

Pantheon Report

Generated at 2018-06-18 18:41:31 (UTC).

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

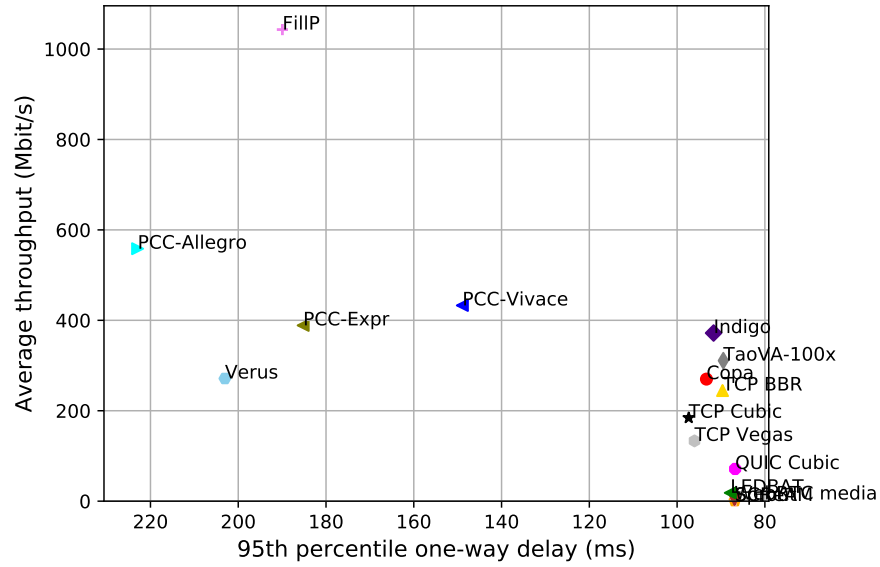
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

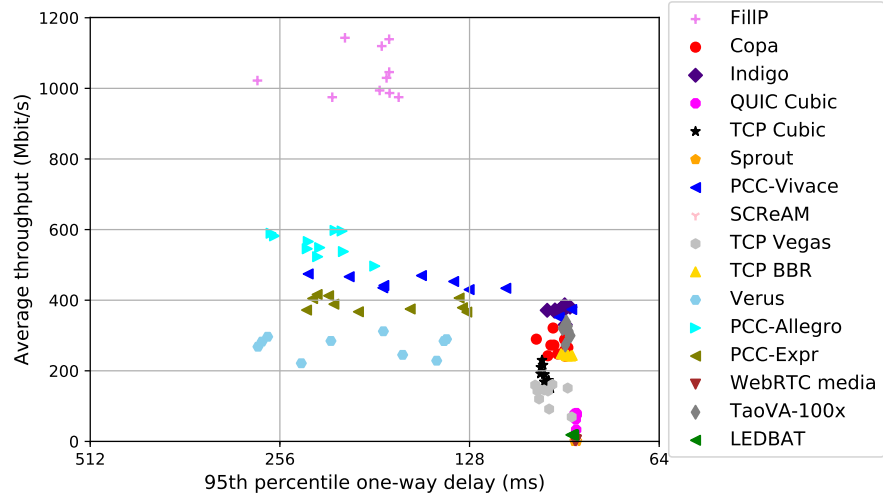
Git summary:

```
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-quirk @ 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 GCE Sydney to GCE Iowa, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



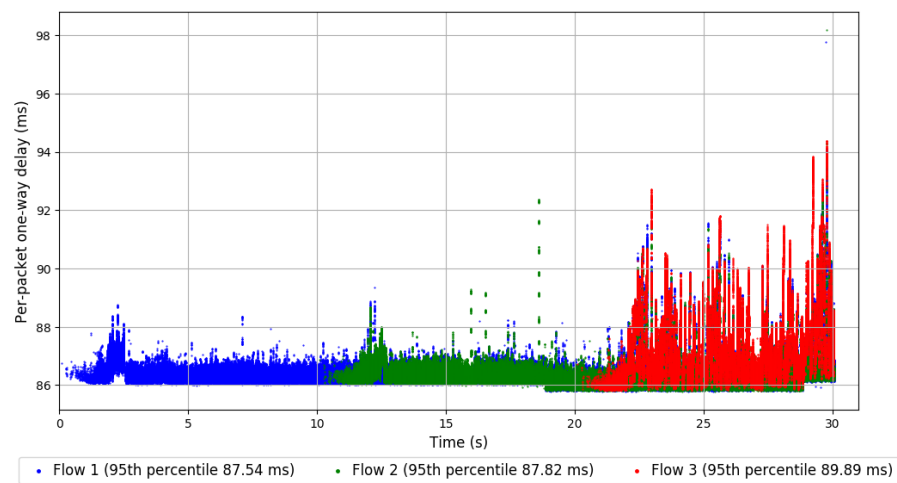
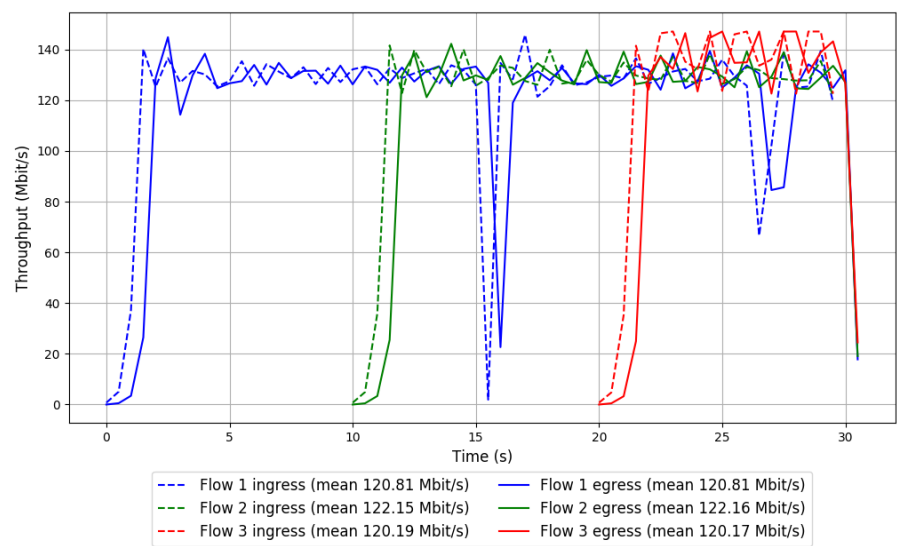
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	124.89	122.33	115.51	89.10	89.21	90.76	0.00	0.00	0.01
Copa	10	145.13	134.36	106.30	92.91	92.79	93.23	0.17	0.37	0.66
TCP Cubic	10	106.22	74.13	87.11	97.23	94.90	95.79	0.06	0.08	0.08
FillP	10	582.05	509.27	369.07	191.28	181.79	147.11	9.90	12.03	12.52
Indigo	10	194.12	189.18	162.36	90.81	92.28	92.60	0.03	0.05	0.09
LEDBAT	10	12.00	7.80	3.56	88.00	87.76	87.46	0.00	0.00	0.00
PCC-Allegro	10	482.31	98.95	31.33	224.61	196.30	191.63	3.86	3.02	4.08
PCC-Expr	10	234.82	175.43	113.00	189.52	124.61	125.19	2.27	1.43	2.33
QUIC Cubic	10	42.96	32.78	20.12	86.67	86.73	86.87	0.00	0.00	0.00
SCReAM	10	0.22	0.22	0.22	86.62	86.69	86.60	0.00	0.00	0.00
Sprout	10	0.28	0.30	0.30	86.82	86.80	86.89	0.00	0.00	0.00
TaoVA-100x	10	166.34	148.59	137.12	89.04	89.84	90.06	0.15	0.28	0.51
TCP Vegas	10	71.42	70.58	44.91	94.40	94.83	94.17	0.06	0.05	0.16
Verus	10	157.16	124.59	98.76	182.64	186.10	213.06	1.81	1.24	3.53
PCC-Vivace	10	257.84	200.31	126.85	144.44	129.72	118.38	0.30	0.13	0.01
WebRTC media	10	2.01	1.24	0.46	86.89	86.80	86.92	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-06-18 12:57:00
End at: 2018-06-18 12:57:30
Local clock offset: 0.102 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2018-06-18 16:54:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 241.90 Mbit/s
95th percentile per-packet one-way delay: 88.474 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 120.81 Mbit/s
95th percentile per-packet one-way delay: 87.536 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.16 Mbit/s
95th percentile per-packet one-way delay: 87.819 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 120.17 Mbit/s
95th percentile per-packet one-way delay: 89.889 ms
Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-18 13:20:48

End at: 2018-06-18 13:21:18

Local clock offset: 0.029 ms

Remote clock offset: -0.02 ms

Below is generated by plot.py at 2018-06-18 16:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.35 Mbit/s

95th percentile per-packet one-way delay: 90.758 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 124.32 Mbit/s

95th percentile per-packet one-way delay: 90.119 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 126.83 Mbit/s

95th percentile per-packet one-way delay: 90.337 ms

Loss rate: 0.00%

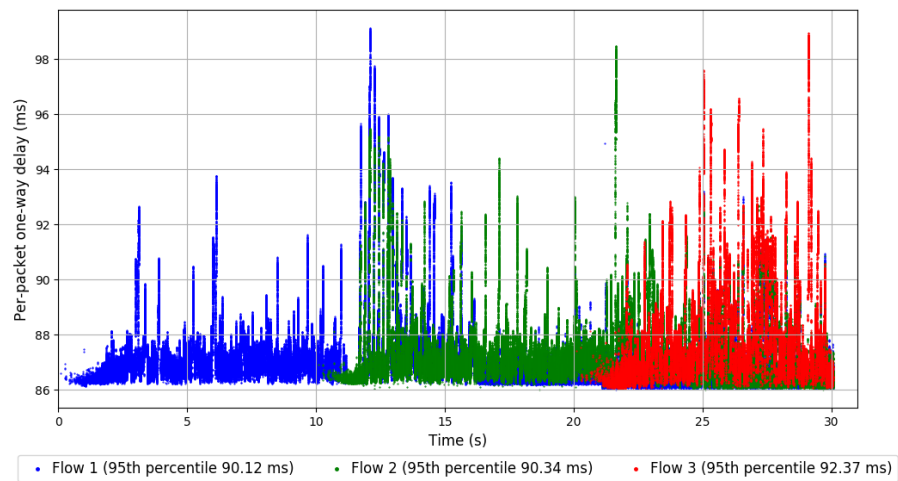
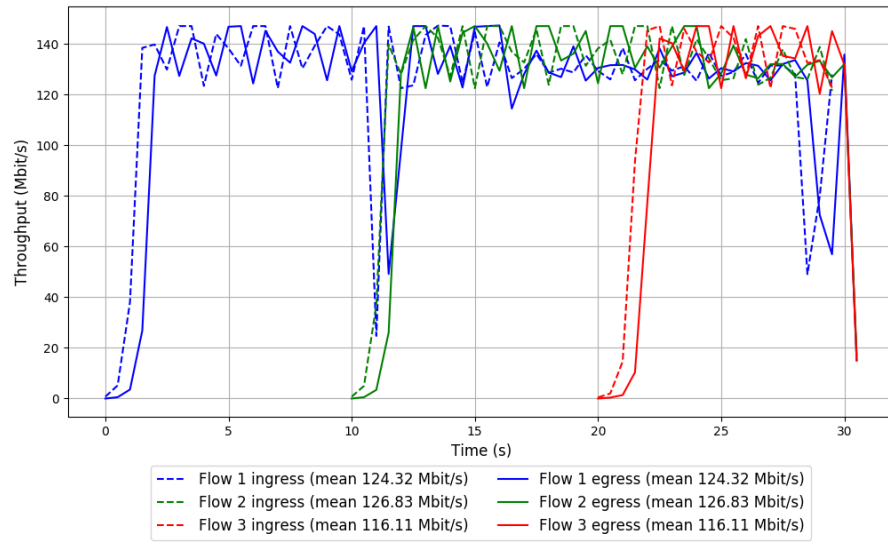
-- Flow 3:

Average throughput: 116.11 Mbit/s

95th percentile per-packet one-way delay: 92.369 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-06-18 13:44:23

End at: 2018-06-18 13:44:53

Local clock offset: 0.155 ms

Remote clock offset: 0.049 ms

Below is generated by plot.py at 2018-06-18 16:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 244.11 Mbit/s

95th percentile per-packet one-way delay: 89.842 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 126.12 Mbit/s

95th percentile per-packet one-way delay: 89.981 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 119.16 Mbit/s

95th percentile per-packet one-way delay: 87.939 ms

Loss rate: 0.00%

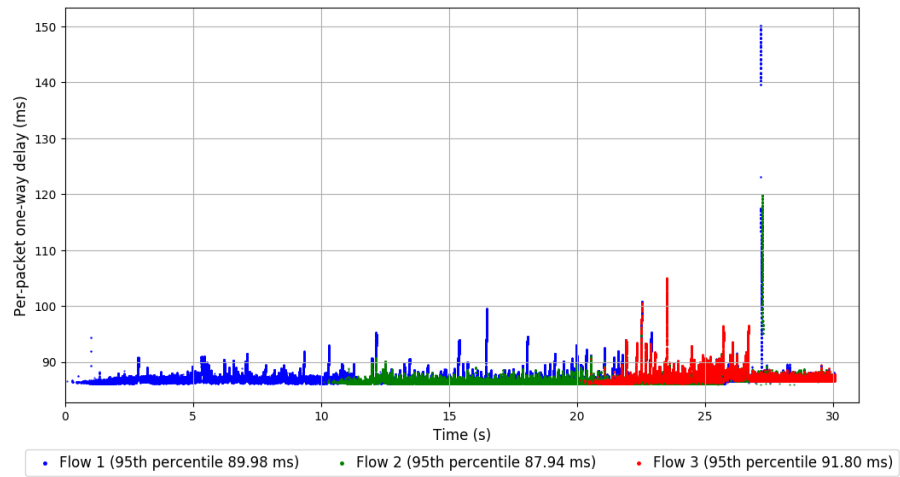
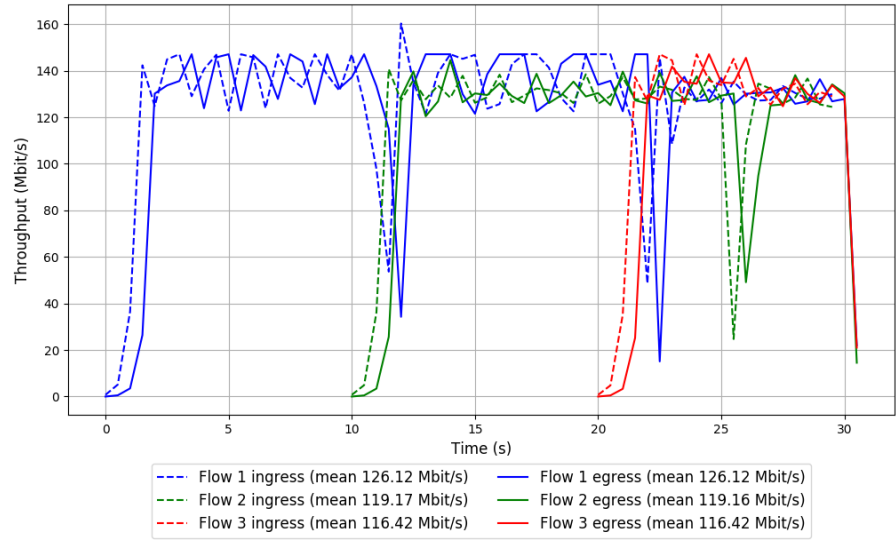
-- Flow 3:

Average throughput: 116.42 Mbit/s

95th percentile per-packet one-way delay: 91.796 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-06-18 14:07:51

End at: 2018-06-18 14:08:21

Local clock offset: -0.083 ms

Remote clock offset: 0.117 ms

Below is generated by plot.py at 2018-06-18 16:54:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.41 Mbit/s

95th percentile per-packet one-way delay: 91.569 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 129.38 Mbit/s

95th percentile per-packet one-way delay: 92.548 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 121.67 Mbit/s

95th percentile per-packet one-way delay: 89.848 ms

Loss rate: 0.00%

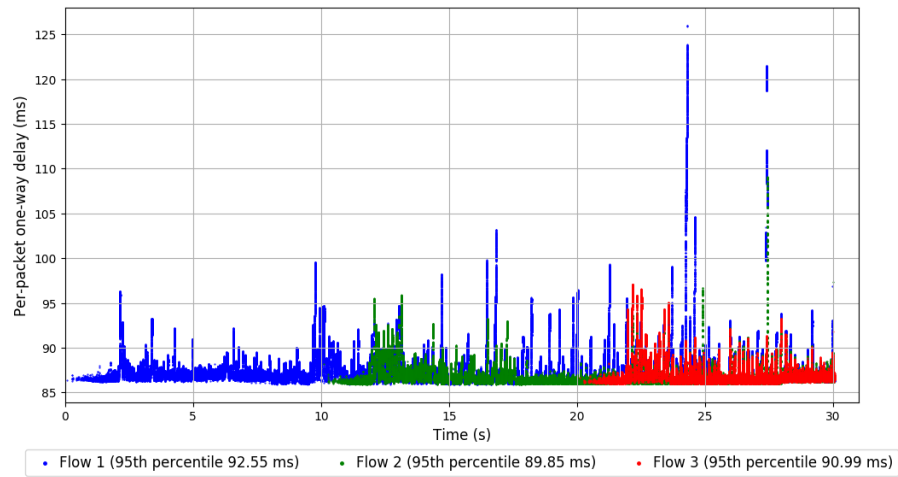
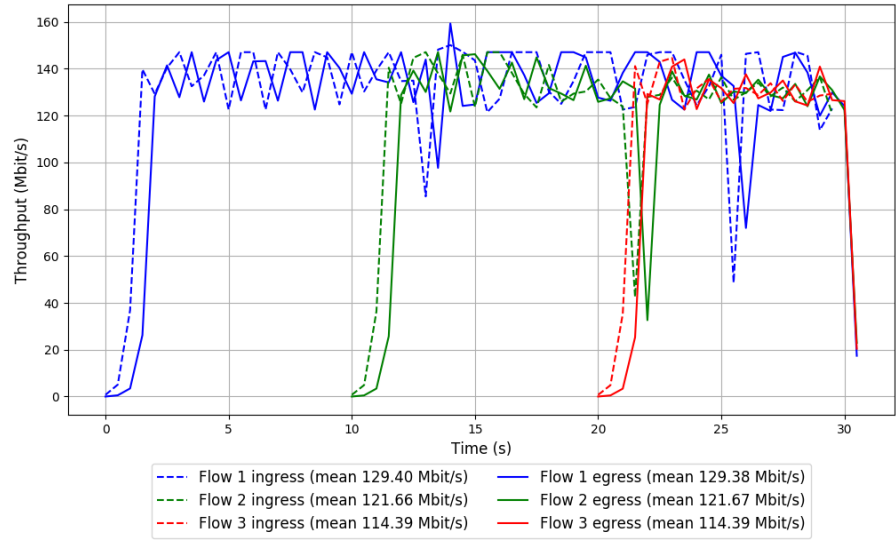
-- Flow 3:

Average throughput: 114.39 Mbit/s

95th percentile per-packet one-way delay: 90.991 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-06-18 14:31:25

End at: 2018-06-18 14:31:55

Local clock offset: -0.092 ms

Remote clock offset: 0.148 ms

Below is generated by plot.py at 2018-06-18 16:54:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.47 Mbit/s

95th percentile per-packet one-way delay: 89.988 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 127.06 Mbit/s

95th percentile per-packet one-way delay: 88.786 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 123.70 Mbit/s

95th percentile per-packet one-way delay: 90.212 ms

Loss rate: 0.00%

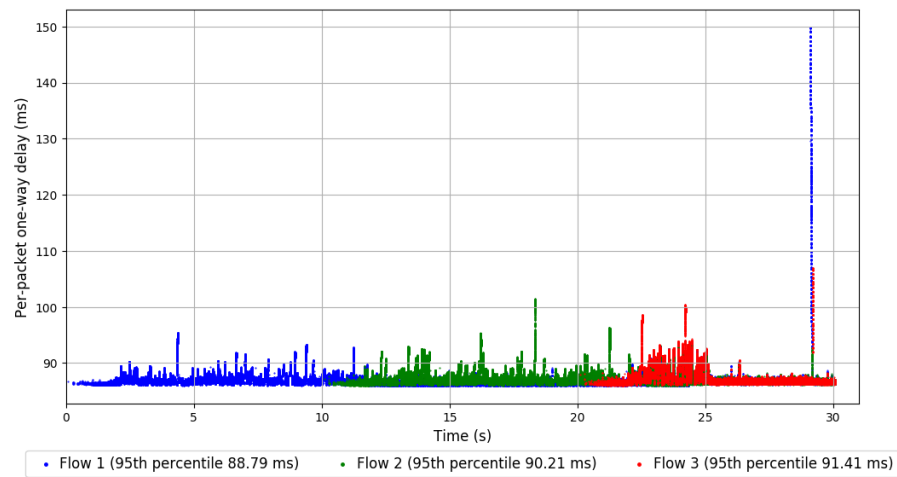
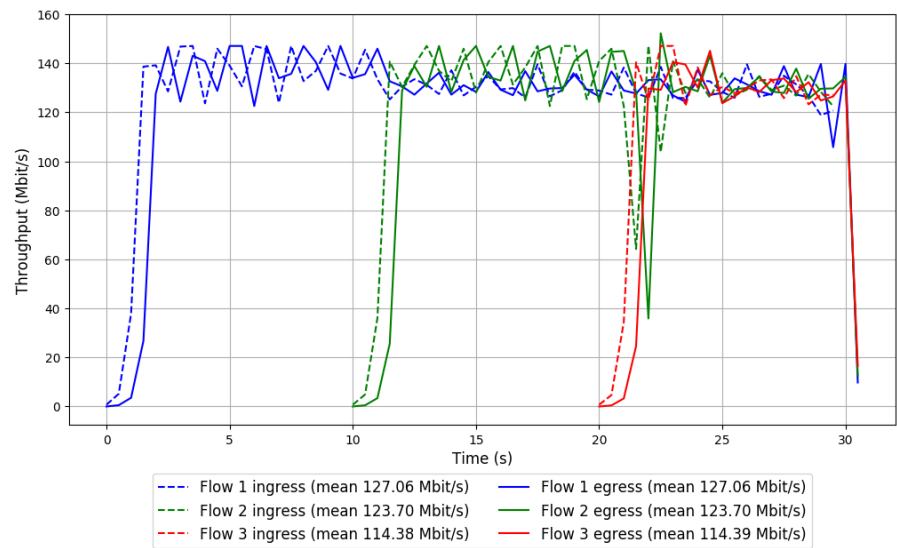
-- Flow 3:

Average throughput: 114.39 Mbit/s

95th percentile per-packet one-way delay: 91.410 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-06-18 14:54:56

End at: 2018-06-18 14:55:26

Local clock offset: 0.2 ms

Remote clock offset: 0.031 ms

Below is generated by plot.py at 2018-06-18 16:54:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.26 Mbit/s

95th percentile per-packet one-way delay: 89.558 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 124.31 Mbit/s

95th percentile per-packet one-way delay: 88.011 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 119.81 Mbit/s

95th percentile per-packet one-way delay: 89.133 ms

Loss rate: 0.01%

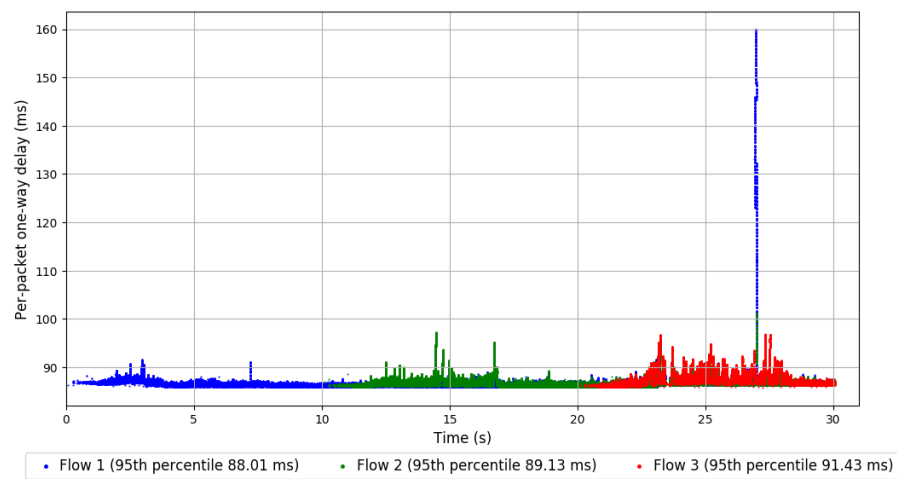
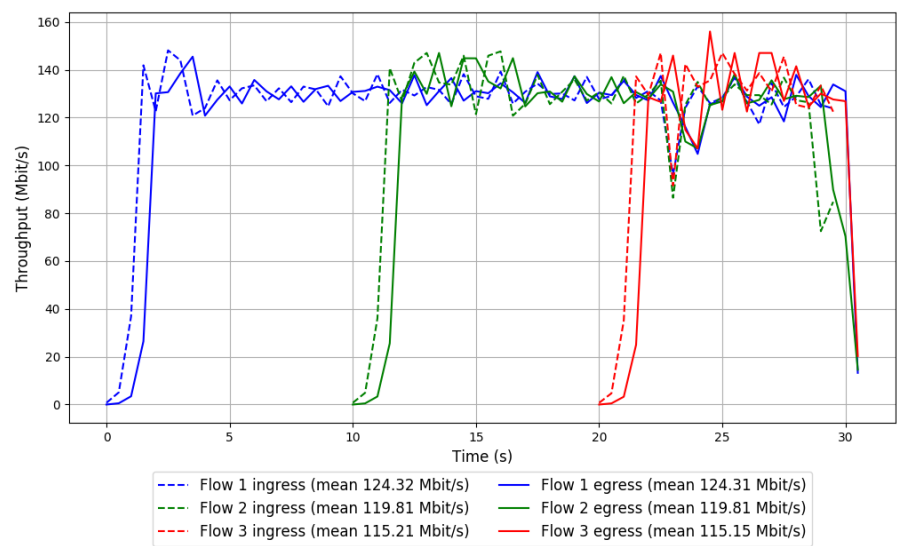
-- Flow 3:

Average throughput: 115.15 Mbit/s

95th percentile per-packet one-way delay: 91.428 ms

Loss rate: 0.05%

Run 6: Report of TCP BBR — Data Link

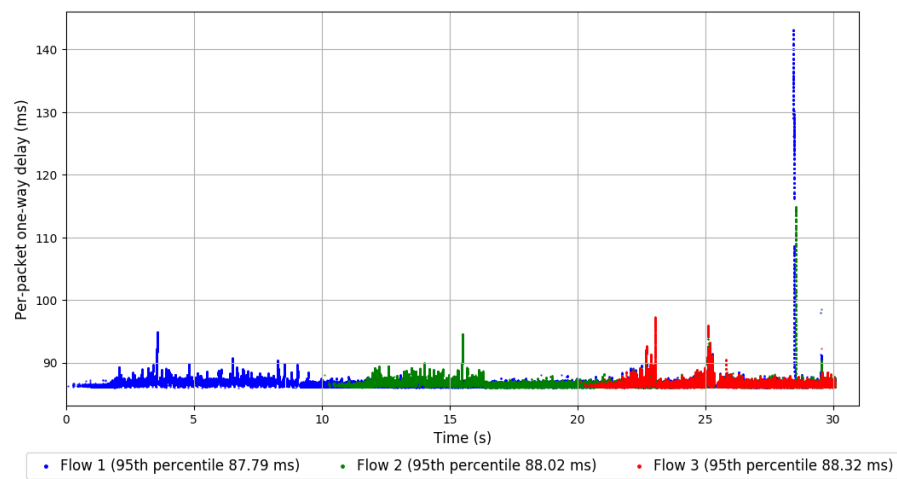
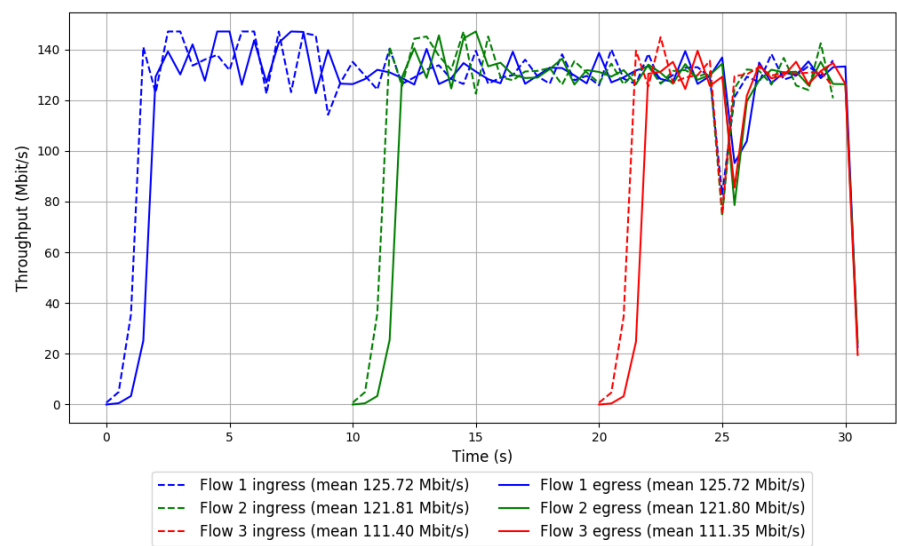


Run 7: Statistics of TCP BBR

Start at: 2018-06-18 15:18:37
End at: 2018-06-18 15:19:07
Local clock offset: -0.03 ms
Remote clock offset: -0.112 ms

Below is generated by plot.py at 2018-06-18 16:54:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 243.80 Mbit/s
95th percentile per-packet one-way delay: 87.946 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 125.72 Mbit/s
95th percentile per-packet one-way delay: 87.789 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 121.80 Mbit/s
95th percentile per-packet one-way delay: 88.017 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 111.35 Mbit/s
95th percentile per-packet one-way delay: 88.317 ms
Loss rate: 0.04%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-06-18 15:42:08

End at: 2018-06-18 15:42:38

Local clock offset: -0.008 ms

Remote clock offset: 0.106 ms

Below is generated by plot.py at 2018-06-18 16:54:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 243.37 Mbit/s

95th percentile per-packet one-way delay: 89.285 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 123.06 Mbit/s

95th percentile per-packet one-way delay: 88.434 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 123.42 Mbit/s

95th percentile per-packet one-way delay: 90.083 ms

Loss rate: 0.00%

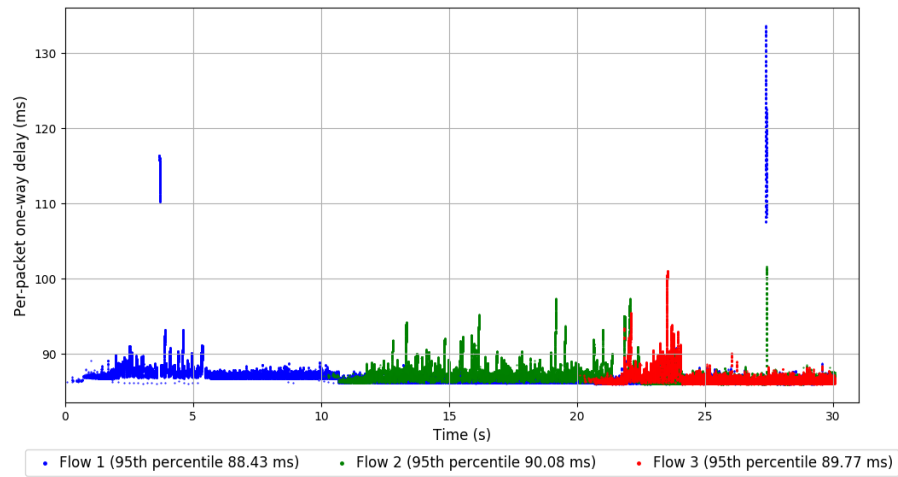
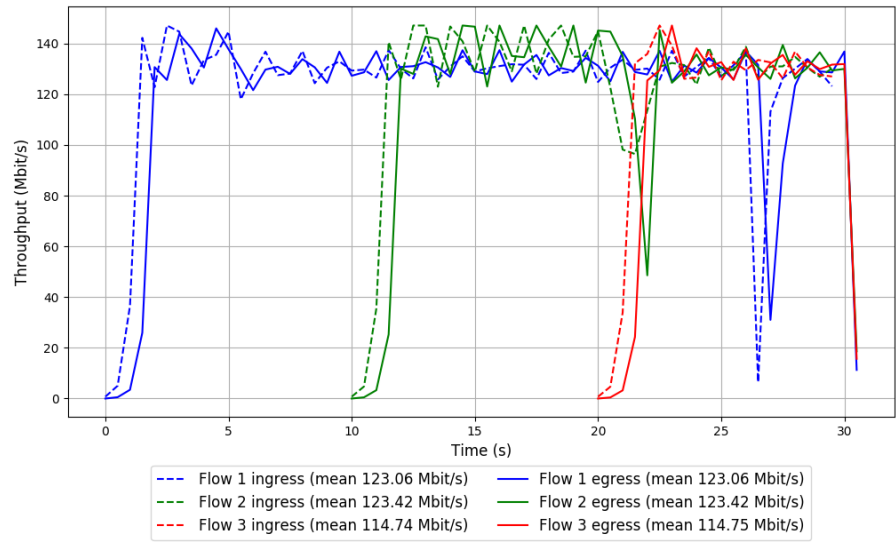
-- Flow 3:

Average throughput: 114.75 Mbit/s

95th percentile per-packet one-way delay: 89.765 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-06-18 16:05:46

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

Local clock offset: 0.237 ms

Remote clock offset: 0.375 ms

Below is generated by plot.py at 2018-06-18 16:57:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 244.80 Mbit/s

95th percentile per-packet one-way delay: 89.462 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 124.08 Mbit/s

95th percentile per-packet one-way delay: 88.747 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 123.43 Mbit/s

95th percentile per-packet one-way delay: 90.244 ms

Loss rate: 0.00%

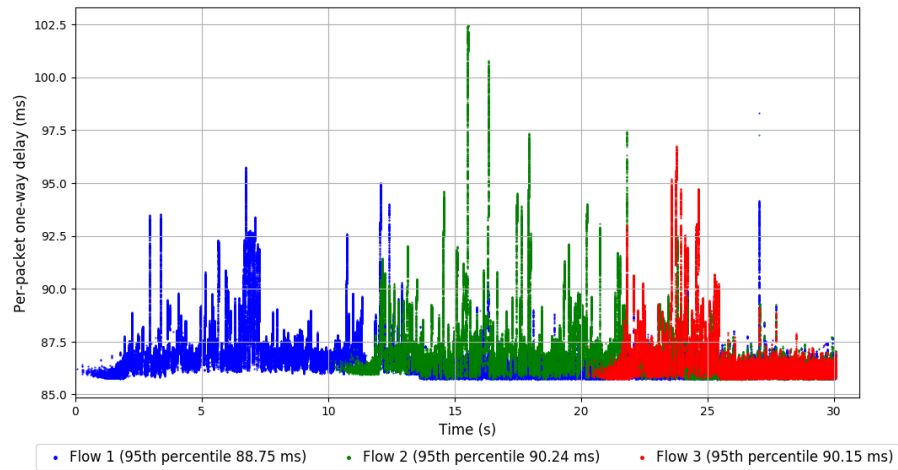
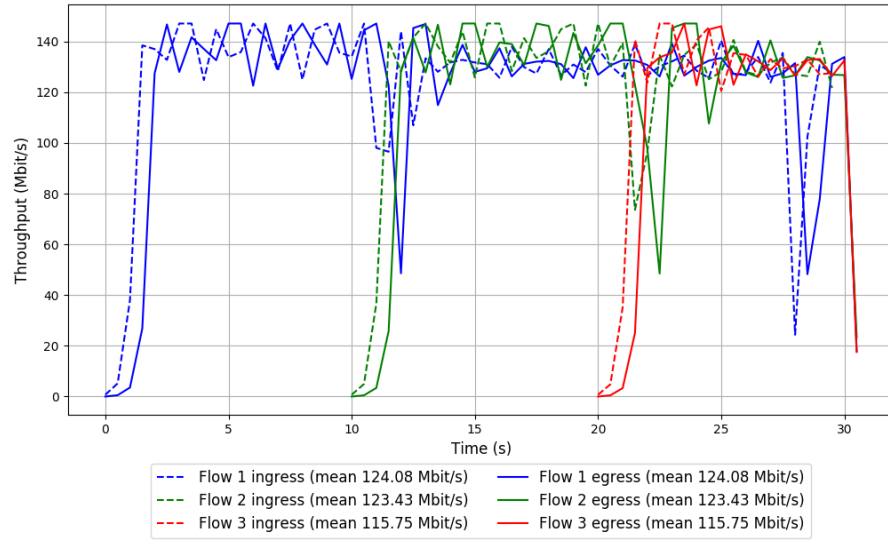
-- Flow 3:

Average throughput: 115.75 Mbit/s

95th percentile per-packet one-way delay: 90.147 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-06-18 16:29:24

End at: 2018-06-18 16:29:54

Local clock offset: -0.117 ms

Remote clock offset: 0.504 ms

Below is generated by plot.py at 2018-06-18 16:57:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 243.61 Mbit/s

95th percentile per-packet one-way delay: 89.602 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 124.07 Mbit/s

95th percentile per-packet one-way delay: 89.095 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 121.31 Mbit/s

95th percentile per-packet one-way delay: 88.432 ms

Loss rate: 0.00%

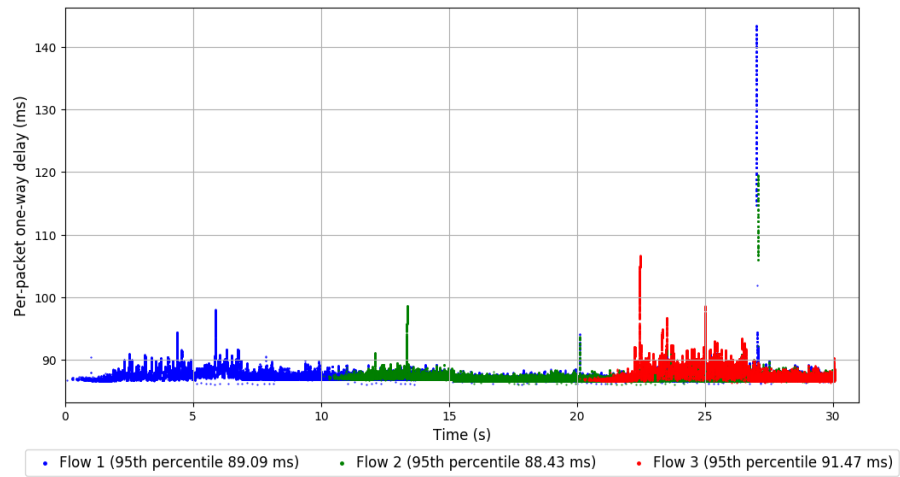
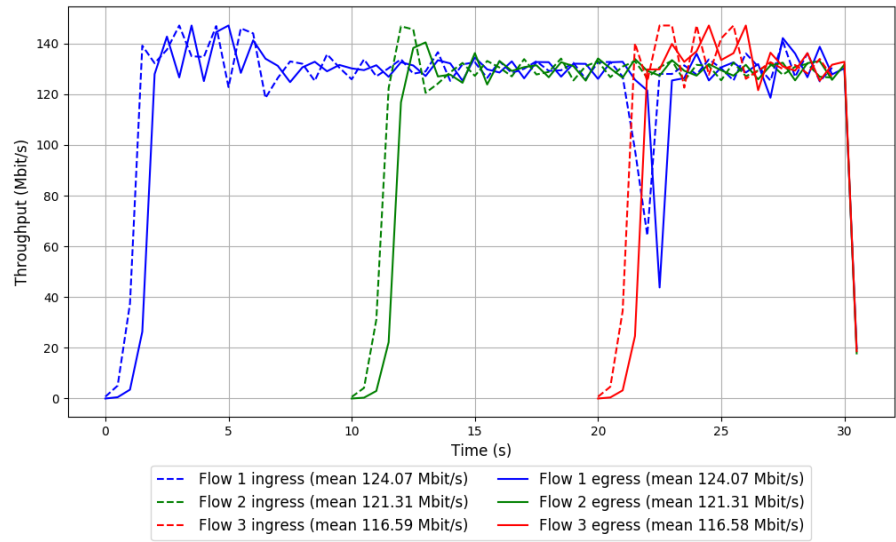
-- Flow 3:

Average throughput: 116.58 Mbit/s

95th percentile per-packet one-way delay: 91.475 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link

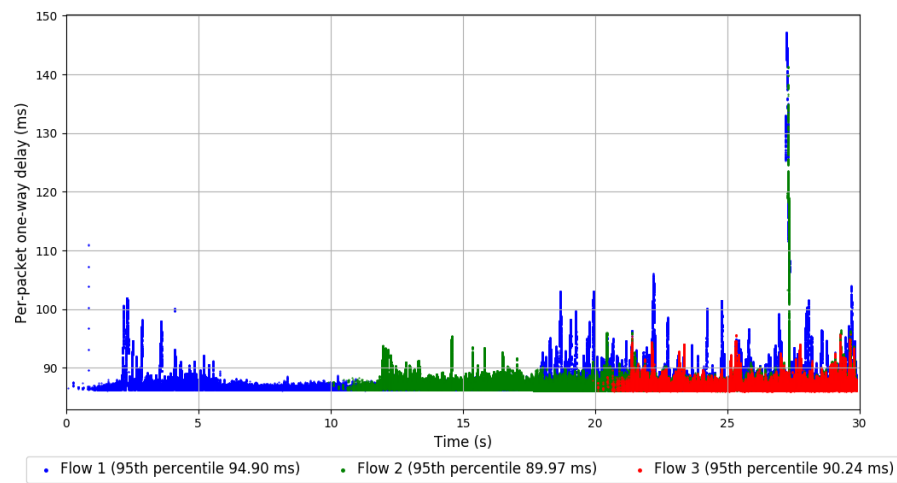
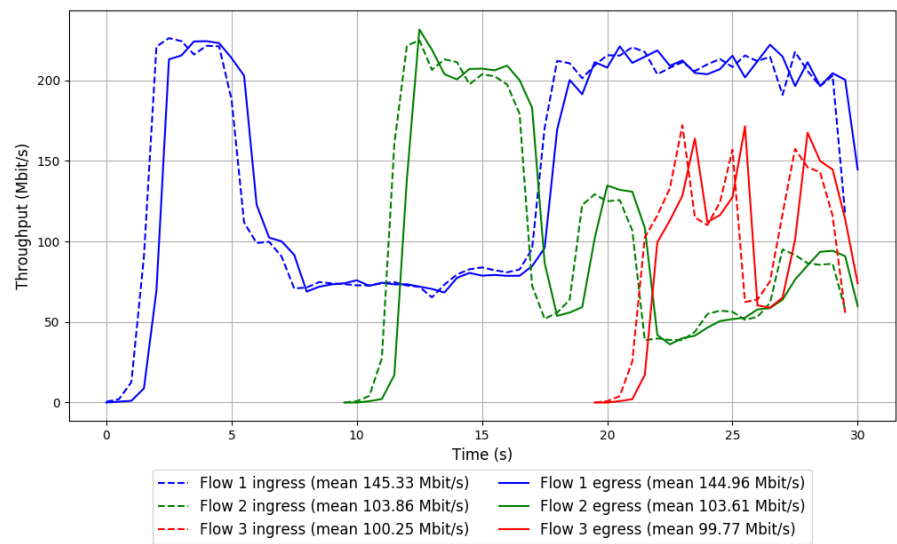


Run 1: Statistics of Copa

Start at: 2018-06-18 12:52:31
End at: 2018-06-18 12:53:01
Local clock offset: -0.116 ms
Remote clock offset: -0.103 ms

Below is generated by plot.py at 2018-06-18 17:01:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 247.66 Mbit/s
95th percentile per-packet one-way delay: 92.783 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 144.96 Mbit/s
95th percentile per-packet one-way delay: 94.897 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 103.61 Mbit/s
95th percentile per-packet one-way delay: 89.967 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 99.77 Mbit/s
95th percentile per-packet one-way delay: 90.242 ms
Loss rate: 0.49%

Run 1: Report of Copa — Data Link

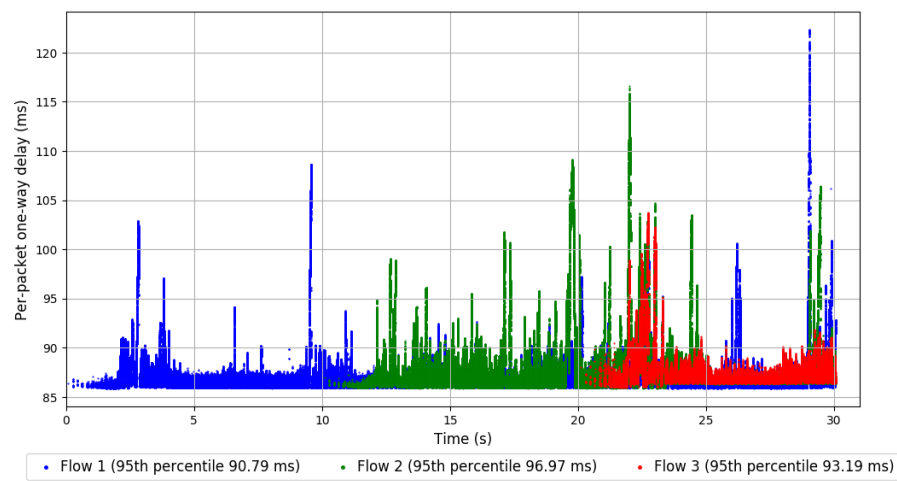
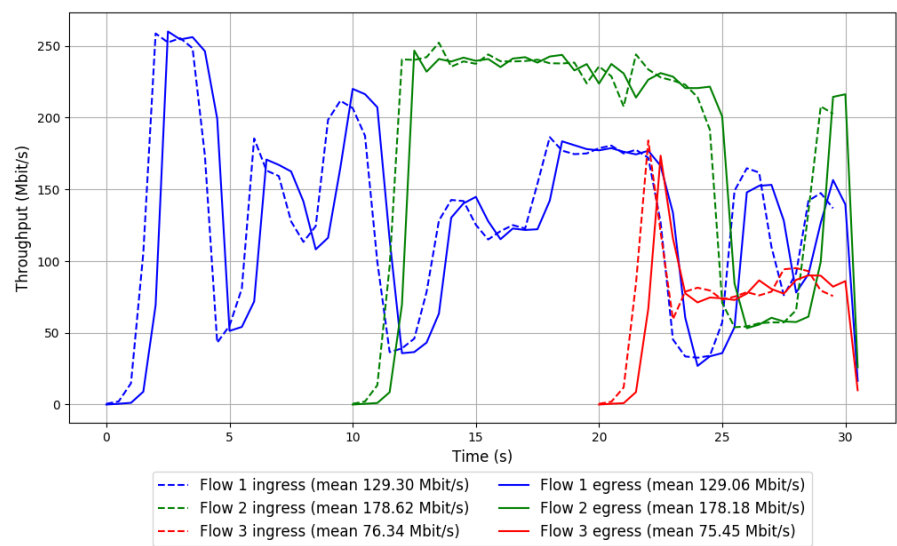


Run 2: Statistics of Copa

Start at: 2018-06-18 13:16:16
End at: 2018-06-18 13:16:46
Local clock offset: 0.002 ms
Remote clock offset: -0.156 ms

Below is generated by plot.py at 2018-06-18 17:02:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 272.79 Mbit/s
95th percentile per-packet one-way delay: 94.034 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 129.06 Mbit/s
95th percentile per-packet one-way delay: 90.788 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 178.18 Mbit/s
95th percentile per-packet one-way delay: 96.966 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 75.45 Mbit/s
95th percentile per-packet one-way delay: 93.190 ms
Loss rate: 1.17%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-06-18 13:39:53

End at: 2018-06-18 13:40:23

Local clock offset: -0.057 ms

Remote clock offset: 0.048 ms

Below is generated by plot.py at 2018-06-18 17:02:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.62 Mbit/s

95th percentile per-packet one-way delay: 100.274 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 168.37 Mbit/s

95th percentile per-packet one-way delay: 105.622 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 99.49 Mbit/s

95th percentile per-packet one-way delay: 92.490 ms

Loss rate: 0.20%

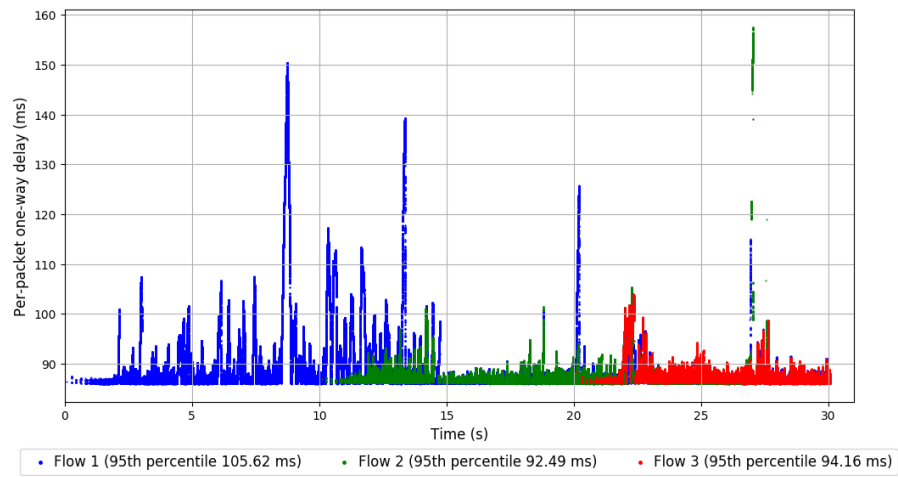
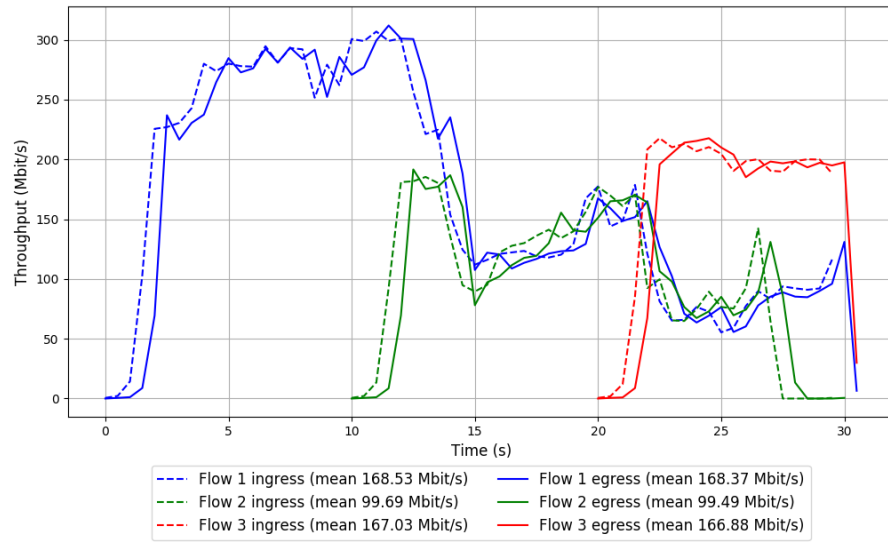
-- Flow 3:

Average throughput: 166.88 Mbit/s

95th percentile per-packet one-way delay: 94.161 ms

Loss rate: 0.11%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-06-18 14:03:21

End at: 2018-06-18 14:03:51

Local clock offset: -0.022 ms

Remote clock offset: 0.095 ms

Below is generated by plot.py at 2018-06-18 17:02:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 265.79 Mbit/s

95th percentile per-packet one-way delay: 89.358 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 138.68 Mbit/s

95th percentile per-packet one-way delay: 89.255 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 128.56 Mbit/s

95th percentile per-packet one-way delay: 89.512 ms

Loss rate: 0.00%

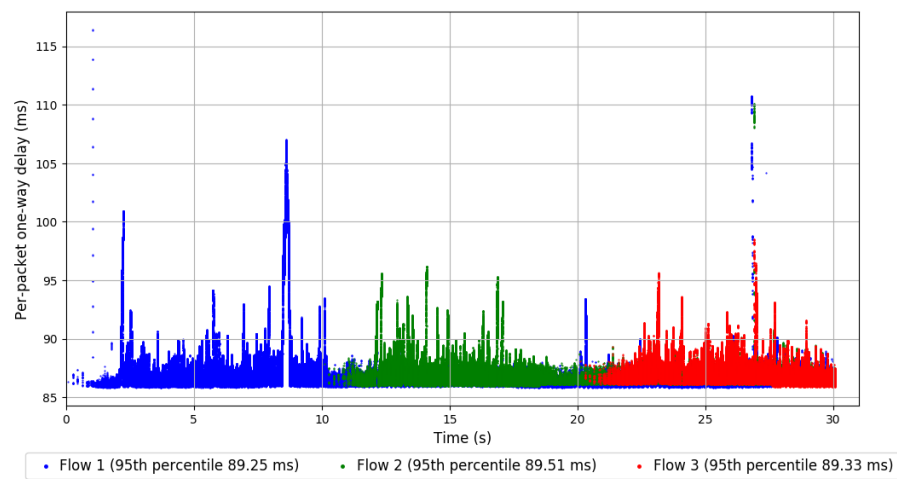
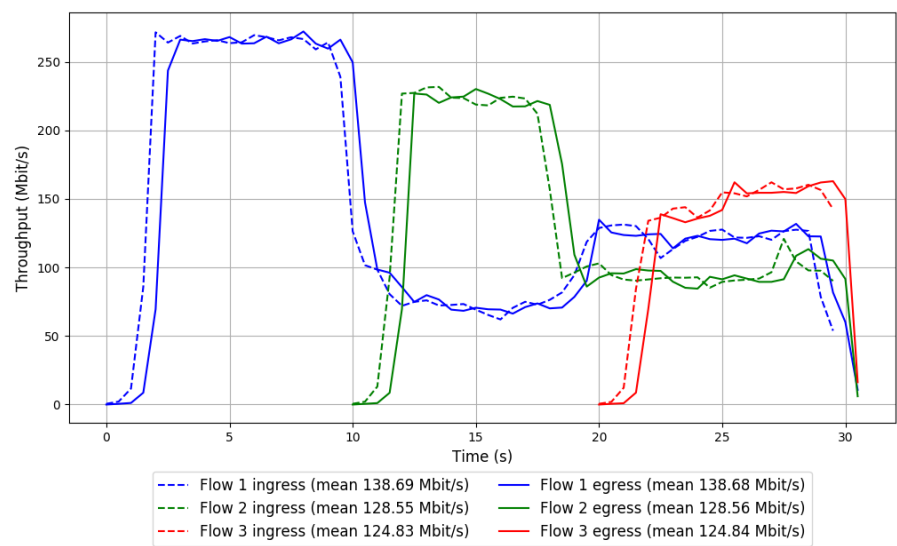
-- Flow 3:

Average throughput: 124.84 Mbit/s

95th percentile per-packet one-way delay: 89.325 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-06-18 14:26:55

End at: 2018-06-18 14:27:25

Local clock offset: -0.205 ms

Remote clock offset: 0.191 ms

Below is generated by plot.py at 2018-06-18 17:02:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.61 Mbit/s

95th percentile per-packet one-way delay: 96.143 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 101.10 Mbit/s

95th percentile per-packet one-way delay: 92.956 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 160.20 Mbit/s

95th percentile per-packet one-way delay: 97.122 ms

Loss rate: 0.44%

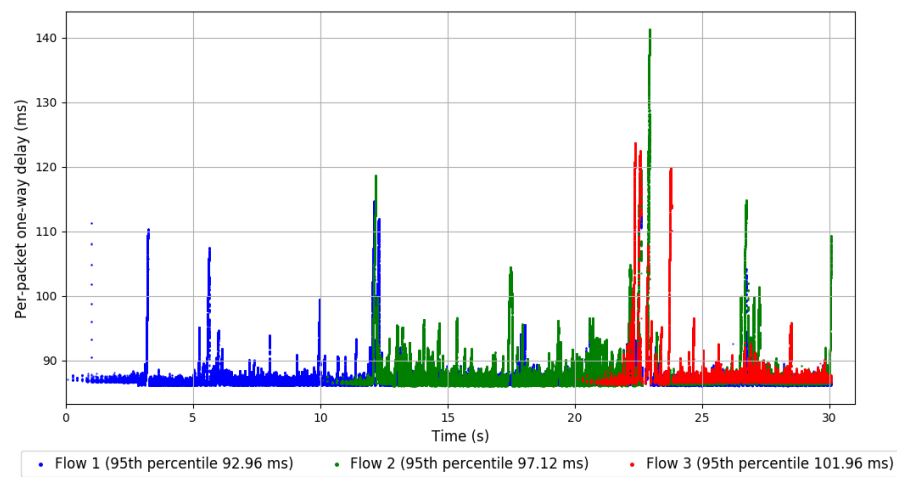
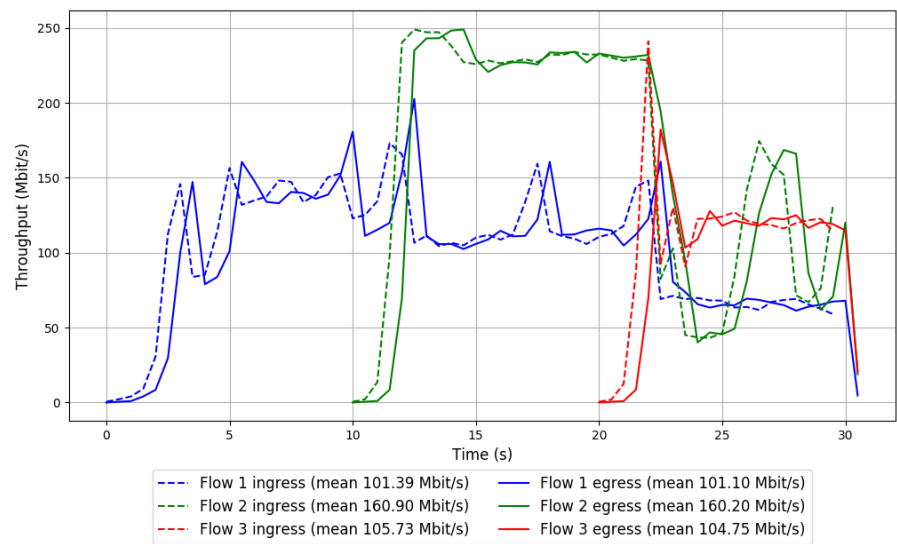
-- Flow 3:

Average throughput: 104.75 Mbit/s

95th percentile per-packet one-way delay: 101.959 ms

Loss rate: 0.93%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-06-18 14:50:27

End at: 2018-06-18 14:50:57

Local clock offset: -0.01 ms

Remote clock offset: 0.023 ms

Below is generated by plot.py at 2018-06-18 17:02:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.65 Mbit/s

95th percentile per-packet one-way delay: 95.088 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 140.15 Mbit/s

95th percentile per-packet one-way delay: 91.137 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 166.77 Mbit/s

95th percentile per-packet one-way delay: 98.205 ms

Loss rate: 0.01%

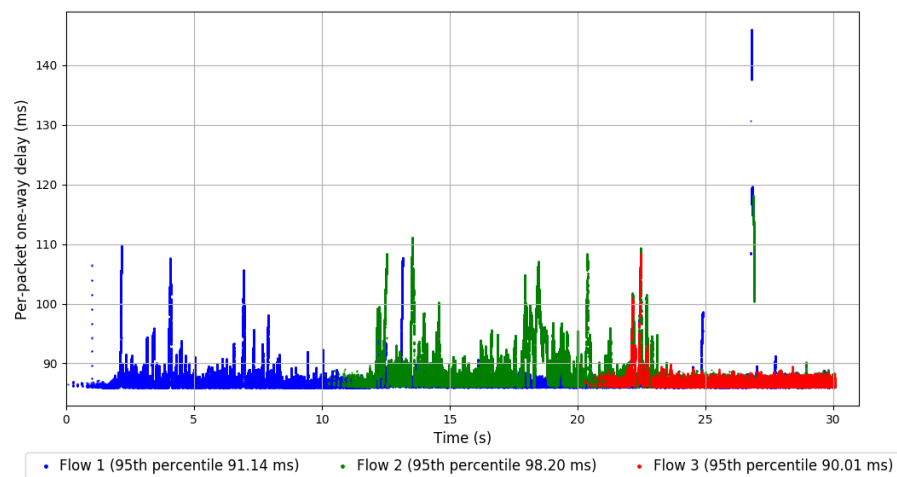
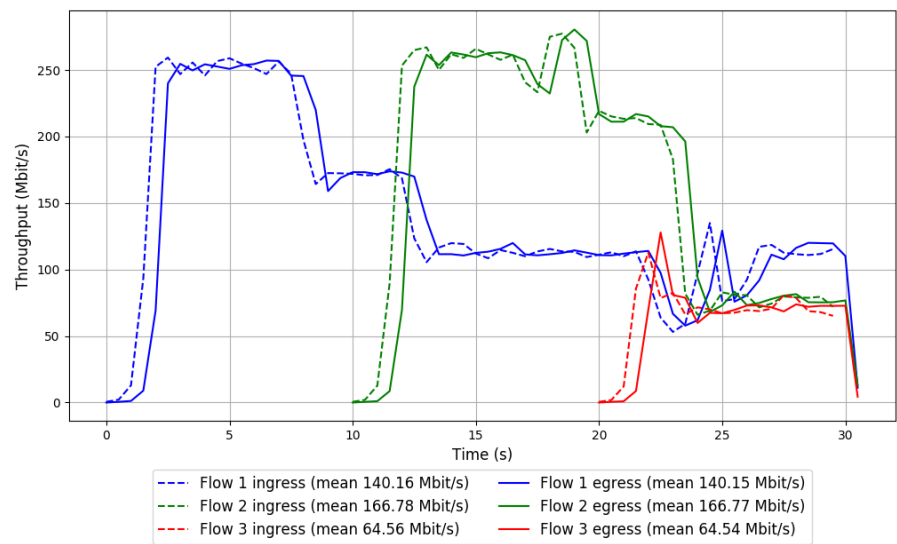
-- Flow 3:

Average throughput: 64.54 Mbit/s

95th percentile per-packet one-way delay: 90.014 ms

Loss rate: 0.06%

Run 6: Report of Copa — Data Link

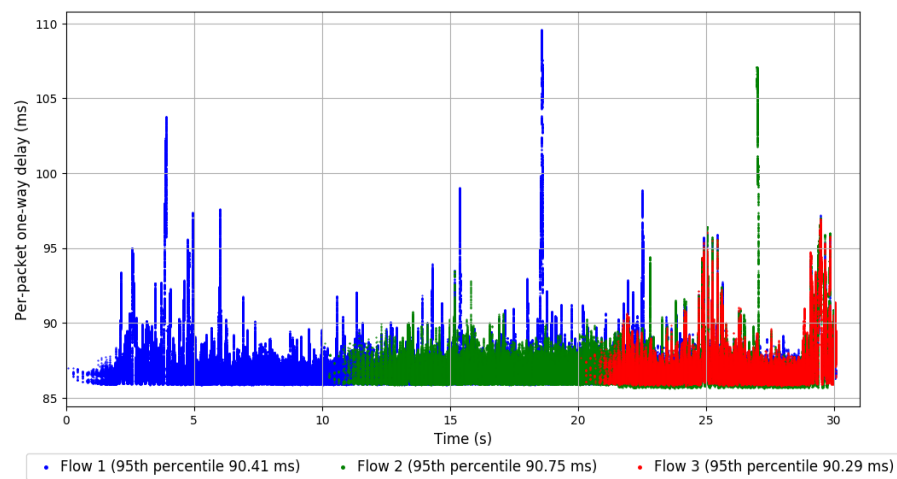
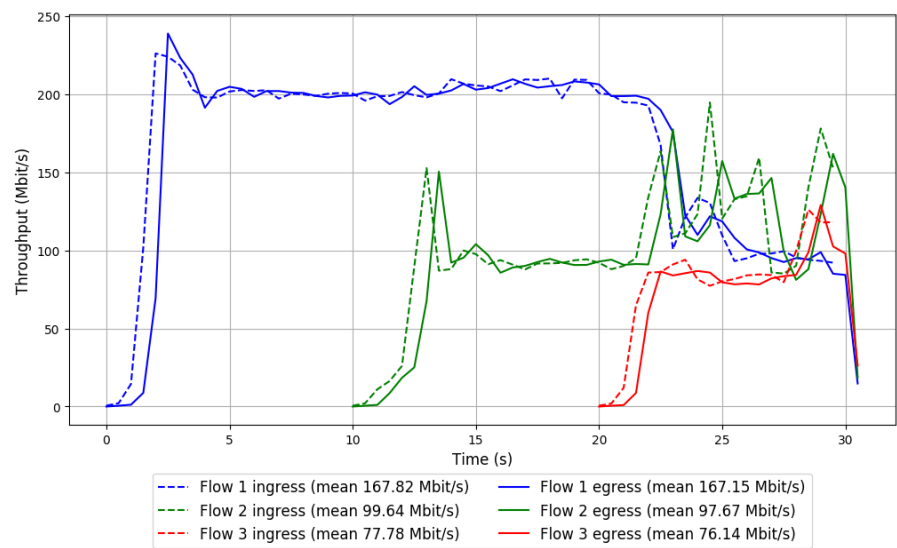


Run 7: Statistics of Copa

Start at: 2018-06-18 15:14:08
End at: 2018-06-18 15:14:38
Local clock offset: 0.253 ms
Remote clock offset: -0.039 ms

Below is generated by plot.py at 2018-06-18 17:06:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 257.42 Mbit/s
95th percentile per-packet one-way delay: 90.476 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 167.15 Mbit/s
95th percentile per-packet one-way delay: 90.411 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 97.67 Mbit/s
95th percentile per-packet one-way delay: 90.746 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 76.14 Mbit/s
95th percentile per-packet one-way delay: 90.288 ms
Loss rate: 2.12%

Run 7: Report of Copa — Data Link

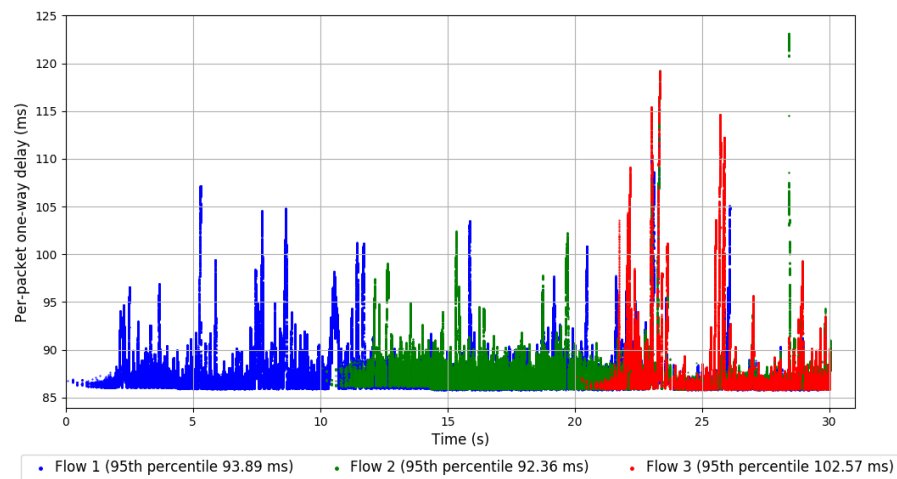
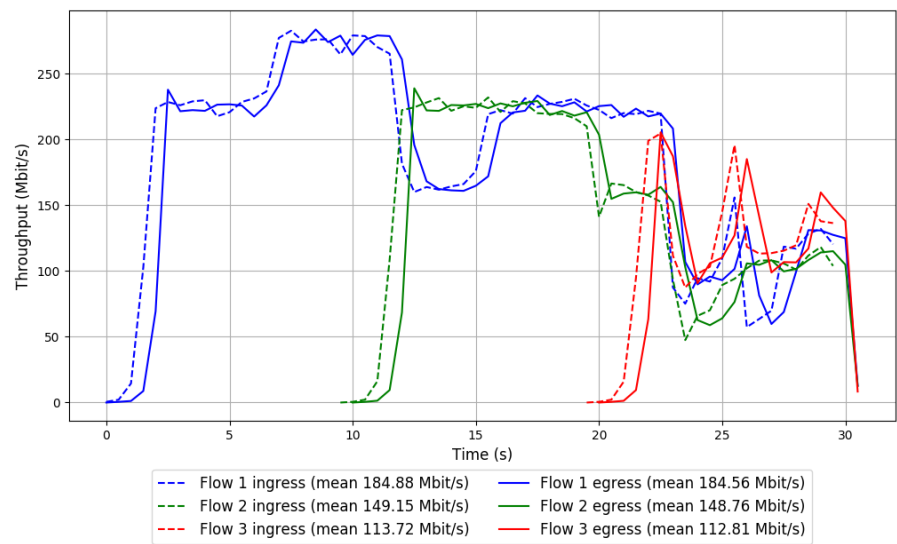


Run 8: Statistics of Copa

Start at: 2018-06-18 15:37:35
End at: 2018-06-18 15:38:05
Local clock offset: 0.04 ms
Remote clock offset: -0.042 ms

Below is generated by plot.py at 2018-06-18 17:08:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 321.24 Mbit/s
95th percentile per-packet one-way delay: 94.320 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 184.56 Mbit/s
95th percentile per-packet one-way delay: 93.891 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 148.76 Mbit/s
95th percentile per-packet one-way delay: 92.365 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 112.81 Mbit/s
95th percentile per-packet one-way delay: 102.571 ms
Loss rate: 0.77%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

End at: 2018-06-18 16:01:46

Local clock offset: 0.049 ms

Remote clock offset: 0.348 ms

Below is generated by plot.py at 2018-06-18 17:10:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.35 Mbit/s

95th percentile per-packet one-way delay: 90.451 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 181.93 Mbit/s

95th percentile per-packet one-way delay: 91.093 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 100.37 Mbit/s

95th percentile per-packet one-way delay: 89.258 ms

Loss rate: 0.04%

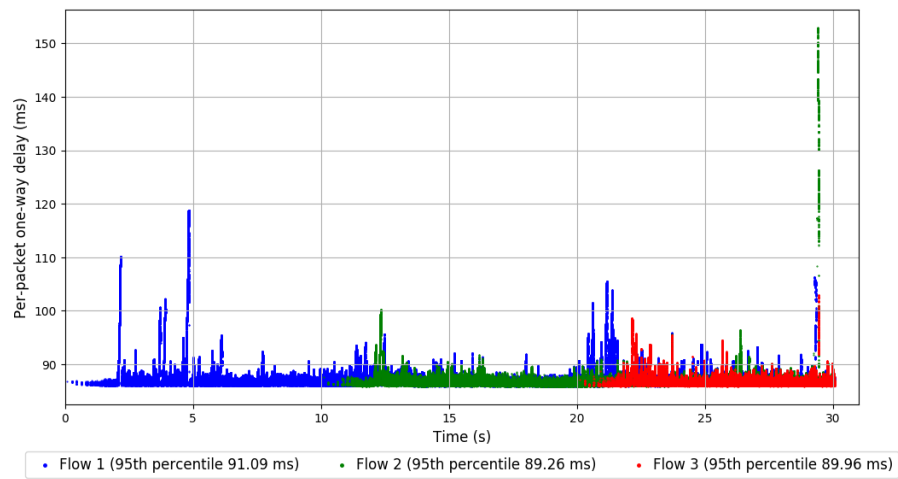
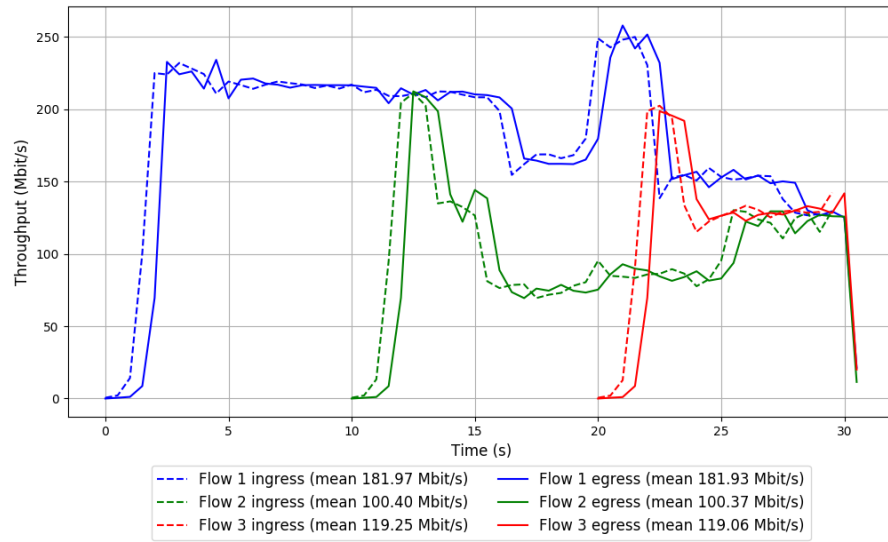
-- Flow 3:

Average throughput: 119.06 Mbit/s

95th percentile per-packet one-way delay: 89.963 ms

Loss rate: 0.16%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-06-18 16:24:58

End at: 2018-06-18 16:25:28

Local clock offset: -0.11 ms

Remote clock offset: 0.498 ms

Below is generated by plot.py at 2018-06-18 17:10:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 241.40 Mbit/s

95th percentile per-packet one-way delay: 90.199 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 95.38 Mbit/s

95th percentile per-packet one-way delay: 89.017 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 160.01 Mbit/s

95th percentile per-packet one-way delay: 91.234 ms

Loss rate: 0.31%

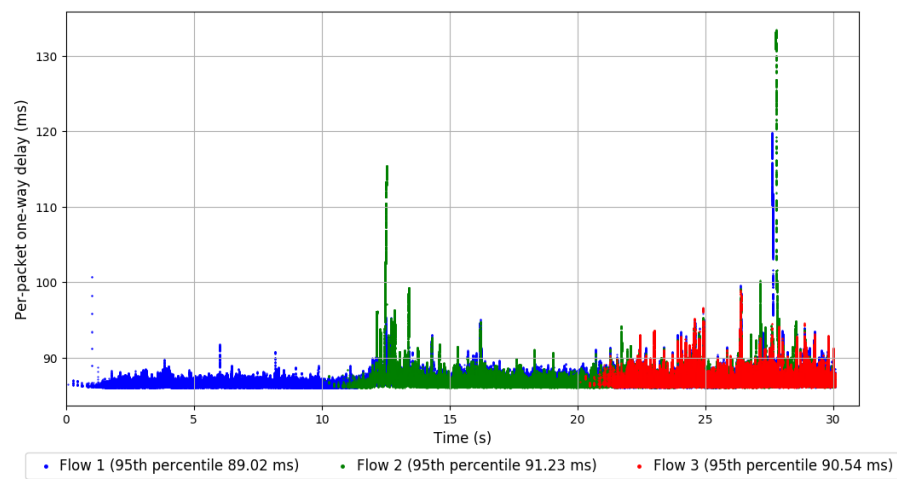
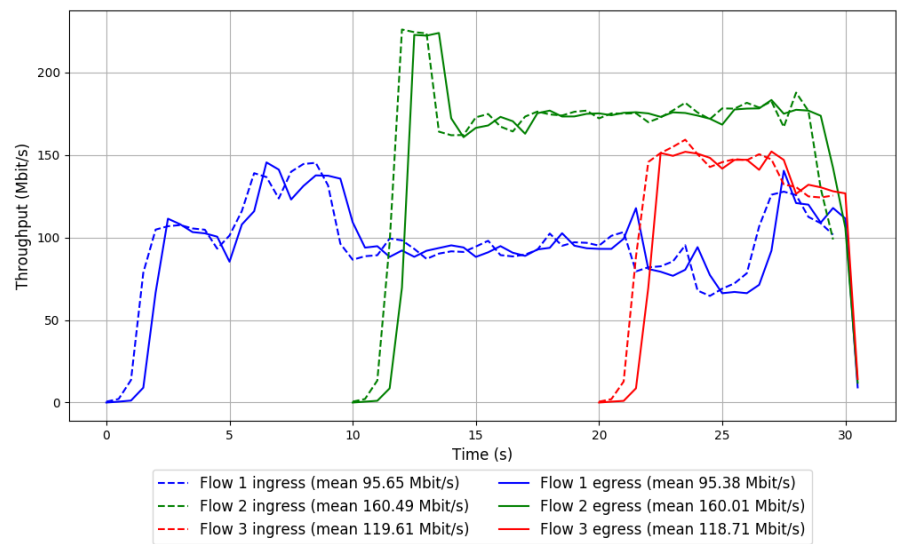
-- Flow 3:

Average throughput: 118.71 Mbit/s

95th percentile per-packet one-way delay: 90.540 ms

Loss rate: 0.75%

Run 10: Report of Copa — Data Link

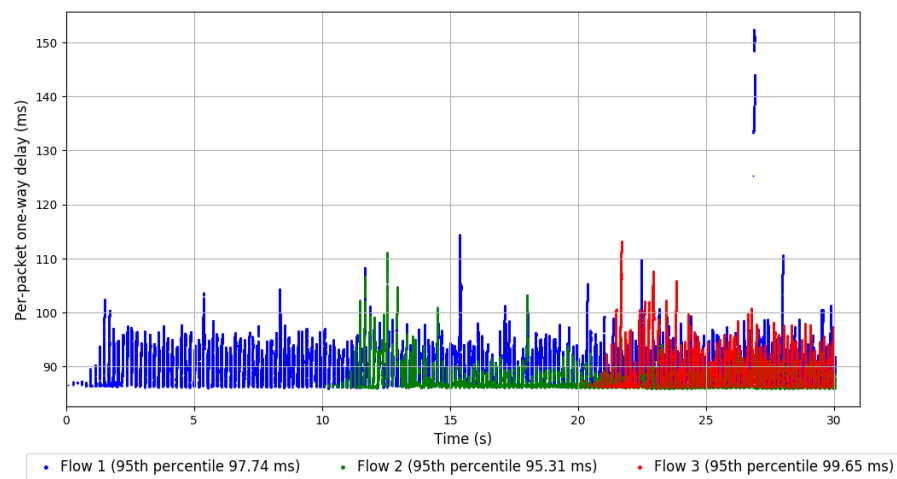
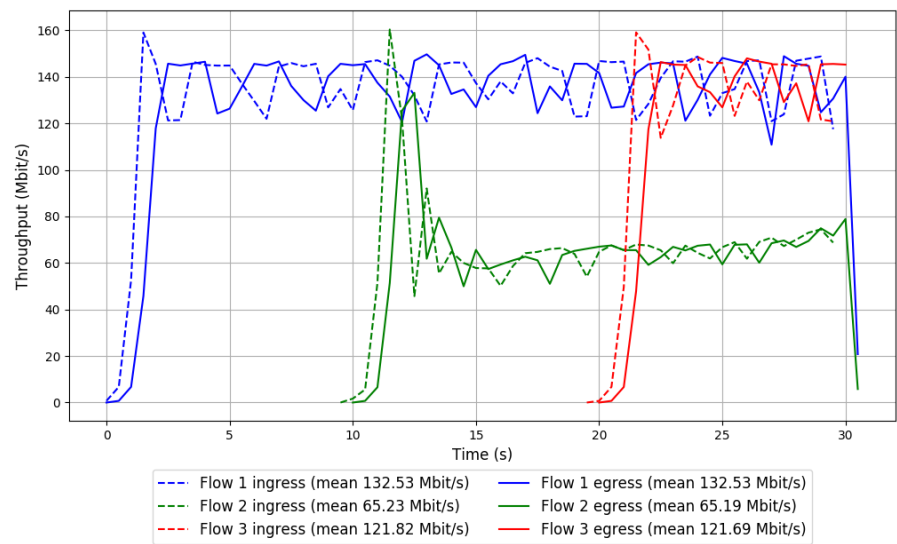


Run 1: Statistics of TCP Cubic

Start at: 2018-06-18 12:44:47
End at: 2018-06-18 12:45:17
Local clock offset: -0.02 ms
Remote clock offset: -0.001 ms

Below is generated by plot.py at 2018-06-18 17:10:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 216.20 Mbit/s
95th percentile per-packet one-way delay: 97.849 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 132.53 Mbit/s
95th percentile per-packet one-way delay: 97.739 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.19 Mbit/s
95th percentile per-packet one-way delay: 95.313 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 121.69 Mbit/s
95th percentile per-packet one-way delay: 99.648 ms
Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link

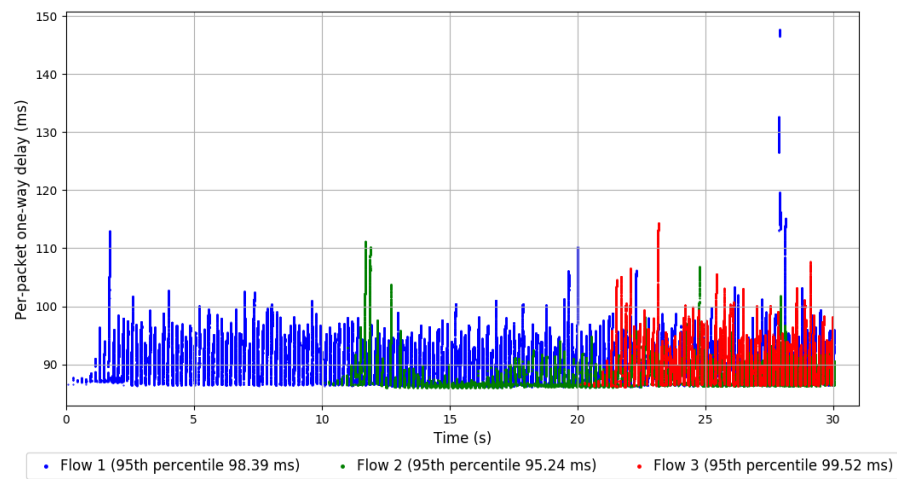
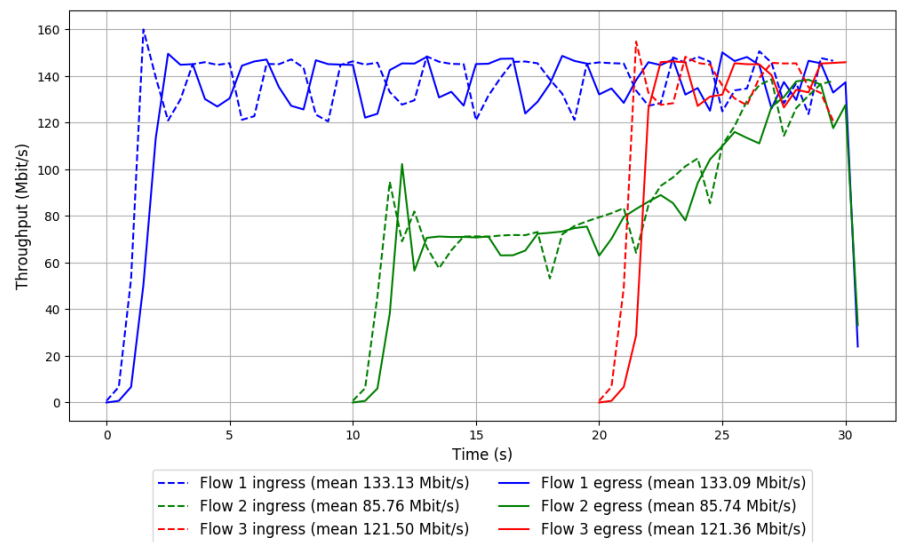


Run 2: Statistics of TCP Cubic

Start at: 2018-06-18 13:08:27
End at: 2018-06-18 13:08:57
Local clock offset: -0.128 ms
Remote clock offset: -0.145 ms

Below is generated by plot.py at 2018-06-18 17:10:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 230.15 Mbit/s
95th percentile per-packet one-way delay: 98.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 133.09 Mbit/s
95th percentile per-packet one-way delay: 98.388 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 95.239 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 121.36 Mbit/s
95th percentile per-packet one-way delay: 99.524 ms
Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link

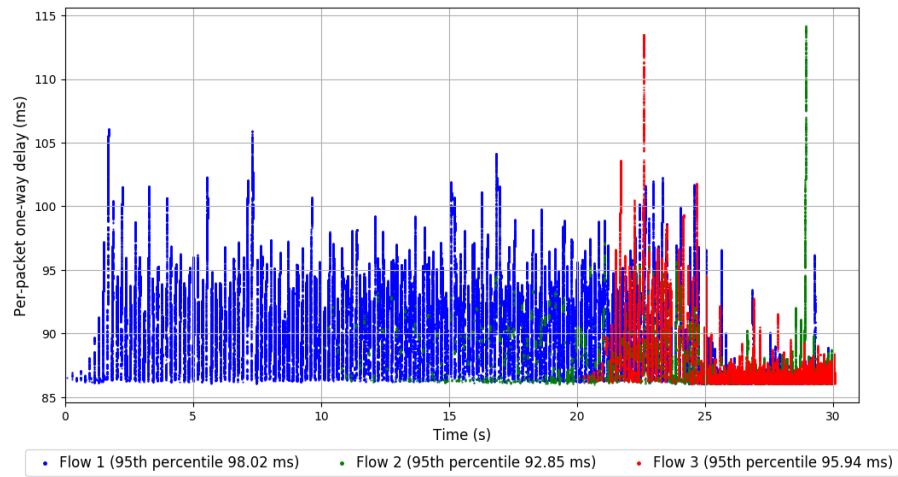
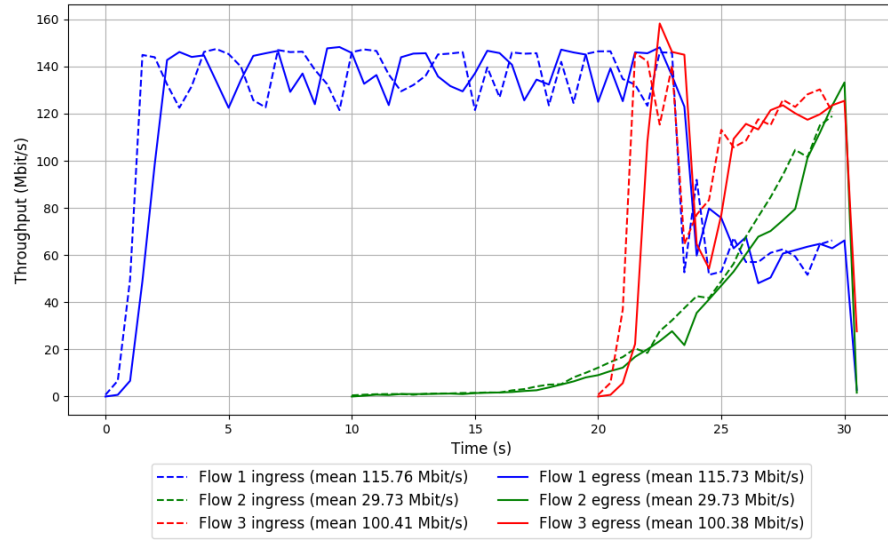


Run 3: Statistics of TCP Cubic

Start at: 2018-06-18 13:32:08
End at: 2018-06-18 13:32:38
Local clock offset: 0.094 ms
Remote clock offset: -0.001 ms

Below is generated by plot.py at 2018-06-18 17:10:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 168.73 Mbit/s
95th percentile per-packet one-way delay: 97.421 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 115.73 Mbit/s
95th percentile per-packet one-way delay: 98.024 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 29.73 Mbit/s
95th percentile per-packet one-way delay: 92.849 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 100.38 Mbit/s
95th percentile per-packet one-way delay: 95.940 ms
Loss rate: 0.04%

Run 3: Report of TCP Cubic — Data Link

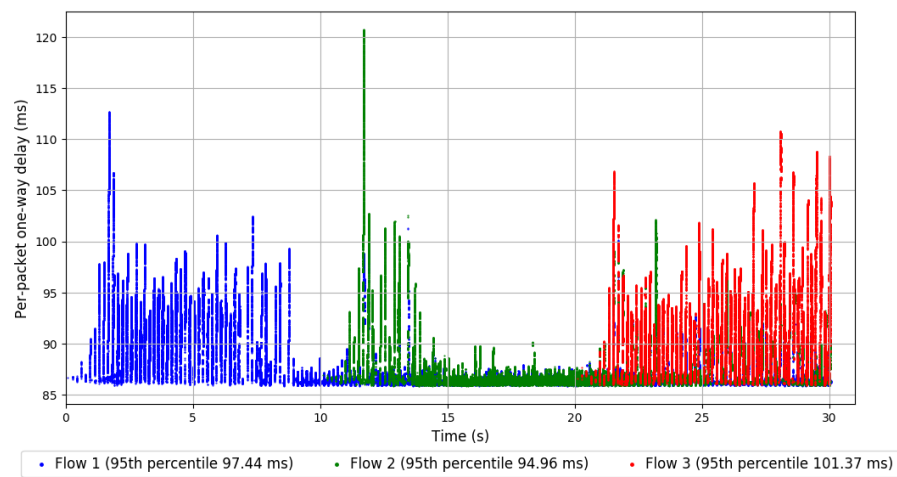
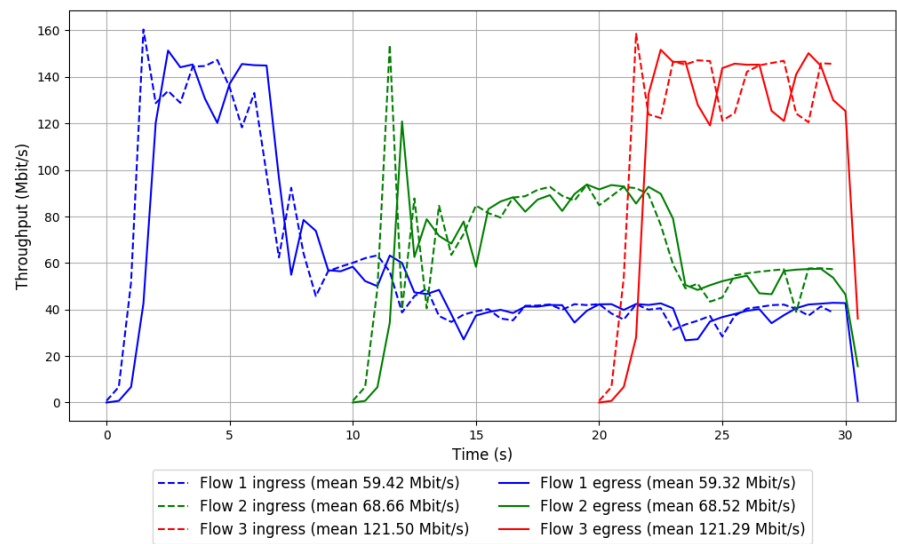


Run 4: Statistics of TCP Cubic

Start at: 2018-06-18 13:55:44
End at: 2018-06-18 13:56:14
Local clock offset: 0.139 ms
Remote clock offset: -0.033 ms

Below is generated by plot.py at 2018-06-18 17:10:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 145.20 Mbit/s
95th percentile per-packet one-way delay: 98.197 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 97.439 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 68.52 Mbit/s
95th percentile per-packet one-way delay: 94.961 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 121.29 Mbit/s
95th percentile per-packet one-way delay: 101.374 ms
Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-06-18 14:19:14

End at: 2018-06-18 14:19:44

Local clock offset: 0.017 ms

Remote clock offset: 0.22 ms

Below is generated by plot.py at 2018-06-18 17:10:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.14 Mbit/s

95th percentile per-packet one-way delay: 95.135 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 83.31 Mbit/s

95th percentile per-packet one-way delay: 95.771 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.07 Mbit/s

95th percentile per-packet one-way delay: 90.747 ms

Loss rate: 0.00%

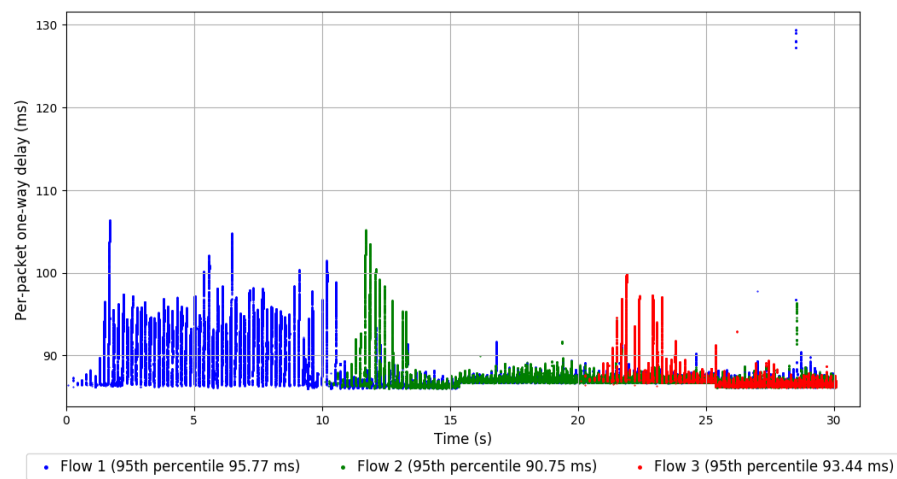
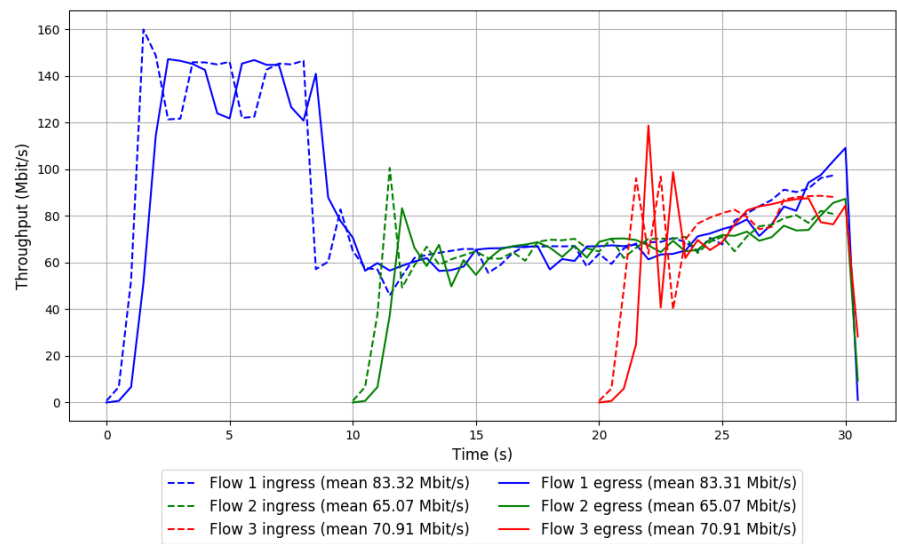
-- Flow 3:

Average throughput: 70.91 Mbit/s

95th percentile per-packet one-way delay: 93.437 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-06-18 14:42:52

End at: 2018-06-18 14:43:22

Local clock offset: 0.059 ms

Remote clock offset: 0.05 ms

Below is generated by plot.py at 2018-06-18 17:10:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.82 Mbit/s

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

Loss rate: 0.26%

-- Flow 1:

Average throughput: 86.95 Mbit/s

95th percentile per-packet one-way delay: 98.586 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 114.15 Mbit/s

95th percentile per-packet one-way delay: 95.231 ms

Loss rate: 0.30%

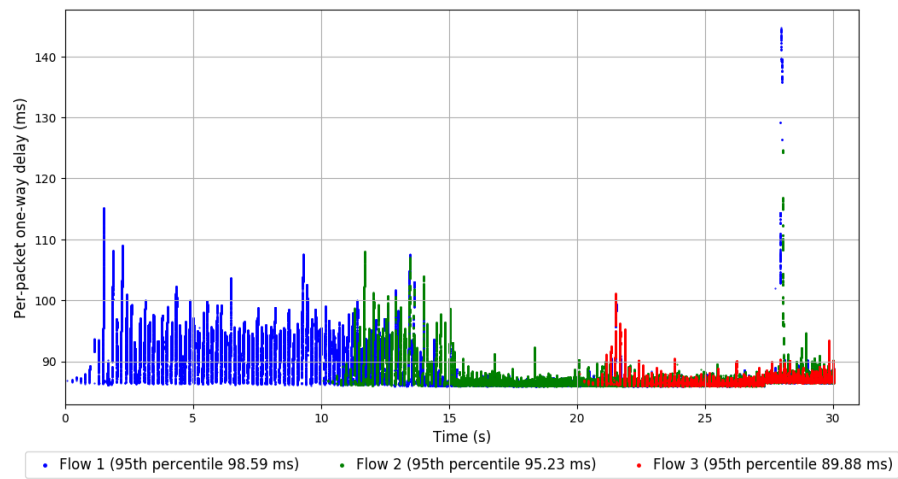
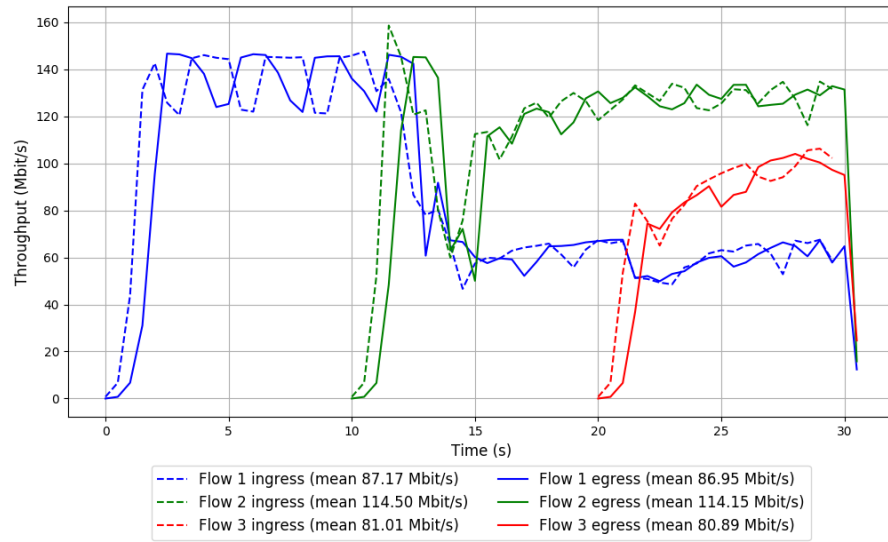
-- Flow 3:

Average throughput: 80.89 Mbit/s

95th percentile per-packet one-way delay: 89.883 ms

Loss rate: 0.16%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-06-18 15:06:27

End at: 2018-06-18 15:06:57

Local clock offset: 0.04 ms

Remote clock offset: 0.012 ms

Below is generated by plot.py at 2018-06-18 17:10:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.42 Mbit/s

95th percentile per-packet one-way delay: 96.195 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 102.51 Mbit/s

95th percentile per-packet one-way delay: 97.239 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 70.04 Mbit/s

95th percentile per-packet one-way delay: 93.297 ms

Loss rate: 0.01%

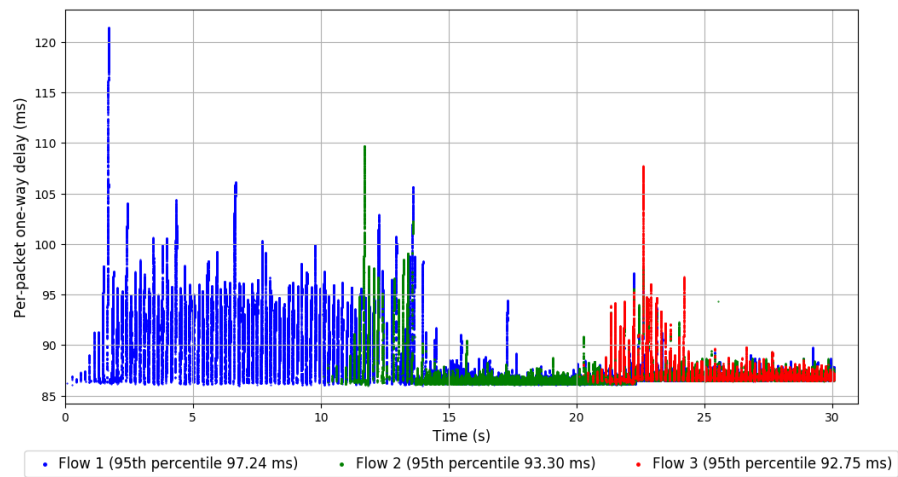
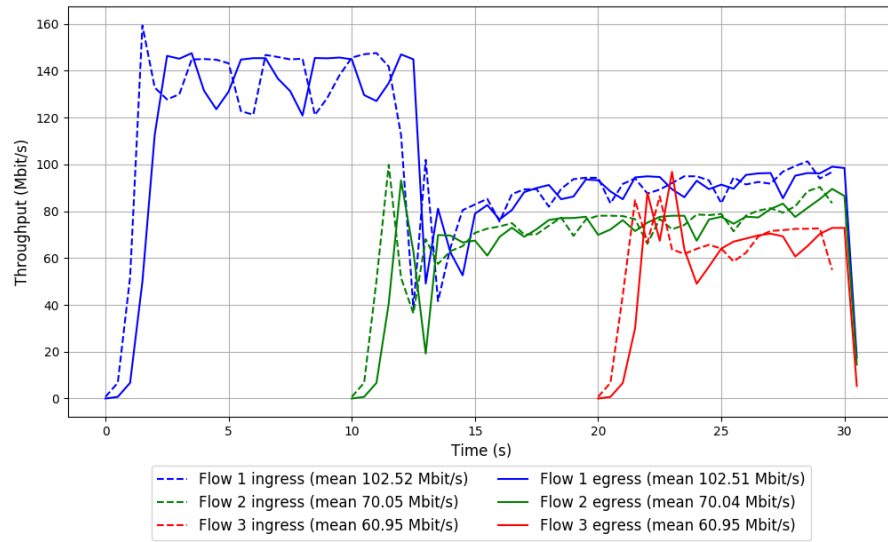
-- Flow 3:

Average throughput: 60.95 Mbit/s

95th percentile per-packet one-way delay: 92.751 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-06-18 15:29:55

End at: 2018-06-18 15:30:25

Local clock offset: -0.006 ms

Remote clock offset: -0.12 ms

Below is generated by plot.py at 2018-06-18 17:10:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.06 Mbit/s

95th percentile per-packet one-way delay: 95.870 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 84.38 Mbit/s

95th percentile per-packet one-way delay: 92.314 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 98.07 Mbit/s

95th percentile per-packet one-way delay: 98.913 ms

Loss rate: 0.25%

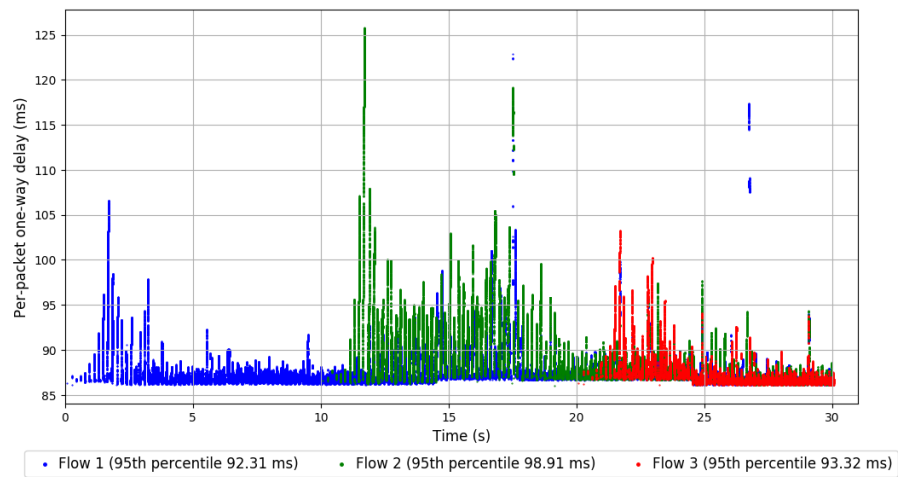
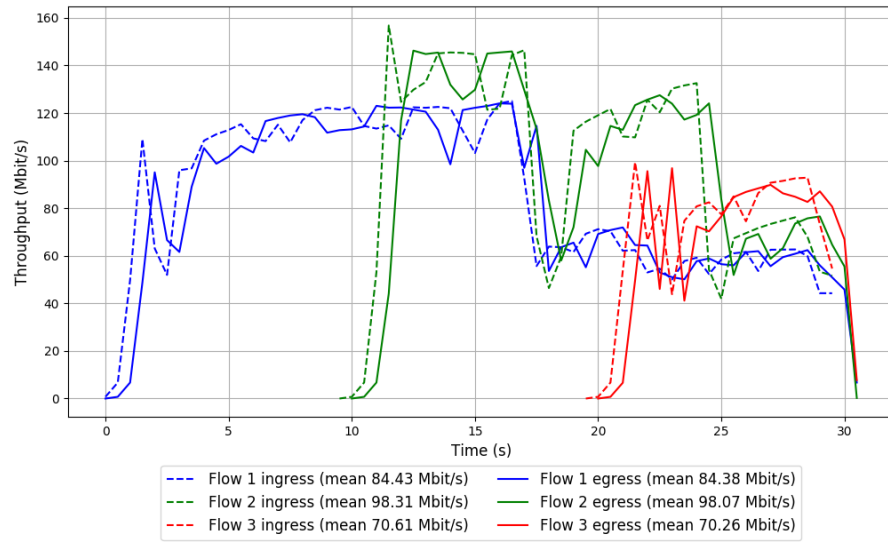
-- Flow 3:

Average throughput: 70.26 Mbit/s

95th percentile per-packet one-way delay: 93.322 ms

Loss rate: 0.49%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-18 15:53:33

End at: 2018-06-18 15:54:03

Local clock offset: -0.029 ms

Remote clock offset: 0.297 ms

Below is generated by plot.py at 2018-06-18 17:10:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.73 Mbit/s

95th percentile per-packet one-way delay: 98.752 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 132.44 Mbit/s

95th percentile per-packet one-way delay: 98.239 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.08 Mbit/s

95th percentile per-packet one-way delay: 93.590 ms

Loss rate: 0.01%

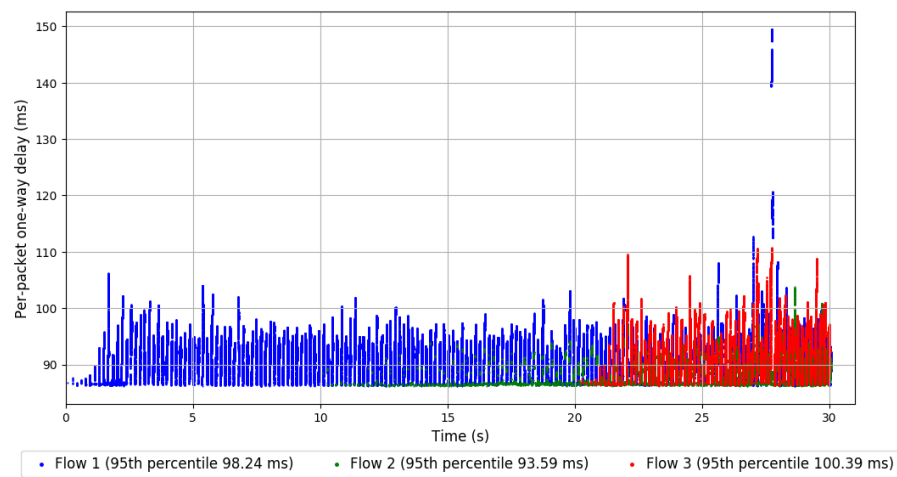
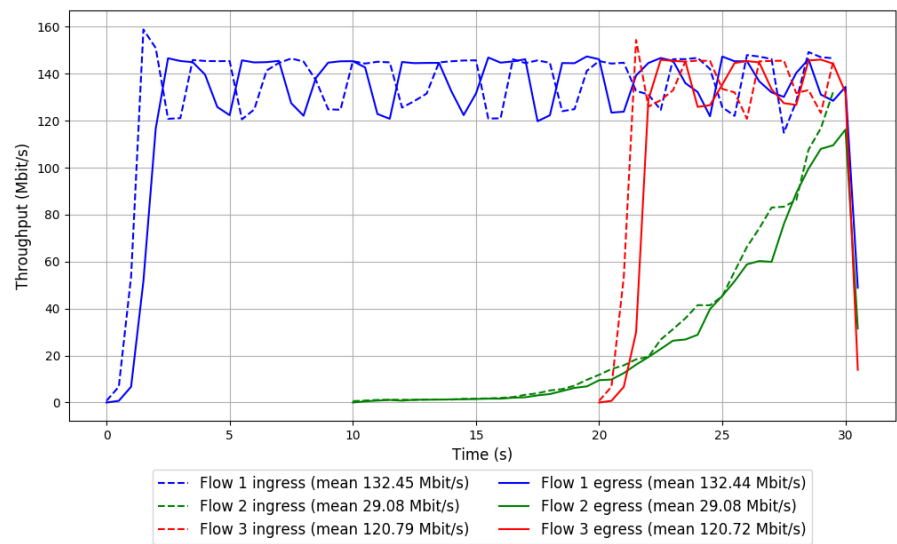
-- Flow 3:

Average throughput: 120.72 Mbit/s

95th percentile per-packet one-way delay: 100.392 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-06-18 16:17:11

End at: 2018-06-18 16:17:41

Local clock offset: 0.094 ms

Remote clock offset: 0.482 ms

Below is generated by plot.py at 2018-06-18 17:10:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.87 Mbit/s

95th percentile per-packet one-way delay: 98.625 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 131.93 Mbit/s

95th percentile per-packet one-way delay: 98.525 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 115.74 Mbit/s

95th percentile per-packet one-way delay: 98.825 ms

Loss rate: 0.00%

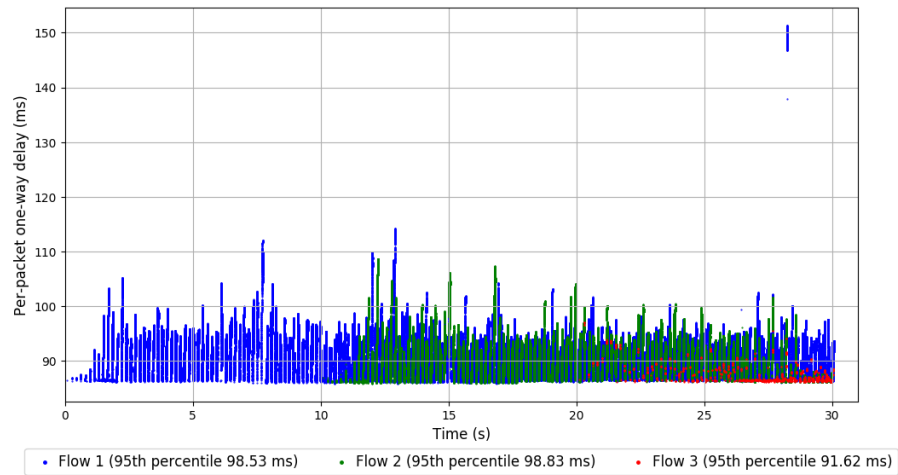
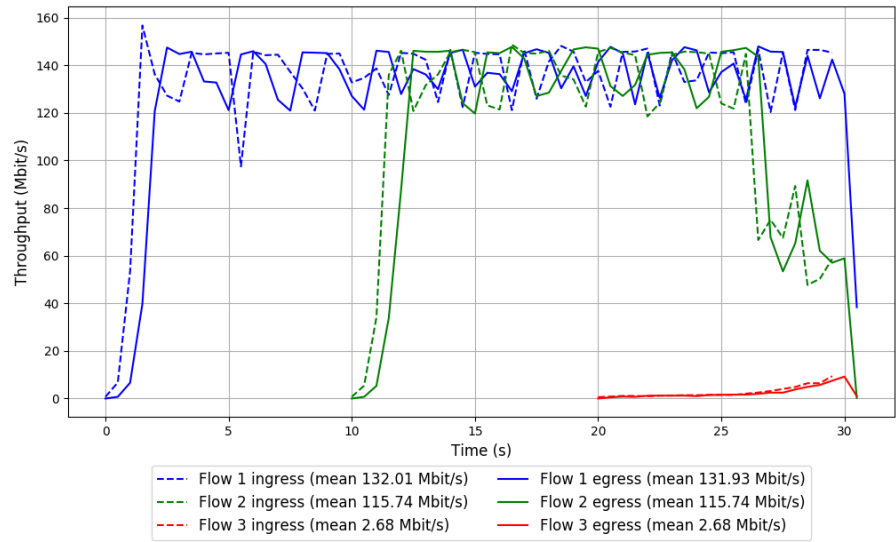
-- Flow 3:

Average throughput: 2.68 Mbit/s

95th percentile per-packet one-way delay: 91.619 ms

Loss rate: 0.13%

Run 10: Report of TCP Cubic — Data Link

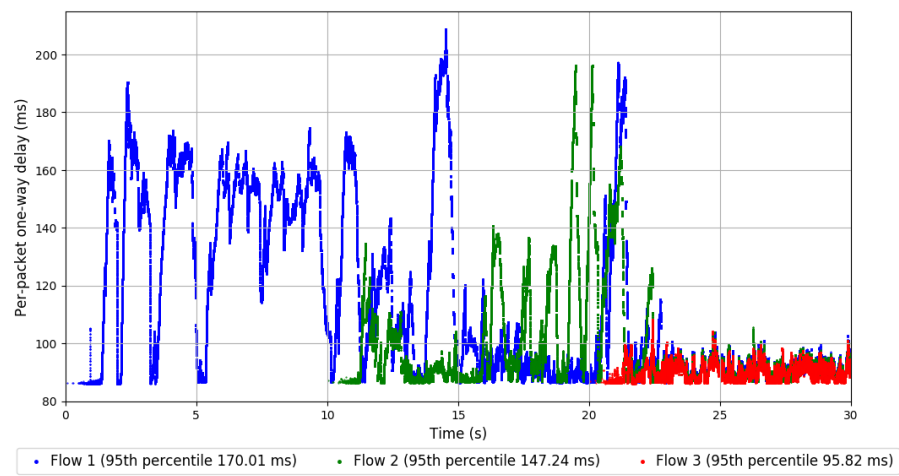
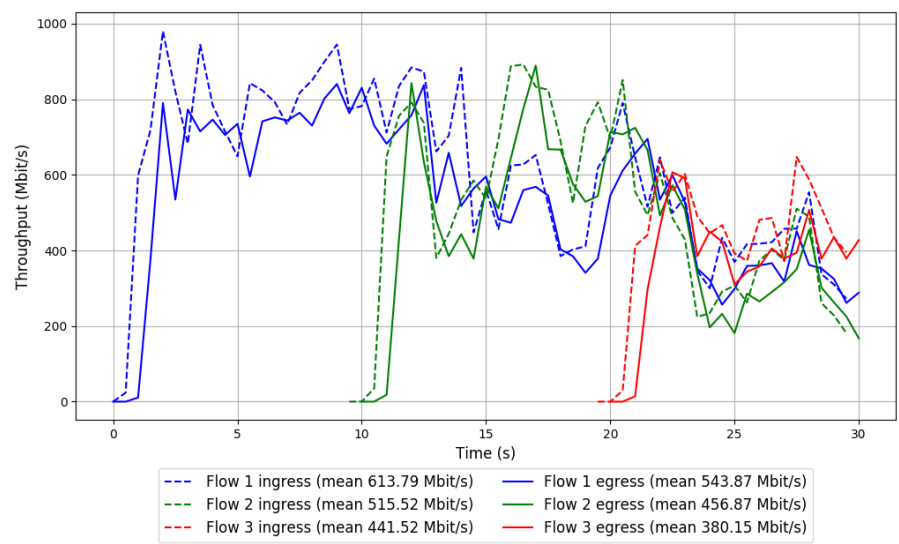


Run 1: Statistics of FillP

Start at: 2018-06-18 12:50:35
End at: 2018-06-18 12:51:05
Local clock offset: -0.16 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2018-06-18 17:26:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 975.00 Mbit/s
95th percentile per-packet one-way delay: 165.847 ms
Loss rate: 11.71%
-- Flow 1:
Average throughput: 543.87 Mbit/s
95th percentile per-packet one-way delay: 170.014 ms
Loss rate: 11.38%
-- Flow 2:
Average throughput: 456.87 Mbit/s
95th percentile per-packet one-way delay: 147.240 ms
Loss rate: 11.38%
-- Flow 3:
Average throughput: 380.15 Mbit/s
95th percentile per-packet one-way delay: 95.820 ms
Loss rate: 13.89%

Run 1: Report of FillP — Data Link

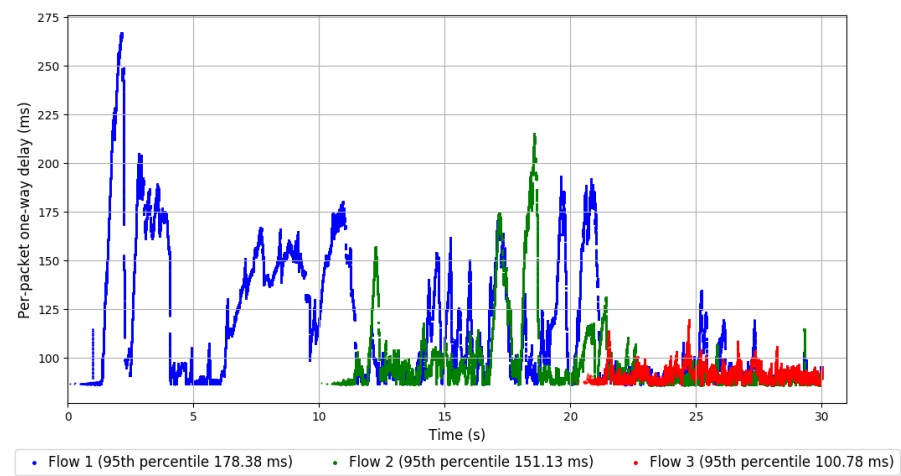
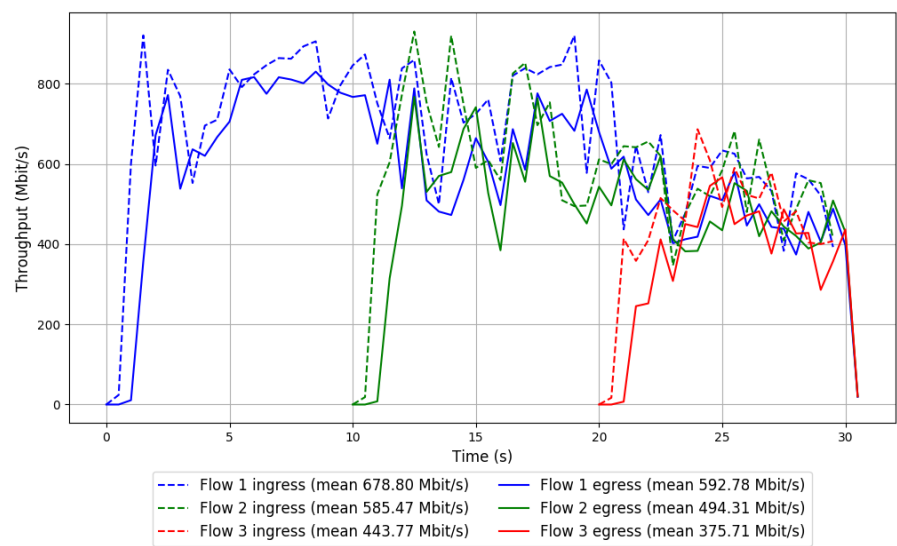


Run 2: Statistics of FillP

Start at: 2018-06-18 13:14:16
End at: 2018-06-18 13:14:46
Local clock offset: 0.001 ms
Remote clock offset: -0.246 ms

Below is generated by plot.py at 2018-06-18 17:29:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 1046.06 Mbit/s
95th percentile per-packet one-way delay: 171.684 ms
Loss rate: 13.92%
-- Flow 1:
Average throughput: 592.78 Mbit/s
95th percentile per-packet one-way delay: 178.381 ms
Loss rate: 12.67%
-- Flow 2:
Average throughput: 494.31 Mbit/s
95th percentile per-packet one-way delay: 151.134 ms
Loss rate: 15.57%
-- Flow 3:
Average throughput: 375.71 Mbit/s
95th percentile per-packet one-way delay: 100.785 ms
Loss rate: 15.34%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-06-18 13:37:55

End at: 2018-06-18 13:38:25

Local clock offset: 0.041 ms

Remote clock offset: -0.06 ms

Below is generated by plot.py at 2018-06-18 17:29:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1029.69 Mbit/s

95th percentile per-packet one-way delay: 173.356 ms

Loss rate: 9.01%

-- Flow 1:

Average throughput: 608.30 Mbit/s

95th percentile per-packet one-way delay: 181.821 ms

Loss rate: 9.65%

-- Flow 2:

Average throughput: 618.10 Mbit/s

95th percentile per-packet one-way delay: 144.704 ms

Loss rate: 8.09%

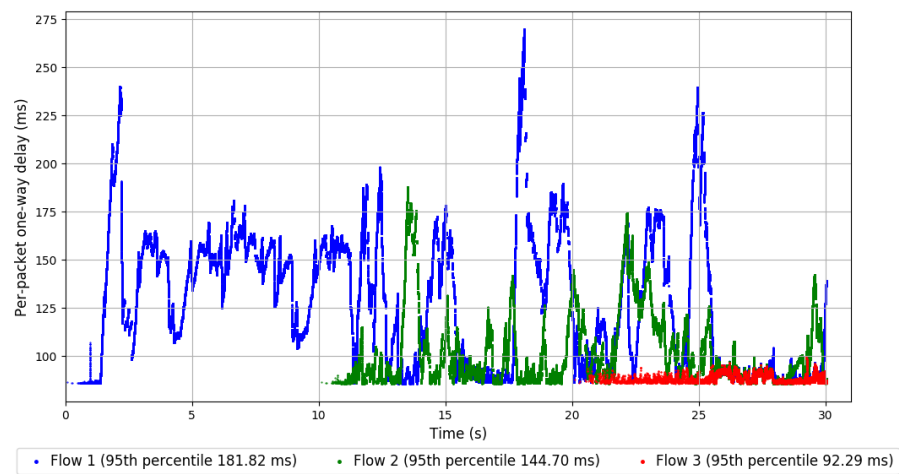
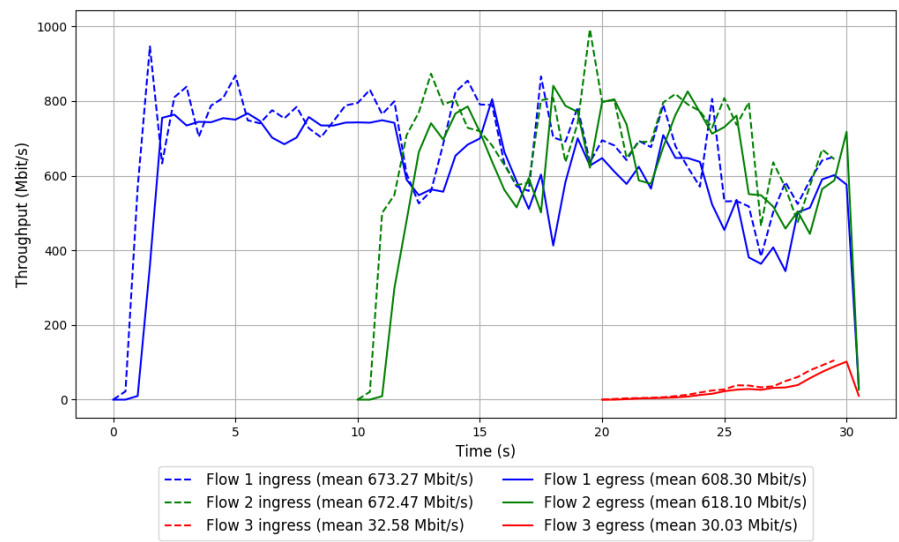
-- Flow 3:

Average throughput: 30.03 Mbit/s

95th percentile per-packet one-way delay: 92.288 ms

Loss rate: 7.84%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-06-18 14:01:19

End at: 2018-06-18 14:01:49

Local clock offset: 0.093 ms

Remote clock offset: 0.072 ms

Below is generated by plot.py at 2018-06-18 17:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 1139.13 Mbit/s

95th percentile per-packet one-way delay: 171.723 ms

Loss rate: 8.48%

-- Flow 1:

Average throughput: 628.00 Mbit/s

95th percentile per-packet one-way delay: 166.477 ms

Loss rate: 7.04%

-- Flow 2:

Average throughput: 533.84 Mbit/s

95th percentile per-packet one-way delay: 180.291 ms

Loss rate: 10.69%

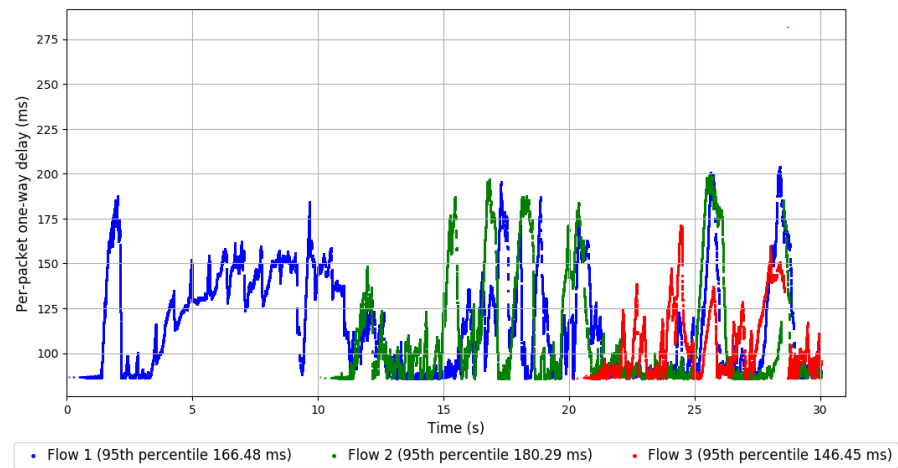
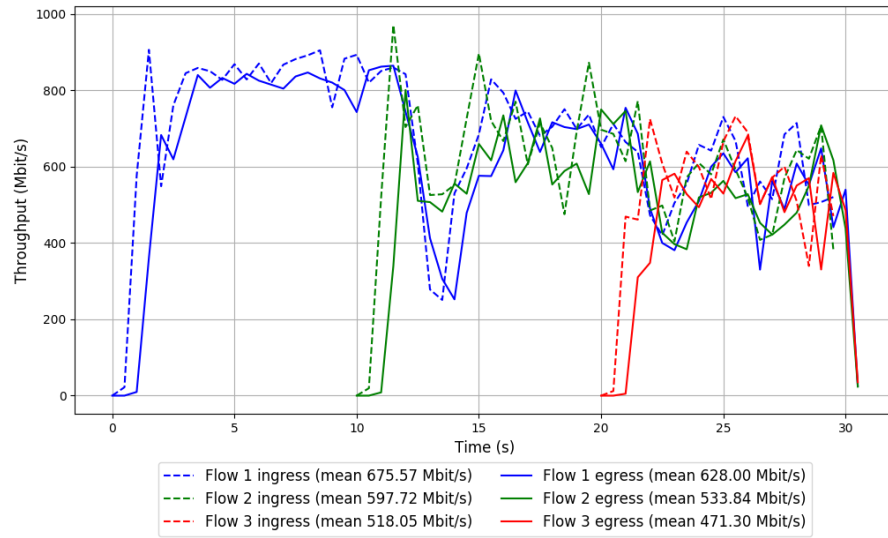
-- Flow 3:

Average throughput: 471.30 Mbit/s

95th percentile per-packet one-way delay: 146.451 ms

Loss rate: 9.00%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-06-18 14:24:53

End at: 2018-06-18 14:25:23

Local clock offset: -0.054 ms

Remote clock offset: 0.191 ms

Below is generated by plot.py at 2018-06-18 17:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 1119.71 Mbit/s

95th percentile per-packet one-way delay: 176.436 ms

Loss rate: 9.45%

-- Flow 1:

Average throughput: 603.60 Mbit/s

95th percentile per-packet one-way delay: 177.195 ms

Loss rate: 8.31%

-- Flow 2:

Average throughput: 546.41 Mbit/s

95th percentile per-packet one-way delay: 154.822 ms

Loss rate: 11.30%

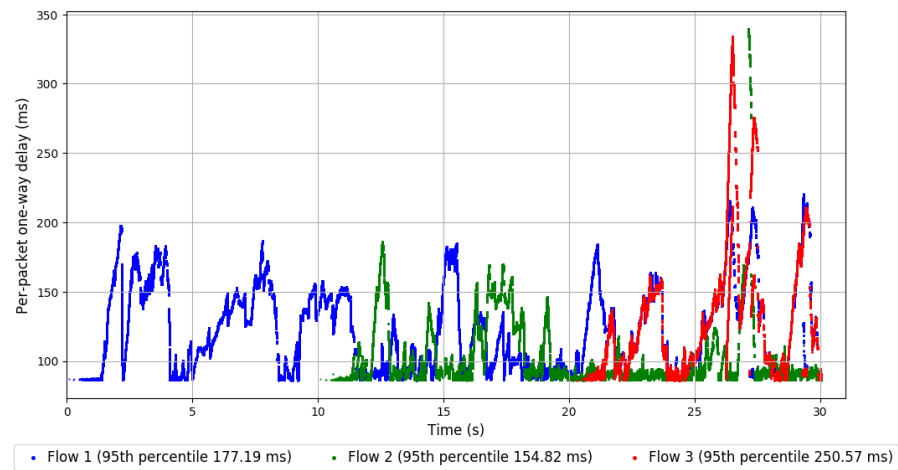
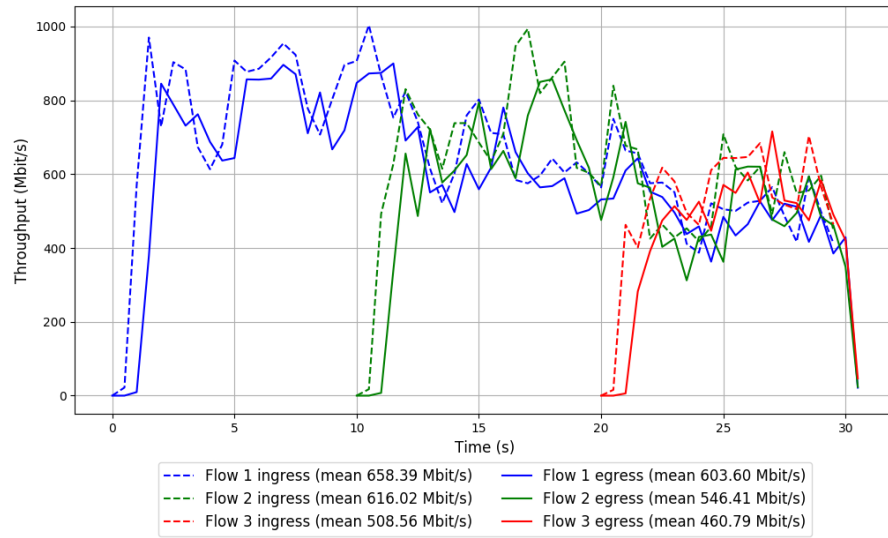
-- Flow 3:

Average throughput: 460.79 Mbit/s

95th percentile per-packet one-way delay: 250.570 ms

Loss rate: 9.39%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-06-18 14:48:31

End at: 2018-06-18 14:49:01

Local clock offset: -0.051 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2018-06-18 17:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 974.91 Mbit/s

95th percentile per-packet one-way delay: 211.397 ms

Loss rate: 13.23%

-- Flow 1:

Average throughput: 544.76 Mbit/s

95th percentile per-packet one-way delay: 221.365 ms

Loss rate: 12.11%

-- Flow 2:

Average throughput: 467.04 Mbit/s

95th percentile per-packet one-way delay: 202.403 ms

Loss rate: 14.51%

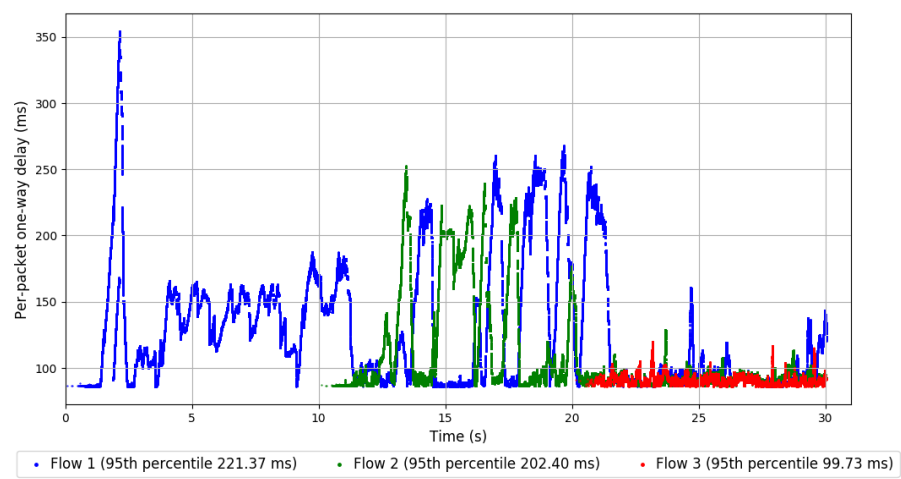
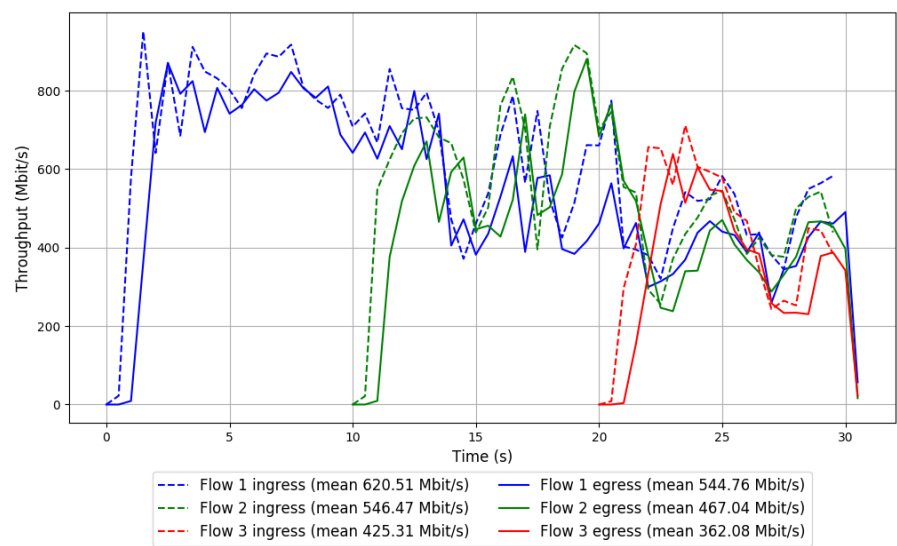
-- Flow 3:

Average throughput: 362.08 Mbit/s

95th percentile per-packet one-way delay: 99.734 ms

Loss rate: 14.87%

Run 6: Report of FillP — Data Link

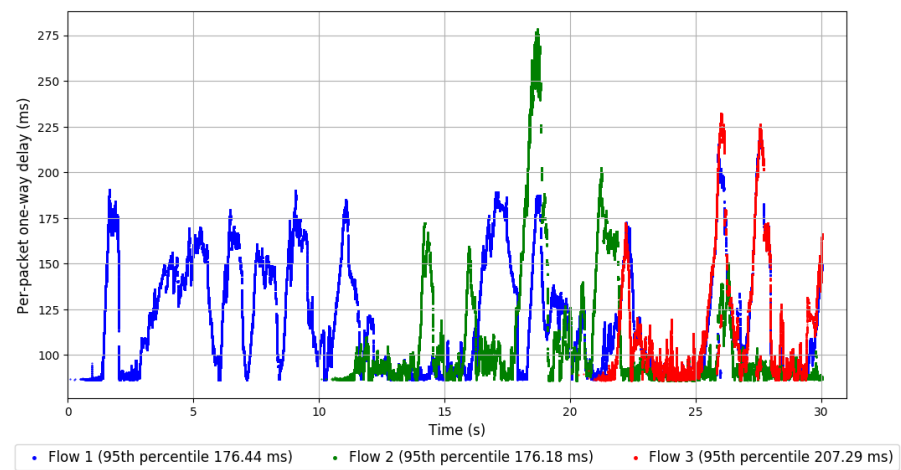
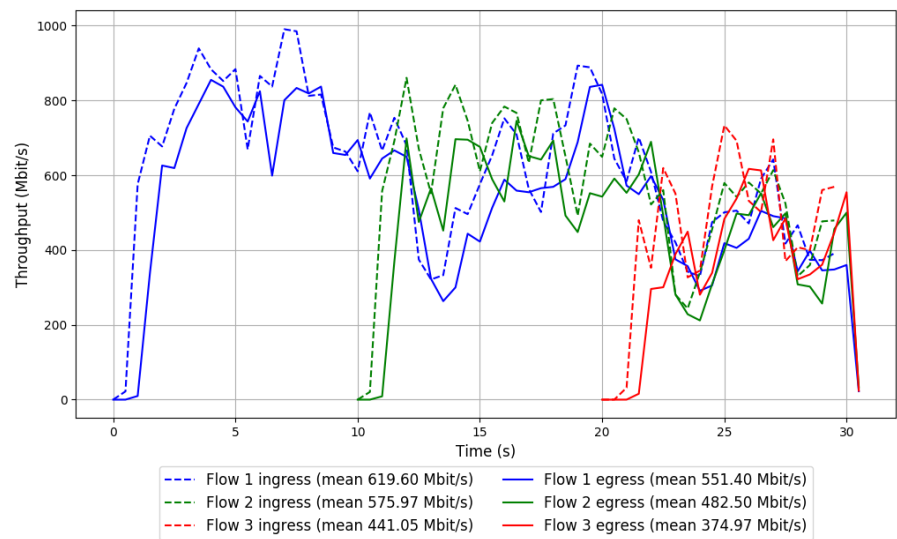


Run 7: Statistics of FillP

Start at: 2018-06-18 15:12:11
End at: 2018-06-18 15:12:41
Local clock offset: -0.013 ms
Remote clock offset: -0.04 ms

Below is generated by plot.py at 2018-06-18 17:31:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 994.09 Mbit/s
95th percentile per-packet one-way delay: 177.787 ms
Loss rate: 13.48%
-- Flow 1:
Average throughput: 551.40 Mbit/s
95th percentile per-packet one-way delay: 176.443 ms
Loss rate: 11.01%
-- Flow 2:
Average throughput: 482.50 Mbit/s
95th percentile per-packet one-way delay: 176.178 ms
Loss rate: 16.23%
-- Flow 3:
Average throughput: 374.97 Mbit/s
95th percentile per-packet one-way delay: 207.294 ms
Loss rate: 16.76%

Run 7: Report of FillP — Data Link

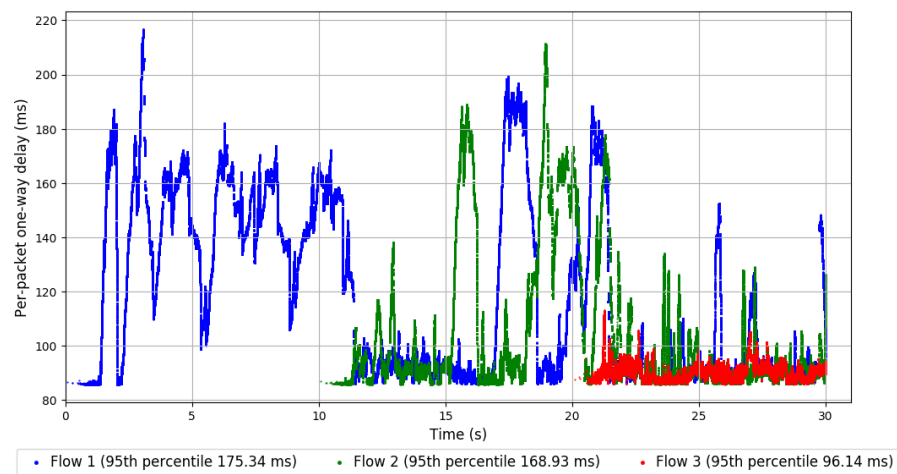
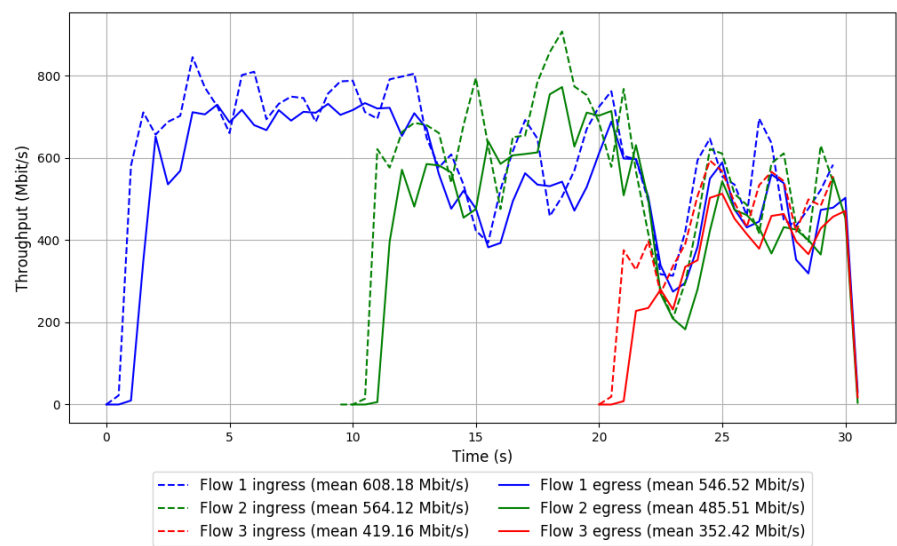


Run 8: Statistics of FillP

Start at: 2018-06-18 15:35:39
End at: 2018-06-18 15:36:09
Local clock offset: 0.151 ms
Remote clock offset: -0.148 ms

Below is generated by plot.py at 2018-06-18 17:31:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 986.72 Mbit/s
95th percentile per-packet one-way delay: 171.447 ms
Loss rate: 12.12%
-- Flow 1:
Average throughput: 546.52 Mbit/s
95th percentile per-packet one-way delay: 175.343 ms
Loss rate: 10.13%
-- Flow 2:
Average throughput: 485.51 Mbit/s
95th percentile per-packet one-way delay: 168.931 ms
Loss rate: 13.94%
-- Flow 3:
Average throughput: 352.42 Mbit/s
95th percentile per-packet one-way delay: 96.143 ms
Loss rate: 15.92%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-06-18 15:59:14

End at: 2018-06-18 15:59:44

Local clock offset: 0.014 ms

Remote clock offset: 0.333 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1143.17 Mbit/s

95th percentile per-packet one-way delay: 201.807 ms

Loss rate: 9.21%

-- Flow 1:

Average throughput: 635.28 Mbit/s

95th percentile per-packet one-way delay: 186.565 ms

Loss rate: 8.67%

-- Flow 2:

Average throughput: 546.93 Mbit/s

95th percentile per-packet one-way delay: 199.546 ms

Loss rate: 9.83%

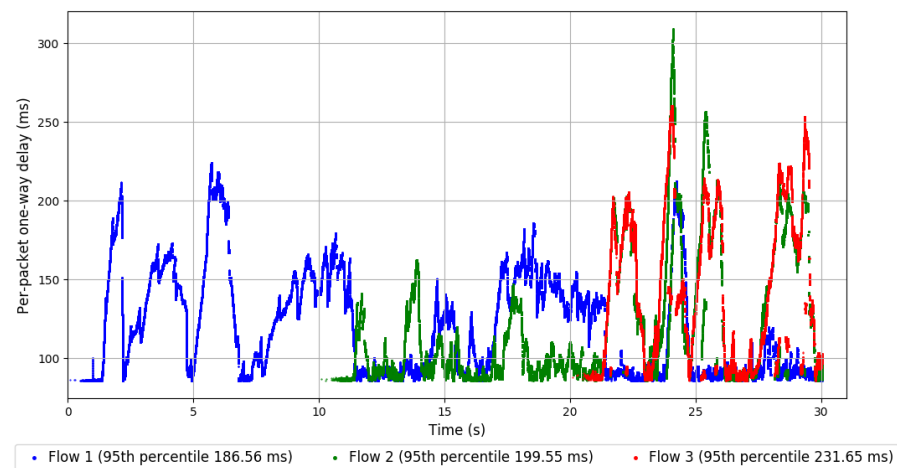
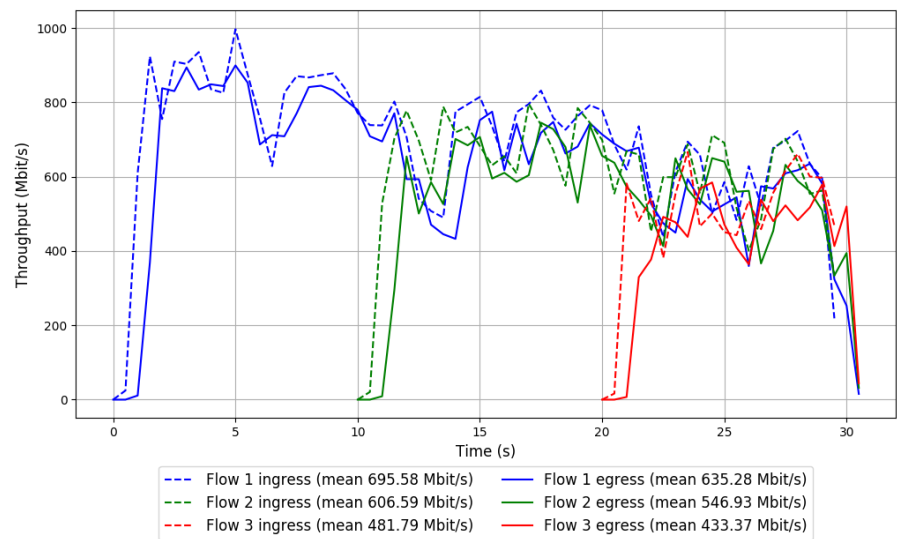
-- Flow 3:

Average throughput: 433.37 Mbit/s

95th percentile per-packet one-way delay: 231.649 ms

Loss rate: 10.05%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-06-18 16:23:00

End at: 2018-06-18 16:23:30

Local clock offset: 0.019 ms

Remote clock offset: 0.465 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1022.09 Mbit/s

95th percentile per-packet one-way delay: 277.875 ms

Loss rate: 8.88%

-- Flow 1:

Average throughput: 565.96 Mbit/s

95th percentile per-packet one-way delay: 279.168 ms

Loss rate: 8.07%

-- Flow 2:

Average throughput: 461.16 Mbit/s

95th percentile per-packet one-way delay: 292.612 ms

Loss rate: 8.73%

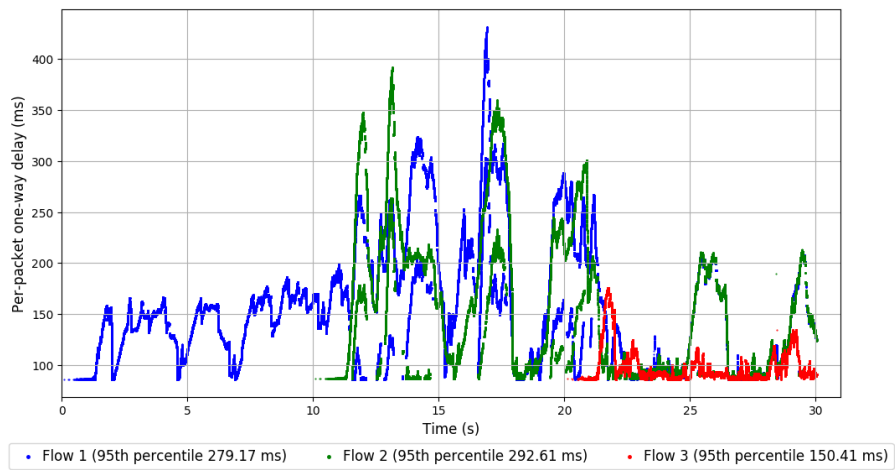
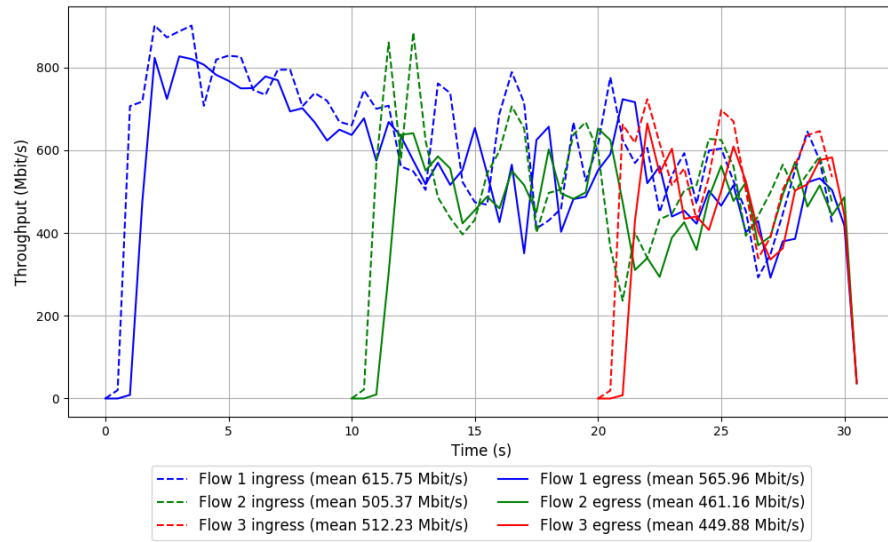
-- Flow 3:

Average throughput: 449.88 Mbit/s

95th percentile per-packet one-way delay: 150.409 ms

Loss rate: 12.13%

Run 10: Report of FillP — Data Link

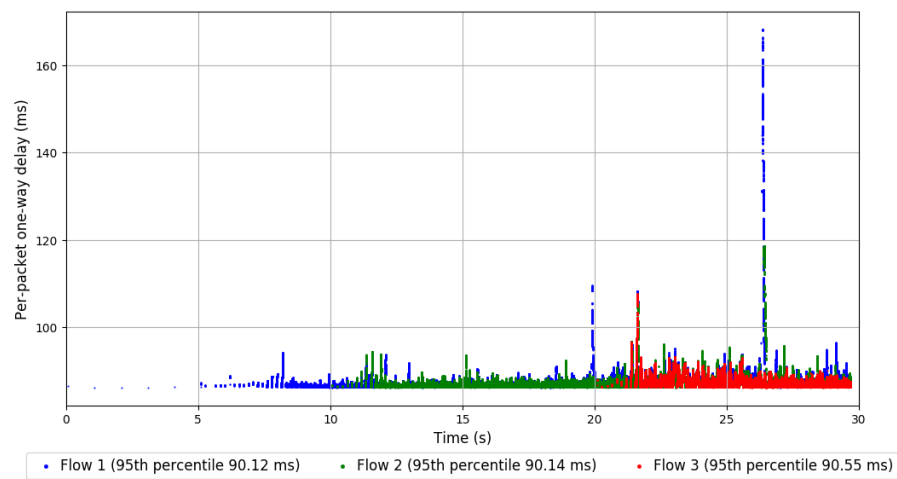
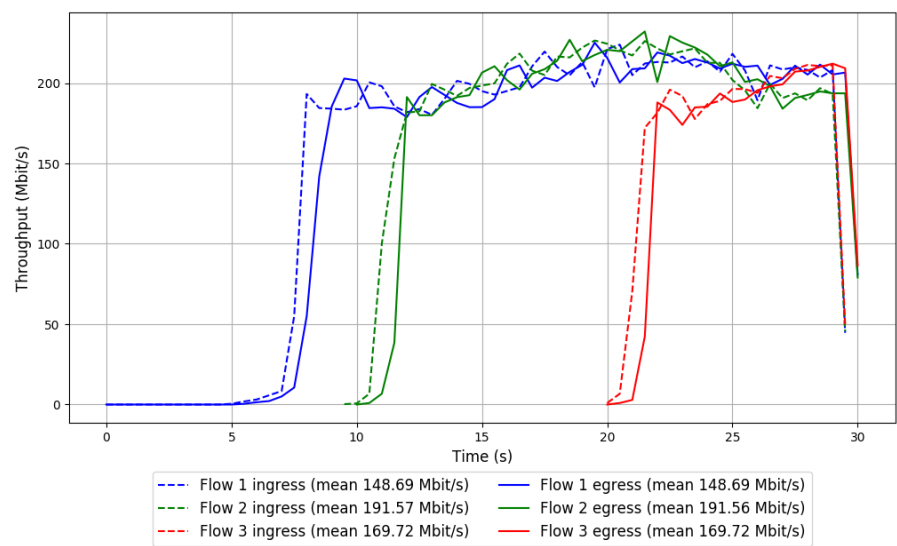


```
Run 1: Statistics of Indigo

Start at: 2018-06-18 13:02:40
End at: 2018-06-18 13:03:10
Local clock offset: -0.087 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-06-18 17:51:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.62 Mbit/s
95th percentile per-packet one-way delay: 90.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 148.69 Mbit/s
95th percentile per-packet one-way delay: 90.119 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.56 Mbit/s
95th percentile per-packet one-way delay: 90.141 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.72 Mbit/s
95th percentile per-packet one-way delay: 90.547 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo — Data Link

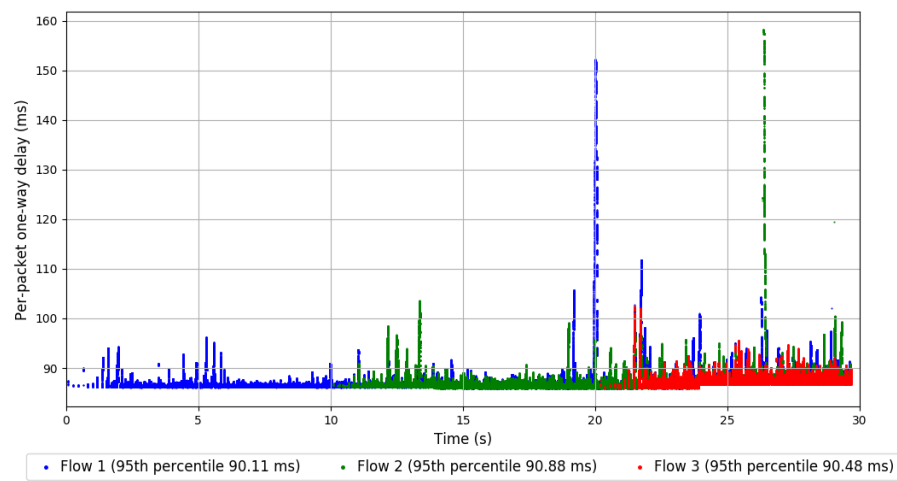
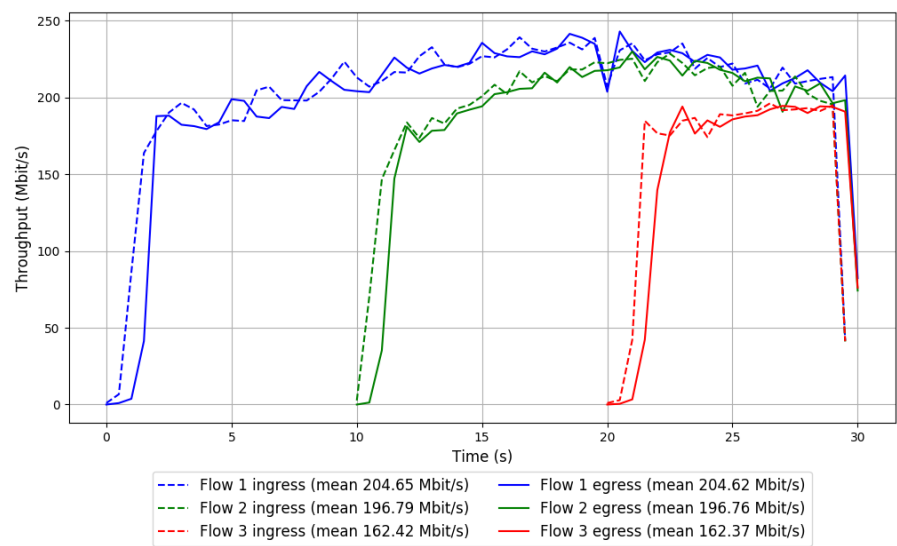


Run 2: Statistics of Indigo

Start at: 2018-06-18 13:26:25
End at: 2018-06-18 13:26:55
Local clock offset: -0.023 ms
Remote clock offset: -0.102 ms

Below is generated by plot.py at 2018-06-18 17:51:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 387.01 Mbit/s
95th percentile per-packet one-way delay: 90.407 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 204.62 Mbit/s
95th percentile per-packet one-way delay: 90.108 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 196.76 Mbit/s
95th percentile per-packet one-way delay: 90.883 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 162.37 Mbit/s
95th percentile per-packet one-way delay: 90.482 ms
Loss rate: 0.02%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-06-18 13:49:57

End at: 2018-06-18 13:50:27

Local clock offset: -0.097 ms

Remote clock offset: 0.037 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.31 Mbit/s

95th percentile per-packet one-way delay: 88.654 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 195.54 Mbit/s

95th percentile per-packet one-way delay: 88.422 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.06 Mbit/s

95th percentile per-packet one-way delay: 88.975 ms

Loss rate: 0.00%

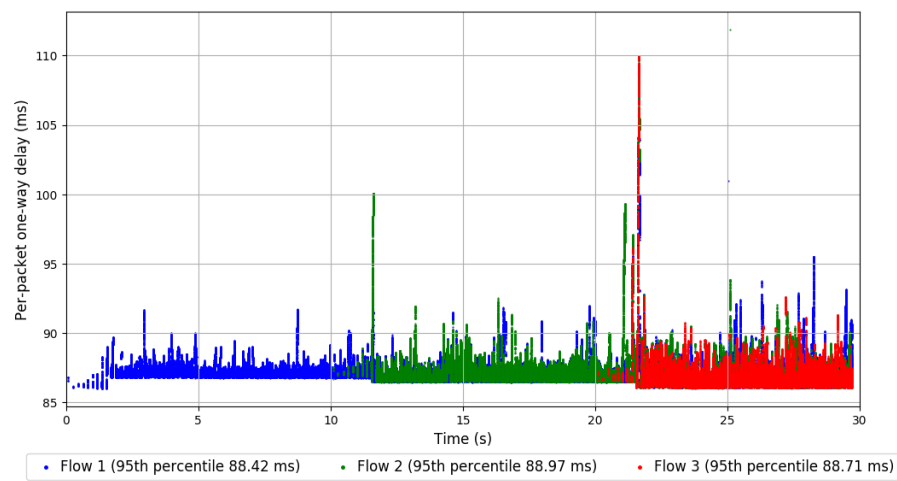
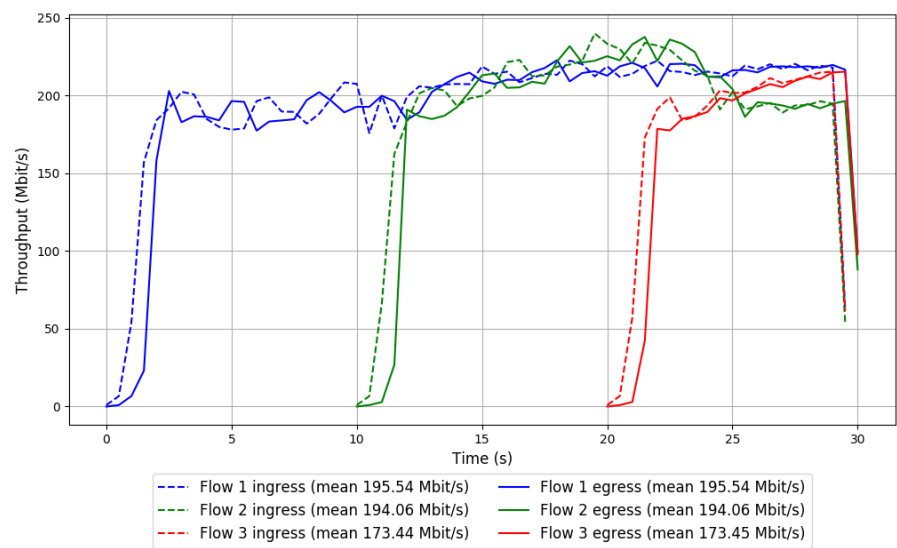
-- Flow 3:

Average throughput: 173.45 Mbit/s

95th percentile per-packet one-way delay: 88.708 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-06-18 14:13:27

End at: 2018-06-18 14:13:57

Local clock offset: -0.006 ms

Remote clock offset: 0.15 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 377.92 Mbit/s

95th percentile per-packet one-way delay: 90.288 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 197.27 Mbit/s

95th percentile per-packet one-way delay: 89.661 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 188.06 Mbit/s

95th percentile per-packet one-way delay: 90.637 ms

Loss rate: 0.08%

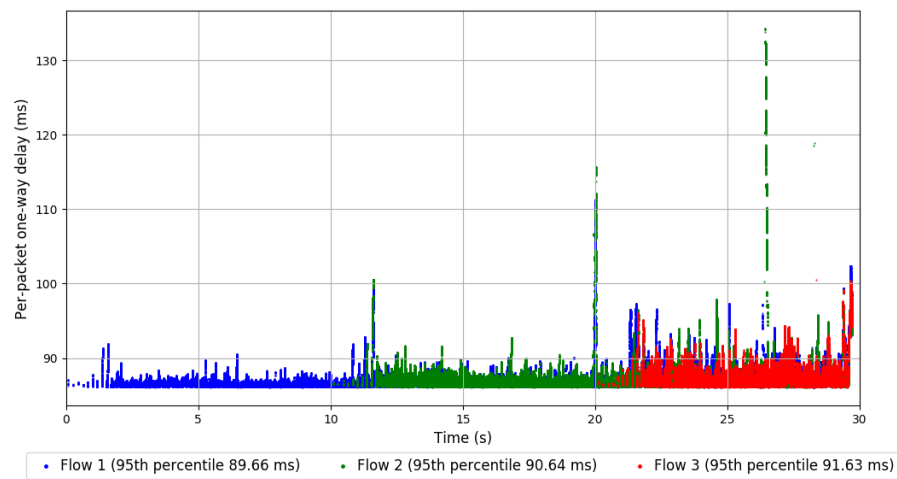
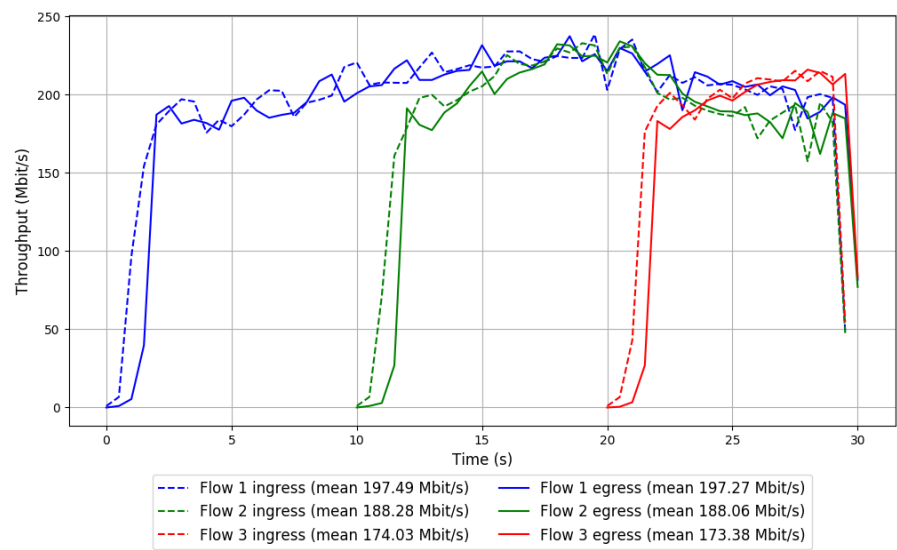
-- Flow 3:

Average throughput: 173.38 Mbit/s

95th percentile per-packet one-way delay: 91.626 ms

Loss rate: 0.30%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-06-18 14:37:04

End at: 2018-06-18 14:37:34

Local clock offset: 0.018 ms

Remote clock offset: 0.079 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 377.52 Mbit/s

95th percentile per-packet one-way delay: 90.073 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 197.85 Mbit/s

95th percentile per-packet one-way delay: 89.014 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 190.40 Mbit/s

95th percentile per-packet one-way delay: 91.206 ms

Loss rate: 0.22%

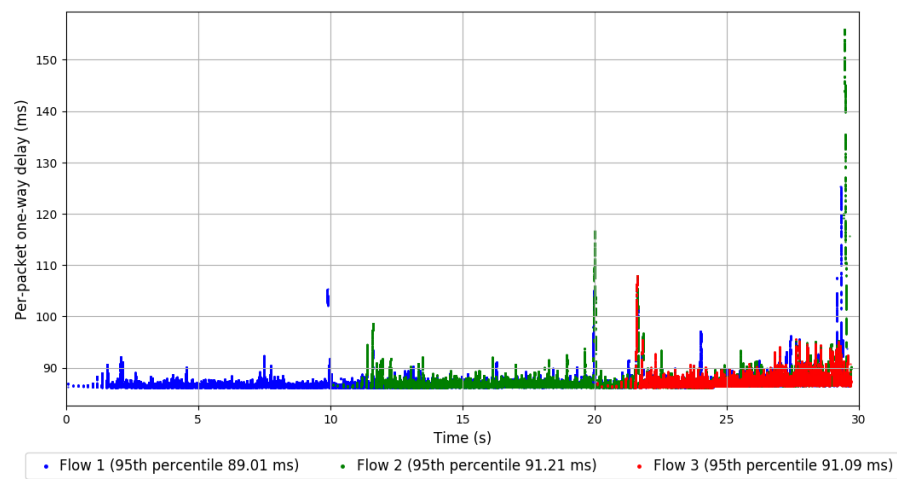
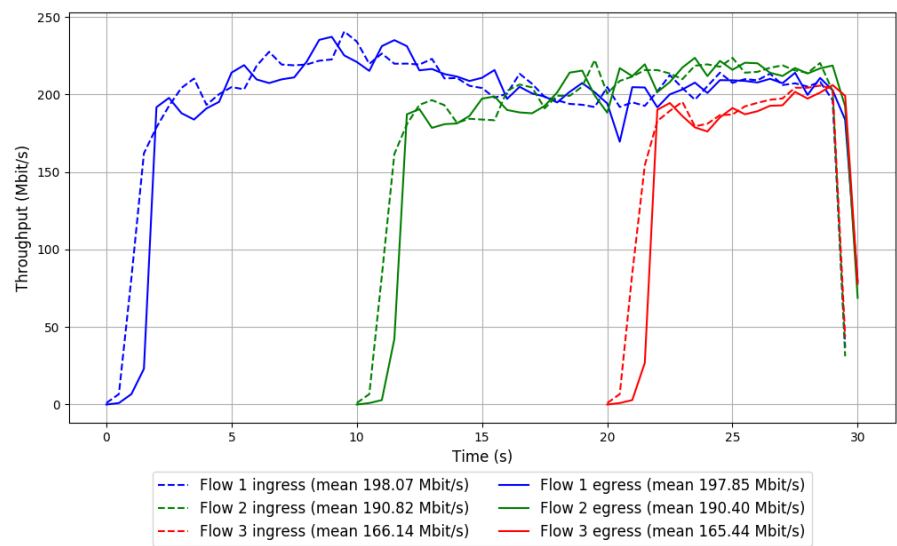
-- Flow 3:

Average throughput: 165.44 Mbit/s

95th percentile per-packet one-way delay: 91.094 ms

Loss rate: 0.41%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-06-18 15:00:39

End at: 2018-06-18 15:01:09

Local clock offset: 0.053 ms

Remote clock offset: 0.006 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 369.17 Mbit/s

95th percentile per-packet one-way delay: 93.884 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 197.01 Mbit/s

95th percentile per-packet one-way delay: 92.276 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 186.80 Mbit/s

95th percentile per-packet one-way delay: 94.613 ms

Loss rate: 0.06%

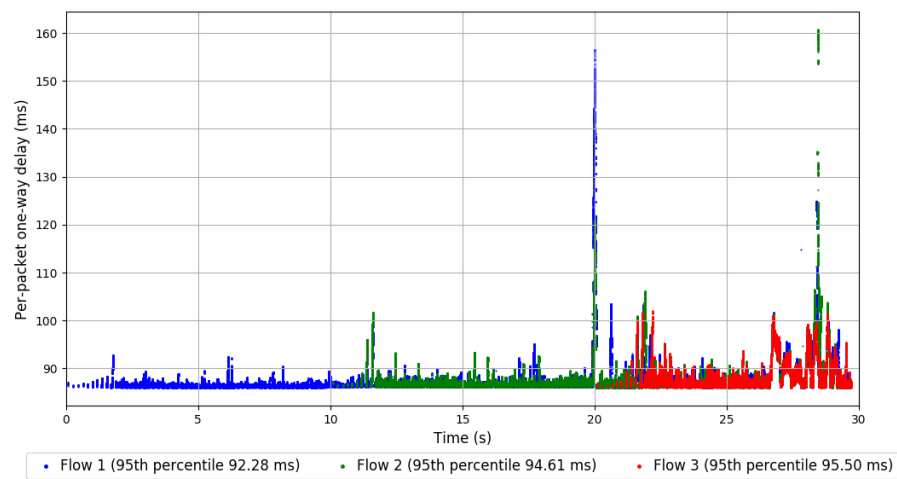
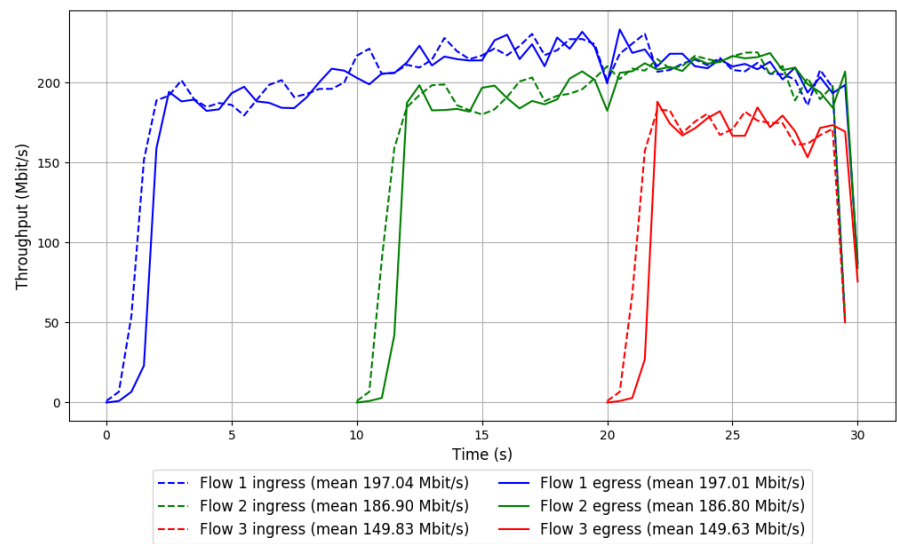
-- Flow 3:

Average throughput: 149.63 Mbit/s

95th percentile per-packet one-way delay: 95.497 ms

Loss rate: 0.14%

Run 6: Report of Indigo — Data Link

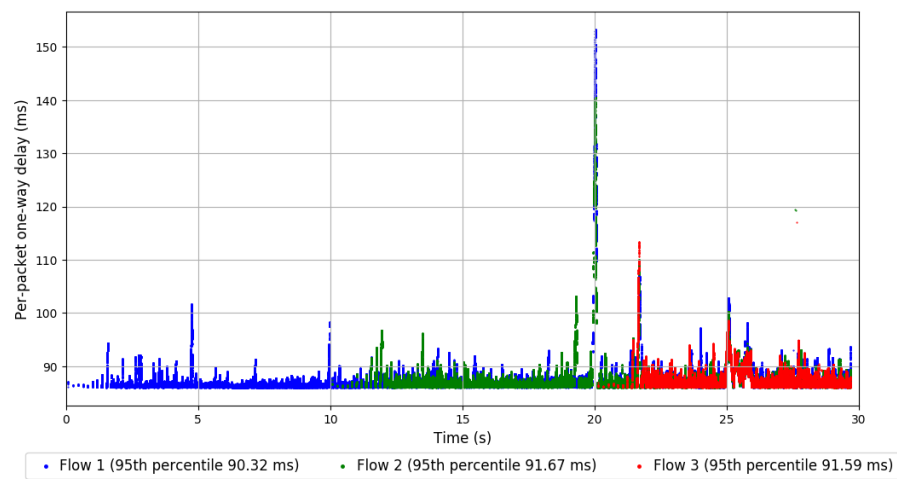
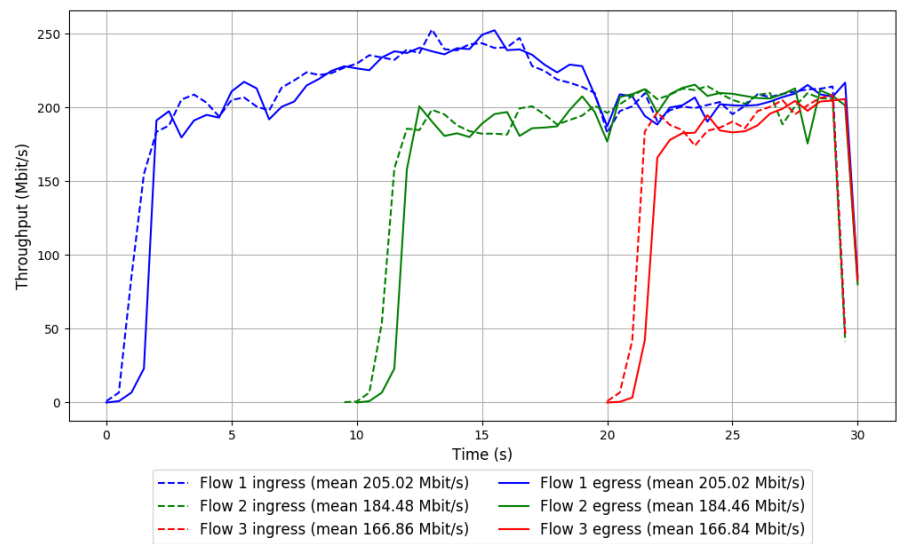


Run 7: Statistics of Indigo

Start at: 2018-06-18 15:24:13
End at: 2018-06-18 15:24:43
Local clock offset: 0.024 ms
Remote clock offset: -0.126 ms

Below is generated by plot.py at 2018-06-18 17:51:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 380.97 Mbit/s
95th percentile per-packet one-way delay: 90.991 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 205.02 Mbit/s
95th percentile per-packet one-way delay: 90.321 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 184.46 Mbit/s
95th percentile per-packet one-way delay: 91.665 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 166.84 Mbit/s
95th percentile per-packet one-way delay: 91.589 ms
Loss rate: 0.02%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-06-18 15:47:45

End at: 2018-06-18 15:48:15

Local clock offset: 0.071 ms

Remote clock offset: 0.313 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 372.37 Mbit/s

95th percentile per-packet one-way delay: 93.678 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 197.96 Mbit/s

95th percentile per-packet one-way delay: 92.089 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.66 Mbit/s

95th percentile per-packet one-way delay: 94.930 ms

Loss rate: 0.01%

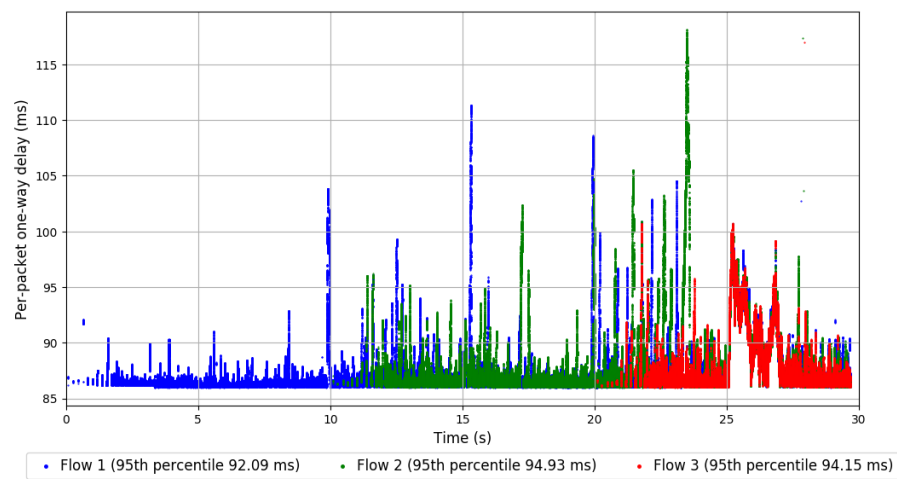
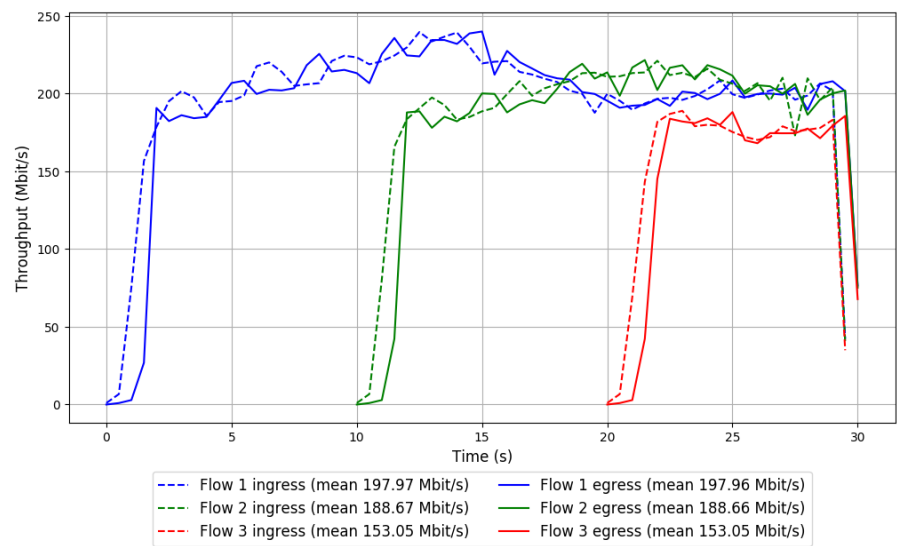
-- Flow 3:

Average throughput: 153.05 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-06-18 16:11:23

End at: 2018-06-18 16:11:53

Local clock offset: 0.006 ms

Remote clock offset: 0.359 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 371.44 Mbit/s

95th percentile per-packet one-way delay: 96.372 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 197.69 Mbit/s

95th percentile per-packet one-way delay: 94.174 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 183.28 Mbit/s

95th percentile per-packet one-way delay: 97.027 ms

Loss rate: 0.01%

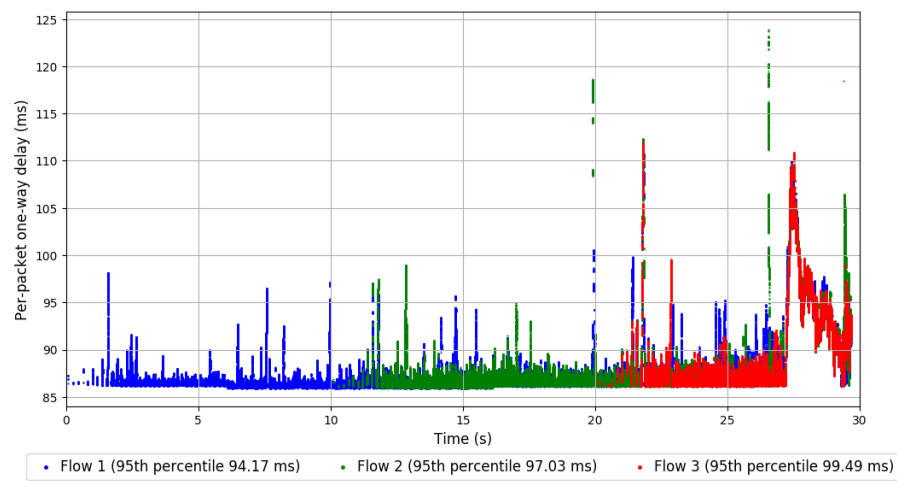
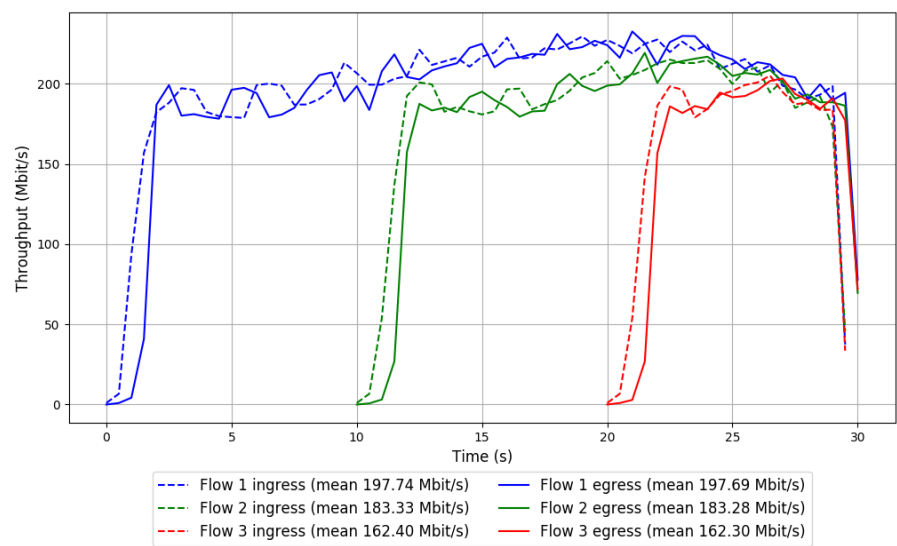
-- Flow 3:

Average throughput: 162.30 Mbit/s

95th percentile per-packet one-way delay: 99.493 ms

Loss rate: 0.01%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-06-18 16:35:05

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

Local clock offset: 0.036 ms

Remote clock offset: 0.517 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 371.28 Mbit/s

95th percentile per-packet one-way delay: 92.318 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 199.58 Mbit/s

95th percentile per-packet one-way delay: 91.909 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 187.75 Mbit/s

95th percentile per-packet one-way delay: 92.679 ms

Loss rate: 0.08%

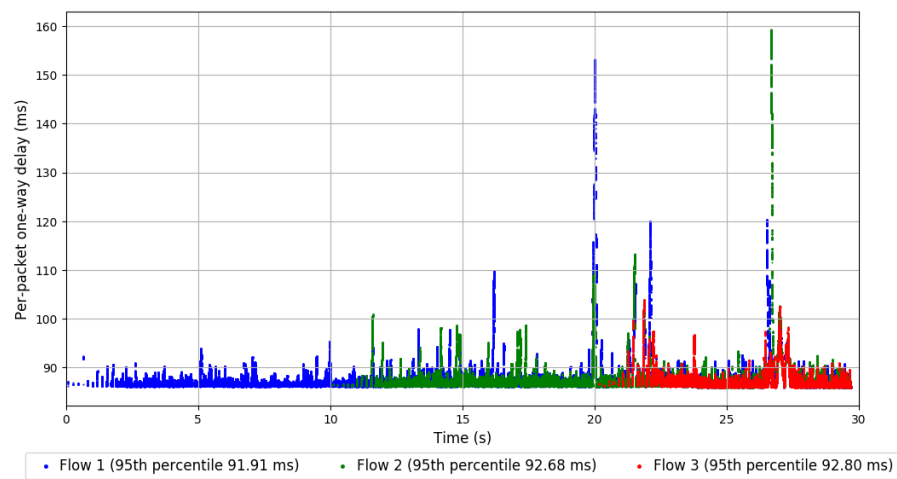
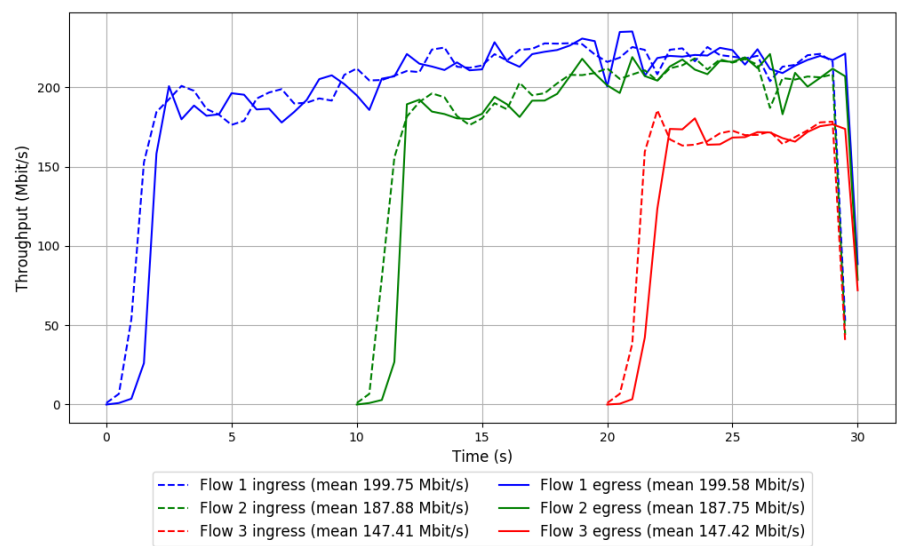
-- Flow 3:

Average throughput: 147.42 Mbit/s

95th percentile per-packet one-way delay: 92.796 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

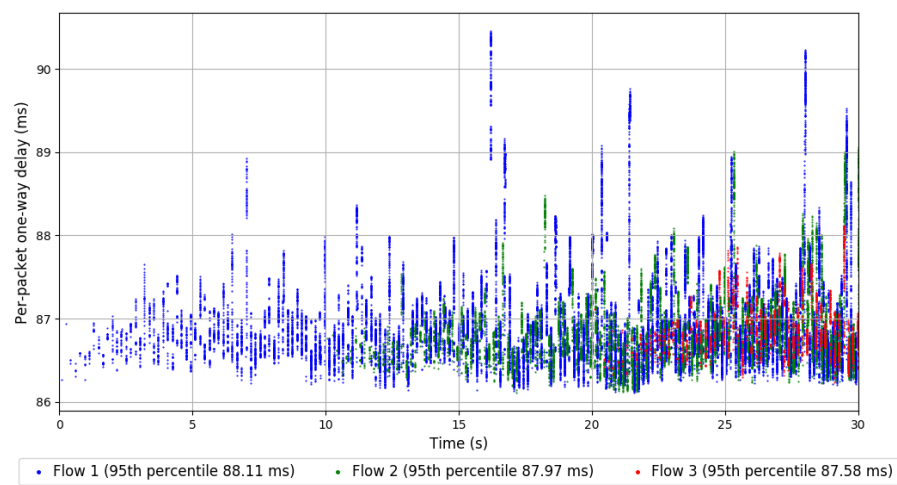
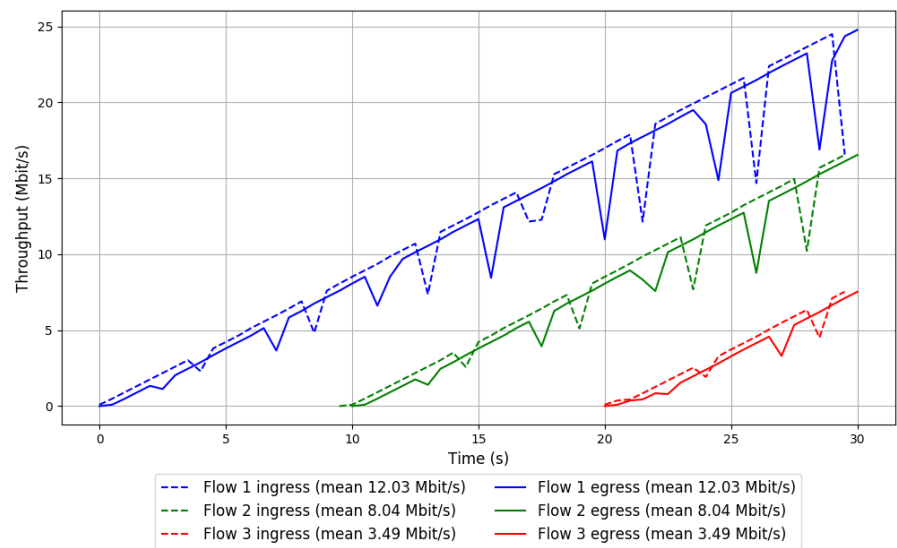


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-18 13:01:27
End at: 2018-06-18 13:01:57
Local clock offset: 0.019 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2018-06-18 17:51:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.50 Mbit/s
95th percentile per-packet one-way delay: 87.996 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 88.107 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.04 Mbit/s
95th percentile per-packet one-way delay: 87.975 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 87.578 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

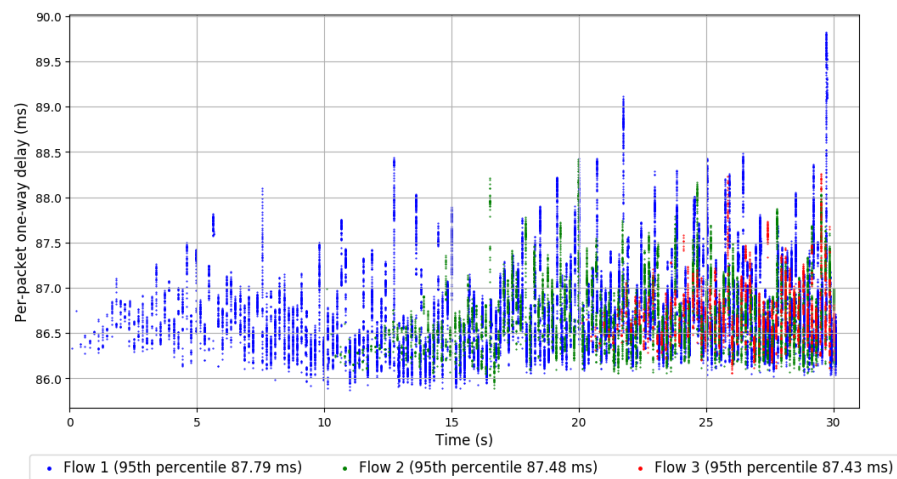
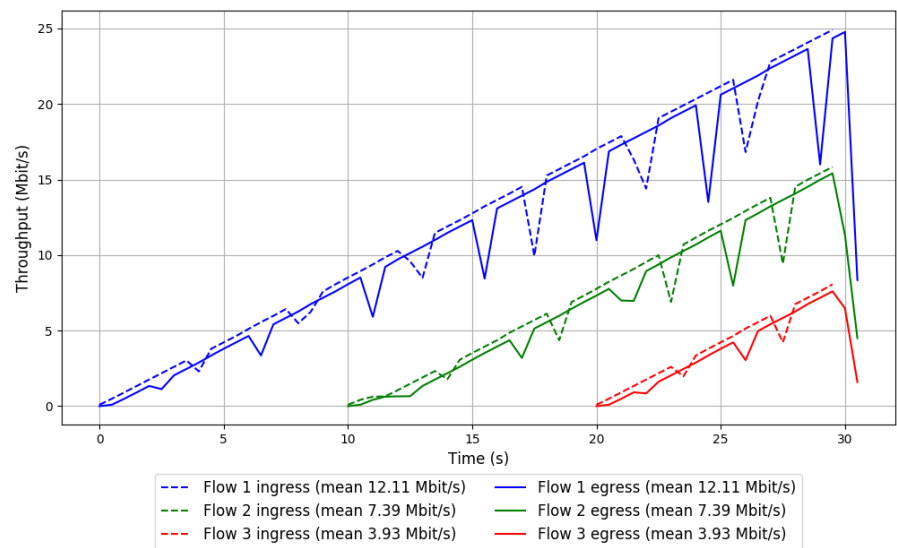


Run 2: Statistics of LEDBAT

Start at: 2018-06-18 13:25:12
End at: 2018-06-18 13:25:42
Local clock offset: 0.062 ms
Remote clock offset: -0.097 ms

Below is generated by plot.py at 2018-06-18 17:51:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.32 Mbit/s
95th percentile per-packet one-way delay: 87.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.11 Mbit/s
95th percentile per-packet one-way delay: 87.791 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 87.483 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 87.430 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-06-18 13:48:45

End at: 2018-06-18 13:49:15

Local clock offset: -0.184 ms

Remote clock offset: 0.012 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.43 Mbit/s

95th percentile per-packet one-way delay: 87.917 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.94 Mbit/s

95th percentile per-packet one-way delay: 87.986 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 87.881 ms

Loss rate: 0.00%

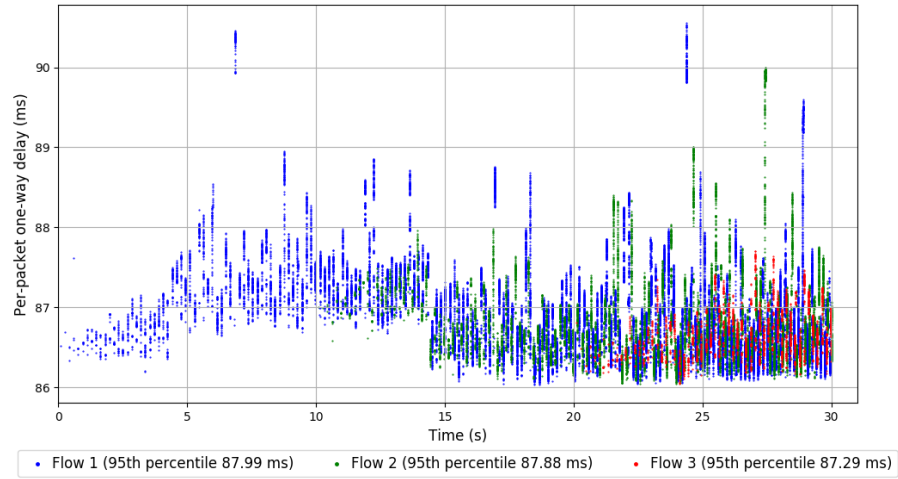
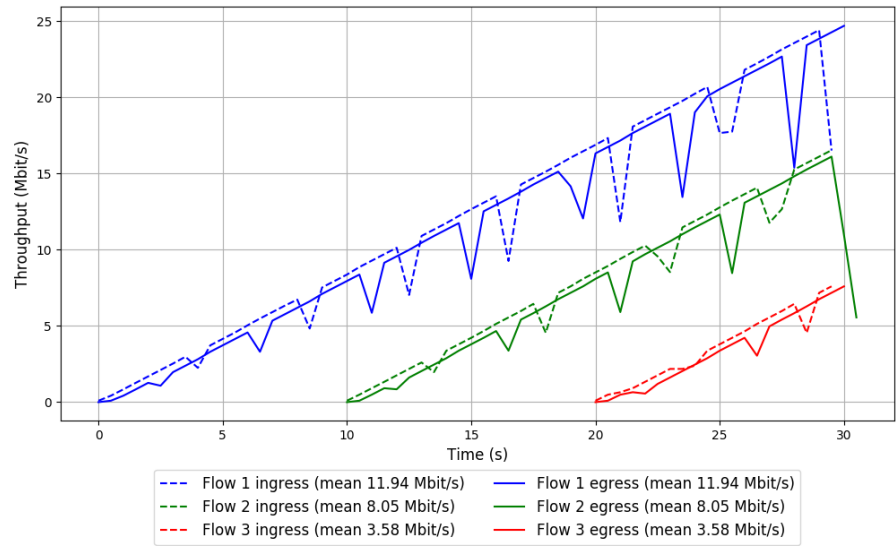
-- Flow 3:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 87.288 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-06-18 14:12:14

End at: 2018-06-18 14:12:44

Local clock offset: -0.149 ms

Remote clock offset: 0.179 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.76 Mbit/s

95th percentile per-packet one-way delay: 87.877 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.12 Mbit/s

95th percentile per-packet one-way delay: 87.975 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.03 Mbit/s

95th percentile per-packet one-way delay: 87.795 ms

Loss rate: 0.00%

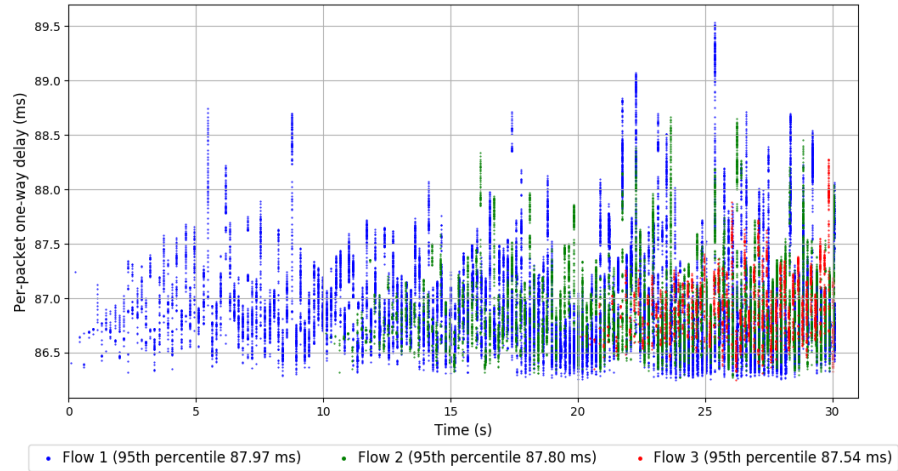
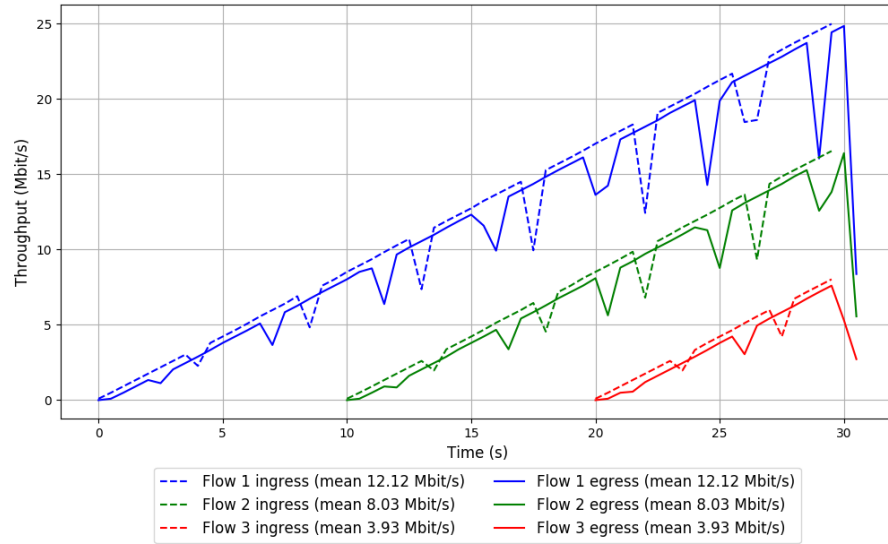
-- Flow 3:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 87.536 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-06-18 14:35:52

End at: 2018-06-18 14:36:22

Local clock offset: 0.075 ms

Remote clock offset: 0.075 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.67 Mbit/s

95th percentile per-packet one-way delay: 87.974 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.05 Mbit/s

95th percentile per-packet one-way delay: 88.081 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.03 Mbit/s

95th percentile per-packet one-way delay: 87.875 ms

Loss rate: 0.00%

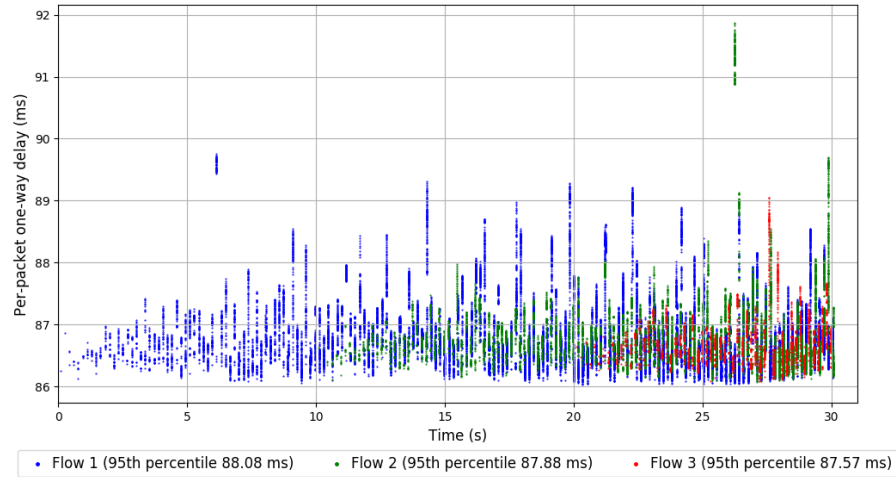
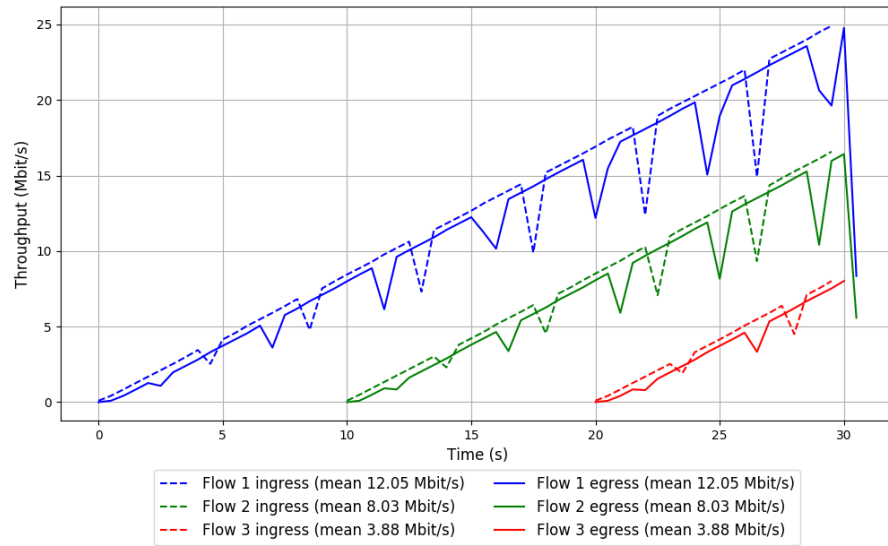
-- Flow 3:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 87.573 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-06-18 14:59:26

End at: 2018-06-18 14:59:57

Local clock offset: 0.109 ms

Remote clock offset: 0.076 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.61 Mbit/s

95th percentile per-packet one-way delay: 87.494 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 87.649 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.06 Mbit/s

95th percentile per-packet one-way delay: 87.278 ms

Loss rate: 0.00%

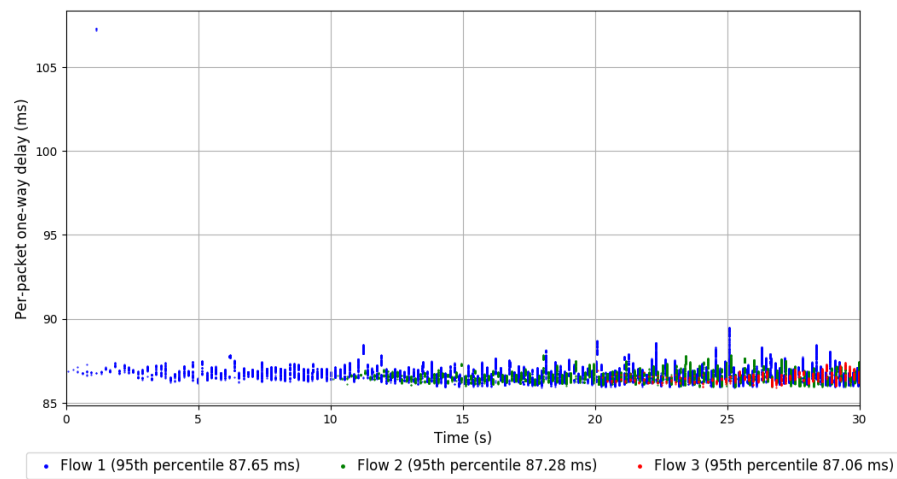
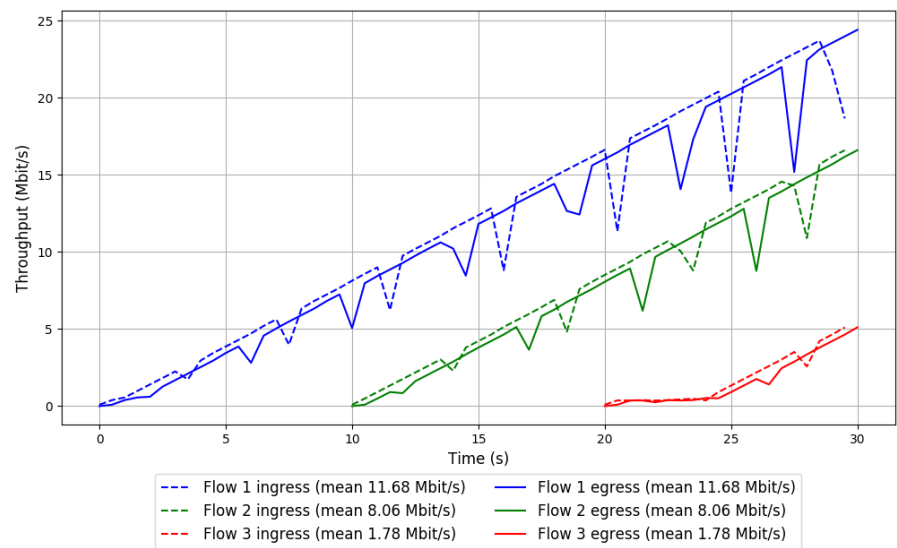
-- Flow 3:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 87.062 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link

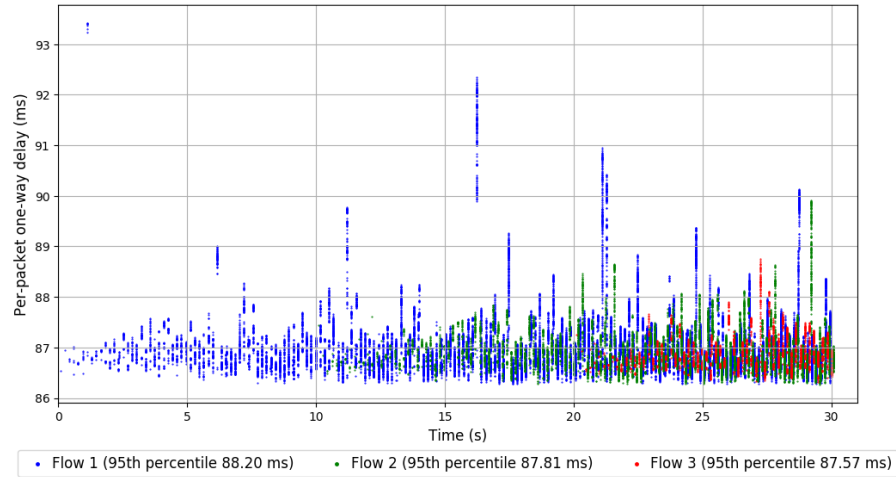
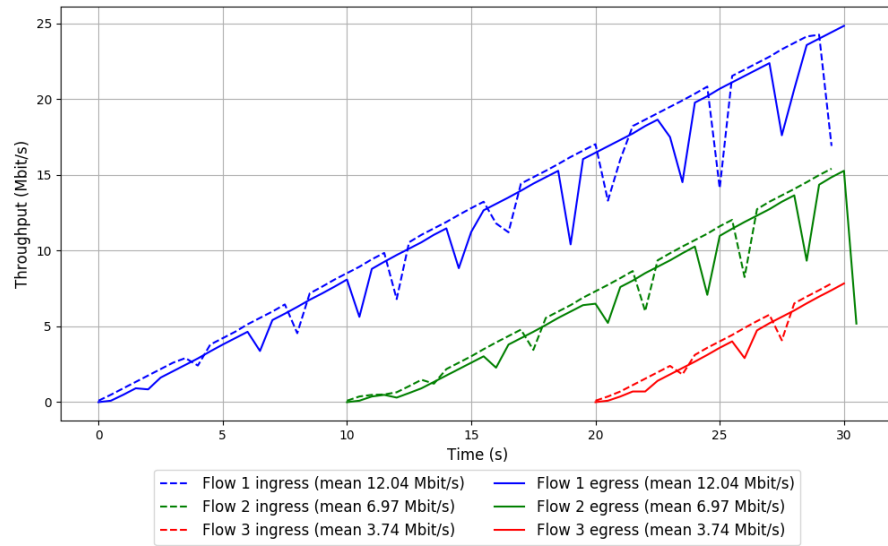


Run 7: Statistics of LEDBAT

Start at: 2018-06-18 15:23:00
End at: 2018-06-18 15:23:30
Local clock offset: -0.291 ms
Remote clock offset: -0.162 ms

Below is generated by plot.py at 2018-06-18 17:51:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 17.86 Mbit/s
95th percentile per-packet one-way delay: 87.988 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.04 Mbit/s
95th percentile per-packet one-way delay: 88.197 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 87.811 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 87.566 ms
Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-06-18 15:46:33

End at: 2018-06-18 15:47:03

Local clock offset: 0.062 ms

Remote clock offset: 0.186 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.48 Mbit/s

95th percentile per-packet one-way delay: 88.410 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 88.588 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 88.093 ms

Loss rate: 0.00%

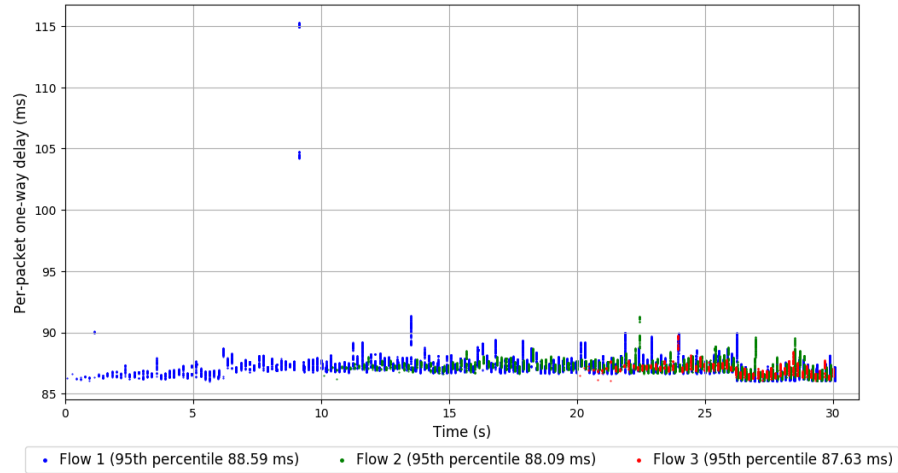
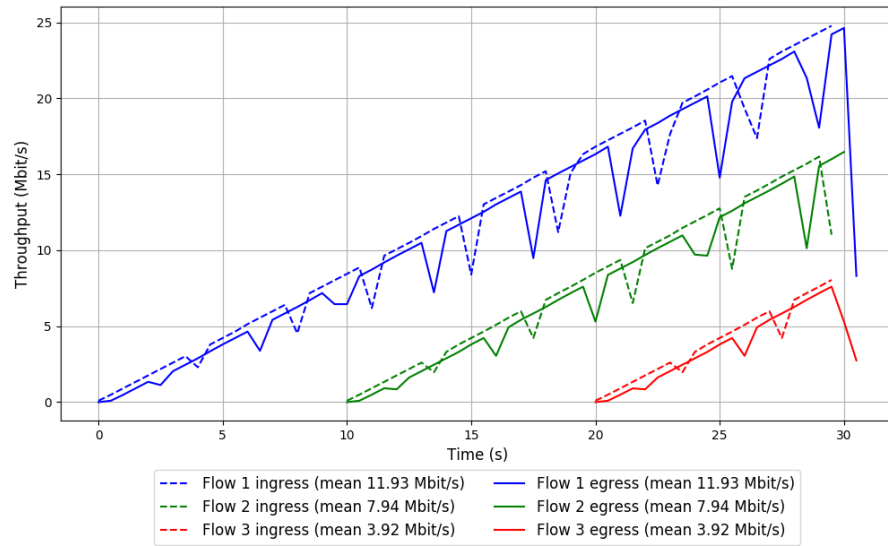
-- Flow 3:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 87.632 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-06-18 16:10:10

End at: 2018-06-18 16:10:40

Local clock offset: 0.137 ms

Remote clock offset: 0.443 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.15 Mbit/s

95th percentile per-packet one-way delay: 87.759 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.06 Mbit/s

95th percentile per-packet one-way delay: 87.824 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.48 Mbit/s

95th percentile per-packet one-way delay: 87.689 ms

Loss rate: 0.00%

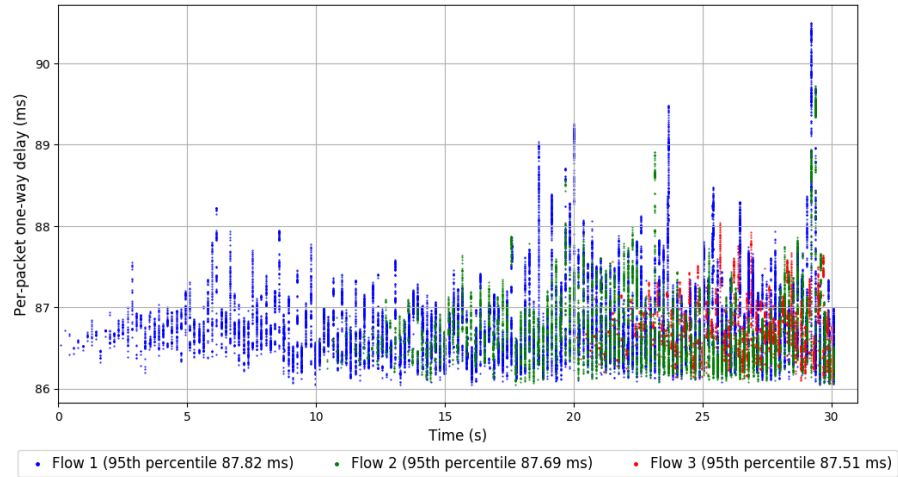
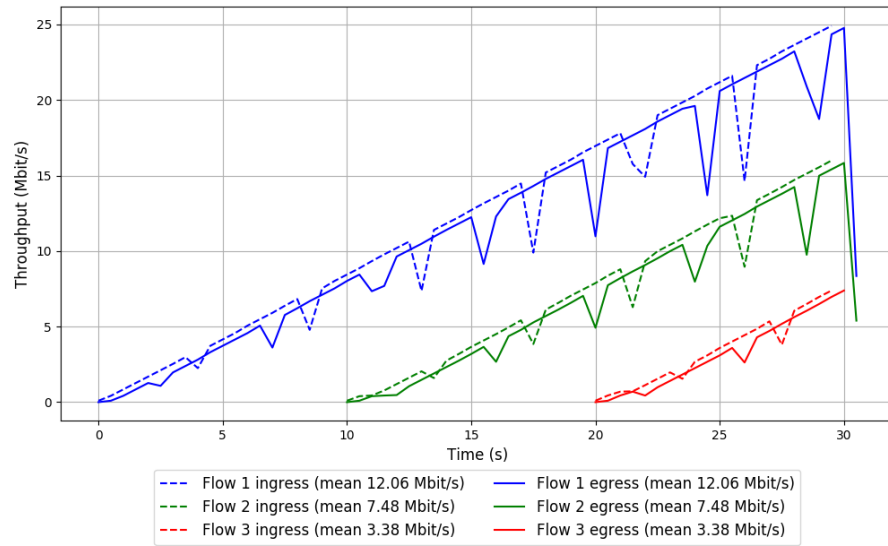
-- Flow 3:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 87.510 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

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

End at: 2018-06-18 16:34:23

Local clock offset: 0.215 ms

Remote clock offset: 0.557 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.62 Mbit/s

95th percentile per-packet one-way delay: 87.722 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.03 Mbit/s

95th percentile per-packet one-way delay: 87.785 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.02 Mbit/s

95th percentile per-packet one-way delay: 87.677 ms

Loss rate: 0.00%

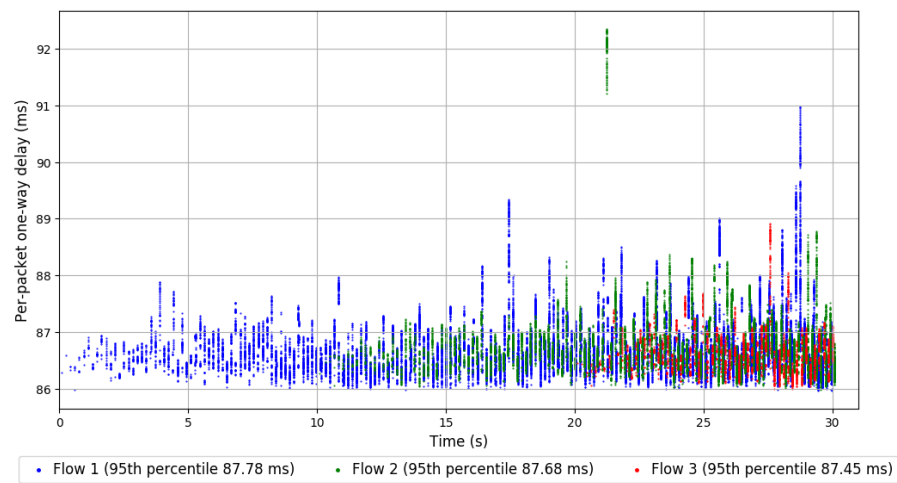
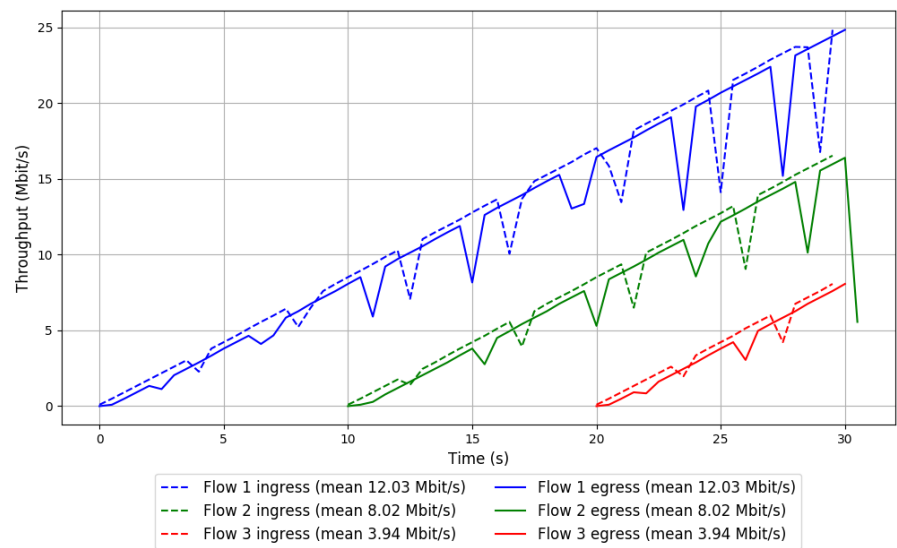
-- Flow 3:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 87.454 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

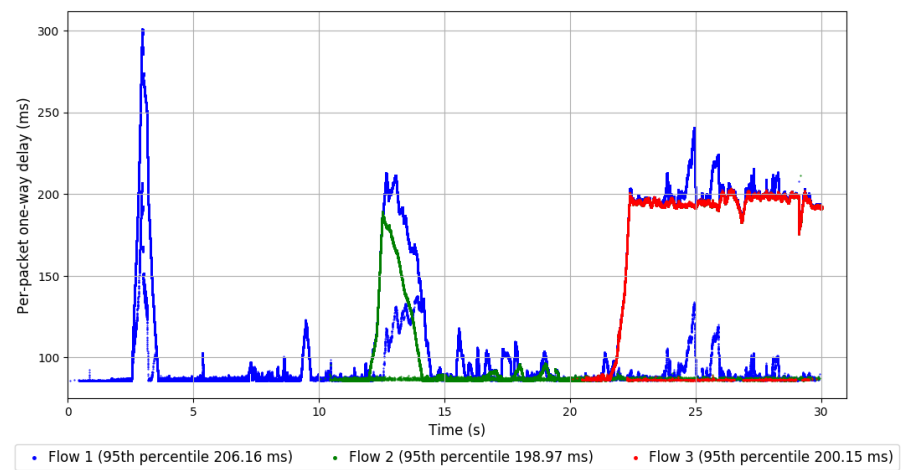
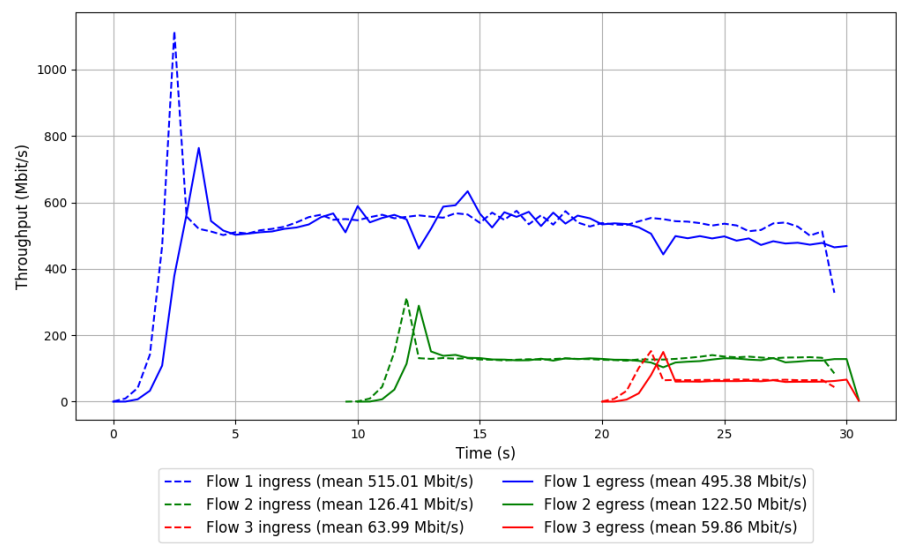


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-18 12:46:10
End at: 2018-06-18 12:46:40
Local clock offset: 0.111 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-06-18 17:51:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 596.05 Mbit/s
95th percentile per-packet one-way delay: 203.930 ms
Loss rate: 3.55%
-- Flow 1:
Average throughput: 495.38 Mbit/s
95th percentile per-packet one-way delay: 206.160 ms
Loss rate: 3.63%
-- Flow 2:
Average throughput: 122.50 Mbit/s
95th percentile per-packet one-way delay: 198.967 ms
Loss rate: 2.58%
-- Flow 3:
Average throughput: 59.86 Mbit/s
95th percentile per-packet one-way delay: 200.153 ms
Loss rate: 5.45%
```


Run 1: Report of PCC-Allegro — Data Link

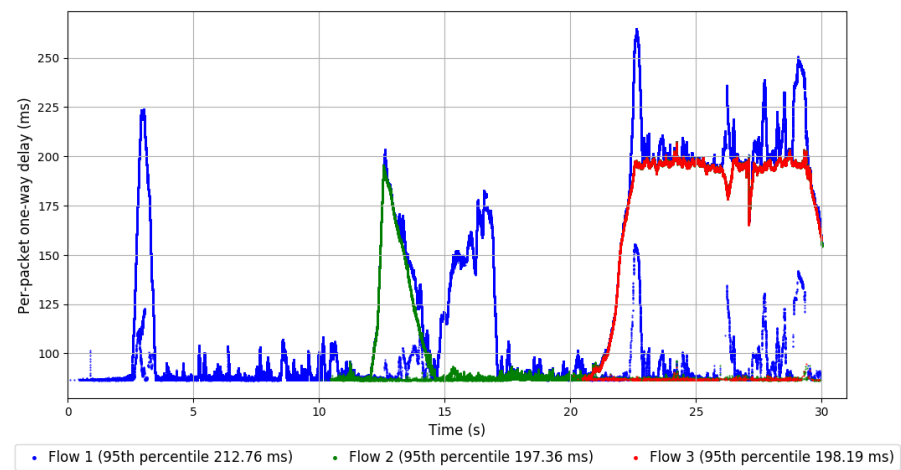
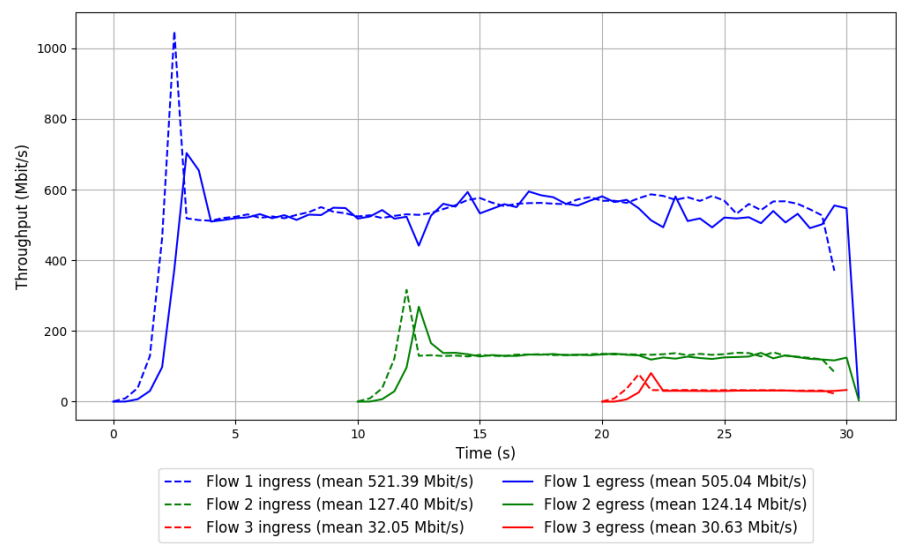


Run 2: Statistics of PCC-Allegro

Start at: 2018-06-18 13:09:50
End at: 2018-06-18 13:10:20
Local clock offset: -0.21 ms
Remote clock offset: -0.085 ms

Below is generated by plot.py at 2018-06-18 17:51:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 597.67 Mbit/s
95th percentile per-packet one-way delay: 209.221 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 505.04 Mbit/s
95th percentile per-packet one-way delay: 212.763 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 124.14 Mbit/s
95th percentile per-packet one-way delay: 197.359 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 30.63 Mbit/s
95th percentile per-packet one-way delay: 198.187 ms
Loss rate: 4.01%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-06-18 13:33:29

End at: 2018-06-18 13:33:59

Local clock offset: 0.079 ms

Remote clock offset: -0.03 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 589.59 Mbit/s

95th percentile per-packet one-way delay: 264.357 ms

Loss rate: 3.88%

-- Flow 1:

Average throughput: 494.31 Mbit/s

95th percentile per-packet one-way delay: 269.018 ms

Loss rate: 4.29%

-- Flow 2:

Average throughput: 127.43 Mbit/s

95th percentile per-packet one-way delay: 195.440 ms

Loss rate: 1.82%

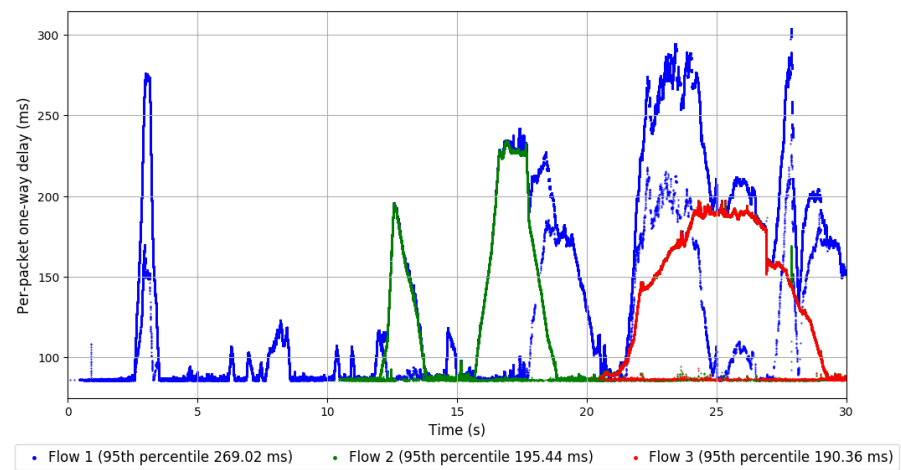
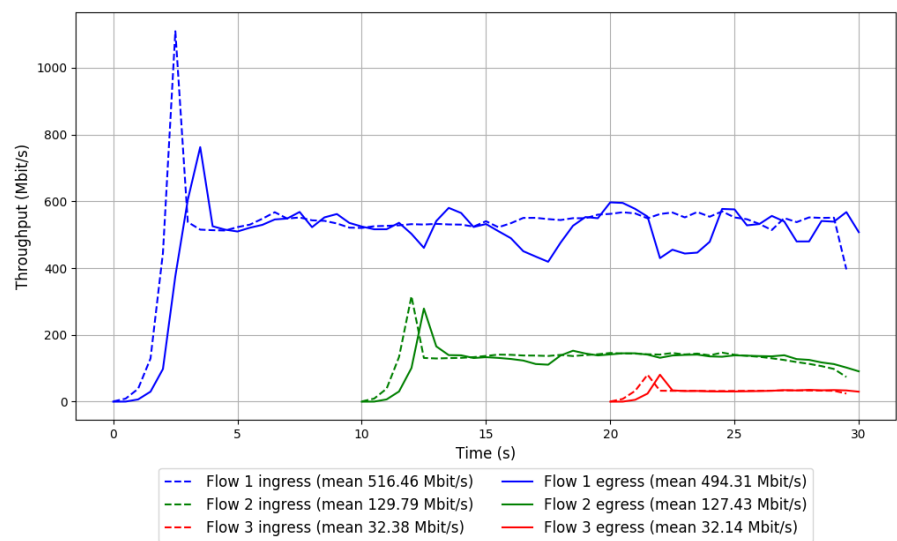
-- Flow 3:

Average throughput: 32.14 Mbit/s

95th percentile per-packet one-way delay: 190.362 ms

Loss rate: 0.76%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-06-18 13:57:03

End at: 2018-06-18 13:57:33

Local clock offset: 0.006 ms

Remote clock offset: 0.086 ms

Below is generated by plot.py at 2018-06-18 17:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 537.74 Mbit/s

95th percentile per-packet one-way delay: 202.972 ms

Loss rate: 4.12%

-- Flow 1:

Average throughput: 499.66 Mbit/s

95th percentile per-packet one-way delay: 202.743 ms

Loss rate: 3.80%

-- Flow 2:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 199.067 ms

Loss rate: 5.52%

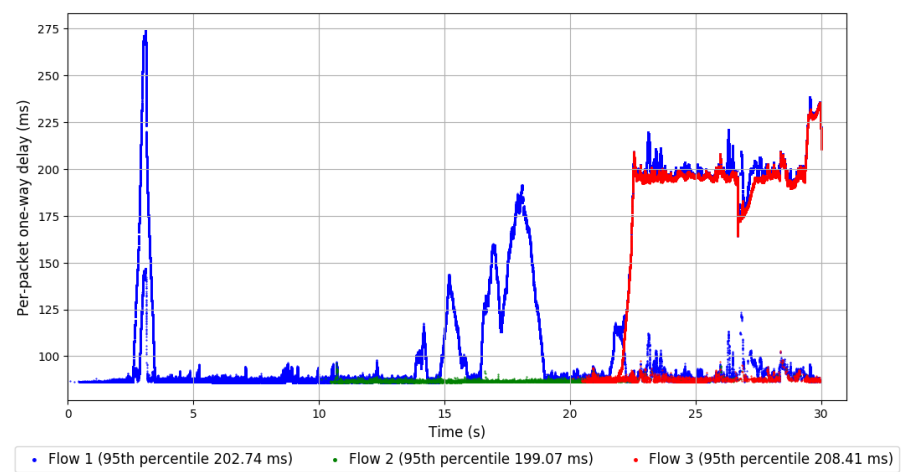
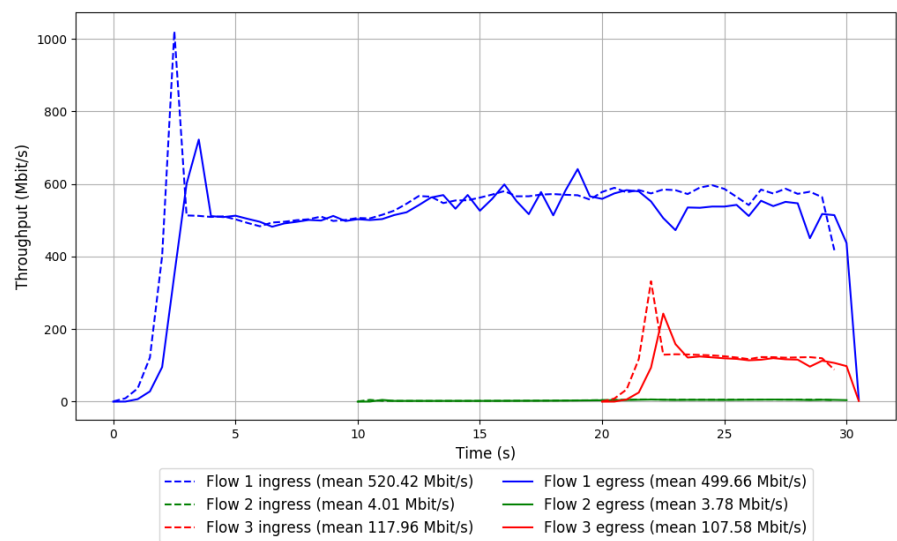
-- Flow 3:

Average throughput: 107.58 Mbit/s

95th percentile per-packet one-way delay: 208.410 ms

Loss rate: 8.26%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-06-18 14:20:33

End at: 2018-06-18 14:21:03

Local clock offset: 0.041 ms

Remote clock offset: 0.256 ms

Below is generated by plot.py at 2018-06-18 17:51:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 582.14 Mbit/s

95th percentile per-packet one-way delay: 261.065 ms

Loss rate: 3.79%

-- Flow 1:

Average throughput: 501.06 Mbit/s

95th percentile per-packet one-way delay: 265.049 ms

Loss rate: 3.80%

-- Flow 2:

Average throughput: 119.99 Mbit/s

95th percentile per-packet one-way delay: 198.158 ms

Loss rate: 3.73%

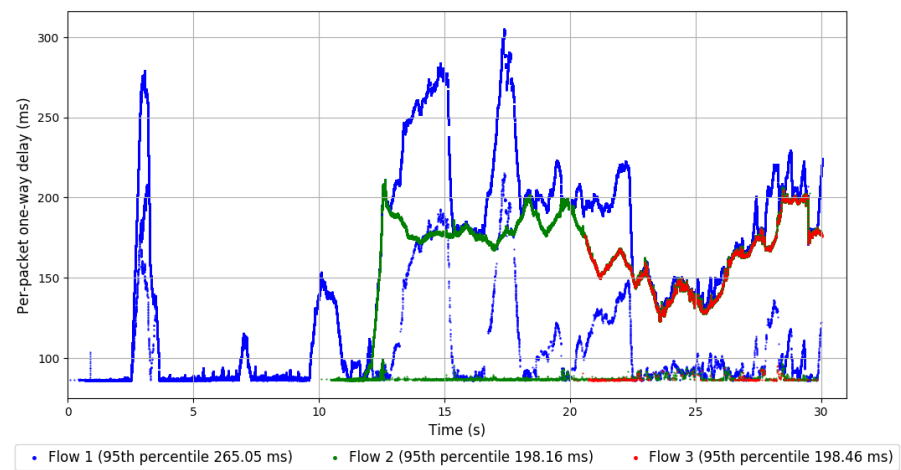
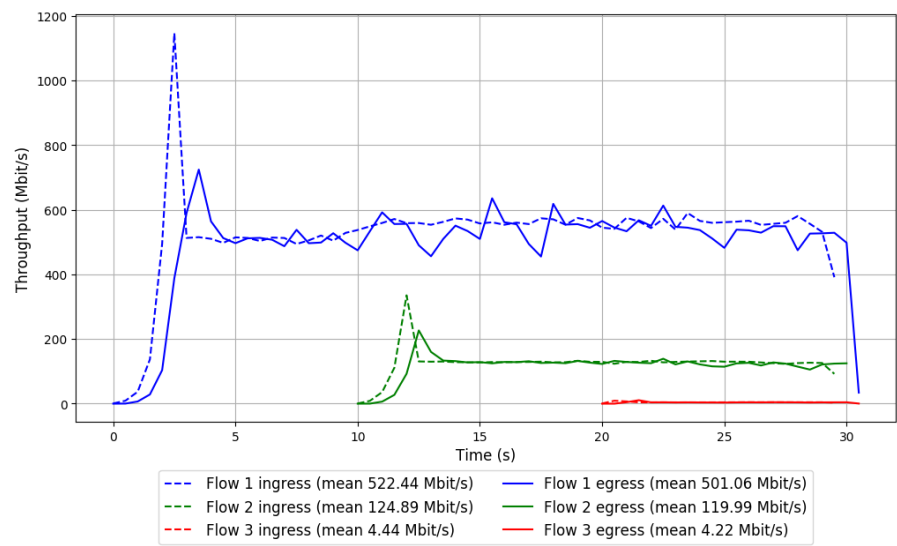
-- Flow 3:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 198.455 ms

Loss rate: 4.06%

Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-06-18 14:44:14

End at: 2018-06-18 14:44:44

Local clock offset: 0.145 ms

Remote clock offset: 0.005 ms

Below is generated by plot.py at 2018-06-18 17:51:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 496.57 Mbit/s

95th percentile per-packet one-way delay: 180.978 ms

Loss rate: 3.16%

-- Flow 1:

Average throughput: 489.68 Mbit/s

95th percentile per-packet one-way delay: 181.220 ms

Loss rate: 3.20%

-- Flow 2:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 88.906 ms

Loss rate: 0.78%

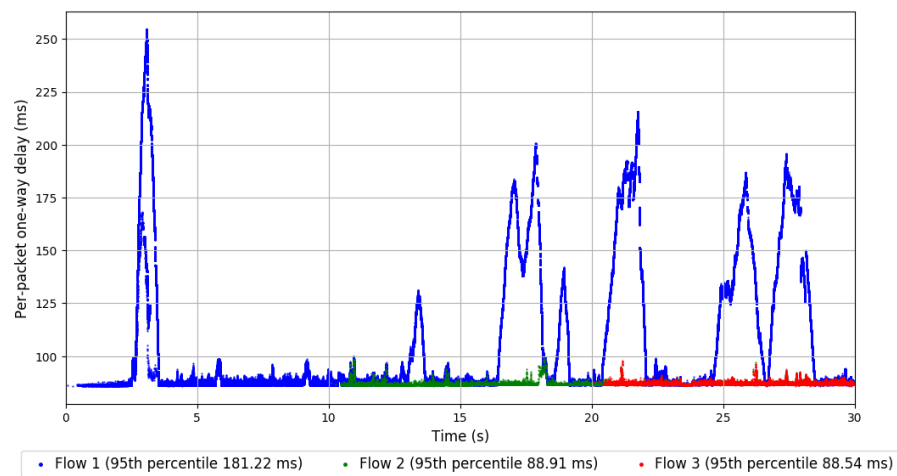
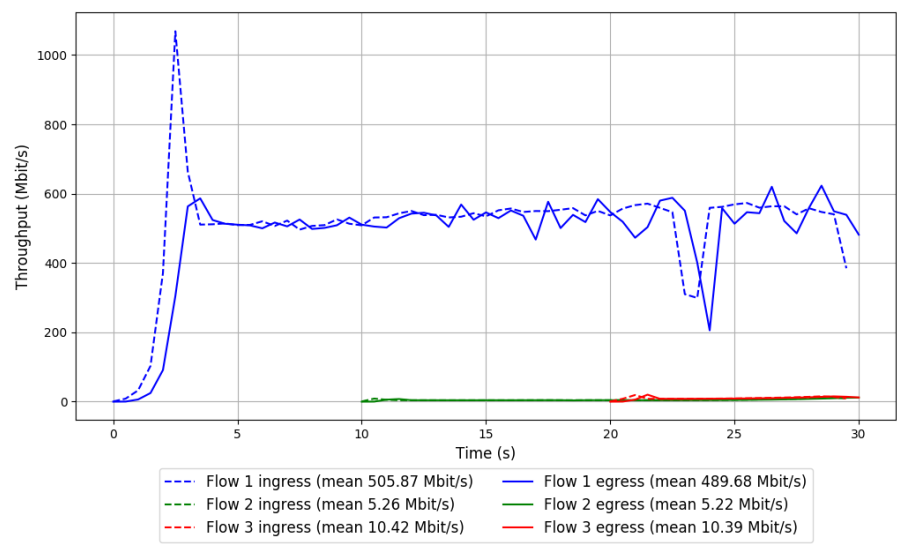
-- Flow 3:

Average throughput: 10.39 Mbit/s

95th percentile per-packet one-way delay: 88.542 ms

Loss rate: 0.31%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-06-18 15:07:48

End at: 2018-06-18 15:08:18

Local clock offset: 0.003 ms

Remote clock offset: -0.09 ms

Below is generated by plot.py at 2018-06-18 17:56:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 548.94 Mbit/s

95th percentile per-packet one-way delay: 221.326 ms

Loss rate: 3.62%

-- Flow 1:

Average throughput: 465.89 Mbit/s

95th percentile per-packet one-way delay: 221.563 ms

Loss rate: 3.53%

-- Flow 2:

Average throughput: 124.06 Mbit/s

95th percentile per-packet one-way delay: 220.458 ms

Loss rate: 4.08%

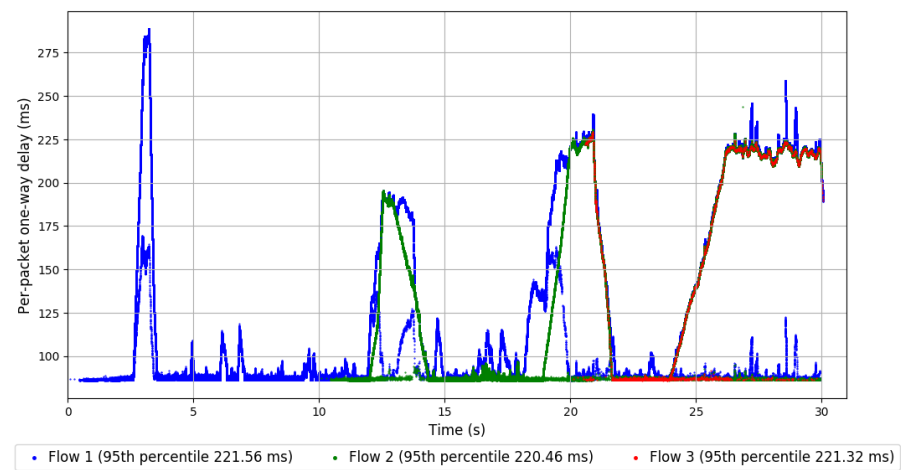
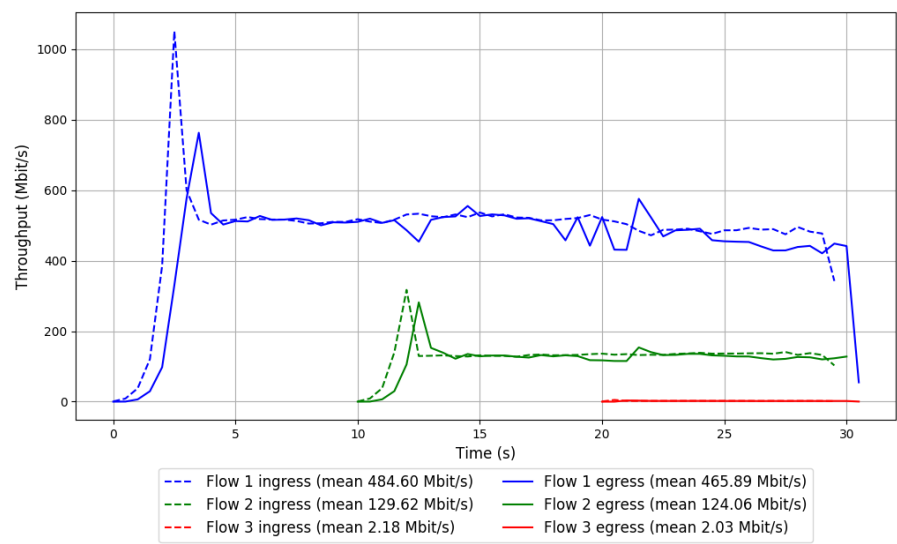
-- Flow 3:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 221.323 ms

Loss rate: 5.55%

Run 7: Report of PCC-Allegro — Data Link

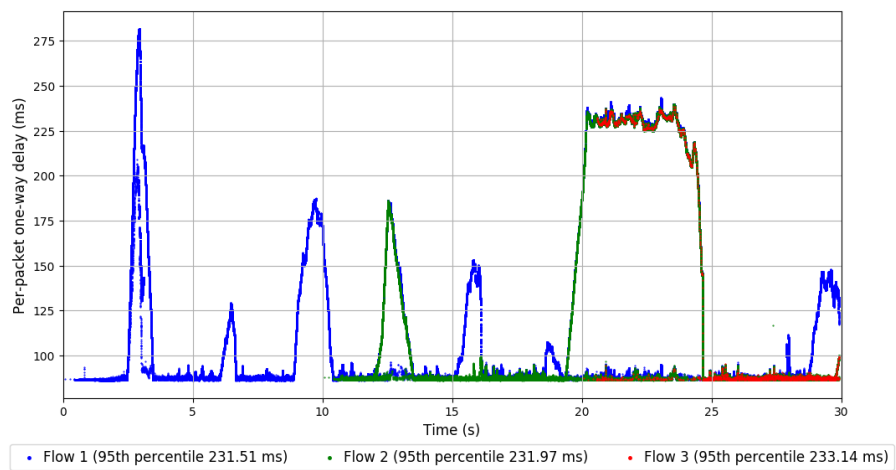
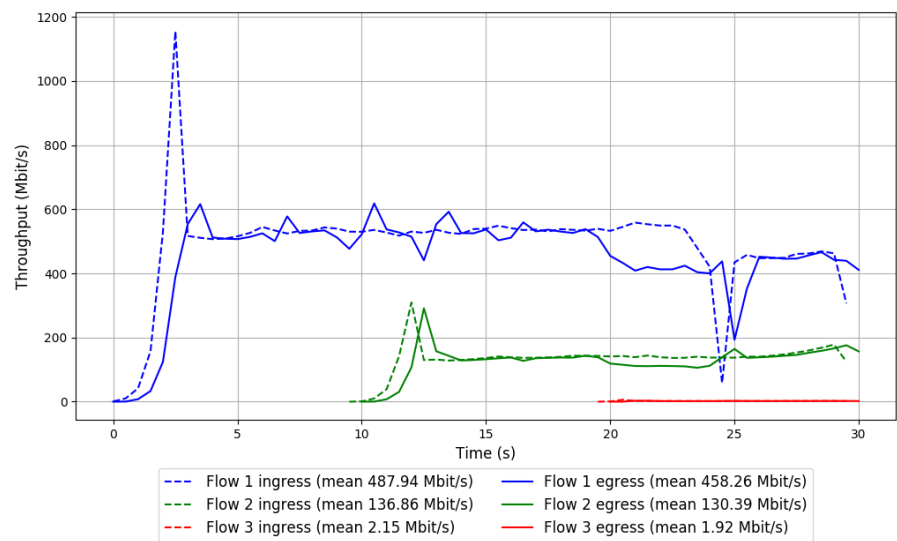


Run 8: Statistics of PCC-Allegro

Start at: 2018-06-18 15:31:15
End at: 2018-06-18 15:31:45
Local clock offset: -0.255 ms
Remote clock offset: -0.124 ms

Below is generated by plot.py at 2018-06-18 17:57:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 545.67 Mbit/s
95th percentile per-packet one-way delay: 231.631 ms
Loss rate: 5.84%
-- Flow 1:
Average throughput: 458.26 Mbit/s
95th percentile per-packet one-way delay: 231.510 ms
Loss rate: 6.05%
-- Flow 2:
Average throughput: 130.39 Mbit/s
95th percentile per-packet one-way delay: 231.971 ms
Loss rate: 4.67%
-- Flow 3:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 233.142 ms
Loss rate: 10.84%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-06-18 15:54:55

End at: 2018-06-18 15:55:25

Local clock offset: 0.041 ms

Remote clock offset: 0.307 ms

Below is generated by plot.py at 2018-06-18 17:57:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 523.17 Mbit/s

95th percentile per-packet one-way delay: 223.000 ms

Loss rate: 3.33%

-- Flow 1:

Average throughput: 450.25 Mbit/s

95th percentile per-packet one-way delay: 223.039 ms

Loss rate: 3.39%

-- Flow 2:

Average throughput: 108.26 Mbit/s

95th percentile per-packet one-way delay: 222.879 ms

Loss rate: 2.96%

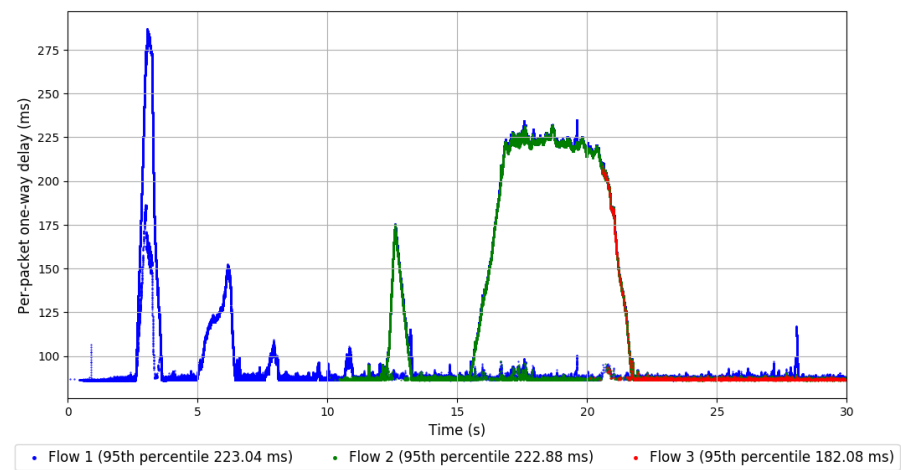
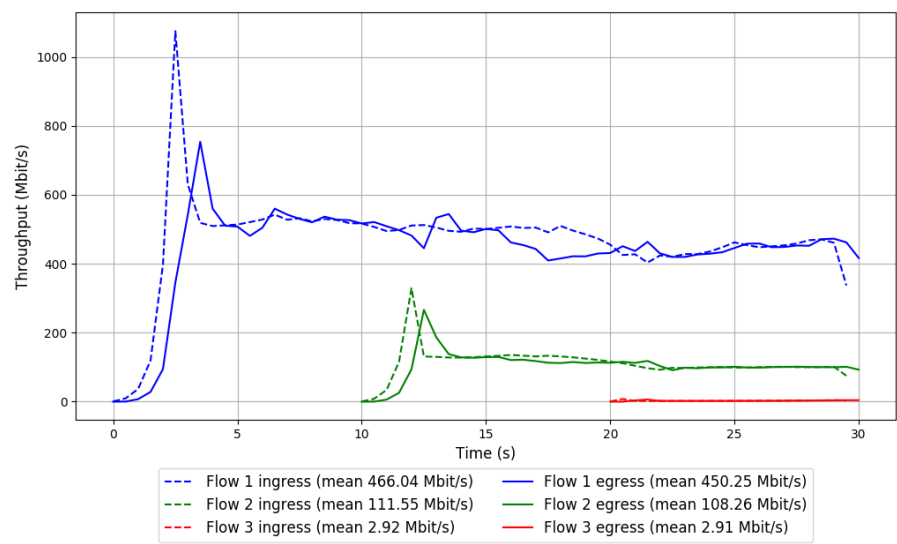
-- Flow 3:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 182.078 ms

Loss rate: 0.42%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

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

End at: 2018-06-18 16:19:04

Local clock offset: -0.035 ms

Remote clock offset: 0.471 ms

Below is generated by plot.py at 2018-06-18 17:59:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 566.12 Mbit/s

95th percentile per-packet one-way delay: 230.762 ms

Loss rate: 3.60%

-- Flow 1:

Average throughput: 463.55 Mbit/s

95th percentile per-packet one-way delay: 233.031 ms

Loss rate: 4.02%

-- Flow 2:

Average throughput: 123.74 Mbit/s

95th percentile per-packet one-way delay: 209.796 ms

Loss rate: 1.80%

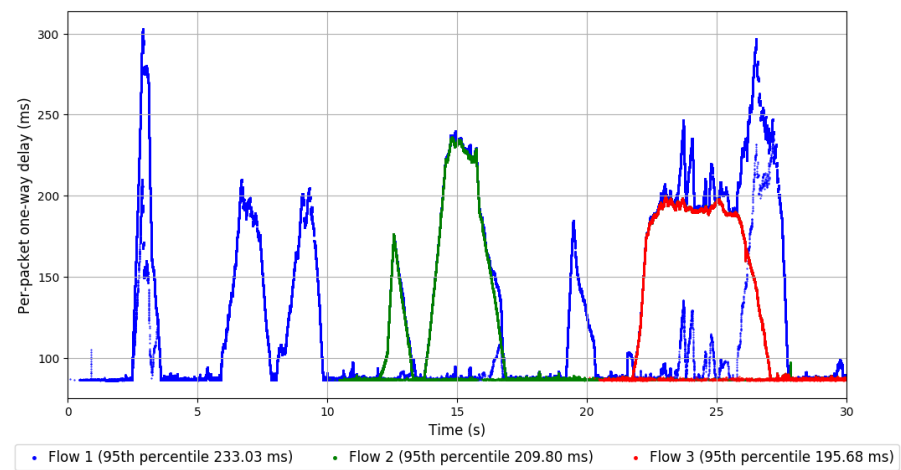
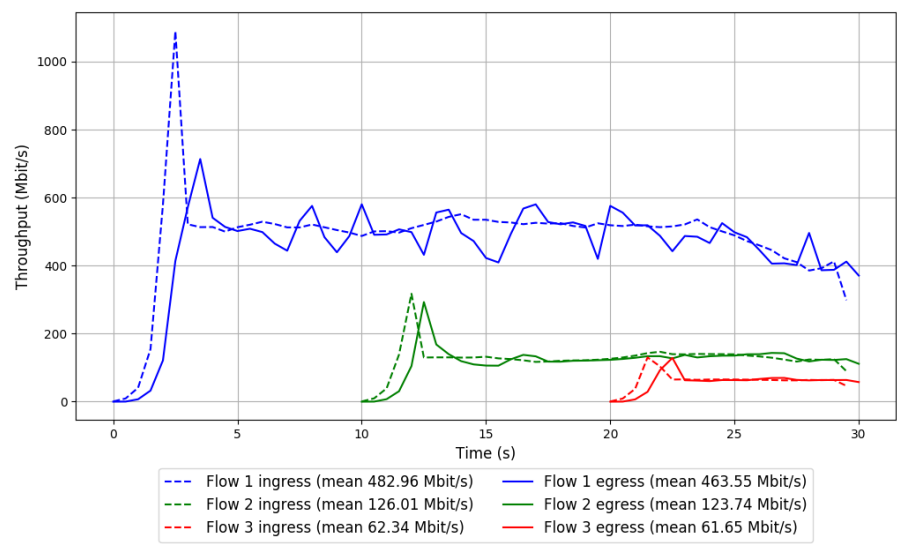
-- Flow 3:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 195.683 ms

Loss rate: 1.11%

Run 10: Report of PCC-Allegro — Data Link

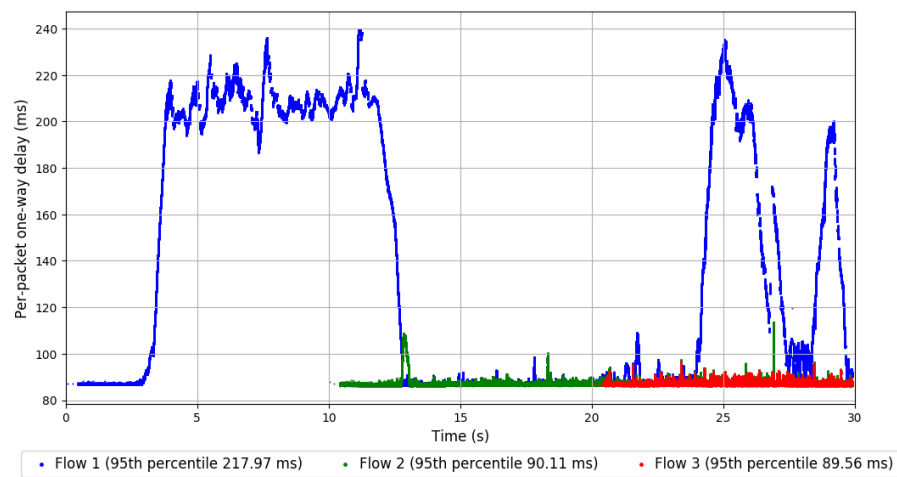
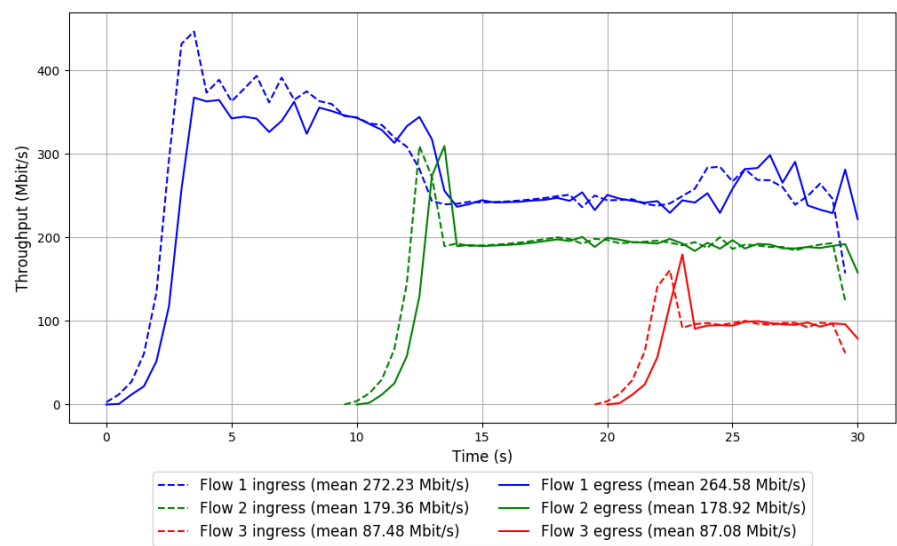


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-18 12:58:25
End at: 2018-06-18 12:58:55
Local clock offset: -0.239 ms
Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2018-06-18 18:02:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 412.67 Mbit/s
95th percentile per-packet one-way delay: 214.287 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 264.58 Mbit/s
95th percentile per-packet one-way delay: 217.967 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 178.92 Mbit/s
95th percentile per-packet one-way delay: 90.114 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 89.556 ms
Loss rate: 0.46%
```

Run 1: Report of PCC-Expr — Data Link

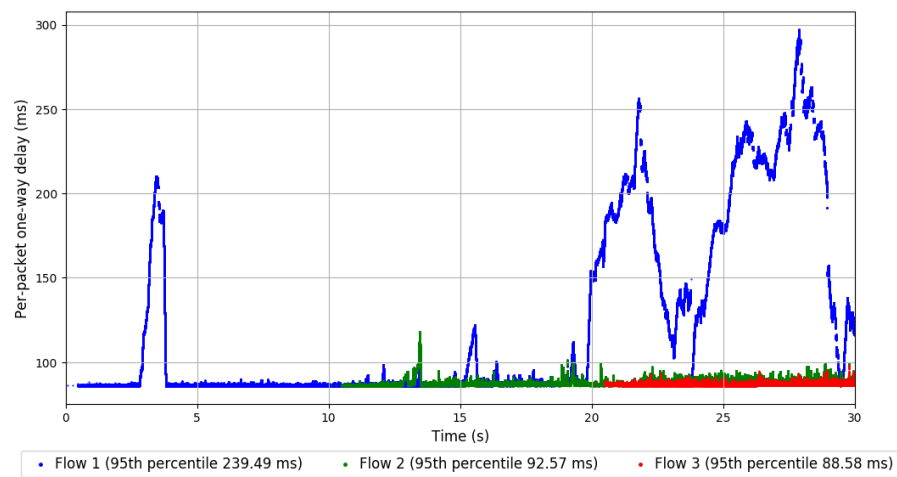
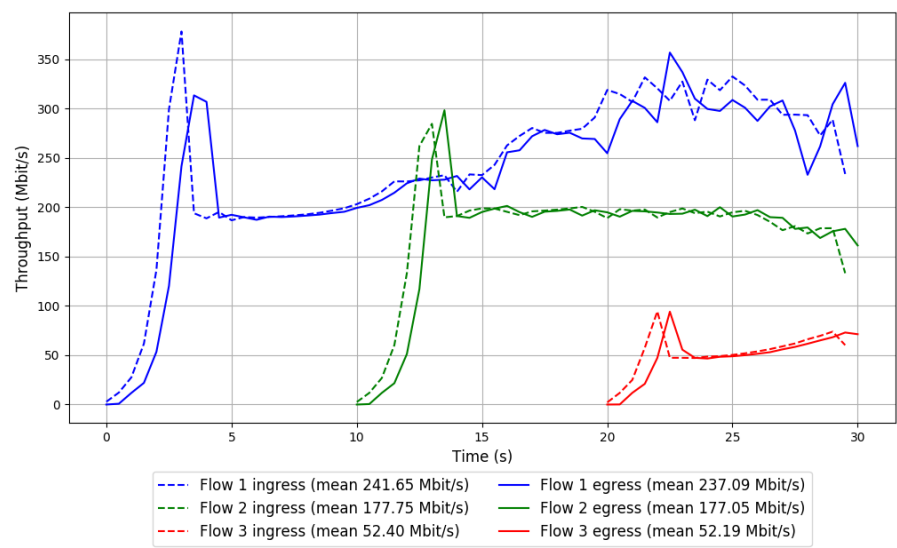


Run 2: Statistics of PCC-Expr

Start at: 2018-06-18 13:22:13
End at: 2018-06-18 13:22:43
Local clock offset: 0.021 ms
Remote clock offset: -0.135 ms

Below is generated by plot.py at 2018-06-18 18:02:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 372.04 Mbit/s
95th percentile per-packet one-way delay: 232.255 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 237.09 Mbit/s
95th percentile per-packet one-way delay: 239.491 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 177.05 Mbit/s
95th percentile per-packet one-way delay: 92.566 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 52.19 Mbit/s
95th percentile per-packet one-way delay: 88.583 ms
Loss rate: 0.41%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-06-18 13:45:48

End at: 2018-06-18 13:46:18

Local clock offset: 0.056 ms

Remote clock offset: 0.006 ms

Below is generated by plot.py at 2018-06-18 18:02:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.32 Mbit/s

95th percentile per-packet one-way delay: 129.303 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 198.74 Mbit/s

95th percentile per-packet one-way delay: 127.347 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 213.17 Mbit/s

95th percentile per-packet one-way delay: 138.939 ms

Loss rate: 1.10%

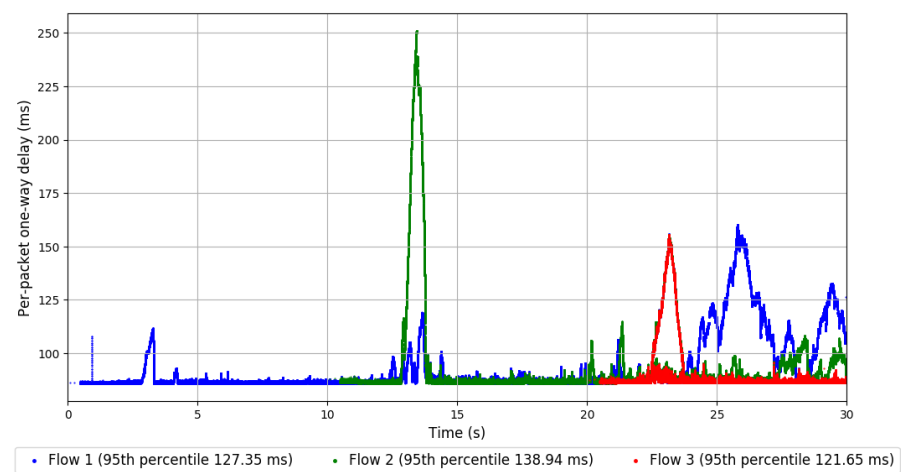
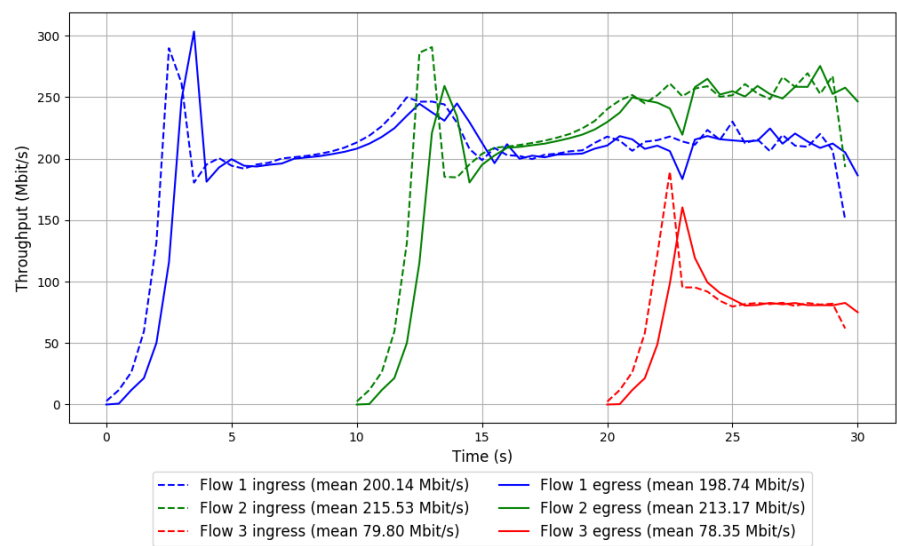
-- Flow 3:

Average throughput: 78.35 Mbit/s

95th percentile per-packet one-way delay: 121.648 ms

Loss rate: 1.83%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-06-18 14:09:16

End at: 2018-06-18 14:09:46

Local clock offset: -0.063 ms

Remote clock offset: 0.139 ms

Below is generated by plot.py at 2018-06-18 18:03:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.09 Mbit/s

95th percentile per-packet one-way delay: 159.029 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 201.25 Mbit/s

95th percentile per-packet one-way delay: 181.651 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 181.28 Mbit/s

95th percentile per-packet one-way delay: 130.990 ms

Loss rate: 1.02%

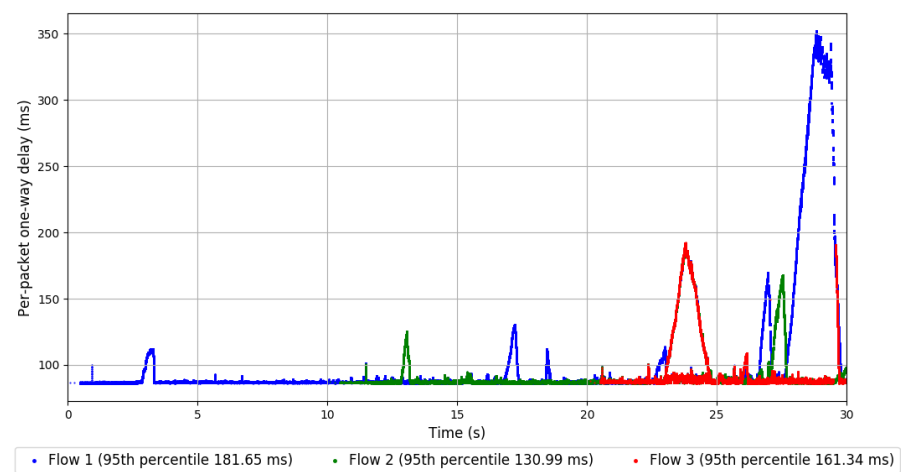
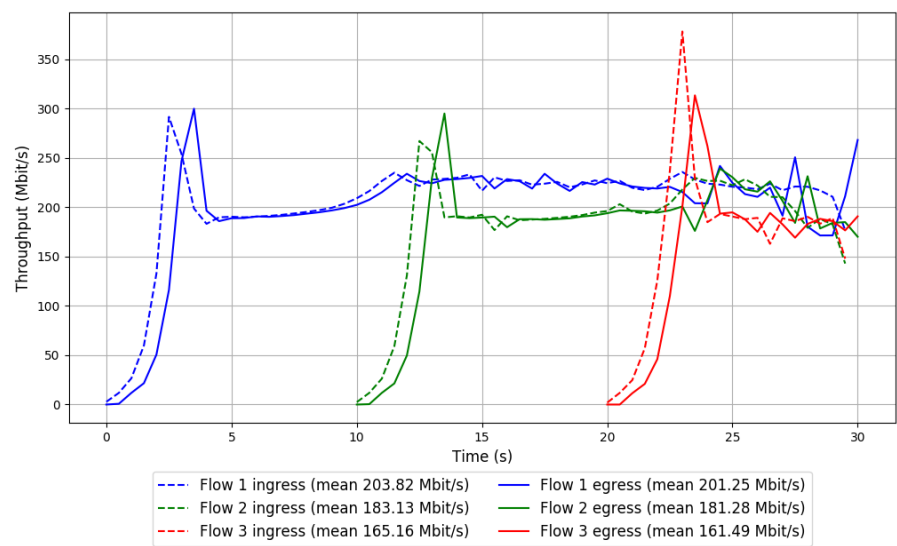
-- Flow 3:

Average throughput: 161.49 Mbit/s

95th percentile per-packet one-way delay: 161.336 ms

Loss rate: 2.24%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-06-18 14:32:50

End at: 2018-06-18 14:33:20

Local clock offset: 0.114 ms

Remote clock offset: 0.13 ms

Below is generated by plot.py at 2018-06-18 18:10:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 404.64 Mbit/s

95th percentile per-packet one-way delay: 227.143 ms

Loss rate: 5.20%

-- Flow 1:

Average throughput: 305.47 Mbit/s

95th percentile per-packet one-way delay: 231.199 ms

Loss rate: 5.25%

-- Flow 2:

Average throughput: 110.30 Mbit/s

95th percentile per-packet one-way delay: 109.597 ms

Loss rate: 4.59%

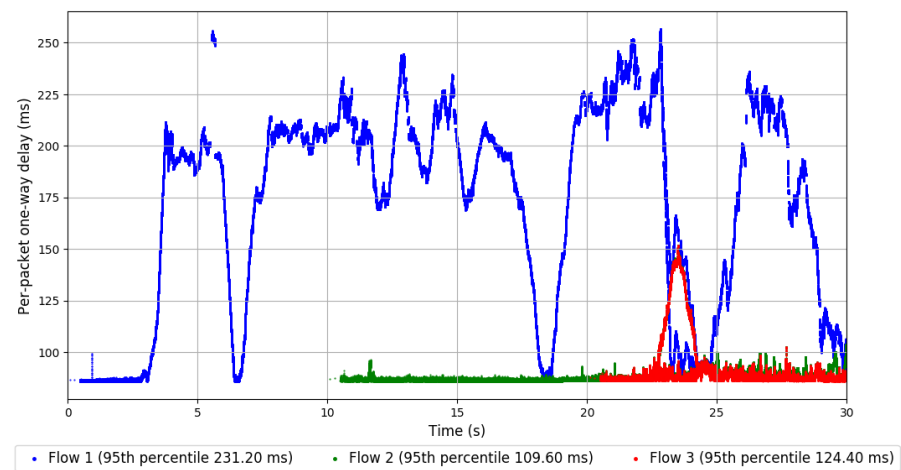
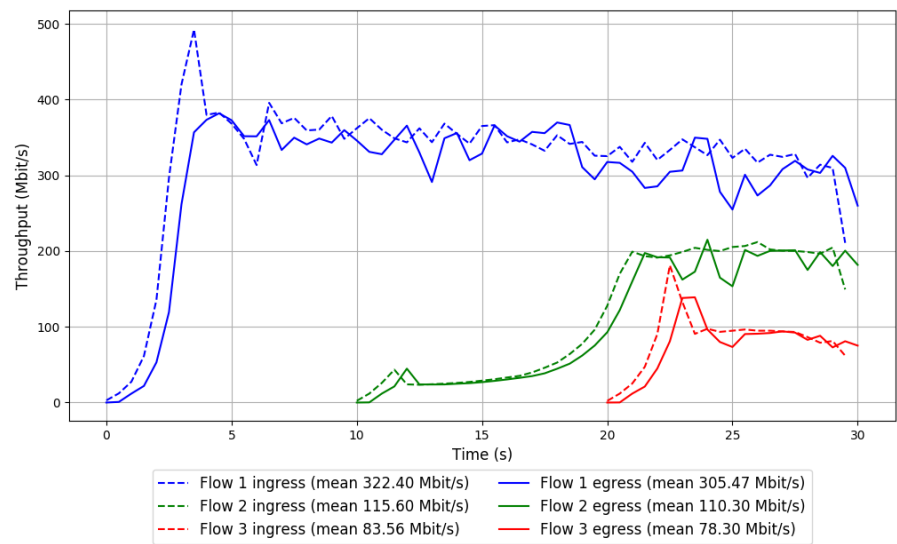
-- Flow 3:

Average throughput: 78.30 Mbit/s

95th percentile per-packet one-way delay: 124.399 ms

Loss rate: 6.31%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-06-18 14:56:21

End at: 2018-06-18 14:56:51

Local clock offset: -0.045 ms

Remote clock offset: 0.081 ms

Below is generated by plot.py at 2018-06-18 18:10:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 416.13 Mbit/s

95th percentile per-packet one-way delay: 223.439 ms

Loss rate: 3.82%

-- Flow 1:

Average throughput: 286.62 Mbit/s

95th percentile per-packet one-way delay: 227.256 ms

Loss rate: 5.27%

-- Flow 2:

Average throughput: 178.12 Mbit/s

95th percentile per-packet one-way delay: 93.519 ms

Loss rate: 0.47%

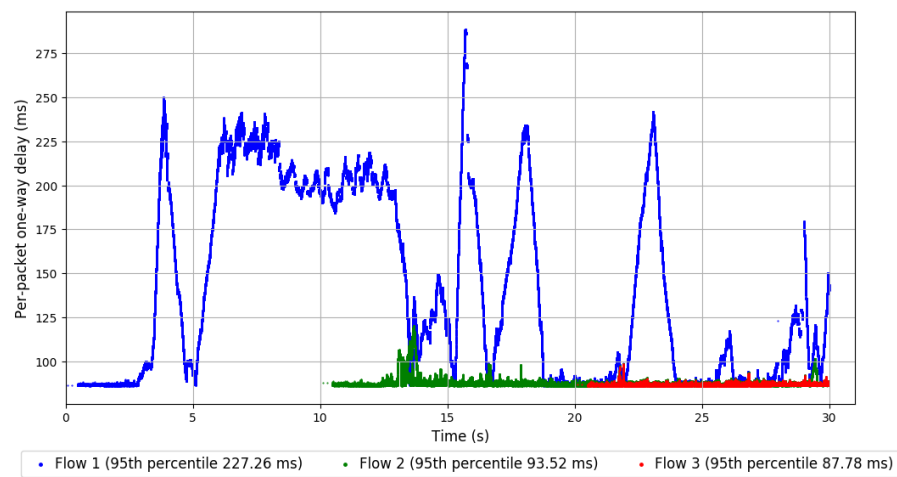
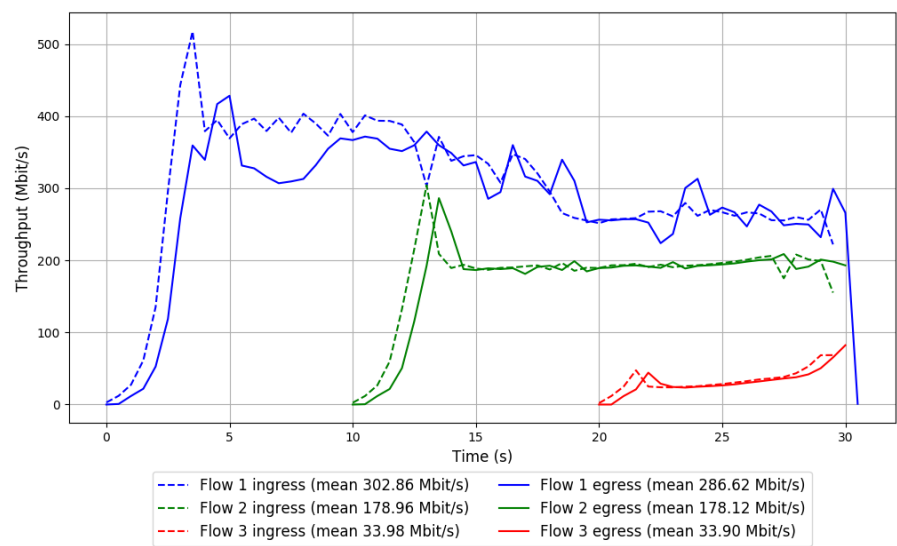
-- Flow 3:

Average throughput: 33.90 Mbit/s

95th percentile per-packet one-way delay: 87.782 ms

Loss rate: 0.21%

Run 6: Report of PCC-Expr — Data Link

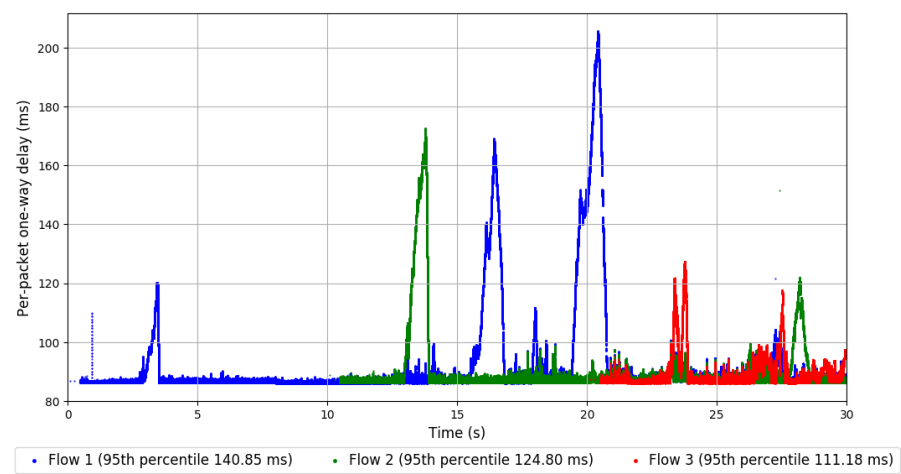
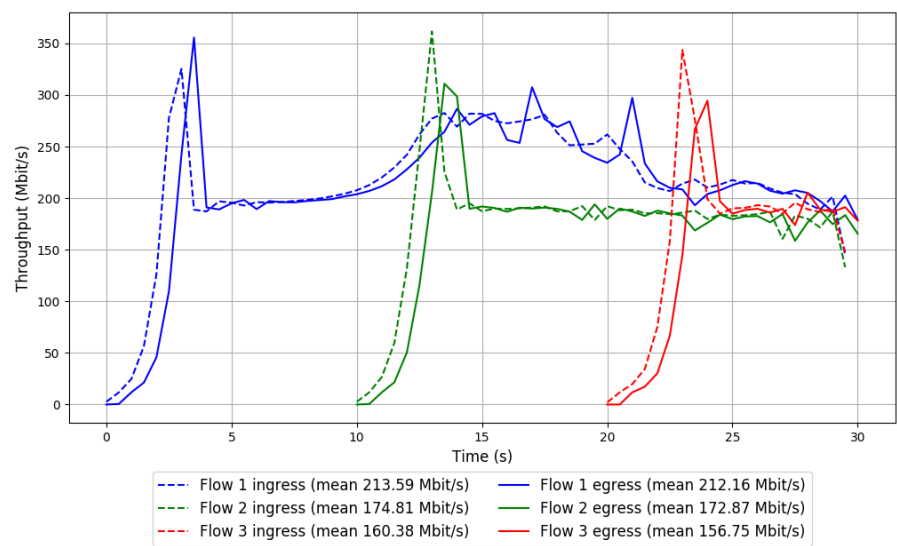


Run 7: Statistics of PCC-Expr

Start at: 2018-06-18 15:20:01
End at: 2018-06-18 15:20:31
Local clock offset: -0.046 ms
Remote clock offset: -0.024 ms

Below is generated by plot.py at 2018-06-18 18:10:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 378.85 Mbit/s
95th percentile per-packet one-way delay: 131.387 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 212.16 Mbit/s
95th percentile per-packet one-way delay: 140.849 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 172.87 Mbit/s
95th percentile per-packet one-way delay: 124.800 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 156.75 Mbit/s
95th percentile per-packet one-way delay: 111.182 ms
Loss rate: 2.32%

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-06-18 15:43:33

End at: 2018-06-18 15:44:03

Local clock offset: -0.031 ms

Remote clock offset: 0.159 ms

Below is generated by plot.py at 2018-06-18 18:12:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 388.70 Mbit/s

95th percentile per-packet one-way delay: 210.178 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 218.09 Mbit/s

95th percentile per-packet one-way delay: 232.444 ms

Loss rate: 2.04%

-- Flow 2:

Average throughput: 176.27 Mbit/s

95th percentile per-packet one-way delay: 116.305 ms

Loss rate: 0.99%

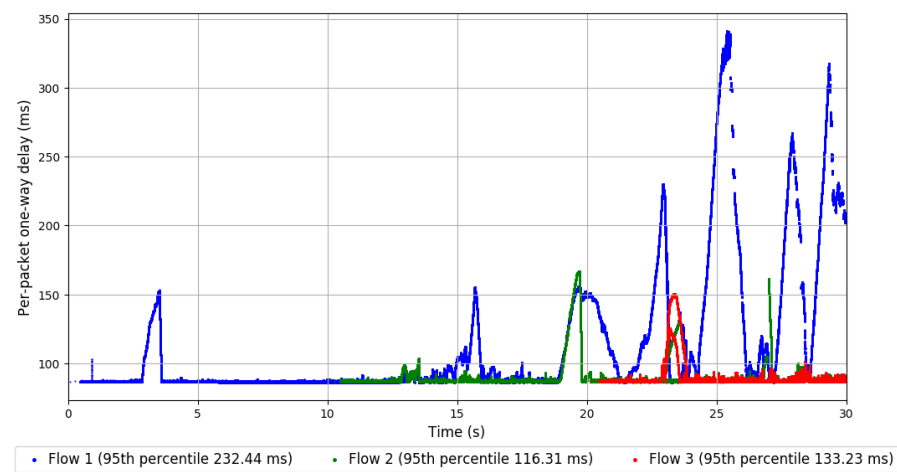
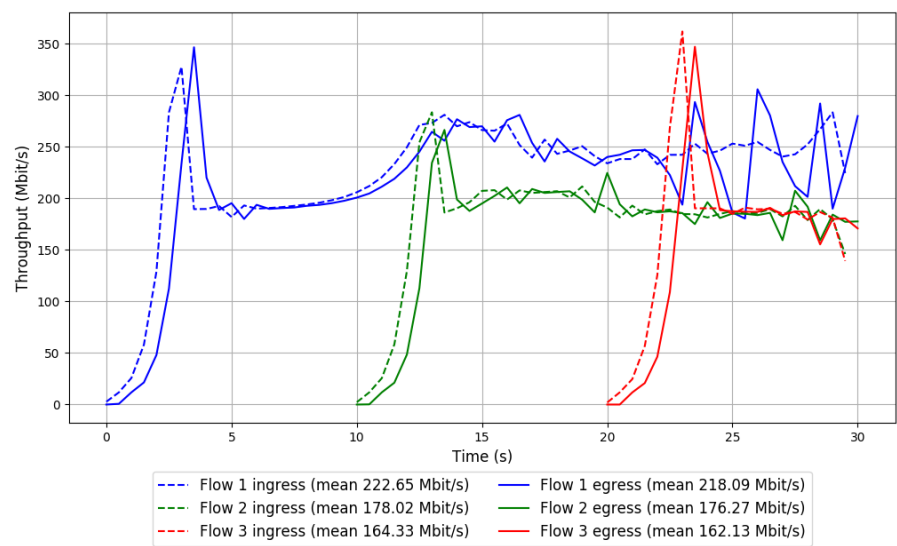
-- Flow 3:

Average throughput: 162.13 Mbit/s

95th percentile per-packet one-way delay: 133.228 ms

Loss rate: 1.33%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-06-18 16:07:11

End at: 2018-06-18 16:07:41

Local clock offset: 0.147 ms

Remote clock offset: 0.431 ms

Below is generated by plot.py at 2018-06-18 18:13:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 367.20 Mbit/s

95th percentile per-packet one-way delay: 192.139 ms

Loss rate: 2.92%

-- Flow 1:

Average throughput: 196.04 Mbit/s

95th percentile per-packet one-way delay: 187.150 ms

Loss rate: 2.03%

-- Flow 2:

Average throughput: 180.03 Mbit/s

95th percentile per-packet one-way delay: 194.634 ms

Loss rate: 2.90%

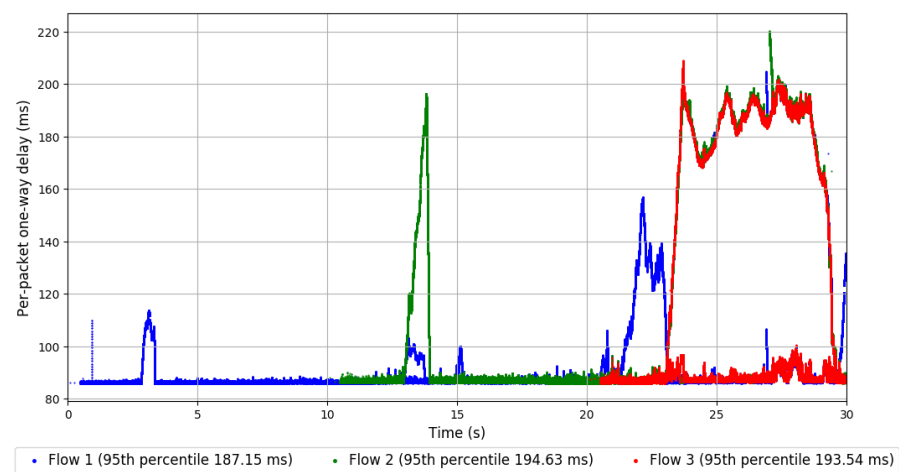
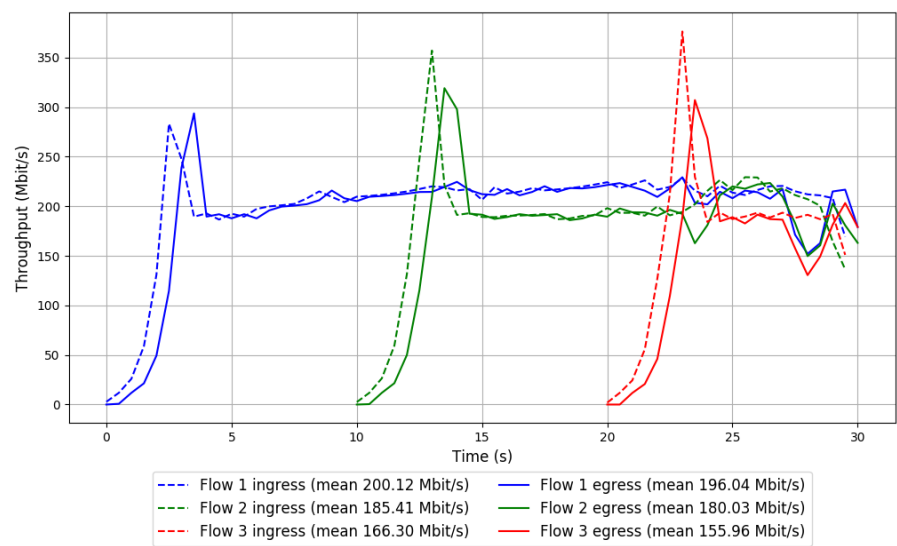
-- Flow 3:

Average throughput: 155.96 Mbit/s

95th percentile per-packet one-way delay: 193.539 ms

Loss rate: 6.21%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-06-18 16:30:49

End at: 2018-06-18 16:31:19

Local clock offset: 0.058 ms

Remote clock offset: 0.52 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 406.12 Mbit/s

95th percentile per-packet one-way delay: 132.990 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 228.21 Mbit/s

95th percentile per-packet one-way delay: 109.843 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 186.26 Mbit/s

95th percentile per-packet one-way delay: 154.643 ms

Loss rate: 1.50%

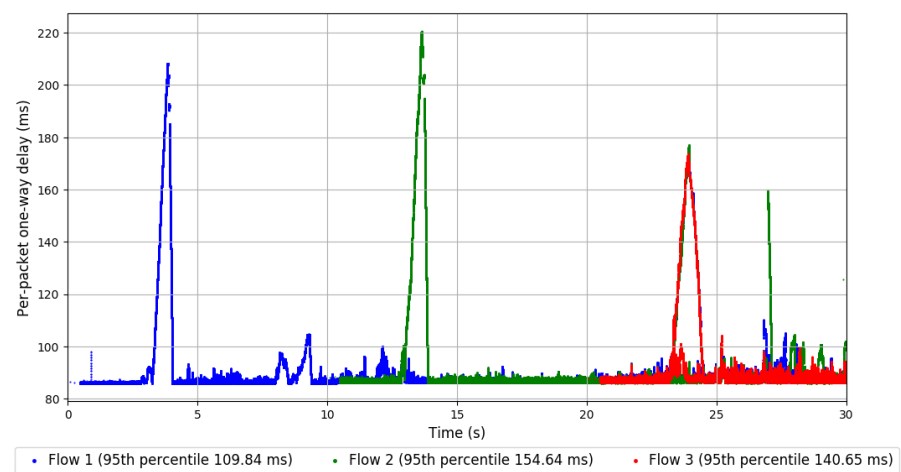
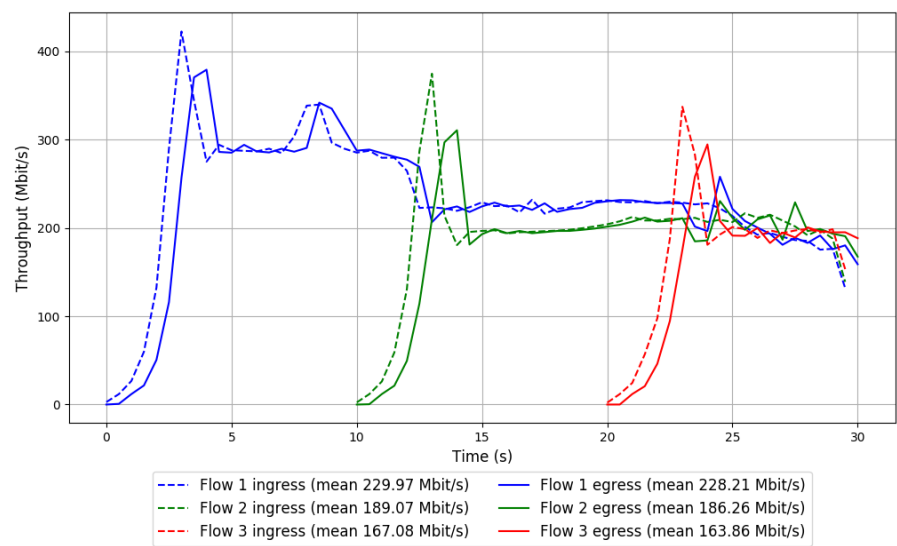
-- Flow 3:

Average throughput: 163.86 Mbit/s

95th percentile per-packet one-way delay: 140.649 ms

Loss rate: 1.94%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-06-18 12:40:39

End at: 2018-06-18 12:41:09

Local clock offset: -0.003 ms

Remote clock offset: 0.008 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.15 Mbit/s

95th percentile per-packet one-way delay: 86.695 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 86.190 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.90 Mbit/s

95th percentile per-packet one-way delay: 86.732 ms

Loss rate: 0.00%

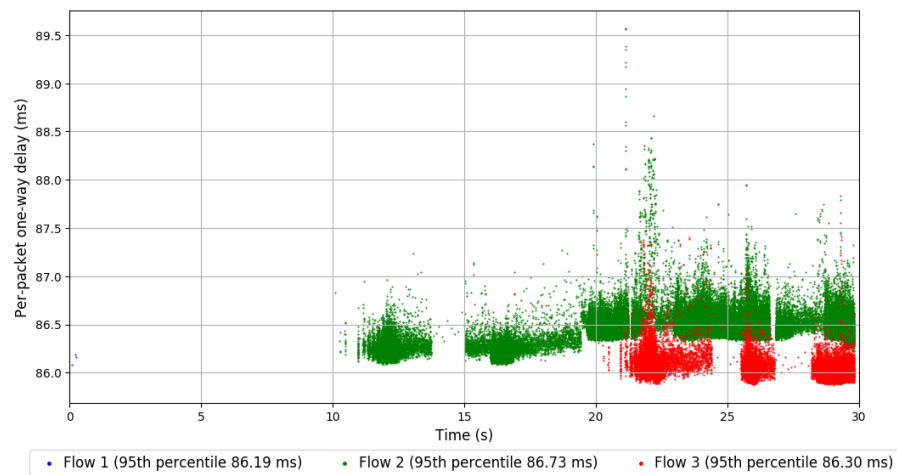
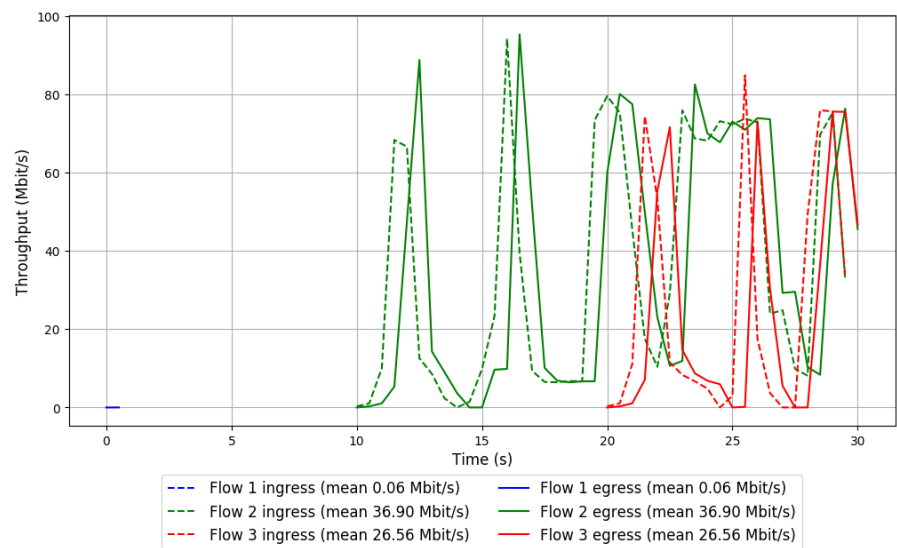
-- Flow 3:

Average throughput: 26.56 Mbit/s

95th percentile per-packet one-way delay: 86.298 ms

Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link

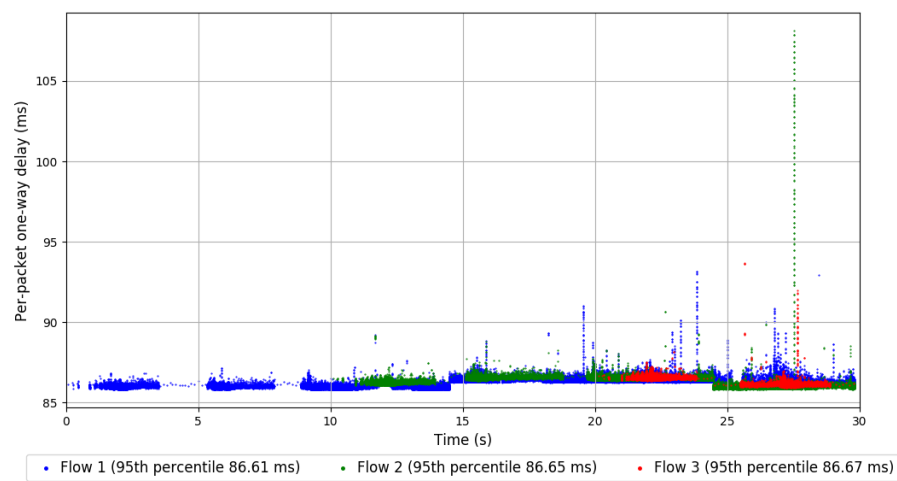
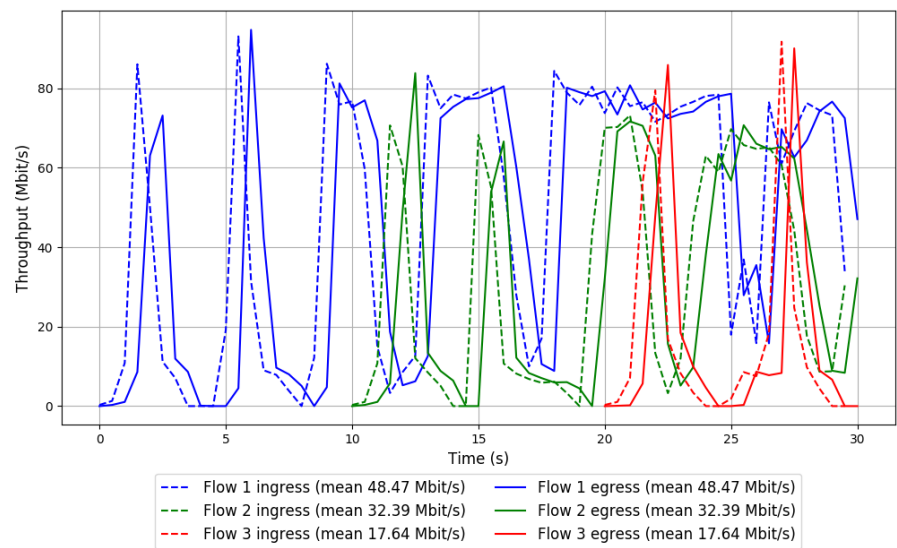


Run 2: Statistics of QUIC Cubic

Start at: 2018-06-18 13:04:14
End at: 2018-06-18 13:04:44
Local clock offset: 0.041 ms
Remote clock offset: -0.135 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.66 Mbit/s
95th percentile per-packet one-way delay: 86.631 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.47 Mbit/s
95th percentile per-packet one-way delay: 86.608 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 86.649 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.64 Mbit/s
95th percentile per-packet one-way delay: 86.669 ms
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link

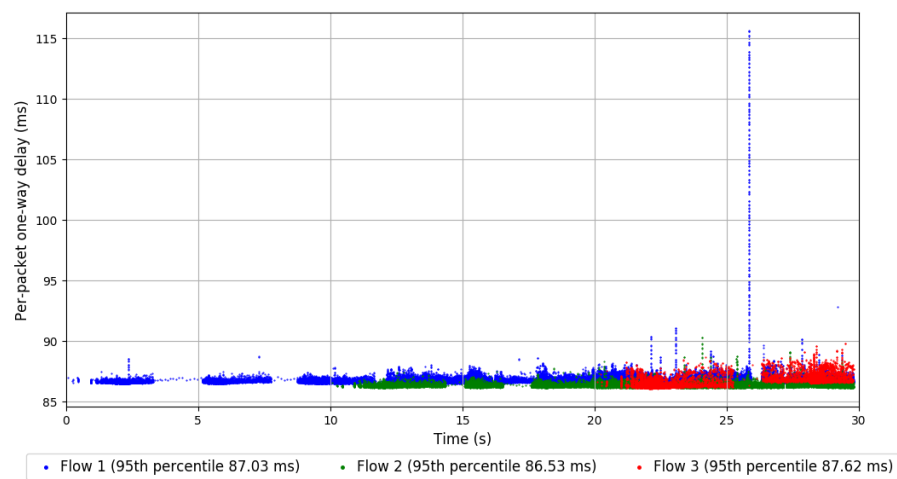
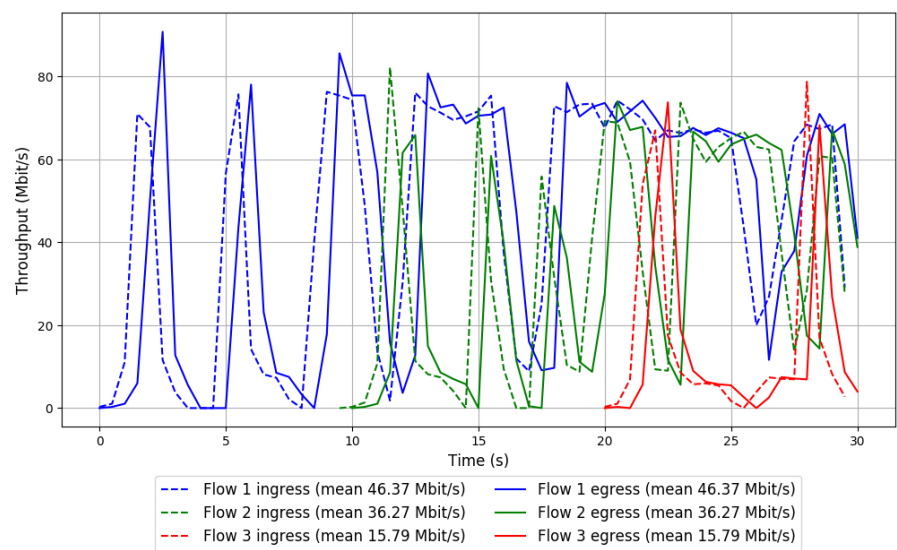


Run 3: Statistics of QUIC Cubic

Start at: 2018-06-18 13:28:03
End at: 2018-06-18 13:28:33
Local clock offset: -0.115 ms
Remote clock offset: -0.013 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.59 Mbit/s
95th percentile per-packet one-way delay: 86.987 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.37 Mbit/s
95th percentile per-packet one-way delay: 87.025 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.27 Mbit/s
95th percentile per-packet one-way delay: 86.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.79 Mbit/s
95th percentile per-packet one-way delay: 87.618 ms
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-06-18 13:51:35

End at: 2018-06-18 13:52:05

Local clock offset: -0.055 ms

Remote clock offset: 0.042 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.17 Mbit/s

95th percentile per-packet one-way delay: 86.612 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.14 Mbit/s

95th percentile per-packet one-way delay: 86.342 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.36 Mbit/s

95th percentile per-packet one-way delay: 86.661 ms

Loss rate: 0.00%

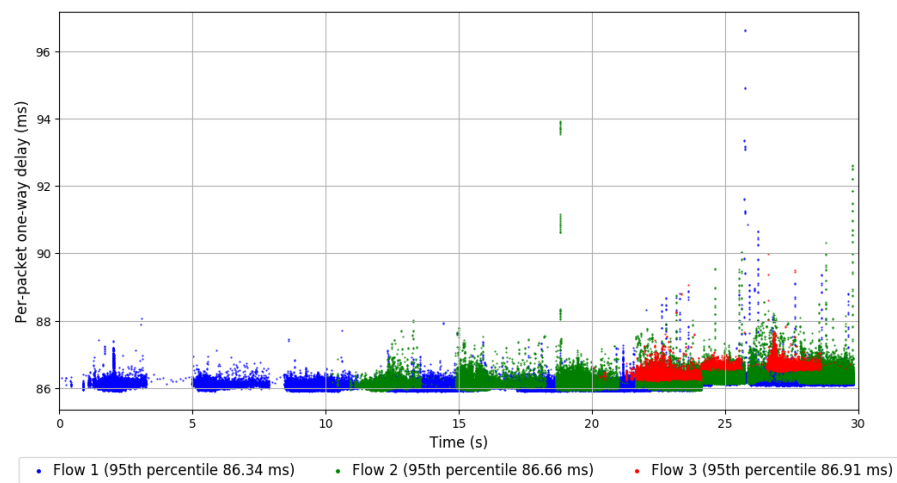
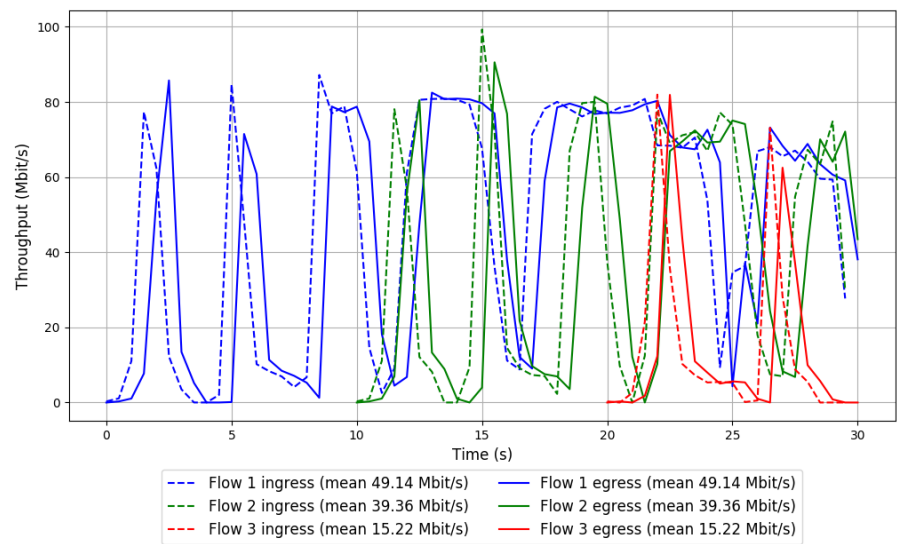
-- Flow 3:

Average throughput: 15.22 Mbit/s

95th percentile per-packet one-way delay: 86.906 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-06-18 14:15:04

End at: 2018-06-18 14:15:34

Local clock offset: 0.099 ms

Remote clock offset: 0.15 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.94 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.36 Mbit/s

95th percentile per-packet one-way delay: 86.454 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.01 Mbit/s

95th percentile per-packet one-way delay: 86.863 ms

Loss rate: 0.00%

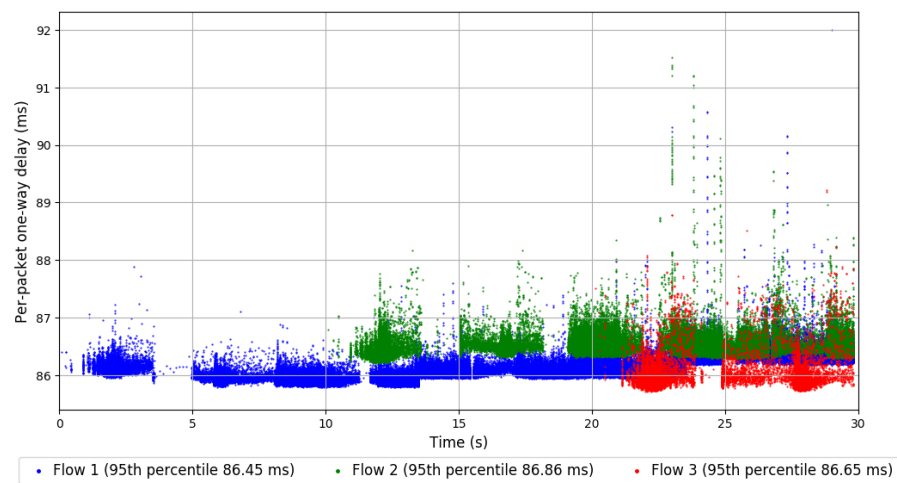
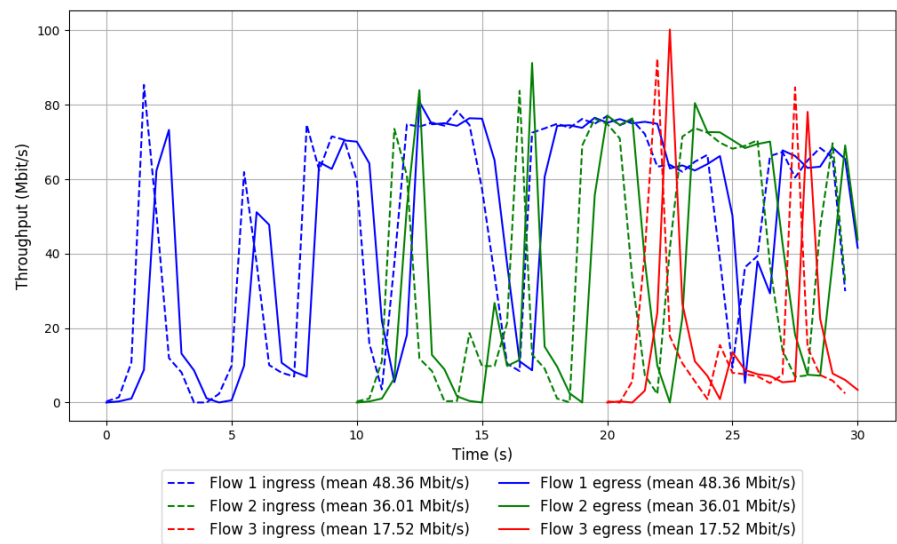
-- Flow 3:

Average throughput: 17.52 Mbit/s

95th percentile per-packet one-way delay: 86.654 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-06-18 14:38:42

End at: 2018-06-18 14:39:12

Local clock offset: 0.063 ms

Remote clock offset: 0.065 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.91 Mbit/s

95th percentile per-packet one-way delay: 86.544 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.41 Mbit/s

95th percentile per-packet one-way delay: 86.576 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.01 Mbit/s

95th percentile per-packet one-way delay: 86.341 ms

Loss rate: 0.00%

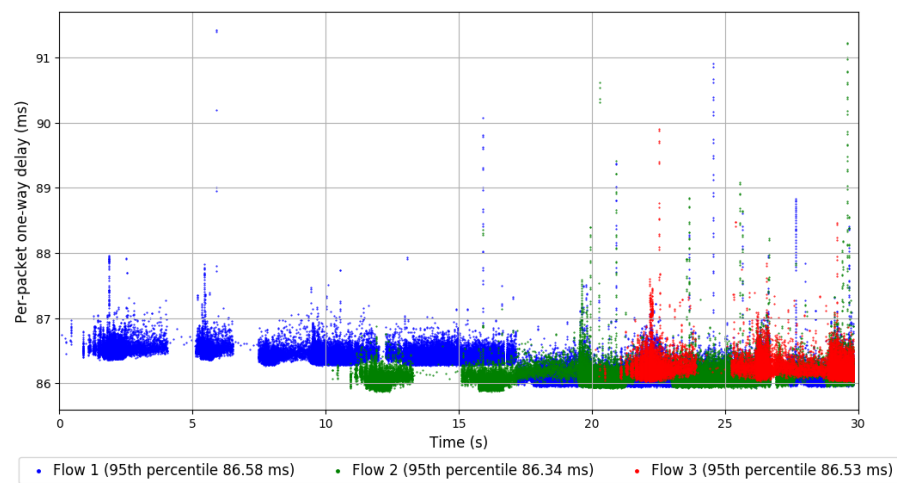
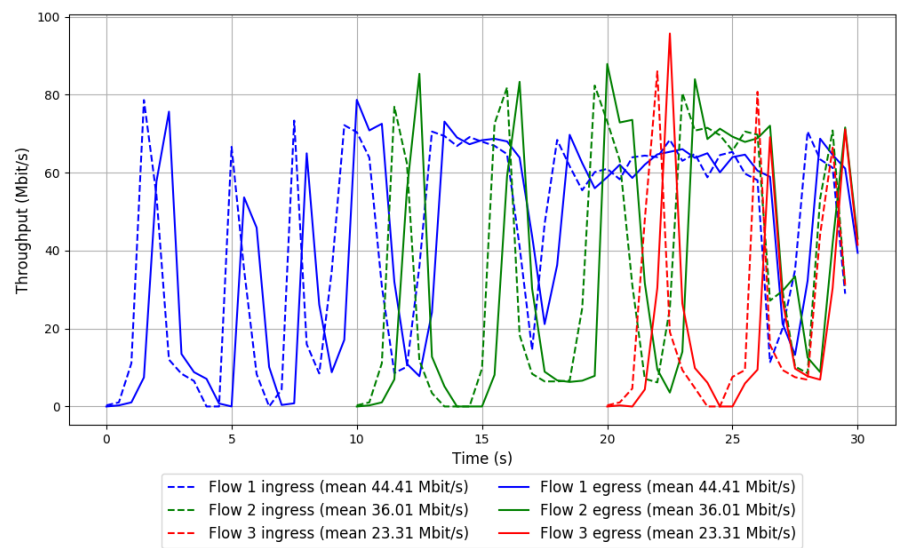
-- Flow 3:

Average throughput: 23.31 Mbit/s

95th percentile per-packet one-way delay: 86.526 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-18 15:02:16

End at: 2018-06-18 15:02:46

Local clock offset: 0.061 ms

Remote clock offset: 0.018 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.94 Mbit/s

95th percentile per-packet one-way delay: 86.917 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 45.75 Mbit/s

95th percentile per-packet one-way delay: 86.812 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.76 Mbit/s

95th percentile per-packet one-way delay: 87.031 ms

Loss rate: 0.00%

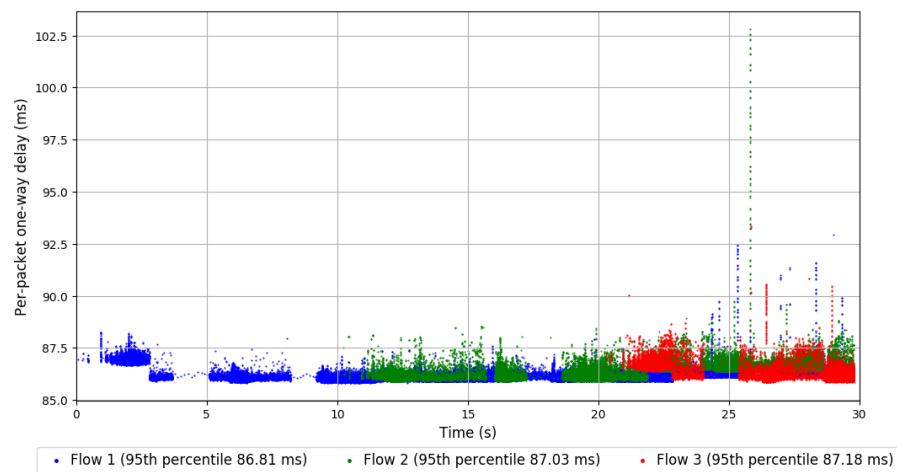
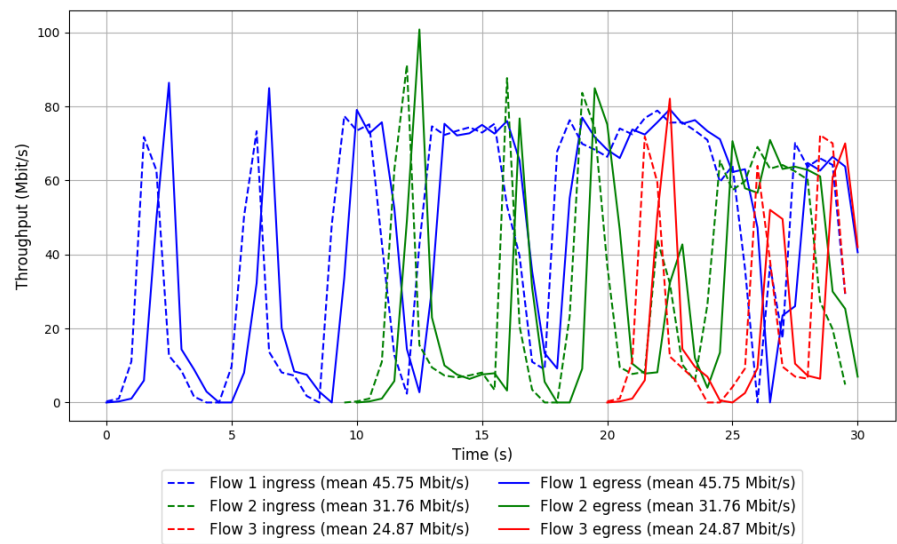
-- Flow 3:

Average throughput: 24.87 Mbit/s

95th percentile per-packet one-way delay: 87.182 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link

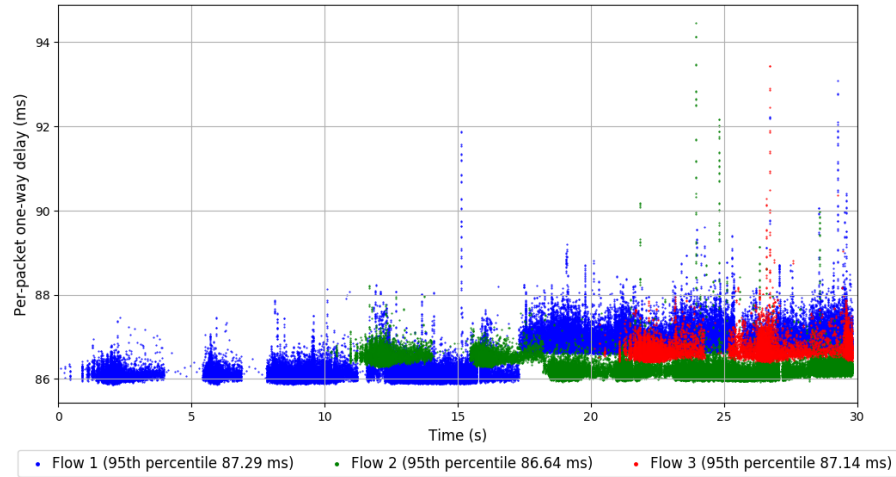
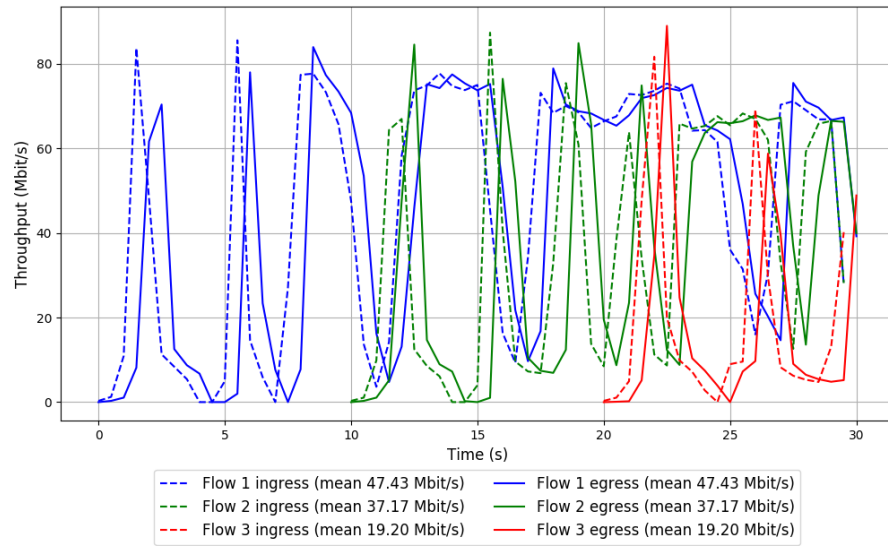


Run 8: Statistics of QUIC Cubic

Start at: 2018-06-18 15:25:51
End at: 2018-06-18 15:26:21
Local clock offset: 0.031 ms
Remote clock offset: -0.072 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 78.32 Mbit/s
95th percentile per-packet one-way delay: 87.185 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.43 Mbit/s
95th percentile per-packet one-way delay: 87.289 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.17 Mbit/s
95th percentile per-packet one-way delay: 86.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.20 Mbit/s
95th percentile per-packet one-way delay: 87.136 ms
Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-06-18 15:49:22

End at: 2018-06-18 15:49:52

Local clock offset: 0.132 ms

Remote clock offset: 0.242 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.38 Mbit/s

95th percentile per-packet one-way delay: 86.828 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.55 Mbit/s

95th percentile per-packet one-way delay: 86.826 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 86.947 ms

Loss rate: 0.00%

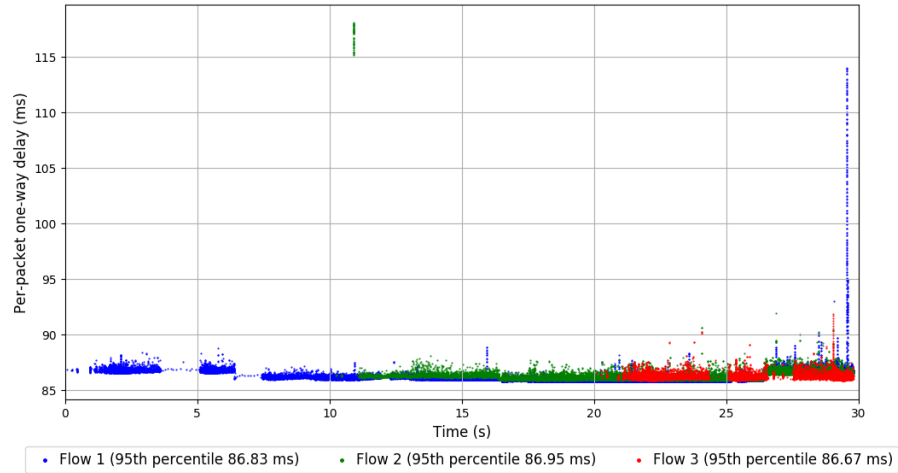
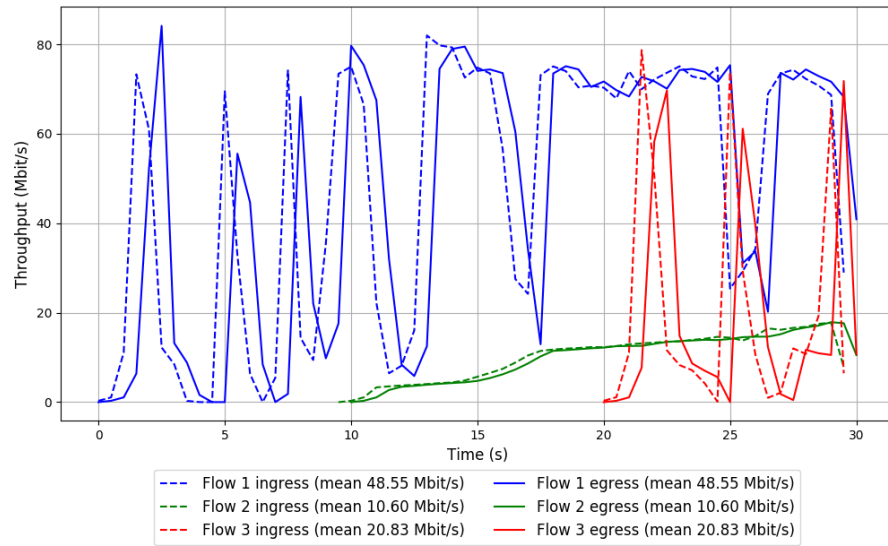
-- Flow 3:

Average throughput: 20.83 Mbit/s

95th percentile per-packet one-way delay: 86.674 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-06-18 16:13:00

End at: 2018-06-18 16:13:30

Local clock offset: 0.128 ms

Remote clock offset: 0.474 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.43 Mbit/s

95th percentile per-packet one-way delay: 86.715 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.02 Mbit/s

95th percentile per-packet one-way delay: 86.588 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.31 Mbit/s

95th percentile per-packet one-way delay: 86.886 ms

Loss rate: 0.00%

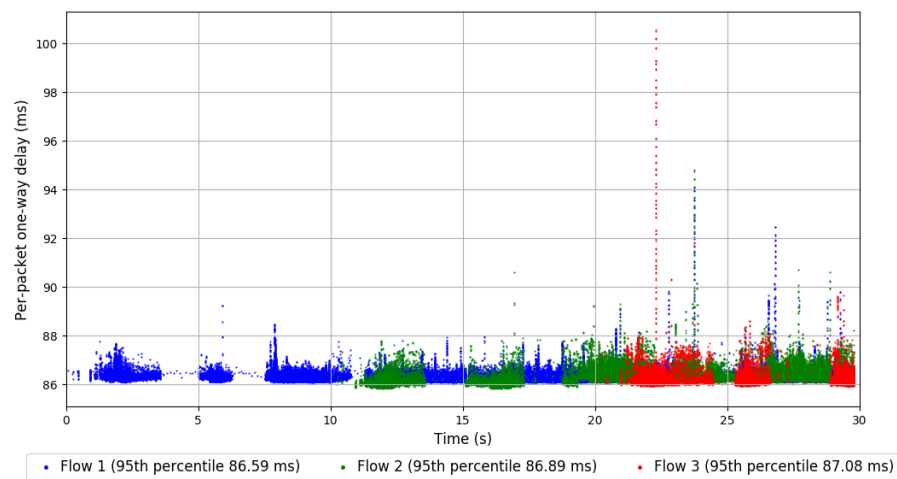
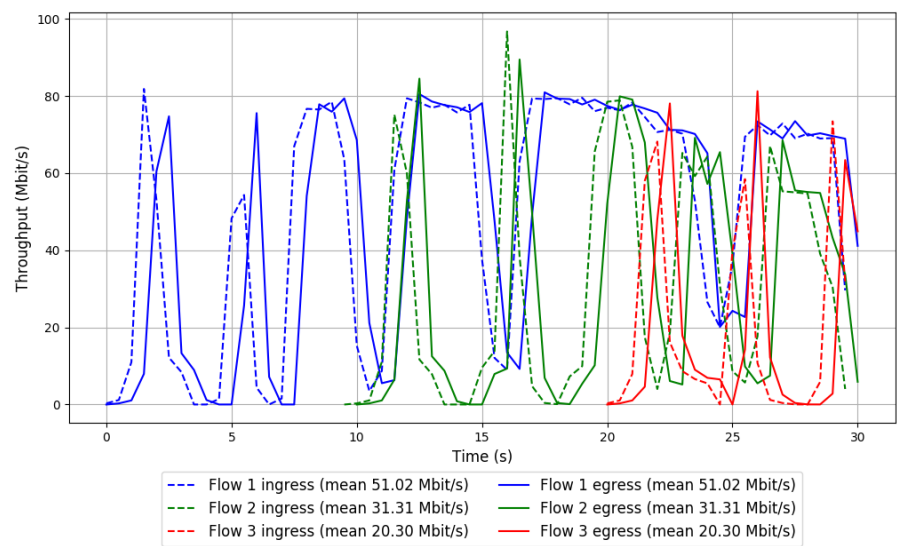
-- Flow 3:

Average throughput: 20.30 Mbit/s

95th percentile per-packet one-way delay: 87.077 ms

Loss rate: 0.01%

Run 10: Report of QUIC Cubic — Data Link

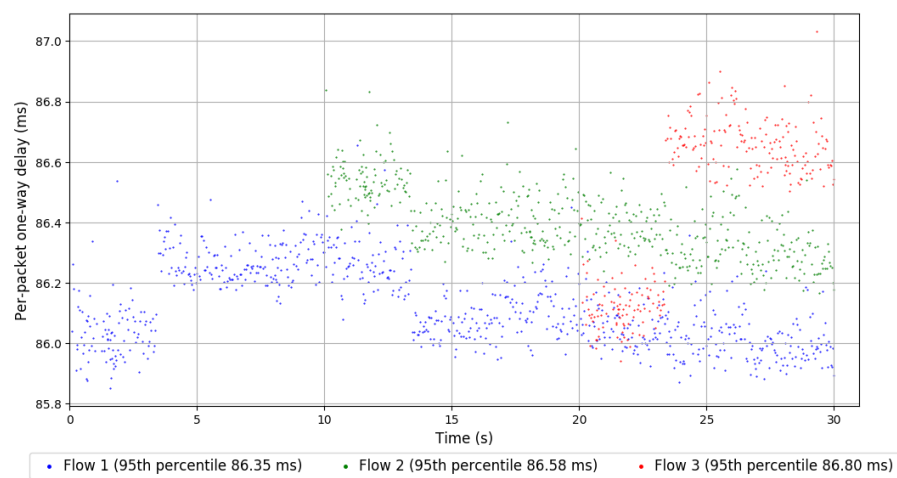
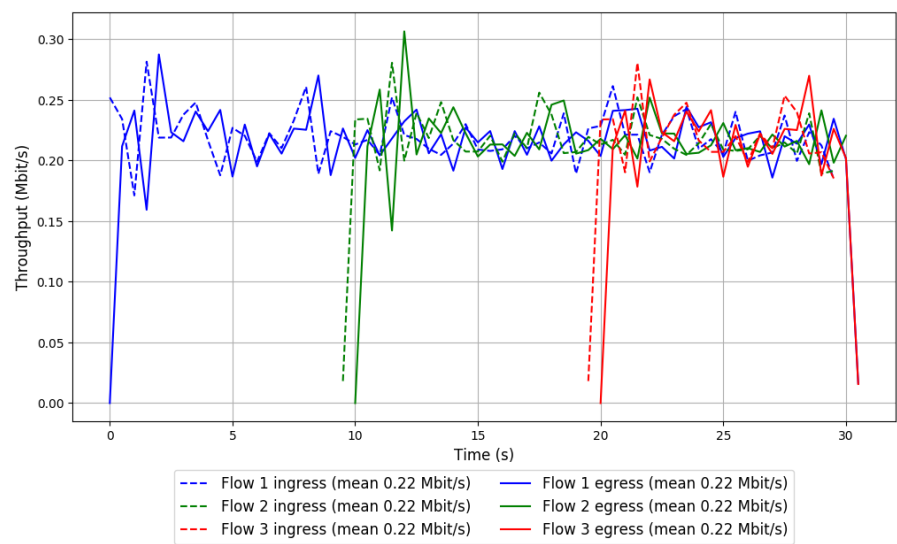


```
Run 1: Statistics of SReAM

Start at: 2018-06-18 12:43:36
End at: 2018-06-18 12:44:06
Local clock offset: 0.148 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-06-18 18:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.669 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.350 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.583 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.799 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

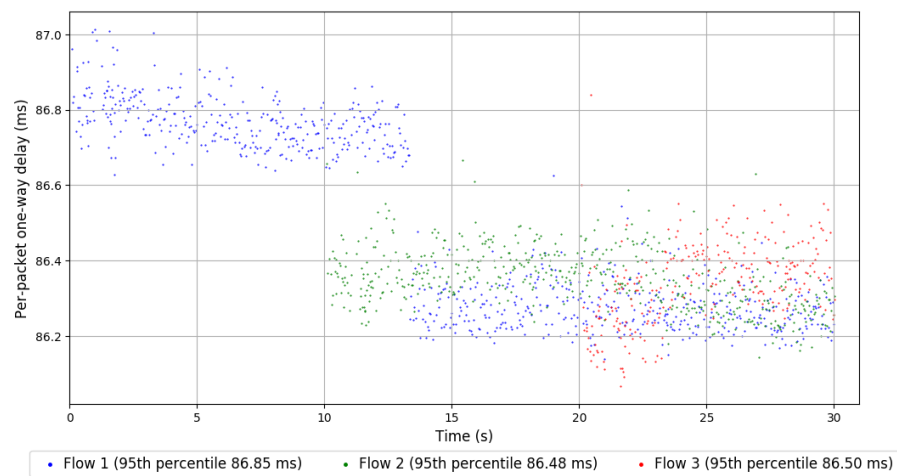
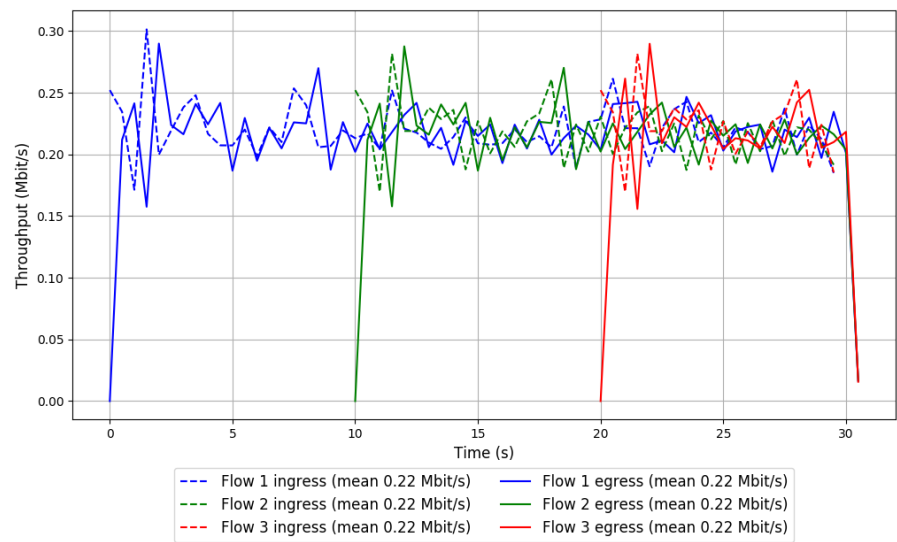


Run 2: Statistics of SReAM

Start at: 2018-06-18 13:07:16
End at: 2018-06-18 13:07:46
Local clock offset: -0.08 ms
Remote clock offset: -0.148 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.819 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.852 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.476 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.503 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

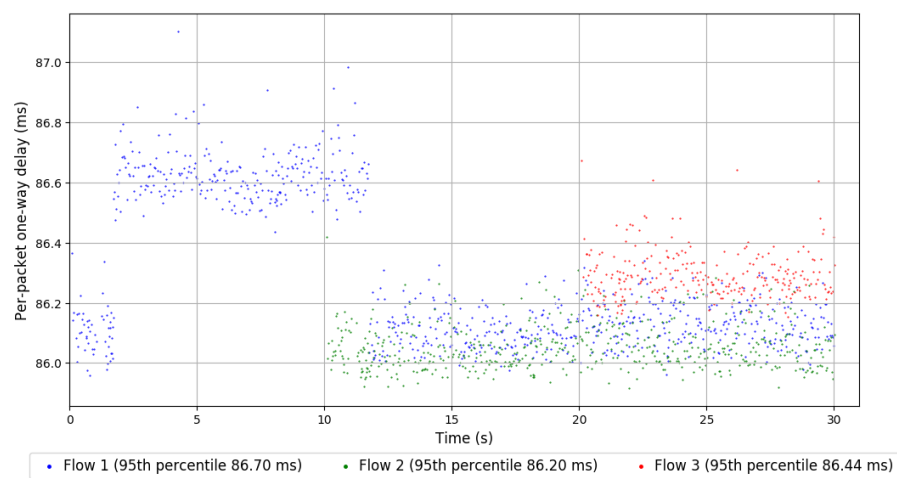
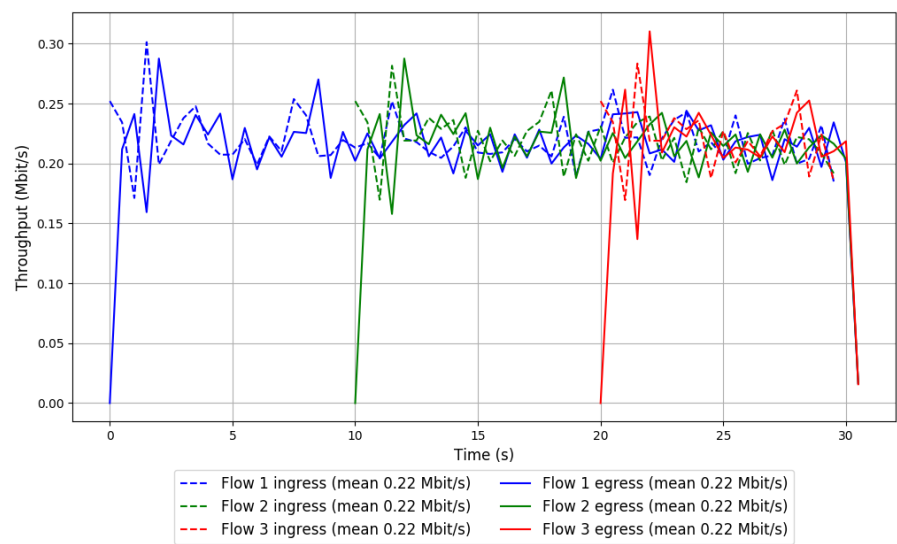


Run 3: Statistics of SReAM

Start at: 2018-06-18 13:30:57
End at: 2018-06-18 13:31:27
Local clock offset: 0.048 ms
Remote clock offset: -0.049 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.649 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.697 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.199 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.444 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-06-18 13:54:34

End at: 2018-06-18 13:55:04

Local clock offset: -0.049 ms

Remote clock offset: 0.08 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.833 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.638 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.827 ms

Loss rate: 0.00%

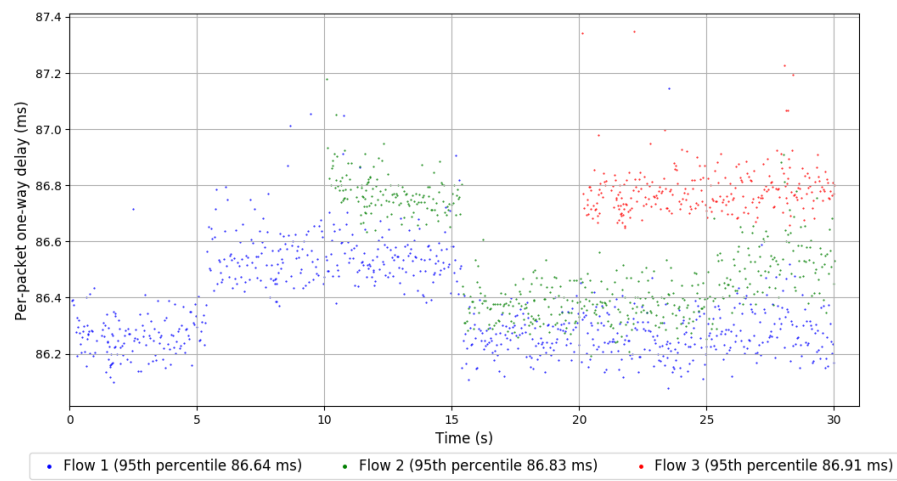
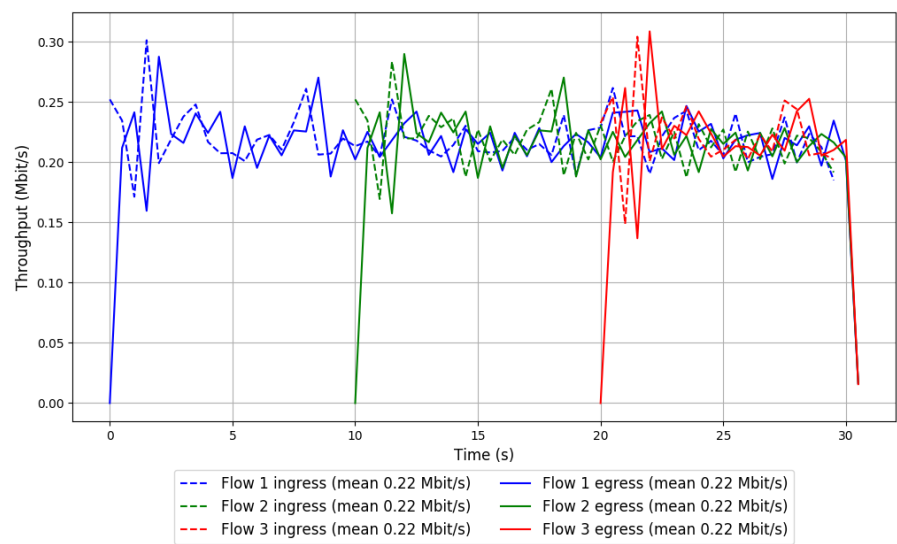
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.912 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-06-18 14:18:03

End at: 2018-06-18 14:18:33

Local clock offset: 0.049 ms

Remote clock offset: 0.198 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.782 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.761 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.791 ms

Loss rate: 0.00%

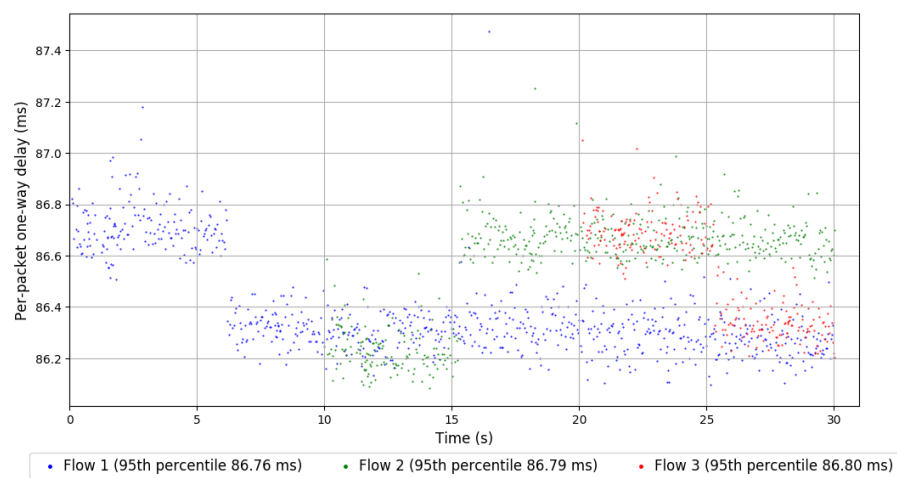
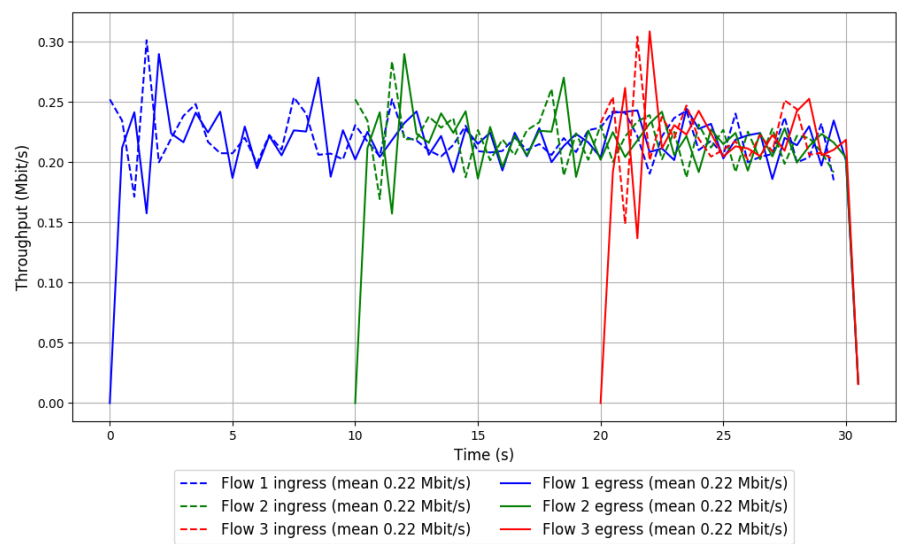
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.800 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-06-18 14:41:41

End at: 2018-06-18 14:42:11

Local clock offset: 0.086 ms

Remote clock offset: 0.035 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.777 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.837 ms

Loss rate: 0.00%

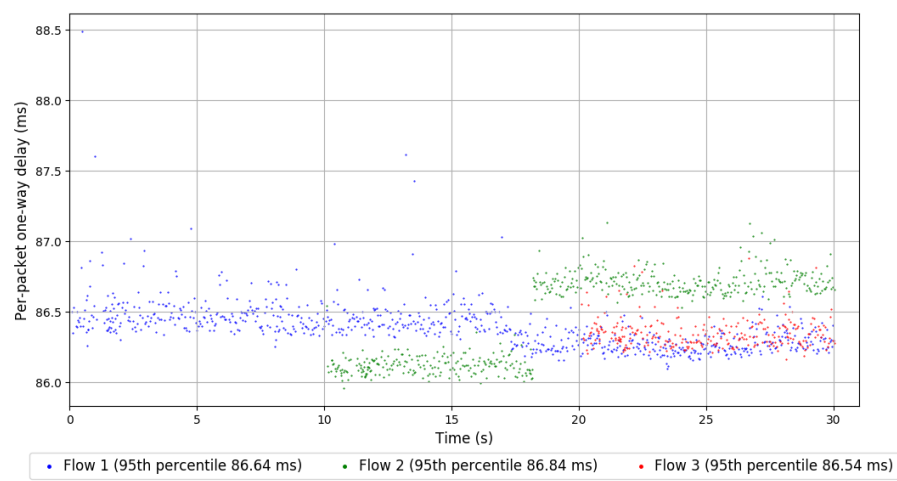
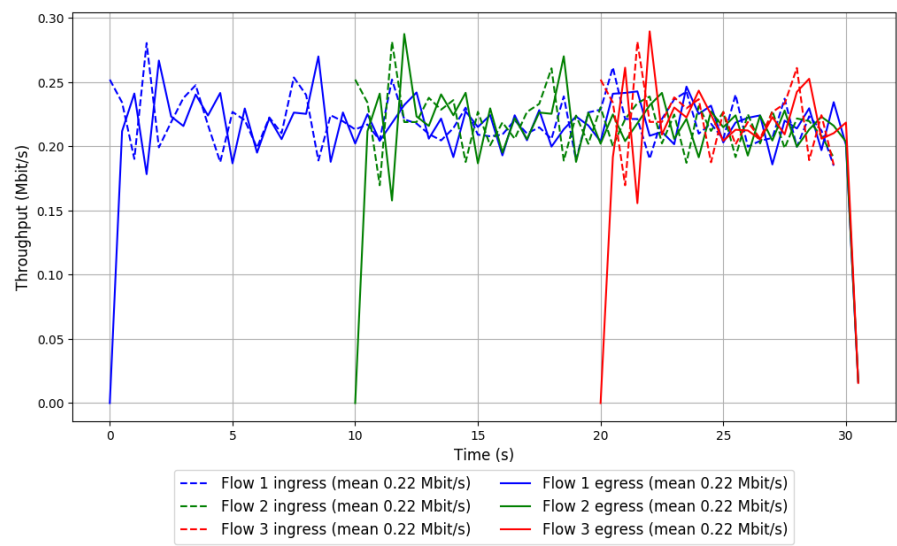
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.539 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-06-18 15:05:16

End at: 2018-06-18 15:05:46

Local clock offset: 0.012 ms

Remote clock offset: 0.033 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.779 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.425 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.508 ms

Loss rate: 0.00%

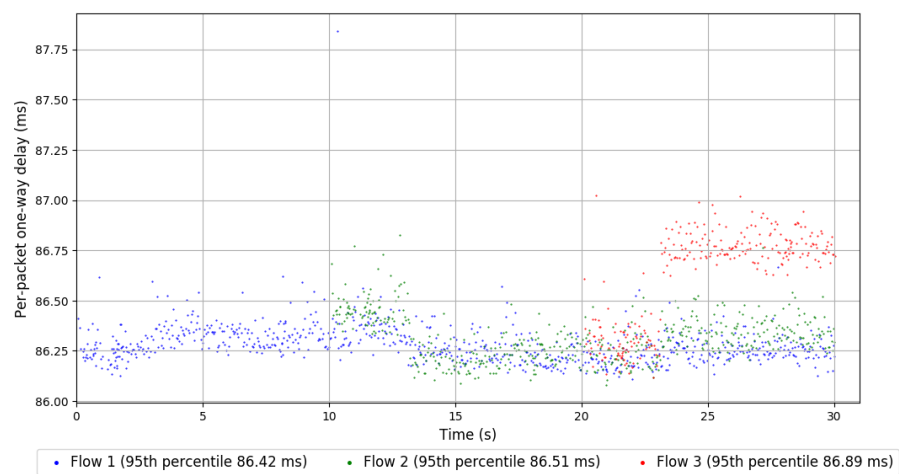
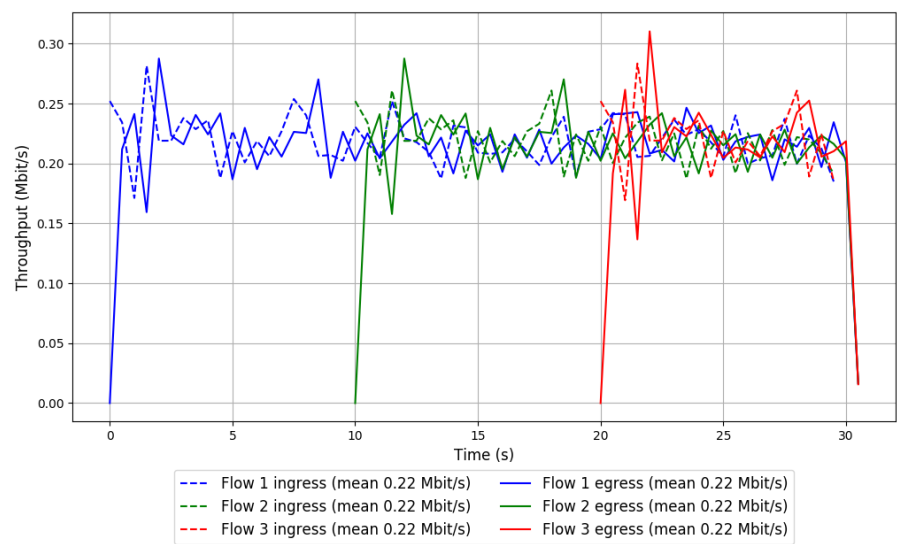
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.887 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link

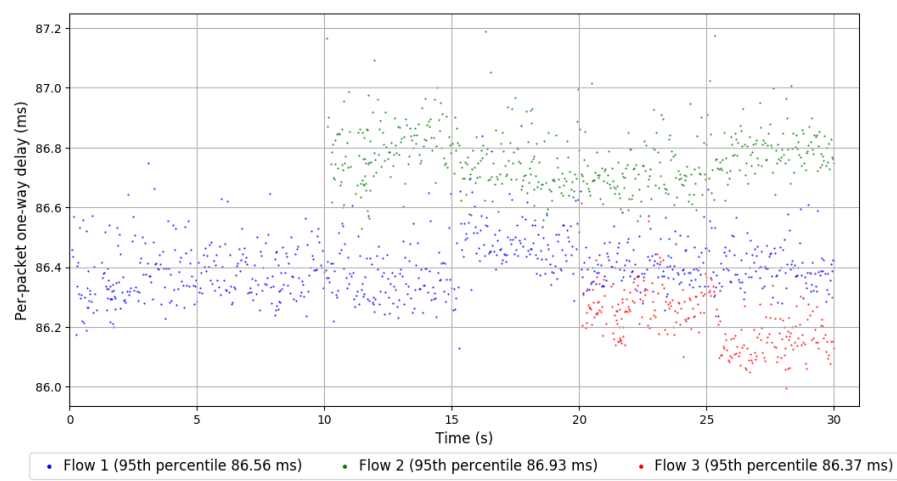
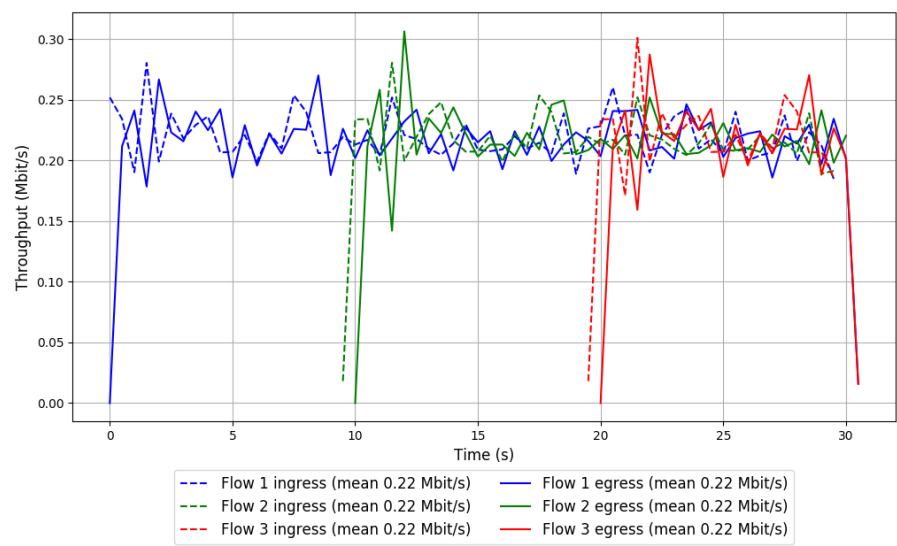


Run 8: Statistics of SReAM

Start at: 2018-06-18 15:28:44
End at: 2018-06-18 15:29:14
Local clock offset: -0.067 ms
Remote clock offset: -0.149 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.851 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.565 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.929 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.368 ms
Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-06-18 15:52:23

End at: 2018-06-18 15:52:53

Local clock offset: 0.05 ms

Remote clock offset: 0.245 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.684 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.372 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.758 ms

Loss rate: 0.00%

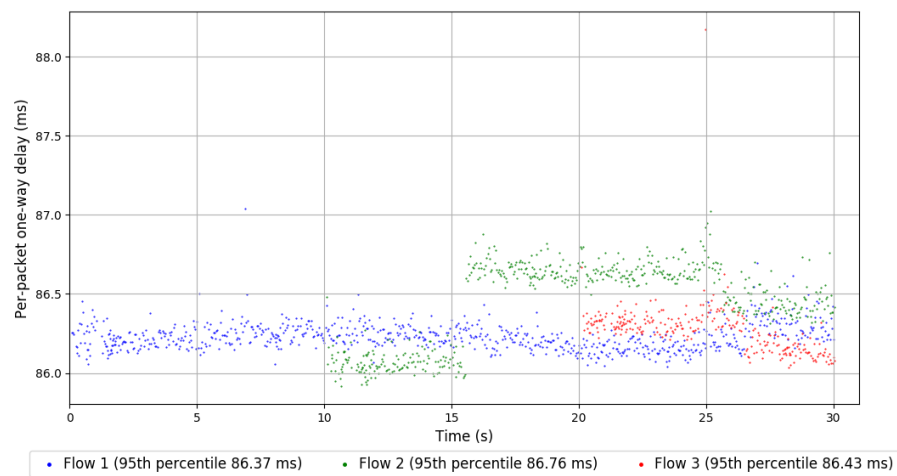
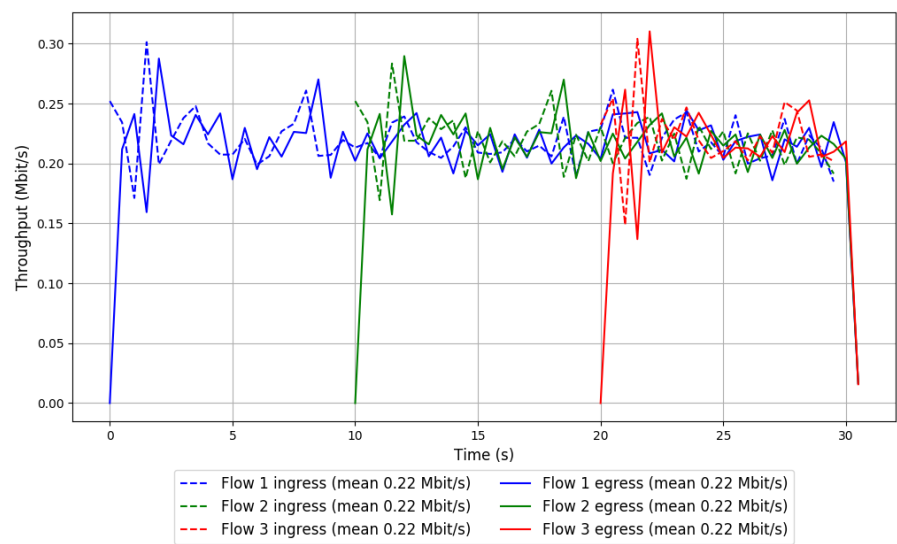
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.432 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

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

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

Local clock offset: 0.02 ms

Remote clock offset: 0.448 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.873 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.989 ms

Loss rate: 0.00%

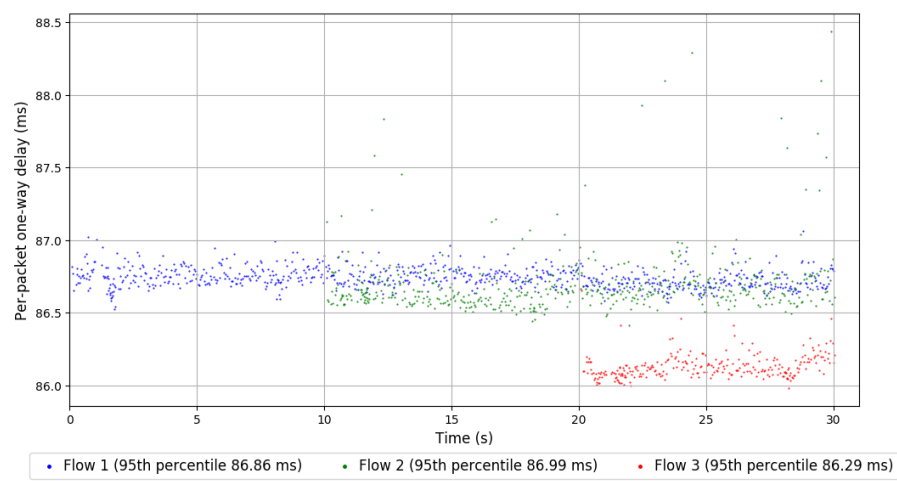
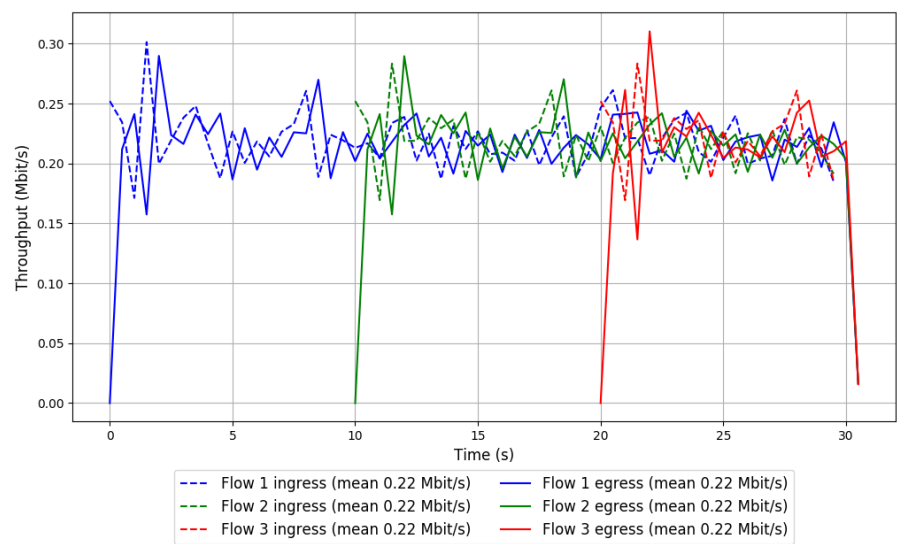
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.289 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

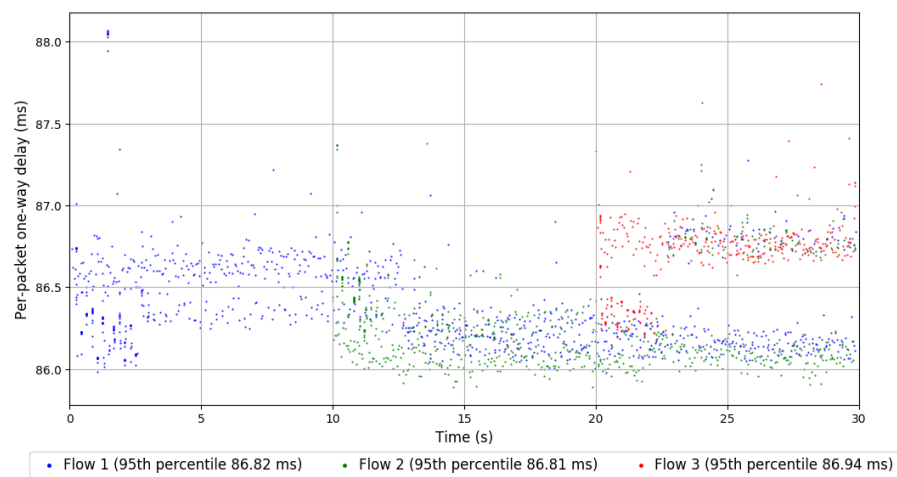
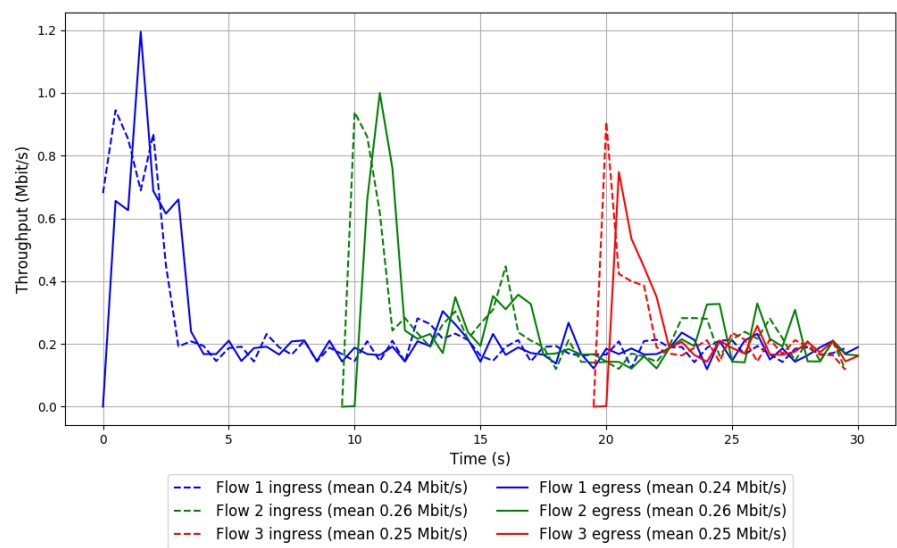


Run 1: Statistics of Sprout

Start at: 2018-06-18 13:00:16
End at: 2018-06-18 13:00:46
Local clock offset: 0.086 ms
Remote clock offset: -0.104 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 86.864 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 86.823 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 86.812 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 86.937 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

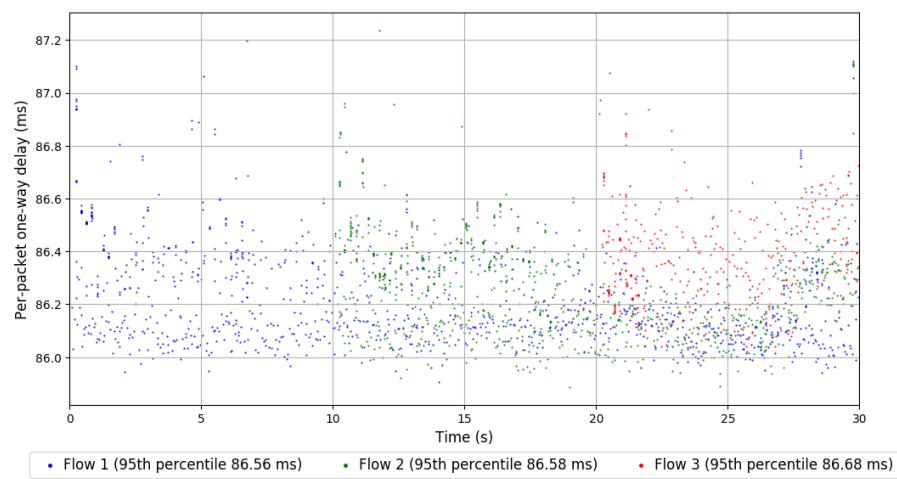
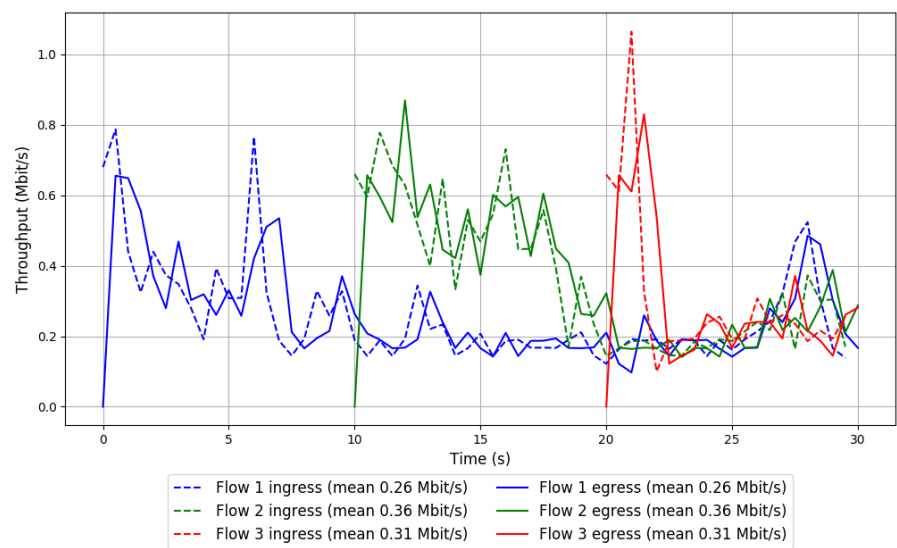


Run 2: Statistics of Sprout

Start at: 2018-06-18 13:24:01
End at: 2018-06-18 13:24:31
Local clock offset: 0.087 ms
Remote clock offset: -0.071 ms

```
# Below is generated by plot.py at 2018-06-18 18:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 86.603 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 86.555 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 86.580 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 86.681 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

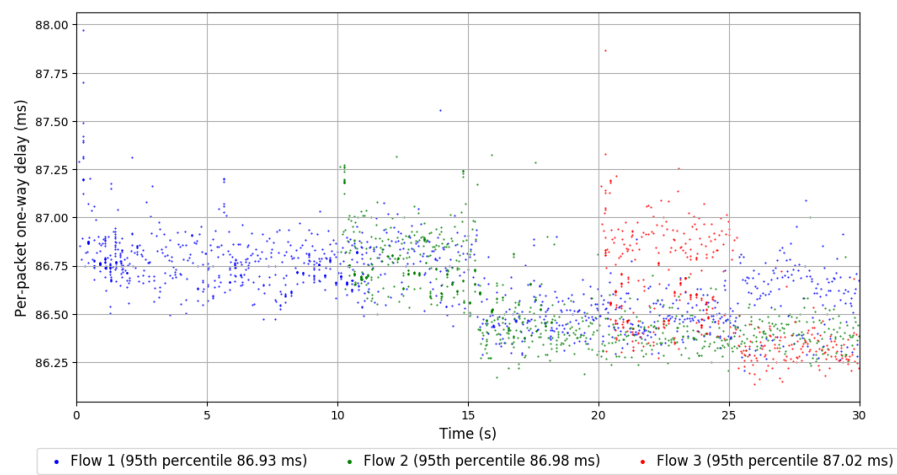
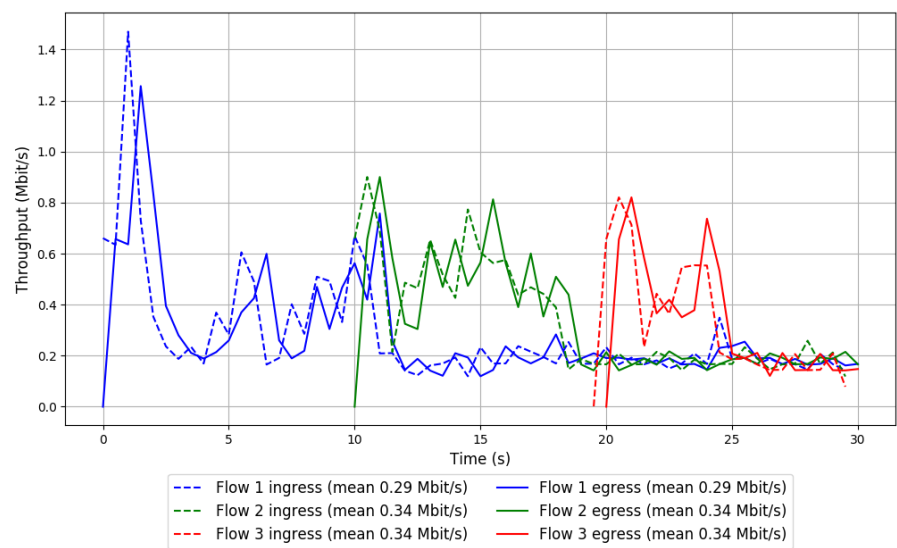


Run 3: Statistics of Sprout

Start at: 2018-06-18 13:47:34
End at: 2018-06-18 13:48:04
Local clock offset: -0.193 ms
Remote clock offset: 0.027 ms

```
# Below is generated by plot.py at 2018-06-18 18:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 86.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 86.934 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 86.980 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 87.015 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

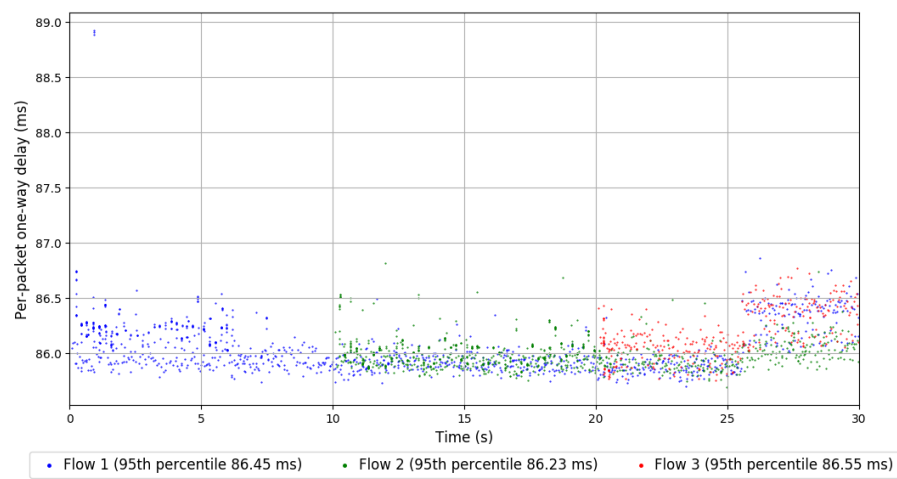
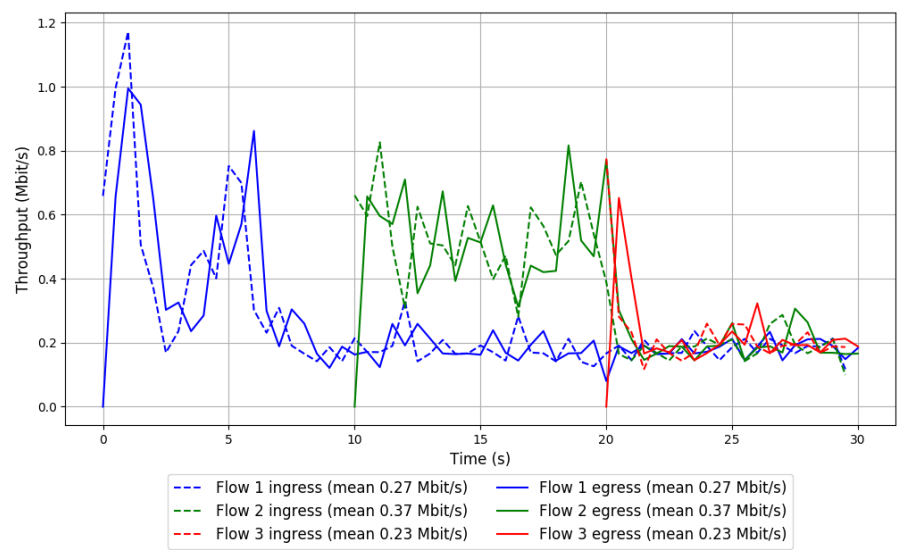


Run 4: Statistics of Sprout

Start at: 2018-06-18 14:11:03
End at: 2018-06-18 14:11:33
Local clock offset: 0.194 ms
Remote clock offset: 0.103 ms

```
# Below is generated by plot.py at 2018-06-18 18:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 86.452 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 86.453 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 86.227 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 86.551 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

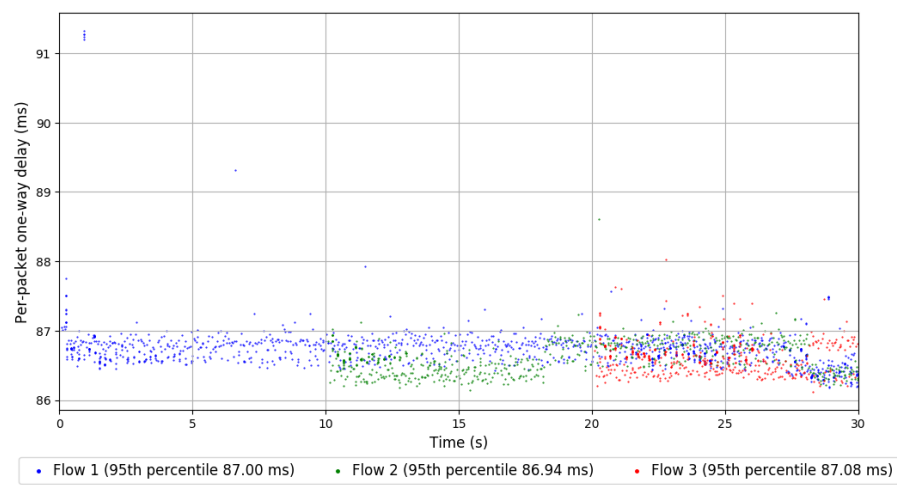
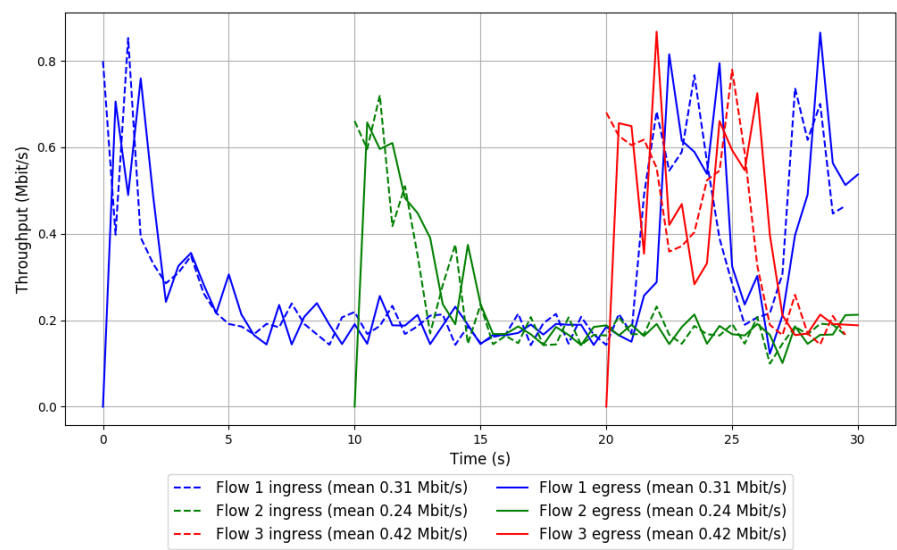


Run 5: Statistics of Sprout

Start at: 2018-06-18 14:34:41
End at: 2018-06-18 14:35:11
Local clock offset: -0.135 ms
Remote clock offset: 0.089 ms

```
# Below is generated by plot.py at 2018-06-18 18:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 86.988 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 87.002 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 86.943 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 87.085 ms
Loss rate: 0.00%
```


Run 5: Report of Sprout — Data Link

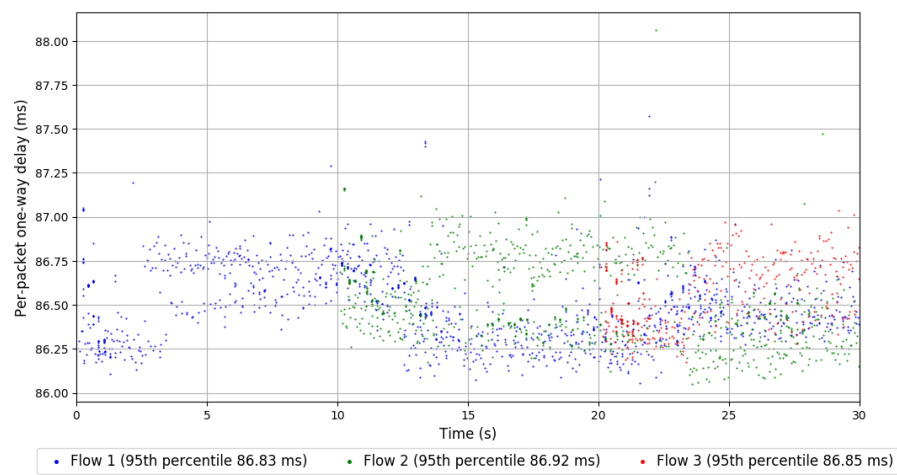
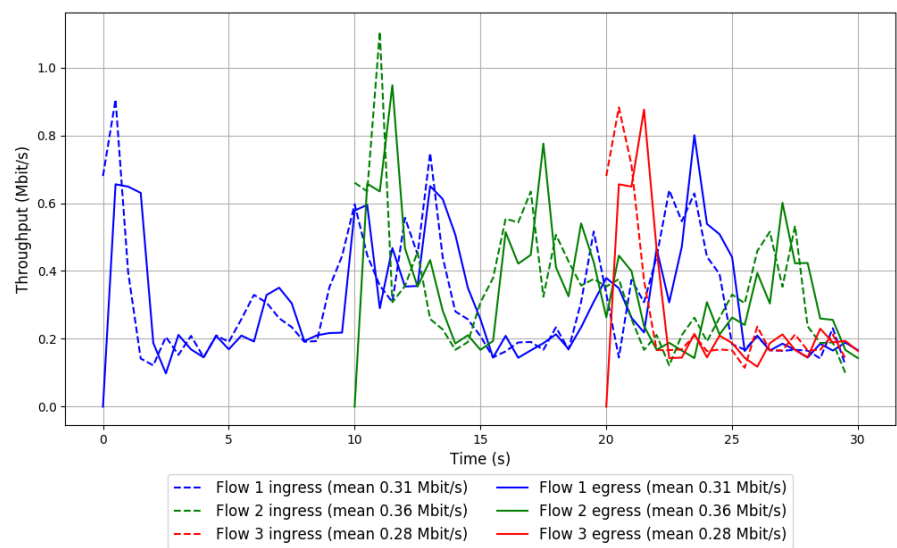


Run 6: Statistics of Sprout

Start at: 2018-06-18 14:58:16
End at: 2018-06-18 14:58:46
Local clock offset: -0.001 ms
Remote clock offset: 0.073 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 86.882 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 86.835 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 86.915 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 86.852 ms
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

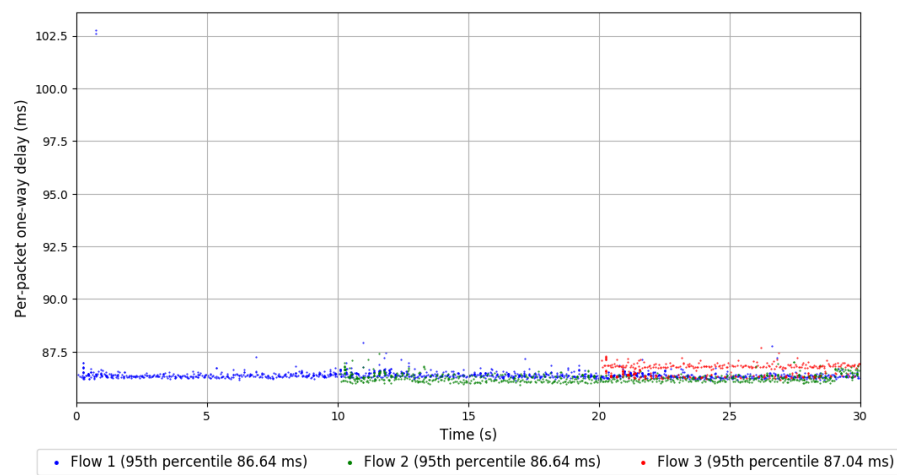
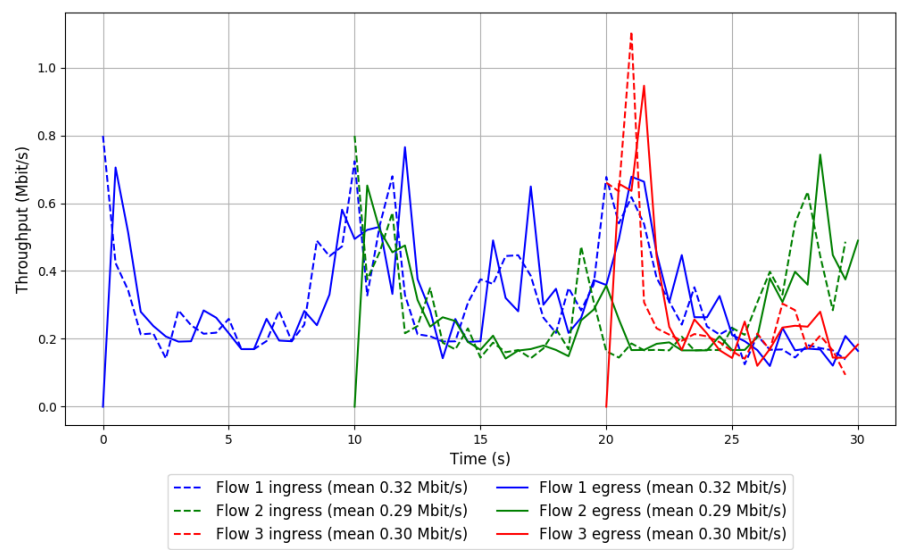


Run 7: Statistics of Sprout

Start at: 2018-06-18 15:21:49
End at: 2018-06-18 15:22:19
Local clock offset: -0.046 ms
Remote clock offset: -0.146 ms

Below is generated by plot.py at 2018-06-18 18:15:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 86.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 86.639 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 86.644 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 87.038 ms
Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-06-18 15:45:22

End at: 2018-06-18 15:45:52

Local clock offset: 0.038 ms

Remote clock offset: 0.173 ms

Below is generated by plot.py at 2018-06-18 18:15:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 87.162 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 87.172 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.25 Mbit/s

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

Loss rate: 0.00%

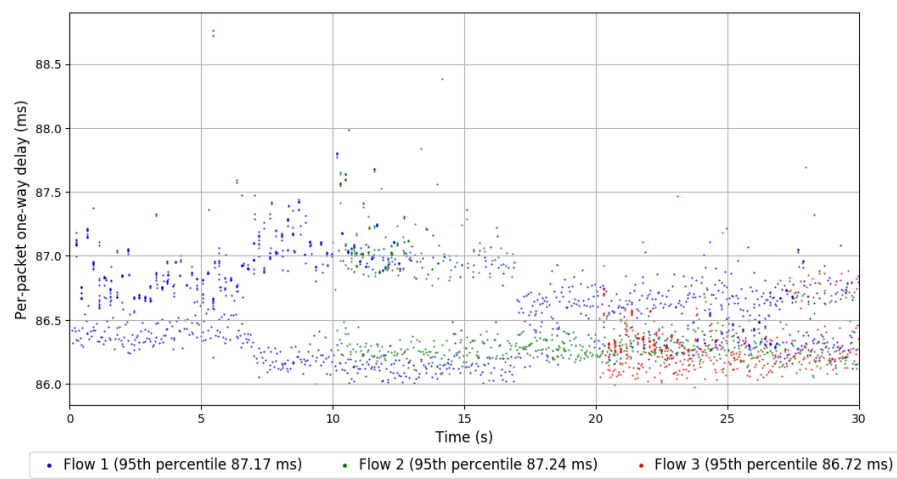
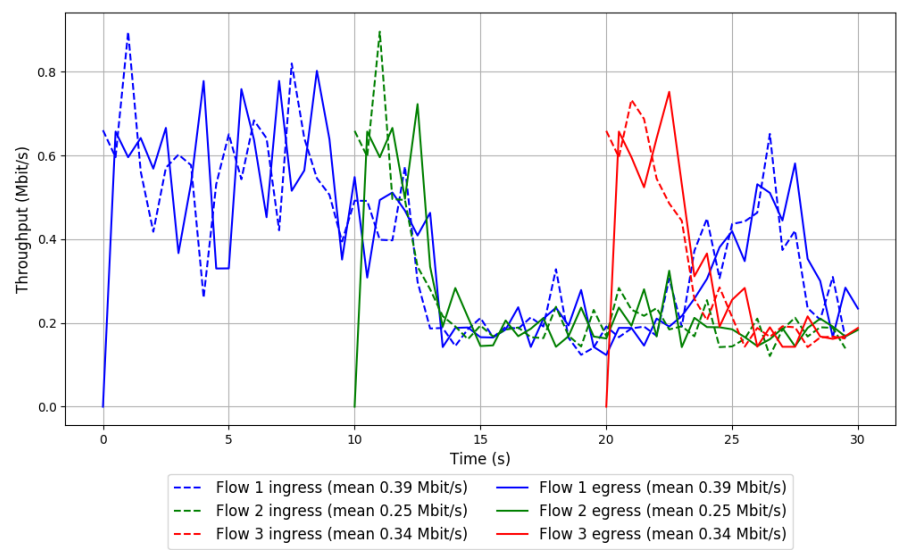
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 86.721 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-06-18 16:08:59

End at: 2018-06-18 16:09:29

Local clock offset: 0.051 ms

Remote clock offset: 0.387 ms

Below is generated by plot.py at 2018-06-18 18:15:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.45 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 86.863 ms

Loss rate: 0.00%

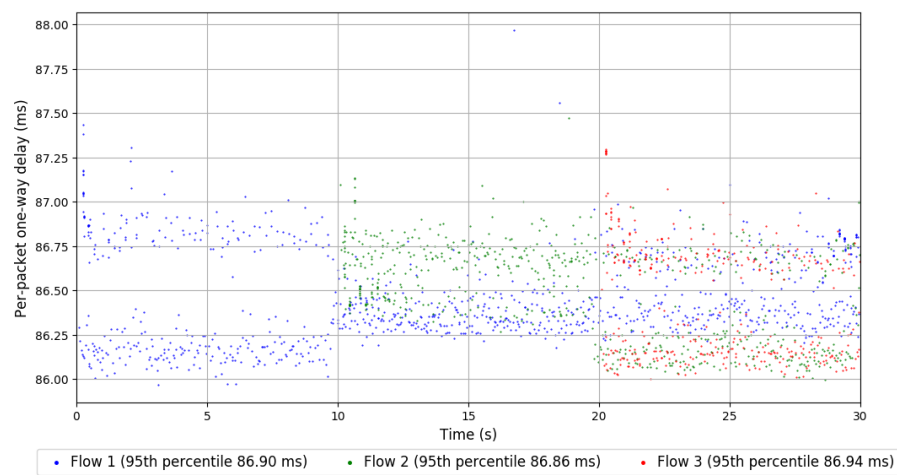
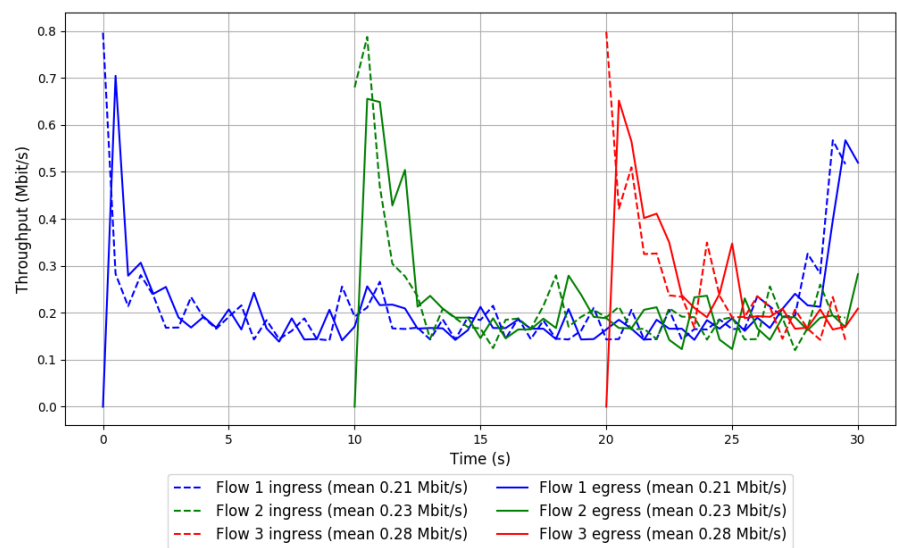
-- Flow 3:

Average throughput: 0.28 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-06-18 16:32:42

End at: 2018-06-18 16:33:12

Local clock offset: 0.082 ms

Remote clock offset: 0.492 ms

Below is generated by plot.py at 2018-06-18 18:15:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 86.852 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 86.845 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 86.827 ms

Loss rate: 0.00%

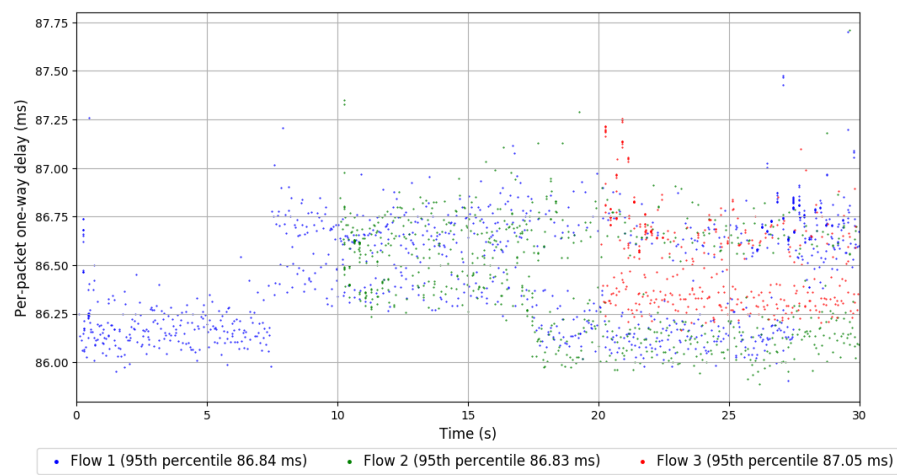
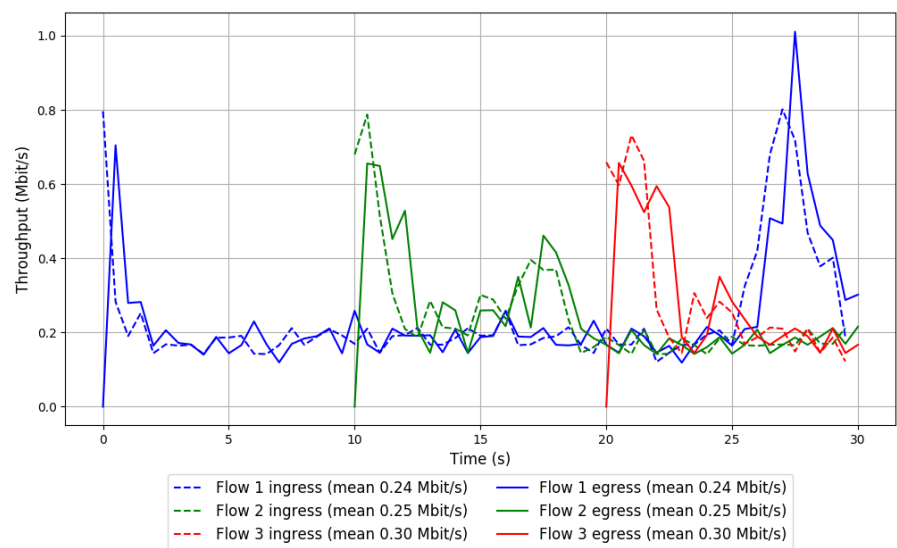
-- Flow 3:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 87.049 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

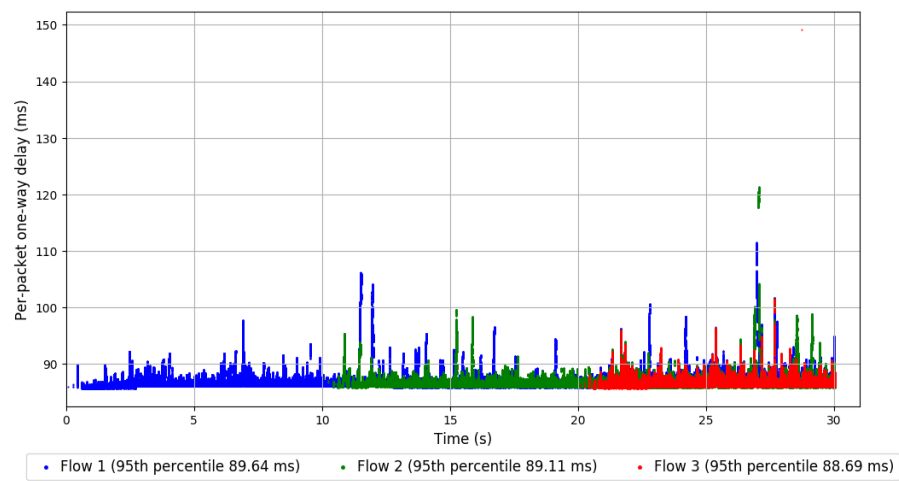
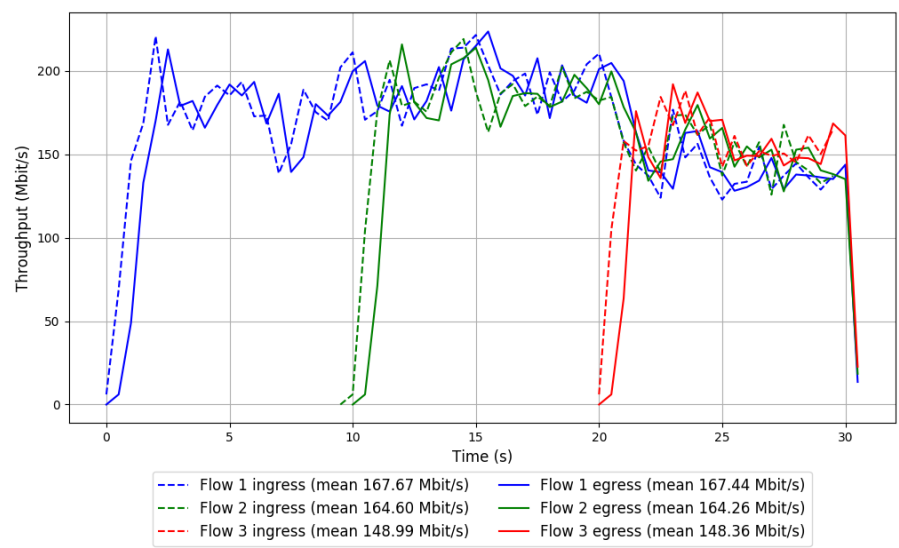


Run 1: Statistics of TaoVA-100x

Start at: 2018-06-18 12:54:06
End at: 2018-06-18 12:54:36
Local clock offset: 0.151 ms
Remote clock offset: -0.072 ms

Below is generated by plot.py at 2018-06-18 18:19:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 326.23 Mbit/s
95th percentile per-packet one-way delay: 89.309 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 167.44 Mbit/s
95th percentile per-packet one-way delay: 89.643 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 164.26 Mbit/s
95th percentile per-packet one-way delay: 89.108 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 148.36 Mbit/s
95th percentile per-packet one-way delay: 88.688 ms
Loss rate: 0.42%

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

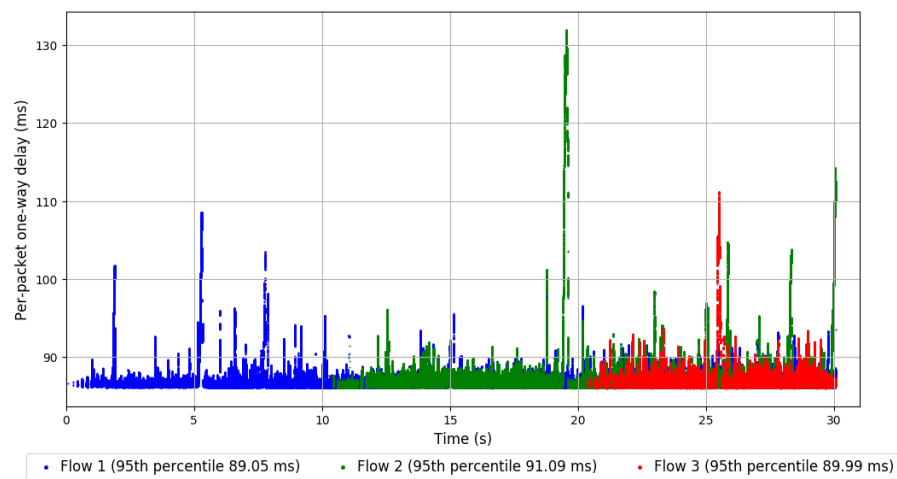
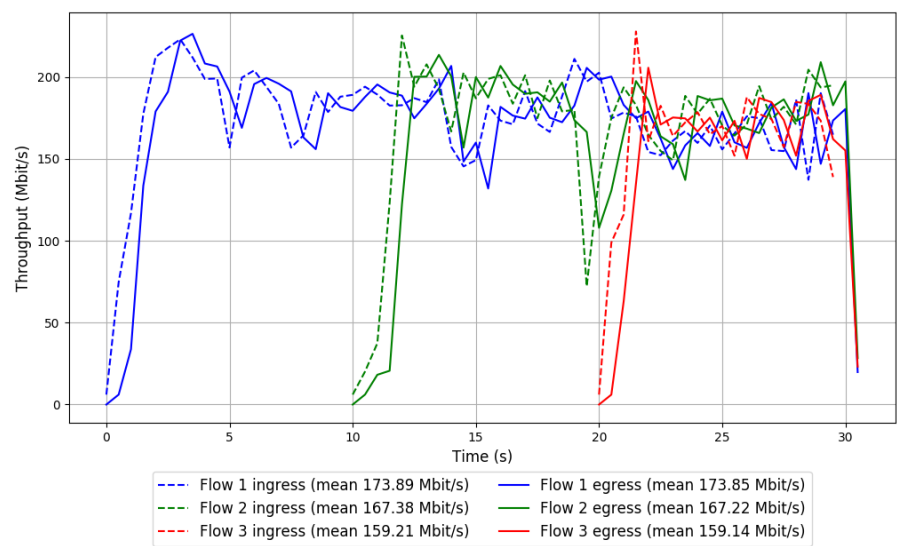


Run 2: Statistics of TaoVA-100x

Start at: 2018-06-18 13:17:54
End at: 2018-06-18 13:18:24
Local clock offset: -0.09 ms
Remote clock offset: -0.146 ms

Below is generated by plot.py at 2018-06-18 18:20:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 338.10 Mbit/s
95th percentile per-packet one-way delay: 89.835 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 173.85 Mbit/s
95th percentile per-packet one-way delay: 89.048 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 167.22 Mbit/s
95th percentile per-packet one-way delay: 91.095 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 159.14 Mbit/s
95th percentile per-packet one-way delay: 89.988 ms
Loss rate: 0.05%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-06-18 13:41:31

End at: 2018-06-18 13:42:01

Local clock offset: 0.108 ms

Remote clock offset: 0.053 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.57 Mbit/s

95th percentile per-packet one-way delay: 89.021 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 169.72 Mbit/s

95th percentile per-packet one-way delay: 88.360 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 141.08 Mbit/s

95th percentile per-packet one-way delay: 89.594 ms

Loss rate: 0.46%

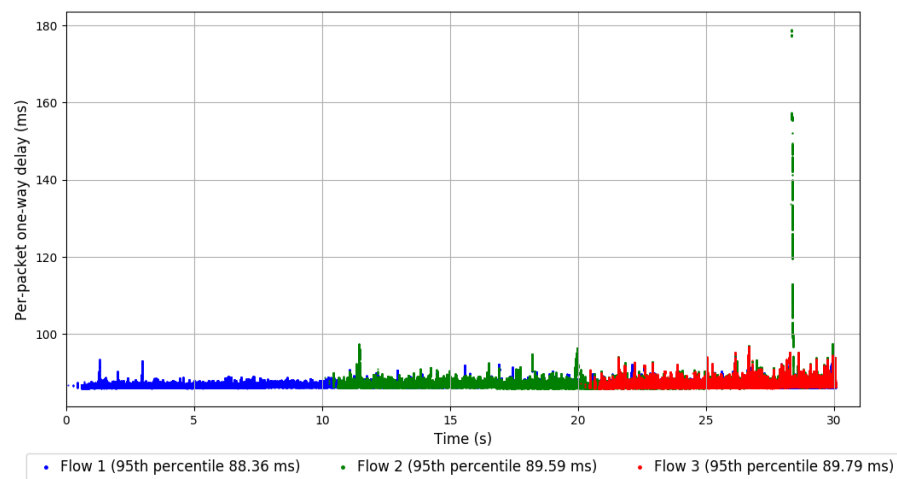
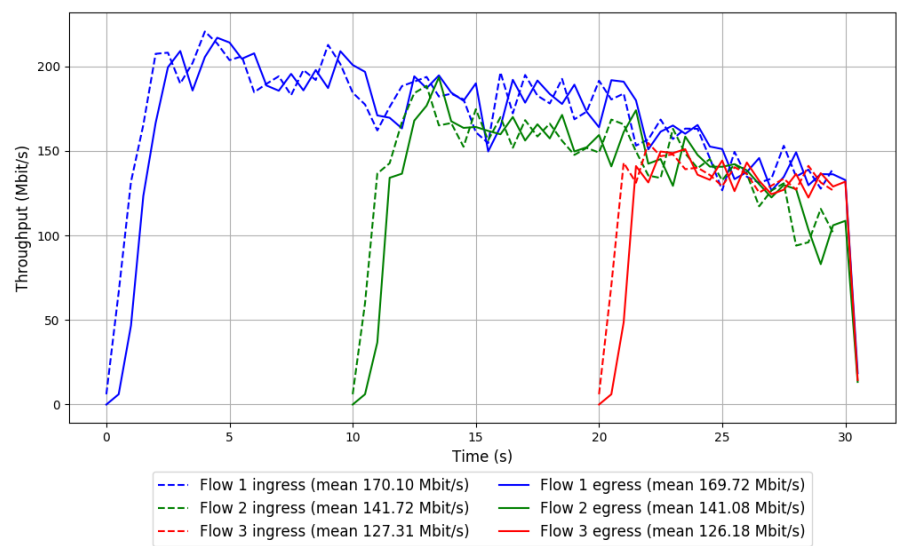
-- Flow 3:

Average throughput: 126.18 Mbit/s

95th percentile per-packet one-way delay: 89.790 ms

Loss rate: 0.88%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-06-18 14:04:58

End at: 2018-06-18 14:05:28

Local clock offset: 0.005 ms

Remote clock offset: 0.142 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.11 Mbit/s

95th percentile per-packet one-way delay: 91.123 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 171.12 Mbit/s

95th percentile per-packet one-way delay: 89.462 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 154.57 Mbit/s

95th percentile per-packet one-way delay: 93.037 ms

Loss rate: 0.05%

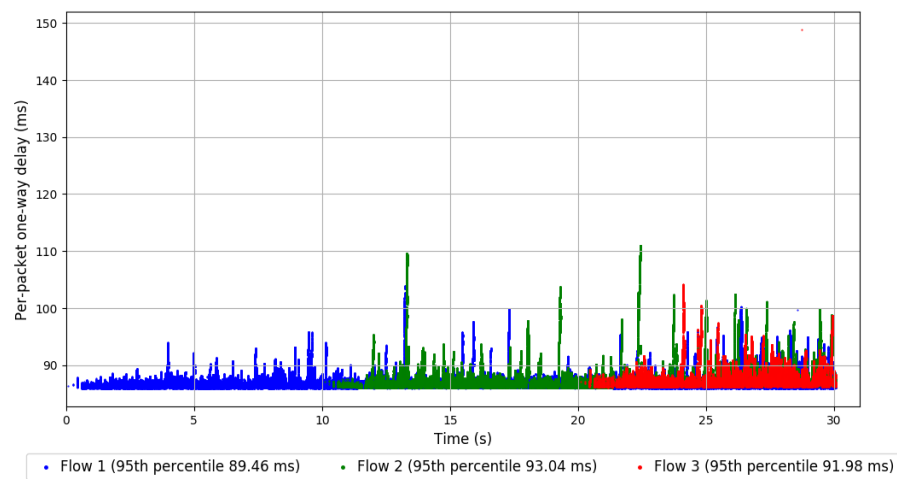
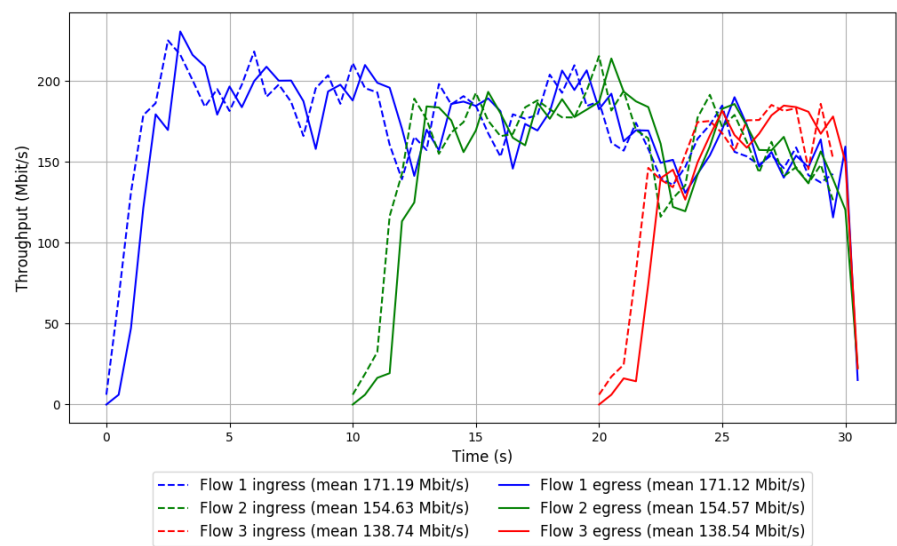
-- Flow 3:

Average throughput: 138.54 Mbit/s

95th percentile per-packet one-way delay: 91.982 ms

Loss rate: 0.15%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-06-18 14:28:30

End at: 2018-06-18 14:29:00

Local clock offset: 0.121 ms

Remote clock offset: 0.167 ms

Below is generated by plot.py at 2018-06-18 18:20:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 329.36 Mbit/s

95th percentile per-packet one-way delay: 89.724 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 183.52 Mbit/s

95th percentile per-packet one-way delay: 89.466 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 154.14 Mbit/s

95th percentile per-packet one-way delay: 89.595 ms

Loss rate: 0.40%

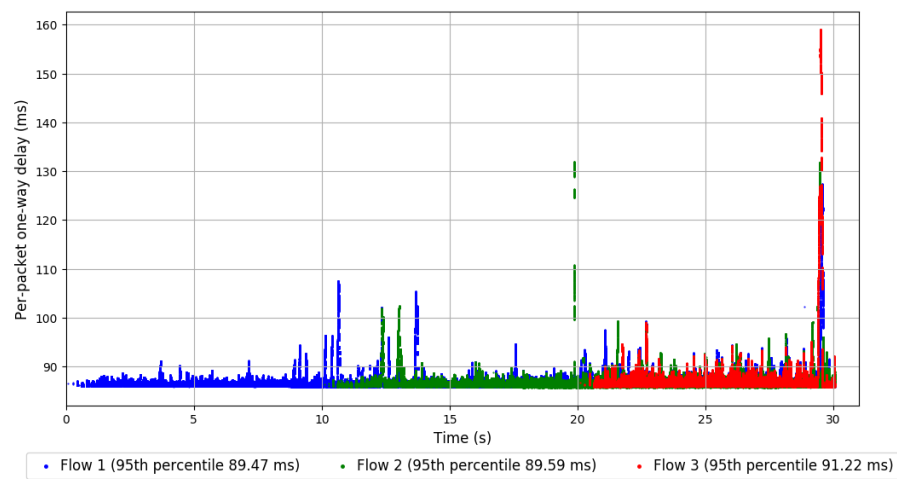
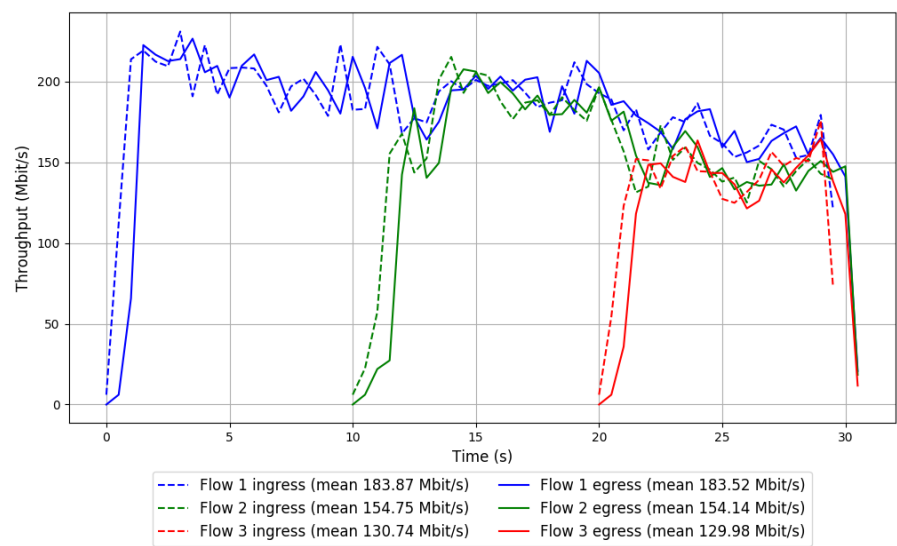
-- Flow 3:

Average throughput: 129.98 Mbit/s

95th percentile per-packet one-way delay: 91.225 ms

Loss rate: 0.58%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-06-18 14:52:05

End at: 2018-06-18 14:52:35

Local clock offset: -0.121 ms

Remote clock offset: 0.087 ms

Below is generated by plot.py at 2018-06-18 18:20:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.25 Mbit/s

95th percentile per-packet one-way delay: 90.193 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 144.47 Mbit/s

95th percentile per-packet one-way delay: 89.746 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 132.15 Mbit/s

95th percentile per-packet one-way delay: 90.242 ms

Loss rate: 0.96%

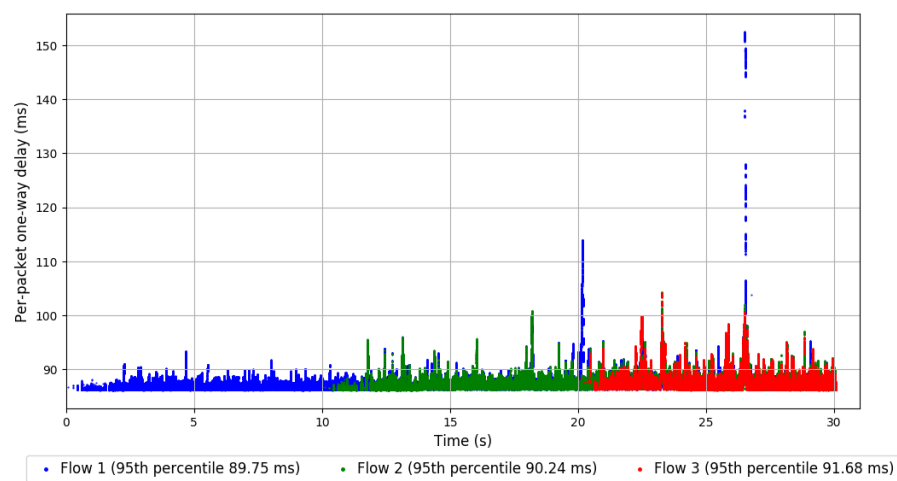
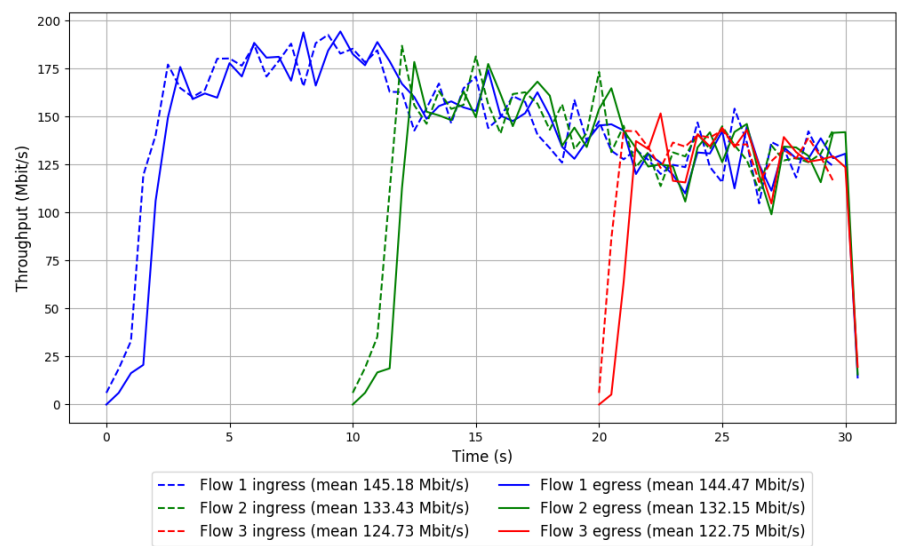
-- Flow 3:

Average throughput: 122.75 Mbit/s

95th percentile per-packet one-way delay: 91.680 ms

Loss rate: 1.61%

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

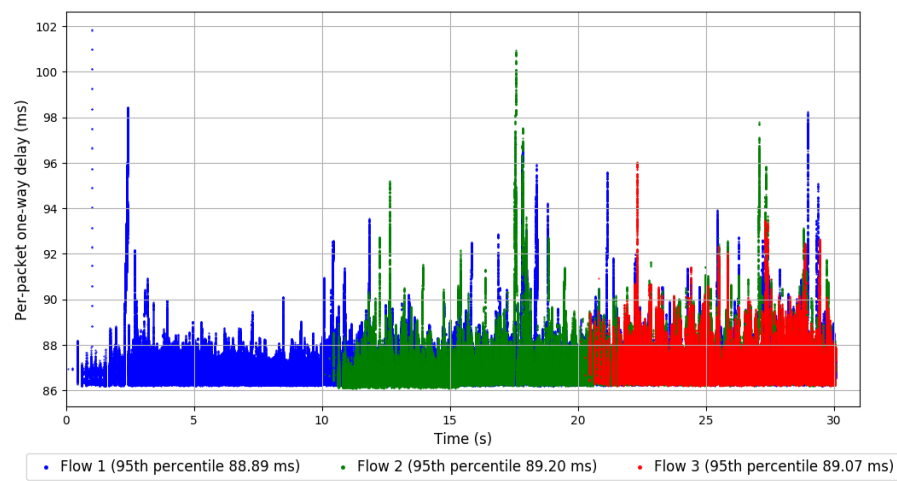
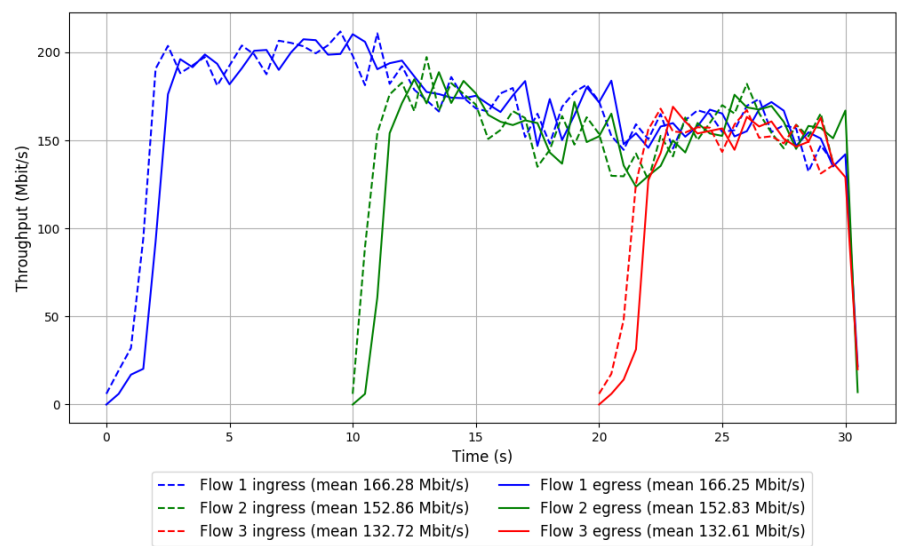


Run 7: Statistics of TaoVA-100x

Start at: 2018-06-18 15:15:44
End at: 2018-06-18 15:16:14
Local clock offset: -0.188 ms
Remote clock offset: -0.107 ms

Below is generated by plot.py at 2018-06-18 18:24:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 312.07 Mbit/s
95th percentile per-packet one-way delay: 89.034 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 166.25 Mbit/s
95th percentile per-packet one-way delay: 88.893 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 152.83 Mbit/s
95th percentile per-packet one-way delay: 89.196 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 132.61 Mbit/s
95th percentile per-packet one-way delay: 89.069 ms
Loss rate: 0.09%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-06-18 15:39:16

End at: 2018-06-18 15:39:46

Local clock offset: 0.027 ms

Remote clock offset: 0.037 ms

Below is generated by plot.py at 2018-06-18 18:25:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 307.38 Mbit/s

95th percentile per-packet one-way delay: 89.193 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 162.08 Mbit/s

95th percentile per-packet one-way delay: 88.863 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 145.22 Mbit/s

95th percentile per-packet one-way delay: 89.495 ms

Loss rate: 0.46%

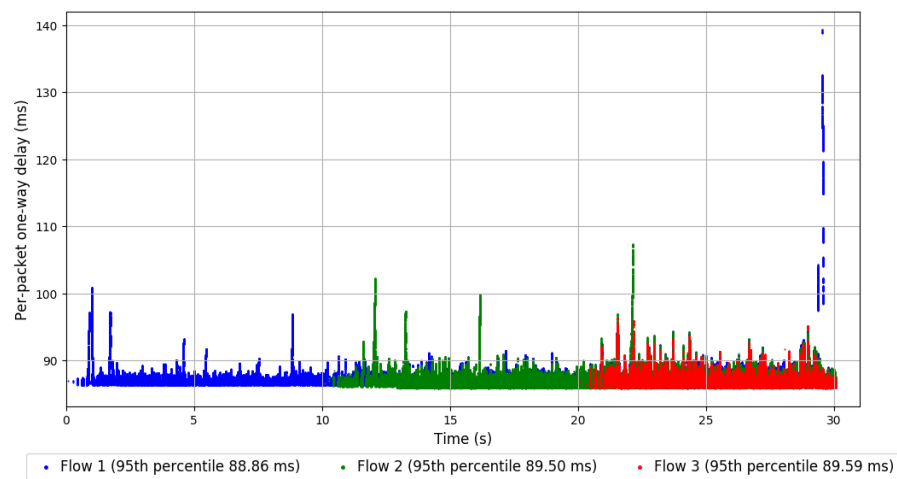
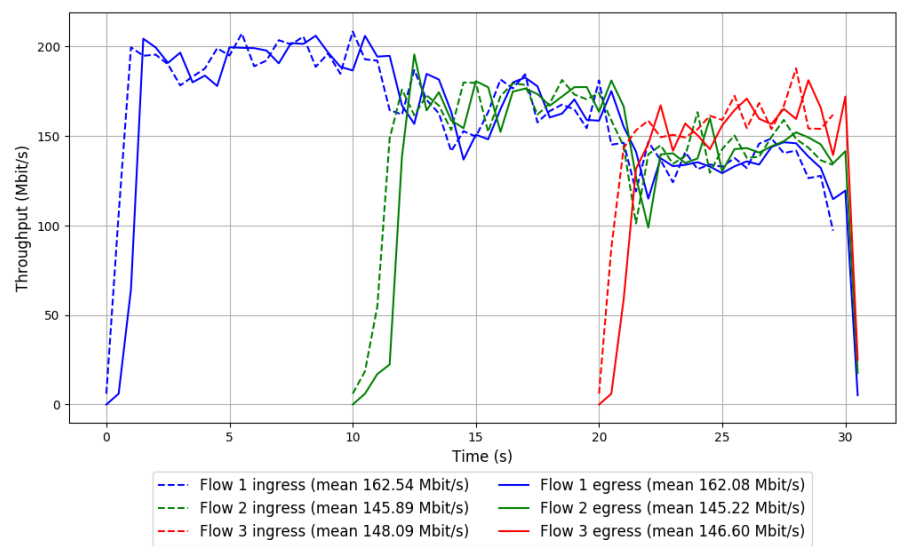
-- Flow 3:

Average throughput: 146.60 Mbit/s

95th percentile per-packet one-way delay: 89.593 ms

Loss rate: 1.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-06-18 16:02:54

End at: 2018-06-18 16:03:24

Local clock offset: 0.138 ms

Remote clock offset: 0.363 ms

Below is generated by plot.py at 2018-06-18 18:28:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 296.82 Mbit/s

95th percentile per-packet one-way delay: 88.839 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 160.56 Mbit/s

95th percentile per-packet one-way delay: 88.836 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 136.74 Mbit/s

95th percentile per-packet one-way delay: 88.403 ms

Loss rate: 0.00%

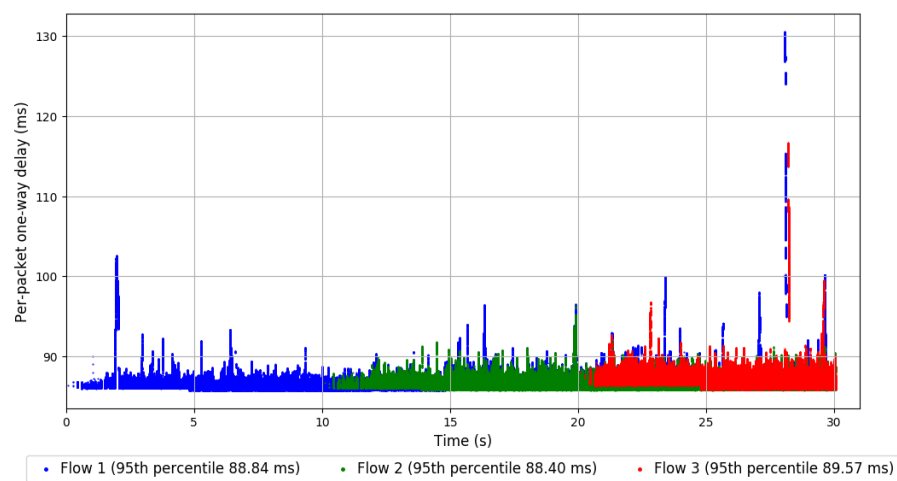
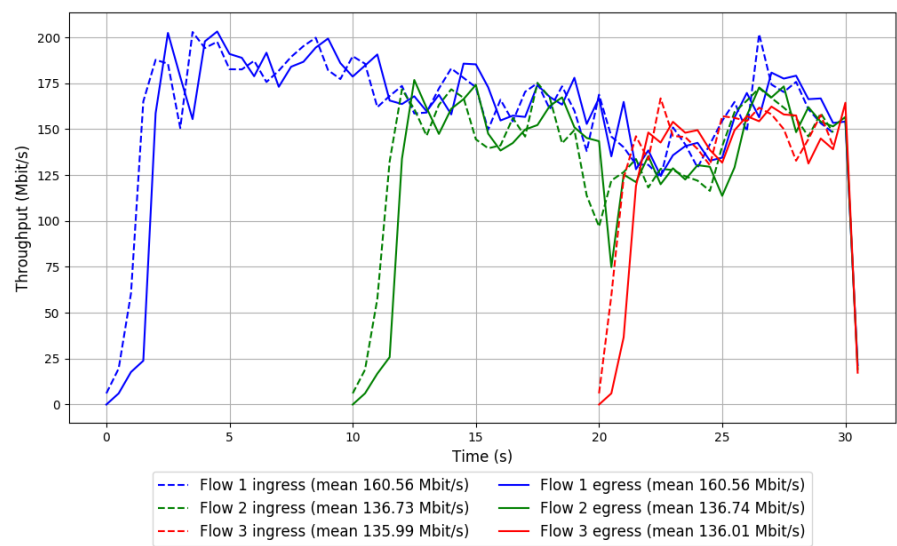
-- Flow 3:

Average throughput: 136.01 Mbit/s

95th percentile per-packet one-way delay: 89.568 ms

Loss rate: 0.00%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-06-18 16:26:33

End at: 2018-06-18 16:27:03

Local clock offset: 0.202 ms

Remote clock offset: 0.509 ms

Below is generated by plot.py at 2018-06-18 18:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.72 Mbit/s

95th percentile per-packet one-way delay: 88.435 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 164.43 Mbit/s

95th percentile per-packet one-way delay: 88.076 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 137.73 Mbit/s

95th percentile per-packet one-way delay: 88.658 ms

Loss rate: 0.18%

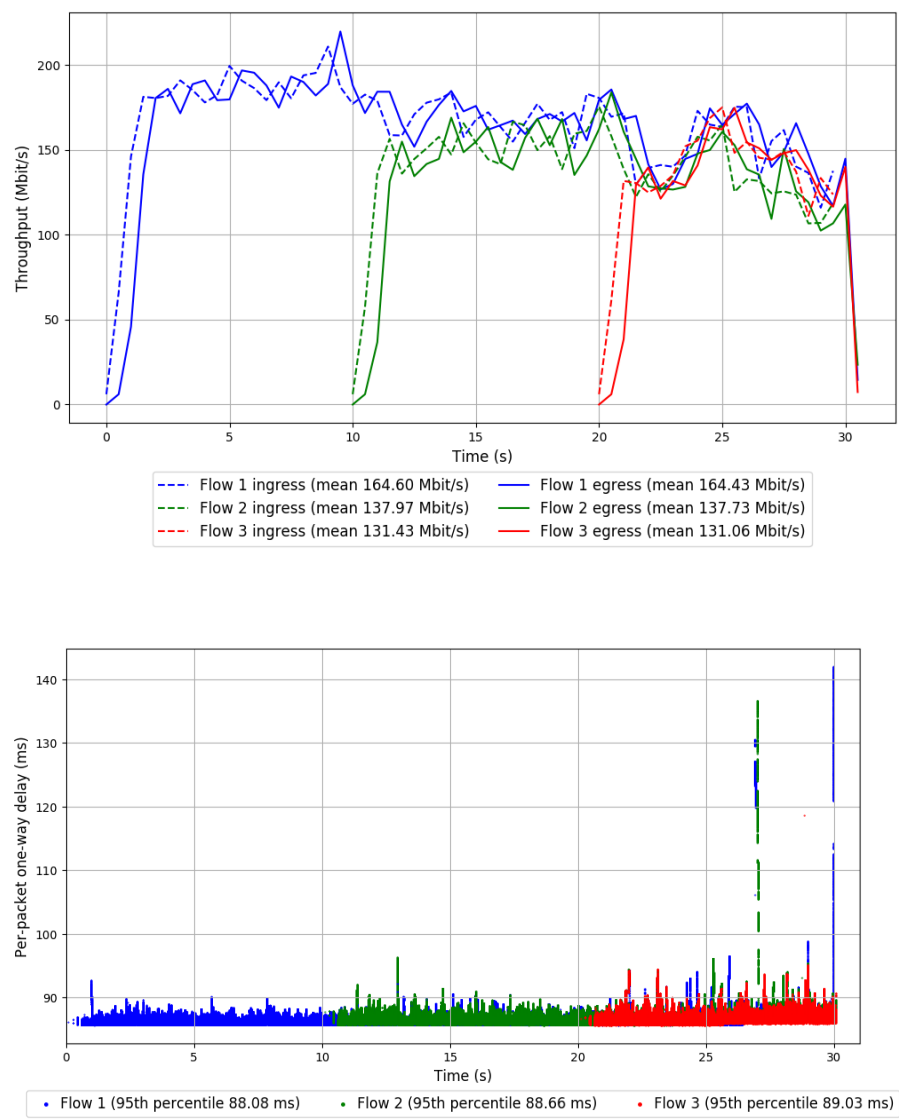
-- Flow 3:

Average throughput: 131.06 Mbit/s

95th percentile per-packet one-way delay: 89.029 ms

Loss rate: 0.29%

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

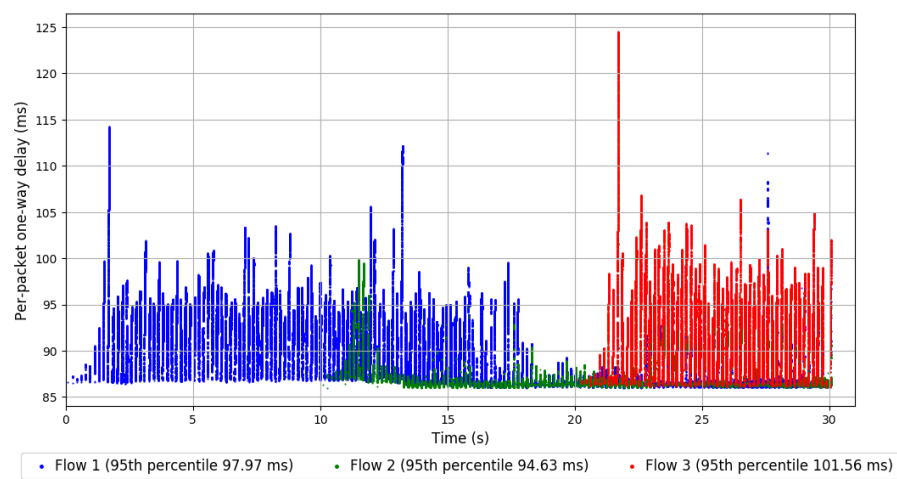
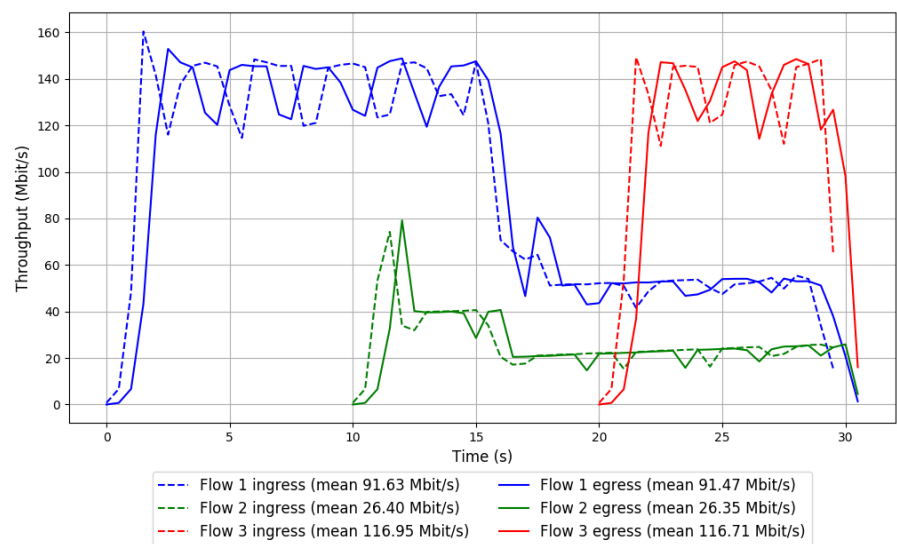


Run 1: Statistics of TCP Vegas

Start at: 2018-06-18 12:49:16
End at: 2018-06-18 12:49:46
Local clock offset: 0.097 ms
Remote clock offset: -0.076 ms

Below is generated by plot.py at 2018-06-18 18:28:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 147.81 Mbit/s
95th percentile per-packet one-way delay: 99.180 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 97.968 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 26.35 Mbit/s
95th percentile per-packet one-way delay: 94.628 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 116.71 Mbit/s
95th percentile per-packet one-way delay: 101.564 ms
Loss rate: 0.05%

Run 1: Report of TCP Vegas — Data Link

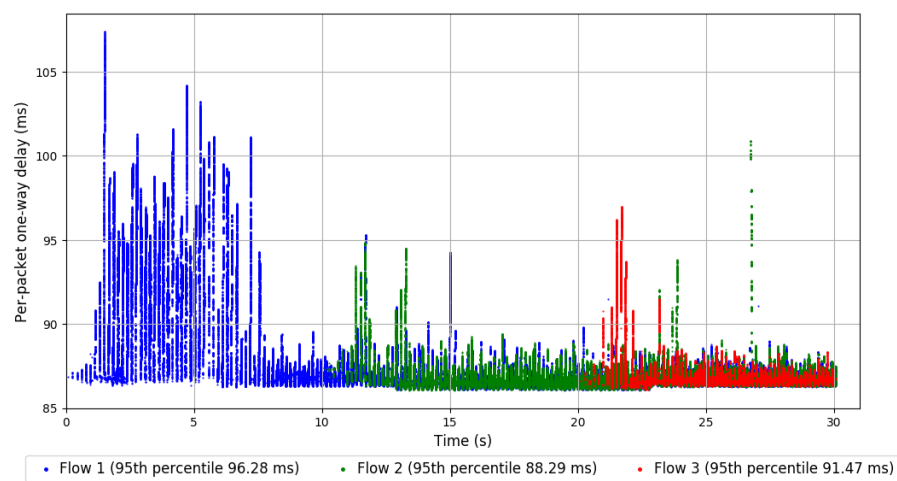
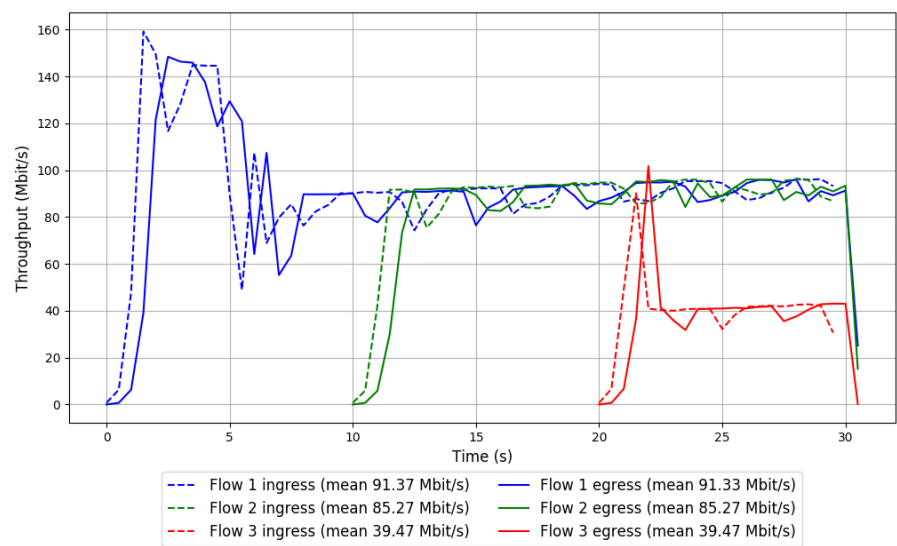


Run 2: Statistics of TCP Vegas

Start at: 2018-06-18 13:12:56
End at: 2018-06-18 13:13:26
Local clock offset: -0.14 ms
Remote clock offset: -0.137 ms

Below is generated by plot.py at 2018-06-18 18:28:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 161.25 Mbit/s
95th percentile per-packet one-way delay: 94.565 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 91.33 Mbit/s
95th percentile per-packet one-way delay: 96.279 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 85.27 Mbit/s
95th percentile per-packet one-way delay: 88.288 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 91.465 ms
Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-06-18 13:36:36

End at: 2018-06-18 13:37:06

Local clock offset: 0.008 ms

Remote clock offset: -0.06 ms

Below is generated by plot.py at 2018-06-18 18:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.39 Mbit/s

95th percentile per-packet one-way delay: 99.861 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 54.47 Mbit/s

95th percentile per-packet one-way delay: 99.854 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 98.72 Mbit/s

95th percentile per-packet one-way delay: 98.988 ms

Loss rate: 0.02%

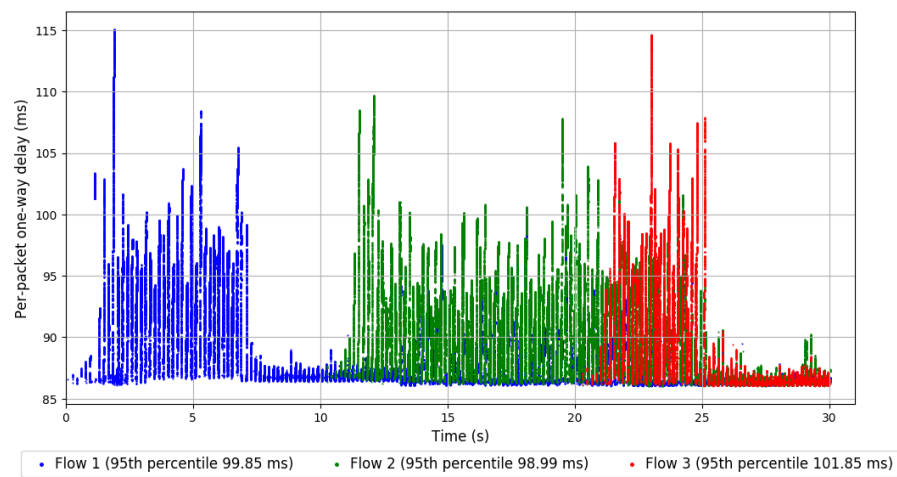
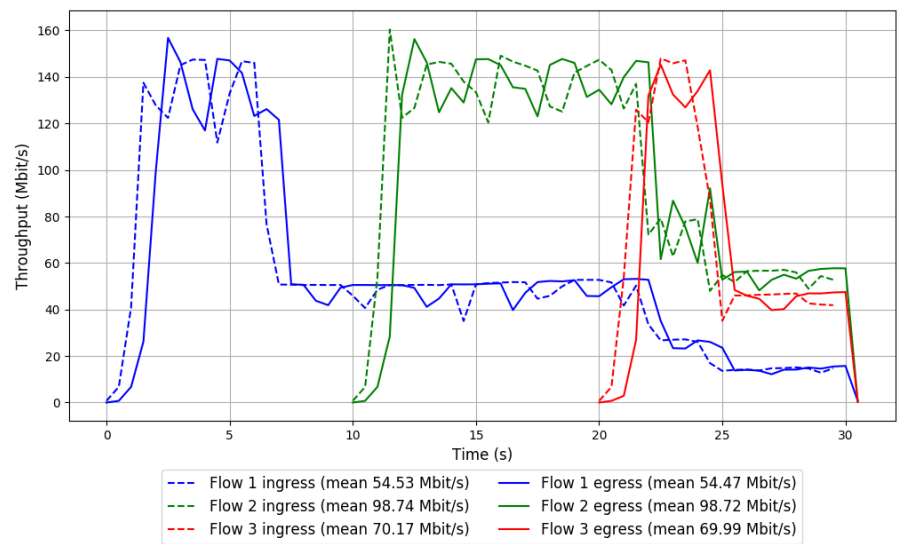
-- Flow 3:

Average throughput: 69.99 Mbit/s

95th percentile per-packet one-way delay: 101.852 ms

Loss rate: 0.25%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-06-18 14:00:03

End at: 2018-06-18 14:00:33

Local clock offset: 0.0 ms

Remote clock offset: 0.104 ms

Below is generated by plot.py at 2018-06-18 18:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.69 Mbit/s

95th percentile per-packet one-way delay: 95.691 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 37.31 Mbit/s

95th percentile per-packet one-way delay: 91.746 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.66 Mbit/s

95th percentile per-packet one-way delay: 96.287 ms

Loss rate: 0.01%

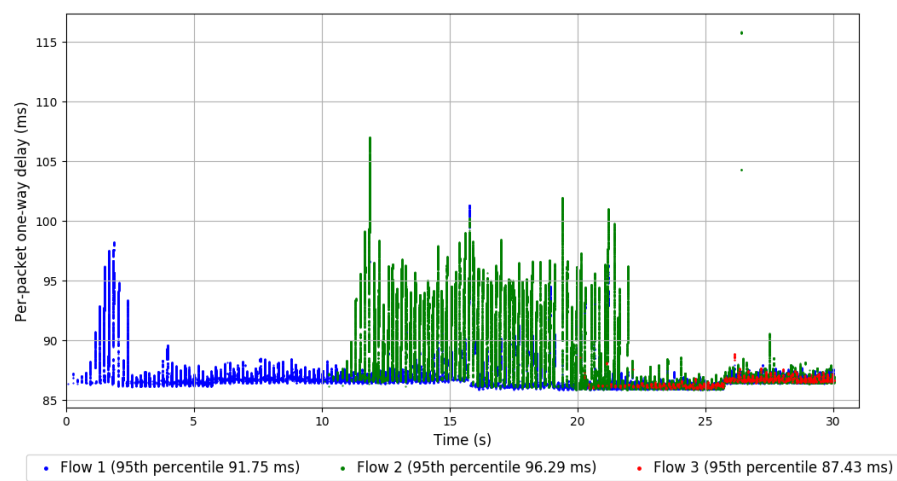
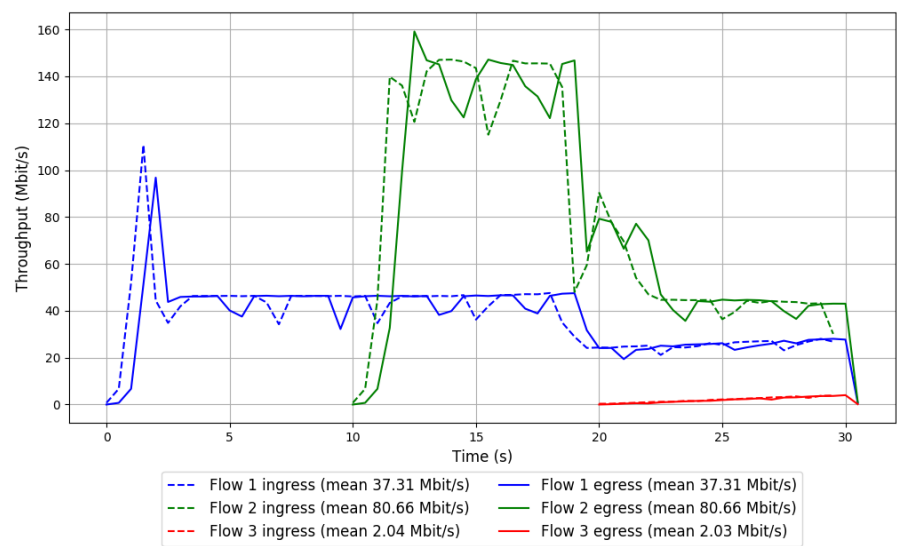
-- Flow 3:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 87.426 ms

Loss rate: 0.47%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-06-18 14:23:39

End at: 2018-06-18 14:24:09

Local clock offset: -0.086 ms

Remote clock offset: 0.218 ms

Below is generated by plot.py at 2018-06-18 18:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.29 Mbit/s

95th percentile per-packet one-way delay: 88.118 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 38.26 Mbit/s

95th percentile per-packet one-way delay: 87.686 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 33.98 Mbit/s

95th percentile per-packet one-way delay: 90.099 ms

Loss rate: 0.19%

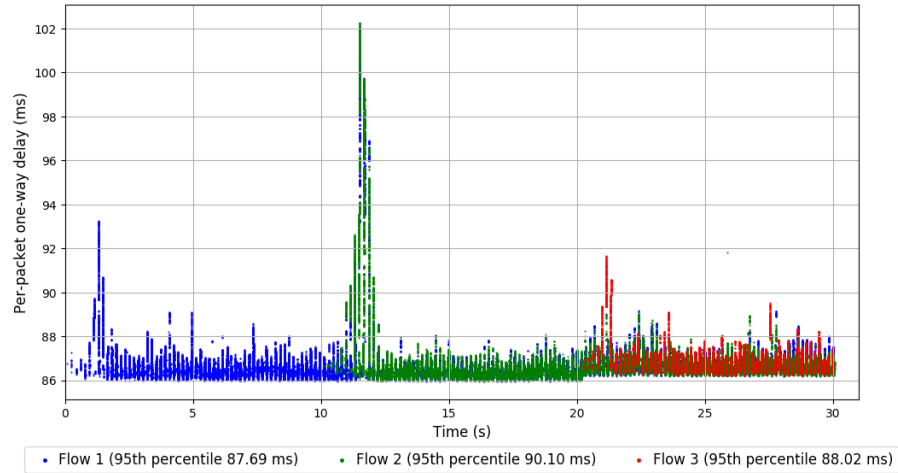
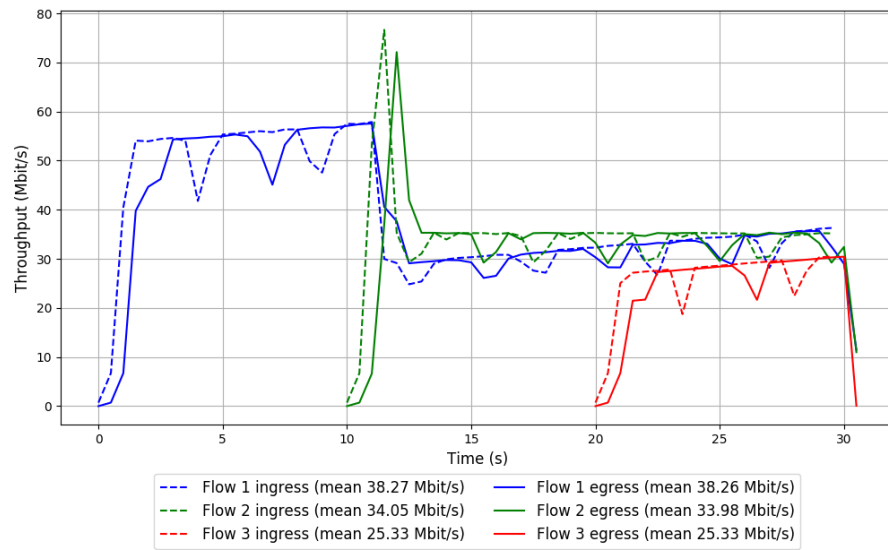
-- Flow 3:

Average throughput: 25.33 Mbit/s

95th percentile per-packet one-way delay: 88.019 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-06-18 14:47:11

End at: 2018-06-18 14:47:41

Local clock offset: -0.104 ms

Remote clock offset: 0.037 ms

Below is generated by plot.py at 2018-06-18 18:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.14 Mbit/s

95th percentile per-packet one-way delay: 89.418 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 100.92 Mbit/s

95th percentile per-packet one-way delay: 88.487 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.09 Mbit/s

95th percentile per-packet one-way delay: 91.453 ms

Loss rate: 0.00%

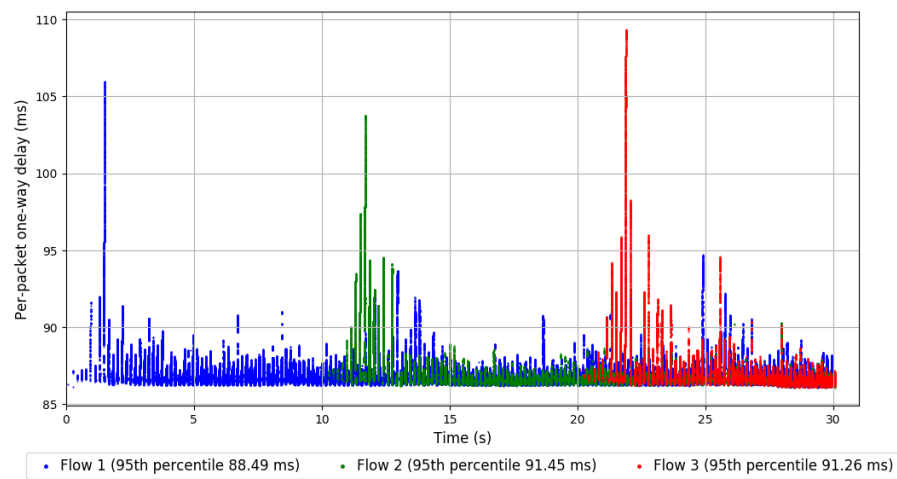
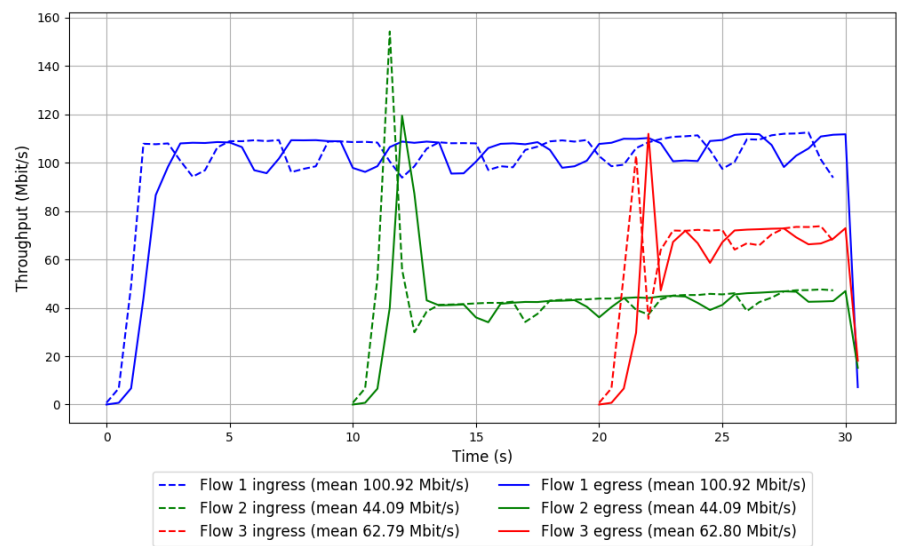
-- Flow 3:

Average throughput: 62.80 Mbit/s

95th percentile per-packet one-way delay: 91.258 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link

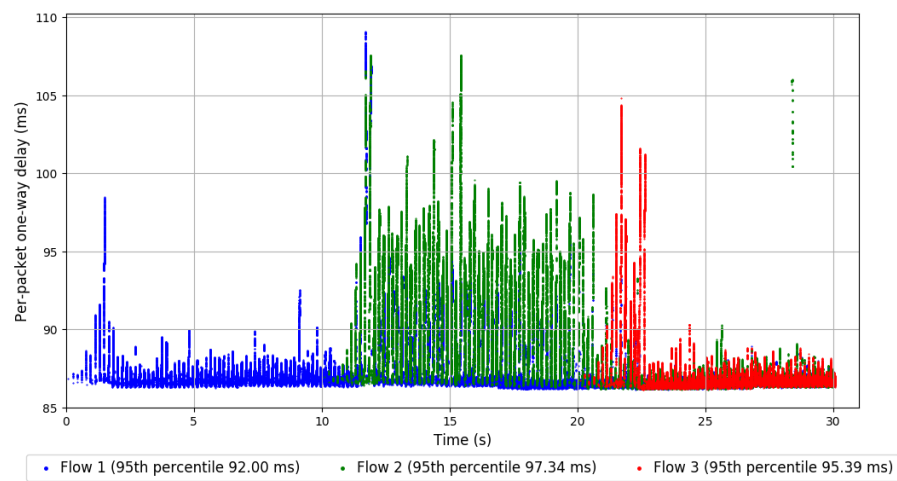
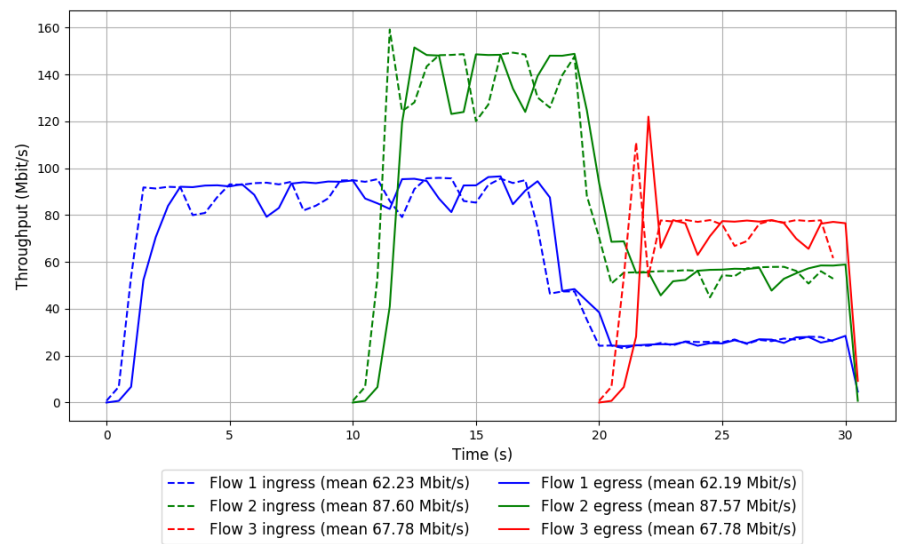


Run 7: Statistics of TCP Vegas

Start at: 2018-06-18 15:10:52
End at: 2018-06-18 15:11:22
Local clock offset: -0.185 ms
Remote clock offset: -0.016 ms

Below is generated by plot.py at 2018-06-18 18:28:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 143.01 Mbit/s
95th percentile per-packet one-way delay: 96.099 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.19 Mbit/s
95th percentile per-packet one-way delay: 91.995 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 87.57 Mbit/s
95th percentile per-packet one-way delay: 97.344 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 67.78 Mbit/s
95th percentile per-packet one-way delay: 95.392 ms
Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link

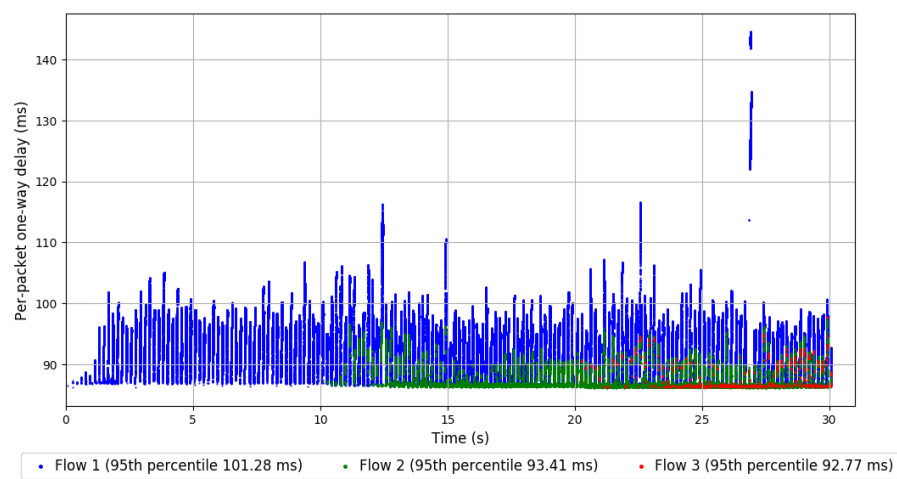
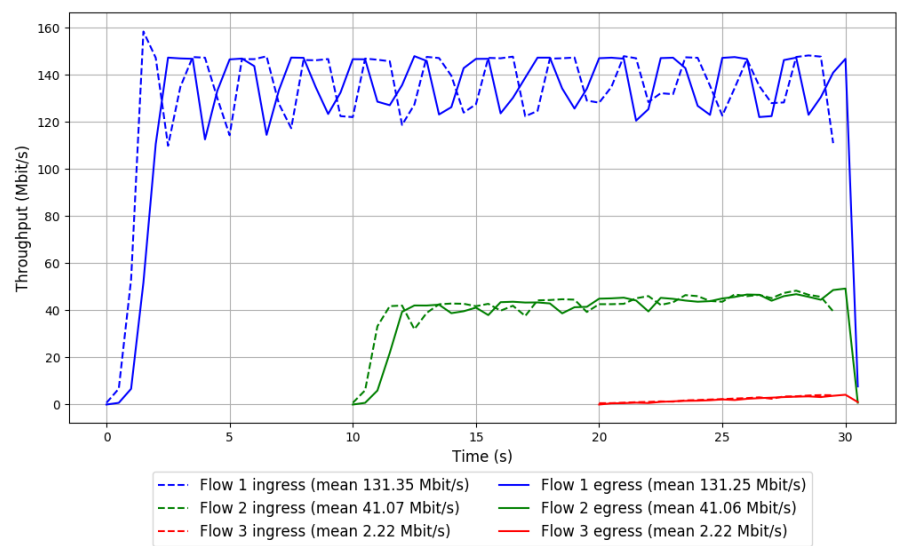


Run 8: Statistics of TCP Vegas

Start at: 2018-06-18 15:34:19
End at: 2018-06-18 15:34:49
Local clock offset: -0.201 ms
Remote clock offset: -0.143 ms

Below is generated by plot.py at 2018-06-18 18:28:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 159.35 Mbit/s
95th percentile per-packet one-way delay: 100.696 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 131.25 Mbit/s
95th percentile per-packet one-way delay: 101.283 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 41.06 Mbit/s
95th percentile per-packet one-way delay: 93.413 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 92.767 ms
Loss rate: 0.16%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-06-18 15:57:56

End at: 2018-06-18 15:58:26

Local clock offset: -0.025 ms

Remote clock offset: 0.398 ms

Below is generated by plot.py at 2018-06-18 18:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.27 Mbit/s

95th percentile per-packet one-way delay: 99.271 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 47.77 Mbit/s

95th percentile per-packet one-way delay: 97.419 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 78.66 Mbit/s

95th percentile per-packet one-way delay: 99.222 ms

Loss rate: 0.03%

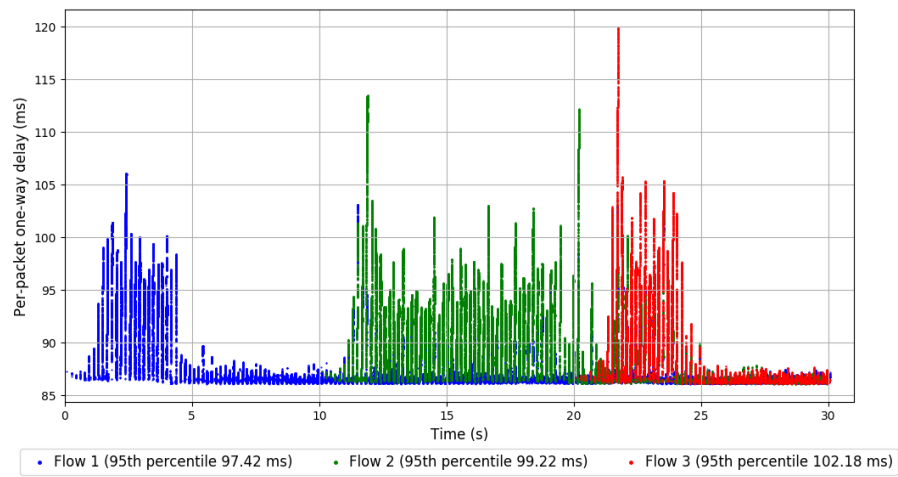
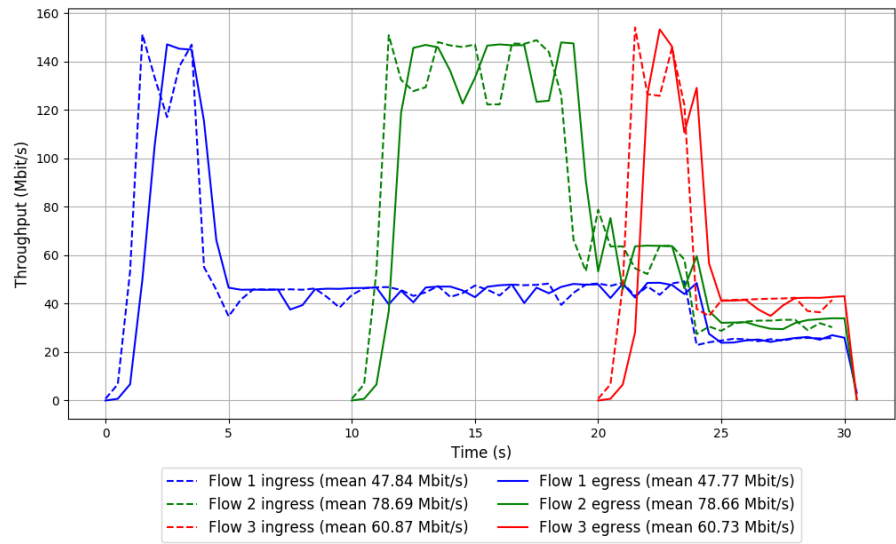
-- Flow 3:

Average throughput: 60.73 Mbit/s

95th percentile per-packet one-way delay: 102.177 ms

Loss rate: 0.24%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-06-18 16:21:41

End at: 2018-06-18 16:22:11

Local clock offset: -0.022 ms

Remote clock offset: 0.505 ms

Below is generated by plot.py at 2018-06-18 18:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.79 Mbit/s

95th percentile per-packet one-way delay: 97.461 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 91.281 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 129.48 Mbit/s

95th percentile per-packet one-way delay: 98.593 ms

Loss rate: 0.00%

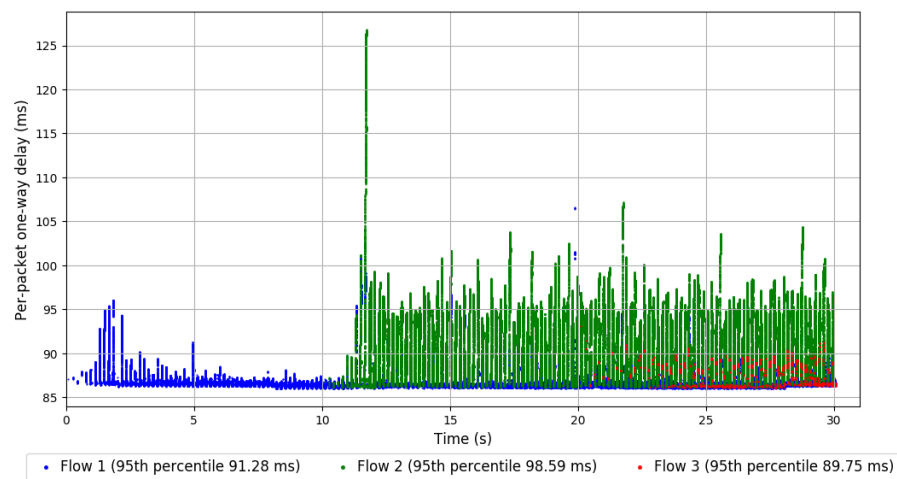
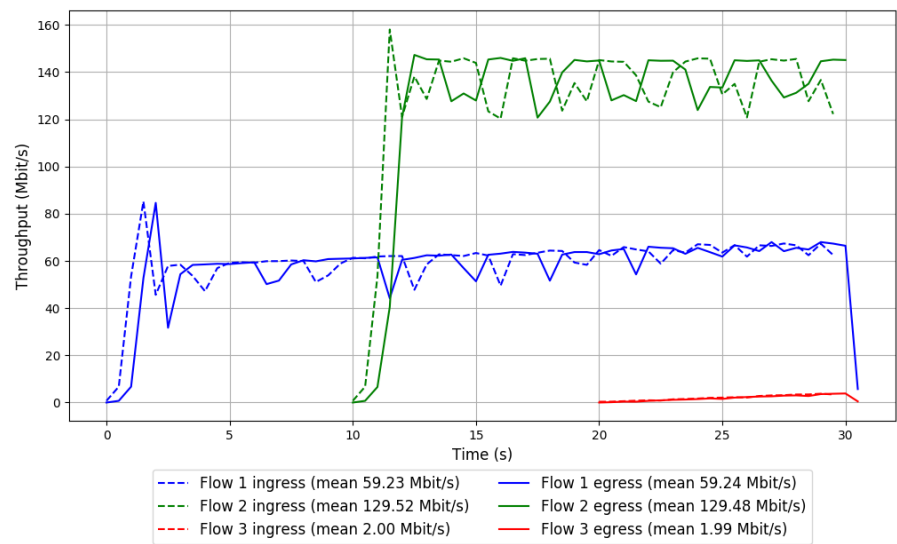
-- Flow 3:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 89.747 ms

Loss rate: 0.48%

Run 10: Report of TCP Vegas — Data Link

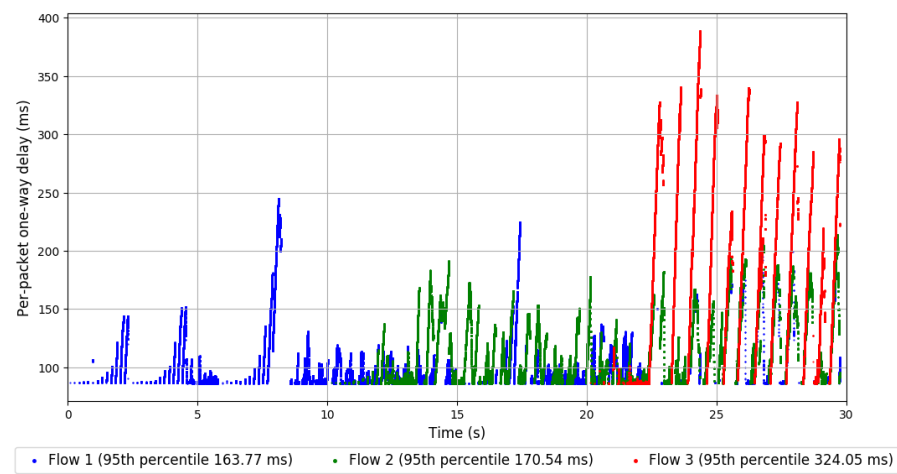
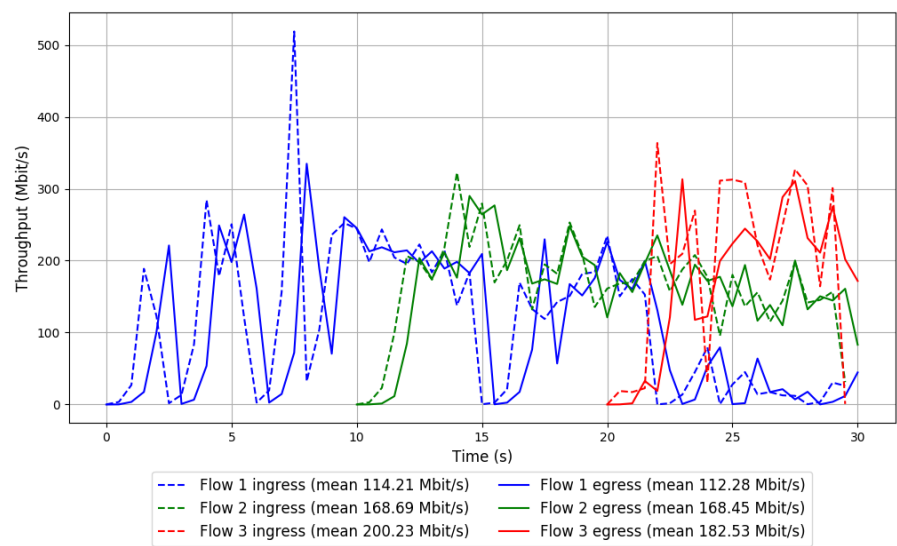


Run 1: Statistics of Verus

Start at: 2018-06-18 12:47:44
End at: 2018-06-18 12:48:14
Local clock offset: -0.138 ms
Remote clock offset: -0.028 ms

Below is generated by plot.py at 2018-06-18 18:29:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 282.75 Mbit/s
95th percentile per-packet one-way delay: 273.293 ms
Loss rate: 2.37%
-- Flow 1:
Average throughput: 112.28 Mbit/s
95th percentile per-packet one-way delay: 163.774 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 168.45 Mbit/s
95th percentile per-packet one-way delay: 170.538 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 182.53 Mbit/s
95th percentile per-packet one-way delay: 324.050 ms
Loss rate: 7.54%

Run 1: Report of Verus — Data Link

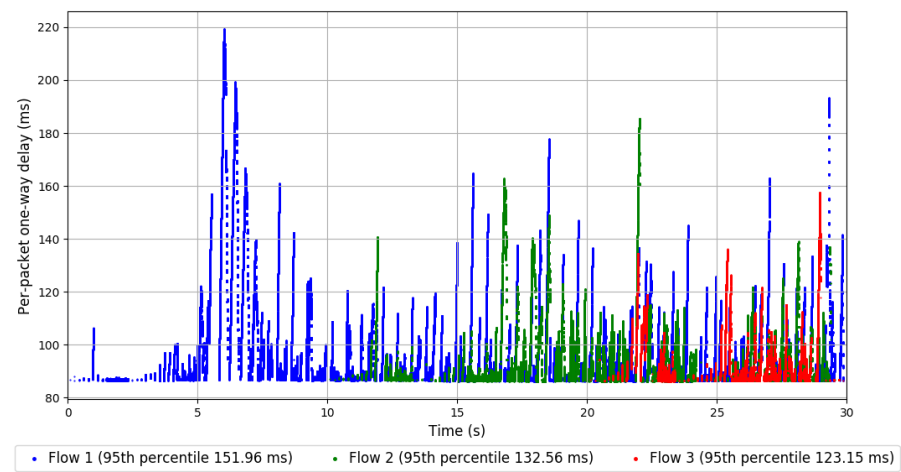
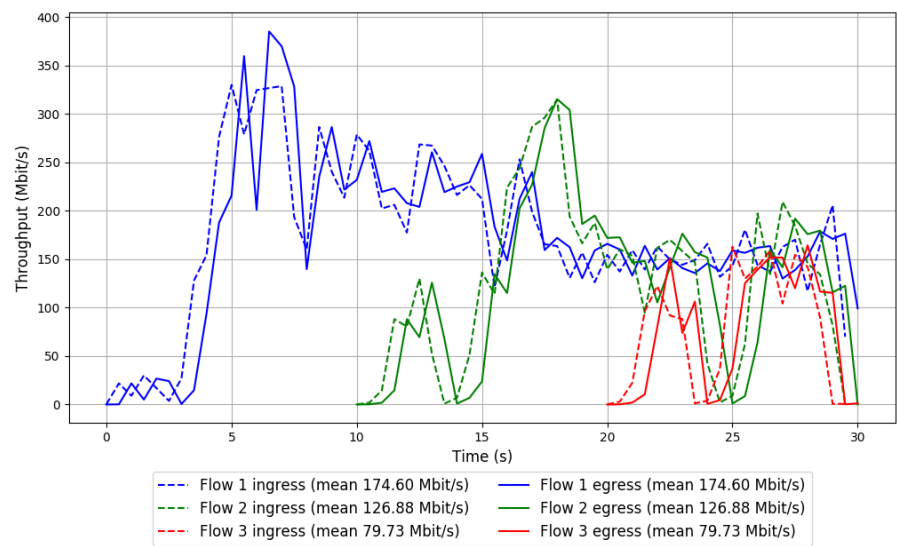


Run 2: Statistics of Verus

Start at: 2018-06-18 13:11:25
End at: 2018-06-18 13:11:55
Local clock offset: -0.168 ms
Remote clock offset: -0.137 ms

Below is generated by plot.py at 2018-06-18 18:30:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 284.26 Mbit/s
95th percentile per-packet one-way delay: 140.519 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 174.60 Mbit/s
95th percentile per-packet one-way delay: 151.962 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 126.88 Mbit/s
95th percentile per-packet one-way delay: 132.556 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 79.73 Mbit/s
95th percentile per-packet one-way delay: 123.150 ms
Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-06-18 13:35:03

End at: 2018-06-18 13:35:33

Local clock offset: 0.081 ms

Remote clock offset: 0.004 ms

Below is generated by plot.py at 2018-06-18 18:30:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 296.47 Mbit/s

95th percentile per-packet one-way delay: 267.689 ms

Loss rate: 4.40%

-- Flow 1:

Average throughput: 145.45 Mbit/s

95th percentile per-packet one-way delay: 216.470 ms

Loss rate: 3.83%

-- Flow 2:

Average throughput: 188.24 Mbit/s

95th percentile per-packet one-way delay: 316.081 ms

Loss rate: 5.74%

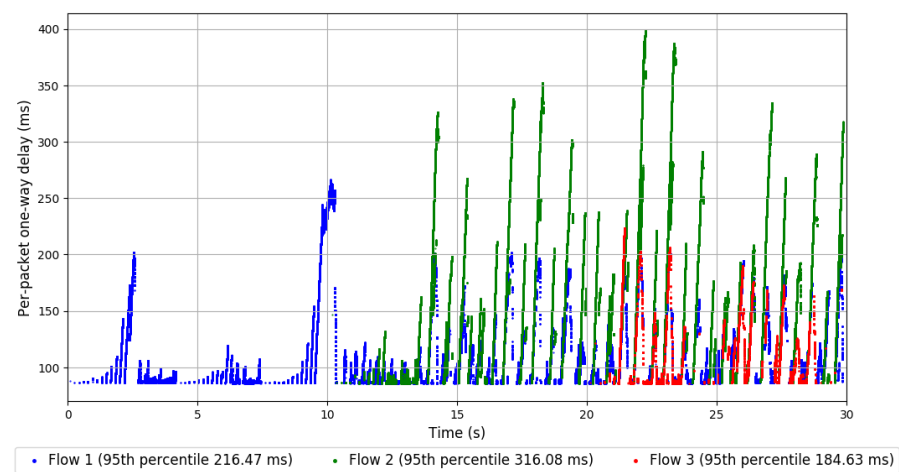
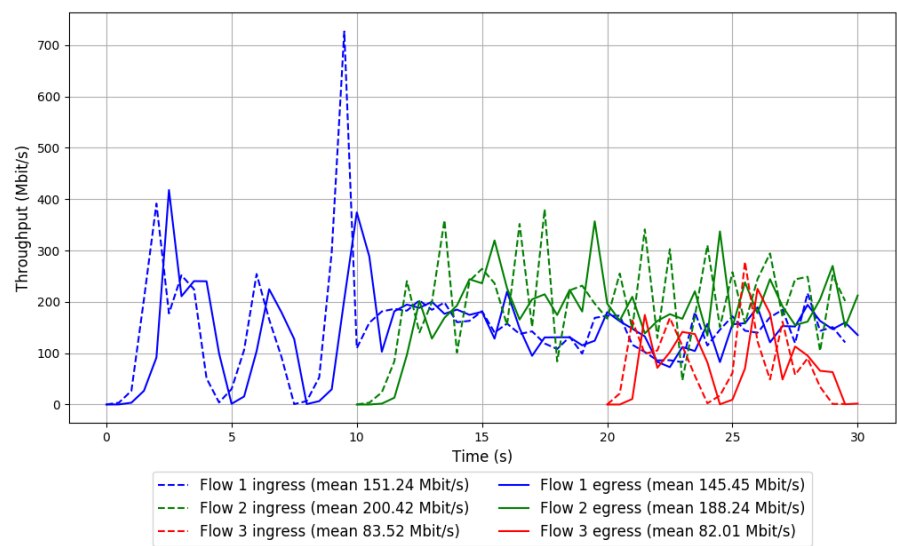
-- Flow 3:

Average throughput: 82.01 Mbit/s

95th percentile per-packet one-way delay: 184.633 ms

Loss rate: 0.97%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-06-18 13:58:35

End at: 2018-06-18 13:59:05

Local clock offset: -0.058 ms

Remote clock offset: 0.091 ms

Below is generated by plot.py at 2018-06-18 18:30:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.41 Mbit/s

95th percentile per-packet one-way delay: 236.714 ms

Loss rate: 3.13%

-- Flow 1:

Average throughput: 103.41 Mbit/s

95th percentile per-packet one-way delay: 232.043 ms

Loss rate: 3.84%

-- Flow 2:

Average throughput: 149.69 Mbit/s

95th percentile per-packet one-way delay: 246.387 ms

Loss rate: 2.96%

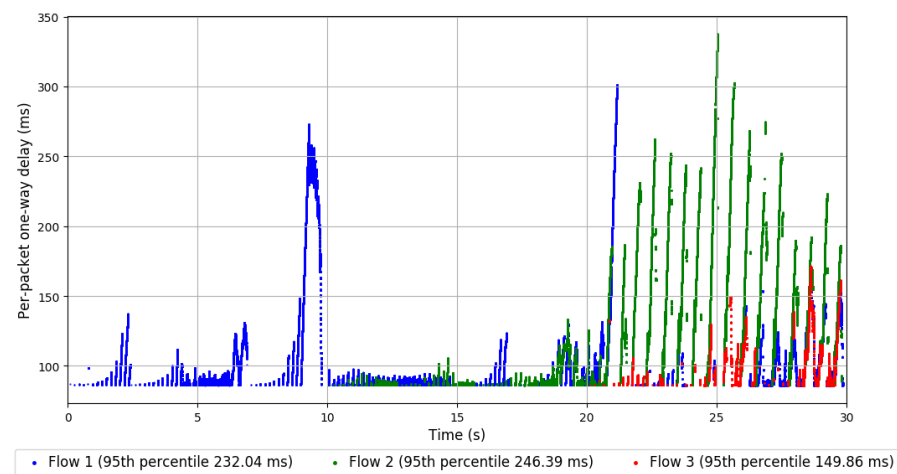
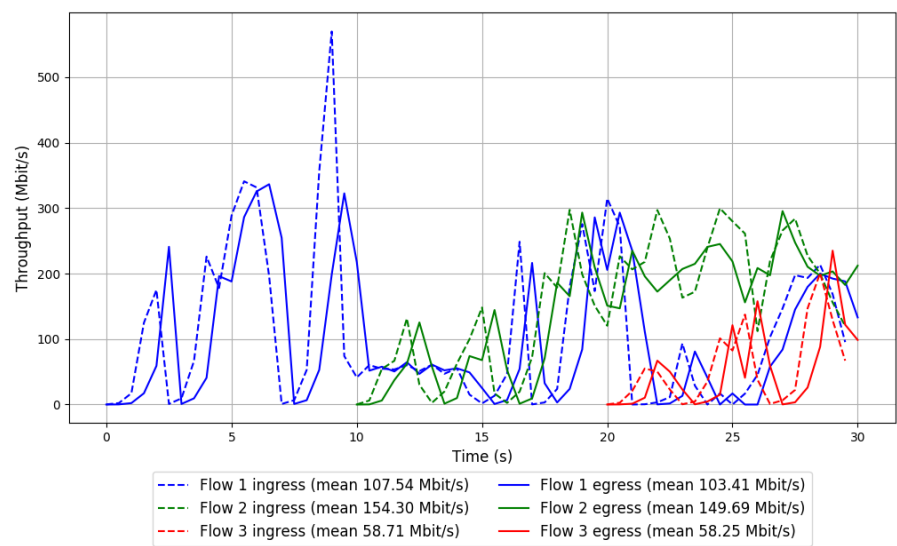
-- Flow 3:

Average throughput: 58.25 Mbit/s

95th percentile per-packet one-way delay: 149.858 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-06-18 14:22:07

End at: 2018-06-18 14:22:37

Local clock offset: -0.032 ms

Remote clock offset: 0.276 ms

Below is generated by plot.py at 2018-06-18 18:30:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.65 Mbit/s

95th percentile per-packet one-way delay: 139.234 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 178.36 Mbit/s

95th percentile per-packet one-way delay: 150.799 ms

Loss rate: 2.82%

-- Flow 2:

Average throughput: 117.62 Mbit/s

95th percentile per-packet one-way delay: 132.909 ms

Loss rate: 0.21%

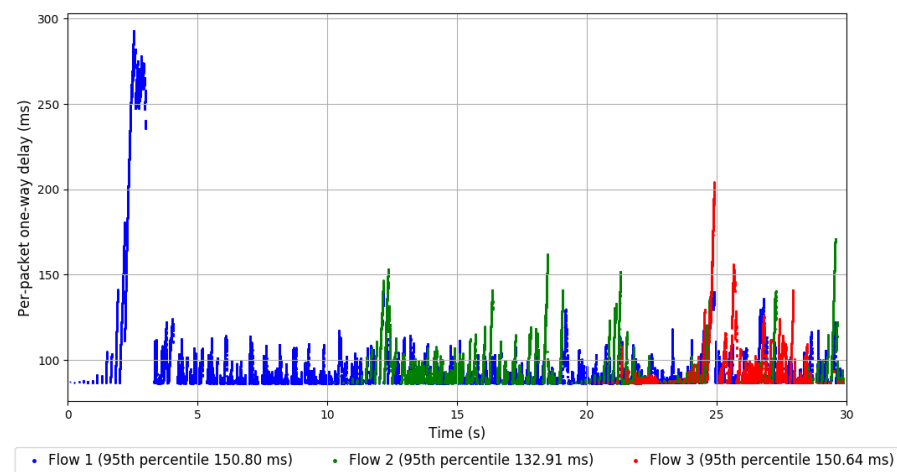
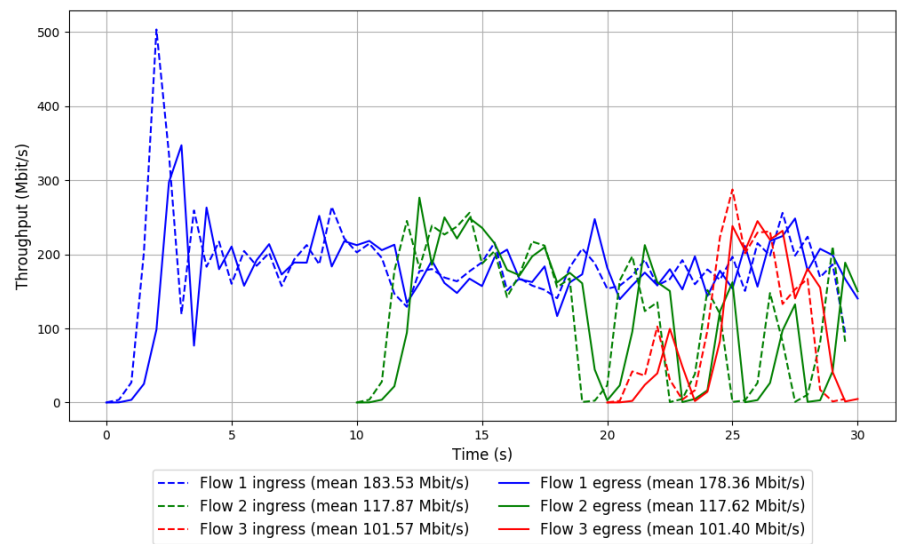
-- Flow 3:

Average throughput: 101.40 Mbit/s

95th percentile per-packet one-way delay: 150.637 ms

Loss rate: 0.15%

Run 5: Report of Verus — Data Link

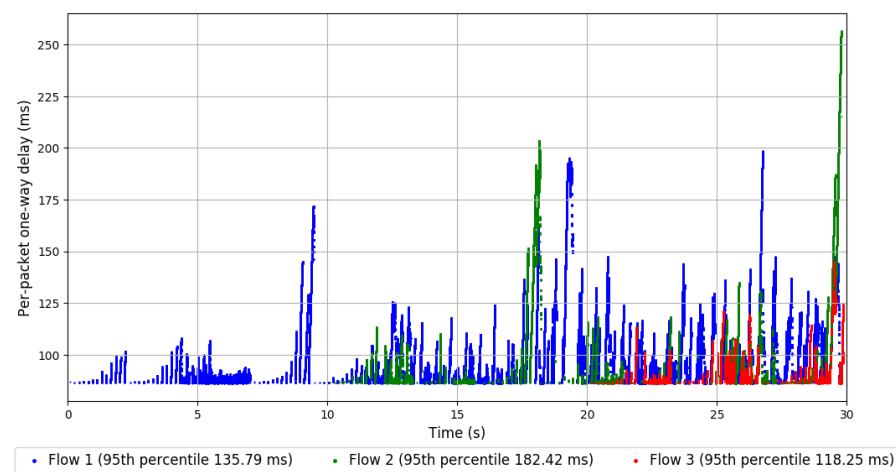
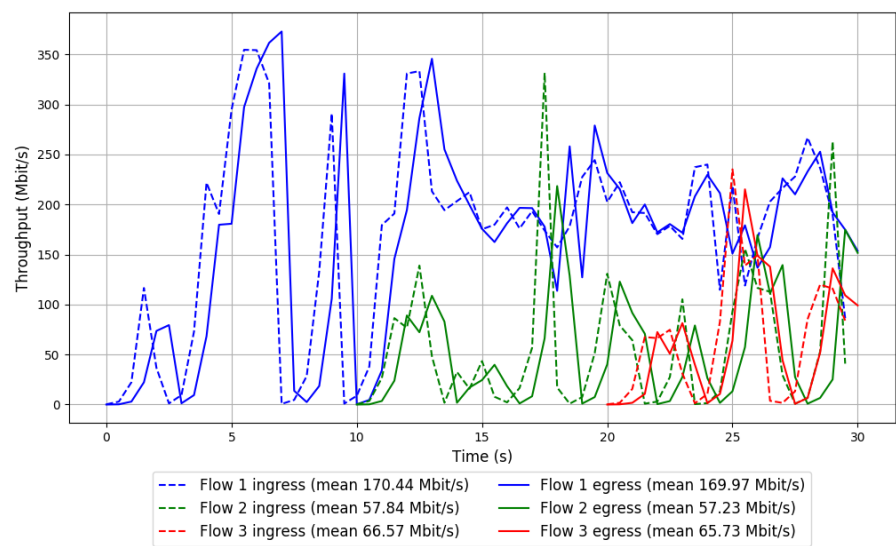


Run 6: Statistics of Verus

Start at: 2018-06-18 14:45:44
End at: 2018-06-18 14:46:14
Local clock offset: 0.054 ms
Remote clock offset: 0.117 ms

Below is generated by plot.py at 2018-06-18 18:30:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 228.69 Mbit/s
95th percentile per-packet one-way delay: 144.322 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 169.97 Mbit/s
95th percentile per-packet one-way delay: 135.788 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 57.23 Mbit/s
95th percentile per-packet one-way delay: 182.423 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 65.73 Mbit/s
95th percentile per-packet one-way delay: 118.250 ms
Loss rate: 1.28%

Run 6: Report of Verus — Data Link

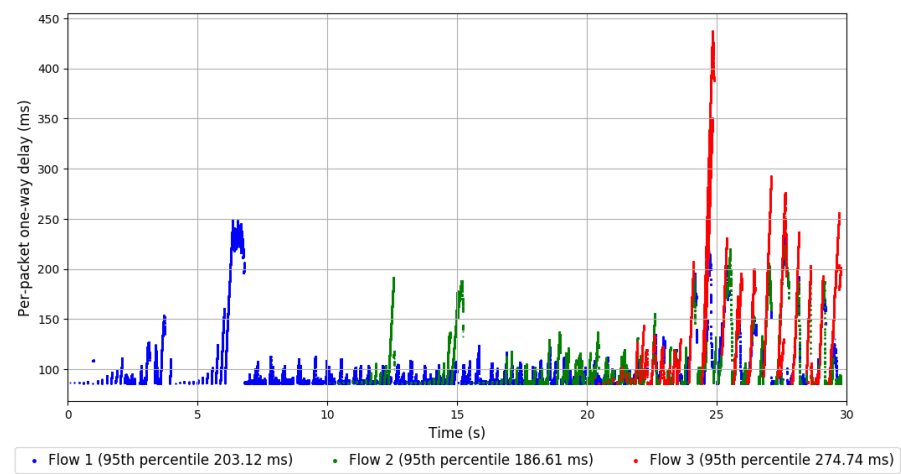
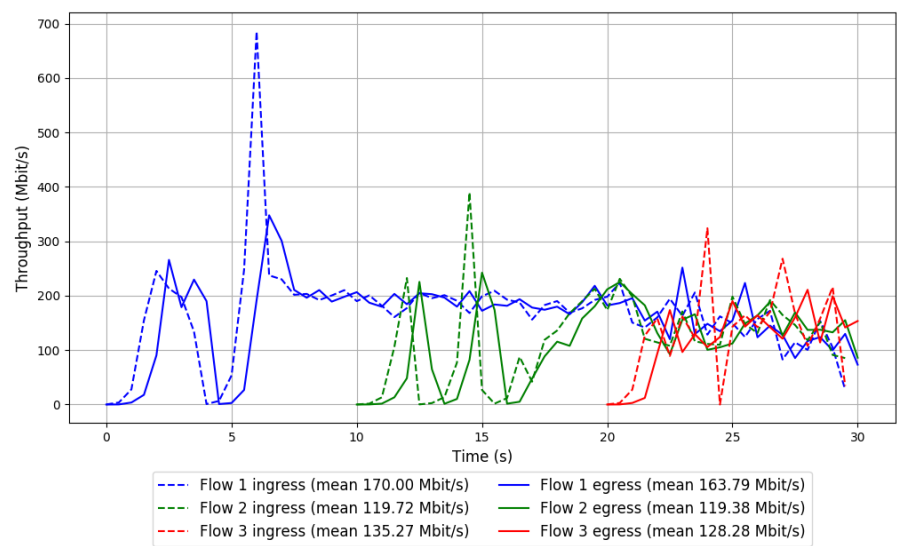


Run 7: Statistics of Verus

Start at: 2018-06-18 15:09:20
End at: 2018-06-18 15:09:50
Local clock offset: 0.194 ms
Remote clock offset: -0.001 ms

Below is generated by plot.py at 2018-06-18 18:33:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 284.56 Mbit/s
95th percentile per-packet one-way delay: 212.425 ms
Loss rate: 2.81%
-- Flow 1:
Average throughput: 163.79 Mbit/s
95th percentile per-packet one-way delay: 203.115 ms
Loss rate: 3.66%
-- Flow 2:
Average throughput: 119.38 Mbit/s
95th percentile per-packet one-way delay: 186.606 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 128.28 Mbit/s
95th percentile per-packet one-way delay: 274.735 ms
Loss rate: 4.09%

Run 7: Report of Verus — Data Link

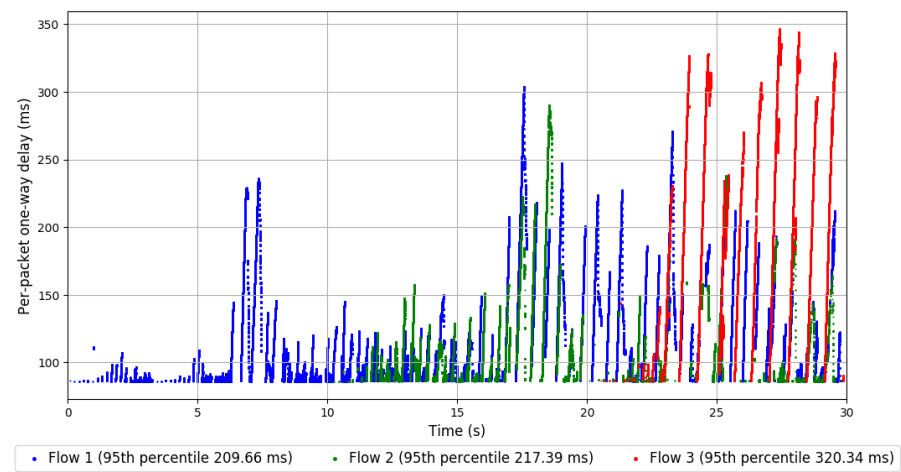
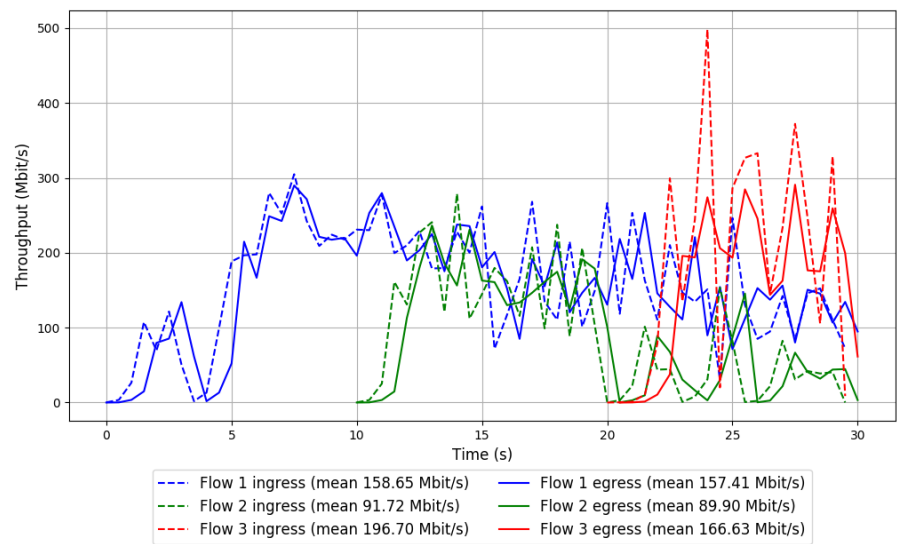


Run 8: Statistics of Verus

Start at: 2018-06-18 15:32:48
End at: 2018-06-18 15:33:18
Local clock offset: -0.081 ms
Remote clock offset: -0.114 ms

Below is generated by plot.py at 2018-06-18 18:33:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 268.27 Mbit/s
95th percentile per-packet one-way delay: 277.351 ms
Loss rate: 4.23%
-- Flow 1:
Average throughput: 157.41 Mbit/s
95th percentile per-packet one-way delay: 209.656 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 89.90 Mbit/s
95th percentile per-packet one-way delay: 217.391 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 166.63 Mbit/s
95th percentile per-packet one-way delay: 320.337 ms
Loss rate: 15.27%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-06-18 15:56:27

End at: 2018-06-18 15:56:57

Local clock offset: -0.1 ms

Remote clock offset: 0.342 ms

Below is generated by plot.py at 2018-06-18 18:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 245.19 Mbit/s

95th percentile per-packet one-way delay: 163.447 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 152.02 Mbit/s

95th percentile per-packet one-way delay: 190.382 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 108.07 Mbit/s

95th percentile per-packet one-way delay: 121.648 ms

Loss rate: 0.06%

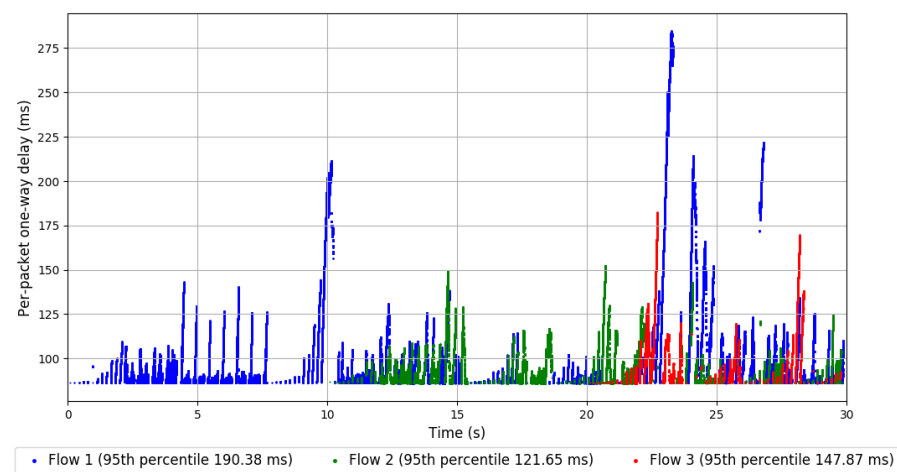
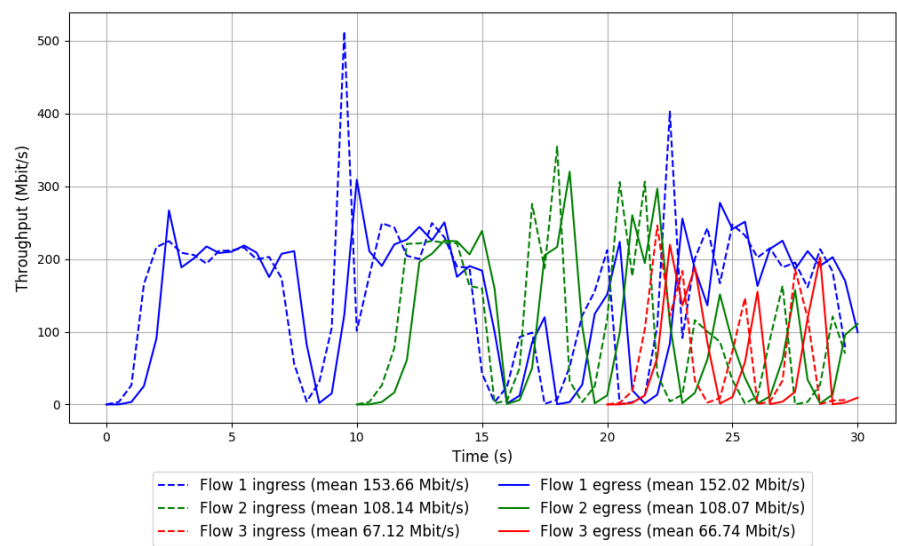
-- Flow 3:

Average throughput: 66.74 Mbit/s

95th percentile per-packet one-way delay: 147.869 ms

Loss rate: 0.51%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-06-18 16:20:08

End at: 2018-06-18 16:20:38

Local clock offset: 0.028 ms

Remote clock offset: 0.492 ms

Below is generated by plot.py at 2018-06-18 18:34:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.99 Mbit/s

95th percentile per-packet one-way delay: 175.374 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 214.30 Mbit/s

95th percentile per-packet one-way delay: 172.372 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 120.43 Mbit/s

95th percentile per-packet one-way delay: 154.443 ms

Loss rate: 0.68%

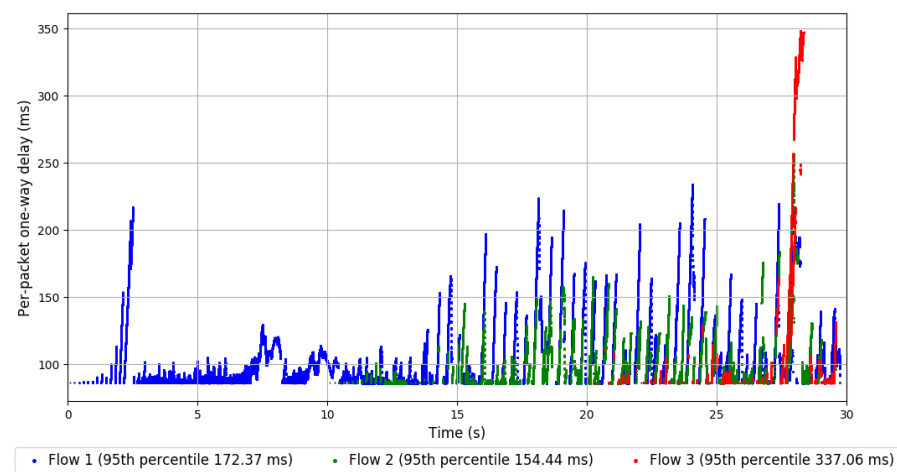
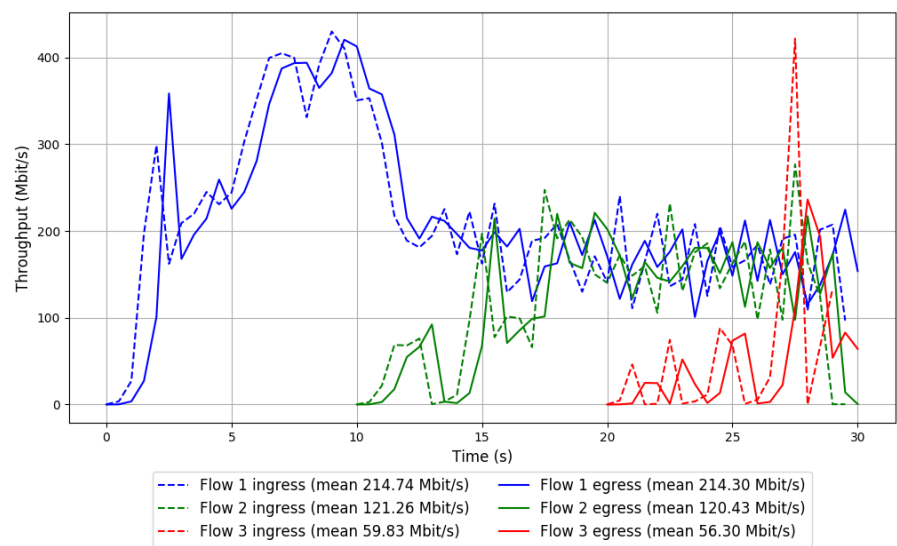
-- Flow 3:

Average throughput: 56.30 Mbit/s

95th percentile per-packet one-way delay: 337.065 ms

Loss rate: 5.47%

Run 10: Report of Verus — Data Link

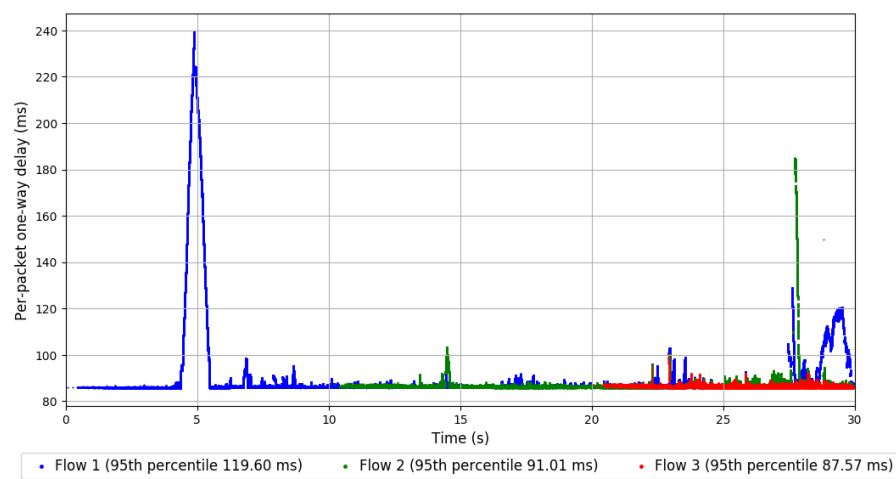
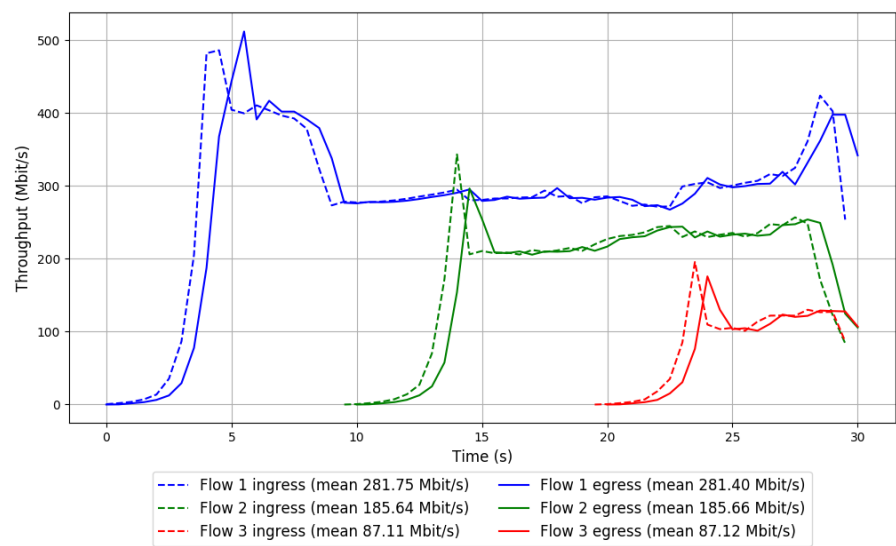


Run 1: Statistics of PCC-Vivace

Start at: 2018-06-18 12:41:53
End at: 2018-06-18 12:42:23
Local clock offset: 0.219 ms
Remote clock offset: -0.006 ms

Below is generated by plot.py at 2018-06-18 18:37:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 433.74 Mbit/s
95th percentile per-packet one-way delay: 112.119 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 281.40 Mbit/s
95th percentile per-packet one-way delay: 119.603 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 185.66 Mbit/s
95th percentile per-packet one-way delay: 91.010 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 87.12 Mbit/s
95th percentile per-packet one-way delay: 87.571 ms
Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

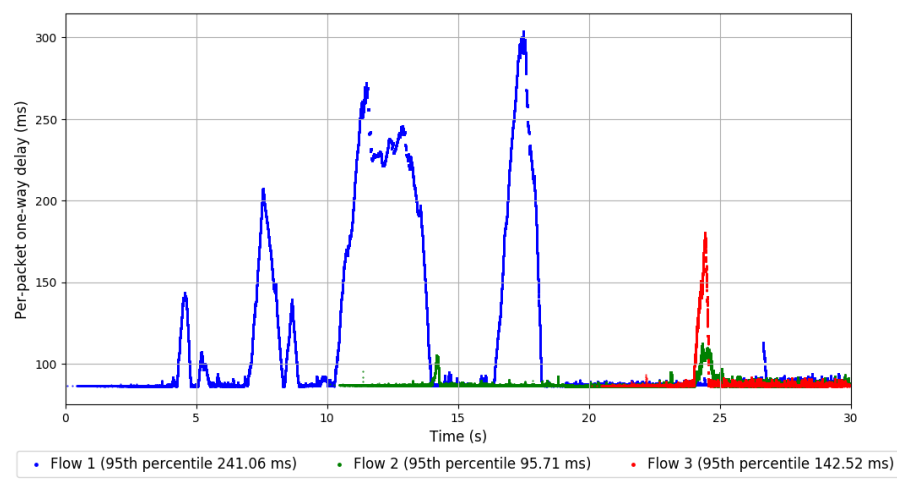
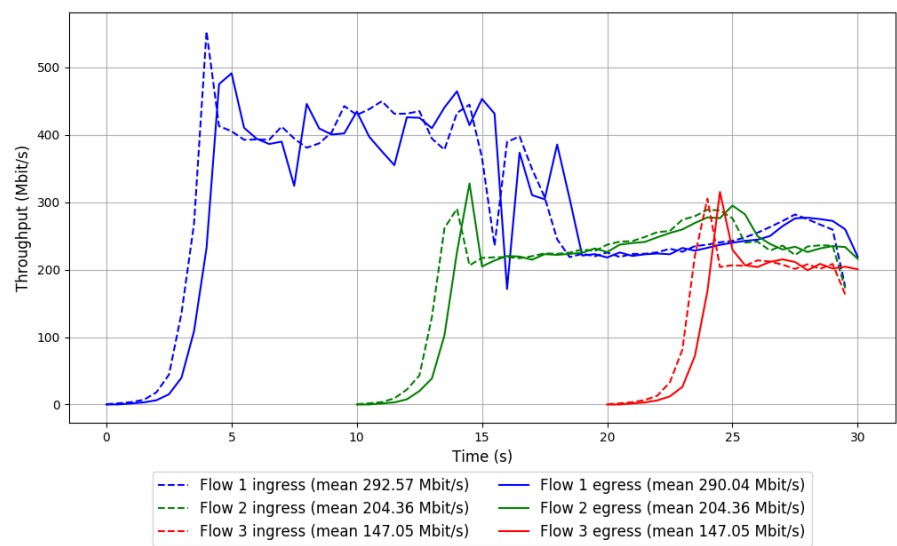


Run 2: Statistics of PCC-Vivace

Start at: 2018-06-18 13:05:30
End at: 2018-06-18 13:06:00
Local clock offset: -0.199 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2018-06-18 18:38:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 474.39 Mbit/s
95th percentile per-packet one-way delay: 230.858 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 290.04 Mbit/s
95th percentile per-packet one-way delay: 241.064 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 204.36 Mbit/s
95th percentile per-packet one-way delay: 95.707 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 147.05 Mbit/s
95th percentile per-packet one-way delay: 142.516 ms
Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-06-18 13:29:18

End at: 2018-06-18 13:29:48

Local clock offset: -0.043 ms

Remote clock offset: -0.01 ms

Below is generated by plot.py at 2018-06-18 18:38:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 373.61 Mbit/s

95th percentile per-packet one-way delay: 88.119 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 230.18 Mbit/s

95th percentile per-packet one-way delay: 88.845 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 191.70 Mbit/s

95th percentile per-packet one-way delay: 87.124 ms

Loss rate: 0.00%

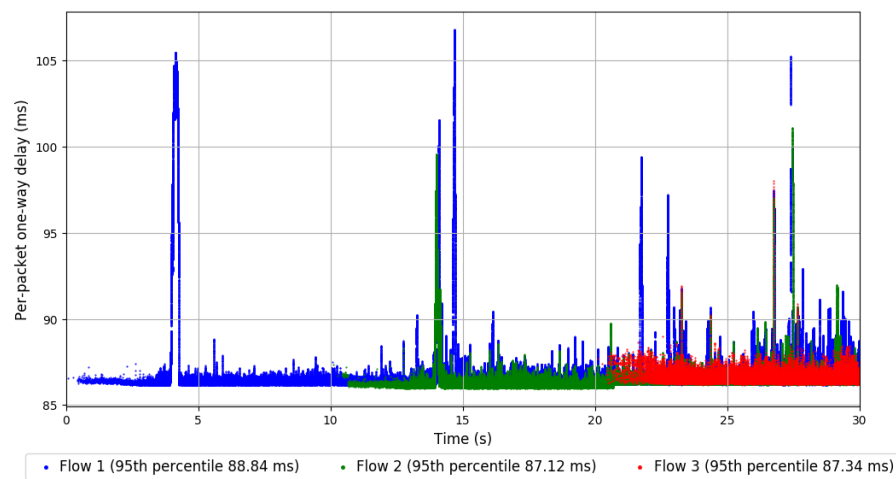
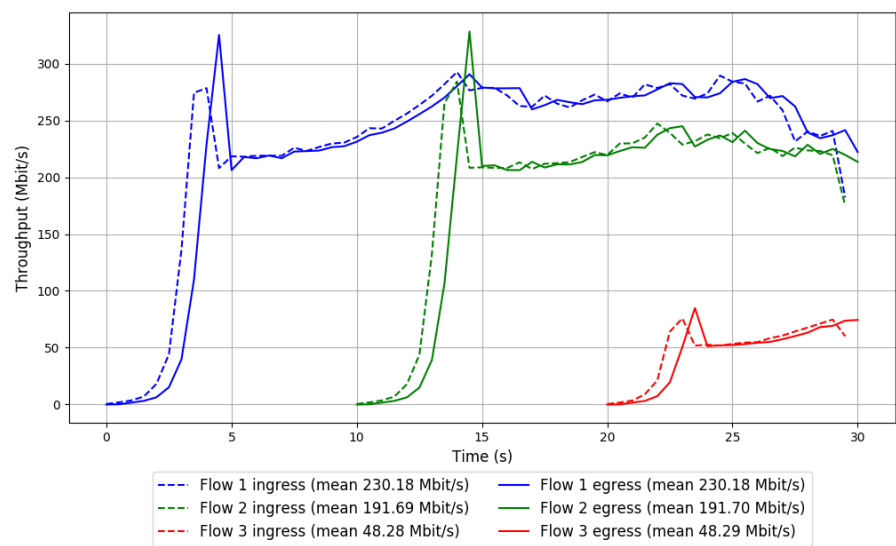
-- Flow 3:

Average throughput: 48.29 Mbit/s

95th percentile per-packet one-way delay: 87.337 ms

Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-06-18 13:52:50

End at: 2018-06-18 13:53:20

Local clock offset: -0.181 ms

Remote clock offset: 0.056 ms

Below is generated by plot.py at 2018-06-18 18:38:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 441.72 Mbit/s

95th percentile per-packet one-way delay: 175.103 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 257.06 Mbit/s

95th percentile per-packet one-way delay: 201.853 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 191.77 Mbit/s

95th percentile per-packet one-way delay: 101.922 ms

Loss rate: 0.00%

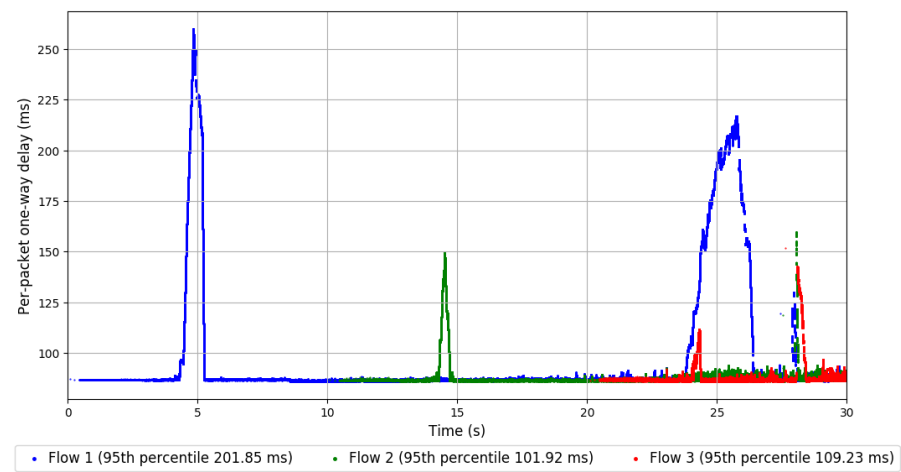
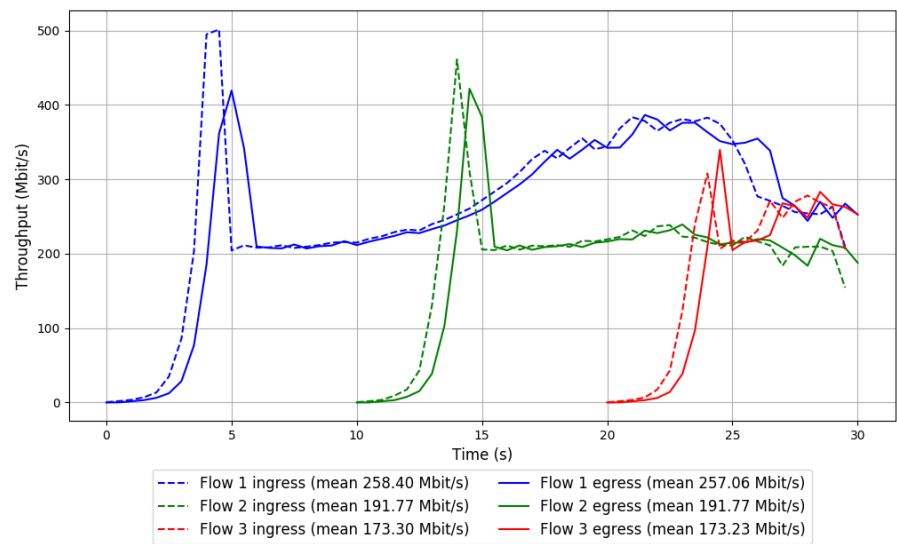
-- Flow 3:

Average throughput: 173.23 Mbit/s

95th percentile per-packet one-way delay: 109.228 ms

Loss rate: 0.02%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-06-18 14:16:20

End at: 2018-06-18 14:16:50

Local clock offset: -0.023 ms

Remote clock offset: 0.162 ms

Below is generated by plot.py at 2018-06-18 18:40:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.99 Mbit/s

95th percentile per-packet one-way delay: 128.203 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 221.57 Mbit/s

95th percentile per-packet one-way delay: 93.369 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 235.42 Mbit/s

95th percentile per-packet one-way delay: 181.521 ms

Loss rate: 0.03%

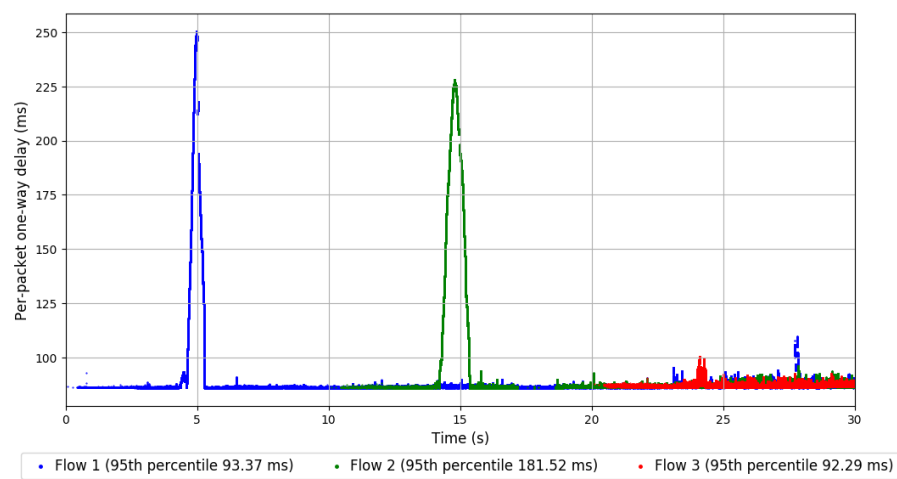
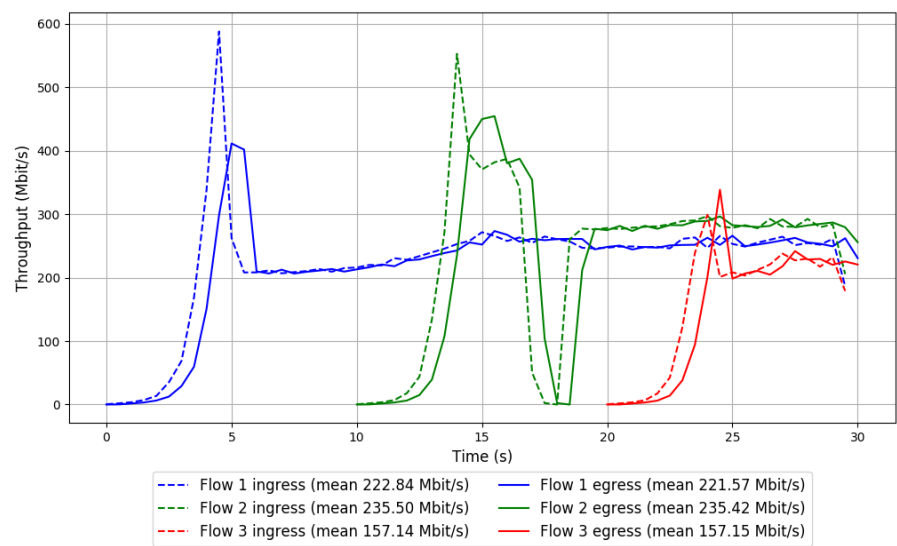
-- Flow 3:

Average throughput: 157.15 Mbit/s

95th percentile per-packet one-way delay: 92.293 ms

Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-06-18 14:39:58

End at: 2018-06-18 14:40:28

Local clock offset: 0.037 ms

Remote clock offset: 0.101 ms

Below is generated by plot.py at 2018-06-18 18:40:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 435.18 Mbit/s

95th percentile per-packet one-way delay: 175.755 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 261.84 Mbit/s

95th percentile per-packet one-way delay: 174.667 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 191.27 Mbit/s

95th percentile per-packet one-way delay: 121.858 ms

Loss rate: 0.03%

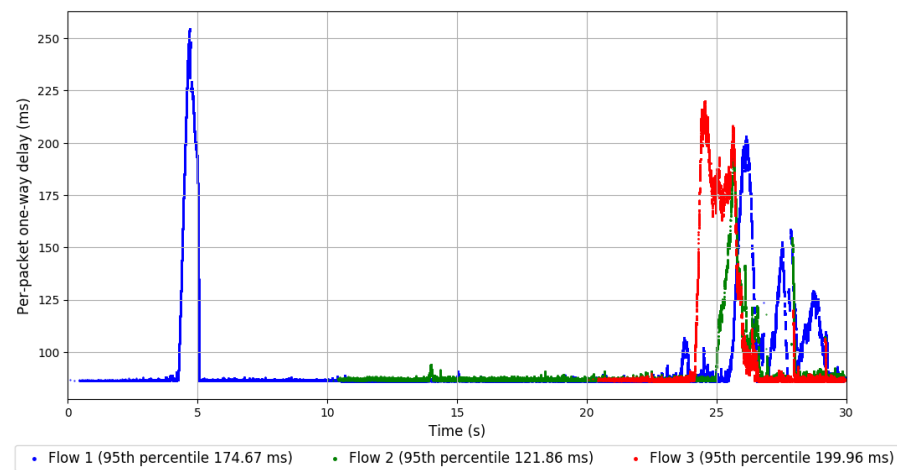
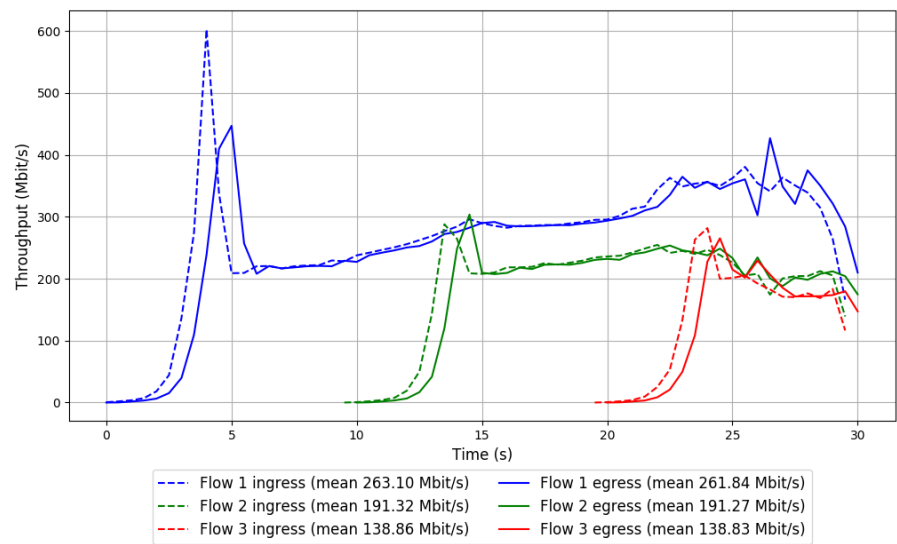
-- Flow 3:

Average throughput: 138.83 Mbit/s

95th percentile per-packet one-way delay: 199.961 ms

Loss rate: 0.03%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-06-18 15:03:31

End at: 2018-06-18 15:04:01

Local clock offset: 0.027 ms

Remote clock offset: 0.057 ms

Below is generated by plot.py at 2018-06-18 18:40:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.01 Mbit/s

95th percentile per-packet one-way delay: 135.662 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 242.96 Mbit/s

95th percentile per-packet one-way delay: 104.771 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 274.95 Mbit/s

95th percentile per-packet one-way delay: 185.308 ms

Loss rate: 0.44%

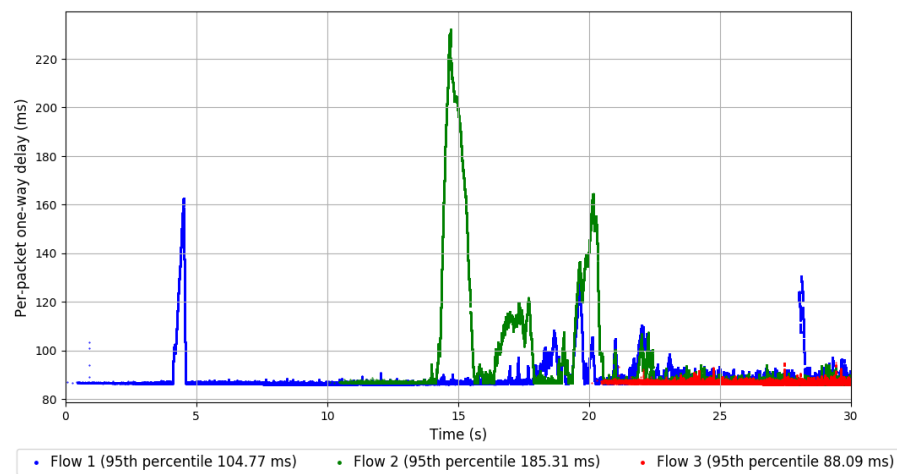
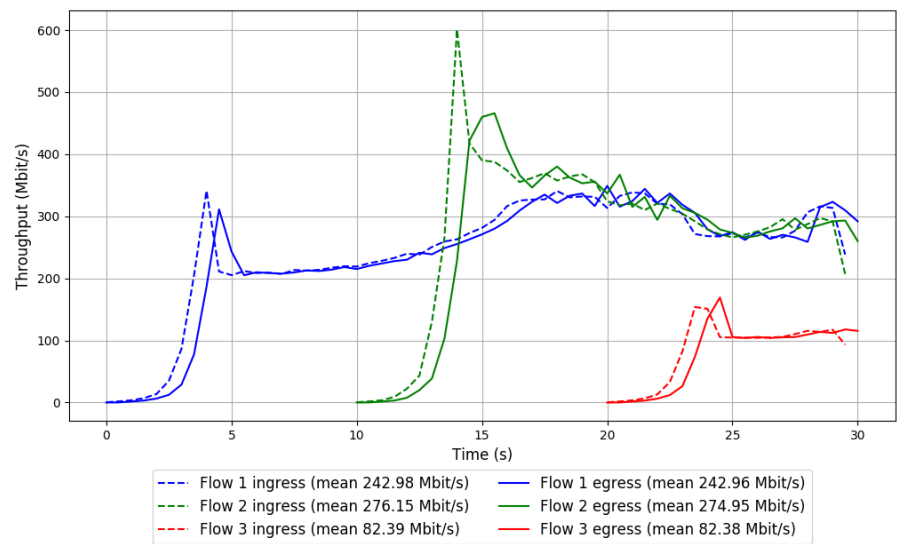
-- Flow 3:

Average throughput: 82.38 Mbit/s

95th percentile per-packet one-way delay: 88.092 ms

Loss rate: 0.00%

Run 7: Report of PCC-Vivace — Data Link

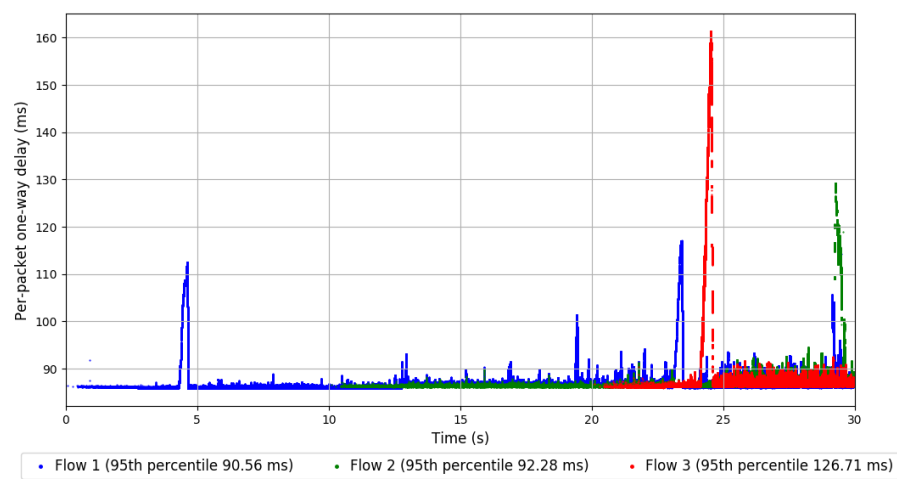
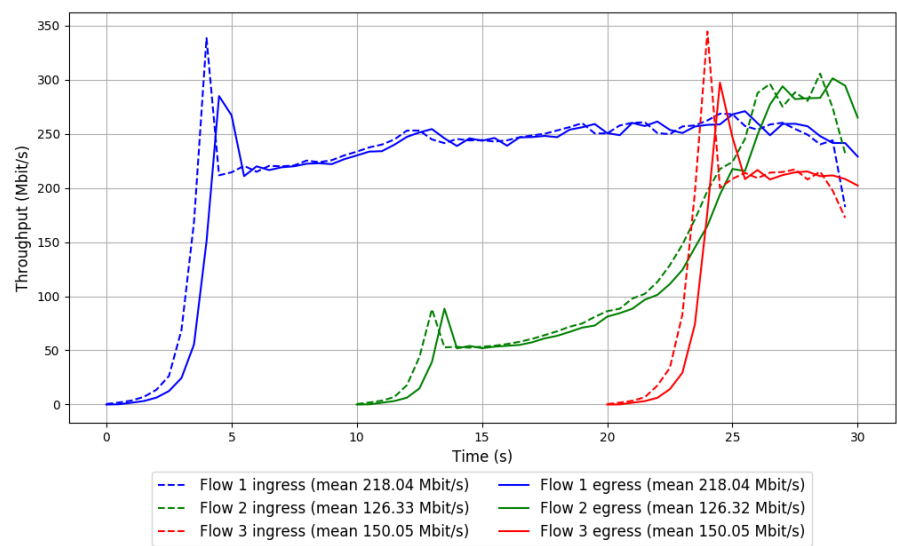


Run 8: Statistics of PCC-Vivace

Start at: 2018-06-18 15:27:06
End at: 2018-06-18 15:27:36
Local clock offset: 0.046 ms
Remote clock offset: -0.027 ms

Below is generated by plot.py at 2018-06-18 18:40:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 351.51 Mbit/s
95th percentile per-packet one-way delay: 92.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 218.04 Mbit/s
95th percentile per-packet one-way delay: 90.558 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 126.32 Mbit/s
95th percentile per-packet one-way delay: 92.278 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 150.05 Mbit/s
95th percentile per-packet one-way delay: 126.711 ms
Loss rate: 0.00%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-06-18 15:50:37

End at: 2018-06-18 15:51:07

Local clock offset: 0.102 ms

Remote clock offset: 0.289 ms

Below is generated by plot.py at 2018-06-18 18:41:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 466.48 Mbit/s

95th percentile per-packet one-way delay: 198.744 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 289.31 Mbit/s

95th percentile per-packet one-way delay: 215.147 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 191.86 Mbit/s

95th percentile per-packet one-way delay: 89.949 ms

Loss rate: 0.00%

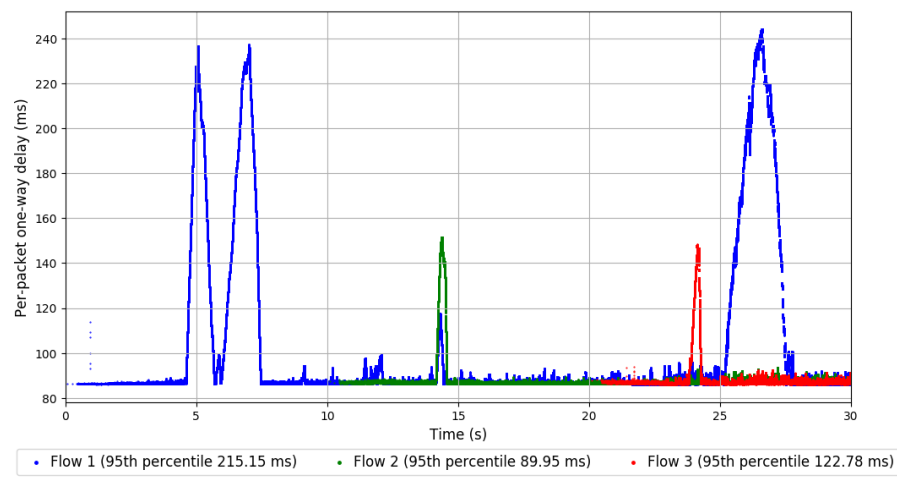
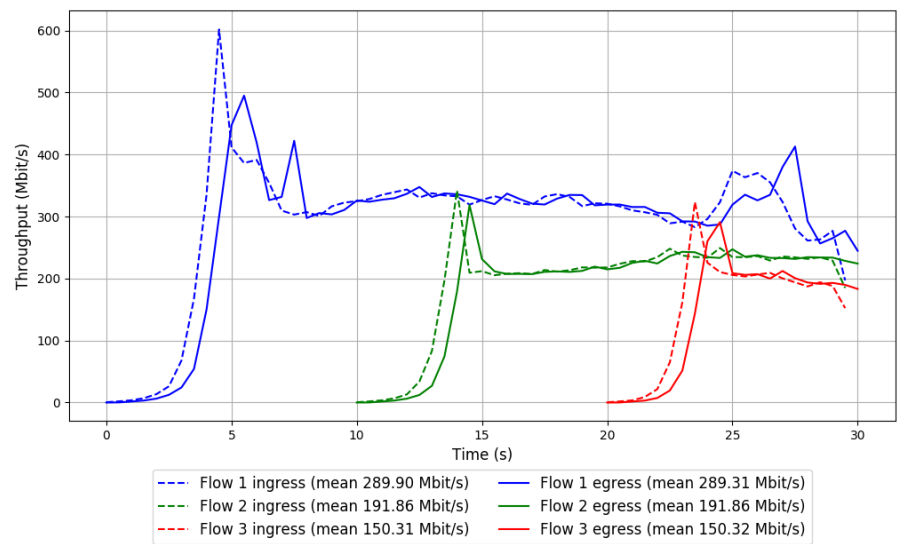
-- Flow 3:

Average throughput: 150.32 Mbit/s

95th percentile per-packet one-way delay: 122.775 ms

Loss rate: 0.00%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-06-18 16:14:15

End at: 2018-06-18 16:14:45

Local clock offset: 0.278 ms

Remote clock offset: 0.459 ms

Below is generated by plot.py at 2018-06-18 18:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 469.74 Mbit/s

95th percentile per-packet one-way delay: 152.602 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 286.02 Mbit/s

95th percentile per-packet one-way delay: 114.500 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 209.81 Mbit/s

95th percentile per-packet one-way delay: 250.564 ms

Loss rate: 0.83%

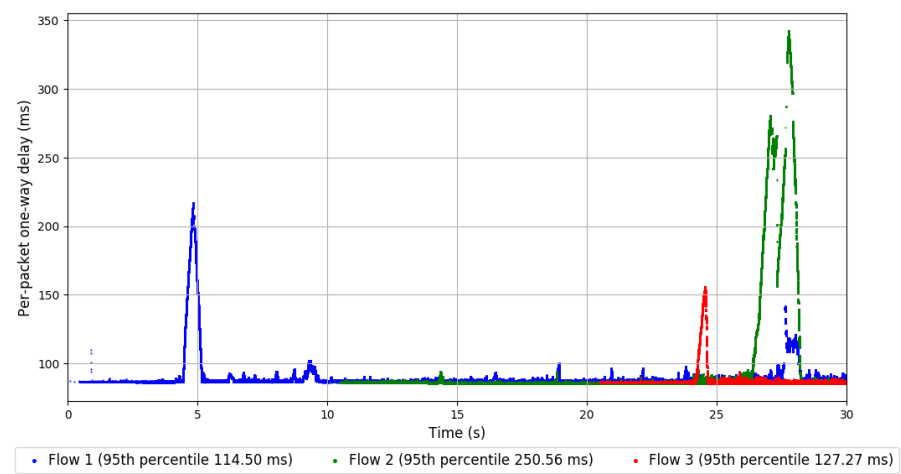
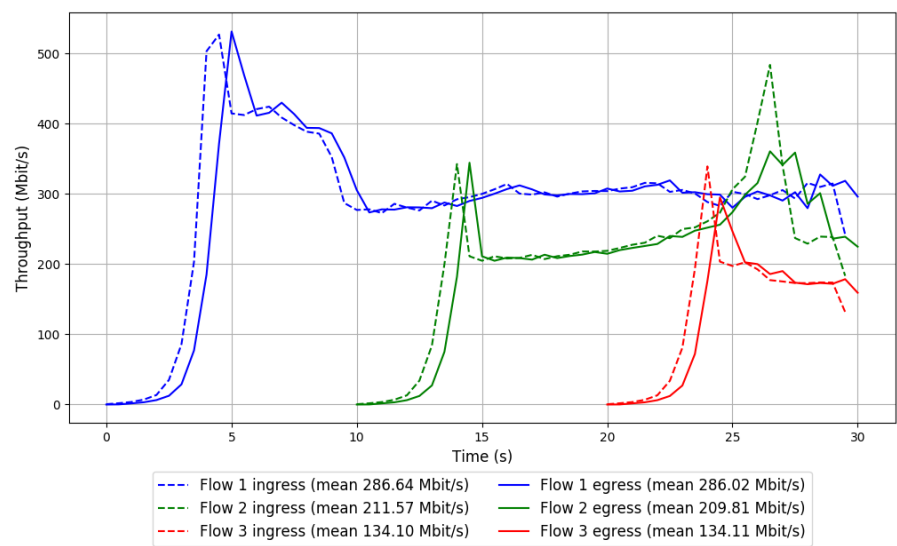
-- Flow 3:

Average throughput: 134.11 Mbit/s

95th percentile per-packet one-way delay: 127.269 ms

Loss rate: 0.00%

Run 10: Report of PCC-Vivace — Data Link

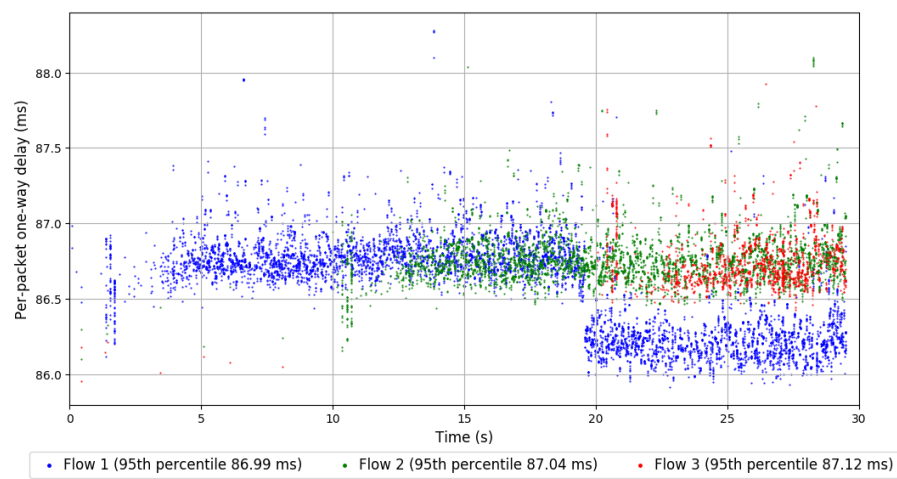
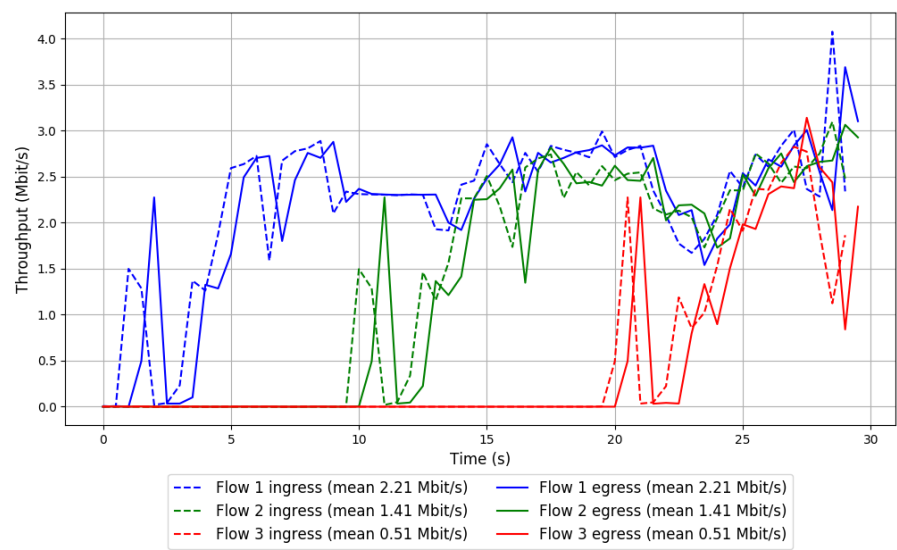


```
Run 1: Statistics of WebRTC media

Start at: 2018-06-18 12:55:49
End at: 2018-06-18 12:56:19
Local clock offset: 0.072 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2018-06-18 18:41:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 87.030 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 86.994 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 87.042 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 87.123 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

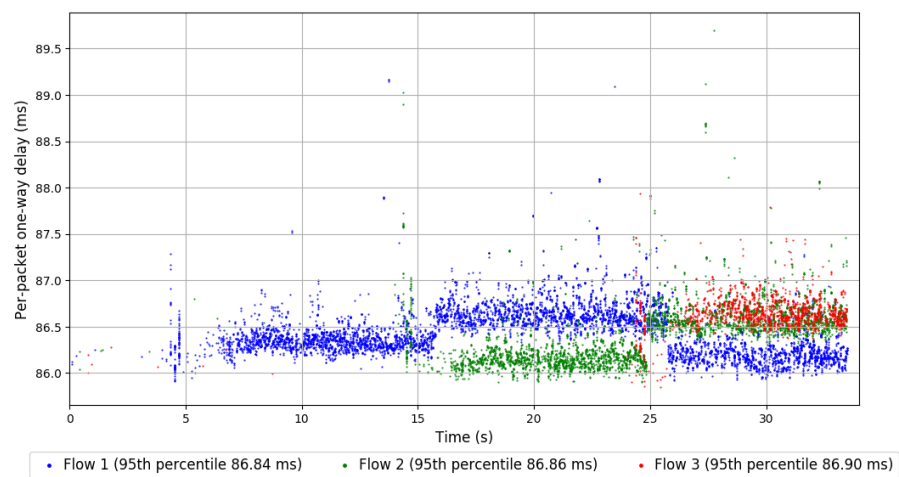
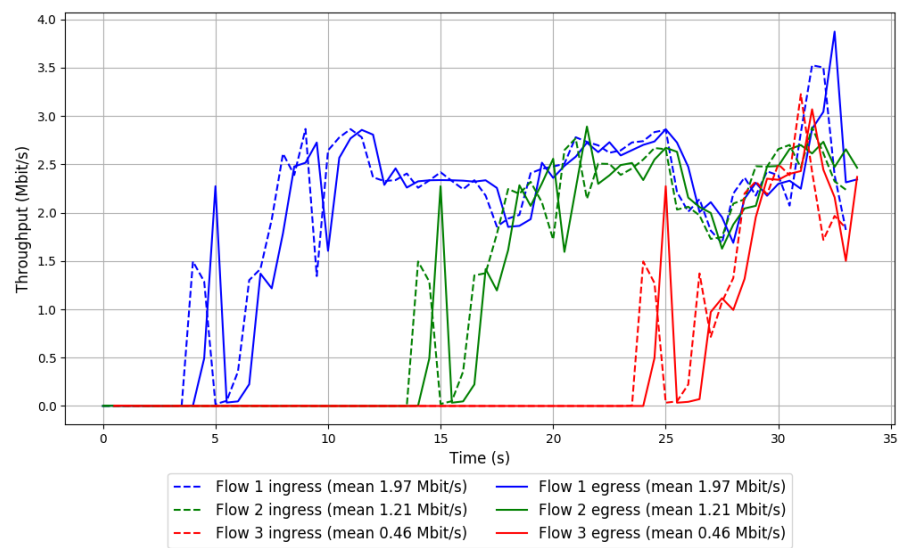


Run 2: Statistics of WebRTC media

Start at: 2018-06-18 13:19:37
End at: 2018-06-18 13:20:07
Local clock offset: 0.096 ms
Remote clock offset: -0.183 ms

Below is generated by plot.py at 2018-06-18 18:41:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 86.858 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 86.836 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 86.857 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 86.898 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

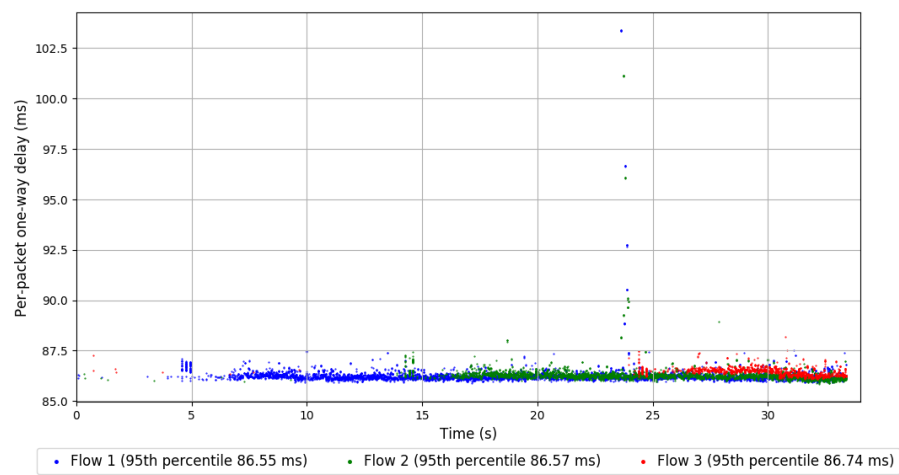
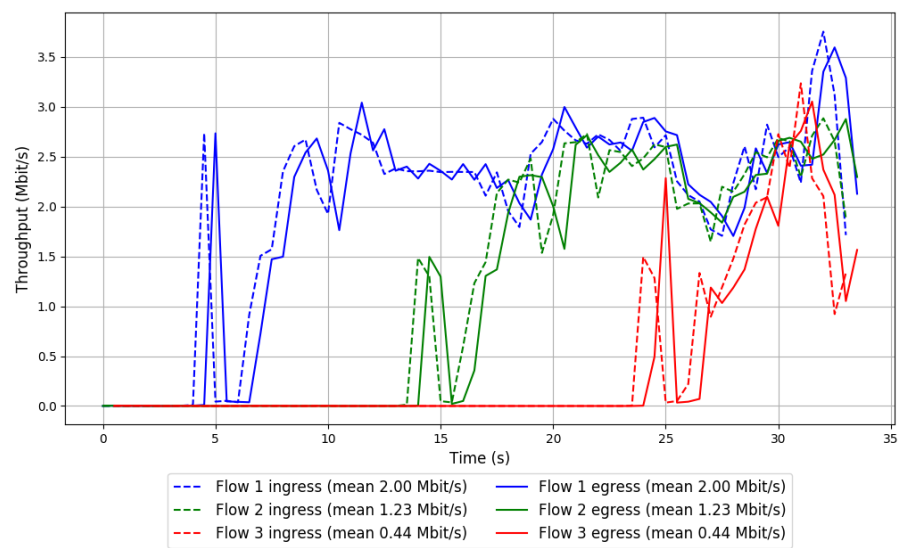


Run 3: Statistics of WebRTC media

Start at: 2018-06-18 13:43:12
End at: 2018-06-18 13:43:42
Local clock offset: 0.032 ms
Remote clock offset: -0.005 ms

Below is generated by plot.py at 2018-06-18 18:41:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.65 Mbit/s
95th percentile per-packet one-way delay: 86.631 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 86.553 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 86.574 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.738 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-06-18 14:06:40

End at: 2018-06-18 14:07:10

Local clock offset: -0.011 ms

Remote clock offset: 0.108 ms

Below is generated by plot.py at 2018-06-18 18:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 86.975 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 87.060 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 86.693 ms

Loss rate: 0.00%

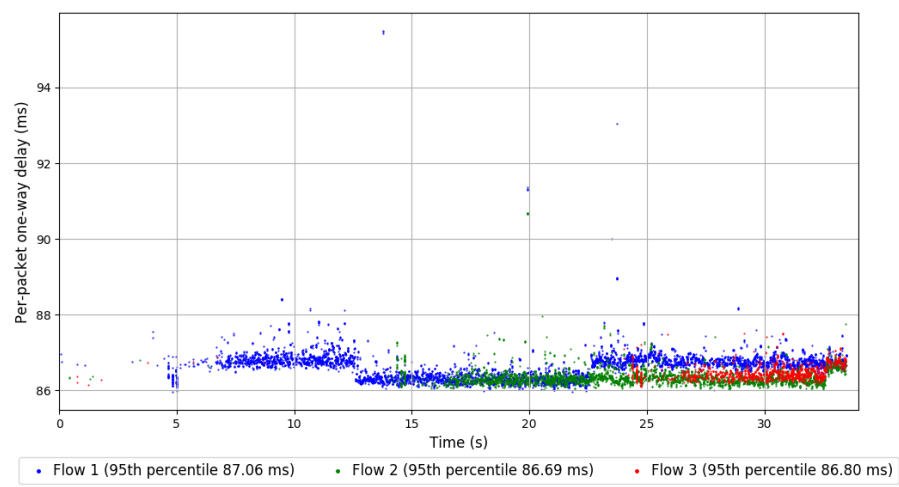
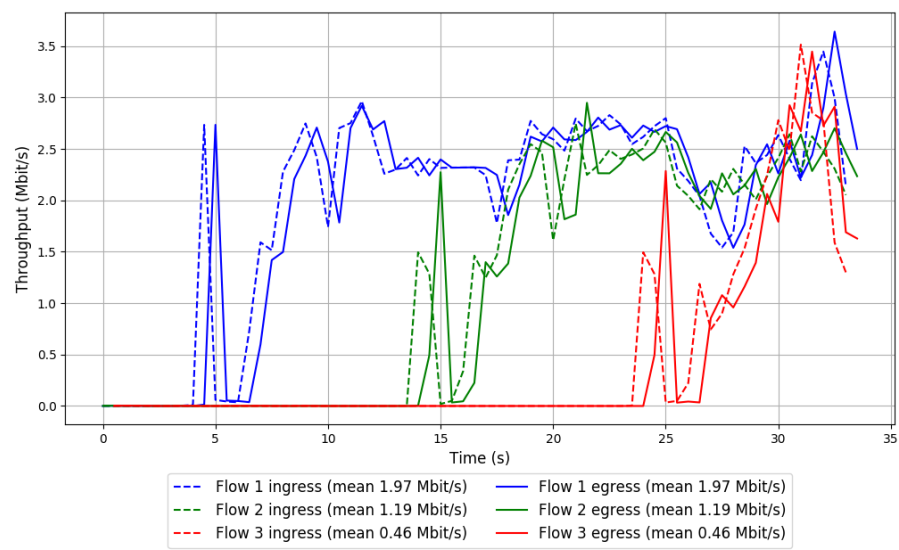
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 86.804 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-06-18 14:30:13

End at: 2018-06-18 14:30:43

Local clock offset: -0.015 ms

Remote clock offset: 0.152 ms

Below is generated by plot.py at 2018-06-18 18:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 86.920 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 86.933 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 86.626 ms

Loss rate: 0.00%

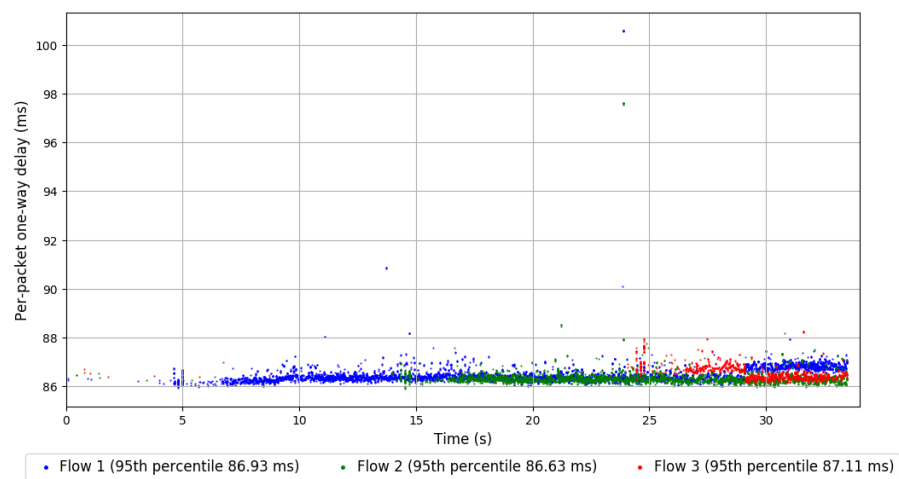
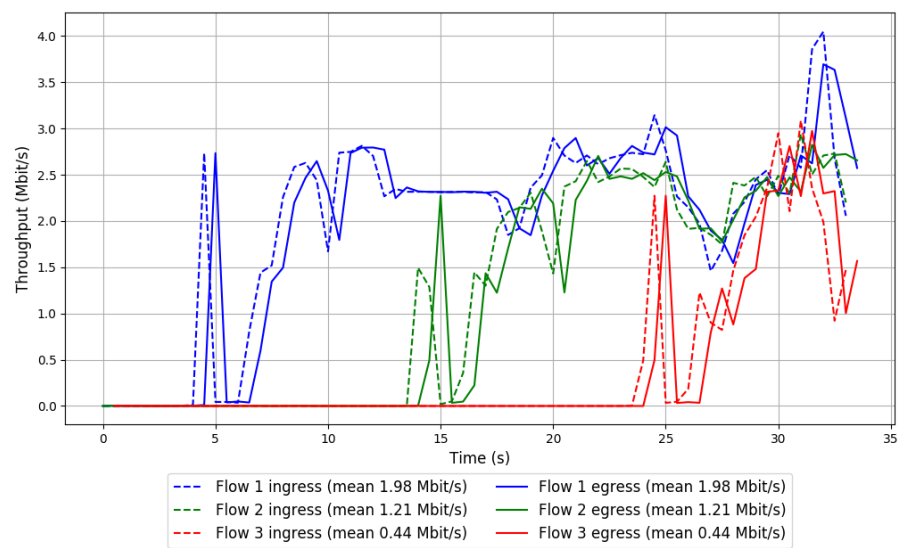
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.106 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-06-18 14:53:45

End at: 2018-06-18 14:54:15

Local clock offset: 0.049 ms

Remote clock offset: 0.052 ms

Below is generated by plot.py at 2018-06-18 18:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 86.961 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 86.699 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 87.072 ms

Loss rate: 0.00%

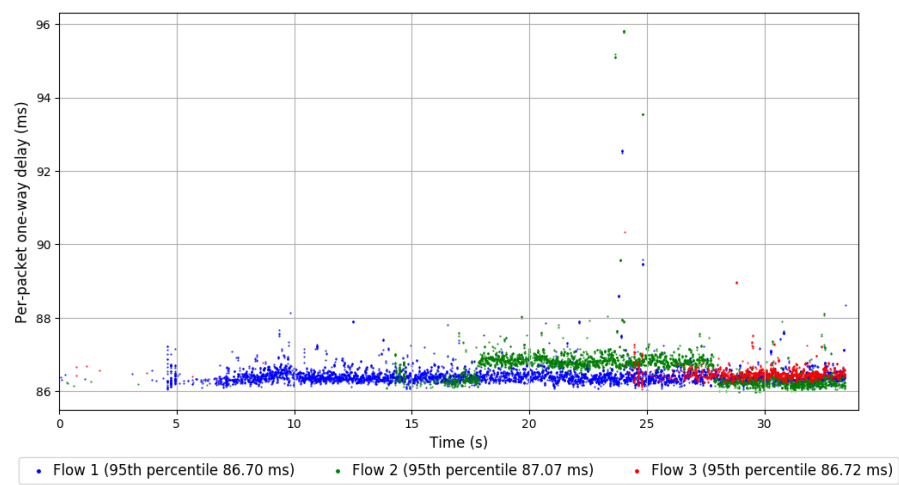
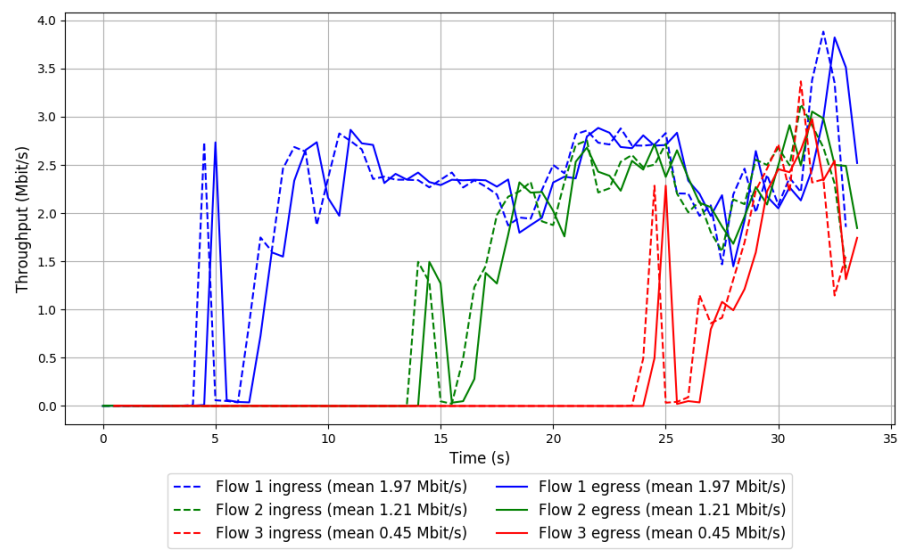
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 86.721 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

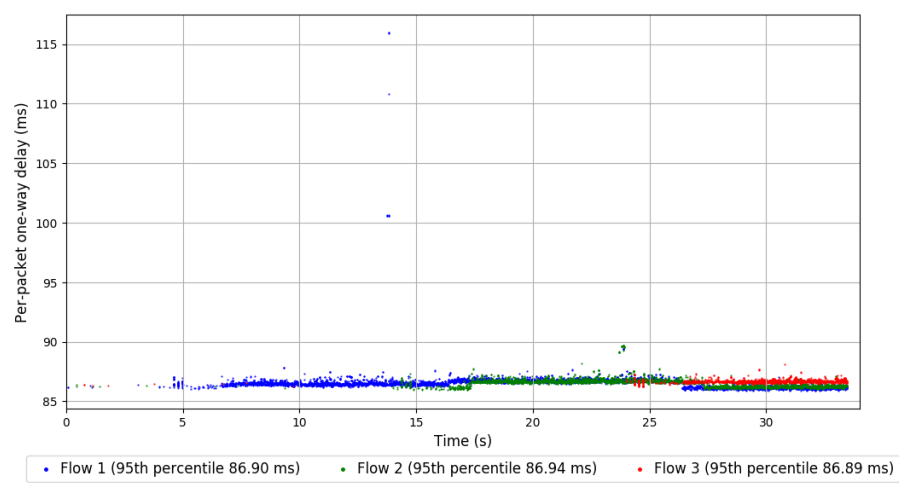
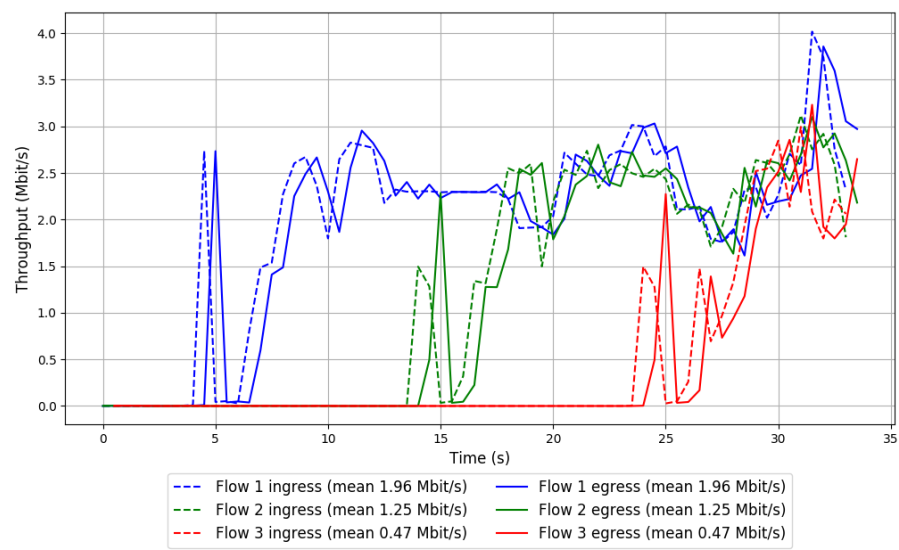


Run 7: Statistics of WebRTC media

Start at: 2018-06-18 15:17:25
End at: 2018-06-18 15:17:55
Local clock offset: 0.01 ms
Remote clock offset: -0.101 ms

Below is generated by plot.py at 2018-06-18 18:41:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.65 Mbit/s
95th percentile per-packet one-way delay: 86.913 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 86.898 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 86.936 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 86.890 ms
Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-06-18 15:40:57

End at: 2018-06-18 15:41:27

Local clock offset: -0.004 ms

Remote clock offset: 0.068 ms

Below is generated by plot.py at 2018-06-18 18:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 86.659 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 86.583 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 86.702 ms

Loss rate: 0.00%

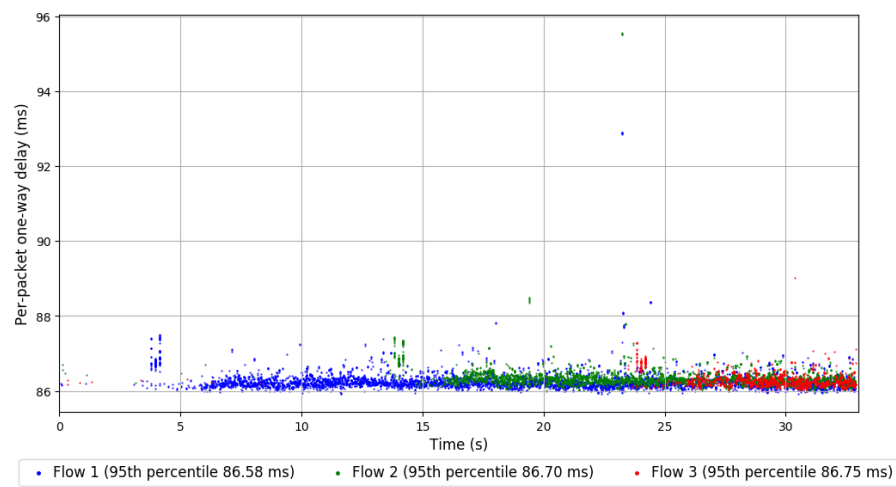
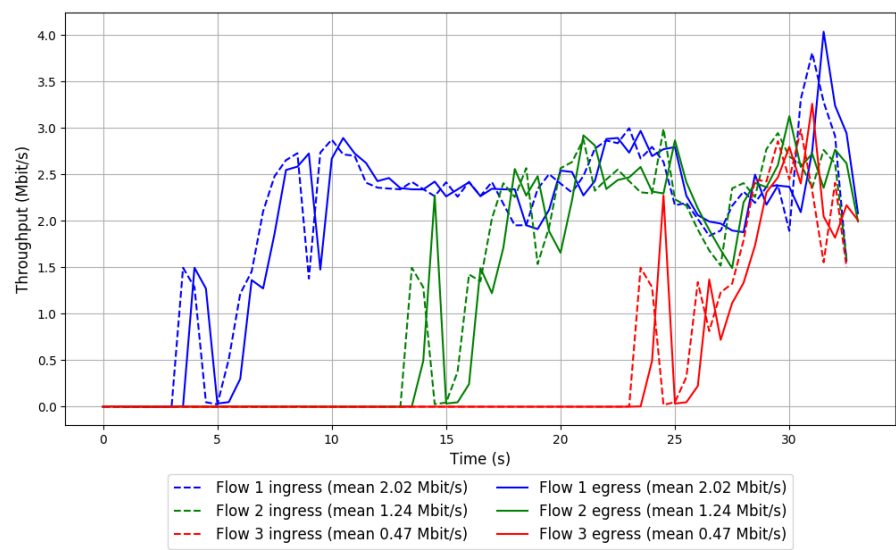
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 86.750 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-06-18 16:04:34

End at: 2018-06-18 16:05:04

Local clock offset: 0.116 ms

Remote clock offset: 0.458 ms

Below is generated by plot.py at 2018-06-18 18:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 87.123 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 87.183 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 86.789 ms

Loss rate: 0.00%

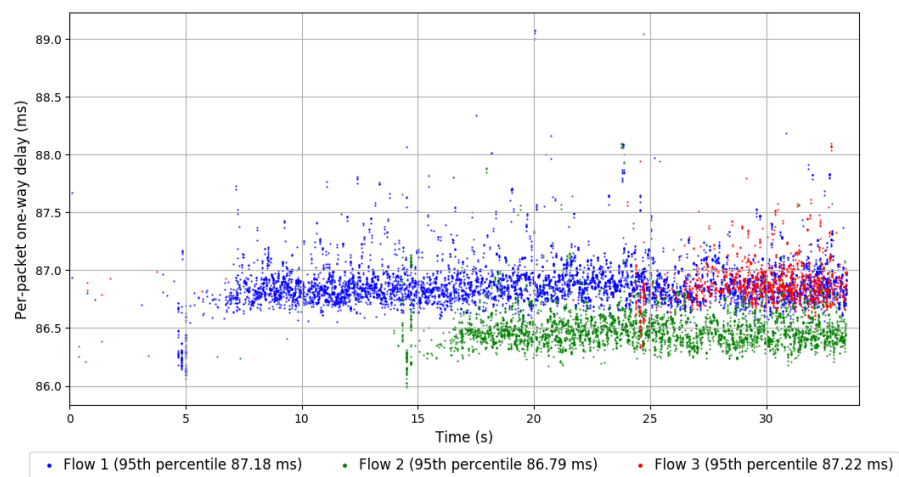
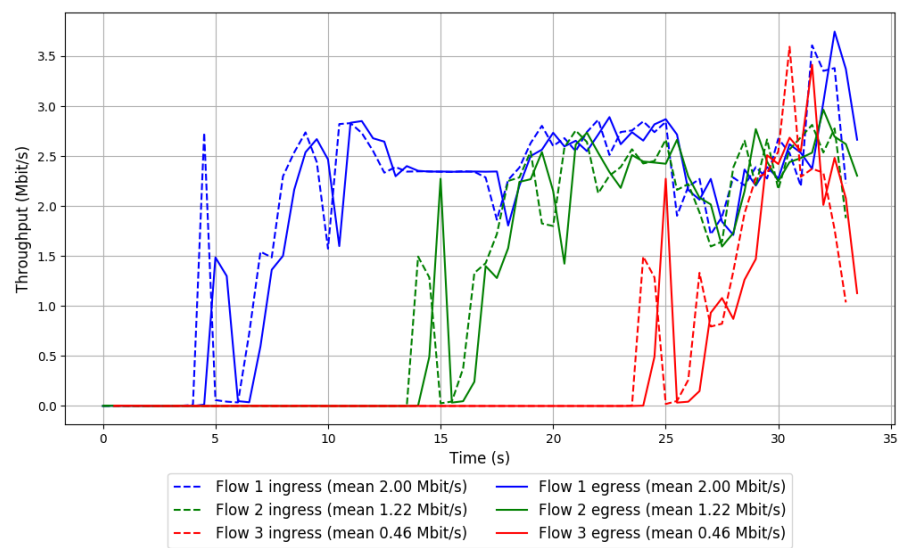
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 87.224 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-18 16:28:13

End at: 2018-06-18 16:28:43

Local clock offset: -0.081 ms

Remote clock offset: 0.493 ms

Below is generated by plot.py at 2018-06-18 18:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 87.078 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 86.688 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 86.945 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

