

Pantheon Report

Generated at 2018-06-18 20:00:16 (UTC).

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

Repeated the test of 16 congestion control schemes 10 times.

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

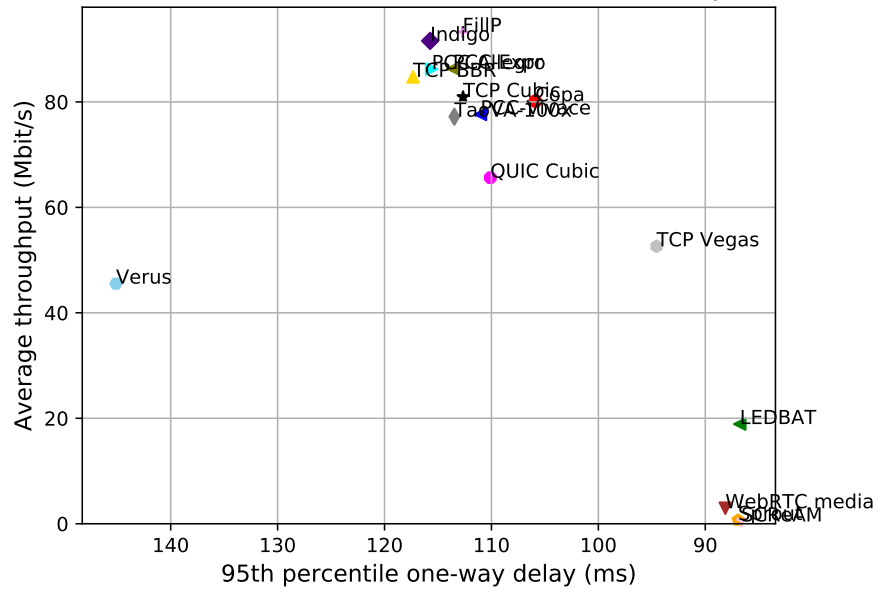
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

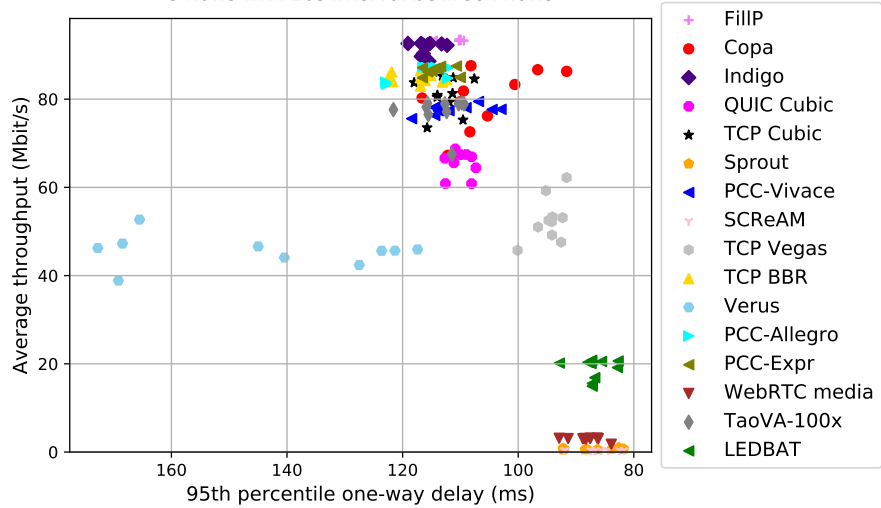
Git summary:

```
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
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, 10 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, 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	10	55.48	32.14	24.59	116.18	115.27	115.97	8.59	11.02	15.99
Copa	10	68.05	12.91	10.49	106.52	101.58	102.42	1.85	0.59	0.45
TCP Cubic	10	50.46	32.92	25.88	111.34	113.66	113.38	0.41	0.96	0.91
FillP	10	56.62	42.31	25.91	111.92	110.85	112.17	18.13	23.13	20.59
Indigo	10	64.14	27.88	28.05	113.95	114.94	114.18	7.54	21.20	50.30
LEDBAT	10	11.92	8.40	4.24	85.44	86.81	85.42	0.00	0.00	0.00
PCC-Allegro	10	76.22	11.47	7.28	115.58	115.30	114.85	3.33	4.36	5.05
PCC-Expr	10	76.00	12.02	6.96	113.20	113.44	112.86	3.70	3.20	4.33
QUIC Cubic	10	45.06	22.21	17.84	110.47	107.55	106.84	0.91	0.49	0.57
SCReAM	10	0.22	0.22	0.22	84.79	86.48	85.05	0.00	0.00	0.00
Sprout	10	0.30	0.35	0.50	83.89	84.37	86.02	0.00	0.00	0.00
TaoVA-100x	10	47.07	30.80	29.05	112.58	113.39	112.66	4.14	8.12	7.65
TCP Vegas	10	25.93	22.00	36.23	94.09	95.45	93.25	0.62	1.00	1.29
Verus	10	29.56	16.25	16.51	146.34	119.93	139.12	52.85	33.65	51.80
PCC-Vivace	10	67.34	11.15	8.70	111.03	110.85	108.61	0.18	0.42	0.54
WebRTC media	10	1.67	1.03	0.26	86.54	86.53	87.65	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-06-18 16:35:57

End at: 2018-06-18 16:36:27

Local clock offset: -2.882 ms

Remote clock offset: 4.465 ms

Below is generated by plot.py at 2018-06-18 19:41:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.86 Mbit/s

95th percentile per-packet one-way delay: 113.122 ms

Loss rate: 10.09%

-- Flow 1:

Average throughput: 60.87 Mbit/s

95th percentile per-packet one-way delay: 113.171 ms

Loss rate: 7.66%

-- Flow 2:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 112.640 ms

Loss rate: 9.16%

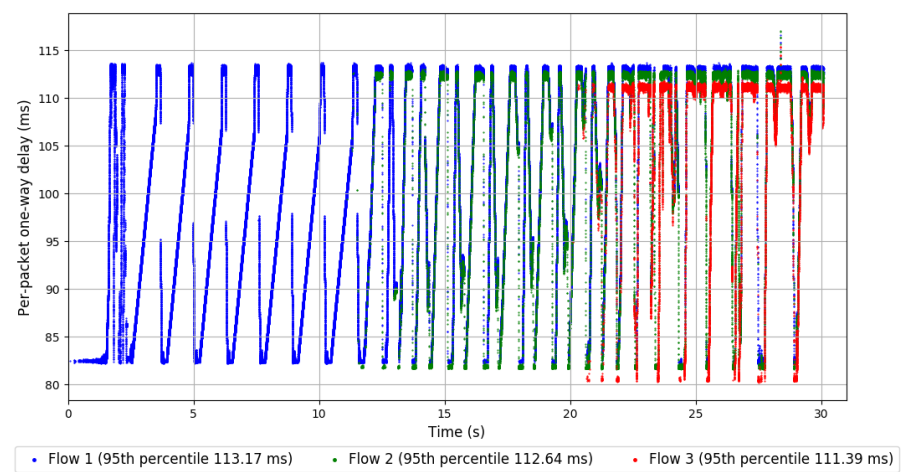
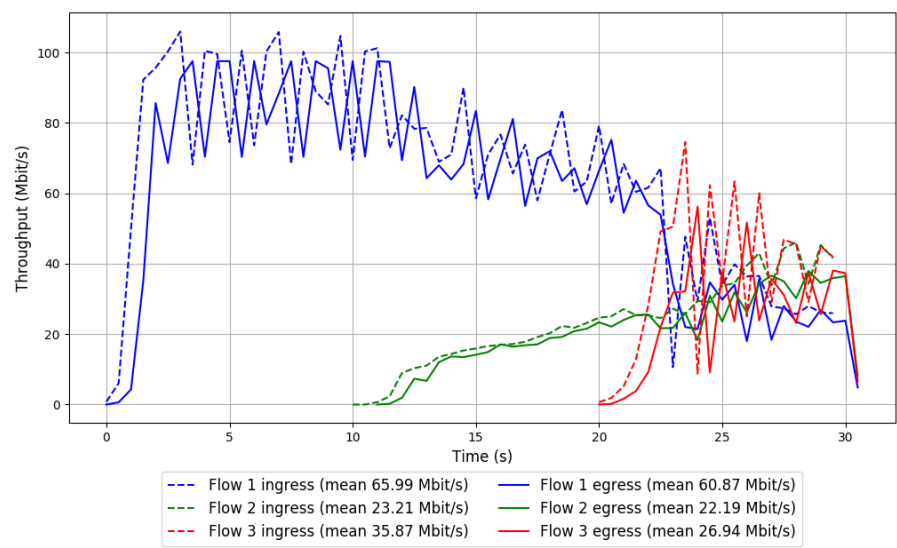
-- Flow 3:

Average throughput: 26.94 Mbit/s

95th percentile per-packet one-way delay: 111.387 ms

Loss rate: 24.76%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-18 16:55:58

End at: 2018-06-18 16:56:28

Local clock offset: -2.921 ms

Remote clock offset: 7.795 ms

Below is generated by plot.py at 2018-06-18 19:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.37 Mbit/s

95th percentile per-packet one-way delay: 115.153 ms

Loss rate: 9.60%

-- Flow 1:

Average throughput: 55.33 Mbit/s

95th percentile per-packet one-way delay: 114.594 ms

Loss rate: 7.92%

-- Flow 2:

Average throughput: 34.62 Mbit/s

95th percentile per-packet one-way delay: 114.172 ms

Loss rate: 11.68%

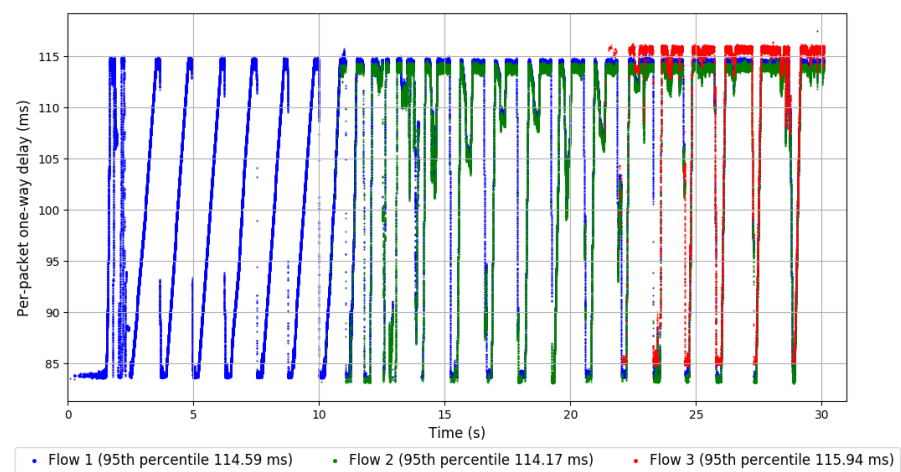
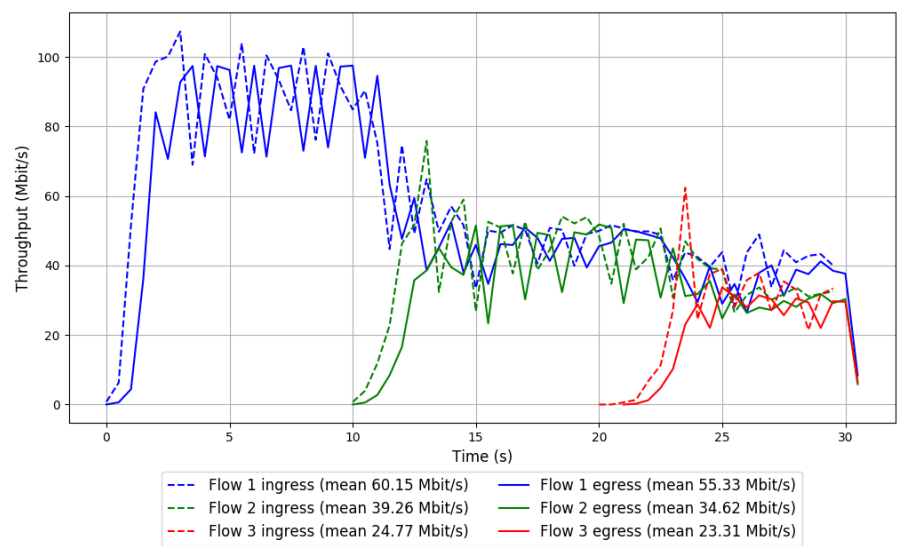
-- Flow 3:

Average throughput: 23.31 Mbit/s

95th percentile per-packet one-way delay: 115.940 ms

Loss rate: 15.35%

Run 2: Report of TCP BBR — Data Link

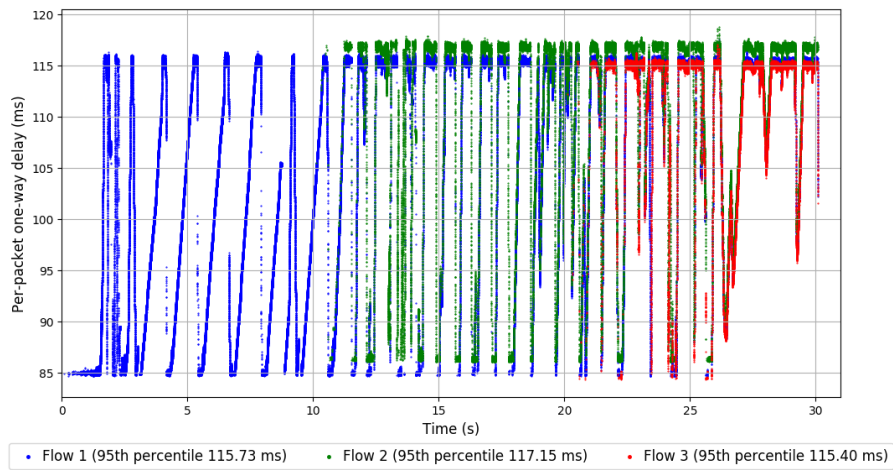
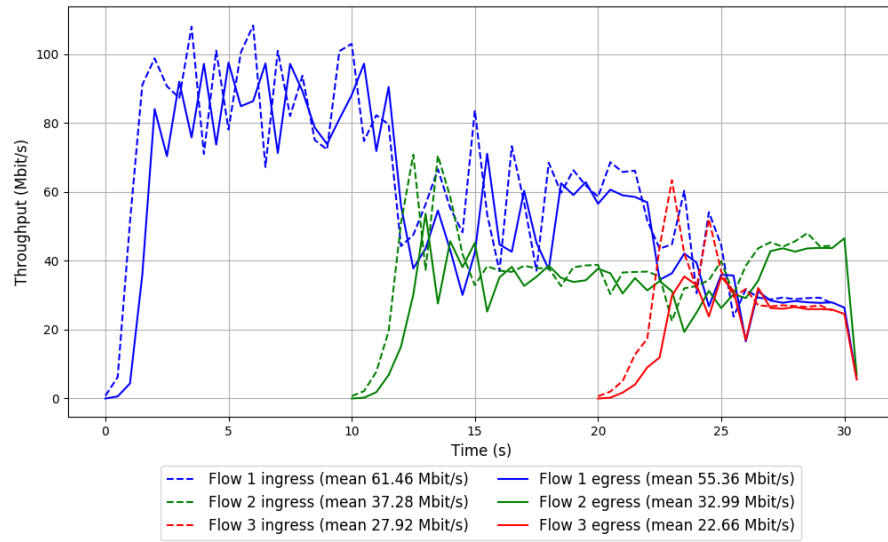


Run 3: Statistics of TCP BBR

Start at: 2018-06-18 17:16:01
End at: 2018-06-18 17:16:31
Local clock offset: -2.743 ms
Remote clock offset: 16.917 ms

Below is generated by plot.py at 2018-06-18 19:41:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.84 Mbit/s
95th percentile per-packet one-way delay: 116.931 ms
Loss rate: 11.18%
-- Flow 1:
Average throughput: 55.36 Mbit/s
95th percentile per-packet one-way delay: 115.727 ms
Loss rate: 9.87%
-- Flow 2:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 117.151 ms
Loss rate: 11.50%
-- Flow 3:
Average throughput: 22.66 Mbit/s
95th percentile per-packet one-way delay: 115.404 ms
Loss rate: 18.93%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-06-18 17:36:05

End at: 2018-06-18 17:36:35

Local clock offset: -2.744 ms

Remote clock offset: 10.62 ms

Below is generated by plot.py at 2018-06-18 19:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.40 Mbit/s

95th percentile per-packet one-way delay: 112.413 ms

Loss rate: 10.06%

-- Flow 1:

Average throughput: 56.67 Mbit/s

95th percentile per-packet one-way delay: 112.330 ms

Loss rate: 9.32%

-- Flow 2:

Average throughput: 30.14 Mbit/s

95th percentile per-packet one-way delay: 110.948 ms

Loss rate: 11.57%

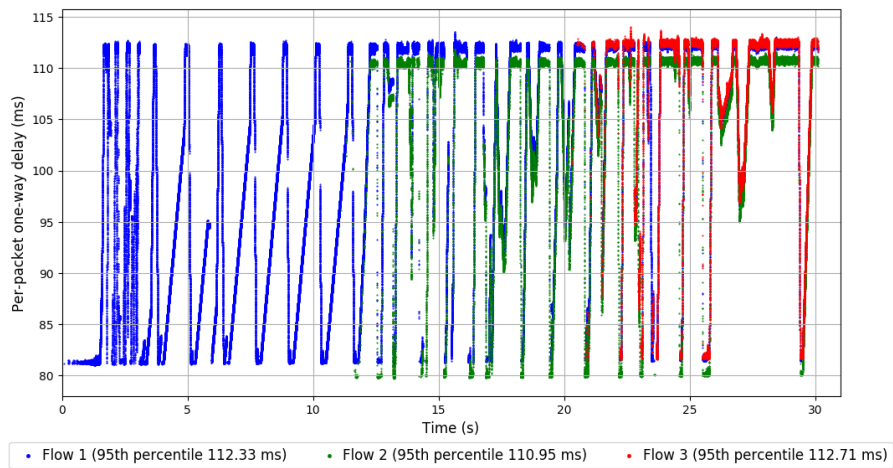
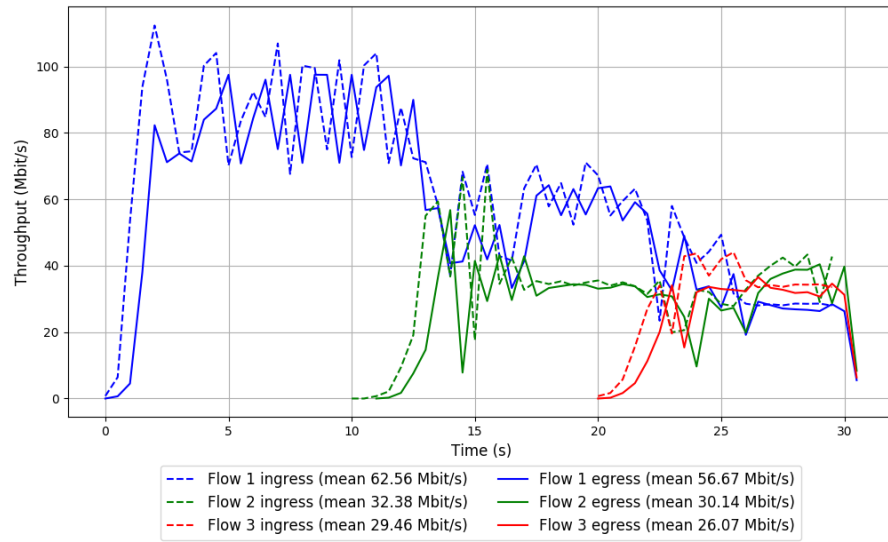
-- Flow 3:

Average throughput: 26.07 Mbit/s

95th percentile per-packet one-way delay: 112.711 ms

Loss rate: 11.42%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-06-18 17:56:16

End at: 2018-06-18 17:56:46

Local clock offset: -2.737 ms

Remote clock offset: 7.557 ms

Below is generated by plot.py at 2018-06-18 19:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.93 Mbit/s

95th percentile per-packet one-way delay: 121.690 ms

Loss rate: 10.73%

-- Flow 1:

Average throughput: 52.34 Mbit/s

95th percentile per-packet one-way delay: 121.750 ms

Loss rate: 9.43%

-- Flow 2:

Average throughput: 34.70 Mbit/s

95th percentile per-packet one-way delay: 115.406 ms

Loss rate: 11.76%

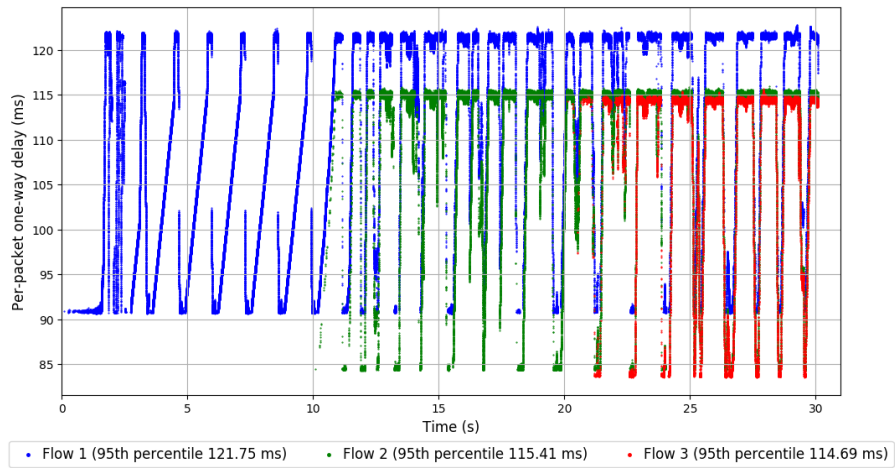
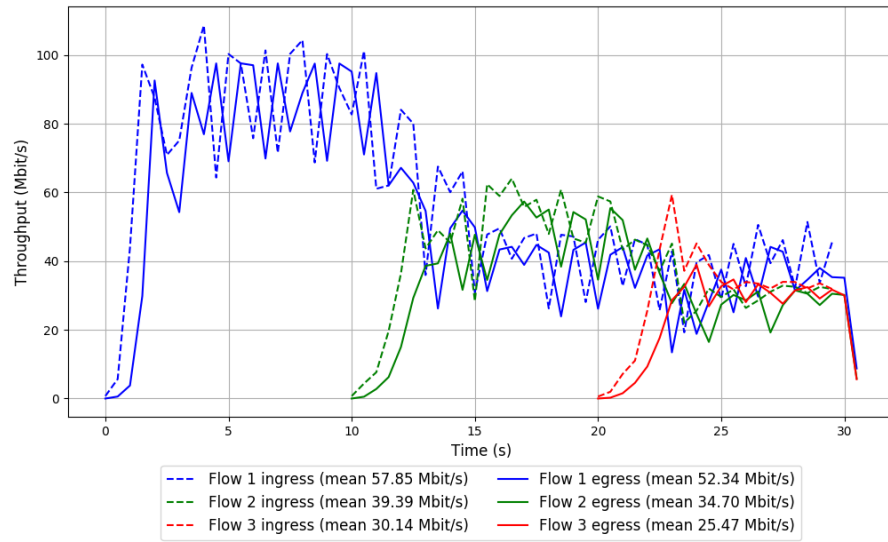
-- Flow 3:

Average throughput: 25.47 Mbit/s

95th percentile per-packet one-way delay: 114.690 ms

Loss rate: 15.50%

Run 5: Report of TCP BBR — Data Link

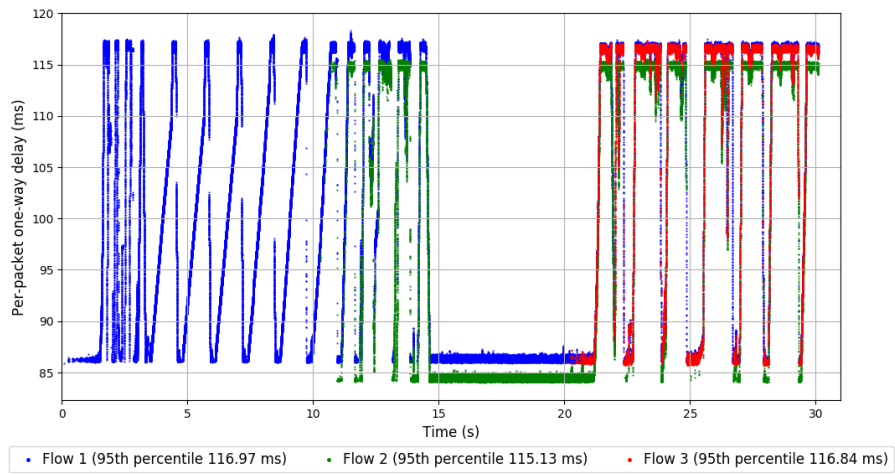
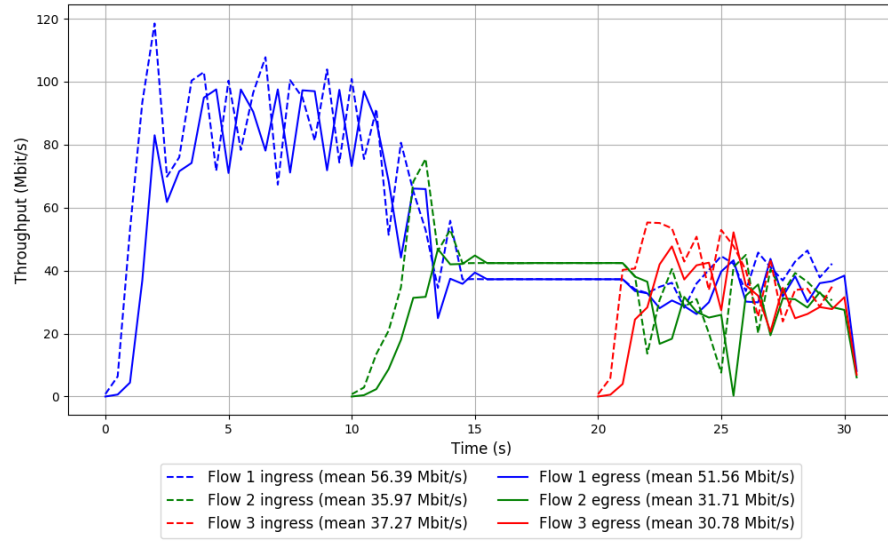


Run 6: Statistics of TCP BBR

Start at: 2018-06-18 18:16:19
End at: 2018-06-18 18:16:49
Local clock offset: -2.874 ms
Remote clock offset: 10.861 ms

Below is generated by plot.py at 2018-06-18 19:41:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.95 Mbit/s
95th percentile per-packet one-way delay: 116.893 ms
Loss rate: 10.48%
-- Flow 1:
Average throughput: 51.56 Mbit/s
95th percentile per-packet one-way delay: 116.972 ms
Loss rate: 8.47%
-- Flow 2:
Average throughput: 31.71 Mbit/s
95th percentile per-packet one-way delay: 115.131 ms
Loss rate: 11.74%
-- Flow 3:
Average throughput: 30.78 Mbit/s
95th percentile per-packet one-way delay: 116.836 ms
Loss rate: 17.16%

Run 6: Report of TCP BBR — Data Link

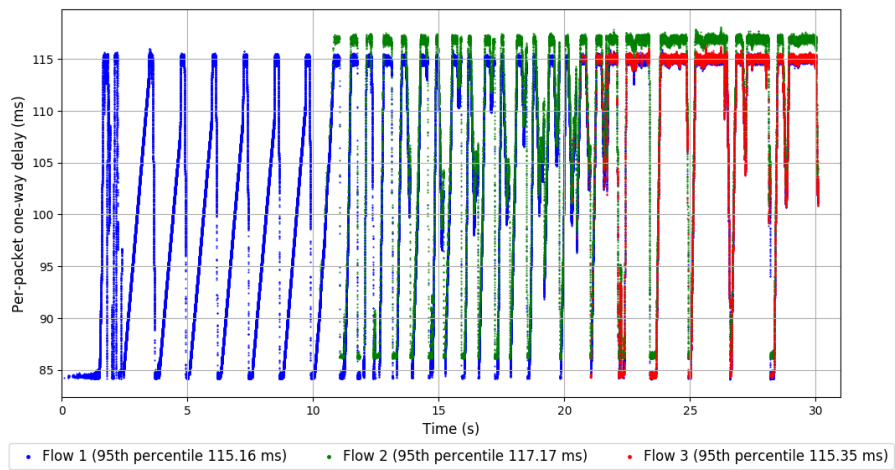
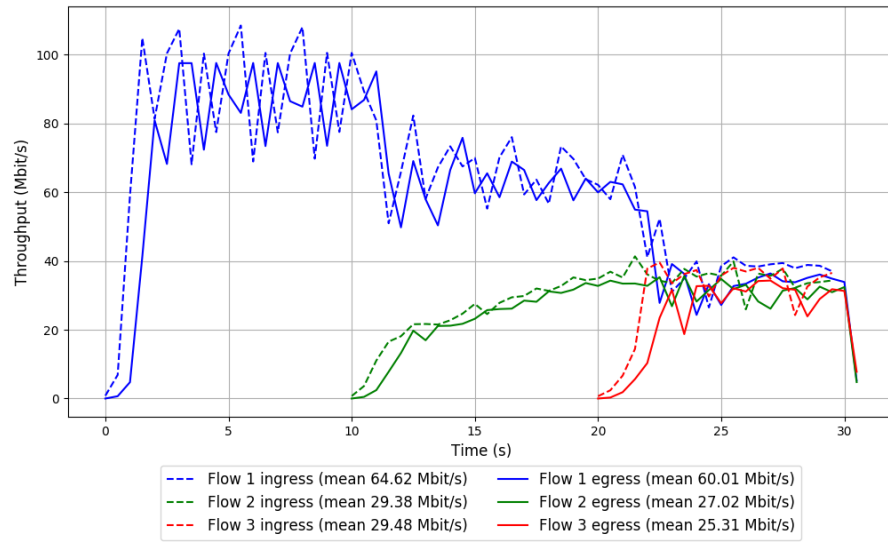


Run 7: Statistics of TCP BBR

Start at: 2018-06-18 18:36:21
End at: 2018-06-18 18:36:51
Local clock offset: -2.936 ms
Remote clock offset: 12.996 ms

Below is generated by plot.py at 2018-06-18 19:41:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.41 Mbit/s
95th percentile per-packet one-way delay: 116.910 ms
Loss rate: 8.02%
-- Flow 1:
Average throughput: 60.01 Mbit/s
95th percentile per-packet one-way delay: 115.163 ms
Loss rate: 7.09%
-- Flow 2:
Average throughput: 27.02 Mbit/s
95th percentile per-packet one-way delay: 117.167 ms
Loss rate: 7.97%
-- Flow 3:
Average throughput: 25.31 Mbit/s
95th percentile per-packet one-way delay: 115.347 ms
Loss rate: 14.28%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-06-18 18:56:33

End at: 2018-06-18 18:57:03

Local clock offset: -2.846 ms

Remote clock offset: 9.101 ms

Below is generated by plot.py at 2018-06-18 19:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 122.274 ms

Loss rate: 9.96%

-- Flow 1:

Average throughput: 55.74 Mbit/s

95th percentile per-packet one-way delay: 115.349 ms

Loss rate: 8.73%

-- Flow 2:

Average throughput: 33.78 Mbit/s

95th percentile per-packet one-way delay: 117.514 ms

Loss rate: 11.01%

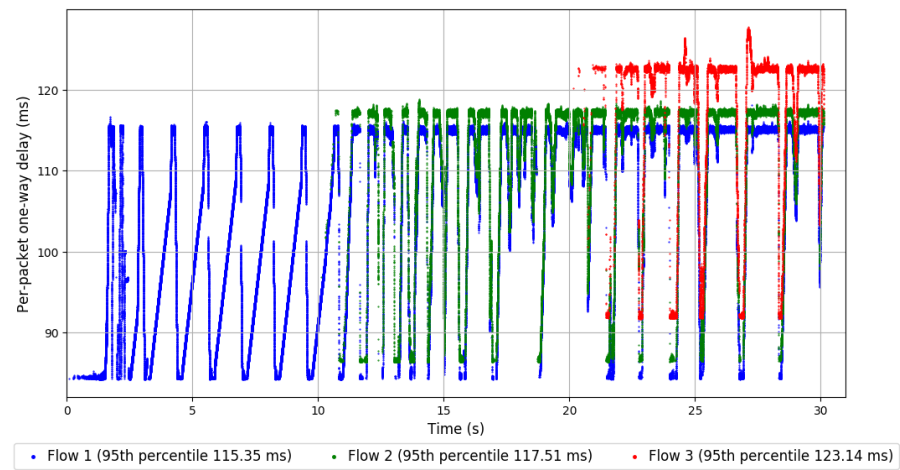
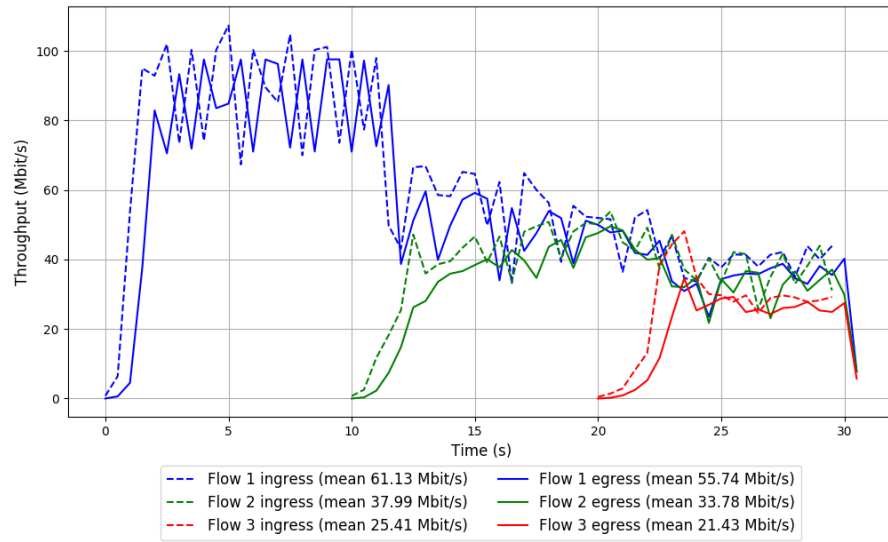
-- Flow 3:

Average throughput: 21.43 Mbit/s

95th percentile per-packet one-way delay: 123.140 ms

Loss rate: 15.68%

Run 8: Report of TCP BBR — Data Link

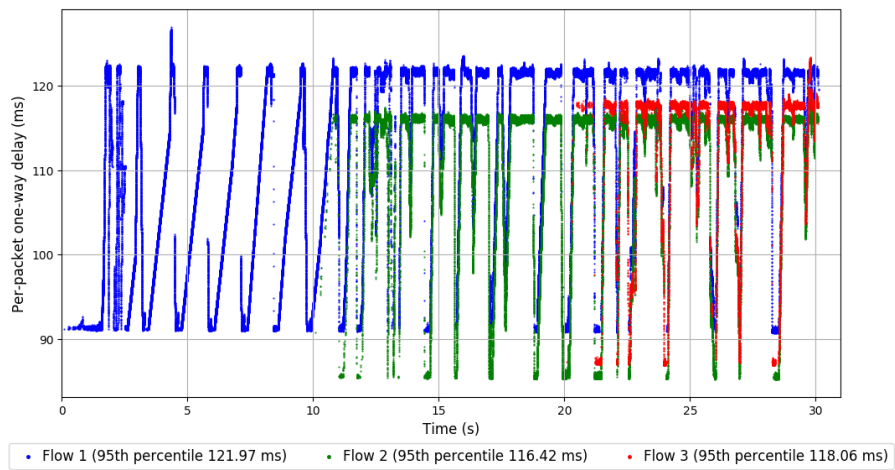
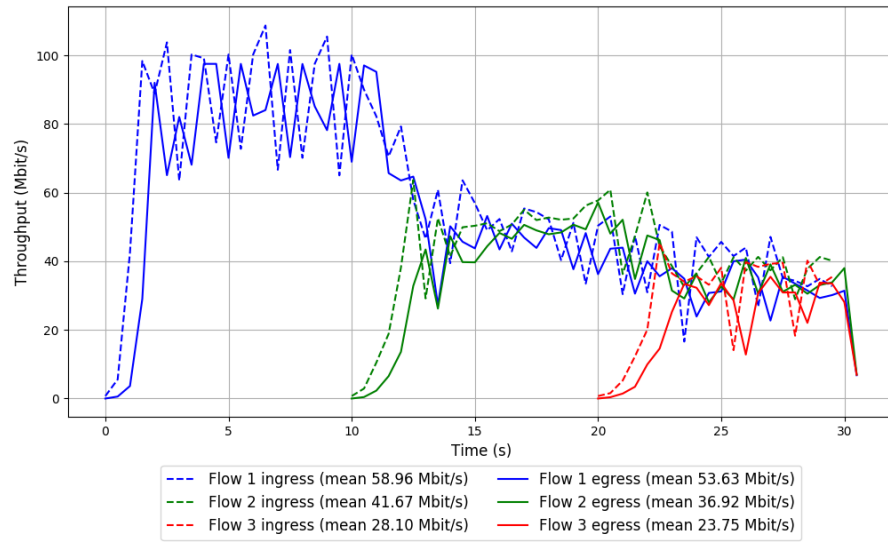


Run 9: Statistics of TCP BBR

Start at: 2018-06-18 19:16:36
End at: 2018-06-18 19:17:06
Local clock offset: -1.982 ms
Remote clock offset: 10.524 ms

Below is generated by plot.py at 2018-06-18 19:42:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.15 Mbit/s
95th percentile per-packet one-way delay: 121.885 ms
Loss rate: 10.24%
-- Flow 1:
Average throughput: 53.63 Mbit/s
95th percentile per-packet one-way delay: 121.973 ms
Loss rate: 8.96%
-- Flow 2:
Average throughput: 36.92 Mbit/s
95th percentile per-packet one-way delay: 116.417 ms
Loss rate: 11.29%
-- Flow 3:
Average throughput: 23.75 Mbit/s
95th percentile per-packet one-way delay: 118.065 ms
Loss rate: 15.23%

Run 9: Report of TCP BBR — Data Link

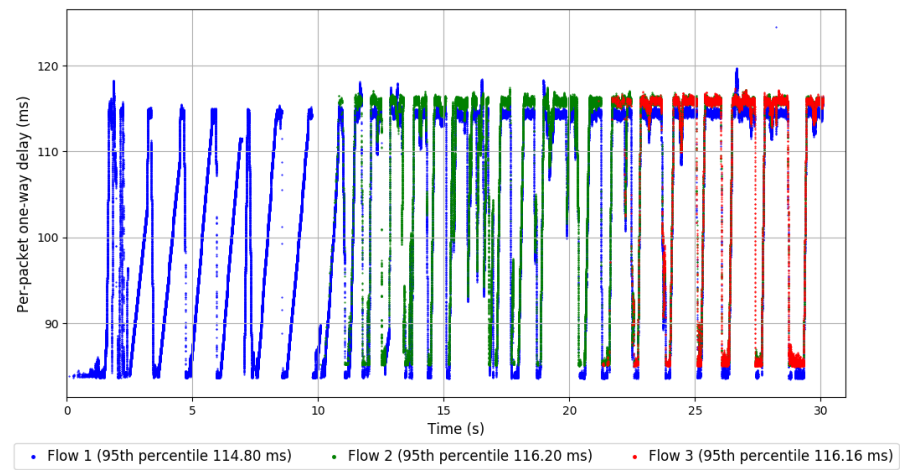
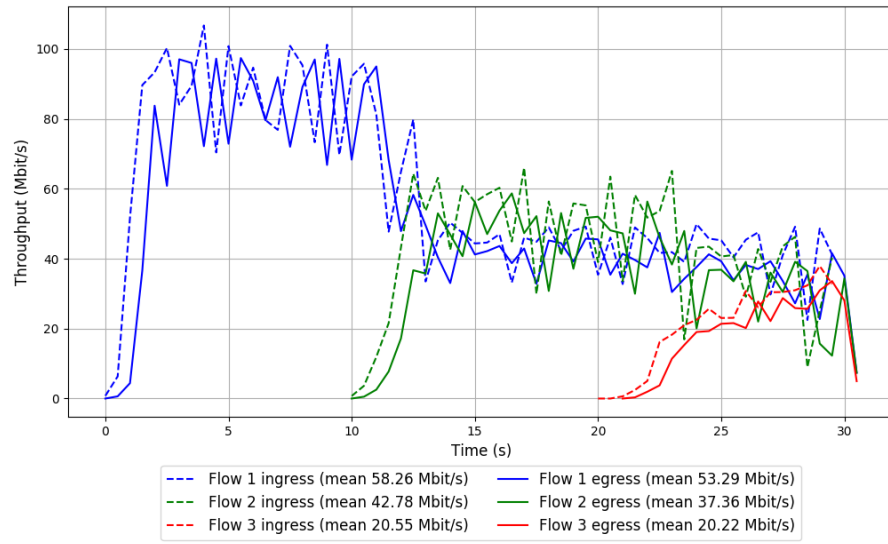


Run 10: Statistics of TCP BBR

Start at: 2018-06-18 19:36:34
End at: 2018-06-18 19:37:04
Local clock offset: -1.726 ms
Remote clock offset: 15.306 ms

Below is generated by plot.py at 2018-06-18 19:42:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.22 Mbit/s
95th percentile per-packet one-way delay: 116.093 ms
Loss rate: 9.91%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 114.802 ms
Loss rate: 8.43%
-- Flow 2:
Average throughput: 37.36 Mbit/s
95th percentile per-packet one-way delay: 116.203 ms
Loss rate: 12.54%
-- Flow 3:
Average throughput: 20.22 Mbit/s
95th percentile per-packet one-way delay: 116.162 ms
Loss rate: 11.63%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-18 16:18:18

End at: 2018-06-18 16:18:48

Local clock offset: -2.714 ms

Remote clock offset: 7.049 ms

Below is generated by plot.py at 2018-06-18 19:43:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.26 Mbit/s

95th percentile per-packet one-way delay: 116.631 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 71.15 Mbit/s

95th percentile per-packet one-way delay: 118.011 ms

Loss rate: 2.14%

-- Flow 2:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 103.971 ms

Loss rate: 0.25%

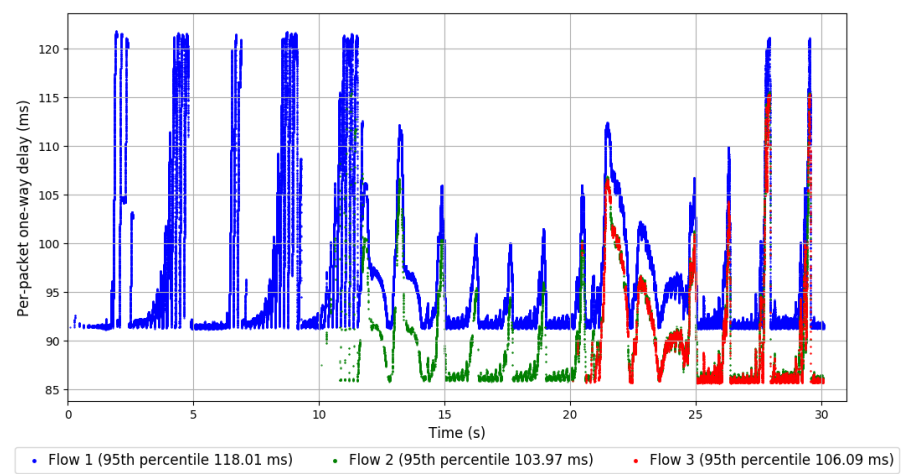
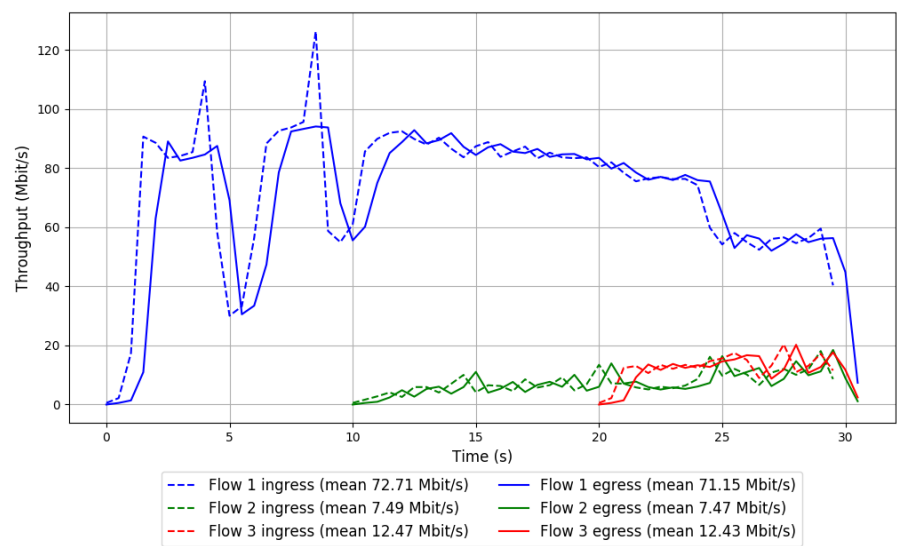
-- Flow 3:

Average throughput: 12.43 Mbit/s

95th percentile per-packet one-way delay: 106.086 ms

Loss rate: 0.28%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-06-18 16:38:25

End at: 2018-06-18 16:38:55

Local clock offset: -2.881 ms

Remote clock offset: 3.56 ms

Below is generated by plot.py at 2018-06-18 19:43:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.41 Mbit/s

95th percentile per-packet one-way delay: 110.053 ms

Loss rate: 2.95%

-- Flow 1:

Average throughput: 69.91 Mbit/s

95th percentile per-packet one-way delay: 110.097 ms

Loss rate: 3.29%

-- Flow 2:

Average throughput: 11.41 Mbit/s

95th percentile per-packet one-way delay: 97.543 ms

Loss rate: 0.37%

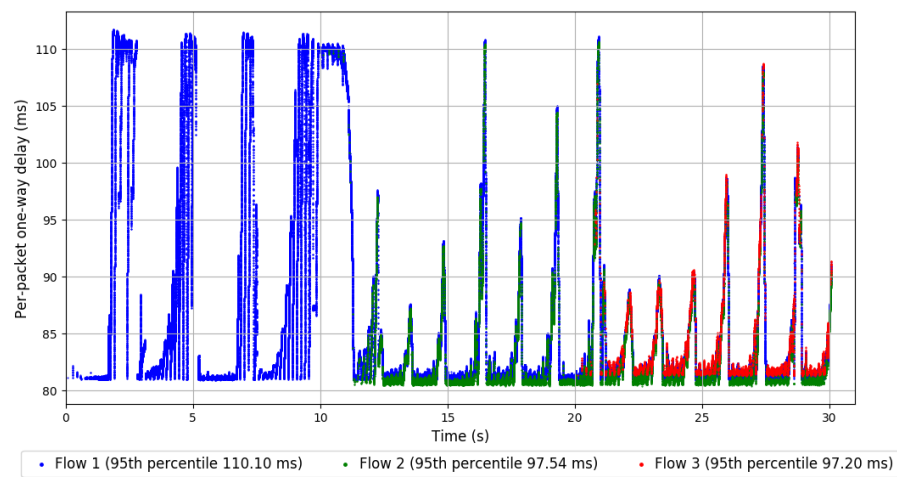
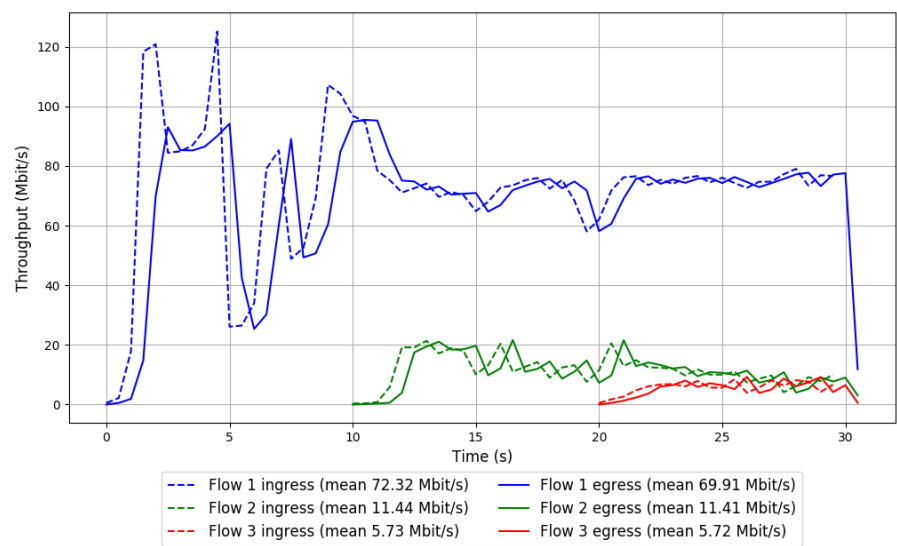
-- Flow 3:

Average throughput: 5.72 Mbit/s

95th percentile per-packet one-way delay: 97.203 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-06-18 16:58:26

End at: 2018-06-18 16:58:56

Local clock offset: -2.961 ms

Remote clock offset: 5.0 ms

Below is generated by plot.py at 2018-06-18 19:43:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.31 Mbit/s

95th percentile per-packet one-way delay: 100.586 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 72.97 Mbit/s

95th percentile per-packet one-way delay: 102.721 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 8.40 Mbit/s

95th percentile per-packet one-way delay: 91.880 ms

Loss rate: 0.00%

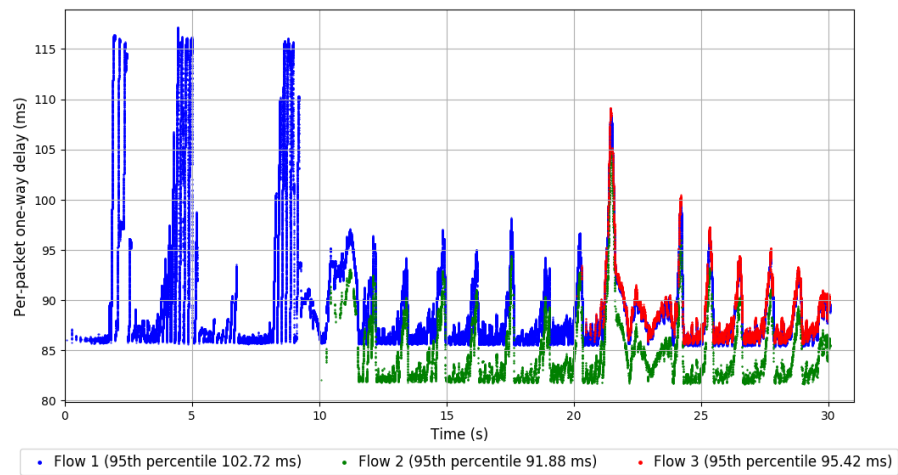
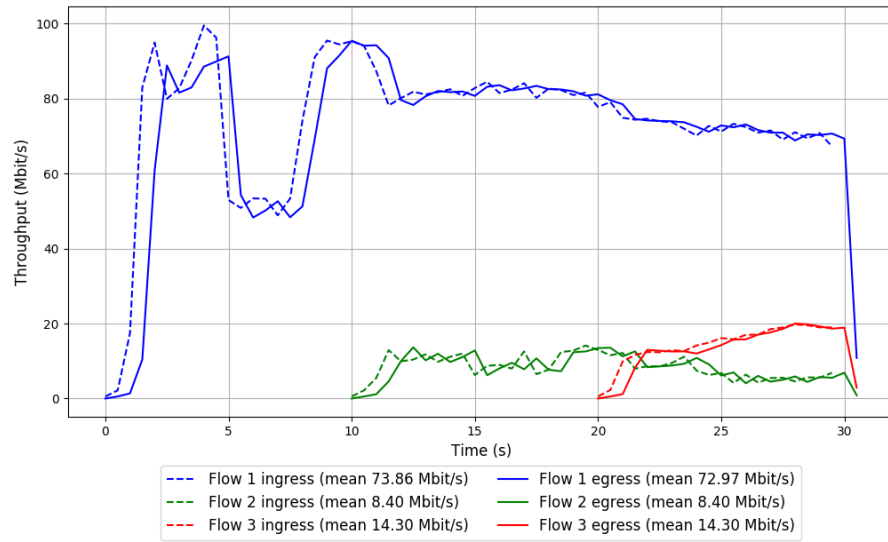
-- Flow 3:

Average throughput: 14.30 Mbit/s

95th percentile per-packet one-way delay: 95.420 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link

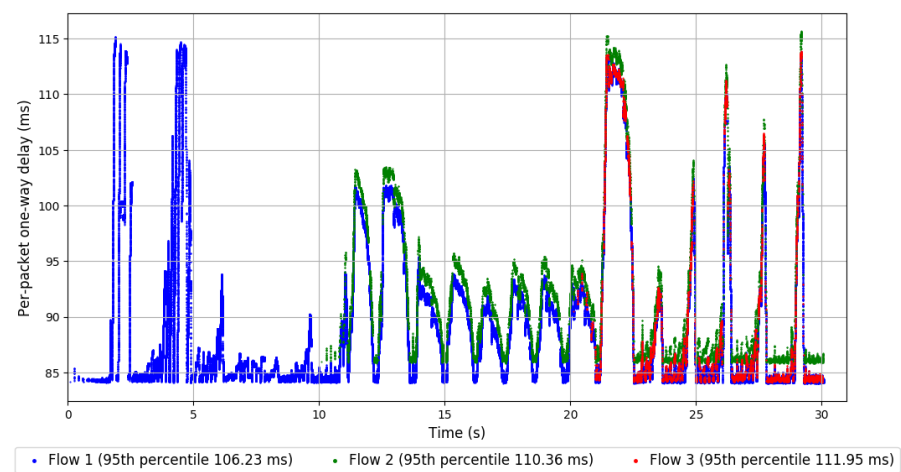
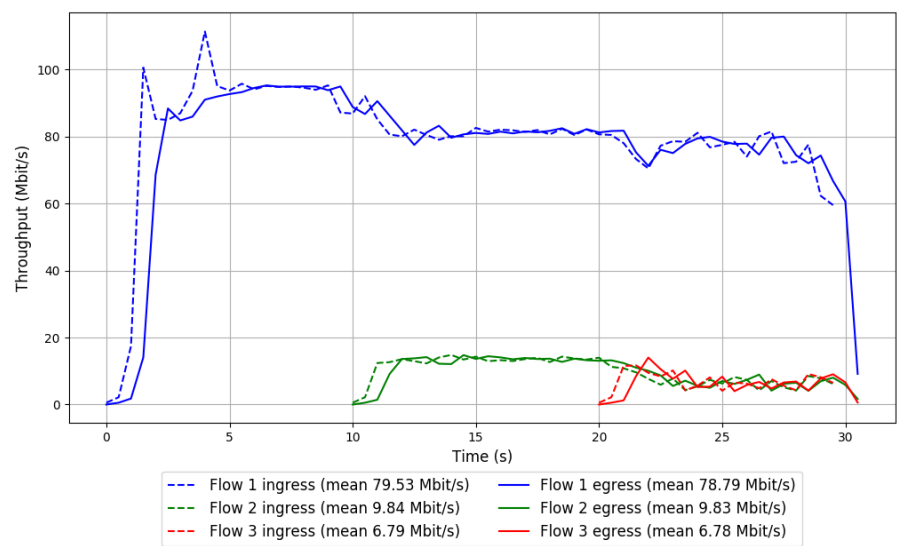


Run 4: Statistics of Copa

Start at: 2018-06-18 17:18:29
End at: 2018-06-18 17:18:59
Local clock offset: -2.717 ms
Remote clock offset: 17.238 ms

```
# Below is generated by plot.py at 2018-06-18 19:43:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.57 Mbit/s
95th percentile per-packet one-way delay: 108.179 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 78.79 Mbit/s
95th percentile per-packet one-way delay: 106.226 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 9.83 Mbit/s
95th percentile per-packet one-way delay: 110.356 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 111.955 ms
Loss rate: 0.25%
```

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-06-18 17:38:33

End at: 2018-06-18 17:39:03

Local clock offset: -2.702 ms

Remote clock offset: 9.002 ms

Below is generated by plot.py at 2018-06-18 19:43:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.20 Mbit/s

95th percentile per-packet one-way delay: 105.315 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 56.54 Mbit/s

95th percentile per-packet one-way delay: 105.823 ms

Loss rate: 2.21%

-- Flow 2:

Average throughput: 20.09 Mbit/s

95th percentile per-packet one-way delay: 103.839 ms

Loss rate: 1.08%

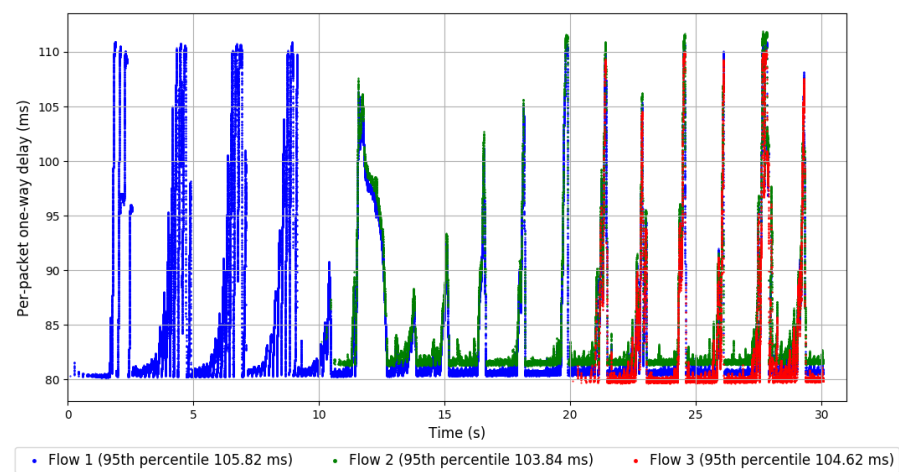
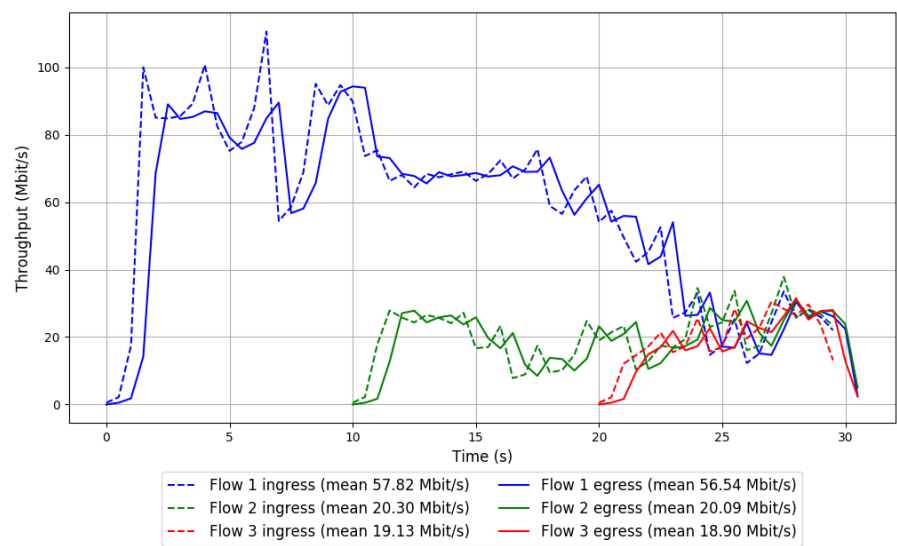
-- Flow 3:

Average throughput: 18.90 Mbit/s

95th percentile per-packet one-way delay: 104.618 ms

Loss rate: 1.18%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-06-18 17:58:44

End at: 2018-06-18 17:59:14

Local clock offset: -2.756 ms

Remote clock offset: 3.4 ms

Below is generated by plot.py at 2018-06-18 19:43:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.30 Mbit/s

95th percentile per-packet one-way delay: 91.620 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 77.34 Mbit/s

95th percentile per-packet one-way delay: 91.662 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 10.32 Mbit/s

95th percentile per-packet one-way delay: 91.363 ms

Loss rate: 0.00%

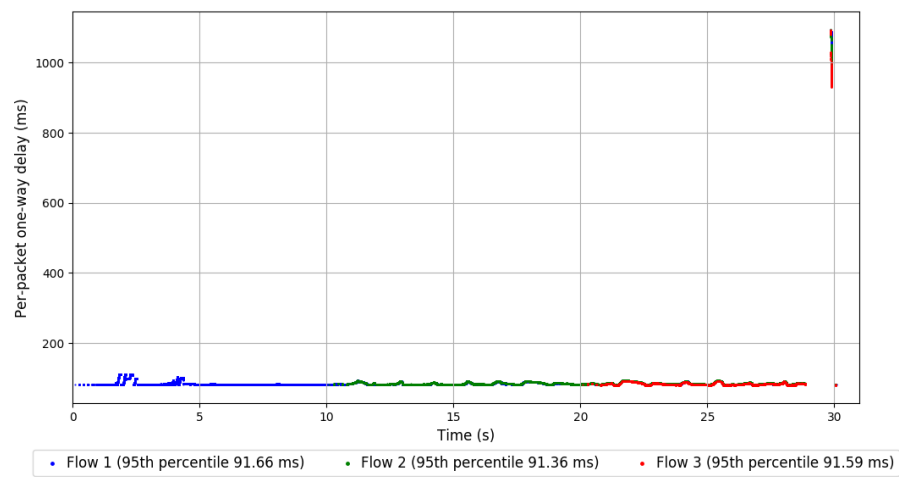
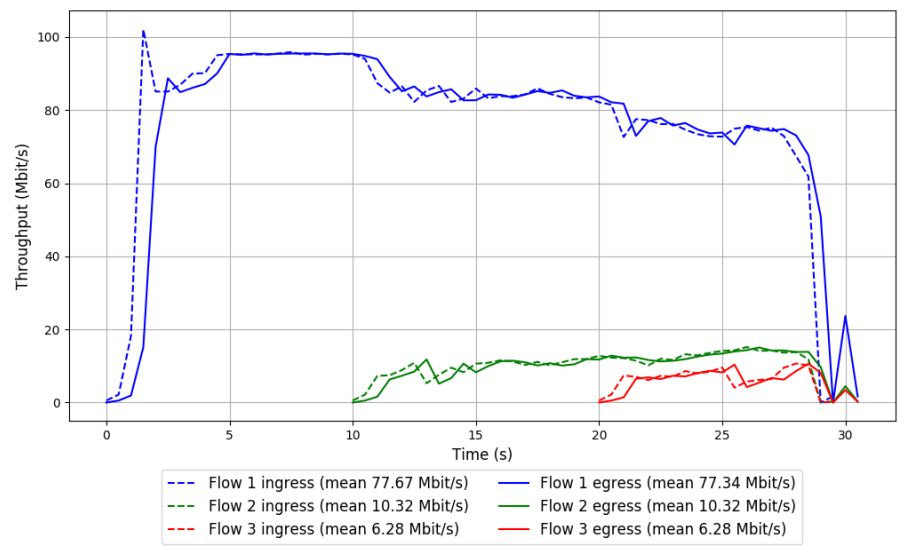
-- Flow 3:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 91.589 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-06-18 18:18:47

End at: 2018-06-18 18:19:17

Local clock offset: -2.94 ms

Remote clock offset: 7.465 ms

Below is generated by plot.py at 2018-06-18 19:43:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.25 Mbit/s

95th percentile per-packet one-way delay: 112.196 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 45.00 Mbit/s

95th percentile per-packet one-way delay: 114.554 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 24.56 Mbit/s

95th percentile per-packet one-way delay: 111.887 ms

Loss rate: 2.46%

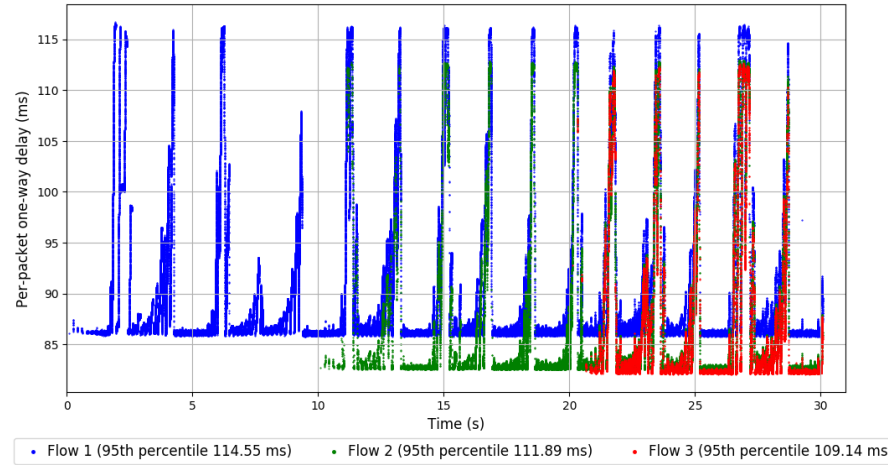
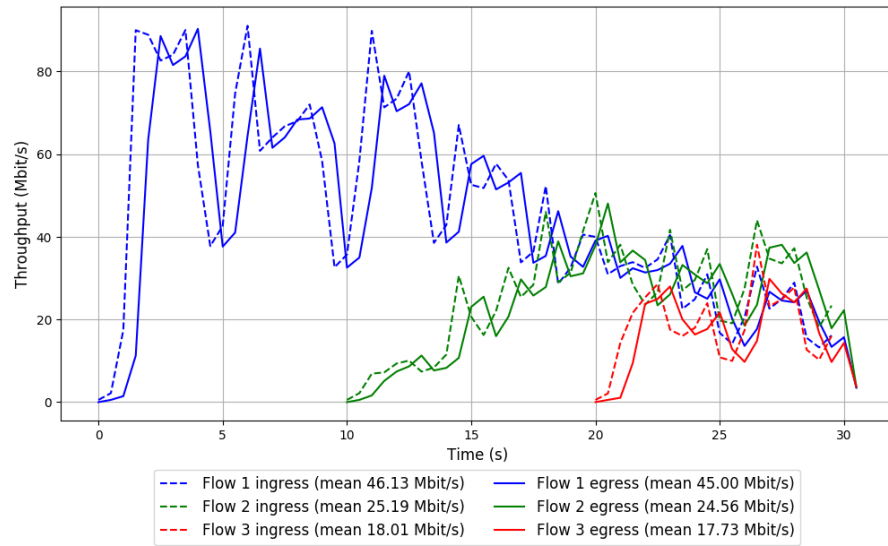
-- Flow 3:

Average throughput: 17.73 Mbit/s

95th percentile per-packet one-way delay: 109.143 ms

Loss rate: 1.66%

Run 7: Report of Copa — Data Link

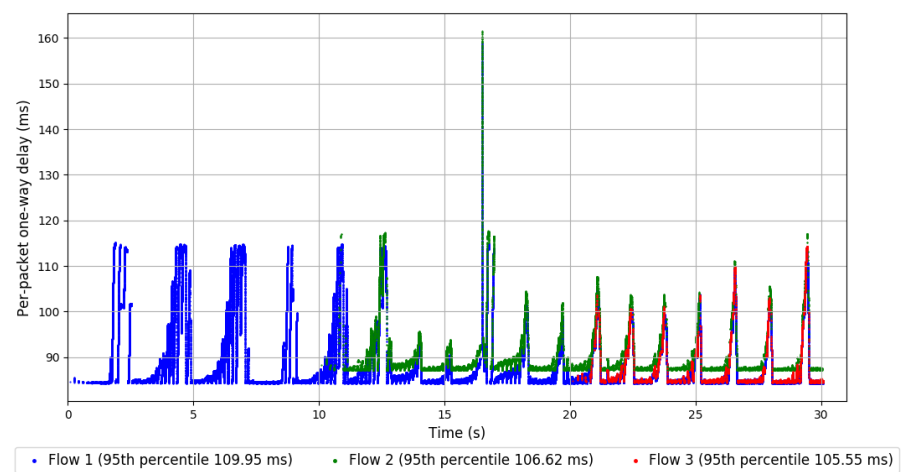
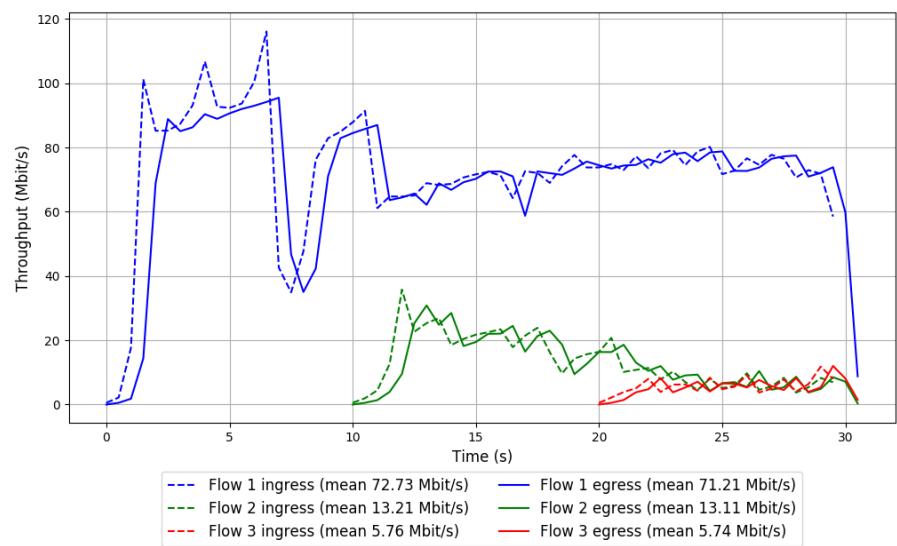


Run 8: Statistics of Copa

Start at: 2018-06-18 18:38:48
End at: 2018-06-18 18:39:18
Local clock offset: -2.887 ms
Remote clock offset: 13.179 ms

Below is generated by plot.py at 2018-06-18 19:44:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.83 Mbit/s
95th percentile per-packet one-way delay: 109.474 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 71.21 Mbit/s
95th percentile per-packet one-way delay: 109.949 ms
Loss rate: 2.09%
-- Flow 2:
Average throughput: 13.11 Mbit/s
95th percentile per-packet one-way delay: 106.618 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 5.74 Mbit/s
95th percentile per-packet one-way delay: 105.545 ms
Loss rate: 0.42%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-06-18 18:59:01

End at: 2018-06-18 18:59:31

Local clock offset: -2.919 ms

Remote clock offset: 3.833 ms

Below is generated by plot.py at 2018-06-18 19:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.67 Mbit/s

95th percentile per-packet one-way delay: 96.632 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 79.85 Mbit/s

95th percentile per-packet one-way delay: 97.306 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 7.14 Mbit/s

95th percentile per-packet one-way delay: 91.855 ms

Loss rate: 0.00%

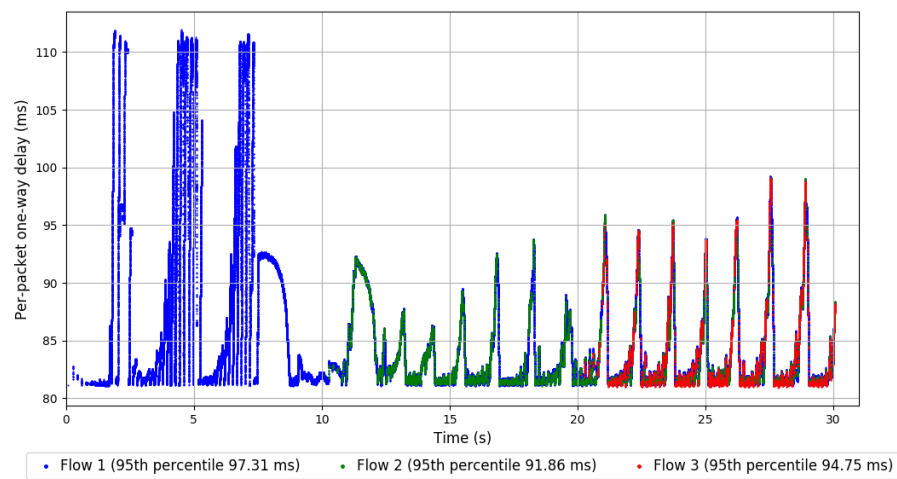
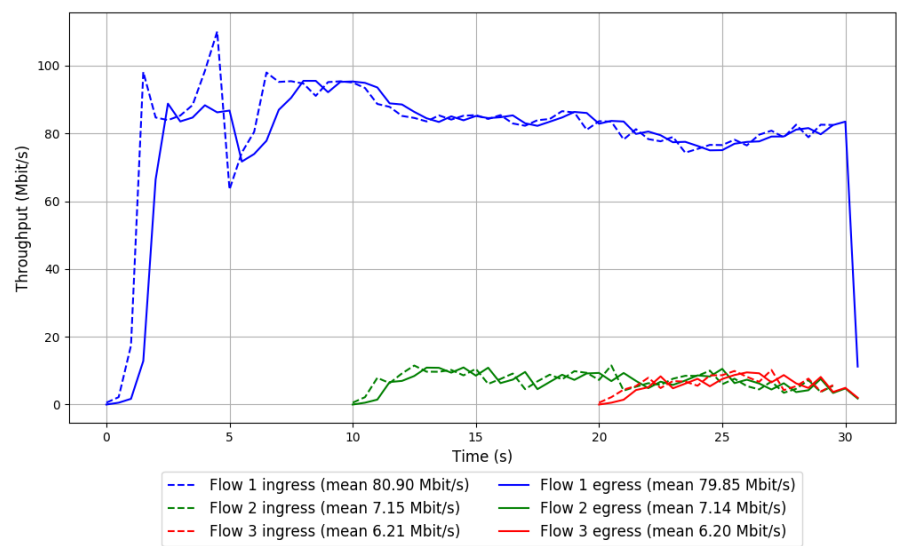
-- Flow 3:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 94.753 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-06-18 19:19:04

End at: 2018-06-18 19:19:34

Local clock offset: -1.887 ms

Remote clock offset: 7.276 ms

Below is generated by plot.py at 2018-06-18 19:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.59 Mbit/s

95th percentile per-packet one-way delay: 108.361 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 57.79 Mbit/s

95th percentile per-packet one-way delay: 108.856 ms

Loss rate: 2.50%

-- Flow 2:

Average throughput: 16.81 Mbit/s

95th percentile per-packet one-way delay: 106.515 ms

Loss rate: 0.88%

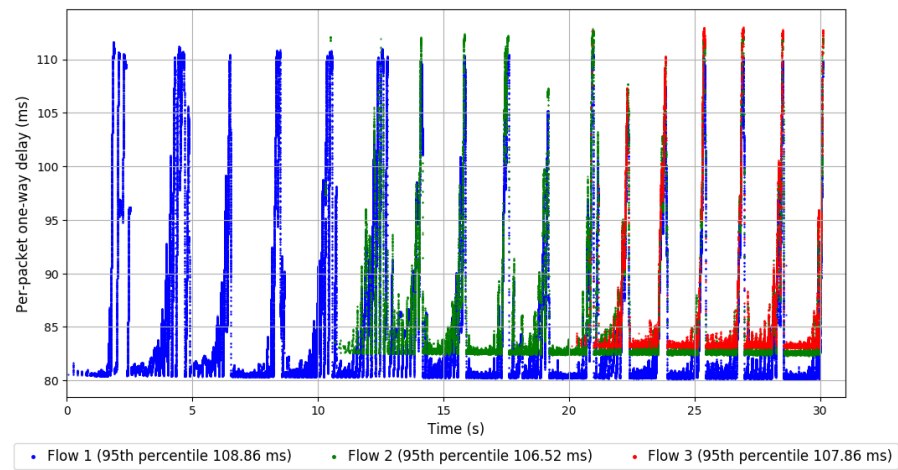
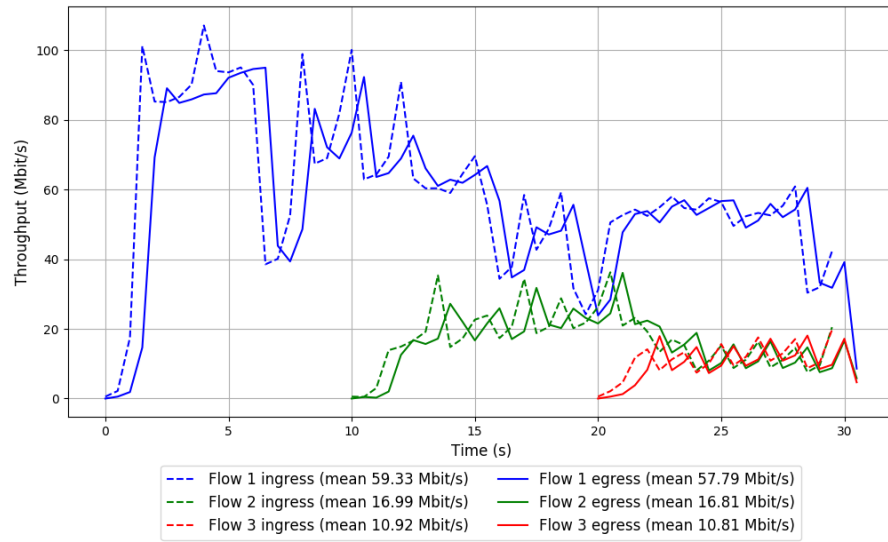
-- Flow 3:

Average throughput: 10.81 Mbit/s

95th percentile per-packet one-way delay: 107.859 ms

Loss rate: 0.72%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-06-18 16:31:01

End at: 2018-06-18 16:31:31

Local clock offset: -2.849 ms

Remote clock offset: 8.588 ms

Below is generated by plot.py at 2018-06-18 19:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.25 Mbit/s

95th percentile per-packet one-way delay: 113.127 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 55.26 Mbit/s

95th percentile per-packet one-way delay: 111.924 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 36.21 Mbit/s

95th percentile per-packet one-way delay: 114.100 ms

Loss rate: 0.73%

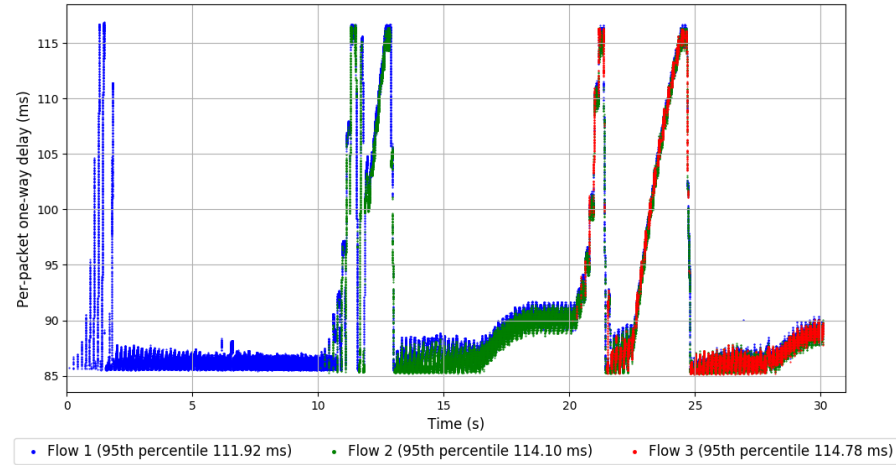
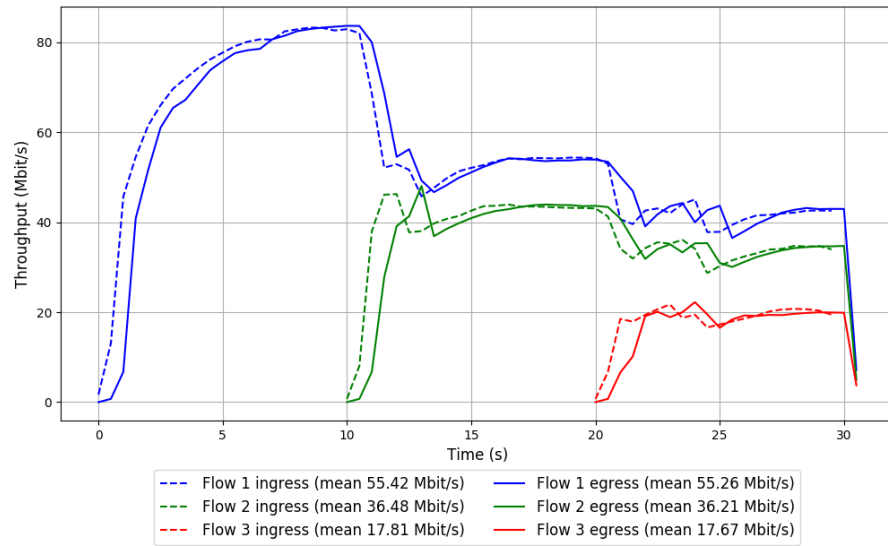
-- Flow 3:

Average throughput: 17.67 Mbit/s

95th percentile per-packet one-way delay: 114.781 ms

Loss rate: 0.84%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-06-18 16:51:03

End at: 2018-06-18 16:51:33

Local clock offset: -2.907 ms

Remote clock offset: 4.9 ms

Below is generated by plot.py at 2018-06-18 19:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.30 Mbit/s

95th percentile per-packet one-way delay: 111.363 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 46.59 Mbit/s

95th percentile per-packet one-way delay: 111.114 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 29.81 Mbit/s

95th percentile per-packet one-way delay: 112.352 ms

Loss rate: 2.09%

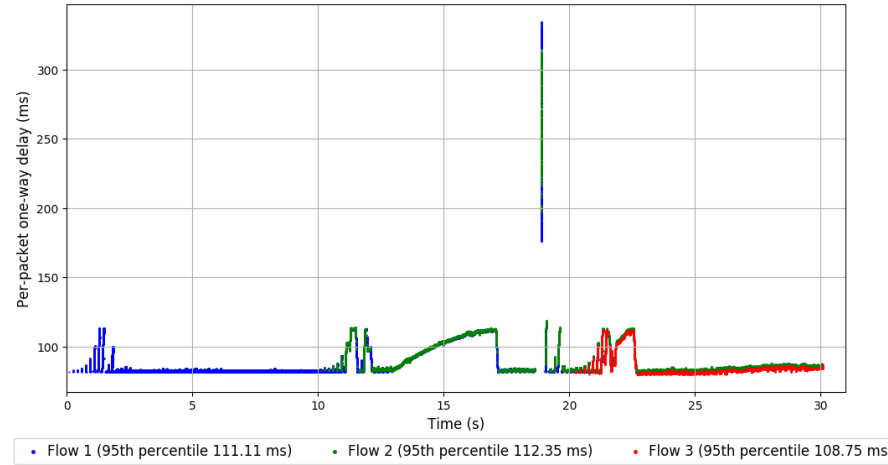
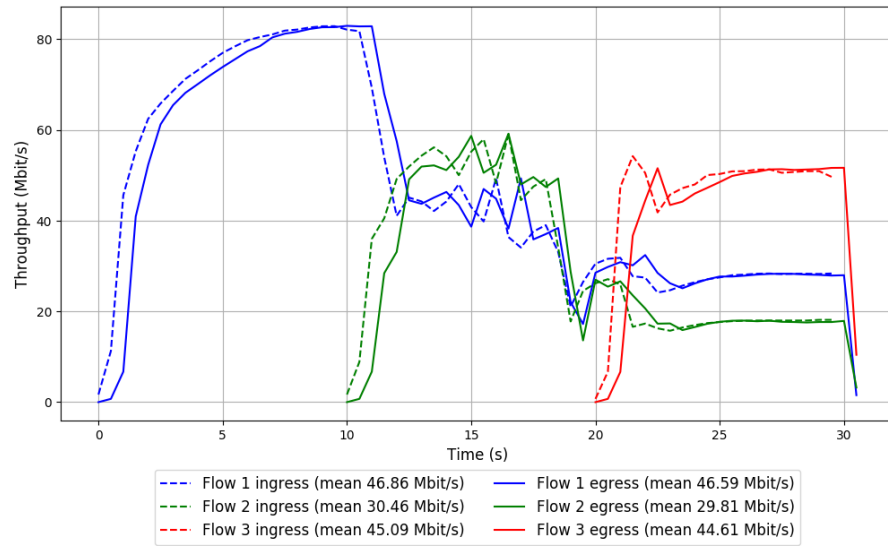
-- Flow 3:

Average throughput: 44.61 Mbit/s

95th percentile per-packet one-way delay: 108.745 ms

Loss rate: 1.01%

Run 2: Report of TCP Cubic — Data Link

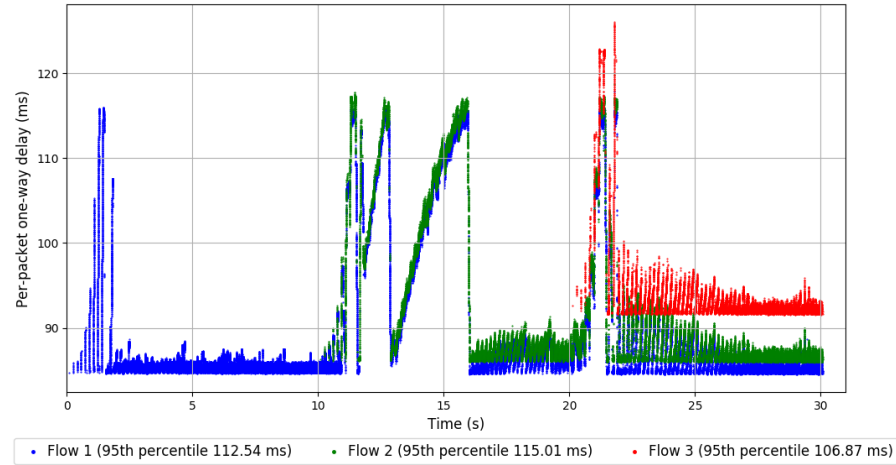
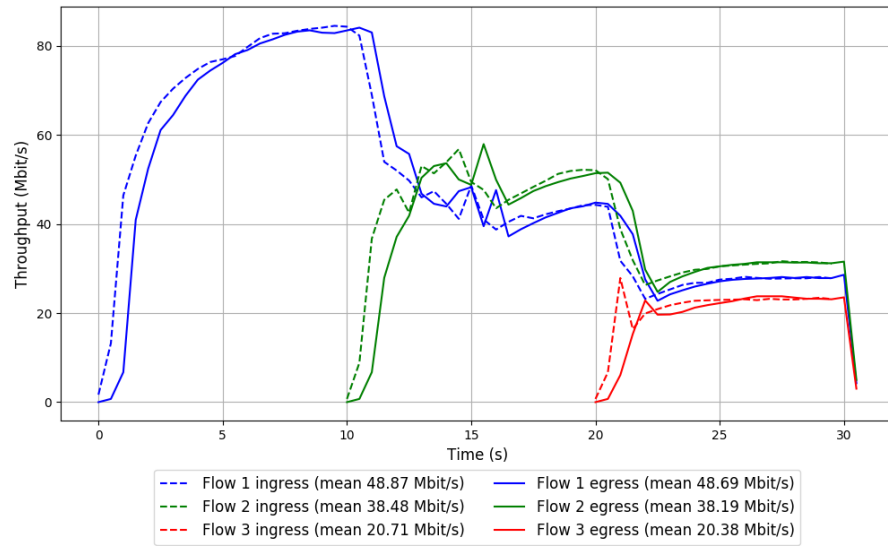


Run 3: Statistics of TCP Cubic

Start at: 2018-06-18 17:11:05
End at: 2018-06-18 17:11:35
Local clock offset: -2.809 ms
Remote clock offset: 15.555 ms

Below is generated by plot.py at 2018-06-18 19:44:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.89 Mbit/s
95th percentile per-packet one-way delay: 113.980 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 48.69 Mbit/s
95th percentile per-packet one-way delay: 112.538 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 38.19 Mbit/s
95th percentile per-packet one-way delay: 115.013 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 20.38 Mbit/s
95th percentile per-packet one-way delay: 106.869 ms
Loss rate: 1.62%

Run 3: Report of TCP Cubic — Data Link

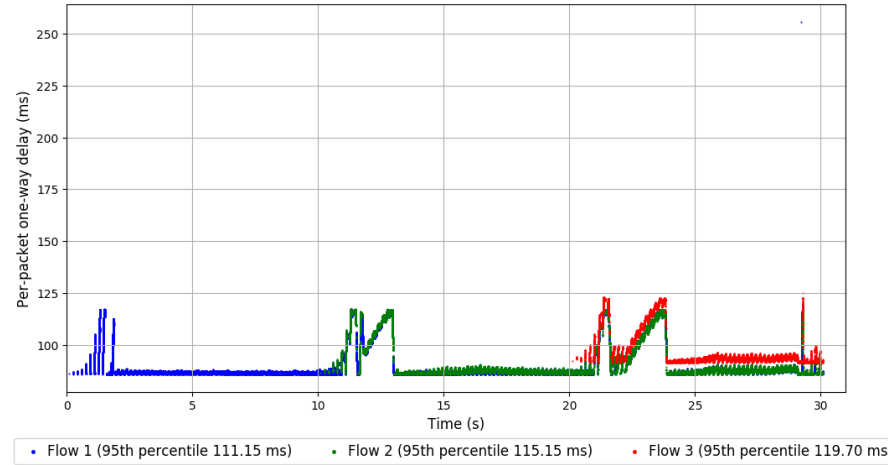
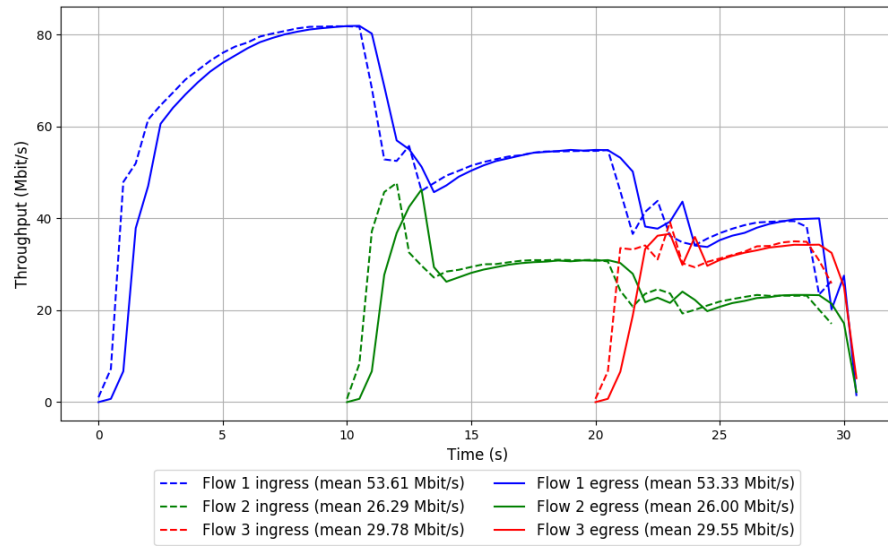


Run 4: Statistics of TCP Cubic

Start at: 2018-06-18 17:31:09
End at: 2018-06-18 17:31:39
Local clock offset: -2.678 ms
Remote clock offset: 19.051 ms

Below is generated by plot.py at 2018-06-18 19:44:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.47 Mbit/s
95th percentile per-packet one-way delay: 114.030 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 53.33 Mbit/s
95th percentile per-packet one-way delay: 111.151 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 26.00 Mbit/s
95th percentile per-packet one-way delay: 115.154 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 29.55 Mbit/s
95th percentile per-packet one-way delay: 119.704 ms
Loss rate: 0.77%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-06-18 17:51:11

End at: 2018-06-18 17:51:42

Local clock offset: -2.717 ms

Remote clock offset: 9.413 ms

Below is generated by plot.py at 2018-06-18 19:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.53 Mbit/s

95th percentile per-packet one-way delay: 115.751 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 41.72 Mbit/s

95th percentile per-packet one-way delay: 114.756 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 39.50 Mbit/s

95th percentile per-packet one-way delay: 113.867 ms

Loss rate: 0.98%

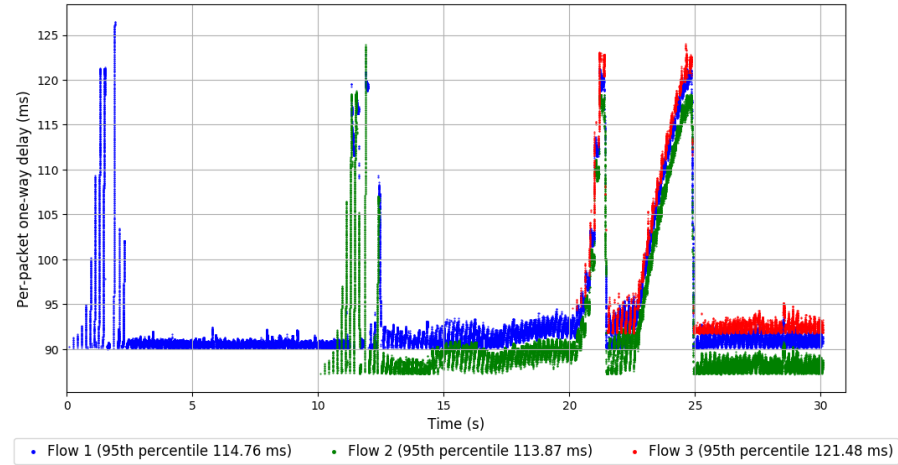
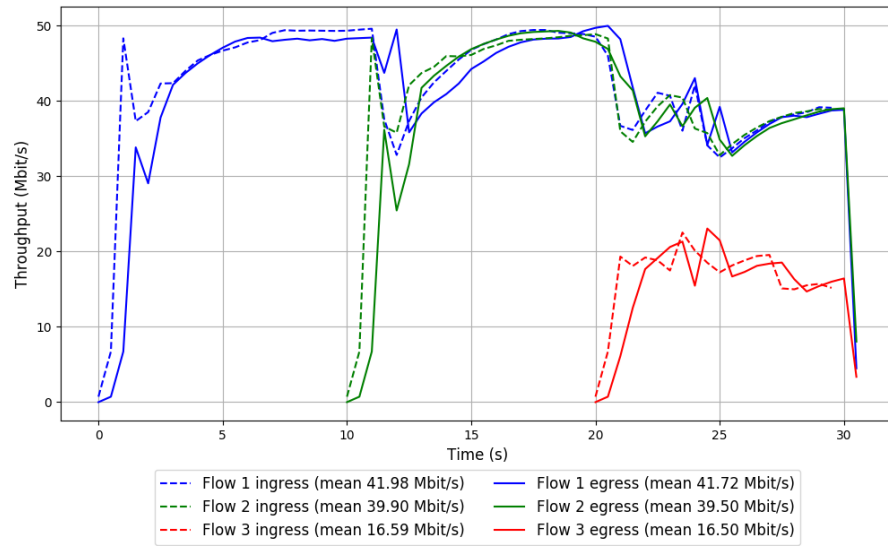
-- Flow 3:

Average throughput: 16.50 Mbit/s

95th percentile per-packet one-way delay: 121.485 ms

Loss rate: 0.57%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-06-18 18:11:24

End at: 2018-06-18 18:11:54

Local clock offset: -2.818 ms

Remote clock offset: 5.615 ms

Below is generated by plot.py at 2018-06-18 19:45:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.29 Mbit/s

95th percentile per-packet one-way delay: 109.549 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 46.62 Mbit/s

95th percentile per-packet one-way delay: 108.498 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 27.84 Mbit/s

95th percentile per-packet one-way delay: 109.483 ms

Loss rate: 0.73%

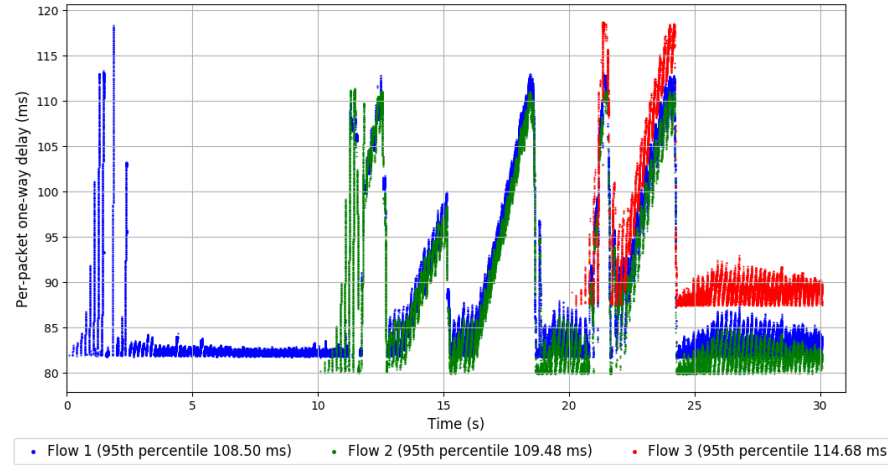
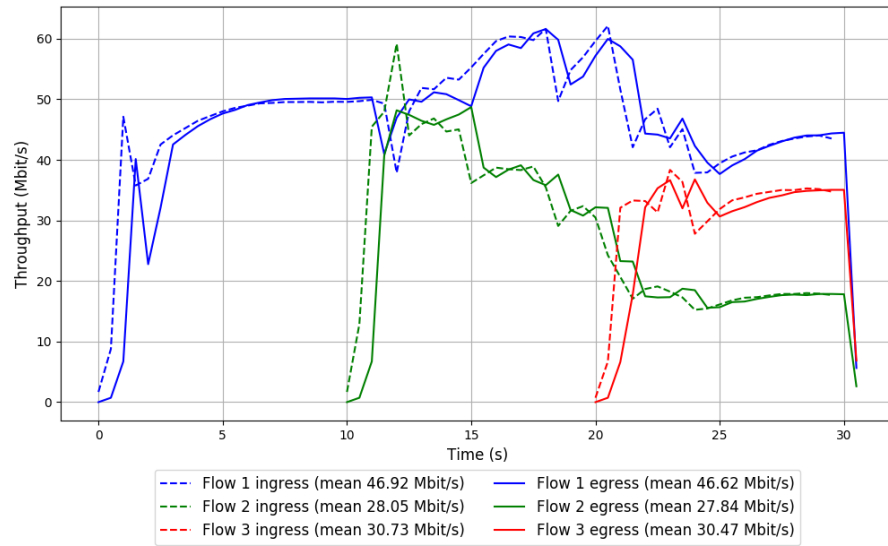
-- Flow 3:

Average throughput: 30.47 Mbit/s

95th percentile per-packet one-way delay: 114.680 ms

Loss rate: 0.87%

Run 6: Report of TCP Cubic — Data Link

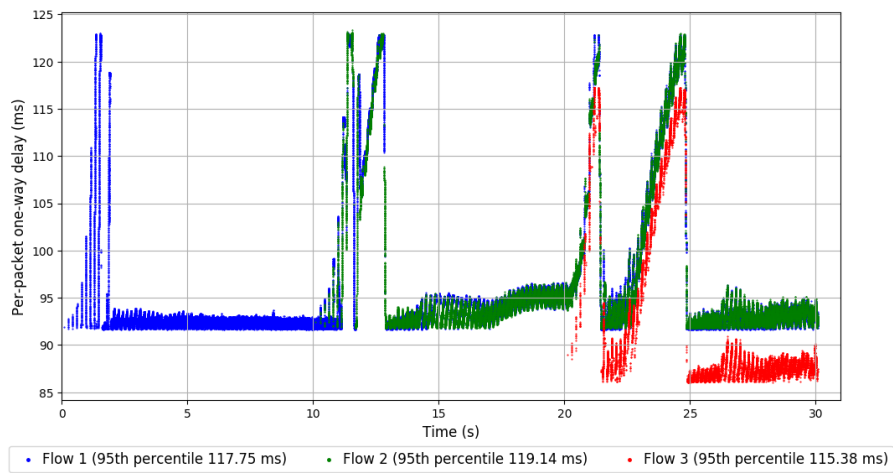
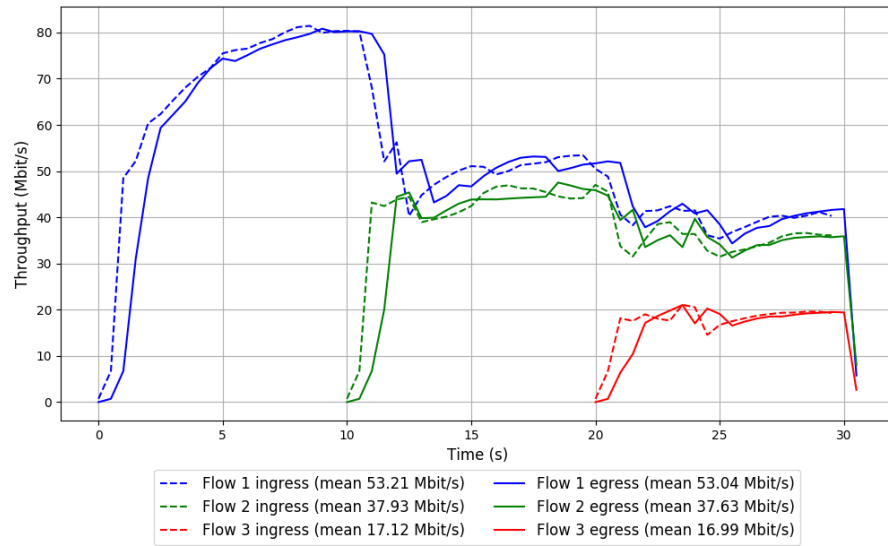


Run 7: Statistics of TCP Cubic

Start at: 2018-06-18 18:31:24
End at: 2018-06-18 18:31:54
Local clock offset: -2.939 ms
Remote clock offset: 12.64 ms

Below is generated by plot.py at 2018-06-18 19:45:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.75 Mbit/s
95th percentile per-packet one-way delay: 118.002 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 53.04 Mbit/s
95th percentile per-packet one-way delay: 117.751 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 119.139 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 16.99 Mbit/s
95th percentile per-packet one-way delay: 115.380 ms
Loss rate: 0.81%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-06-18 18:51:27

End at: 2018-06-18 18:51:57

Local clock offset: -2.829 ms

Remote clock offset: 5.793 ms

Below is generated by plot.py at 2018-06-18 19:45:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.33 Mbit/s

95th percentile per-packet one-way delay: 111.925 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 45.52 Mbit/s

95th percentile per-packet one-way delay: 110.886 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 28.48 Mbit/s

95th percentile per-packet one-way delay: 114.232 ms

Loss rate: 0.98%

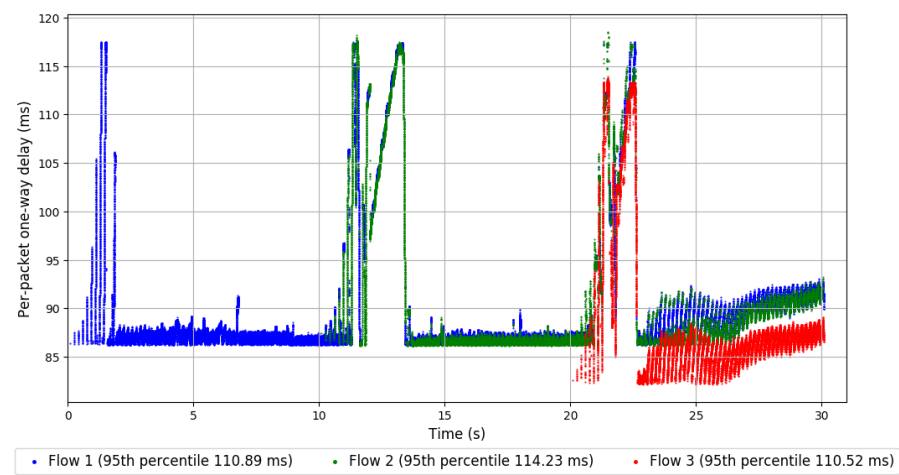
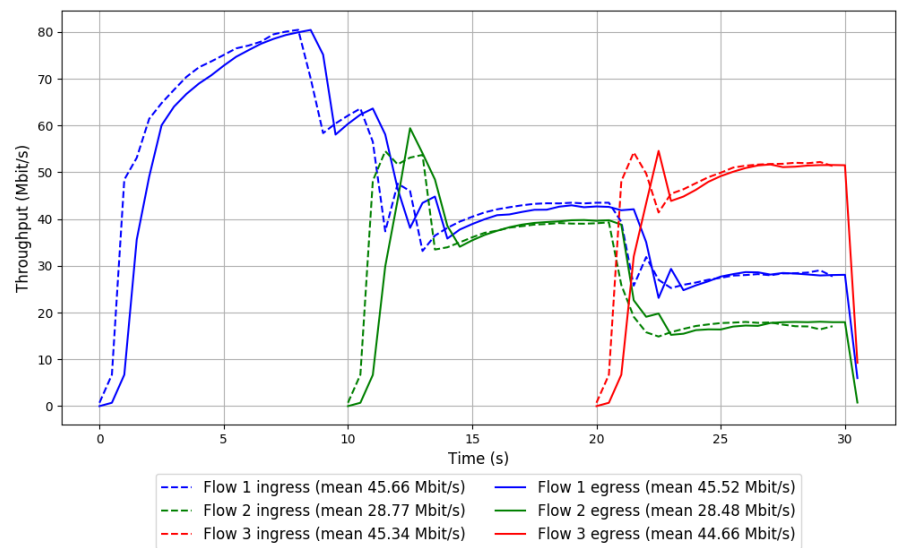
-- Flow 3:

Average throughput: 44.66 Mbit/s

95th percentile per-packet one-way delay: 110.524 ms

Loss rate: 1.46%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-18 19:11:38

End at: 2018-06-18 19:12:08

Local clock offset: -2.201 ms

Remote clock offset: 3.089 ms

Below is generated by plot.py at 2018-06-18 19:45:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.59 Mbit/s

95th percentile per-packet one-way delay: 107.581 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 58.60 Mbit/s

95th percentile per-packet one-way delay: 106.333 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 29.91 Mbit/s

95th percentile per-packet one-way delay: 109.502 ms

Loss rate: 0.67%

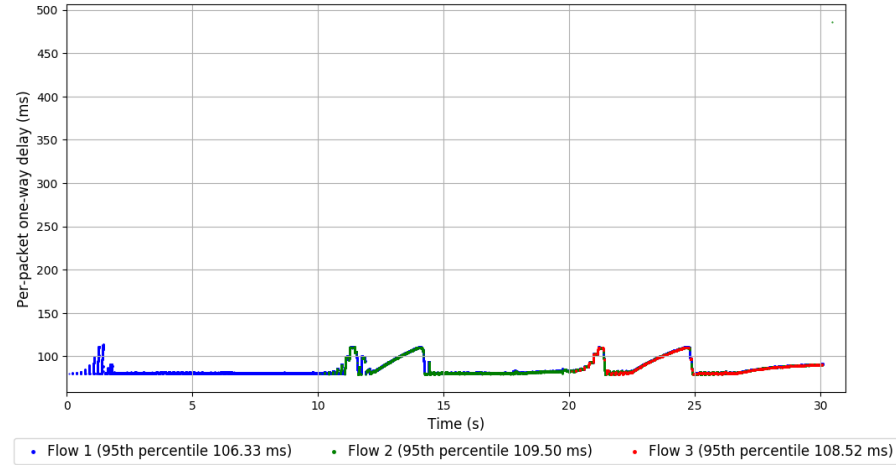
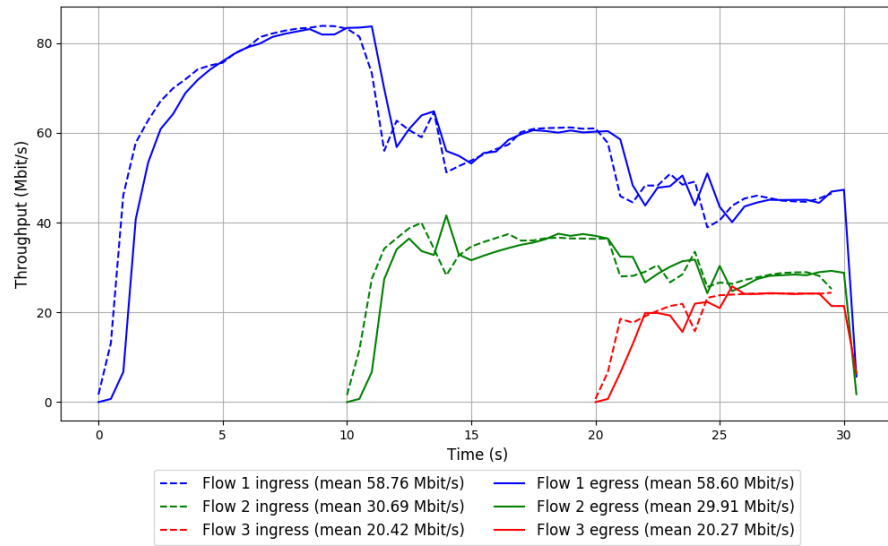
-- Flow 3:

Average throughput: 20.27 Mbit/s

95th percentile per-packet one-way delay: 108.524 ms

Loss rate: 0.63%

Run 9: Report of TCP Cubic — Data Link

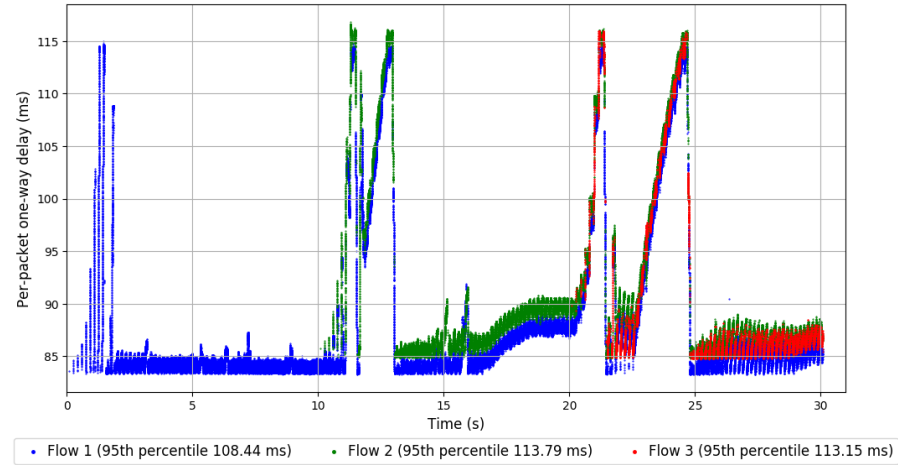
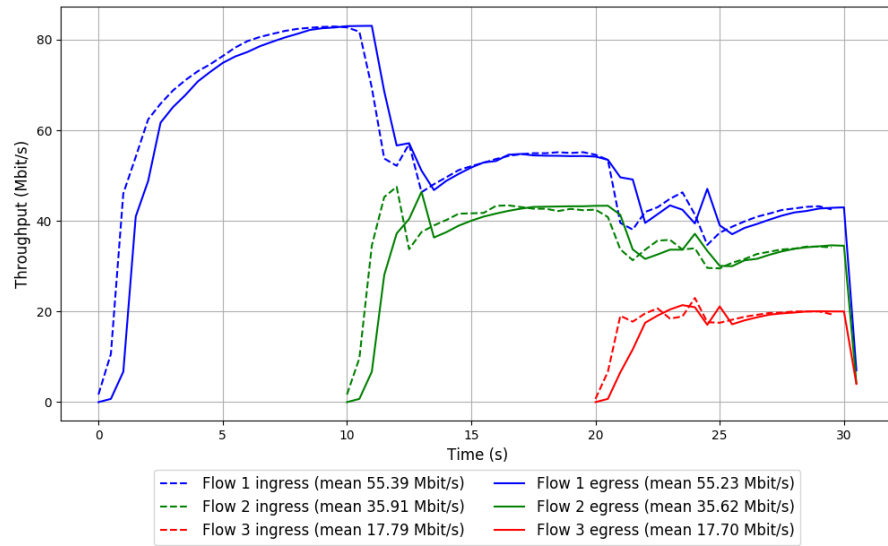


Run 10: Statistics of TCP Cubic

Start at: 2018-06-18 19:31:39
End at: 2018-06-18 19:32:09
Local clock offset: -1.594 ms
Remote clock offset: 14.288 ms

Below is generated by plot.py at 2018-06-18 19:45:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 111.243 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 55.23 Mbit/s
95th percentile per-packet one-way delay: 108.436 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 35.62 Mbit/s
95th percentile per-packet one-way delay: 113.791 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 17.70 Mbit/s
95th percentile per-packet one-way delay: 113.147 ms
Loss rate: 0.54%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-06-18 16:20:59

End at: 2018-06-18 16:21:29

Local clock offset: -2.7 ms

Remote clock offset: 0.682 ms

Below is generated by plot.py at 2018-06-18 19:46:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.29 Mbit/s

95th percentile per-packet one-way delay: 110.164 ms

Loss rate: 23.66%

-- Flow 1:

Average throughput: 54.53 Mbit/s

95th percentile per-packet one-way delay: 109.166 ms

Loss rate: 20.21%

-- Flow 2:

Average throughput: 53.18 Mbit/s

95th percentile per-packet one-way delay: 109.480 ms

Loss rate: 29.34%

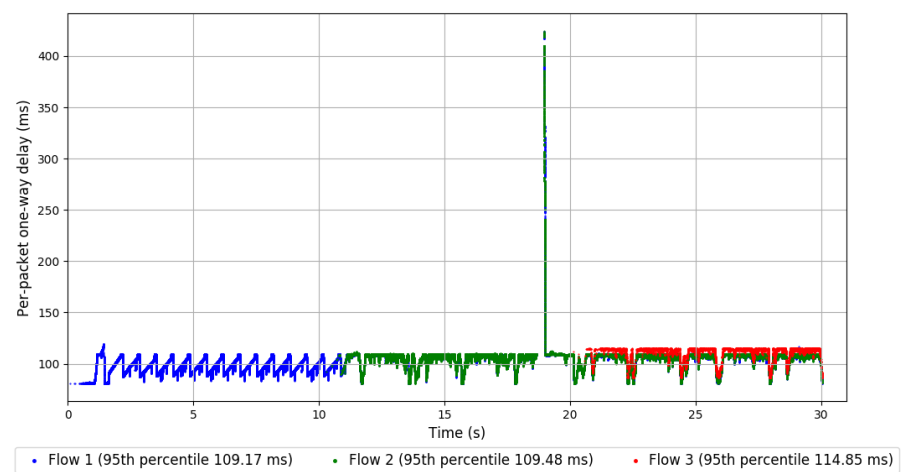
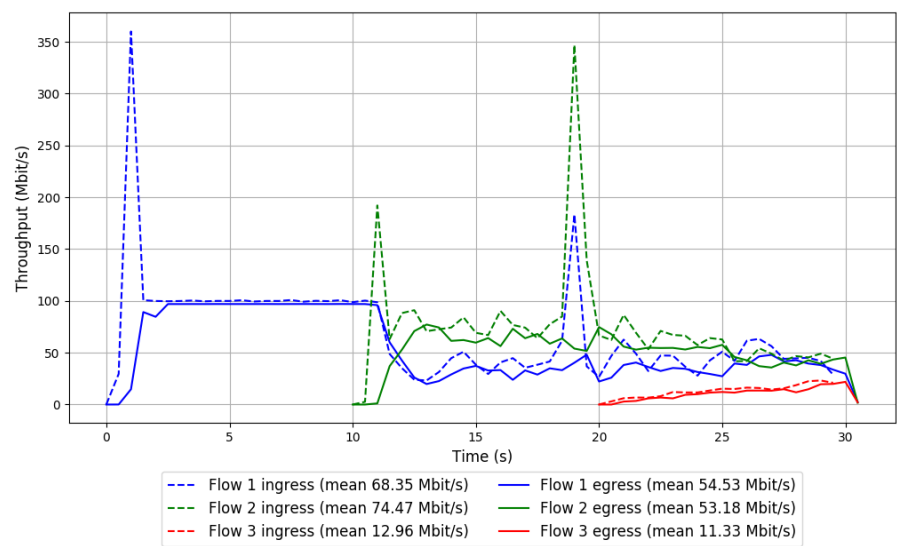
-- Flow 3:

Average throughput: 11.33 Mbit/s

95th percentile per-packet one-way delay: 114.848 ms

Loss rate: 12.83%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-06-18 16:41:02

End at: 2018-06-18 16:41:32

Local clock offset: -2.914 ms

Remote clock offset: 8.839 ms

Below is generated by plot.py at 2018-06-18 19:46:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.28 Mbit/s

95th percentile per-packet one-way delay: 119.157 ms

Loss rate: 20.37%

-- Flow 1:

Average throughput: 54.14 Mbit/s

95th percentile per-packet one-way delay: 114.235 ms

Loss rate: 18.03%

-- Flow 2:

Average throughput: 45.22 Mbit/s

95th percentile per-packet one-way delay: 112.745 ms

Loss rate: 23.76%

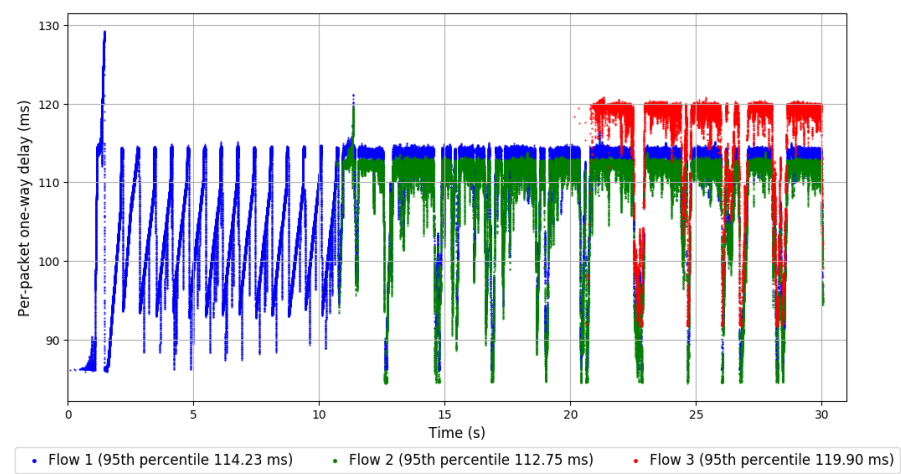
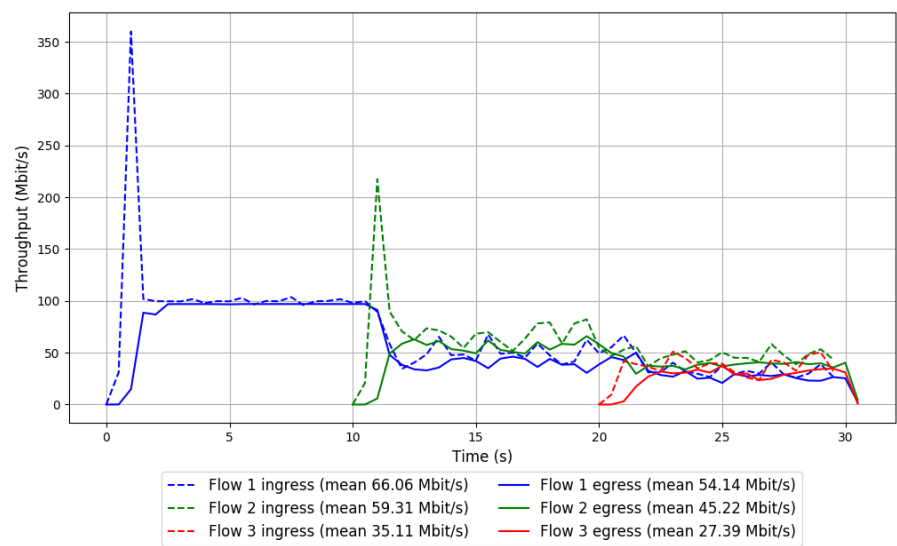
-- Flow 3:

Average throughput: 27.39 Mbit/s

95th percentile per-packet one-way delay: 119.904 ms

Loss rate: 22.16%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-06-18 17:01:03

End at: 2018-06-18 17:01:33

Local clock offset: -3.041 ms

Remote clock offset: 6.007 ms

Below is generated by plot.py at 2018-06-18 19:46:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.95 Mbit/s

95th percentile per-packet one-way delay: 114.606 ms

Loss rate: 19.50%

-- Flow 1:

Average throughput: 57.04 Mbit/s

95th percentile per-packet one-way delay: 114.712 ms

Loss rate: 18.49%

-- Flow 2:

Average throughput: 40.95 Mbit/s

95th percentile per-packet one-way delay: 109.257 ms

Loss rate: 20.80%

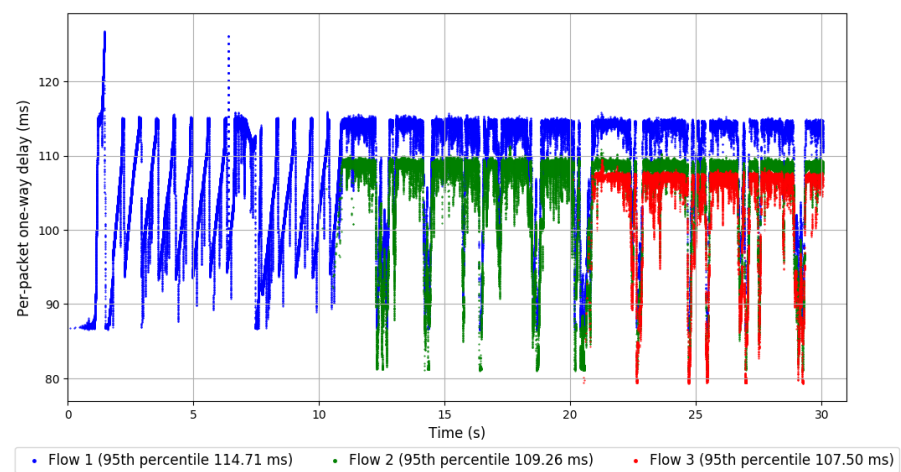
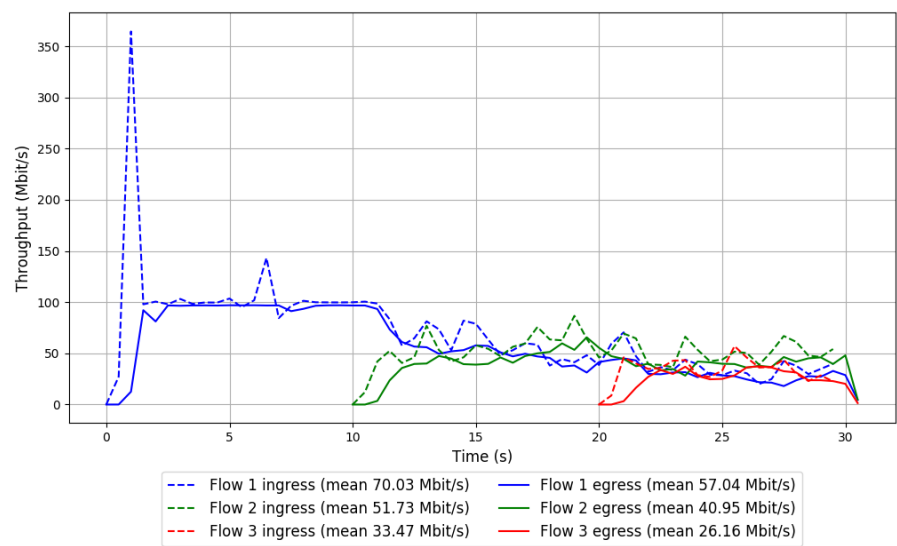
-- Flow 3:

Average throughput: 26.16 Mbit/s

95th percentile per-packet one-way delay: 107.503 ms

Loss rate: 21.82%

Run 3: Report of FillP — Data Link

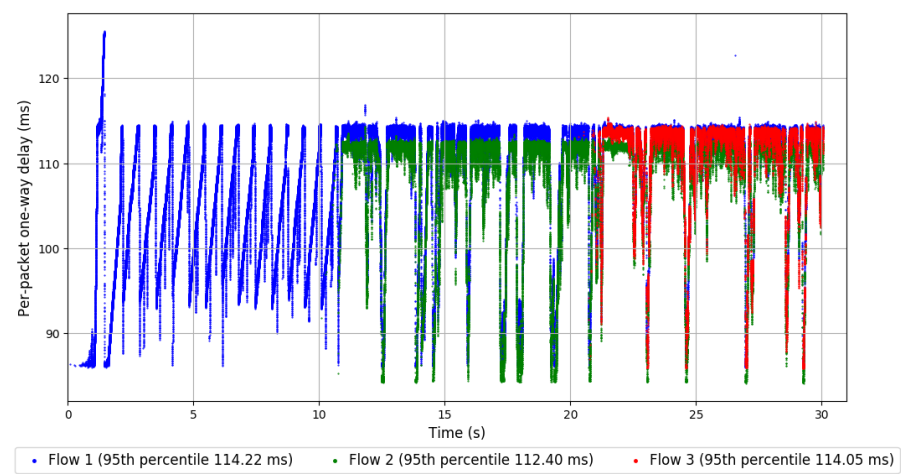
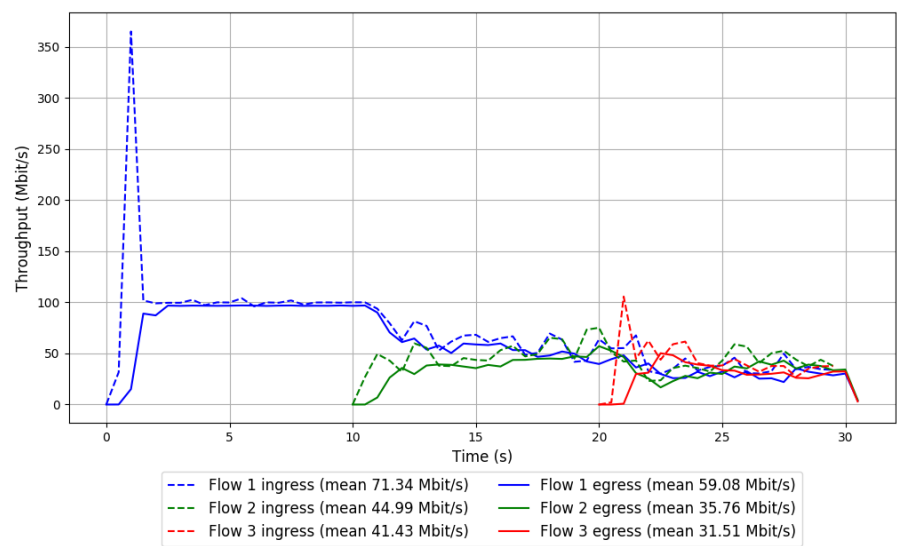


Run 4: Statistics of FillP

Start at: 2018-06-18 17:21:07
End at: 2018-06-18 17:21:37
Local clock offset: -2.792 ms
Remote clock offset: 17.733 ms

Below is generated by plot.py at 2018-06-18 19:46:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.14 Mbit/s
95th percentile per-packet one-way delay: 114.158 ms
Loss rate: 18.98%
-- Flow 1:
Average throughput: 59.08 Mbit/s
95th percentile per-packet one-way delay: 114.224 ms
Loss rate: 17.11%
-- Flow 2:
Average throughput: 35.76 Mbit/s
95th percentile per-packet one-way delay: 112.402 ms
Loss rate: 20.44%
-- Flow 3:
Average throughput: 31.51 Mbit/s
95th percentile per-packet one-way delay: 114.049 ms
Loss rate: 25.46%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-06-18 17:41:11

End at: 2018-06-18 17:41:41

Local clock offset: -2.7 ms

Remote clock offset: 7.471 ms

Below is generated by plot.py at 2018-06-18 19:46:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.27 Mbit/s

95th percentile per-packet one-way delay: 109.408 ms

Loss rate: 19.42%

-- Flow 1:

Average throughput: 59.35 Mbit/s

95th percentile per-packet one-way delay: 109.478 ms

Loss rate: 17.83%

-- Flow 2:

Average throughput: 46.30 Mbit/s

95th percentile per-packet one-way delay: 108.356 ms

Loss rate: 22.80%

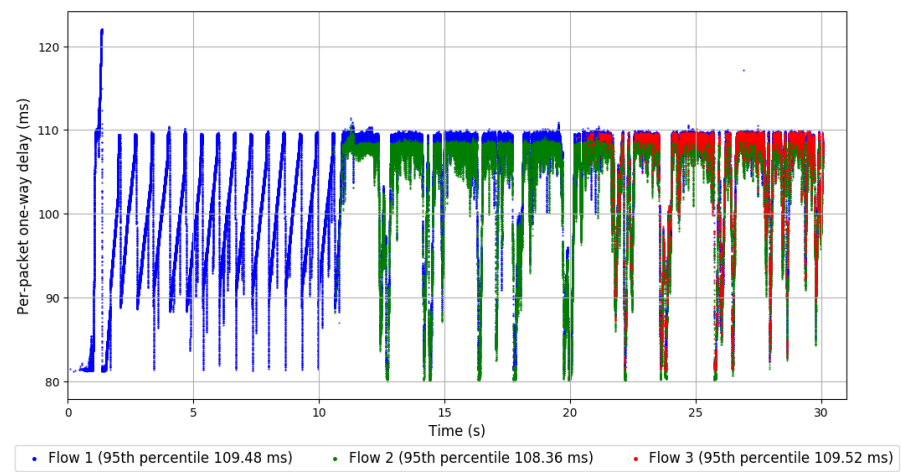
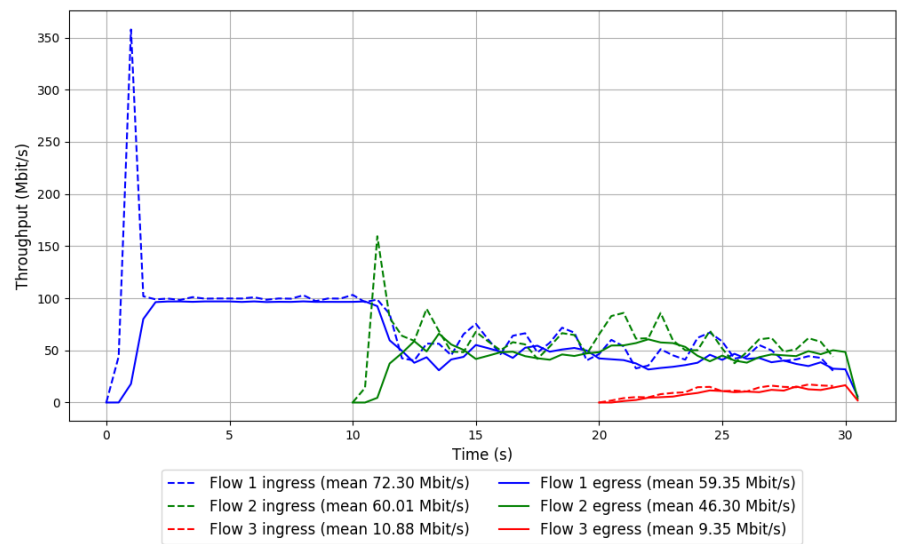
-- Flow 3:

Average throughput: 9.35 Mbit/s

95th percentile per-packet one-way delay: 109.515 ms

Loss rate: 13.95%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-06-18 18:01:23

End at: 2018-06-18 18:01:53

Local clock offset: -2.808 ms

Remote clock offset: 4.208 ms

Below is generated by plot.py at 2018-06-18 19:46:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.29 Mbit/s

95th percentile per-packet one-way delay: 110.281 ms

Loss rate: 20.30%

-- Flow 1:

Average throughput: 54.70 Mbit/s

95th percentile per-packet one-way delay: 110.299 ms

Loss rate: 18.05%

-- Flow 2:

Average throughput: 44.06 Mbit/s

95th percentile per-packet one-way delay: 110.241 ms

Loss rate: 23.90%

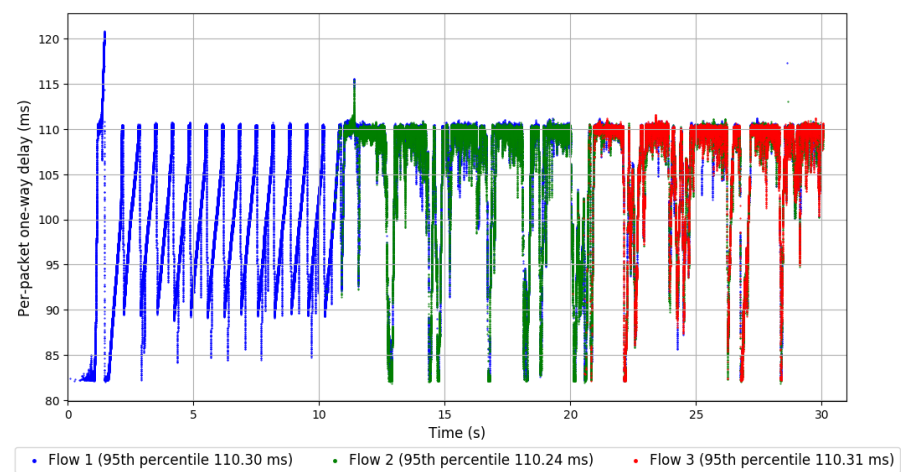
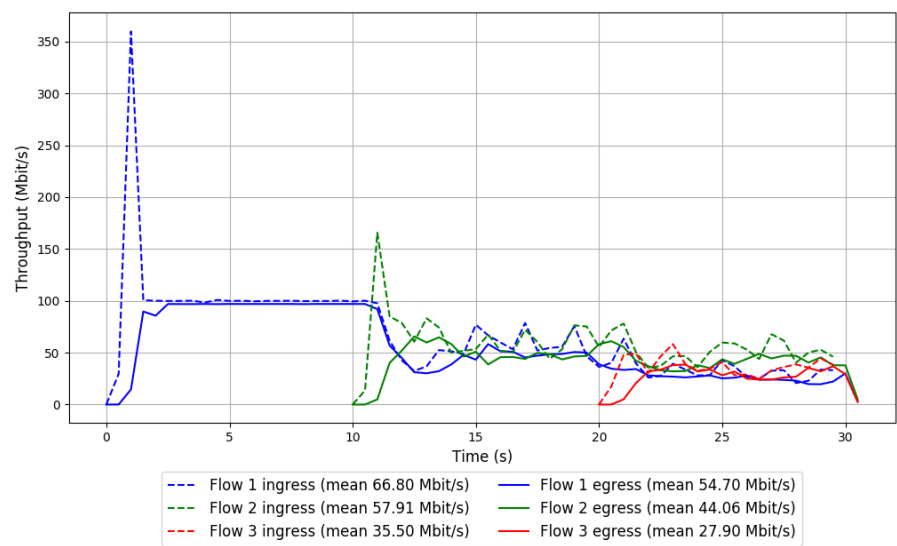
-- Flow 3:

Average throughput: 27.90 Mbit/s

95th percentile per-packet one-way delay: 110.312 ms

Loss rate: 21.25%

Run 6: Report of FillP — Data Link

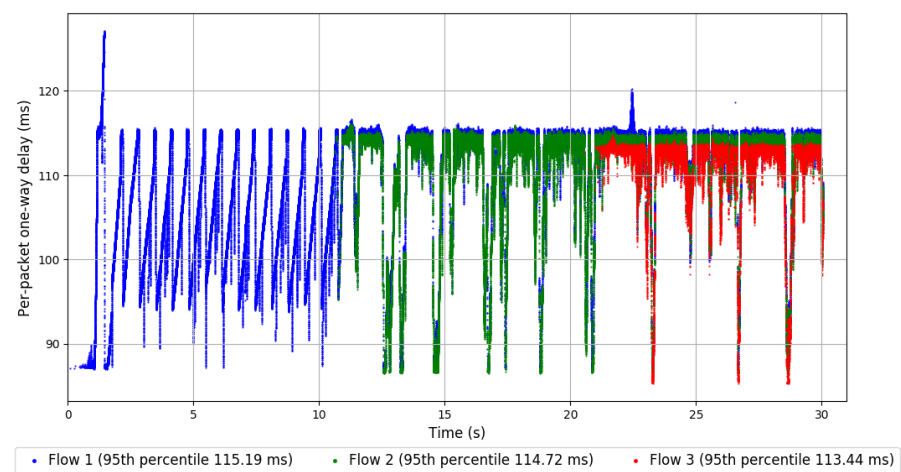
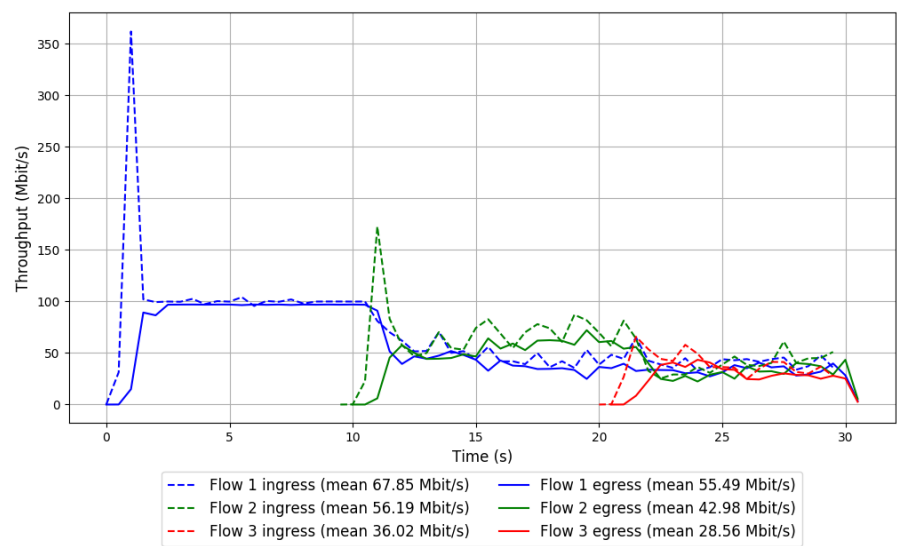


Run 7: Statistics of FillP

Start at: 2018-06-18 18:21:23
End at: 2018-06-18 18:21:53
Local clock offset: -2.927 ms
Remote clock offset: 12.832 ms

Below is generated by plot.py at 2018-06-18 19:46:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.20 Mbit/s
95th percentile per-packet one-way delay: 115.088 ms
Loss rate: 20.44%
-- Flow 1:
Average throughput: 55.49 Mbit/s
95th percentile per-packet one-way delay: 115.194 ms
Loss rate: 18.15%
-- Flow 2:
Average throughput: 42.98 Mbit/s
95th percentile per-packet one-way delay: 114.717 ms
Loss rate: 23.45%
-- Flow 3:
Average throughput: 28.56 Mbit/s
95th percentile per-packet one-way delay: 113.442 ms
Loss rate: 23.99%

Run 7: Report of FillP — Data Link

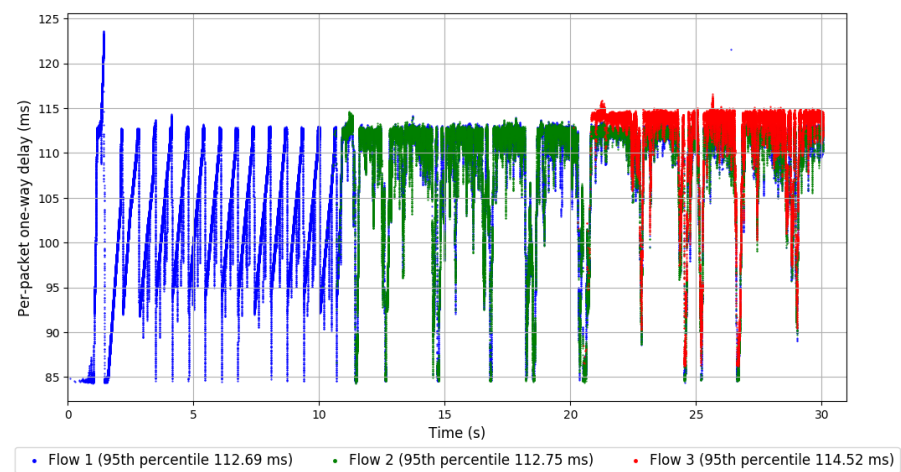
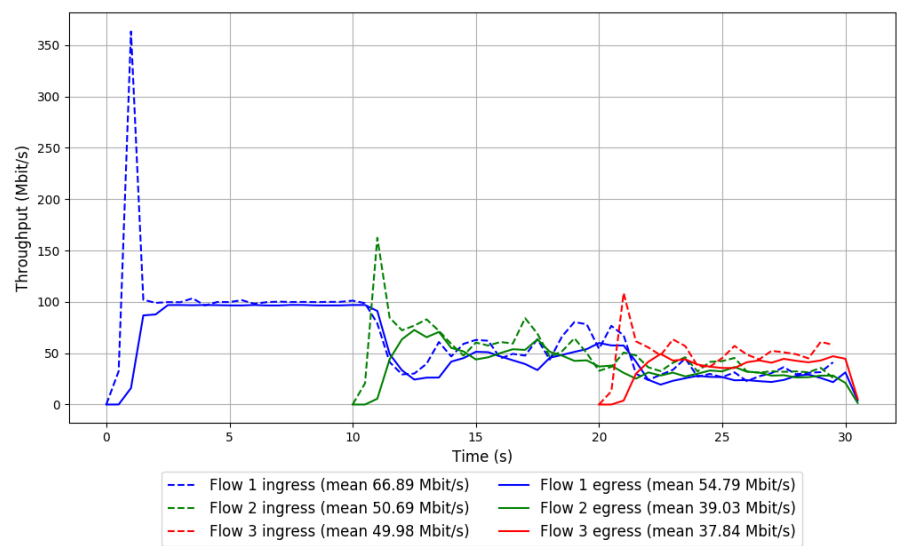


Run 8: Statistics of FillP

Start at: 2018-06-18 18:41:27
End at: 2018-06-18 18:41:57
Local clock offset: -2.876 ms
Remote clock offset: 13.061 ms

Below is generated by plot.py at 2018-06-18 19:46:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.31 Mbit/s
95th percentile per-packet one-way delay: 114.073 ms
Loss rate: 20.32%
-- Flow 1:
Average throughput: 54.79 Mbit/s
95th percentile per-packet one-way delay: 112.688 ms
Loss rate: 18.02%
-- Flow 2:
Average throughput: 39.03 Mbit/s
95th percentile per-packet one-way delay: 112.749 ms
Loss rate: 22.93%
-- Flow 3:
Average throughput: 37.84 Mbit/s
95th percentile per-packet one-way delay: 114.521 ms
Loss rate: 24.28%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-06-18 19:01:40

End at: 2018-06-18 19:02:10

Local clock offset: -2.853 ms

Remote clock offset: 3.693 ms

Below is generated by plot.py at 2018-06-18 19:47:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.57 Mbit/s

95th percentile per-packet one-way delay: 110.131 ms

Loss rate: 20.40%

-- Flow 1:

Average throughput: 58.84 Mbit/s

95th percentile per-packet one-way delay: 109.148 ms

Loss rate: 18.20%

-- Flow 2:

Average throughput: 35.79 Mbit/s

95th percentile per-packet one-way delay: 110.353 ms

Loss rate: 24.73%

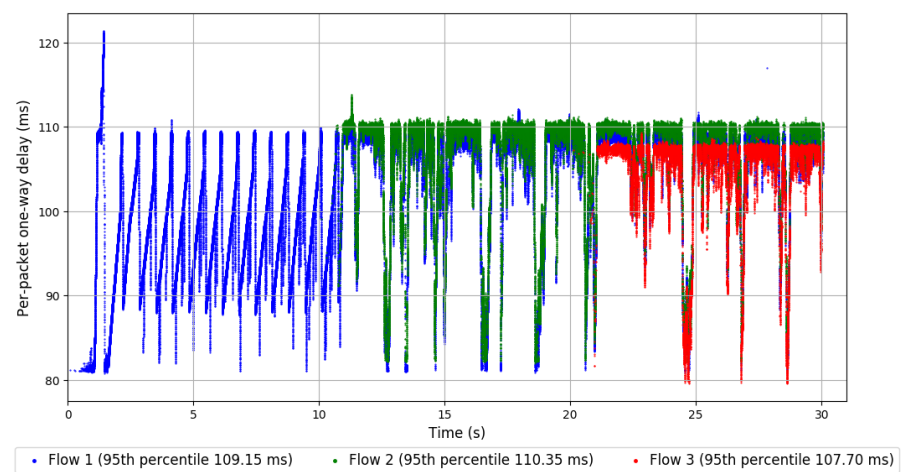
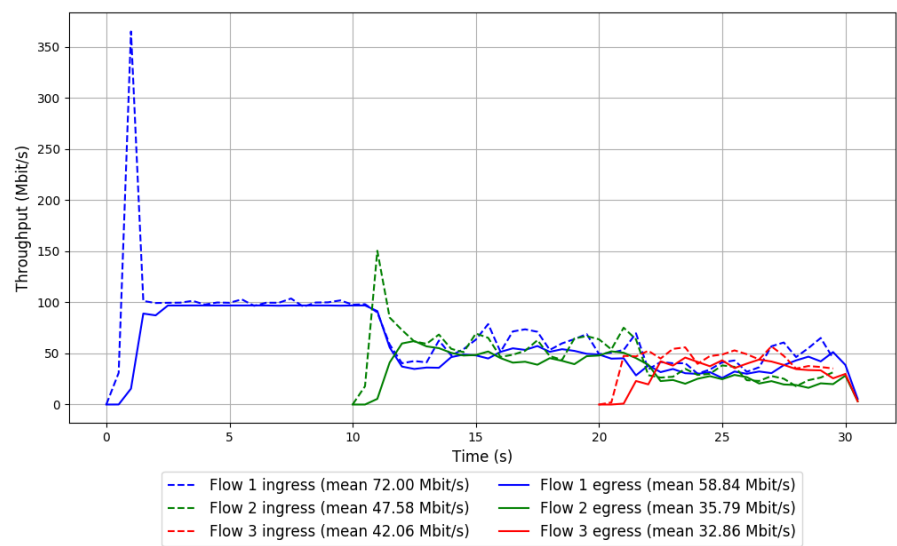
-- Flow 3:

Average throughput: 32.86 Mbit/s

95th percentile per-packet one-way delay: 107.701 ms

Loss rate: 21.87%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-06-18 19:21:40

End at: 2018-06-18 19:22:10

Local clock offset: -1.804 ms

Remote clock offset: 8.359 ms

Below is generated by plot.py at 2018-06-18 19:48:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.35 Mbit/s

95th percentile per-packet one-way delay: 109.951 ms

Loss rate: 17.85%

-- Flow 1:

Average throughput: 58.20 Mbit/s

95th percentile per-packet one-way delay: 110.036 ms

Loss rate: 17.18%

-- Flow 2:

Average throughput: 39.81 Mbit/s

95th percentile per-packet one-way delay: 108.211 ms

Loss rate: 19.17%

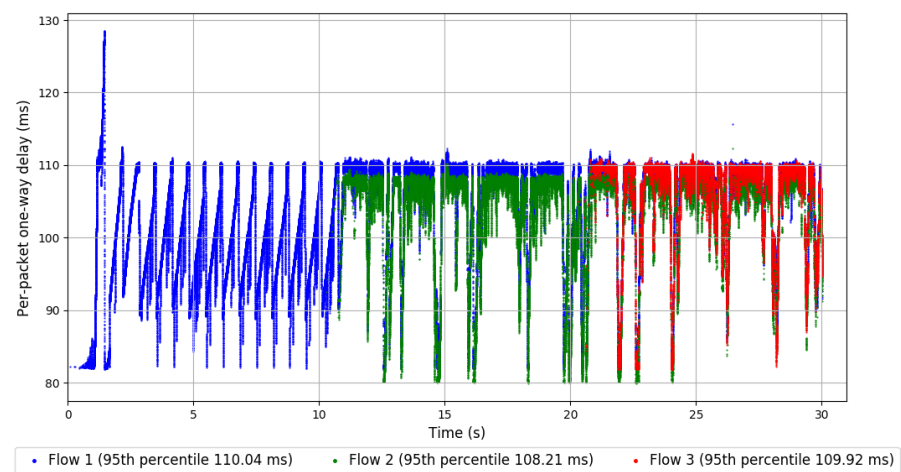
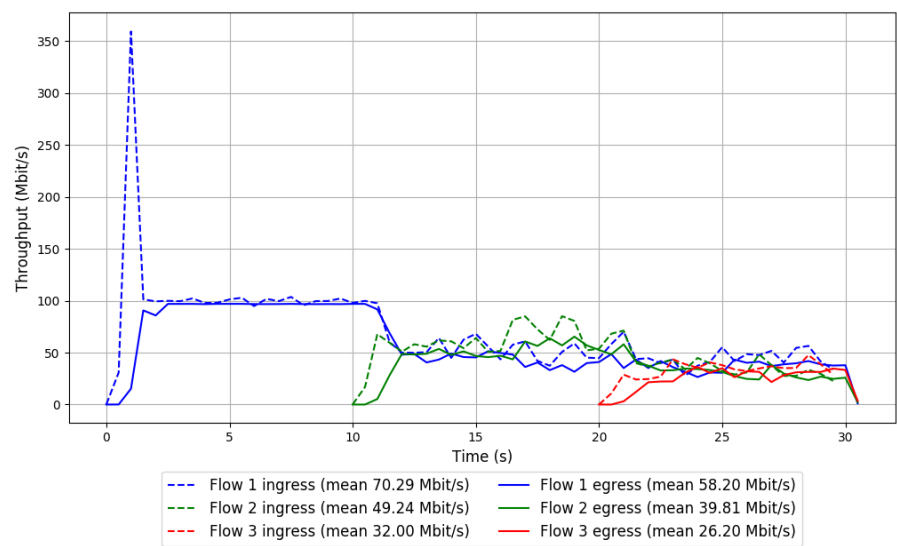
-- Flow 3:

Average throughput: 26.20 Mbit/s

95th percentile per-packet one-way delay: 109.916 ms

Loss rate: 18.24%

Run 10: Report of FillP — Data Link

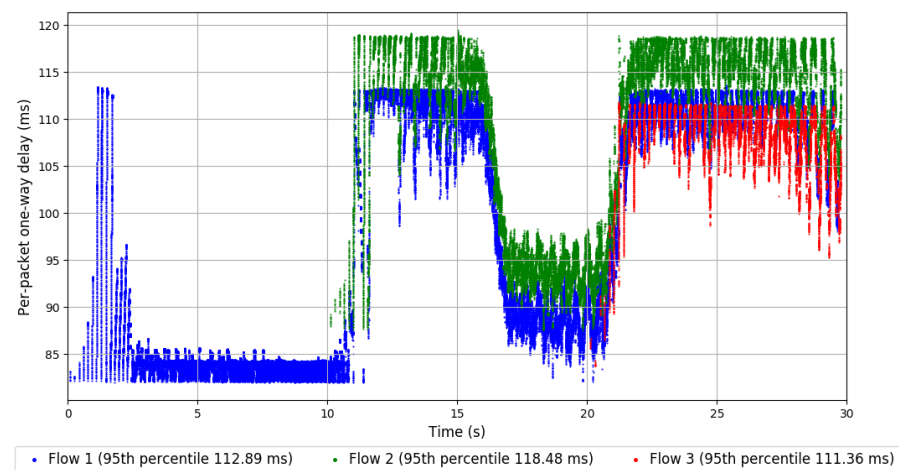
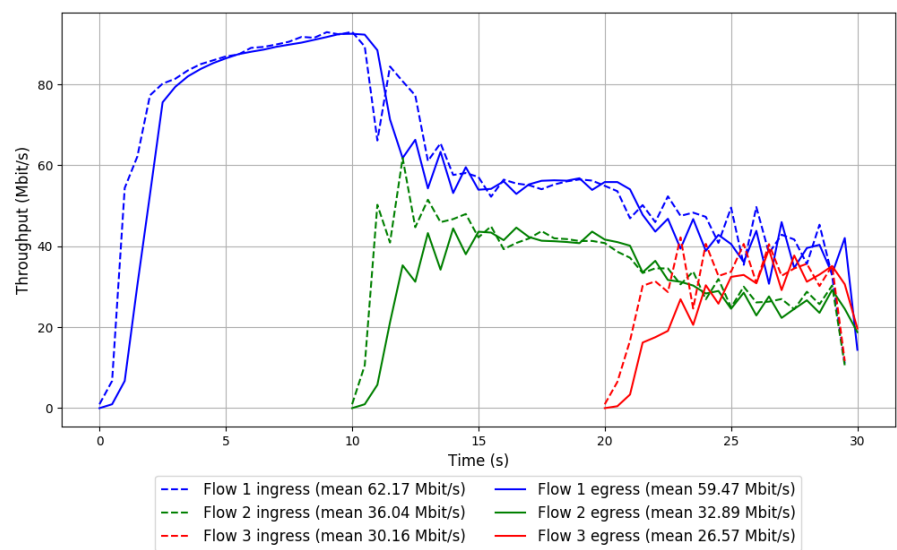


```
Run 1: Statistics of Indigo

Start at: 2018-06-18 16:27:10
End at: 2018-06-18 16:27:40
Local clock offset: -2.81 ms
Remote clock offset: 2.448 ms

# Below is generated by plot.py at 2018-06-18 19:48:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.68 Mbit/s
95th percentile per-packet one-way delay: 116.777 ms
Loss rate: 6.12%
-- Flow 1:
Average throughput: 59.47 Mbit/s
95th percentile per-packet one-way delay: 112.887 ms
Loss rate: 4.26%
-- Flow 2:
Average throughput: 32.89 Mbit/s
95th percentile per-packet one-way delay: 118.484 ms
Loss rate: 8.66%
-- Flow 3:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 111.358 ms
Loss rate: 11.69%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-06-18 16:47:13

End at: 2018-06-18 16:47:43

Local clock offset: -2.895 ms

Remote clock offset: 3.921 ms

Below is generated by plot.py at 2018-06-18 19:48:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.34 Mbit/s

95th percentile per-packet one-way delay: 115.655 ms

Loss rate: 19.99%

-- Flow 1:

Average throughput: 64.79 Mbit/s

95th percentile per-packet one-way delay: 111.812 ms

Loss rate: 7.36%

-- Flow 2:

Average throughput: 31.72 Mbit/s

95th percentile per-packet one-way delay: 115.992 ms

Loss rate: 18.51%

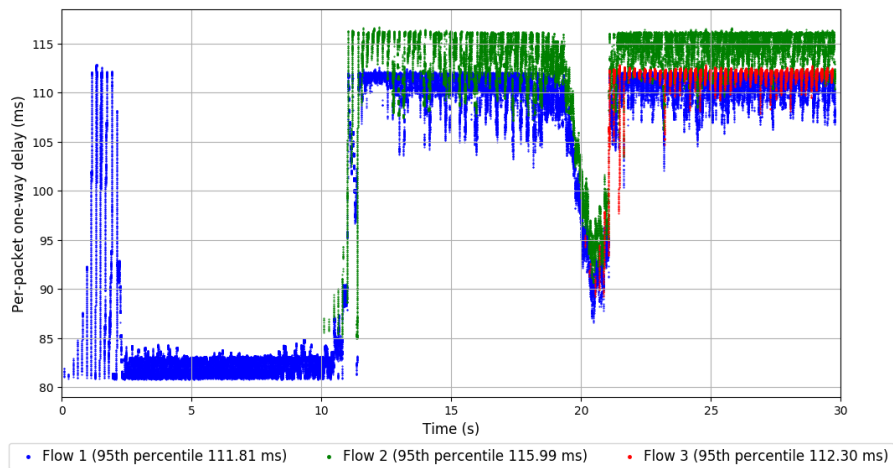
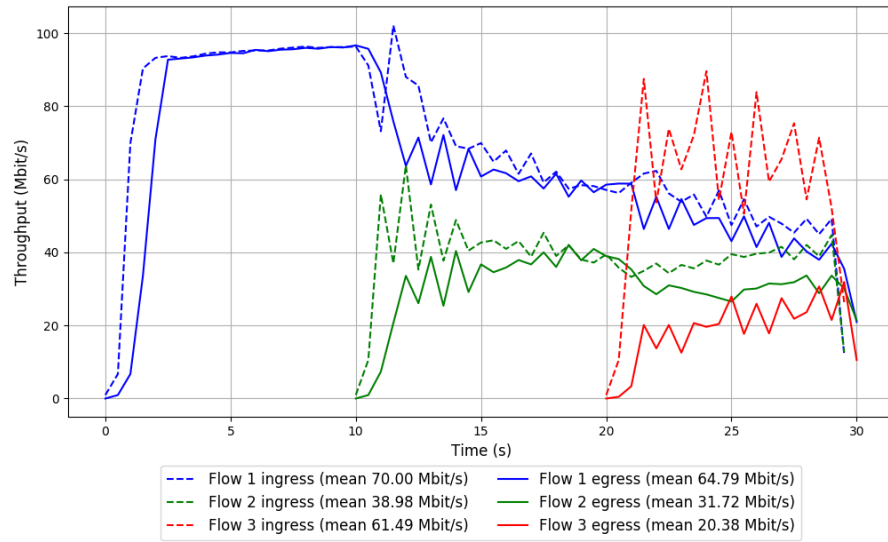
-- Flow 3:

Average throughput: 20.38 Mbit/s

95th percentile per-packet one-way delay: 112.304 ms

Loss rate: 66.80%

Run 2: Report of Indigo — Data Link

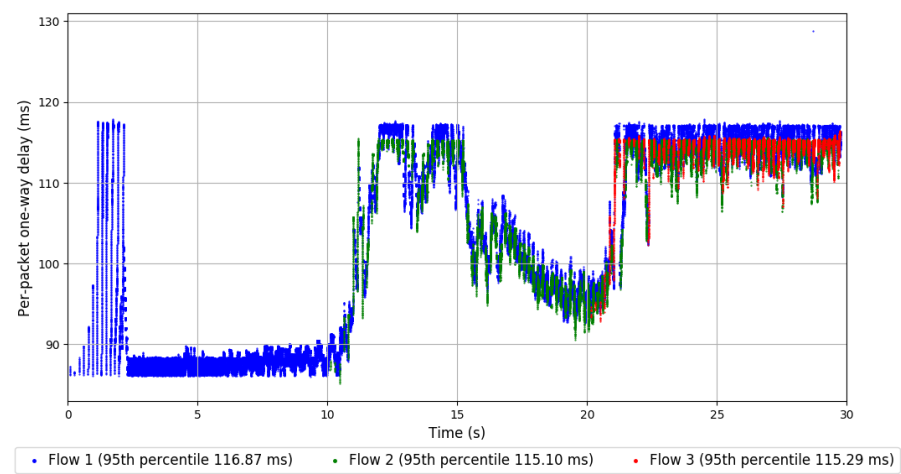
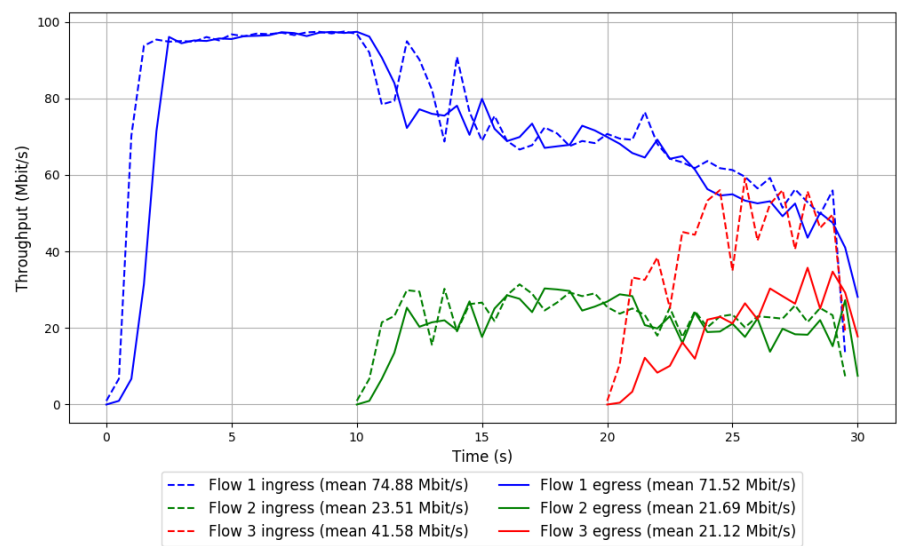


Run 3: Statistics of Indigo

Start at: 2018-06-18 17:07:15
End at: 2018-06-18 17:07:45
Local clock offset: -2.914 ms
Remote clock offset: 14.358 ms

```
# Below is generated by plot.py at 2018-06-18 19:48:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.65 Mbit/s
95th percentile per-packet one-way delay: 116.799 ms
Loss rate: 10.65%
-- Flow 1:
Average throughput: 71.52 Mbit/s
95th percentile per-packet one-way delay: 116.867 ms
Loss rate: 4.39%
-- Flow 2:
Average throughput: 21.69 Mbit/s
95th percentile per-packet one-way delay: 115.103 ms
Loss rate: 7.64%
-- Flow 3:
Average throughput: 21.12 Mbit/s
95th percentile per-packet one-way delay: 115.289 ms
Loss rate: 49.09%
```

Run 3: Report of Indigo — Data Link

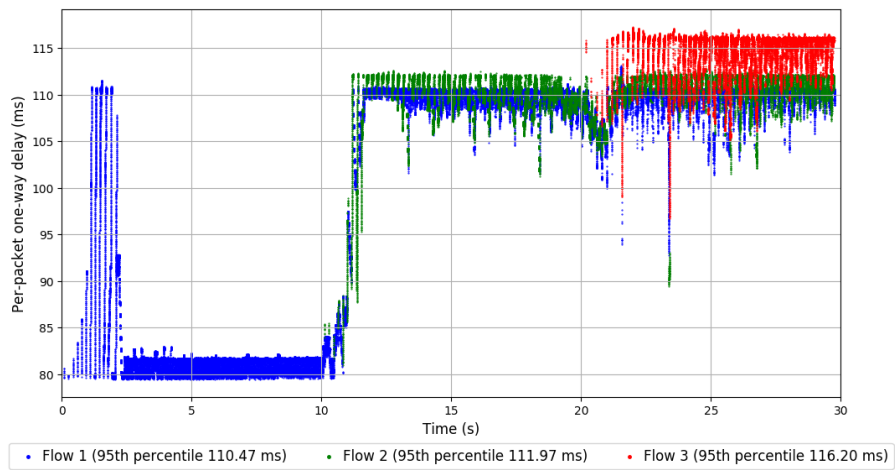
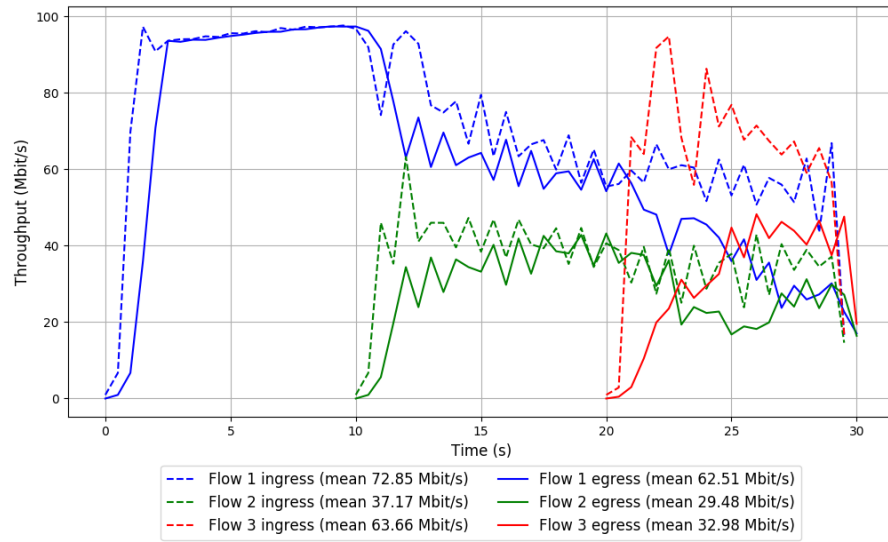


Run 4: Statistics of Indigo

Start at: 2018-06-18 17:27:19
End at: 2018-06-18 17:27:49
Local clock offset: -2.691 ms
Remote clock offset: 13.622 ms

Below is generated by plot.py at 2018-06-18 19:48:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.63 Mbit/s
95th percentile per-packet one-way delay: 115.277 ms
Loss rate: 21.38%
-- Flow 1:
Average throughput: 62.51 Mbit/s
95th percentile per-packet one-way delay: 110.471 ms
Loss rate: 14.11%
-- Flow 2:
Average throughput: 29.48 Mbit/s
95th percentile per-packet one-way delay: 111.973 ms
Loss rate: 20.57%
-- Flow 3:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: 116.197 ms
Loss rate: 48.19%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-06-18 17:47:22

End at: 2018-06-18 17:47:52

Local clock offset: -2.709 ms

Remote clock offset: 9.084 ms

Below is generated by plot.py at 2018-06-18 19:48:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.21 Mbit/s

95th percentile per-packet one-way delay: 116.348 ms

Loss rate: 31.17%

-- Flow 1:

Average throughput: 65.90 Mbit/s

95th percentile per-packet one-way delay: 116.138 ms

Loss rate: 9.53%

-- Flow 2:

Average throughput: 24.01 Mbit/s

95th percentile per-packet one-way delay: 116.499 ms

Loss rate: 31.45%

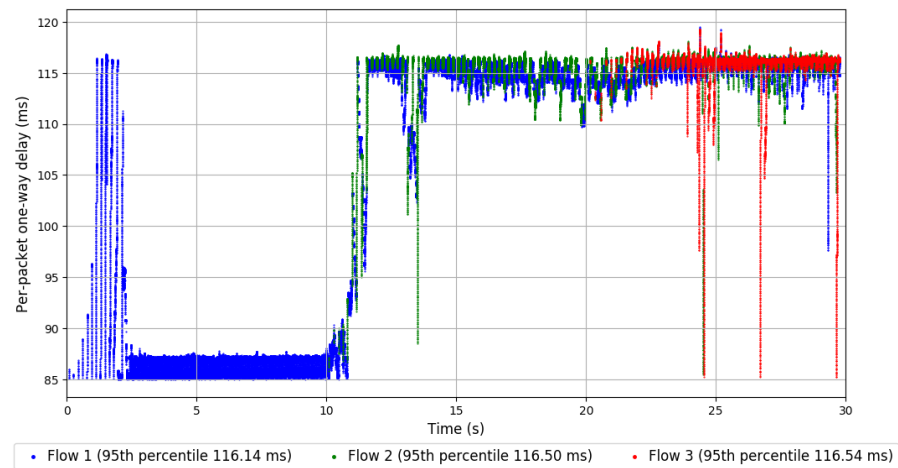
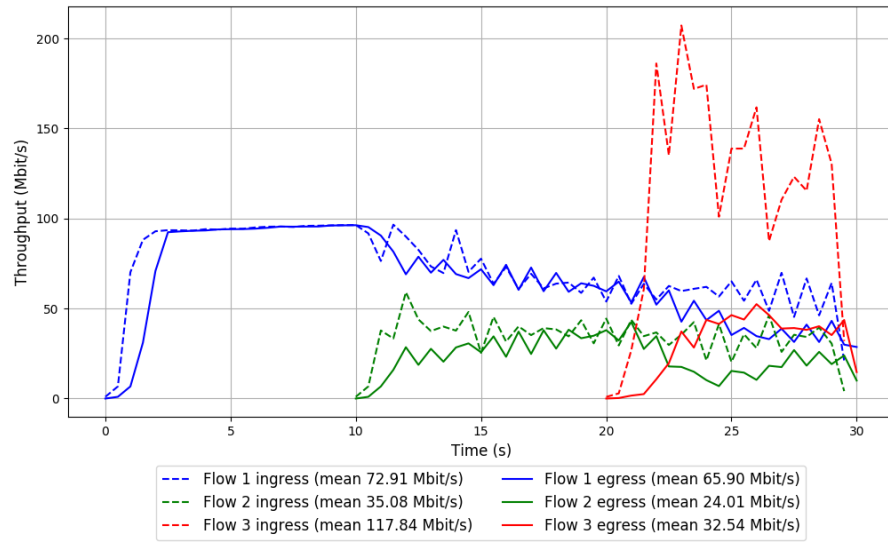
-- Flow 3:

Average throughput: 32.54 Mbit/s

95th percentile per-packet one-way delay: 116.538 ms

Loss rate: 72.38%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-06-18 18:07:34

End at: 2018-06-18 18:08:04

Local clock offset: -2.796 ms

Remote clock offset: 3.255 ms

Below is generated by plot.py at 2018-06-18 19:48:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.19 Mbit/s

95th percentile per-packet one-way delay: 112.308 ms

Loss rate: 23.29%

-- Flow 1:

Average throughput: 66.44 Mbit/s

95th percentile per-packet one-way delay: 112.359 ms

Loss rate: 7.06%

-- Flow 2:

Average throughput: 28.09 Mbit/s

95th percentile per-packet one-way delay: 110.375 ms

Loss rate: 22.54%

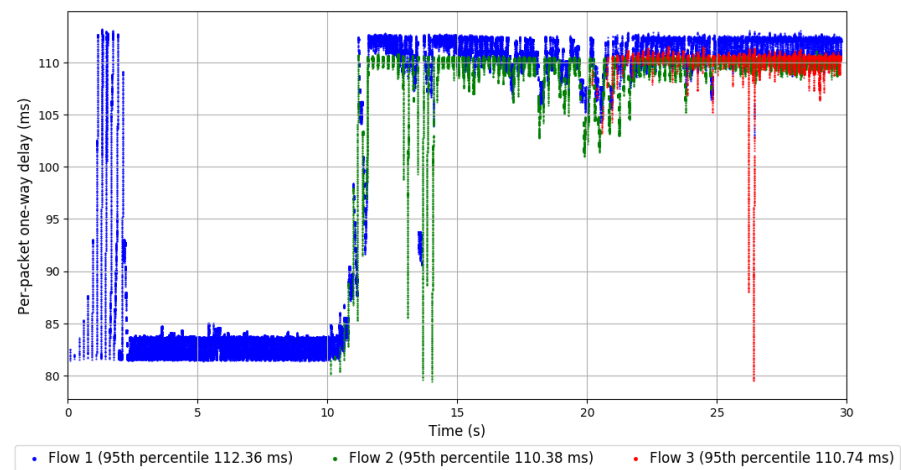
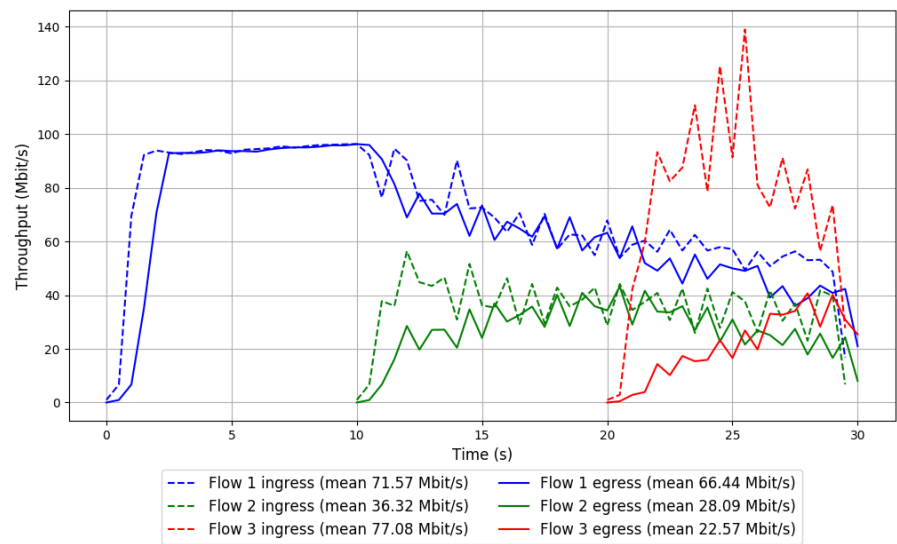
-- Flow 3:

Average throughput: 22.57 Mbit/s

95th percentile per-packet one-way delay: 110.743 ms

Loss rate: 70.72%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-06-18 18:27:34

End at: 2018-06-18 18:28:04

Local clock offset: -3.002 ms

Remote clock offset: 7.231 ms

Below is generated by plot.py at 2018-06-18 19:48:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 115.441 ms

Loss rate: 6.59%

-- Flow 1:

Average throughput: 58.55 Mbit/s

95th percentile per-packet one-way delay: 111.928 ms

Loss rate: 3.12%

-- Flow 2:

Average throughput: 36.76 Mbit/s

95th percentile per-packet one-way delay: 115.752 ms

Loss rate: 7.53%

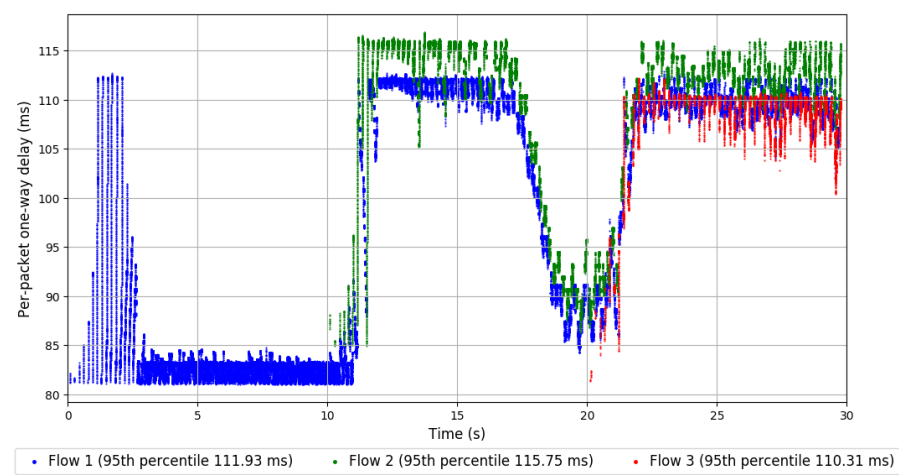
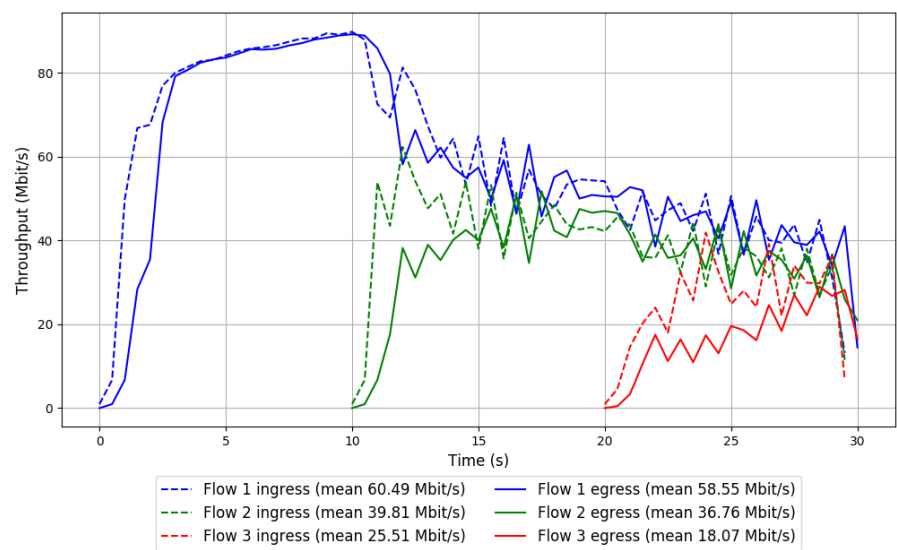
-- Flow 3:

Average throughput: 18.07 Mbit/s

95th percentile per-packet one-way delay: 110.305 ms

Loss rate: 28.93%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-06-18 18:47:39

End at: 2018-06-18 18:48:09

Local clock offset: -2.836 ms

Remote clock offset: 5.524 ms

Below is generated by plot.py at 2018-06-18 19:49:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.51 Mbit/s

95th percentile per-packet one-way delay: 113.258 ms

Loss rate: 29.21%

-- Flow 1:

Average throughput: 67.46 Mbit/s

95th percentile per-packet one-way delay: 112.385 ms

Loss rate: 6.70%

-- Flow 2:

Average throughput: 21.48 Mbit/s

95th percentile per-packet one-way delay: 112.306 ms

Loss rate: 40.53%

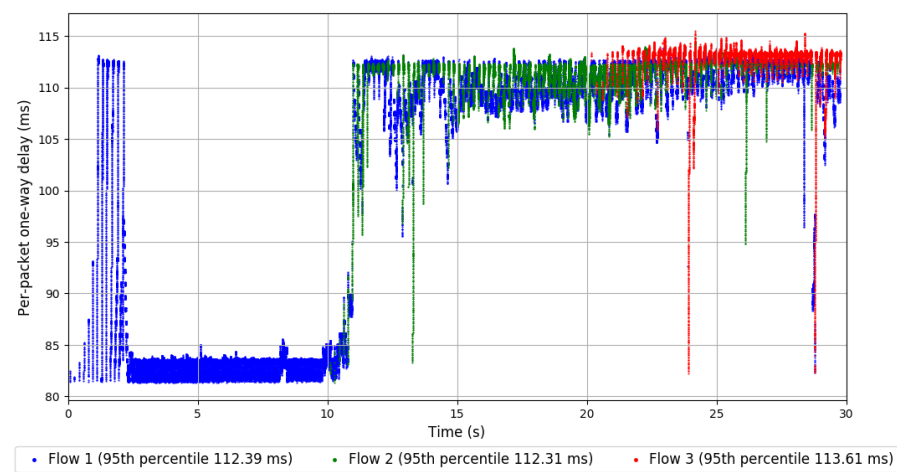
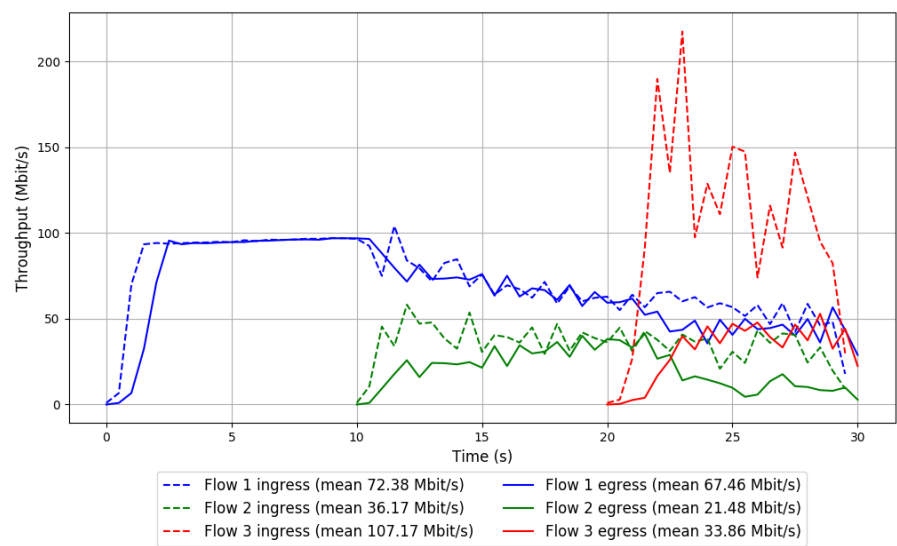
-- Flow 3:

Average throughput: 33.86 Mbit/s

95th percentile per-packet one-way delay: 113.607 ms

Loss rate: 68.41%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-06-18 19:07:50

End at: 2018-06-18 19:08:20

Local clock offset: -2.46 ms

Remote clock offset: 9.37 ms

Below is generated by plot.py at 2018-06-18 19:49:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.60 Mbit/s

95th percentile per-packet one-way delay: 119.070 ms

Loss rate: 30.37%

-- Flow 1:

Average throughput: 63.08 Mbit/s

95th percentile per-packet one-way delay: 118.171 ms

Loss rate: 13.28%

-- Flow 2:

Average throughput: 23.68 Mbit/s

95th percentile per-packet one-way delay: 116.830 ms

Loss rate: 34.73%

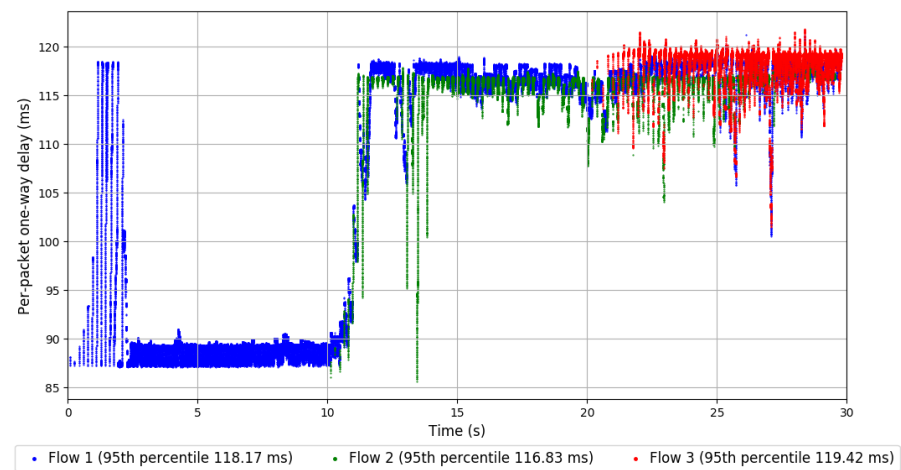
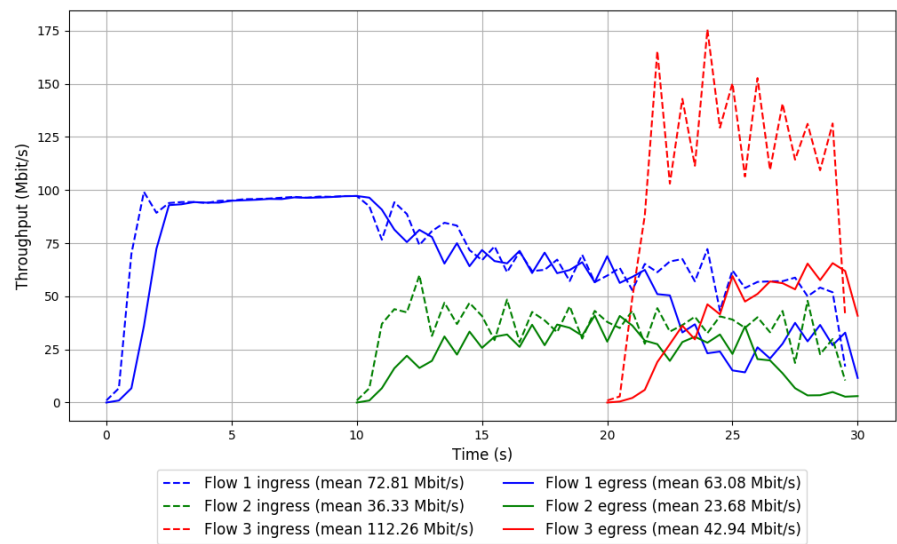
-- Flow 3:

Average throughput: 42.94 Mbit/s

95th percentile per-packet one-way delay: 119.423 ms

Loss rate: 61.73%

Run 9: Report of Indigo — Data Link

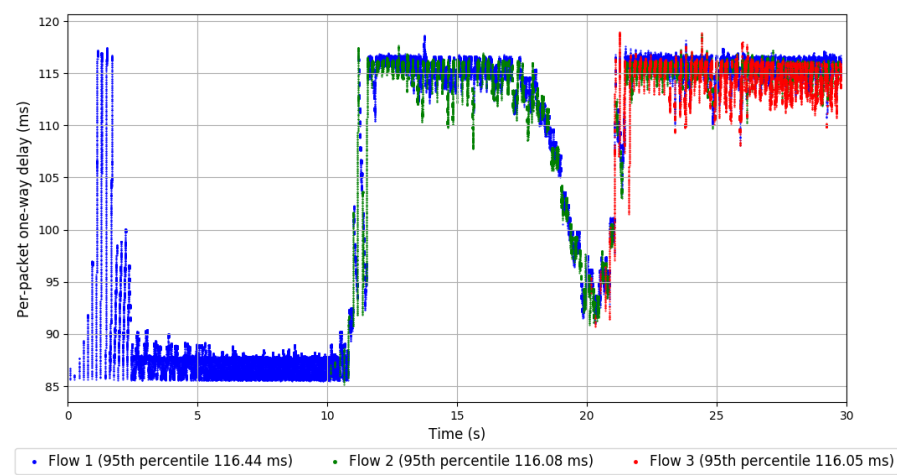
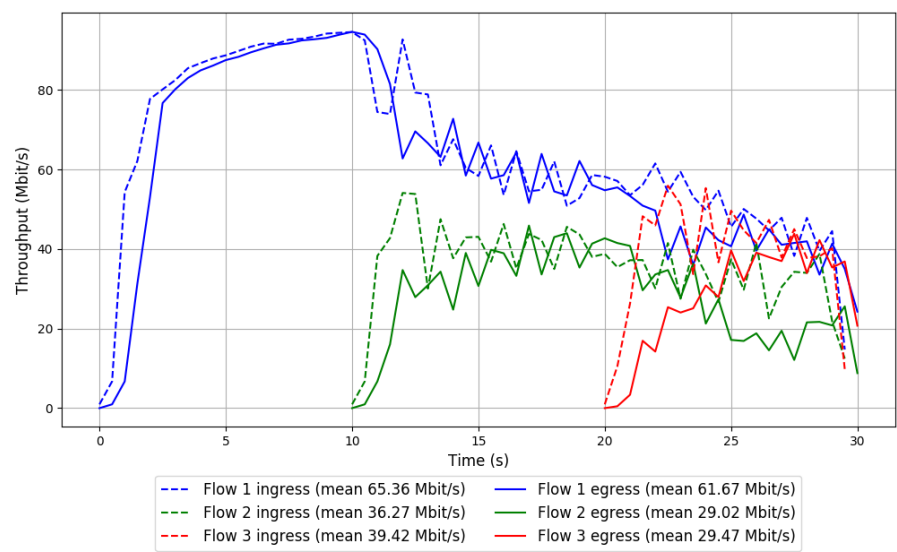


Run 10: Statistics of Indigo

Start at: 2018-06-18 19:27:51
End at: 2018-06-18 19:28:21
Local clock offset: -1.68 ms
Remote clock offset: 14.615 ms

Below is generated by plot.py at 2018-06-18 19:49:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.32 Mbit/s
95th percentile per-packet one-way delay: 116.410 ms
Loss rate: 11.35%
-- Flow 1:
Average throughput: 61.67 Mbit/s
95th percentile per-packet one-way delay: 116.439 ms
Loss rate: 5.55%
-- Flow 2:
Average throughput: 29.02 Mbit/s
95th percentile per-packet one-way delay: 116.077 ms
Loss rate: 19.87%
-- Flow 3:
Average throughput: 29.47 Mbit/s
95th percentile per-packet one-way delay: 116.048 ms
Loss rate: 25.09%

Run 10: Report of Indigo — Data Link

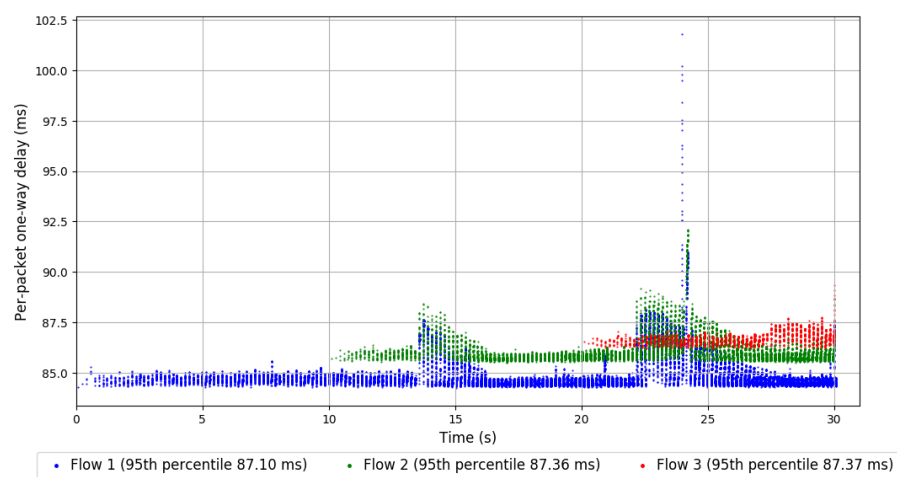
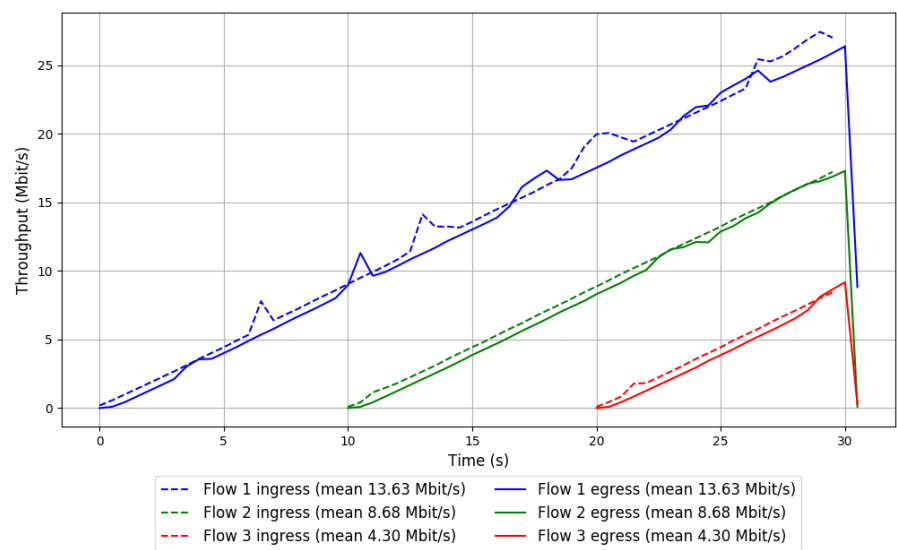


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-18 16:23:29
End at: 2018-06-18 16:23:59
Local clock offset: -2.806 ms
Remote clock offset: 5.361 ms

# Below is generated by plot.py at 2018-06-18 19:49:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.81 Mbit/s
95th percentile per-packet one-way delay: 87.268 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.63 Mbit/s
95th percentile per-packet one-way delay: 87.100 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 87.357 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 87.366 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

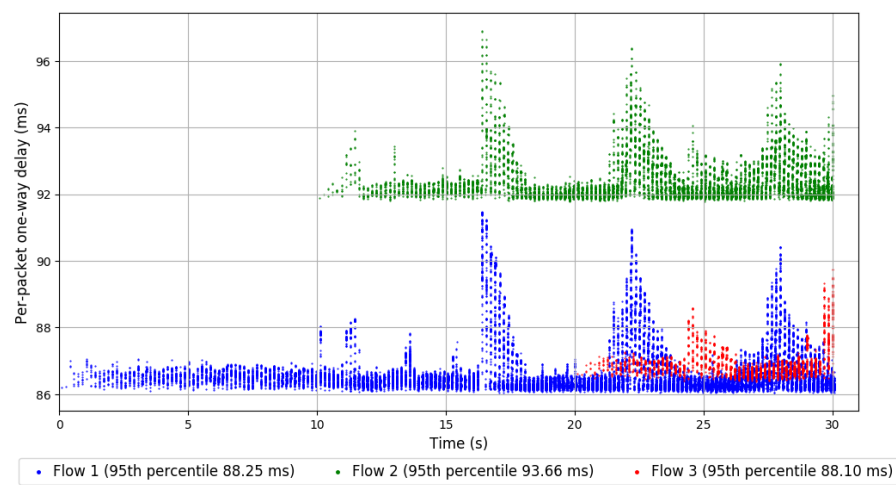
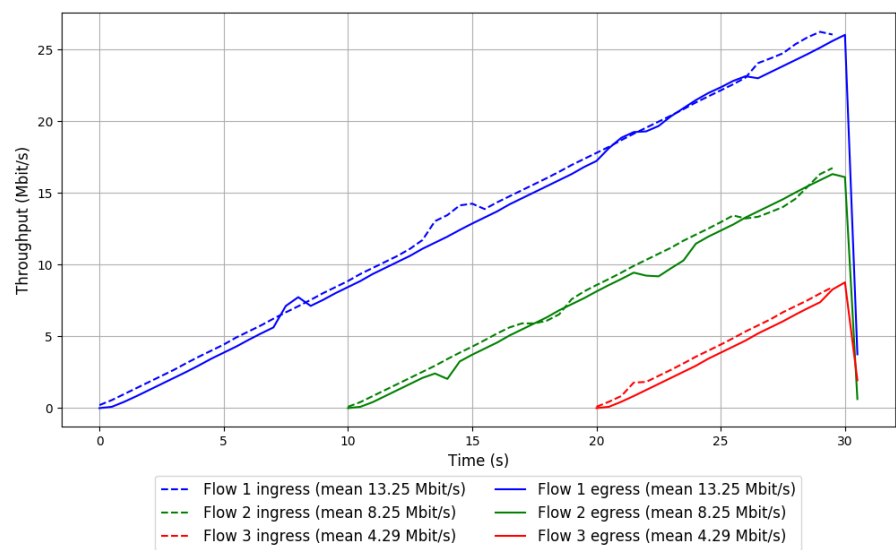


```
Run 2: Statistics of LEDBAT

Start at: 2018-06-18 16:43:31
End at: 2018-06-18 16:44:01
Local clock offset: -2.887 ms
Remote clock offset: 8.893 ms

# Below is generated by plot.py at 2018-06-18 19:49:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.15 Mbit/s
95th percentile per-packet one-way delay: 92.876 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.25 Mbit/s
95th percentile per-packet one-way delay: 88.246 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 93.659 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 88.096 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-06-18 17:03:34

End at: 2018-06-18 17:04:04

Local clock offset: -3.008 ms

Remote clock offset: 8.589 ms

Below is generated by plot.py at 2018-06-18 19:49:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.93 Mbit/s

95th percentile per-packet one-way delay: 87.199 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 85.171 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 88.318 ms

Loss rate: 0.00%

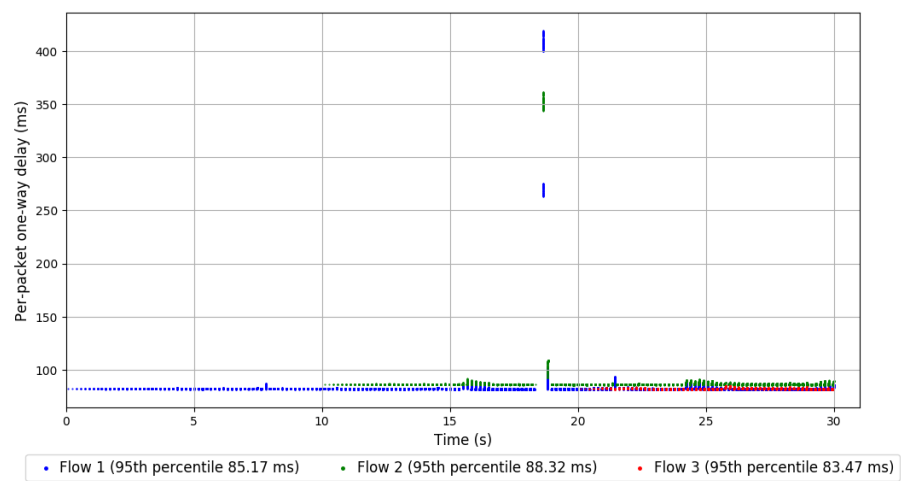
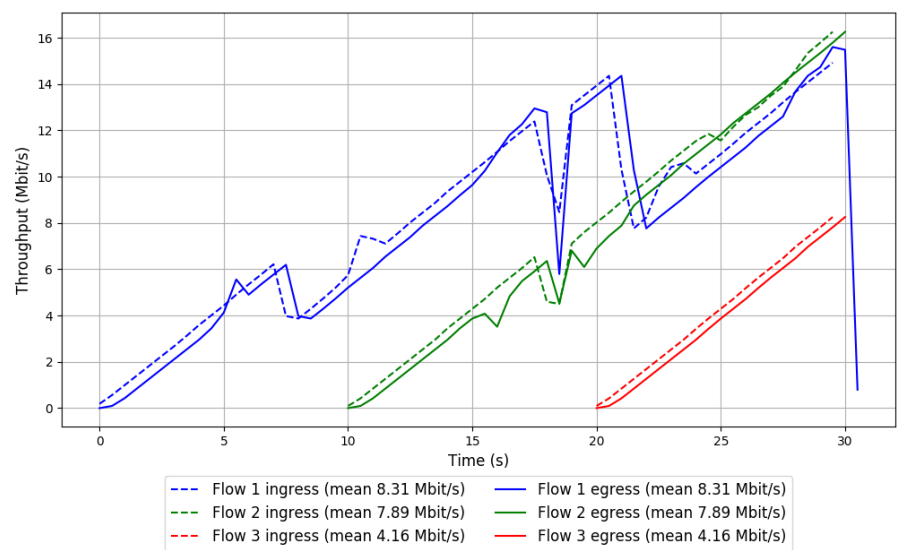
-- Flow 3:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 83.466 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

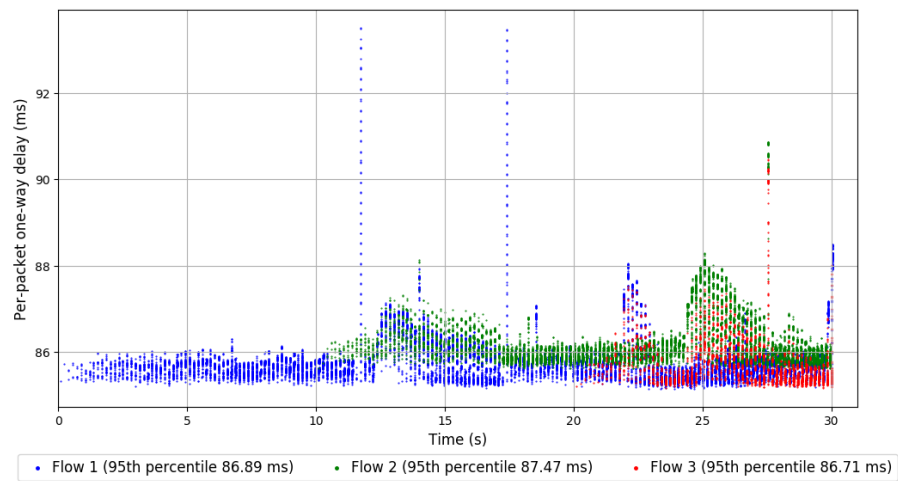
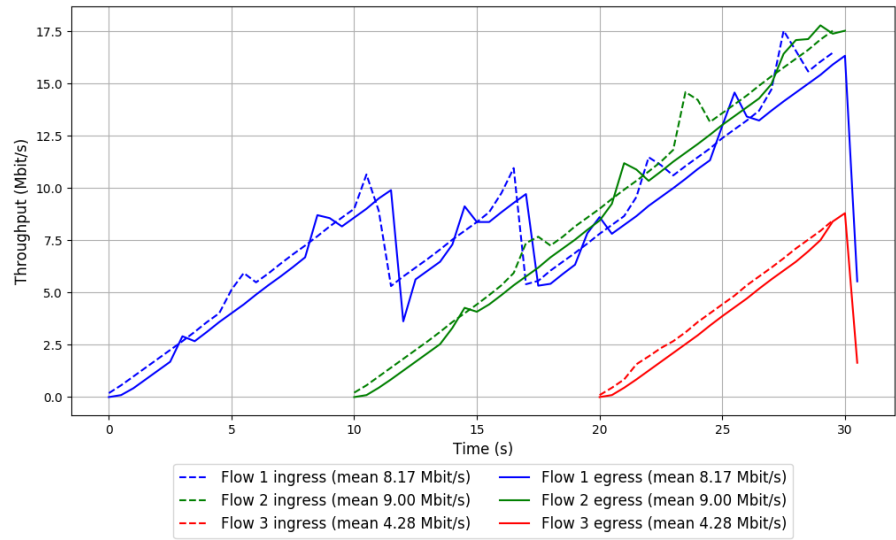


Run 4: Statistics of LEDBAT

Start at: 2018-06-18 17:23:37
End at: 2018-06-18 17:24:07
Local clock offset: -2.689 ms
Remote clock offset: 19.227 ms

Below is generated by plot.py at 2018-06-18 19:49:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 15.56 Mbit/s
95th percentile per-packet one-way delay: 87.182 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 86.894 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 9.00 Mbit/s
95th percentile per-packet one-way delay: 87.467 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 86.706 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-06-18 17:43:41

End at: 2018-06-18 17:44:11

Local clock offset: -2.714 ms

Remote clock offset: 11.4 ms

Below is generated by plot.py at 2018-06-18 19:49:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.32 Mbit/s

95th percentile per-packet one-way delay: 87.947 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.05 Mbit/s

95th percentile per-packet one-way delay: 87.596 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 87.408 ms

Loss rate: 0.00%

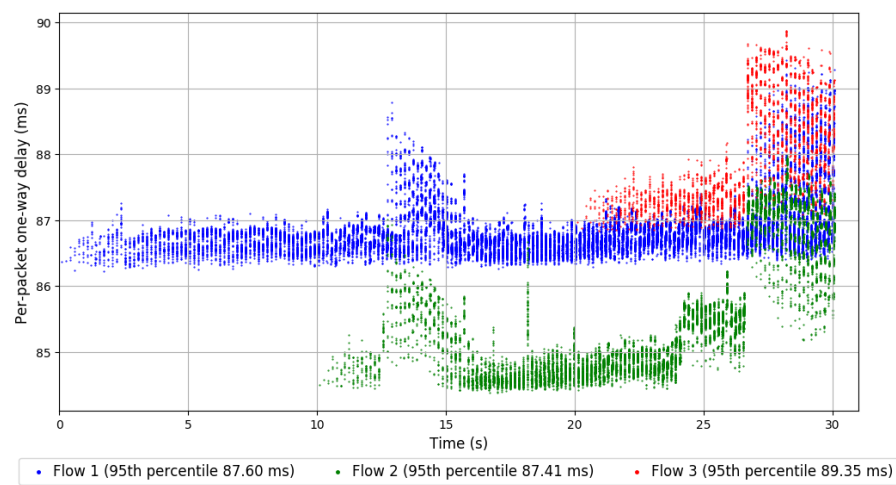
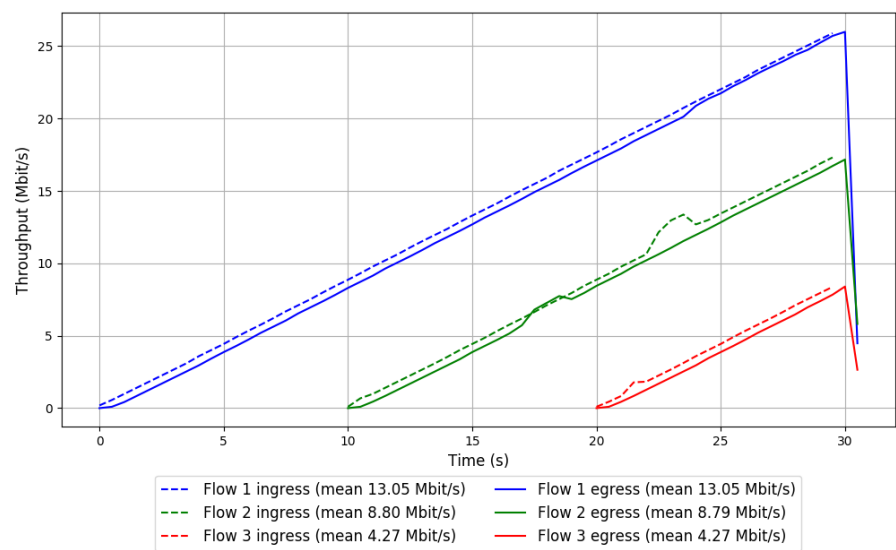
-- Flow 3:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 89.353 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-06-18 18:03:52

End at: 2018-06-18 18:04:22

Local clock offset: -2.762 ms

Remote clock offset: 2.965 ms

Below is generated by plot.py at 2018-06-18 19:49:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.15 Mbit/s

95th percentile per-packet one-way delay: 82.833 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.10 Mbit/s

95th percentile per-packet one-way delay: 82.812 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.96 Mbit/s

95th percentile per-packet one-way delay: 82.529 ms

Loss rate: 0.01%

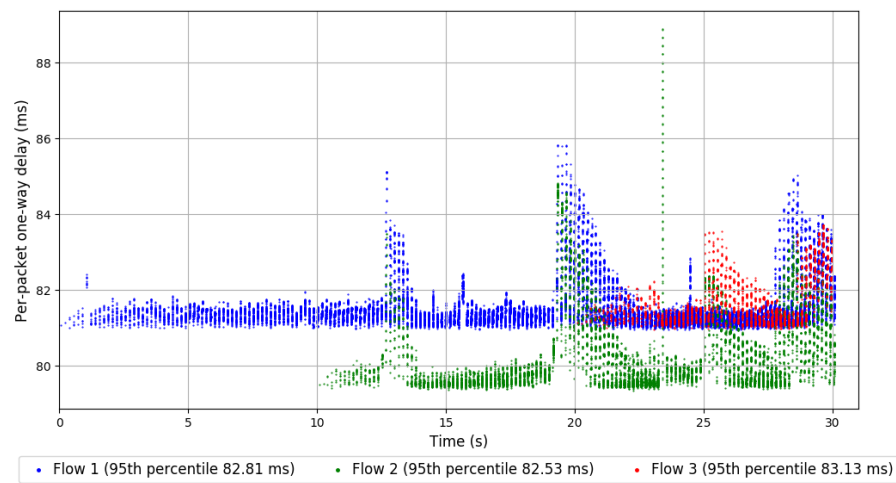
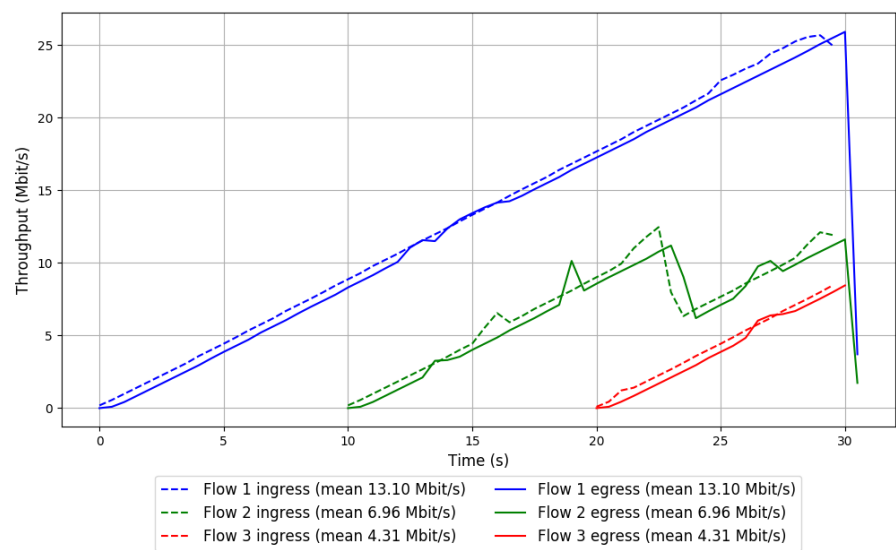
-- Flow 3:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 83.126 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link

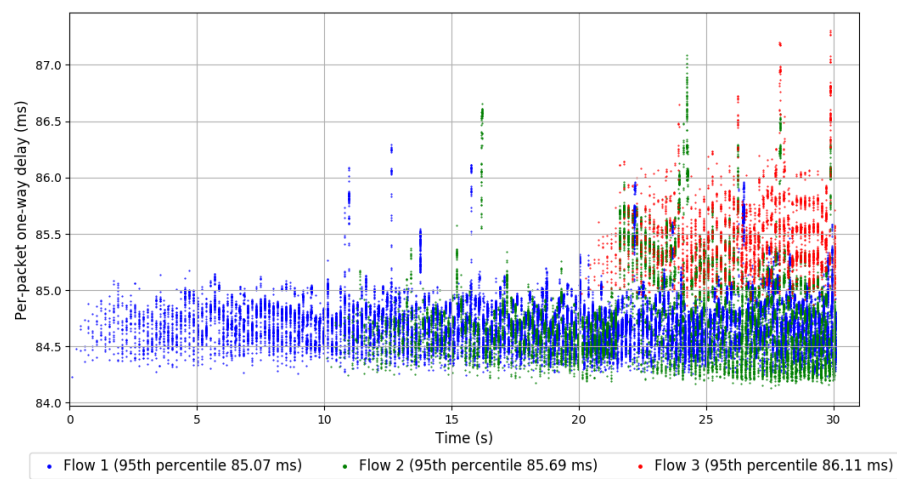
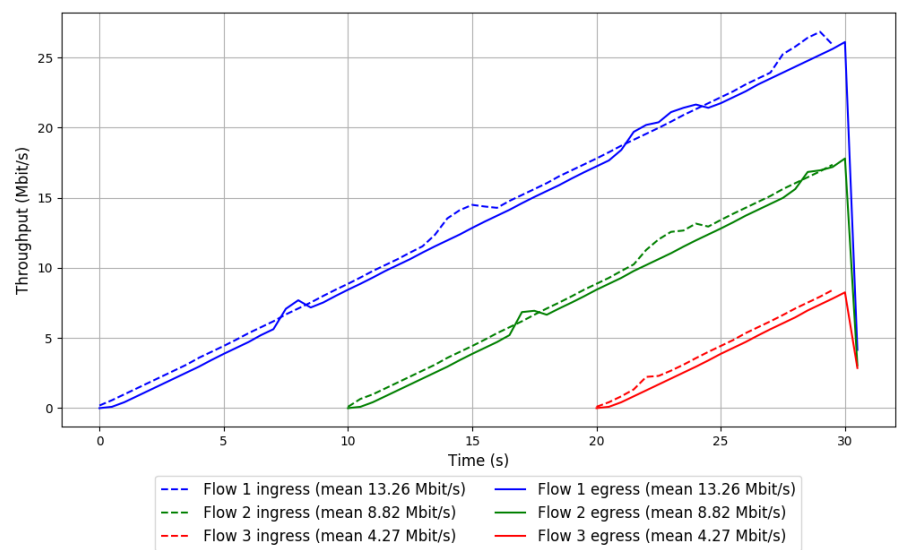


Run 7: Statistics of LEDBAT

Start at: 2018-06-18 18:23:52
End at: 2018-06-18 18:24:22
Local clock offset: -2.887 ms
Remote clock offset: 12.119 ms

Below is generated by plot.py at 2018-06-18 19:49:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 20.53 Mbit/s
95th percentile per-packet one-way delay: 85.582 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 85.068 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.82 Mbit/s
95th percentile per-packet one-way delay: 85.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 86.107 ms
Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-06-18 18:43:57

End at: 2018-06-18 18:44:28

Local clock offset: -2.851 ms

Remote clock offset: 6.835 ms

Below is generated by plot.py at 2018-06-18 19:49:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.86 Mbit/s

95th percentile per-packet one-way delay: 86.754 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 9.60 Mbit/s

95th percentile per-packet one-way delay: 87.279 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 83.958 ms

Loss rate: 0.00%

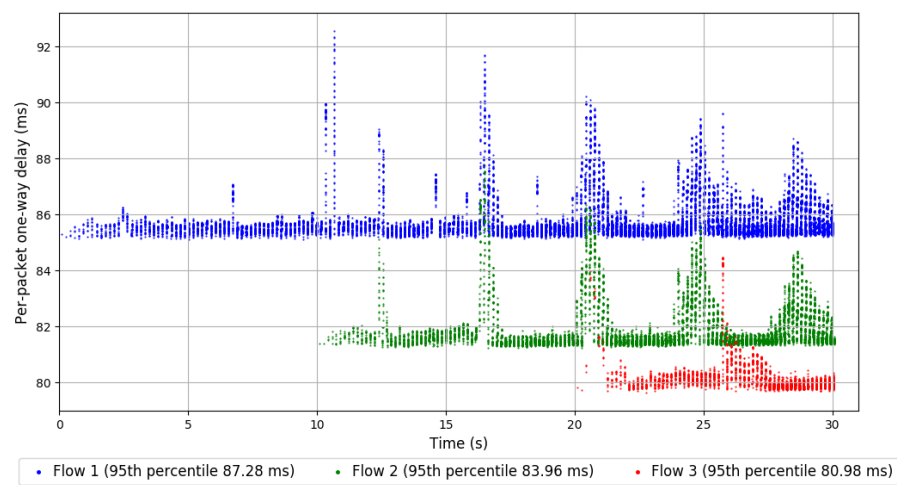
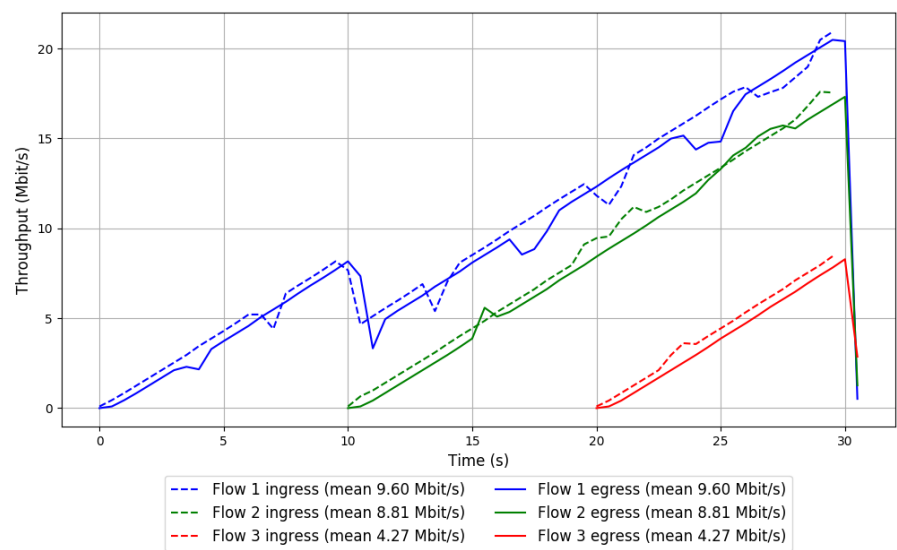
-- Flow 3:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 80.980 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-06-18 19:04:09

End at: 2018-06-18 19:04:39

Local clock offset: -2.86 ms

Remote clock offset: 3.649 ms

Below is generated by plot.py at 2018-06-18 19:49:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.64 Mbit/s

95th percentile per-packet one-way delay: 82.709 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.31 Mbit/s

95th percentile per-packet one-way delay: 81.354 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.87 Mbit/s

95th percentile per-packet one-way delay: 83.096 ms

Loss rate: 0.00%

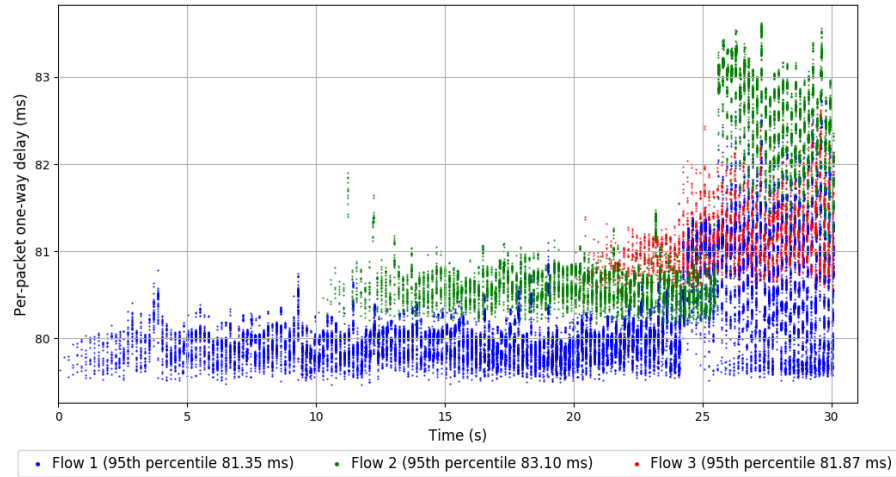
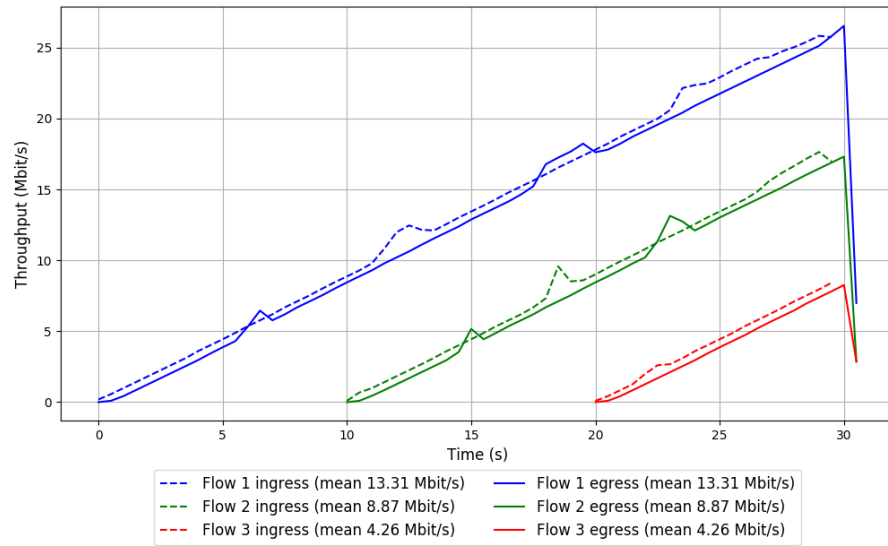
-- Flow 3:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 81.873 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-06-18 19:24:10

End at: 2018-06-18 19:24:40

Local clock offset: -1.757 ms

Remote clock offset: 8.369 ms

Below is generated by plot.py at 2018-06-18 19:49:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.07 Mbit/s

95th percentile per-packet one-way delay: 87.399 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.47 Mbit/s

95th percentile per-packet one-way delay: 82.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 88.655 ms

Loss rate: 0.00%

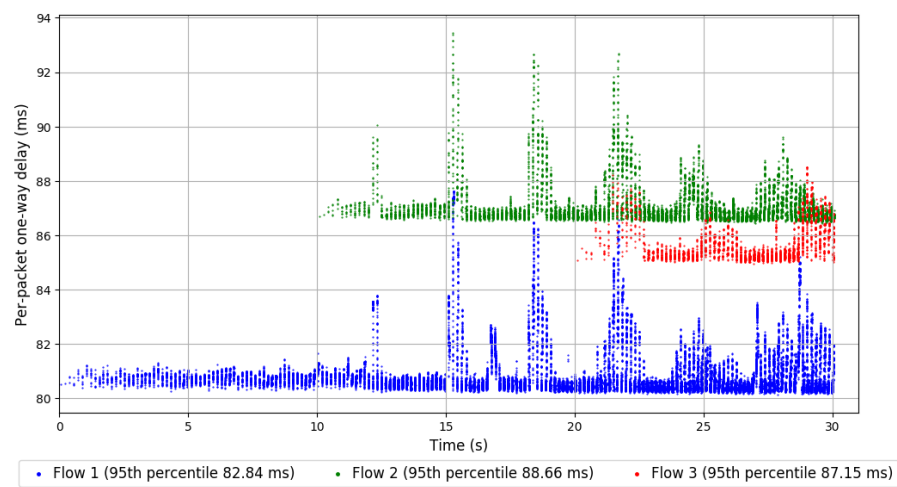
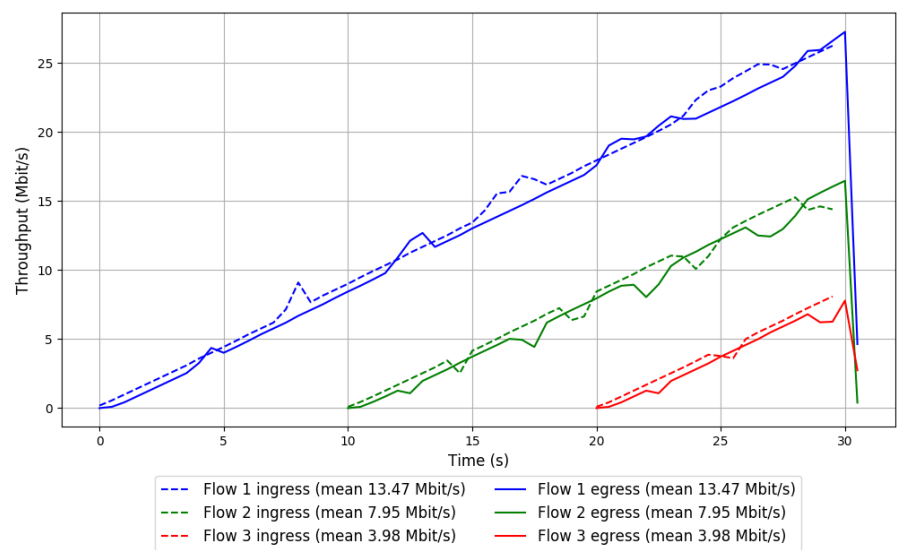
-- Flow 3:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 87.149 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-06-18 16:29:46

End at: 2018-06-18 16:30:16

Local clock offset: -2.837 ms

Remote clock offset: 6.166 ms

Below is generated by plot.py at 2018-06-18 19:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.19 Mbit/s

95th percentile per-packet one-way delay: 115.911 ms

Loss rate: 2.63%

-- Flow 1:

Average throughput: 79.38 Mbit/s

95th percentile per-packet one-way delay: 115.839 ms

Loss rate: 2.45%

-- Flow 2:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 119.909 ms

Loss rate: 4.00%

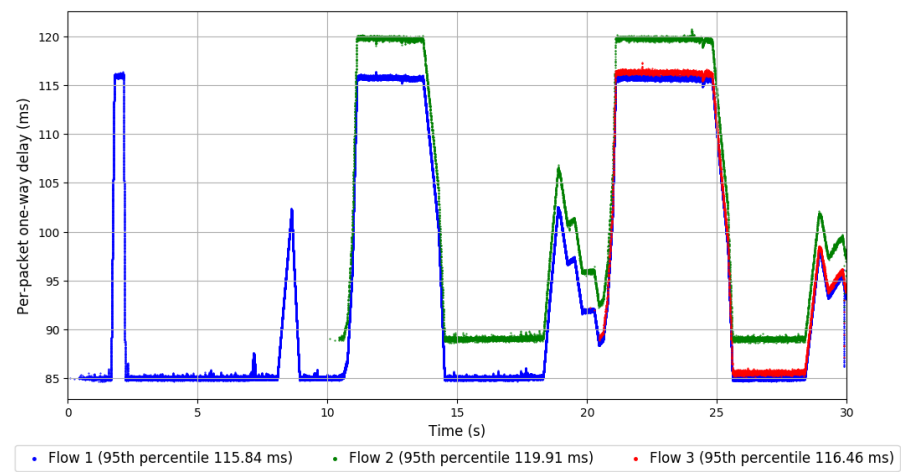
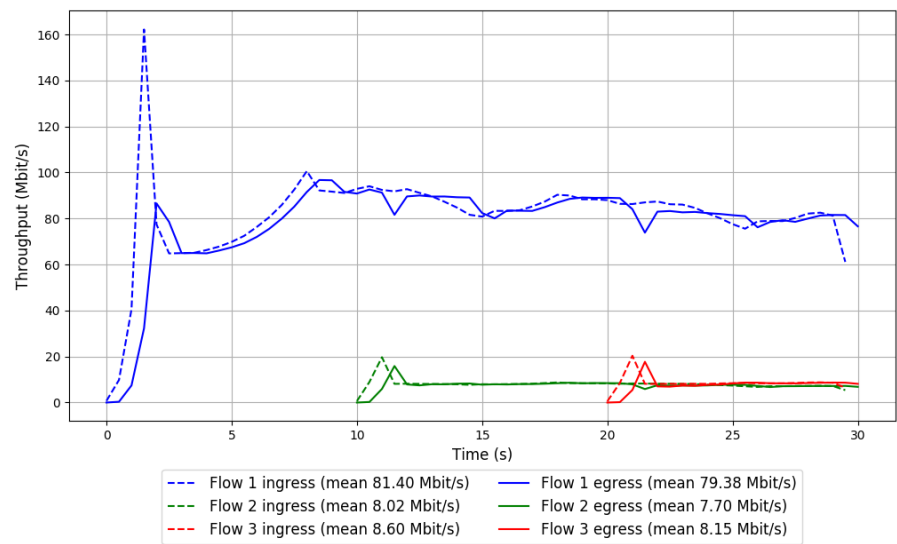
-- Flow 3:

Average throughput: 8.15 Mbit/s

95th percentile per-packet one-way delay: 116.464 ms

Loss rate: 5.24%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-06-18 16:49:49

End at: 2018-06-18 16:50:19

Local clock offset: -2.924 ms

Remote clock offset: 4.078 ms

Below is generated by plot.py at 2018-06-18 19:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.73 Mbit/s

95th percentile per-packet one-way delay: 112.195 ms

Loss rate: 2.56%

-- Flow 1:

Average throughput: 77.93 Mbit/s

95th percentile per-packet one-way delay: 112.187 ms

Loss rate: 2.45%

-- Flow 2:

Average throughput: 8.11 Mbit/s

95th percentile per-packet one-way delay: 112.294 ms

Loss rate: 3.91%

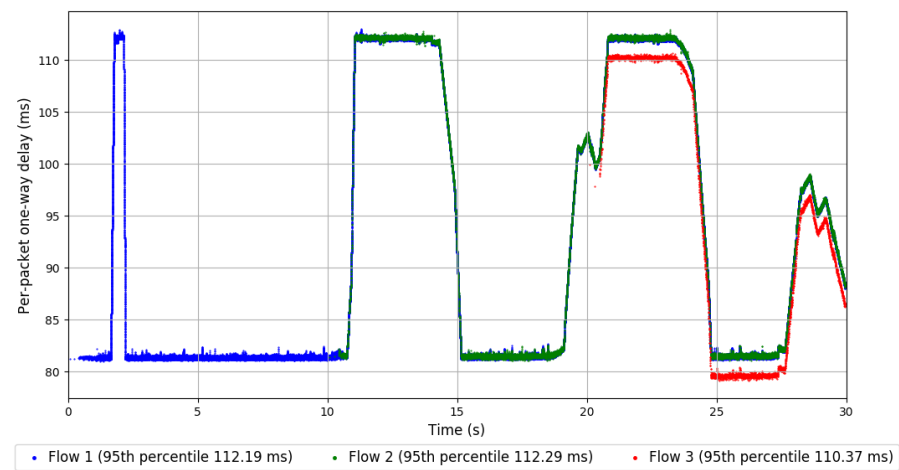
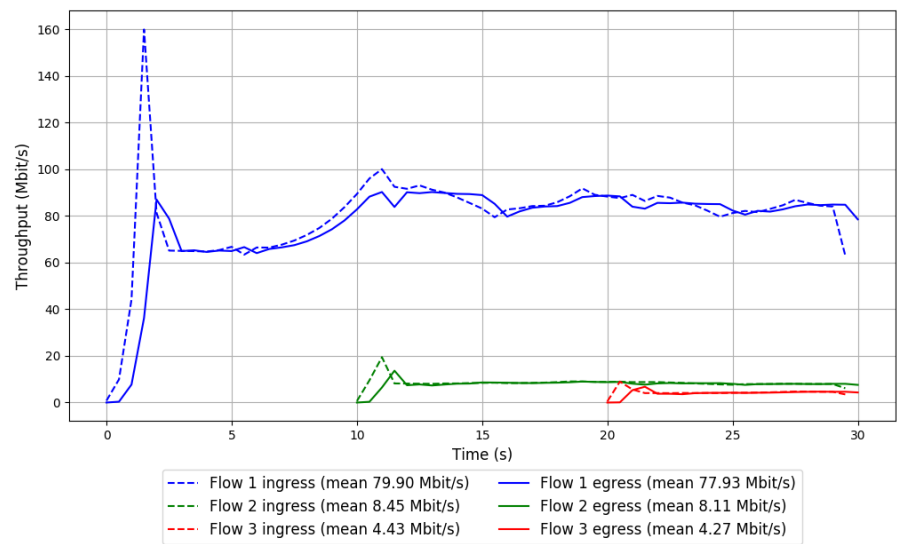
-- Flow 3:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 110.371 ms

Loss rate: 3.60%

Run 2: Report of PCC-Allegro — Data Link

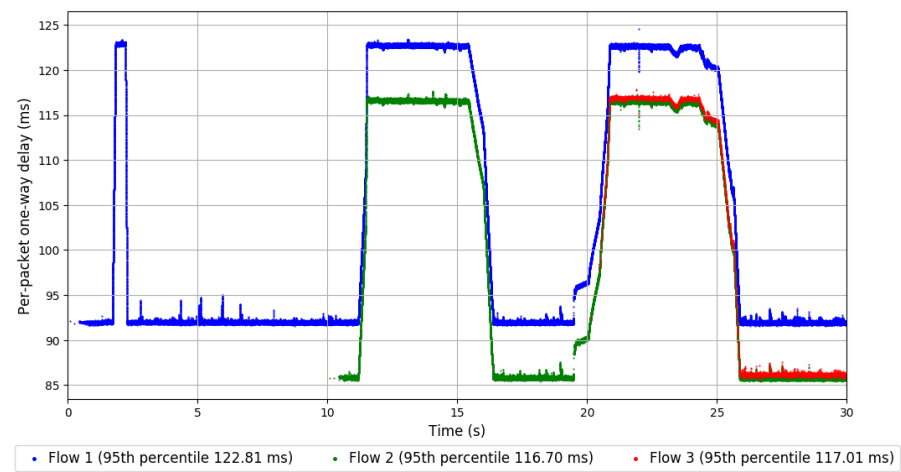
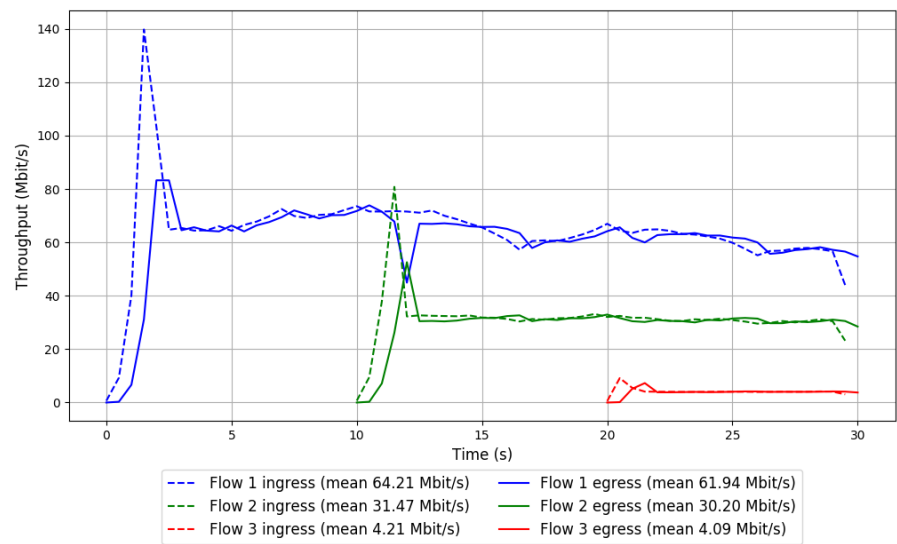


Run 3: Statistics of PCC-Allegro

Start at: 2018-06-18 17:09:50
End at: 2018-06-18 17:10:20
Local clock offset: -2.888 ms
Remote clock offset: 15.359 ms

Below is generated by plot.py at 2018-06-18 19:49:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.37 Mbit/s
95th percentile per-packet one-way delay: 122.776 ms
Loss rate: 3.65%
-- Flow 1:
Average throughput: 61.94 Mbit/s
95th percentile per-packet one-way delay: 122.805 ms
Loss rate: 3.53%
-- Flow 2:
Average throughput: 30.20 Mbit/s
95th percentile per-packet one-way delay: 116.700 ms
Loss rate: 4.03%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 117.010 ms
Loss rate: 3.05%

Run 3: Report of PCC-Allegro — Data Link

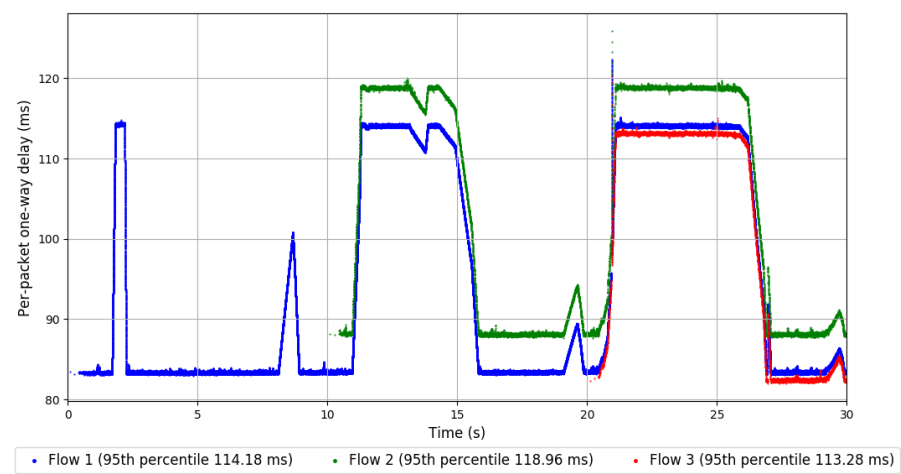
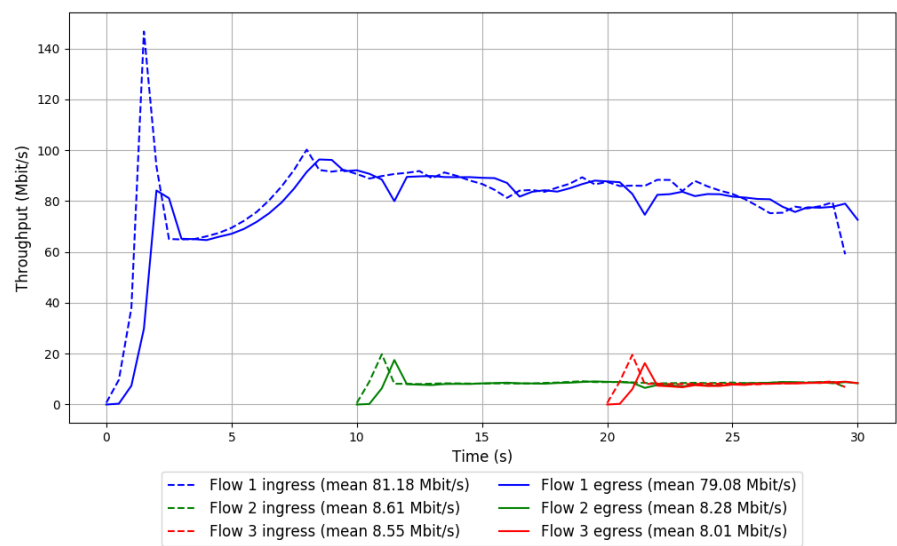


Run 4: Statistics of PCC-Allegro

Start at: 2018-06-18 17:29:54
End at: 2018-06-18 17:30:24
Local clock offset: -2.735 ms
Remote clock offset: 15.087 ms

```
# Below is generated by plot.py at 2018-06-18 19:50:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.21 Mbit/s
95th percentile per-packet one-way delay: 114.231 ms
Loss rate: 2.79%
-- Flow 1:
Average throughput: 79.08 Mbit/s
95th percentile per-packet one-way delay: 114.180 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 118.960 ms
Loss rate: 3.86%
-- Flow 3:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 113.279 ms
Loss rate: 6.28%
```

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-06-18 17:49:57

End at: 2018-06-18 17:50:27

Local clock offset: -2.727 ms

Remote clock offset: 4.598 ms

Below is generated by plot.py at 2018-06-18 19:50:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.13 Mbit/s

95th percentile per-packet one-way delay: 112.224 ms

Loss rate: 2.53%

-- Flow 1:

Average throughput: 79.17 Mbit/s

95th percentile per-packet one-way delay: 112.229 ms

Loss rate: 2.43%

-- Flow 2:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 112.183 ms

Loss rate: 3.27%

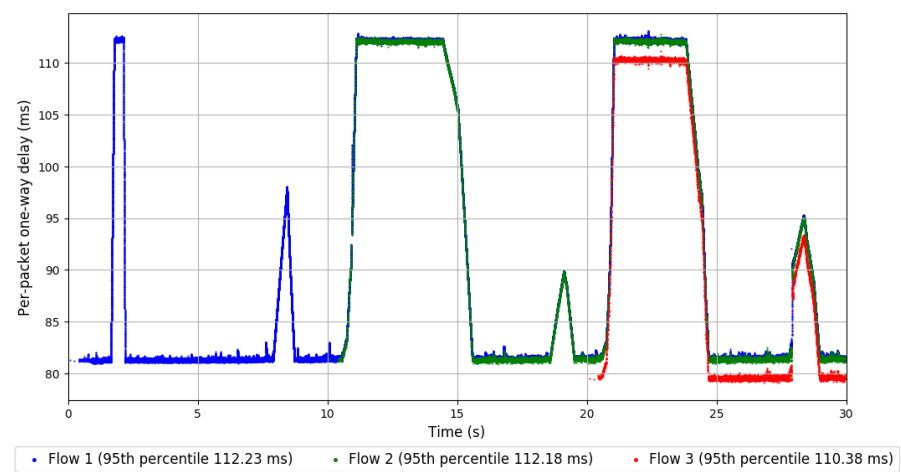
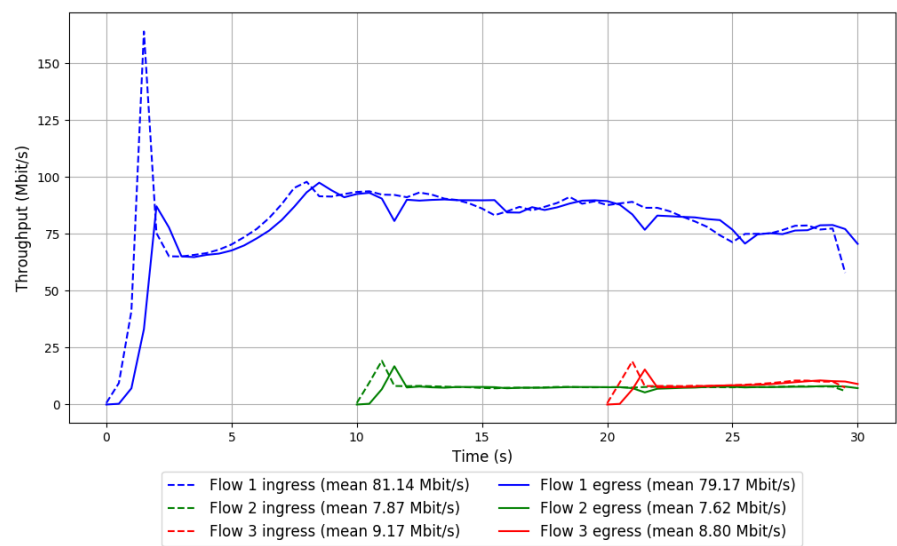
-- Flow 3:

Average throughput: 8.80 Mbit/s

95th percentile per-packet one-way delay: 110.379 ms

Loss rate: 3.95%

Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-06-18 18:10:09

End at: 2018-06-18 18:10:39

Local clock offset: -2.812 ms

Remote clock offset: 7.998 ms

Below is generated by plot.py at 2018-06-18 19:50:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.11 Mbit/s

95th percentile per-packet one-way delay: 114.776 ms

Loss rate: 2.58%

-- Flow 1:

Average throughput: 78.28 Mbit/s

95th percentile per-packet one-way delay: 114.787 ms

Loss rate: 2.50%

-- Flow 2:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 113.903 ms

Loss rate: 3.17%

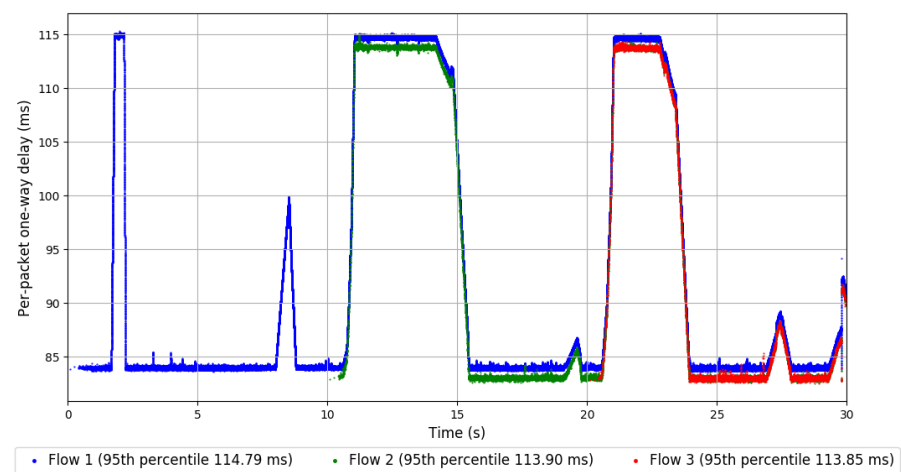
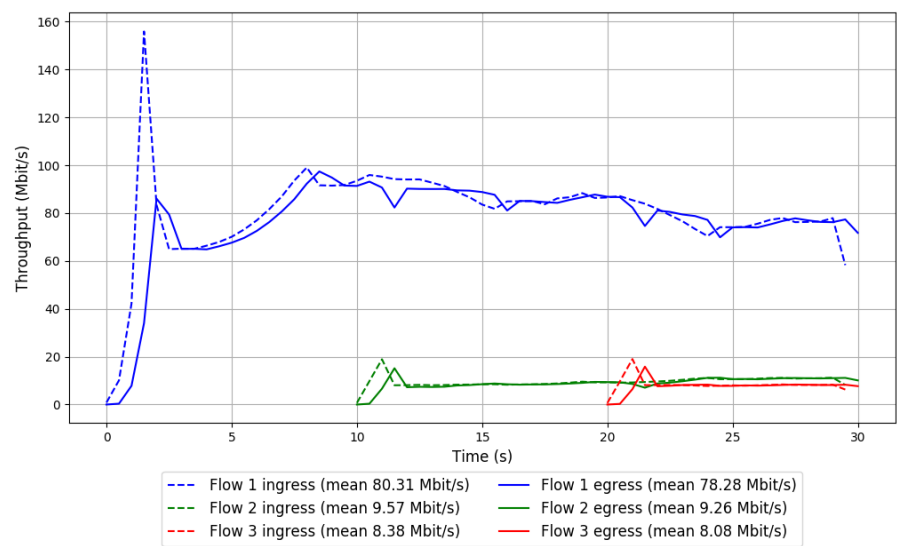
-- Flow 3:

Average throughput: 8.08 Mbit/s

95th percentile per-packet one-way delay: 113.848 ms

Loss rate: 3.50%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-06-18 18:30:09

End at: 2018-06-18 18:30:39

Local clock offset: -2.995 ms

Remote clock offset: 11.43 ms

Below is generated by plot.py at 2018-06-18 19:50:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.30 Mbit/s

95th percentile per-packet one-way delay: 116.492 ms

Loss rate: 2.90%

-- Flow 1:

Average throughput: 77.01 Mbit/s

95th percentile per-packet one-way delay: 116.487 ms

Loss rate: 2.68%

-- Flow 2:

Average throughput: 11.73 Mbit/s

95th percentile per-packet one-way delay: 116.553 ms

Loss rate: 3.65%

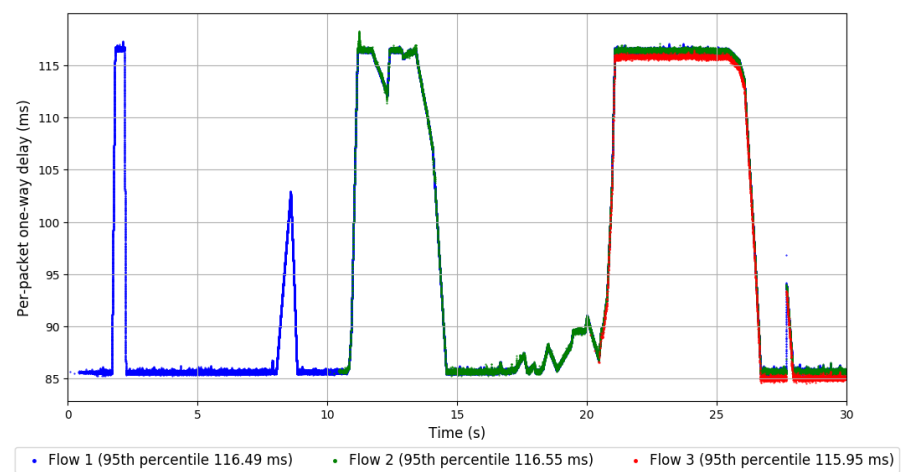
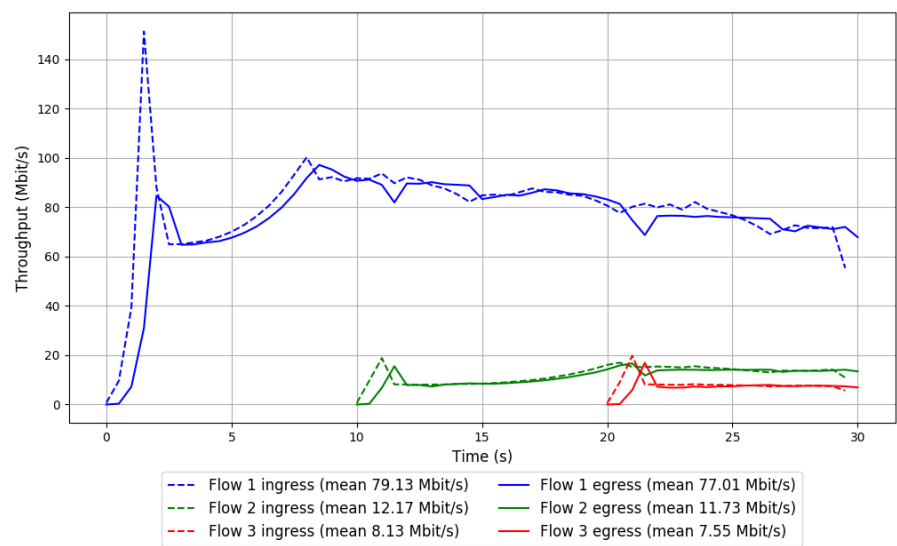
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 115.951 ms

Loss rate: 7.14%

Run 7: Report of PCC-Allegro — Data Link

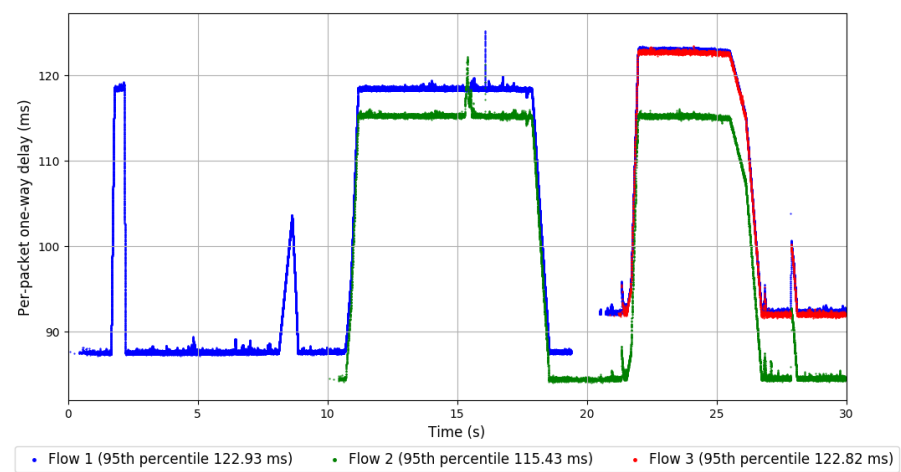
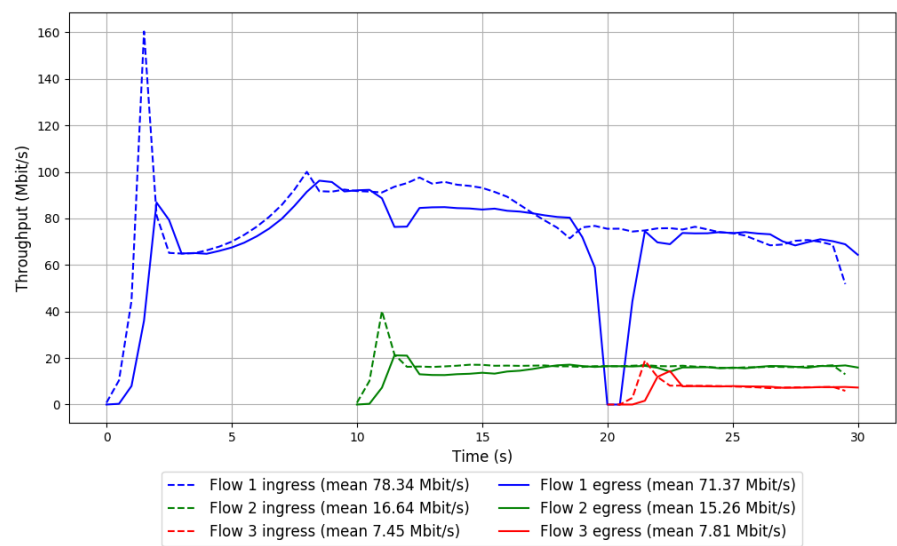


Run 8: Statistics of PCC-Allegro

Start at: 2018-06-18 18:50:13
End at: 2018-06-18 18:50:43
Local clock offset: -2.832 ms
Remote clock offset: 10.075 ms

Below is generated by plot.py at 2018-06-18 19:50:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.89 Mbit/s
95th percentile per-packet one-way delay: 122.913 ms
Loss rate: 8.66%
-- Flow 1:
Average throughput: 71.37 Mbit/s
95th percentile per-packet one-way delay: 122.934 ms
Loss rate: 8.88%
-- Flow 2:
Average throughput: 15.26 Mbit/s
95th percentile per-packet one-way delay: 115.429 ms
Loss rate: 8.31%
-- Flow 3:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 122.817 ms
Loss rate: 3.24%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-06-18 19:10:24

End at: 2018-06-18 19:10:54

Local clock offset: -2.273 ms

Remote clock offset: 3.208 ms

Below is generated by plot.py at 2018-06-18 19:50:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.14 Mbit/s

95th percentile per-packet one-way delay: 112.186 ms

Loss rate: 3.76%

-- Flow 1:

Average throughput: 78.76 Mbit/s

95th percentile per-packet one-way delay: 112.159 ms

Loss rate: 3.39%

-- Flow 2:

Average throughput: 8.75 Mbit/s

95th percentile per-packet one-way delay: 110.731 ms

Loss rate: 6.12%

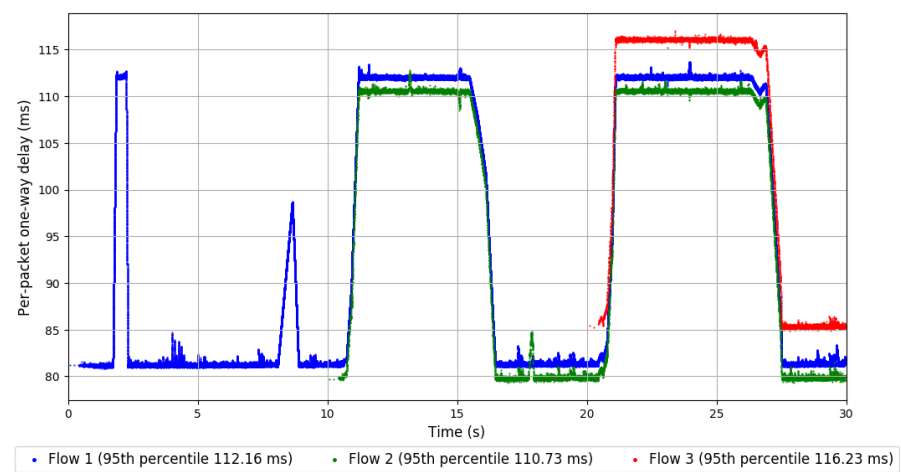
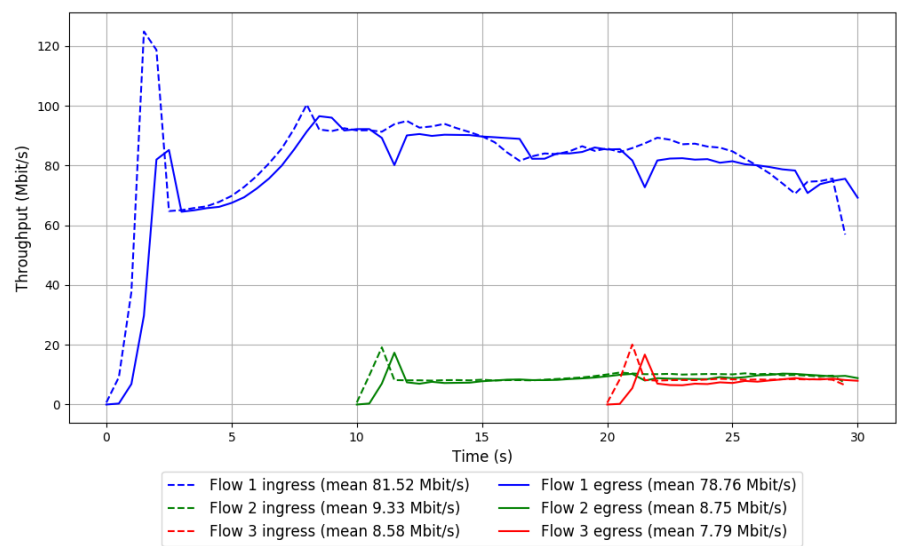
-- Flow 3:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 116.230 ms

Loss rate: 9.19%

Run 9: Report of PCC-Allegro — Data Link

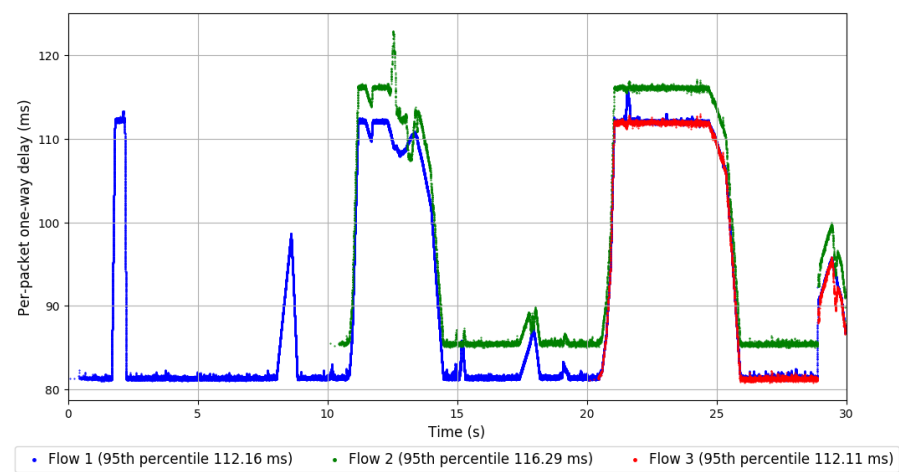
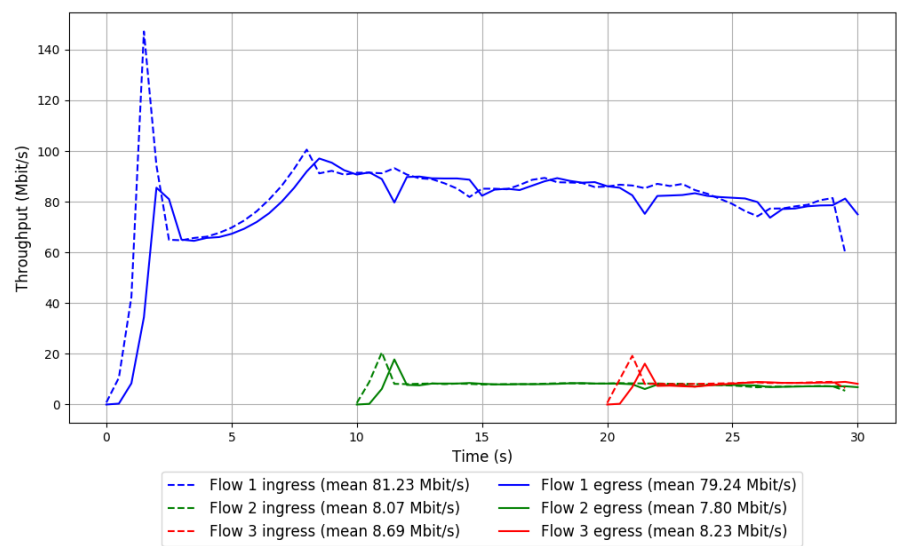


Run 10: Statistics of PCC-Allegro

Start at: 2018-06-18 19:30:25
End at: 2018-06-18 19:30:55
Local clock offset: -1.621 ms
Remote clock offset: 10.196 ms

Below is generated by plot.py at 2018-06-18 19:50:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 112.211 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 79.24 Mbit/s
95th percentile per-packet one-way delay: 112.161 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 116.293 ms
Loss rate: 3.30%
-- Flow 3:
Average throughput: 8.23 Mbit/s
95th percentile per-packet one-way delay: 112.113 ms
Loss rate: 5.27%

Run 10: Report of PCC-Allegro — Data Link

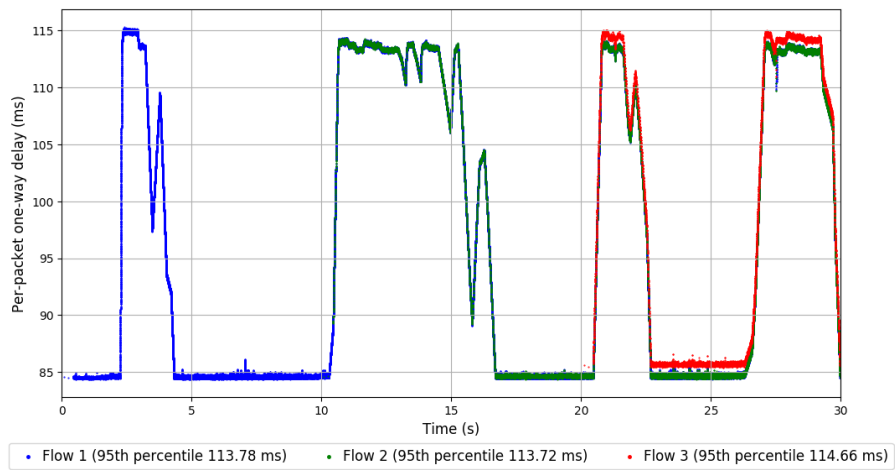
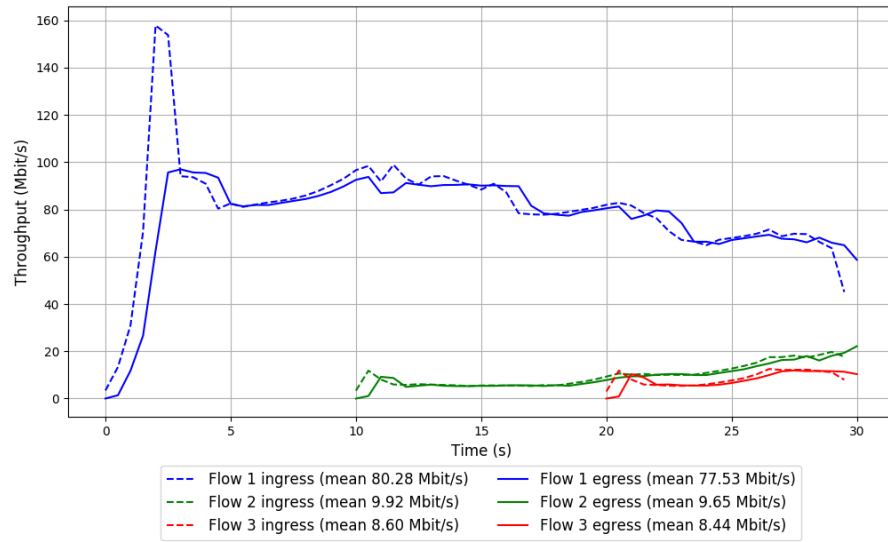


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-18 16:19:39
End at: 2018-06-18 16:20:09
Local clock offset: -2.686 ms
Remote clock offset: 5.679 ms

# Below is generated by plot.py at 2018-06-18 19:51:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 113.832 ms
Loss rate: 3.32%
-- Flow 1:
Average throughput: 77.53 Mbit/s
95th percentile per-packet one-way delay: 113.777 ms
Loss rate: 3.43%
-- Flow 2:
Average throughput: 9.65 Mbit/s
95th percentile per-packet one-way delay: 113.717 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 114.659 ms
Loss rate: 1.80%
```

Run 1: Report of PCC-Expr — Data Link

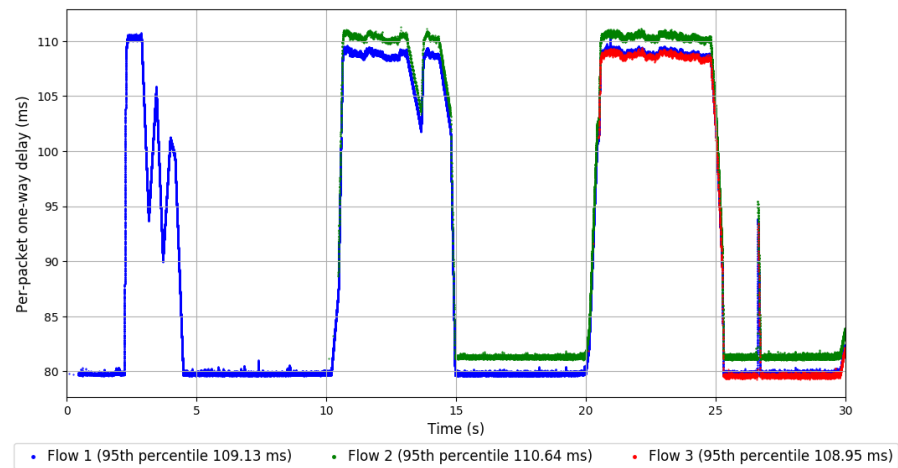
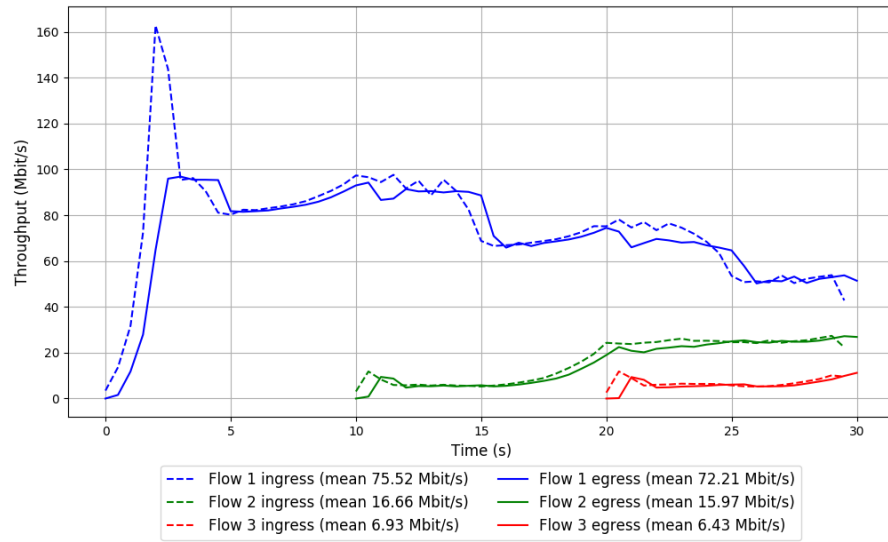


```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-18 16:39:43
End at: 2018-06-18 16:40:13
Local clock offset: -2.878 ms
Remote clock offset: 3.805 ms

# Below is generated by plot.py at 2018-06-18 19:52:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 110.060 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 72.21 Mbit/s
95th percentile per-packet one-way delay: 109.129 ms
Loss rate: 4.37%
-- Flow 2:
Average throughput: 15.97 Mbit/s
95th percentile per-packet one-way delay: 110.643 ms
Loss rate: 4.10%
-- Flow 3:
Average throughput: 6.43 Mbit/s
95th percentile per-packet one-way delay: 108.954 ms
Loss rate: 7.23%
```

Run 2: Report of PCC-Expr — Data Link

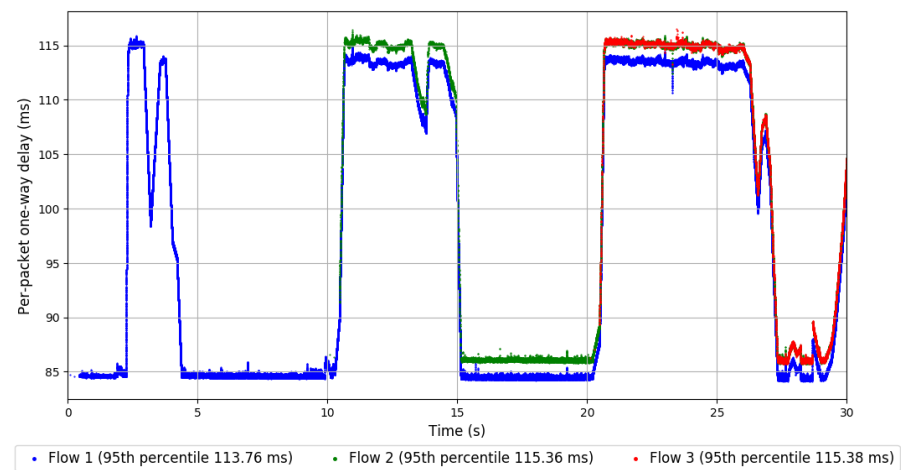
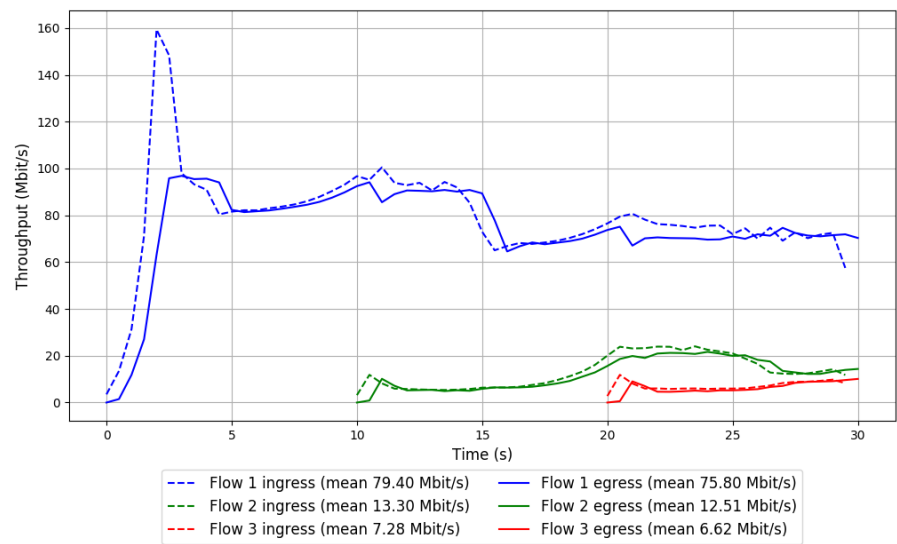


Run 3: Statistics of PCC-Expr

Start at: 2018-06-18 16:59:45
End at: 2018-06-18 17:00:15
Local clock offset: -2.951 ms
Remote clock offset: 10.177 ms

Below is generated by plot.py at 2018-06-18 19:52:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.31 Mbit/s
95th percentile per-packet one-way delay: 114.916 ms
Loss rate: 4.73%
-- Flow 1:
Average throughput: 75.80 Mbit/s
95th percentile per-packet one-way delay: 113.763 ms
Loss rate: 4.48%
-- Flow 2:
Average throughput: 12.51 Mbit/s
95th percentile per-packet one-way delay: 115.365 ms
Loss rate: 5.83%
-- Flow 3:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 115.376 ms
Loss rate: 8.90%

Run 3: Report of PCC-Expr — Data Link

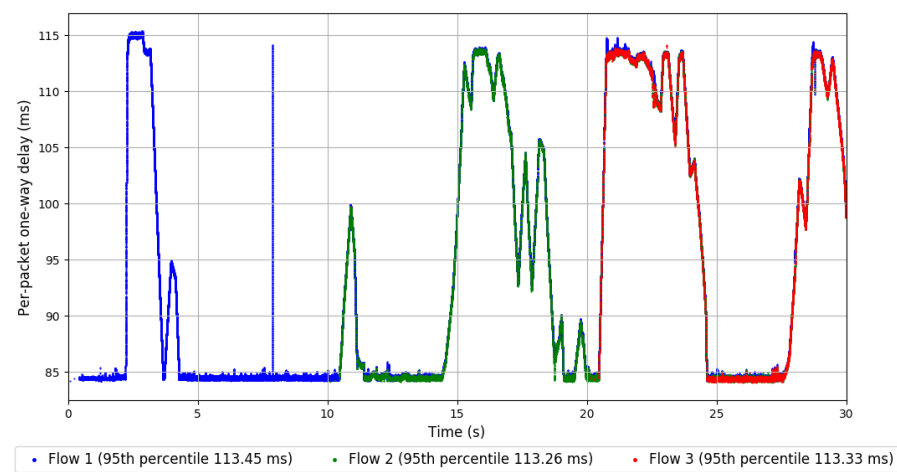
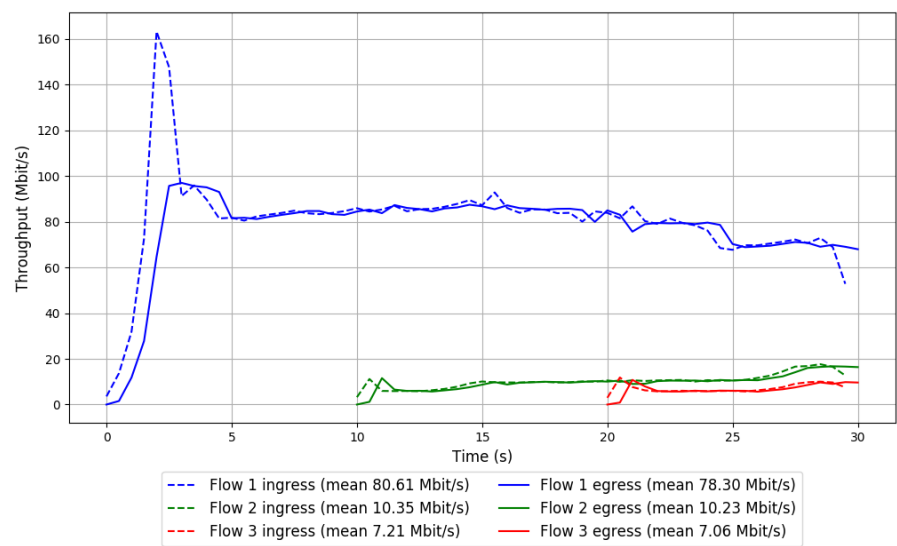


Run 4: Statistics of PCC-Expr

Start at: 2018-06-18 17:19:48
End at: 2018-06-18 17:20:18
Local clock offset: -2.703 ms
Remote clock offset: 17.563 ms

Below is generated by plot.py at 2018-06-18 19:52:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.44 Mbit/s
95th percentile per-packet one-way delay: 113.427 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 78.30 Mbit/s
95th percentile per-packet one-way delay: 113.448 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 10.23 Mbit/s
95th percentile per-packet one-way delay: 113.256 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 7.06 Mbit/s
95th percentile per-packet one-way delay: 113.328 ms
Loss rate: 1.98%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-06-18 17:39:51

End at: 2018-06-18 17:40:21

Local clock offset: -2.712 ms

Remote clock offset: 8.009 ms

Below is generated by plot.py at 2018-06-18 19:52:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.51 Mbit/s

95th percentile per-packet one-way delay: 110.694 ms

Loss rate: 3.91%

-- Flow 1:

Average throughput: 78.87 Mbit/s

95th percentile per-packet one-way delay: 110.566 ms

Loss rate: 3.83%

-- Flow 2:

Average throughput: 10.42 Mbit/s

95th percentile per-packet one-way delay: 110.998 ms

Loss rate: 4.12%

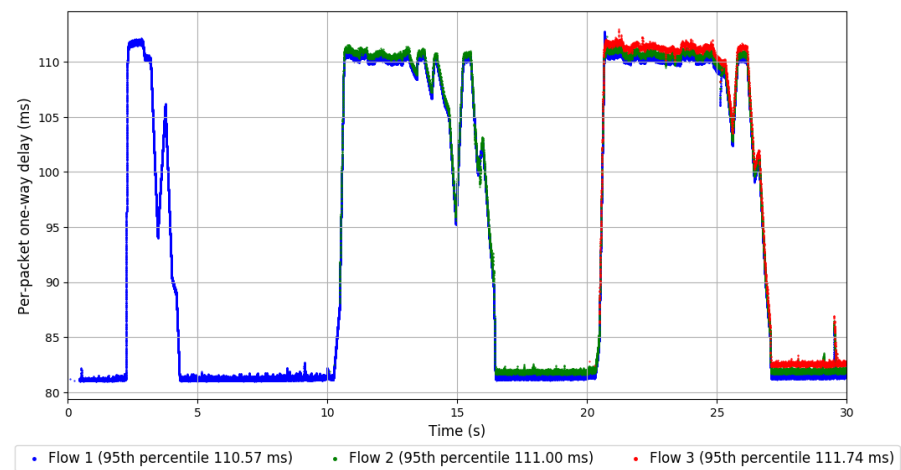
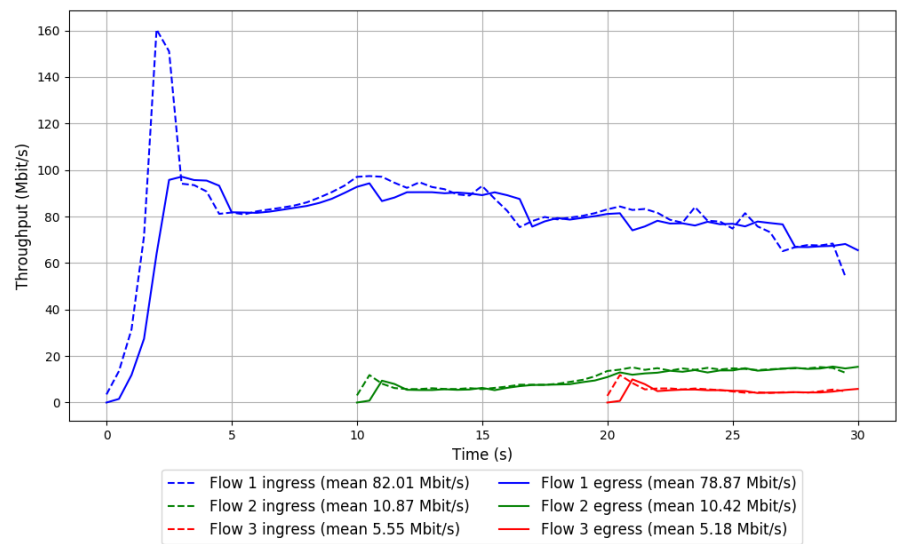
-- Flow 3:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 111.736 ms

Loss rate: 6.60%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-06-18 18:00:04

End at: 2018-06-18 18:00:34

Local clock offset: -2.746 ms

Remote clock offset: 7.184 ms

Below is generated by plot.py at 2018-06-18 19:52:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.98 Mbit/s

95th percentile per-packet one-way delay: 114.365 ms

Loss rate: 3.17%

-- Flow 1:

Average throughput: 79.26 Mbit/s

95th percentile per-packet one-way delay: 114.372 ms

Loss rate: 3.23%

-- Flow 2:

Average throughput: 6.78 Mbit/s

95th percentile per-packet one-way delay: 114.418 ms

Loss rate: 3.42%

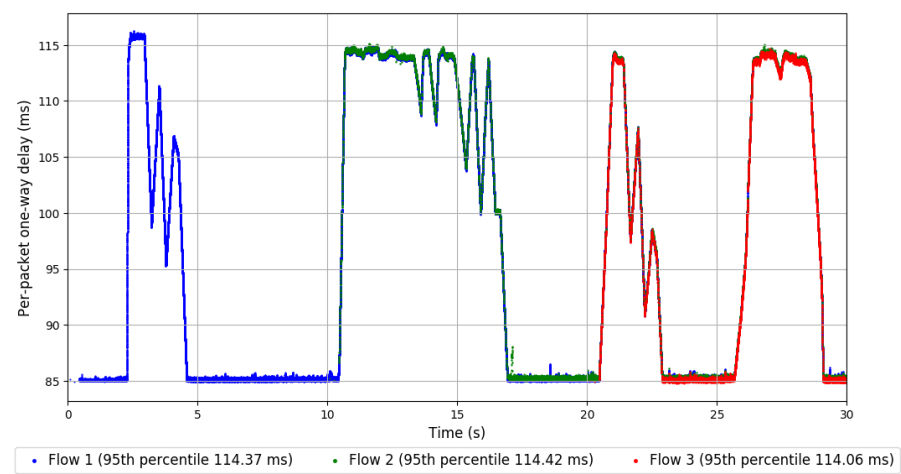
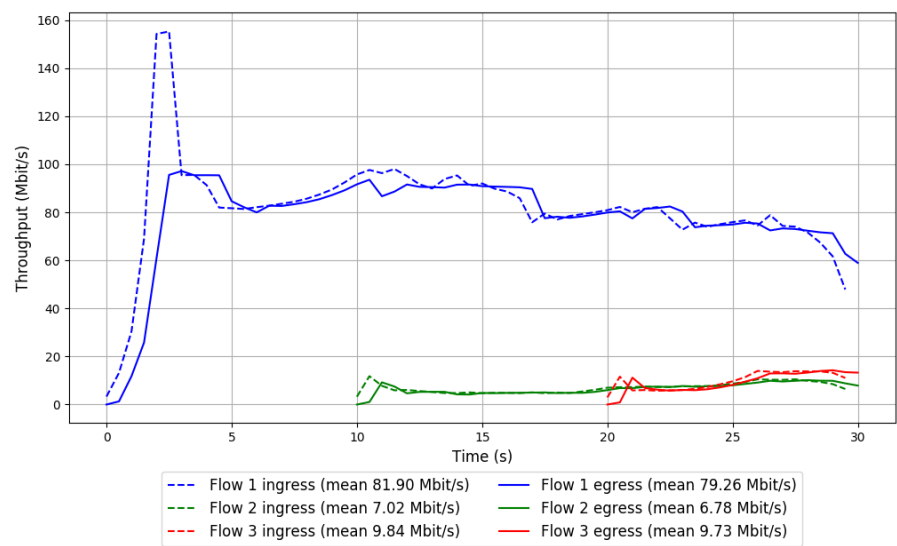
-- Flow 3:

Average throughput: 9.73 Mbit/s

95th percentile per-packet one-way delay: 114.065 ms

Loss rate: 1.16%

Run 6: Report of PCC-Expr — Data Link

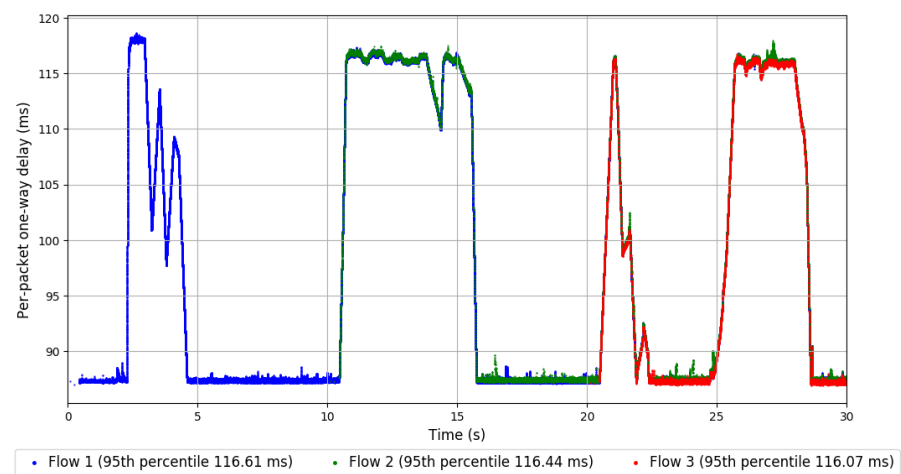
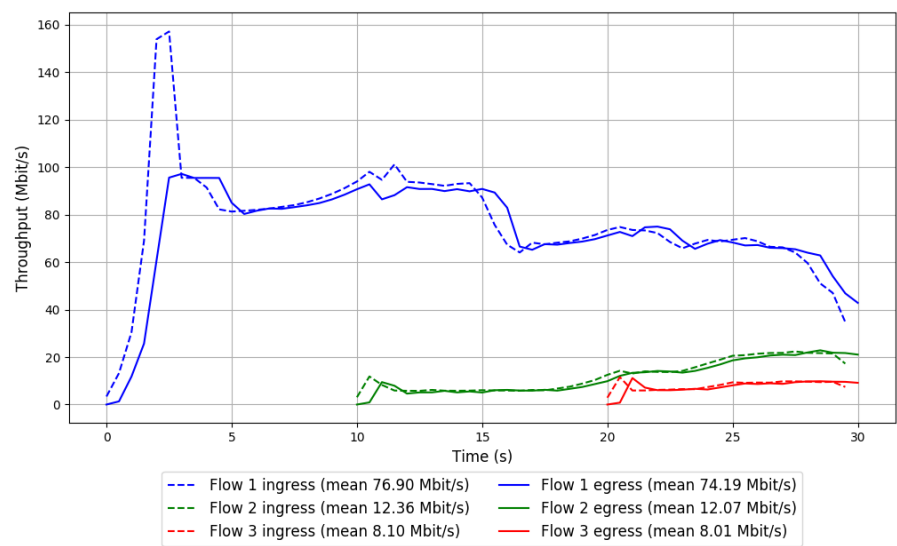


Run 7: Statistics of PCC-Expr

Start at: 2018-06-18 18:20:04
End at: 2018-06-18 18:20:34
Local clock offset: -2.893 ms
Remote clock offset: 12.736 ms

Below is generated by plot.py at 2018-06-18 19:52:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 116.584 ms
Loss rate: 3.35%
-- Flow 1:
Average throughput: 74.19 Mbit/s
95th percentile per-packet one-way delay: 116.609 ms
Loss rate: 3.53%
-- Flow 2:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 116.442 ms
Loss rate: 2.37%
-- Flow 3:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 116.068 ms
Loss rate: 1.09%

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-06-18 18:40:08

End at: 2018-06-18 18:40:38

Local clock offset: -2.885 ms

Remote clock offset: 8.234 ms

Below is generated by plot.py at 2018-06-18 19:53:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.87 Mbit/s

95th percentile per-packet one-way delay: 110.026 ms

Loss rate: 4.24%

-- Flow 1:

Average throughput: 73.19 Mbit/s

95th percentile per-packet one-way delay: 108.831 ms

Loss rate: 4.20%

-- Flow 2:

Average throughput: 14.96 Mbit/s

95th percentile per-packet one-way delay: 110.797 ms

Loss rate: 3.91%

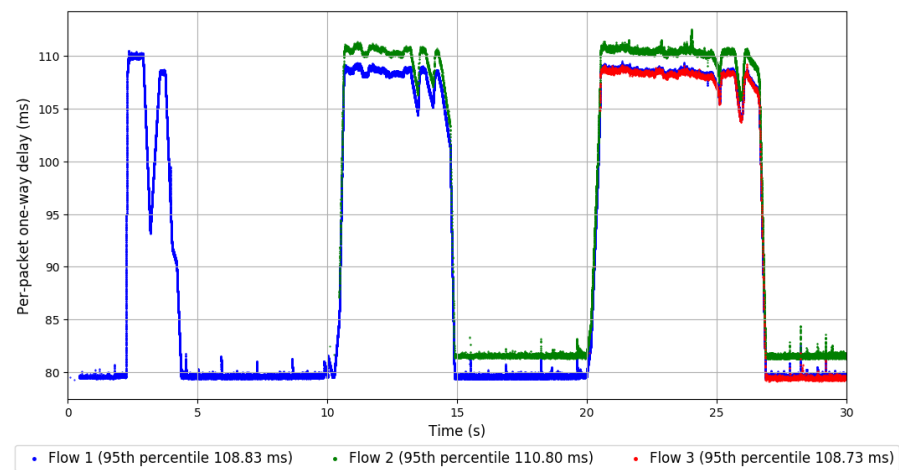
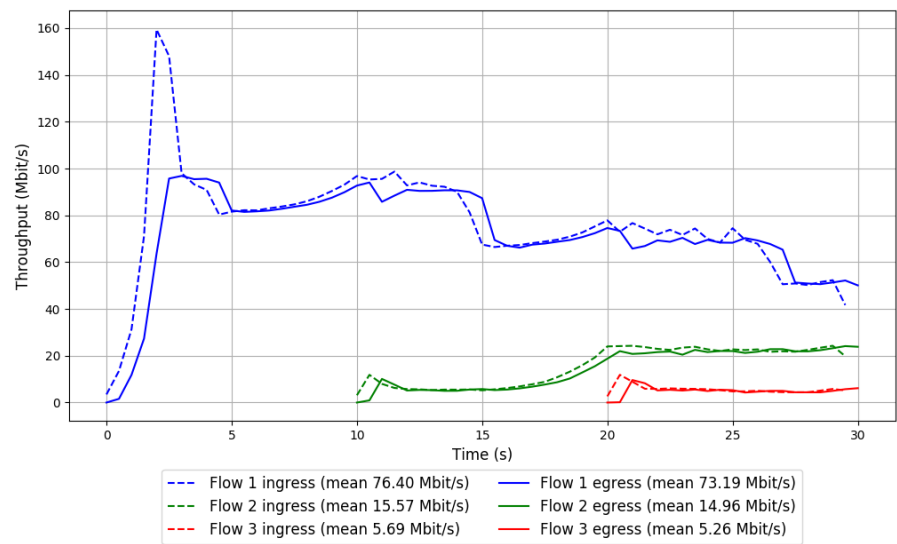
-- Flow 3:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 108.730 ms

Loss rate: 7.56%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-06-18 19:00:21

End at: 2018-06-18 19:00:51

Local clock offset: -2.843 ms

Remote clock offset: 9.774 ms

Below is generated by plot.py at 2018-06-18 19:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.18 Mbit/s

95th percentile per-packet one-way delay: 115.644 ms

Loss rate: 3.66%

-- Flow 1:

Average throughput: 76.53 Mbit/s

95th percentile per-packet one-way delay: 114.919 ms

Loss rate: 3.70%

-- Flow 2:

Average throughput: 11.35 Mbit/s

95th percentile per-packet one-way delay: 116.976 ms

Loss rate: 3.06%

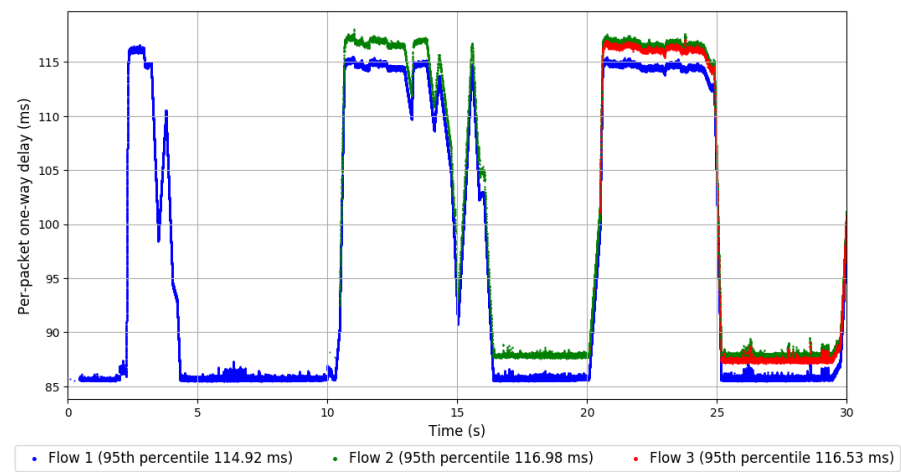
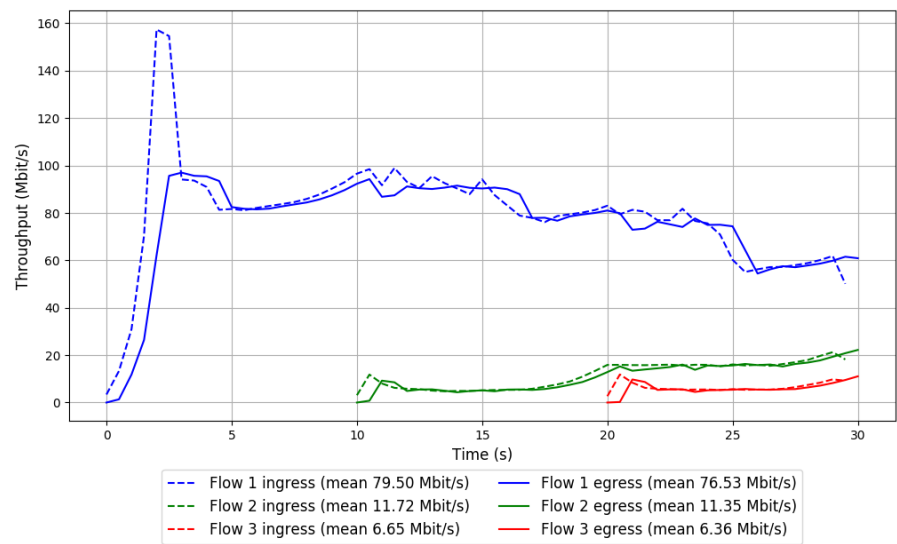
-- Flow 3:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 116.534 ms

Loss rate: 4.35%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-06-18 19:20:21

End at: 2018-06-18 19:20:51

Local clock offset: -1.837 ms

Remote clock offset: 7.709 ms

Below is generated by plot.py at 2018-06-18 19:54:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.11 Mbit/s

95th percentile per-packet one-way delay: 116.570 ms

Loss rate: 3.14%

-- Flow 1:

Average throughput: 74.13 Mbit/s

95th percentile per-packet one-way delay: 116.614 ms

Loss rate: 3.40%

-- Flow 2:

Average throughput: 16.30 Mbit/s

95th percentile per-packet one-way delay: 111.815 ms

Loss rate: 1.40%

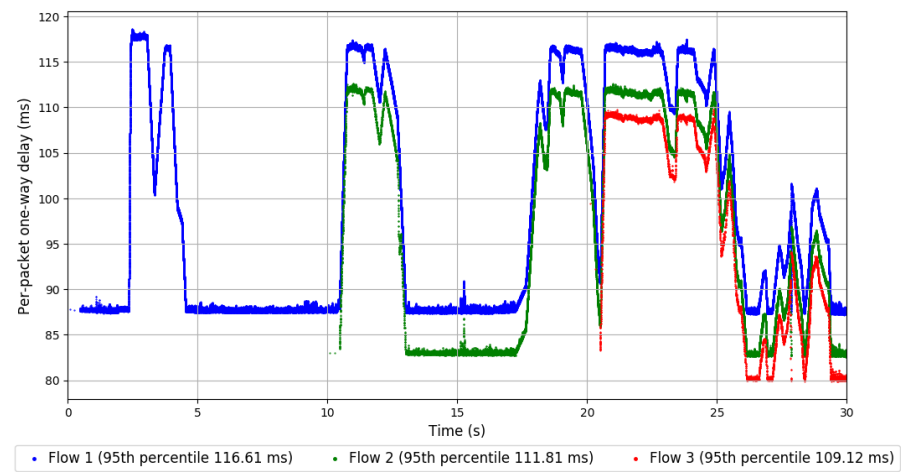
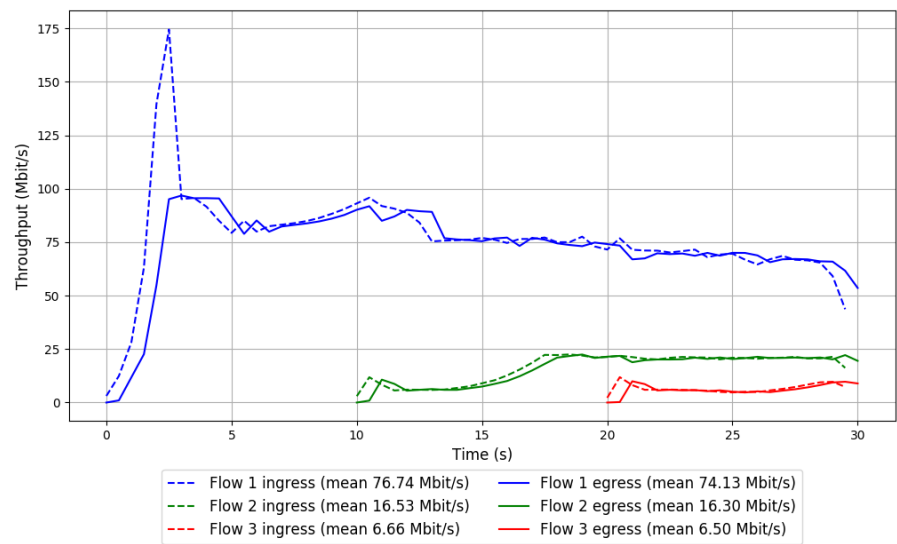
-- Flow 3:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 109.121 ms

Loss rate: 2.63%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-06-18 16:32:16

End at: 2018-06-18 16:32:46

Local clock offset: -2.943 ms

Remote clock offset: 7.732 ms

Below is generated by plot.py at 2018-06-18 19:54:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.72 Mbit/s

95th percentile per-packet one-way delay: 110.880 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 41.62 Mbit/s

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

Loss rate: 0.89%

-- Flow 2:

Average throughput: 32.97 Mbit/s

95th percentile per-packet one-way delay: 110.138 ms

Loss rate: 0.46%

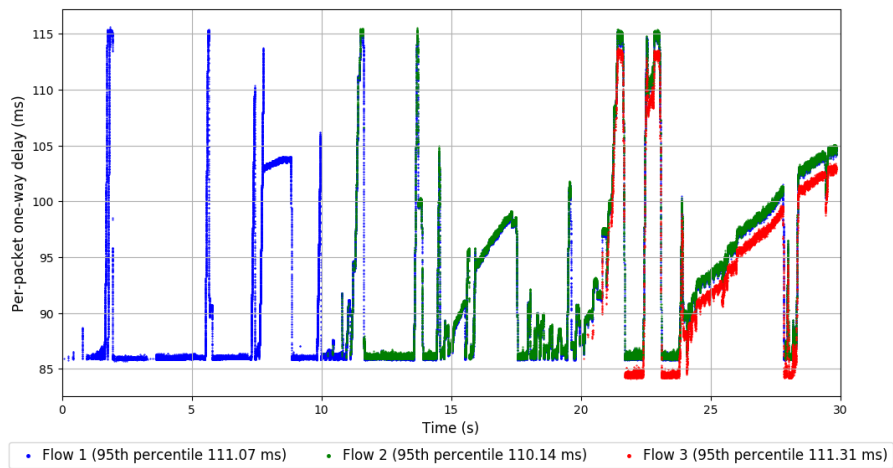
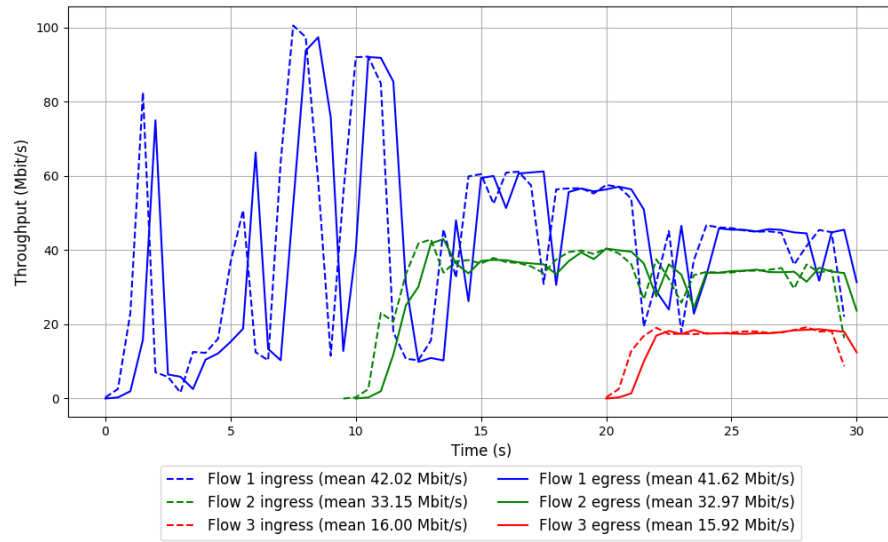
-- Flow 3:

Average throughput: 15.92 Mbit/s

95th percentile per-packet one-way delay: 111.312 ms

Loss rate: 0.32%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-06-18 16:52:19

End at: 2018-06-18 16:52:49

Local clock offset: -2.984 ms

Remote clock offset: 5.127 ms

Below is generated by plot.py at 2018-06-18 19:54:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.85 Mbit/s

95th percentile per-packet one-way delay: 108.073 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 47.32 Mbit/s

95th percentile per-packet one-way delay: 108.340 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 12.16 Mbit/s

95th percentile per-packet one-way delay: 100.527 ms

Loss rate: 0.34%

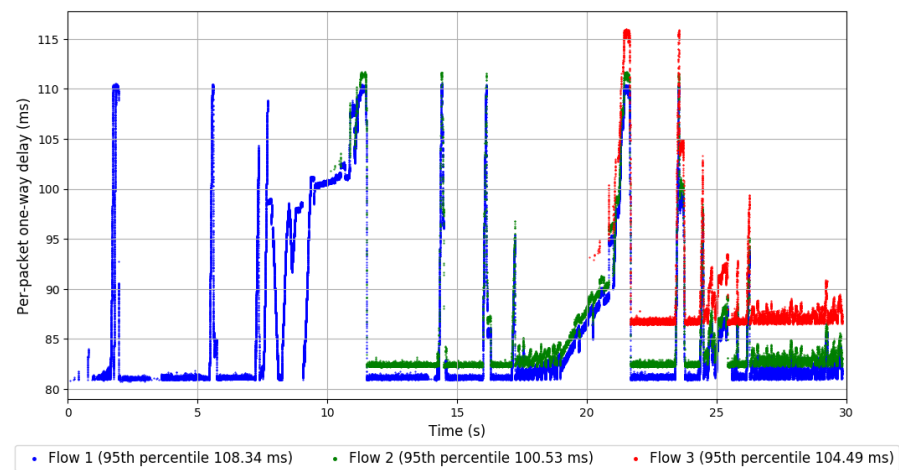
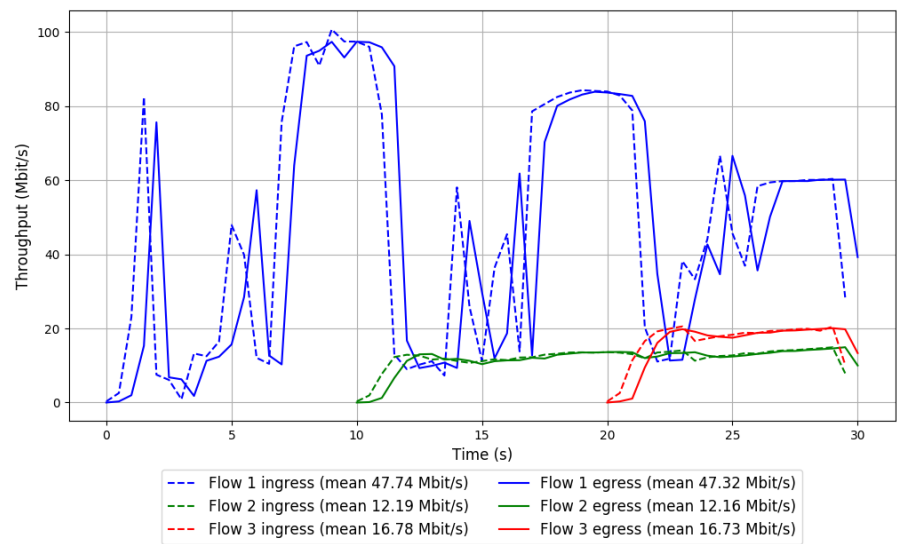
-- Flow 3:

Average throughput: 16.73 Mbit/s

95th percentile per-packet one-way delay: 104.490 ms

Loss rate: 0.33%

Run 2: Report of QUIC Cubic — Data Link

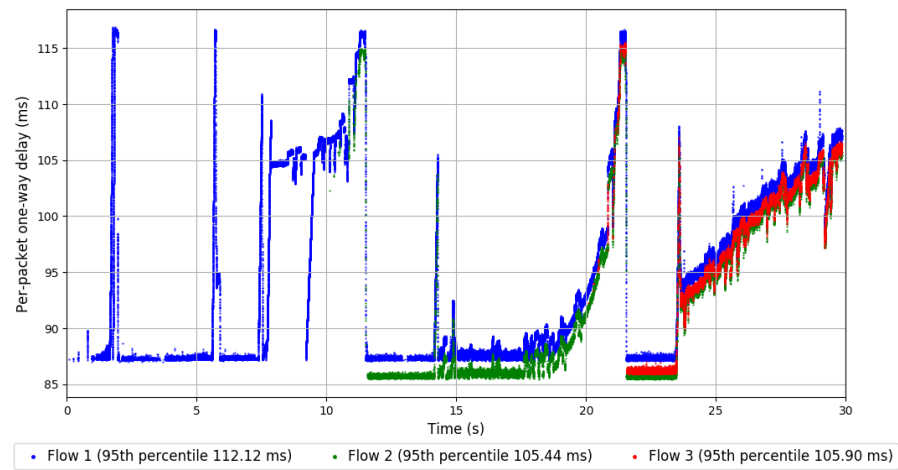
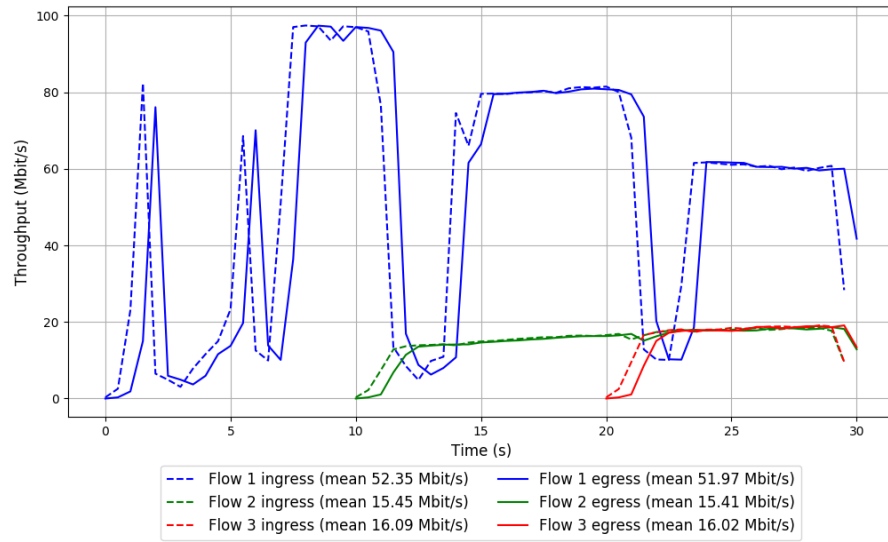


Run 3: Statistics of QUIC Cubic

Start at: 2018-06-18 17:12:20
End at: 2018-06-18 17:12:50
Local clock offset: -2.786 ms
Remote clock offset: 17.006 ms

Below is generated by plot.py at 2018-06-18 19:54:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.43 Mbit/s
95th percentile per-packet one-way delay: 111.368 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 51.97 Mbit/s
95th percentile per-packet one-way delay: 112.123 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 15.41 Mbit/s
95th percentile per-packet one-way delay: 105.436 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 16.02 Mbit/s
95th percentile per-packet one-way delay: 105.898 ms
Loss rate: 0.30%

Run 3: Report of QUIC Cubic — Data Link

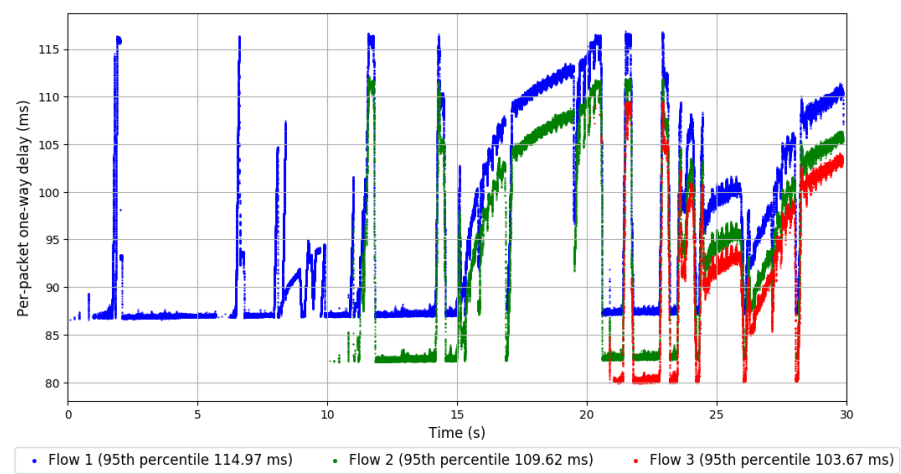
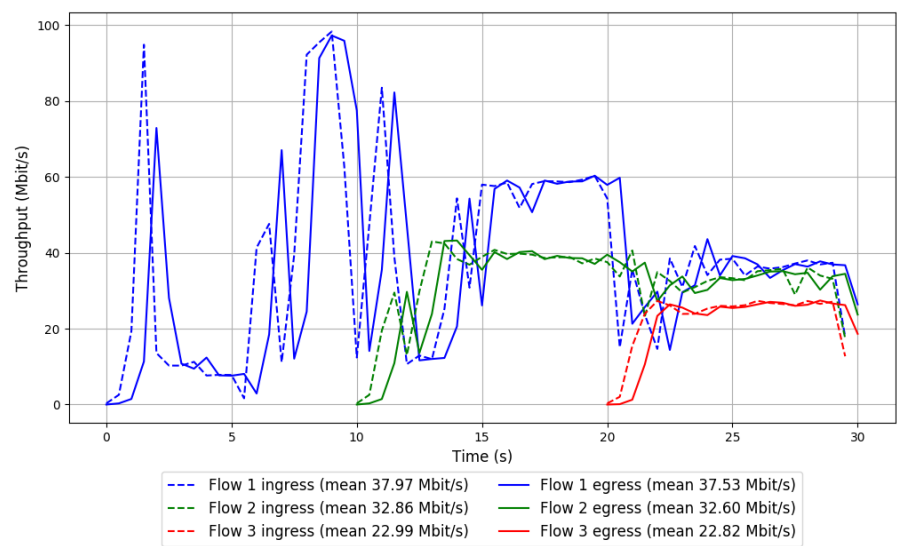


Run 4: Statistics of QUIC Cubic

Start at: 2018-06-18 17:32:24
End at: 2018-06-18 17:32:54
Local clock offset: -2.673 ms
Remote clock offset: 14.302 ms

Below is generated by plot.py at 2018-06-18 19:54:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.61 Mbit/s
95th percentile per-packet one-way delay: 112.688 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 37.53 Mbit/s
95th percentile per-packet one-way delay: 114.969 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 32.60 Mbit/s
95th percentile per-packet one-way delay: 109.617 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 22.82 Mbit/s
95th percentile per-packet one-way delay: 103.672 ms
Loss rate: 0.75%

Run 4: Report of QUIC Cubic — Data Link

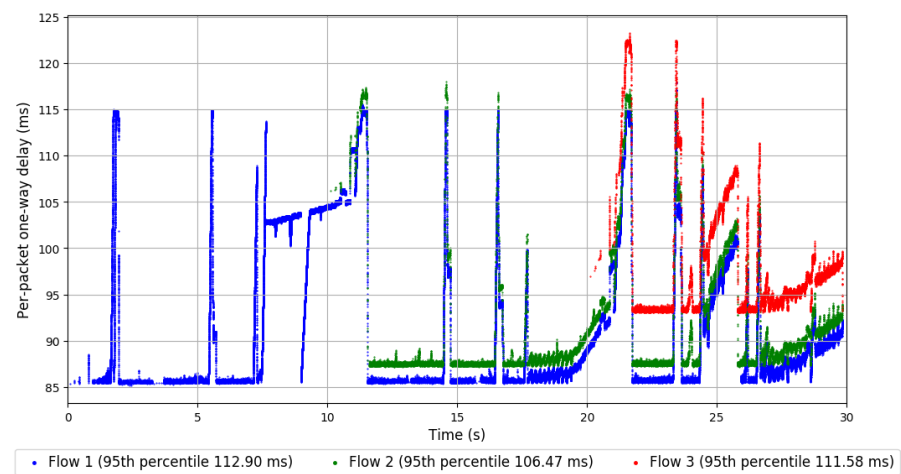
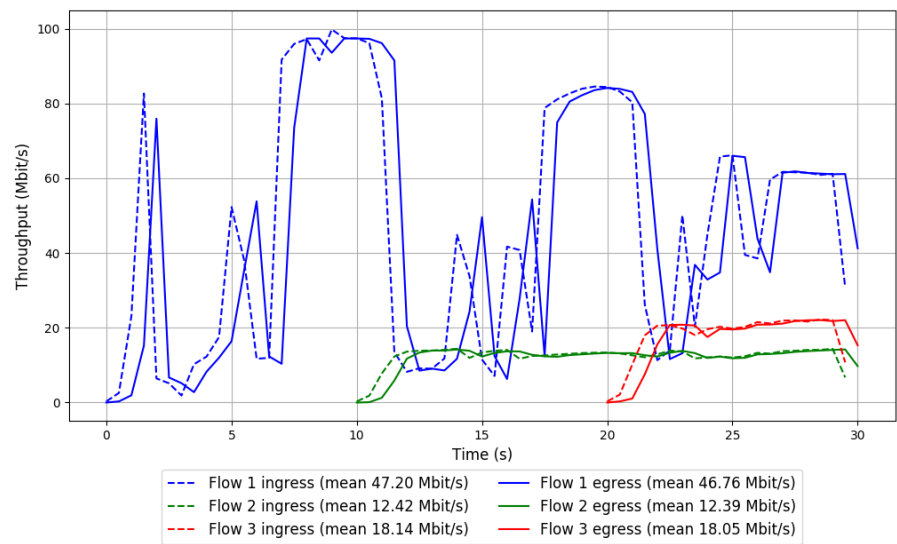


Run 5: Statistics of QUIC Cubic

Start at: 2018-06-18 17:52:26
End at: 2018-06-18 17:52:56
Local clock offset: -2.777 ms
Remote clock offset: 10.281 ms

Below is generated by plot.py at 2018-06-18 19:54:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 60.87 Mbit/s
95th percentile per-packet one-way delay: 112.591 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 46.76 Mbit/s
95th percentile per-packet one-way delay: 112.903 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 12.39 Mbit/s
95th percentile per-packet one-way delay: 106.473 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 18.05 Mbit/s
95th percentile per-packet one-way delay: 111.584 ms
Loss rate: 0.53%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-06-18 18:12:39

End at: 2018-06-18 18:13:09

Local clock offset: -2.834 ms

Remote clock offset: 5.068 ms

Below is generated by plot.py at 2018-06-18 19:54:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.92 Mbit/s

95th percentile per-packet one-way delay: 108.066 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 48.44 Mbit/s

95th percentile per-packet one-way delay: 108.010 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 19.78 Mbit/s

95th percentile per-packet one-way delay: 108.508 ms

Loss rate: 0.51%

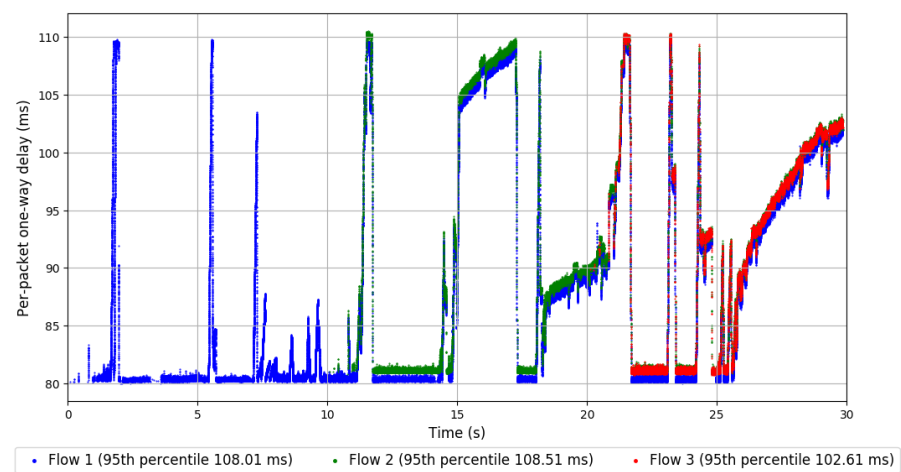
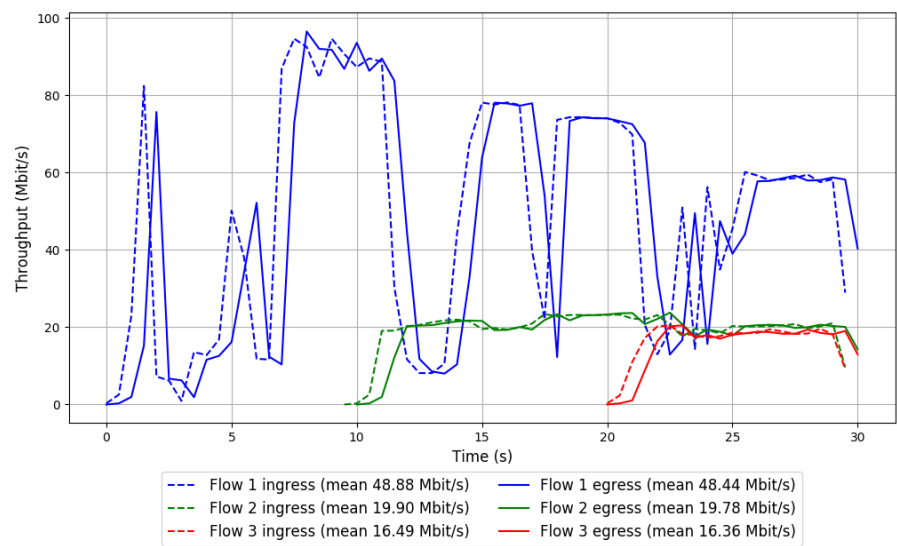
-- Flow 3:

Average throughput: 16.36 Mbit/s

95th percentile per-packet one-way delay: 102.614 ms

Loss rate: 0.64%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-18 18:32:40

End at: 2018-06-18 18:33:10

Local clock offset: -3.03 ms

Remote clock offset: 8.8 ms

Below is generated by plot.py at 2018-06-18 19:54:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.44 Mbit/s

95th percentile per-packet one-way delay: 107.329 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 50.73 Mbit/s

95th percentile per-packet one-way delay: 108.629 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 13.34 Mbit/s

95th percentile per-packet one-way delay: 103.341 ms

Loss rate: 0.30%

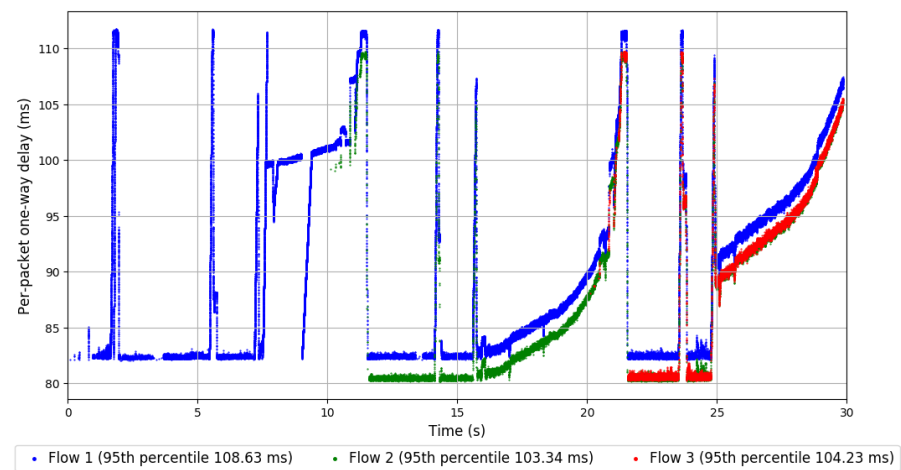
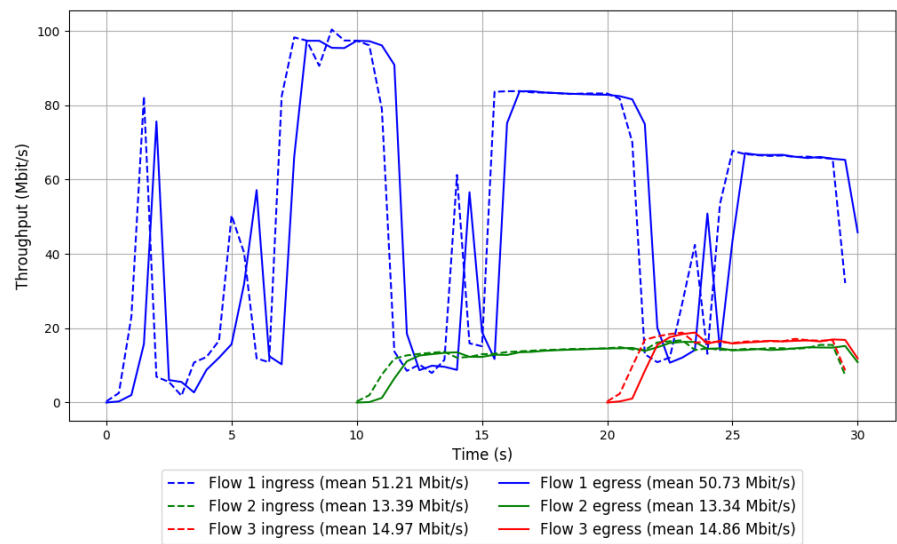
-- Flow 3:

Average throughput: 14.86 Mbit/s

95th percentile per-packet one-way delay: 104.233 ms

Loss rate: 0.54%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-06-18 18:52:42

End at: 2018-06-18 18:53:12

Local clock offset: -2.859 ms

Remote clock offset: 5.695 ms

Below is generated by plot.py at 2018-06-18 19:54:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.42 Mbit/s

95th percentile per-packet one-way delay: 109.954 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 37.60 Mbit/s

95th percentile per-packet one-way delay: 109.479 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 37.47 Mbit/s

95th percentile per-packet one-way delay: 110.599 ms

Loss rate: 0.81%

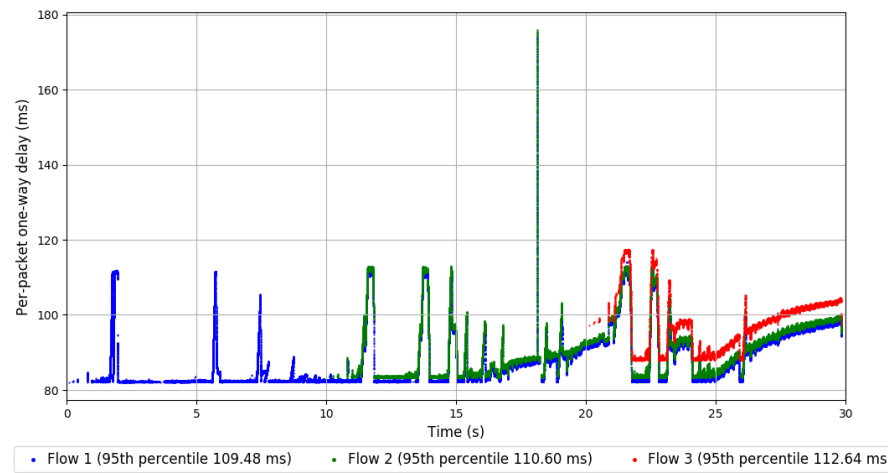
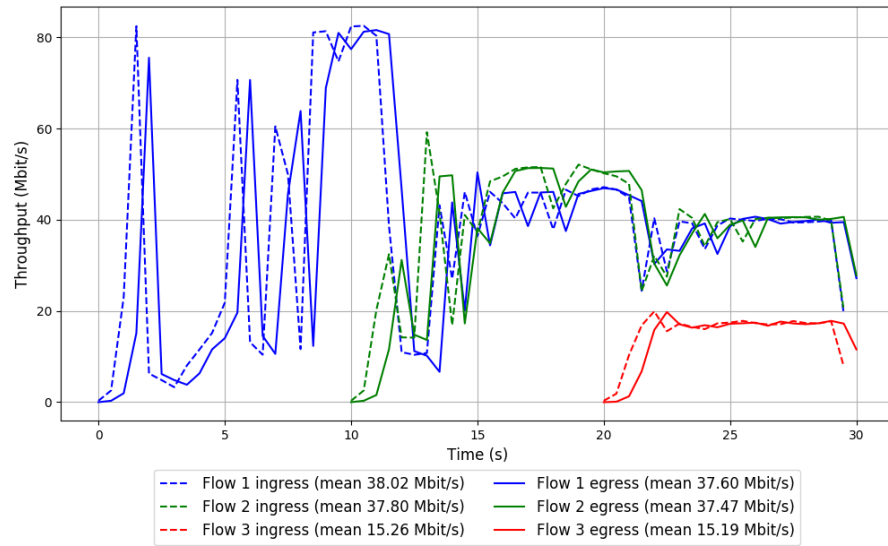
-- Flow 3:

Average throughput: 15.19 Mbit/s

95th percentile per-packet one-way delay: 112.640 ms

Loss rate: 0.49%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-06-18 19:12:54

End at: 2018-06-18 19:13:24

Local clock offset: -2.143 ms

Remote clock offset: 6.919 ms

Below is generated by plot.py at 2018-06-18 19:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.46 Mbit/s

95th percentile per-packet one-way delay: 108.963 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 52.69 Mbit/s

95th percentile per-packet one-way delay: 109.339 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 16.92 Mbit/s

95th percentile per-packet one-way delay: 104.935 ms

Loss rate: 0.34%

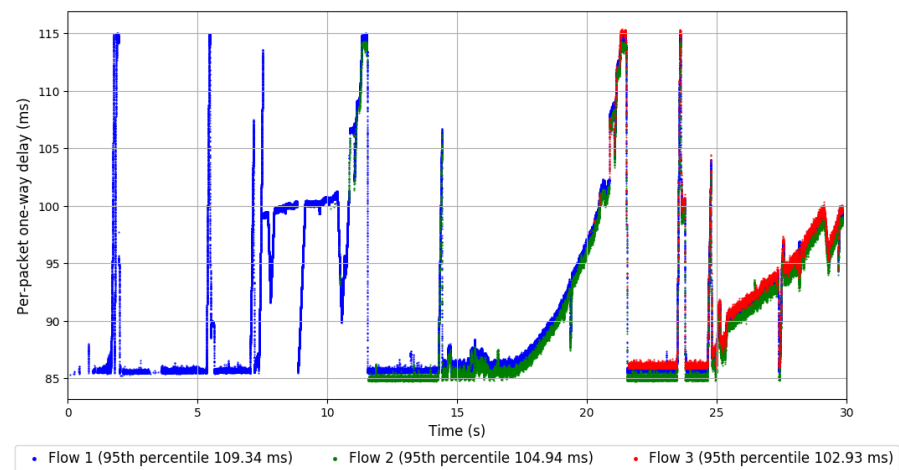
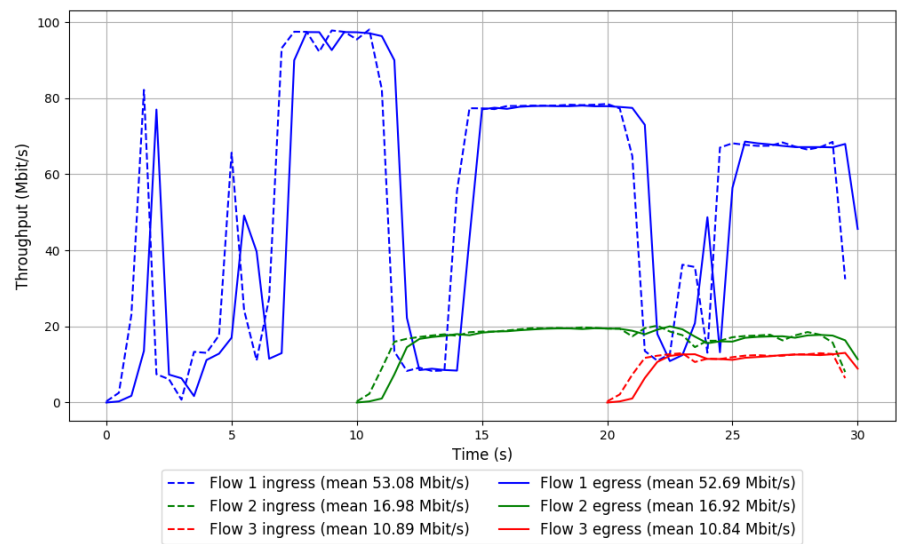
-- Flow 3:

Average throughput: 10.84 Mbit/s

95th percentile per-packet one-way delay: 102.932 ms

Loss rate: 0.46%

Run 9: Report of QUIC Cubic — Data Link

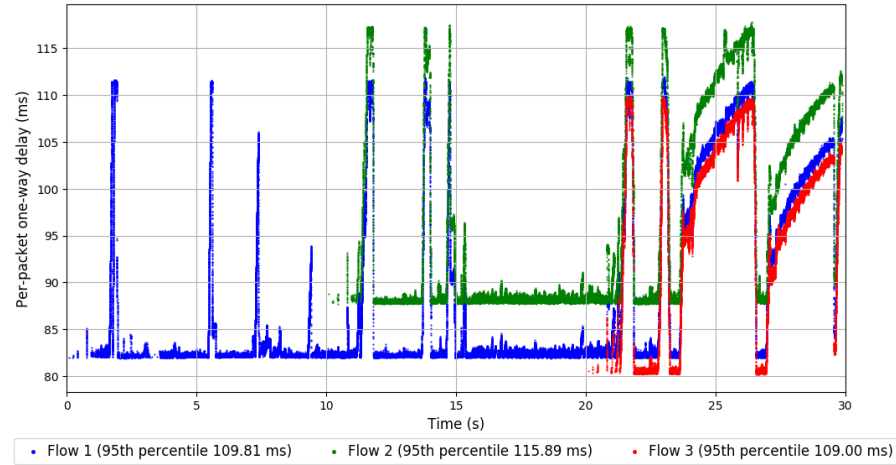
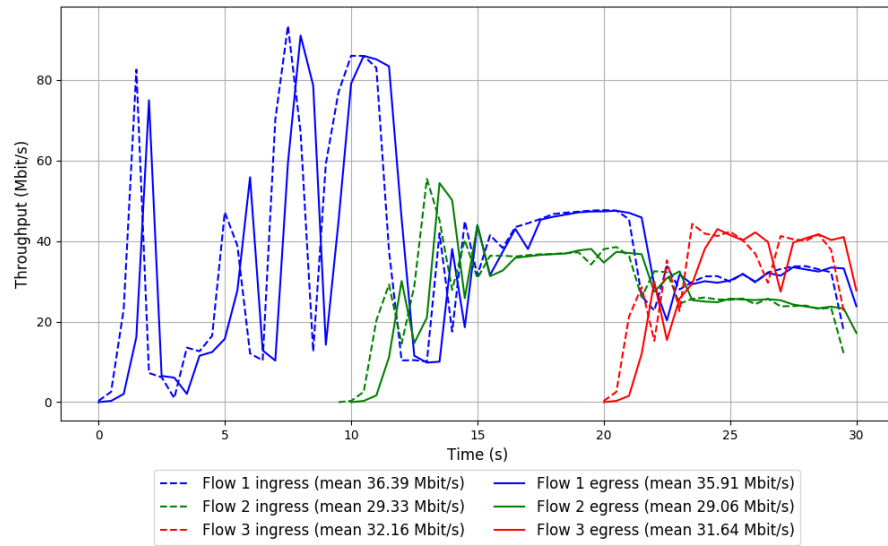


Run 10: Statistics of QUIC Cubic

Start at: 2018-06-18 19:32:55
End at: 2018-06-18 19:33:25
Local clock offset: -1.579 ms
Remote clock offset: 11.735 ms

Below is generated by plot.py at 2018-06-18 19:54:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 65.57 Mbit/s
95th percentile per-packet one-way delay: 111.131 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 35.91 Mbit/s
95th percentile per-packet one-way delay: 109.814 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 29.06 Mbit/s
95th percentile per-packet one-way delay: 115.892 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 109.004 ms
Loss rate: 1.36%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SReAM

Start at: 2018-06-18 16:24:42

End at: 2018-06-18 16:25:12

Local clock offset: -2.842 ms

Remote clock offset: 5.498 ms

Below is generated by plot.py at 2018-06-18 19:54:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 84.447 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.368 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.409 ms

Loss rate: 0.00%

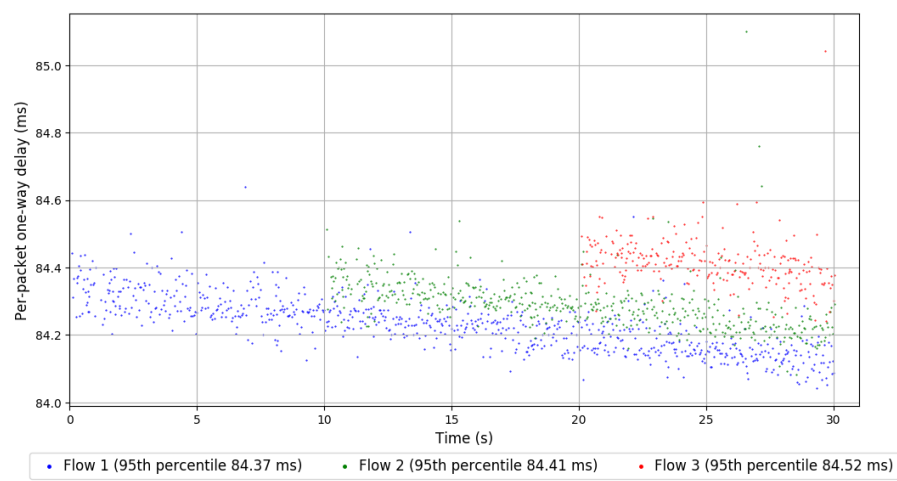
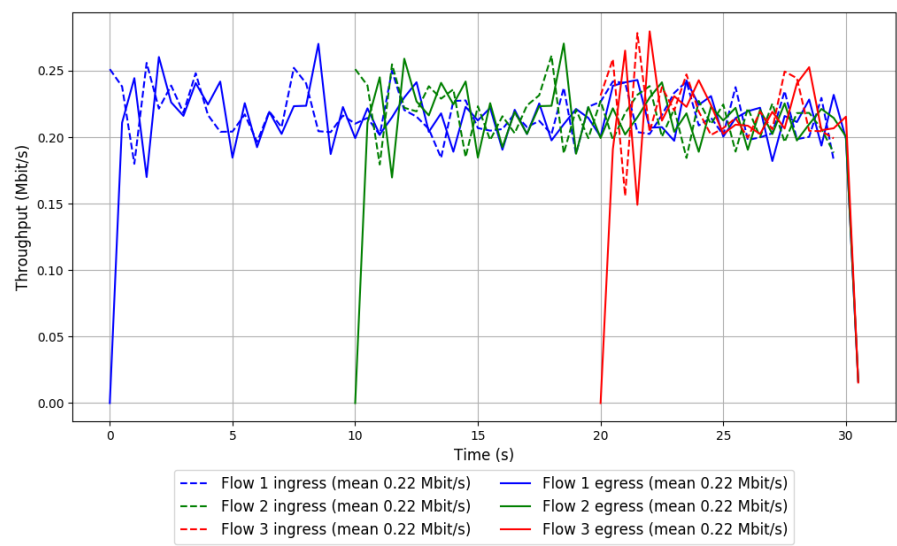
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.518 ms

Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

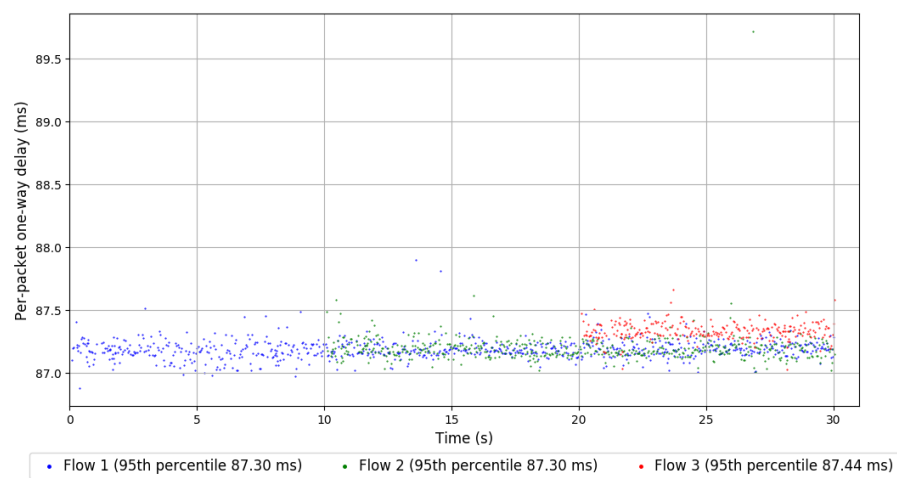
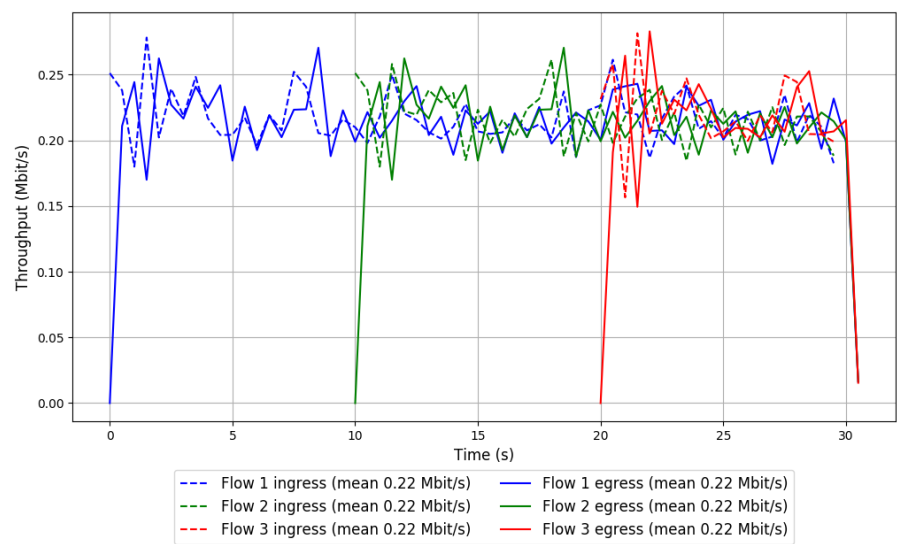


Run 2: Statistics of SReAM

Start at: 2018-06-18 16:44:44
End at: 2018-06-18 16:45:14
Local clock offset: -2.881 ms
Remote clock offset: 10.109 ms

Below is generated by plot.py at 2018-06-18 19:54:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.383 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.297 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.302 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.435 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-06-18 17:04:46

End at: 2018-06-18 17:05:16

Local clock offset: -3.051 ms

Remote clock offset: 12.16 ms

Below is generated by plot.py at 2018-06-18 19:54:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 85.644 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.636 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.664 ms

Loss rate: 0.00%

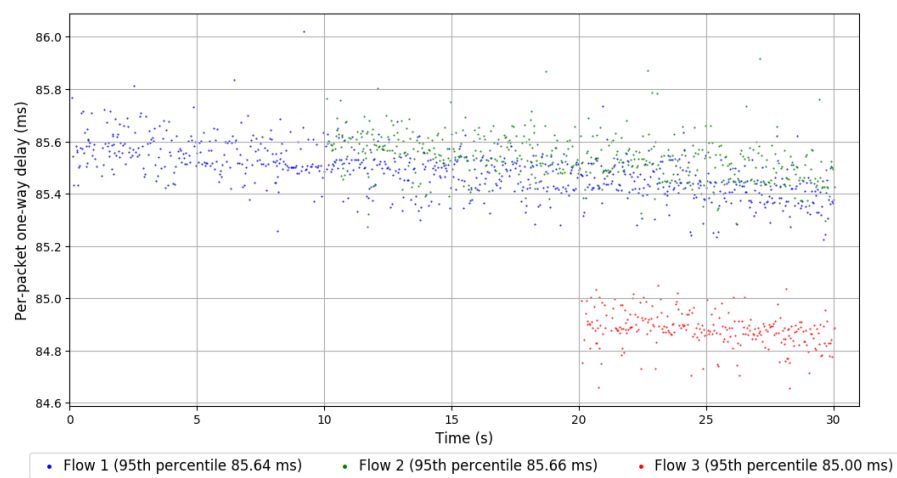
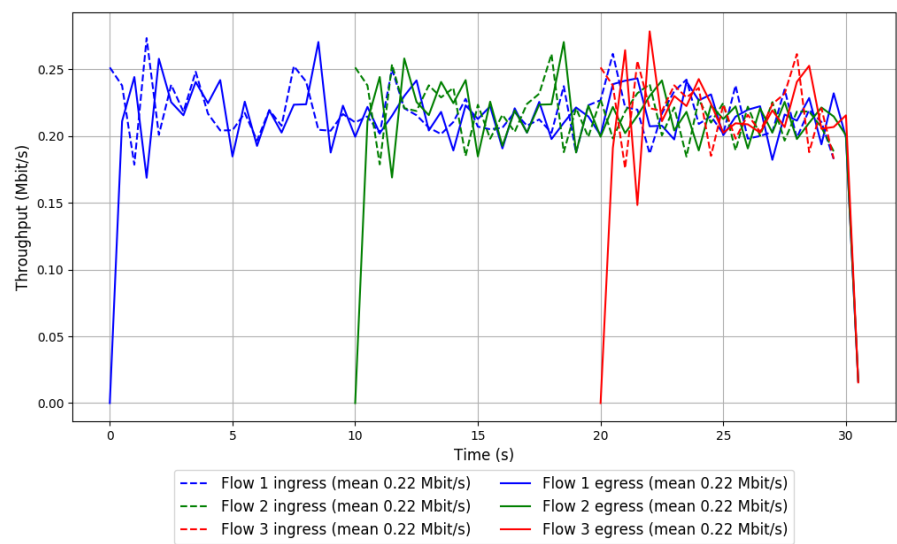
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.995 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

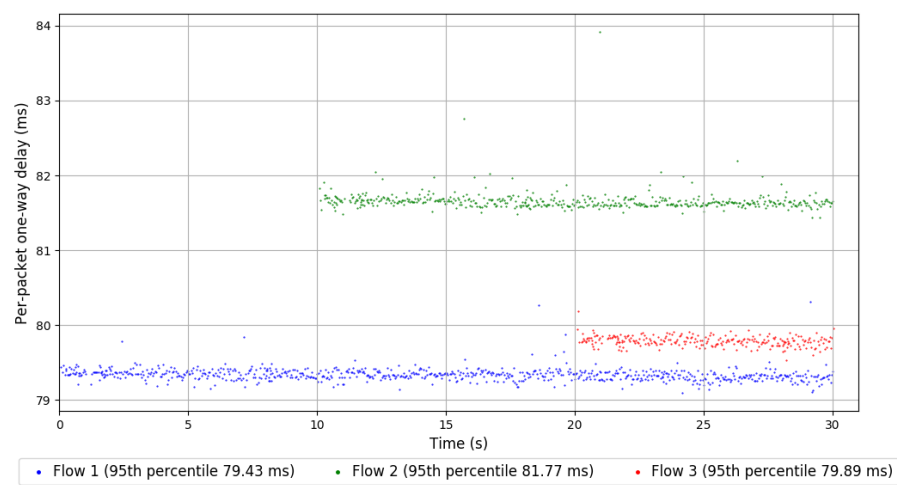
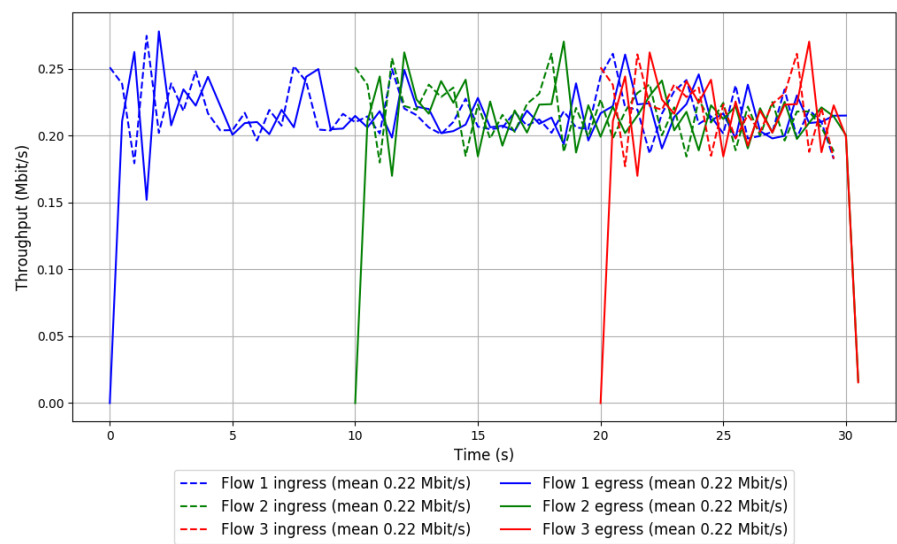


Run 4: Statistics of SReAM

Start at: 2018-06-18 17:24:49
End at: 2018-06-18 17:25:19
Local clock offset: -2.703 ms
Remote clock offset: 13.284 ms

```
# Below is generated by plot.py at 2018-06-18 19:54:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 81.702 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.432 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.774 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.889 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

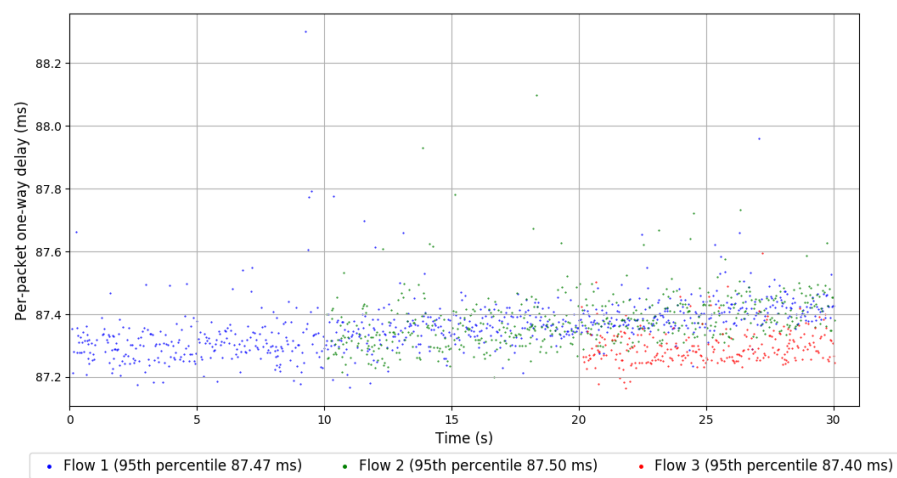
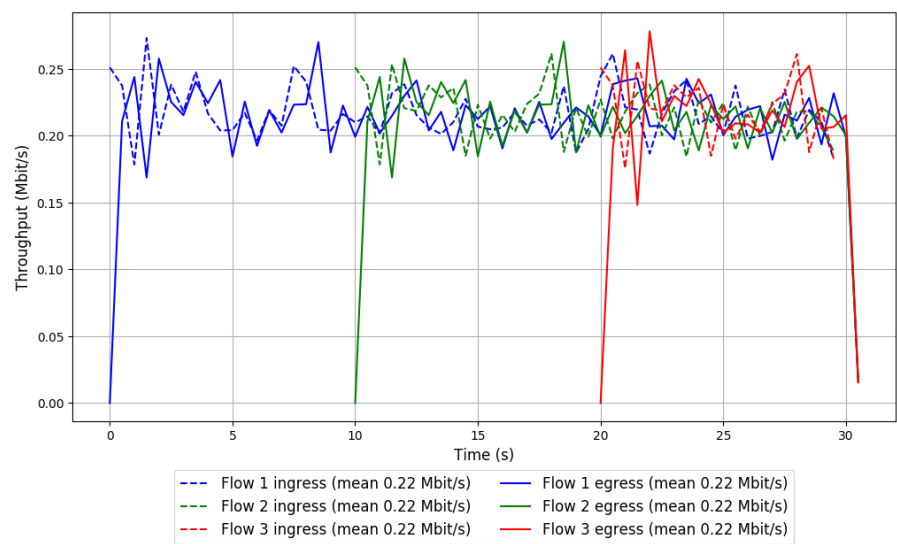


Run 5: Statistics of SReAM

Start at: 2018-06-18 17:44:53
End at: 2018-06-18 17:45:23
Local clock offset: -2.694 ms
Remote clock offset: 12.085 ms

Below is generated by plot.py at 2018-06-18 19:54:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.480 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.473 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.495 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.397 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-06-18 18:05:04

End at: 2018-06-18 18:05:34

Local clock offset: -2.772 ms

Remote clock offset: 8.001 ms

Below is generated by plot.py at 2018-06-18 19:54:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 92.046 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.377 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 92.092 ms

Loss rate: 0.00%

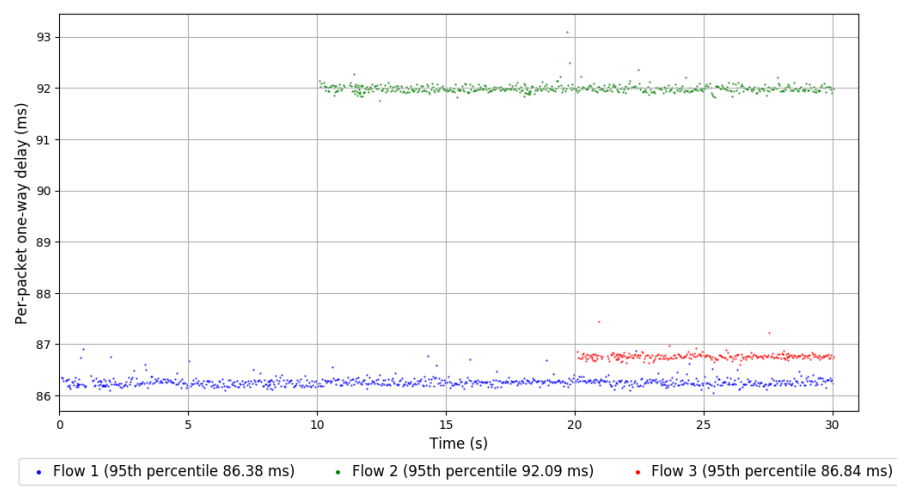
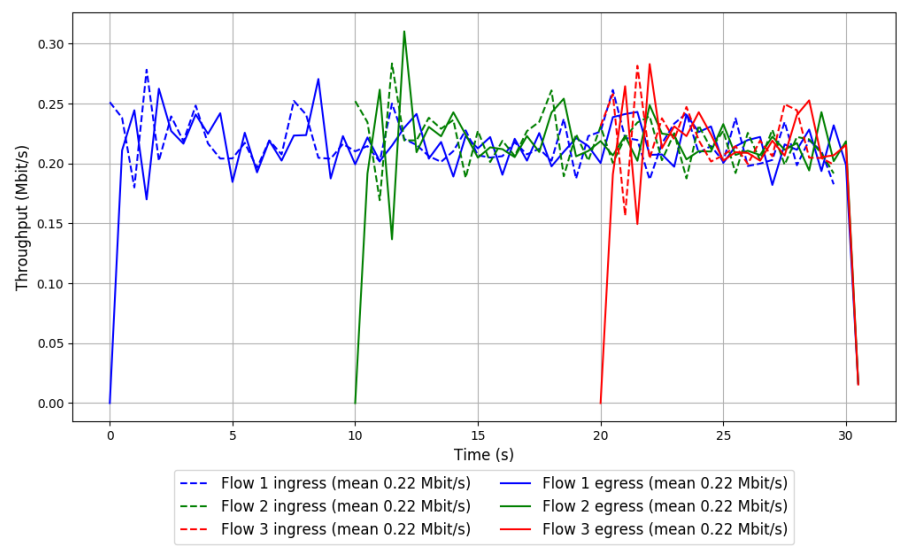
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.841 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

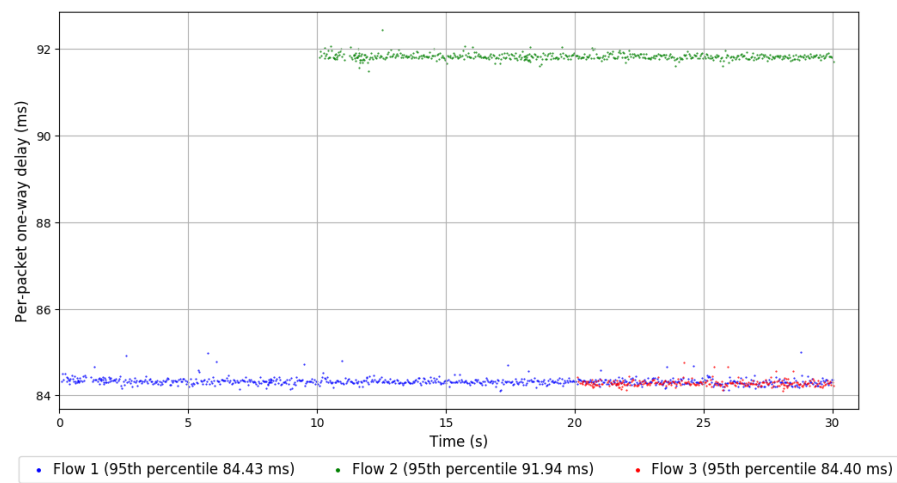
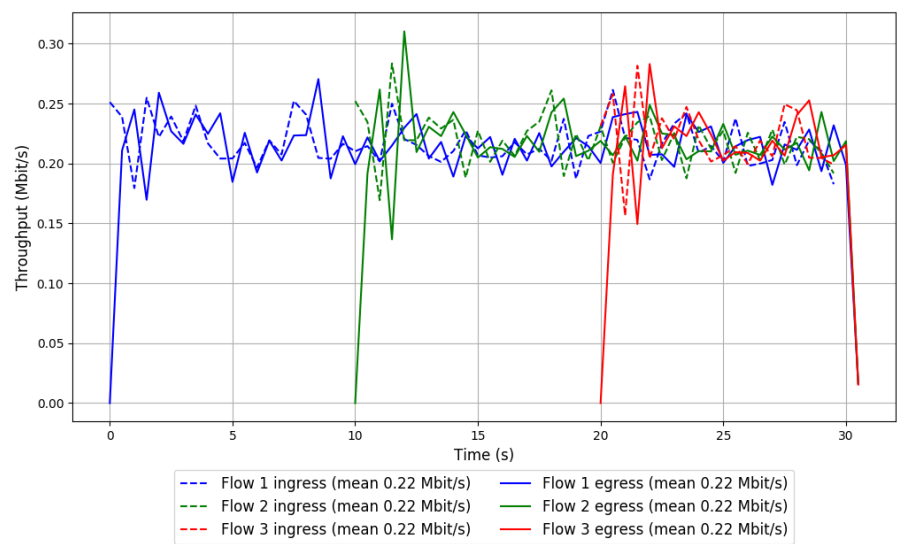


Run 7: Statistics of SReAM

Start at: 2018-06-18 18:25:05
End at: 2018-06-18 18:25:35
Local clock offset: -2.927 ms
Remote clock offset: 12.099 ms

Below is generated by plot.py at 2018-06-18 19:54:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 91.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.432 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.945 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.403 ms
Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-06-18 18:45:10

End at: 2018-06-18 18:45:40

Local clock offset: -2.858 ms

Remote clock offset: 7.528 ms

Below is generated by plot.py at 2018-06-18 19:54:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 82.505 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.073 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.578 ms

Loss rate: 0.00%

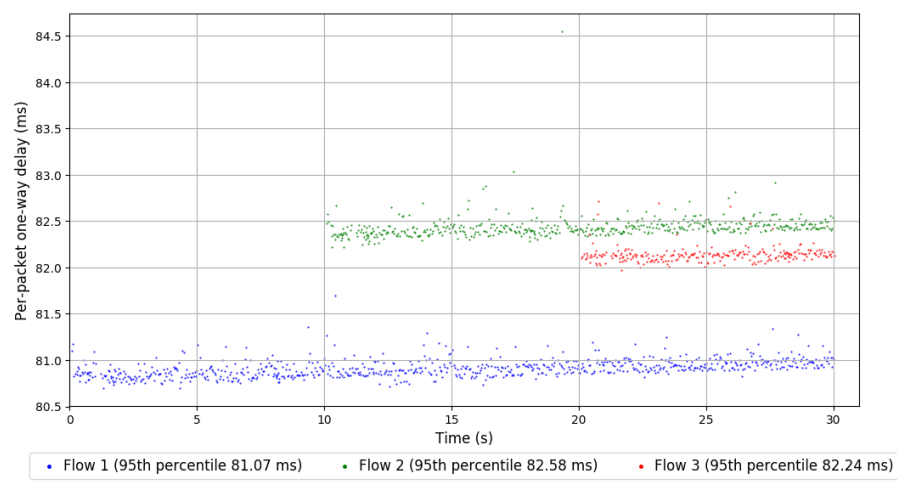
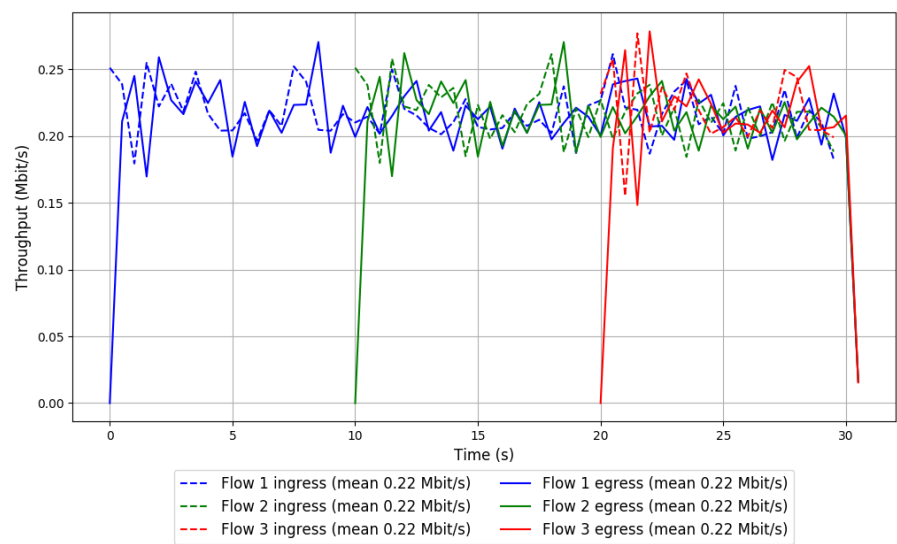
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.242 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-06-18 19:05:22

End at: 2018-06-18 19:05:52

Local clock offset: -2.7 ms

Remote clock offset: 8.452 ms

Below is generated by plot.py at 2018-06-18 19:54:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.754 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.793 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.811 ms

Loss rate: 0.00%

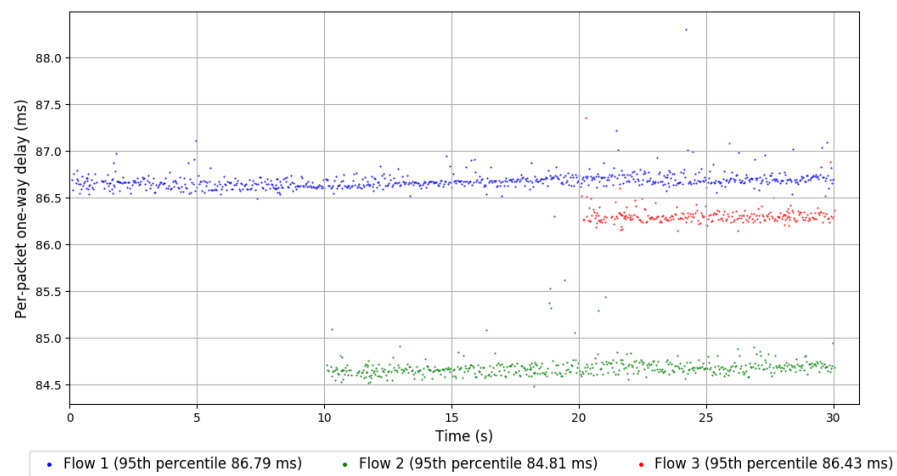
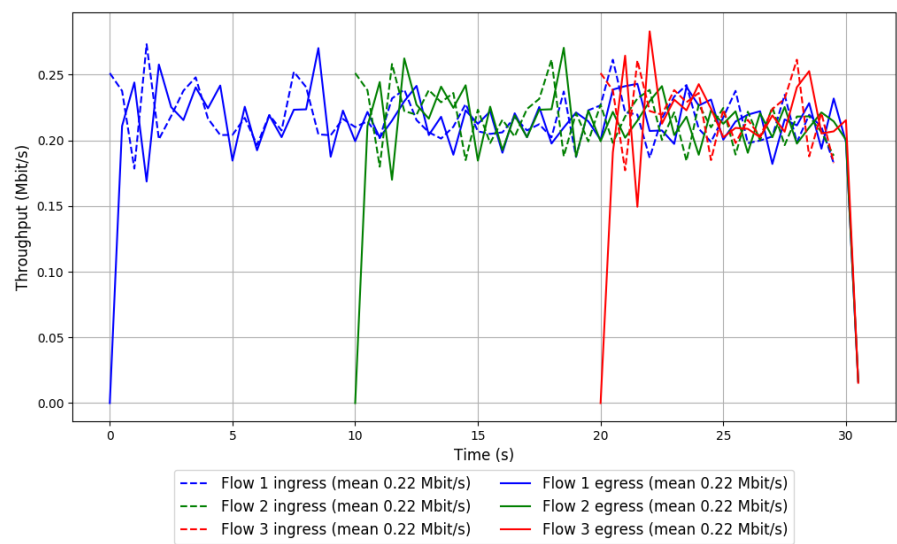
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.427 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-06-18 19:25:22

End at: 2018-06-18 19:25:52

Local clock offset: -1.731 ms

Remote clock offset: 13.89 ms

Below is generated by plot.py at 2018-06-18 19:54:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.624 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.004 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.687 ms

Loss rate: 0.00%

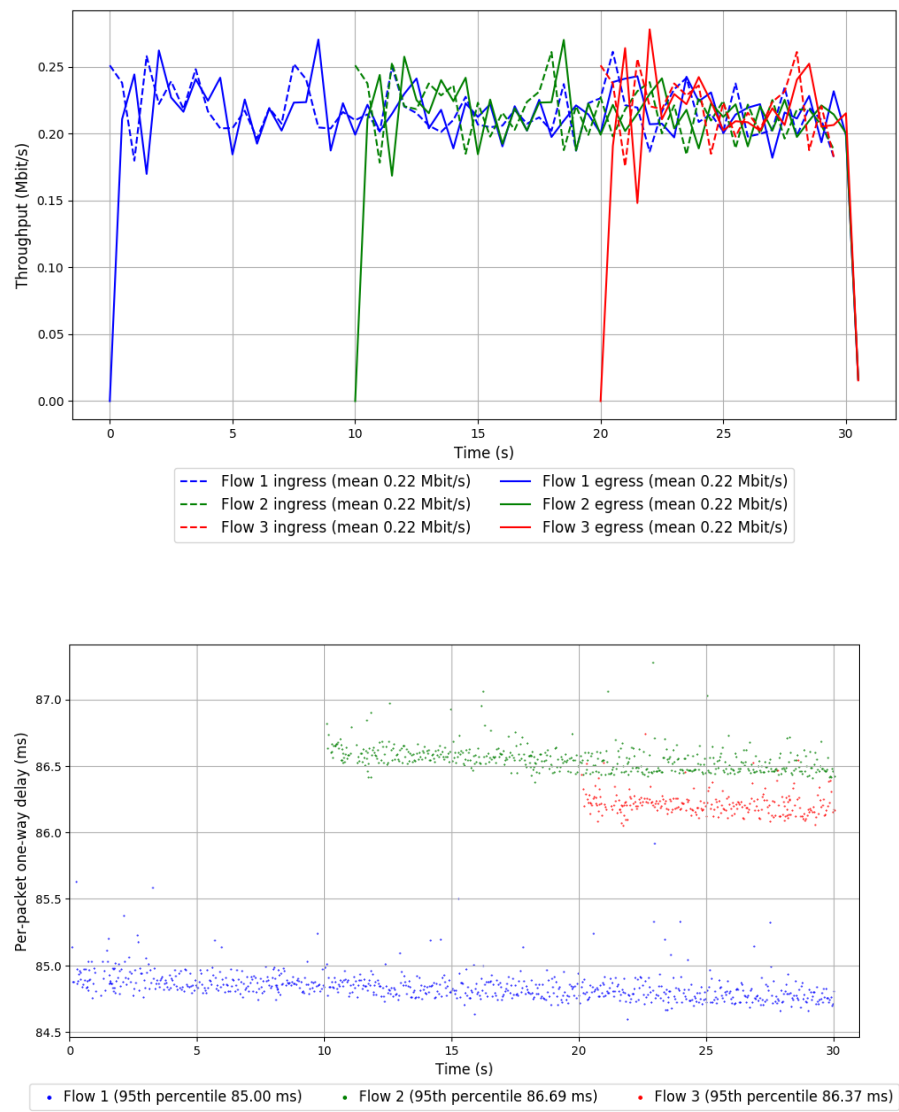
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.374 ms

Loss rate: 0.00%

Run 10: Report of SCRaM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-06-18 16:33:31

End at: 2018-06-18 16:34:01

Local clock offset: -2.96 ms

Remote clock offset: 2.893 ms

Below is generated by plot.py at 2018-06-18 19:54:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 82.571 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 80.676 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 81.705 ms

Loss rate: 0.00%

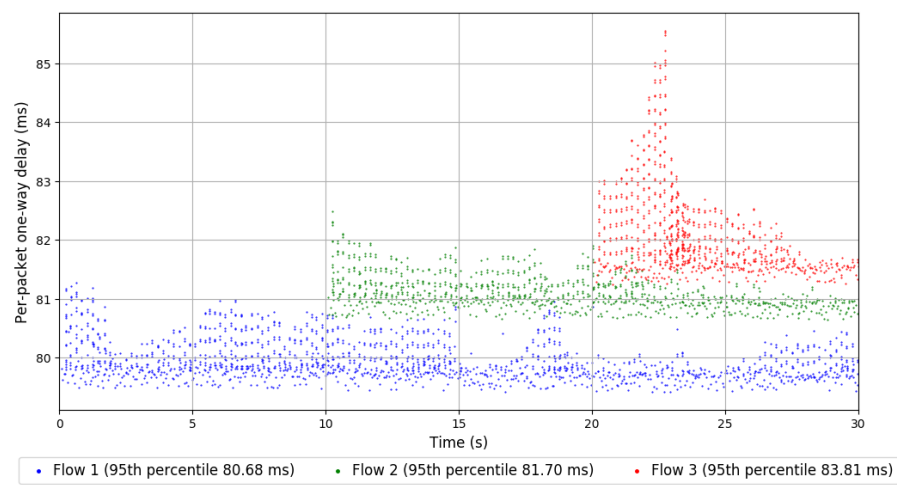
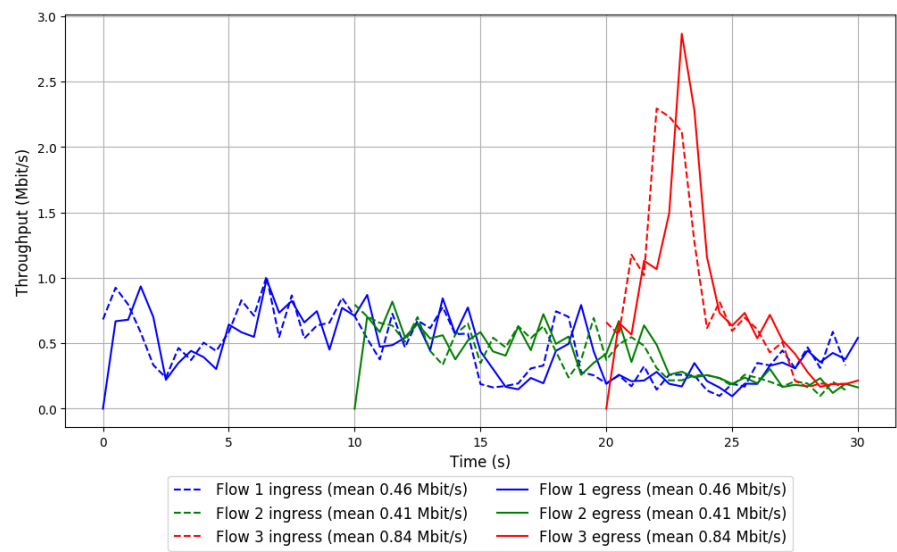
-- Flow 3:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 83.815 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-06-18 16:53:33

End at: 2018-06-18 16:54:03

Local clock offset: -2.925 ms

Remote clock offset: 5.101 ms

Below is generated by plot.py at 2018-06-18 19:54:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 88.443 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 83.400 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 82.013 ms

Loss rate: 0.00%

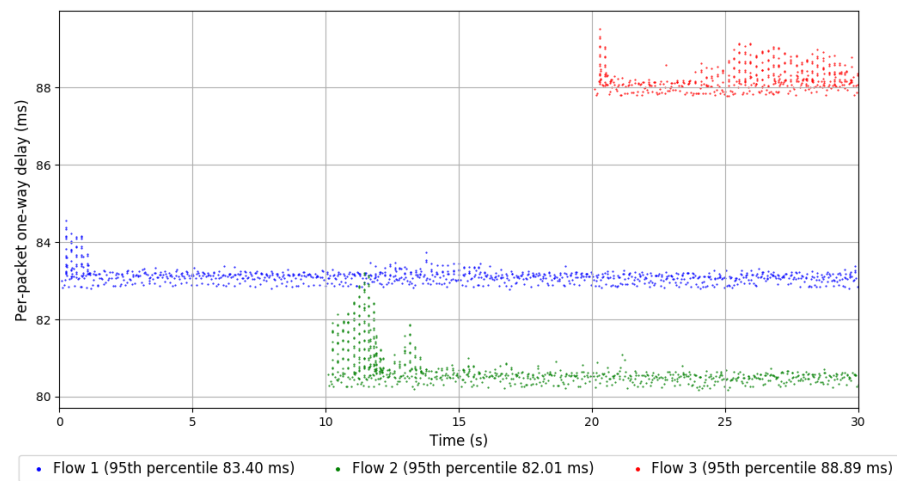
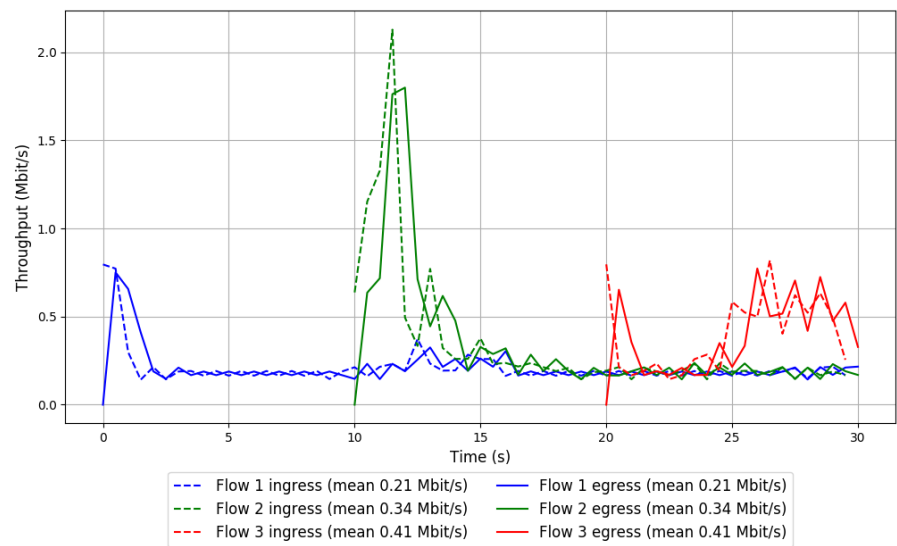
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 88.887 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

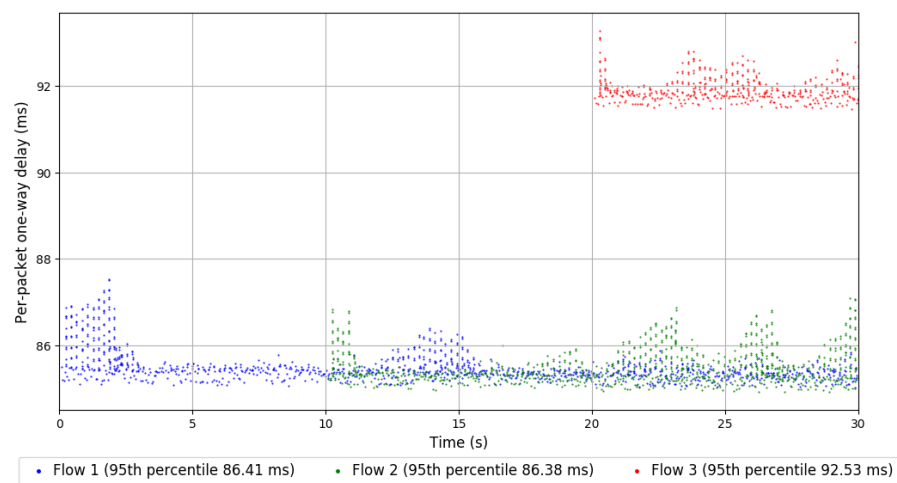
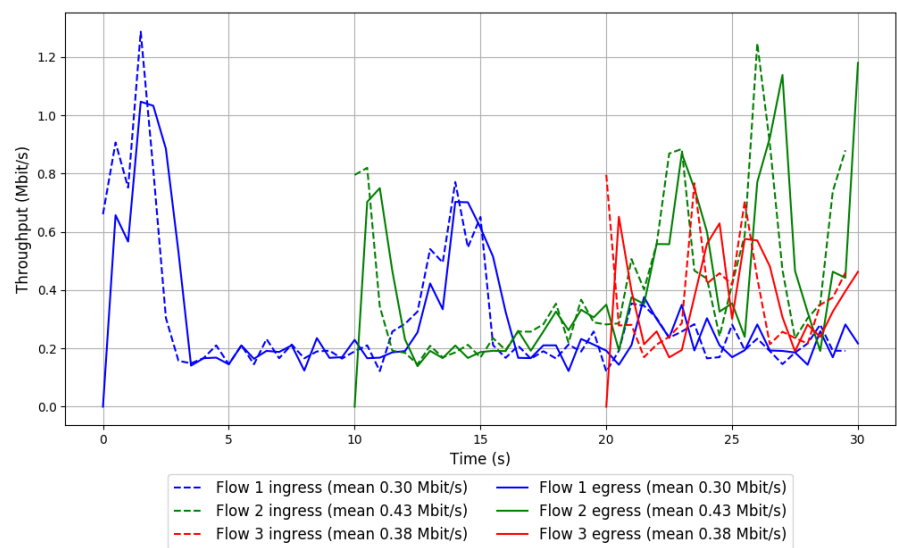


Run 3: Statistics of Sprout

Start at: 2018-06-18 17:13:35
End at: 2018-06-18 17:14:05
Local clock offset: -2.754 ms
Remote clock offset: 16.357 ms

```
# Below is generated by plot.py at 2018-06-18 19:54:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 92.047 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 86.412 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 86.379 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 92.525 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

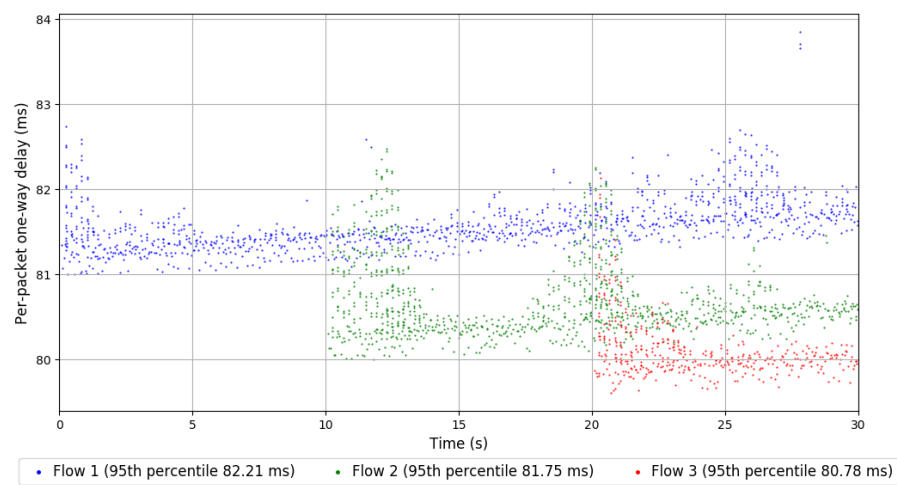
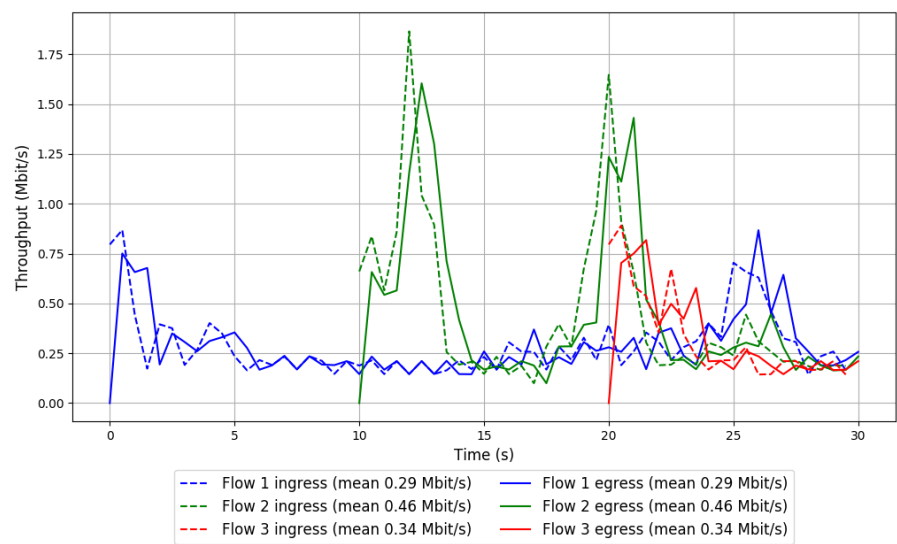


Run 4: Statistics of Sprout

Start at: 2018-06-18 17:33:39
End at: 2018-06-18 17:34:09
Local clock offset: -2.706 ms
Remote clock offset: 12.809 ms

```
# Below is generated by plot.py at 2018-06-18 19:54:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 82.003 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 82.208 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 81.751 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 80.777 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

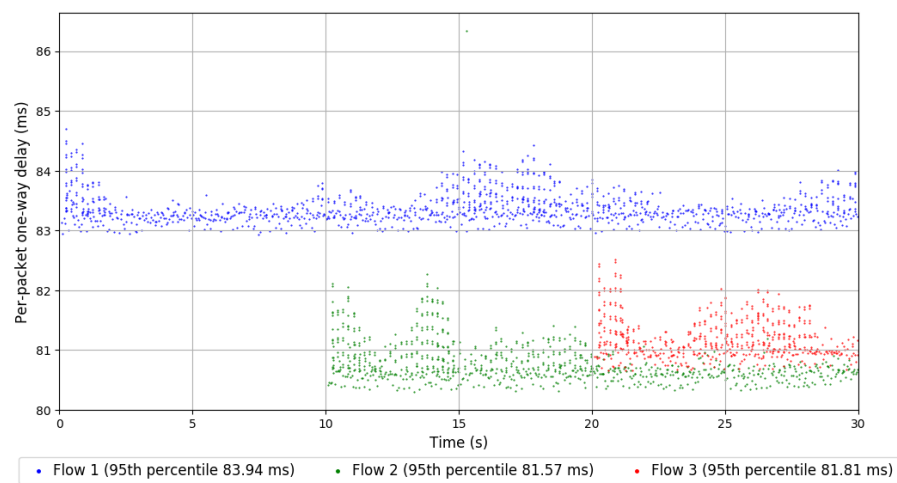
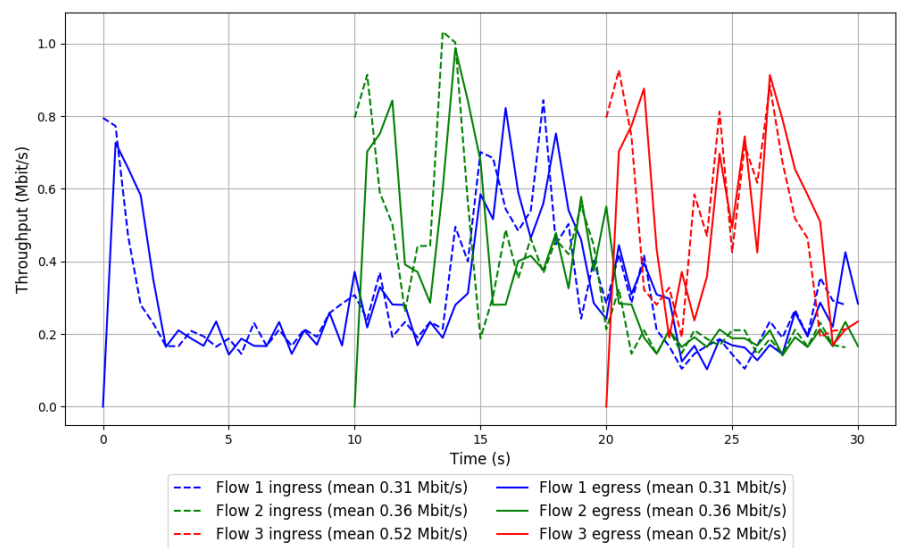


Run 5: Statistics of Sprout

Start at: 2018-06-18 17:53:41
End at: 2018-06-18 17:54:11
Local clock offset: -2.741 ms
Remote clock offset: 5.049 ms

```
# Below is generated by plot.py at 2018-06-18 19:54:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 83.730 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 83.939 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 81.571 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 81.812 ms
Loss rate: 0.00%
```


Run 5: Report of Sprout — Data Link

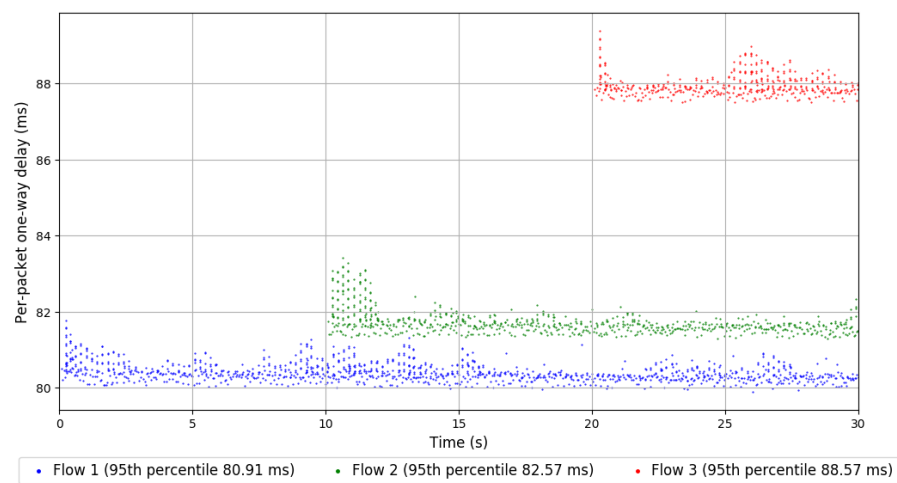
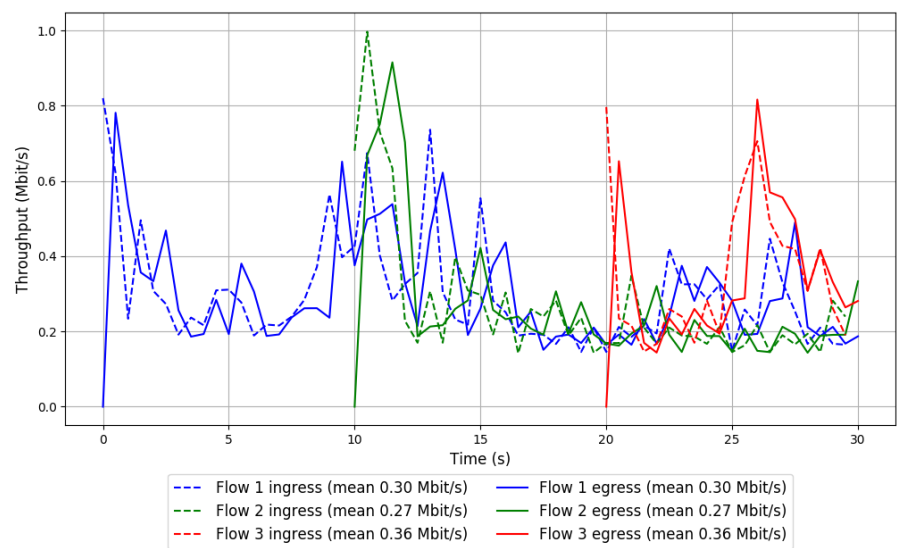


Run 6: Statistics of Sprout

Start at: 2018-06-18 18:13:54
End at: 2018-06-18 18:14:24
Local clock offset: -2.909 ms
Remote clock offset: 6.478 ms

Below is generated by plot.py at 2018-06-18 19:54:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 88.073 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 80.909 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 82.572 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 88.567 ms
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

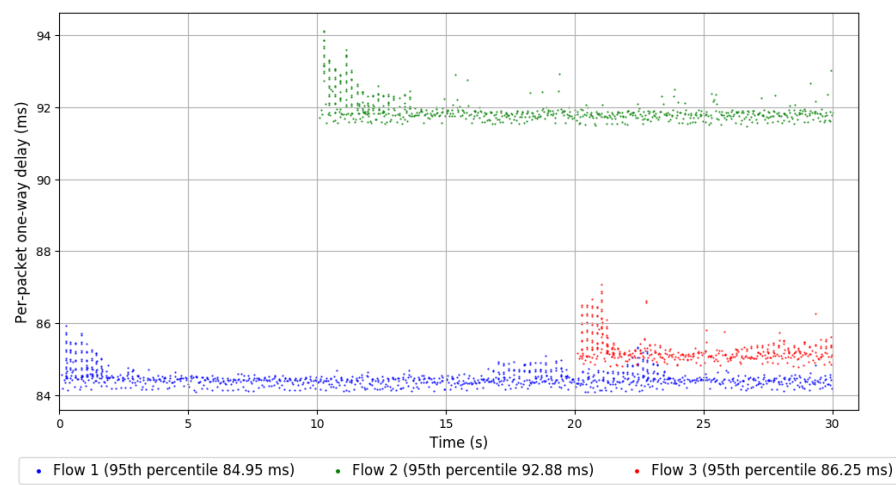
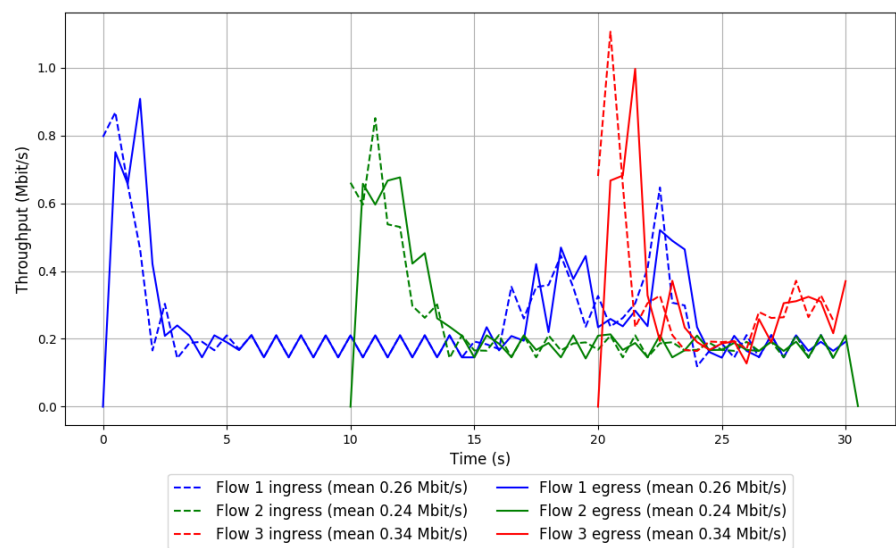


Run 7: Statistics of Sprout

Start at: 2018-06-18 18:33:55
End at: 2018-06-18 18:34:25
Local clock offset: -2.96 ms
Remote clock offset: 12.94 ms

```
# Below is generated by plot.py at 2018-06-18 19:54:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 92.203 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 84.953 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 92.882 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 86.246 ms
Loss rate: 0.00%
```

Run 7: Report of Sprout — Data Link

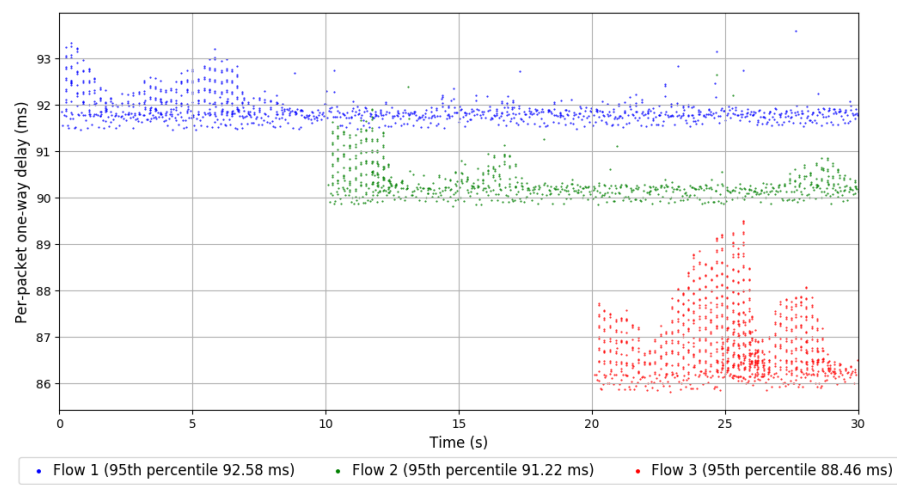
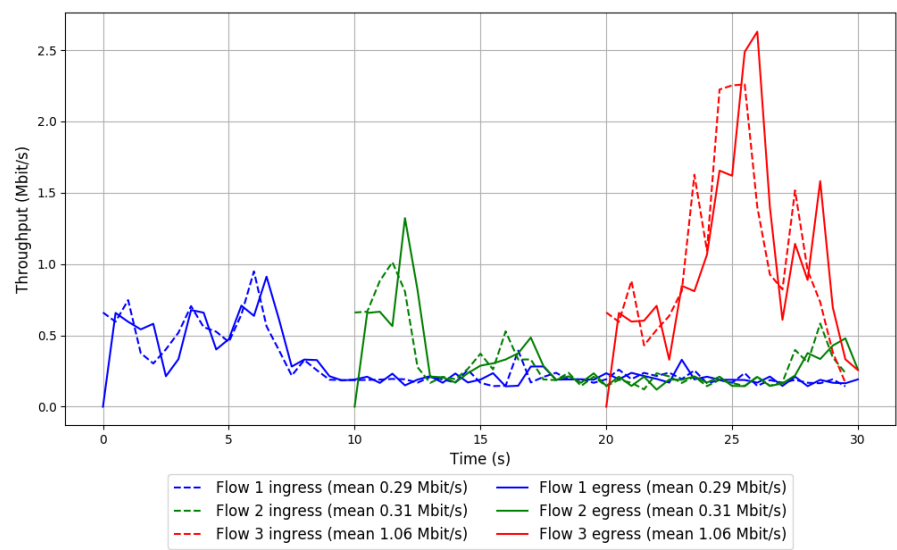


Run 8: Statistics of Sprout

Start at: 2018-06-18 18:53:57
End at: 2018-06-18 18:54:27
Local clock offset: -2.873 ms
Remote clock offset: 9.382 ms

```
# Below is generated by plot.py at 2018-06-18 19:54:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 92.254 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 92.584 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 91.216 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 88.460 ms
Loss rate: 0.00%
```

Run 8: Report of Sprout — Data Link

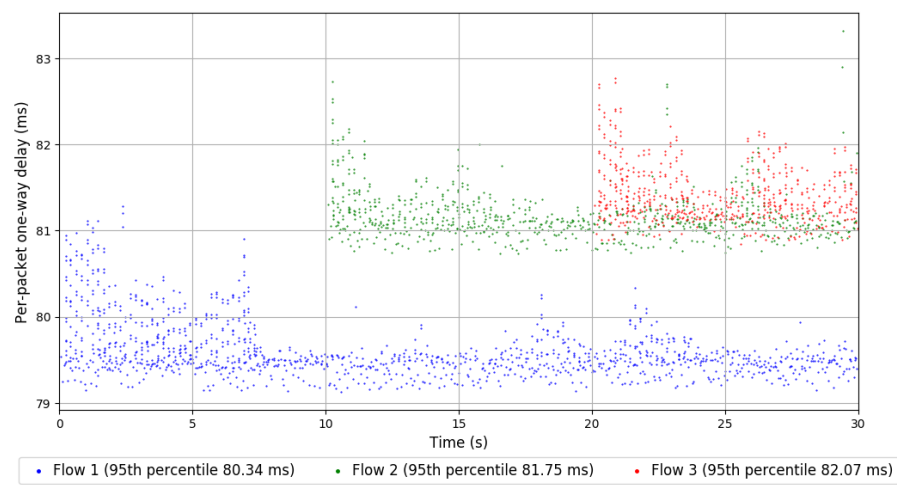
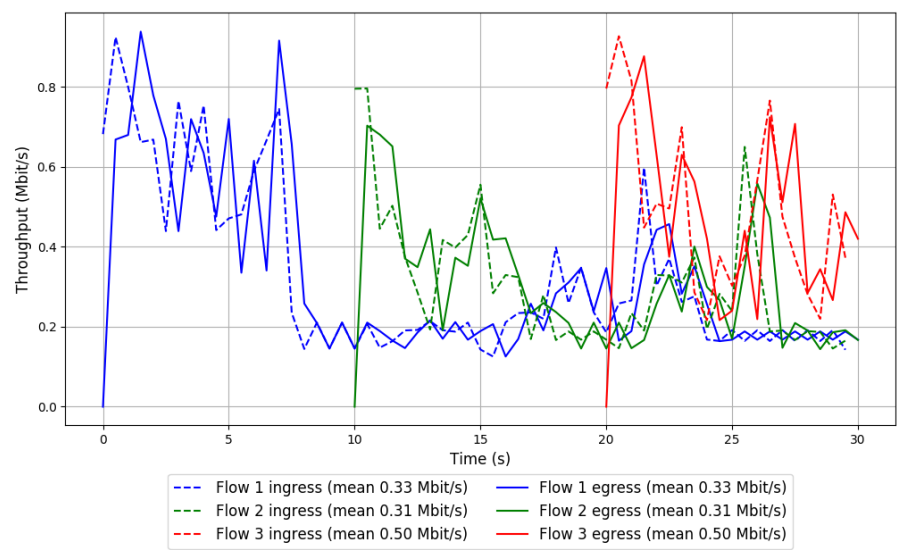


Run 9: Statistics of Sprout

Start at: 2018-06-18 19:14:08
End at: 2018-06-18 19:14:39
Local clock offset: -2.066 ms
Remote clock offset: 2.977 ms

```
# Below is generated by plot.py at 2018-06-18 19:54:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 81.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 80.338 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 81.753 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 82.074 ms
Loss rate: 0.00%
```


Run 9: Report of Sprout — Data Link

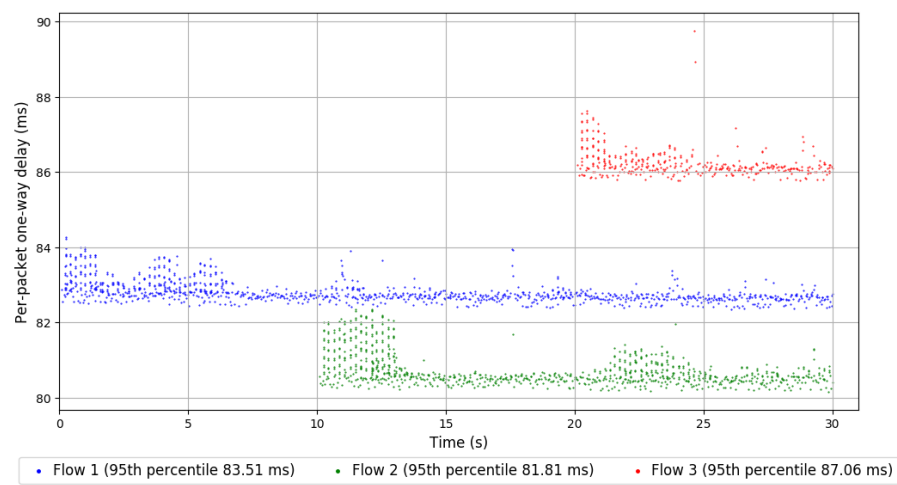
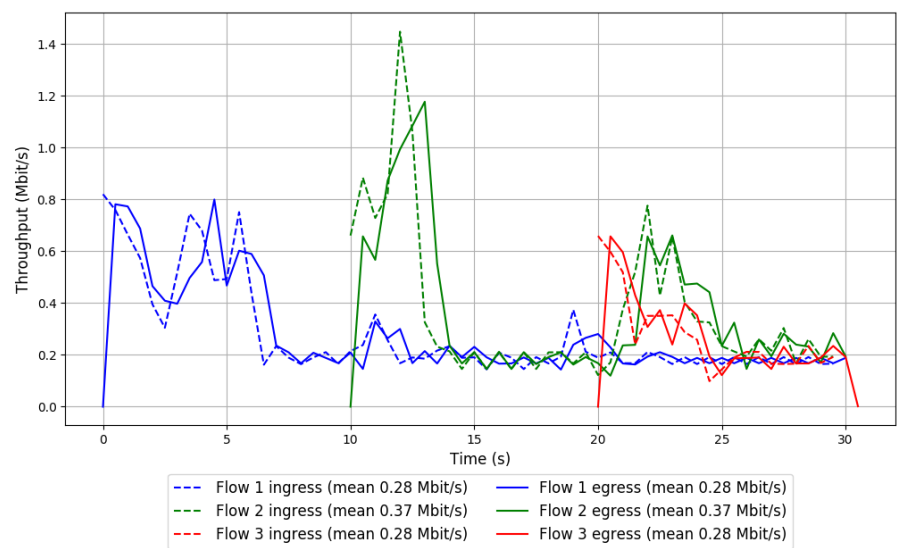


Run 10: Statistics of Sprout

Start at: 2018-06-18 19:34:09
End at: 2018-06-18 19:34:39
Local clock offset: -1.553 ms
Remote clock offset: 12.003 ms

Below is generated by plot.py at 2018-06-18 19:54:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 86.274 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 83.512 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 81.811 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 87.065 ms
Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

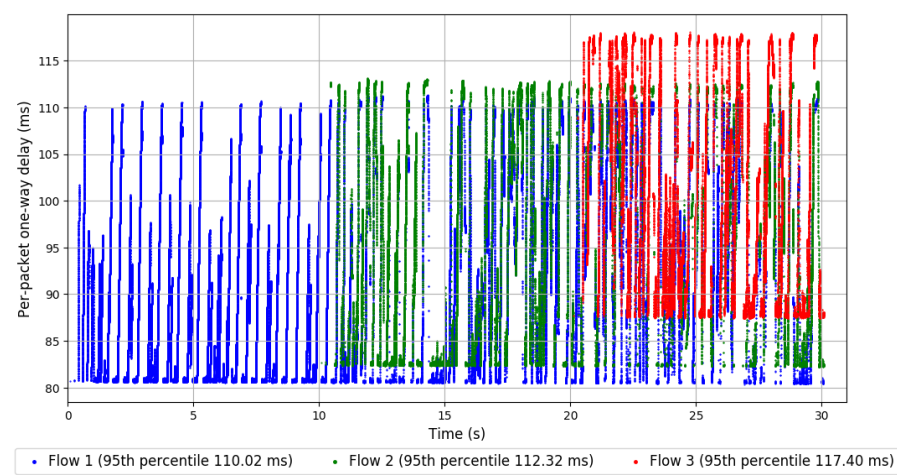
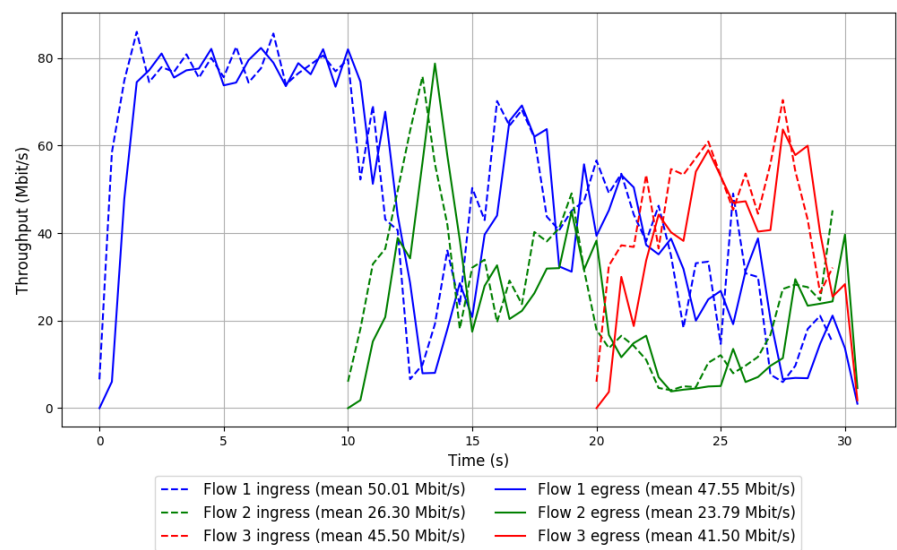


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-18 16:25:52
End at: 2018-06-18 16:26:22
Local clock offset: -2.799 ms
Remote clock offset: 2.111 ms

# Below is generated by plot.py at 2018-06-18 19:56:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.17 Mbit/s
95th percentile per-packet one-way delay: 112.385 ms
Loss rate: 6.61%
-- Flow 1:
Average throughput: 47.55 Mbit/s
95th percentile per-packet one-way delay: 110.023 ms
Loss rate: 4.93%
-- Flow 2:
Average throughput: 23.79 Mbit/s
95th percentile per-packet one-way delay: 112.323 ms
Loss rate: 9.55%
-- Flow 3:
Average throughput: 41.50 Mbit/s
95th percentile per-packet one-way delay: 117.400 ms
Loss rate: 8.79%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-06-18 16:45:54

End at: 2018-06-18 16:46:24

Local clock offset: -2.948 ms

Remote clock offset: 5.09 ms

Below is generated by plot.py at 2018-06-18 19:56:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.93 Mbit/s

95th percentile per-packet one-way delay: 110.295 ms

Loss rate: 4.88%

-- Flow 1:

Average throughput: 50.71 Mbit/s

95th percentile per-packet one-way delay: 110.245 ms

Loss rate: 3.78%

-- Flow 2:

Average throughput: 21.21 Mbit/s

95th percentile per-packet one-way delay: 110.578 ms

Loss rate: 8.54%

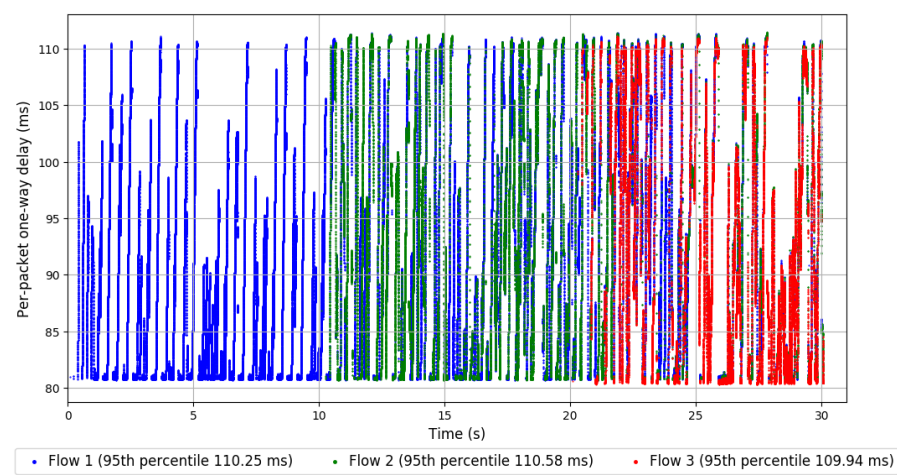
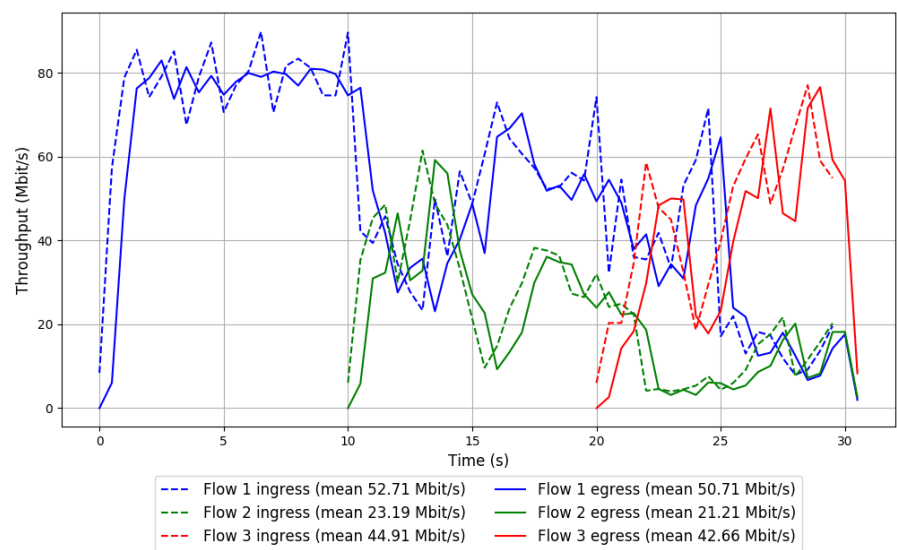
-- Flow 3:

Average throughput: 42.66 Mbit/s

95th percentile per-packet one-way delay: 109.937 ms

Loss rate: 4.96%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-06-18 17:05:56

End at: 2018-06-18 17:06:26

Local clock offset: -2.989 ms

Remote clock offset: 9.807 ms

Below is generated by plot.py at 2018-06-18 19:56:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.51 Mbit/s

95th percentile per-packet one-way delay: 115.558 ms

Loss rate: 5.67%

-- Flow 1:

Average throughput: 48.94 Mbit/s

95th percentile per-packet one-way delay: 115.646 ms

Loss rate: 4.07%

-- Flow 2:

Average throughput: 33.38 Mbit/s

95th percentile per-packet one-way delay: 115.520 ms

Loss rate: 7.95%

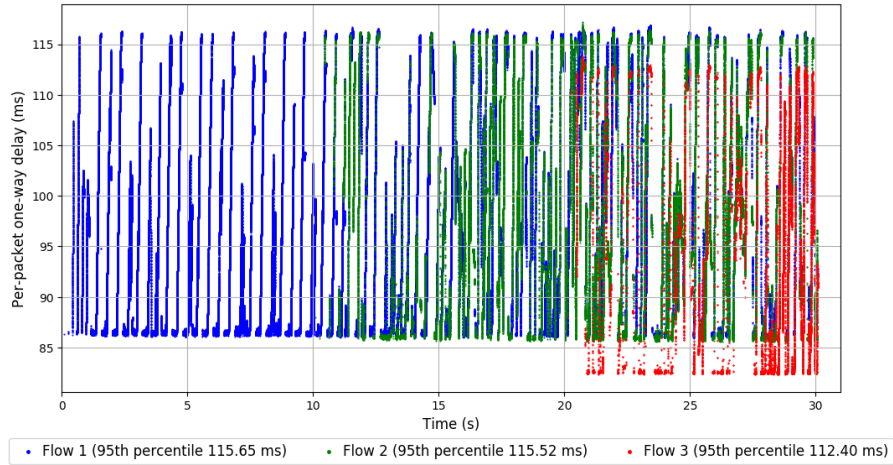
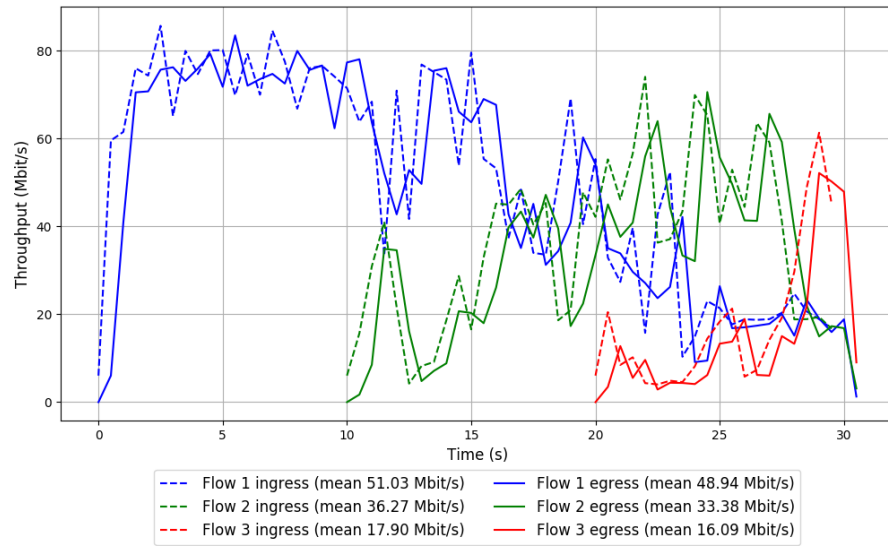
-- Flow 3:

Average throughput: 16.09 Mbit/s

95th percentile per-packet one-way delay: 112.397 ms

Loss rate: 10.07%

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

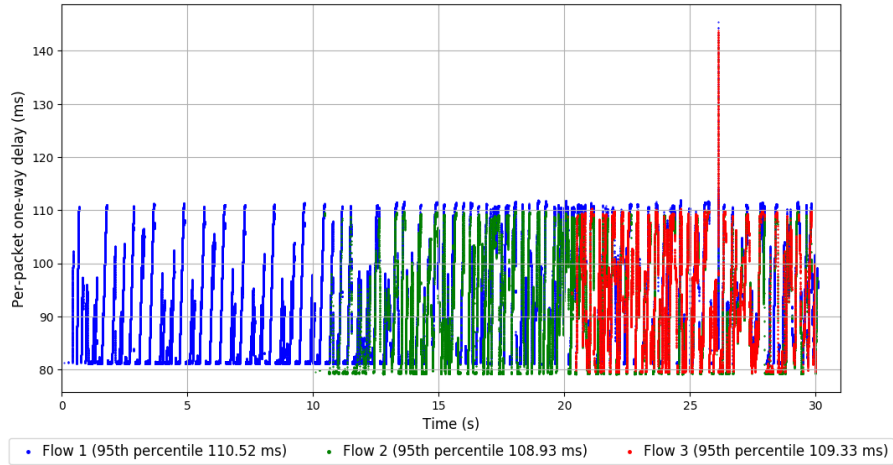
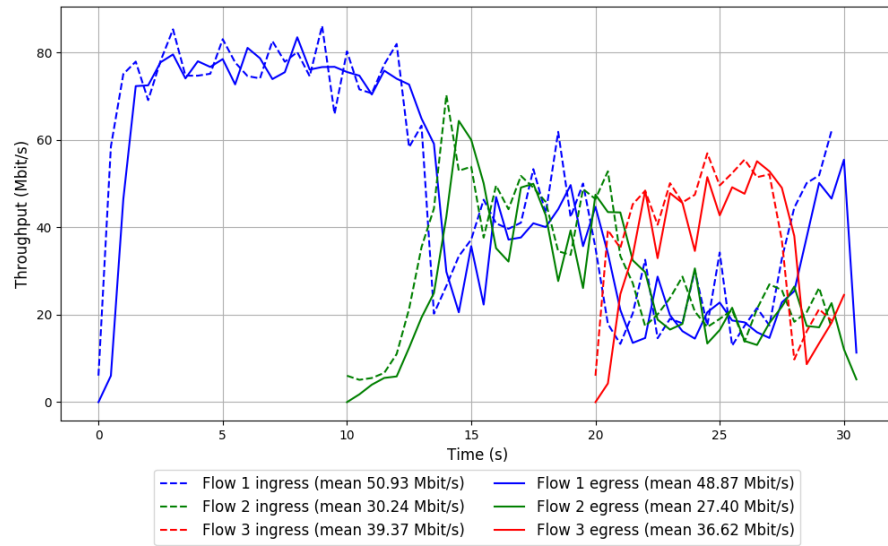


Run 4: Statistics of TaoVA-100x

Start at: 2018-06-18 17:25:59
End at: 2018-06-18 17:26:29
Local clock offset: -2.677 ms
Remote clock offset: 13.436 ms

Below is generated by plot.py at 2018-06-18 19:56:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 79.13 Mbit/s
95th percentile per-packet one-way delay: 109.757 ms
Loss rate: 5.77%
-- Flow 1:
Average throughput: 48.87 Mbit/s
95th percentile per-packet one-way delay: 110.518 ms
Loss rate: 3.99%
-- Flow 2:
Average throughput: 27.40 Mbit/s
95th percentile per-packet one-way delay: 108.930 ms
Loss rate: 9.31%
-- Flow 3:
Average throughput: 36.62 Mbit/s
95th percentile per-packet one-way delay: 109.334 ms
Loss rate: 7.23%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-06-18 17:46:04

End at: 2018-06-18 17:46:34

Local clock offset: -2.719 ms

Remote clock offset: 6.729 ms

Below is generated by plot.py at 2018-06-18 19:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.52 Mbit/s

95th percentile per-packet one-way delay: 111.471 ms

Loss rate: 3.99%

-- Flow 1:

Average throughput: 43.20 Mbit/s

95th percentile per-packet one-way delay: 112.079 ms

Loss rate: 3.29%

-- Flow 2:

Average throughput: 29.58 Mbit/s

95th percentile per-packet one-way delay: 109.925 ms

Loss rate: 5.39%

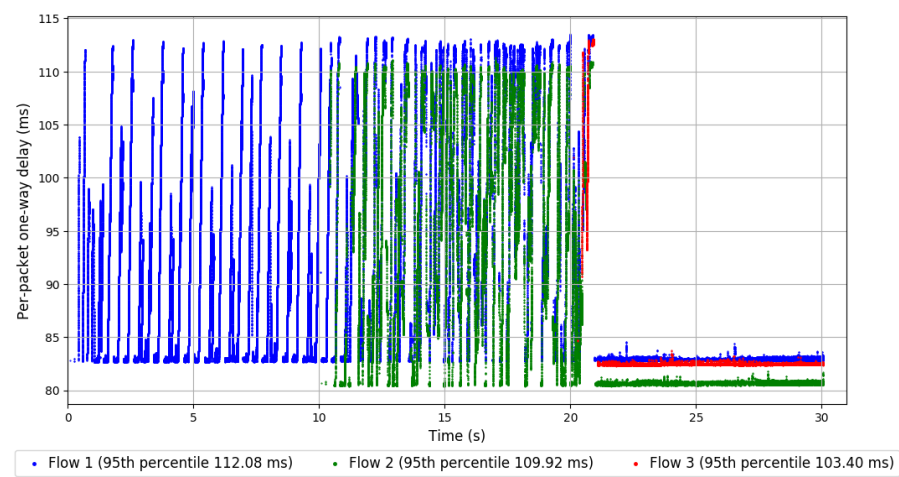
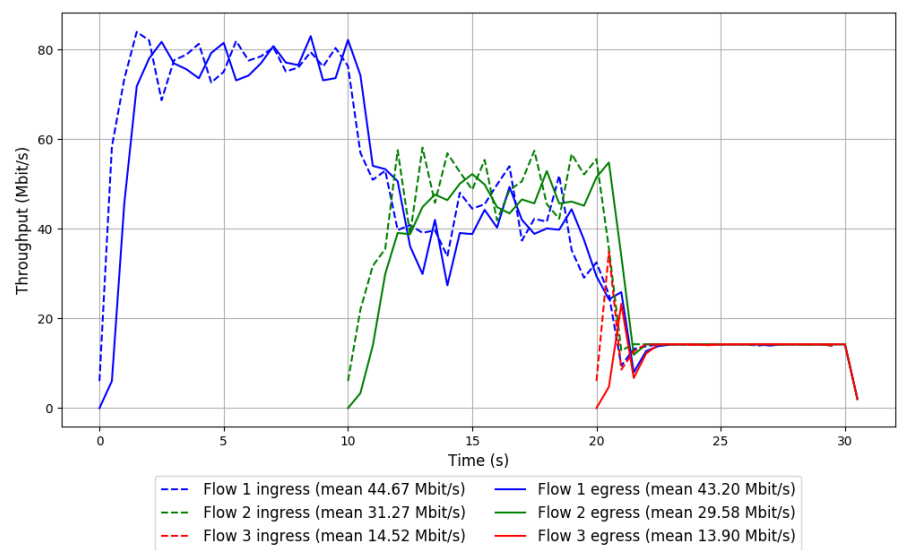
-- Flow 3:

Average throughput: 13.90 Mbit/s

95th percentile per-packet one-way delay: 103.399 ms

Loss rate: 4.45%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-06-18 18:06:15

End at: 2018-06-18 18:06:45

Local clock offset: -2.838 ms

Remote clock offset: 2.714 ms

Below is generated by plot.py at 2018-06-18 19:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.93 Mbit/s

95th percentile per-packet one-way delay: 109.367 ms

Loss rate: 6.93%

-- Flow 1:

Average throughput: 47.24 Mbit/s

95th percentile per-packet one-way delay: 109.144 ms

Loss rate: 5.69%

-- Flow 2:

Average throughput: 40.25 Mbit/s

95th percentile per-packet one-way delay: 109.509 ms

Loss rate: 8.65%

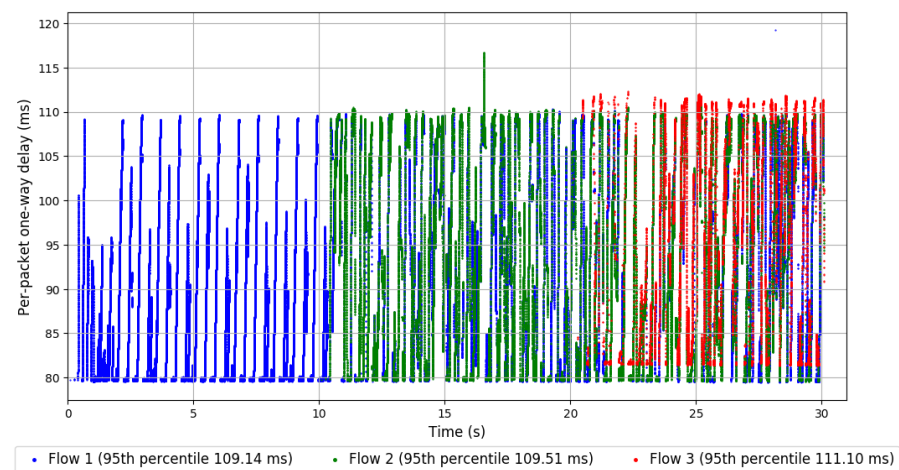
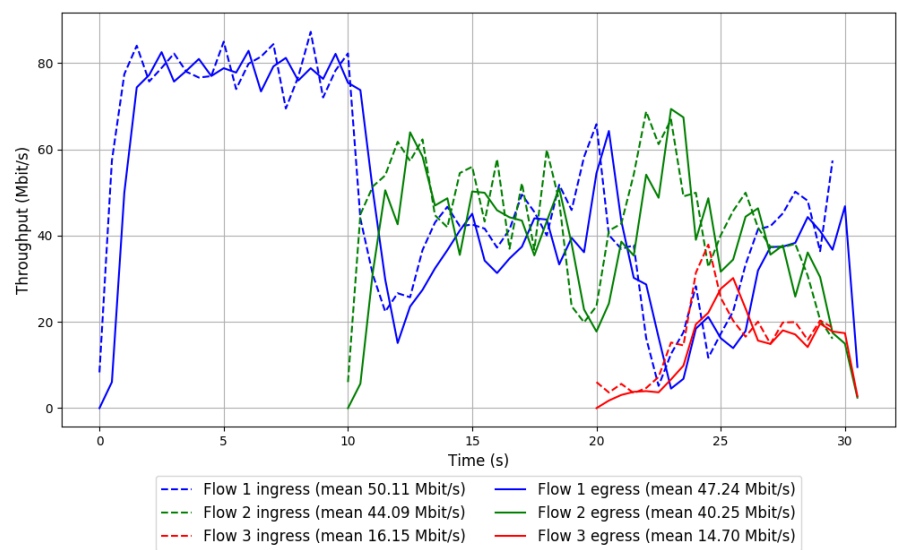
-- Flow 3:

Average throughput: 14.70 Mbit/s

95th percentile per-packet one-way delay: 111.104 ms

Loss rate: 9.08%

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

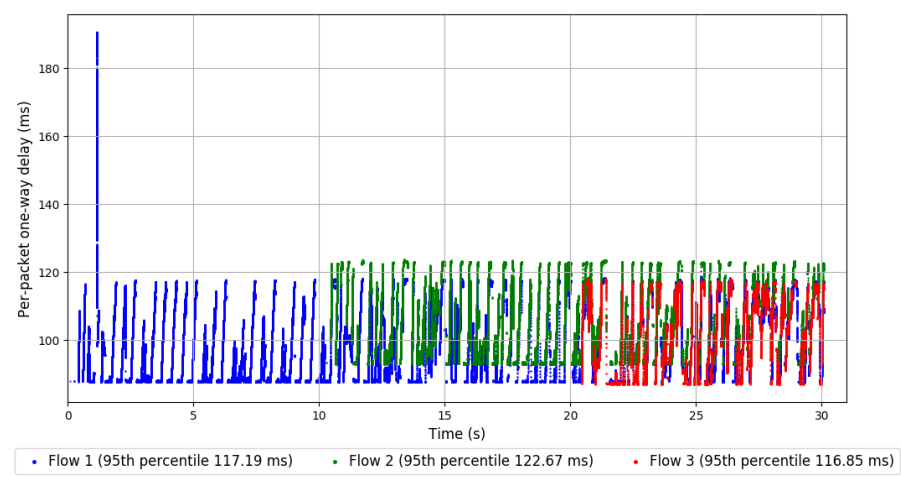
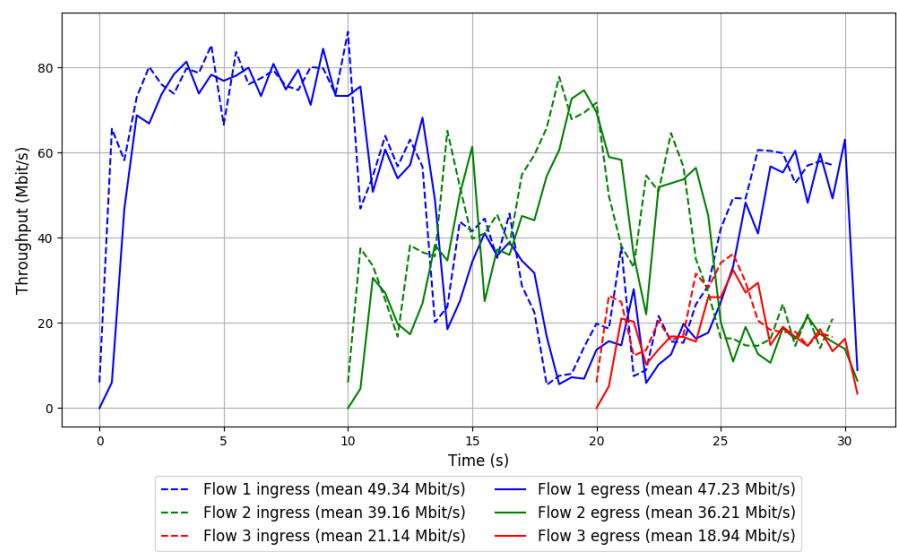


Run 7: Statistics of TaoVA-100x

Start at: 2018-06-18 18:26:15
End at: 2018-06-18 18:26:45
Local clock offset: -2.991 ms
Remote clock offset: 13.308 ms

Below is generated by plot.py at 2018-06-18 19:56:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.62 Mbit/s
95th percentile per-packet one-way delay: 121.592 ms
Loss rate: 5.74%
-- Flow 1:
Average throughput: 47.23 Mbit/s
95th percentile per-packet one-way delay: 117.191 ms
Loss rate: 4.21%
-- Flow 2:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 122.675 ms
Loss rate: 7.45%
-- Flow 3:
Average throughput: 18.94 Mbit/s
95th percentile per-packet one-way delay: 116.847 ms
Loss rate: 10.18%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-06-18 18:46:20

End at: 2018-06-18 18:46:50

Local clock offset: -2.864 ms

Remote clock offset: 7.057 ms

Below is generated by plot.py at 2018-06-18 19:56:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.94 Mbit/s

95th percentile per-packet one-way delay: 112.682 ms

Loss rate: 5.77%

-- Flow 1:

Average throughput: 44.36 Mbit/s

95th percentile per-packet one-way delay: 111.568 ms

Loss rate: 4.26%

-- Flow 2:

Average throughput: 36.37 Mbit/s

95th percentile per-packet one-way delay: 113.213 ms

Loss rate: 7.26%

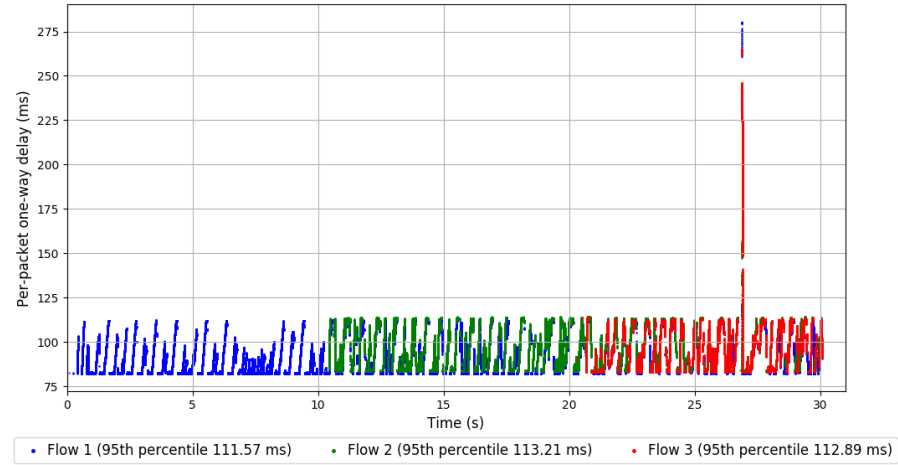
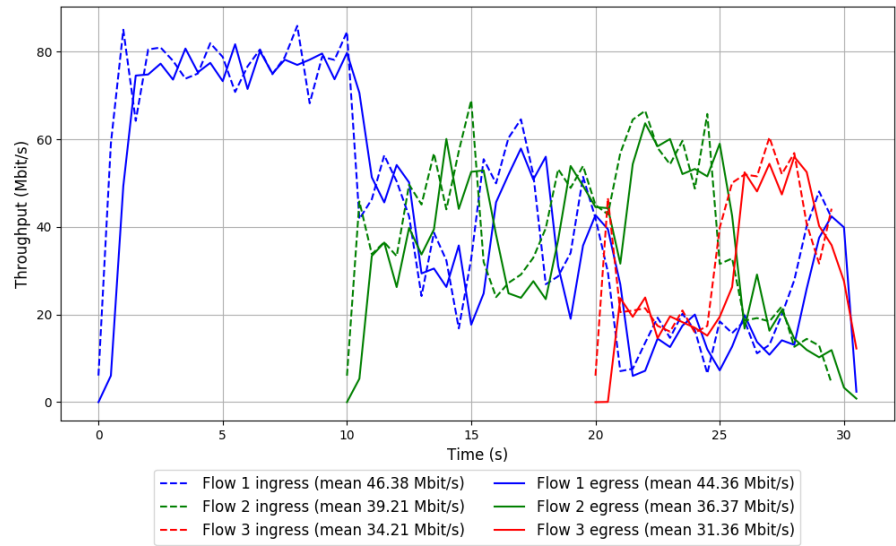
-- Flow 3:

Average throughput: 31.36 Mbit/s

95th percentile per-packet one-way delay: 112.888 ms

Loss rate: 8.52%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-06-18 19:06:32

End at: 2018-06-18 19:07:02

Local clock offset: -2.673 ms

Remote clock offset: 8.545 ms

Below is generated by plot.py at 2018-06-18 19:57:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.18 Mbit/s

95th percentile per-packet one-way delay: 115.909 ms

Loss rate: 5.37%

-- Flow 1:

Average throughput: 44.10 Mbit/s

95th percentile per-packet one-way delay: 115.923 ms

Loss rate: 4.00%

-- Flow 2:

Average throughput: 35.59 Mbit/s

95th percentile per-packet one-way delay: 116.115 ms

Loss rate: 7.39%

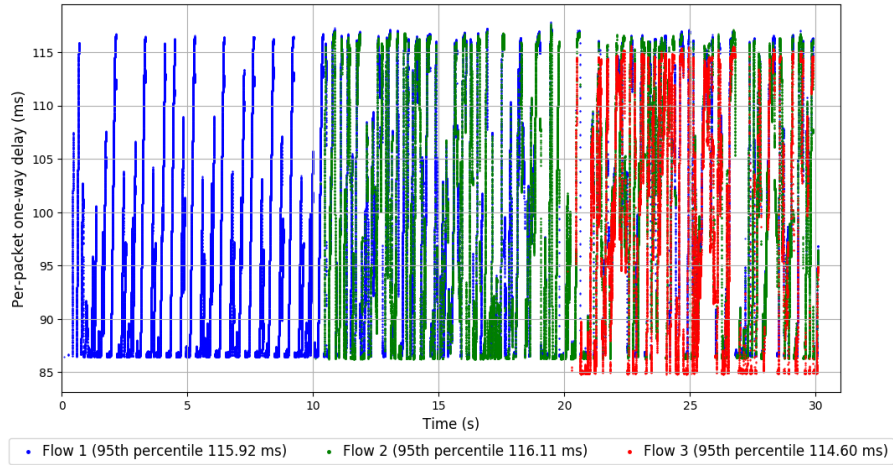
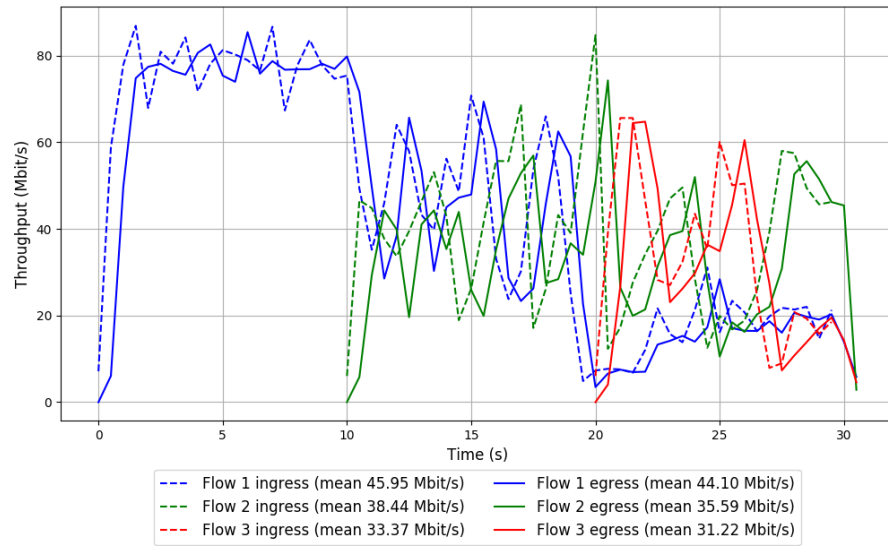
-- Flow 3:

Average throughput: 31.22 Mbit/s

95th percentile per-packet one-way delay: 114.598 ms

Loss rate: 6.44%

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

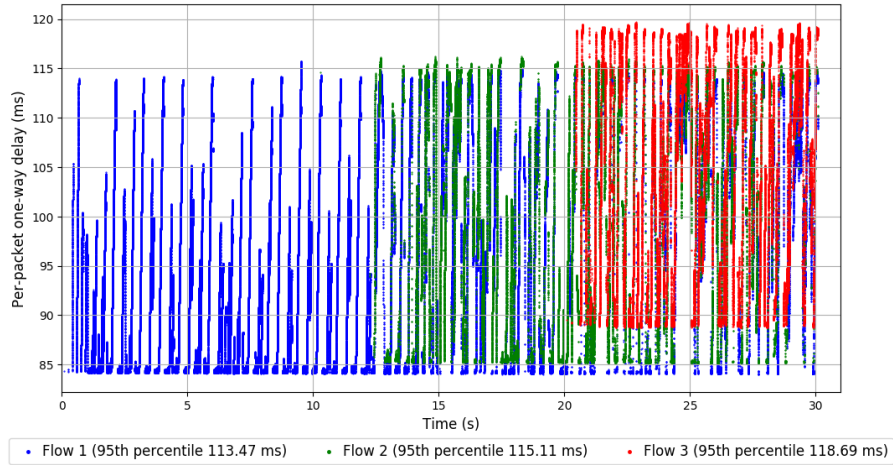
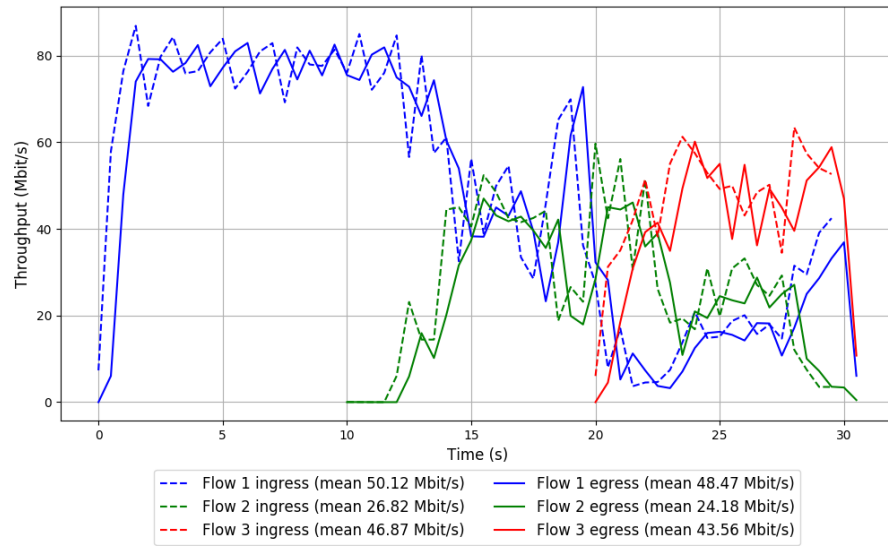


Run 10: Statistics of TaoVA-100x

Start at: 2018-06-18 19:26:33
End at: 2018-06-18 19:27:03
Local clock offset: -1.765 ms
Remote clock offset: 13.037 ms

Below is generated by plot.py at 2018-06-18 19:57:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 79.08 Mbit/s
95th percentile per-packet one-way delay: 115.705 ms
Loss rate: 5.28%
-- Flow 1:
Average throughput: 48.47 Mbit/s
95th percentile per-packet one-way delay: 113.465 ms
Loss rate: 3.22%
-- Flow 2:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 115.115 ms
Loss rate: 9.74%
-- Flow 3:
Average throughput: 43.56 Mbit/s
95th percentile per-packet one-way delay: 118.693 ms
Loss rate: 6.79%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-06-18 16:22:15

End at: 2018-06-18 16:22:45

Local clock offset: -2.728 ms

Remote clock offset: 6.703 ms

Below is generated by plot.py at 2018-06-18 19:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 95.207 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 26.25 Mbit/s

95th percentile per-packet one-way delay: 95.172 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 31.31 Mbit/s

95th percentile per-packet one-way delay: 95.298 ms

Loss rate: 0.64%

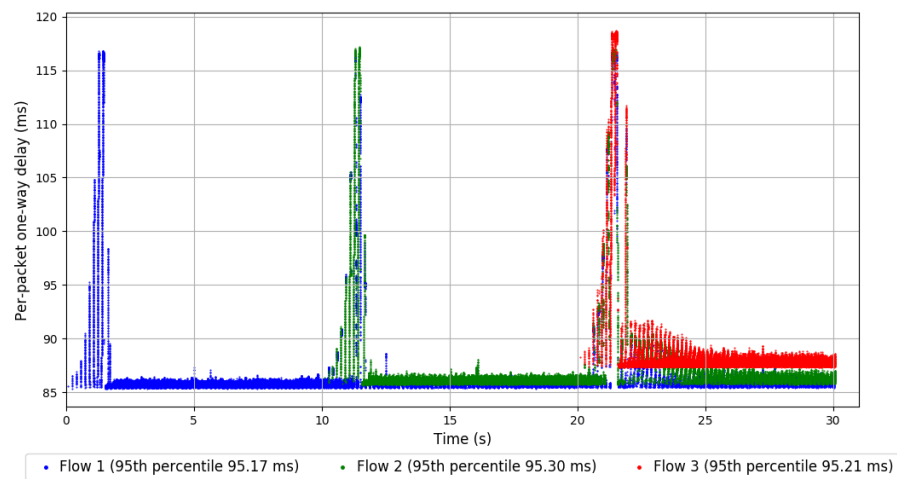
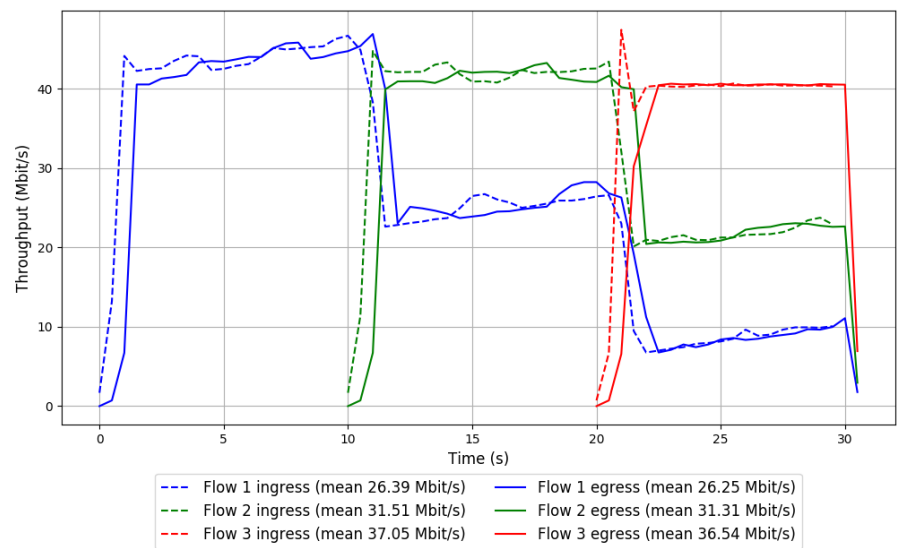
-- Flow 3:

Average throughput: 36.54 Mbit/s

95th percentile per-packet one-way delay: 95.207 ms

Loss rate: 1.38%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-06-18 16:42:18

End at: 2018-06-18 16:42:48

Local clock offset: -2.882 ms

Remote clock offset: 3.846 ms

Below is generated by plot.py at 2018-06-18 19:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.73 Mbit/s

95th percentile per-packet one-way delay: 100.105 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 22.97 Mbit/s

95th percentile per-packet one-way delay: 93.850 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 20.18 Mbit/s

95th percentile per-packet one-way delay: 102.104 ms

Loss rate: 2.21%

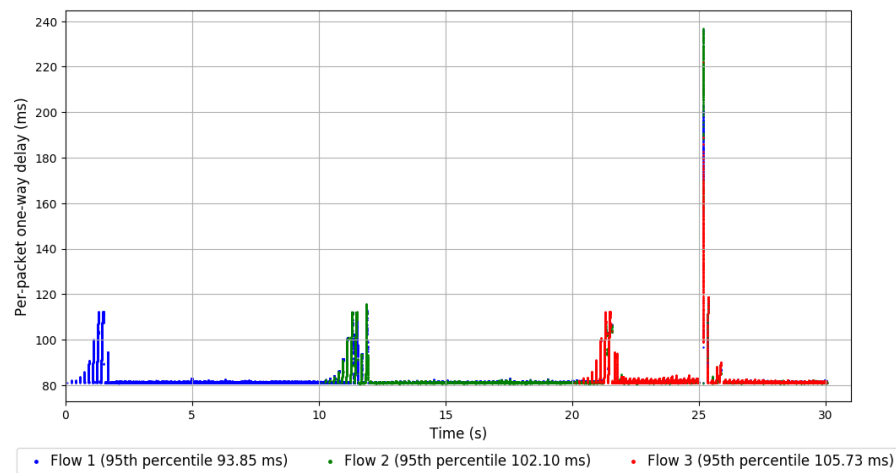
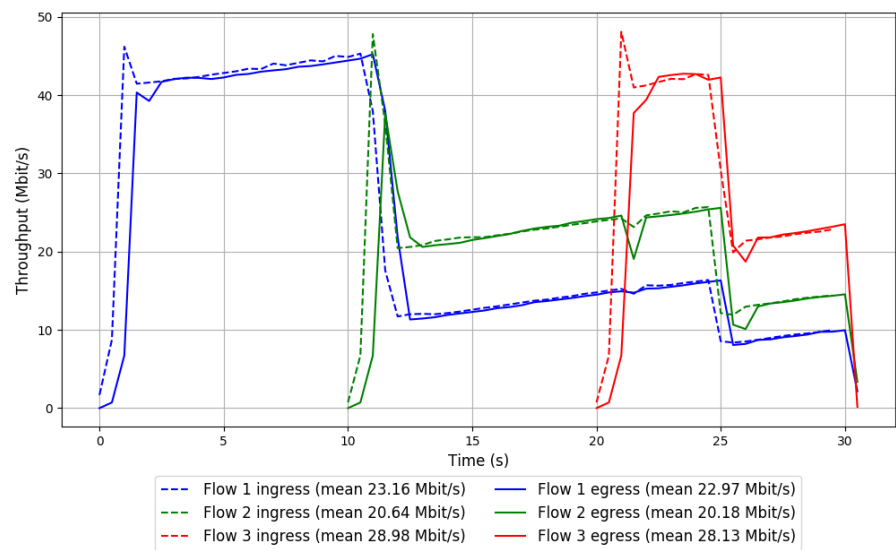
-- Flow 3:

Average throughput: 28.13 Mbit/s

95th percentile per-packet one-way delay: 105.730 ms

Loss rate: 2.91%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-06-18 17:02:19

End at: 2018-06-18 17:02:49

Local clock offset: -2.976 ms

Remote clock offset: 7.949 ms

Below is generated by plot.py at 2018-06-18 19:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.21 Mbit/s

95th percentile per-packet one-way delay: 91.628 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 34.80 Mbit/s

95th percentile per-packet one-way delay: 90.296 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 21.92 Mbit/s

95th percentile per-packet one-way delay: 96.412 ms

Loss rate: 0.87%

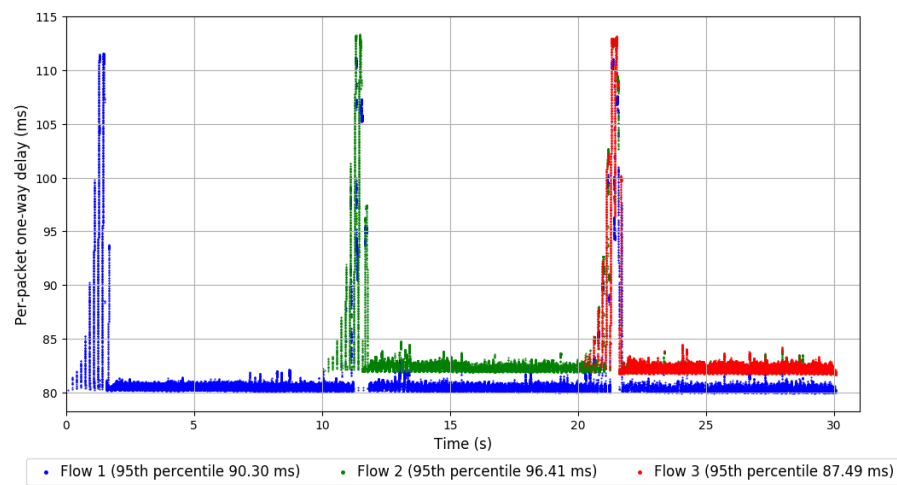
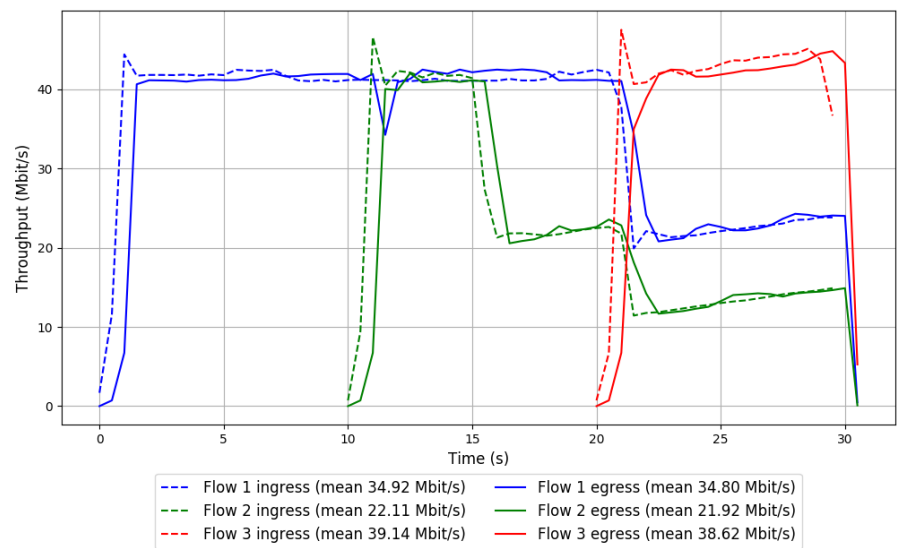
-- Flow 3:

Average throughput: 38.62 Mbit/s

95th percentile per-packet one-way delay: 87.490 ms

Loss rate: 1.33%

Run 3: Report of TCP Vegas — Data Link

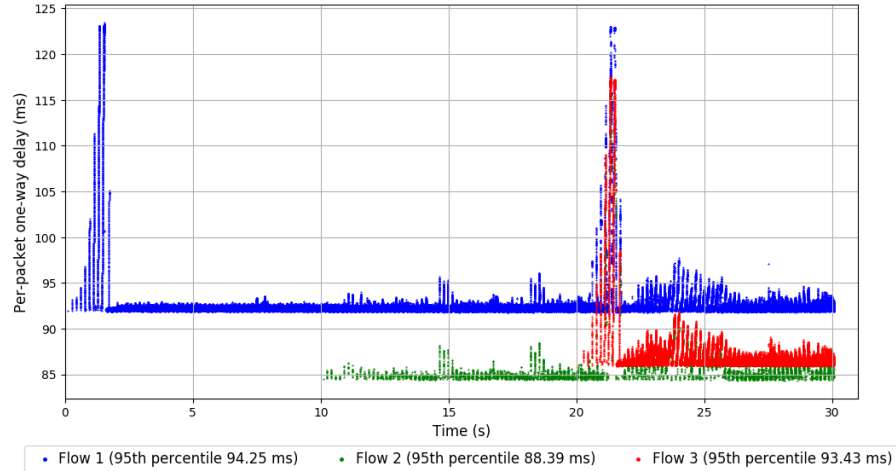
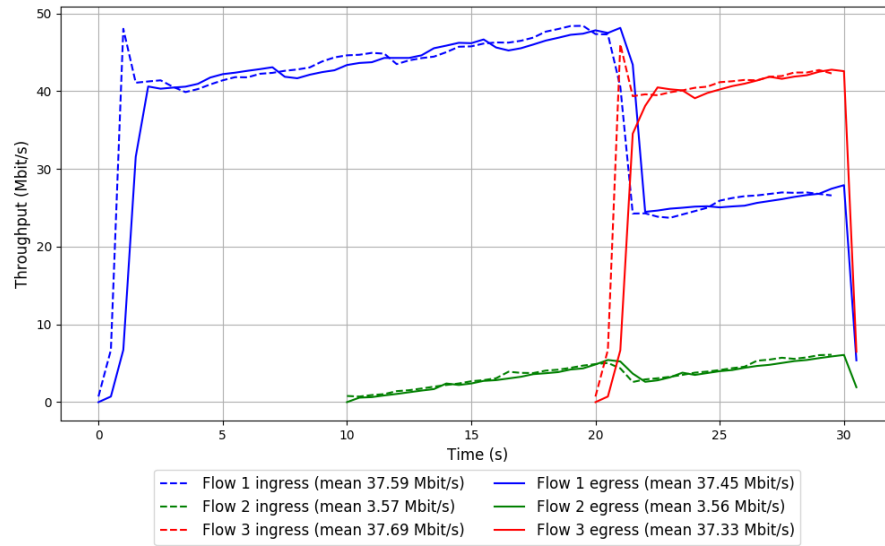


Run 4: Statistics of TCP Vegas

Start at: 2018-06-18 17:22:23
End at: 2018-06-18 17:22:53
Local clock offset: -2.698 ms
Remote clock offset: 17.966 ms

```
# Below is generated by plot.py at 2018-06-18 19:57:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.24 Mbit/s
95th percentile per-packet one-way delay: 94.180 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 37.45 Mbit/s
95th percentile per-packet one-way delay: 94.253 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 88.393 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 37.33 Mbit/s
95th percentile per-packet one-way delay: 93.428 ms
Loss rate: 0.95%
```

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-06-18 17:42:27

End at: 2018-06-18 17:42:57

Local clock offset: -2.721 ms

Remote clock offset: 7.929 ms

Below is generated by plot.py at 2018-06-18 19:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.53 Mbit/s

95th percentile per-packet one-way delay: 94.751 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 24.36 Mbit/s

95th percentile per-packet one-way delay: 93.970 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 22.99 Mbit/s

95th percentile per-packet one-way delay: 97.881 ms

Loss rate: 1.27%

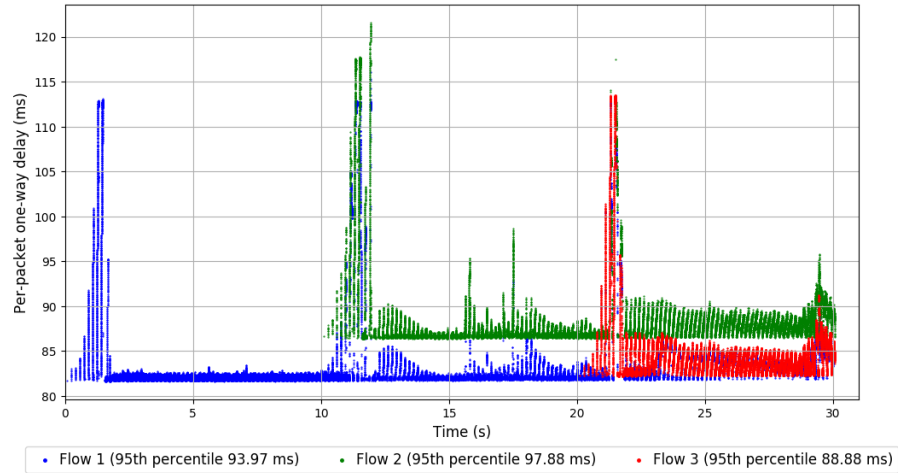
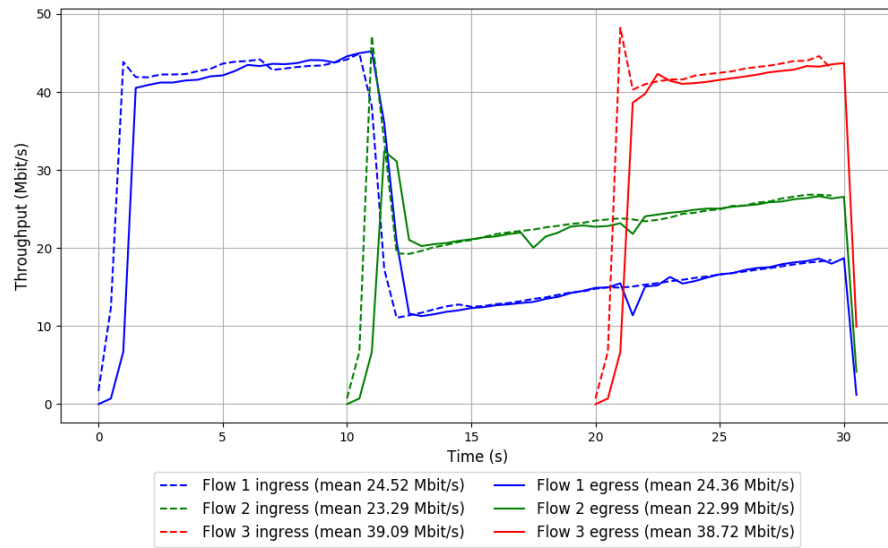
-- Flow 3:

Average throughput: 38.72 Mbit/s

95th percentile per-packet one-way delay: 88.884 ms

Loss rate: 0.94%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-06-18 18:02:39

End at: 2018-06-18 18:03:09

Local clock offset: -2.843 ms

Remote clock offset: 6.943 ms

Below is generated by plot.py at 2018-06-18 19:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.30 Mbit/s

95th percentile per-packet one-way delay: 94.072 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 18.89 Mbit/s

95th percentile per-packet one-way delay: 92.748 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 33.08 Mbit/s

95th percentile per-packet one-way delay: 95.641 ms

Loss rate: 0.60%

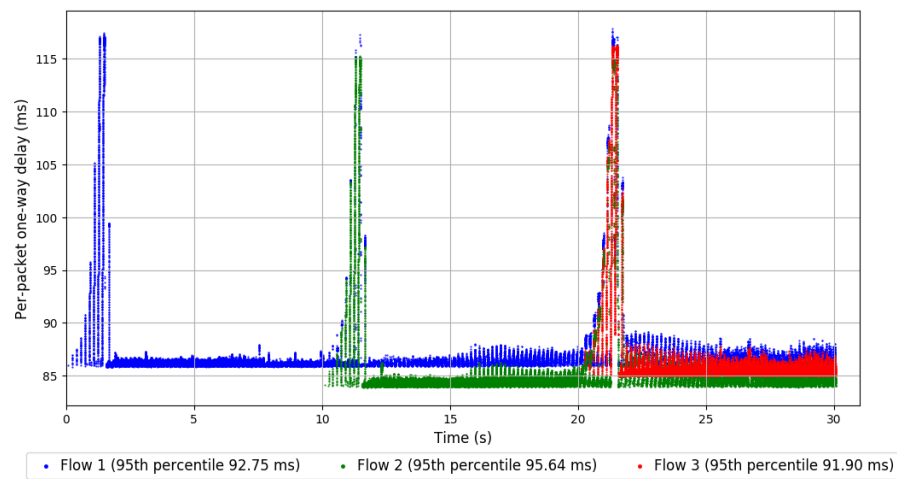
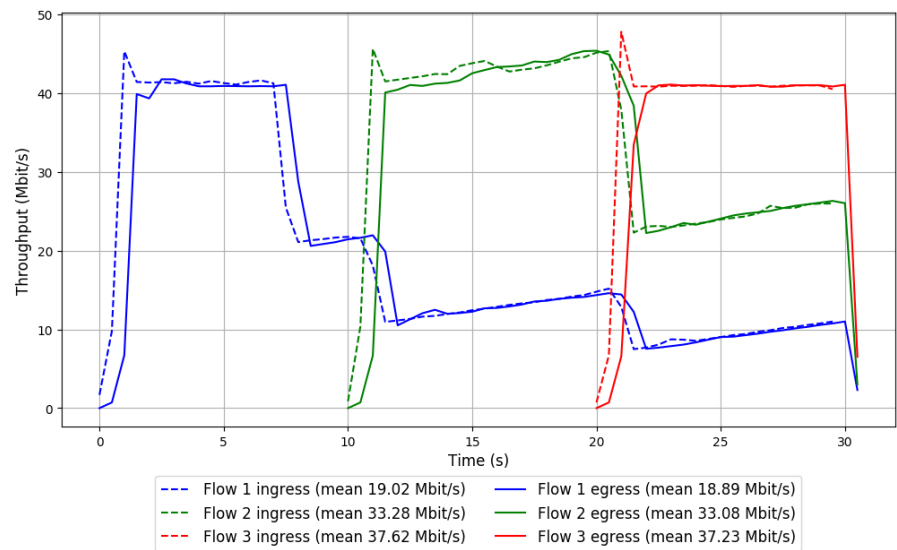
-- Flow 3:

Average throughput: 37.23 Mbit/s

95th percentile per-packet one-way delay: 91.899 ms

Loss rate: 1.05%

Run 6: Report of TCP Vegas — Data Link

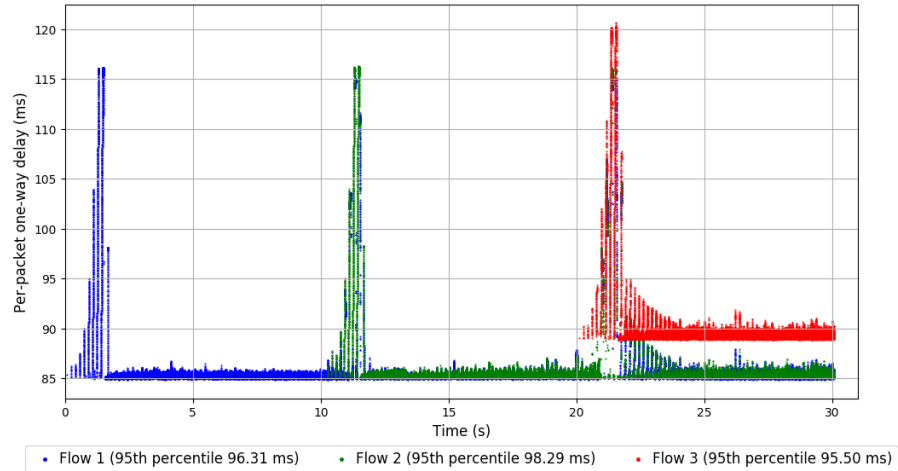
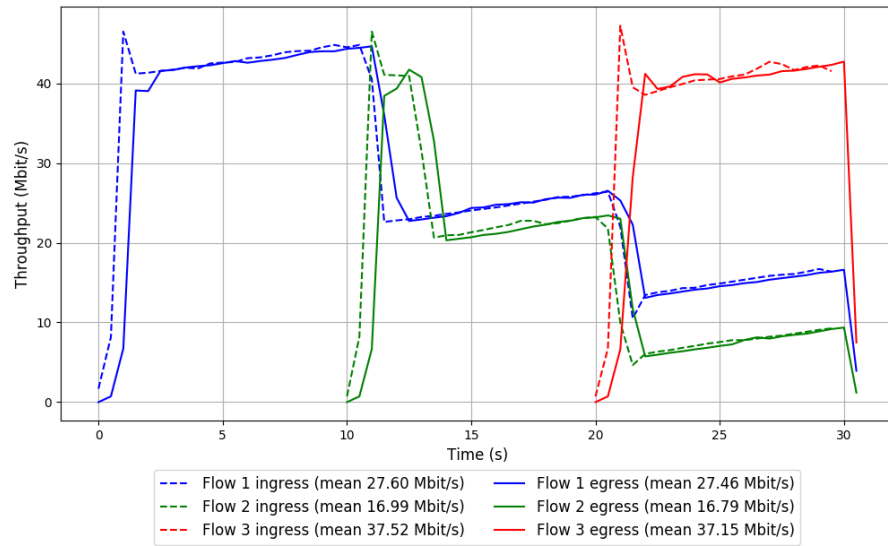


Run 7: Statistics of TCP Vegas

Start at: 2018-06-18 18:22:39
End at: 2018-06-18 18:23:09
Local clock offset: -2.916 ms
Remote clock offset: 10.841 ms

Below is generated by plot.py at 2018-06-18 19:57:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 51.00 Mbit/s
95th percentile per-packet one-way delay: 96.571 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 96.315 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 16.79 Mbit/s
95th percentile per-packet one-way delay: 98.286 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 37.15 Mbit/s
95th percentile per-packet one-way delay: 95.500 ms
Loss rate: 0.96%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-06-18 18:42:44

End at: 2018-06-18 18:43:14

Local clock offset: -2.851 ms

Remote clock offset: 8.347 ms

Below is generated by plot.py at 2018-06-18 19:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.13 Mbit/s

95th percentile per-packet one-way delay: 92.317 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 26.51 Mbit/s

95th percentile per-packet one-way delay: 92.780 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 21.18 Mbit/s

95th percentile per-packet one-way delay: 93.452 ms

Loss rate: 0.95%

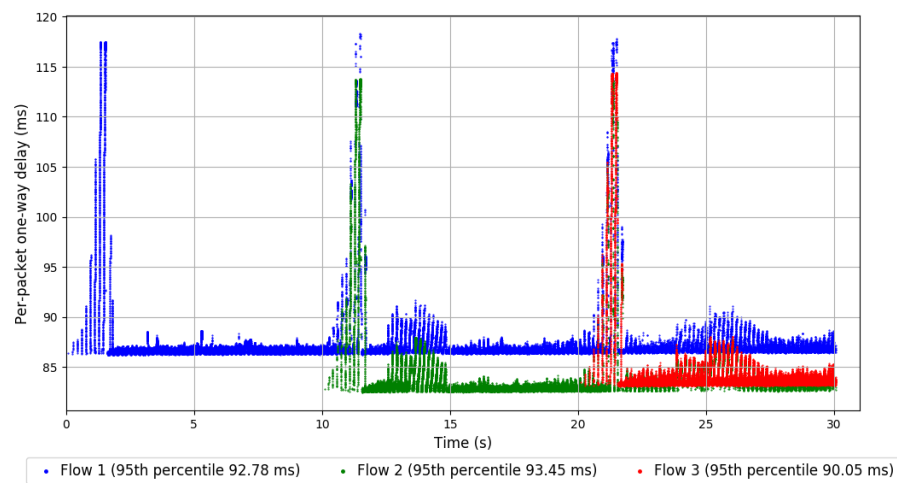
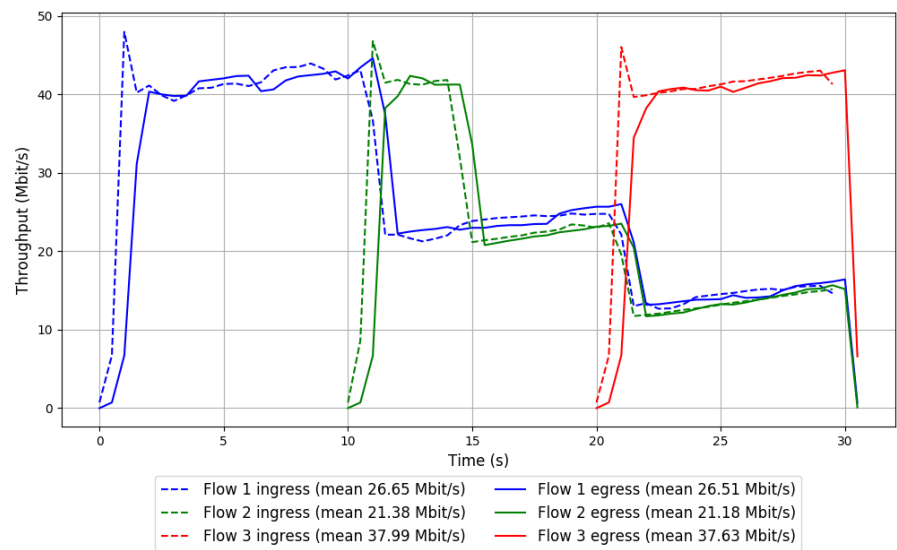
-- Flow 3:

Average throughput: 37.63 Mbit/s

95th percentile per-packet one-way delay: 90.053 ms

Loss rate: 0.93%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-06-18 19:02:56

End at: 2018-06-18 19:03:26

Local clock offset: -2.828 ms

Remote clock offset: 4.788 ms

Below is generated by plot.py at 2018-06-18 19:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.58 Mbit/s

95th percentile per-packet one-way delay: 92.578 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 22.42 Mbit/s

95th percentile per-packet one-way delay: 92.172 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 18.59 Mbit/s

95th percentile per-packet one-way delay: 95.066 ms

Loss rate: 1.53%

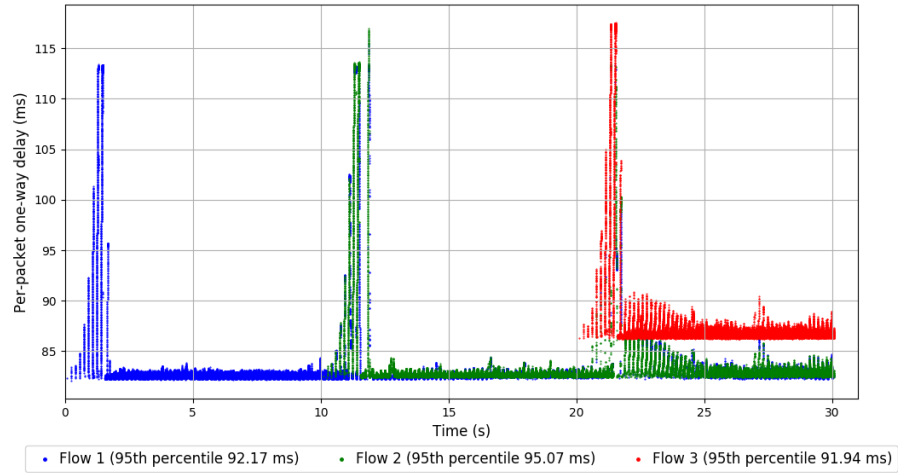
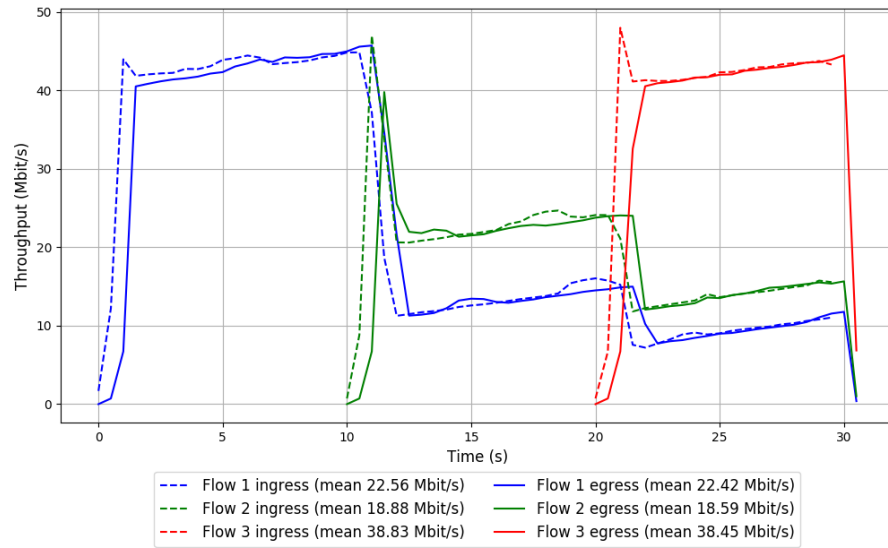
-- Flow 3:

Average throughput: 38.45 Mbit/s

95th percentile per-packet one-way delay: 91.942 ms

Loss rate: 0.99%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-06-18 19:22:56

End at: 2018-06-18 19:23:26

Local clock offset: -1.836 ms

Remote clock offset: 8.891 ms

Below is generated by plot.py at 2018-06-18 19:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.20 Mbit/s

95th percentile per-packet one-way delay: 94.152 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 18.19 Mbit/s

95th percentile per-packet one-way delay: 99.348 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 30.37 Mbit/s

95th percentile per-packet one-way delay: 91.952 ms

Loss rate: 0.63%

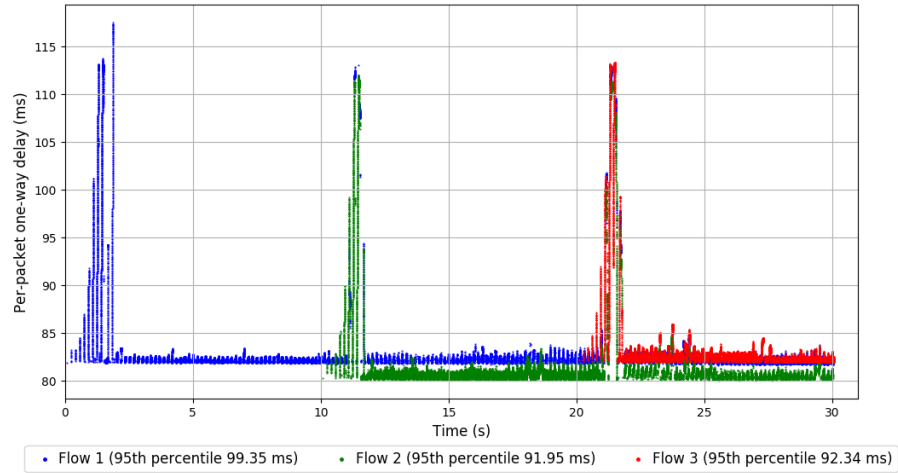
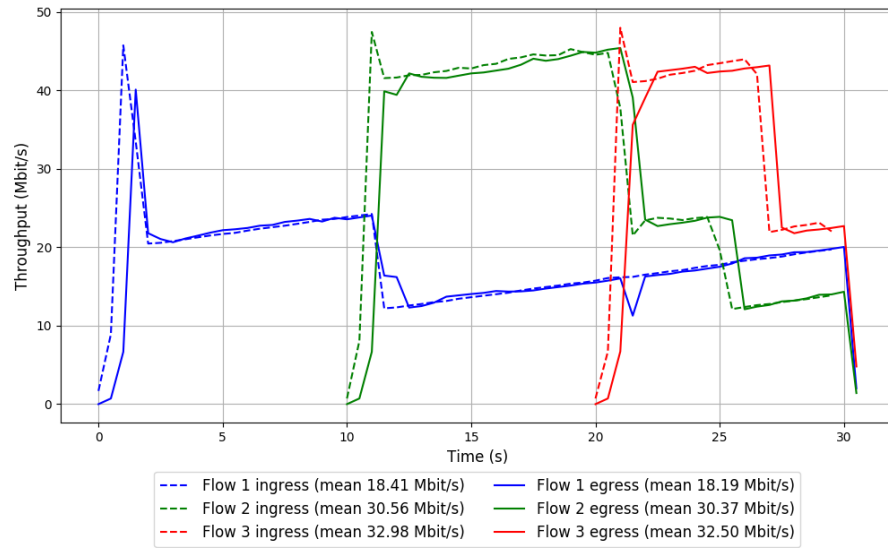
-- Flow 3:

Average throughput: 32.50 Mbit/s

95th percentile per-packet one-way delay: 92.341 ms

Loss rate: 1.46%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-06-18 16:34:42

End at: 2018-06-18 16:35:12

Local clock offset: -2.893 ms

Remote clock offset: 4.176 ms

Below is generated by plot.py at 2018-06-18 19:57:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.86 Mbit/s

95th percentile per-packet one-way delay: 169.173 ms

Loss rate: 69.83%

-- Flow 1:

Average throughput: 25.46 Mbit/s

95th percentile per-packet one-way delay: 169.971 ms

Loss rate: 74.71%

-- Flow 2:

Average throughput: 8.83 Mbit/s

95th percentile per-packet one-way delay: 112.424 ms

Loss rate: 24.13%

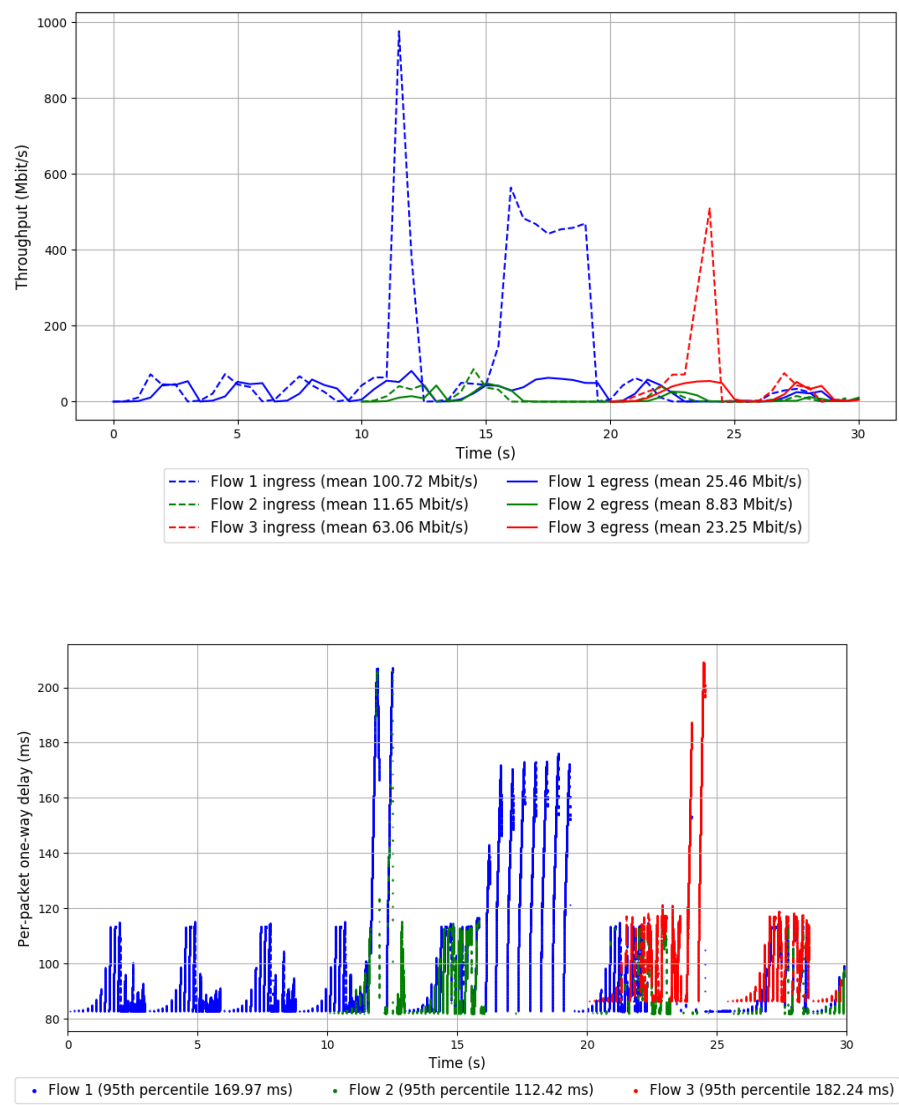
-- Flow 3:

Average throughput: 23.25 Mbit/s

95th percentile per-packet one-way delay: 182.236 ms

Loss rate: 63.11%

Run 1: Report of Verus — Data Link

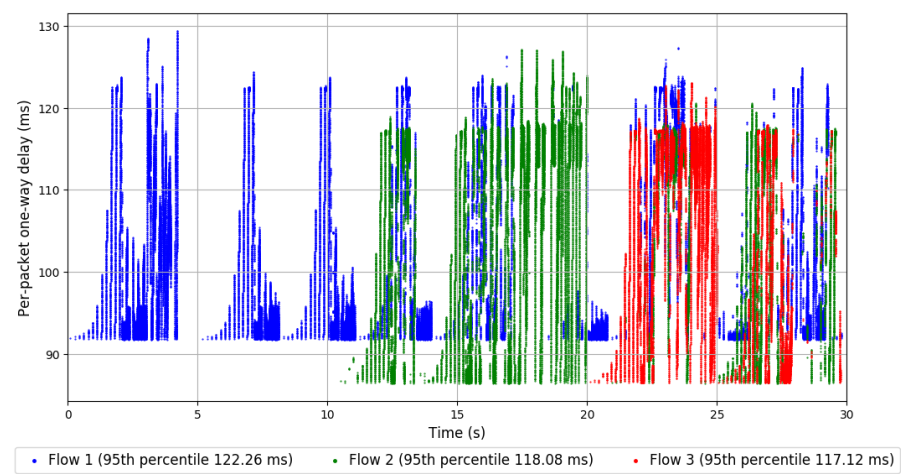
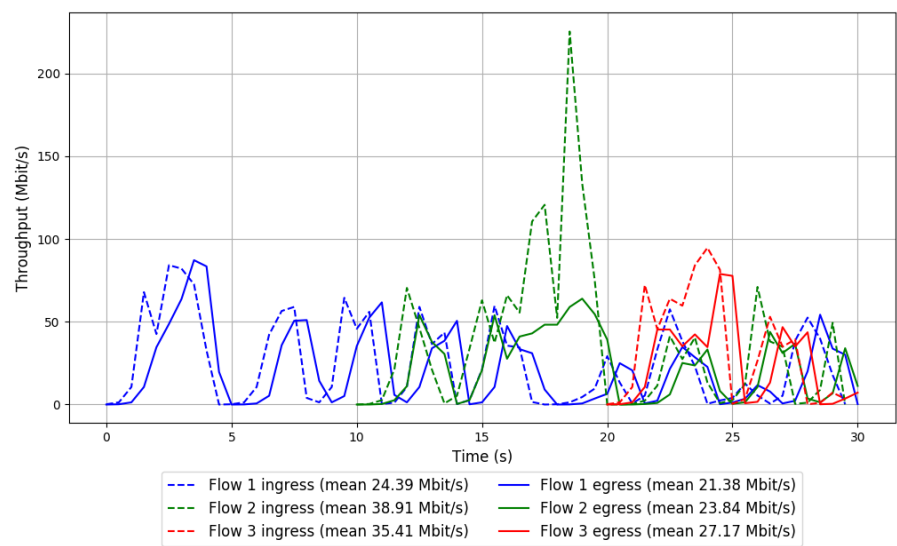


Run 2: Statistics of Verus

Start at: 2018-06-18 16:54:44
End at: 2018-06-18 16:55:14
Local clock offset: -2.943 ms
Remote clock offset: 8.934 ms

Below is generated by plot.py at 2018-06-18 19:57:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 45.65 Mbit/s
95th percentile per-packet one-way delay: 121.320 ms
Loss rate: 25.28%
-- Flow 1:
Average throughput: 21.38 Mbit/s
95th percentile per-packet one-way delay: 122.256 ms
Loss rate: 12.34%
-- Flow 2:
Average throughput: 23.84 Mbit/s
95th percentile per-packet one-way delay: 118.079 ms
Loss rate: 38.72%
-- Flow 3:
Average throughput: 27.17 Mbit/s
95th percentile per-packet one-way delay: 117.121 ms
Loss rate: 23.26%

Run 2: Report of Verus — Data Link

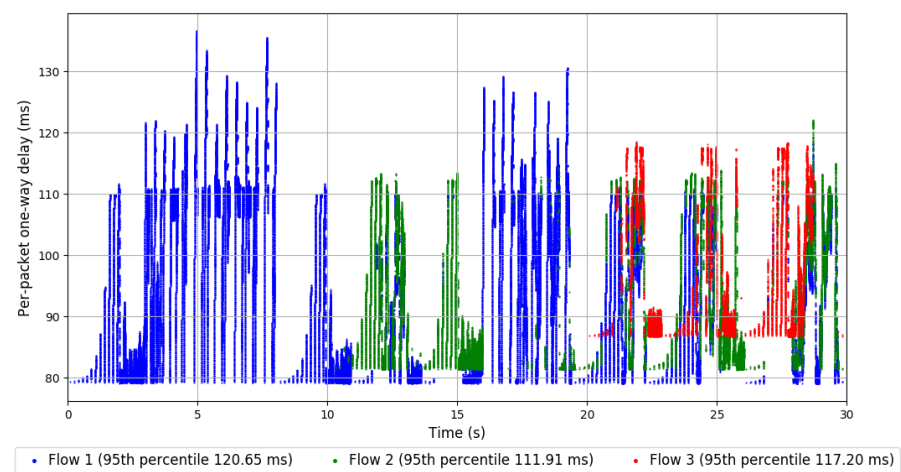
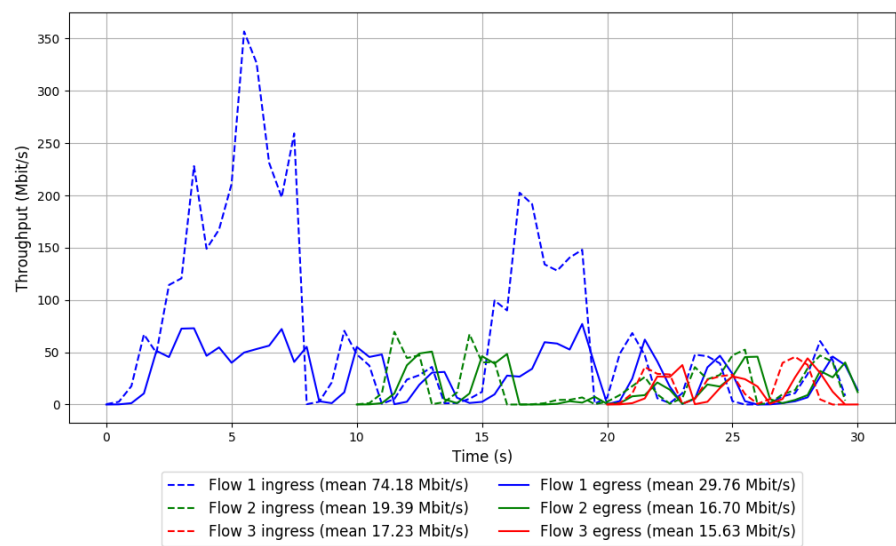


Run 3: Statistics of Verus

Start at: 2018-06-18 17:14:46
End at: 2018-06-18 17:15:16
Local clock offset: -2.792 ms
Remote clock offset: 11.492 ms

```
# Below is generated by plot.py at 2018-06-18 19:58:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.93 Mbit/s
95th percentile per-packet one-way delay: 117.413 ms
Loss rate: 50.43%
-- Flow 1:
Average throughput: 29.76 Mbit/s
95th percentile per-packet one-way delay: 120.648 ms
Loss rate: 59.89%
-- Flow 2:
Average throughput: 16.70 Mbit/s
95th percentile per-packet one-way delay: 111.906 ms
Loss rate: 13.89%
-- Flow 3:
Average throughput: 15.63 Mbit/s
95th percentile per-packet one-way delay: 117.203 ms
Loss rate: 9.29%
```


Run 3: Report of Verus — Data Link

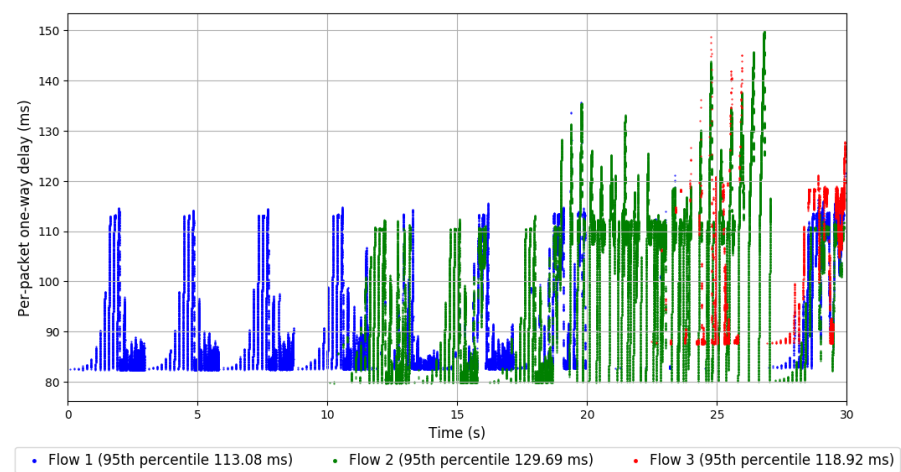
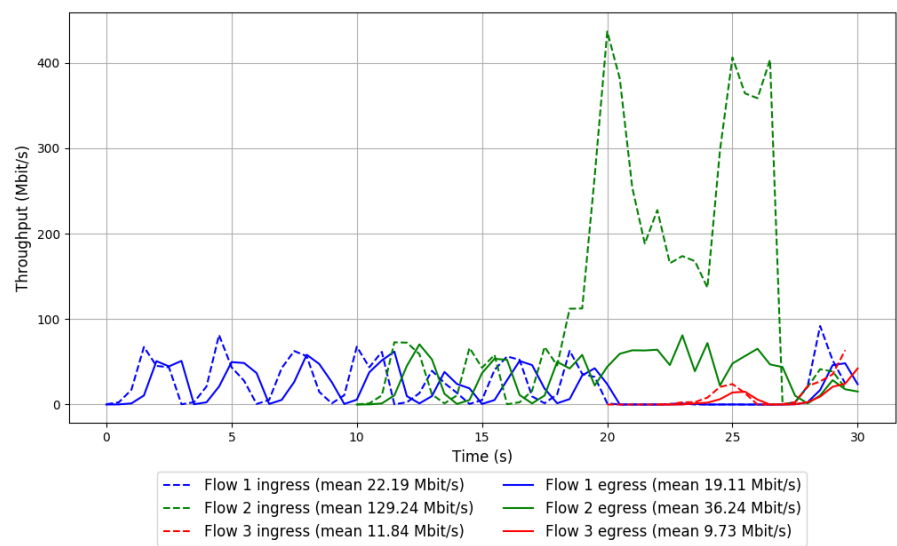


Run 4: Statistics of Verus

Start at: 2018-06-18 17:34:50
End at: 2018-06-18 17:35:20
Local clock offset: -2.697 ms
Remote clock offset: 11.916 ms

Below is generated by plot.py at 2018-06-18 19:58:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 45.62 Mbit/s
95th percentile per-packet one-way delay: 123.622 ms
Loss rate: 59.13%
-- Flow 1:
Average throughput: 19.11 Mbit/s
95th percentile per-packet one-way delay: 113.080 ms
Loss rate: 13.73%
-- Flow 2:
Average throughput: 36.24 Mbit/s
95th percentile per-packet one-way delay: 129.690 ms
Loss rate: 71.91%
-- Flow 3:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 118.919 ms
Loss rate: 35.06%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-06-18 17:54:52

End at: 2018-06-18 17:55:22

Local clock offset: -2.809 ms

Remote clock offset: 9.995 ms

Below is generated by plot.py at 2018-06-18 19:58:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.26 Mbit/s

95th percentile per-packet one-way delay: 168.463 ms

Loss rate: 82.75%

-- Flow 1:

Average throughput: 45.85 Mbit/s

95th percentile per-packet one-way delay: 168.727 ms

Loss rate: 83.17%

-- Flow 2:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 122.149 ms

Loss rate: 8.55%

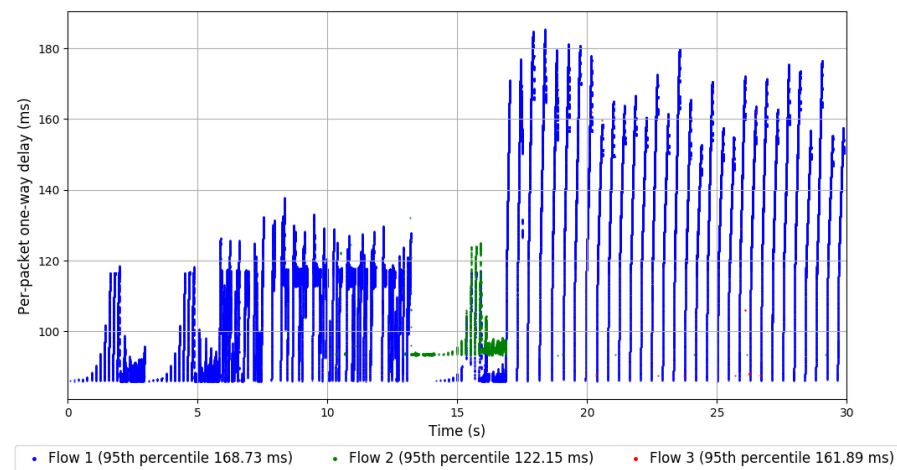
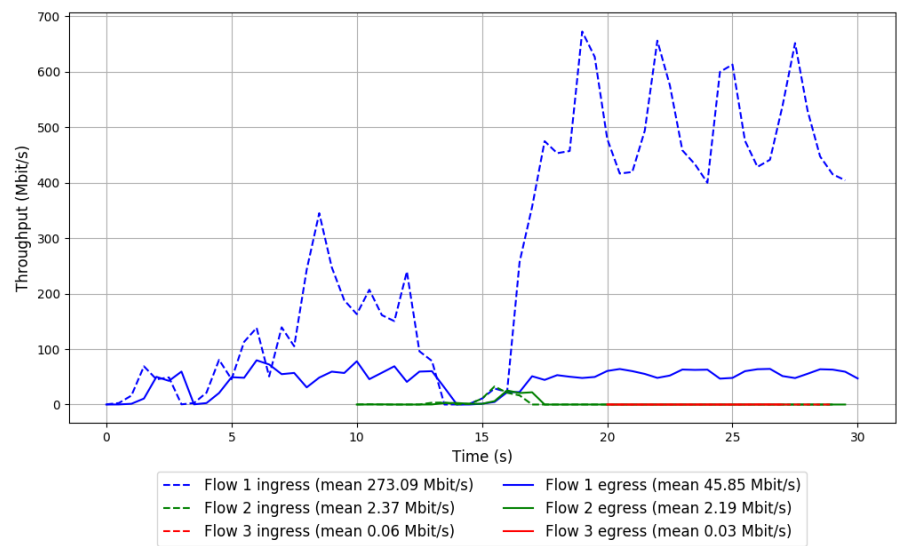
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 161.892 ms

Loss rate: 59.57%

Run 5: Report of Verus — Data Link

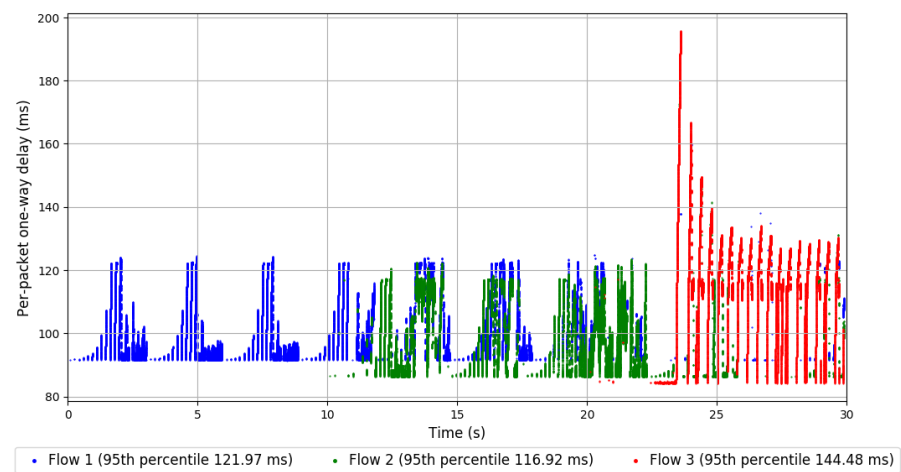
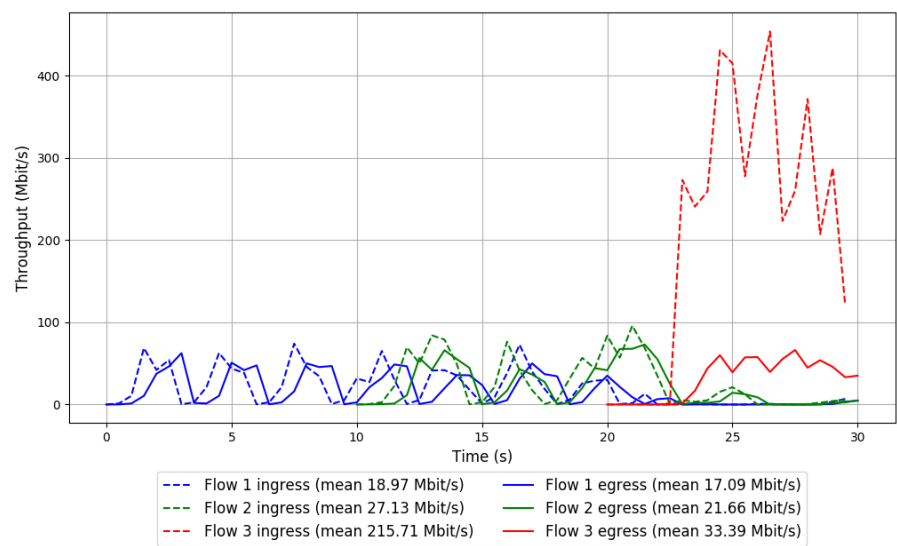


Run 6: Statistics of Verus

Start at: 2018-06-18 18:15:04
End at: 2018-06-18 18:15:34
Local clock offset: -2.856 ms
Remote clock offset: 10.567 ms

Below is generated by plot.py at 2018-06-18 19:58:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 42.40 Mbit/s
95th percentile per-packet one-way delay: 127.496 ms
Loss rate: 60.55%
-- Flow 1:
Average throughput: 17.09 Mbit/s
95th percentile per-packet one-way delay: 121.975 ms
Loss rate: 9.86%
-- Flow 2:
Average throughput: 21.66 Mbit/s
95th percentile per-packet one-way delay: 116.920 ms
Loss rate: 20.09%
-- Flow 3:
Average throughput: 33.39 Mbit/s
95th percentile per-packet one-way delay: 144.484 ms
Loss rate: 84.50%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-06-18 18:35:05

End at: 2018-06-18 18:35:35

Local clock offset: -2.95 ms

Remote clock offset: 7.797 ms

Below is generated by plot.py at 2018-06-18 19:58:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.61 Mbit/s

95th percentile per-packet one-way delay: 144.979 ms

Loss rate: 59.26%

-- Flow 1:

Average throughput: 23.44 Mbit/s

95th percentile per-packet one-way delay: 169.640 ms

Loss rate: 62.66%

-- Flow 2:

Average throughput: 24.55 Mbit/s

95th percentile per-packet one-way delay: 113.406 ms

Loss rate: 54.54%

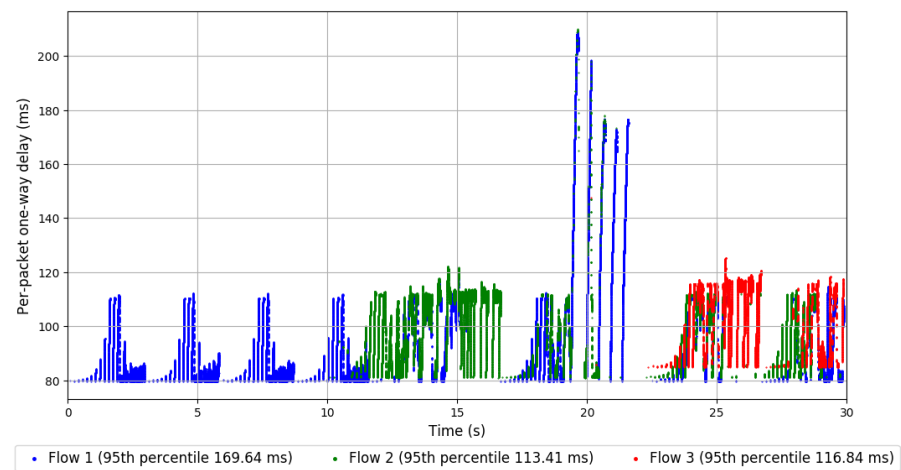
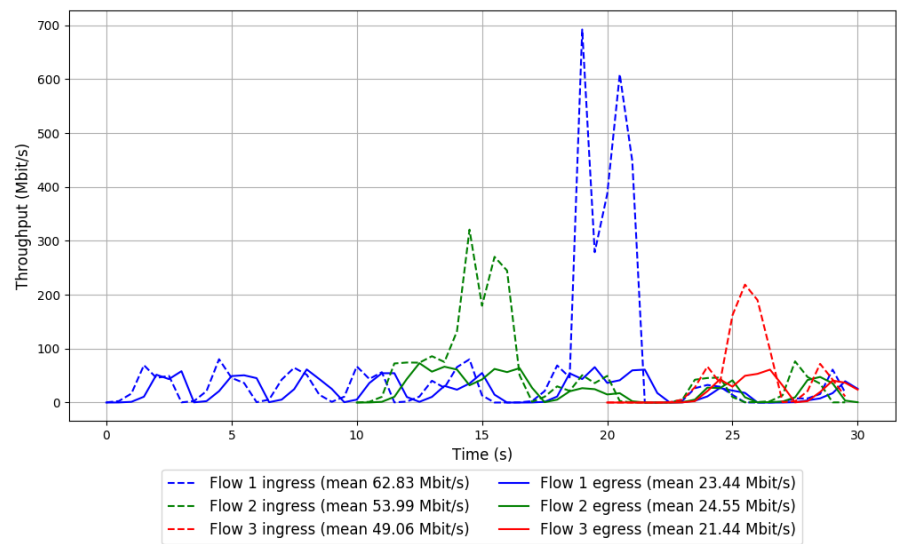
-- Flow 3:

Average throughput: 21.44 Mbit/s

95th percentile per-packet one-way delay: 116.845 ms

Loss rate: 56.47%

Run 7: Report of Verus — Data Link

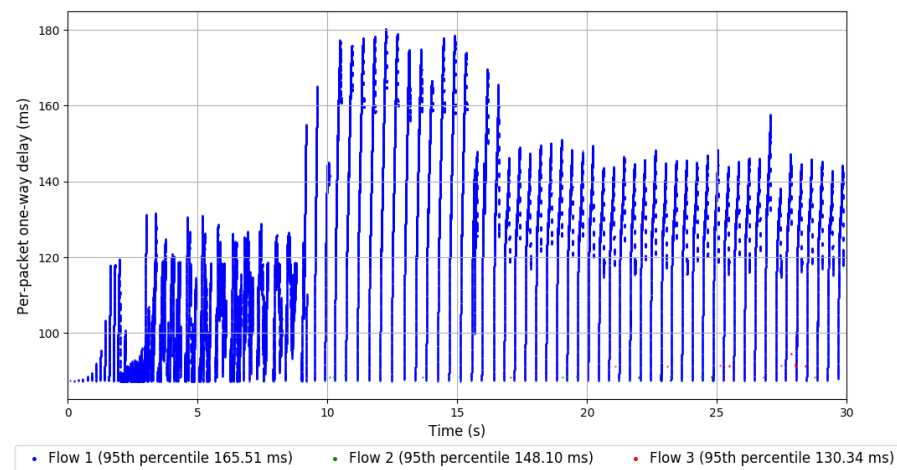
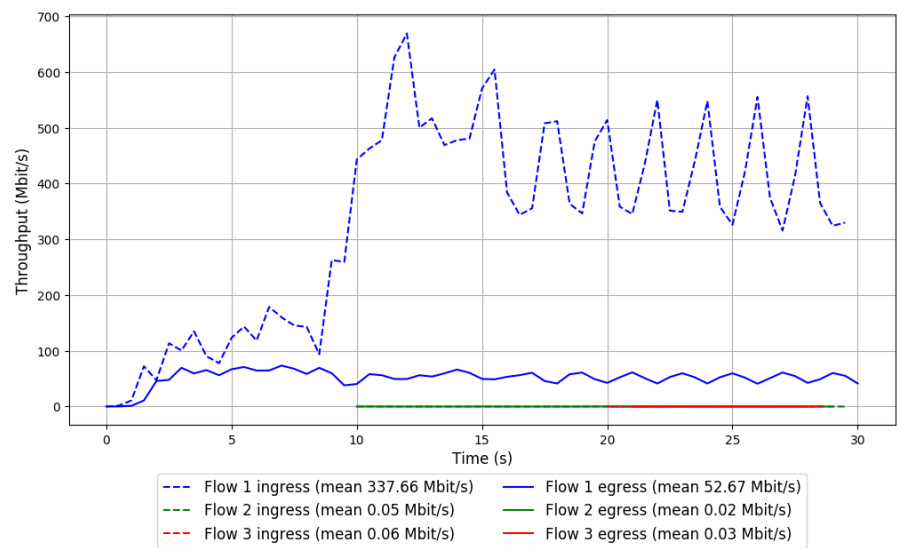


Run 8: Statistics of Verus

Start at: 2018-06-18 18:55:08
End at: 2018-06-18 18:55:38
Local clock offset: -2.83 ms
Remote clock offset: 10.323 ms

Below is generated by plot.py at 2018-06-18 19:59:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 52.69 Mbit/s
95th percentile per-packet one-way delay: 165.510 ms
Loss rate: 84.38%
-- Flow 1:
Average throughput: 52.67 Mbit/s
95th percentile per-packet one-way delay: 165.512 ms
Loss rate: 84.38%
-- Flow 2:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 148.100 ms
Loss rate: 57.69%
-- Flow 3:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 130.337 ms
Loss rate: 56.82%

Run 8: Report of Verus — Data Link

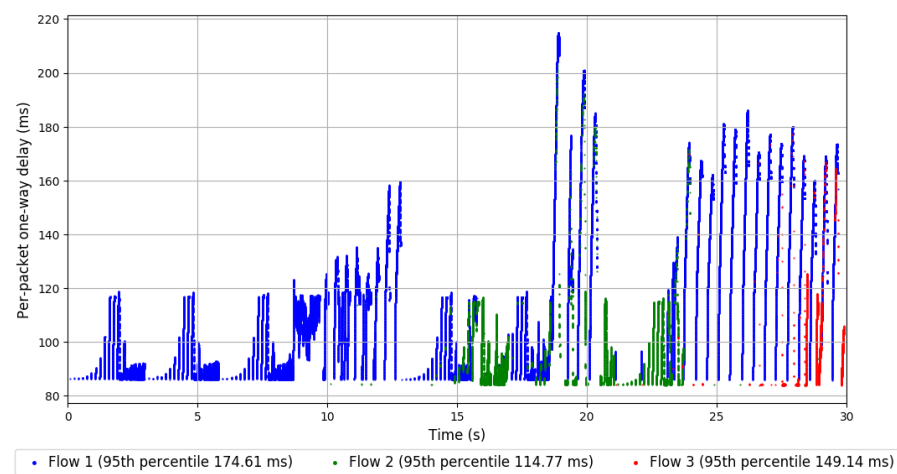
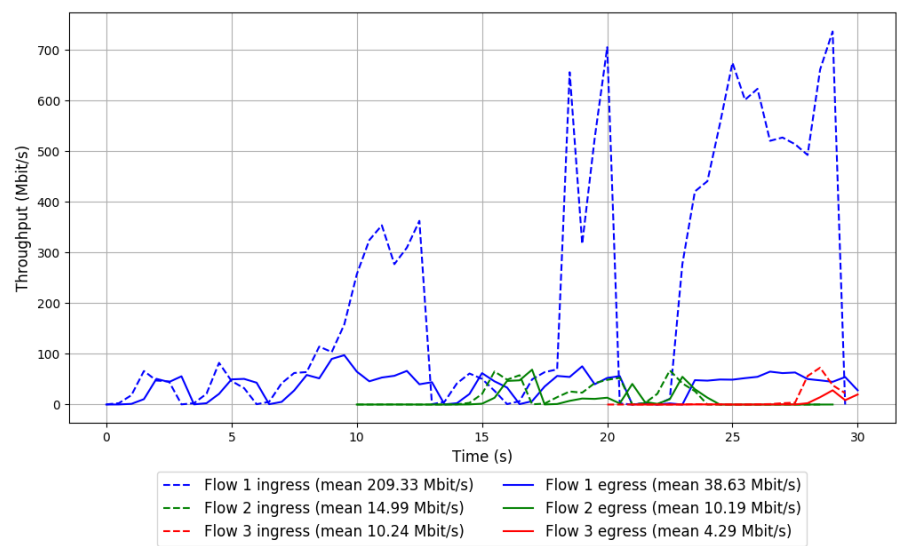


Run 9: Statistics of Verus

Start at: 2018-06-18 19:15:19
End at: 2018-06-18 19:15:49
Local clock offset: -2.022 ms
Remote clock offset: 8.511 ms

```
# Below is generated by plot.py at 2018-06-18 19:59:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.24 Mbit/s
95th percentile per-packet one-way delay: 172.738 ms
Loss rate: 79.15%
-- Flow 1:
Average throughput: 38.63 Mbit/s
95th percentile per-packet one-way delay: 174.610 ms
Loss rate: 81.54%
-- Flow 2:
Average throughput: 10.19 Mbit/s
95th percentile per-packet one-way delay: 114.766 ms
Loss rate: 32.60%
-- Flow 3:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 149.143 ms
Loss rate: 62.32%
```

Run 9: Report of Verus — Data Link

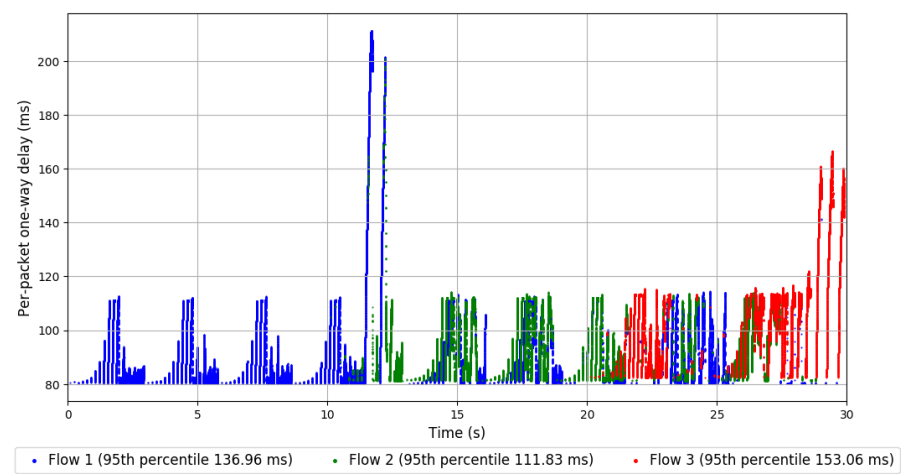
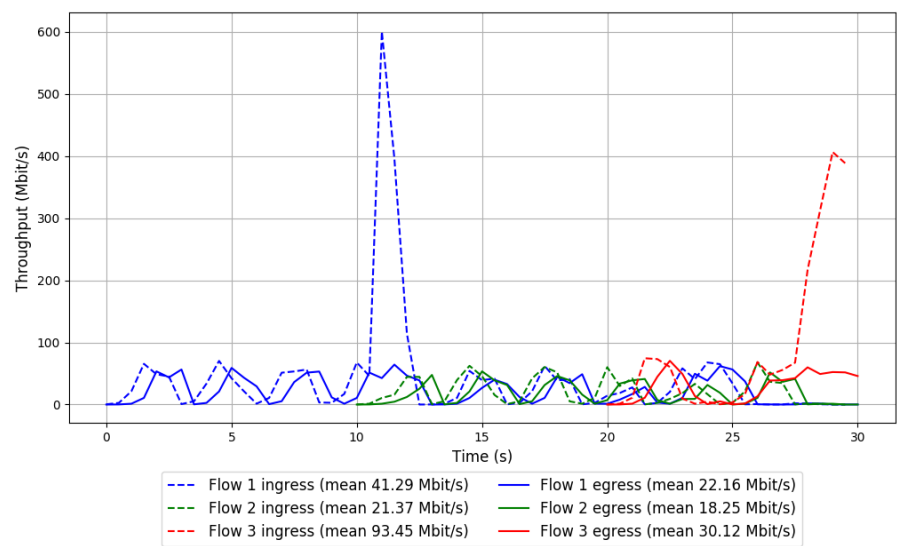


Run 10: Statistics of Verus

Start at: 2018-06-18 19:35:20
End at: 2018-06-18 19:35:50
Local clock offset: -1.655 ms
Remote clock offset: 12.148 ms

Below is generated by plot.py at 2018-06-18 19:59:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 44.08 Mbit/s
95th percentile per-packet one-way delay: 140.459 ms
Loss rate: 48.57%
-- Flow 1:
Average throughput: 22.16 Mbit/s
95th percentile per-packet one-way delay: 136.957 ms
Loss rate: 46.21%
-- Flow 2:
Average throughput: 18.25 Mbit/s
95th percentile per-packet one-way delay: 111.832 ms
Loss rate: 14.37%
-- Flow 3:
Average throughput: 30.12 Mbit/s
95th percentile per-packet one-way delay: 153.059 ms
Loss rate: 67.56%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-18 16:28:29

End at: 2018-06-18 16:28:59

Local clock offset: -2.825 ms

Remote clock offset: 5.823 ms

Below is generated by plot.py at 2018-06-18 19:59:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.32 Mbit/s

95th percentile per-packet one-way delay: 114.440 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 64.30 Mbit/s

95th percentile per-packet one-way delay: 114.354 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 114.844 ms

Loss rate: 0.40%

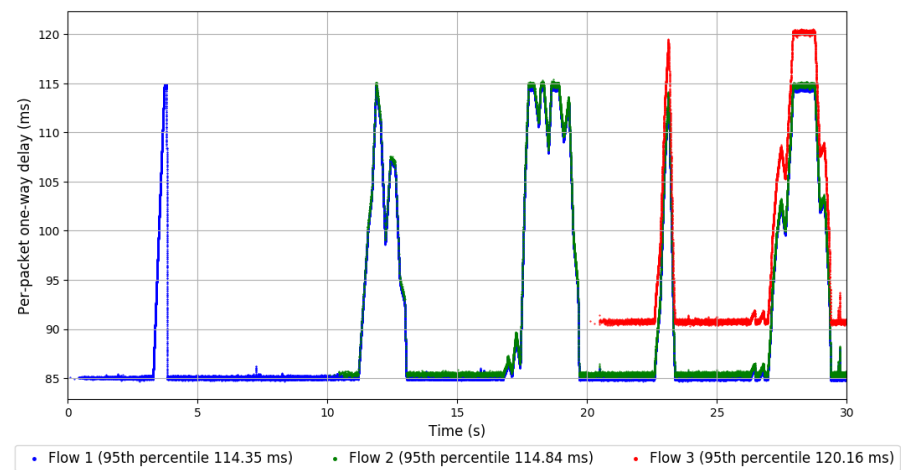
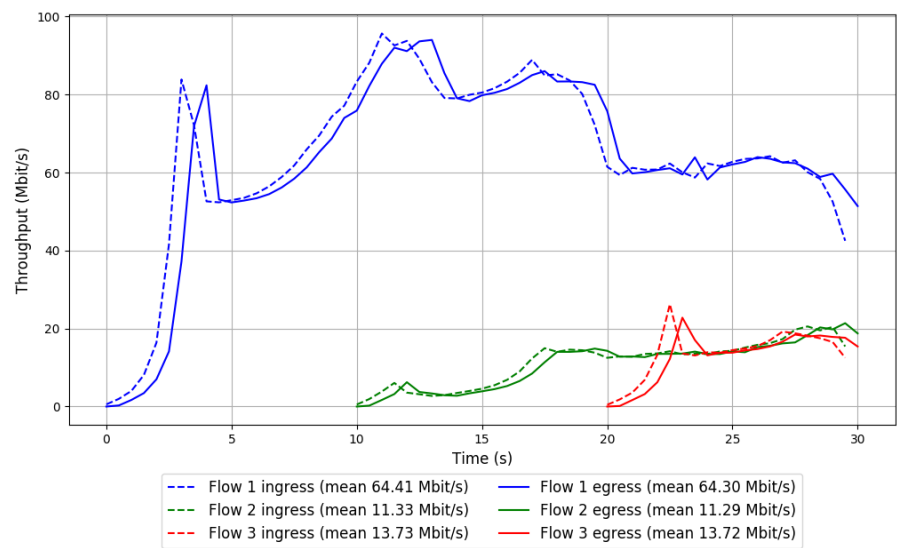
-- Flow 3:

Average throughput: 13.72 Mbit/s

95th percentile per-packet one-way delay: 120.163 ms

Loss rate: 0.18%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-06-18 16:48:32

End at: 2018-06-18 16:49:02

Local clock offset: -2.951 ms

Remote clock offset: 7.94 ms

Below is generated by plot.py at 2018-06-18 19:59:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.66 Mbit/s

95th percentile per-packet one-way delay: 104.519 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 69.81 Mbit/s

95th percentile per-packet one-way delay: 105.309 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 8.68 Mbit/s

95th percentile per-packet one-way delay: 95.376 ms

Loss rate: 0.01%

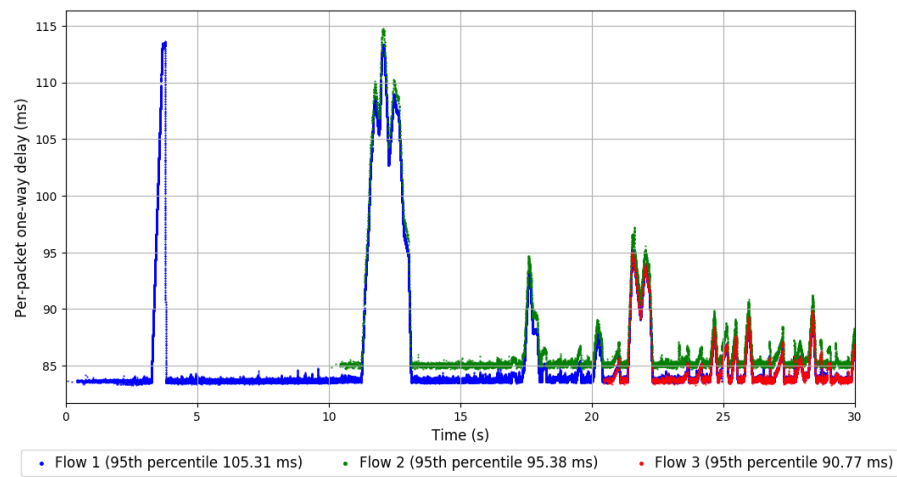
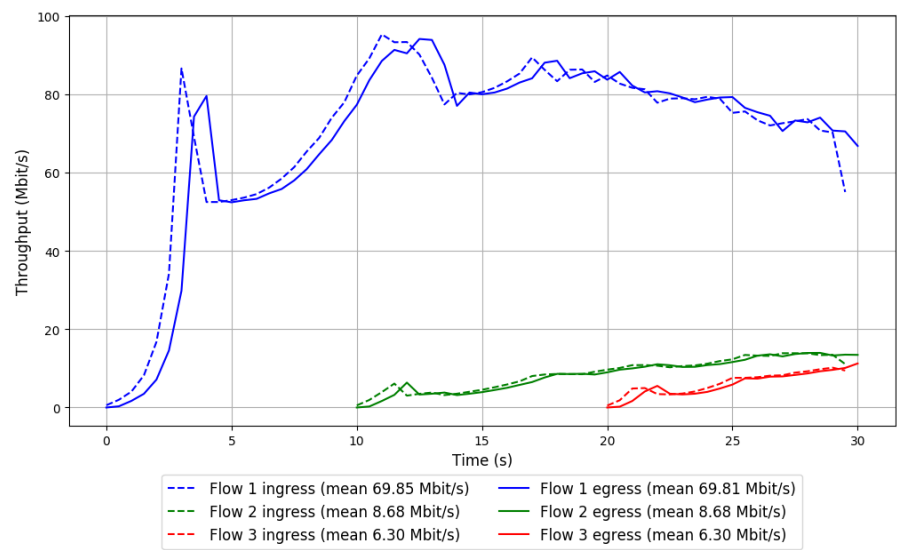
-- Flow 3:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 90.771 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

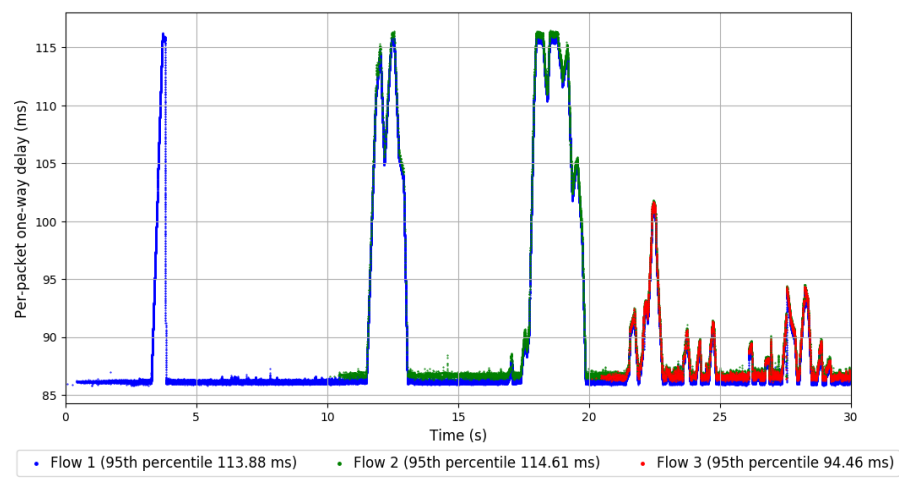
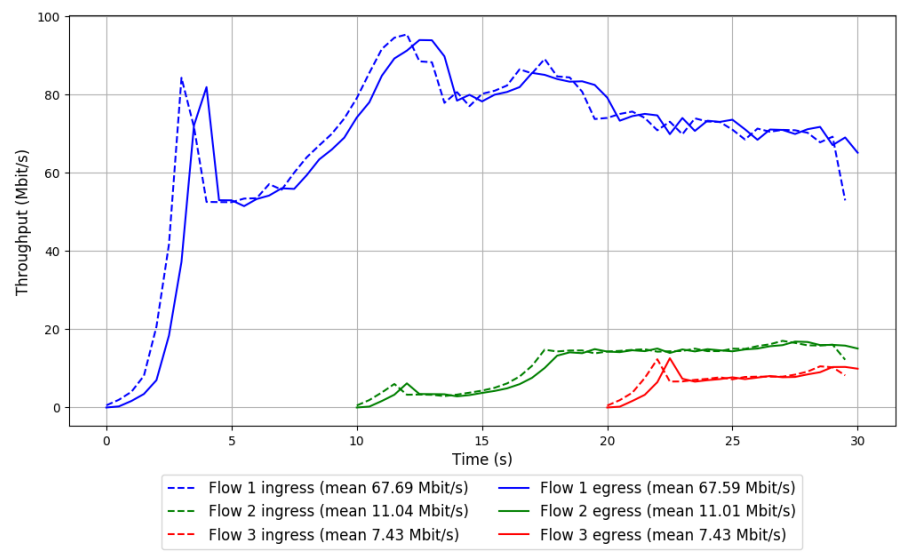


Run 3: Statistics of PCC-Vivace

Start at: 2018-06-18 17:08:33
End at: 2018-06-18 17:09:03
Local clock offset: -2.86 ms
Remote clock offset: 14.816 ms

Below is generated by plot.py at 2018-06-18 19:59:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.37 Mbit/s
95th percentile per-packet one-way delay: 113.838 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 67.59 Mbit/s
95th percentile per-packet one-way delay: 113.881 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 11.01 Mbit/s
95th percentile per-packet one-way delay: 114.613 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: 94.462 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-06-18 17:28:37

End at: 2018-06-18 17:29:07

Local clock offset: -2.682 ms

Remote clock offset: 18.68 ms

Below is generated by plot.py at 2018-06-18 19:59:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.62 Mbit/s

95th percentile per-packet one-way delay: 113.696 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 69.21 Mbit/s

95th percentile per-packet one-way delay: 113.554 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 10.18 Mbit/s

95th percentile per-packet one-way delay: 121.204 ms

Loss rate: 1.20%

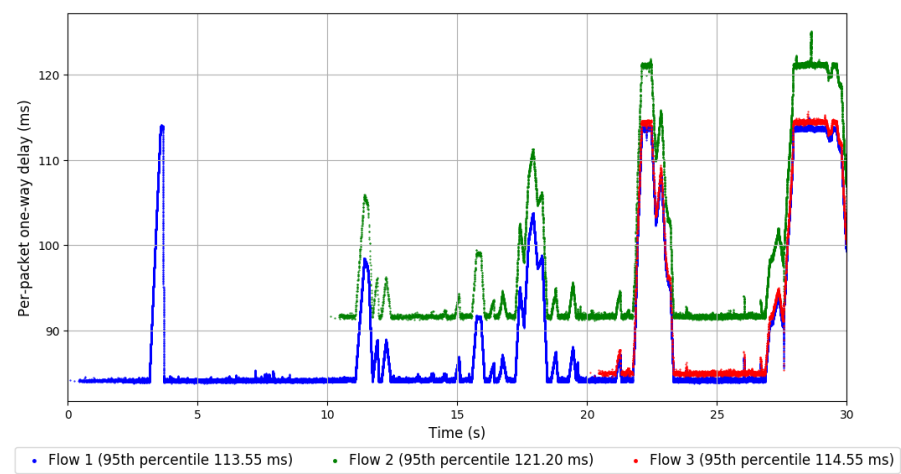
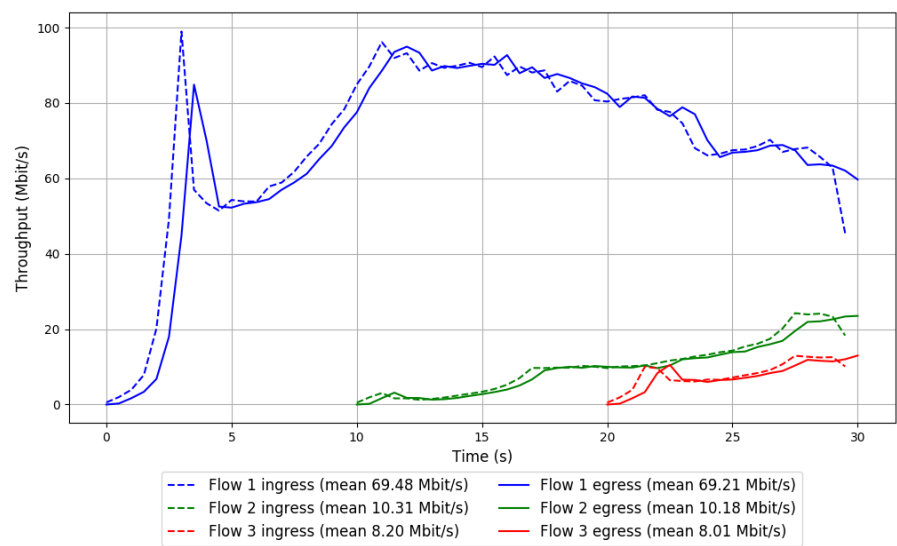
-- Flow 3:

Average throughput: 8.01 Mbit/s

95th percentile per-packet one-way delay: 114.552 ms

Loss rate: 2.11%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-06-18 17:48:40

End at: 2018-06-18 17:49:10

Local clock offset: -2.713 ms

Remote clock offset: 4.817 ms

Below is generated by plot.py at 2018-06-18 19:59:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.70 Mbit/s

95th percentile per-packet one-way delay: 102.974 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 67.16 Mbit/s

95th percentile per-packet one-way delay: 102.870 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 12.97 Mbit/s

95th percentile per-packet one-way delay: 102.906 ms

Loss rate: 0.01%

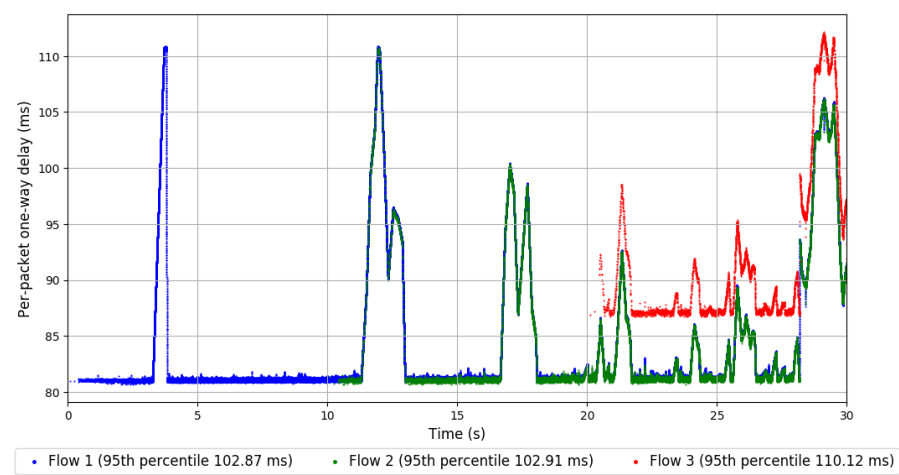
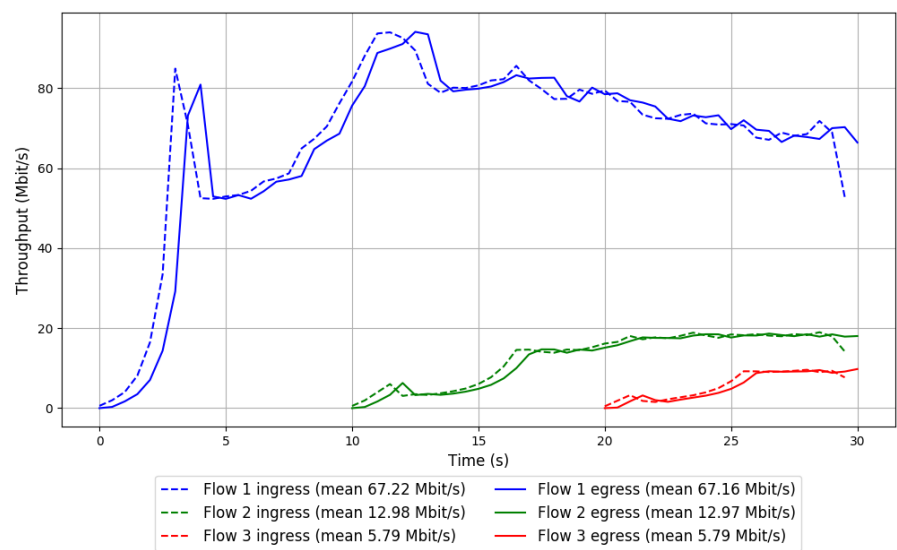
-- Flow 3:

Average throughput: 5.79 Mbit/s

95th percentile per-packet one-way delay: 110.118 ms

Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-06-18 18:08:51

End at: 2018-06-18 18:09:21

Local clock offset: -2.878 ms

Remote clock offset: 7.656 ms

Below is generated by plot.py at 2018-06-18 20:00:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.58 Mbit/s

95th percentile per-packet one-way delay: 118.444 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 64.06 Mbit/s

95th percentile per-packet one-way delay: 118.427 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 12.83 Mbit/s

95th percentile per-packet one-way delay: 118.603 ms

Loss rate: 0.84%

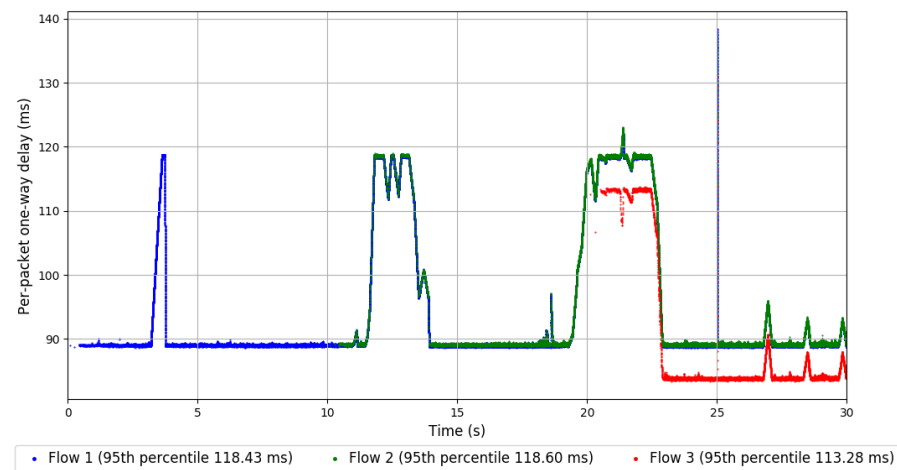
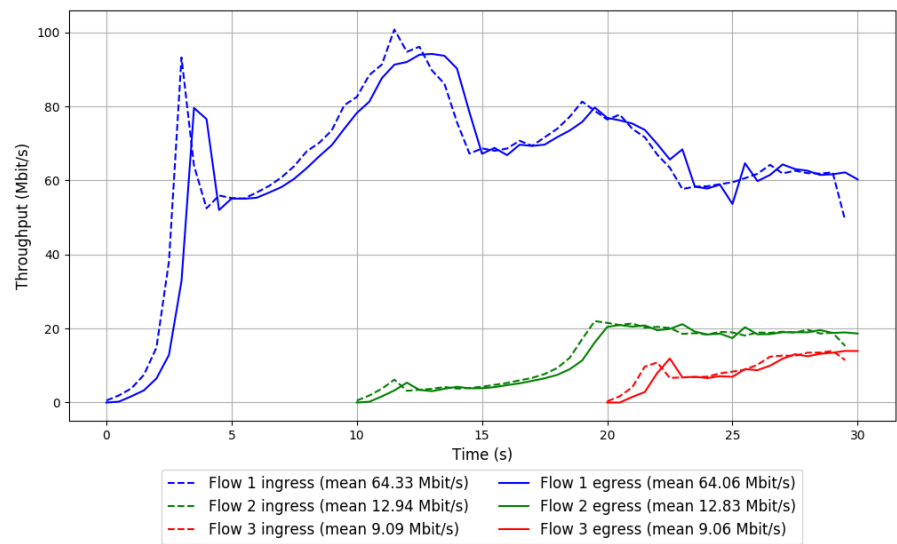
-- Flow 3:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 113.279 ms

Loss rate: 0.58%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-06-18 18:28:52

End at: 2018-06-18 18:29:22

Local clock offset: -2.931 ms

Remote clock offset: 7.567 ms

Below is generated by plot.py at 2018-06-18 20:00:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.48 Mbit/s

95th percentile per-packet one-way delay: 106.872 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 70.22 Mbit/s

95th percentile per-packet one-way delay: 107.588 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 9.90 Mbit/s

95th percentile per-packet one-way delay: 100.074 ms

Loss rate: 0.25%

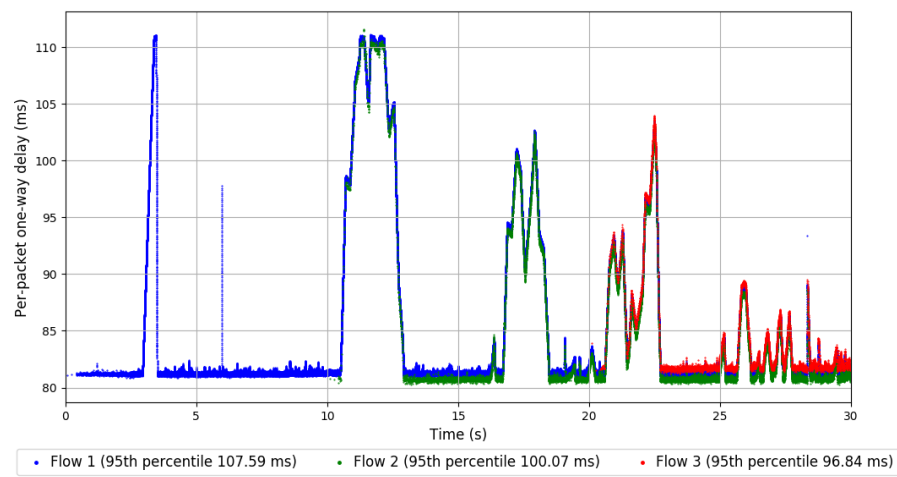
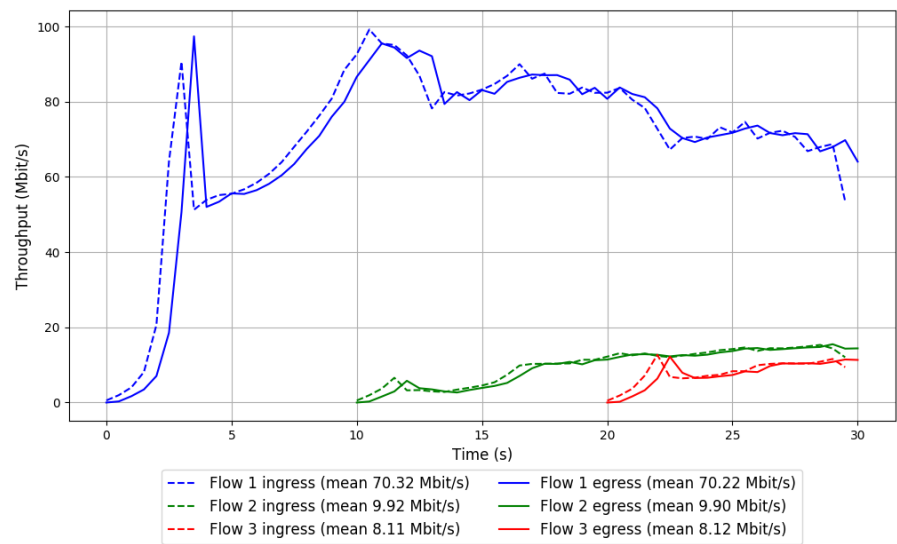
-- Flow 3:

Average throughput: 8.12 Mbit/s

95th percentile per-packet one-way delay: 96.841 ms

Loss rate: 0.00%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-06-18 18:48:56

End at: 2018-06-18 18:49:26

Local clock offset: -2.89 ms

Remote clock offset: 5.168 ms

Below is generated by plot.py at 2018-06-18 20:00:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.06 Mbit/s

95th percentile per-packet one-way delay: 109.025 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 70.56 Mbit/s

95th percentile per-packet one-way delay: 108.976 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 111.653 ms

Loss rate: 0.71%

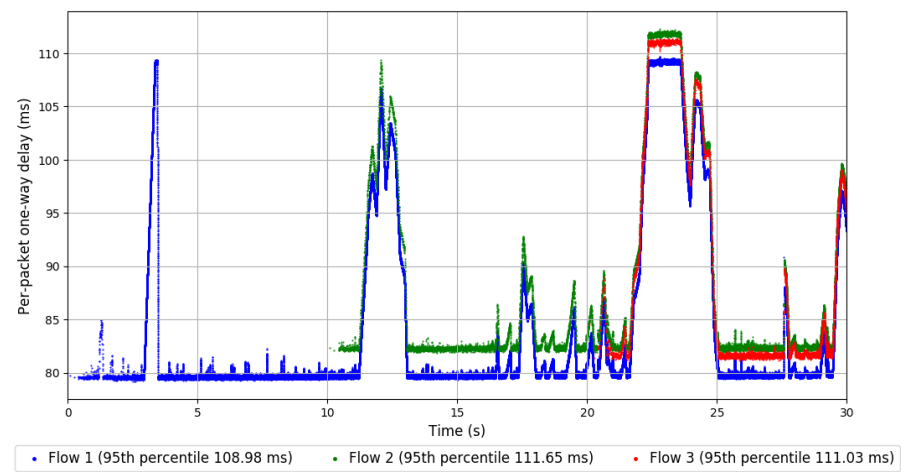
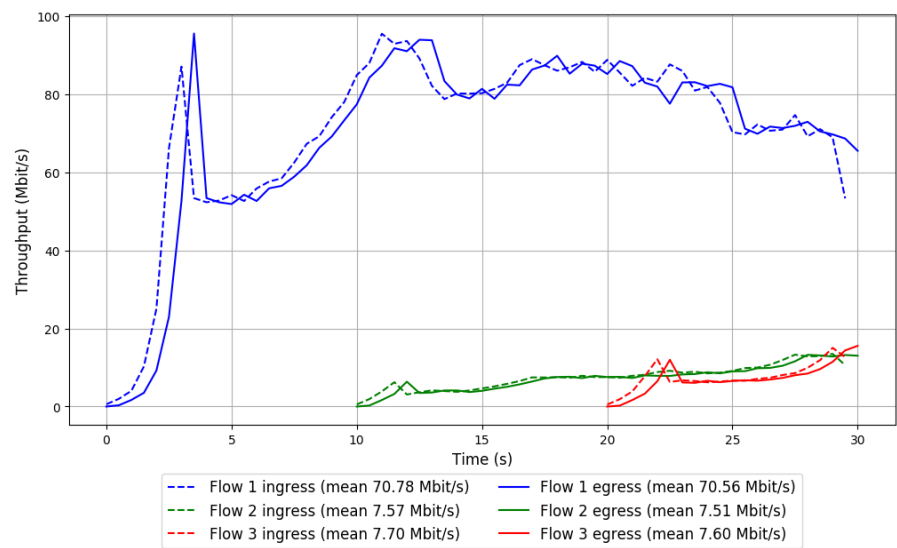
-- Flow 3:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 111.029 ms

Loss rate: 1.23%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-06-18 19:09:07

End at: 2018-06-18 19:09:37

Local clock offset: -2.442 ms

Remote clock offset: 7.078 ms

Below is generated by plot.py at 2018-06-18 20:00:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.38 Mbit/s

95th percentile per-packet one-way delay: 111.971 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 64.88 Mbit/s

95th percentile per-packet one-way delay: 111.128 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 12.56 Mbit/s

95th percentile per-packet one-way delay: 116.690 ms

Loss rate: 0.40%

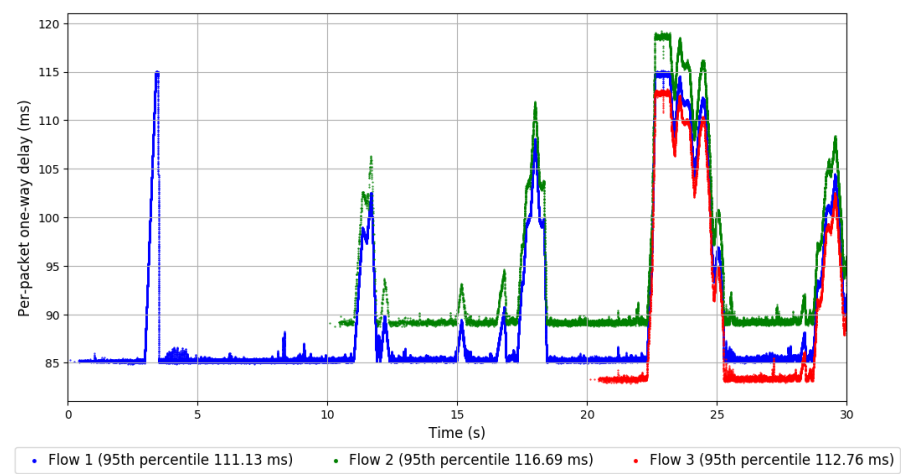
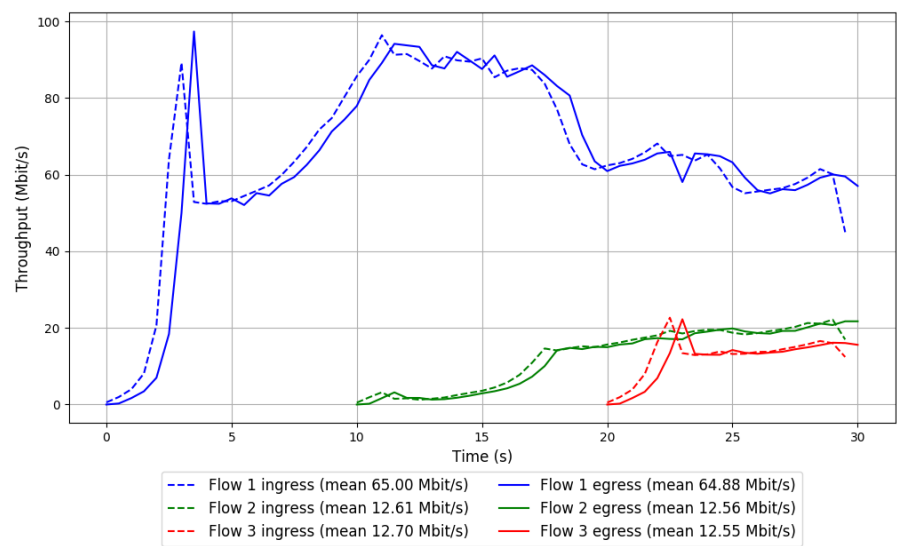
-- Flow 3:

Average throughput: 12.55 Mbit/s

95th percentile per-packet one-way delay: 112.758 ms

Loss rate: 1.10%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-06-18 19:29:08

End at: 2018-06-18 19:29:38

Local clock offset: -1.643 ms

Remote clock offset: 15.91 ms

Below is generated by plot.py at 2018-06-18 20:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.12 Mbit/s

95th percentile per-packet one-way delay: 114.507 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 65.66 Mbit/s

95th percentile per-packet one-way delay: 114.184 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 14.57 Mbit/s

95th percentile per-packet one-way delay: 112.584 ms

Loss rate: 0.07%

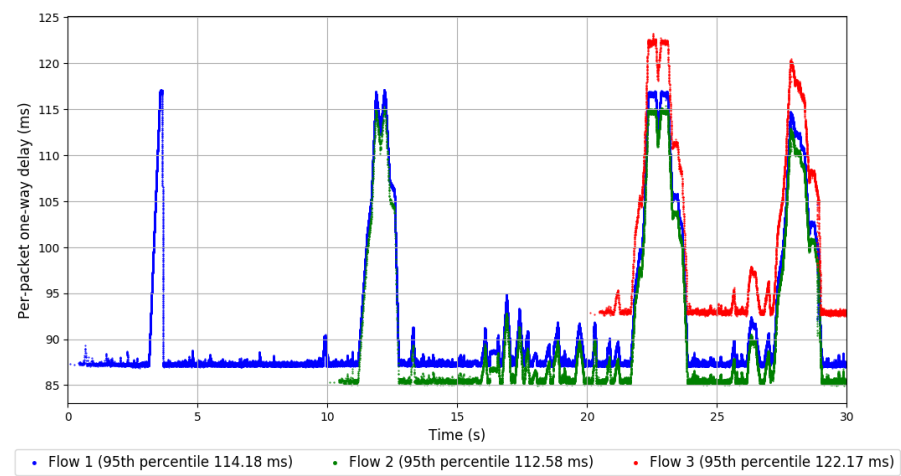
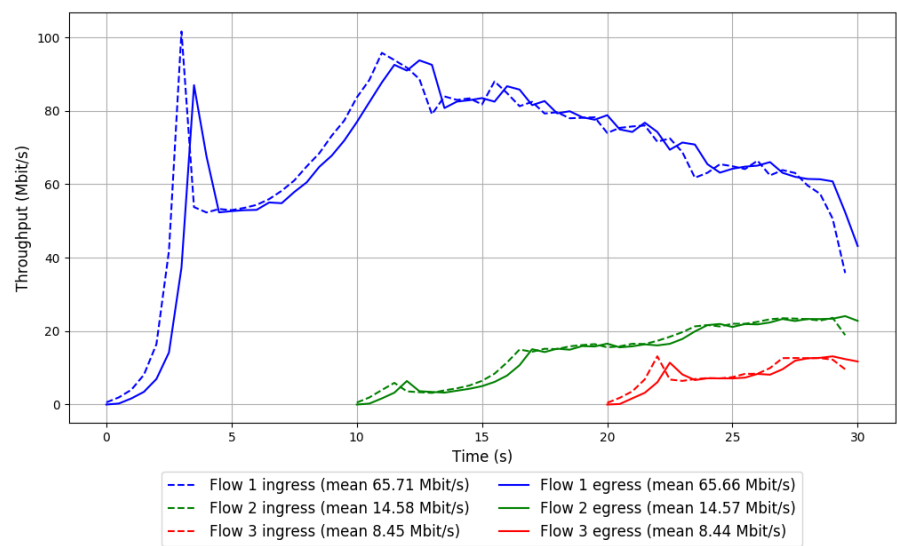
-- Flow 3:

Average throughput: 8.44 Mbit/s

95th percentile per-packet one-way delay: 122.165 ms

Loss rate: 0.21%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-06-18 16:17:08

End at: 2018-06-18 16:17:38

Local clock offset: -2.69 ms

Remote clock offset: 2.403 ms

Below is generated by plot.py at 2018-06-18 20:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 83.897 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.85 Mbit/s

95th percentile per-packet one-way delay: 83.646 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 82.813 ms

Loss rate: 0.00%

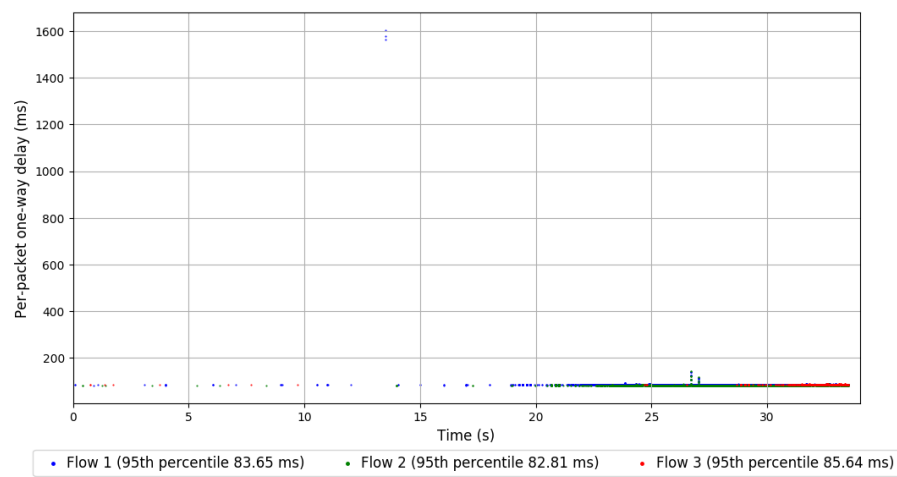
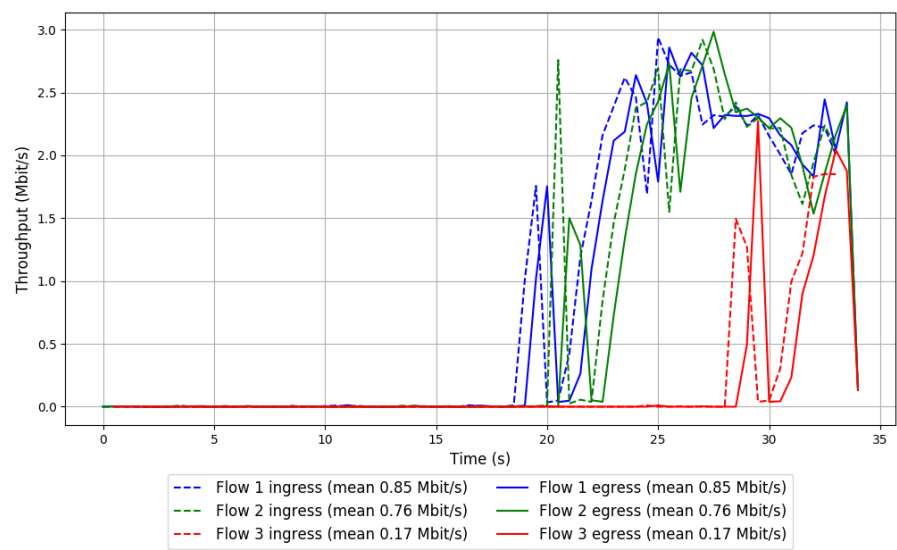
-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 85.642 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-06-18 16:37:14

End at: 2018-06-18 16:37:44

Local clock offset: -2.949 ms

Remote clock offset: 4.599 ms

Below is generated by plot.py at 2018-06-18 20:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 88.811 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 83.154 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 89.146 ms

Loss rate: 0.00%

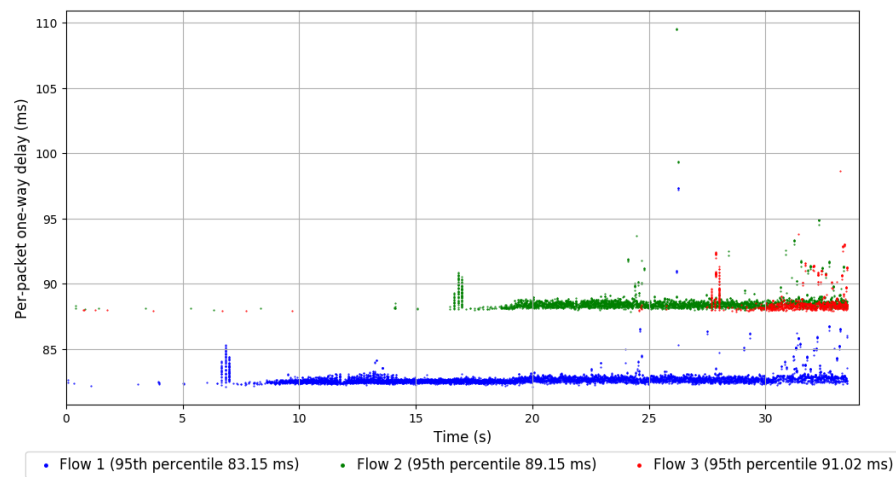
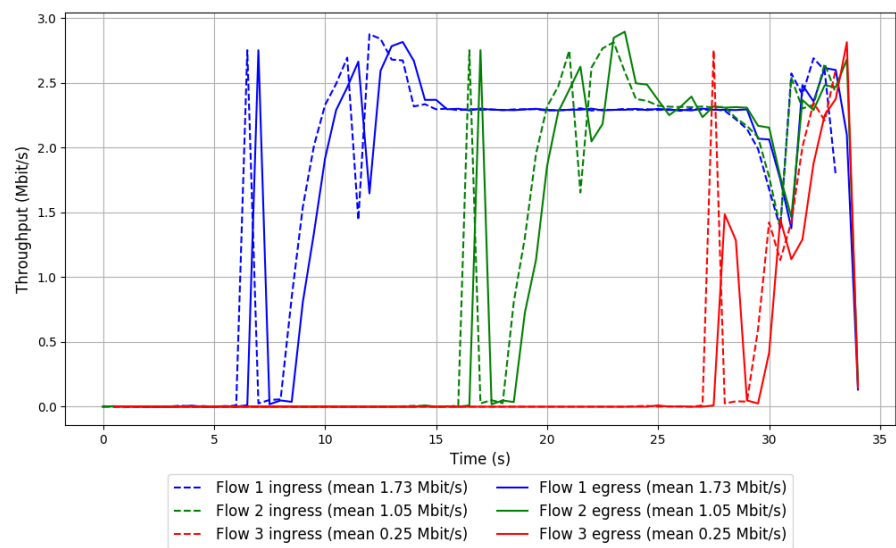
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 91.015 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

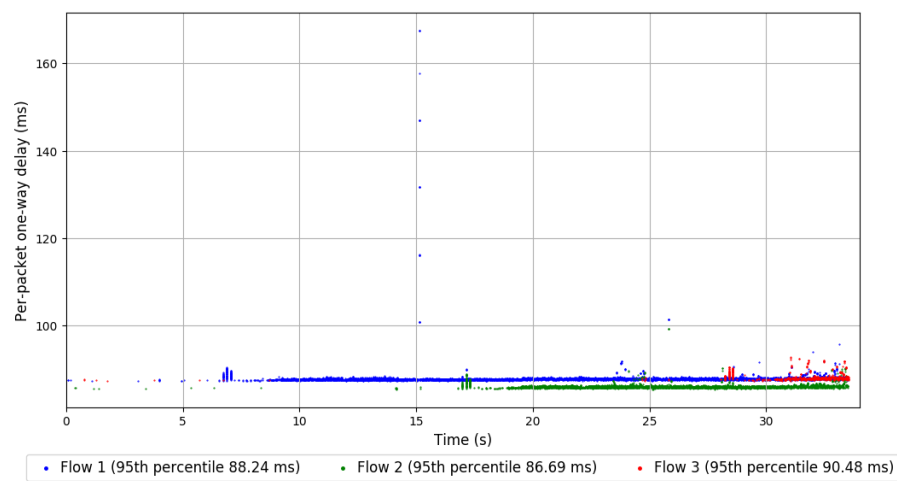
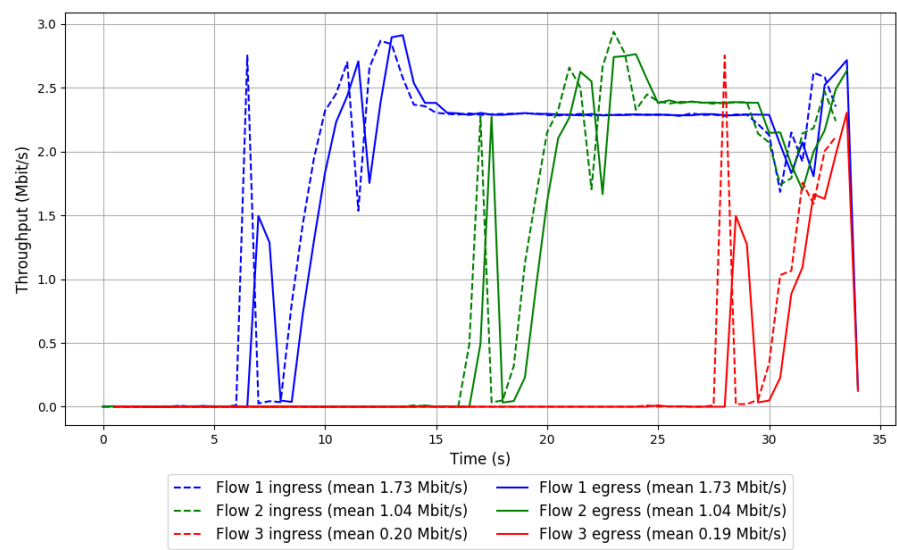


Run 3: Statistics of WebRTC media

Start at: 2018-06-18 16:57:15
End at: 2018-06-18 16:57:45
Local clock offset: -2.998 ms
Remote clock offset: 10.169 ms

Below is generated by plot.py at 2018-06-18 20:00:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 88.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 88.241 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 86.689 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 90.482 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

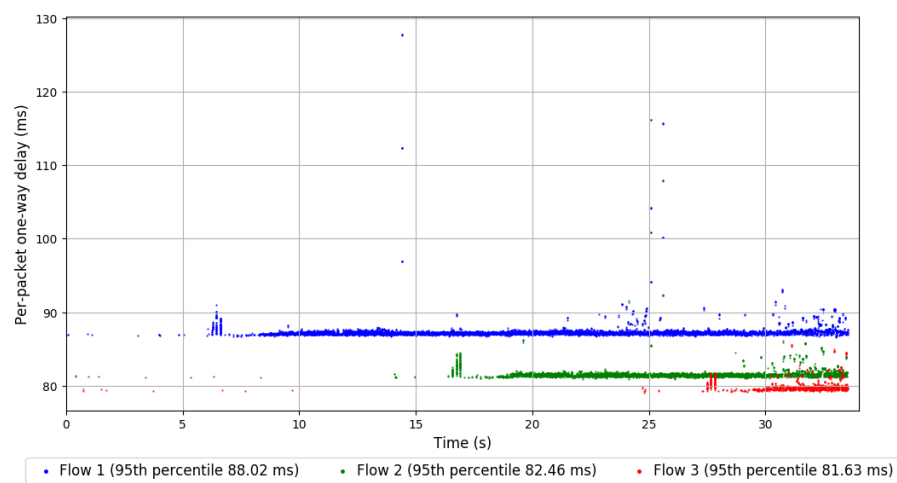
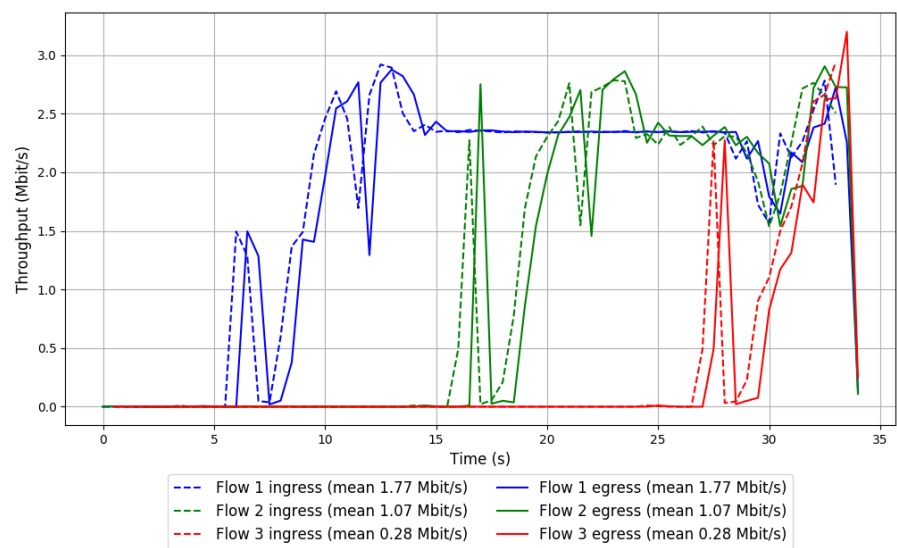


Run 4: Statistics of WebRTC media

Start at: 2018-06-18 17:17:18
End at: 2018-06-18 17:17:48
Local clock offset: -2.727 ms
Remote clock offset: 12.072 ms

```
# Below is generated by plot.py at 2018-06-18 20:00:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 87.584 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 88.019 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 82.460 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 81.628 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

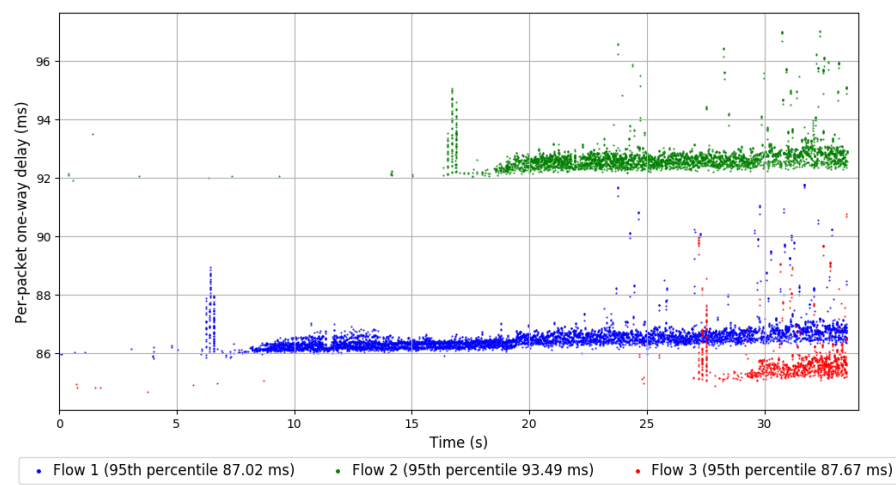
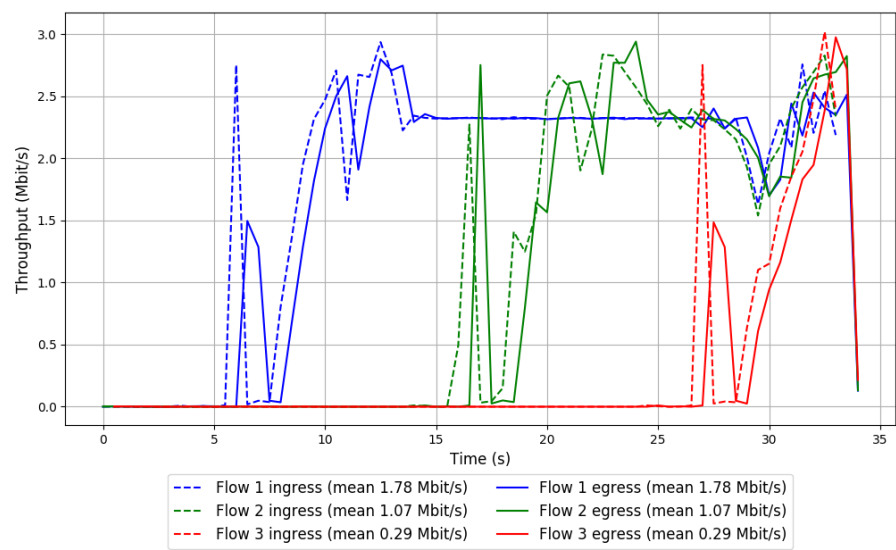


Run 5: Statistics of WebRTC media

Start at: 2018-06-18 17:37:22
End at: 2018-06-18 17:37:52
Local clock offset: -2.686 ms
Remote clock offset: 14.604 ms

Below is generated by plot.py at 2018-06-18 20:00:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 92.909 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 87.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 93.488 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 87.675 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-06-18 17:57:33

End at: 2018-06-18 17:58:03

Local clock offset: -2.815 ms

Remote clock offset: 7.417 ms

Below is generated by plot.py at 2018-06-18 20:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 86.136 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 86.322 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 84.550 ms

Loss rate: 0.00%

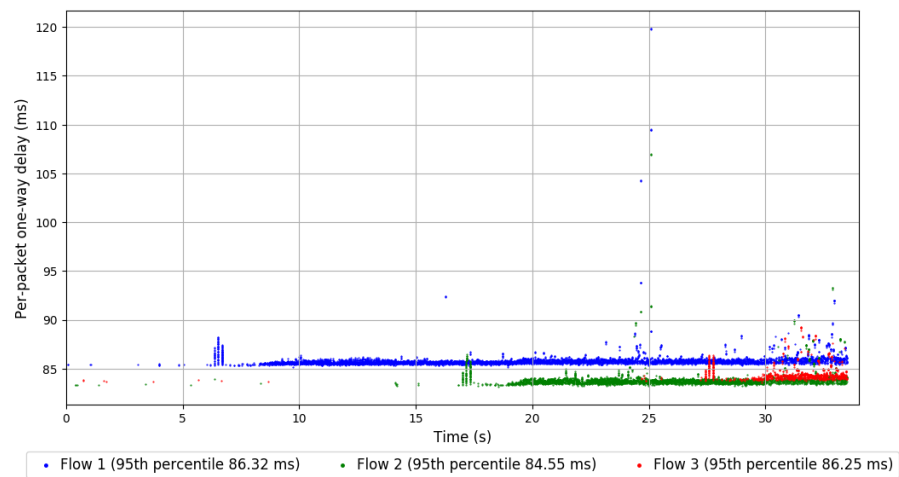
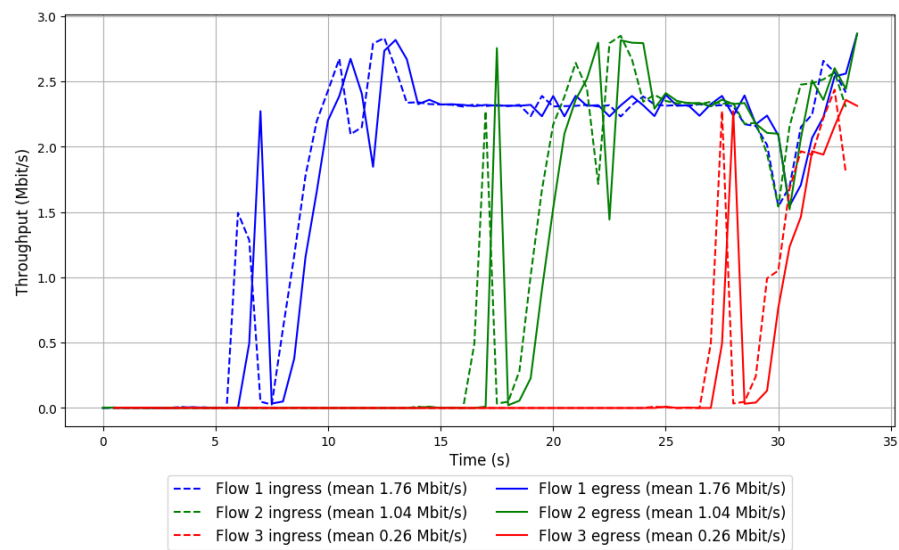
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 86.253 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

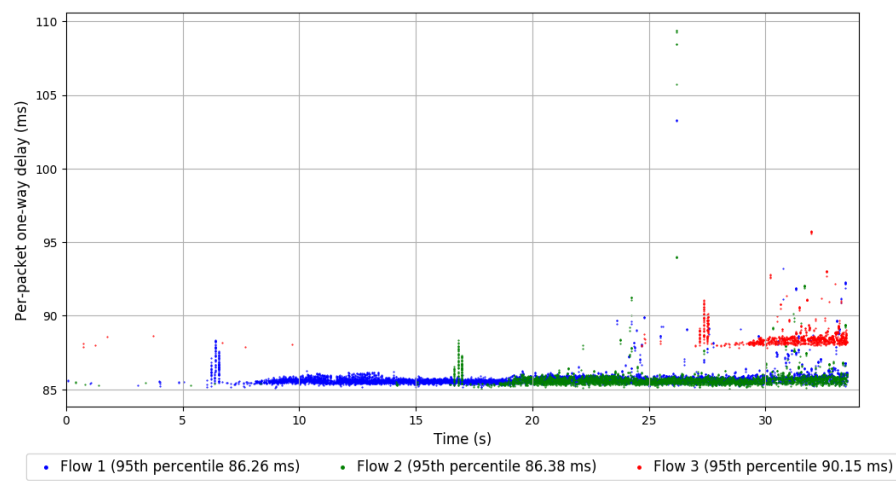
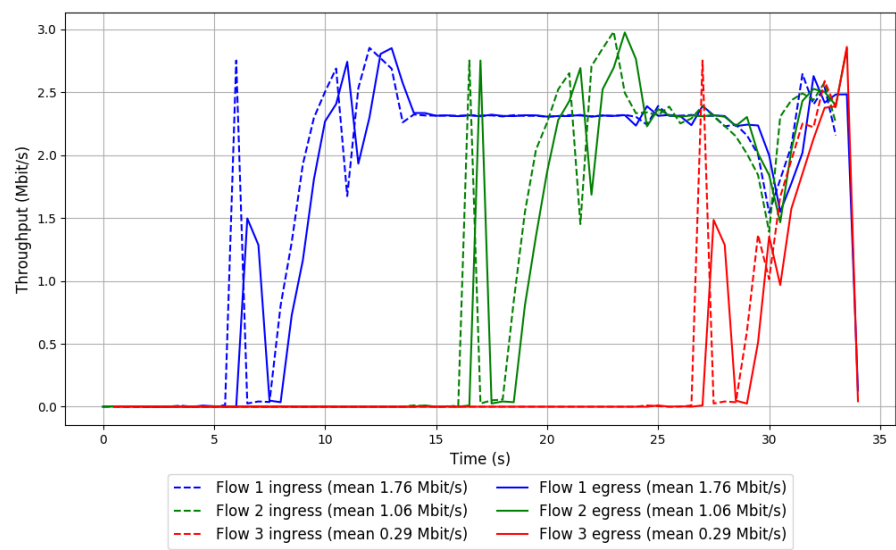


Run 7: Statistics of WebRTC media

Start at: 2018-06-18 18:17:35
End at: 2018-06-18 18:18:05
Local clock offset: -2.874 ms
Remote clock offset: 12.253 ms

```
# Below is generated by plot.py at 2018-06-18 20:00:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 88.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 86.258 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 86.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 90.152 ms
Loss rate: 0.00%
```


Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-06-18 18:37:37

End at: 2018-06-18 18:38:07

Local clock offset: -2.909 ms

Remote clock offset: 8.002 ms

Below is generated by plot.py at 2018-06-18 20:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 86.340 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 85.983 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 87.086 ms

Loss rate: 0.00%

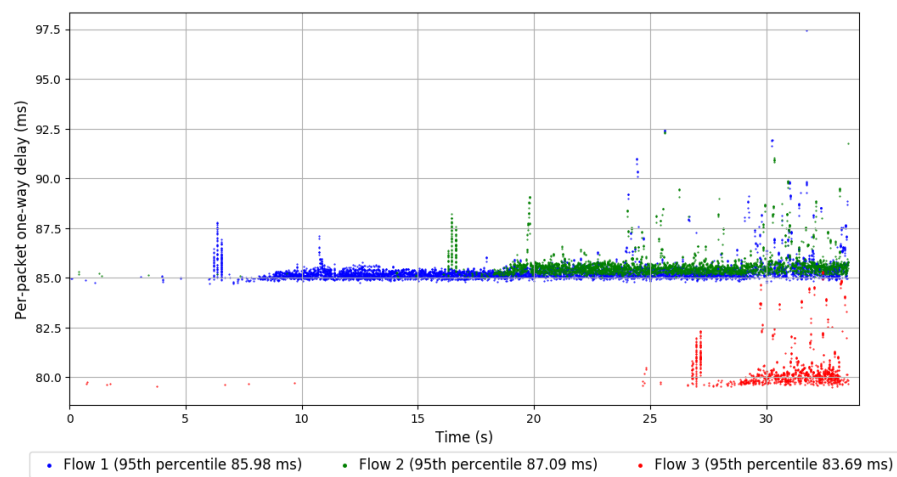
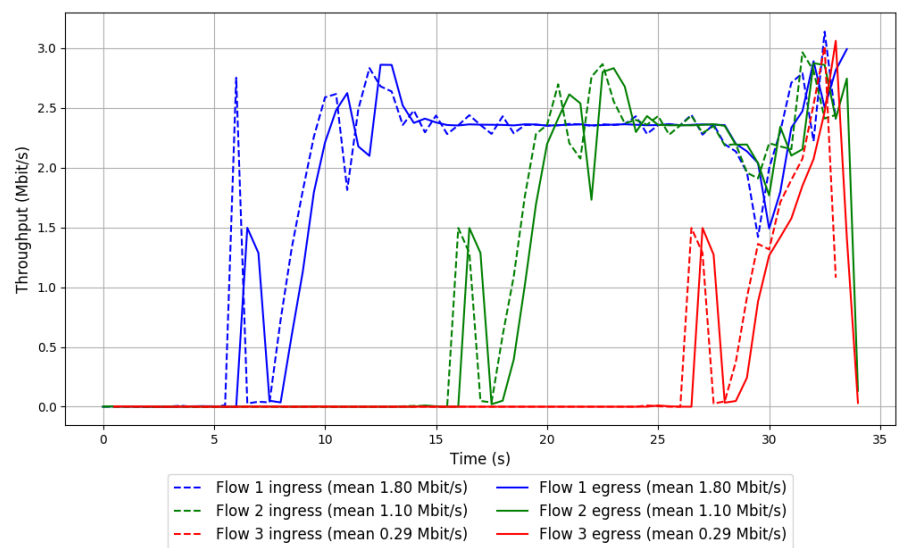
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 83.691 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-06-18 18:57:50

End at: 2018-06-18 18:58:20

Local clock offset: -2.842 ms

Remote clock offset: 9.003 ms

Below is generated by plot.py at 2018-06-18 20:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 87.510 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 87.755 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 85.848 ms

Loss rate: 0.00%

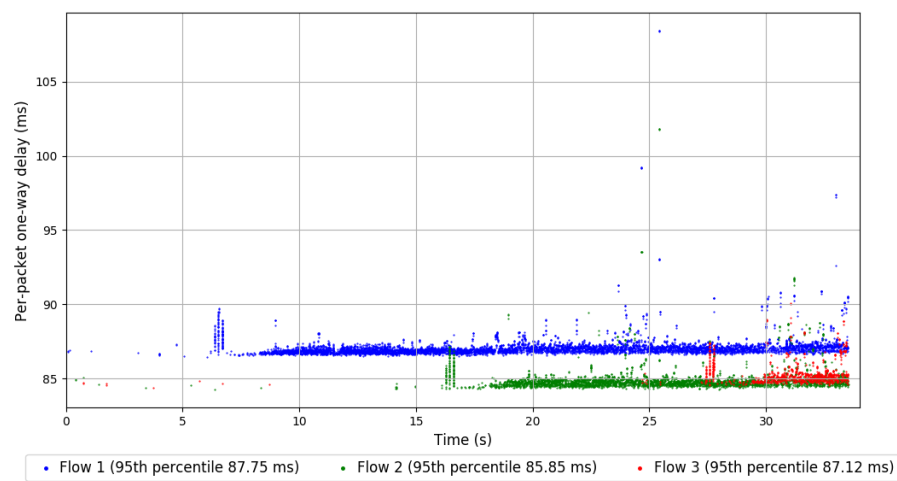
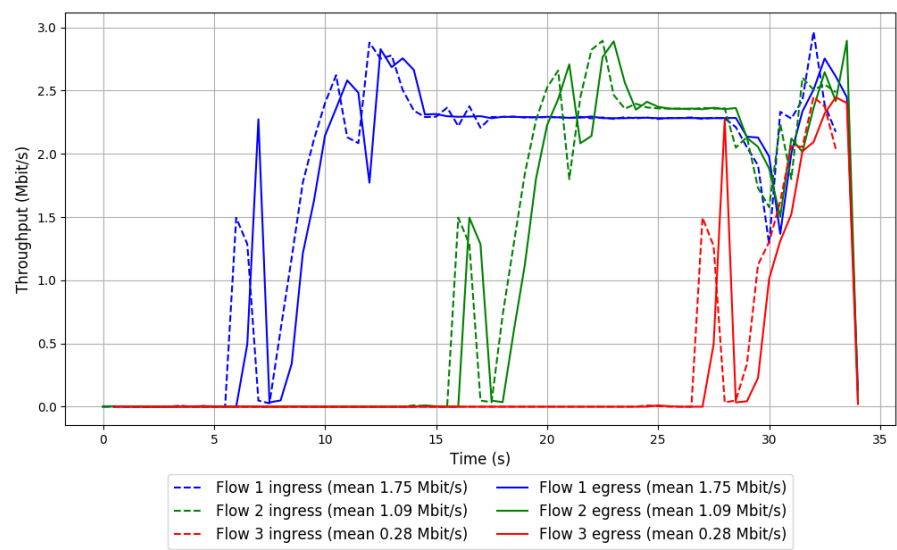
-- Flow 3:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 87.116 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-18 19:17:53

End at: 2018-06-18 19:18:23

Local clock offset: -1.929 ms

Remote clock offset: 11.3 ms

Below is generated by plot.py at 2018-06-18 20:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 91.356 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 89.032 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 86.813 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 92.804 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

