

Pantheon Report

Generated at 2018-05-30 15:27:28 (UTC).

Data path: AWS Korea Ethernet (*local*) → China ppp0 ppp0 (*remote*).

Repeated the test of 16 congestion control schemes 3 times.

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

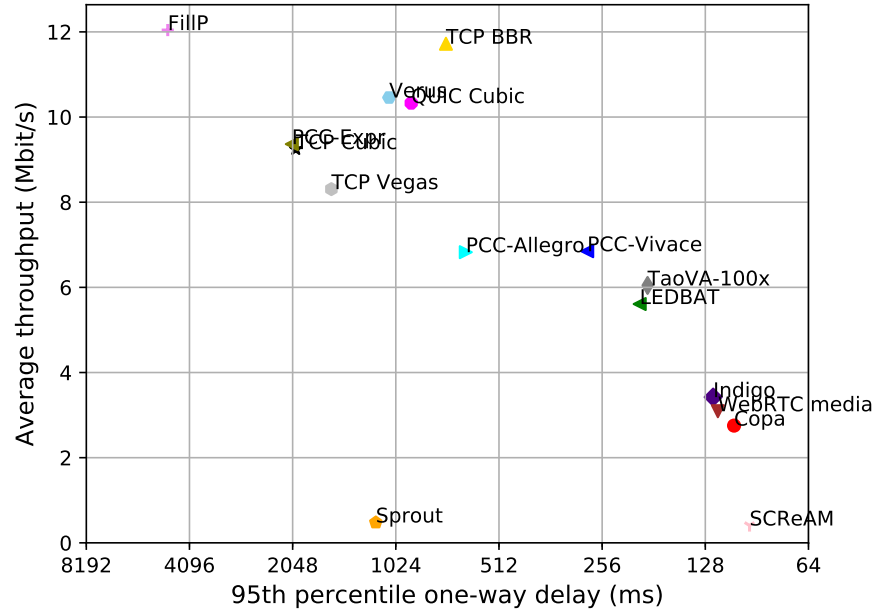
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

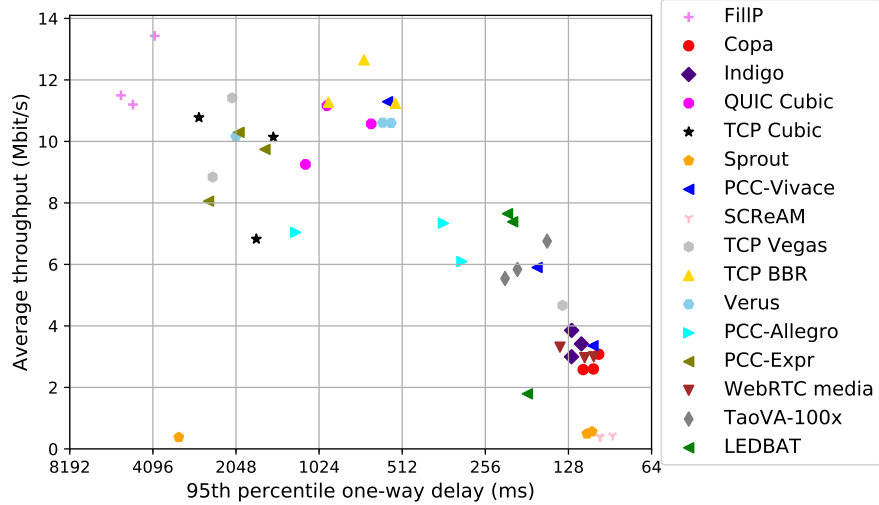
Git summary:

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

test from AWS Korea to China ppp0, 3 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS Korea to China ppp0, 3 runs of 30s each per scheme
3 flows with 10s interval between flows



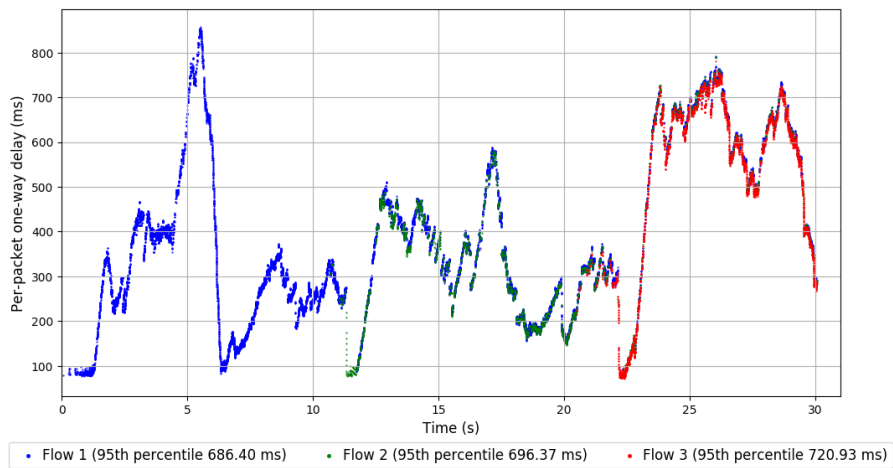
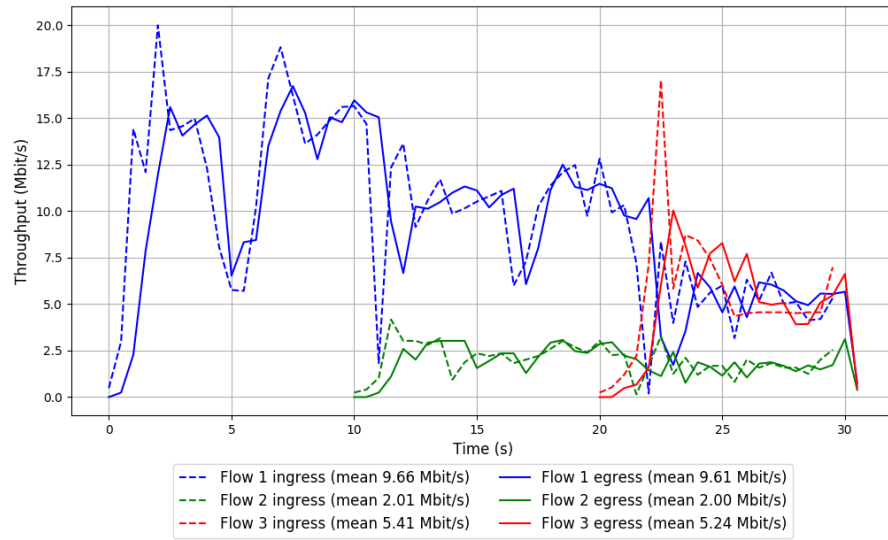
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	8.89	2.02	4.59	606.30	750.38	792.76	0.42	1.13	2.99
Copa	3	1.46	1.20	1.51	100.85	106.60	108.33	0.10	0.24	0.36
TCP Cubic	3	6.63	3.79	0.37	1784.41	3595.77	1716.42	2.88	19.29	26.13
FillP	3	11.53	0.97	0.00	4740.54	4282.38	4247.59	43.40	67.39	96.26
Indigo	3	1.63	1.91	1.67	115.86	121.88	140.25	0.05	0.46	0.03
LEDBAT	3	3.40	2.85	0.97	155.98	201.71	752.77	0.22	0.67	1.33
PCC-Allegro	3	2.78	4.29	3.62	457.67	671.25	490.38	0.09	1.12	2.21
PCC-Expr	3	5.11	4.26	4.44	1993.23	2023.88	2245.81	7.92	9.02	23.70
QUIC Cubic	3	8.18	2.70	1.19	905.06	945.58	984.61	2.36	4.35	11.98
SCReAM	3	0.19	0.22	0.22	91.90	91.57	99.13	0.14	0.06	0.30
Sprout	3	0.20	0.28	0.29	870.95	1129.27	1493.91	0.01	0.30	0.03
TaoVA-100x	3	3.11	2.86	3.12	161.23	182.70	229.96	0.11	0.15	0.24
TCP Vegas	3	3.68	6.45	1.19	1241.96	1662.67	1188.42	1.08	3.94	25.37
Verus	3	6.12	4.52	4.19	749.47	768.47	1332.54	0.76	1.95	20.91
PCC-Vivace	3	4.88	2.18	1.59	287.51	261.22	275.39	0.19	0.36	0.57
WebRTC media	3	1.74	1.18	0.19	113.37	117.80	147.72	0.05	0.34	0.29

Run 1: Statistics of TCP BBR

Start at: 2018-05-30 14:33:05
End at: 2018-05-30 14:33:35
Local clock offset: 6.025 ms
Remote clock offset: 52.083 ms

Below is generated by plot.py at 2018-05-30 15:26:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.65 Mbit/s
95th percentile per-packet one-way delay: 704.132 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 686.403 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 696.367 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 720.926 ms
Loss rate: 4.14%

Run 1: Report of TCP BBR — Data Link

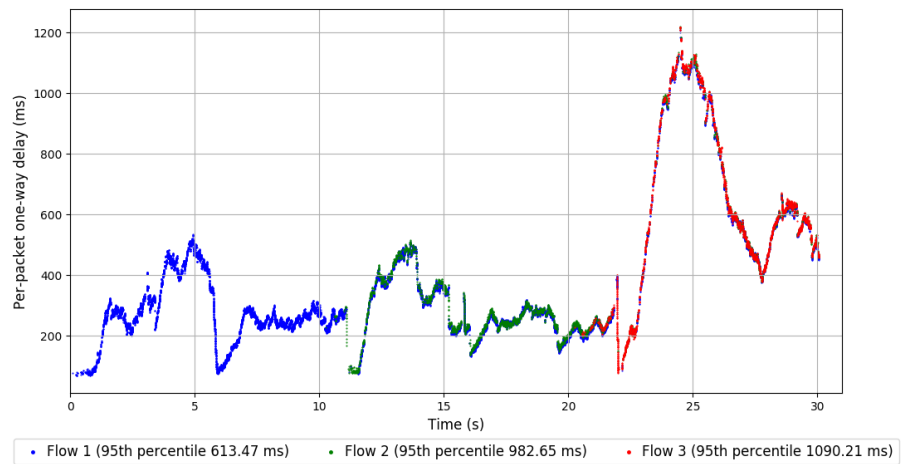
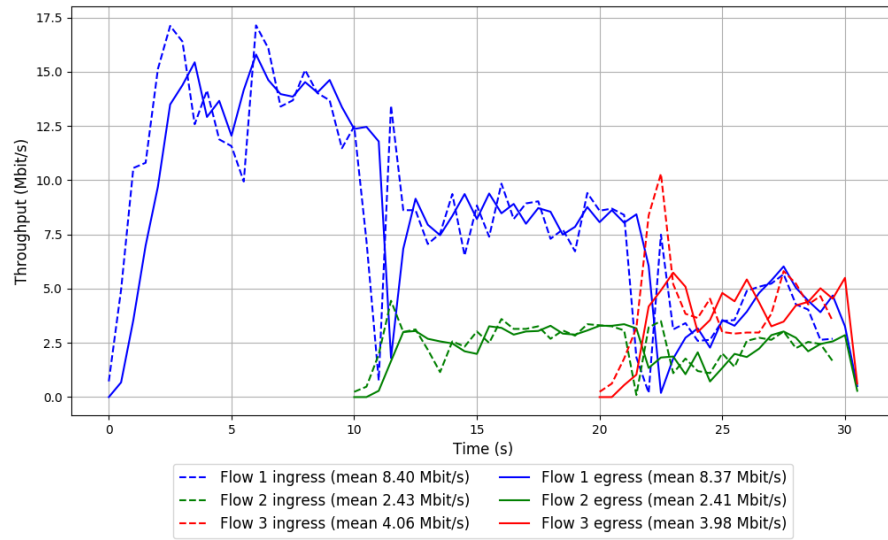


Run 2: Statistics of TCP BBR

Start at: 2018-05-30 14:54:02
End at: 2018-05-30 14:54:32
Local clock offset: 6.914 ms
Remote clock offset: 47.015 ms

Below is generated by plot.py at 2018-05-30 15:26:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.27 Mbit/s
95th percentile per-packet one-way delay: 947.264 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 613.470 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 982.652 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 1090.213 ms
Loss rate: 3.50%

Run 2: Report of TCP BBR — Data Link

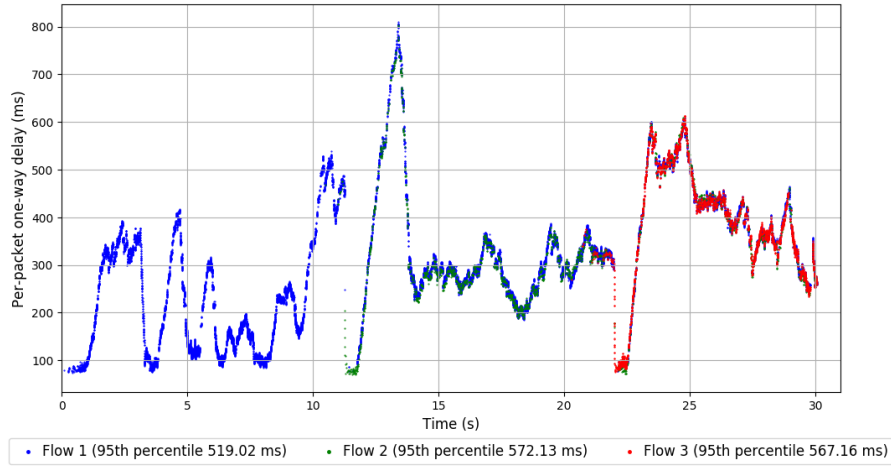
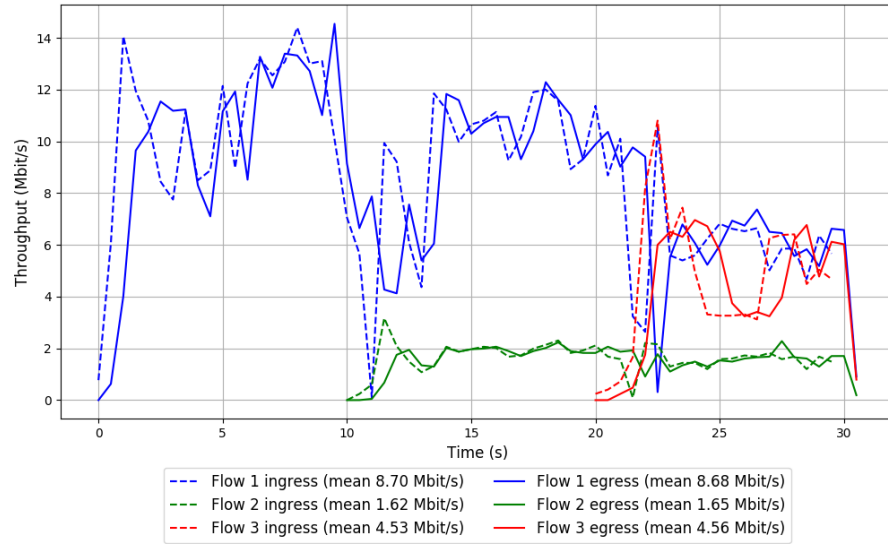


Run 3: Statistics of TCP BBR

Start at: 2018-05-30 15:15:04
End at: 2018-05-30 15:15:34
Local clock offset: 7.649 ms
Remote clock offset: 47.875 ms

Below is generated by plot.py at 2018-05-30 15:26:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.24 Mbit/s
95th percentile per-packet one-way delay: 542.021 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 519.017 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 572.126 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 567.156 ms
Loss rate: 1.33%

Run 3: Report of TCP BBR — Data Link

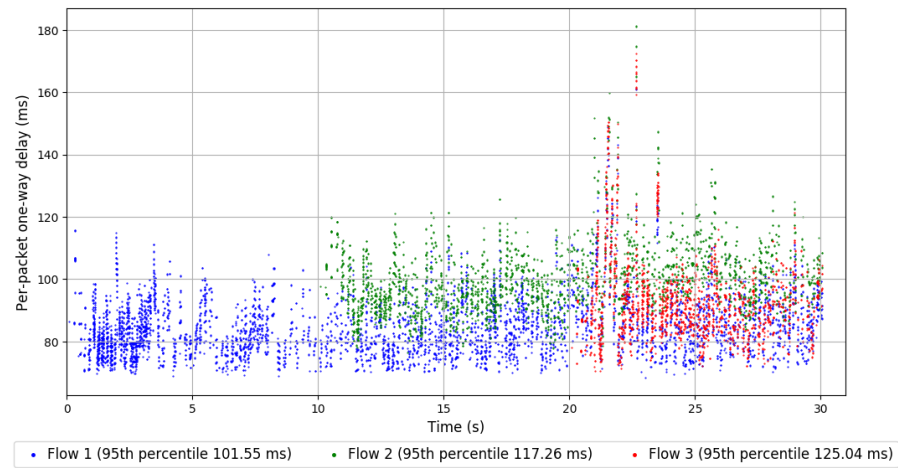
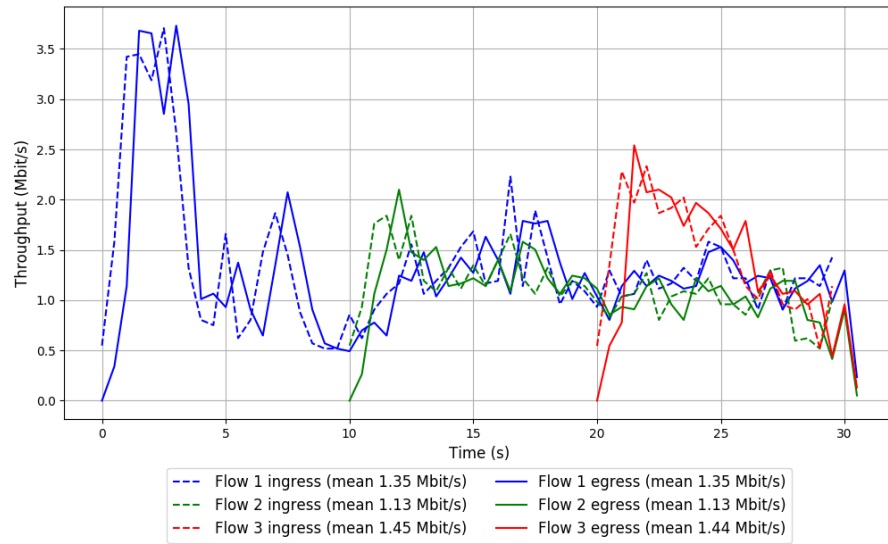


Run 1: Statistics of Copa

Start at: 2018-05-30 14:38:19
End at: 2018-05-30 14:38:49
Local clock offset: 5.997 ms
Remote clock offset: 49.295 ms

Below is generated by plot.py at 2018-05-30 15:26:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 113.227 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 101.553 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 117.261 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 125.043 ms
Loss rate: 0.62%

Run 1: Report of Copa — Data Link

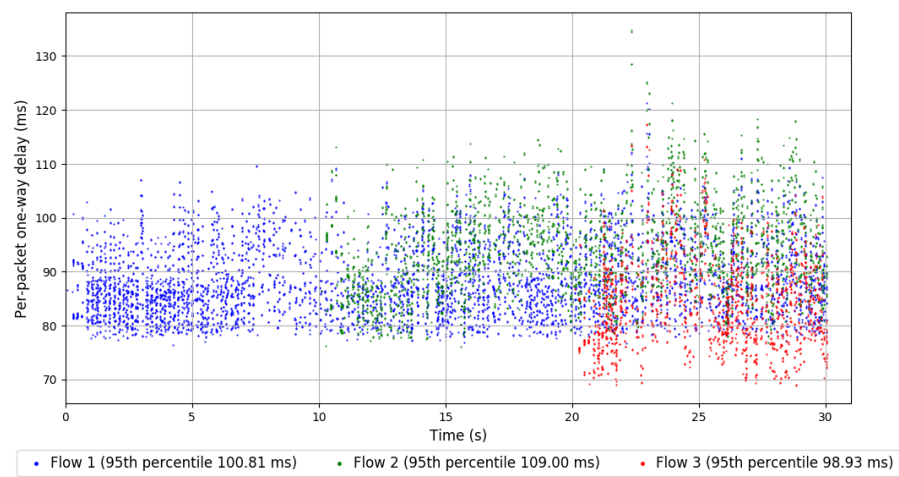
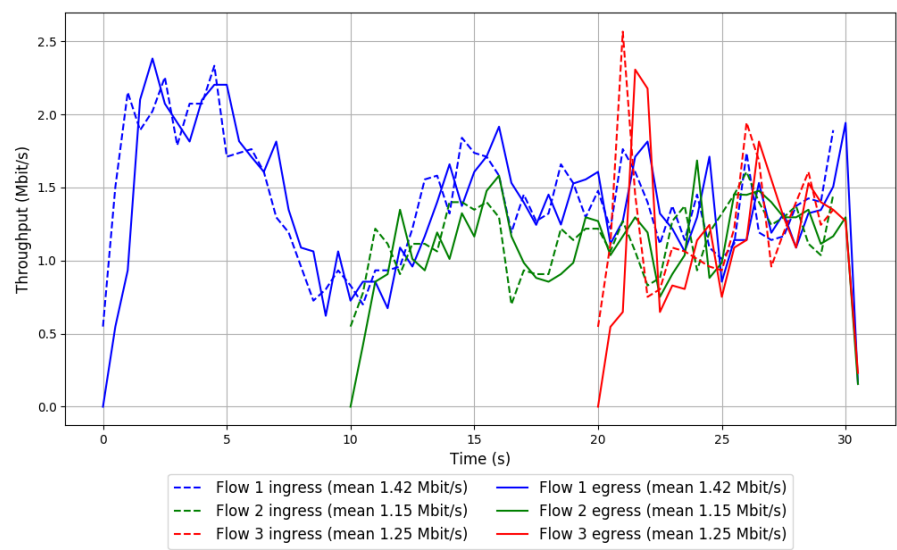


Run 2: Statistics of Copa

Start at: 2018-05-30 14:59:20
End at: 2018-05-30 14:59:50
Local clock offset: 7.475 ms
Remote clock offset: 46.935 ms

Below is generated by plot.py at 2018-05-30 15:26:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 103.942 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 100.812 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 109.000 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 98.928 ms
Loss rate: 0.11%

Run 2: Report of Copa — Data Link

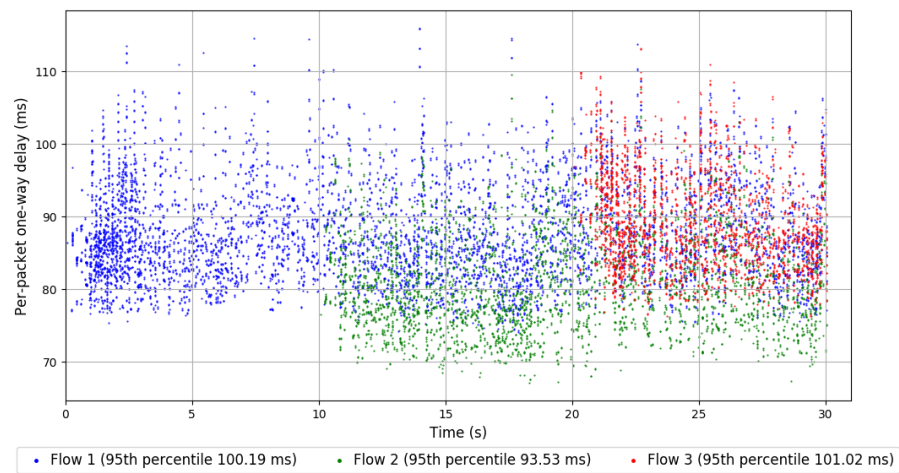
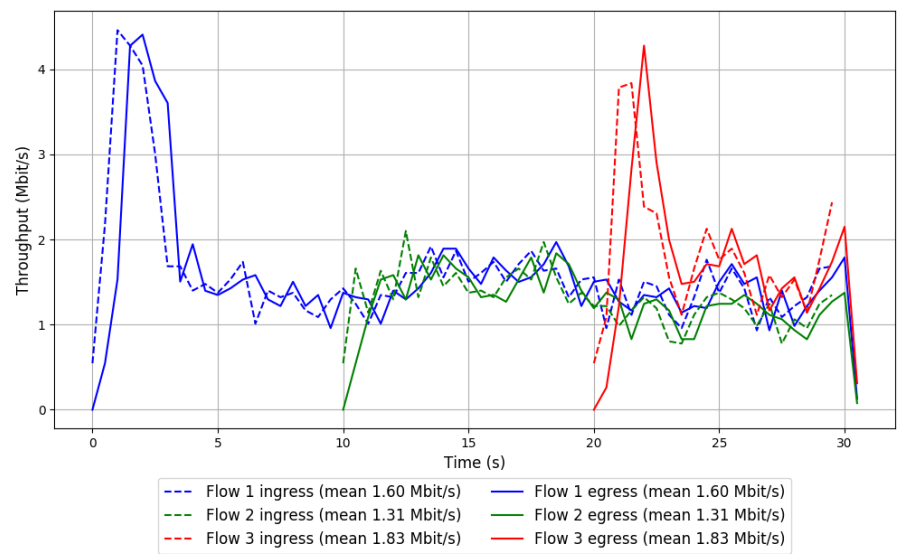


Run 3: Statistics of Copa

Start at: 2018-05-30 15:20:18
End at: 2018-05-30 15:20:48
Local clock offset: 7.663 ms
Remote clock offset: 48.145 ms

```
# Below is generated by plot.py at 2018-05-30 15:26:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 99.387 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 100.188 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 93.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 101.017 ms
Loss rate: 0.35%
```

Run 3: Report of Copa — Data Link

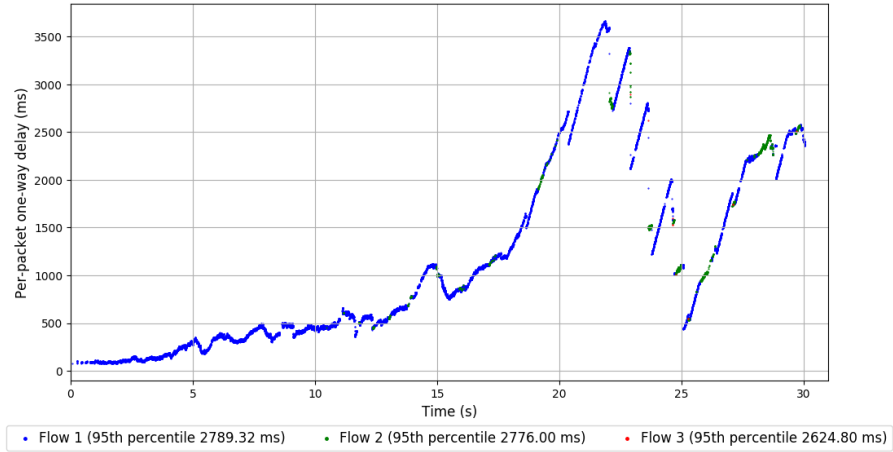
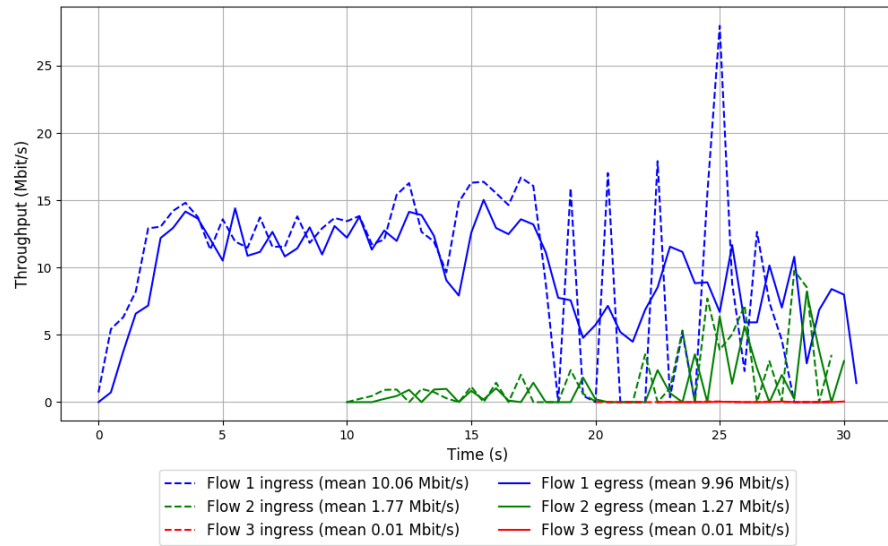


Run 1: Statistics of TCP Cubic

Start at: 2018-05-30 14:40:56
End at: 2018-05-30 14:41:26
Local clock offset: 6.011 ms
Remote clock offset: 48.439 ms

Below is generated by plot.py at 2018-05-30 15:26:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 10.78 Mbit/s
95th percentile per-packet one-way delay: 2788.644 ms
Loss rate: 3.62%
-- Flow 1:
Average throughput: 9.96 Mbit/s
95th percentile per-packet one-way delay: 2789.315 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 2775.997 ms
Loss rate: 30.87%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2624.800 ms
Loss rate: 38.58%

Run 1: Report of TCP Cubic — Data Link

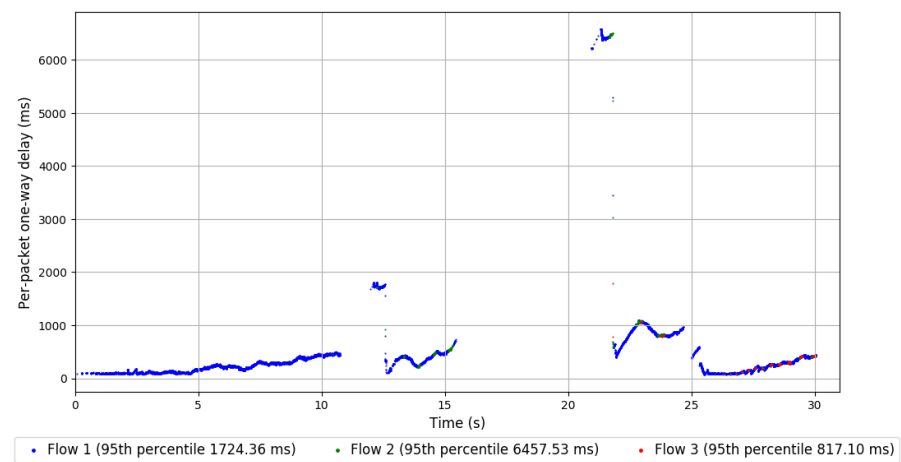
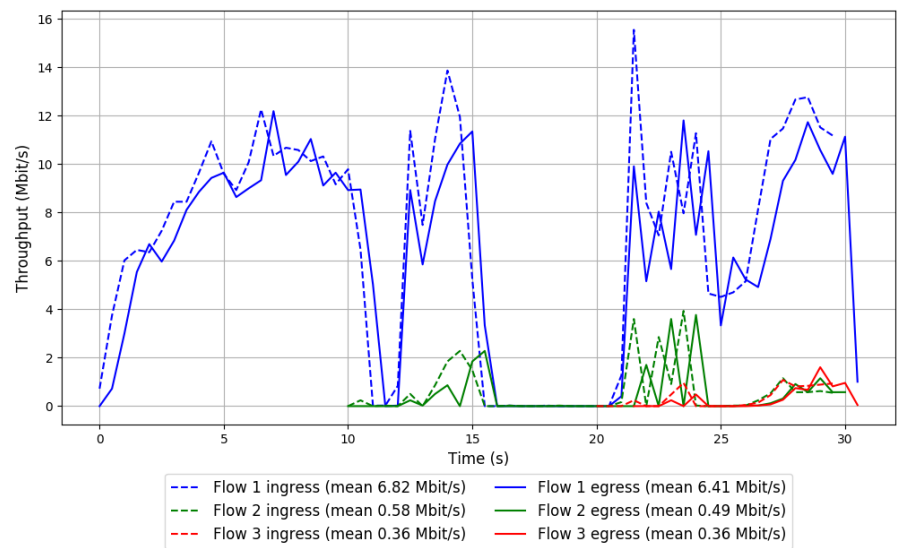


Run 2: Statistics of TCP Cubic

Start at: 2018-05-30 15:01:57
End at: 2018-05-30 15:02:27
Local clock offset: 7.375 ms
Remote clock offset: 46.859 ms

Below is generated by plot.py at 2018-05-30 15:26:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 1728.117 ms
Loss rate: 6.67%
-- Flow 1:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 1724.356 ms
Loss rate: 5.95%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 6457.528 ms
Loss rate: 17.25%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 817.095 ms
Loss rate: 13.93%

Run 2: Report of TCP Cubic — Data Link

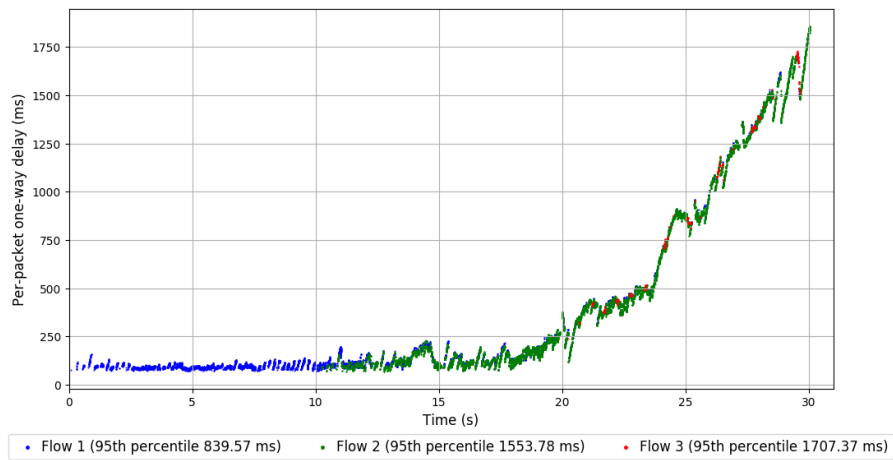
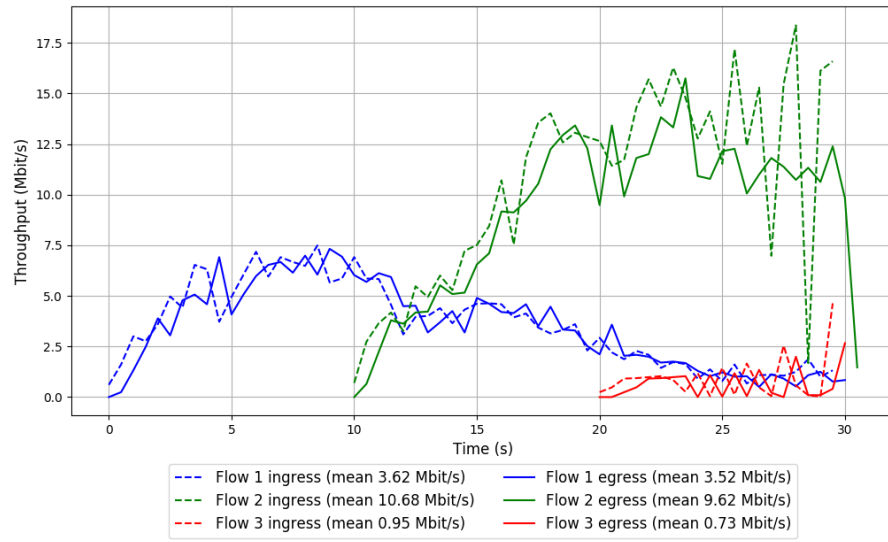


Run 3: Statistics of TCP Cubic

Start at: 2018-05-30 15:22:55
End at: 2018-05-30 15:23:25
Local clock offset: 7.792 ms
Remote clock offset: 48.295 ms

Below is generated by plot.py at 2018-05-30 15:26:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 1499.551 ms
Loss rate: 7.77%
-- Flow 1:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 839.568 ms
Loss rate: 2.30%
-- Flow 2:
Average throughput: 9.62 Mbit/s
95th percentile per-packet one-way delay: 1553.776 ms
Loss rate: 9.75%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 1707.367 ms
Loss rate: 25.89%

Run 3: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-05-30 14:25:12

End at: 2018-05-30 14:25:42

Local clock offset: 6.264 ms

Remote clock offset: 53.31 ms

Below is generated by plot.py at 2018-05-30 15:26:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.43 Mbit/s

95th percentile per-packet one-way delay: 4033.144 ms

Loss rate: 39.49%

-- Flow 1:

Average throughput: 13.12 Mbit/s

95th percentile per-packet one-way delay: 4033.178 ms

Loss rate: 39.39%

-- Flow 2:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 4032.857 ms

Loss rate: 39.01%

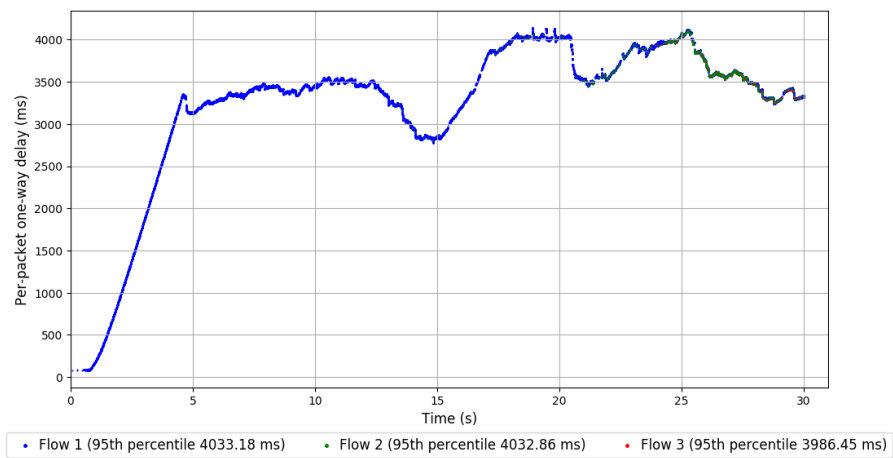
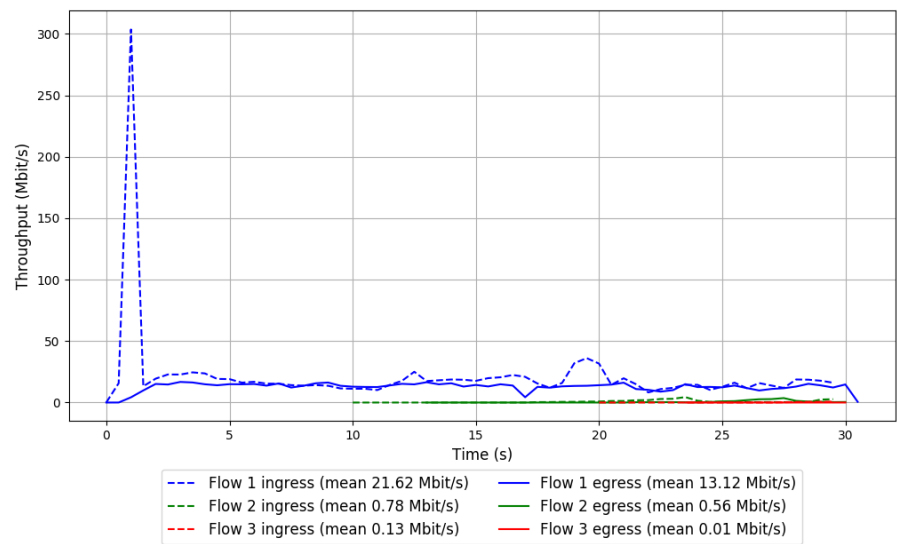
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 3986.450 ms

Loss rate: 96.37%

Run 1: Report of FillP — Data Link

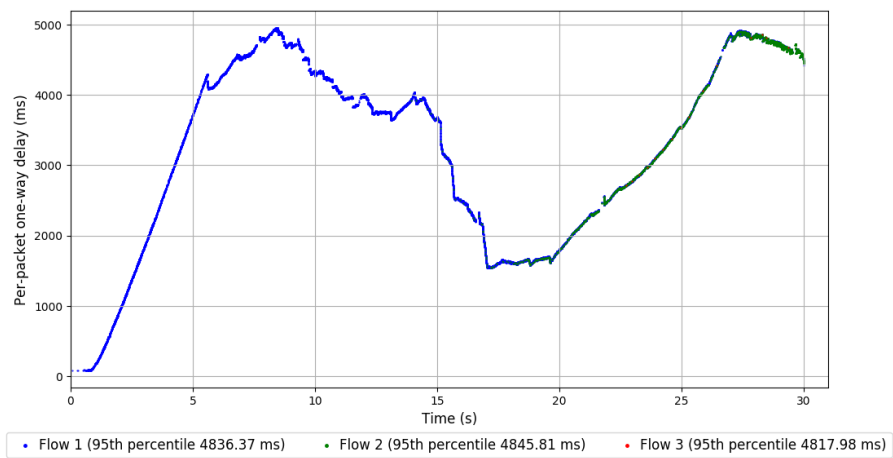
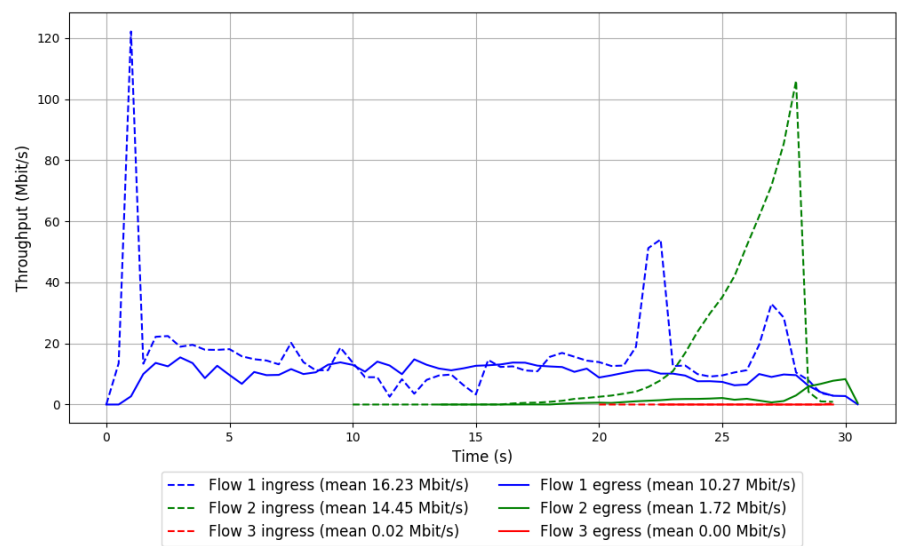


Run 2: Statistics of FillP

Start at: 2018-05-30 14:46:10
End at: 2018-05-30 14:46:40
Local clock offset: 6.333 ms
Remote clock offset: 47.441 ms

Below is generated by plot.py at 2018-05-30 15:26:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.20 Mbit/s
95th percentile per-packet one-way delay: 4838.738 ms
Loss rate: 56.73%
-- Flow 1:
Average throughput: 10.27 Mbit/s
95th percentile per-packet one-way delay: 4836.369 ms
Loss rate: 36.76%
-- Flow 2:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 4845.806 ms
Loss rate: 90.38%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 4817.979 ms
Loss rate: 94.56%

Run 2: Report of FillP — Data Link

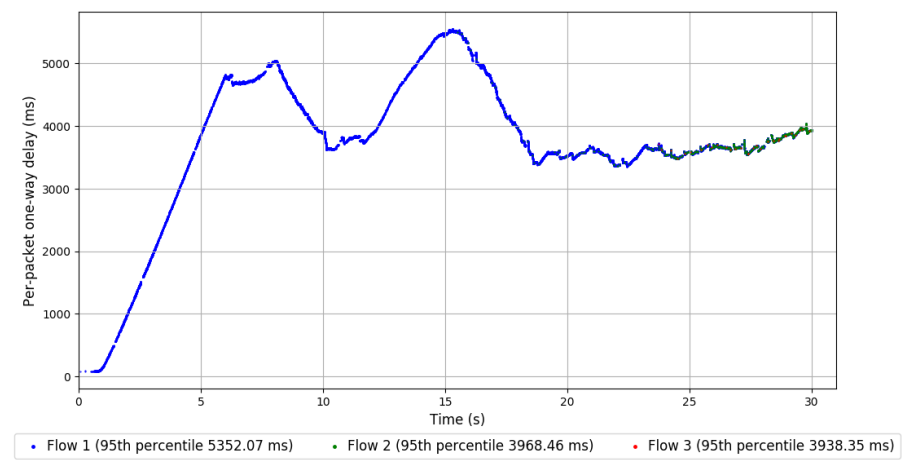
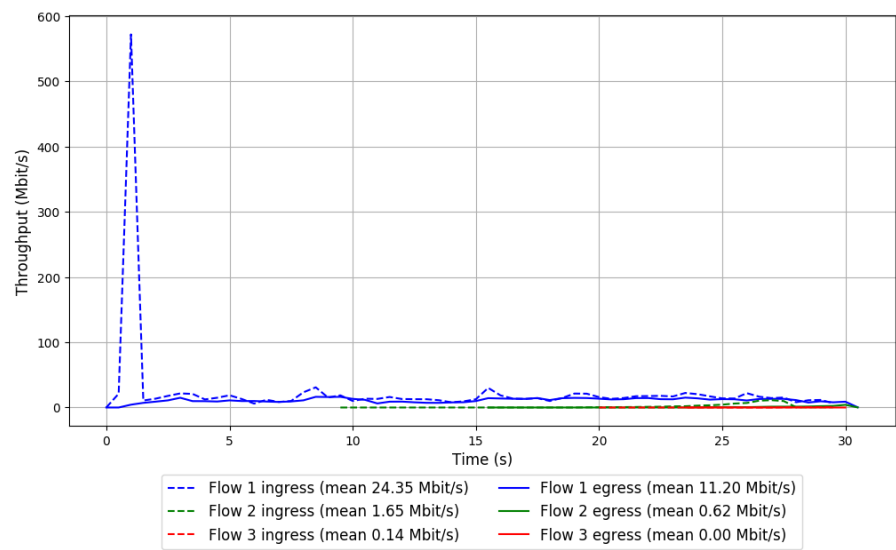


Run 3: Statistics of FillP

Start at: 2018-05-30 15:07:11
End at: 2018-05-30 15:07:41
Local clock offset: 7.68 ms
Remote clock offset: 47.185 ms

Below is generated by plot.py at 2018-05-30 15:26:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.50 Mbit/s
95th percentile per-packet one-way delay: 5346.264 ms
Loss rate: 54.92%
-- Flow 1:
Average throughput: 11.20 Mbit/s
95th percentile per-packet one-way delay: 5352.071 ms
Loss rate: 54.04%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 3968.462 ms
Loss rate: 72.78%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3938.353 ms
Loss rate: 97.85%

Run 3: Report of FillP — Data Link

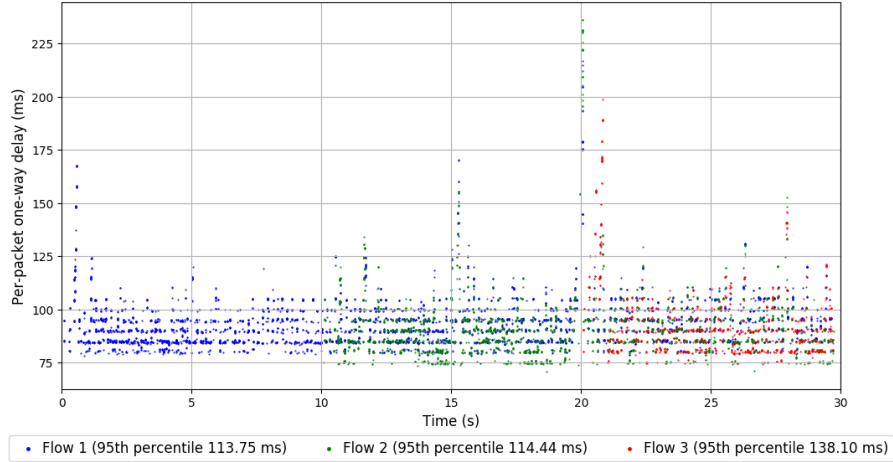
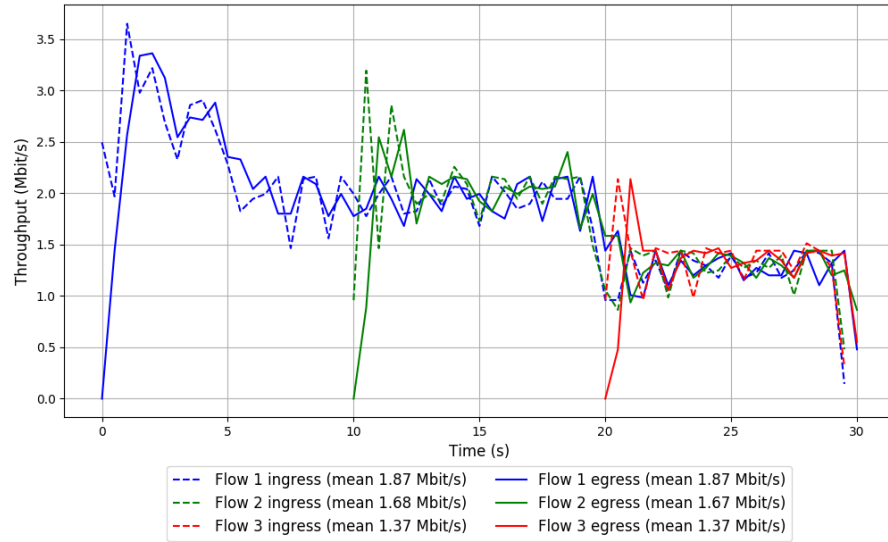


Run 1: Statistics of Indigo

Start at: 2018-05-30 14:34:23
End at: 2018-05-30 14:34:53
Local clock offset: 5.823 ms
Remote clock offset: 51.296 ms

Below is generated by plot.py at 2018-05-30 15:26:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 114.896 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 113.755 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 114.445 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 138.102 ms
Loss rate: 0.09%

Run 1: Report of Indigo — Data Link

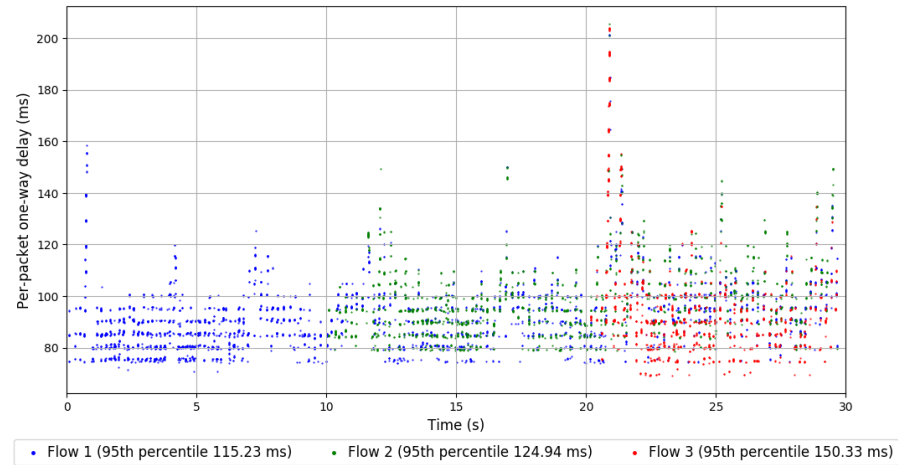
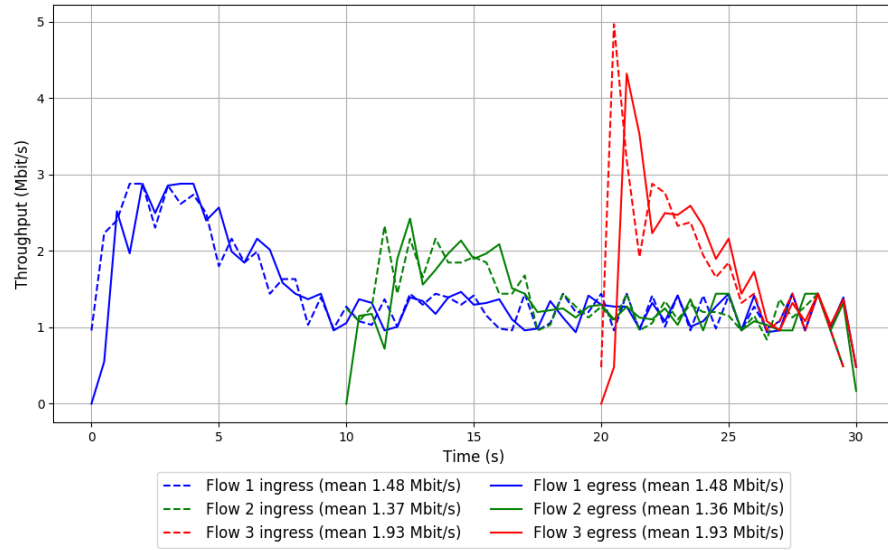


Run 2: Statistics of Indigo

Start at: 2018-05-30 14:55:20
End at: 2018-05-30 14:55:50
Local clock offset: 7.1 ms
Remote clock offset: 46.915 ms

Below is generated by plot.py at 2018-05-30 15:26:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 124.767 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 115.226 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 124.942 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 150.329 ms
Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

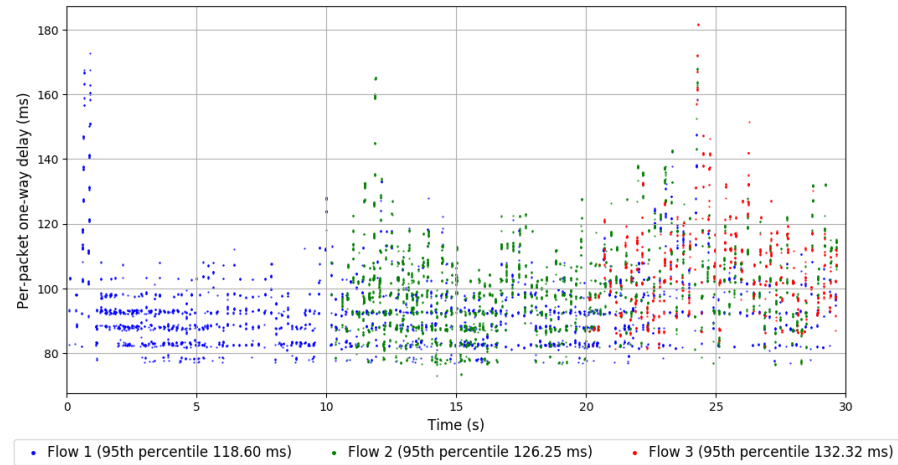
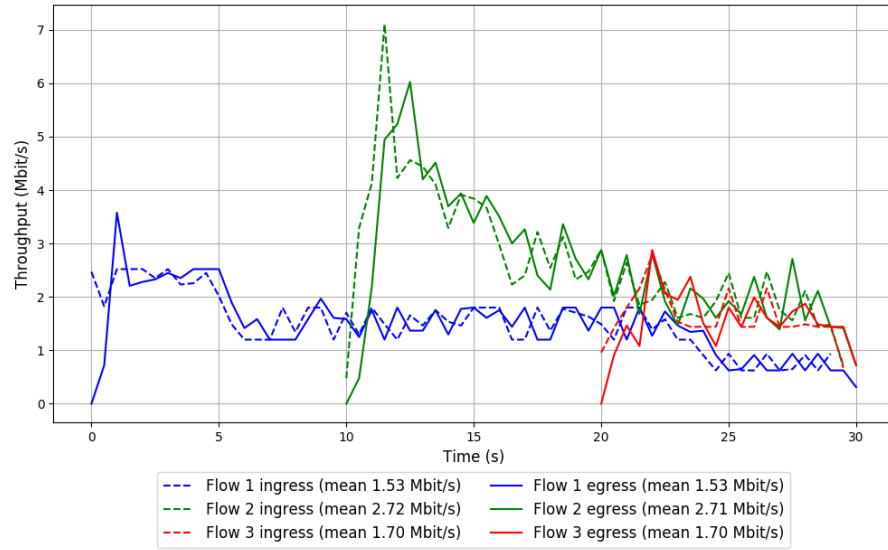


Run 3: Statistics of Indigo

Start at: 2018-05-30 15:16:23
End at: 2018-05-30 15:16:53
Local clock offset: 7.707 ms
Remote clock offset: 47.995 ms

Below is generated by plot.py at 2018-05-30 15:26:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 124.626 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 118.596 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 126.255 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 132.322 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

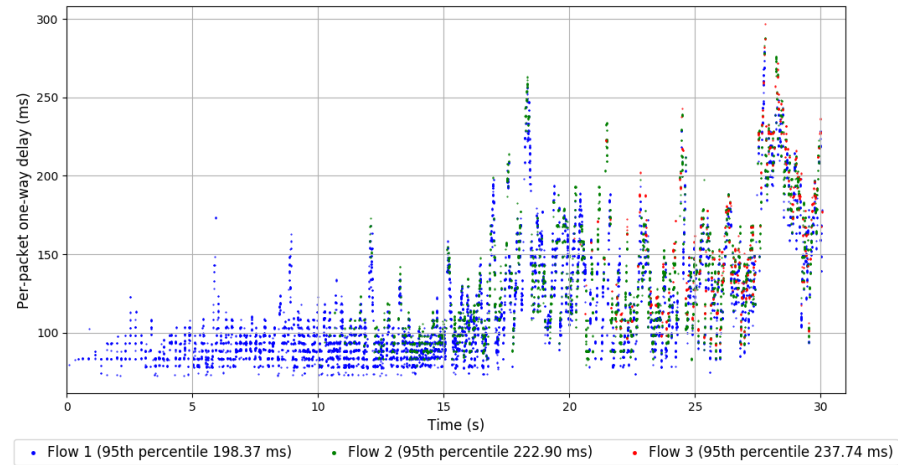
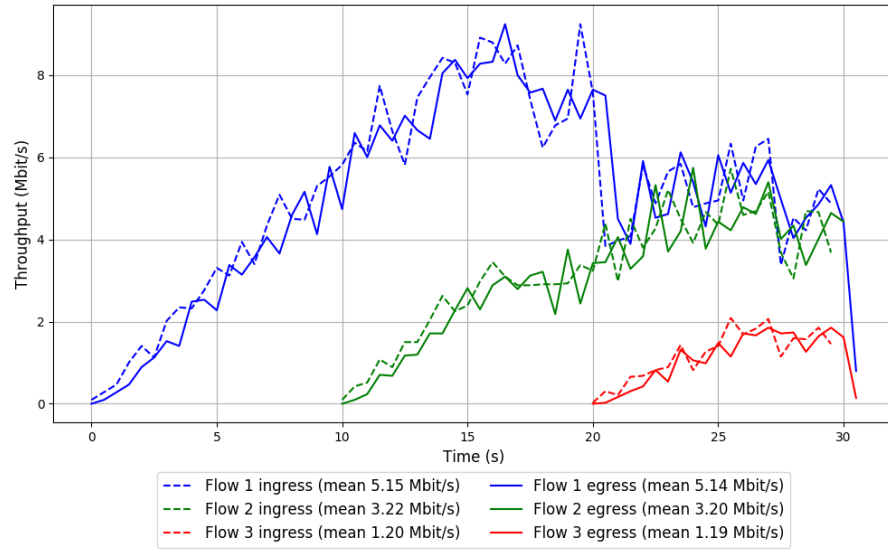


```
Run 1: Statistics of LEDBAT

Start at: 2018-05-30 14:42:14
End at: 2018-05-30 14:42:44
Local clock offset: 5.683 ms
Remote clock offset: 48.199 ms

# Below is generated by plot.py at 2018-05-30 15:26:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 212.765 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 198.370 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 222.900 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 237.740 ms
Loss rate: 1.48%
```

Run 1: Report of LEDBAT — Data Link

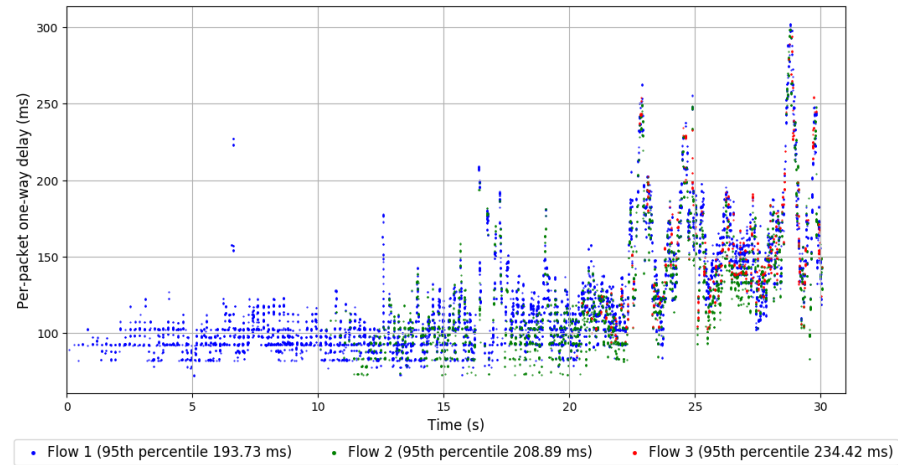
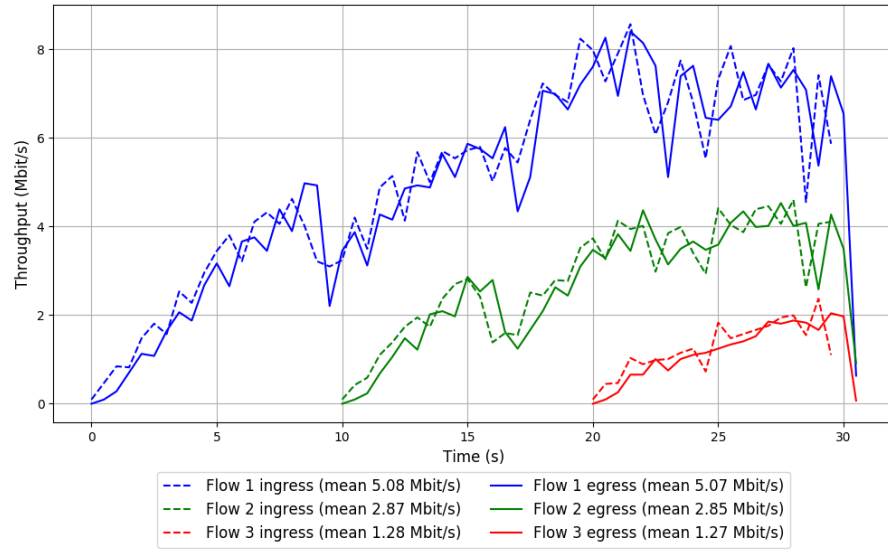


Run 2: Statistics of LEDBAT

Start at: 2018-05-30 15:03:16
End at: 2018-05-30 15:03:46
Local clock offset: 7.34 ms
Remote clock offset: 46.917 ms

Below is generated by plot.py at 2018-05-30 15:26:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 203.838 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 5.07 Mbit/s
95th percentile per-packet one-way delay: 193.731 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 208.894 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 234.424 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

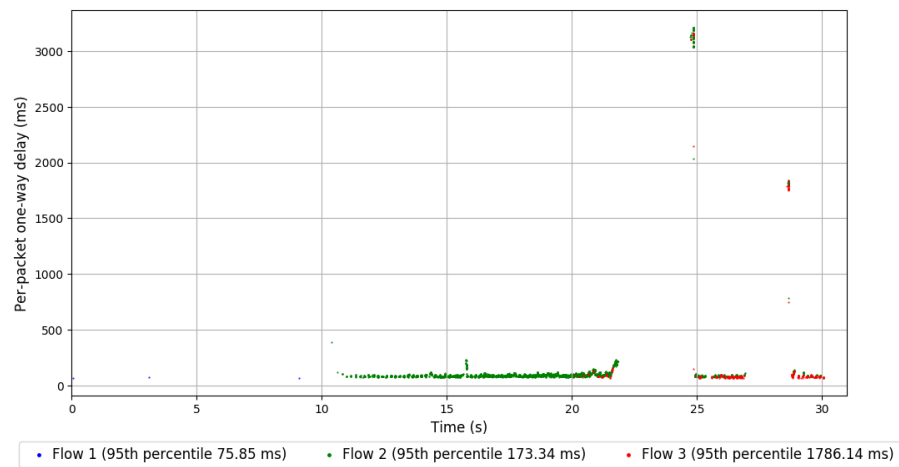
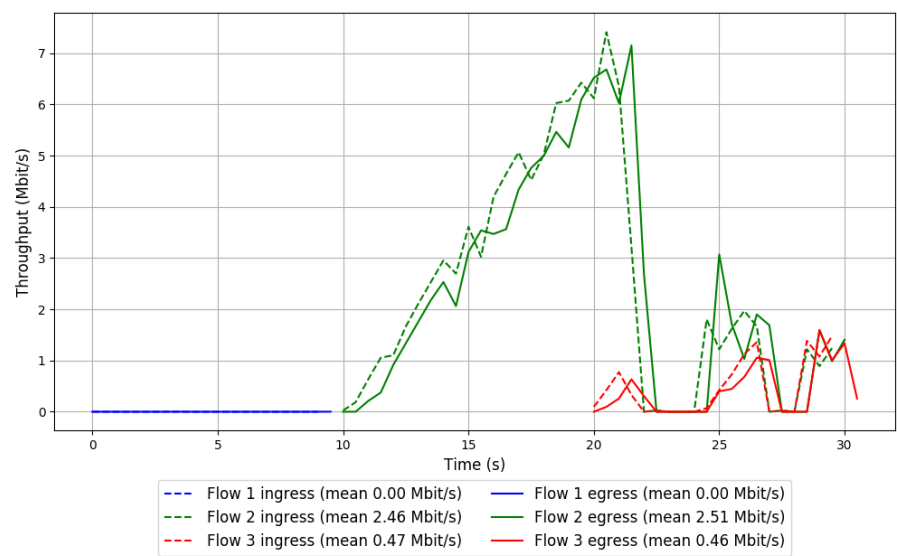


Run 3: Statistics of LEDBAT

Start at: 2018-05-30 15:24:14
End at: 2018-05-30 15:24:44
Local clock offset: 7.829 ms
Remote clock offset: 48.375 ms

Below is generated by plot.py at 2018-05-30 15:26:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 180.237 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 75.851 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 173.343 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 1786.137 ms
Loss rate: 2.52%

Run 3: Report of LEDBAT — Data Link

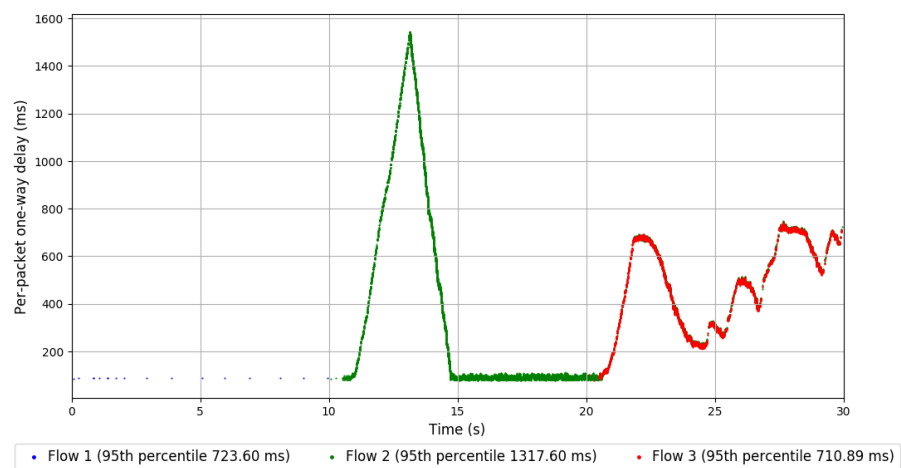
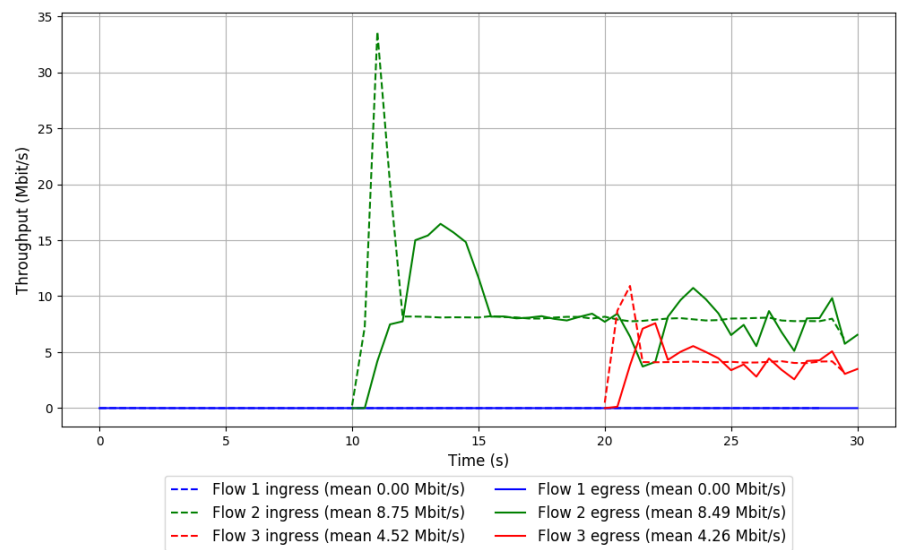


Run 1: Statistics of PCC-Allegro

Start at: 2018-05-30 14:30:28
End at: 2018-05-30 14:30:58
Local clock offset: 5.973 ms
Remote clock offset: 54.219 ms

Below is generated by plot.py at 2018-05-30 15:26:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 1244.998 ms
Loss rate: 3.65%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 723.601 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 1317.596 ms
Loss rate: 3.03%
-- Flow 3:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 710.889 ms
Loss rate: 6.09%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-05-30 14:51:25

End at: 2018-05-30 14:51:55

Local clock offset: 7.067 ms

Remote clock offset: 47.16 ms

Below is generated by plot.py at 2018-05-30 15:26:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.09 Mbit/s

95th percentile per-packet one-way delay: 311.318 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 287.460 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 321.305 ms

Loss rate: 0.17%

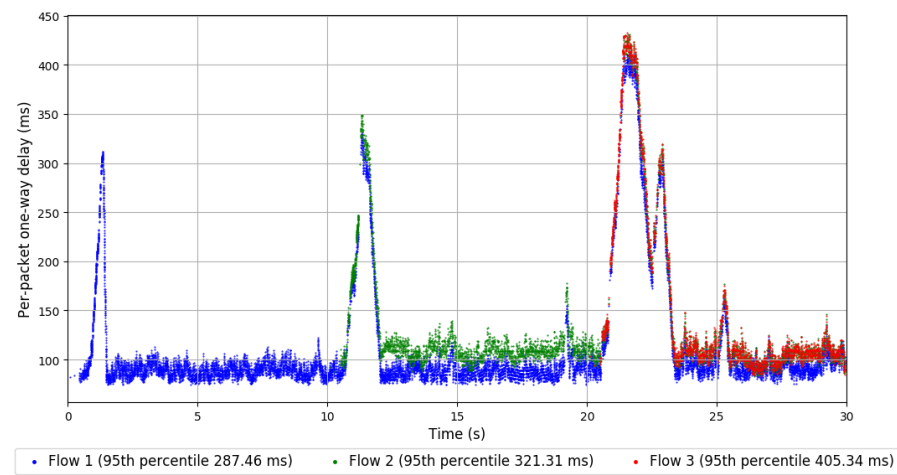
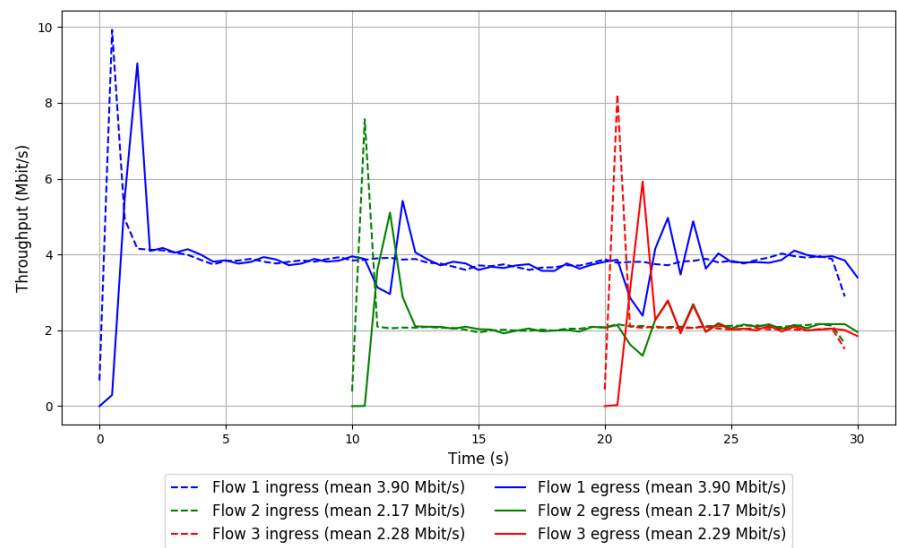
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 405.341 ms

Loss rate: 0.22%

Run 2: Report of PCC-Allegro — Data Link

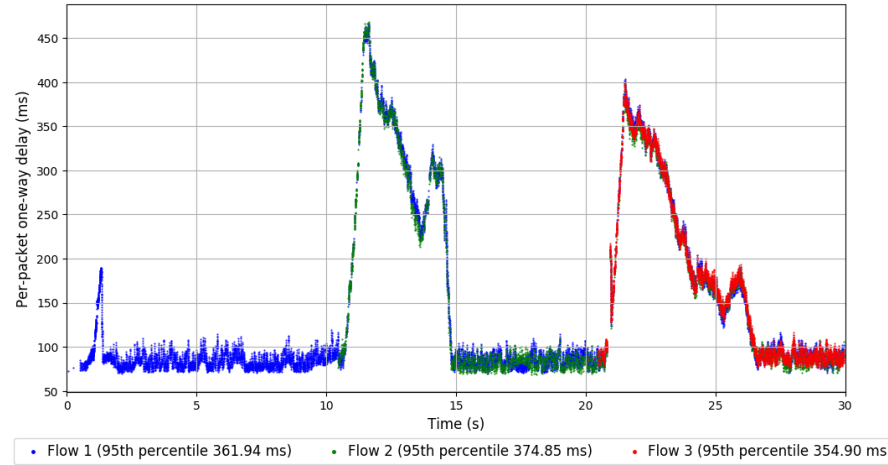
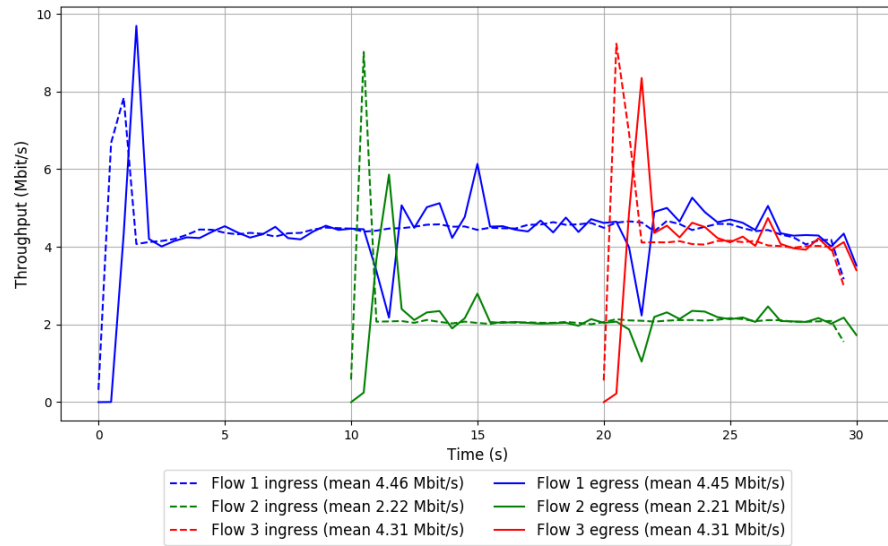


Run 3: Statistics of PCC-Allegro

Start at: 2018-05-30 15:12:26
End at: 2018-05-30 15:12:56
Local clock offset: 7.657 ms
Remote clock offset: 47.651 ms

Below is generated by plot.py at 2018-05-30 15:26:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.34 Mbit/s
95th percentile per-packet one-way delay: 363.118 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 361.941 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 374.846 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 354.904 ms
Loss rate: 0.31%

Run 3: Report of PCC-Allegro — Data Link

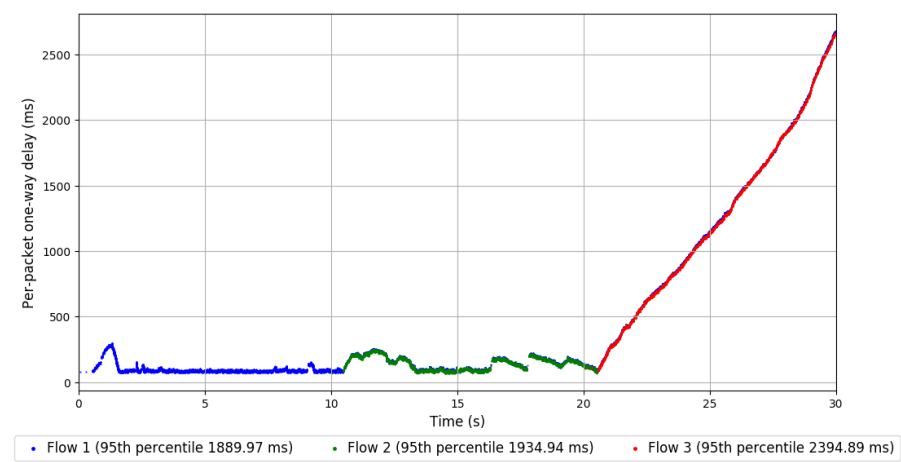
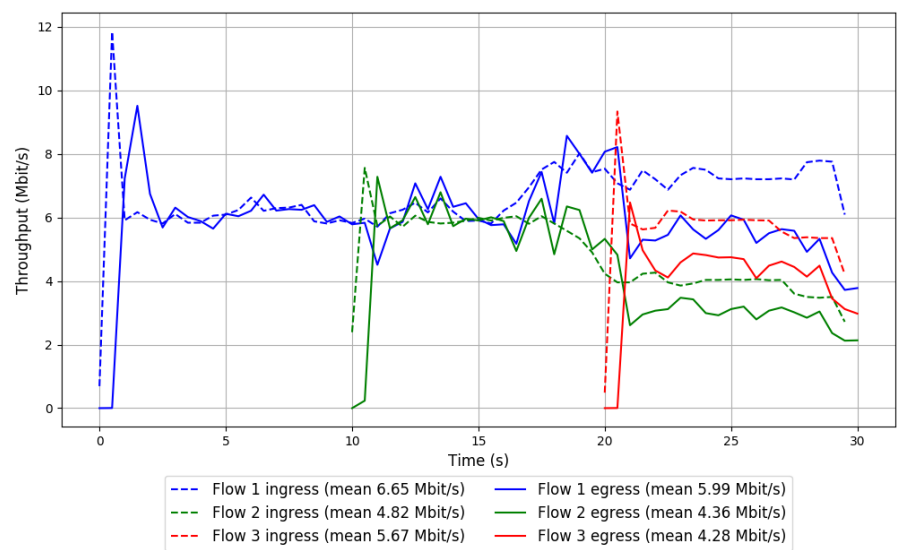


```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-30 14:26:31
End at: 2018-05-30 14:27:01
Local clock offset: 6.16 ms
Remote clock offset: 53.565 ms

# Below is generated by plot.py at 2018-05-30 15:27:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.30 Mbit/s
95th percentile per-packet one-way delay: 1996.582 ms
Loss rate: 12.26%
-- Flow 1:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 1889.972 ms
Loss rate: 9.98%
-- Flow 2:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 1934.945 ms
Loss rate: 9.62%
-- Flow 3:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 2394.895 ms
Loss rate: 24.85%
```

Run 1: Report of PCC-Expr — Data Link

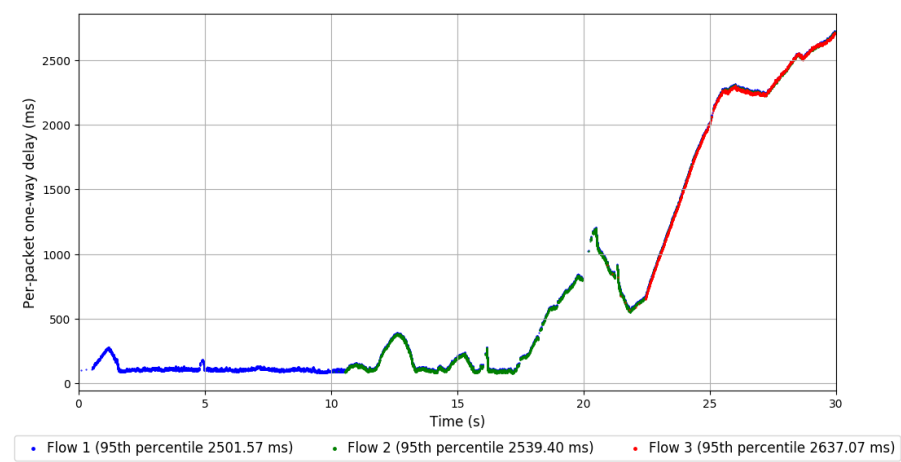
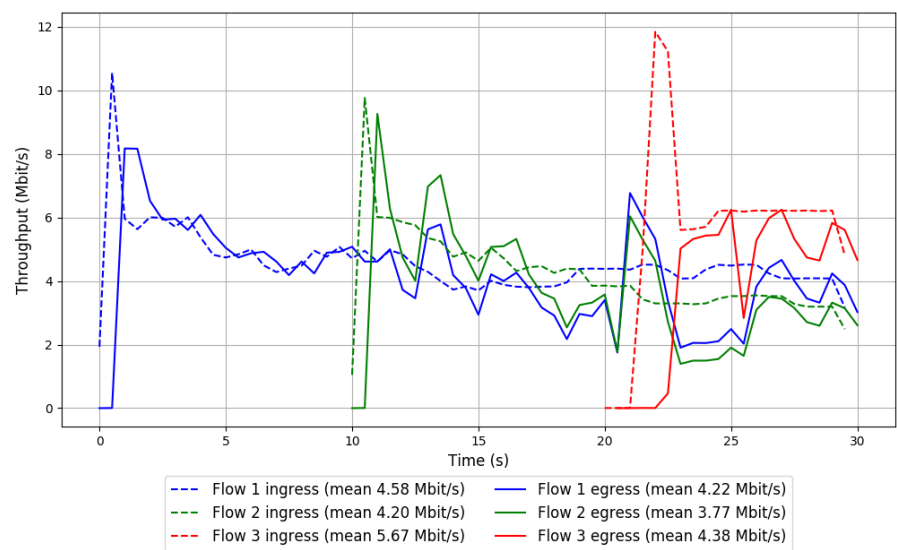


Run 2: Statistics of PCC-Expr

Start at: 2018-05-30 14:47:29
End at: 2018-05-30 14:47:59
Local clock offset: 6.649 ms
Remote clock offset: 47.482 ms

Below is generated by plot.py at 2018-05-30 15:27:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 2573.809 ms
Loss rate: 12.97%
-- Flow 1:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 2501.567 ms
Loss rate: 7.91%
-- Flow 2:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 2539.403 ms
Loss rate: 10.30%
-- Flow 3:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 2637.065 ms
Loss rate: 29.34%

Run 2: Report of PCC-Expr — Data Link

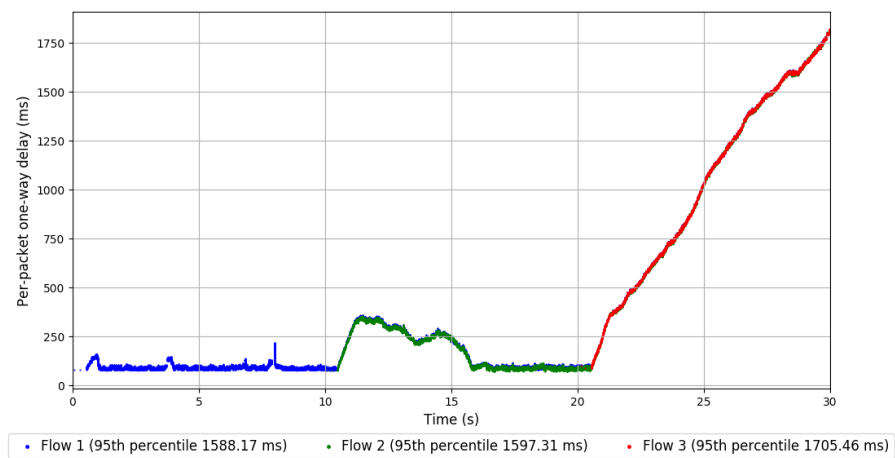
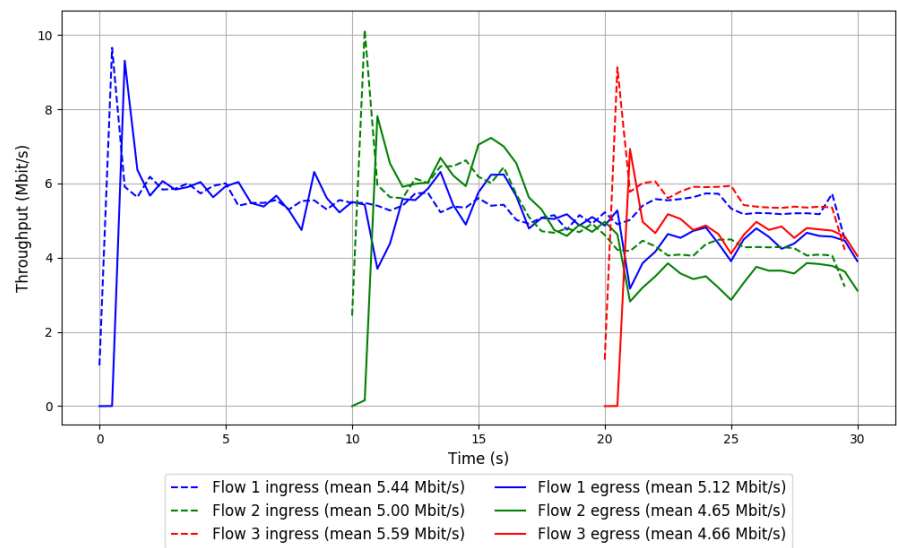


Run 3: Statistics of PCC-Expr

Start at: 2018-05-30 15:08:30
End at: 2018-05-30 15:09:00
Local clock offset: 7.406 ms
Remote clock offset: 47.292 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 9.74 Mbit/s
95th percentile per-packet one-way delay: 1608.272 ms
Loss rate: 8.18%
-- Flow 1:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 1588.166 ms
Loss rate: 5.86%
-- Flow 2:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 1597.305 ms
Loss rate: 7.14%
-- Flow 3:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 1705.465 ms
Loss rate: 16.91%

Run 3: Report of PCC-Expr — Data Link

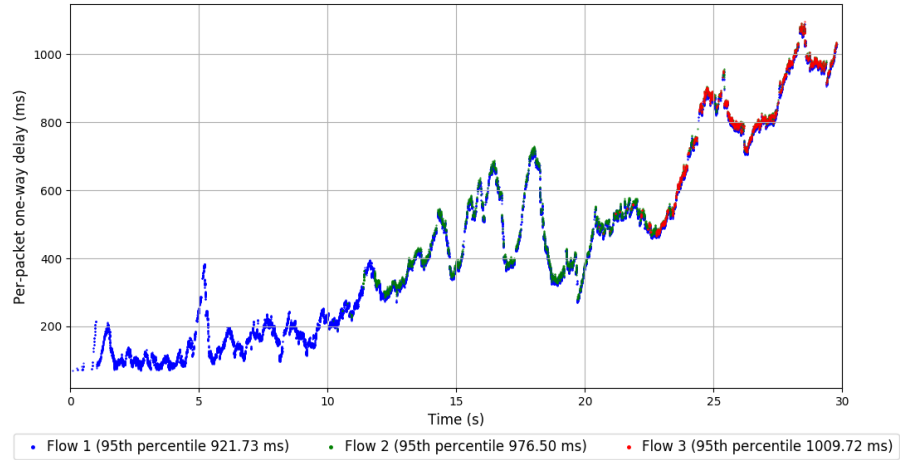
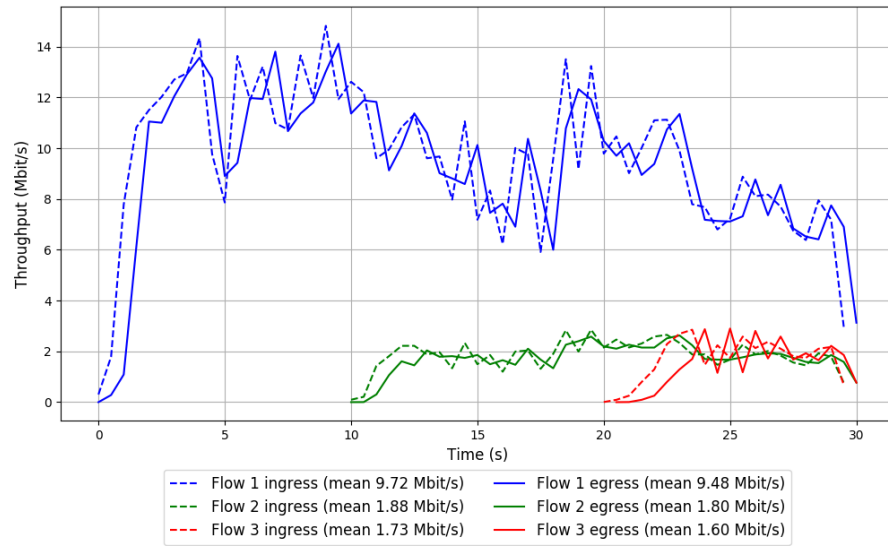


Run 1: Statistics of QUIC Cubic

Start at: 2018-05-30 14:39:37
End at: 2018-05-30 14:40:07
Local clock offset: 6.006 ms
Remote clock offset: 48.798 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.16 Mbit/s
95th percentile per-packet one-way delay: 959.241 ms
Loss rate: 3.15%
-- Flow 1:
Average throughput: 9.48 Mbit/s
95th percentile per-packet one-way delay: 921.729 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 976.503 ms
Loss rate: 4.74%
-- Flow 3:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 1009.722 ms
Loss rate: 11.92%

Run 1: Report of QUIC Cubic — Data Link

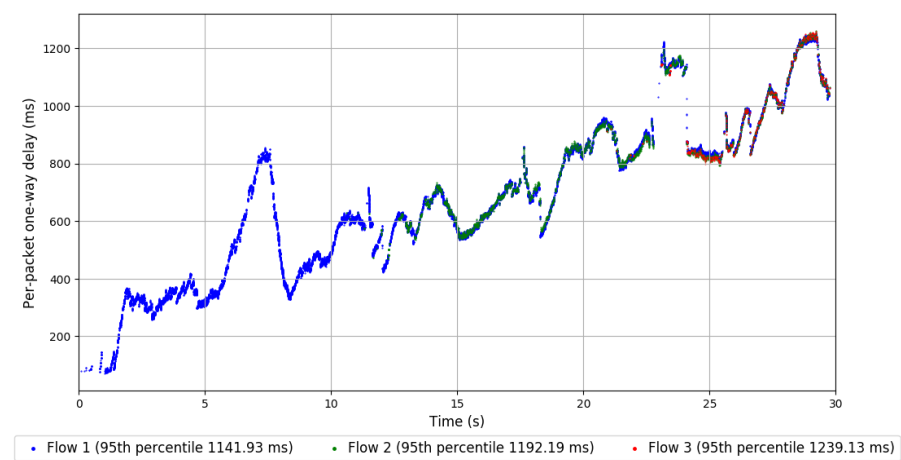
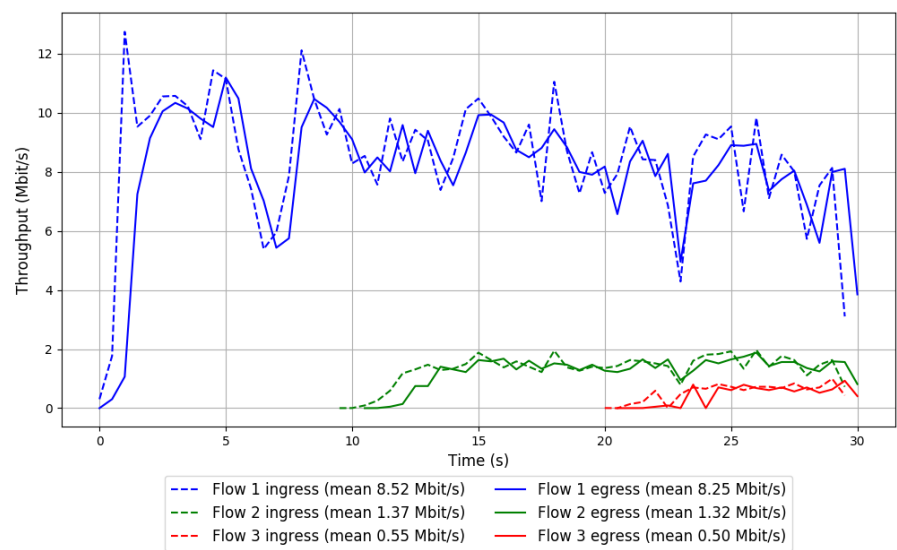


Run 2: Statistics of QUIC Cubic

Start at: 2018-05-30 15:00:39
End at: 2018-05-30 15:01:09
Local clock offset: 7.228 ms
Remote clock offset: 46.938 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 1147.329 ms
Loss rate: 3.77%
-- Flow 1:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 1141.926 ms
Loss rate: 3.23%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 1192.189 ms
Loss rate: 6.11%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 1239.127 ms
Loss rate: 17.44%

Run 2: Report of QUIC Cubic — Data Link

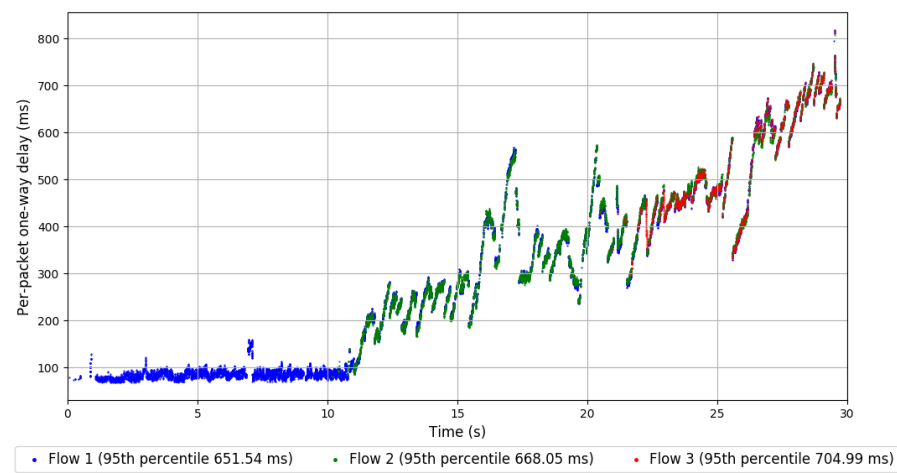
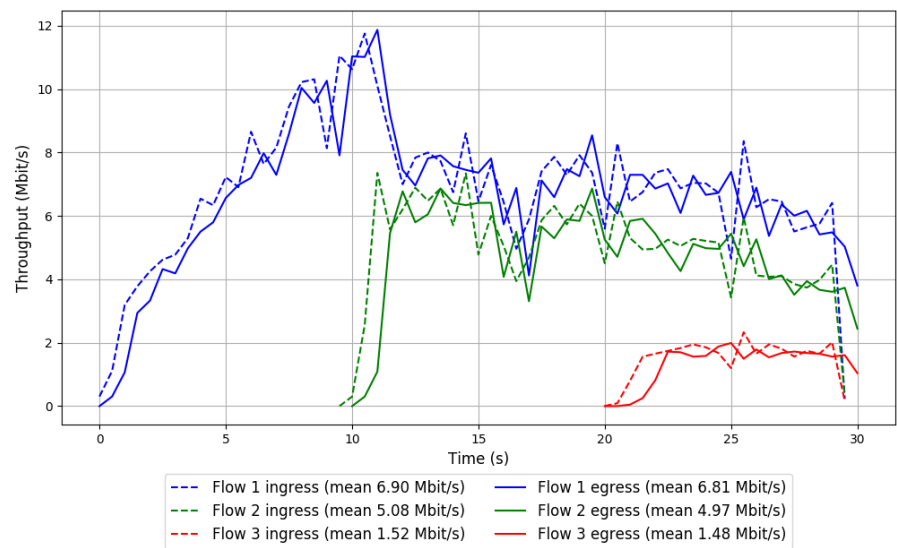


Run 3: Statistics of QUIC Cubic

Start at: 2018-05-30 15:21:36
End at: 2018-05-30 15:22:06
Local clock offset: 7.683 ms
Remote clock offset: 48.224 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 10.57 Mbit/s
95th percentile per-packet one-way delay: 663.395 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 651.539 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 668.054 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 704.987 ms
Loss rate: 6.59%

Run 3: Report of QUIC Cubic — Data Link

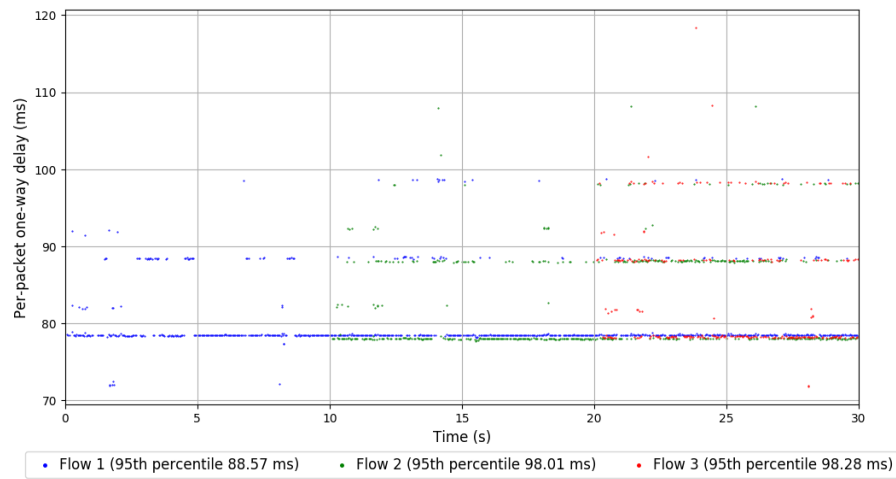
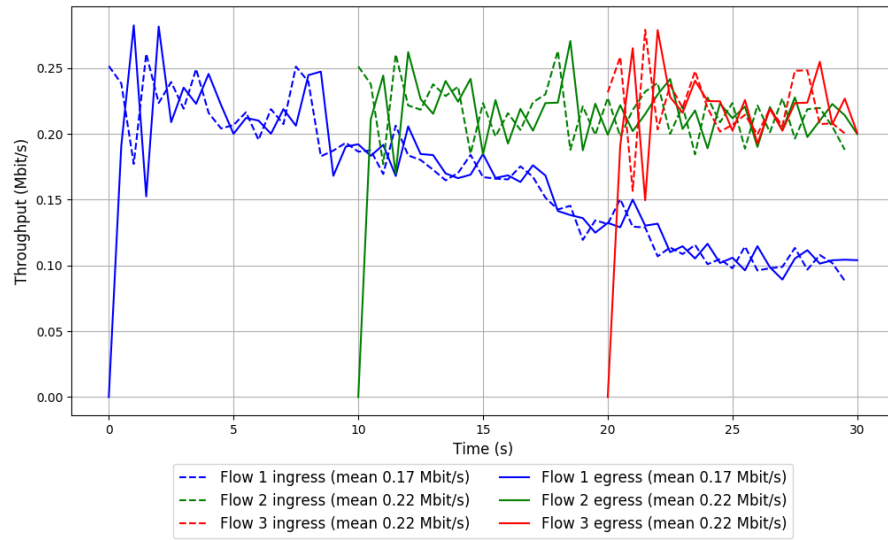


Run 1: Statistics of SCReAM

Start at: 2018-05-30 14:27:50
End at: 2018-05-30 14:28:20
Local clock offset: 6.319 ms
Remote clock offset: 53.773 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 98.102 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 88.574 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.007 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.275 ms
Loss rate: 0.35%

Run 1: Report of SReAM — Data Link

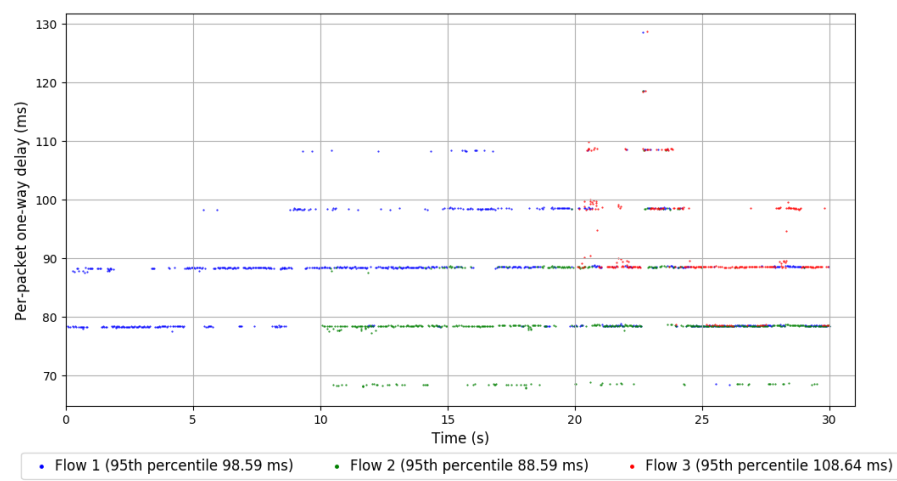
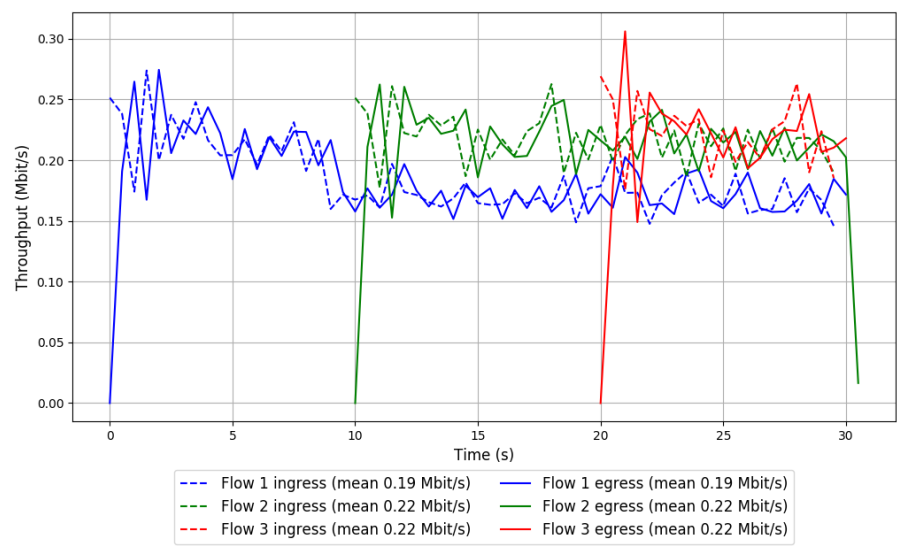


Run 2: Statistics of SReAM

Start at: 2018-05-30 14:48:48
End at: 2018-05-30 14:49:18
Local clock offset: 6.724 ms
Remote clock offset: 47.214 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 98.660 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 98.595 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 88.588 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.642 ms
Loss rate: 0.35%

Run 2: Report of SReAM — Data Link

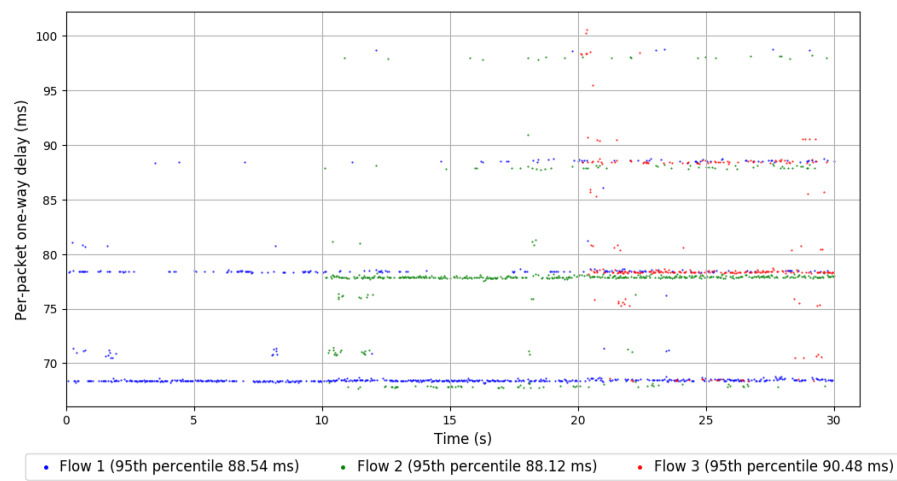
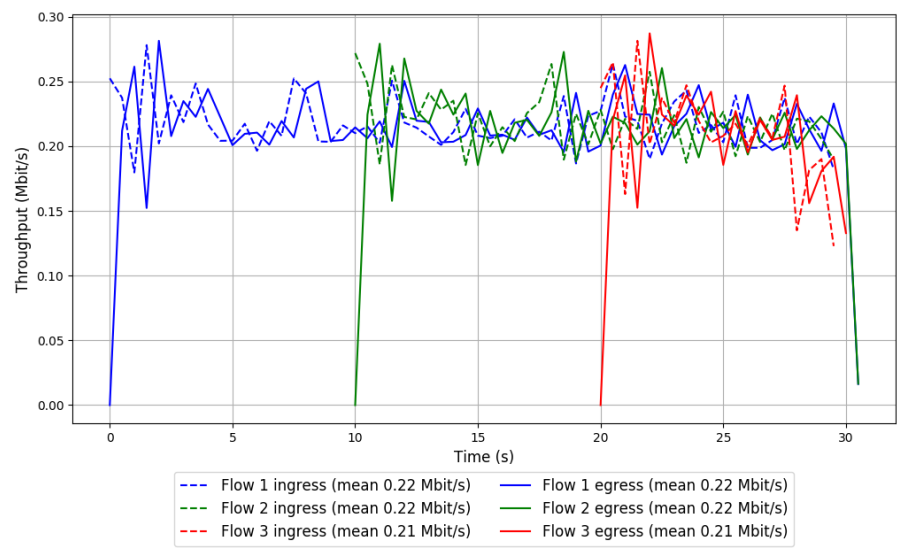


Run 3: Statistics of SReAM

Start at: 2018-05-30 15:09:49
End at: 2018-05-30 15:10:19
Local clock offset: 7.547 ms
Remote clock offset: 47.535 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 88.564 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 88.541 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 88.118 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 90.482 ms
Loss rate: 0.21%

Run 3: Report of SCRaM — Data Link

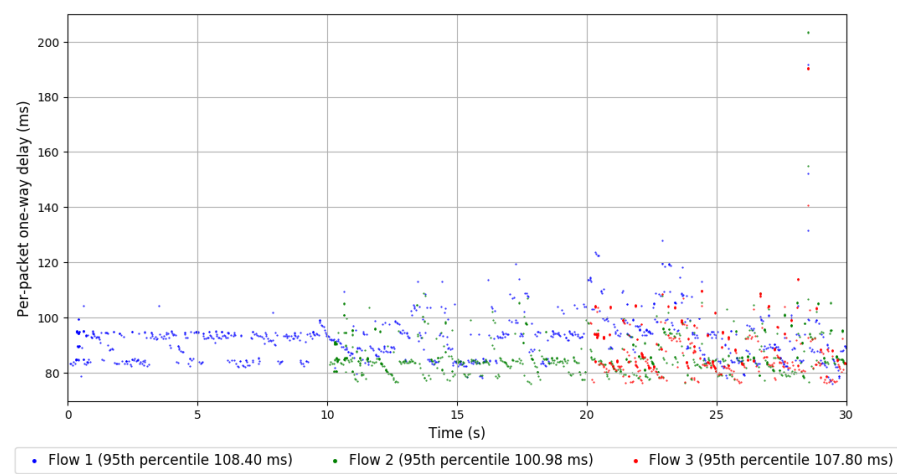
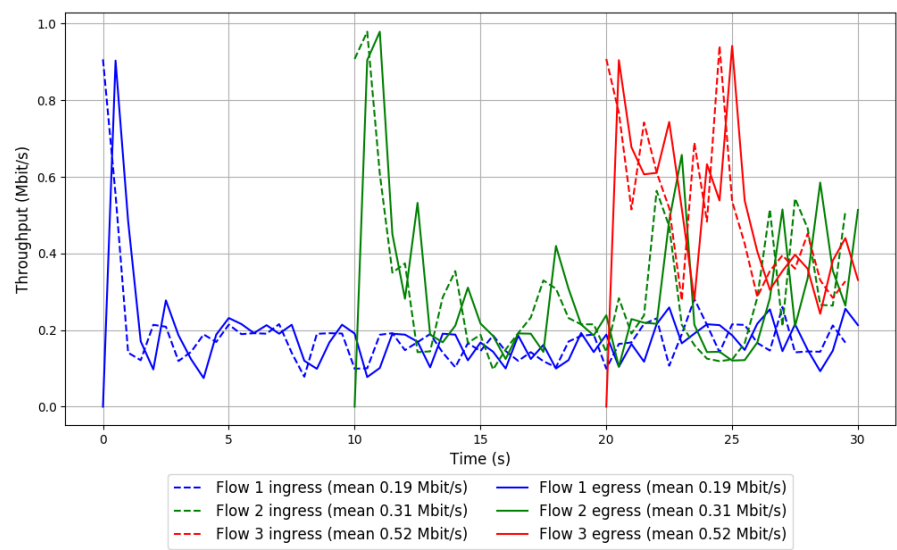


Run 1: Statistics of Sprout

Start at: 2018-05-30 14:37:01
End at: 2018-05-30 14:37:31
Local clock offset: 5.948 ms
Remote clock offset: 49.729 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 105.116 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 108.402 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 100.985 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 107.797 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

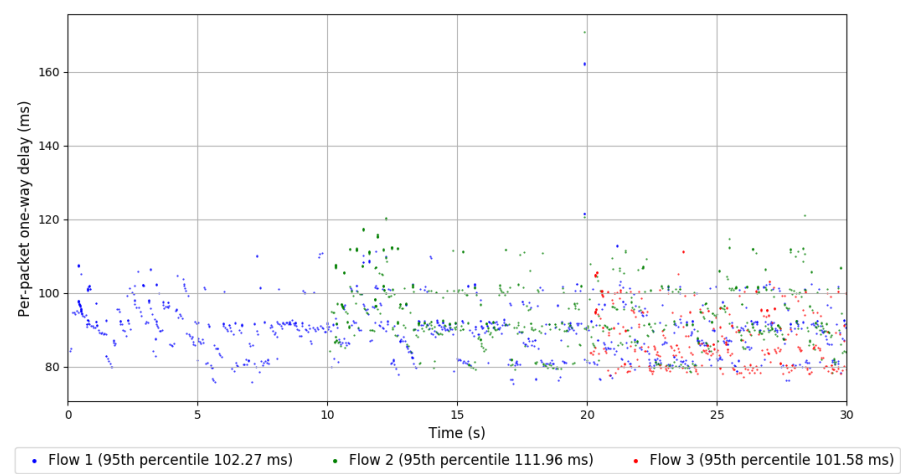
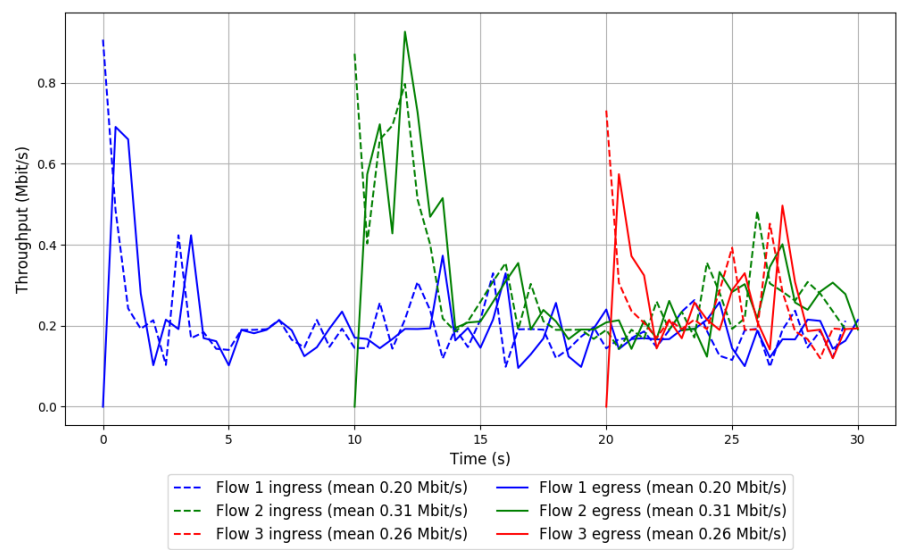


Run 2: Statistics of Sprout

Start at: 2018-05-30 14:57:57
End at: 2018-05-30 14:58:27
Local clock offset: 7.228 ms
Remote clock offset: 46.894 ms

```
# Below is generated by plot.py at 2018-05-30 15:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 109.749 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 102.270 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 111.960 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 101.578 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-05-30 15:18:59

End at: 2018-05-30 15:19:29

Local clock offset: 7.693 ms

Remote clock offset: 48.02 ms

Below is generated by plot.py at 2018-05-30 15:27:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 3298.936 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 2402.166 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3174.869 ms

Loss rate: 0.50%

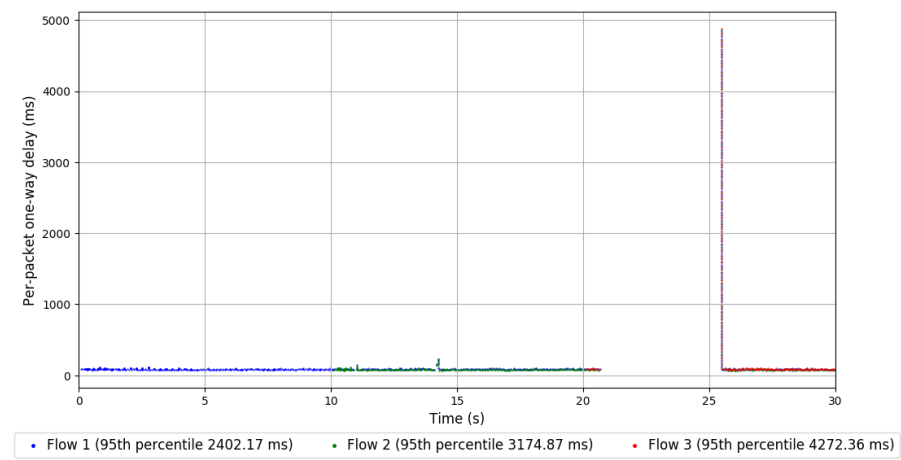
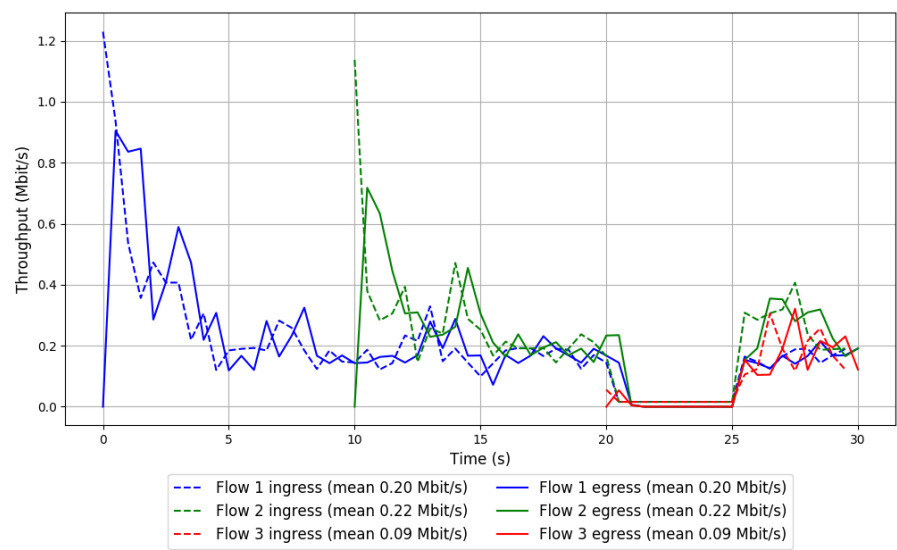
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 4272.361 ms

Loss rate: 0.09%

Run 3: Report of Sprout — Data Link

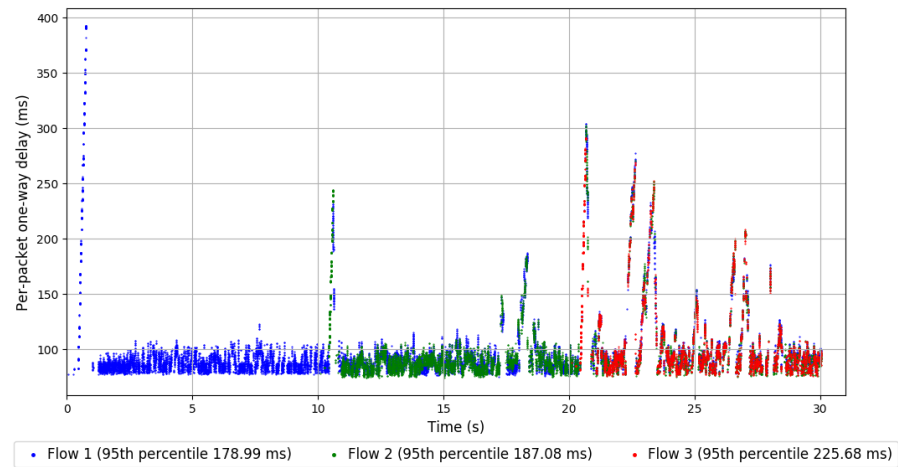
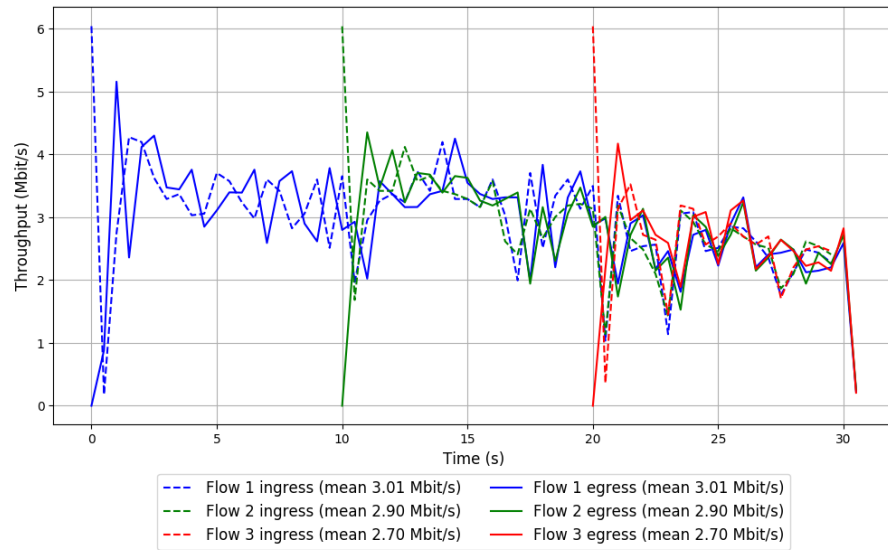


Run 1: Statistics of TaoVA-100x

Start at: 2018-05-30 14:29:08
End at: 2018-05-30 14:29:38
Local clock offset: 5.975 ms
Remote clock offset: 53.981 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 195.898 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 178.990 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 187.077 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 225.684 ms
Loss rate: 0.05%

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

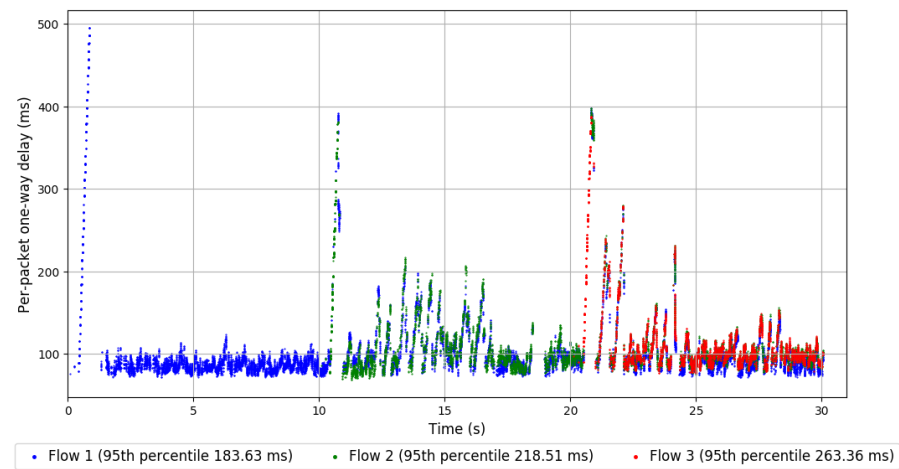
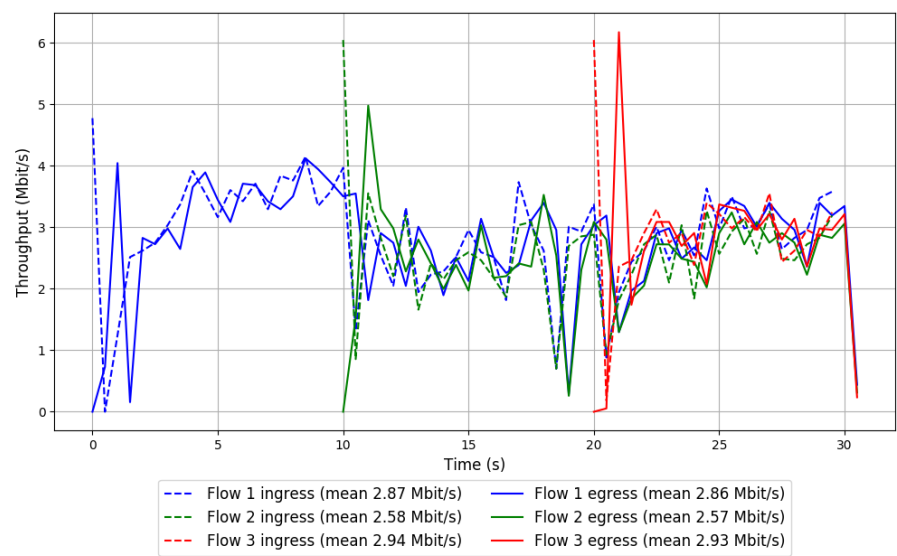


Run 2: Statistics of TaoVA-100x

Start at: 2018-05-30 14:50:06
End at: 2018-05-30 14:50:36
Local clock offset: 6.709 ms
Remote clock offset: 47.158 ms

Below is generated by plot.py at 2018-05-30 15:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 5.54 Mbit/s
95th percentile per-packet one-way delay: 217.214 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 183.630 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 218.507 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 263.362 ms
Loss rate: 0.66%

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

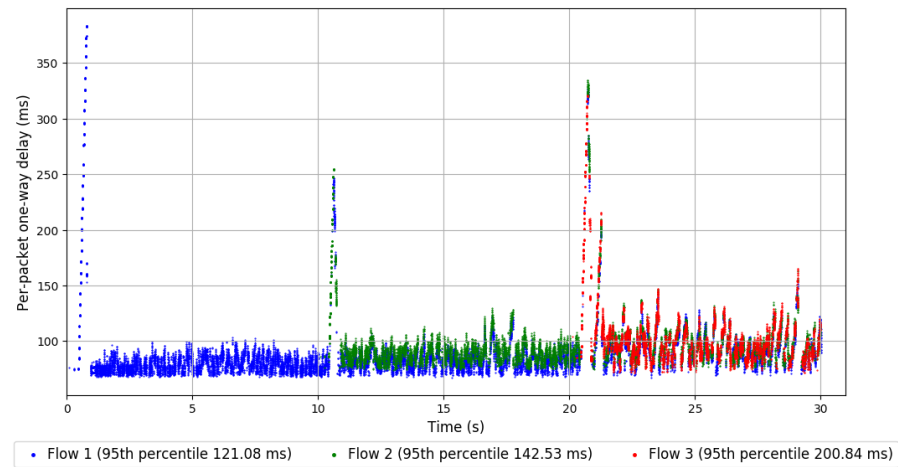
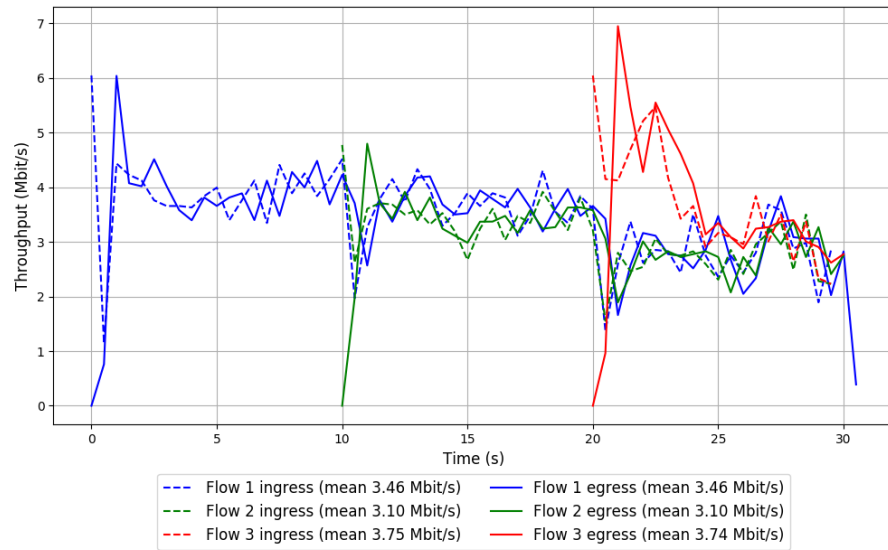


Run 3: Statistics of TaoVA-100x

Start at: 2018-05-30 15:11:08
End at: 2018-05-30 15:11:38
Local clock offset: 7.746 ms
Remote clock offset: 47.503 ms

Below is generated by plot.py at 2018-05-30 15:27:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 152.914 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 121.082 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 142.528 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 200.843 ms
Loss rate: 0.01%

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

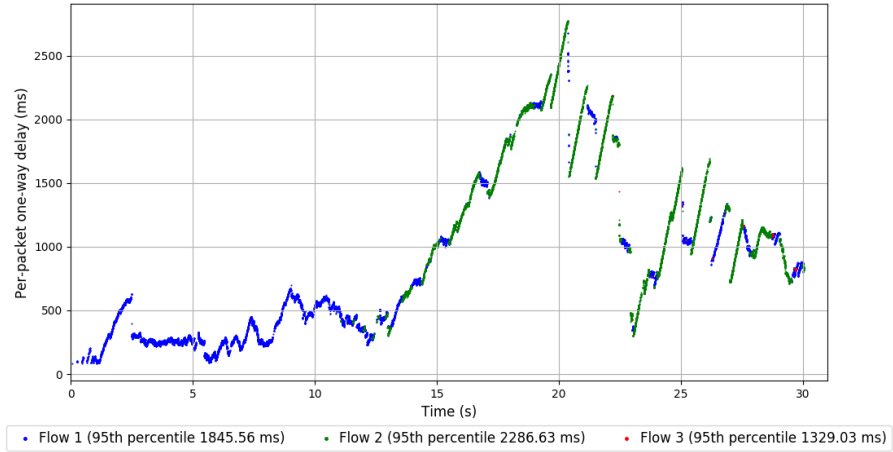
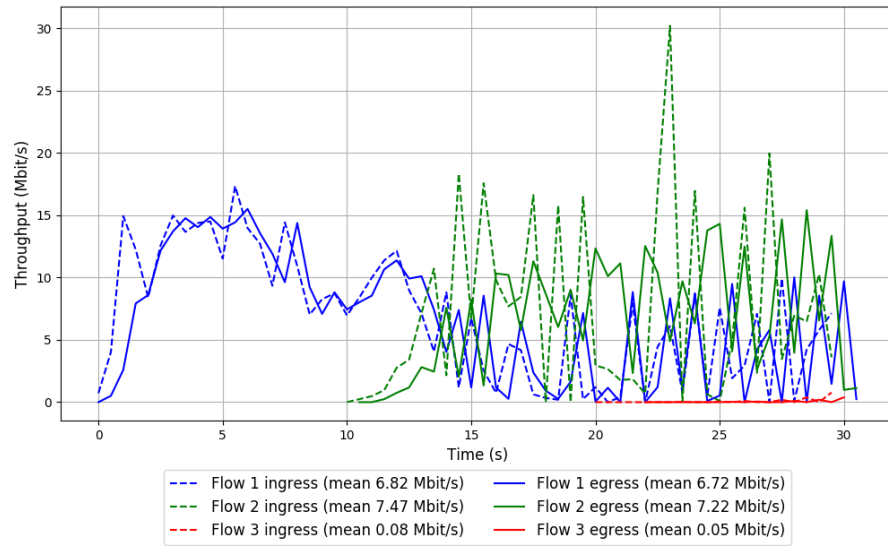


Run 1: Statistics of TCP Vegas

Start at: 2018-05-30 14:35:42
End at: 2018-05-30 14:36:12
Local clock offset: 6.116 ms
Remote clock offset: 50.448 ms

Below is generated by plot.py at 2018-05-30 15:27:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.41 Mbit/s
95th percentile per-packet one-way delay: 2114.466 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 1845.559 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 2286.627 ms
Loss rate: 4.16%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1329.031 ms
Loss rate: 50.50%

Run 1: Report of TCP Vegas — Data Link

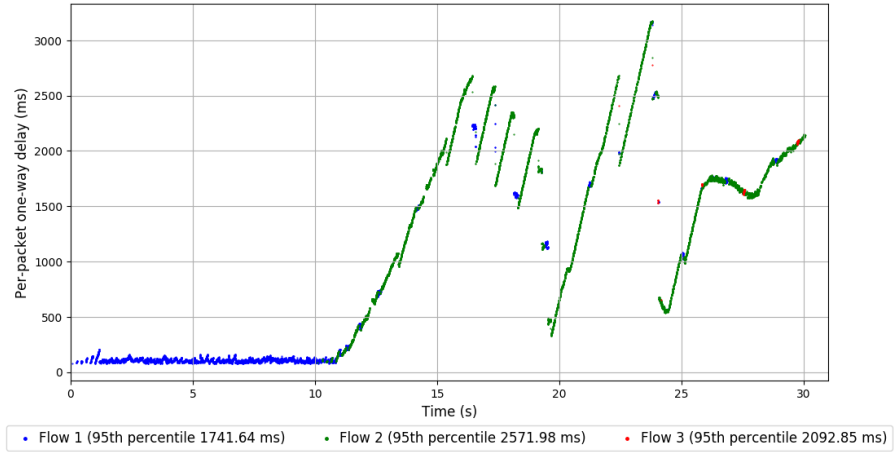
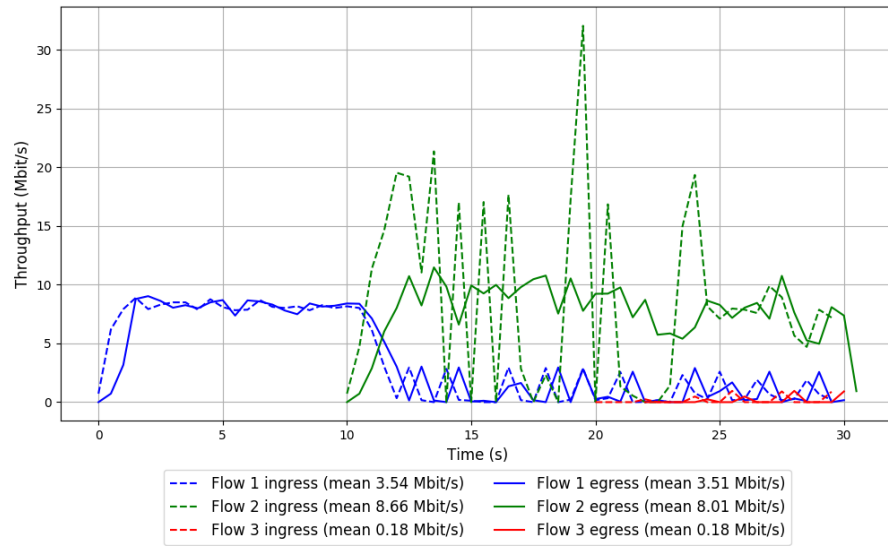


Run 2: Statistics of TCP Vegas

Start at: 2018-05-30 14:56:39
End at: 2018-05-30 14:57:09
Local clock offset: 7.04 ms
Remote clock offset: 46.999 ms

Below is generated by plot.py at 2018-05-30 15:27:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 2486.861 ms
Loss rate: 5.43%
-- Flow 1:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 1741.640 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 2571.977 ms
Loss rate: 7.66%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 2092.846 ms
Loss rate: 25.48%

Run 2: Report of TCP Vegas — Data Link

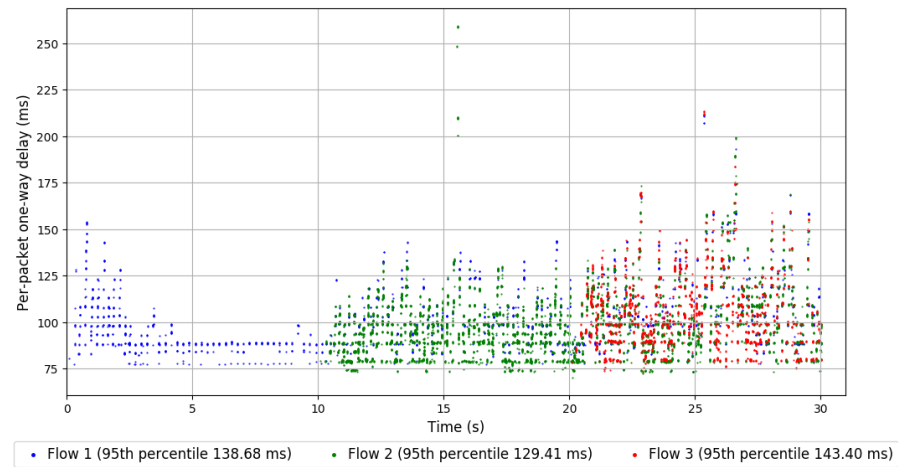
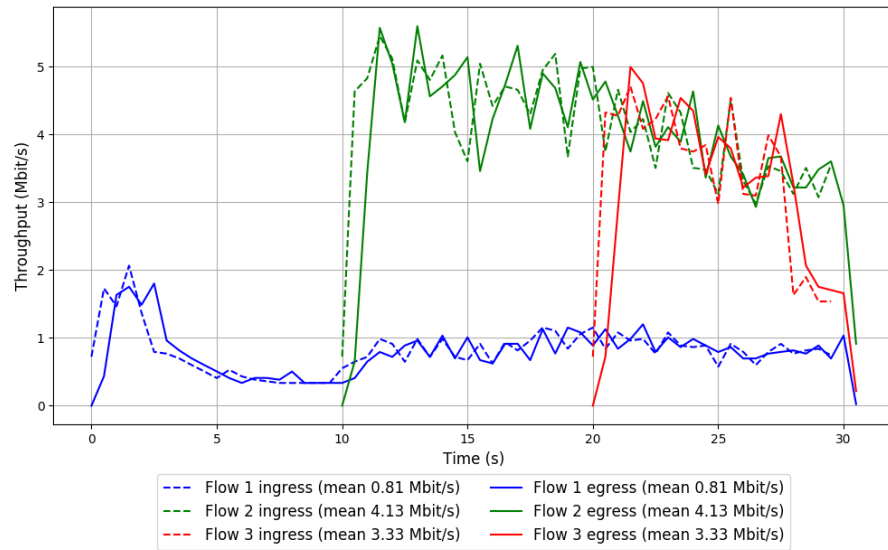


Run 3: Statistics of TCP Vegas

Start at: 2018-05-30 15:17:41
End at: 2018-05-30 15:18:11
Local clock offset: 7.534 ms
Remote clock offset: 48.071 ms

Below is generated by plot.py at 2018-05-30 15:27:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 134.545 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 138.676 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 129.414 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.33 Mbit/s
95th percentile per-packet one-way delay: 143.397 ms
Loss rate: 0.14%

Run 3: Report of TCP Vegas — Data Link

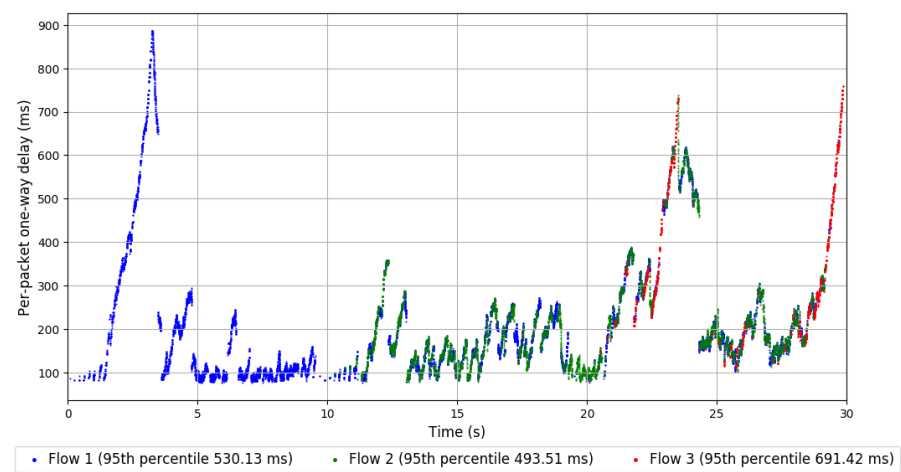
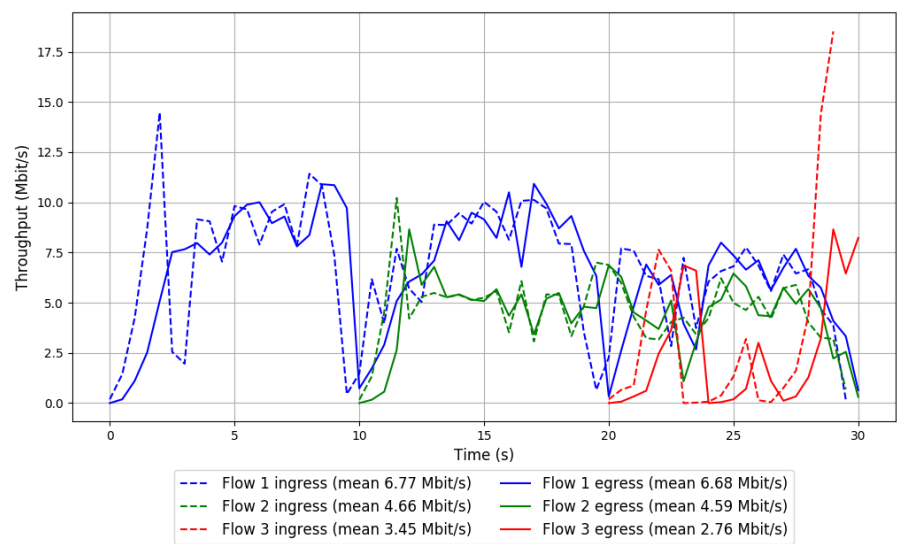


Run 1: Statistics of Verus

Start at: 2018-05-30 14:43:33
End at: 2018-05-30 14:44:03
Local clock offset: 6.118 ms
Remote clock offset: 47.915 ms

Below is generated by plot.py at 2018-05-30 15:27:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 10.60 Mbit/s
95th percentile per-packet one-way delay: 561.422 ms
Loss rate: 2.91%
-- Flow 1:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 530.135 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 493.507 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: 691.424 ms
Loss rate: 17.51%

Run 1: Report of Verus — Data Link

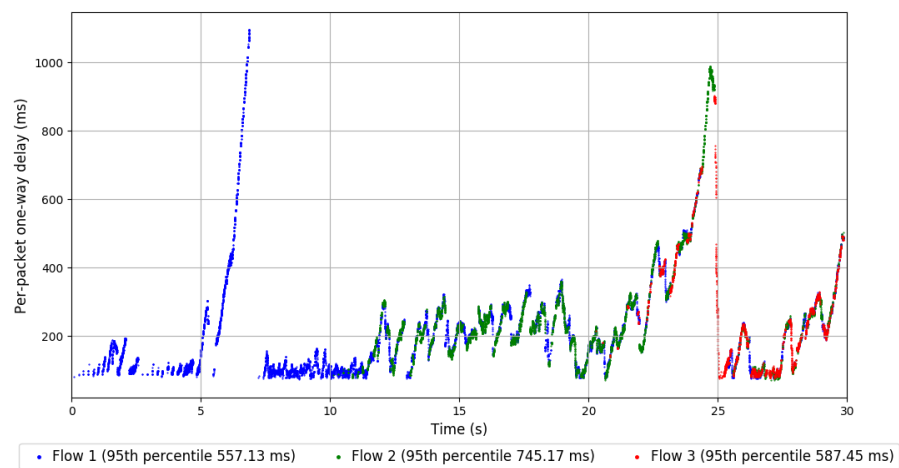
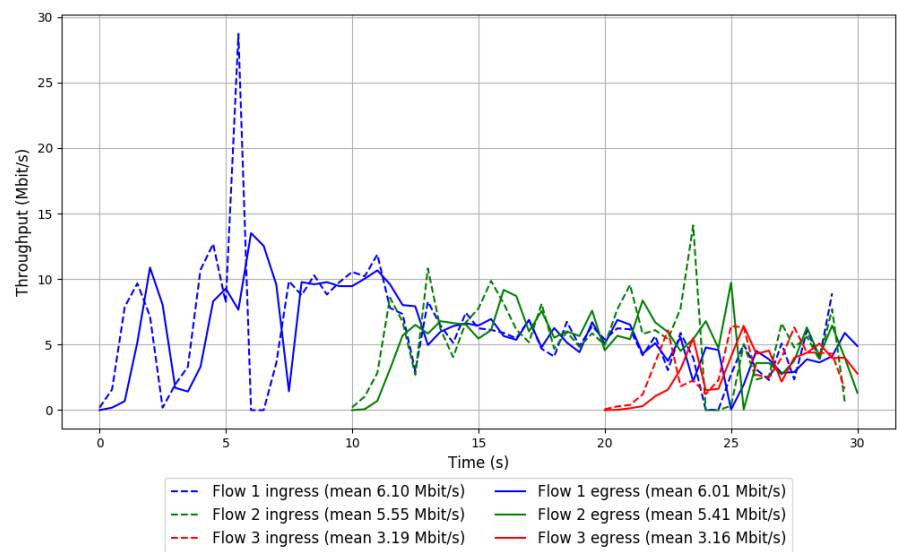


Run 2: Statistics of Verus

Start at: 2018-05-30 15:04:34
End at: 2018-05-30 15:05:04
Local clock offset: 7.455 ms
Remote clock offset: 46.91 ms

Below is generated by plot.py at 2018-05-30 15:27:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 10.61 Mbit/s
95th percentile per-packet one-way delay: 602.878 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 6.01 Mbit/s
95th percentile per-packet one-way delay: 557.134 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 745.166 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: 587.446 ms
Loss rate: 2.62%

Run 2: Report of Verus — Data Link

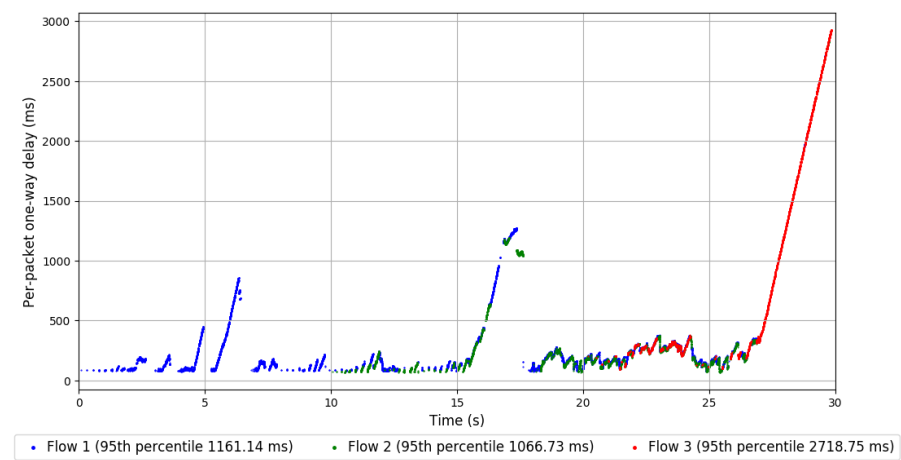
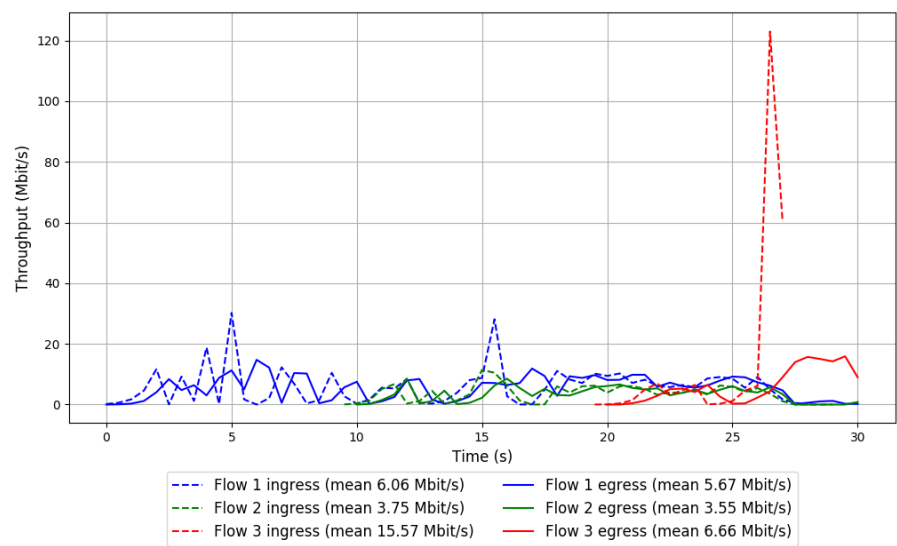


Run 3: Statistics of Verus

Start at: 2018-05-30 15:25:32
End at: 2018-05-30 15:26:02
Local clock offset: 7.808 ms
Remote clock offset: 48.482 ms

Below is generated by plot.py at 2018-05-30 15:27:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 10.17 Mbit/s
95th percentile per-packet one-way delay: 2049.188 ms
Loss rate: 14.41%
-- Flow 1:
Average throughput: 5.67 Mbit/s
95th percentile per-packet one-way delay: 1161.141 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 1066.735 ms
Loss rate: 2.12%
-- Flow 3:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 2718.748 ms
Loss rate: 42.61%

Run 3: Report of Verus — Data Link

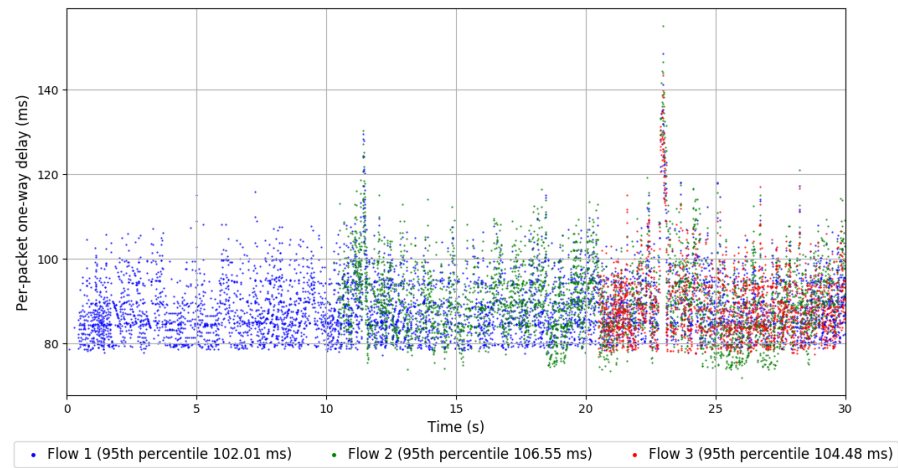
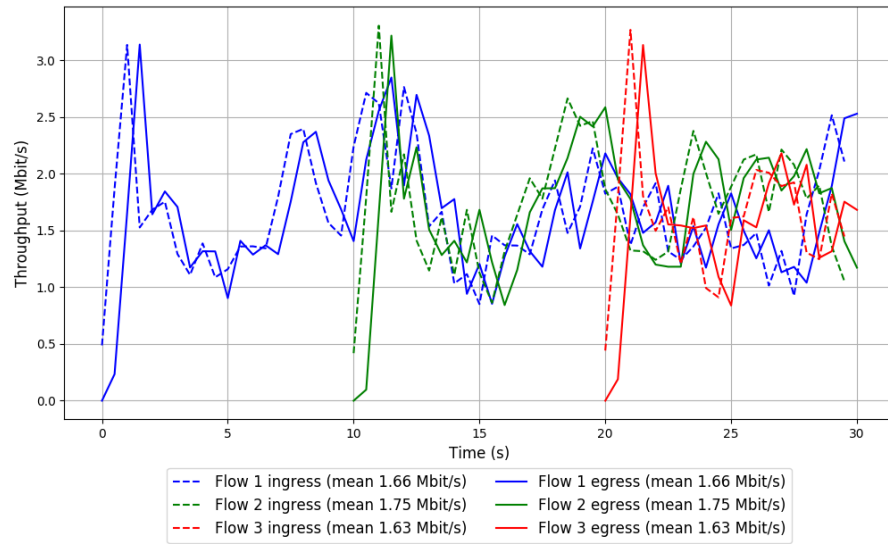


Run 1: Statistics of PCC-Vivace

Start at: 2018-05-30 14:31:46
End at: 2018-05-30 14:32:16
Local clock offset: 5.994 ms
Remote clock offset: 52.845 ms

Below is generated by plot.py at 2018-05-30 15:27:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 104.317 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 102.012 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 106.552 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 104.477 ms
Loss rate: 0.22%

Run 1: Report of PCC-Vivace — Data Link

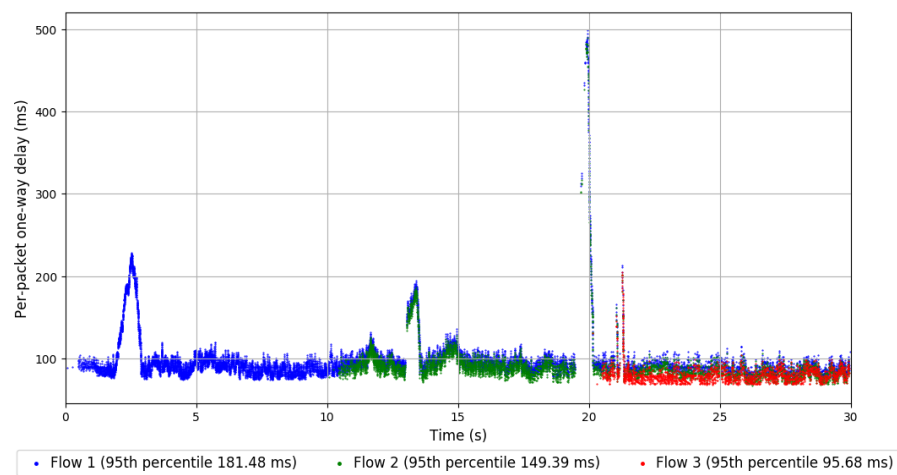
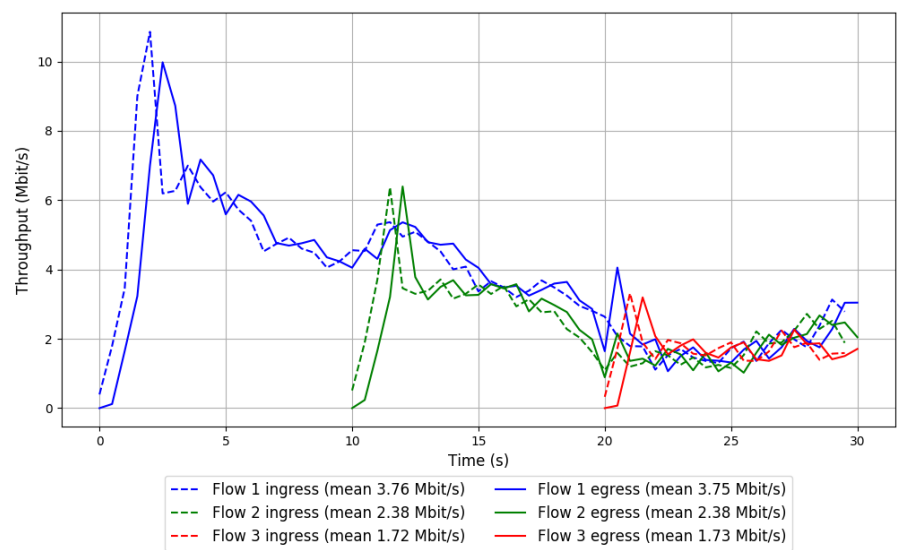


Run 2: Statistics of PCC-Vivace

Start at: 2018-05-30 14:52:43
End at: 2018-05-30 14:53:13
Local clock offset: 7.054 ms
Remote clock offset: 47.042 ms

Below is generated by plot.py at 2018-05-30 15:27:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 5.90 Mbit/s
95th percentile per-packet one-way delay: 166.301 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 181.484 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 149.392 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 95.678 ms
Loss rate: 0.42%

Run 2: Report of PCC-Vivace — Data Link

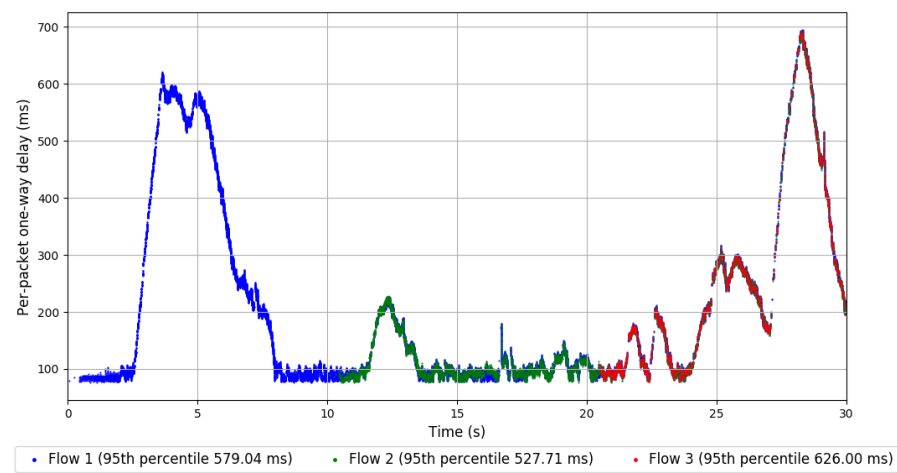
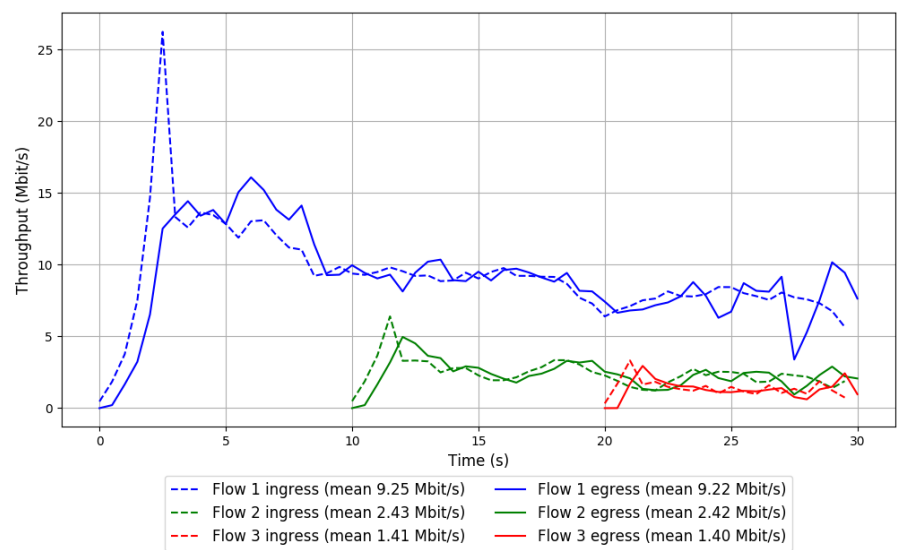


Run 3: Statistics of PCC-Vivace

Start at: 2018-05-30 15:13:45
End at: 2018-05-30 15:14:15
Local clock offset: 7.684 ms
Remote clock offset: 47.799 ms

Below is generated by plot.py at 2018-05-30 15:27:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 578.621 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 9.22 Mbit/s
95th percentile per-packet one-way delay: 579.036 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 527.713 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 626.004 ms
Loss rate: 1.08%

Run 3: Report of PCC-Vivace — Data Link

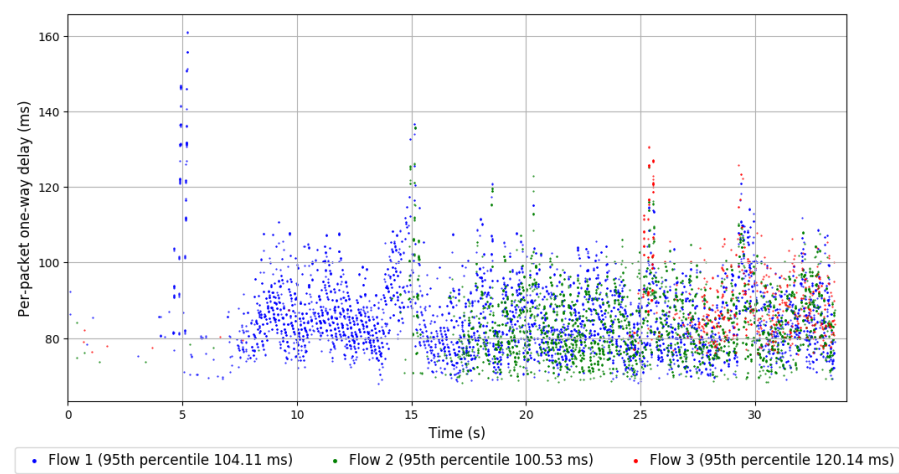
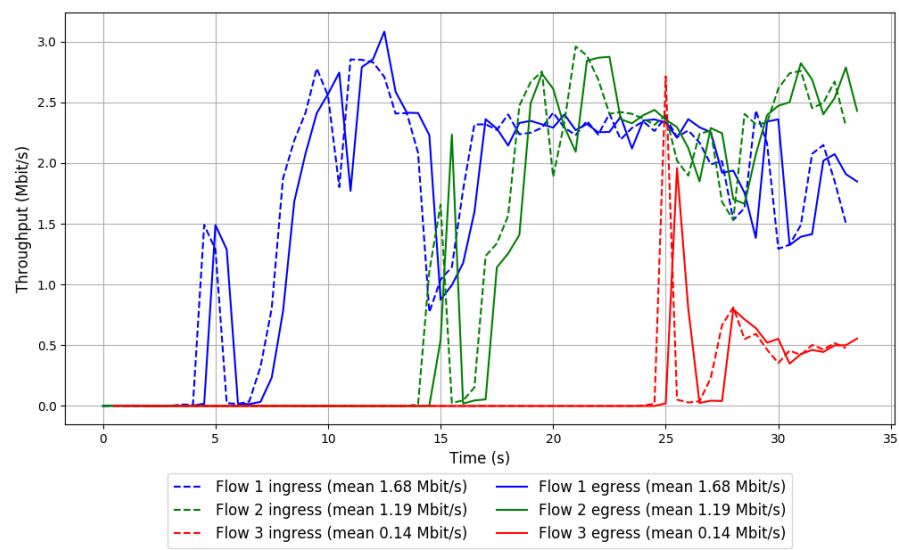


Run 1: Statistics of WebRTC media

Start at: 2018-05-30 14:23:54
End at: 2018-05-30 14:24:24
Local clock offset: 6.29 ms
Remote clock offset: 53.096 ms

Below is generated by plot.py at 2018-05-30 15:27:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 103.689 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 104.111 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 100.534 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 120.141 ms
Loss rate: 0.15%

Run 1: Report of WebRTC media — Data Link

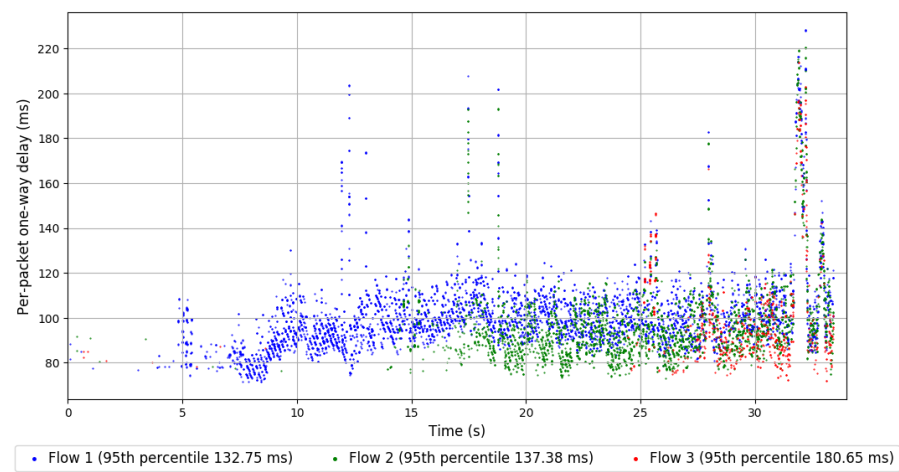
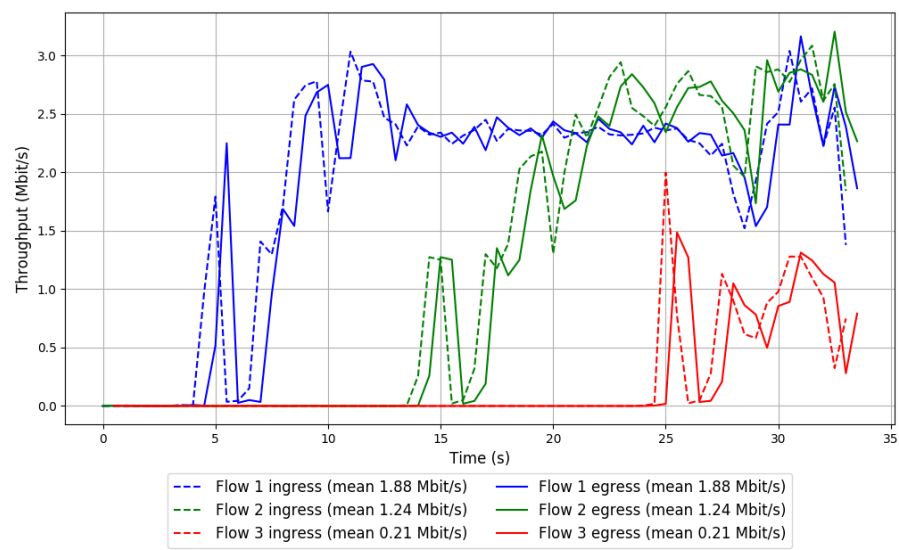


Run 2: Statistics of WebRTC media

Start at: 2018-05-30 14:44:52
End at: 2018-05-30 14:45:22
Local clock offset: 6.193 ms
Remote clock offset: 47.716 ms

Below is generated by plot.py at 2018-05-30 15:27:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 137.381 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 132.755 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 137.383 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 180.648 ms
Loss rate: 0.49%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-05-30 15:05:53
End at: 2018-05-30 15:06:23
Local clock offset: 7.597 ms
Remote clock offset: 47.156 ms

Below is generated by plot.py at 2018-05-30 15:27:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 111.851 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 103.234 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 115.494 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.381 ms
Loss rate: 0.24%

Run 3: Report of WebRTC media — Data Link

