

Pantheon Report

Generated at 2018-06-05 18:03:31 (UTC).

Data path: AWS California 1 Ethernet (*local*) → Stanford 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.

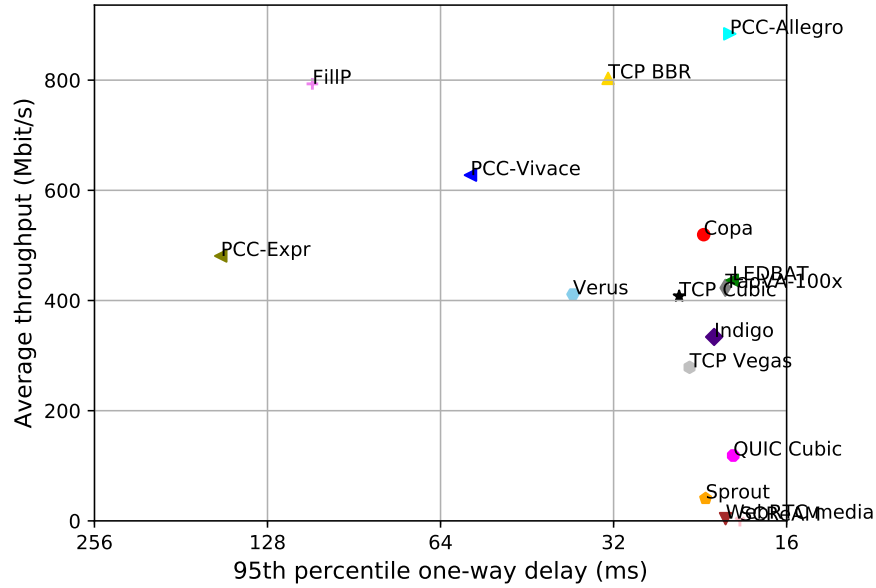
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

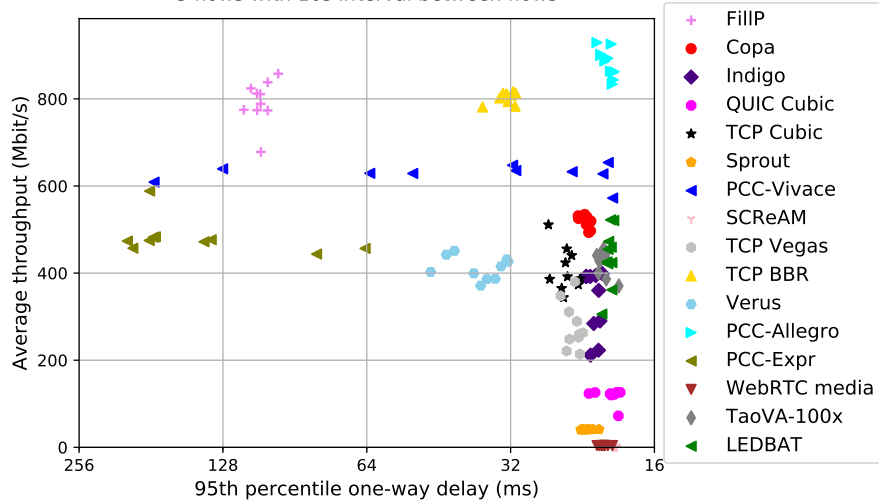
Git summary:

```
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS California 1 to Stanford, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS California 1 to Stanford, 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	468.72	356.03	296.00	33.80	26.89	20.46	5.77	9.96	11.51
Copa	10	284.32	247.95	210.64	21.45	22.45	23.61	0.02	0.02	0.04
TCP Cubic	10	219.81	175.50	213.97	23.84	26.16	24.51	0.08	0.10	0.14
FillP	10	499.28	329.61	225.54	105.63	99.08	85.83	11.68	17.85	19.44
Indigo	10	154.63	174.73	195.04	21.86	21.60	20.76	0.00	0.00	0.02
LEDBAT	10	256.98	195.17	149.87	19.78	19.81	20.25	0.02	0.04	0.04
PCC-Allegro	10	744.58	170.69	78.98	20.00	20.02	19.36	0.40	0.31	0.42
PCC-Expr	10	295.78	231.66	93.88	138.90	146.12	32.05	2.47	1.03	0.06
QUIC Cubic	10	60.65	61.30	52.49	18.84	19.89	22.26	0.00	0.01	0.02
SCReAM	10	0.22	0.22	0.22	19.26	18.73	19.04	0.00	0.00	0.00
Sprout	10	20.43	20.55	20.25	22.01	21.96	22.42	0.01	0.02	0.04
TaoVA-100x	10	208.51	226.23	191.94	19.74	20.52	21.54	0.01	0.01	0.01
TCP Vegas	10	143.11	124.39	158.56	22.57	23.29	25.15	0.03	0.07	0.09
Verus	10	214.37	211.48	170.49	37.00	34.25	50.60	21.22	23.62	25.90
PCC-Vivace	10	386.48	324.74	76.22	62.61	35.18	19.12	0.36	0.33	0.19
WebRTC media	10	2.04	1.44	0.58	20.16	20.53	20.65	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-06-05 11:27:24

End at: 2018-06-05 11:27:54

Local clock offset: 0.352 ms

Remote clock offset: 0.051 ms

Below is generated by plot.py at 2018-06-05 16:06:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 781.32 Mbit/s

95th percentile per-packet one-way delay: 36.626 ms

Loss rate: 8.51%

-- Flow 1:

Average throughput: 460.02 Mbit/s

95th percentile per-packet one-way delay: 37.148 ms

Loss rate: 6.35%

-- Flow 2:

Average throughput: 332.77 Mbit/s

95th percentile per-packet one-way delay: 36.442 ms

Loss rate: 11.56%

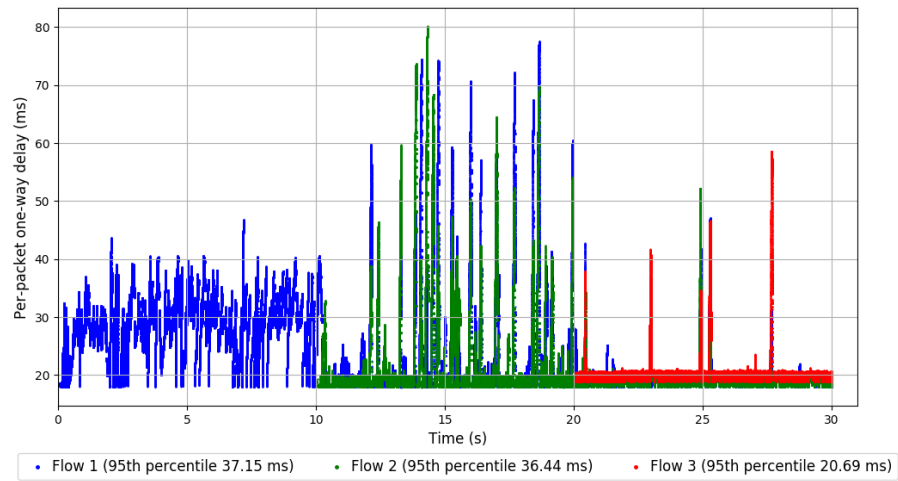
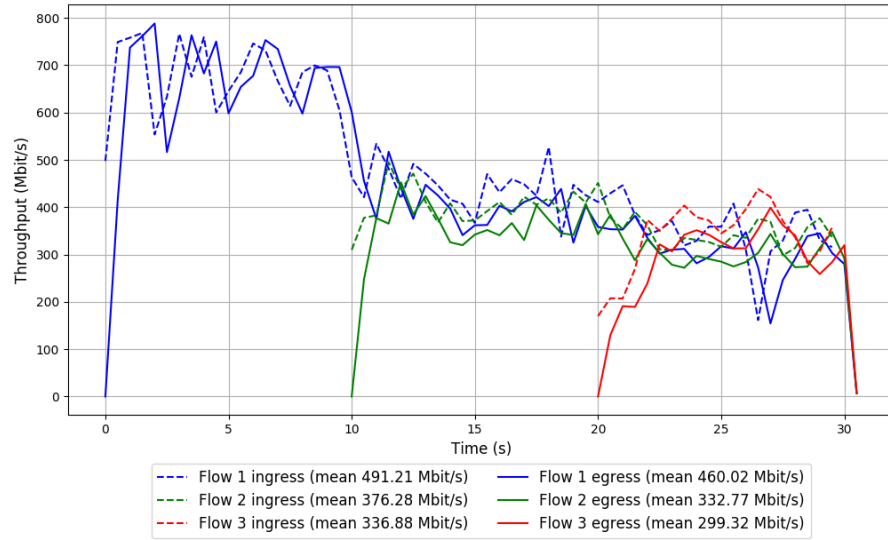
-- Flow 3:

Average throughput: 299.32 Mbit/s

95th percentile per-packet one-way delay: 20.688 ms

Loss rate: 11.15%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-05 11:52:51

End at: 2018-06-05 11:53:21

Local clock offset: 0.219 ms

Remote clock offset: 0.256 ms

Below is generated by plot.py at 2018-06-05 16:06:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 809.52 Mbit/s

95th percentile per-packet one-way delay: 32.544 ms

Loss rate: 8.26%

-- Flow 1:

Average throughput: 477.02 Mbit/s

95th percentile per-packet one-way delay: 33.539 ms

Loss rate: 5.86%

-- Flow 2:

Average throughput: 364.01 Mbit/s

95th percentile per-packet one-way delay: 26.358 ms

Loss rate: 11.08%

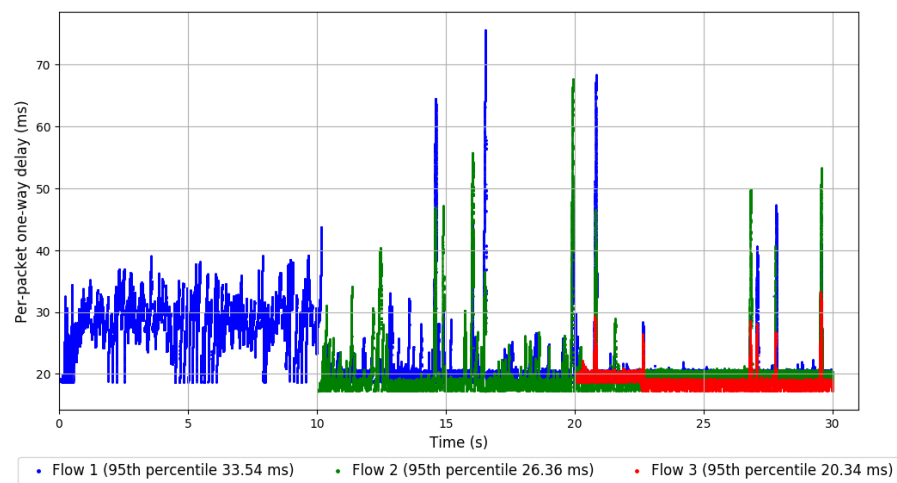
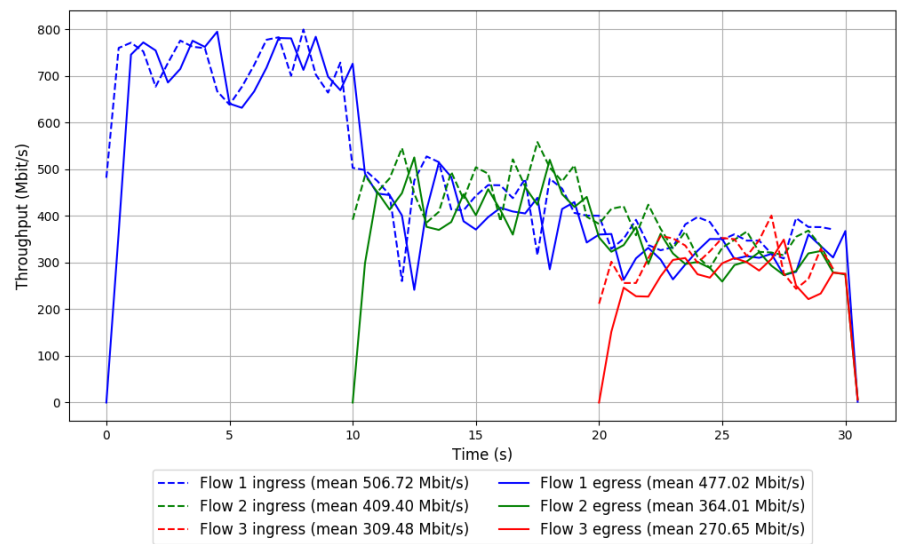
-- Flow 3:

Average throughput: 270.65 Mbit/s

95th percentile per-packet one-way delay: 20.343 ms

Loss rate: 12.56%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-06-05 12:18:42

End at: 2018-06-05 12:19:12

Local clock offset: 0.223 ms

Remote clock offset: 0.371 ms

Below is generated by plot.py at 2018-06-05 16:06:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 812.81 Mbit/s

95th percentile per-packet one-way delay: 33.194 ms

Loss rate: 7.74%

-- Flow 1:

Average throughput: 497.63 Mbit/s

95th percentile per-packet one-way delay: 34.133 ms

Loss rate: 5.42%

-- Flow 2:

Average throughput: 326.64 Mbit/s

95th percentile per-packet one-way delay: 24.264 ms

Loss rate: 10.76%

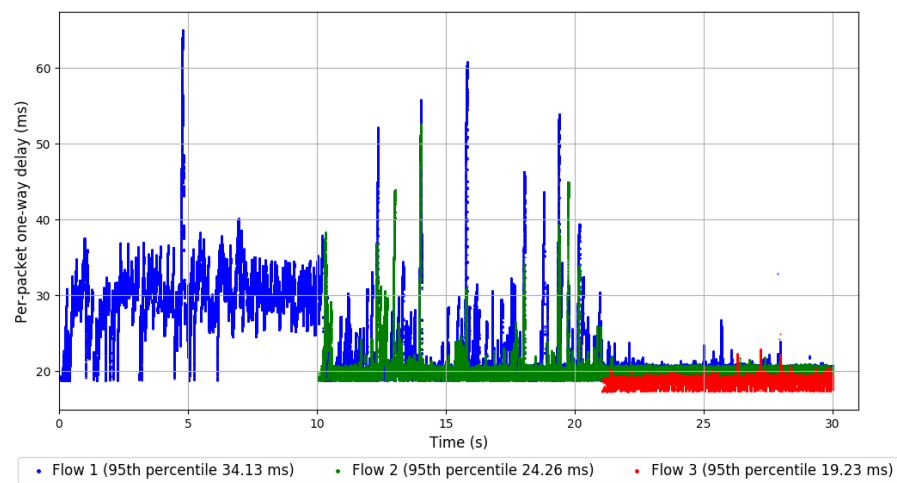
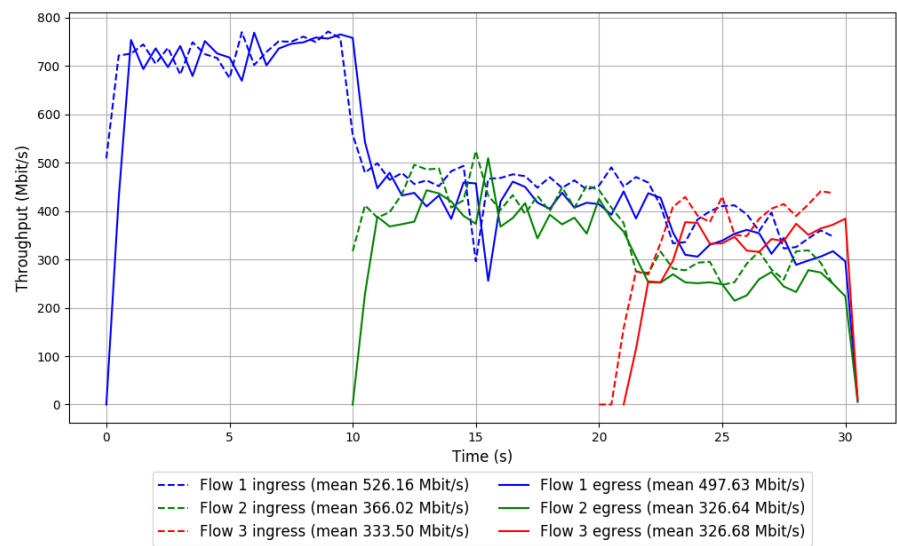
-- Flow 3:

Average throughput: 326.68 Mbit/s

95th percentile per-packet one-way delay: 19.235 ms

Loss rate: 12.07%

Run 3: Report of TCP BBR — Data Link

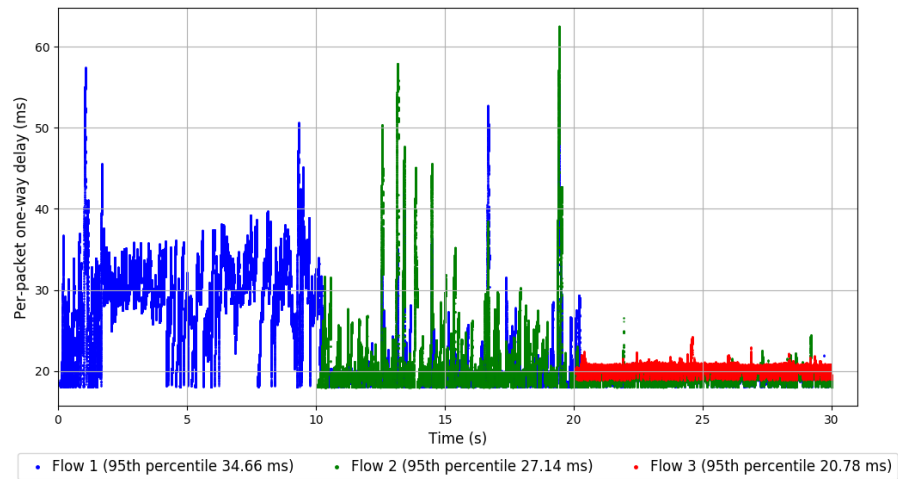
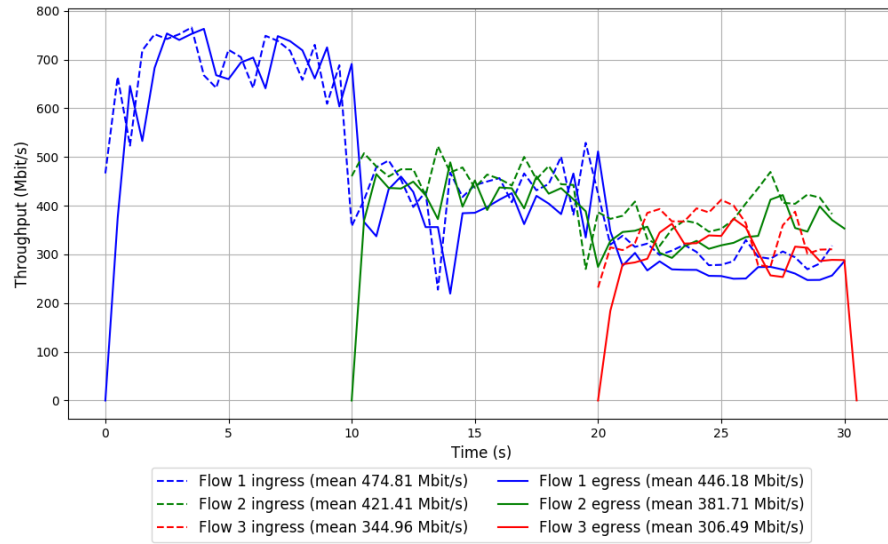


Run 4: Statistics of TCP BBR

Start at: 2018-06-05 12:44:12
End at: 2018-06-05 12:44:42
Local clock offset: 0.285 ms
Remote clock offset: -0.423 ms

Below is generated by plot.py at 2018-06-05 16:06:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 802.22 Mbit/s
95th percentile per-packet one-way delay: 33.723 ms
Loss rate: 7.80%
-- Flow 1:
Average throughput: 446.18 Mbit/s
95th percentile per-packet one-way delay: 34.659 ms
Loss rate: 6.03%
-- Flow 2:
Average throughput: 381.71 Mbit/s
95th percentile per-packet one-way delay: 27.144 ms
Loss rate: 9.42%
-- Flow 3:
Average throughput: 306.49 Mbit/s
95th percentile per-packet one-way delay: 20.778 ms
Loss rate: 11.16%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-06-05 13:09:47

End at: 2018-06-05 13:10:17

Local clock offset: 0.297 ms

Remote clock offset: 0.043 ms

Below is generated by plot.py at 2018-06-05 16:06:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 811.22 Mbit/s

95th percentile per-packet one-way delay: 32.676 ms

Loss rate: 7.35%

-- Flow 1:

Average throughput: 466.04 Mbit/s

95th percentile per-packet one-way delay: 33.548 ms

Loss rate: 5.33%

-- Flow 2:

Average throughput: 367.51 Mbit/s

95th percentile per-packet one-way delay: 27.243 ms

Loss rate: 9.31%

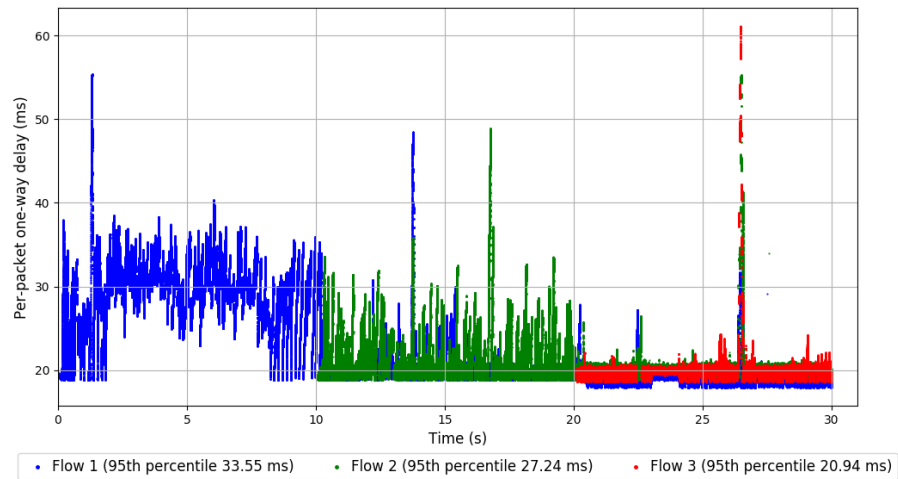
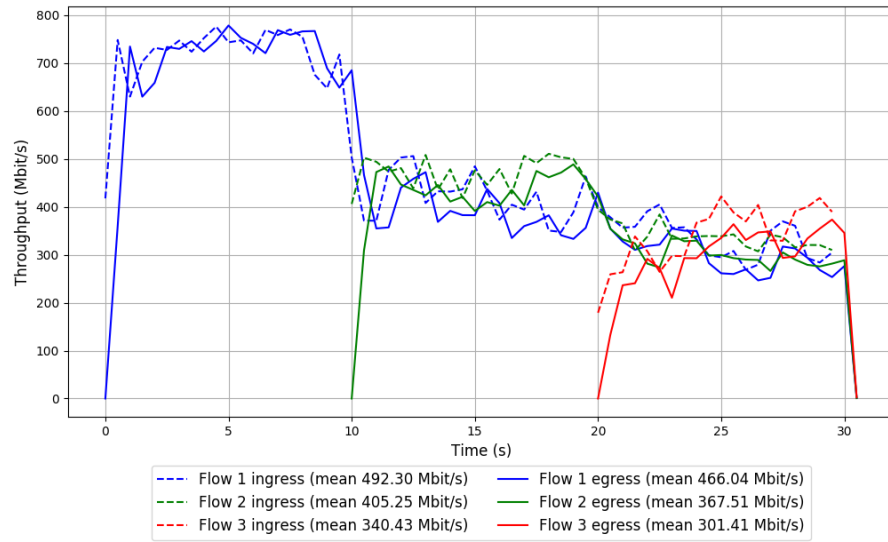
-- Flow 3:

Average throughput: 301.41 Mbit/s

95th percentile per-packet one-way delay: 20.940 ms

Loss rate: 11.46%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-06-05 13:35:18

End at: 2018-06-05 13:35:48

Local clock offset: 0.294 ms

Remote clock offset: 0.073 ms

Below is generated by plot.py at 2018-06-05 16:06:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 794.02 Mbit/s

95th percentile per-packet one-way delay: 32.373 ms

Loss rate: 8.28%

-- Flow 1:

Average throughput: 467.06 Mbit/s

95th percentile per-packet one-way delay: 33.705 ms

Loss rate: 6.78%

-- Flow 2:

Average throughput: 360.18 Mbit/s

95th percentile per-packet one-way delay: 25.465 ms

Loss rate: 9.62%

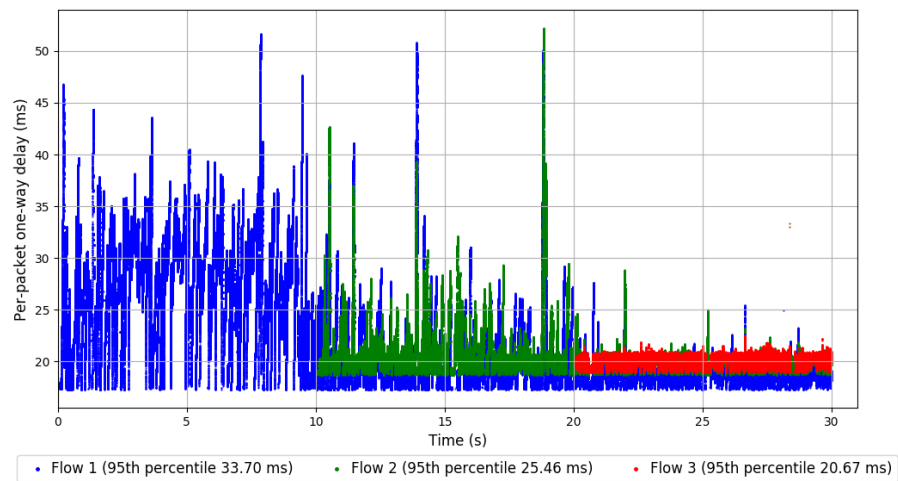
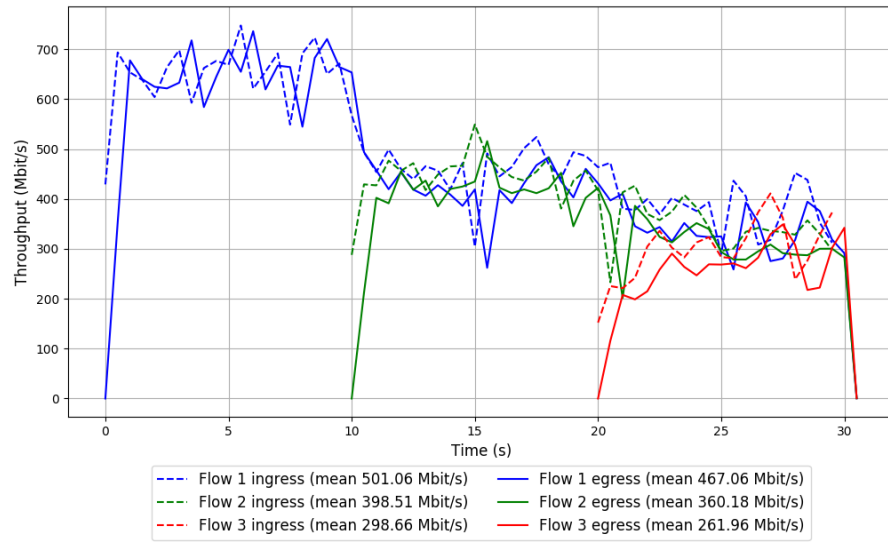
-- Flow 3:

Average throughput: 261.96 Mbit/s

95th percentile per-packet one-way delay: 20.670 ms

Loss rate: 12.30%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-06-05 14:00:58

End at: 2018-06-05 14:01:28

Local clock offset: 0.42 ms

Remote clock offset: 0.072 ms

Below is generated by plot.py at 2018-06-05 16:06:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 816.71 Mbit/s

95th percentile per-packet one-way delay: 31.555 ms

Loss rate: 7.67%

-- Flow 1:

Average throughput: 483.51 Mbit/s

95th percentile per-packet one-way delay: 32.785 ms

Loss rate: 5.49%

-- Flow 2:

Average throughput: 356.73 Mbit/s

95th percentile per-packet one-way delay: 24.977 ms

Loss rate: 10.56%

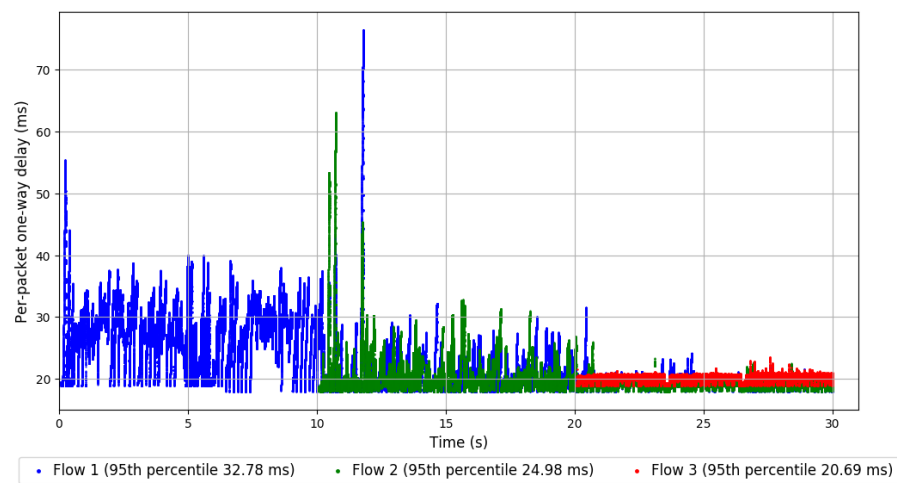
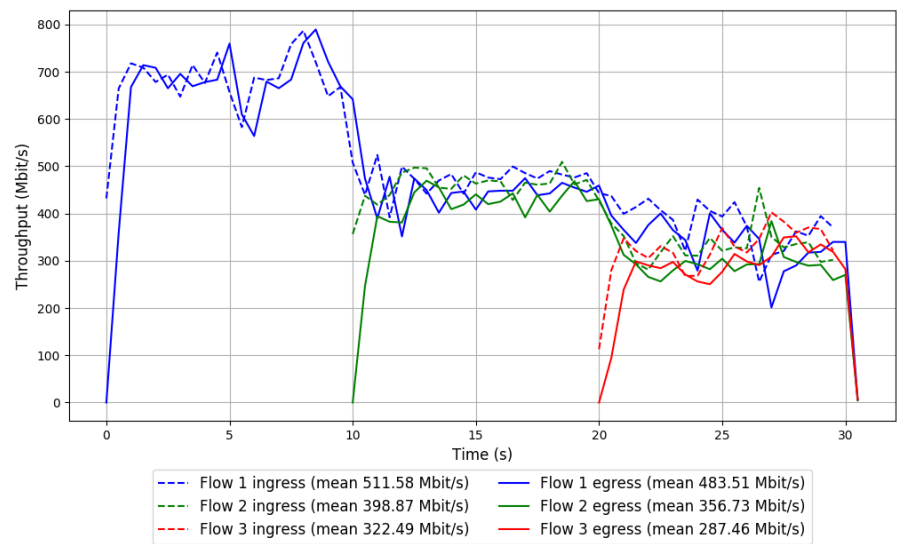
-- Flow 3:

Average throughput: 287.46 Mbit/s

95th percentile per-packet one-way delay: 20.689 ms

Loss rate: 10.87%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-06-05 14:26:30

End at: 2018-06-05 14:27:00

Local clock offset: 0.351 ms

Remote clock offset: 0.178 ms

Below is generated by plot.py at 2018-06-05 16:06:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 812.28 Mbit/s

95th percentile per-packet one-way delay: 31.202 ms

Loss rate: 7.65%

-- Flow 1:

Average throughput: 471.43 Mbit/s

95th percentile per-packet one-way delay: 32.348 ms

Loss rate: 5.44%

-- Flow 2:

Average throughput: 359.14 Mbit/s

95th percentile per-packet one-way delay: 25.277 ms

Loss rate: 9.72%

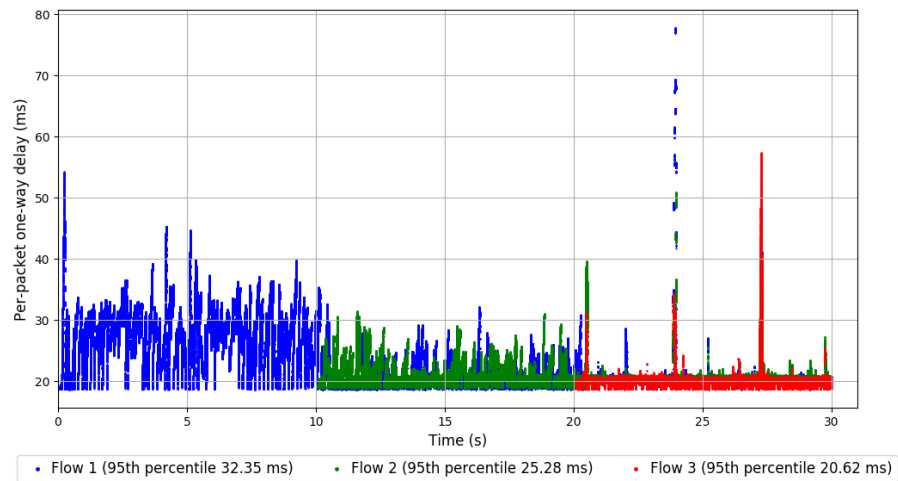
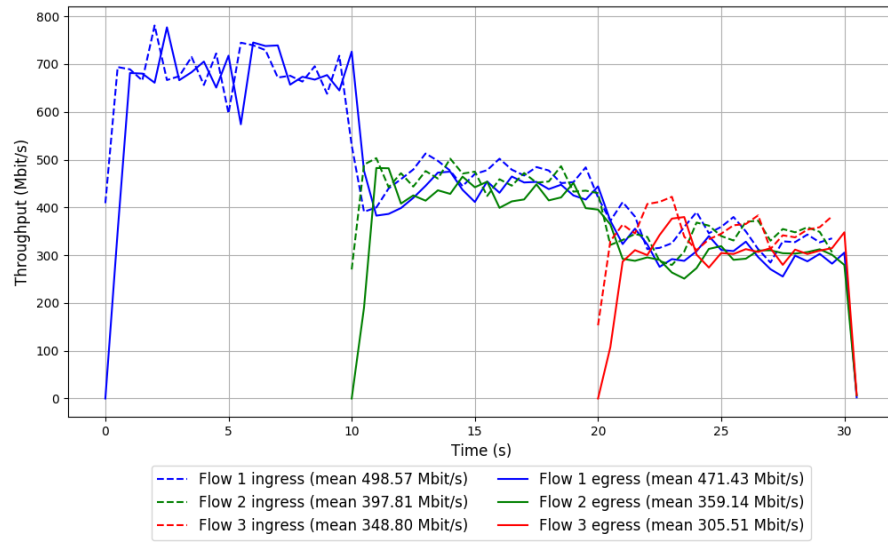
-- Flow 3:

Average throughput: 305.51 Mbit/s

95th percentile per-packet one-way delay: 20.625 ms

Loss rate: 12.42%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-06-05 14:52:13

End at: 2018-06-05 14:52:43

Local clock offset: 0.255 ms

Remote clock offset: 0.071 ms

Below is generated by plot.py at 2018-06-05 16:15:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 808.90 Mbit/s

95th percentile per-packet one-way delay: 31.898 ms

Loss rate: 7.20%

-- Flow 1:

Average throughput: 462.06 Mbit/s

95th percentile per-packet one-way delay: 33.387 ms

Loss rate: 5.21%

-- Flow 2:

Average throughput: 372.51 Mbit/s

95th percentile per-packet one-way delay: 25.330 ms

Loss rate: 9.10%

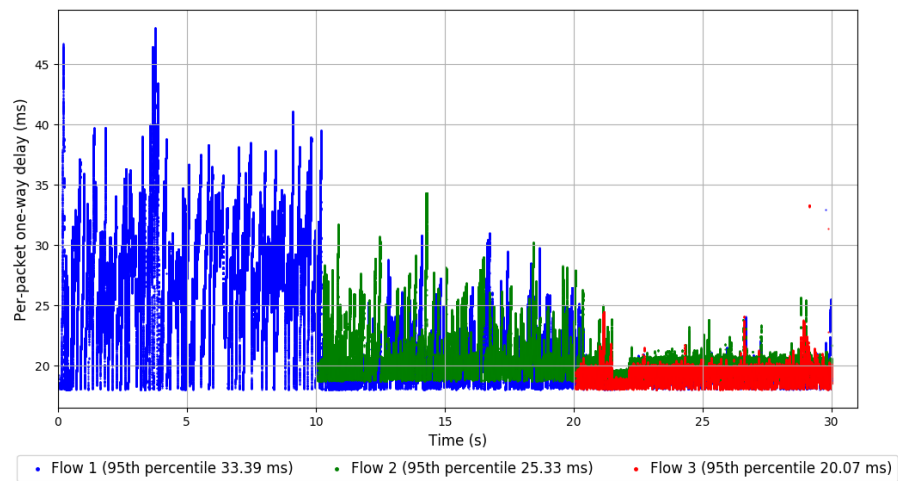
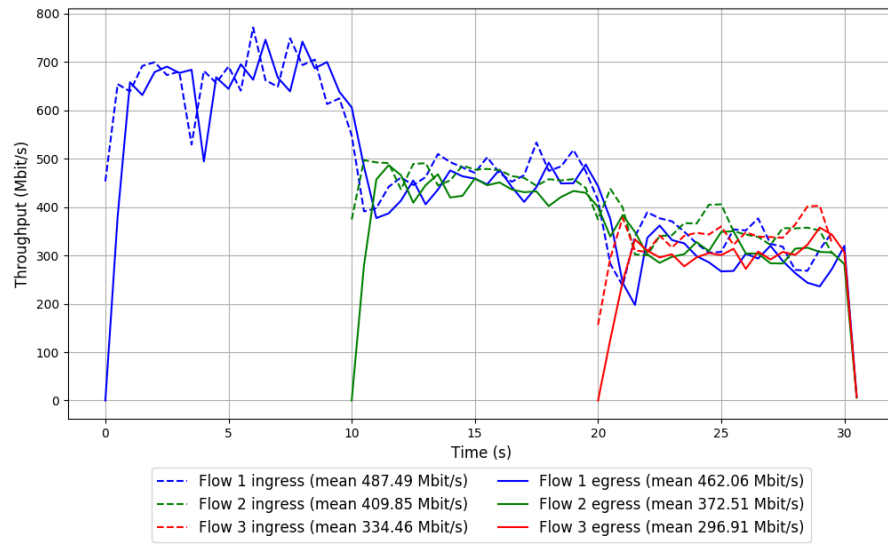
-- Flow 3:

Average throughput: 296.91 Mbit/s

95th percentile per-packet one-way delay: 20.068 ms

Loss rate: 11.22%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-06-05 15:17:57

End at: 2018-06-05 15:18:27

Local clock offset: 0.385 ms

Remote clock offset: 0.189 ms

Below is generated by plot.py at 2018-06-05 16:15:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 783.22 Mbit/s

95th percentile per-packet one-way delay: 31.315 ms

Loss rate: 7.11%

-- Flow 1:

Average throughput: 456.28 Mbit/s

95th percentile per-packet one-way delay: 32.773 ms

Loss rate: 5.78%

-- Flow 2:

Average throughput: 339.15 Mbit/s

95th percentile per-packet one-way delay: 26.360 ms

Loss rate: 8.46%

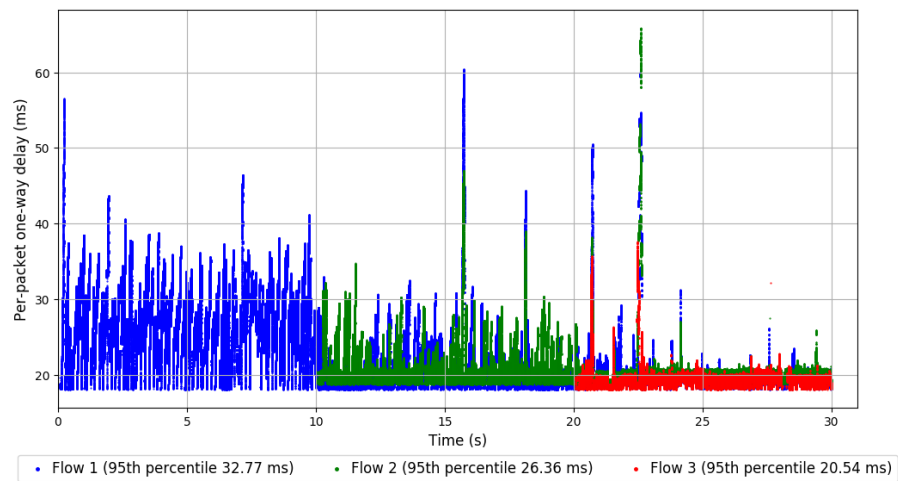
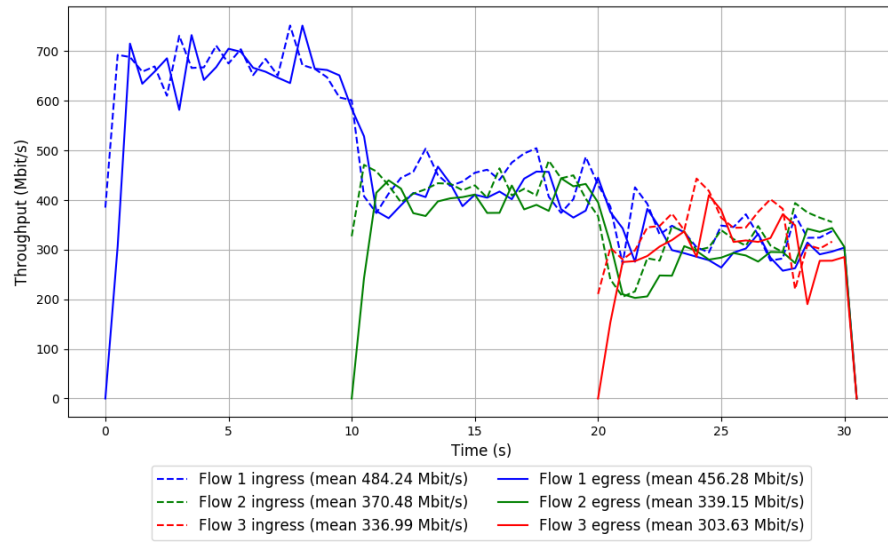
-- Flow 3:

Average throughput: 303.63 Mbit/s

95th percentile per-packet one-way delay: 20.542 ms

Loss rate: 9.91%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-05 11:30:36

End at: 2018-06-05 11:31:06

Local clock offset: 0.301 ms

Remote clock offset: 0.132 ms

Below is generated by plot.py at 2018-06-05 16:18:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 525.52 Mbit/s

95th percentile per-packet one-way delay: 22.238 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 286.03 Mbit/s

95th percentile per-packet one-way delay: 22.163 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 252.92 Mbit/s

95th percentile per-packet one-way delay: 21.266 ms

Loss rate: 0.03%

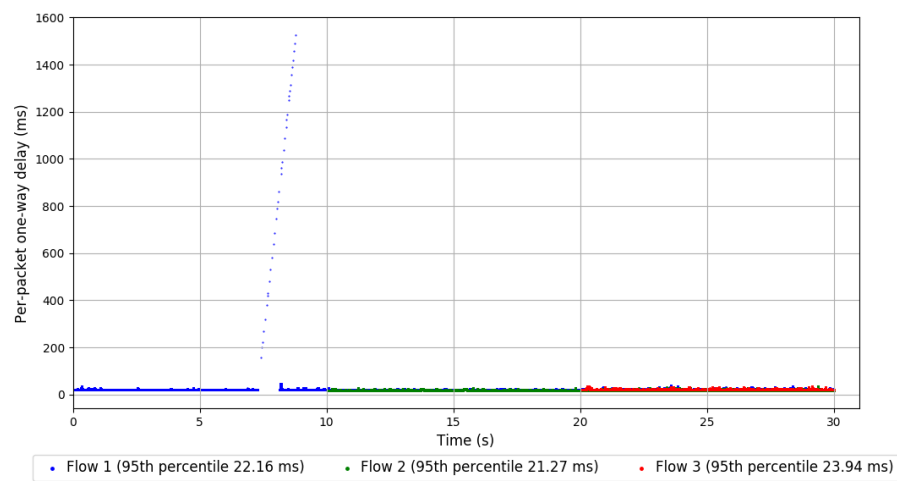
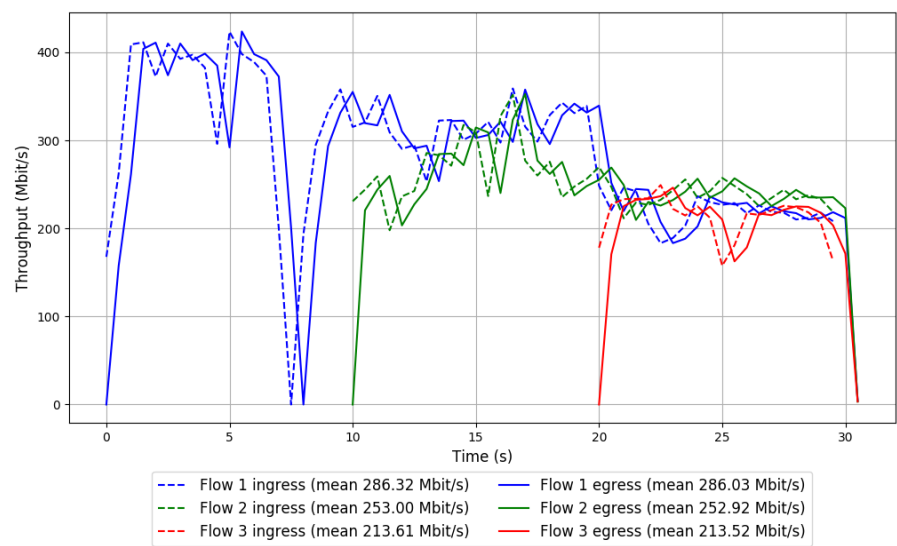
-- Flow 3:

Average throughput: 213.52 Mbit/s

95th percentile per-packet one-way delay: 23.937 ms

Loss rate: 0.04%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-06-05 11:56:07

End at: 2018-06-05 11:56:37

Local clock offset: 0.224 ms

Remote clock offset: 0.217 ms

Below is generated by plot.py at 2018-06-05 16:18:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 528.24 Mbit/s

95th percentile per-packet one-way delay: 22.139 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 290.30 Mbit/s

95th percentile per-packet one-way delay: 21.200 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 259.13 Mbit/s

95th percentile per-packet one-way delay: 23.094 ms

Loss rate: 0.02%

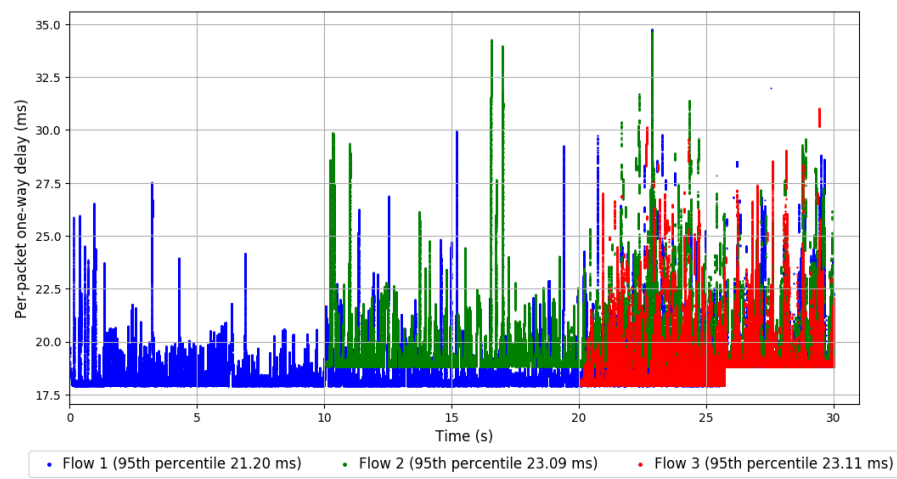
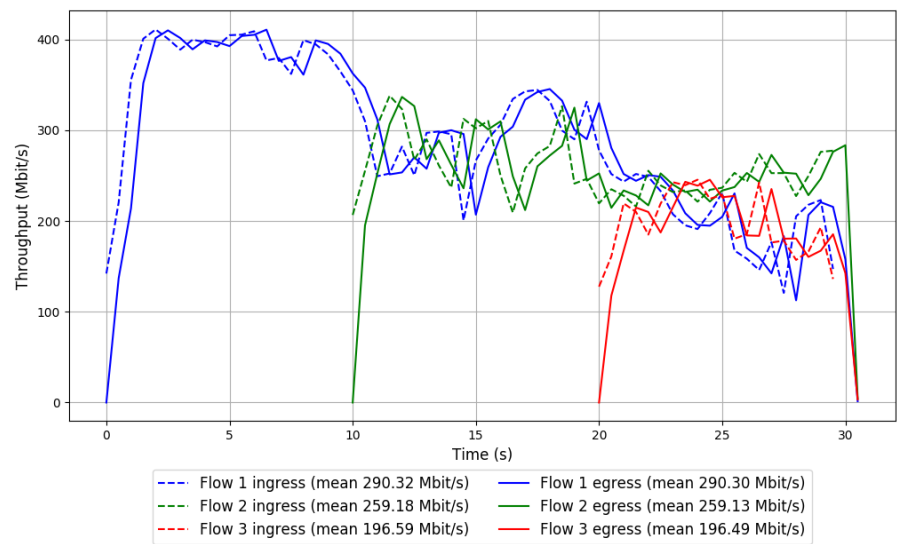
-- Flow 3:

Average throughput: 196.49 Mbit/s

95th percentile per-packet one-way delay: 23.106 ms

Loss rate: 0.05%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-06-05 12:21:58

End at: 2018-06-05 12:22:28

Local clock offset: 0.214 ms

Remote clock offset: 0.148 ms

Below is generated by plot.py at 2018-06-05 16:18:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 525.58 Mbit/s

95th percentile per-packet one-way delay: 23.064 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 296.34 Mbit/s

95th percentile per-packet one-way delay: 23.294 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 239.04 Mbit/s

95th percentile per-packet one-way delay: 21.434 ms

Loss rate: 0.03%

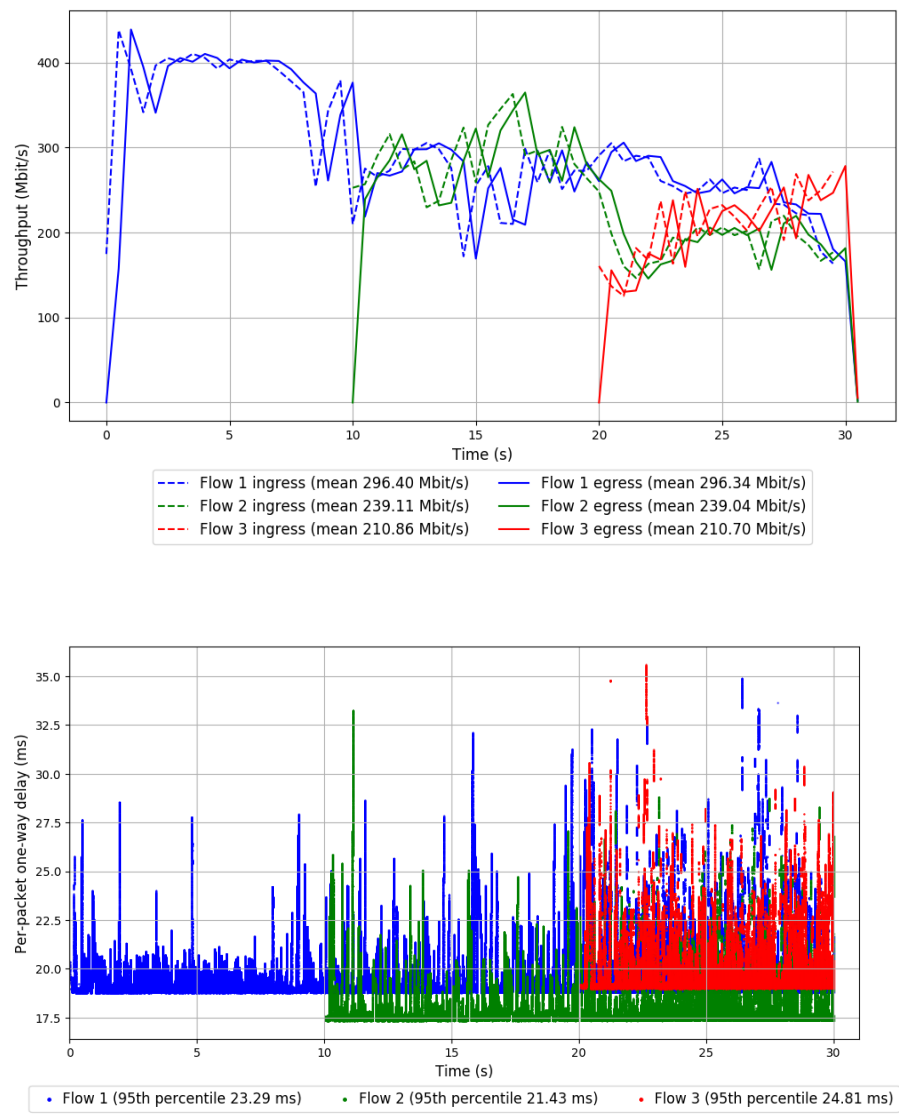
-- Flow 3:

Average throughput: 210.70 Mbit/s

95th percentile per-packet one-way delay: 24.811 ms

Loss rate: 0.08%

Run 3: Report of Copa — Data Link

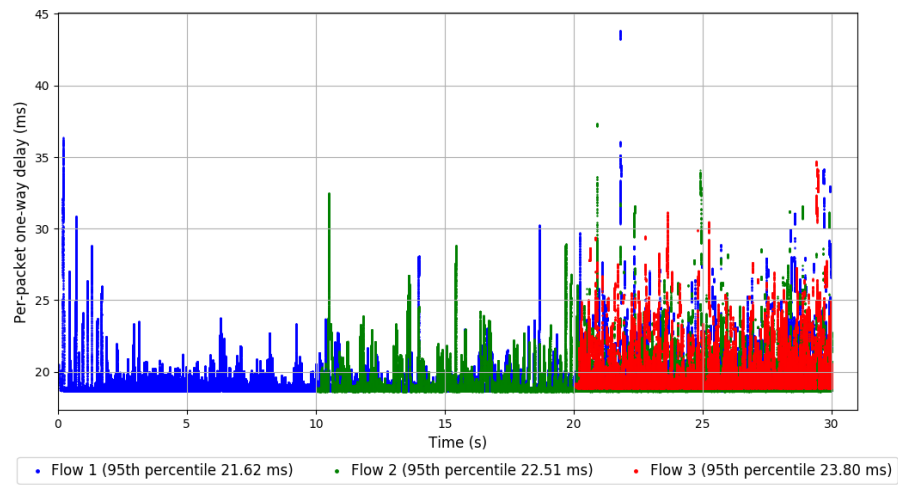
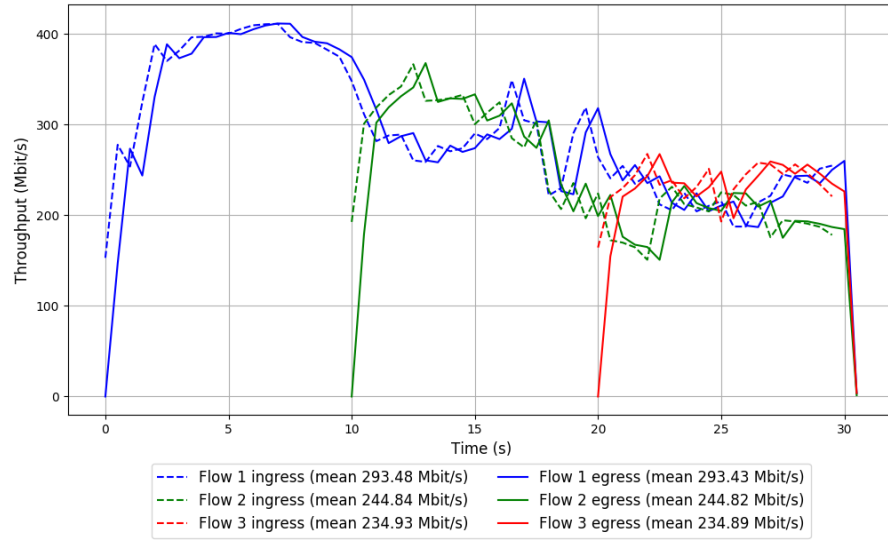


Run 4: Statistics of Copa

Start at: 2018-06-05 12:47:23
End at: 2018-06-05 12:47:53
Local clock offset: 0.3 ms
Remote clock offset: -0.501 ms

Below is generated by plot.py at 2018-06-05 16:18:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 534.55 Mbit/s
95th percentile per-packet one-way delay: 22.389 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 293.43 Mbit/s
95th percentile per-packet one-way delay: 21.621 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 244.82 Mbit/s
95th percentile per-packet one-way delay: 22.512 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 234.89 Mbit/s
95th percentile per-packet one-way delay: 23.803 ms
Loss rate: 0.02%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-06-05 13:13:04

End at: 2018-06-05 13:13:34

Local clock offset: 0.202 ms

Remote clock offset: 0.114 ms

Below is generated by plot.py at 2018-06-05 16:18:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 531.47 Mbit/s

95th percentile per-packet one-way delay: 23.094 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 288.08 Mbit/s

95th percentile per-packet one-way delay: 20.183 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 247.92 Mbit/s

95th percentile per-packet one-way delay: 24.029 ms

Loss rate: 0.01%

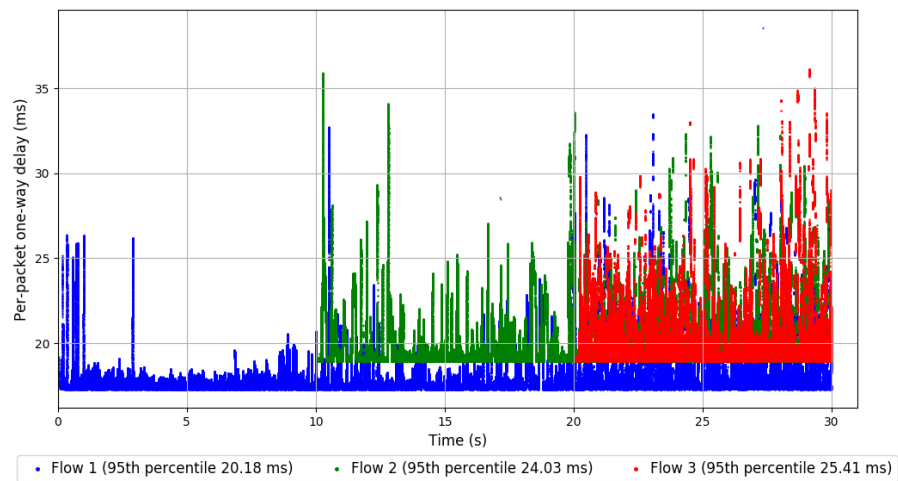
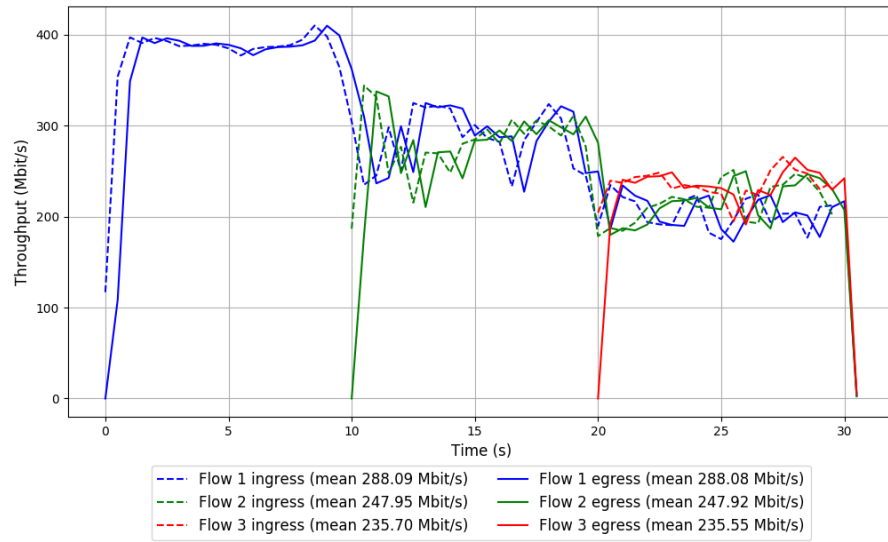
-- Flow 3:

Average throughput: 235.55 Mbit/s

95th percentile per-packet one-way delay: 25.409 ms

Loss rate: 0.06%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-06-05 13:38:31

End at: 2018-06-05 13:39:01

Local clock offset: 0.189 ms

Remote clock offset: 0.08 ms

Below is generated by plot.py at 2018-06-05 16:18:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 527.93 Mbit/s

95th percentile per-packet one-way delay: 22.435 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 290.36 Mbit/s

95th percentile per-packet one-way delay: 21.908 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 250.57 Mbit/s

95th percentile per-packet one-way delay: 23.086 ms

Loss rate: 0.07%

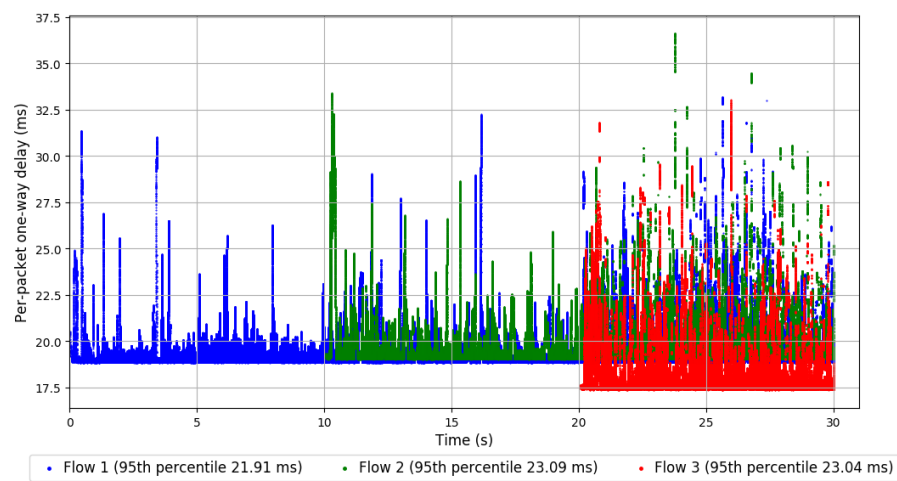
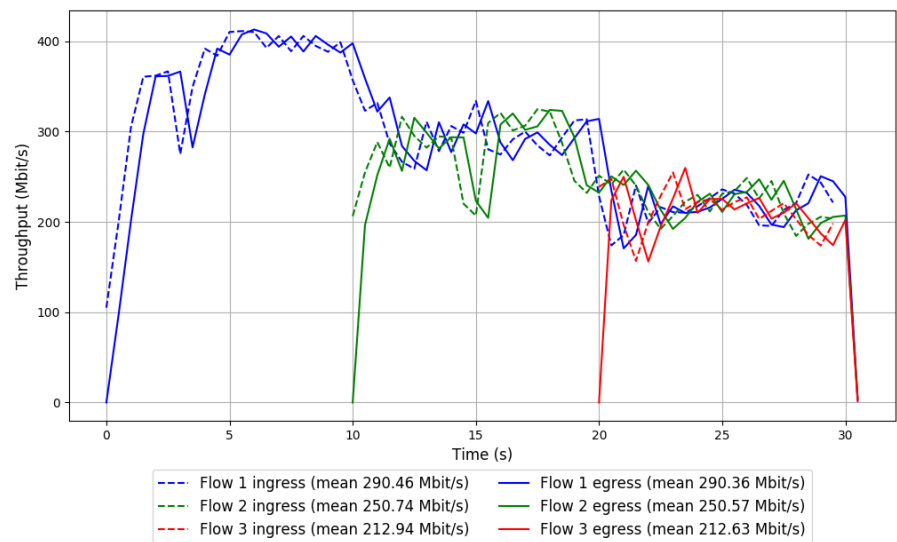
-- Flow 3:

Average throughput: 212.63 Mbit/s

95th percentile per-packet one-way delay: 23.039 ms

Loss rate: 0.14%

Run 6: Report of Copa — Data Link

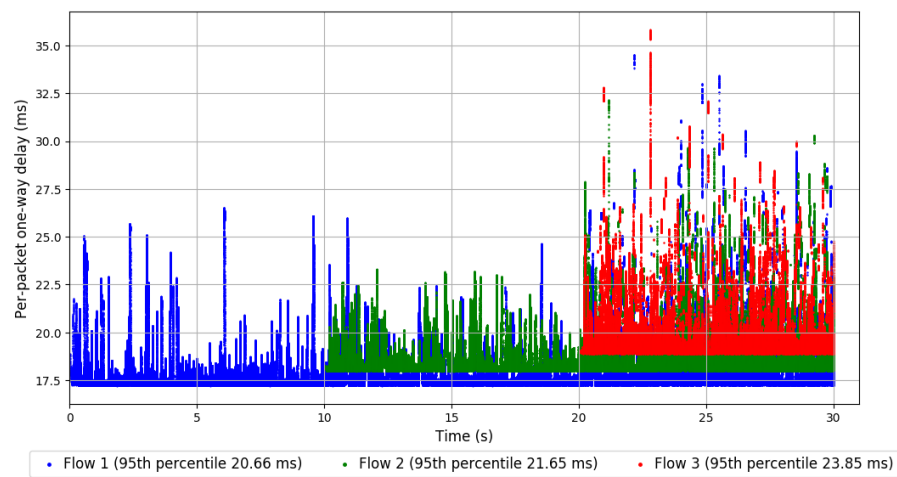
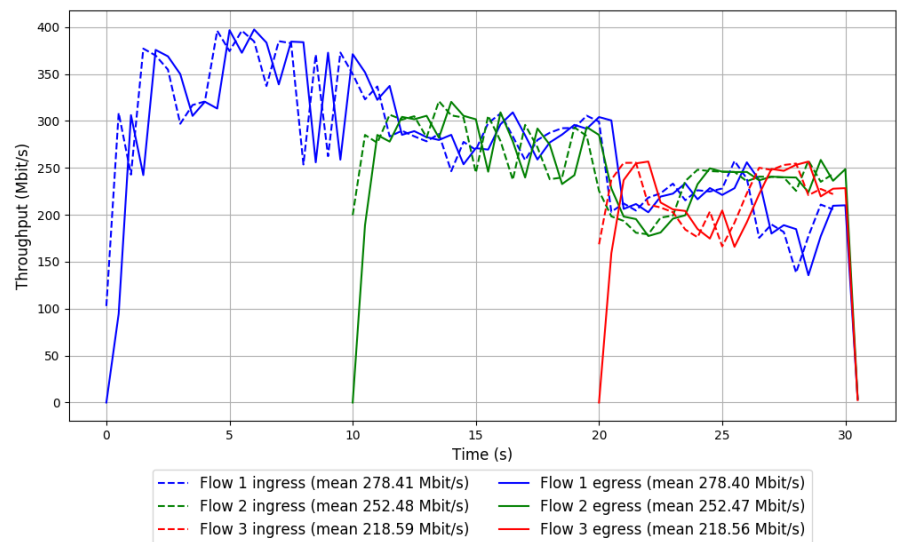


Run 7: Statistics of Copa

Start at: 2018-06-05 14:04:18
End at: 2018-06-05 14:04:48
Local clock offset: 0.34 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2018-06-05 16:28:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 519.26 Mbit/s
95th percentile per-packet one-way delay: 21.734 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 278.40 Mbit/s
95th percentile per-packet one-way delay: 20.660 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 252.47 Mbit/s
95th percentile per-packet one-way delay: 21.650 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 218.56 Mbit/s
95th percentile per-packet one-way delay: 23.847 ms
Loss rate: 0.01%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-06-05 14:29:42

End at: 2018-06-05 14:30:13

Local clock offset: 0.306 ms

Remote clock offset: 0.163 ms

Below is generated by plot.py at 2018-06-05 16:28:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 511.87 Mbit/s

95th percentile per-packet one-way delay: 22.224 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 282.31 Mbit/s

95th percentile per-packet one-way delay: 21.492 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 238.61 Mbit/s

95th percentile per-packet one-way delay: 22.510 ms

Loss rate: 0.00%

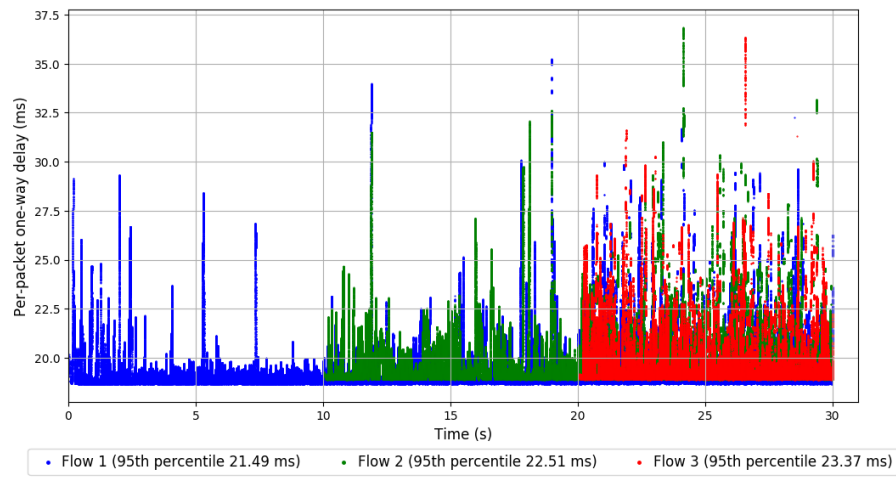
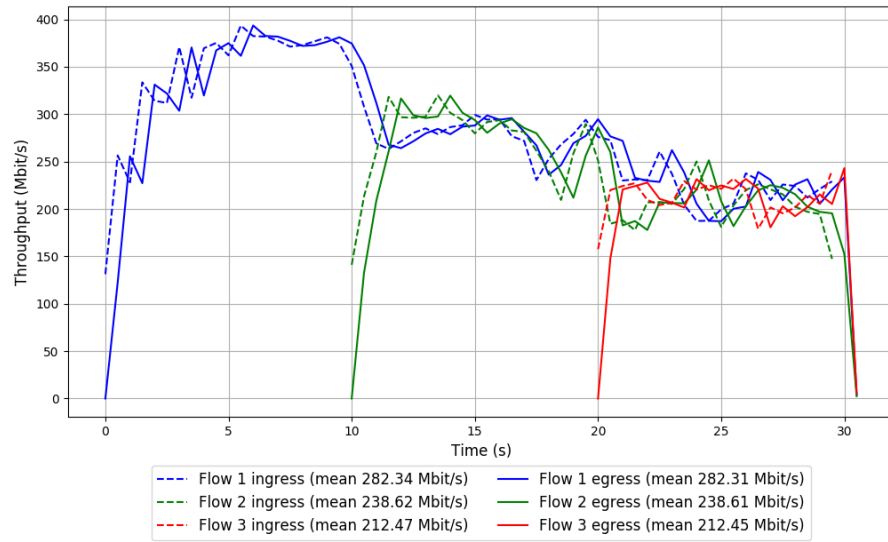
-- Flow 3:

Average throughput: 212.45 Mbit/s

95th percentile per-packet one-way delay: 23.368 ms

Loss rate: 0.01%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-06-05 14:55:34

End at: 2018-06-05 14:56:04

Local clock offset: 0.319 ms

Remote clock offset: 0.122 ms

Below is generated by plot.py at 2018-06-05 16:29:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 497.07 Mbit/s

95th percentile per-packet one-way delay: 21.773 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 262.34 Mbit/s

95th percentile per-packet one-way delay: 20.593 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 256.36 Mbit/s

95th percentile per-packet one-way delay: 22.074 ms

Loss rate: 0.00%

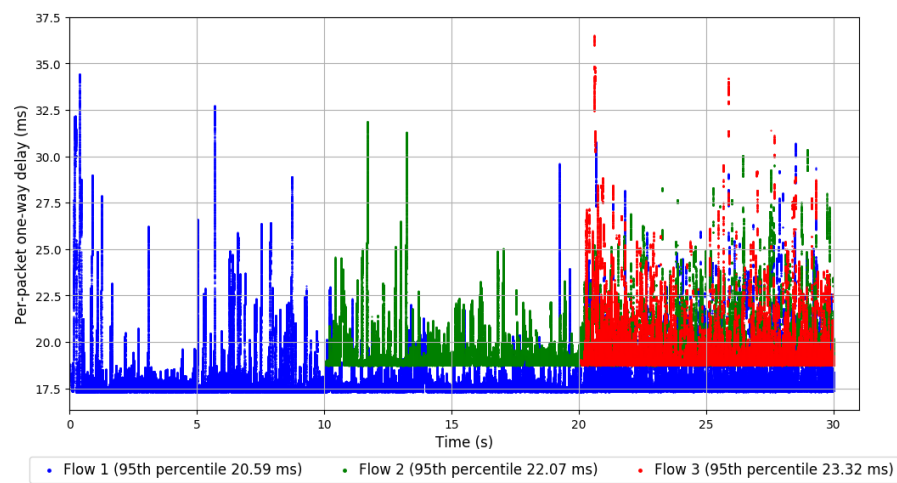
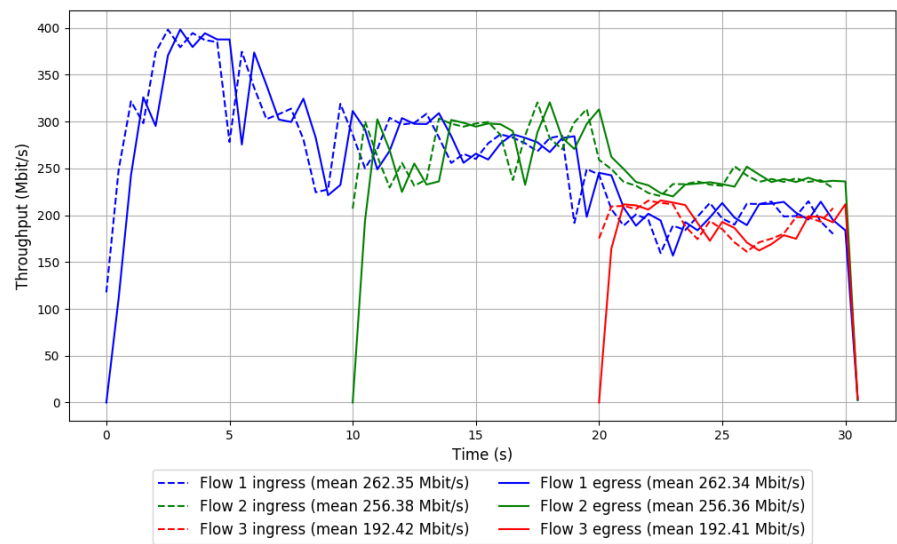
-- Flow 3:

Average throughput: 192.41 Mbit/s

95th percentile per-packet one-way delay: 23.315 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-06-05 15:21:10

End at: 2018-06-05 15:21:40

Local clock offset: 0.431 ms

Remote clock offset: 0.217 ms

Below is generated by plot.py at 2018-06-05 16:29:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 493.52 Mbit/s

95th percentile per-packet one-way delay: 21.955 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 275.64 Mbit/s

95th percentile per-packet one-way delay: 21.395 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 237.62 Mbit/s

95th percentile per-packet one-way delay: 22.894 ms

Loss rate: 0.01%

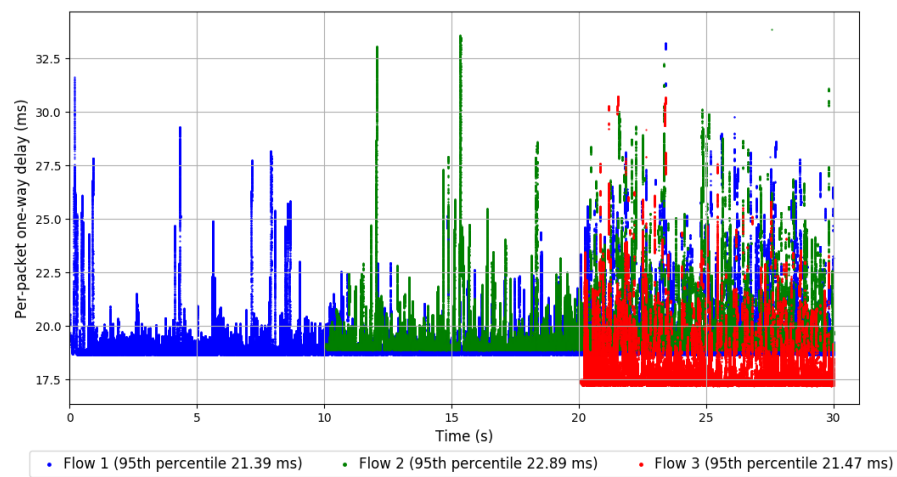
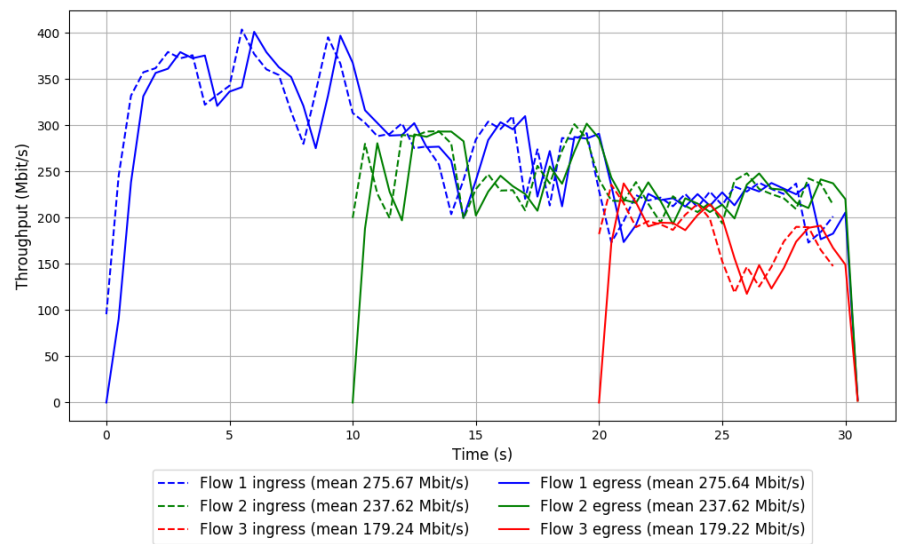
-- Flow 3:

Average throughput: 179.22 Mbit/s

95th percentile per-packet one-way delay: 21.474 ms

Loss rate: 0.01%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-06-05 11:38:37

End at: 2018-06-05 11:39:07

Local clock offset: 0.233 ms

Remote clock offset: 0.265 ms

Below is generated by plot.py at 2018-06-05 16:29:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 343.85 Mbit/s

95th percentile per-packet one-way delay: 24.797 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 190.33 Mbit/s

95th percentile per-packet one-way delay: 24.172 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 175.65 Mbit/s

95th percentile per-packet one-way delay: 27.112 ms

Loss rate: 0.11%

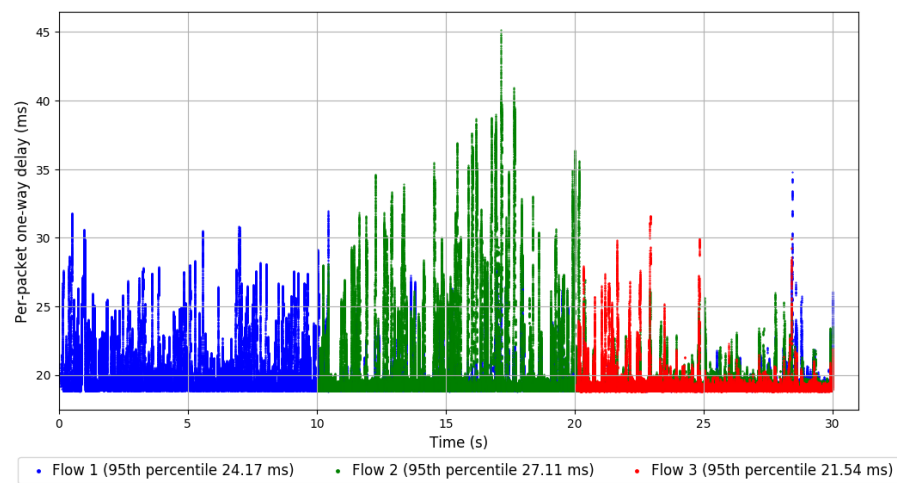
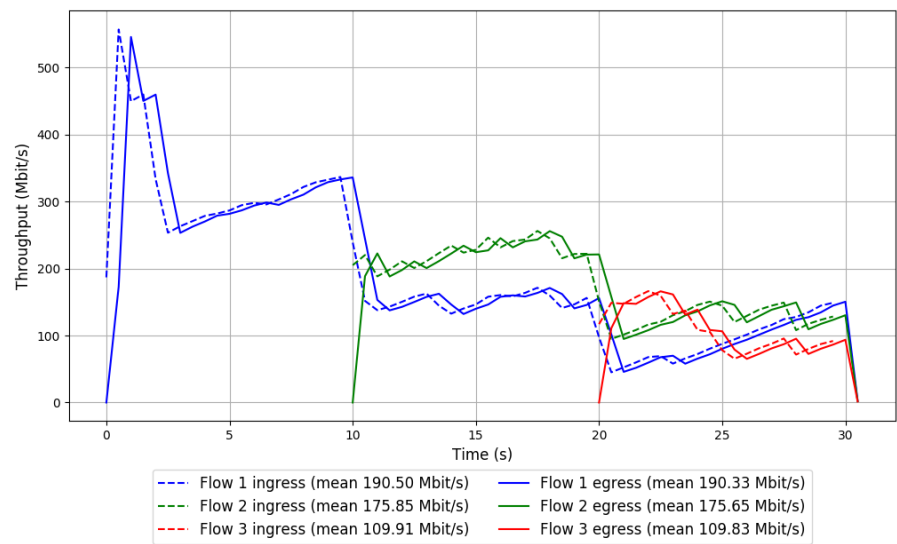
-- Flow 3:

Average throughput: 109.83 Mbit/s

95th percentile per-packet one-way delay: 21.540 ms

Loss rate: 0.04%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-06-05 12:04:18

End at: 2018-06-05 12:04:48

Local clock offset: 0.171 ms

Remote clock offset: 0.362 ms

Below is generated by plot.py at 2018-06-05 16:29:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 511.01 Mbit/s

95th percentile per-packet one-way delay: 26.661 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 298.75 Mbit/s

95th percentile per-packet one-way delay: 24.306 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 217.42 Mbit/s

95th percentile per-packet one-way delay: 30.816 ms

Loss rate: 0.15%

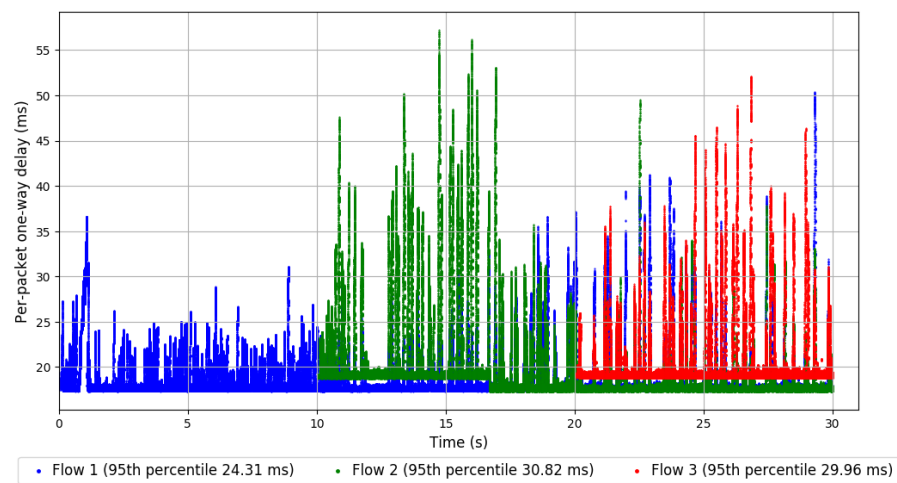
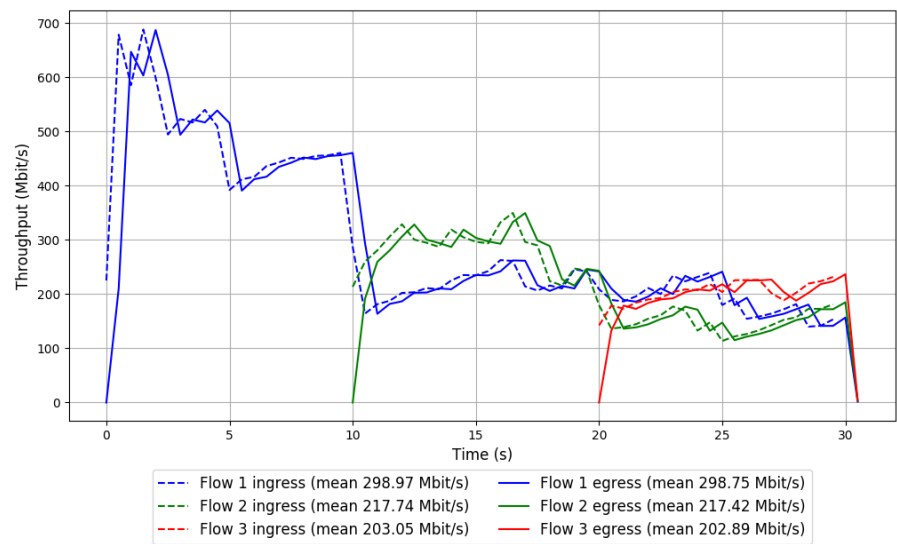
-- Flow 3:

Average throughput: 202.89 Mbit/s

95th percentile per-packet one-way delay: 29.959 ms

Loss rate: 0.07%

Run 2: Report of TCP Cubic — Data Link

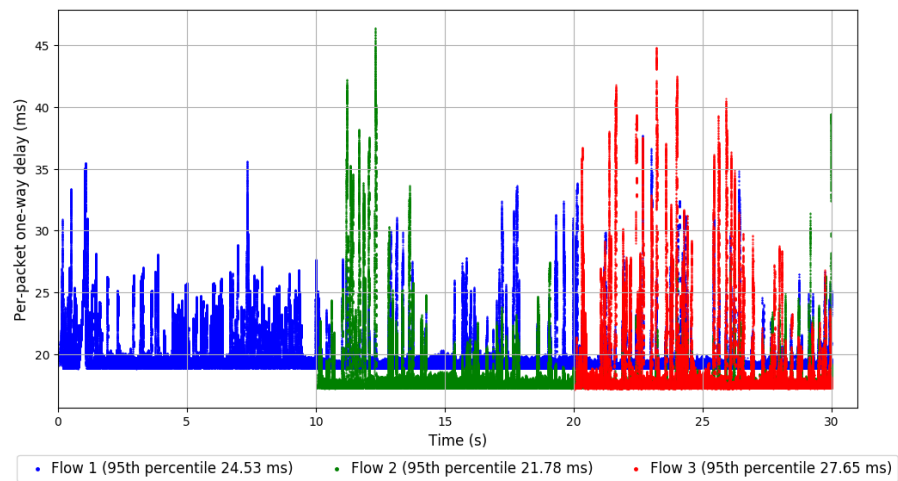
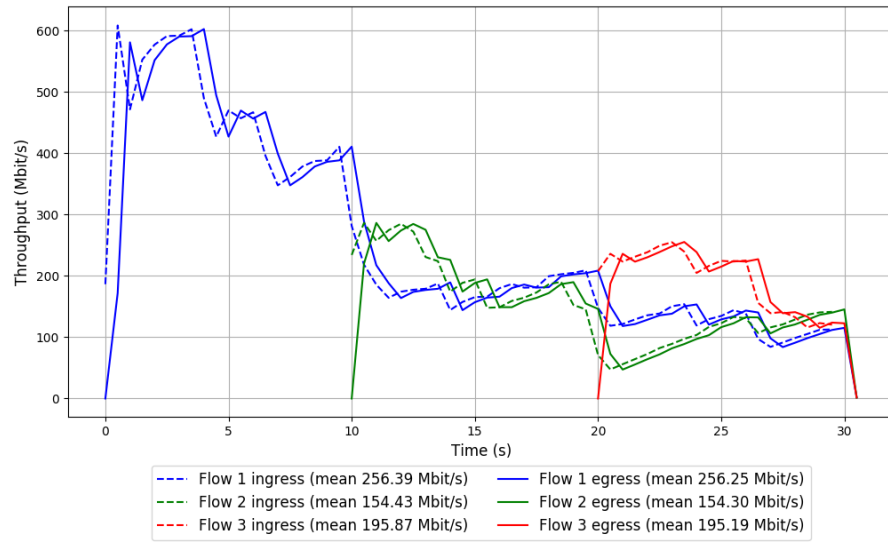


Run 3: Statistics of TCP Cubic

Start at: 2018-06-05 12:29:55
End at: 2018-06-05 12:30:25
Local clock offset: 0.283 ms
Remote clock offset: -0.234 ms

Below is generated by plot.py at 2018-06-05 16:29:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 423.92 Mbit/s
95th percentile per-packet one-way delay: 24.562 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 256.25 Mbit/s
95th percentile per-packet one-way delay: 24.527 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 154.30 Mbit/s
95th percentile per-packet one-way delay: 21.784 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 195.19 Mbit/s
95th percentile per-packet one-way delay: 27.648 ms
Loss rate: 0.35%

Run 3: Report of TCP Cubic — Data Link

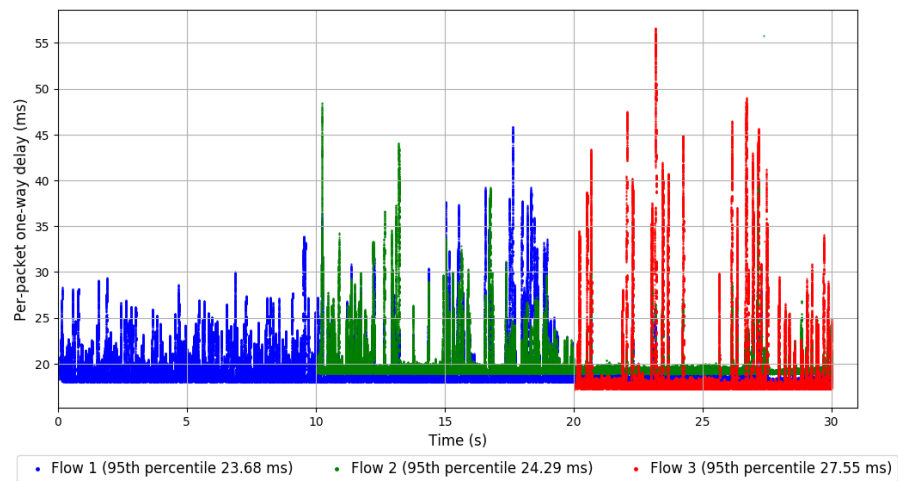
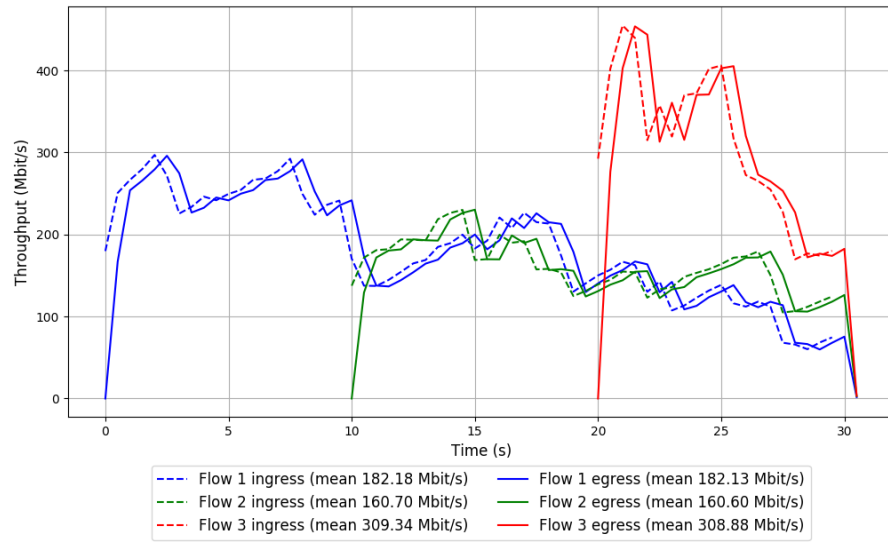


Run 4: Statistics of TCP Cubic

Start at: 2018-06-05 12:55:22
End at: 2018-06-05 12:55:52
Local clock offset: 0.257 ms
Remote clock offset: -0.258 ms

Below is generated by plot.py at 2018-06-05 16:29:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 391.83 Mbit/s
95th percentile per-packet one-way delay: 24.322 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 182.13 Mbit/s
95th percentile per-packet one-way delay: 23.679 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 160.60 Mbit/s
95th percentile per-packet one-way delay: 24.294 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 308.88 Mbit/s
95th percentile per-packet one-way delay: 27.553 ms
Loss rate: 0.13%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-06-05 13:21:05

End at: 2018-06-05 13:21:35

Local clock offset: 0.184 ms

Remote clock offset: 0.218 ms

Below is generated by plot.py at 2018-06-05 16:29:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 387.17 Mbit/s

95th percentile per-packet one-way delay: 22.880 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 240.84 Mbit/s

95th percentile per-packet one-way delay: 22.464 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 138.11 Mbit/s

95th percentile per-packet one-way delay: 24.624 ms

Loss rate: 0.03%

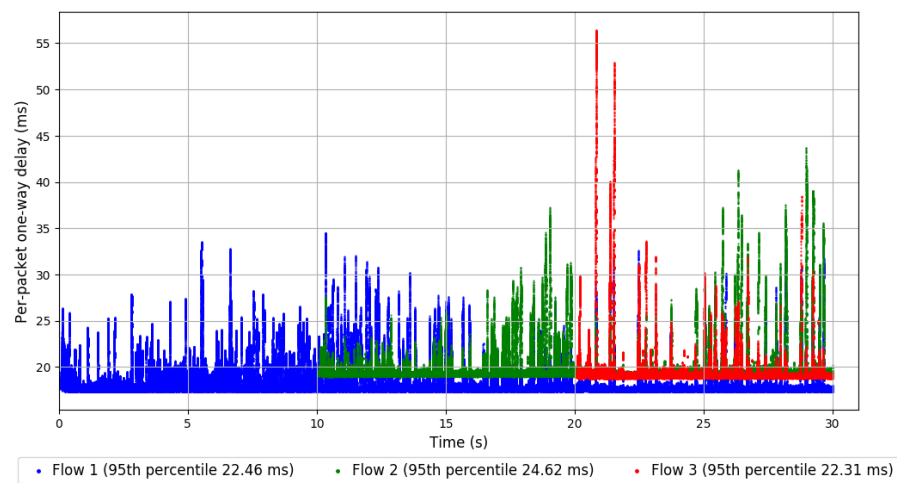
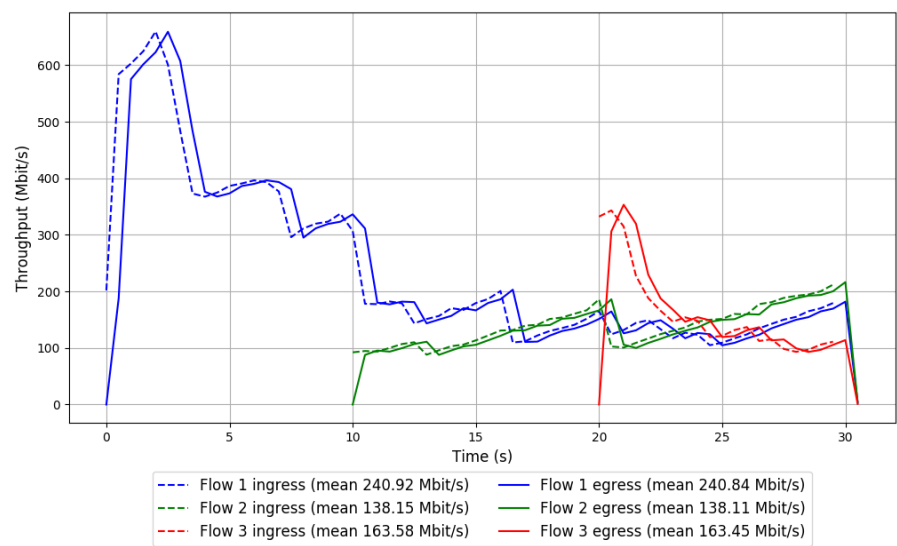
-- Flow 3:

Average throughput: 163.45 Mbit/s

95th percentile per-packet one-way delay: 22.312 ms

Loss rate: 0.07%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-06-05 13:46:33

End at: 2018-06-05 13:47:03

Local clock offset: 0.333 ms

Remote clock offset: 0.035 ms

Below is generated by plot.py at 2018-06-05 16:29:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 386.16 Mbit/s

95th percentile per-packet one-way delay: 26.502 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 193.62 Mbit/s

95th percentile per-packet one-way delay: 24.166 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 180.62 Mbit/s

95th percentile per-packet one-way delay: 31.727 ms

Loss rate: 0.07%

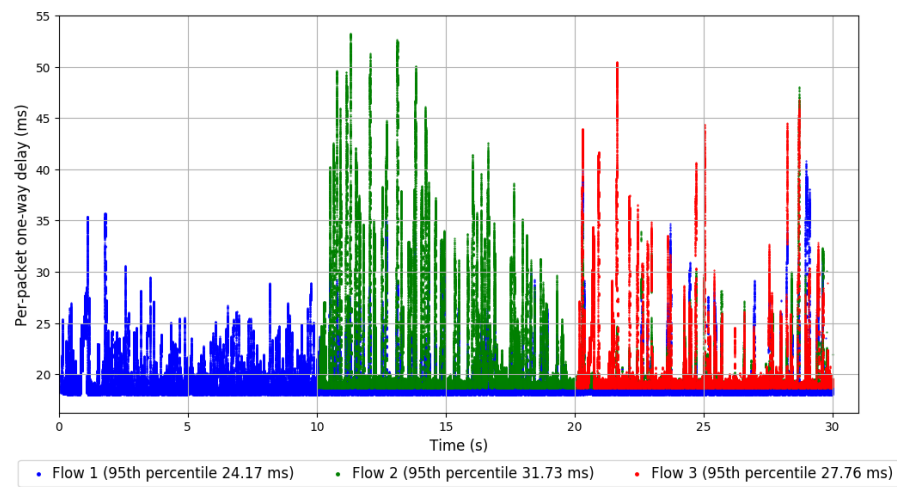
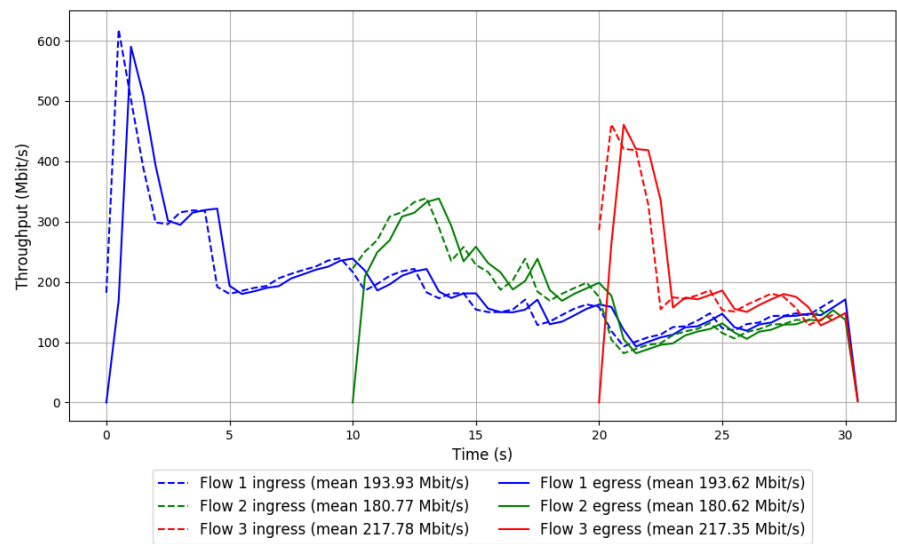
-- Flow 3:

Average throughput: 217.35 Mbit/s

95th percentile per-packet one-way delay: 27.756 ms

Loss rate: 0.19%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-06-05 14:12:20

End at: 2018-06-05 14:12:50

Local clock offset: 0.474 ms

Remote clock offset: 0.027 ms

Below is generated by plot.py at 2018-06-05 16:29:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 373.41 Mbit/s

95th percentile per-packet one-way delay: 23.092 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 192.66 Mbit/s

95th percentile per-packet one-way delay: 22.689 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 159.88 Mbit/s

95th percentile per-packet one-way delay: 24.559 ms

Loss rate: 0.28%

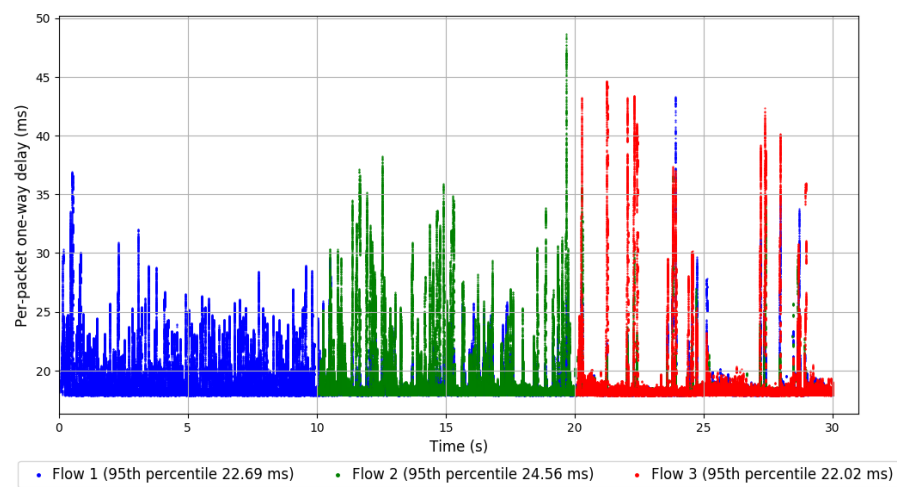
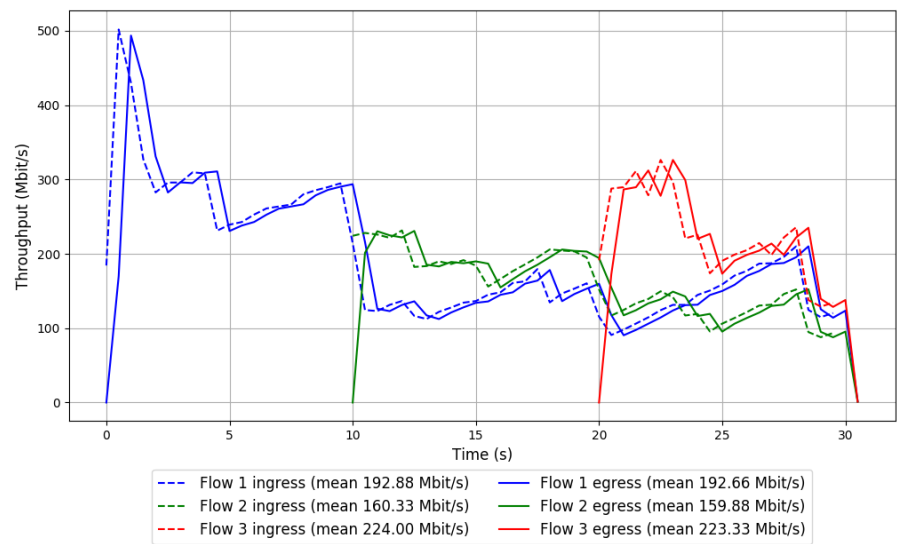
-- Flow 3:

Average throughput: 223.33 Mbit/s

95th percentile per-packet one-way delay: 22.017 ms

Loss rate: 0.29%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-06-05 14:37:43

End at: 2018-06-05 14:38:13

Local clock offset: 0.246 ms

Remote clock offset: 0.159 ms

Below is generated by plot.py at 2018-06-05 16:30:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 455.67 Mbit/s

95th percentile per-packet one-way delay: 24.410 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 247.03 Mbit/s

95th percentile per-packet one-way delay: 24.783 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 160.98 Mbit/s

95th percentile per-packet one-way delay: 23.774 ms

Loss rate: 0.05%

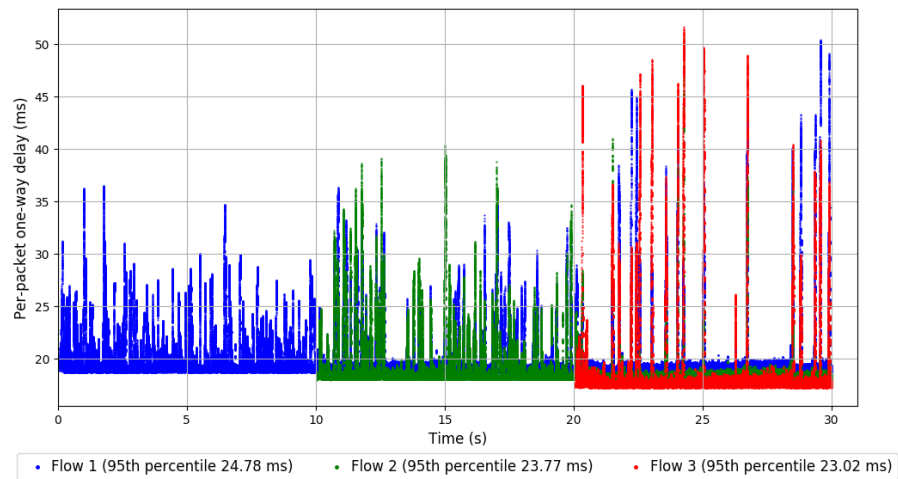
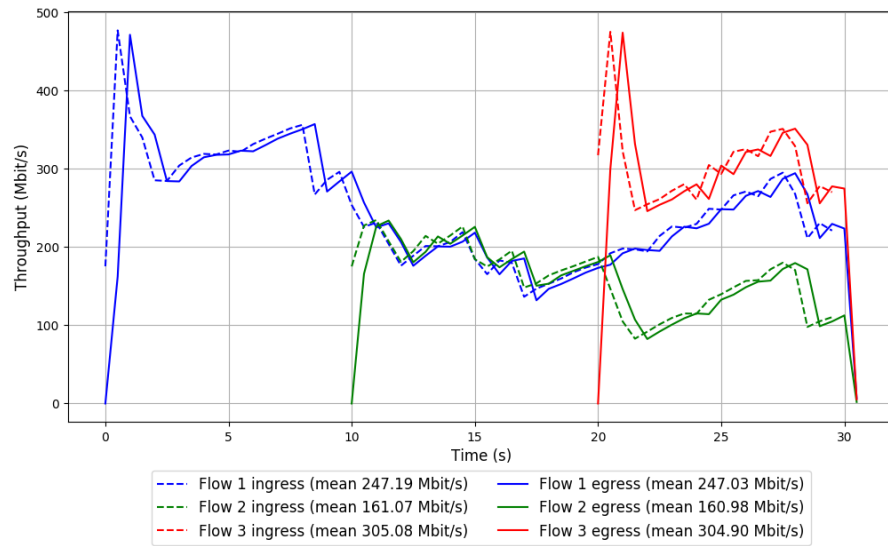
-- Flow 3:

Average throughput: 304.90 Mbit/s

95th percentile per-packet one-way delay: 23.022 ms

Loss rate: 0.05%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-05 15:03:38

End at: 2018-06-05 15:04:08

Local clock offset: 0.429 ms

Remote clock offset: 0.111 ms

Below is generated by plot.py at 2018-06-05 16:32:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 365.07 Mbit/s

95th percentile per-packet one-way delay: 25.021 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 197.57 Mbit/s

95th percentile per-packet one-way delay: 24.582 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 182.61 Mbit/s

95th percentile per-packet one-way delay: 26.362 ms

Loss rate: 0.08%

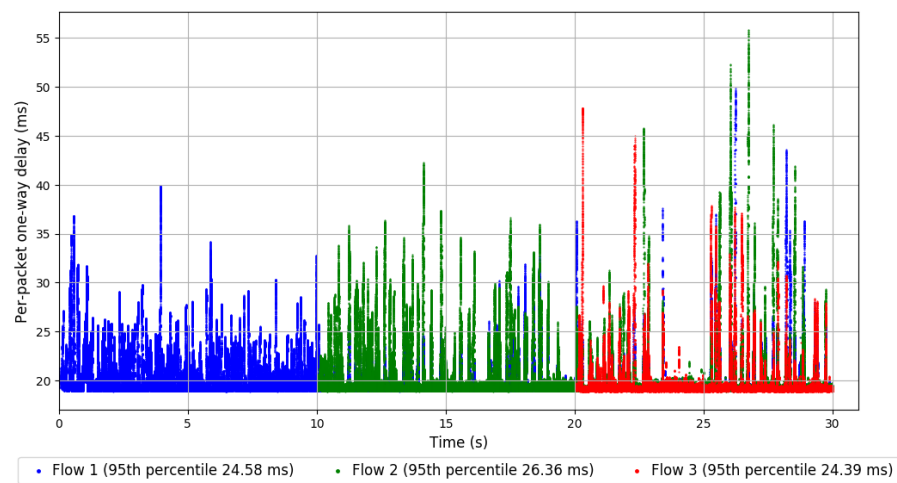
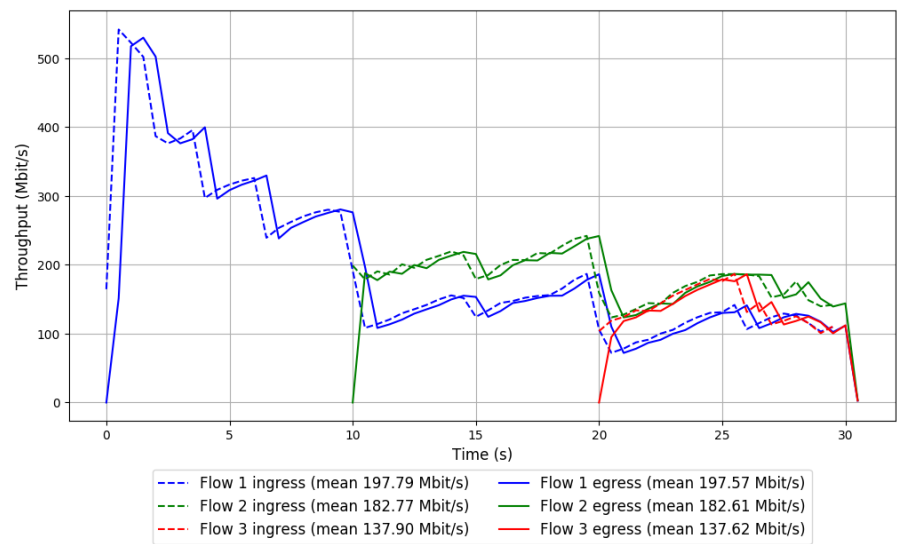
-- Flow 3:

Average throughput: 137.62 Mbit/s

95th percentile per-packet one-way delay: 24.387 ms

Loss rate: 0.20%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-06-05 15:29:10

End at: 2018-06-05 15:29:40

Local clock offset: 0.282 ms

Remote clock offset: 0.228 ms

Below is generated by plot.py at 2018-06-05 16:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.53 Mbit/s

95th percentile per-packet one-way delay: 23.834 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 198.92 Mbit/s

95th percentile per-packet one-way delay: 23.063 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 224.81 Mbit/s

95th percentile per-packet one-way delay: 26.544 ms

Loss rate: 0.09%

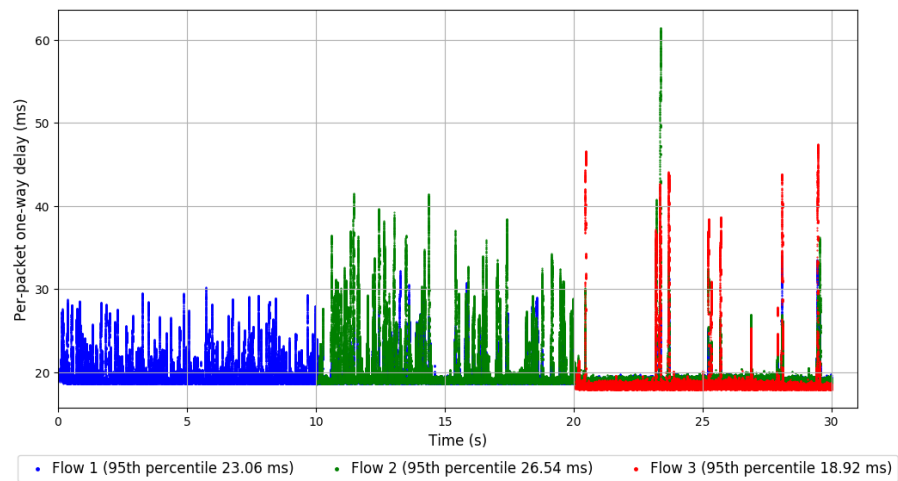
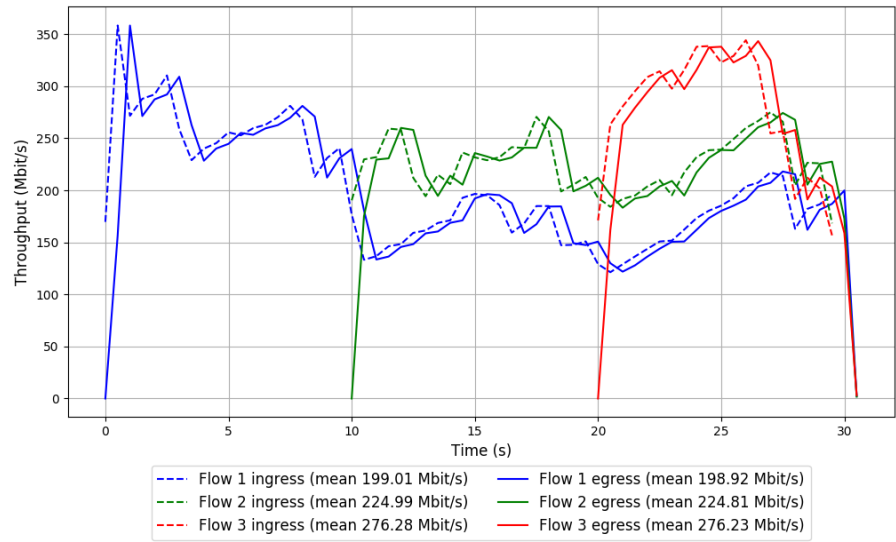
-- Flow 3:

Average throughput: 276.23 Mbit/s

95th percentile per-packet one-way delay: 18.923 ms

Loss rate: 0.03%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-06-05 11:24:12

End at: 2018-06-05 11:24:42

Local clock offset: 0.408 ms

Remote clock offset: 0.009 ms

Below is generated by plot.py at 2018-06-05 16:41:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 838.20 Mbit/s

95th percentile per-packet one-way delay: 103.137 ms

Loss rate: 12.89%

-- Flow 1:

Average throughput: 495.91 Mbit/s

95th percentile per-packet one-way delay: 90.215 ms

Loss rate: 11.17%

-- Flow 2:

Average throughput: 455.51 Mbit/s

95th percentile per-packet one-way delay: 107.450 ms

Loss rate: 13.89%

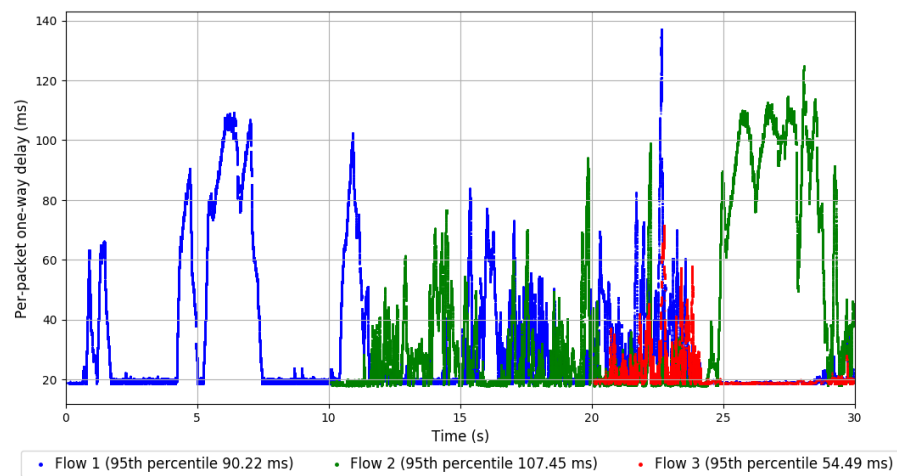
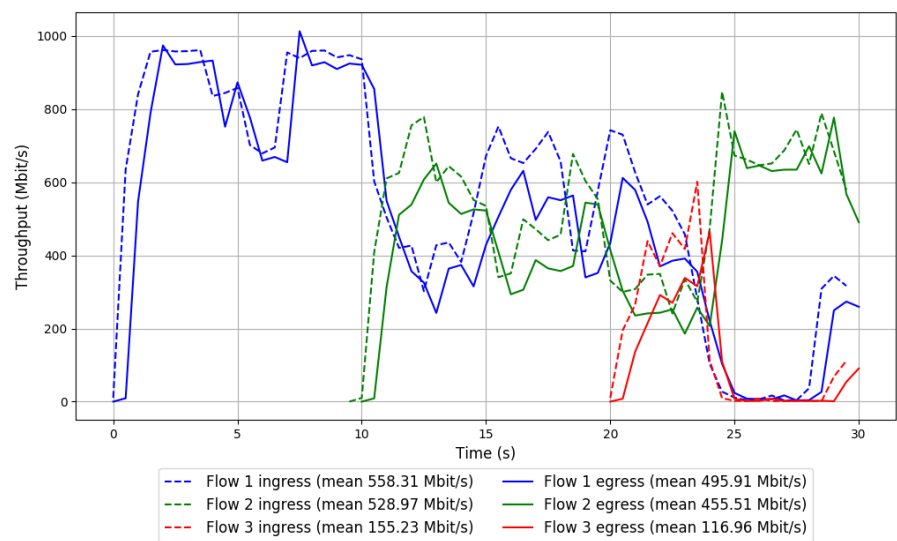
-- Flow 3:

Average throughput: 116.96 Mbit/s

95th percentile per-packet one-way delay: 54.488 ms

Loss rate: 24.66%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-06-05 11:49:35

End at: 2018-06-05 11:50:05

Local clock offset: 0.124 ms

Remote clock offset: 0.267 ms

Below is generated by plot.py at 2018-06-05 16:42:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 857.78 Mbit/s

95th percentile per-packet one-way delay: 98.050 ms

Loss rate: 15.44%

-- Flow 1:

Average throughput: 556.75 Mbit/s

95th percentile per-packet one-way delay: 98.652 ms

Loss rate: 11.61%

-- Flow 2:

Average throughput: 324.28 Mbit/s

95th percentile per-packet one-way delay: 92.747 ms

Loss rate: 20.36%

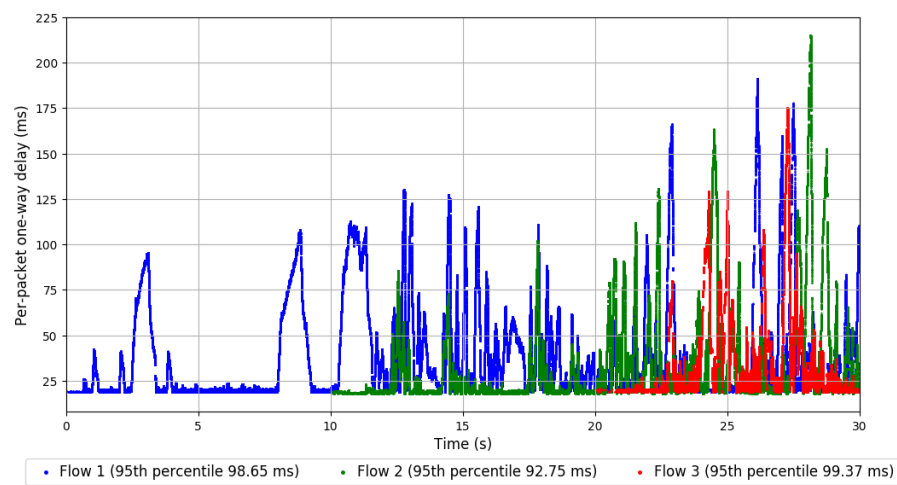
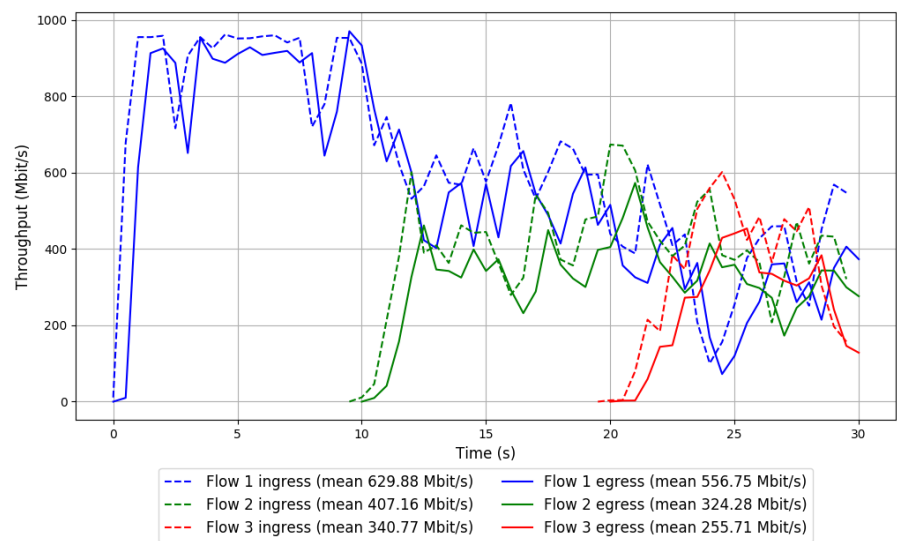
-- Flow 3:

Average throughput: 255.71 Mbit/s

95th percentile per-packet one-way delay: 99.374 ms

Loss rate: 24.97%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-06-05 12:15:29

End at: 2018-06-05 12:15:59

Local clock offset: 0.307 ms

Remote clock offset: 0.471 ms

Below is generated by plot.py at 2018-06-05 16:42:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 824.11 Mbit/s

95th percentile per-packet one-way delay: 111.847 ms

Loss rate: 15.21%

-- Flow 1:

Average throughput: 599.38 Mbit/s

95th percentile per-packet one-way delay: 116.411 ms

Loss rate: 14.15%

-- Flow 2:

Average throughput: 222.15 Mbit/s

95th percentile per-packet one-way delay: 62.912 ms

Loss rate: 16.45%

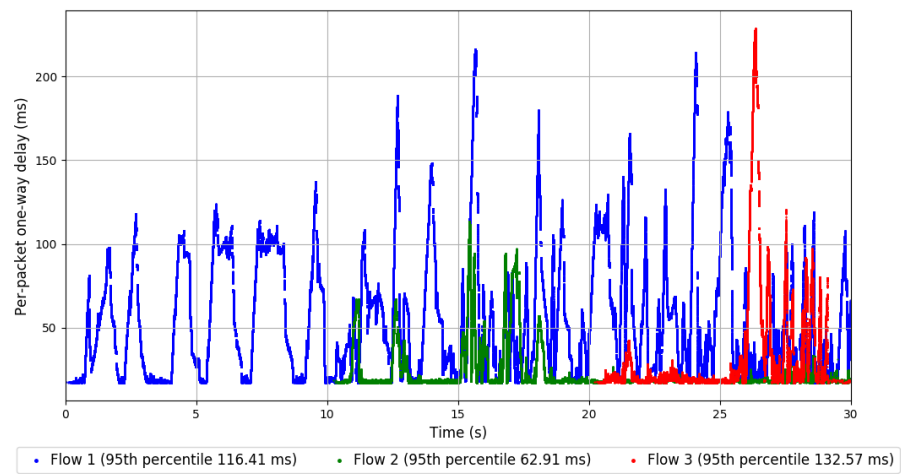
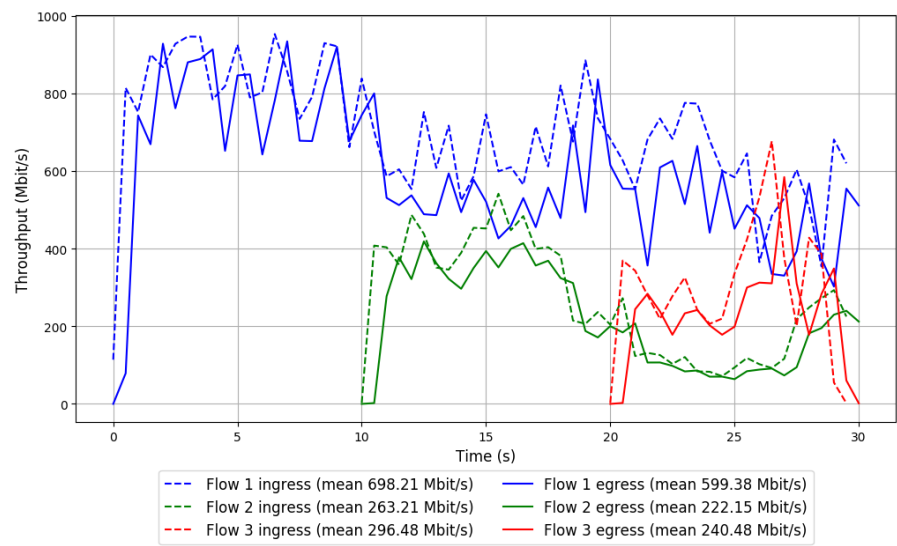
-- Flow 3:

Average throughput: 240.48 Mbit/s

95th percentile per-packet one-way delay: 132.573 ms

Loss rate: 20.53%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-06-05 12:40:58

End at: 2018-06-05 12:41:28

Local clock offset: 0.297 ms

Remote clock offset: -0.38 ms

Below is generated by plot.py at 2018-06-05 16:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 810.92 Mbit/s

95th percentile per-packet one-way delay: 106.921 ms

Loss rate: 13.81%

-- Flow 1:

Average throughput: 532.78 Mbit/s

95th percentile per-packet one-way delay: 106.752 ms

Loss rate: 10.96%

-- Flow 2:

Average throughput: 336.66 Mbit/s

95th percentile per-packet one-way delay: 115.924 ms

Loss rate: 18.26%

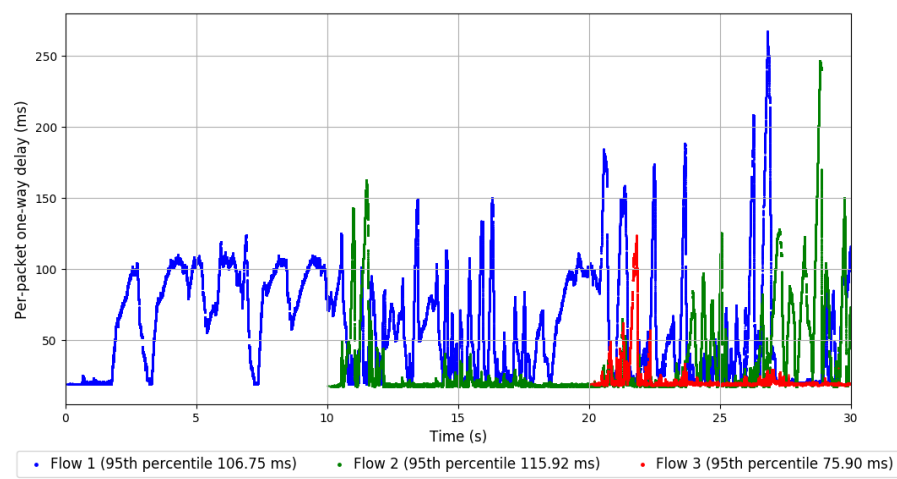
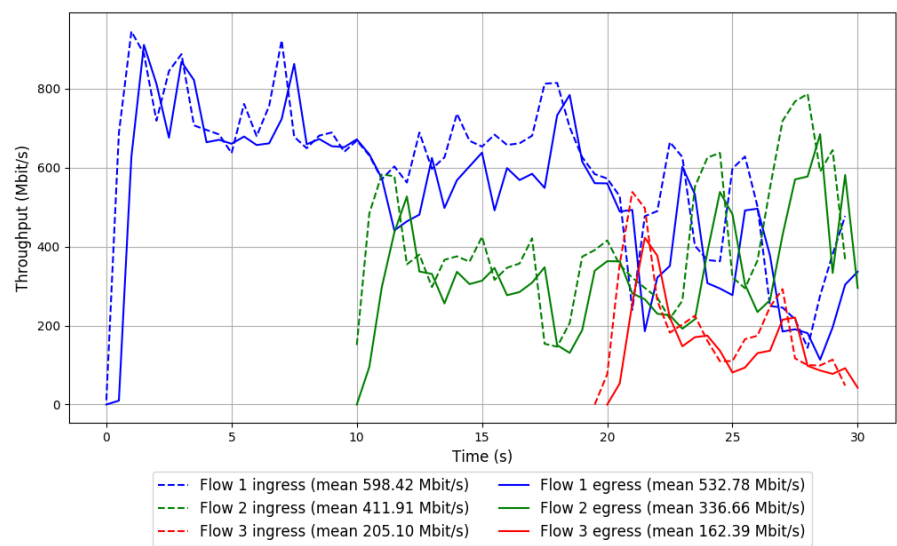
-- Flow 3:

Average throughput: 162.39 Mbit/s

95th percentile per-packet one-way delay: 75.900 ms

Loss rate: 20.82%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-06-05 13:06:32

End at: 2018-06-05 13:07:02

Local clock offset: 0.302 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2018-06-05 16:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 812.05 Mbit/s

95th percentile per-packet one-way delay: 108.645 ms

Loss rate: 15.40%

-- Flow 1:

Average throughput: 509.19 Mbit/s

95th percentile per-packet one-way delay: 108.643 ms

Loss rate: 11.21%

-- Flow 2:

Average throughput: 345.47 Mbit/s

95th percentile per-packet one-way delay: 110.165 ms

Loss rate: 20.70%

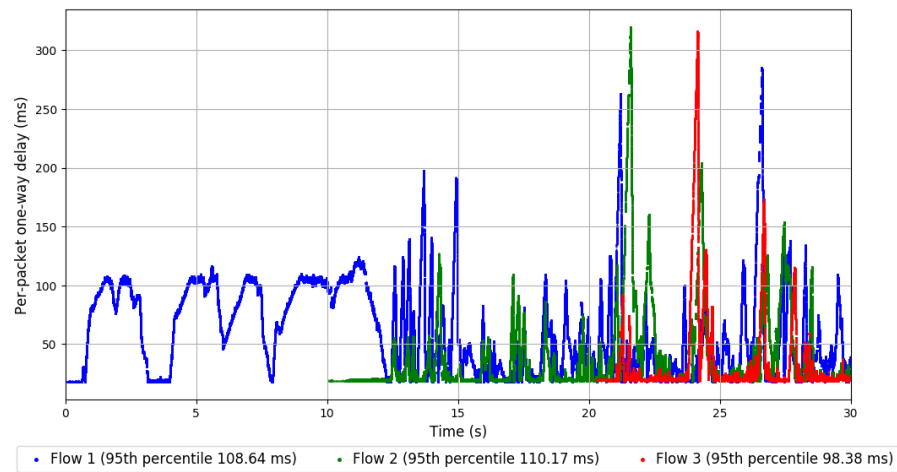
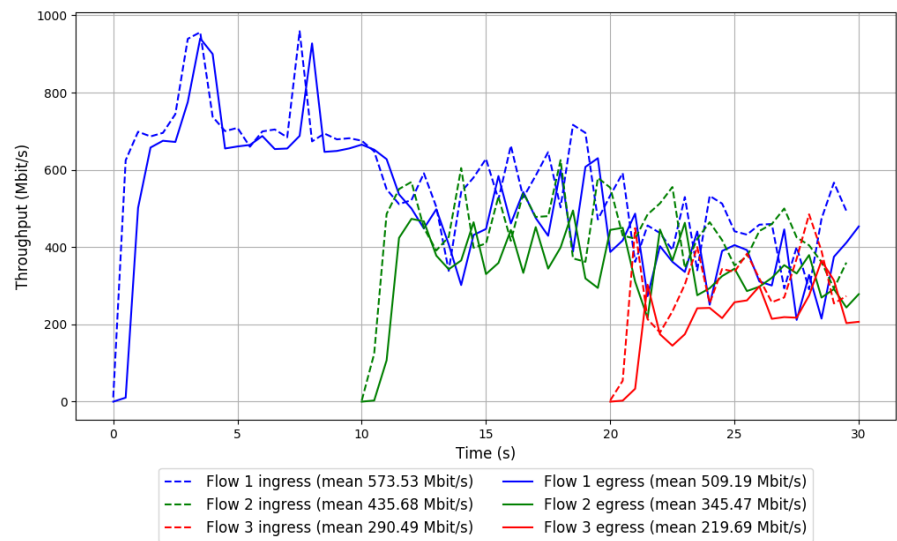
-- Flow 3:

Average throughput: 219.69 Mbit/s

95th percentile per-packet one-way delay: 98.380 ms

Loss rate: 24.37%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-06-05 13:32:07

End at: 2018-06-05 13:32:37

Local clock offset: 0.271 ms

Remote clock offset: 0.126 ms

Below is generated by plot.py at 2018-06-05 16:43:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 773.52 Mbit/s

95th percentile per-packet one-way delay: 103.172 ms

Loss rate: 15.84%

-- Flow 1:

Average throughput: 432.61 Mbit/s

95th percentile per-packet one-way delay: 103.548 ms

Loss rate: 13.31%

-- Flow 2:

Average throughput: 407.55 Mbit/s

95th percentile per-packet one-way delay: 98.440 ms

Loss rate: 17.55%

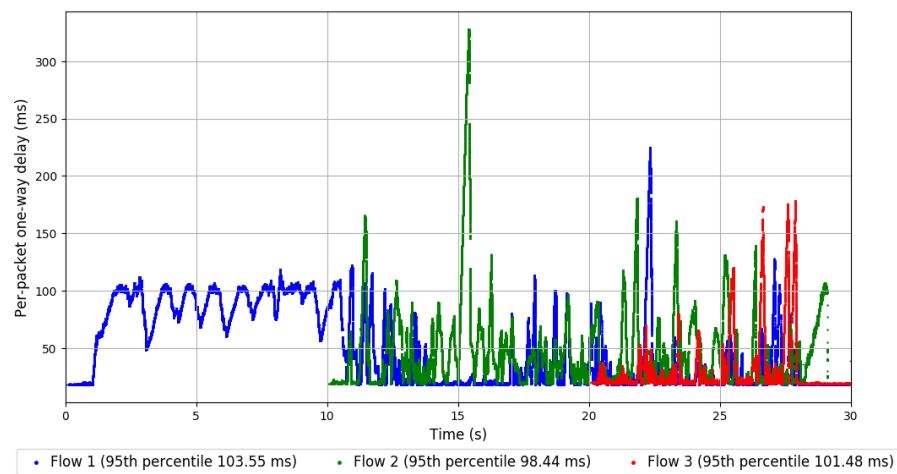
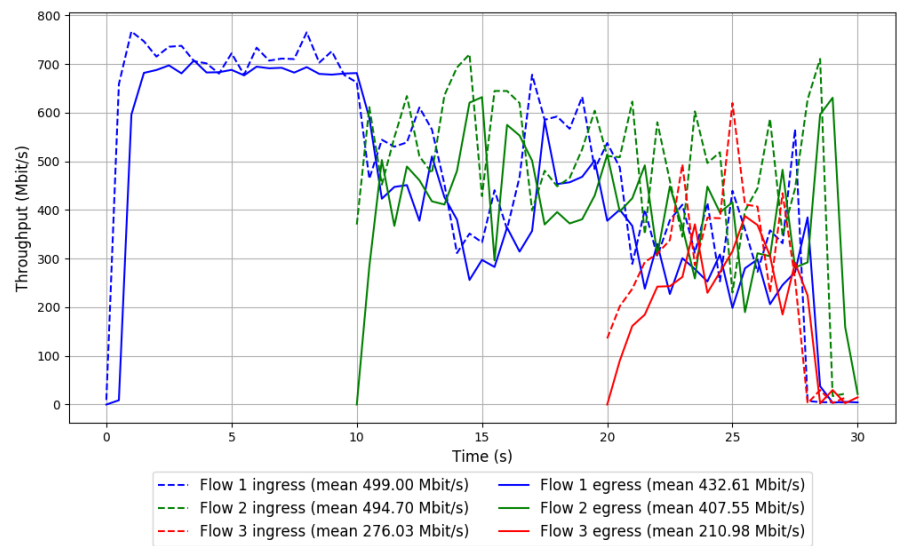
-- Flow 3:

Average throughput: 210.98 Mbit/s

95th percentile per-packet one-way delay: 101.484 ms

Loss rate: 23.57%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-06-05 13:57:43

End at: 2018-06-05 13:58:13

Local clock offset: 0.409 ms

Remote clock offset: 0.073 ms

Below is generated by plot.py at 2018-06-05 16:44:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 774.88 Mbit/s

95th percentile per-packet one-way delay: 115.734 ms

Loss rate: 15.75%

-- Flow 1:

Average throughput: 486.71 Mbit/s

95th percentile per-packet one-way delay: 106.521 ms

Loss rate: 12.99%

-- Flow 2:

Average throughput: 389.97 Mbit/s

95th percentile per-packet one-way delay: 152.799 ms

Loss rate: 20.44%

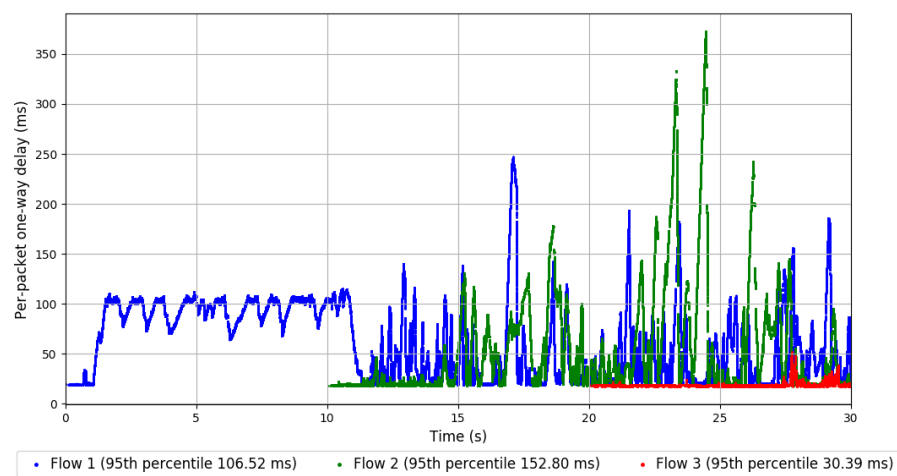
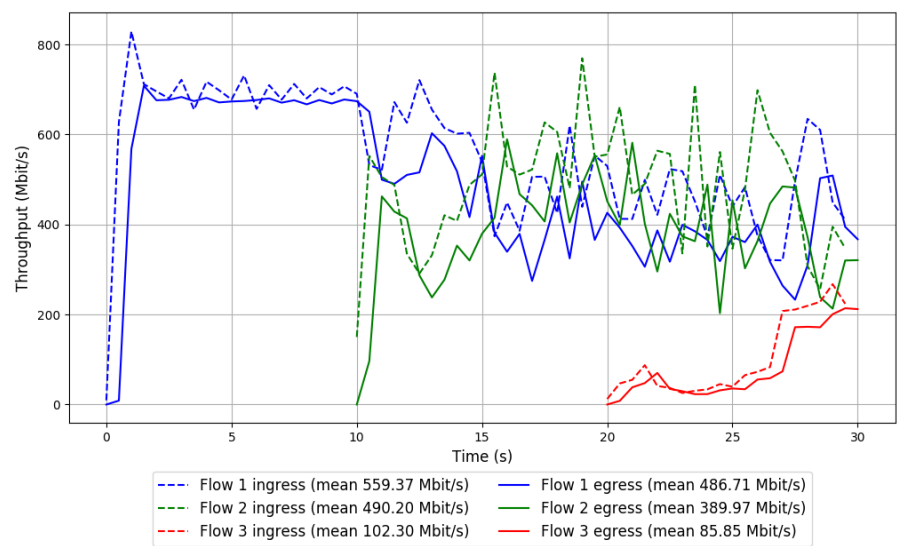
-- Flow 3:

Average throughput: 85.85 Mbit/s

95th percentile per-packet one-way delay: 30.390 ms

Loss rate: 16.08%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-06-05 14:23:22

End at: 2018-06-05 14:23:52

Local clock offset: 0.326 ms

Remote clock offset: 0.137 ms

Below is generated by plot.py at 2018-06-05 16:44:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 678.20 Mbit/s

95th percentile per-packet one-way delay: 106.613 ms

Loss rate: 12.20%

-- Flow 1:

Average throughput: 374.03 Mbit/s

95th percentile per-packet one-way delay: 106.021 ms

Loss rate: 9.94%

-- Flow 2:

Average throughput: 271.25 Mbit/s

95th percentile per-packet one-way delay: 102.409 ms

Loss rate: 17.05%

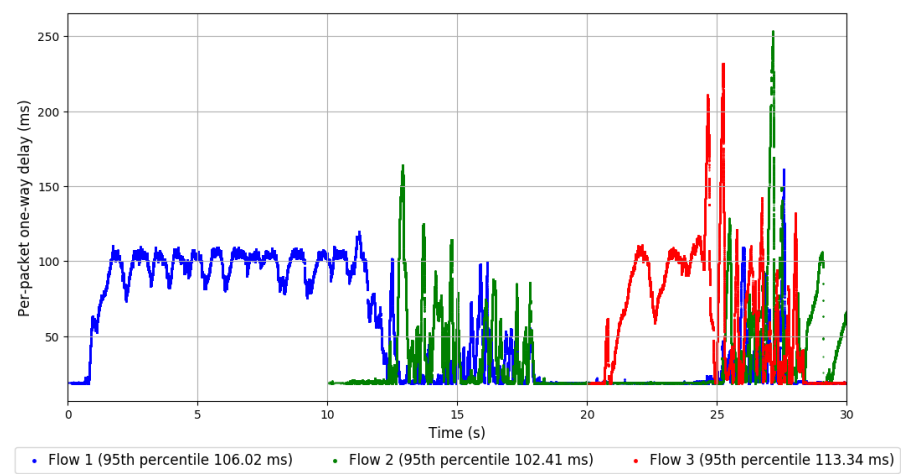
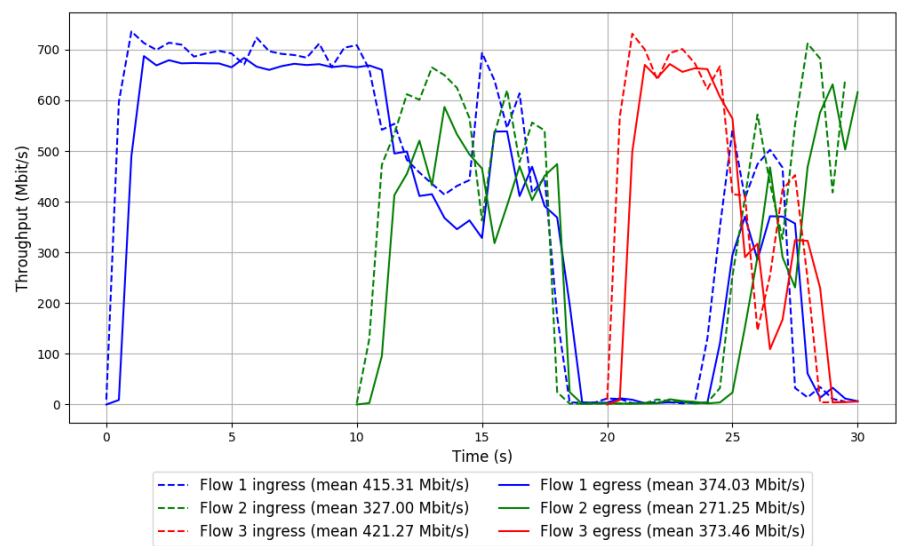
-- Flow 3:

Average throughput: 373.46 Mbit/s

95th percentile per-packet one-way delay: 113.344 ms

Loss rate: 11.35%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-06-05 14:48:59

End at: 2018-06-05 14:49:29

Local clock offset: 0.212 ms

Remote clock offset: 0.107 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 788.66 Mbit/s

95th percentile per-packet one-way delay: 106.707 ms

Loss rate: 11.66%

-- Flow 1:

Average throughput: 555.03 Mbit/s

95th percentile per-packet one-way delay: 112.287 ms

Loss rate: 9.93%

-- Flow 2:

Average throughput: 269.54 Mbit/s

95th percentile per-packet one-way delay: 49.324 ms

Loss rate: 15.62%

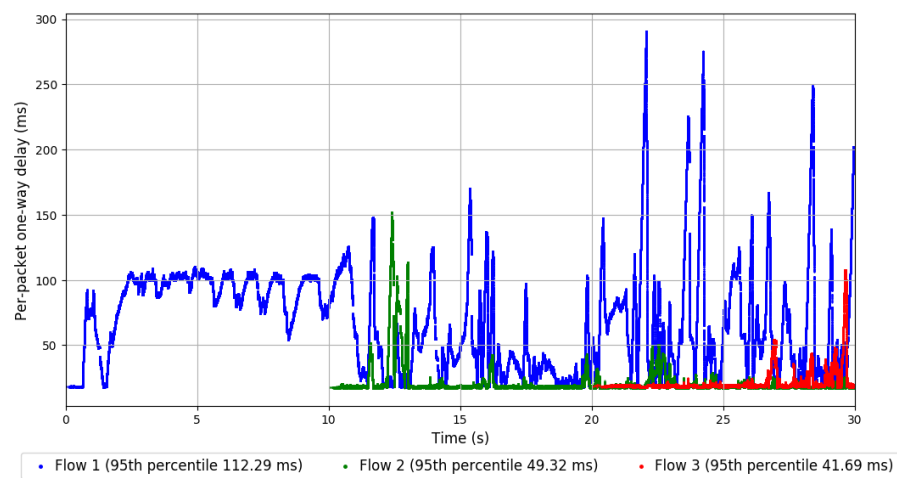
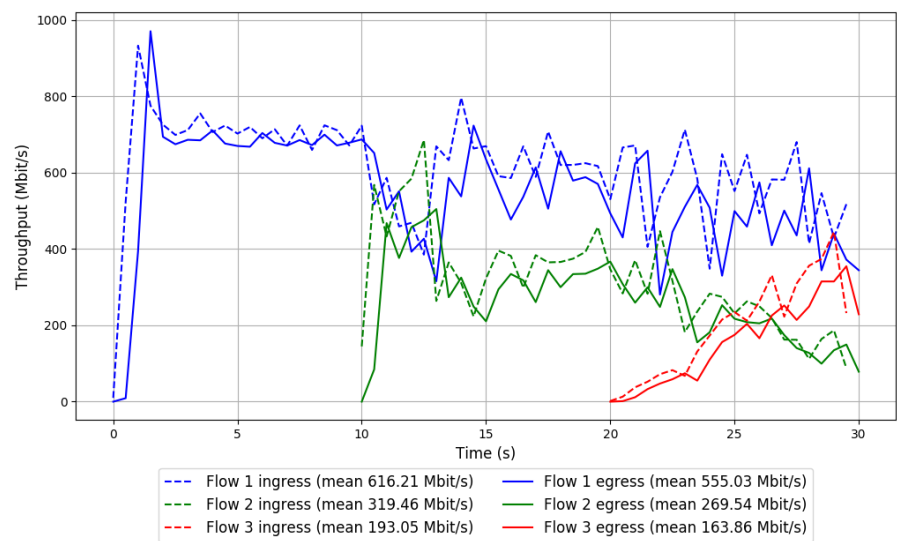
-- Flow 3:

Average throughput: 163.86 Mbit/s

95th percentile per-packet one-way delay: 41.690 ms

Loss rate: 15.12%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-06-05 15:14:42

End at: 2018-06-05 15:15:12

Local clock offset: 0.447 ms

Remote clock offset: 0.102 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 773.98 Mbit/s

95th percentile per-packet one-way delay: 108.548 ms

Loss rate: 13.45%

-- Flow 1:

Average throughput: 450.41 Mbit/s

95th percentile per-packet one-way delay: 107.260 ms

Loss rate: 11.57%

-- Flow 2:

Average throughput: 273.76 Mbit/s

95th percentile per-packet one-way delay: 98.678 ms

Loss rate: 18.16%

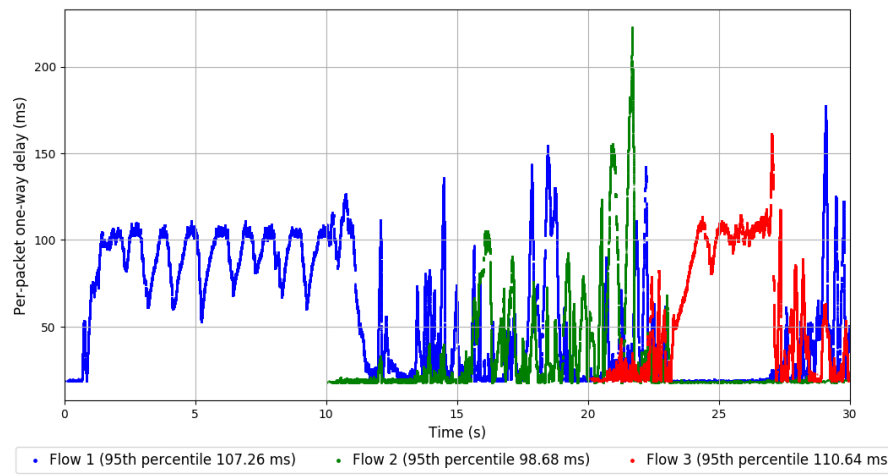
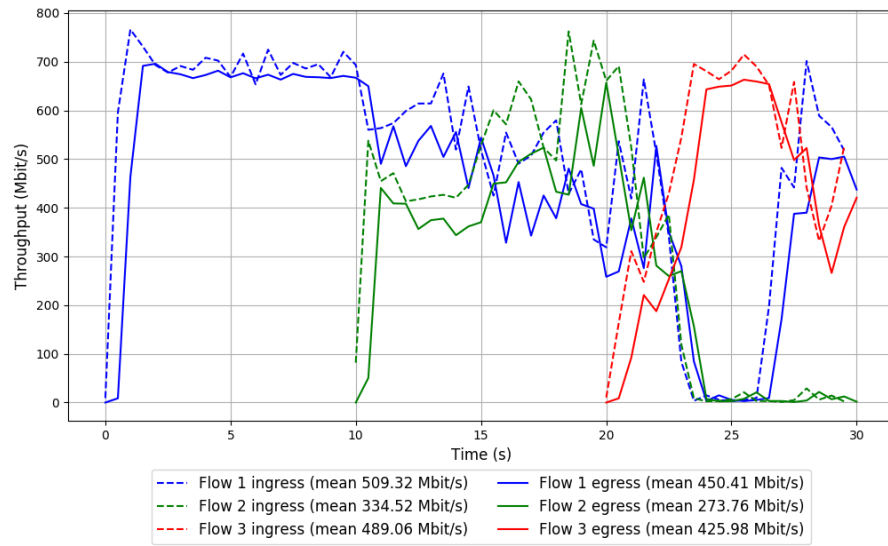
-- Flow 3:

Average throughput: 425.98 Mbit/s

95th percentile per-packet one-way delay: 110.641 ms

Loss rate: 12.90%

Run 10: Report of FillP — Data Link

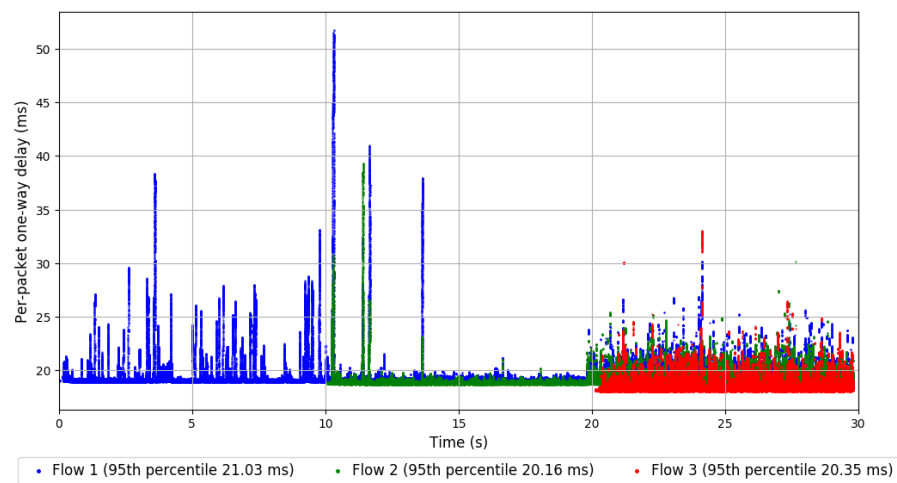
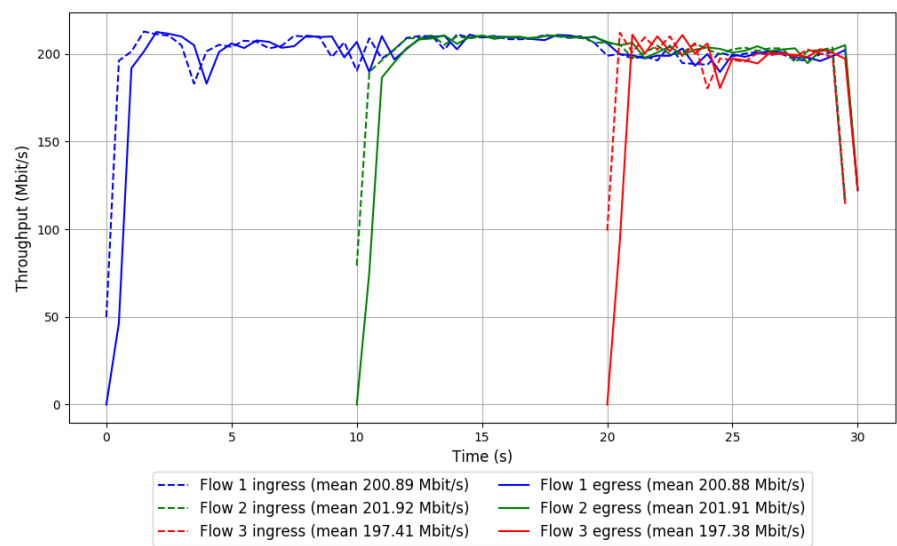


```
Run 1: Statistics of Indigo

Start at: 2018-06-05 11:46:22
End at: 2018-06-05 11:46:52
Local clock offset: 0.117 ms
Remote clock offset: 0.299 ms

# Below is generated by plot.py at 2018-06-05 16:54:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.80 Mbit/s
95th percentile per-packet one-way delay: 20.572 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 200.88 Mbit/s
95th percentile per-packet one-way delay: 21.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 201.91 Mbit/s
95th percentile per-packet one-way delay: 20.157 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 197.38 Mbit/s
95th percentile per-packet one-way delay: 20.350 ms
Loss rate: 0.01%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-06-05 12:12:18

End at: 2018-06-05 12:12:48

Local clock offset: 0.289 ms

Remote clock offset: 0.474 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.17 Mbit/s

95th percentile per-packet one-way delay: 21.232 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 201.55 Mbit/s

95th percentile per-packet one-way delay: 21.890 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 197.71 Mbit/s

95th percentile per-packet one-way delay: 20.912 ms

Loss rate: 0.00%

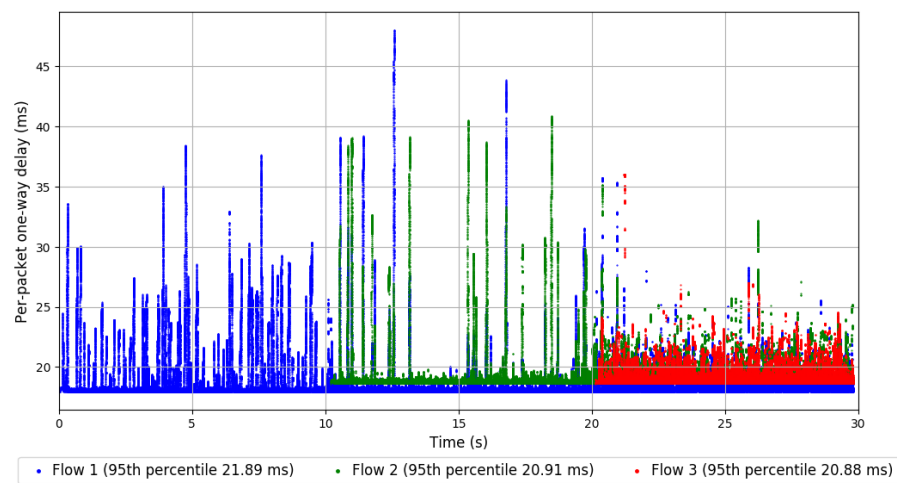
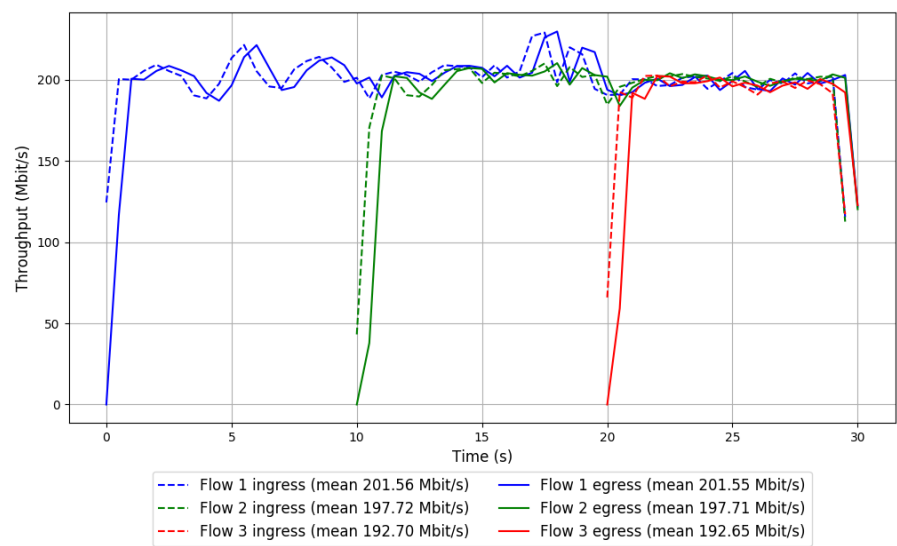
-- Flow 3:

Average throughput: 192.65 Mbit/s

95th percentile per-packet one-way delay: 20.878 ms

Loss rate: 0.04%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-06-05 12:37:49

End at: 2018-06-05 12:38:19

Local clock offset: 0.283 ms

Remote clock offset: -0.34 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.32 Mbit/s

95th percentile per-packet one-way delay: 20.928 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 166.33 Mbit/s

95th percentile per-packet one-way delay: 20.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 196.45 Mbit/s

95th percentile per-packet one-way delay: 20.932 ms

Loss rate: 0.00%

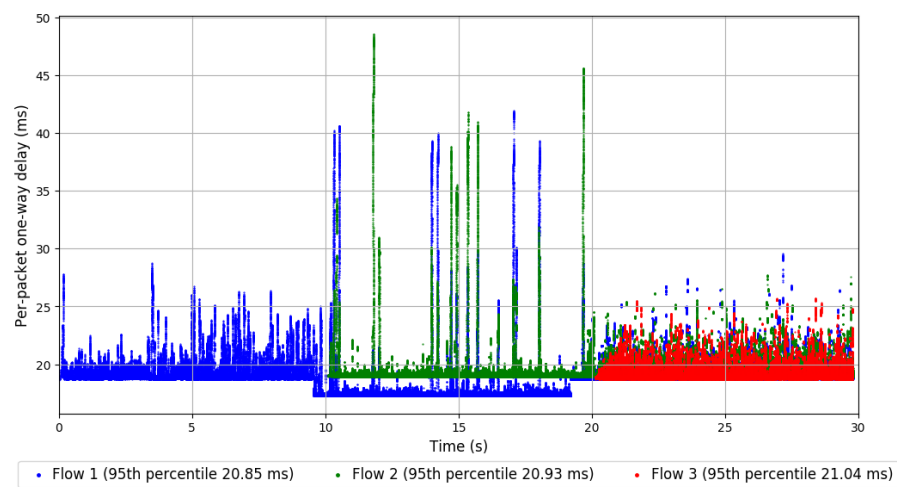
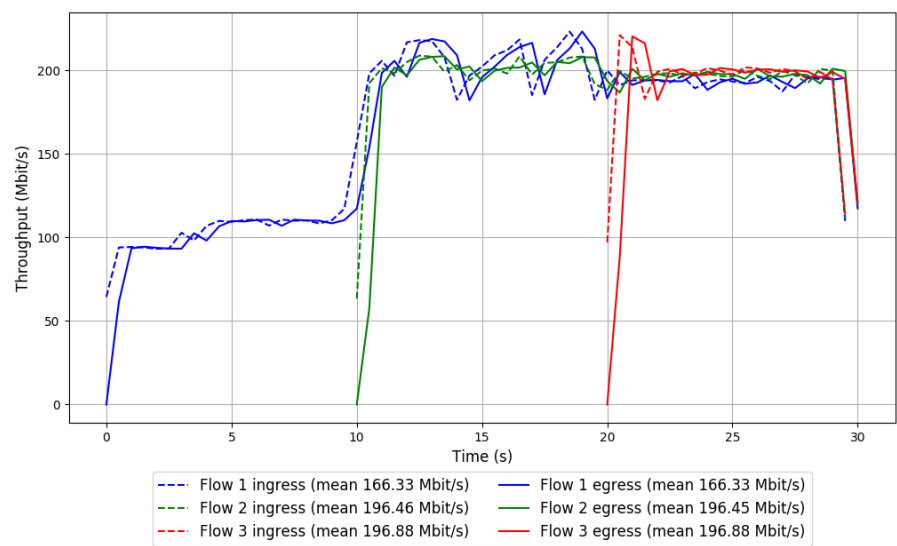
-- Flow 3:

Average throughput: 196.88 Mbit/s

95th percentile per-packet one-way delay: 21.043 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

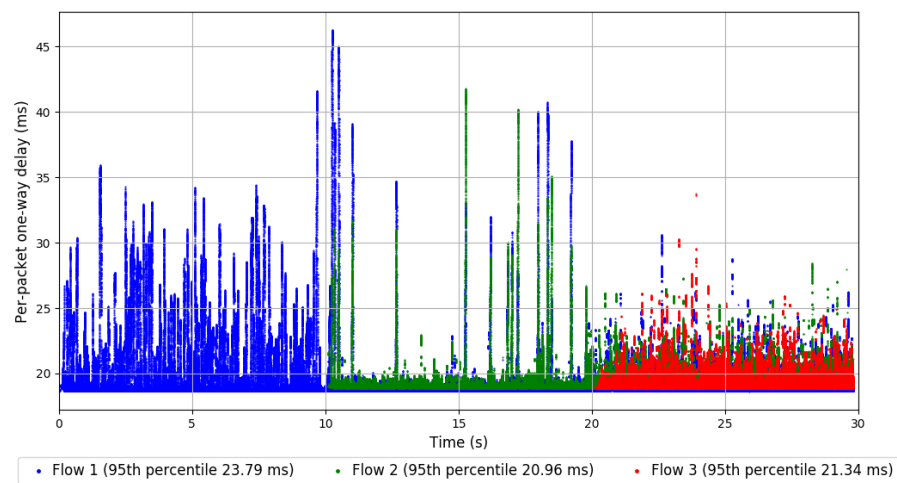
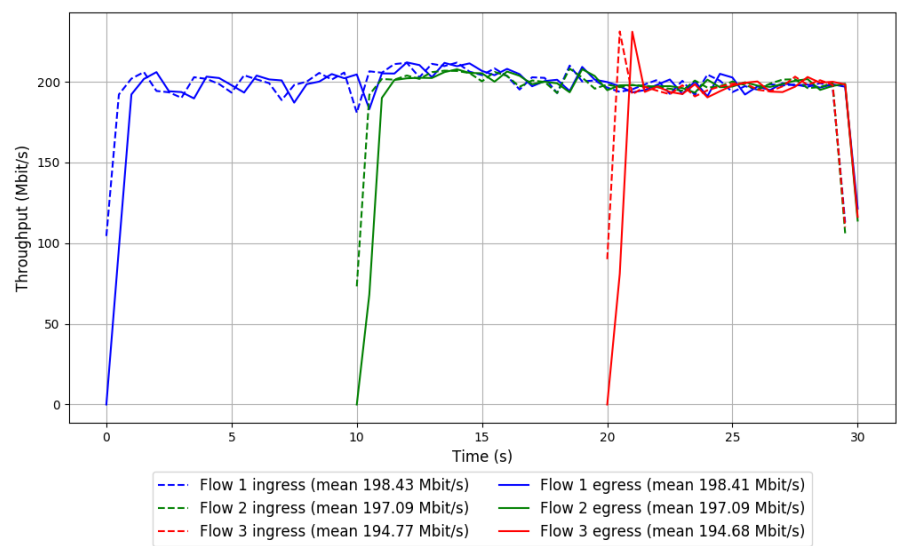


Run 4: Statistics of Indigo

Start at: 2018-06-05 13:03:20
End at: 2018-06-05 13:03:50
Local clock offset: 0.294 ms
Remote clock offset: -0.022 ms

Below is generated by plot.py at 2018-06-05 16:54:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 392.10 Mbit/s
95th percentile per-packet one-way delay: 22.266 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 198.41 Mbit/s
95th percentile per-packet one-way delay: 23.792 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 197.09 Mbit/s
95th percentile per-packet one-way delay: 20.960 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 194.68 Mbit/s
95th percentile per-packet one-way delay: 21.335 ms
Loss rate: 0.04%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-06-05 13:28:56

End at: 2018-06-05 13:29:26

Local clock offset: 0.264 ms

Remote clock offset: 0.134 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.26 Mbit/s

95th percentile per-packet one-way delay: 21.436 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 97.26 Mbit/s

95th percentile per-packet one-way delay: 20.474 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 183.48 Mbit/s

95th percentile per-packet one-way delay: 26.410 ms

Loss rate: 0.01%

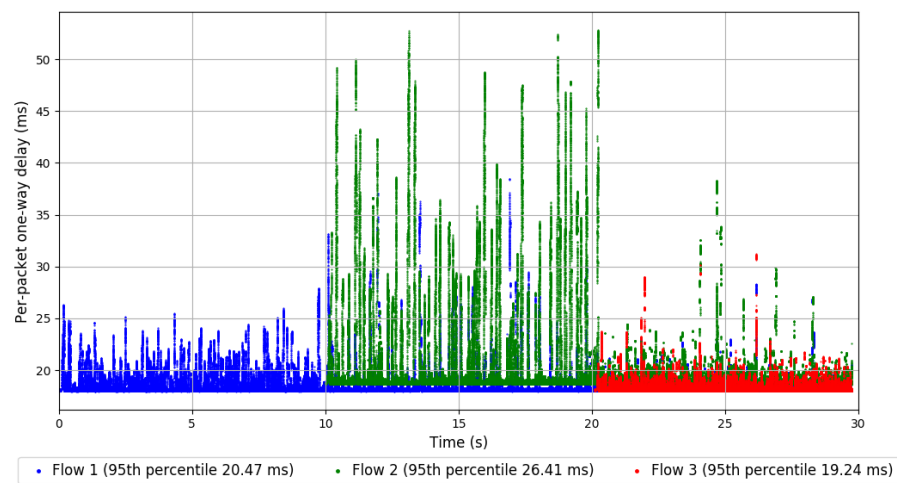
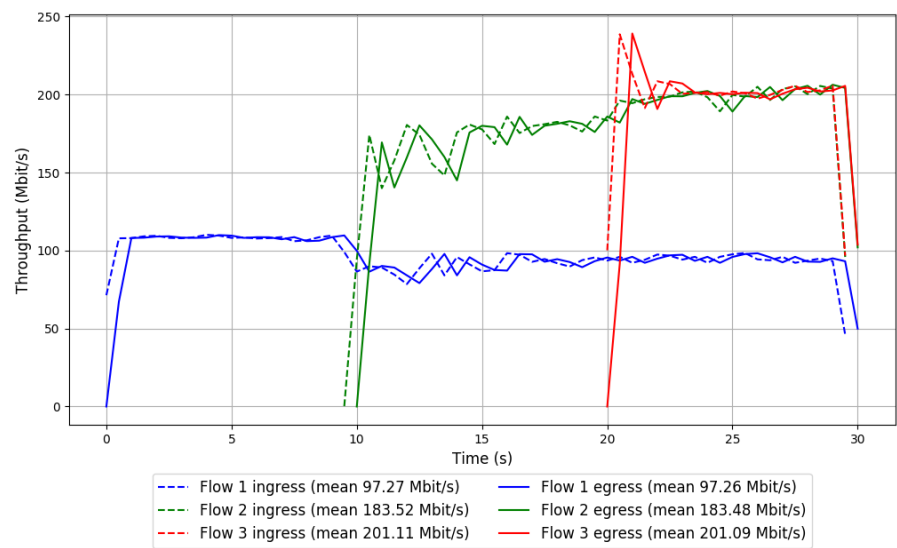
-- Flow 3:

Average throughput: 201.09 Mbit/s

95th percentile per-packet one-way delay: 19.239 ms

Loss rate: 0.02%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-06-05 13:54:28

End at: 2018-06-05 13:54:58

Local clock offset: 0.407 ms

Remote clock offset: 0.084 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.29 Mbit/s

95th percentile per-packet one-way delay: 22.180 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 195.88 Mbit/s

95th percentile per-packet one-way delay: 24.246 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 200.31 Mbit/s

95th percentile per-packet one-way delay: 19.669 ms

Loss rate: 0.00%

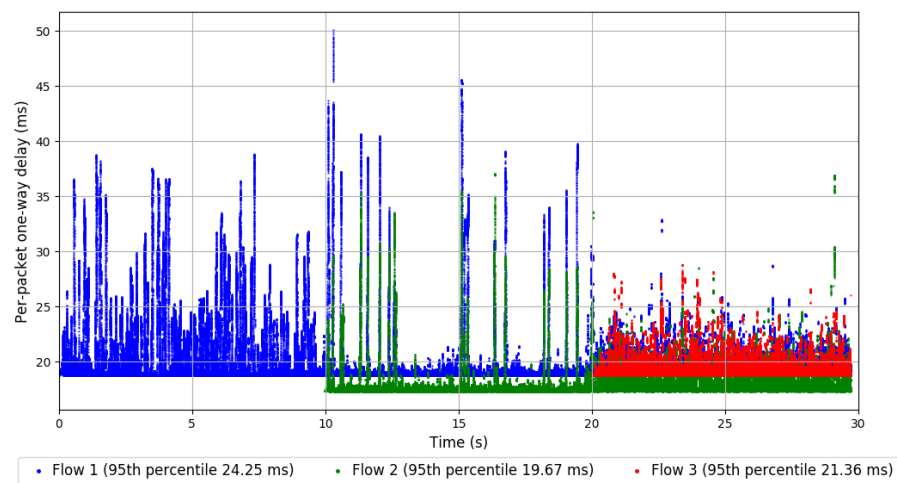
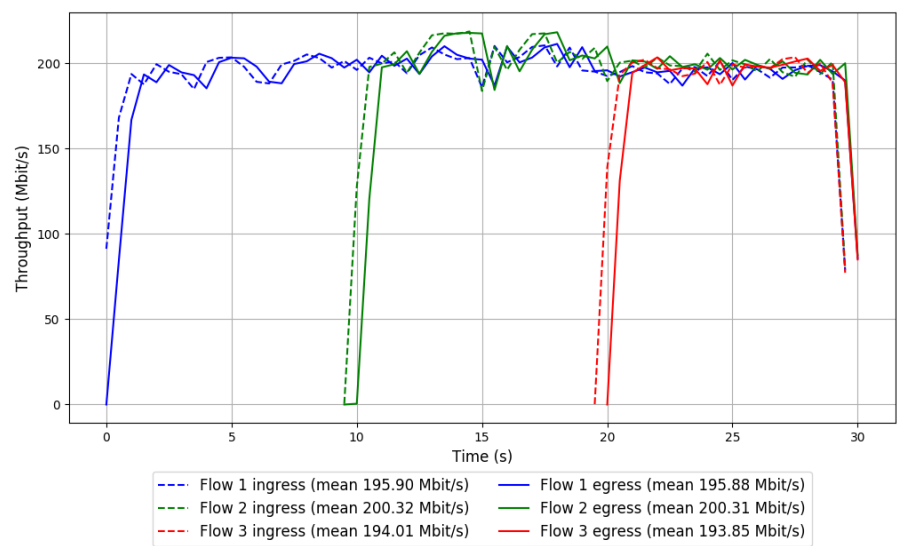
-- Flow 3:

Average throughput: 193.85 Mbit/s

95th percentile per-packet one-way delay: 21.363 ms

Loss rate: 0.01%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-06-05 14:20:17

End at: 2018-06-05 14:20:47

Local clock offset: 0.372 ms

Remote clock offset: 0.098 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.85 Mbit/s

95th percentile per-packet one-way delay: 20.950 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 99.95 Mbit/s

95th percentile per-packet one-way delay: 20.534 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 89.54 Mbit/s

95th percentile per-packet one-way delay: 21.709 ms

Loss rate: 0.01%

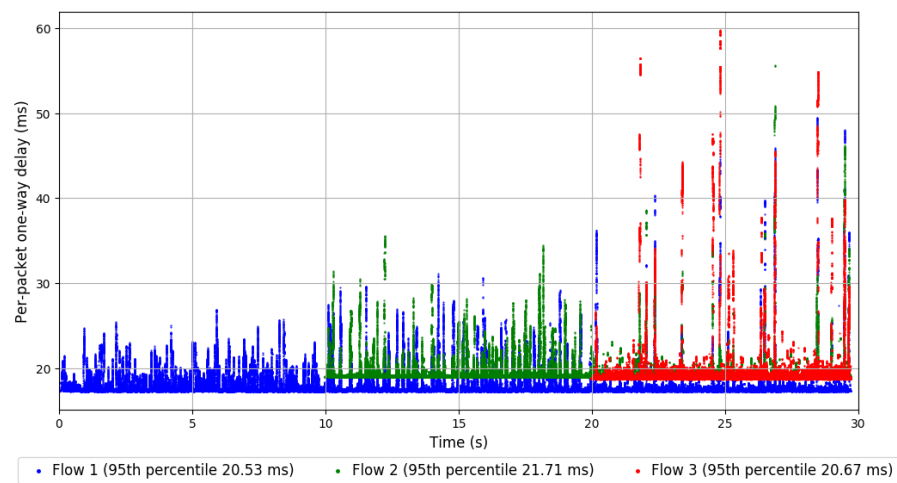
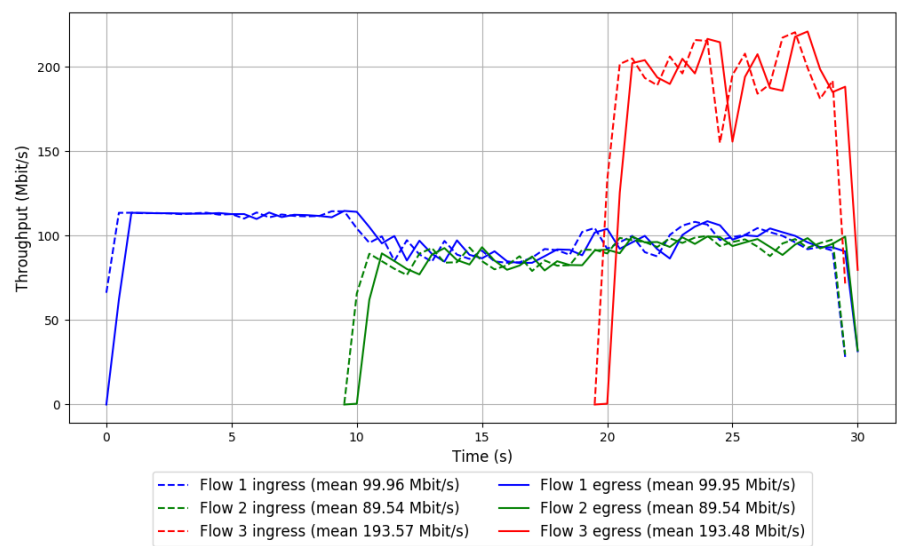
-- Flow 3:

Average throughput: 193.48 Mbit/s

95th percentile per-packet one-way delay: 20.669 ms

Loss rate: 0.03%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-06-05 14:45:45

End at: 2018-06-05 14:46:15

Local clock offset: 0.225 ms

Remote clock offset: 0.088 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.29 Mbit/s

95th percentile per-packet one-way delay: 21.795 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 196.45 Mbit/s

95th percentile per-packet one-way delay: 23.429 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 201.89 Mbit/s

95th percentile per-packet one-way delay: 19.569 ms

Loss rate: 0.00%

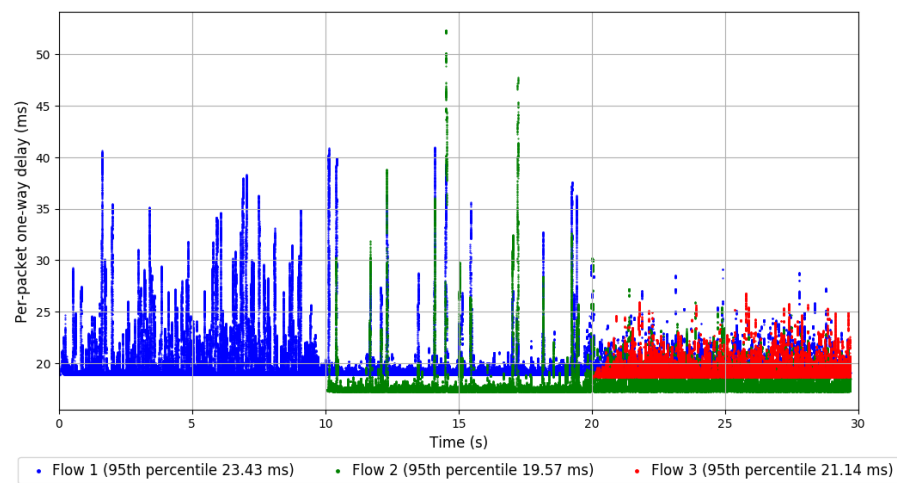
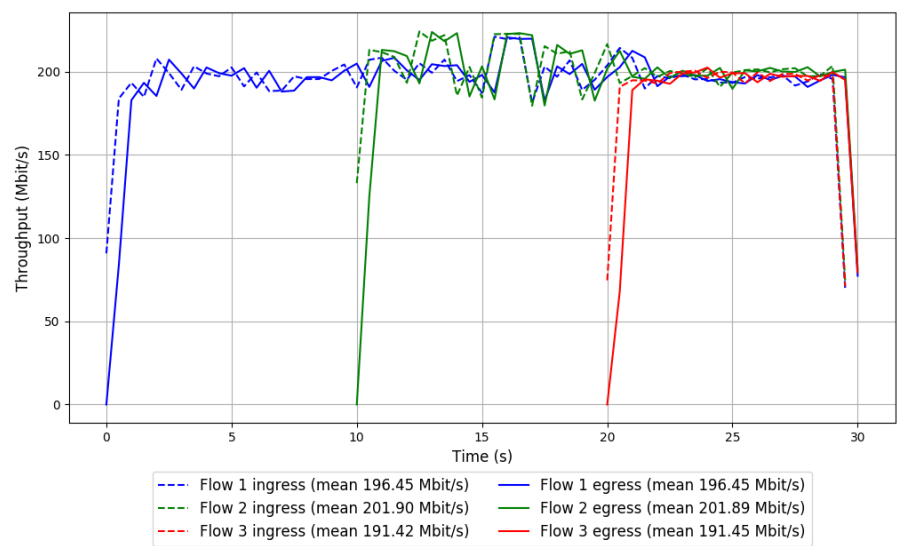
-- Flow 3:

Average throughput: 191.45 Mbit/s

95th percentile per-packet one-way delay: 21.135 ms

Loss rate: 0.01%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-06-05 15:11:31

End at: 2018-06-05 15:12:01

Local clock offset: 0.463 ms

Remote clock offset: 0.197 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.94 Mbit/s

95th percentile per-packet one-way delay: 20.801 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 99.28 Mbit/s

95th percentile per-packet one-way delay: 21.046 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.53 Mbit/s

95th percentile per-packet one-way delay: 23.285 ms

Loss rate: 0.01%

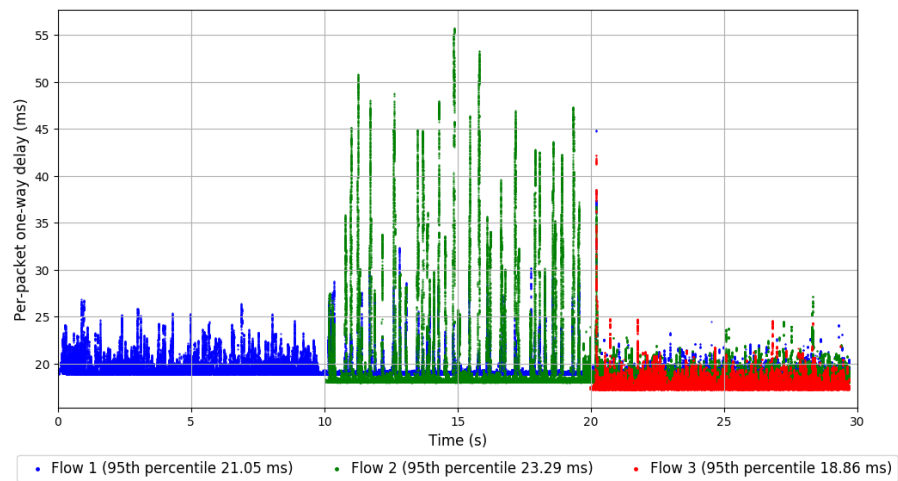
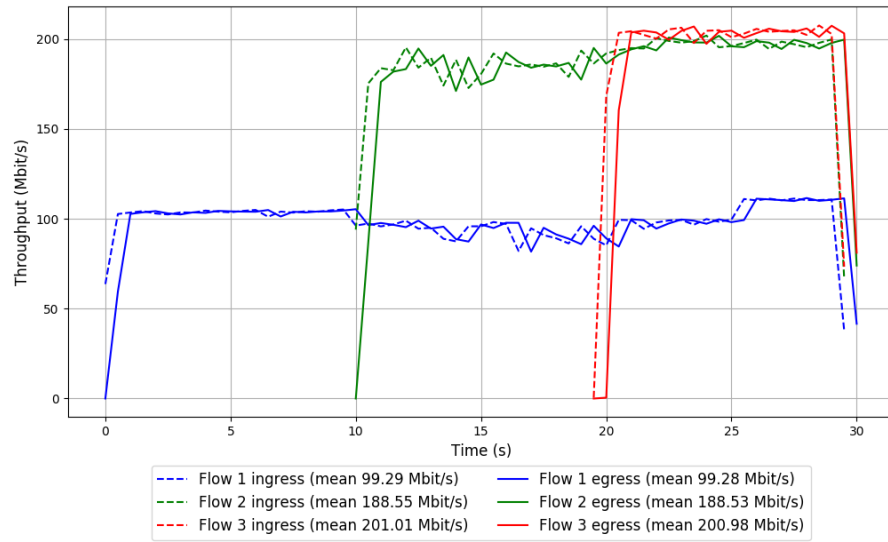
-- Flow 3:

Average throughput: 200.98 Mbit/s

95th percentile per-packet one-way delay: 18.862 ms

Loss rate: 0.01%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-06-05 15:37:03

End at: 2018-06-05 15:37:33

Local clock offset: 0.126 ms

Remote clock offset: 0.298 ms

Below is generated by plot.py at 2018-06-05 16:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.65 Mbit/s

95th percentile per-packet one-way delay: 21.770 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 90.32 Mbit/s

95th percentile per-packet one-way delay: 21.344 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.43 Mbit/s

95th percentile per-packet one-way delay: 22.374 ms

Loss rate: 0.00%

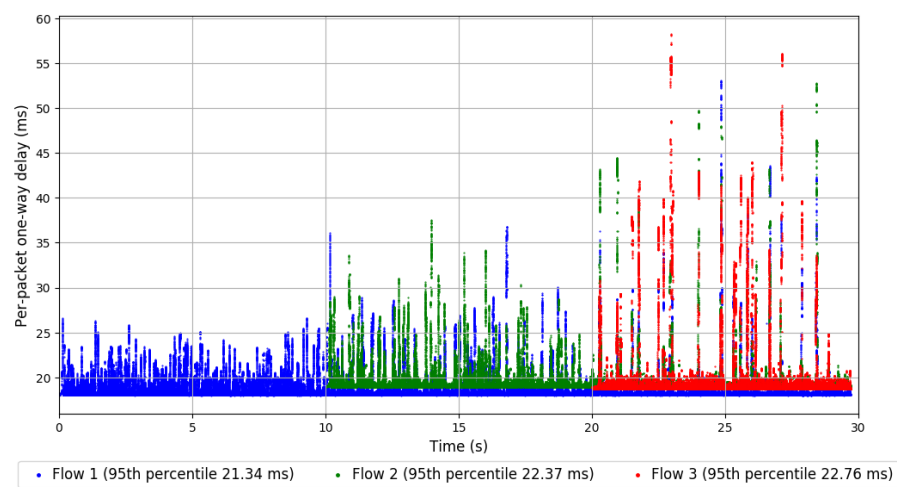
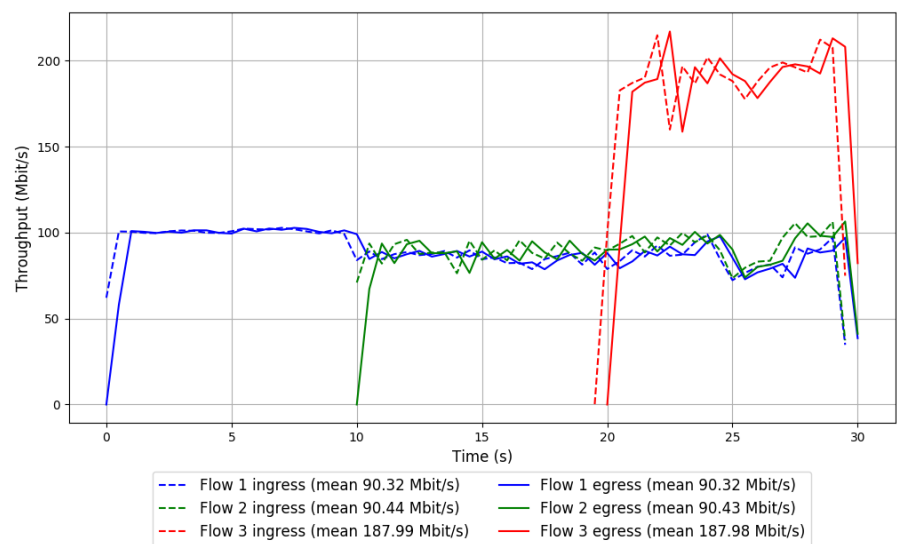
-- Flow 3:

Average throughput: 187.98 Mbit/s

95th percentile per-packet one-way delay: 22.764 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

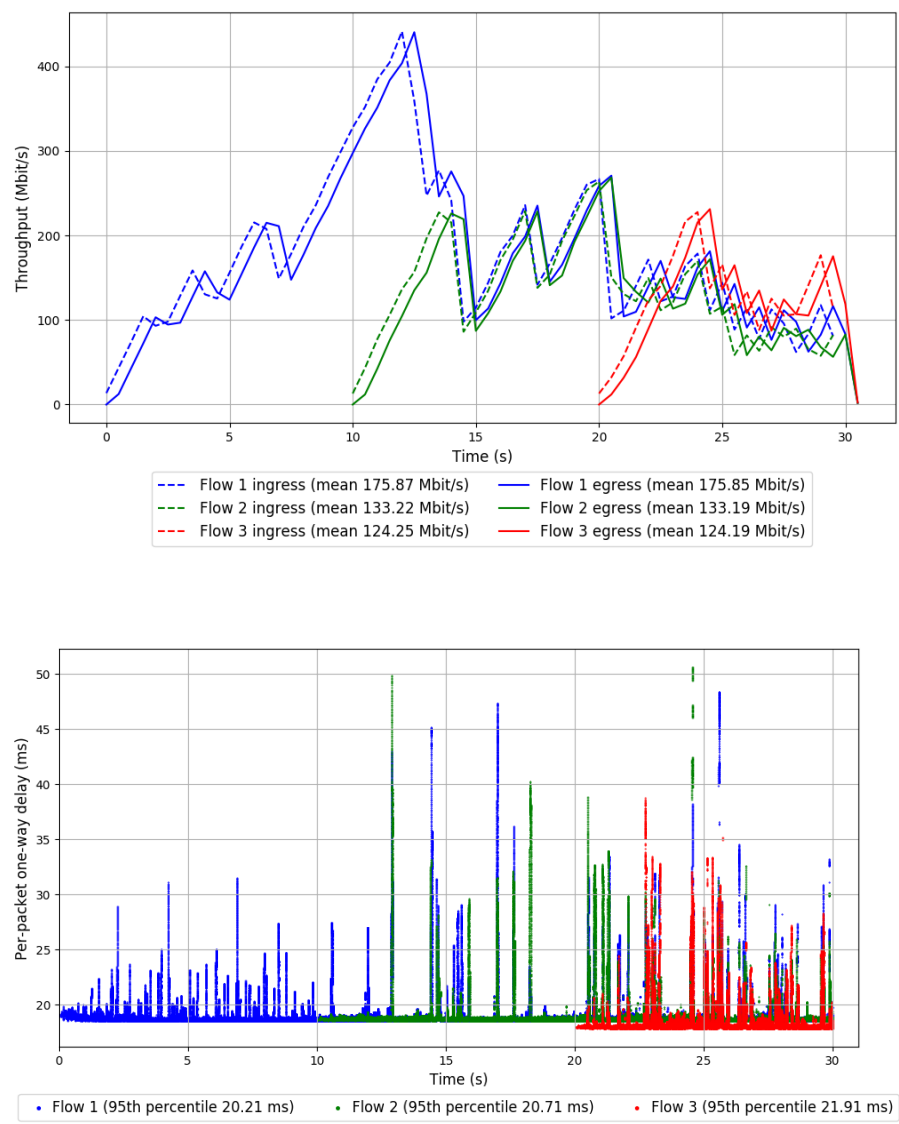


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-05 11:40:06
End at: 2018-06-05 11:40:36
Local clock offset: 0.234 ms
Remote clock offset: 0.283 ms

# Below is generated by plot.py at 2018-06-05 16:54:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.86 Mbit/s
95th percentile per-packet one-way delay: 20.613 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 175.85 Mbit/s
95th percentile per-packet one-way delay: 20.213 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 133.19 Mbit/s
95th percentile per-packet one-way delay: 20.709 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 124.19 Mbit/s
95th percentile per-packet one-way delay: 21.909 ms
Loss rate: 0.05%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-06-05 12:05:53

End at: 2018-06-05 12:06:23

Local clock offset: 0.249 ms

Remote clock offset: 0.375 ms

Below is generated by plot.py at 2018-06-05 16:56:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 520.67 Mbit/s

95th percentile per-packet one-way delay: 19.468 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 326.31 Mbit/s

95th percentile per-packet one-way delay: 18.822 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 225.75 Mbit/s

95th percentile per-packet one-way delay: 20.050 ms

Loss rate: 0.02%

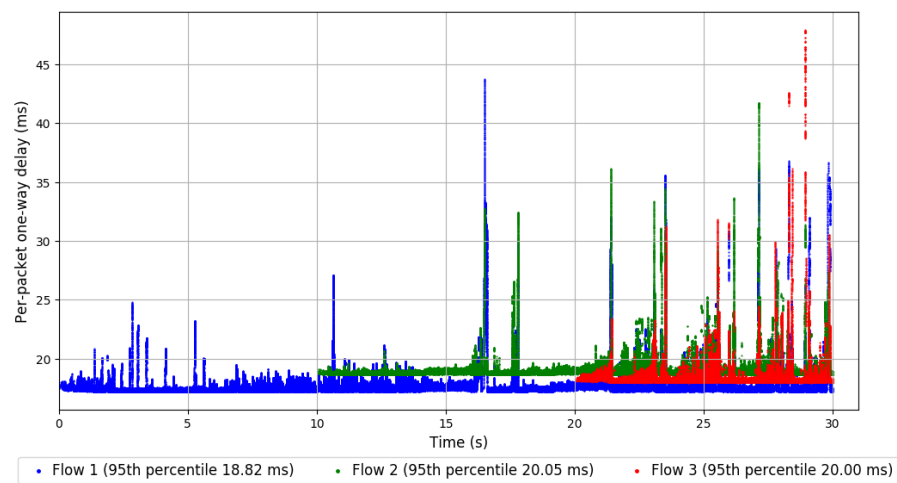
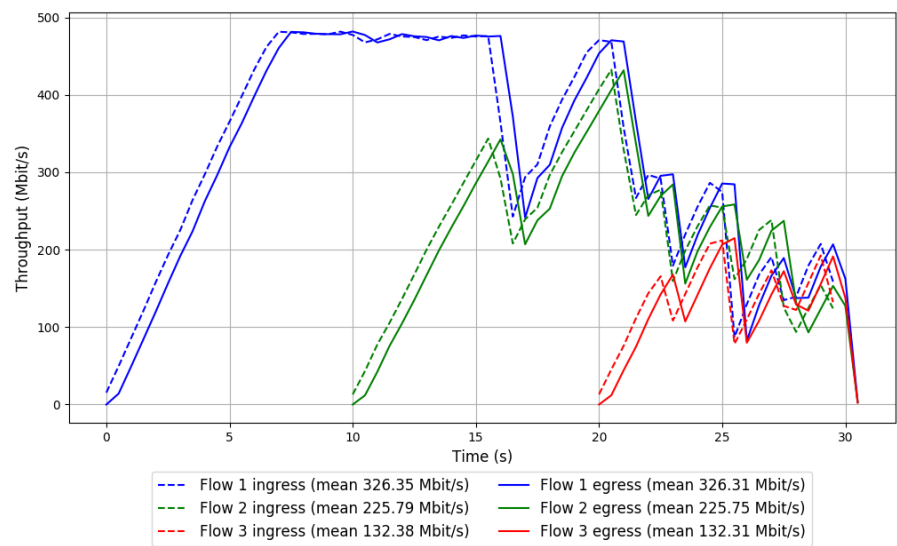
-- Flow 3:

Average throughput: 132.31 Mbit/s

95th percentile per-packet one-way delay: 19.999 ms

Loss rate: 0.05%

Run 2: Report of LEDBAT — Data Link

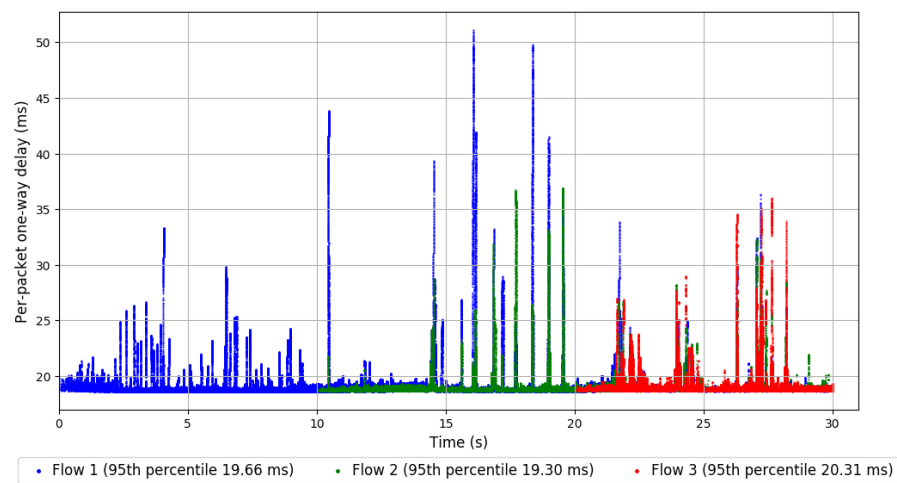
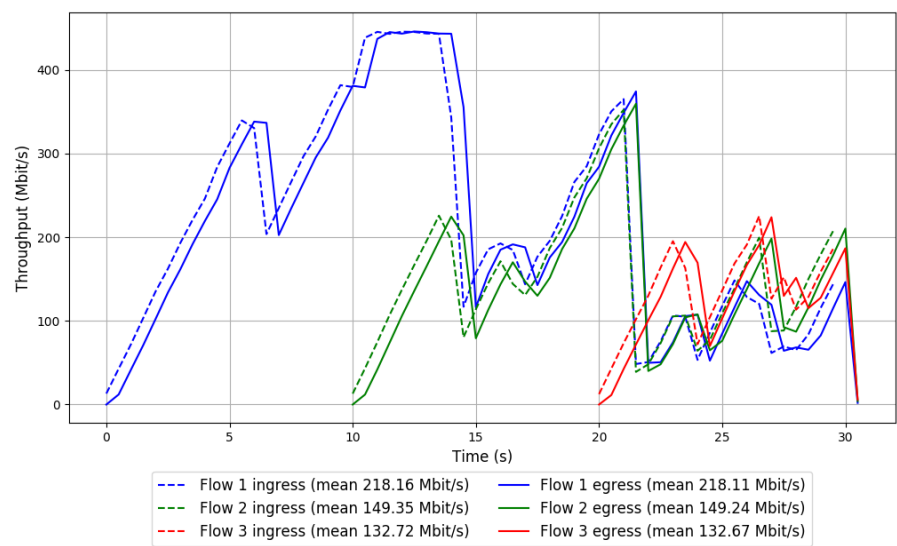


Run 3: Statistics of LEDBAT

Start at: 2018-06-05 12:31:27
End at: 2018-06-05 12:31:57
Local clock offset: 0.27 ms
Remote clock offset: -0.308 ms

Below is generated by plot.py at 2018-06-05 16:56:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 361.59 Mbit/s
95th percentile per-packet one-way delay: 19.643 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 218.11 Mbit/s
95th percentile per-packet one-way delay: 19.660 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 149.24 Mbit/s
95th percentile per-packet one-way delay: 19.299 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 132.67 Mbit/s
95th percentile per-packet one-way delay: 20.306 ms
Loss rate: 0.04%

Run 3: Report of LEDBAT — Data Link

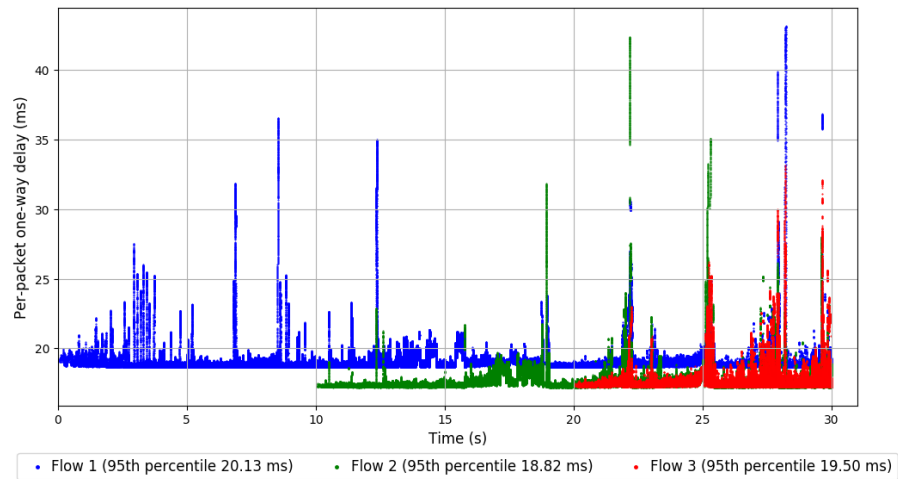
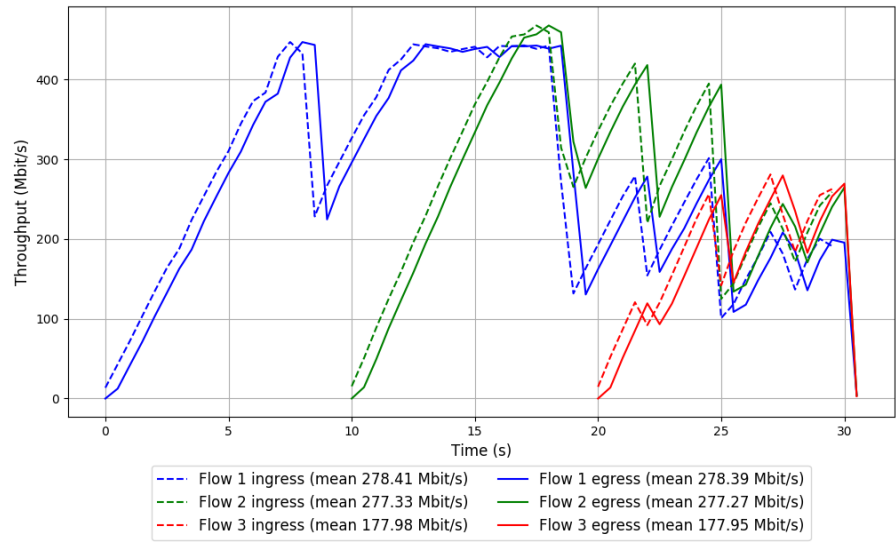


Run 4: Statistics of LEDBAT

Start at: 2018-06-05 12:56:53
End at: 2018-06-05 12:57:23
Local clock offset: 0.182 ms
Remote clock offset: -0.289 ms

Below is generated by plot.py at 2018-06-05 16:57:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 522.27 Mbit/s
95th percentile per-packet one-way delay: 19.766 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 278.39 Mbit/s
95th percentile per-packet one-way delay: 20.133 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 277.27 Mbit/s
95th percentile per-packet one-way delay: 18.822 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 177.95 Mbit/s
95th percentile per-packet one-way delay: 19.495 ms
Loss rate: 0.02%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-06-05 13:22:36

End at: 2018-06-05 13:23:06

Local clock offset: 0.198 ms

Remote clock offset: 0.179 ms

Below is generated by plot.py at 2018-06-05 16:57:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 421.32 Mbit/s

95th percentile per-packet one-way delay: 20.035 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 256.37 Mbit/s

95th percentile per-packet one-way delay: 19.884 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 166.15 Mbit/s

95th percentile per-packet one-way delay: 20.454 ms

Loss rate: 0.04%

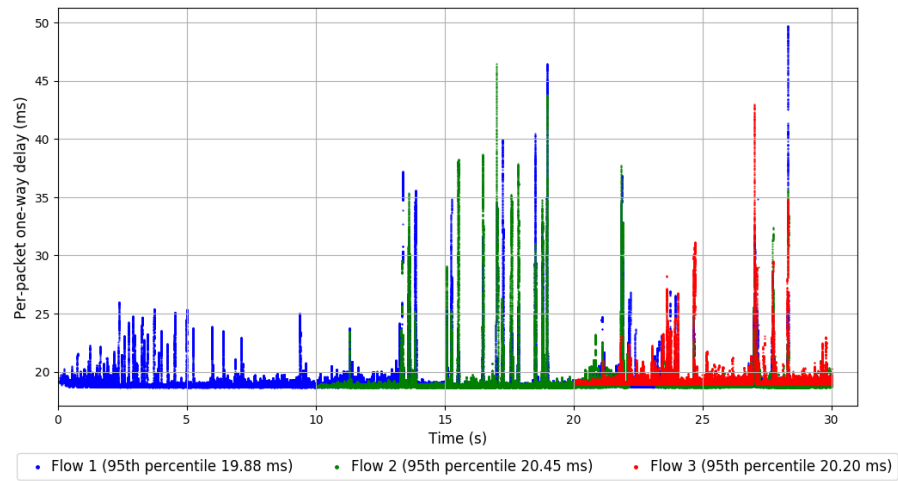
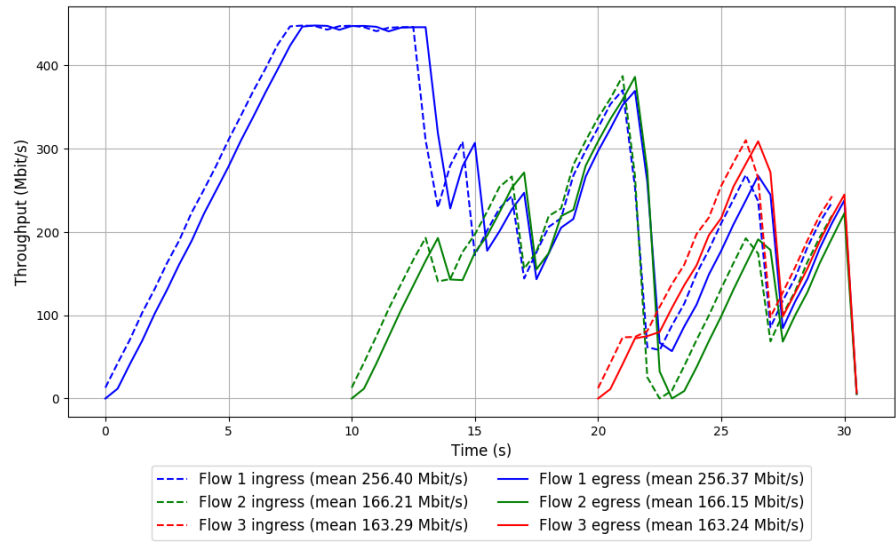
-- Flow 3:

Average throughput: 163.24 Mbit/s

95th percentile per-packet one-way delay: 20.200 ms

Loss rate: 0.03%

Run 5: Report of LEDBAT — Data Link

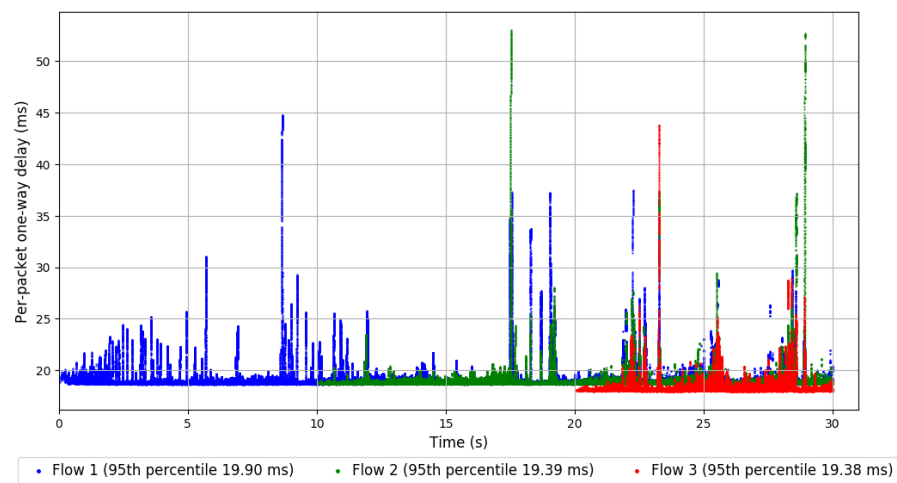
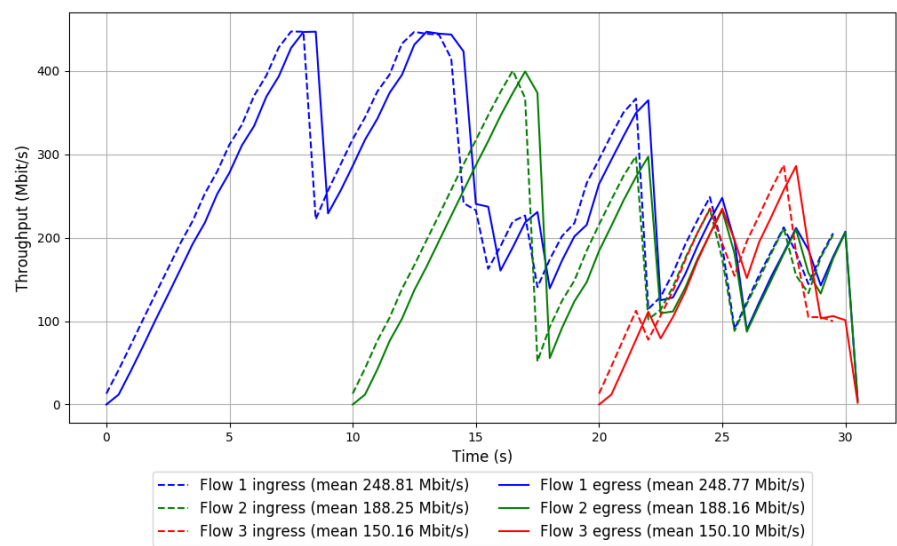


Run 6: Statistics of LEDBAT

Start at: 2018-06-05 13:48:04
End at: 2018-06-05 13:48:34
Local clock offset: 0.342 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2018-06-05 16:57:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 424.00 Mbit/s
95th percentile per-packet one-way delay: 19.644 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 248.77 Mbit/s
95th percentile per-packet one-way delay: 19.900 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 188.16 Mbit/s
95th percentile per-packet one-way delay: 19.389 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 150.10 Mbit/s
95th percentile per-packet one-way delay: 19.375 ms
Loss rate: 0.04%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-06-05 14:13:50

End at: 2018-06-05 14:14:20

Local clock offset: 0.462 ms

Remote clock offset: 0.114 ms

Below is generated by plot.py at 2018-06-05 16:57:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 459.29 Mbit/s

95th percentile per-packet one-way delay: 19.704 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 270.24 Mbit/s

95th percentile per-packet one-way delay: 18.958 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 188.15 Mbit/s

95th percentile per-packet one-way delay: 19.457 ms

Loss rate: 0.04%

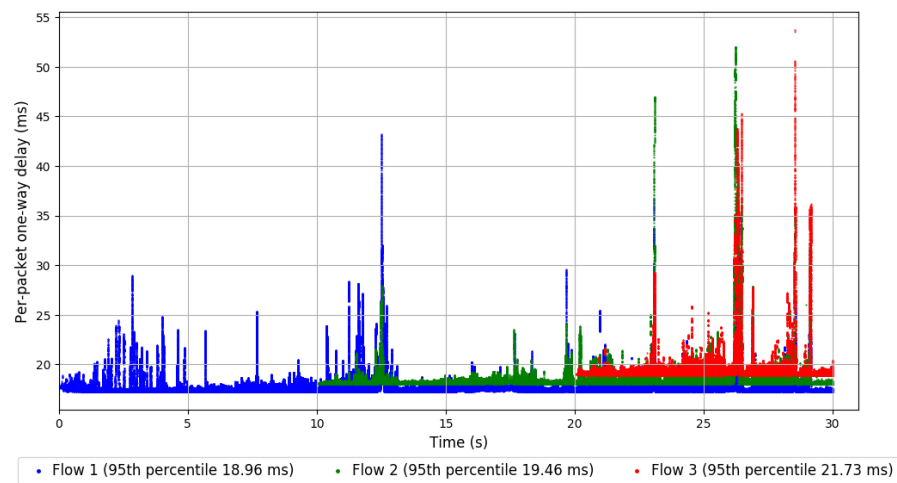
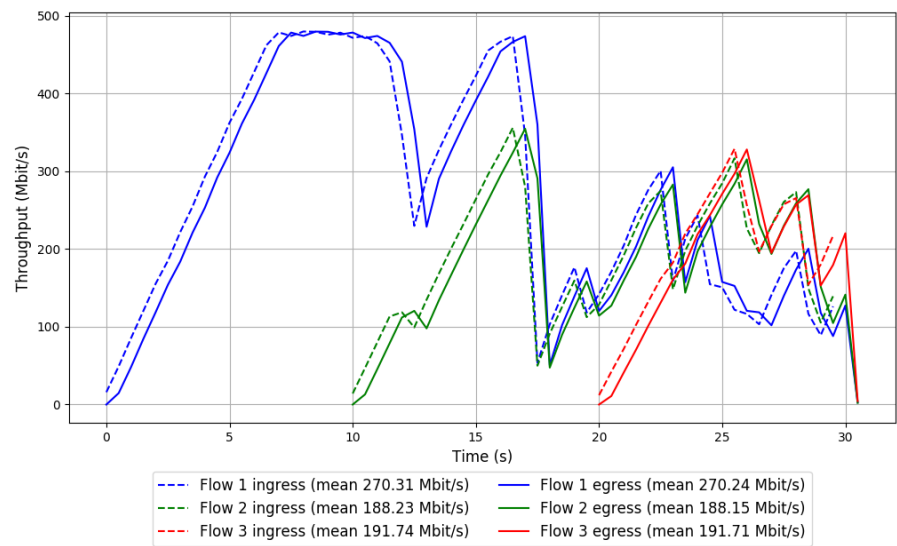
-- Flow 3:

Average throughput: 191.71 Mbit/s

95th percentile per-packet one-way delay: 21.726 ms

Loss rate: 0.01%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-06-05 14:39:16

End at: 2018-06-05 14:39:46

Local clock offset: 0.148 ms

Remote clock offset: 0.034 ms

Below is generated by plot.py at 2018-06-05 16:59:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 454.59 Mbit/s

95th percentile per-packet one-way delay: 20.005 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 256.78 Mbit/s

95th percentile per-packet one-way delay: 20.143 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 225.43 Mbit/s

95th percentile per-packet one-way delay: 19.699 ms

Loss rate: 0.04%

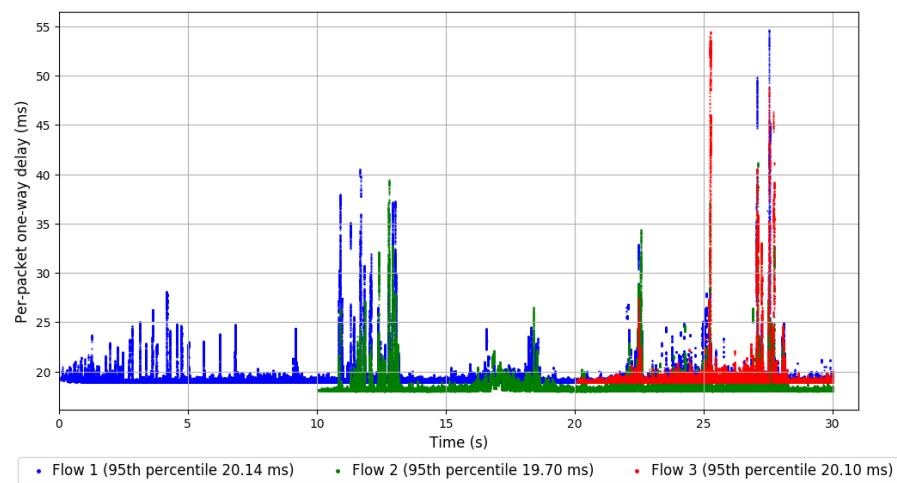
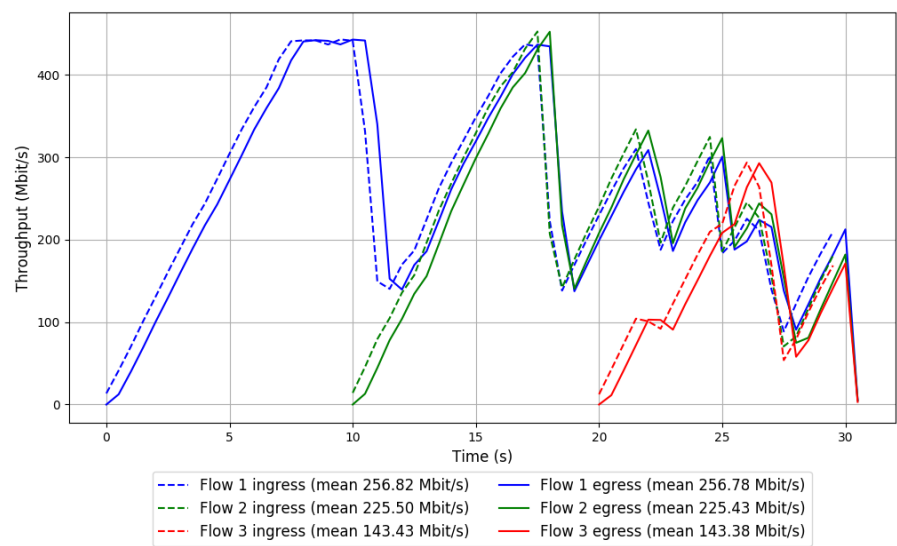
-- Flow 3:

Average throughput: 143.38 Mbit/s

95th percentile per-packet one-way delay: 20.102 ms

Loss rate: 0.04%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-06-05 15:05:09

End at: 2018-06-05 15:05:39

Local clock offset: 0.359 ms

Remote clock offset: 0.111 ms

Below is generated by plot.py at 2018-06-05 17:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 472.70 Mbit/s

95th percentile per-packet one-way delay: 19.945 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 297.81 Mbit/s

95th percentile per-packet one-way delay: 19.904 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 193.94 Mbit/s

95th percentile per-packet one-way delay: 19.852 ms

Loss rate: 0.04%

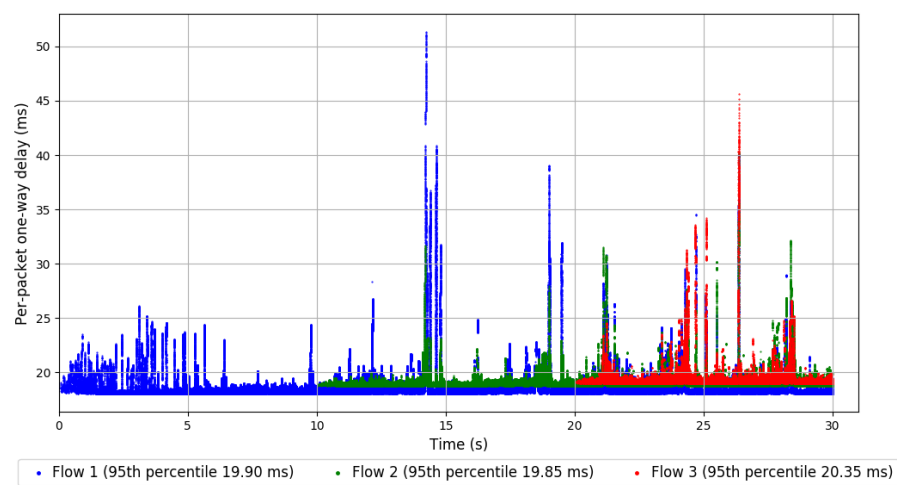
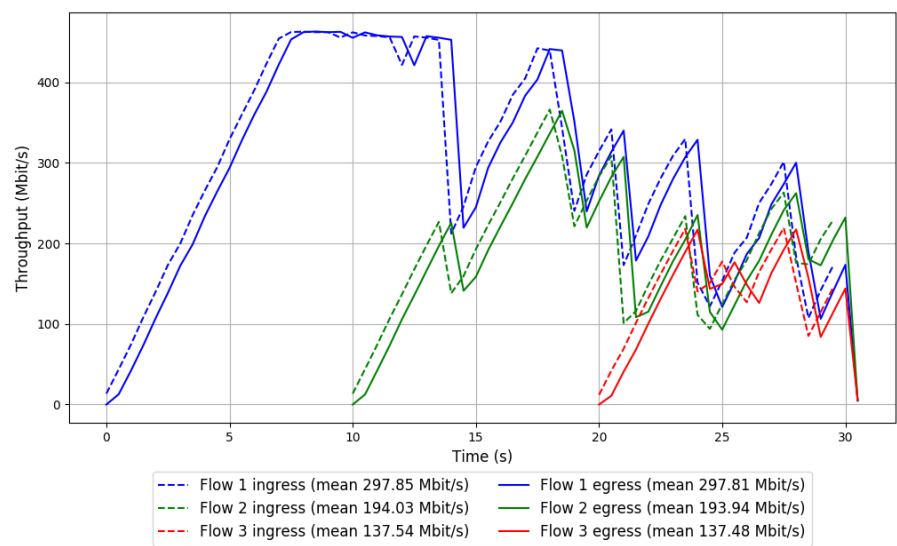
-- Flow 3:

Average throughput: 137.48 Mbit/s

95th percentile per-packet one-way delay: 20.347 ms

Loss rate: 0.04%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-06-05 15:30:43

End at: 2018-06-05 15:31:13

Local clock offset: 0.191 ms

Remote clock offset: 0.248 ms

Below is generated by plot.py at 2018-06-05 17:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.71 Mbit/s

95th percentile per-packet one-way delay: 20.114 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 241.19 Mbit/s

95th percentile per-packet one-way delay: 20.190 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 204.37 Mbit/s

95th percentile per-packet one-way delay: 20.359 ms

Loss rate: 0.04%

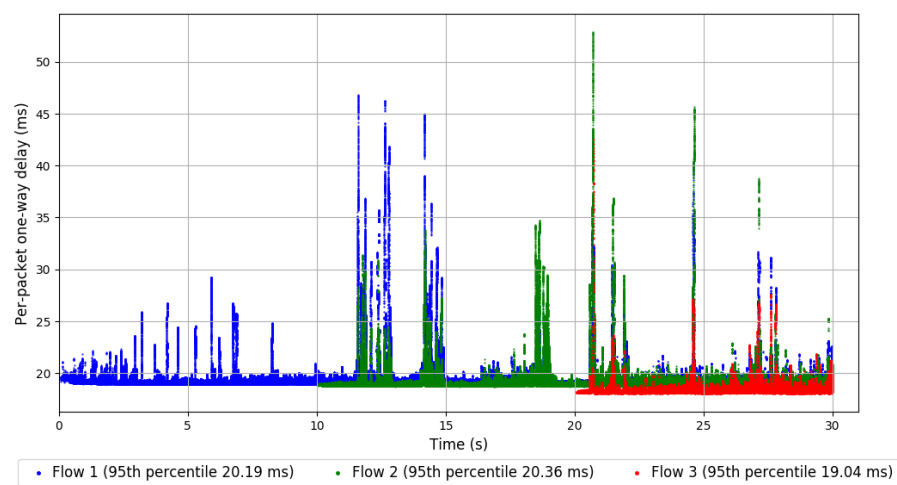
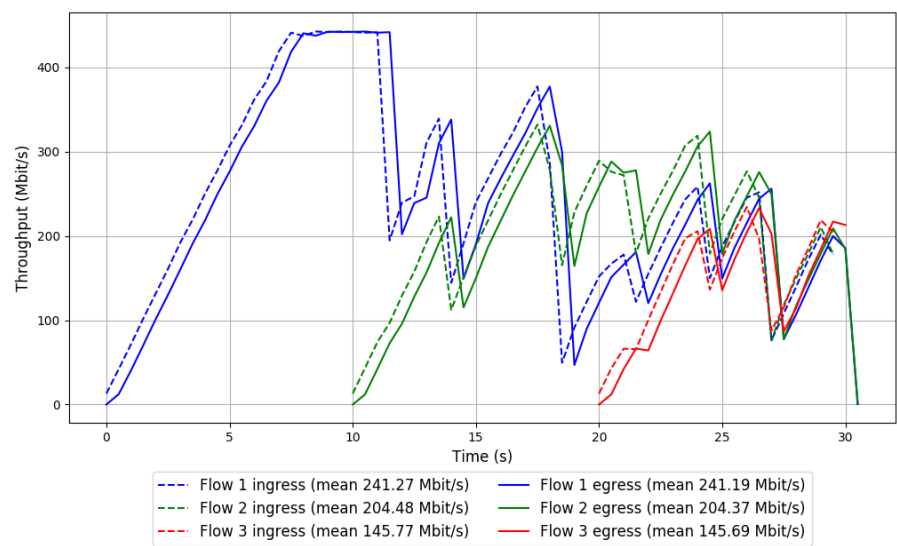
-- Flow 3:

Average throughput: 145.69 Mbit/s

95th percentile per-packet one-way delay: 19.041 ms

Loss rate: 0.04%

Run 10: Report of LEDBAT — Data Link

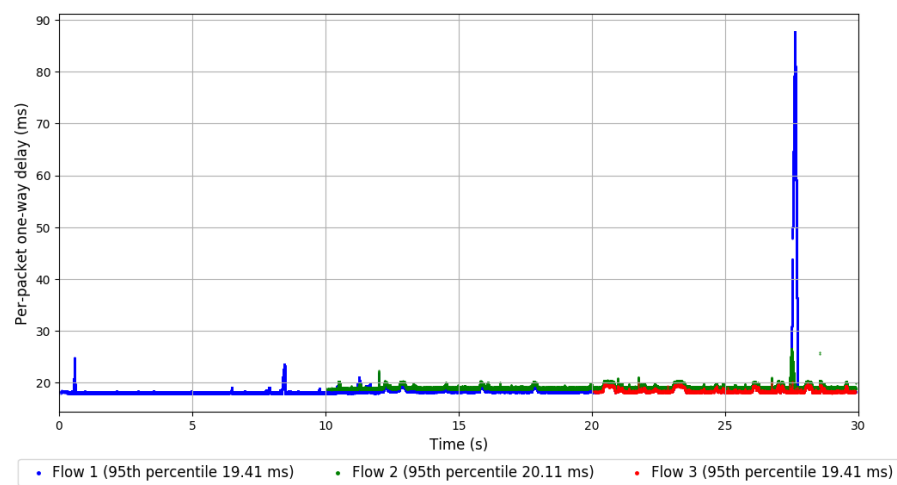
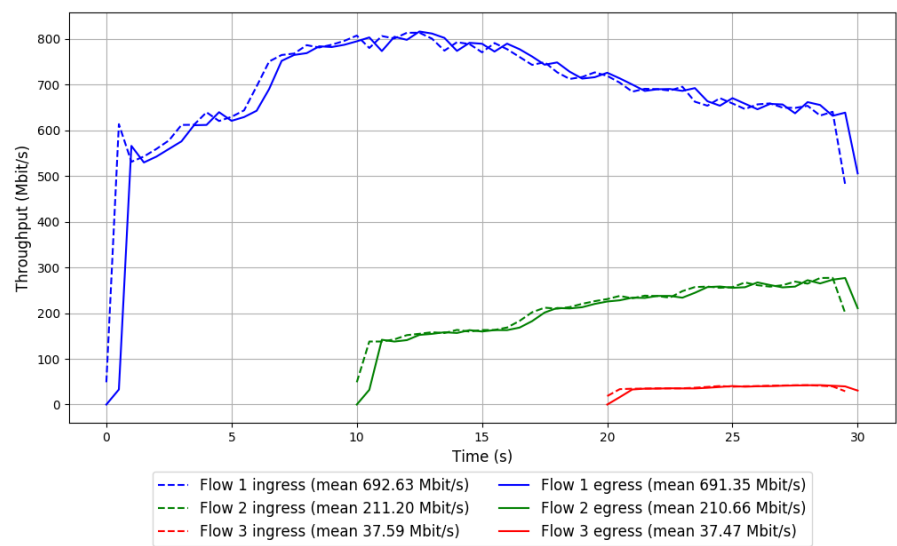


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-05 11:44:43
End at: 2018-06-05 11:45:13
Local clock offset: 0.206 ms
Remote clock offset: 0.373 ms

# Below is generated by plot.py at 2018-06-05 17:06:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 843.73 Mbit/s
95th percentile per-packet one-way delay: 19.522 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 691.35 Mbit/s
95th percentile per-packet one-way delay: 19.409 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 210.66 Mbit/s
95th percentile per-packet one-way delay: 20.113 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 37.47 Mbit/s
95th percentile per-packet one-way delay: 19.413 ms
Loss rate: 0.32%
```


Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-06-05 12:10:39

End at: 2018-06-05 12:11:09

Local clock offset: 0.184 ms

Remote clock offset: 0.44 ms

Below is generated by plot.py at 2018-06-05 17:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 899.76 Mbit/s

95th percentile per-packet one-way delay: 20.719 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 819.43 Mbit/s

95th percentile per-packet one-way delay: 20.858 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 46.82 Mbit/s

95th percentile per-packet one-way delay: 20.132 ms

Loss rate: 0.19%

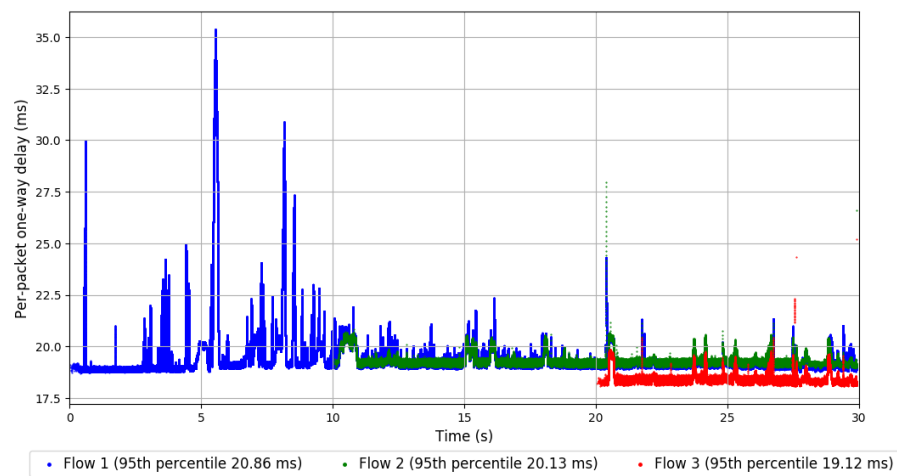
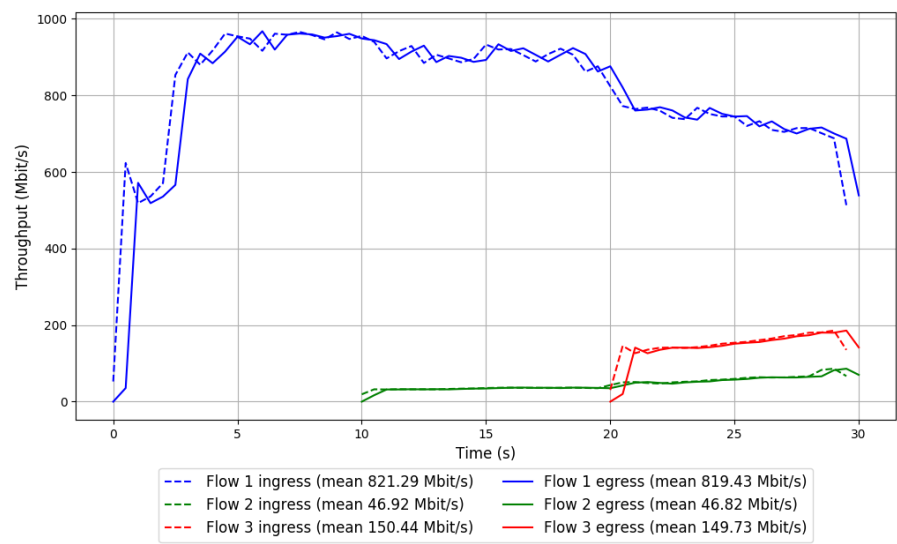
-- Flow 3:

Average throughput: 149.73 Mbit/s

95th percentile per-packet one-way delay: 19.121 ms

Loss rate: 0.41%

Run 2: Report of PCC-Allegro — Data Link

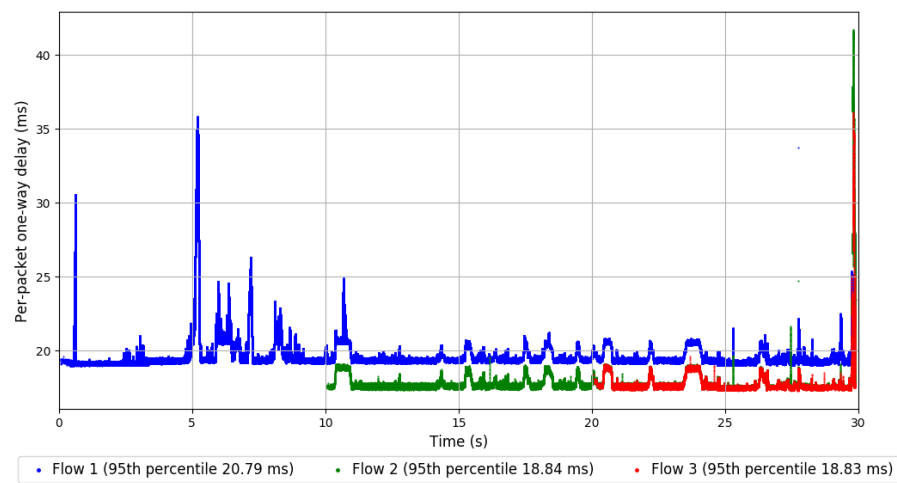
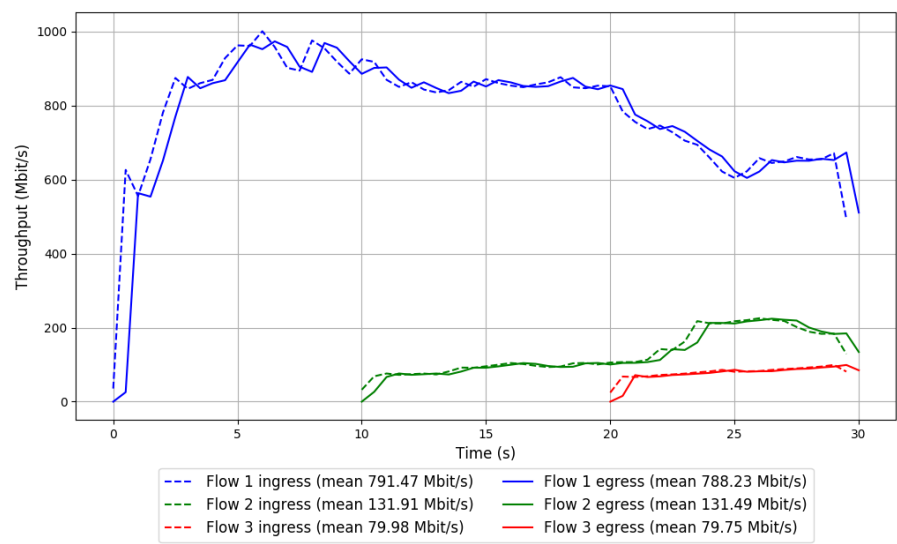


Run 3: Statistics of PCC-Allegro

Start at: 2018-06-05 12:36:09
End at: 2018-06-05 12:36:39
Local clock offset: 0.209 ms
Remote clock offset: -0.334 ms

Below is generated by plot.py at 2018-06-05 17:09:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 901.87 Mbit/s
95th percentile per-packet one-way delay: 20.705 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 788.23 Mbit/s
95th percentile per-packet one-way delay: 20.785 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 131.49 Mbit/s
95th percentile per-packet one-way delay: 18.836 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 79.75 Mbit/s
95th percentile per-packet one-way delay: 18.828 ms
Loss rate: 0.30%

Run 3: Report of PCC-Allegro — Data Link

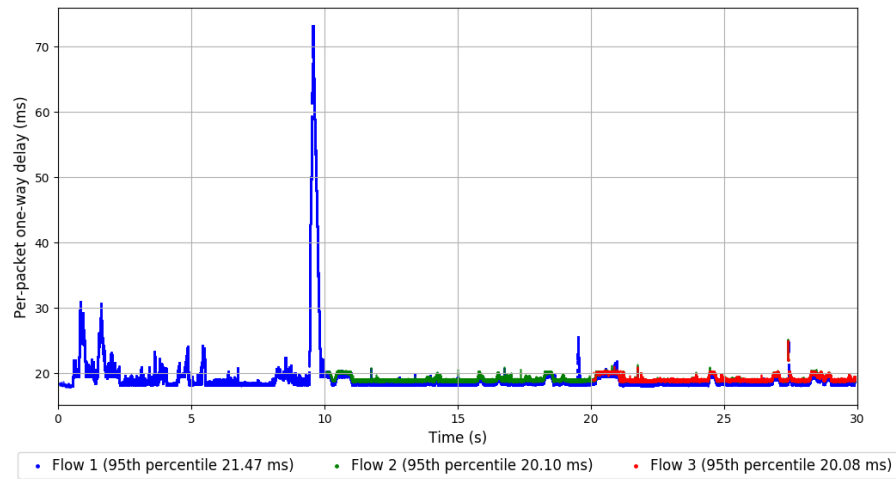
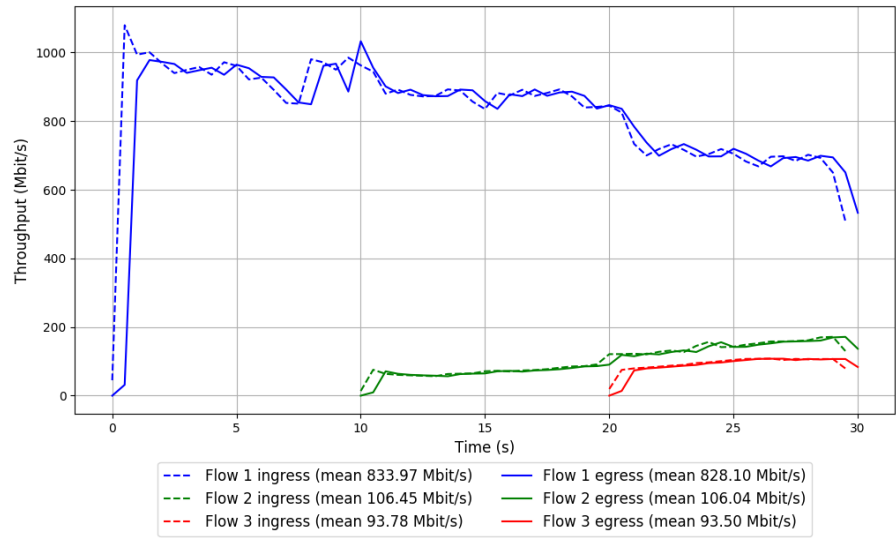


Run 4: Statistics of PCC-Allegro

Start at: 2018-06-05 13:01:40
End at: 2018-06-05 13:02:10
Local clock offset: 0.279 ms
Remote clock offset: -0.098 ms

Below is generated by plot.py at 2018-06-05 17:09:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 929.38 Mbit/s
95th percentile per-packet one-way delay: 21.098 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 828.10 Mbit/s
95th percentile per-packet one-way delay: 21.473 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 106.04 Mbit/s
95th percentile per-packet one-way delay: 20.098 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 93.50 Mbit/s
95th percentile per-packet one-way delay: 20.082 ms
Loss rate: 0.30%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-06-05 13:27:18

End at: 2018-06-05 13:27:48

Local clock offset: 0.26 ms

Remote clock offset: 0.217 ms

Below is generated by plot.py at 2018-06-05 17:09:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 833.88 Mbit/s

95th percentile per-packet one-way delay: 19.612 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 651.53 Mbit/s

95th percentile per-packet one-way delay: 19.597 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 256.20 Mbit/s

95th percentile per-packet one-way delay: 20.282 ms

Loss rate: 0.25%

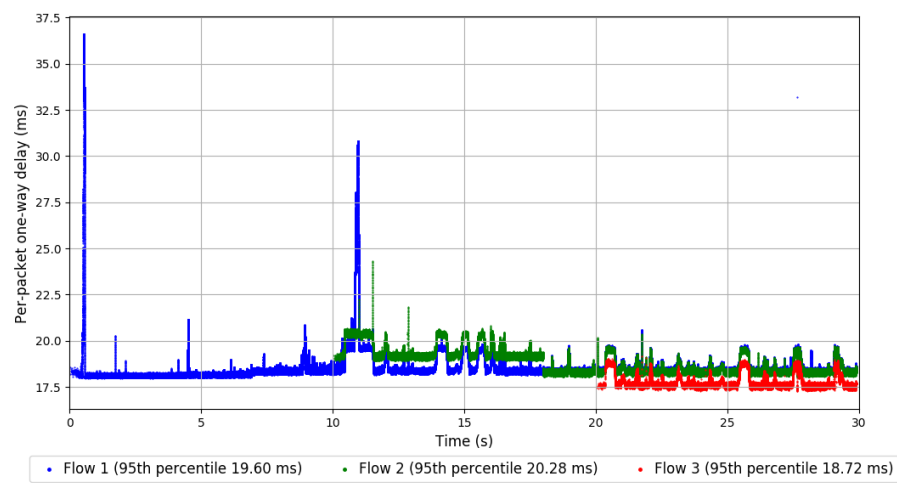
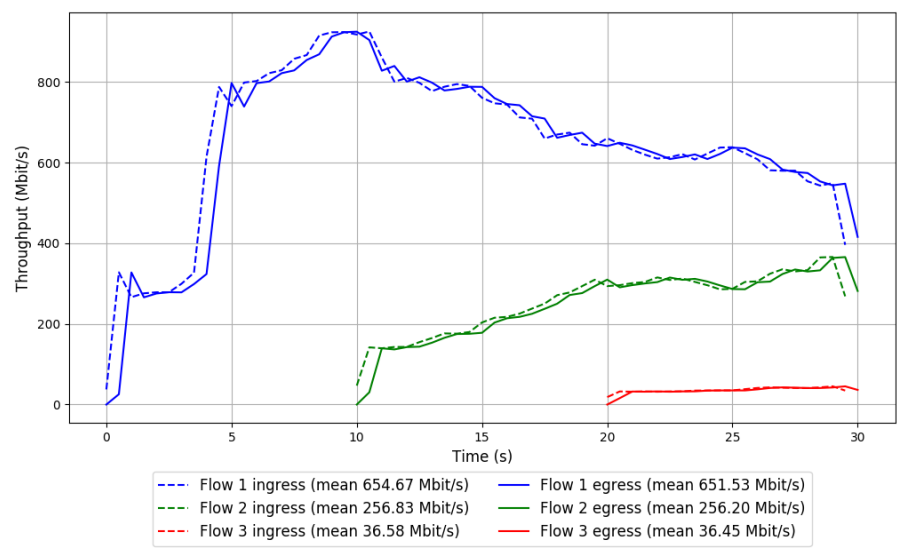
-- Flow 3:

Average throughput: 36.45 Mbit/s

95th percentile per-packet one-way delay: 18.721 ms

Loss rate: 0.35%

Run 5: Report of PCC-Allegro — Data Link

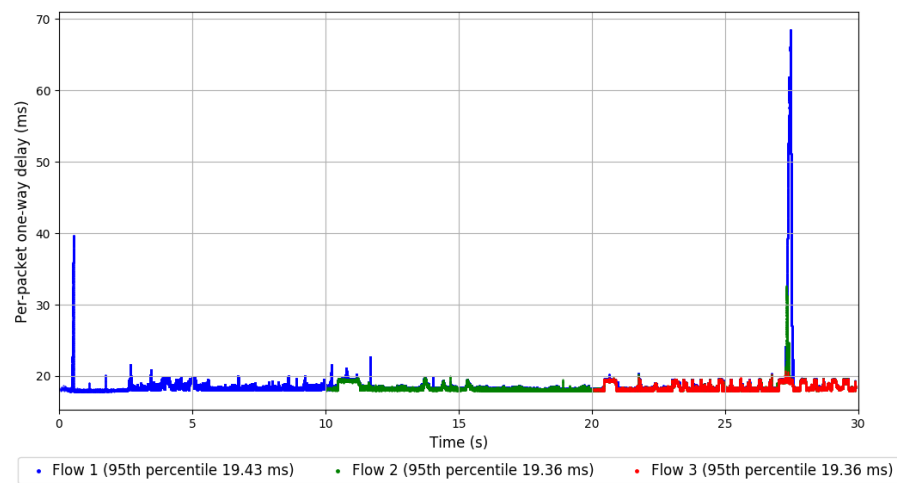
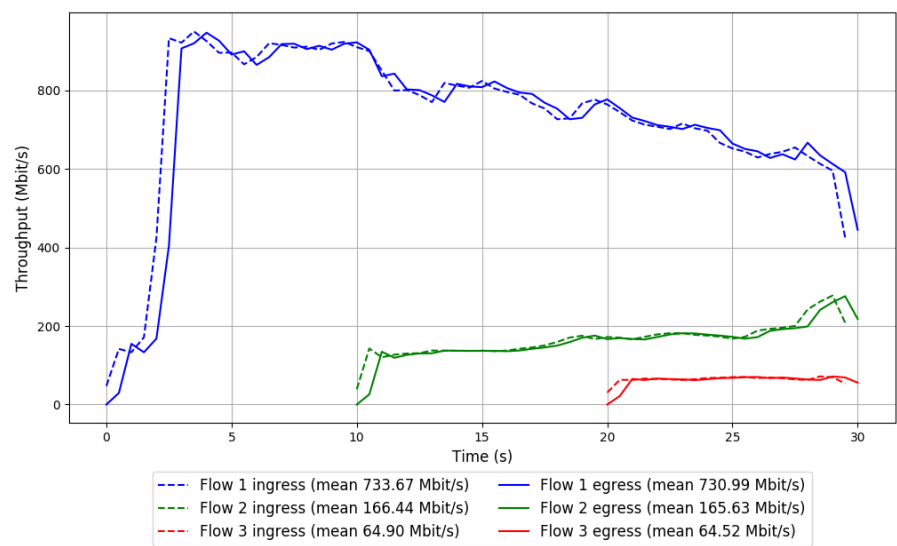


Run 6: Statistics of PCC-Allegro

Start at: 2018-06-05 13:52:49
End at: 2018-06-05 13:53:19
Local clock offset: 0.376 ms
Remote clock offset: -0.091 ms

Below is generated by plot.py at 2018-06-05 17:10:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 862.39 Mbit/s
95th percentile per-packet one-way delay: 19.418 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 730.99 Mbit/s
95th percentile per-packet one-way delay: 19.428 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 165.63 Mbit/s
95th percentile per-packet one-way delay: 19.362 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 64.52 Mbit/s
95th percentile per-packet one-way delay: 19.363 ms
Loss rate: 0.58%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-06-05 14:18:37

End at: 2018-06-05 14:19:07

Local clock offset: 0.391 ms

Remote clock offset: 0.13 ms

Below is generated by plot.py at 2018-06-05 17:10:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 886.91 Mbit/s

95th percentile per-packet one-way delay: 20.317 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 733.34 Mbit/s

95th percentile per-packet one-way delay: 20.297 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 188.92 Mbit/s

95th percentile per-packet one-way delay: 20.458 ms

Loss rate: 0.25%

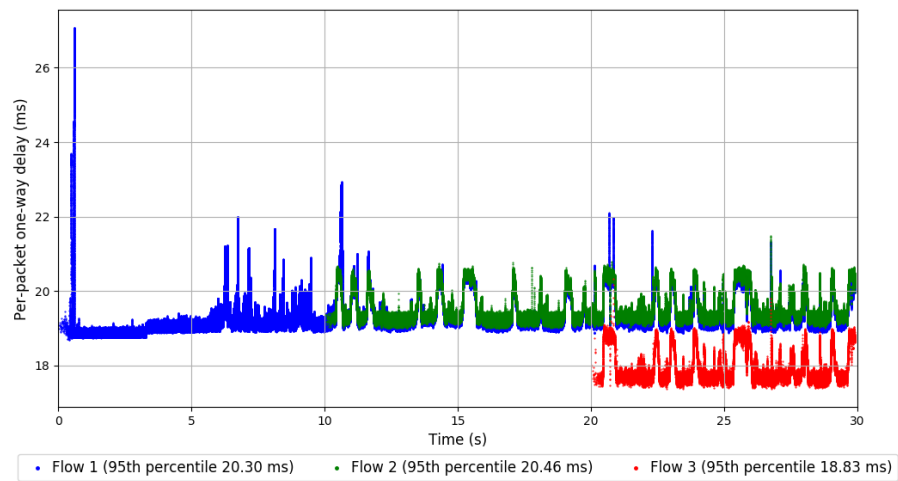
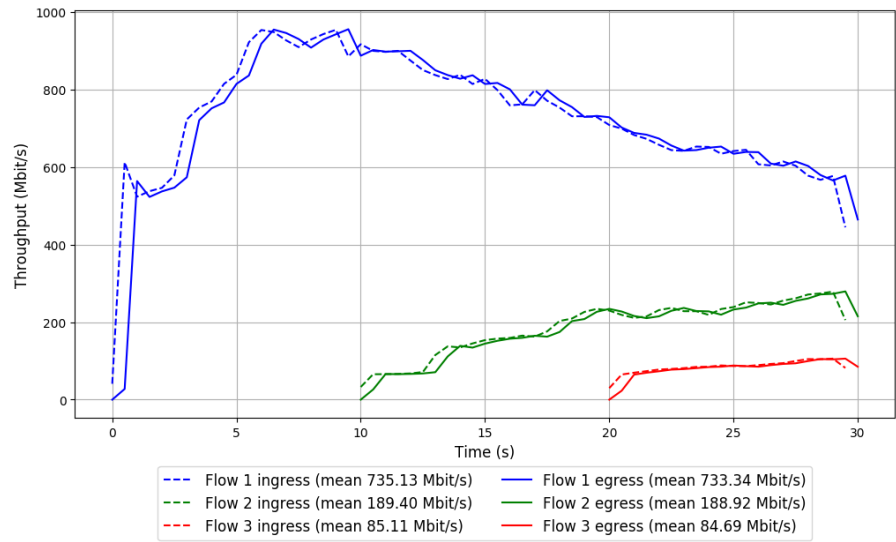
-- Flow 3:

Average throughput: 84.69 Mbit/s

95th percentile per-packet one-way delay: 18.831 ms

Loss rate: 0.49%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-06-05 14:44:03

End at: 2018-06-05 14:44:33

Local clock offset: 0.2 ms

Remote clock offset: 0.078 ms

Below is generated by plot.py at 2018-06-05 17:11:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 925.61 Mbit/s

95th percentile per-packet one-way delay: 19.703 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 809.21 Mbit/s

95th percentile per-packet one-way delay: 19.627 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 138.09 Mbit/s

95th percentile per-packet one-way delay: 20.164 ms

Loss rate: 0.26%

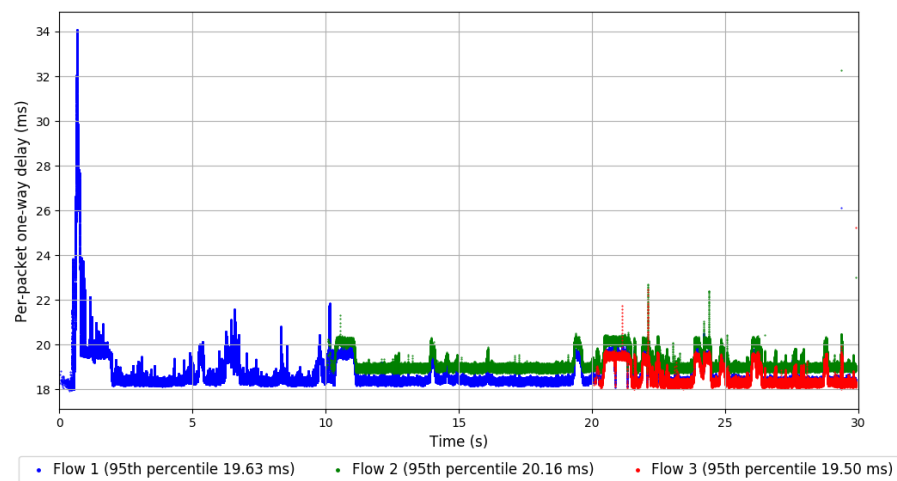
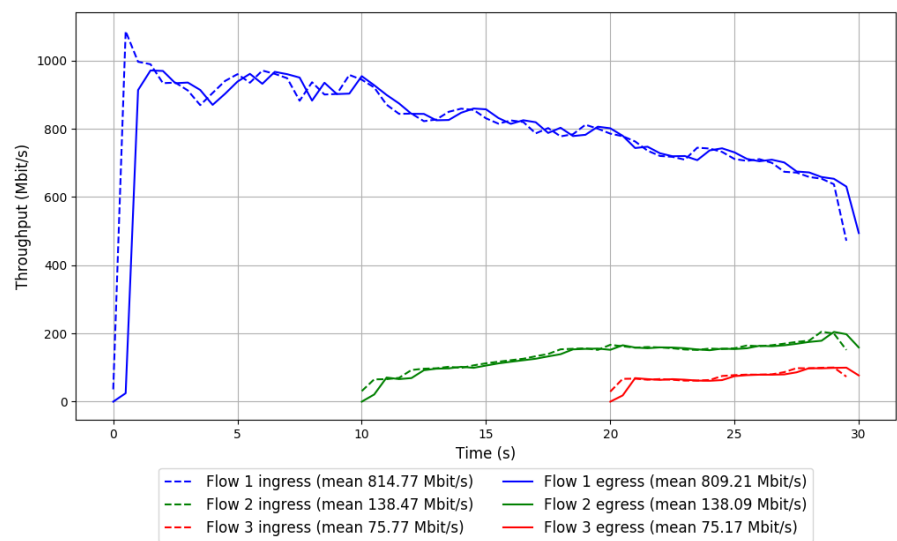
-- Flow 3:

Average throughput: 75.17 Mbit/s

95th percentile per-packet one-way delay: 19.495 ms

Loss rate: 0.72%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-06-05 15:09:51

End at: 2018-06-05 15:10:21

Local clock offset: 0.357 ms

Remote clock offset: 0.148 ms

Below is generated by plot.py at 2018-06-05 17:17:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 893.33 Mbit/s

95th percentile per-packet one-way delay: 20.036 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 736.14 Mbit/s

95th percentile per-packet one-way delay: 19.659 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 193.11 Mbit/s

95th percentile per-packet one-way delay: 20.500 ms

Loss rate: 0.49%

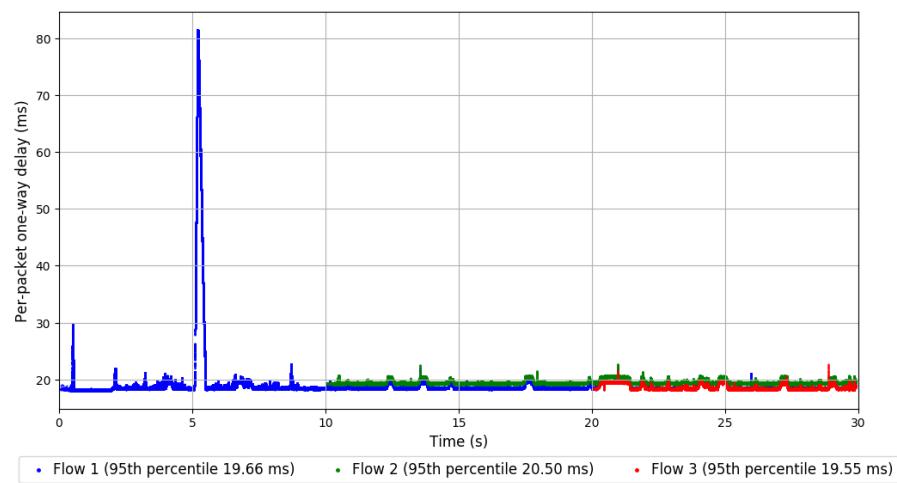
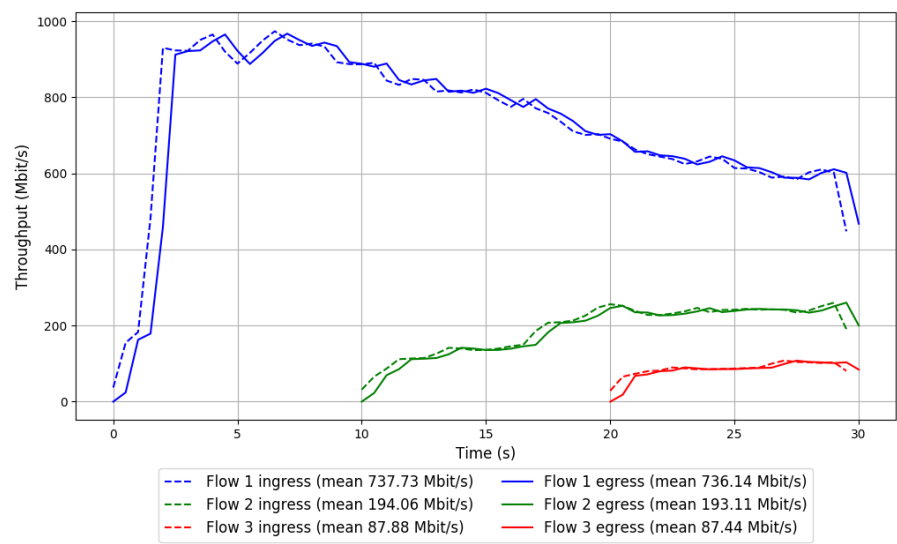
-- Flow 3:

Average throughput: 87.44 Mbit/s

95th percentile per-packet one-way delay: 19.548 ms

Loss rate: 0.50%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-06-05 15:35:24

End at: 2018-06-05 15:35:54

Local clock offset: 0.222 ms

Remote clock offset: 0.267 ms

Below is generated by plot.py at 2018-06-05 17:18:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 863.49 Mbit/s

95th percentile per-packet one-way delay: 19.767 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 657.47 Mbit/s

95th percentile per-packet one-way delay: 18.866 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 269.93 Mbit/s

95th percentile per-packet one-way delay: 20.267 ms

Loss rate: 0.19%

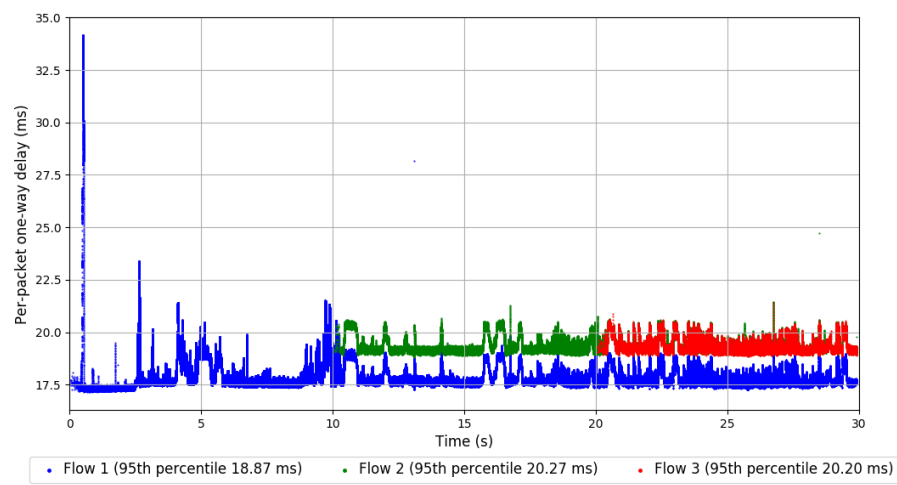
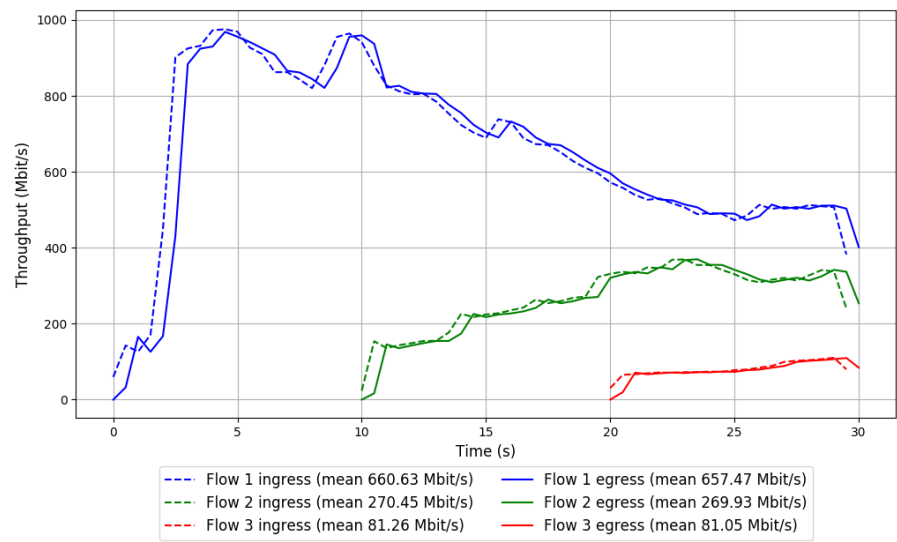
-- Flow 3:

Average throughput: 81.05 Mbit/s

95th percentile per-packet one-way delay: 20.198 ms

Loss rate: 0.26%

Run 10: Report of PCC-Allegro — Data Link

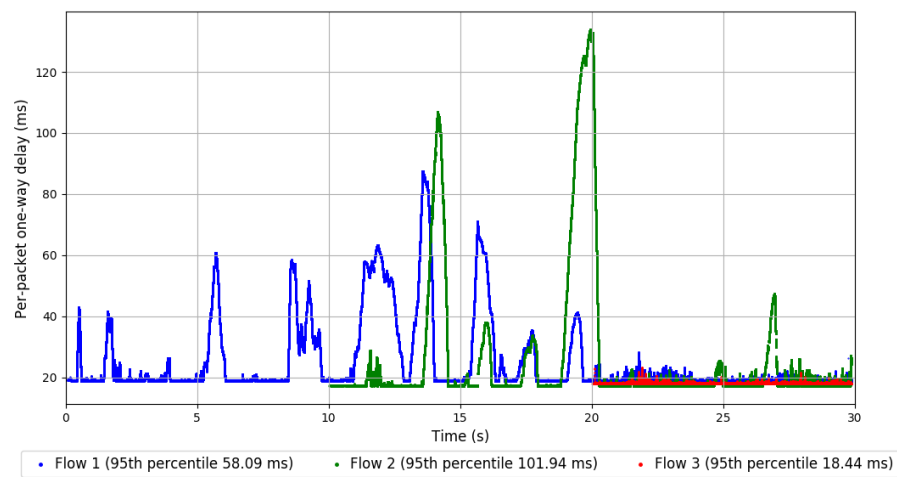
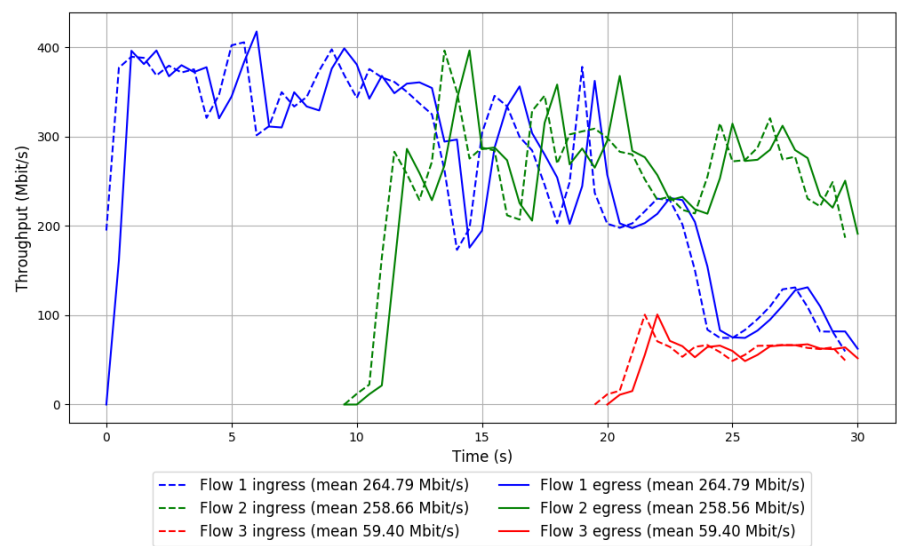


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-05 11:32:26
End at: 2018-06-05 11:32:56
Local clock offset: 0.277 ms
Remote clock offset: 0.168 ms

# Below is generated by plot.py at 2018-06-05 17:18:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 456.56 Mbit/s
95th percentile per-packet one-way delay: 64.530 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 264.79 Mbit/s
95th percentile per-packet one-way delay: 58.085 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.56 Mbit/s
95th percentile per-packet one-way delay: 101.938 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 59.40 Mbit/s
95th percentile per-packet one-way delay: 18.437 ms
Loss rate: 0.01%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-06-05 11:57:58

End at: 2018-06-05 11:58:28

Local clock offset: 0.22 ms

Remote clock offset: 0.234 ms

Below is generated by plot.py at 2018-06-05 17:22:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 588.37 Mbit/s

95th percentile per-packet one-way delay: 182.261 ms

Loss rate: 12.35%

-- Flow 1:

Average throughput: 396.97 Mbit/s

95th percentile per-packet one-way delay: 188.340 ms

Loss rate: 17.21%

-- Flow 2:

Average throughput: 216.27 Mbit/s

95th percentile per-packet one-way delay: 119.715 ms

Loss rate: 0.13%

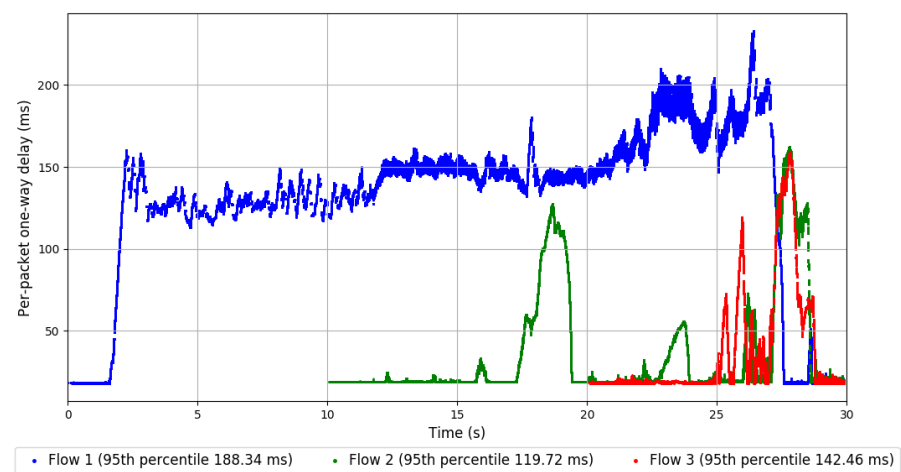
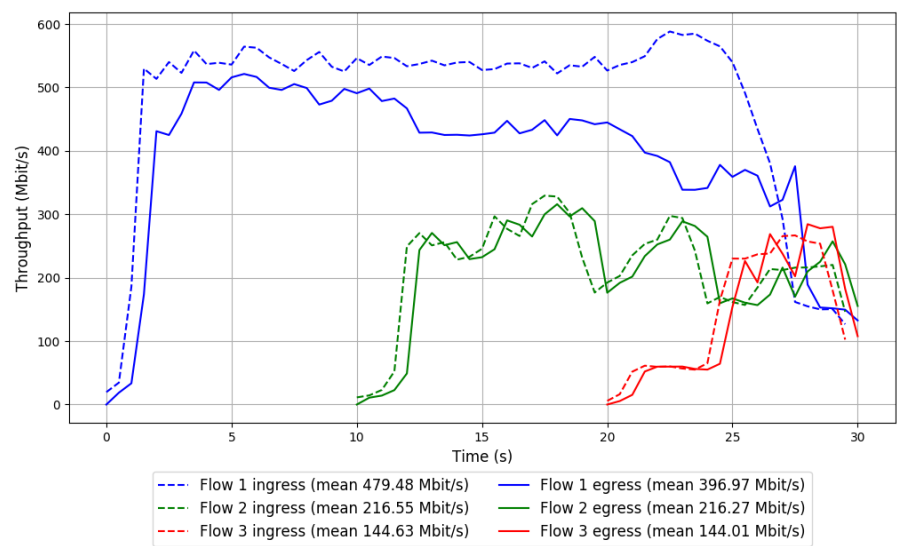
-- Flow 3:

Average throughput: 144.01 Mbit/s

95th percentile per-packet one-way delay: 142.460 ms

Loss rate: 0.50%

Run 2: Report of PCC-Expr — Data Link

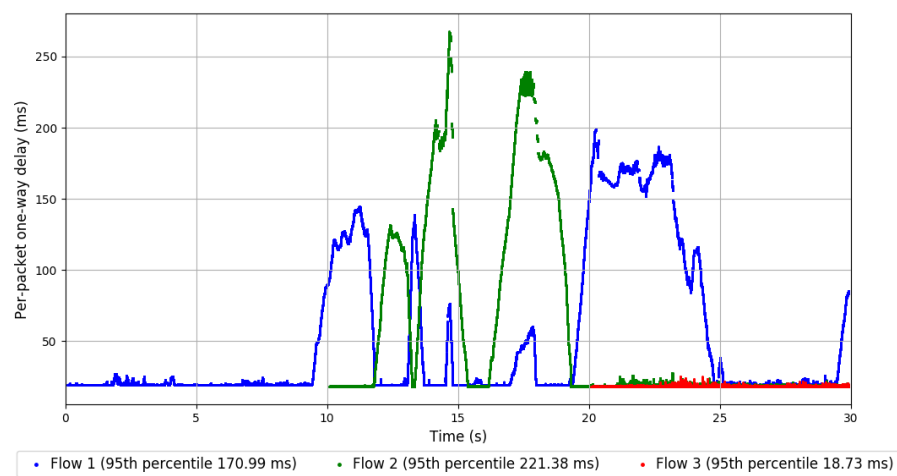
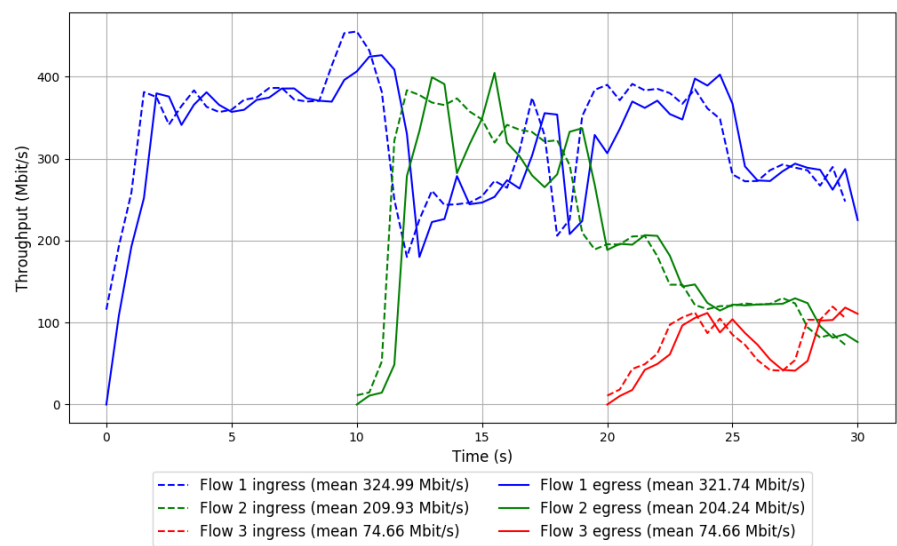


Run 3: Statistics of PCC-Expr

Start at: 2018-06-05 12:23:47
End at: 2018-06-05 12:24:17
Local clock offset: 0.306 ms
Remote clock offset: -0.009 ms

Below is generated by plot.py at 2018-06-05 17:22:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 482.24 Mbit/s
95th percentile per-packet one-way delay: 179.141 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 321.74 Mbit/s
95th percentile per-packet one-way delay: 170.986 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 204.24 Mbit/s
95th percentile per-packet one-way delay: 221.380 ms
Loss rate: 2.71%
-- Flow 3:
Average throughput: 74.66 Mbit/s
95th percentile per-packet one-way delay: 18.730 ms
Loss rate: 0.00%

Run 3: Report of PCC-Expr — Data Link

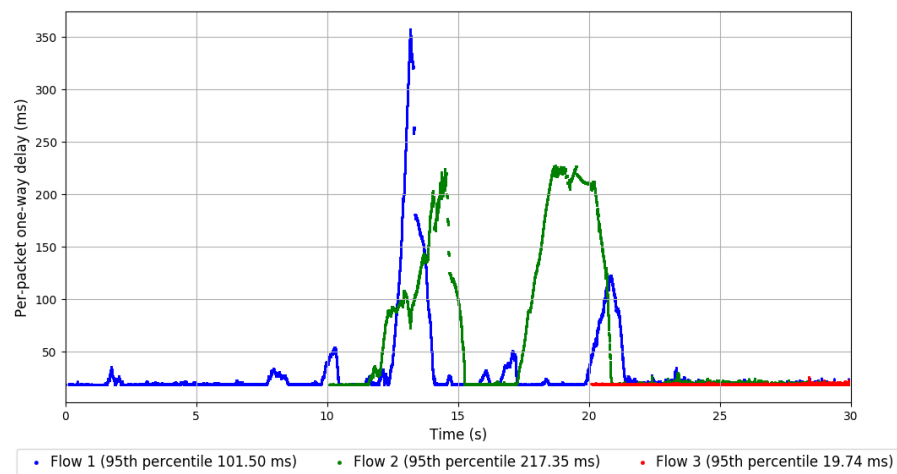
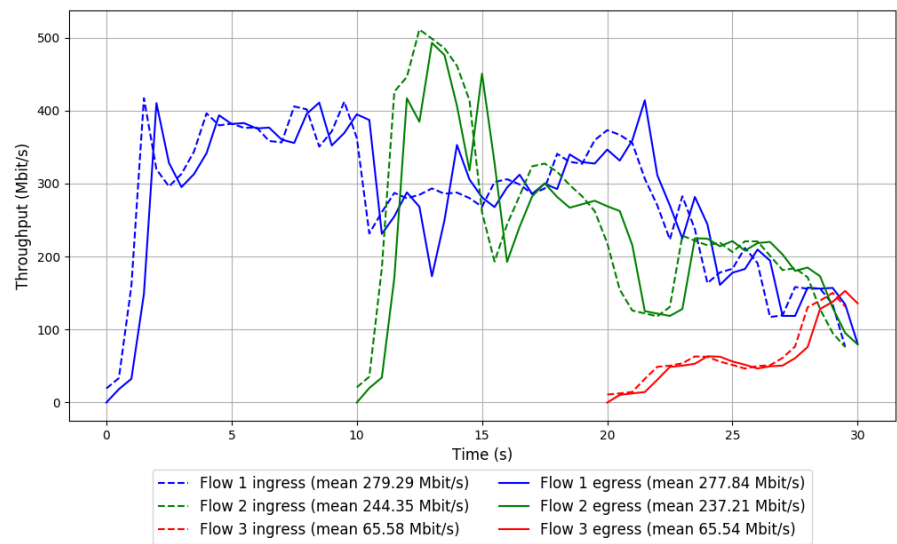


Run 4: Statistics of PCC-Expr

Start at: 2018-06-05 12:49:13
End at: 2018-06-05 12:49:43
Local clock offset: 0.201 ms
Remote clock offset: -0.538 ms

Below is generated by plot.py at 2018-06-05 17:22:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 457.22 Mbit/s
95th percentile per-packet one-way delay: 197.642 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 277.84 Mbit/s
95th percentile per-packet one-way delay: 101.503 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 237.21 Mbit/s
95th percentile per-packet one-way delay: 217.354 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 65.54 Mbit/s
95th percentile per-packet one-way delay: 19.739 ms
Loss rate: 0.05%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-06-05 13:14:54

End at: 2018-06-05 13:15:24

Local clock offset: 0.289 ms

Remote clock offset: 0.1 ms

Below is generated by plot.py at 2018-06-05 17:22:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 473.58 Mbit/s

95th percentile per-packet one-way delay: 202.888 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 260.62 Mbit/s

95th percentile per-packet one-way delay: 203.055 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 259.00 Mbit/s

95th percentile per-packet one-way delay: 217.418 ms

Loss rate: 2.81%

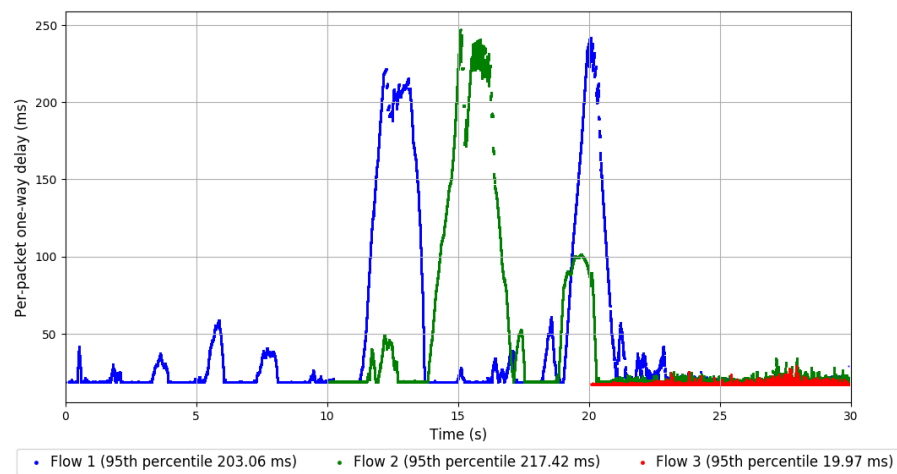
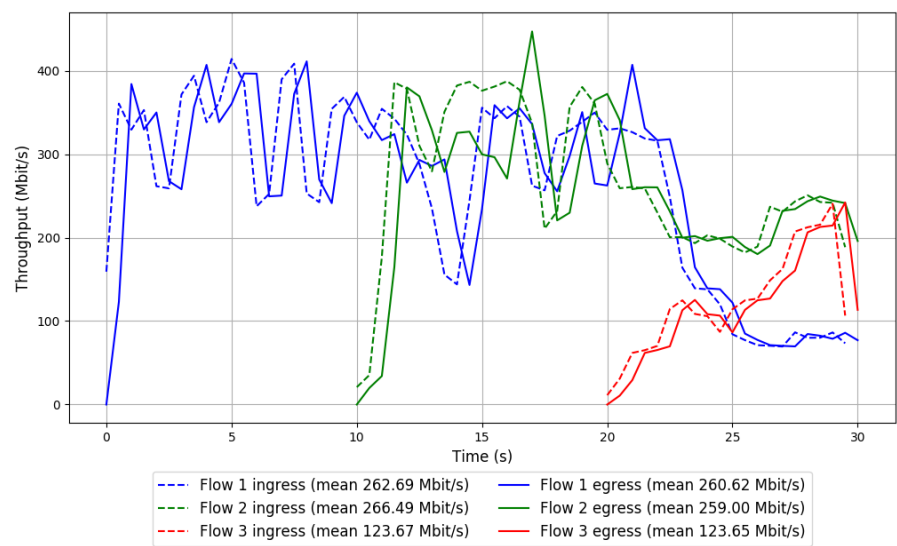
-- Flow 3:

Average throughput: 123.65 Mbit/s

95th percentile per-packet one-way delay: 19.970 ms

Loss rate: 0.01%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-06-05 13:40:21

End at: 2018-06-05 13:40:51

Local clock offset: 0.294 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2018-06-05 17:23:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 483.34 Mbit/s

95th percentile per-packet one-way delay: 177.298 ms

Loss rate: 2.51%

-- Flow 1:

Average throughput: 272.45 Mbit/s

95th percentile per-packet one-way delay: 203.118 ms

Loss rate: 4.36%

-- Flow 2:

Average throughput: 259.60 Mbit/s

95th percentile per-packet one-way delay: 43.828 ms

Loss rate: 0.01%

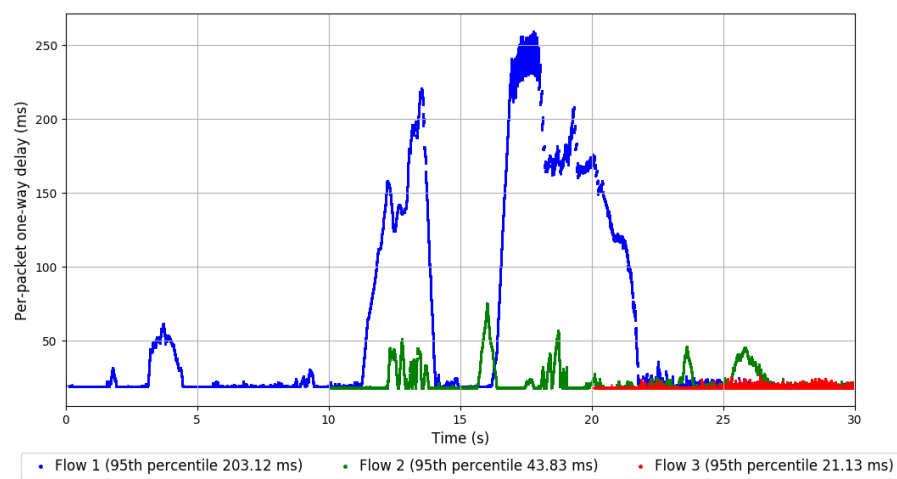
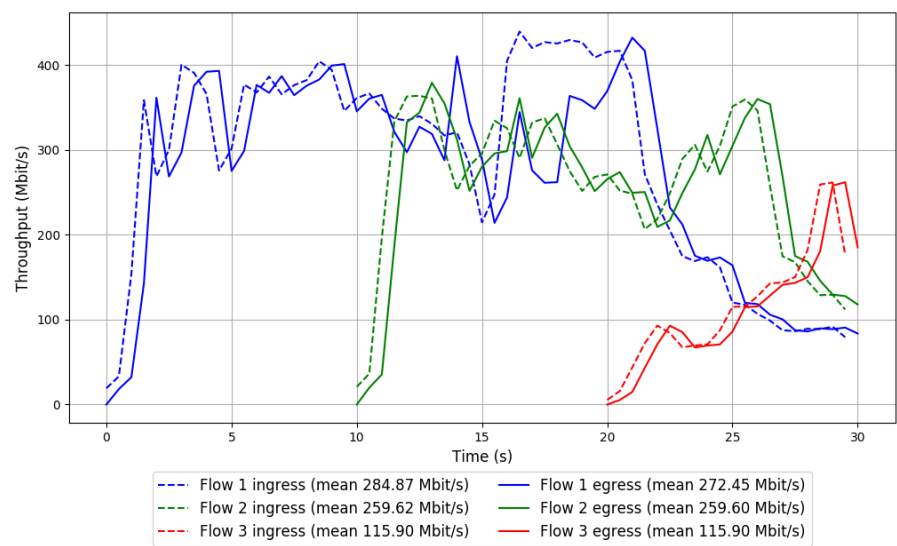
-- Flow 3:

Average throughput: 115.90 Mbit/s

95th percentile per-packet one-way delay: 21.134 ms

Loss rate: 0.00%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-06-05 14:06:08

End at: 2018-06-05 14:06:38

Local clock offset: 0.364 ms

Remote clock offset: 0.053 ms

Below is generated by plot.py at 2018-06-05 17:30:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 476.66 Mbit/s

95th percentile per-packet one-way delay: 135.457 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 305.15 Mbit/s

95th percentile per-packet one-way delay: 152.914 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 234.94 Mbit/s

95th percentile per-packet one-way delay: 48.518 ms

Loss rate: 0.00%

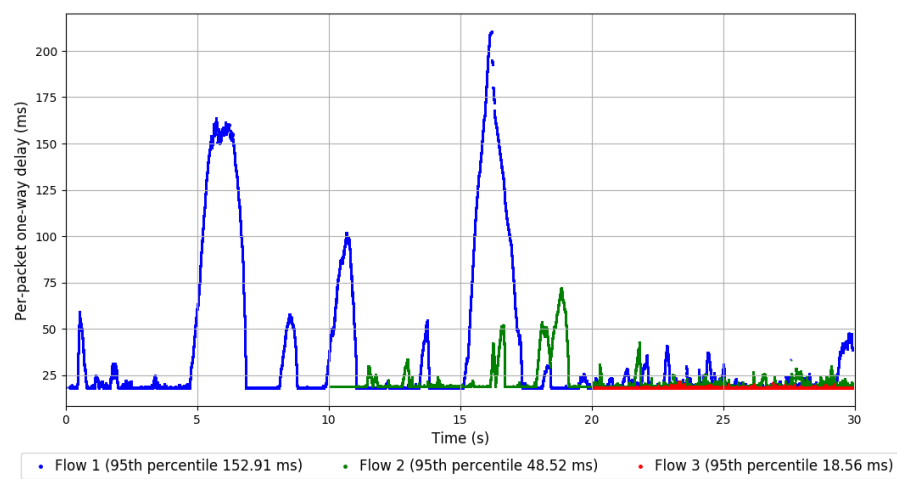
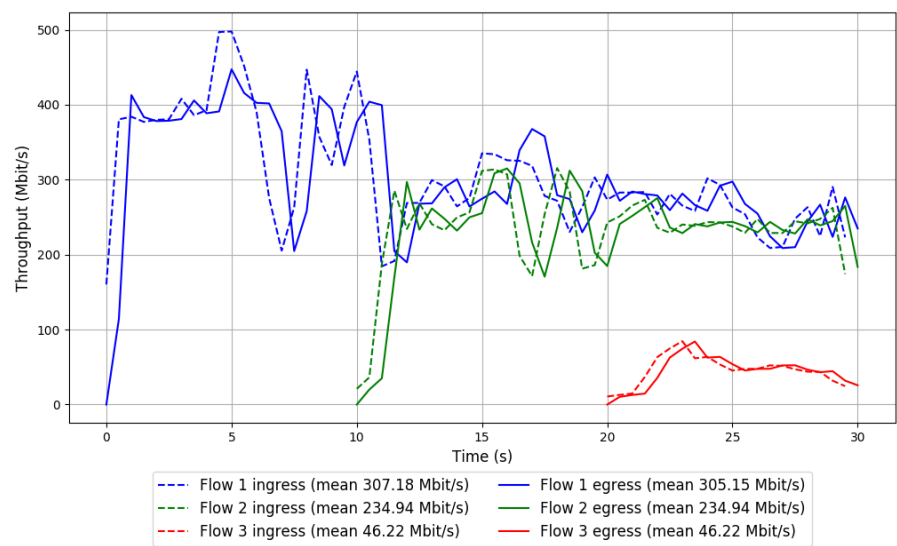
-- Flow 3:

Average throughput: 46.22 Mbit/s

95th percentile per-packet one-way delay: 18.563 ms

Loss rate: 0.00%

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-06-05 14:31:32

End at: 2018-06-05 14:32:02

Local clock offset: 0.3 ms

Remote clock offset: 0.181 ms

Below is generated by plot.py at 2018-06-05 17:30:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 443.77 Mbit/s

95th percentile per-packet one-way delay: 81.529 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 294.34 Mbit/s

95th percentile per-packet one-way delay: 82.117 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 177.90 Mbit/s

95th percentile per-packet one-way delay: 88.605 ms

Loss rate: 0.00%

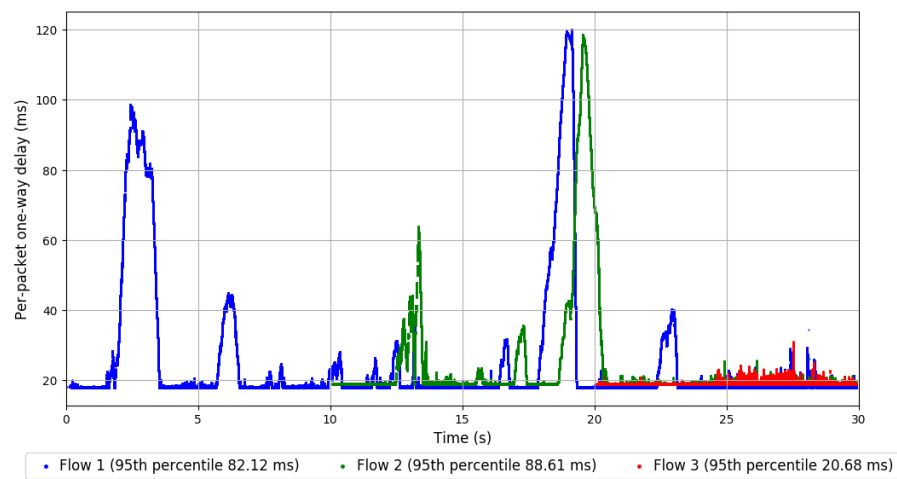
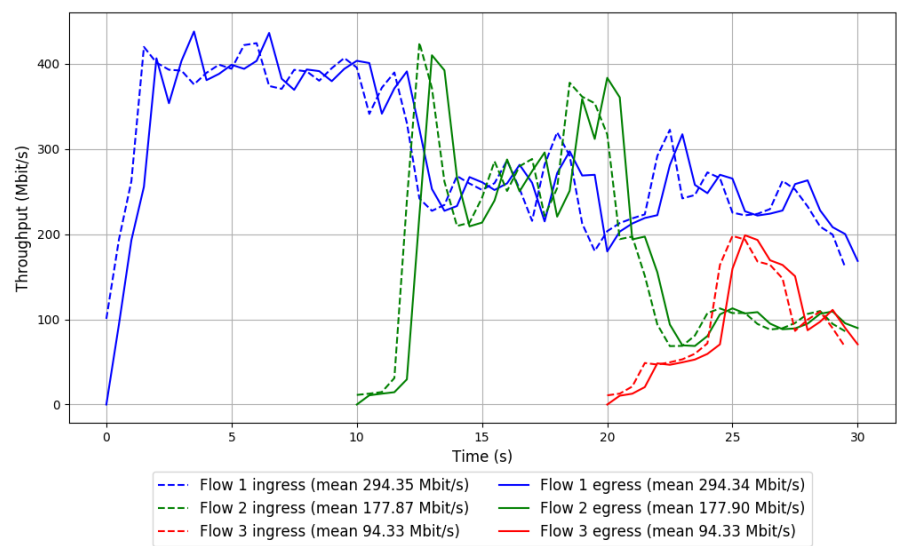
-- Flow 3:

Average throughput: 94.33 Mbit/s

95th percentile per-packet one-way delay: 20.683 ms

Loss rate: 0.00%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-06-05 14:57:23

End at: 2018-06-05 14:57:53

Local clock offset: 0.268 ms

Remote clock offset: 0.106 ms

Below is generated by plot.py at 2018-06-05 17:30:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 474.84 Mbit/s

95th percentile per-packet one-way delay: 182.617 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 281.20 Mbit/s

95th percentile per-packet one-way delay: 130.745 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 265.20 Mbit/s

95th percentile per-packet one-way delay: 215.100 ms

Loss rate: 1.55%

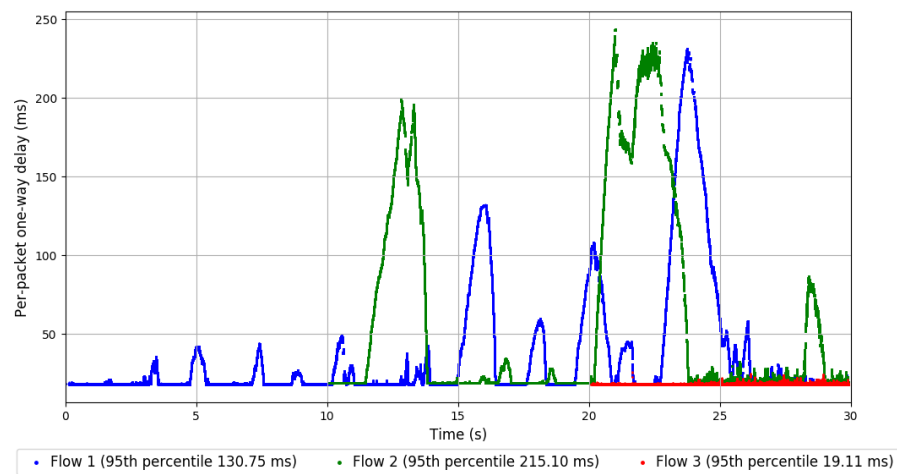
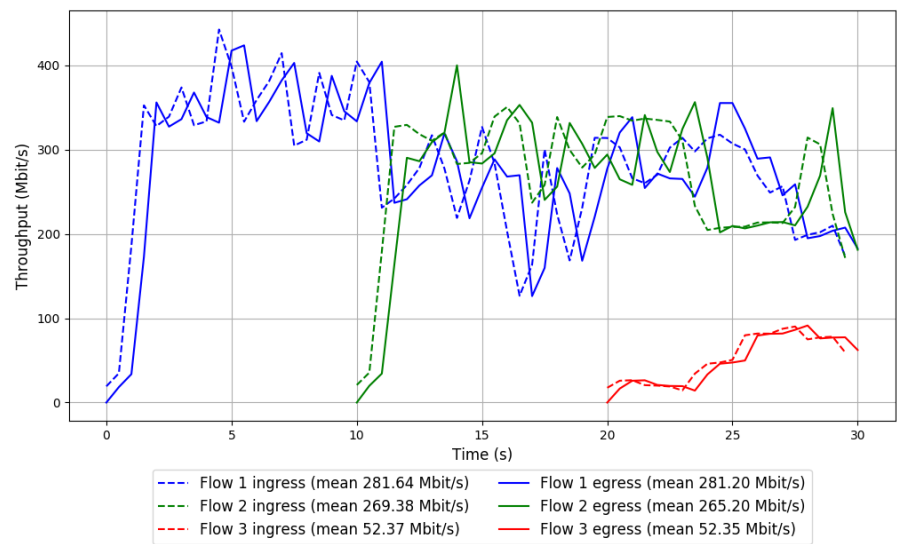
-- Flow 3:

Average throughput: 52.35 Mbit/s

95th percentile per-packet one-way delay: 19.114 ms

Loss rate: 0.03%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-06-05 15:22:58

End at: 2018-06-05 15:23:28

Local clock offset: 0.417 ms

Remote clock offset: 0.206 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 471.90 Mbit/s

95th percentile per-packet one-way delay: 140.232 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 282.75 Mbit/s

95th percentile per-packet one-way delay: 98.095 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 203.65 Mbit/s

95th percentile per-packet one-way delay: 187.340 ms

Loss rate: 0.14%

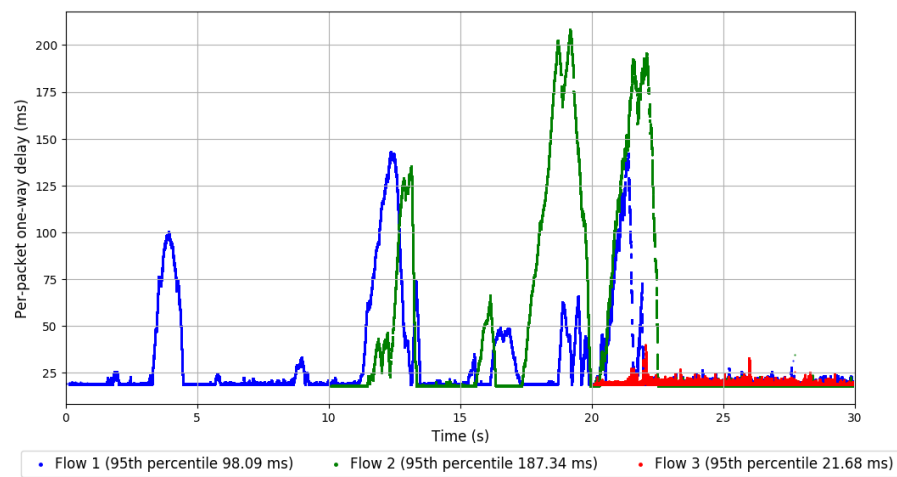
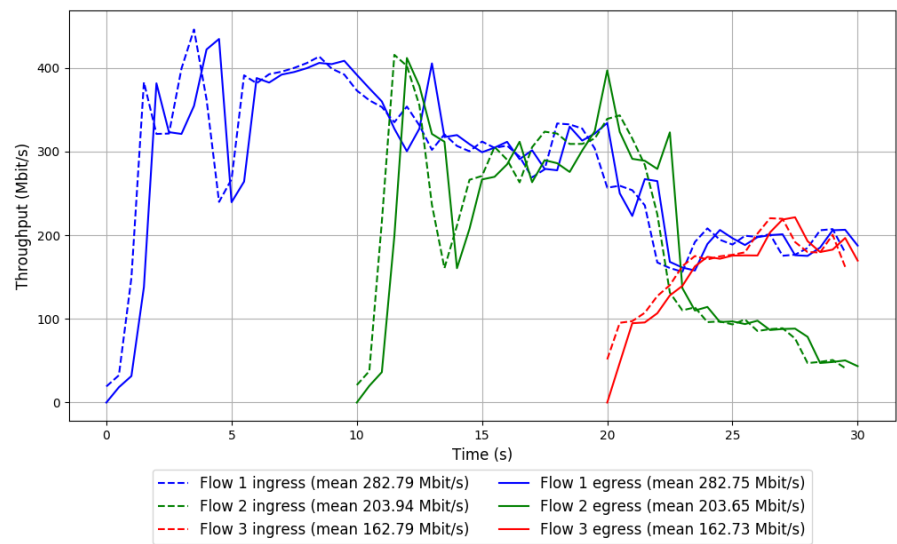
-- Flow 3:

Average throughput: 162.73 Mbit/s

95th percentile per-packet one-way delay: 21.680 ms

Loss rate: 0.03%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-06-05 11:41:38

End at: 2018-06-05 11:42:08

Local clock offset: 0.134 ms

Remote clock offset: 0.345 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.24 Mbit/s

95th percentile per-packet one-way delay: 19.037 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 18.131 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 19.054 ms

Loss rate: 0.01%

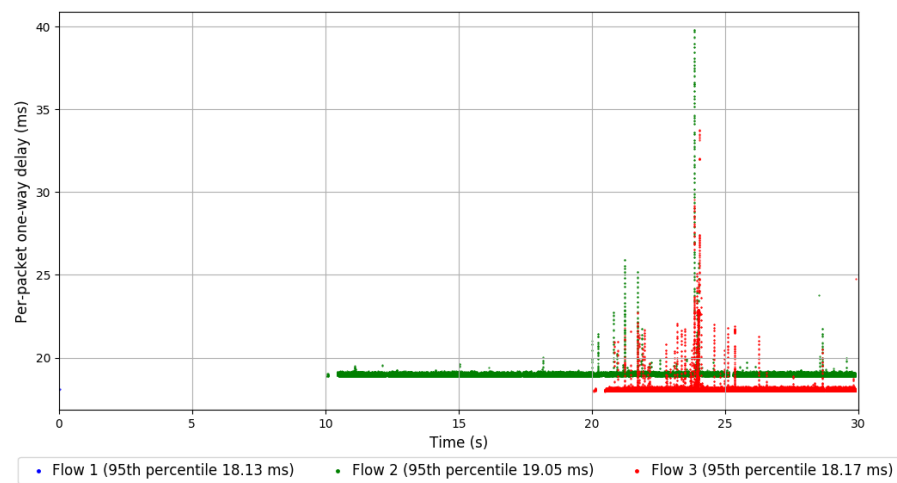
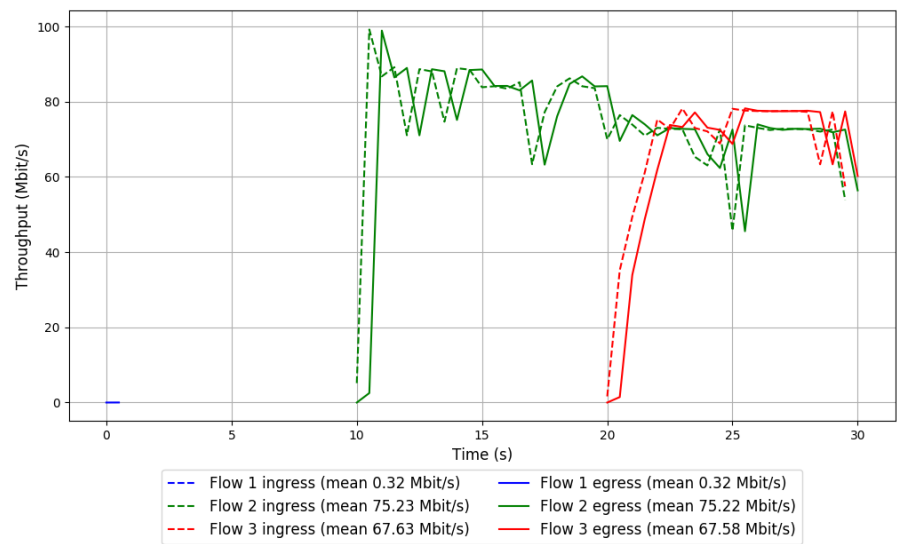
-- Flow 3:

Average throughput: 67.58 Mbit/s

95th percentile per-packet one-way delay: 18.174 ms

Loss rate: 0.01%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-06-05 12:07:33

End at: 2018-06-05 12:08:03

Local clock offset: 0.259 ms

Remote clock offset: 0.356 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.81 Mbit/s

95th percentile per-packet one-way delay: 19.809 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.68 Mbit/s

95th percentile per-packet one-way delay: 18.092 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.53 Mbit/s

95th percentile per-packet one-way delay: 19.598 ms

Loss rate: 0.01%

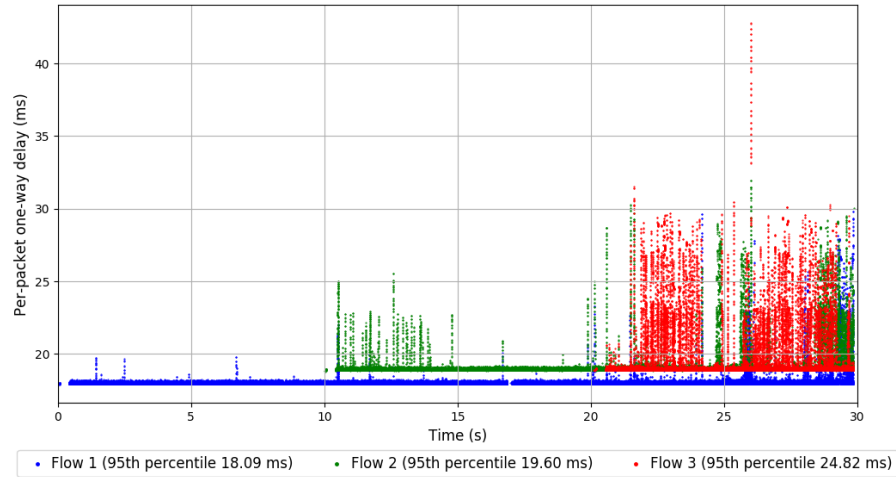
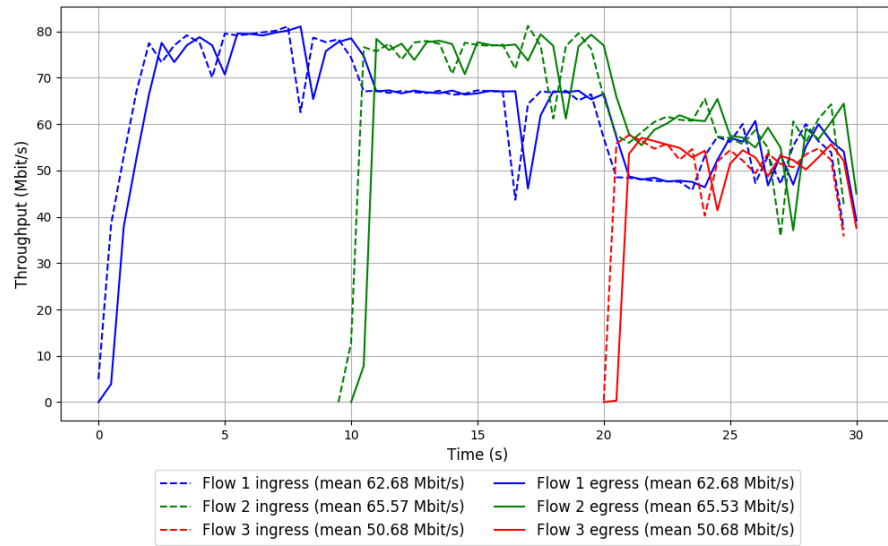
-- Flow 3:

Average throughput: 50.68 Mbit/s

95th percentile per-packet one-way delay: 24.821 ms

Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link

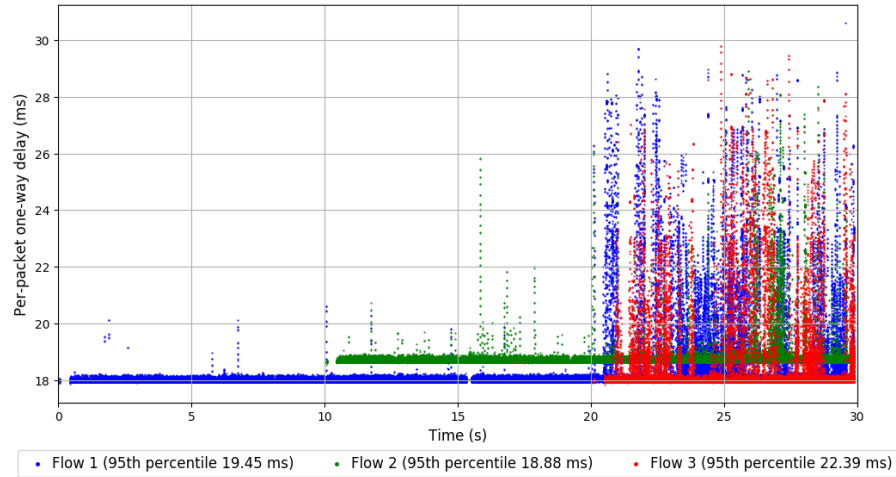
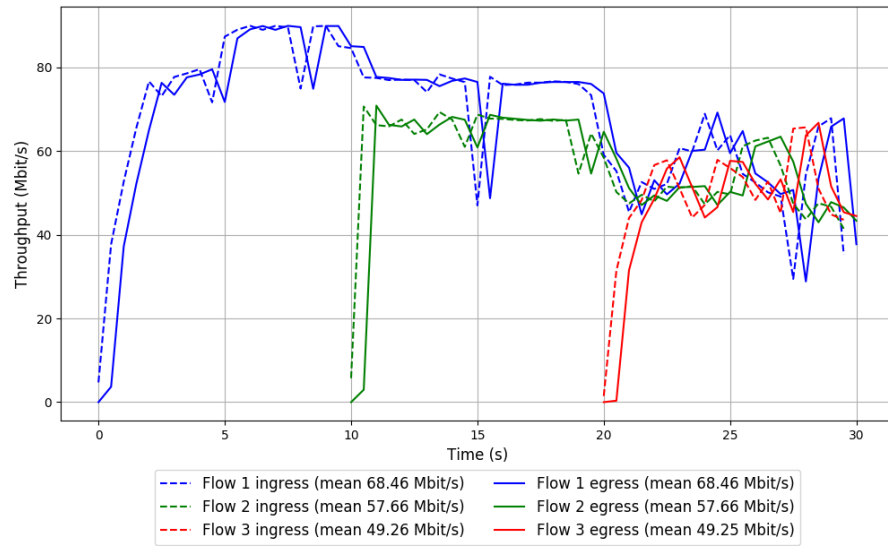


Run 3: Statistics of QUIC Cubic

Start at: 2018-06-05 12:33:01
End at: 2018-06-05 12:33:31
Local clock offset: 0.279 ms
Remote clock offset: -0.361 ms

Below is generated by plot.py at 2018-06-05 17:31:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 122.95 Mbit/s
95th percentile per-packet one-way delay: 19.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.46 Mbit/s
95th percentile per-packet one-way delay: 19.448 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.66 Mbit/s
95th percentile per-packet one-way delay: 18.876 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.25 Mbit/s
95th percentile per-packet one-way delay: 22.391 ms
Loss rate: 0.02%

Run 3: Report of QUIC Cubic — Data Link

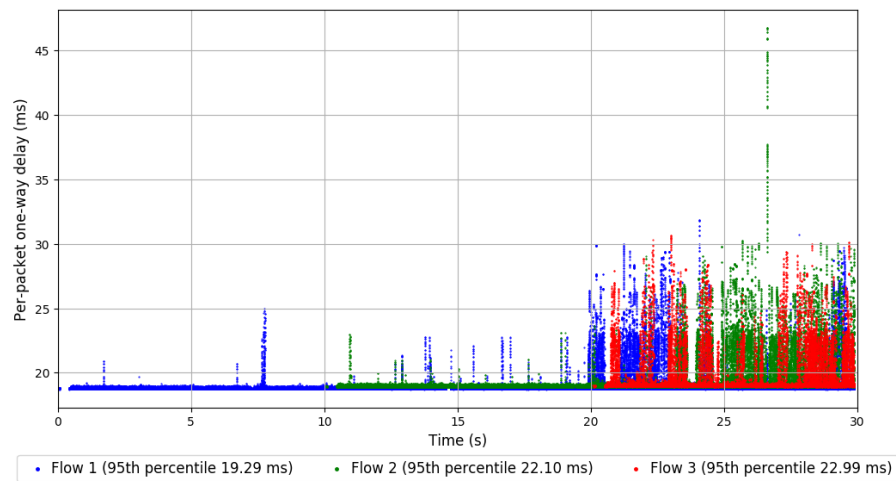
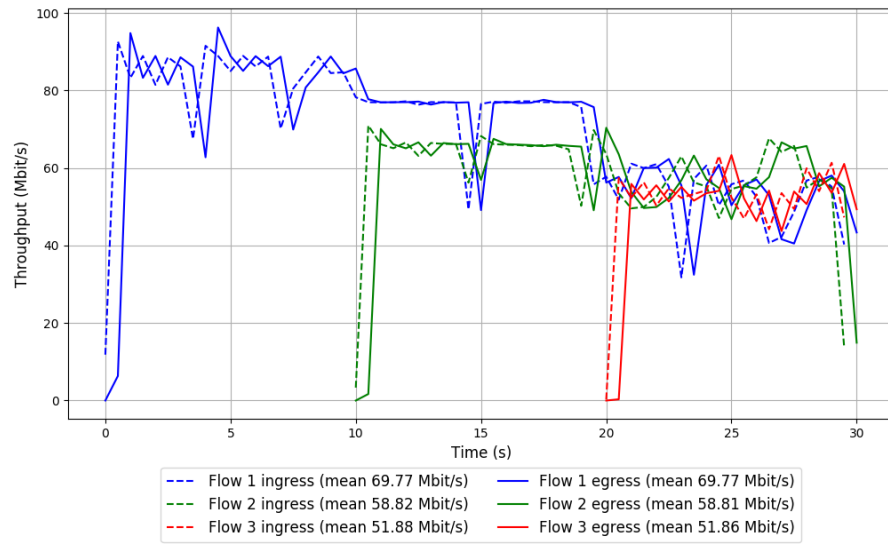


Run 4: Statistics of QUIC Cubic

Start at: 2018-06-05 12:58:33
End at: 2018-06-05 12:59:03
Local clock offset: 0.173 ms
Remote clock offset: -0.193 ms

Below is generated by plot.py at 2018-06-05 17:31:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 125.83 Mbit/s
95th percentile per-packet one-way delay: 21.290 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 69.77 Mbit/s
95th percentile per-packet one-way delay: 19.290 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.81 Mbit/s
95th percentile per-packet one-way delay: 22.099 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 51.86 Mbit/s
95th percentile per-packet one-way delay: 22.987 ms
Loss rate: 0.04%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-06-05 13:24:13

End at: 2018-06-05 13:24:43

Local clock offset: 0.208 ms

Remote clock offset: 0.297 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.20 Mbit/s

95th percentile per-packet one-way delay: 19.177 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.83 Mbit/s

95th percentile per-packet one-way delay: 17.530 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.08 Mbit/s

95th percentile per-packet one-way delay: 20.223 ms

Loss rate: 0.00%

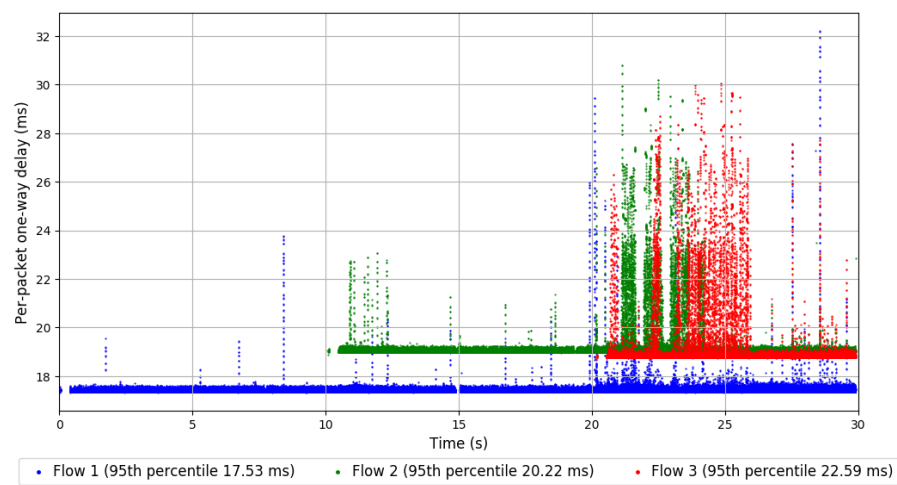
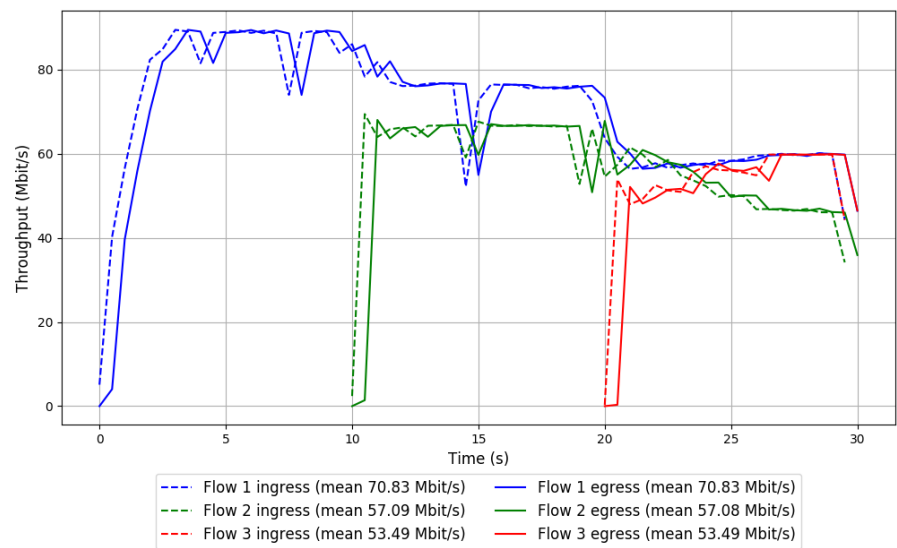
-- Flow 3:

Average throughput: 53.49 Mbit/s

95th percentile per-packet one-way delay: 22.586 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-06-05 13:49:41

End at: 2018-06-05 13:50:11

Local clock offset: 0.341 ms

Remote clock offset: -0.05 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.51 Mbit/s

95th percentile per-packet one-way delay: 19.427 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 66.97 Mbit/s

95th percentile per-packet one-way delay: 19.039 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.49 Mbit/s

95th percentile per-packet one-way delay: 19.784 ms

Loss rate: 0.01%

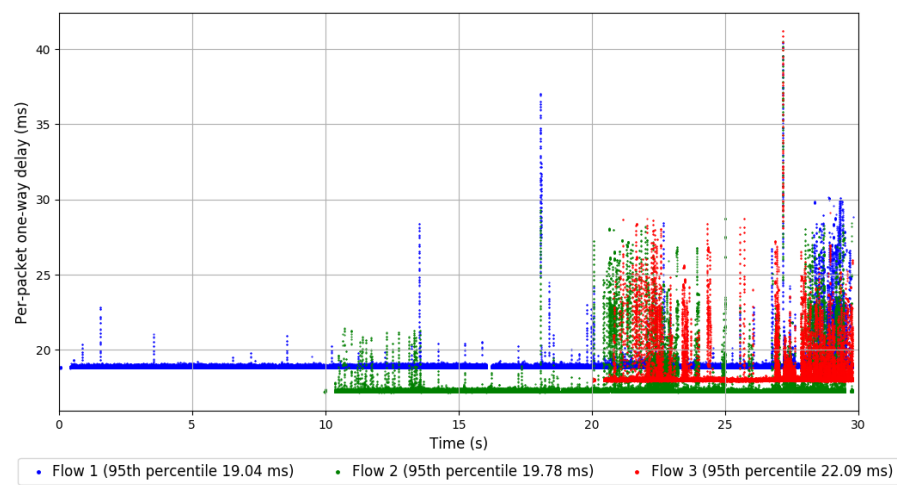
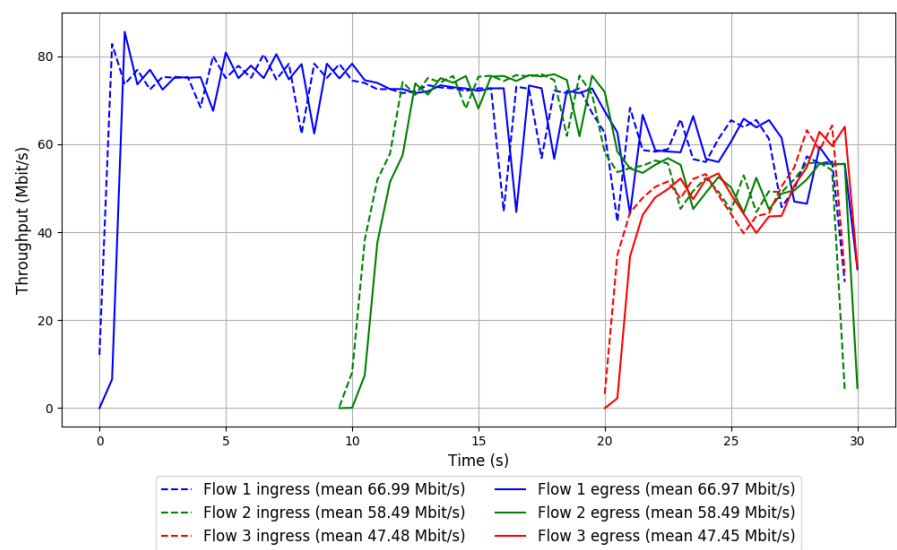
-- Flow 3:

Average throughput: 47.45 Mbit/s

95th percentile per-packet one-way delay: 22.093 ms

Loss rate: 0.05%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-05 14:15:28

End at: 2018-06-05 14:15:58

Local clock offset: 0.374 ms

Remote clock offset: 0.02 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.61 Mbit/s

95th percentile per-packet one-way delay: 21.936 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 65.50 Mbit/s

95th percentile per-packet one-way delay: 21.507 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.54 Mbit/s

95th percentile per-packet one-way delay: 21.780 ms

Loss rate: 0.01%

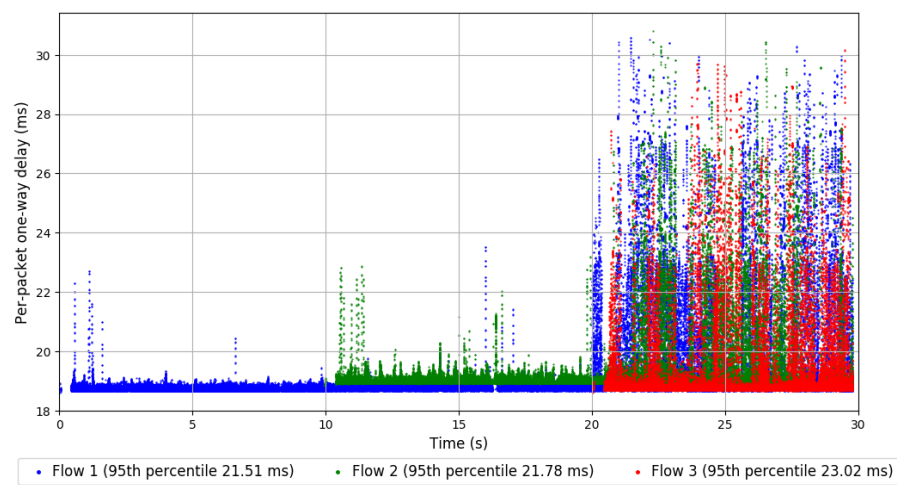
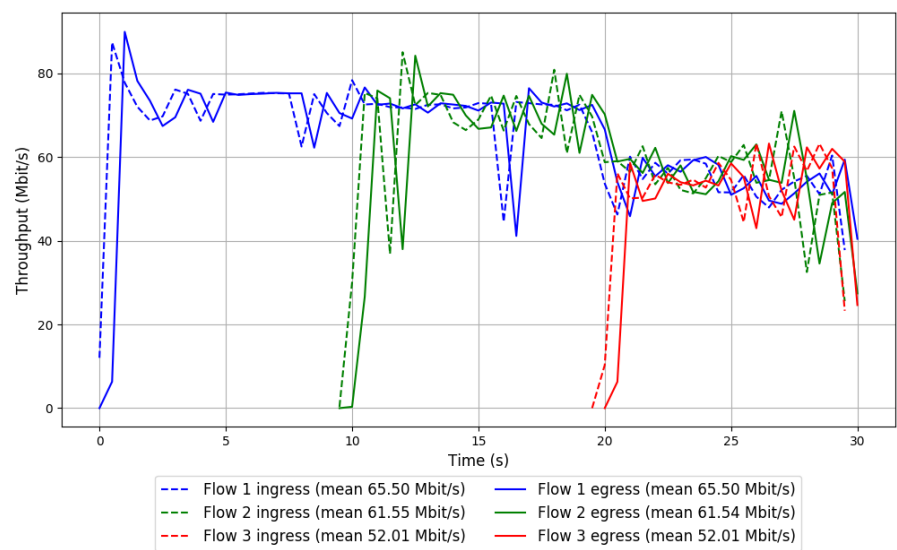
-- Flow 3:

Average throughput: 52.01 Mbit/s

95th percentile per-packet one-way delay: 23.025 ms

Loss rate: 0.01%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-06-05 14:40:53

End at: 2018-06-05 14:41:23

Local clock offset: 0.115 ms

Remote clock offset: 0.023 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.98 Mbit/s

95th percentile per-packet one-way delay: 19.187 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.60 Mbit/s

95th percentile per-packet one-way delay: 19.113 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.59 Mbit/s

95th percentile per-packet one-way delay: 19.979 ms

Loss rate: 0.00%

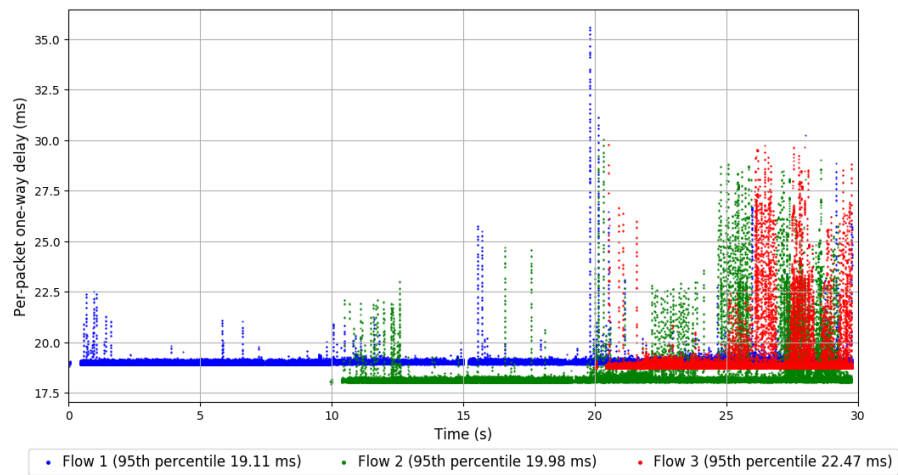
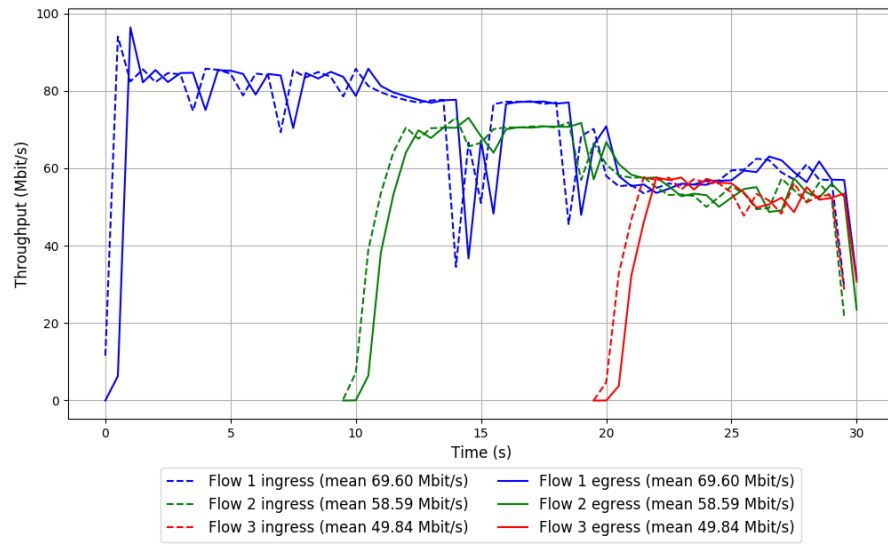
-- Flow 3:

Average throughput: 49.84 Mbit/s

95th percentile per-packet one-way delay: 22.474 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-06-05 15:06:47

End at: 2018-06-05 15:07:17

Local clock offset: 0.365 ms

Remote clock offset: 0.129 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.01 Mbit/s

95th percentile per-packet one-way delay: 19.697 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.61 Mbit/s

95th percentile per-packet one-way delay: 18.776 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.10 Mbit/s

95th percentile per-packet one-way delay: 19.256 ms

Loss rate: 0.00%

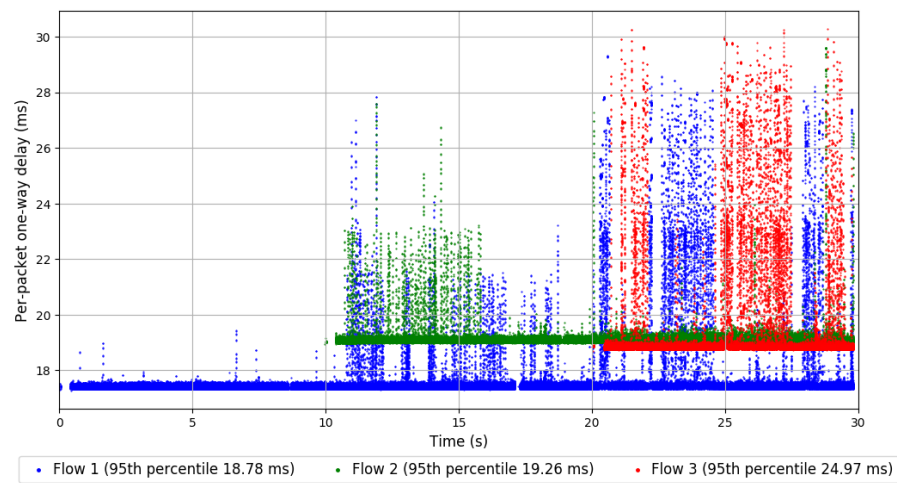
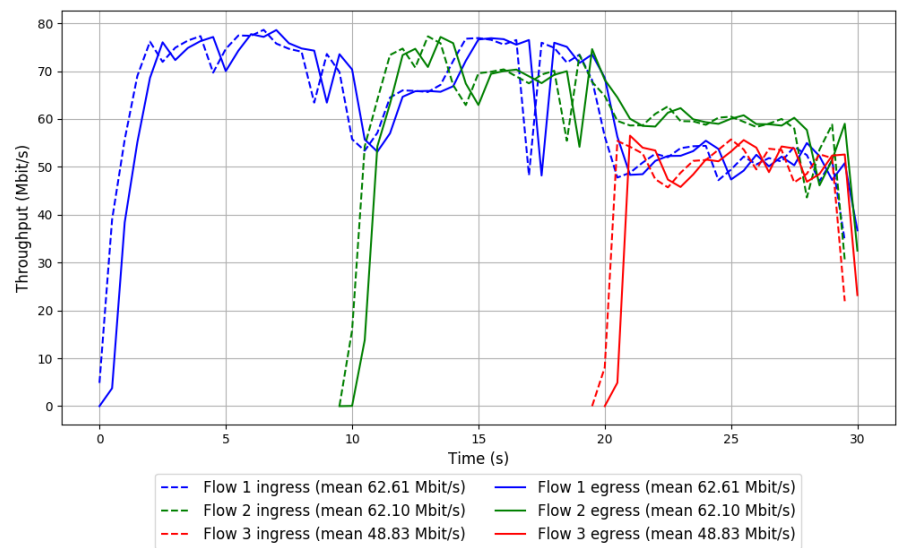
-- Flow 3:

Average throughput: 48.83 Mbit/s

95th percentile per-packet one-way delay: 24.971 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-06-05 15:32:19

End at: 2018-06-05 15:32:49

Local clock offset: 0.176 ms

Remote clock offset: 0.229 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.17 Mbit/s

95th percentile per-packet one-way delay: 18.864 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.71 Mbit/s

95th percentile per-packet one-way delay: 17.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.02 Mbit/s

95th percentile per-packet one-way delay: 18.255 ms

Loss rate: 0.00%

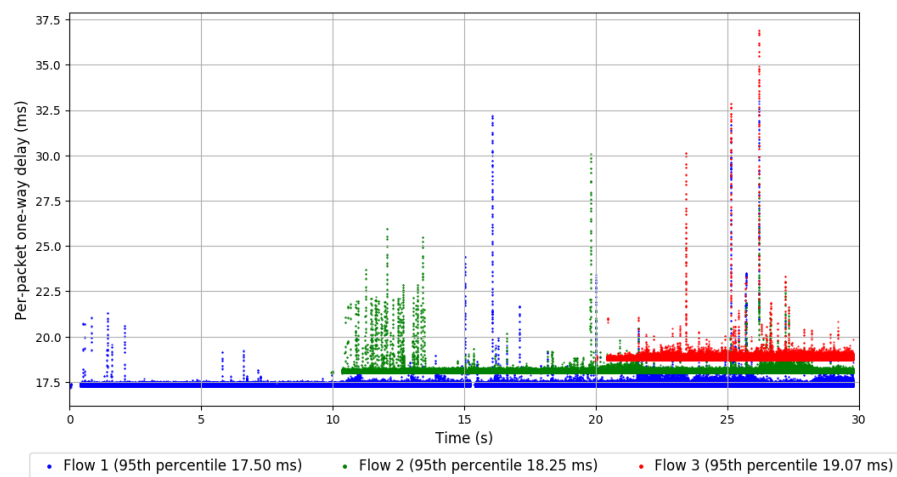
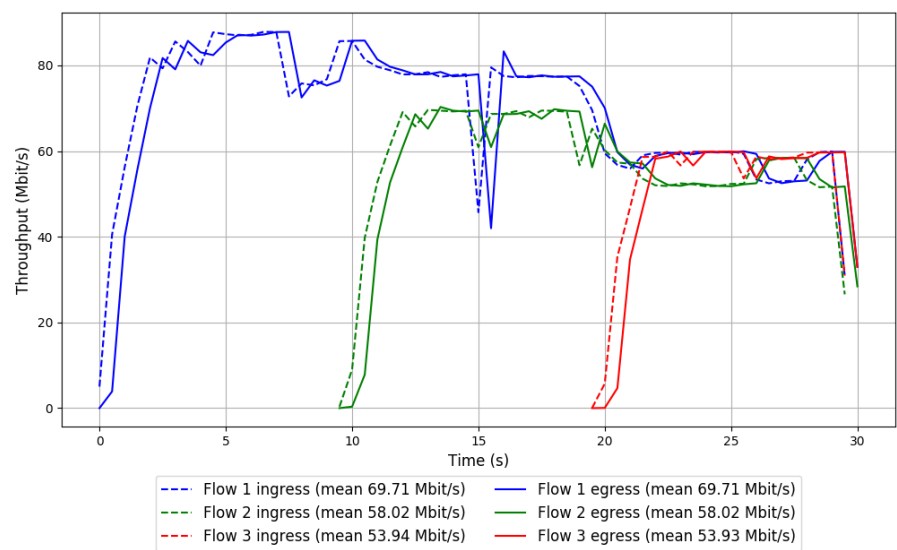
-- Flow 3:

Average throughput: 53.93 Mbit/s

95th percentile per-packet one-way delay: 19.067 ms

Loss rate: 0.02%

Run 10: Report of QUIC Cubic — Data Link

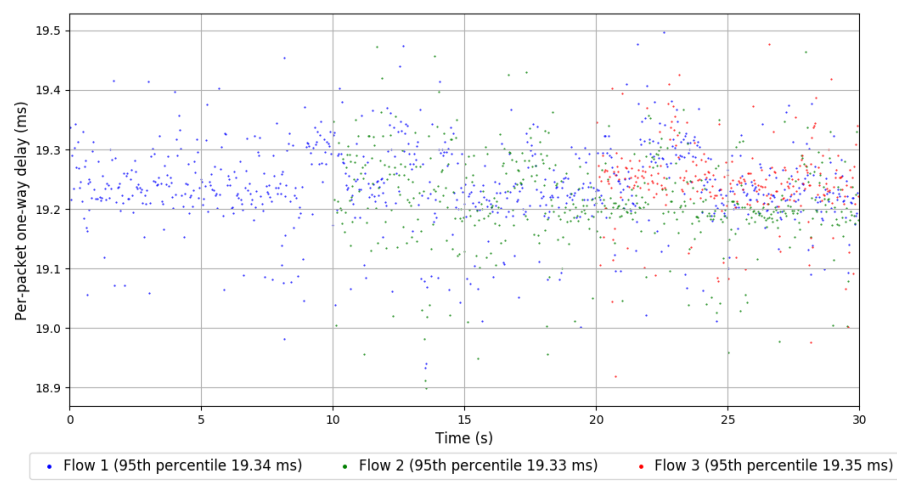
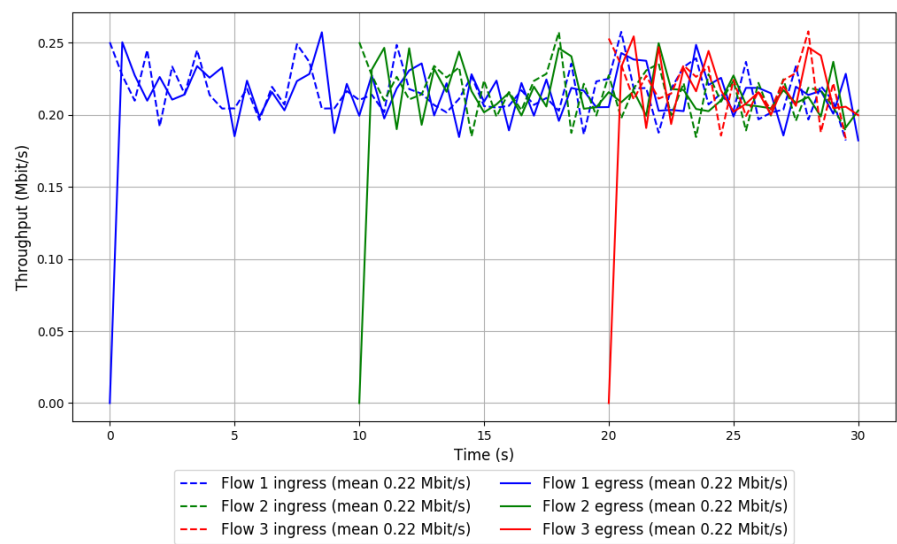


```
Run 1: Statistics of SReAM

Start at: 2018-06-05 11:35:30
End at: 2018-06-05 11:36:00
Local clock offset: 0.158 ms
Remote clock offset: 0.184 ms

# Below is generated by plot.py at 2018-06-05 17:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.342 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.343 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.328 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.347 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

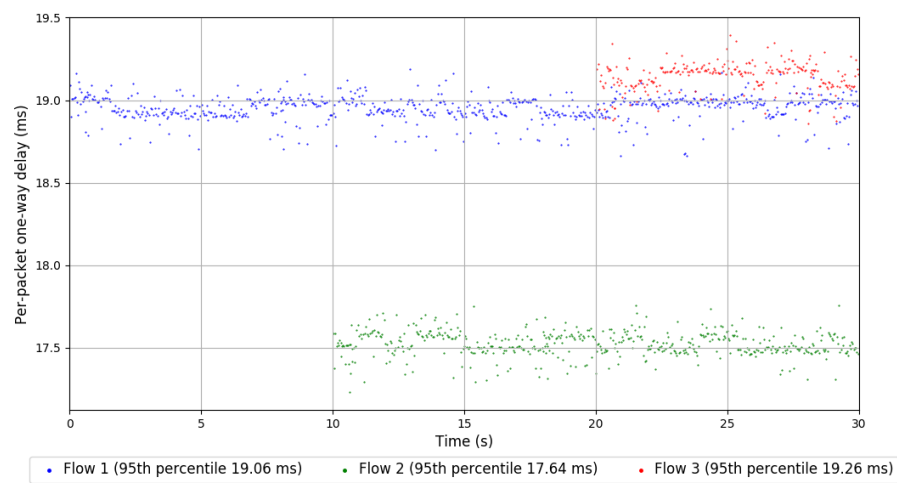
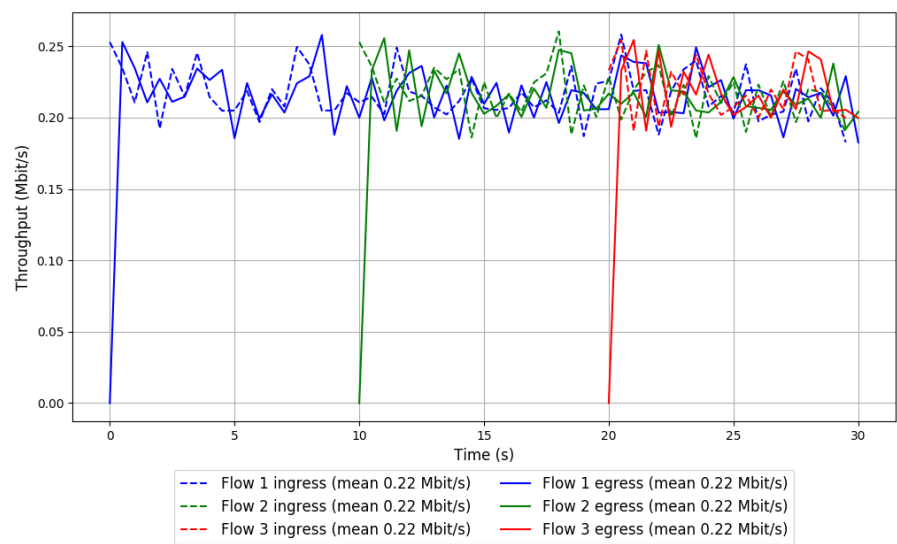


```
Run 2: Statistics of SReAM

Start at: 2018-06-05 12:01:12
End at: 2018-06-05 12:01:42
Local clock offset: 0.258 ms
Remote clock offset: 0.279 ms

# Below is generated by plot.py at 2018-06-05 17:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.186 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.058 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.639 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.256 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

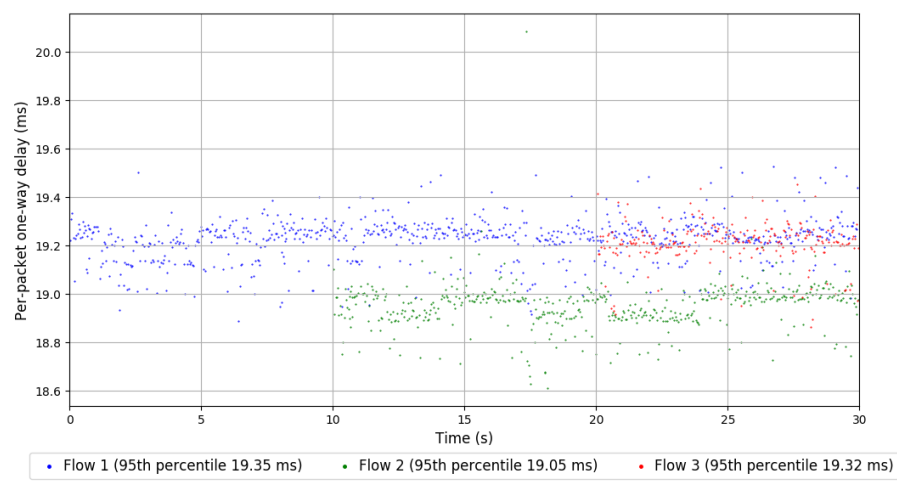
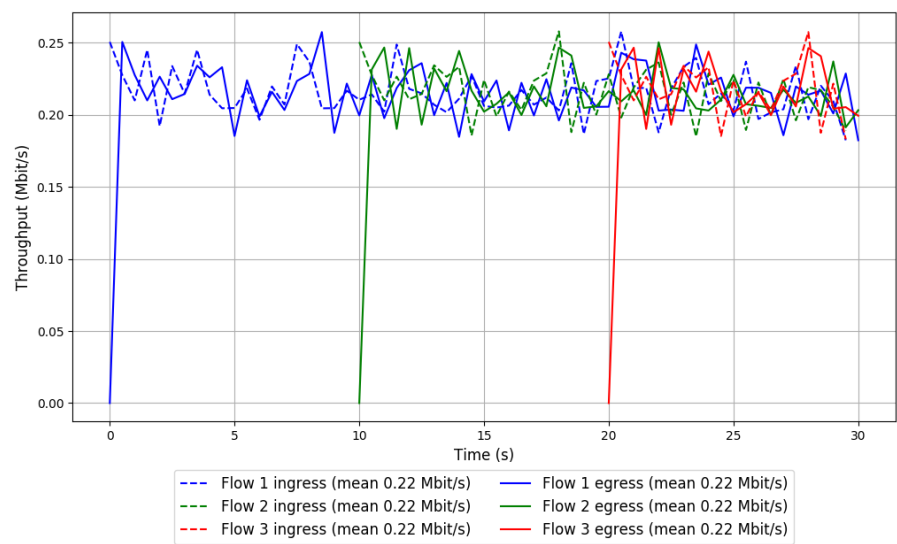


Run 3: Statistics of SReAM

Start at: 2018-06-05 12:26:53
End at: 2018-06-05 12:27:23
Local clock offset: 0.292 ms
Remote clock offset: -0.173 ms

Below is generated by plot.py at 2018-06-05 17:31:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.349 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.052 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.317 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

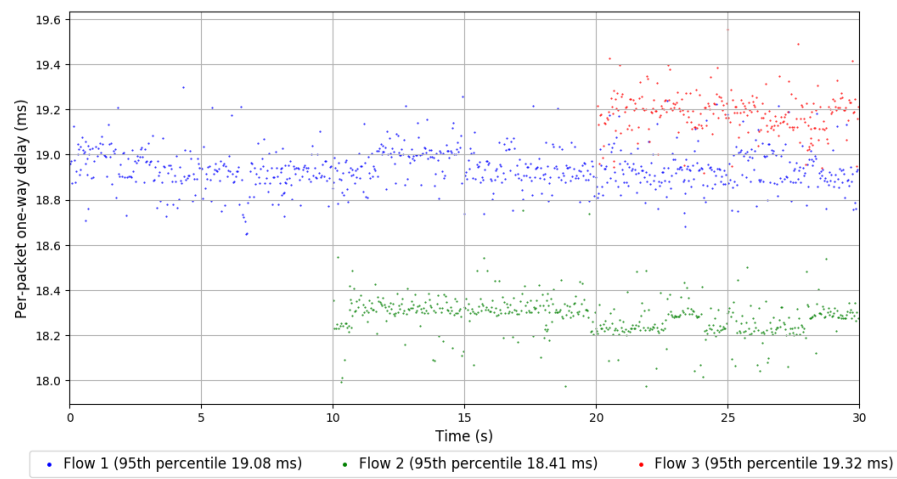
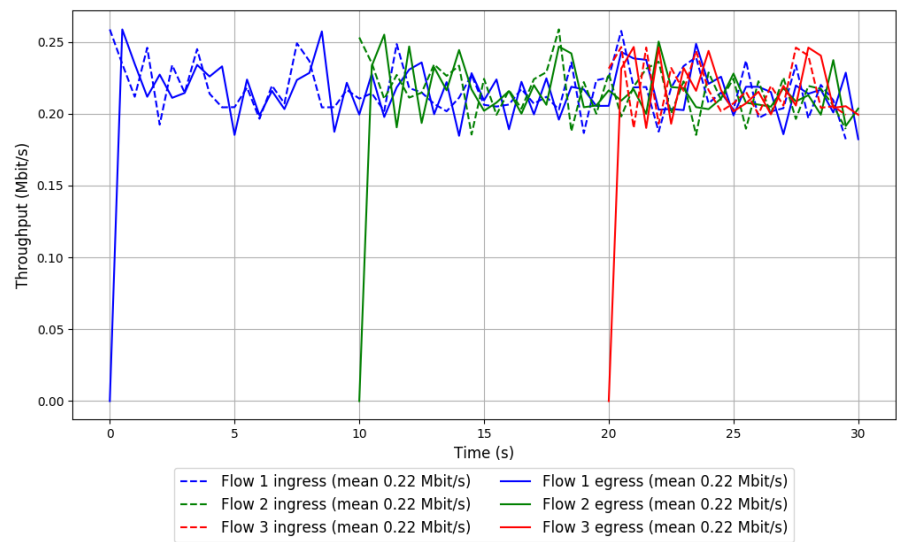


Run 4: Statistics of SReAM

Start at: 2018-06-05 12:52:17
End at: 2018-06-05 12:52:47
Local clock offset: 0.267 ms
Remote clock offset: -0.515 ms

Below is generated by plot.py at 2018-06-05 17:31:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.408 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.325 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-06-05 13:18:00

End at: 2018-06-05 13:18:30

Local clock offset: 0.283 ms

Remote clock offset: 0.212 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.348 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.414 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.450 ms

Loss rate: 0.00%

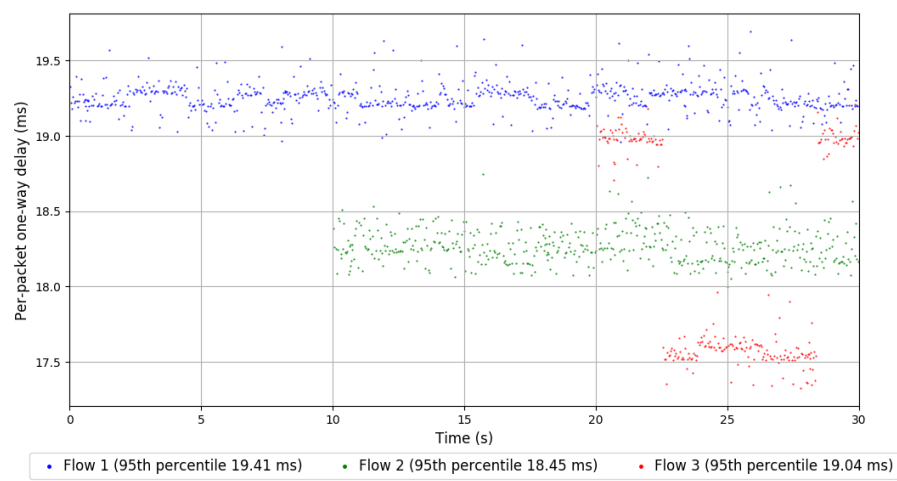
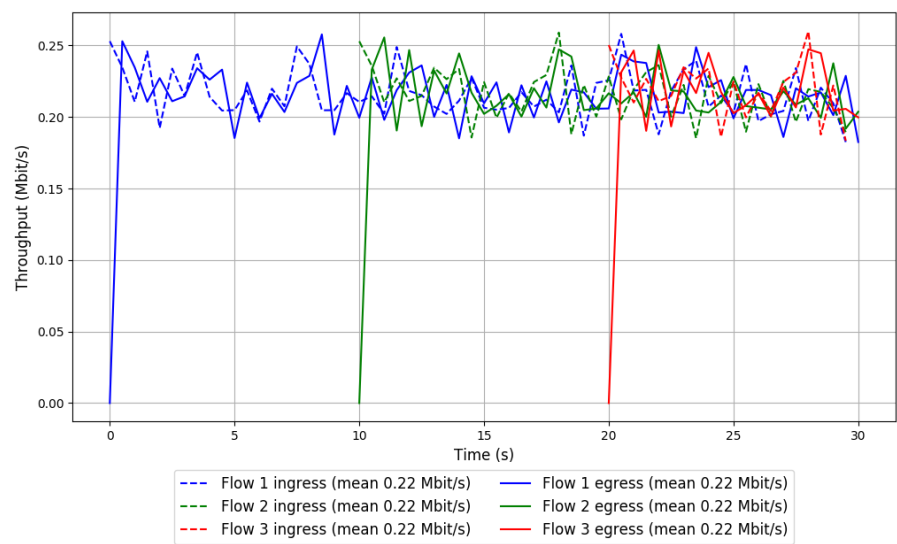
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.042 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-06-05 13:43:28

End at: 2018-06-05 13:43:58

Local clock offset: 0.228 ms

Remote clock offset: 0.039 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.270 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.562 ms

Loss rate: 0.00%

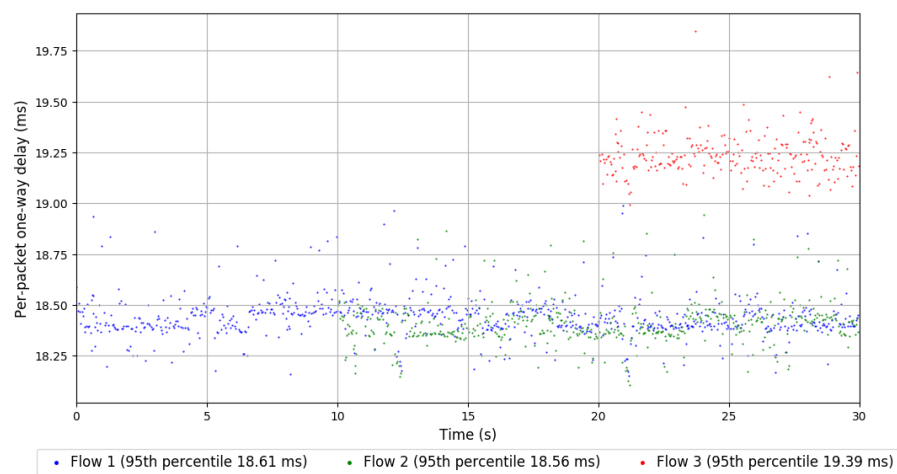
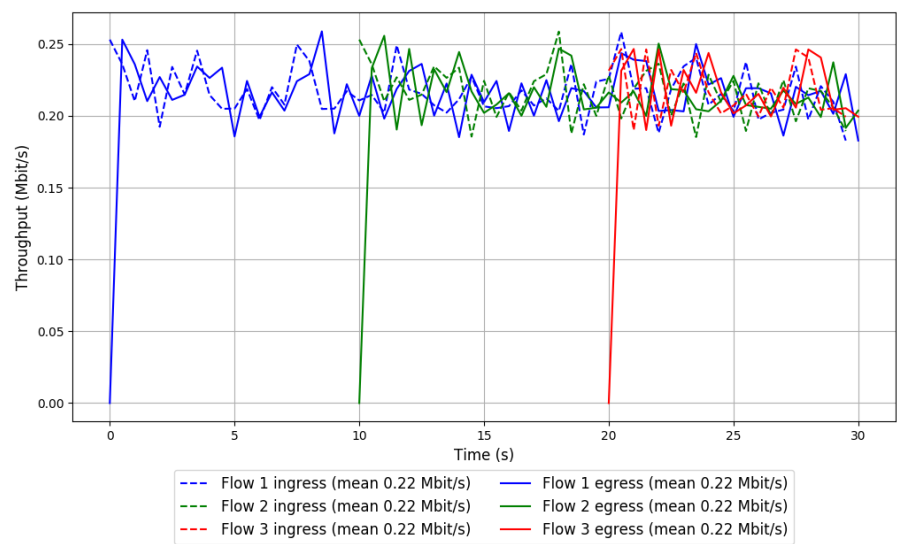
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.394 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

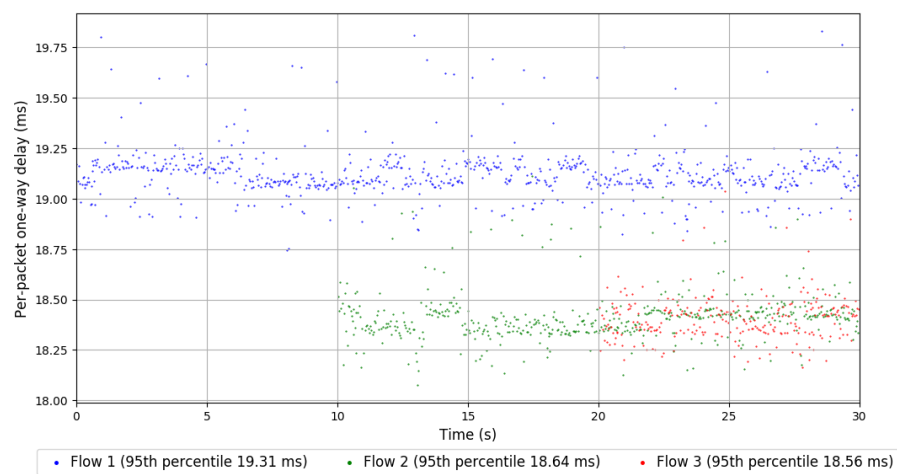
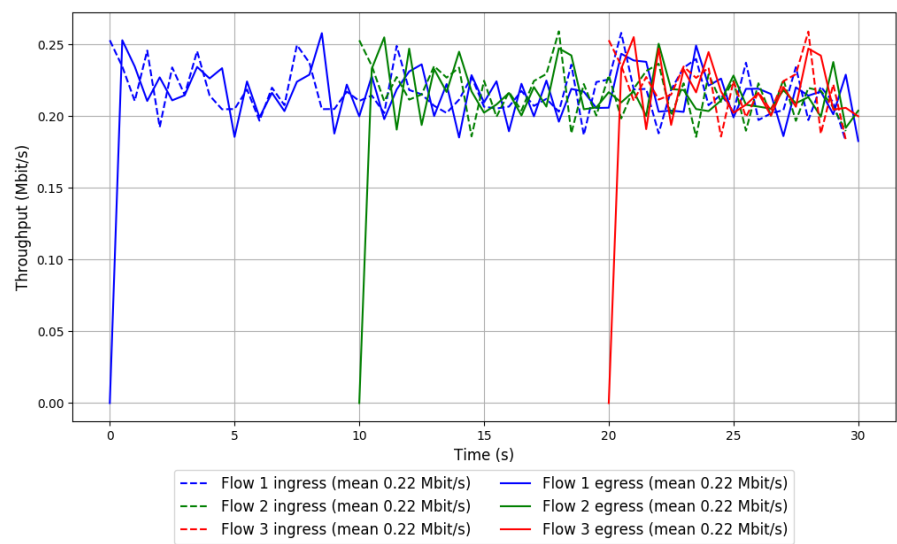


Run 7: Statistics of SReAM

Start at: 2018-06-05 14:09:14
End at: 2018-06-05 14:09:44
Local clock offset: 0.363 ms
Remote clock offset: 0.075 ms

Below is generated by plot.py at 2018-06-05 17:31:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.640 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.556 ms
Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-06-05 14:34:36

End at: 2018-06-05 14:35:06

Local clock offset: 0.274 ms

Remote clock offset: 0.115 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.262 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.215 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.325 ms

Loss rate: 0.00%

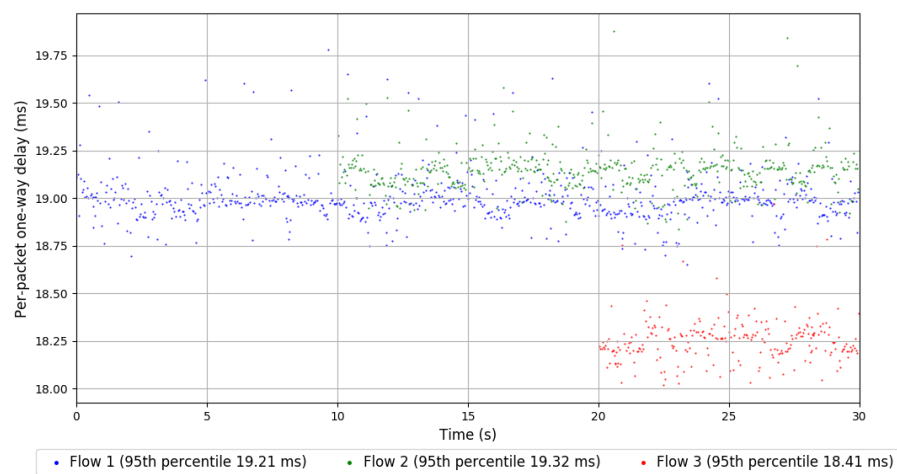
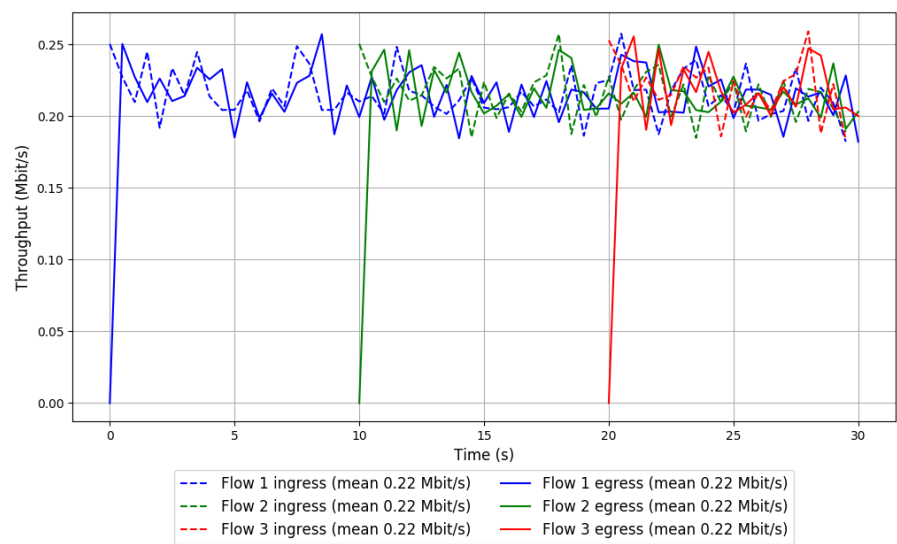
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.411 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-06-05 15:00:31

End at: 2018-06-05 15:01:01

Local clock offset: 0.321 ms

Remote clock offset: 0.113 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.358 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.569 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.660 ms

Loss rate: 0.00%

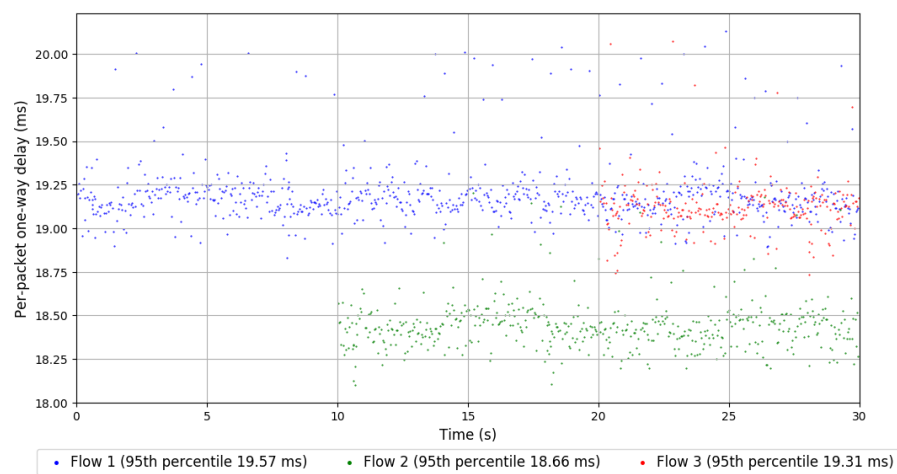
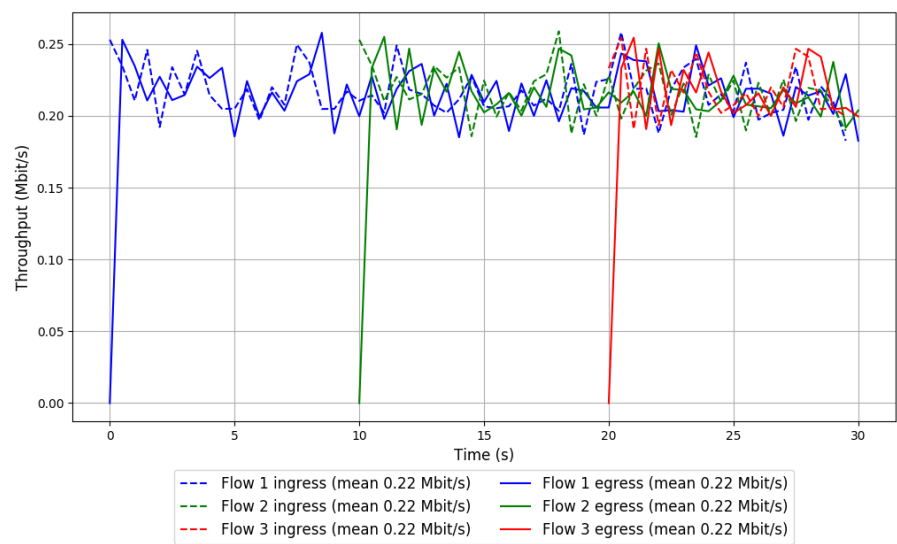
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.309 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-06-05 15:26:04

End at: 2018-06-05 15:26:34

Local clock offset: 0.34 ms

Remote clock offset: 0.225 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.412 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.690 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.238 ms

Loss rate: 0.00%

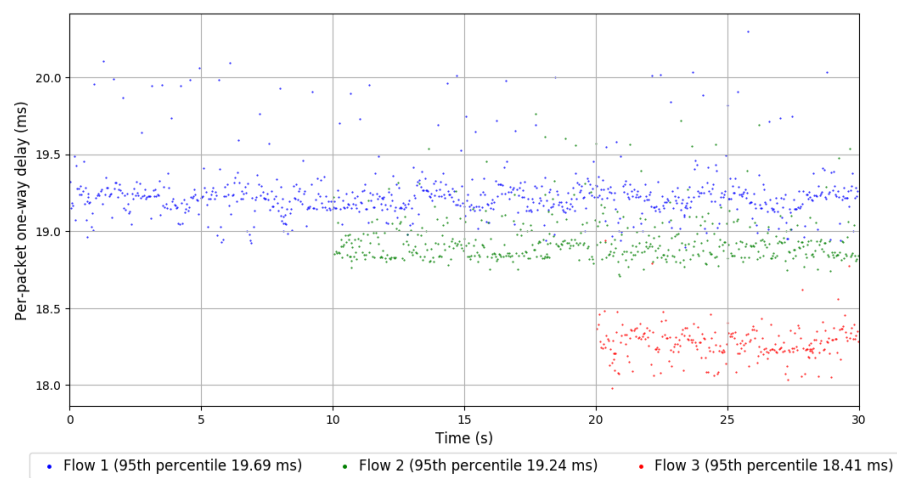
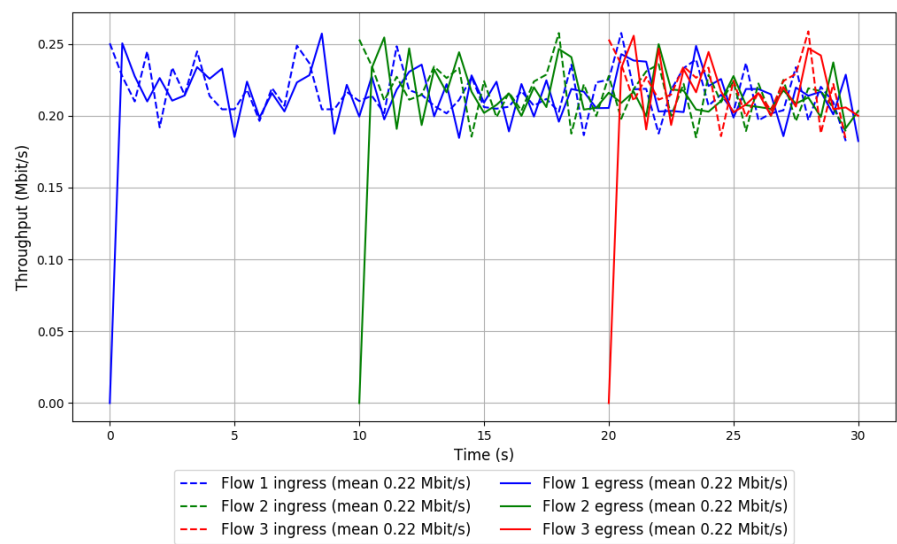
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.414 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-06-05 11:29:16

End at: 2018-06-05 11:29:46

Local clock offset: 0.31 ms

Remote clock offset: 0.051 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.92 Mbit/s

95th percentile per-packet one-way delay: 21.815 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 20.33 Mbit/s

95th percentile per-packet one-way delay: 21.957 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 20.90 Mbit/s

95th percentile per-packet one-way delay: 21.247 ms

Loss rate: 0.00%

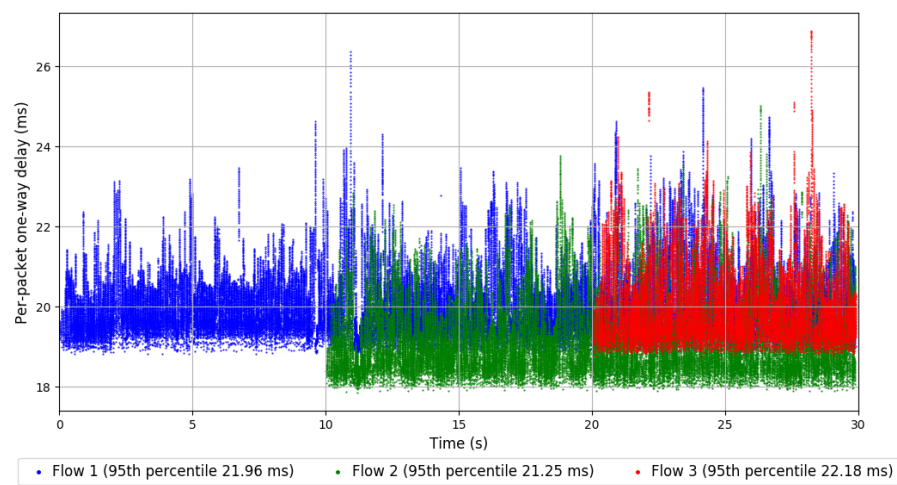
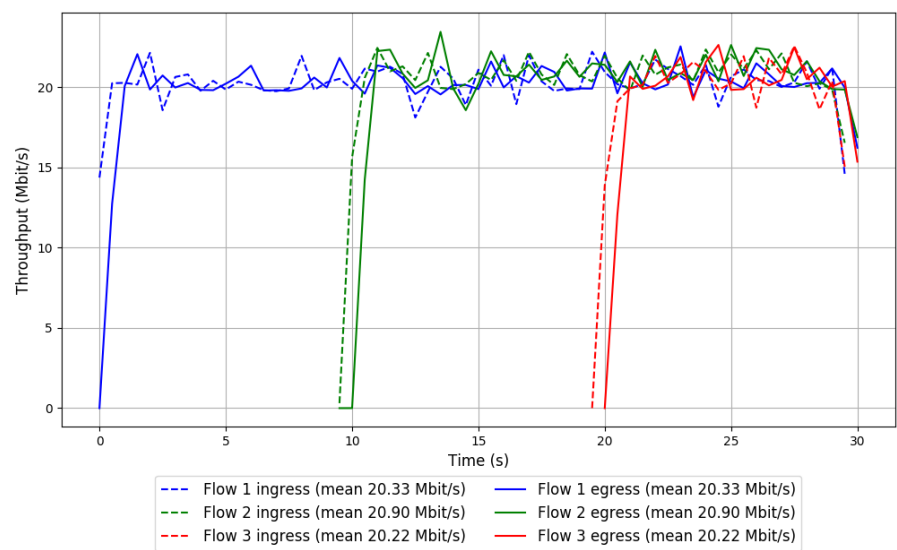
-- Flow 3:

Average throughput: 20.22 Mbit/s

95th percentile per-packet one-way delay: 22.183 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-06-05 11:54:47

End at: 2018-06-05 11:55:17

Local clock offset: 0.236 ms

Remote clock offset: 0.259 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.20 Mbit/s

95th percentile per-packet one-way delay: 20.894 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 20.78 Mbit/s

95th percentile per-packet one-way delay: 20.571 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 20.53 Mbit/s

95th percentile per-packet one-way delay: 21.042 ms

Loss rate: 0.00%

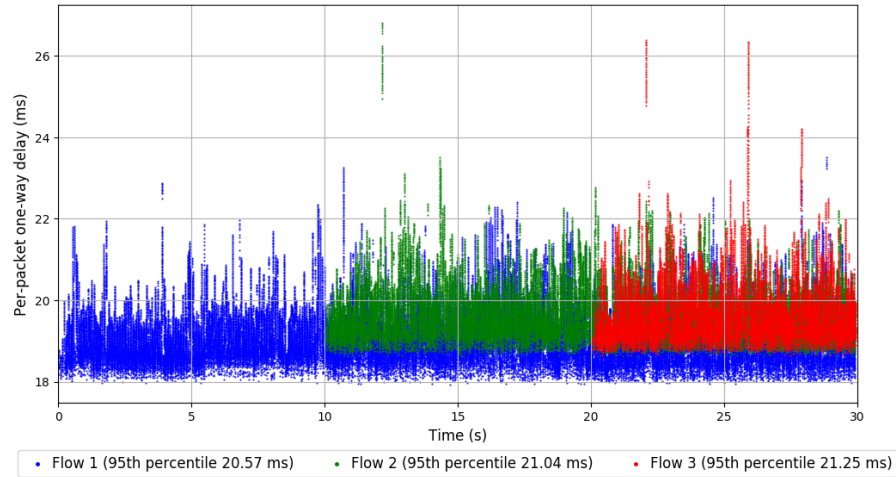
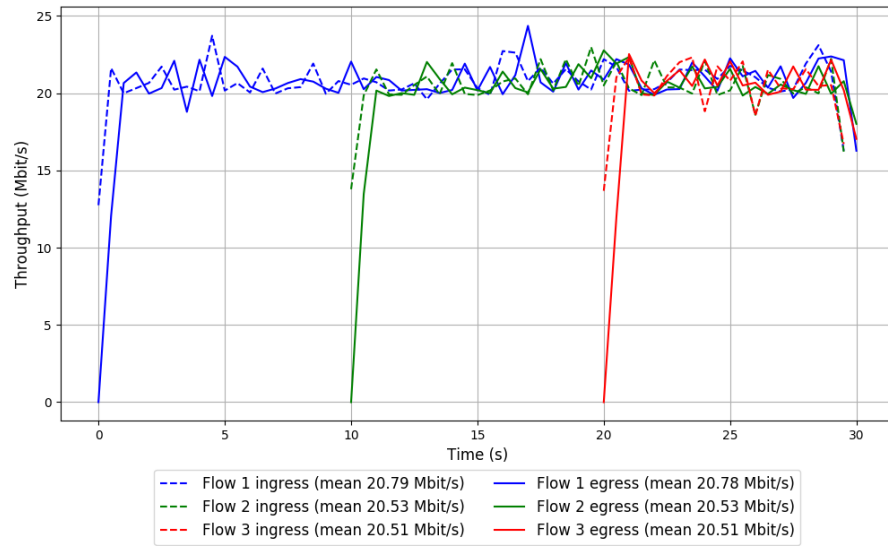
-- Flow 3:

Average throughput: 20.51 Mbit/s

95th percentile per-packet one-way delay: 21.251 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-06-05 12:20:38

End at: 2018-06-05 12:21:08

Local clock offset: 0.318 ms

Remote clock offset: 0.24 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 22.194 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.30 Mbit/s

95th percentile per-packet one-way delay: 22.118 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.49 Mbit/s

95th percentile per-packet one-way delay: 22.142 ms

Loss rate: 0.00%

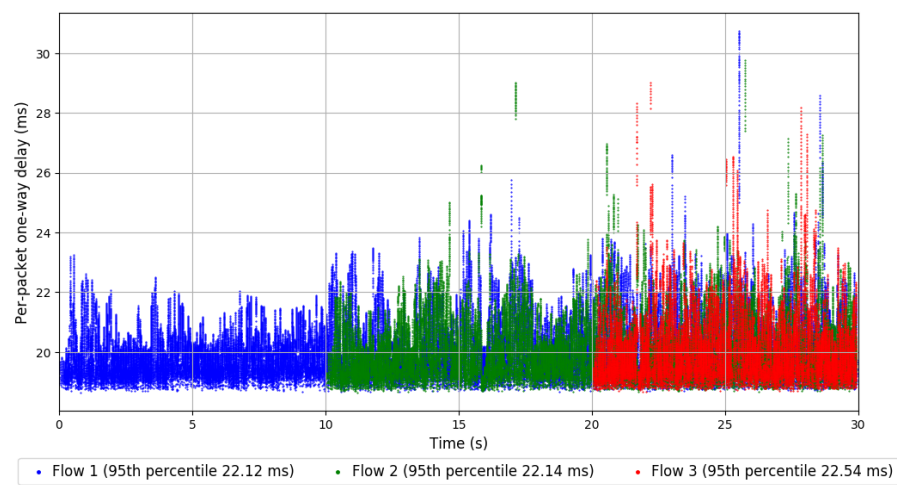
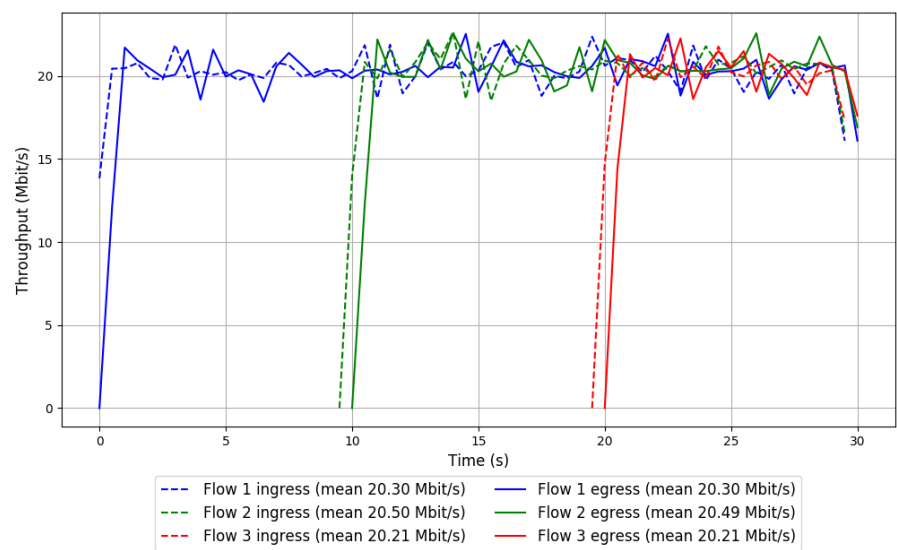
-- Flow 3:

Average throughput: 20.21 Mbit/s

95th percentile per-packet one-way delay: 22.535 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

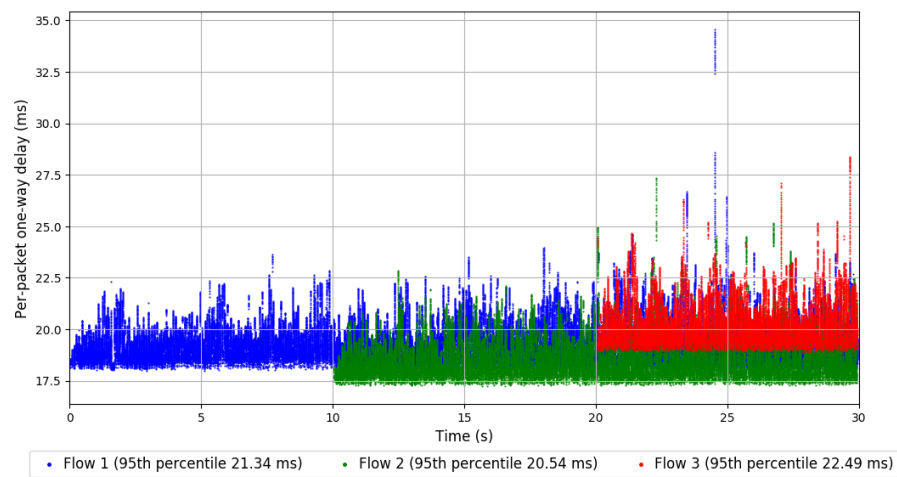
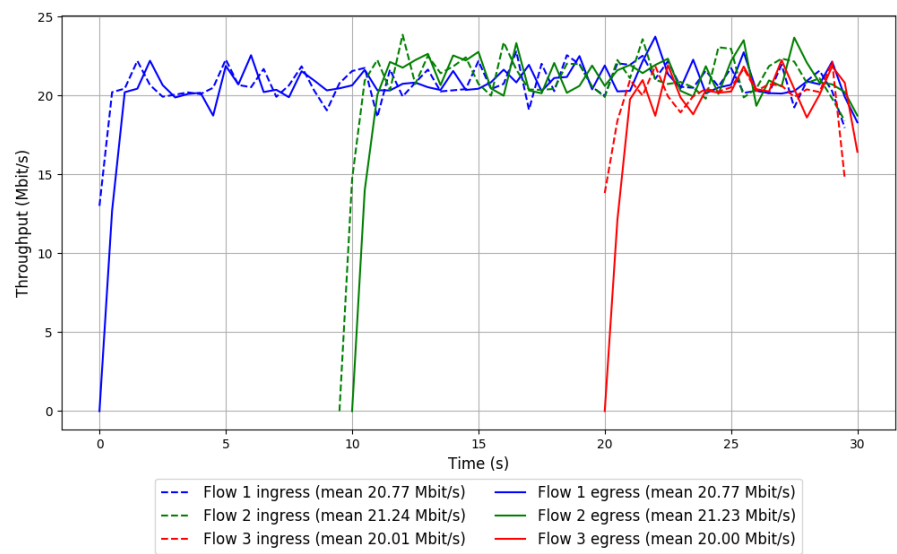


Run 4: Statistics of Sprout

Start at: 2018-06-05 12:46:03
End at: 2018-06-05 12:46:33
Local clock offset: 0.294 ms
Remote clock offset: -0.462 ms

```
# Below is generated by plot.py at 2018-06-05 17:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.51 Mbit/s
95th percentile per-packet one-way delay: 21.503 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 20.77 Mbit/s
95th percentile per-packet one-way delay: 21.337 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 20.538 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 20.00 Mbit/s
95th percentile per-packet one-way delay: 22.494 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-06-05 13:11:44

End at: 2018-06-05 13:12:14

Local clock offset: 0.179 ms

Remote clock offset: 0.148 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.55 Mbit/s

95th percentile per-packet one-way delay: 22.285 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 20.20 Mbit/s

95th percentile per-packet one-way delay: 22.490 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 20.59 Mbit/s

95th percentile per-packet one-way delay: 21.648 ms

Loss rate: 0.00%

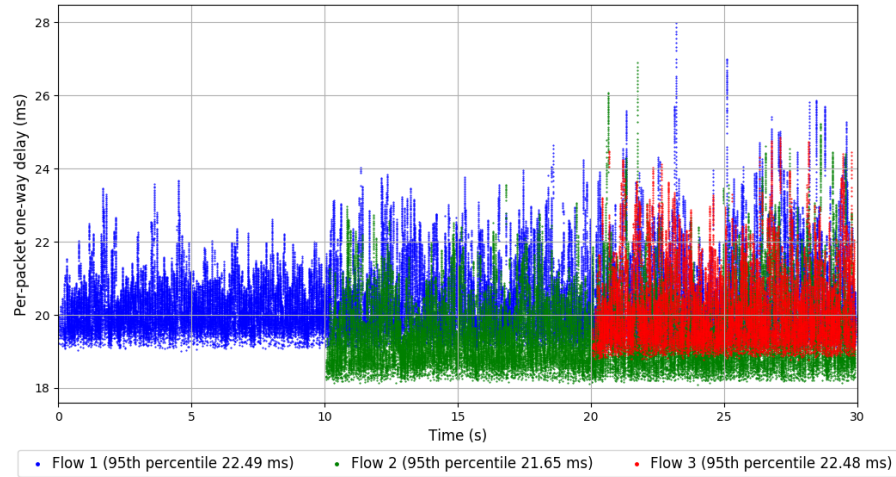
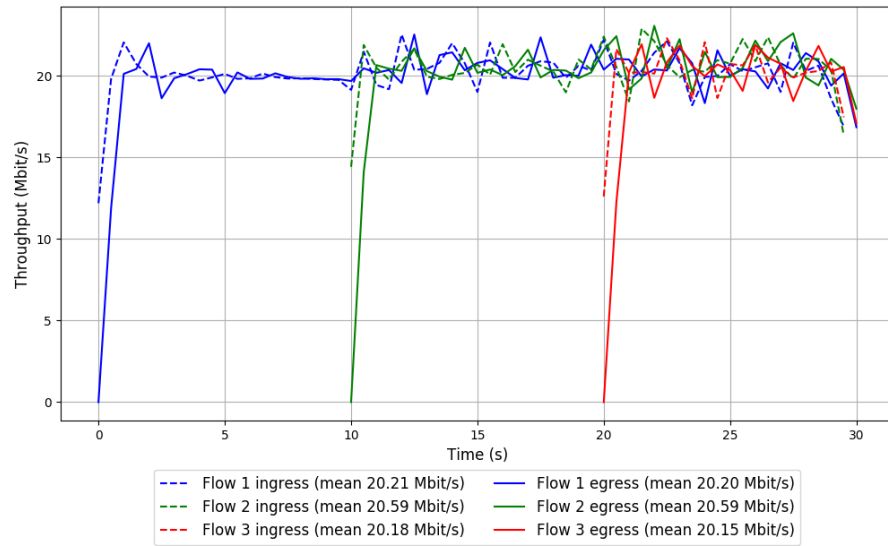
-- Flow 3:

Average throughput: 20.15 Mbit/s

95th percentile per-packet one-way delay: 22.478 ms

Loss rate: 0.17%

Run 5: Report of Sprout — Data Link

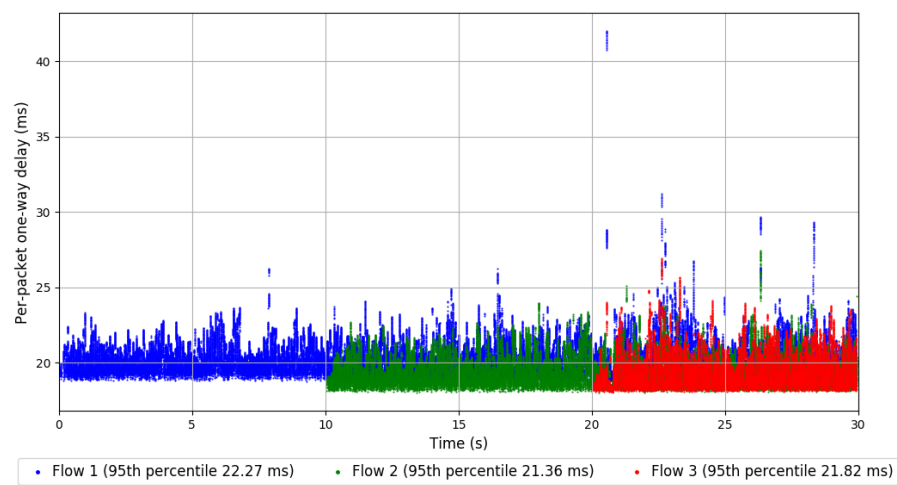
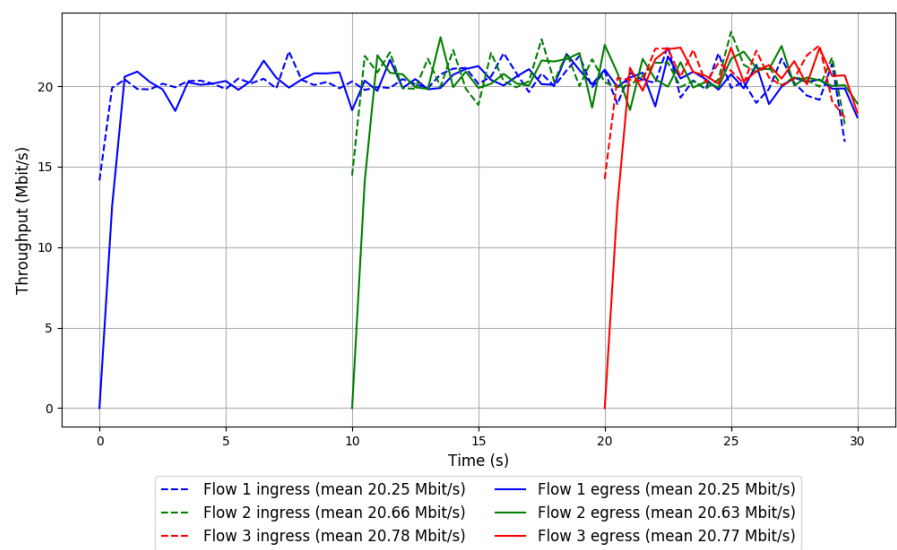


Run 6: Statistics of Sprout

Start at: 2018-06-05 13:37:11
End at: 2018-06-05 13:37:41
Local clock offset: 0.196 ms
Remote clock offset: 0.022 ms

```
# Below is generated by plot.py at 2018-06-05 17:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.82 Mbit/s
95th percentile per-packet one-way delay: 21.961 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 20.25 Mbit/s
95th percentile per-packet one-way delay: 22.267 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.63 Mbit/s
95th percentile per-packet one-way delay: 21.362 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 20.77 Mbit/s
95th percentile per-packet one-way delay: 21.817 ms
Loss rate: 0.00%
```

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-06-05 14:02:58

End at: 2018-06-05 14:03:28

Local clock offset: 0.338 ms

Remote clock offset: 0.055 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.36 Mbit/s

95th percentile per-packet one-way delay: 22.621 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.22 Mbit/s

95th percentile per-packet one-way delay: 22.460 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.27 Mbit/s

95th percentile per-packet one-way delay: 22.794 ms

Loss rate: 0.00%

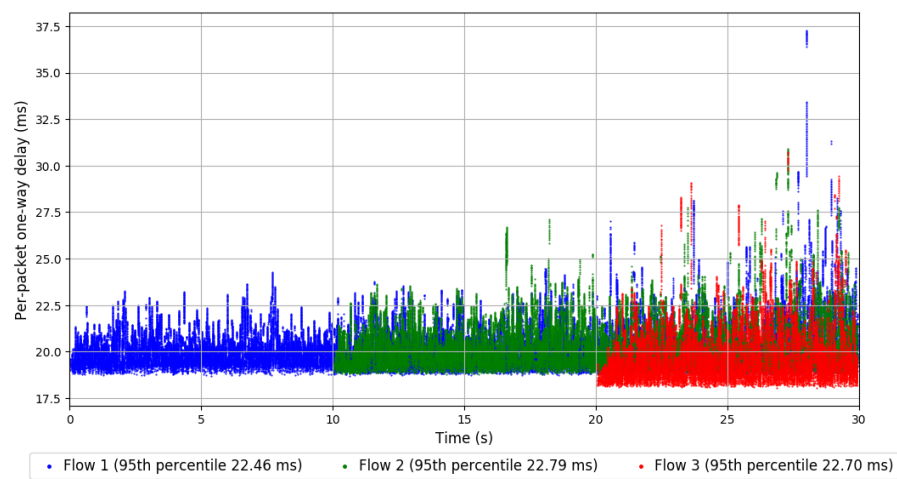
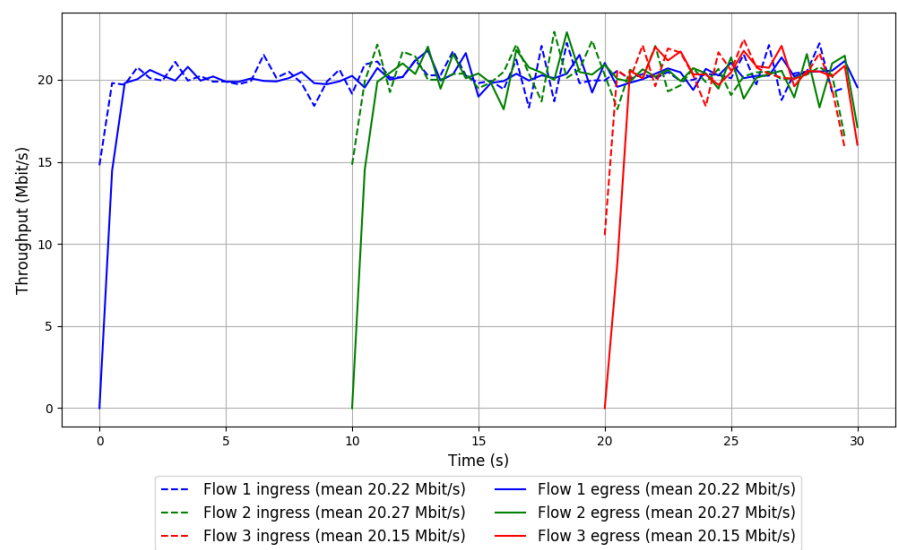
-- Flow 3:

Average throughput: 20.15 Mbit/s

95th percentile per-packet one-way delay: 22.705 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-06-05 14:28:22

End at: 2018-06-05 14:28:52

Local clock offset: 0.328 ms

Remote clock offset: 0.184 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 22.544 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 20.47 Mbit/s

95th percentile per-packet one-way delay: 22.012 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 20.45 Mbit/s

95th percentile per-packet one-way delay: 22.808 ms

Loss rate: 0.06%

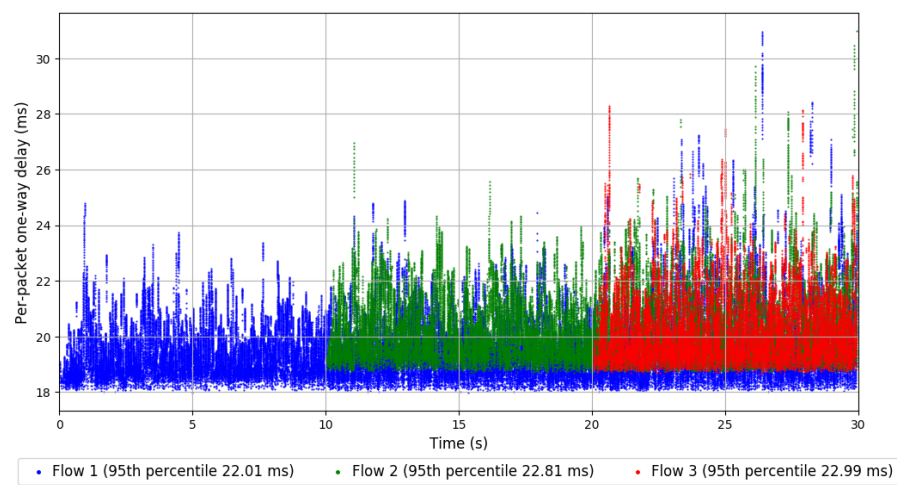
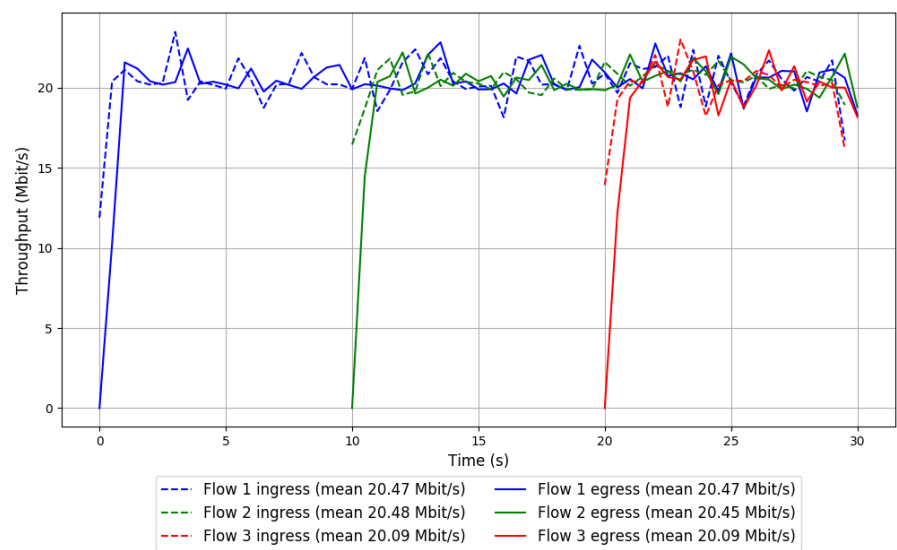
-- Flow 3:

Average throughput: 20.09 Mbit/s

95th percentile per-packet one-way delay: 22.993 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link

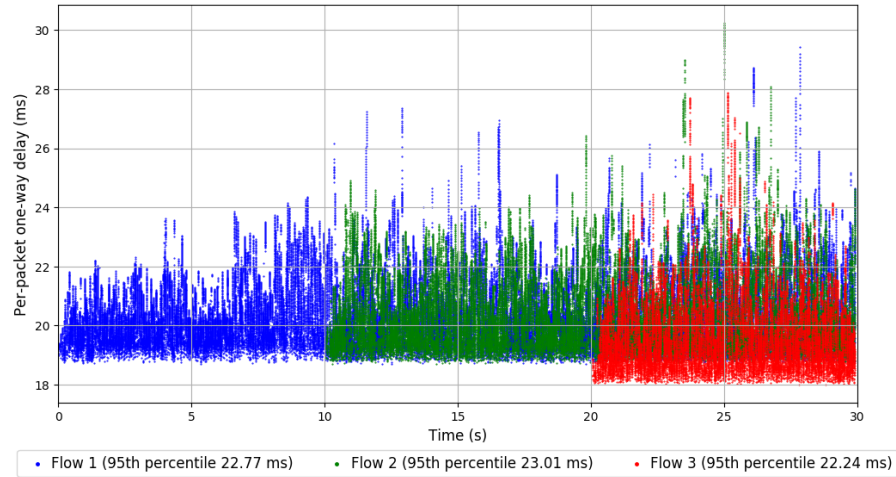
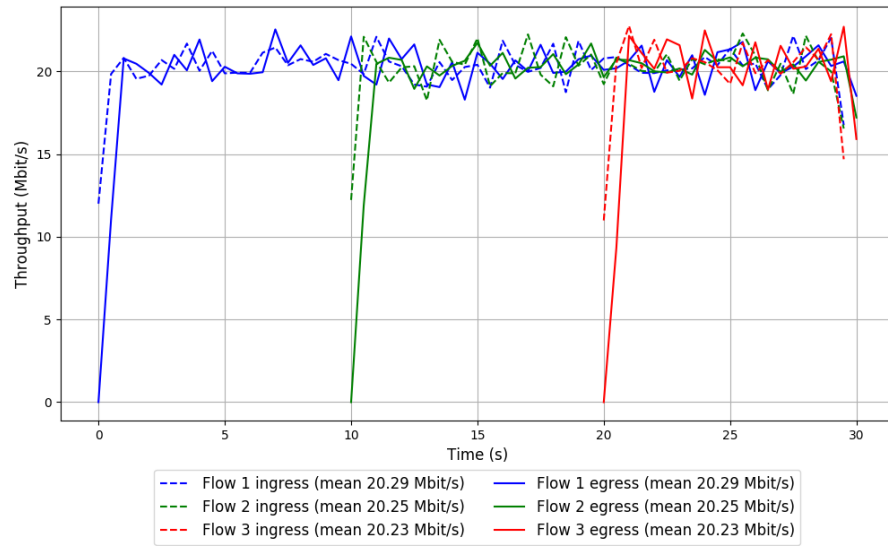


Run 9: Statistics of Sprout

Start at: 2018-06-05 14:54:13
End at: 2018-06-05 14:54:43
Local clock offset: 0.309 ms
Remote clock offset: 0.085 ms

```
# Below is generated by plot.py at 2018-06-05 17:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.43 Mbit/s
95th percentile per-packet one-way delay: 22.822 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: 22.768 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.25 Mbit/s
95th percentile per-packet one-way delay: 23.007 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.23 Mbit/s
95th percentile per-packet one-way delay: 22.236 ms
Loss rate: 0.00%
```


Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-06-05 15:19:50

End at: 2018-06-05 15:20:20

Local clock offset: 0.456 ms

Remote clock offset: 0.196 ms

Below is generated by plot.py at 2018-06-05 17:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.72 Mbit/s

95th percentile per-packet one-way delay: 22.704 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 20.64 Mbit/s

95th percentile per-packet one-way delay: 22.138 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.20 Mbit/s

95th percentile per-packet one-way delay: 23.002 ms

Loss rate: 0.00%

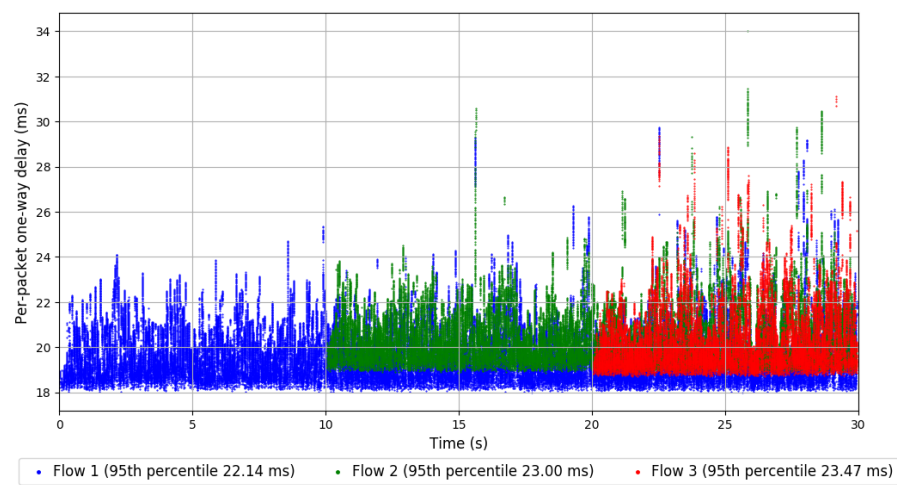
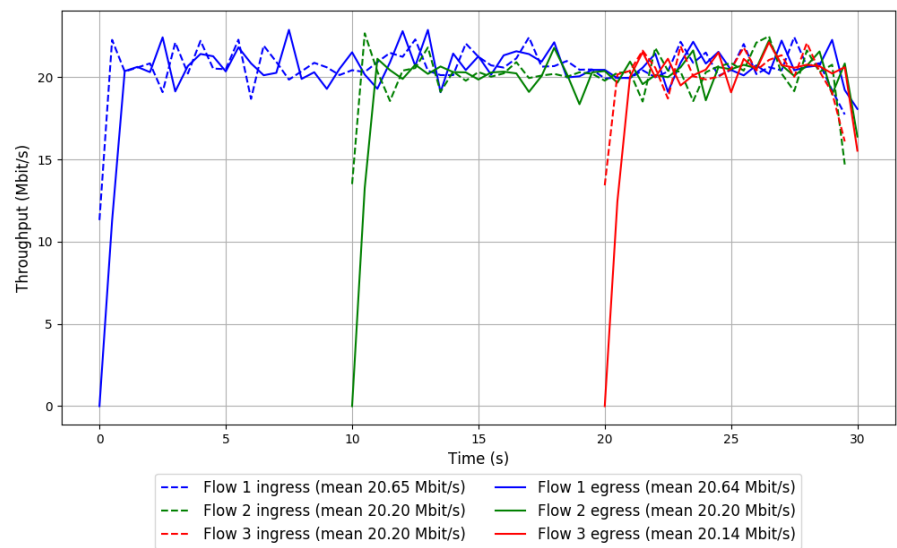
-- Flow 3:

Average throughput: 20.14 Mbit/s

95th percentile per-packet one-way delay: 23.467 ms

Loss rate: 0.22%

Run 10: Report of Sprout — Data Link

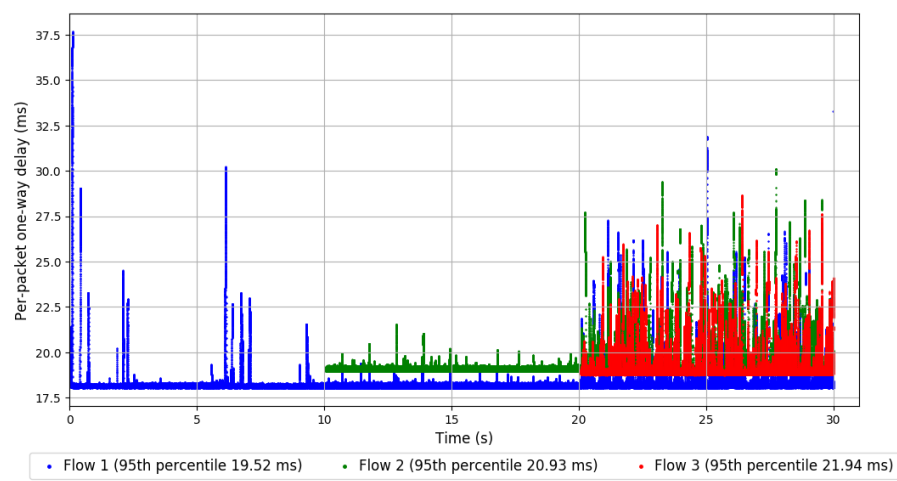
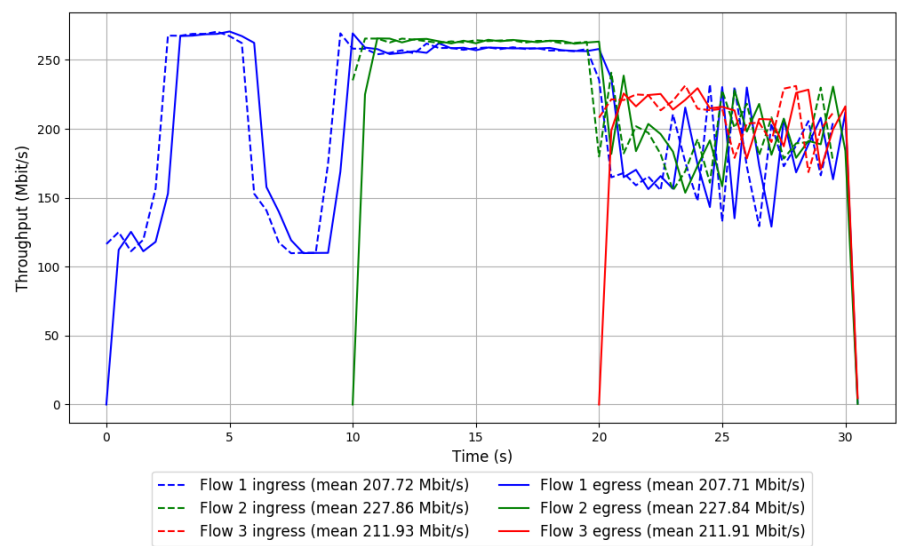


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-05 11:42:58
End at: 2018-06-05 11:43:28
Local clock offset: 0.122 ms
Remote clock offset: 0.415 ms

# Below is generated by plot.py at 2018-06-05 17:37:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.93 Mbit/s
95th percentile per-packet one-way delay: 20.727 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 207.71 Mbit/s
95th percentile per-packet one-way delay: 19.521 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 227.84 Mbit/s
95th percentile per-packet one-way delay: 20.933 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 211.91 Mbit/s
95th percentile per-packet one-way delay: 21.940 ms
Loss rate: 0.01%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-06-05 12:08:55

End at: 2018-06-05 12:09:25

Local clock offset: 0.266 ms

Remote clock offset: 0.36 ms

Below is generated by plot.py at 2018-06-05 17:37:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 428.02 Mbit/s

95th percentile per-packet one-way delay: 20.881 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 211.35 Mbit/s

95th percentile per-packet one-way delay: 19.779 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 225.33 Mbit/s

95th percentile per-packet one-way delay: 21.143 ms

Loss rate: 0.02%

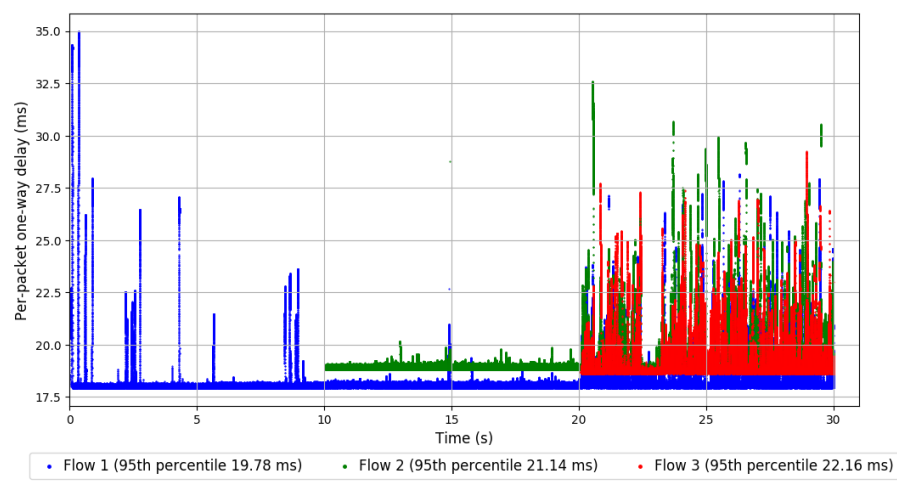
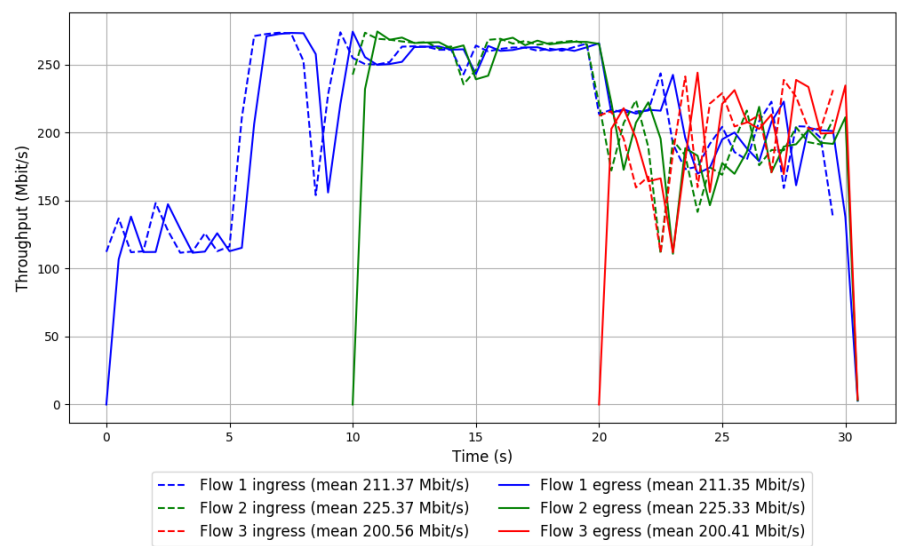
-- Flow 3:

Average throughput: 200.41 Mbit/s

95th percentile per-packet one-way delay: 22.165 ms

Loss rate: 0.05%

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

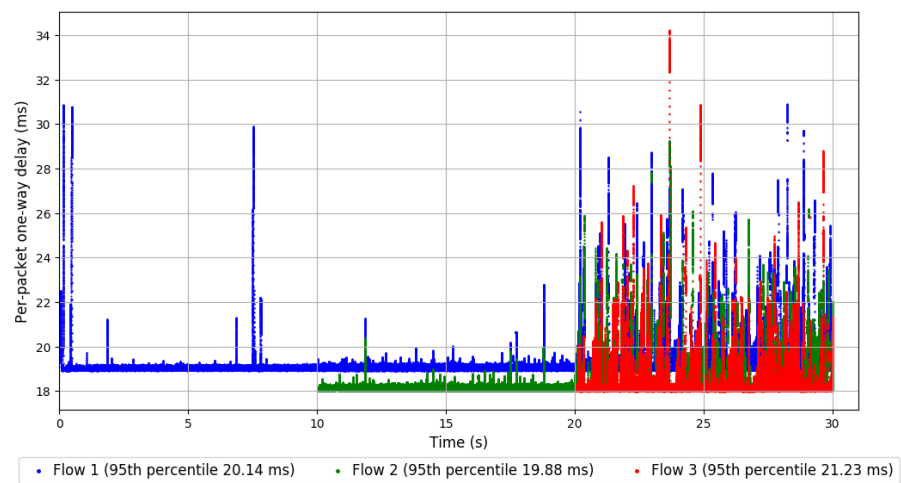
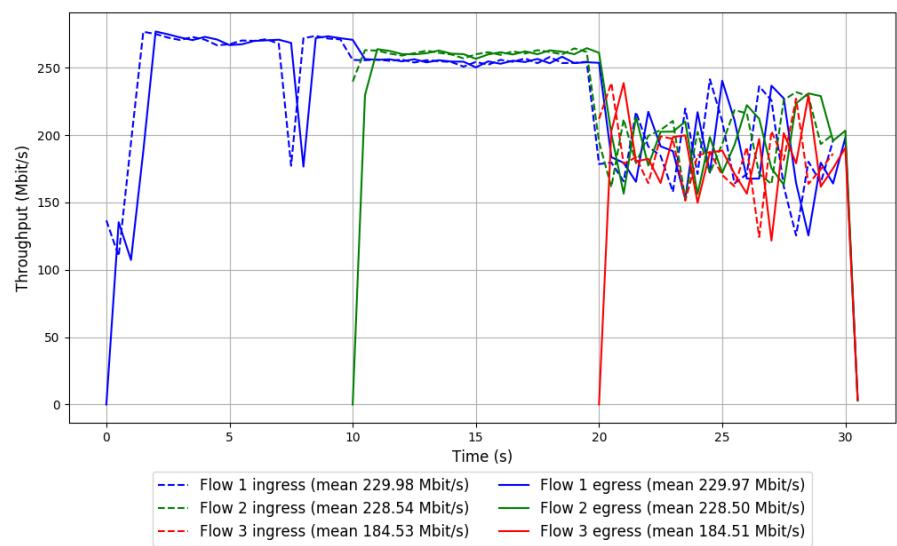


Run 3: Statistics of TaoVA-100x

Start at: 2018-06-05 12:34:24
End at: 2018-06-05 12:34:54
Local clock offset: 0.276 ms
Remote clock offset: -0.316 ms

Below is generated by plot.py at 2018-06-05 17:38:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 443.56 Mbit/s
95th percentile per-packet one-way delay: 20.256 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 229.97 Mbit/s
95th percentile per-packet one-way delay: 20.143 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 228.50 Mbit/s
95th percentile per-packet one-way delay: 19.881 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 184.51 Mbit/s
95th percentile per-packet one-way delay: 21.229 ms
Loss rate: 0.01%

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

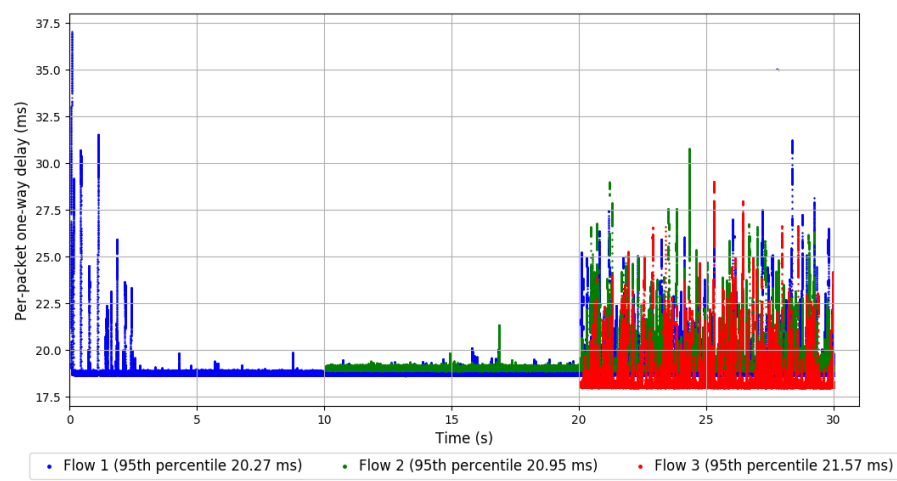
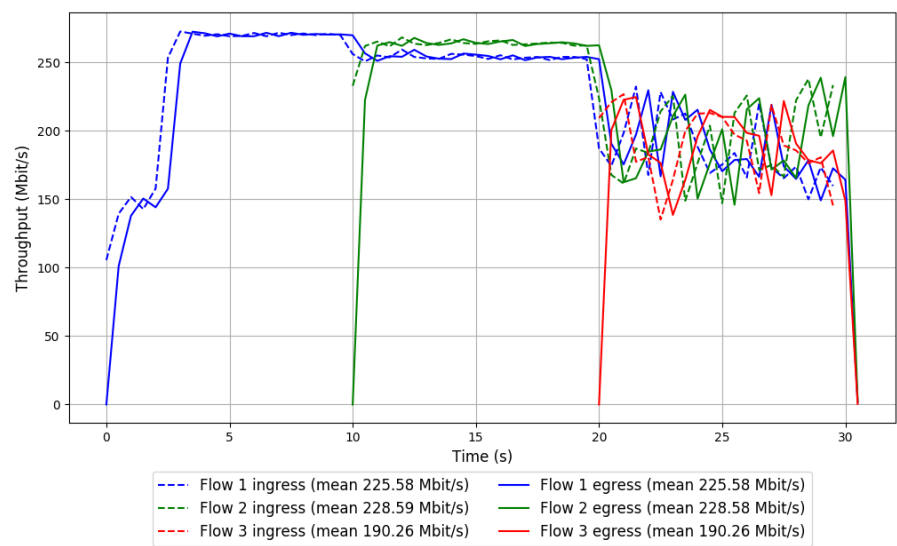


Run 4: Statistics of TaoVA-100x

Start at: 2018-06-05 12:59:55
End at: 2018-06-05 13:00:25
Local clock offset: 0.267 ms
Remote clock offset: -0.126 ms

Below is generated by plot.py at 2018-06-05 17:38:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 441.08 Mbit/s
95th percentile per-packet one-way delay: 20.826 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.58 Mbit/s
95th percentile per-packet one-way delay: 20.271 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 228.58 Mbit/s
95th percentile per-packet one-way delay: 20.946 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 190.26 Mbit/s
95th percentile per-packet one-way delay: 21.570 ms
Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-06-05 13:25:35

End at: 2018-06-05 13:26:05

Local clock offset: 0.27 ms

Remote clock offset: 0.278 ms

Below is generated by plot.py at 2018-06-05 17:38:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 400.12 Mbit/s

95th percentile per-packet one-way delay: 20.951 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 191.30 Mbit/s

95th percentile per-packet one-way delay: 20.612 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 221.86 Mbit/s

95th percentile per-packet one-way delay: 20.923 ms

Loss rate: 0.00%

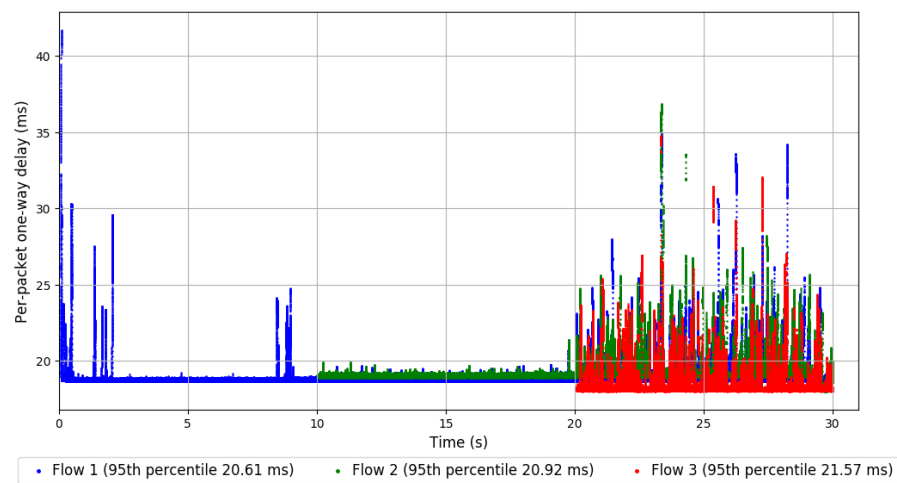
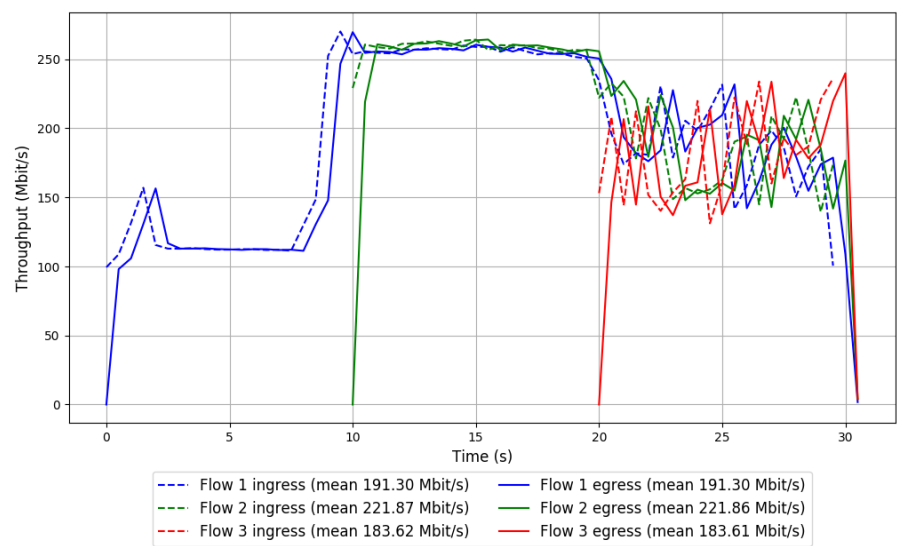
-- Flow 3:

Average throughput: 183.61 Mbit/s

95th percentile per-packet one-way delay: 21.571 ms

Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-06-05 13:51:04

End at: 2018-06-05 13:51:34

Local clock offset: 0.262 ms

Remote clock offset: 0.014 ms

Below is generated by plot.py at 2018-06-05 17:40:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.51 Mbit/s

95th percentile per-packet one-way delay: 21.125 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 225.02 Mbit/s

95th percentile per-packet one-way delay: 20.242 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 224.61 Mbit/s

95th percentile per-packet one-way delay: 20.977 ms

Loss rate: 0.03%

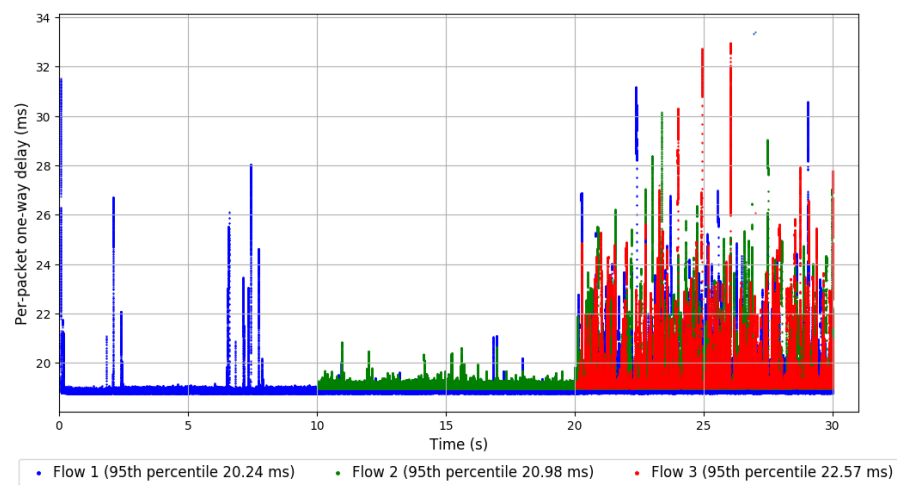
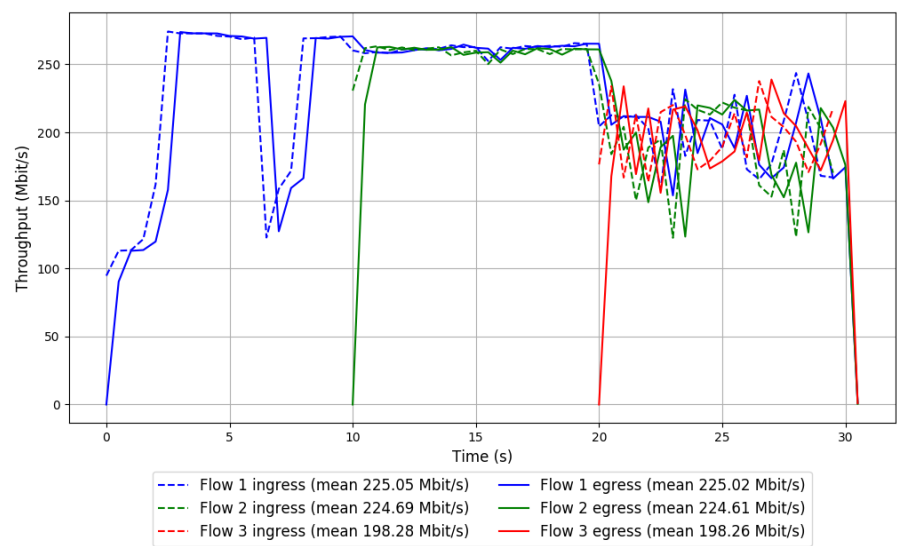
-- Flow 3:

Average throughput: 198.26 Mbit/s

95th percentile per-packet one-way delay: 22.571 ms

Loss rate: 0.01%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-06-05 14:16:51

End at: 2018-06-05 14:17:21

Local clock offset: 0.451 ms

Remote clock offset: 0.129 ms

Below is generated by plot.py at 2018-06-05 17:41:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 455.94 Mbit/s

95th percentile per-packet one-way delay: 20.431 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 234.83 Mbit/s

95th percentile per-packet one-way delay: 19.168 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 234.48 Mbit/s

95th percentile per-packet one-way delay: 20.460 ms

Loss rate: 0.00%

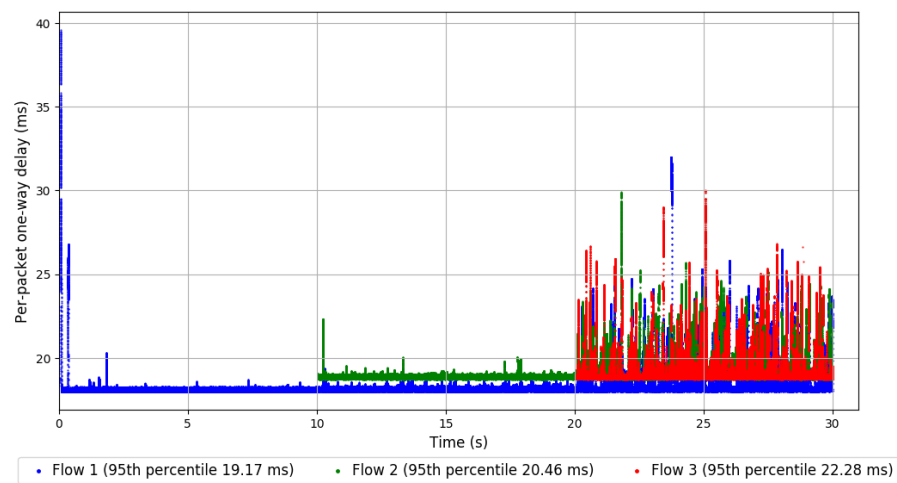
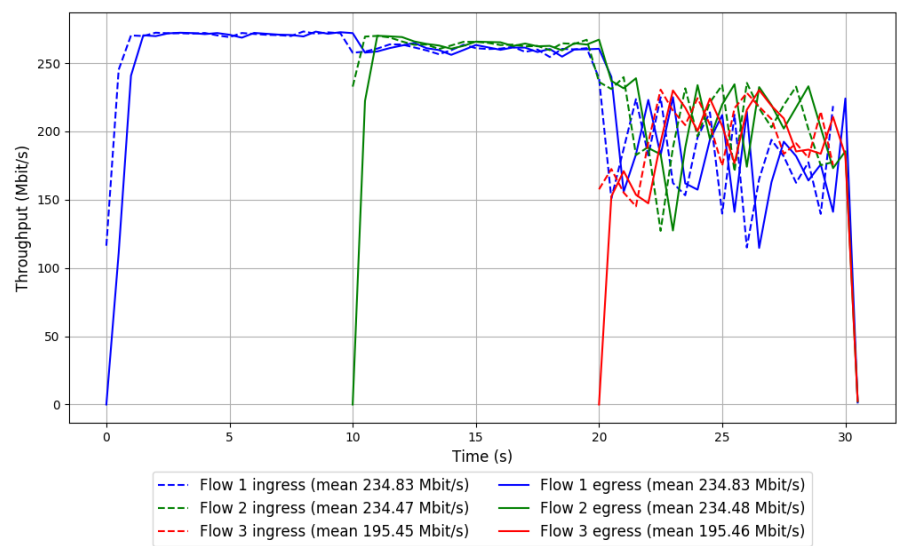
-- Flow 3:

Average throughput: 195.46 Mbit/s

95th percentile per-packet one-way delay: 22.284 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-06-05 14:42:16

End at: 2018-06-05 14:42:46

Local clock offset: 0.11 ms

Remote clock offset: 0.072 ms

Below is generated by plot.py at 2018-06-05 17:41:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.73 Mbit/s

95th percentile per-packet one-way delay: 20.218 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 222.62 Mbit/s

95th percentile per-packet one-way delay: 19.619 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 220.89 Mbit/s

95th percentile per-packet one-way delay: 20.444 ms

Loss rate: 0.05%

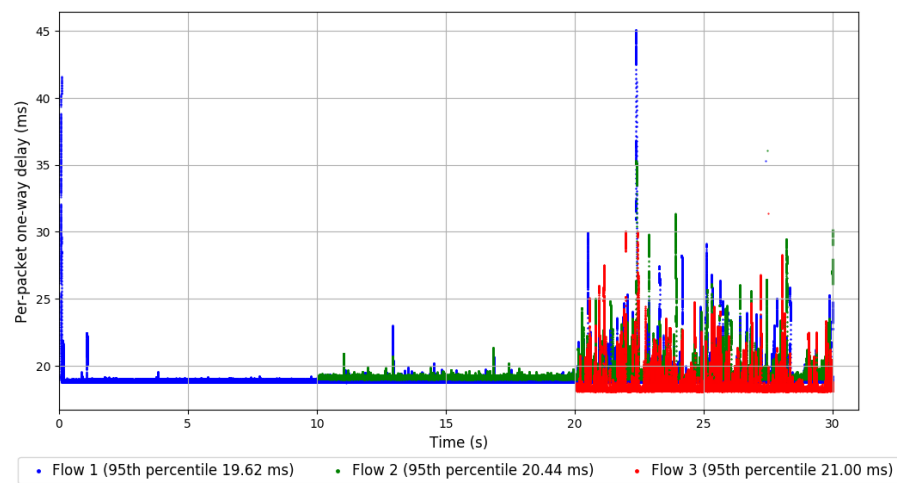
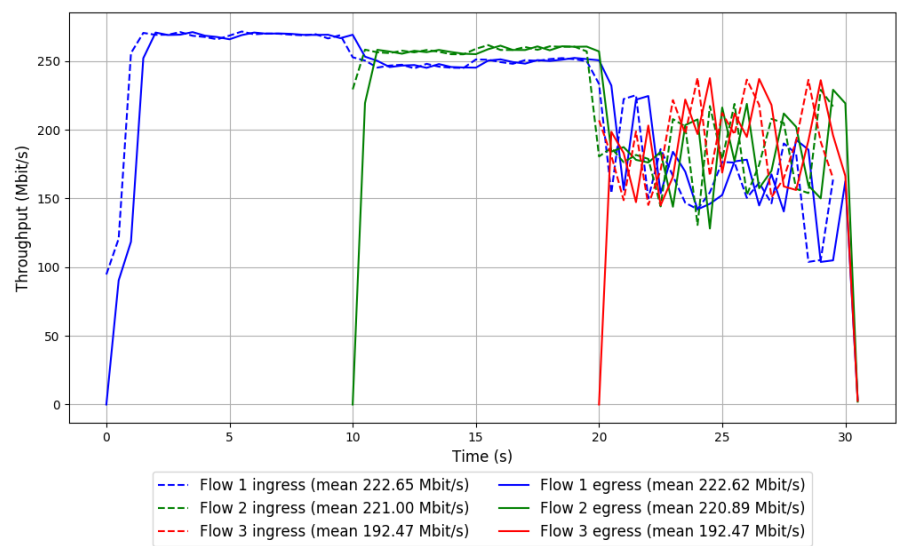
-- Flow 3:

Average throughput: 192.47 Mbit/s

95th percentile per-packet one-way delay: 21.003 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-06-05 15:08:10

End at: 2018-06-05 15:08:40

Local clock offset: 0.377 ms

Remote clock offset: 0.122 ms

Below is generated by plot.py at 2018-06-05 17:46:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 370.49 Mbit/s

95th percentile per-packet one-way delay: 18.995 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 157.74 Mbit/s

95th percentile per-packet one-way delay: 18.922 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 229.99 Mbit/s

95th percentile per-packet one-way delay: 18.732 ms

Loss rate: 0.00%

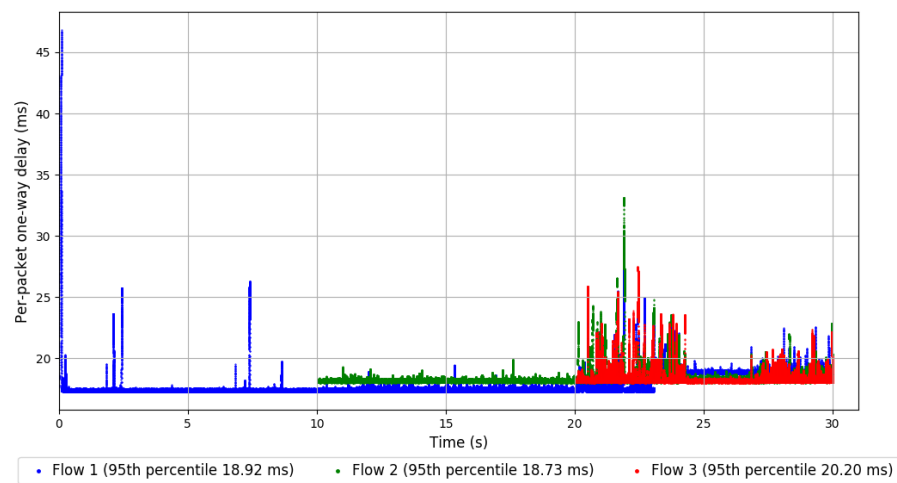
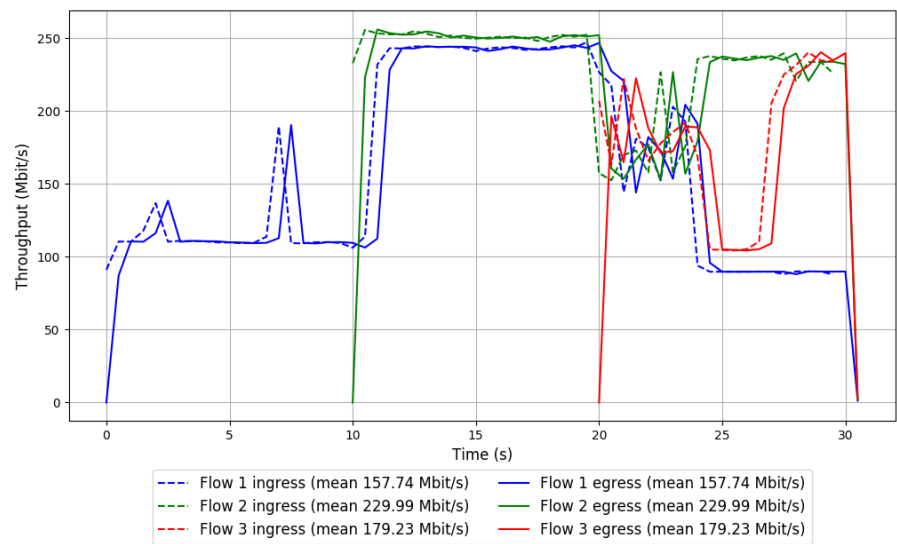
-- Flow 3:

Average throughput: 179.23 Mbit/s

95th percentile per-packet one-way delay: 20.203 ms

Loss rate: 0.00%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-06-05 15:33:42

End at: 2018-06-05 15:34:12

Local clock offset: 0.162 ms

Remote clock offset: 0.275 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 386.55 Mbit/s

95th percentile per-packet one-way delay: 20.183 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 178.97 Mbit/s

95th percentile per-packet one-way delay: 19.074 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 220.22 Mbit/s

95th percentile per-packet one-way delay: 20.785 ms

Loss rate: 0.00%

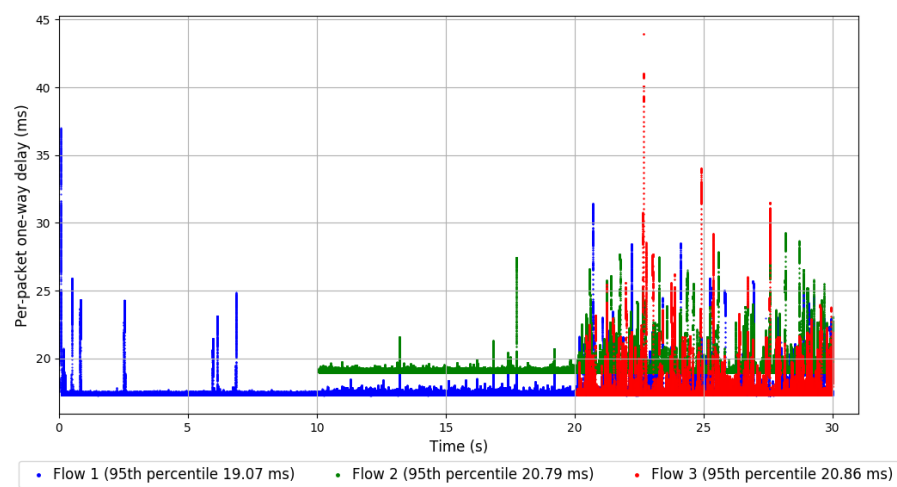
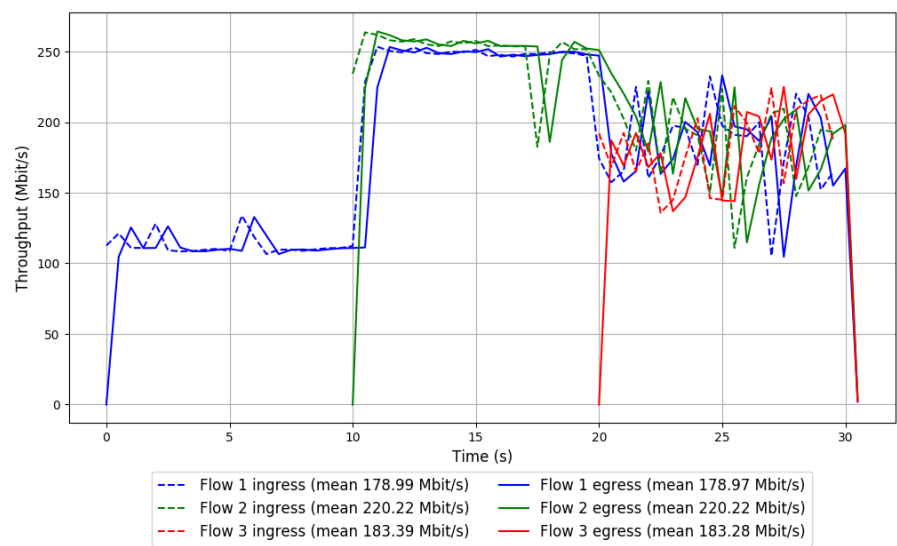
-- Flow 3:

Average throughput: 183.28 Mbit/s

95th percentile per-packet one-way delay: 20.855 ms

Loss rate: 0.05%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-06-05 11:25:58

End at: 2018-06-05 11:26:28

Local clock offset: 0.359 ms

Remote clock offset: 0.02 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.02 Mbit/s

95th percentile per-packet one-way delay: 24.427 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 84.57 Mbit/s

95th percentile per-packet one-way delay: 21.442 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 111.93 Mbit/s

95th percentile per-packet one-way delay: 24.538 ms

Loss rate: 0.05%

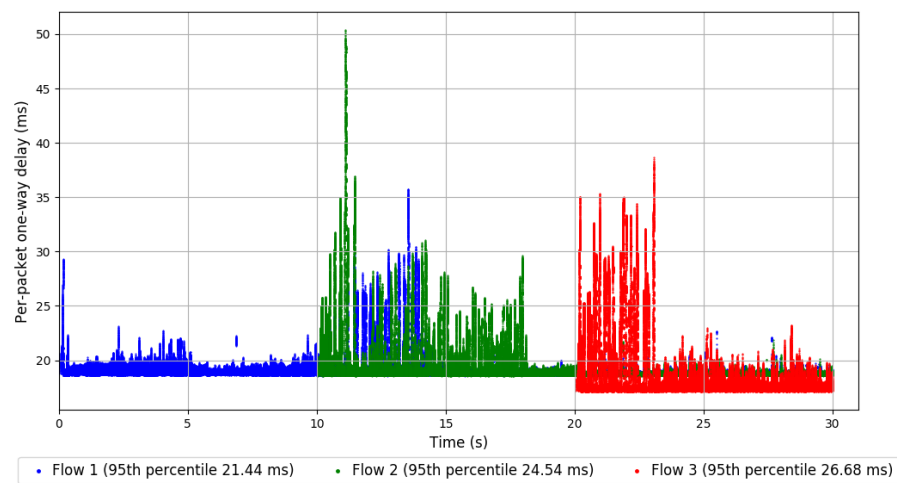
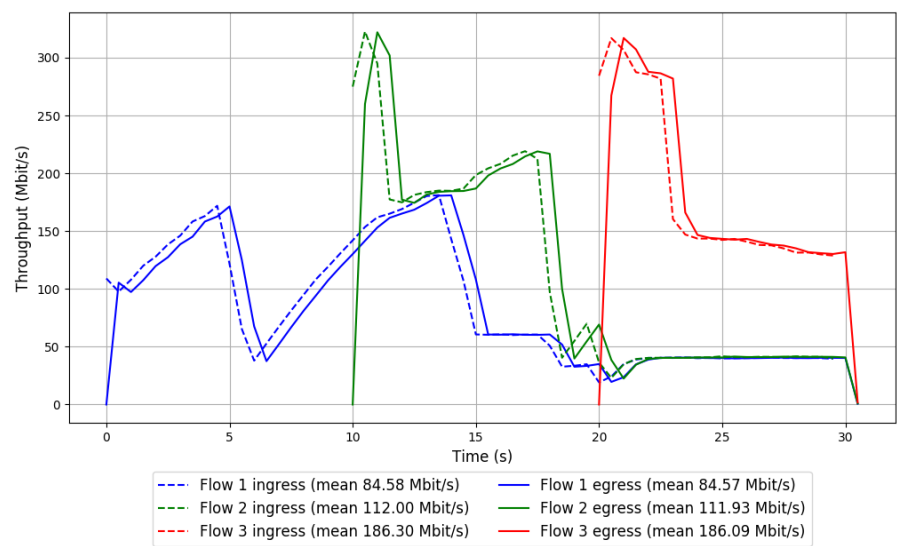
-- Flow 3:

Average throughput: 186.09 Mbit/s

95th percentile per-packet one-way delay: 26.677 ms

Loss rate: 0.11%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-06-05 11:51:24

End at: 2018-06-05 11:51:54

Local clock offset: 0.118 ms

Remote clock offset: 0.249 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.01 Mbit/s

95th percentile per-packet one-way delay: 22.967 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 116.34 Mbit/s

95th percentile per-packet one-way delay: 21.328 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 120.33 Mbit/s

95th percentile per-packet one-way delay: 23.178 ms

Loss rate: 0.04%

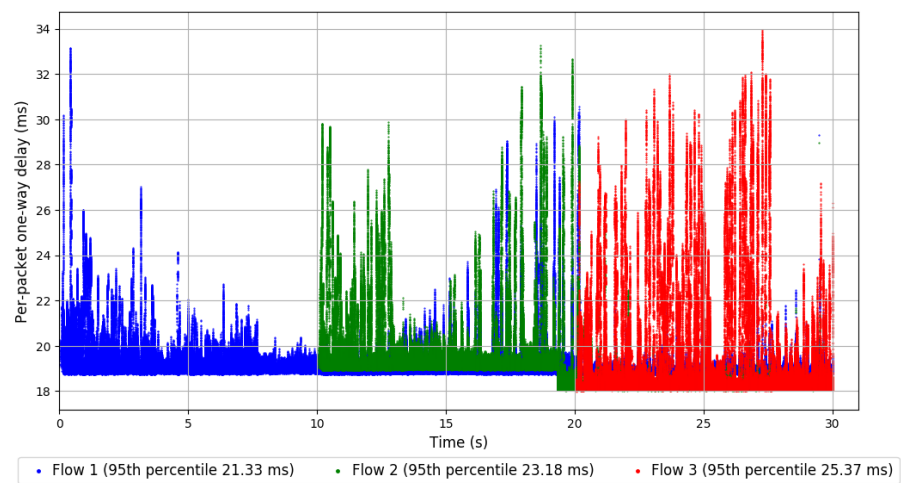
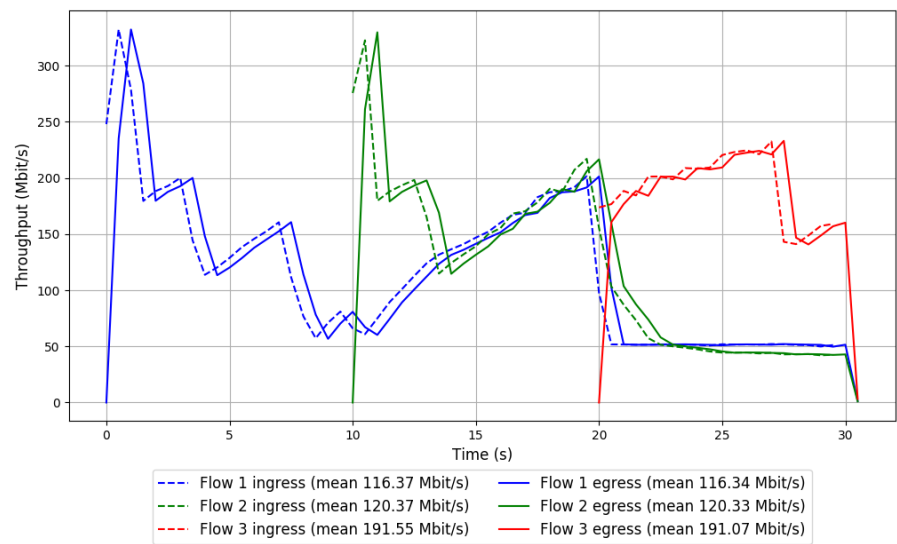
-- Flow 3:

Average throughput: 191.07 Mbit/s

95th percentile per-packet one-way delay: 25.373 ms

Loss rate: 0.20%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-06-05 12:17:16

End at: 2018-06-05 12:17:46

Local clock offset: 0.208 ms

Remote clock offset: 0.45 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.23 Mbit/s

95th percentile per-packet one-way delay: 24.083 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 130.78 Mbit/s

95th percentile per-packet one-way delay: 22.972 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.15 Mbit/s

95th percentile per-packet one-way delay: 25.259 ms

Loss rate: 0.01%

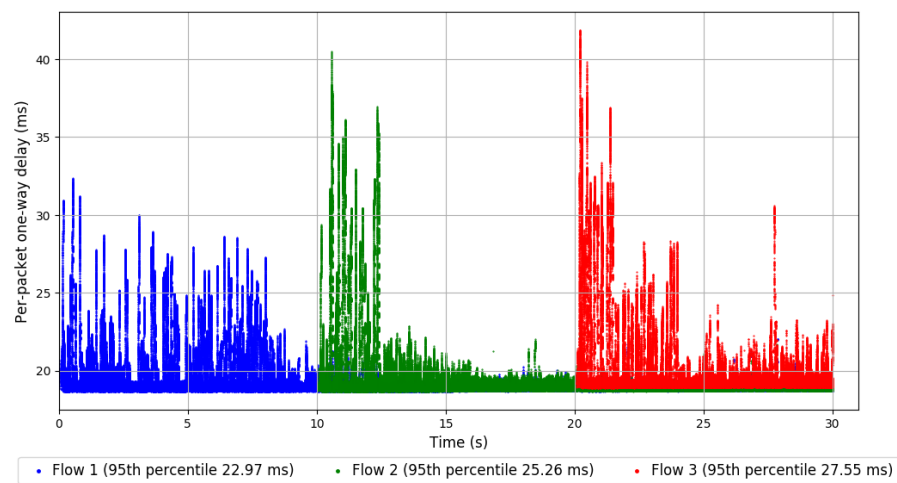
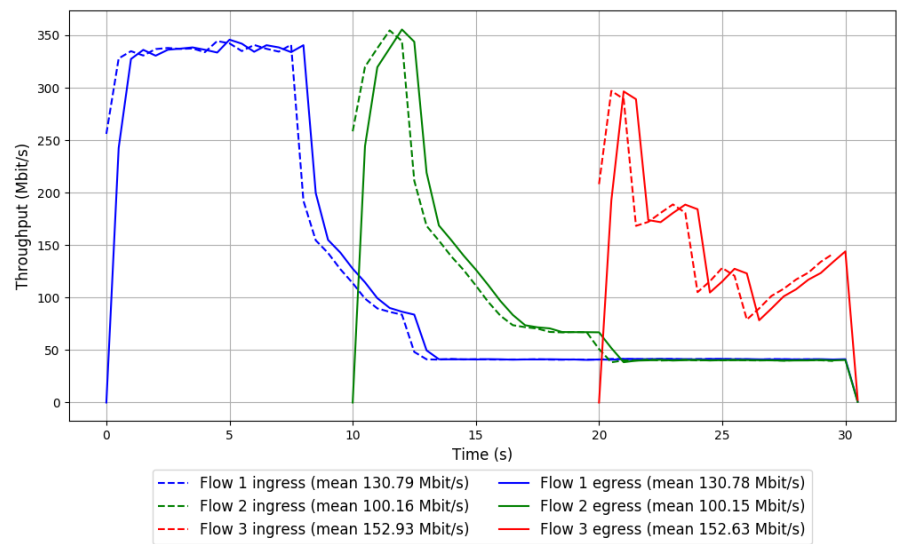
-- Flow 3:

Average throughput: 152.63 Mbit/s

95th percentile per-packet one-way delay: 27.549 ms

Loss rate: 0.14%

Run 3: Report of TCP Vegas — Data Link

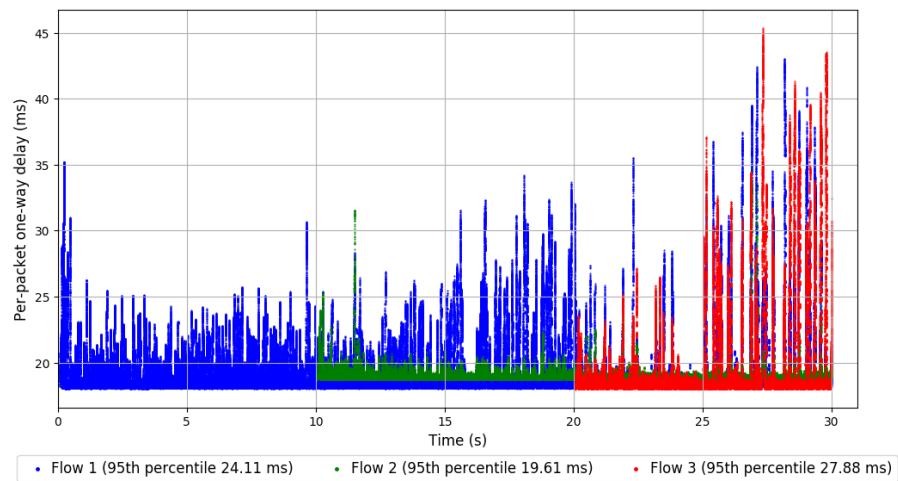
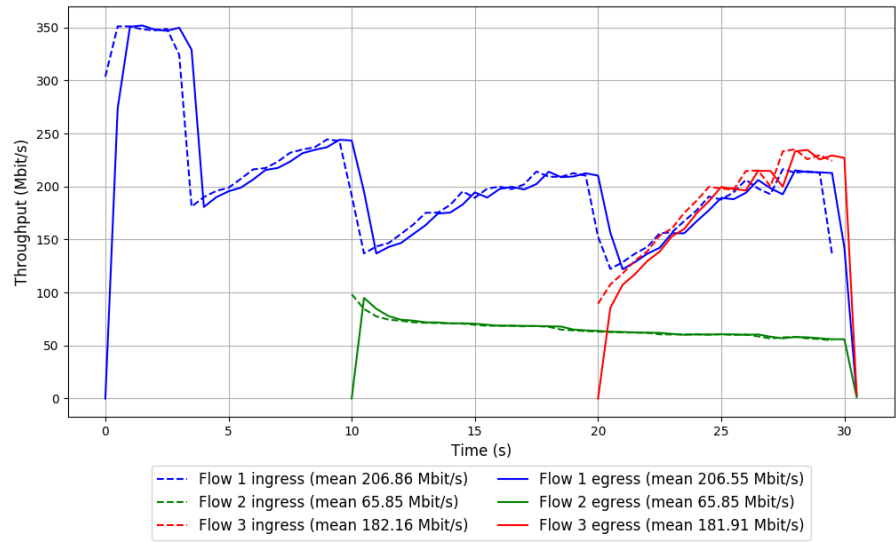


Run 4: Statistics of TCP Vegas

Start at: 2018-06-05 12:42:44
End at: 2018-06-05 12:43:14
Local clock offset: 0.2 ms
Remote clock offset: -0.469 ms

Below is generated by plot.py at 2018-06-05 17:47:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 310.90 Mbit/s
95th percentile per-packet one-way delay: 24.148 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 206.55 Mbit/s
95th percentile per-packet one-way delay: 24.114 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 65.85 Mbit/s
95th percentile per-packet one-way delay: 19.608 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 181.91 Mbit/s
95th percentile per-packet one-way delay: 27.877 ms
Loss rate: 0.10%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-06-05 13:08:19

End at: 2018-06-05 13:08:49

Local clock offset: 0.281 ms

Remote clock offset: 0.073 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.08 Mbit/s

95th percentile per-packet one-way delay: 23.250 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 130.82 Mbit/s

95th percentile per-packet one-way delay: 21.625 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 173.96 Mbit/s

95th percentile per-packet one-way delay: 25.033 ms

Loss rate: 0.02%

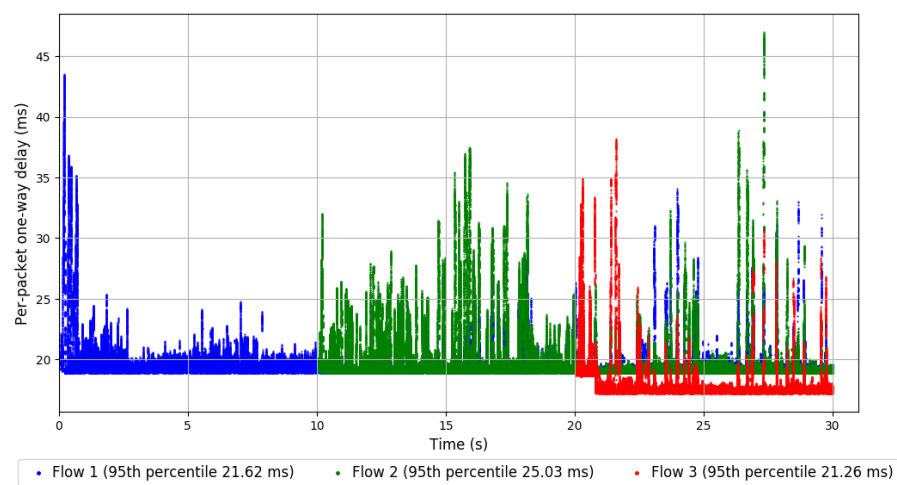
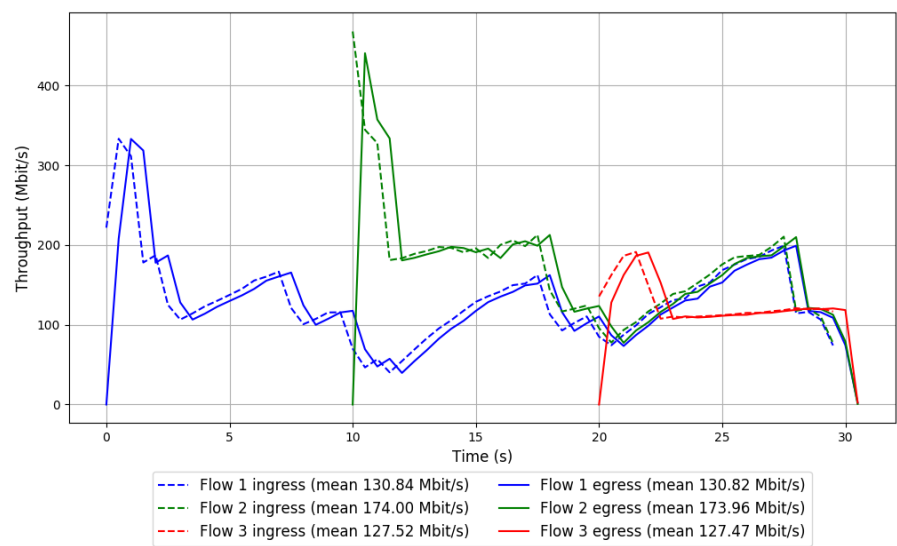
-- Flow 3:

Average throughput: 127.47 Mbit/s

95th percentile per-packet one-way delay: 21.256 ms

Loss rate: 0.05%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-06-05 13:33:53

End at: 2018-06-05 13:34:23

Local clock offset: 0.293 ms

Remote clock offset: 0.073 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.06 Mbit/s

95th percentile per-packet one-way delay: 22.905 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 100.58 Mbit/s

95th percentile per-packet one-way delay: 21.508 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 134.89 Mbit/s

95th percentile per-packet one-way delay: 23.516 ms

Loss rate: 0.05%

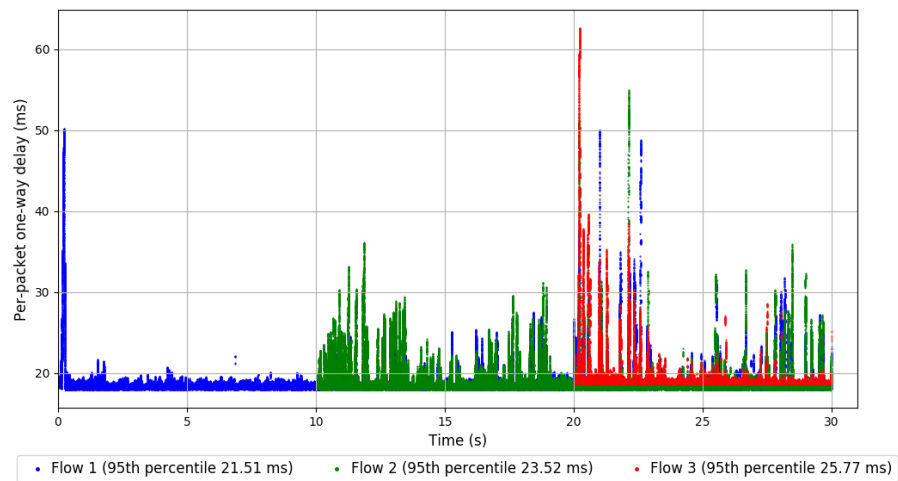
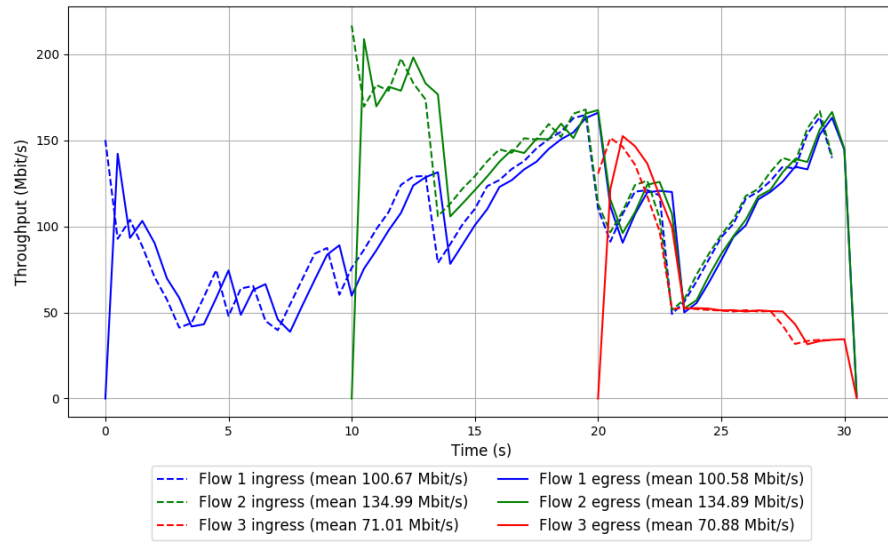
-- Flow 3:

Average throughput: 70.88 Mbit/s

95th percentile per-packet one-way delay: 25.772 ms

Loss rate: 0.16%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-06-05 13:59:29

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

Local clock offset: 0.419 ms

Remote clock offset: 0.064 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.78 Mbit/s

95th percentile per-packet one-way delay: 25.142 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 196.53 Mbit/s

95th percentile per-packet one-way delay: 24.326 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 188.09 Mbit/s

95th percentile per-packet one-way delay: 27.303 ms

Loss rate: 0.04%

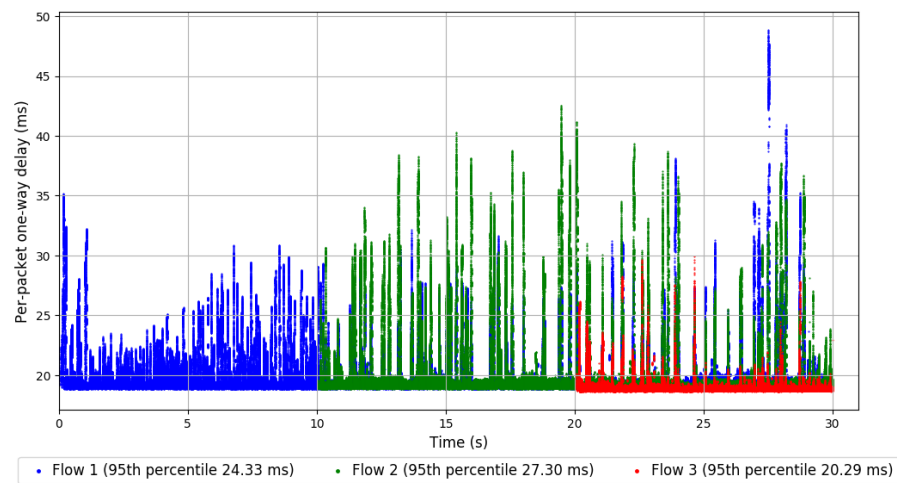
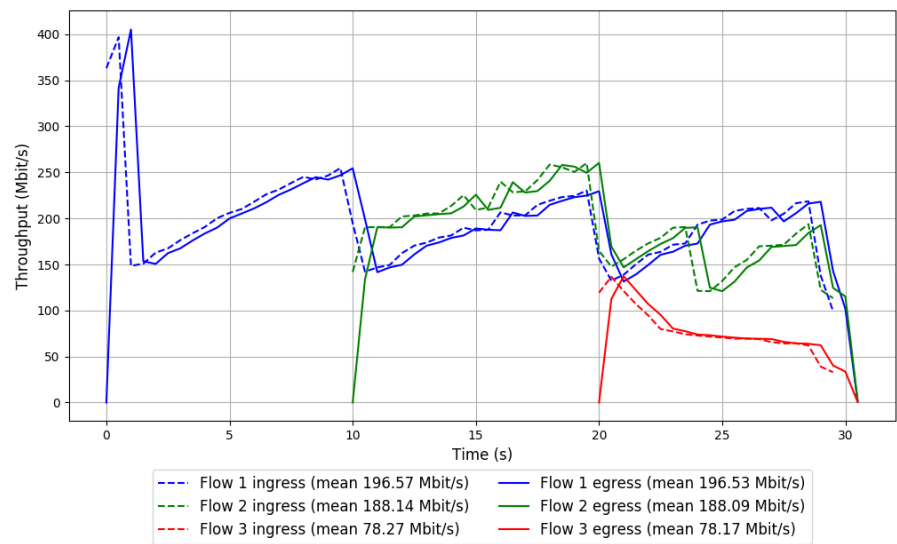
-- Flow 3:

Average throughput: 78.17 Mbit/s

95th percentile per-packet one-way delay: 20.293 ms

Loss rate: 0.09%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-06-05 14:25:03

End at: 2018-06-05 14:25:33

Local clock offset: 0.384 ms

Remote clock offset: 0.119 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.73 Mbit/s

95th percentile per-packet one-way delay: 23.074 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 109.97 Mbit/s

95th percentile per-packet one-way delay: 22.557 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 112.53 Mbit/s

95th percentile per-packet one-way delay: 20.022 ms

Loss rate: 0.15%

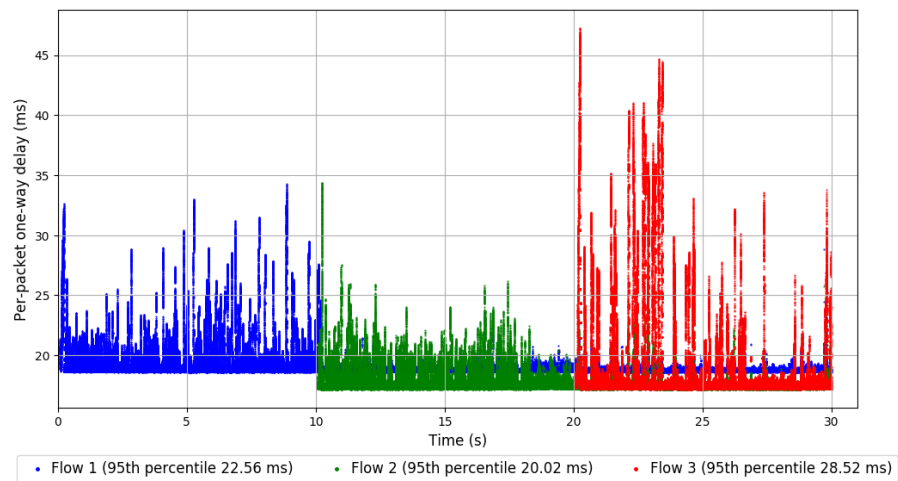
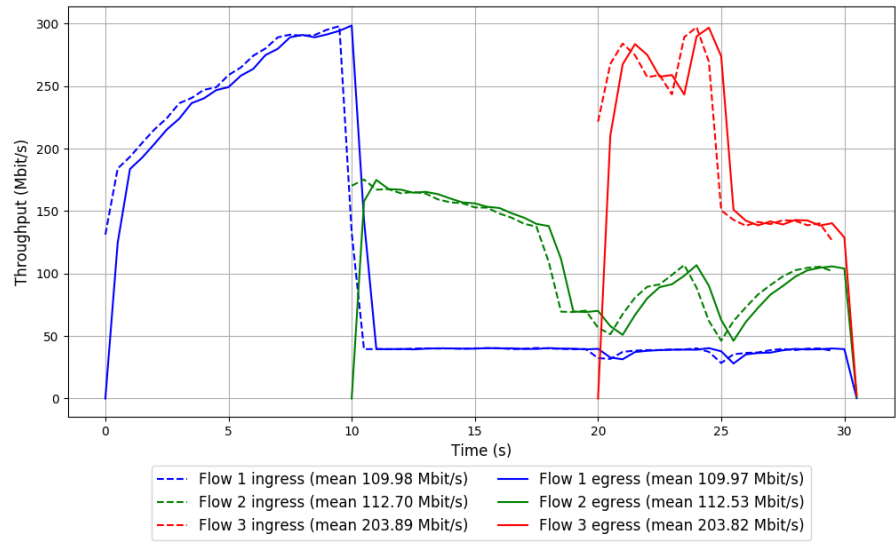
-- Flow 3:

Average throughput: 203.82 Mbit/s

95th percentile per-packet one-way delay: 28.520 ms

Loss rate: 0.03%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-06-05 14:50:45

End at: 2018-06-05 14:51:15

Local clock offset: 0.205 ms

Remote clock offset: 0.02 ms

Below is generated by plot.py at 2018-06-05 17:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.87 Mbit/s

95th percentile per-packet one-way delay: 22.589 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 161.93 Mbit/s

95th percentile per-packet one-way delay: 22.791 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 62.30 Mbit/s

95th percentile per-packet one-way delay: 19.967 ms

Loss rate: 0.29%

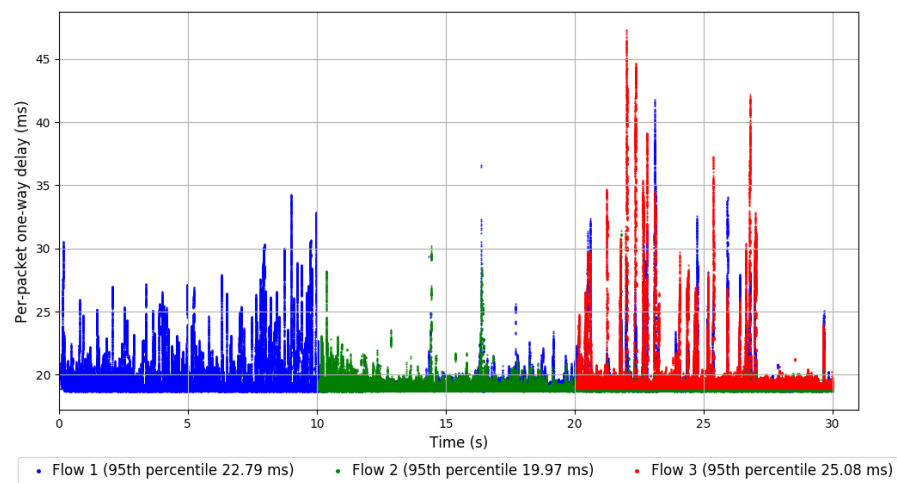
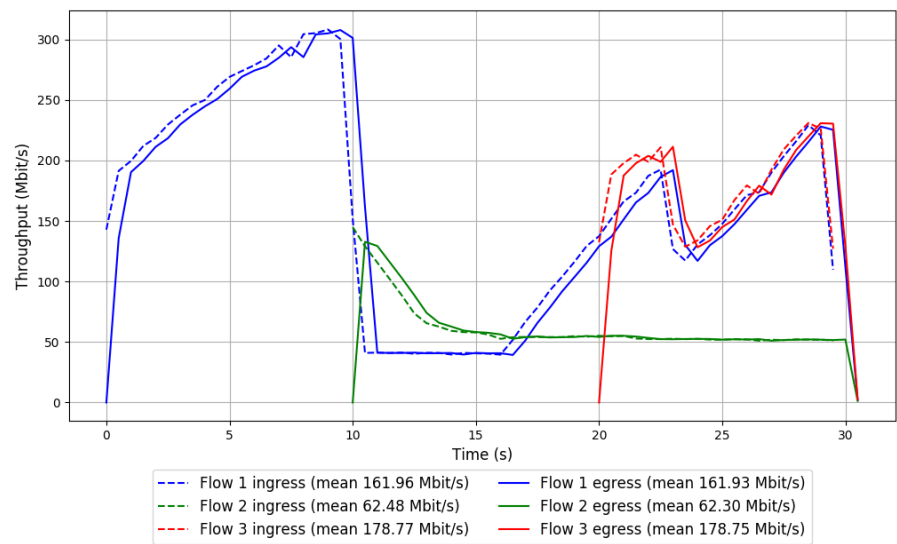
-- Flow 3:

Average throughput: 178.75 Mbit/s

95th percentile per-packet one-way delay: 25.078 ms

Loss rate: 0.01%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-06-05 15:16:26

End at: 2018-06-05 15:16:56

Local clock offset: 0.371 ms

Remote clock offset: 0.164 ms

Below is generated by plot.py at 2018-06-05 17:48:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.25 Mbit/s

95th percentile per-packet one-way delay: 23.477 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 192.99 Mbit/s

95th percentile per-packet one-way delay: 23.053 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 173.91 Mbit/s

95th percentile per-packet one-way delay: 24.489 ms

Loss rate: 0.08%

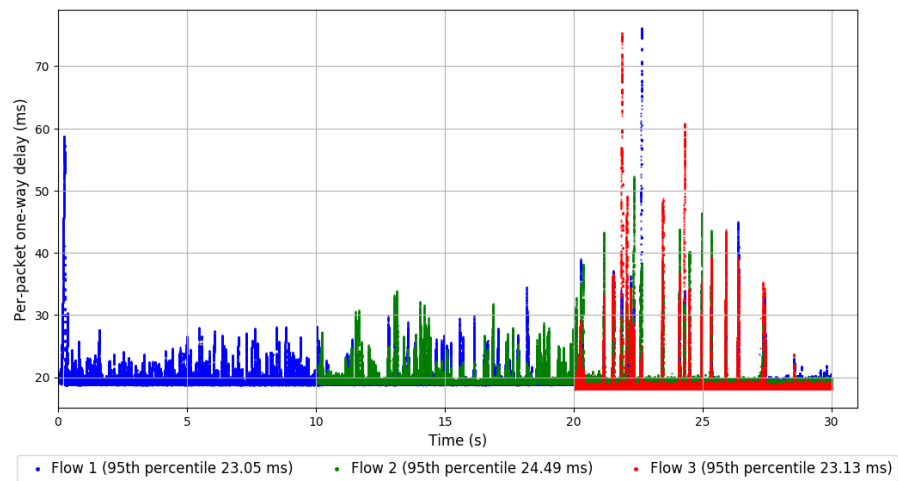
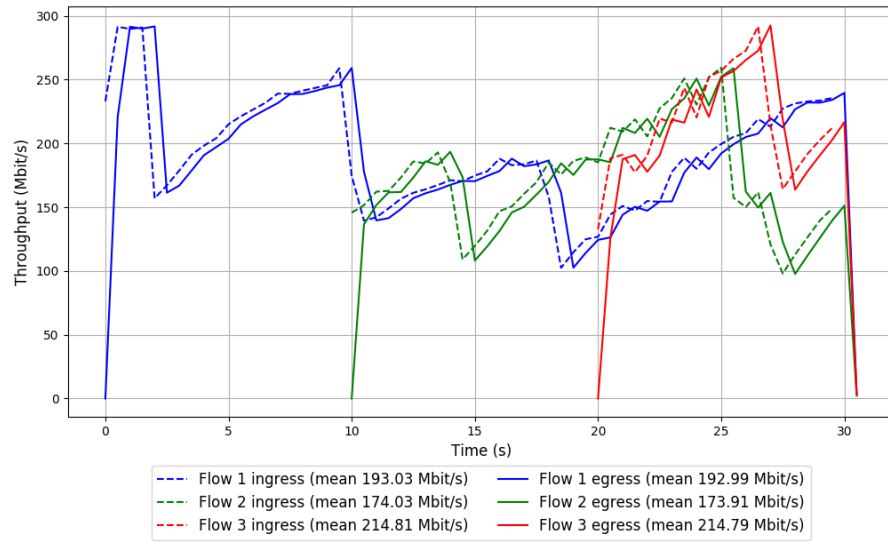
-- Flow 3:

Average throughput: 214.79 Mbit/s

95th percentile per-packet one-way delay: 23.130 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-06-05 11:47:57

End at: 2018-06-05 11:48:27

Local clock offset: 0.215 ms

Remote clock offset: 0.324 ms

Below is generated by plot.py at 2018-06-05 17:49:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.73 Mbit/s

95th percentile per-packet one-way delay: 47.032 ms

Loss rate: 24.60%

-- Flow 1:

Average throughput: 195.99 Mbit/s

95th percentile per-packet one-way delay: 48.602 ms

Loss rate: 21.63%

-- Flow 2:

Average throughput: 198.78 Mbit/s

95th percentile per-packet one-way delay: 40.149 ms

Loss rate: 21.25%

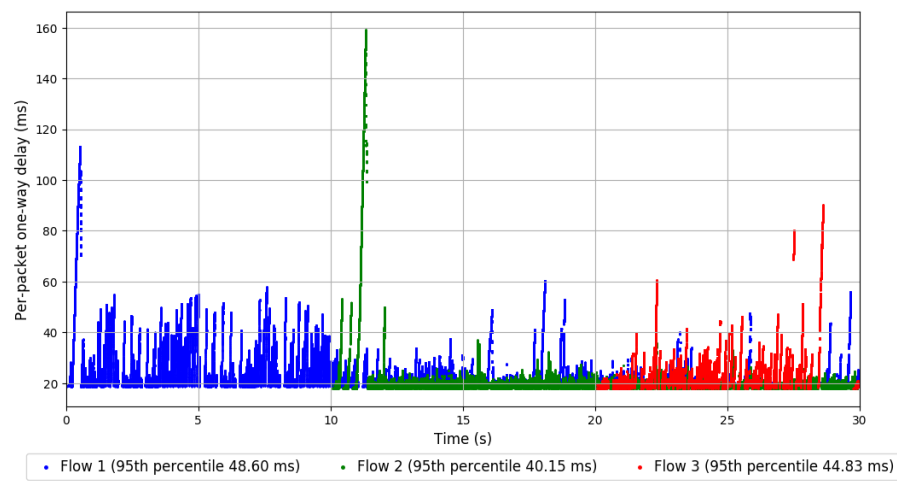
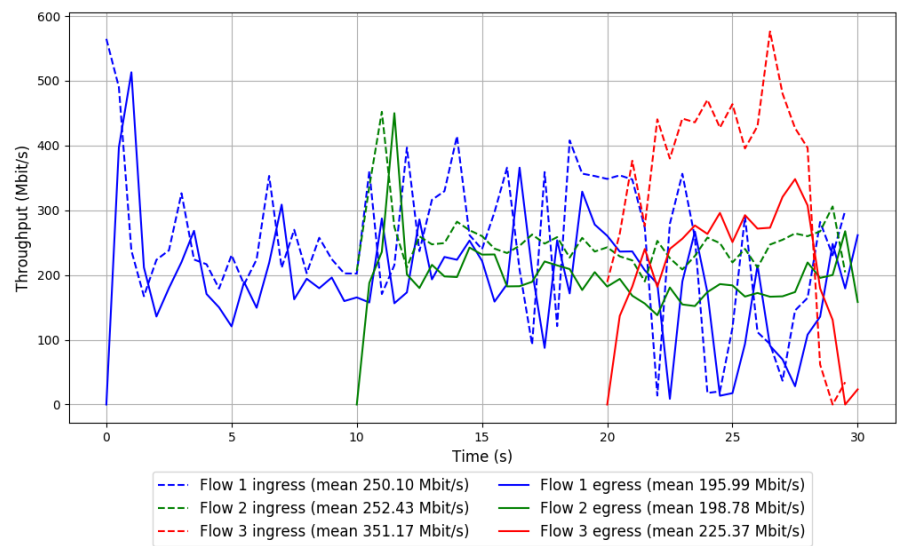
-- Flow 3:

Average throughput: 225.37 Mbit/s

95th percentile per-packet one-way delay: 44.826 ms

Loss rate: 35.82%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-06-05 12:13:53

End at: 2018-06-05 12:14:23

Local clock offset: 0.205 ms

Remote clock offset: 0.452 ms

Below is generated by plot.py at 2018-06-05 17:49:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 371.24 Mbit/s

95th percentile per-packet one-way delay: 36.972 ms

Loss rate: 26.90%

-- Flow 1:

Average throughput: 176.97 Mbit/s

95th percentile per-packet one-way delay: 44.579 ms

Loss rate: 25.72%

-- Flow 2:

Average throughput: 221.96 Mbit/s

95th percentile per-packet one-way delay: 30.429 ms

Loss rate: 29.38%

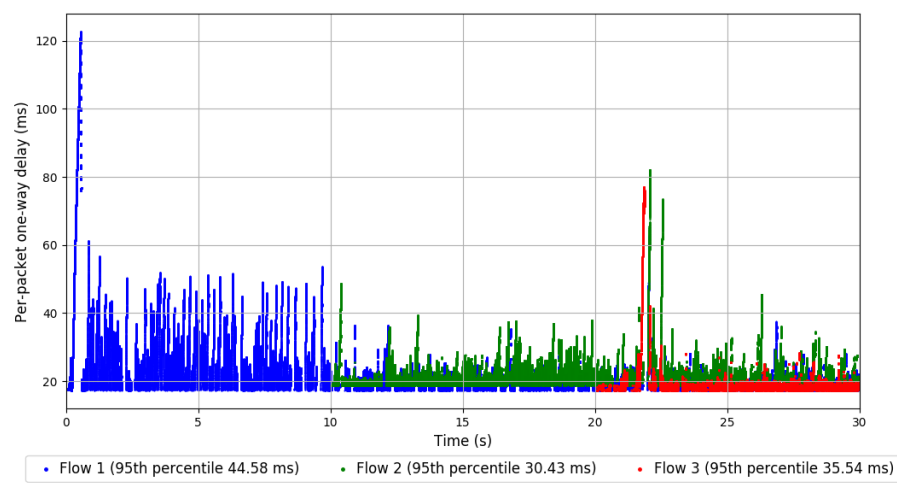
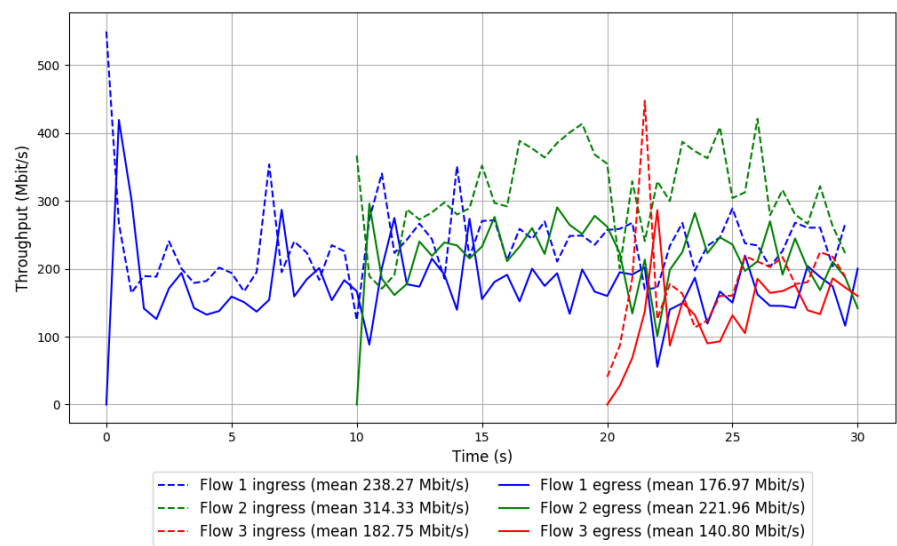
-- Flow 3:

Average throughput: 140.80 Mbit/s

95th percentile per-packet one-way delay: 35.544 ms

Loss rate: 22.94%

Run 2: Report of Verus — Data Link

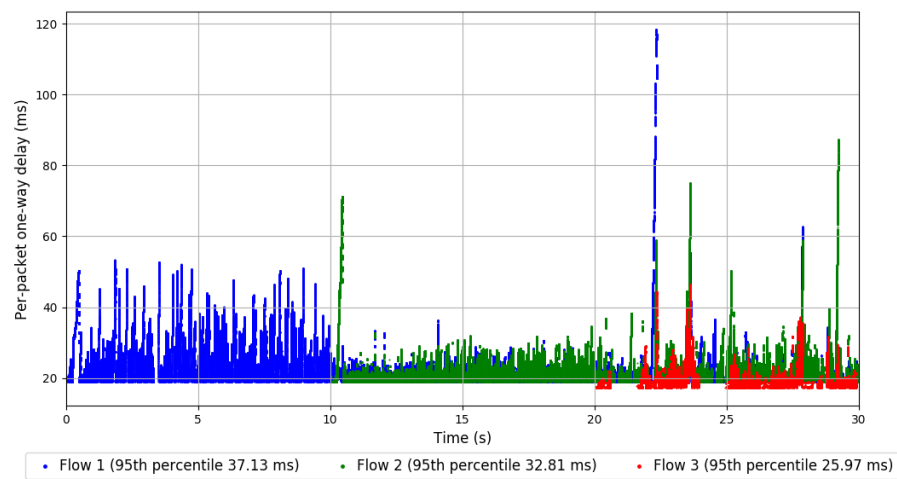
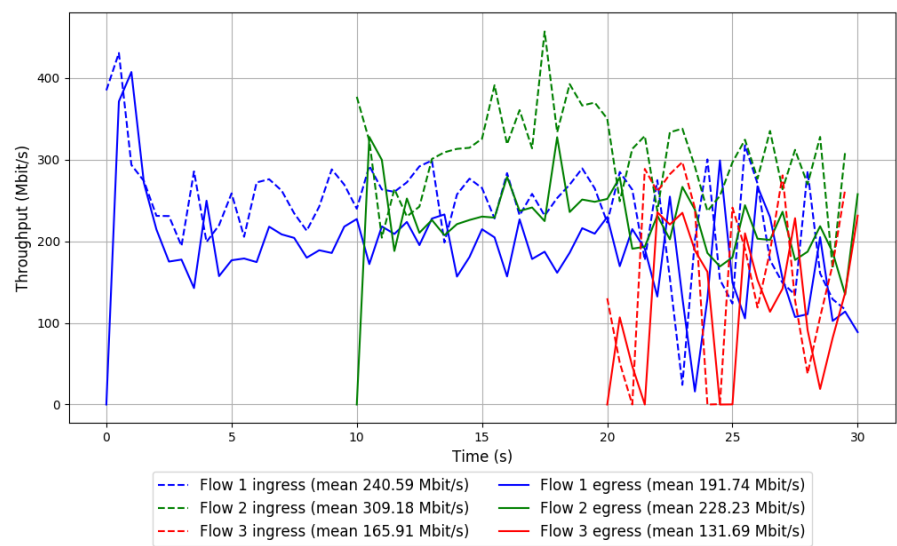


Run 3: Statistics of Verus

Start at: 2018-06-05 12:39:22
End at: 2018-06-05 12:39:52
Local clock offset: 0.209 ms
Remote clock offset: -0.437 ms

Below is generated by plot.py at 2018-06-05 17:50:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 387.06 Mbit/s
95th percentile per-packet one-way delay: 34.452 ms
Loss rate: 22.75%
-- Flow 1:
Average throughput: 191.74 Mbit/s
95th percentile per-packet one-way delay: 37.129 ms
Loss rate: 20.30%
-- Flow 2:
Average throughput: 228.23 Mbit/s
95th percentile per-packet one-way delay: 32.809 ms
Loss rate: 26.18%
-- Flow 3:
Average throughput: 131.69 Mbit/s
95th percentile per-packet one-way delay: 25.969 ms
Loss rate: 20.61%

Run 3: Report of Verus — Data Link

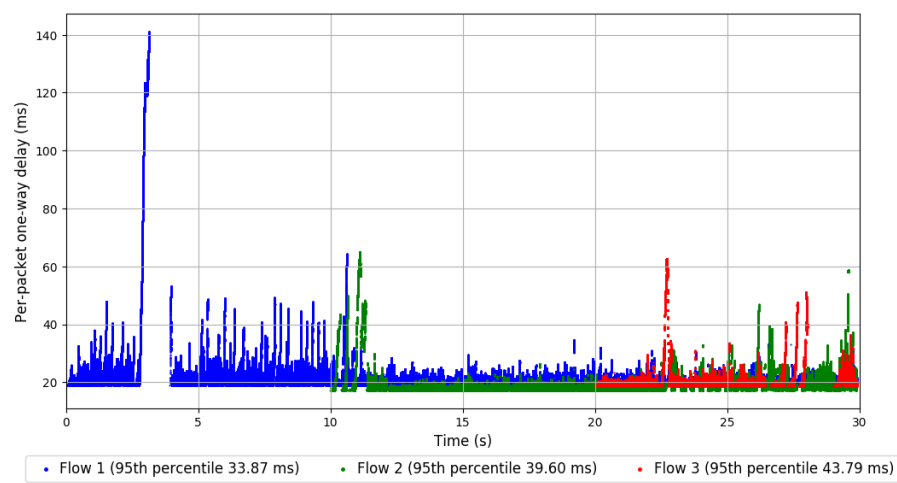
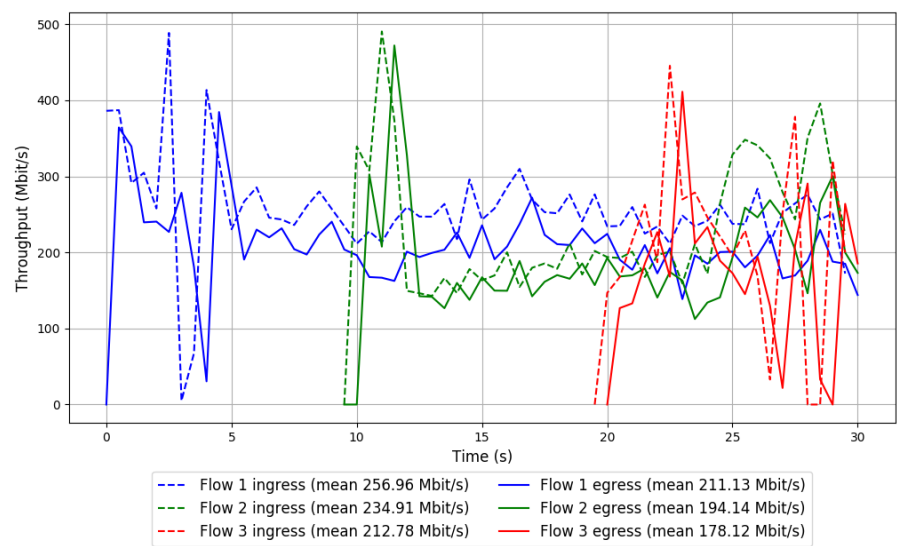


Run 4: Statistics of Verus

Start at: 2018-06-05 13:04:55
End at: 2018-06-05 13:05:25
Local clock offset: 0.303 ms
Remote clock offset: -0.016 ms

Below is generated by plot.py at 2018-06-05 17:50:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 399.48 Mbit/s
95th percentile per-packet one-way delay: 38.203 ms
Loss rate: 17.44%
-- Flow 1:
Average throughput: 211.13 Mbit/s
95th percentile per-packet one-way delay: 33.873 ms
Loss rate: 17.83%
-- Flow 2:
Average throughput: 194.14 Mbit/s
95th percentile per-packet one-way delay: 39.597 ms
Loss rate: 17.33%
-- Flow 3:
Average throughput: 178.12 Mbit/s
95th percentile per-packet one-way delay: 43.788 ms
Loss rate: 16.29%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-06-05 13:30:27

End at: 2018-06-05 13:30:57

Local clock offset: 0.284 ms

Remote clock offset: 0.102 ms

Below is generated by plot.py at 2018-06-05 17:52:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 451.14 Mbit/s

95th percentile per-packet one-way delay: 41.952 ms

Loss rate: 26.33%

-- Flow 1:

Average throughput: 235.75 Mbit/s

95th percentile per-packet one-way delay: 35.377 ms

Loss rate: 21.64%

-- Flow 2:

Average throughput: 210.64 Mbit/s

95th percentile per-packet one-way delay: 29.256 ms

Loss rate: 30.51%

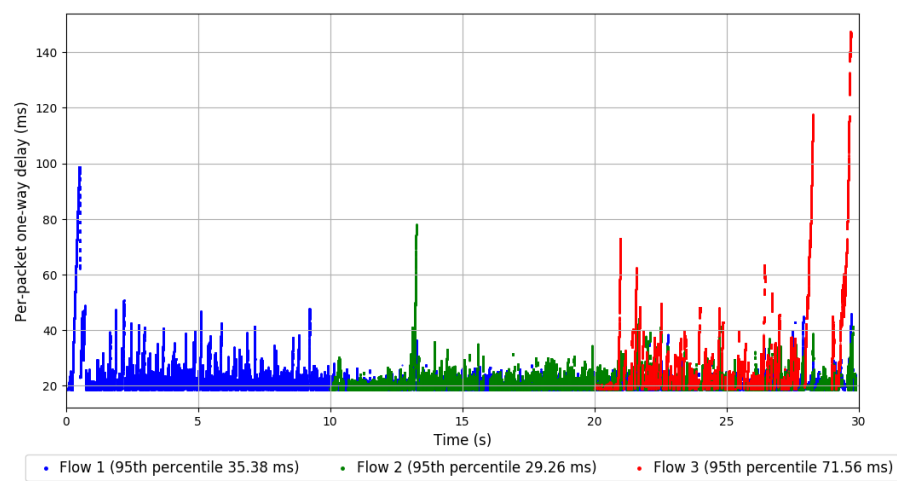
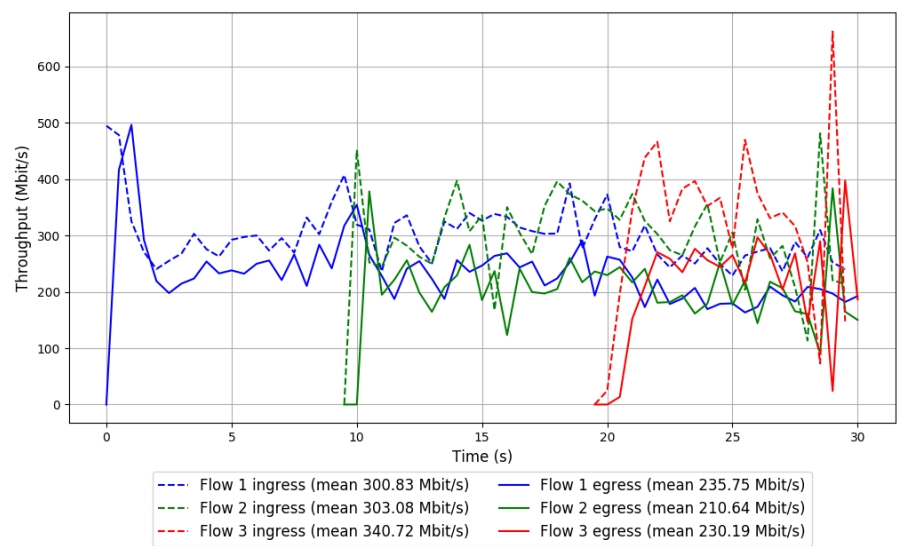
-- Flow 3:

Average throughput: 230.19 Mbit/s

95th percentile per-packet one-way delay: 71.565 ms

Loss rate: 31.55%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-06-05 13:56:03

End at: 2018-06-05 13:56:33

Local clock offset: 0.409 ms

Remote clock offset: 0.08 ms

Below is generated by plot.py at 2018-06-05 17:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 431.39 Mbit/s

95th percentile per-packet one-way delay: 32.586 ms

Loss rate: 24.25%

-- Flow 1:

Average throughput: 225.89 Mbit/s

95th percentile per-packet one-way delay: 31.295 ms

Loss rate: 23.00%

-- Flow 2:

Average throughput: 213.10 Mbit/s

95th percentile per-packet one-way delay: 32.419 ms

Loss rate: 23.71%

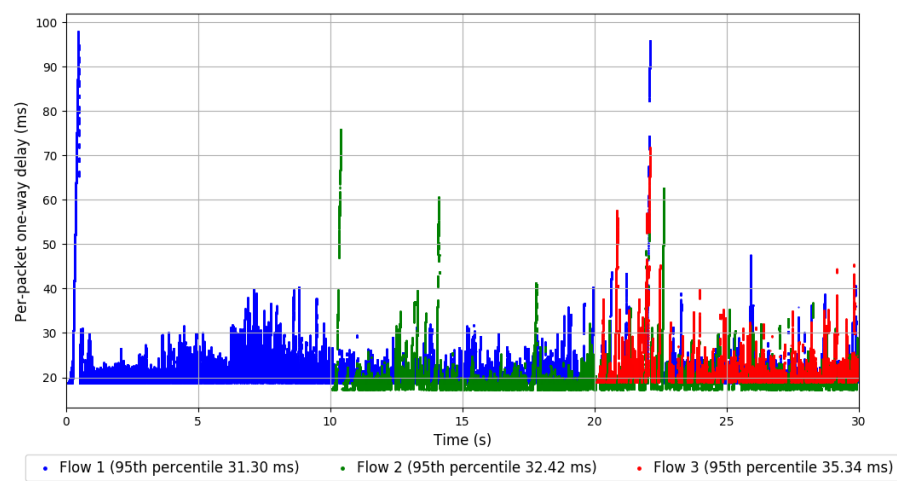
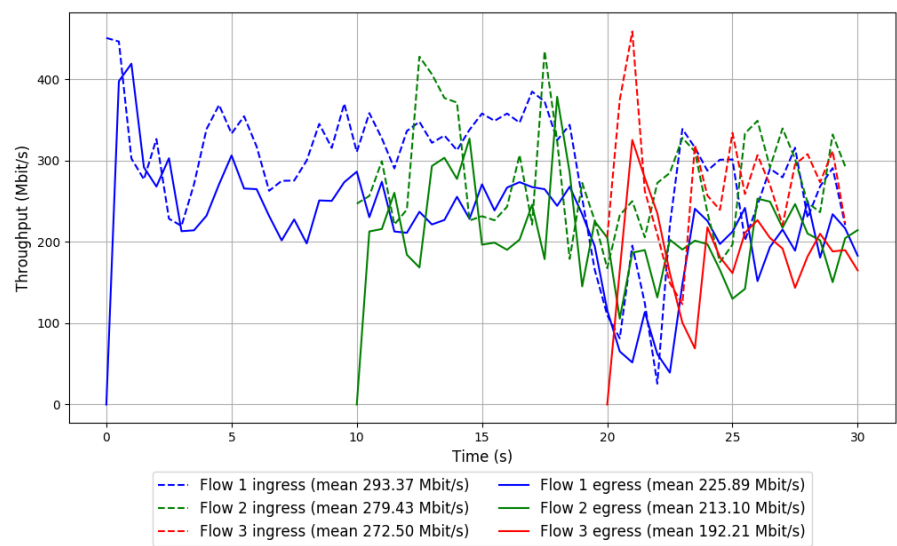
-- Flow 3:

Average throughput: 192.21 Mbit/s

95th percentile per-packet one-way delay: 35.345 ms

Loss rate: 29.46%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-06-05 14:21:45

End at: 2018-06-05 14:22:15

Local clock offset: 0.439 ms

Remote clock offset: 0.188 ms

Below is generated by plot.py at 2018-06-05 17:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 386.21 Mbit/s

95th percentile per-packet one-way delay: 35.868 ms

Loss rate: 21.44%

-- Flow 1:

Average throughput: 180.45 Mbit/s

95th percentile per-packet one-way delay: 39.335 ms

Loss rate: 17.48%

-- Flow 2:

Average throughput: 227.74 Mbit/s

95th percentile per-packet one-way delay: 33.936 ms

Loss rate: 24.86%

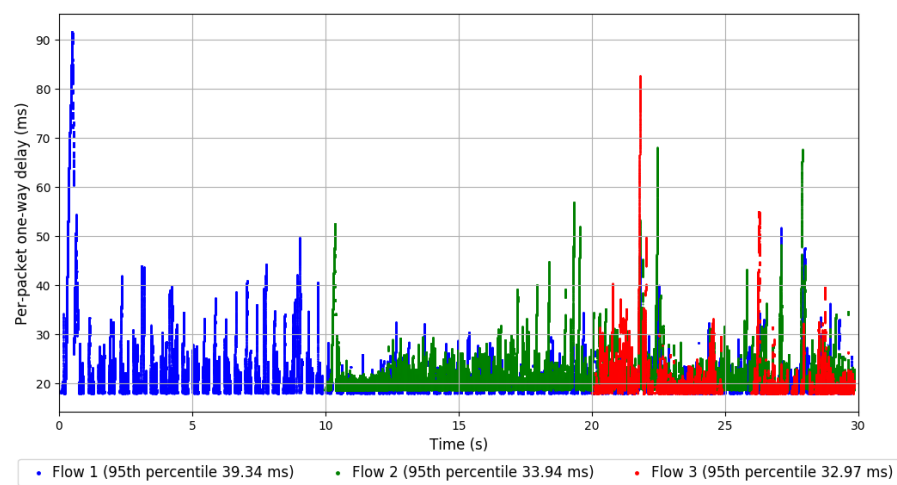
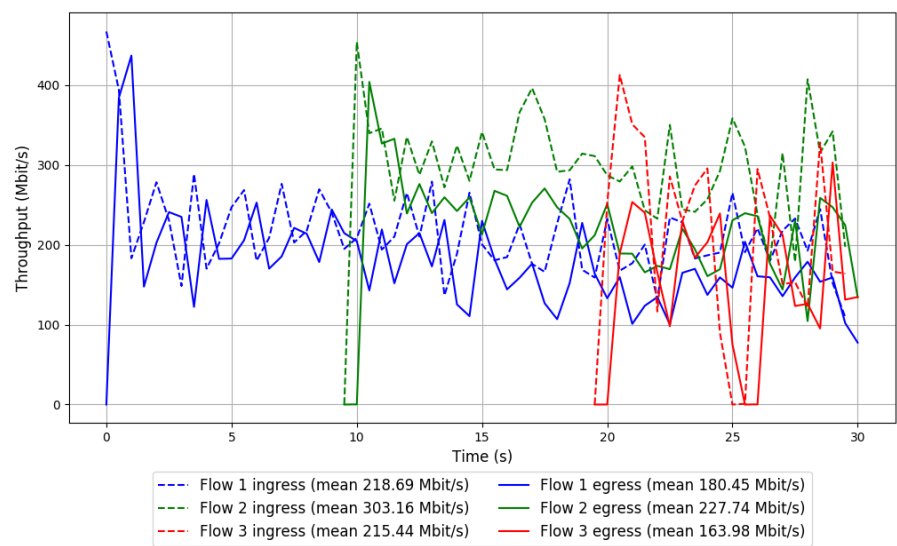
-- Flow 3:

Average throughput: 163.98 Mbit/s

95th percentile per-packet one-way delay: 32.969 ms

Loss rate: 23.87%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-06-05 14:47:21

End at: 2018-06-05 14:47:51

Local clock offset: 0.219 ms

Remote clock offset: 0.066 ms

Below is generated by plot.py at 2018-06-05 17:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 415.49 Mbit/s

95th percentile per-packet one-way delay: 33.516 ms

Loss rate: 21.22%

-- Flow 1:

Average throughput: 232.92 Mbit/s

95th percentile per-packet one-way delay: 32.541 ms

Loss rate: 19.67%

-- Flow 2:

Average throughput: 198.28 Mbit/s

95th percentile per-packet one-way delay: 34.493 ms

Loss rate: 19.95%

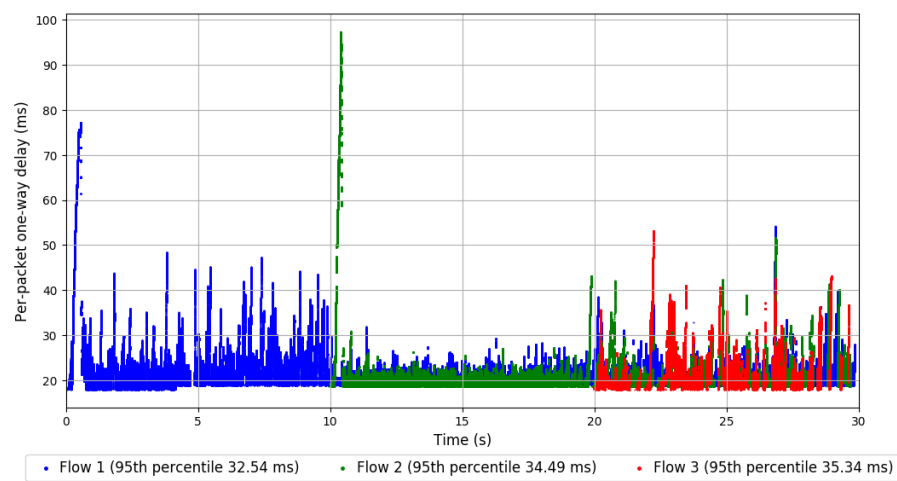
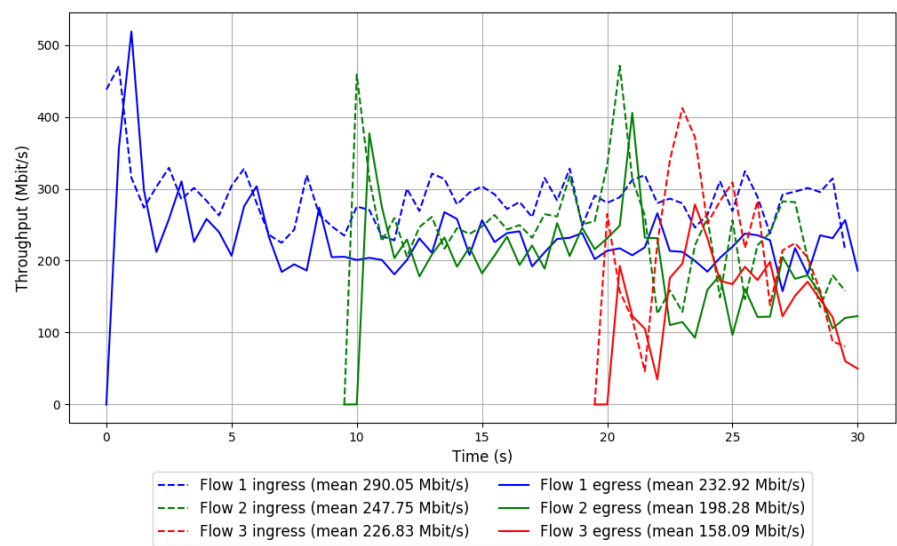
-- Flow 3:

Average throughput: 158.09 Mbit/s

95th percentile per-packet one-way delay: 35.337 ms

Loss rate: 30.18%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-06-05 15:13:02

End at: 2018-06-05 15:13:32

Local clock offset: 0.457 ms

Remote clock offset: 0.091 ms

Below is generated by plot.py at 2018-06-05 17:55:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 442.24 Mbit/s

95th percentile per-packet one-way delay: 43.617 ms

Loss rate: 24.77%

-- Flow 1:

Average throughput: 252.65 Mbit/s

95th percentile per-packet one-way delay: 26.864 ms

Loss rate: 23.05%

-- Flow 2:

Average throughput: 221.69 Mbit/s

95th percentile per-packet one-way delay: 37.917 ms

Loss rate: 26.75%

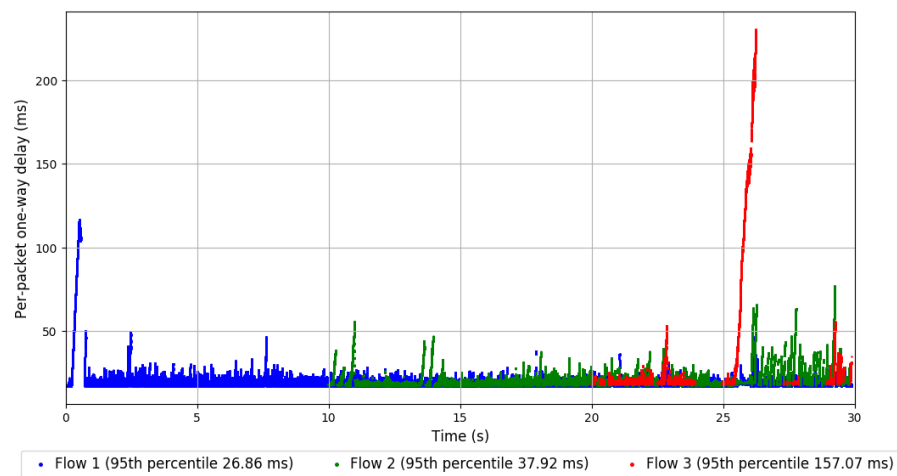
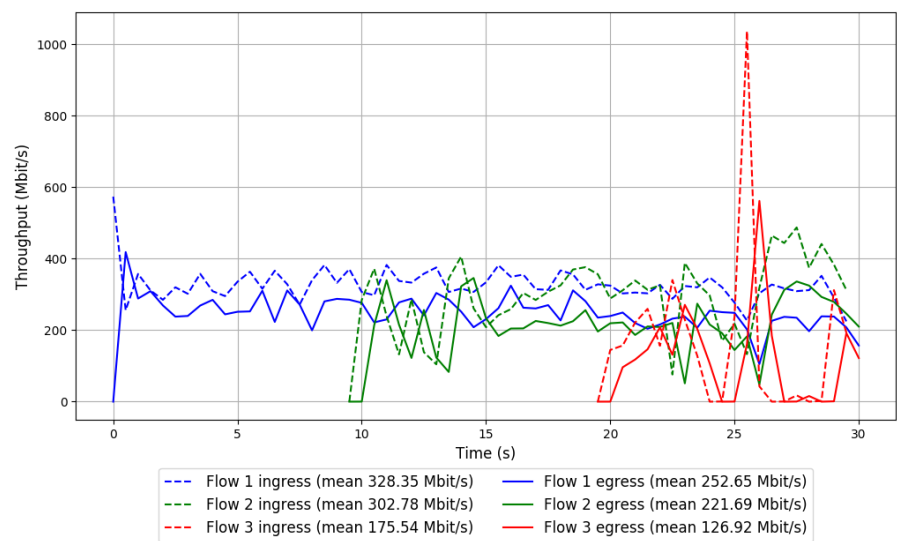
-- Flow 3:

Average throughput: 126.92 Mbit/s

95th percentile per-packet one-way delay: 157.066 ms

Loss rate: 27.61%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-06-05 15:38:31

End at: 2018-06-05 15:39:01

Local clock offset: 0.206 ms

Remote clock offset: 0.298 ms

Below is generated by plot.py at 2018-06-05 17:55:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.06 Mbit/s

95th percentile per-packet one-way delay: 32.378 ms

Loss rate: 20.06%

-- Flow 1:

Average throughput: 240.22 Mbit/s

95th percentile per-packet one-way delay: 40.382 ms

Loss rate: 21.92%

-- Flow 2:

Average throughput: 200.25 Mbit/s

95th percentile per-packet one-way delay: 31.467 ms

Loss rate: 16.26%

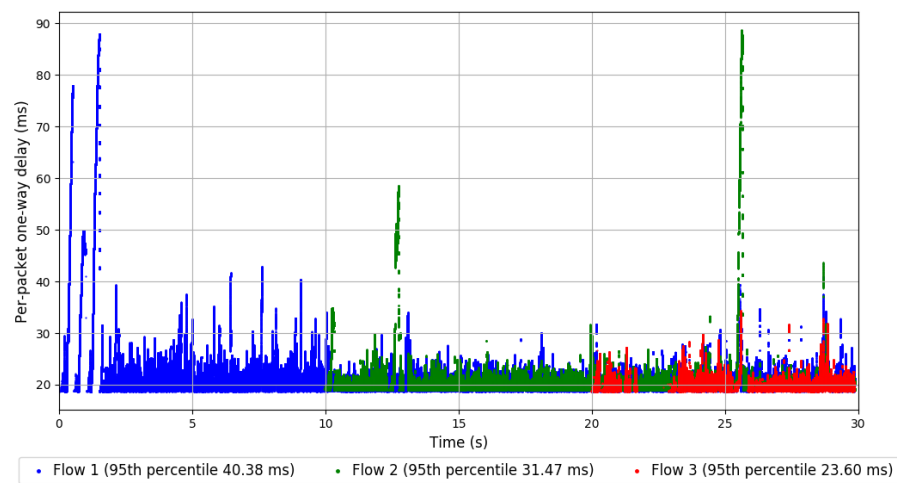
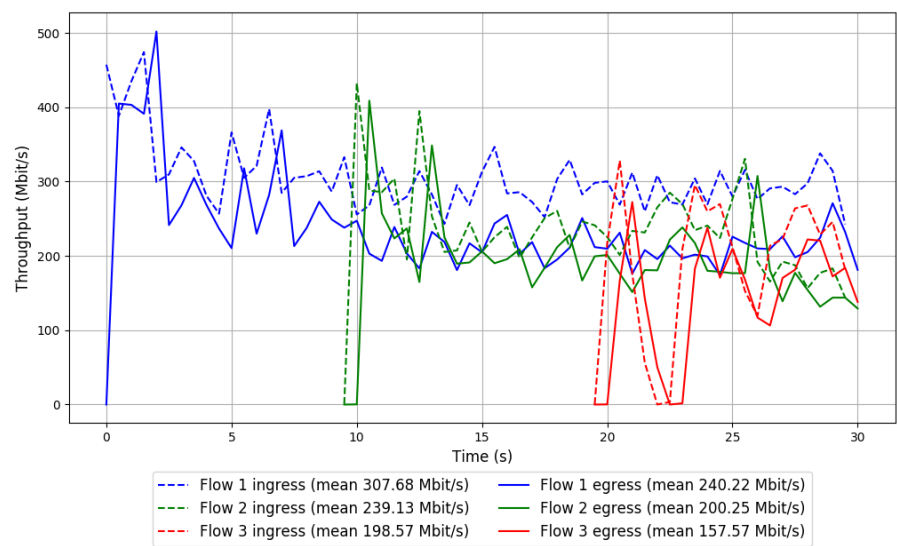
-- Flow 3:

Average throughput: 157.57 Mbit/s

95th percentile per-packet one-way delay: 23.598 ms

Loss rate: 20.64%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-05 11:36:48

End at: 2018-06-05 11:37:18

Local clock offset: 0.16 ms

Remote clock offset: 0.271 ms

Below is generated by plot.py at 2018-06-05 17:58:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 653.96 Mbit/s

95th percentile per-packet one-way delay: 19.995 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 389.90 Mbit/s

95th percentile per-packet one-way delay: 22.787 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 322.70 Mbit/s

95th percentile per-packet one-way delay: 18.363 ms

Loss rate: 0.24%

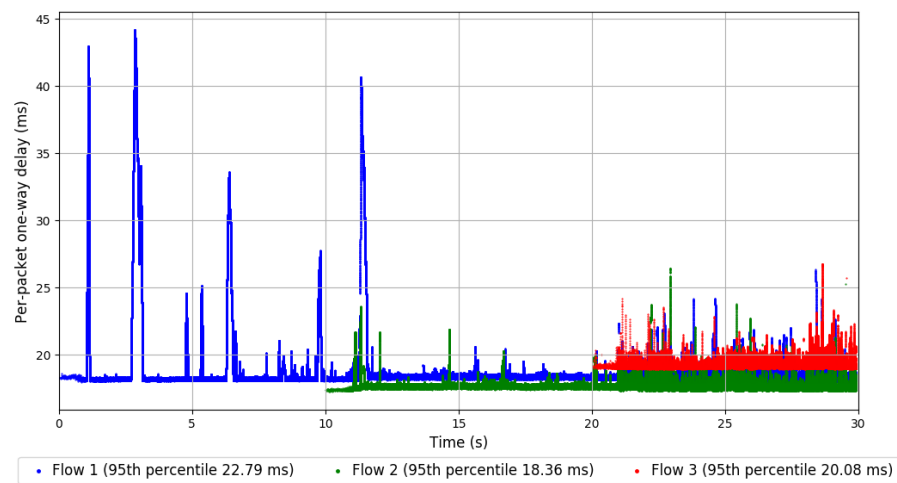
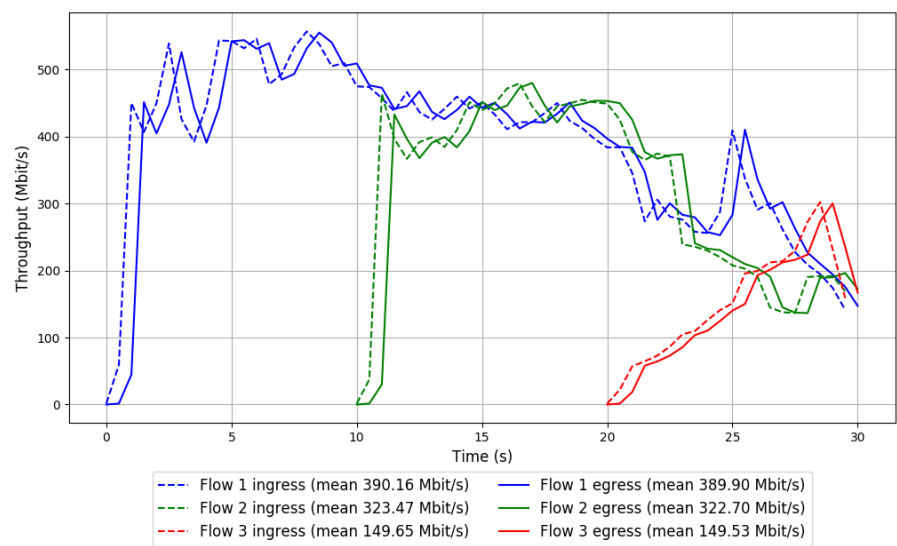
-- Flow 3:

Average throughput: 149.53 Mbit/s

95th percentile per-packet one-way delay: 20.082 ms

Loss rate: 0.08%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-06-05 12:02:30

End at: 2018-06-05 12:03:00

Local clock offset: 0.261 ms

Remote clock offset: 0.282 ms

Below is generated by plot.py at 2018-06-05 17:58:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 635.38 Mbit/s

95th percentile per-packet one-way delay: 31.207 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 413.69 Mbit/s

95th percentile per-packet one-way delay: 59.766 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 297.42 Mbit/s

95th percentile per-packet one-way delay: 19.430 ms

Loss rate: 0.29%

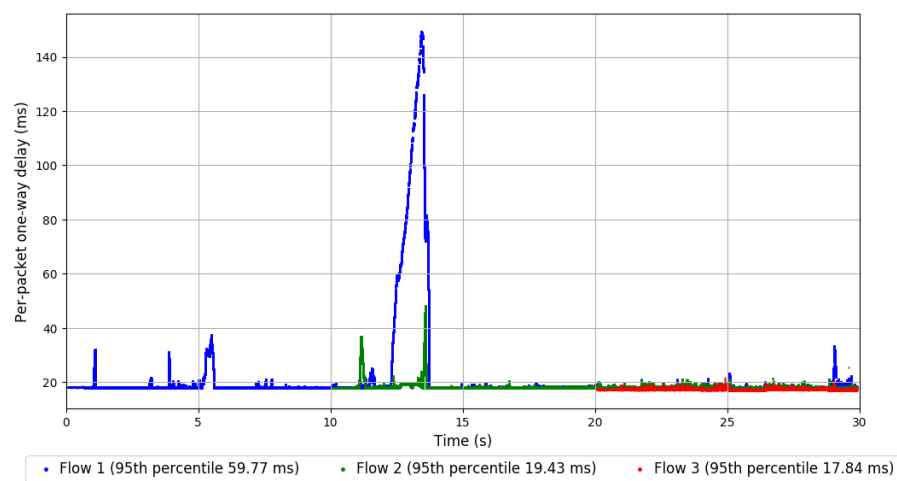
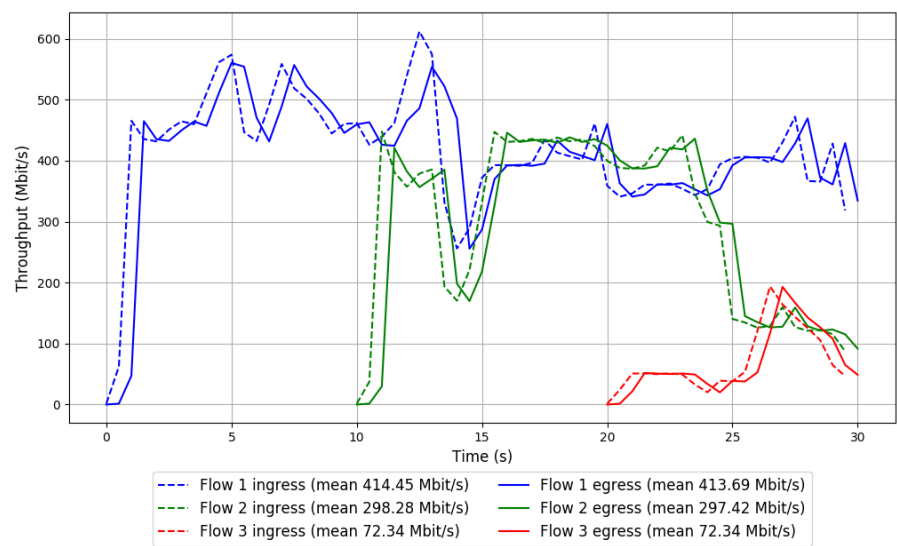
-- Flow 3:

Average throughput: 72.34 Mbit/s

95th percentile per-packet one-way delay: 17.845 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

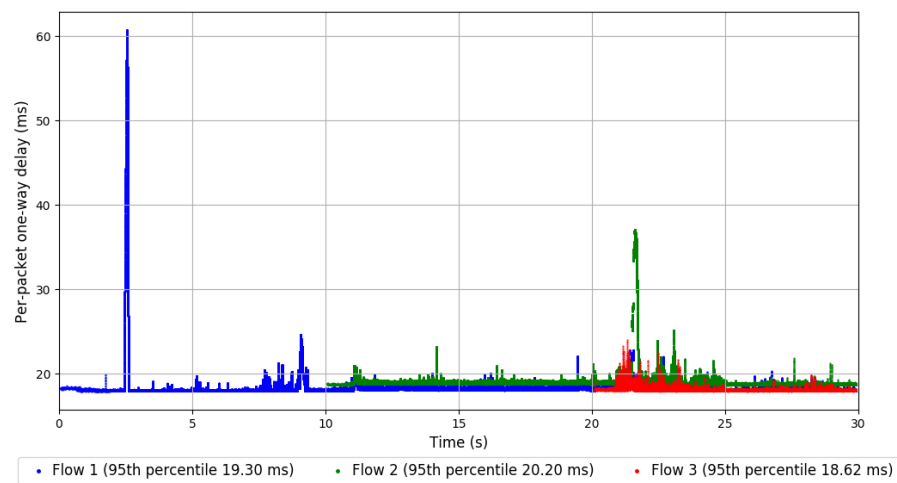
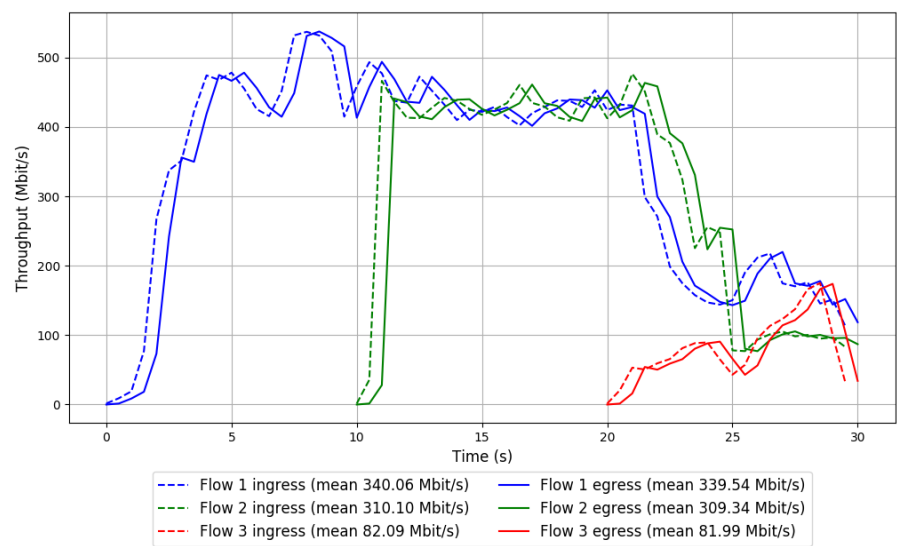


Run 3: Statistics of PCC-Vivace

Start at: 2018-06-05 12:28:11
End at: 2018-06-05 12:28:41
Local clock offset: 0.272 ms
Remote clock offset: -0.178 ms

Below is generated by plot.py at 2018-06-05 17:59:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 572.28 Mbit/s
95th percentile per-packet one-way delay: 19.571 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 339.54 Mbit/s
95th percentile per-packet one-way delay: 19.296 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 309.34 Mbit/s
95th percentile per-packet one-way delay: 20.202 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 81.99 Mbit/s
95th percentile per-packet one-way delay: 18.624 ms
Loss rate: 0.11%

Run 3: Report of PCC-Vivace — Data Link

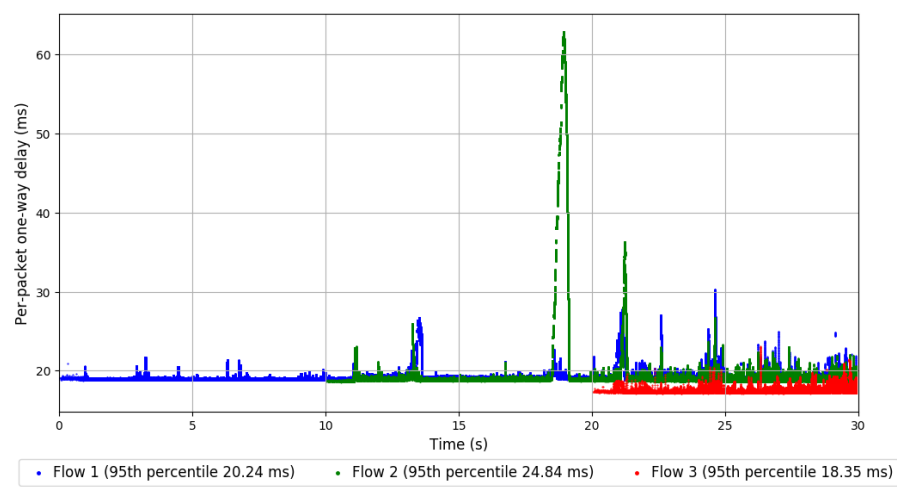
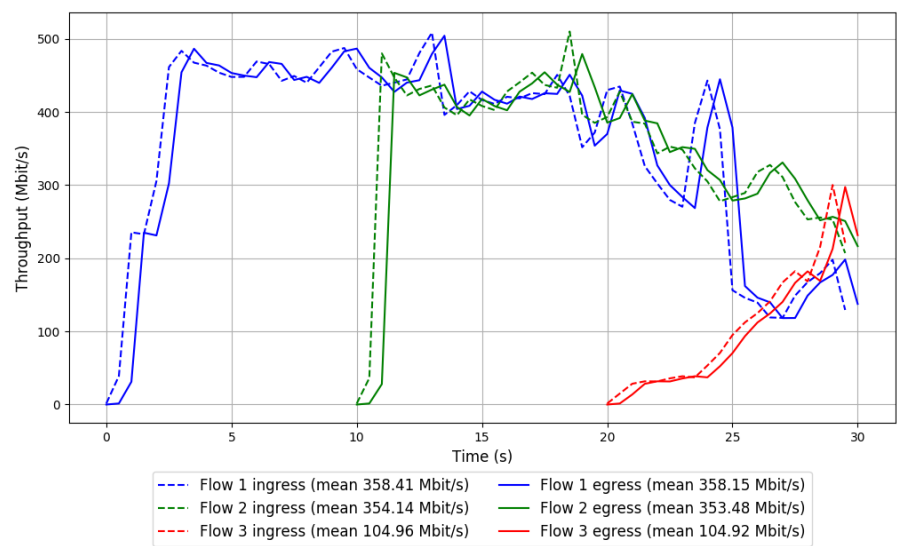


Run 4: Statistics of PCC-Vivace

Start at: 2018-06-05 12:53:35
End at: 2018-06-05 12:54:05
Local clock offset: 0.279 ms
Remote clock offset: -0.394 ms

Below is generated by plot.py at 2018-06-05 18:00:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 627.88 Mbit/s
95th percentile per-packet one-way delay: 20.508 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 358.15 Mbit/s
95th percentile per-packet one-way delay: 20.240 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 353.48 Mbit/s
95th percentile per-packet one-way delay: 24.835 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 104.92 Mbit/s
95th percentile per-packet one-way delay: 18.354 ms
Loss rate: 0.04%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-06-05 13:19:18

End at: 2018-06-05 13:19:48

Local clock offset: 0.286 ms

Remote clock offset: 0.174 ms

Below is generated by plot.py at 2018-06-05 18:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 632.82 Mbit/s

95th percentile per-packet one-way delay: 23.788 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 375.64 Mbit/s

95th percentile per-packet one-way delay: 19.639 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 355.00 Mbit/s

95th percentile per-packet one-way delay: 85.553 ms

Loss rate: 0.23%

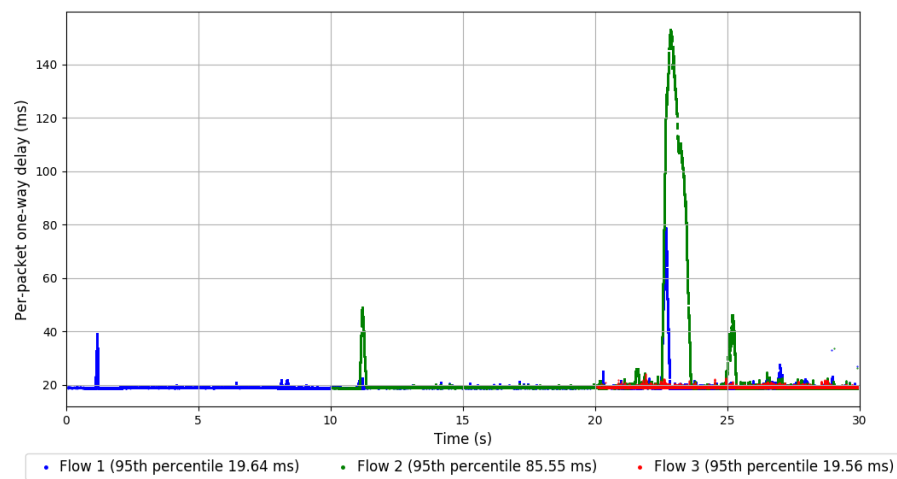
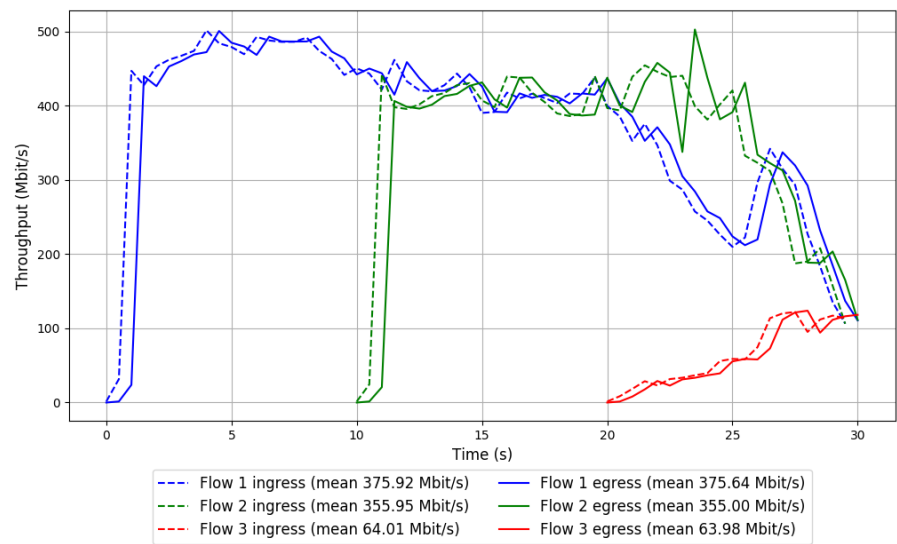
-- Flow 3:

Average throughput: 63.98 Mbit/s

95th percentile per-packet one-way delay: 19.564 ms

Loss rate: 0.06%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-06-05 13:44:47

End at: 2018-06-05 13:45:17

Local clock offset: 0.339 ms

Remote clock offset: 0.027 ms

Below is generated by plot.py at 2018-06-05 18:01:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 608.85 Mbit/s

95th percentile per-packet one-way delay: 178.403 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 410.56 Mbit/s

95th percentile per-packet one-way delay: 187.709 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 263.58 Mbit/s

95th percentile per-packet one-way delay: 19.677 ms

Loss rate: 0.13%

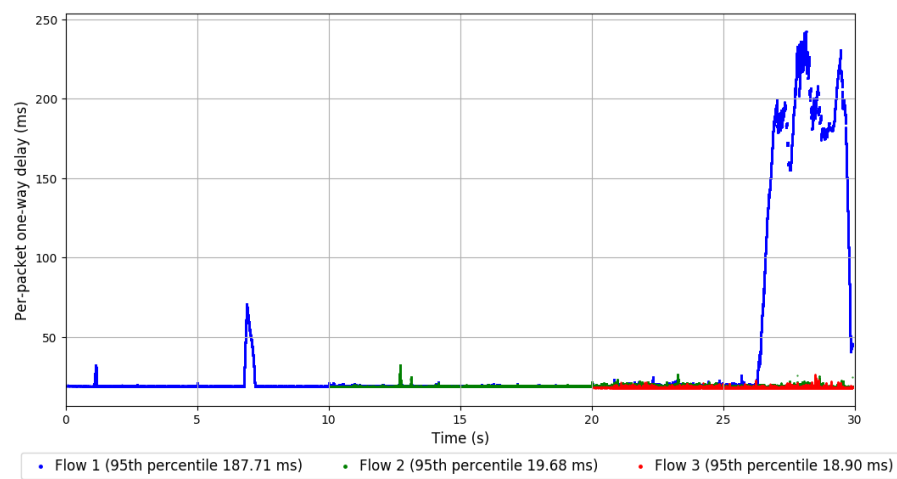
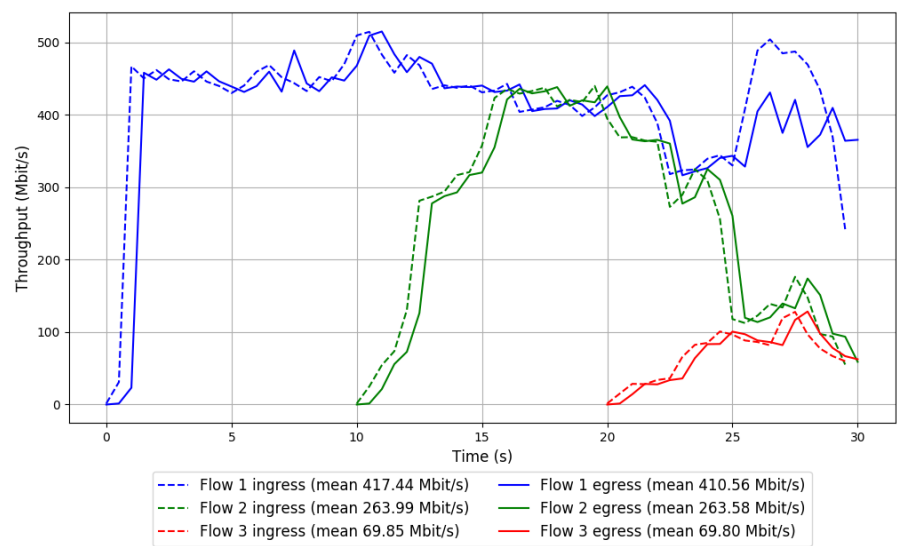
-- Flow 3:

Average throughput: 69.80 Mbit/s

95th percentile per-packet one-way delay: 18.904 ms

Loss rate: 0.07%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-06-05 14:10:32

End at: 2018-06-05 14:11:02

Local clock offset: 0.438 ms

Remote clock offset: 0.055 ms

Below is generated by plot.py at 2018-06-05 18:02:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 628.81 Mbit/s

95th percentile per-packet one-way delay: 51.286 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 410.13 Mbit/s

95th percentile per-packet one-way delay: 58.783 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 313.04 Mbit/s

95th percentile per-packet one-way delay: 21.284 ms

Loss rate: 0.34%

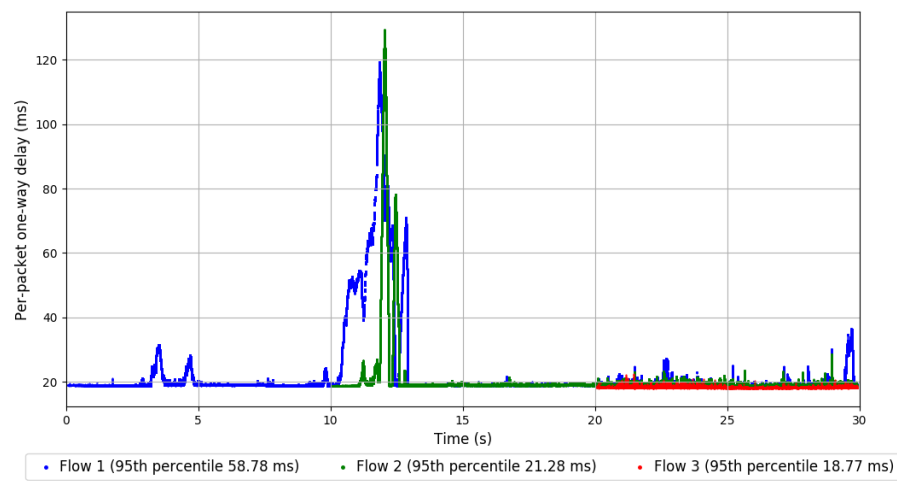
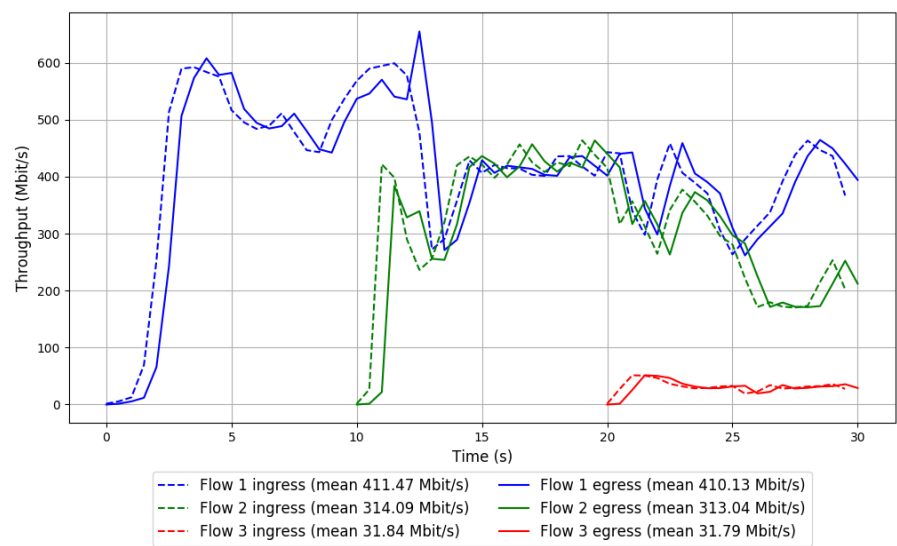
-- Flow 3:

Average throughput: 31.79 Mbit/s

95th percentile per-packet one-way delay: 18.770 ms

Loss rate: 0.18%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-06-05 14:35:55

End at: 2018-06-05 14:36:25

Local clock offset: 0.181 ms

Remote clock offset: 0.14 ms

Below is generated by plot.py at 2018-06-05 18:02:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 639.43 Mbit/s

95th percentile per-packet one-way delay: 128.202 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 405.84 Mbit/s

95th percentile per-packet one-way delay: 143.337 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 324.49 Mbit/s

95th percentile per-packet one-way delay: 19.611 ms

Loss rate: 0.27%

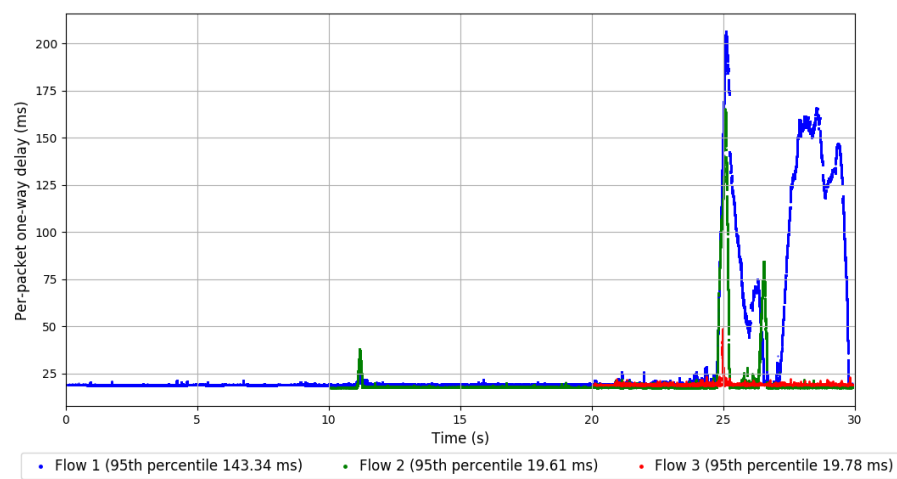
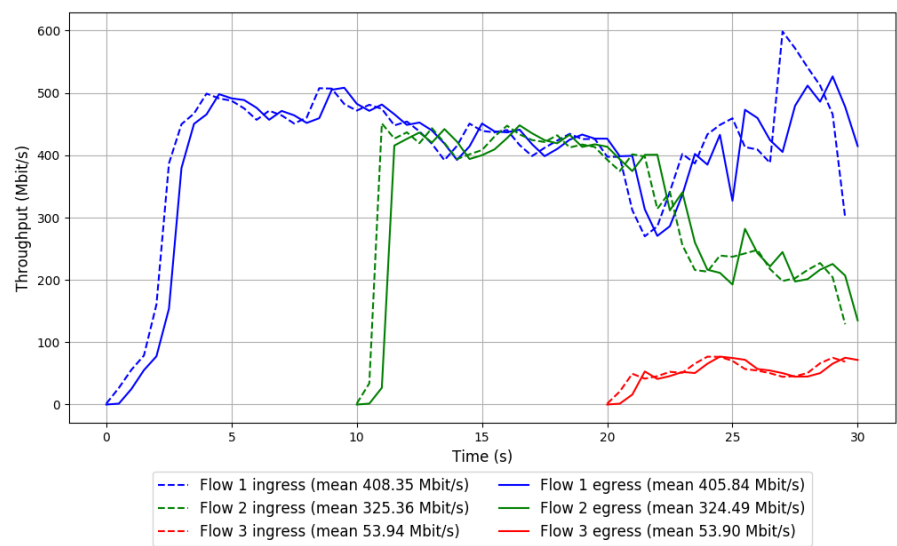
-- Flow 3:

Average throughput: 53.90 Mbit/s

95th percentile per-packet one-way delay: 19.783 ms

Loss rate: 0.08%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-06-05 15:01:49

End at: 2018-06-05 15:02:19

Local clock offset: 0.348 ms

Remote clock offset: 0.065 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 647.60 Mbit/s

95th percentile per-packet one-way delay: 31.699 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 375.83 Mbit/s

95th percentile per-packet one-way delay: 43.674 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 367.19 Mbit/s

95th percentile per-packet one-way delay: 24.313 ms

Loss rate: 0.68%

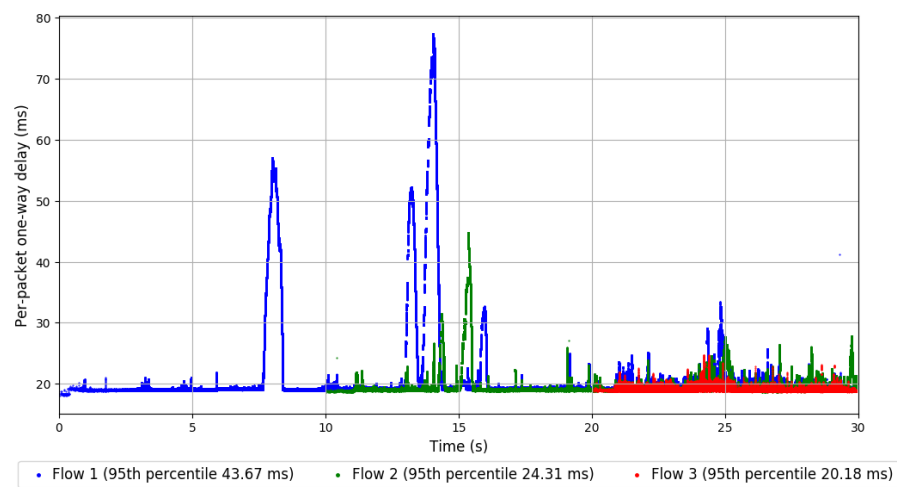
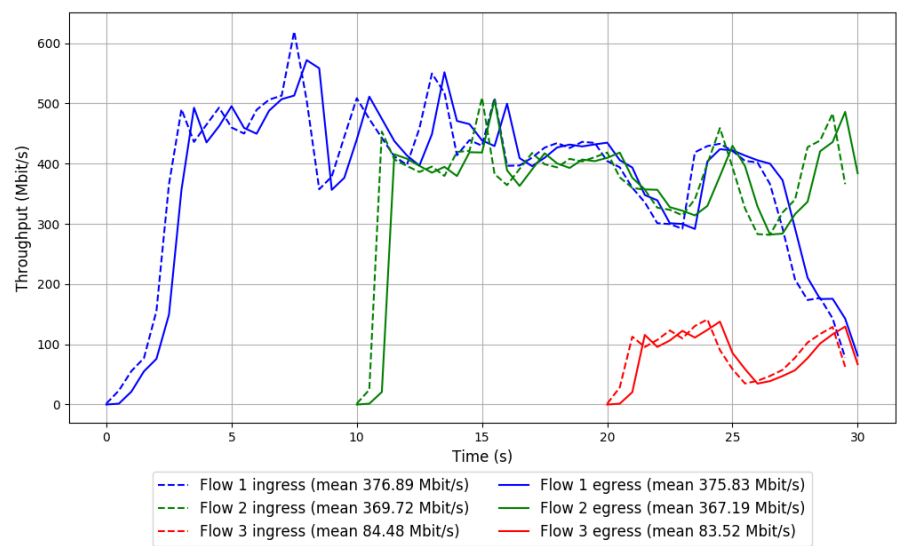
-- Flow 3:

Average throughput: 83.52 Mbit/s

95th percentile per-packet one-way delay: 20.178 ms

Loss rate: 1.14%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-06-05 15:27:23

End at: 2018-06-05 15:27:53

Local clock offset: 0.216 ms

Remote clock offset: 0.23 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 629.09 Mbit/s

95th percentile per-packet one-way delay: 63.080 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 385.51 Mbit/s

95th percentile per-packet one-way delay: 50.850 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 341.19 Mbit/s

95th percentile per-packet one-way delay: 98.524 ms

Loss rate: 0.71%

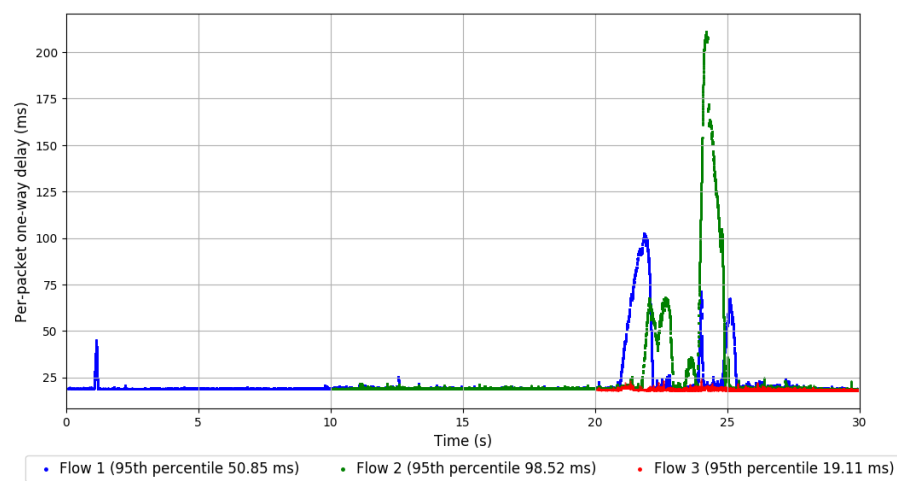
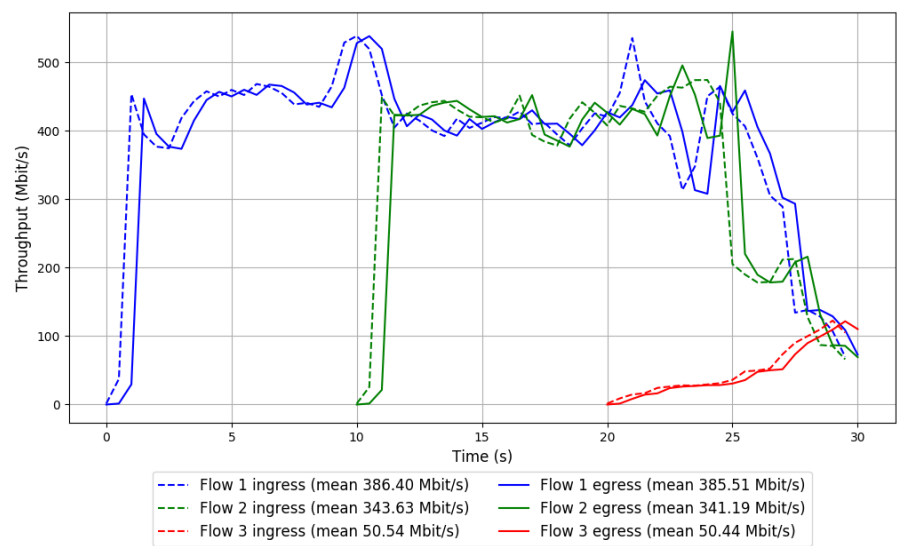
-- Flow 3:

Average throughput: 50.44 Mbit/s

95th percentile per-packet one-way delay: 19.115 ms

Loss rate: 0.19%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-06-05 11:34:12

End at: 2018-06-05 11:34:42

Local clock offset: 0.255 ms

Remote clock offset: 0.198 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 20.379 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 19.779 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 21.042 ms

Loss rate: 0.02%

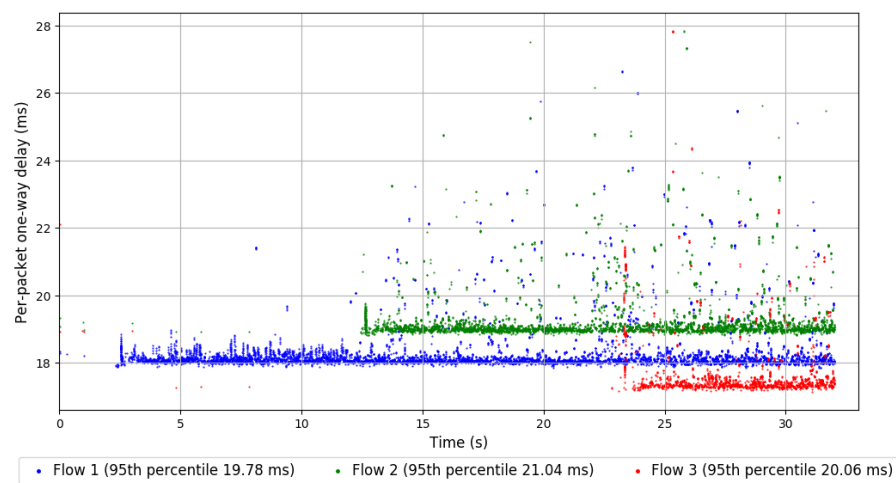
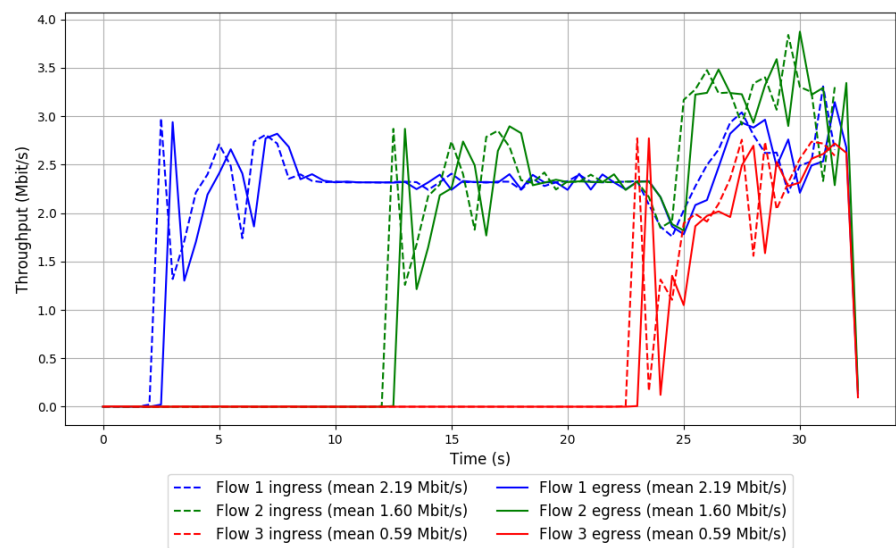
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 20.058 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-06-05 11:59:54

End at: 2018-06-05 12:00:24

Local clock offset: 0.23 ms

Remote clock offset: 0.259 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 20.490 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 20.511 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 20.398 ms

Loss rate: 0.00%

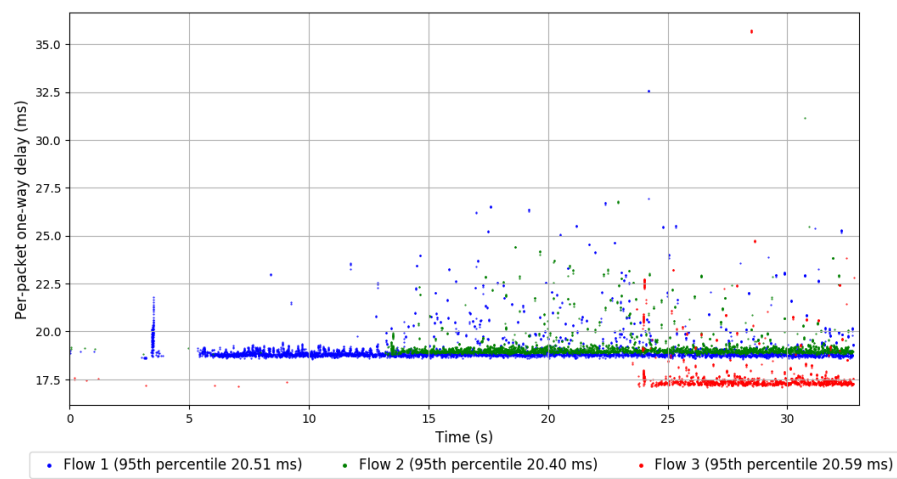
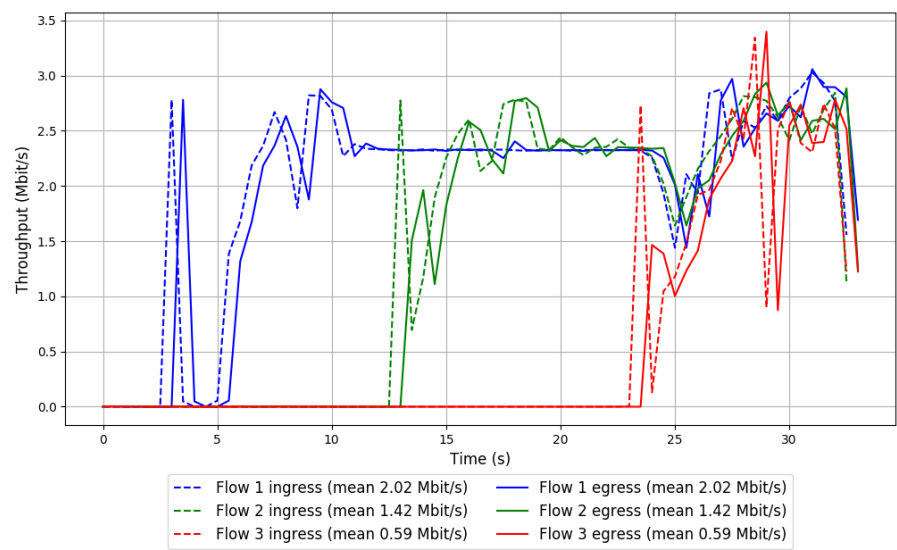
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 20.586 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

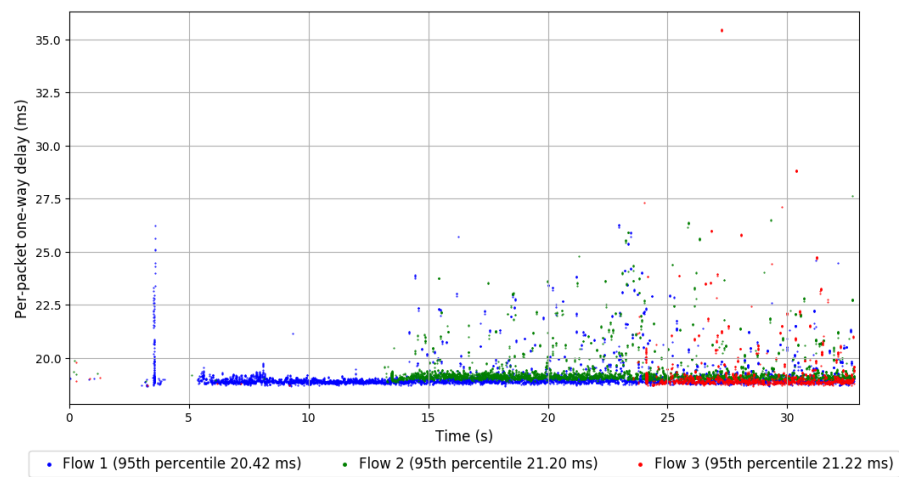
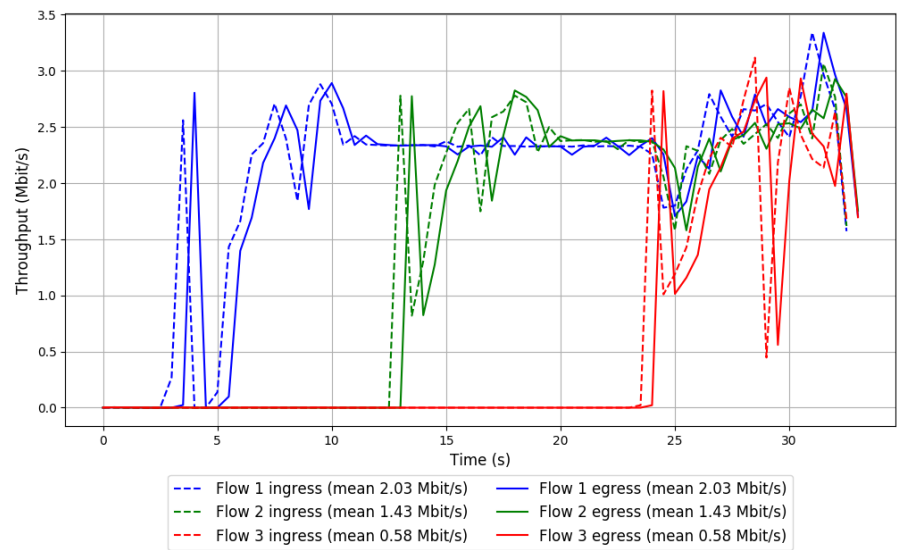


Run 3: Statistics of WebRTC media

Start at: 2018-06-05 12:25:35
End at: 2018-06-05 12:26:05
Local clock offset: 0.195 ms
Remote clock offset: -0.098 ms

Below is generated by plot.py at 2018-06-05 18:03:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 20.871 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 20.417 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 21.198 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 21.218 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

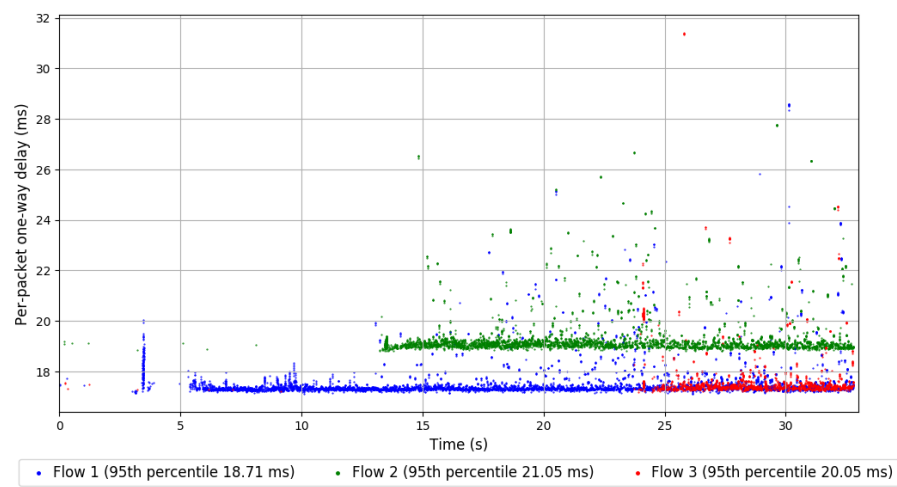
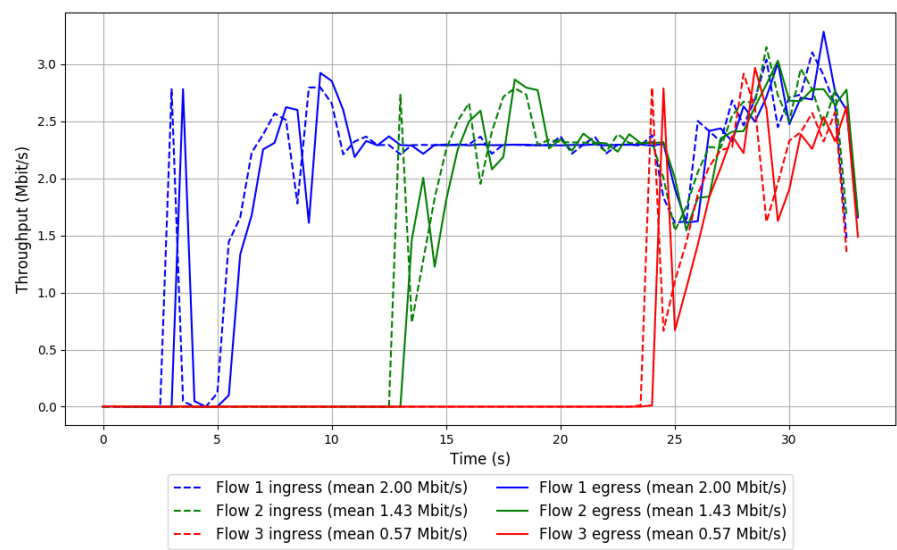


Run 4: Statistics of WebRTC media

Start at: 2018-06-05 12:50:59
End at: 2018-06-05 12:51:29
Local clock offset: 0.184 ms
Remote clock offset: -0.621 ms

Below is generated by plot.py at 2018-06-05 18:03:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 20.020 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 18.714 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 21.051 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20.054 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-06-05 13:16:42

End at: 2018-06-05 13:17:12

Local clock offset: 0.273 ms

Remote clock offset: 0.144 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 20.587 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 20.470 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 20.285 ms

Loss rate: 0.00%

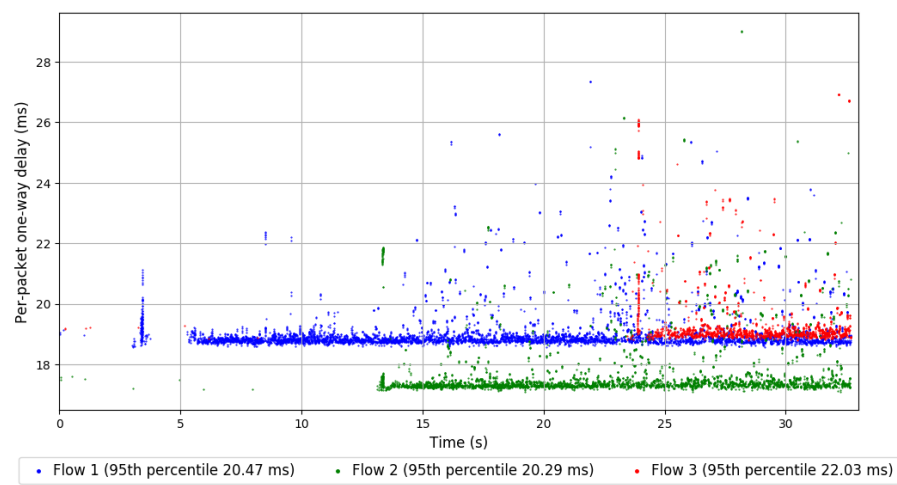
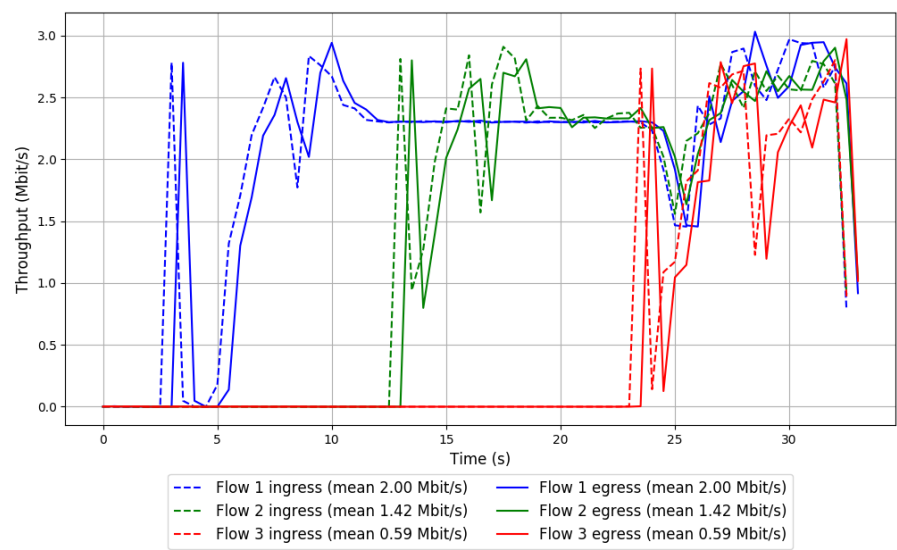
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 22.030 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-06-05 13:42:10

End at: 2018-06-05 13:42:40

Local clock offset: 0.307 ms

Remote clock offset: 0.062 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 21.091 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 20.760 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 21.070 ms

Loss rate: 0.00%

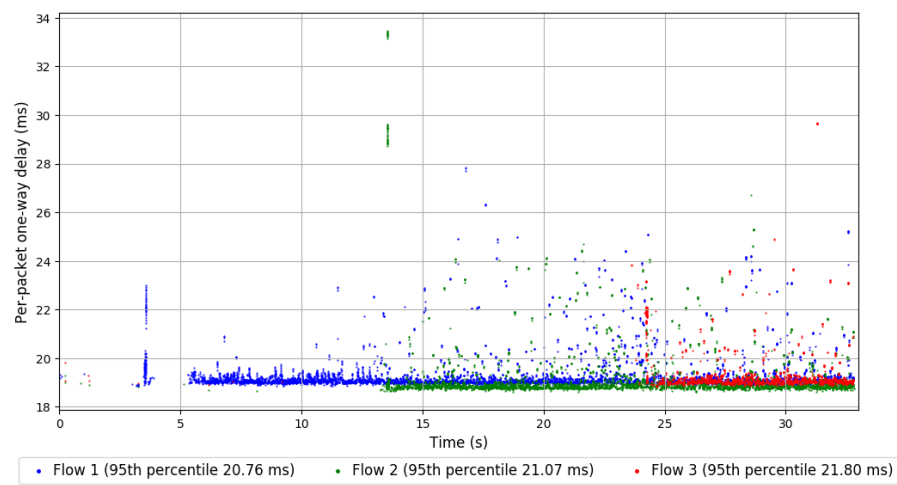
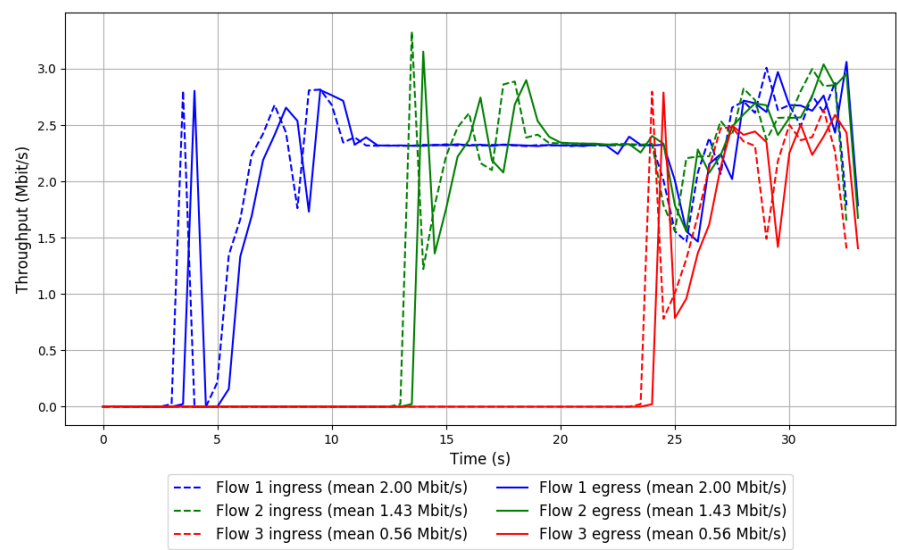
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 21.803 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-06-05 14:07:56

End at: 2018-06-05 14:08:26

Local clock offset: 0.444 ms

Remote clock offset: 0.071 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 20.334 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 20.379 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 20.242 ms

Loss rate: 0.00%

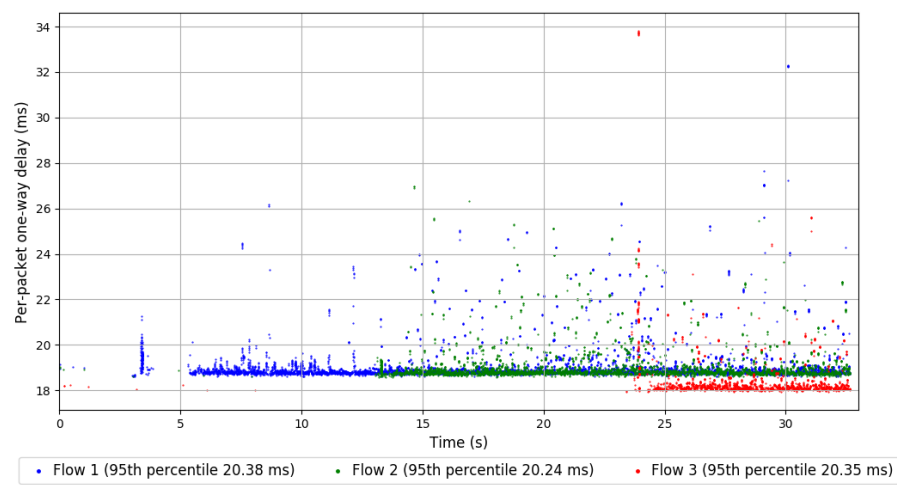
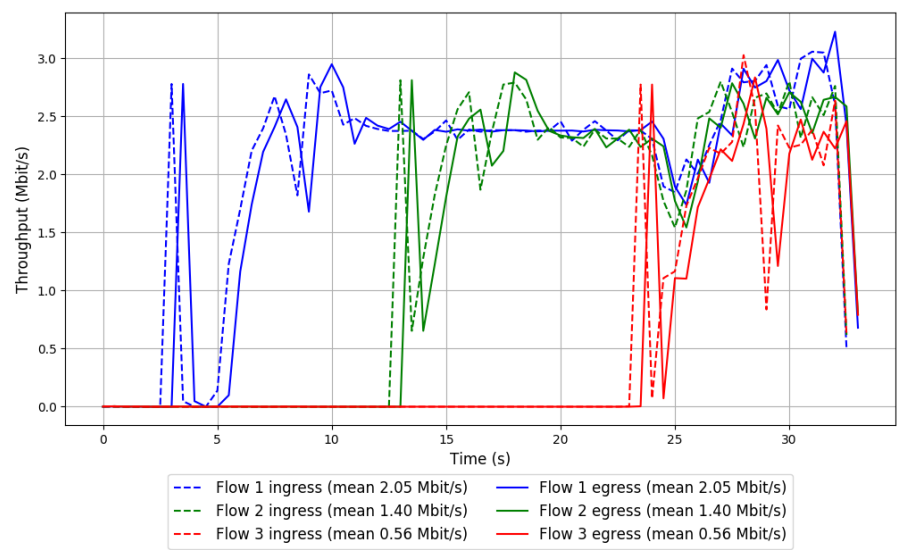
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 20.353 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-06-05 14:33:18

End at: 2018-06-05 14:33:48

Local clock offset: 0.189 ms

Remote clock offset: 0.234 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 20.674 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 20.592 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 20.578 ms

Loss rate: 0.00%

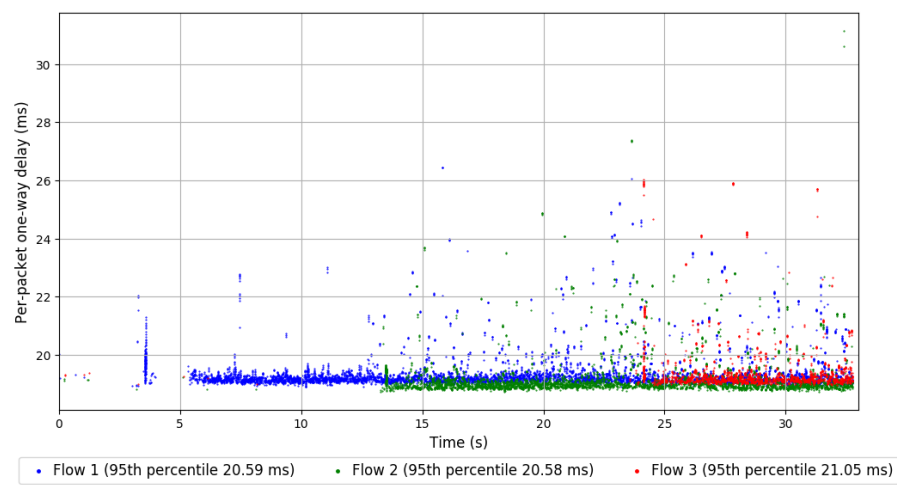
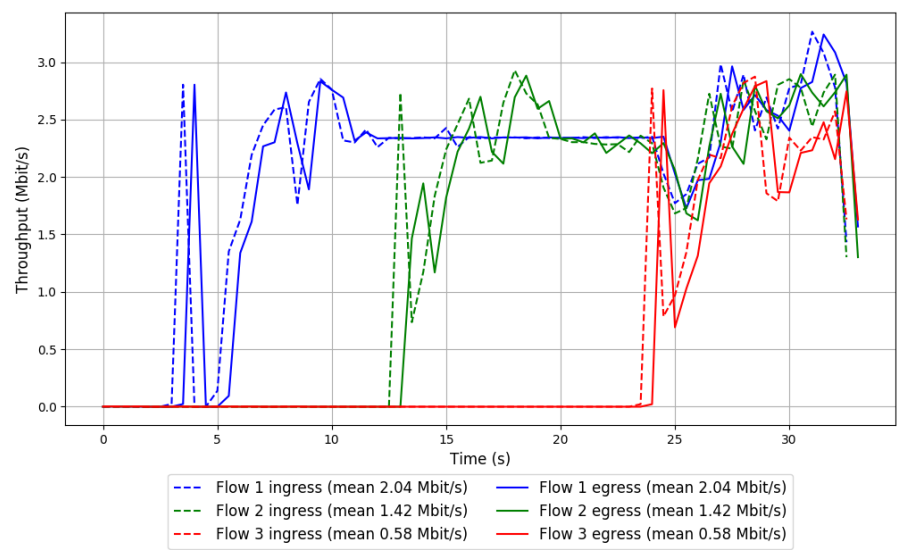
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 21.052 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-06-05 14:59:12

End at: 2018-06-05 14:59:42

Local clock offset: 0.385 ms

Remote clock offset: 0.081 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 20.301 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 20.271 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 20.609 ms

Loss rate: 0.00%

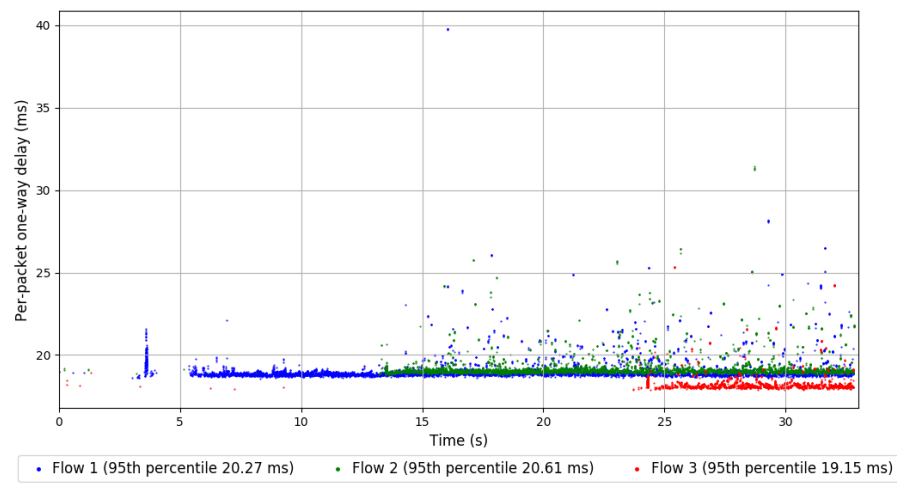
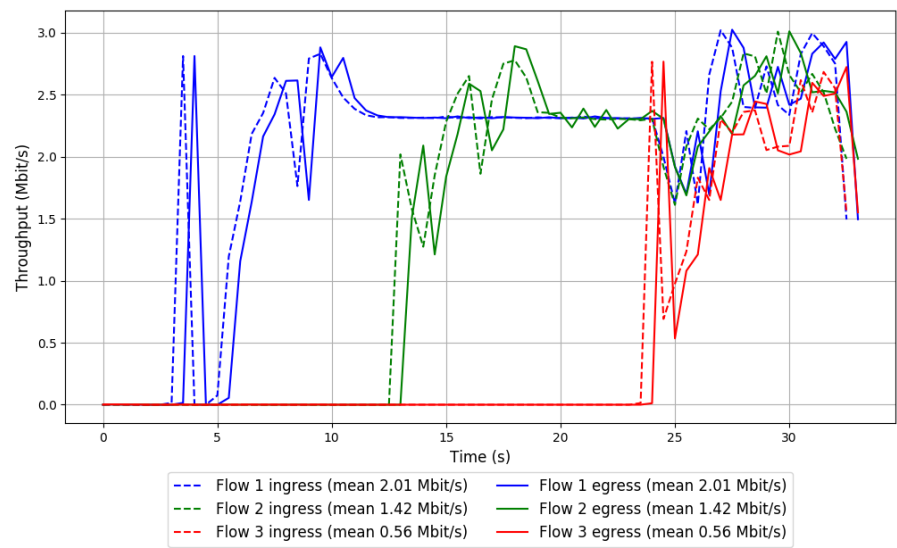
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 19.149 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-05 15:24:46

End at: 2018-06-05 15:25:16

Local clock offset: 0.374 ms

Remote clock offset: 0.221 ms

Below is generated by plot.py at 2018-06-05 18:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 19.592 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 19.746 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 18.806 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 20.174 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

