

Pantheon Report

Generated at 2018-06-19 13:11:12 (UTC).

Data path: Mexico Ethernet (*remote*) → AWS California 2 Ethernet (*local*).

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.

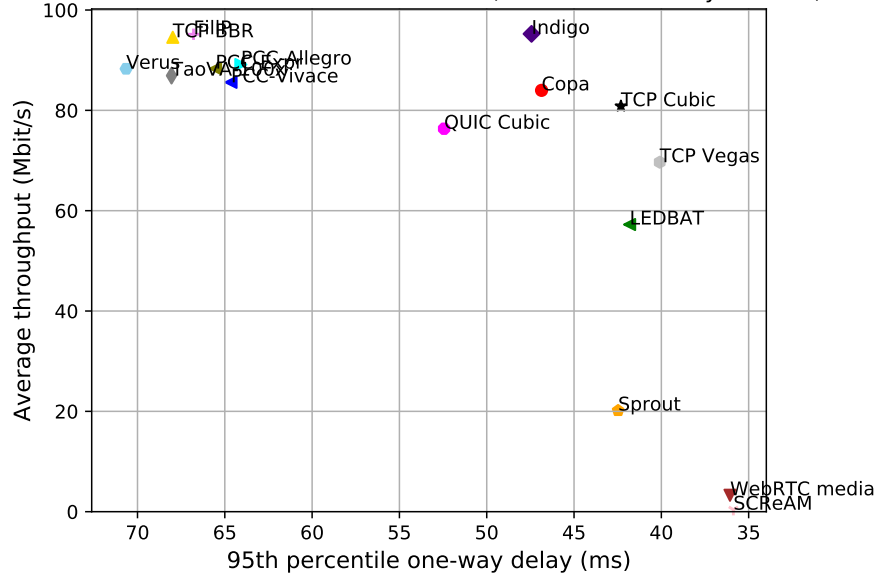
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

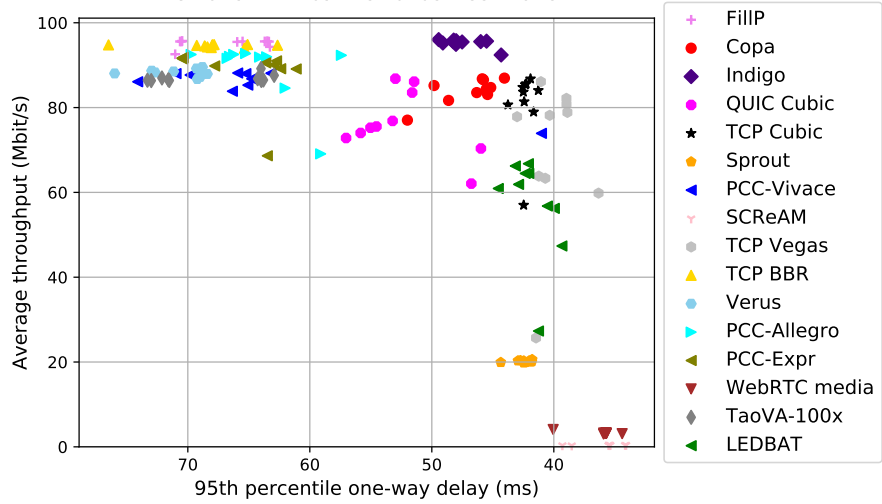
Git summary:

```
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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



test from Mexico to AWS California 2, 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	56.55	41.78	30.87	65.95	66.22	71.96	1.93	3.33	3.81
Copa	10	54.84	30.68	26.34	46.53	46.89	45.84	0.20	0.38	0.80
TCP Cubic	10	47.85	34.58	30.15	41.21	42.01	43.53	0.19	0.29	0.70
FillP	10	58.41	40.40	30.03	64.26	63.89	66.91	1.73	3.68	4.68
Indigo	10	57.63	39.26	35.26	48.44	47.78	45.95	0.22	0.40	0.79
LEDBAT	10	33.02	26.85	19.25	41.53	42.54	41.25	0.21	0.40	1.04
PCC-Allegro	10	55.16	40.24	22.03	59.97	60.54	59.59	3.91	3.01	1.59
PCC-Expr	10	53.01	36.83	32.96	64.53	64.21	61.54	0.74	1.15	1.52
QUIC Cubic	10	44.59	34.60	26.60	45.51	55.45	62.90	0.27	0.41	1.05
SCReAM	10	0.20	0.19	0.21	35.30	35.51	35.67	0.28	0.46	0.73
Sprout	10	10.21	10.16	9.76	42.23	42.58	42.73	0.23	0.35	0.86
TaoVA-100x	10	51.29	37.55	32.14	62.22	67.80	65.47	0.65	1.34	2.62
TCP Vegas	10	40.41	30.33	27.43	40.53	38.96	46.14	0.20	0.33	0.76
Verus	10	53.86	36.05	31.65	65.80	75.28	69.54	0.38	0.62	1.31
PCC-Vivace	10	56.06	33.09	22.92	63.68	62.65	59.93	2.38	0.87	1.56
WebRTC media	10	1.81	1.03	0.44	35.54	35.73	35.41	0.14	0.23	0.81

Run 1: Statistics of TCP BBR

Start at: 2018-06-19 09:23:05

End at: 2018-06-19 09:23:35

Local clock offset: -2.964 ms

Remote clock offset: 2.892 ms

Below is generated by plot.py at 2018-06-19 12:51:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.65 Mbit/s

95th percentile per-packet one-way delay: 69.266 ms

Loss rate: 3.03%

-- Flow 1:

Average throughput: 57.61 Mbit/s

95th percentile per-packet one-way delay: 67.203 ms

Loss rate: 2.04%

-- Flow 2:

Average throughput: 39.90 Mbit/s

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

Loss rate: 4.28%

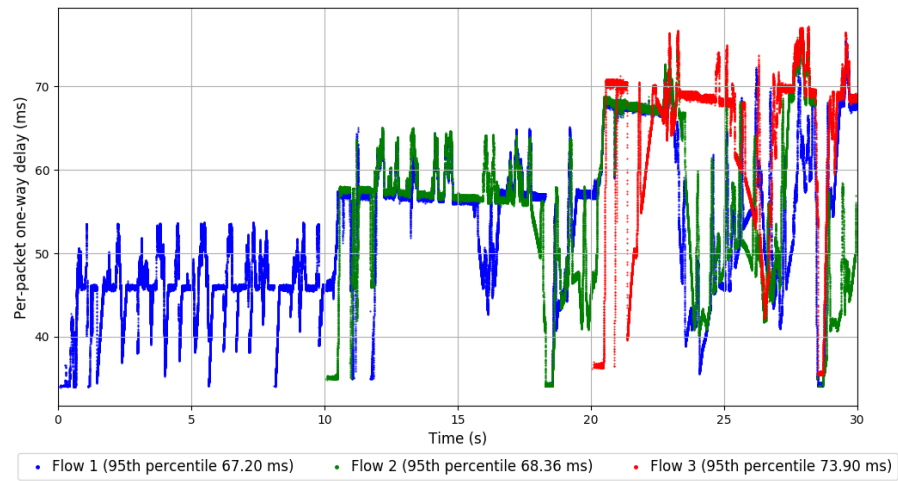
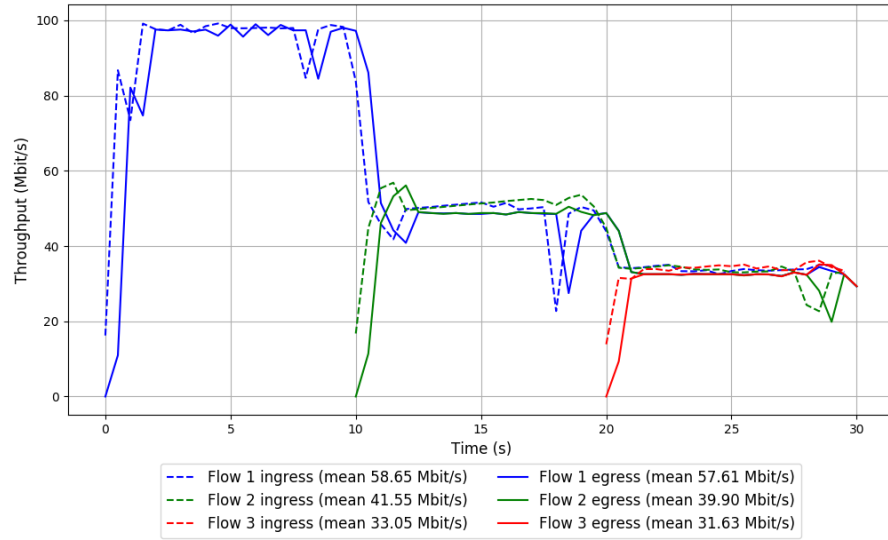
-- Flow 3:

Average throughput: 31.63 Mbit/s

95th percentile per-packet one-way delay: 73.902 ms

Loss rate: 5.12%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-19 09:46:56

End at: 2018-06-19 09:47:26

Local clock offset: -0.469 ms

Remote clock offset: 3.358 ms

Below is generated by plot.py at 2018-06-19 12:51:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.30 Mbit/s

95th percentile per-packet one-way delay: 68.391 ms

Loss rate: 2.54%

-- Flow 1:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 68.469 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 40.02 Mbit/s

95th percentile per-packet one-way delay: 67.809 ms

Loss rate: 3.30%

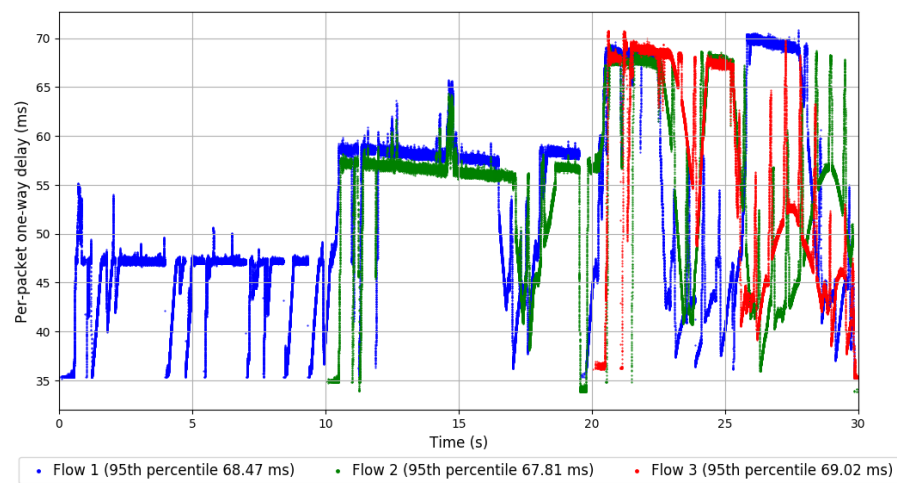
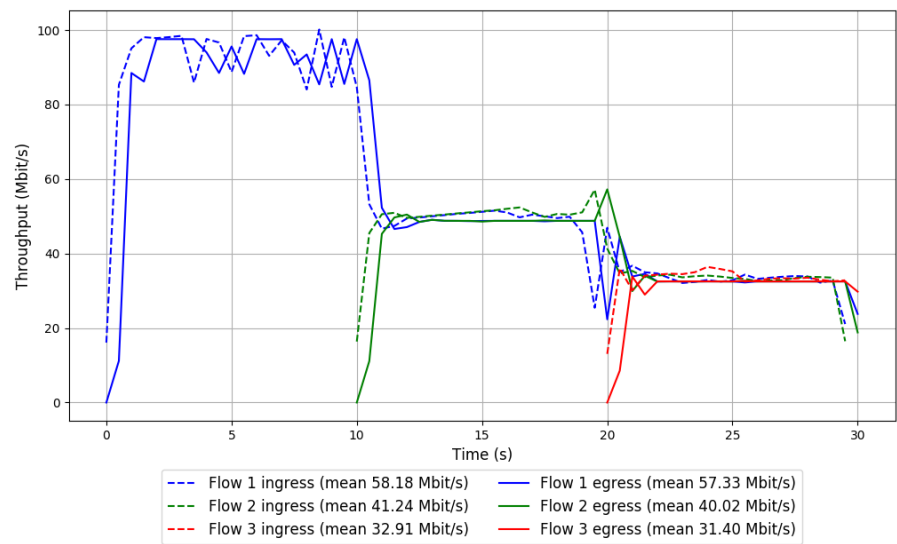
-- Flow 3:

Average throughput: 31.40 Mbit/s

95th percentile per-packet one-way delay: 69.017 ms

Loss rate: 5.28%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-06-19 10:10:00

End at: 2018-06-19 10:10:30

Local clock offset: 0.448 ms

Remote clock offset: 3.906 ms

Below is generated by plot.py at 2018-06-19 12:51:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.86 Mbit/s

95th percentile per-packet one-way delay: 67.846 ms

Loss rate: 2.73%

-- Flow 1:

Average throughput: 57.94 Mbit/s

95th percentile per-packet one-way delay: 68.054 ms

Loss rate: 2.03%

-- Flow 2:

Average throughput: 39.75 Mbit/s

95th percentile per-packet one-way delay: 66.454 ms

Loss rate: 3.53%

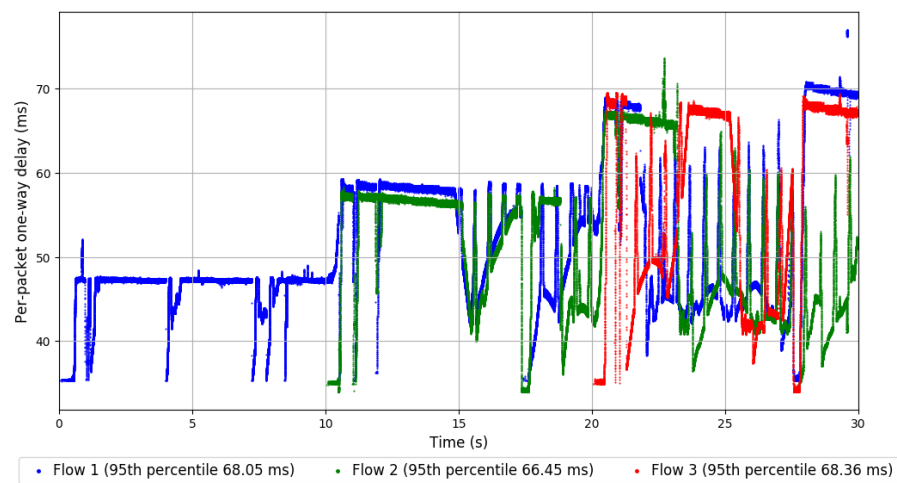
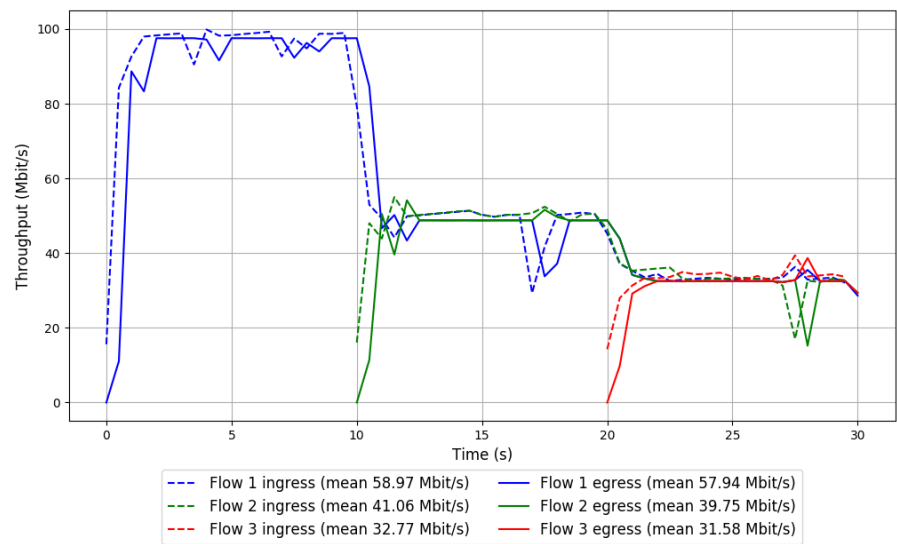
-- Flow 3:

Average throughput: 31.58 Mbit/s

95th percentile per-packet one-way delay: 68.363 ms

Loss rate: 4.45%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-06-19 10:32:13

End at: 2018-06-19 10:32:43

Local clock offset: 0.558 ms

Remote clock offset: 2.529 ms

Below is generated by plot.py at 2018-06-19 12:51:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.99 Mbit/s

95th percentile per-packet one-way delay: 65.359 ms

Loss rate: 2.72%

-- Flow 1:

Average throughput: 54.54 Mbit/s

95th percentile per-packet one-way delay: 60.209 ms

Loss rate: 2.09%

-- Flow 2:

Average throughput: 47.37 Mbit/s

95th percentile per-packet one-way delay: 58.929 ms

Loss rate: 3.51%

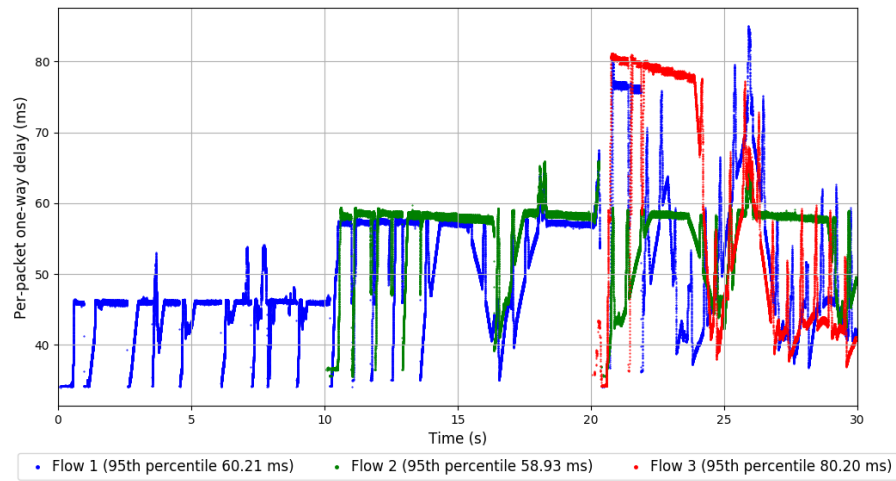
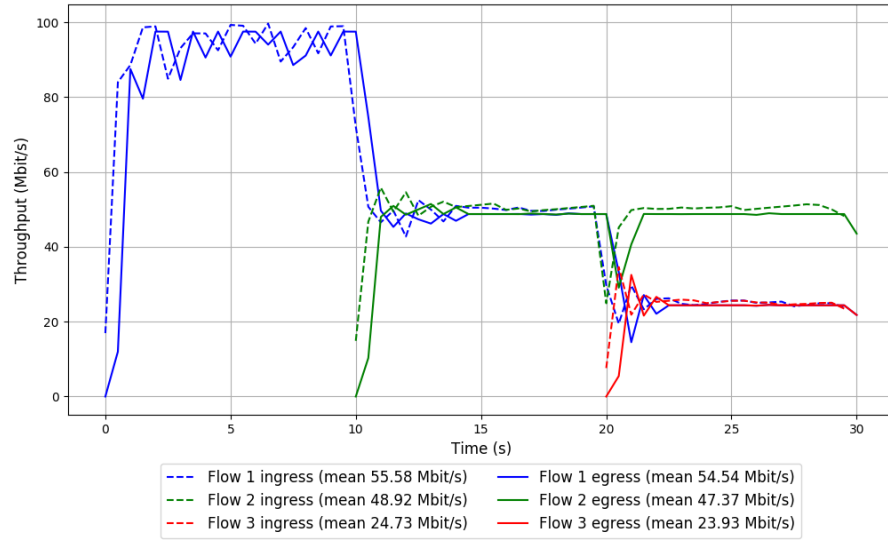
-- Flow 3:

Average throughput: 23.93 Mbit/s

95th percentile per-packet one-way delay: 80.203 ms

Loss rate: 3.88%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

End at: 2018-06-19 10:54:48

Local clock offset: 0.5 ms

Remote clock offset: 1.817 ms

Below is generated by plot.py at 2018-06-19 12:51:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.78 Mbit/s

95th percentile per-packet one-way delay: 76.499 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 55.06 Mbit/s

95th percentile per-packet one-way delay: 75.788 ms

Loss rate: 2.16%

-- Flow 2:

Average throughput: 47.84 Mbit/s

95th percentile per-packet one-way delay: 57.287 ms

Loss rate: 3.36%

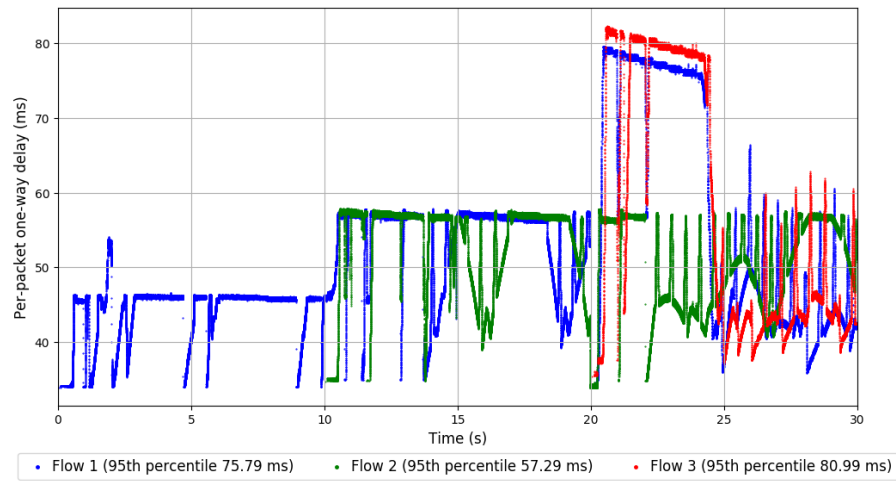
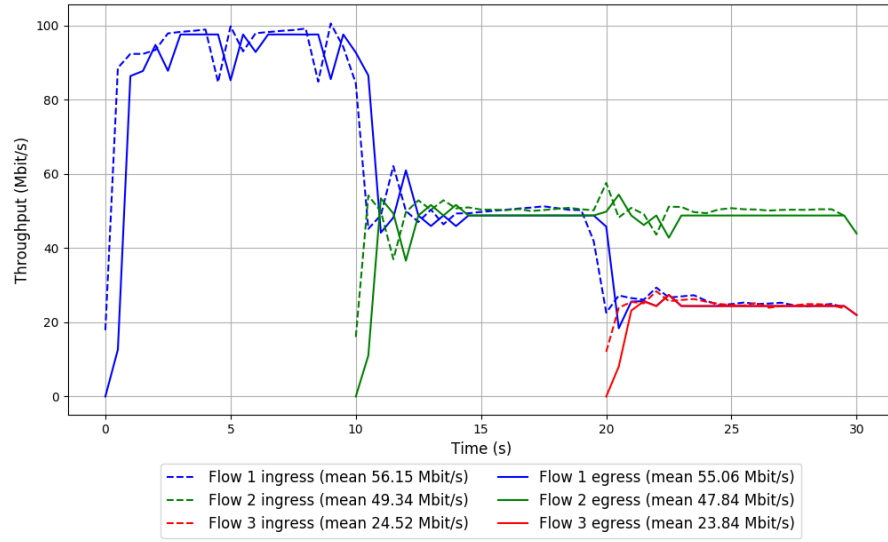
-- Flow 3:

Average throughput: 23.84 Mbit/s

95th percentile per-packet one-way delay: 80.988 ms

Loss rate: 3.46%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-06-19 11:16:36

End at: 2018-06-19 11:17:06

Local clock offset: 0.236 ms

Remote clock offset: 1.257 ms

Below is generated by plot.py at 2018-06-19 12:51:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.15 Mbit/s

95th percentile per-packet one-way delay: 68.079 ms

Loss rate: 2.29%

-- Flow 1:

Average throughput: 57.06 Mbit/s

95th percentile per-packet one-way delay: 58.073 ms

Loss rate: 1.79%

-- Flow 2:

Average throughput: 40.03 Mbit/s

95th percentile per-packet one-way delay: 68.808 ms

Loss rate: 3.00%

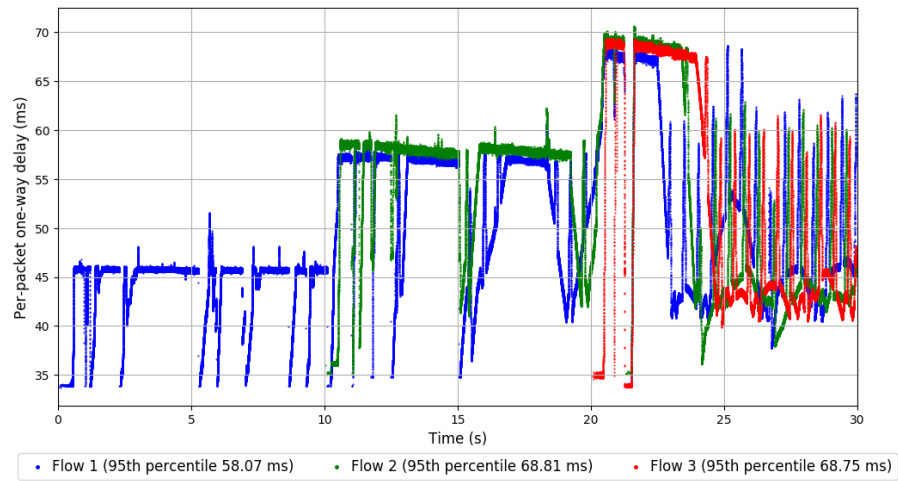
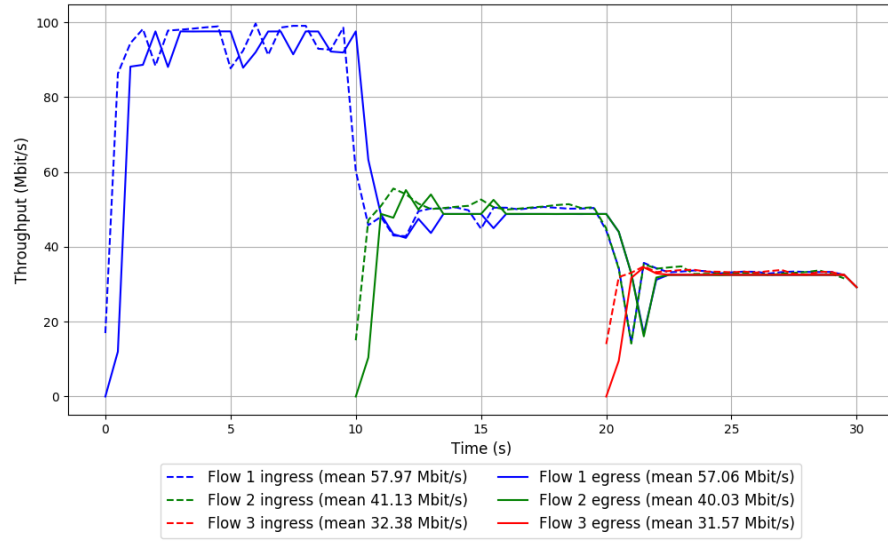
-- Flow 3:

Average throughput: 31.57 Mbit/s

95th percentile per-packet one-way delay: 68.752 ms

Loss rate: 3.16%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-06-19 11:38:31

End at: 2018-06-19 11:39:01

Local clock offset: -0.504 ms

Remote clock offset: 0.773 ms

Below is generated by plot.py at 2018-06-19 12:51:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.54 Mbit/s

95th percentile per-packet one-way delay: 68.619 ms

Loss rate: 2.32%

-- Flow 1:

Average throughput: 57.82 Mbit/s

95th percentile per-packet one-way delay: 67.902 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 39.49 Mbit/s

95th percentile per-packet one-way delay: 69.019 ms

Loss rate: 2.80%

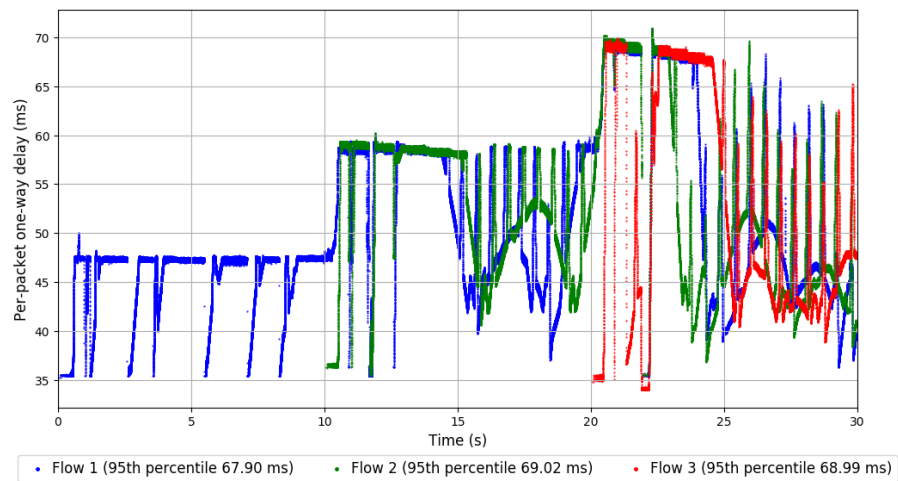
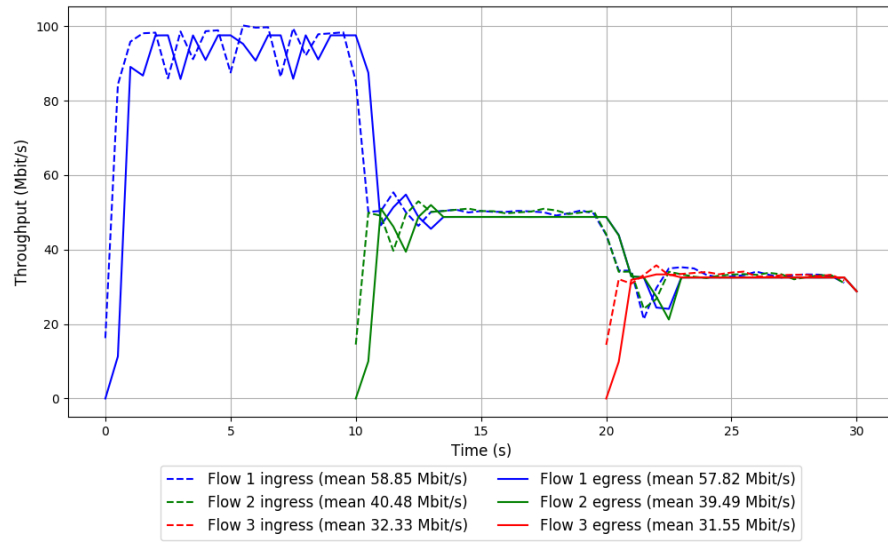
-- Flow 3:

Average throughput: 31.55 Mbit/s

95th percentile per-packet one-way delay: 68.991 ms

Loss rate: 3.09%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-06-19 12:00:37

End at: 2018-06-19 12:01:07

Local clock offset: -1.607 ms

Remote clock offset: 1.37 ms

Below is generated by plot.py at 2018-06-19 12:51:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.70 Mbit/s

95th percentile per-packet one-way delay: 62.646 ms

Loss rate: 2.56%

-- Flow 1:

Average throughput: 55.10 Mbit/s

95th percentile per-packet one-way delay: 67.717 ms

Loss rate: 1.88%

-- Flow 2:

Average throughput: 47.70 Mbit/s

95th percentile per-packet one-way delay: 57.589 ms

Loss rate: 3.64%

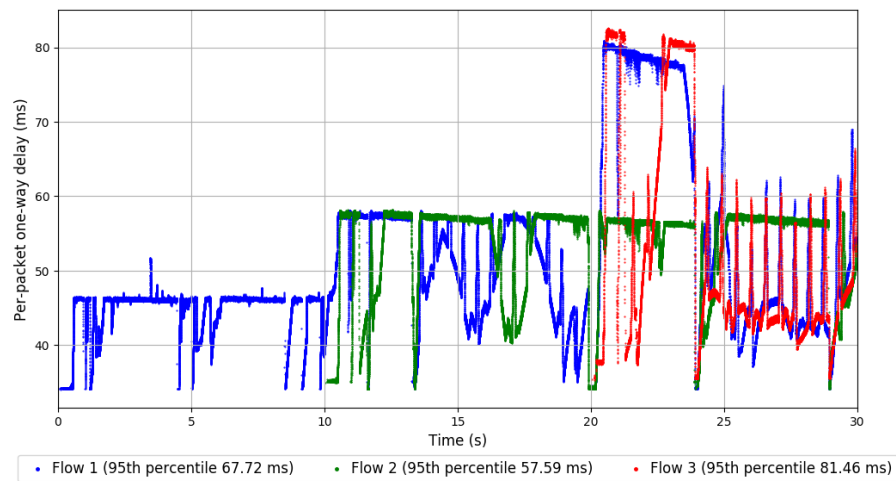
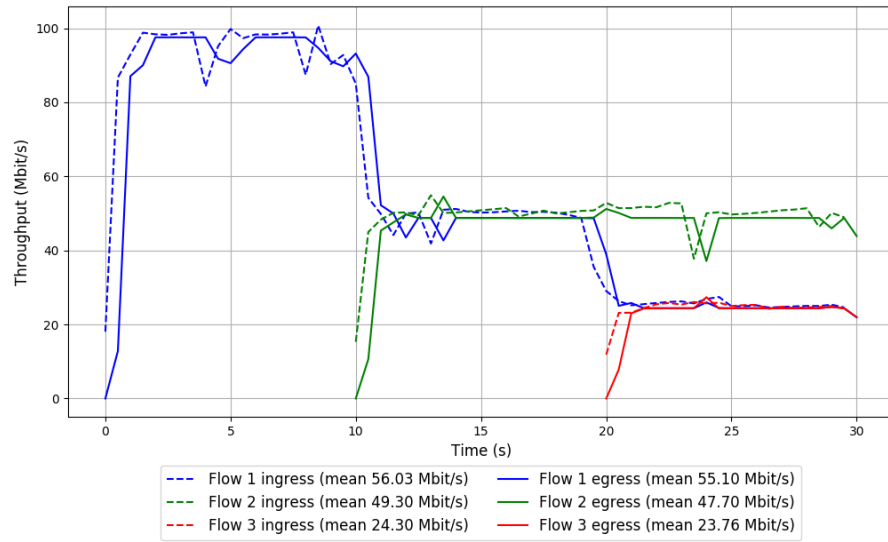
-- Flow 3:

Average throughput: 23.76 Mbit/s

95th percentile per-packet one-way delay: 81.462 ms

Loss rate: 2.89%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-06-19 12:22:27

End at: 2018-06-19 12:22:57

Local clock offset: 0.536 ms

Remote clock offset: 2.18 ms

Below is generated by plot.py at 2018-06-19 12:51:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.86 Mbit/s

95th percentile per-packet one-way delay: 65.105 ms

Loss rate: 2.52%

-- Flow 1:

Average throughput: 55.03 Mbit/s

95th percentile per-packet one-way delay: 58.718 ms

Loss rate: 1.88%

-- Flow 2:

Average throughput: 36.14 Mbit/s

95th percentile per-packet one-way delay: 79.088 ms

Loss rate: 3.51%

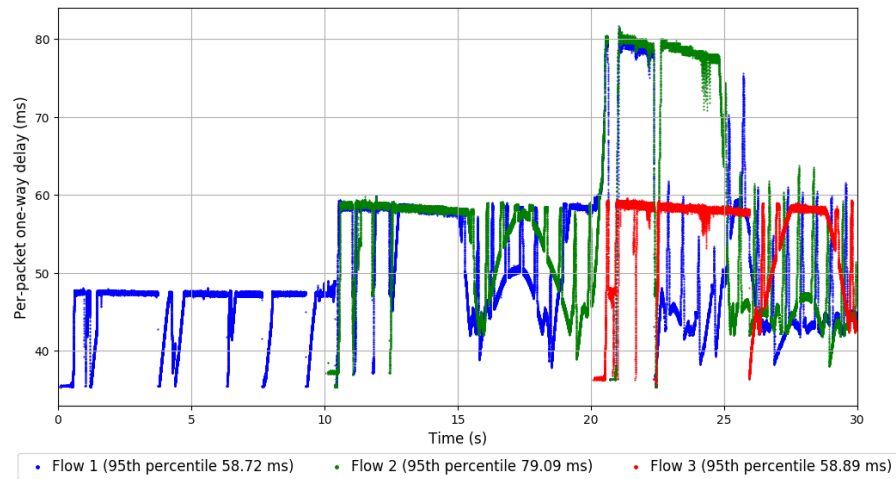
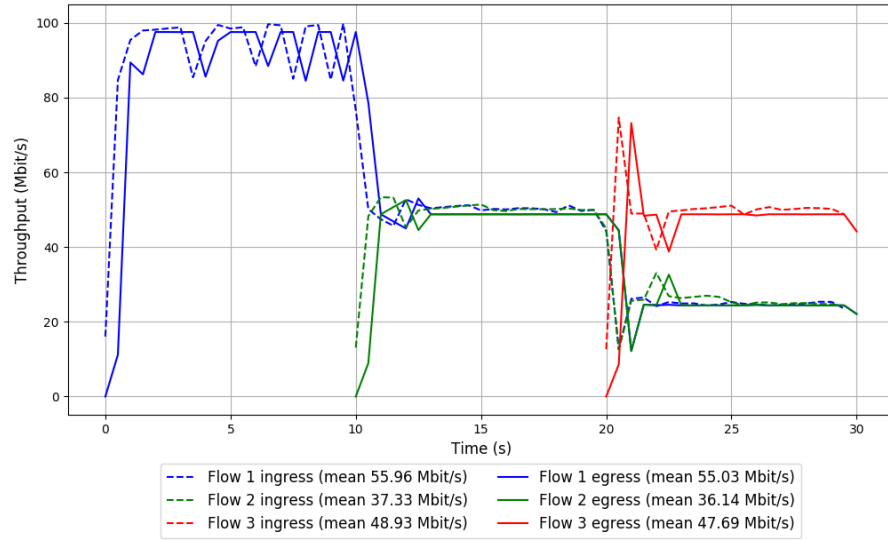
-- Flow 3:

Average throughput: 47.69 Mbit/s

95th percentile per-packet one-way delay: 58.888 ms

Loss rate: 3.21%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-06-19 12:44:33

End at: 2018-06-19 12:45:03

Local clock offset: 0.603 ms

Remote clock offset: 3.291 ms

Below is generated by plot.py at 2018-06-19 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.83 Mbit/s

95th percentile per-packet one-way delay: 67.986 ms

Loss rate: 2.14%

-- Flow 1:

Average throughput: 58.01 Mbit/s

95th percentile per-packet one-way delay: 67.352 ms

Loss rate: 1.80%

-- Flow 2:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 68.894 ms

Loss rate: 2.33%

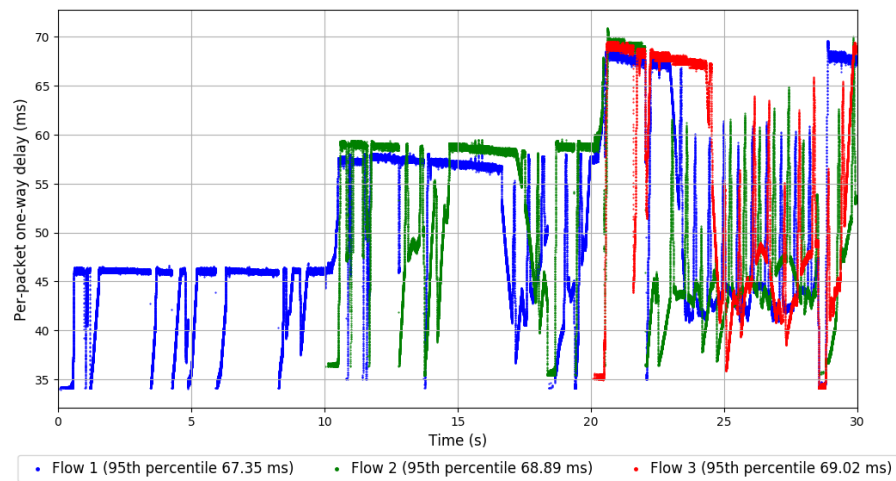
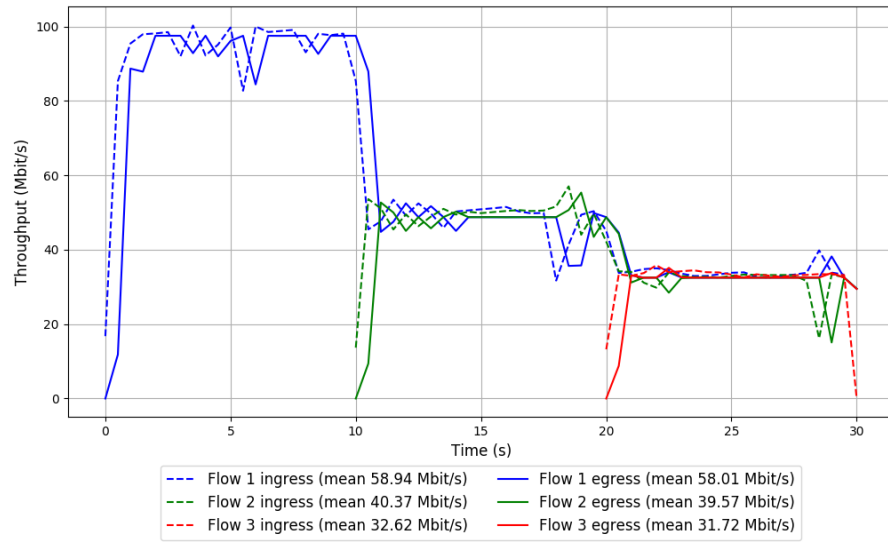
-- Flow 3:

Average throughput: 31.72 Mbit/s

95th percentile per-packet one-way delay: 69.020 ms

Loss rate: 3.58%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-19 09:10:17

End at: 2018-06-19 09:10:47

Local clock offset: -1.412 ms

Remote clock offset: 2.684 ms

Below is generated by plot.py at 2018-06-19 12:52:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.78 Mbit/s

95th percentile per-packet one-way delay: 45.863 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 57.97 Mbit/s

95th percentile per-packet one-way delay: 46.750 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 30.17 Mbit/s

95th percentile per-packet one-way delay: 44.480 ms

Loss rate: 0.55%

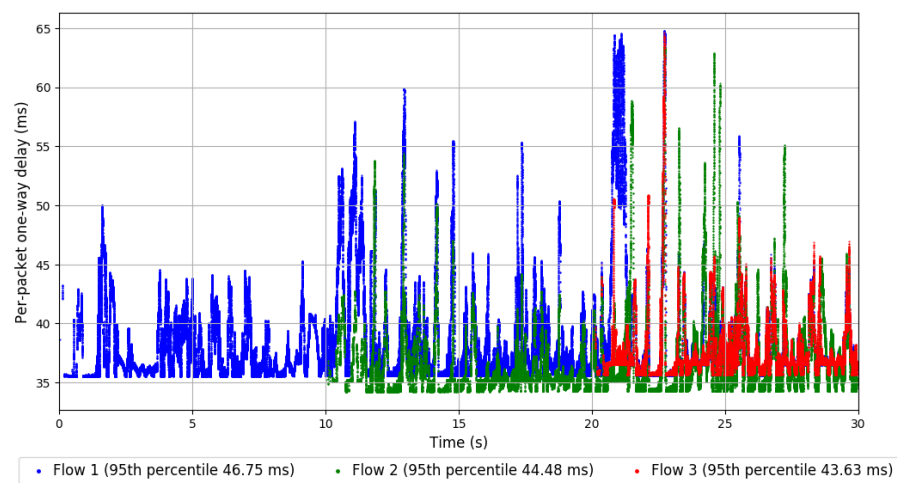
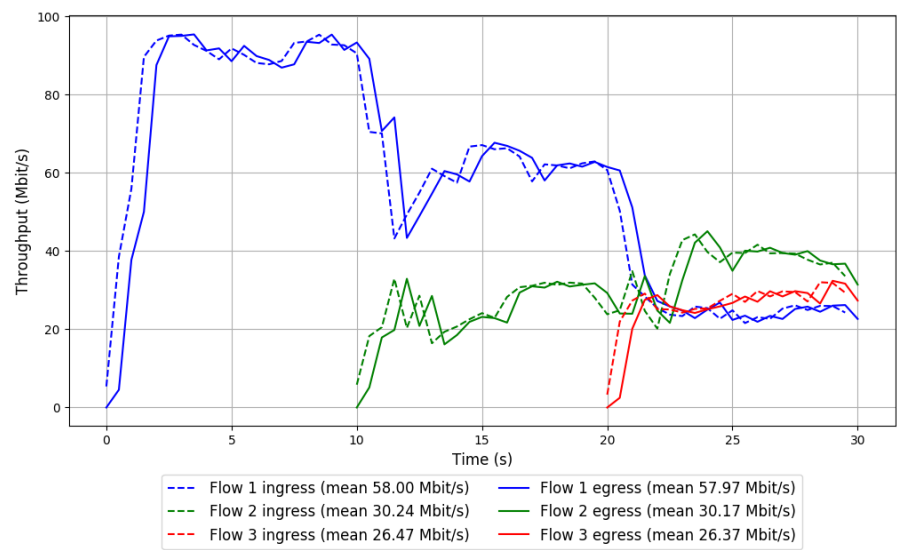
-- Flow 3:

Average throughput: 26.37 Mbit/s

95th percentile per-packet one-way delay: 43.627 ms

Loss rate: 1.11%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-06-19 09:33:14

End at: 2018-06-19 09:33:44

Local clock offset: -3.538 ms

Remote clock offset: 3.141 ms

Below is generated by plot.py at 2018-06-19 12:52:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.53 Mbit/s

95th percentile per-packet one-way delay: 46.320 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 50.67 Mbit/s

95th percentile per-packet one-way delay: 44.350 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 37.10 Mbit/s

95th percentile per-packet one-way delay: 52.709 ms

Loss rate: 0.50%

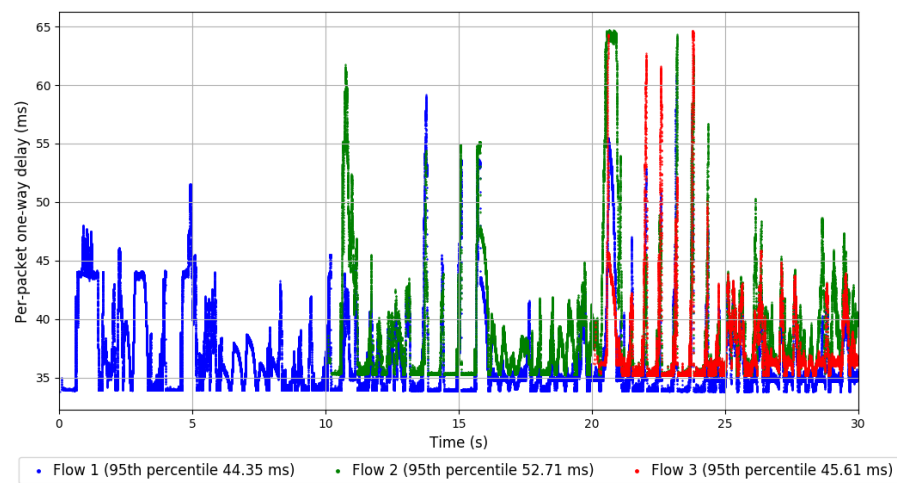
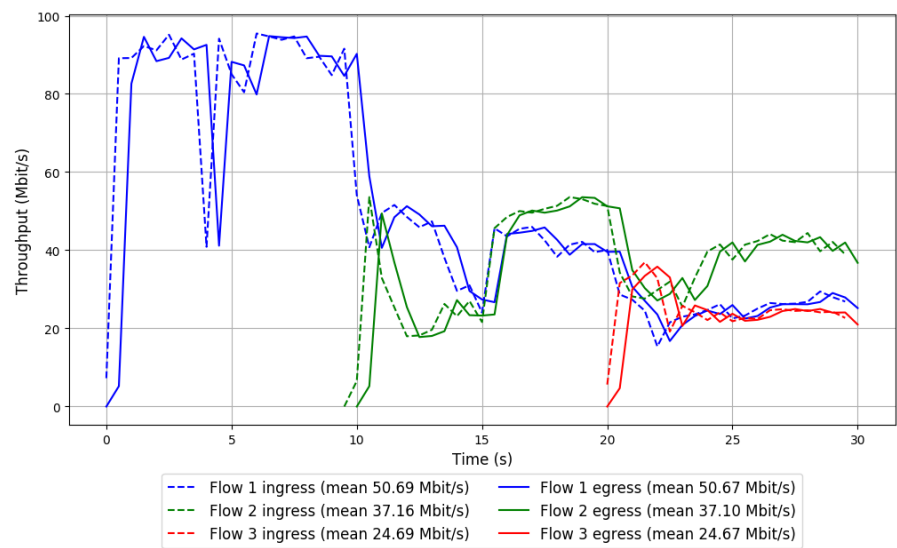
-- Flow 3:

Average throughput: 24.67 Mbit/s

95th percentile per-packet one-way delay: 45.607 ms

Loss rate: 0.79%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-06-19 09:57:14

End at: 2018-06-19 09:57:44

Local clock offset: 0.329 ms

Remote clock offset: 3.65 ms

Below is generated by plot.py at 2018-06-19 12:52:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.95 Mbit/s

95th percentile per-packet one-way delay: 44.049 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 62.44 Mbit/s

95th percentile per-packet one-way delay: 44.094 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 20.69 Mbit/s

95th percentile per-packet one-way delay: 42.002 ms

Loss rate: 0.43%

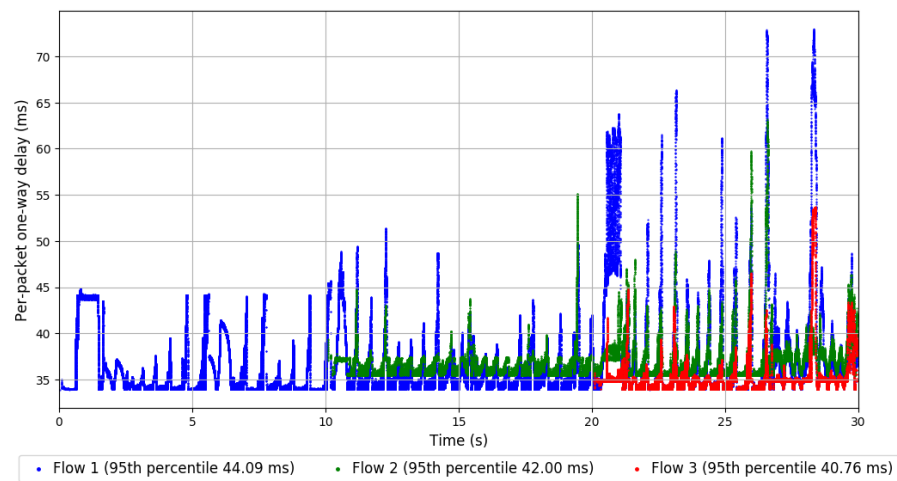
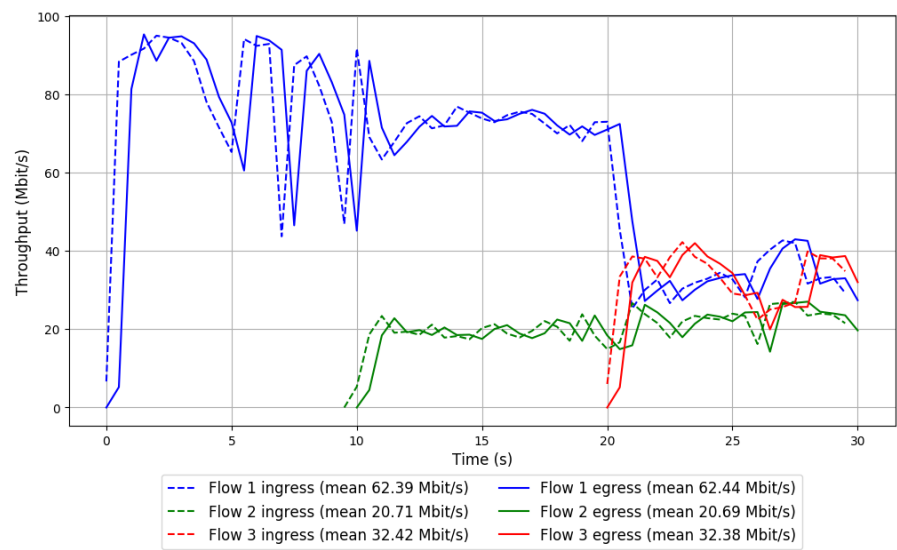
-- Flow 3:

Average throughput: 32.38 Mbit/s

95th percentile per-packet one-way delay: 40.762 ms

Loss rate: 0.81%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-06-19 10:19:50

End at: 2018-06-19 10:20:20

Local clock offset: 0.455 ms

Remote clock offset: 3.01 ms

Below is generated by plot.py at 2018-06-19 12:52:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.55 Mbit/s

95th percentile per-packet one-way delay: 45.768 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 58.49 Mbit/s

95th percentile per-packet one-way delay: 46.090 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 26.92 Mbit/s

95th percentile per-packet one-way delay: 45.852 ms

Loss rate: 0.29%

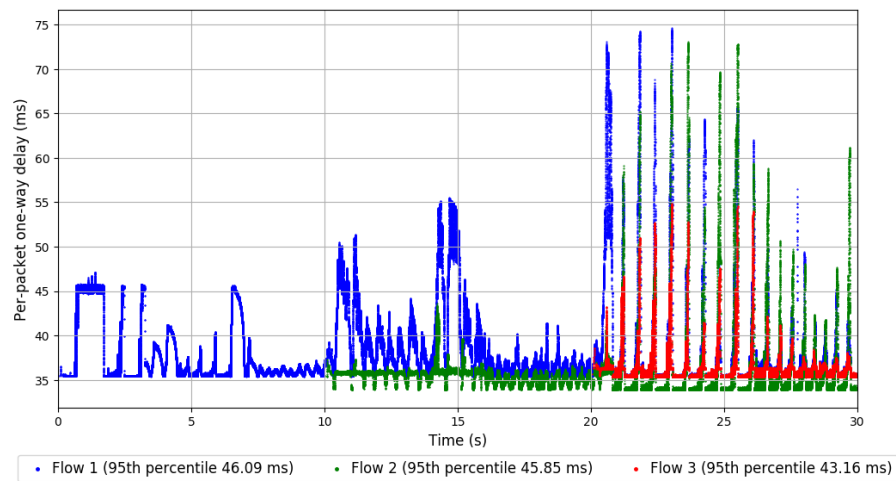
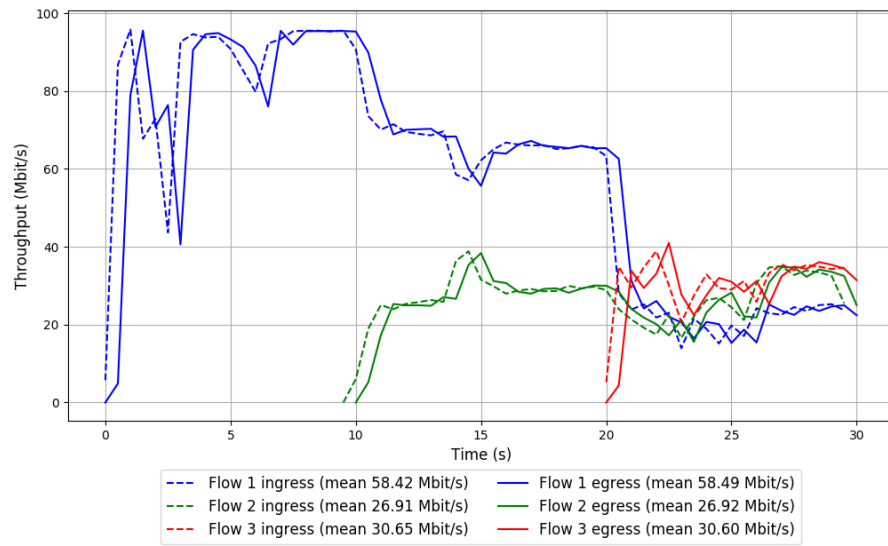
-- Flow 3:

Average throughput: 30.60 Mbit/s

95th percentile per-packet one-way delay: 43.165 ms

Loss rate: 0.83%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-06-19 10:41:54

End at: 2018-06-19 10:42:24

Local clock offset: 0.473 ms

Remote clock offset: 2.499 ms

Below is generated by plot.py at 2018-06-19 12:52:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.04 Mbit/s

95th percentile per-packet one-way delay: 52.000 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 46.54 Mbit/s

95th percentile per-packet one-way delay: 52.313 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 35.28 Mbit/s

95th percentile per-packet one-way delay: 48.808 ms

Loss rate: 0.20%

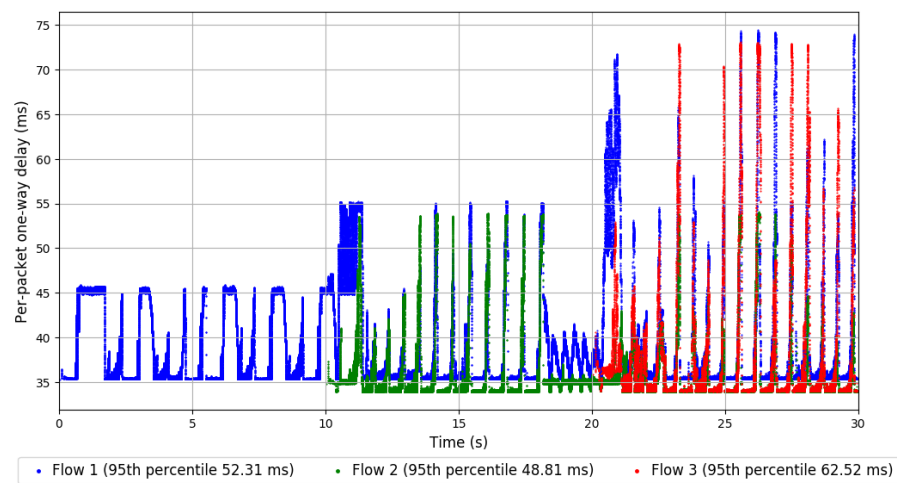
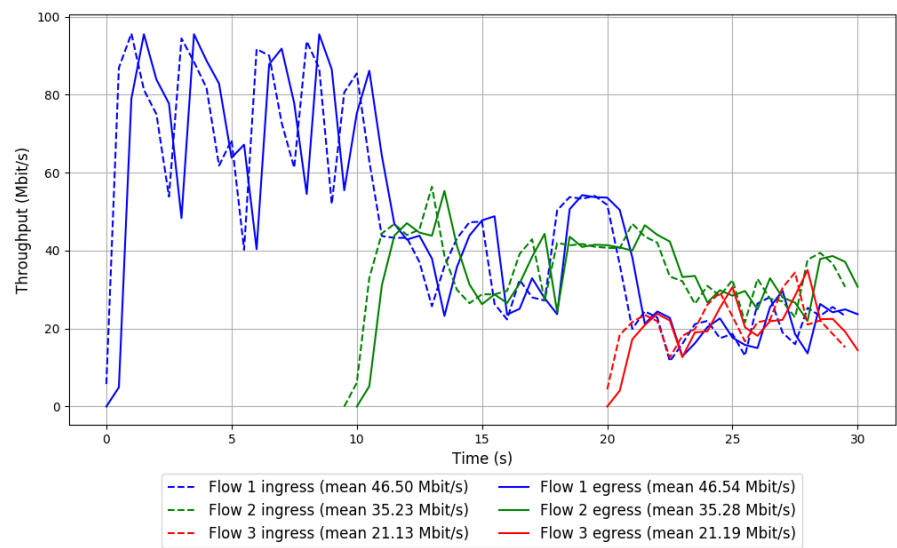
-- Flow 3:

Average throughput: 21.19 Mbit/s

95th percentile per-packet one-way delay: 62.517 ms

Loss rate: 0.40%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-06-19 11:04:06

End at: 2018-06-19 11:04:36

Local clock offset: 0.567 ms

Remote clock offset: 1.509 ms

Below is generated by plot.py at 2018-06-19 12:52:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.09 Mbit/s

95th percentile per-packet one-way delay: 45.432 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 57.76 Mbit/s

95th percentile per-packet one-way delay: 45.508 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 30.05 Mbit/s

95th percentile per-packet one-way delay: 37.963 ms

Loss rate: 0.36%

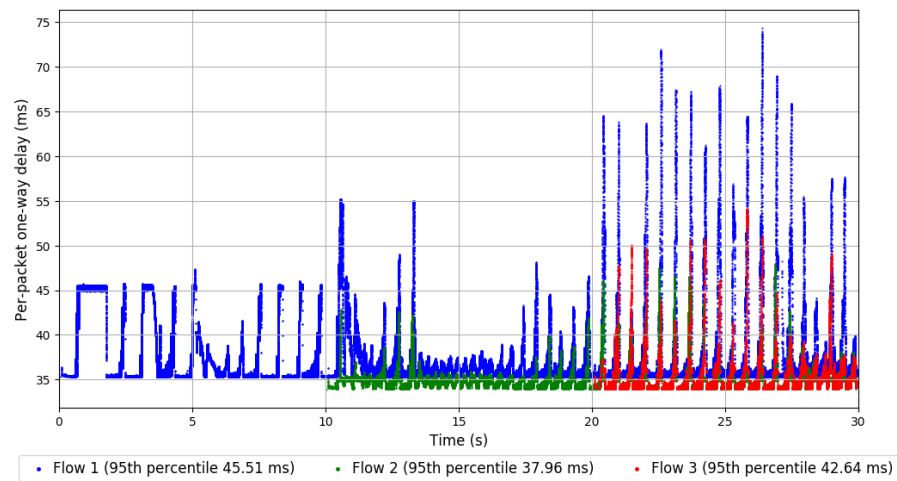
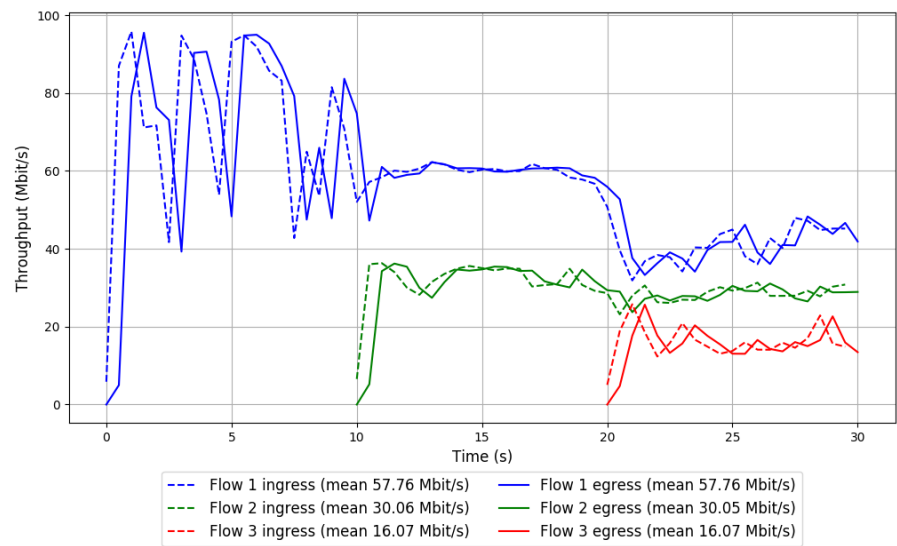
-- Flow 3:

Average throughput: 16.07 Mbit/s

95th percentile per-packet one-way delay: 42.637 ms

Loss rate: 0.70%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-06-19 11:26:14

End at: 2018-06-19 11:26:44

Local clock offset: 0.288 ms

Remote clock offset: 0.998 ms

Below is generated by plot.py at 2018-06-19 12:54:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.20 Mbit/s

95th percentile per-packet one-way delay: 49.819 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 58.54 Mbit/s

95th percentile per-packet one-way delay: 47.689 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 25.80 Mbit/s

95th percentile per-packet one-way delay: 53.335 ms

Loss rate: 0.28%

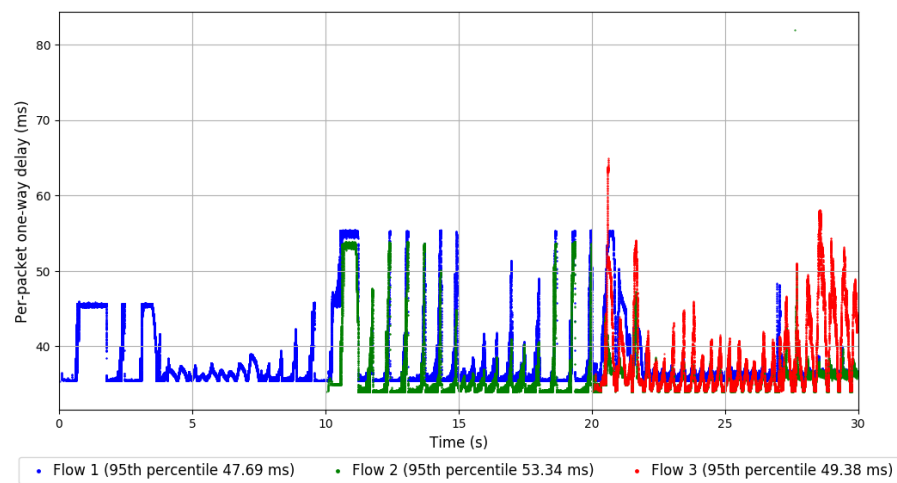
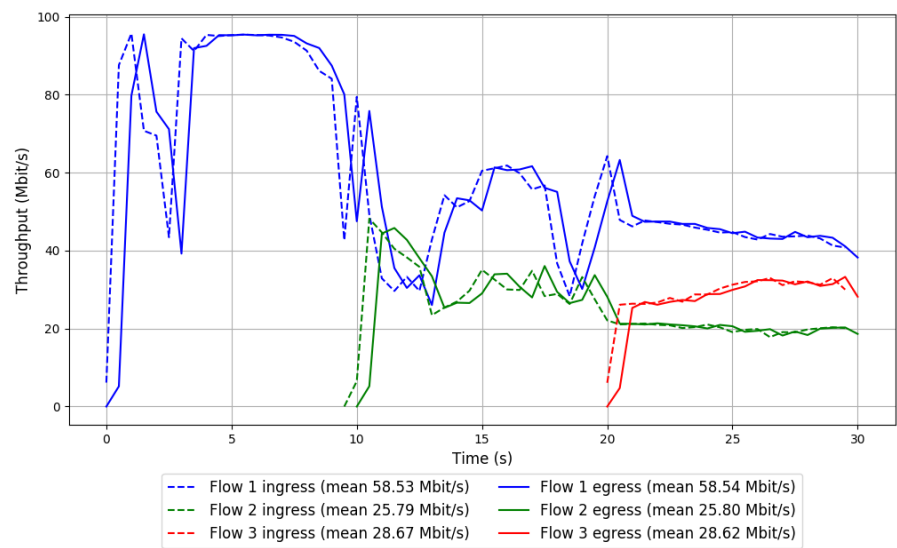
-- Flow 3:

Average throughput: 28.62 Mbit/s

95th percentile per-packet one-way delay: 49.375 ms

Loss rate: 0.83%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-06-19 11:48:08

End at: 2018-06-19 11:48:38

Local clock offset: -1.121 ms

Remote clock offset: 0.681 ms

Below is generated by plot.py at 2018-06-19 12:54:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.32 Mbit/s

95th percentile per-packet one-way delay: 45.546 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 52.31 Mbit/s

95th percentile per-packet one-way delay: 46.981 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 37.46 Mbit/s

95th percentile per-packet one-way delay: 41.605 ms

Loss rate: 0.42%

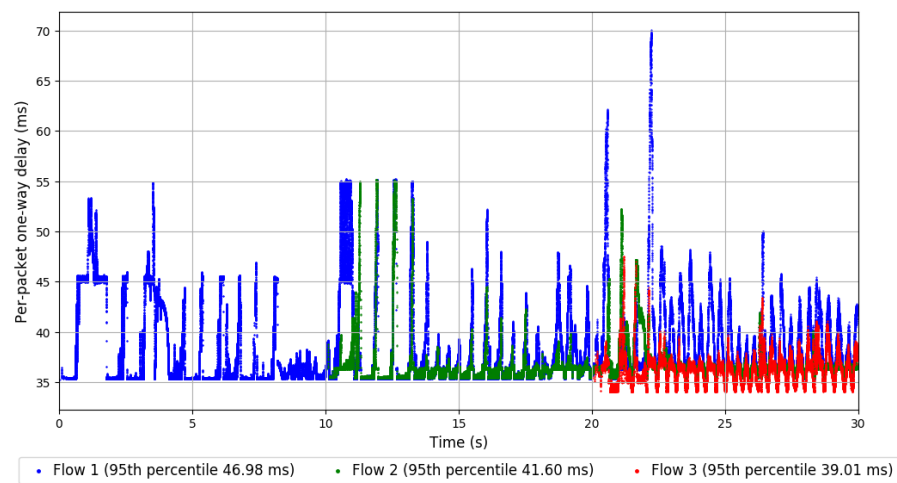
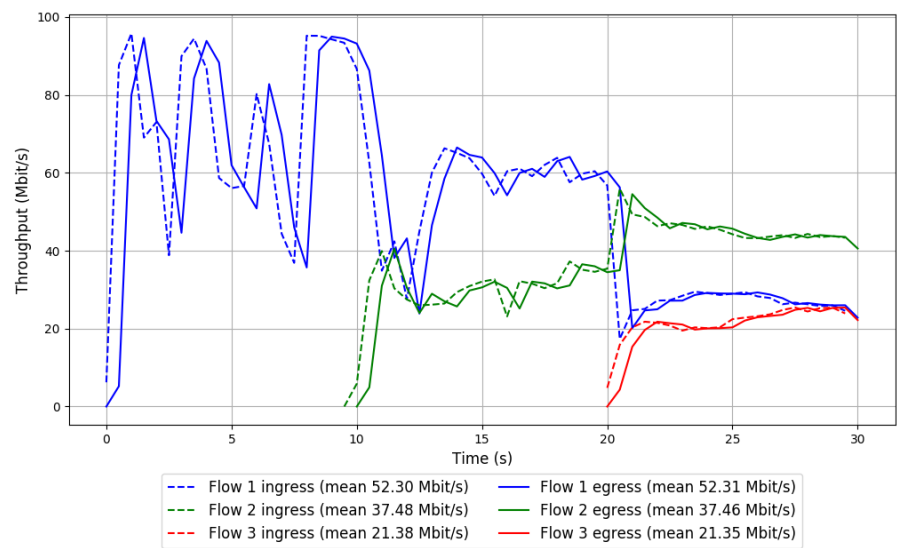
-- Flow 3:

Average throughput: 21.35 Mbit/s

95th percentile per-packet one-way delay: 39.007 ms

Loss rate: 0.80%

Run 8: Report of Copa — Data Link

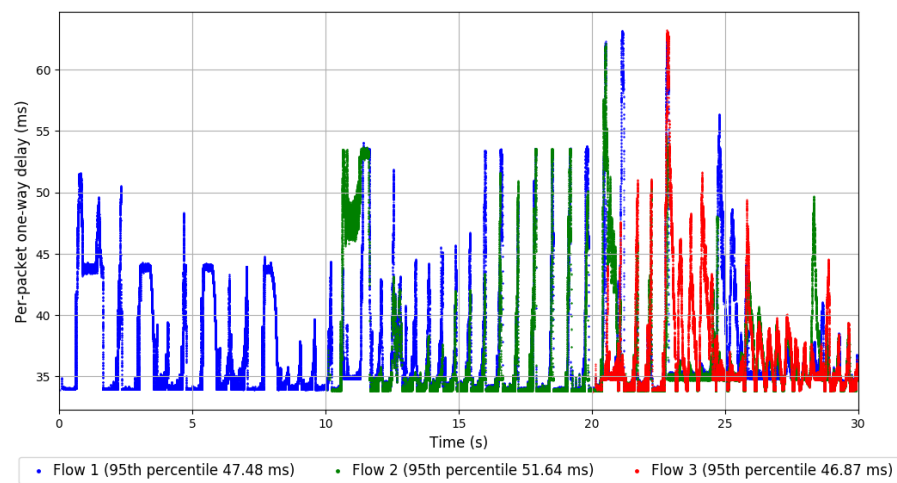
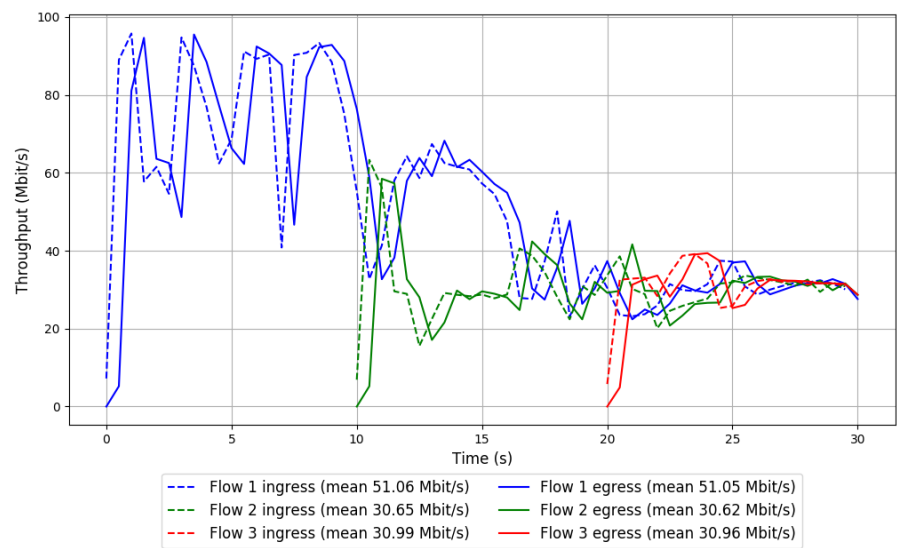


Run 9: Statistics of Copa

Start at: 2018-06-19 12:10:12
End at: 2018-06-19 12:10:42
Local clock offset: -0.544 ms
Remote clock offset: 1.888 ms

Below is generated by plot.py at 2018-06-19 12:54:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.69 Mbit/s
95th percentile per-packet one-way delay: 48.628 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 51.05 Mbit/s
95th percentile per-packet one-way delay: 47.485 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 51.638 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 30.96 Mbit/s
95th percentile per-packet one-way delay: 46.868 ms
Loss rate: 0.76%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-06-19 12:32:10

End at: 2018-06-19 12:32:40

Local clock offset: 0.745 ms

Remote clock offset: 2.666 ms

Below is generated by plot.py at 2018-06-19 12:54:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.73 Mbit/s

95th percentile per-packet one-way delay: 45.171 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 52.63 Mbit/s

95th percentile per-packet one-way delay: 44.049 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 32.71 Mbit/s

95th percentile per-packet one-way delay: 50.505 ms

Loss rate: 0.35%

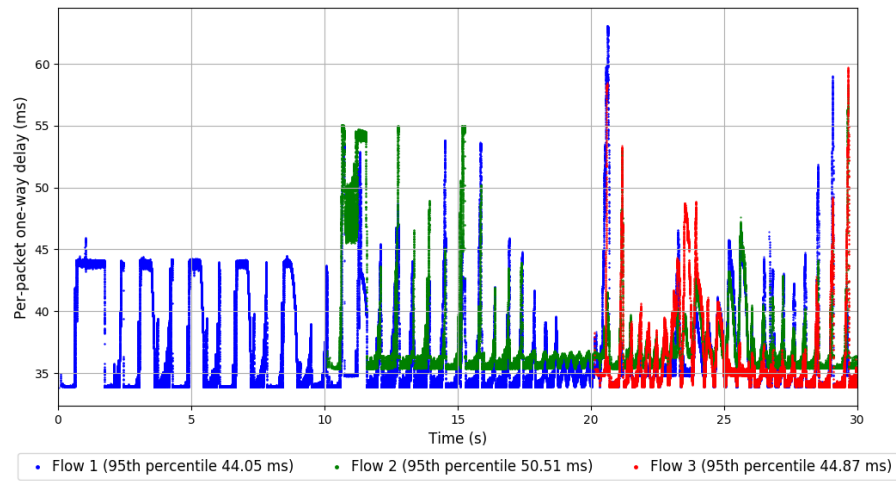
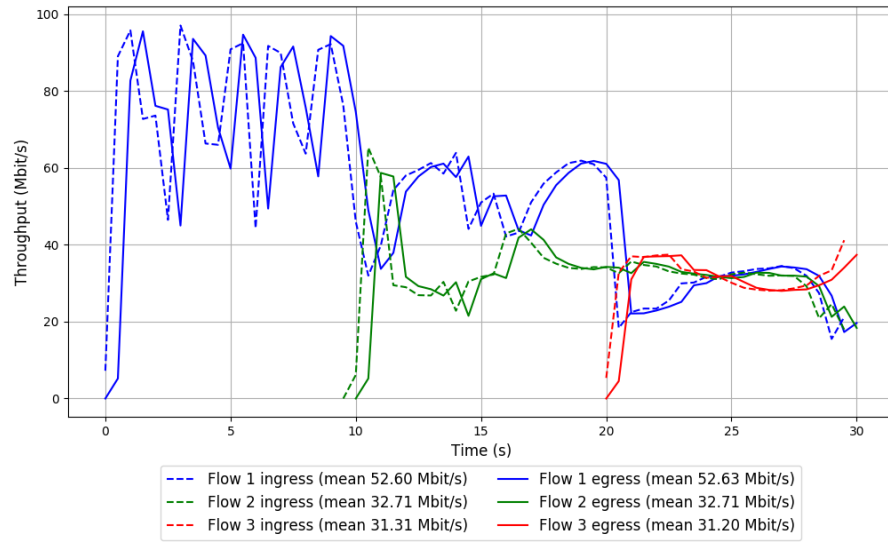
-- Flow 3:

Average throughput: 31.20 Mbit/s

95th percentile per-packet one-way delay: 44.866 ms

Loss rate: 1.02%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-06-19 09:18:58

End at: 2018-06-19 09:19:28

Local clock offset: -2.634 ms

Remote clock offset: 2.827 ms

Below is generated by plot.py at 2018-06-19 12:54:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.01 Mbit/s

95th percentile per-packet one-way delay: 42.473 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 28.47 Mbit/s

95th percentile per-packet one-way delay: 41.503 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 24.66 Mbit/s

95th percentile per-packet one-way delay: 43.156 ms

Loss rate: 0.30%

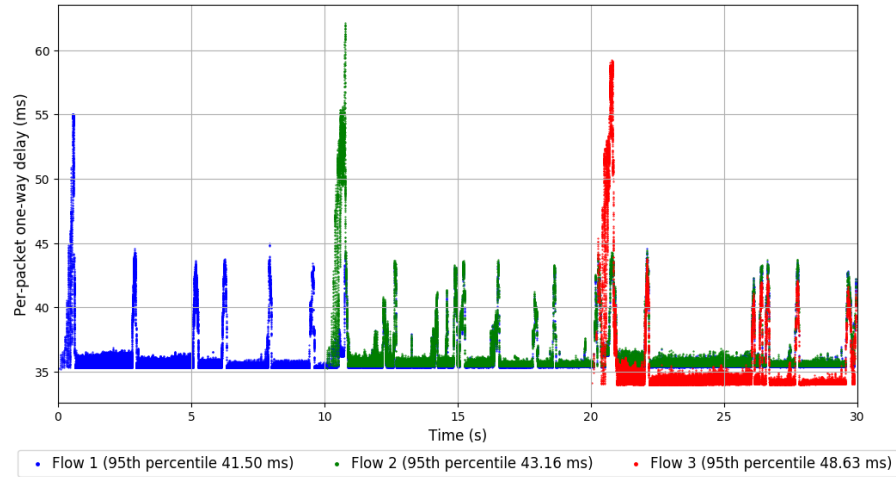
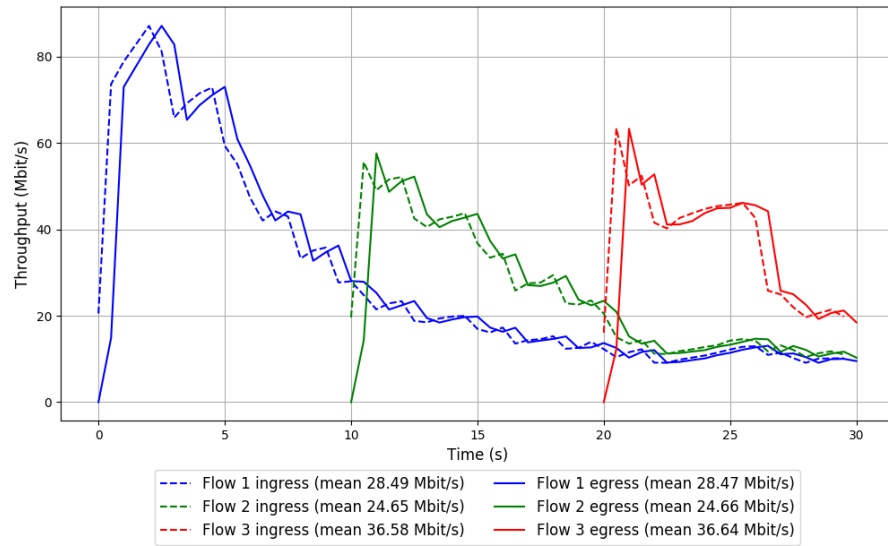
-- Flow 3:

Average throughput: 36.64 Mbit/s

95th percentile per-packet one-way delay: 48.628 ms

Loss rate: 0.50%

Run 1: Report of TCP Cubic — Data Link

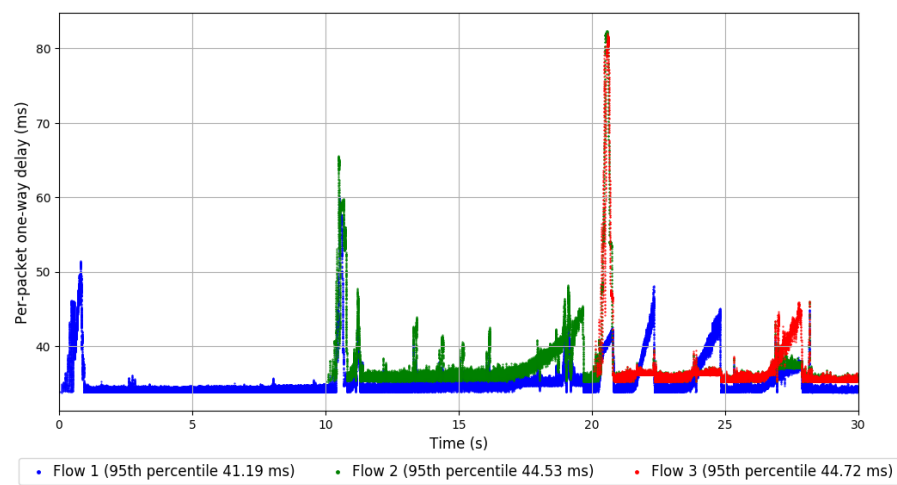
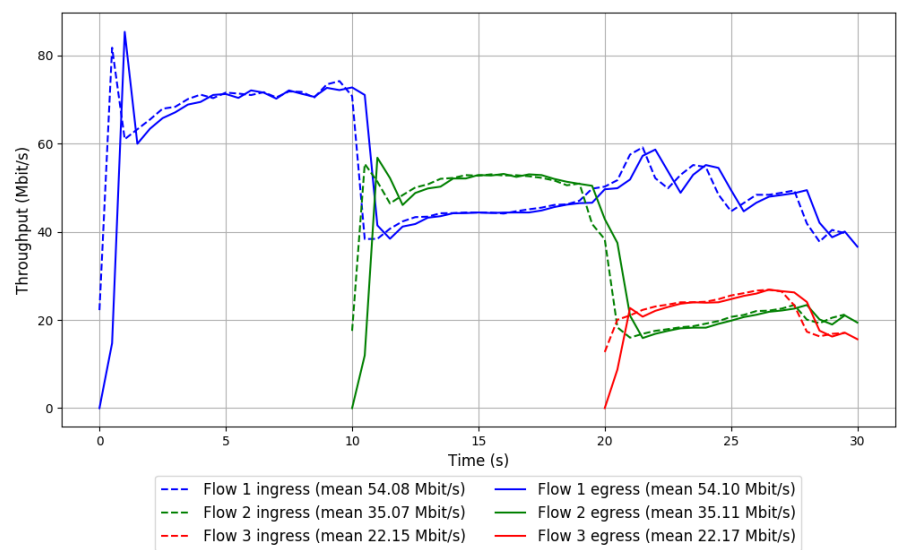


Run 2: Statistics of TCP Cubic

Start at: 2018-06-19 09:42:39
End at: 2018-06-19 09:43:09
Local clock offset: -1.083 ms
Remote clock offset: 3.262 ms

Below is generated by plot.py at 2018-06-19 12:54:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 42.545 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 54.10 Mbit/s
95th percentile per-packet one-way delay: 41.189 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 35.11 Mbit/s
95th percentile per-packet one-way delay: 44.531 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 22.17 Mbit/s
95th percentile per-packet one-way delay: 44.721 ms
Loss rate: 0.60%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-06-19 10:05:57

End at: 2018-06-19 10:06:27

Local clock offset: 0.503 ms

Remote clock offset: 3.858 ms

Below is generated by plot.py at 2018-06-19 12:54:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.69 Mbit/s

95th percentile per-packet one-way delay: 42.498 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 43.35 Mbit/s

95th percentile per-packet one-way delay: 42.545 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 48.32 Mbit/s

95th percentile per-packet one-way delay: 40.921 ms

Loss rate: 0.34%

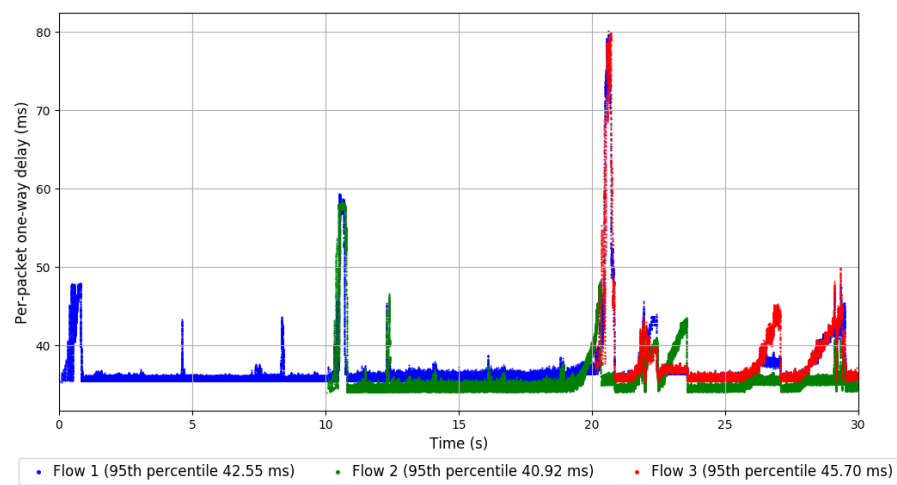
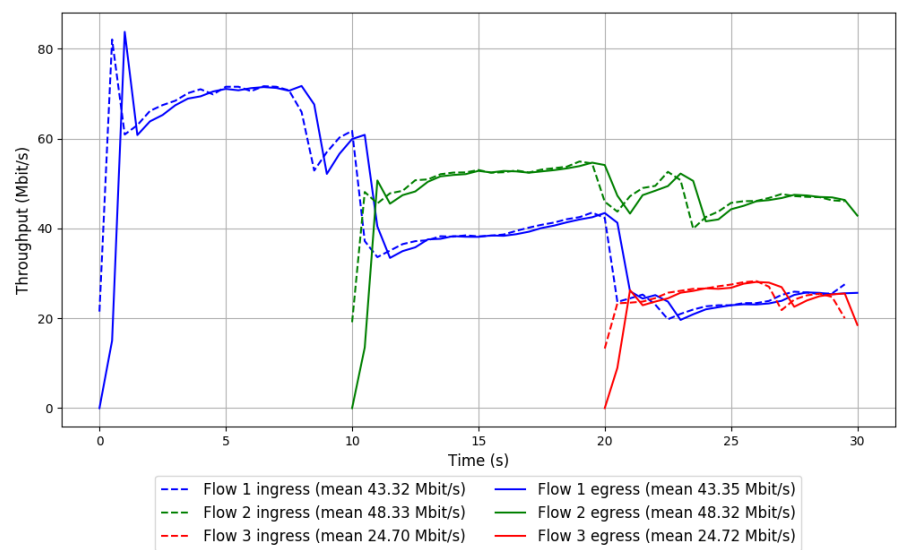
-- Flow 3:

Average throughput: 24.72 Mbit/s

95th percentile per-packet one-way delay: 45.699 ms

Loss rate: 0.62%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-06-19 10:28:09

End at: 2018-06-19 10:28:39

Local clock offset: 0.419 ms

Remote clock offset: 2.668 ms

Below is generated by plot.py at 2018-06-19 12:54:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.05 Mbit/s

95th percentile per-packet one-way delay: 41.269 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 46.57 Mbit/s

95th percentile per-packet one-way delay: 39.423 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 38.48 Mbit/s

95th percentile per-packet one-way delay: 42.449 ms

Loss rate: 0.26%

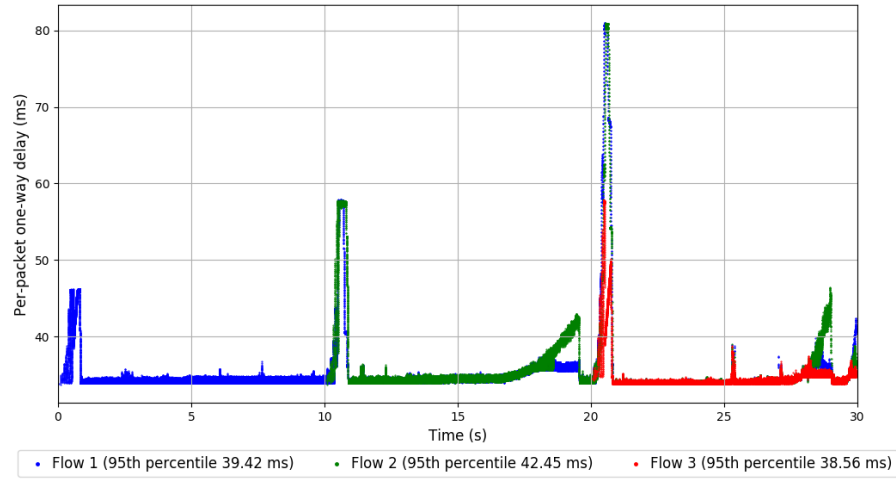
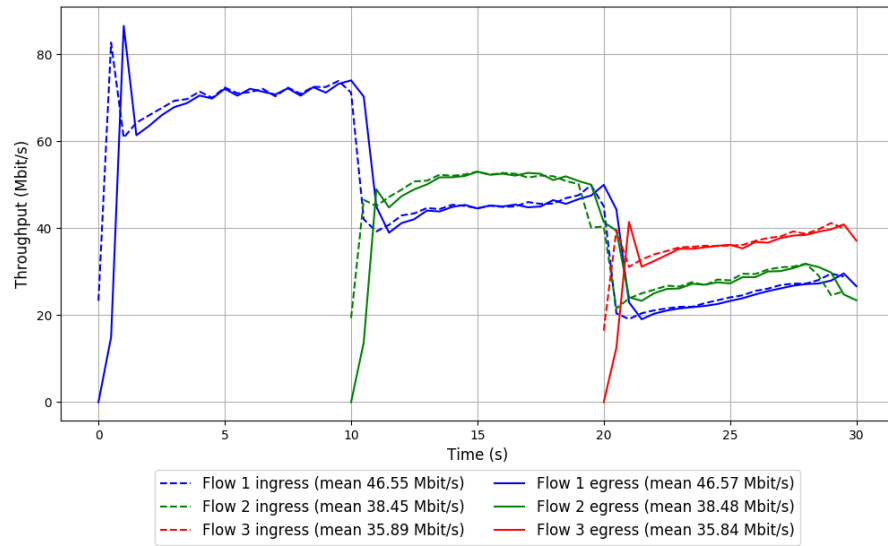
-- Flow 3:

Average throughput: 35.84 Mbit/s

95th percentile per-packet one-way delay: 38.559 ms

Loss rate: 0.81%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-06-19 10:50:11

End at: 2018-06-19 10:50:41

Local clock offset: 0.502 ms

Remote clock offset: 2.082 ms

Below is generated by plot.py at 2018-06-19 12:54:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.78 Mbit/s

95th percentile per-packet one-way delay: 41.911 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 54.95 Mbit/s

95th percentile per-packet one-way delay: 41.183 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 35.25 Mbit/s

95th percentile per-packet one-way delay: 42.624 ms

Loss rate: 0.14%

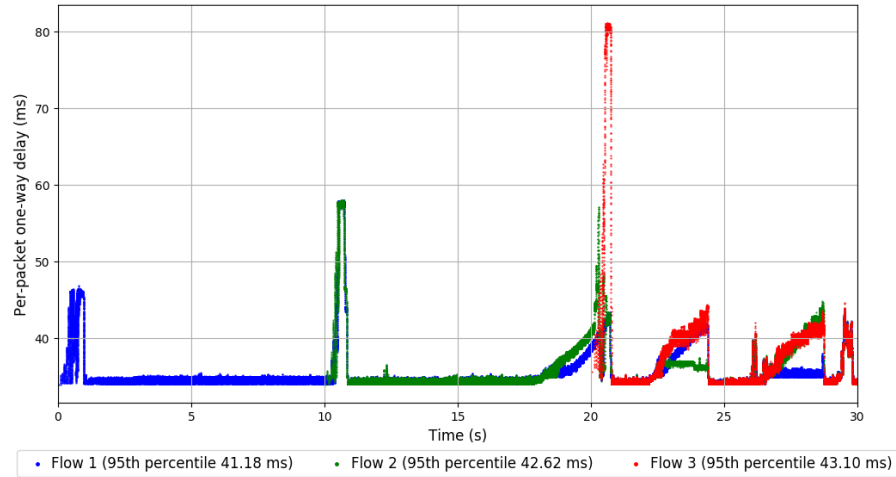
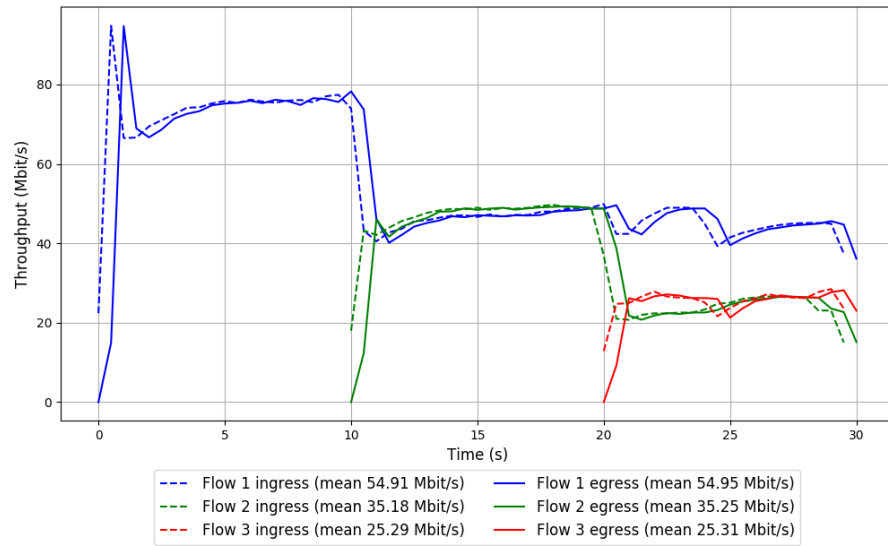
-- Flow 3:

Average throughput: 25.31 Mbit/s

95th percentile per-packet one-way delay: 43.097 ms

Loss rate: 0.59%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-06-19 11:12:35

End at: 2018-06-19 11:13:05

Local clock offset: 0.268 ms

Remote clock offset: 1.299 ms

Below is generated by plot.py at 2018-06-19 12:54:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.38 Mbit/s

95th percentile per-packet one-way delay: 42.429 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 52.49 Mbit/s

95th percentile per-packet one-way delay: 41.524 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 29.46 Mbit/s

95th percentile per-packet one-way delay: 44.123 ms

Loss rate: 0.29%

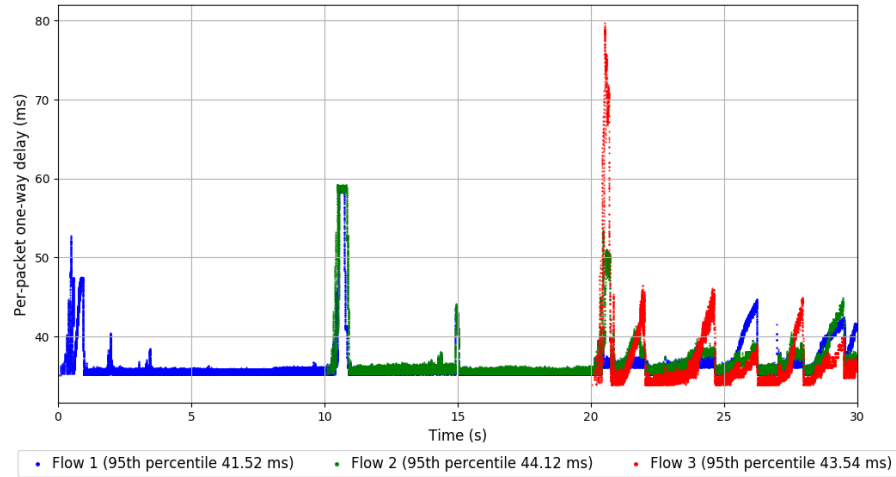
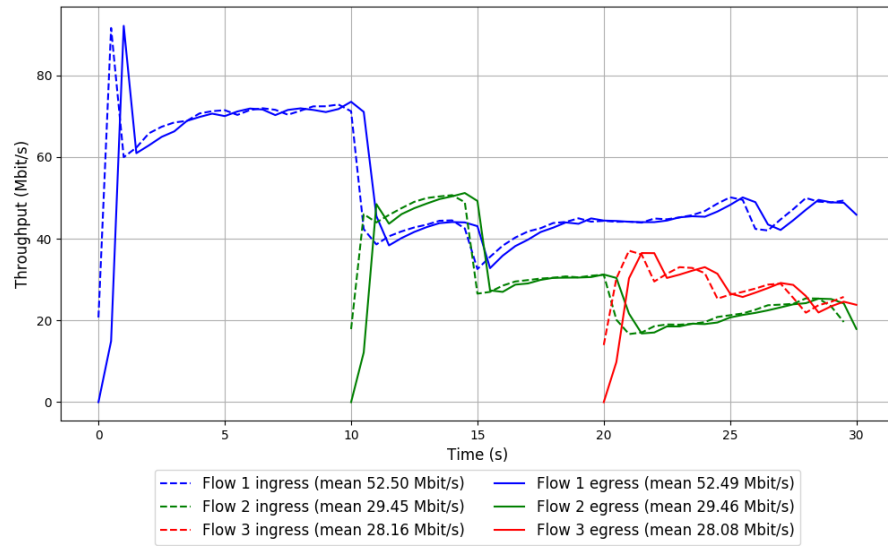
-- Flow 3:

Average throughput: 28.08 Mbit/s

95th percentile per-packet one-way delay: 43.541 ms

Loss rate: 0.97%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-06-19 11:34:25

End at: 2018-06-19 11:34:55

Local clock offset: 0.177 ms

Remote clock offset: 0.892 ms

Below is generated by plot.py at 2018-06-19 12:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.42 Mbit/s

95th percentile per-packet one-way delay: 42.338 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 55.40 Mbit/s

95th percentile per-packet one-way delay: 41.616 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 35.05 Mbit/s

95th percentile per-packet one-way delay: 44.072 ms

Loss rate: 0.28%

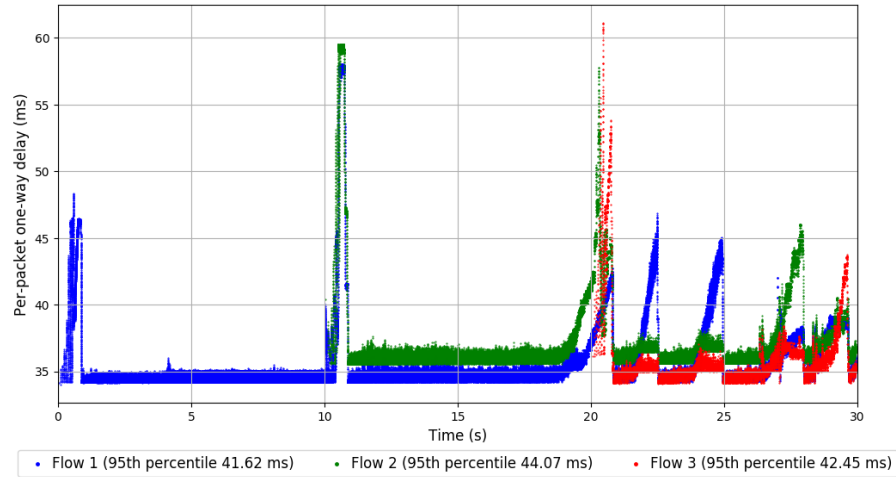
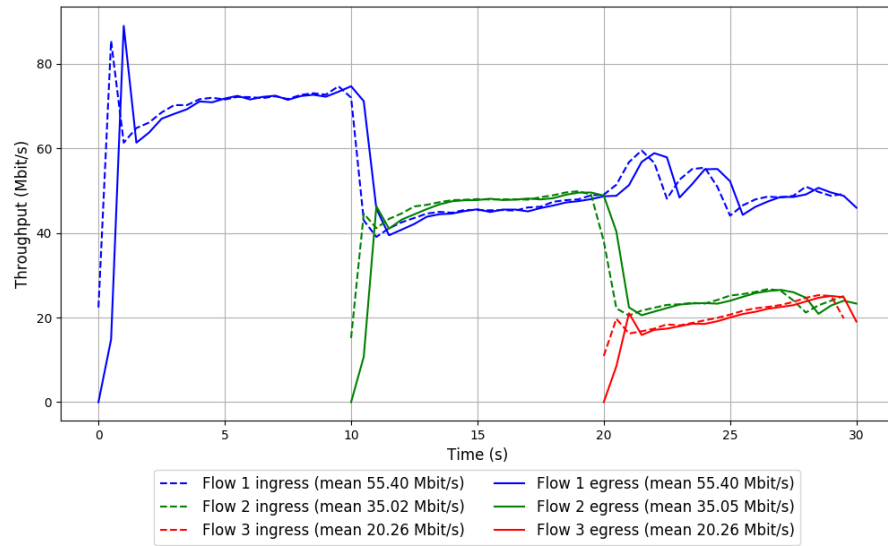
-- Flow 3:

Average throughput: 20.26 Mbit/s

95th percentile per-packet one-way delay: 42.450 ms

Loss rate: 0.71%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-06-19 11:56:35

End at: 2018-06-19 11:57:05

Local clock offset: -1.474 ms

Remote clock offset: 1.13 ms

Below is generated by plot.py at 2018-06-19 12:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.65 Mbit/s

95th percentile per-packet one-way delay: 43.761 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 48.55 Mbit/s

95th percentile per-packet one-way delay: 40.179 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 31.41 Mbit/s

95th percentile per-packet one-way delay: 37.705 ms

Loss rate: 0.35%

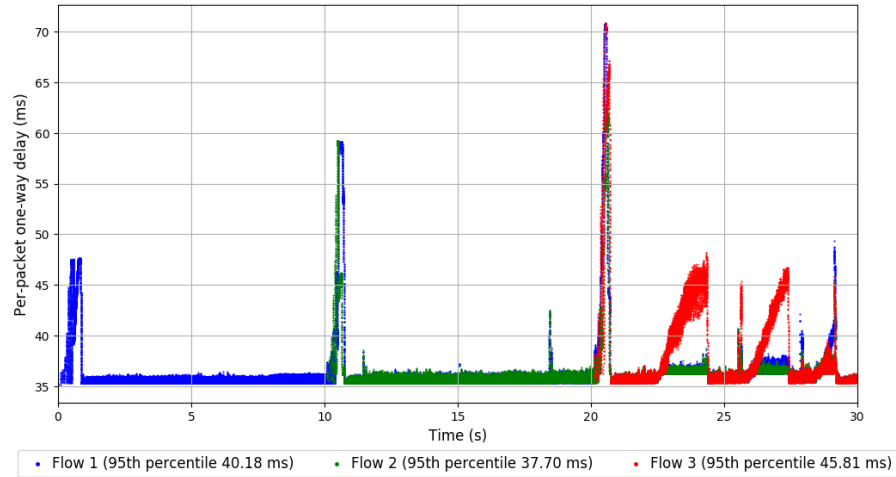
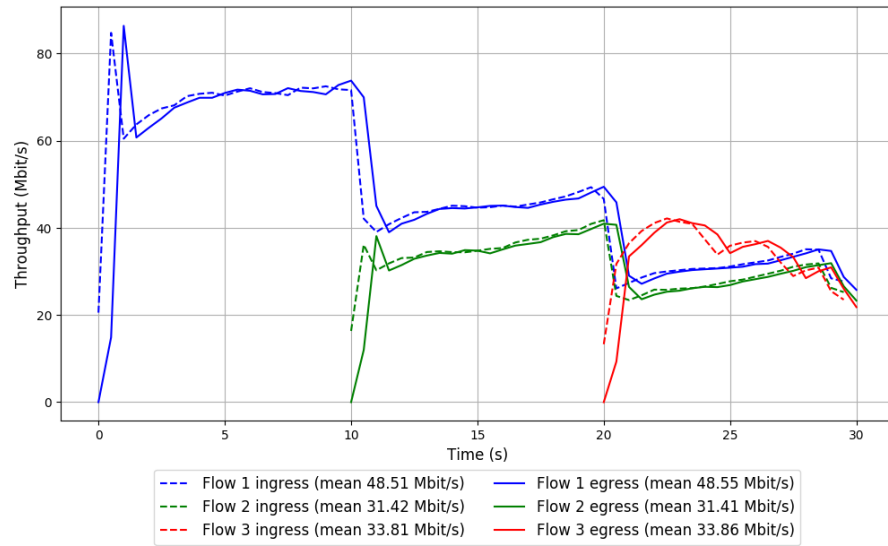
-- Flow 3:

Average throughput: 33.86 Mbit/s

95th percentile per-packet one-way delay: 45.812 ms

Loss rate: 0.54%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-19 12:18:26

End at: 2018-06-19 12:18:56

Local clock offset: 0.324 ms

Remote clock offset: 2.18 ms

Below is generated by plot.py at 2018-06-19 12:55:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.98 Mbit/s

95th percentile per-packet one-way delay: 41.657 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 48.47 Mbit/s

95th percentile per-packet one-way delay: 42.357 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 31.57 Mbit/s

95th percentile per-packet one-way delay: 38.249 ms

Loss rate: 0.47%

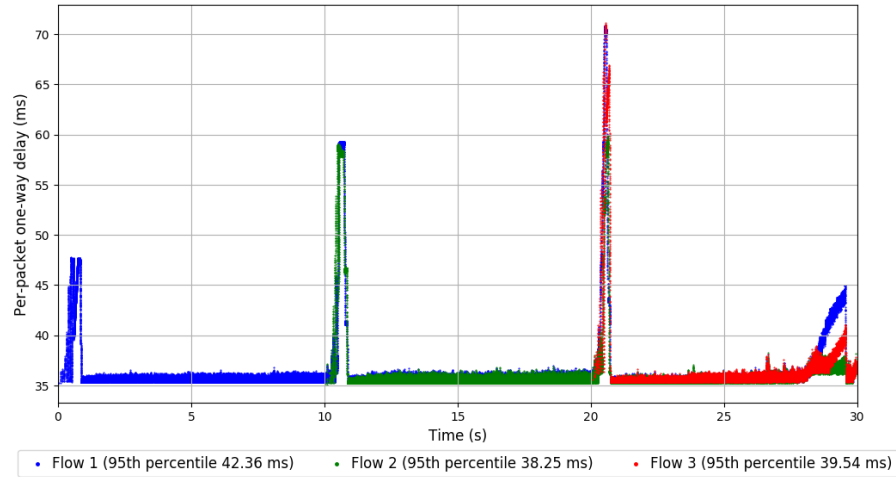
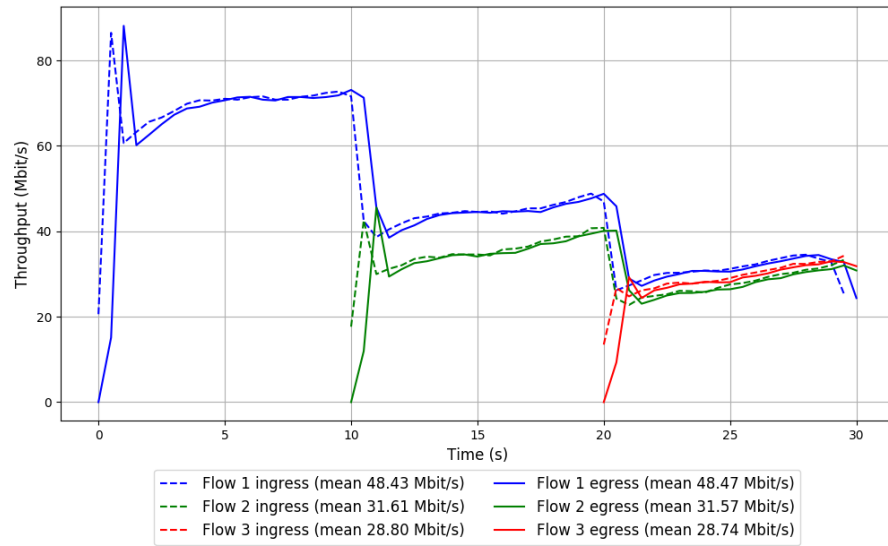
-- Flow 3:

Average throughput: 28.74 Mbit/s

95th percentile per-packet one-way delay: 39.541 ms

Loss rate: 0.89%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-06-19 12:40:24

End at: 2018-06-19 12:40:54

Local clock offset: 0.644 ms

Remote clock offset: 3.192 ms

Below is generated by plot.py at 2018-06-19 12:55:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.62 Mbit/s

95th percentile per-packet one-way delay: 42.274 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 46.12 Mbit/s

95th percentile per-packet one-way delay: 40.535 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 36.52 Mbit/s

95th percentile per-packet one-way delay: 42.263 ms

Loss rate: 0.27%

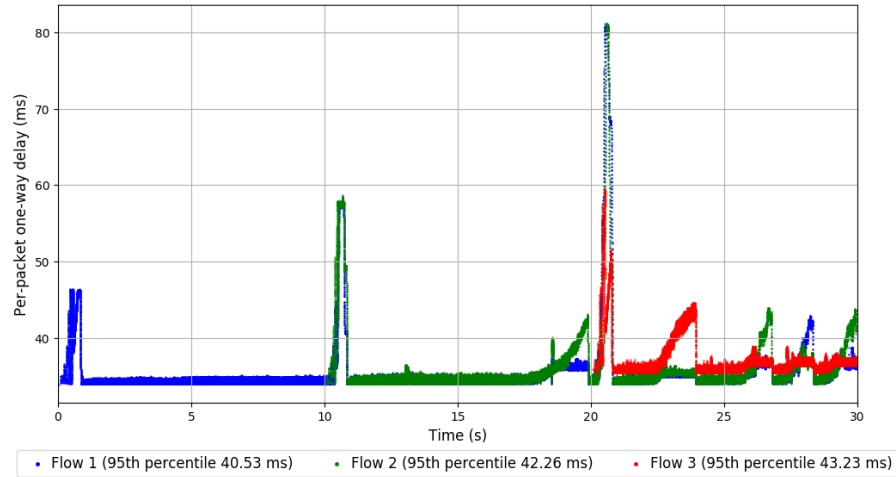
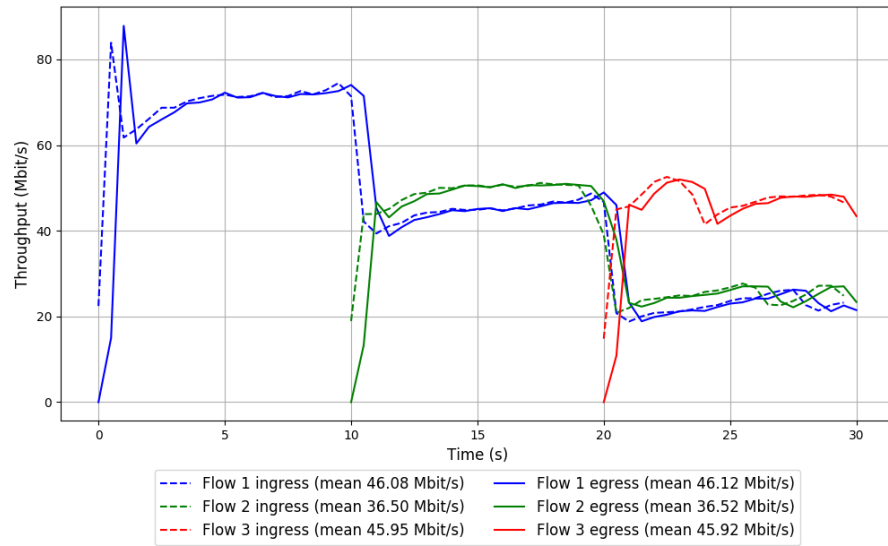
-- Flow 3:

Average throughput: 45.92 Mbit/s

95th percentile per-packet one-way delay: 43.229 ms

Loss rate: 0.74%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-06-19 09:07:23

End at: 2018-06-19 09:07:53

Local clock offset: -0.909 ms

Remote clock offset: 2.735 ms

Below is generated by plot.py at 2018-06-19 12:55:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.59 Mbit/s

95th percentile per-packet one-way delay: 65.512 ms

Loss rate: 3.03%

-- Flow 1:

Average throughput: 58.86 Mbit/s

95th percentile per-packet one-way delay: 63.227 ms

Loss rate: 2.19%

-- Flow 2:

Average throughput: 39.78 Mbit/s

95th percentile per-packet one-way delay: 65.365 ms

Loss rate: 4.06%

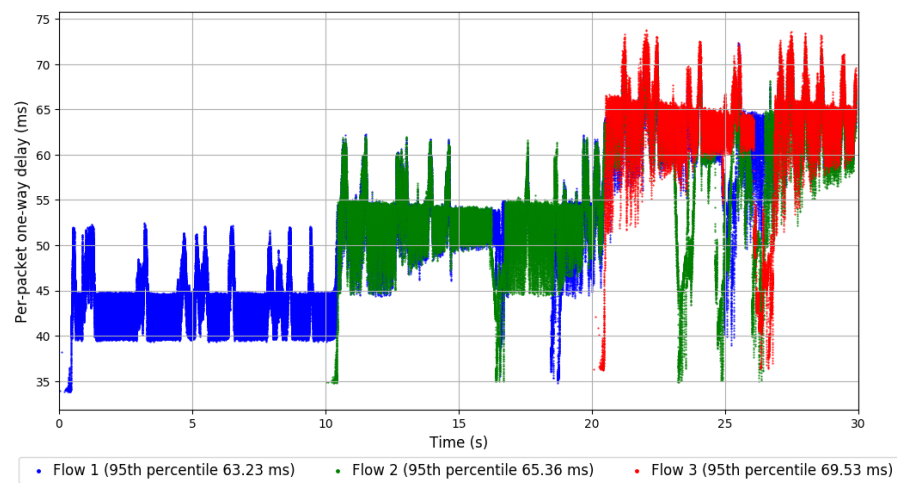
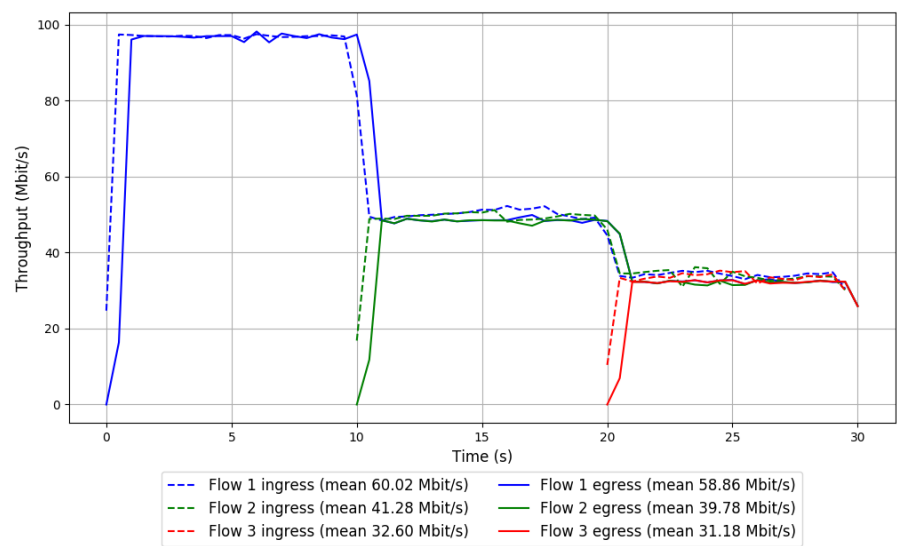
-- Flow 3:

Average throughput: 31.18 Mbit/s

95th percentile per-packet one-way delay: 69.525 ms

Loss rate: 5.12%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-06-19 09:30:23

End at: 2018-06-19 09:30:53

Local clock offset: -3.391 ms

Remote clock offset: 3.163 ms

Below is generated by plot.py at 2018-06-19 12:56:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.49 Mbit/s

95th percentile per-packet one-way delay: 65.950 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 58.78 Mbit/s

95th percentile per-packet one-way delay: 64.502 ms

Loss rate: 2.13%

-- Flow 2:

Average throughput: 40.06 Mbit/s

95th percentile per-packet one-way delay: 66.298 ms

Loss rate: 4.06%

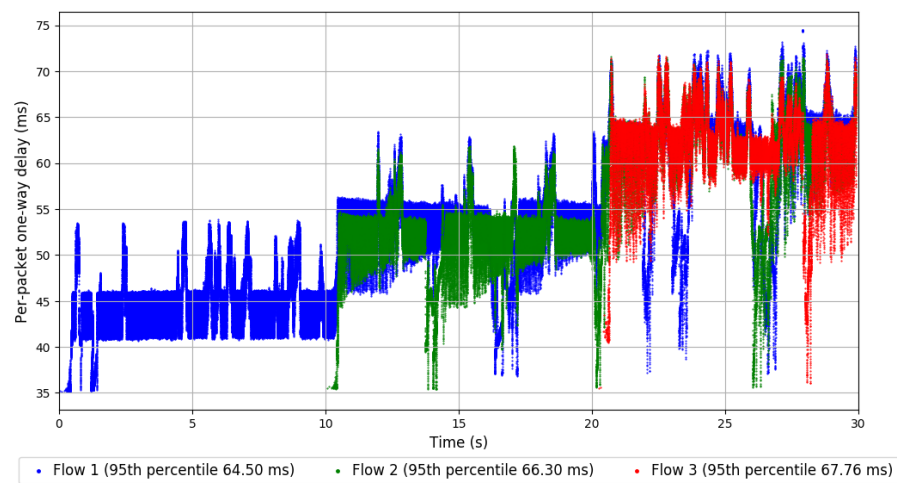
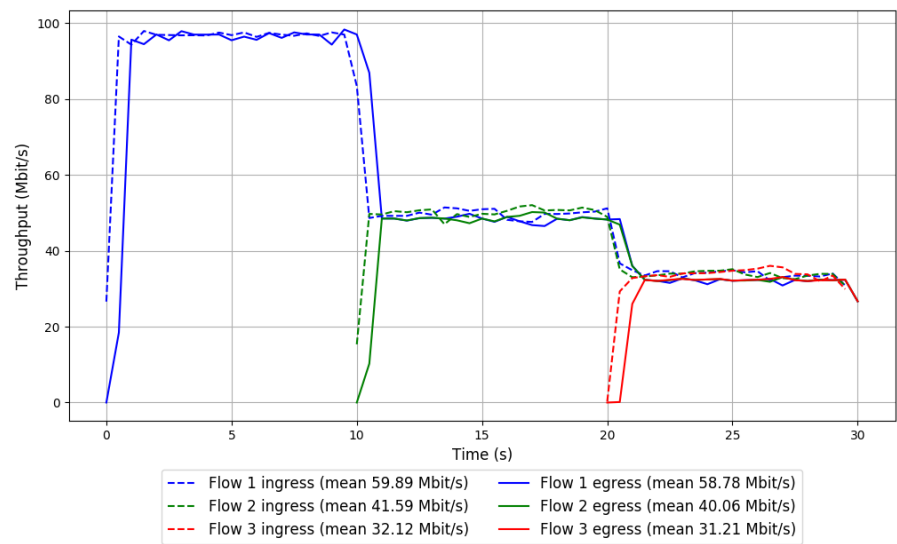
-- Flow 3:

Average throughput: 31.21 Mbit/s

95th percentile per-packet one-way delay: 67.761 ms

Loss rate: 5.57%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-06-19 09:54:30

End at: 2018-06-19 09:55:00

Local clock offset: 0.112 ms

Remote clock offset: 3.503 ms

Below is generated by plot.py at 2018-06-19 12:56:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.66 Mbit/s

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

Loss rate: 2.57%

-- Flow 1:

Average throughput: 59.17 Mbit/s

95th percentile per-packet one-way delay: 63.093 ms

Loss rate: 1.55%

-- Flow 2:

Average throughput: 39.28 Mbit/s

95th percentile per-packet one-way delay: 63.886 ms

Loss rate: 3.97%

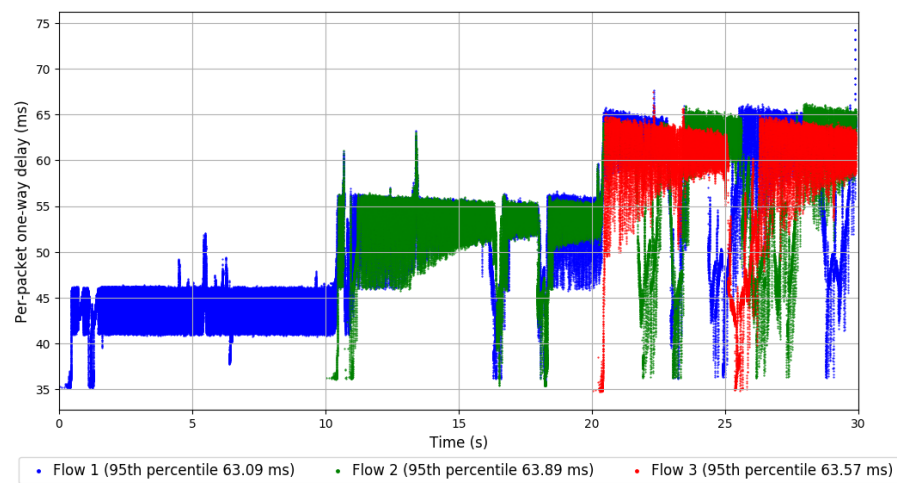
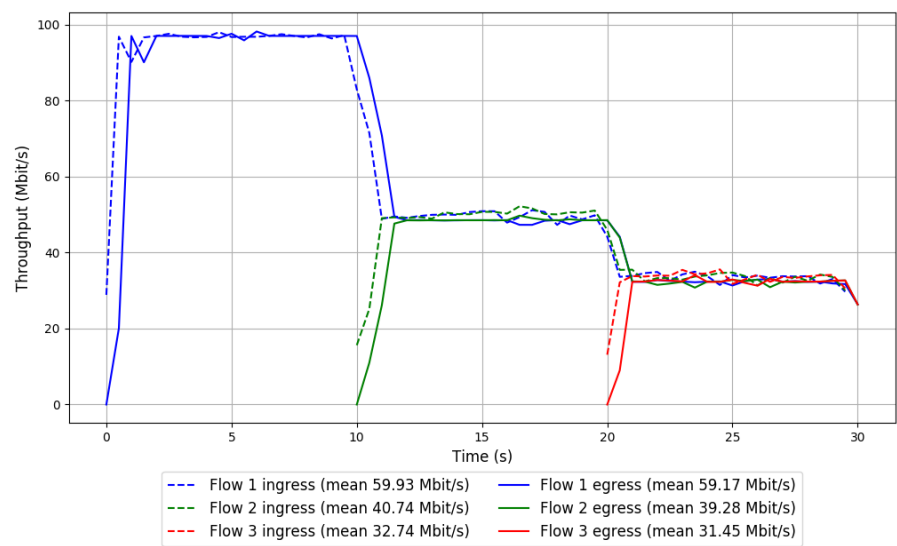
-- Flow 3:

Average throughput: 31.45 Mbit/s

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

Loss rate: 4.69%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-06-19 10:17:07

End at: 2018-06-19 10:17:37

Local clock offset: 0.439 ms

Remote clock offset: 3.183 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.60 Mbit/s

95th percentile per-packet one-way delay: 63.695 ms

Loss rate: 2.76%

-- Flow 1:

Average throughput: 58.89 Mbit/s

95th percentile per-packet one-way delay: 61.578 ms

Loss rate: 1.90%

-- Flow 2:

Average throughput: 40.00 Mbit/s

95th percentile per-packet one-way delay: 64.257 ms

Loss rate: 3.67%

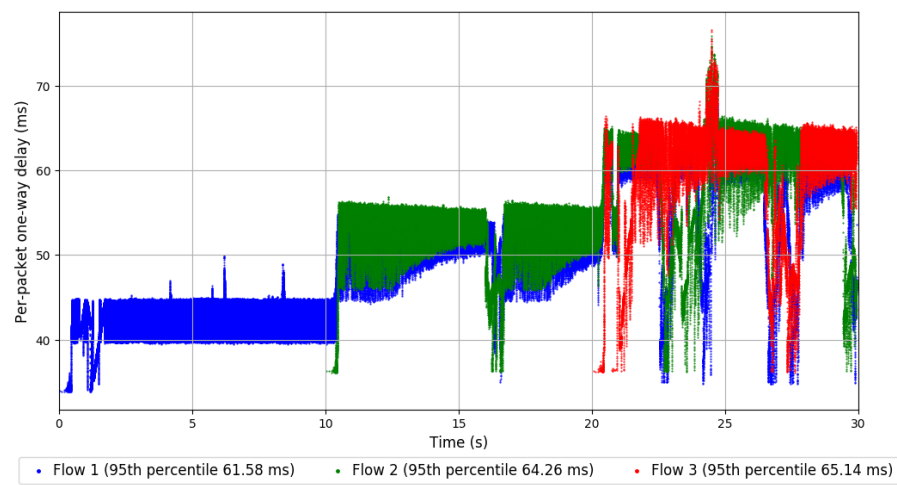
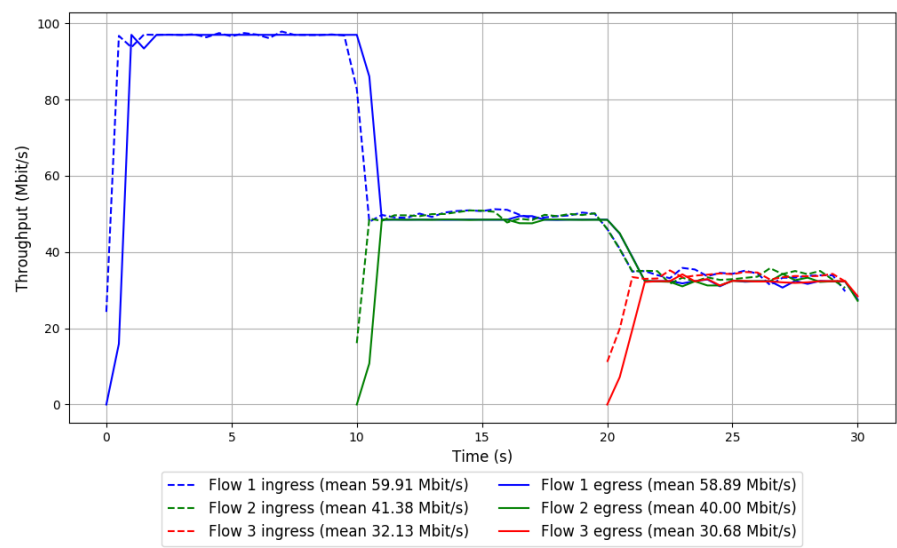
-- Flow 3:

Average throughput: 30.68 Mbit/s

95th percentile per-packet one-way delay: 65.139 ms

Loss rate: 5.26%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-06-19 10:39:06

End at: 2018-06-19 10:39:36

Local clock offset: 0.49 ms

Remote clock offset: 2.465 ms

Below is generated by plot.py at 2018-06-19 12:56:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.56 Mbit/s

95th percentile per-packet one-way delay: 63.352 ms

Loss rate: 2.48%

-- Flow 1:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 62.037 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 39.40 Mbit/s

95th percentile per-packet one-way delay: 63.066 ms

Loss rate: 3.78%

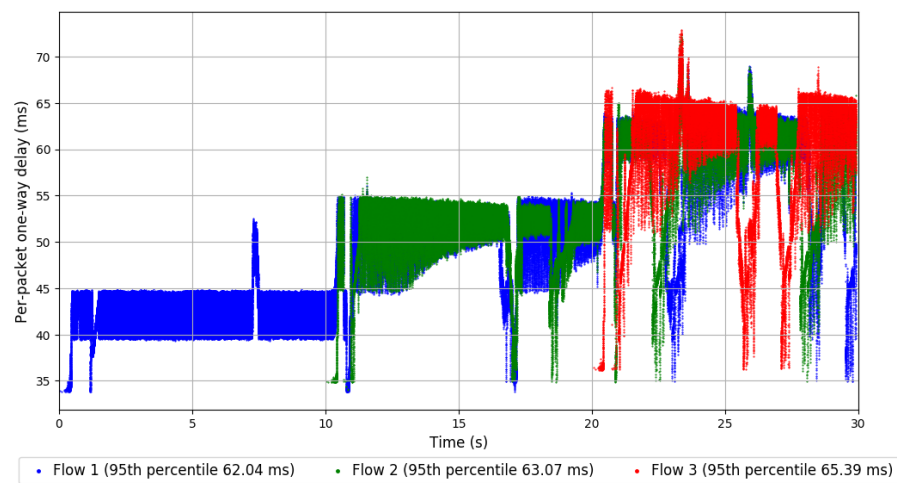
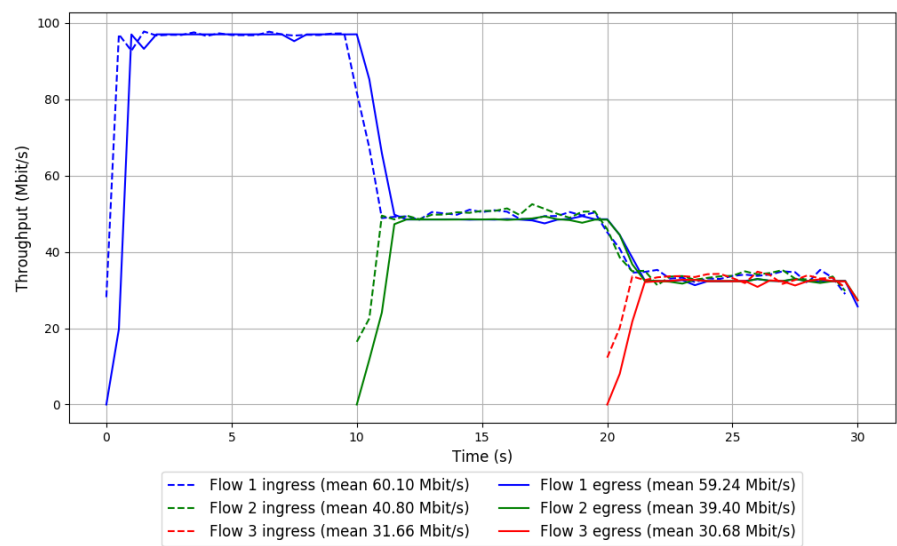
-- Flow 3:

Average throughput: 30.68 Mbit/s

95th percentile per-packet one-way delay: 65.387 ms

Loss rate: 3.89%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-06-19 11:01:18

End at: 2018-06-19 11:01:48

Local clock offset: 0.464 ms

Remote clock offset: 1.58 ms

Below is generated by plot.py at 2018-06-19 12:56:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.71 Mbit/s

95th percentile per-packet one-way delay: 70.460 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 64.47 Mbit/s

95th percentile per-packet one-way delay: 53.460 ms

Loss rate: 1.56%

-- Flow 2:

Average throughput: 35.34 Mbit/s

95th percentile per-packet one-way delay: 71.358 ms

Loss rate: 3.62%

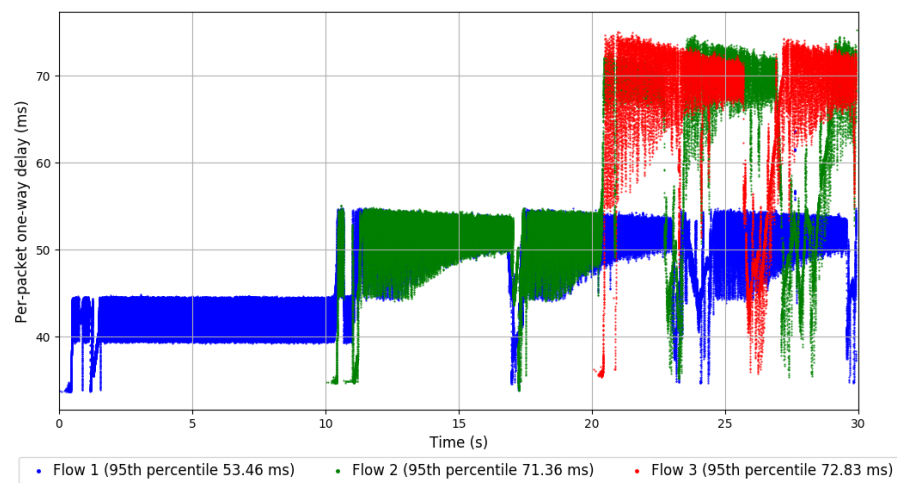
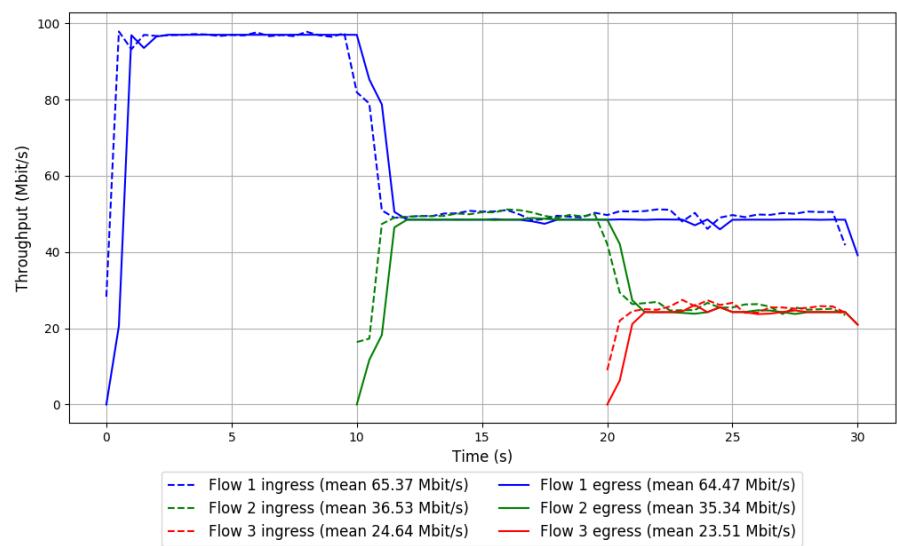
-- Flow 3:

Average throughput: 23.51 Mbit/s

95th percentile per-packet one-way delay: 72.833 ms

Loss rate: 5.36%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-06-19 11:23:31

End at: 2018-06-19 11:24:01

Local clock offset: 0.283 ms

Remote clock offset: 1.056 ms

Below is generated by plot.py at 2018-06-19 12:56:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.31 Mbit/s

95th percentile per-packet one-way delay: 63.272 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 57.66 Mbit/s

95th percentile per-packet one-way delay: 63.271 ms

Loss rate: 1.59%

-- Flow 2:

Average throughput: 39.85 Mbit/s

95th percentile per-packet one-way delay: 62.894 ms

Loss rate: 3.35%

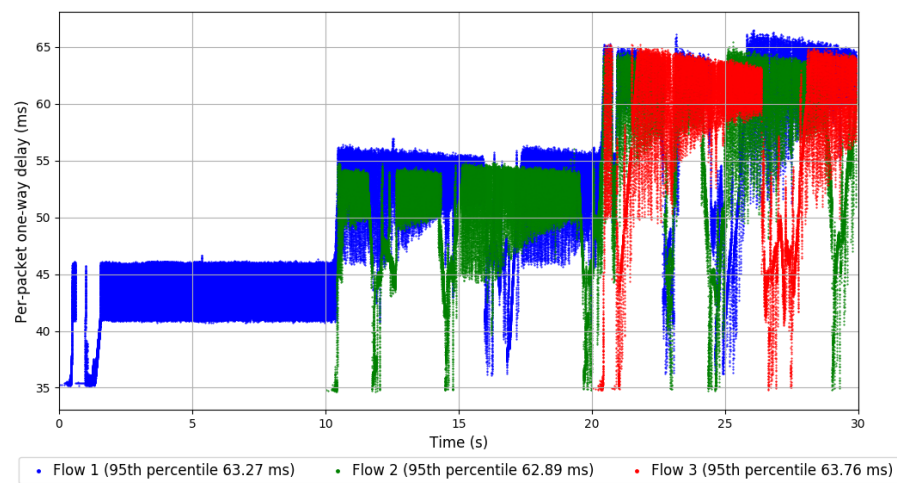
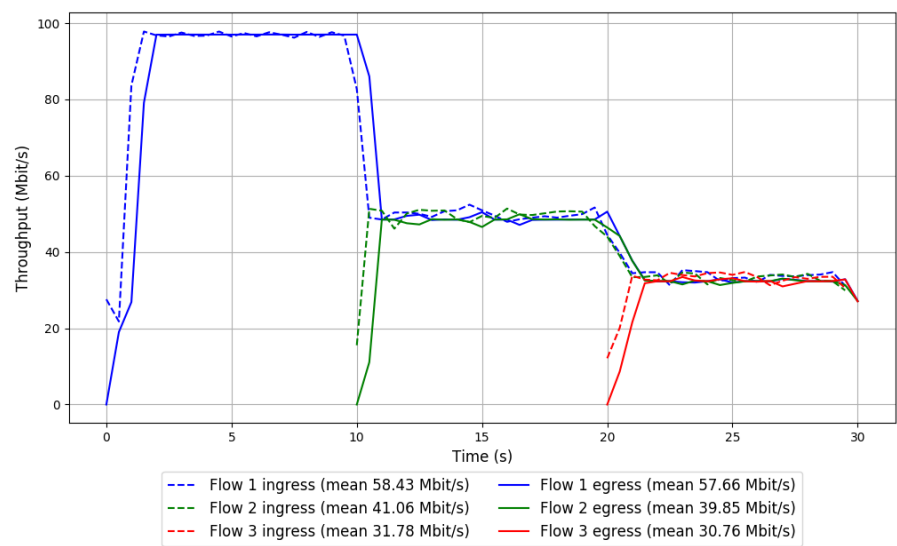
-- Flow 3:

Average throughput: 30.76 Mbit/s

95th percentile per-packet one-way delay: 63.764 ms

Loss rate: 3.94%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-06-19 11:45:24

End at: 2018-06-19 11:45:54

Local clock offset: -0.981 ms

Remote clock offset: 0.748 ms

Below is generated by plot.py at 2018-06-19 12:56:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.58 Mbit/s

95th percentile per-packet one-way delay: 70.506 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 57.10 Mbit/s

95th percentile per-packet one-way delay: 69.787 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 46.99 Mbit/s

95th percentile per-packet one-way delay: 55.502 ms

Loss rate: 3.09%

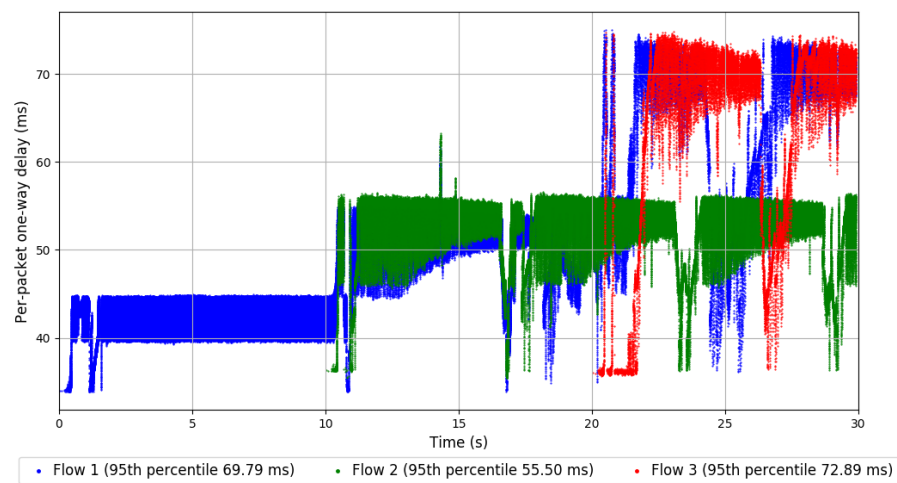
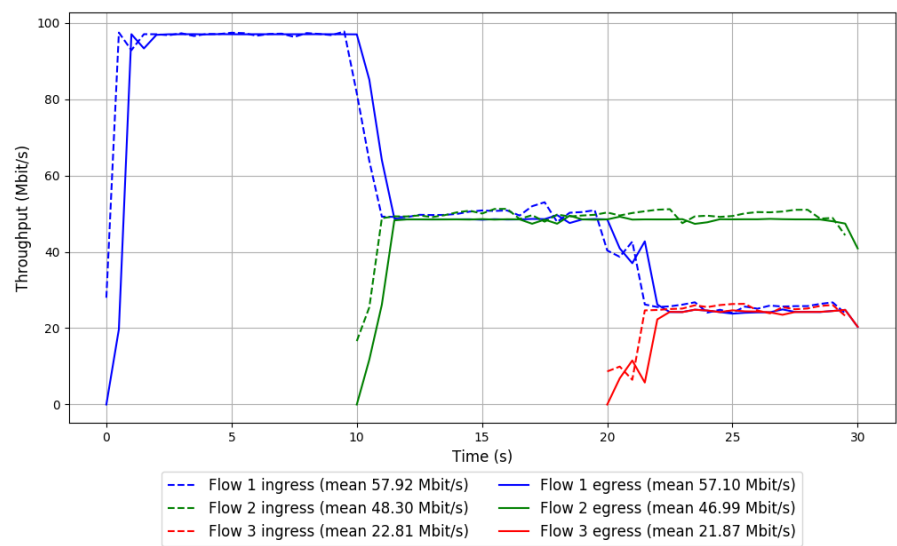
-- Flow 3:

Average throughput: 21.87 Mbit/s

95th percentile per-packet one-way delay: 72.887 ms

Loss rate: 4.86%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-06-19 12:07:28

End at: 2018-06-19 12:07:58

Local clock offset: -0.915 ms

Remote clock offset: 1.752 ms

Below is generated by plot.py at 2018-06-19 12:57:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.59 Mbit/s

95th percentile per-packet one-way delay: 70.641 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 56.64 Mbit/s

95th percentile per-packet one-way delay: 71.249 ms

Loss rate: 1.33%

-- Flow 2:

Average throughput: 46.96 Mbit/s

95th percentile per-packet one-way delay: 53.963 ms

Loss rate: 3.47%

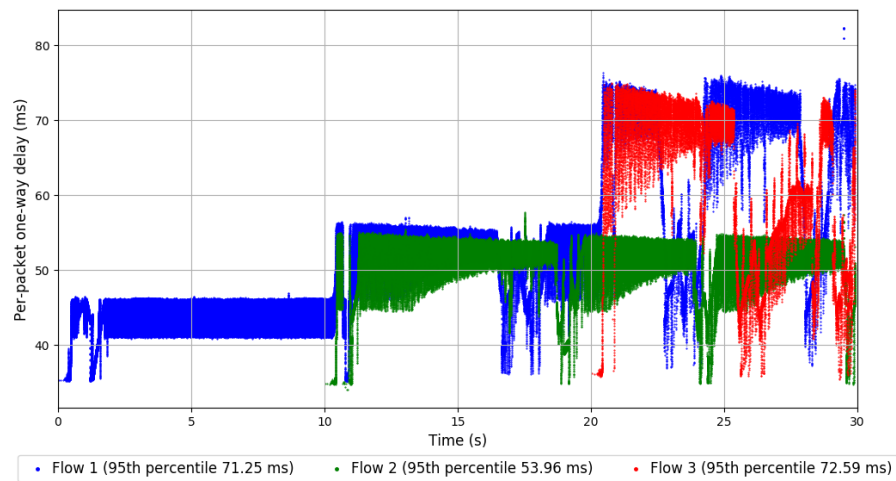
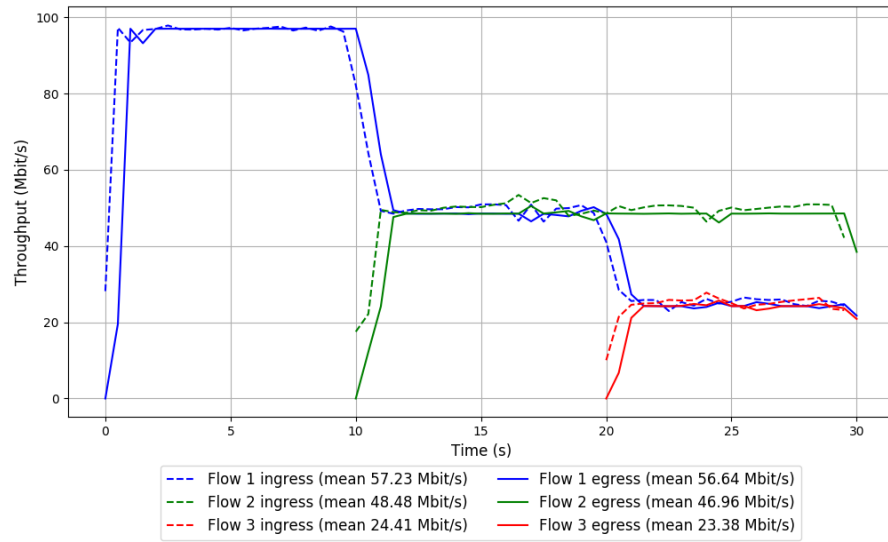
-- Flow 3:

Average throughput: 23.38 Mbit/s

95th percentile per-packet one-way delay: 72.594 ms

Loss rate: 5.00%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-06-19 12:29:28

End at: 2018-06-19 12:29:58

Local clock offset: 0.764 ms

Remote clock offset: 2.385 ms

Below is generated by plot.py at 2018-06-19 12:57:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.58 Mbit/s

95th percentile per-packet one-way delay: 71.035 ms

Loss rate: 2.50%

-- Flow 1:

Average throughput: 53.34 Mbit/s

95th percentile per-packet one-way delay: 70.430 ms

Loss rate: 1.76%

-- Flow 2:

Average throughput: 36.36 Mbit/s

95th percentile per-packet one-way delay: 72.332 ms

Loss rate: 3.72%

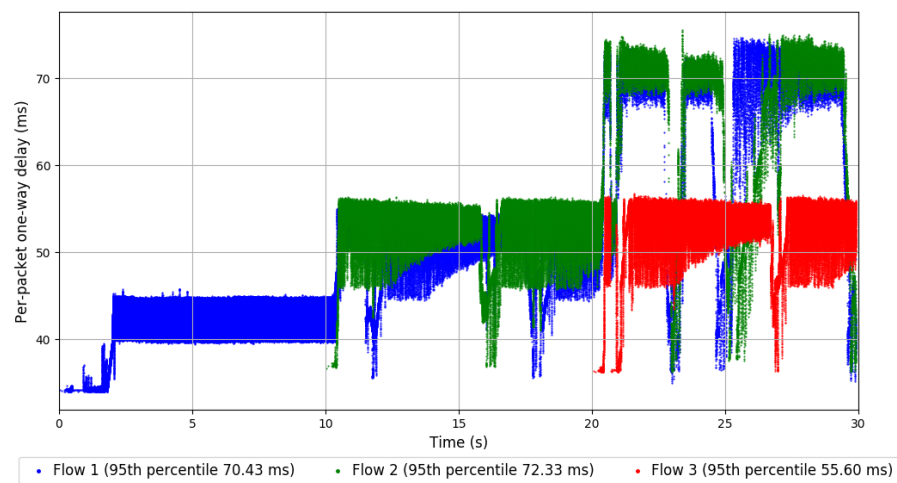
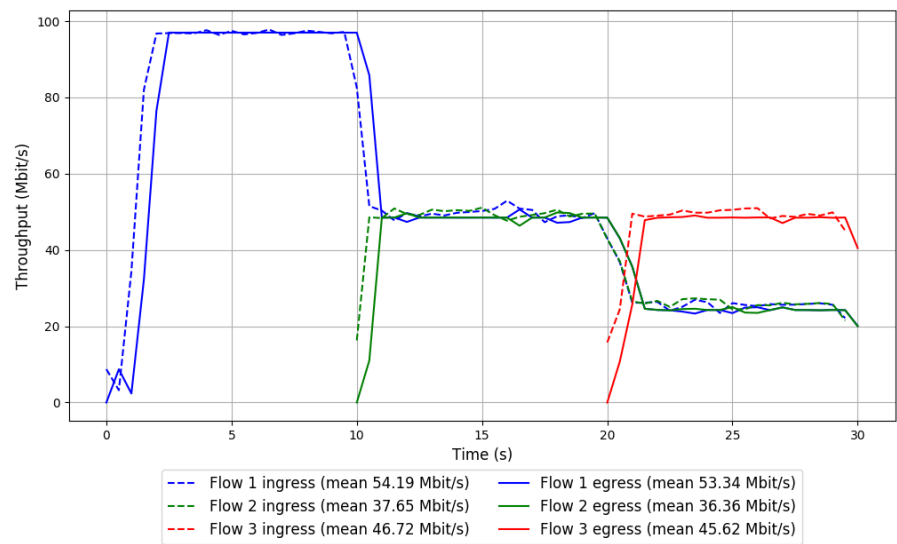
-- Flow 3:

Average throughput: 45.62 Mbit/s

95th percentile per-packet one-way delay: 55.605 ms

Loss rate: 3.09%

Run 10: Report of FillP — Data Link

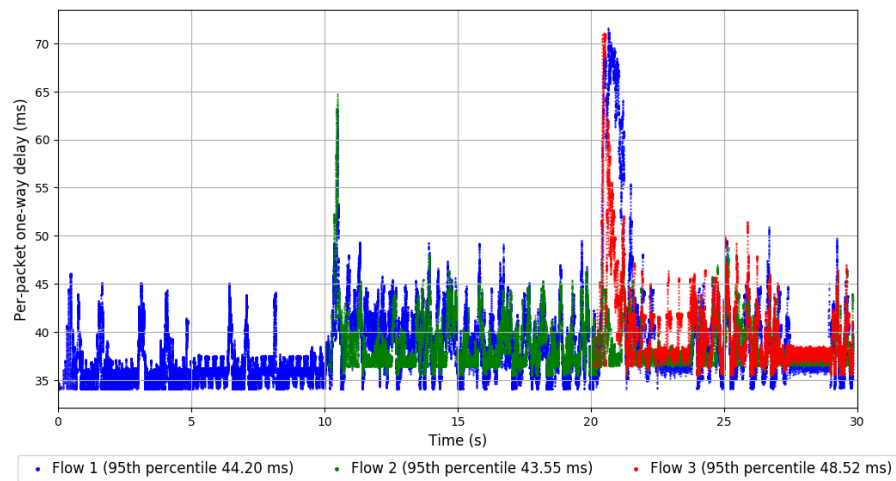
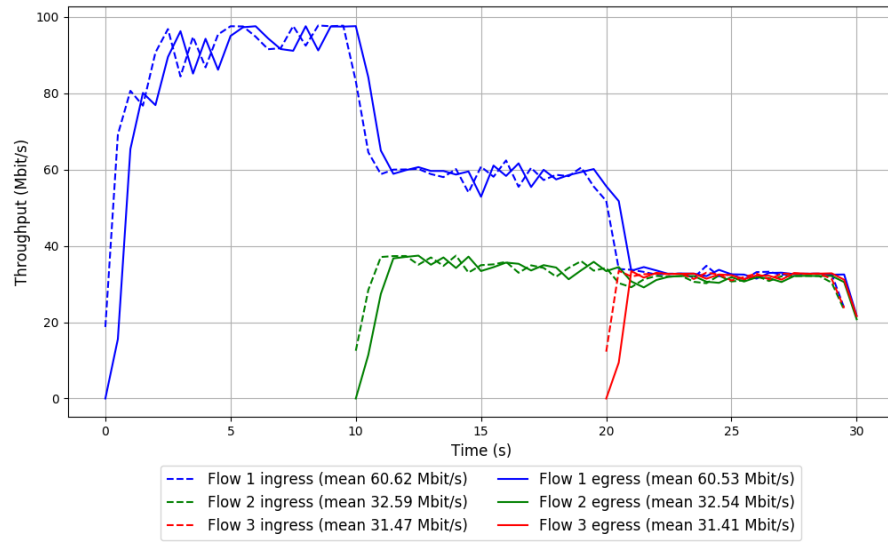


```
Run 1: Statistics of Indigo

Start at: 2018-06-19 09:11:51
End at: 2018-06-19 09:12:21
Local clock offset: -1.676 ms
Remote clock offset: 2.72 ms

# Below is generated by plot.py at 2018-06-19 12:57:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.40 Mbit/s
95th percentile per-packet one-way delay: 44.317 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 60.53 Mbit/s
95th percentile per-packet one-way delay: 44.203 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 32.54 Mbit/s
95th percentile per-packet one-way delay: 43.553 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 48.524 ms
Loss rate: 0.87%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-06-19 09:34:46

End at: 2018-06-19 09:35:16

Local clock offset: -3.141 ms

Remote clock offset: 3.143 ms

Below is generated by plot.py at 2018-06-19 12:57:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.91 Mbit/s

95th percentile per-packet one-way delay: 48.022 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 58.45 Mbit/s

95th percentile per-packet one-way delay: 49.739 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 39.32 Mbit/s

95th percentile per-packet one-way delay: 45.037 ms

Loss rate: 0.38%

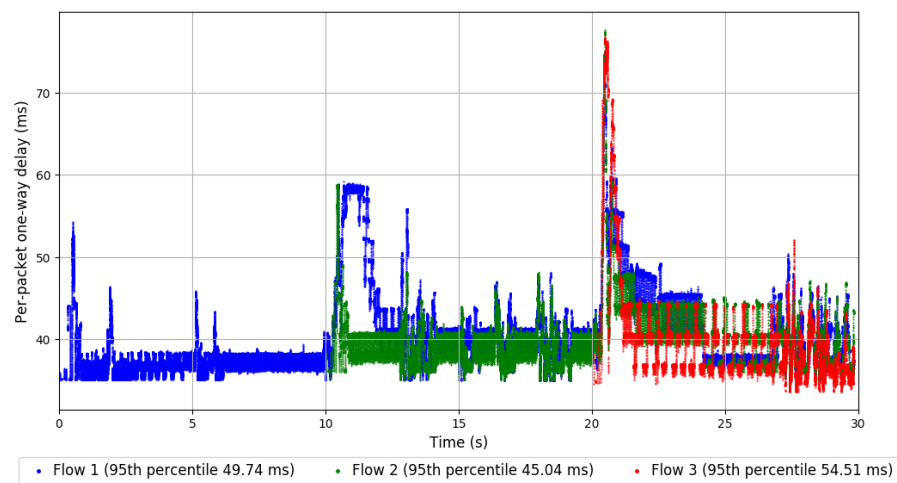
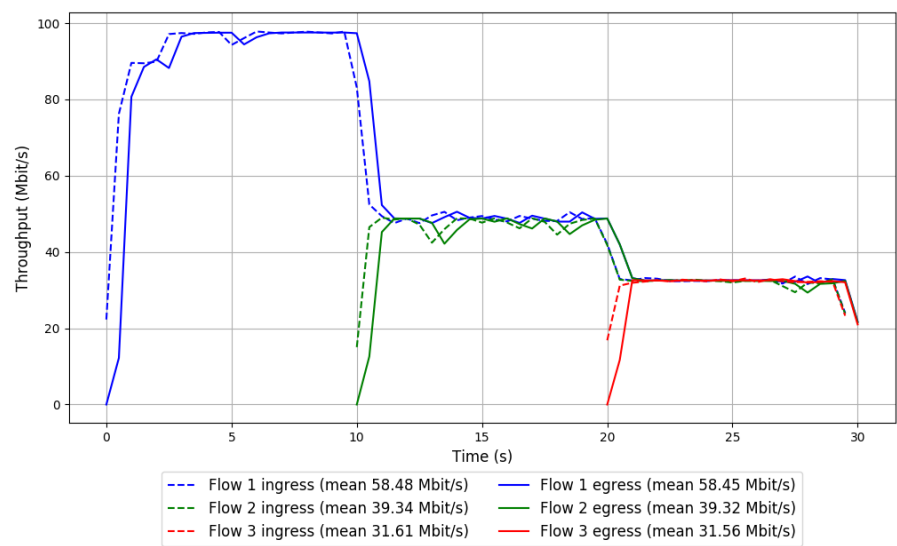
-- Flow 3:

Average throughput: 31.56 Mbit/s

95th percentile per-packet one-way delay: 54.513 ms

Loss rate: 0.86%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-06-19 09:58:44

End at: 2018-06-19 09:59:14

Local clock offset: 0.312 ms

Remote clock offset: 3.666 ms

Below is generated by plot.py at 2018-06-19 12:57:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.56 Mbit/s

95th percentile per-packet one-way delay: 45.992 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 59.13 Mbit/s

95th percentile per-packet one-way delay: 47.930 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 47.47 Mbit/s

95th percentile per-packet one-way delay: 43.325 ms

Loss rate: 0.36%

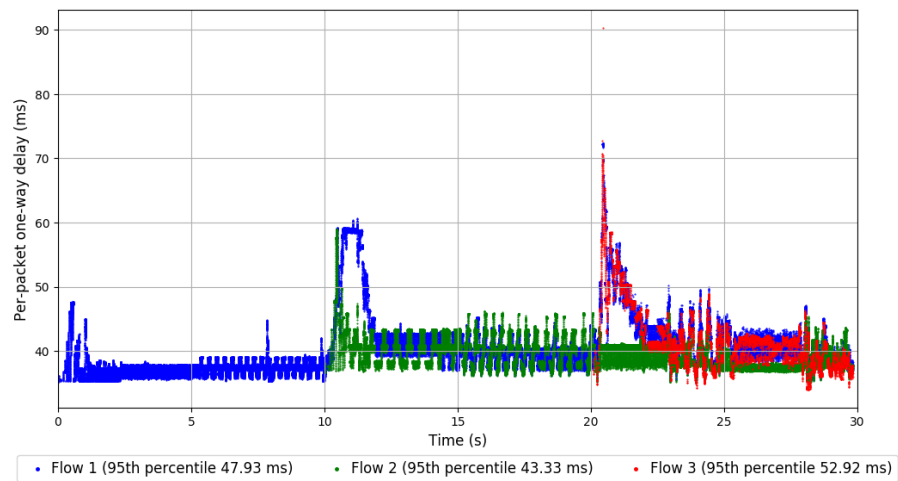
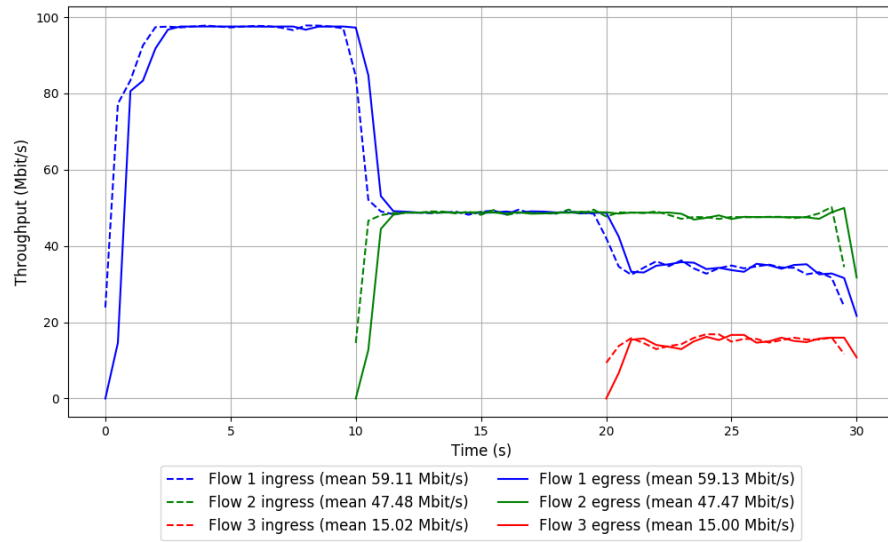
-- Flow 3:

Average throughput: 15.00 Mbit/s

95th percentile per-packet one-way delay: 52.918 ms

Loss rate: 0.87%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-06-19 10:21:15

End at: 2018-06-19 10:21:45

Local clock offset: 0.365 ms

Remote clock offset: 2.906 ms

Below is generated by plot.py at 2018-06-19 12:57:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.54 Mbit/s

95th percentile per-packet one-way delay: 48.242 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 56.36 Mbit/s

95th percentile per-packet one-way delay: 48.532 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 35.82 Mbit/s

95th percentile per-packet one-way delay: 51.976 ms

Loss rate: 0.39%

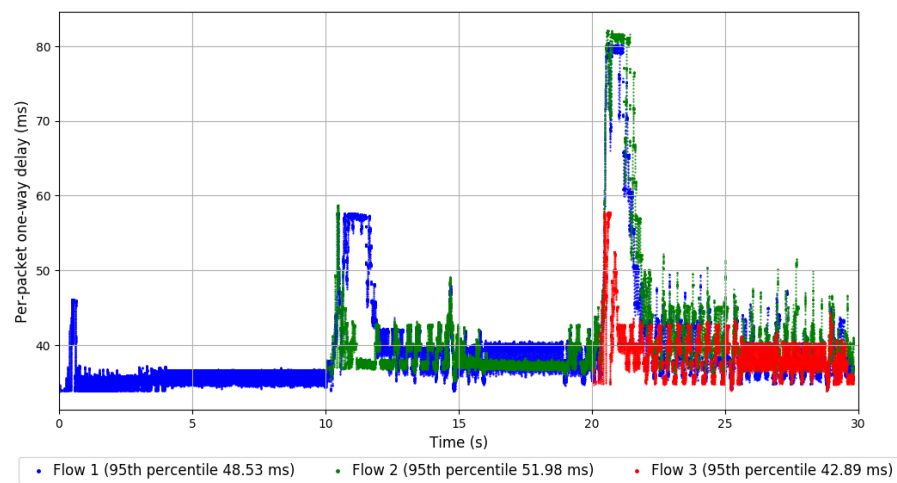
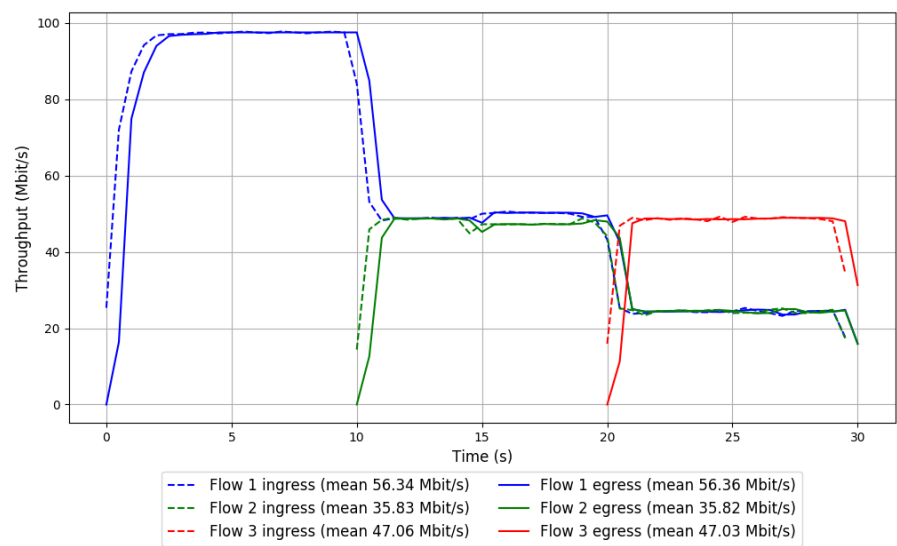
-- Flow 3:

Average throughput: 47.03 Mbit/s

95th percentile per-packet one-way delay: 42.894 ms

Loss rate: 0.75%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-06-19 10:43:21

End at: 2018-06-19 10:43:51

Local clock offset: 0.487 ms

Remote clock offset: 2.473 ms

Below is generated by plot.py at 2018-06-19 12:57:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.66 Mbit/s

95th percentile per-packet one-way delay: 45.515 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 56.04 Mbit/s

95th percentile per-packet one-way delay: 49.357 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 47.96 Mbit/s

95th percentile per-packet one-way delay: 41.066 ms

Loss rate: 0.38%

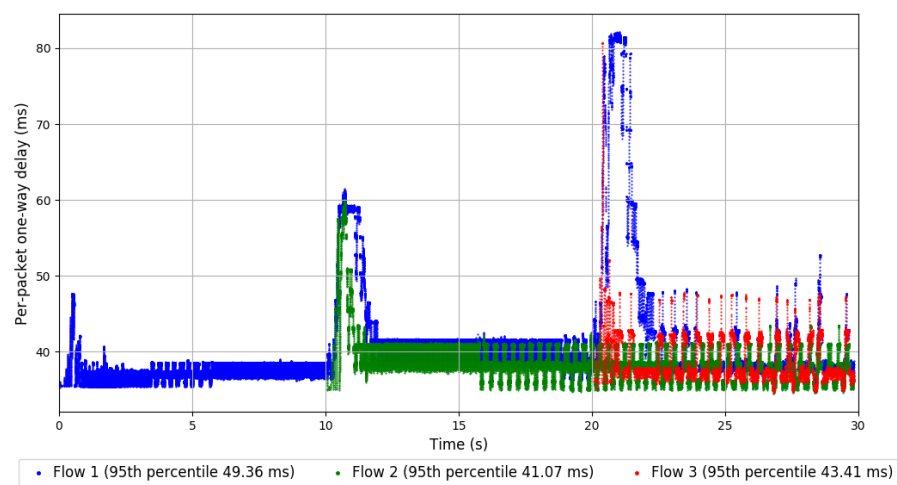
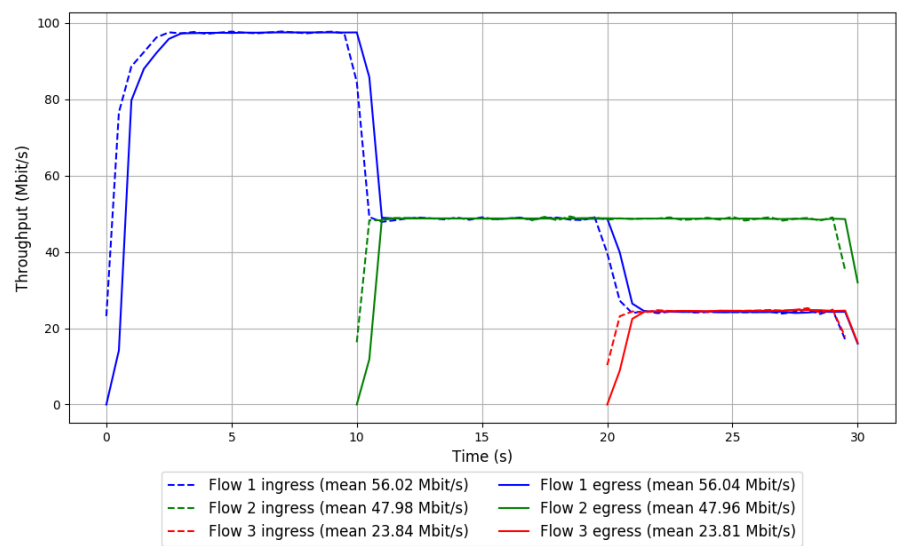
-- Flow 3:

Average throughput: 23.81 Mbit/s

95th percentile per-packet one-way delay: 43.415 ms

Loss rate: 0.82%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-06-19 11:05:34

End at: 2018-06-19 11:06:04

Local clock offset: 0.423 ms

Remote clock offset: 1.488 ms

Below is generated by plot.py at 2018-06-19 12:57:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.03 Mbit/s

95th percentile per-packet one-way delay: 49.438 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 56.39 Mbit/s

95th percentile per-packet one-way delay: 49.063 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 36.40 Mbit/s

95th percentile per-packet one-way delay: 50.337 ms

Loss rate: 0.39%

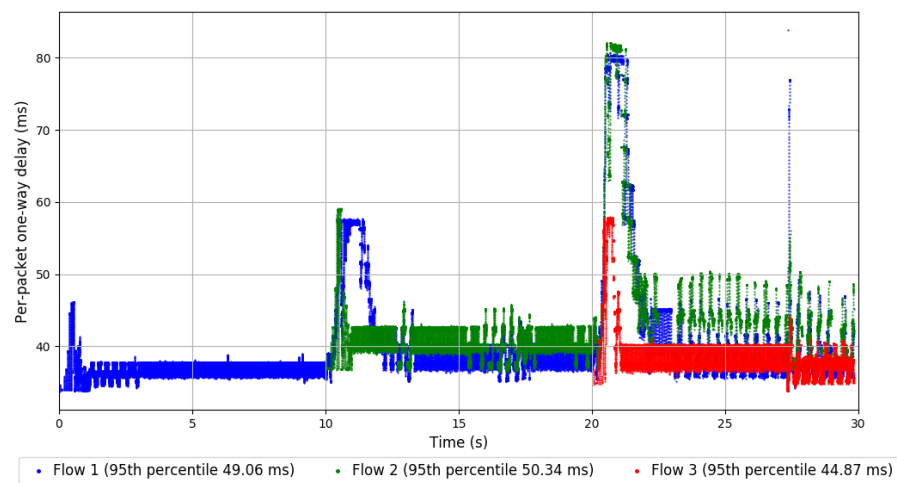
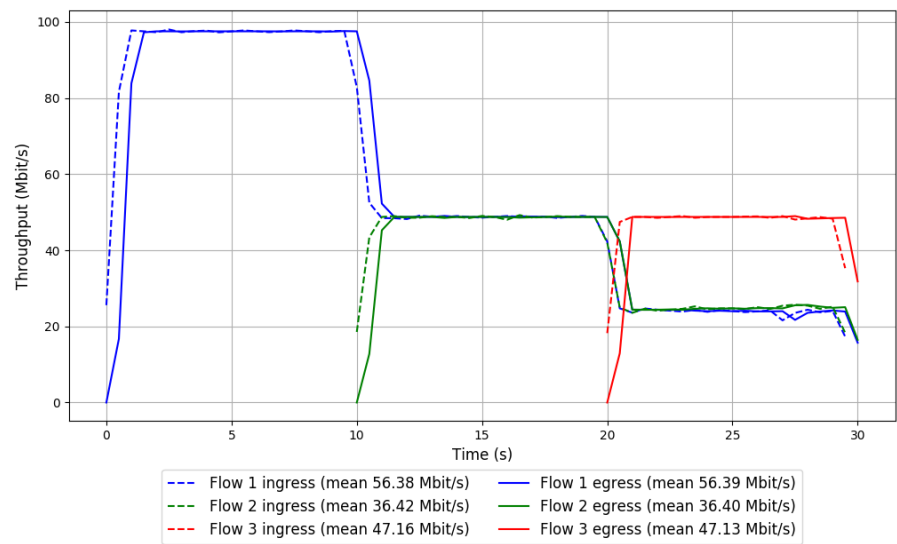
-- Flow 3:

Average throughput: 47.13 Mbit/s

95th percentile per-packet one-way delay: 44.867 ms

Loss rate: 0.76%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-06-19 11:27:38

End at: 2018-06-19 11:28:08

Local clock offset: 0.262 ms

Remote clock offset: 0.982 ms

Below is generated by plot.py at 2018-06-19 12:58:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.23 Mbit/s

95th percentile per-packet one-way delay: 49.097 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 55.64 Mbit/s

95th percentile per-packet one-way delay: 49.222 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 36.56 Mbit/s

95th percentile per-packet one-way delay: 57.361 ms

Loss rate: 0.40%

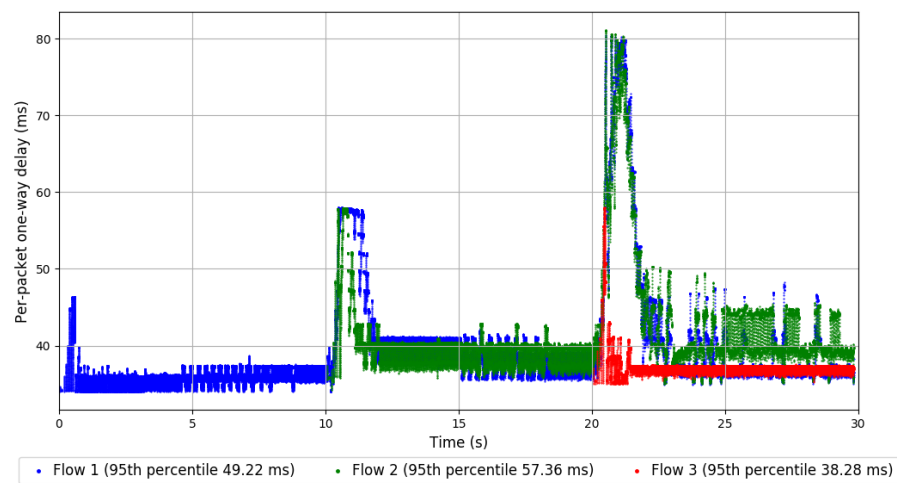
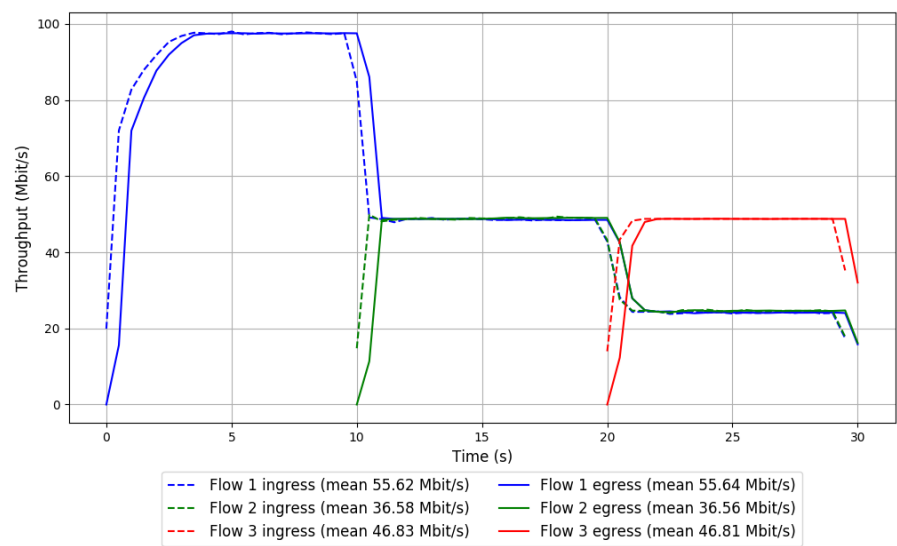
-- Flow 3:

Average throughput: 46.81 Mbit/s

95th percentile per-packet one-way delay: 38.281 ms

Loss rate: 0.74%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-06-19 11:49:33

End at: 2018-06-19 11:50:03

Local clock offset: -1.211 ms

Remote clock offset: 0.681 ms

Below is generated by plot.py at 2018-06-19 12:58:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.91 Mbit/s

95th percentile per-packet one-way delay: 48.210 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 59.04 Mbit/s

95th percentile per-packet one-way delay: 49.359 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 40.08 Mbit/s

95th percentile per-packet one-way delay: 47.779 ms

Loss rate: 0.39%

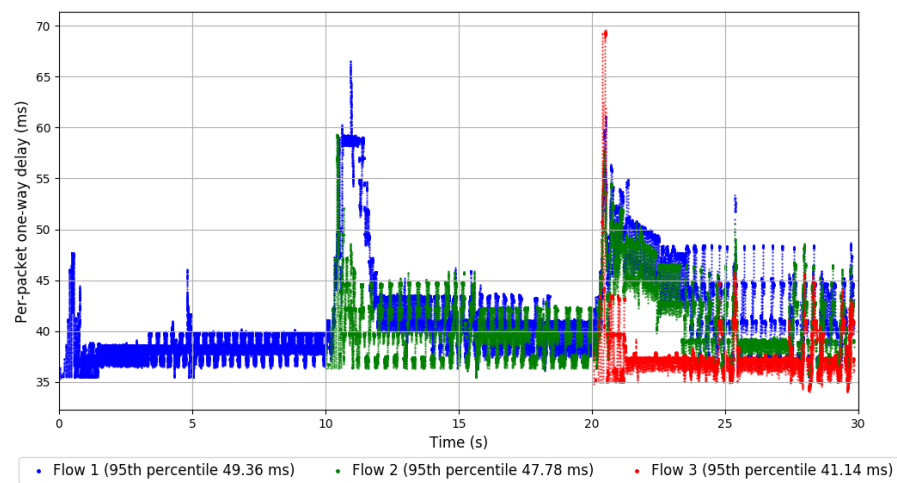
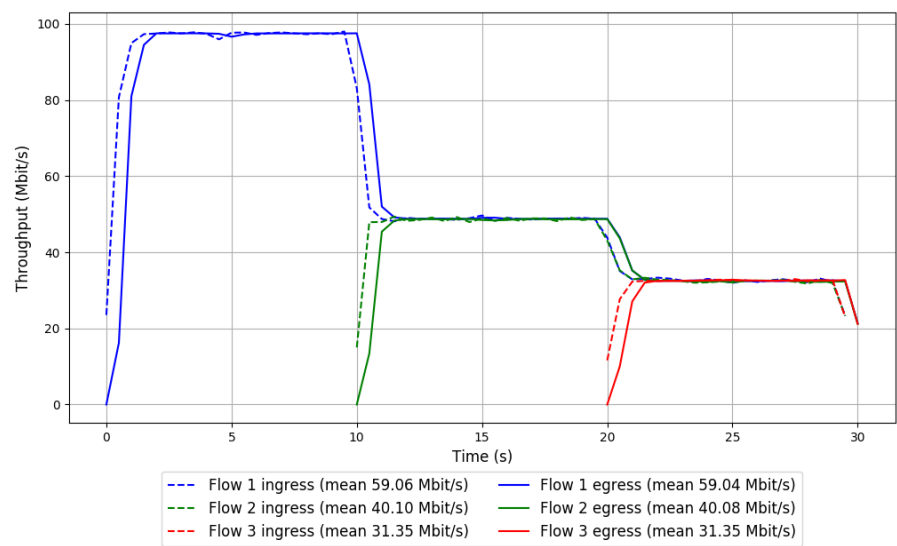
-- Flow 3:

Average throughput: 31.35 Mbit/s

95th percentile per-packet one-way delay: 41.140 ms

Loss rate: 0.70%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-06-19 12:11:37

End at: 2018-06-19 12:12:07

Local clock offset: -0.268 ms

Remote clock offset: 1.913 ms

Below is generated by plot.py at 2018-06-19 12:58:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.77 Mbit/s

95th percentile per-packet one-way delay: 48.004 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 58.86 Mbit/s

95th percentile per-packet one-way delay: 47.852 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 40.00 Mbit/s

95th percentile per-packet one-way delay: 48.033 ms

Loss rate: 0.40%

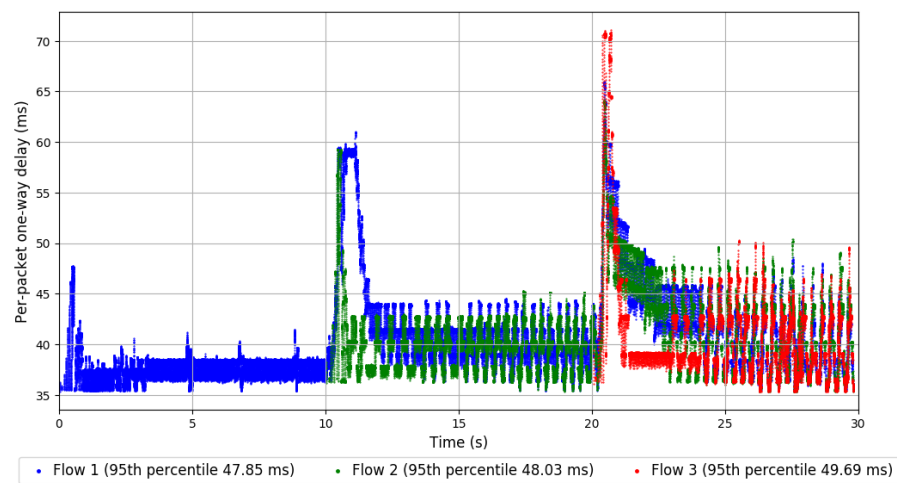
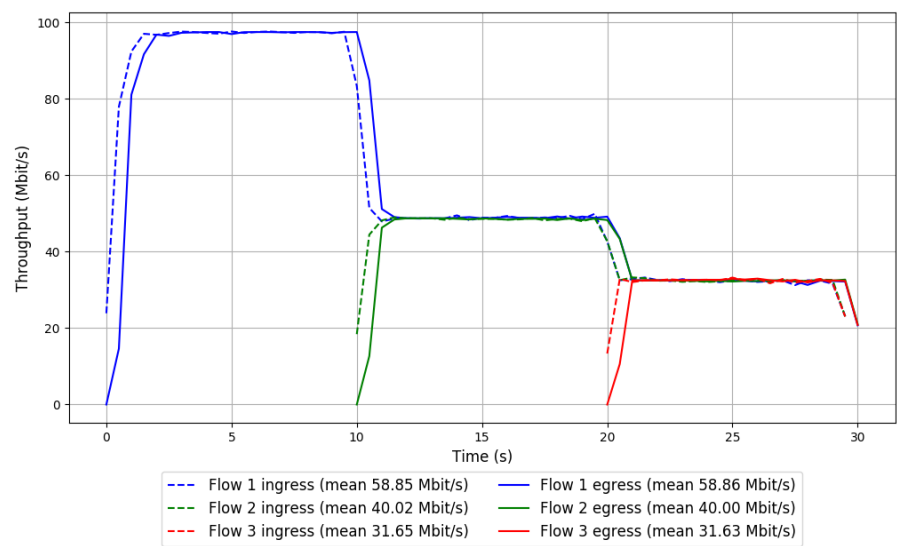
-- Flow 3:

Average throughput: 31.63 Mbit/s

95th percentile per-packet one-way delay: 49.689 ms

Loss rate: 0.74%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-06-19 12:33:34

End at: 2018-06-19 12:34:04

Local clock offset: 0.78 ms

Remote clock offset: 2.801 ms

Below is generated by plot.py at 2018-06-19 12:58:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.47 Mbit/s

95th percentile per-packet one-way delay: 47.516 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 55.89 Mbit/s

95th percentile per-packet one-way delay: 49.127 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 36.49 Mbit/s

95th percentile per-packet one-way delay: 49.311 ms

Loss rate: 0.37%

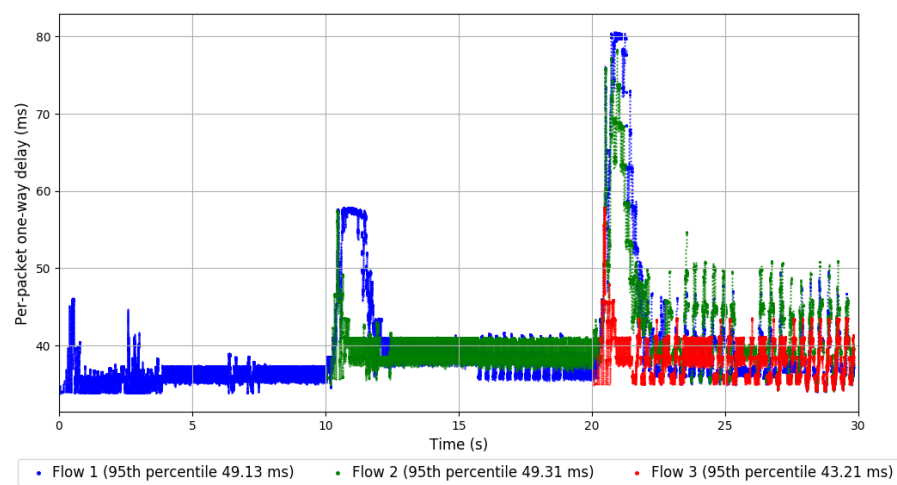
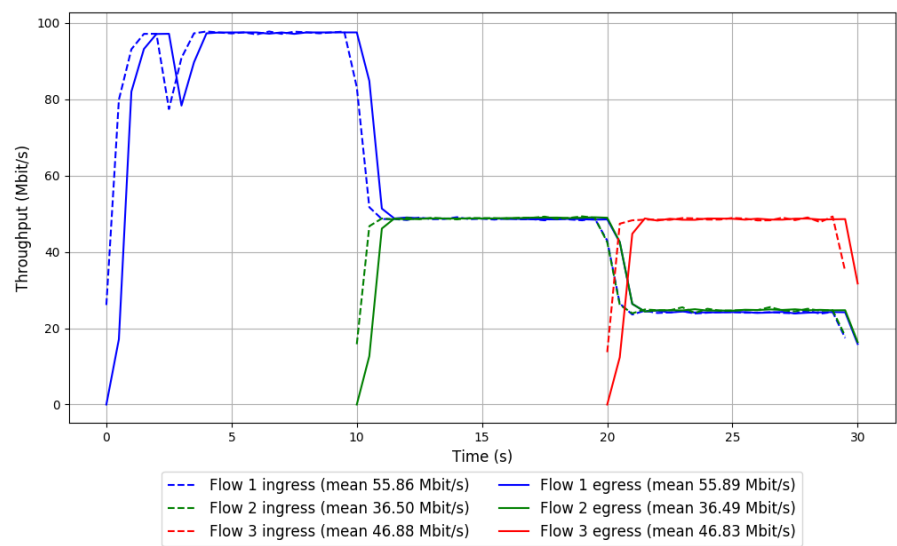
-- Flow 3:

Average throughput: 46.83 Mbit/s

95th percentile per-packet one-way delay: 43.214 ms

Loss rate: 0.78%

Run 10: Report of Indigo — Data Link

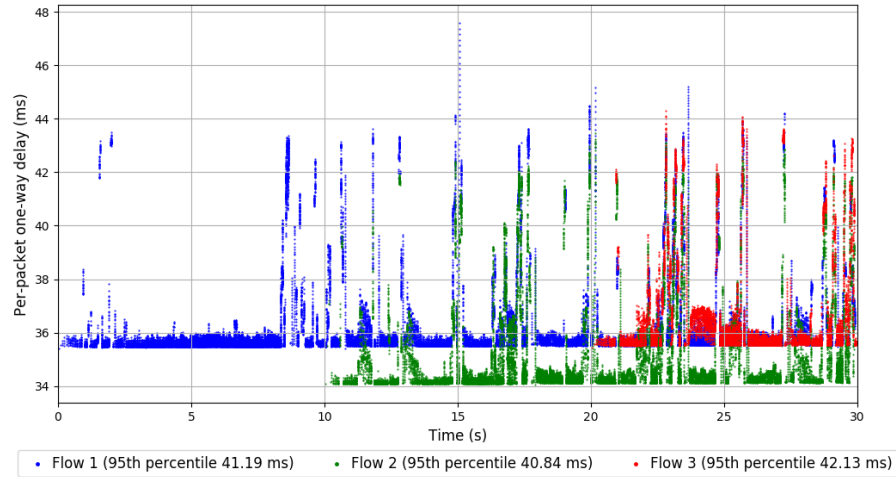
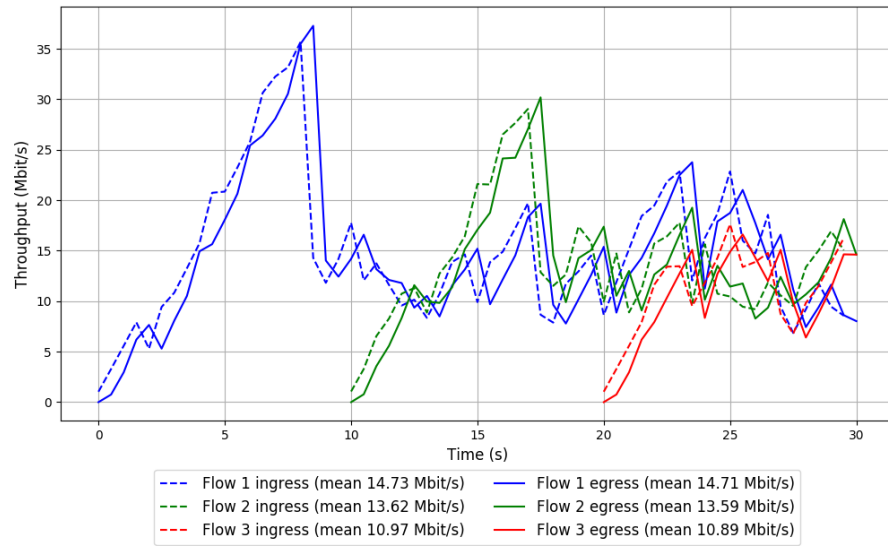


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-19 09:13:25
End at: 2018-06-19 09:13:55
Local clock offset: -1.939 ms
Remote clock offset: 2.762 ms

# Below is generated by plot.py at 2018-06-19 12:58:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 41.260 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 14.71 Mbit/s
95th percentile per-packet one-way delay: 41.185 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 40.843 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 42.134 ms
Loss rate: 1.40%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-06-19 09:36:31

End at: 2018-06-19 09:37:01

Local clock offset: -2.519 ms

Remote clock offset: 3.183 ms

Below is generated by plot.py at 2018-06-19 12:58:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.36 Mbit/s

95th percentile per-packet one-way delay: 39.340 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 29.68 Mbit/s

95th percentile per-packet one-way delay: 37.534 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 16.41 Mbit/s

95th percentile per-packet one-way delay: 41.088 ms

Loss rate: 0.42%

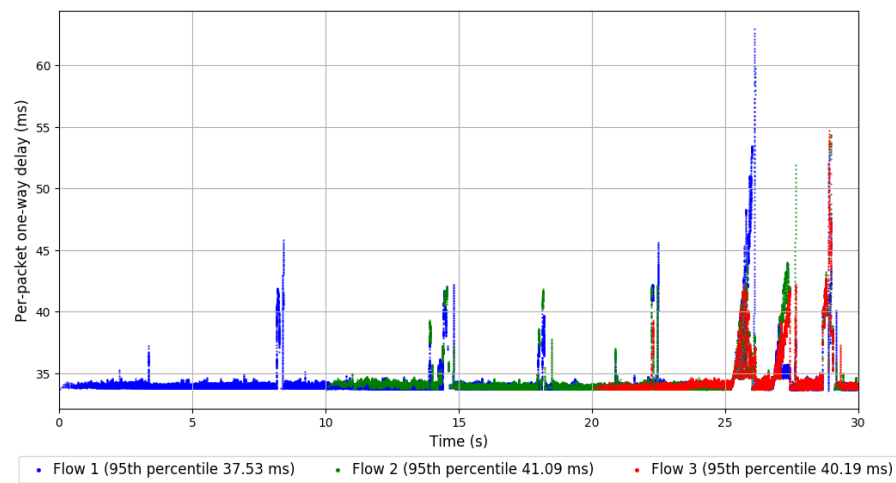
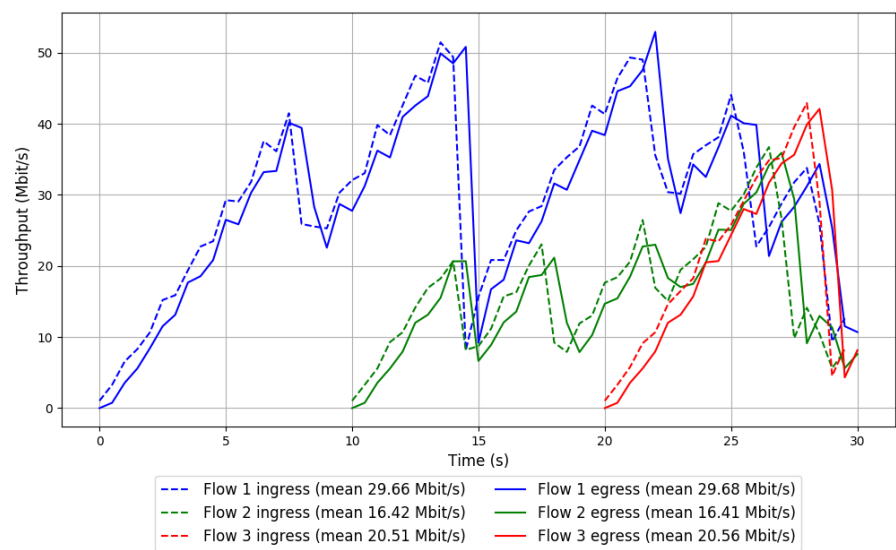
-- Flow 3:

Average throughput: 20.56 Mbit/s

95th percentile per-packet one-way delay: 40.194 ms

Loss rate: 0.45%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-06-19 10:00:12

End at: 2018-06-19 10:00:42

Local clock offset: 0.465 ms

Remote clock offset: 3.7 ms

Below is generated by plot.py at 2018-06-19 12:58:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.48 Mbit/s

95th percentile per-packet one-way delay: 42.056 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 36.59 Mbit/s

95th percentile per-packet one-way delay: 42.869 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 33.78 Mbit/s

95th percentile per-packet one-way delay: 40.602 ms

Loss rate: 0.44%

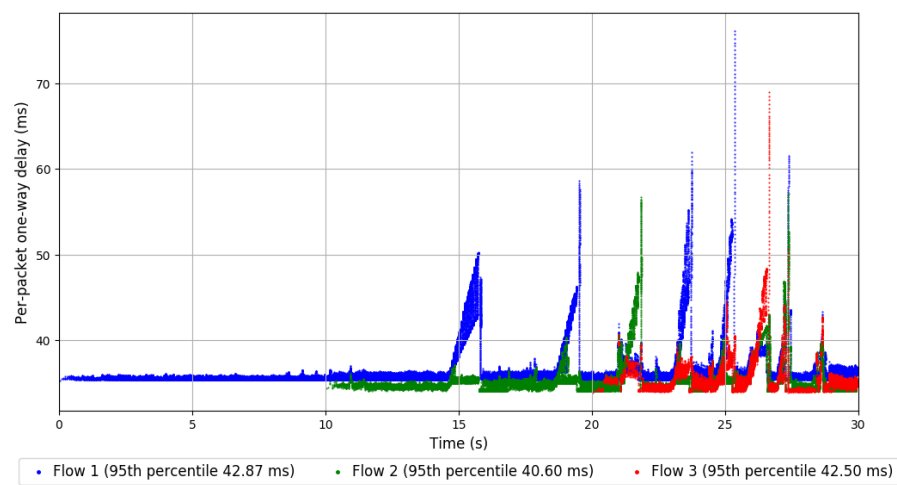
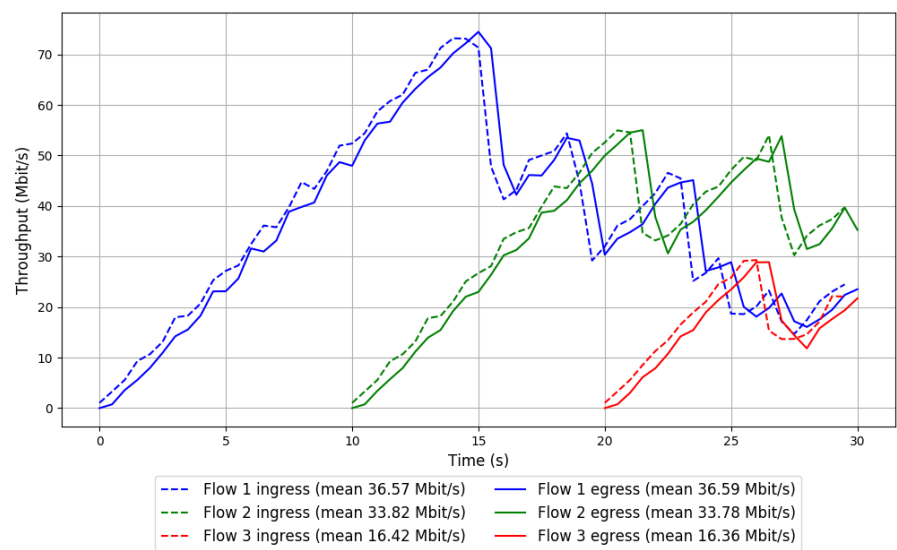
-- Flow 3:

Average throughput: 16.36 Mbit/s

95th percentile per-packet one-way delay: 42.504 ms

Loss rate: 1.04%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-06-19 10:22:39

End at: 2018-06-19 10:23:09

Local clock offset: 0.459 ms

Remote clock offset: 2.855 ms

Below is generated by plot.py at 2018-06-19 12:58:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.92 Mbit/s

95th percentile per-packet one-way delay: 44.555 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 32.73 Mbit/s

95th percentile per-packet one-way delay: 43.695 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 32.75 Mbit/s

95th percentile per-packet one-way delay: 45.113 ms

Loss rate: 0.44%

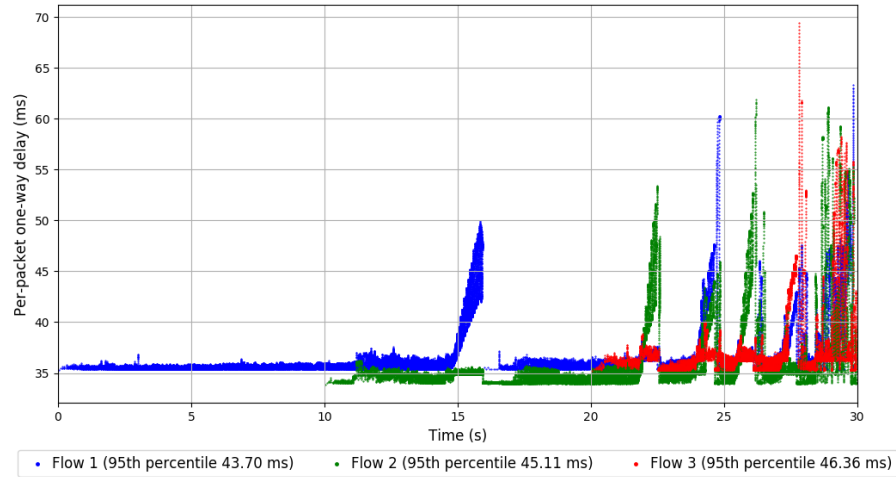
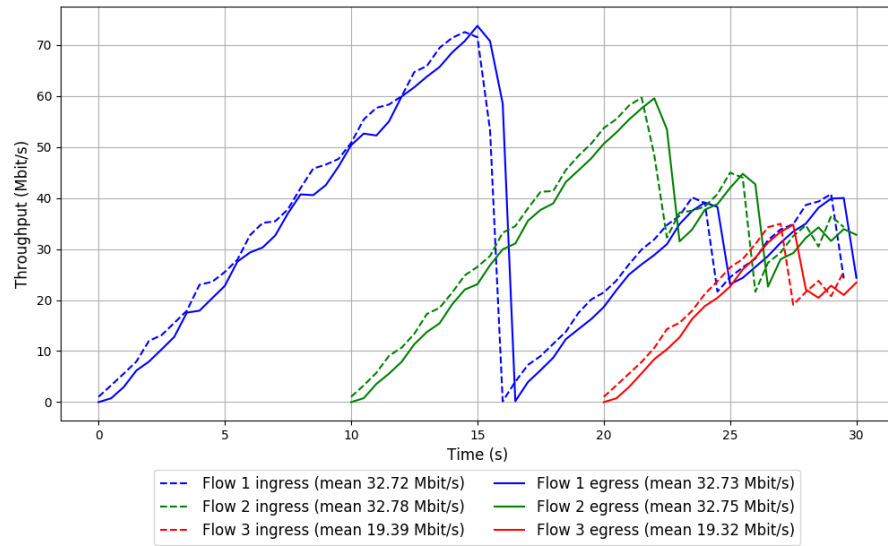
-- Flow 3:

Average throughput: 19.32 Mbit/s

95th percentile per-packet one-way delay: 46.362 ms

Loss rate: 1.04%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-06-19 10:44:45

End at: 2018-06-19 10:45:15

Local clock offset: 0.479 ms

Remote clock offset: 2.457 ms

Below is generated by plot.py at 2018-06-19 12:58:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.23 Mbit/s

95th percentile per-packet one-way delay: 39.961 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 38.377 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 25.26 Mbit/s

95th percentile per-packet one-way delay: 42.148 ms

Loss rate: 0.36%

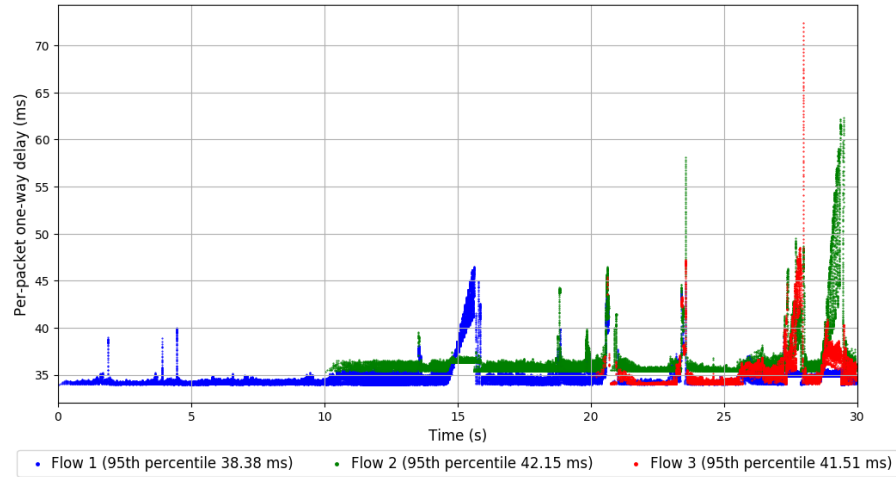
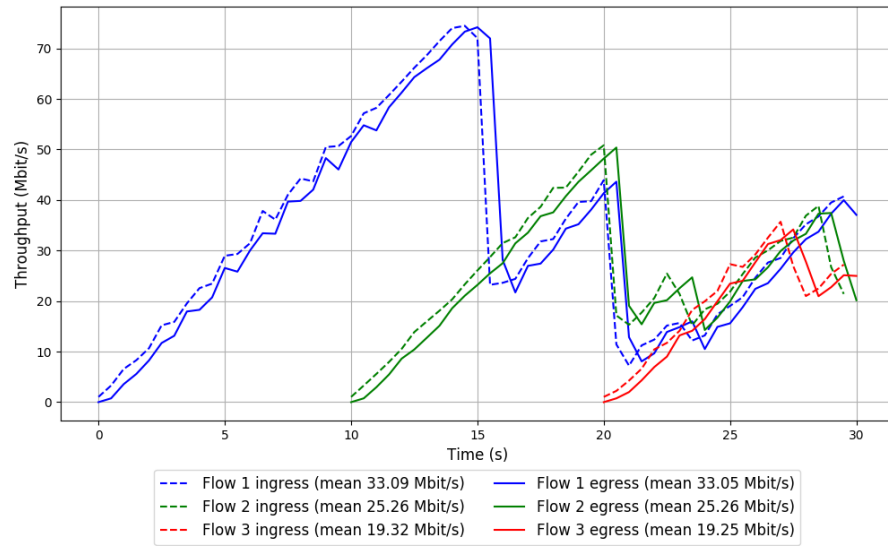
-- Flow 3:

Average throughput: 19.25 Mbit/s

95th percentile per-packet one-way delay: 41.511 ms

Loss rate: 1.07%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-06-19 11:07:00

End at: 2018-06-19 11:07:30

Local clock offset: 0.364 ms

Remote clock offset: 1.402 ms

Below is generated by plot.py at 2018-06-19 12:59:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.47 Mbit/s

95th percentile per-packet one-way delay: 42.347 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 39.33 Mbit/s

95th percentile per-packet one-way delay: 42.800 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 25.37 Mbit/s

95th percentile per-packet one-way delay: 44.346 ms

Loss rate: 0.28%

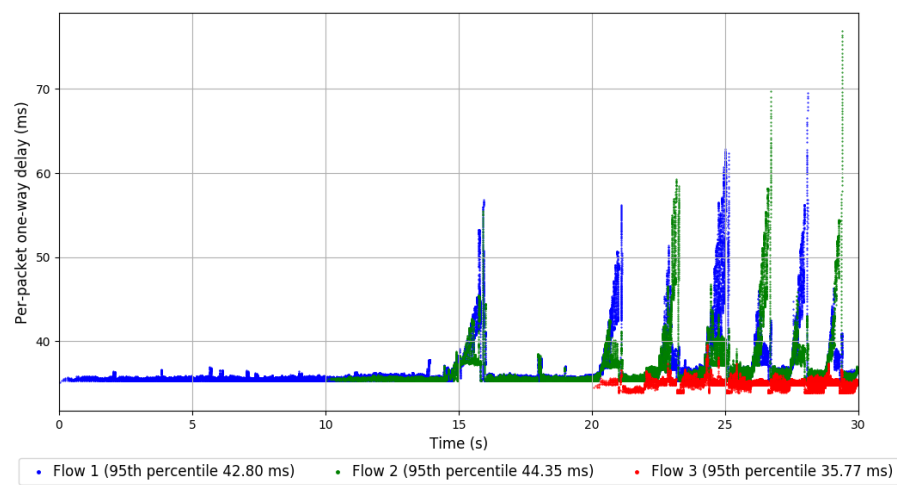
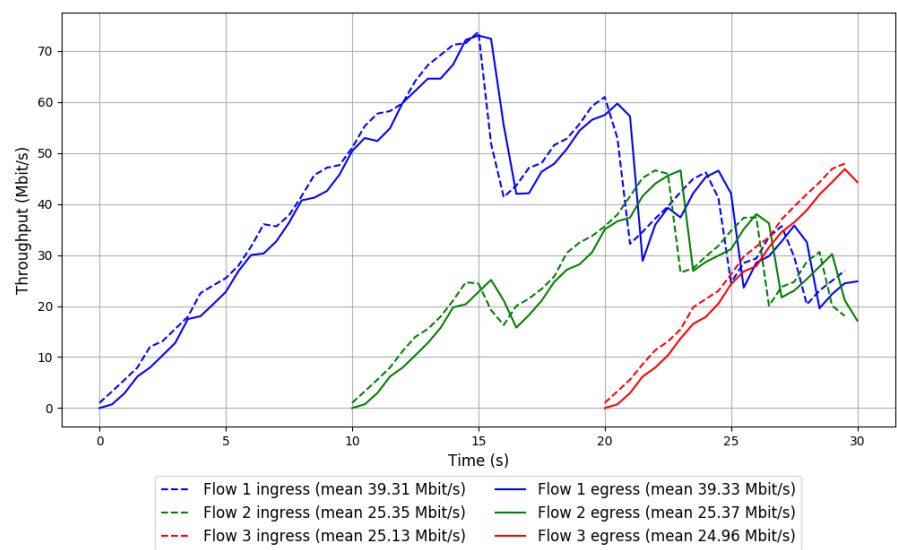
-- Flow 3:

Average throughput: 24.96 Mbit/s

95th percentile per-packet one-way delay: 35.766 ms

Loss rate: 1.38%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-06-19 11:29:01

End at: 2018-06-19 11:29:31

Local clock offset: 0.26 ms

Remote clock offset: 0.988 ms

Below is generated by plot.py at 2018-06-19 12:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.23 Mbit/s

95th percentile per-packet one-way delay: 43.158 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 38.50 Mbit/s

95th percentile per-packet one-way delay: 42.840 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 31.36 Mbit/s

95th percentile per-packet one-way delay: 44.836 ms

Loss rate: 0.22%

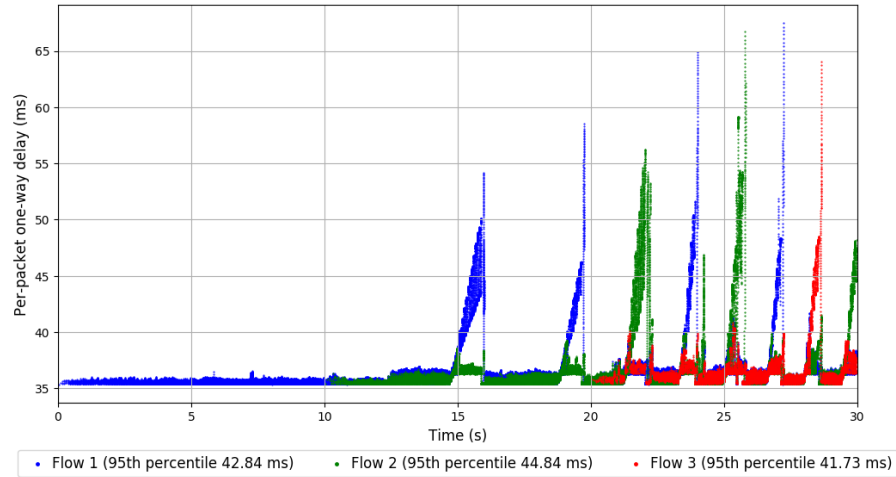
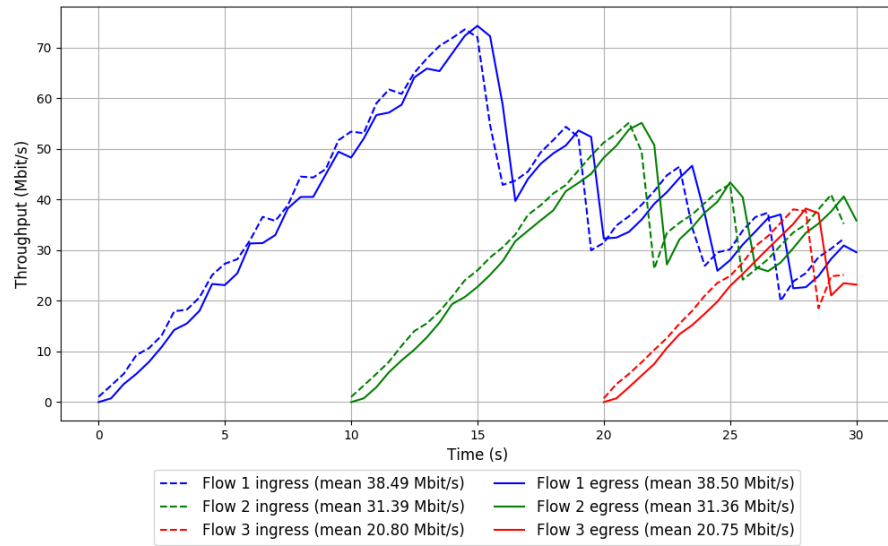
-- Flow 3:

Average throughput: 20.75 Mbit/s

95th percentile per-packet one-way delay: 41.735 ms

Loss rate: 0.92%

Run 7: Report of LEDBAT — Data Link

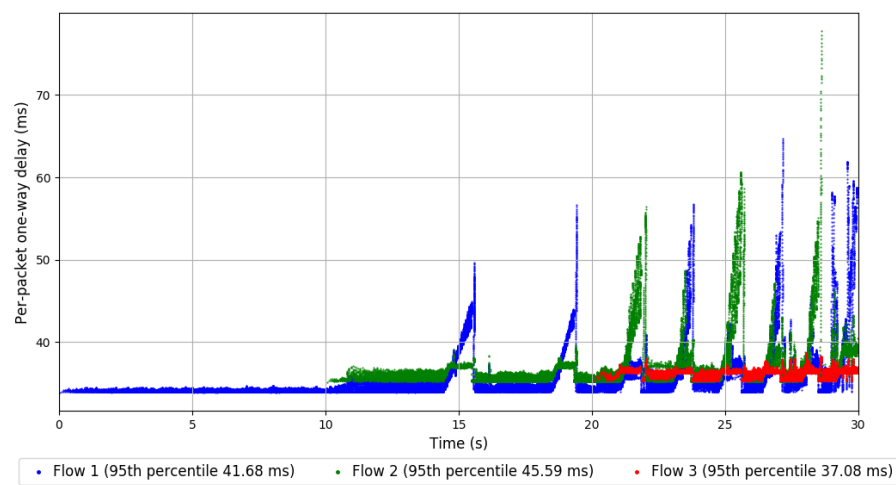
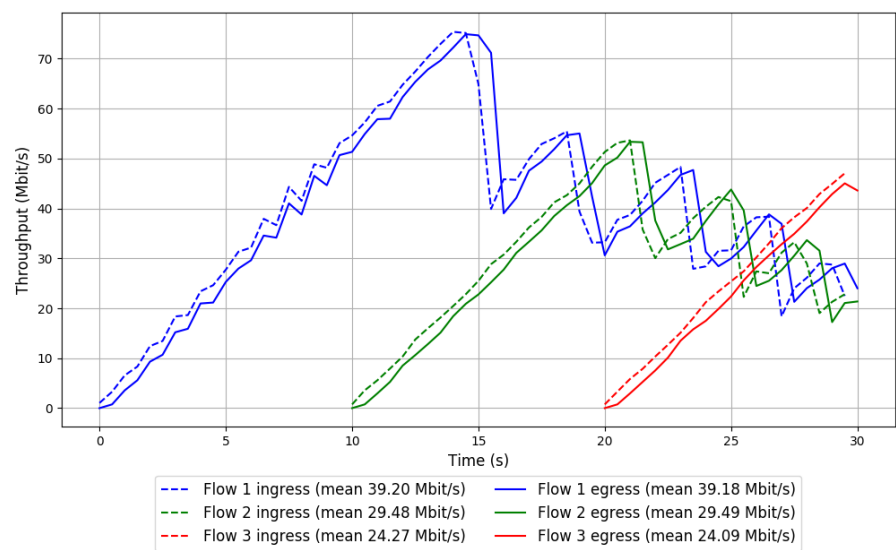


Run 8: Statistics of LEDBAT

Start at: 2018-06-19 11:50:56
End at: 2018-06-19 11:51:26
Local clock offset: -1.358 ms
Remote clock offset: 0.675 ms

```
# Below is generated by plot.py at 2018-06-19 12:59:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.76 Mbit/s
95th percentile per-packet one-way delay: 42.087 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 41.684 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 45.587 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 24.09 Mbit/s
95th percentile per-packet one-way delay: 37.084 ms
Loss rate: 1.41%
```

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-06-19 12:13:00

End at: 2018-06-19 12:13:30

Local clock offset: -0.126 ms

Remote clock offset: 1.952 ms

Below is generated by plot.py at 2018-06-19 12:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.89 Mbit/s

95th percentile per-packet one-way delay: 42.892 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 34.06 Mbit/s

95th percentile per-packet one-way delay: 43.908 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 32.66 Mbit/s

95th percentile per-packet one-way delay: 41.688 ms

Loss rate: 0.43%

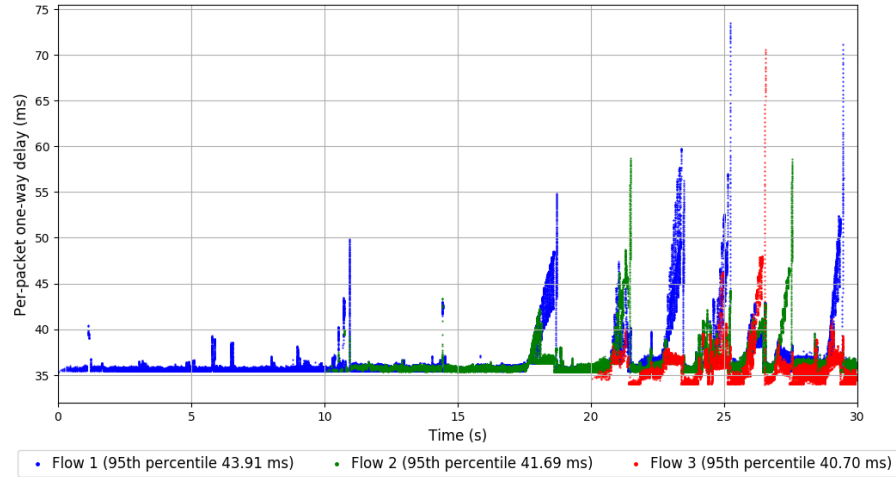
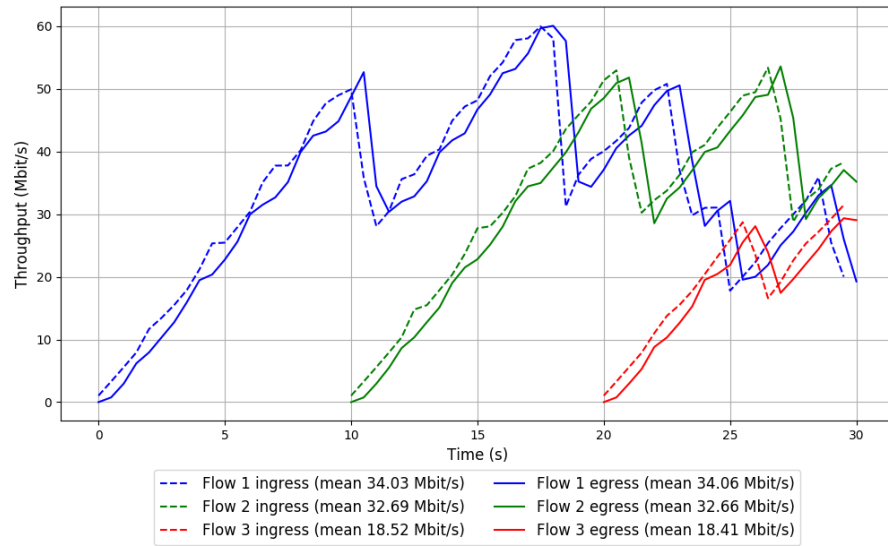
-- Flow 3:

Average throughput: 18.41 Mbit/s

95th percentile per-packet one-way delay: 40.696 ms

Loss rate: 1.25%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-06-19 12:34:58

End at: 2018-06-19 12:35:28

Local clock offset: 0.818 ms

Remote clock offset: 2.93 ms

Below is generated by plot.py at 2018-06-19 12:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.78 Mbit/s

95th percentile per-packet one-way delay: 40.533 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 32.32 Mbit/s

95th percentile per-packet one-way delay: 40.442 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 27.87 Mbit/s

95th percentile per-packet one-way delay: 39.104 ms

Loss rate: 0.56%

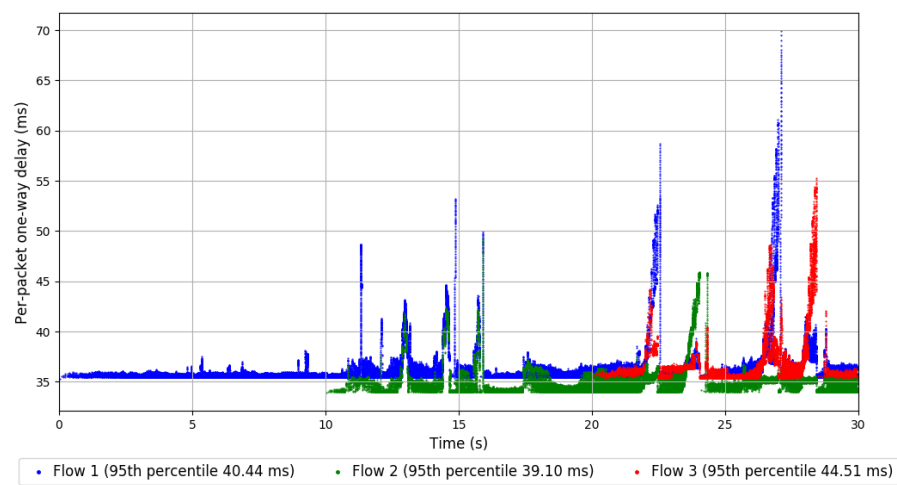
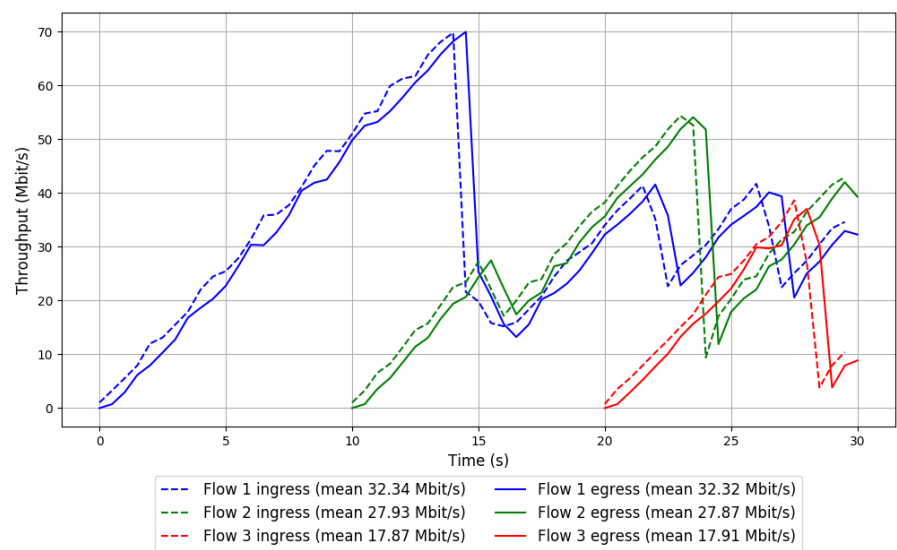
-- Flow 3:

Average throughput: 17.91 Mbit/s

95th percentile per-packet one-way delay: 44.514 ms

Loss rate: 0.48%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-06-19 09:05:58

End at: 2018-06-19 09:06:28

Local clock offset: -0.438 ms

Remote clock offset: 2.704 ms

Below is generated by plot.py at 2018-06-19 12:59:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.09 Mbit/s

95th percentile per-packet one-way delay: 59.110 ms

Loss rate: 3.46%

-- Flow 1:

Average throughput: 28.57 Mbit/s

95th percentile per-packet one-way delay: 42.717 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 51.40 Mbit/s

95th percentile per-packet one-way delay: 61.102 ms

Loss rate: 6.24%

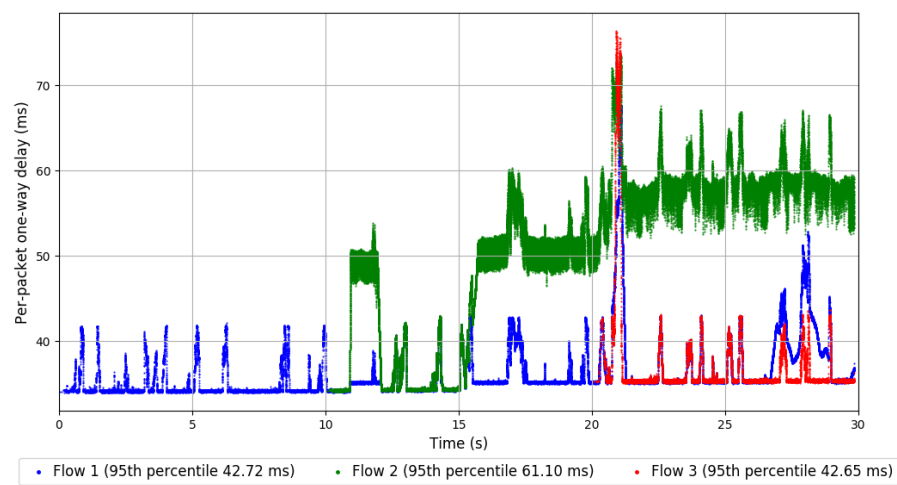
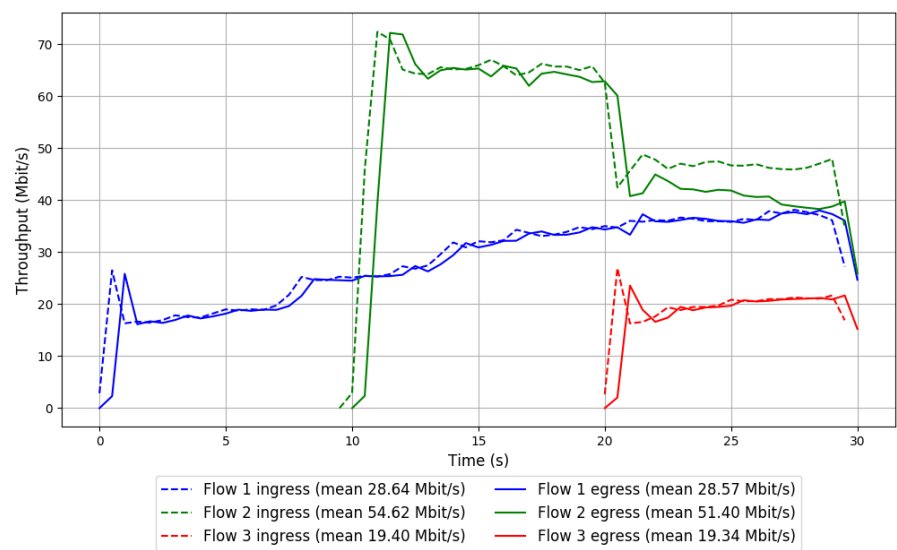
-- Flow 3:

Average throughput: 19.34 Mbit/s

95th percentile per-packet one-way delay: 42.653 ms

Loss rate: 0.99%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-06-19 09:28:58

End at: 2018-06-19 09:29:28

Local clock offset: -3.307 ms

Remote clock offset: 3.044 ms

Below is generated by plot.py at 2018-06-19 12:59:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.59 Mbit/s

95th percentile per-packet one-way delay: 62.024 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 54.62 Mbit/s

95th percentile per-packet one-way delay: 62.393 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 35.89 Mbit/s

95th percentile per-packet one-way delay: 59.753 ms

Loss rate: 0.83%

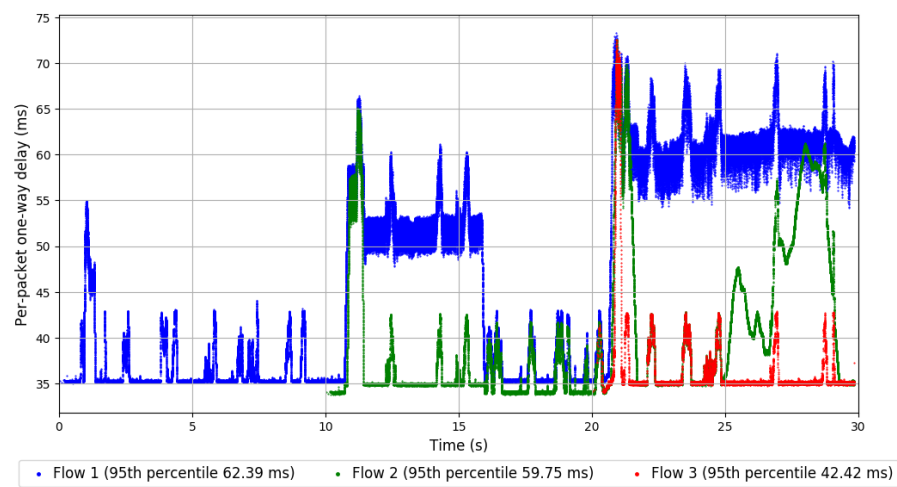
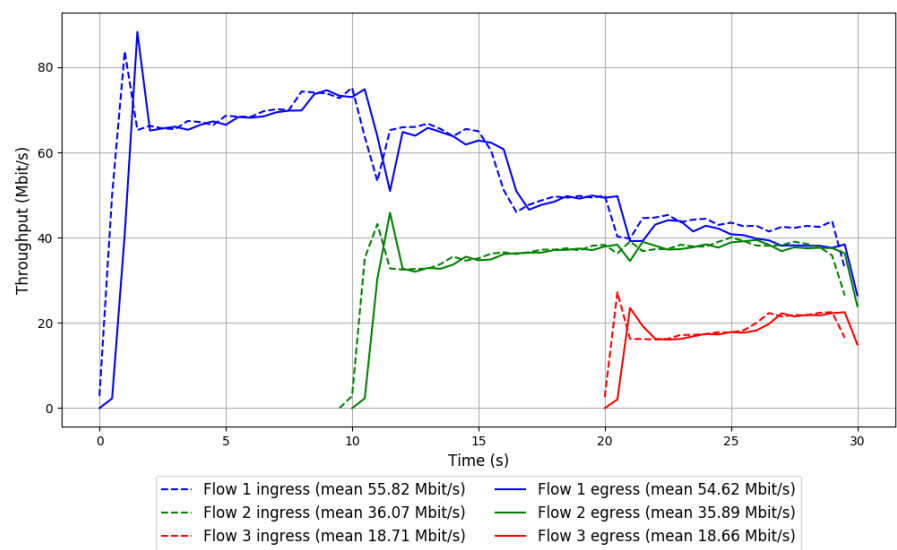
-- Flow 3:

Average throughput: 18.66 Mbit/s

95th percentile per-packet one-way delay: 42.417 ms

Loss rate: 0.92%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-06-19 09:53:04

End at: 2018-06-19 09:53:34

Local clock offset: 0.139 ms

Remote clock offset: 3.493 ms

Below is generated by plot.py at 2018-06-19 12:59:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.32 Mbit/s

95th percentile per-packet one-way delay: 57.412 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 63.14 Mbit/s

95th percentile per-packet one-way delay: 56.680 ms

Loss rate: 2.33%

-- Flow 2:

Average throughput: 41.56 Mbit/s

95th percentile per-packet one-way delay: 58.442 ms

Loss rate: 0.87%

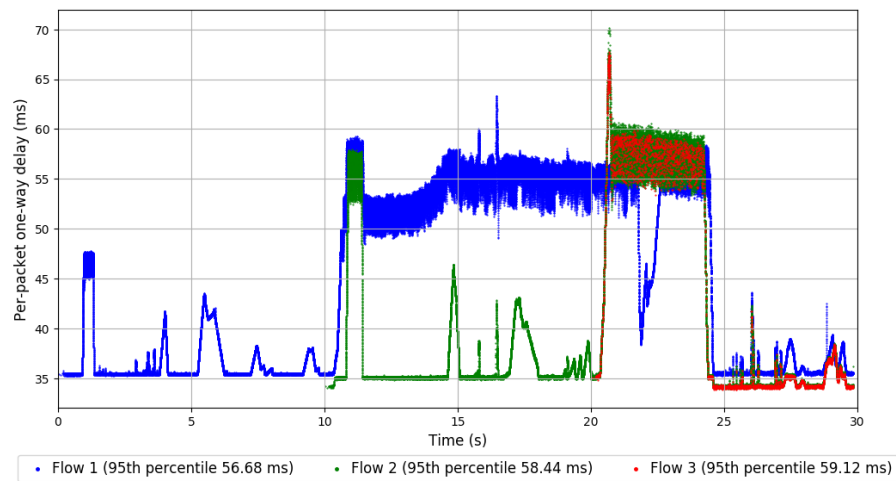
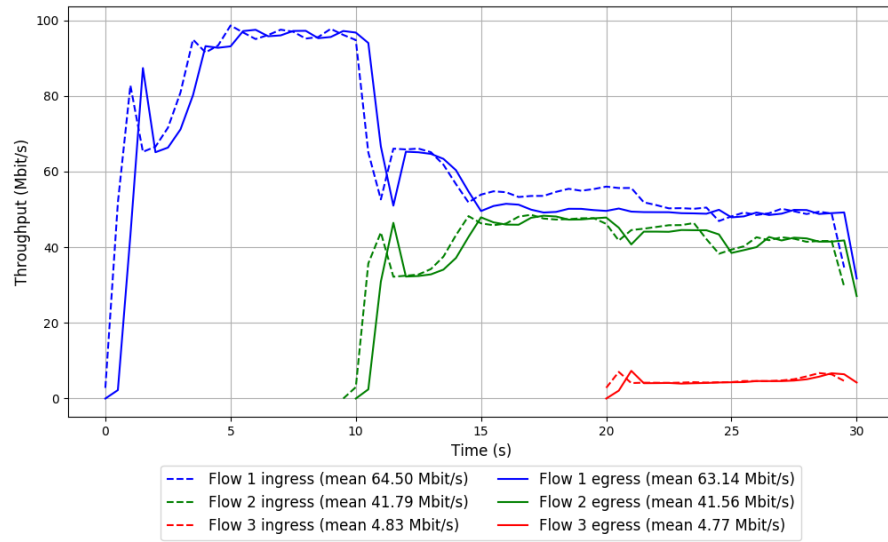
-- Flow 3:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 59.115 ms

Loss rate: 1.89%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-06-19 10:15:47

End at: 2018-06-19 10:16:17

Local clock offset: 0.418 ms

Remote clock offset: 3.37 ms

Below is generated by plot.py at 2018-06-19 13:00:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.52 Mbit/s

95th percentile per-packet one-way delay: 69.724 ms

Loss rate: 2.92%

-- Flow 1:

Average throughput: 62.87 Mbit/s

95th percentile per-packet one-way delay: 54.954 ms

Loss rate: 2.58%

-- Flow 2:

Average throughput: 34.14 Mbit/s

95th percentile per-packet one-way delay: 73.689 ms

Loss rate: 4.42%

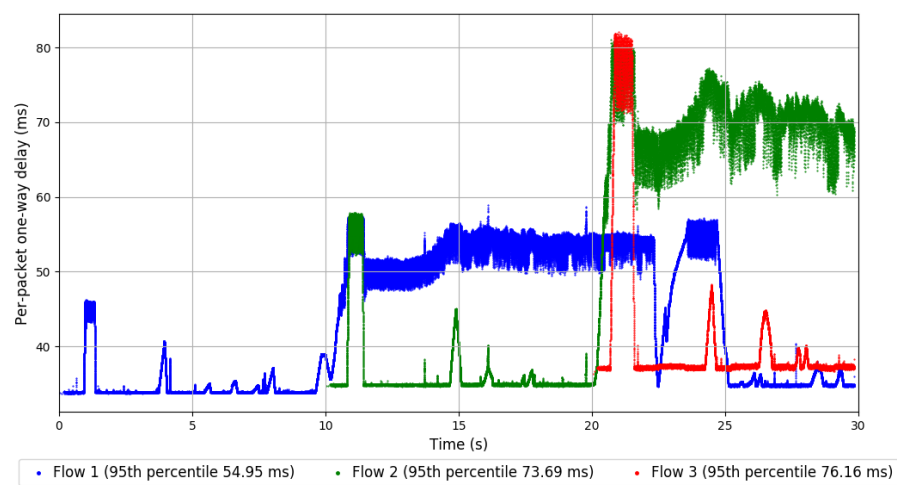
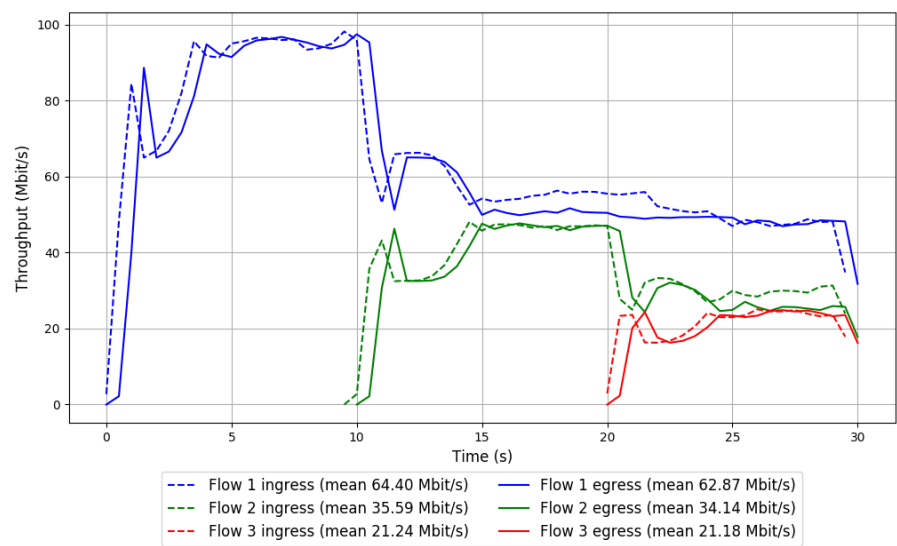
-- Flow 3:

Average throughput: 21.18 Mbit/s

95th percentile per-packet one-way delay: 76.157 ms

Loss rate: 0.98%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-06-19 10:37:44

End at: 2018-06-19 10:38:14

Local clock offset: 0.507 ms

Remote clock offset: 2.471 ms

Below is generated by plot.py at 2018-06-19 13:00:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.61 Mbit/s

95th percentile per-packet one-way delay: 66.778 ms

Loss rate: 3.01%

-- Flow 1:

Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 65.315 ms

Loss rate: 2.41%

-- Flow 2:

Average throughput: 39.06 Mbit/s

95th percentile per-packet one-way delay: 67.572 ms

Loss rate: 4.43%

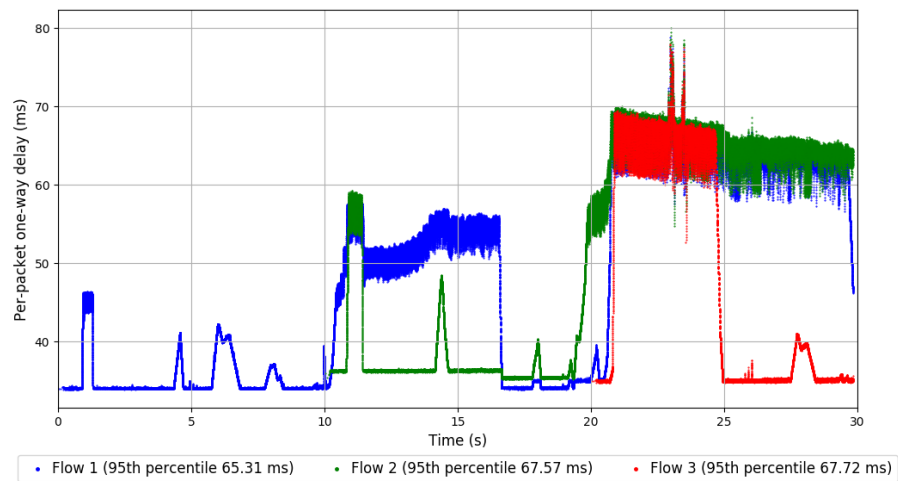
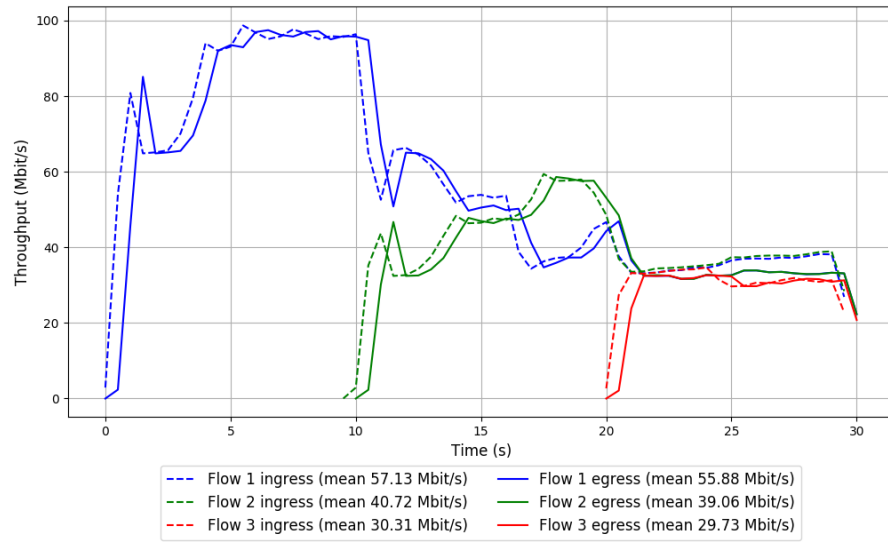
-- Flow 3:

Average throughput: 29.73 Mbit/s

95th percentile per-packet one-way delay: 67.719 ms

Loss rate: 2.58%

Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-06-19 10:59:51

End at: 2018-06-19 11:00:21

Local clock offset: 0.542 ms

Remote clock offset: 1.628 ms

Below is generated by plot.py at 2018-06-19 13:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.97 Mbit/s

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

Loss rate: 4.29%

-- Flow 1:

Average throughput: 55.82 Mbit/s

95th percentile per-packet one-way delay: 65.002 ms

Loss rate: 6.60%

-- Flow 2:

Average throughput: 43.93 Mbit/s

95th percentile per-packet one-way delay: 40.756 ms

Loss rate: 0.38%

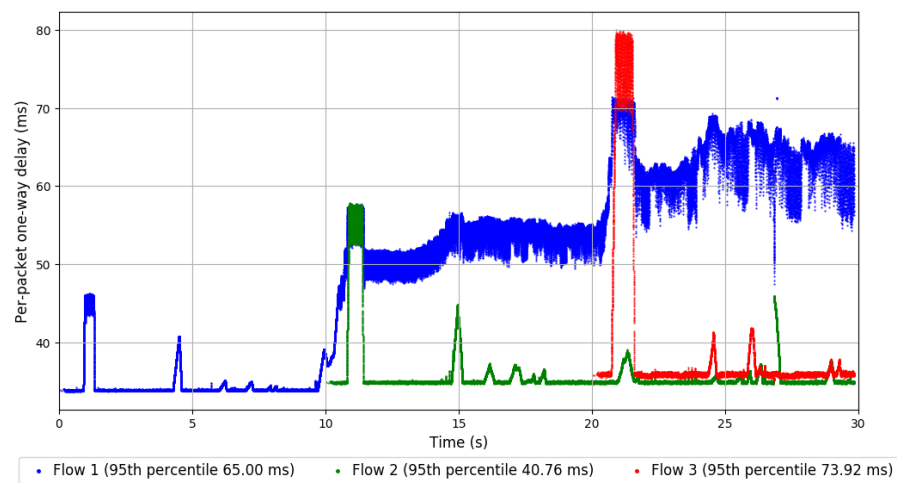
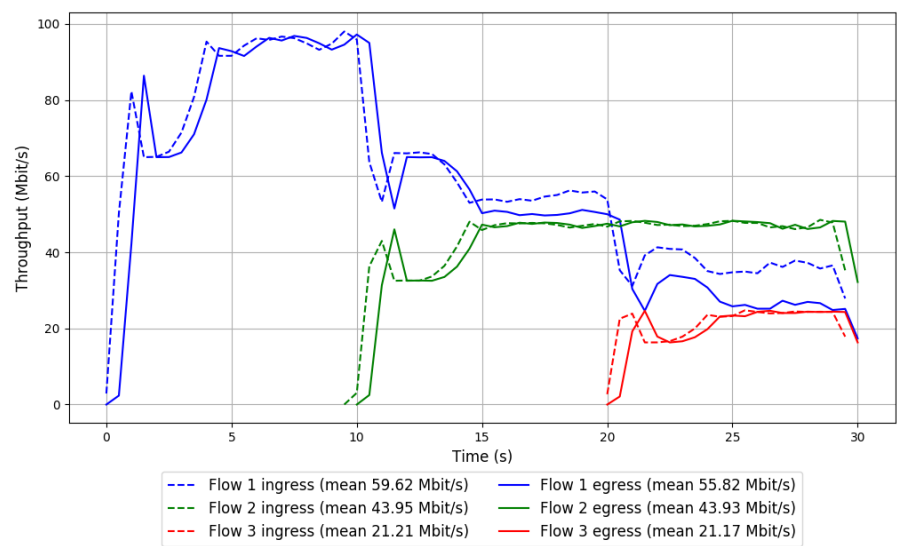
-- Flow 3:

Average throughput: 21.17 Mbit/s

95th percentile per-packet one-way delay: 73.924 ms

Loss rate: 0.90%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-06-19 11:22:09

End at: 2018-06-19 11:22:39

Local clock offset: 0.295 ms

Remote clock offset: 1.075 ms

Below is generated by plot.py at 2018-06-19 13:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.75 Mbit/s

95th percentile per-packet one-way delay: 65.263 ms

Loss rate: 4.27%

-- Flow 1:

Average throughput: 56.27 Mbit/s

95th percentile per-packet one-way delay: 66.827 ms

Loss rate: 6.44%

-- Flow 2:

Average throughput: 44.26 Mbit/s

95th percentile per-packet one-way delay: 42.423 ms

Loss rate: 0.40%

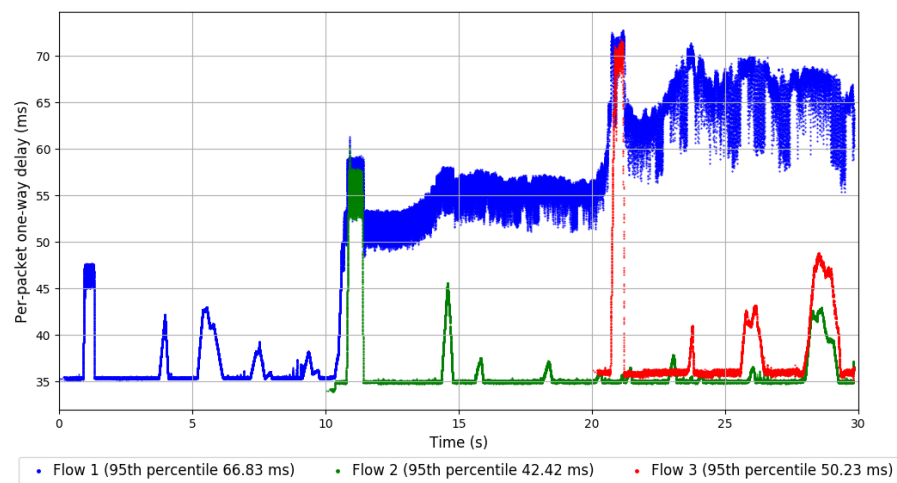
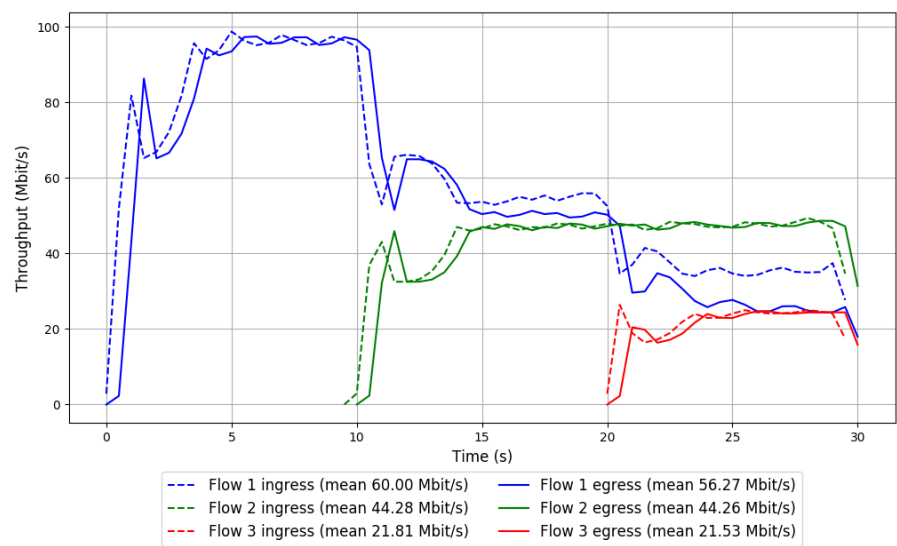
-- Flow 3:

Average throughput: 21.53 Mbit/s

95th percentile per-packet one-way delay: 50.235 ms

Loss rate: 2.00%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-06-19 11:44:03

End at: 2018-06-19 11:44:33

Local clock offset: -0.901 ms

Remote clock offset: 0.734 ms

Below is generated by plot.py at 2018-06-19 13:00:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.07 Mbit/s

95th percentile per-packet one-way delay: 66.586 ms

Loss rate: 5.32%

-- Flow 1:

Average throughput: 57.23 Mbit/s

95th percentile per-packet one-way delay: 61.849 ms

Loss rate: 6.18%

-- Flow 2:

Average throughput: 37.55 Mbit/s

95th percentile per-packet one-way delay: 68.181 ms

Loss rate: 4.42%

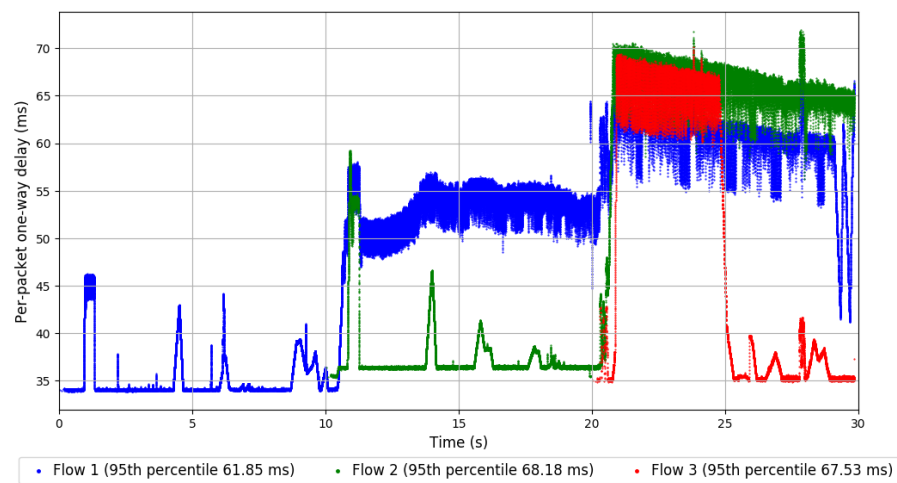
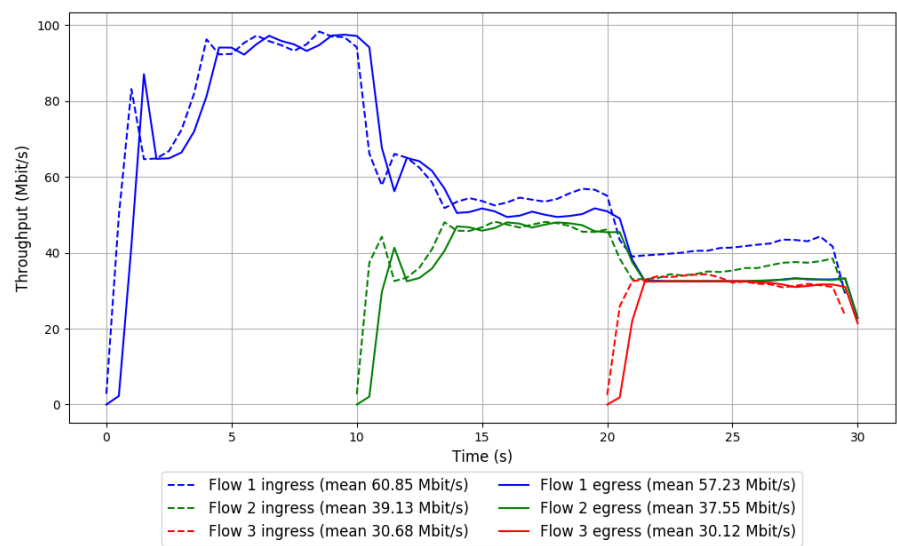
-- Flow 3:

Average throughput: 30.12 Mbit/s

95th percentile per-packet one-way delay: 67.533 ms

Loss rate: 2.48%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-06-19 12:06:08

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

Local clock offset: -1.139 ms

Remote clock offset: 1.734 ms

Below is generated by plot.py at 2018-06-19 13:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.54 Mbit/s

95th percentile per-packet one-way delay: 66.236 ms

Loss rate: 5.31%

-- Flow 1:

Average throughput: 57.65 Mbit/s

95th percentile per-packet one-way delay: 61.332 ms

Loss rate: 6.42%

-- Flow 2:

Average throughput: 37.72 Mbit/s

95th percentile per-packet one-way delay: 67.863 ms

Loss rate: 3.89%

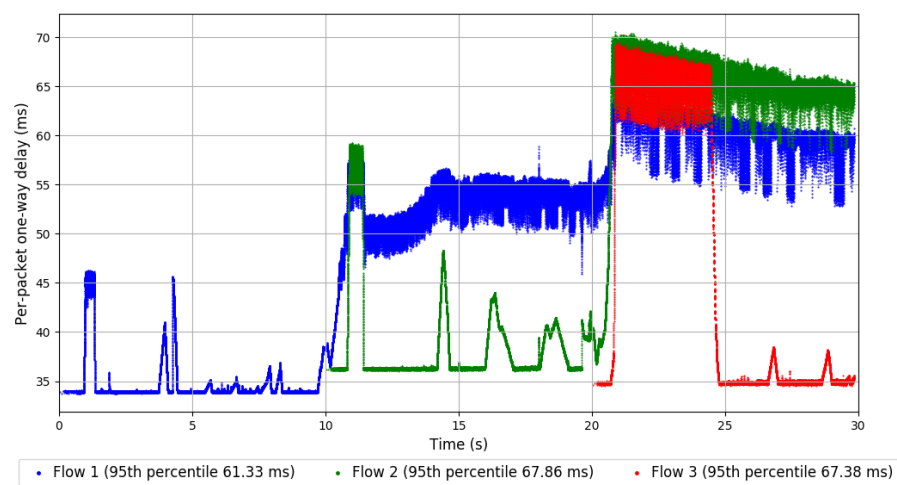
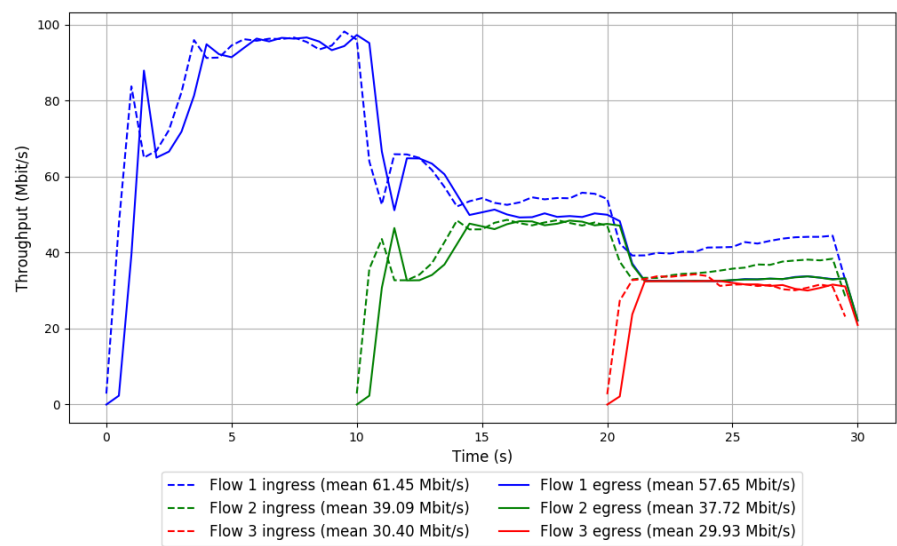
-- Flow 3:

Average throughput: 29.93 Mbit/s

95th percentile per-packet one-way delay: 67.384 ms

Loss rate: 2.23%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-06-19 12:28:08

End at: 2018-06-19 12:28:38

Local clock offset: 0.738 ms

Remote clock offset: 2.285 ms

Below is generated by plot.py at 2018-06-19 13:00:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.91 Mbit/s

95th percentile per-packet one-way delay: 64.117 ms

Loss rate: 3.30%

-- Flow 1:

Average throughput: 59.57 Mbit/s

95th percentile per-packet one-way delay: 62.647 ms

Loss rate: 3.22%

-- Flow 2:

Average throughput: 36.88 Mbit/s

95th percentile per-packet one-way delay: 65.617 ms

Loss rate: 4.22%

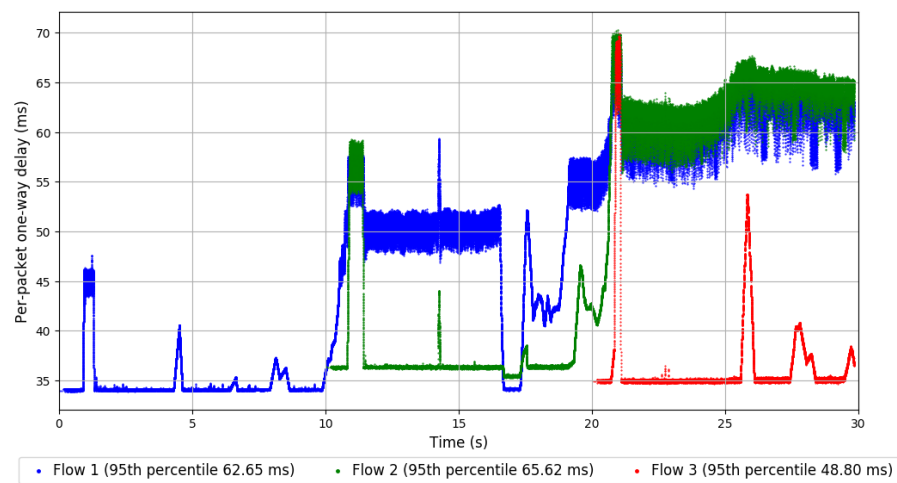
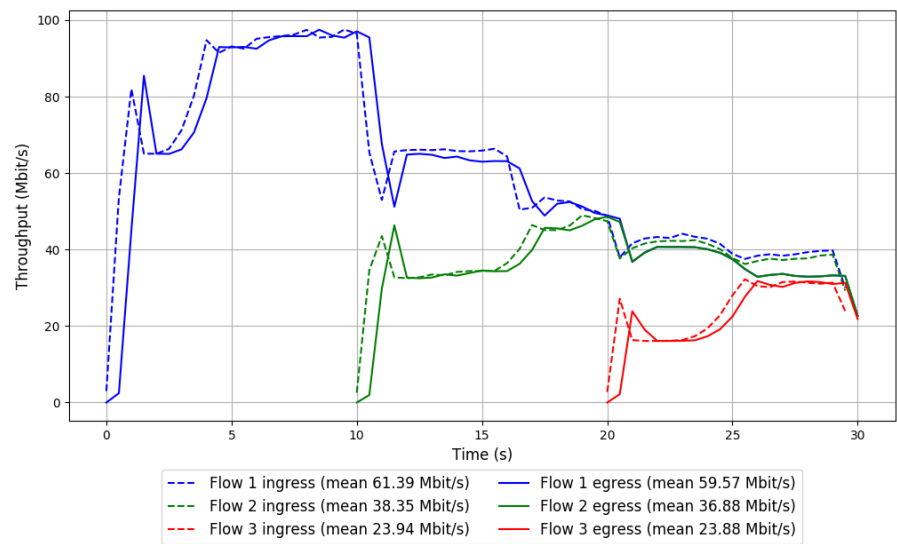
-- Flow 3:

Average throughput: 23.88 Mbit/s

95th percentile per-packet one-way delay: 48.801 ms

Loss rate: 0.96%

Run 10: Report of PCC-Allegro — Data Link

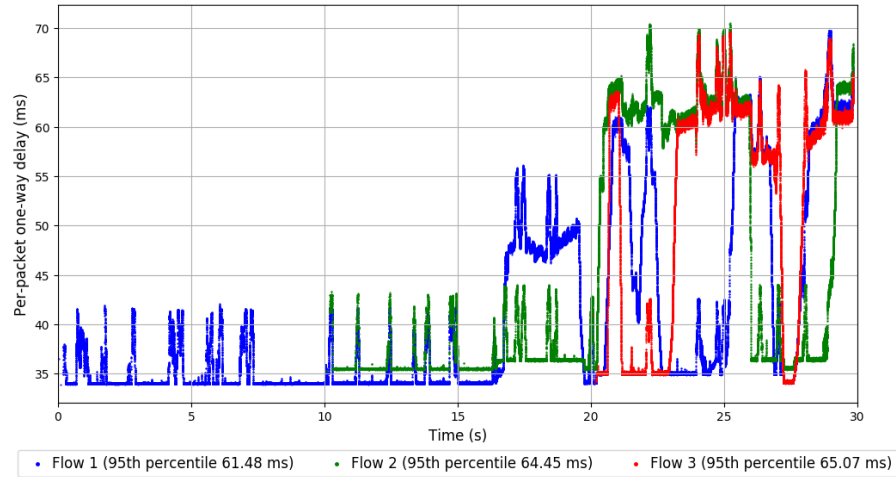
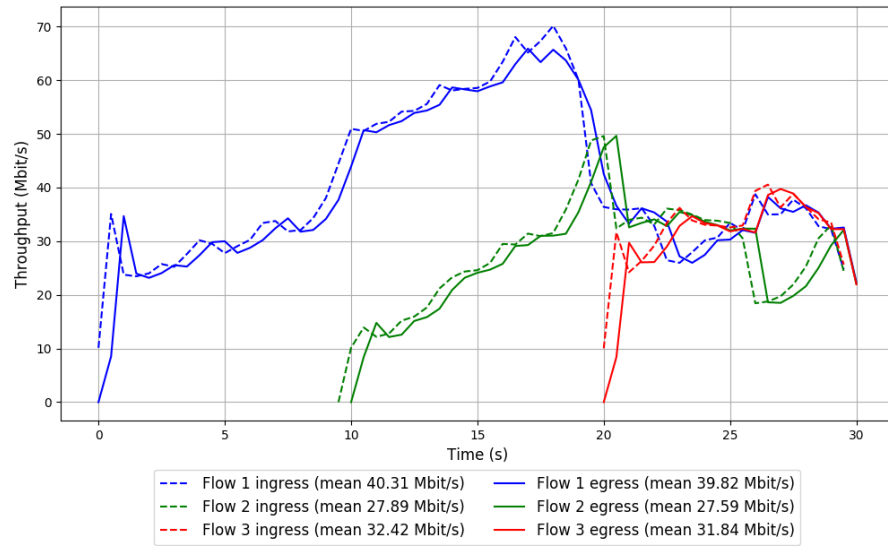


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-19 09:16:05
End at: 2018-06-19 09:16:35
Local clock offset: -2.331 ms
Remote clock offset: 2.78 ms

# Below is generated by plot.py at 2018-06-19 13:01:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.63 Mbit/s
95th percentile per-packet one-way delay: 63.486 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 39.82 Mbit/s
95th percentile per-packet one-way delay: 61.480 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 27.59 Mbit/s
95th percentile per-packet one-way delay: 64.451 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 65.071 ms
Loss rate: 2.64%
```

Run 1: Report of PCC-Expr — Data Link

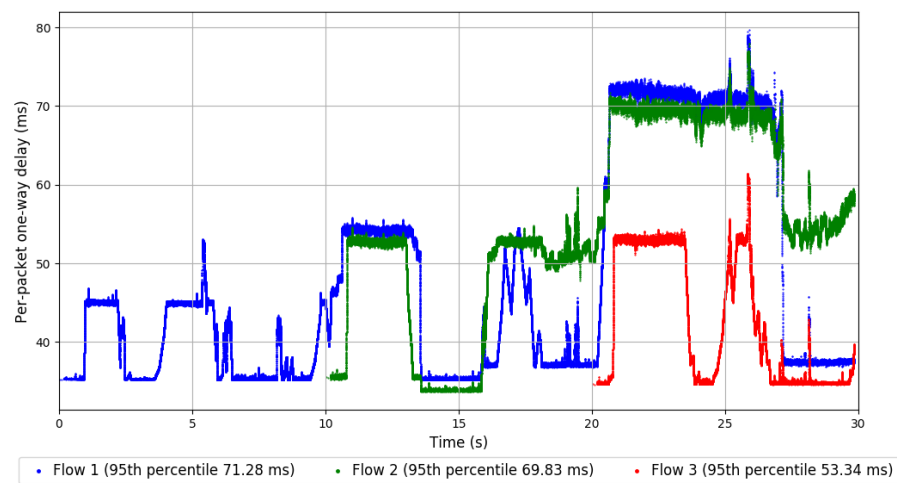
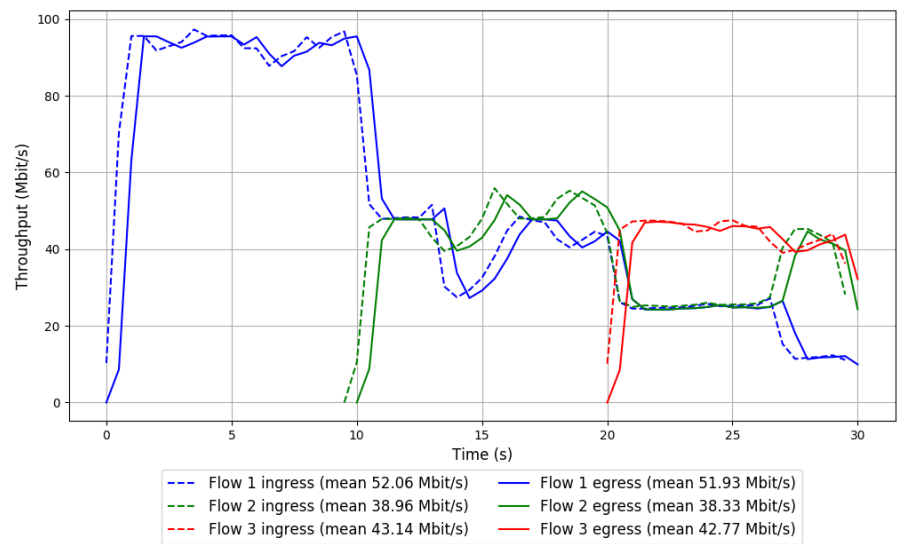


```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-19 09:39:37
End at: 2018-06-19 09:40:07
Local clock offset: -1.624 ms
Remote clock offset: 3.239 ms

# Below is generated by plot.py at 2018-06-19 13:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 70.422 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 51.93 Mbit/s
95th percentile per-packet one-way delay: 71.278 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 69.825 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 42.77 Mbit/s
95th percentile per-packet one-way delay: 53.345 ms
Loss rate: 1.54%
```

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-06-19 10:03:00

End at: 2018-06-19 10:03:30

Local clock offset: 0.542 ms

Remote clock offset: 3.831 ms

Below is generated by plot.py at 2018-06-19 13:02:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.09 Mbit/s

95th percentile per-packet one-way delay: 62.939 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 55.23 Mbit/s

95th percentile per-packet one-way delay: 63.103 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 38.03 Mbit/s

95th percentile per-packet one-way delay: 61.152 ms

Loss rate: 1.56%

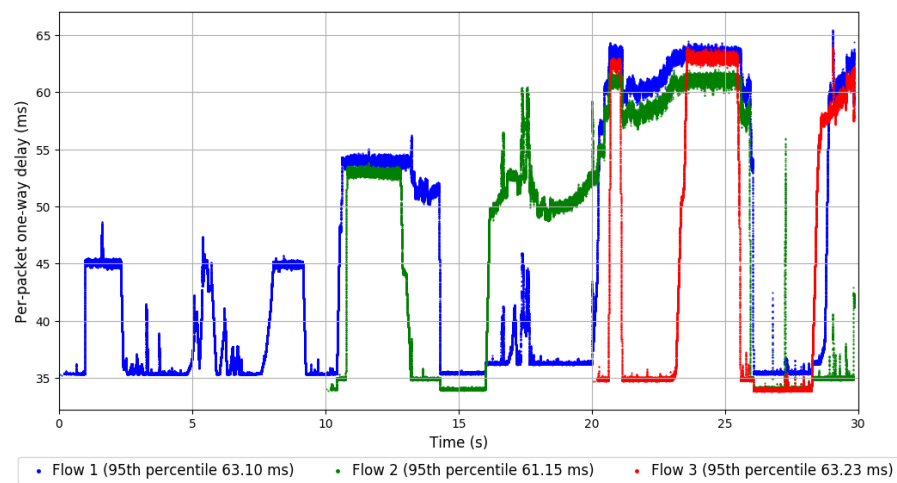
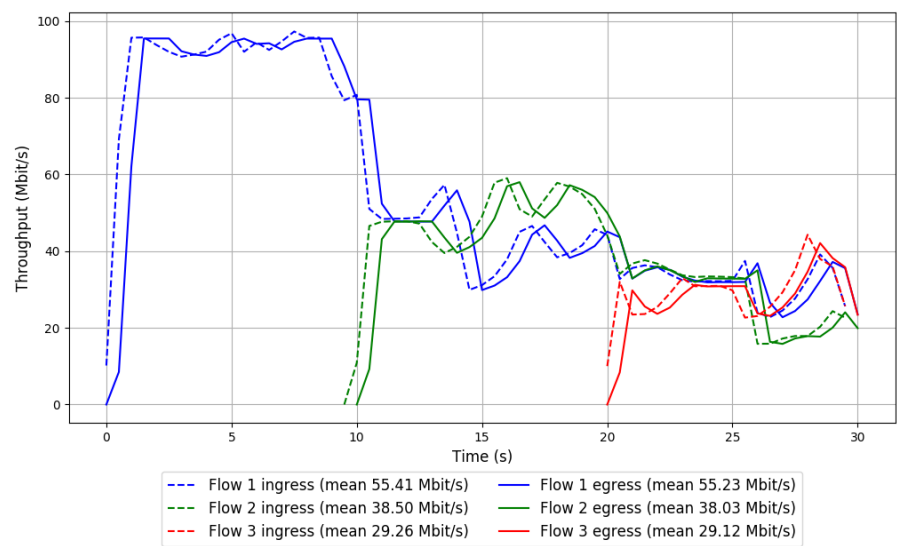
-- Flow 3:

Average throughput: 29.12 Mbit/s

95th percentile per-packet one-way delay: 63.226 ms

Loss rate: 1.26%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-06-19 10:25:24

End at: 2018-06-19 10:25:54

Local clock offset: 0.392 ms

Remote clock offset: 2.669 ms

Below is generated by plot.py at 2018-06-19 13:02:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.81 Mbit/s

95th percentile per-packet one-way delay: 67.798 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 53.15 Mbit/s

95th percentile per-packet one-way delay: 68.095 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 42.66 Mbit/s

95th percentile per-packet one-way delay: 53.378 ms

Loss rate: 0.50%

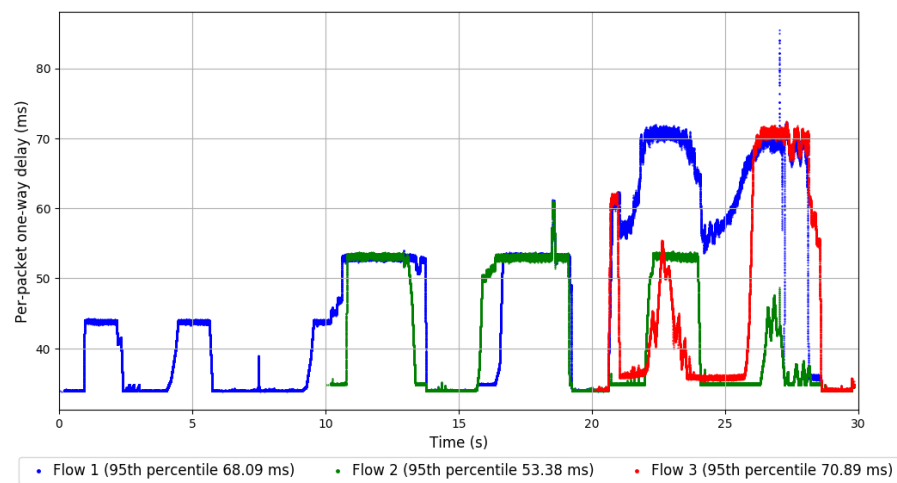
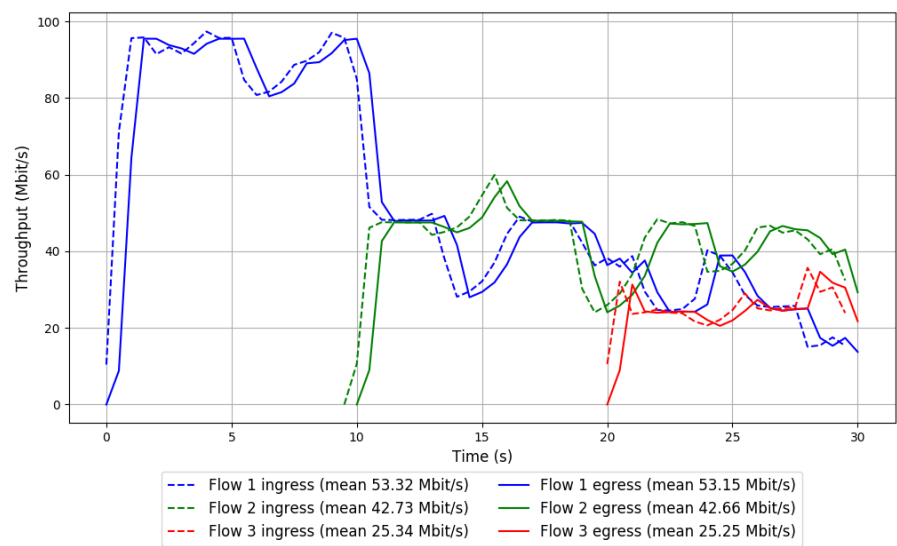
-- Flow 3:

Average throughput: 25.25 Mbit/s

95th percentile per-packet one-way delay: 70.887 ms

Loss rate: 1.01%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-06-19 10:47:26

End at: 2018-06-19 10:47:56

Local clock offset: 0.469 ms

Remote clock offset: 2.328 ms

Below is generated by plot.py at 2018-06-19 13:02:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.81 Mbit/s

95th percentile per-packet one-way delay: 70.369 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 53.89 Mbit/s

95th percentile per-packet one-way delay: 62.803 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 36.23 Mbit/s

95th percentile per-packet one-way delay: 72.030 ms

Loss rate: 1.23%

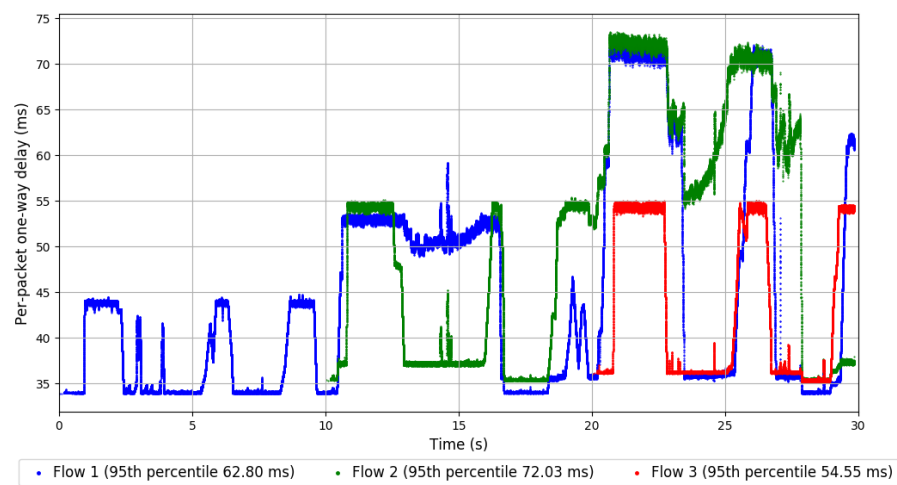
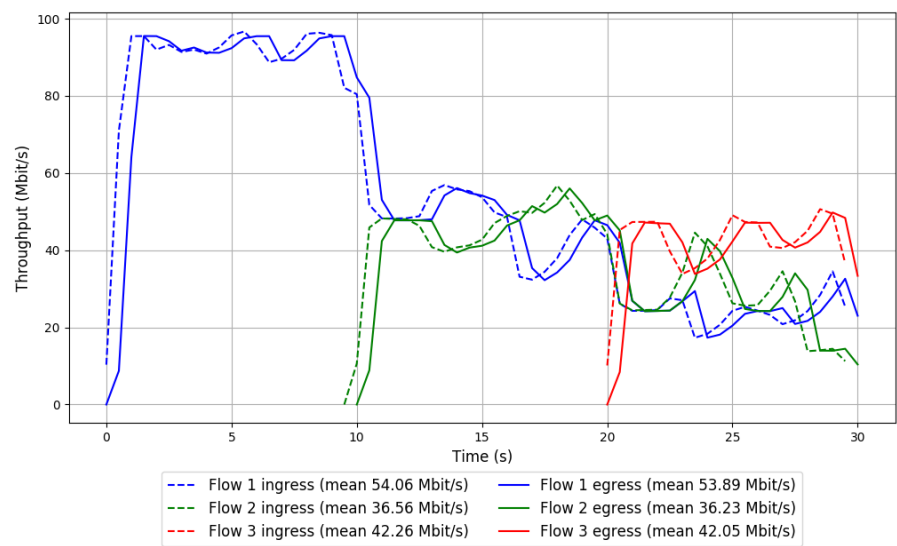
-- Flow 3:

Average throughput: 42.05 Mbit/s

95th percentile per-packet one-way delay: 54.547 ms

Loss rate: 1.27%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-06-19 11:09:44

End at: 2018-06-19 11:10:14

Local clock offset: 0.41 ms

Remote clock offset: 1.354 ms

Below is generated by plot.py at 2018-06-19 13:02:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.55 Mbit/s

95th percentile per-packet one-way delay: 63.615 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 56.65 Mbit/s

95th percentile per-packet one-way delay: 63.061 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 37.12 Mbit/s

95th percentile per-packet one-way delay: 63.642 ms

Loss rate: 0.70%

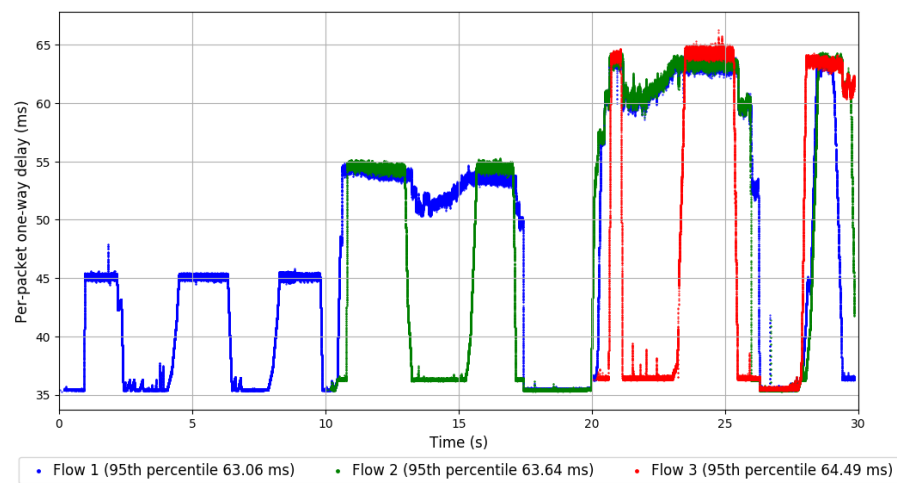
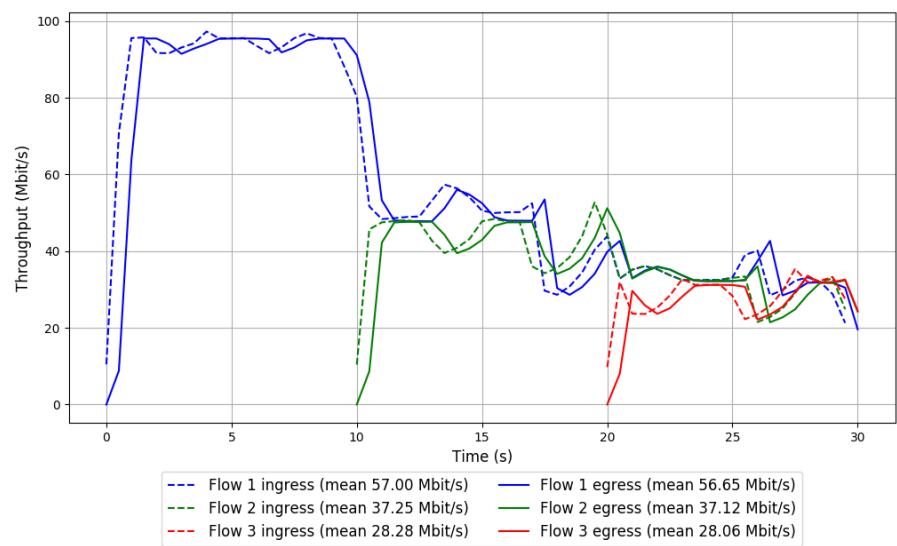
-- Flow 3:

Average throughput: 28.06 Mbit/s

95th percentile per-packet one-way delay: 64.490 ms

Loss rate: 1.52%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-06-19 11:31:43

End at: 2018-06-19 11:32:13

Local clock offset: 0.254 ms

Remote clock offset: 0.927 ms

Below is generated by plot.py at 2018-06-19 13:02:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.10 Mbit/s

95th percentile per-packet one-way delay: 61.120 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 53.51 Mbit/s

95th percentile per-packet one-way delay: 60.014 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 38.90 Mbit/s

95th percentile per-packet one-way delay: 63.315 ms

Loss rate: 1.18%

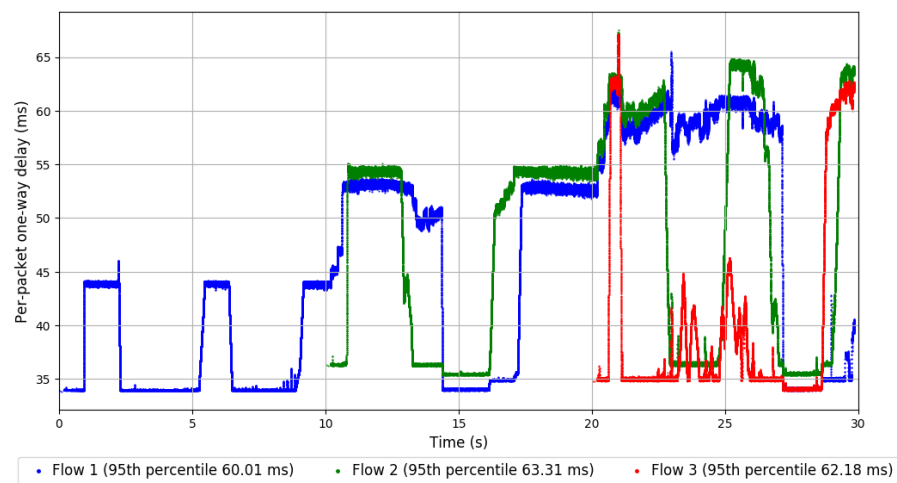
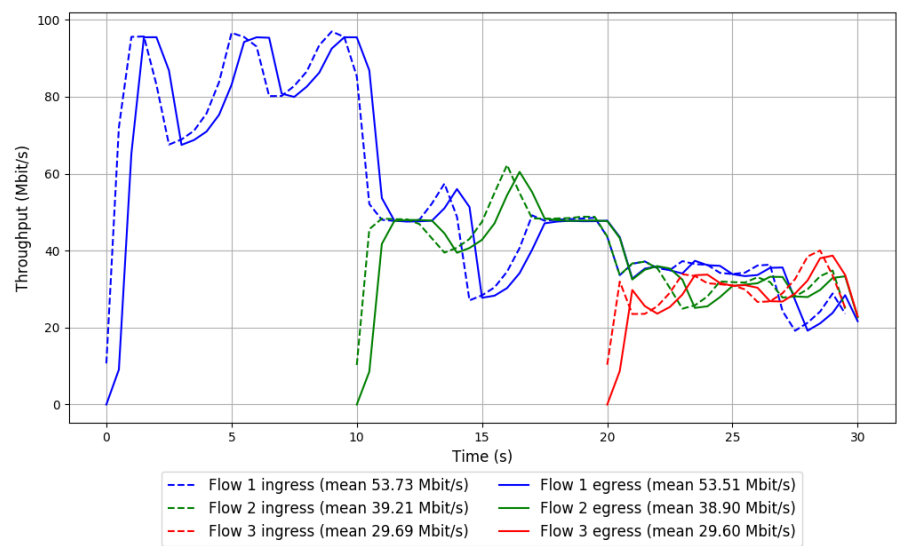
-- Flow 3:

Average throughput: 29.60 Mbit/s

95th percentile per-packet one-way delay: 62.178 ms

Loss rate: 1.08%

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-06-19 11:53:44

End at: 2018-06-19 11:54:14

Local clock offset: -1.39 ms

Remote clock offset: 0.625 ms

Below is generated by plot.py at 2018-06-19 13:02:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.17 Mbit/s

95th percentile per-packet one-way delay: 62.388 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 55.45 Mbit/s

95th percentile per-packet one-way delay: 61.431 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 36.72 Mbit/s

95th percentile per-packet one-way delay: 61.753 ms

Loss rate: 0.99%

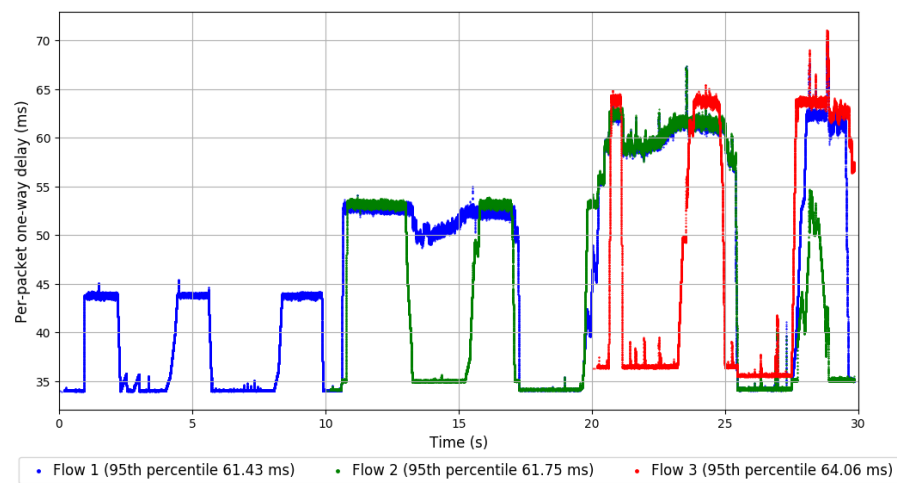
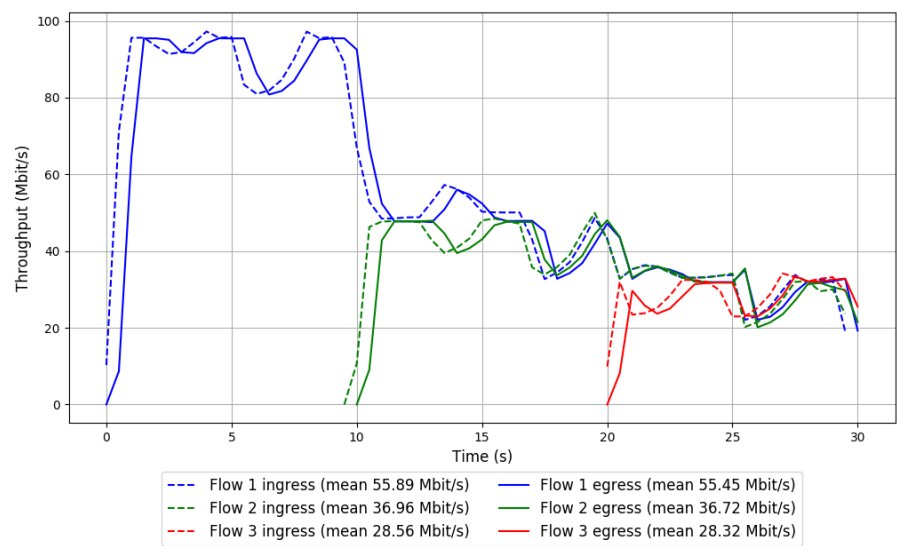
-- Flow 3:

Average throughput: 28.32 Mbit/s

95th percentile per-packet one-way delay: 64.061 ms

Loss rate: 1.58%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-06-19 12:15:41

End at: 2018-06-19 12:16:11

Local clock offset: 0.133 ms

Remote clock offset: 2.081 ms

Below is generated by plot.py at 2018-06-19 13:03:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.64 Mbit/s

95th percentile per-packet one-way delay: 70.488 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 54.98 Mbit/s

95th percentile per-packet one-way delay: 71.387 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 33.48 Mbit/s

95th percentile per-packet one-way delay: 70.127 ms

Loss rate: 1.29%

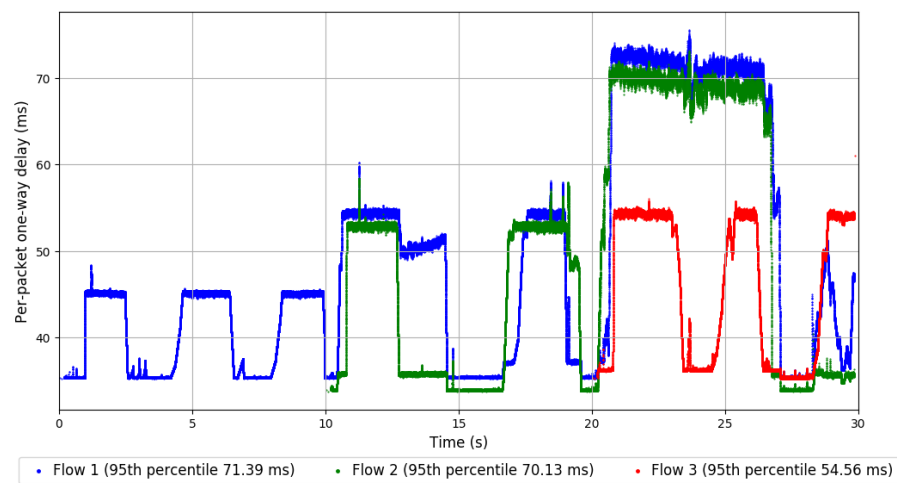
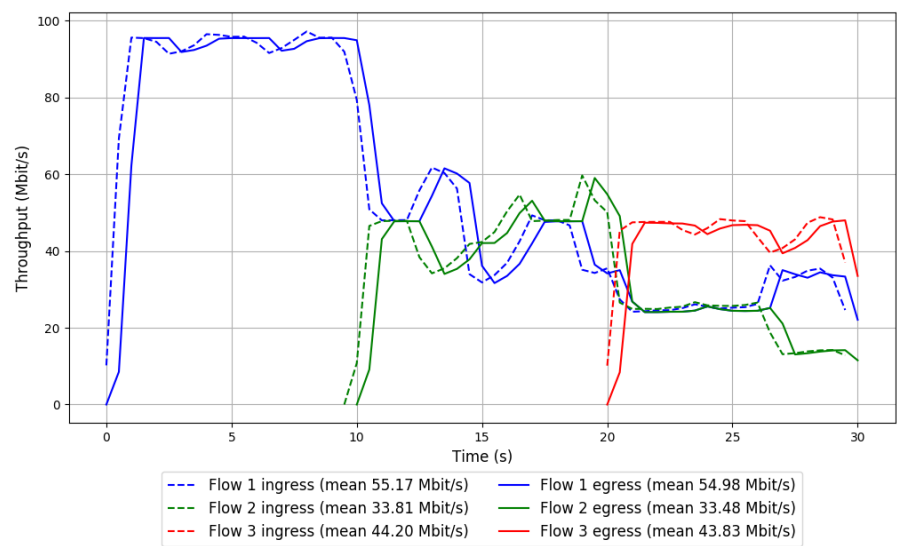
-- Flow 3:

Average throughput: 43.83 Mbit/s

95th percentile per-packet one-way delay: 54.562 ms

Loss rate: 1.54%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-06-19 12:37:39

End at: 2018-06-19 12:38:09

Local clock offset: 0.636 ms

Remote clock offset: 2.989 ms

Below is generated by plot.py at 2018-06-19 13:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 62.729 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 55.49 Mbit/s

95th percentile per-packet one-way delay: 62.611 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 39.21 Mbit/s

95th percentile per-packet one-way delay: 62.418 ms

Loss rate: 0.64%

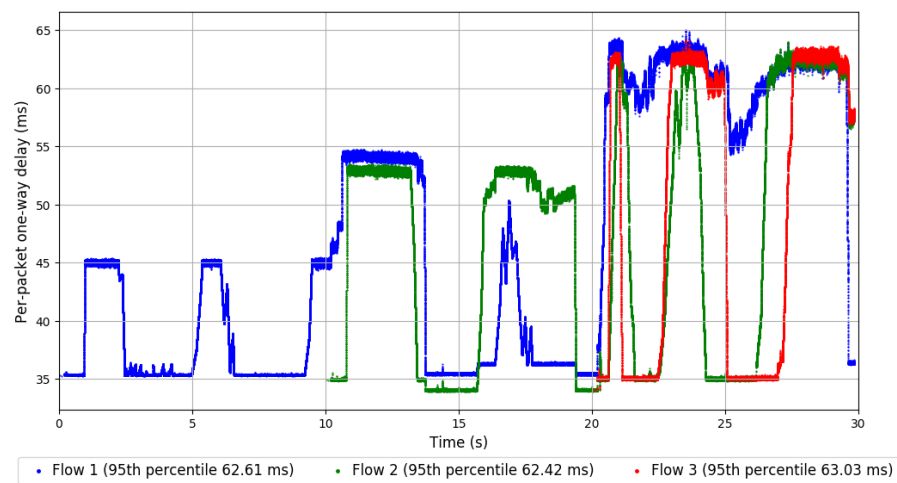
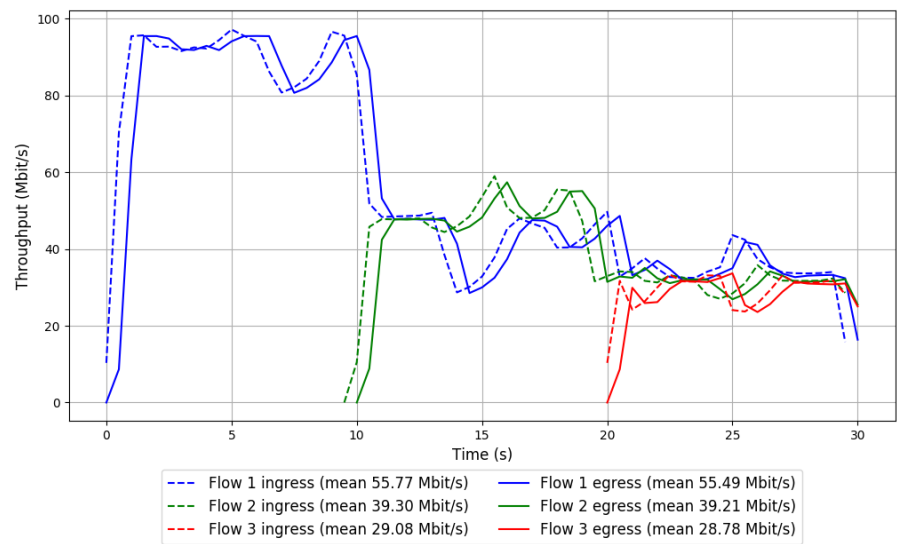
-- Flow 3:

Average throughput: 28.78 Mbit/s

95th percentile per-packet one-way delay: 63.033 ms

Loss rate: 1.79%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-06-19 09:08:51

End at: 2018-06-19 09:09:21

Local clock offset: -1.224 ms

Remote clock offset: 2.693 ms

Below is generated by plot.py at 2018-06-19 13:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.36 Mbit/s

95th percentile per-packet one-way delay: 45.976 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 39.37 Mbit/s

95th percentile per-packet one-way delay: 43.627 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 33.77 Mbit/s

95th percentile per-packet one-way delay: 52.393 ms

Loss rate: 0.42%

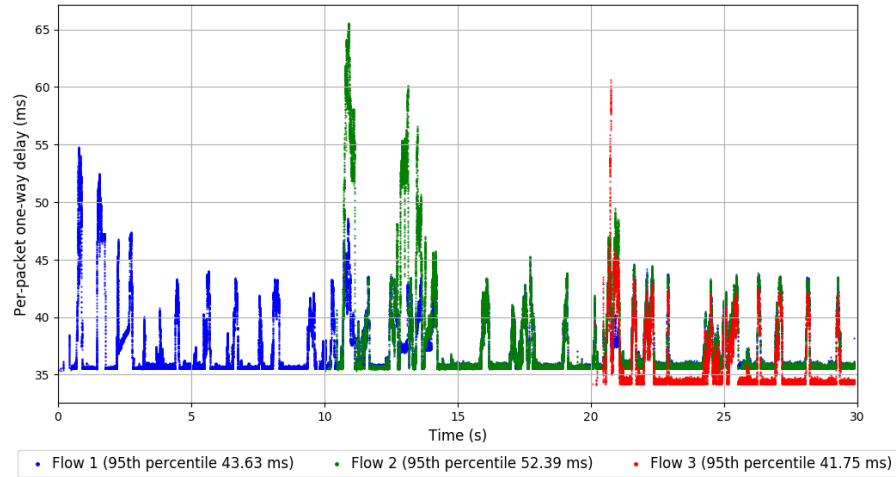
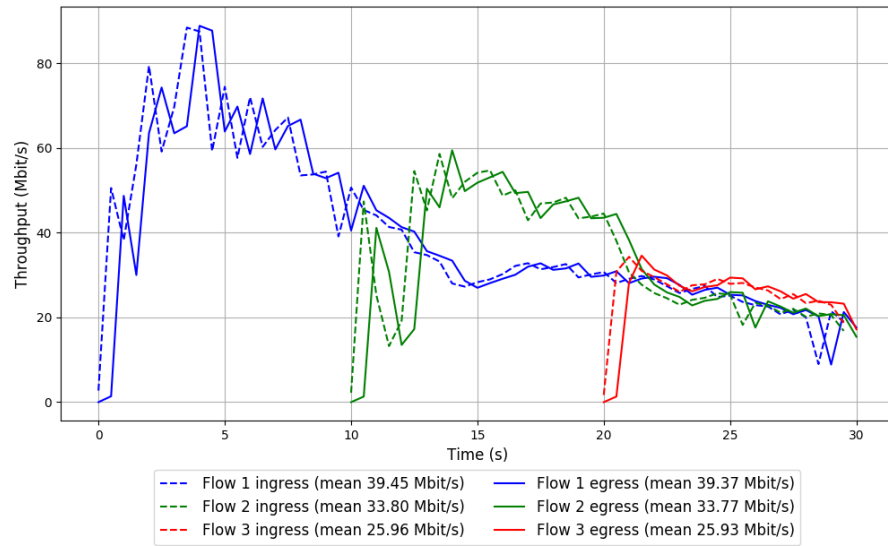
-- Flow 3:

Average throughput: 25.93 Mbit/s

95th percentile per-packet one-way delay: 41.746 ms

Loss rate: 0.76%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-06-19 09:31:50

End at: 2018-06-19 09:32:20

Local clock offset: -3.362 ms

Remote clock offset: 3.088 ms

Below is generated by plot.py at 2018-06-19 13:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.07 Mbit/s

95th percentile per-packet one-way delay: 46.760 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 34.02 Mbit/s

95th percentile per-packet one-way delay: 46.110 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 37.07 Mbit/s

95th percentile per-packet one-way delay: 51.586 ms

Loss rate: 0.53%

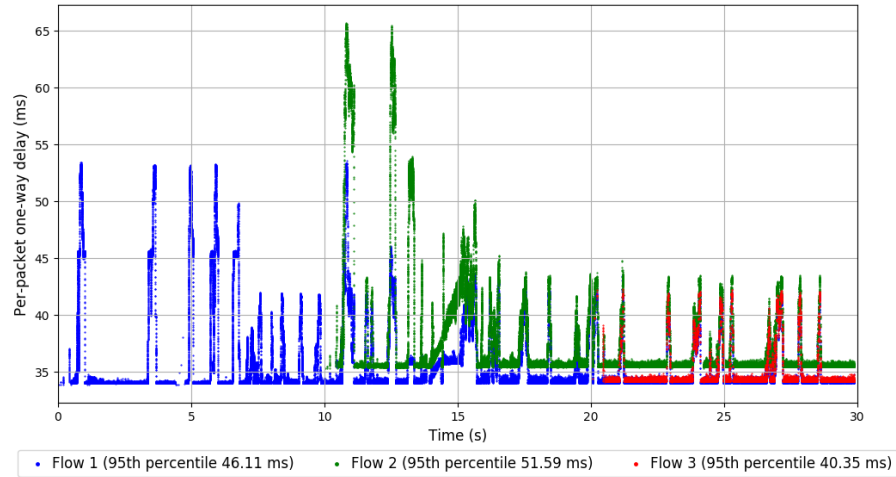
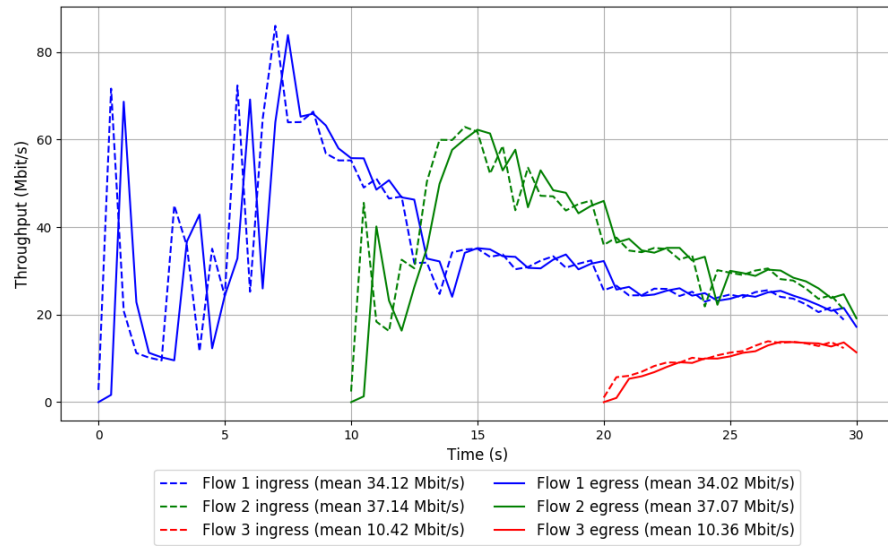
-- Flow 3:

Average throughput: 10.36 Mbit/s

95th percentile per-packet one-way delay: 40.351 ms

Loss rate: 1.24%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-06-19 09:55:53

End at: 2018-06-19 09:56:23

Local clock offset: 0.192 ms

Remote clock offset: 3.66 ms

Below is generated by plot.py at 2018-06-19 13:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.86 Mbit/s

95th percentile per-packet one-way delay: 53.213 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 47.40 Mbit/s

95th percentile per-packet one-way delay: 45.180 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 32.83 Mbit/s

95th percentile per-packet one-way delay: 55.992 ms

Loss rate: 0.37%

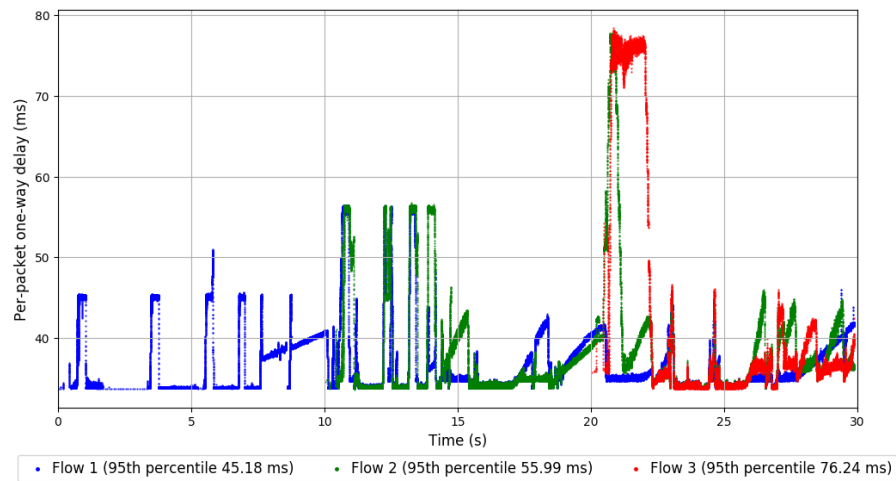
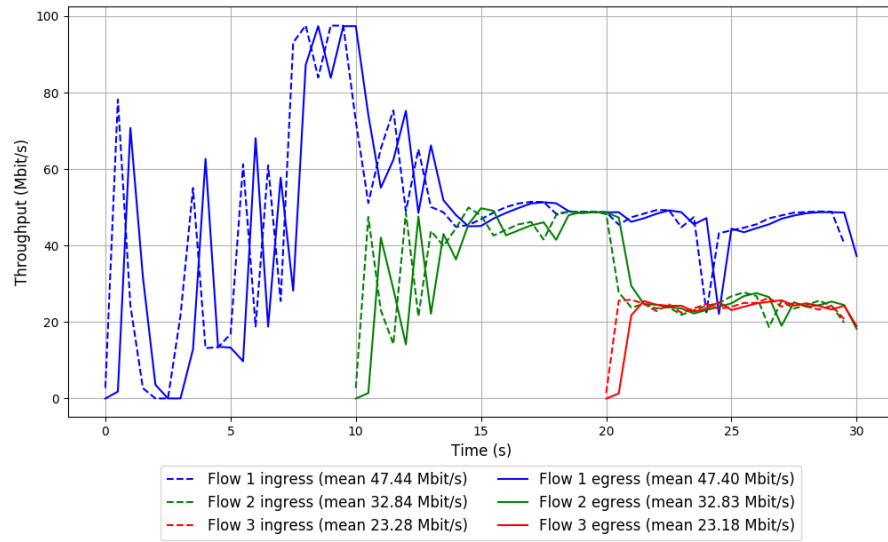
-- Flow 3:

Average throughput: 23.18 Mbit/s

95th percentile per-packet one-way delay: 76.238 ms

Loss rate: 1.11%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-06-19 10:18:29

End at: 2018-06-19 10:18:59

Local clock offset: 0.338 ms

Remote clock offset: 3.078 ms

Below is generated by plot.py at 2018-06-19 13:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.12 Mbit/s

95th percentile per-packet one-way delay: 51.449 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 49.49 Mbit/s

95th percentile per-packet one-way delay: 45.335 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 43.65 Mbit/s

95th percentile per-packet one-way delay: 54.388 ms

Loss rate: 0.44%

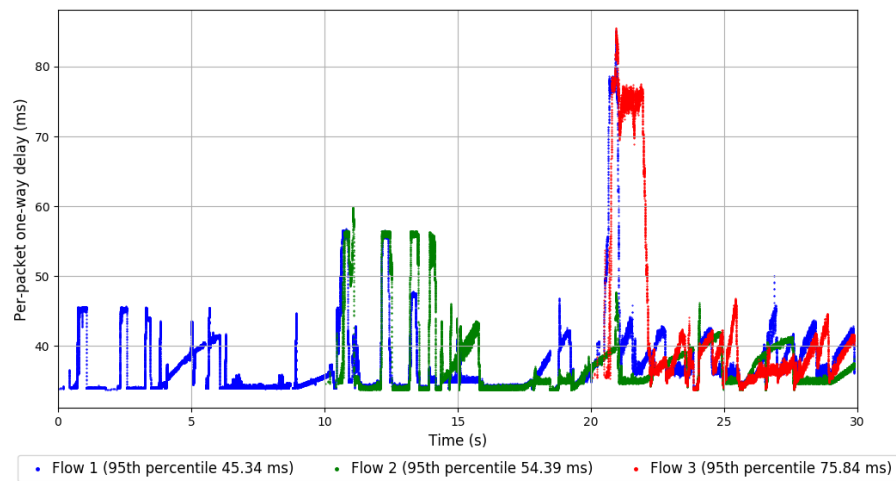
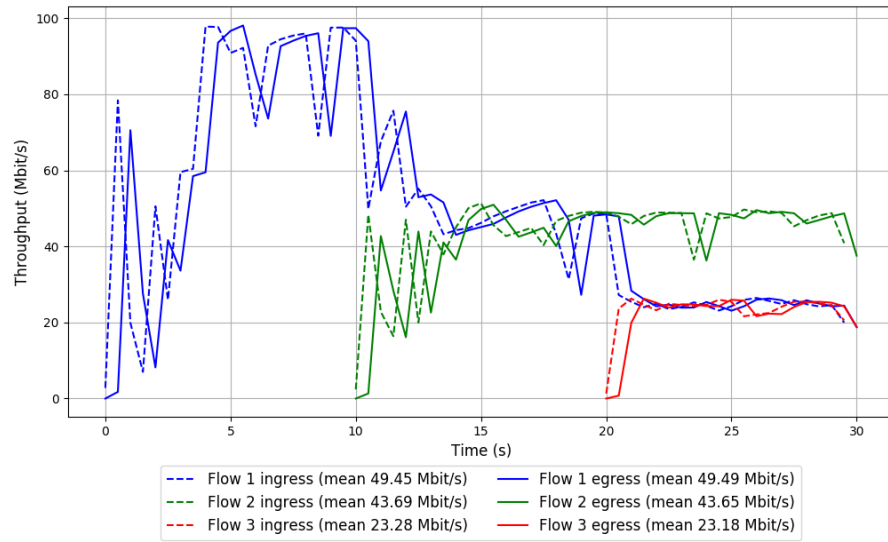
-- Flow 3:

Average throughput: 23.18 Mbit/s

95th percentile per-packet one-way delay: 75.844 ms

Loss rate: 1.10%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-06-19 10:40:31

End at: 2018-06-19 10:41:01

Local clock offset: 0.388 ms

Remote clock offset: 2.486 ms

Below is generated by plot.py at 2018-06-19 13:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.01 Mbit/s

95th percentile per-packet one-way delay: 55.833 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 39.74 Mbit/s

95th percentile per-packet one-way delay: 45.415 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 32.34 Mbit/s

95th percentile per-packet one-way delay: 55.988 ms

Loss rate: 0.35%

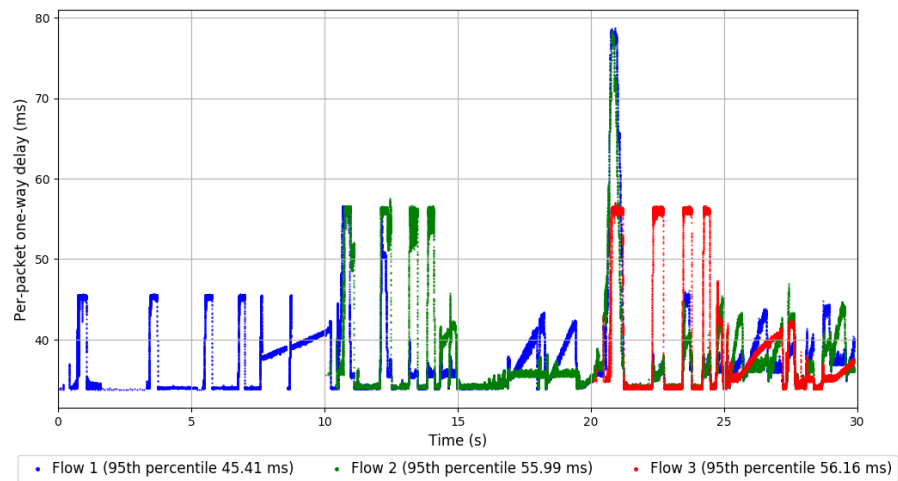
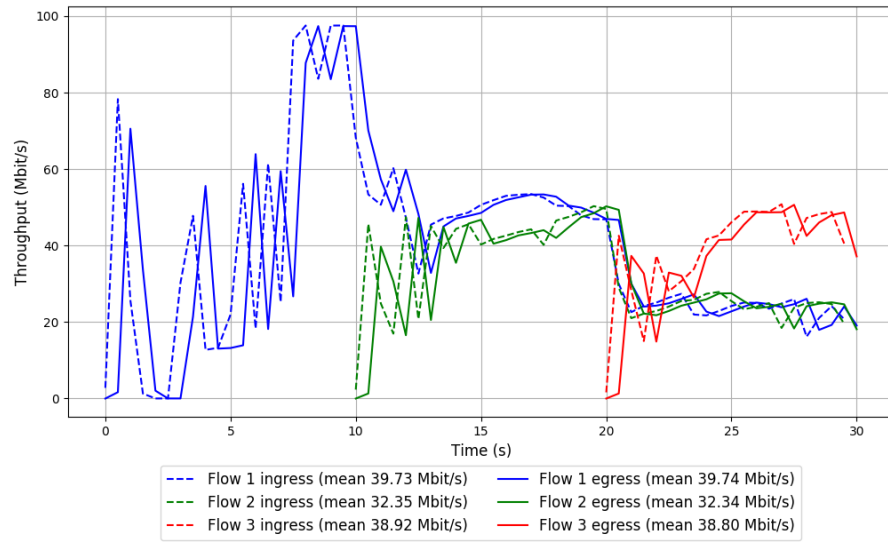
-- Flow 3:

Average throughput: 38.80 Mbit/s

95th percentile per-packet one-way delay: 56.157 ms

Loss rate: 1.01%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-06-19 11:02:43

End at: 2018-06-19 11:03:13

Local clock offset: 0.56 ms

Remote clock offset: 1.521 ms

Below is generated by plot.py at 2018-06-19 13:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.25 Mbit/s

95th percentile per-packet one-way delay: 55.029 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 46.84 Mbit/s

95th percentile per-packet one-way delay: 46.844 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 31.12 Mbit/s

95th percentile per-packet one-way delay: 56.107 ms

Loss rate: 0.38%

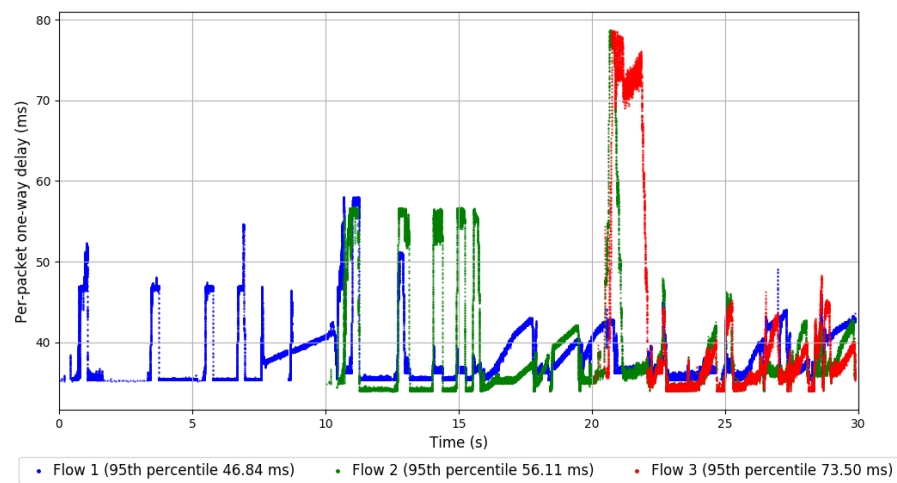
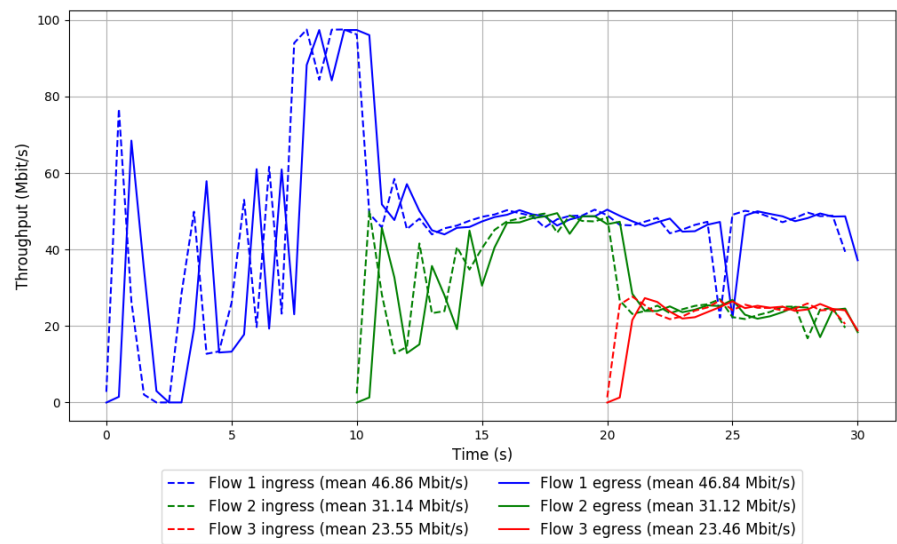
-- Flow 3:

Average throughput: 23.46 Mbit/s

95th percentile per-packet one-way delay: 73.498 ms

Loss rate: 1.06%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-19 11:24:53

End at: 2018-06-19 11:25:23

Local clock offset: 0.189 ms

Remote clock offset: 1.071 ms

Below is generated by plot.py at 2018-06-19 13:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.54 Mbit/s

95th percentile per-packet one-way delay: 54.537 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 42.41 Mbit/s

95th percentile per-packet one-way delay: 46.779 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 34.89 Mbit/s

95th percentile per-packet one-way delay: 55.877 ms

Loss rate: 0.43%

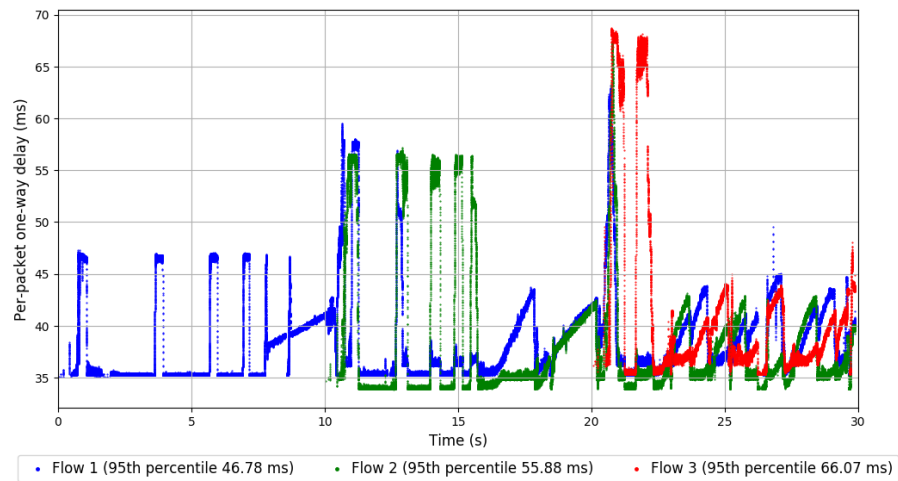
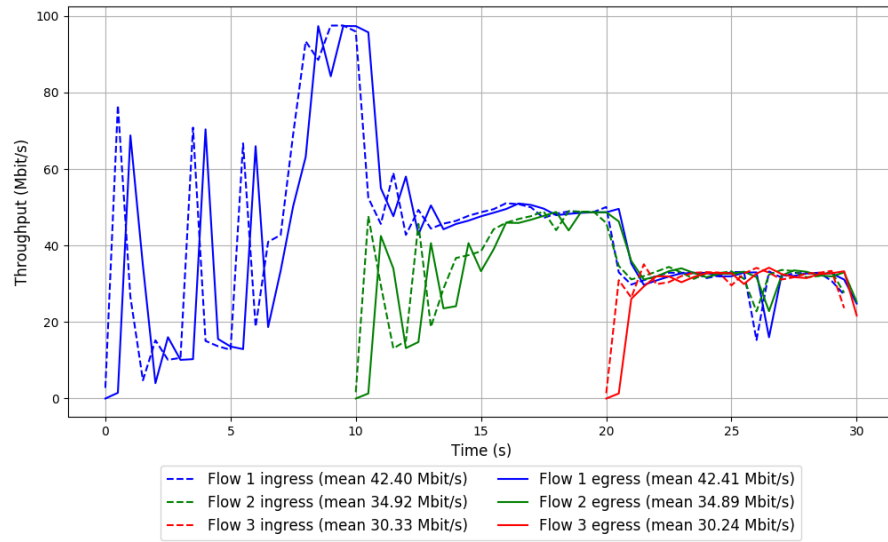
-- Flow 3:

Average throughput: 30.24 Mbit/s

95th percentile per-packet one-way delay: 66.067 ms

Loss rate: 0.96%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-06-19 11:46:47

End at: 2018-06-19 11:47:17

Local clock offset: -1.146 ms

Remote clock offset: 0.773 ms

Below is generated by plot.py at 2018-06-19 13:04:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.82 Mbit/s

95th percentile per-packet one-way delay: 52.985 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 52.78 Mbit/s

95th percentile per-packet one-way delay: 45.244 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 36.20 Mbit/s

95th percentile per-packet one-way delay: 57.333 ms

Loss rate: 0.42%

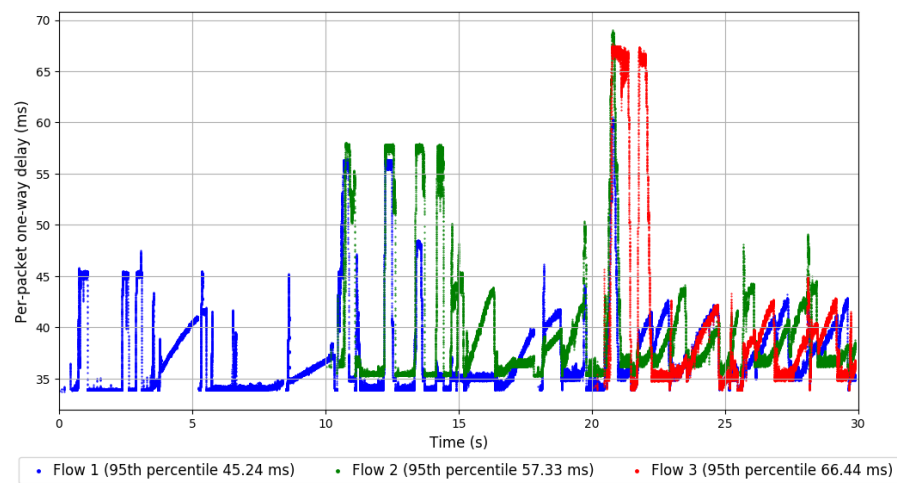
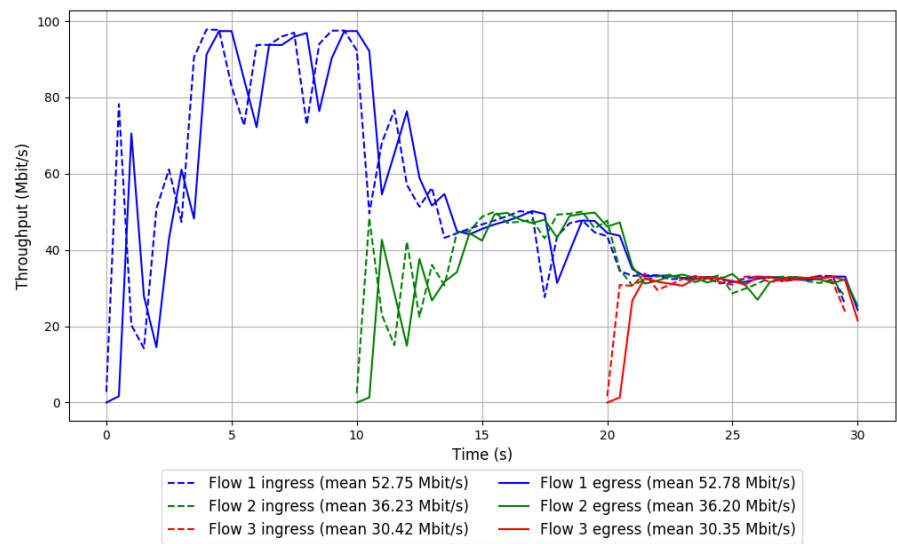
-- Flow 3:

Average throughput: 30.35 Mbit/s

95th percentile per-packet one-way delay: 66.445 ms

Loss rate: 0.91%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-06-19 12:08:50

End at: 2018-06-19 12:09:20

Local clock offset: -0.677 ms

Remote clock offset: 1.85 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.54 Mbit/s

95th percentile per-packet one-way delay: 51.609 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 54.37 Mbit/s

95th percentile per-packet one-way delay: 45.070 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 32.48 Mbit/s

95th percentile per-packet one-way delay: 57.351 ms

Loss rate: 0.41%

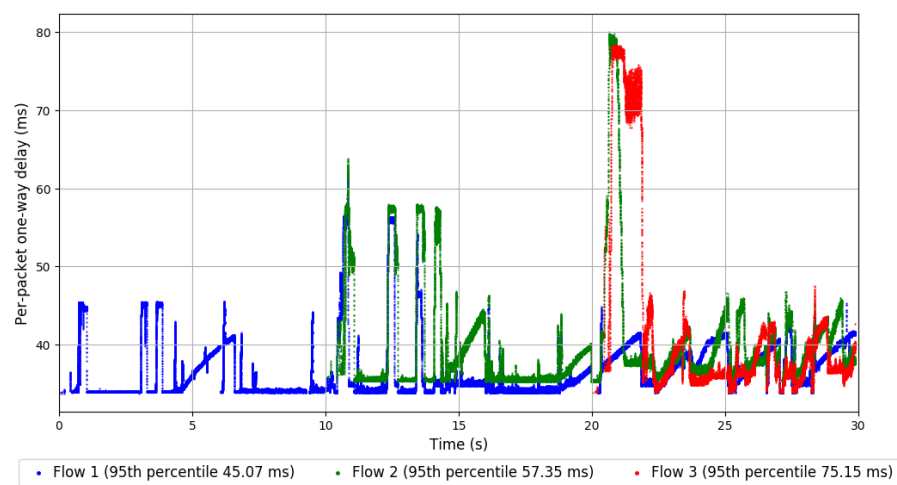
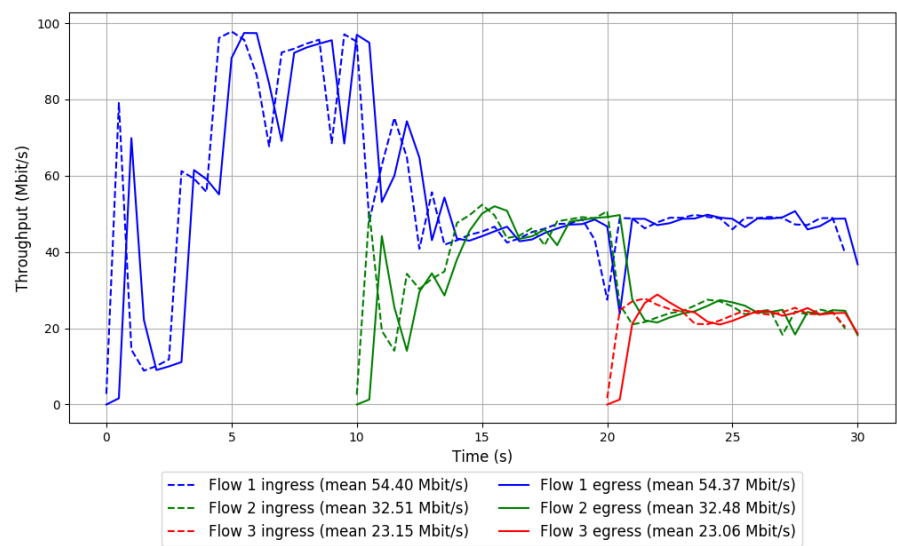
-- Flow 3:

Average throughput: 23.06 Mbit/s

95th percentile per-packet one-way delay: 75.151 ms

Loss rate: 1.05%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-06-19 12:30:49

End at: 2018-06-19 12:31:19

Local clock offset: 0.809 ms

Remote clock offset: 2.579 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.82 Mbit/s

95th percentile per-packet one-way delay: 57.028 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 39.46 Mbit/s

95th percentile per-packet one-way delay: 45.461 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 31.67 Mbit/s

95th percentile per-packet one-way delay: 57.463 ms

Loss rate: 0.34%

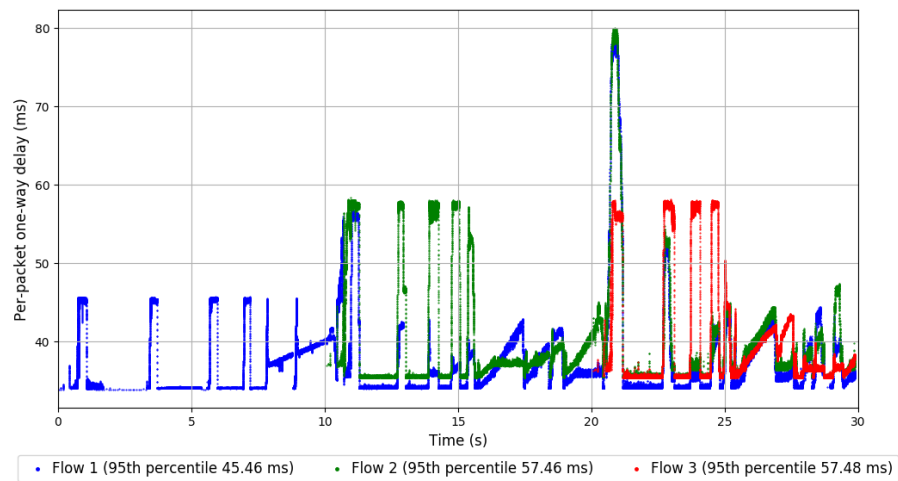
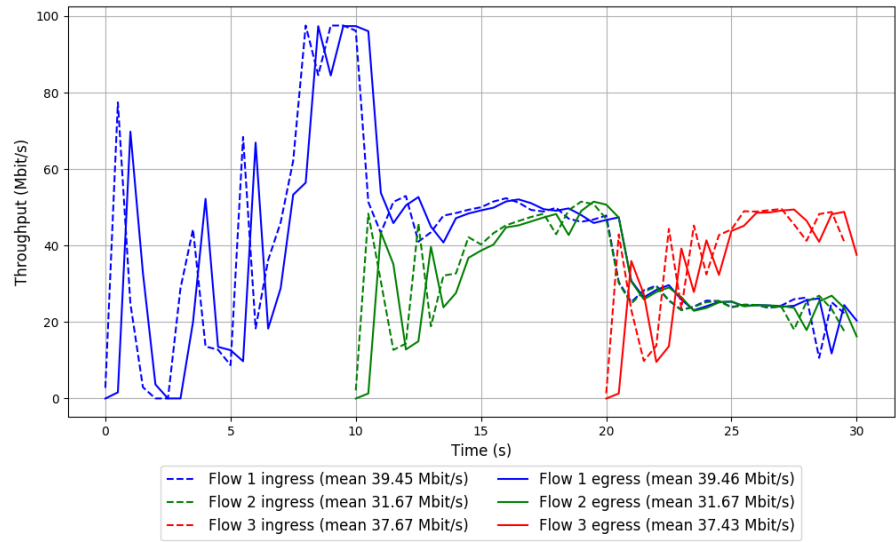
-- Flow 3:

Average throughput: 37.43 Mbit/s

95th percentile per-packet one-way delay: 57.480 ms

Loss rate: 1.32%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-06-19 09:04:42

End at: 2018-06-19 09:05:12

Local clock offset: -0.16 ms

Remote clock offset: 2.696 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 39.298 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 38.686 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 39.996 ms

Loss rate: 0.62%

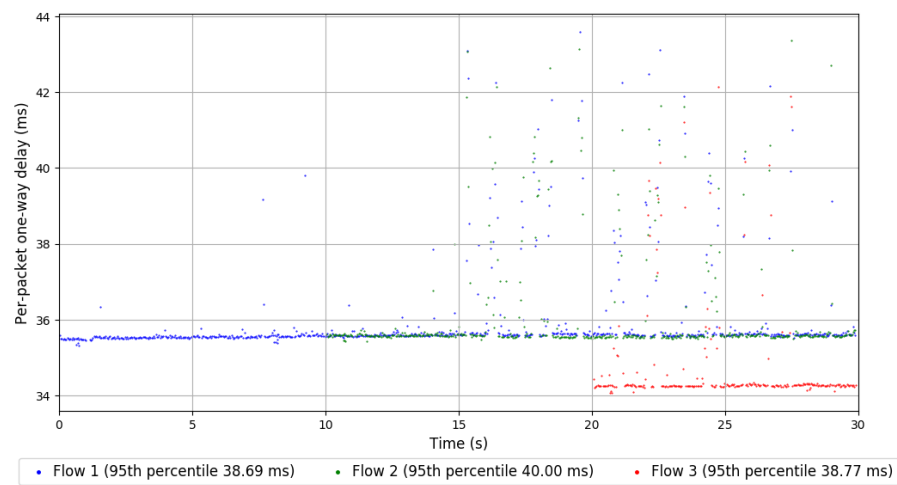
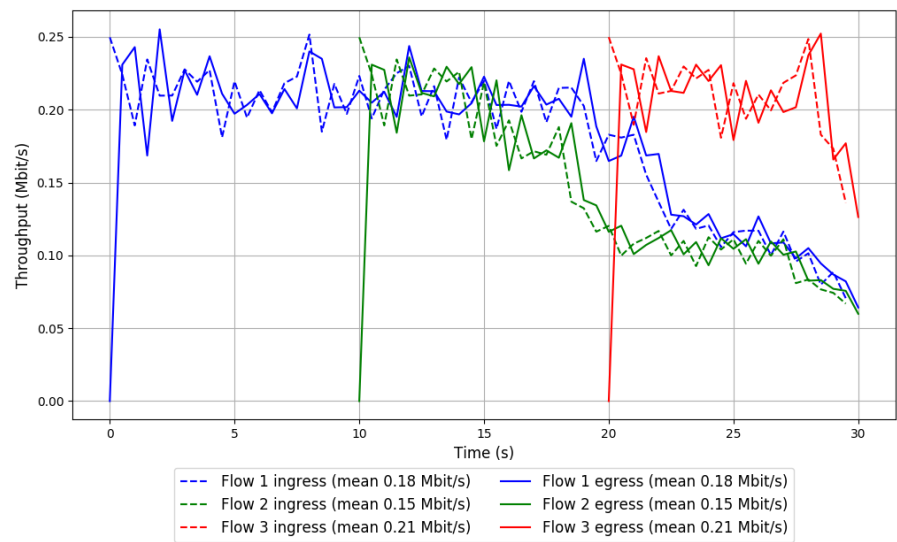
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.772 ms

Loss rate: 0.94%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2018-06-19 09:27:42

End at: 2018-06-19 09:28:12

Local clock offset: -3.236 ms

Remote clock offset: 2.958 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 38.531 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 37.577 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 38.490 ms

Loss rate: 0.72%

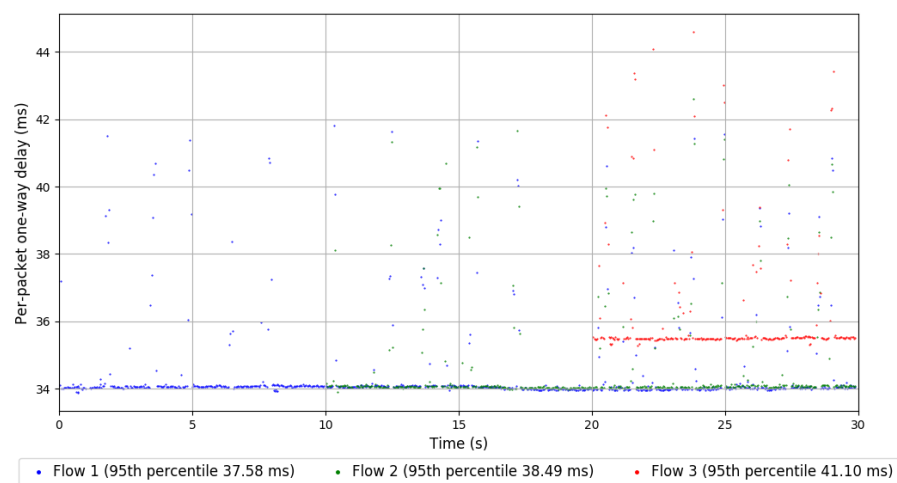
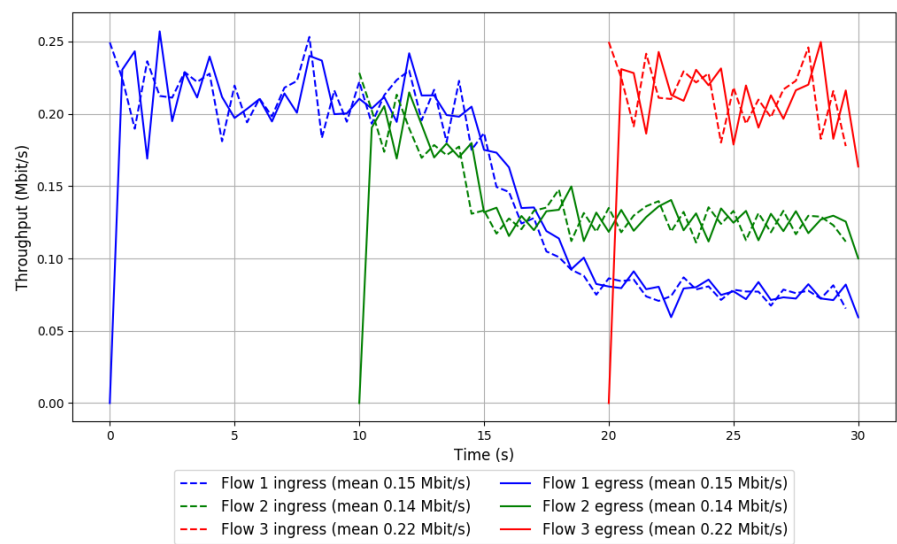
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 41.101 ms

Loss rate: 0.70%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-06-19 09:51:48

End at: 2018-06-19 09:52:18

Local clock offset: -0.05 ms

Remote clock offset: 3.47 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 35.427 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 35.480 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 34.114 ms

Loss rate: 0.51%

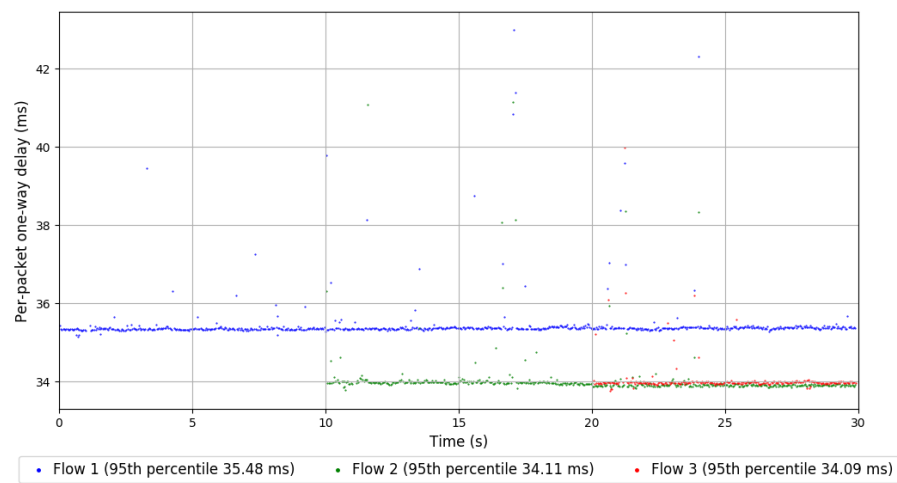
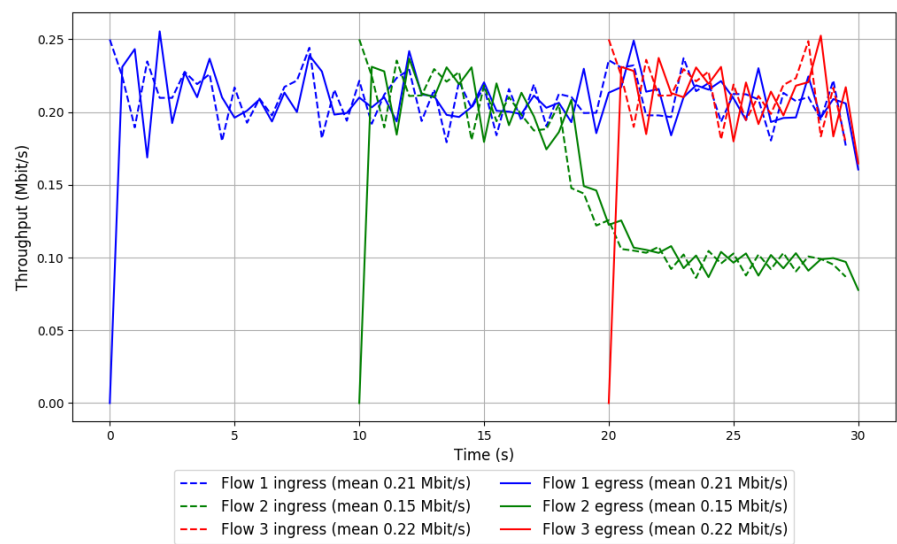
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 34.089 ms

Loss rate: 0.71%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-06-19 10:14:31

End at: 2018-06-19 10:15:01

Local clock offset: 0.417 ms

Remote clock offset: 3.452 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 35.473 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 34.052 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 35.495 ms

Loss rate: 0.40%

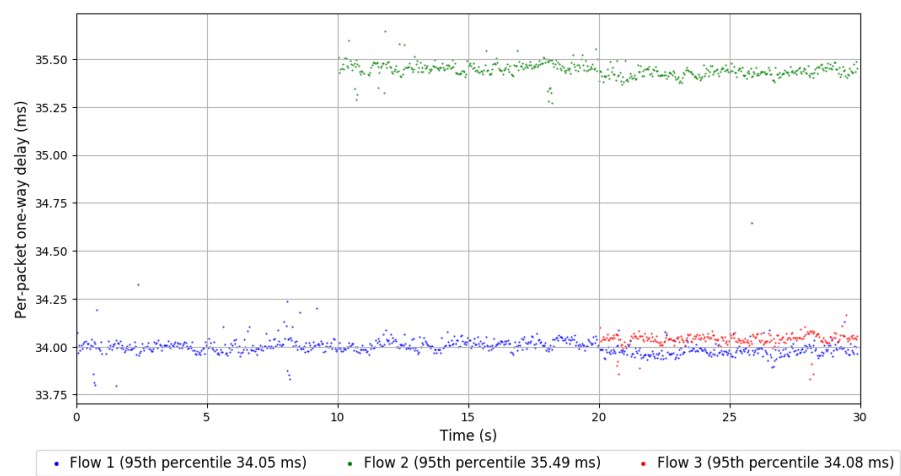
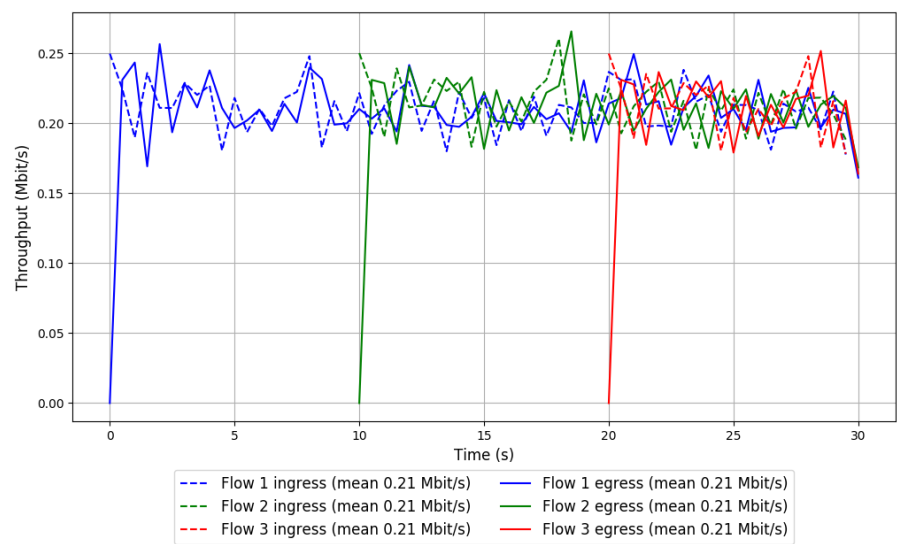
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 34.075 ms

Loss rate: 0.71%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-06-19 10:36:27

End at: 2018-06-19 10:36:57

Local clock offset: 0.503 ms

Remote clock offset: 2.539 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 34.076 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 34.081 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 34.030 ms

Loss rate: 0.39%

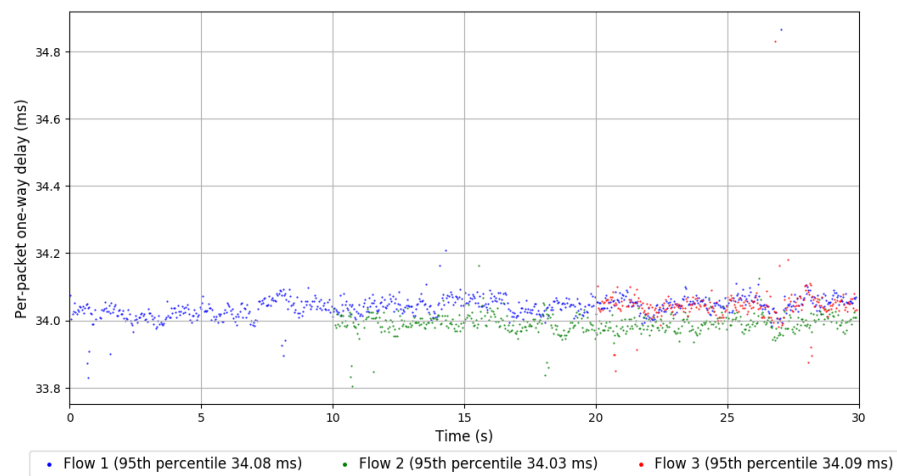
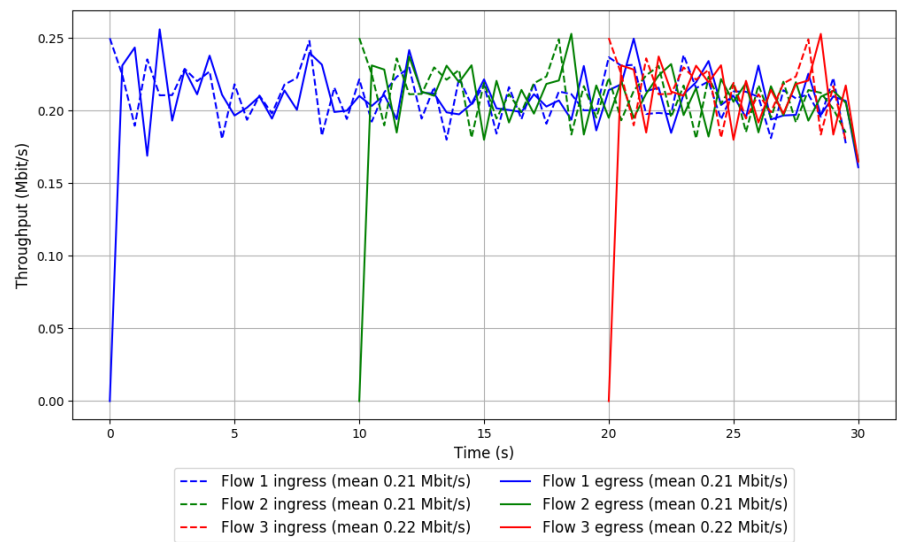
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 34.090 ms

Loss rate: 0.71%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-06-19 10:58:34

End at: 2018-06-19 10:59:04

Local clock offset: 0.517 ms

Remote clock offset: 1.655 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 35.472 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 34.054 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 33.989 ms

Loss rate: 0.39%

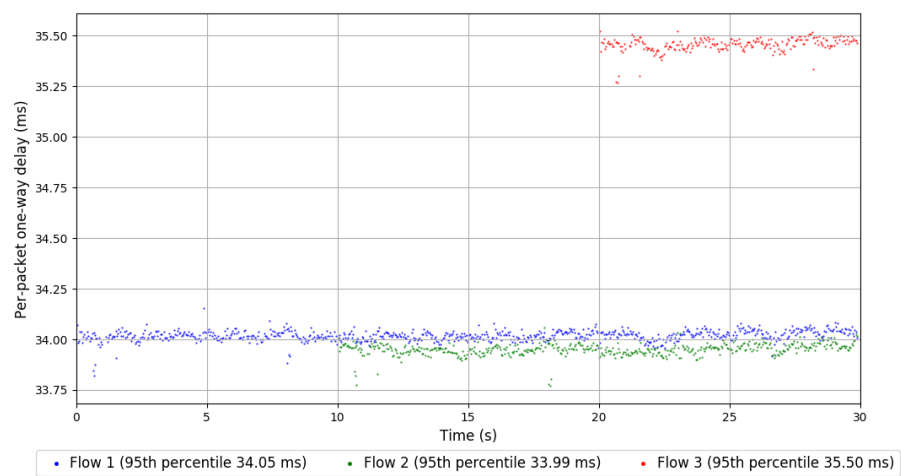
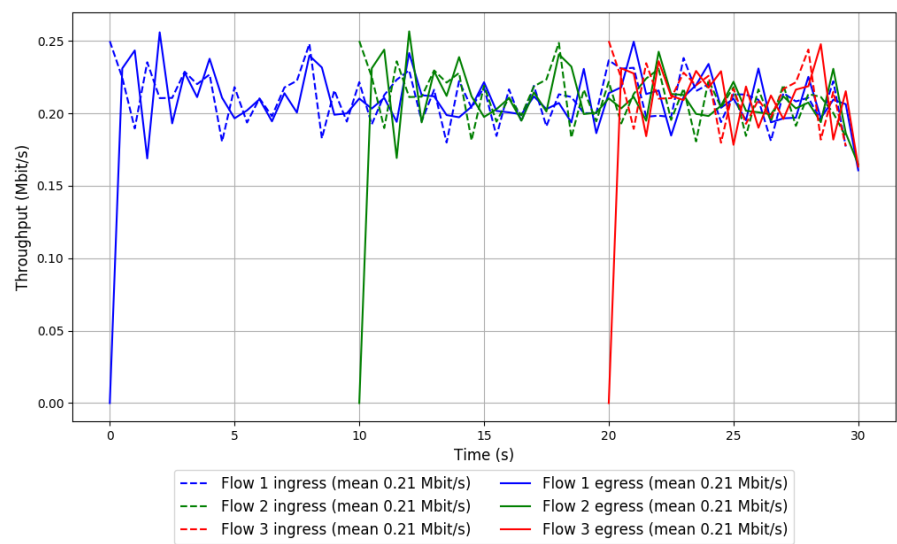
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 35.497 ms

Loss rate: 0.71%

Run 6: Report of SReAM — Data Link

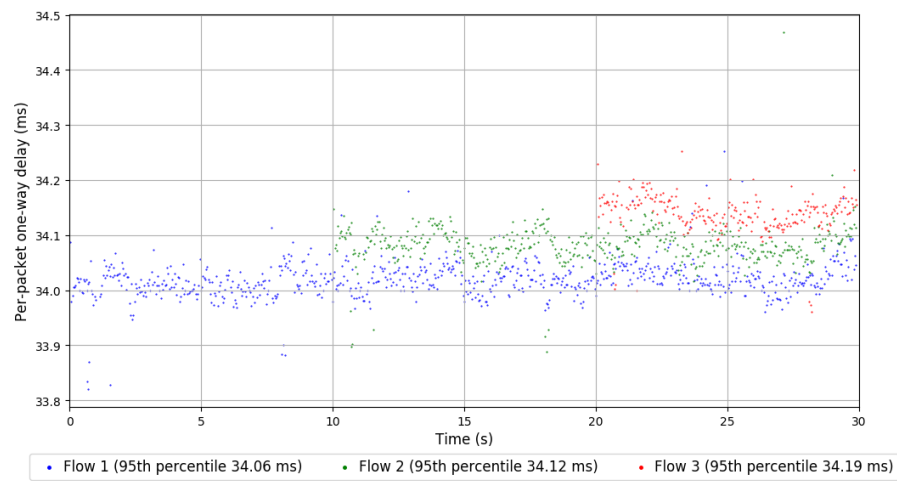
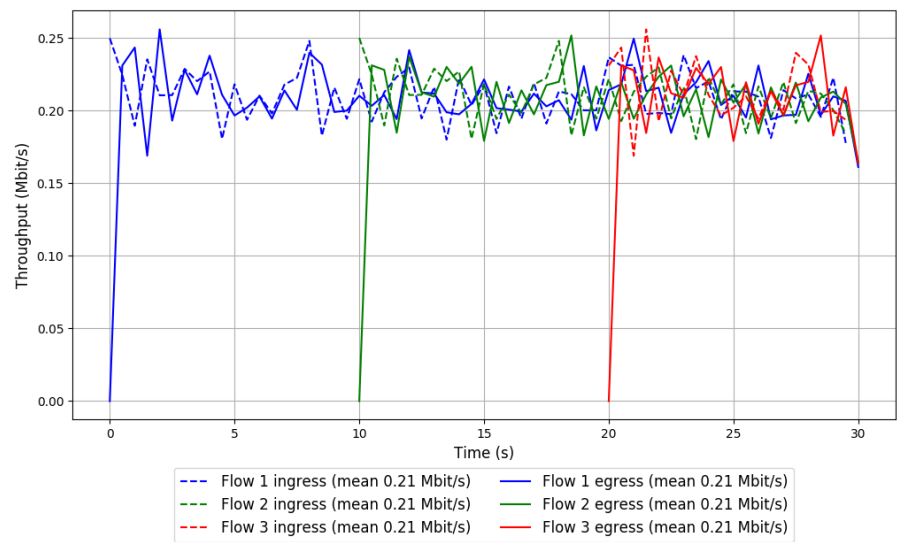


Run 7: Statistics of SCReAM

Start at: 2018-06-19 11:20:53
End at: 2018-06-19 11:21:23
Local clock offset: 0.305 ms
Remote clock offset: 1.091 ms

Below is generated by plot.py at 2018-06-19 13:04:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 34.158 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.063 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.125 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.187 ms
Loss rate: 0.70%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-06-19 11:42:46

End at: 2018-06-19 11:43:16

Local clock offset: -0.881 ms

Remote clock offset: 0.723 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 35.507 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 35.515 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 35.480 ms

Loss rate: 0.40%

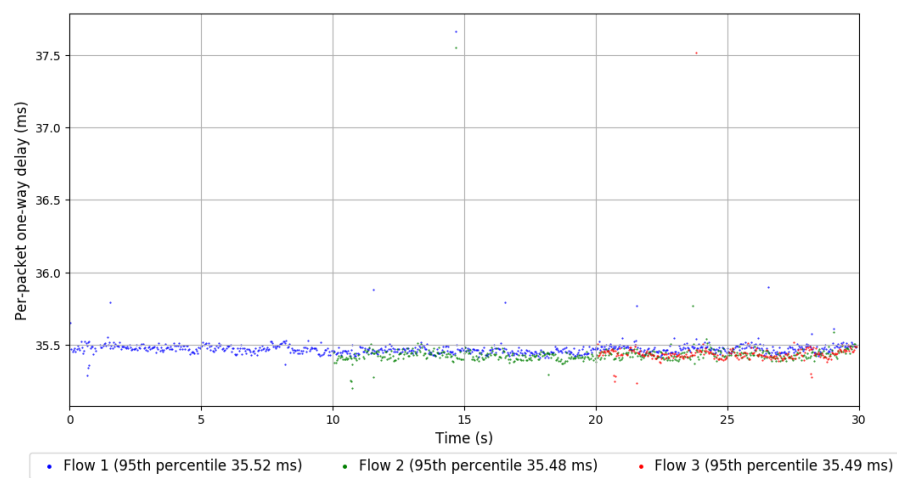
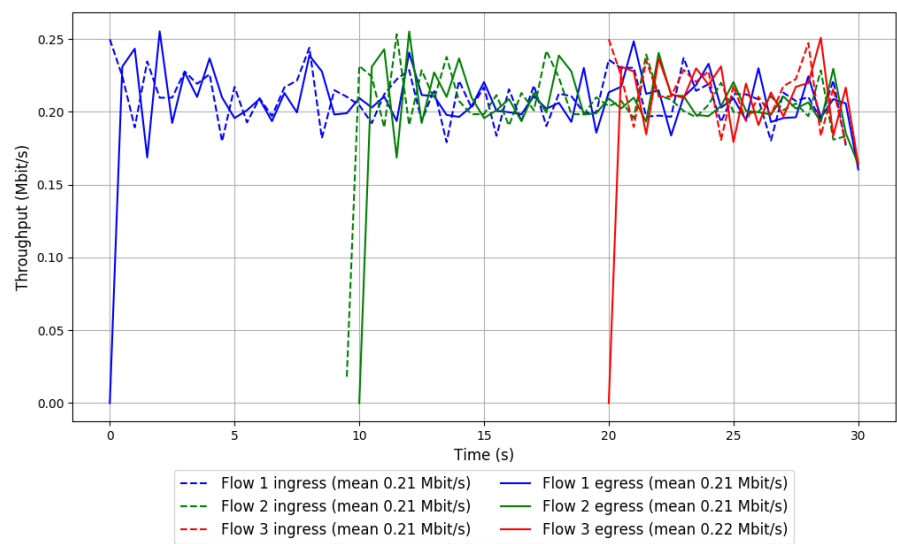
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 35.486 ms

Loss rate: 0.71%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-06-19 12:04:51

End at: 2018-06-19 12:05:21

Local clock offset: -1.43 ms

Remote clock offset: 1.629 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 35.366 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 35.376 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 33.960 ms

Loss rate: 0.39%

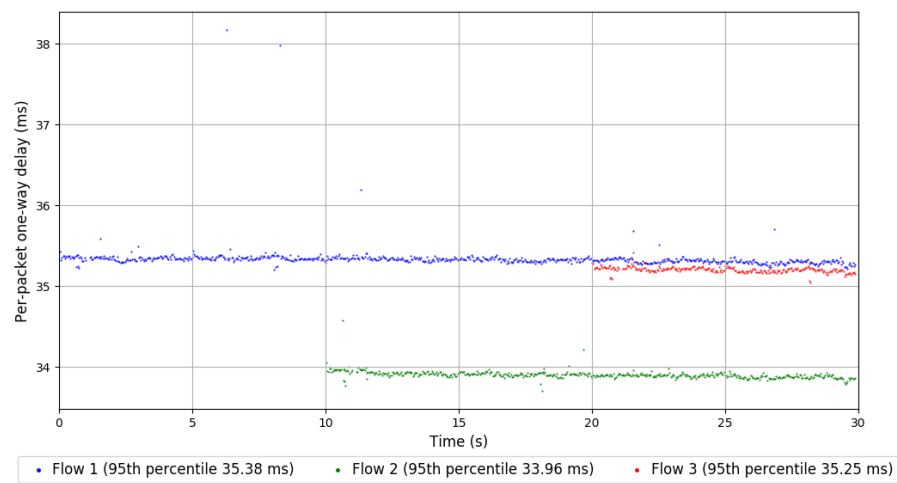
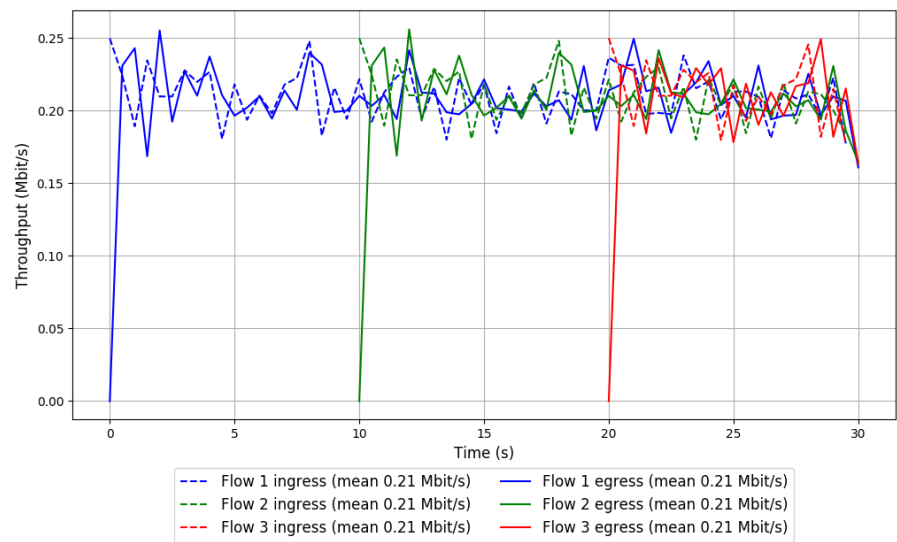
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 35.246 ms

Loss rate: 0.71%

Run 9: Report of SCReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2018-06-19 12:26:51

End at: 2018-06-19 12:27:21

Local clock offset: 0.703 ms

Remote clock offset: 2.21 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 35.447 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 34.139 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 35.465 ms

Loss rate: 0.39%

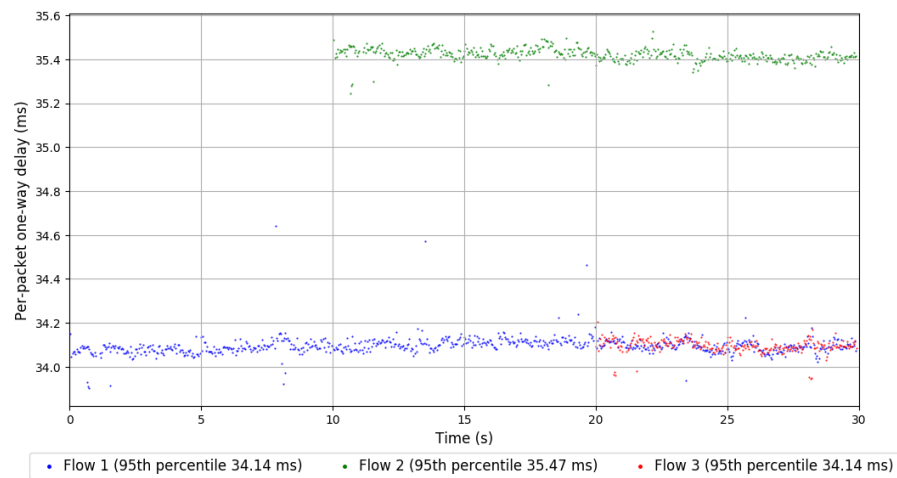
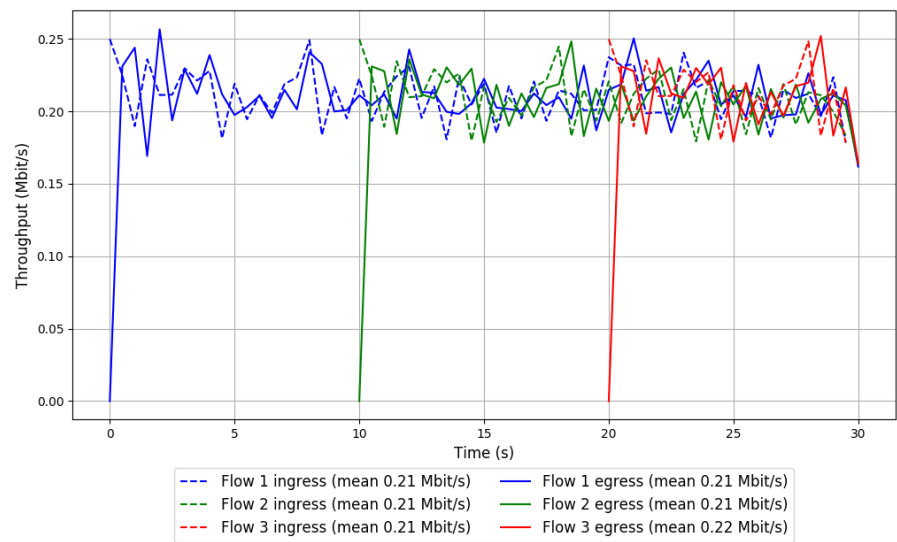
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 34.137 ms

Loss rate: 0.71%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-06-19 09:17:39

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

Local clock offset: -2.488 ms

Remote clock offset: 2.828 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.93 Mbit/s

95th percentile per-packet one-way delay: 44.347 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 10.01 Mbit/s

95th percentile per-packet one-way delay: 43.773 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 10.19 Mbit/s

95th percentile per-packet one-way delay: 44.145 ms

Loss rate: 0.22%

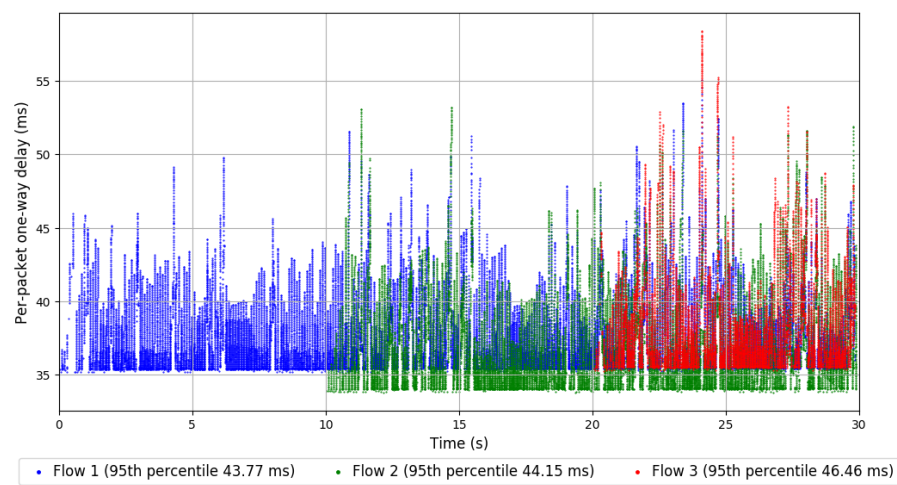
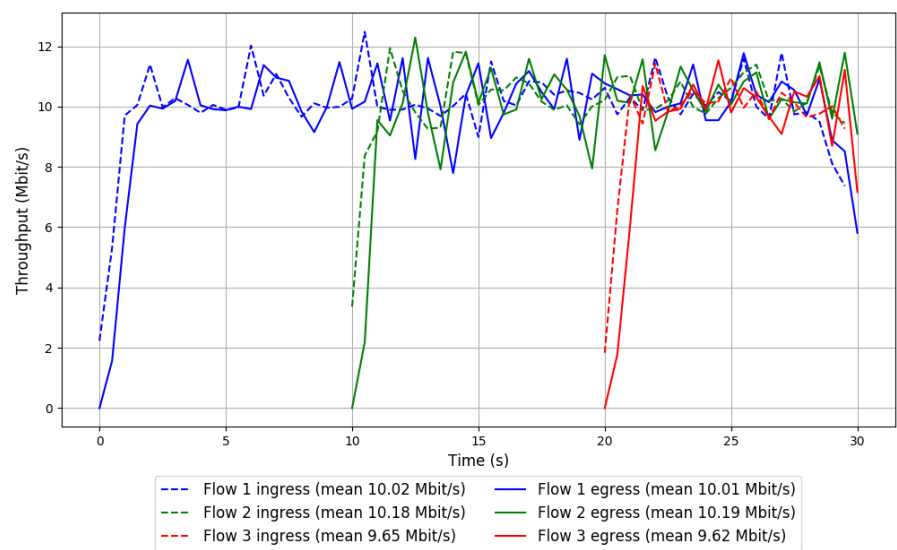
-- Flow 3:

Average throughput: 9.62 Mbit/s

95th percentile per-packet one-way delay: 46.464 ms

Loss rate: 1.19%

Run 1: Report of Sprout — Data Link

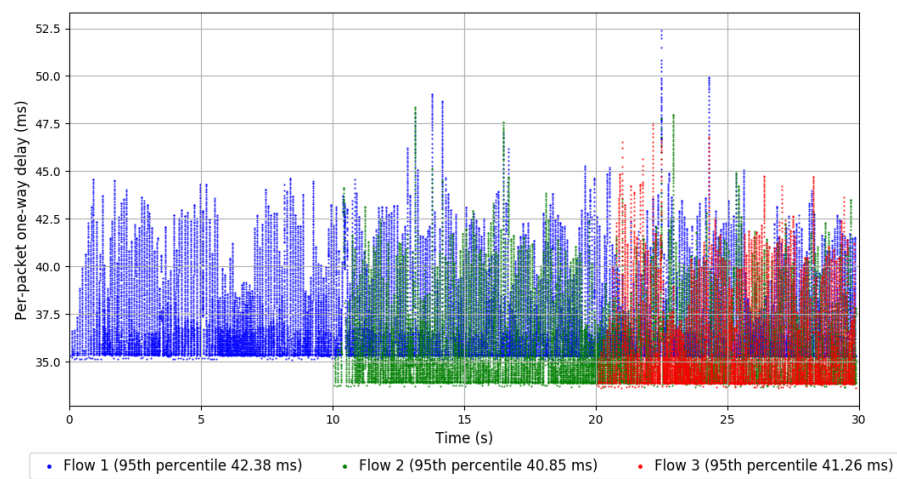
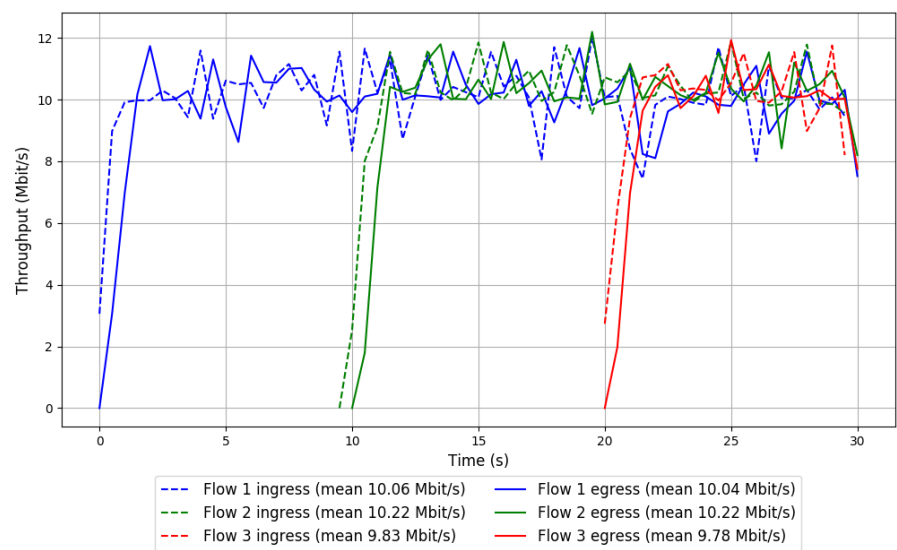


Run 2: Statistics of Sprout

Start at: 2018-06-19 09:41:20
End at: 2018-06-19 09:41:50
Local clock offset: -1.239 ms
Remote clock offset: 3.246 ms

Below is generated by plot.py at 2018-06-19 13:04:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 20.05 Mbit/s
95th percentile per-packet one-way delay: 41.894 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 10.04 Mbit/s
95th percentile per-packet one-way delay: 42.379 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 40.854 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 9.78 Mbit/s
95th percentile per-packet one-way delay: 41.264 ms
Loss rate: 1.28%

Run 2: Report of Sprout — Data Link

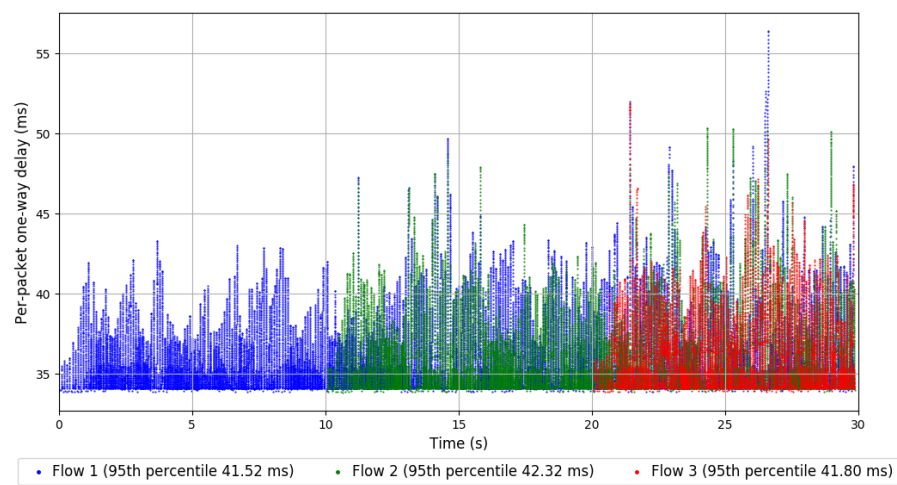
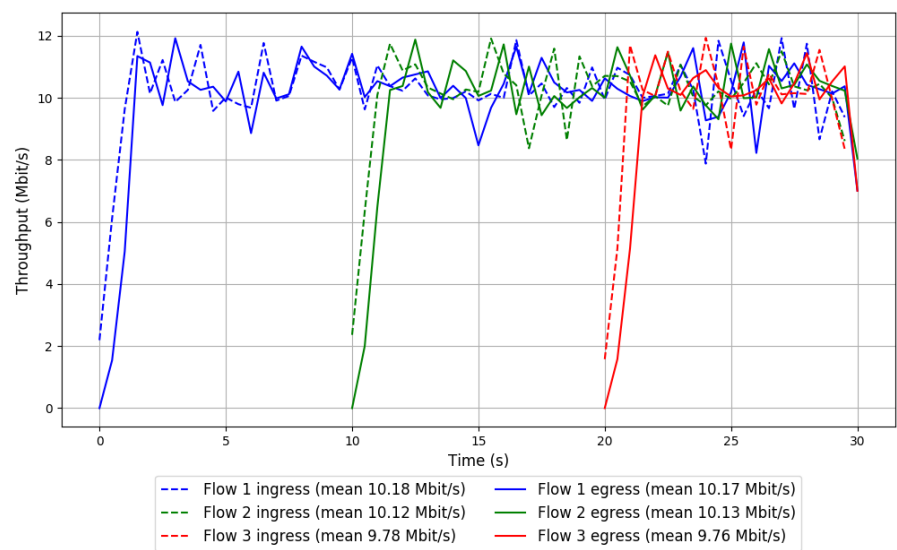


Run 3: Statistics of Sprout

Start at: 2018-06-19 10:04:39
End at: 2018-06-19 10:05:09
Local clock offset: 0.564 ms
Remote clock offset: 3.82 ms

```
# Below is generated by plot.py at 2018-06-19 13:04:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.11 Mbit/s
95th percentile per-packet one-way delay: 41.800 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 10.17 Mbit/s
95th percentile per-packet one-way delay: 41.525 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 10.13 Mbit/s
95th percentile per-packet one-way delay: 42.316 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 41.797 ms
Loss rate: 0.82%
```

Run 3: Report of Sprout — Data Link

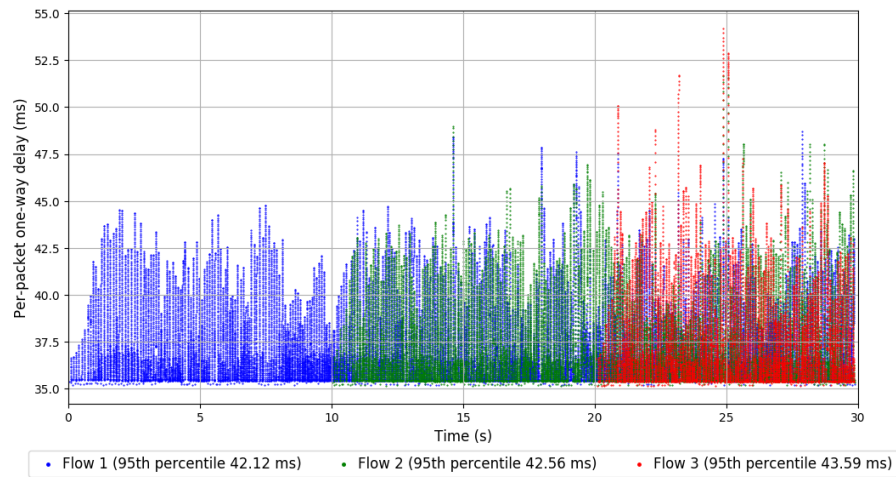
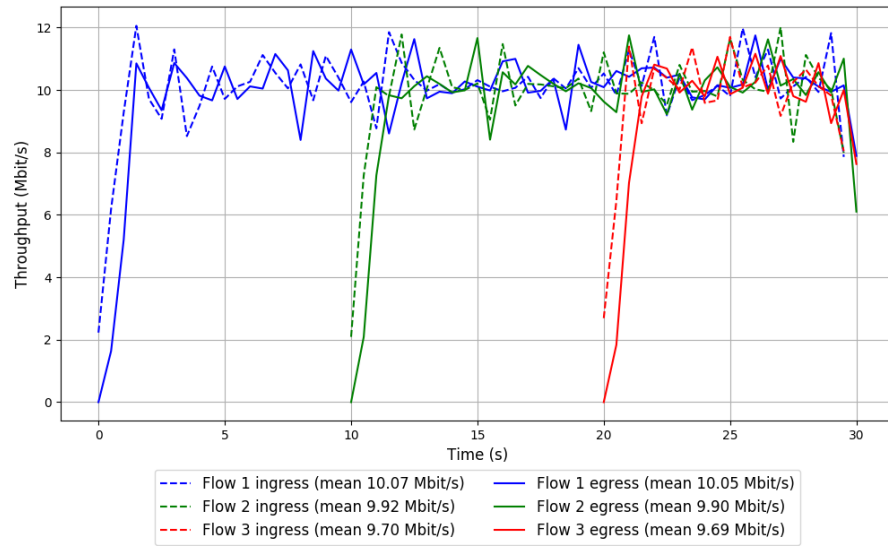


Run 4: Statistics of Sprout

Start at: 2018-06-19 10:26:51
End at: 2018-06-19 10:27:21
Local clock offset: 0.484 ms
Remote clock offset: 2.709 ms

```
# Below is generated by plot.py at 2018-06-19 13:04:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.82 Mbit/s
95th percentile per-packet one-way delay: 42.459 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 10.05 Mbit/s
95th percentile per-packet one-way delay: 42.118 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 42.561 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 43.595 ms
Loss rate: 0.99%
```

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-06-19 10:48:53

End at: 2018-06-19 10:49:23

Local clock offset: 0.502 ms

Remote clock offset: 2.219 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.31 Mbit/s

95th percentile per-packet one-way delay: 42.935 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 10.37 Mbit/s

95th percentile per-packet one-way delay: 42.498 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 10.11 Mbit/s

95th percentile per-packet one-way delay: 43.725 ms

Loss rate: 0.14%

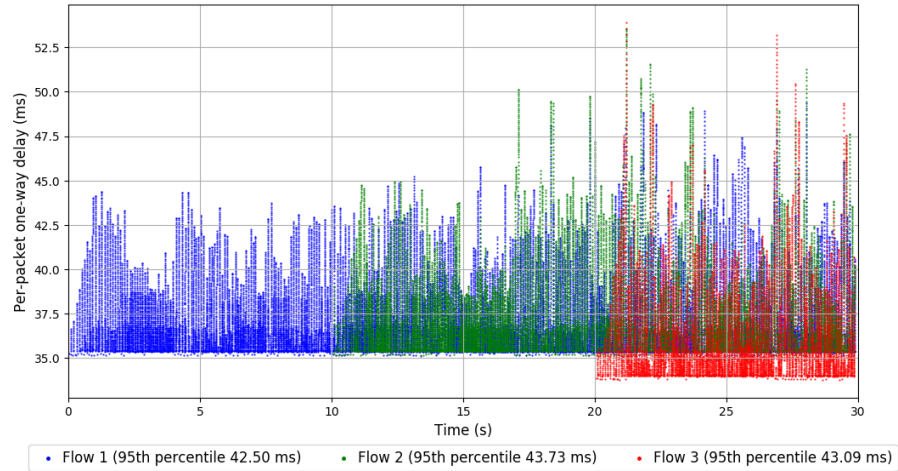
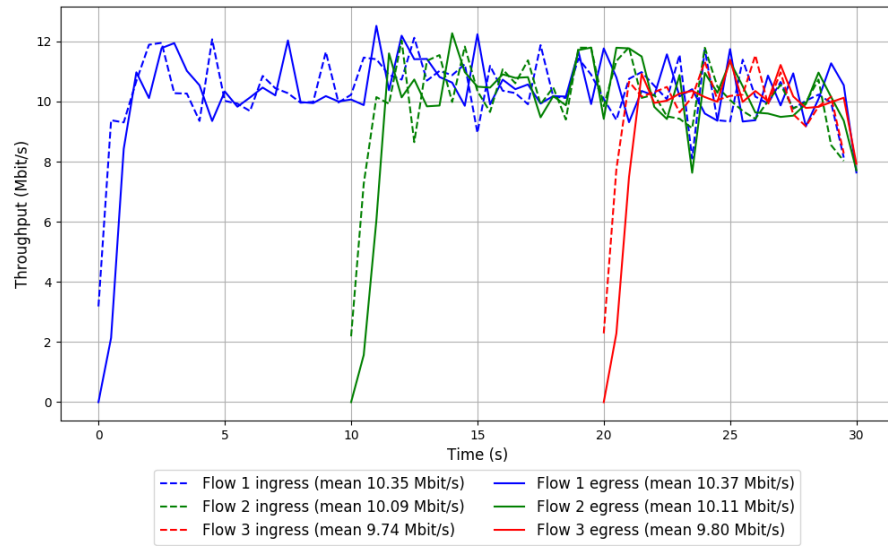
-- Flow 3:

Average throughput: 9.80 Mbit/s

95th percentile per-packet one-way delay: 43.087 ms

Loss rate: 0.24%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-06-19 11:11:16

End at: 2018-06-19 11:11:46

Local clock offset: 0.379 ms

Remote clock offset: 1.331 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.36 Mbit/s

95th percentile per-packet one-way delay: 42.739 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 10.18 Mbit/s

95th percentile per-packet one-way delay: 42.635 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 10.34 Mbit/s

95th percentile per-packet one-way delay: 43.184 ms

Loss rate: 0.57%

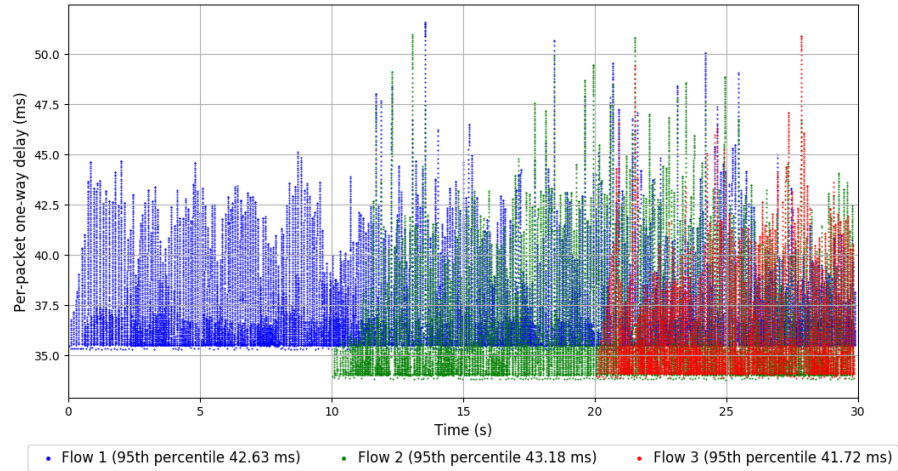
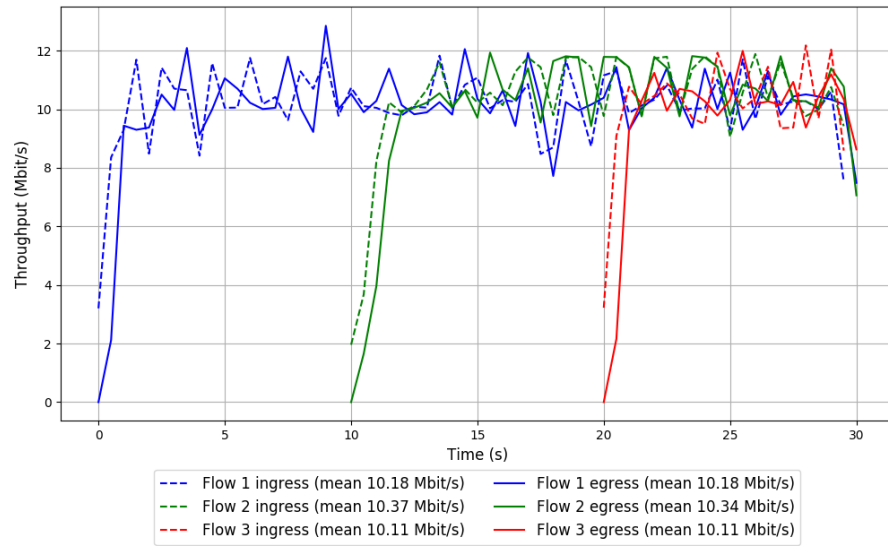
-- Flow 3:

Average throughput: 10.11 Mbit/s

95th percentile per-packet one-way delay: 41.724 ms

Loss rate: 0.95%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-06-19 11:33:07

End at: 2018-06-19 11:33:37

Local clock offset: 0.257 ms

Remote clock offset: 0.954 ms

Below is generated by plot.py at 2018-06-19 13:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.60 Mbit/s

95th percentile per-packet one-way delay: 41.777 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 41.562 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 10.38 Mbit/s

95th percentile per-packet one-way delay: 42.174 ms

Loss rate: 0.47%

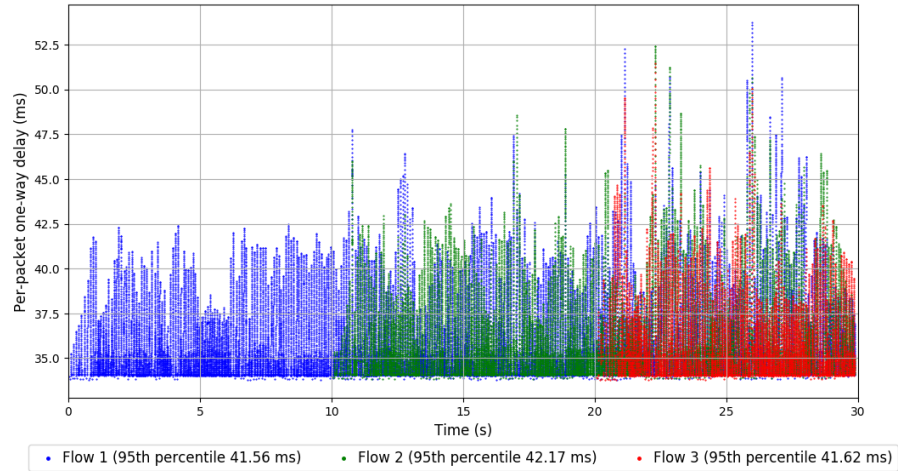
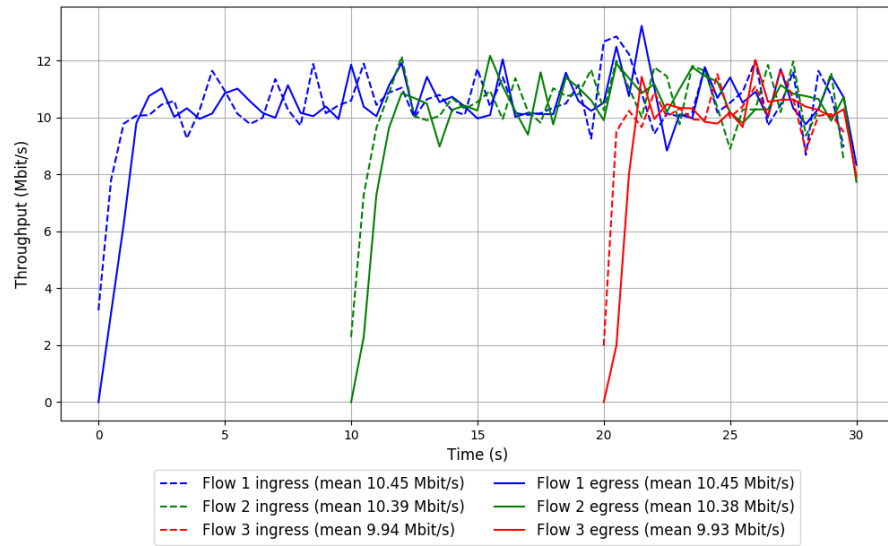
-- Flow 3:

Average throughput: 9.93 Mbit/s

95th percentile per-packet one-way delay: 41.615 ms

Loss rate: 0.84%

Run 7: Report of Sprout — Data Link

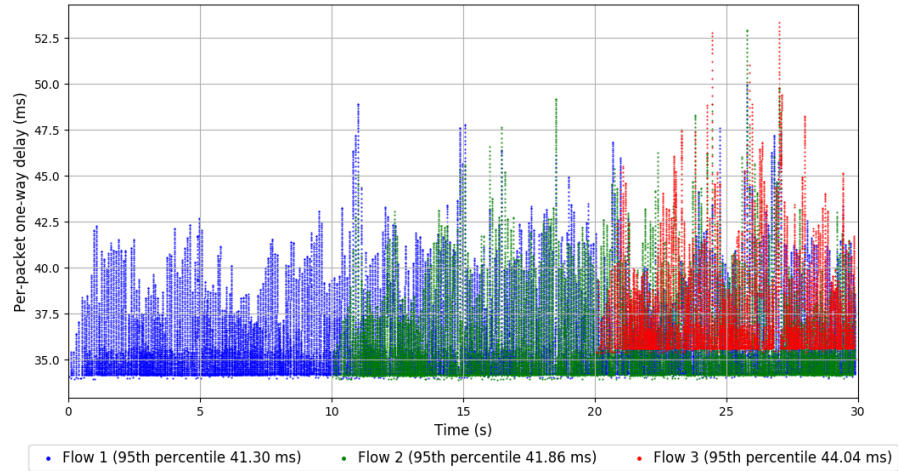
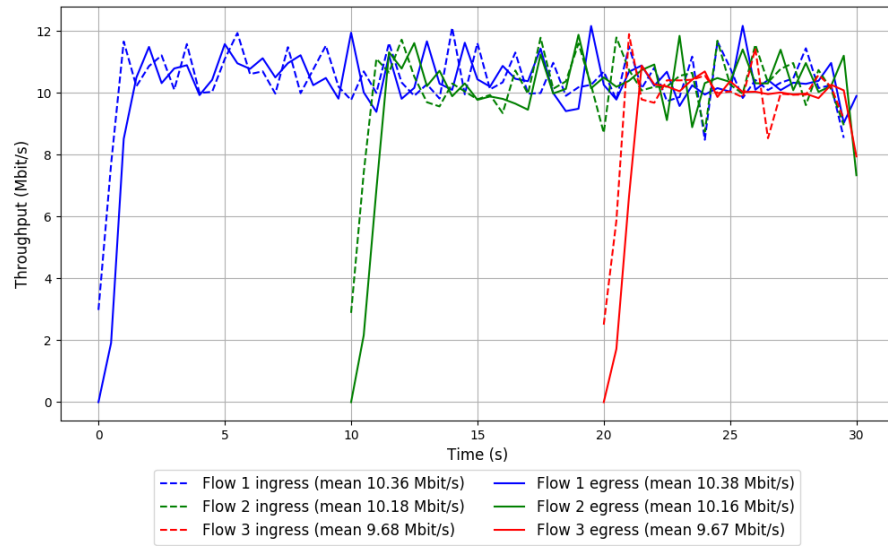


Run 8: Statistics of Sprout

Start at: 2018-06-19 11:55:15
End at: 2018-06-19 11:55:45
Local clock offset: -1.428 ms
Remote clock offset: 0.817 ms

Below is generated by plot.py at 2018-06-19 13:04:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 20.30 Mbit/s
95th percentile per-packet one-way delay: 42.019 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 41.295 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 10.16 Mbit/s
95th percentile per-packet one-way delay: 41.864 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 9.67 Mbit/s
95th percentile per-packet one-way delay: 44.040 ms
Loss rate: 1.02%

Run 8: Report of Sprout — Data Link

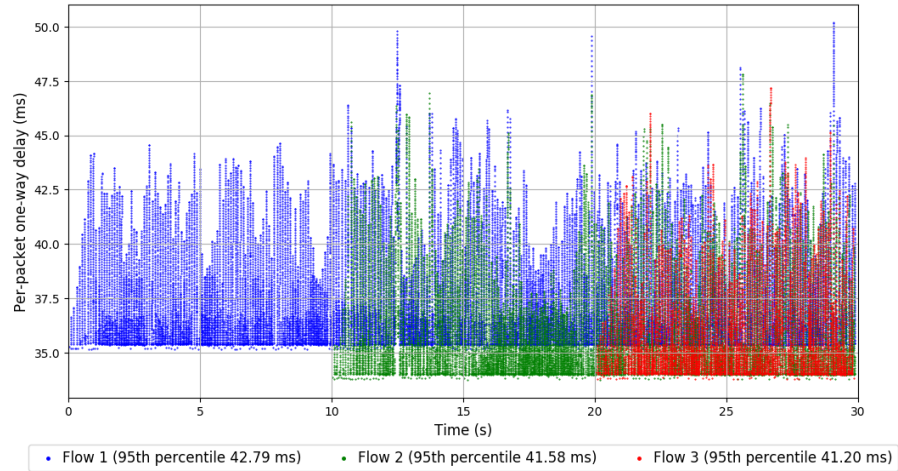
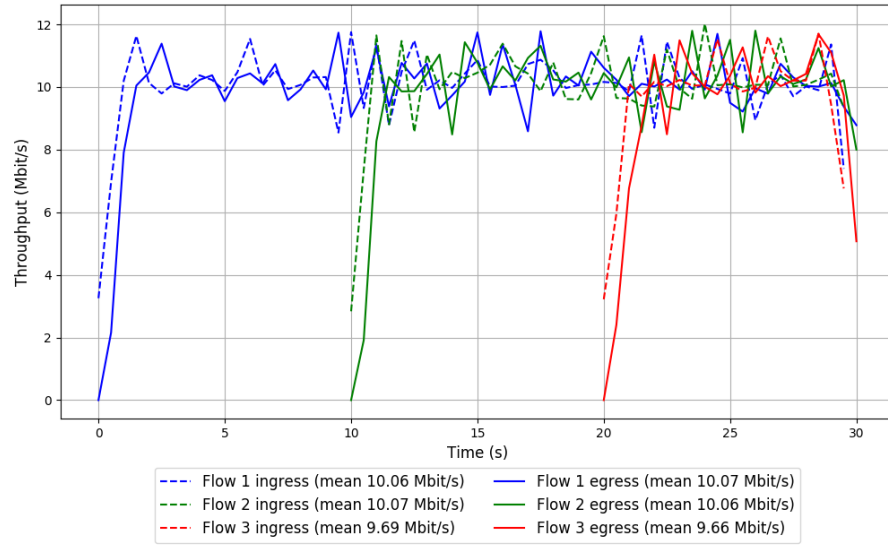


Run 9: Statistics of Sprout

Start at: 2018-06-19 12:17:07
End at: 2018-06-19 12:17:37
Local clock offset: 0.227 ms
Remote clock offset: 2.135 ms

Below is generated by plot.py at 2018-06-19 13:04:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.92 Mbit/s
95th percentile per-packet one-way delay: 42.327 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 10.07 Mbit/s
95th percentile per-packet one-way delay: 42.793 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 10.06 Mbit/s
95th percentile per-packet one-way delay: 41.583 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 41.197 ms
Loss rate: 1.14%

Run 9: Report of Sprout — Data Link

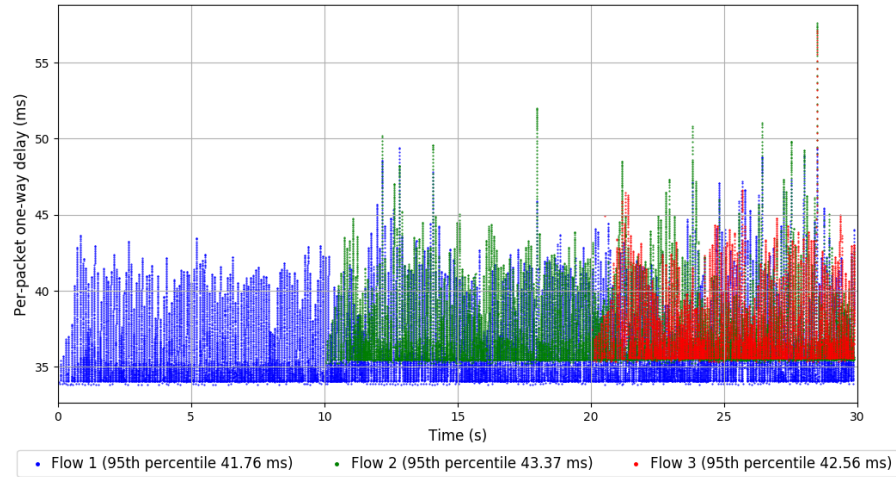
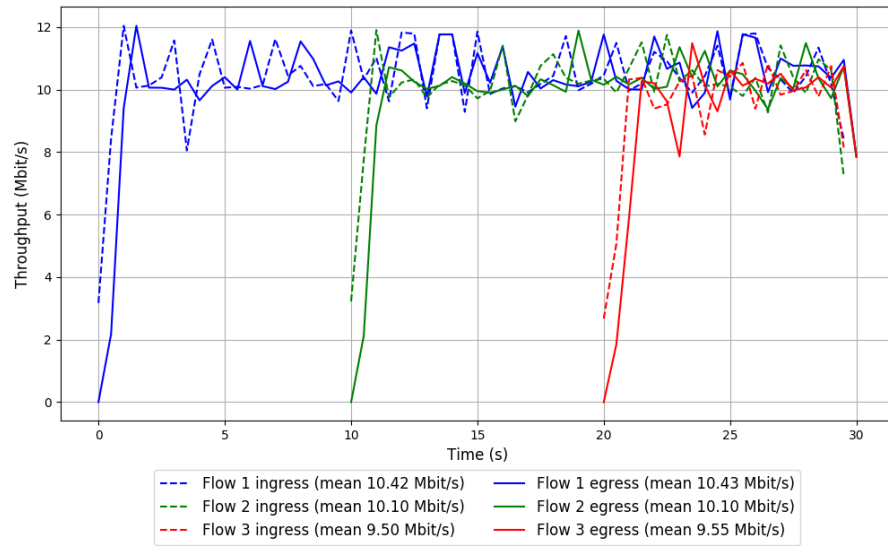


Run 10: Statistics of Sprout

Start at: 2018-06-19 12:39:04
End at: 2018-06-19 12:39:34
Local clock offset: 0.662 ms
Remote clock offset: 3.077 ms

Below is generated by plot.py at 2018-06-19 13:04:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 20.28 Mbit/s
95th percentile per-packet one-way delay: 42.466 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 10.43 Mbit/s
95th percentile per-packet one-way delay: 41.757 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 10.10 Mbit/s
95th percentile per-packet one-way delay: 43.373 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 42.564 ms
Loss rate: 0.15%

Run 10: Report of Sprout — Data Link

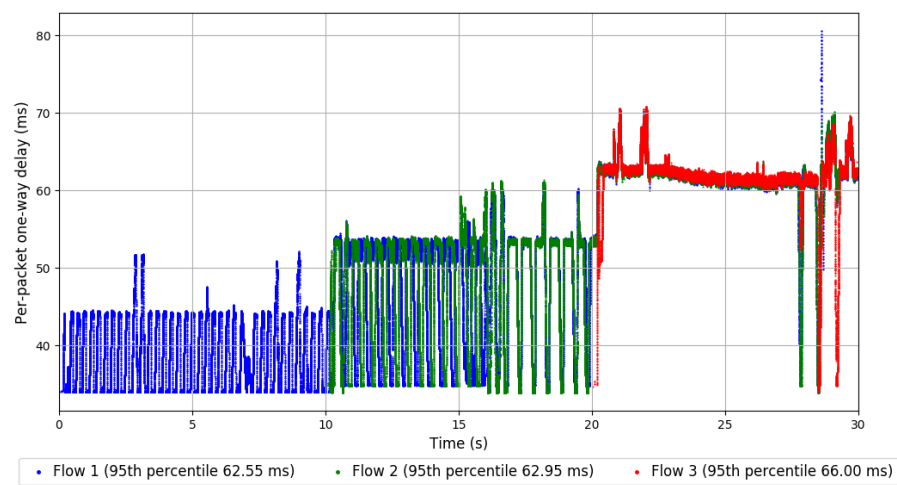
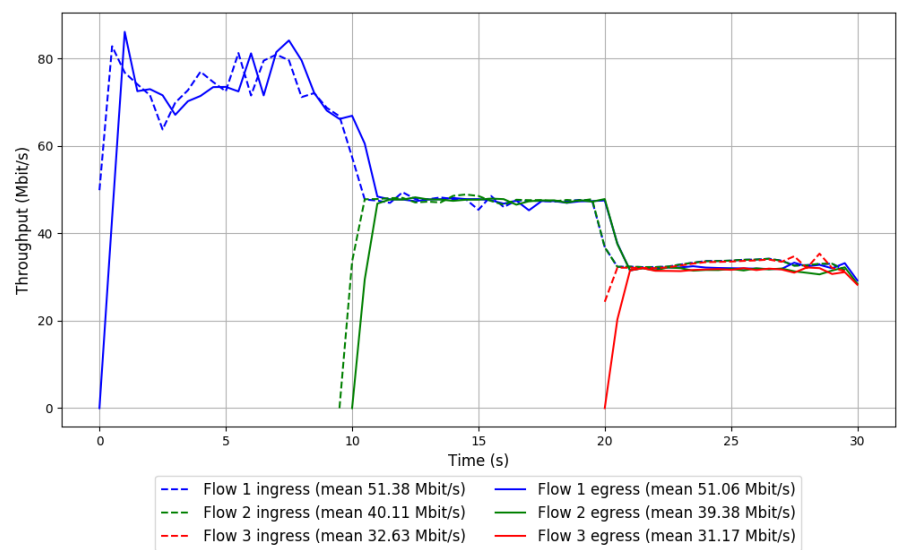


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-19 09:02:59
End at: 2018-06-19 09:03:29
Local clock offset: 0.119 ms
Remote clock offset: 2.68 ms

# Below is generated by plot.py at 2018-06-19 13:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.59 Mbit/s
95th percentile per-packet one-way delay: 62.923 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 51.06 Mbit/s
95th percentile per-packet one-way delay: 62.554 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 62.947 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 31.17 Mbit/s
95th percentile per-packet one-way delay: 66.000 ms
Loss rate: 5.25%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-06-19 09:26:05

End at: 2018-06-19 09:26:35

Local clock offset: -3.054 ms

Remote clock offset: 3.012 ms

Below is generated by plot.py at 2018-06-19 13:06:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 73.309 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 54.88 Mbit/s

95th percentile per-packet one-way delay: 55.025 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 73.843 ms

Loss rate: 1.11%

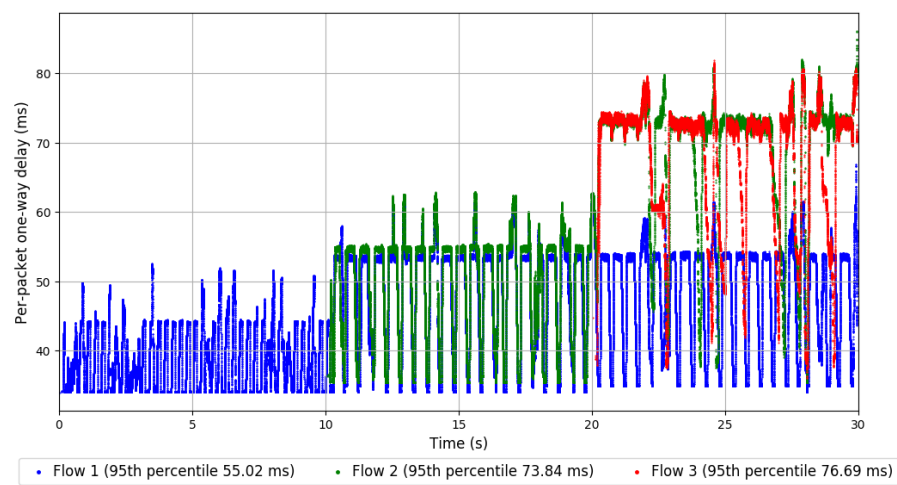
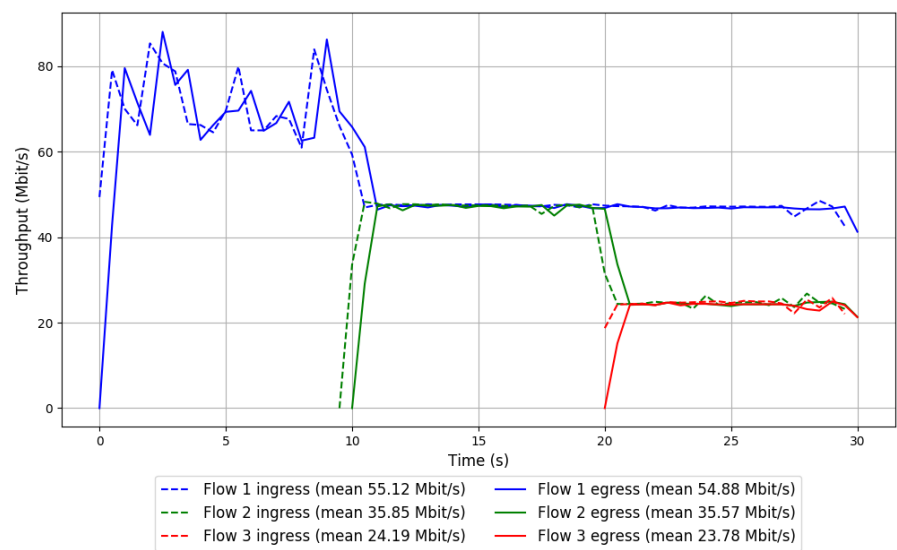
-- Flow 3:

Average throughput: 23.78 Mbit/s

95th percentile per-packet one-way delay: 76.686 ms

Loss rate: 2.47%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-06-19 09:49:57

End at: 2018-06-19 09:50:27

Local clock offset: -0.083 ms

Remote clock offset: 3.553 ms

Below is generated by plot.py at 2018-06-19 13:06:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.19 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 52.65 Mbit/s

95th percentile per-packet one-way delay: 62.433 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 39.42 Mbit/s

95th percentile per-packet one-way delay: 63.949 ms

Loss rate: 1.21%

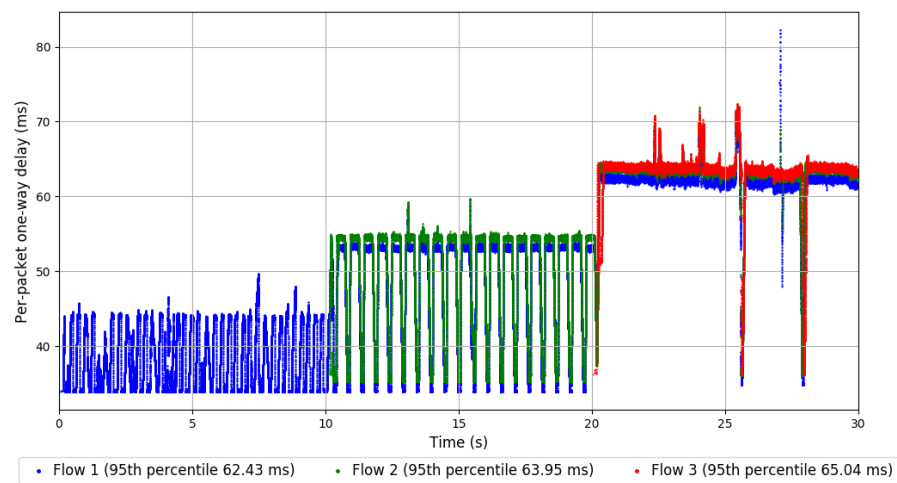
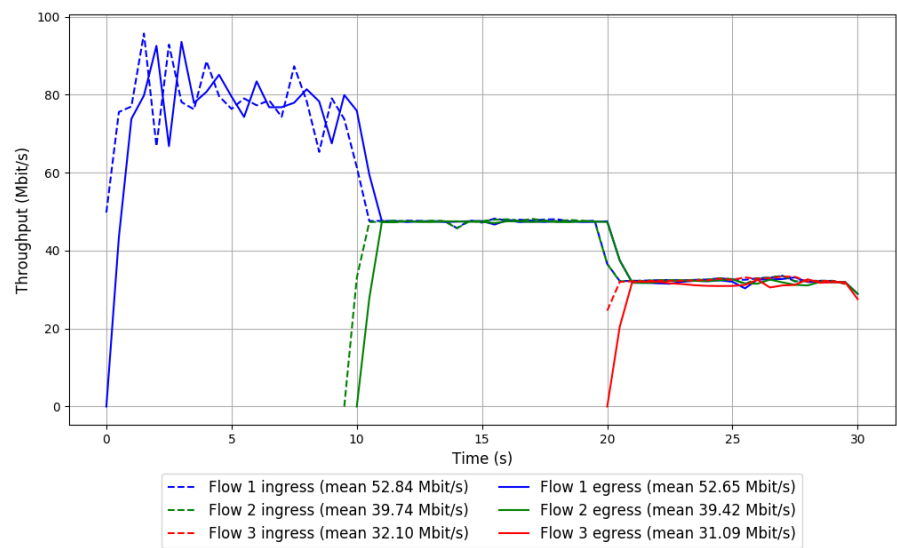
-- Flow 3:

Average throughput: 31.09 Mbit/s

95th percentile per-packet one-way delay: 65.043 ms

Loss rate: 3.95%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-06-19 10:13:01

End at: 2018-06-19 10:13:31

Local clock offset: 0.332 ms

Remote clock offset: 3.744 ms

Below is generated by plot.py at 2018-06-19 13:06:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.50 Mbit/s

95th percentile per-packet one-way delay: 63.804 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 49.92 Mbit/s

95th percentile per-packet one-way delay: 62.658 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 39.32 Mbit/s

95th percentile per-packet one-way delay: 62.782 ms

Loss rate: 1.01%

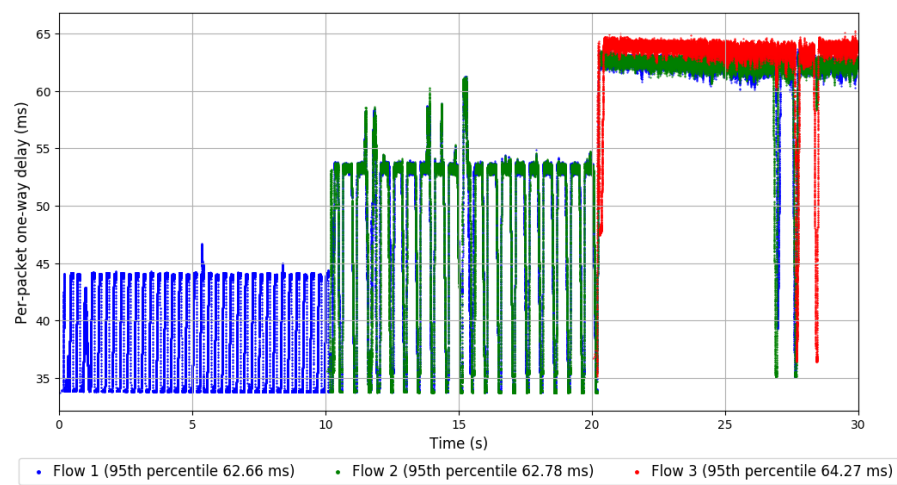
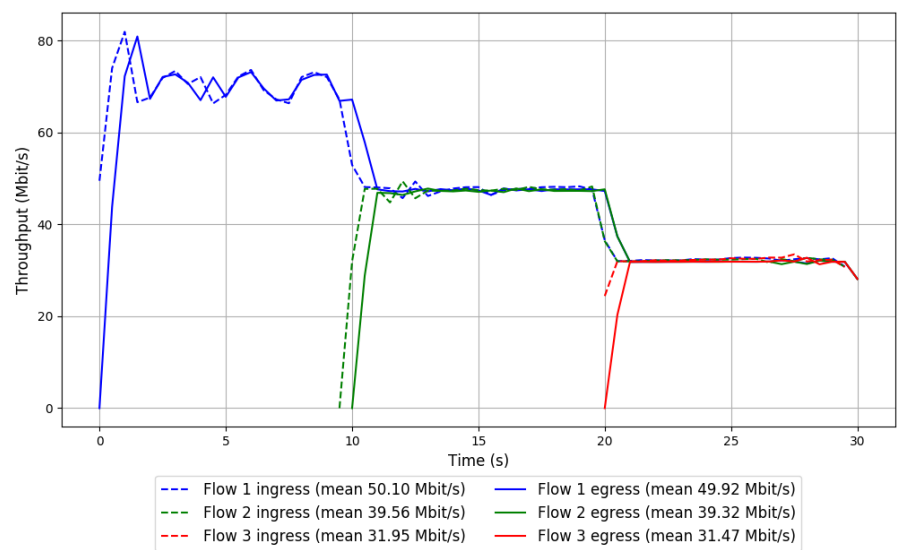
-- Flow 3:

Average throughput: 31.47 Mbit/s

95th percentile per-packet one-way delay: 64.274 ms

Loss rate: 2.33%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-06-19 10:35:00

End at: 2018-06-19 10:35:30

Local clock offset: 0.534 ms

Remote clock offset: 2.486 ms

Below is generated by plot.py at 2018-06-19 13:06:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.56 Mbit/s

95th percentile per-packet one-way delay: 71.592 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 47.45 Mbit/s

95th percentile per-packet one-way delay: 71.483 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 35.76 Mbit/s

95th percentile per-packet one-way delay: 71.927 ms

Loss rate: 1.09%

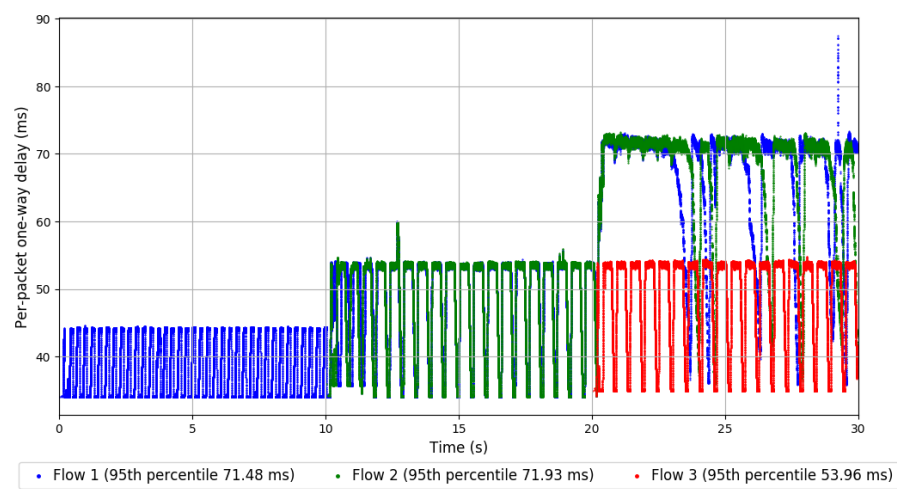
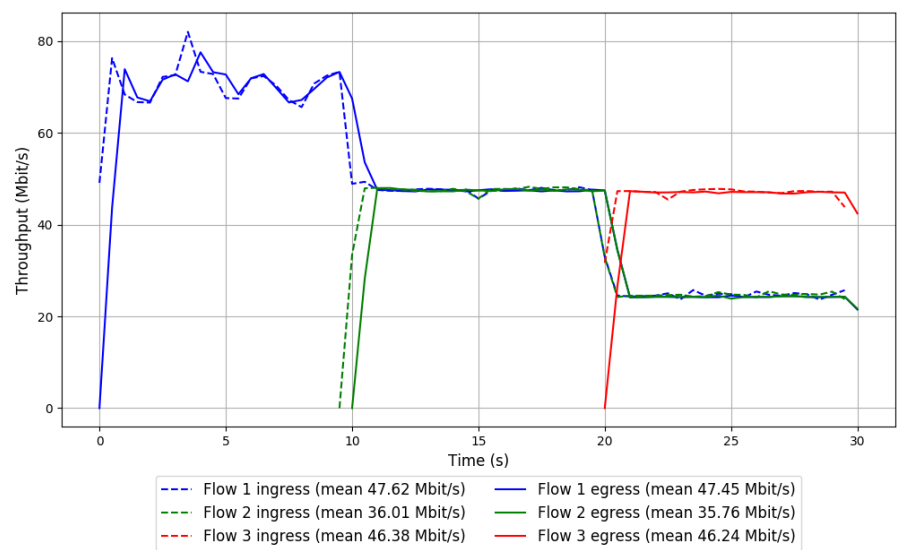
-- Flow 3:

Average throughput: 46.24 Mbit/s

95th percentile per-packet one-way delay: 53.959 ms

Loss rate: 0.99%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-06-19 10:57:08

End at: 2018-06-19 10:57:38

Local clock offset: 0.533 ms

Remote clock offset: 1.763 ms

Below is generated by plot.py at 2018-06-19 13:06:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.39 Mbit/s

95th percentile per-packet one-way delay: 71.520 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 54.72 Mbit/s

95th percentile per-packet one-way delay: 53.579 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 35.68 Mbit/s

95th percentile per-packet one-way delay: 71.835 ms

Loss rate: 1.23%

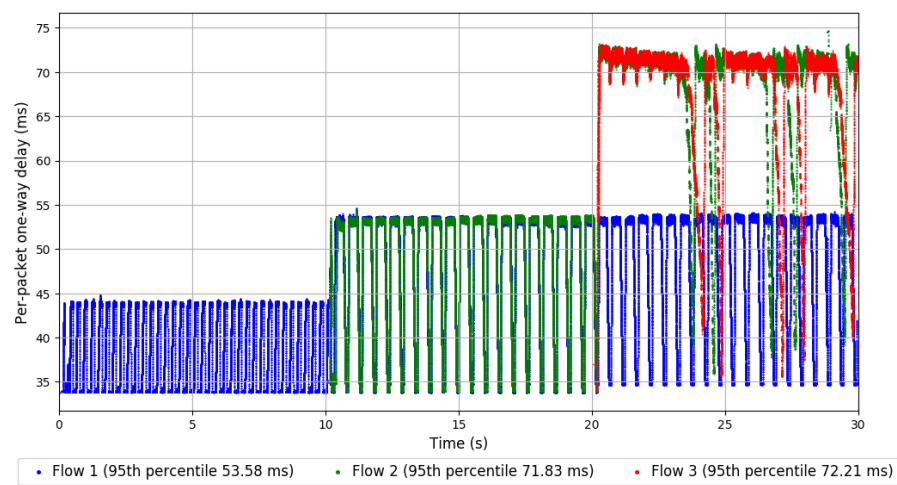
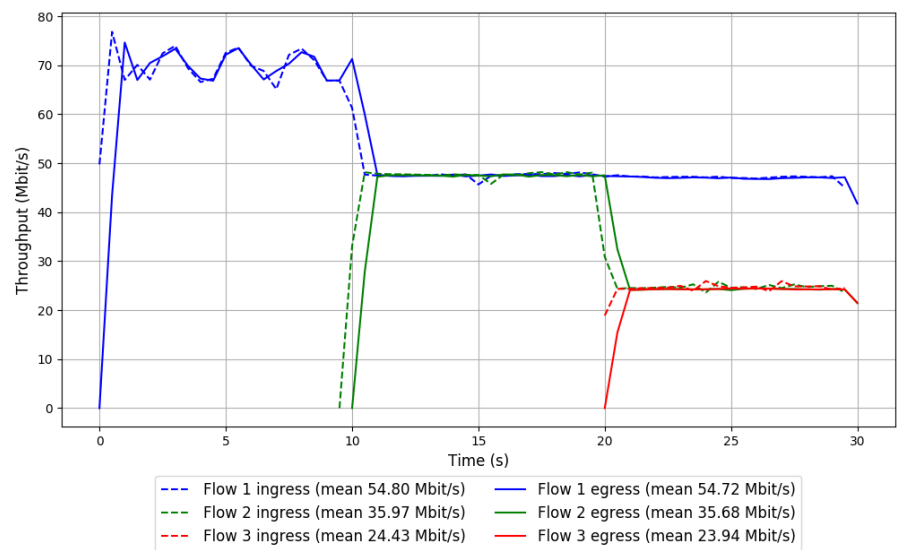
-- Flow 3:

Average throughput: 23.94 Mbit/s

95th percentile per-packet one-way delay: 72.212 ms

Loss rate: 2.86%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-06-19 11:19:23

End at: 2018-06-19 11:19:53

Local clock offset: 0.335 ms

Remote clock offset: 1.18 ms

Below is generated by plot.py at 2018-06-19 13:06:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.36 Mbit/s

95th percentile per-packet one-way delay: 72.997 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 54.60 Mbit/s

95th percentile per-packet one-way delay: 53.578 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 35.82 Mbit/s

95th percentile per-packet one-way delay: 73.306 ms

Loss rate: 1.15%

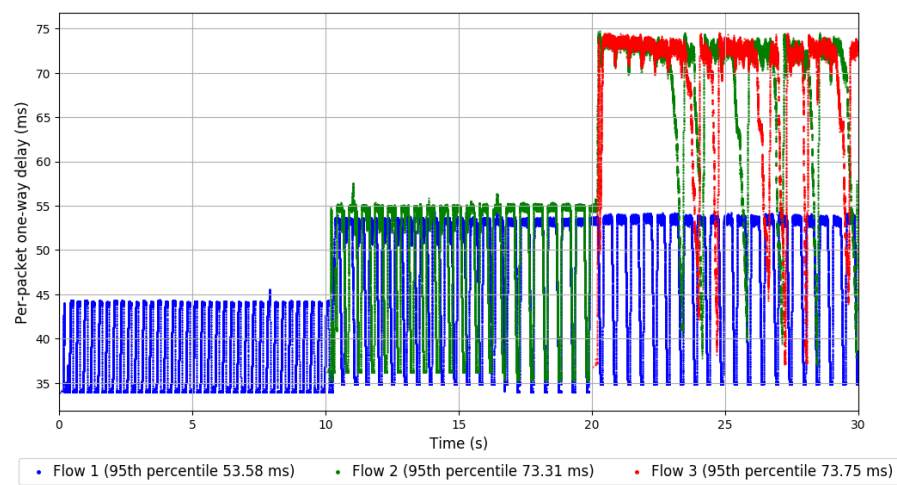
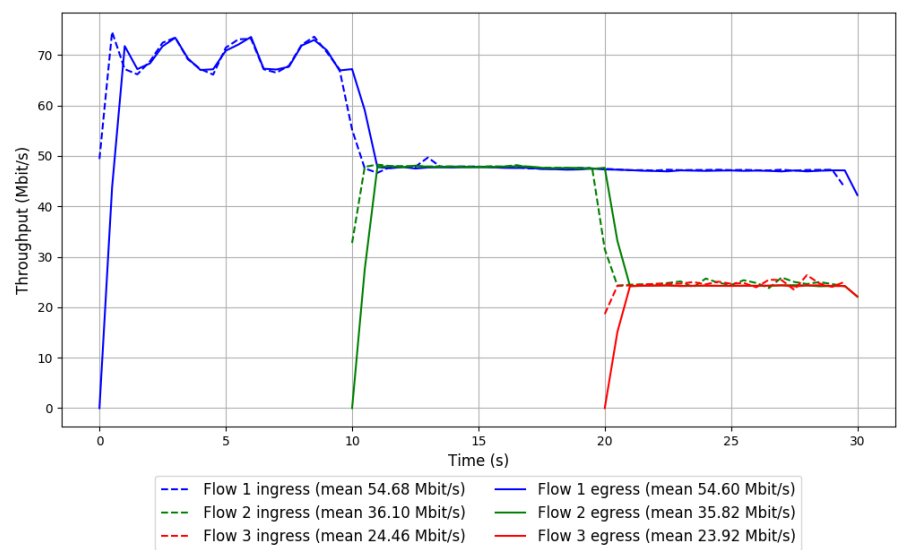
-- Flow 3:

Average throughput: 23.92 Mbit/s

95th percentile per-packet one-way delay: 73.749 ms

Loss rate: 2.91%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-06-19 11:41:20

End at: 2018-06-19 11:41:50

Local clock offset: -0.69 ms

Remote clock offset: 0.773 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.80 Mbit/s

95th percentile per-packet one-way delay: 64.276 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 50.09 Mbit/s

95th percentile per-packet one-way delay: 64.189 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 39.51 Mbit/s

95th percentile per-packet one-way delay: 62.960 ms

Loss rate: 1.11%

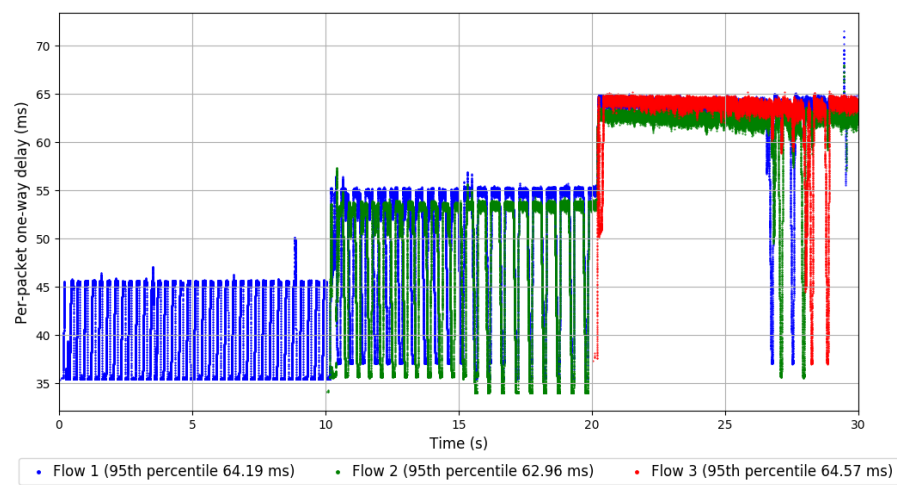
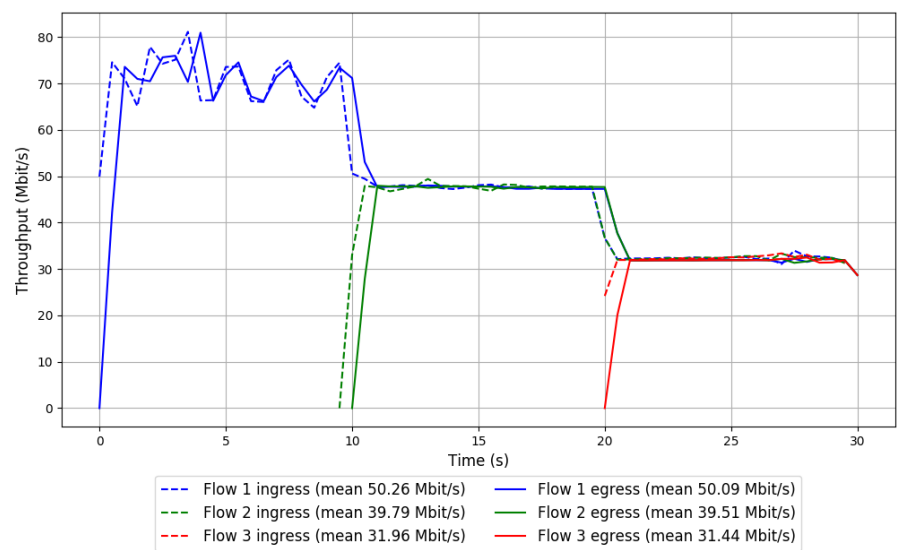
-- Flow 3:

Average throughput: 31.44 Mbit/s

95th percentile per-packet one-way delay: 64.566 ms

Loss rate: 2.46%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-06-19 12:03:25

End at: 2018-06-19 12:03:55

Local clock offset: -1.666 ms

Remote clock offset: 1.584 ms

Below is generated by plot.py at 2018-06-19 13:08:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.39 Mbit/s

95th percentile per-packet one-way delay: 63.973 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 49.63 Mbit/s

95th percentile per-packet one-way delay: 63.926 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 39.26 Mbit/s

95th percentile per-packet one-way delay: 62.742 ms

Loss rate: 2.23%

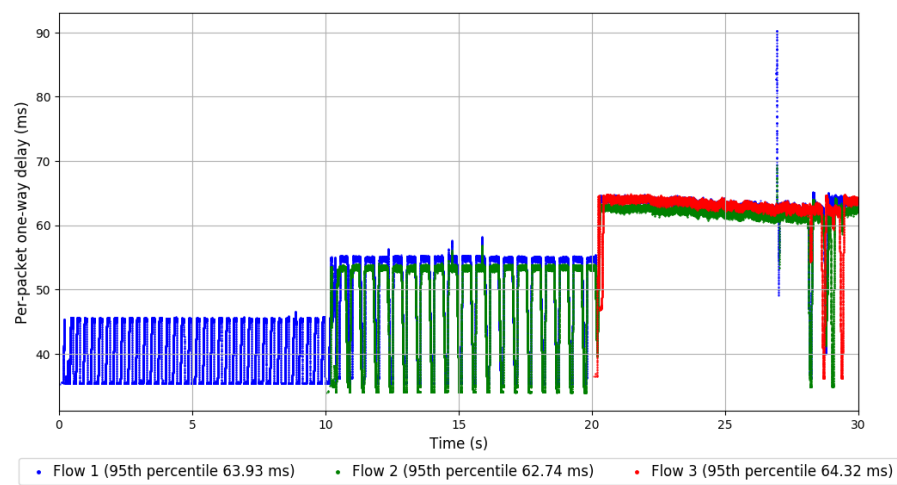
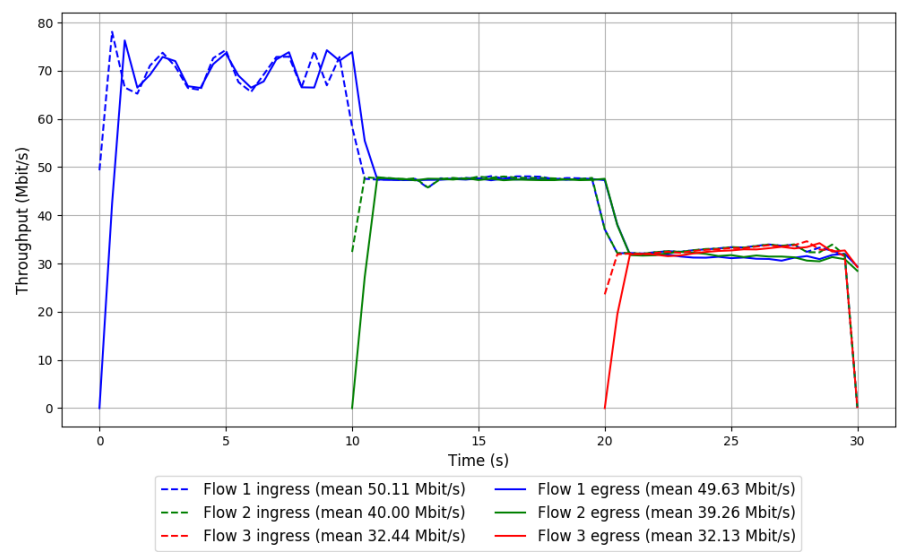
-- Flow 3:

Average throughput: 32.13 Mbit/s

95th percentile per-packet one-way delay: 64.318 ms

Loss rate: 1.79%

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

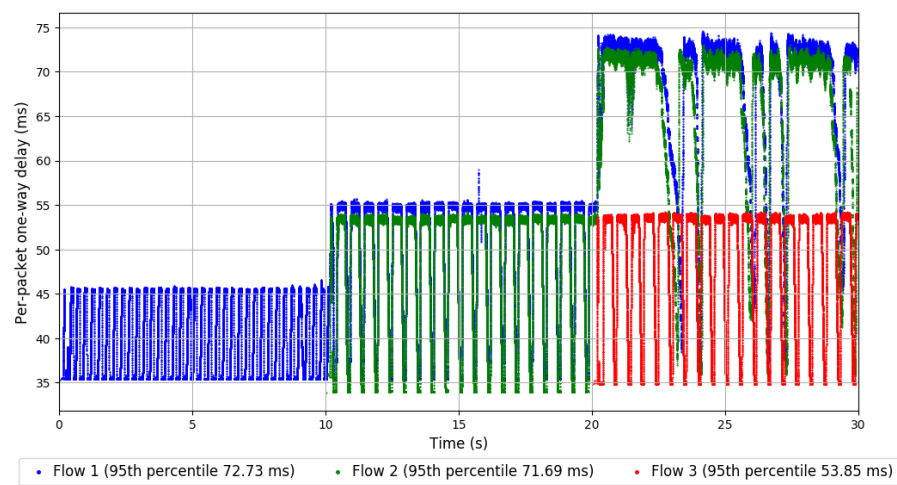
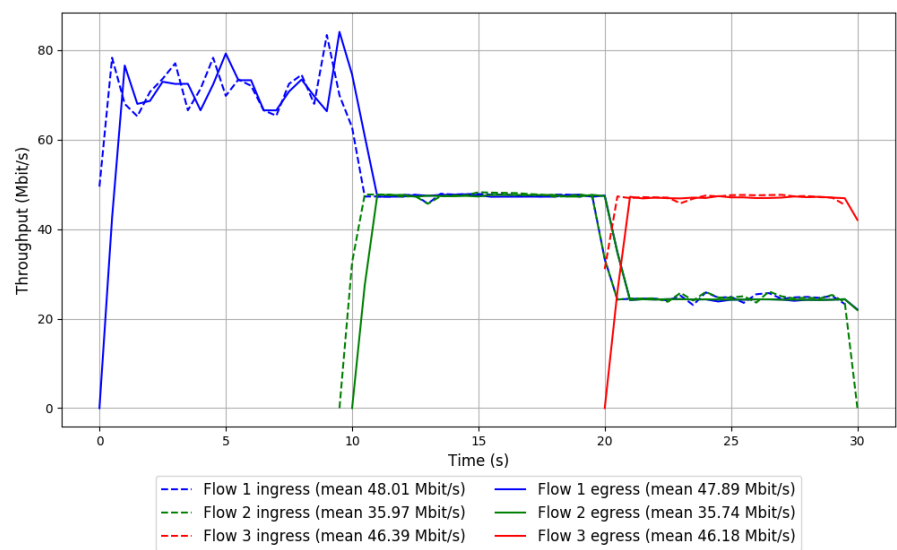


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-19 12:25:26
End at: 2018-06-19 12:25:56
Local clock offset: 0.657 ms
Remote clock offset: 2.235 ms

# Below is generated by plot.py at 2018-06-19 13:08:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.98 Mbit/s
95th percentile per-packet one-way delay: 72.120 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 47.89 Mbit/s
95th percentile per-packet one-way delay: 72.726 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 35.74 Mbit/s
95th percentile per-packet one-way delay: 71.687 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 46.18 Mbit/s
95th percentile per-packet one-way delay: 53.854 ms
Loss rate: 1.22%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-06-19 09:14:45

End at: 2018-06-19 09:15:15

Local clock offset: -2.107 ms

Remote clock offset: 2.735 ms

Below is generated by plot.py at 2018-06-19 13:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.68 Mbit/s

95th percentile per-packet one-way delay: 41.458 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 11.21 Mbit/s

95th percentile per-packet one-way delay: 41.855 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 16.00 Mbit/s

95th percentile per-packet one-way delay: 40.864 ms

Loss rate: 0.34%

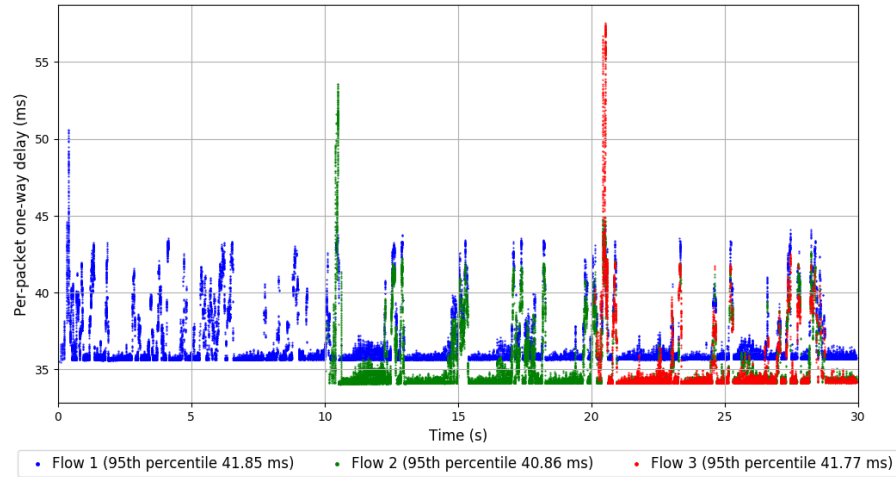
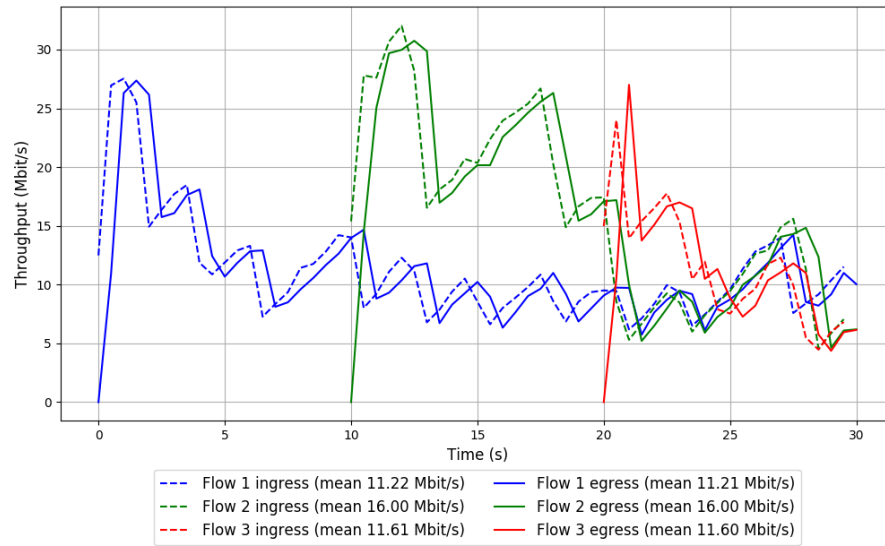
-- Flow 3:

Average throughput: 11.60 Mbit/s

95th percentile per-packet one-way delay: 41.767 ms

Loss rate: 0.82%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-06-19 09:38:01

End at: 2018-06-19 09:38:31

Local clock offset: -2.04 ms

Remote clock offset: 3.224 ms

Below is generated by plot.py at 2018-06-19 13:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.82 Mbit/s

95th percentile per-packet one-way delay: 36.334 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 26.26 Mbit/s

95th percentile per-packet one-way delay: 35.258 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 23.84 Mbit/s

95th percentile per-packet one-way delay: 35.451 ms

Loss rate: 0.45%

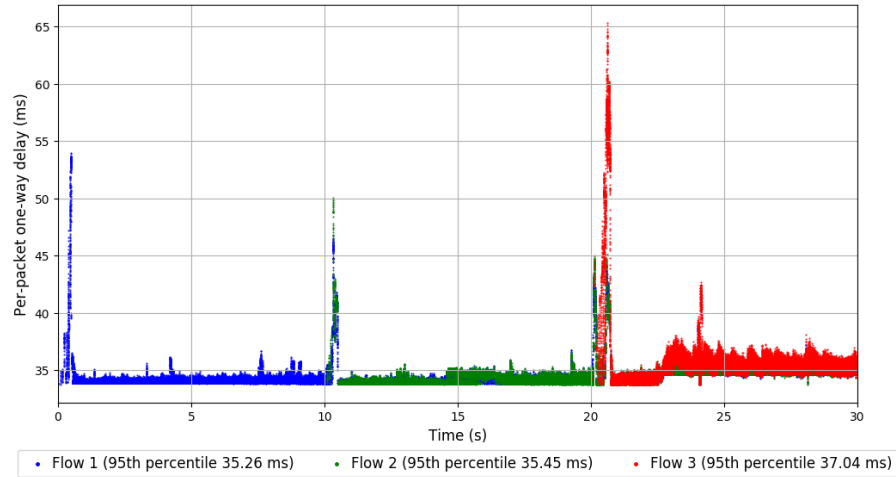
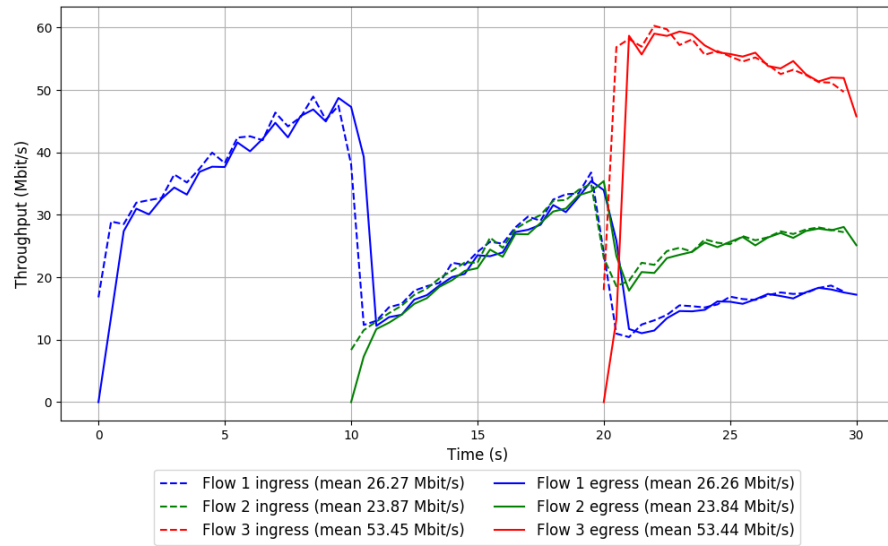
-- Flow 3:

Average throughput: 53.44 Mbit/s

95th percentile per-packet one-way delay: 37.038 ms

Loss rate: 0.68%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-06-19 10:01:33

End at: 2018-06-19 10:02:03

Local clock offset: 0.422 ms

Remote clock offset: 3.728 ms

Below is generated by plot.py at 2018-06-19 13:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.18 Mbit/s

95th percentile per-packet one-way delay: 40.336 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 49.16 Mbit/s

95th percentile per-packet one-way delay: 40.479 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 33.30 Mbit/s

95th percentile per-packet one-way delay: 37.051 ms

Loss rate: 0.22%

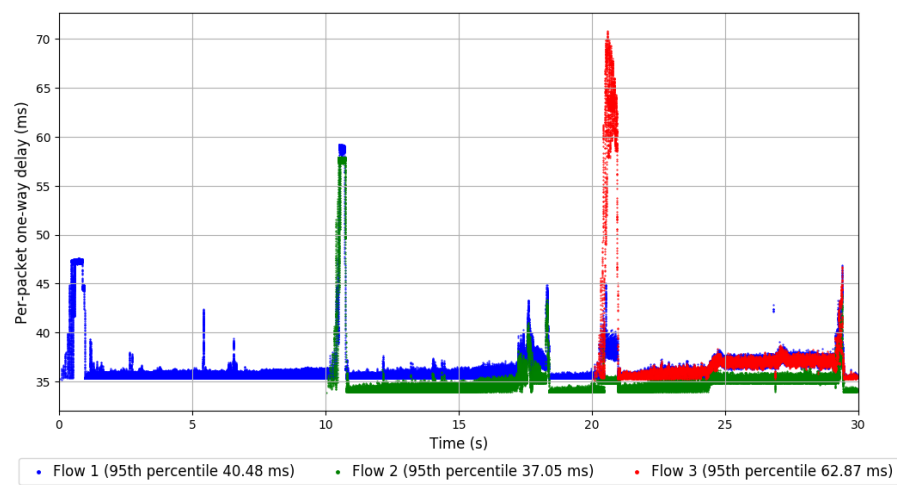
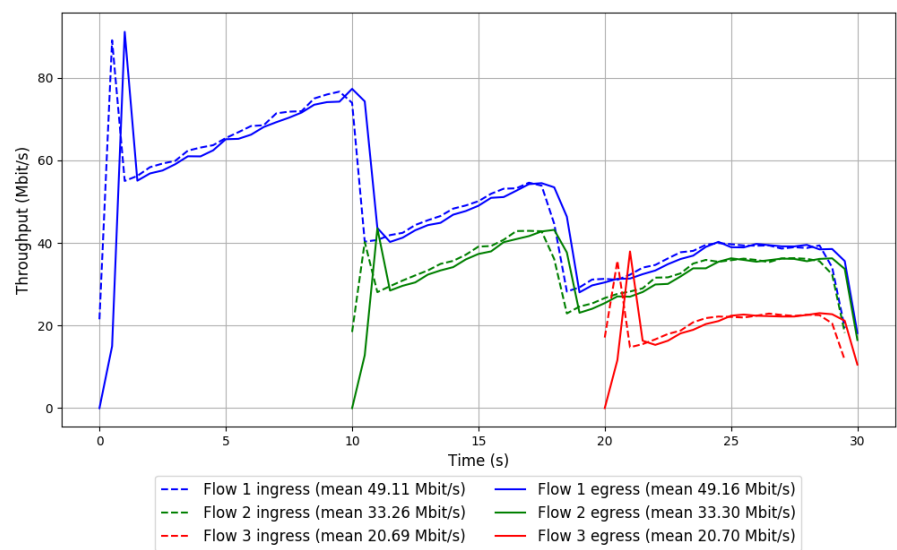
-- Flow 3:

Average throughput: 20.70 Mbit/s

95th percentile per-packet one-way delay: 62.870 ms

Loss rate: 0.63%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-06-19 10:24:01

End at: 2018-06-19 10:24:31

Local clock offset: 0.467 ms

Remote clock offset: 2.832 ms

Below is generated by plot.py at 2018-06-19 13:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.17 Mbit/s

95th percentile per-packet one-way delay: 38.967 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 47.31 Mbit/s

95th percentile per-packet one-way delay: 40.828 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 41.77 Mbit/s

95th percentile per-packet one-way delay: 38.633 ms

Loss rate: 0.40%

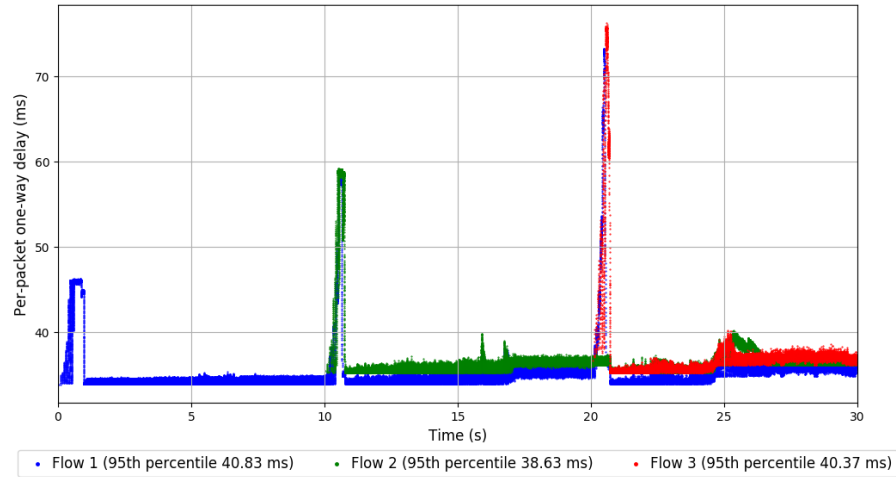
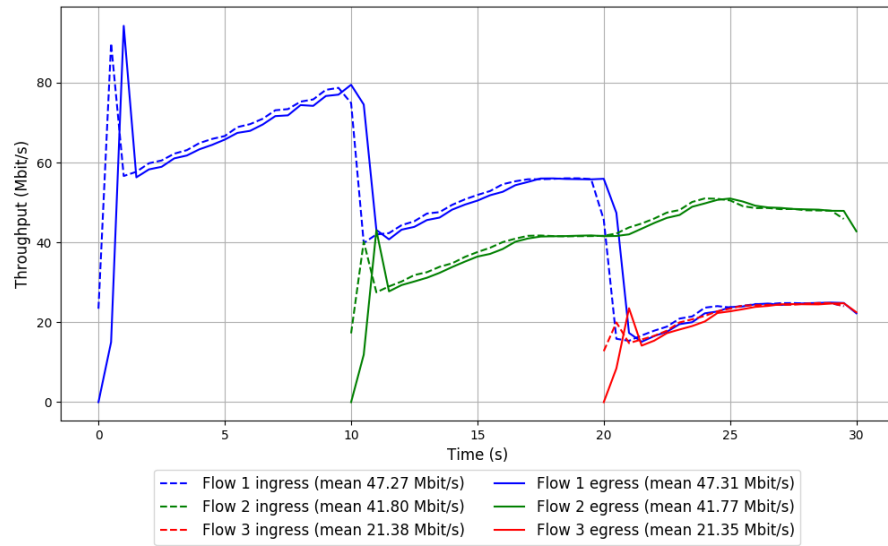
-- Flow 3:

Average throughput: 21.35 Mbit/s

95th percentile per-packet one-way delay: 40.367 ms

Loss rate: 0.83%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-06-19 10:46:06

End at: 2018-06-19 10:46:36

Local clock offset: 0.485 ms

Remote clock offset: 2.481 ms

Below is generated by plot.py at 2018-06-19 13:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.84 Mbit/s

95th percentile per-packet one-way delay: 41.233 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 40.34 Mbit/s

95th percentile per-packet one-way delay: 38.446 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 27.61 Mbit/s

95th percentile per-packet one-way delay: 39.814 ms

Loss rate: 0.32%

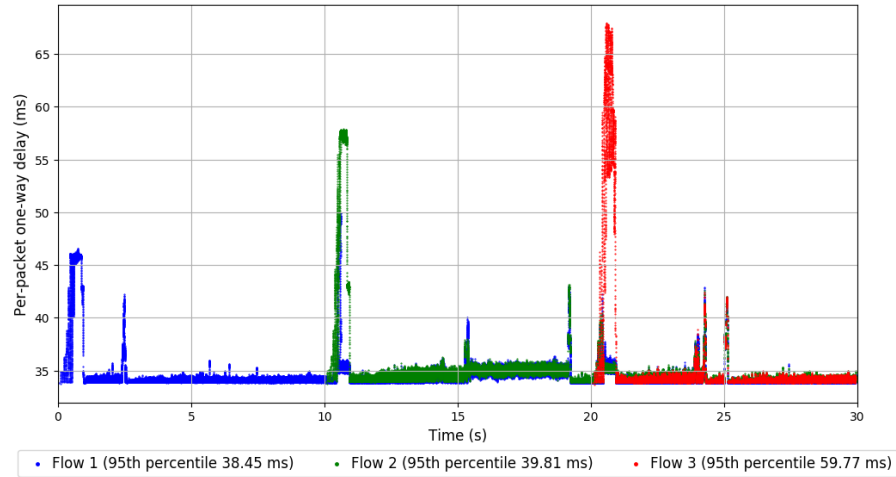
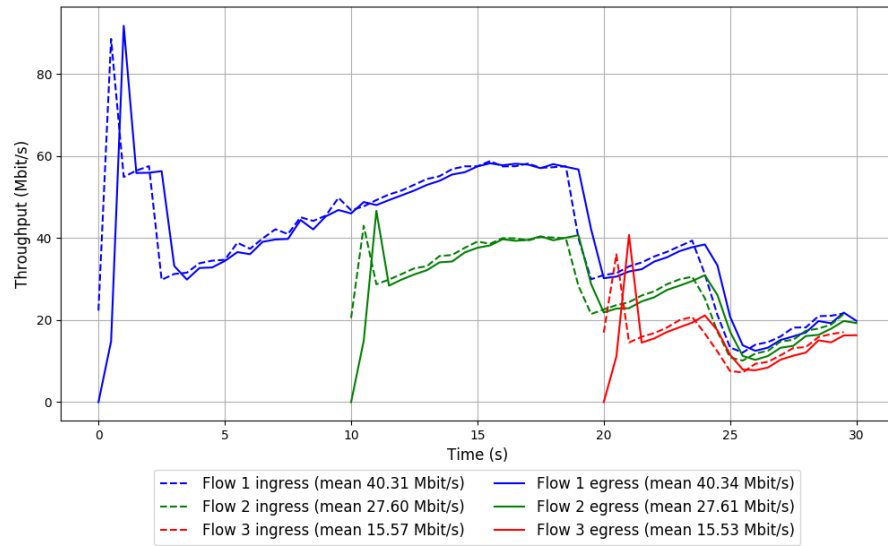
-- Flow 3:

Average throughput: 15.53 Mbit/s

95th percentile per-packet one-way delay: 59.766 ms

Loss rate: 0.92%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-06-19 11:08:22

End at: 2018-06-19 11:08:52

Local clock offset: 0.335 ms

Remote clock offset: 1.376 ms

Below is generated by plot.py at 2018-06-19 13:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.11 Mbit/s

95th percentile per-packet one-way delay: 41.058 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 54.06 Mbit/s

95th percentile per-packet one-way delay: 42.194 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 31.16 Mbit/s

95th percentile per-packet one-way delay: 38.089 ms

Loss rate: 0.29%

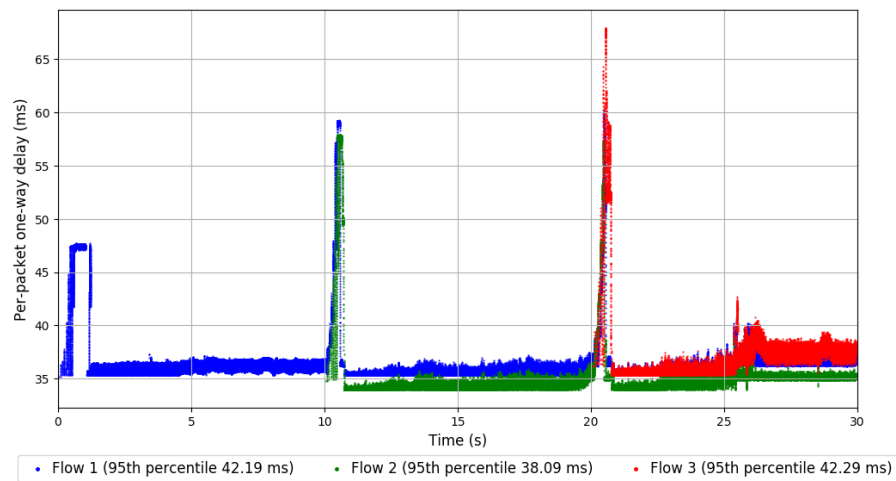
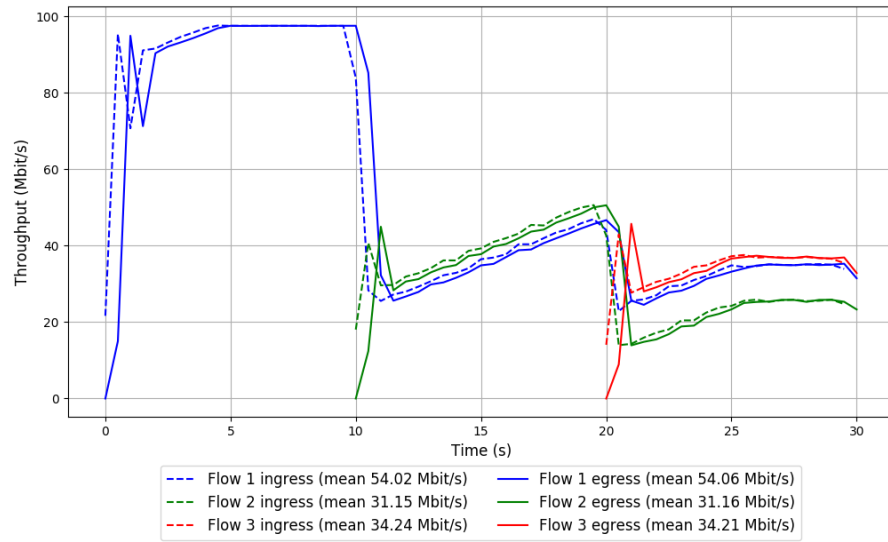
-- Flow 3:

Average throughput: 34.21 Mbit/s

95th percentile per-packet one-way delay: 42.293 ms

Loss rate: 0.77%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-06-19 11:30:22

End at: 2018-06-19 11:30:52

Local clock offset: 0.155 ms

Remote clock offset: 0.96 ms

Below is generated by plot.py at 2018-06-19 13:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.77 Mbit/s

95th percentile per-packet one-way delay: 38.962 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 50.85 Mbit/s

95th percentile per-packet one-way delay: 40.975 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 28.68 Mbit/s

95th percentile per-packet one-way delay: 38.225 ms

Loss rate: 0.30%

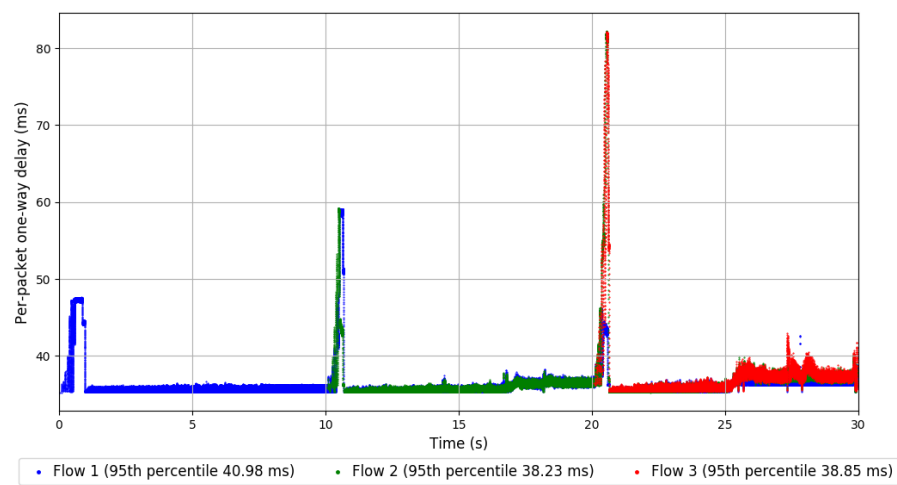
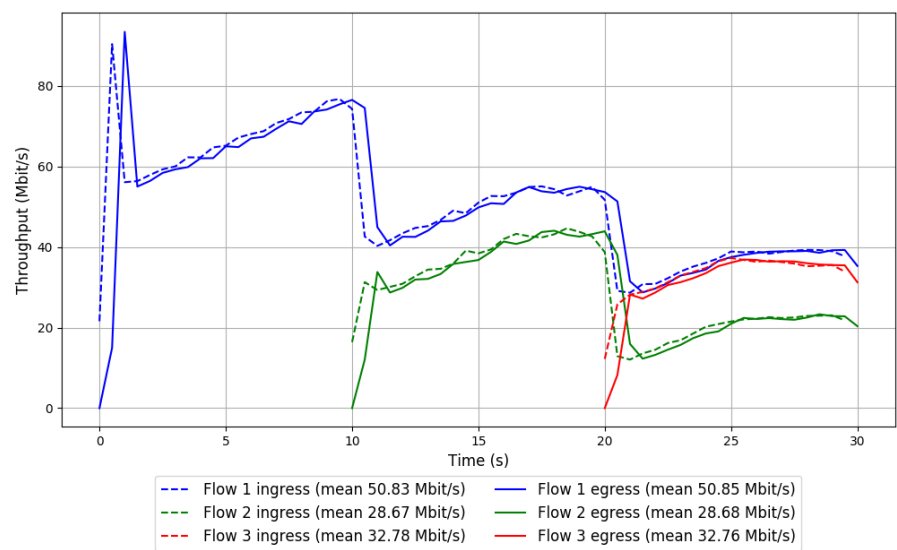
-- Flow 3:

Average throughput: 32.76 Mbit/s

95th percentile per-packet one-way delay: 38.853 ms

Loss rate: 0.78%

Run 7: Report of TCP Vegas — Data Link

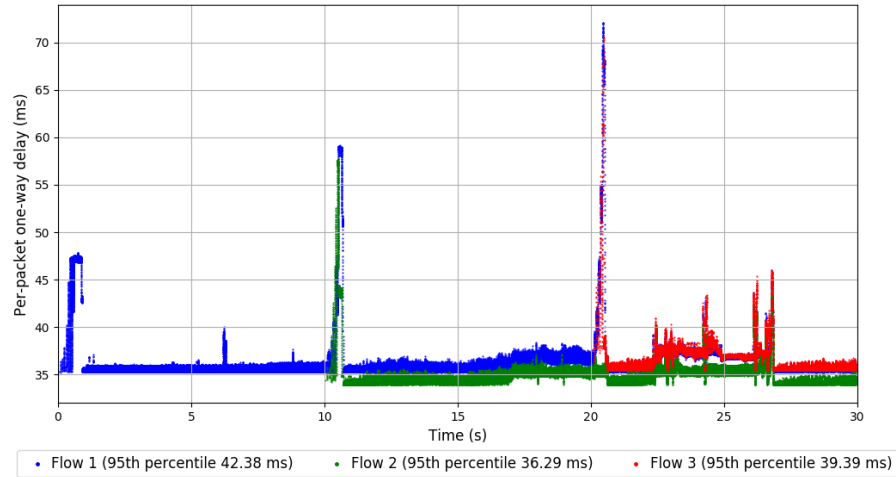
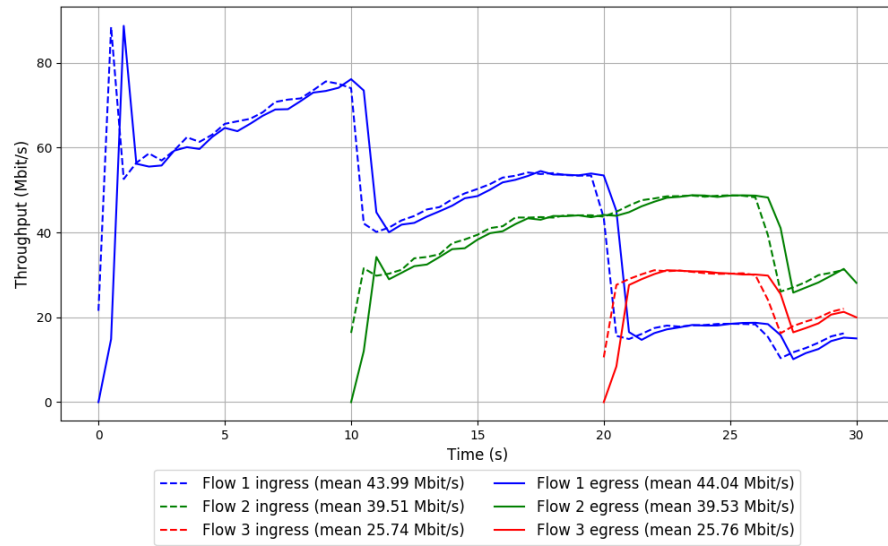


Run 8: Statistics of TCP Vegas

Start at: 2018-06-19 11:52:18
End at: 2018-06-19 11:52:48
Local clock offset: -1.348 ms
Remote clock offset: 0.696 ms

Below is generated by plot.py at 2018-06-19 13:08:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 78.86 Mbit/s
95th percentile per-packet one-way delay: 38.887 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 44.04 Mbit/s
95th percentile per-packet one-way delay: 42.376 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 39.53 Mbit/s
95th percentile per-packet one-way delay: 36.289 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 25.76 Mbit/s
95th percentile per-packet one-way delay: 39.393 ms
Loss rate: 0.63%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-06-19 12:14:21

End at: 2018-06-19 12:14:51

Local clock offset: -0.109 ms

Remote clock offset: 2.007 ms

Below is generated by plot.py at 2018-06-19 13:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.33 Mbit/s

95th percentile per-packet one-way delay: 40.696 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 34.60 Mbit/s

95th percentile per-packet one-way delay: 39.939 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 32.41 Mbit/s

95th percentile per-packet one-way delay: 39.493 ms

Loss rate: 0.40%

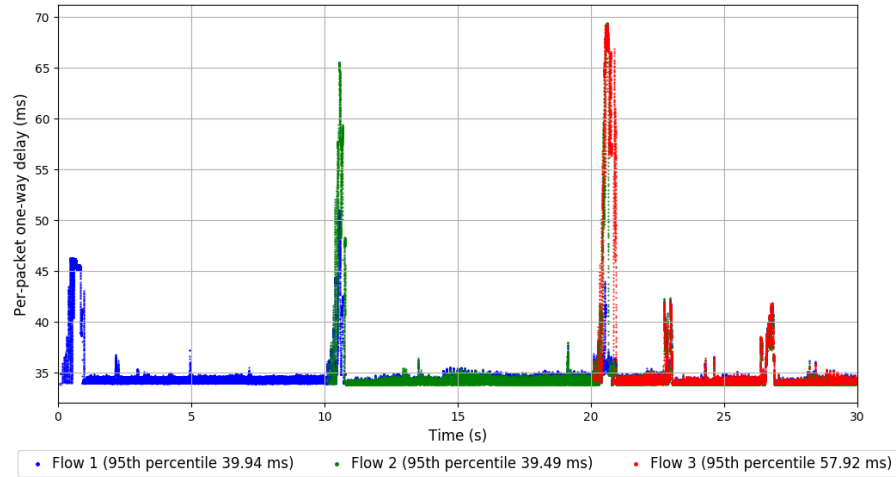
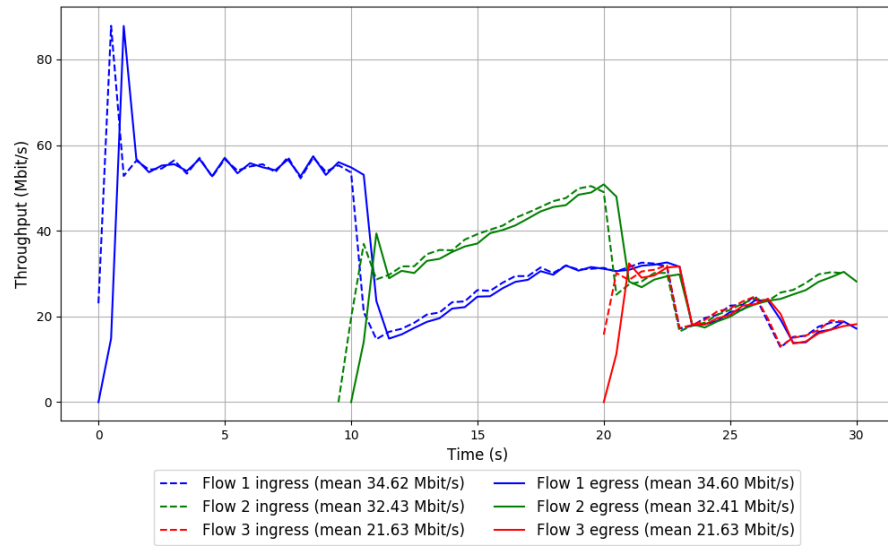
-- Flow 3:

Average throughput: 21.63 Mbit/s

95th percentile per-packet one-way delay: 57.920 ms

Loss rate: 0.70%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-06-19 12:36:18

End at: 2018-06-19 12:36:48

Local clock offset: 0.685 ms

Remote clock offset: 3.011 ms

Below is generated by plot.py at 2018-06-19 13:08:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.85 Mbit/s

95th percentile per-packet one-way delay: 43.011 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 46.22 Mbit/s

95th percentile per-packet one-way delay: 42.908 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 28.96 Mbit/s

95th percentile per-packet one-way delay: 45.647 ms

Loss rate: 0.33%

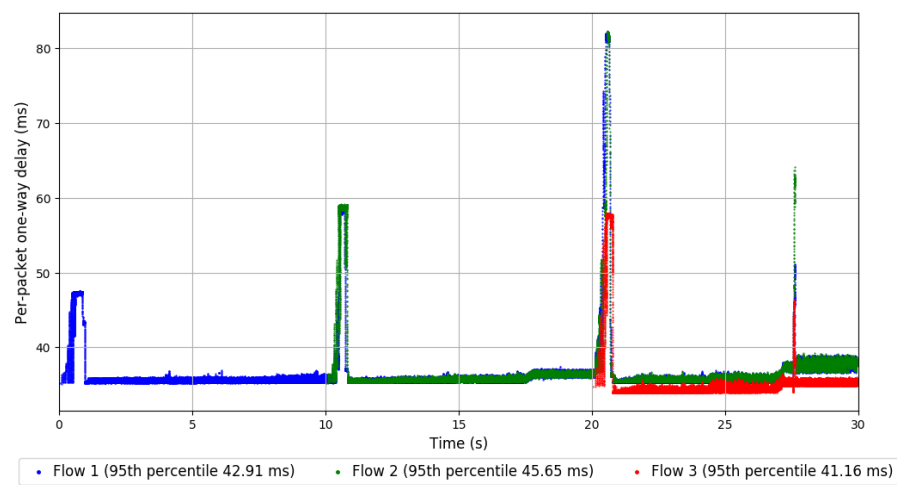
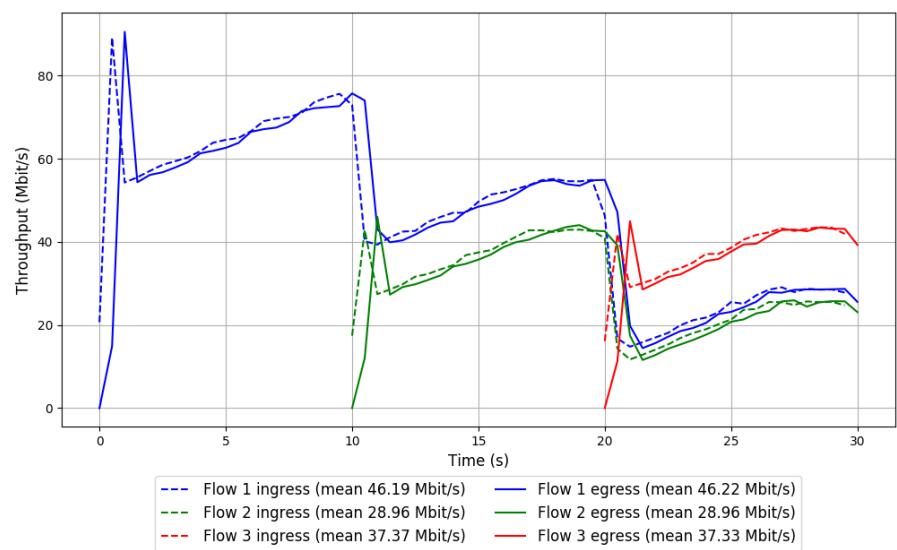
-- Flow 3:

Average throughput: 37.33 Mbit/s

95th percentile per-packet one-way delay: 41.161 ms

Loss rate: 0.81%

Run 10: Report of TCP Vegas — Data Link

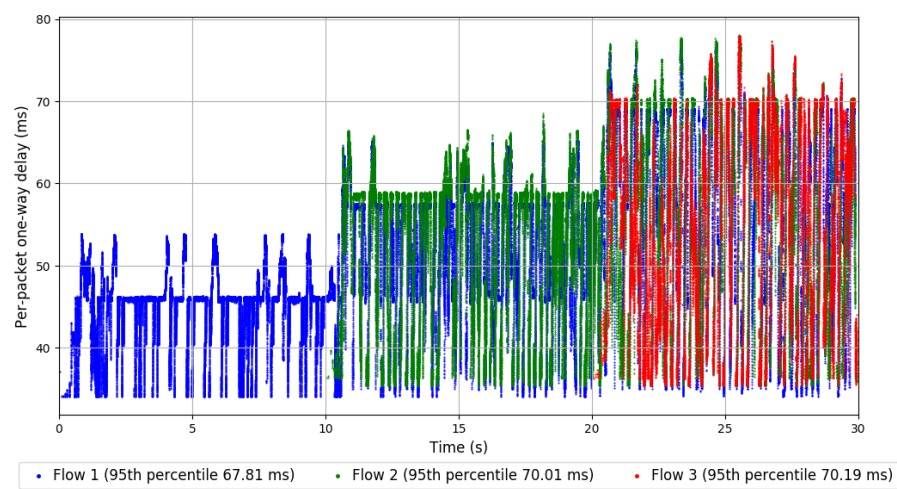
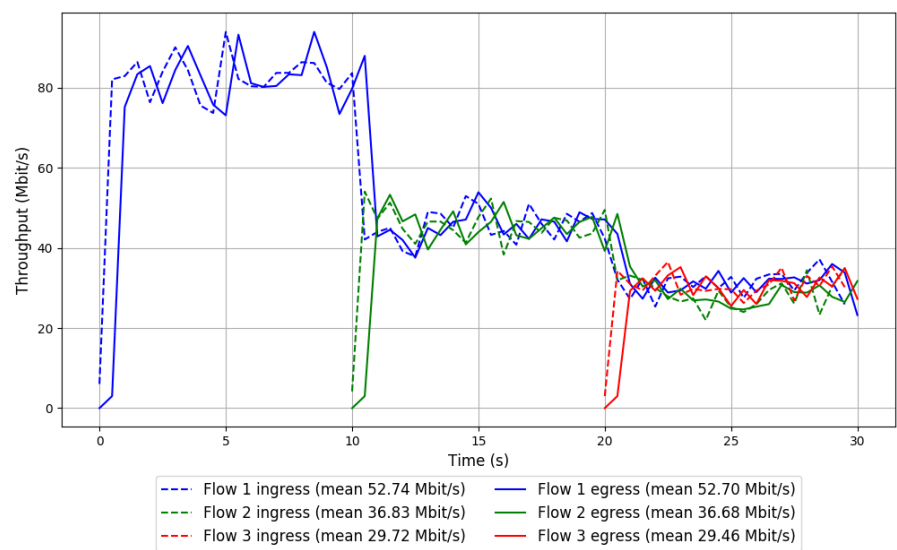


Run 1: Statistics of Verus

Start at: 2018-06-19 09:20:18
End at: 2018-06-19 09:20:48
Local clock offset: -2.745 ms
Remote clock offset: 2.8 ms

Below is generated by plot.py at 2018-06-19 13:08:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 69.227 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 52.70 Mbit/s
95th percentile per-packet one-way delay: 67.812 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 70.009 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 29.46 Mbit/s
95th percentile per-packet one-way delay: 70.190 ms
Loss rate: 1.56%

Run 1: Report of Verus — Data Link

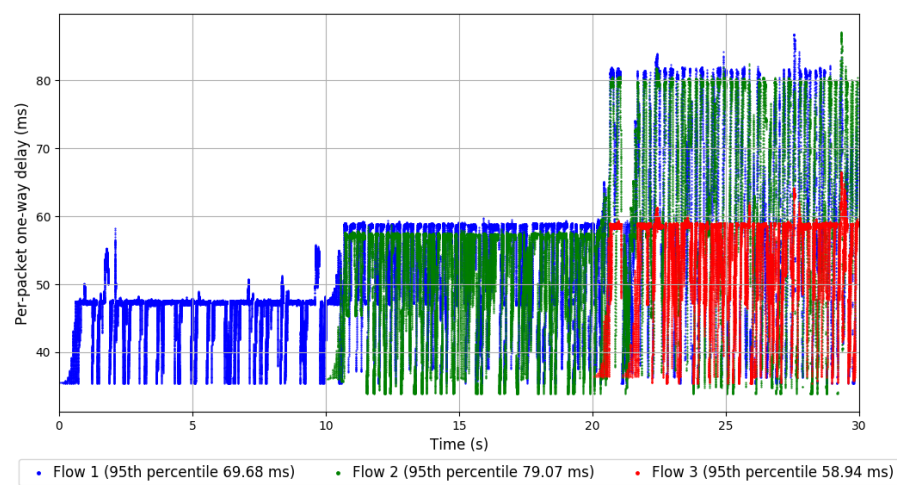
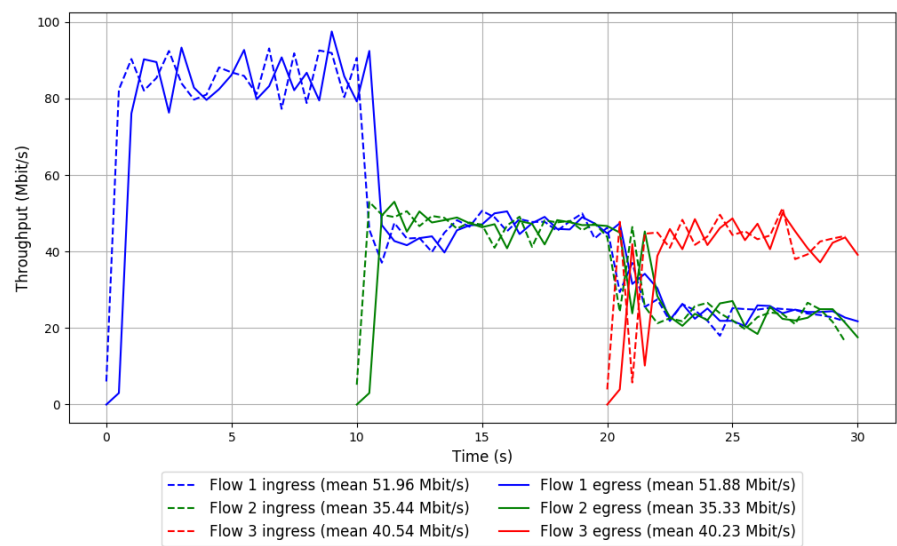


Run 2: Statistics of Verus

Start at: 2018-06-19 09:44:03
End at: 2018-06-19 09:44:33
Local clock offset: -0.756 ms
Remote clock offset: 3.315 ms

Below is generated by plot.py at 2018-06-19 13:08:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.70 Mbit/s
95th percentile per-packet one-way delay: 72.959 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 51.88 Mbit/s
95th percentile per-packet one-way delay: 69.681 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 35.33 Mbit/s
95th percentile per-packet one-way delay: 79.068 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 40.23 Mbit/s
95th percentile per-packet one-way delay: 58.941 ms
Loss rate: 1.45%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-06-19 10:07:19

End at: 2018-06-19 10:07:49

Local clock offset: 0.398 ms

Remote clock offset: 3.897 ms

Below is generated by plot.py at 2018-06-19 13:08:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.93 Mbit/s

95th percentile per-packet one-way delay: 68.403 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 52.24 Mbit/s

95th percentile per-packet one-way delay: 67.554 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 38.83 Mbit/s

95th percentile per-packet one-way delay: 68.483 ms

Loss rate: 1.01%

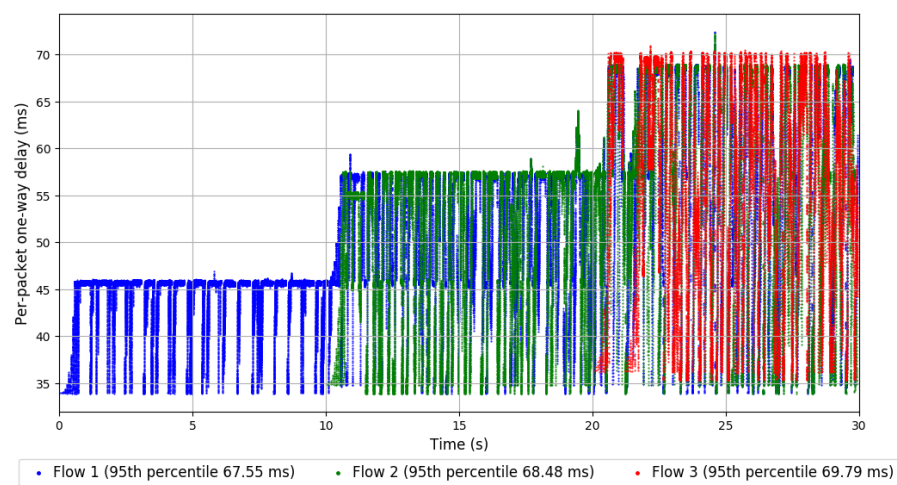
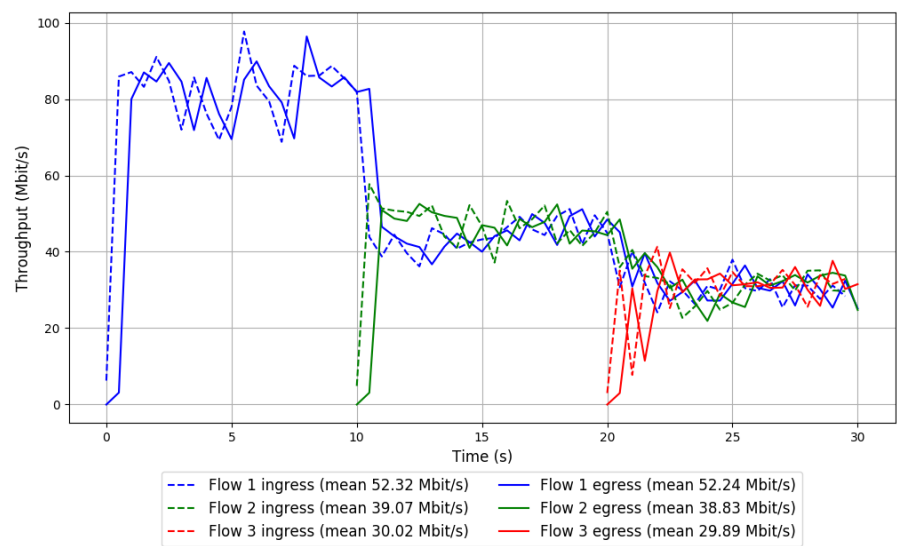
-- Flow 3:

Average throughput: 29.89 Mbit/s

95th percentile per-packet one-way delay: 69.790 ms

Loss rate: 0.88%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-06-19 10:29:32

End at: 2018-06-19 10:30:02

Local clock offset: 0.493 ms

Remote clock offset: 2.627 ms

Below is generated by plot.py at 2018-06-19 13:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.28 Mbit/s

95th percentile per-packet one-way delay: 72.675 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 71.199 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 34.62 Mbit/s

95th percentile per-packet one-way delay: 78.622 ms

Loss rate: 0.57%

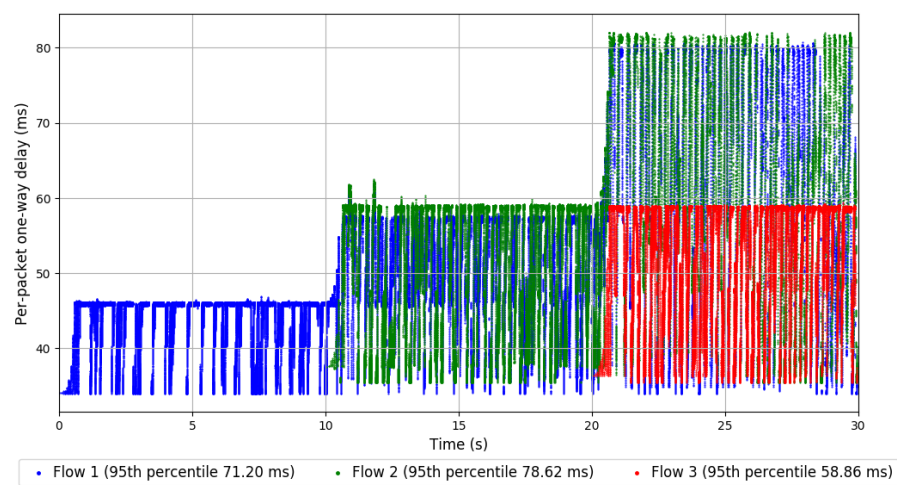
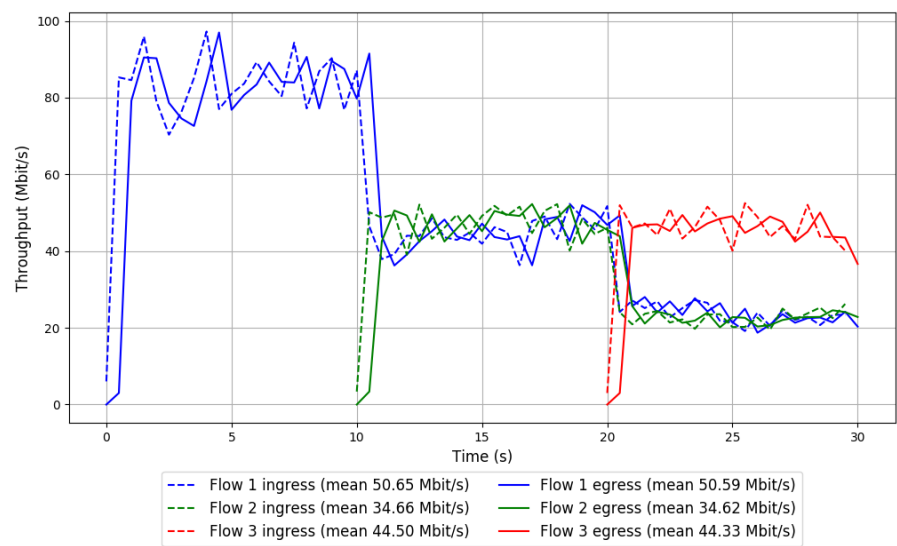
-- Flow 3:

Average throughput: 44.33 Mbit/s

95th percentile per-packet one-way delay: 58.860 ms

Loss rate: 1.17%

Run 4: Report of Verus — Data Link

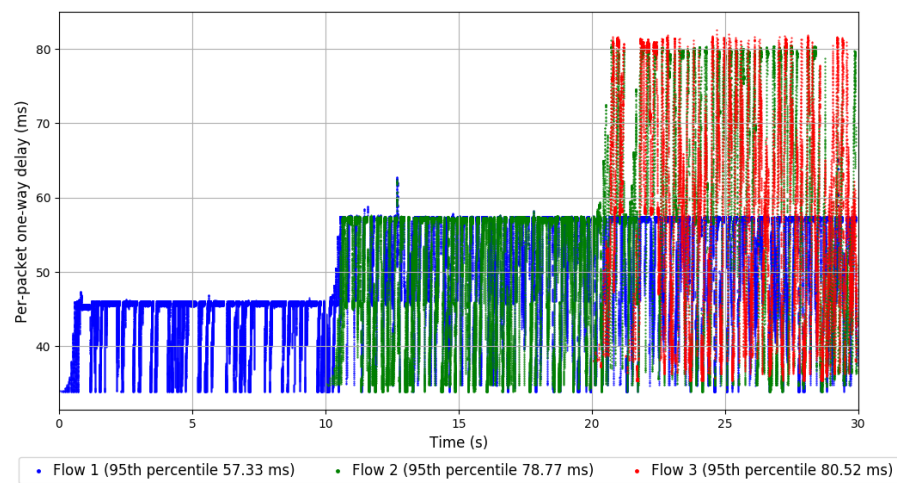
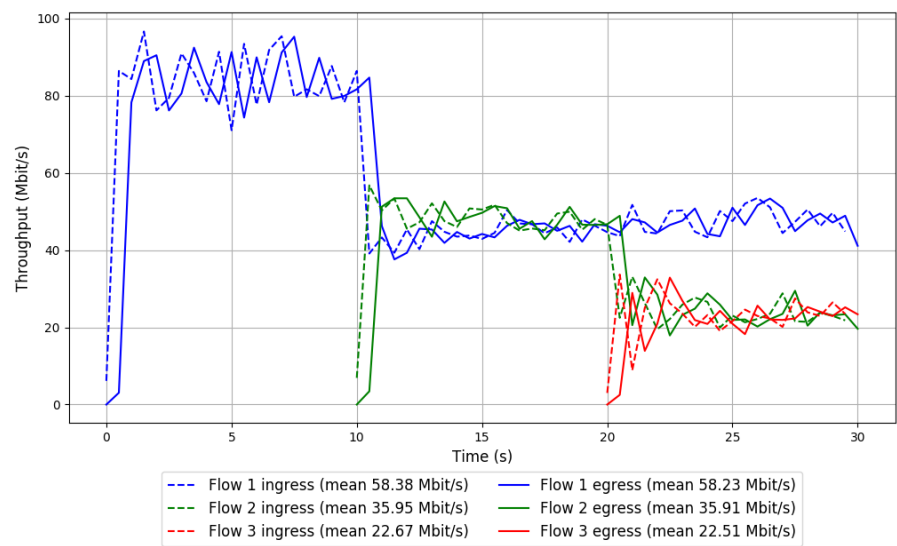


Run 5: Statistics of Verus

Start at: 2018-06-19 10:51:35
End at: 2018-06-19 10:52:05
Local clock offset: 0.408 ms
Remote clock offset: 1.998 ms

Below is generated by plot.py at 2018-06-19 13:09:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.55 Mbit/s
95th percentile per-packet one-way delay: 68.803 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 58.23 Mbit/s
95th percentile per-packet one-way delay: 57.331 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 35.91 Mbit/s
95th percentile per-packet one-way delay: 78.765 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 22.51 Mbit/s
95th percentile per-packet one-way delay: 80.520 ms
Loss rate: 1.37%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-06-19 11:13:56

End at: 2018-06-19 11:14:26

Local clock offset: 0.347 ms

Remote clock offset: 1.227 ms

Below is generated by plot.py at 2018-06-19 13:09:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.23 Mbit/s

95th percentile per-packet one-way delay: 68.977 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 56.42 Mbit/s

95th percentile per-packet one-way delay: 57.403 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 35.06 Mbit/s

95th percentile per-packet one-way delay: 79.235 ms

Loss rate: 0.56%

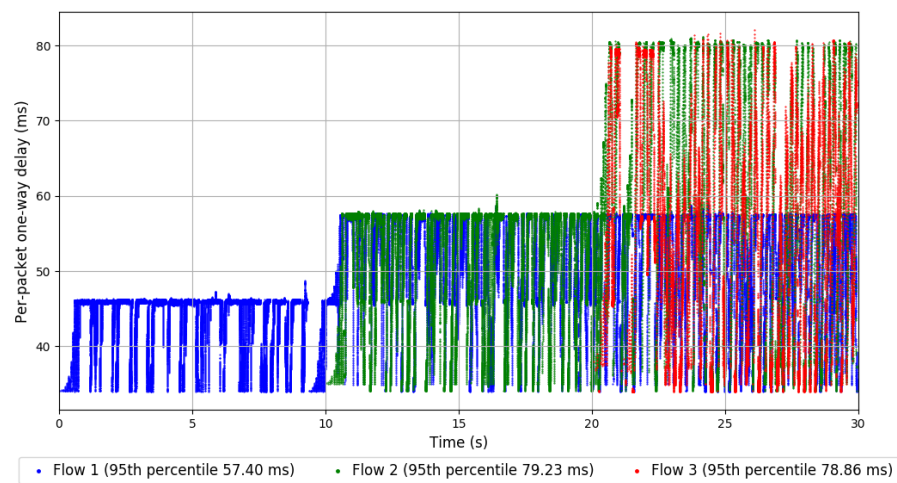
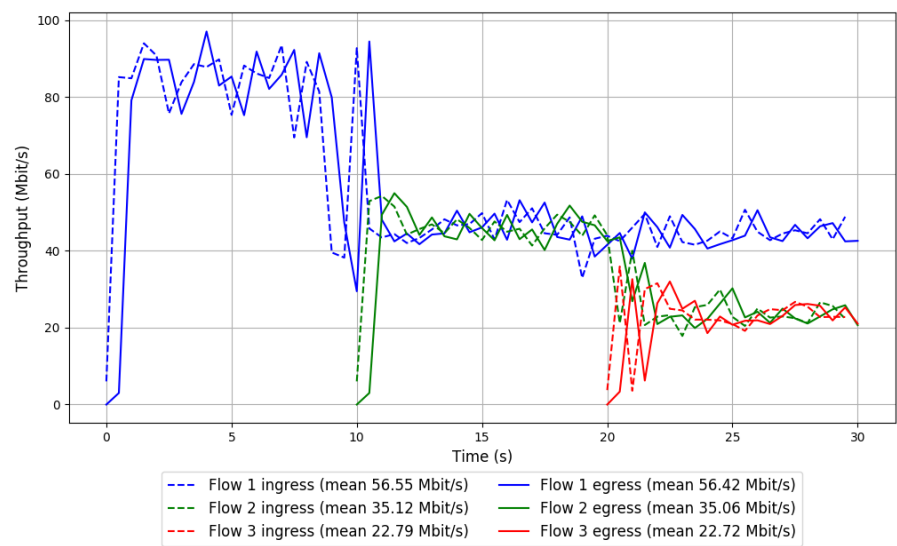
-- Flow 3:

Average throughput: 22.72 Mbit/s

95th percentile per-packet one-way delay: 78.861 ms

Loss rate: 1.12%

Run 6: Report of Verus — Data Link

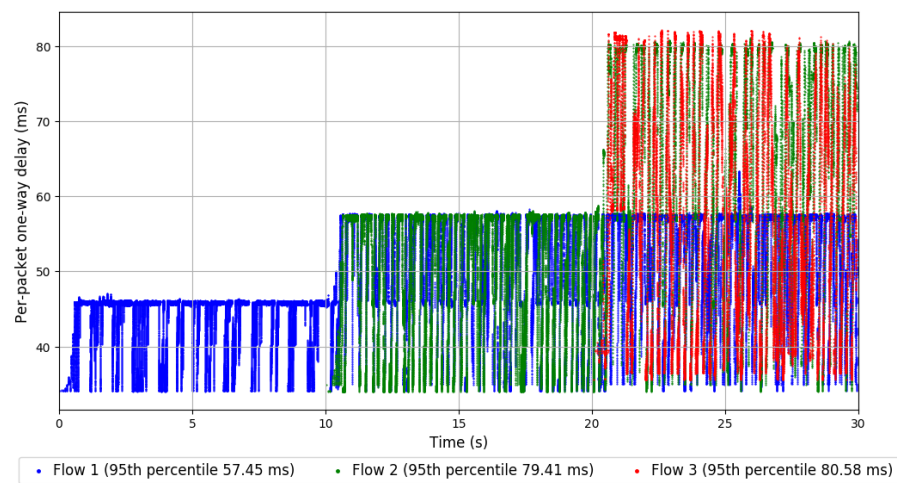
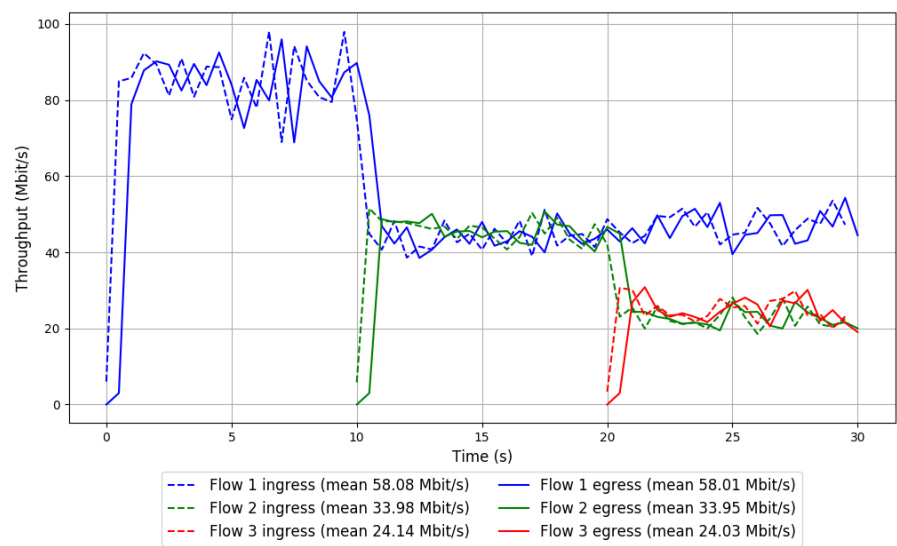


Run 7: Statistics of Verus

Start at: 2018-06-19 11:35:48
End at: 2018-06-19 11:36:18
Local clock offset: -0.068 ms
Remote clock offset: 0.869 ms

Below is generated by plot.py at 2018-06-19 13:09:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.51 Mbit/s
95th percentile per-packet one-way delay: 71.162 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 58.01 Mbit/s
95th percentile per-packet one-way delay: 57.445 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 33.95 Mbit/s
95th percentile per-packet one-way delay: 79.409 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 24.03 Mbit/s
95th percentile per-packet one-way delay: 80.584 ms
Loss rate: 1.39%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-06-19 11:57:57

End at: 2018-06-19 11:58:27

Local clock offset: -1.514 ms

Remote clock offset: 1.189 ms

Below is generated by plot.py at 2018-06-19 13:09:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.22 Mbit/s

95th percentile per-packet one-way delay: 69.289 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 53.71 Mbit/s

95th percentile per-packet one-way delay: 66.938 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 37.88 Mbit/s

95th percentile per-packet one-way delay: 69.797 ms

Loss rate: 0.63%

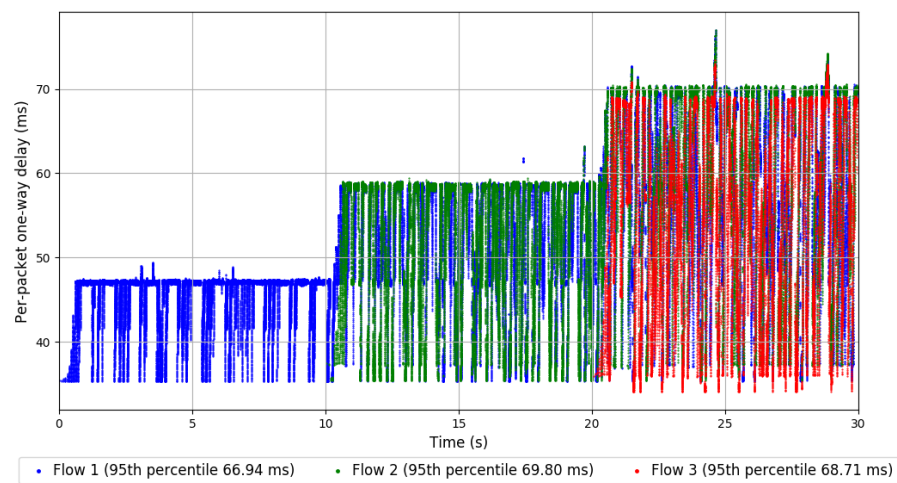
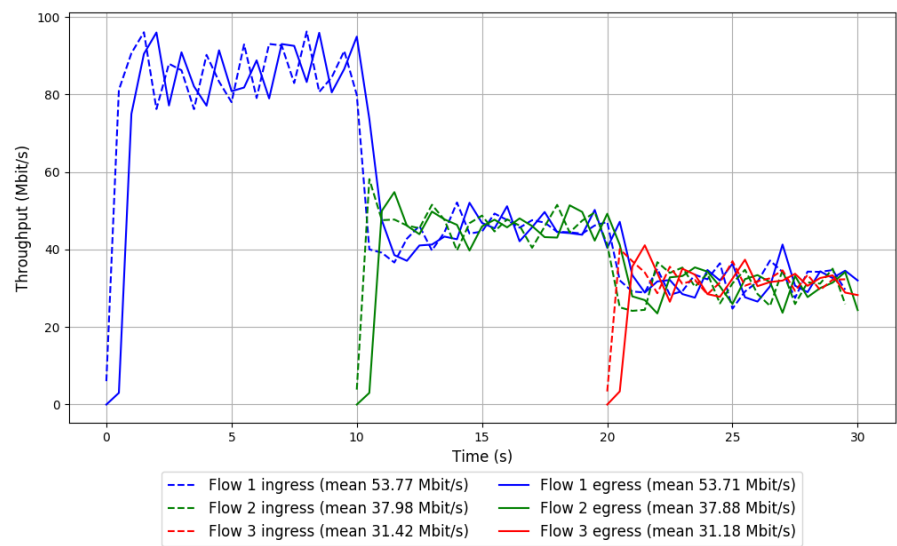
-- Flow 3:

Average throughput: 31.18 Mbit/s

95th percentile per-packet one-way delay: 68.714 ms

Loss rate: 1.40%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-06-19 12:19:47

End at: 2018-06-19 12:20:17

Local clock offset: 0.401 ms

Remote clock offset: 2.103 ms

Below is generated by plot.py at 2018-06-19 13:09:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.68 Mbit/s

95th percentile per-packet one-way delay: 69.020 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 53.29 Mbit/s

95th percentile per-packet one-way delay: 68.638 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 39.19 Mbit/s

95th percentile per-packet one-way delay: 68.632 ms

Loss rate: 0.66%

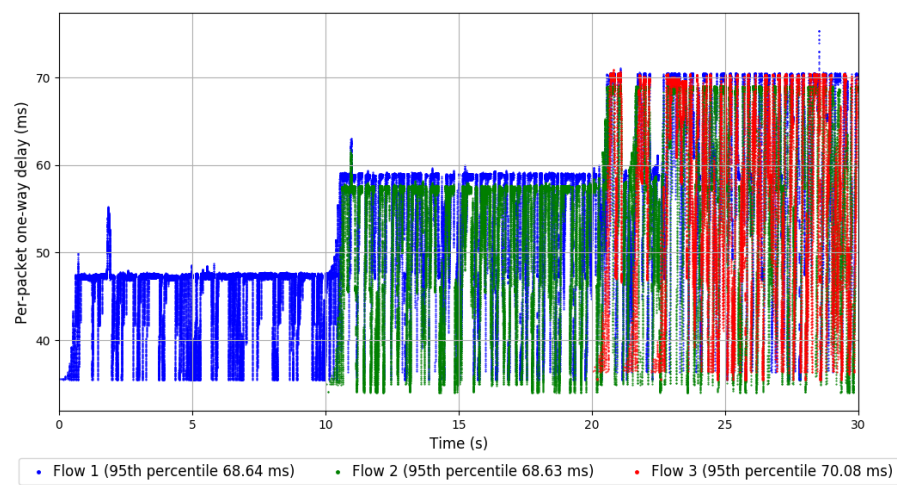
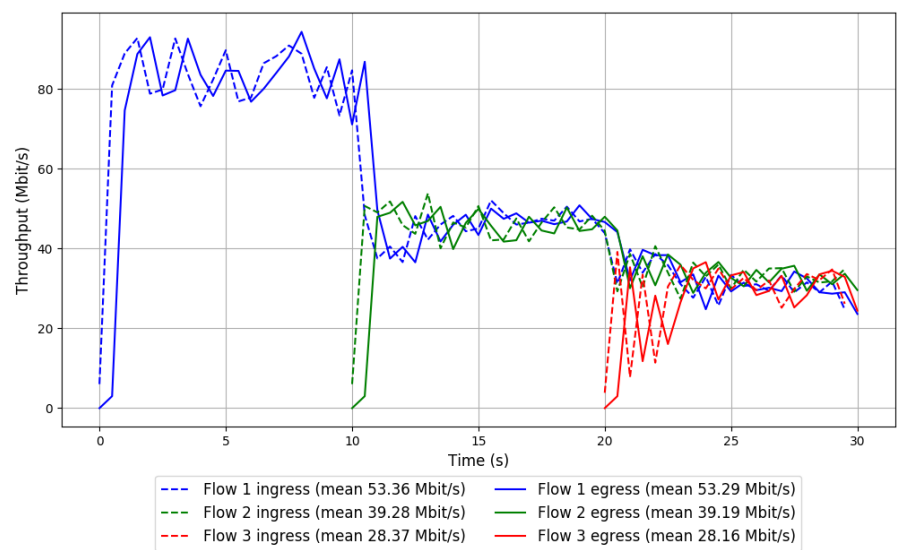
-- Flow 3:

Average throughput: 28.16 Mbit/s

95th percentile per-packet one-way delay: 70.077 ms

Loss rate: 1.42%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-06-19 12:41:49

End at: 2018-06-19 12:42:19

Local clock offset: 0.529 ms

Remote clock offset: 3.224 ms

Below is generated by plot.py at 2018-06-19 13:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.05 Mbit/s

95th percentile per-packet one-way delay: 75.997 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 51.53 Mbit/s

95th percentile per-packet one-way delay: 73.980 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 33.00 Mbit/s

95th percentile per-packet one-way delay: 80.829 ms

Loss rate: 0.54%

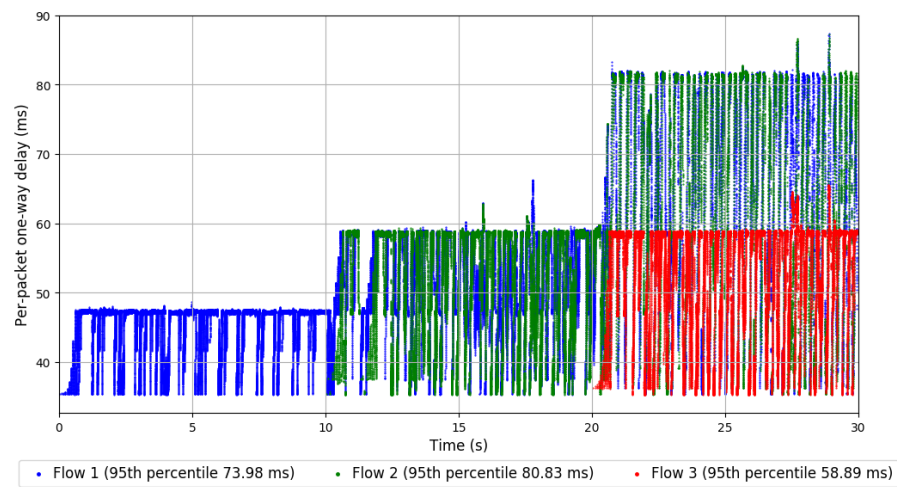
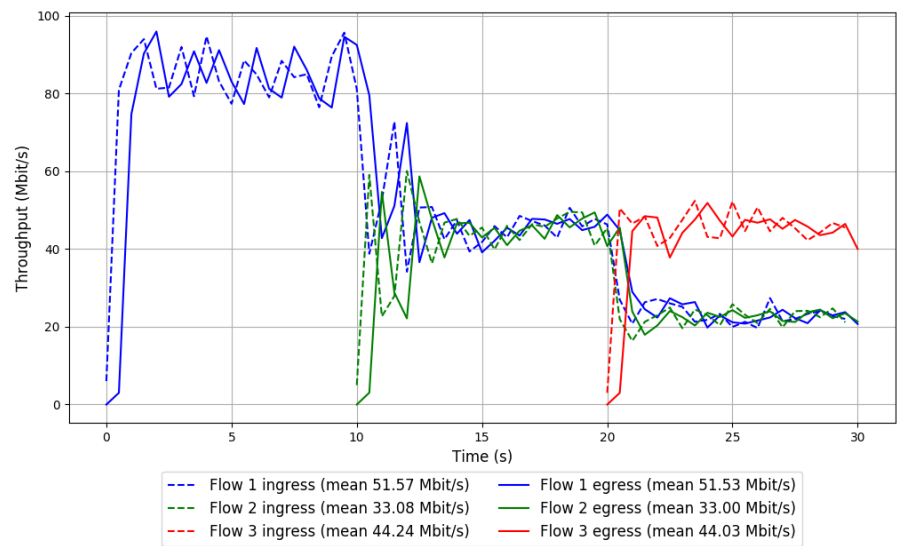
-- Flow 3:

Average throughput: 44.03 Mbit/s

95th percentile per-packet one-way delay: 58.890 ms

Loss rate: 1.29%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-19 09:24:36

End at: 2018-06-19 09:25:06

Local clock offset: -3.083 ms

Remote clock offset: 2.961 ms

Below is generated by plot.py at 2018-06-19 13:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.92 Mbit/s

95th percentile per-packet one-way delay: 41.018 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 64.76 Mbit/s

95th percentile per-packet one-way delay: 41.029 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 9.23 Mbit/s

95th percentile per-packet one-way delay: 40.924 ms

Loss rate: 1.00%

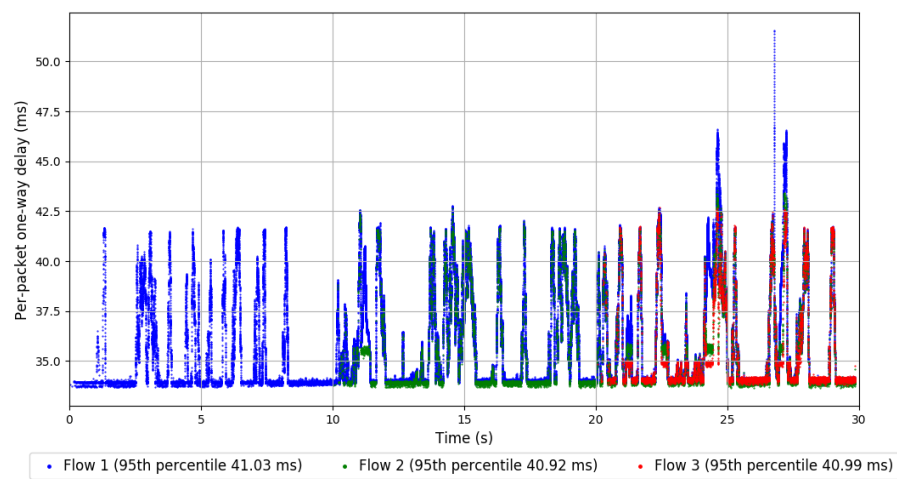
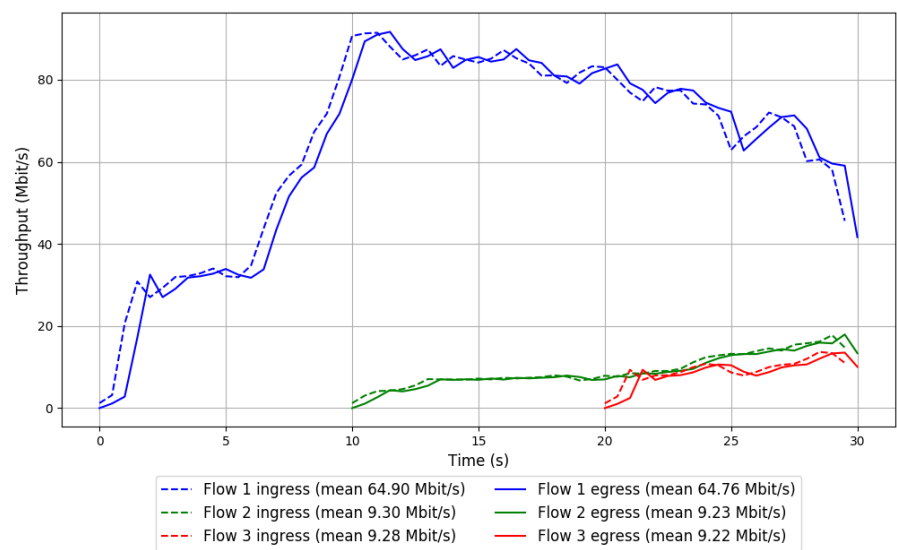
-- Flow 3:

Average throughput: 9.22 Mbit/s

95th percentile per-packet one-way delay: 40.988 ms

Loss rate: 1.26%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-06-19 09:48:28

End at: 2018-06-19 09:48:58

Local clock offset: -0.316 ms

Remote clock offset: 3.478 ms

Below is generated by plot.py at 2018-06-19 13:10:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.68 Mbit/s

95th percentile per-packet one-way delay: 69.819 ms

Loss rate: 2.43%

-- Flow 1:

Average throughput: 53.88 Mbit/s

95th percentile per-packet one-way delay: 63.641 ms

Loss rate: 3.26%

-- Flow 2:

Average throughput: 39.24 Mbit/s

95th percentile per-packet one-way delay: 50.581 ms

Loss rate: 0.57%

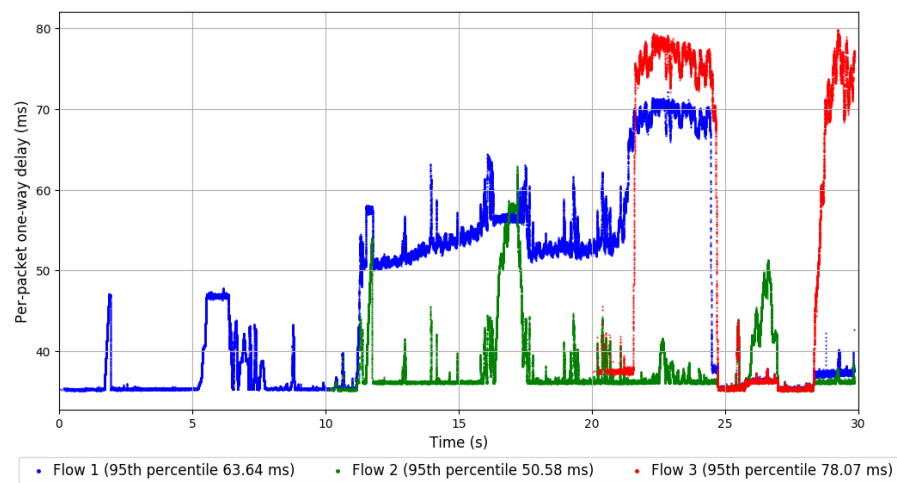
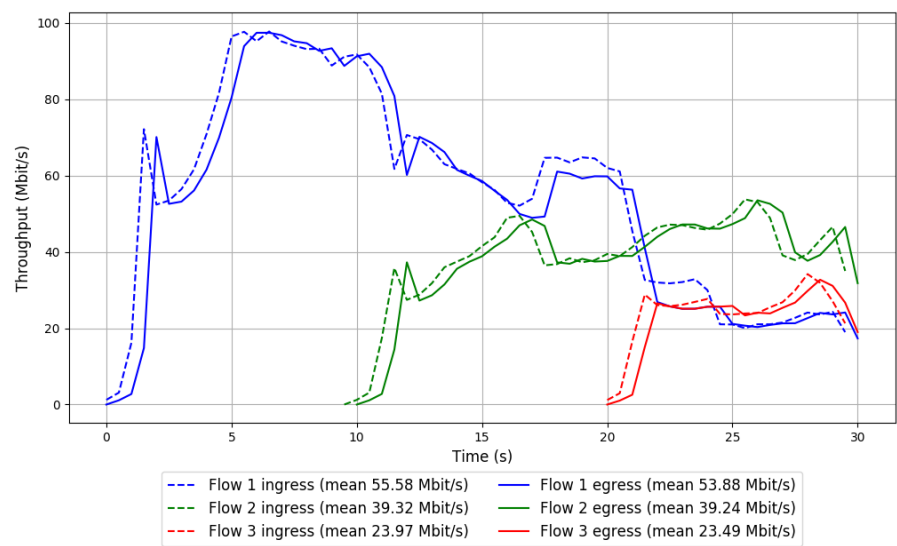
-- Flow 3:

Average throughput: 23.49 Mbit/s

95th percentile per-packet one-way delay: 78.071 ms

Loss rate: 2.74%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-06-19 10:11:27

End at: 2018-06-19 10:11:57

Local clock offset: 0.343 ms

Remote clock offset: 3.995 ms

Below is generated by plot.py at 2018-06-19 13:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.85 Mbit/s

95th percentile per-packet one-way delay: 66.350 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 52.83 Mbit/s

95th percentile per-packet one-way delay: 69.492 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 39.37 Mbit/s

95th percentile per-packet one-way delay: 55.975 ms

Loss rate: 0.60%

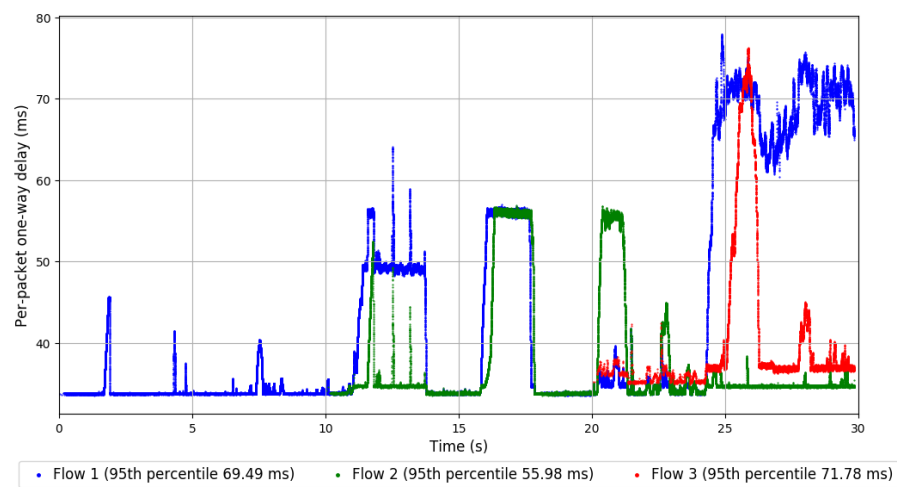
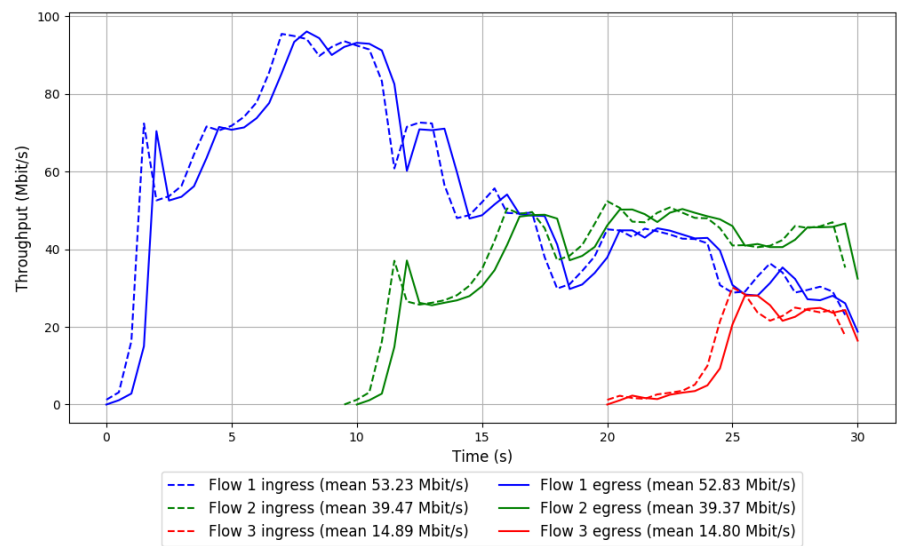
-- Flow 3:

Average throughput: 14.80 Mbit/s

95th percentile per-packet one-way delay: 71.782 ms

Loss rate: 1.32%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-06-19 10:33:36

End at: 2018-06-19 10:34:06

Local clock offset: 0.518 ms

Remote clock offset: 2.616 ms

Below is generated by plot.py at 2018-06-19 13:10:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.78 Mbit/s

95th percentile per-packet one-way delay: 64.770 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 54.96 Mbit/s

95th percentile per-packet one-way delay: 64.698 ms

Loss rate: 1.76%

-- Flow 2:

Average throughput: 35.06 Mbit/s

95th percentile per-packet one-way delay: 64.295 ms

Loss rate: 0.65%

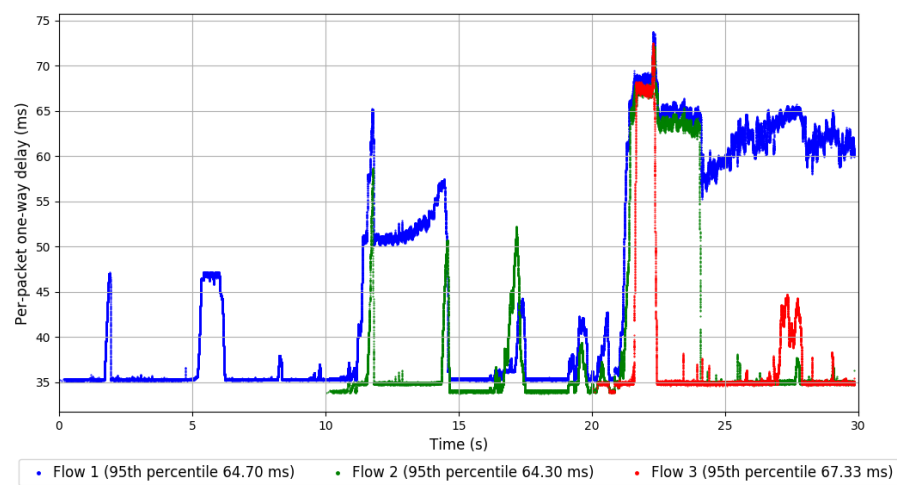
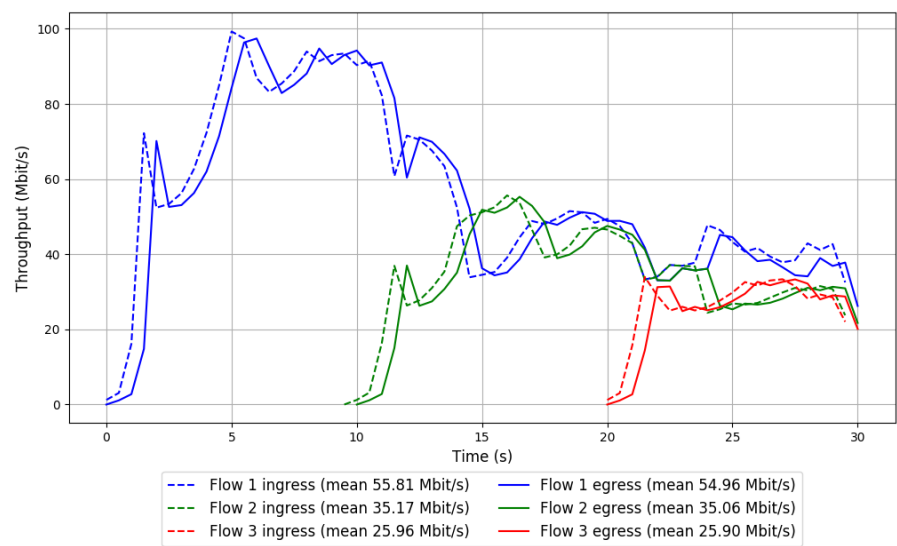
-- Flow 3:

Average throughput: 25.90 Mbit/s

95th percentile per-packet one-way delay: 67.331 ms

Loss rate: 0.88%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-06-19 10:55:43

End at: 2018-06-19 10:56:13

Local clock offset: 0.522 ms

Remote clock offset: 1.782 ms

Below is generated by plot.py at 2018-06-19 13:10:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.01 Mbit/s

95th percentile per-packet one-way delay: 70.968 ms

Loss rate: 2.33%

-- Flow 1:

Average throughput: 54.50 Mbit/s

95th percentile per-packet one-way delay: 70.765 ms

Loss rate: 3.30%

-- Flow 2:

Average throughput: 41.06 Mbit/s

95th percentile per-packet one-way delay: 56.301 ms

Loss rate: 0.45%

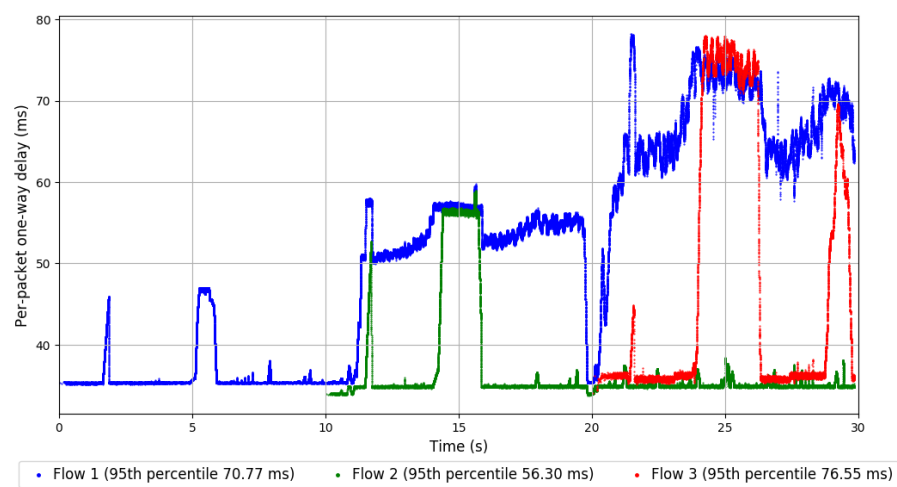
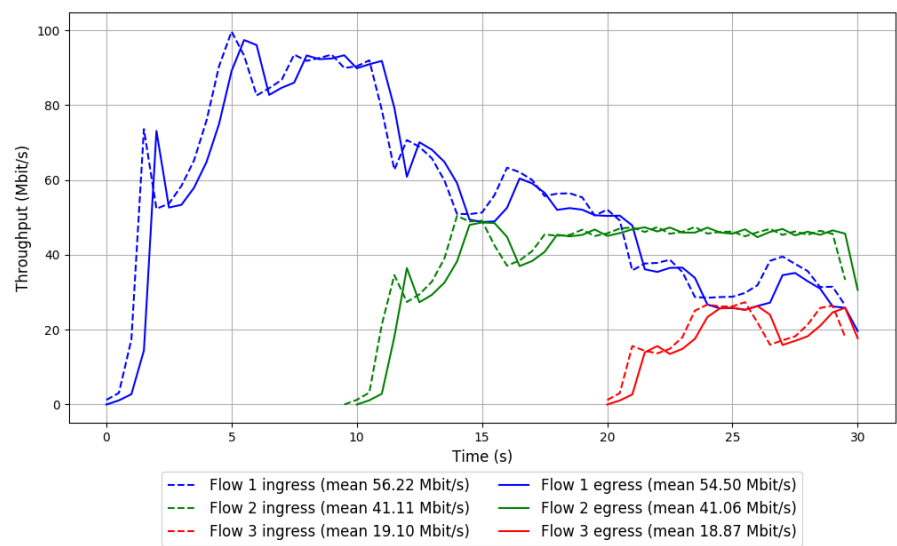
-- Flow 3:

Average throughput: 18.87 Mbit/s

95th percentile per-packet one-way delay: 76.547 ms

Loss rate: 1.88%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-06-19 11:17:59

End at: 2018-06-19 11:18:29

Local clock offset: 0.234 ms

Remote clock offset: 1.192 ms

Below is generated by plot.py at 2018-06-19 13:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.09 Mbit/s

95th percentile per-packet one-way delay: 63.196 ms

Loss rate: 3.67%

-- Flow 1:

Average throughput: 56.96 Mbit/s

95th percentile per-packet one-way delay: 60.165 ms

Loss rate: 5.13%

-- Flow 2:

Average throughput: 33.54 Mbit/s

95th percentile per-packet one-way delay: 67.510 ms

Loss rate: 0.81%

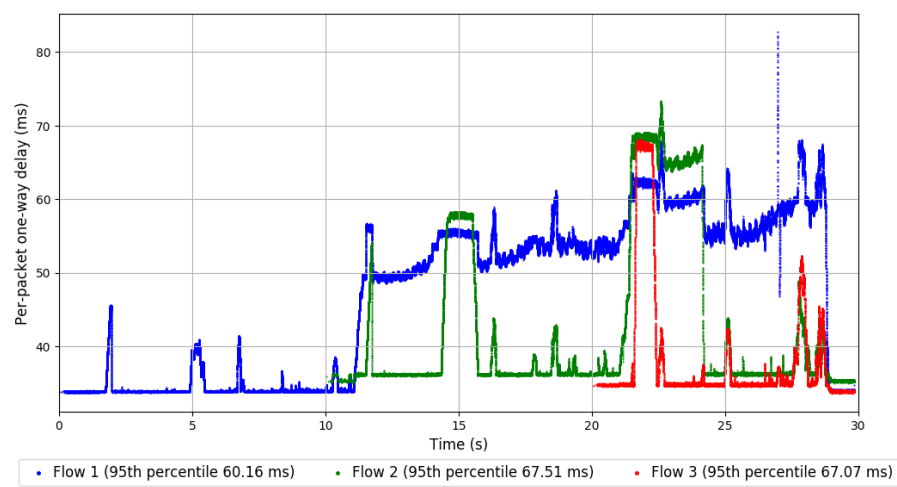
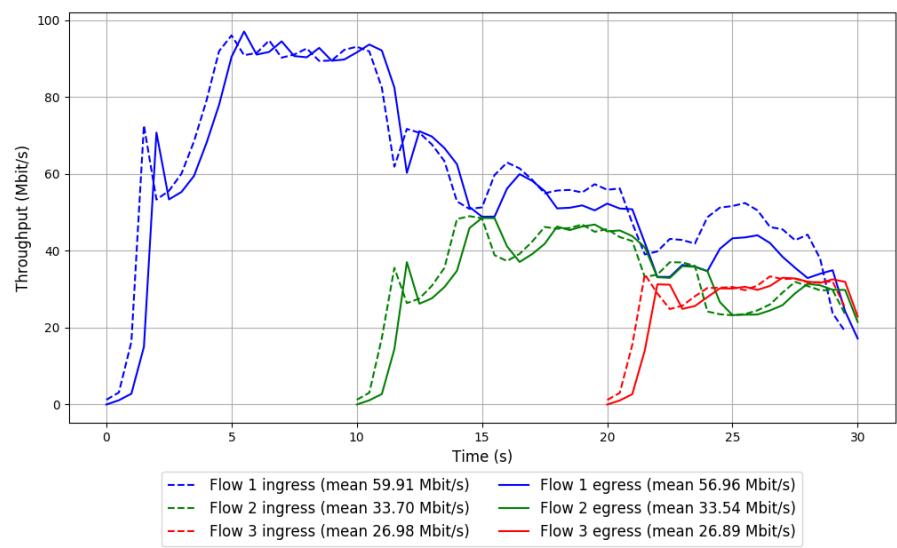
-- Flow 3:

Average throughput: 26.89 Mbit/s

95th percentile per-packet one-way delay: 67.070 ms

Loss rate: 1.02%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-06-19 11:39:55

End at: 2018-06-19 11:40:25

Local clock offset: -0.66 ms

Remote clock offset: 0.829 ms

Below is generated by plot.py at 2018-06-19 13:11:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.00 Mbit/s

95th percentile per-packet one-way delay: 65.244 ms

Loss rate: 3.64%

-- Flow 1:

Average throughput: 55.83 Mbit/s

95th percentile per-packet one-way delay: 60.243 ms

Loss rate: 4.80%

-- Flow 2:

Average throughput: 35.77 Mbit/s

95th percentile per-packet one-way delay: 76.199 ms

Loss rate: 1.02%

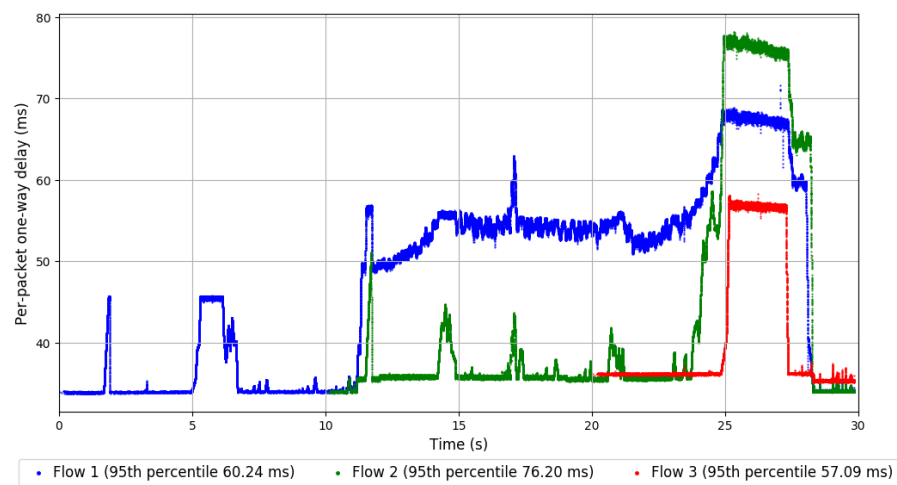
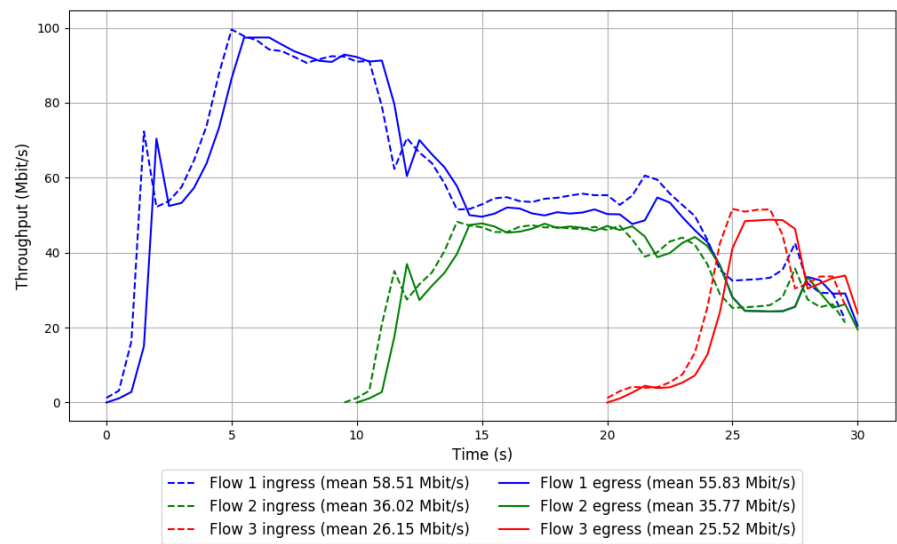
-- Flow 3:

Average throughput: 25.52 Mbit/s

95th percentile per-packet one-way delay: 57.087 ms

Loss rate: 3.07%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-06-19 12:02:01

End at: 2018-06-19 12:02:31

Local clock offset: -1.634 ms

Remote clock offset: 1.532 ms

Below is generated by plot.py at 2018-06-19 13:11:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.29 Mbit/s

95th percentile per-packet one-way delay: 65.083 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 55.99 Mbit/s

95th percentile per-packet one-way delay: 64.990 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 32.09 Mbit/s

95th percentile per-packet one-way delay: 66.494 ms

Loss rate: 0.65%

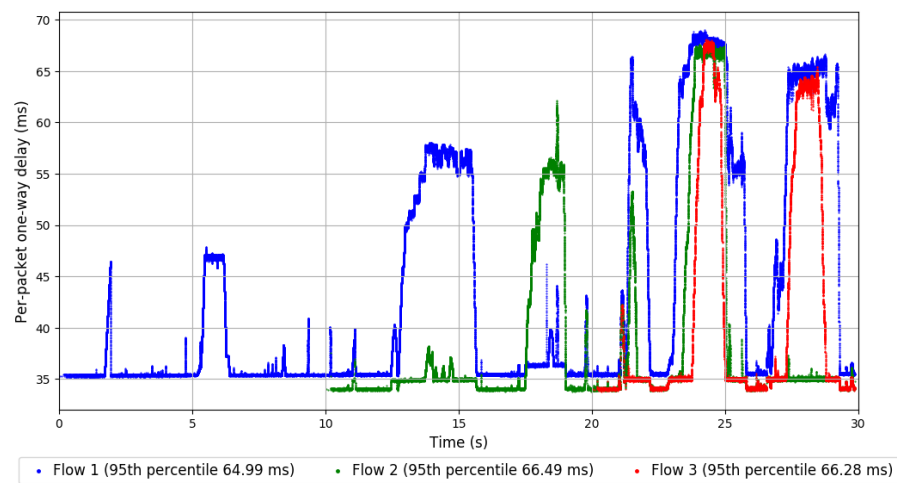
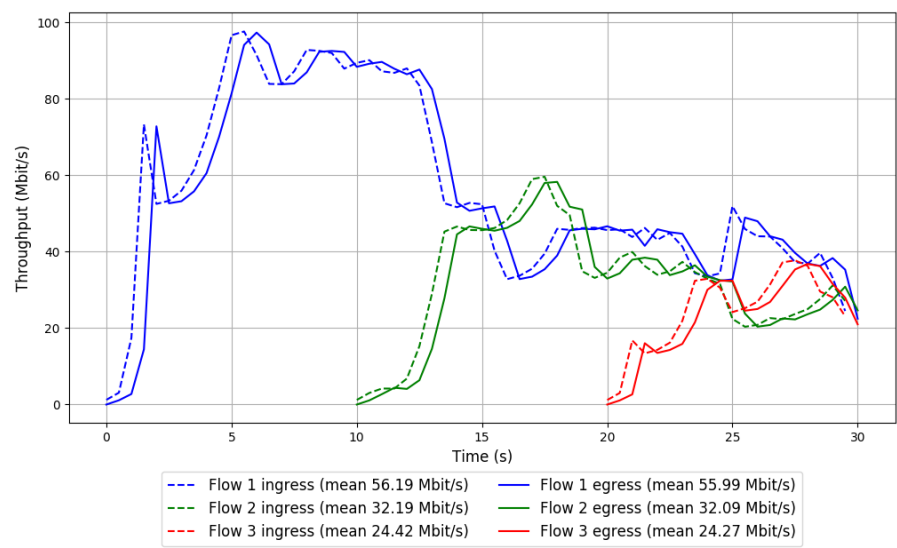
-- Flow 3:

Average throughput: 24.27 Mbit/s

95th percentile per-packet one-way delay: 66.282 ms

Loss rate: 1.28%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-06-19 12:24:01

End at: 2018-06-19 12:24:31

Local clock offset: 0.594 ms

Remote clock offset: 2.235 ms

Below is generated by plot.py at 2018-06-19 13:11:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.09 Mbit/s

95th percentile per-packet one-way delay: 74.109 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 54.87 Mbit/s

95th percentile per-packet one-way delay: 74.188 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 31.24 Mbit/s

95th percentile per-packet one-way delay: 74.760 ms

Loss rate: 2.48%

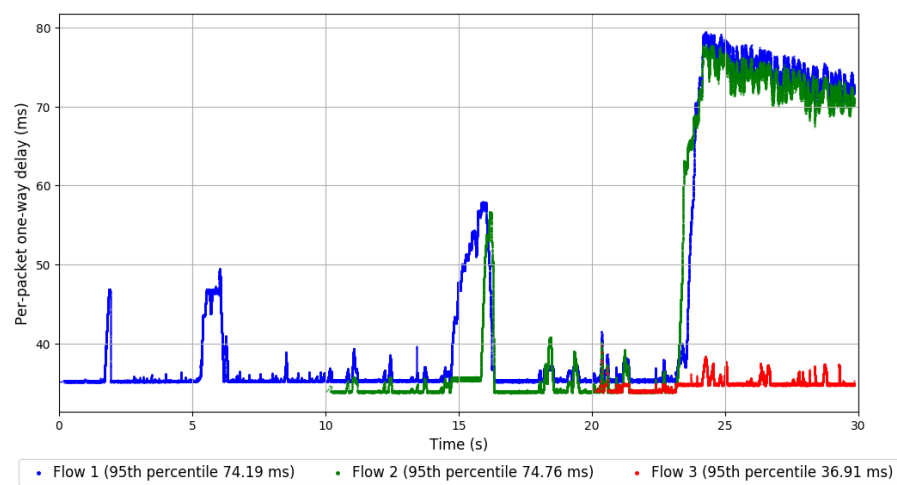
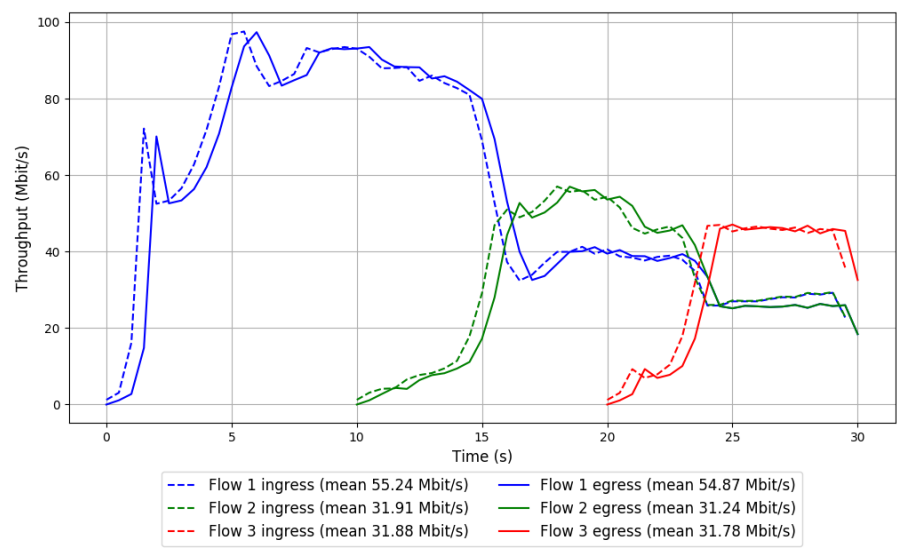
-- Flow 3:

Average throughput: 31.78 Mbit/s

95th percentile per-packet one-way delay: 36.906 ms

Loss rate: 1.02%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-06-19 12:45:56

End at: 2018-06-19 12:46:26

Local clock offset: 0.567 ms

Remote clock offset: 3.342 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.15 Mbit/s

95th percentile per-packet one-way delay: 65.914 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 67.618 ms

Loss rate: 2.54%

-- Flow 2:

Average throughput: 34.34 Mbit/s

95th percentile per-packet one-way delay: 73.412 ms

Loss rate: 0.51%

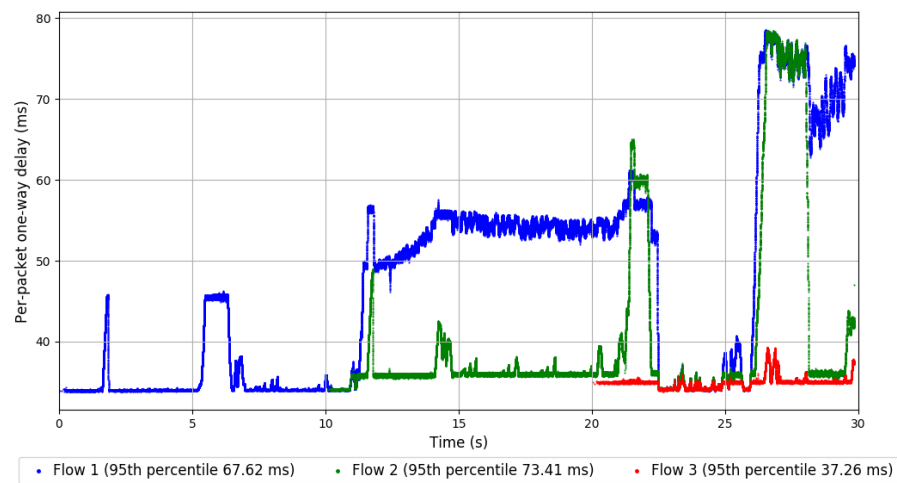
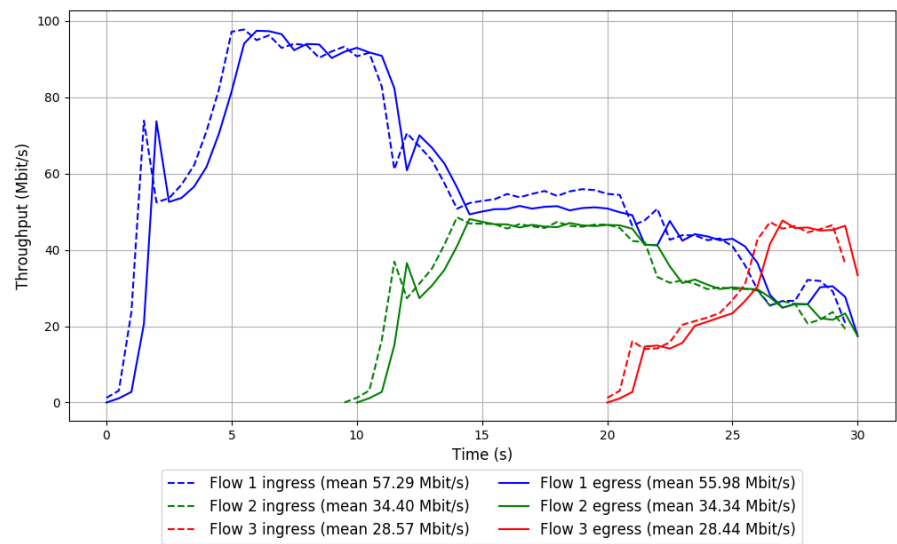
-- Flow 3:

Average throughput: 28.44 Mbit/s

95th percentile per-packet one-way delay: 37.261 ms

Loss rate: 1.14%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-06-19 09:21:47

End at: 2018-06-19 09:22:17

Local clock offset: -2.88 ms

Remote clock offset: 2.924 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 40.052 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 40.518 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 39.192 ms

Loss rate: 0.39%

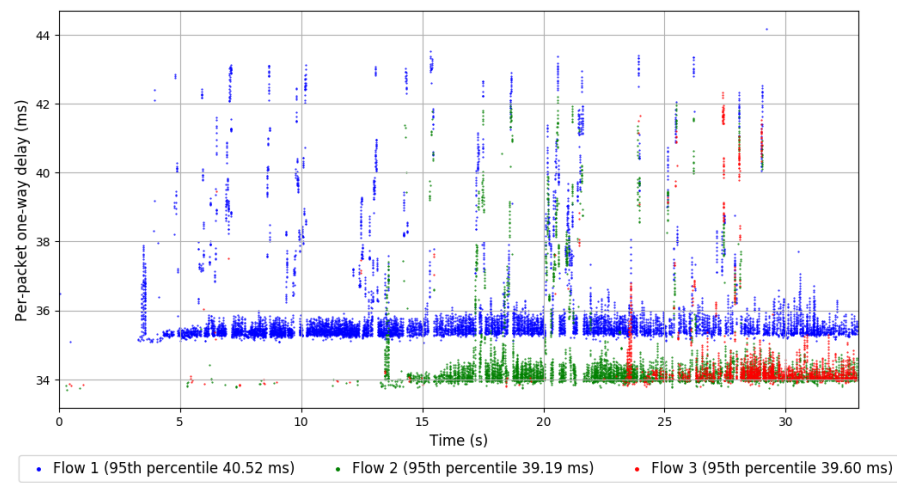
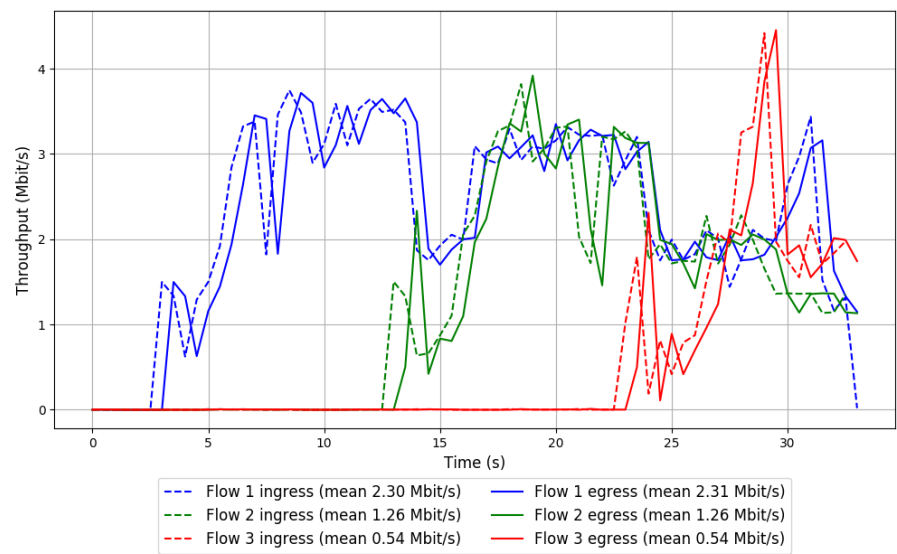
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 39.596 ms

Loss rate: 1.06%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-06-19 09:45:39

End at: 2018-06-19 09:46:09

Local clock offset: -0.631 ms

Remote clock offset: 3.354 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.32 Mbit/s

95th percentile per-packet one-way delay: 35.708 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 35.806 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 34.474 ms

Loss rate: 0.22%

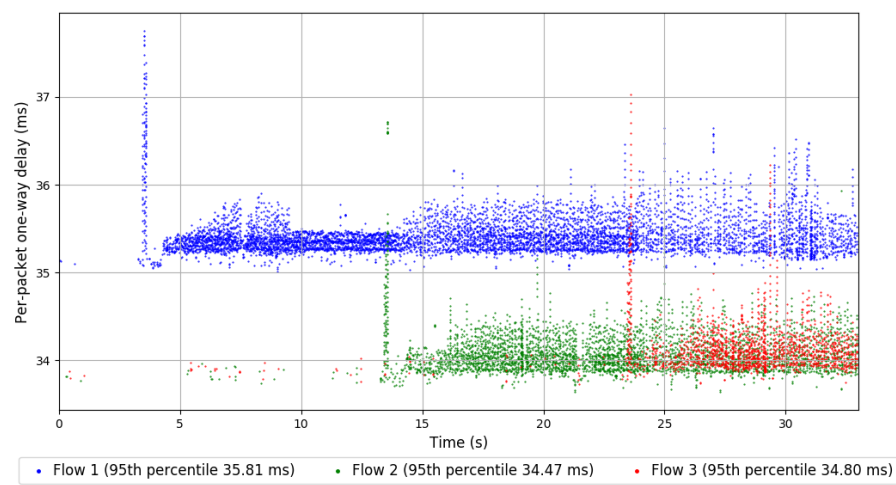
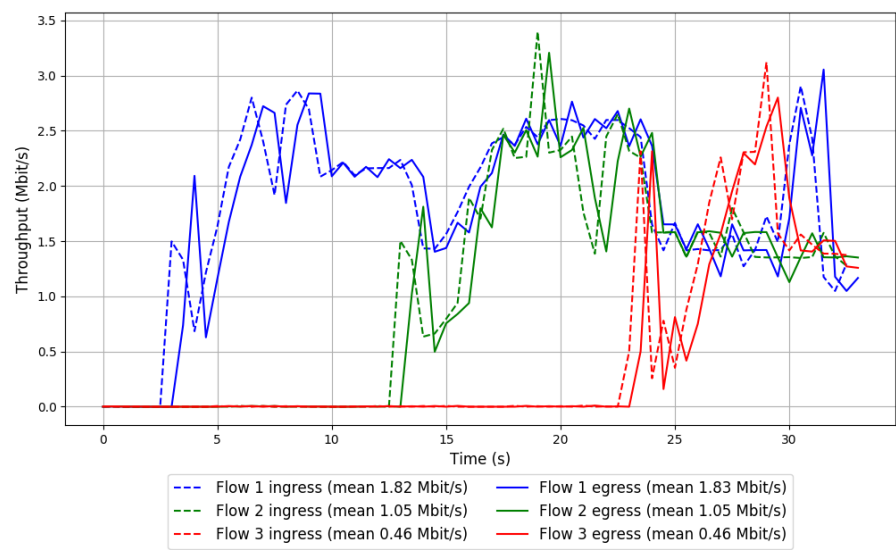
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 34.796 ms

Loss rate: 0.76%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-06-19 10:08:43

End at: 2018-06-19 10:09:13

Local clock offset: 0.467 ms

Remote clock offset: 3.91 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 35.914 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 36.057 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 34.713 ms

Loss rate: 0.00%

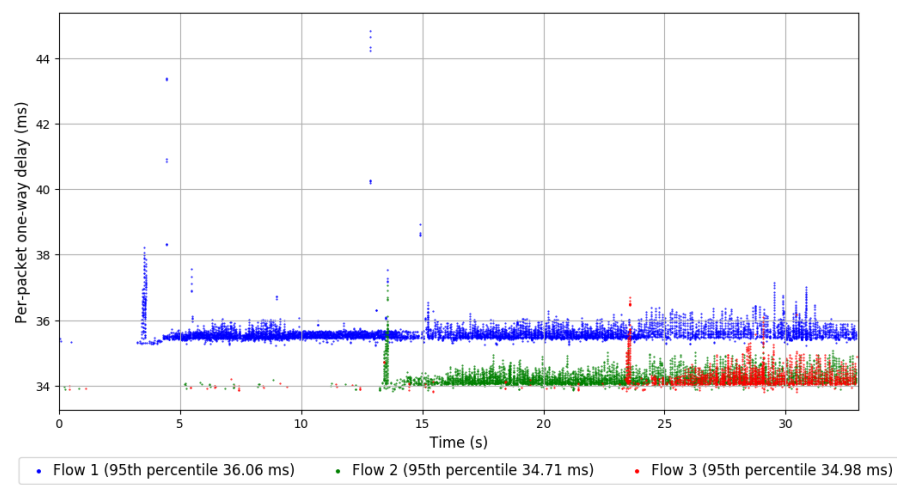
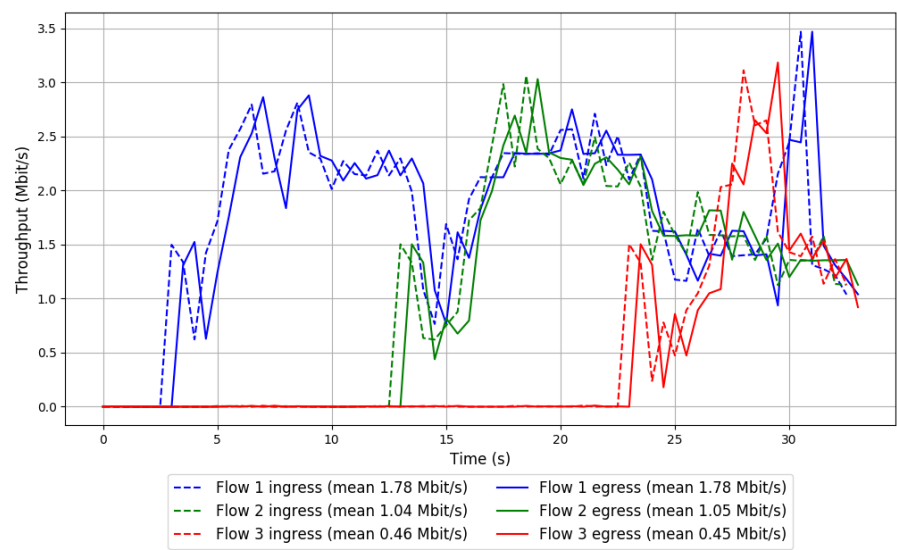
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 34.979 ms

Loss rate: 0.70%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-06-19 10:30:56

End at: 2018-06-19 10:31:26

Local clock offset: 0.425 ms

Remote clock offset: 2.616 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.11 Mbit/s

95th percentile per-packet one-way delay: 34.398 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 34.259 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 34.459 ms

Loss rate: 0.36%

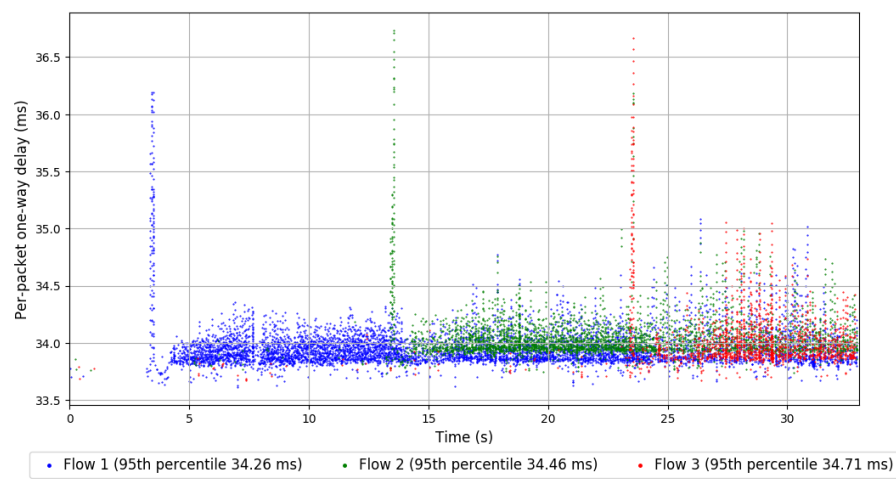
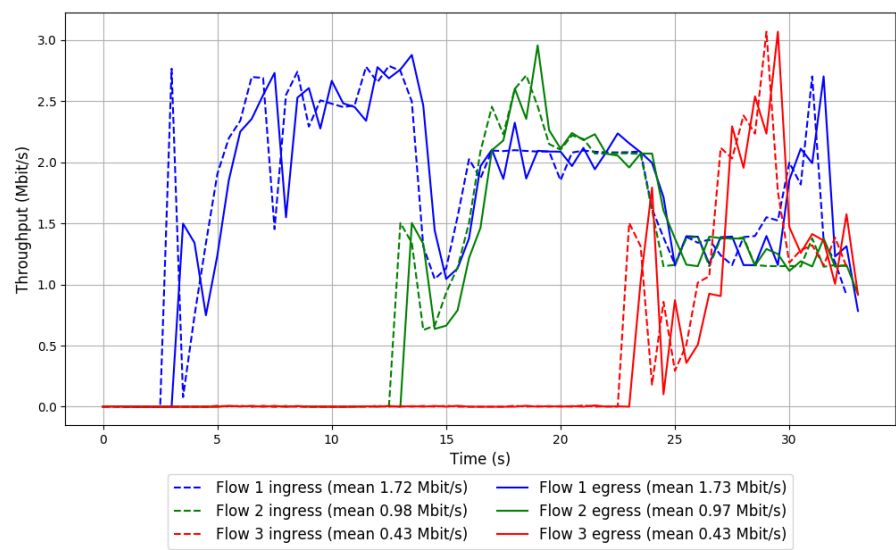
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 34.713 ms

Loss rate: 0.82%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-06-19 10:53:01

End at: 2018-06-19 10:53:31

Local clock offset: 0.52 ms

Remote clock offset: 1.849 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.20 Mbit/s

95th percentile per-packet one-way delay: 35.713 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 34.647 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 35.937 ms

Loss rate: 0.23%

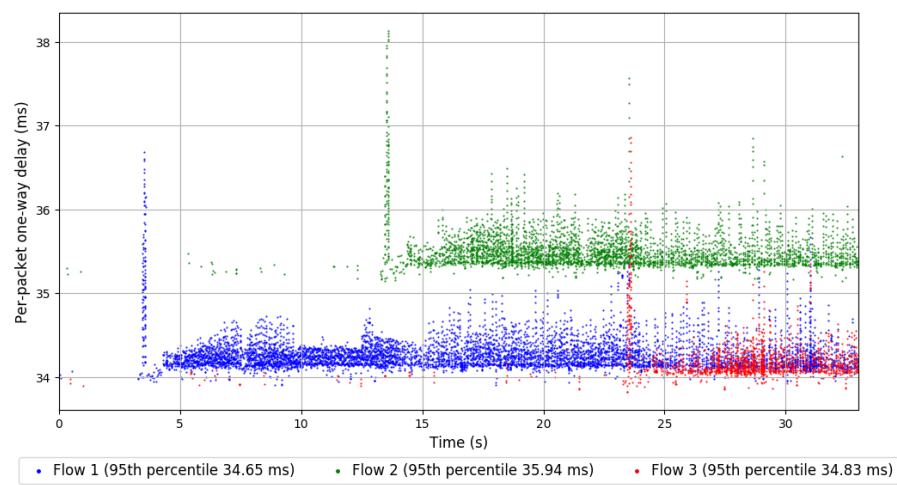
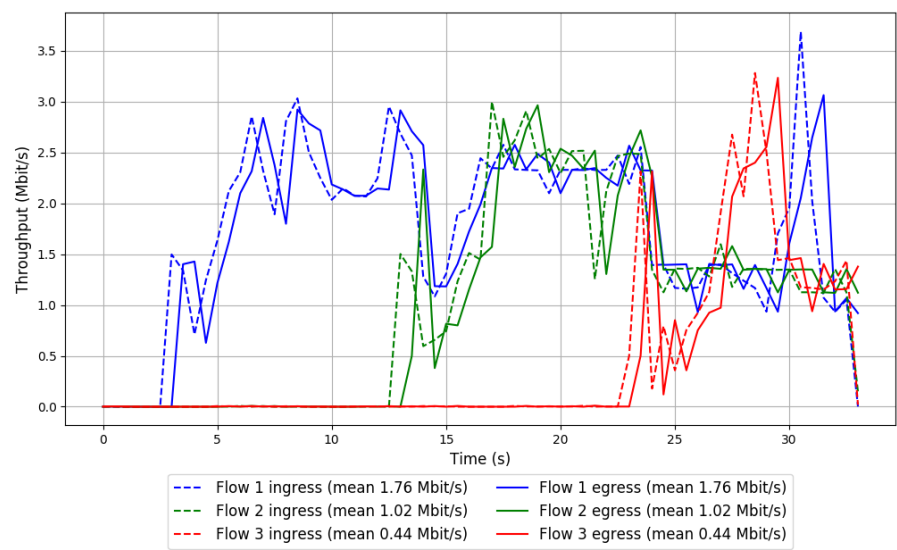
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 34.832 ms

Loss rate: 0.54%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-06-19 11:15:19

End at: 2018-06-19 11:15:49

Local clock offset: 0.325 ms

Remote clock offset: 1.243 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 35.697 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 34.389 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 35.961 ms

Loss rate: 0.35%

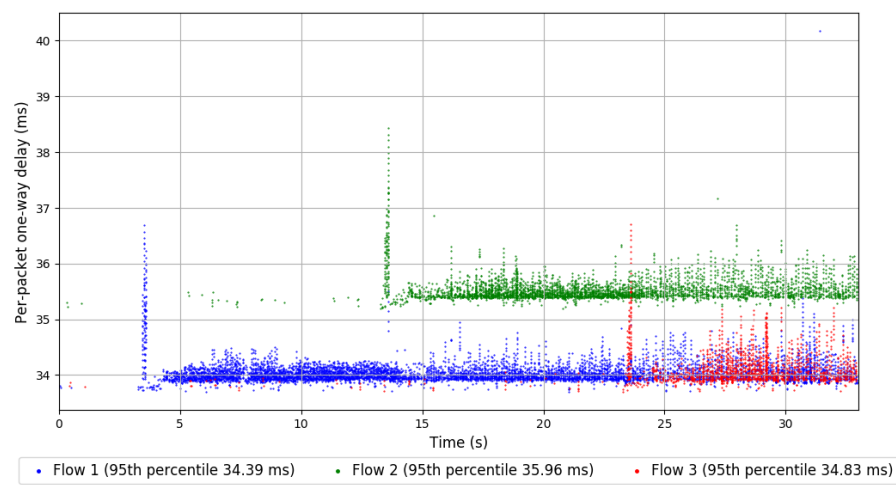
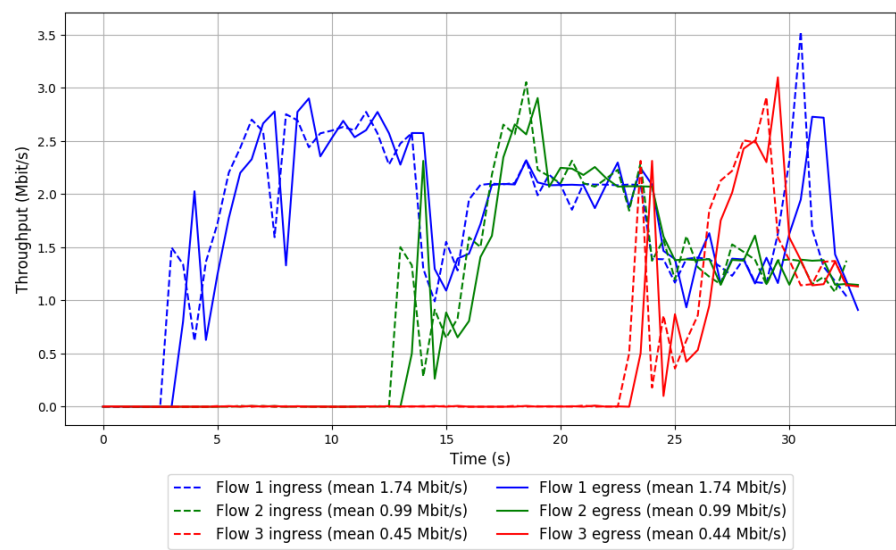
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 34.829 ms

Loss rate: 0.79%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-06-19 11:37:14

End at: 2018-06-19 11:37:44

Local clock offset: -0.263 ms

Remote clock offset: 0.843 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 35.921 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 34.655 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 36.146 ms

Loss rate: 0.35%

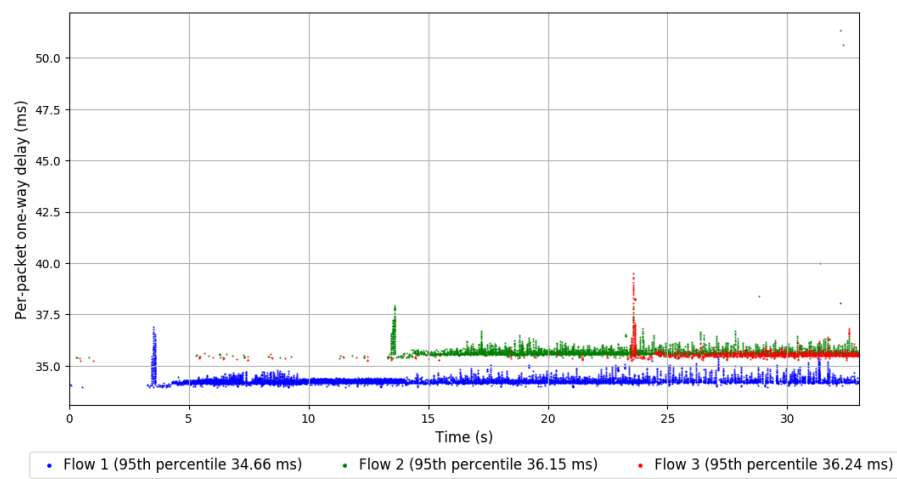
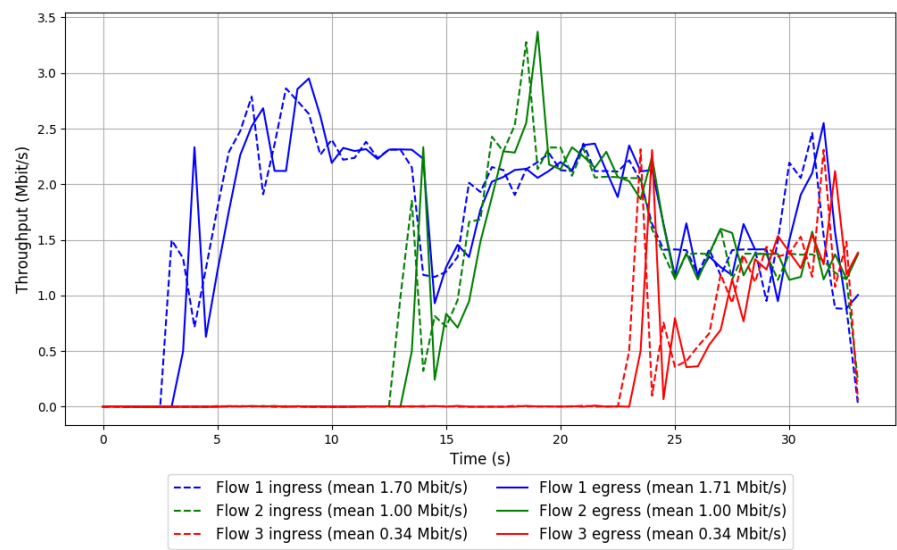
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 36.236 ms

Loss rate: 1.07%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-06-19 11:59:20

End at: 2018-06-19 11:59:50

Local clock offset: -1.648 ms

Remote clock offset: 1.258 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 35.766 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 34.503 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 36.009 ms

Loss rate: 0.00%

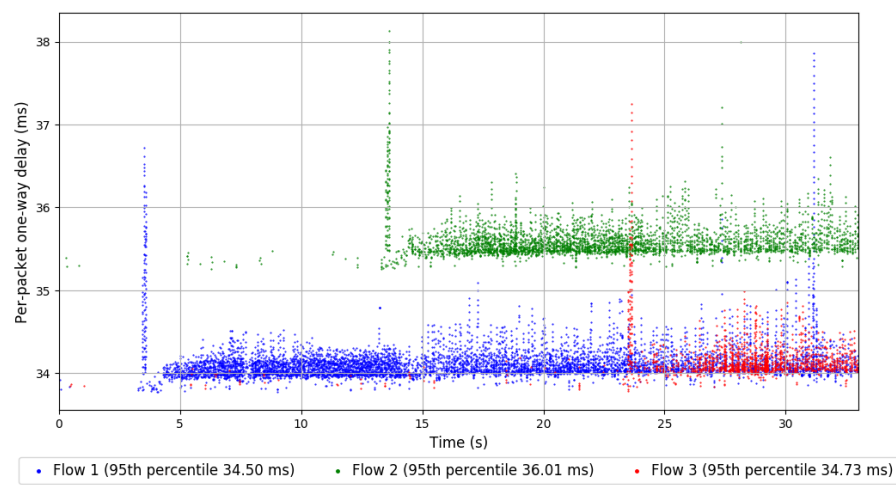
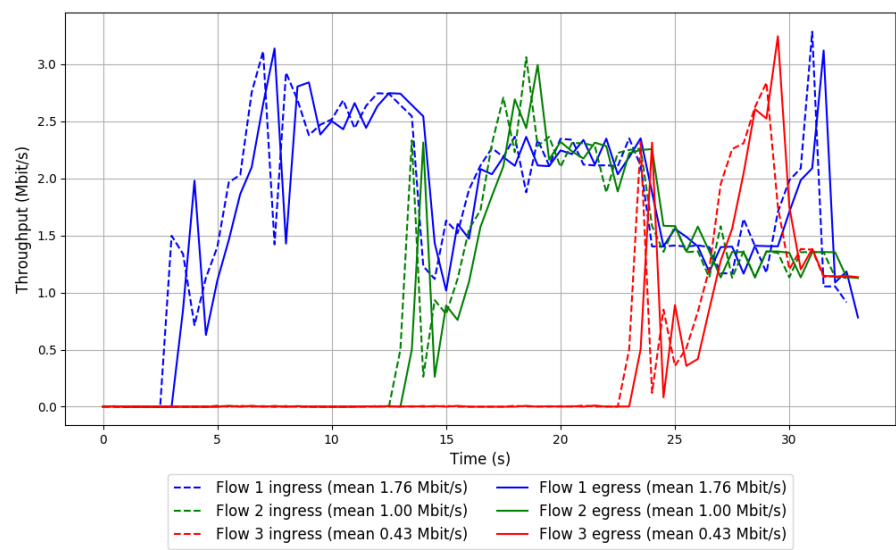
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 34.725 ms

Loss rate: 0.81%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-06-19 12:21:10

End at: 2018-06-19 12:21:40

Local clock offset: 0.448 ms

Remote clock offset: 2.176 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 35.800 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 35.941 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 34.506 ms

Loss rate: 0.03%

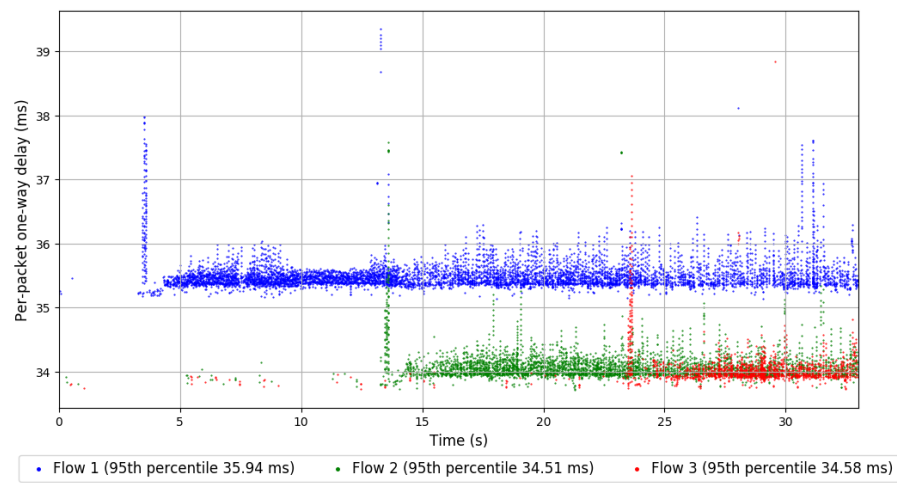
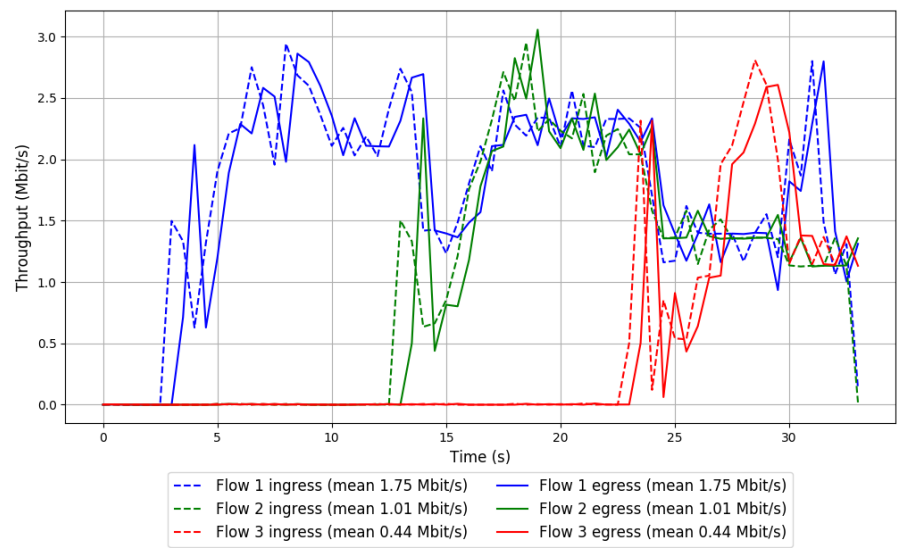
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 34.580 ms

Loss rate: 0.79%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-19 12:43:16

End at: 2018-06-19 12:43:46

Local clock offset: 0.594 ms

Remote clock offset: 3.288 ms

Below is generated by plot.py at 2018-06-19 13:11:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 35.710 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 34.587 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 35.950 ms

Loss rate: 0.34%

-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 34.860 ms

Loss rate: 0.80%

Run 10: Report of WebRTC media — Data Link

