

Pantheon Report

Generated at 2018-05-22 18:31:08 (UTC).

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

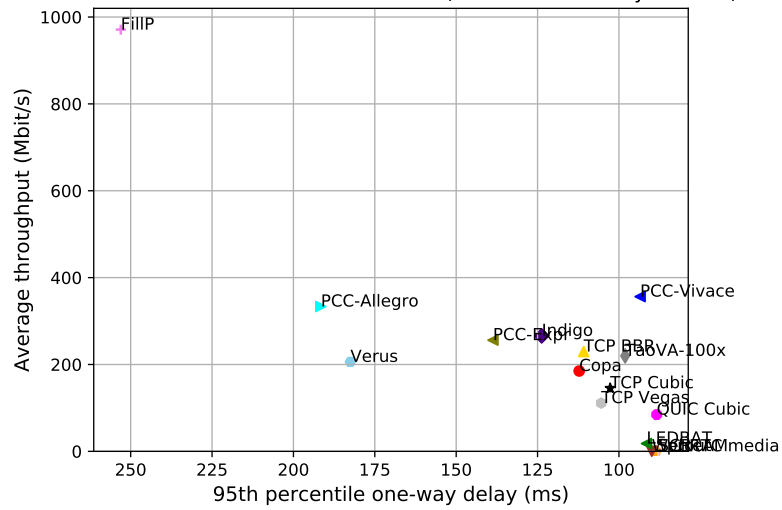
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

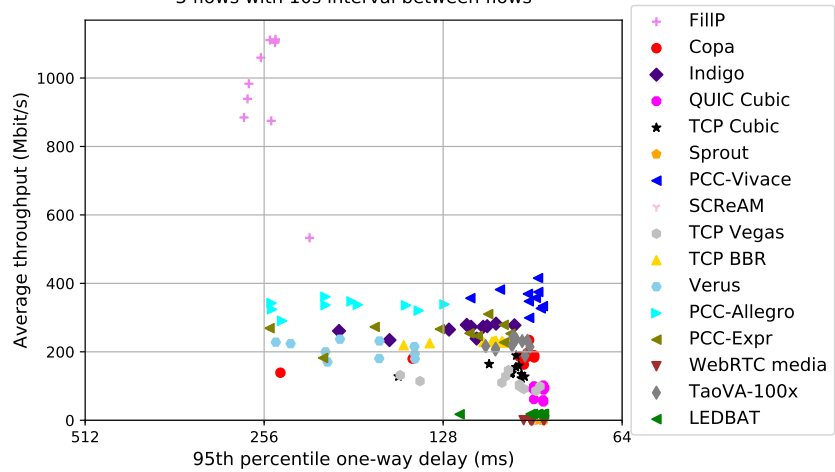
Git summary:

```
branch: master @ 2d1d4407e851ba626e5ca4626a306105793df686
third_party/llnwd @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from GCE Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Iowa Ethernet to GCE Sydney Ethernet, 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	119.03	114.98	104.82	107.88	116.39	107.53	0.64	0.99	1.96
Copa	10	102.28	91.88	67.39	98.26	111.46	119.79	0.35	0.63	2.31
TCP Cubic	10	87.44	70.85	33.45	101.22	103.28	99.10	0.61	1.36	5.01
FillP	10	545.50	471.62	344.26	252.63	219.53	194.45	0.79	0.95	2.88
Indigo	10	144.50	131.70	105.35	113.49	125.28	128.54	0.58	0.93	2.23
LEDBAT	10	11.69	7.72	3.65	90.68	91.92	91.84	1.17	1.76	3.61
PCC-Allegro	10	262.78	99.26	15.02	191.52	190.76	183.63	0.97	1.33	2.22
PCC-Expr	10	185.77	84.22	44.32	137.13	137.90	123.69	0.84	1.18	2.69
QUIC Cubic	10	36.93	47.16	50.03	88.26	88.38	88.32	0.83	1.19	1.68
SCReAM	10	0.22	0.22	0.22	87.80	87.86	87.76	0.54	0.95	1.68
Sprout	10	0.26	0.32	0.35	88.54	88.56	88.56	0.50	0.61	1.19
TaoVA-100x	10	128.09	99.80	77.94	96.08	101.13	103.59	0.43	0.71	2.21
TCP Vegas	10	61.88	56.49	35.82	104.65	99.83	101.51	0.50	0.91	2.73
Verus	10	129.64	87.87	59.73	178.41	179.45	181.80	1.00	1.04	3.65
PCC-Vivace	10	214.99	176.46	74.60	90.16	97.01	98.91	0.68	1.07	2.90
WebRTC media	10	0.05	0.05	0.05	89.53	89.72	90.19	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-05-22 13:14:23

End at: 2018-05-22 13:14:53

Local clock offset: 3.459 ms

Remote clock offset: 0.826 ms

Below is generated by plot.py at 2018-05-22 17:00:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.81 Mbit/s

95th percentile per-packet one-way delay: 109.512 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 117.66 Mbit/s

95th percentile per-packet one-way delay: 106.865 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 117.54 Mbit/s

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

Loss rate: 0.94%

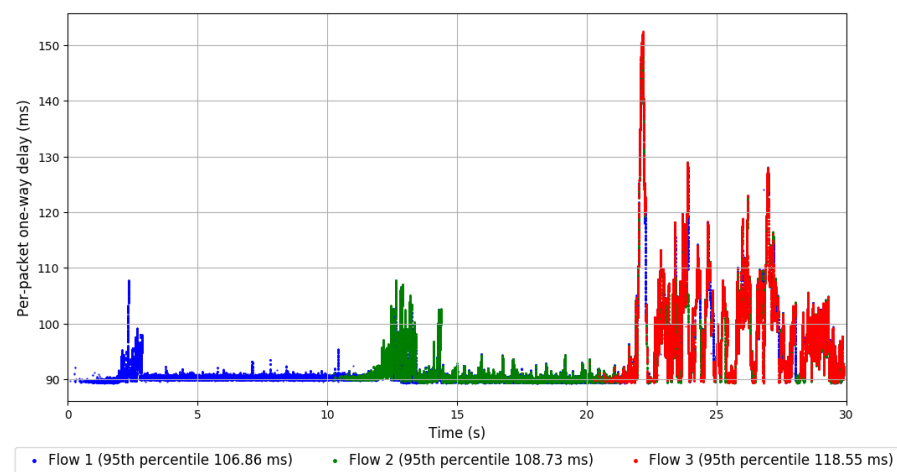
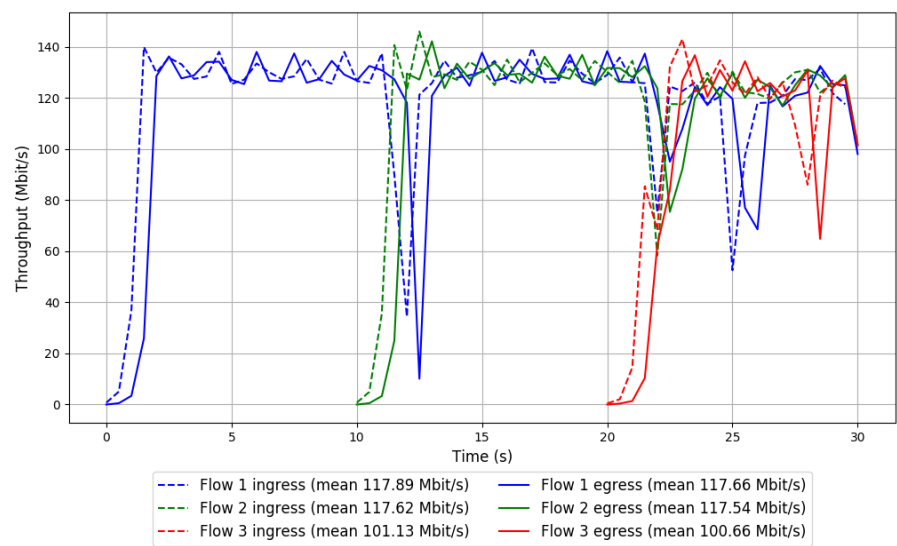
-- Flow 3:

Average throughput: 100.66 Mbit/s

95th percentile per-packet one-way delay: 118.548 ms

Loss rate: 2.23%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-05-22 13:36:55

End at: 2018-05-22 13:37:25

Local clock offset: -0.11 ms

Remote clock offset: 0.891 ms

Below is generated by plot.py at 2018-05-22 17:00:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 235.69 Mbit/s

95th percentile per-packet one-way delay: 98.352 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 122.88 Mbit/s

95th percentile per-packet one-way delay: 97.285 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 116.99 Mbit/s

95th percentile per-packet one-way delay: 98.377 ms

Loss rate: 0.97%

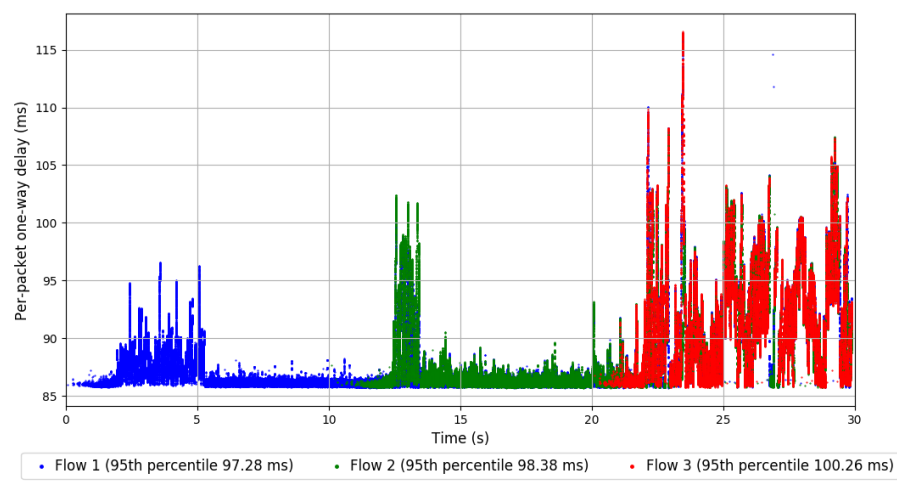
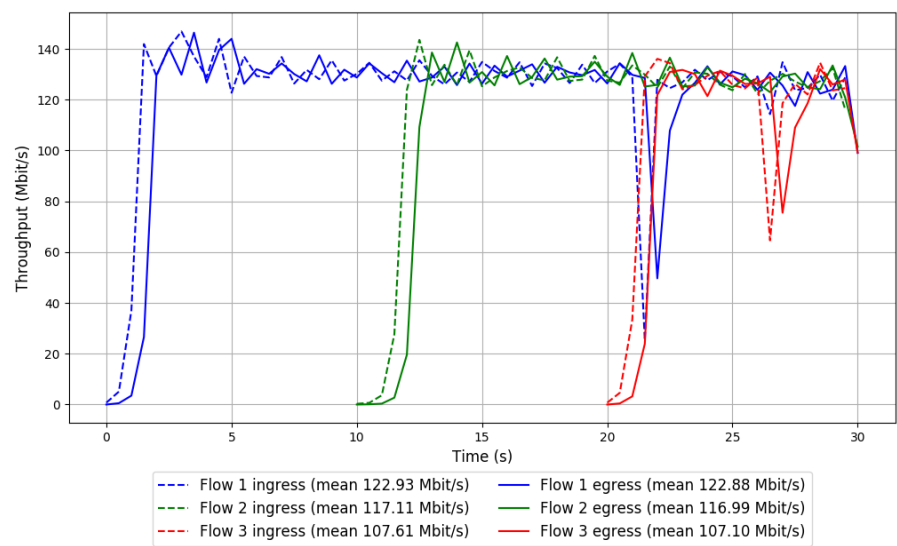
-- Flow 3:

Average throughput: 107.10 Mbit/s

95th percentile per-packet one-way delay: 100.264 ms

Loss rate: 2.24%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-05-22 13:59:36

End at: 2018-05-22 14:00:06

Local clock offset: 0.009 ms

Remote clock offset: 1.042 ms

Below is generated by plot.py at 2018-05-22 17:00:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.23 Mbit/s

95th percentile per-packet one-way delay: 134.848 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 118.53 Mbit/s

95th percentile per-packet one-way delay: 133.631 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 111.62 Mbit/s

95th percentile per-packet one-way delay: 143.798 ms

Loss rate: 1.01%

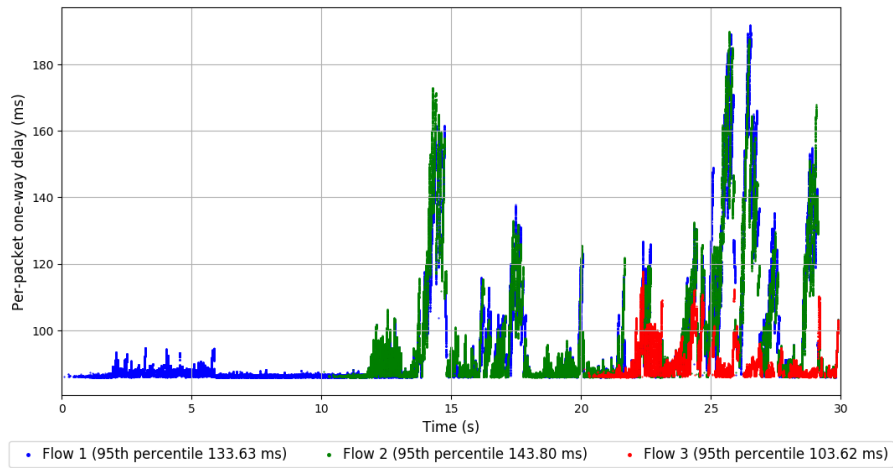
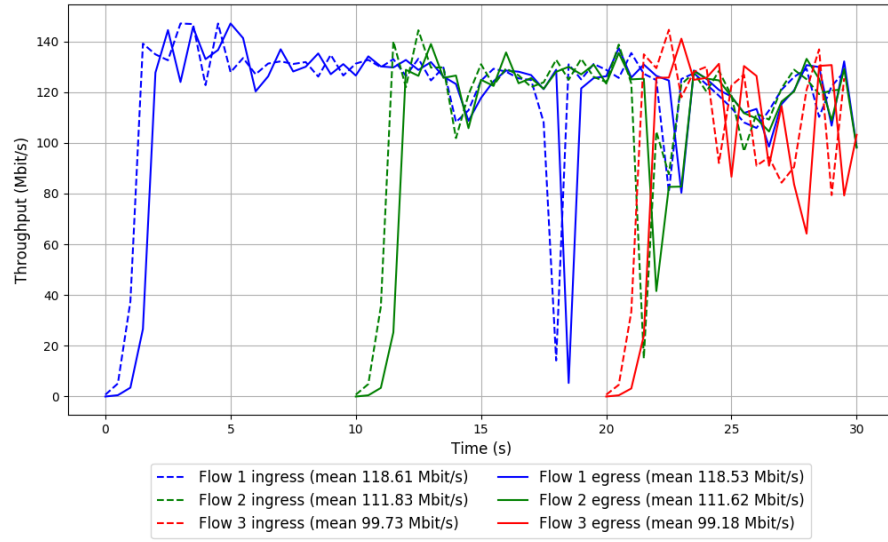
-- Flow 3:

Average throughput: 99.18 Mbit/s

95th percentile per-packet one-way delay: 103.621 ms

Loss rate: 2.32%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

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

End at: 2018-05-22 14:22:44

Local clock offset: 0.333 ms

Remote clock offset: 1.136 ms

Below is generated by plot.py at 2018-05-22 17:00:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.96 Mbit/s

95th percentile per-packet one-way delay: 104.352 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 118.90 Mbit/s

95th percentile per-packet one-way delay: 101.346 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 117.58 Mbit/s

95th percentile per-packet one-way delay: 104.928 ms

Loss rate: 0.97%

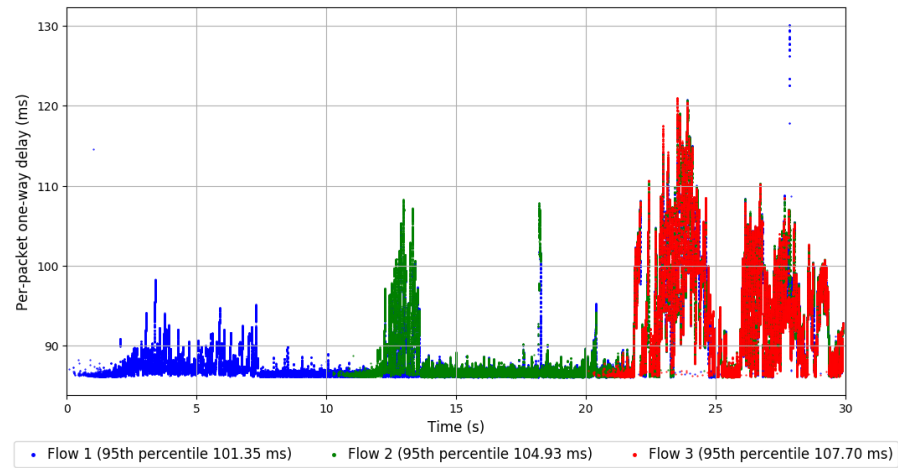
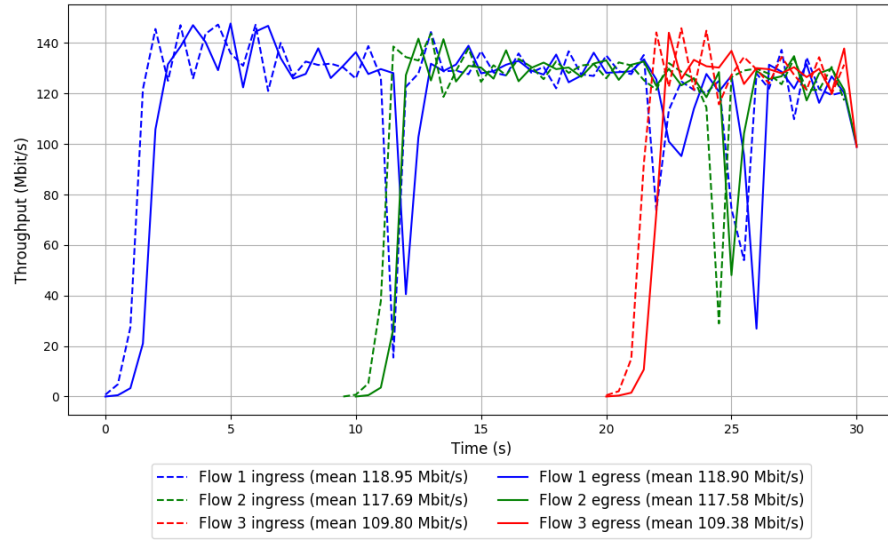
-- Flow 3:

Average throughput: 109.38 Mbit/s

95th percentile per-packet one-way delay: 107.704 ms

Loss rate: 2.14%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-05-22 14:44:38

End at: 2018-05-22 14:45:08

Local clock offset: 0.447 ms

Remote clock offset: 1.248 ms

Below is generated by plot.py at 2018-05-22 17:00:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 226.91 Mbit/s

95th percentile per-packet one-way delay: 101.249 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 120.17 Mbit/s

95th percentile per-packet one-way delay: 97.867 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 118.29 Mbit/s

95th percentile per-packet one-way delay: 99.702 ms

Loss rate: 0.94%

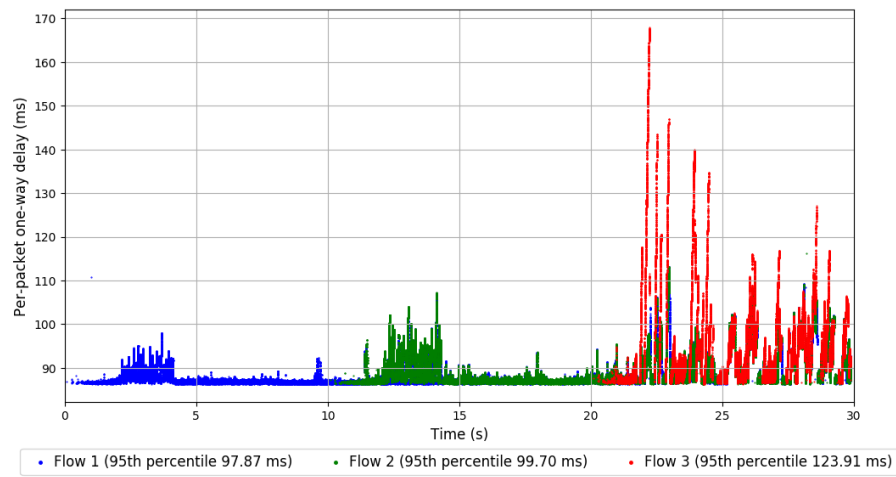
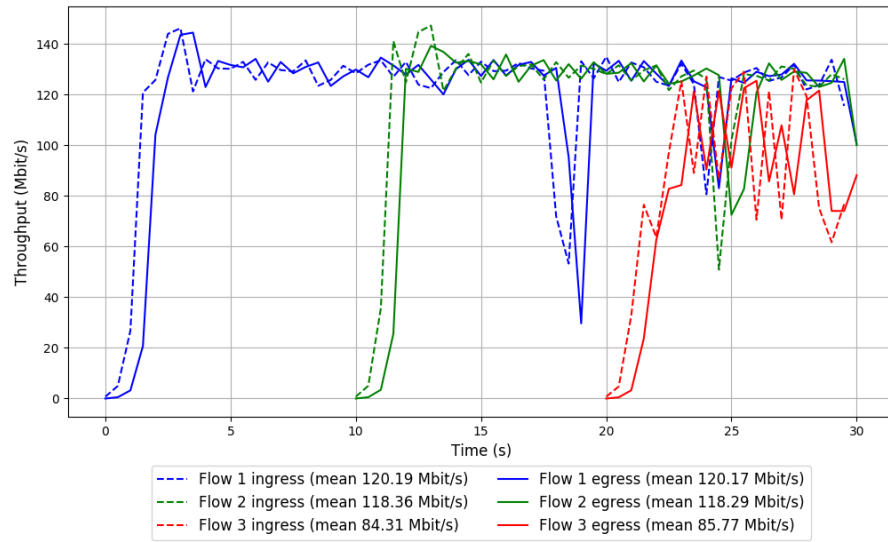
-- Flow 3:

Average throughput: 85.77 Mbit/s

95th percentile per-packet one-way delay: 123.911 ms

Loss rate: 0.07%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-05-22 15:06:54

End at: 2018-05-22 15:07:24

Local clock offset: -0.105 ms

Remote clock offset: 1.366 ms

Below is generated by plot.py at 2018-05-22 17:00:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.55 Mbit/s

95th percentile per-packet one-way delay: 104.937 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 119.11 Mbit/s

95th percentile per-packet one-way delay: 104.096 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 115.71 Mbit/s

95th percentile per-packet one-way delay: 109.360 ms

Loss rate: 0.96%

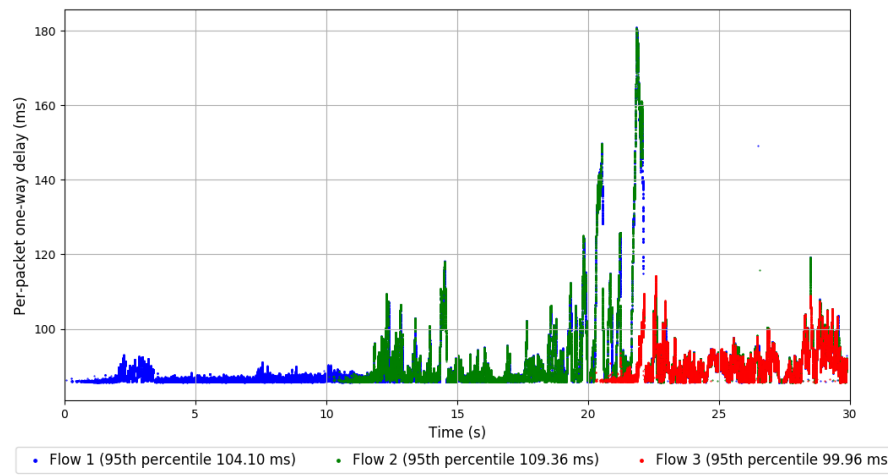
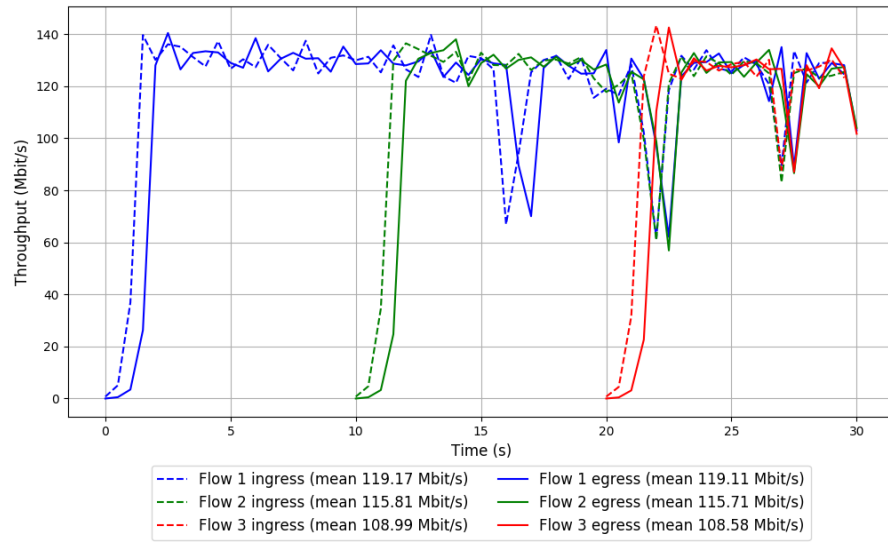
-- Flow 3:

Average throughput: 108.58 Mbit/s

95th percentile per-packet one-way delay: 99.961 ms

Loss rate: 2.17%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-05-22 15:29:28

End at: 2018-05-22 15:29:58

Local clock offset: 0.021 ms

Remote clock offset: 1.434 ms

Below is generated by plot.py at 2018-05-22 17:00:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.48 Mbit/s

95th percentile per-packet one-way delay: 149.122 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 112.60 Mbit/s

95th percentile per-packet one-way delay: 140.850 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 106.65 Mbit/s

95th percentile per-packet one-way delay: 192.430 ms

Loss rate: 1.00%

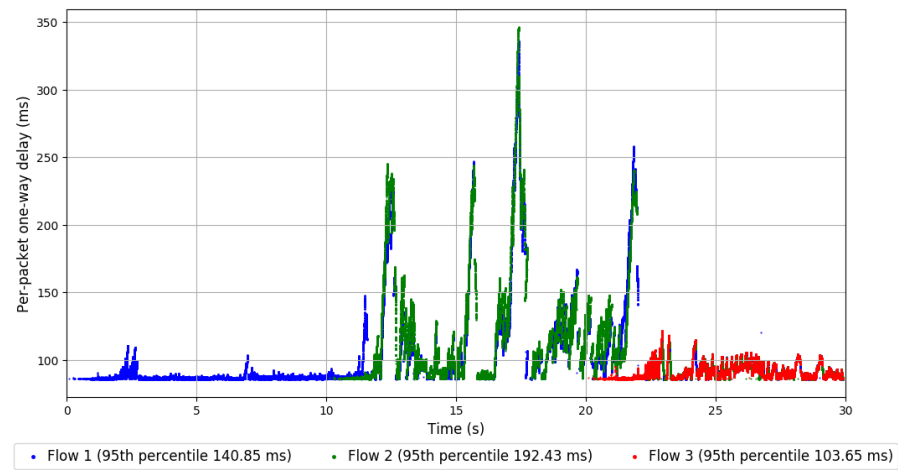
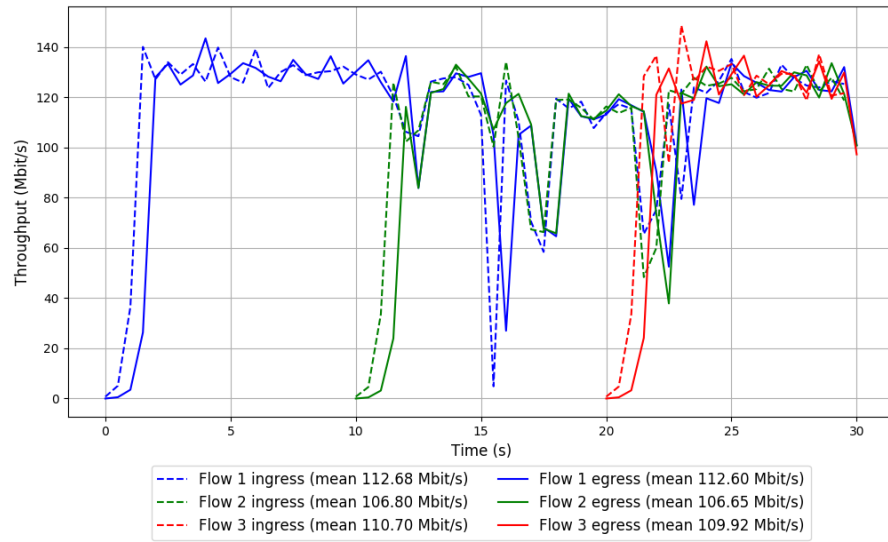
-- Flow 3:

Average throughput: 109.92 Mbit/s

95th percentile per-packet one-way delay: 103.647 ms

Loss rate: 2.17%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-05-22 15:52:08

End at: 2018-05-22 15:52:38

Local clock offset: 0.201 ms

Remote clock offset: 0.204 ms

Below is generated by plot.py at 2018-05-22 17:00:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.94 Mbit/s

95th percentile per-packet one-way delay: 98.082 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 122.64 Mbit/s

95th percentile per-packet one-way delay: 95.869 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 117.42 Mbit/s

95th percentile per-packet one-way delay: 98.296 ms

Loss rate: 0.95%

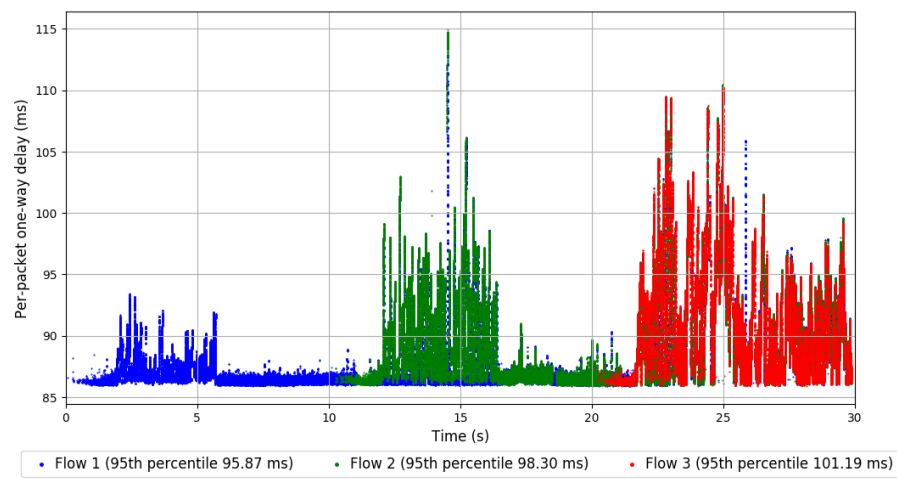
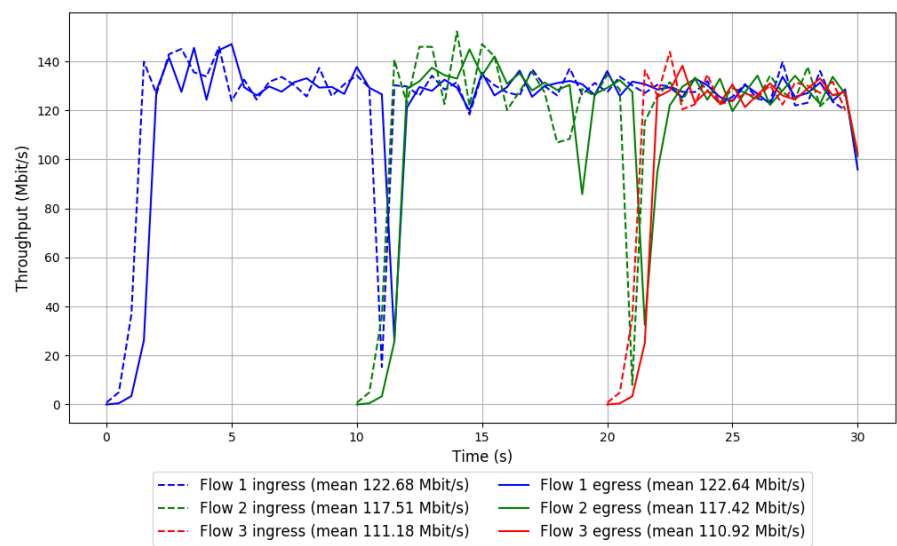
-- Flow 3:

Average throughput: 110.92 Mbit/s

95th percentile per-packet one-way delay: 101.194 ms

Loss rate: 1.98%

Run 8: Report of TCP BBR — Data Link

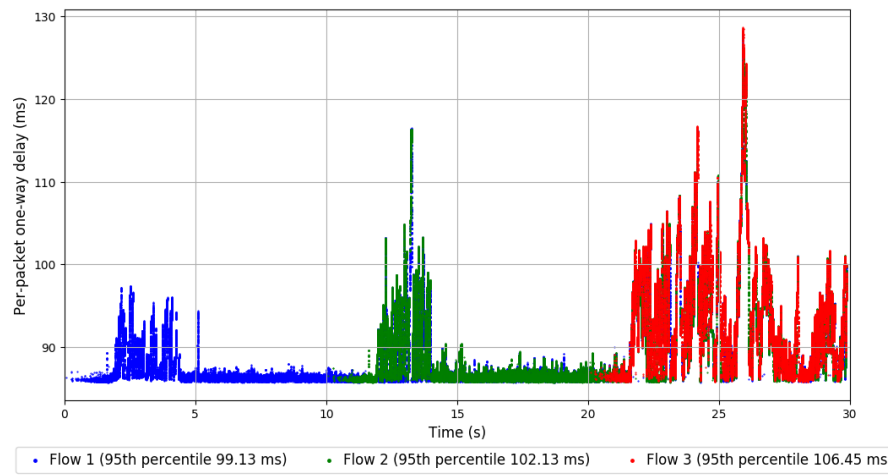
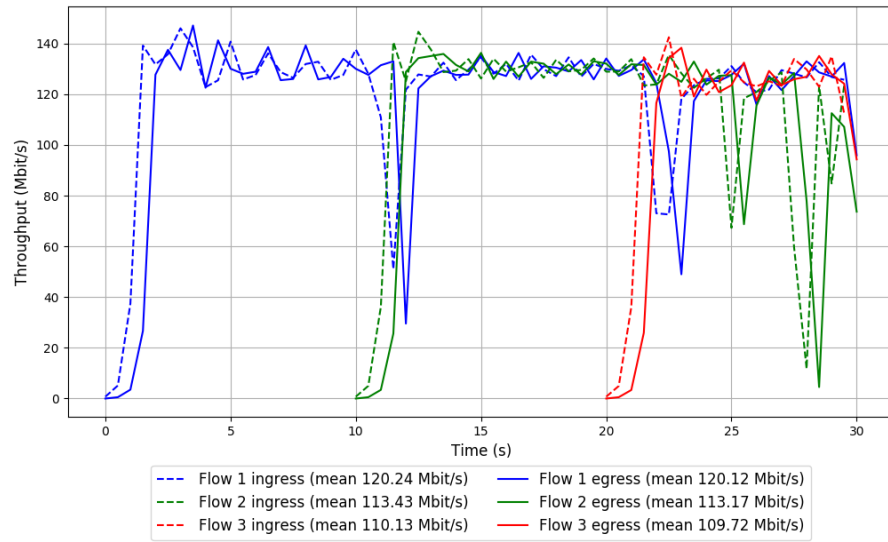


Run 9: Statistics of TCP BBR

Start at: 2018-05-22 16:14:37
End at: 2018-05-22 16:15:07
Local clock offset: -0.017 ms
Remote clock offset: -0.492 ms

Below is generated by plot.py at 2018-05-22 17:03:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 231.35 Mbit/s
95th percentile per-packet one-way delay: 101.939 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 120.12 Mbit/s
95th percentile per-packet one-way delay: 99.128 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 113.17 Mbit/s
95th percentile per-packet one-way delay: 102.133 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 109.72 Mbit/s
95th percentile per-packet one-way delay: 106.448 ms
Loss rate: 2.12%

Run 9: Report of TCP BBR — Data Link

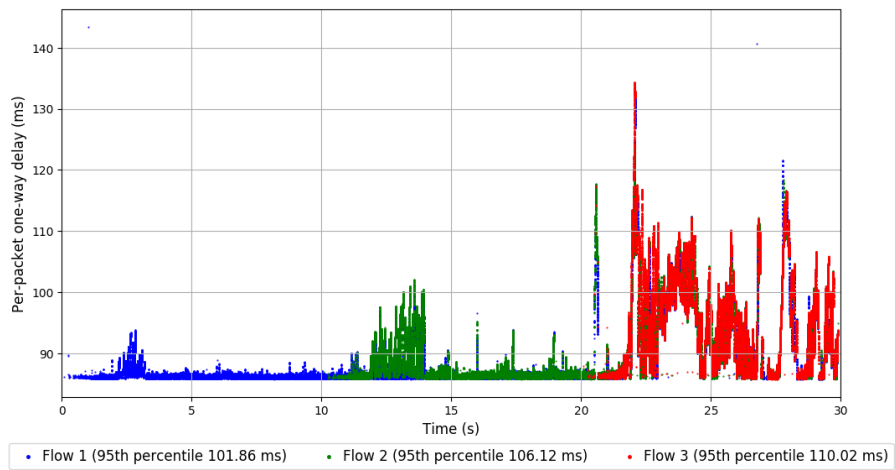
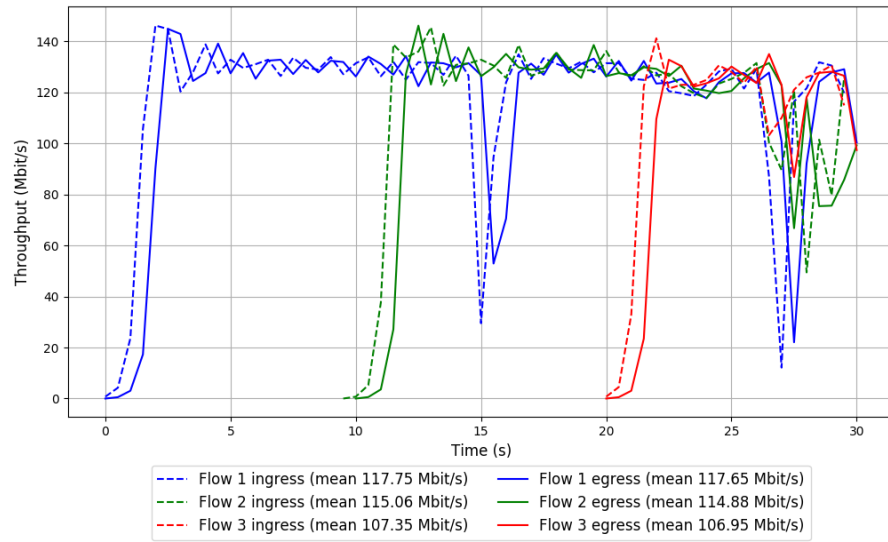


Run 10: Statistics of TCP BBR

Start at: 2018-05-22 16:37:09
End at: 2018-05-22 16:37:39
Local clock offset: 0.032 ms
Remote clock offset: -0.756 ms

Below is generated by plot.py at 2018-05-22 17:03:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 229.13 Mbit/s
95th percentile per-packet one-way delay: 106.007 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 117.65 Mbit/s
95th percentile per-packet one-way delay: 101.865 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 114.88 Mbit/s
95th percentile per-packet one-way delay: 106.123 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 106.95 Mbit/s
95th percentile per-packet one-way delay: 110.023 ms
Loss rate: 2.13%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-05-22 13:17:14

End at: 2018-05-22 13:17:44

Local clock offset: 3.095 ms

Remote clock offset: 0.868 ms

Below is generated by plot.py at 2018-05-22 17:05:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.27 Mbit/s

95th percentile per-packet one-way delay: 92.689 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 102.78 Mbit/s

95th percentile per-packet one-way delay: 92.400 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 83.21 Mbit/s

95th percentile per-packet one-way delay: 92.980 ms

Loss rate: 0.57%

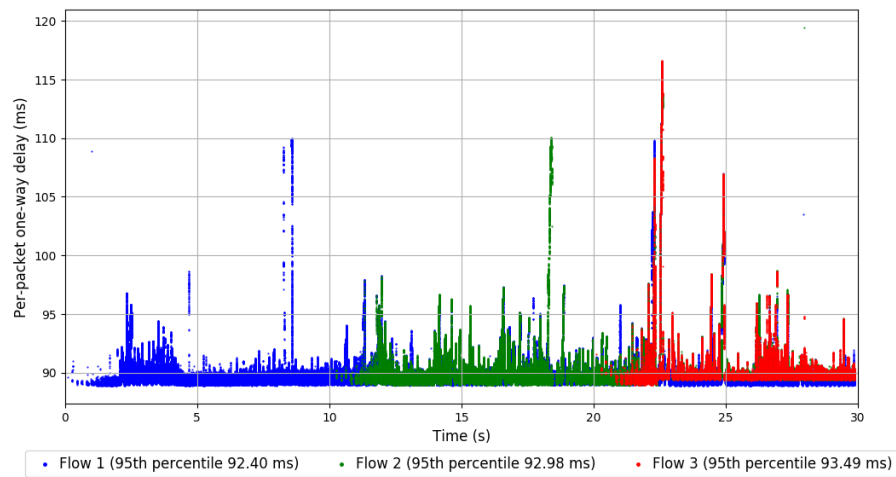
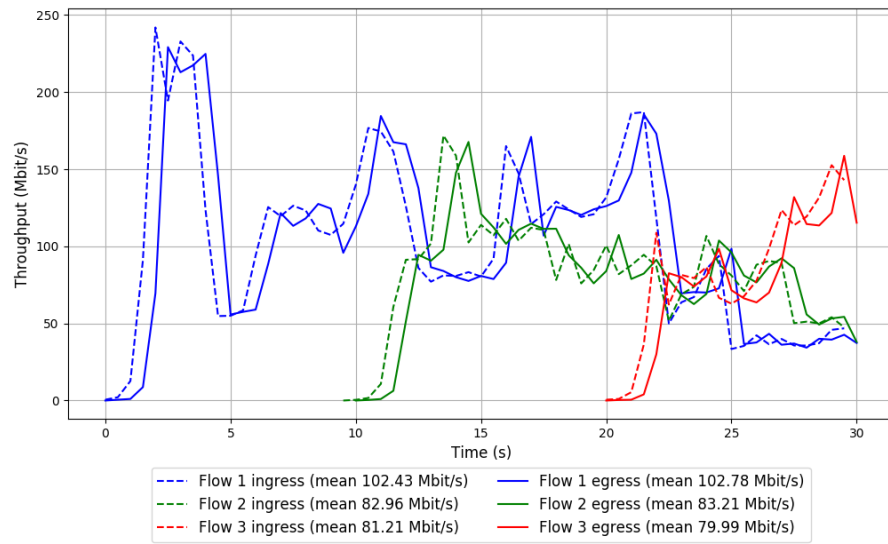
-- Flow 3:

Average throughput: 79.99 Mbit/s

95th percentile per-packet one-way delay: 93.491 ms

Loss rate: 3.23%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-05-22 13:39:47

End at: 2018-05-22 13:40:17

Local clock offset: 0.025 ms

Remote clock offset: 0.973 ms

Below is generated by plot.py at 2018-05-22 17:06:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.44 Mbit/s

95th percentile per-packet one-way delay: 92.375 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 107.24 Mbit/s

95th percentile per-packet one-way delay: 91.154 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 102.93 Mbit/s

95th percentile per-packet one-way delay: 93.493 ms

Loss rate: 0.79%

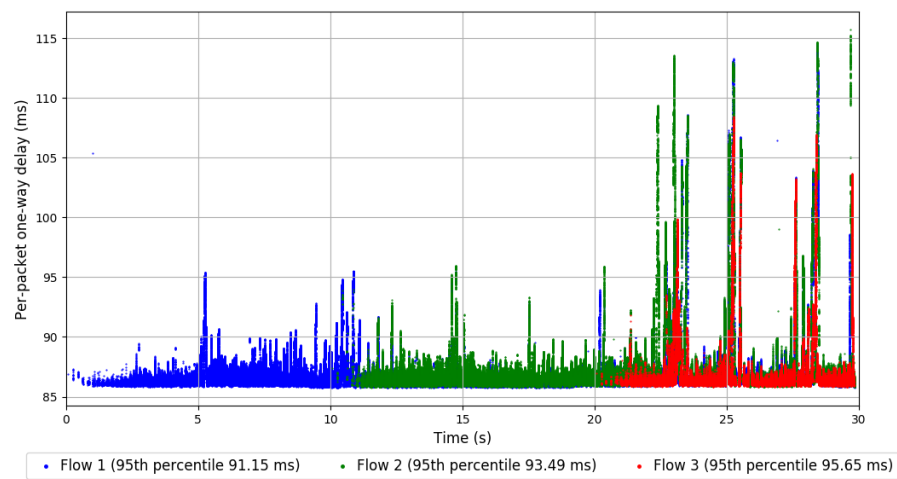
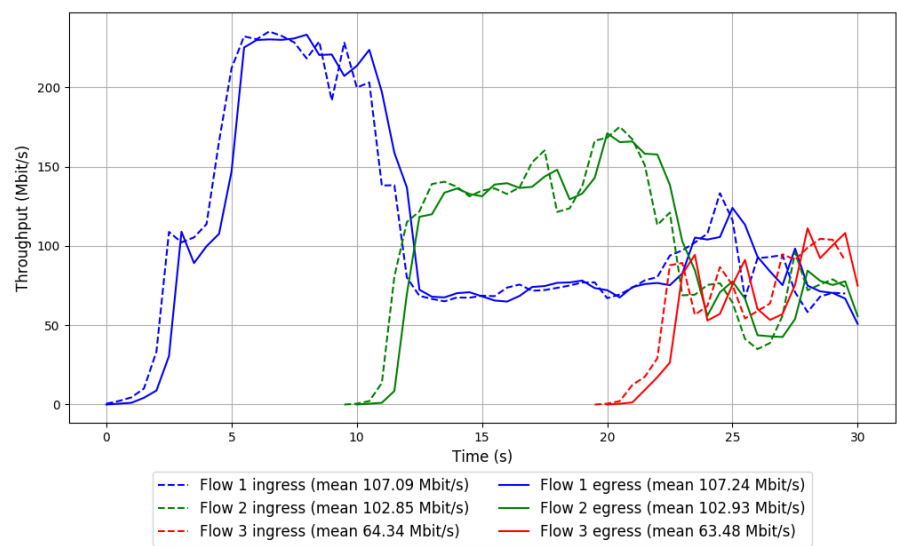
-- Flow 3:

Average throughput: 63.48 Mbit/s

95th percentile per-packet one-way delay: 95.652 ms

Loss rate: 3.06%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-05-22 14:02:26

End at: 2018-05-22 14:02:56

Local clock offset: 3.68 ms

Remote clock offset: 1.136 ms

Below is generated by plot.py at 2018-05-22 17:06:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.77 Mbit/s

95th percentile per-packet one-way delay: 93.652 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 107.98 Mbit/s

95th percentile per-packet one-way delay: 93.757 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 57.16 Mbit/s

95th percentile per-packet one-way delay: 93.945 ms

Loss rate: 0.76%

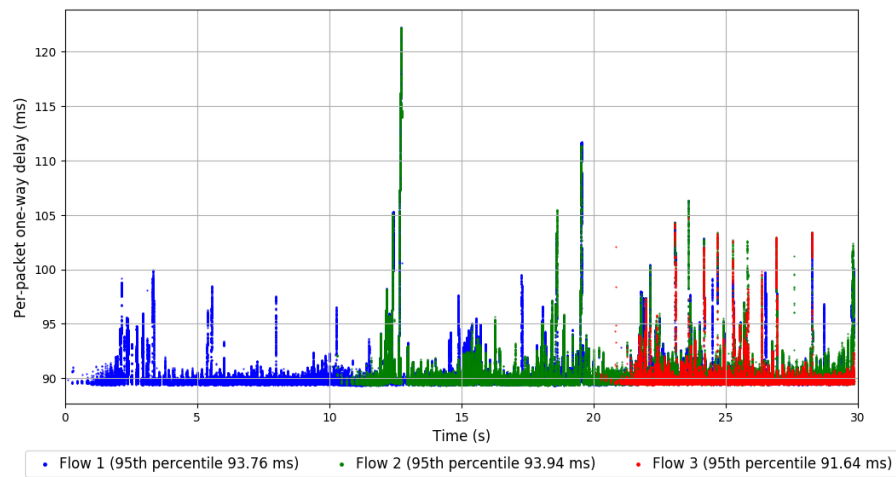
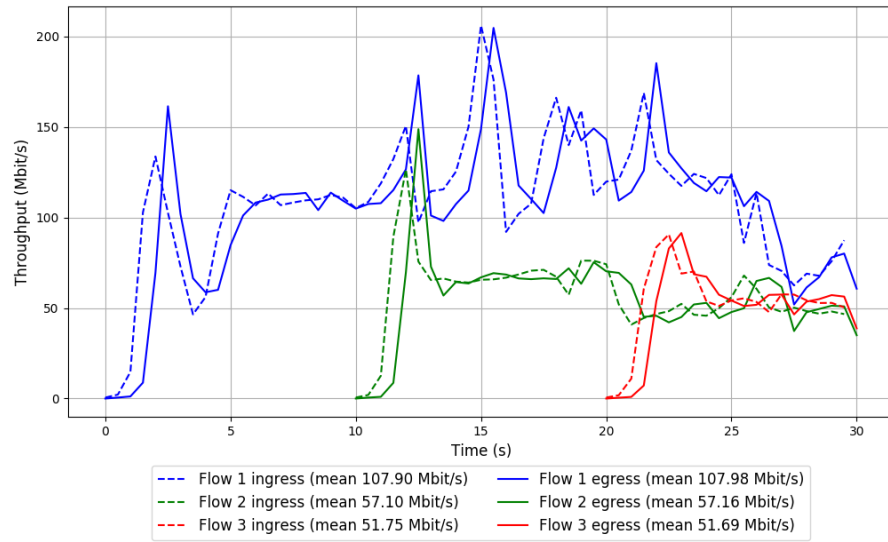
-- Flow 3:

Average throughput: 51.69 Mbit/s

95th percentile per-packet one-way delay: 91.637 ms

Loss rate: 1.87%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-05-22 14:25:02

End at: 2018-05-22 14:25:32

Local clock offset: 3.37 ms

Remote clock offset: 1.158 ms

Below is generated by plot.py at 2018-05-22 17:06:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.92 Mbit/s

95th percentile per-packet one-way delay: 240.358 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 65.19 Mbit/s

95th percentile per-packet one-way delay: 105.865 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 275.626 ms

Loss rate: 1.07%

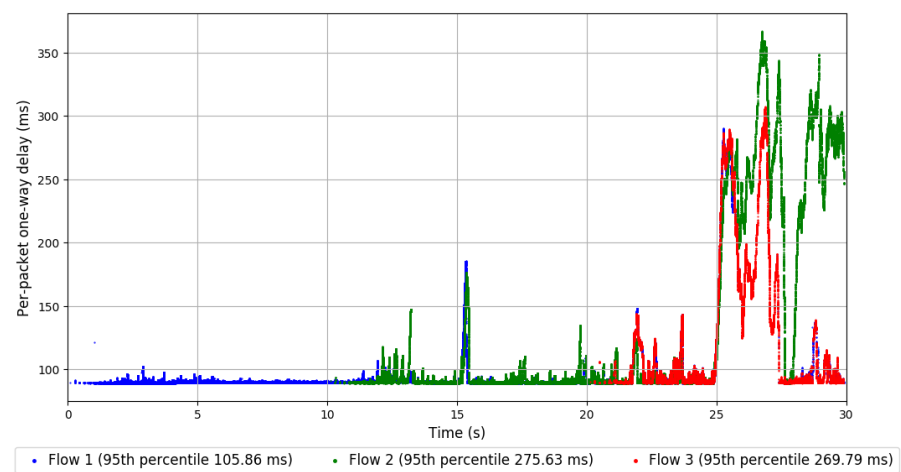
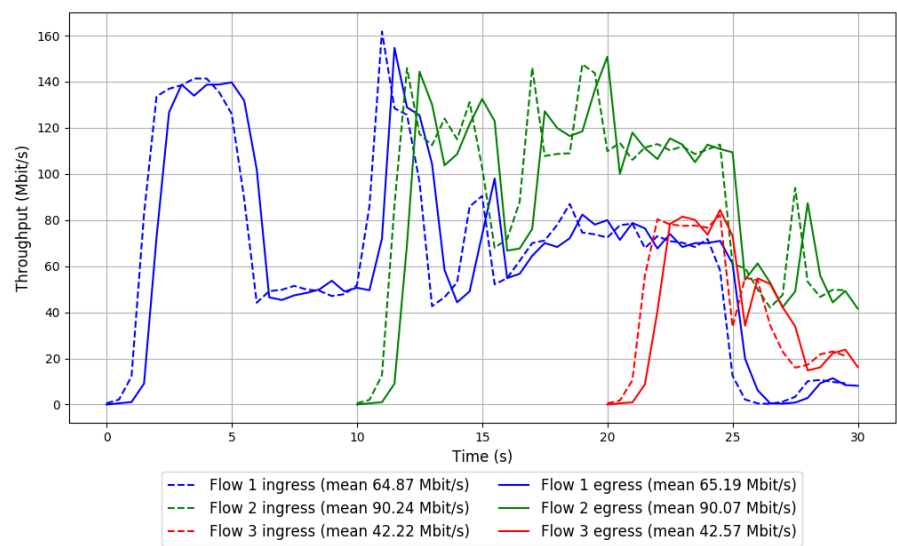
-- Flow 3:

Average throughput: 42.57 Mbit/s

95th percentile per-packet one-way delay: 269.792 ms

Loss rate: 0.92%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-05-22 14:47:30

End at: 2018-05-22 14:48:00

Local clock offset: -0.1 ms

Remote clock offset: 1.309 ms

Below is generated by plot.py at 2018-05-22 17:06:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.93 Mbit/s

95th percentile per-packet one-way delay: 92.081 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 103.96 Mbit/s

95th percentile per-packet one-way delay: 92.585 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 88.18 Mbit/s

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

Loss rate: 0.39%

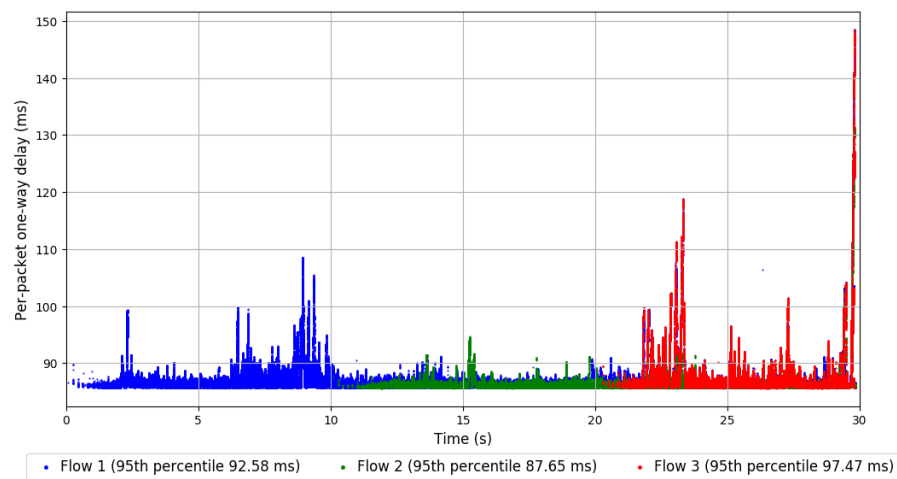
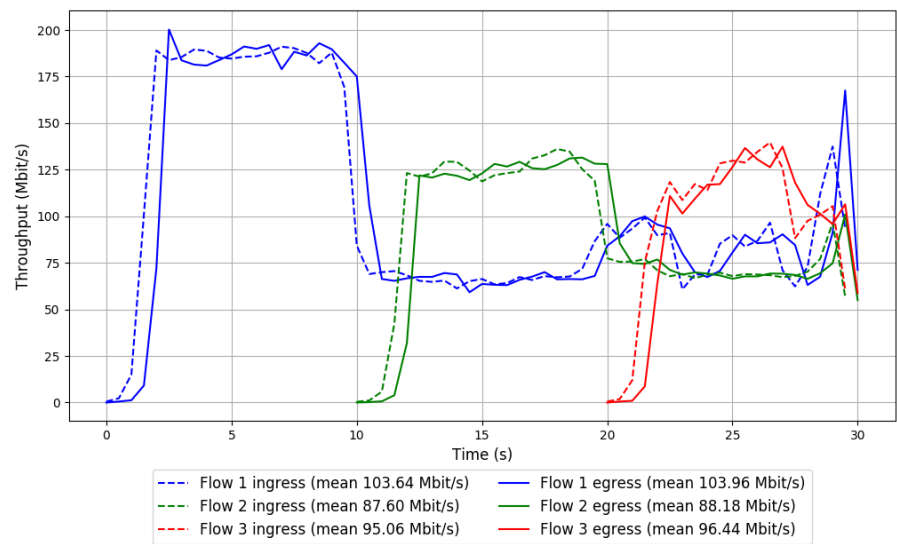
-- Flow 3:

Average throughput: 96.44 Mbit/s

95th percentile per-packet one-way delay: 97.466 ms

Loss rate: 0.90%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-05-22 15:09:42

End at: 2018-05-22 15:10:12

Local clock offset: 0.27 ms

Remote clock offset: 1.387 ms

Below is generated by plot.py at 2018-05-22 17:07:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.30 Mbit/s

95th percentile per-packet one-way delay: 91.755 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 138.47 Mbit/s

95th percentile per-packet one-way delay: 90.721 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 113.91 Mbit/s

95th percentile per-packet one-way delay: 94.521 ms

Loss rate: 0.77%

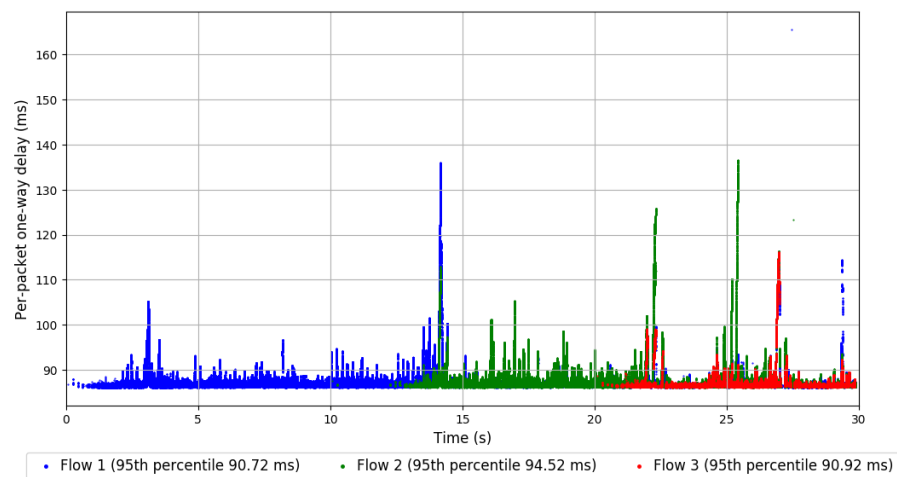
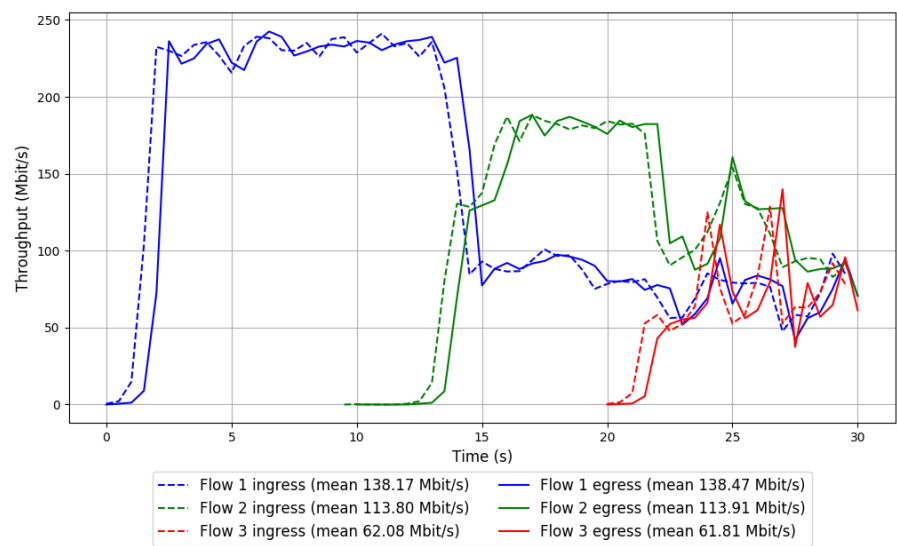
-- Flow 3:

Average throughput: 61.81 Mbit/s

95th percentile per-packet one-way delay: 90.918 ms

Loss rate: 2.24%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-05-22 15:32:19

End at: 2018-05-22 15:32:49

Local clock offset: 0.093 ms

Remote clock offset: 1.433 ms

Below is generated by plot.py at 2018-05-22 17:09:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.87 Mbit/s

95th percentile per-packet one-way delay: 144.039 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 95.42 Mbit/s

95th percentile per-packet one-way delay: 148.945 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 102.72 Mbit/s

95th percentile per-packet one-way delay: 96.080 ms

Loss rate: 0.07%

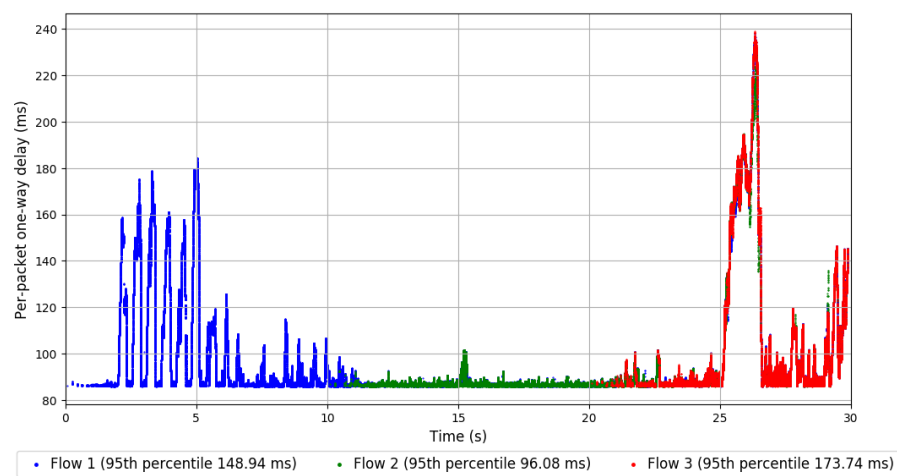
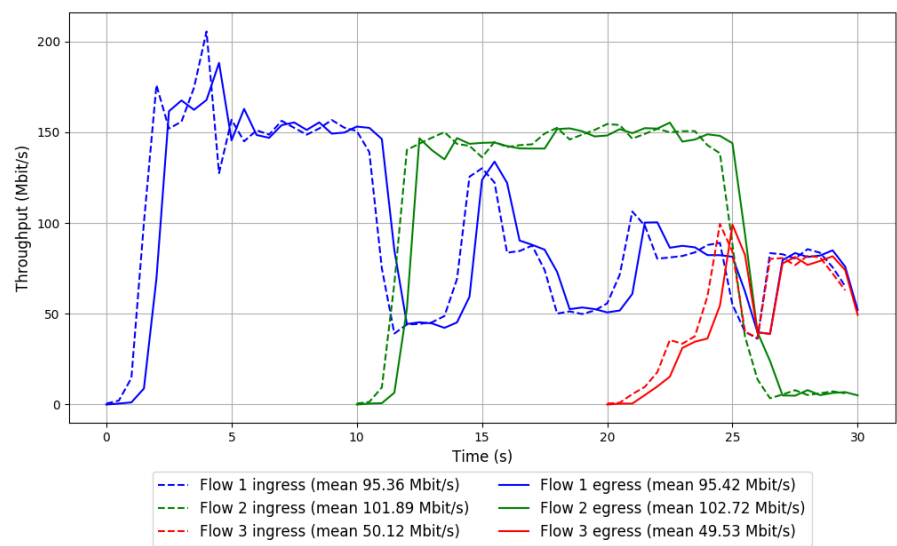
-- Flow 3:

Average throughput: 49.53 Mbit/s

95th percentile per-packet one-way delay: 173.739 ms

Loss rate: 2.89%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-05-22 15:54:57

End at: 2018-05-22 15:55:27

Local clock offset: 0.003 ms

Remote clock offset: 0.126 ms

Below is generated by plot.py at 2018-05-22 17:10:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.43 Mbit/s

95th percentile per-packet one-way delay: 89.967 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 99.43 Mbit/s

95th percentile per-packet one-way delay: 89.037 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 95.91 Mbit/s

95th percentile per-packet one-way delay: 91.268 ms

Loss rate: 0.65%

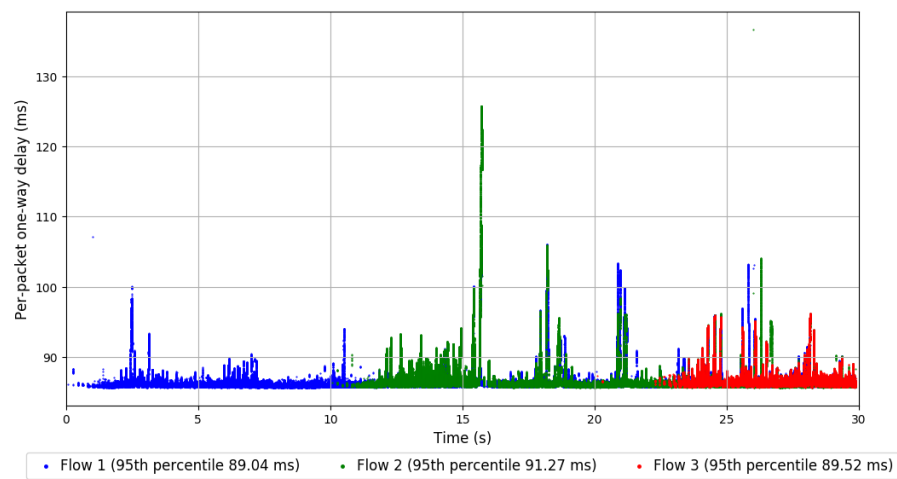
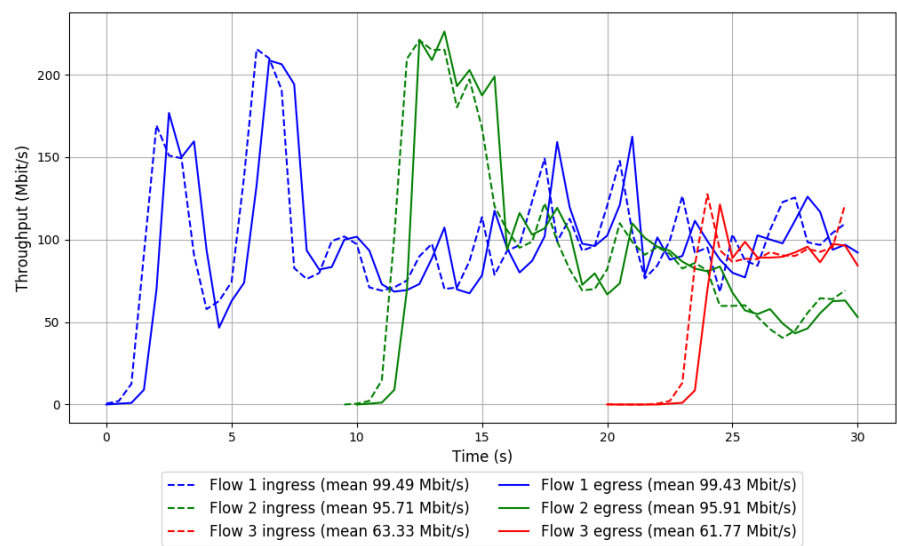
-- Flow 3:

Average throughput: 61.77 Mbit/s

95th percentile per-packet one-way delay: 89.517 ms

Loss rate: 4.17%

Run 8: Report of Copa — Data Link

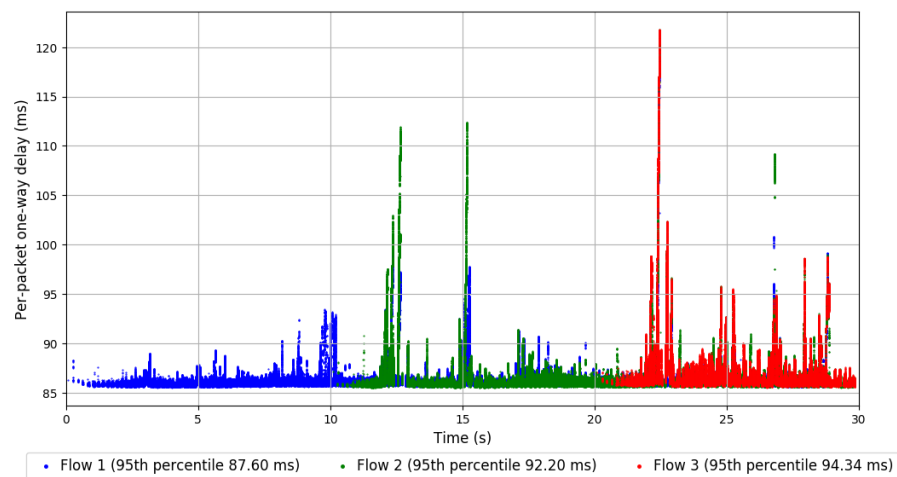
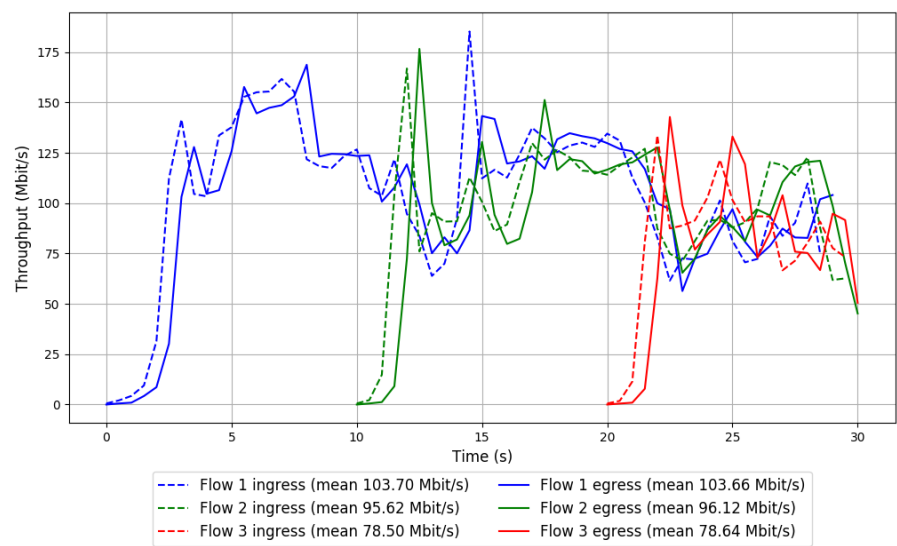


Run 9: Statistics of Copa

Start at: 2018-05-22 16:17:30
End at: 2018-05-22 16:18:00
Local clock offset: -0.178 ms
Remote clock offset: -0.508 ms

Below is generated by plot.py at 2018-05-22 17:11:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 189.84 Mbit/s
95th percentile per-packet one-way delay: 89.943 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 103.66 Mbit/s
95th percentile per-packet one-way delay: 87.602 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 92.201 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 78.64 Mbit/s
95th percentile per-packet one-way delay: 94.344 ms
Loss rate: 1.57%

Run 9: Report of Copa — Data Link

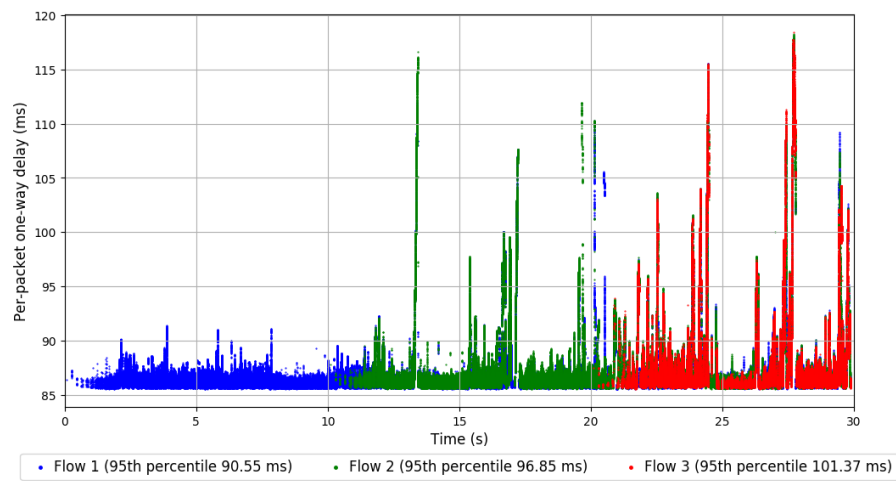
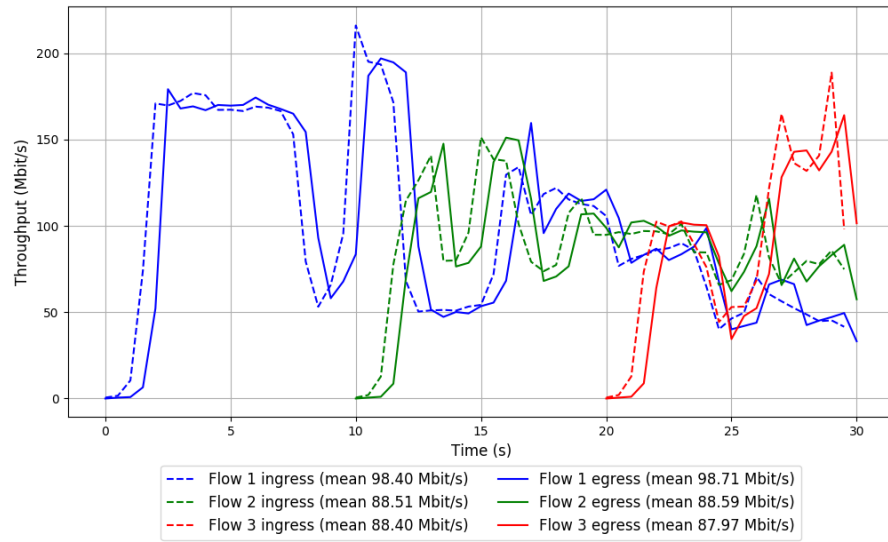


Run 10: Statistics of Copa

Start at: 2018-05-22 16:40:02
End at: 2018-05-22 16:40:32
Local clock offset: -0.147 ms
Remote clock offset: -0.724 ms

Below is generated by plot.py at 2018-05-22 17:11:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 186.37 Mbit/s
95th percentile per-packet one-way delay: 95.261 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 98.71 Mbit/s
95th percentile per-packet one-way delay: 90.553 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 88.59 Mbit/s
95th percentile per-packet one-way delay: 96.854 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 87.97 Mbit/s
95th percentile per-packet one-way delay: 101.374 ms
Loss rate: 2.23%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-05-22 13:08:50

End at: 2018-05-22 13:09:20

Local clock offset: 3.284 ms

Remote clock offset: 0.79 ms

Below is generated by plot.py at 2018-05-22 17:11:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.79 Mbit/s

95th percentile per-packet one-way delay: 98.169 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 99.51 Mbit/s

95th percentile per-packet one-way delay: 98.697 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 28.05 Mbit/s

95th percentile per-packet one-way delay: 93.755 ms

Loss rate: 3.96%

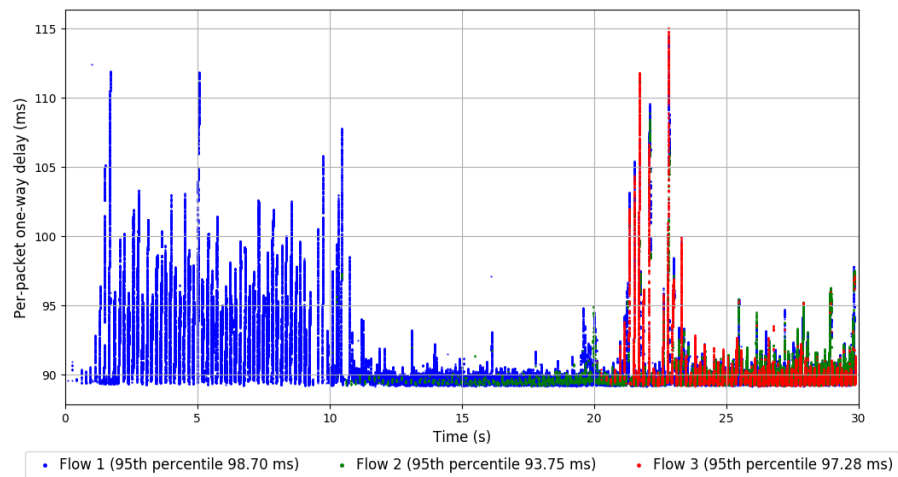
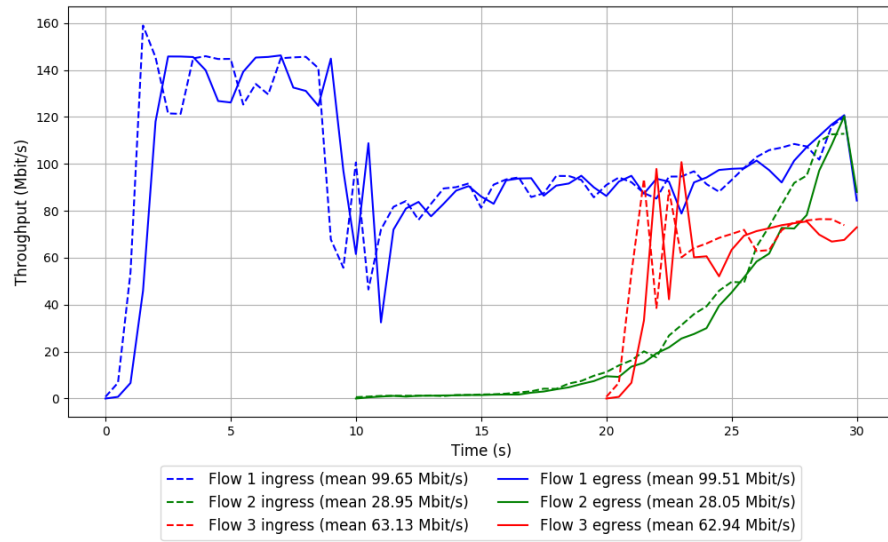
-- Flow 3:

Average throughput: 62.94 Mbit/s

95th percentile per-packet one-way delay: 97.278 ms

Loss rate: 2.04%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-05-22 13:31:21

End at: 2018-05-22 13:31:51

Local clock offset: 3.837 ms

Remote clock offset: 0.866 ms

Below is generated by plot.py at 2018-05-22 17:11:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.80 Mbit/s

95th percentile per-packet one-way delay: 152.191 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 74.71 Mbit/s

95th percentile per-packet one-way delay: 153.319 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 78.83 Mbit/s

95th percentile per-packet one-way delay: 151.905 ms

Loss rate: 1.09%

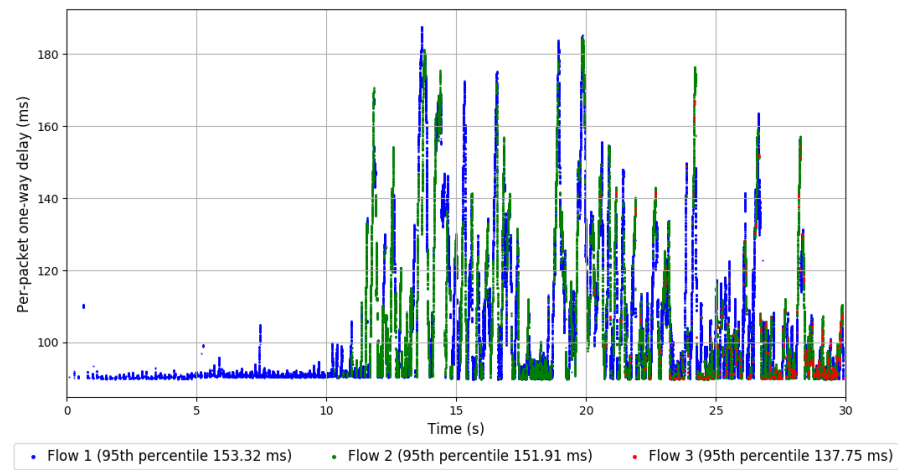
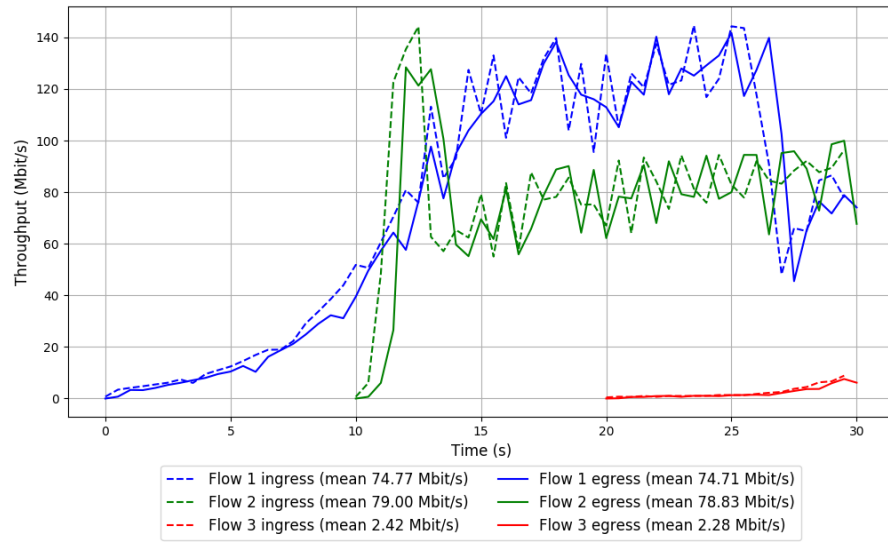
-- Flow 3:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 137.747 ms

Loss rate: 7.37%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-05-22 13:53:56

End at: 2018-05-22 13:54:26

Local clock offset: 3.64 ms

Remote clock offset: 0.951 ms

Below is generated by plot.py at 2018-05-22 17:11:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.36 Mbit/s

95th percentile per-packet one-way delay: 98.488 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 72.04 Mbit/s

95th percentile per-packet one-way delay: 99.048 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 61.09 Mbit/s

95th percentile per-packet one-way delay: 96.160 ms

Loss rate: 1.25%

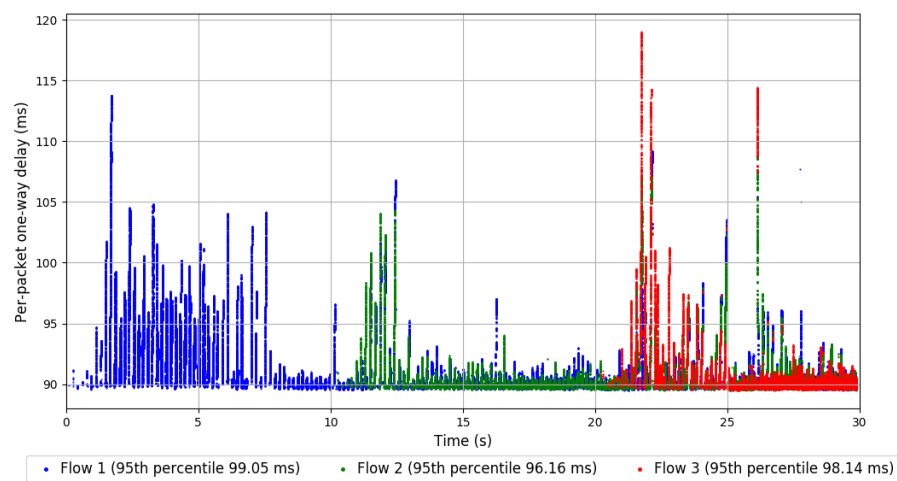
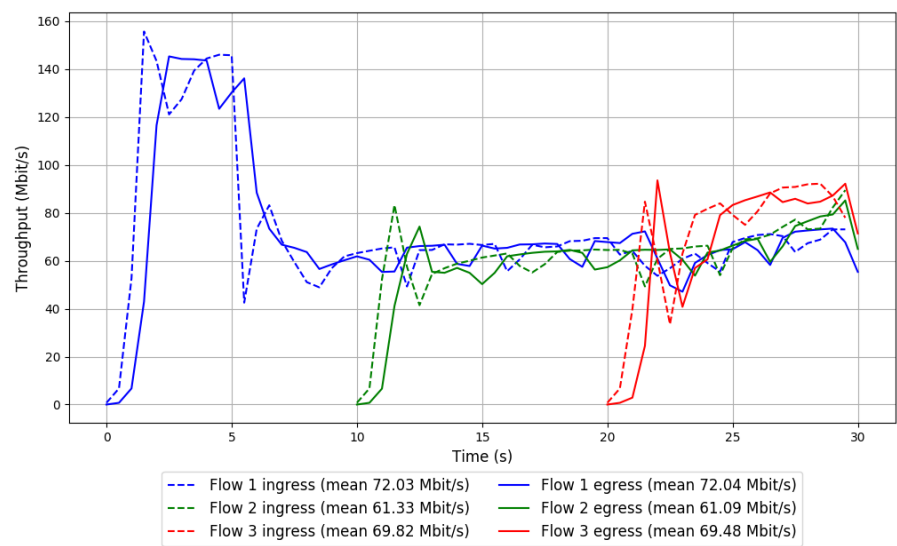
-- Flow 3:

Average throughput: 69.48 Mbit/s

95th percentile per-packet one-way delay: 98.143 ms

Loss rate: 2.22%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-05-22 14:16:33

End at: 2018-05-22 14:17:03

Local clock offset: 3.566 ms

Remote clock offset: 1.107 ms

Below is generated by plot.py at 2018-05-22 17:11:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.08 Mbit/s

95th percentile per-packet one-way delay: 96.543 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 109.18 Mbit/s

95th percentile per-packet one-way delay: 96.225 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 67.82 Mbit/s

95th percentile per-packet one-way delay: 97.099 ms

Loss rate: 1.13%

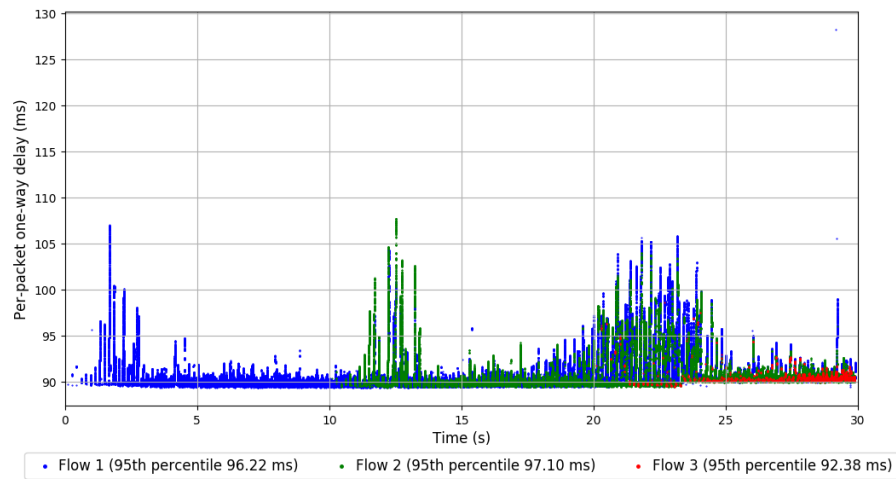
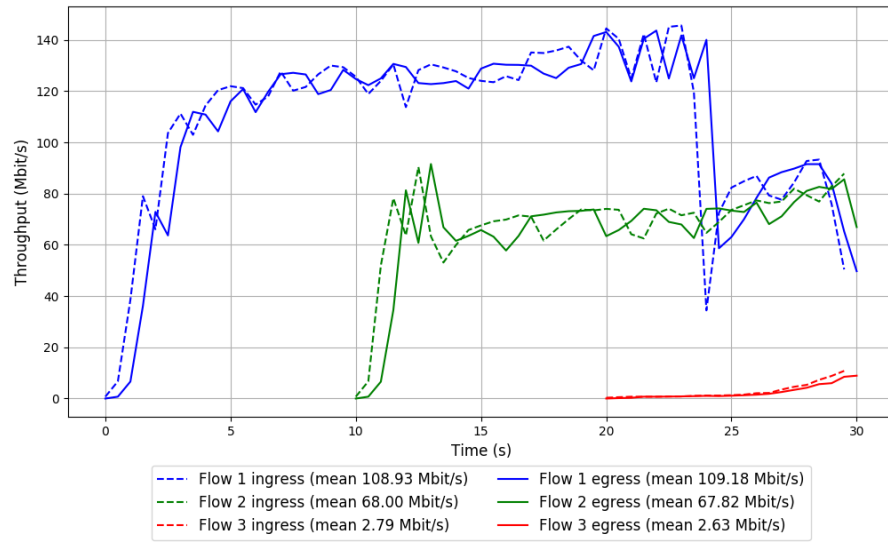
-- Flow 3:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 92.378 ms

Loss rate: 7.44%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-05-22 14:39:01

End at: 2018-05-22 14:39:31

Local clock offset: 2.01 ms

Remote clock offset: 1.188 ms

Below is generated by plot.py at 2018-05-22 17:11:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.01 Mbit/s

95th percentile per-packet one-way delay: 94.506 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 72.78 Mbit/s

95th percentile per-packet one-way delay: 95.159 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 72.84 Mbit/s

95th percentile per-packet one-way delay: 93.705 ms

Loss rate: 1.16%

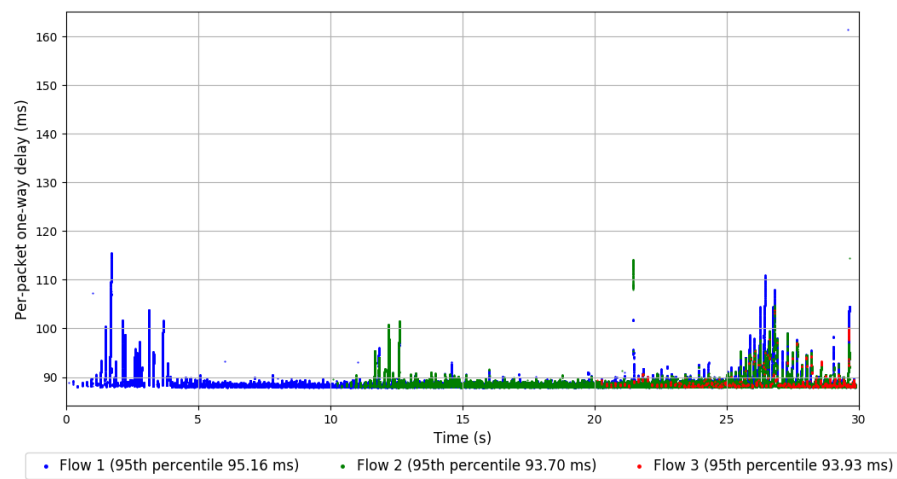
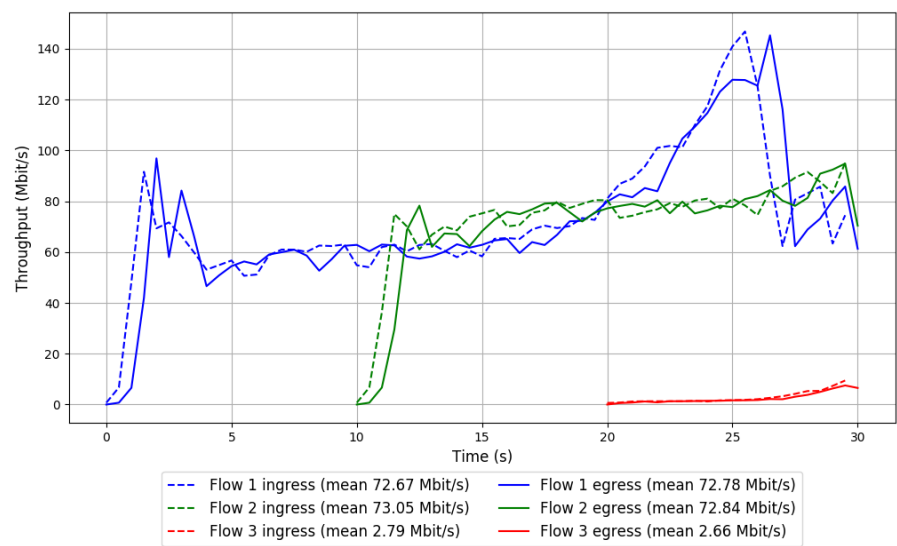
-- Flow 3:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 93.933 ms

Loss rate: 6.32%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-05-22 15:01:38

End at: 2018-05-22 15:02:08

Local clock offset: -0.239 ms

Remote clock offset: 1.346 ms

Below is generated by plot.py at 2018-05-22 17:11:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.50 Mbit/s

95th percentile per-packet one-way delay: 93.363 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 80.01 Mbit/s

95th percentile per-packet one-way delay: 93.051 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 70.33 Mbit/s

95th percentile per-packet one-way delay: 93.794 ms

Loss rate: 1.12%

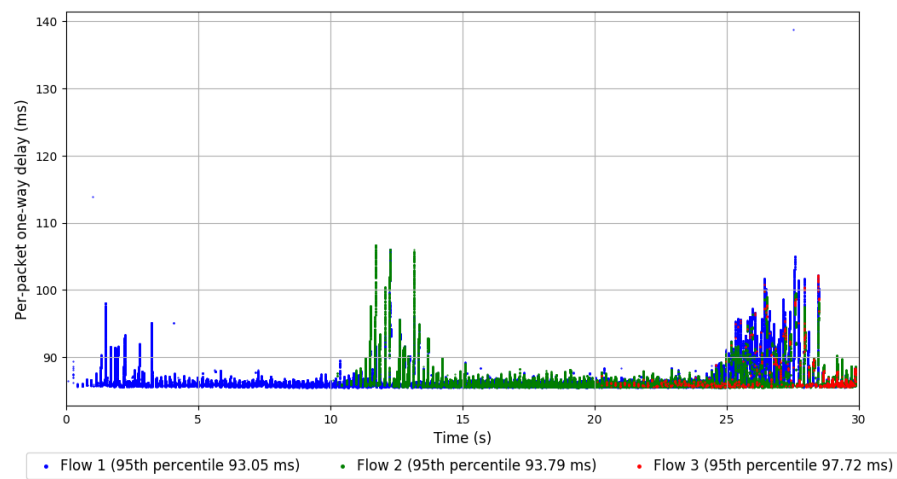
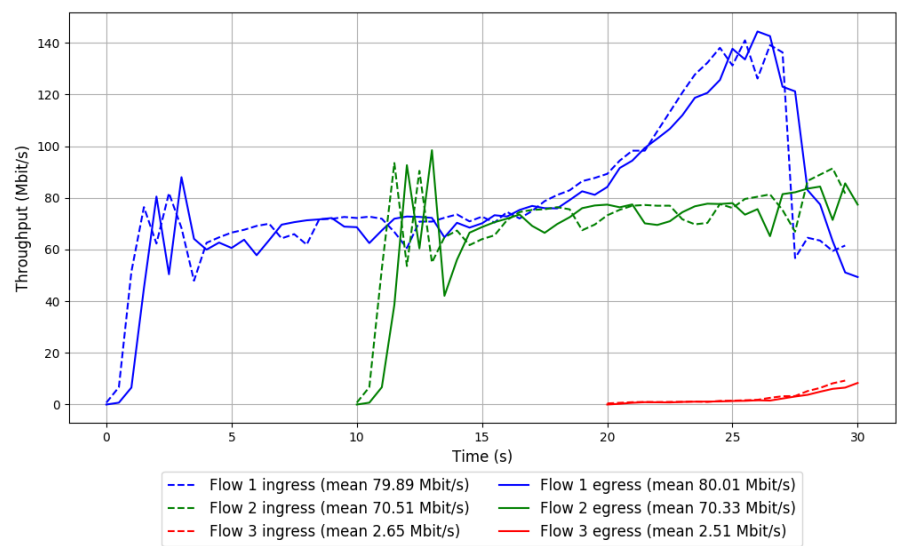
-- Flow 3:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 97.721 ms

Loss rate: 6.99%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-05-22 15:23:46

End at: 2018-05-22 15:24:16

Local clock offset: 0.156 ms

Remote clock offset: 1.425 ms

Below is generated by plot.py at 2018-05-22 17:12:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.18 Mbit/s

95th percentile per-packet one-way delay: 96.457 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 111.38 Mbit/s

95th percentile per-packet one-way delay: 96.546 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 63.60 Mbit/s

95th percentile per-packet one-way delay: 97.104 ms

Loss rate: 1.19%

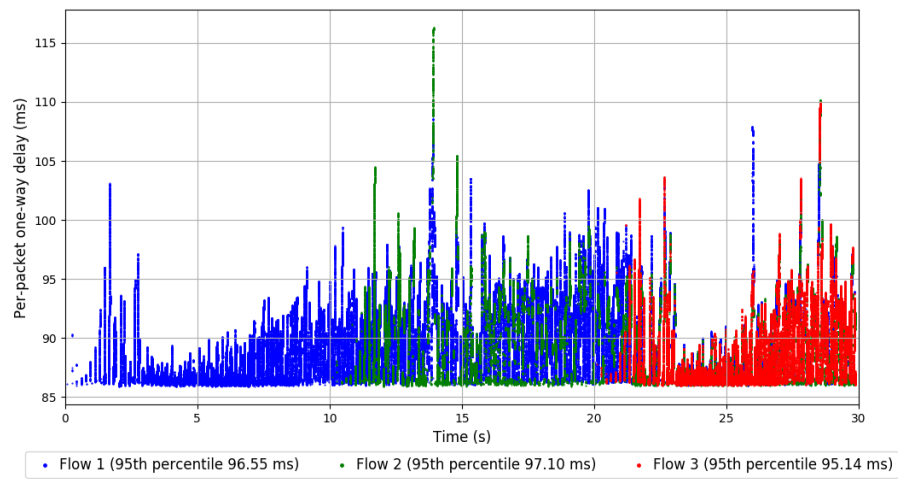
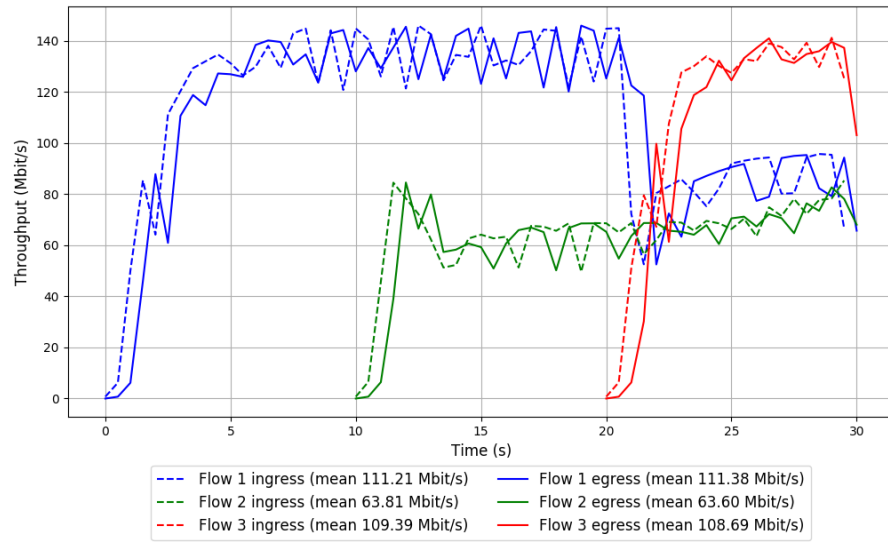
-- Flow 3:

Average throughput: 108.69 Mbit/s

95th percentile per-packet one-way delay: 95.137 ms

Loss rate: 2.02%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-05-22 15:46:28

End at: 2018-05-22 15:46:58

Local clock offset: 0.523 ms

Remote clock offset: 0.708 ms

Below is generated by plot.py at 2018-05-22 17:12:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.71 Mbit/s

95th percentile per-packet one-way delay: 94.499 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 88.37 Mbit/s

95th percentile per-packet one-way delay: 95.309 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 68.65 Mbit/s

95th percentile per-packet one-way delay: 93.335 ms

Loss rate: 1.15%

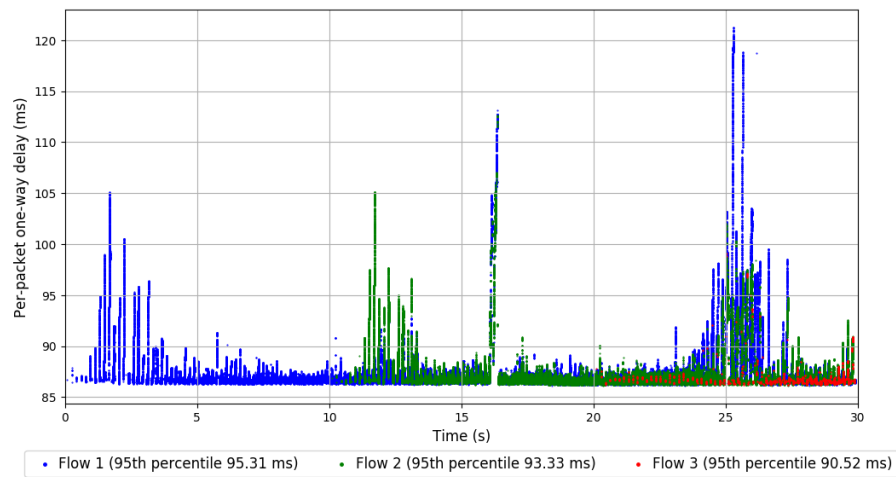
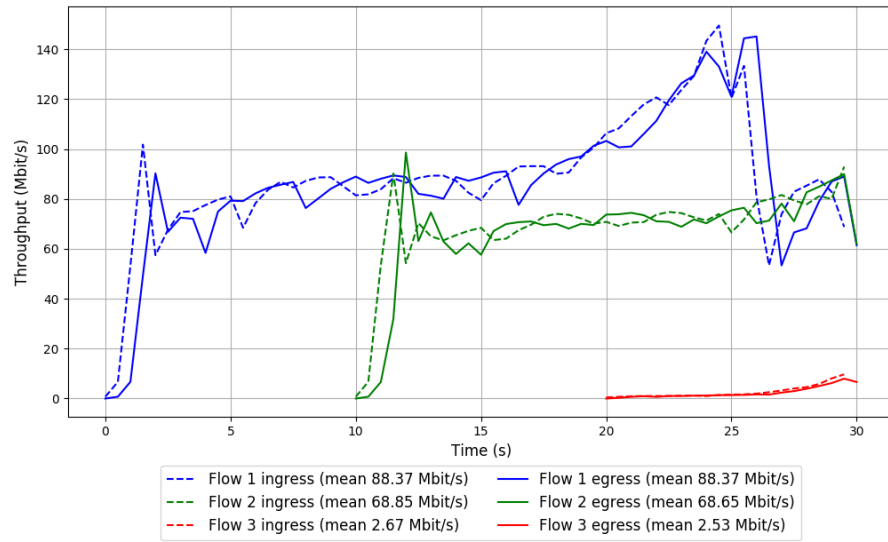
-- Flow 3:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 90.517 ms

Loss rate: 6.87%

Run 8: Report of TCP Cubic — Data Link

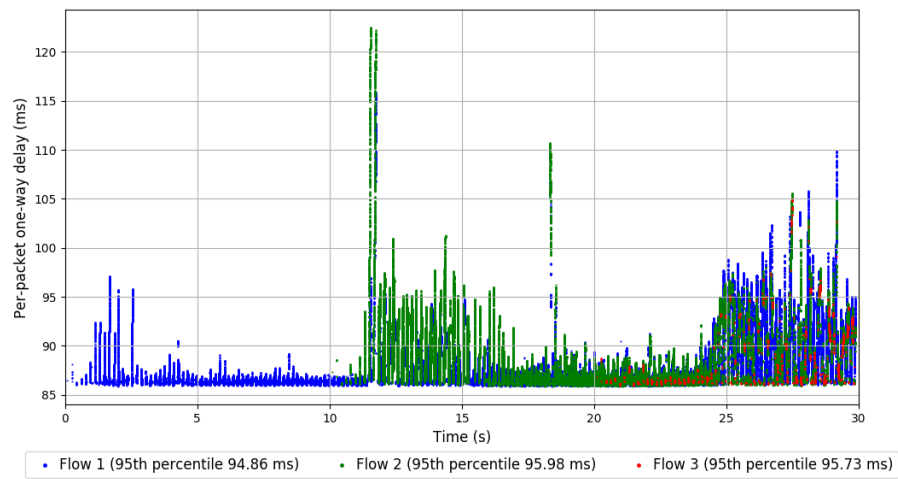
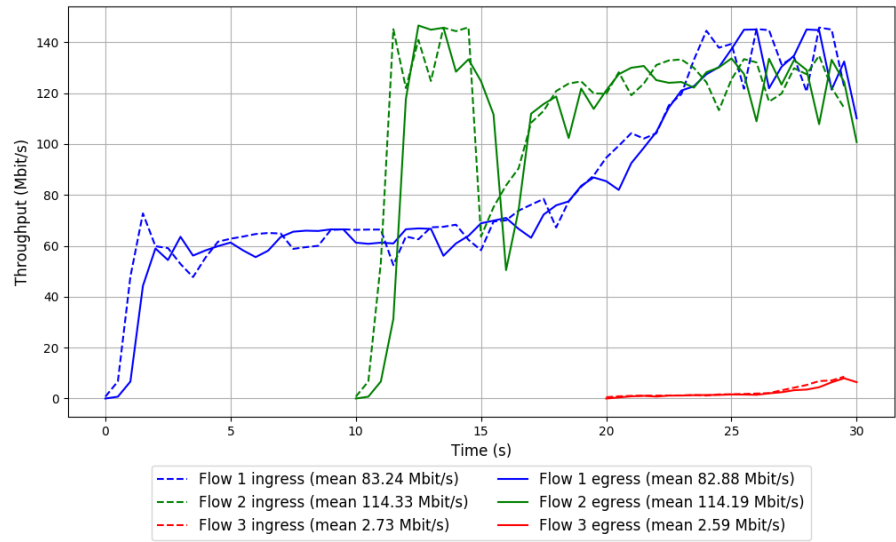


Run 9: Statistics of TCP Cubic

Start at: 2018-05-22 16:09:04
End at: 2018-05-22 16:09:34
Local clock offset: 0.082 ms
Remote clock offset: -0.437 ms

Below is generated by plot.py at 2018-05-22 17:13:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 159.53 Mbit/s
95th percentile per-packet one-way delay: 95.518 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 82.88 Mbit/s
95th percentile per-packet one-way delay: 94.862 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 114.19 Mbit/s
95th percentile per-packet one-way delay: 95.981 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 95.734 ms
Loss rate: 6.71%

Run 9: Report of TCP Cubic — Data Link

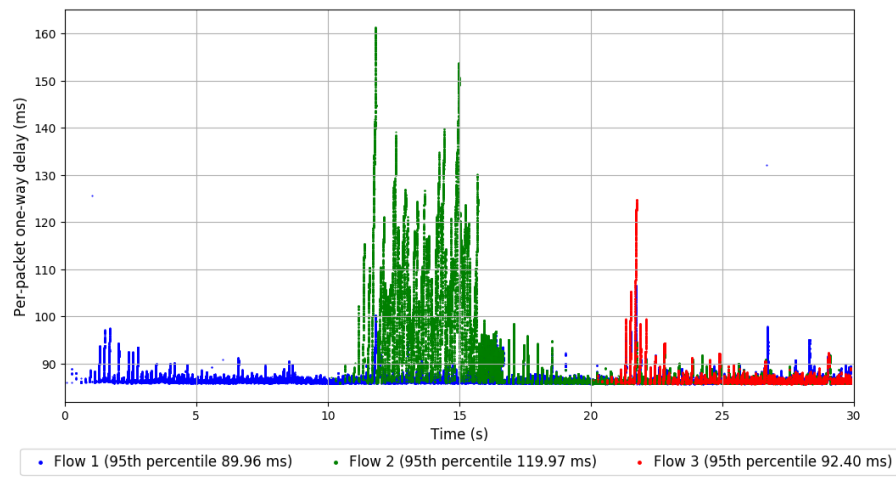
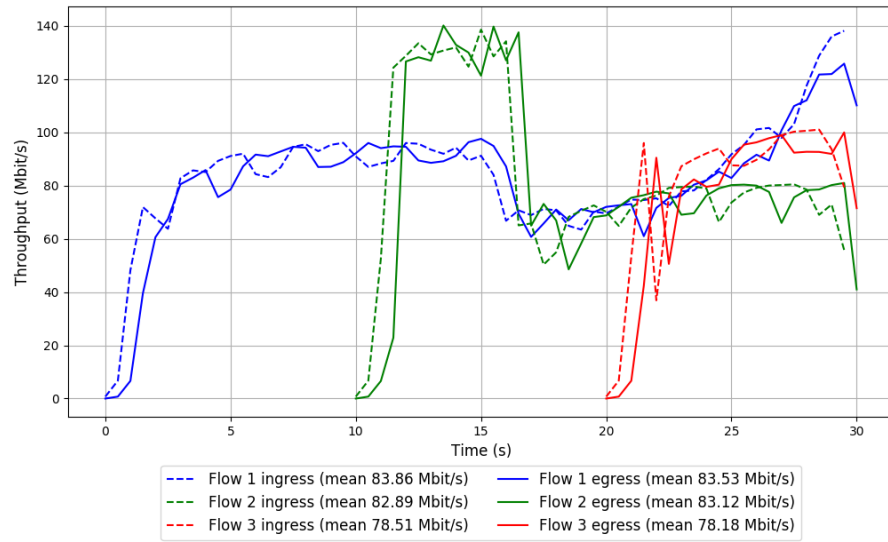


Run 10: Statistics of TCP Cubic

Start at: 2018-05-22 16:31:37
End at: 2018-05-22 16:32:07
Local clock offset: 0.011 ms
Remote clock offset: -0.631 ms

Below is generated by plot.py at 2018-05-22 17:13:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 164.27 Mbit/s
95th percentile per-packet one-way delay: 107.120 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 83.53 Mbit/s
95th percentile per-packet one-way delay: 89.956 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 83.12 Mbit/s
95th percentile per-packet one-way delay: 119.965 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 78.18 Mbit/s
95th percentile per-packet one-way delay: 92.404 ms
Loss rate: 2.16%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-05-22 13:12:31

End at: 2018-05-22 13:13:01

Local clock offset: 3.46 ms

Remote clock offset: 0.846 ms

Below is generated by plot.py at 2018-05-22 17:30:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 939.17 Mbit/s

95th percentile per-packet one-way delay: 272.987 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 541.67 Mbit/s

95th percentile per-packet one-way delay: 258.166 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 508.12 Mbit/s

95th percentile per-packet one-way delay: 268.342 ms

Loss rate: 1.71%

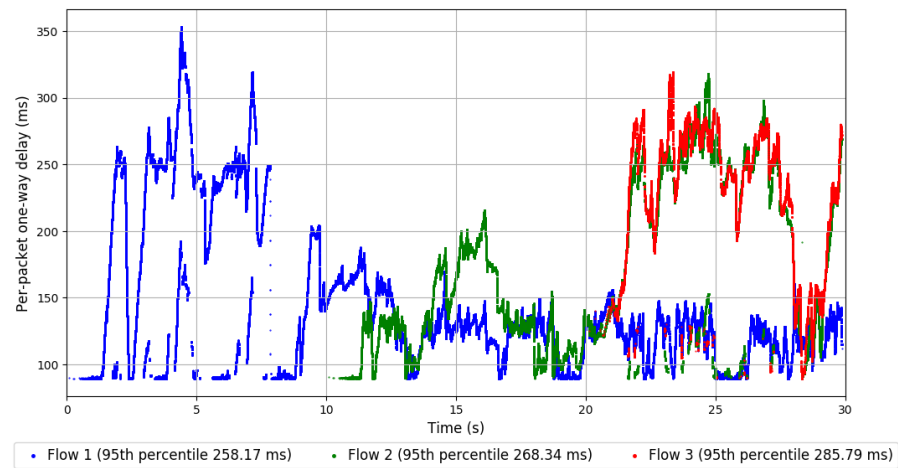
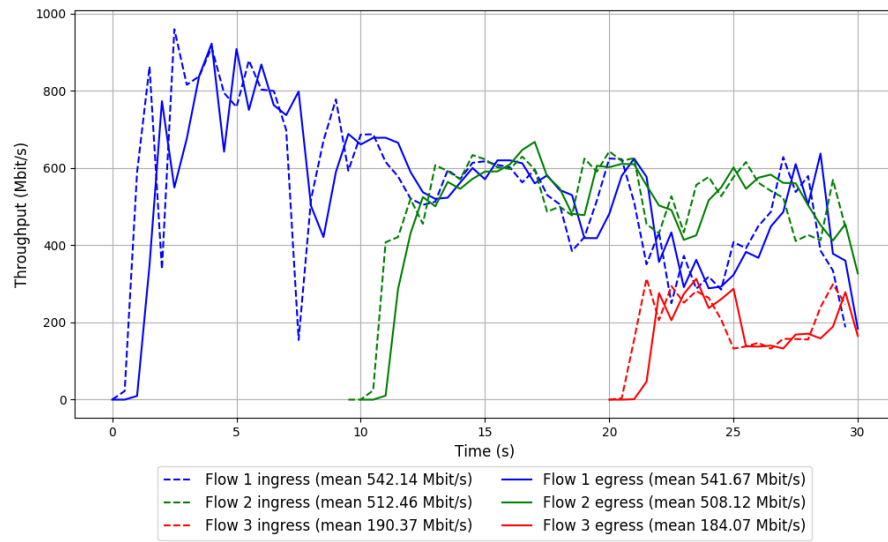
-- Flow 3:

Average throughput: 184.07 Mbit/s

95th percentile per-packet one-way delay: 285.792 ms

Loss rate: 5.34%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-05-22 13:35:02

End at: 2018-05-22 13:35:32

Local clock offset: 0.145 ms

Remote clock offset: 0.902 ms

Below is generated by plot.py at 2018-05-22 17:31:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 983.33 Mbit/s

95th percentile per-packet one-way delay: 271.627 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 533.97 Mbit/s

95th percentile per-packet one-way delay: 256.134 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 440.61 Mbit/s

95th percentile per-packet one-way delay: 223.015 ms

Loss rate: 0.64%

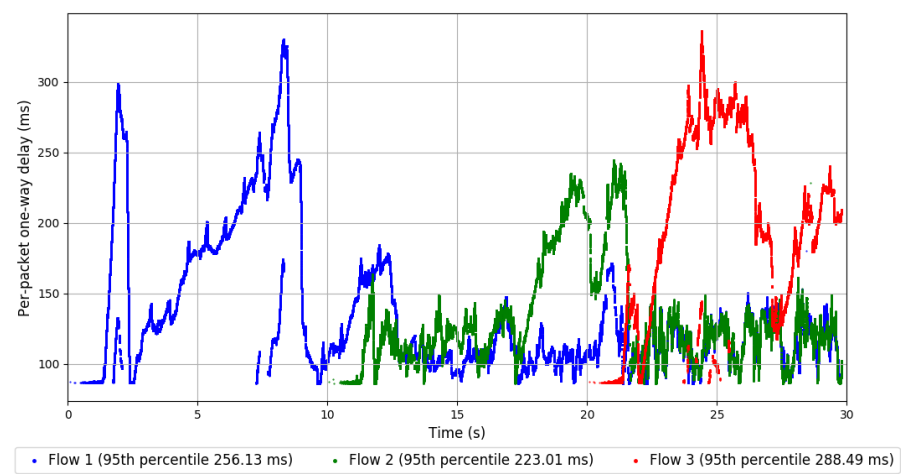
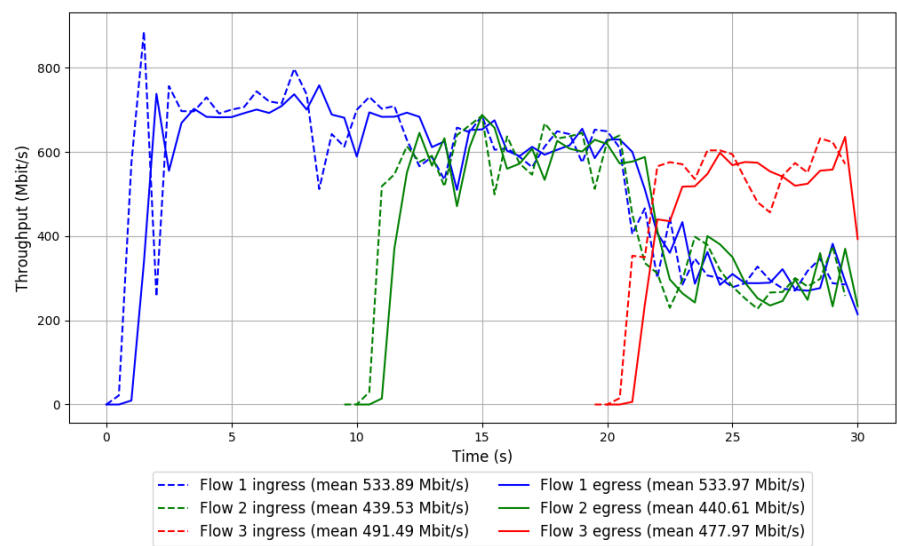
-- Flow 3:

Average throughput: 477.97 Mbit/s

95th percentile per-packet one-way delay: 288.487 ms

Loss rate: 4.47%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-05-22 13:57:37

End at: 2018-05-22 13:58:07

Local clock offset: 3.154 ms

Remote clock offset: 1.007 ms

Below is generated by plot.py at 2018-05-22 17:34:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 1113.01 Mbit/s

95th percentile per-packet one-way delay: 244.983 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 598.71 Mbit/s

95th percentile per-packet one-way delay: 243.023 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 512.84 Mbit/s

95th percentile per-packet one-way delay: 251.962 ms

Loss rate: 1.23%

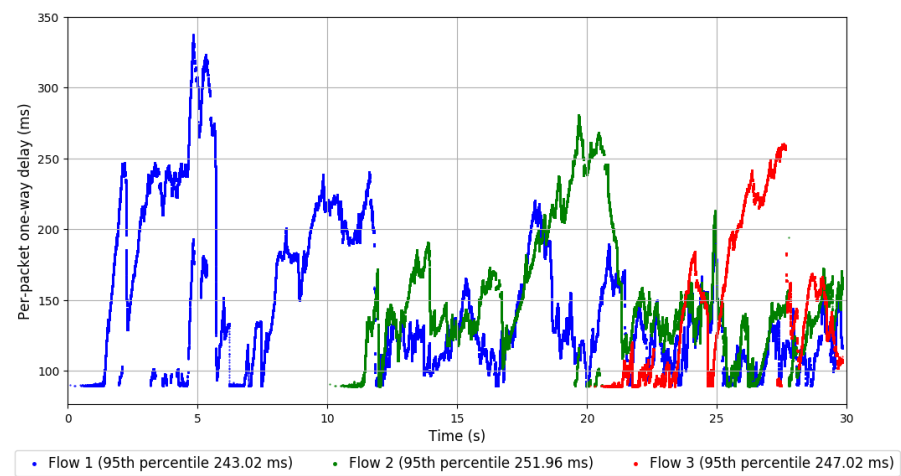
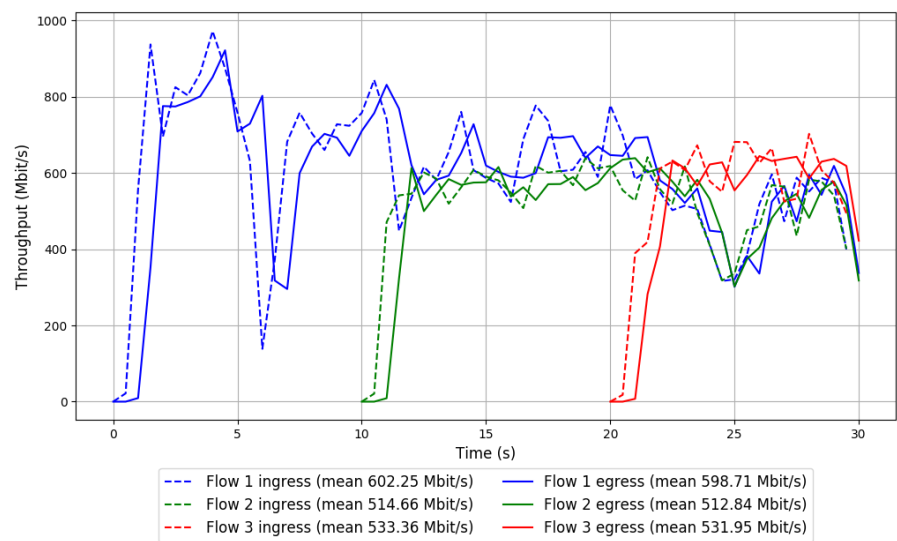
-- Flow 3:

Average throughput: 531.95 Mbit/s

95th percentile per-packet one-way delay: 247.023 ms

Loss rate: 2.00%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-05-22 14:20:15

End at: 2018-05-22 14:20:45

Local clock offset: 3.45 ms

Remote clock offset: 1.248 ms

Below is generated by plot.py at 2018-05-22 17:34:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 1110.93 Mbit/s

95th percentile per-packet one-way delay: 250.321 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 563.61 Mbit/s

95th percentile per-packet one-way delay: 257.454 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 621.84 Mbit/s

95th percentile per-packet one-way delay: 218.510 ms

Loss rate: 0.82%

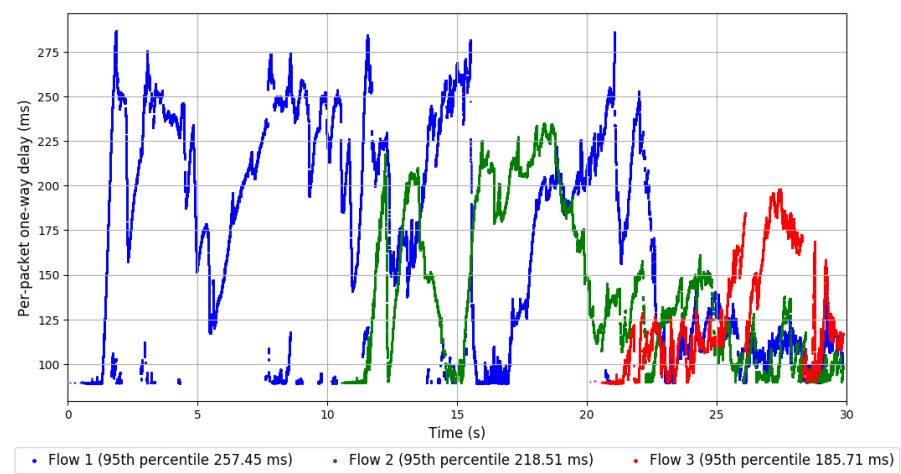
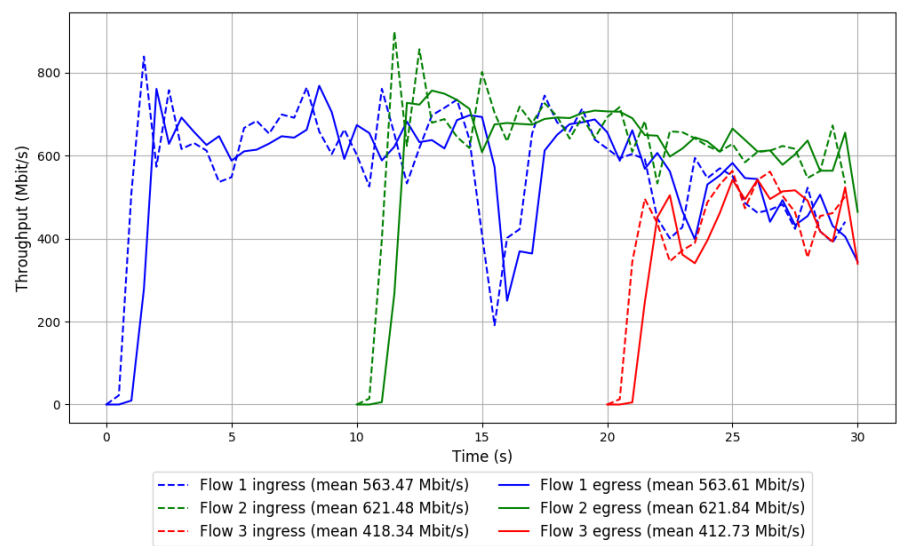
-- Flow 3:

Average throughput: 412.73 Mbit/s

95th percentile per-packet one-way delay: 185.713 ms

Loss rate: 3.09%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-05-22 14:42:41

End at: 2018-05-22 14:43:11

Local clock offset: 1.841 ms

Remote clock offset: 1.224 ms

Below is generated by plot.py at 2018-05-22 17:34:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 1059.52 Mbit/s

95th percentile per-packet one-way delay: 259.280 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 625.01 Mbit/s

95th percentile per-packet one-way delay: 258.531 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 471.46 Mbit/s

95th percentile per-packet one-way delay: 266.759 ms

Loss rate: 0.72%

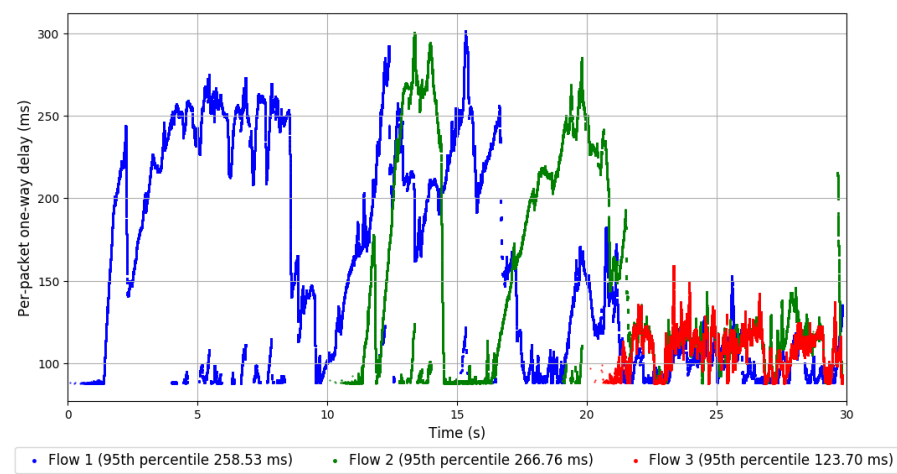
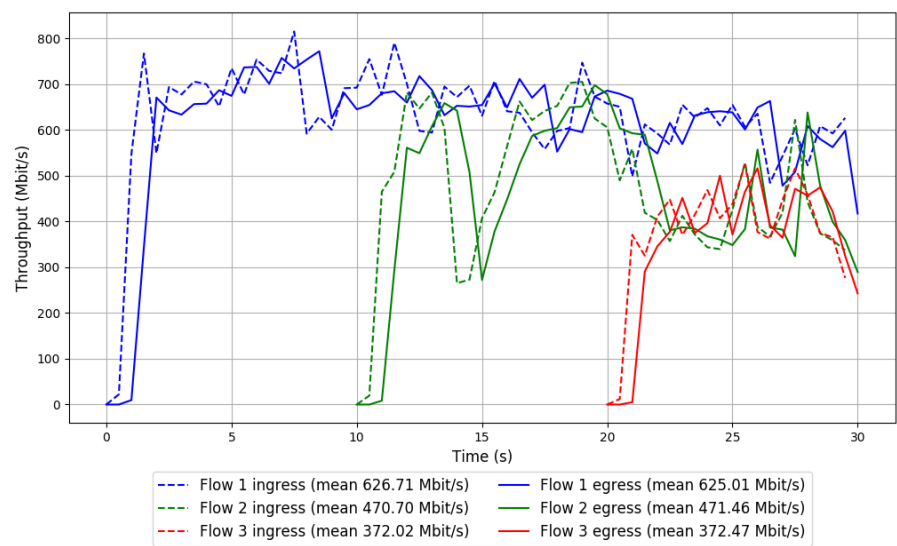
-- Flow 3:

Average throughput: 372.47 Mbit/s

95th percentile per-packet one-way delay: 123.705 ms

Loss rate: 1.71%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-05-22 15:05:18

End at: 2018-05-22 15:05:48

Local clock offset: 1.729 ms

Remote clock offset: 1.48 ms

Below is generated by plot.py at 2018-05-22 17:34:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 533.13 Mbit/s

95th percentile per-packet one-way delay: 214.669 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 356.11 Mbit/s

95th percentile per-packet one-way delay: 203.367 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 212.45 Mbit/s

95th percentile per-packet one-way delay: 226.048 ms

Loss rate: 1.09%

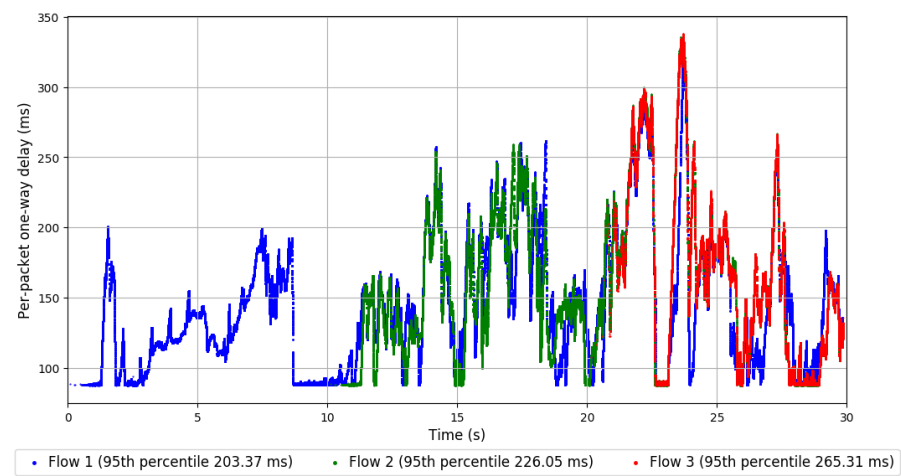
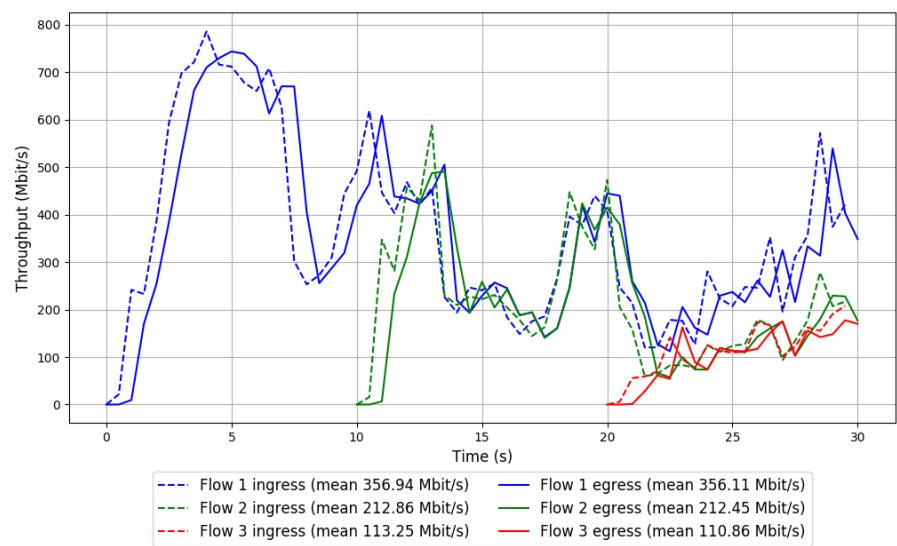
-- Flow 3:

Average throughput: 110.86 Mbit/s

95th percentile per-packet one-way delay: 265.306 ms

Loss rate: 3.99%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-05-22 15:27:30

End at: 2018-05-22 15:28:00

Local clock offset: 0.096 ms

Remote clock offset: 1.455 ms

Below is generated by plot.py at 2018-05-22 17:36:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1103.46 Mbit/s

95th percentile per-packet one-way delay: 245.466 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 559.08 Mbit/s

95th percentile per-packet one-way delay: 252.098 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 632.48 Mbit/s

95th percentile per-packet one-way delay: 232.140 ms

Loss rate: 1.04%

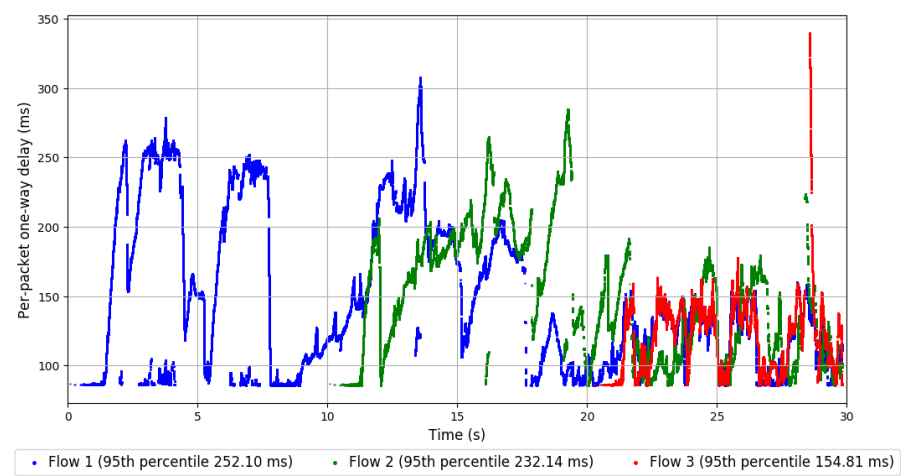
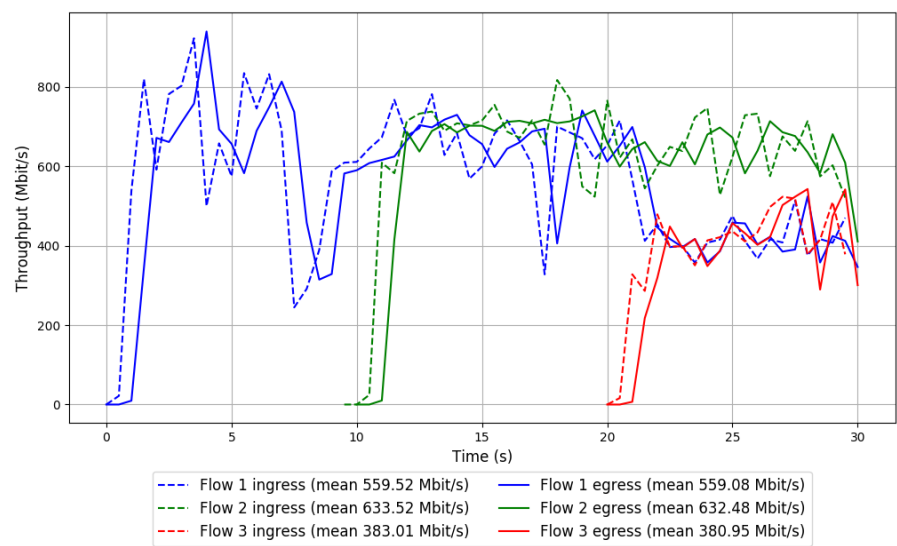
-- Flow 3:

Average throughput: 380.95 Mbit/s

95th percentile per-packet one-way delay: 154.805 ms

Loss rate: 2.21%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-05-22 15:50:09

End at: 2018-05-22 15:50:39

Local clock offset: 0.086 ms

Remote clock offset: 0.333 ms

Below is generated by plot.py at 2018-05-22 17:37:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 1107.80 Mbit/s

95th percentile per-packet one-way delay: 245.359 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 646.53 Mbit/s

95th percentile per-packet one-way delay: 249.358 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 515.21 Mbit/s

95th percentile per-packet one-way delay: 241.559 ms

Loss rate: 1.04%

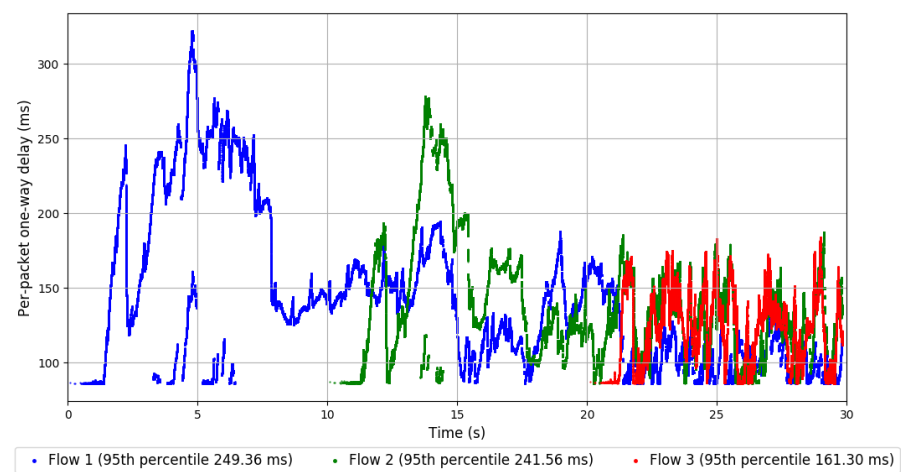
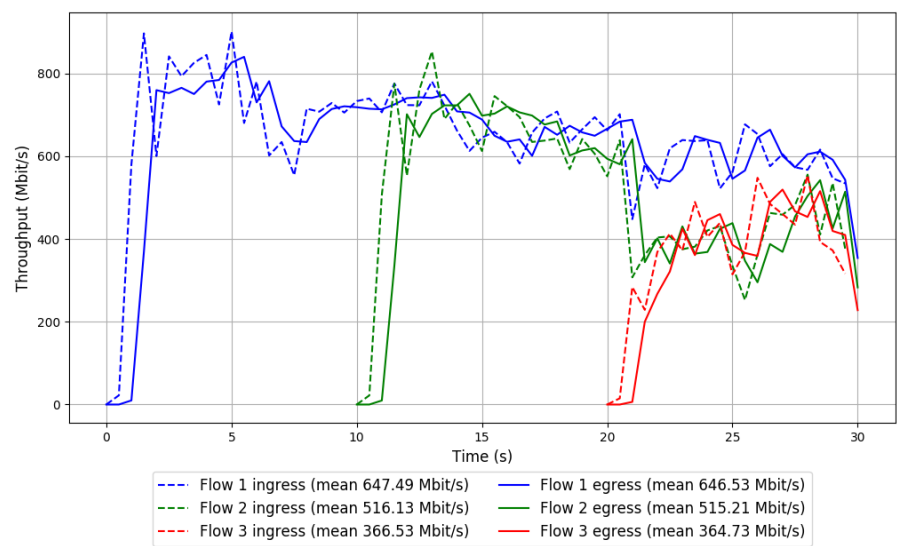
-- Flow 3:

Average throughput: 364.73 Mbit/s

95th percentile per-packet one-way delay: 161.303 ms

Loss rate: 2.23%

Run 8: Report of FillP — Data Link

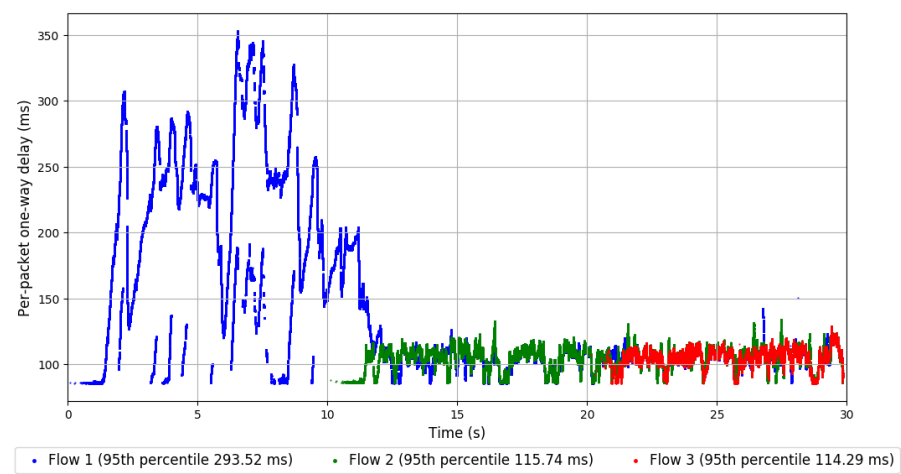
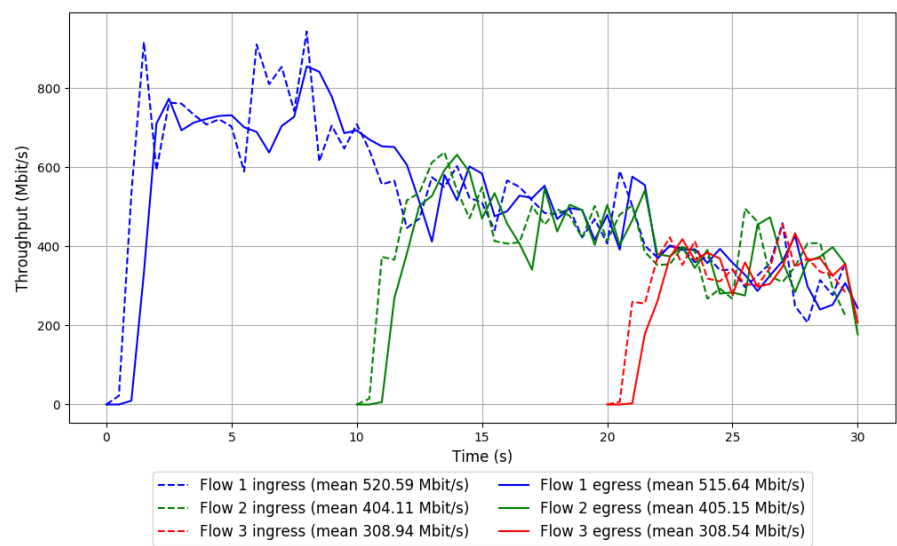


Run 9: Statistics of FillP

Start at: 2018-05-22 16:12:46
End at: 2018-05-22 16:13:16
Local clock offset: -0.255 ms
Remote clock offset: -0.505 ms

Below is generated by plot.py at 2018-05-22 17:44:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 884.75 Mbit/s
95th percentile per-packet one-way delay: 276.732 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 515.64 Mbit/s
95th percentile per-packet one-way delay: 293.519 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 405.15 Mbit/s
95th percentile per-packet one-way delay: 115.736 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 308.54 Mbit/s
95th percentile per-packet one-way delay: 114.294 ms
Loss rate: 2.09%

Run 9: Report of FillP — Data Link

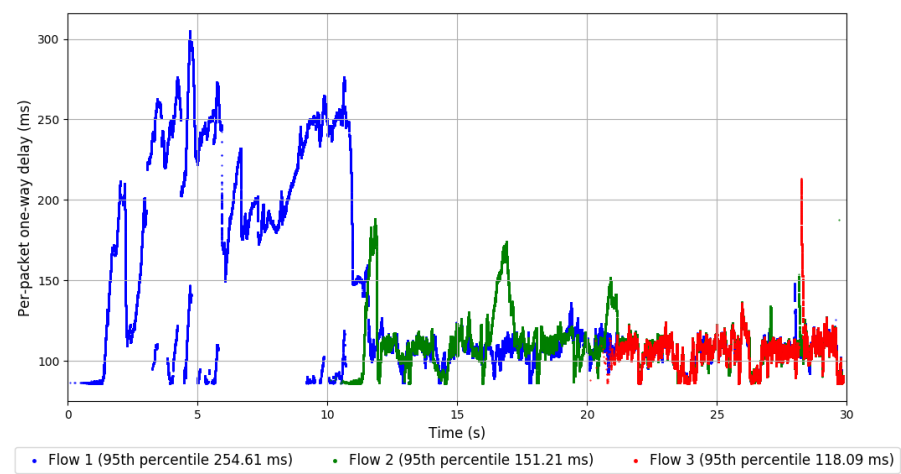
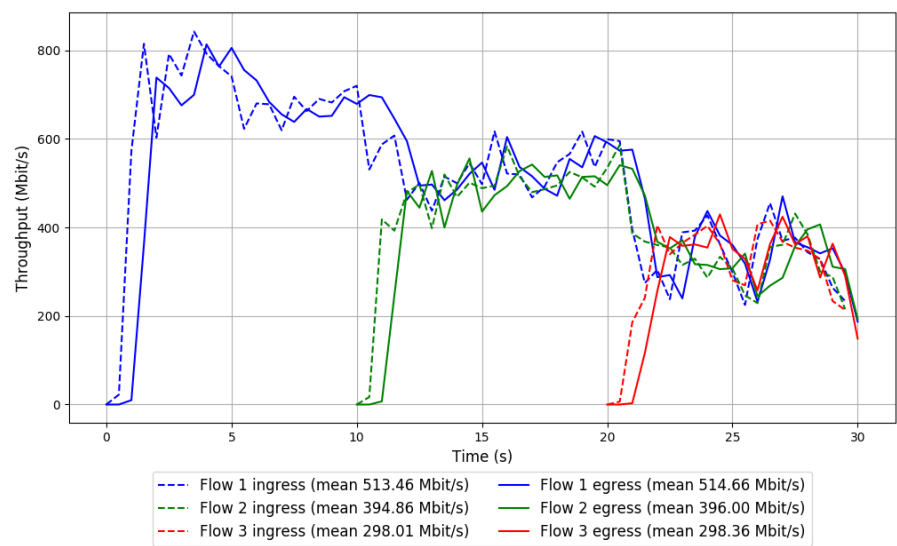


Run 10: Statistics of FillP

Start at: 2018-05-22 16:35:19
End at: 2018-05-22 16:35:49
Local clock offset: -0.02 ms
Remote clock offset: -0.804 ms

Below is generated by plot.py at 2018-05-22 17:51:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 874.89 Mbit/s
95th percentile per-packet one-way delay: 249.030 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 514.66 Mbit/s
95th percentile per-packet one-way delay: 254.609 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 396.00 Mbit/s
95th percentile per-packet one-way delay: 151.205 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 298.36 Mbit/s
95th percentile per-packet one-way delay: 118.089 ms
Loss rate: 1.62%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo

Start at: 2018-05-22 13:05:59

End at: 2018-05-22 13:06:29

Local clock offset: -0.243 ms

Remote clock offset: 0.629 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.30 Mbit/s

95th percentile per-packet one-way delay: 104.293 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 153.77 Mbit/s

95th percentile per-packet one-way delay: 101.353 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 140.98 Mbit/s

95th percentile per-packet one-way delay: 105.821 ms

Loss rate: 0.84%

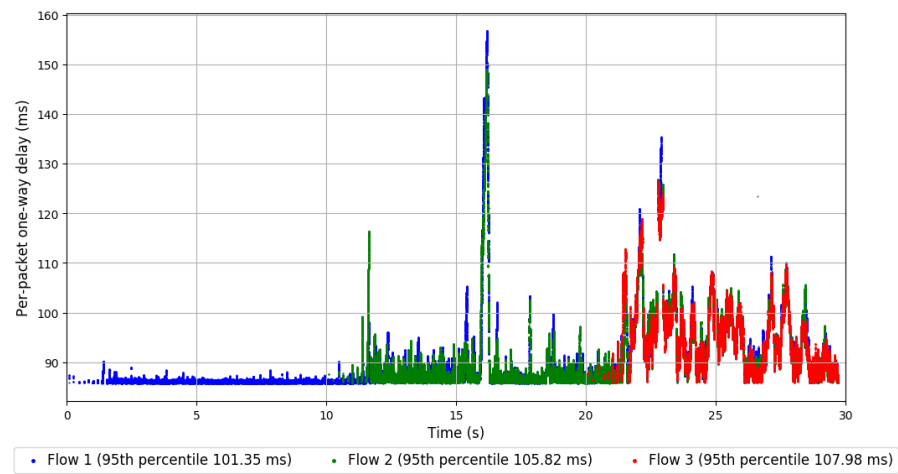
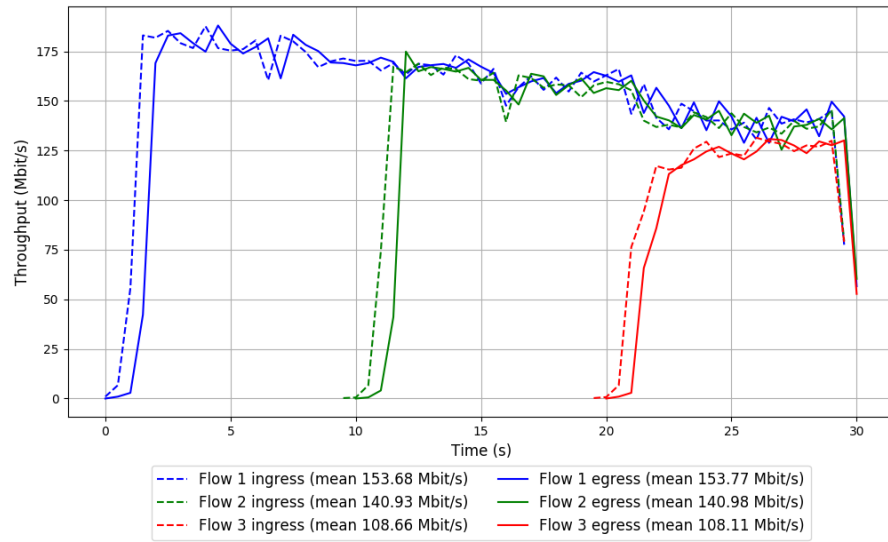
-- Flow 3:

Average throughput: 108.11 Mbit/s

95th percentile per-packet one-way delay: 107.980 ms

Loss rate: 2.27%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-05-22 13:28:35

End at: 2018-05-22 13:29:05

Local clock offset: 3.454 ms

Remote clock offset: 0.878 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.95 Mbit/s

95th percentile per-packet one-way delay: 191.559 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 148.81 Mbit/s

95th percentile per-packet one-way delay: 101.246 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 129.73 Mbit/s

95th percentile per-packet one-way delay: 209.955 ms

Loss rate: 0.85%

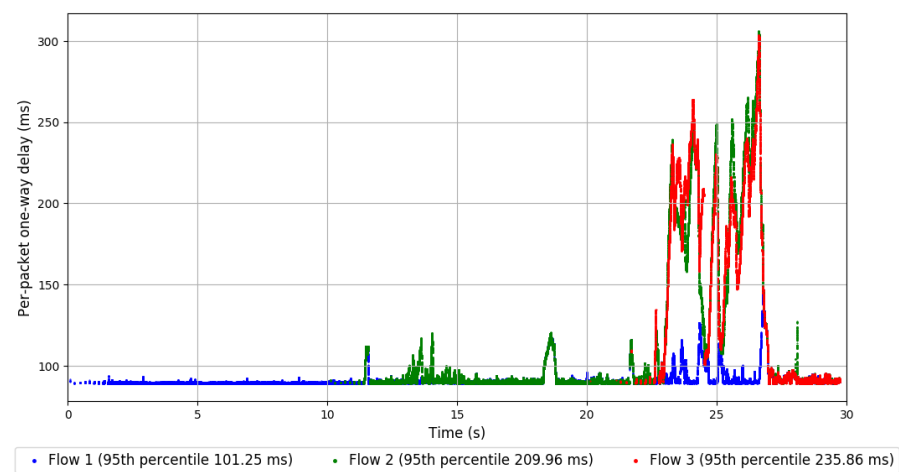
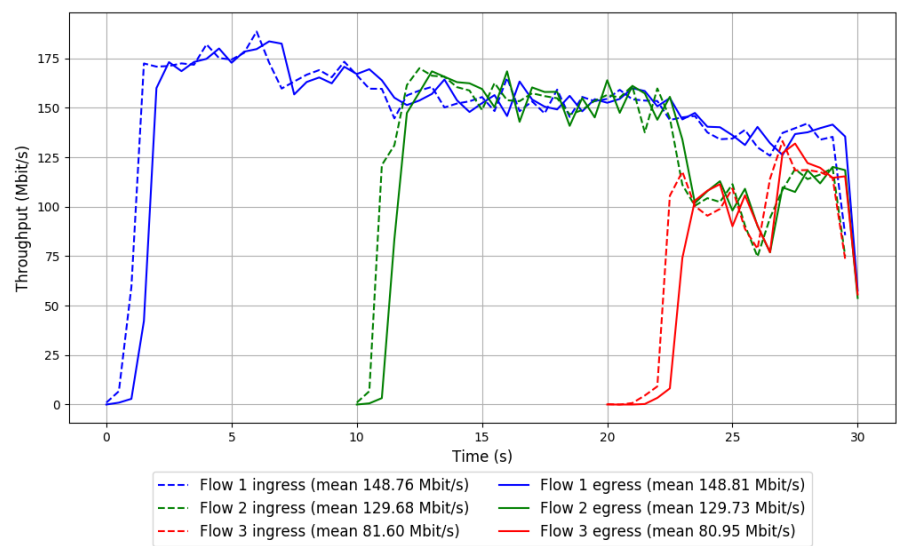
-- Flow 3:

Average throughput: 80.95 Mbit/s

95th percentile per-packet one-way delay: 235.856 ms

Loss rate: 2.55%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-05-22 13:51:08

End at: 2018-05-22 13:51:38

Local clock offset: 3.411 ms

Remote clock offset: 1.019 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.97 Mbit/s

95th percentile per-packet one-way delay: 109.642 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 143.91 Mbit/s

95th percentile per-packet one-way delay: 106.254 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 136.16 Mbit/s

95th percentile per-packet one-way delay: 110.248 ms

Loss rate: 0.93%

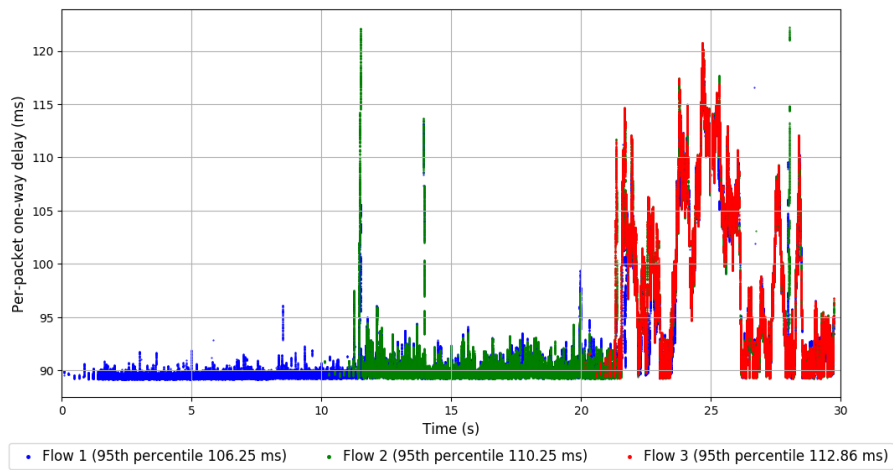
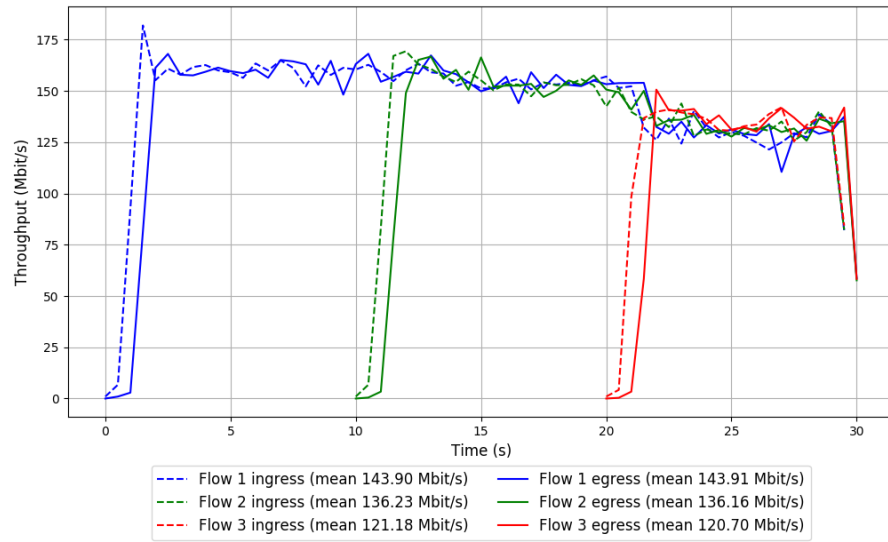
-- Flow 3:

Average throughput: 120.70 Mbit/s

95th percentile per-packet one-way delay: 112.864 ms

Loss rate: 2.15%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-05-22 14:13:43

End at: 2018-05-22 14:14:13

Local clock offset: 3.604 ms

Remote clock offset: 1.104 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.91 Mbit/s

95th percentile per-packet one-way delay: 107.918 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 149.00 Mbit/s

95th percentile per-packet one-way delay: 103.150 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 132.43 Mbit/s

95th percentile per-packet one-way delay: 107.979 ms

Loss rate: 0.89%

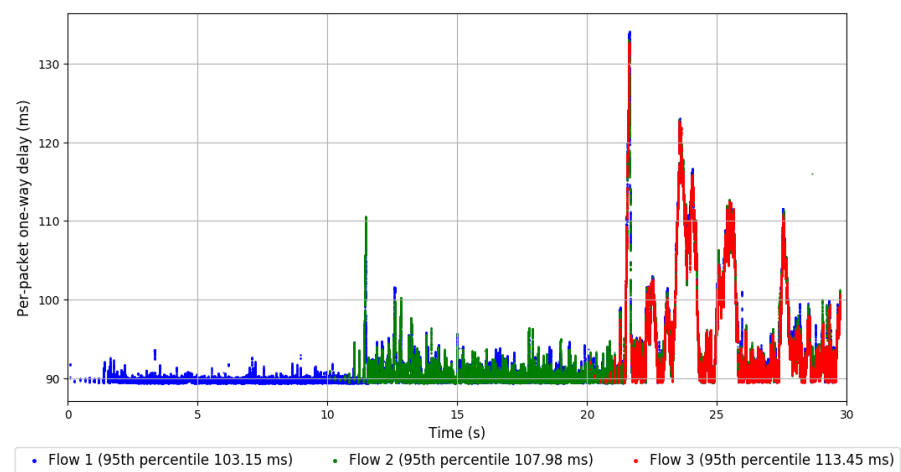
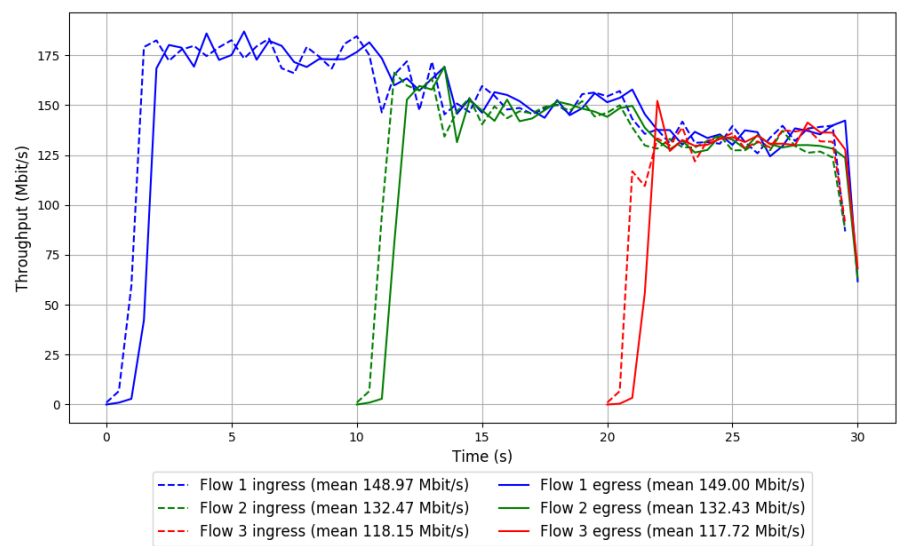
-- Flow 3:

Average throughput: 117.72 Mbit/s

95th percentile per-packet one-way delay: 113.448 ms

Loss rate: 2.14%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-05-22 14:36:13

End at: 2018-05-22 14:36:43

Local clock offset: 0.188 ms

Remote clock offset: 1.193 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.51 Mbit/s

95th percentile per-packet one-way delay: 97.104 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 150.47 Mbit/s

95th percentile per-packet one-way delay: 94.242 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 134.78 Mbit/s

95th percentile per-packet one-way delay: 97.732 ms

Loss rate: 0.95%

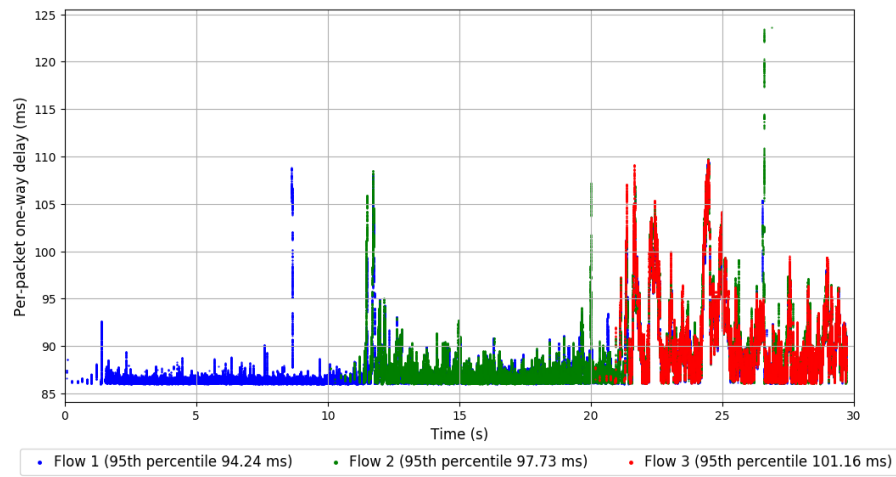
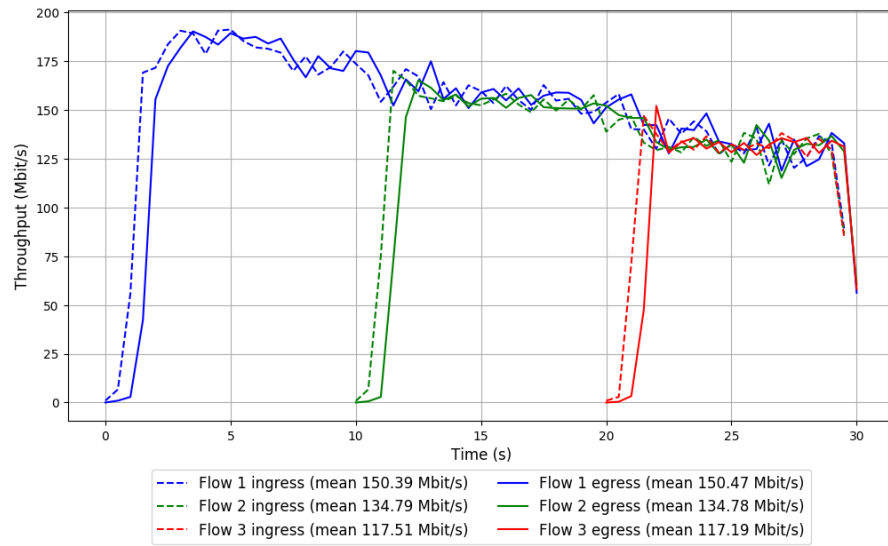
-- Flow 3:

Average throughput: 117.19 Mbit/s

95th percentile per-packet one-way delay: 101.162 ms

Loss rate: 2.15%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-05-22 14:58:51

End at: 2018-05-22 14:59:21

Local clock offset: 1.777 ms

Remote clock offset: 1.318 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.22 Mbit/s

95th percentile per-packet one-way delay: 114.880 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 150.21 Mbit/s

95th percentile per-packet one-way delay: 107.246 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 135.96 Mbit/s

95th percentile per-packet one-way delay: 116.984 ms

Loss rate: 0.91%

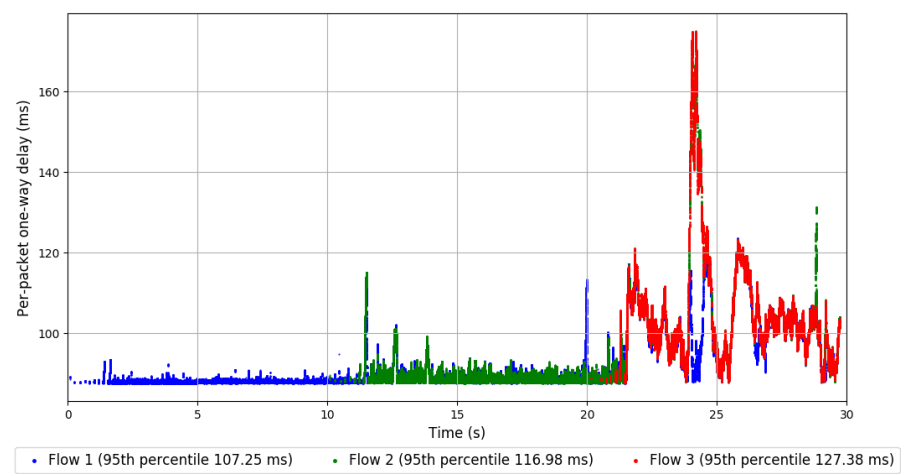
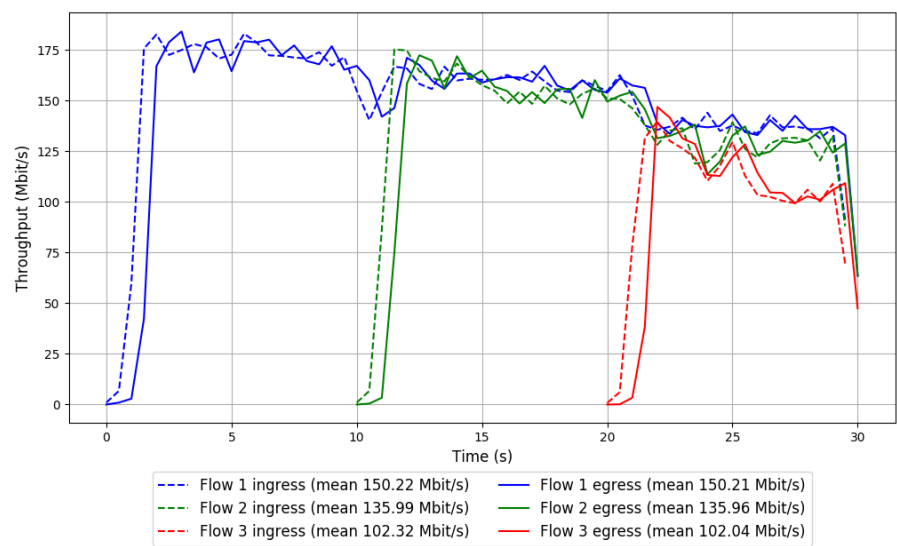
-- Flow 3:

Average throughput: 102.04 Mbit/s

95th percentile per-packet one-way delay: 127.376 ms

Loss rate: 2.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-05-22 15:20:58

End at: 2018-05-22 15:21:28

Local clock offset: 1.918 ms

Remote clock offset: 1.493 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 264.92 Mbit/s

95th percentile per-packet one-way delay: 125.134 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 145.61 Mbit/s

95th percentile per-packet one-way delay: 119.874 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 124.92 Mbit/s

95th percentile per-packet one-way delay: 125.636 ms

Loss rate: 1.06%

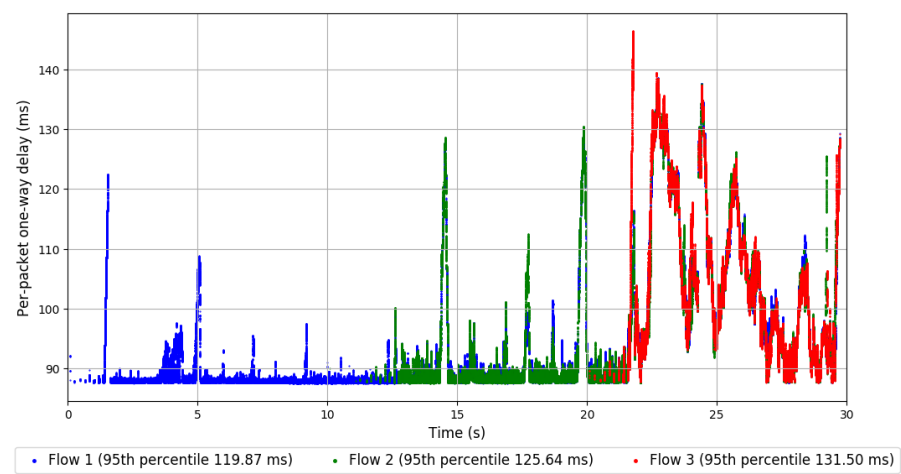
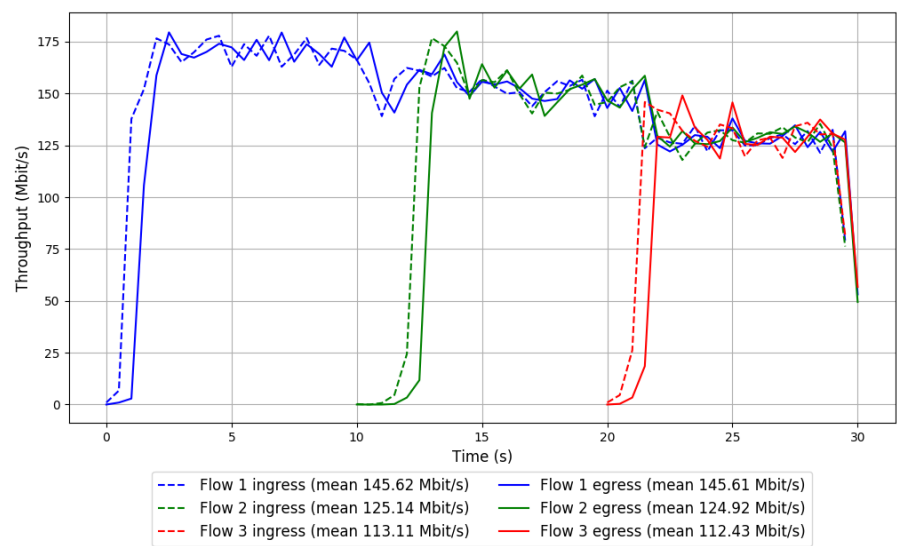
-- Flow 3:

Average throughput: 112.43 Mbit/s

95th percentile per-packet one-way delay: 131.497 ms

Loss rate: 2.36%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-05-22 15:43:39

End at: 2018-05-22 15:44:09

Local clock offset: 3.824 ms

Remote clock offset: 0.979 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.67 Mbit/s

95th percentile per-packet one-way delay: 116.808 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 153.49 Mbit/s

95th percentile per-packet one-way delay: 113.755 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 133.32 Mbit/s

95th percentile per-packet one-way delay: 117.436 ms

Loss rate: 0.81%

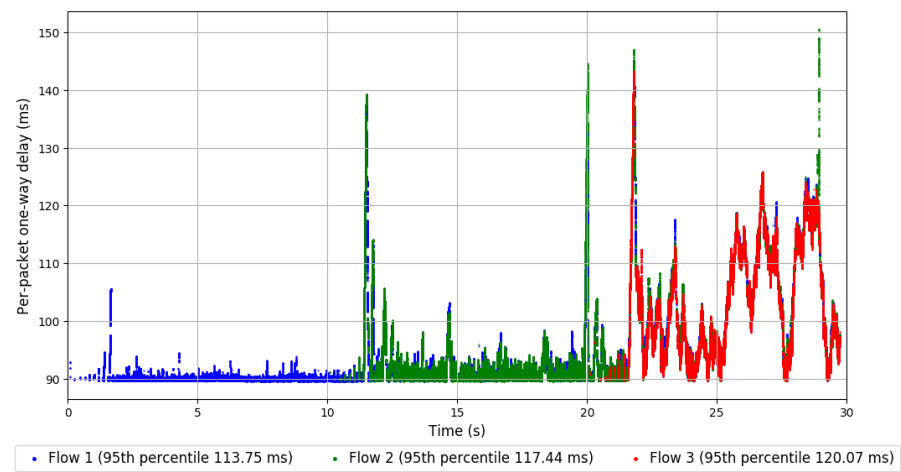
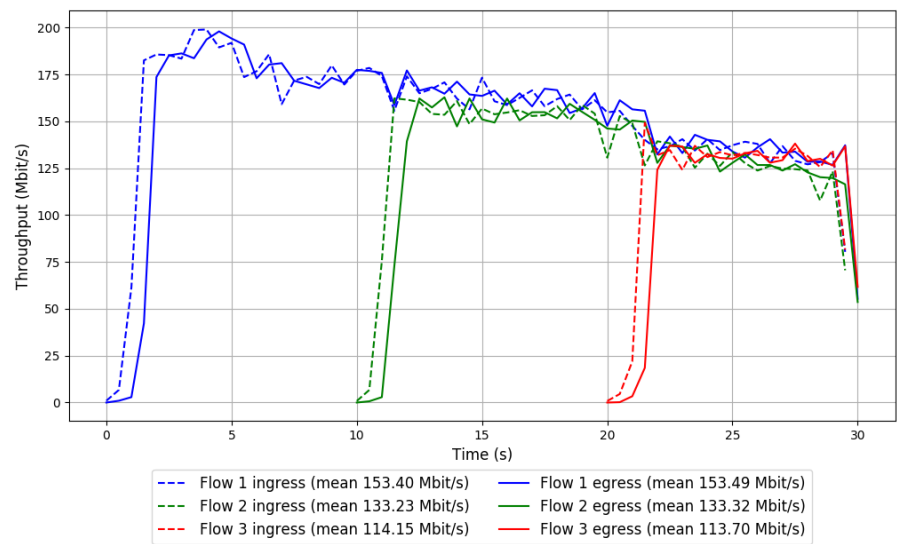
-- Flow 3:

Average throughput: 113.70 Mbit/s

95th percentile per-packet one-way delay: 120.068 ms

Loss rate: 2.18%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-05-22 16:06:17

End at: 2018-05-22 16:06:47

Local clock offset: -0.098 ms

Remote clock offset: -0.54 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.67 Mbit/s

95th percentile per-packet one-way delay: 112.445 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 123.12 Mbit/s

95th percentile per-packet one-way delay: 127.975 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 139.55 Mbit/s

95th percentile per-packet one-way delay: 89.622 ms

Loss rate: 0.87%

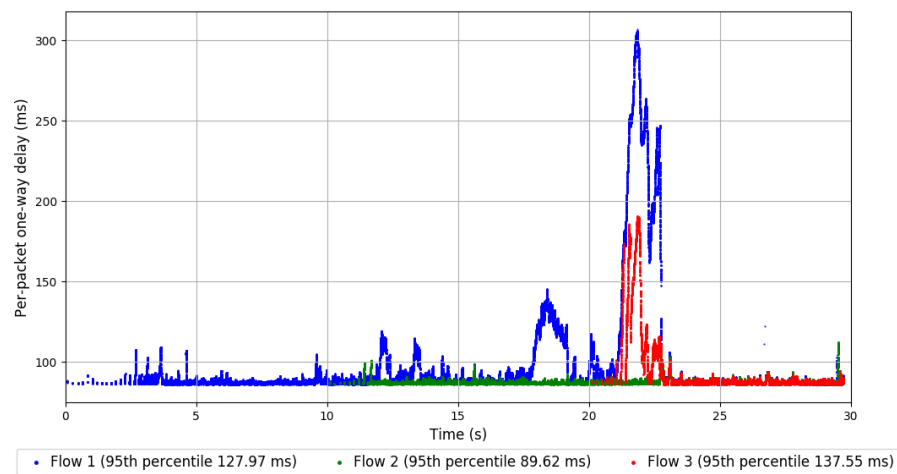
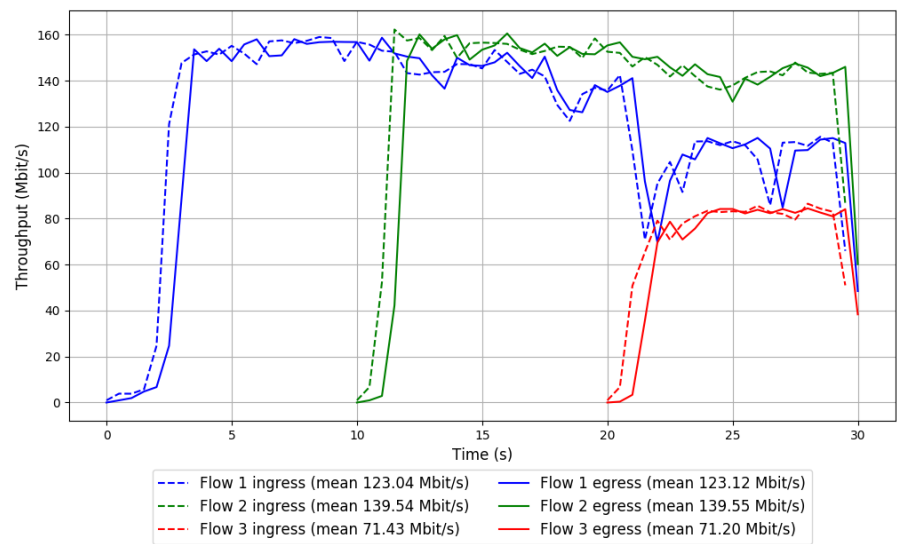
-- Flow 3:

Average throughput: 71.20 Mbit/s

95th percentile per-packet one-way delay: 137.554 ms

Loss rate: 2.08%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-05-22 16:28:52

End at: 2018-05-22 16:29:22

Local clock offset: 0.193 ms

Remote clock offset: -0.62 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.27 Mbit/s

95th percentile per-packet one-way delay: 157.561 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 126.59 Mbit/s

95th percentile per-packet one-way delay: 159.794 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 109.18 Mbit/s

95th percentile per-packet one-way delay: 171.383 ms

Loss rate: 1.17%

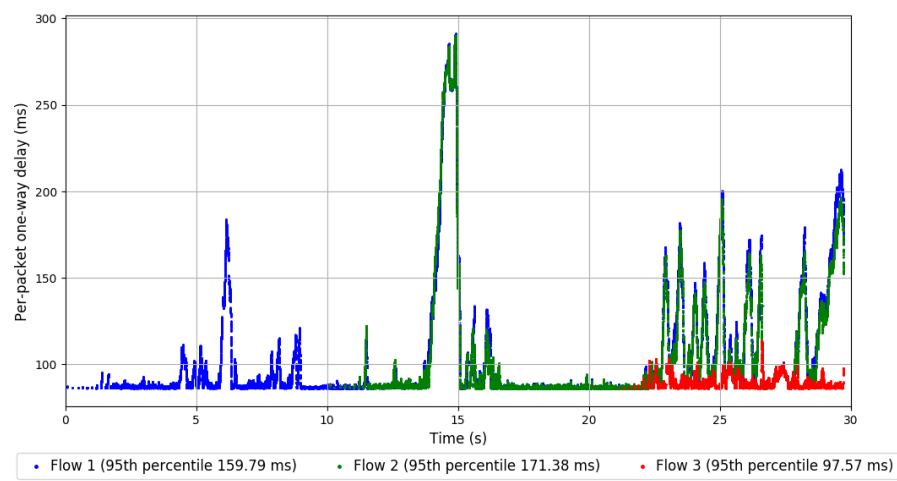
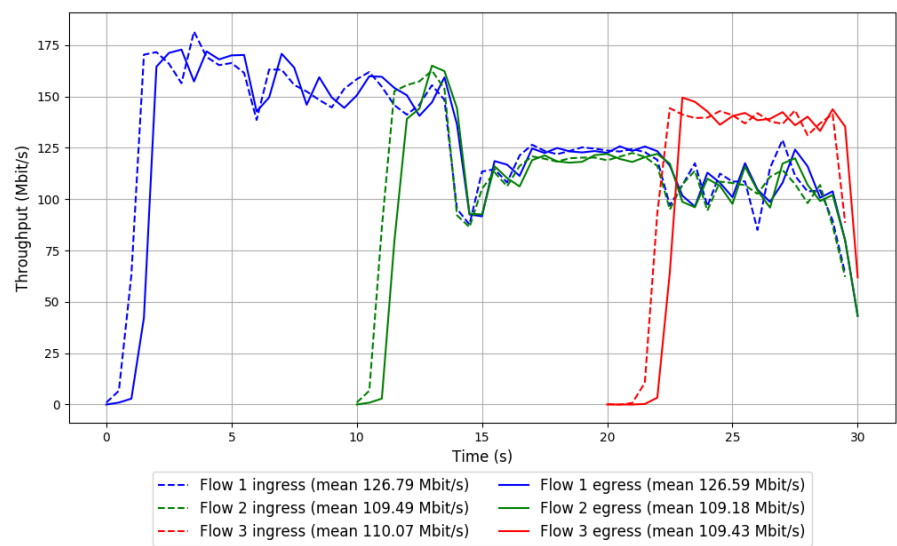
-- Flow 3:

Average throughput: 109.43 Mbit/s

95th percentile per-packet one-way delay: 97.570 ms

Loss rate: 2.38%

Run 10: Report of Indigo — Data Link

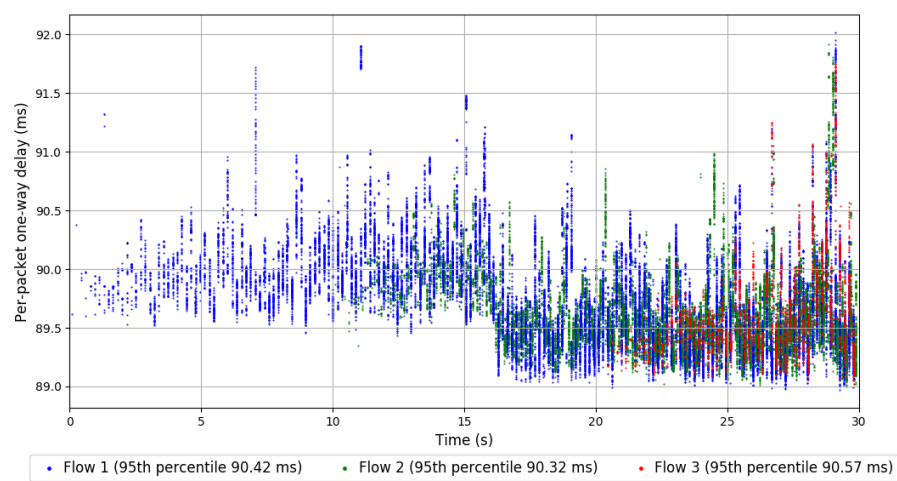
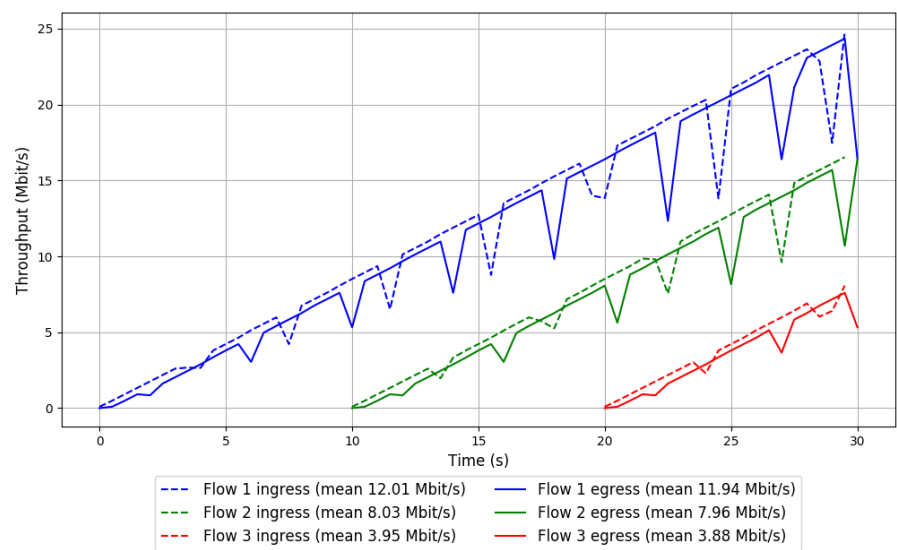


```
Run 1: Statistics of LEDBAT

Start at: 2018-05-22 13:20:20
End at: 2018-05-22 13:20:50
Local clock offset: 3.084 ms
Remote clock offset: 0.804 ms

# Below is generated by plot.py at 2018-05-22 17:51:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.46 Mbit/s
95th percentile per-packet one-way delay: 90.410 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 90.418 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 90.322 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 90.570 ms
Loss rate: 3.52%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-05-22 13:42:54

End at: 2018-05-22 13:43:24

Local clock offset: -0.206 ms

Remote clock offset: 0.975 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.40 Mbit/s

95th percentile per-packet one-way delay: 120.091 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 11.65 Mbit/s

95th percentile per-packet one-way delay: 111.883 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 6.98 Mbit/s

95th percentile per-packet one-way delay: 123.752 ms

Loss rate: 1.82%

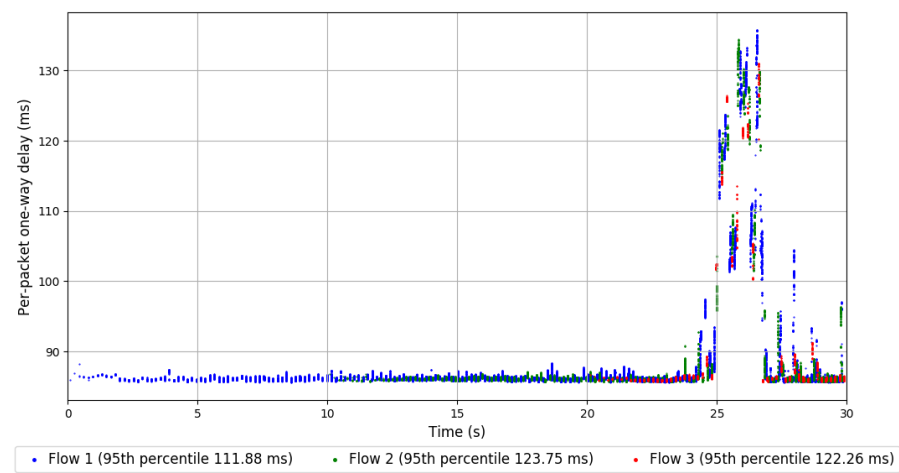
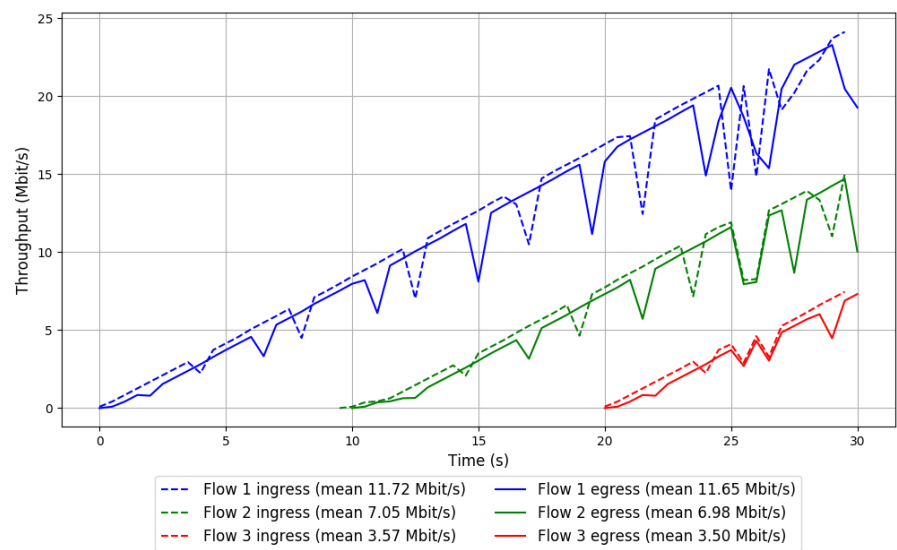
-- Flow 3:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 122.259 ms

Loss rate: 3.56%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

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

End at: 2018-05-22 14:05:58

Local clock offset: 3.64 ms

Remote clock offset: 1.134 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.25 Mbit/s

95th percentile per-packet one-way delay: 91.249 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 90.812 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 91.777 ms

Loss rate: 1.76%

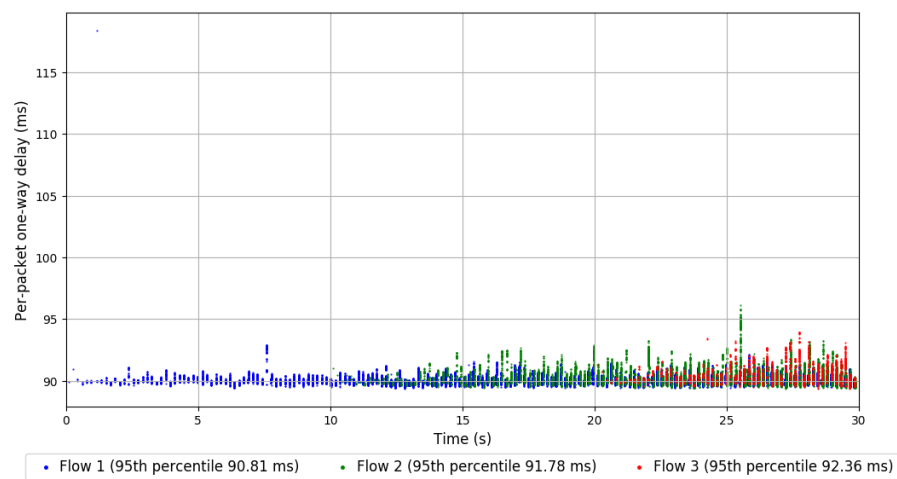
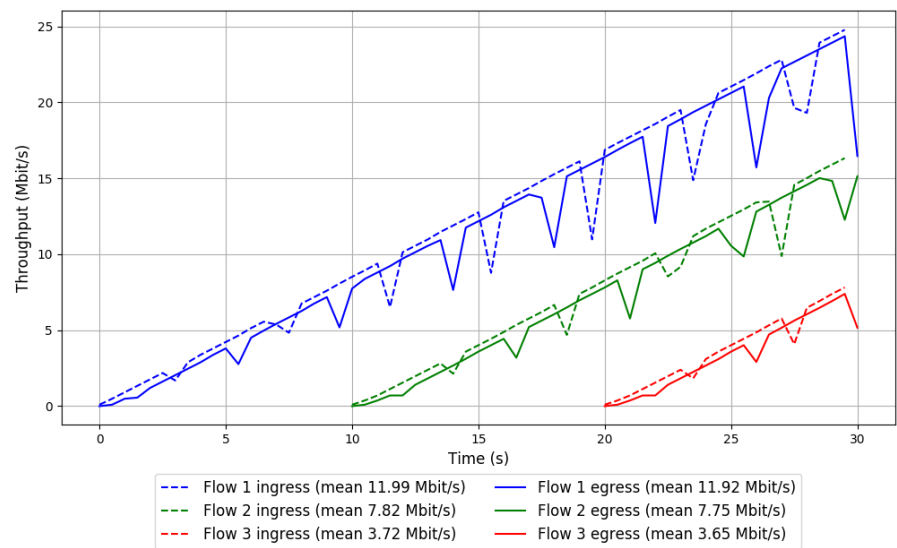
-- Flow 3:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 92.357 ms

Loss rate: 3.59%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-05-22 14:28:02

End at: 2018-05-22 14:28:32

Local clock offset: 1.882 ms

Remote clock offset: 1.136 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.42 Mbit/s

95th percentile per-packet one-way delay: 88.784 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 11.91 Mbit/s

95th percentile per-packet one-way delay: 88.725 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 88.895 ms

Loss rate: 1.74%

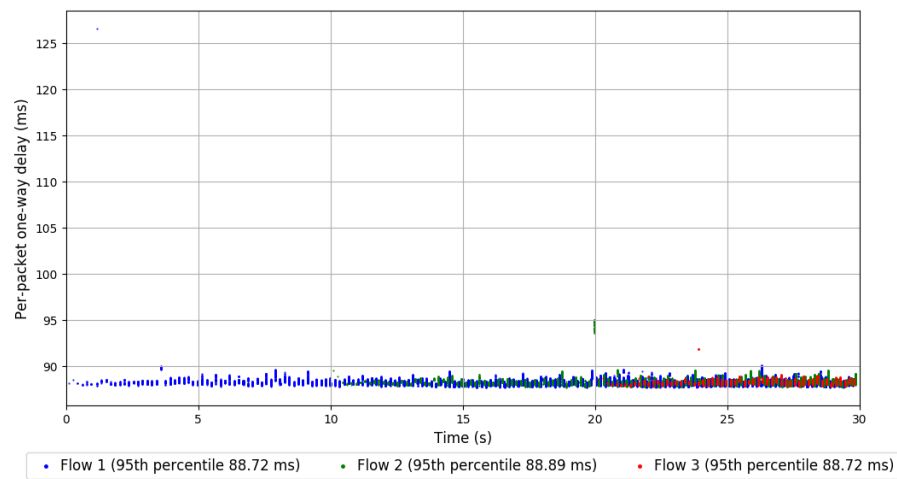
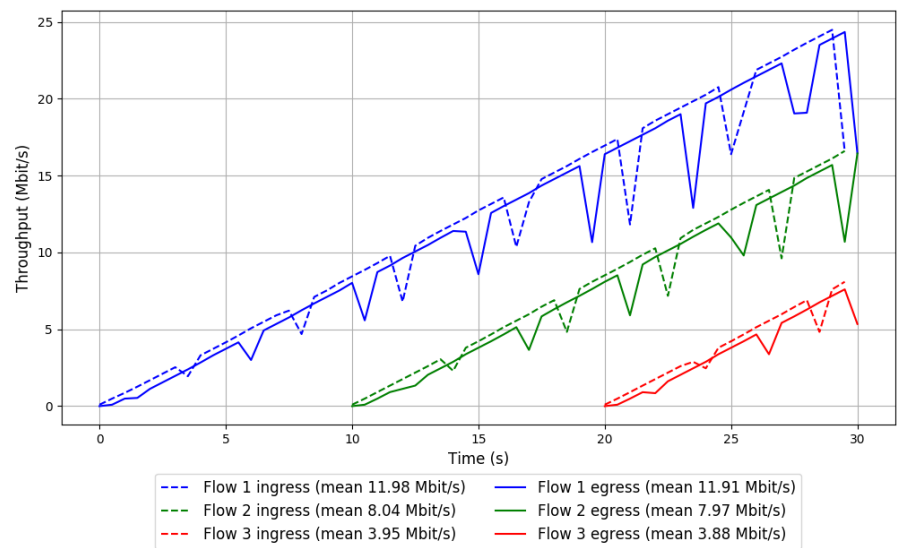
-- Flow 3:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 88.720 ms

Loss rate: 3.52%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-05-22 14:50:36

End at: 2018-05-22 14:51:06

Local clock offset: 1.298 ms

Remote clock offset: 1.288 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.45 Mbit/s

95th percentile per-packet one-way delay: 88.308 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 10.17 Mbit/s

95th percentile per-packet one-way delay: 88.292 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 88.332 ms

Loss rate: 1.78%

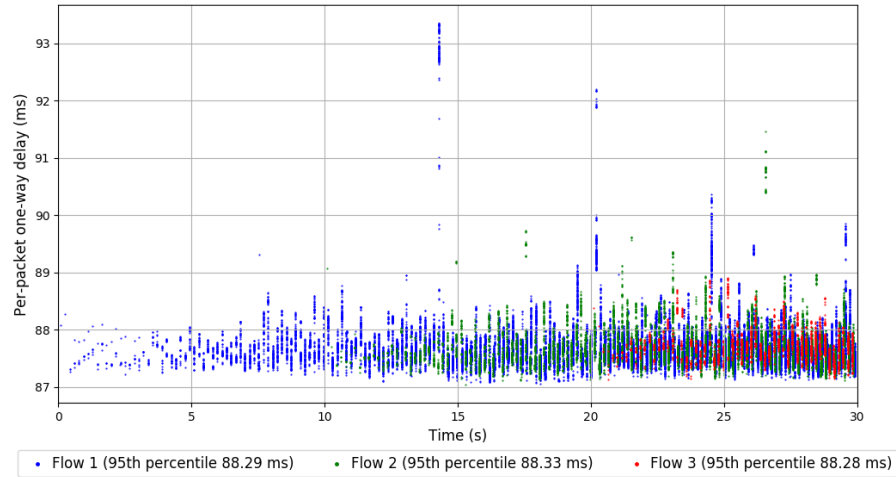
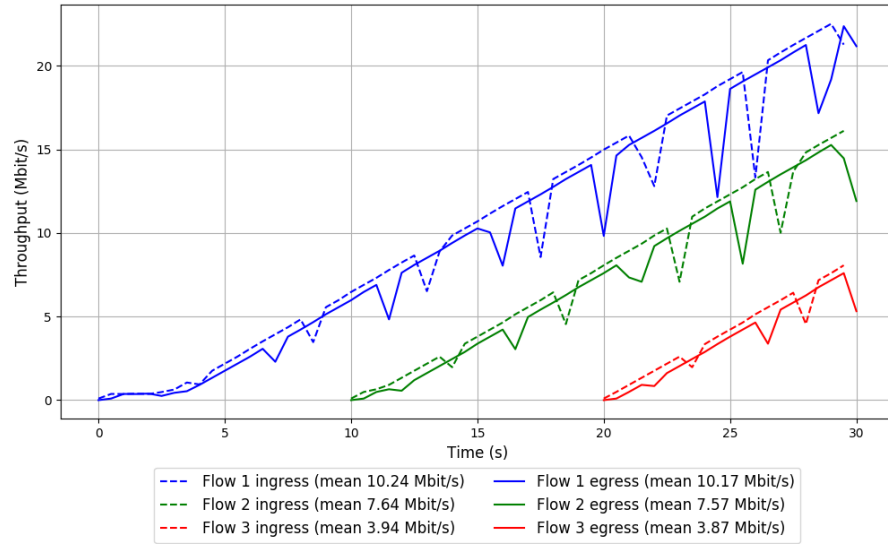
-- Flow 3:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 88.275 ms

Loss rate: 3.52%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-05-22 15:12:46

End at: 2018-05-22 15:13:16

Local clock offset: 1.93 ms

Remote clock offset: 1.412 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.94 Mbit/s

95th percentile per-packet one-way delay: 88.788 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 88.812 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 88.743 ms

Loss rate: 1.76%

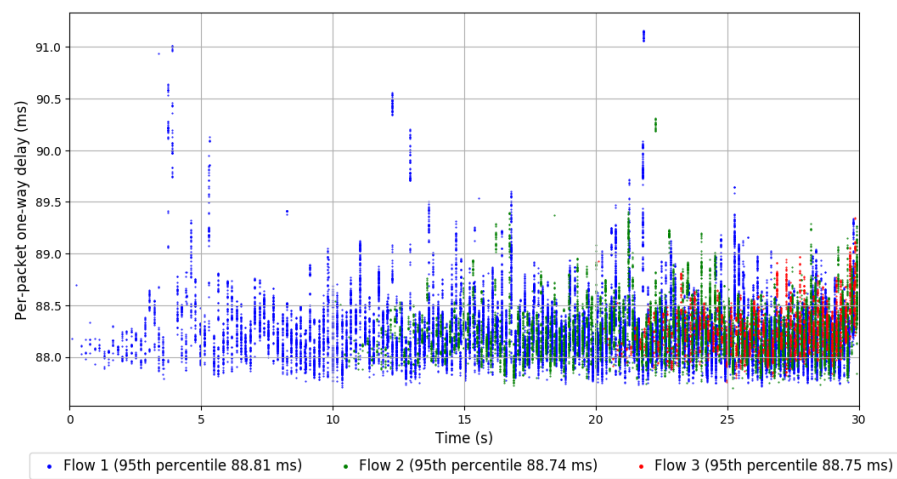
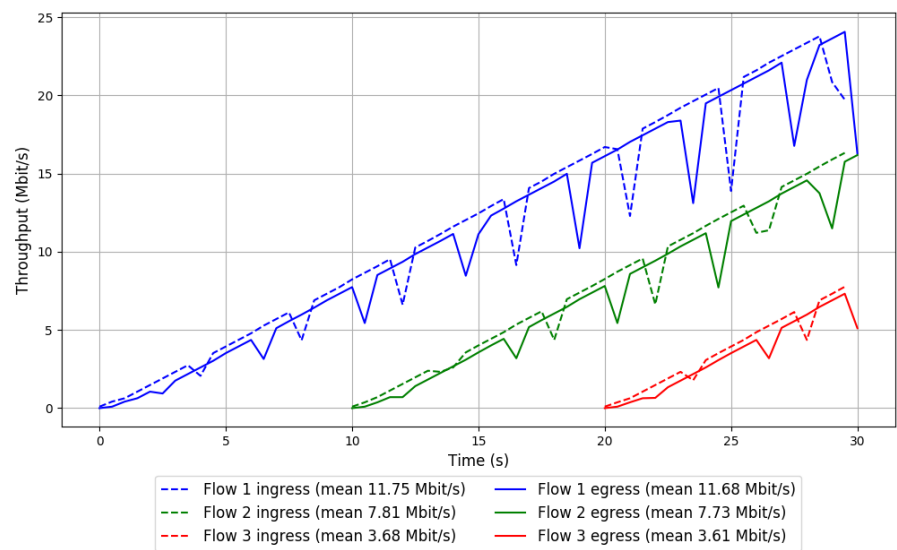
-- Flow 3:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 88.751 ms

Loss rate: 3.64%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-05-22 15:35:21

End at: 2018-05-22 15:35:51

Local clock offset: 0.161 ms

Remote clock offset: 1.466 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.97 Mbit/s

95th percentile per-packet one-way delay: 87.138 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 12.04 Mbit/s

95th percentile per-packet one-way delay: 87.160 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 87.127 ms

Loss rate: 1.78%

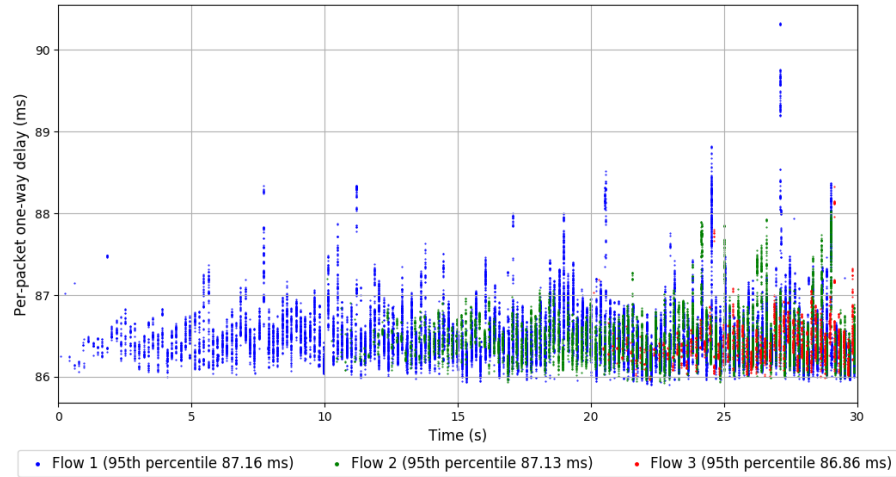
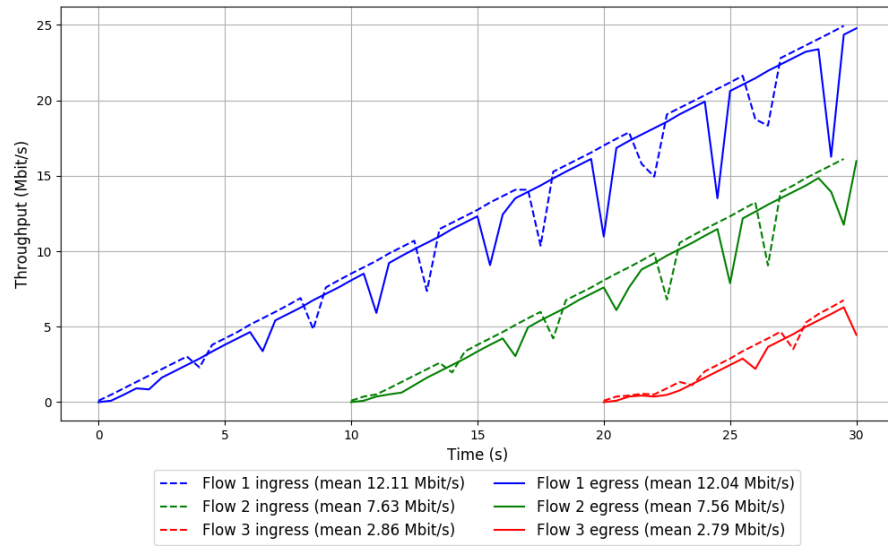
-- Flow 3:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 86.861 ms

Loss rate: 4.07%

Run 7: Report of LEDBAT — Data Link

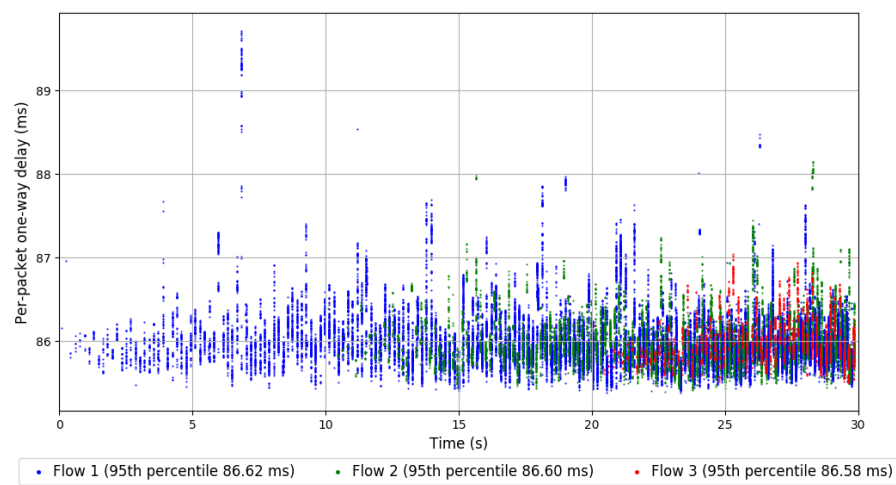
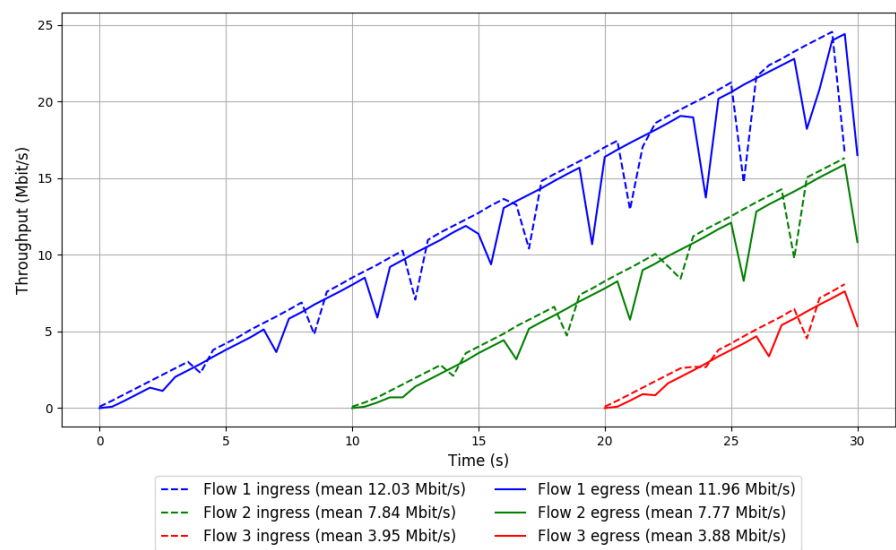


Run 8: Statistics of LEDBAT

Start at: 2018-05-22 15:58:01
End at: 2018-05-22 15:58:32
Local clock offset: -0.415 ms
Remote clock offset: -0.148 ms

Below is generated by plot.py at 2018-05-22 17:51:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.34 Mbit/s
95th percentile per-packet one-way delay: 86.609 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 86.620 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 86.602 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 86.581 ms
Loss rate: 3.52%

Run 8: Report of LEDBAT — Data Link

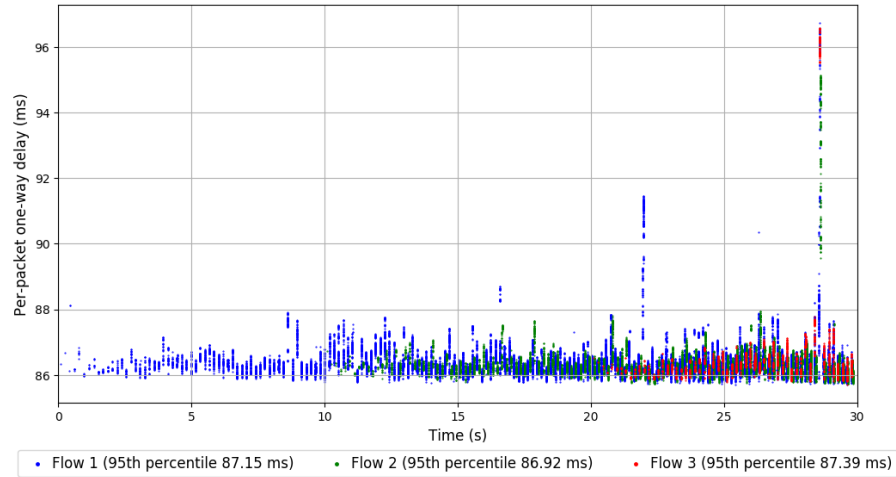
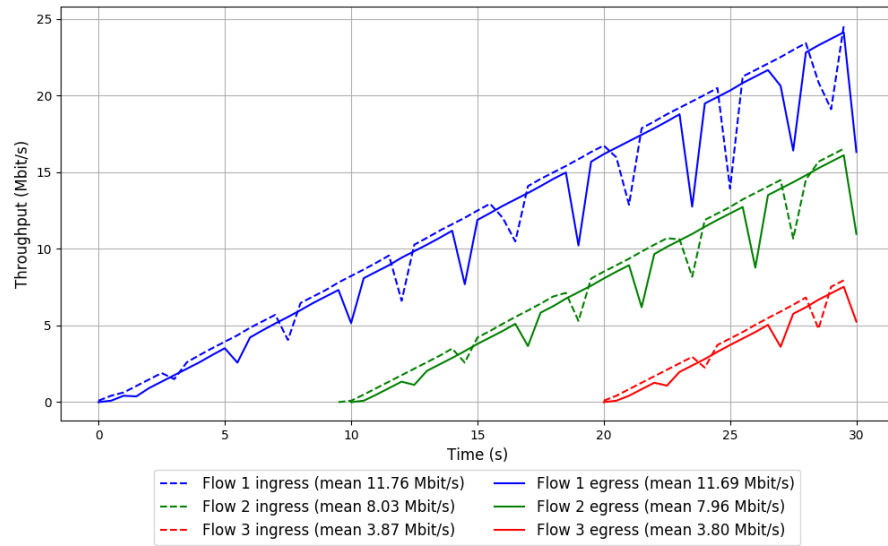


Run 9: Statistics of LEDBAT

Start at: 2018-05-22 16:20:35
End at: 2018-05-22 16:21:05
Local clock offset: 0.021 ms
Remote clock offset: -0.466 ms

Below is generated by plot.py at 2018-05-22 17:51:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.20 Mbit/s
95th percentile per-packet one-way delay: 87.122 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 11.69 Mbit/s
95th percentile per-packet one-way delay: 87.148 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 86.924 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 87.387 ms
Loss rate: 3.53%

Run 9: Report of LEDBAT — Data Link

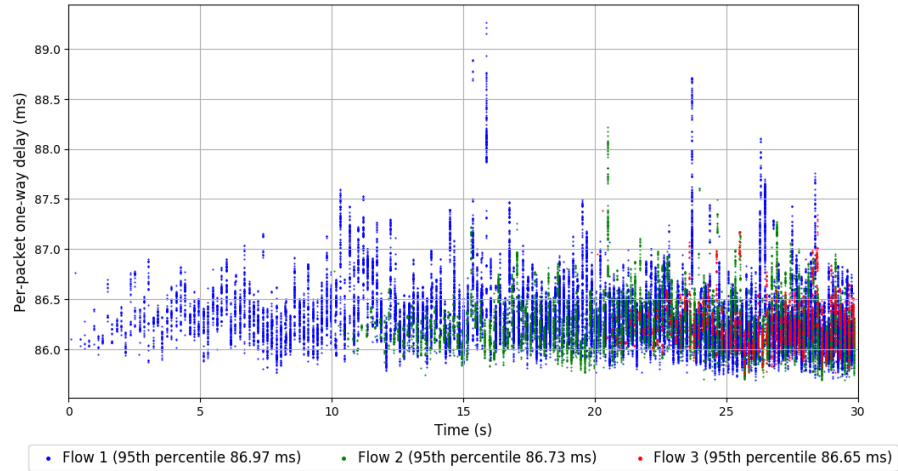
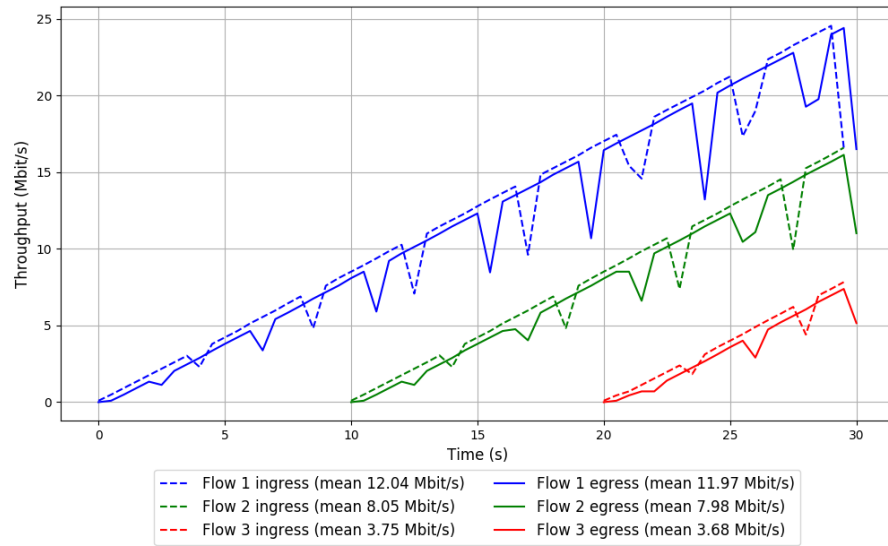


Run 10: Statistics of LEDBAT

Start at: 2018-05-22 16:43:12
End at: 2018-05-22 16:43:42
Local clock offset: -0.02 ms
Remote clock offset: -0.818 ms

Below is generated by plot.py at 2018-05-22 17:51:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.43 Mbit/s
95th percentile per-packet one-way delay: 86.886 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 86.971 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 86.731 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 86.648 ms
Loss rate: 3.61%

Run 10: Report of LEDBAT — Data Link

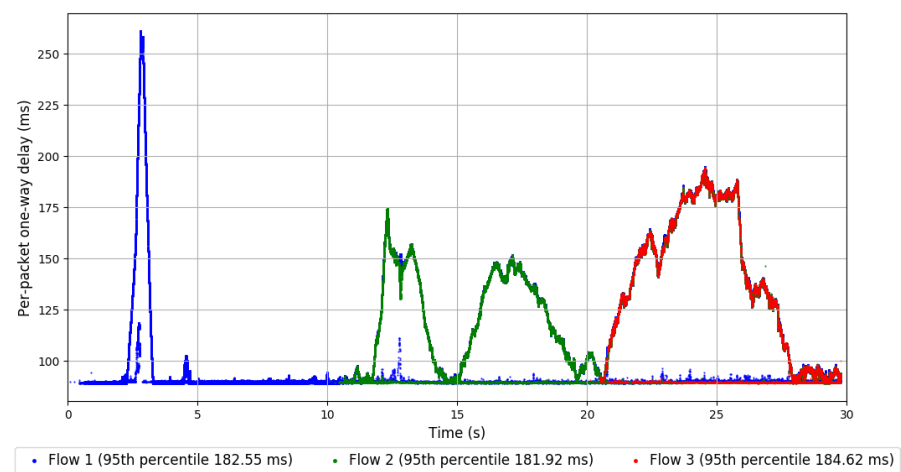
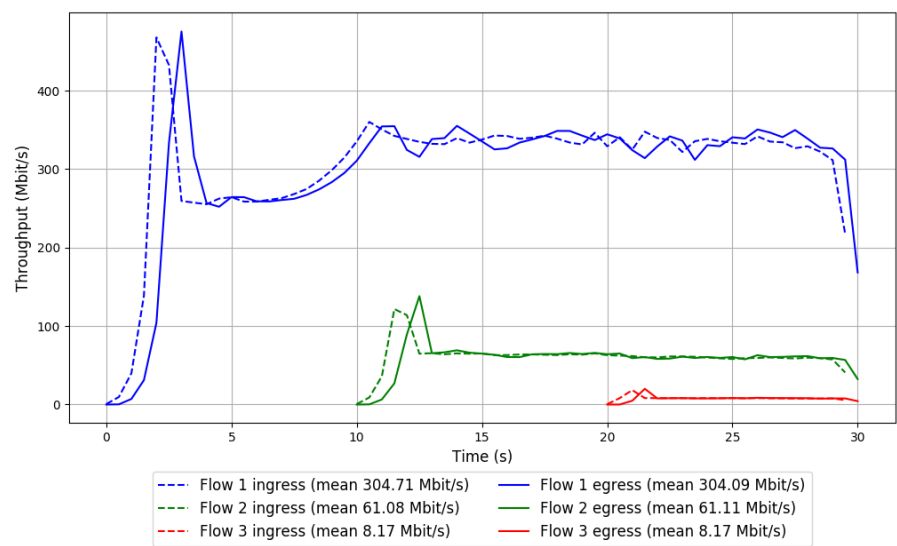


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-22 13:21:33
End at: 2018-05-22 13:22:03
Local clock offset: 3.197 ms
Remote clock offset: 0.845 ms

# Below is generated by plot.py at 2018-05-22 17:51:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 347.16 Mbit/s
95th percentile per-packet one-way delay: 182.492 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 304.09 Mbit/s
95th percentile per-packet one-way delay: 182.553 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 61.11 Mbit/s
95th percentile per-packet one-way delay: 181.921 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 184.618 ms
Loss rate: 1.75%
```


Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-05-22 13:44:07

End at: 2018-05-22 13:44:37

Local clock offset: 3.388 ms

Remote clock offset: 0.972 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.69 Mbit/s

95th percentile per-packet one-way delay: 127.317 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 292.30 Mbit/s

95th percentile per-packet one-way delay: 127.165 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 66.06 Mbit/s

95th percentile per-packet one-way delay: 128.641 ms

Loss rate: 0.83%

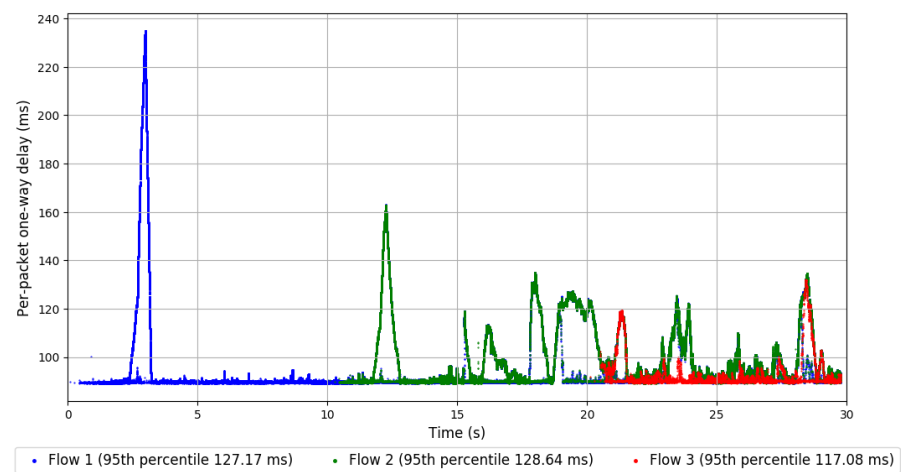
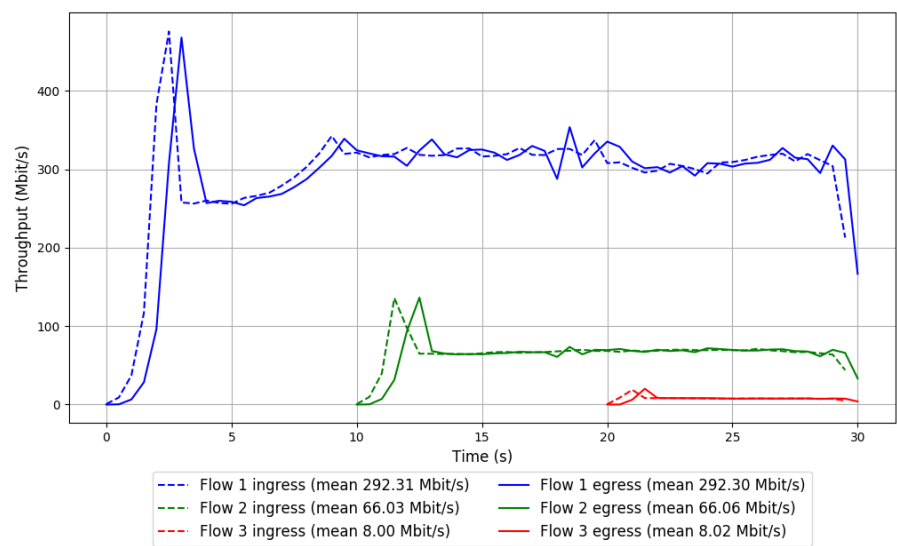
-- Flow 3:

Average throughput: 8.02 Mbit/s

95th percentile per-packet one-way delay: 117.084 ms

Loss rate: 1.54%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-05-22 14:06:41

End at: 2018-05-22 14:07:11

Local clock offset: 3.169 ms

Remote clock offset: 1.03 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.90 Mbit/s

95th percentile per-packet one-way delay: 201.899 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 329.38 Mbit/s

95th percentile per-packet one-way delay: 201.249 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 32.16 Mbit/s

95th percentile per-packet one-way delay: 202.580 ms

Loss rate: 1.41%

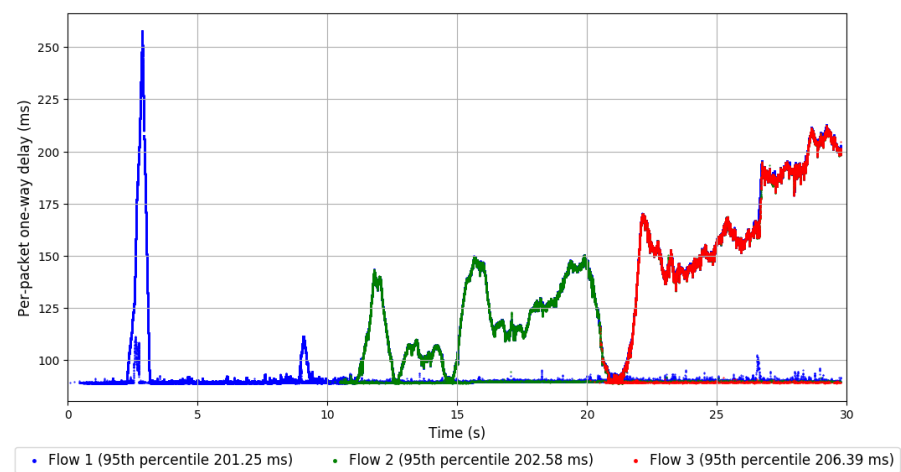
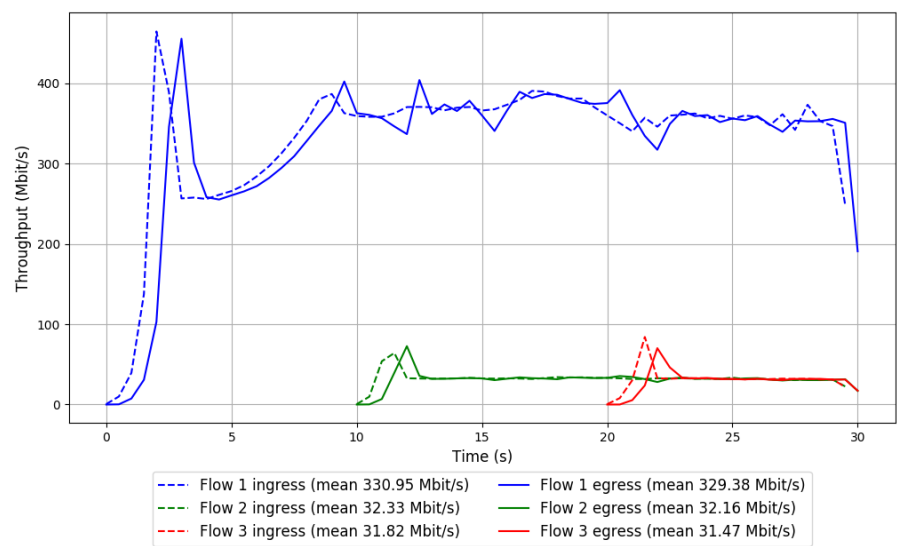
-- Flow 3:

Average throughput: 31.47 Mbit/s

95th percentile per-packet one-way delay: 206.388 ms

Loss rate: 2.81%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-05-22 14:29:15

End at: 2018-05-22 14:29:45

Local clock offset: -0.224 ms

Remote clock offset: 1.187 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.67 Mbit/s

95th percentile per-packet one-way delay: 238.749 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 135.02 Mbit/s

95th percentile per-packet one-way delay: 229.108 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 232.66 Mbit/s

95th percentile per-packet one-way delay: 243.896 ms

Loss rate: 1.81%

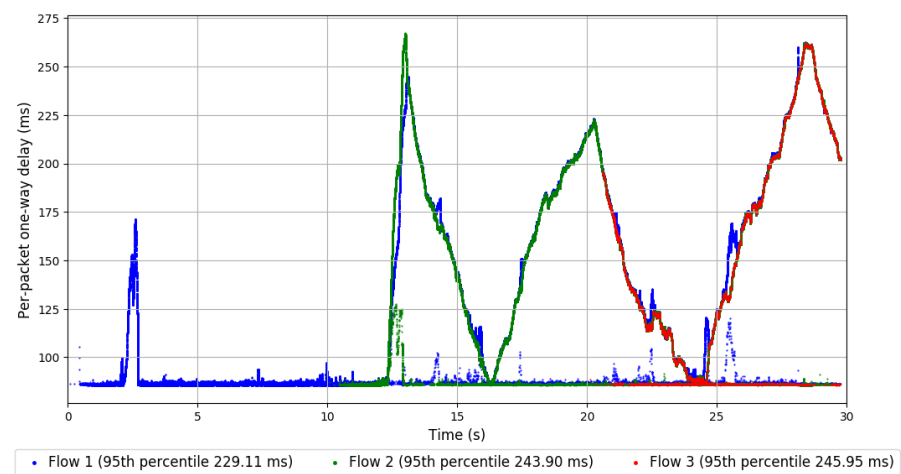
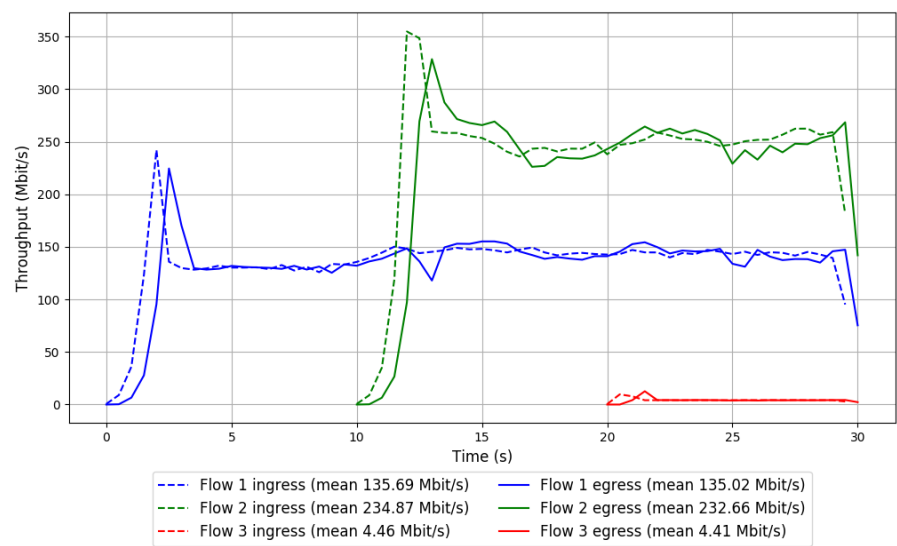
-- Flow 3:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 245.952 ms

Loss rate: 2.77%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-05-22 14:51:48

End at: 2018-05-22 14:52:18

Local clock offset: 0.291 ms

Remote clock offset: 1.329 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.39 Mbit/s

95th percentile per-packet one-way delay: 248.778 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 259.77 Mbit/s

95th percentile per-packet one-way delay: 247.317 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 123.51 Mbit/s

95th percentile per-packet one-way delay: 251.428 ms

Loss rate: 1.60%

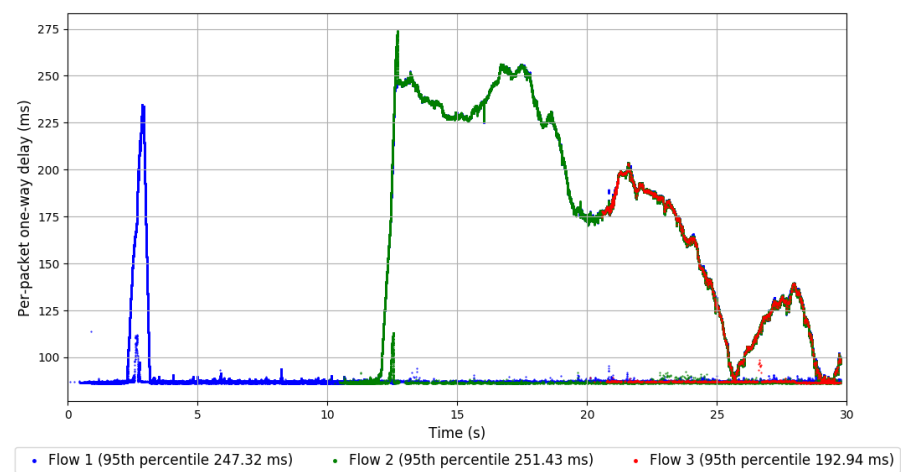
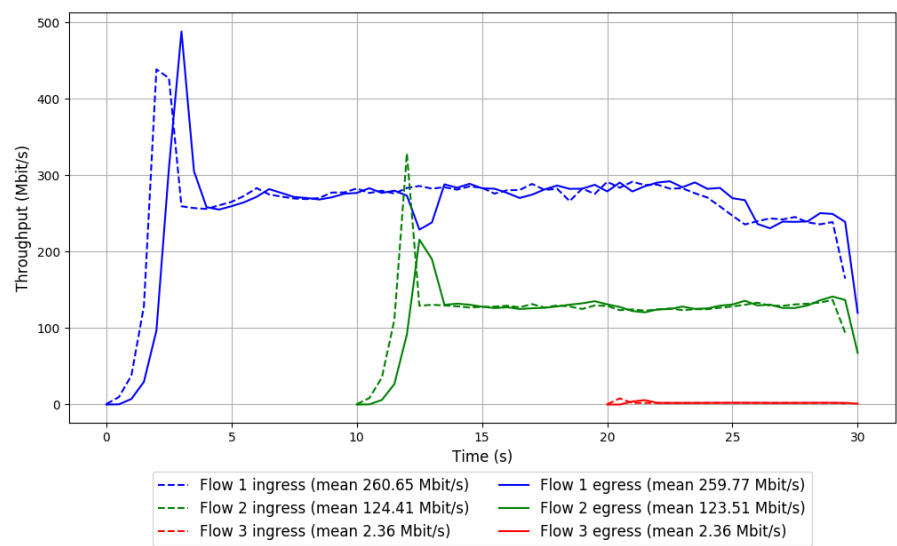
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 192.938 ms

Loss rate: 1.67%

Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-05-22 15:13:58

End at: 2018-05-22 15:14:28

Local clock offset: 3.477 ms

Remote clock offset: 1.381 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.49 Mbit/s

95th percentile per-packet one-way delay: 178.077 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 257.43 Mbit/s

95th percentile per-packet one-way delay: 180.125 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 119.00 Mbit/s

95th percentile per-packet one-way delay: 175.149 ms

Loss rate: 0.96%

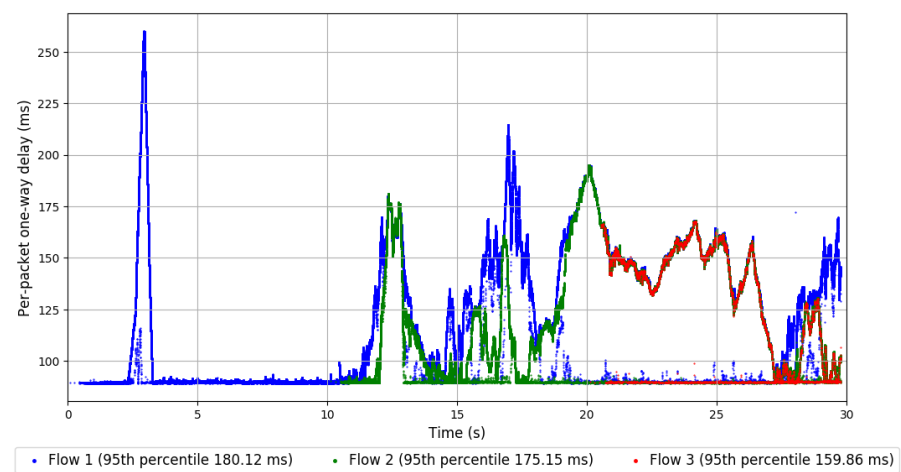
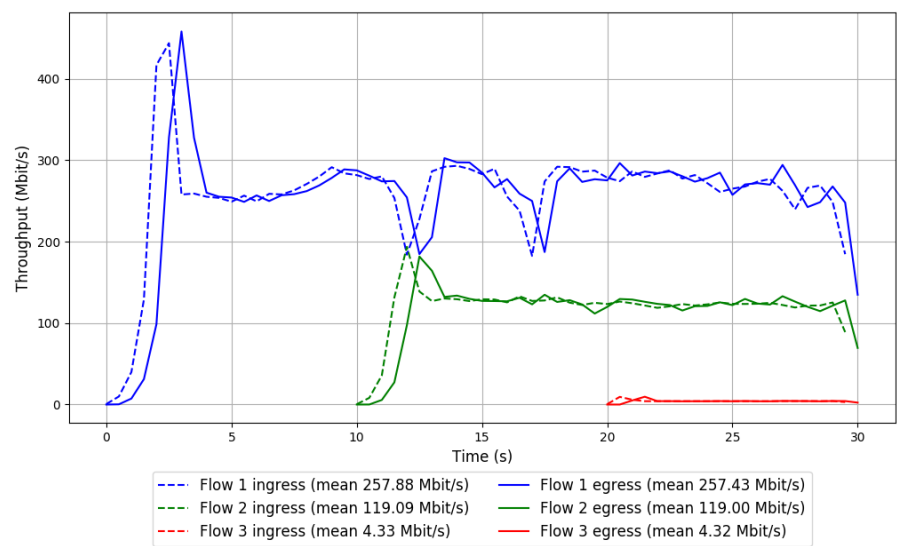
-- Flow 3:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 159.863 ms

Loss rate: 1.78%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-05-22 15:36:34

End at: 2018-05-22 15:37:04

Local clock offset: 0.045 ms

Remote clock offset: 1.611 ms

Below is generated by plot.py at 2018-05-22 17:51:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.50 Mbit/s

95th percentile per-packet one-way delay: 201.758 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 313.09 Mbit/s

95th percentile per-packet one-way delay: 200.126 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 192.048 ms

Loss rate: 0.89%

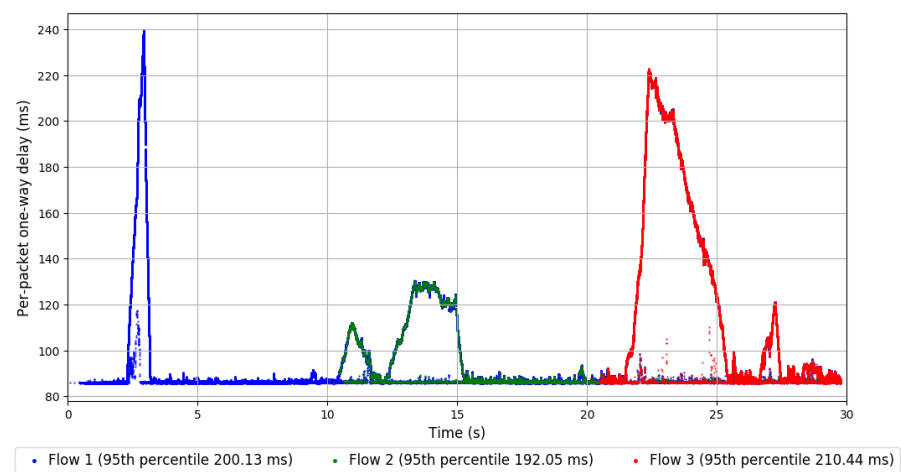
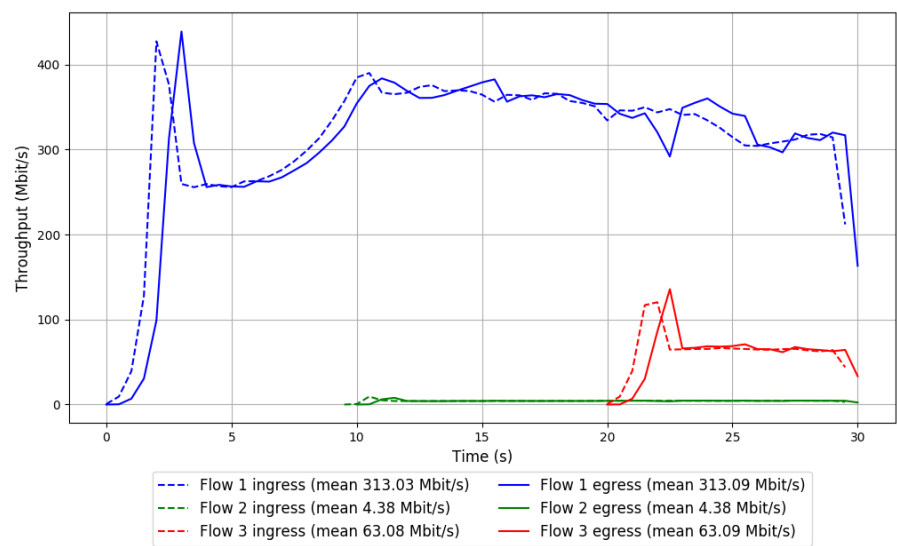
-- Flow 3:

Average throughput: 63.09 Mbit/s

95th percentile per-packet one-way delay: 210.442 ms

Loss rate: 1.75%

Run 7: Report of PCC-Allegro — Data Link

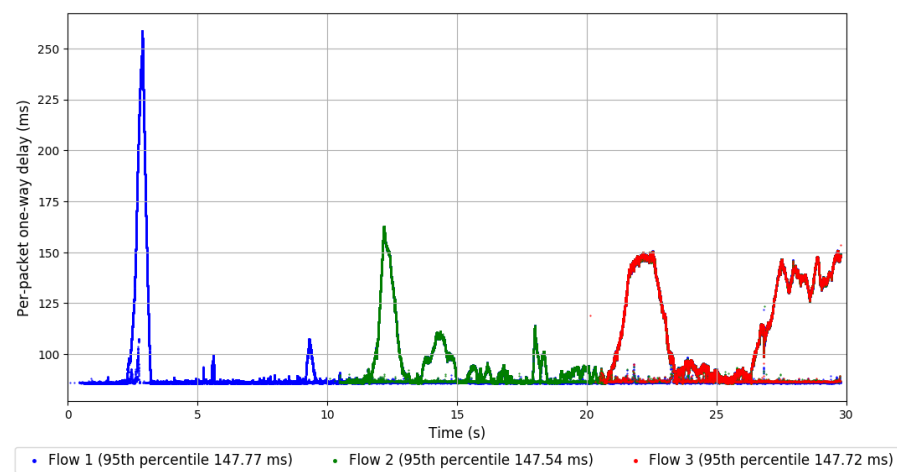
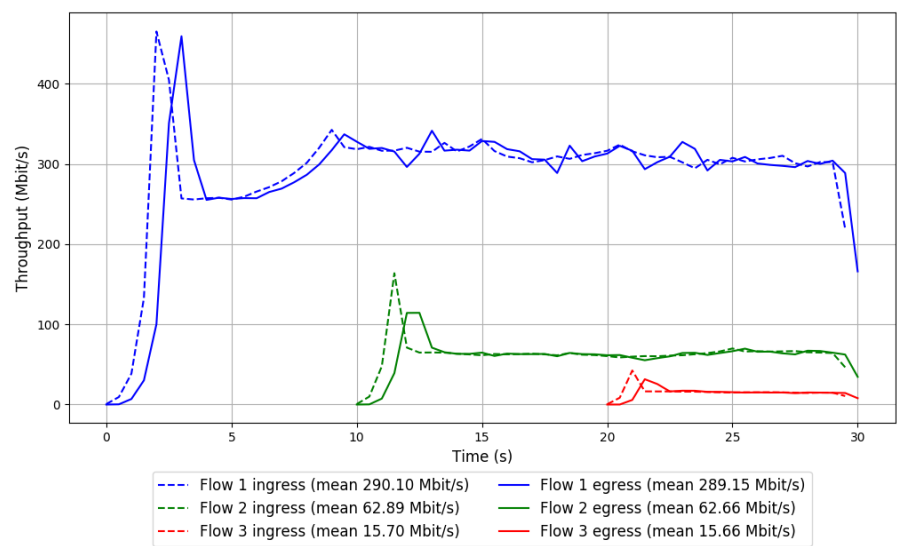


Run 8: Statistics of PCC-Allegro

Start at: 2018-05-22 15:59:14
End at: 2018-05-22 15:59:44
Local clock offset: -0.025 ms
Remote clock offset: -0.136 ms

Below is generated by plot.py at 2018-05-22 17:55:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 335.70 Mbit/s
95th percentile per-packet one-way delay: 147.733 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 289.15 Mbit/s
95th percentile per-packet one-way delay: 147.768 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 62.66 Mbit/s
95th percentile per-packet one-way delay: 147.540 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 15.66 Mbit/s
95th percentile per-packet one-way delay: 147.718 ms
Loss rate: 2.29%

Run 8: Report of PCC-Allegro — Data Link

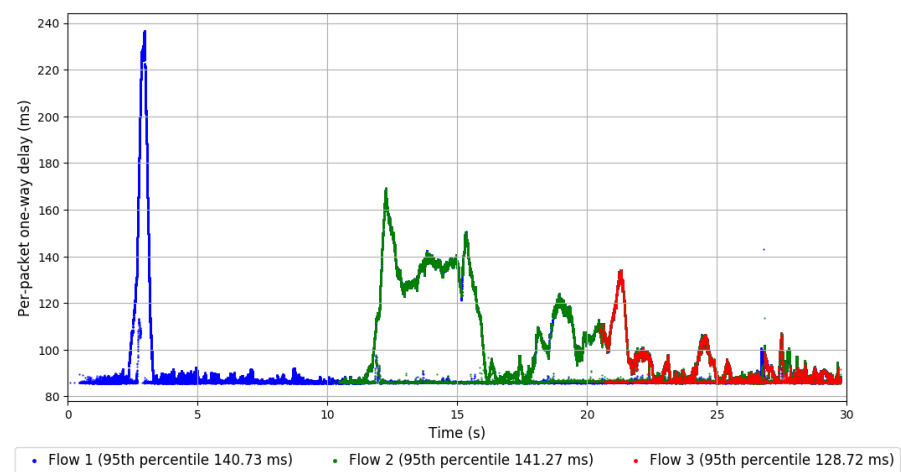
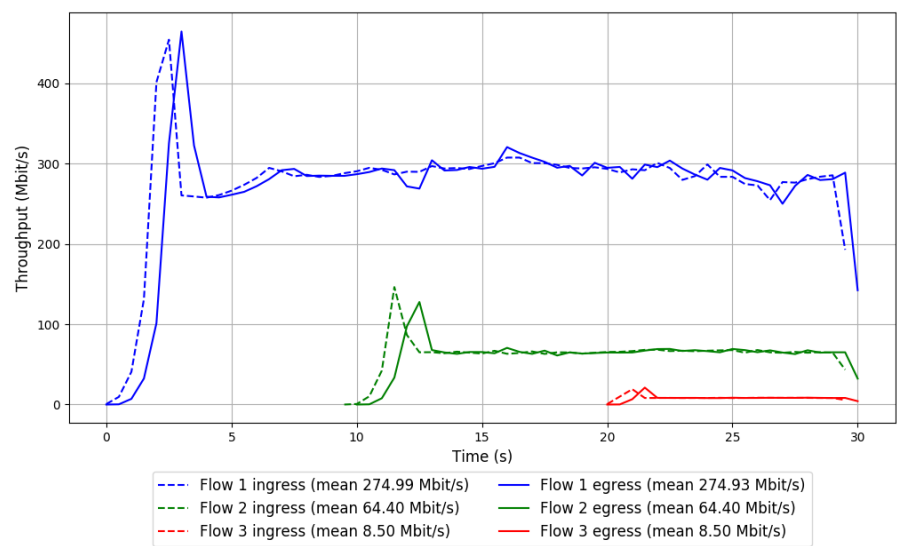


Run 9: Statistics of PCC-Allegro

Start at: 2018-05-22 16:21:48
End at: 2018-05-22 16:22:18
Local clock offset: -0.187 ms
Remote clock offset: -0.607 ms

Below is generated by plot.py at 2018-05-22 17:55:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 320.35 Mbit/s
95th percentile per-packet one-way delay: 140.686 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 274.93 Mbit/s
95th percentile per-packet one-way delay: 140.730 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 64.40 Mbit/s
95th percentile per-packet one-way delay: 141.273 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 128.718 ms
Loss rate: 1.71%

Run 9: Report of PCC-Allegro — Data Link

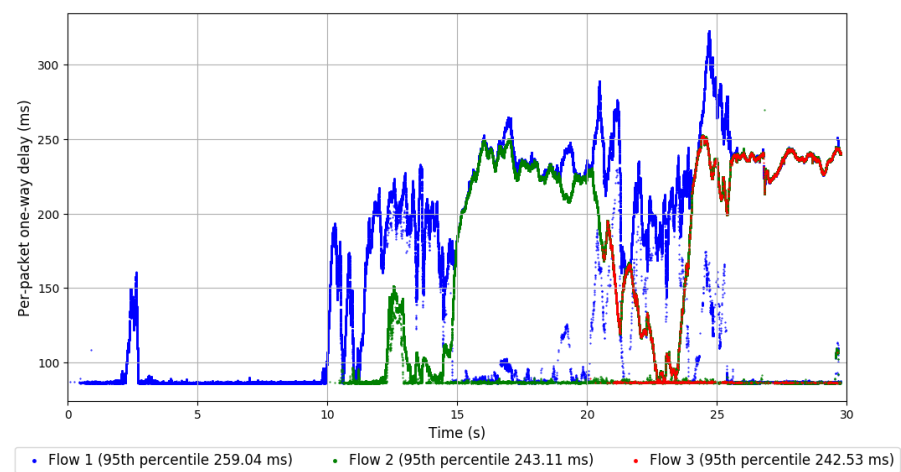
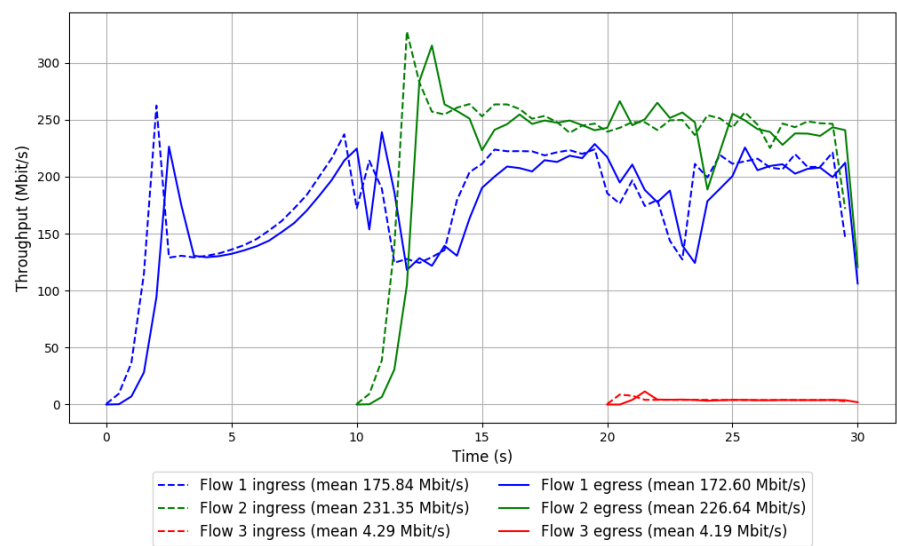


Run 10: Statistics of PCC-Allegro

Start at: 2018-05-22 16:44:25
End at: 2018-05-22 16:44:55
Local clock offset: 0.145 ms
Remote clock offset: -1.106 ms

Below is generated by plot.py at 2018-05-22 17:55:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 324.17 Mbit/s
95th percentile per-packet one-way delay: 248.277 ms
Loss rate: 2.65%
-- Flow 1:
Average throughput: 172.60 Mbit/s
95th percentile per-packet one-way delay: 259.039 ms
Loss rate: 2.42%
-- Flow 2:
Average throughput: 226.64 Mbit/s
95th percentile per-packet one-way delay: 243.114 ms
Loss rate: 2.90%
-- Flow 3:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 242.531 ms
Loss rate: 4.09%

Run 10: Report of PCC-Allegro — Data Link

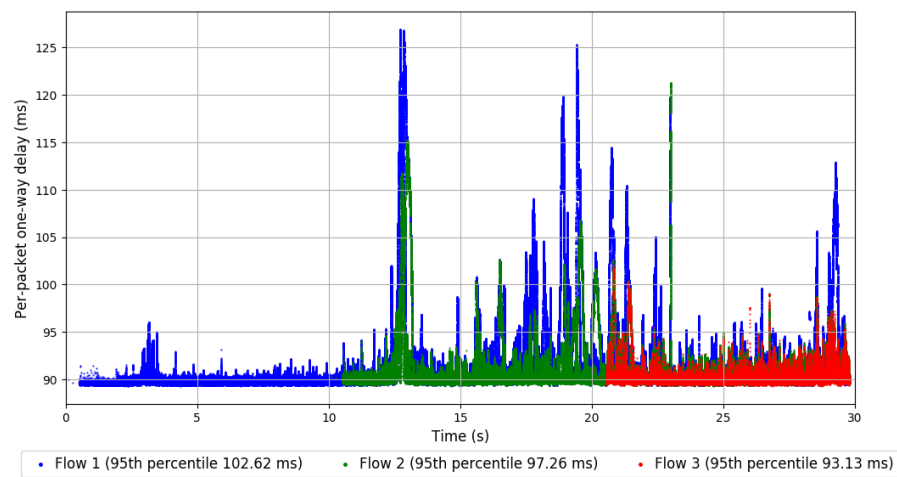
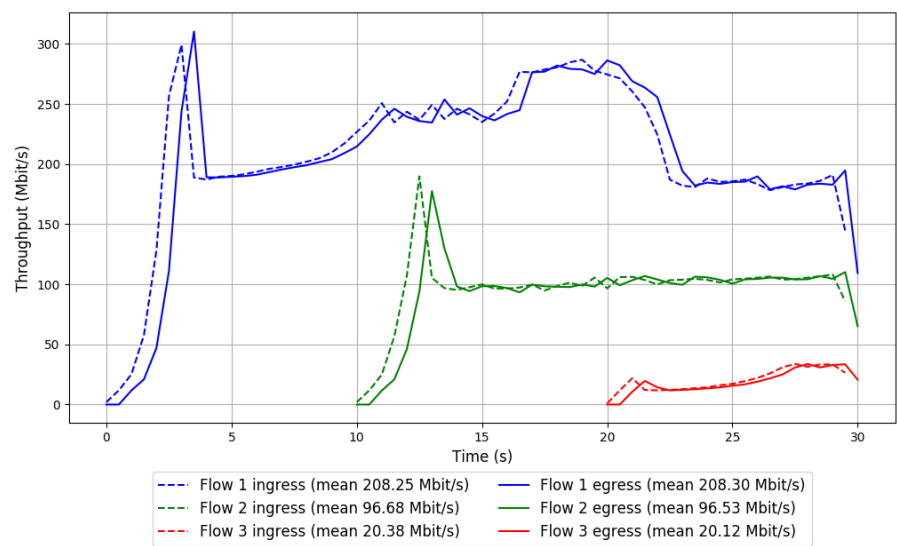


```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-22 13:18:43
End at: 2018-05-22 13:19:13
Local clock offset: 3.465 ms
Remote clock offset: 0.801 ms

# Below is generated by plot.py at 2018-05-22 17:59:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.84 Mbit/s
95th percentile per-packet one-way delay: 101.266 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 208.30 Mbit/s
95th percentile per-packet one-way delay: 102.625 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 97.264 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 20.12 Mbit/s
95th percentile per-packet one-way delay: 93.133 ms
Loss rate: 3.01%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-05-22 13:41:18

End at: 2018-05-22 13:41:48

Local clock offset: 3.524 ms

Remote clock offset: 1.024 ms

Below is generated by plot.py at 2018-05-22 17:59:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.01 Mbit/s

95th percentile per-packet one-way delay: 250.746 ms

Loss rate: 2.61%

-- Flow 1:

Average throughput: 226.53 Mbit/s

95th percentile per-packet one-way delay: 250.987 ms

Loss rate: 2.60%

-- Flow 2:

Average throughput: 61.24 Mbit/s

95th percentile per-packet one-way delay: 249.234 ms

Loss rate: 2.64%

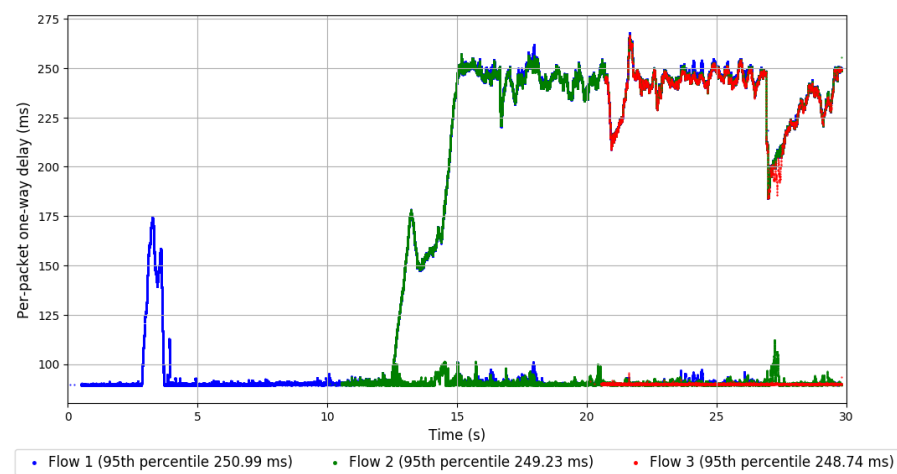
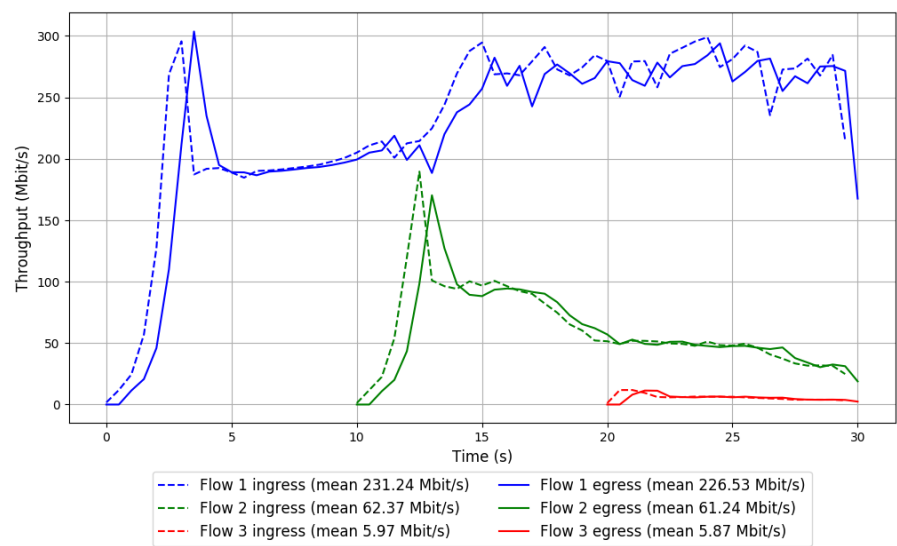
-- Flow 3:

Average throughput: 5.87 Mbit/s

95th percentile per-packet one-way delay: 248.737 ms

Loss rate: 3.37%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-05-22 14:03:53

End at: 2018-05-22 14:04:23

Local clock offset: 3.862 ms

Remote clock offset: 0.981 ms

Below is generated by plot.py at 2018-05-22 17:59:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.26 Mbit/s

95th percentile per-packet one-way delay: 129.649 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 178.91 Mbit/s

95th percentile per-packet one-way delay: 120.579 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 107.86 Mbit/s

95th percentile per-packet one-way delay: 135.633 ms

Loss rate: 1.06%

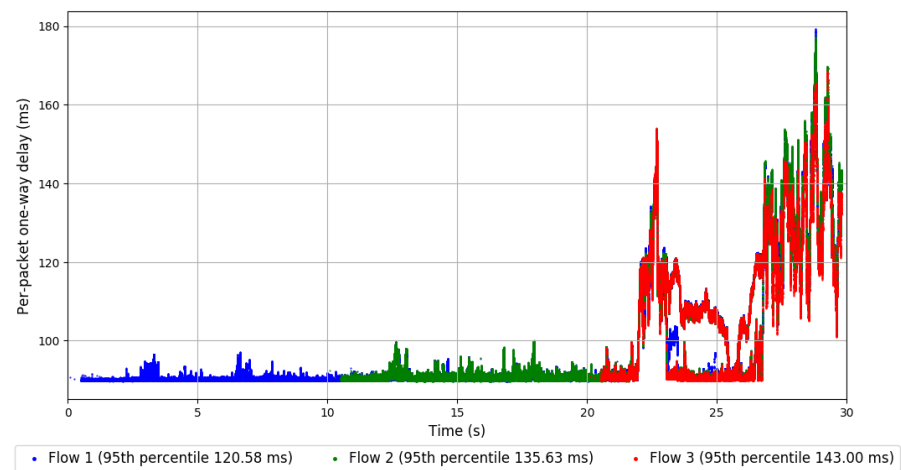
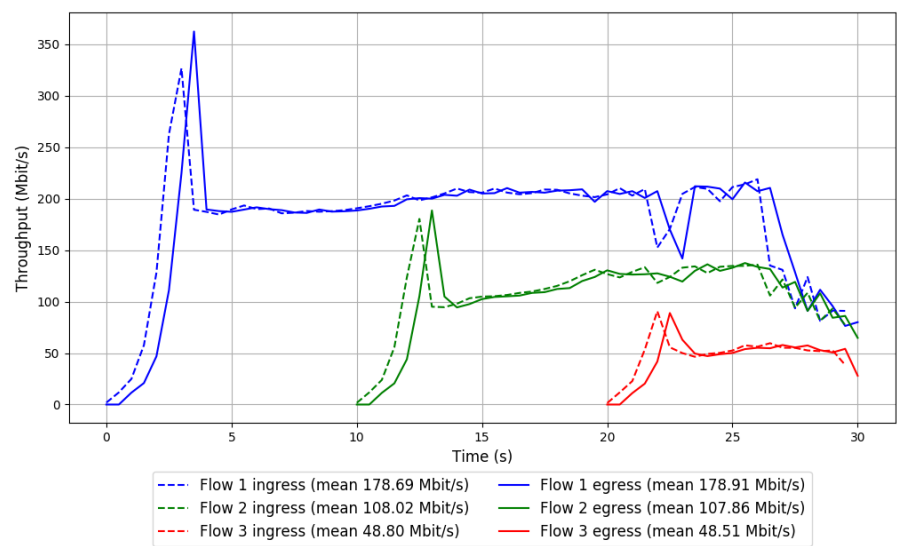
-- Flow 3:

Average throughput: 48.51 Mbit/s

95th percentile per-packet one-way delay: 142.997 ms

Loss rate: 2.34%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-05-22 14:26:28

End at: 2018-05-22 14:26:58

Local clock offset: 3.452 ms

Remote clock offset: 1.27 ms

Below is generated by plot.py at 2018-05-22 17:59:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.53 Mbit/s

95th percentile per-packet one-way delay: 111.937 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 188.31 Mbit/s

95th percentile per-packet one-way delay: 113.330 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 74.09 Mbit/s

95th percentile per-packet one-way delay: 103.032 ms

Loss rate: 1.43%

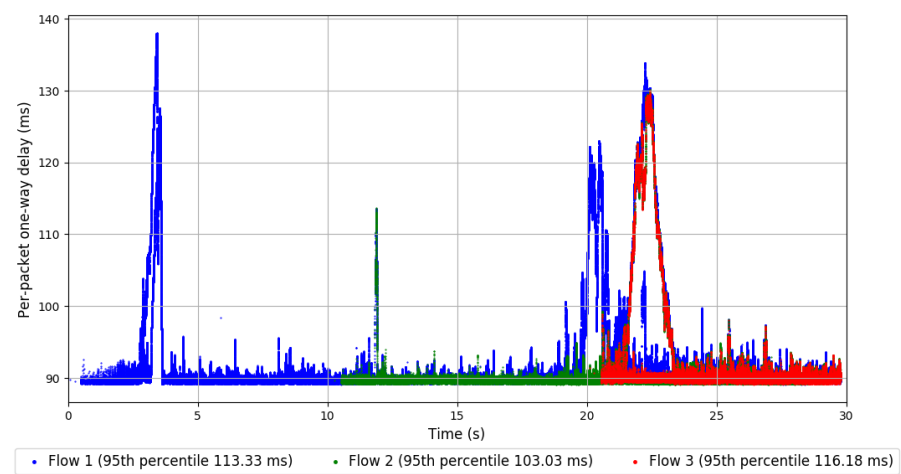
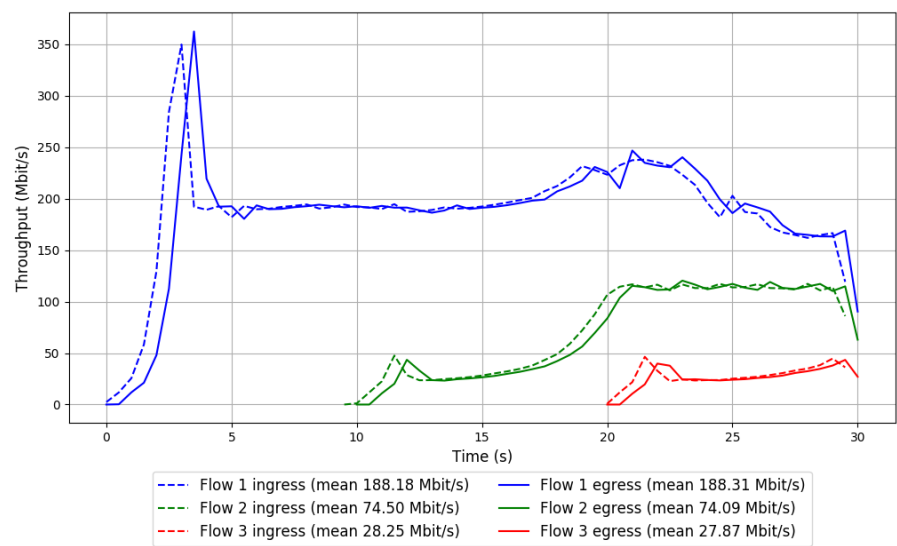
-- Flow 3:

Average throughput: 27.87 Mbit/s

95th percentile per-packet one-way delay: 116.180 ms

Loss rate: 3.10%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-05-22 14:49:00

End at: 2018-05-22 14:49:30

Local clock offset: 0.08 ms

Remote clock offset: 1.371 ms

Below is generated by plot.py at 2018-05-22 18:00:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.81 Mbit/s

95th percentile per-packet one-way delay: 166.878 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 171.40 Mbit/s

95th percentile per-packet one-way delay: 162.290 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 140.20 Mbit/s

95th percentile per-packet one-way delay: 177.314 ms

Loss rate: 0.37%

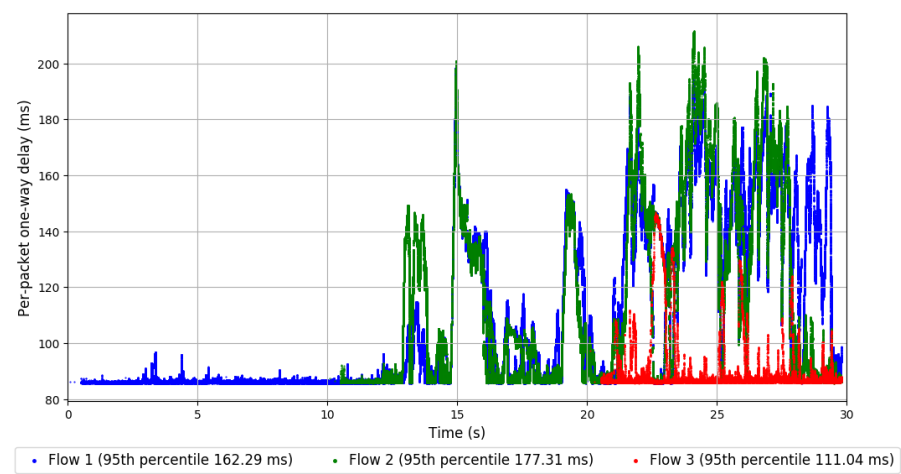
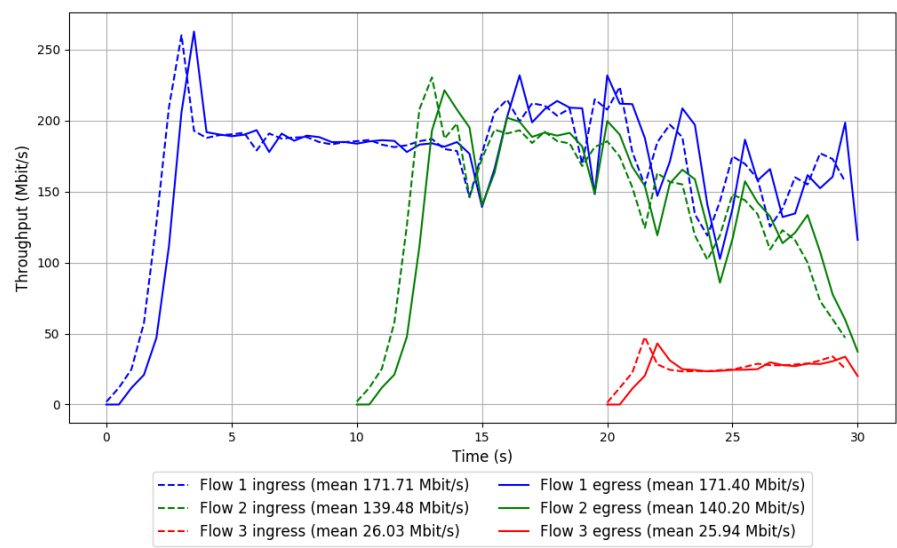
-- Flow 3:

Average throughput: 25.94 Mbit/s

95th percentile per-packet one-way delay: 111.042 ms

Loss rate: 2.21%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-05-22 15:11:16

End at: 2018-05-22 15:11:46

Local clock offset: 0.235 ms

Remote clock offset: 1.367 ms

Below is generated by plot.py at 2018-05-22 18:02:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.03 Mbit/s

95th percentile per-packet one-way delay: 203.789 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 123.89 Mbit/s

95th percentile per-packet one-way delay: 198.787 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 43.97 Mbit/s

95th percentile per-packet one-way delay: 224.527 ms

Loss rate: 1.11%

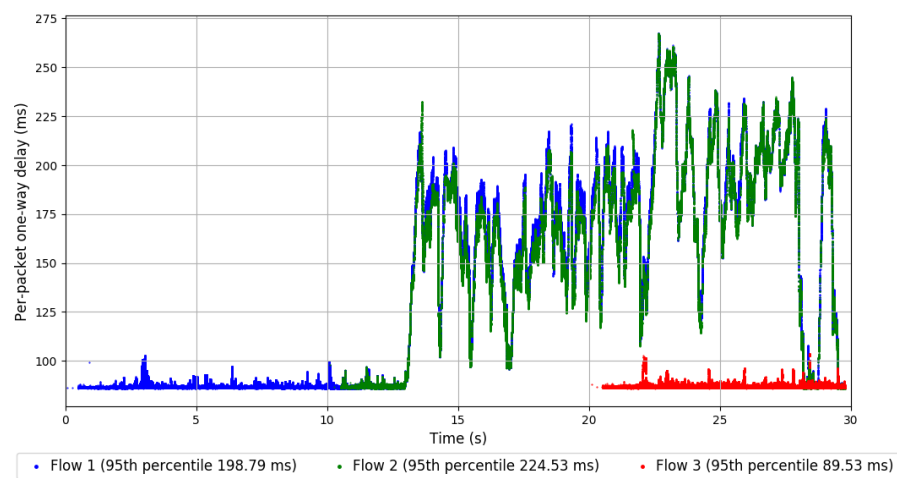
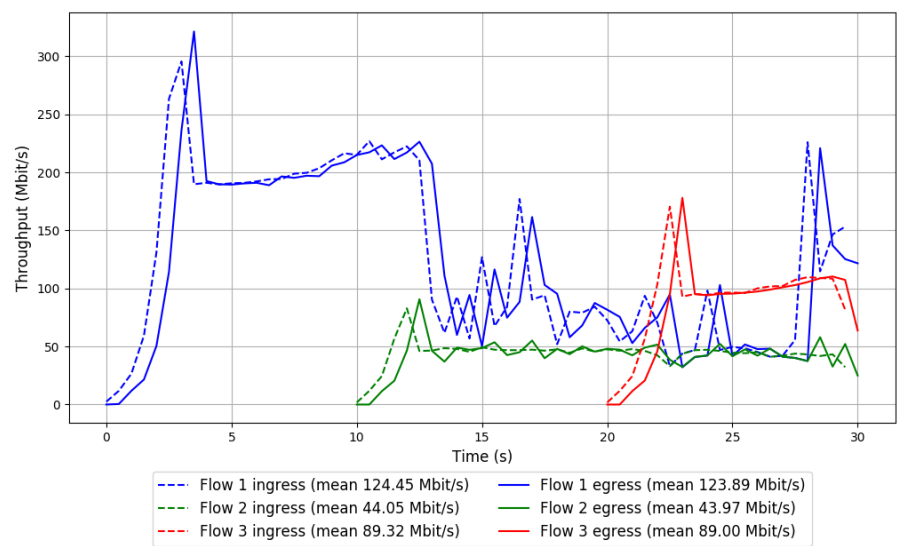
-- Flow 3:

Average throughput: 89.00 Mbit/s

95th percentile per-packet one-way delay: 89.532 ms

Loss rate: 2.12%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-05-22 15:33:49

End at: 2018-05-22 15:34:19

Local clock offset: 0.385 ms

Remote clock offset: 1.429 ms

Below is generated by plot.py at 2018-05-22 18:03:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.49 Mbit/s

95th percentile per-packet one-way delay: 101.071 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 175.90 Mbit/s

95th percentile per-packet one-way delay: 97.737 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 32.99 Mbit/s

95th percentile per-packet one-way delay: 99.719 ms

Loss rate: 1.33%

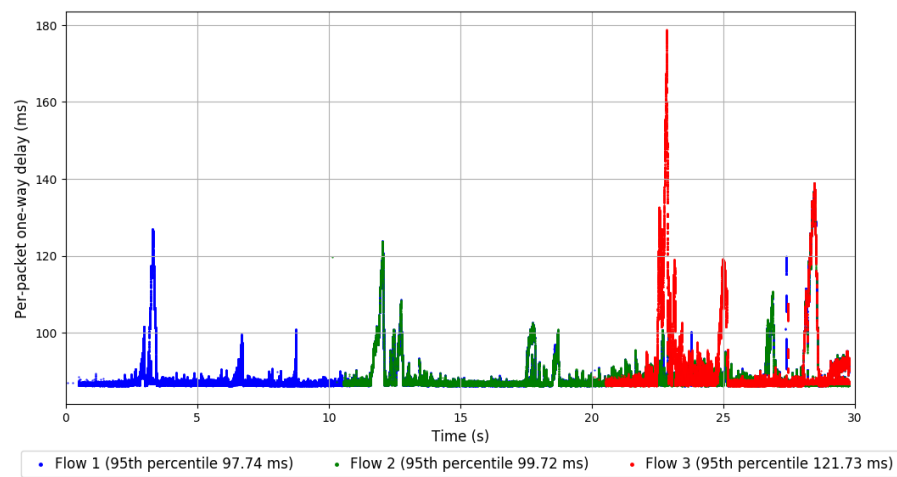
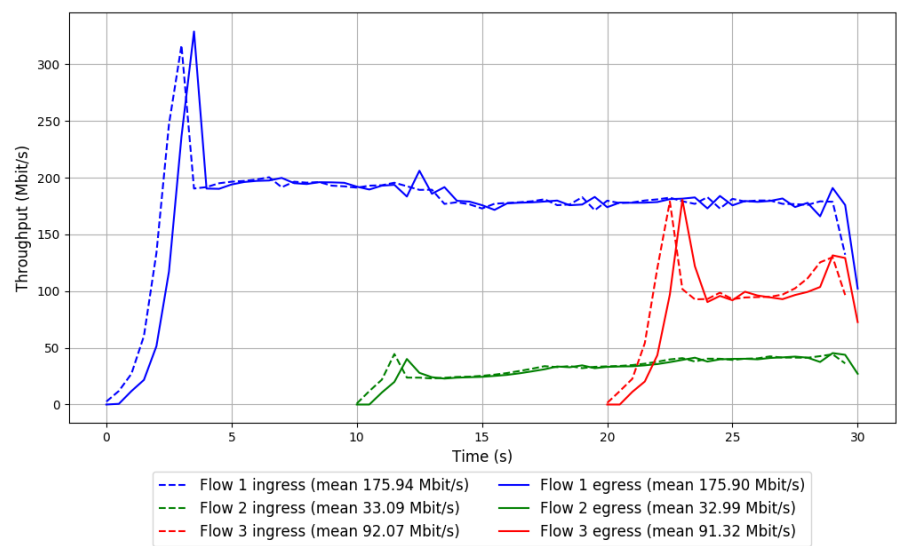
-- Flow 3:

Average throughput: 91.32 Mbit/s

95th percentile per-packet one-way delay: 121.726 ms

Loss rate: 2.57%

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-05-22 15:56:26

End at: 2018-05-22 15:56:56

Local clock offset: -0.102 ms

Remote clock offset: 0.031 ms

Below is generated by plot.py at 2018-05-22 18:04:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.26 Mbit/s

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

Loss rate: 0.87%

-- Flow 1:

Average throughput: 176.89 Mbit/s

95th percentile per-packet one-way delay: 95.779 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 89.01 Mbit/s

95th percentile per-packet one-way delay: 102.496 ms

Loss rate: 1.08%

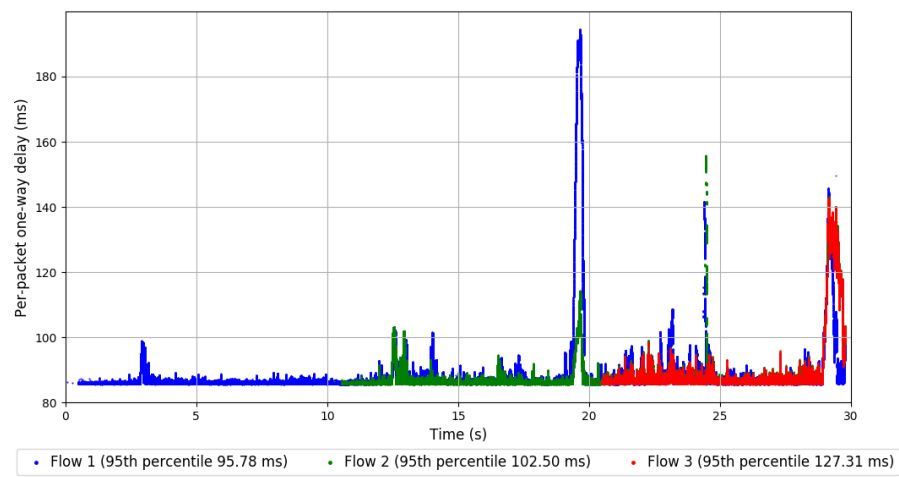
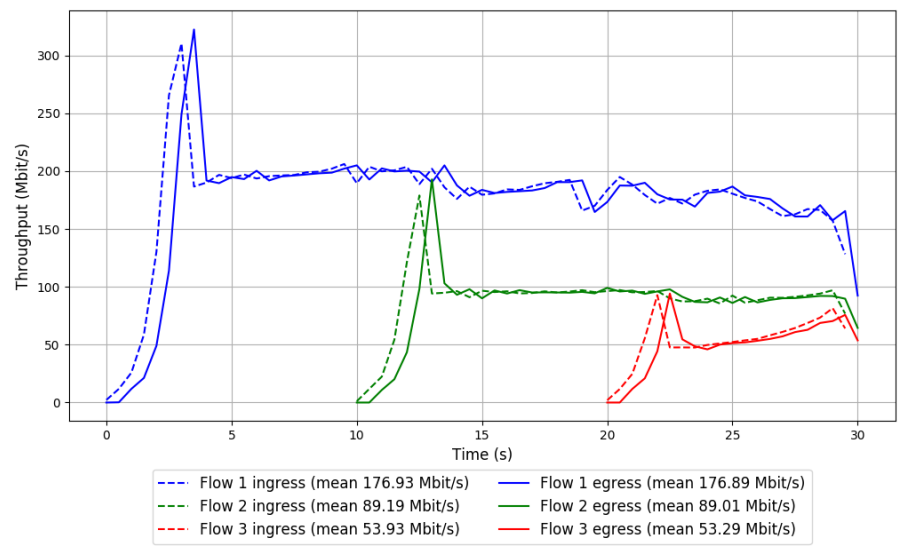
-- Flow 3:

Average throughput: 53.29 Mbit/s

95th percentile per-packet one-way delay: 127.313 ms

Loss rate: 2.93%

Run 8: Report of PCC-Expr — Data Link

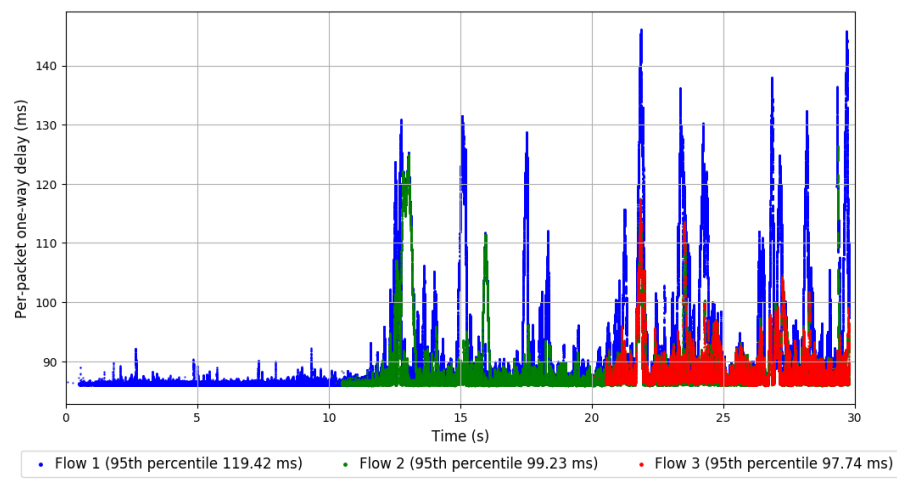
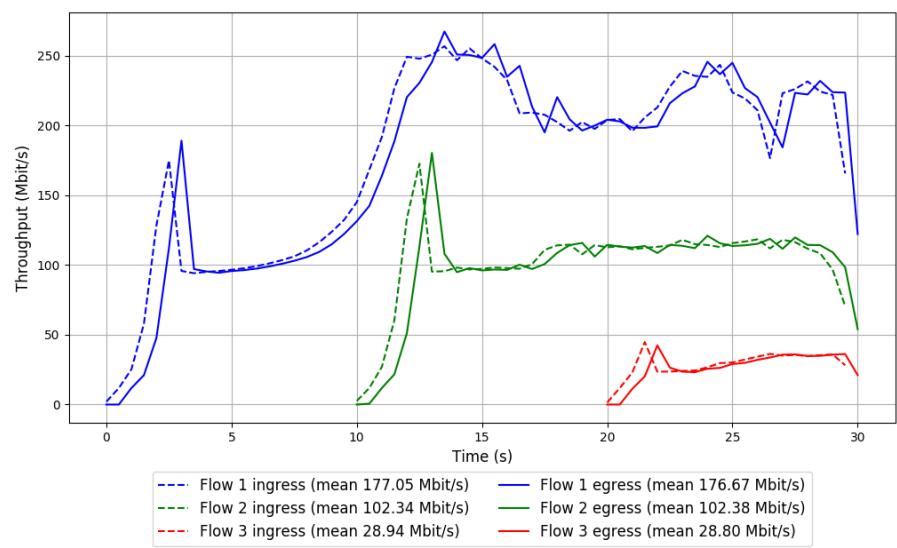


Run 9: Statistics of PCC-Expr

Start at: 2018-05-22 16:19:00
End at: 2018-05-22 16:19:30
Local clock offset: 0.122 ms
Remote clock offset: -0.485 ms

Below is generated by plot.py at 2018-05-22 18:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 253.96 Mbit/s
95th percentile per-packet one-way delay: 115.633 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 176.67 Mbit/s
95th percentile per-packet one-way delay: 119.417 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 102.38 Mbit/s
95th percentile per-packet one-way delay: 99.230 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 28.80 Mbit/s
95th percentile per-packet one-way delay: 97.742 ms
Loss rate: 2.26%

Run 9: Report of PCC-Expr — Data Link

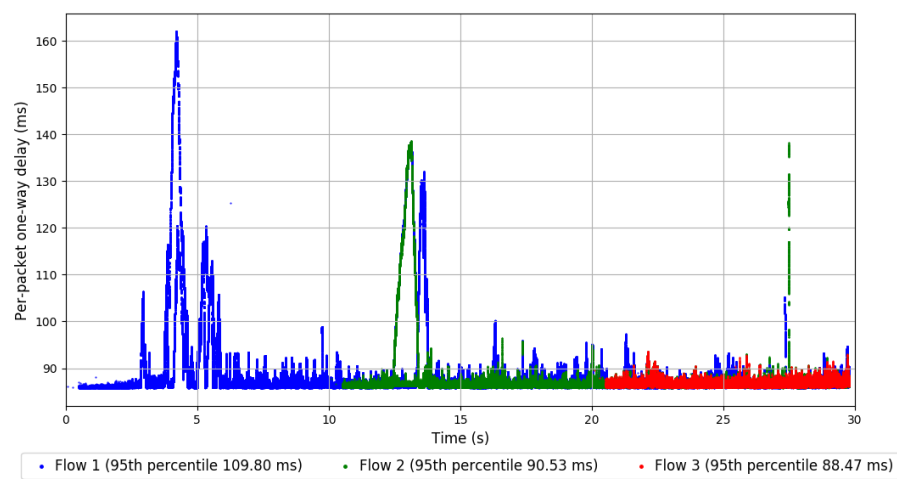
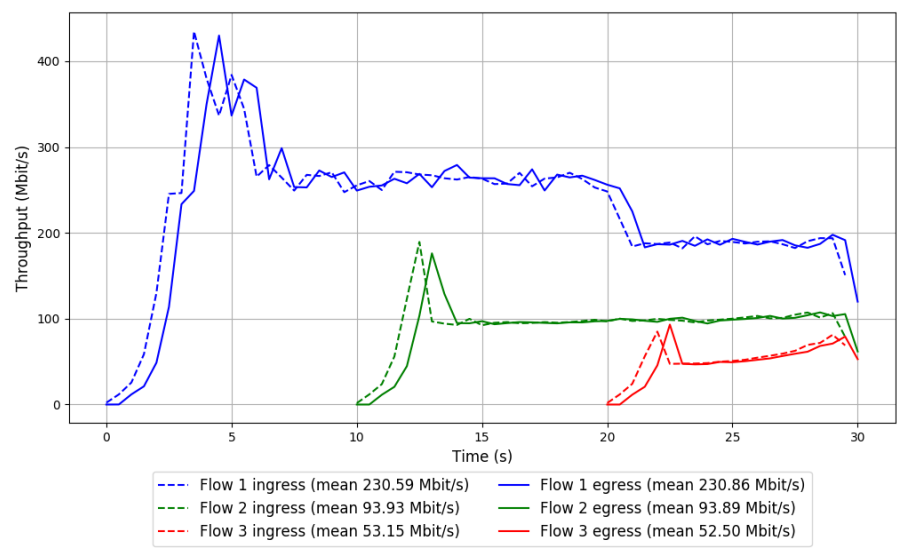


Run 10: Statistics of PCC-Expr

Start at: 2018-05-22 16:41:32
End at: 2018-05-22 16:42:02
Local clock offset: 0.059 ms
Remote clock offset: -0.777 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 310.18 Mbit/s
95th percentile per-packet one-way delay: 107.514 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 230.86 Mbit/s
95th percentile per-packet one-way delay: 109.801 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 93.89 Mbit/s
95th percentile per-packet one-way delay: 90.534 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 52.50 Mbit/s
95th percentile per-packet one-way delay: 88.475 ms
Loss rate: 3.00%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-05-22 13:24:27

End at: 2018-05-22 13:24:57

Local clock offset: 3.315 ms

Remote clock offset: 0.851 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.54 Mbit/s

95th percentile per-packet one-way delay: 90.002 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 48.34 Mbit/s

95th percentile per-packet one-way delay: 89.814 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 47.93 Mbit/s

95th percentile per-packet one-way delay: 90.142 ms

Loss rate: 1.10%

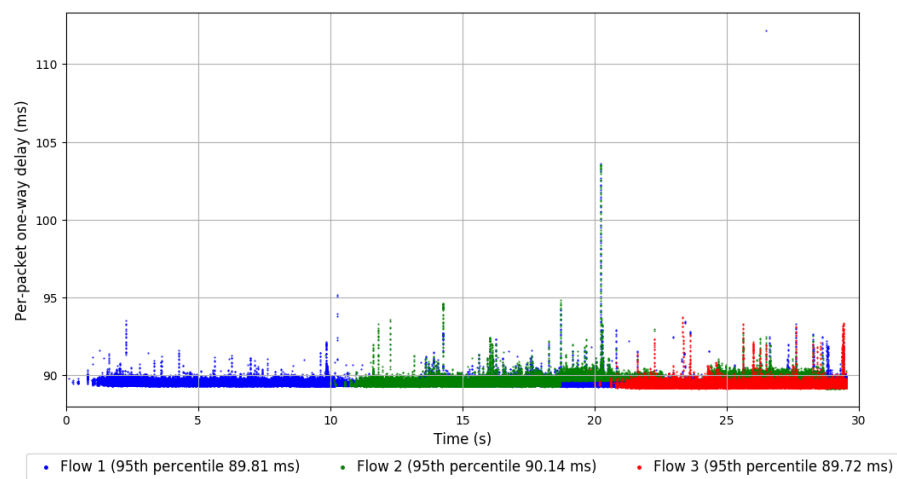
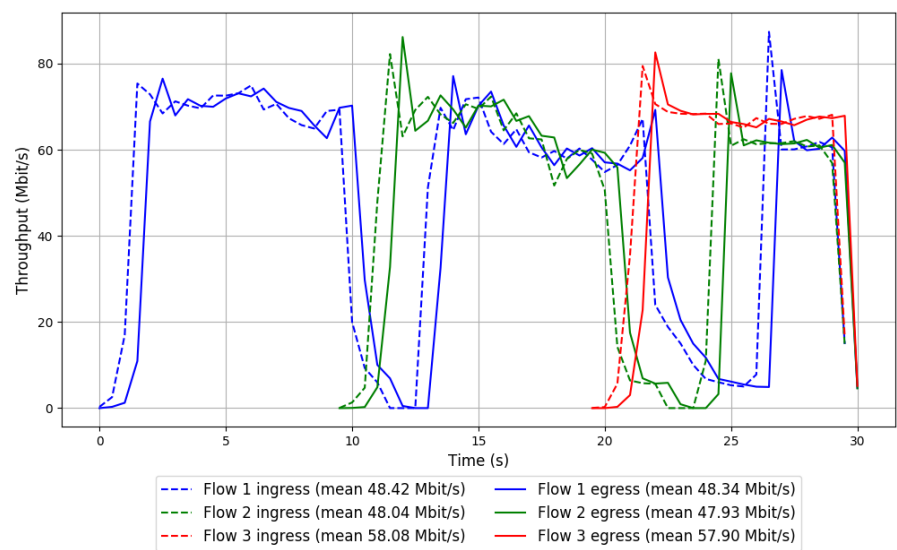
-- Flow 3:

Average throughput: 57.90 Mbit/s

95th percentile per-packet one-way delay: 89.716 ms

Loss rate: 2.05%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-05-22 13:47:06

End at: 2018-05-22 13:47:36

Local clock offset: 3.521 ms

Remote clock offset: 1.067 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.16 Mbit/s

95th percentile per-packet one-way delay: 90.042 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 55.44 Mbit/s

95th percentile per-packet one-way delay: 90.063 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 47.82 Mbit/s

95th percentile per-packet one-way delay: 89.725 ms

Loss rate: 1.23%

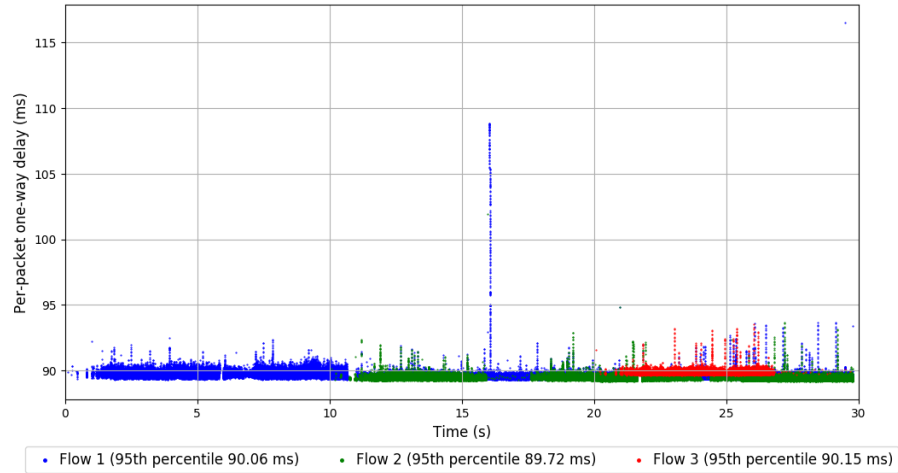
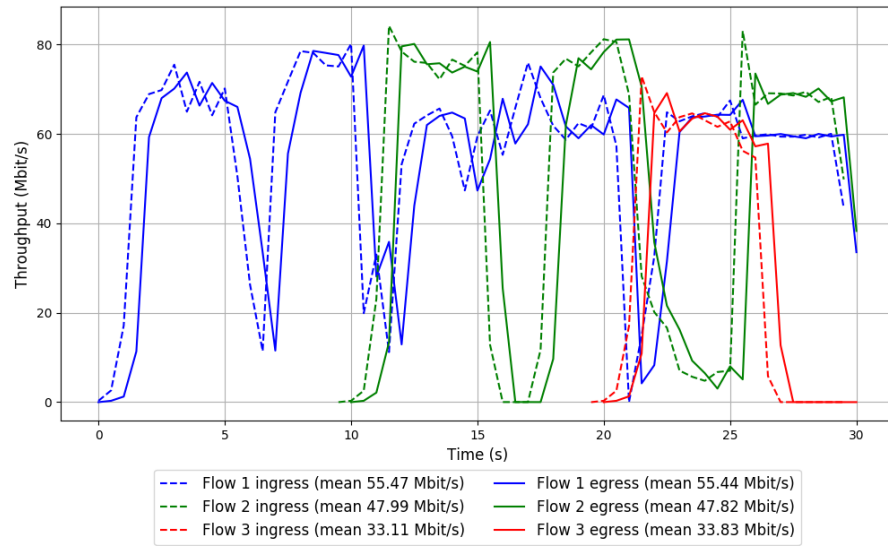
-- Flow 3:

Average throughput: 33.83 Mbit/s

95th percentile per-packet one-way delay: 90.153 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-05-22 14:09:40

End at: 2018-05-22 14:10:10

Local clock offset: 3.317 ms

Remote clock offset: 1.08 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.56 Mbit/s

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

Loss rate: 1.46%

-- Flow 1:

Average throughput: 10.35 Mbit/s

95th percentile per-packet one-way delay: 90.075 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 49.85 Mbit/s

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

Loss rate: 1.18%

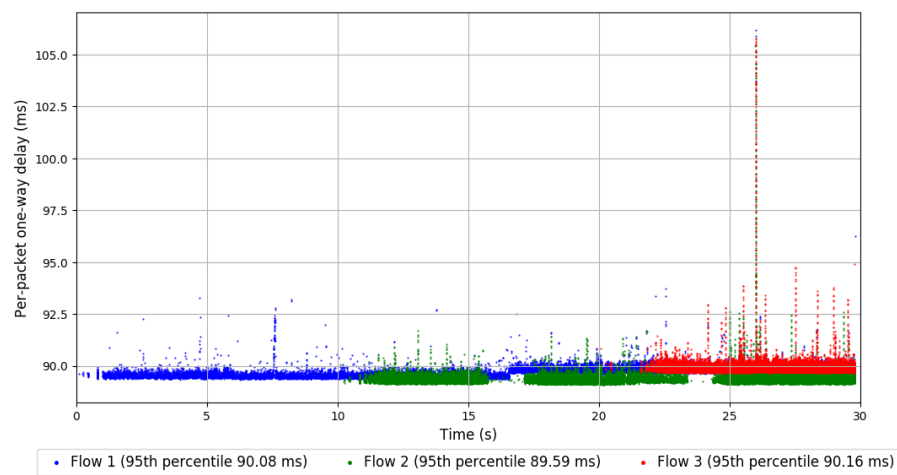
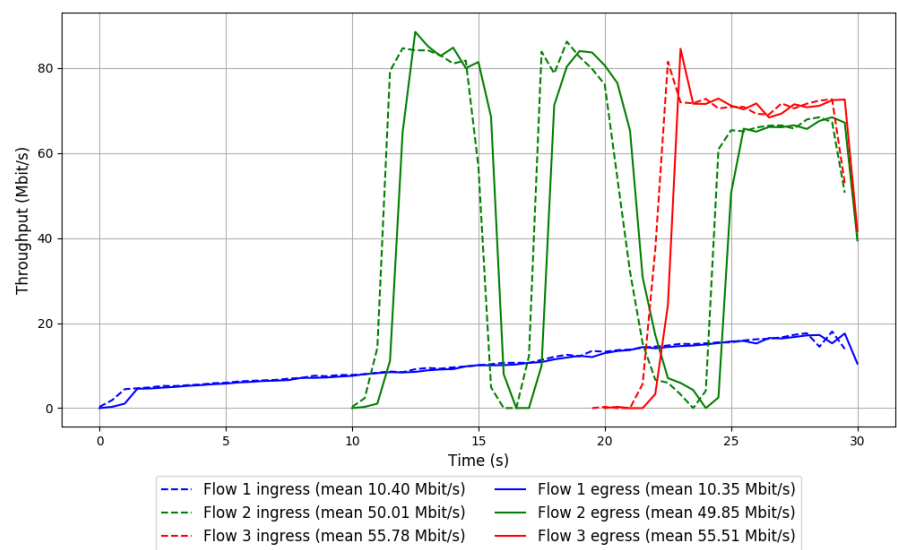
-- Flow 3:

Average throughput: 55.51 Mbit/s

95th percentile per-packet one-way delay: 90.163 ms

Loss rate: 2.19%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-05-22 14:32:10

End at: 2018-05-22 14:32:40

Local clock offset: 3.486 ms

Remote clock offset: 1.135 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.55 Mbit/s

95th percentile per-packet one-way delay: 90.301 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 48.91 Mbit/s

95th percentile per-packet one-way delay: 90.218 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 47.80 Mbit/s

95th percentile per-packet one-way delay: 90.371 ms

Loss rate: 1.22%

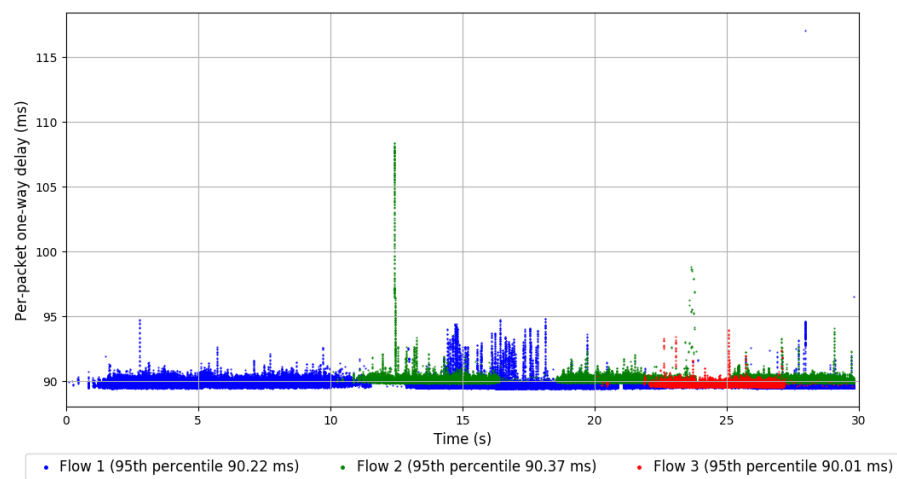
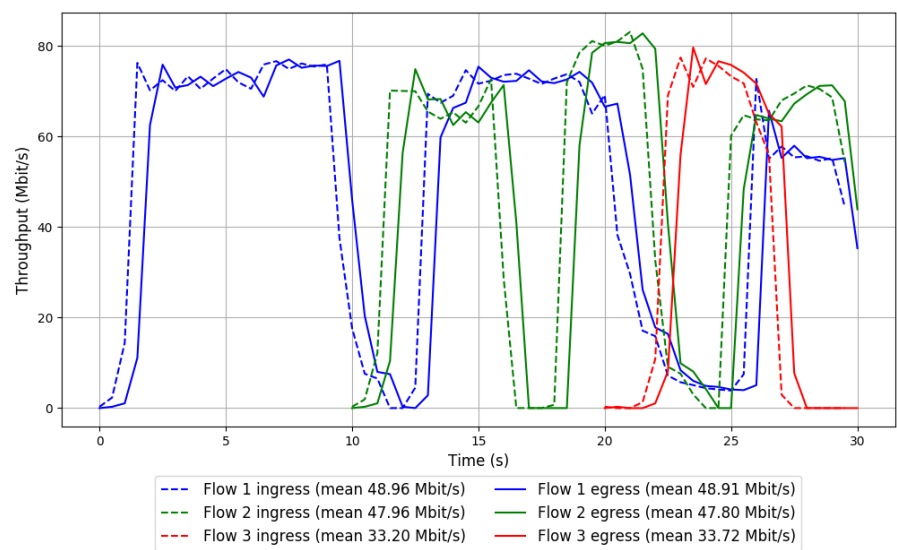
-- Flow 3:

Average throughput: 33.72 Mbit/s

95th percentile per-packet one-way delay: 90.006 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-05-22 14:54:48

End at: 2018-05-22 14:55:18

Local clock offset: 0.211 ms

Remote clock offset: 1.357 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.24 Mbit/s

95th percentile per-packet one-way delay: 86.809 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 9.65 Mbit/s

95th percentile per-packet one-way delay: 86.572 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 40.32 Mbit/s

95th percentile per-packet one-way delay: 86.871 ms

Loss rate: 1.25%

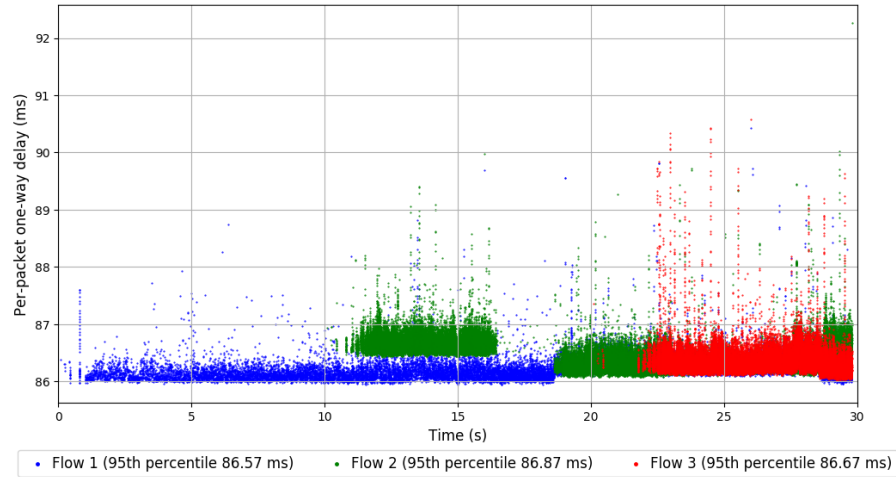
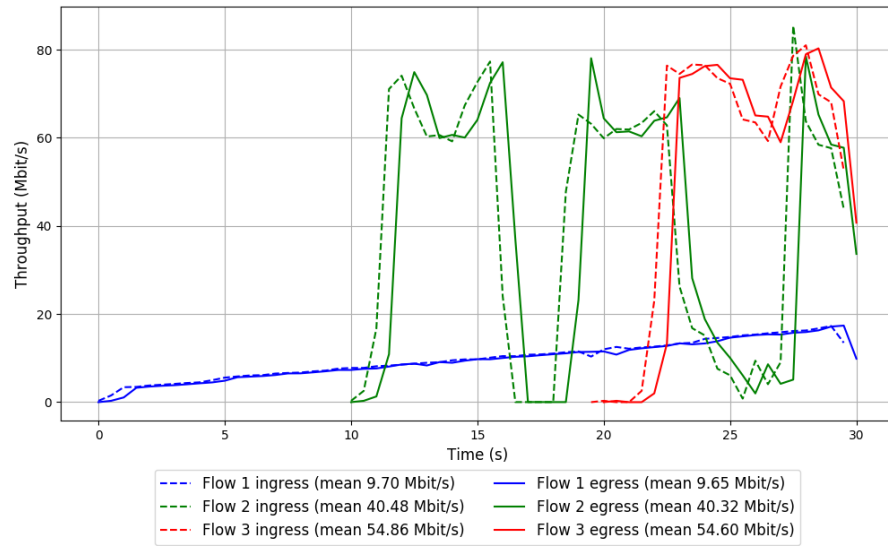
-- Flow 3:

Average throughput: 54.60 Mbit/s

95th percentile per-packet one-way delay: 86.672 ms

Loss rate: 2.24%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-05-22 15:16:54

End at: 2018-05-22 15:17:24

Local clock offset: 3.518 ms

Remote clock offset: 1.41 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.93 Mbit/s

95th percentile per-packet one-way delay: 89.910 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 46.92 Mbit/s

95th percentile per-packet one-way delay: 89.887 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 48.13 Mbit/s

95th percentile per-packet one-way delay: 89.950 ms

Loss rate: 1.16%

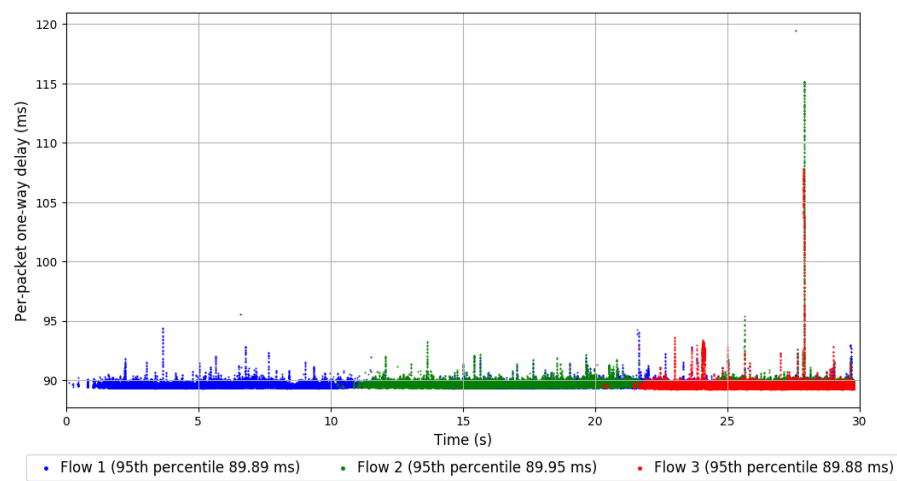
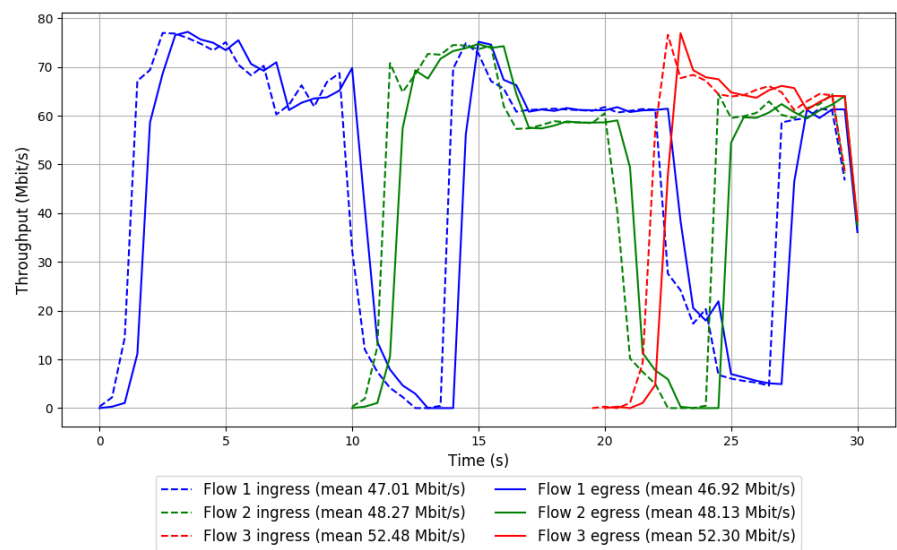
-- Flow 3:

Average throughput: 52.30 Mbit/s

95th percentile per-packet one-way delay: 89.879 ms

Loss rate: 2.11%

Run 6: Report of QUIC Cubic — Data Link

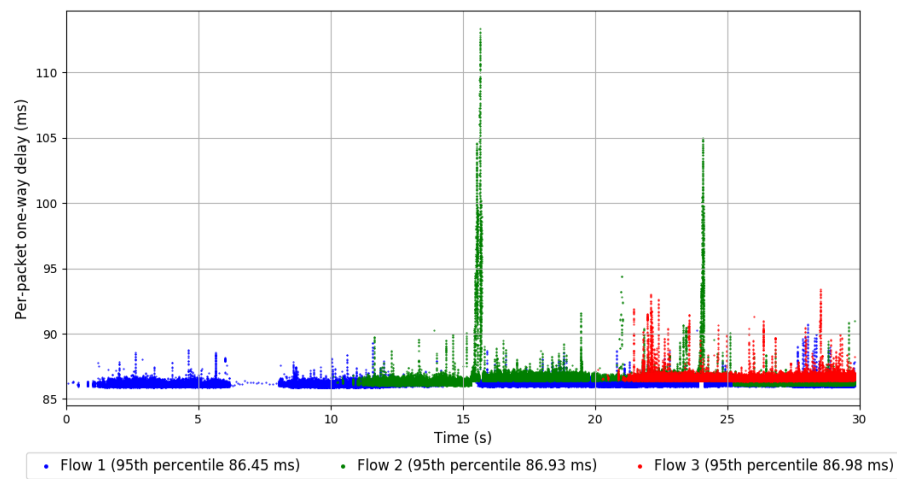
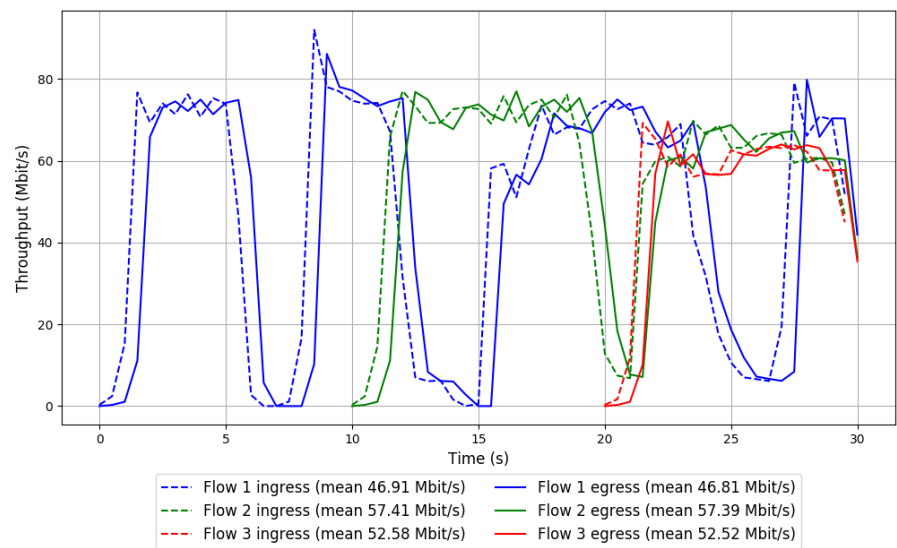


Run 7: Statistics of QUIC Cubic

Start at: 2018-05-22 15:39:31
End at: 2018-05-22 15:40:01
Local clock offset: 0.087 ms
Remote clock offset: 1.472 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 102.01 Mbit/s
95th percentile per-packet one-way delay: 86.835 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 46.81 Mbit/s
95th percentile per-packet one-way delay: 86.447 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 57.39 Mbit/s
95th percentile per-packet one-way delay: 86.927 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 52.52 Mbit/s
95th percentile per-packet one-way delay: 86.977 ms
Loss rate: 1.87%

Run 7: Report of QUIC Cubic — Data Link

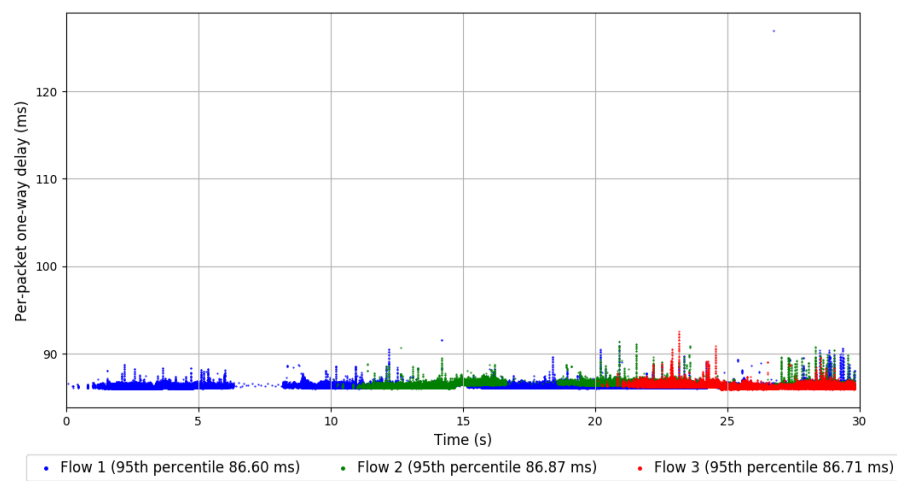
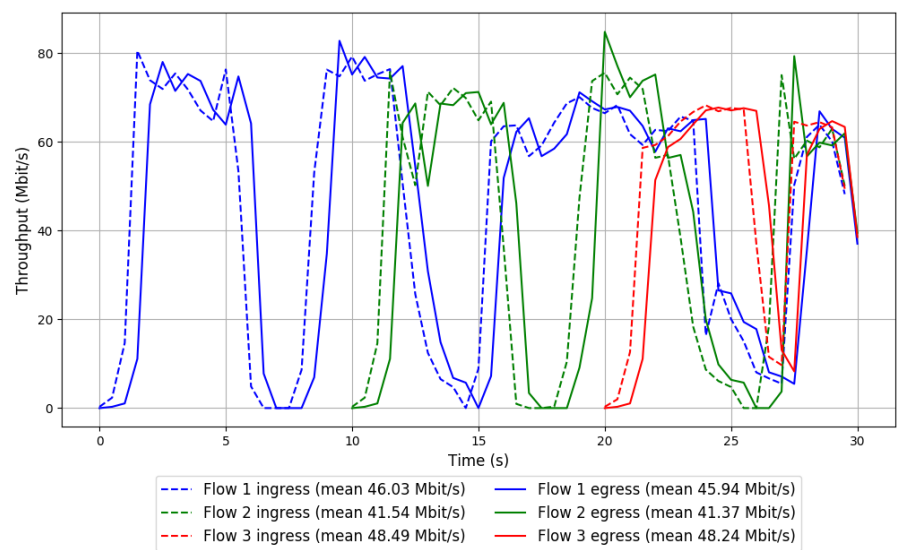


Run 8: Statistics of QUIC Cubic

Start at: 2018-05-22 16:02:11
End at: 2018-05-22 16:02:42
Local clock offset: 0.129 ms
Remote clock offset: -0.256 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.15 Mbit/s
95th percentile per-packet one-way delay: 86.755 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 45.94 Mbit/s
95th percentile per-packet one-way delay: 86.600 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 41.37 Mbit/s
95th percentile per-packet one-way delay: 86.872 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 48.24 Mbit/s
95th percentile per-packet one-way delay: 86.707 ms
Loss rate: 2.27%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-05-22 16:24:44

End at: 2018-05-22 16:25:14

Local clock offset: -0.051 ms

Remote clock offset: -0.56 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.93 Mbit/s

95th percentile per-packet one-way delay: 86.433 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 44.90 Mbit/s

95th percentile per-packet one-way delay: 86.511 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 49.47 Mbit/s

95th percentile per-packet one-way delay: 86.397 ms

Loss rate: 1.12%

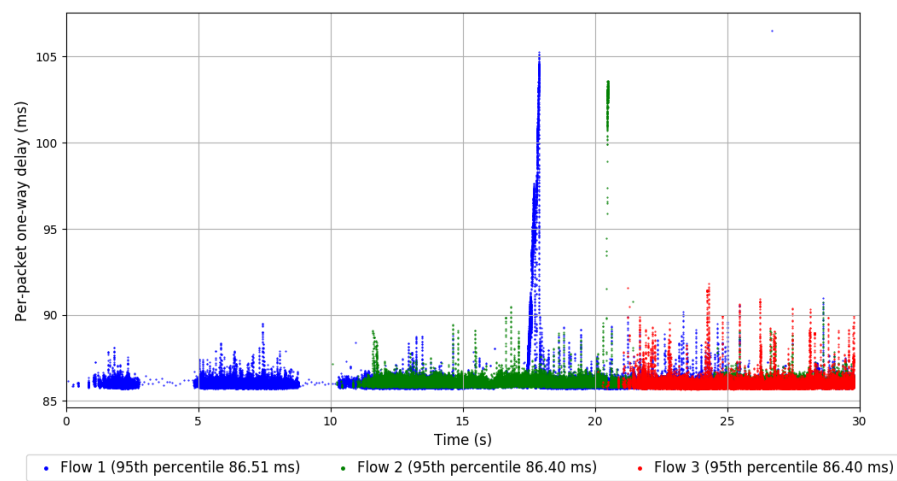
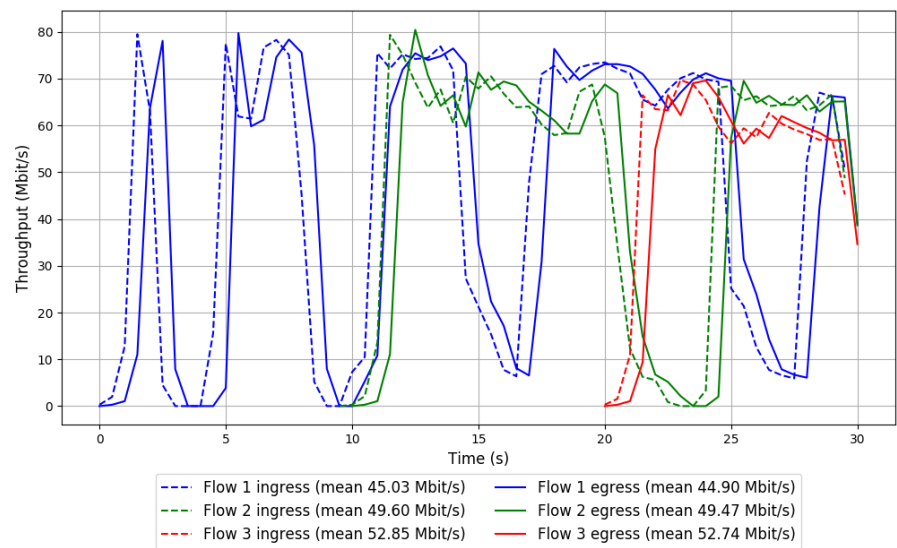
-- Flow 3:

Average throughput: 52.74 Mbit/s

95th percentile per-packet one-way delay: 86.404 ms

Loss rate: 1.97%

Run 9: Report of QUIC Cubic — Data Link

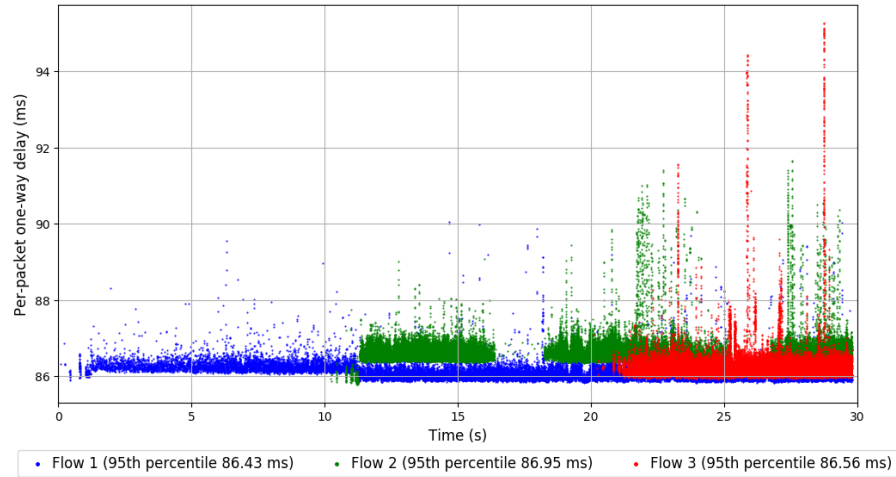
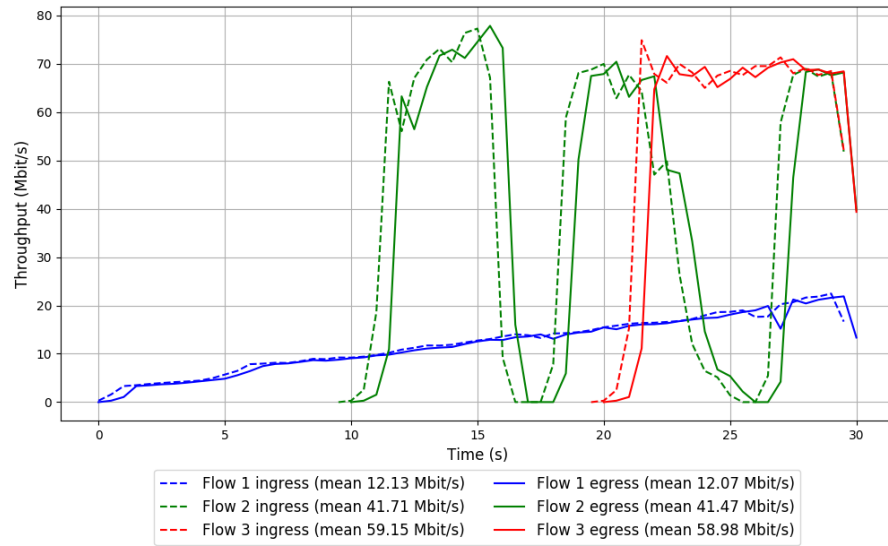


Run 10: Statistics of QUIC Cubic

Start at: 2018-05-22 16:47:25
End at: 2018-05-22 16:47:55
Local clock offset: 0.182 ms
Remote clock offset: -0.815 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 58.85 Mbit/s
95th percentile per-packet one-way delay: 86.865 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 86.427 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 41.47 Mbit/s
95th percentile per-packet one-way delay: 86.953 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 58.98 Mbit/s
95th percentile per-packet one-way delay: 86.559 ms
Loss rate: 2.05%

Run 10: Report of QUIC Cubic — Data Link

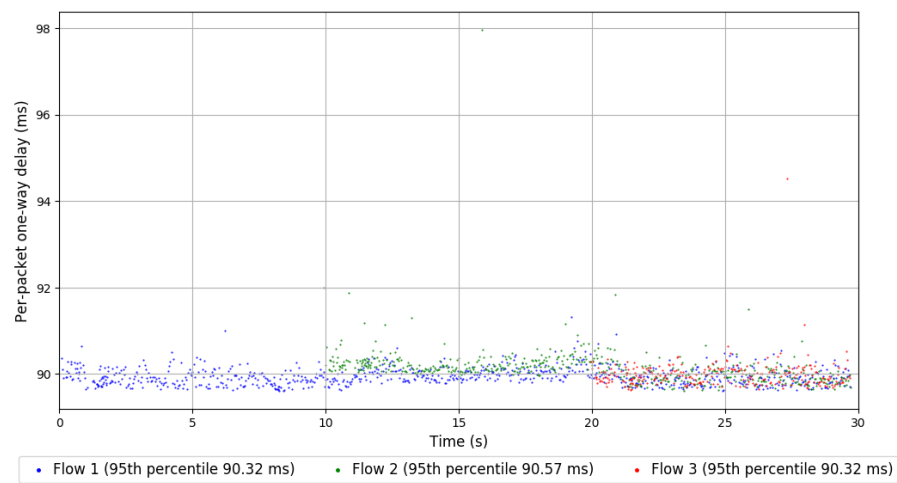
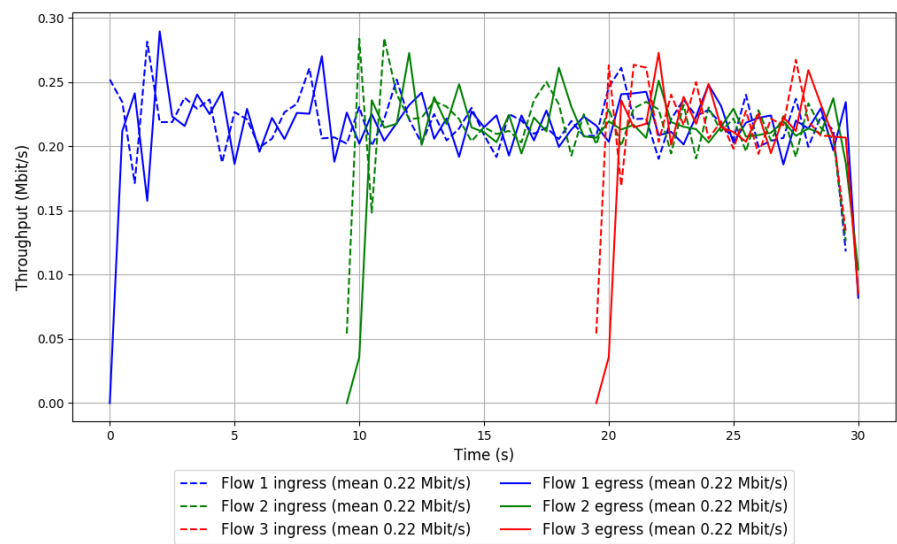


```
Run 1: Statistics of SCReAM

Start at: 2018-05-22 13:25:45
End at: 2018-05-22 13:26:15
Local clock offset: 3.658 ms
Remote clock offset: 0.864 ms

# Below is generated by plot.py at 2018-05-22 18:10:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 90.406 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.316 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.571 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.317 ms
Loss rate: 1.85%
```

Run 1: Report of SReAM — Data Link

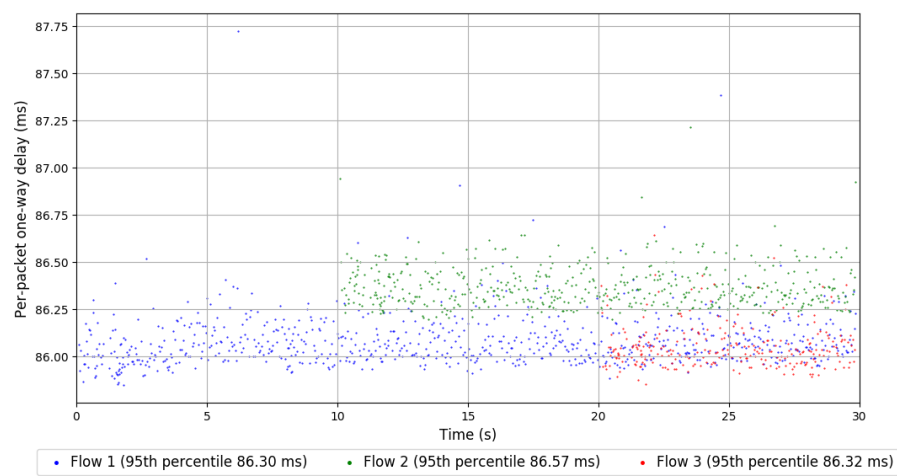
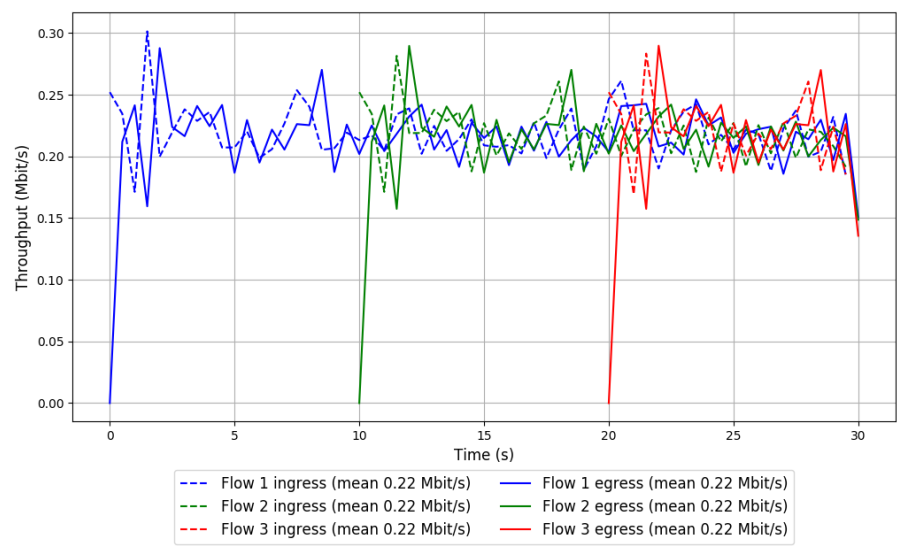


```
Run 2: Statistics of SReAM

Start at: 2018-05-22 13:48:23
End at: 2018-05-22 13:48:53
Local clock offset: -0.163 ms
Remote clock offset: 0.947 ms

# Below is generated by plot.py at 2018-05-22 18:10:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.500 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.300 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.567 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.316 ms
Loss rate: 1.85%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-05-22 14:10:55

End at: 2018-05-22 14:11:25

Local clock offset: 3.461 ms

Remote clock offset: 1.081 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 90.343 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.383 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.078 ms

Loss rate: 1.04%

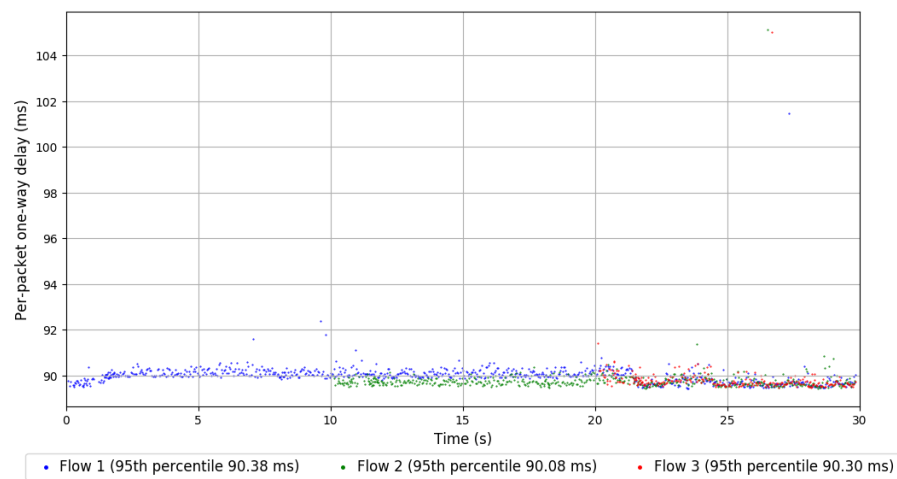
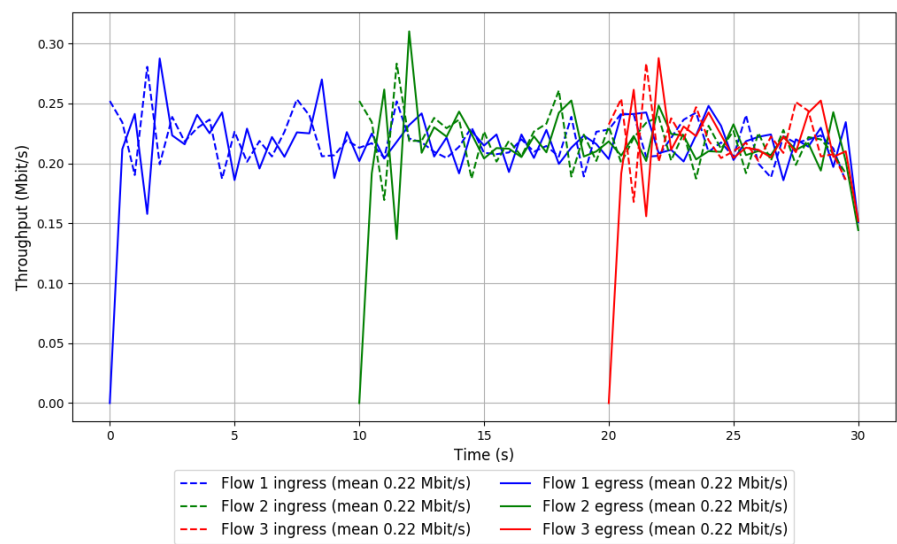
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.297 ms

Loss rate: 1.50%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-05-22 14:33:26

End at: 2018-05-22 14:33:56

Local clock offset: 3.453 ms

Remote clock offset: 1.181 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 89.862 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 89.852 ms

Loss rate: 1.04%

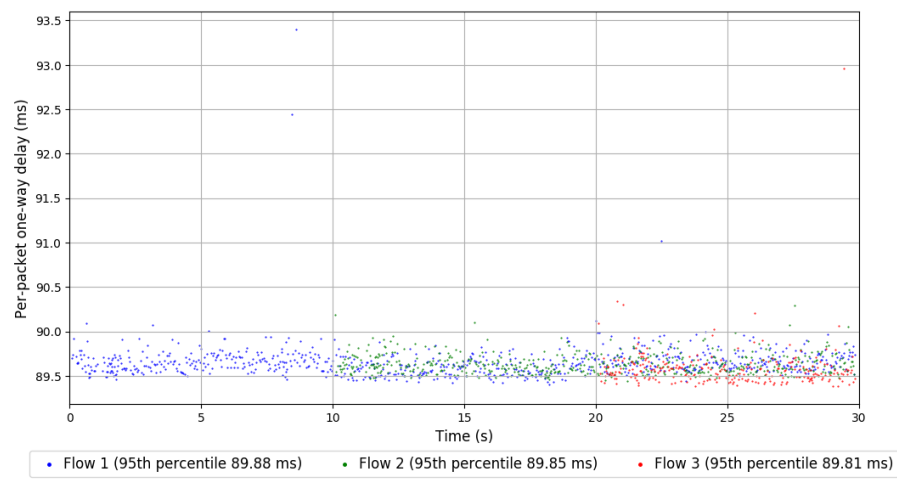
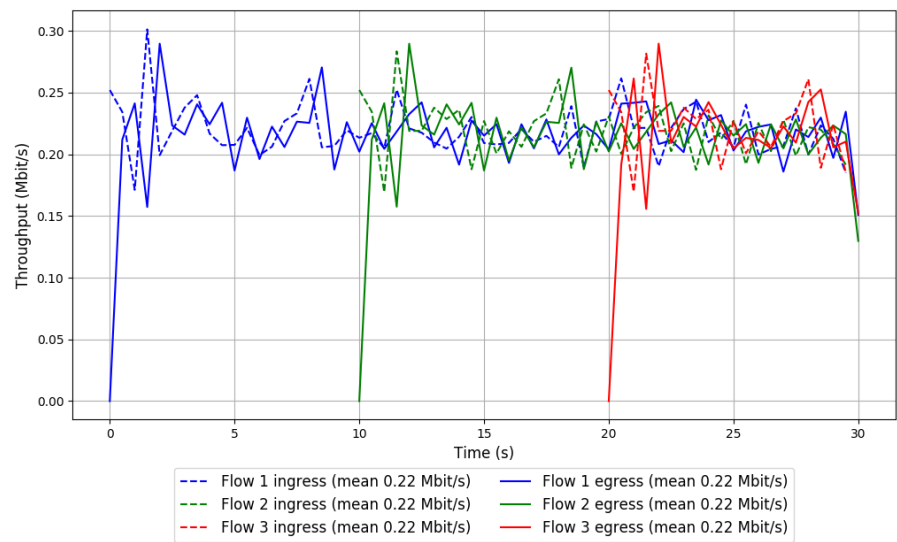
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 89.813 ms

Loss rate: 1.85%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-05-22 14:56:02

End at: 2018-05-22 14:56:32

Local clock offset: 0.355 ms

Remote clock offset: 1.308 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.028 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.843 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.165 ms

Loss rate: 1.04%

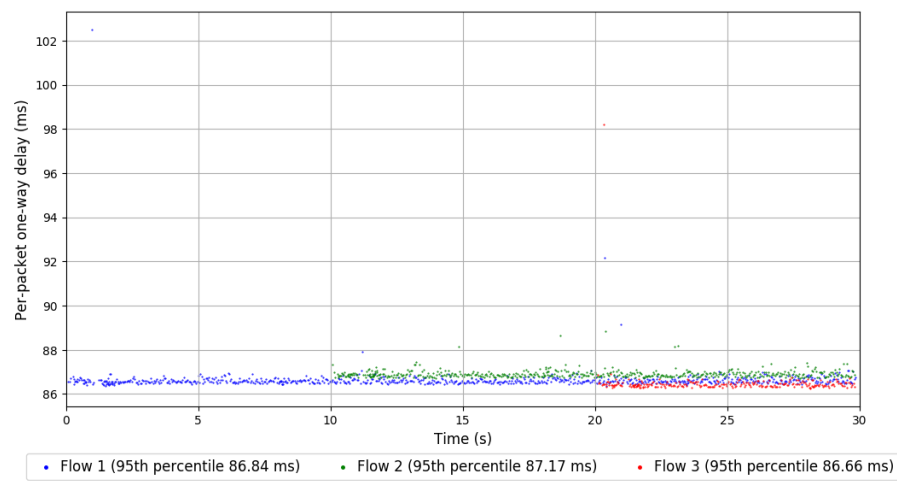
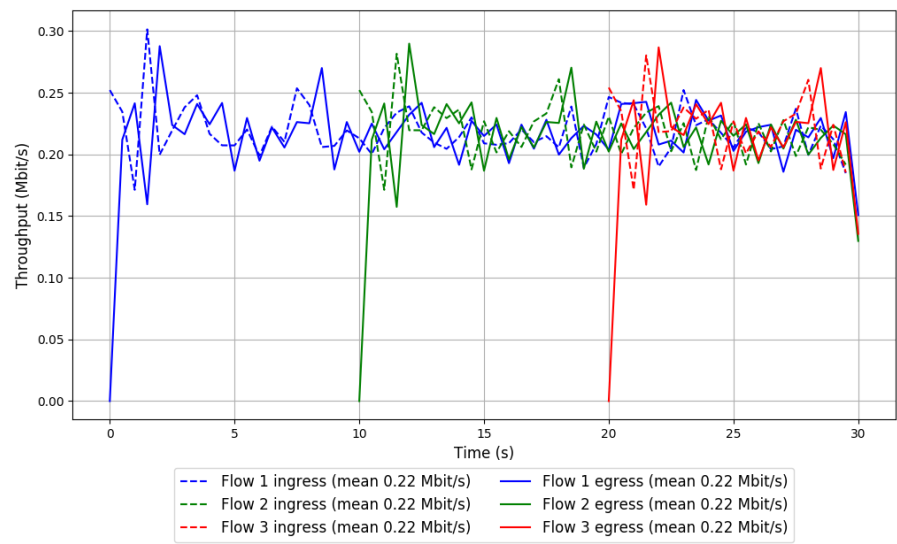
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.663 ms

Loss rate: 1.85%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-05-22 15:18:11

End at: 2018-05-22 15:18:41

Local clock offset: 0.272 ms

Remote clock offset: 1.369 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.054 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.803 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.154 ms

Loss rate: 1.04%

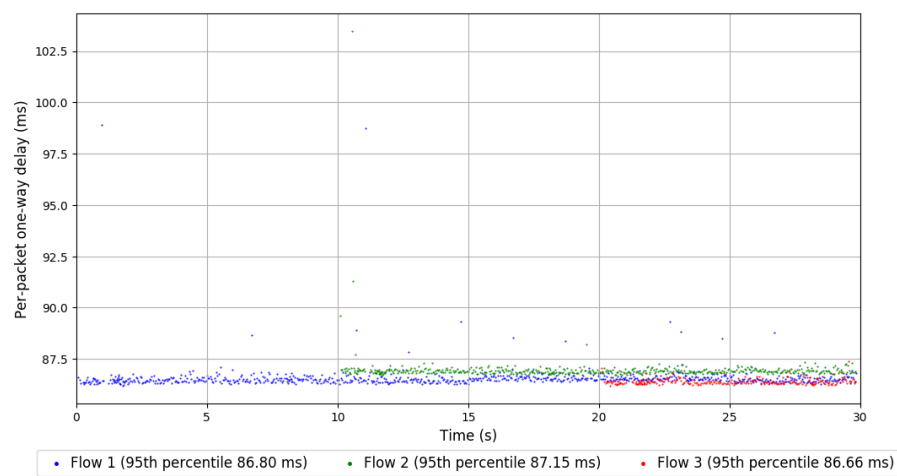
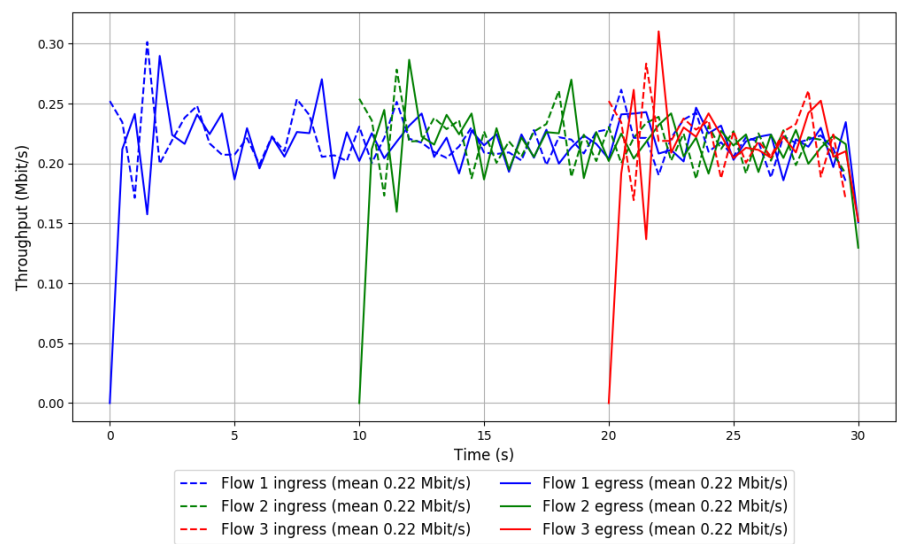
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.659 ms

Loss rate: 1.50%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-05-22 15:40:48

End at: 2018-05-22 15:41:18

Local clock offset: 0.267 ms

Remote clock offset: 1.507 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.771 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.864 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.623 ms

Loss rate: 1.04%

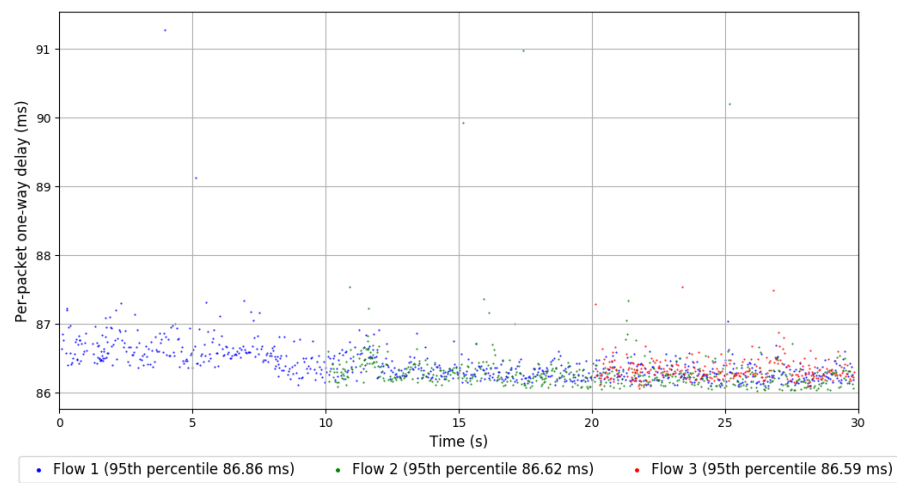
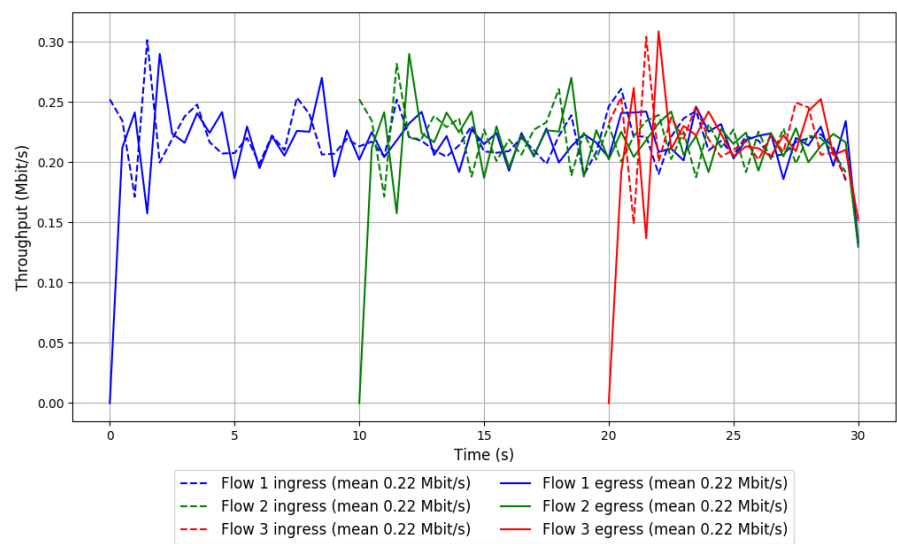
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.592 ms

Loss rate: 1.50%

Run 7: Report of SReAM — Data Link

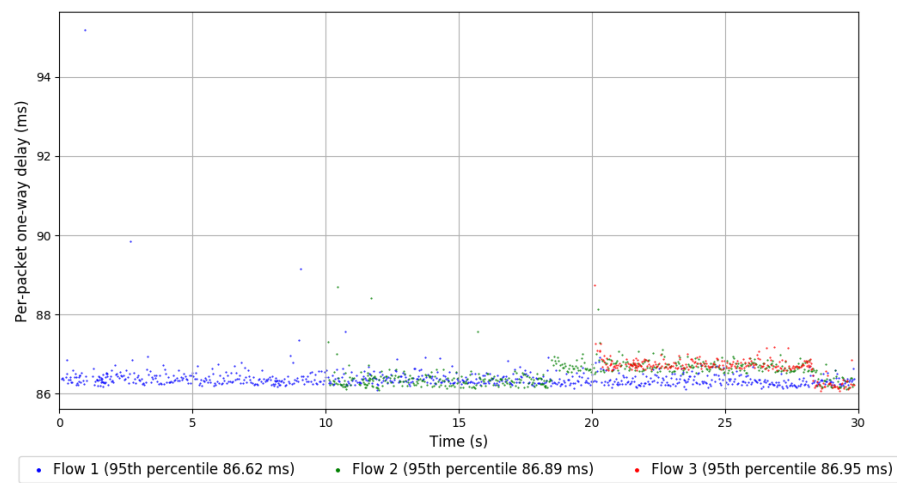
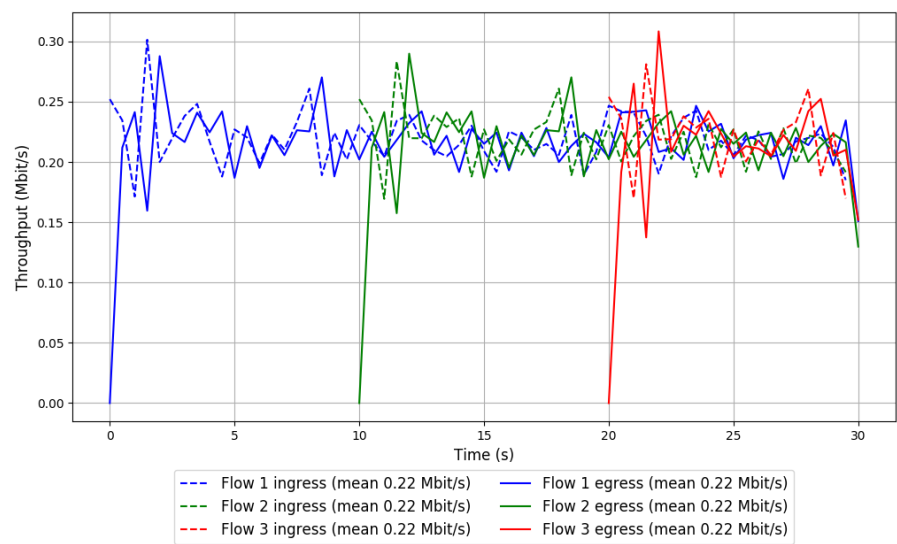


Run 8: Statistics of SReAM

Start at: 2018-05-22 16:03:28
End at: 2018-05-22 16:03:58
Local clock offset: 0.144 ms
Remote clock offset: -0.265 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.855 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.621 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.888 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.954 ms
Loss rate: 1.50%

Run 8: Report of SReAM — Data Link

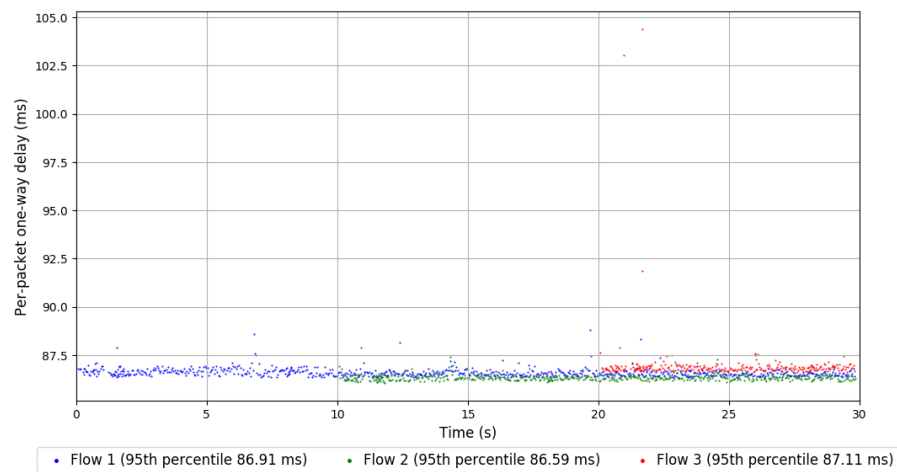
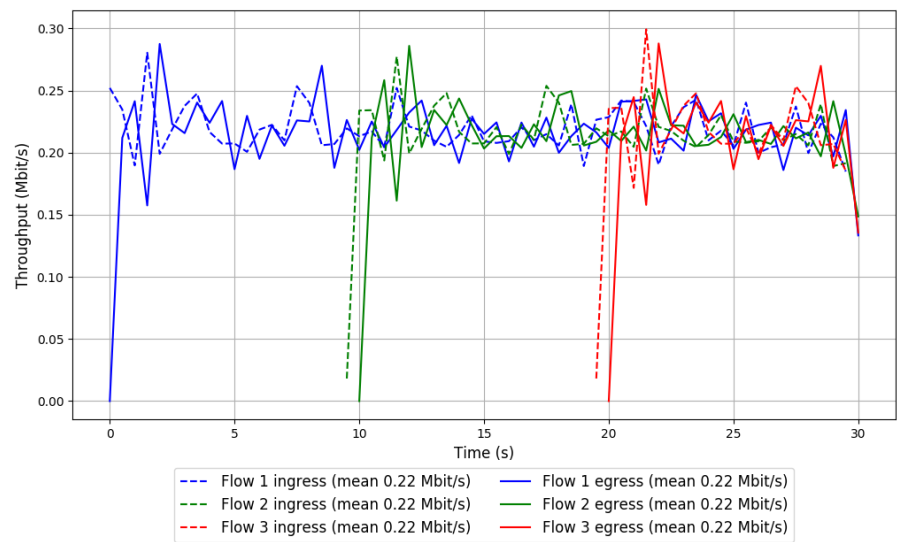


Run 9: Statistics of SReAM

Start at: 2018-05-22 16:26:01
End at: 2018-05-22 16:26:31
Local clock offset: 0.241 ms
Remote clock offset: -0.536 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.959 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.912 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.595 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.115 ms
Loss rate: 1.85%

Run 9: Report of SReAM — Data Link

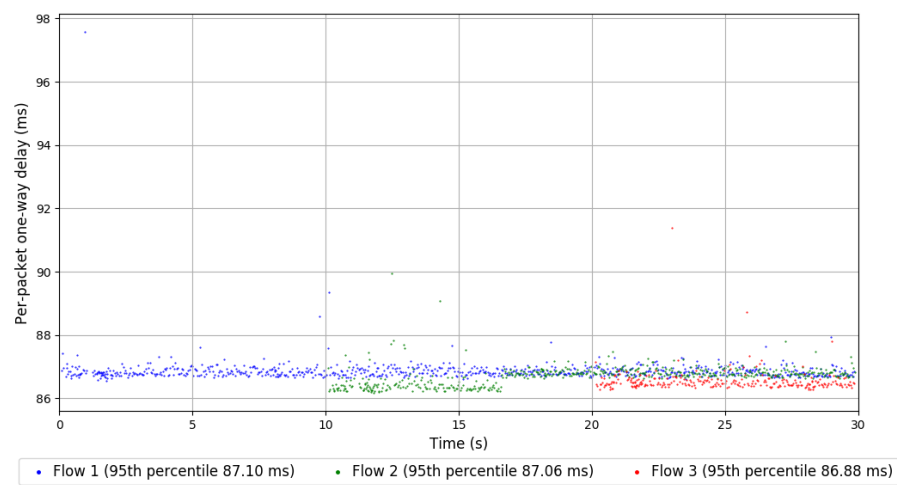
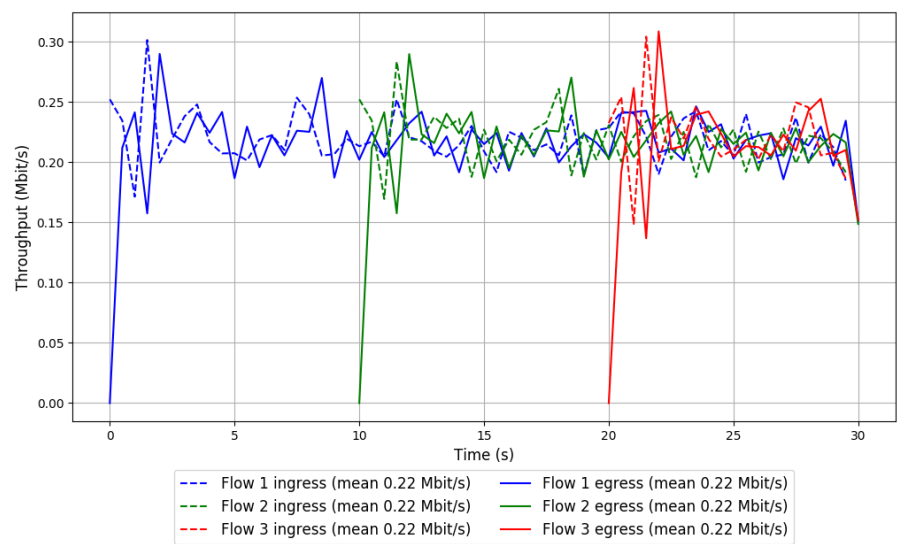


Run 10: Statistics of SReAM

Start at: 2018-05-22 16:48:40
End at: 2018-05-22 16:49:10
Local clock offset: 0.31 ms
Remote clock offset: -0.892 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.086 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.103 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.059 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.884 ms
Loss rate: 1.50%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-05-22 13:10:09

End at: 2018-05-22 13:10:39

Local clock offset: -0.138 ms

Remote clock offset: 0.732 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 86.802 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 86.821 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 86.752 ms

Loss rate: 0.46%

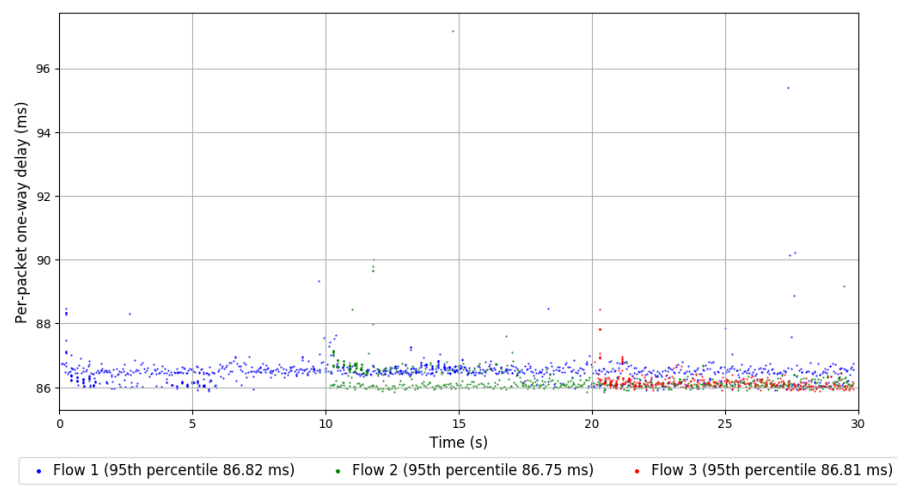
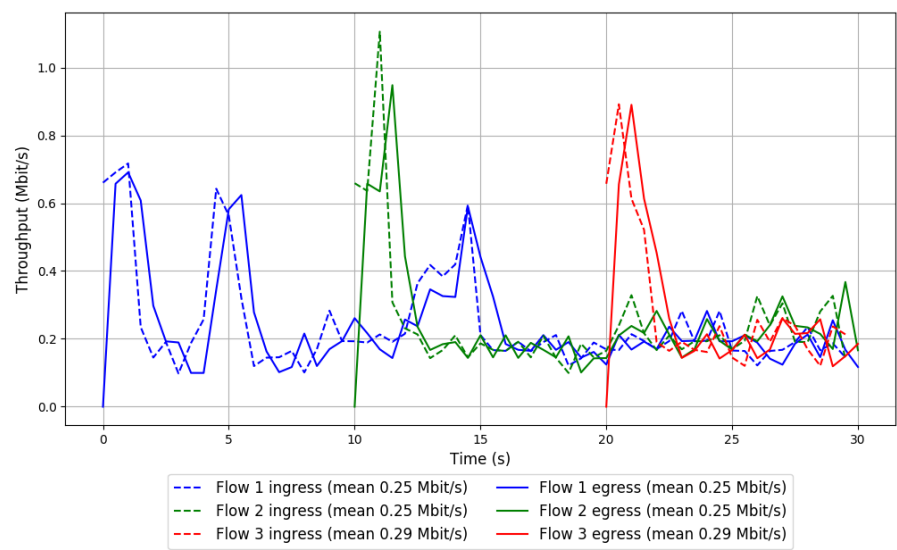
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 86.805 ms

Loss rate: 2.07%

Run 1: Report of Sprout — Data Link

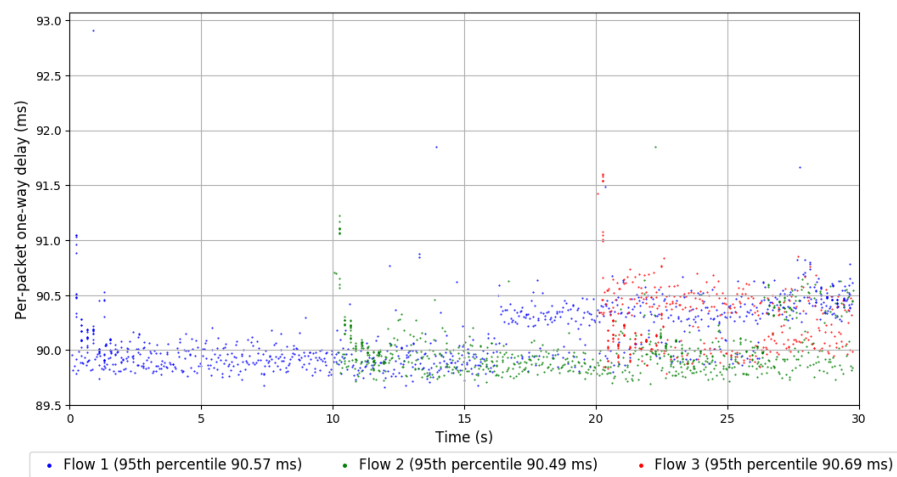
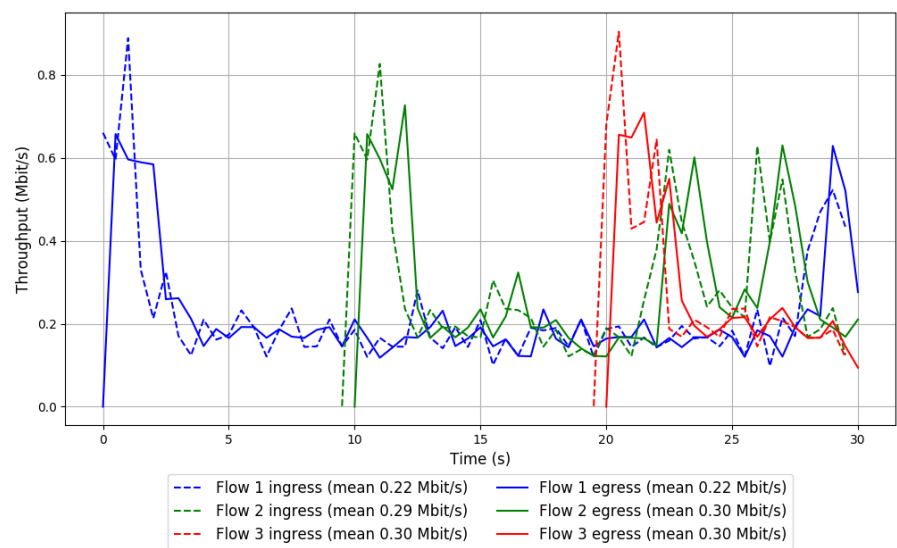


Run 2: Statistics of Sprout

Start at: 2018-05-22 13:32:40
End at: 2018-05-22 13:33:10
Local clock offset: 3.881 ms
Remote clock offset: 0.922 ms

```
# Below is generated by plot.py at 2018-05-22 18:10:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 90.583 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.569 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 90.492 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 90.694 ms
Loss rate: 1.17%
```

Run 2: Report of Sprout — Data Link

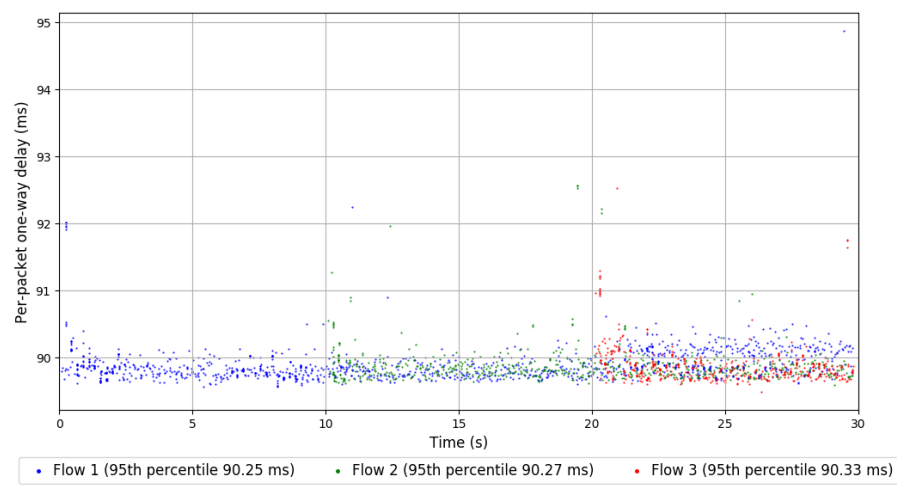
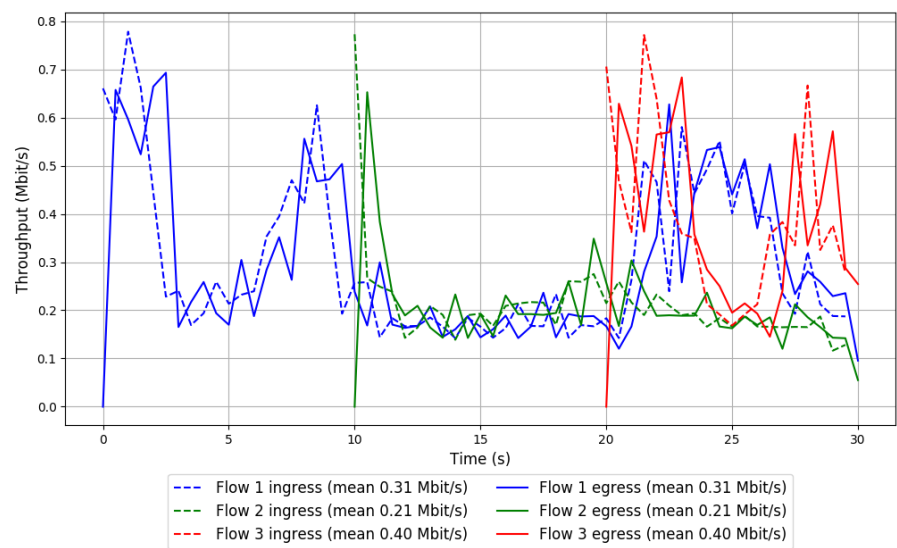


Run 3: Statistics of Sprout

Start at: 2018-05-22 13:55:15
End at: 2018-05-22 13:55:45
Local clock offset: 3.657 ms
Remote clock offset: 1.011 ms

```
# Below is generated by plot.py at 2018-05-22 18:10:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 90.253 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 90.247 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 90.268 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 90.327 ms
Loss rate: 1.48%
```

Run 3: Report of Sprout — Data Link

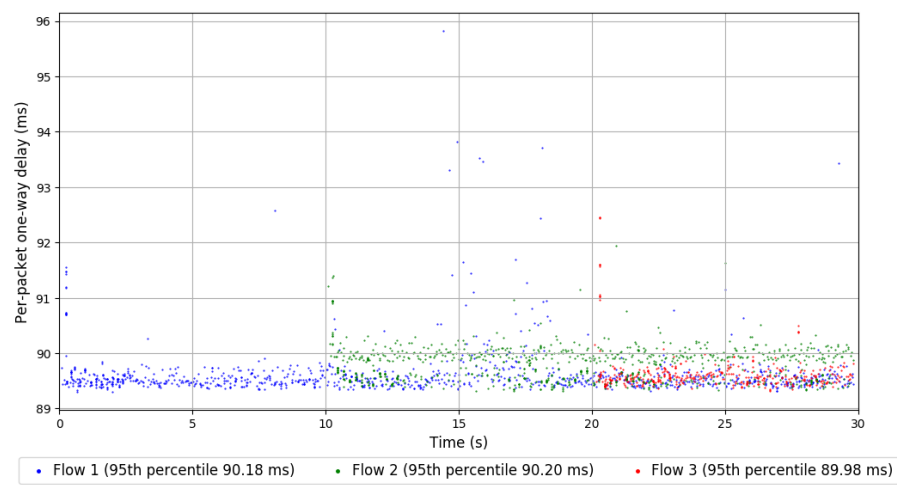
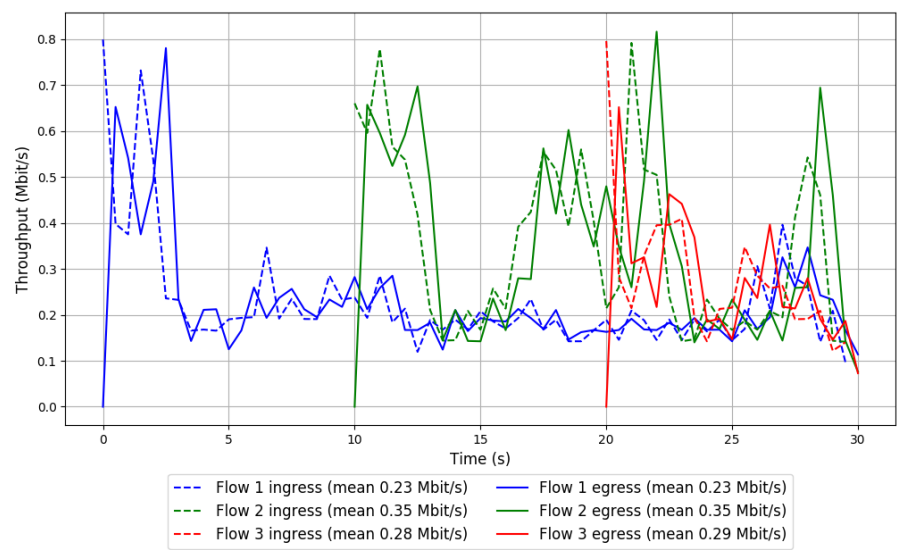


Run 4: Statistics of Sprout

Start at: 2018-05-22 14:17:53
End at: 2018-05-22 14:18:23
Local clock offset: 3.428 ms
Remote clock offset: 1.094 ms

```
# Below is generated by plot.py at 2018-05-22 18:10:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 90.194 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 90.178 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 90.201 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 89.979 ms
Loss rate: 1.23%
```

Run 4: Report of Sprout — Data Link

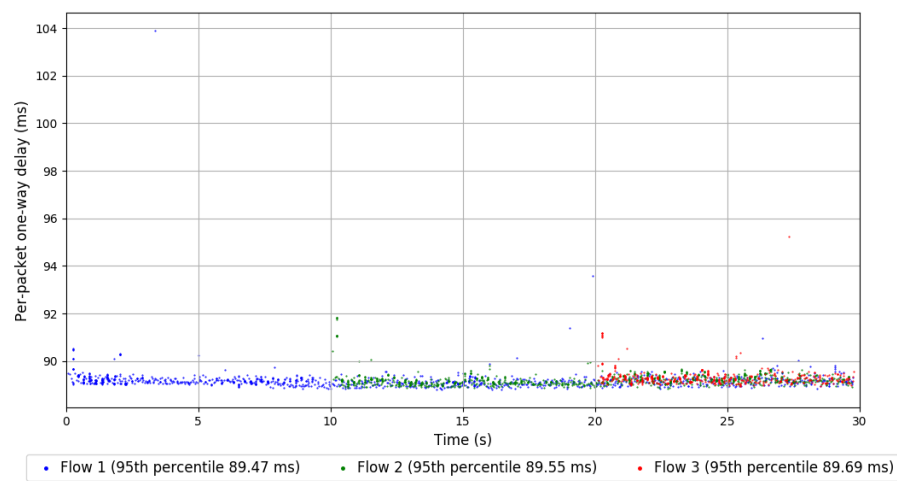
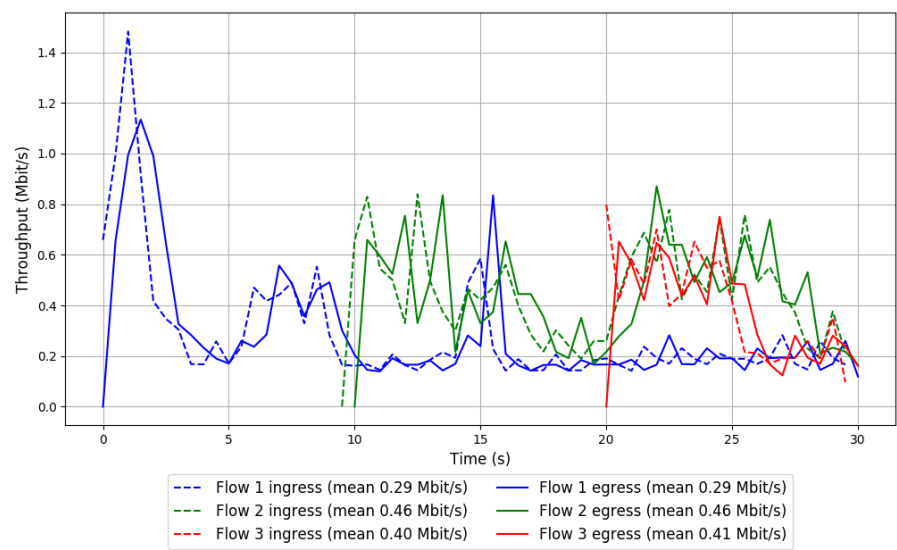


Run 5: Statistics of Sprout

Start at: 2018-05-22 14:40:19
End at: 2018-05-22 14:40:49
Local clock offset: 2.977 ms
Remote clock offset: 1.187 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 89.551 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 89.468 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 89.549 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 89.692 ms
Loss rate: 0.63%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-05-22 15:02:56

End at: 2018-05-22 15:03:26

Local clock offset: 0.376 ms

Remote clock offset: 1.338 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 87.132 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 87.164 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 87.015 ms

Loss rate: 0.49%

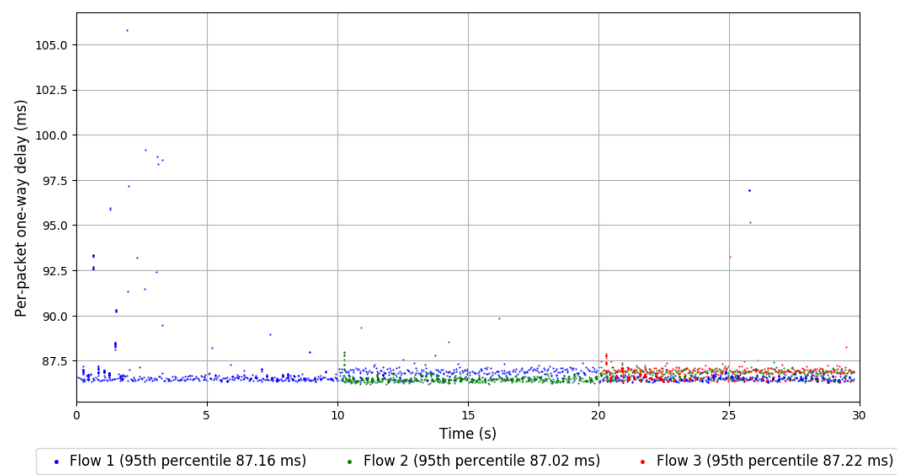
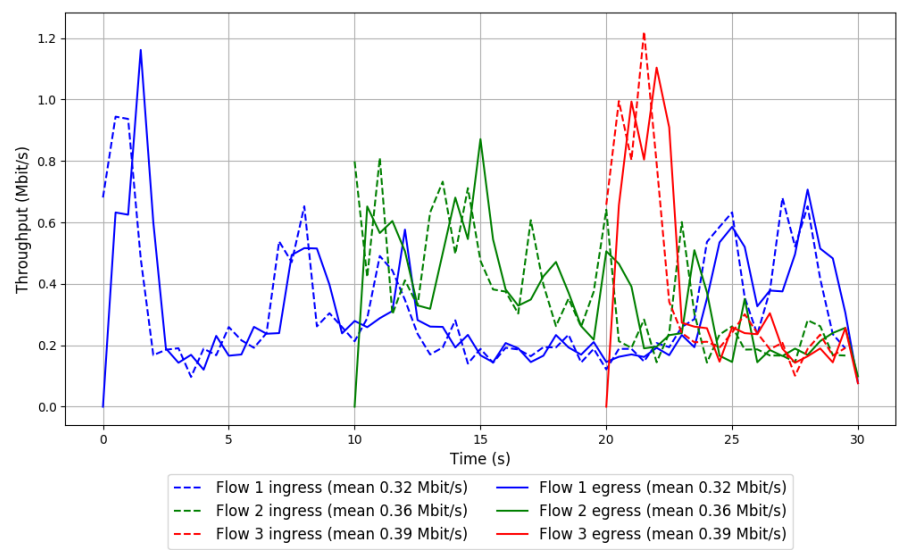
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 87.217 ms

Loss rate: 1.51%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-05-22 15:25:08

End at: 2018-05-22 15:25:38

Local clock offset: 3.547 ms

Remote clock offset: 1.477 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 90.210 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 90.112 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 90.237 ms

Loss rate: 0.42%

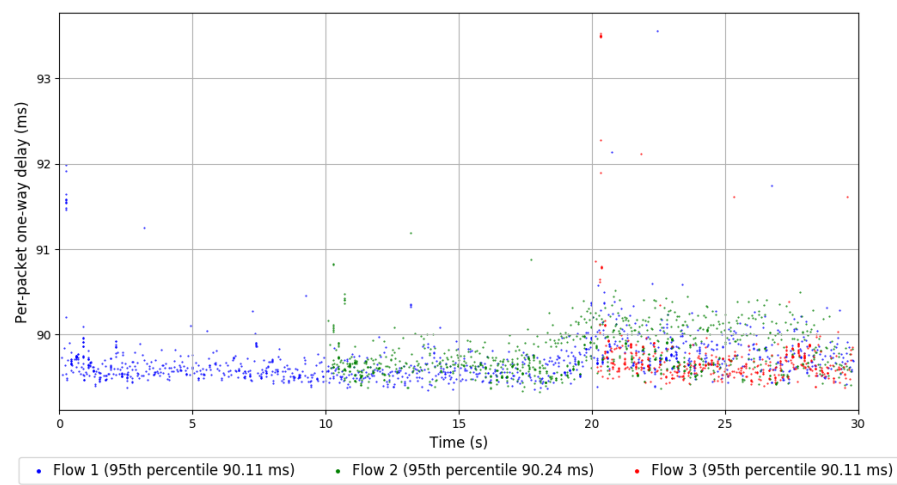
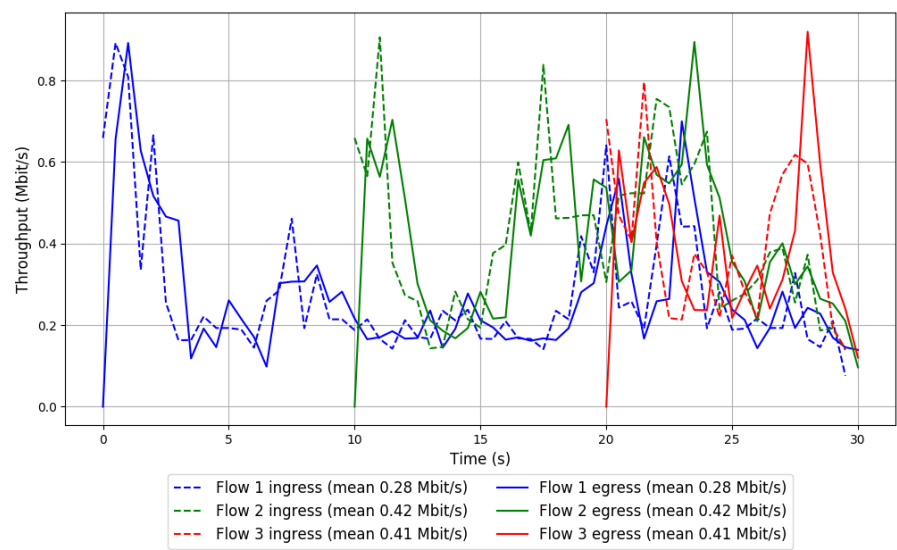
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 90.114 ms

Loss rate: 0.88%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-05-22 15:47:47

End at: 2018-05-22 15:48:17

Local clock offset: 0.641 ms

Remote clock offset: 0.521 ms

Below is generated by plot.py at 2018-05-22 18:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 87.299 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.122 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 87.353 ms

Loss rate: 0.60%

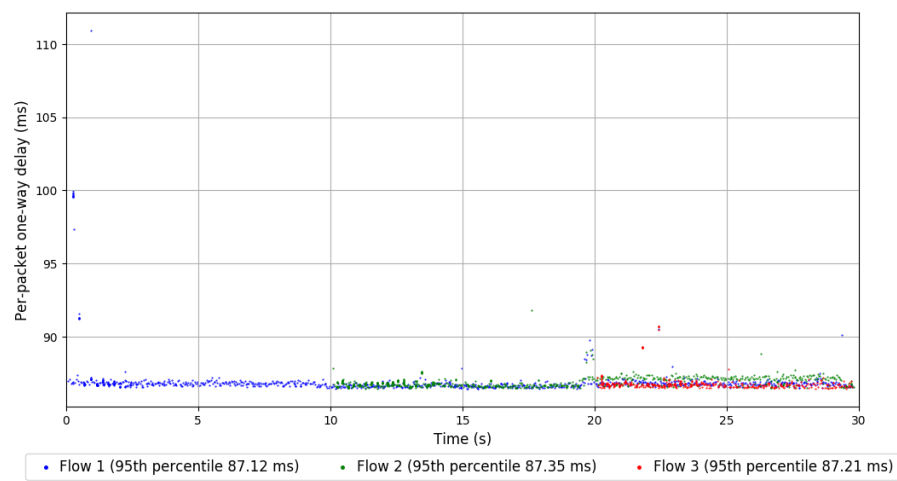
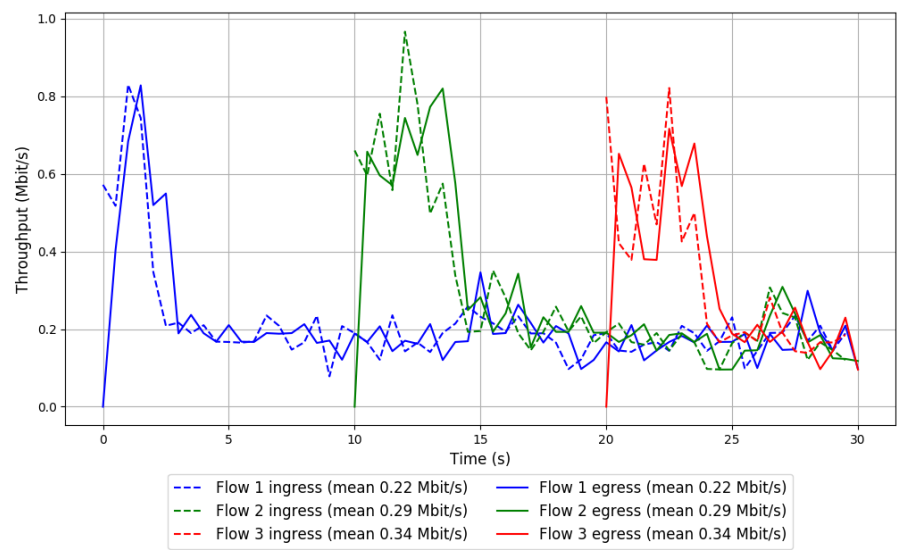
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 87.209 ms

Loss rate: 1.39%

Run 8: Report of Sprout — Data Link

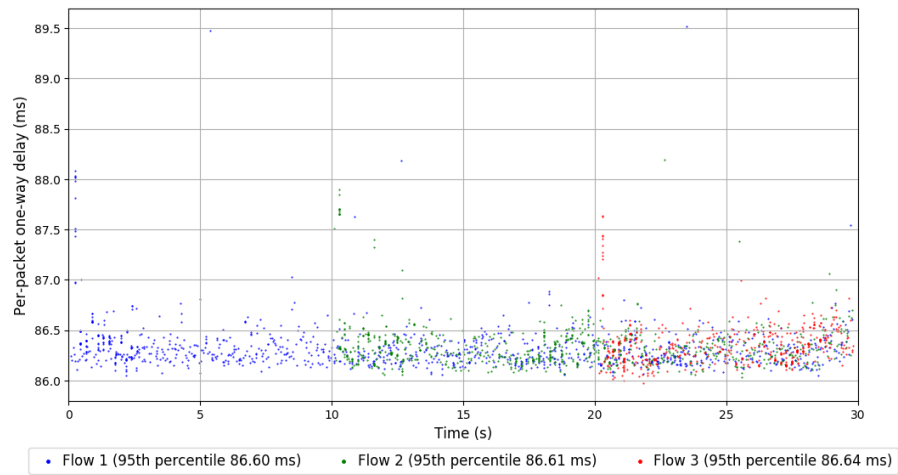
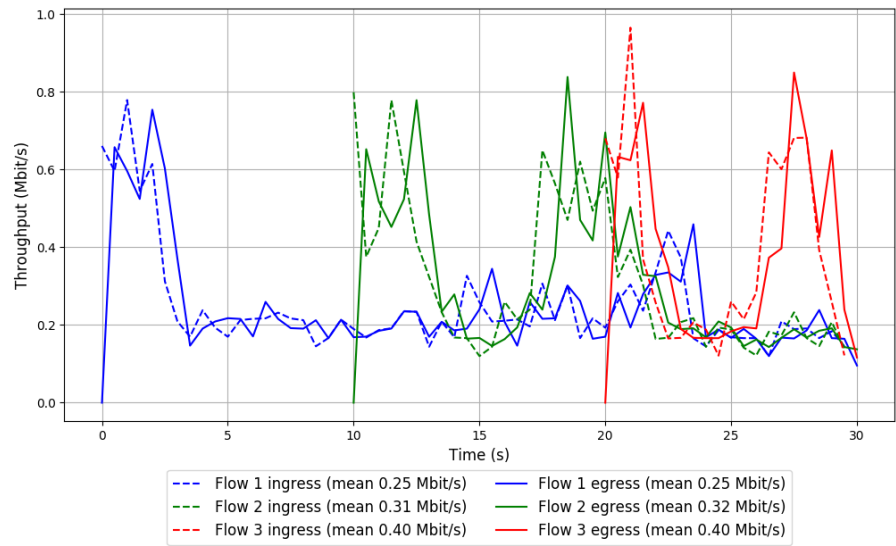


Run 9: Statistics of Sprout

Start at: 2018-05-22 16:10:24
End at: 2018-05-22 16:10:54
Local clock offset: 0.186 ms
Remote clock offset: -0.396 ms

```
# Below is generated by plot.py at 2018-05-22 18:10:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 86.616 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 86.602 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 86.605 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 86.644 ms
Loss rate: 0.34%
```


Run 9: Report of Sprout — Data Link

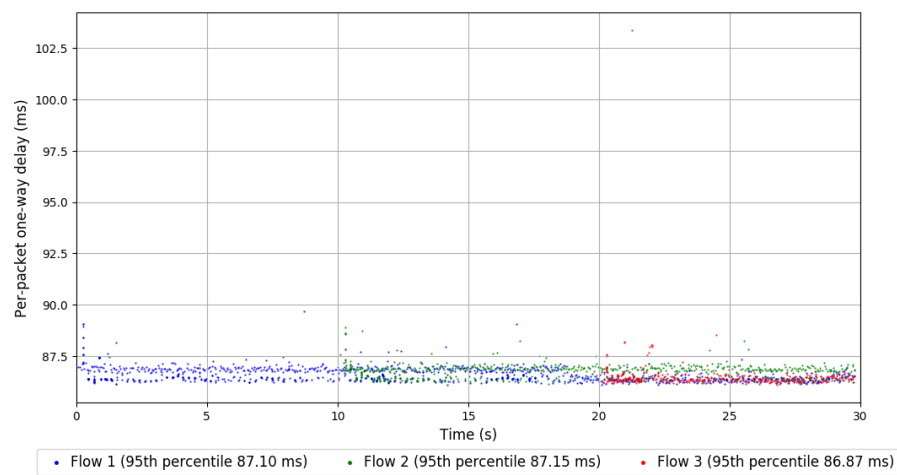
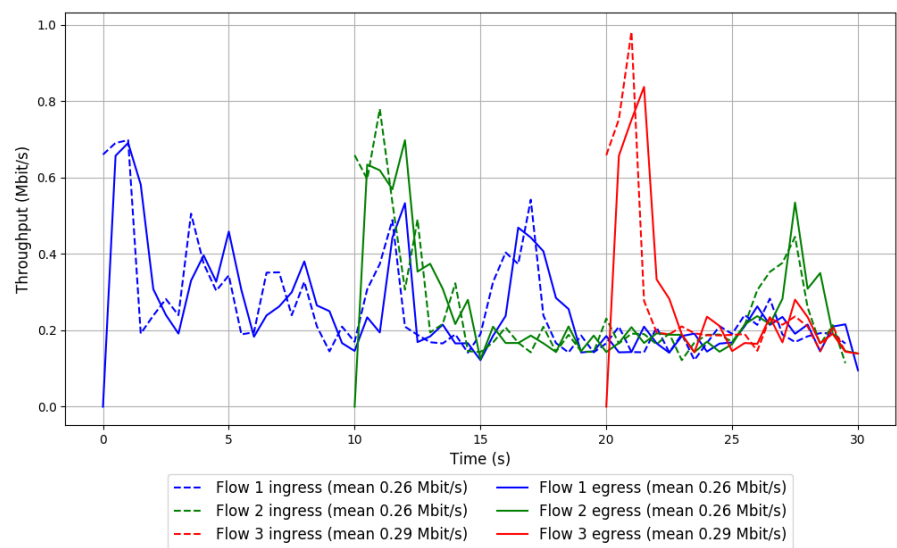


Run 10: Statistics of Sprout

Start at: 2018-05-22 16:32:57
End at: 2018-05-22 16:33:27
Local clock offset: 0.287 ms
Remote clock offset: -0.704 ms

Below is generated by plot.py at 2018-05-22 18:10:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 87.127 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 87.098 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 87.152 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 86.871 ms
Loss rate: 1.24%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-05-22 13:22:58

End at: 2018-05-22 13:23:28

Local clock offset: 3.261 ms

Remote clock offset: 0.915 ms

Below is generated by plot.py at 2018-05-22 18:10:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.10 Mbit/s

95th percentile per-packet one-way delay: 93.194 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 97.37 Mbit/s

95th percentile per-packet one-way delay: 92.350 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 96.60 Mbit/s

95th percentile per-packet one-way delay: 93.849 ms

Loss rate: 0.88%

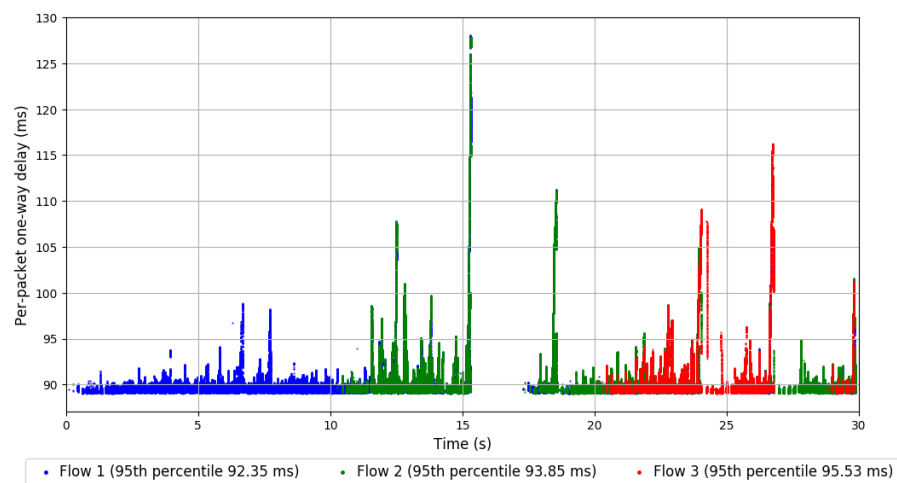
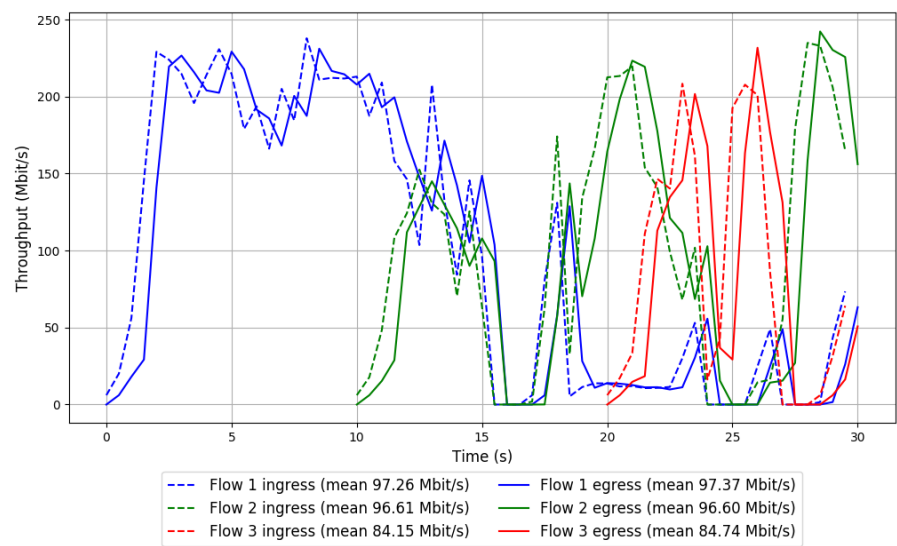
-- Flow 3:

Average throughput: 84.74 Mbit/s

95th percentile per-packet one-way delay: 95.534 ms

Loss rate: 1.71%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-05-22 13:45:32

End at: 2018-05-22 13:46:02

Local clock offset: 3.056 ms

Remote clock offset: 0.96 ms

Below is generated by plot.py at 2018-05-22 18:12:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 237.14 Mbit/s

95th percentile per-packet one-way delay: 96.500 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 136.24 Mbit/s

95th percentile per-packet one-way delay: 96.105 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 115.70 Mbit/s

95th percentile per-packet one-way delay: 98.000 ms

Loss rate: 0.48%

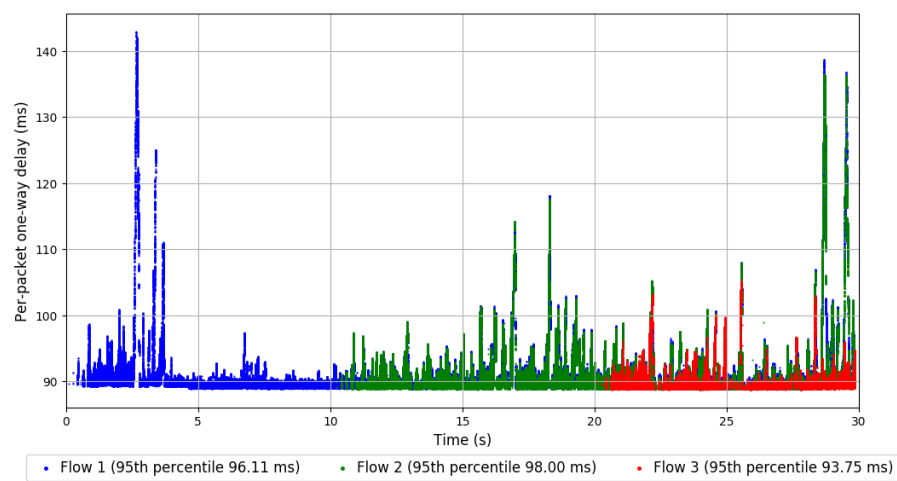
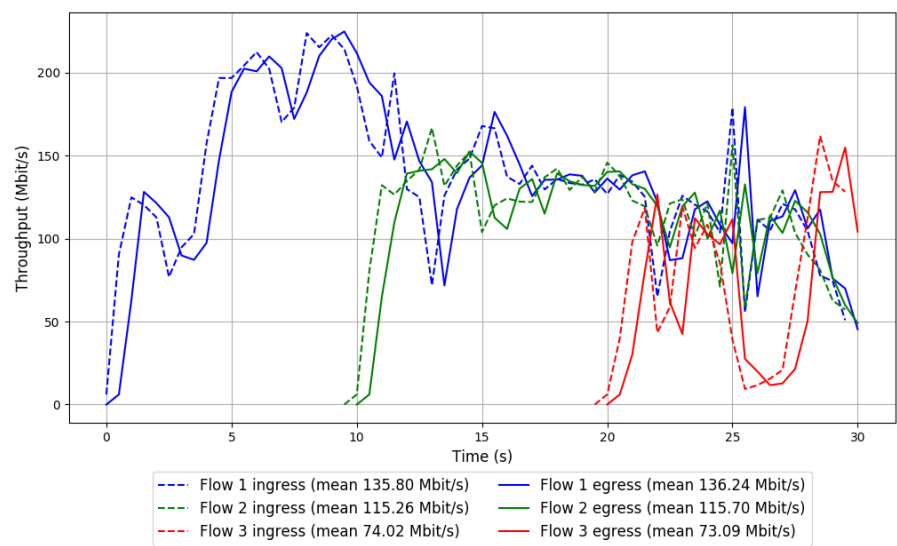
-- Flow 3:

Average throughput: 73.09 Mbit/s

95th percentile per-packet one-way delay: 93.745 ms

Loss rate: 2.97%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-05-22 14:08:06

End at: 2018-05-22 14:08:36

Local clock offset: 0.312 ms

Remote clock offset: 1.041 ms

Below is generated by plot.py at 2018-05-22 18:12:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.11 Mbit/s

95th percentile per-packet one-way delay: 92.335 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 133.90 Mbit/s

95th percentile per-packet one-way delay: 91.476 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 105.56 Mbit/s

95th percentile per-packet one-way delay: 93.756 ms

Loss rate: 0.81%

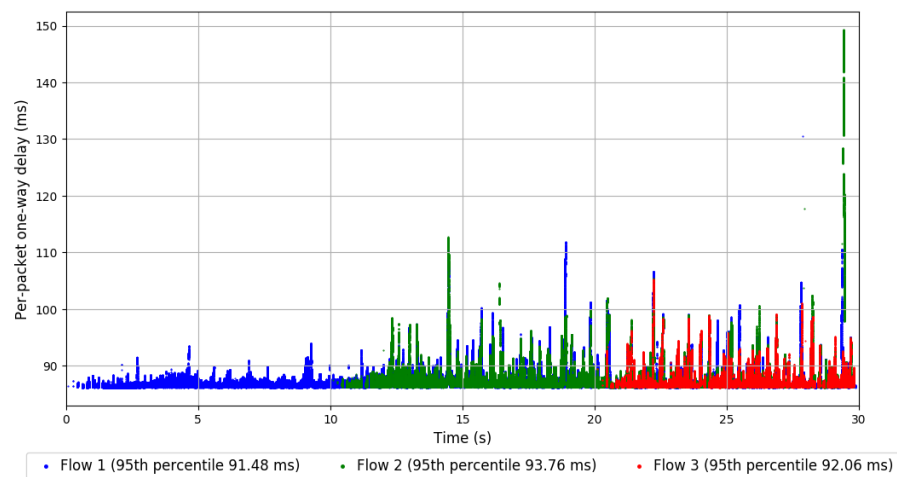
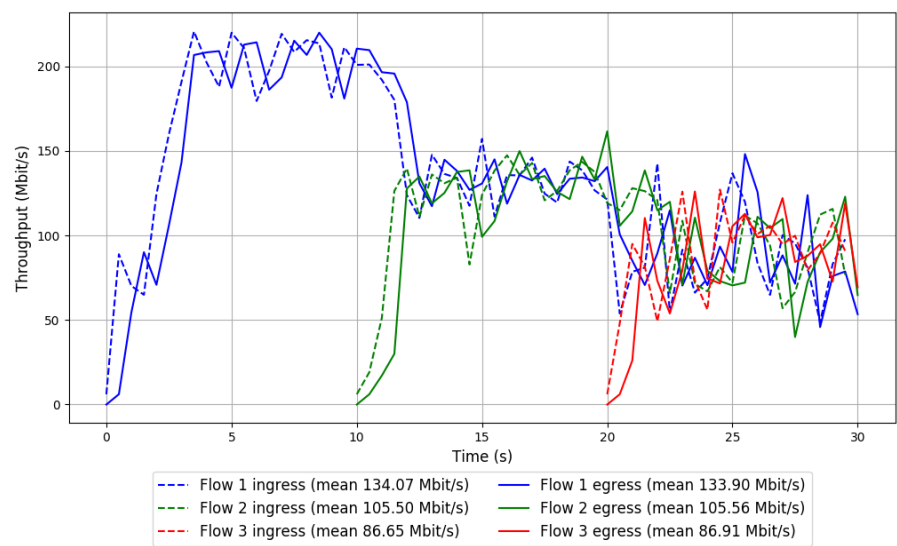
-- Flow 3:

Average throughput: 86.91 Mbit/s

95th percentile per-packet one-way delay: 92.060 ms

Loss rate: 2.08%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-05-22 14:30:38

End at: 2018-05-22 14:31:08

Local clock offset: 3.116 ms

Remote clock offset: 1.192 ms

Below is generated by plot.py at 2018-05-22 18:12:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.78 Mbit/s

95th percentile per-packet one-way delay: 98.012 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 155.13 Mbit/s

95th percentile per-packet one-way delay: 93.240 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 78.18 Mbit/s

95th percentile per-packet one-way delay: 110.228 ms

Loss rate: 1.07%

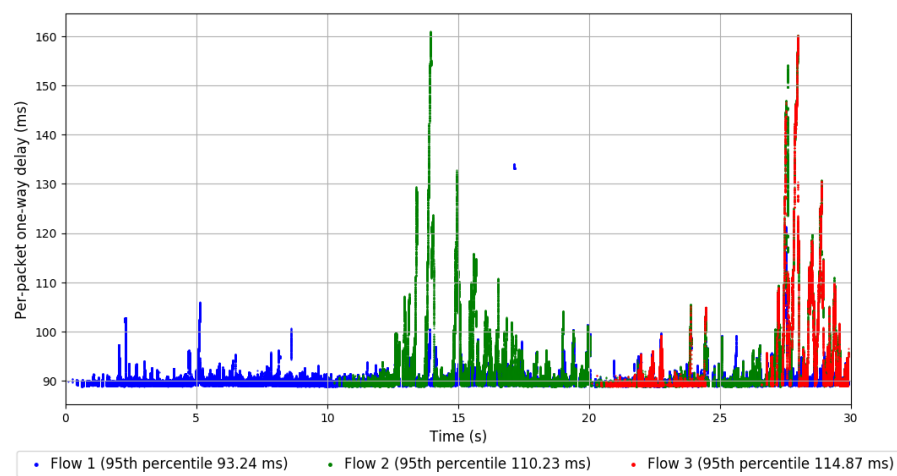
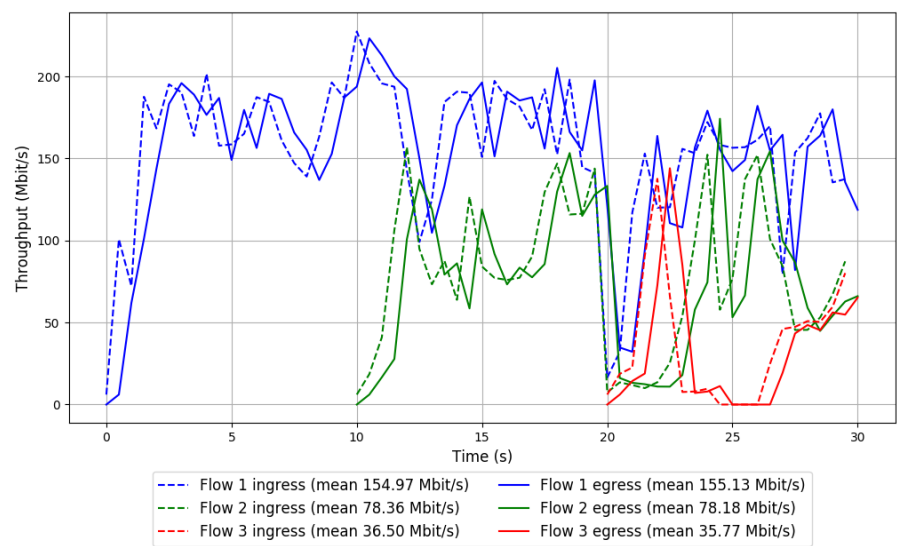
-- Flow 3:

Average throughput: 35.77 Mbit/s

95th percentile per-packet one-way delay: 114.868 ms

Loss rate: 3.66%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-05-22 14:53:13

End at: 2018-05-22 14:53:43

Local clock offset: 0.186 ms

Remote clock offset: 1.276 ms

Below is generated by plot.py at 2018-05-22 18:13:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.76 Mbit/s

95th percentile per-packet one-way delay: 97.714 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 143.43 Mbit/s

95th percentile per-packet one-way delay: 94.234 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 119.56 Mbit/s

95th percentile per-packet one-way delay: 100.420 ms

Loss rate: 0.58%

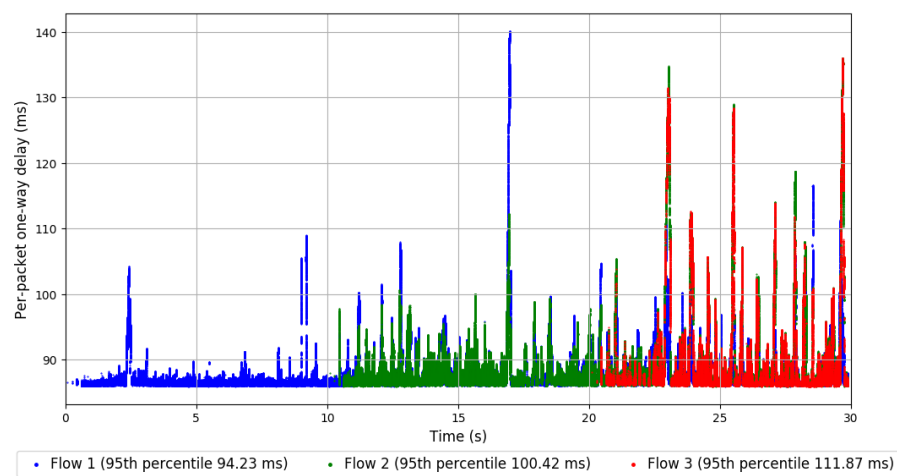
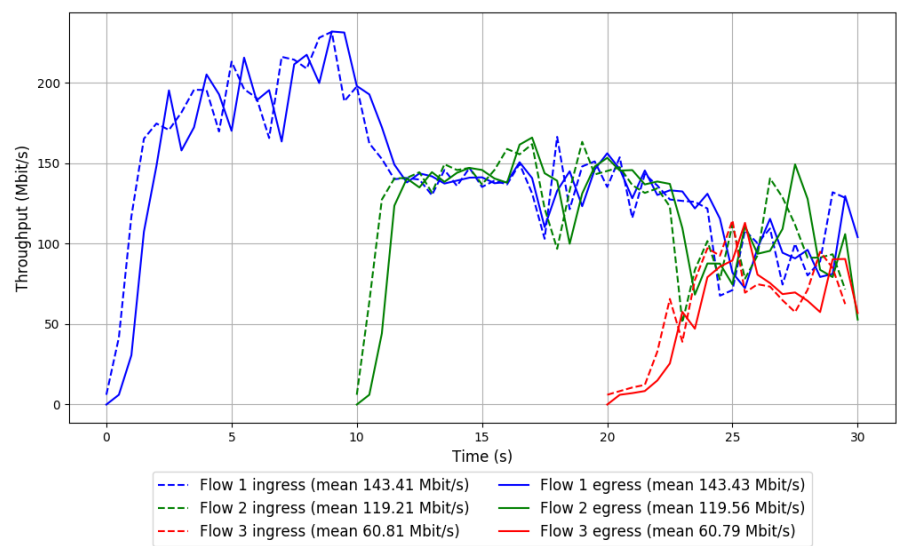
-- Flow 3:

Average throughput: 60.79 Mbit/s

95th percentile per-packet one-way delay: 111.867 ms

Loss rate: 1.79%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-05-22 15:15:23

End at: 2018-05-22 15:15:53

Local clock offset: 3.617 ms

Remote clock offset: 1.498 ms

Below is generated by plot.py at 2018-05-22 18:13:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.00 Mbit/s

95th percentile per-packet one-way delay: 104.423 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 117.97 Mbit/s

95th percentile per-packet one-way delay: 103.210 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 81.07 Mbit/s

95th percentile per-packet one-way delay: 109.609 ms

Loss rate: 0.15%

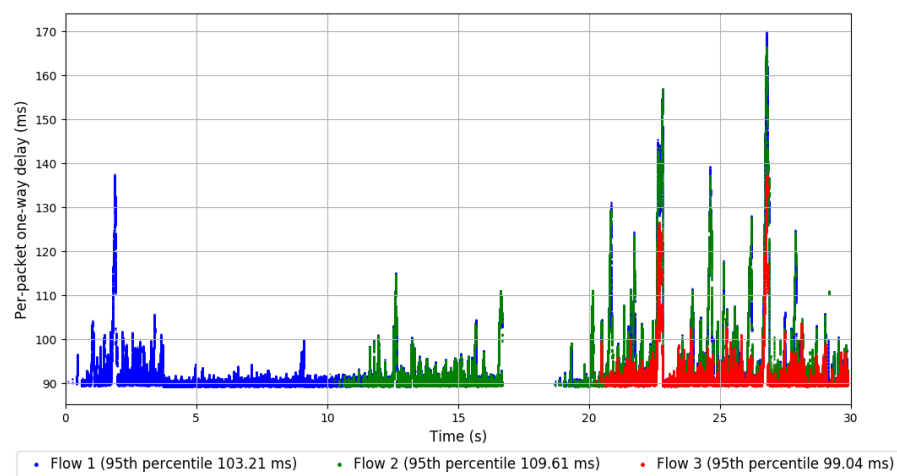
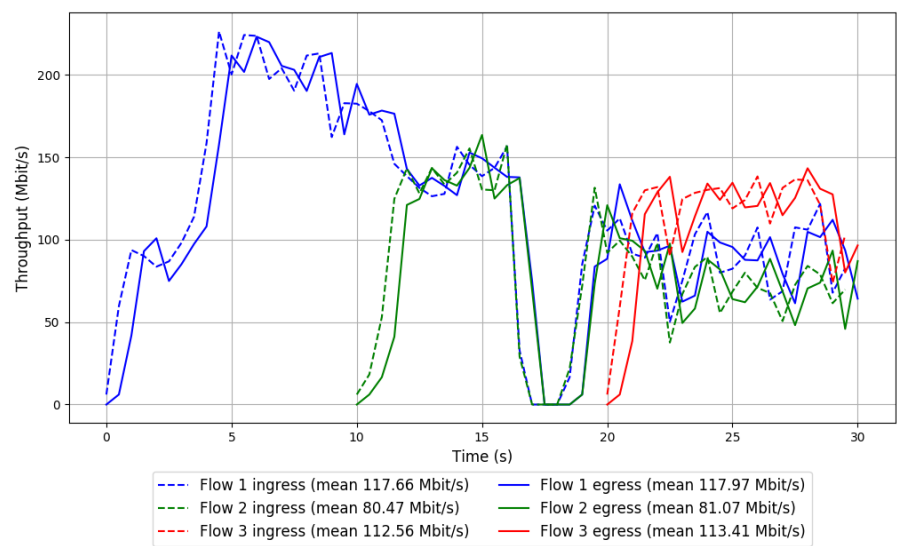
-- Flow 3:

Average throughput: 113.41 Mbit/s

95th percentile per-packet one-way delay: 99.044 ms

Loss rate: 0.99%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-05-22 15:37:58

End at: 2018-05-22 15:38:29

Local clock offset: 0.237 ms

Remote clock offset: 1.445 ms

Below is generated by plot.py at 2018-05-22 18:16:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 216.66 Mbit/s

95th percentile per-packet one-way delay: 108.562 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 134.35 Mbit/s

95th percentile per-packet one-way delay: 99.514 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 91.62 Mbit/s

95th percentile per-packet one-way delay: 117.899 ms

Loss rate: 0.80%

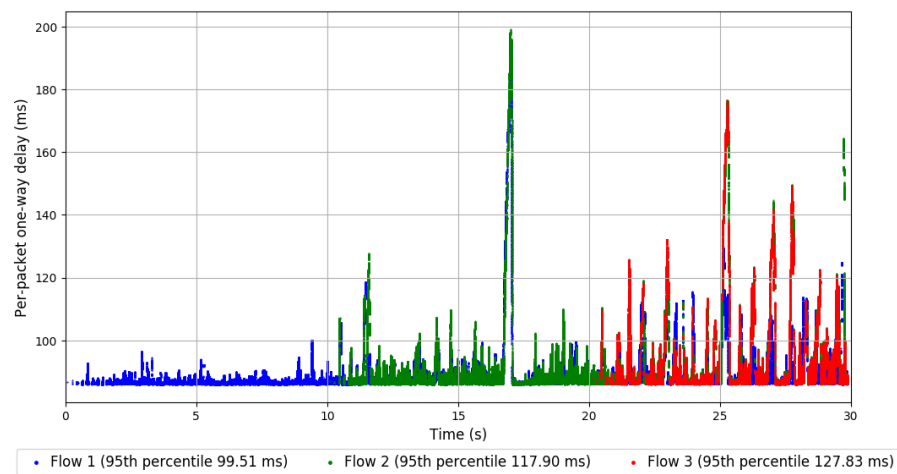
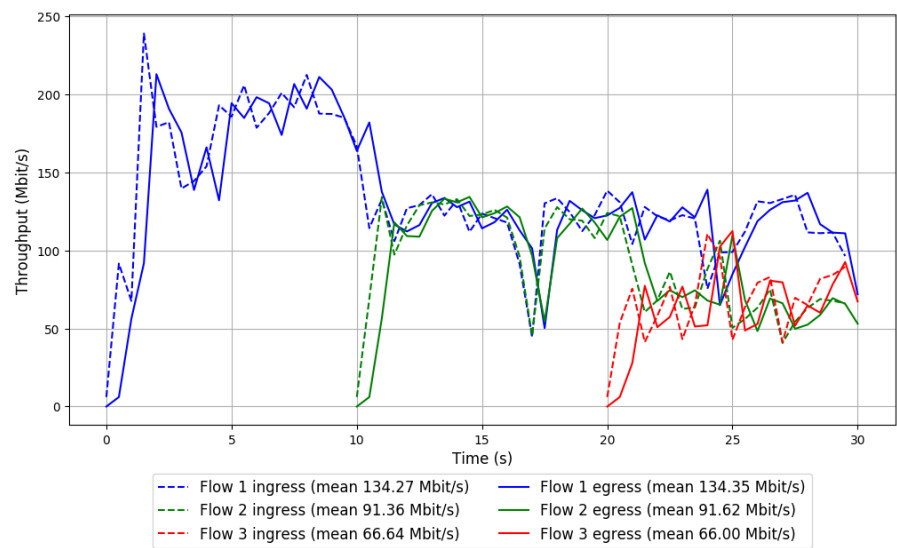
-- Flow 3:

Average throughput: 66.00 Mbit/s

95th percentile per-packet one-way delay: 127.835 ms

Loss rate: 2.65%

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

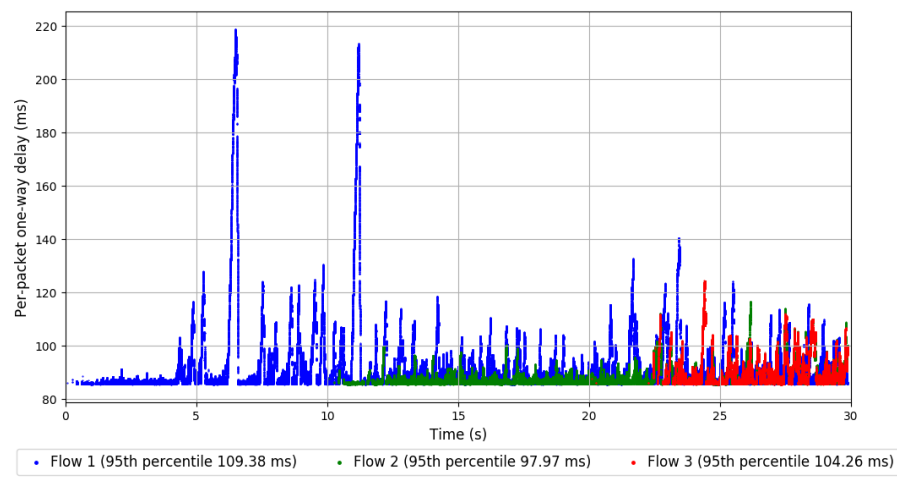
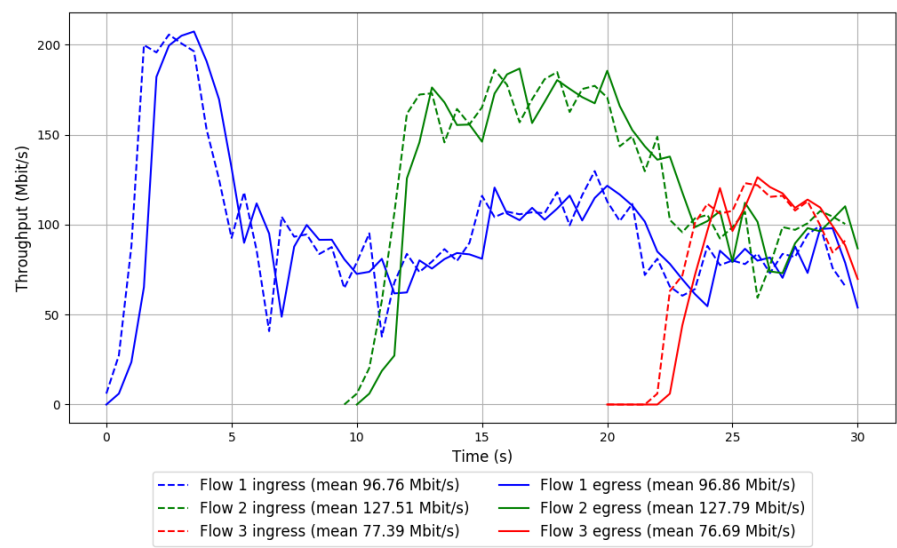


Run 8: Statistics of TaoVA-100x

Start at: 2018-05-22 16:00:39
End at: 2018-05-22 16:01:09
Local clock offset: -0.18 ms
Remote clock offset: -0.183 ms

Below is generated by plot.py at 2018-05-22 18:17:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 206.90 Mbit/s
95th percentile per-packet one-way delay: 104.560 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 96.86 Mbit/s
95th percentile per-packet one-way delay: 109.382 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 127.79 Mbit/s
95th percentile per-packet one-way delay: 97.973 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 76.69 Mbit/s
95th percentile per-packet one-way delay: 104.264 ms
Loss rate: 2.57%

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

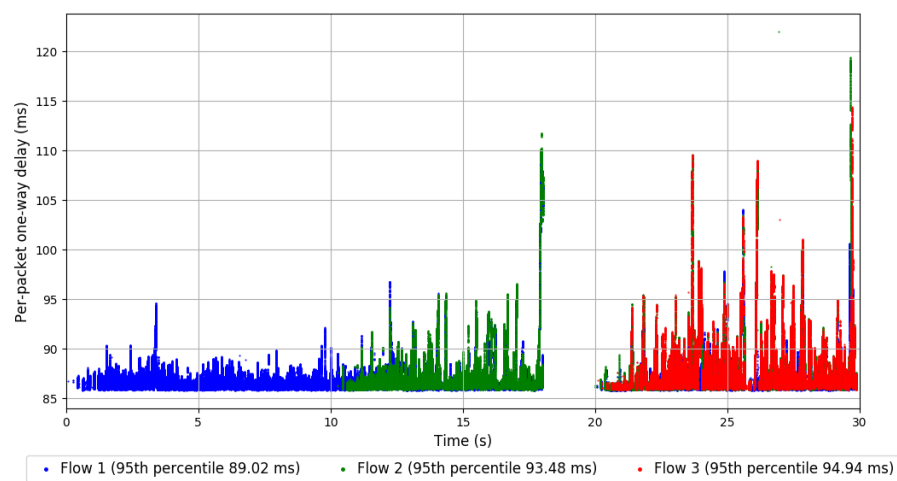
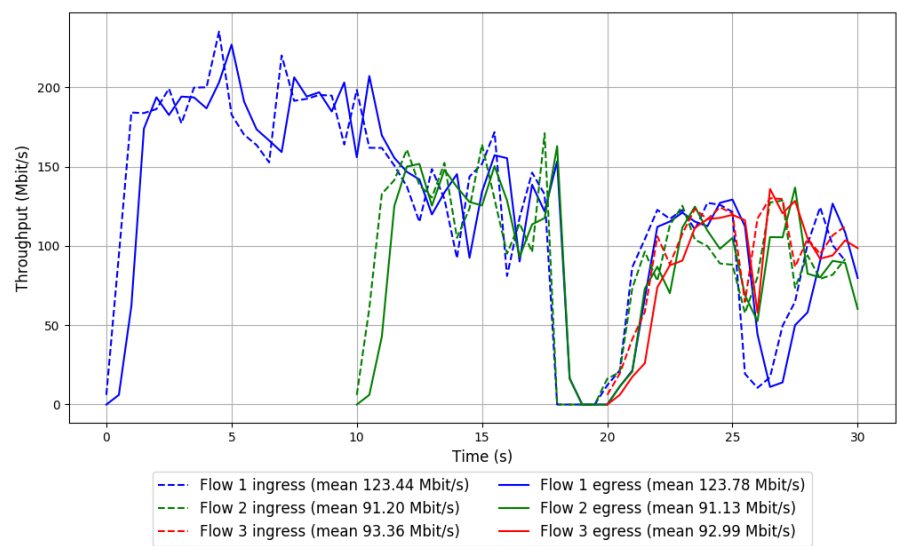


Run 9: Statistics of TaoVA-100x

Start at: 2018-05-22 16:23:12
End at: 2018-05-22 16:23:42
Local clock offset: -0.03 ms
Remote clock offset: -0.597 ms

Below is generated by plot.py at 2018-05-22 18:18:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 214.59 Mbit/s
95th percentile per-packet one-way delay: 91.435 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 123.78 Mbit/s
95th percentile per-packet one-way delay: 89.020 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 91.13 Mbit/s
95th percentile per-packet one-way delay: 93.481 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 92.99 Mbit/s
95th percentile per-packet one-way delay: 94.945 ms
Loss rate: 2.14%

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

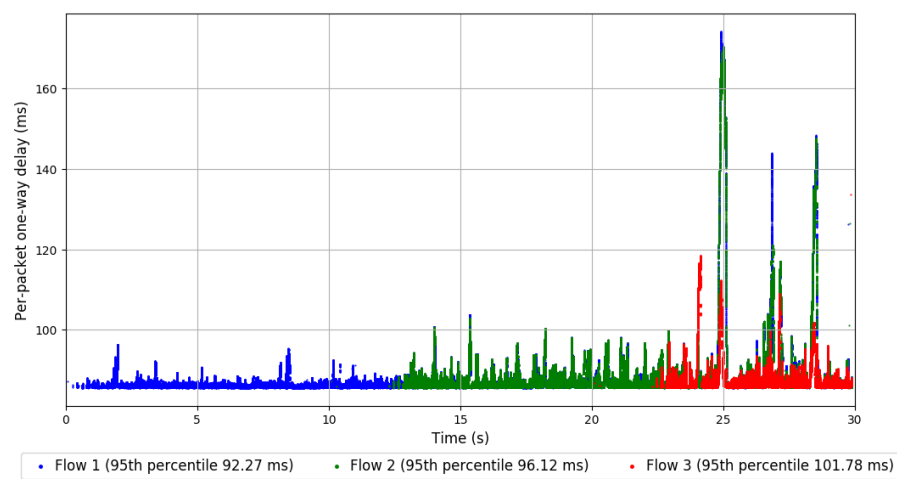
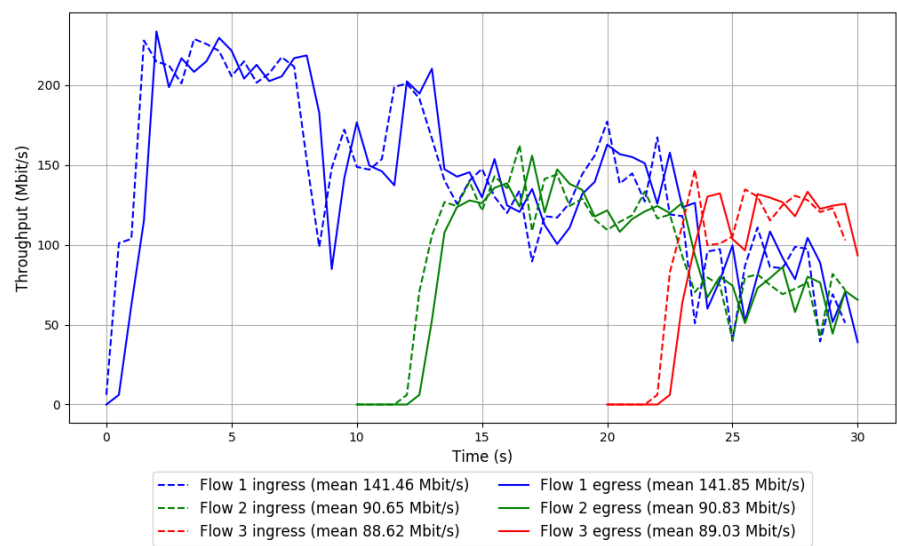


Run 10: Statistics of TaoVA-100x

Start at: 2018-05-22 16:45:50
End at: 2018-05-22 16:46:20
Local clock offset: -0.099 ms
Remote clock offset: -0.831 ms

Below is generated by plot.py at 2018-05-22 18:20:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 231.22 Mbit/s
95th percentile per-packet one-way delay: 94.238 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 141.85 Mbit/s
95th percentile per-packet one-way delay: 92.267 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 90.83 Mbit/s
95th percentile per-packet one-way delay: 96.124 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 89.03 Mbit/s
95th percentile per-packet one-way delay: 101.775 ms
Loss rate: 1.52%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-05-22 13:07:31

End at: 2018-05-22 13:08:01

Local clock offset: 3.417 ms

Remote clock offset: 0.745 ms

Below is generated by plot.py at 2018-05-22 18:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.62 Mbit/s

95th percentile per-packet one-way delay: 99.395 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 63.53 Mbit/s

95th percentile per-packet one-way delay: 96.768 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 124.66 Mbit/s

95th percentile per-packet one-way delay: 100.196 ms

Loss rate: 0.55%

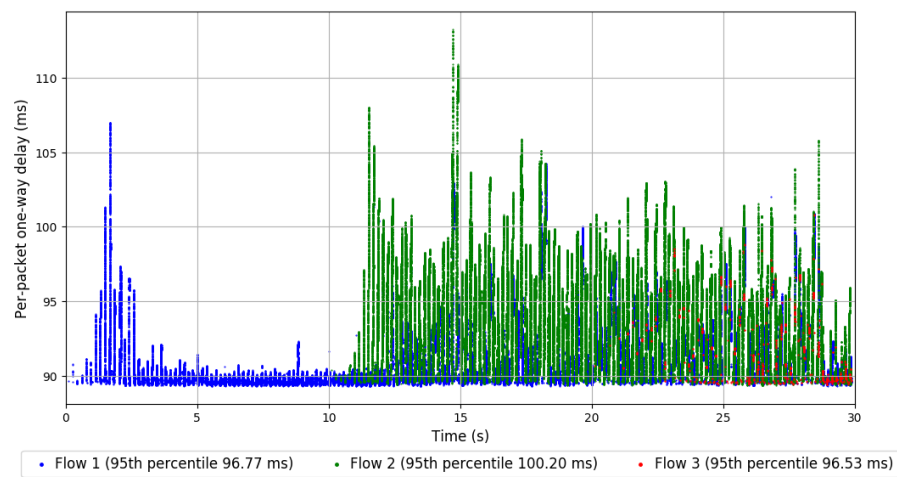
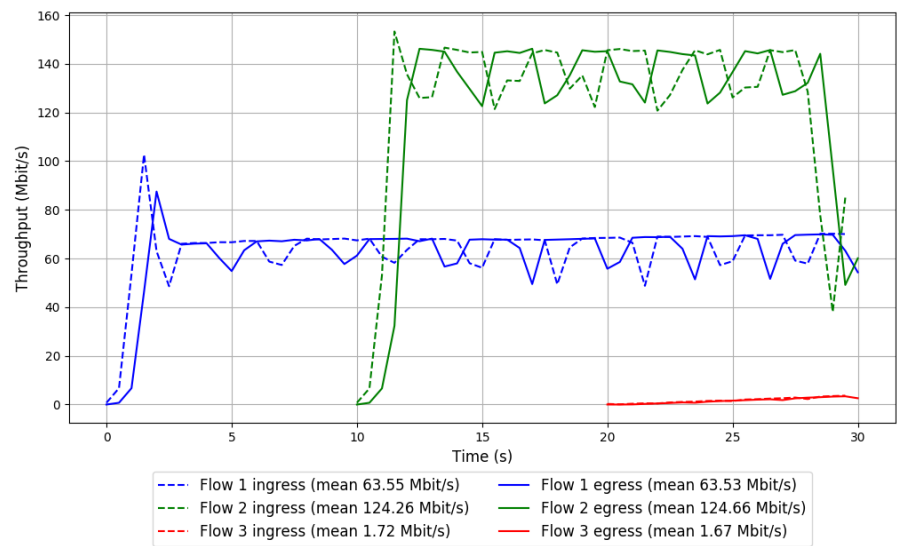
-- Flow 3:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 96.533 ms

Loss rate: 4.36%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-05-22 13:30:05

End at: 2018-05-22 13:30:35

Local clock offset: 3.342 ms

Remote clock offset: 0.876 ms

Below is generated by plot.py at 2018-05-22 18:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.81 Mbit/s

95th percentile per-packet one-way delay: 101.956 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 61.01 Mbit/s

95th percentile per-packet one-way delay: 105.401 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 72.30 Mbit/s

95th percentile per-packet one-way delay: 96.187 ms

Loss rate: 0.92%

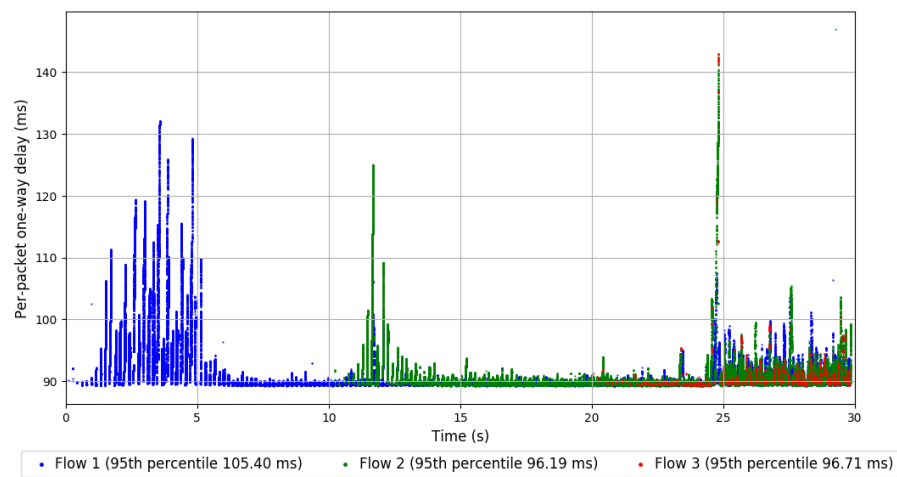
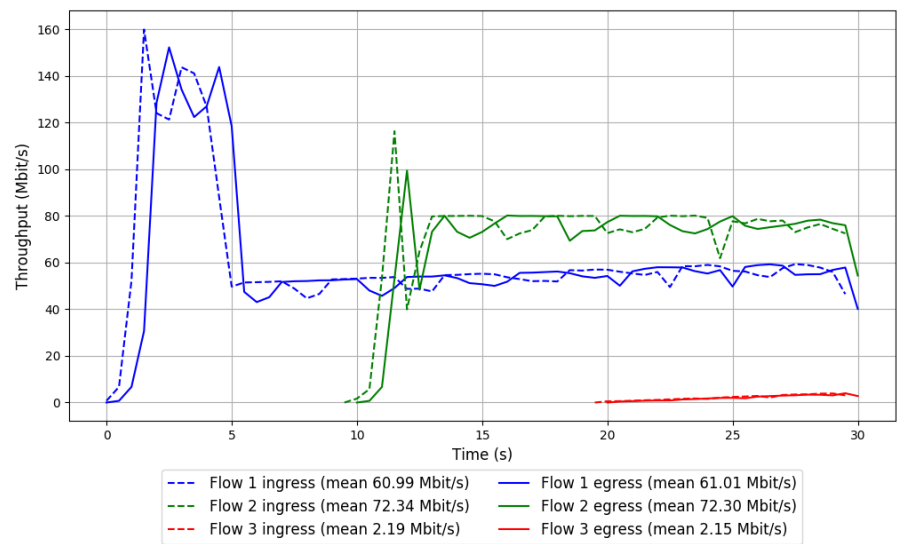
-- Flow 3:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 96.713 ms

Loss rate: 3.43%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-05-22 13:52:39

End at: 2018-05-22 13:53:09

Local clock offset: 0.04 ms

Remote clock offset: 0.993 ms

Below is generated by plot.py at 2018-05-22 18:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.18 Mbit/s

95th percentile per-packet one-way delay: 95.206 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 42.70 Mbit/s

95th percentile per-packet one-way delay: 92.275 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 64.62 Mbit/s

95th percentile per-packet one-way delay: 96.896 ms

Loss rate: 0.66%

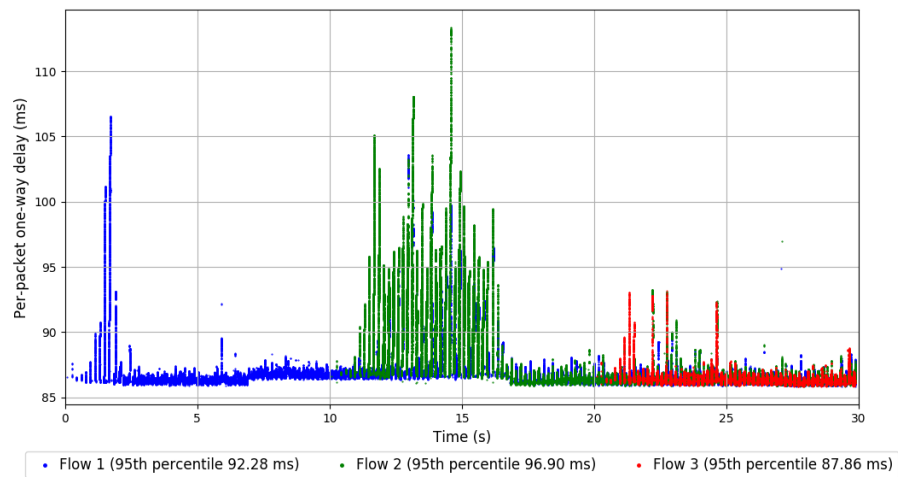
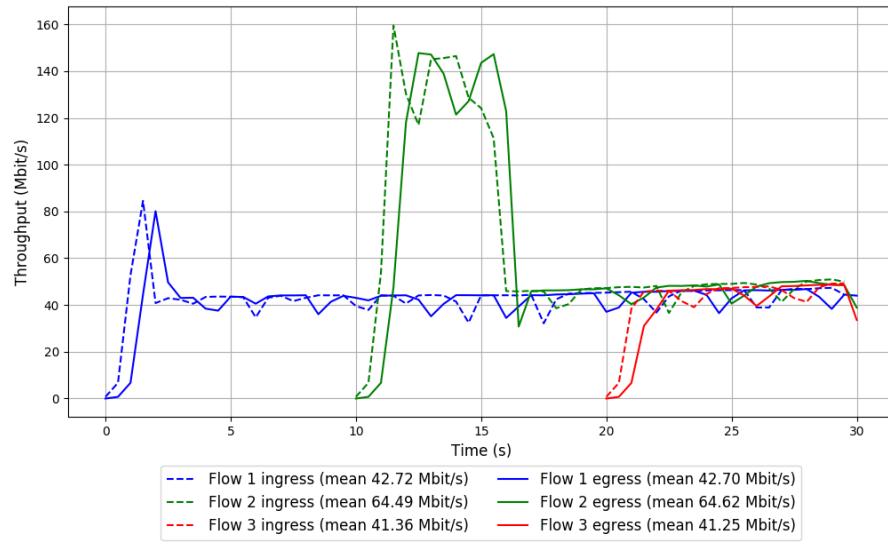
-- Flow 3:

Average throughput: 41.25 Mbit/s

95th percentile per-packet one-way delay: 87.864 ms

Loss rate: 2.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-05-22 14:15:15

End at: 2018-05-22 14:15:45

Local clock offset: 3.588 ms

Remote clock offset: 1.083 ms

Below is generated by plot.py at 2018-05-22 18:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.59 Mbit/s

95th percentile per-packet one-way delay: 151.145 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 71.37 Mbit/s

95th percentile per-packet one-way delay: 173.266 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 69.30 Mbit/s

95th percentile per-packet one-way delay: 103.552 ms

Loss rate: 0.96%

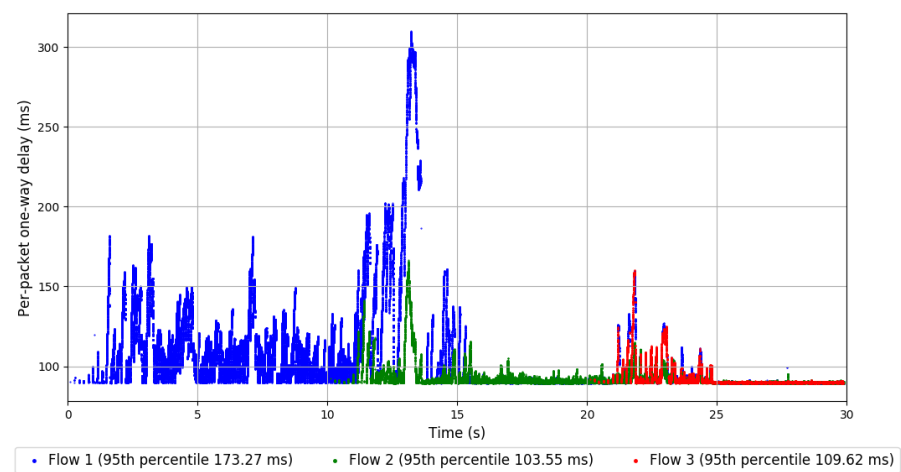
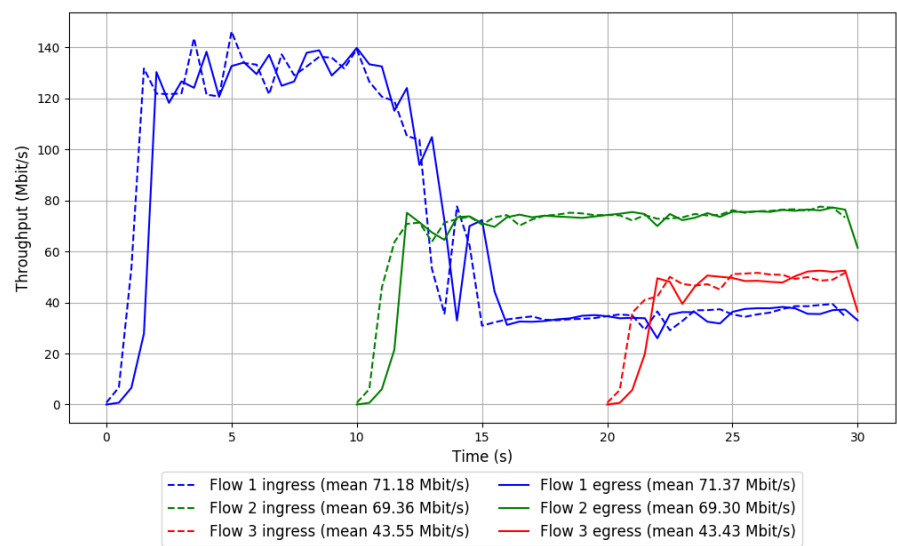
-- Flow 3:

Average throughput: 43.43 Mbit/s

95th percentile per-packet one-way delay: 109.620 ms

Loss rate: 2.05%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-05-22 14:37:45

End at: 2018-05-22 14:38:15

Local clock offset: 0.115 ms

Remote clock offset: 1.276 ms

Below is generated by plot.py at 2018-05-22 18:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.49 Mbit/s

95th percentile per-packet one-way delay: 93.670 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 55.19 Mbit/s

95th percentile per-packet one-way delay: 91.721 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 53.69 Mbit/s

95th percentile per-packet one-way delay: 94.705 ms

Loss rate: 0.72%

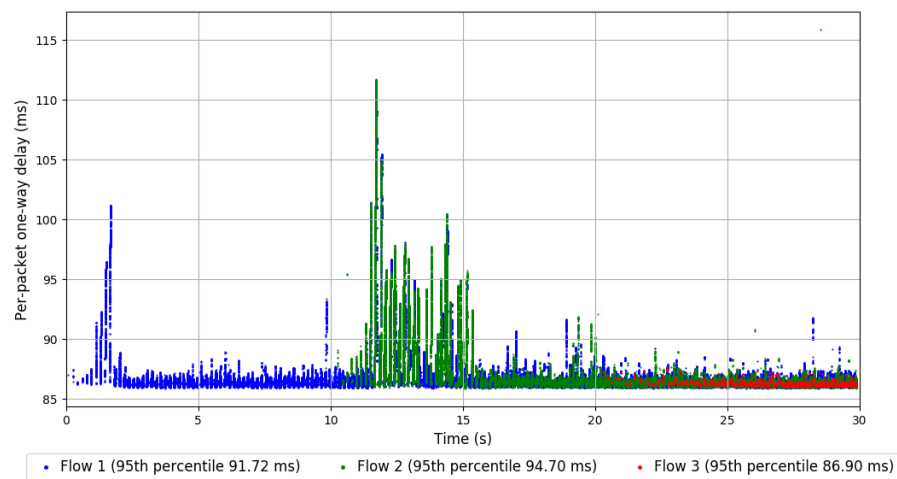
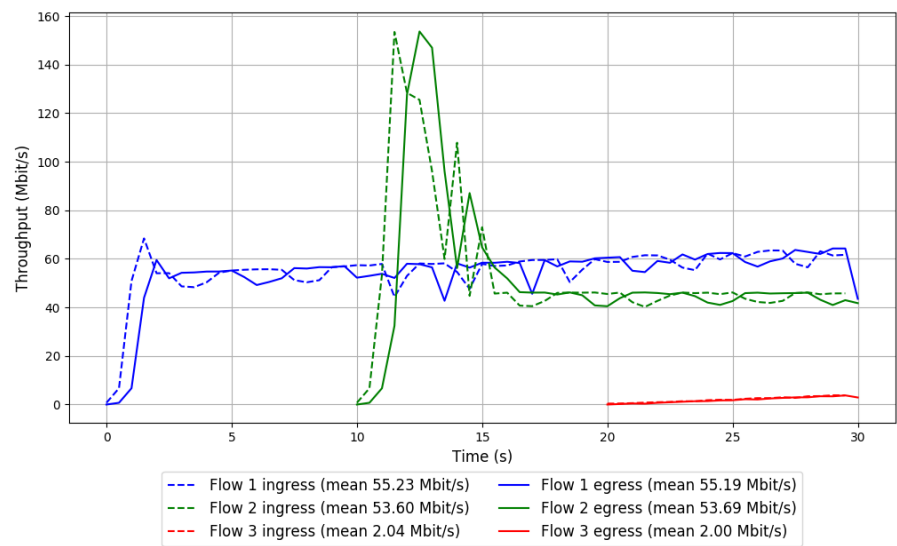
-- Flow 3:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 86.902 ms

Loss rate: 3.73%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-05-22 15:00:22

End at: 2018-05-22 15:00:52

Local clock offset: -0.299 ms

Remote clock offset: 1.299 ms

Below is generated by plot.py at 2018-05-22 18:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.94 Mbit/s

95th percentile per-packet one-way delay: 89.384 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 60.46 Mbit/s

95th percentile per-packet one-way delay: 89.340 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 37.47 Mbit/s

95th percentile per-packet one-way delay: 89.839 ms

Loss rate: 0.95%

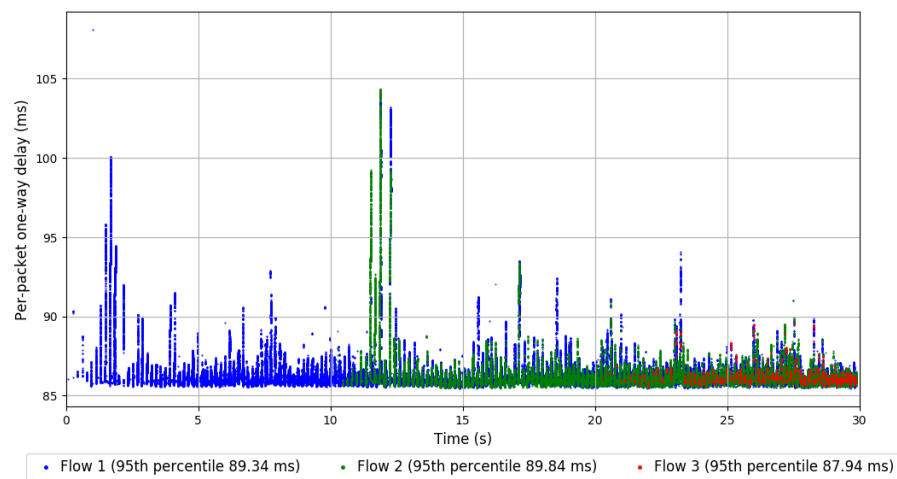
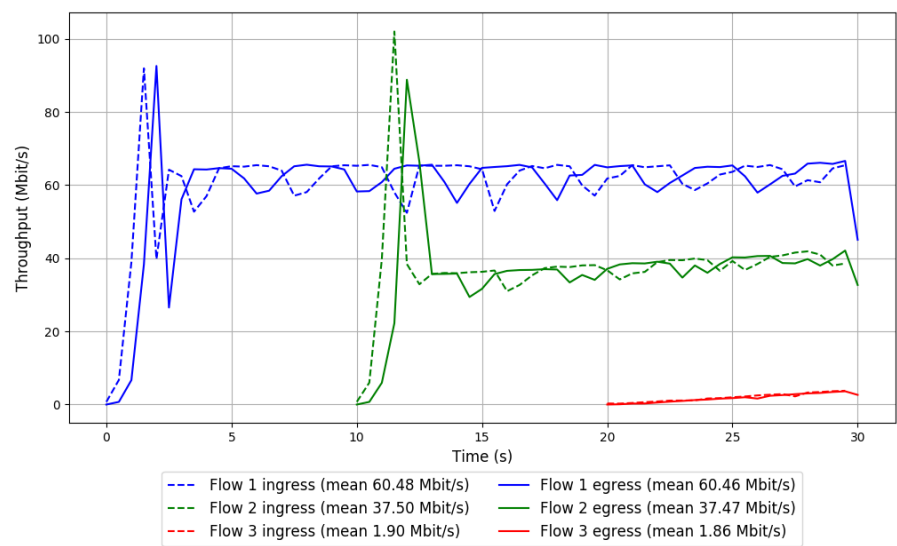
-- Flow 3:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 87.937 ms

Loss rate: 4.12%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-05-22 15:22:28

End at: 2018-05-22 15:22:58

Local clock offset: 3.655 ms

Remote clock offset: 1.403 ms

Below is generated by plot.py at 2018-05-22 18:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.43 Mbit/s

95th percentile per-packet one-way delay: 100.463 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 61.88 Mbit/s

95th percentile per-packet one-way delay: 99.138 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 40.92 Mbit/s

95th percentile per-packet one-way delay: 99.982 ms

Loss rate: 0.90%

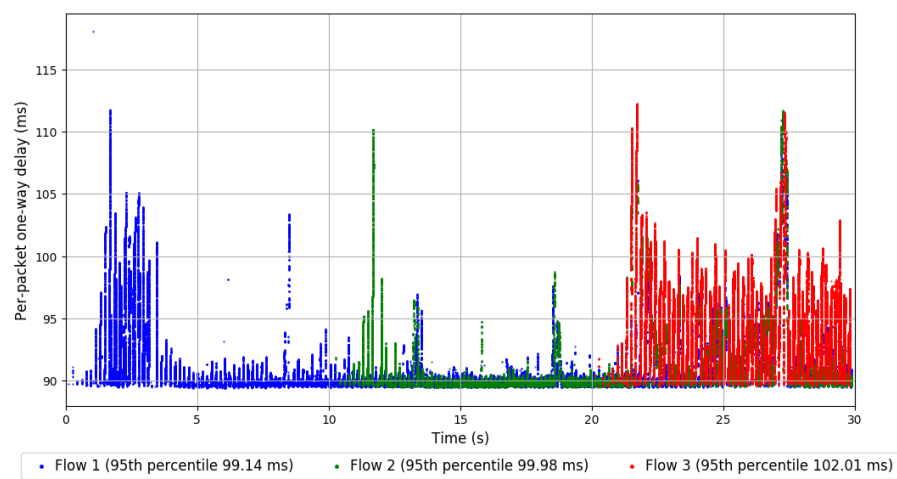
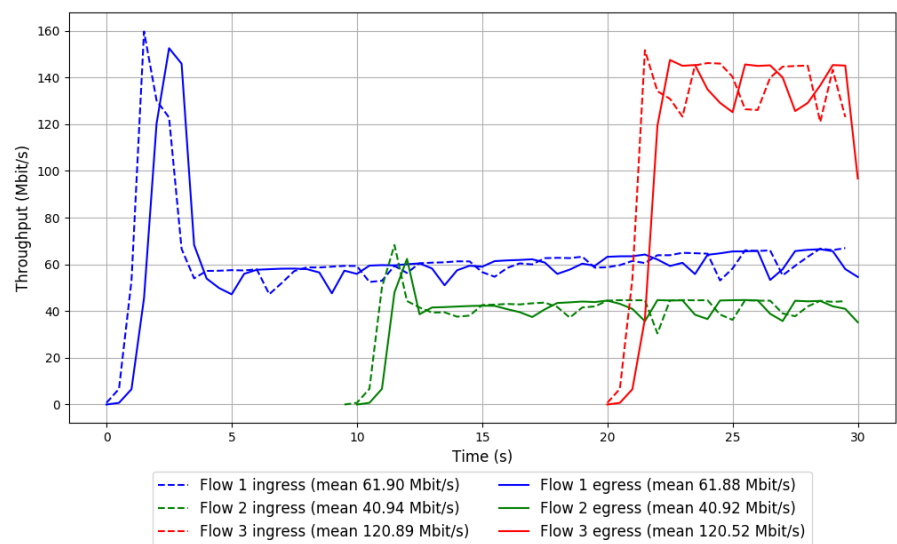
-- Flow 3:

Average throughput: 120.52 Mbit/s

95th percentile per-packet one-way delay: 102.013 ms

Loss rate: 2.03%

Run 7: Report of TCP Vegas — Data Link

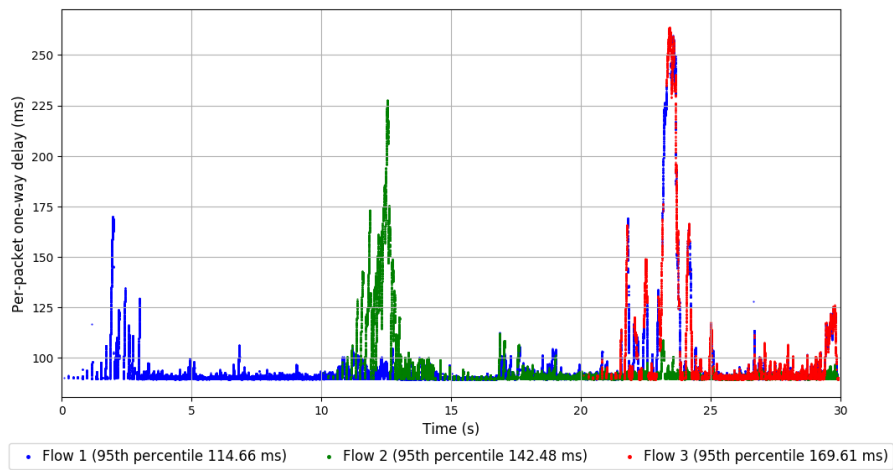
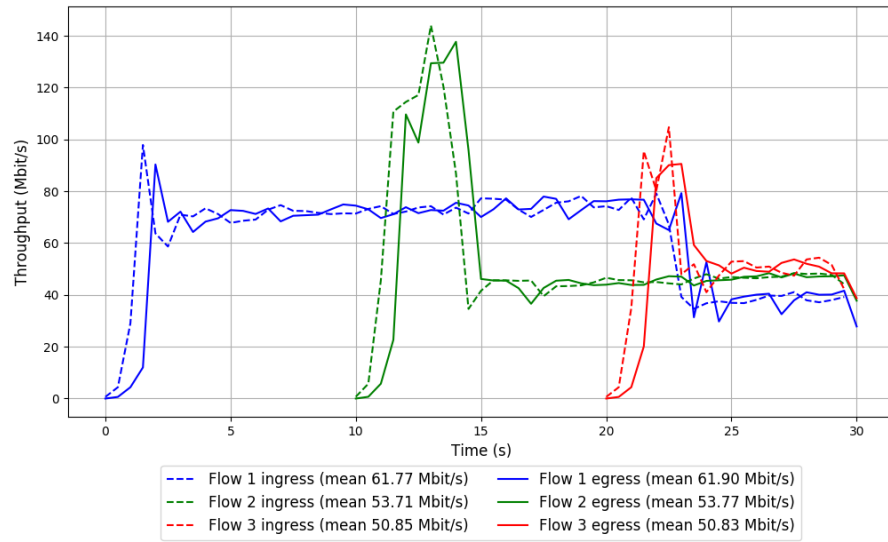


Run 8: Statistics of TCP Vegas

Start at: 2018-05-22 15:45:11
End at: 2018-05-22 15:45:41
Local clock offset: 3.675 ms
Remote clock offset: 0.817 ms

Below is generated by plot.py at 2018-05-22 18:20:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 114.30 Mbit/s
95th percentile per-packet one-way delay: 139.976 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 61.90 Mbit/s
95th percentile per-packet one-way delay: 114.656 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 53.77 Mbit/s
95th percentile per-packet one-way delay: 142.483 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 50.83 Mbit/s
95th percentile per-packet one-way delay: 169.614 ms
Loss rate: 1.79%

Run 8: Report of TCP Vegas — Data Link

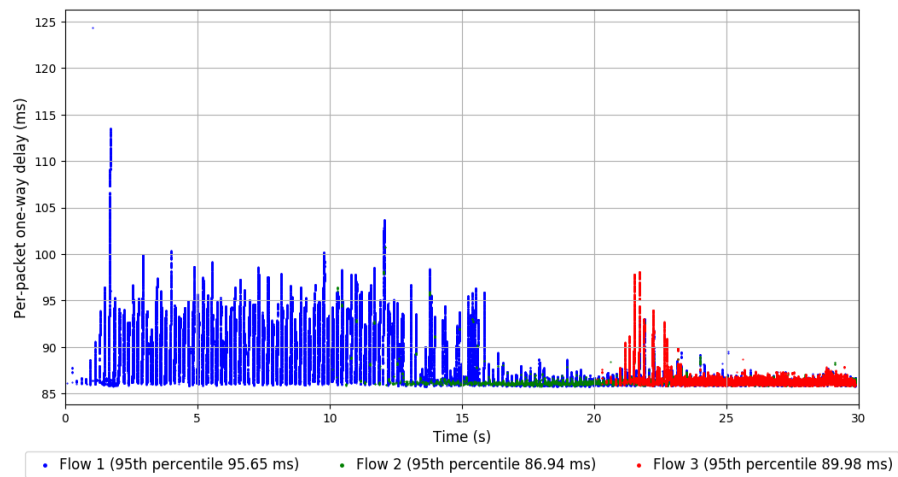
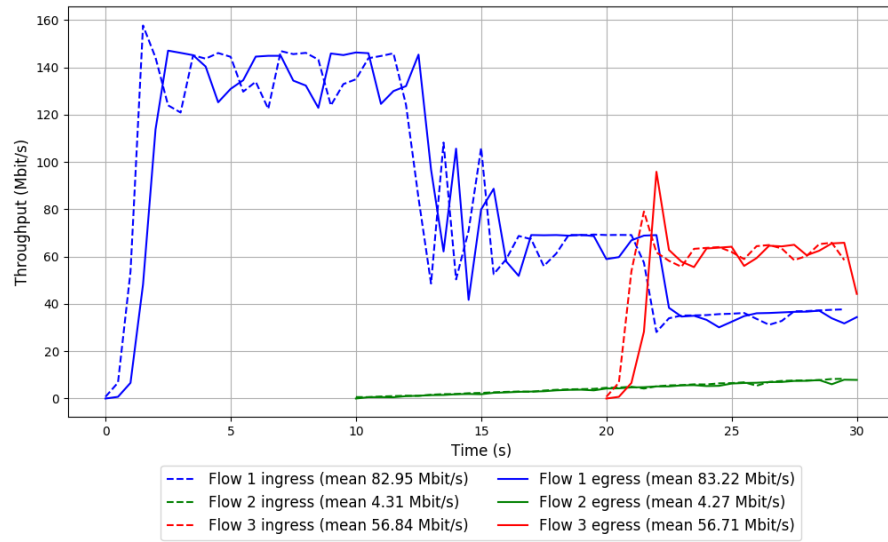


Run 9: Statistics of TCP Vegas

Start at: 2018-05-22 16:07:46
End at: 2018-05-22 16:08:16
Local clock offset: 0.072 ms
Remote clock offset: -0.311 ms

Below is generated by plot.py at 2018-05-22 18:20:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 104.63 Mbit/s
95th percentile per-packet one-way delay: 95.237 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 83.22 Mbit/s
95th percentile per-packet one-way delay: 95.653 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 86.944 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 56.71 Mbit/s
95th percentile per-packet one-way delay: 89.982 ms
Loss rate: 1.95%

Run 9: Report of TCP Vegas — Data Link

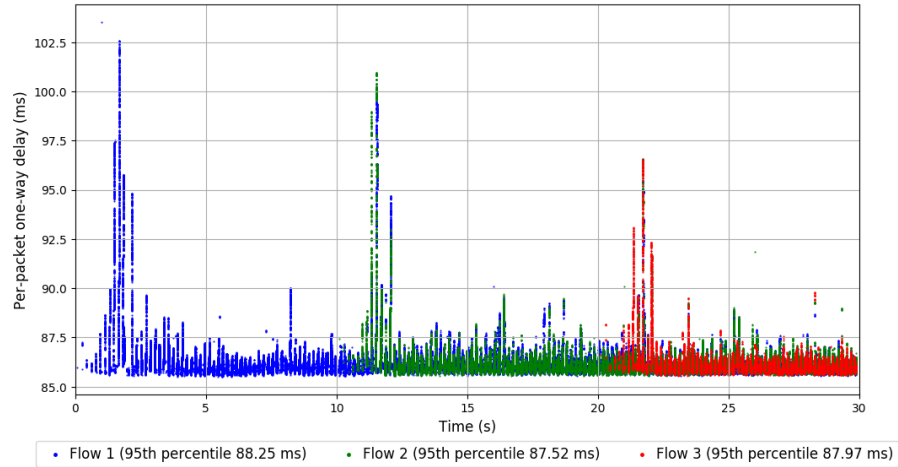
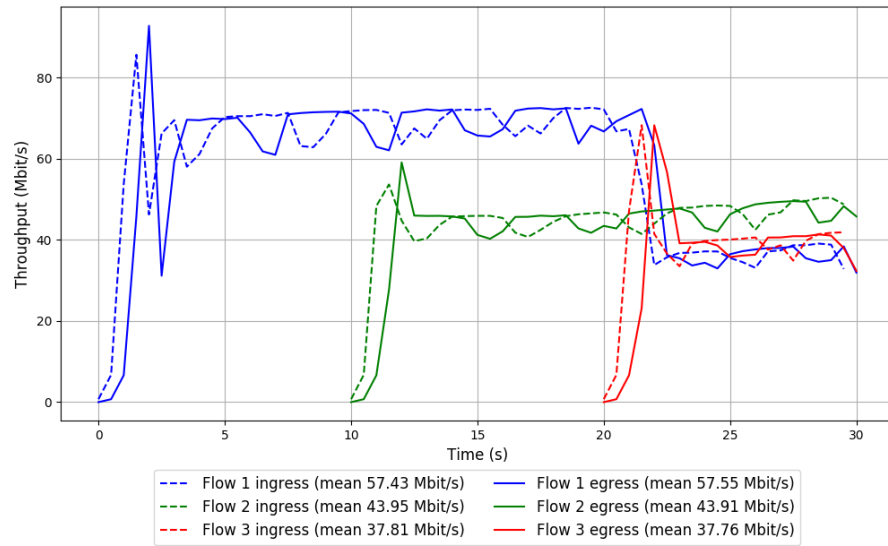


Run 10: Statistics of TCP Vegas

Start at: 2018-05-22 16:30:20
End at: 2018-05-22 16:30:50
Local clock offset: -0.18 ms
Remote clock offset: -0.587 ms

Below is generated by plot.py at 2018-05-22 18:20:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 99.05 Mbit/s
95th percentile per-packet one-way delay: 87.961 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 57.55 Mbit/s
95th percentile per-packet one-way delay: 88.246 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 43.91 Mbit/s
95th percentile per-packet one-way delay: 87.519 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 37.76 Mbit/s
95th percentile per-packet one-way delay: 87.971 ms
Loss rate: 1.87%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-05-22 13:15:47

End at: 2018-05-22 13:16:17

Local clock offset: -0.29 ms

Remote clock offset: 0.831 ms

Below is generated by plot.py at 2018-05-22 18:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 199.91 Mbit/s

95th percentile per-packet one-way delay: 201.872 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 119.63 Mbit/s

95th percentile per-packet one-way delay: 189.515 ms

Loss rate: 1.80%

-- Flow 2:

Average throughput: 96.00 Mbit/s

95th percentile per-packet one-way delay: 201.699 ms

Loss rate: 0.13%

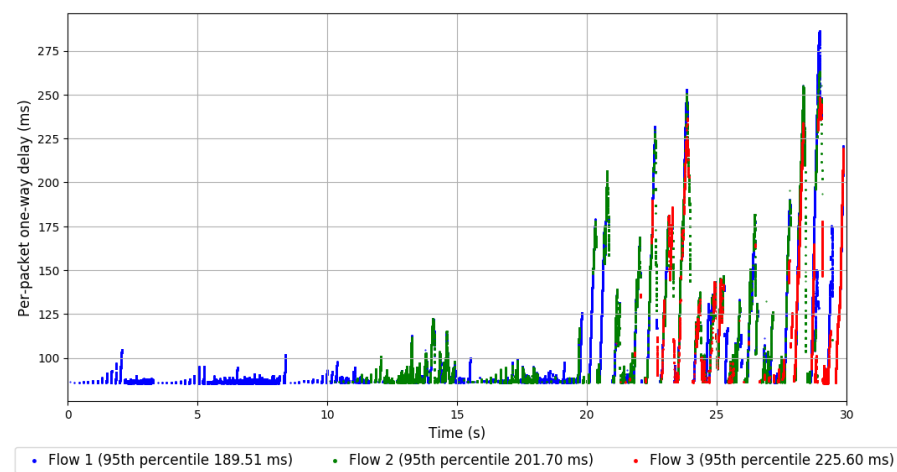
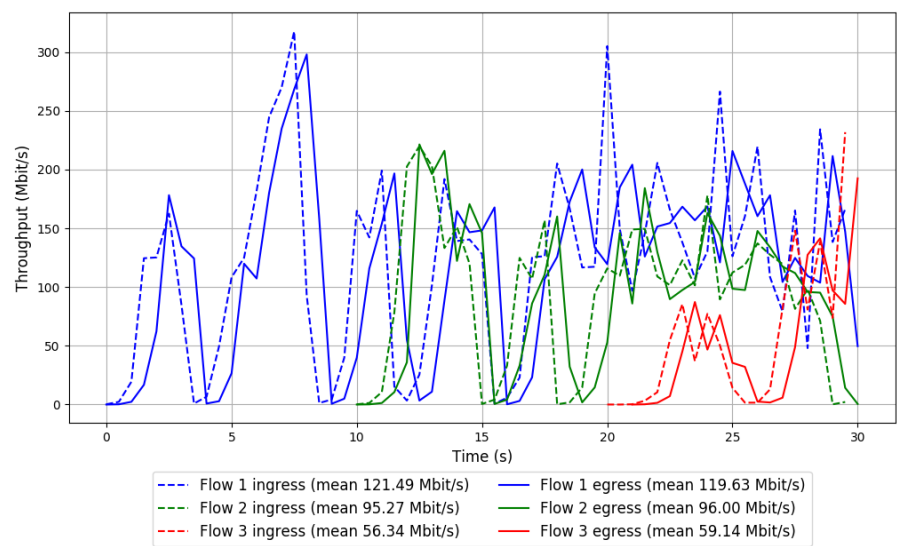
-- Flow 3:

Average throughput: 59.14 Mbit/s

95th percentile per-packet one-way delay: 225.605 ms

Loss rate: 6.23%

Run 1: Report of Verus — Data Link

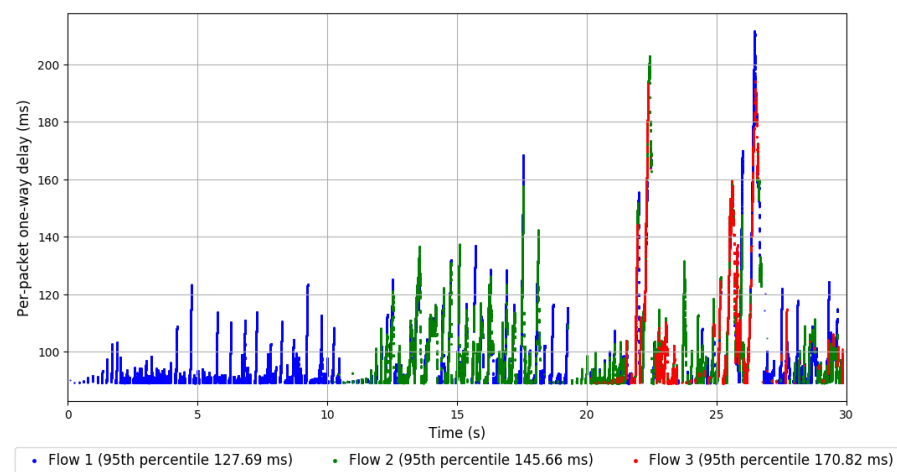
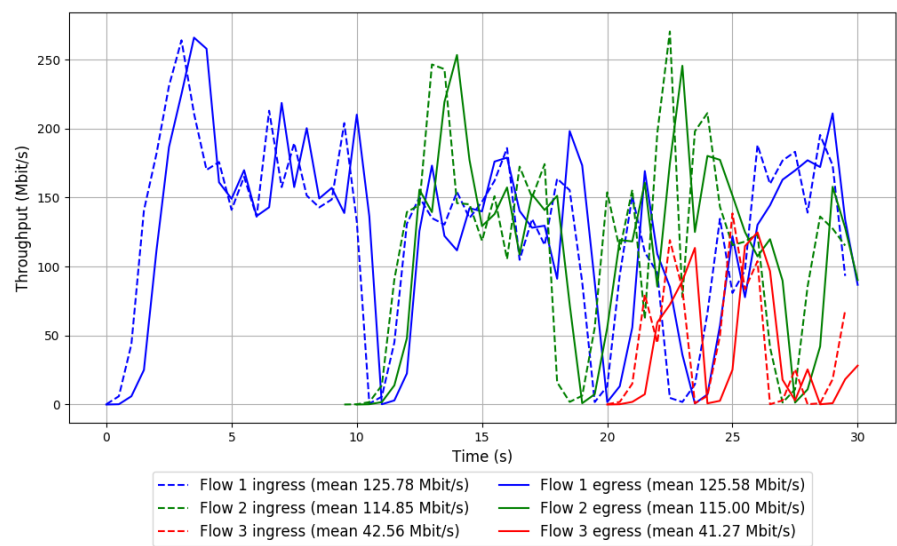


Run 2: Statistics of Verus

Start at: 2018-05-22 13:38:19
End at: 2018-05-22 13:38:49
Local clock offset: 3.285 ms
Remote clock offset: 0.925 ms

Below is generated by plot.py at 2018-05-22 18:21:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 215.25 Mbit/s
95th percentile per-packet one-way delay: 143.025 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 125.58 Mbit/s
95th percentile per-packet one-way delay: 127.695 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 115.00 Mbit/s
95th percentile per-packet one-way delay: 145.658 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 41.27 Mbit/s
95th percentile per-packet one-way delay: 170.820 ms
Loss rate: 4.74%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-05-22 14:01:00

End at: 2018-05-22 14:01:30

Local clock offset: 3.584 ms

Remote clock offset: 1.073 ms

Below is generated by plot.py at 2018-05-22 18:21:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.96 Mbit/s

95th percentile per-packet one-way delay: 142.844 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 101.27 Mbit/s

95th percentile per-packet one-way delay: 144.195 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 80.65 Mbit/s

95th percentile per-packet one-way delay: 132.232 ms

Loss rate: 0.74%

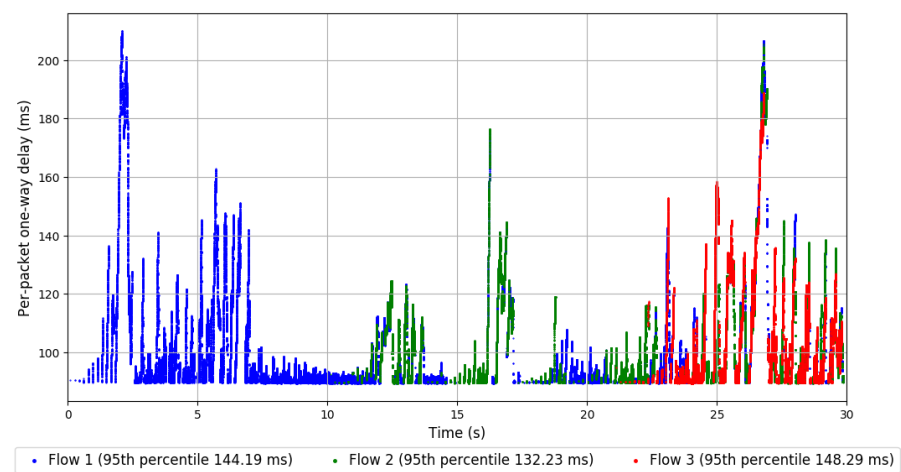
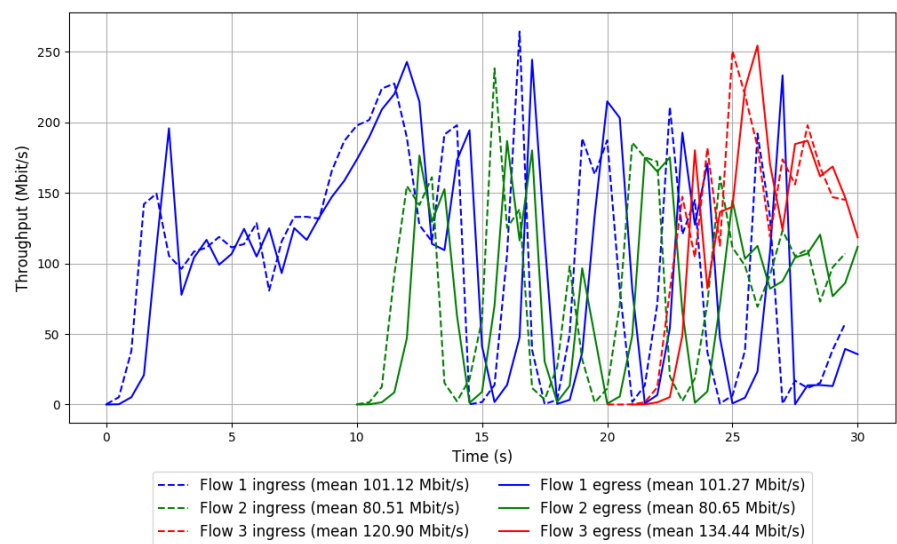
-- Flow 3:

Average throughput: 134.44 Mbit/s

95th percentile per-packet one-way delay: 148.292 ms

Loss rate: 2.73%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-05-22 14:23:38

End at: 2018-05-22 14:24:08

Local clock offset: 1.716 ms

Remote clock offset: 1.187 ms

Below is generated by plot.py at 2018-05-22 18:21:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.30 Mbit/s

95th percentile per-packet one-way delay: 200.310 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 107.09 Mbit/s

95th percentile per-packet one-way delay: 188.773 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 79.23 Mbit/s

95th percentile per-packet one-way delay: 207.220 ms

Loss rate: 0.00%

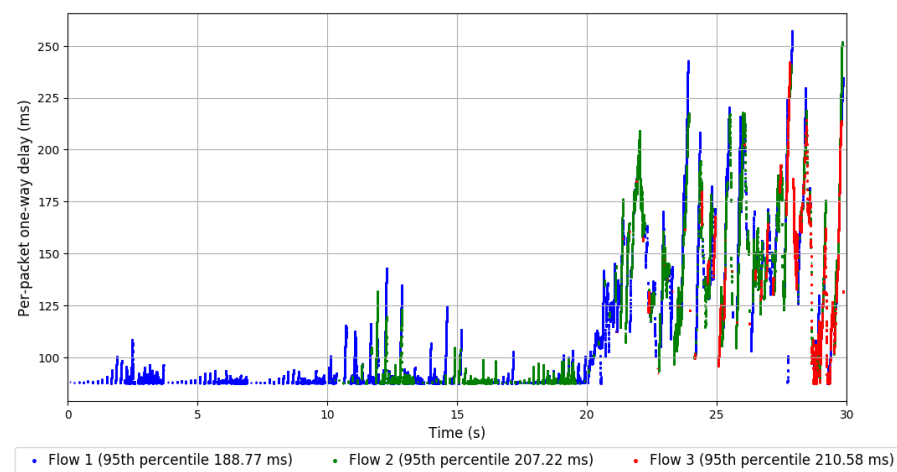
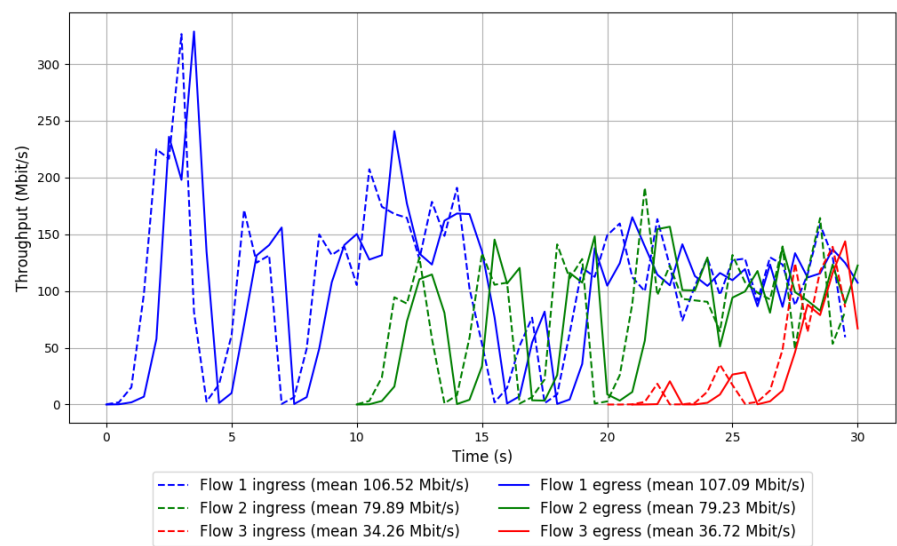
-- Flow 3:

Average throughput: 36.72 Mbit/s

95th percentile per-packet one-way delay: 210.583 ms

Loss rate: 5.81%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-05-22 14:46:01

End at: 2018-05-22 14:46:31

Local clock offset: 3.374 ms

Remote clock offset: 1.253 ms

Below is generated by plot.py at 2018-05-22 18:22:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.63 Mbit/s

95th percentile per-packet one-way delay: 163.807 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 174.53 Mbit/s

95th percentile per-packet one-way delay: 159.218 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 65.93 Mbit/s

95th percentile per-packet one-way delay: 170.878 ms

Loss rate: 4.45%

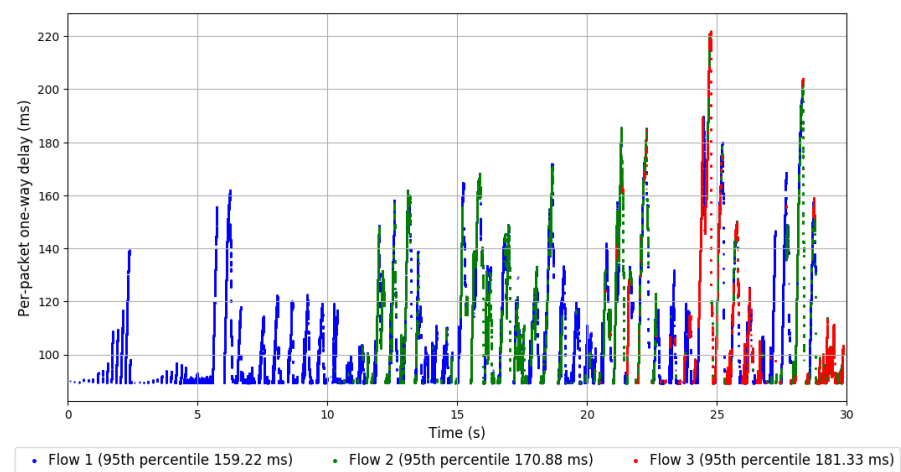
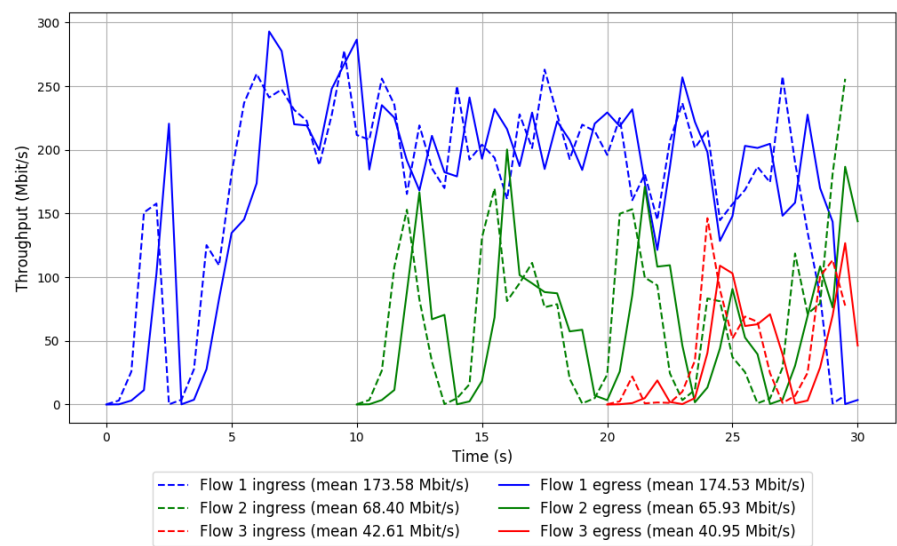
-- Flow 3:

Average throughput: 40.95 Mbit/s

95th percentile per-packet one-way delay: 181.329 ms

Loss rate: 5.78%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-05-22 15:08:18

End at: 2018-05-22 15:08:48

Local clock offset: 3.438 ms

Remote clock offset: 1.363 ms

Below is generated by plot.py at 2018-05-22 18:22:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.47 Mbit/s

95th percentile per-packet one-way delay: 142.768 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 122.35 Mbit/s

95th percentile per-packet one-way delay: 144.387 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 59.23 Mbit/s

95th percentile per-packet one-way delay: 143.037 ms

Loss rate: 0.14%

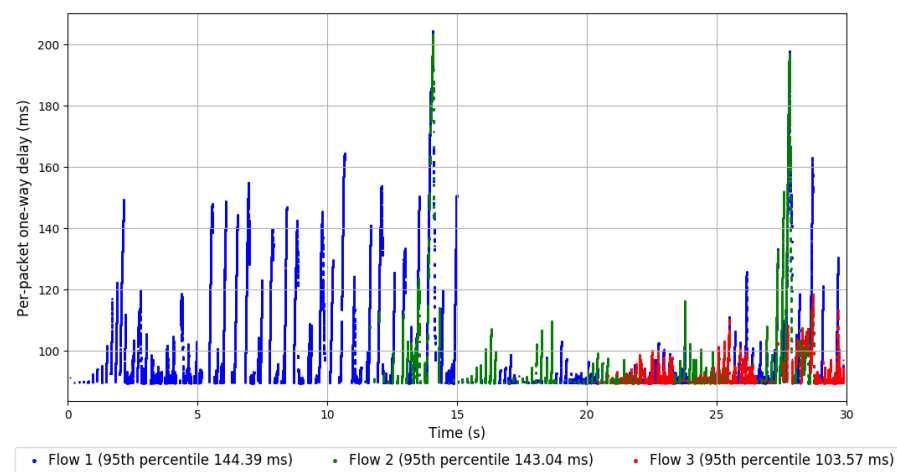
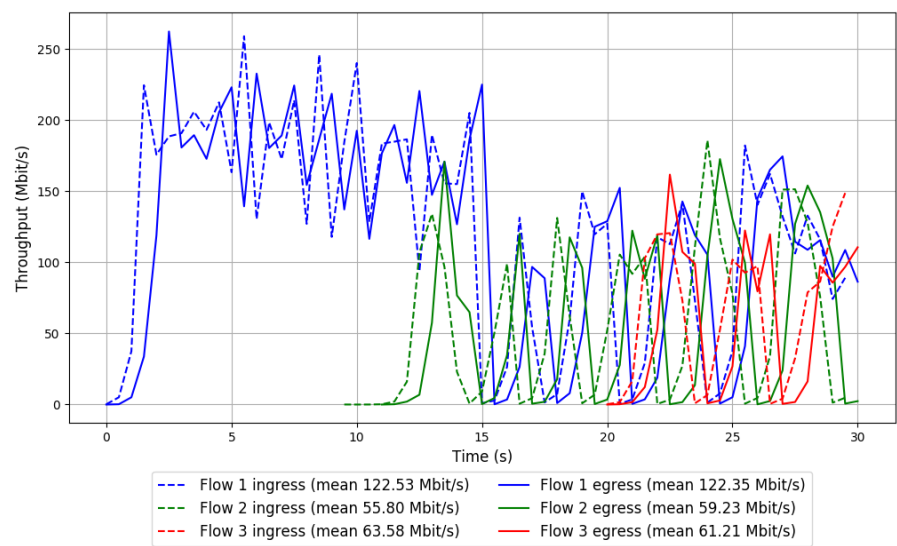
-- Flow 3:

Average throughput: 61.21 Mbit/s

95th percentile per-packet one-way delay: 103.567 ms

Loss rate: 5.32%

Run 6: Report of Verus — Data Link

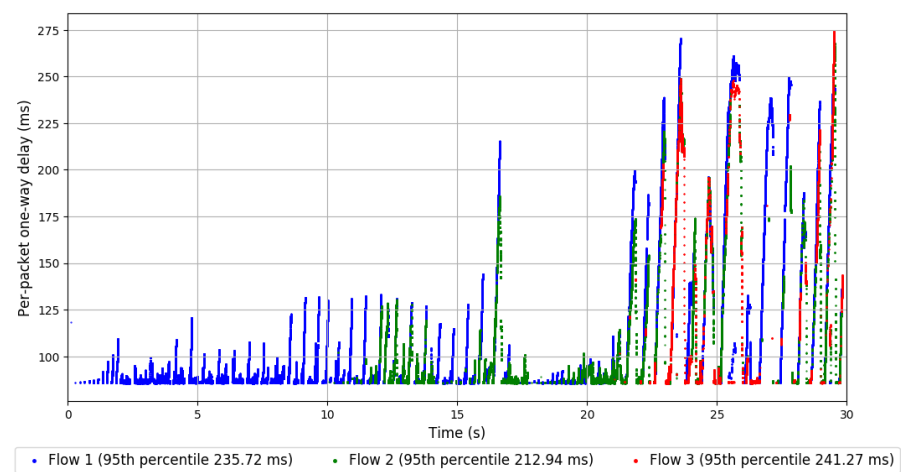
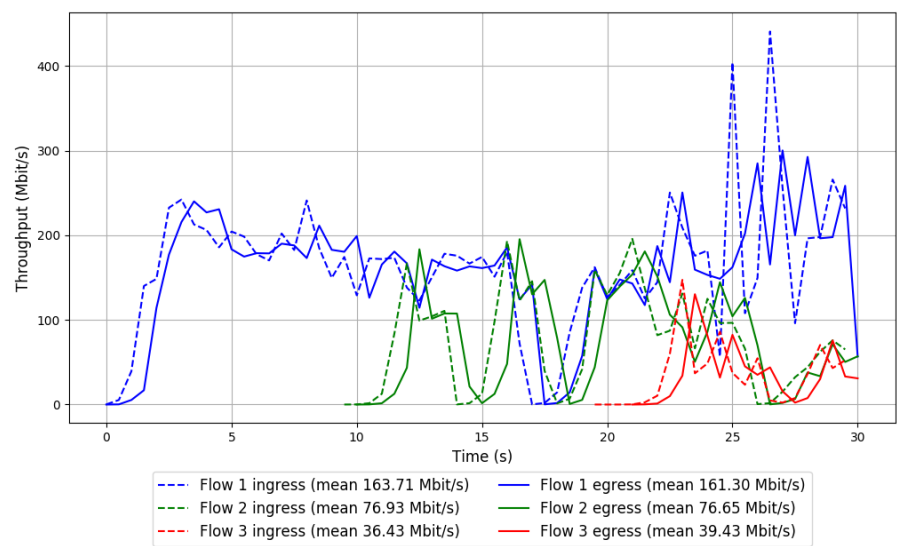


Run 7: Statistics of Verus

Start at: 2018-05-22 15:30:51
End at: 2018-05-22 15:31:21
Local clock offset: -0.175 ms
Remote clock offset: 1.447 ms

Below is generated by plot.py at 2018-05-22 18:22:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 223.91 Mbit/s
95th percentile per-packet one-way delay: 231.057 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 161.30 Mbit/s
95th percentile per-packet one-way delay: 235.719 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 76.65 Mbit/s
95th percentile per-packet one-way delay: 212.940 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 241.273 ms
Loss rate: 4.58%

Run 7: Report of Verus — Data Link

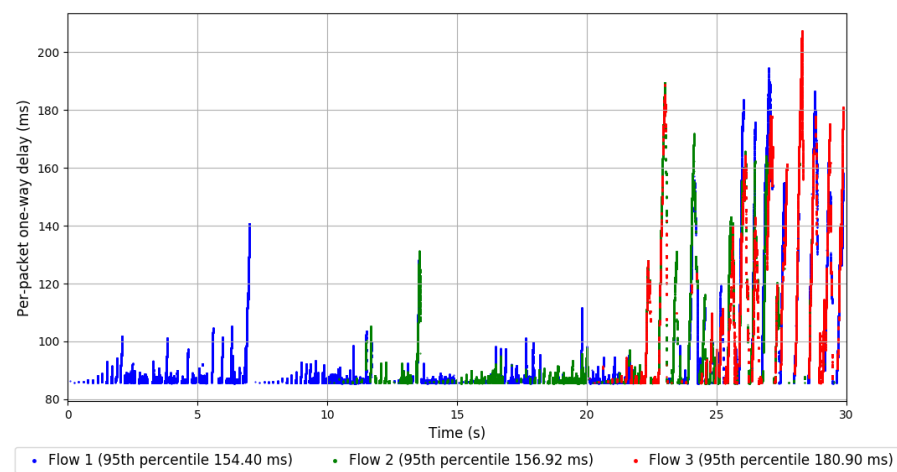
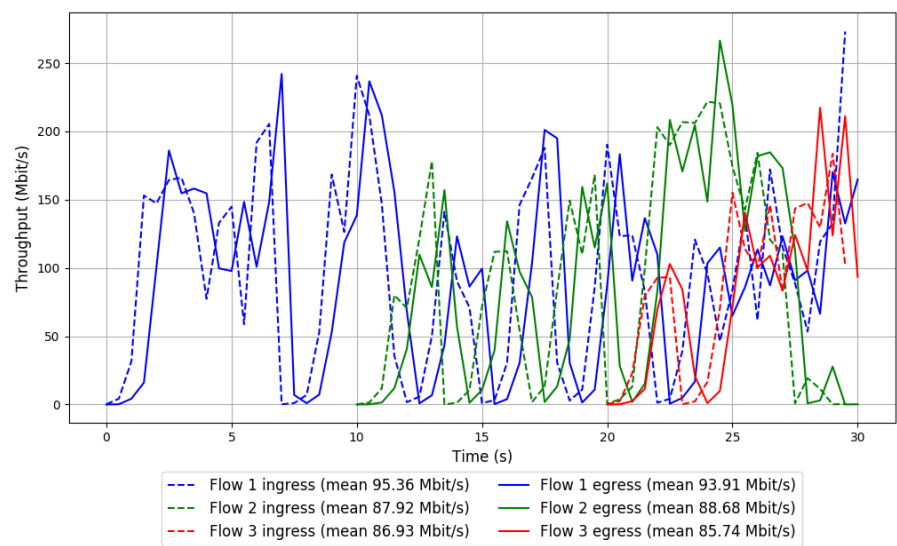


Run 8: Statistics of Verus

Start at: 2018-05-22 15:53:32
End at: 2018-05-22 15:54:02
Local clock offset: -0.263 ms
Remote clock offset: 0.145 ms

Below is generated by plot.py at 2018-05-22 18:23:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 180.51 Mbit/s
95th percentile per-packet one-way delay: 163.950 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 154.403 ms
Loss rate: 1.90%
-- Flow 2:
Average throughput: 88.68 Mbit/s
95th percentile per-packet one-way delay: 156.916 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 180.896 ms
Loss rate: 0.54%

Run 8: Report of Verus — Data Link

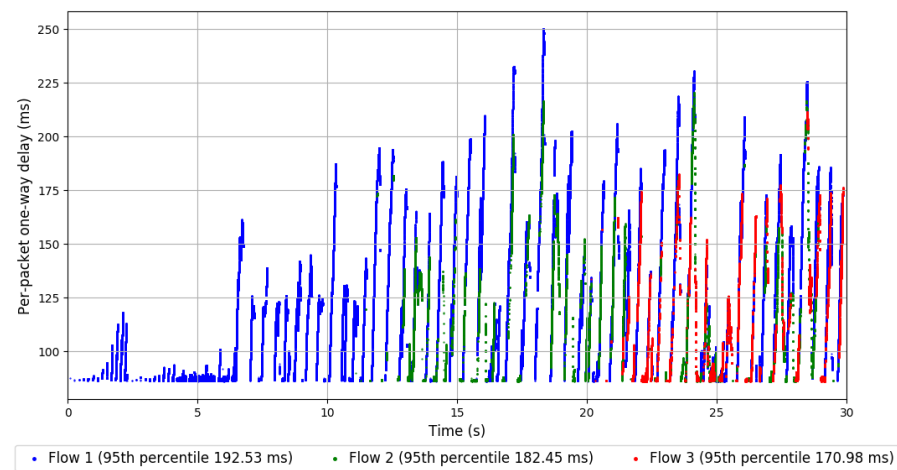
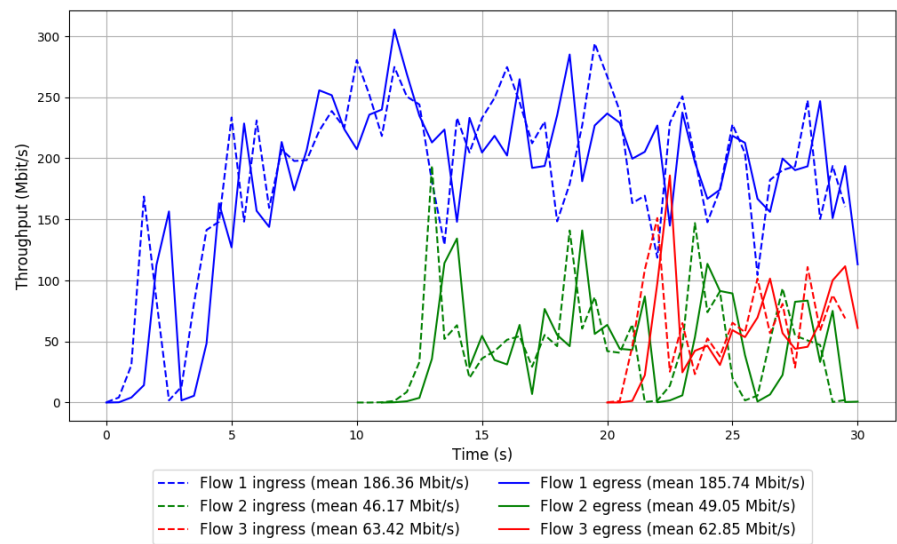


Run 9: Statistics of Verus

Start at: 2018-05-22 16:16:01
End at: 2018-05-22 16:16:31
Local clock offset: 0.138 ms
Remote clock offset: -0.499 ms

Below is generated by plot.py at 2018-05-22 18:24:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 236.84 Mbit/s
95th percentile per-packet one-way delay: 190.842 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 185.74 Mbit/s
95th percentile per-packet one-way delay: 192.535 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 182.452 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 62.85 Mbit/s
95th percentile per-packet one-way delay: 170.977 ms
Loss rate: 0.64%

Run 9: Report of Verus — Data Link

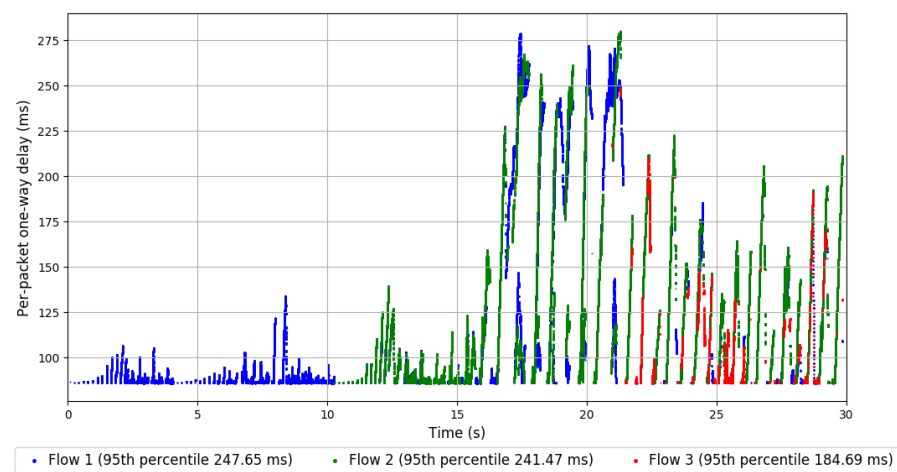
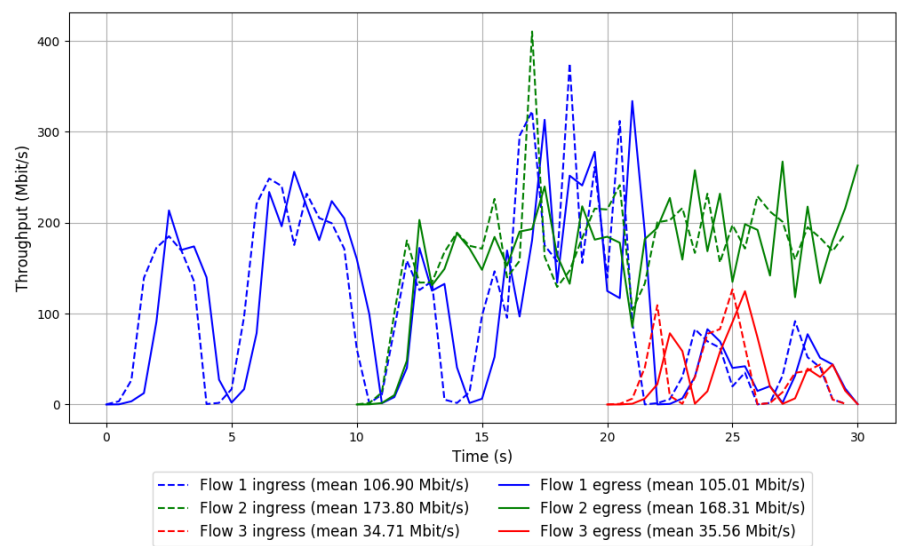


Run 10: Statistics of Verus

Start at: 2018-05-22 16:38:33
End at: 2018-05-22 16:39:03
Local clock offset: 0.069 ms
Remote clock offset: -0.735 ms

Below is generated by plot.py at 2018-05-22 18:25:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 228.17 Mbit/s
95th percentile per-packet one-way delay: 244.647 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 105.01 Mbit/s
95th percentile per-packet one-way delay: 247.653 ms
Loss rate: 2.34%
-- Flow 2:
Average throughput: 168.31 Mbit/s
95th percentile per-packet one-way delay: 241.470 ms
Loss rate: 2.54%
-- Flow 3:
Average throughput: 35.56 Mbit/s
95th percentile per-packet one-way delay: 184.693 ms
Loss rate: 0.09%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-05-22 13:26:56

End at: 2018-05-22 13:27:26

Local clock offset: 3.404 ms

Remote clock offset: 0.824 ms

Below is generated by plot.py at 2018-05-22 18:28:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 369.26 Mbit/s

95th percentile per-packet one-way delay: 92.188 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 194.70 Mbit/s

95th percentile per-packet one-way delay: 91.400 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 192.59 Mbit/s

95th percentile per-packet one-way delay: 92.207 ms

Loss rate: 1.34%

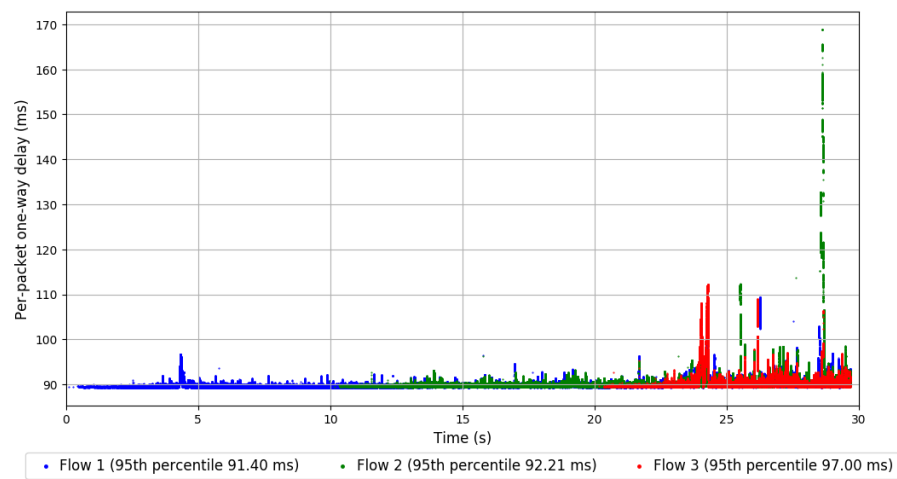
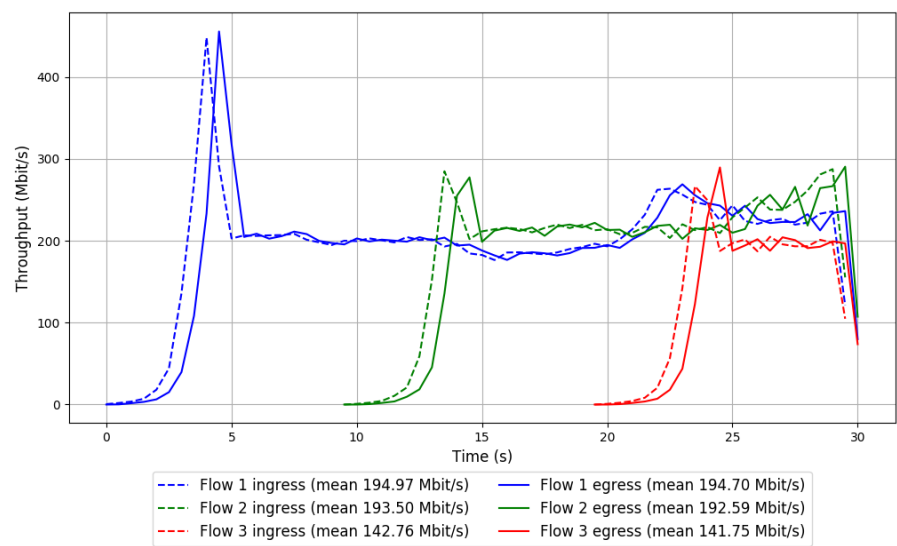
-- Flow 3:

Average throughput: 141.75 Mbit/s

95th percentile per-packet one-way delay: 96.995 ms

Loss rate: 2.45%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-05-22 13:49:34

End at: 2018-05-22 13:50:04

Local clock offset: 3.729 ms

Remote clock offset: 1.005 ms

Below is generated by plot.py at 2018-05-22 18:28:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.20 Mbit/s

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

Loss rate: 0.88%

-- Flow 1:

Average throughput: 174.84 Mbit/s

95th percentile per-packet one-way delay: 91.602 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 166.74 Mbit/s

95th percentile per-packet one-way delay: 92.030 ms

Loss rate: 1.11%

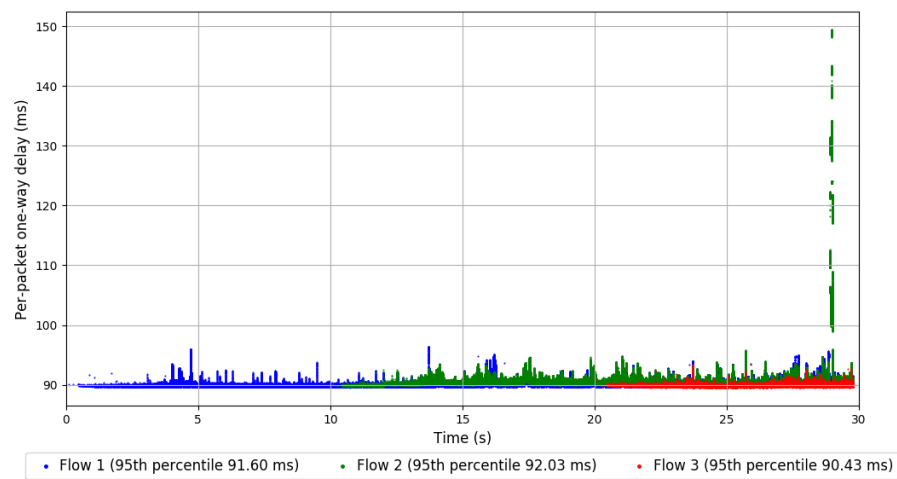
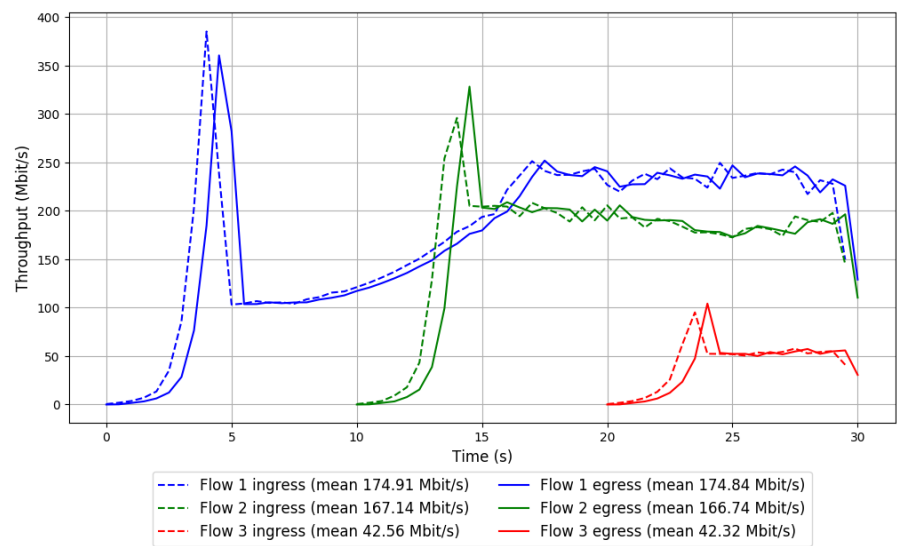
-- Flow 3:

Average throughput: 42.32 Mbit/s

95th percentile per-packet one-way delay: 90.433 ms

Loss rate: 2.34%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-05-22 14:12:06

End at: 2018-05-22 14:12:36

Local clock offset: 3.605 ms

Remote clock offset: 1.102 ms

Below is generated by plot.py at 2018-05-22 18:28:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.58 Mbit/s

95th percentile per-packet one-way delay: 91.864 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 179.84 Mbit/s

95th percentile per-packet one-way delay: 92.603 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 183.29 Mbit/s

95th percentile per-packet one-way delay: 91.071 ms

Loss rate: 0.98%

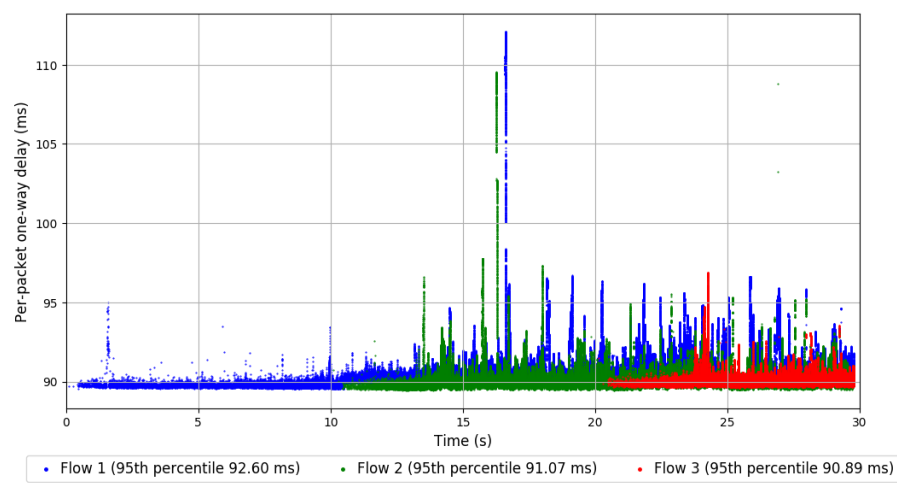
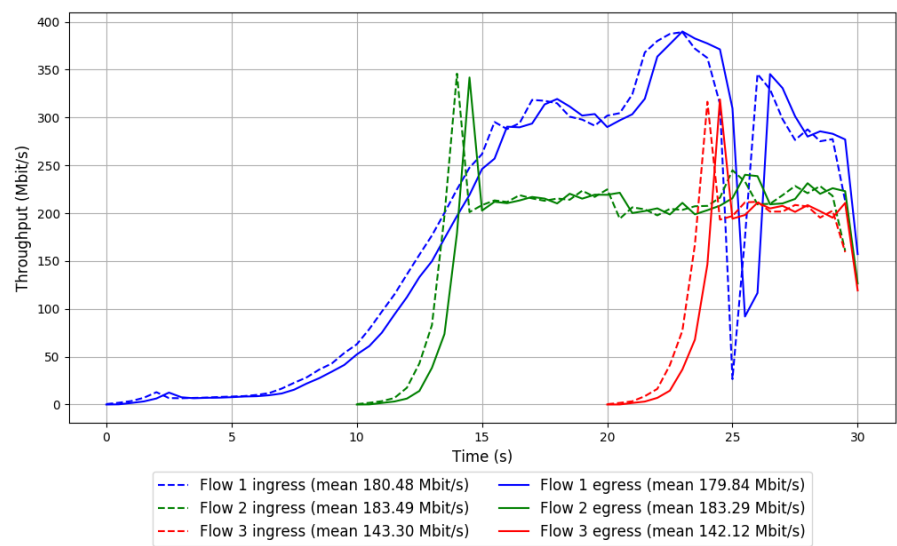
-- Flow 3:

Average throughput: 142.12 Mbit/s

95th percentile per-packet one-way delay: 90.892 ms

Loss rate: 2.58%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-05-22 14:34:37

End at: 2018-05-22 14:35:07

Local clock offset: -0.071 ms

Remote clock offset: 1.2 ms

Below is generated by plot.py at 2018-05-22 18:28:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.50 Mbit/s

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

Loss rate: 1.05%

-- Flow 1:

Average throughput: 239.71 Mbit/s

95th percentile per-packet one-way delay: 87.147 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 130.42 Mbit/s

95th percentile per-packet one-way delay: 86.785 ms

Loss rate: 1.22%

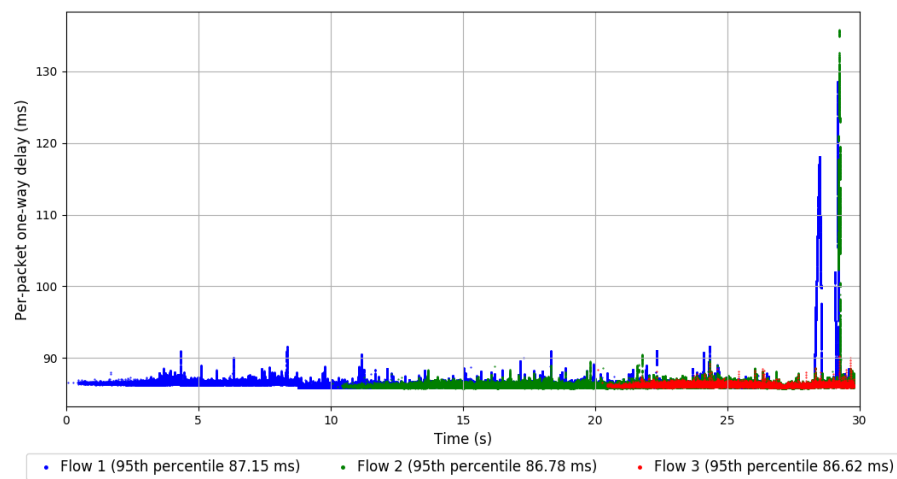
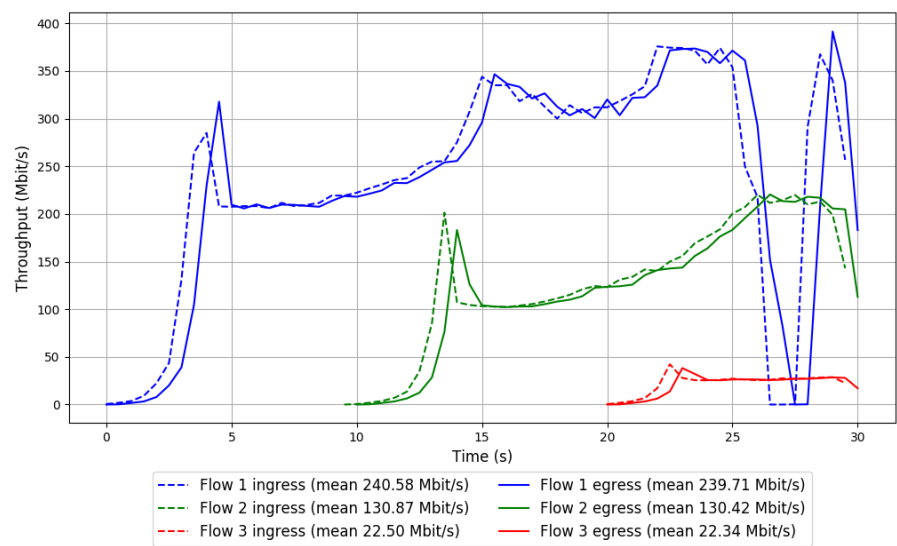
-- Flow 3:

Average throughput: 22.34 Mbit/s

95th percentile per-packet one-way delay: 86.621 ms

Loss rate: 2.47%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-05-22 14:57:13

End at: 2018-05-22 14:57:43

Local clock offset: 1.482 ms

Remote clock offset: 1.324 ms

Below is generated by plot.py at 2018-05-22 18:29:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.77 Mbit/s

95th percentile per-packet one-way delay: 89.410 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 212.15 Mbit/s

95th percentile per-packet one-way delay: 89.233 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 209.63 Mbit/s

95th percentile per-packet one-way delay: 89.660 ms

Loss rate: 1.33%

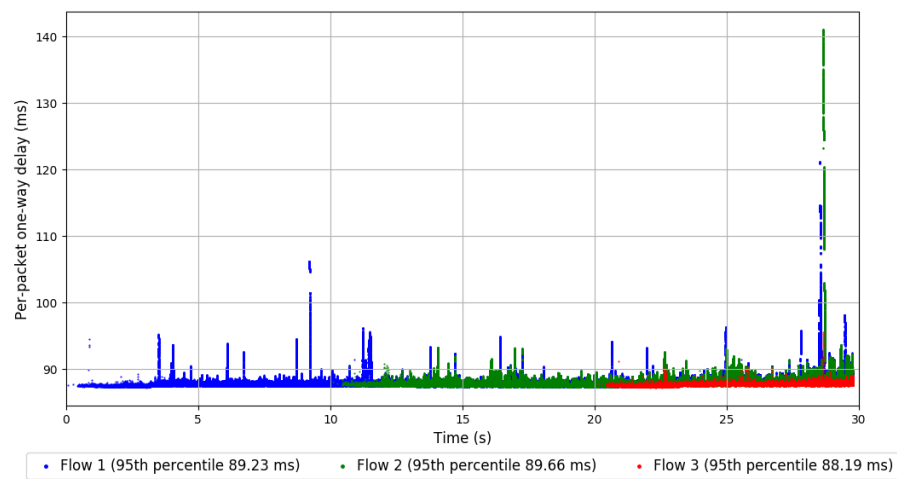
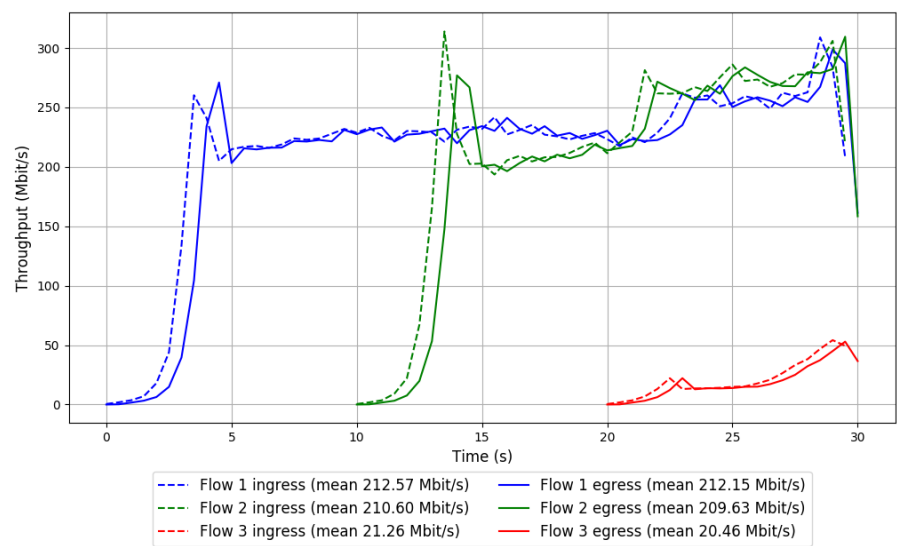
-- Flow 3:

Average throughput: 20.46 Mbit/s

95th percentile per-packet one-way delay: 88.186 ms

Loss rate: 5.48%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-05-22 15:19:22

End at: 2018-05-22 15:19:52

Local clock offset: 0.193 ms

Remote clock offset: 1.428 ms

Below is generated by plot.py at 2018-05-22 18:29:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.85 Mbit/s

95th percentile per-packet one-way delay: 87.710 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 194.55 Mbit/s

95th percentile per-packet one-way delay: 87.482 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 186.01 Mbit/s

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

Loss rate: 1.32%

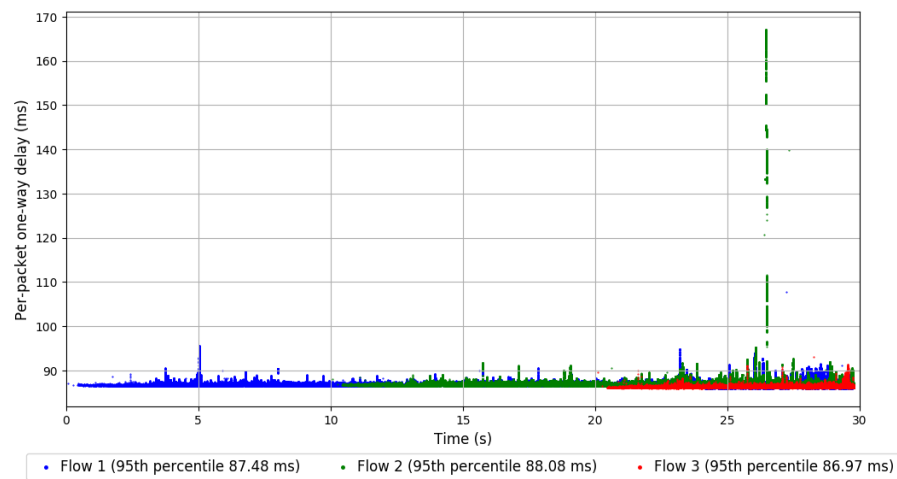
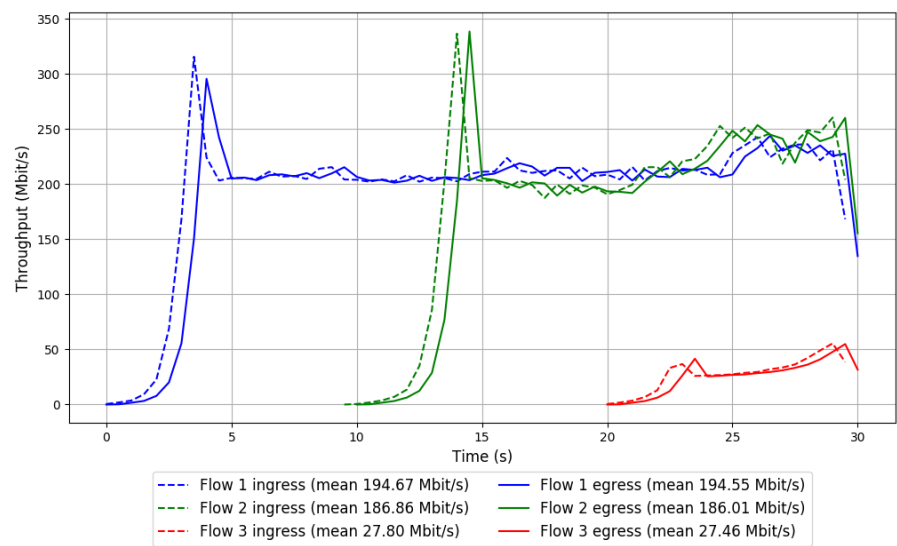
-- Flow 3:

Average throughput: 27.46 Mbit/s

95th percentile per-packet one-way delay: 86.973 ms

Loss rate: 3.02%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-05-22 15:41:59

End at: 2018-05-22 15:42:29

Local clock offset: -0.047 ms

Remote clock offset: 1.305 ms

Below is generated by plot.py at 2018-05-22 18:30:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 381.85 Mbit/s

95th percentile per-packet one-way delay: 102.730 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 235.50 Mbit/s

95th percentile per-packet one-way delay: 96.984 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 153.42 Mbit/s

95th percentile per-packet one-way delay: 111.772 ms

Loss rate: 0.76%

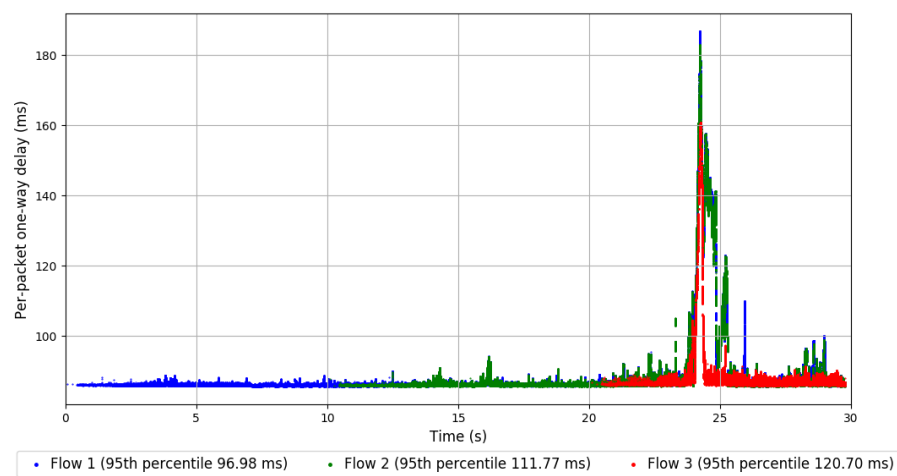
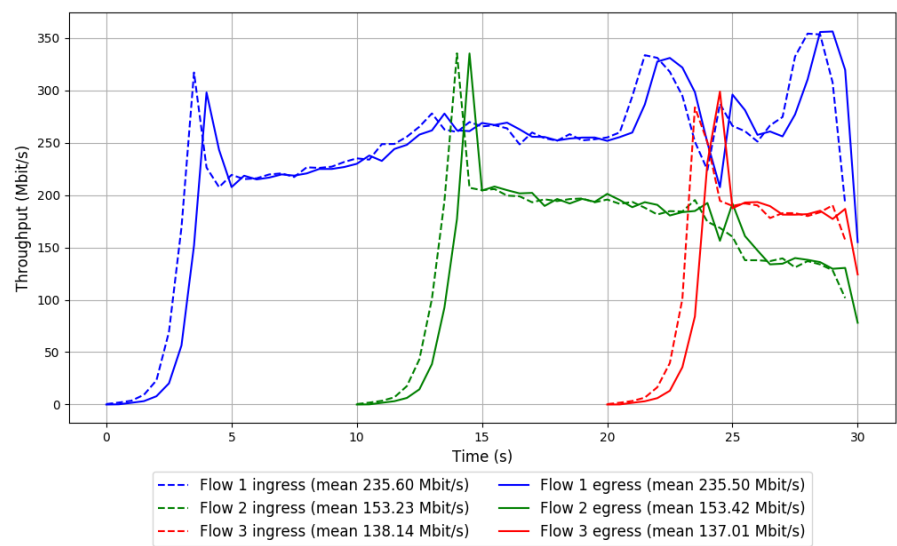
-- Flow 3:

Average throughput: 137.01 Mbit/s

95th percentile per-packet one-way delay: 120.703 ms

Loss rate: 2.56%

Run 7: Report of PCC-Vivace — Data Link

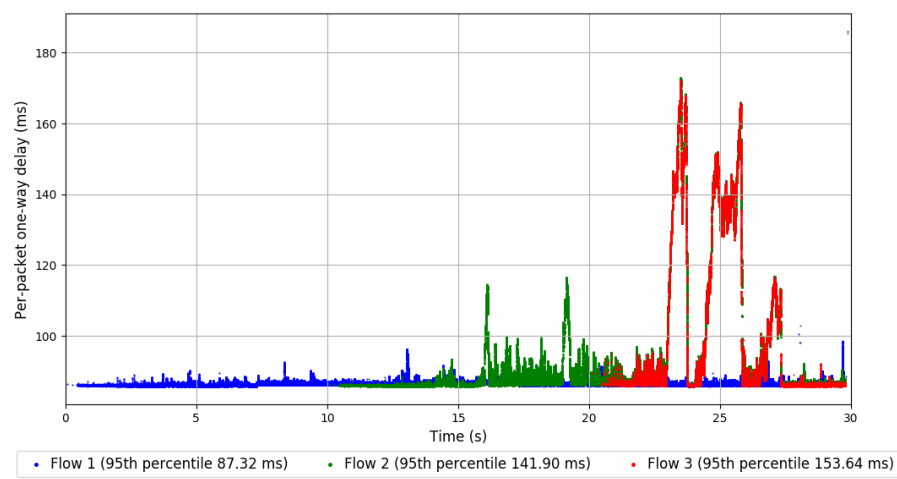
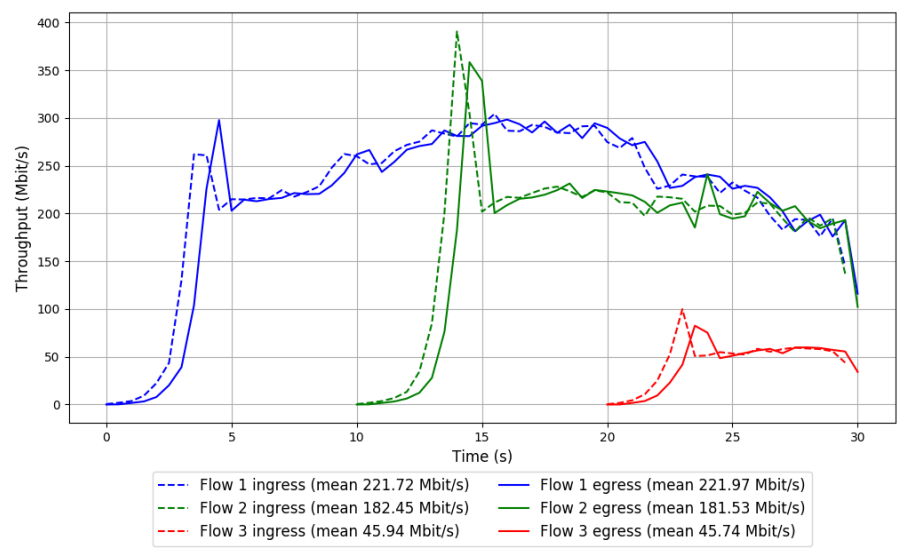


Run 8: Statistics of PCC-Vivace

Start at: 2018-05-22 16:04:39
End at: 2018-05-22 16:05:09
Local clock offset: -0.079 ms
Remote clock offset: -0.248 ms

Below is generated by plot.py at 2018-05-22 18:30:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 356.72 Mbit/s
95th percentile per-packet one-way delay: 115.205 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 221.97 Mbit/s
95th percentile per-packet one-way delay: 87.321 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 181.53 Mbit/s
95th percentile per-packet one-way delay: 141.900 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 45.74 Mbit/s
95th percentile per-packet one-way delay: 153.638 ms
Loss rate: 2.21%

Run 8: Report of PCC-Vivace — Data Link

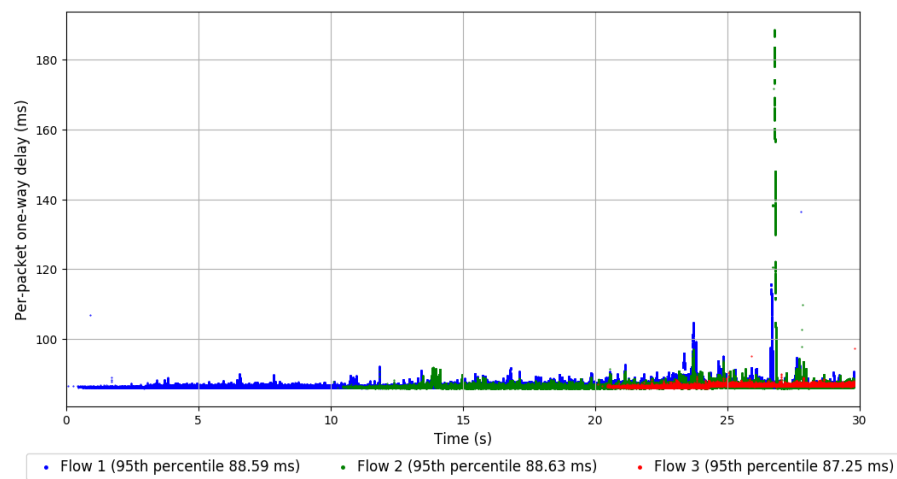
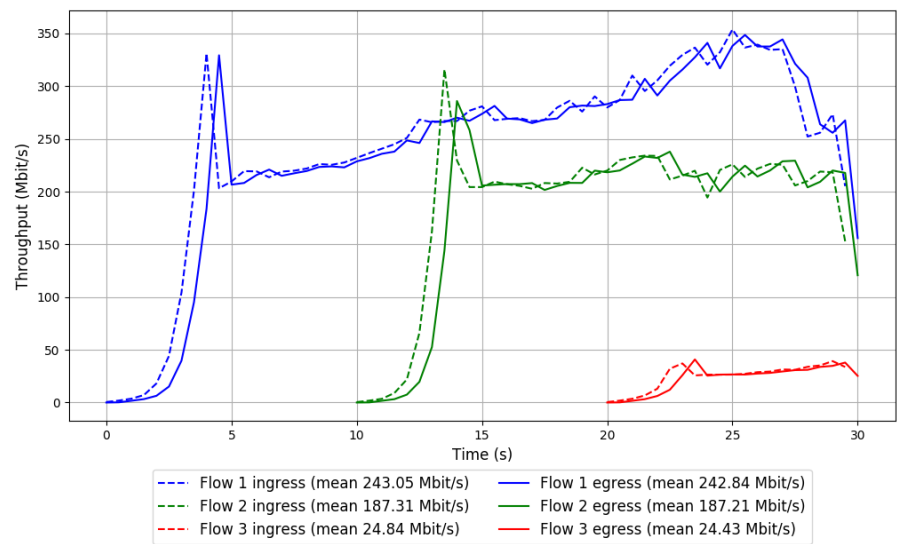


Run 9: Statistics of PCC-Vivace

Start at: 2018-05-22 16:27:12
End at: 2018-05-22 16:27:42
Local clock offset: 0.022 ms
Remote clock offset: -0.661 ms

Below is generated by plot.py at 2018-05-22 18:30:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 374.75 Mbit/s
95th percentile per-packet one-way delay: 88.566 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 242.84 Mbit/s
95th percentile per-packet one-way delay: 88.591 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 187.21 Mbit/s
95th percentile per-packet one-way delay: 88.628 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 24.43 Mbit/s
95th percentile per-packet one-way delay: 87.248 ms
Loss rate: 3.26%

Run 9: Report of PCC-Vivace — Data Link

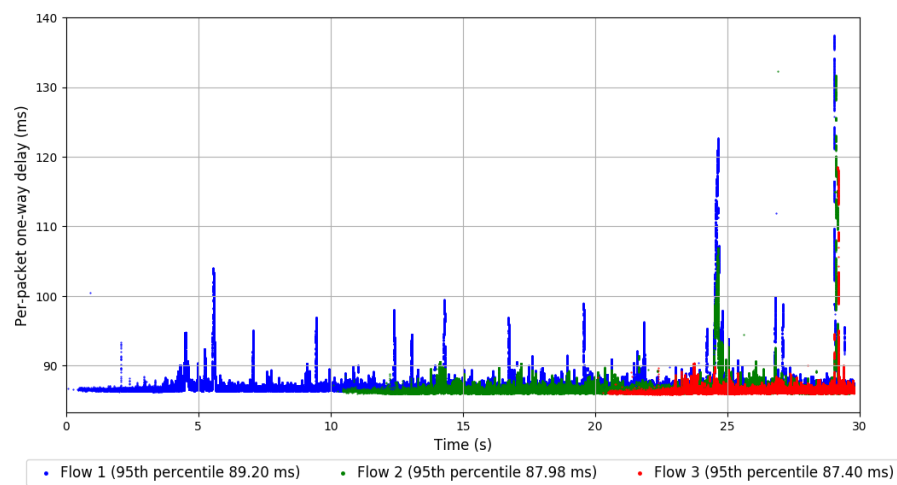
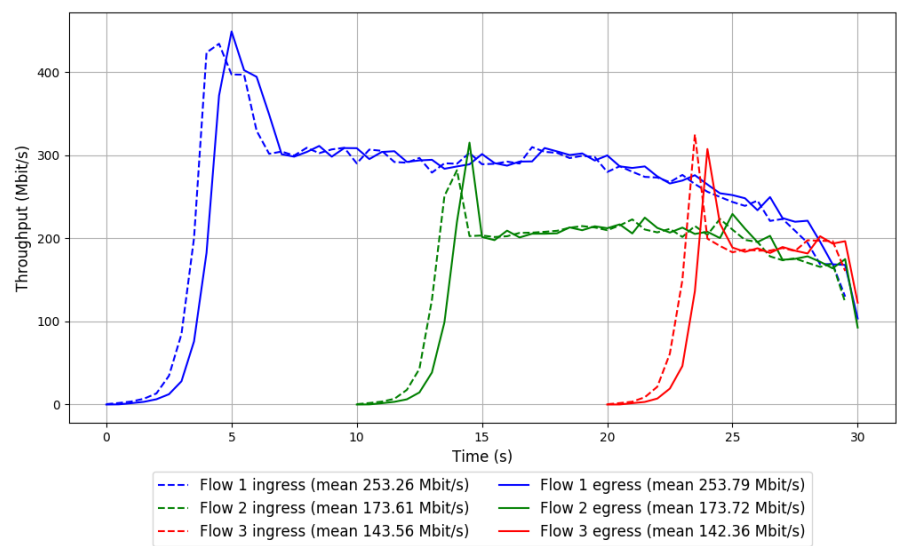


Run 10: Statistics of PCC-Vivace

Start at: 2018-05-22 16:49:51
End at: 2018-05-22 16:50:21
Local clock offset: 0.044 ms
Remote clock offset: -0.814 ms

Below is generated by plot.py at 2018-05-22 18:31:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 415.32 Mbit/s
95th percentile per-packet one-way delay: 88.642 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 253.79 Mbit/s
95th percentile per-packet one-way delay: 89.198 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 173.72 Mbit/s
95th percentile per-packet one-way delay: 87.984 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 142.36 Mbit/s
95th percentile per-packet one-way delay: 87.396 ms
Loss rate: 2.59%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-05-22 13:11:20

End at: 2018-05-22 13:11:50

Local clock offset: 3.053 ms

Remote clock offset: 0.697 ms

Below is generated by plot.py at 2018-05-22 18:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 90.557 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.542 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 91.062 ms

Loss rate: 0.00%

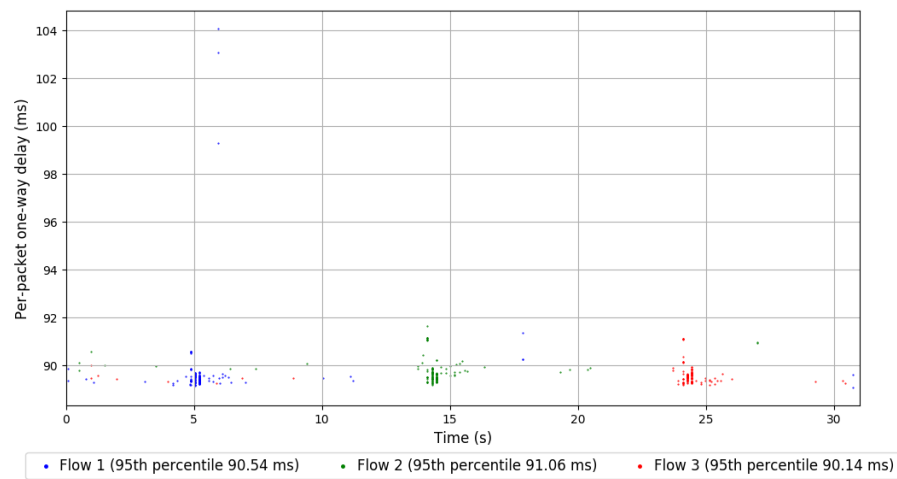
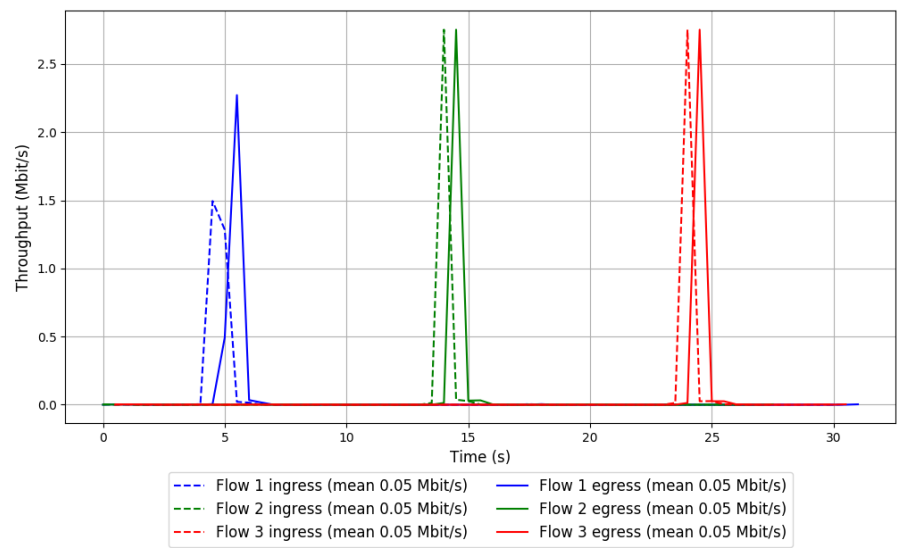
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.143 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-05-22 13:33:51

End at: 2018-05-22 13:34:21

Local clock offset: 3.48 ms

Remote clock offset: 0.877 ms

Below is generated by plot.py at 2018-05-22 18:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 91.078 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.480 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 92.095 ms

Loss rate: 0.00%

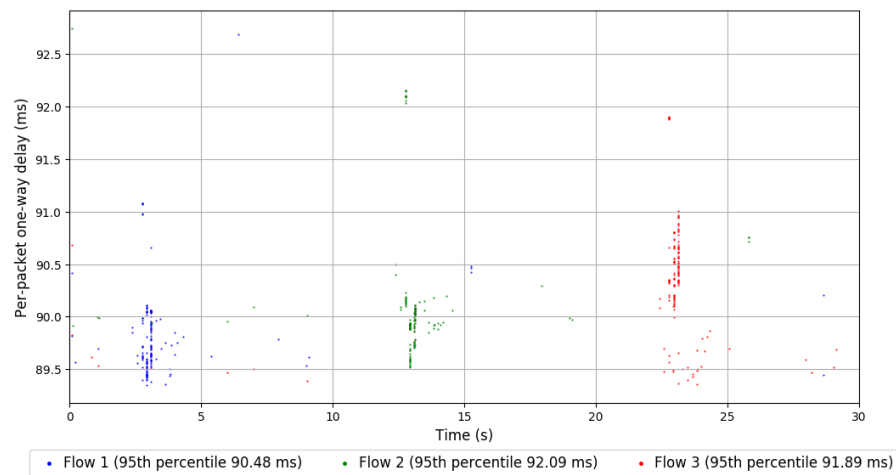
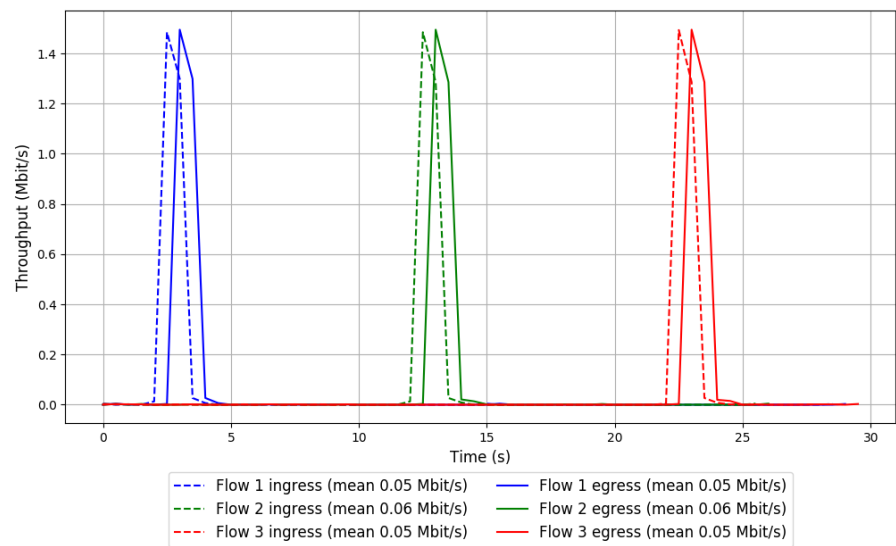
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 91.885 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-05-22 13:56:26

End at: 2018-05-22 13:56:56

Local clock offset: 3.673 ms

Remote clock offset: 1.028 ms

Below is generated by plot.py at 2018-05-22 18:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 90.841 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.769 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.779 ms

Loss rate: 0.00%

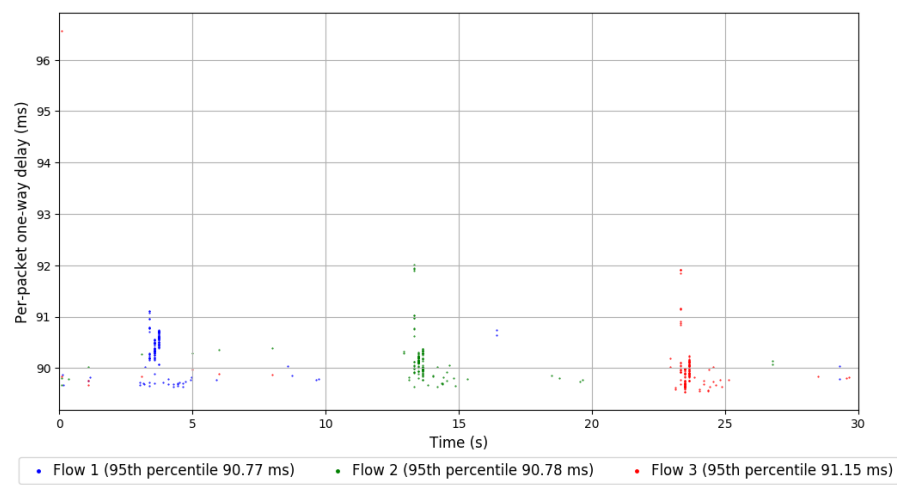
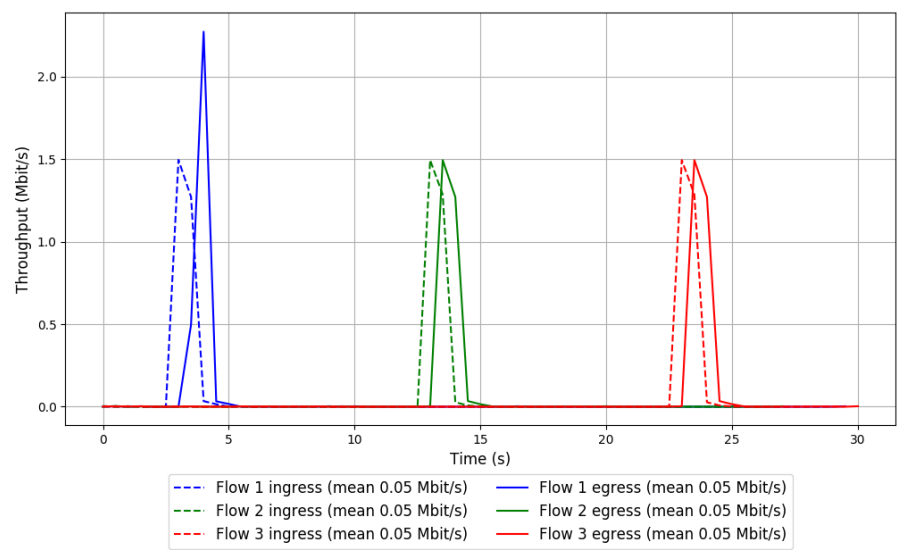
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 91.146 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-05-22 14:19:04

End at: 2018-05-22 14:19:34

Local clock offset: 3.878 ms

Remote clock offset: 1.137 ms

Below is generated by plot.py at 2018-05-22 18:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 91.245 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.819 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 91.585 ms

Loss rate: 0.00%

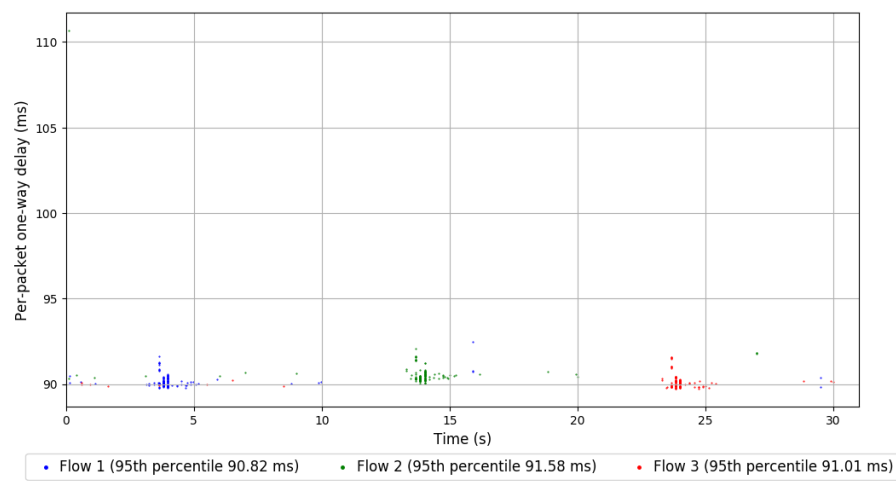
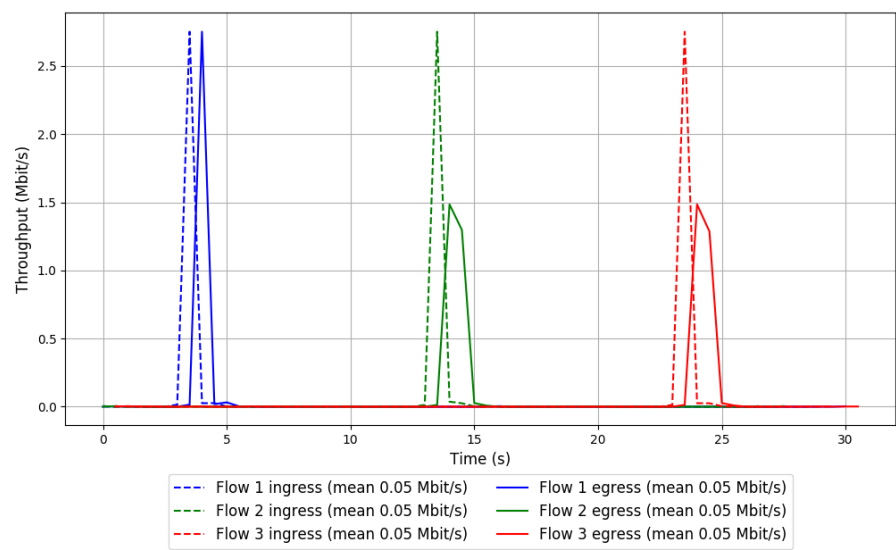
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 91.007 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-05-22 14:41:30

End at: 2018-05-22 14:42:00

Local clock offset: 3.506 ms

Remote clock offset: 1.207 ms

Below is generated by plot.py at 2018-05-22 18:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 90.927 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.941 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.732 ms

Loss rate: 0.00%

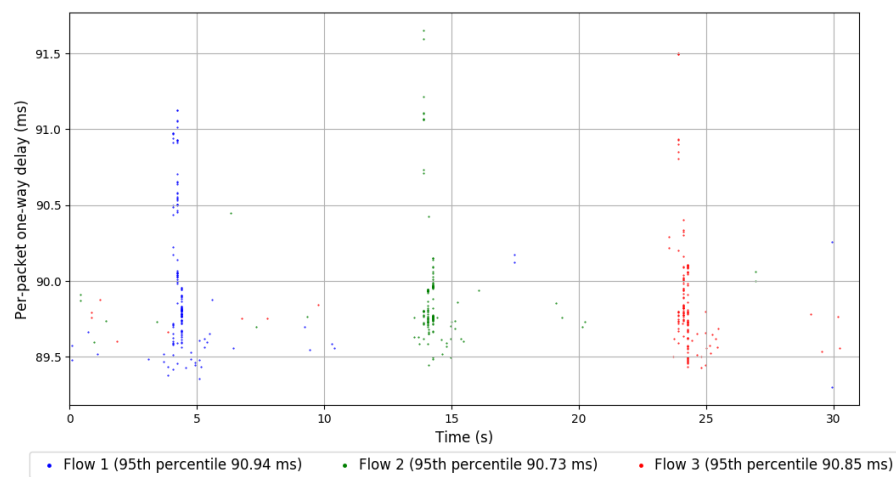
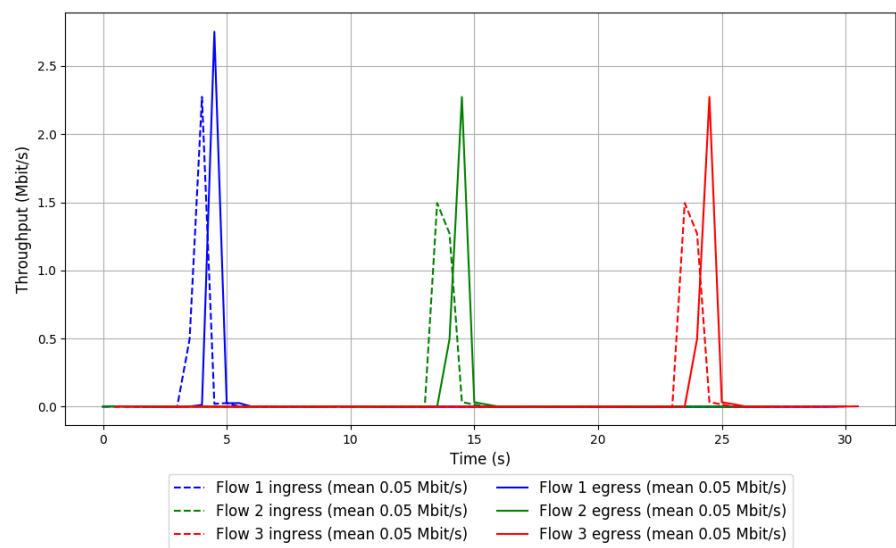
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.849 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-05-22 15:04:07

End at: 2018-05-22 15:04:37

Local clock offset: 3.543 ms

Remote clock offset: 1.401 ms

Below is generated by plot.py at 2018-05-22 18:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 90.778 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.760 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.345 ms

Loss rate: 0.00%

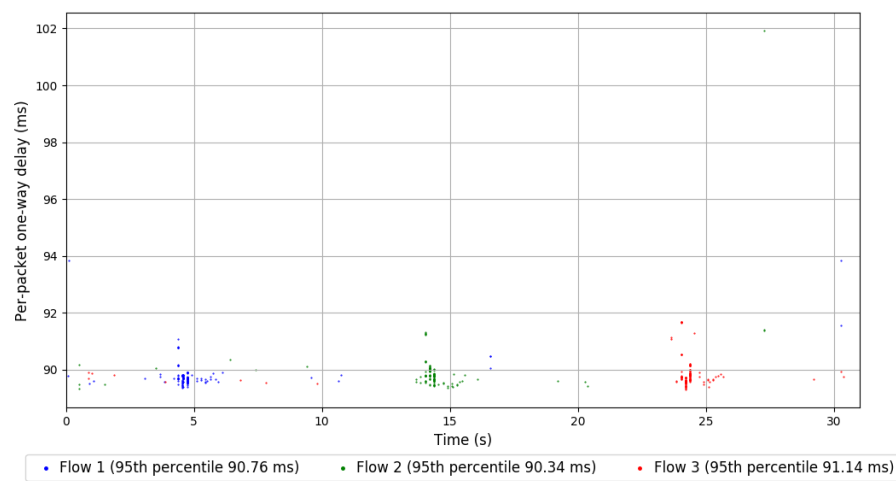
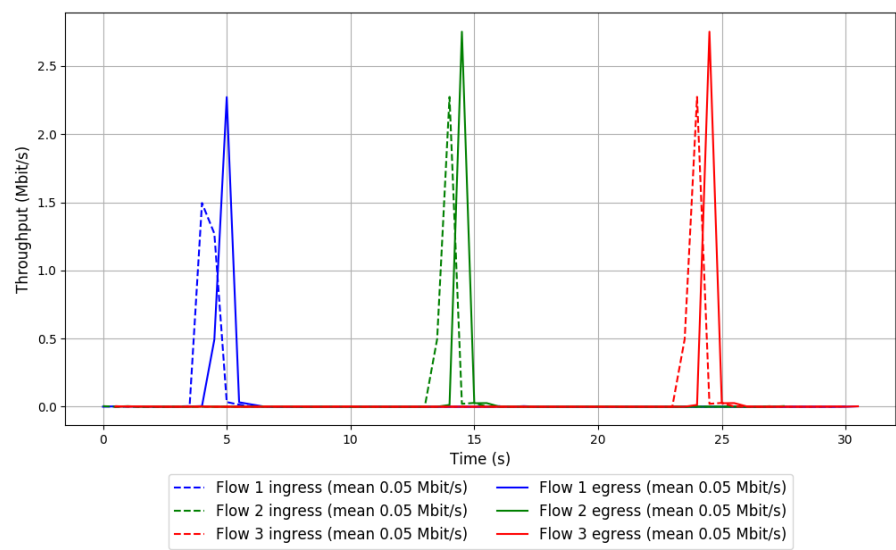
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 91.143 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-05-22 15:26:19

End at: 2018-05-22 15:26:49

Local clock offset: 3.49 ms

Remote clock offset: 1.438 ms

Below is generated by plot.py at 2018-05-22 18:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 93.715 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 91.029 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 90.503 ms

Loss rate: 0.00%

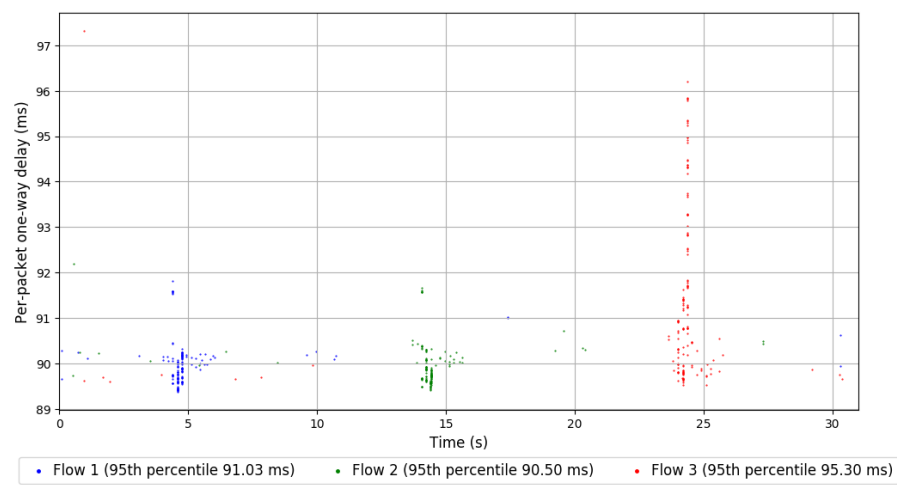
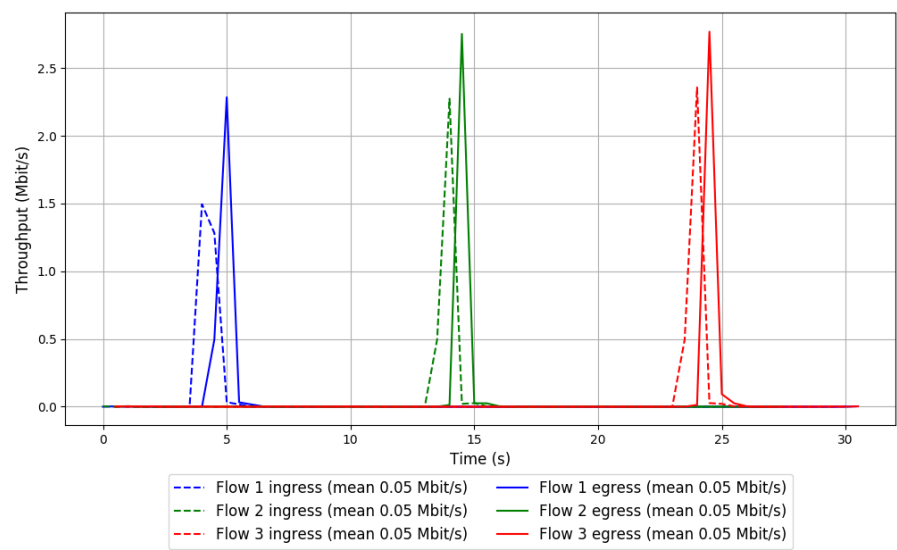
-- Flow 3:

Average throughput: 0.05 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-05-22 15:48:58

End at: 2018-05-22 15:49:28

Local clock offset: -0.348 ms

Remote clock offset: 0.441 ms

Below is generated by plot.py at 2018-05-22 18:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 86.584 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.650 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.369 ms

Loss rate: 0.00%

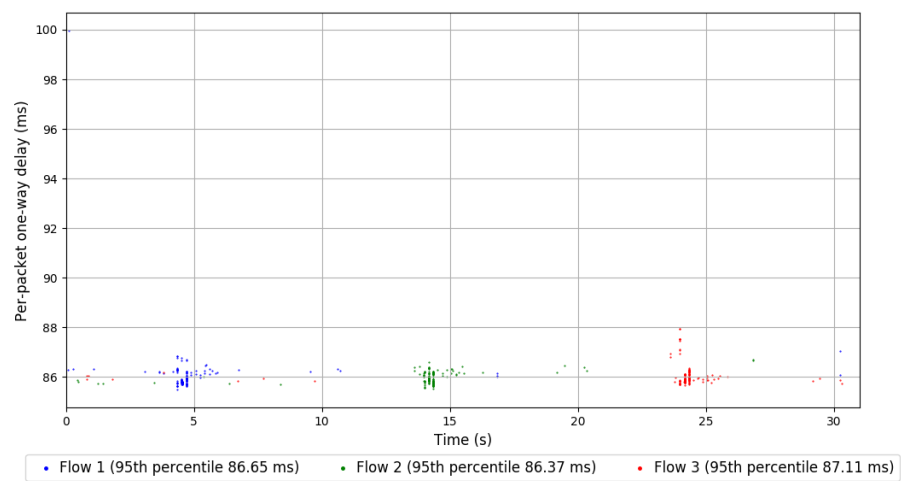
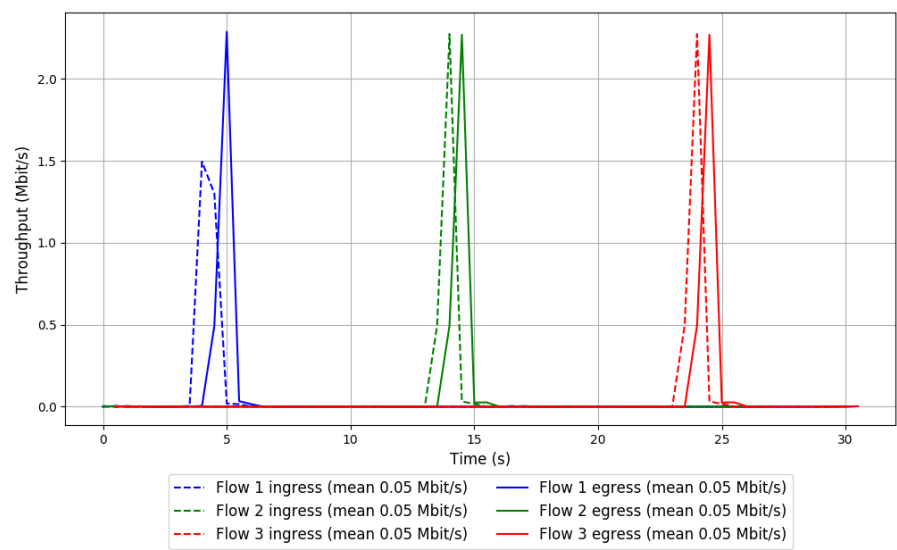
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 87.115 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link

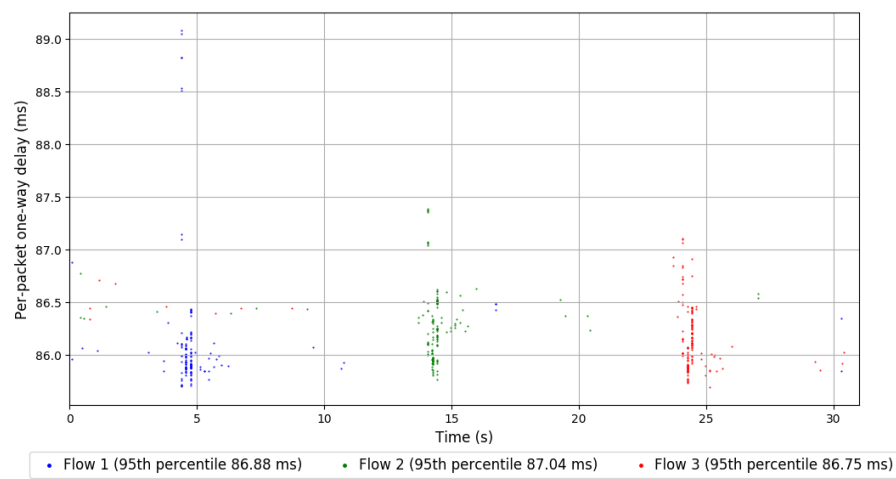
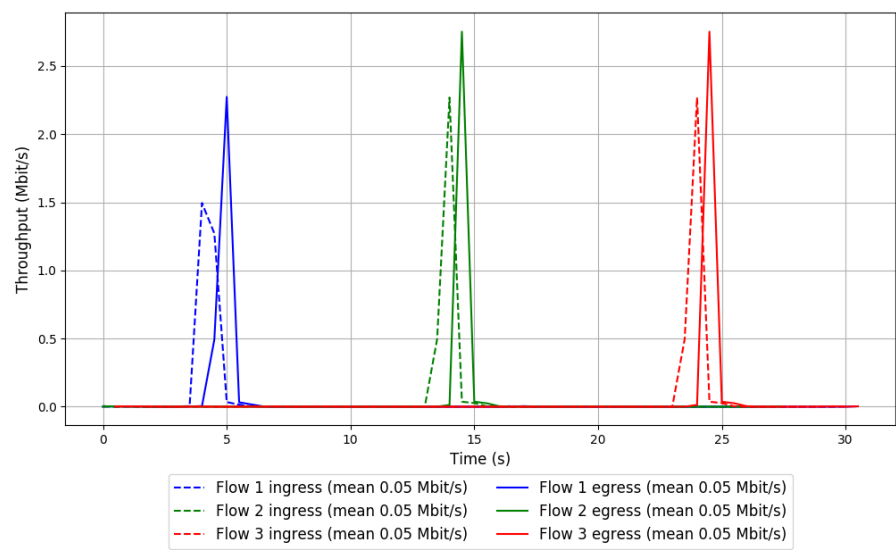


Run 9: Statistics of WebRTC media

Start at: 2018-05-22 16:11:35
End at: 2018-05-22 16:12:05
Local clock offset: -0.139 ms
Remote clock offset: -0.463 ms

Below is generated by plot.py at 2018-05-22 18:31:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.847 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.877 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.044 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.755 ms
Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-05-22 16:34:09
End at: 2018-05-22 16:34:39
Local clock offset: -0.215 ms
Remote clock offset: -0.626 ms

Below is generated by plot.py at 2018-05-22 18:31:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.546 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.419 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.703 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.546 ms
Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

