

Pantheon Report

Generated at 2018-07-10 19:44:07 (UTC).

Data path: India ppp0 ppp0 (*remote*) → AWS India 1 Ethernet (*local*).

Repeated the test of 17 congestion control schemes 3 times.

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

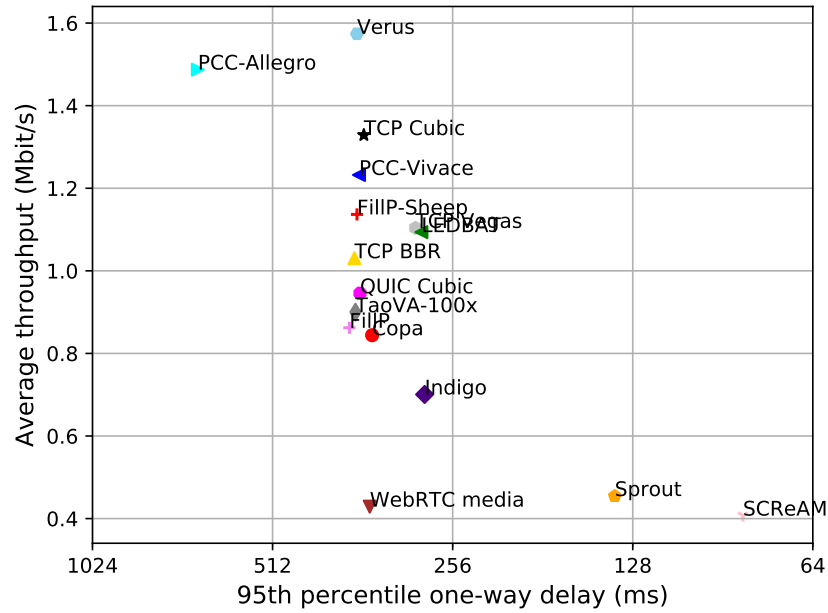
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

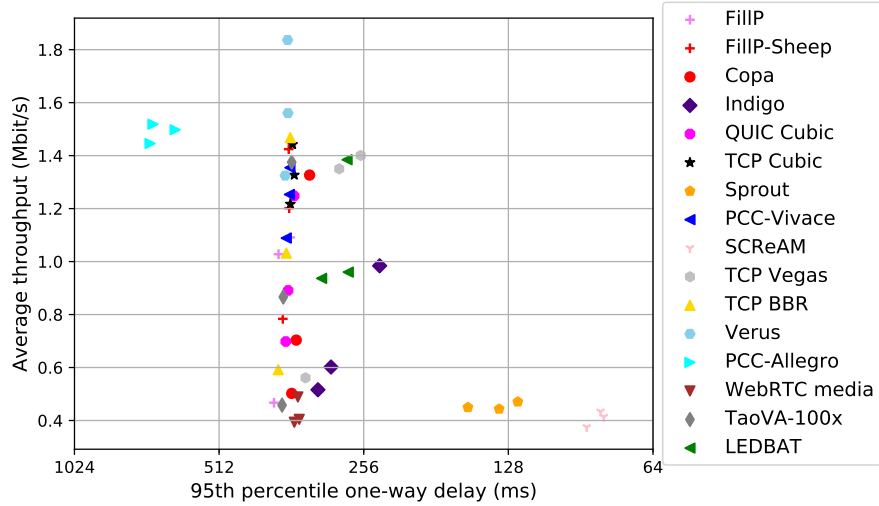
Git summary:

```
branch: master @ 9250dbeec7fb57193cdff1ba8c440b4e16ab30f0
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 37162fe9af85249aeccac061c93e75640ef710b5
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from India ppp0 to AWS India 1, 3 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from India ppp0 to AWS India 1, 3 runs of 30s each per scheme
 3 flows with 10s interval between flows



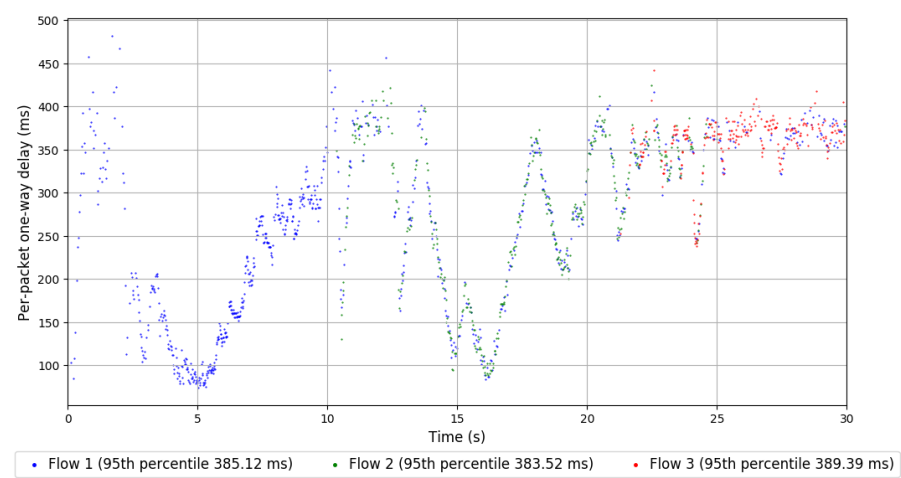
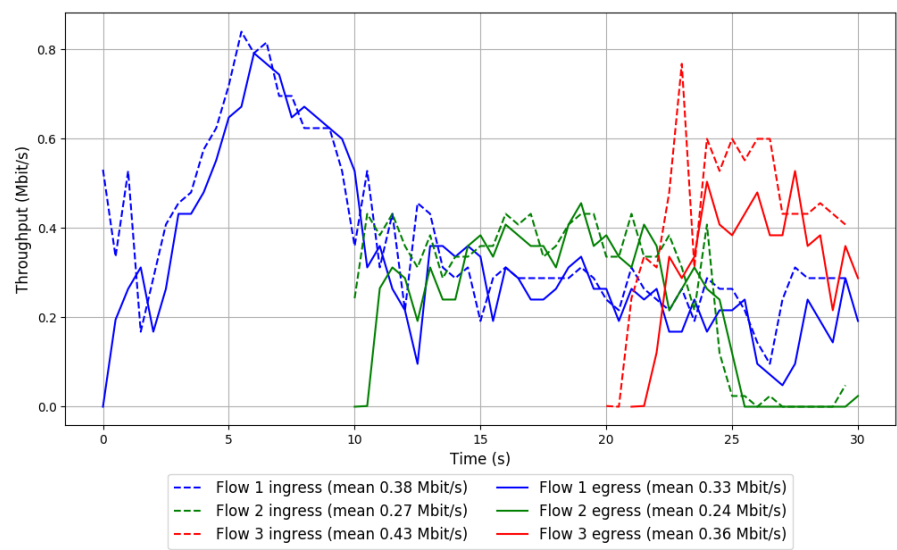
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	0.60	0.44	0.43	372.19	373.84	376.44	13.98	20.93	31.45
Copa	3	0.51	0.37	0.29	344.94	350.72	357.25	5.45	7.92	9.11
TCP Cubic	3	0.79	0.56	0.55	360.05	360.55	361.72	3.70	5.76	9.54
FillP	3	0.55	0.30	0.34	435.22	377.37	386.70	55.90	55.07	58.70
FillP-Sheep	3	0.78	0.37	0.38	369.14	370.73	368.00	47.86	72.09	74.32
Indigo	3	0.36	0.29	0.47	267.20	289.21	308.71	3.76	6.07	9.15
LEDBAT	3	0.53	0.62	0.59	277.31	291.98	290.76	0.43	0.86	3.12
PCC-Allegro	3	0.87	0.71	0.55	392.99	719.82	832.80	64.36	80.74	90.17
PCC-Expr	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QUIC Cubic	3	0.60	0.37	0.35	363.99	366.31	374.28	15.43	23.18	32.07
SCReAM	3	0.21	0.20	0.21	84.72	84.25	82.97	0.25	0.38	0.70
Sprout	3	0.22	0.24	0.24	137.79	132.97	145.99	0.84	0.67	1.65
TaoVA-100x	3	0.69	0.25	0.35	370.47	380.15	389.98	35.34	63.74	57.55
TCP Vegas	3	0.58	0.51	0.59	280.70	302.97	323.58	1.34	1.97	2.82
Verus	3	1.42	0.20	0.10	369.27	408.44	369.49	24.74	64.79	56.96
PCC-Vivace	3	0.75	0.55	0.38	363.96	371.22	371.99	44.07	60.25	70.92
WebRTC media	3	0.15	0.19	0.09	349.00	350.98	357.84	11.35	7.82	16.82

Run 1: Statistics of TCP BBR

Start at: 2018-07-10 18:54:04
End at: 2018-07-10 18:54:34
Local clock offset: 2.312 ms
Remote clock offset: -8.197 ms

Below is generated by plot.py at 2018-07-10 19:43:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 385.666 ms
Loss rate: 16.09%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 385.118 ms
Loss rate: 12.55%
-- Flow 2:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 383.522 ms
Loss rate: 14.66%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 389.386 ms
Loss rate: 27.33%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-07-10 19:12:51

End at: 2018-07-10 19:13:21

Local clock offset: -0.429 ms

Remote clock offset: -2.49 ms

Below is generated by plot.py at 2018-07-10 19:43:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 371.011 ms

Loss rate: 25.43%

-- Flow 1:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 368.267 ms

Loss rate: 18.46%

-- Flow 2:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 375.735 ms

Loss rate: 30.40%

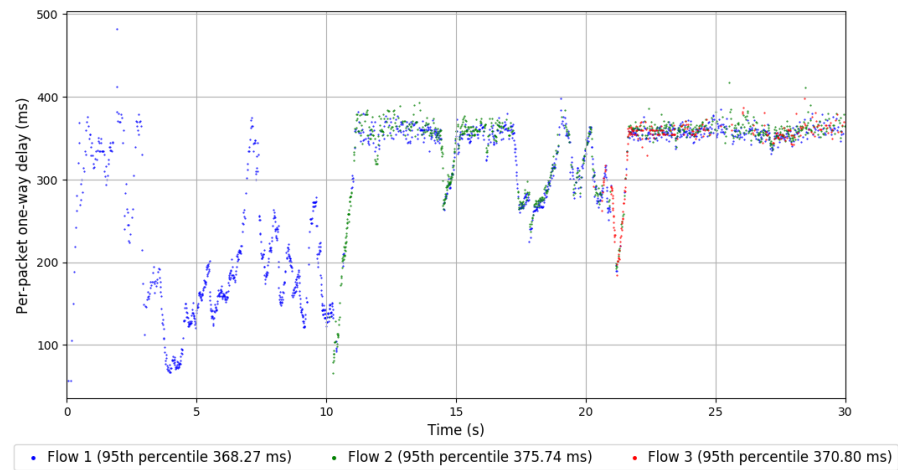
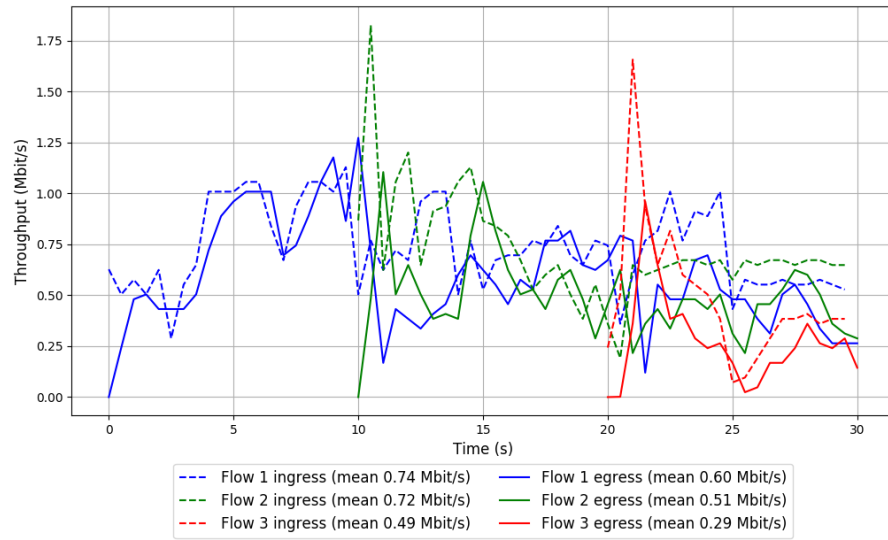
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 370.803 ms

Loss rate: 42.14%

Run 2: Report of TCP BBR — Data Link

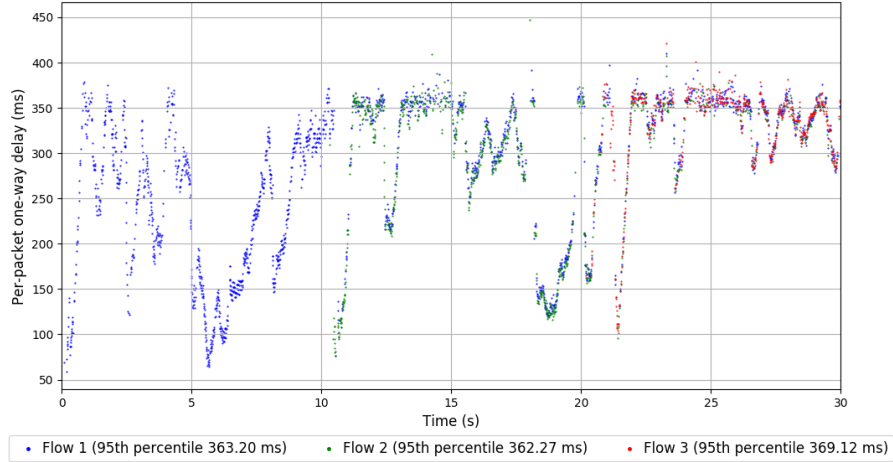
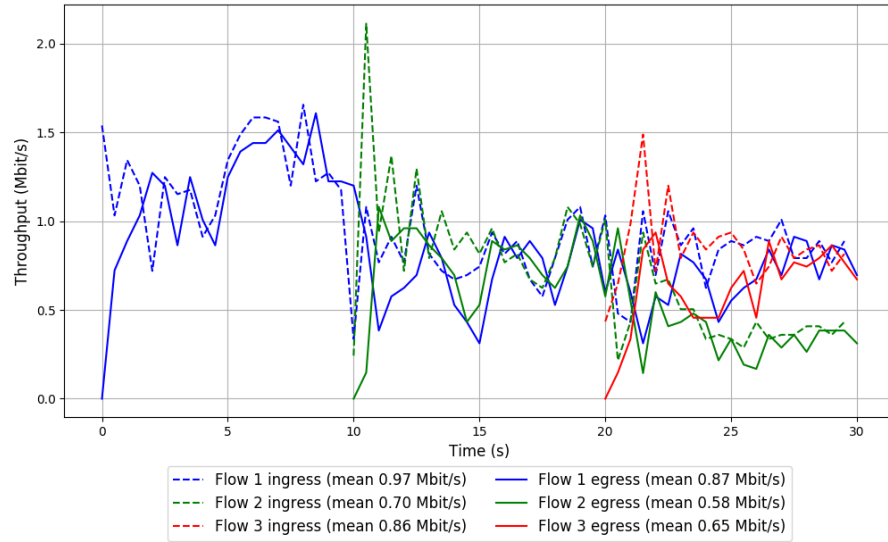


Run 3: Statistics of TCP BBR

Start at: 2018-07-10 19:31:34
End at: 2018-07-10 19:32:04
Local clock offset: -1.284 ms
Remote clock offset: -0.582 ms

Below is generated by plot.py at 2018-07-10 19:43:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 364.058 ms
Loss rate: 15.07%
-- Flow 1:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 363.198 ms
Loss rate: 10.93%
-- Flow 2:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 362.271 ms
Loss rate: 17.73%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 369.123 ms
Loss rate: 24.89%

Run 3: Report of TCP BBR — Data Link

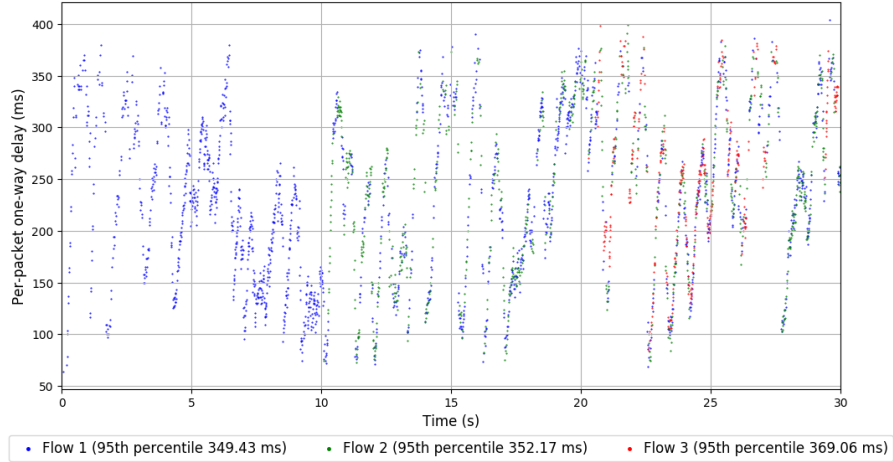
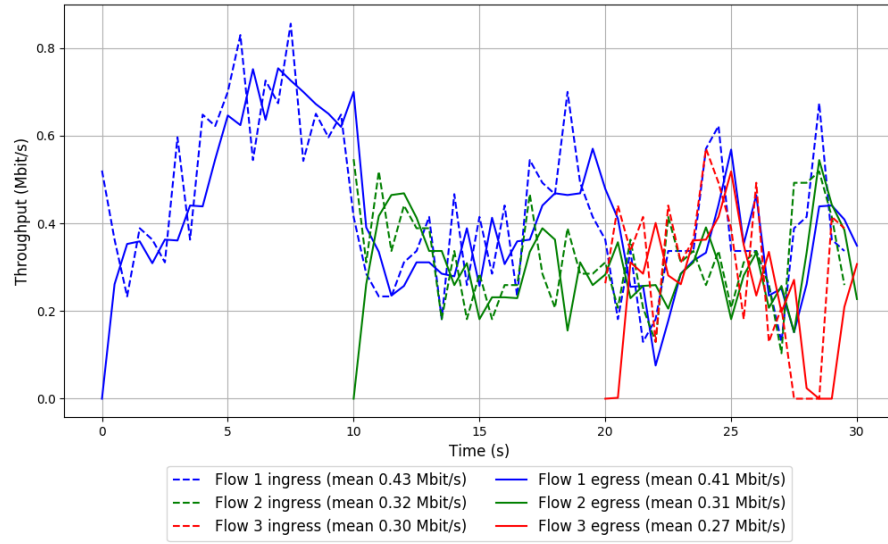


Run 1: Statistics of Copa

Start at: 2018-07-10 18:48:34
End at: 2018-07-10 18:49:04
Local clock offset: 3.467 ms
Remote clock offset: -6.981 ms

Below is generated by plot.py at 2018-07-10 19:43:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 353.758 ms
Loss rate: 5.52%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 349.427 ms
Loss rate: 3.87%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 352.165 ms
Loss rate: 4.87%
-- Flow 3:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 369.061 ms
Loss rate: 14.03%

Run 1: Report of Copa — Data Link

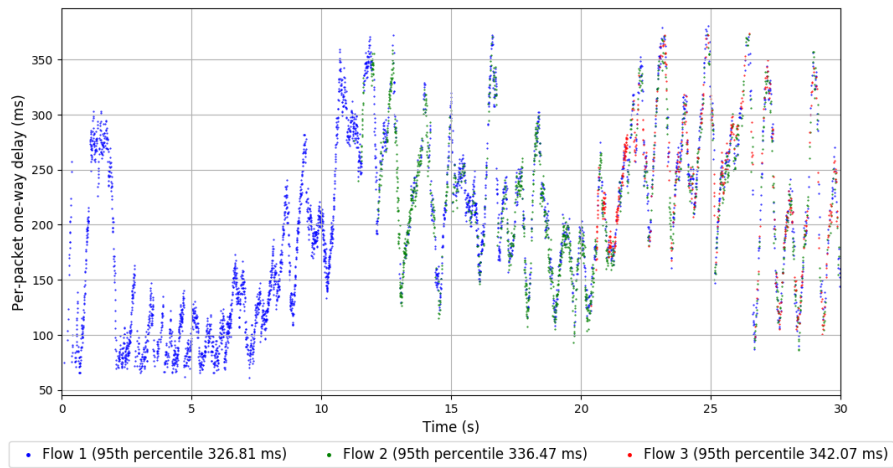
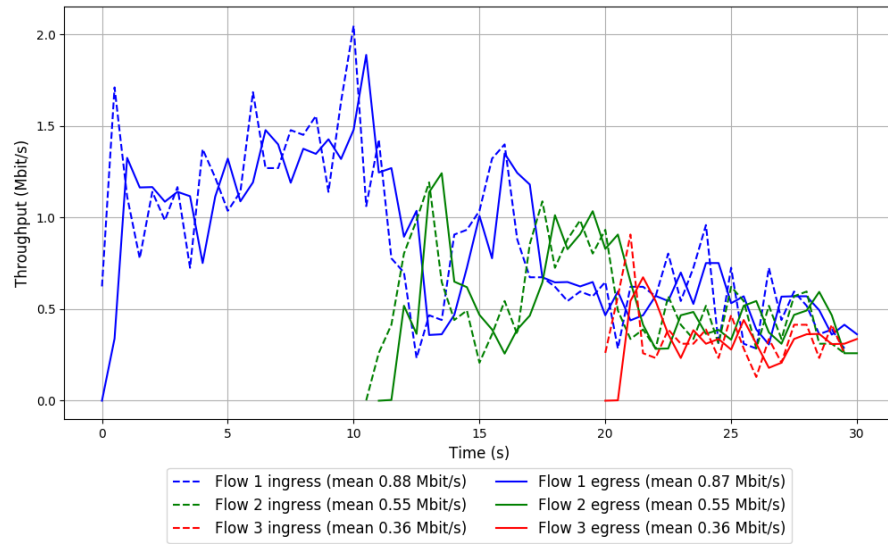


Run 2: Statistics of Copa

Start at: 2018-07-10 19:07:14
End at: 2018-07-10 19:07:44
Local clock offset: 3.061 ms
Remote clock offset: -3.243 ms

Below is generated by plot.py at 2018-07-10 19:43:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 331.838 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 326.806 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 336.467 ms
Loss rate: 1.77%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 342.071 ms
Loss rate: 2.75%

Run 2: Report of Copa — Data Link

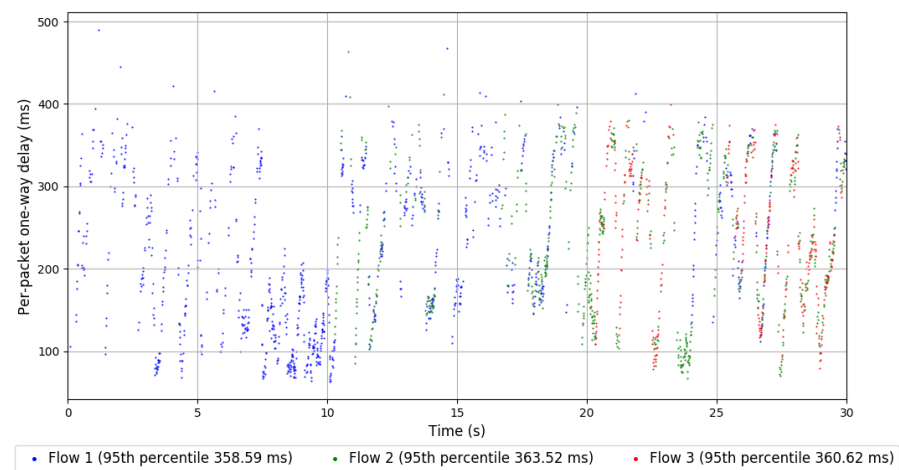
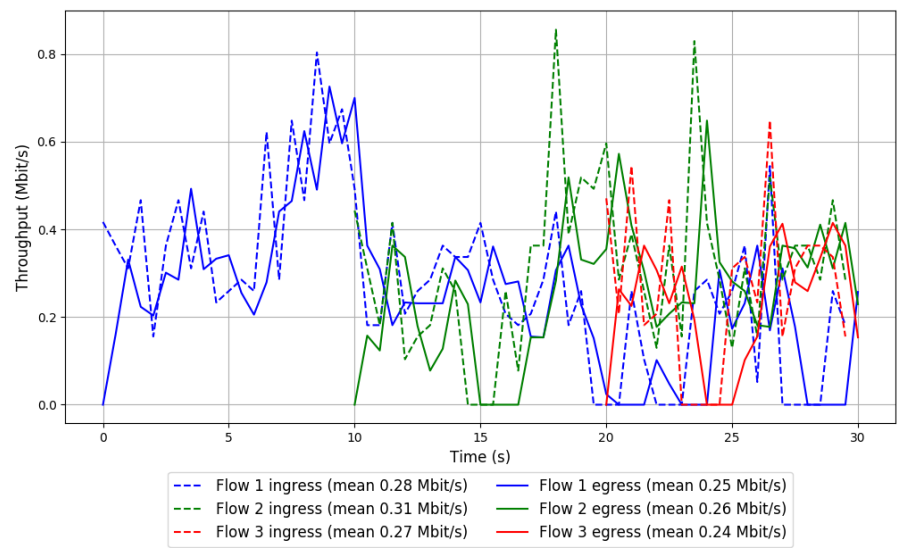


Run 3: Statistics of Copa

Start at: 2018-07-10 19:25:59
End at: 2018-07-10 19:26:29
Local clock offset: -2.227 ms
Remote clock offset: -1.382 ms

Below is generated by plot.py at 2018-07-10 19:43:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 361.520 ms
Loss rate: 13.22%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 358.588 ms
Loss rate: 11.15%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 363.521 ms
Loss rate: 17.11%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 360.621 ms
Loss rate: 10.55%

Run 3: Report of Copa — Data Link

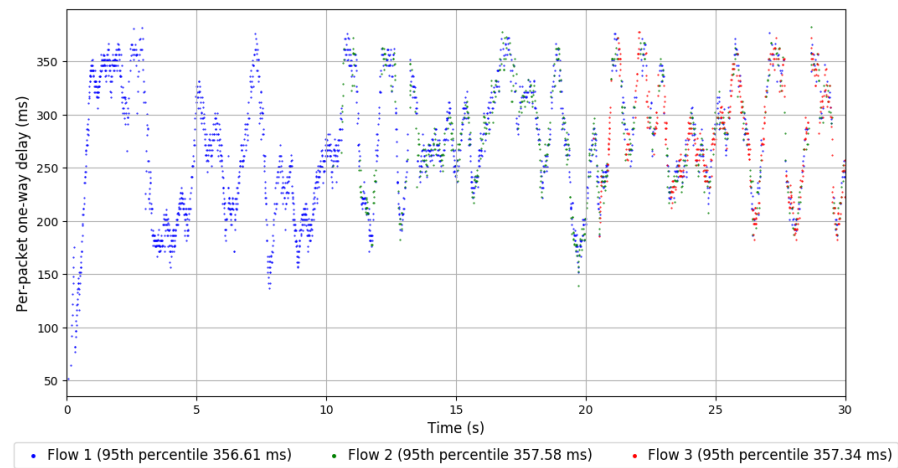
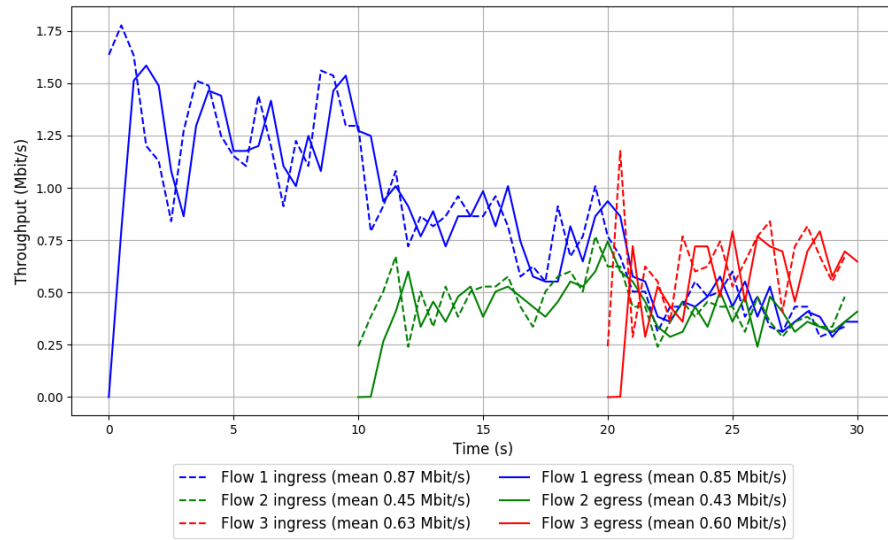


Run 1: Statistics of TCP Cubic

Start at: 2018-07-10 19:02:51
End at: 2018-07-10 19:03:21
Local clock offset: -0.759 ms
Remote clock offset: -4.796 ms

Below is generated by plot.py at 2018-07-10 19:43:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 357.103 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 356.612 ms
Loss rate: 2.48%
-- Flow 2:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 357.585 ms
Loss rate: 5.38%
-- Flow 3:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 357.339 ms
Loss rate: 8.38%

Run 1: Report of TCP Cubic — Data Link

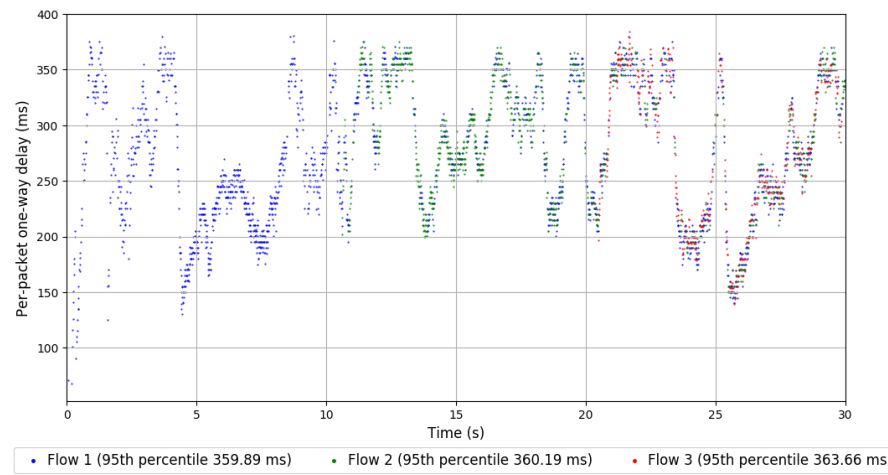
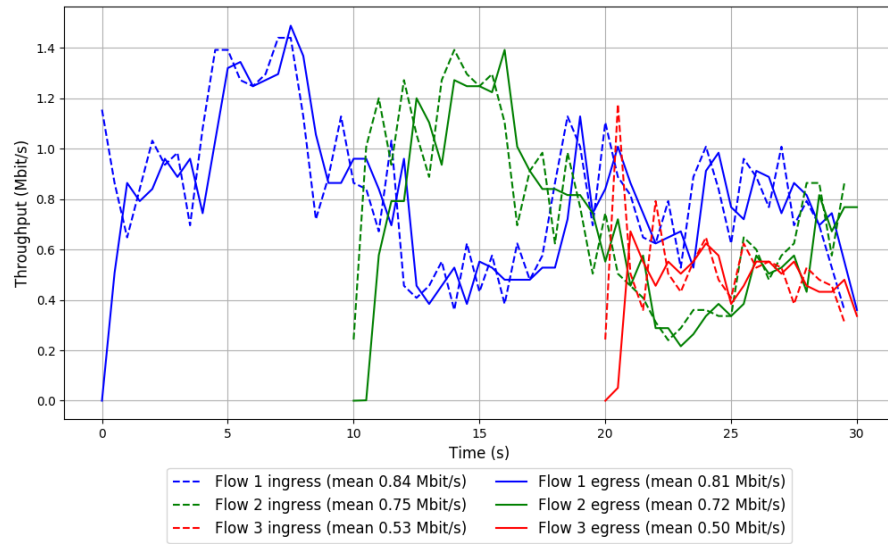


Run 2: Statistics of TCP Cubic

Start at: 2018-07-10 19:21:36
End at: 2018-07-10 19:22:06
Local clock offset: 2.173 ms
Remote clock offset: -1.758 ms

Below is generated by plot.py at 2018-07-10 19:43:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 360.034 ms
Loss rate: 4.87%
-- Flow 1:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 359.891 ms
Loss rate: 3.36%
-- Flow 2:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 360.191 ms
Loss rate: 6.37%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 363.658 ms
Loss rate: 7.78%

Run 2: Report of TCP Cubic — Data Link

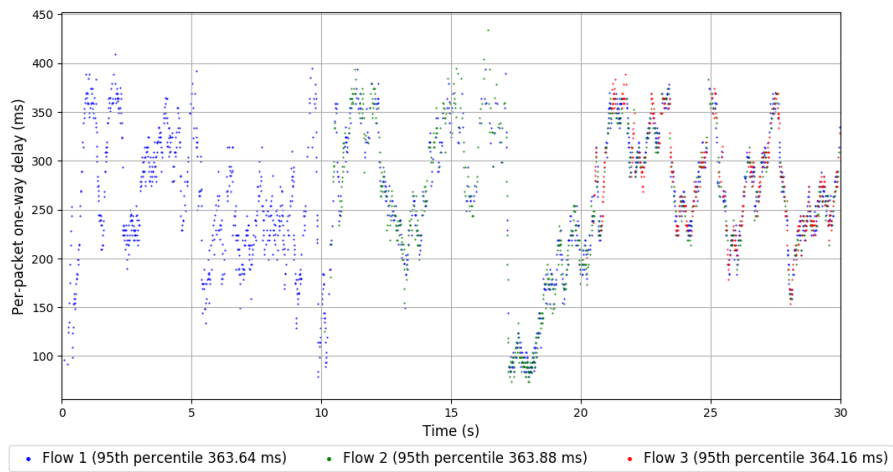
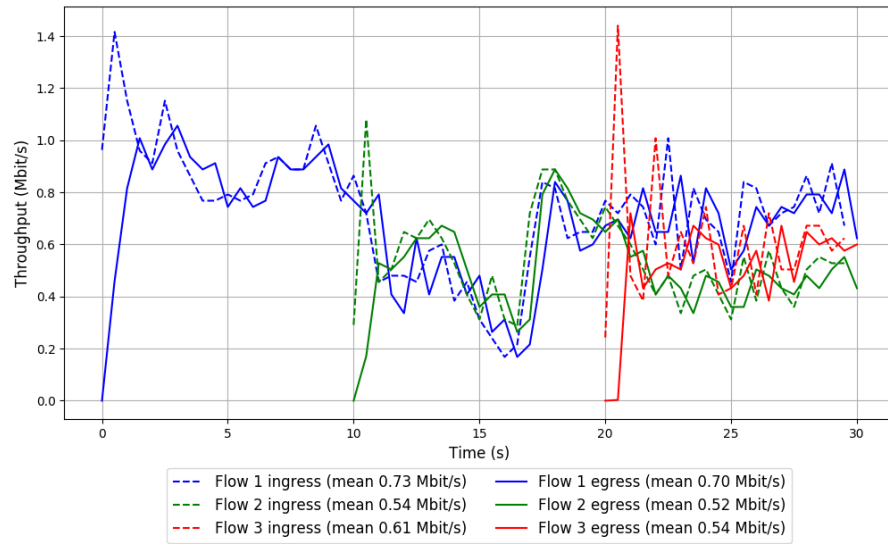


Run 3: Statistics of TCP Cubic

Start at: 2018-07-10 19:40:23
End at: 2018-07-10 19:40:53
Local clock offset: 3.605 ms
Remote clock offset: -6.152 ms

Below is generated by plot.py at 2018-07-10 19:43:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 363.837 ms
Loss rate: 6.45%
-- Flow 1:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 363.643 ms
Loss rate: 5.25%
-- Flow 2:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 363.879 ms
Loss rate: 5.53%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 364.161 ms
Loss rate: 12.45%

Run 3: Report of TCP Cubic — Data Link

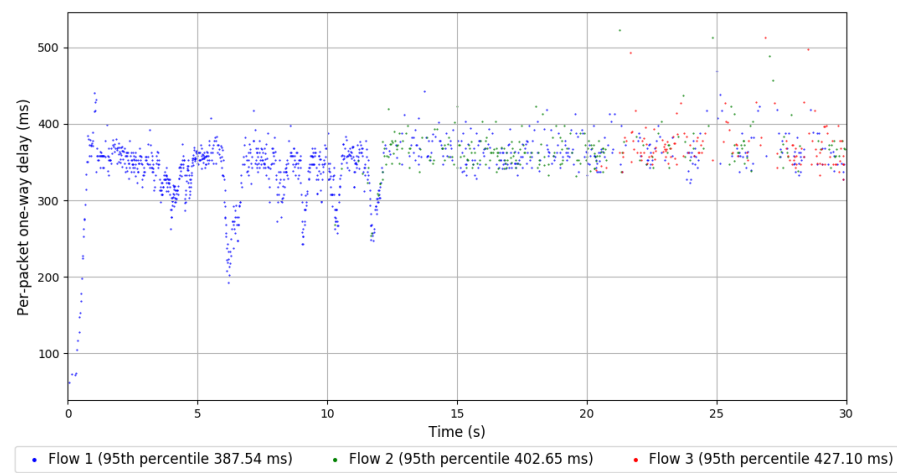
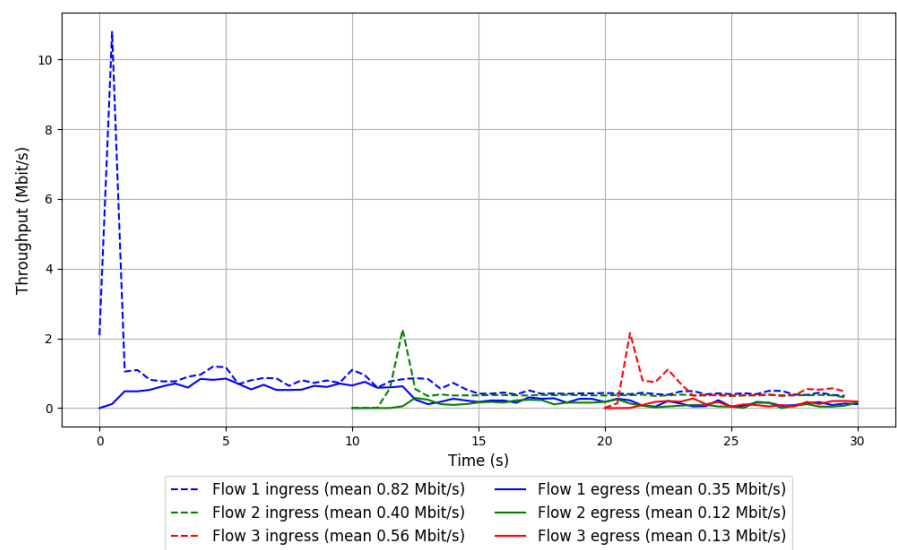


Run 1: Statistics of FillP

Start at: 2018-07-10 18:49:39
End at: 2018-07-10 18:50:09
Local clock offset: 3.212 ms
Remote clock offset: -8.379 ms

Below is generated by plot.py at 2018-07-10 19:43:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 393.573 ms
Loss rate: 63.30%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 387.537 ms
Loss rate: 57.68%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 402.653 ms
Loss rate: 71.12%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 427.103 ms
Loss rate: 76.89%

Run 1: Report of FillP — Data Link

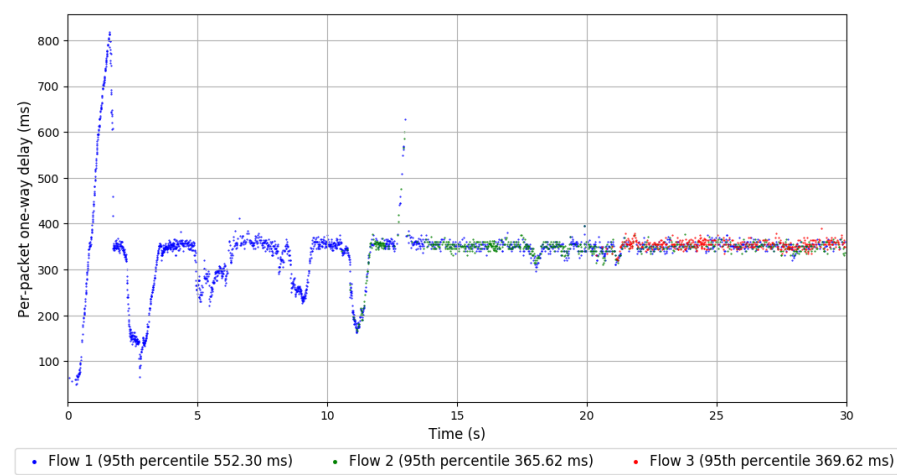
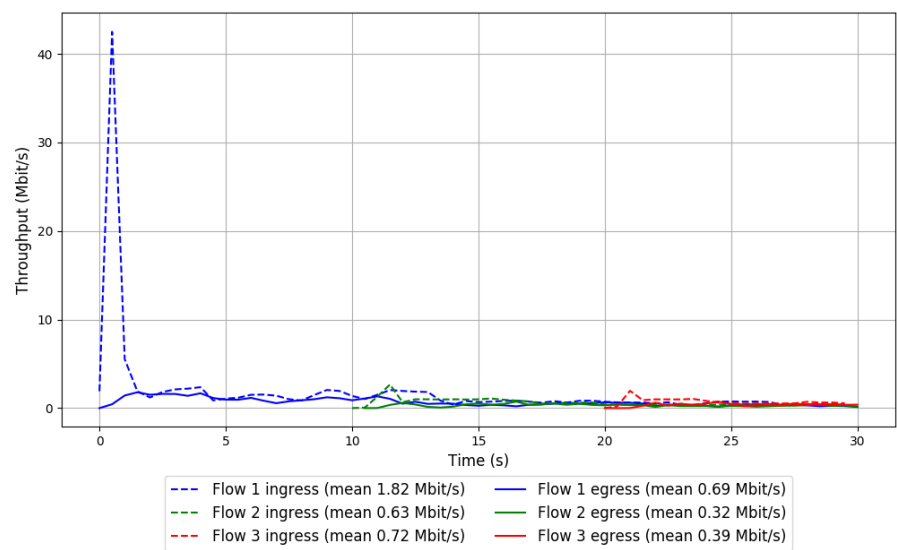


Run 2: Statistics of FillP

Start at: 2018-07-10 19:08:21
End at: 2018-07-10 19:08:51
Local clock offset: 2.502 ms
Remote clock offset: -3.352 ms

Below is generated by plot.py at 2018-07-10 19:43:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 385.089 ms
Loss rate: 58.57%
-- Flow 1:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 552.297 ms
Loss rate: 61.95%
-- Flow 2:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 365.621 ms
Loss rate: 50.23%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 369.617 ms
Loss rate: 47.53%

Run 2: Report of FillP — Data Link

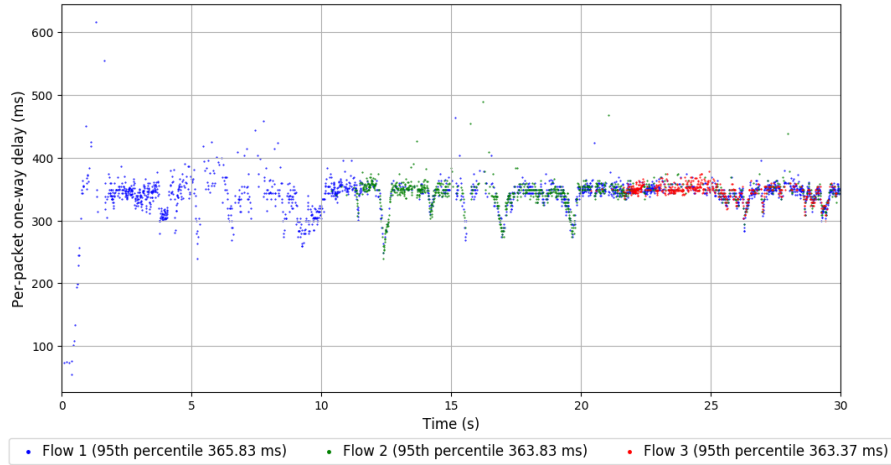
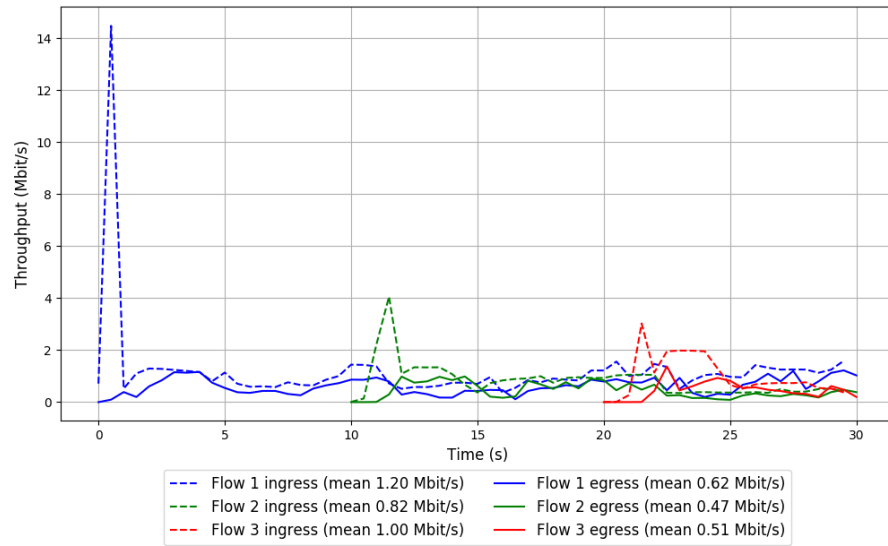


Run 3: Statistics of FillP

Start at: 2018-07-10 19:27:04
End at: 2018-07-10 19:27:34
Local clock offset: 1.093 ms
Remote clock offset: -1.375 ms

Below is generated by plot.py at 2018-07-10 19:43:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 364.196 ms
Loss rate: 47.54%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 365.830 ms
Loss rate: 48.08%
-- Flow 2:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 363.827 ms
Loss rate: 43.86%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 363.366 ms
Loss rate: 51.69%

Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-07-10 19:05:03

End at: 2018-07-10 19:05:33

Local clock offset: 1.201 ms

Remote clock offset: -3.96 ms

Below is generated by plot.py at 2018-07-10 19:43:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 365.938 ms

Loss rate: 54.92%

-- Flow 1:

Average throughput: 0.90 Mbit/s

95th percentile per-packet one-way delay: 363.319 ms

Loss rate: 38.79%

-- Flow 2:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 369.423 ms

Loss rate: 72.78%

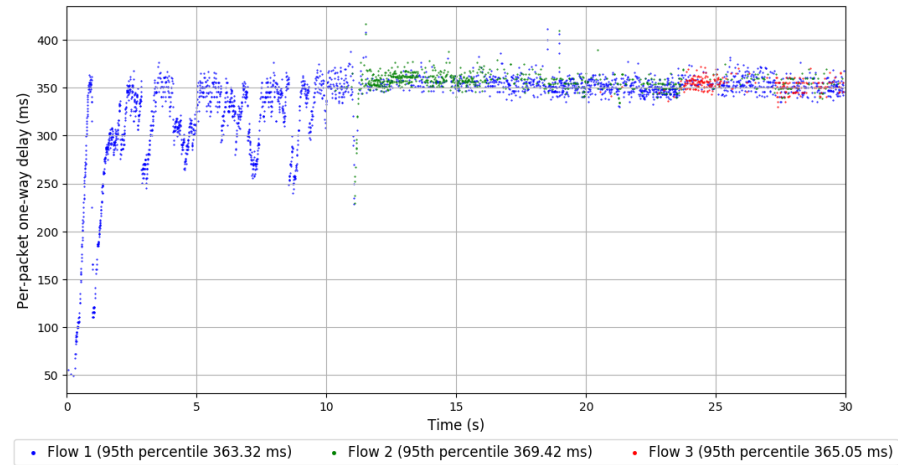
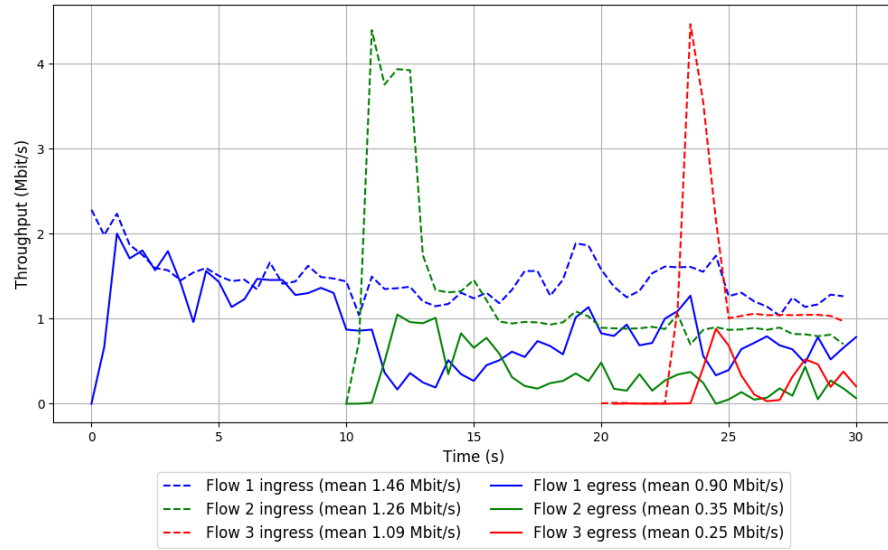
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 365.051 ms

Loss rate: 78.75%

Run 1: Report of FillP-Sheep — Data Link

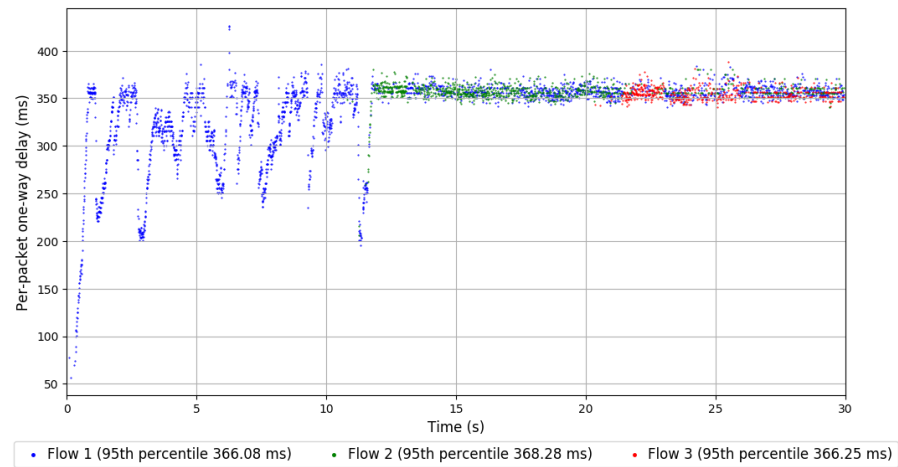
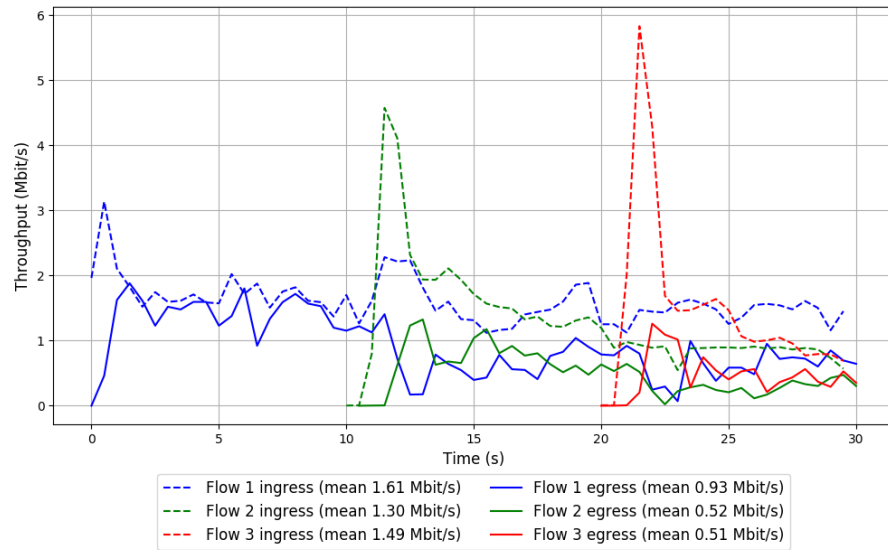


Run 2: Statistics of FillP-Sheep

Start at: 2018-07-10 19:23:48
End at: 2018-07-10 19:24:18
Local clock offset: 3.206 ms
Remote clock offset: -1.023 ms

Below is generated by plot.py at 2018-07-10 19:43:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 366.702 ms
Loss rate: 51.99%
-- Flow 1:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 366.083 ms
Loss rate: 42.47%
-- Flow 2:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 368.284 ms
Loss rate: 61.28%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 366.254 ms
Loss rate: 66.94%

Run 2: Report of FillP-Sheep — Data Link

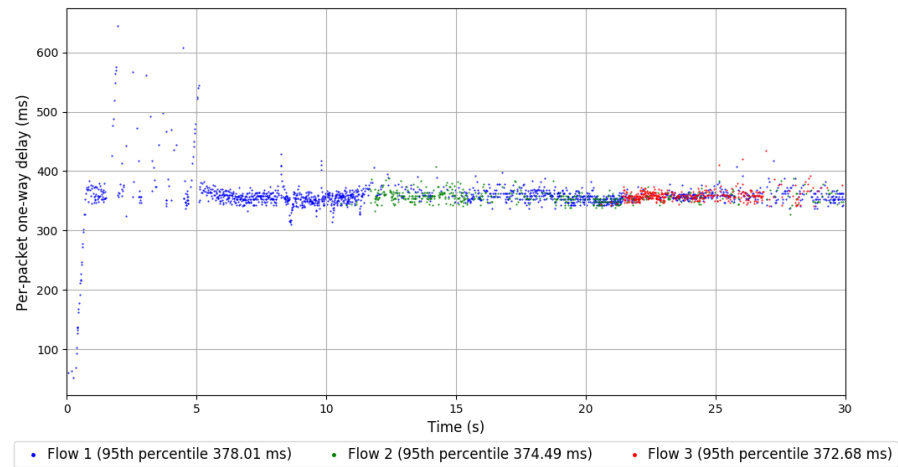
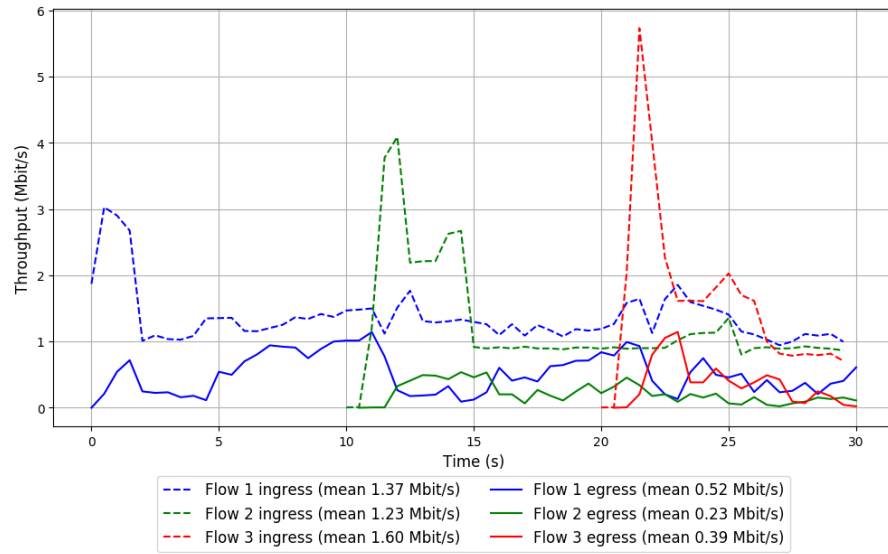


Run 3: Statistics of FillP-Sheep

Start at: 2018-07-10 19:42:49
End at: 2018-07-10 19:43:19
Local clock offset: 1.272 ms
Remote clock offset: -7.202 ms

Below is generated by plot.py at 2018-07-10 19:43:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 377.314 ms
Loss rate: 71.25%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 378.008 ms
Loss rate: 62.33%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 374.493 ms
Loss rate: 82.20%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 372.683 ms
Loss rate: 77.27%

Run 3: Report of FillP-Sheep — Data Link

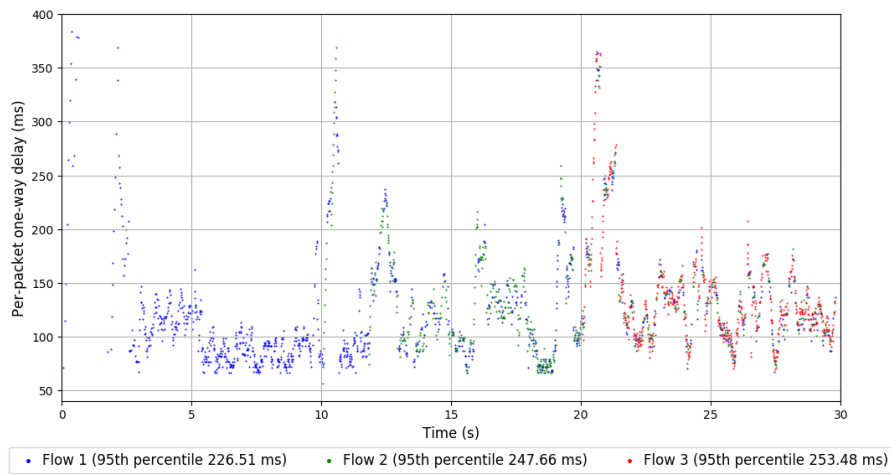
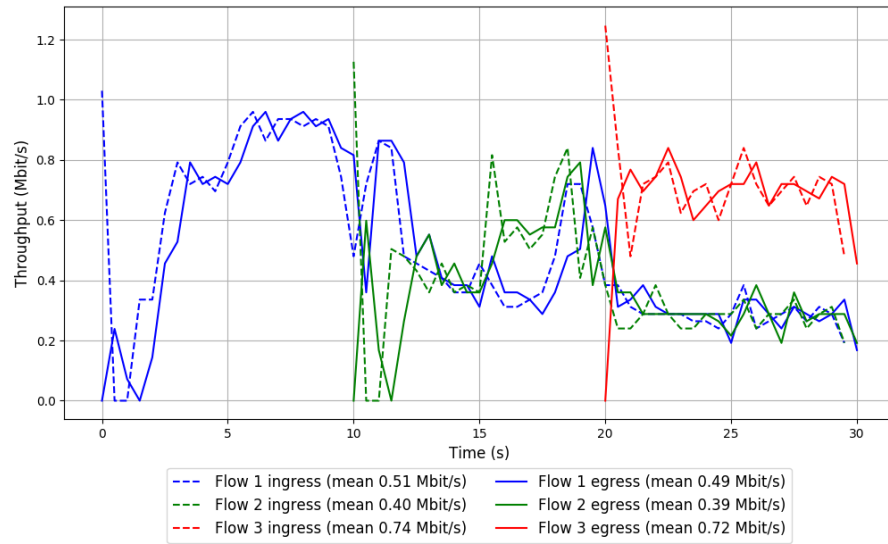


Run 1: Statistics of Indigo

Start at: 2018-07-10 18:56:16
End at: 2018-07-10 18:56:46
Local clock offset: -0.22 ms
Remote clock offset: -7.718 ms

Below is generated by plot.py at 2018-07-10 19:43:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 237.212 ms
Loss rate: 2.83%
-- Flow 1:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 226.512 ms
Loss rate: 2.79%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 247.657 ms
Loss rate: 2.91%
-- Flow 3:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 253.482 ms
Loss rate: 2.83%

Run 1: Report of Indigo — Data Link

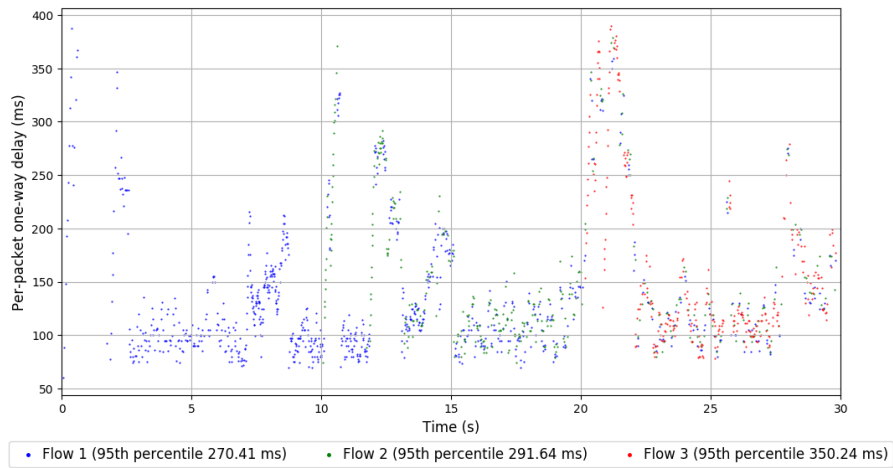
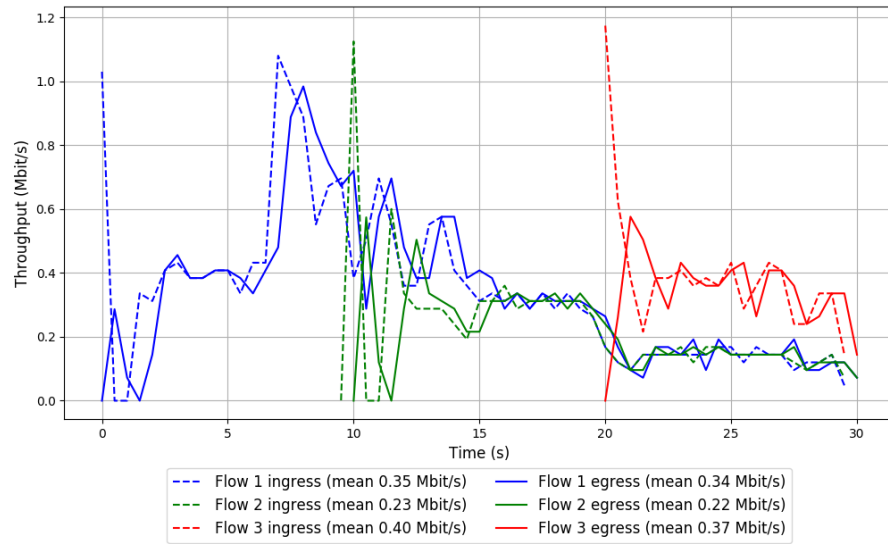


Run 2: Statistics of Indigo

Start at: 2018-07-10 19:15:03
End at: 2018-07-10 19:15:33
Local clock offset: 3.911 ms
Remote clock offset: -1.456 ms

Below is generated by plot.py at 2018-07-10 19:43:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 299.432 ms
Loss rate: 5.21%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 270.412 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 291.637 ms
Loss rate: 5.50%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 350.238 ms
Loss rate: 9.42%

Run 2: Report of Indigo — Data Link

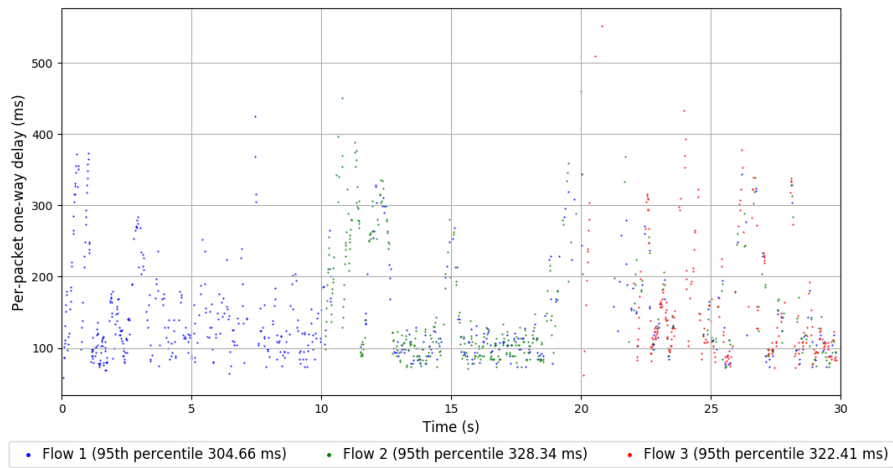
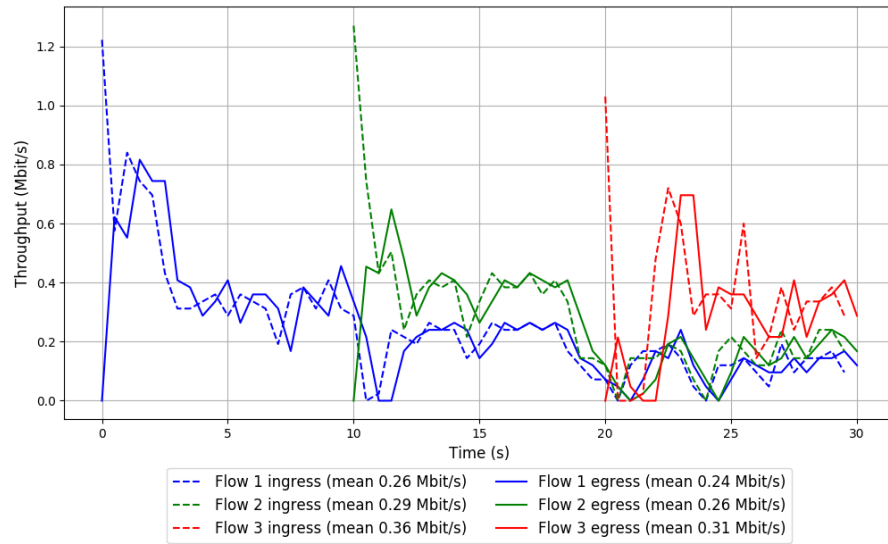


Run 3: Statistics of Indigo

Start at: 2018-07-10 19:33:45
End at: 2018-07-10 19:34:15
Local clock offset: 3.111 ms
Remote clock offset: -2.528 ms

```
# Below is generated by plot.py at 2018-07-10 19:43:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 318.796 ms
Loss rate: 8.77%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 304.662 ms
Loss rate: 5.02%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 328.340 ms
Loss rate: 9.79%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 322.410 ms
Loss rate: 15.21%
```

Run 3: Report of Indigo — Data Link

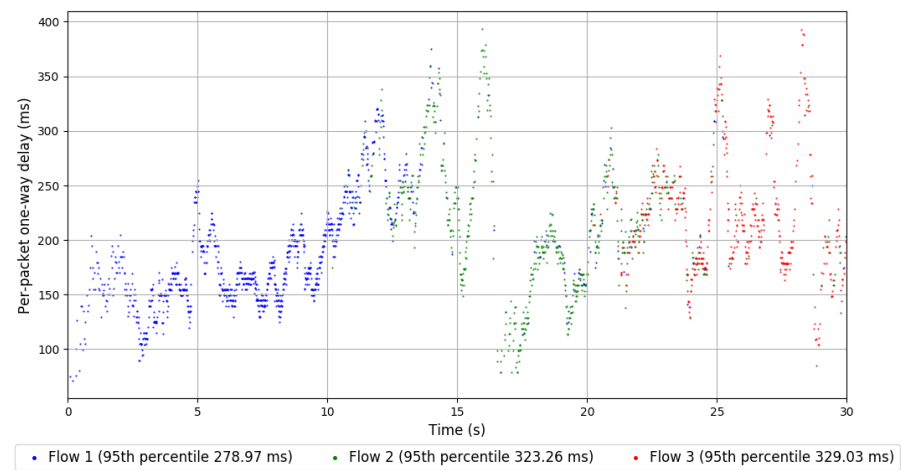
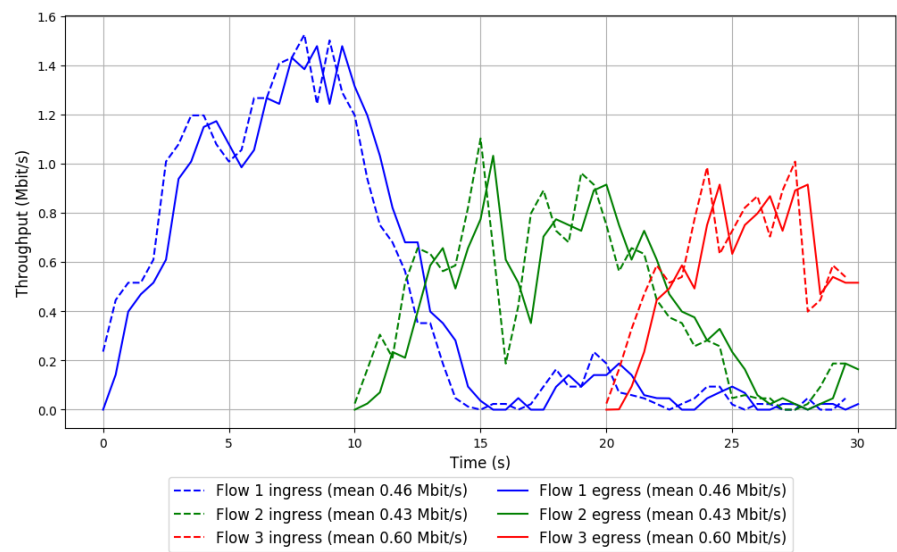


Run 1: Statistics of LEDBAT

Start at: 2018-07-10 18:50:46
End at: 2018-07-10 18:51:16
Local clock offset: 2.712 ms
Remote clock offset: -7.907 ms

Below is generated by plot.py at 2018-07-10 19:43:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 313.270 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 278.974 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 323.264 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 329.027 ms
Loss rate: 3.12%

Run 1: Report of LEDBAT — Data Link

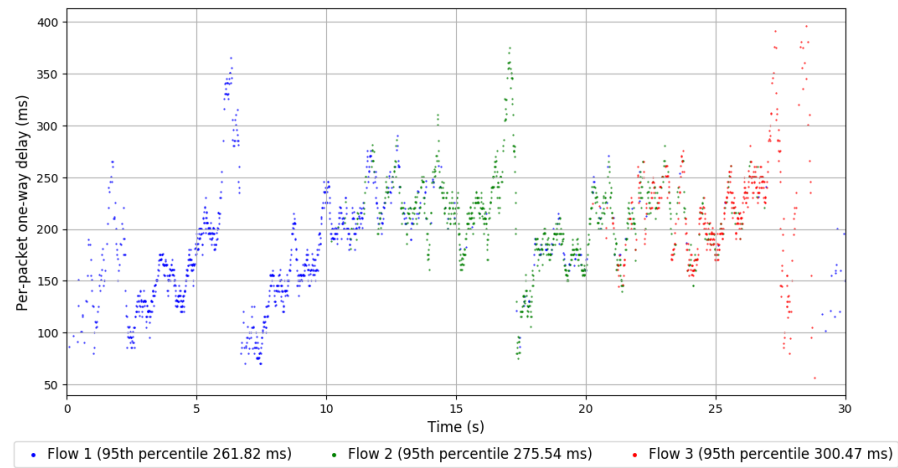
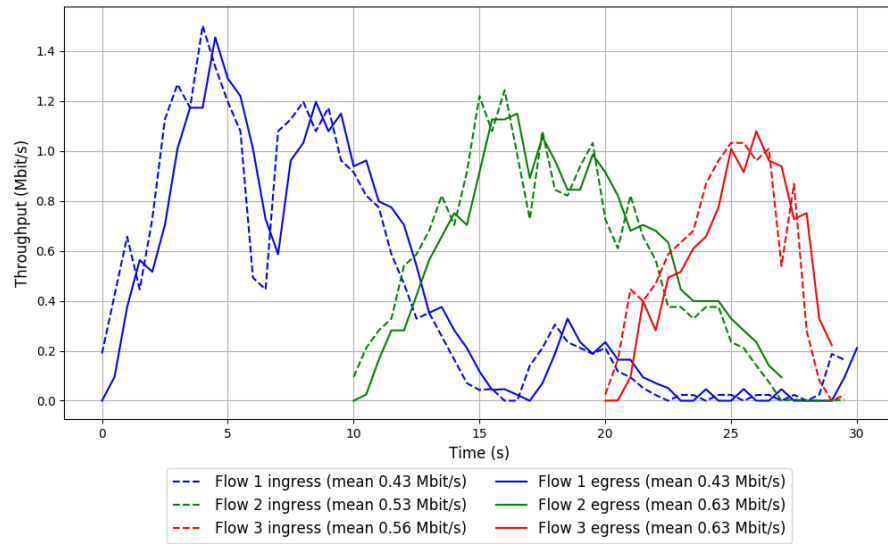


Run 2: Statistics of LEDBAT

Start at: 2018-07-10 19:09:33
End at: 2018-07-10 19:10:03
Local clock offset: 0.536 ms
Remote clock offset: -2.028 ms

Below is generated by plot.py at 2018-07-10 19:43:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 275.756 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 261.824 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 275.539 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 300.471 ms
Loss rate: 2.75%

Run 2: Report of LEDBAT — Data Link

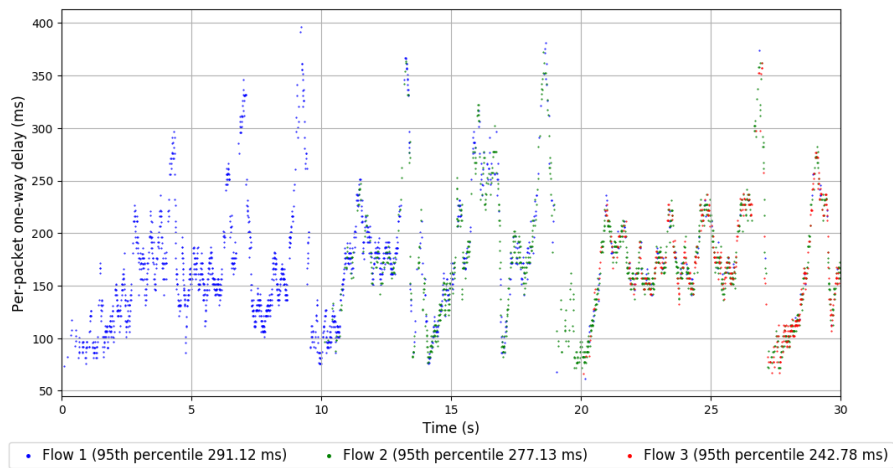
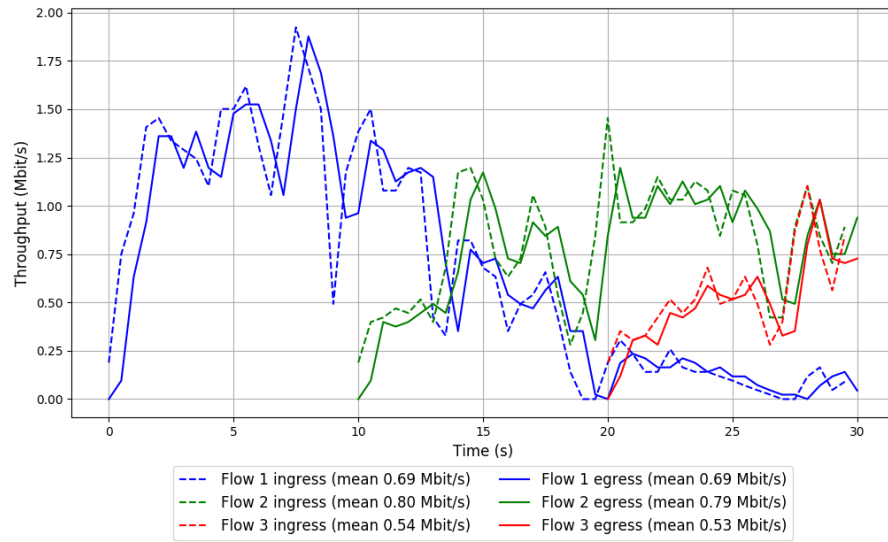


Run 3: Statistics of LEDBAT

Start at: 2018-07-10 19:28:10
End at: 2018-07-10 19:28:40
Local clock offset: 2.5 ms
Remote clock offset: -0.262 ms

Below is generated by plot.py at 2018-07-10 19:43:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 277.295 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 291.122 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 277.130 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 242.784 ms
Loss rate: 3.50%

Run 3: Report of LEDBAT — Data Link

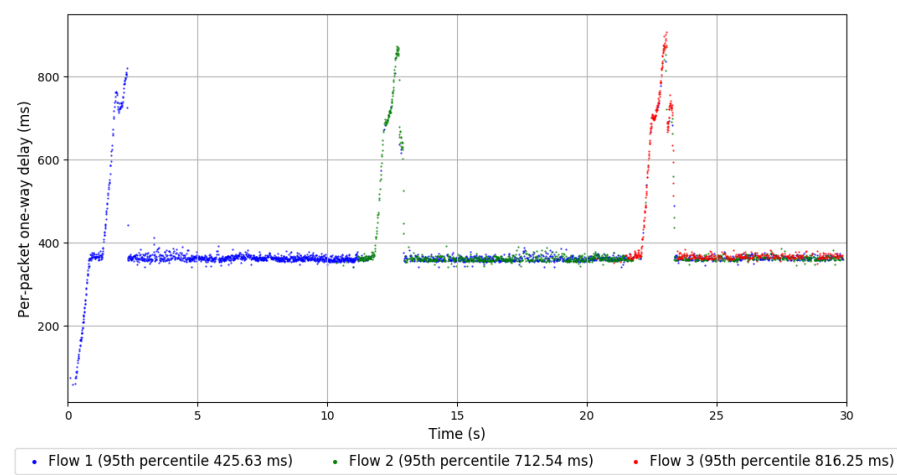
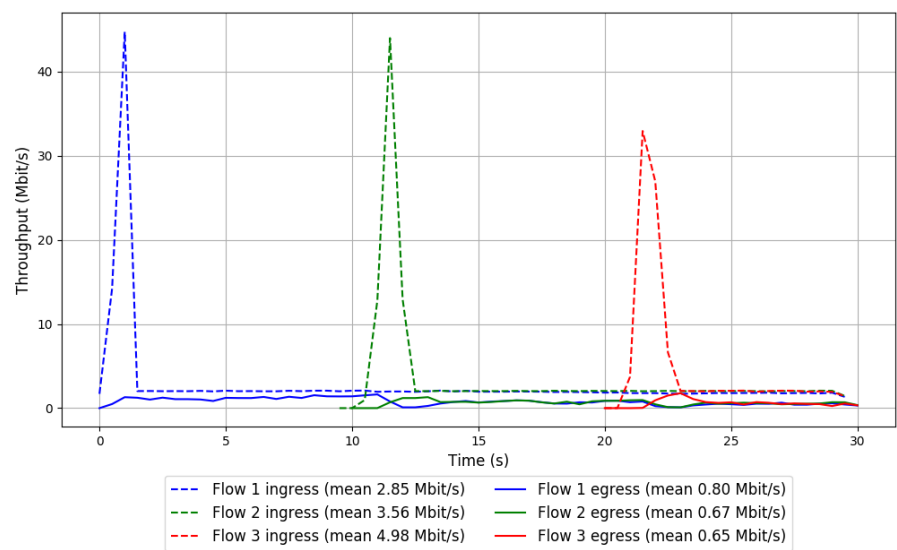


Run 1: Statistics of PCC-Allegro

Start at: 2018-07-10 19:00:40
End at: 2018-07-10 19:01:10
Local clock offset: 3.122 ms
Remote clock offset: -4.745 ms

Below is generated by plot.py at 2018-07-10 19:43:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 712.637 ms
Loss rate: 78.96%
-- Flow 1:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 425.630 ms
Loss rate: 71.97%
-- Flow 2:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 712.537 ms
Loss rate: 81.51%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 816.253 ms
Loss rate: 87.43%

Run 1: Report of PCC-Allegro — Data Link

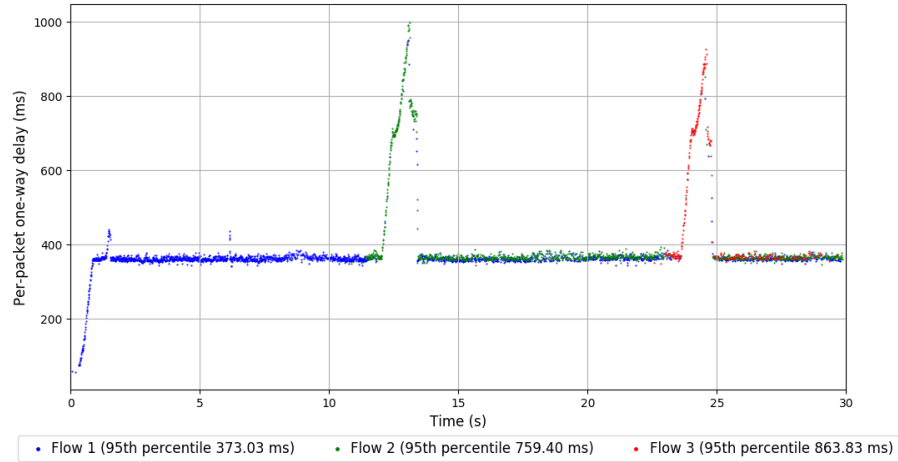
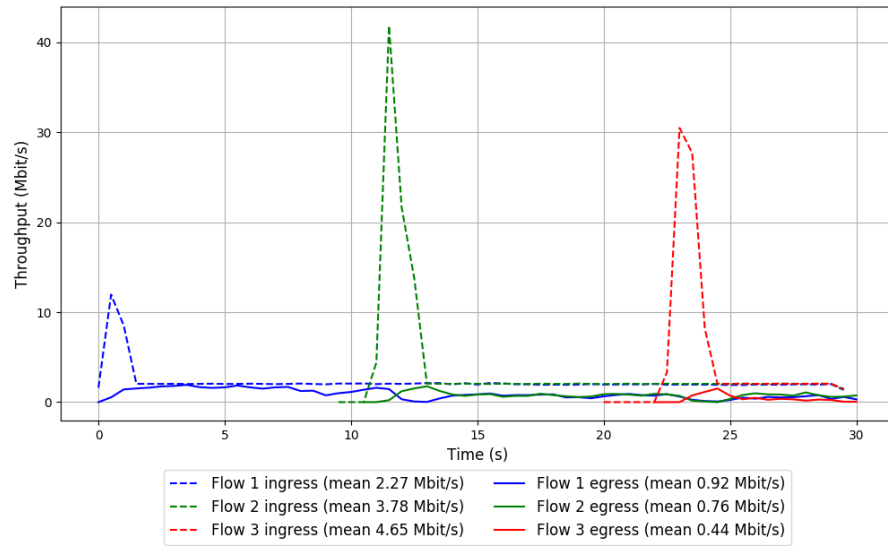


Run 2: Statistics of PCC-Allegro

Start at: 2018-07-10 19:19:25
End at: 2018-07-10 19:19:55
Local clock offset: 0.434 ms
Remote clock offset: -1.635 ms

Below is generated by plot.py at 2018-07-10 19:43:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 702.930 ms
Loss rate: 76.02%
-- Flow 1:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 373.030 ms
Loss rate: 59.76%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 759.399 ms
Loss rate: 80.52%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 863.827 ms
Loss rate: 92.72%

Run 2: Report of PCC-Allegro — Data Link

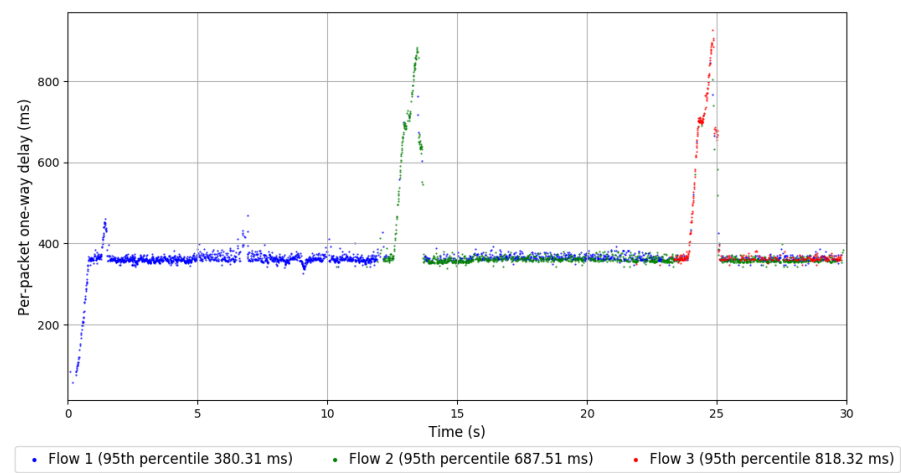
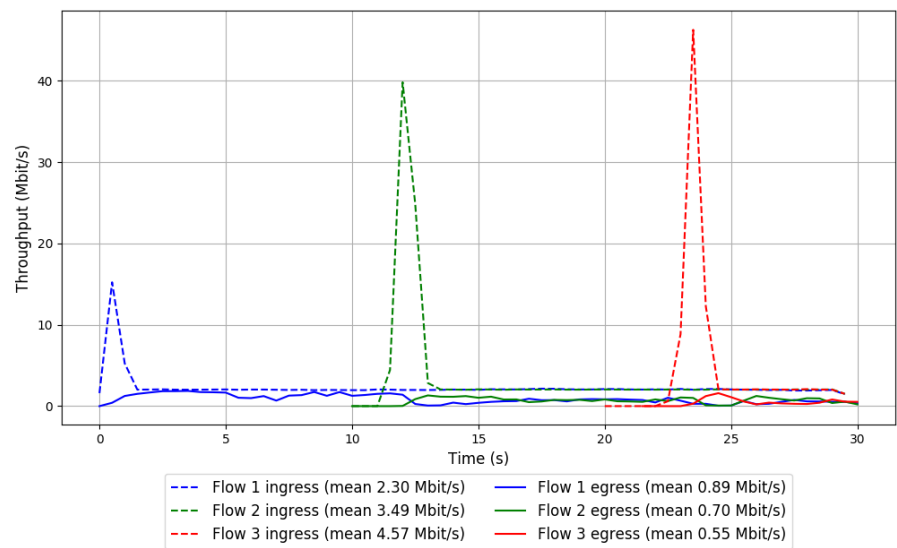


Run 3: Statistics of PCC-Allegro

Start at: 2018-07-10 19:38:07
End at: 2018-07-10 19:38:37
Local clock offset: -0.571 ms
Remote clock offset: -5.142 ms

Below is generated by plot.py at 2018-07-10 19:43:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 632.056 ms
Loss rate: 75.63%
-- Flow 1:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 380.307 ms
Loss rate: 61.36%
-- Flow 2:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 687.514 ms
Loss rate: 80.20%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 818.319 ms
Loss rate: 90.37%

Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

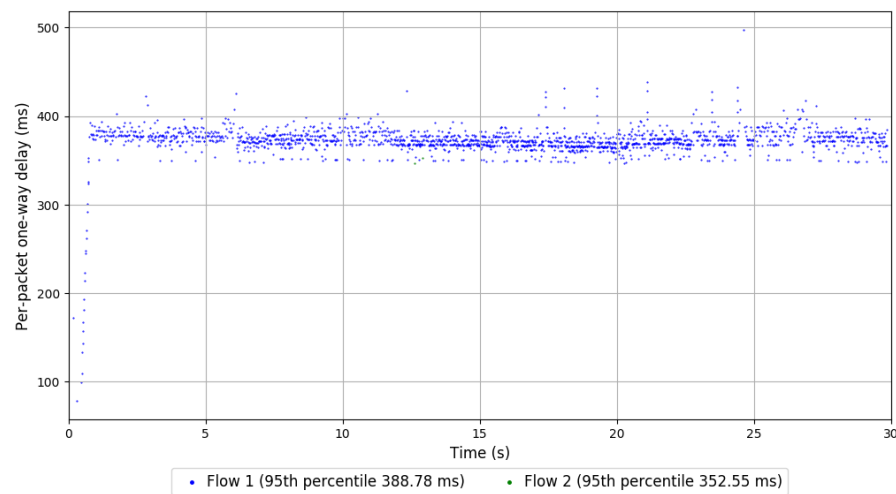
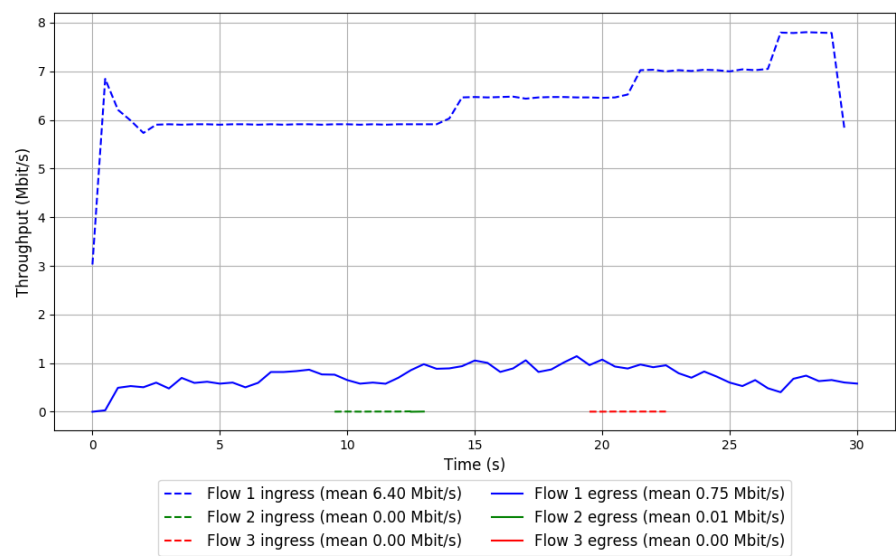
Start at: 2018-07-10 18:51:51

End at: 2018-07-10 18:52:21

Local clock offset: 0.218 ms

Remote clock offset: -7.758 ms

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

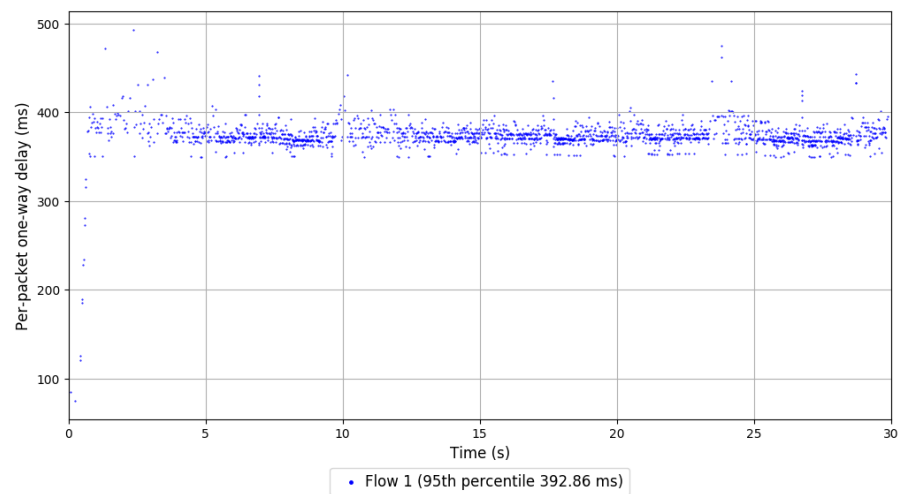
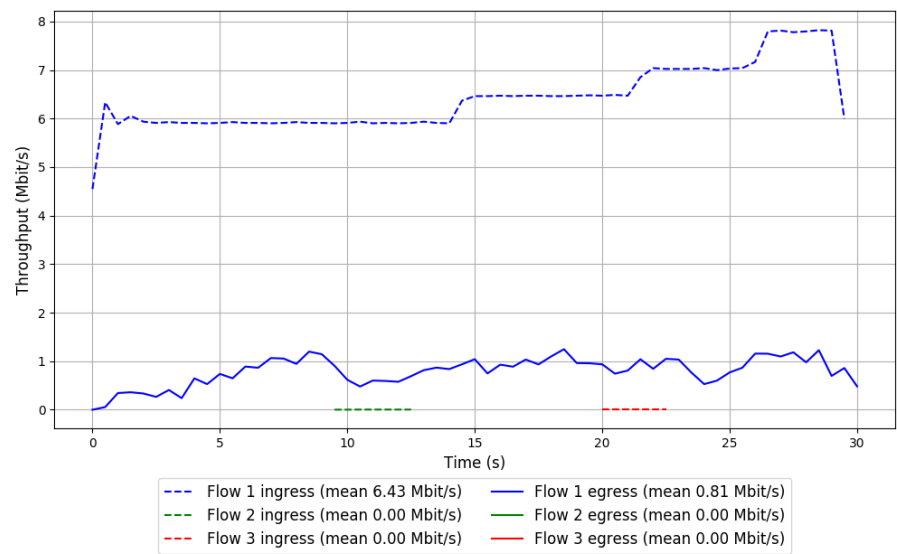
Start at: 2018-07-10 19:10:38

End at: 2018-07-10 19:11:08

Local clock offset: 2.573 ms

Remote clock offset: -2.634 ms

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

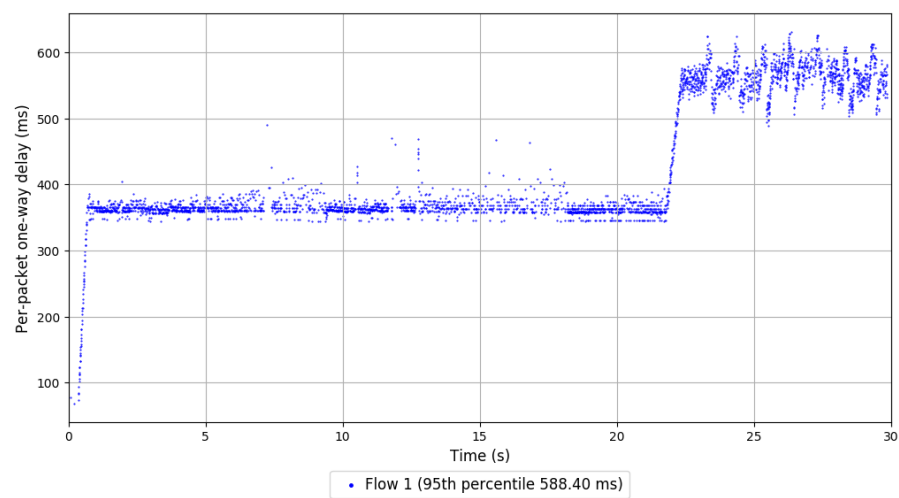
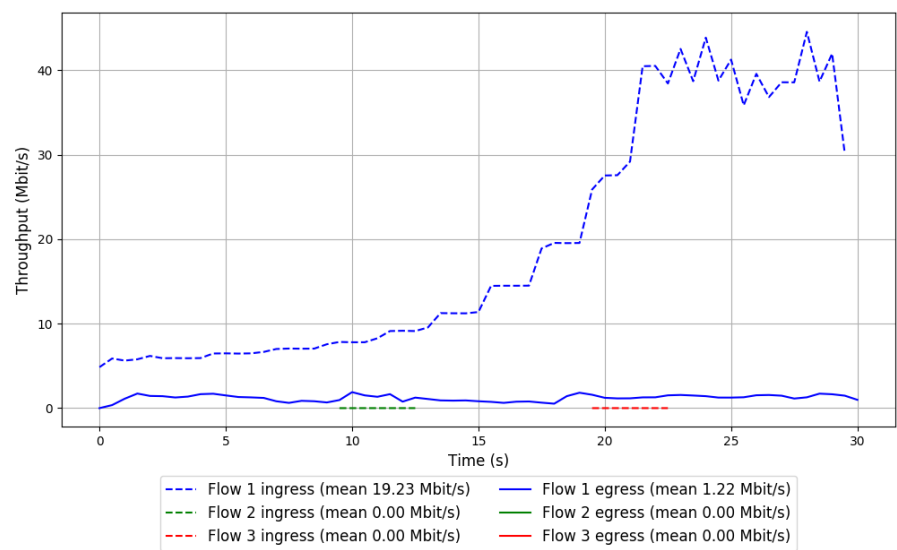
Start at: 2018-07-10 19:29:22

End at: 2018-07-10 19:29:52

Local clock offset: -1.78 ms

Remote clock offset: 0.28 ms

Run 3: Report of PCC-Expr — Data Link

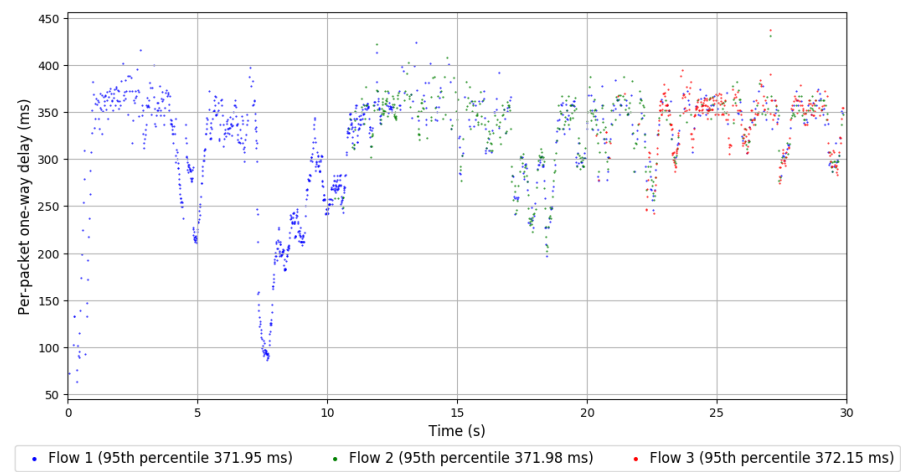
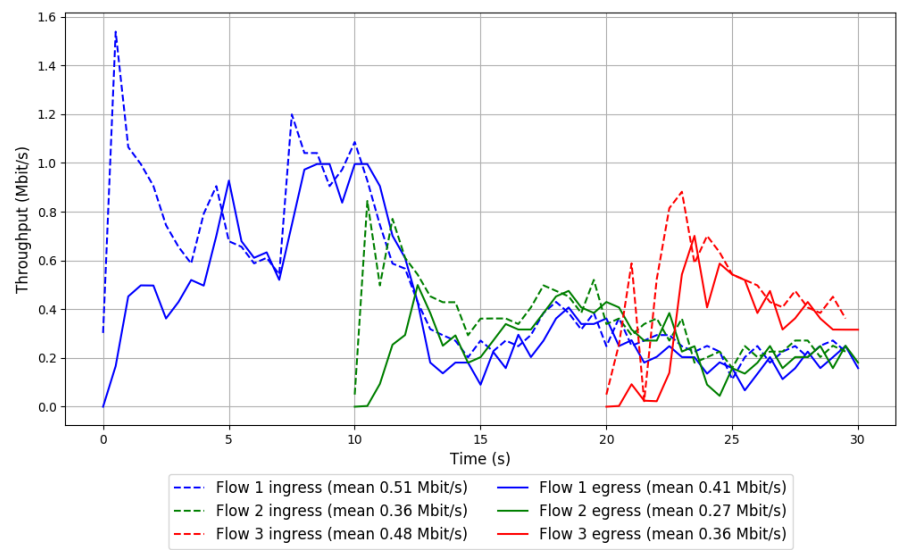


Run 1: Statistics of QUIC Cubic

Start at: 2018-07-10 18:47:27
End at: 2018-07-10 18:47:57
Local clock offset: -0.559 ms
Remote clock offset: -7.888 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 372.004 ms
Loss rate: 23.03%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 371.955 ms
Loss rate: 20.15%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 371.978 ms
Loss rate: 25.77%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 372.151 ms
Loss rate: 28.06%

Run 1: Report of QUIC Cubic — Data Link

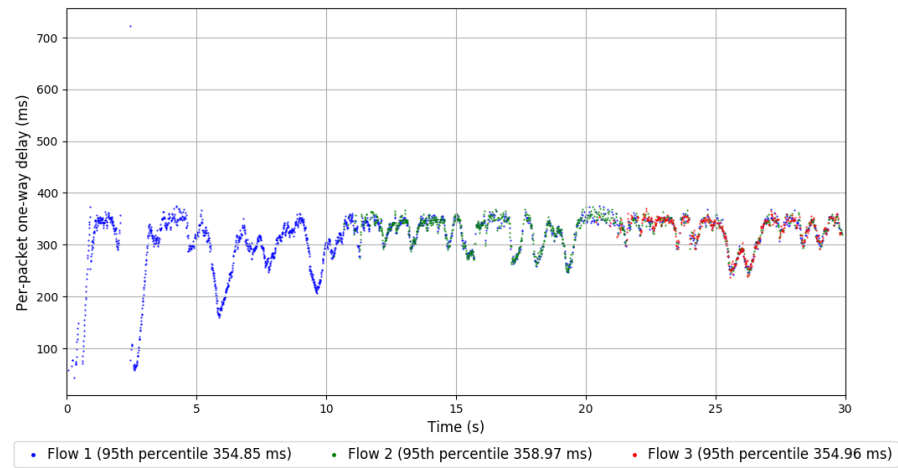
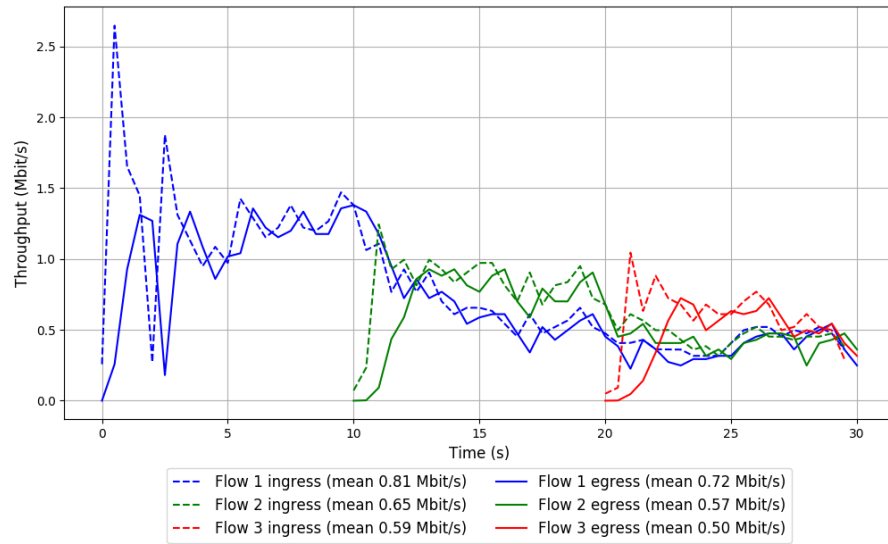


Run 2: Statistics of QUIC Cubic

Start at: 2018-07-10 19:06:09
End at: 2018-07-10 19:06:39
Local clock offset: -0.313 ms
Remote clock offset: -3.752 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 357.247 ms
Loss rate: 13.07%
-- Flow 1:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 354.852 ms
Loss rate: 11.58%
-- Flow 2:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 358.970 ms
Loss rate: 13.15%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 354.961 ms
Loss rate: 19.03%

Run 2: Report of QUIC Cubic — Data Link

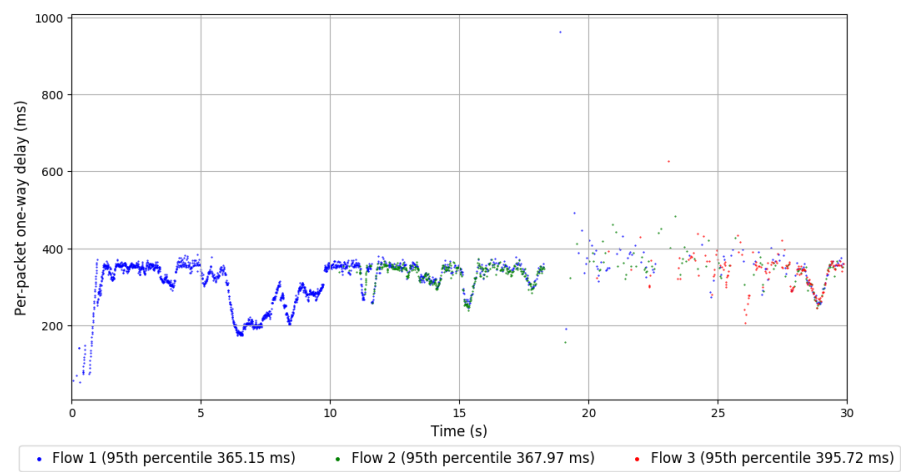
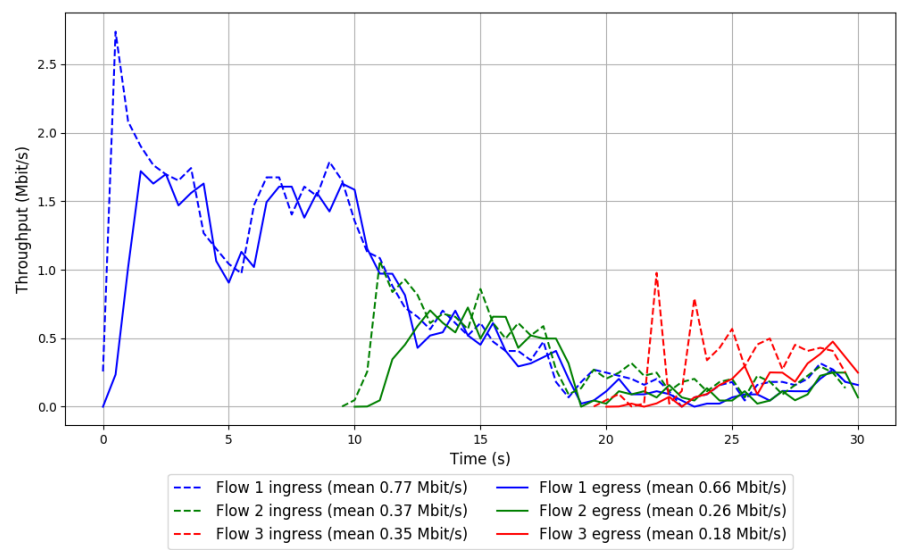


Run 3: Statistics of QUIC Cubic

Start at: 2018-07-10 19:24:53
End at: 2018-07-10 19:25:23
Local clock offset: 1.326 ms
Remote clock offset: -0.045 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 367.769 ms
Loss rate: 21.58%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 365.149 ms
Loss rate: 14.57%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 367.974 ms
Loss rate: 30.61%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 395.719 ms
Loss rate: 49.11%

Run 3: Report of QUIC Cubic — Data Link

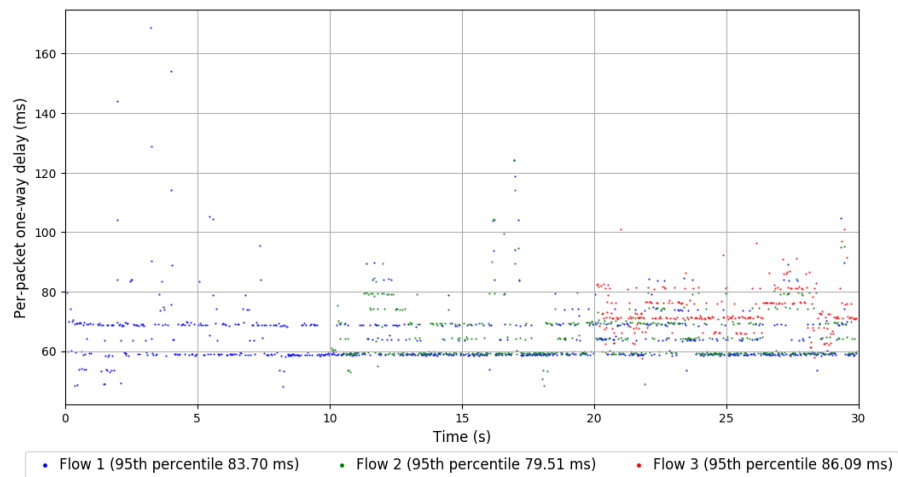
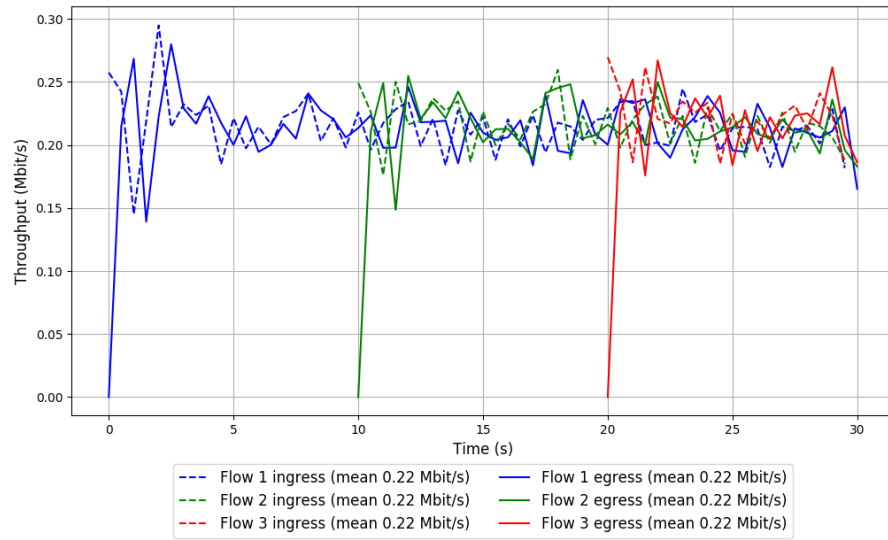


```
Run 1: Statistics of SCReAM

Start at: 2018-07-10 19:01:46
End at: 2018-07-10 19:02:16
Local clock offset: 3.21 ms
Remote clock offset: -5.677 ms

# Below is generated by plot.py at 2018-07-10 19:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 82.301 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.705 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.514 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.093 ms
Loss rate: 0.70%
```


Run 1: Report of SReAM — Data Link

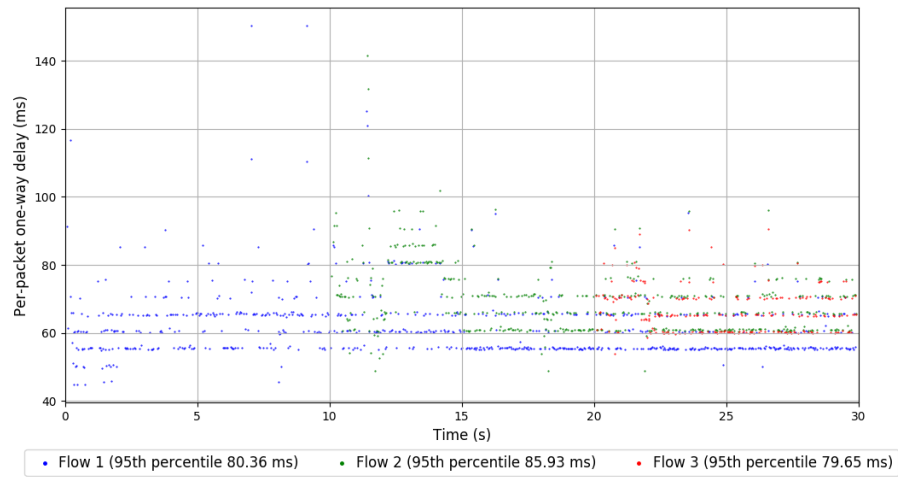
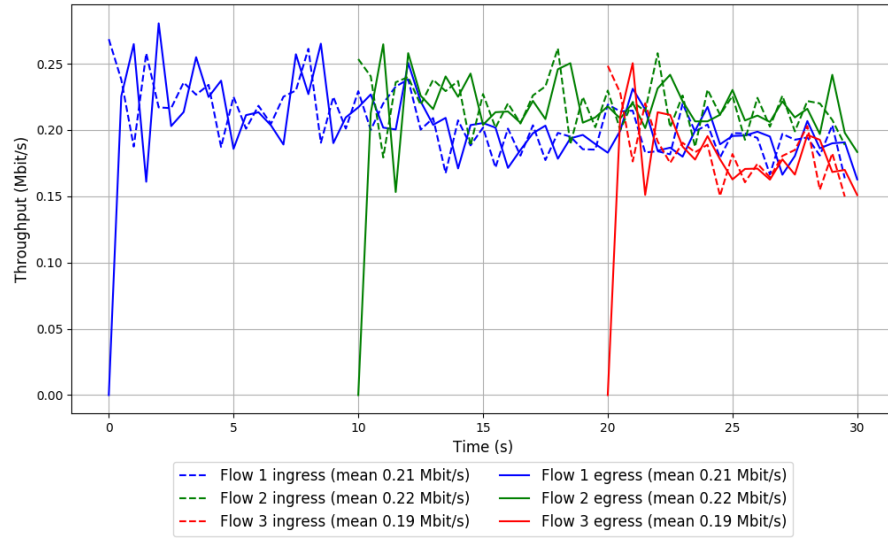


Run 2: Statistics of SCReAM

Start at: 2018-07-10 19:20:30
End at: 2018-07-10 19:21:00
Local clock offset: 1.736 ms
Remote clock offset: -0.605 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 81.017 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 80.356 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.928 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 79.650 ms
Loss rate: 0.68%

Run 2: Report of SReAM — Data Link

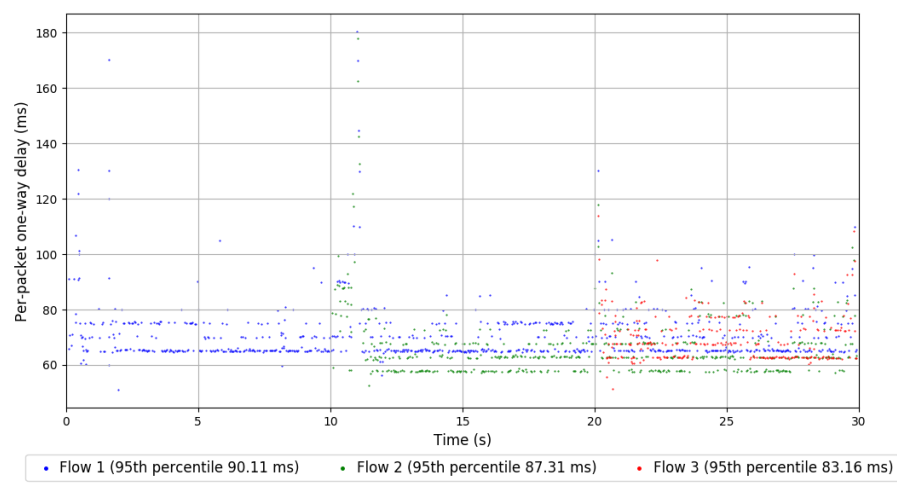
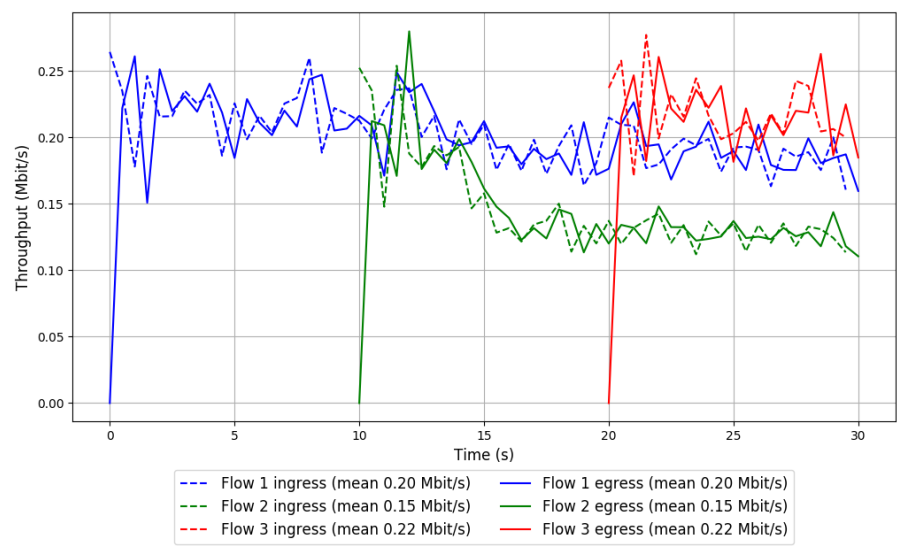


Run 3: Statistics of SCReAM

Start at: 2018-07-10 19:39:18
End at: 2018-07-10 19:39:48
Local clock offset: 3.819 ms
Remote clock offset: -5.763 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 87.927 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 90.111 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 87.311 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.159 ms
Loss rate: 0.71%

Run 3: Report of SReAM — Data Link

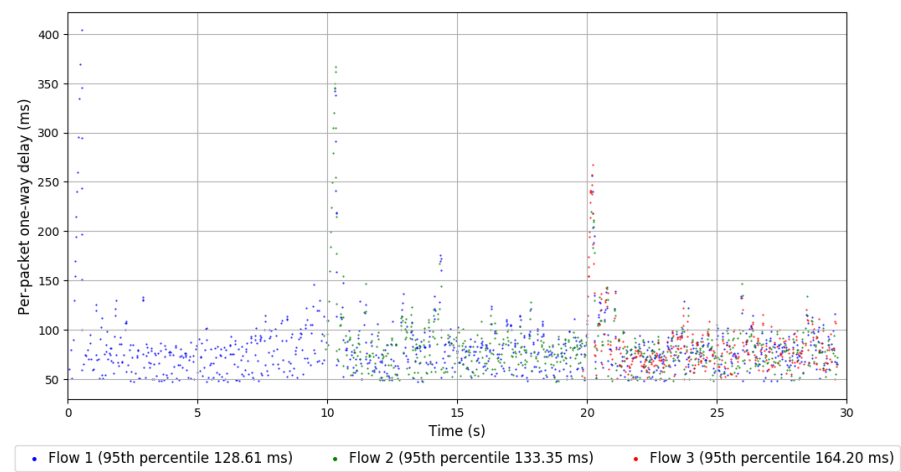
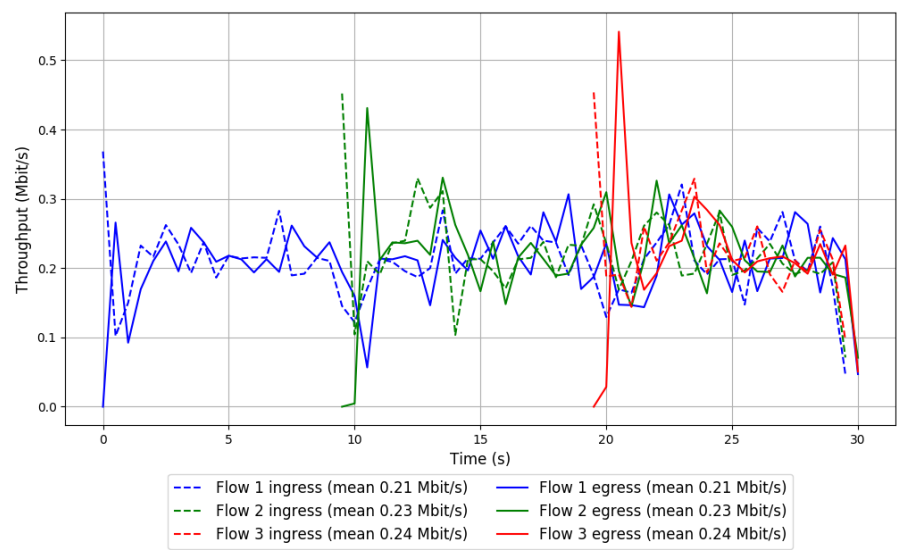


Run 1: Statistics of Sprout

Start at: 2018-07-10 18:55:10
End at: 2018-07-10 18:55:40
Local clock offset: 0.88 ms
Remote clock offset: -7.865 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 133.793 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 128.610 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 133.350 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 164.198 ms
Loss rate: 1.97%

Run 1: Report of Sprout — Data Link

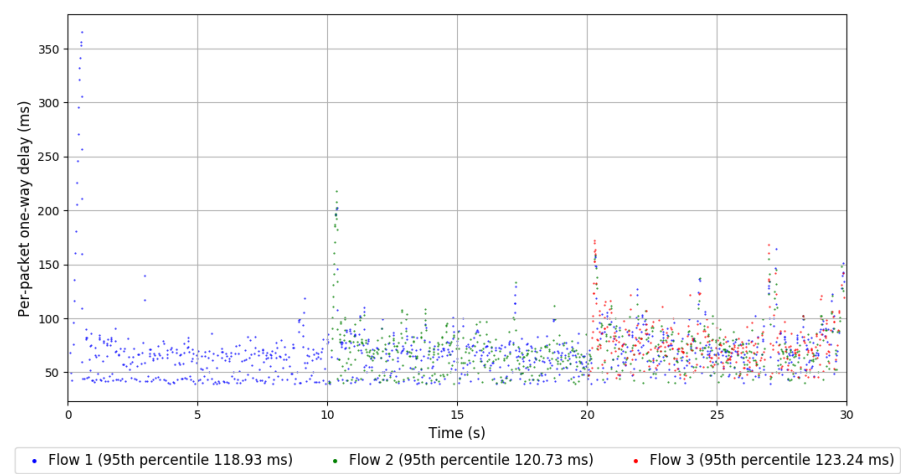
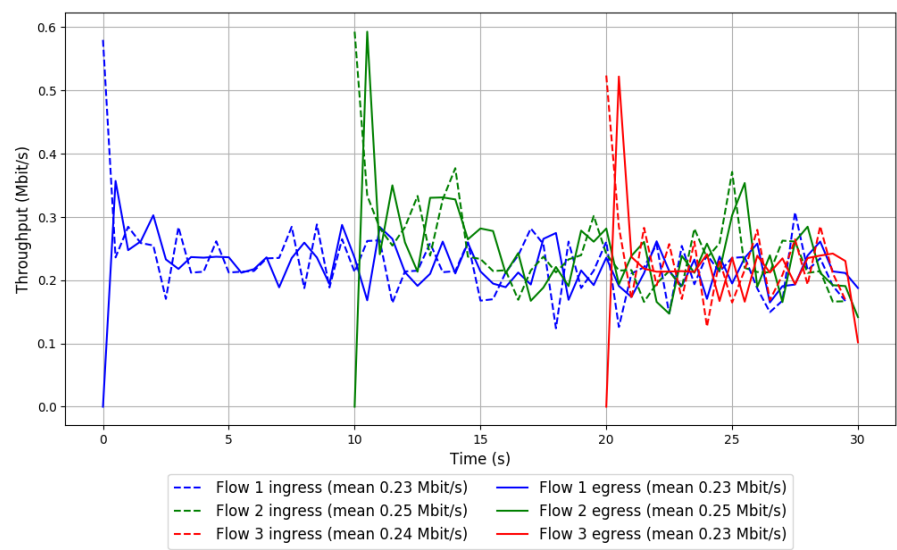


Run 2: Statistics of Sprout

Start at: 2018-07-10 19:13:57
End at: 2018-07-10 19:14:27
Local clock offset: -3.535 ms
Remote clock offset: -2.215 ms

```
# Below is generated by plot.py at 2018-07-10 19:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 122.344 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 118.926 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 120.726 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 123.244 ms
Loss rate: 1.98%
```


Run 2: Report of Sprout — Data Link

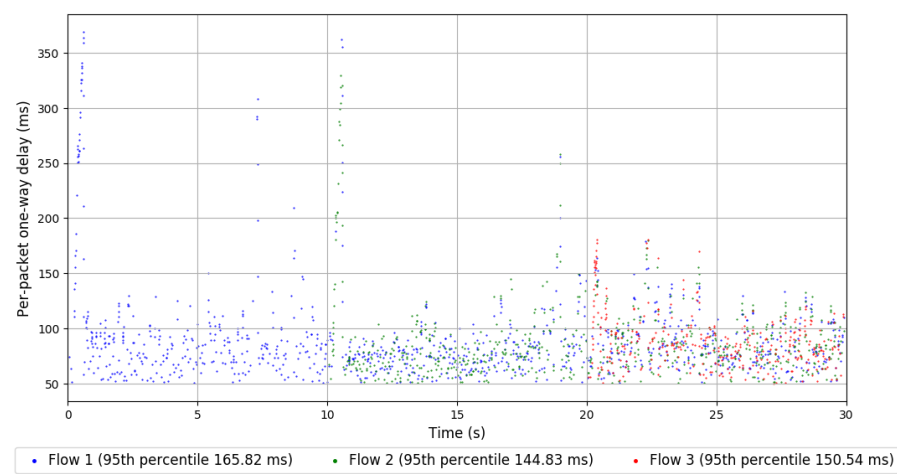
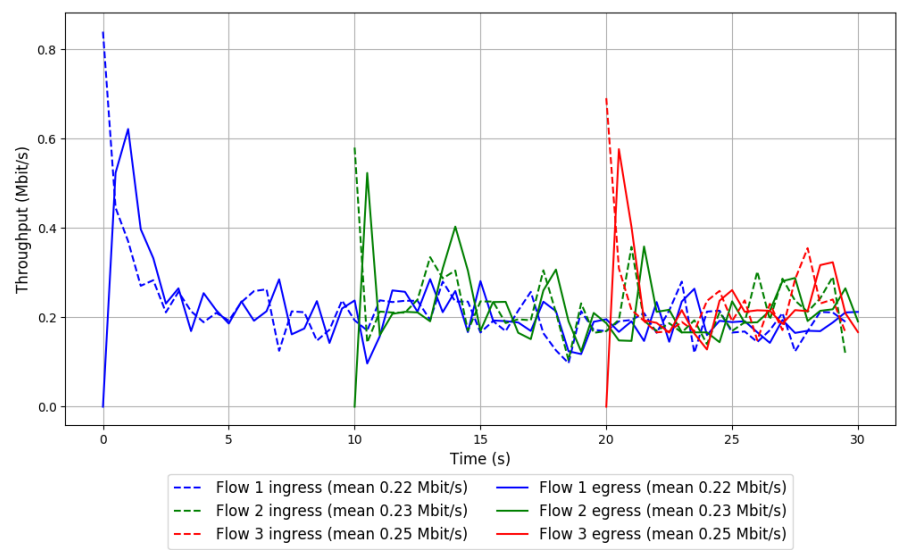


Run 3: Statistics of Sprout

Start at: 2018-07-10 19:32:40
End at: 2018-07-10 19:33:10
Local clock offset: 3.122 ms
Remote clock offset: -2.385 ms

```
# Below is generated by plot.py at 2018-07-10 19:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 155.395 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 165.822 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 144.834 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 150.536 ms
Loss rate: 1.01%
```

Run 3: Report of Sprout — Data Link

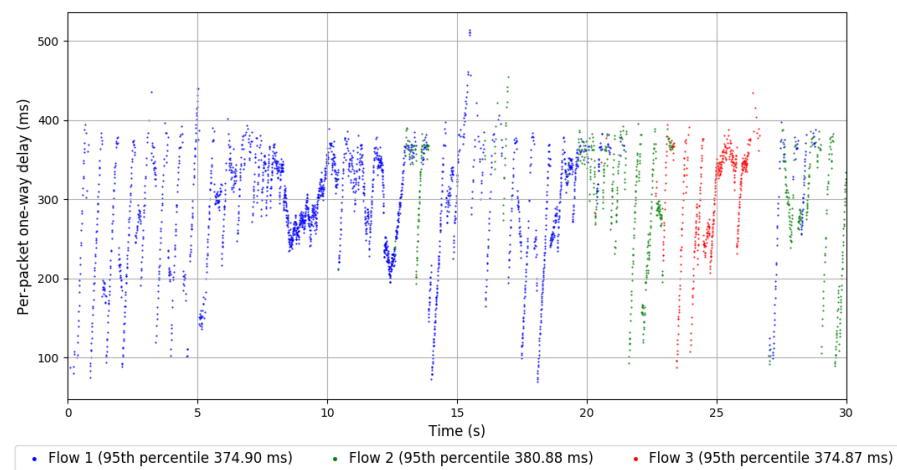
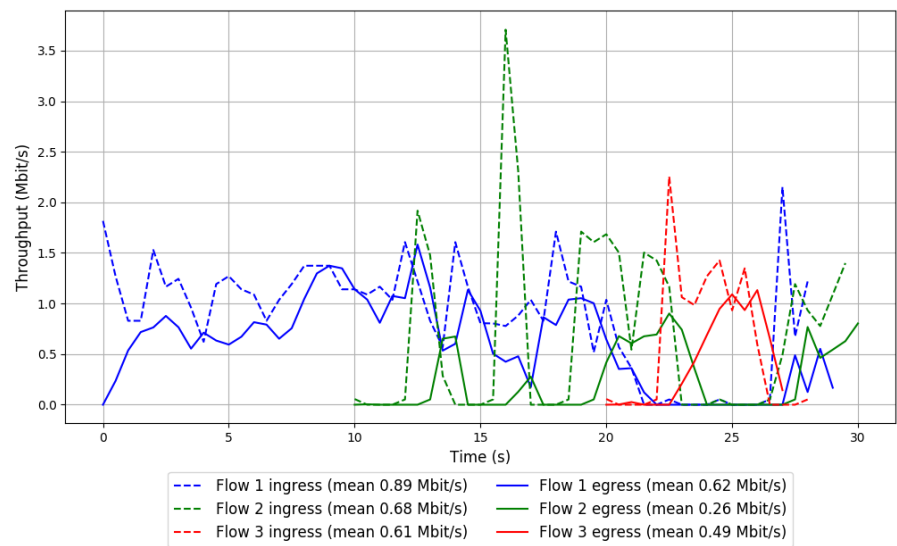


Run 1: Statistics of TaoVA-100x

Start at: 2018-07-10 18:52:58
End at: 2018-07-10 18:53:28
Local clock offset: 2.273 ms
Remote clock offset: -7.809 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 376.439 ms
Loss rate: 40.97%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 374.897 ms
Loss rate: 30.18%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 380.875 ms
Loss rate: 62.39%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 374.866 ms
Loss rate: 37.67%

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

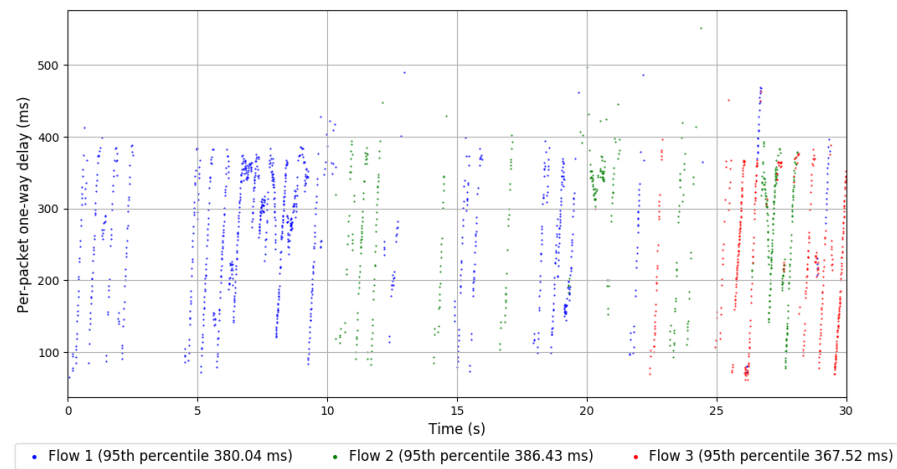
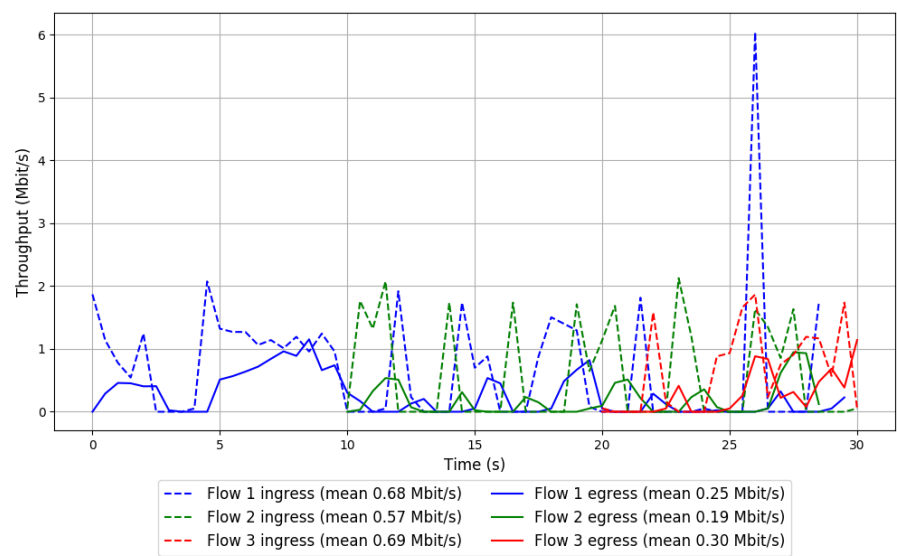


Run 2: Statistics of TaoVA-100x

Start at: 2018-07-10 19:11:45
End at: 2018-07-10 19:12:15
Local clock offset: 2.66 ms
Remote clock offset: -1.793 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 378.624 ms
Loss rate: 63.91%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 380.039 ms
Loss rate: 62.68%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 386.426 ms
Loss rate: 69.75%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 367.520 ms
Loss rate: 57.79%

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

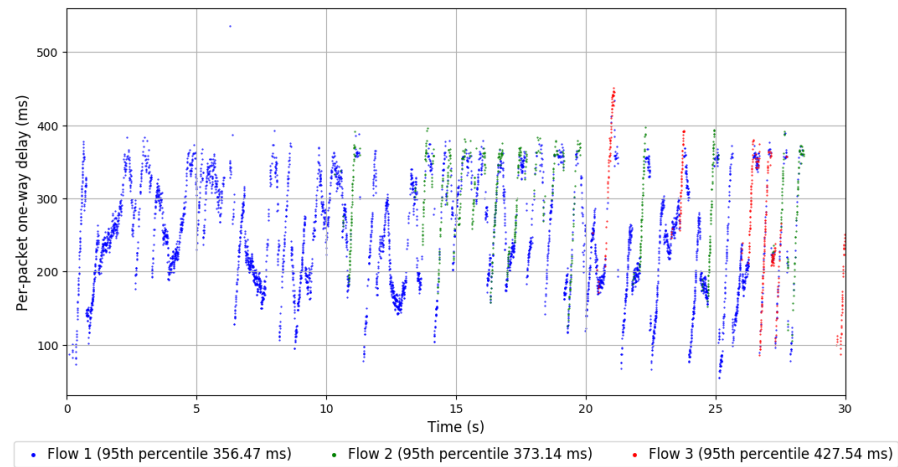
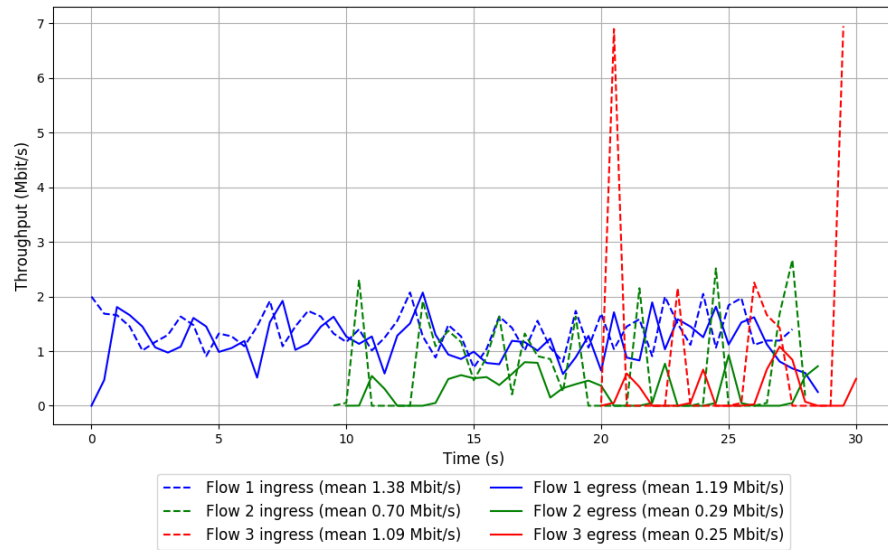


Run 3: Statistics of TaoVA-100x

Start at: 2018-07-10 19:30:29
End at: 2018-07-10 19:30:59
Local clock offset: 0.364 ms
Remote clock offset: -0.962 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 361.560 ms
Loss rate: 33.65%
-- Flow 1:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 356.466 ms
Loss rate: 13.16%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 373.145 ms
Loss rate: 59.09%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 427.544 ms
Loss rate: 77.20%

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

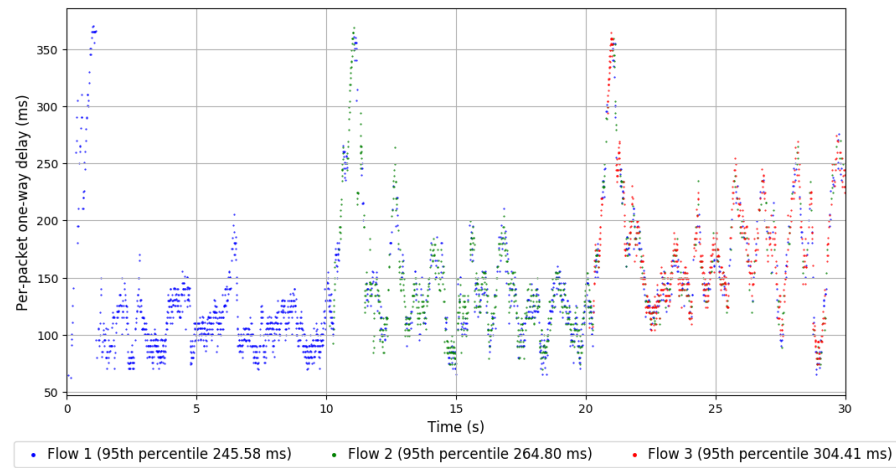
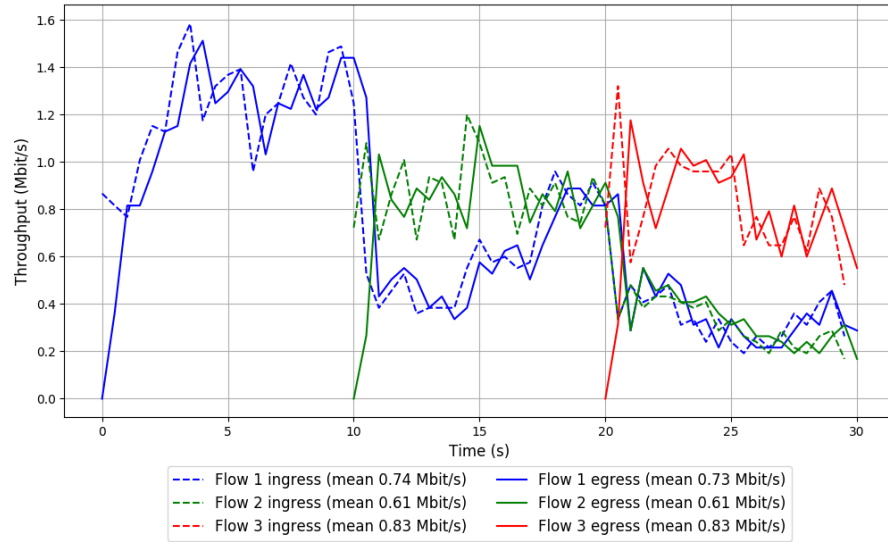


Run 1: Statistics of TCP Vegas

Start at: 2018-07-10 18:58:27
End at: 2018-07-10 18:58:57
Local clock offset: 0.715 ms
Remote clock offset: -7.047 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 259.810 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 245.580 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 264.796 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 304.406 ms
Loss rate: 1.45%

Run 1: Report of TCP Vegas — Data Link

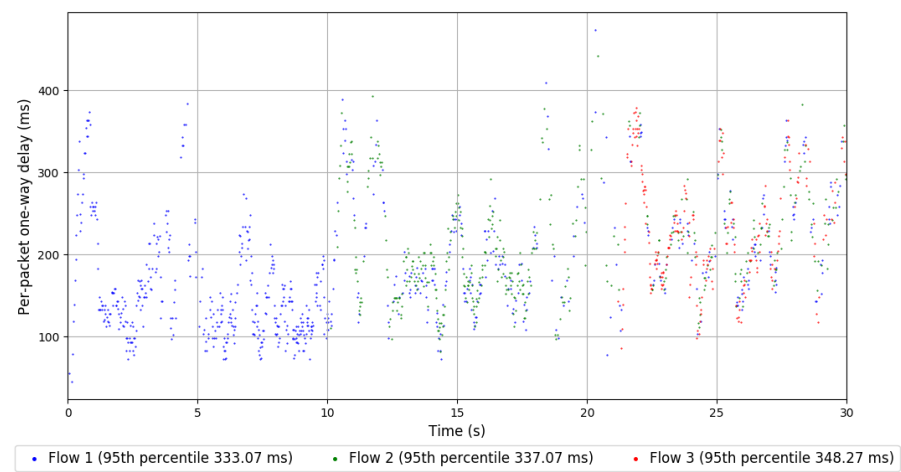
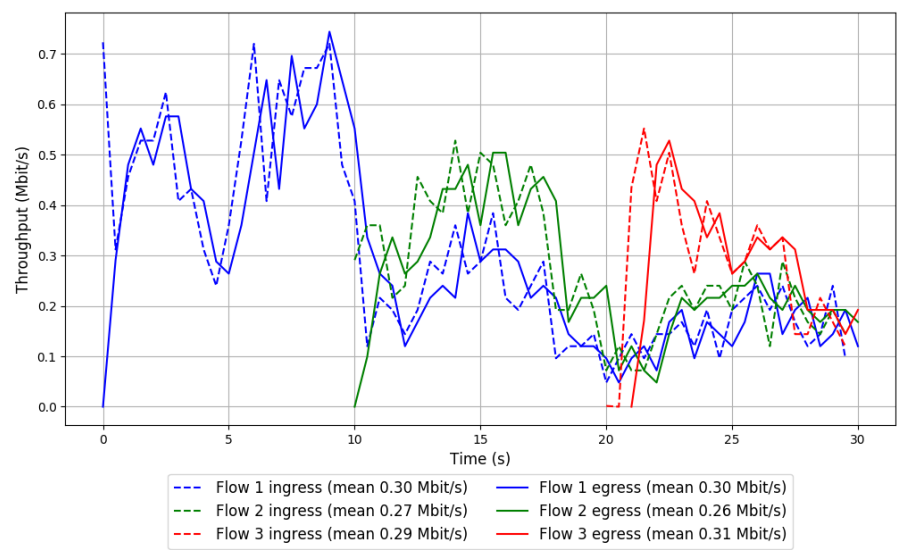


Run 2: Statistics of TCP Vegas

Start at: 2018-07-10 19:17:13
End at: 2018-07-10 19:17:43
Local clock offset: 0.812 ms
Remote clock offset: -0.578 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 338.386 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 333.069 ms
Loss rate: 1.74%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 337.073 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 348.266 ms
Loss rate: 2.16%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-07-10 19:35:56

End at: 2018-07-10 19:36:26

Local clock offset: 0.719 ms

Remote clock offset: -4.16 ms

Below is generated by plot.py at 2018-07-10 19:44:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 287.929 ms

Loss rate: 2.04%

-- Flow 1:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 263.466 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 307.041 ms

Loss rate: 2.21%

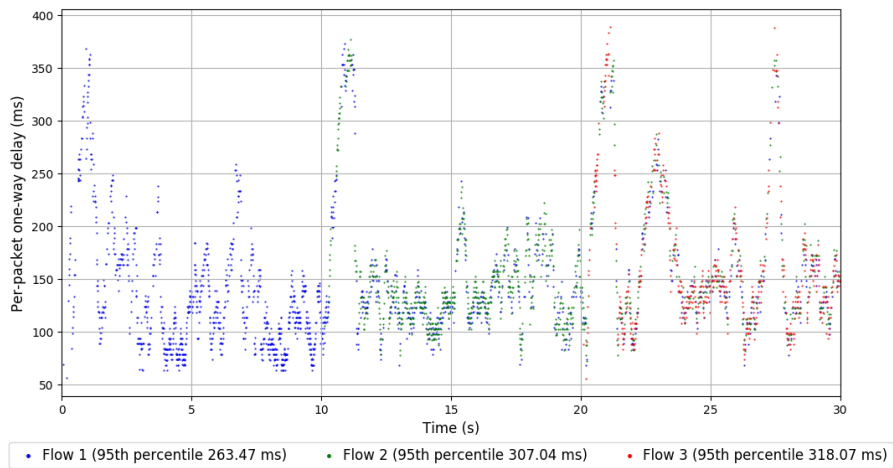
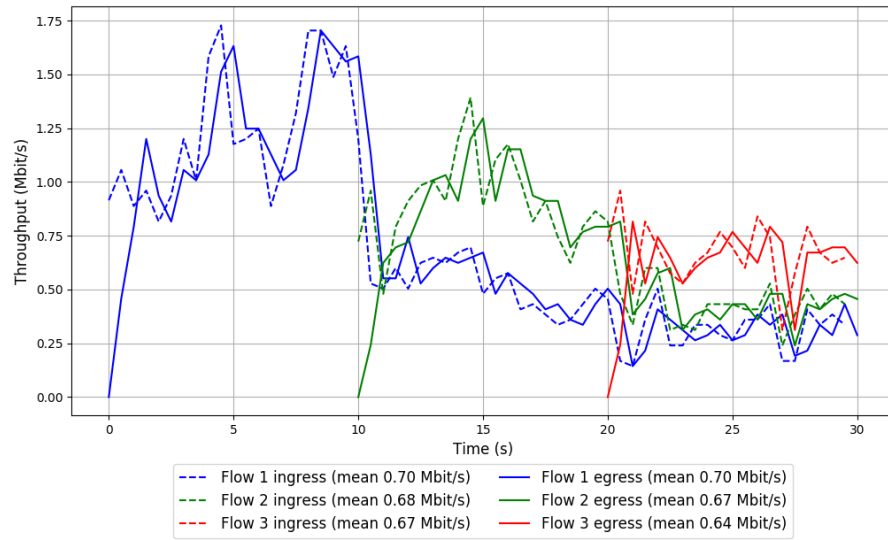
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 318.068 ms

Loss rate: 4.86%

Run 3: Report of TCP Vegas — Data Link

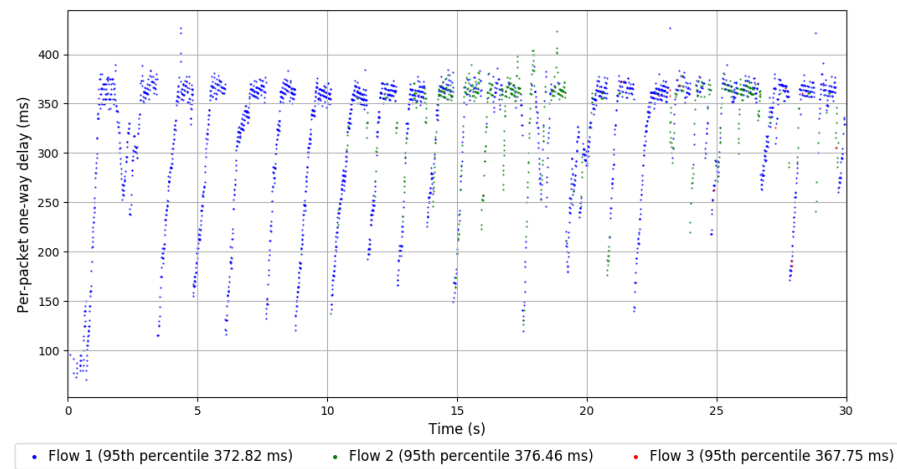
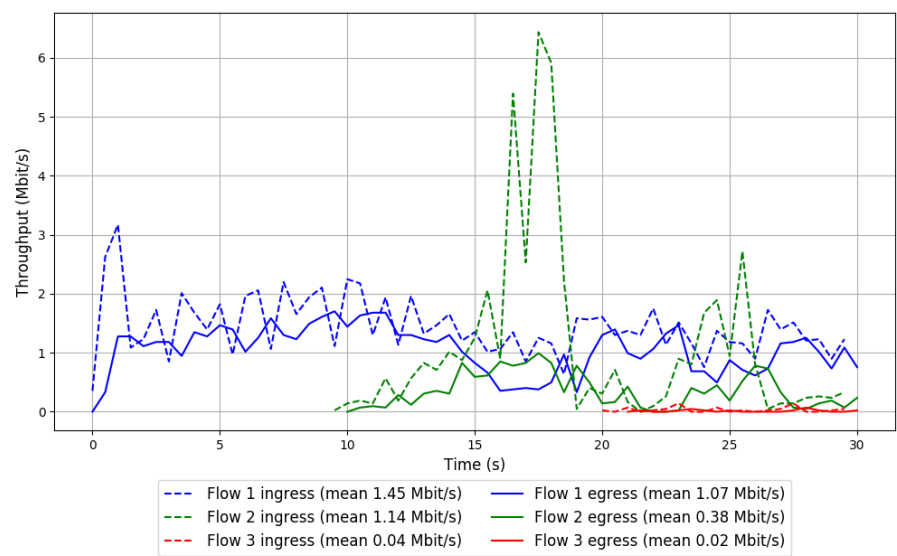


Run 1: Statistics of Verus

Start at: 2018-07-10 19:03:57
End at: 2018-07-10 19:04:27
Local clock offset: 3.201 ms
Remote clock offset: -3.685 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 373.078 ms
Loss rate: 40.47%
-- Flow 1:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 372.823 ms
Loss rate: 26.52%
-- Flow 2:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 376.457 ms
Loss rate: 67.10%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 367.755 ms
Loss rate: 58.62%

Run 1: Report of Verus — Data Link

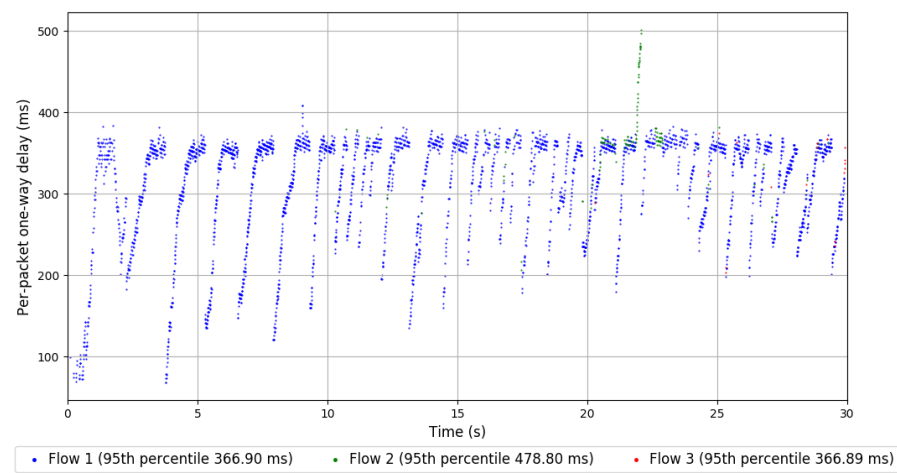
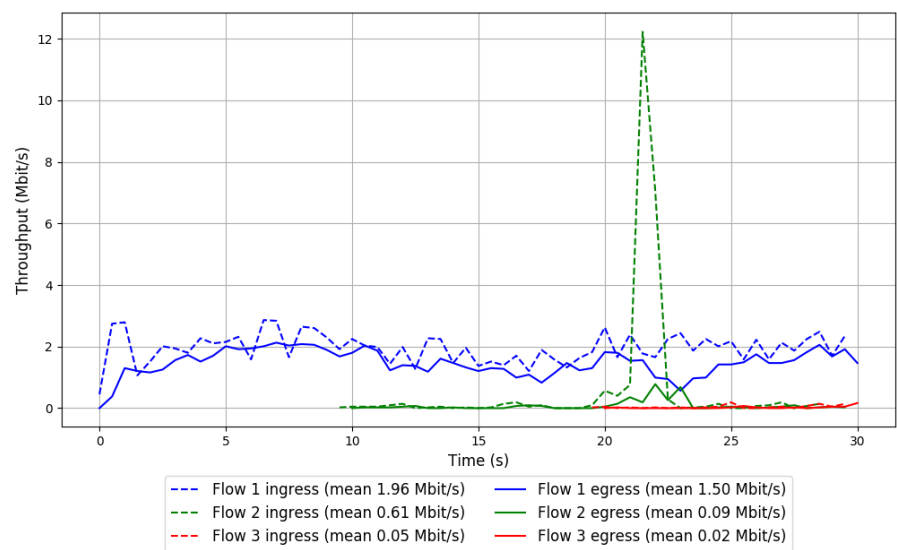


Run 2: Statistics of Verus

Start at: 2018-07-10 19:22:41
End at: 2018-07-10 19:23:11
Local clock offset: 0.441 ms
Remote clock offset: -1.054 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 368.108 ms
Loss rate: 34.09%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 366.900 ms
Loss rate: 23.74%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 478.797 ms
Loss rate: 85.90%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 366.891 ms
Loss rate: 48.65%

Run 2: Report of Verus — Data Link

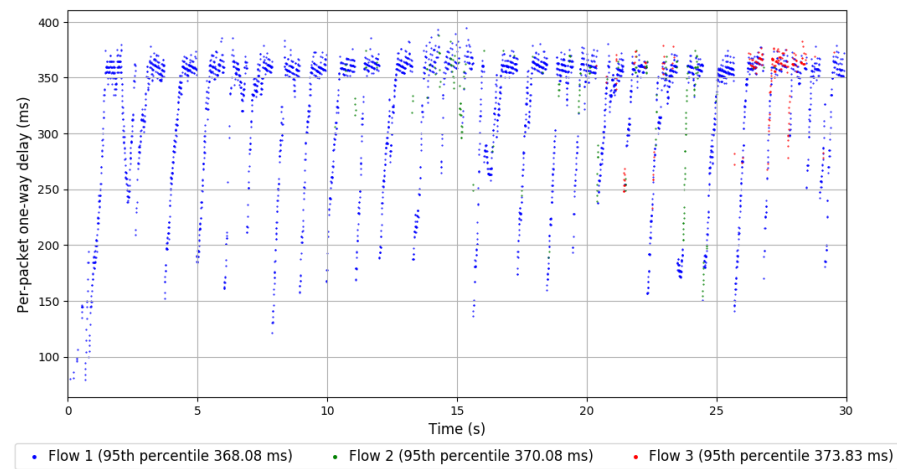
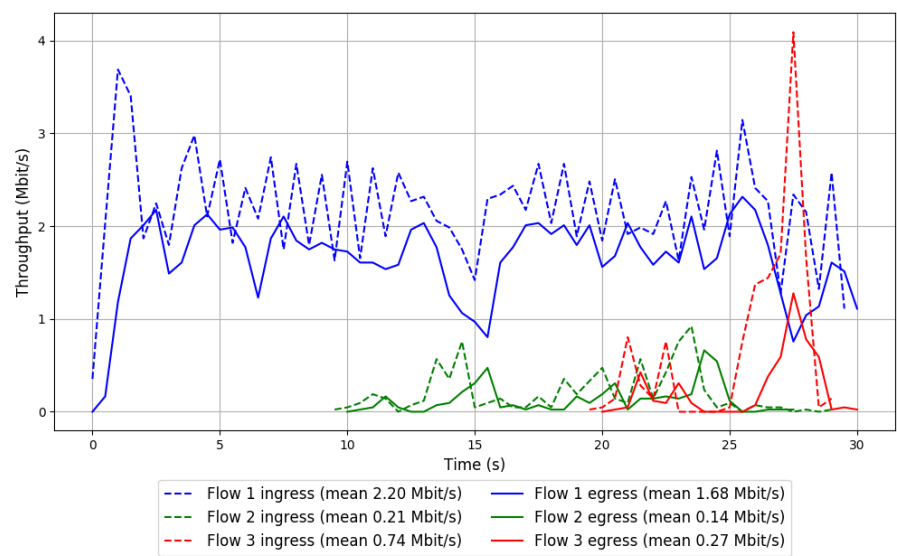


Run 3: Statistics of Verus

Start at: 2018-07-10 19:41:29
End at: 2018-07-10 19:41:59
Local clock offset: 3.247 ms
Remote clock offset: -6.355 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 368.726 ms
Loss rate: 28.35%
-- Flow 1:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 368.079 ms
Loss rate: 23.95%
-- Flow 2:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 370.080 ms
Loss rate: 41.37%
-- Flow 3:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 373.830 ms
Loss rate: 63.62%

Run 3: Report of Verus — Data Link

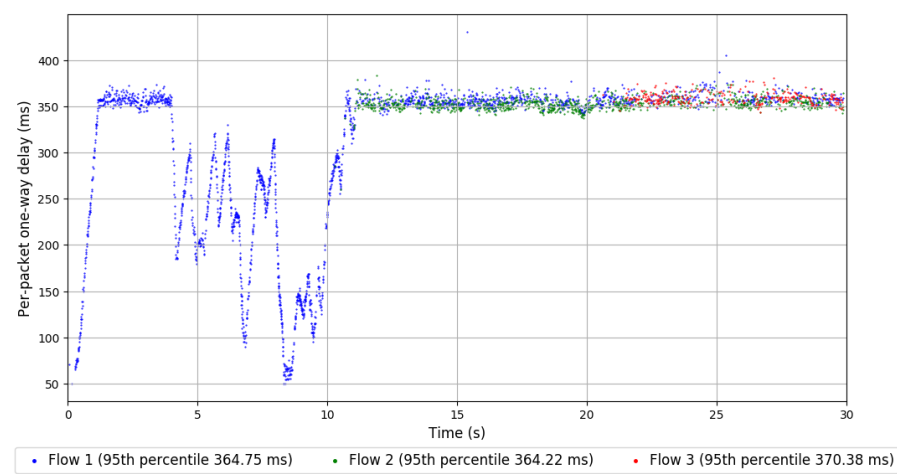
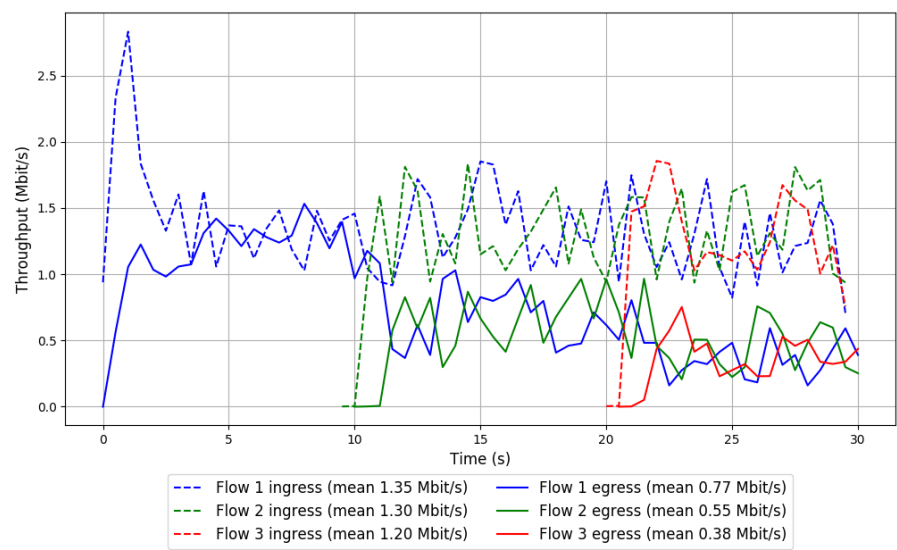


Run 1: Statistics of PCC-Vivace

Start at: 2018-07-10 18:59:33
End at: 2018-07-10 19:00:03
Local clock offset: 0.583 ms
Remote clock offset: -5.501 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 365.545 ms
Loss rate: 52.17%
-- Flow 1:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 364.753 ms
Loss rate: 43.03%
-- Flow 2:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 364.218 ms
Loss rate: 57.95%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 370.384 ms
Loss rate: 70.74%

Run 1: Report of PCC-Vivace — Data Link

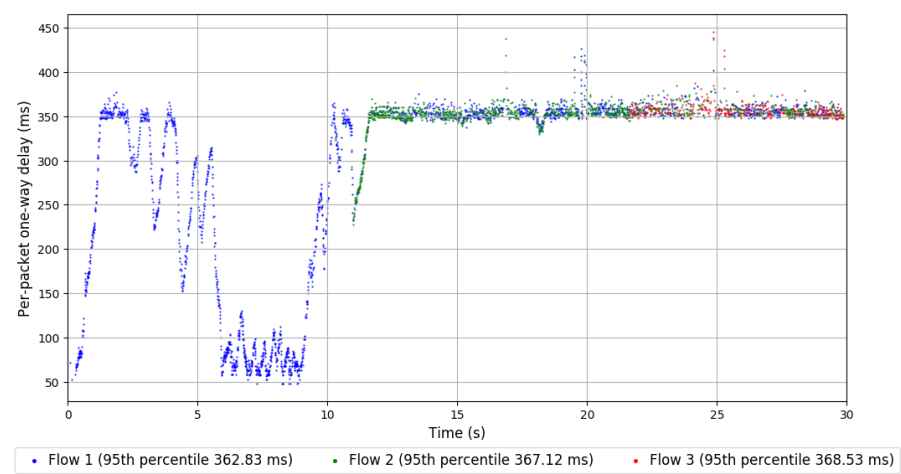
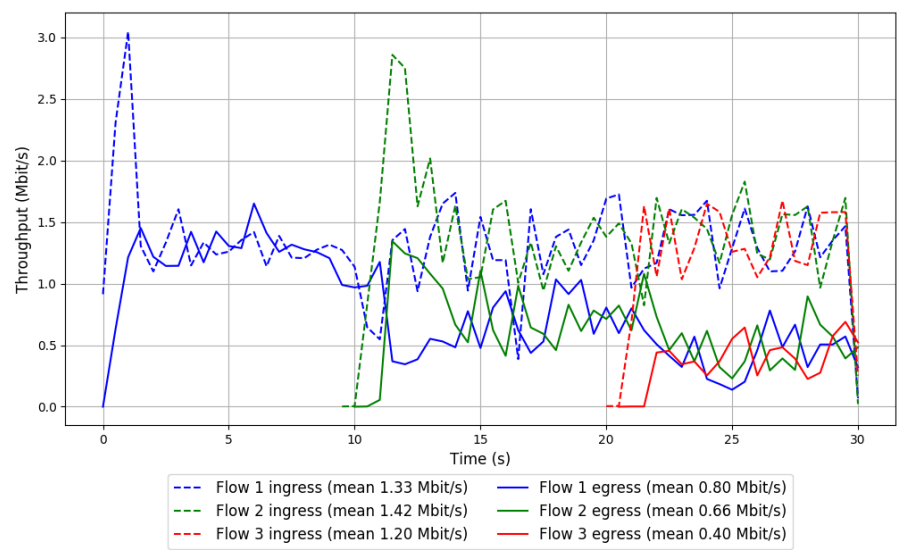


Run 2: Statistics of PCC-Vivace

Start at: 2018-07-10 19:18:19
End at: 2018-07-10 19:18:49
Local clock offset: 2.44 ms
Remote clock offset: -1.532 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 364.719 ms
Loss rate: 49.83%
-- Flow 1:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 362.828 ms
Loss rate: 40.09%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 367.120 ms
Loss rate: 54.82%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 368.527 ms
Loss rate: 70.02%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-07-10 19:37:01

End at: 2018-07-10 19:37:31

Local clock offset: -0.469 ms

Remote clock offset: -4.87 ms

Below is generated by plot.py at 2018-07-10 19:44:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 371.169 ms

Loss rate: 59.13%

-- Flow 1:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 364.287 ms

Loss rate: 49.09%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 382.316 ms

Loss rate: 67.97%

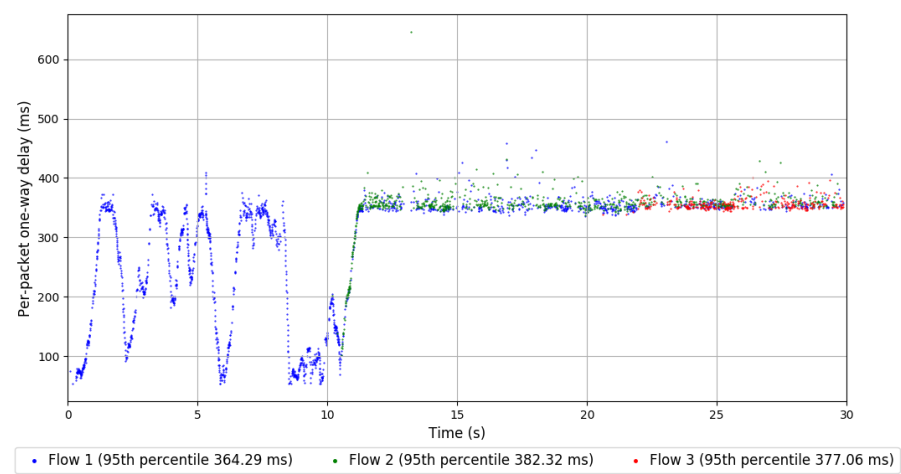
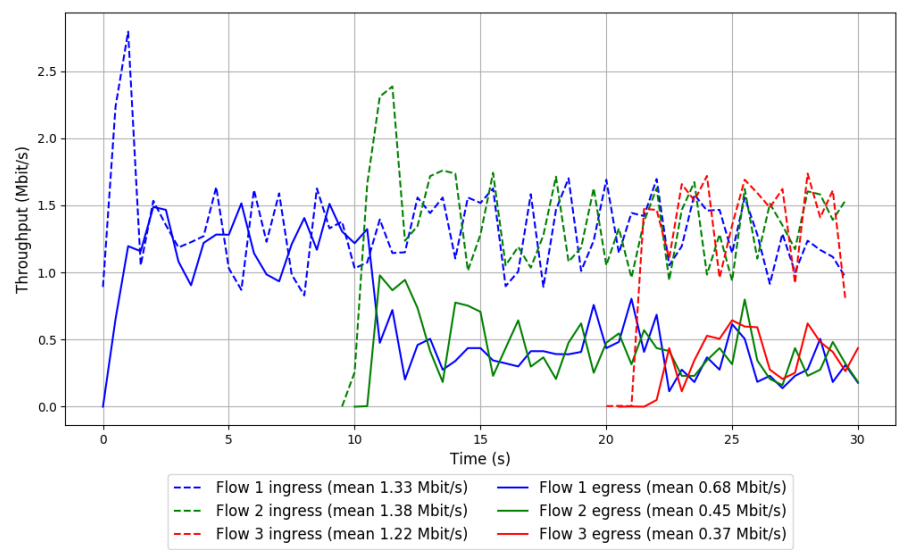
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 377.061 ms

Loss rate: 71.99%

Run 3: Report of PCC-Vivace — Data Link

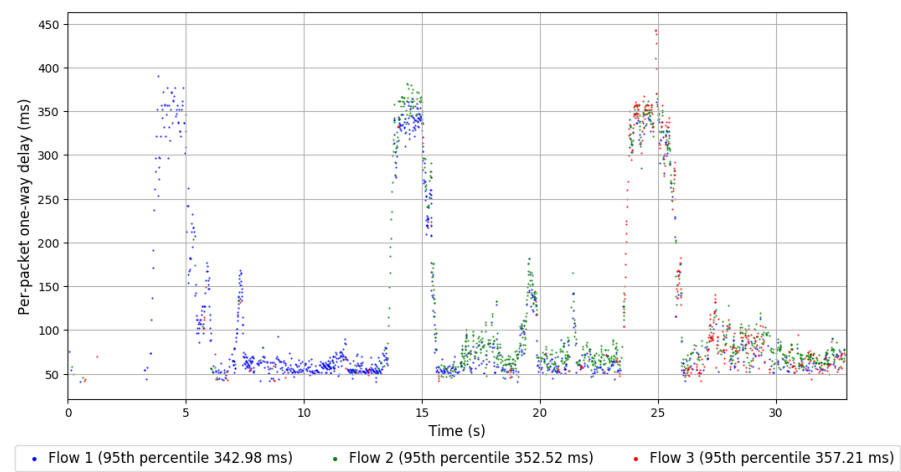
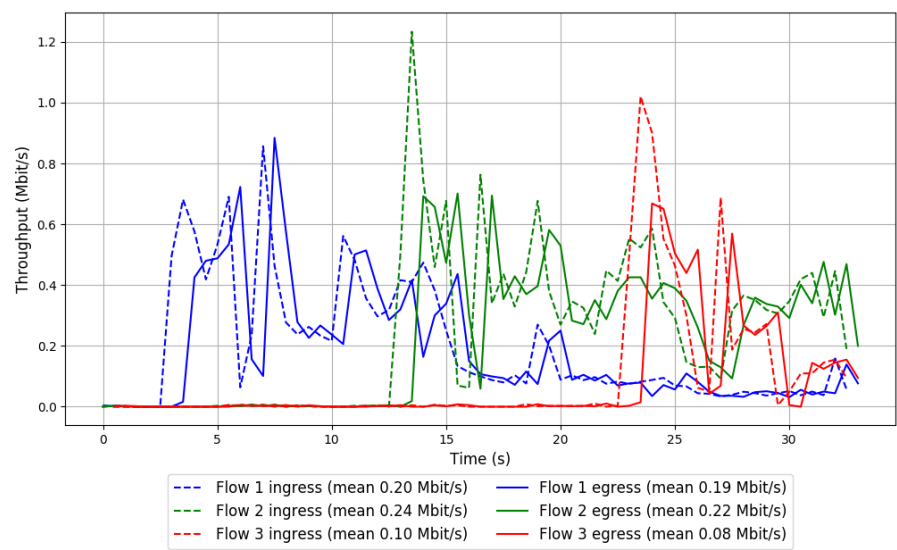


Run 1: Statistics of WebRTC media

Start at: 2018-07-10 18:57:22
End at: 2018-07-10 18:57:52
Local clock offset: -2.462 ms
Remote clock offset: -7.602 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 351.031 ms
Loss rate: 8.69%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 342.976 ms
Loss rate: 7.31%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 352.517 ms
Loss rate: 7.33%
-- Flow 3:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 357.208 ms
Loss rate: 15.03%

Run 1: Report of WebRTC media — Data Link

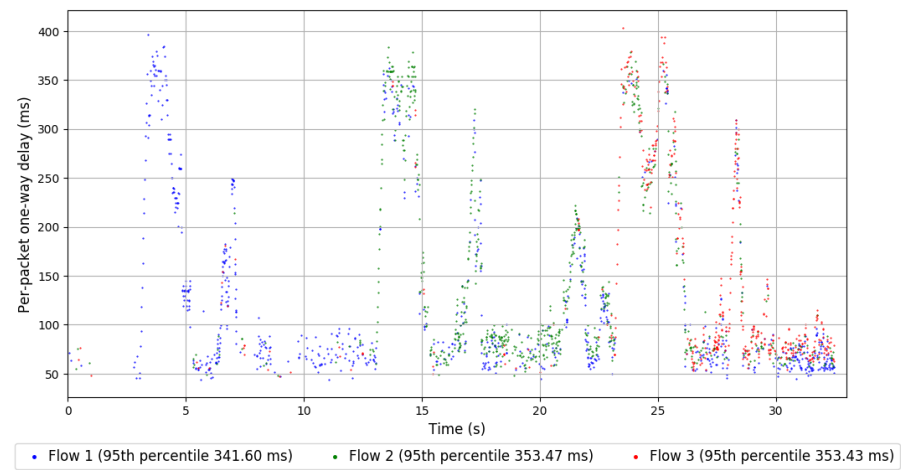
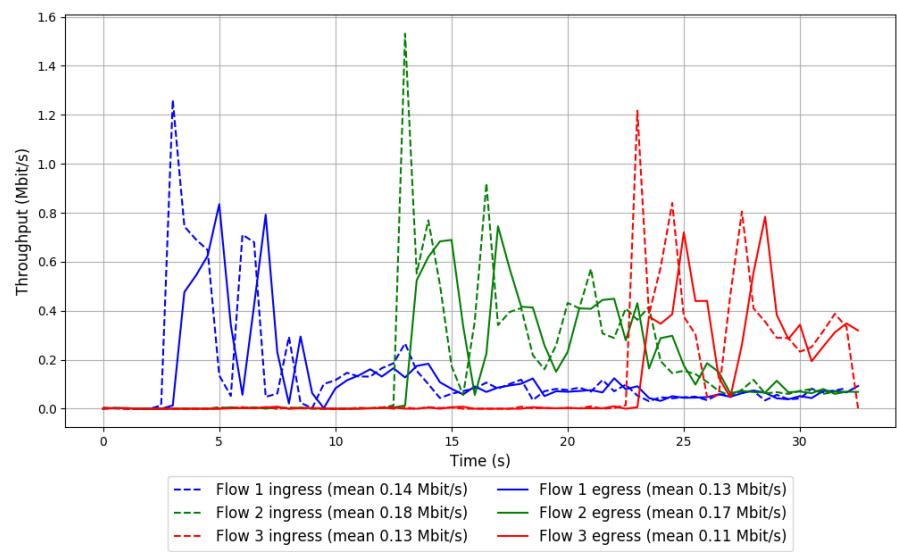


Run 2: Statistics of WebRTC media

Start at: 2018-07-10 19:16:08
End at: 2018-07-10 19:16:38
Local clock offset: 1.937 ms
Remote clock offset: -0.482 ms

Below is generated by plot.py at 2018-07-10 19:44:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 348.724 ms
Loss rate: 9.13%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 341.597 ms
Loss rate: 7.71%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 353.471 ms
Loss rate: 7.72%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 353.434 ms
Loss rate: 12.78%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-07-10 19:34:50

End at: 2018-07-10 19:35:20

Local clock offset: -0.263 ms

Remote clock offset: -3.9 ms

Below is generated by plot.py at 2018-07-10 19:44:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 356.969 ms

Loss rate: 15.80%

-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 362.437 ms

Loss rate: 19.03%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 346.957 ms

Loss rate: 8.41%

-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 362.886 ms

Loss rate: 22.65%

Run 3: Report of WebRTC media — Data Link

