

Pantheon Report

Generated at 2018-07-03 17:51:45 (UTC).

Data path: AWS Brazil 2 Ethernet (*local*) → Colombia ppp0 ppp0 (*remote*).

Repeated the test of 17 congestion control schemes 3 times.

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

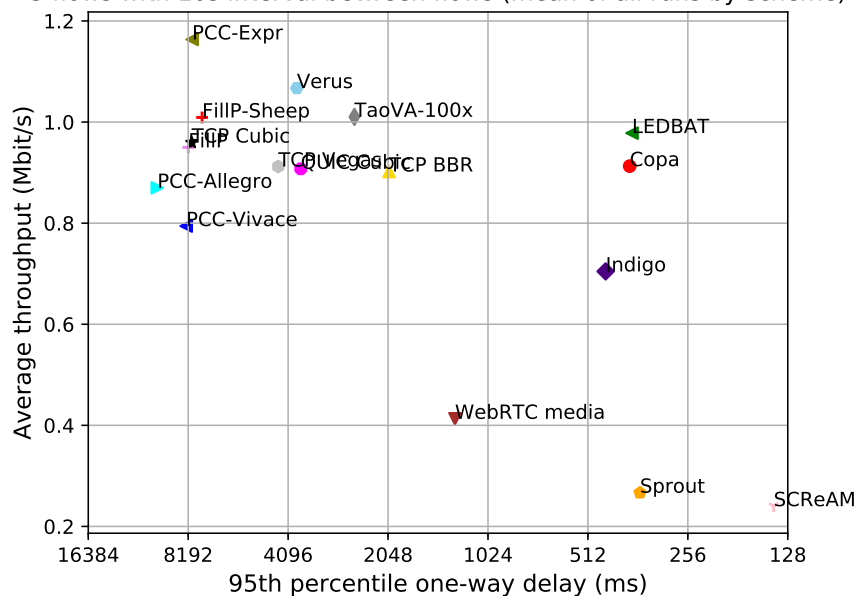
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

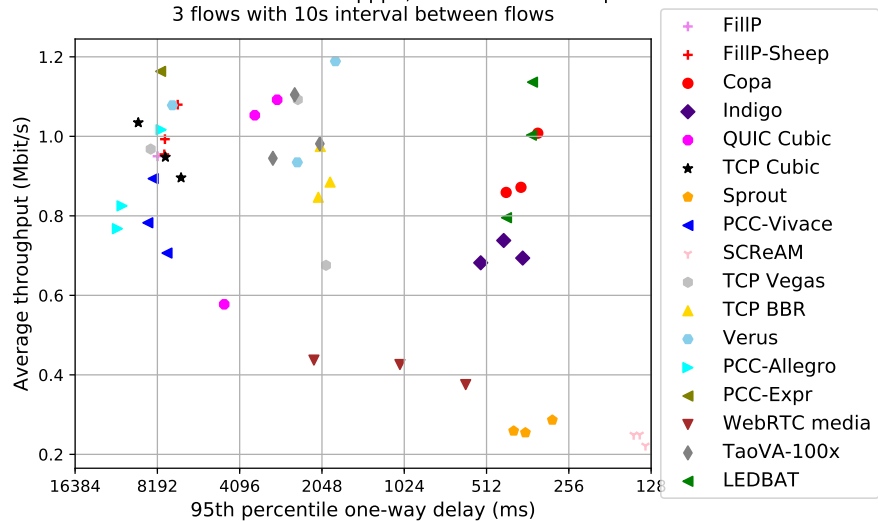
Git summary:

```
branch: master @ 9250dbeec7fb57193cdff1ba8c440b4e16ab30f0
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 37162fe9af85249aeccac061c93e75640ef710b5
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf90c077e64d
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS Brazil 2 to Colombia ppp0, 3 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS Brazil 2 to Colombia ppp0, 3 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	3	0.61	0.34	0.24	1968.00	2190.25	1929.07	3.09	5.62	16.22
Copa	3	0.52	0.40	0.37	390.24	379.14	367.09	0.32	0.87	1.65
TCP Cubic	3	0.95	0.03	0.00	8003.41	6209.07	8822.07	25.72	49.73	85.56
FillP	1	0.95	0.00	0.00	8184.16	7935.30	6920.07	96.41	26.29	81.25
FillP-Sheep	3	1.01	0.01	0.00	7449.39	7008.53	6937.12	24.55	0.77	81.85
Indigo	3	0.41	0.28	0.34	441.42	477.13	421.14	0.06	0.30	1.14
LEDBAT	3	0.66	0.33	0.29	383.88	413.47	377.69	0.43	2.04	2.48
PCC-Allegro	3	0.87	0.00	0.00	10148.48	8518.71	8270.36	82.48	6.76	64.20
PCC-Expr	1	1.16	0.00	0.00	7973.56	7082.88	5722.99	81.19	45.42	80.84
QUIC Cubic	3	0.74	0.25	0.04	3616.80	3859.25	3807.99	9.31	25.87	39.67
SCReAM	3	0.08	0.14	0.19	133.47	148.54	146.45	0.09	0.18	0.34
Sprout	3	0.13	0.14	0.14	350.84	352.13	373.38	0.01	0.11	0.33
TaoVA-100x	3	0.58	0.45	0.41	1701.94	3042.09	1883.93	2.24	3.78	9.91
TCP Vegas	3	0.73	0.25	0.13	4275.86	4511.56	4081.23	12.89	25.13	53.56
Verus	3	0.91	0.27	0.02	3999.53	2066.30	1954.50	6.89	7.49	10.34
PCC-Vivace	3	0.56	0.35	0.00	8224.13	8335.86	8139.01	30.82	18.40	65.32
WebRTC media	3	0.20	0.15	0.07	1062.10	1405.02	1225.37	0.02	0.06	0.43

Run 1: Statistics of TCP BBR

Start at: 2018-07-03 17:08:13

End at: 2018-07-03 17:08:43

Local clock offset: -3.046 ms

Remote clock offset: 5.522 ms

Below is generated by plot.py at 2018-07-03 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.85 Mbit/s

95th percentile per-packet one-way delay: 2111.604 ms

Loss rate: 3.83%

-- Flow 1:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 2111.604 ms

Loss rate: 2.51%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 2305.470 ms

Loss rate: 4.03%

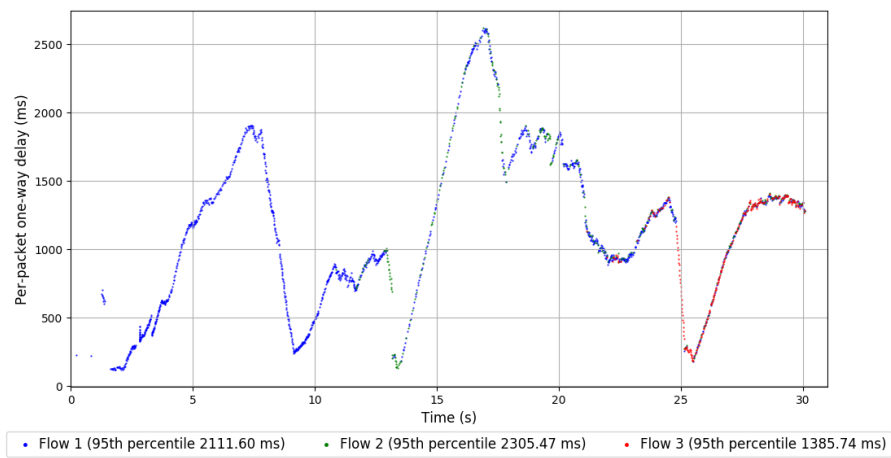
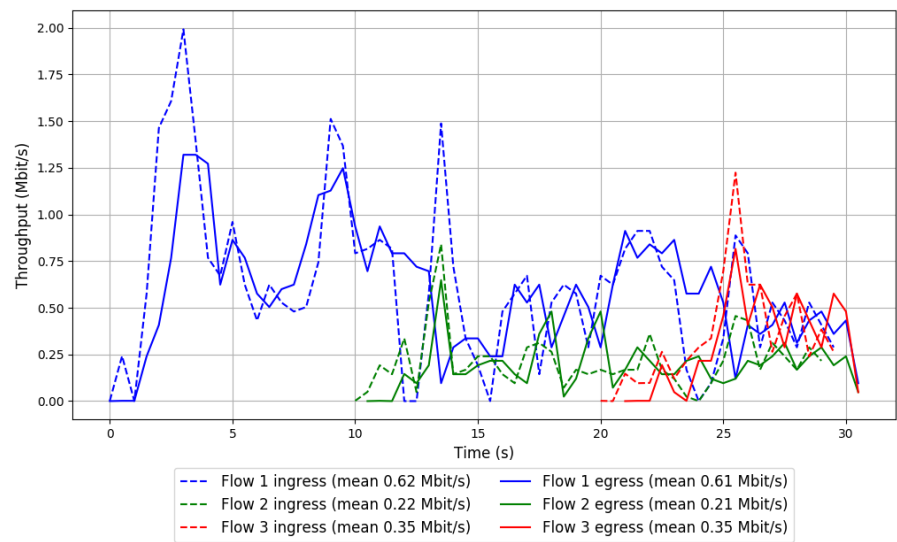
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 1385.743 ms

Loss rate: 10.75%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-07-03 17:28:40

End at: 2018-07-03 17:29:10

Local clock offset: -3.173 ms

Remote clock offset: 5.469 ms

Below is generated by plot.py at 2018-07-03 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 2076.604 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 1950.122 ms

Loss rate: 1.29%

-- Flow 2:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 2349.975 ms

Loss rate: 2.17%

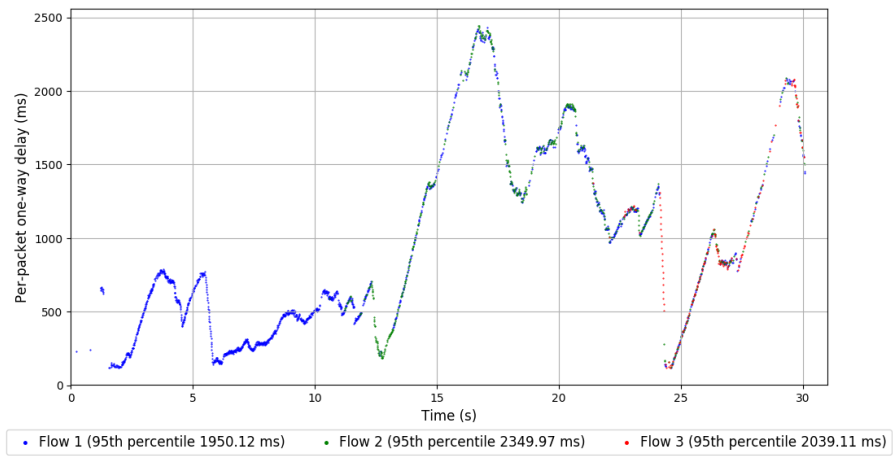
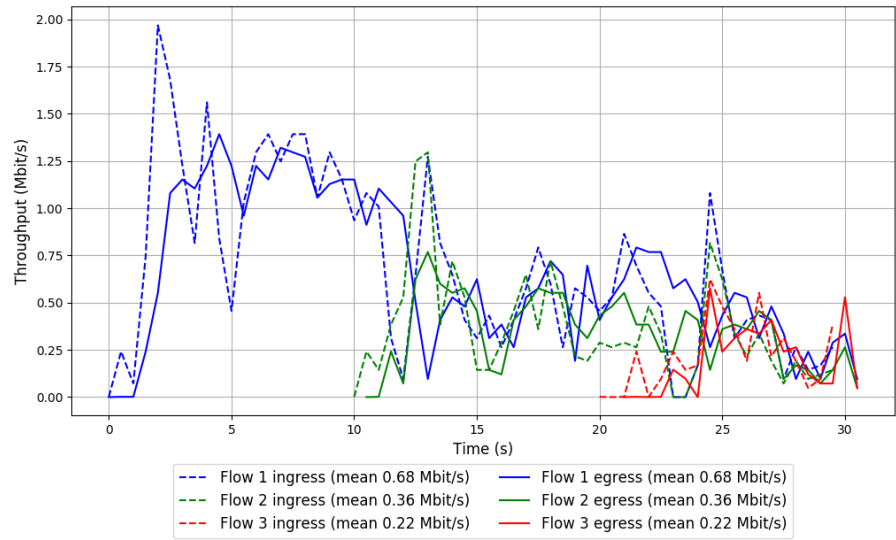
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2039.106 ms

Loss rate: 12.14%

Run 2: Report of TCP BBR — Data Link

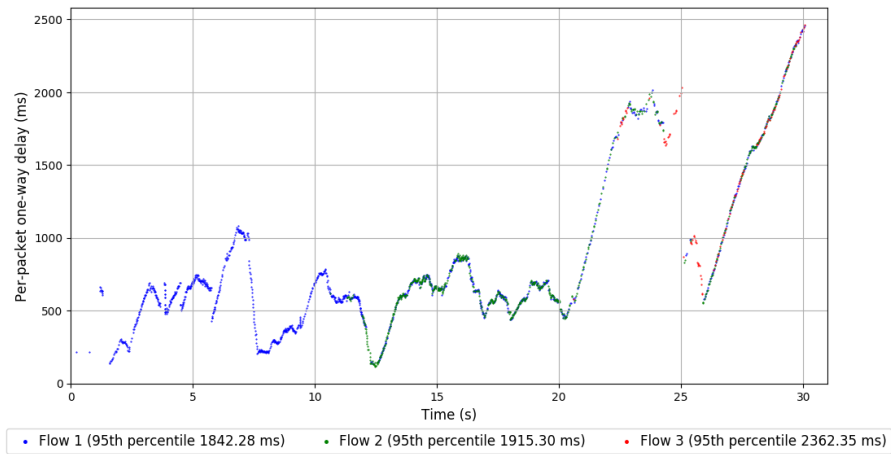
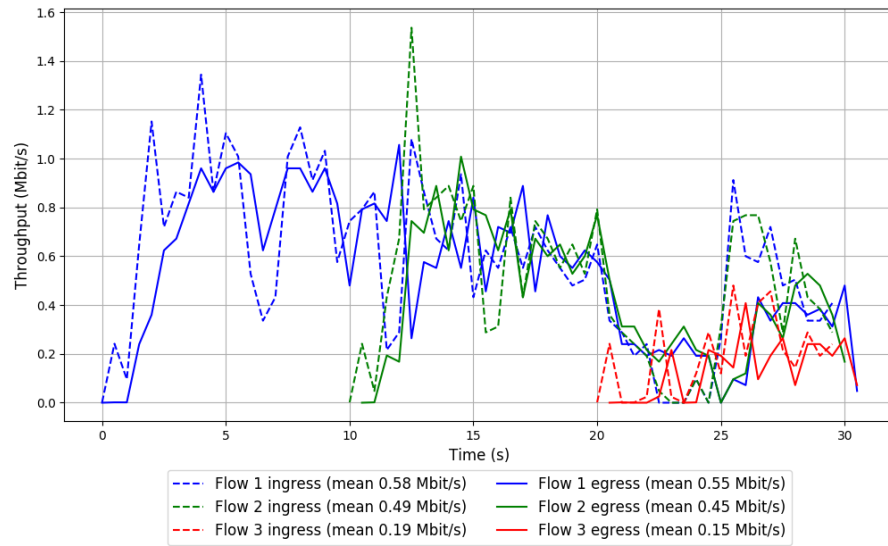


Run 3: Statistics of TCP BBR

Start at: 2018-07-03 17:49:13
End at: 2018-07-03 17:49:43
Local clock offset: -2.814 ms
Remote clock offset: 10.644 ms

Below is generated by plot.py at 2018-07-03 17:51:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 1912.032 ms
Loss rate: 8.56%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 1842.279 ms
Loss rate: 5.48%
-- Flow 2:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 1915.297 ms
Loss rate: 10.67%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 2362.350 ms
Loss rate: 25.76%

Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-07-03 16:51:17

End at: 2018-07-03 16:51:47

Local clock offset: -2.916 ms

Remote clock offset: 8.69 ms

Below is generated by plot.py at 2018-07-03 17:51:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 332.490 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 313.331 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 322.519 ms

Loss rate: 0.46%

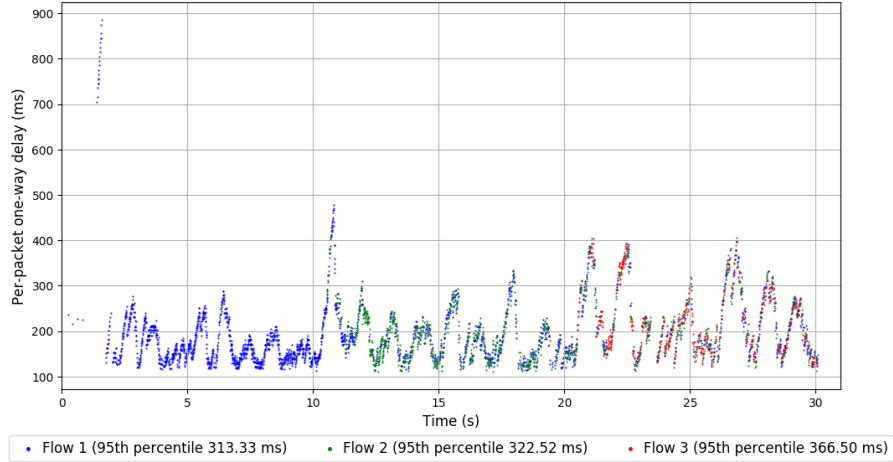
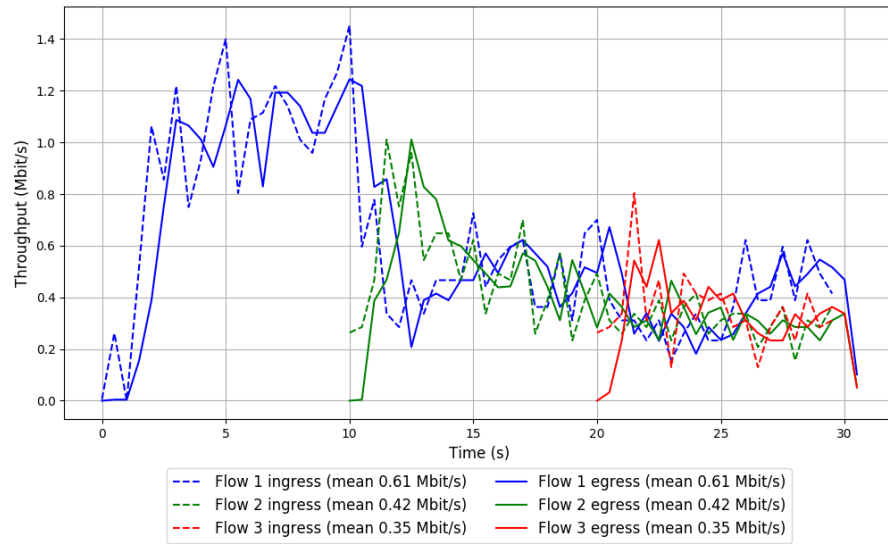
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 366.498 ms

Loss rate: 0.37%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-07-03 17:11:52

End at: 2018-07-03 17:12:22

Local clock offset: -3.059 ms

Remote clock offset: 5.959 ms

Below is generated by plot.py at 2018-07-03 17:51:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.87 Mbit/s

95th percentile per-packet one-way delay: 383.075 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 380.439 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 424.146 ms

Loss rate: 0.68%

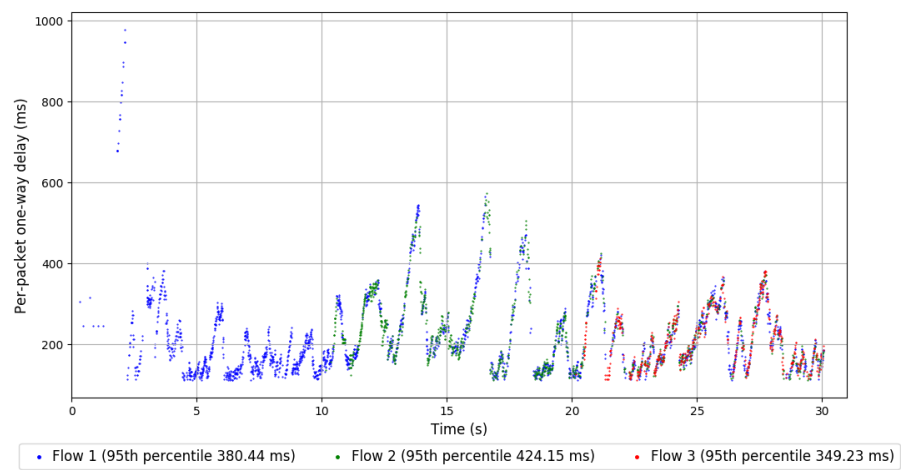
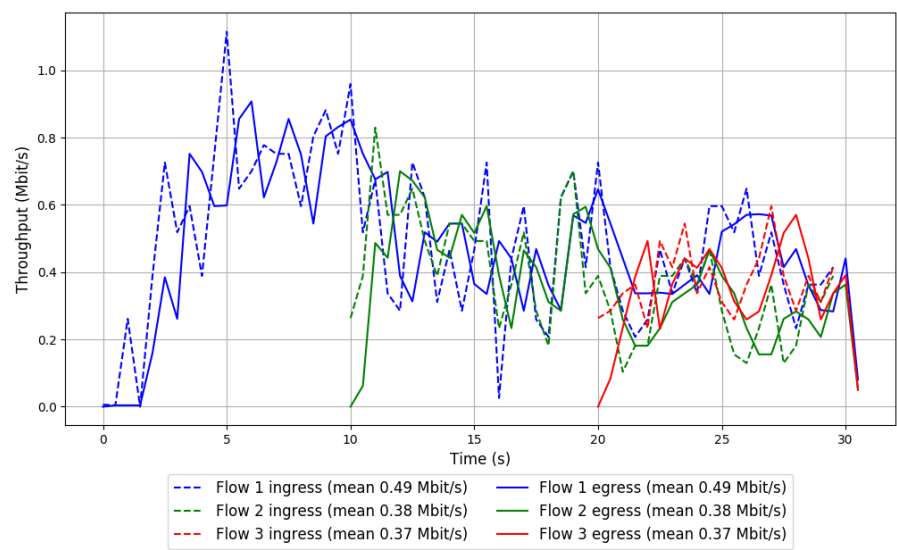
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 349.231 ms

Loss rate: 1.39%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-07-03 17:32:18

End at: 2018-07-03 17:32:48

Local clock offset: -3.202 ms

Remote clock offset: 1.787 ms

Below is generated by plot.py at 2018-07-03 17:51:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 433.966 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 476.949 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 390.753 ms

Loss rate: 1.47%

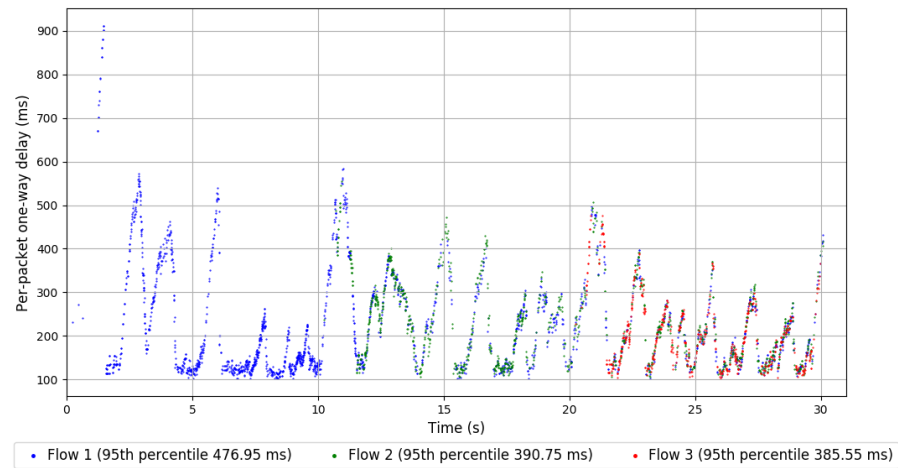
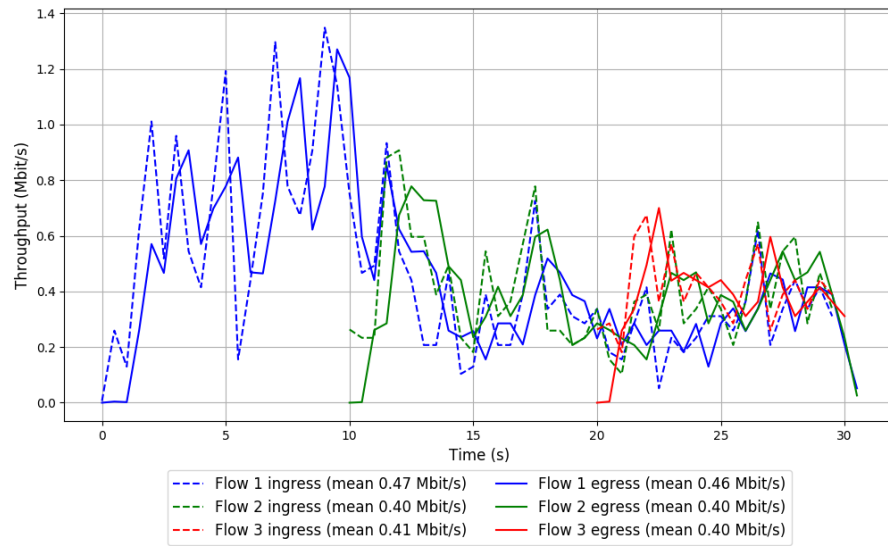
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 385.552 ms

Loss rate: 3.20%

Run 3: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-07-03 17:02:10

End at: 2018-07-03 17:02:40

Local clock offset: -3.065 ms

Remote clock offset: 6.798 ms

Below is generated by plot.py at 2018-07-03 17:51:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 9622.454 ms

Loss rate: 27.16%

-- Flow 1:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 9632.605 ms

Loss rate: 26.62%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 9230.705 ms

Loss rate: 43.42%

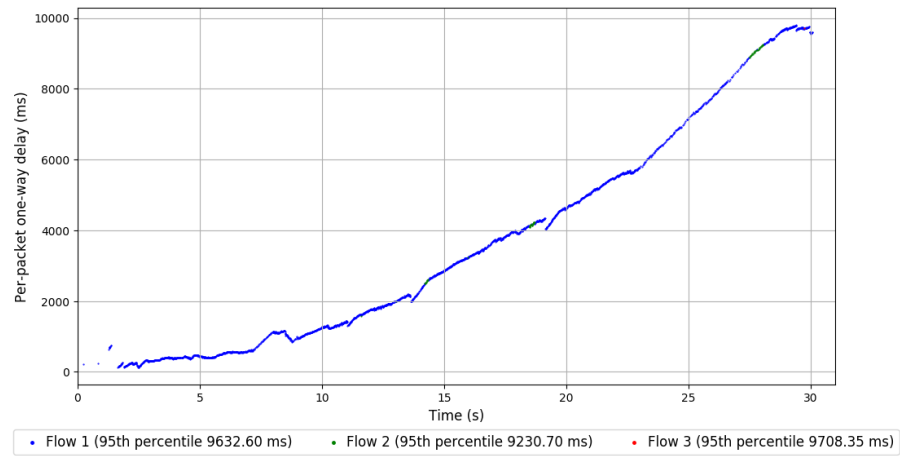
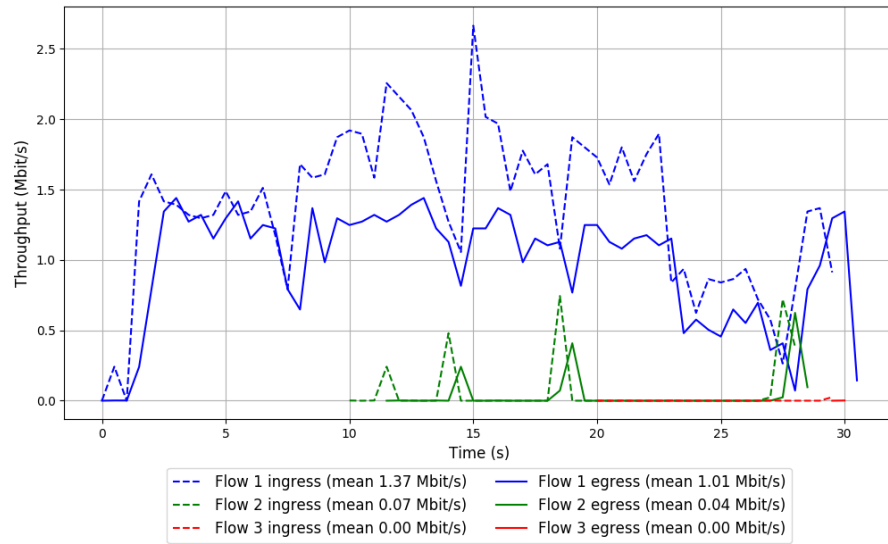
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 9708.349 ms

Loss rate: 95.13%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-07-03 17:22:40

End at: 2018-07-03 17:23:10

Local clock offset: -3.141 ms

Remote clock offset: 6.492 ms

Below is generated by plot.py at 2018-07-03 17:51:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.90 Mbit/s

95th percentile per-packet one-way delay: 6711.231 ms

Loss rate: 22.43%

-- Flow 1:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 6711.231 ms

Loss rate: 22.24%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 4809.718 ms

Loss rate: 52.06%

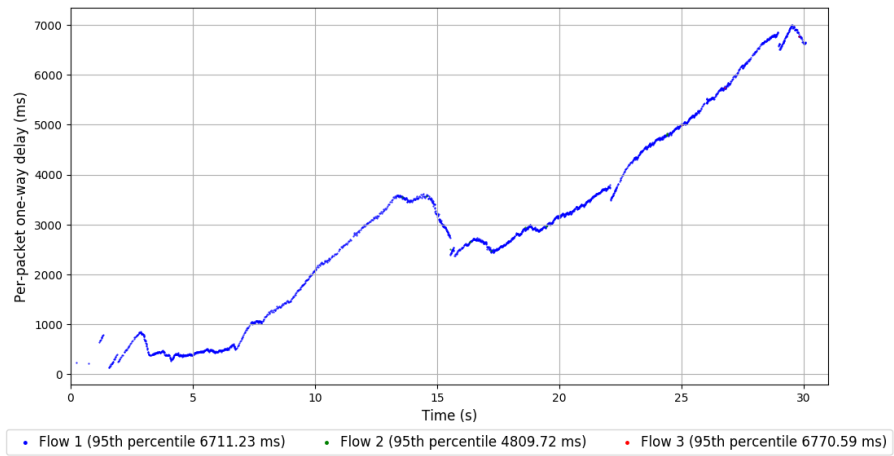
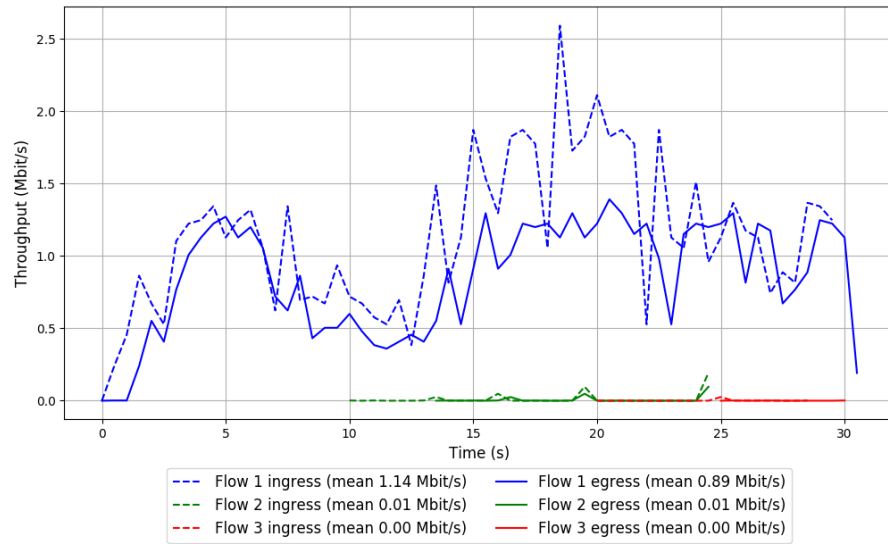
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 6770.590 ms

Loss rate: 86.54%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-07-03 17:43:13

End at: 2018-07-03 17:43:43

Local clock offset: -3.075 ms

Remote clock offset: 5.609 ms

Below is generated by plot.py at 2018-07-03 17:51:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 7656.409 ms

Loss rate: 28.79%

-- Flow 1:

Average throughput: 0.94 Mbit/s

95th percentile per-packet one-way delay: 7666.402 ms

Loss rate: 28.30%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 4586.796 ms

Loss rate: 53.71%

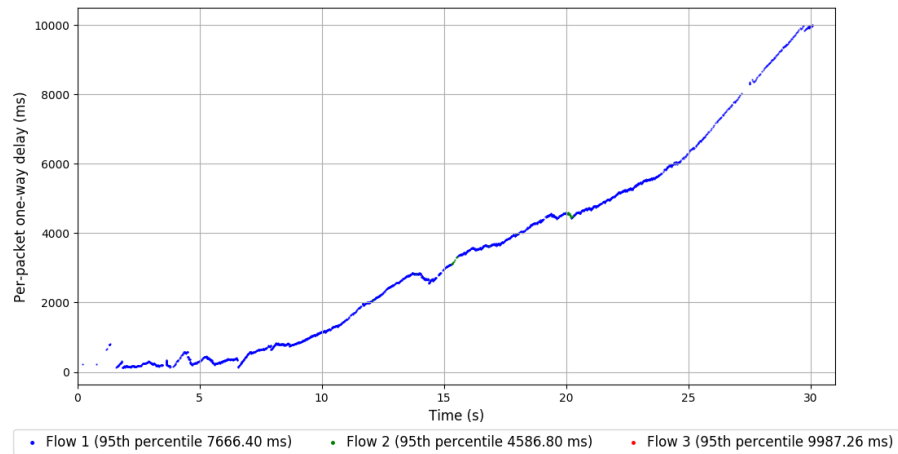
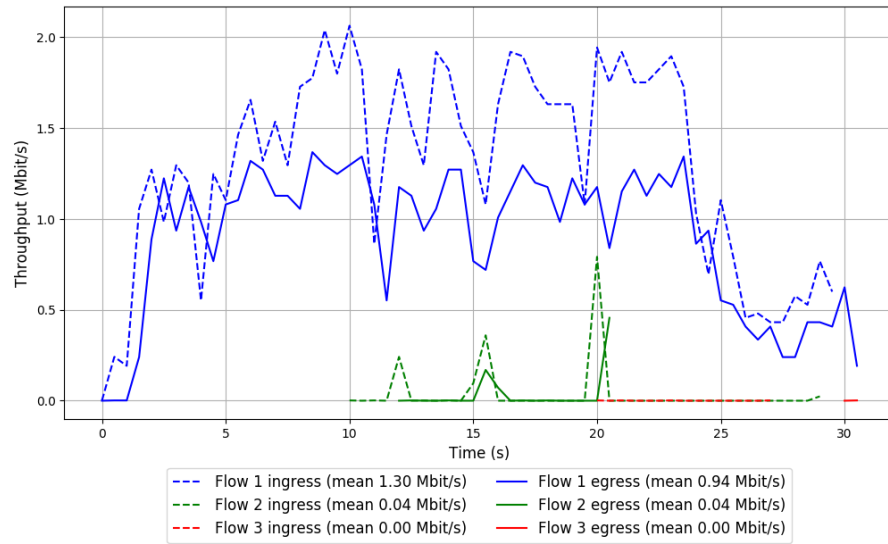
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 9987.256 ms

Loss rate: 75.00%

Run 3: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

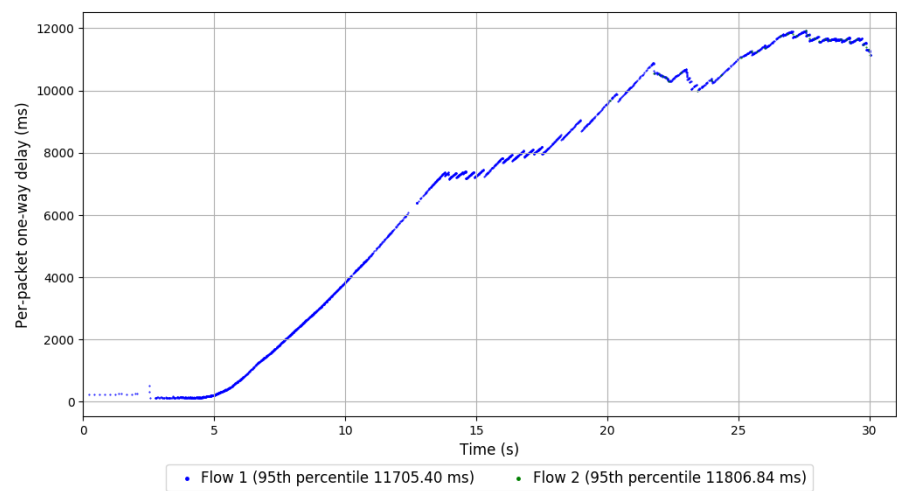
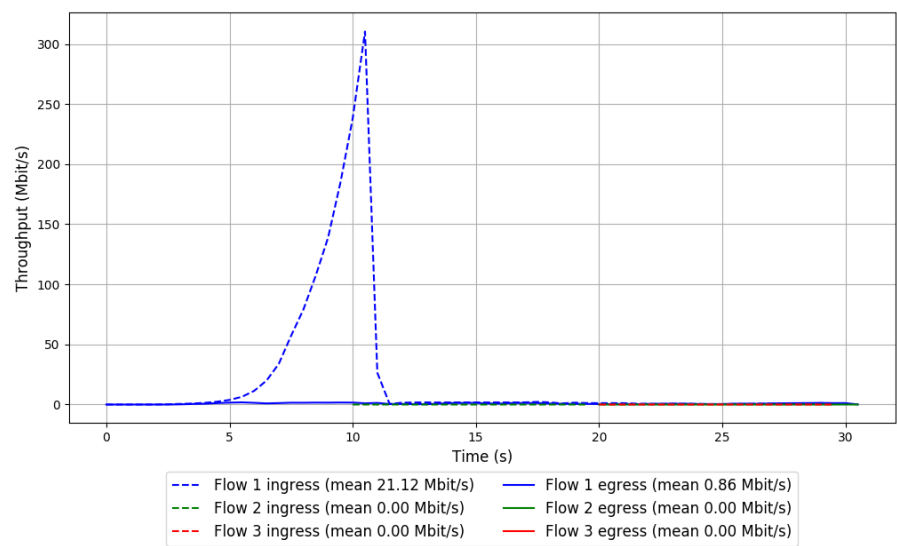
Start at: 2018-07-03 17:09:25

End at: 2018-07-03 17:09:55

Local clock offset: -3.057 ms

Remote clock offset: 5.619 ms

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-07-03 17:29:52

End at: 2018-07-03 17:30:22

Local clock offset: -3.167 ms

Remote clock offset: 1.805 ms

Below is generated by plot.py at 2018-07-03 17:51:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 8182.704 ms

Loss rate: 96.41%

-- Flow 1:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 8184.157 ms

Loss rate: 96.41%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7935.304 ms

Loss rate: 26.29%

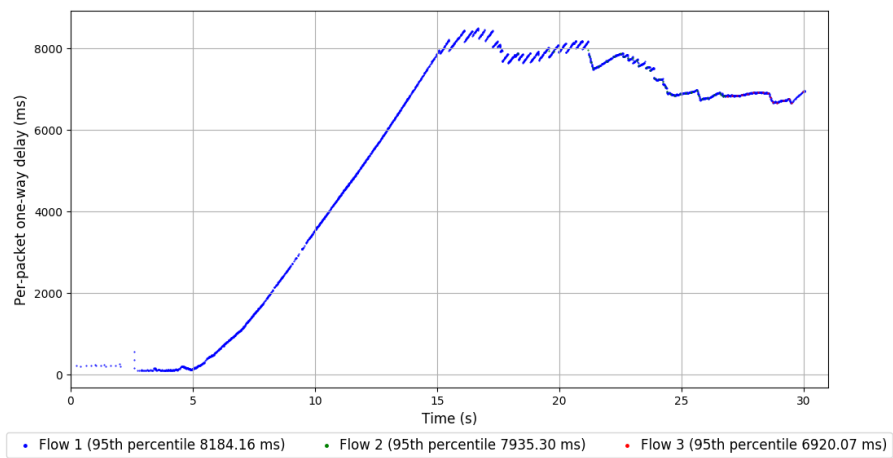
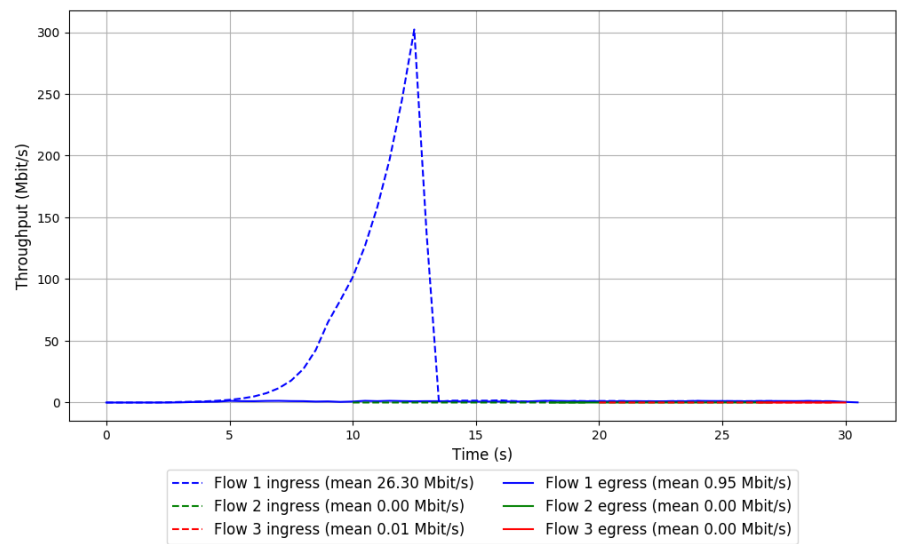
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 6920.073 ms

Loss rate: 81.25%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

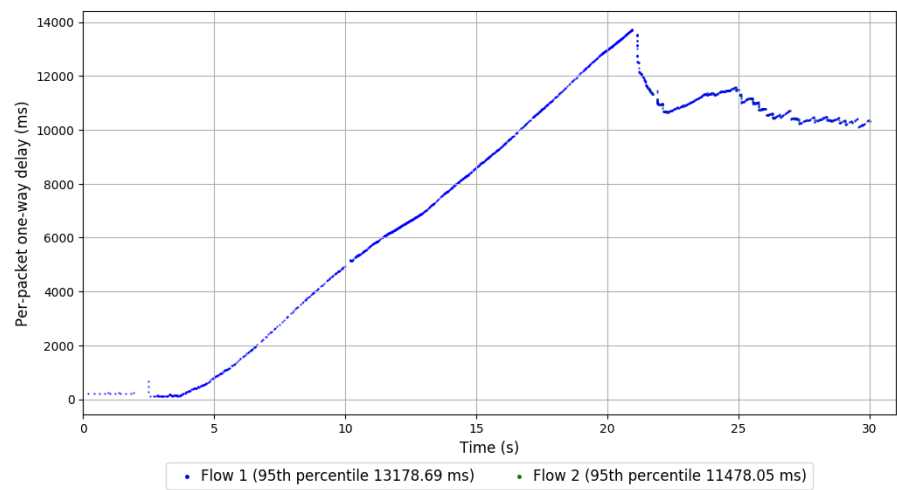
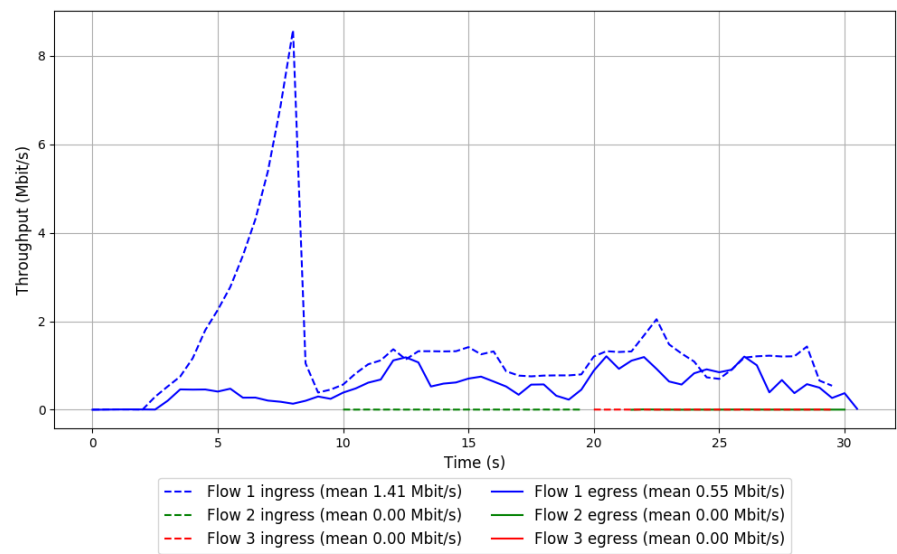
Start at: 2018-07-03 17:50:25

End at: 2018-07-03 17:50:55

Local clock offset: -2.764 ms

Remote clock offset: 10.834 ms

Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-07-03 16:52:29

End at: 2018-07-03 16:52:59

Local clock offset: -2.909 ms

Remote clock offset: 4.174 ms

Below is generated by plot.py at 2018-07-03 17:51:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 7727.890 ms

Loss rate: 25.31%

-- Flow 1:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 7728.953 ms

Loss rate: 25.26%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 7230.169 ms

Loss rate: 0.00%

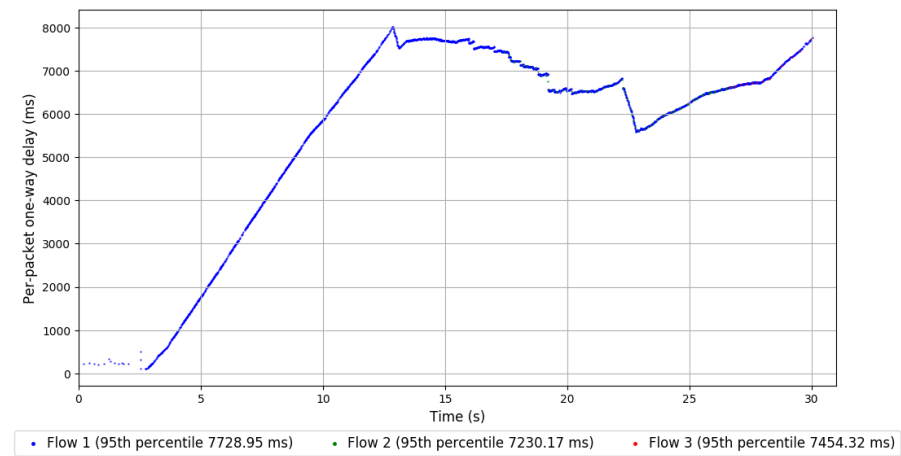
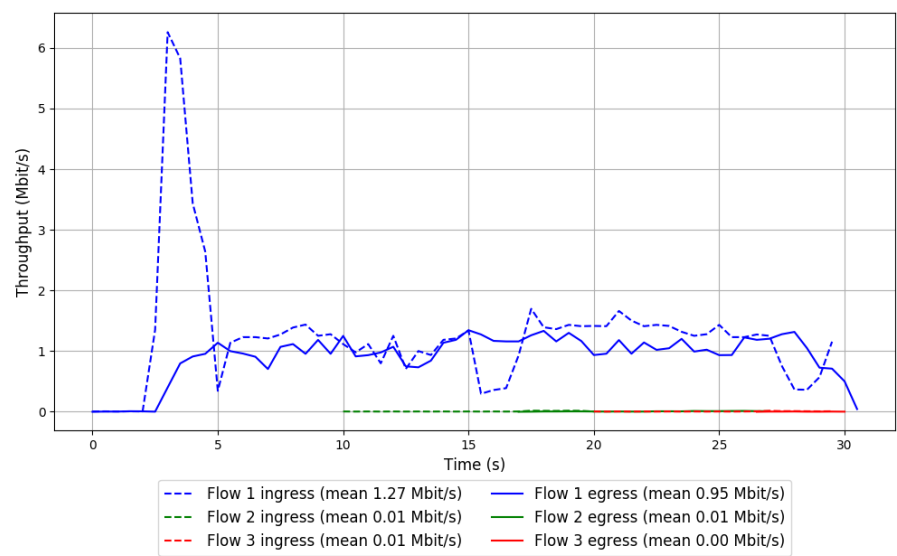
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7454.325 ms

Loss rate: 84.33%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2018-07-03 17:13:04

End at: 2018-07-03 17:13:34

Local clock offset: -3.077 ms

Remote clock offset: 5.715 ms

Below is generated by plot.py at 2018-07-03 17:51:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 6901.693 ms

Loss rate: 22.10%

-- Flow 1:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 6901.693 ms

Loss rate: 22.04%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 6908.540 ms

Loss rate: 2.32%

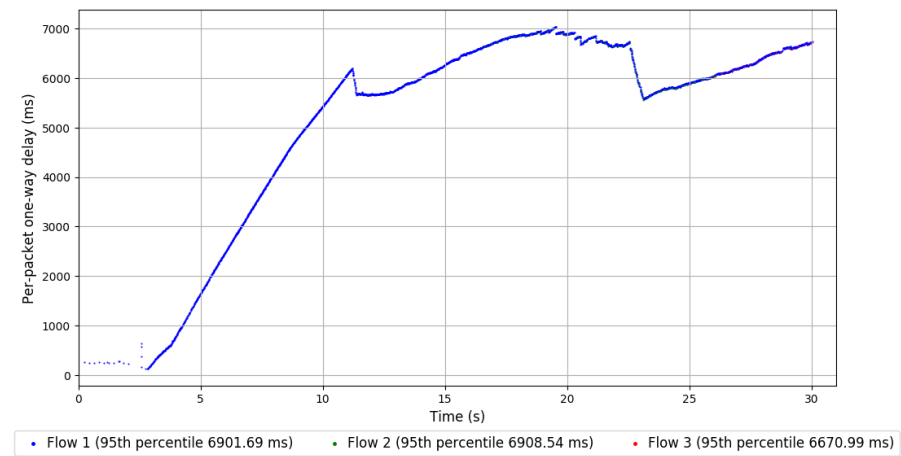
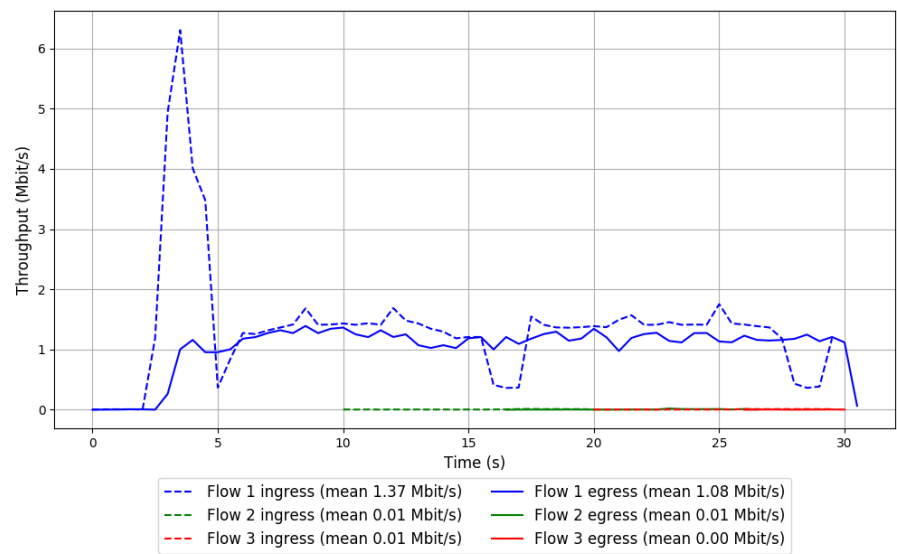
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 6670.992 ms

Loss rate: 80.61%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2018-07-03 17:33:32

End at: 2018-07-03 17:34:02

Local clock offset: -3.215 ms

Remote clock offset: 1.684 ms

Below is generated by plot.py at 2018-07-03 17:51:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 7687.736 ms

Loss rate: 26.40%

-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 7717.512 ms

Loss rate: 26.36%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 6886.889 ms

Loss rate: 0.00%

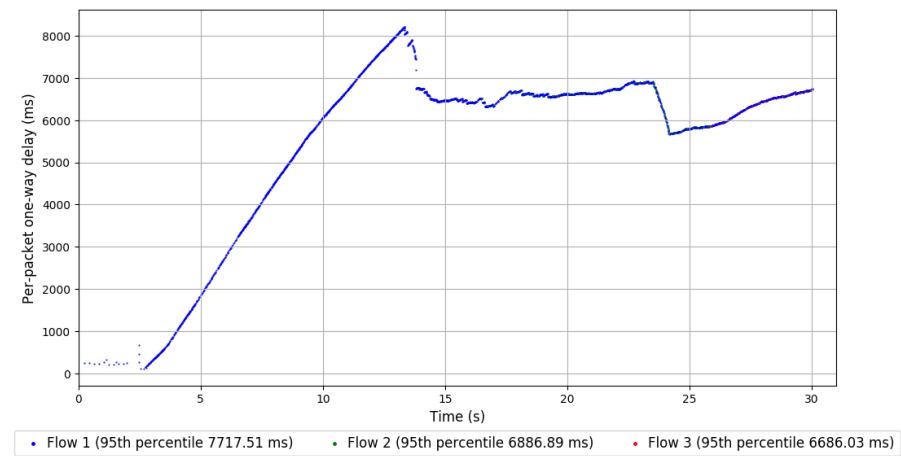
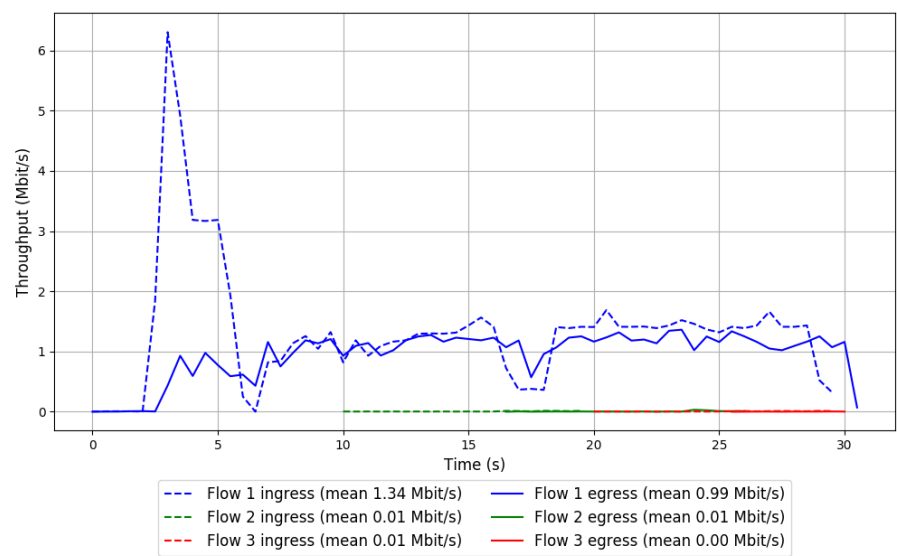
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 6686.028 ms

Loss rate: 80.61%

Run 3: Report of FillP-Sheep — Data Link

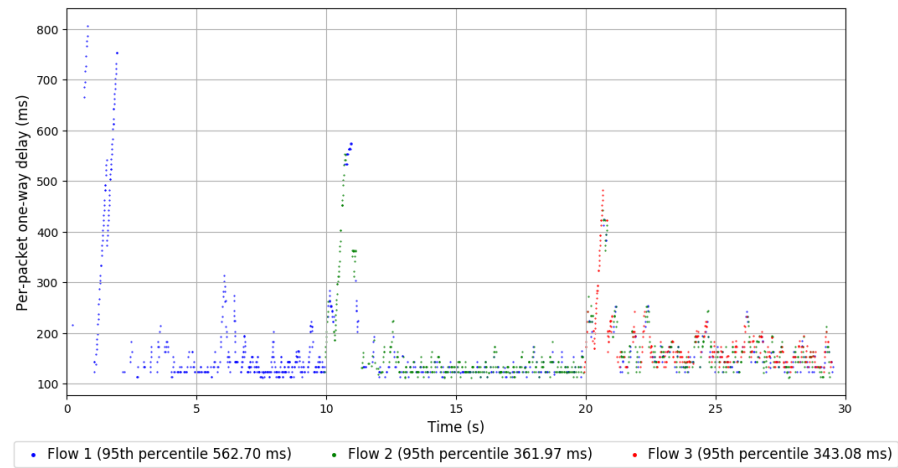
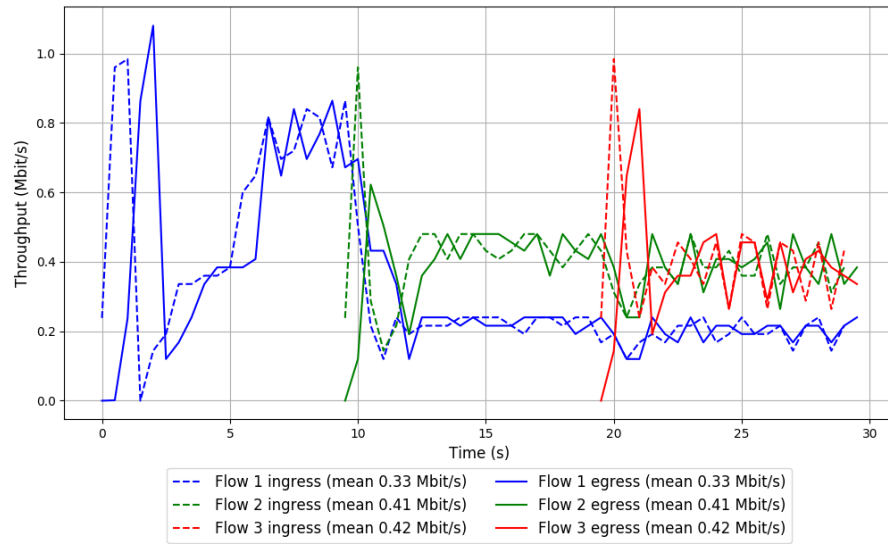


```
Run 1: Statistics of Indigo

Start at: 2018-07-03 16:54:55
End at: 2018-07-03 16:55:25
Local clock offset: -3.009 ms
Remote clock offset: 3.75 ms

# Below is generated by plot.py at 2018-07-03 17:51:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 443.093 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 562.695 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 361.973 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 343.082 ms
Loss rate: 1.49%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-07-03 17:15:28

End at: 2018-07-03 17:15:58

Local clock offset: -3.095 ms

Remote clock offset: 6.417 ms

Below is generated by plot.py at 2018-07-03 17:51:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 377.584 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 353.701 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 391.504 ms

Loss rate: 0.00%

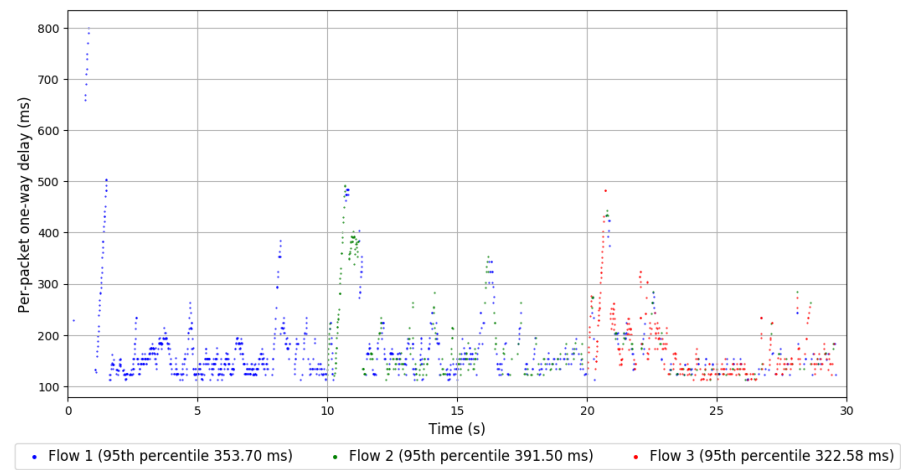
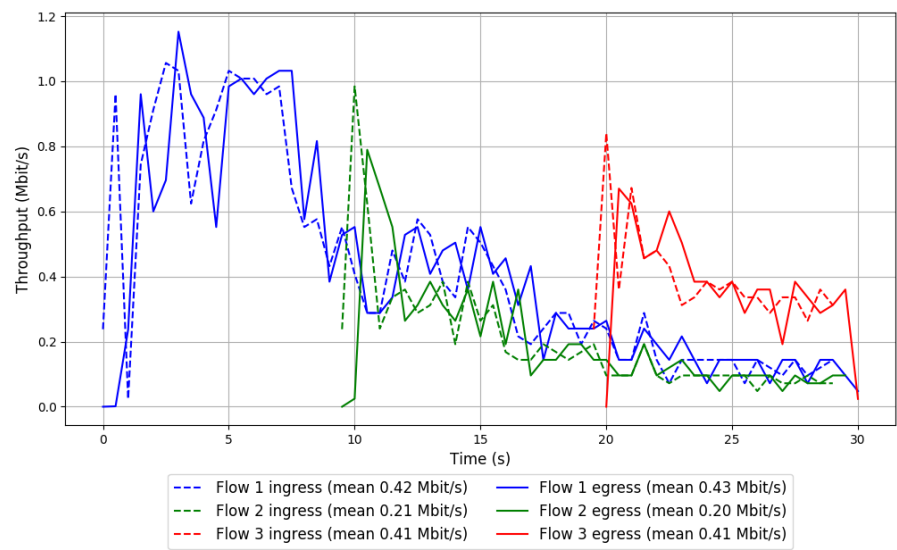
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 322.582 ms

Loss rate: 1.23%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-07-03 17:35:56

End at: 2018-07-03 17:36:26

Local clock offset: -3.212 ms

Remote clock offset: 1.895 ms

Below is generated by plot.py at 2018-07-03 17:51:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 537.776 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 407.857 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 677.913 ms

Loss rate: 0.29%

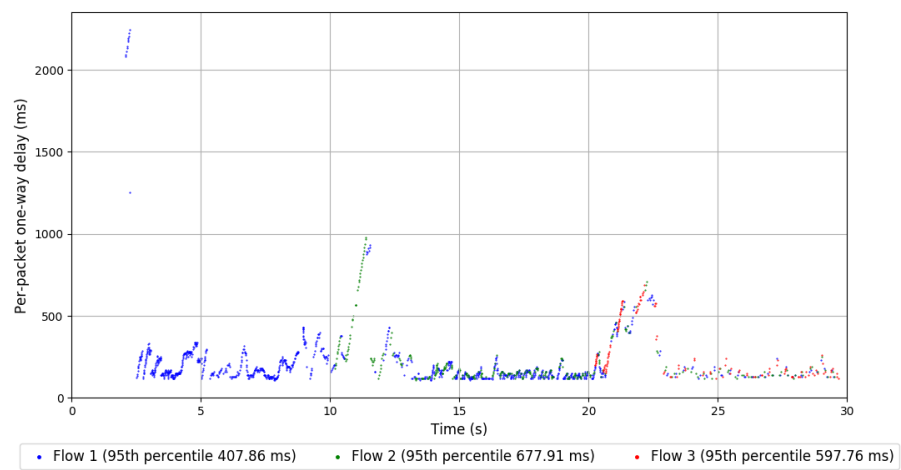
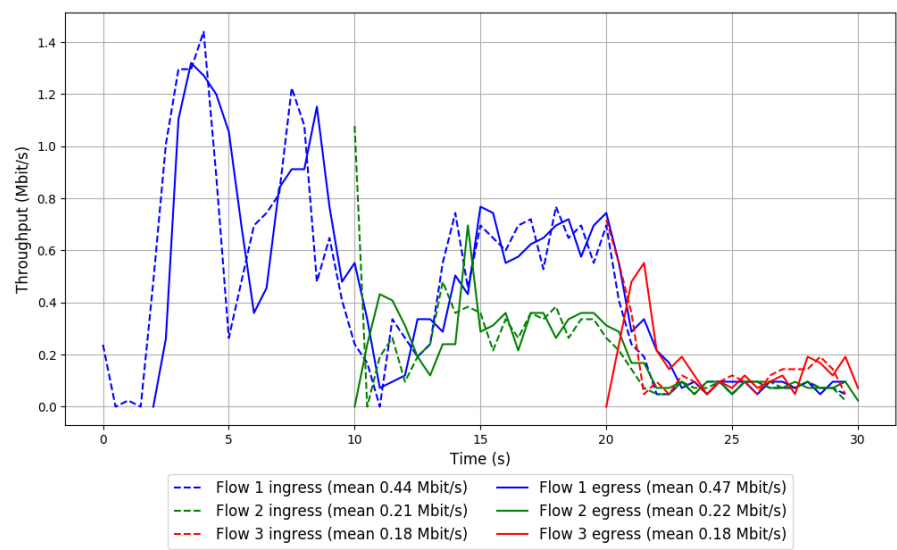
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 597.765 ms

Loss rate: 0.71%

Run 3: Report of Indigo — Data Link

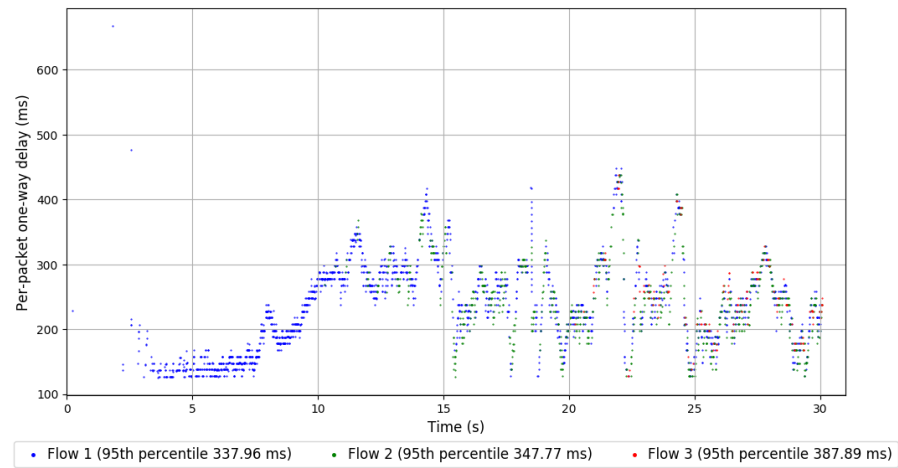
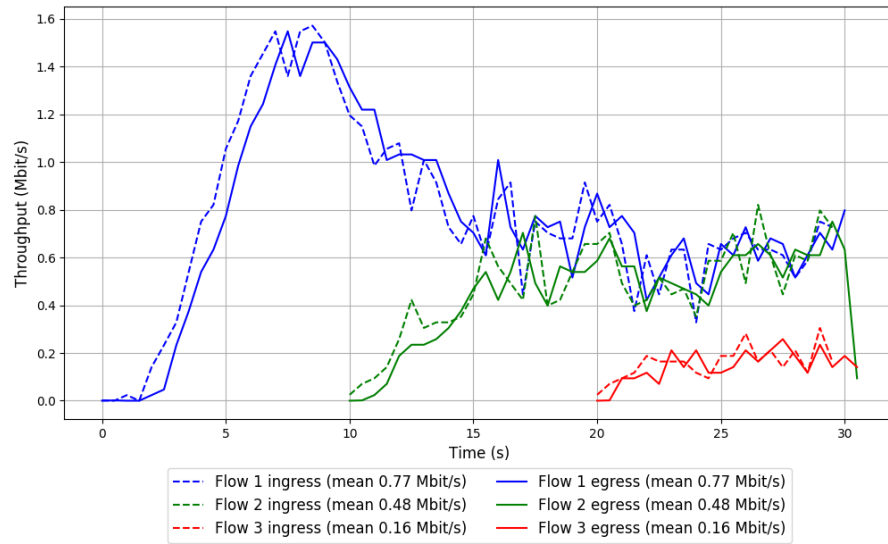


```
Run 1: Statistics of LEDBAT

Start at: 2018-07-03 17:07:01
End at: 2018-07-03 17:07:31
Local clock offset: -3.097 ms
Remote clock offset: 5.711 ms

# Below is generated by plot.py at 2018-07-03 17:51:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 347.677 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 337.964 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 347.770 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 387.894 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-07-03 17:27:28

End at: 2018-07-03 17:27:58

Local clock offset: -3.889 ms

Remote clock offset: 6.212 ms

Below is generated by plot.py at 2018-07-03 17:51:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 432.866 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 432.866 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 552.847 ms

Loss rate: 4.04%

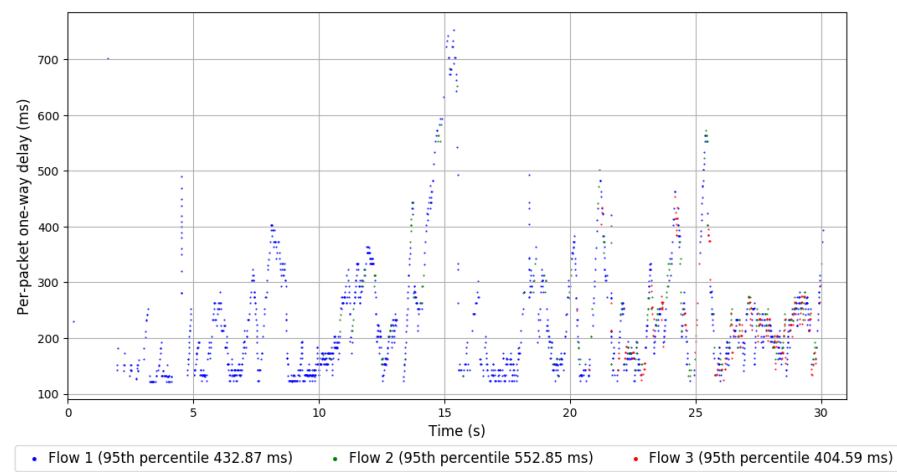
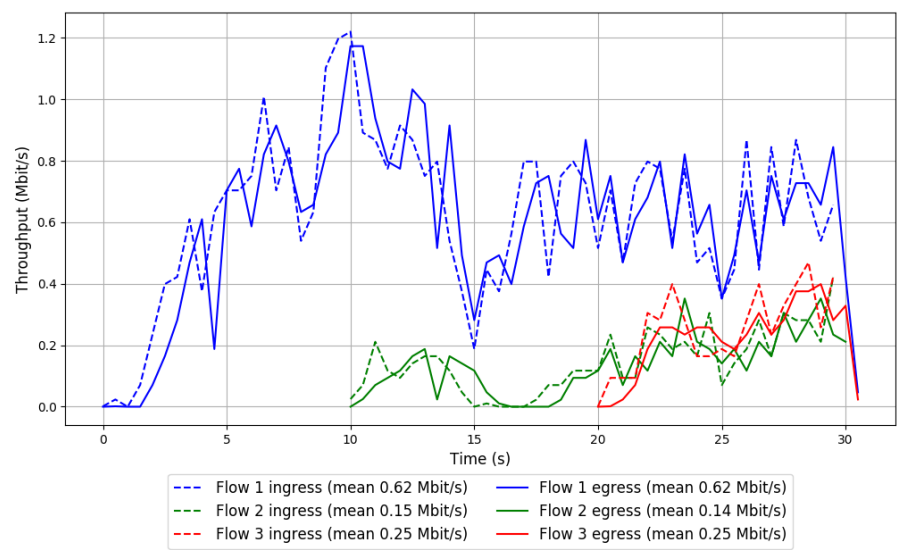
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 404.587 ms

Loss rate: 4.67%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-07-03 17:48:01

End at: 2018-07-03 17:48:31

Local clock offset: -2.83 ms

Remote clock offset: 6.105 ms

Below is generated by plot.py at 2018-07-03 17:51:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 350.813 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 380.803 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 339.780 ms

Loss rate: 0.62%

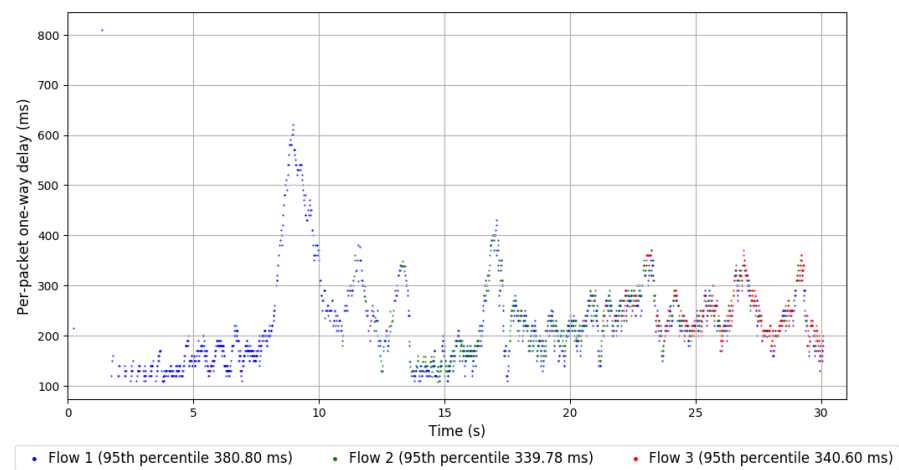
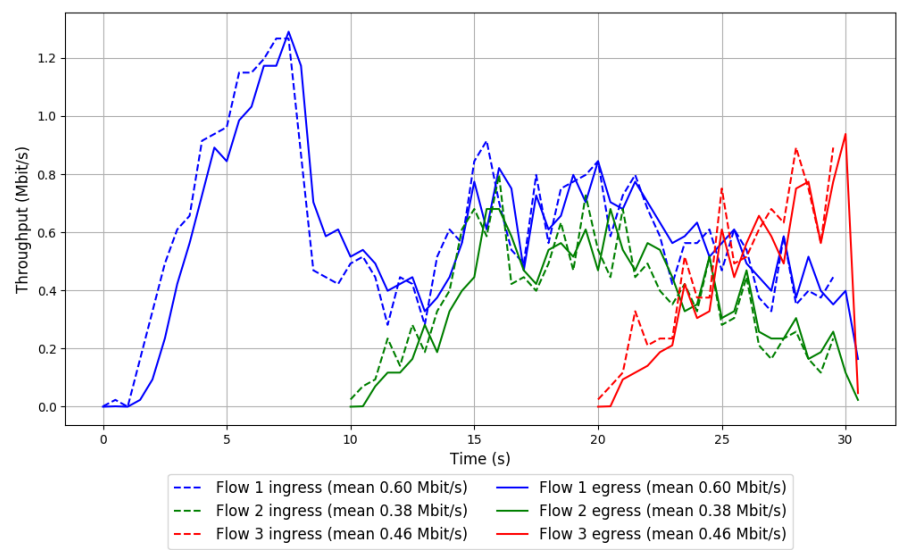
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 340.596 ms

Loss rate: 2.78%

Run 3: Report of LEDBAT — Data Link

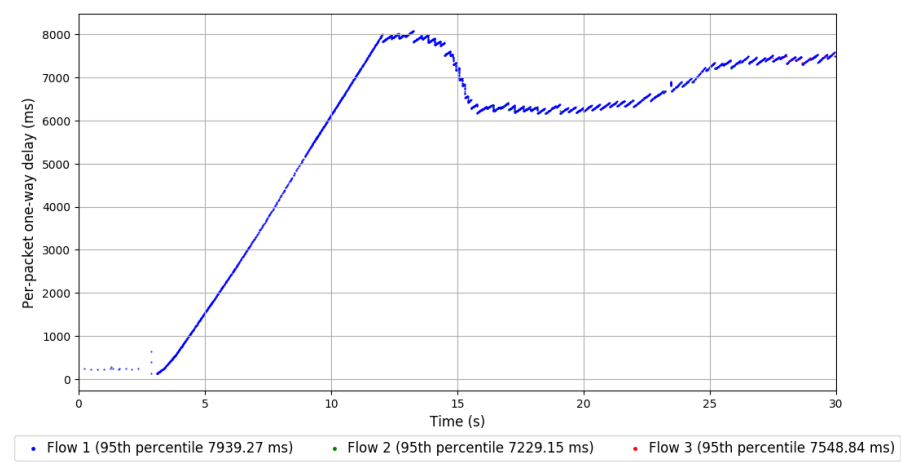
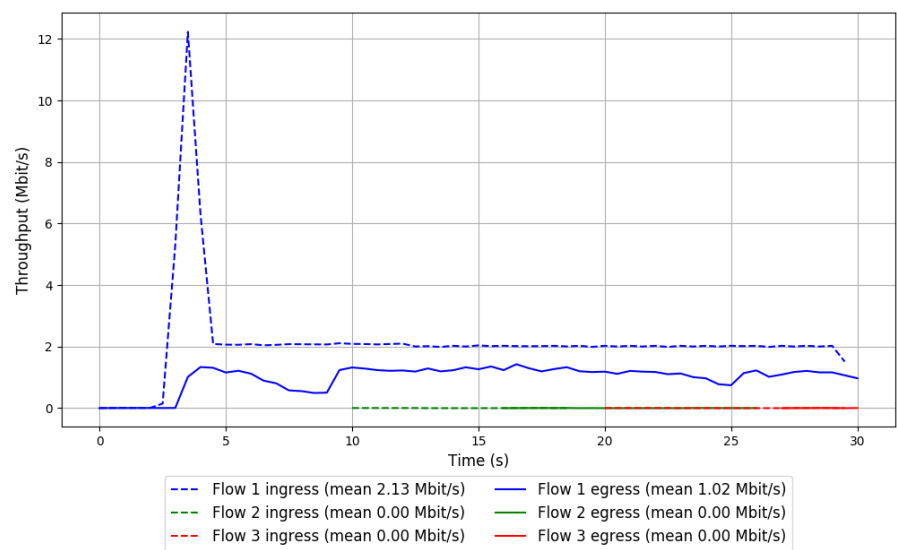


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-03 17:04:37
End at: 2018-07-03 17:05:07
Local clock offset: -3.07 ms
Remote clock offset: 2.213 ms

# Below is generated by plot.py at 2018-07-03 17:51:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 7939.233 ms
Loss rate: 52.54%
-- Flow 1:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 7939.267 ms
Loss rate: 52.56%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7229.151 ms
Loss rate: 4.60%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7548.838 ms
Loss rate: 58.62%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-07-03 17:25:04

End at: 2018-07-03 17:25:34

Local clock offset: -3.16 ms

Remote clock offset: 5.986 ms

Below is generated by plot.py at 2018-07-03 17:51:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 11033.079 ms

Loss rate: 97.20%

-- Flow 1:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 11034.184 ms

Loss rate: 97.21%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 9176.871 ms

Loss rate: 9.74%

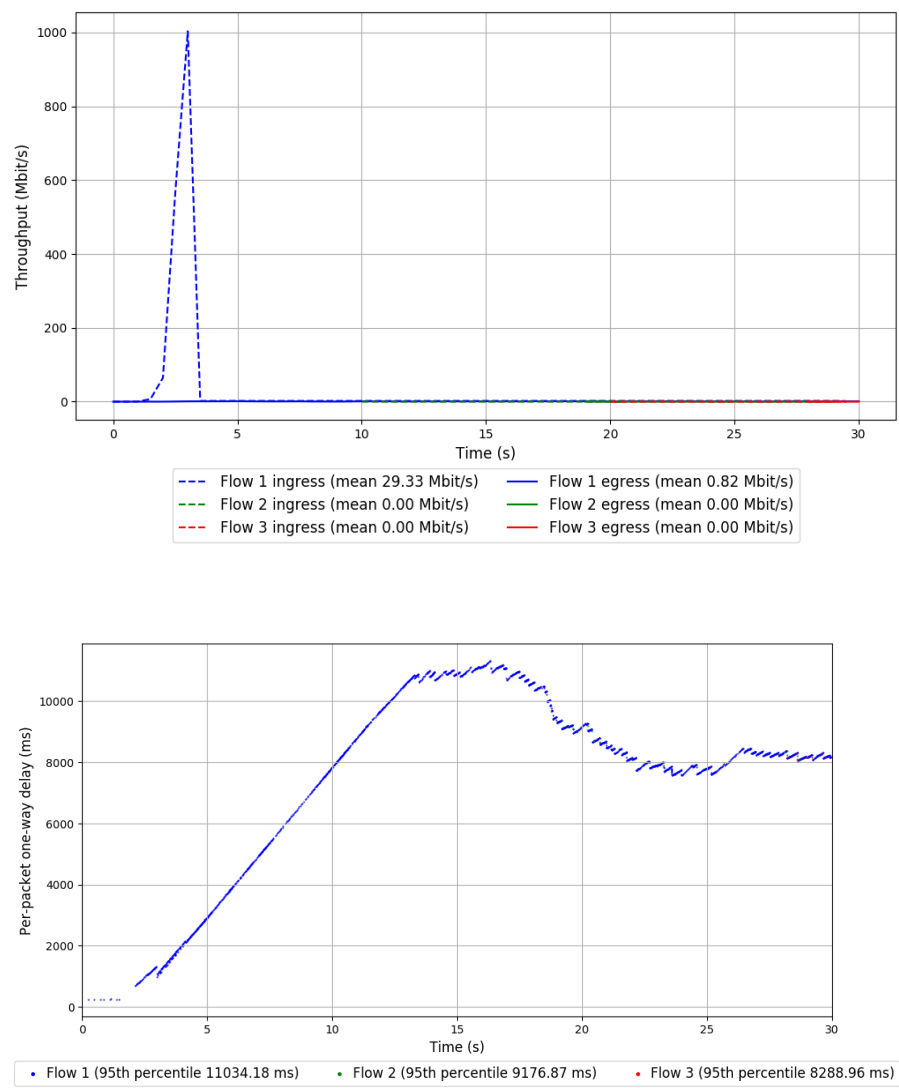
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8288.959 ms

Loss rate: 65.91%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-07-03 17:45:37

End at: 2018-07-03 17:46:07

Local clock offset: -2.927 ms

Remote clock offset: 4.237 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 11469.239 ms

Loss rate: 97.65%

-- Flow 1:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 11471.998 ms

Loss rate: 97.66%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 9150.097 ms

Loss rate: 5.94%

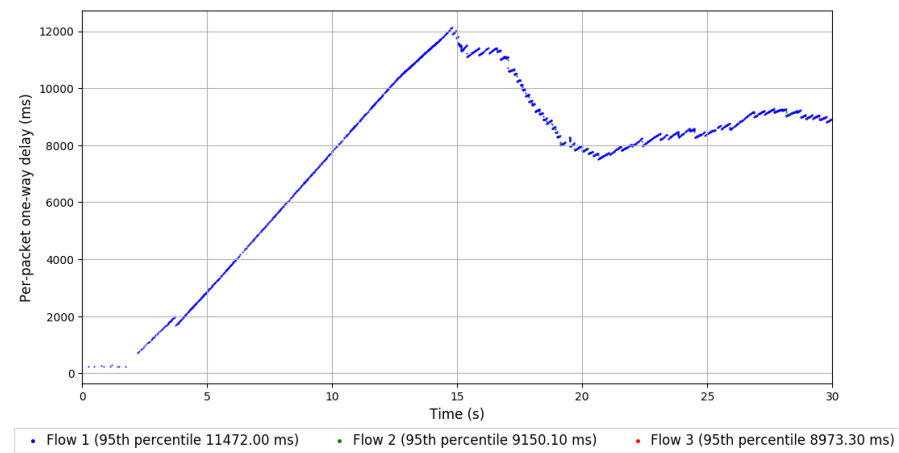
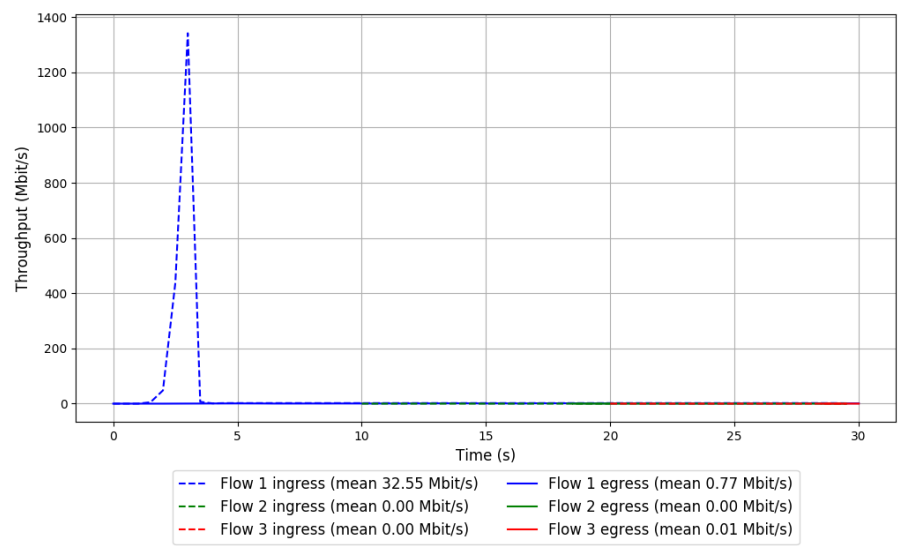
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 8973.298 ms

Loss rate: 68.06%

Run 3: Report of PCC-Allegro — Data Link

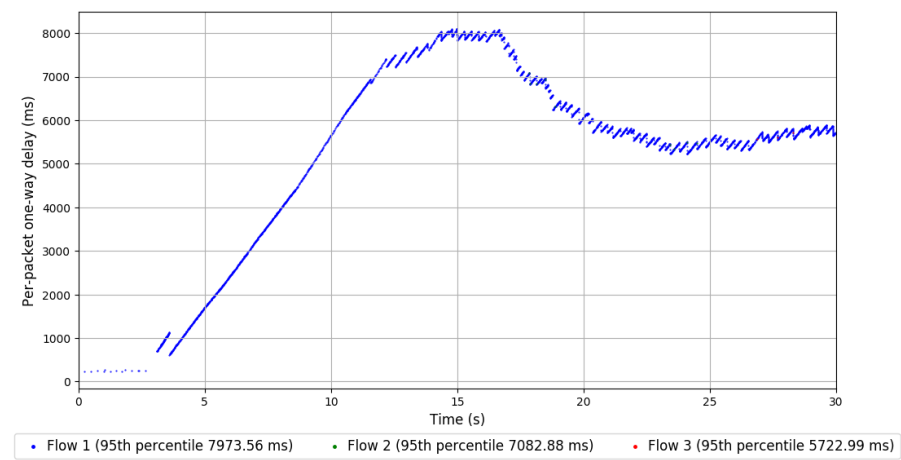
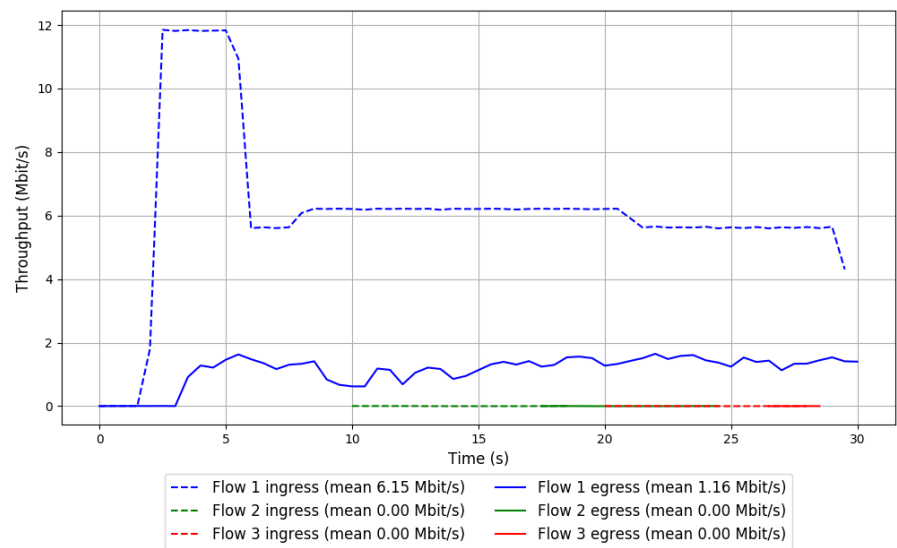


```
Run 1: Statistics of PCC-Expr

Start at: 2018-07-03 17:05:49
End at: 2018-07-03 17:06:19
Local clock offset: -3.014 ms
Remote clock offset: 5.902 ms

# Below is generated by plot.py at 2018-07-03 17:51:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 7973.486 ms
Loss rate: 81.19%
-- Flow 1:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 7973.562 ms
Loss rate: 81.19%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 7082.880 ms
Loss rate: 45.42%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5722.995 ms
Loss rate: 80.84%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

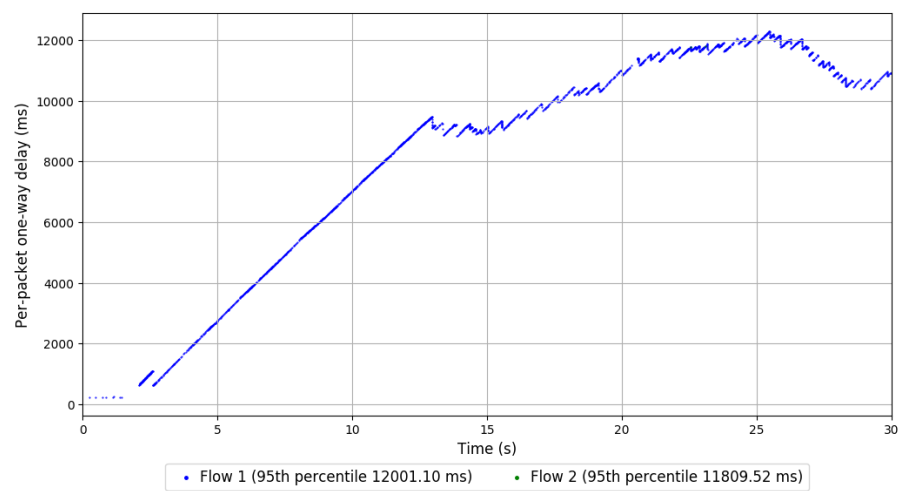
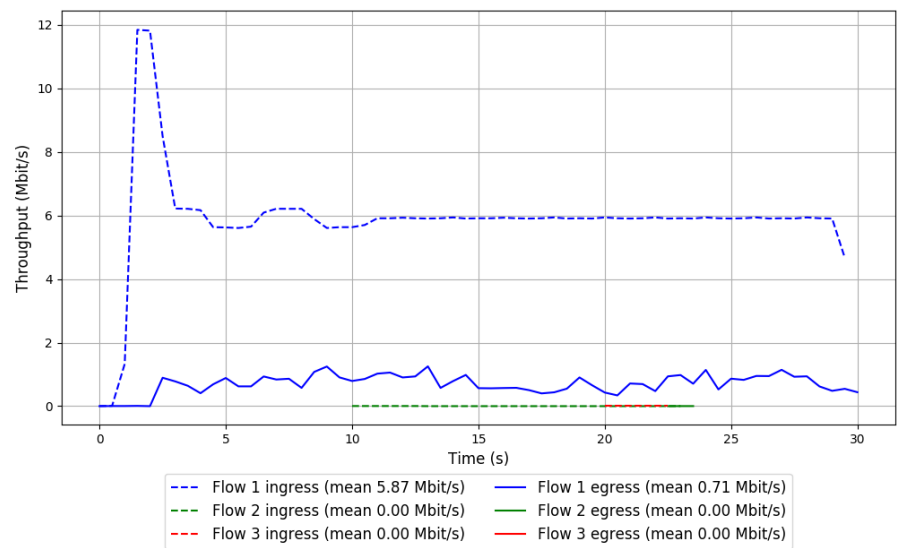
Start at: 2018-07-03 17:26:16

End at: 2018-07-03 17:26:46

Local clock offset: -3.16 ms

Remote clock offset: 5.992 ms

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

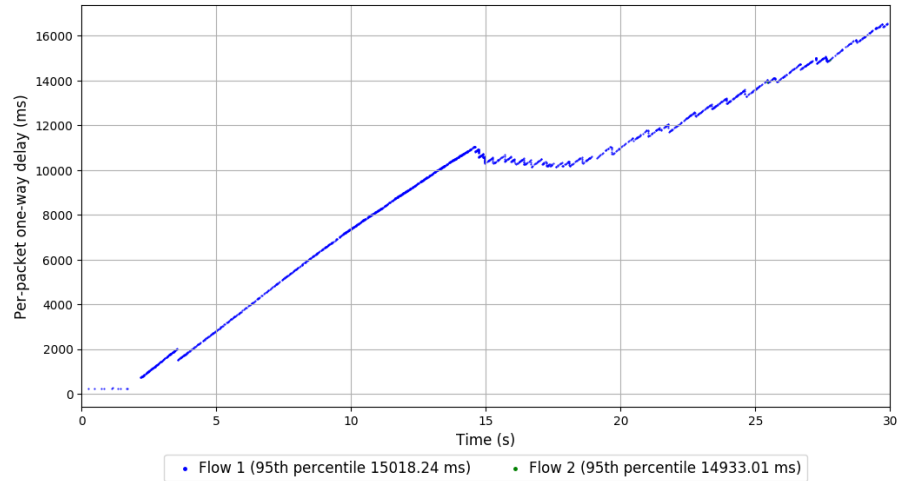
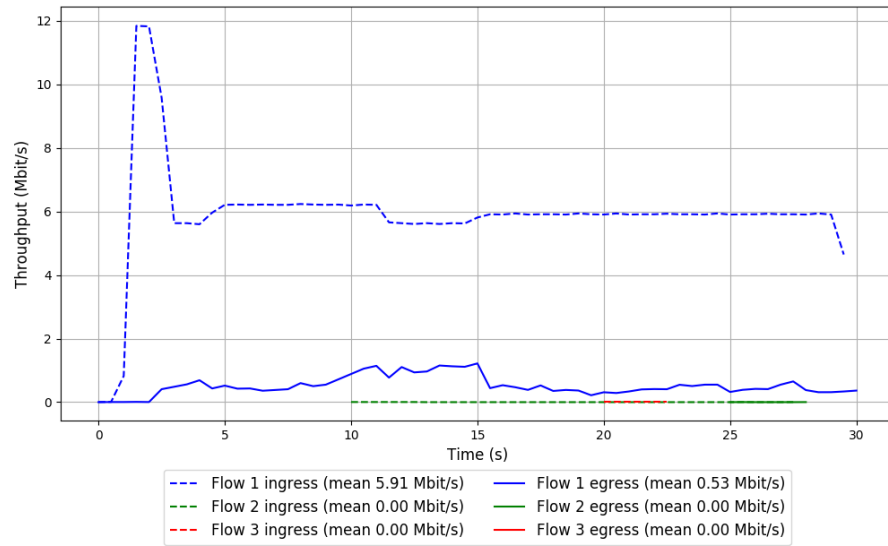
Start at: 2018-07-03 17:46:50

End at: 2018-07-03 17:47:20

Local clock offset: -2.894 ms

Remote clock offset: 8.616 ms

Run 3: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-07-03 16:56:07

End at: 2018-07-03 16:56:37

Local clock offset: -2.953 ms

Remote clock offset: 3.916 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 2986.539 ms

Loss rate: 11.68%

-- Flow 1:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 2906.832 ms

Loss rate: 6.73%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 2996.345 ms

Loss rate: 16.24%

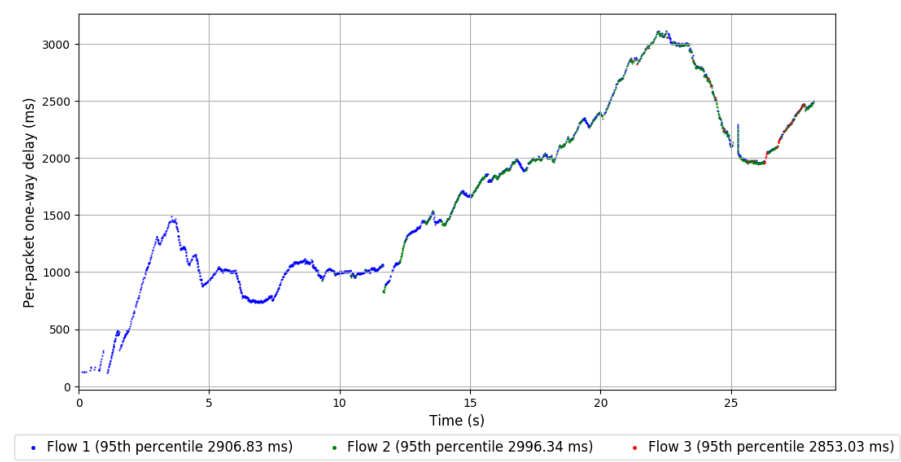
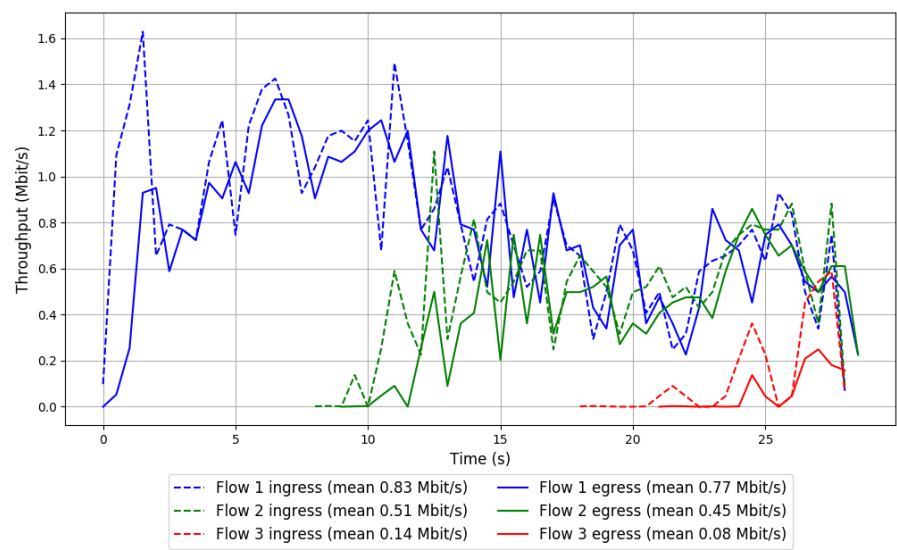
-- Flow 3:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 2853.029 ms

Loss rate: 62.13%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-07-03 17:16:39

End at: 2018-07-03 17:17:09

Local clock offset: -3.094 ms

Remote clock offset: 6.486 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 3606.573 ms

Loss rate: 11.70%

-- Flow 1:

Average throughput: 0.94 Mbit/s

95th percentile per-packet one-way delay: 3553.605 ms

Loss rate: 8.79%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 3731.343 ms

Loss rate: 26.50%

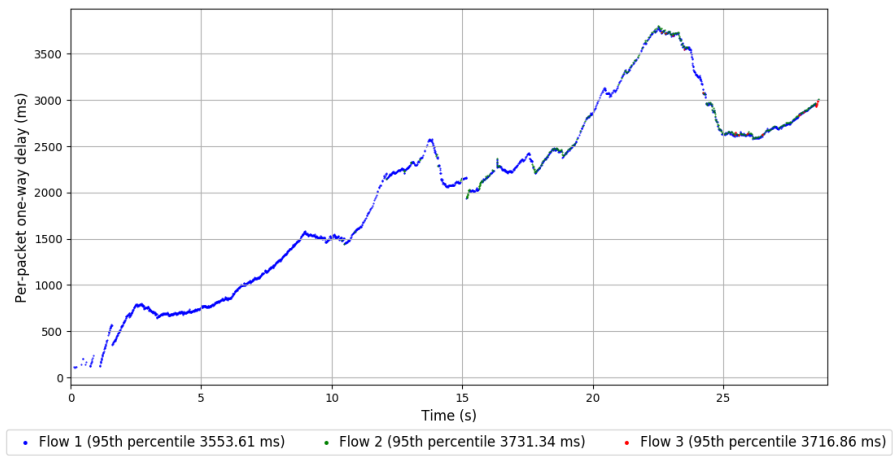
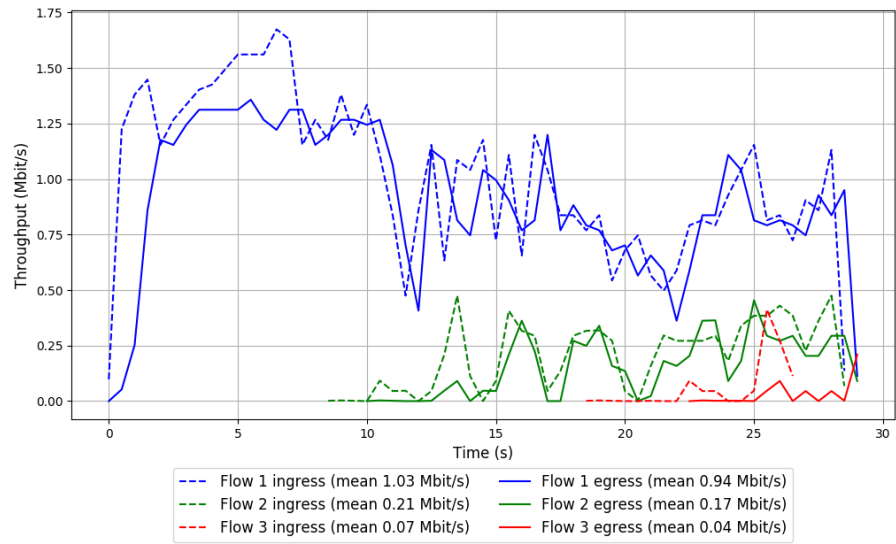
-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 3716.863 ms

Loss rate: 56.88%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-07-03 17:37:09

End at: 2018-07-03 17:37:39

Local clock offset: -3.229 ms

Remote clock offset: 4.893 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 4665.329 ms

Loss rate: 16.34%

-- Flow 1:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 4389.954 ms

Loss rate: 12.42%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 4850.077 ms

Loss rate: 34.88%

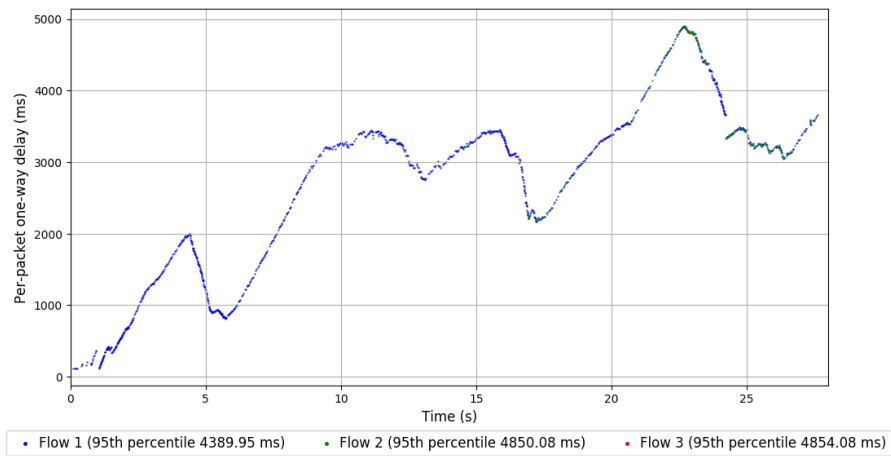
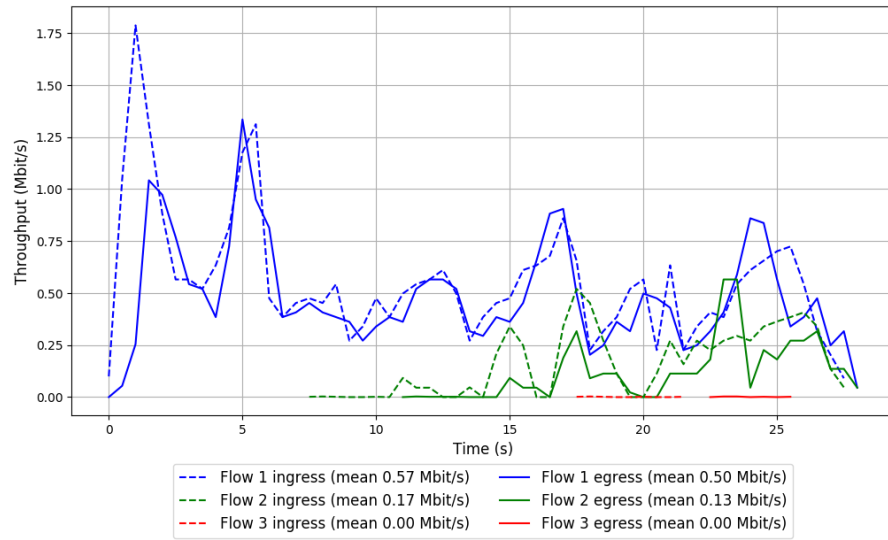
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 4854.083 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-07-03 16:53:44

End at: 2018-07-03 16:54:14

Local clock offset: -2.929 ms

Remote clock offset: 7.425 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 140.889 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 127.602 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 147.278 ms

Loss rate: 0.19%

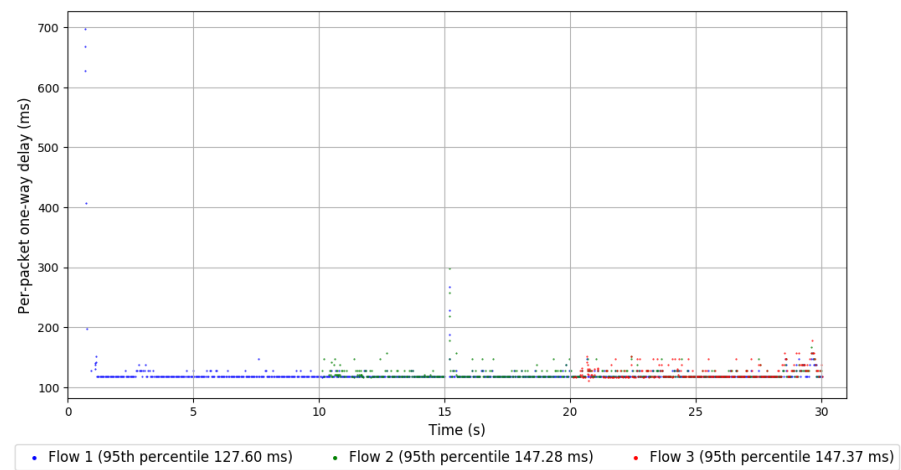
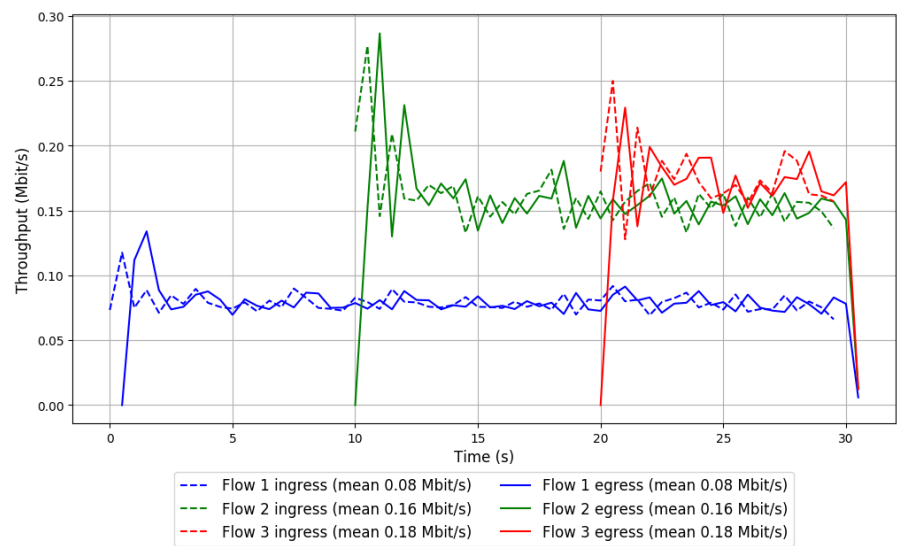
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 147.373 ms

Loss rate: 0.35%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-07-03 17:14:16

End at: 2018-07-03 17:14:46

Local clock offset: -3.148 ms

Remote clock offset: 2.537 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 134.259 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 124.536 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 134.234 ms

Loss rate: 0.17%

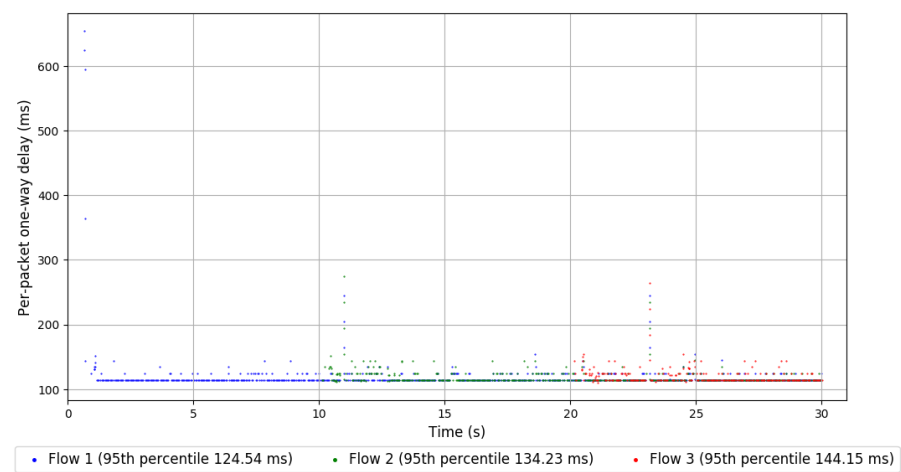
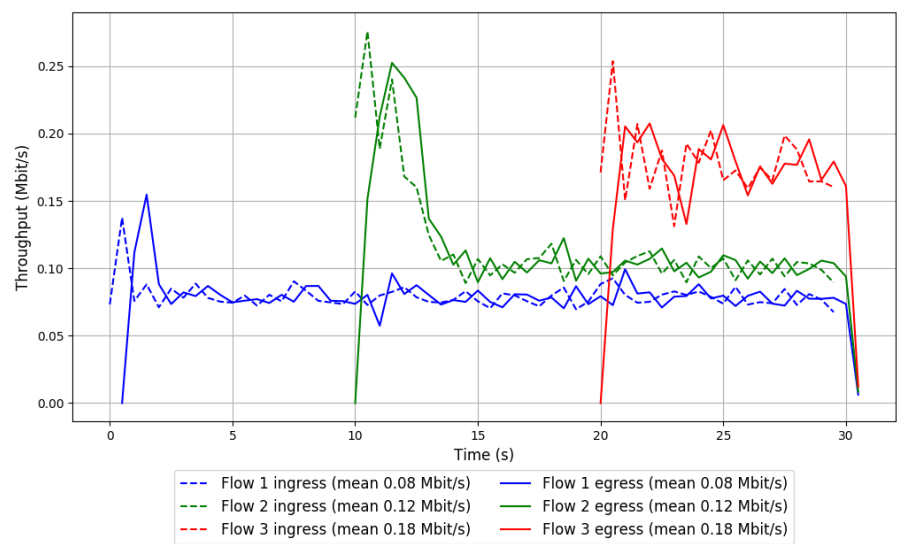
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 144.147 ms

Loss rate: 0.35%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-07-03 17:34:44

End at: 2018-07-03 17:35:14

Local clock offset: -3.225 ms

Remote clock offset: 5.501 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 148.281 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 148.281 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 164.123 ms

Loss rate: 0.17%

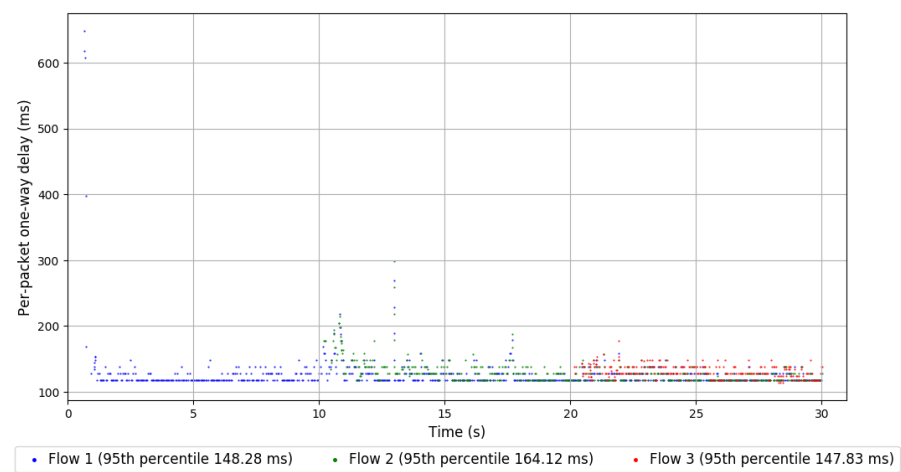
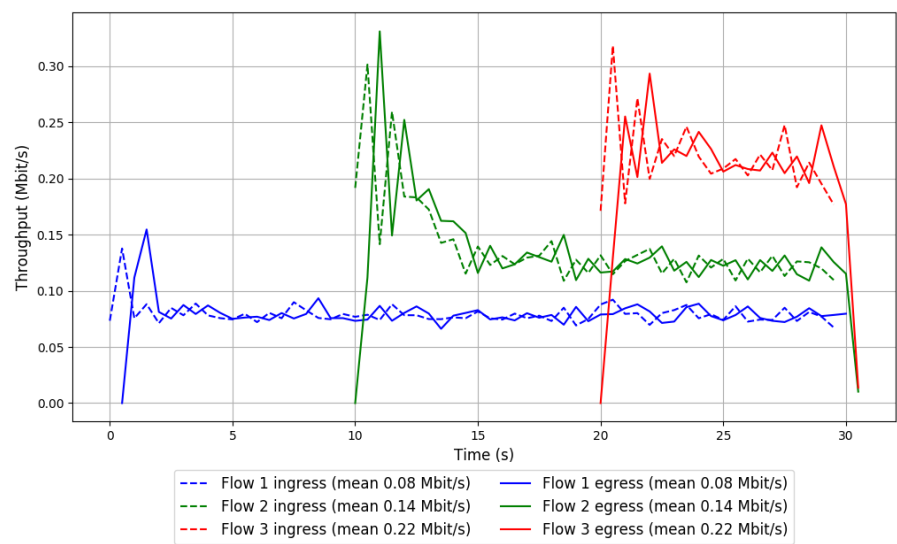
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 147.829 ms

Loss rate: 0.32%

Run 3: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-07-03 17:03:24

End at: 2018-07-03 17:03:54

Local clock offset: -2.983 ms

Remote clock offset: 6.665 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 368.964 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 381.791 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 310.565 ms

Loss rate: 0.03%

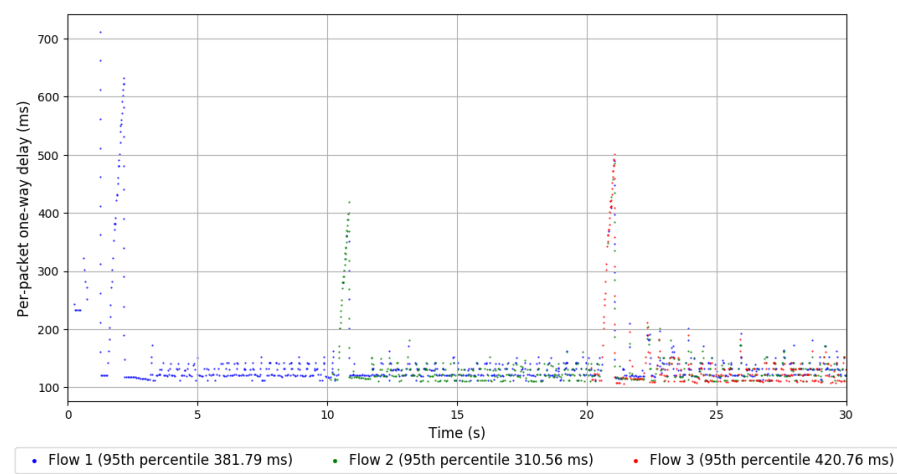
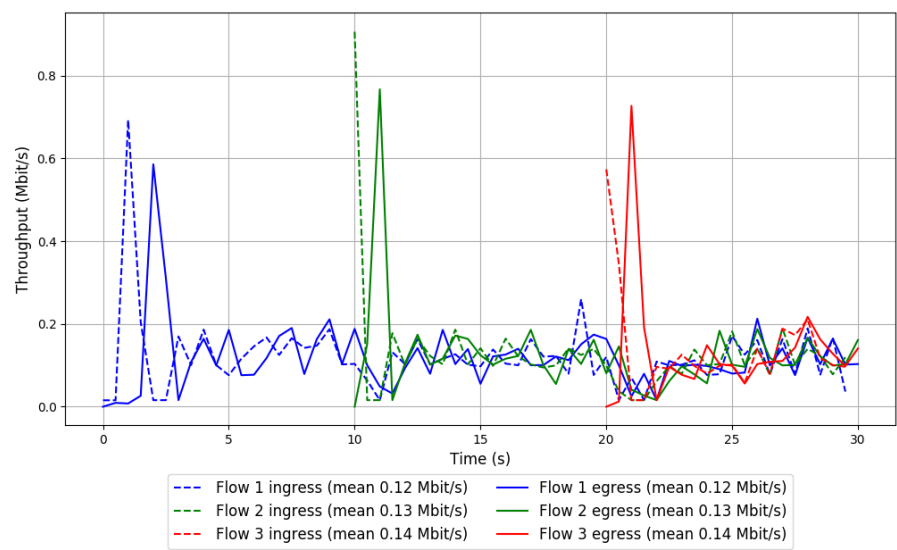
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 420.763 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-07-03 17:23:52

End at: 2018-07-03 17:24:22

Local clock offset: -3.139 ms

Remote clock offset: 6.145 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 407.427 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 386.445 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 481.351 ms

Loss rate: 0.30%

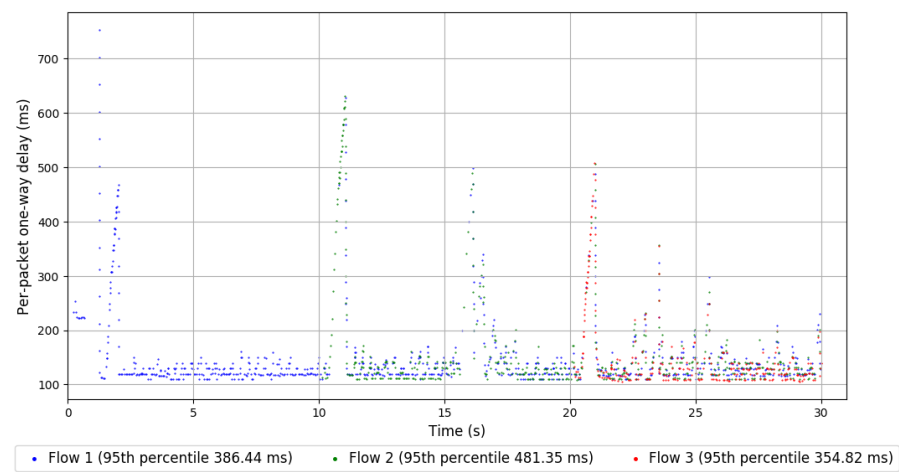
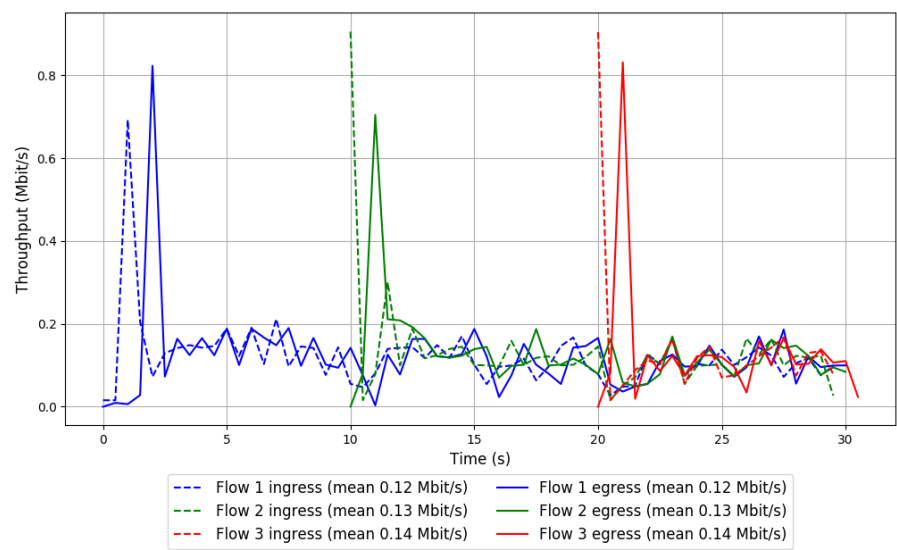
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 354.823 ms

Loss rate: 0.15%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-07-03 17:44:25

End at: 2018-07-03 17:44:55

Local clock offset: -3.06 ms

Remote clock offset: 7.302 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 294.125 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 284.296 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 264.488 ms

Loss rate: 0.00%

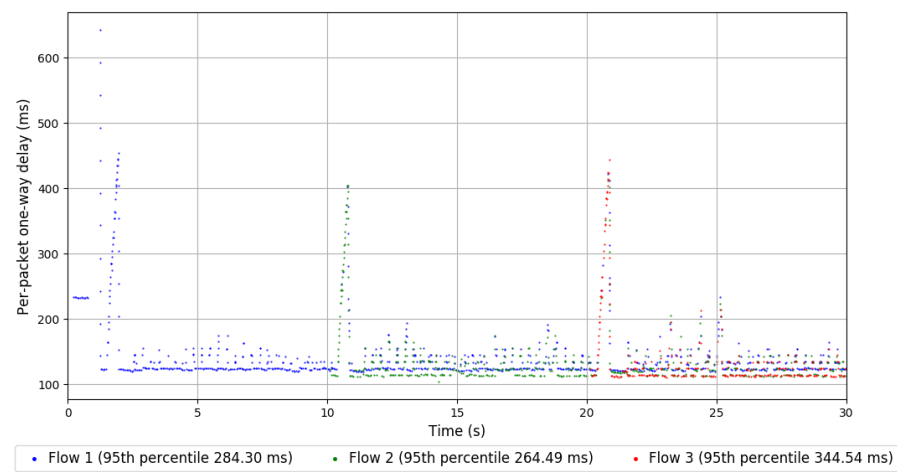
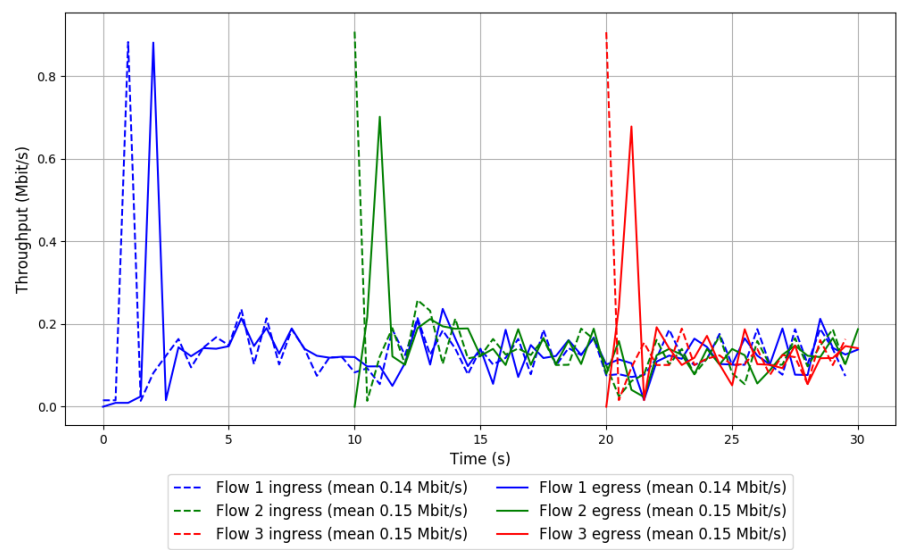
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 344.540 ms

Loss rate: 0.83%

Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-07-03 16:57:20

End at: 2018-07-03 16:57:50

Local clock offset: -2.944 ms

Remote clock offset: 7.51 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.94 Mbit/s

95th percentile per-packet one-way delay: 3096.647 ms

Loss rate: 4.10%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 1329.846 ms

Loss rate: 2.70%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 3795.118 ms

Loss rate: 3.61%

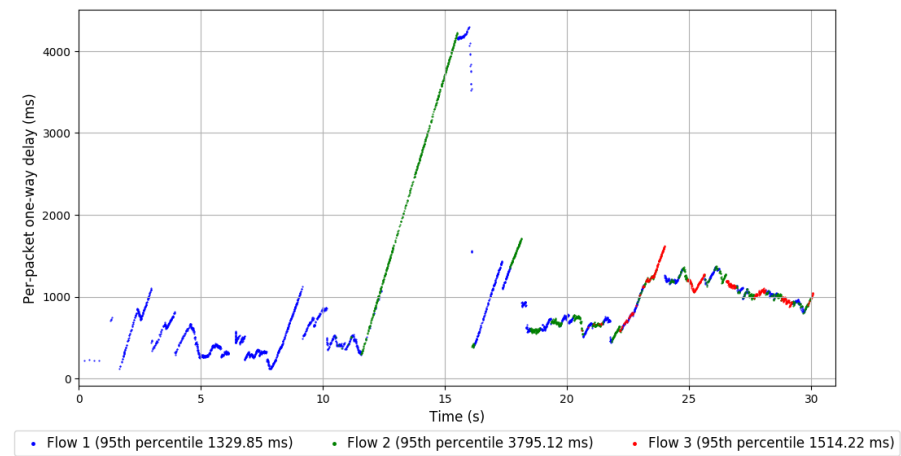
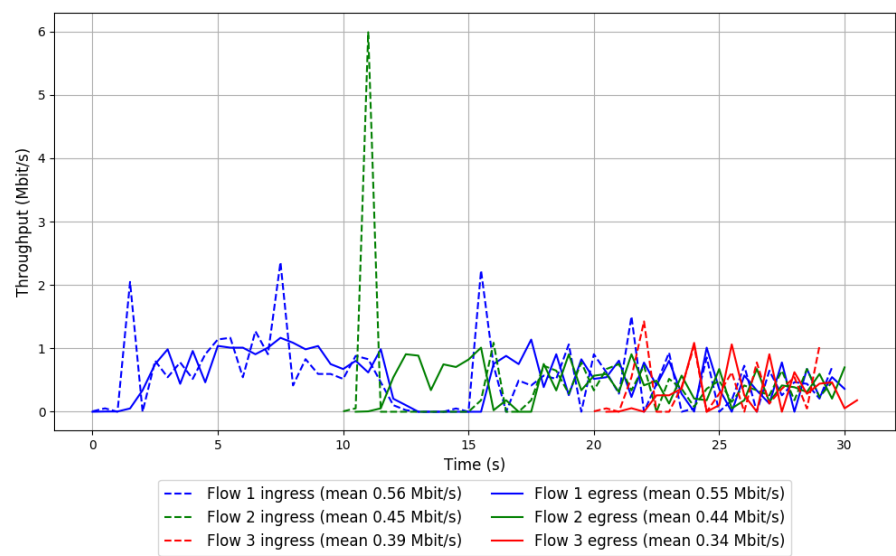
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 1514.224 ms

Loss rate: 11.75%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-07-03 17:17:52

End at: 2018-07-03 17:18:22

Local clock offset: -3.103 ms

Remote clock offset: 2.529 ms

Below is generated by plot.py at 2018-07-03 17:51:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 2084.945 ms

Loss rate: 3.83%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 1666.491 ms

Loss rate: 2.05%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 2527.887 ms

Loss rate: 4.43%

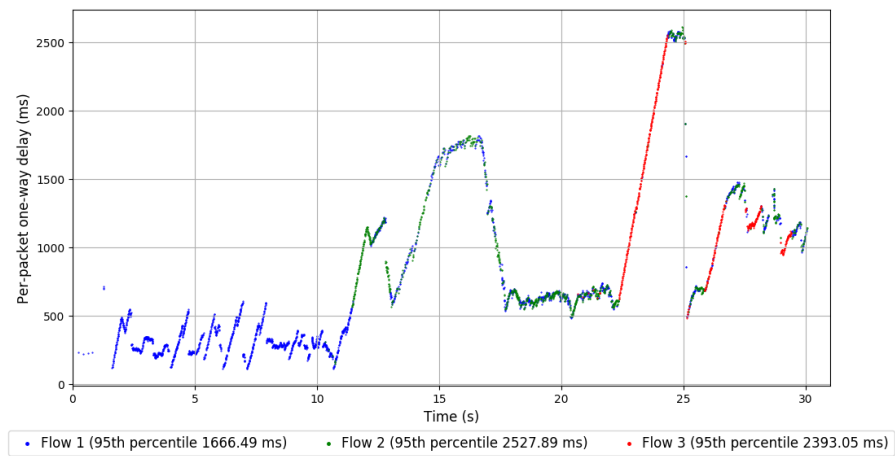
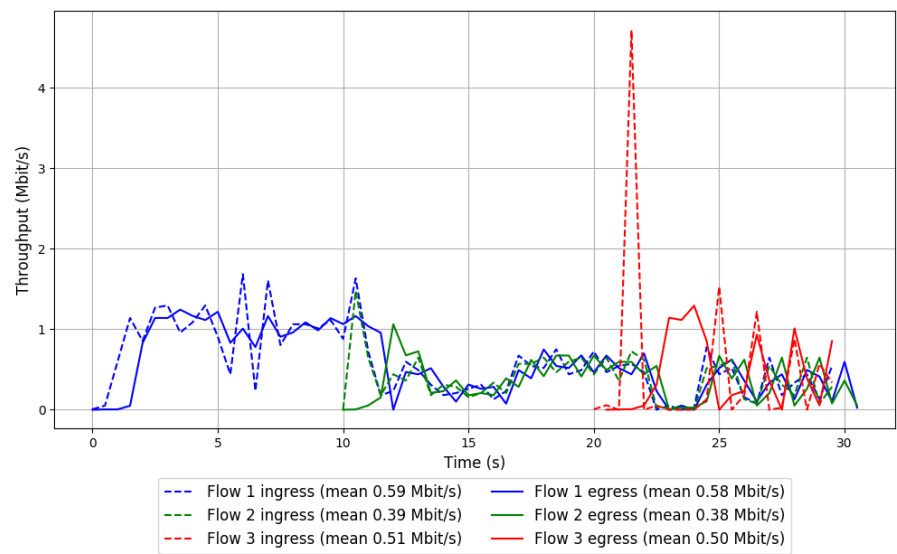
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 2393.045 ms

Loss rate: 9.35%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-07-03 17:38:25

End at: 2018-07-03 17:38:55

Local clock offset: -3.22 ms

Remote clock offset: 1.319 ms

Below is generated by plot.py at 2018-07-03 17:51:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 2576.777 ms

Loss rate: 3.19%

-- Flow 1:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 2109.494 ms

Loss rate: 1.98%

-- Flow 2:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 2803.270 ms

Loss rate: 3.29%

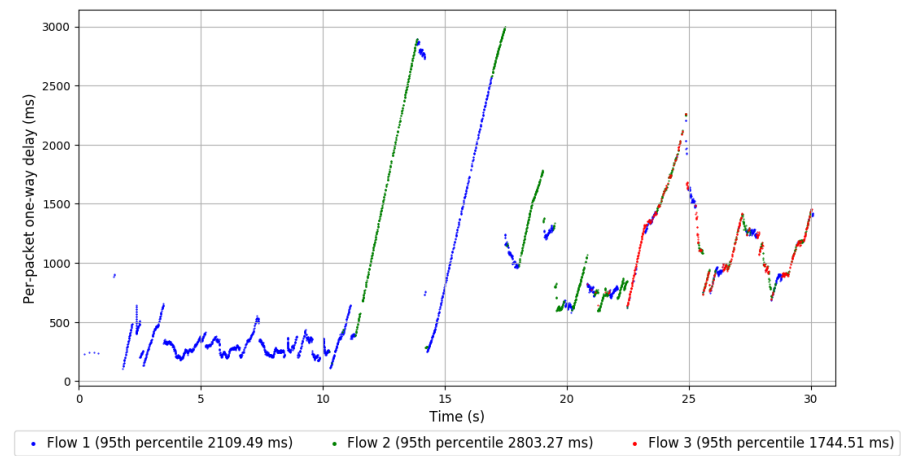
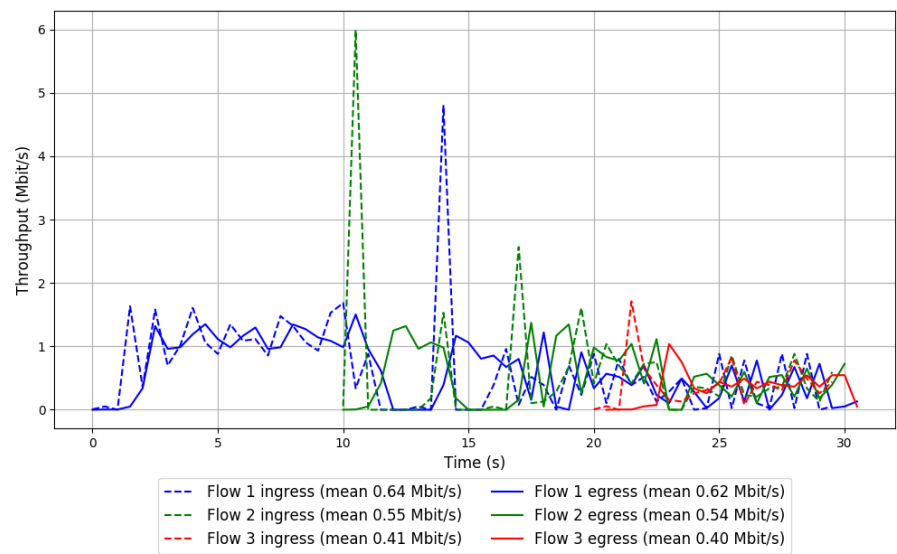
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 1744.508 ms

Loss rate: 8.64%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-07-03 16:58:32

End at: 2018-07-03 16:59:02

Local clock offset: -2.952 ms

Remote clock offset: 3.066 ms

Below is generated by plot.py at 2018-07-03 17:51:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 8667.161 ms

Loss rate: 31.17%

-- Flow 1:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 8667.233 ms

Loss rate: 31.12%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8384.630 ms

Loss rate: 58.98%

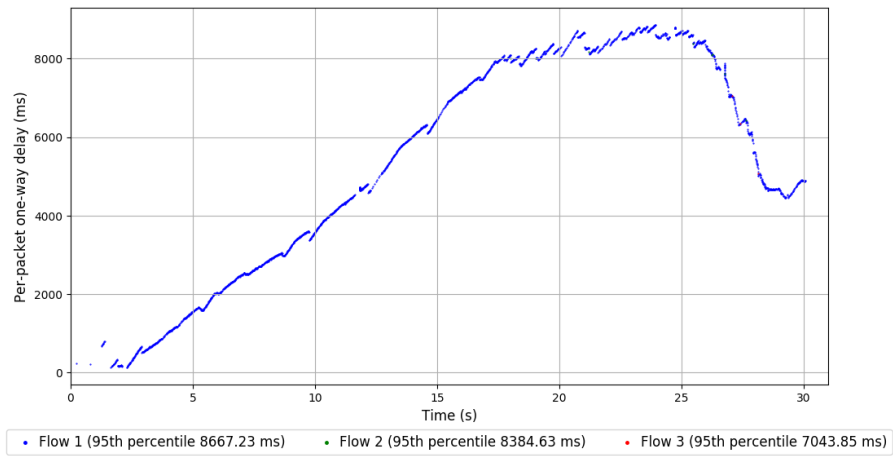
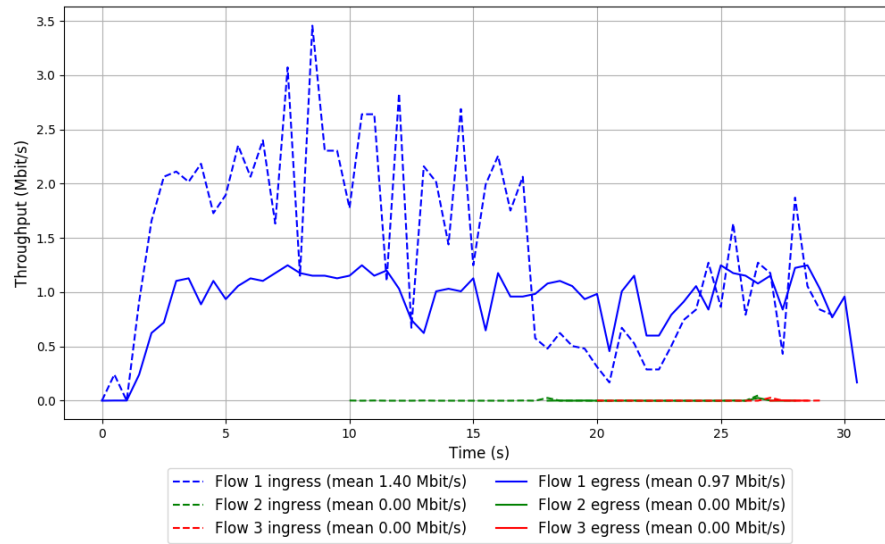
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7043.850 ms

Loss rate: 87.12%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-07-03 17:19:04

End at: 2018-07-03 17:19:34

Local clock offset: -3.096 ms

Remote clock offset: 2.618 ms

Below is generated by plot.py at 2018-07-03 17:51:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 1979.915 ms

Loss rate: 13.40%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 1890.387 ms

Loss rate: 2.71%

-- Flow 2:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2009.993 ms

Loss rate: 6.87%

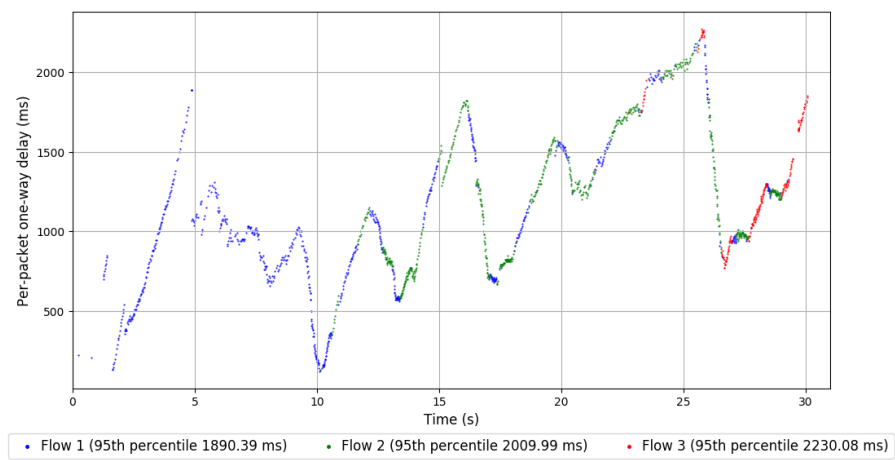
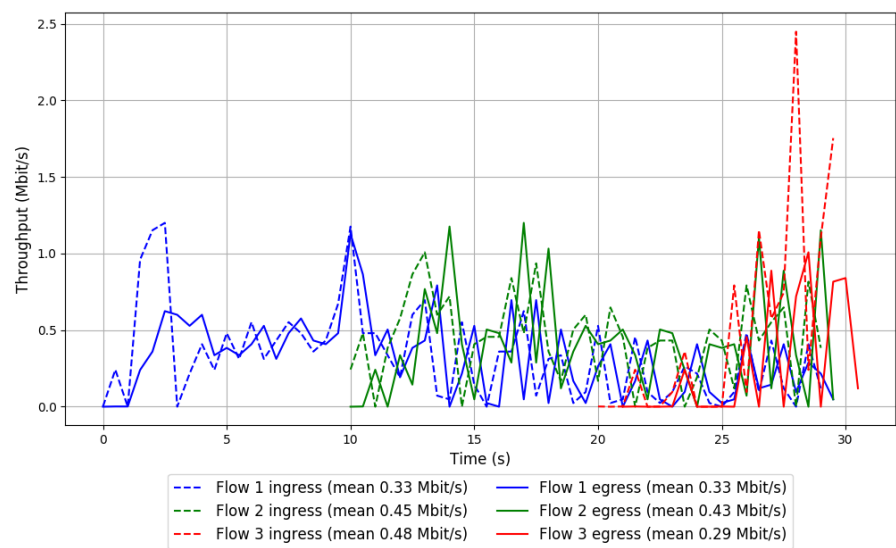
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 2230.079 ms

Loss rate: 46.98%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-07-03 17:39:37

End at: 2018-07-03 17:40:07

Local clock offset: -3.255 ms

Remote clock offset: 1.345 ms

Below is generated by plot.py at 2018-07-03 17:51:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 2510.250 ms

Loss rate: 6.41%

-- Flow 1:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 2269.974 ms

Loss rate: 4.85%

-- Flow 2:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 3140.059 ms

Loss rate: 9.55%

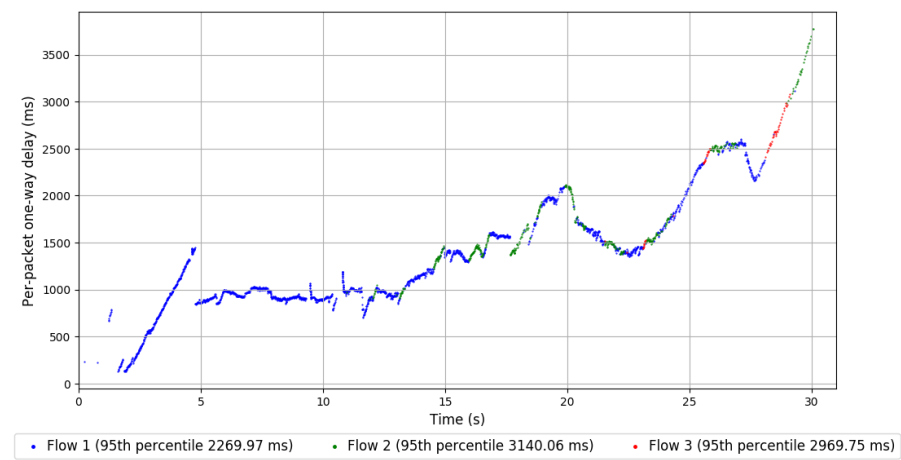
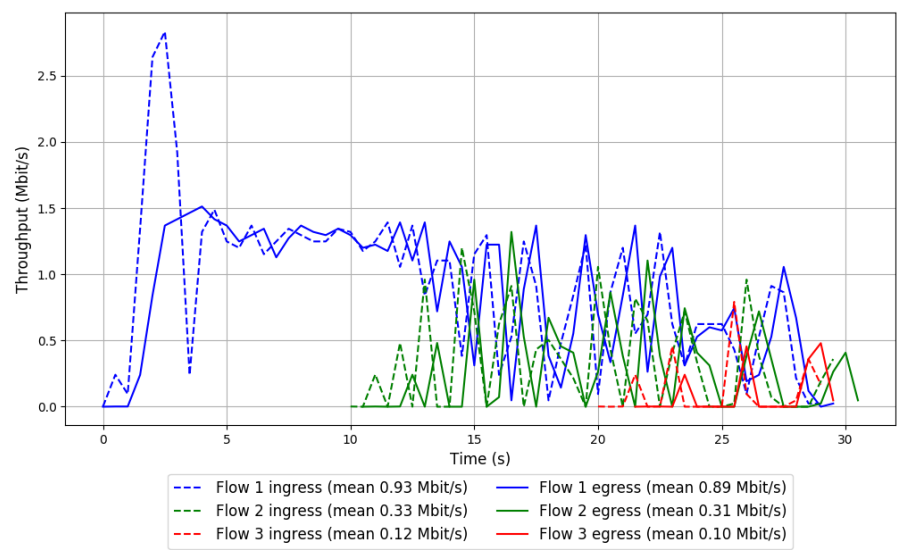
-- Flow 3:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 2969.754 ms

Loss rate: 26.59%

Run 3: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-07-03 16:50:05

End at: 2018-07-03 16:50:35

Local clock offset: -2.881 ms

Remote clock offset: 4.851 ms

Below is generated by plot.py at 2018-07-03 17:51:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 7218.235 ms

Loss rate: 10.32%

-- Flow 1:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 7542.193 ms

Loss rate: 11.88%

-- Flow 2:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 2129.468 ms

Loss rate: 5.38%

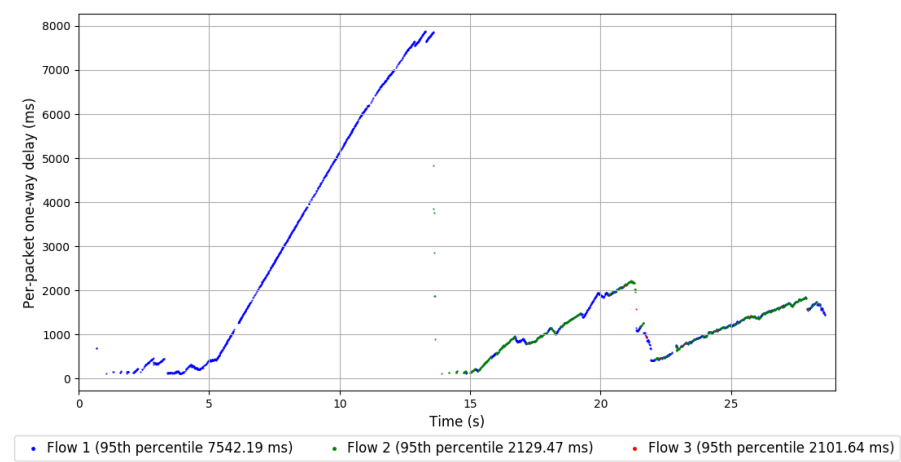
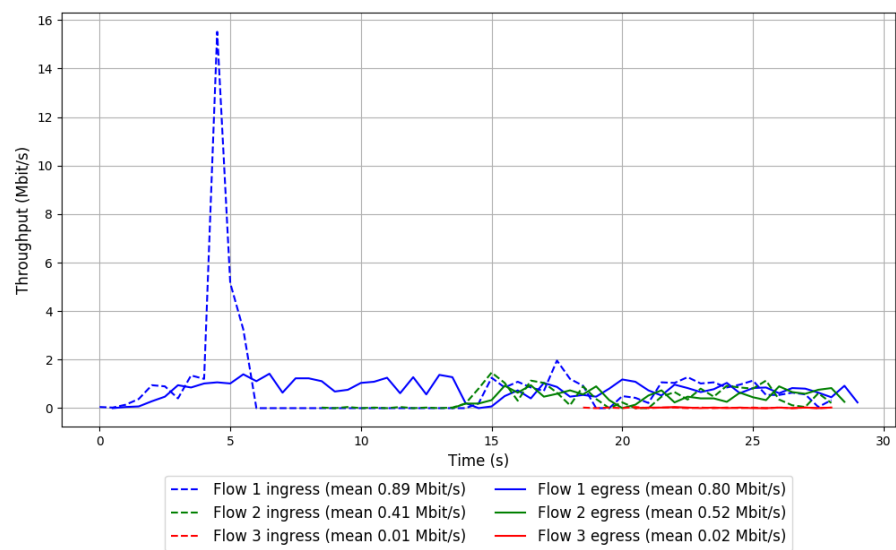
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 2101.635 ms

Loss rate: 16.67%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-07-03 17:10:40

End at: 2018-07-03 17:11:10

Local clock offset: -3.053 ms

Remote clock offset: 5.775 ms

Below is generated by plot.py at 2018-07-03 17:51:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 1828.274 ms

Loss rate: 2.66%

-- Flow 1:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 1828.274 ms

Loss rate: 2.59%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1782.324 ms

Loss rate: 9.52%

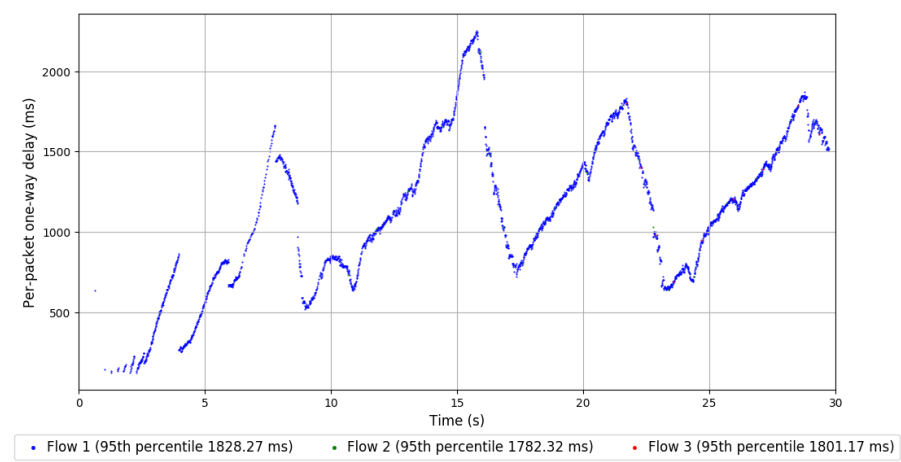
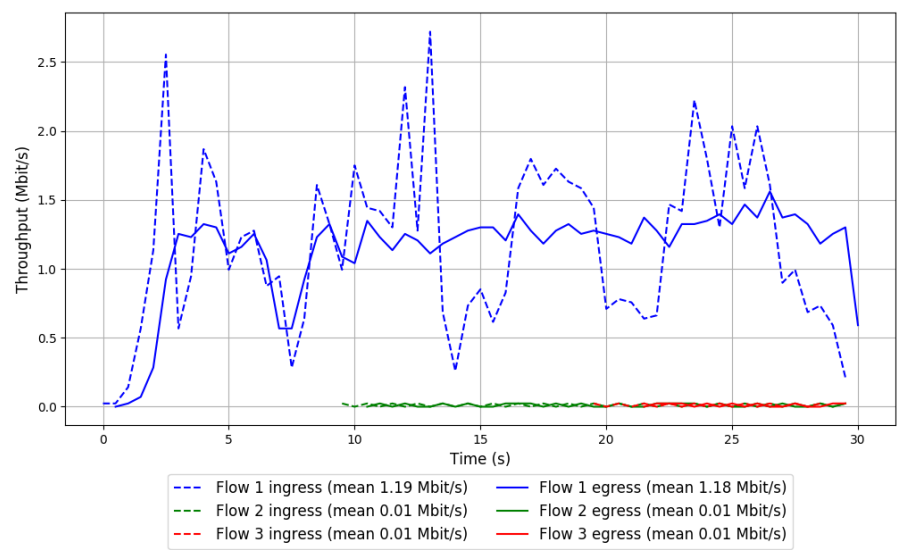
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1801.167 ms

Loss rate: 10.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-07-03 17:31:05

End at: 2018-07-03 17:31:35

Local clock offset: -3.18 ms

Remote clock offset: 1.821 ms

Below is generated by plot.py at 2018-07-03 17:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 2520.119 ms

Loss rate: 6.44%

-- Flow 1:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 2628.122 ms

Loss rate: 6.19%

-- Flow 2:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 2287.116 ms

Loss rate: 7.58%

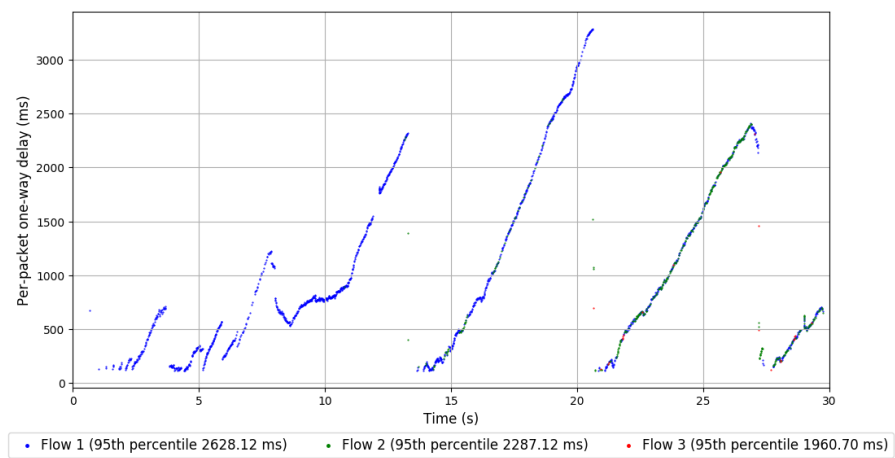
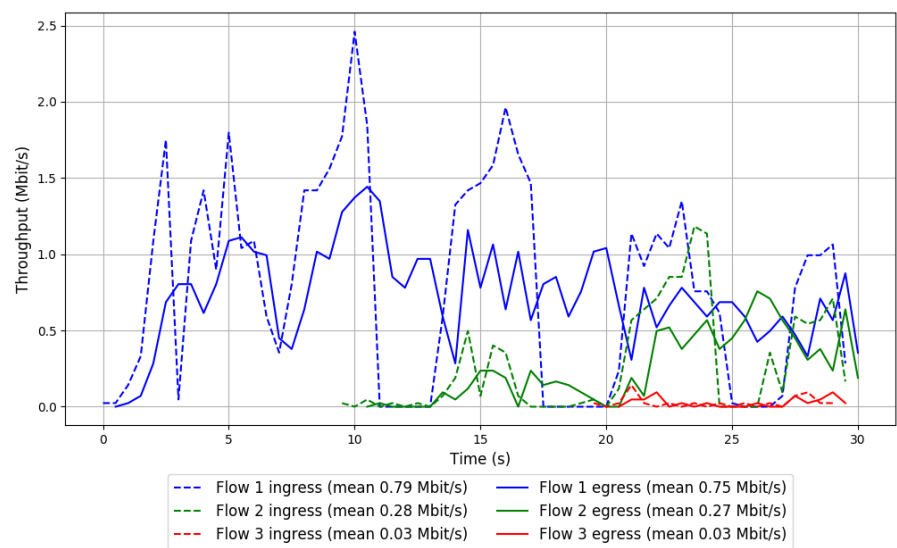
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 1960.698 ms

Loss rate: 4.35%

Run 3: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-07-03 16:59:46

End at: 2018-07-03 17:00:16

Local clock offset: -2.977 ms

Remote clock offset: 2.871 ms

Below is generated by plot.py at 2018-07-03 17:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 7556.617 ms

Loss rate: 40.39%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7305.101 ms

Loss rate: 15.62%

-- Flow 2:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 7557.656 ms

Loss rate: 40.41%

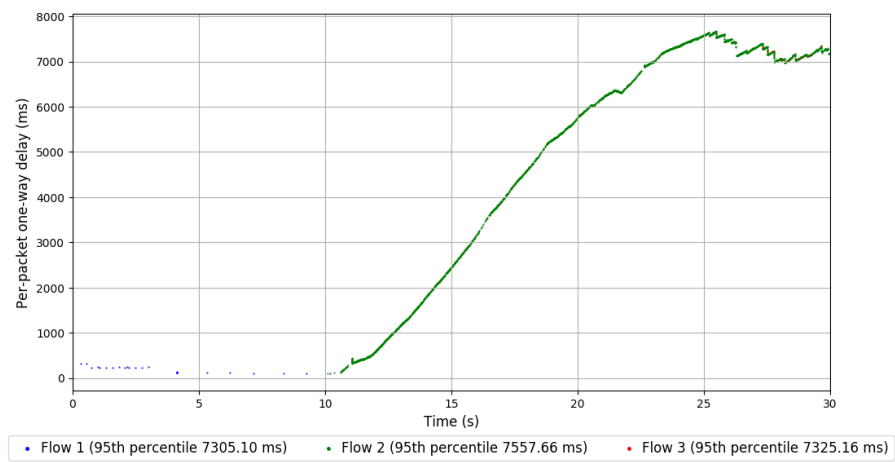
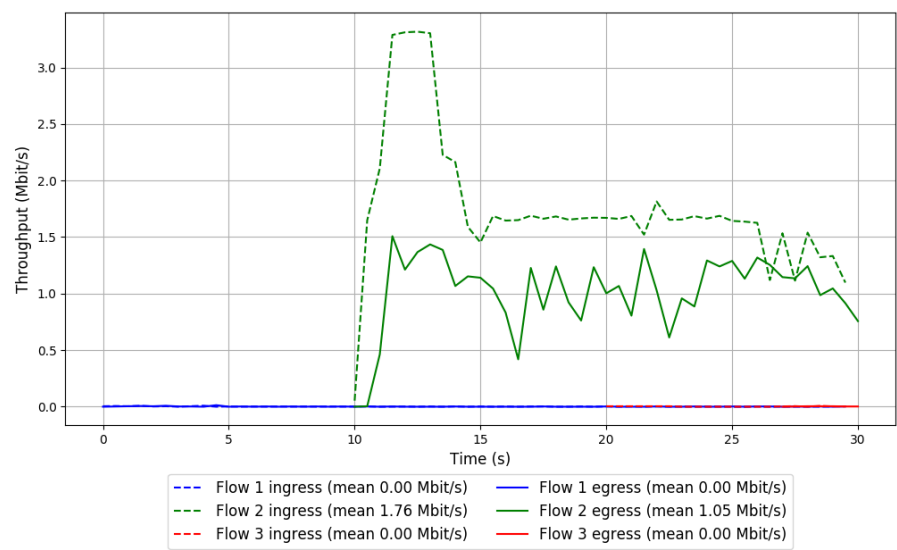
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7325.163 ms

Loss rate: 58.62%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-07-03 17:20:16

End at: 2018-07-03 17:20:46

Local clock offset: -3.114 ms

Remote clock offset: 6.186 ms

Below is generated by plot.py at 2018-07-03 17:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 8878.340 ms

Loss rate: 44.96%

-- Flow 1:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 8876.252 ms

Loss rate: 44.96%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8937.606 ms

Loss rate: 14.80%

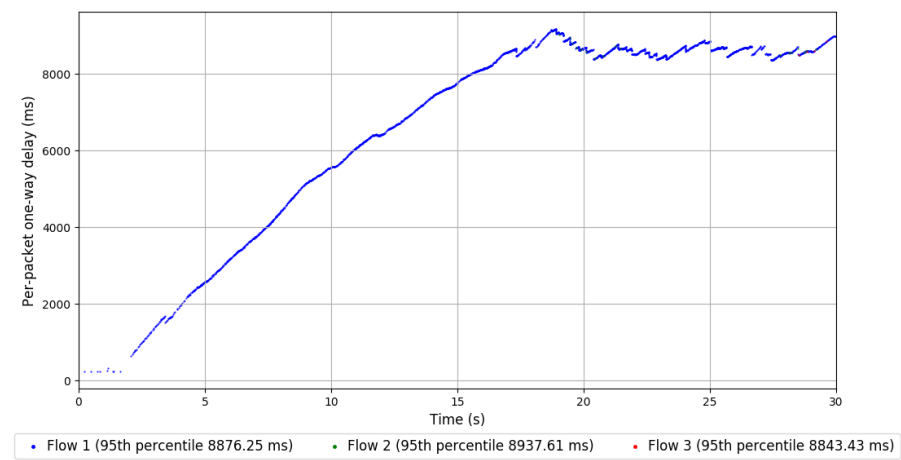
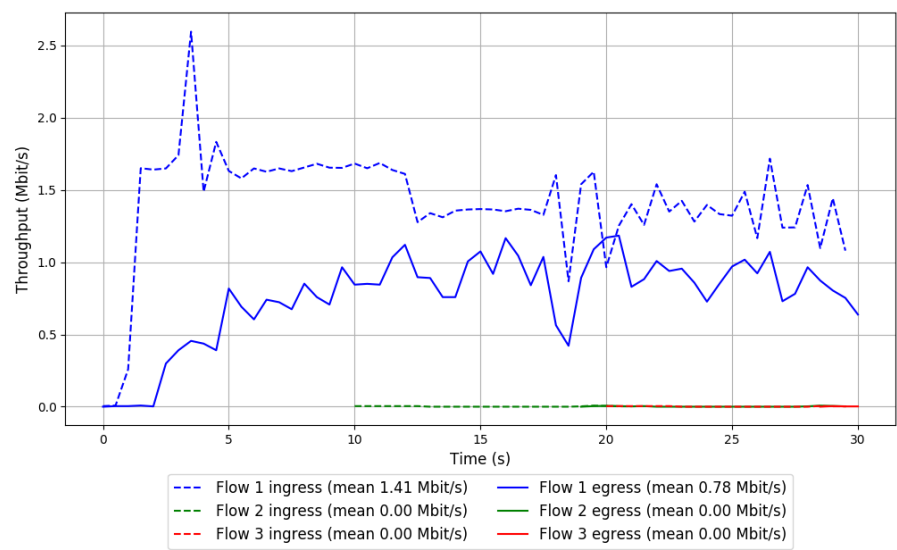
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8843.431 ms

Loss rate: 76.30%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-07-03 17:40:49

End at: 2018-07-03 17:41:19

Local clock offset: -3.229 ms

Remote clock offset: 4.851 ms

Below is generated by plot.py at 2018-07-03 17:51:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 8491.034 ms

Loss rate: 31.86%

-- Flow 1:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 8491.034 ms

Loss rate: 31.87%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8512.331 ms

Loss rate: 0.00%

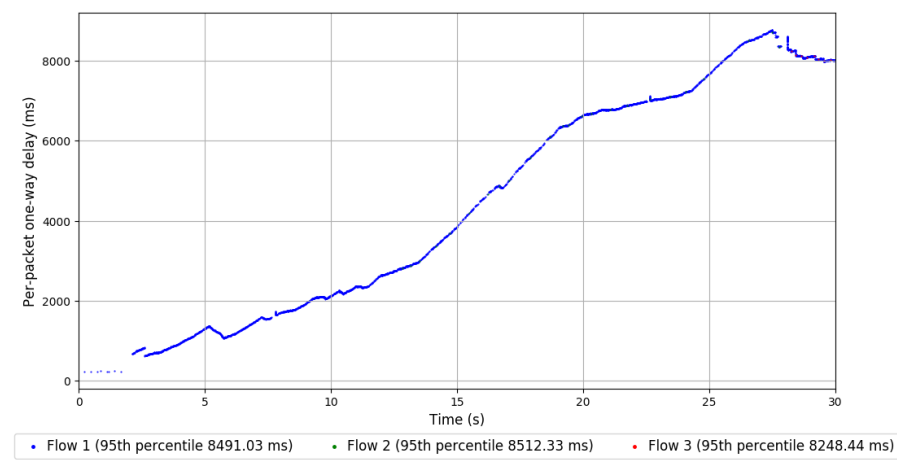
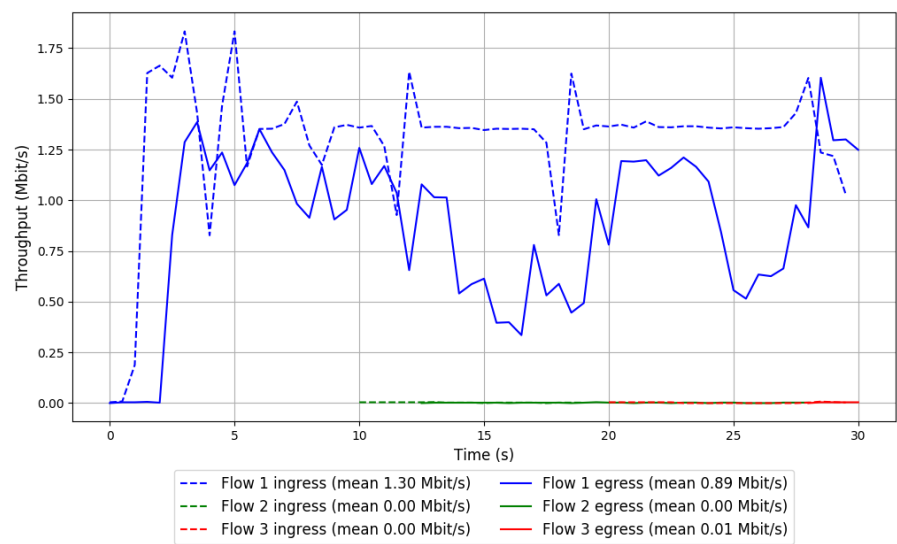
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 8248.442 ms

Loss rate: 61.04%

Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-07-03 17:00:58

End at: 2018-07-03 17:01:28

Local clock offset: -2.979 ms

Remote clock offset: 6.256 ms

Below is generated by plot.py at 2018-07-03 17:51:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 1061.915 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 1073.235 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 1287.297 ms

Loss rate: 0.06%

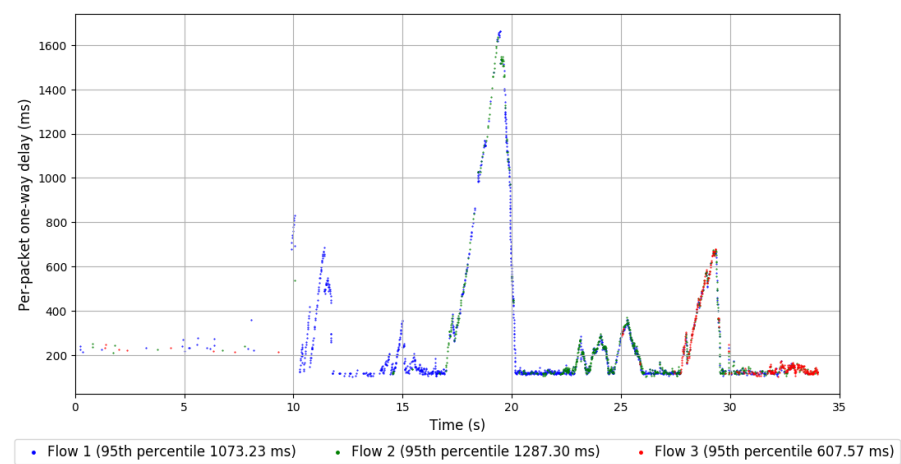
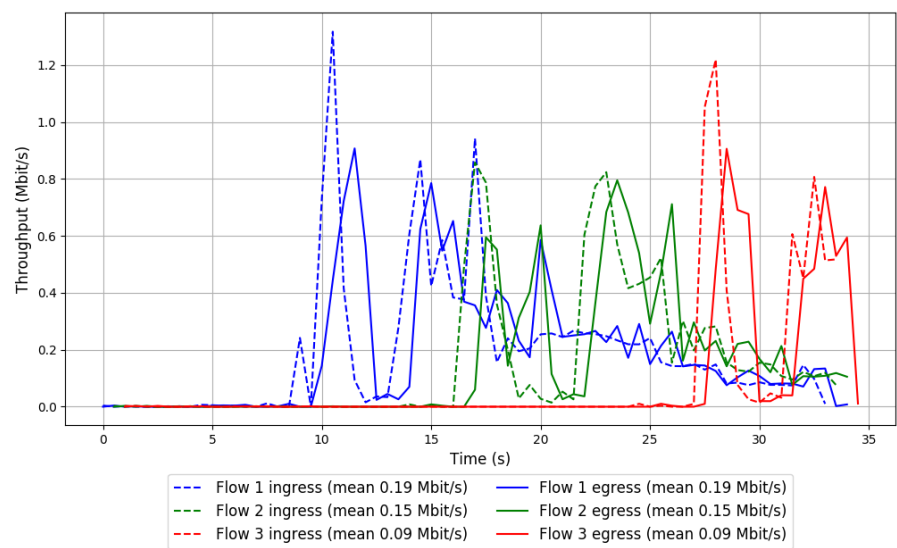
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 607.567 ms

Loss rate: 0.97%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-07-03 17:21:29

End at: 2018-07-03 17:21:59

Local clock offset: -3.116 ms

Remote clock offset: 6.222 ms

Below is generated by plot.py at 2018-07-03 17:51:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 610.315 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 596.213 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 640.269 ms

Loss rate: 0.06%

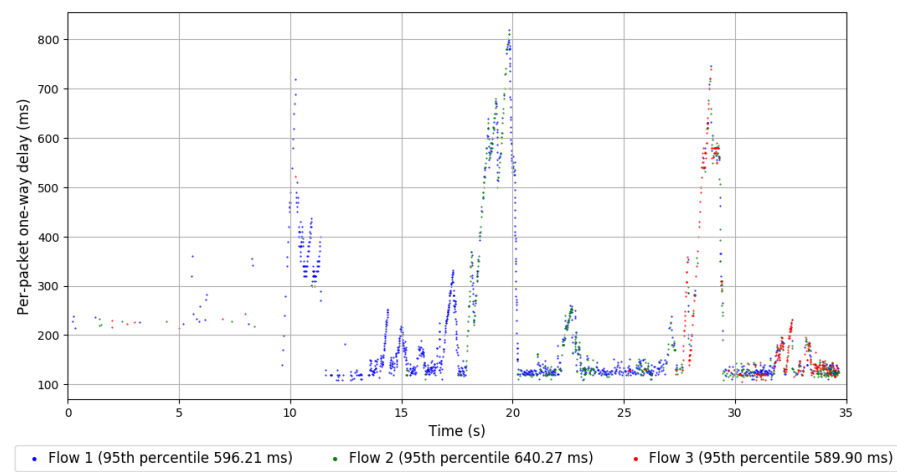
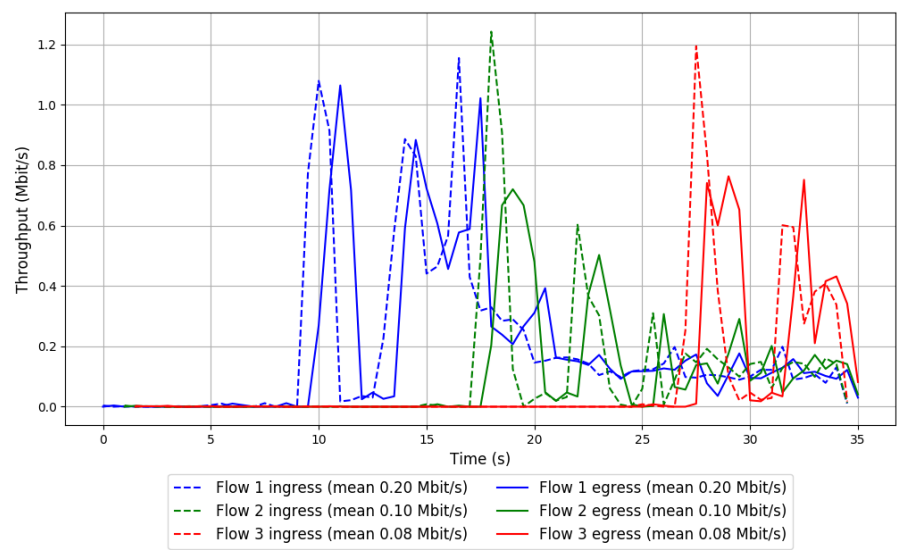
-- Flow 3:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 589.903 ms

Loss rate: 0.32%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-07-03 17:42:02

End at: 2018-07-03 17:42:32

Local clock offset: -3.127 ms

Remote clock offset: 1.11 ms

Below is generated by plot.py at 2018-07-03 17:51:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 2191.382 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 1516.851 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 2287.506 ms

Loss rate: 0.05%

-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 2478.643 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

