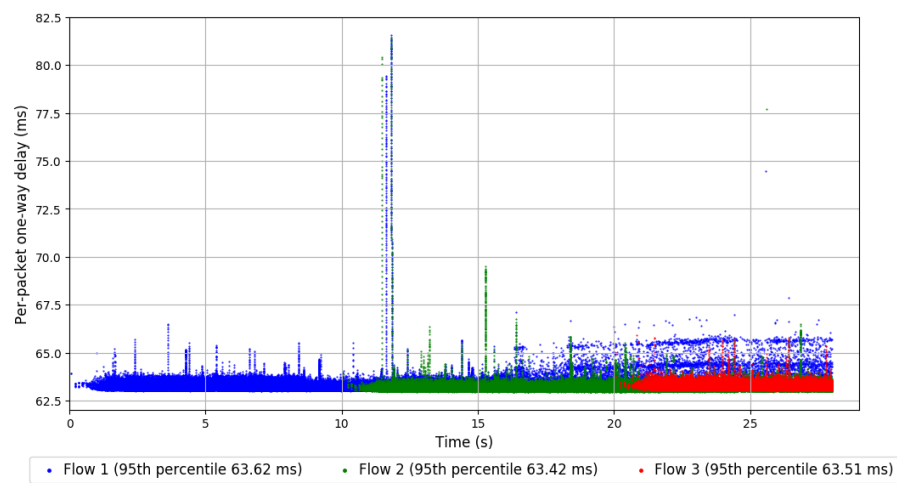
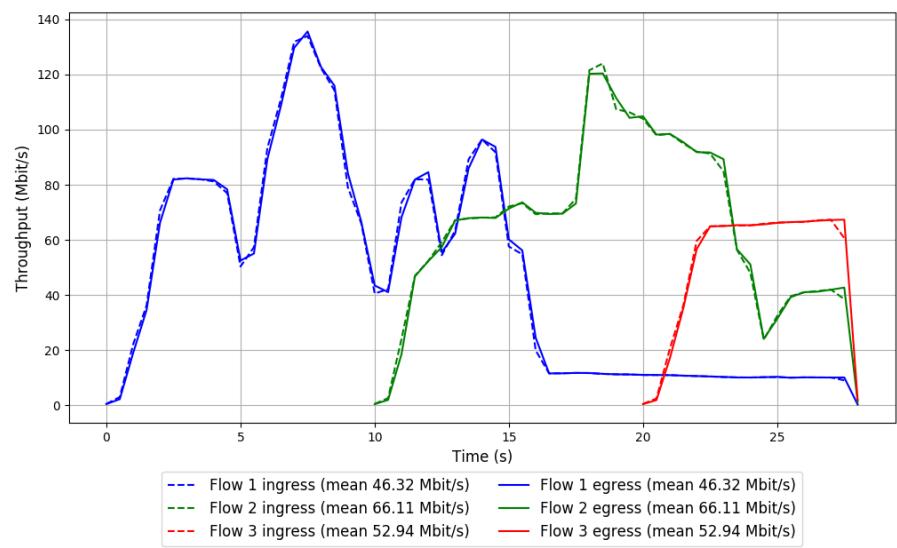
-- Flow 3:

Average throughput: 52.94 Mbit/s

95th percentile per-packet one-way delay: 63.511 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

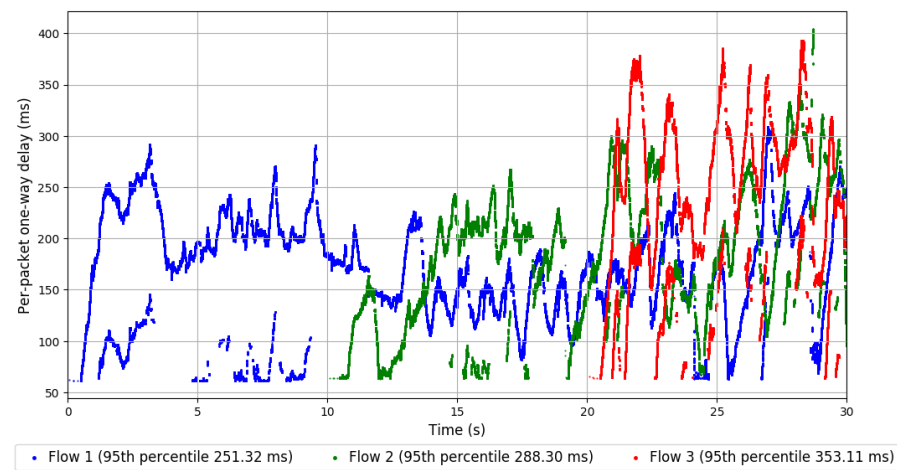
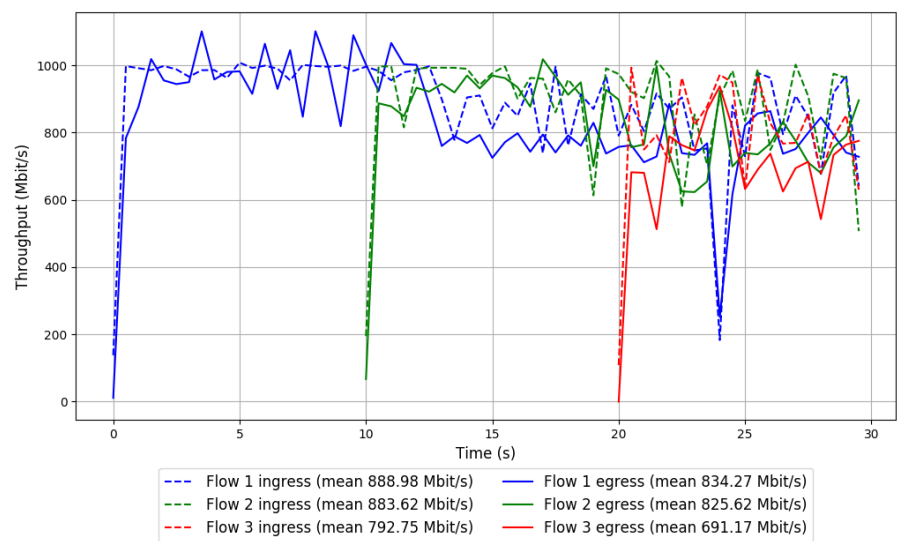


```
Run 1: Statistics of FillP

Start at: 2017-12-21 07:20:05
End at: 2017-12-21 07:20:35

# Below is generated by plot.py at 2017-12-21 12:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1612.23 Mbit/s
95th percentile per-packet one-way delay: 296.158 ms
Loss rate: 7.40%
-- Flow 1:
Average throughput: 834.27 Mbit/s
95th percentile per-packet one-way delay: 251.317 ms
Loss rate: 6.15%
-- Flow 2:
Average throughput: 825.62 Mbit/s
95th percentile per-packet one-way delay: 288.299 ms
Loss rate: 6.89%
-- Flow 3:
Average throughput: 691.17 Mbit/s
95th percentile per-packet one-way delay: 353.113 ms
Loss rate: 12.81%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2017-12-21 07:34:17

End at: 2017-12-21 07:34:47

Below is generated by plot.py at 2017-12-21 12:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1035.47 Mbit/s

95th percentile per-packet one-way delay: 274.414 ms

Loss rate: 4.86%

-- Flow 1:

Average throughput: 158.70 Mbit/s

95th percentile per-packet one-way delay: 273.637 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 913.00 Mbit/s

95th percentile per-packet one-way delay: 272.020 ms

Loss rate: 4.27%

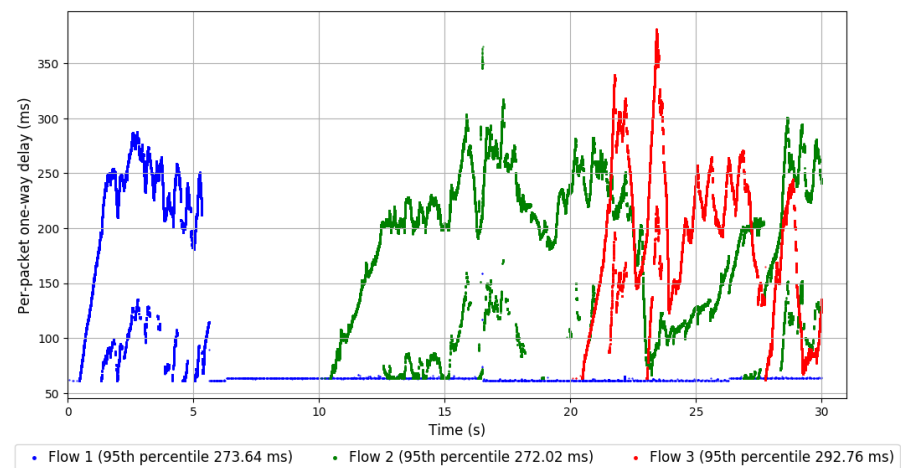
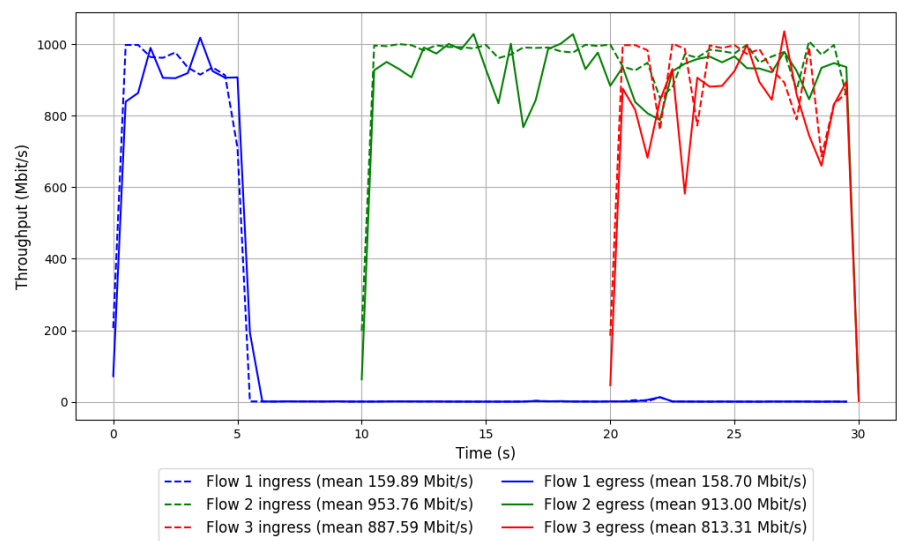
-- Flow 3:

Average throughput: 813.31 Mbit/s

95th percentile per-packet one-way delay: 292.756 ms

Loss rate: 8.36%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-21 07:48:09

End at: 2017-12-21 07:48:39

Below is generated by plot.py at 2017-12-21 12:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1395.19 Mbit/s

95th percentile per-packet one-way delay: 281.055 ms

Loss rate: 3.90%

-- Flow 1:

Average throughput: 935.85 Mbit/s

95th percentile per-packet one-way delay: 270.864 ms

Loss rate: 2.84%

-- Flow 2:

Average throughput: 271.10 Mbit/s

95th percentile per-packet one-way delay: 276.239 ms

Loss rate: 0.04%

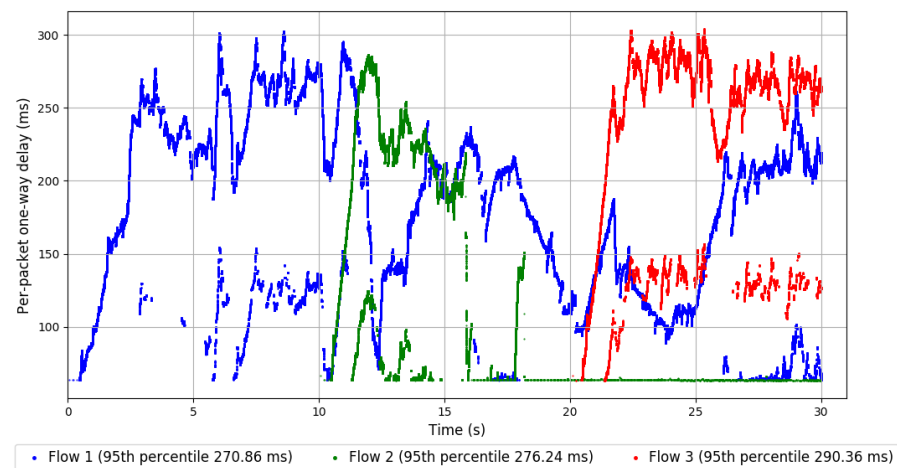
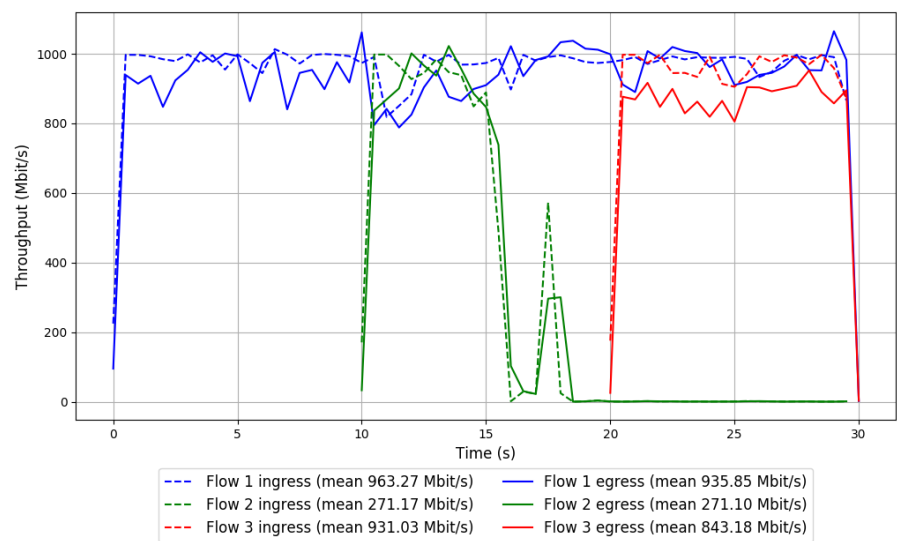
-- Flow 3:

Average throughput: 843.18 Mbit/s

95th percentile per-packet one-way delay: 290.363 ms

Loss rate: 9.45%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-21 08:02:03

End at: 2017-12-21 08:02:33

Below is generated by plot.py at 2017-12-21 12:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1502.24 Mbit/s

95th percentile per-packet one-way delay: 262.712 ms

Loss rate: 5.58%

-- Flow 1:

Average throughput: 867.22 Mbit/s

95th percentile per-packet one-way delay: 200.188 ms

Loss rate: 5.57%

-- Flow 2:

Average throughput: 490.02 Mbit/s

95th percentile per-packet one-way delay: 285.942 ms

Loss rate: 9.09%

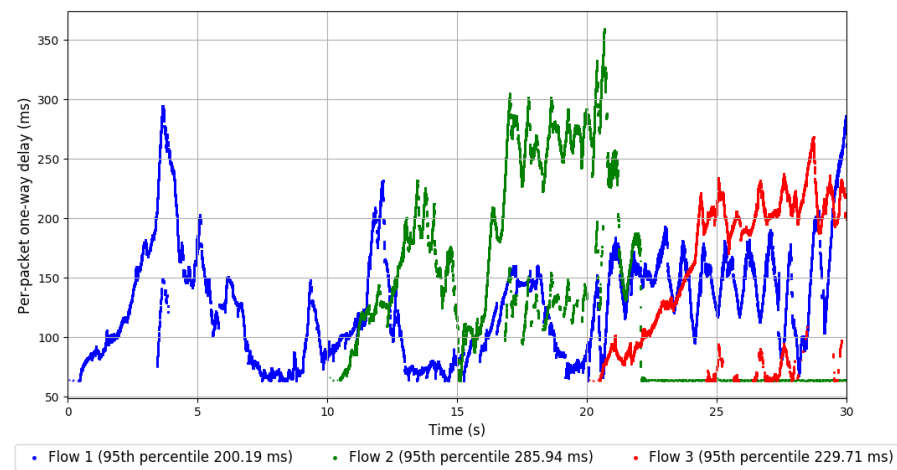
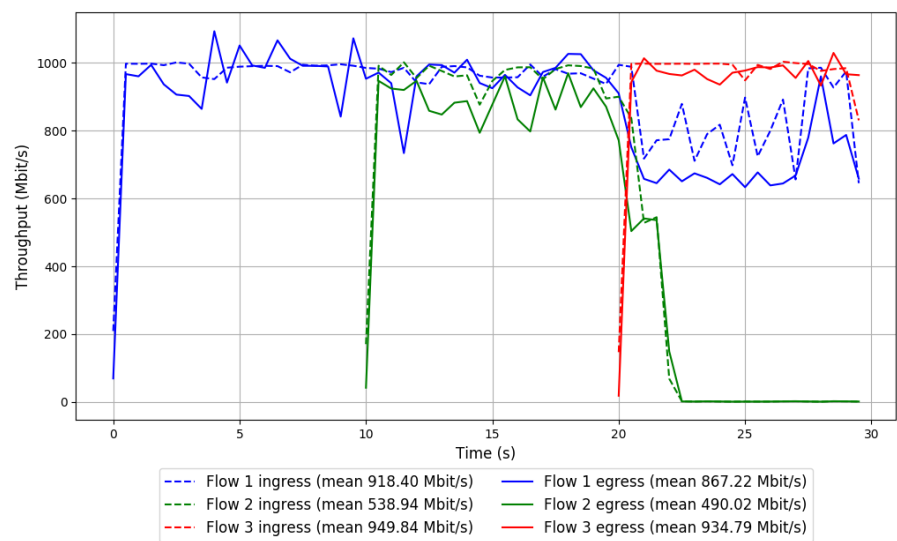
-- Flow 3:

Average throughput: 934.79 Mbit/s

95th percentile per-packet one-way delay: 229.706 ms

Loss rate: 1.58%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-21 08:15:56

End at: 2017-12-21 08:16:26

Below is generated by plot.py at 2017-12-21 12:29:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1655.86 Mbit/s

95th percentile per-packet one-way delay: 232.585 ms

Loss rate: 7.15%

-- Flow 1:

Average throughput: 874.73 Mbit/s

95th percentile per-packet one-way delay: 188.463 ms

Loss rate: 4.82%

-- Flow 2:

Average throughput: 795.41 Mbit/s

95th percentile per-packet one-way delay: 255.341 ms

Loss rate: 9.31%

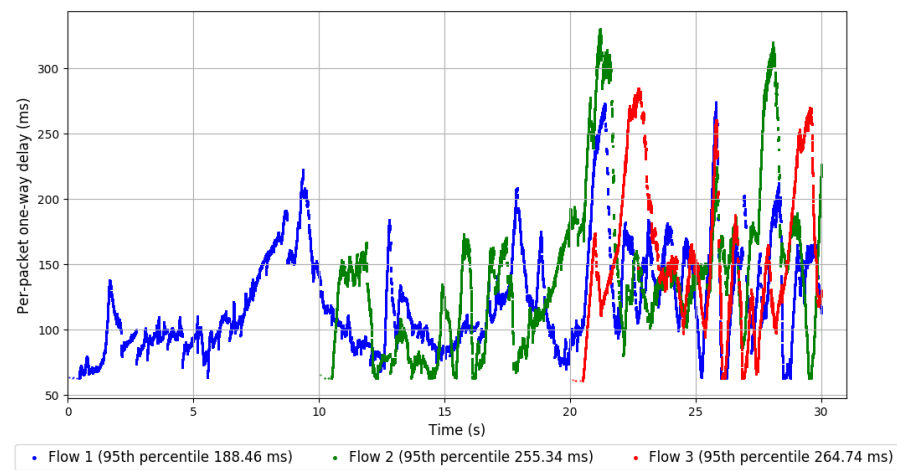
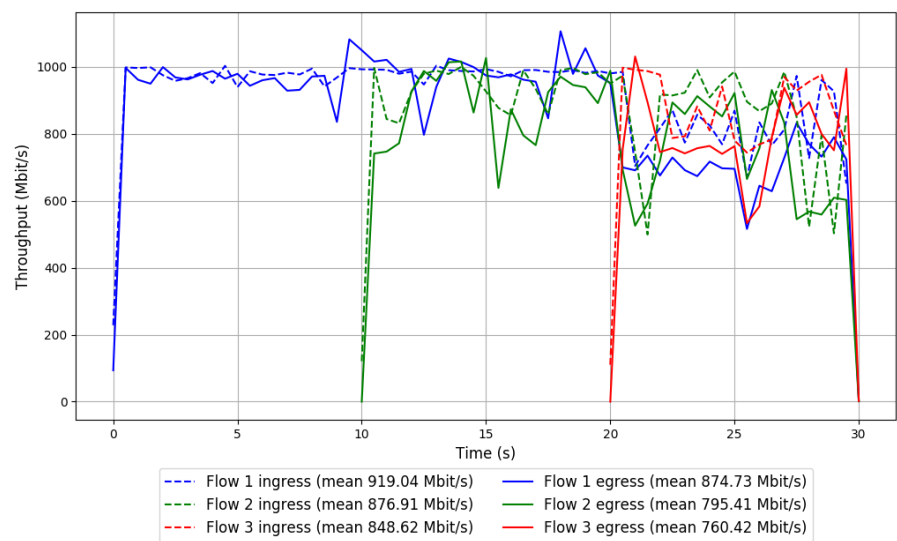
-- Flow 3:

Average throughput: 760.42 Mbit/s

95th percentile per-packet one-way delay: 264.741 ms

Loss rate: 10.28%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-21 08:30:04

End at: 2017-12-21 08:30:34

Below is generated by plot.py at 2017-12-21 12:29:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1602.43 Mbit/s

95th percentile per-packet one-way delay: 182.145 ms

Loss rate: 7.88%

-- Flow 1:

Average throughput: 856.26 Mbit/s

95th percentile per-packet one-way delay: 163.940 ms

Loss rate: 3.43%

-- Flow 2:

Average throughput: 741.10 Mbit/s

95th percentile per-packet one-way delay: 185.848 ms

Loss rate: 13.69%

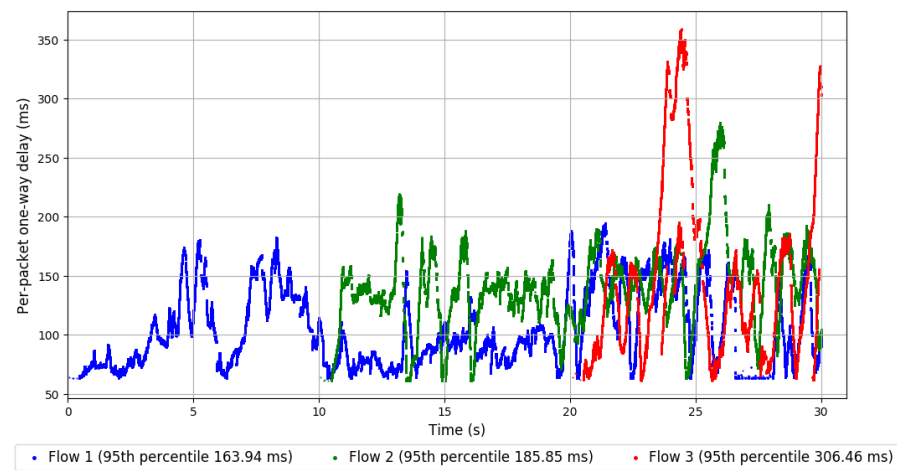
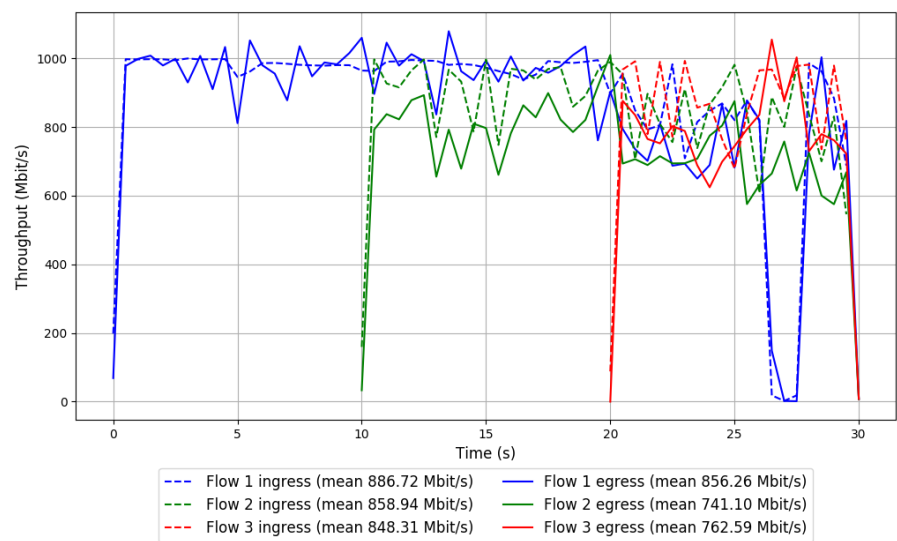
-- Flow 3:

Average throughput: 762.59 Mbit/s

95th percentile per-packet one-way delay: 306.463 ms

Loss rate: 10.08%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-21 08:44:12

End at: 2017-12-21 08:44:42

Below is generated by plot.py at 2017-12-21 12:29:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1125.24 Mbit/s

95th percentile per-packet one-way delay: 227.593 ms

Loss rate: 2.44%

-- Flow 1:

Average throughput: 218.80 Mbit/s

95th percentile per-packet one-way delay: 266.506 ms

Loss rate: 2.64%

-- Flow 2:

Average throughput: 918.16 Mbit/s

95th percentile per-packet one-way delay: 189.491 ms

Loss rate: 1.72%

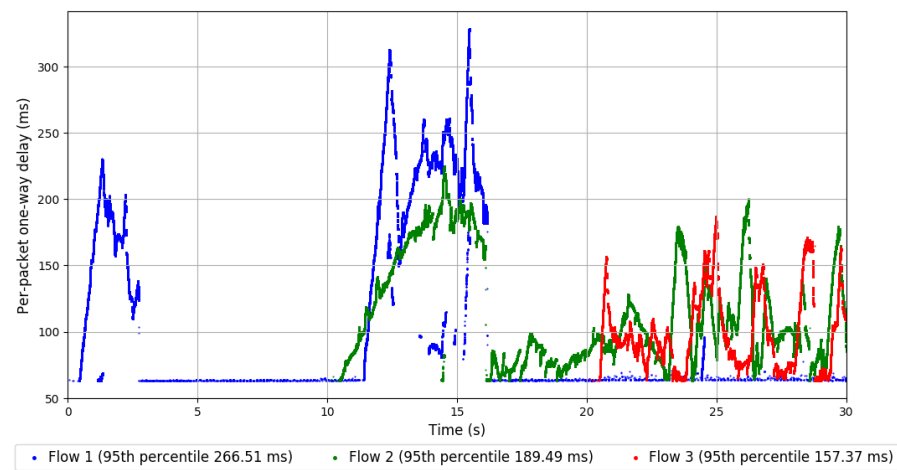
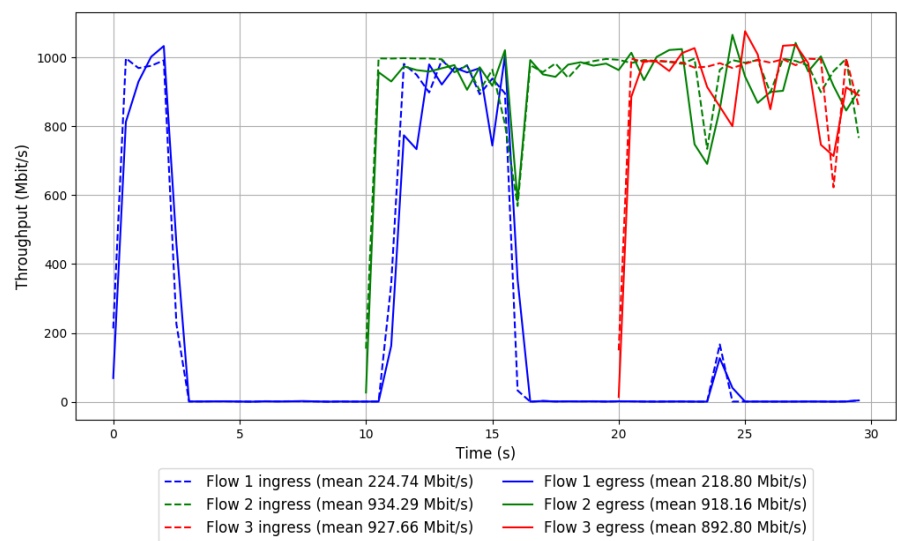
-- Flow 3:

Average throughput: 892.80 Mbit/s

95th percentile per-packet one-way delay: 157.368 ms

Loss rate: 3.76%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-21 08:58:14

End at: 2017-12-21 08:58:44

Below is generated by plot.py at 2017-12-21 12:29:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1291.49 Mbit/s

95th percentile per-packet one-way delay: 225.621 ms

Loss rate: 4.13%

-- Flow 1:

Average throughput: 901.20 Mbit/s

95th percentile per-packet one-way delay: 234.953 ms

Loss rate: 4.36%

-- Flow 2:

Average throughput: 143.36 Mbit/s

95th percentile per-packet one-way delay: 132.924 ms

Loss rate: 0.04%

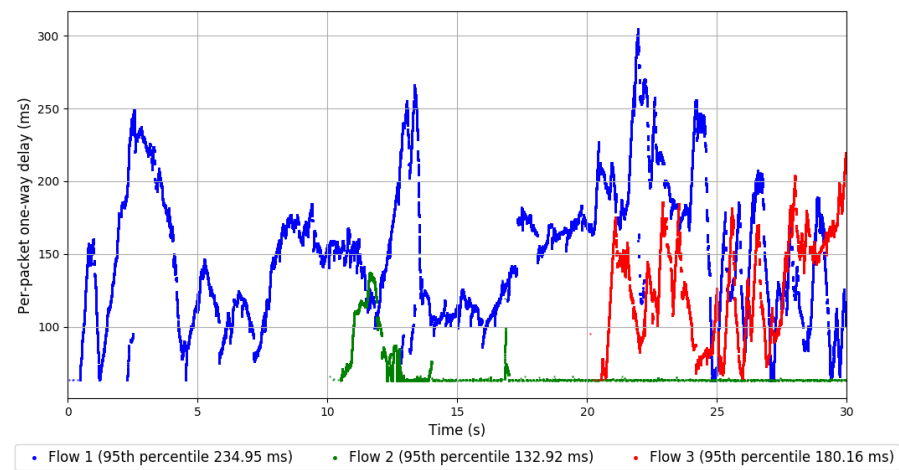
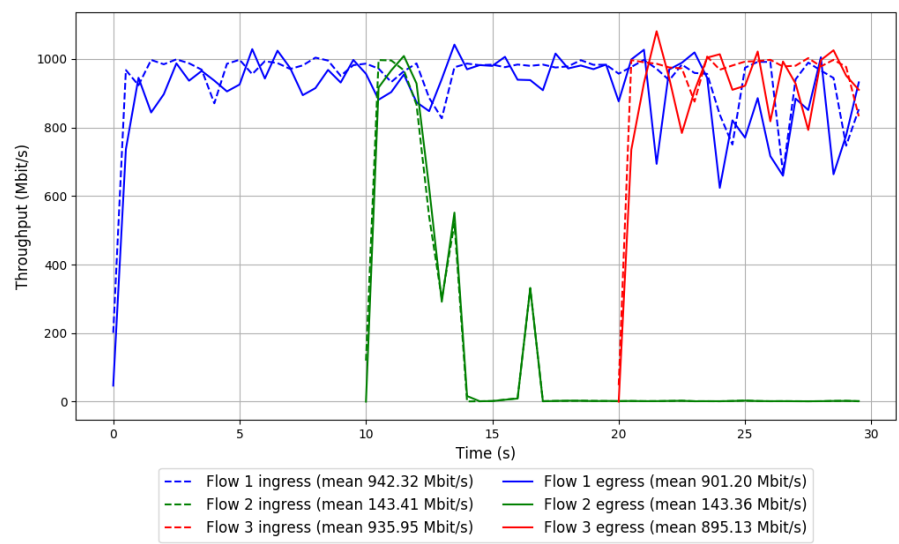
-- Flow 3:

Average throughput: 895.13 Mbit/s

95th percentile per-packet one-way delay: 180.162 ms

Loss rate: 4.66%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-21 09:12:16

End at: 2017-12-21 09:12:46

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 1661.34 Mbit/s

95th percentile per-packet one-way delay: 228.818 ms

Loss rate: 7.31%

-- Flow 1:

Average throughput: 861.69 Mbit/s

95th percentile per-packet one-way delay: 237.095 ms

Loss rate: 6.09%

-- Flow 2:

Average throughput: 838.24 Mbit/s

95th percentile per-packet one-way delay: 206.971 ms

Loss rate: 7.08%

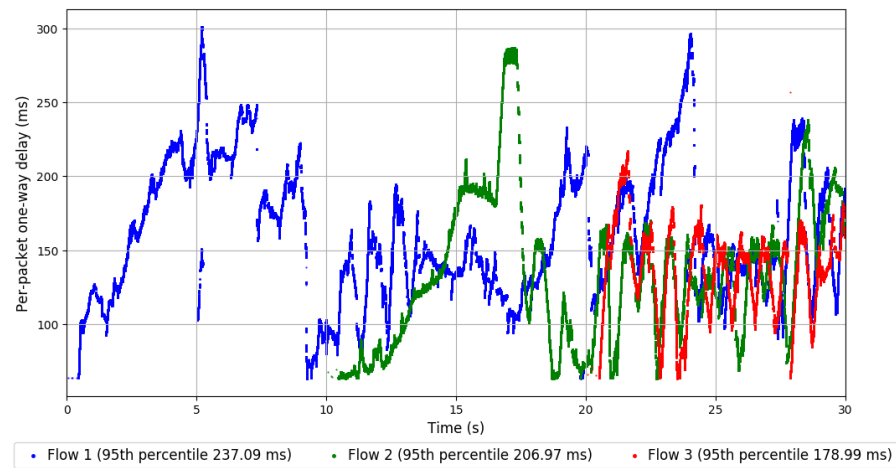
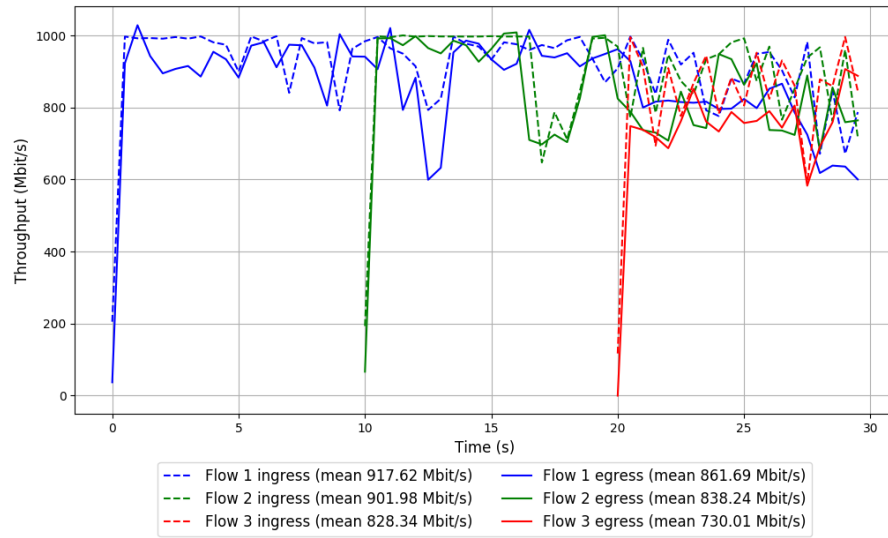
-- Flow 3:

Average throughput: 730.01 Mbit/s

95th percentile per-packet one-way delay: 178.993 ms

Loss rate: 11.88%

Run 9: Report of FillP — Data Link

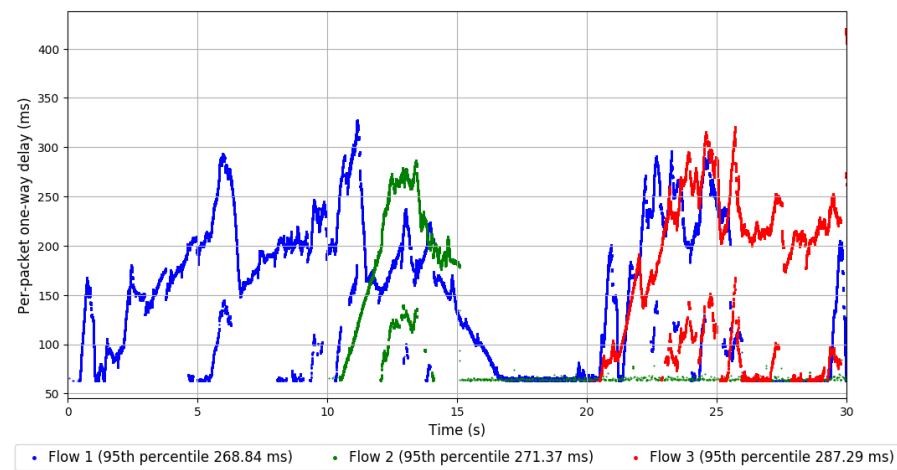
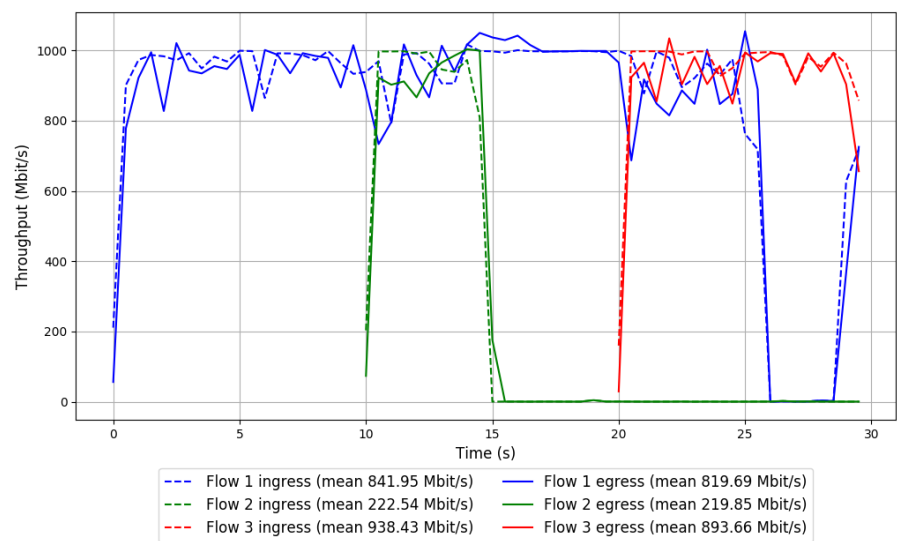


```
Run 10: Statistics of FillP

Start at: 2017-12-21 09:26:25
End at: 2017-12-21 09:26:55

# Below is generated by plot.py at 2017-12-21 12:36:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1262.20 Mbit/s
95th percentile per-packet one-way delay: 273.961 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 819.69 Mbit/s
95th percentile per-packet one-way delay: 268.843 ms
Loss rate: 2.65%
-- Flow 2:
Average throughput: 219.85 Mbit/s
95th percentile per-packet one-way delay: 271.370 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 893.66 Mbit/s
95th percentile per-packet one-way delay: 287.289 ms
Loss rate: 4.77%
```

Run 10: Report of FillP — Data Link

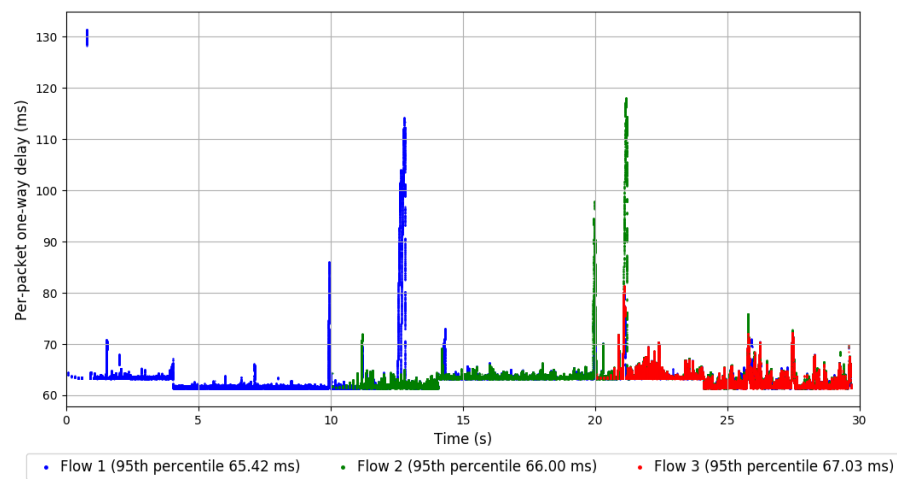
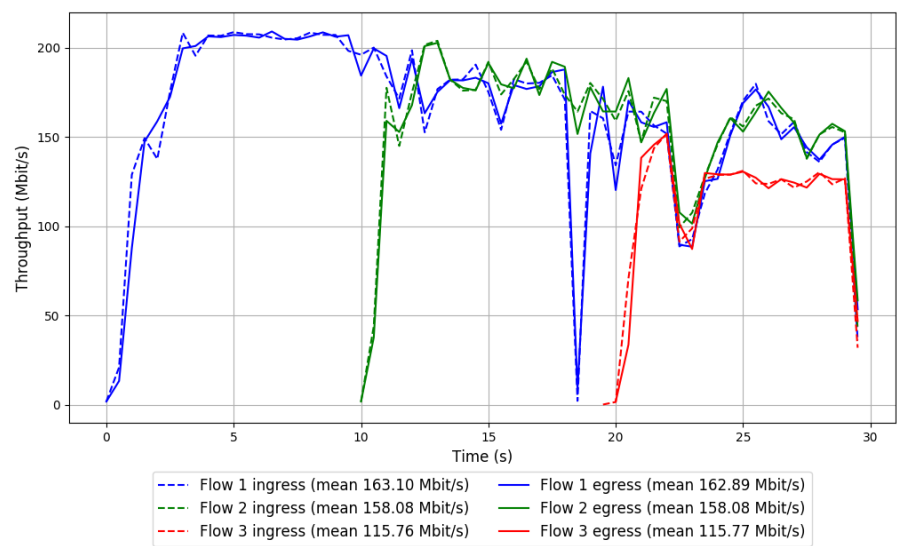


```
Run 1: Statistics of Indigo

Start at: 2017-12-21 07:13:49
End at: 2017-12-21 07:14:19

# Below is generated by plot.py at 2017-12-21 12:36:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.20 Mbit/s
95th percentile per-packet one-way delay: 65.947 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 162.89 Mbit/s
95th percentile per-packet one-way delay: 65.423 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 158.08 Mbit/s
95th percentile per-packet one-way delay: 66.002 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.77 Mbit/s
95th percentile per-packet one-way delay: 67.035 ms
Loss rate: 0.01%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-21 07:28:01

End at: 2017-12-21 07:28:31

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.17 Mbit/s

95th percentile per-packet one-way delay: 66.997 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 169.29 Mbit/s

95th percentile per-packet one-way delay: 65.162 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 172.65 Mbit/s

95th percentile per-packet one-way delay: 68.019 ms

Loss rate: 0.01%

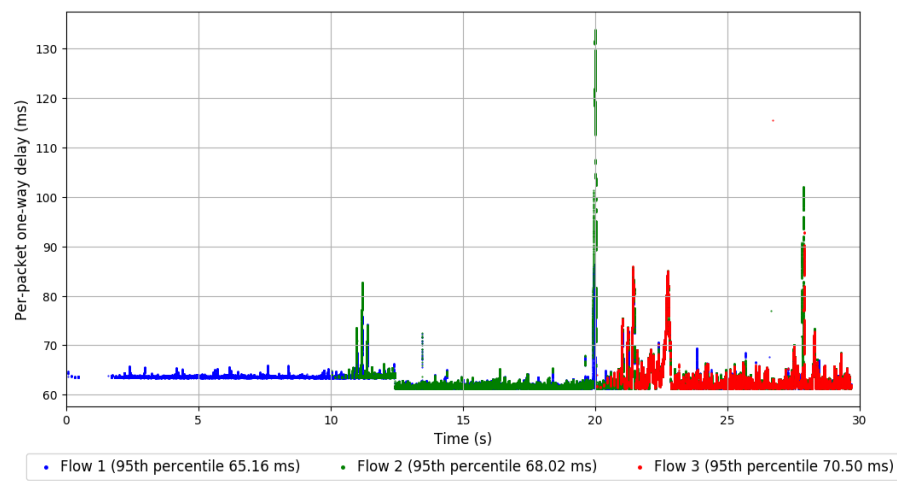
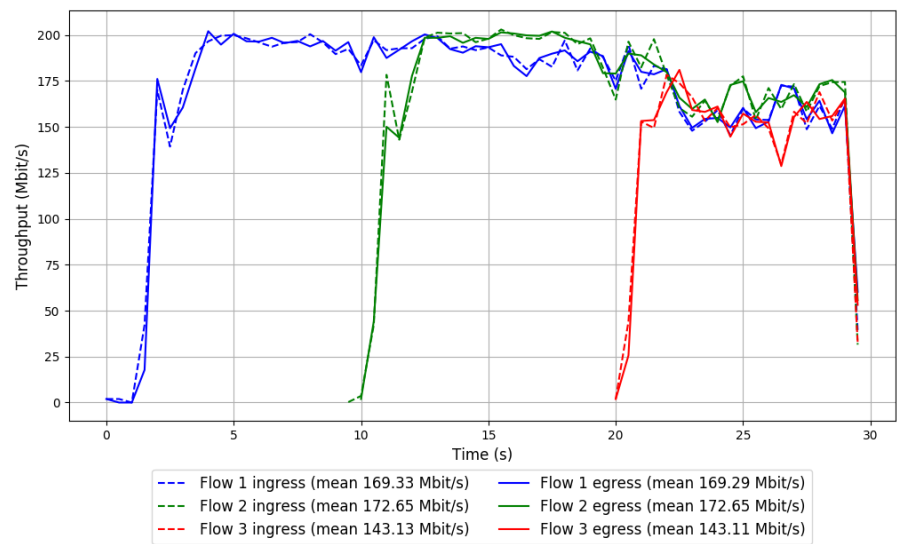
-- Flow 3:

Average throughput: 143.11 Mbit/s

95th percentile per-packet one-way delay: 70.501 ms

Loss rate: 0.02%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-21 07:41:49

End at: 2017-12-21 07:42:19

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.58 Mbit/s

95th percentile per-packet one-way delay: 67.808 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 178.35 Mbit/s

95th percentile per-packet one-way delay: 67.803 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 171.29 Mbit/s

95th percentile per-packet one-way delay: 67.216 ms

Loss rate: 0.02%

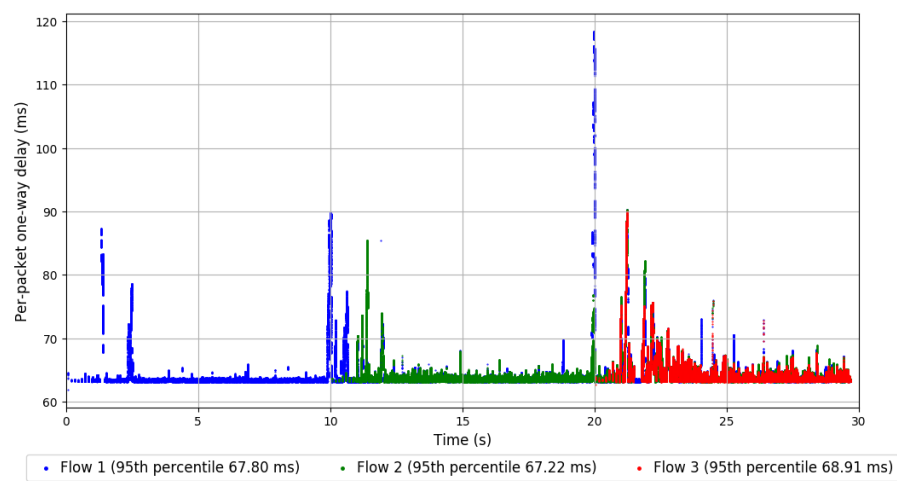
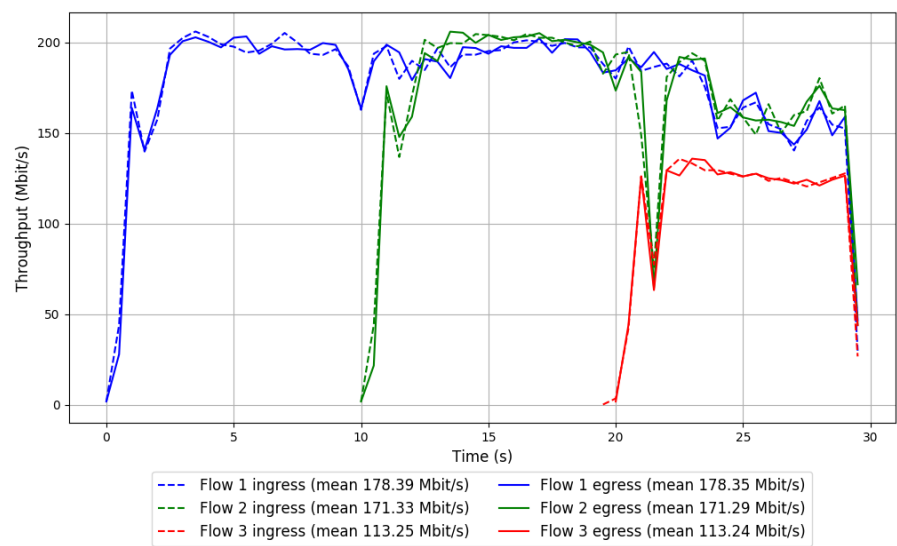
-- Flow 3:

Average throughput: 113.24 Mbit/s

95th percentile per-packet one-way delay: 68.912 ms

Loss rate: 0.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-21 07:55:51

End at: 2017-12-21 07:56:21

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.43 Mbit/s

95th percentile per-packet one-way delay: 67.167 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 176.11 Mbit/s

95th percentile per-packet one-way delay: 66.443 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 162.78 Mbit/s

95th percentile per-packet one-way delay: 67.400 ms

Loss rate: 0.00%

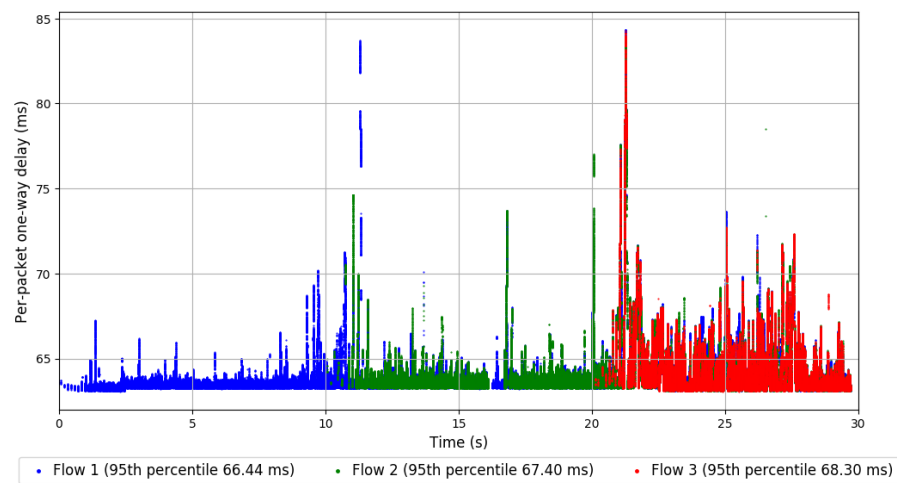
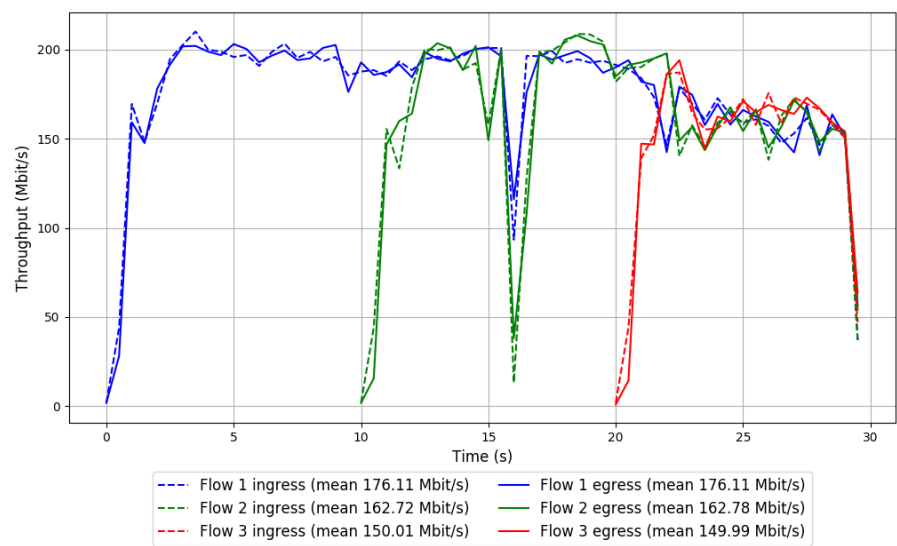
-- Flow 3:

Average throughput: 149.99 Mbit/s

95th percentile per-packet one-way delay: 68.298 ms

Loss rate: 0.02%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-21 08:09:46

End at: 2017-12-21 08:10:17

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.63 Mbit/s

95th percentile per-packet one-way delay: 66.665 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 173.23 Mbit/s

95th percentile per-packet one-way delay: 65.712 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 162.26 Mbit/s

95th percentile per-packet one-way delay: 66.971 ms

Loss rate: 0.03%

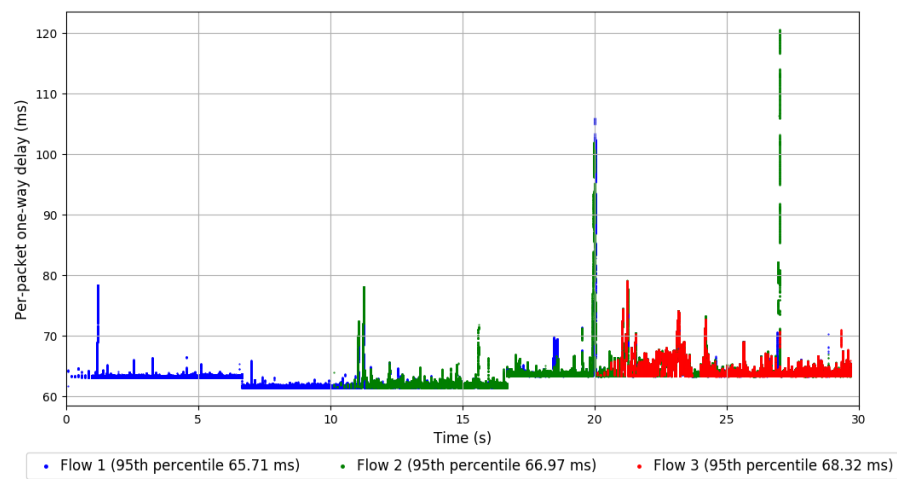
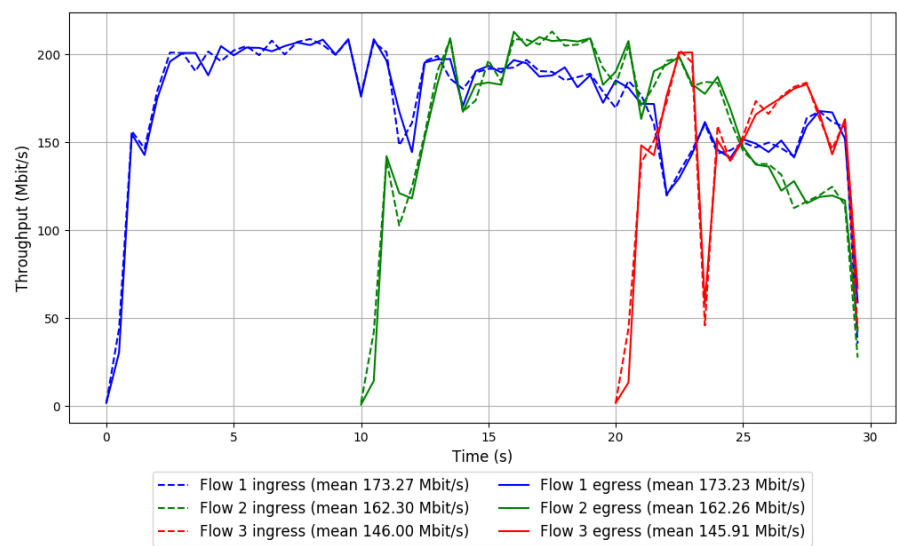
-- Flow 3:

Average throughput: 145.91 Mbit/s

95th percentile per-packet one-way delay: 68.324 ms

Loss rate: 0.04%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-21 08:23:52

End at: 2017-12-21 08:24:22

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.14 Mbit/s

95th percentile per-packet one-way delay: 66.618 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 178.22 Mbit/s

95th percentile per-packet one-way delay: 65.774 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 172.40 Mbit/s

95th percentile per-packet one-way delay: 66.680 ms

Loss rate: 0.02%

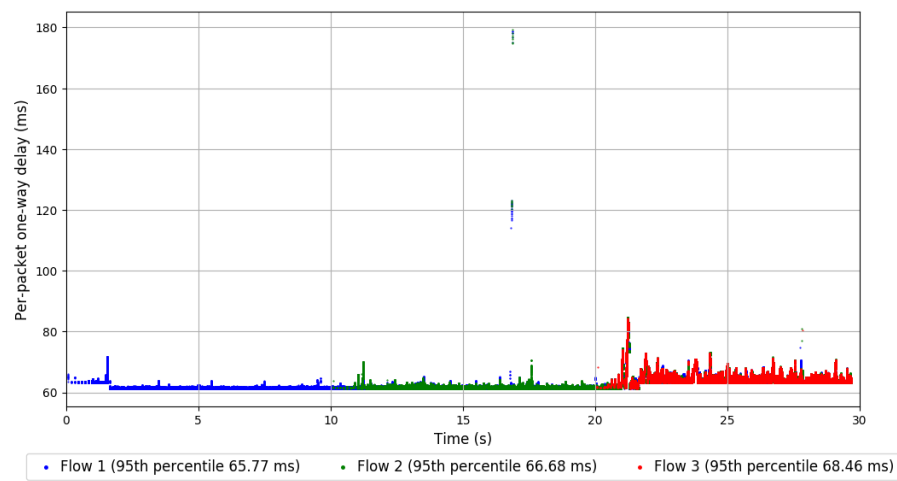
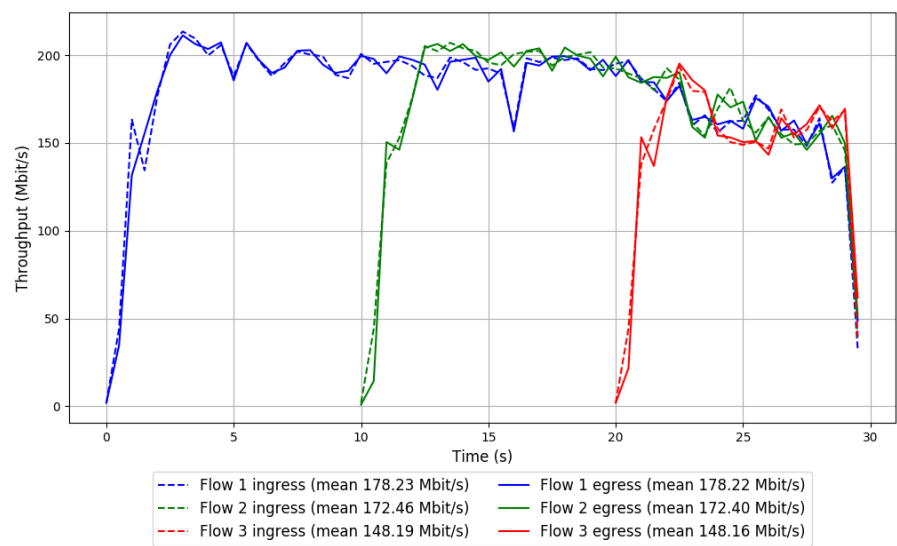
-- Flow 3:

Average throughput: 148.16 Mbit/s

95th percentile per-packet one-way delay: 68.457 ms

Loss rate: 0.01%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-21 08:37:58

End at: 2017-12-21 08:38:28

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.29 Mbit/s

95th percentile per-packet one-way delay: 69.236 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 182.92 Mbit/s

95th percentile per-packet one-way delay: 68.507 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 162.40 Mbit/s

95th percentile per-packet one-way delay: 69.114 ms

Loss rate: 0.02%

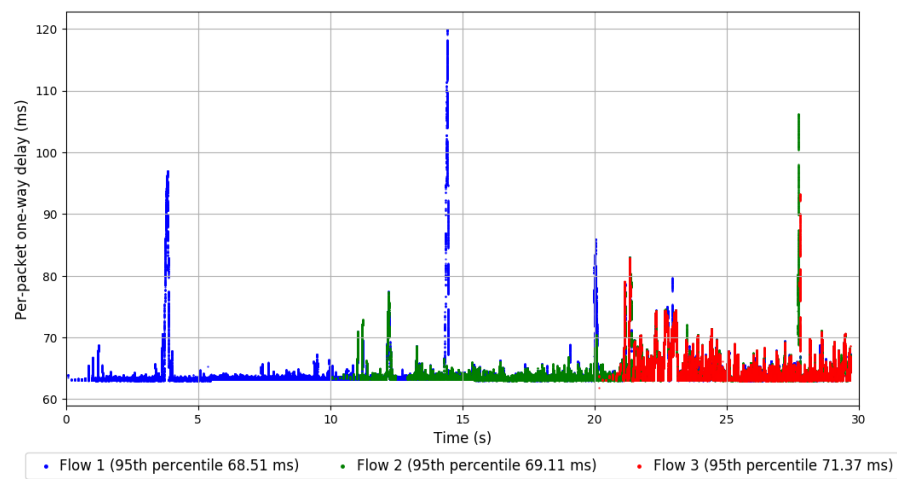
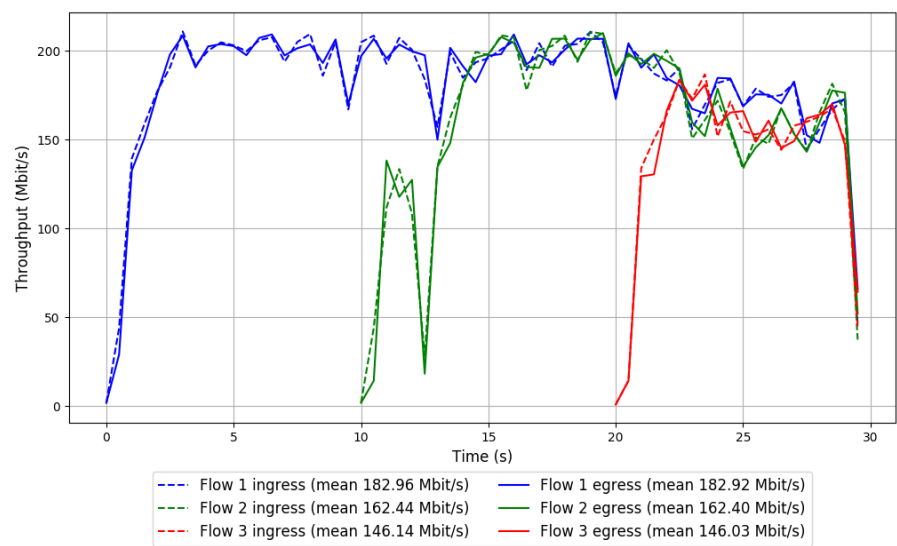
-- Flow 3:

Average throughput: 146.03 Mbit/s

95th percentile per-packet one-way delay: 71.368 ms

Loss rate: 0.03%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-21 08:51:53

End at: 2017-12-21 08:52:23

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.69 Mbit/s

95th percentile per-packet one-way delay: 66.285 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 170.72 Mbit/s

95th percentile per-packet one-way delay: 65.521 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 160.35 Mbit/s

95th percentile per-packet one-way delay: 66.333 ms

Loss rate: 0.03%

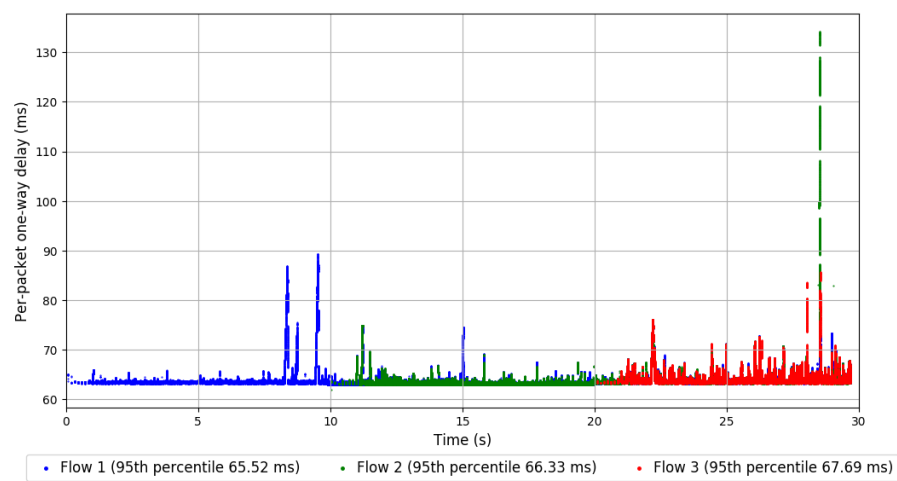
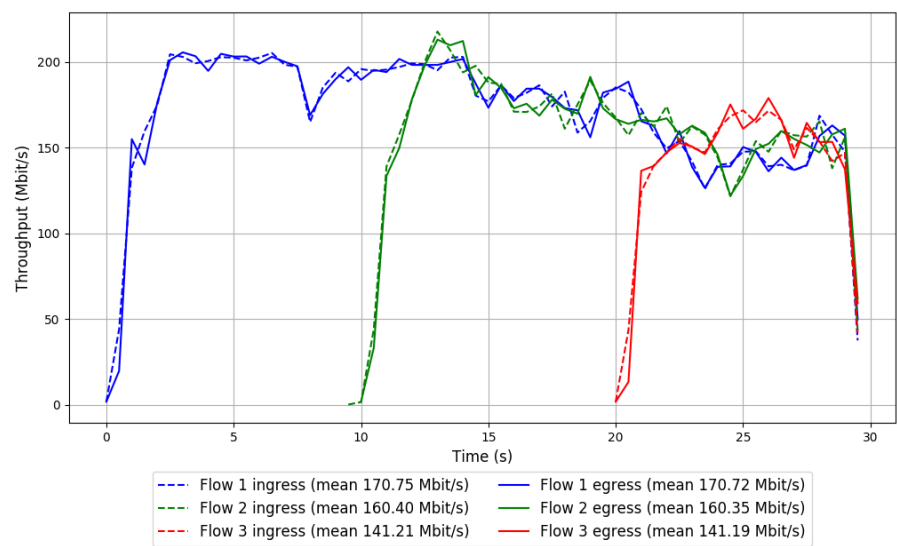
-- Flow 3:

Average throughput: 141.19 Mbit/s

95th percentile per-packet one-way delay: 67.690 ms

Loss rate: 0.04%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-21 09:05:59

End at: 2017-12-21 09:06:29

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.89 Mbit/s

95th percentile per-packet one-way delay: 67.393 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 175.98 Mbit/s

95th percentile per-packet one-way delay: 66.570 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 162.59 Mbit/s

95th percentile per-packet one-way delay: 67.319 ms

Loss rate: 0.13%

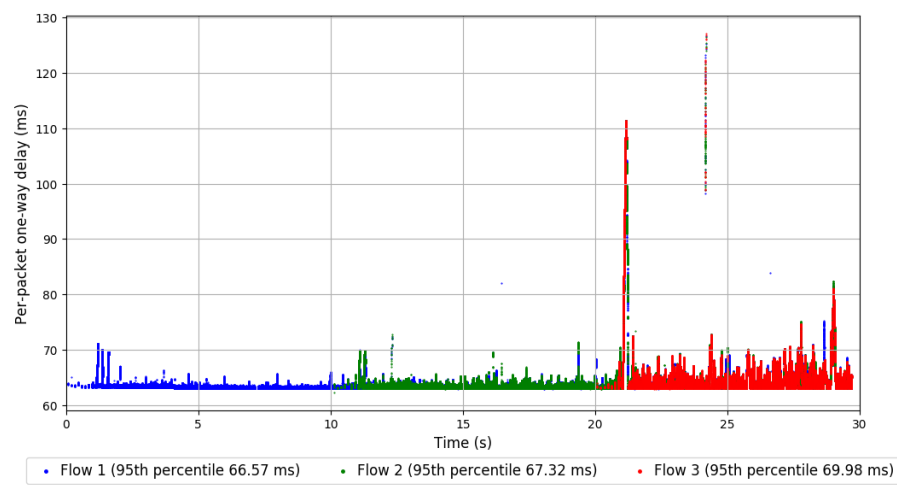
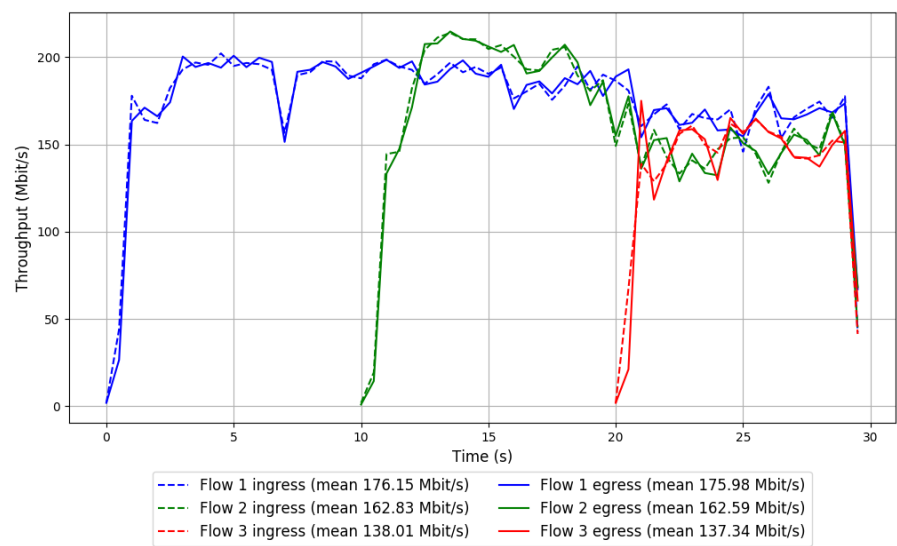
-- Flow 3:

Average throughput: 137.34 Mbit/s

95th percentile per-packet one-way delay: 69.984 ms

Loss rate: 0.49%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-21 09:20:06

End at: 2017-12-21 09:20:36

Below is generated by plot.py at 2017-12-21 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.09 Mbit/s

95th percentile per-packet one-way delay: 68.461 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 176.99 Mbit/s

95th percentile per-packet one-way delay: 67.401 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 168.67 Mbit/s

95th percentile per-packet one-way delay: 68.612 ms

Loss rate: 0.01%

-- Flow 3:

Average throughput: 149.17 Mbit/s

95th percentile per-packet one-way delay: 71.158 ms

Loss rate: 0.01%

Run 10: Report of Indigo — Data Link

