

Pantheon Report

Generated at 2018-12-20 10:06:52 (UTC).

Data path: Colombia on **p4p1** (*remote*) → AWS Brazil 2 on **ens5** (*local*).

Repeated the test of 19 congestion control schemes 5 times.

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

NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

System info:

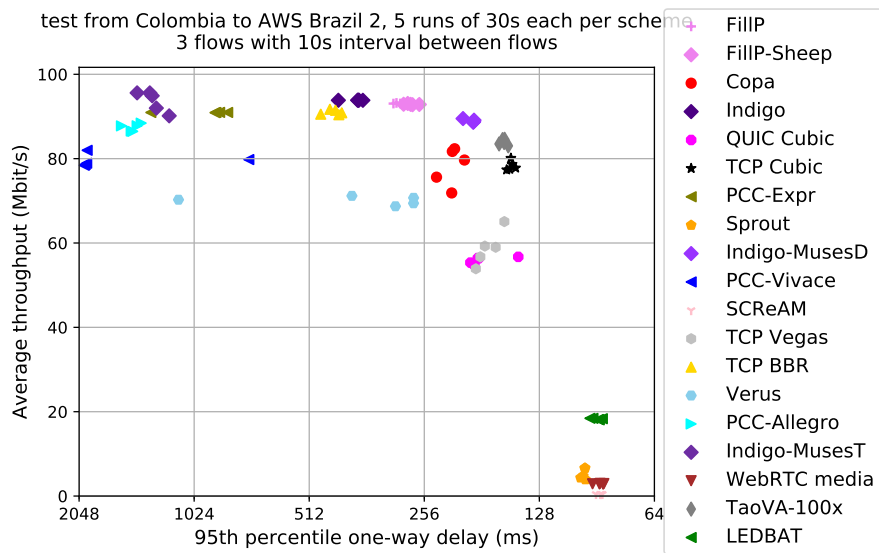
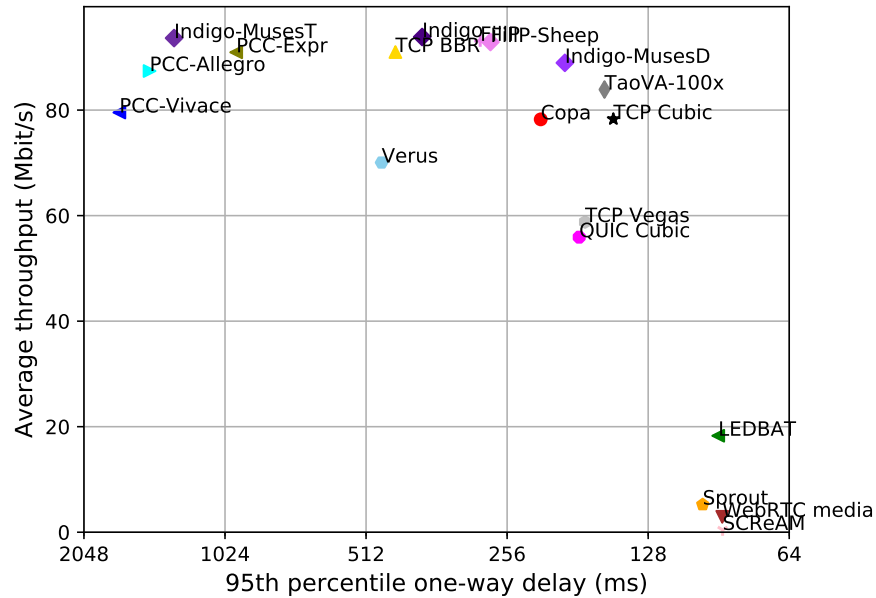
```
Linux 4.15.0-1029-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ c654af0b7d59d4ef4b914cfac404e1fc2e96dc68
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfc58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/muses-refactored @ 31f8f0ba8ef8b1da76c2bc0cd0a7850c33ff64fb
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
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
  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 Colombia to AWS Brazil 2, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



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	5	55.57	38.52	30.02	440.67	517.39	418.35	2.74	5.08	7.30
Copa	5	48.58	31.10	27.35	214.44	153.23	200.65	0.63	0.85	2.28
TCP Cubic	5	42.38	36.68	35.13	183.22	145.00	136.73	0.37	0.75	2.06
FillP	5	57.52	39.03	29.44	306.40	247.96	307.14	1.76	2.78	3.05
FillP-Sheep	5	56.84	39.11	30.66	291.49	220.96	327.19	0.83	2.19	3.79
Indigo	5	58.47	38.86	29.53	418.74	158.39	147.87	7.83	1.54	3.19
Indigo-MusesD	5	55.73	37.64	25.22	191.48	185.29	197.07	0.95	1.93	3.65
Indigo-MusesT	5	58.82	38.83	30.77	1126.24	1238.95	1359.45	16.86	40.02	52.37
LEDBAT	5	11.89	7.80	3.79	90.93	90.52	90.42	1.15	1.75	3.53
PCC-Allegro	5	54.73	34.75	29.50	1552.27	1136.16	1402.63	26.23	15.38	21.33
PCC-Expr	5	56.65	38.87	26.05	987.15	848.82	241.21	23.01	6.70	3.13
QUIC Cubic	5	36.05	21.37	17.40	133.45	211.04	277.49	0.54	1.21	1.94
SCReAM	5	0.22	0.22	0.22	88.24	88.65	88.32	0.51	0.91	1.77
Sprout	5	2.34	3.25	2.31	96.57	97.81	95.47	1.12	1.32	2.01
TaoVA-100x	5	49.35	37.40	29.45	155.03	166.19	152.93	0.43	0.86	2.08
TCP Vegas	5	35.31	25.54	19.81	180.88	161.14	188.90	0.54	1.05	2.01
Verus	5	43.74	27.99	23.75	287.26	566.41	682.25	0.94	1.92	3.83
PCC-Vivace	5	51.14	31.73	22.48	1486.84	1048.52	348.24	6.15	6.21	3.00
WebRTC media	5	1.71	0.93	0.28	88.65	89.07	88.33	0.36	0.75	2.54

Run 1: Statistics of TCP BBR

Start at: 2018-12-20 08:12:27

End at: 2018-12-20 08:12:57

Local clock offset: -6.379 ms

Remote clock offset: 3.1 ms

Below is generated by plot.py at 2018-12-20 09:56:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.41 Mbit/s

95th percentile per-packet one-way delay: 428.345 ms

Loss rate: 4.62%

-- Flow 1:

Average throughput: 55.89 Mbit/s

95th percentile per-packet one-way delay: 495.970 ms

Loss rate: 3.69%

-- Flow 2:

Average throughput: 37.27 Mbit/s

95th percentile per-packet one-way delay: 413.747 ms

Loss rate: 5.63%

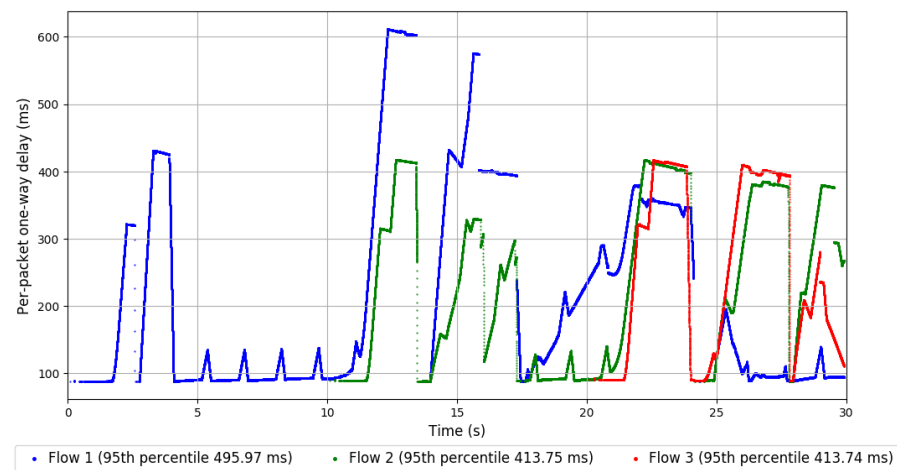
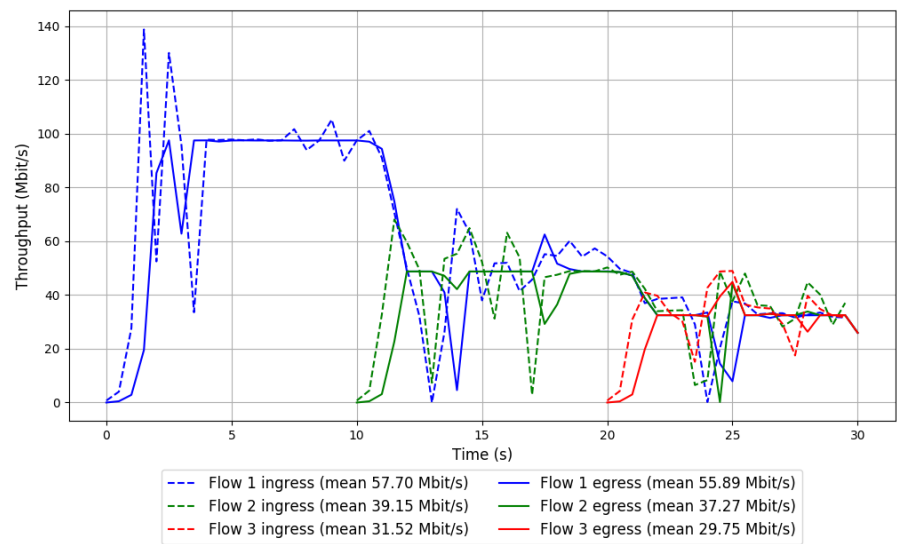
-- Flow 3:

Average throughput: 29.75 Mbit/s

95th percentile per-packet one-way delay: 413.740 ms

Loss rate: 7.23%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-12-20 08:37:15

End at: 2018-12-20 08:37:45

Local clock offset: -5.825 ms

Remote clock offset: 1.682 ms

Below is generated by plot.py at 2018-12-20 09:56:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.71 Mbit/s

95th percentile per-packet one-way delay: 452.140 ms

Loss rate: 4.30%

-- Flow 1:

Average throughput: 55.75 Mbit/s

95th percentile per-packet one-way delay: 418.195 ms

Loss rate: 2.80%

-- Flow 2:

Average throughput: 39.07 Mbit/s

95th percentile per-packet one-way delay: 536.442 ms

Loss rate: 5.88%

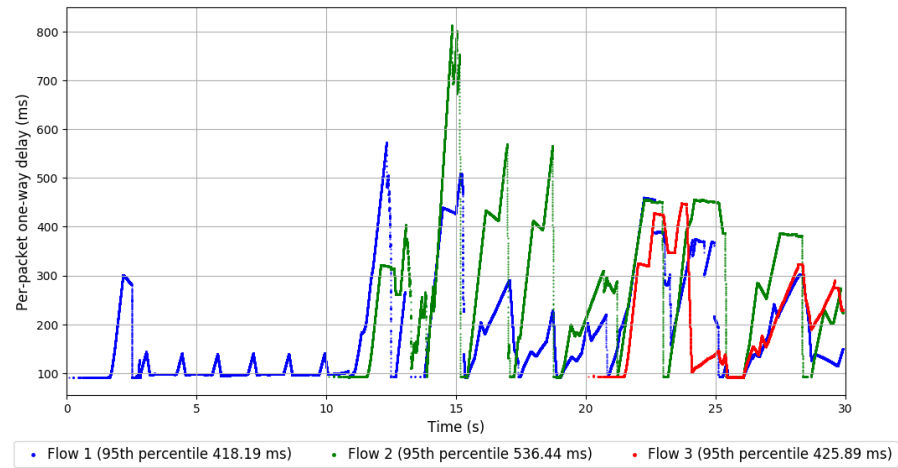
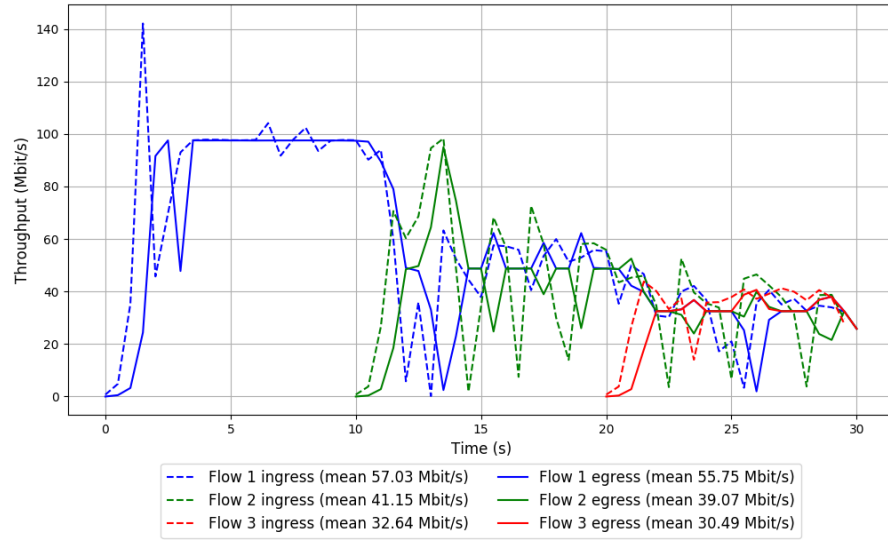
-- Flow 3:

Average throughput: 30.49 Mbit/s

95th percentile per-packet one-way delay: 425.888 ms

Loss rate: 8.20%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-12-20 09:01:41

End at: 2018-12-20 09:02:11

Local clock offset: -6.815 ms

Remote clock offset: 1.291 ms

Below is generated by plot.py at 2018-12-20 09:56:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.47 Mbit/s

95th percentile per-packet one-way delay: 437.069 ms

Loss rate: 3.07%

-- Flow 1:

Average throughput: 55.41 Mbit/s

95th percentile per-packet one-way delay: 419.240 ms

Loss rate: 1.91%

-- Flow 2:

Average throughput: 39.40 Mbit/s

95th percentile per-packet one-way delay: 625.088 ms

Loss rate: 3.62%

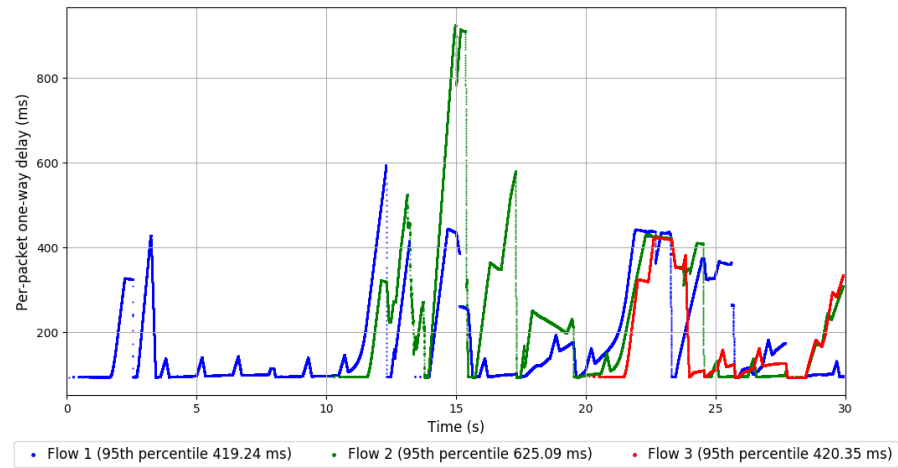
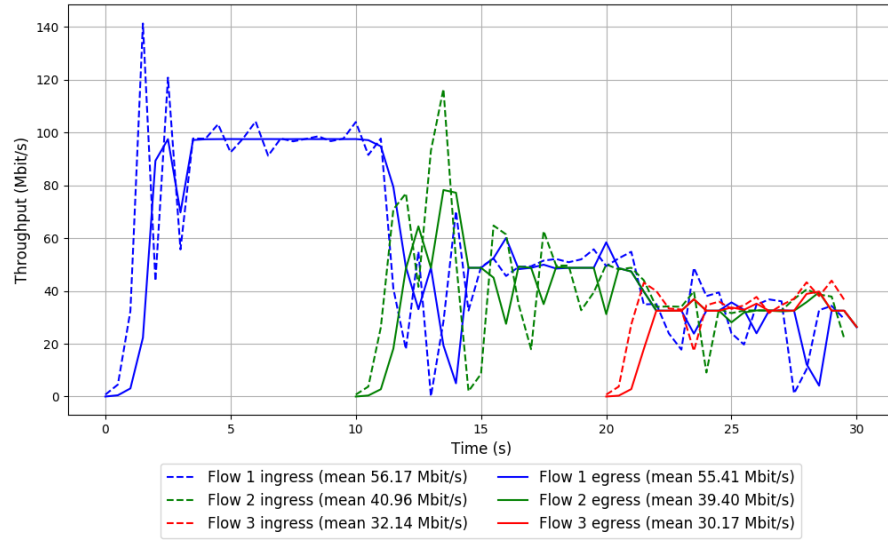
-- Flow 3:

Average throughput: 30.17 Mbit/s

95th percentile per-packet one-way delay: 420.354 ms

Loss rate: 7.77%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-12-20 09:26:06

End at: 2018-12-20 09:26:36

Local clock offset: -6.973 ms

Remote clock offset: 9.825 ms

Below is generated by plot.py at 2018-12-20 09:56:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.87 Mbit/s

95th percentile per-packet one-way delay: 420.913 ms

Loss rate: 4.45%

-- Flow 1:

Average throughput: 54.85 Mbit/s

95th percentile per-packet one-way delay: 392.199 ms

Loss rate: 2.71%

-- Flow 2:

Average throughput: 39.52 Mbit/s

95th percentile per-packet one-way delay: 465.104 ms

Loss rate: 6.76%

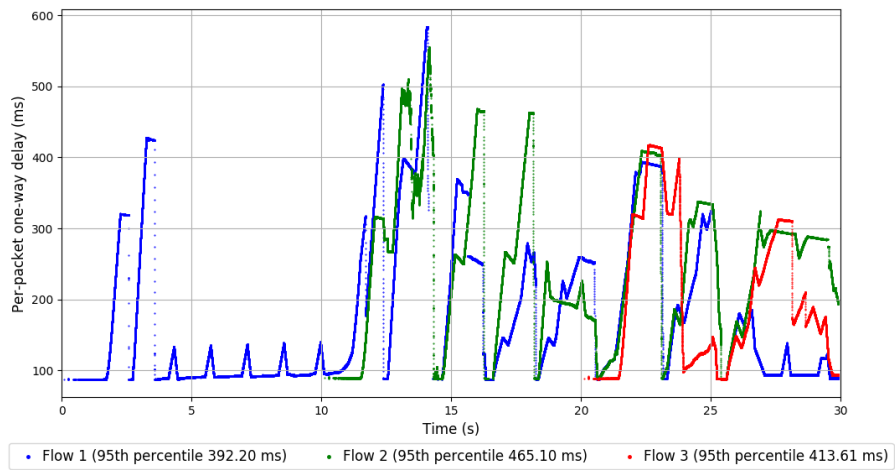
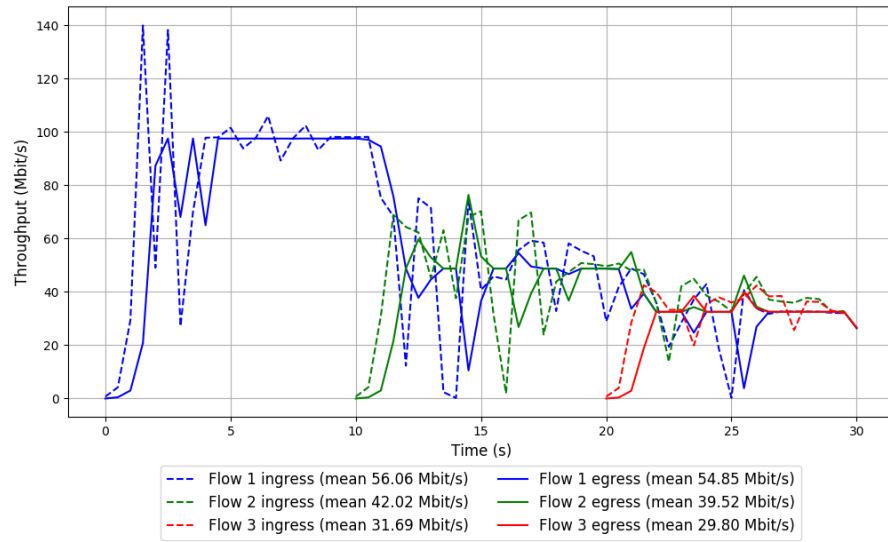
-- Flow 3:

Average throughput: 29.80 Mbit/s

95th percentile per-packet one-way delay: 413.612 ms

Loss rate: 7.59%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-12-20 09:50:31

End at: 2018-12-20 09:51:01

Local clock offset: -1.165 ms

Remote clock offset: 6.566 ms

Below is generated by plot.py at 2018-12-20 09:56:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.54 Mbit/s

95th percentile per-packet one-way delay: 477.683 ms

Loss rate: 3.19%

-- Flow 1:

Average throughput: 55.95 Mbit/s

95th percentile per-packet one-way delay: 477.732 ms

Loss rate: 2.59%

-- Flow 2:

Average throughput: 37.32 Mbit/s

95th percentile per-packet one-way delay: 546.570 ms

Loss rate: 3.53%

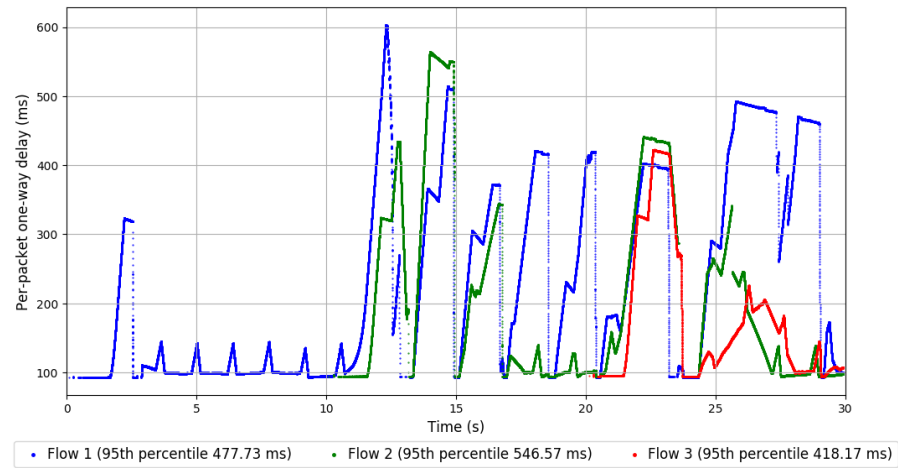
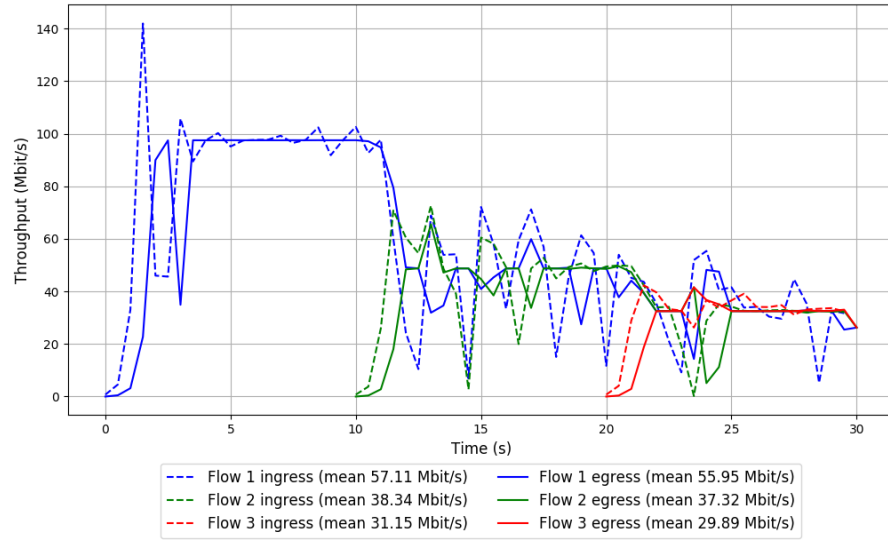
-- Flow 3:

Average throughput: 29.89 Mbit/s

95th percentile per-packet one-way delay: 418.165 ms

Loss rate: 5.73%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-12-20 08:09:54

End at: 2018-12-20 08:10:24

Local clock offset: -6.366 ms

Remote clock offset: 5.233 ms

Below is generated by plot.py at 2018-12-20 09:57:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.67 Mbit/s

95th percentile per-packet one-way delay: 200.962 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 50.30 Mbit/s

95th percentile per-packet one-way delay: 203.300 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 31.59 Mbit/s

95th percentile per-packet one-way delay: 155.050 ms

Loss rate: 0.91%

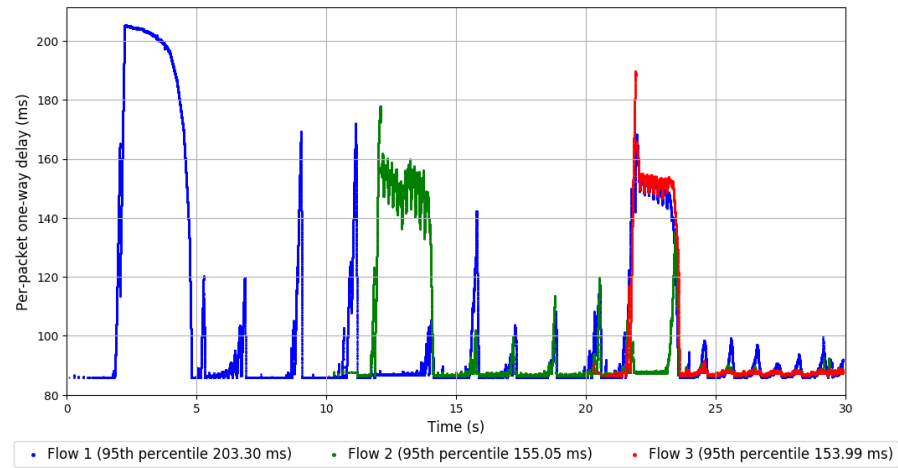
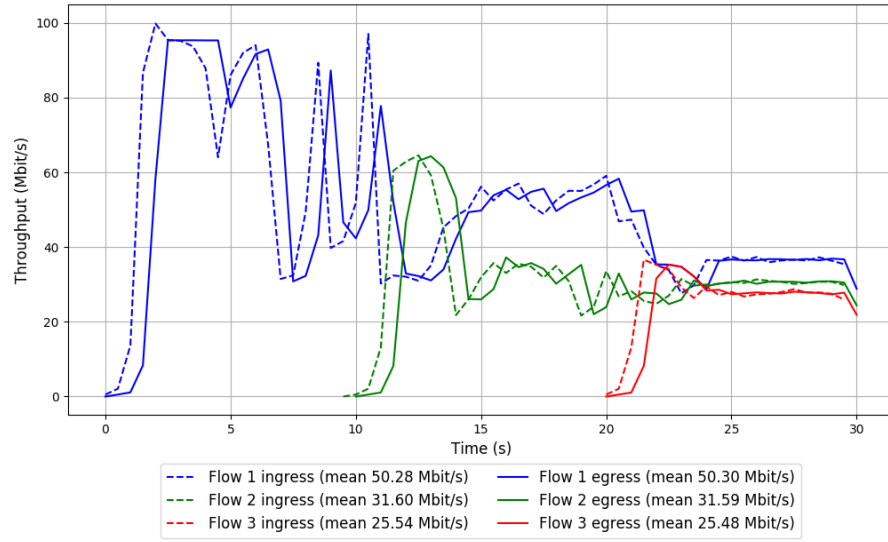
-- Flow 3:

Average throughput: 25.48 Mbit/s

95th percentile per-packet one-way delay: 153.985 ms

Loss rate: 1.97%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-12-20 08:34:41

End at: 2018-12-20 08:35:11

Local clock offset: -6.403 ms

Remote clock offset: 4.333 ms

Below is generated by plot.py at 2018-12-20 09:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.71 Mbit/s

95th percentile per-packet one-way delay: 216.219 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 50.02 Mbit/s

95th percentile per-packet one-way delay: 217.250 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 34.86 Mbit/s

95th percentile per-packet one-way delay: 210.812 ms

Loss rate: 0.74%

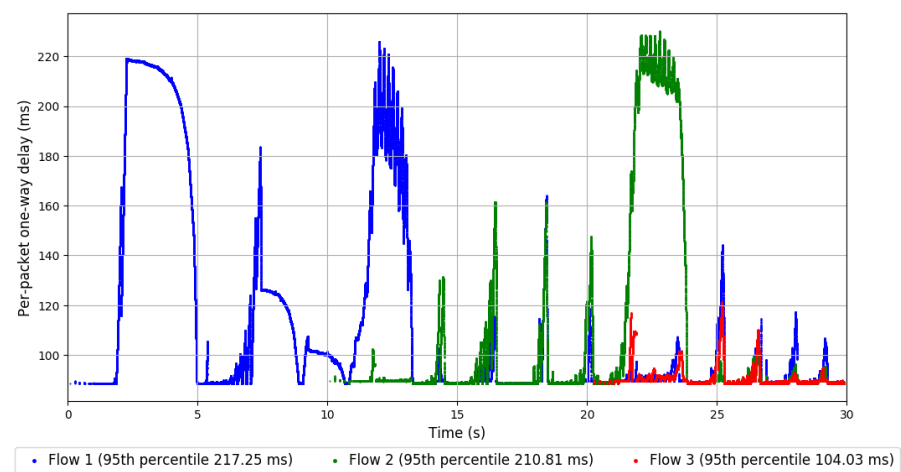
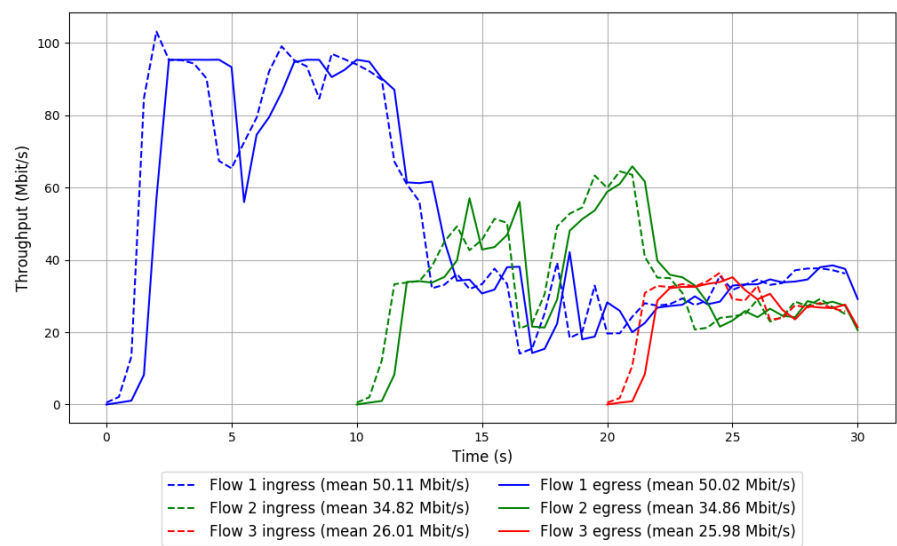
-- Flow 3:

Average throughput: 25.98 Mbit/s

95th percentile per-packet one-way delay: 104.026 ms

Loss rate: 1.84%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-12-20 08:59:07

End at: 2018-12-20 08:59:37

Local clock offset: -7.602 ms

Remote clock offset: 6.196 ms

Below is generated by plot.py at 2018-12-20 09:57:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.35 Mbit/s

95th percentile per-packet one-way delay: 213.247 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 53.18 Mbit/s

95th percentile per-packet one-way delay: 215.910 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 29.75 Mbit/s

95th percentile per-packet one-way delay: 99.549 ms

Loss rate: 0.80%

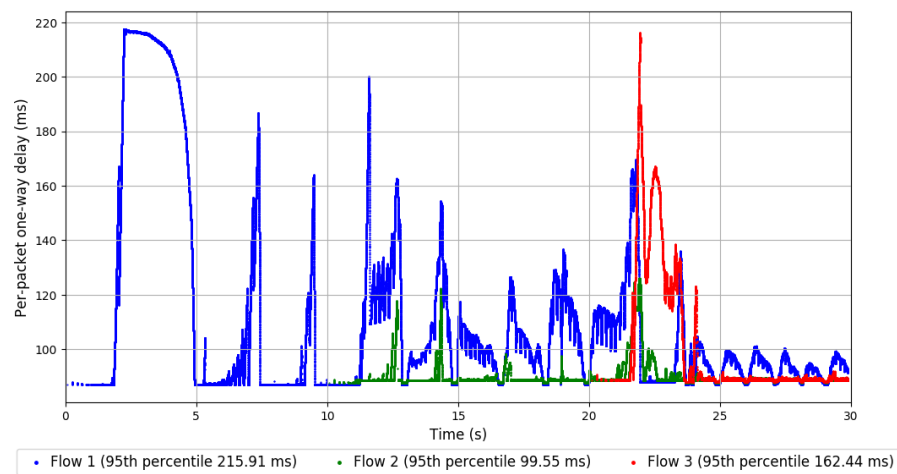
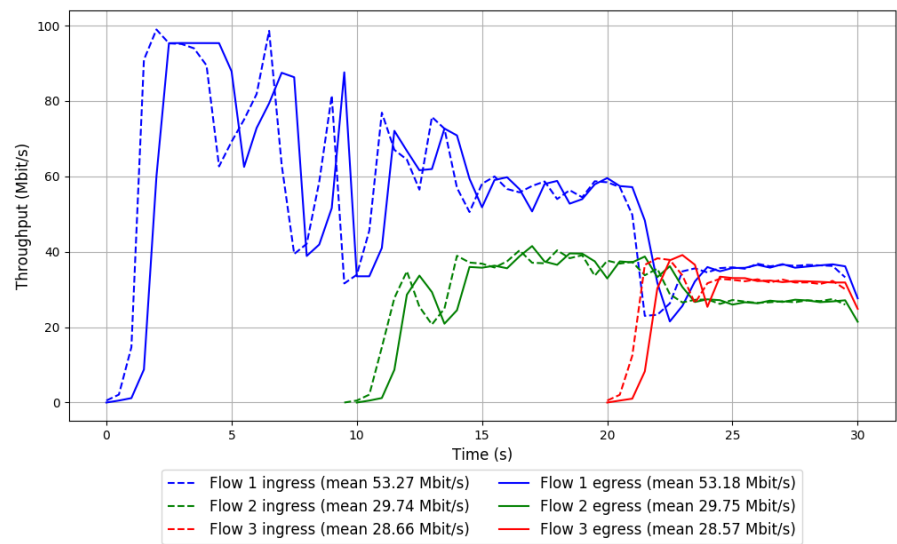
-- Flow 3:

Average throughput: 28.57 Mbit/s

95th percentile per-packet one-way delay: 162.441 ms

Loss rate: 2.07%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-12-20 09:23:33

End at: 2018-12-20 09:24:03

Local clock offset: -6.992 ms

Remote clock offset: 9.106 ms

Below is generated by plot.py at 2018-12-20 09:58:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.87 Mbit/s

95th percentile per-packet one-way delay: 217.028 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 44.70 Mbit/s

95th percentile per-packet one-way delay: 216.245 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 26.41 Mbit/s

95th percentile per-packet one-way delay: 133.894 ms

Loss rate: 0.86%

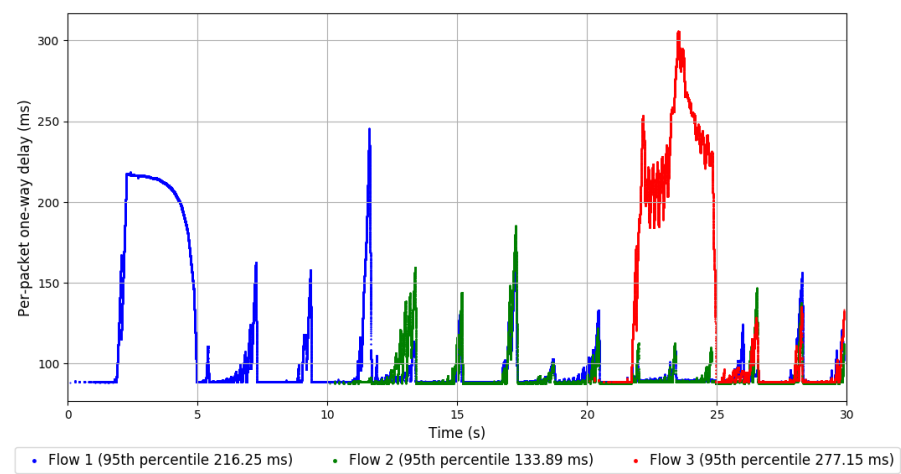
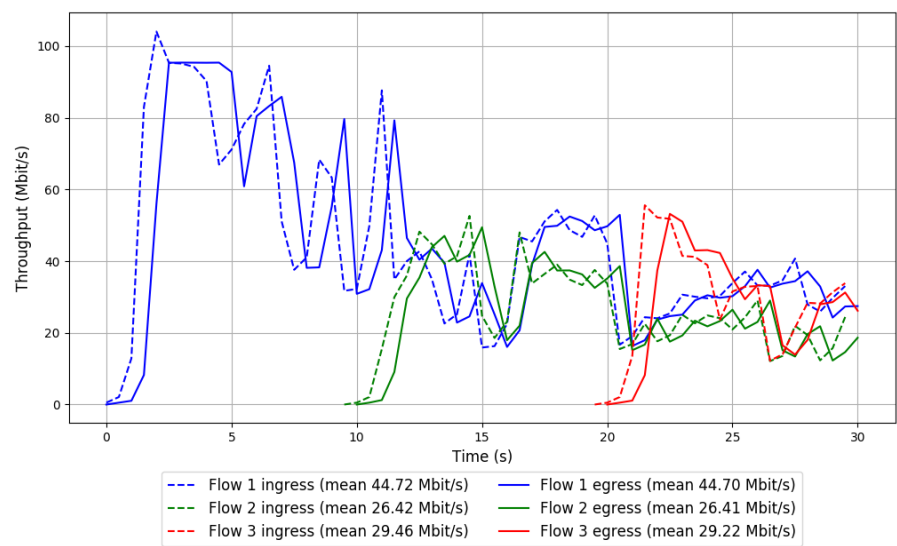
-- Flow 3:

Average throughput: 29.22 Mbit/s

95th percentile per-packet one-way delay: 277.151 ms

Loss rate: 2.53%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-12-20 09:47:58

End at: 2018-12-20 09:48:28

Local clock offset: -1.674 ms

Remote clock offset: 7.58 ms

Below is generated by plot.py at 2018-12-20 09:58:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.61 Mbit/s

95th percentile per-packet one-way delay: 237.820 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 44.71 Mbit/s

95th percentile per-packet one-way delay: 219.471 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 32.91 Mbit/s

95th percentile per-packet one-way delay: 166.833 ms

Loss rate: 0.96%

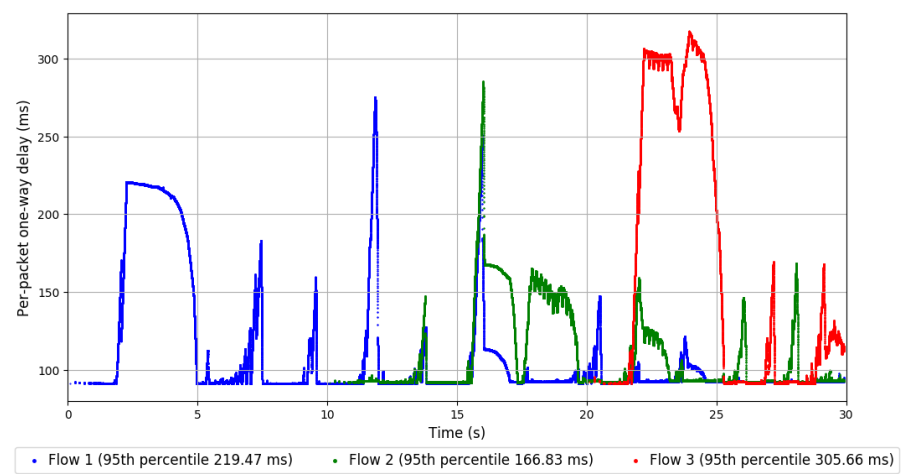
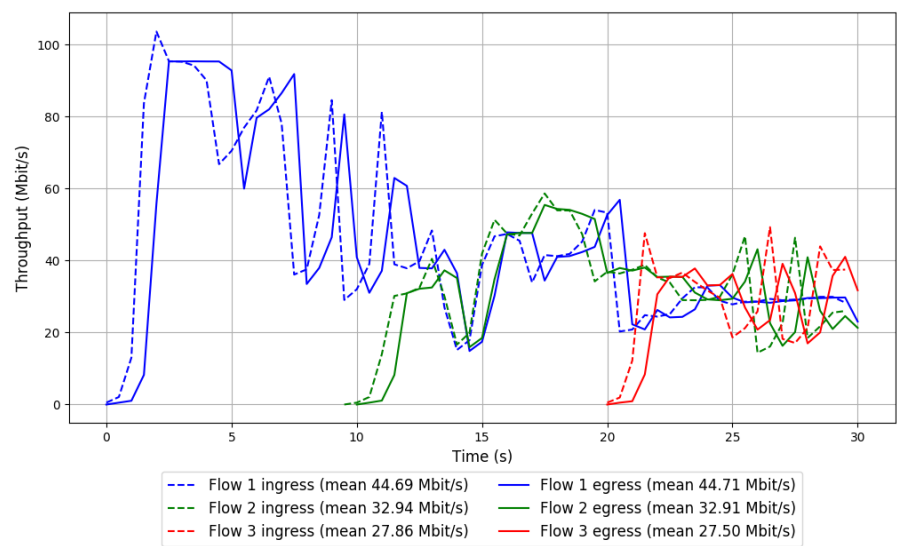
-- Flow 3:

Average throughput: 27.50 Mbit/s

95th percentile per-packet one-way delay: 305.664 ms

Loss rate: 2.99%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-12-20 08:08:37

End at: 2018-12-20 08:09:07

Local clock offset: -6.317 ms

Remote clock offset: 4.293 ms

Below is generated by plot.py at 2018-12-20 09:58:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.11 Mbit/s

95th percentile per-packet one-way delay: 151.954 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 42.68 Mbit/s

95th percentile per-packet one-way delay: 180.554 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 38.67 Mbit/s

95th percentile per-packet one-way delay: 146.327 ms

Loss rate: 0.76%

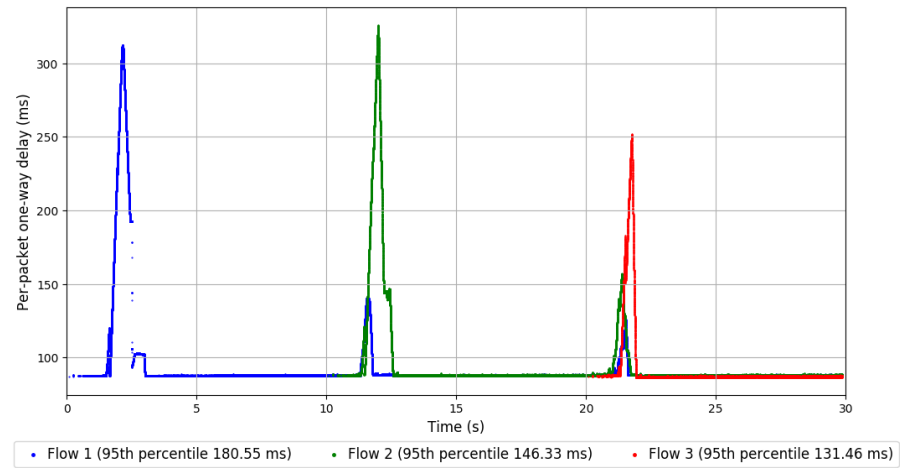
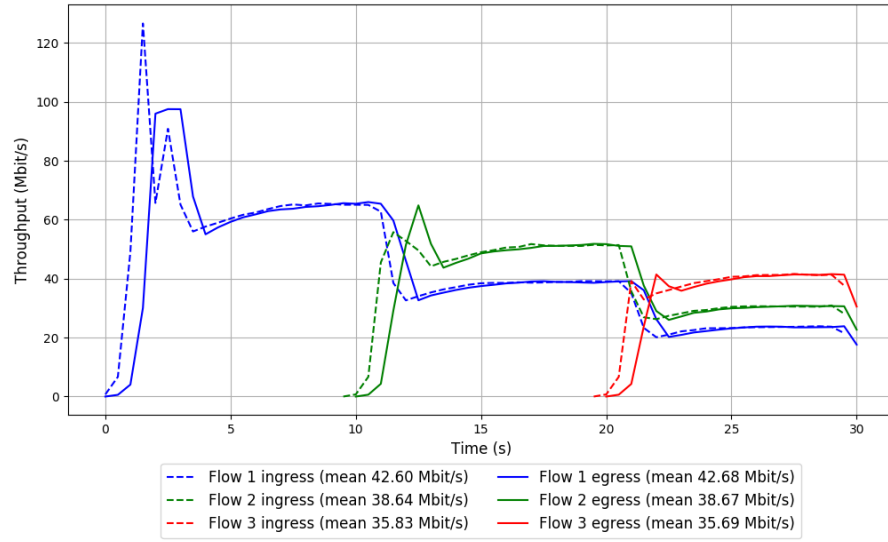
-- Flow 3:

Average throughput: 35.69 Mbit/s

95th percentile per-packet one-way delay: 131.457 ms

Loss rate: 2.11%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-12-20 08:33:24

End at: 2018-12-20 08:33:54

Local clock offset: -6.452 ms

Remote clock offset: 0.36 ms

Below is generated by plot.py at 2018-12-20 09:58:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.36 Mbit/s

95th percentile per-packet one-way delay: 155.863 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 42.20 Mbit/s

95th percentile per-packet one-way delay: 188.401 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 35.36 Mbit/s

95th percentile per-packet one-way delay: 148.148 ms

Loss rate: 0.74%

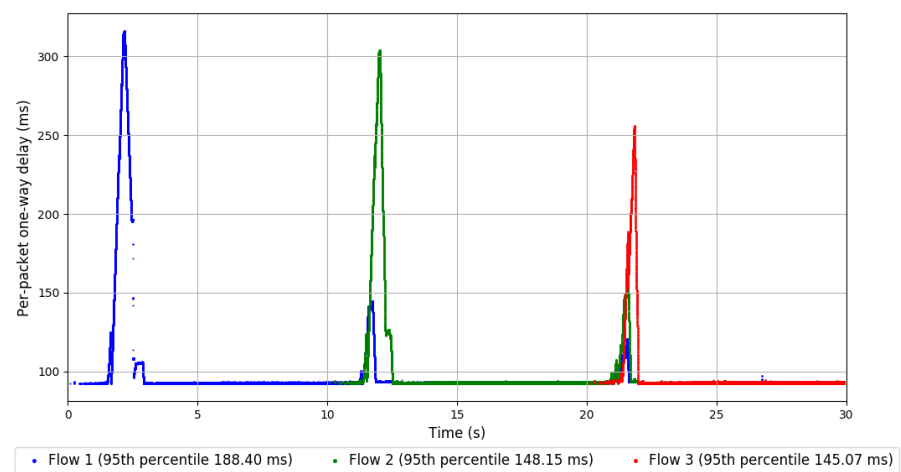
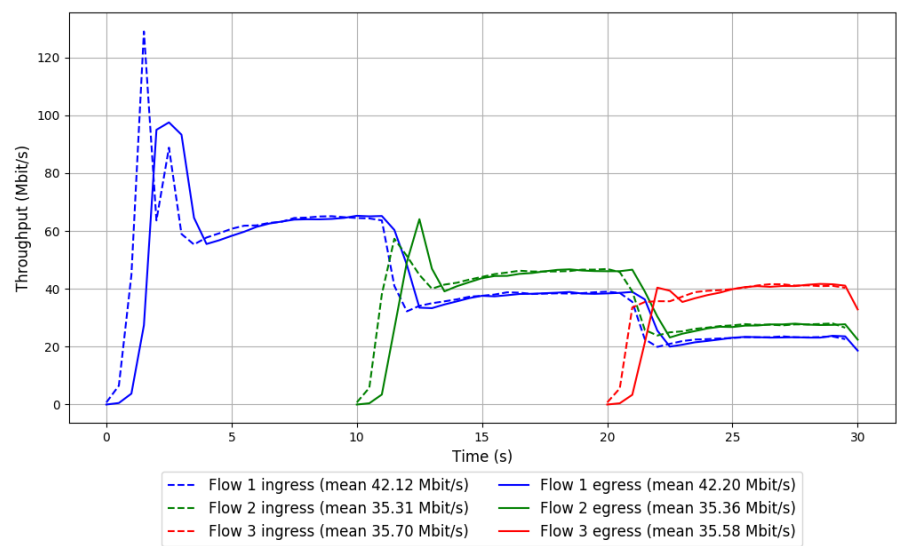
-- Flow 3:

Average throughput: 35.58 Mbit/s

95th percentile per-packet one-way delay: 145.074 ms

Loss rate: 2.07%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-12-20 08:57:50

End at: 2018-12-20 08:58:20

Local clock offset: -7.512 ms

Remote clock offset: 7.486 ms

Below is generated by plot.py at 2018-12-20 09:58:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.67 Mbit/s

95th percentile per-packet one-way delay: 150.838 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 41.95 Mbit/s

95th percentile per-packet one-way delay: 184.654 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 38.47 Mbit/s

95th percentile per-packet one-way delay: 142.668 ms

Loss rate: 0.75%

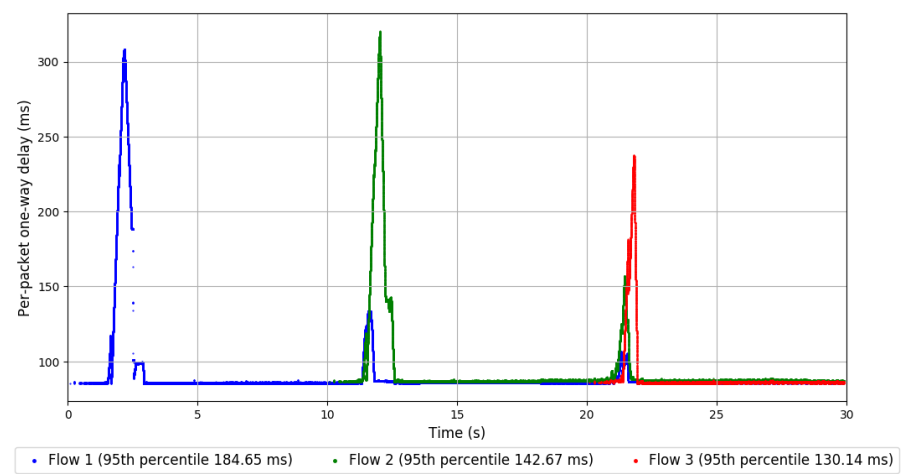
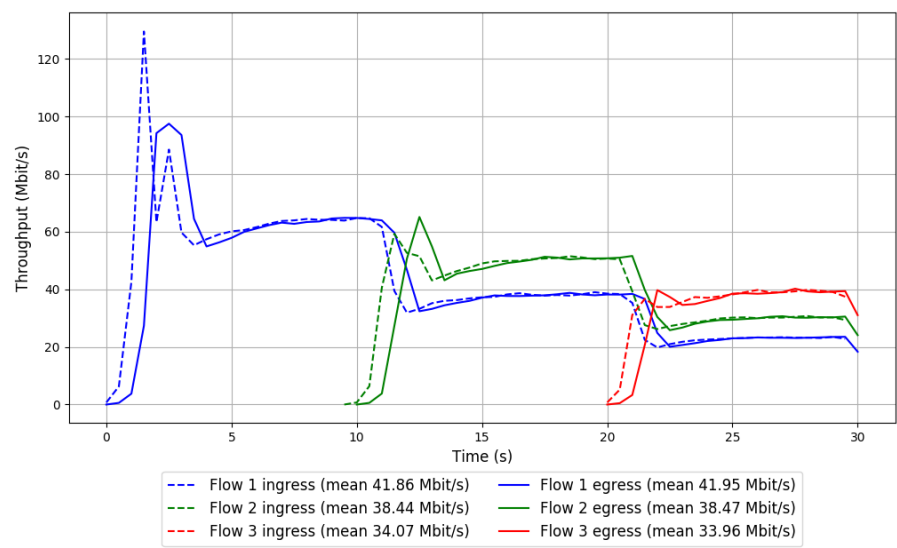
-- Flow 3:

Average throughput: 33.96 Mbit/s

95th percentile per-packet one-way delay: 130.141 ms

Loss rate: 2.01%

Run 3: Report of TCP Cubic — Data Link

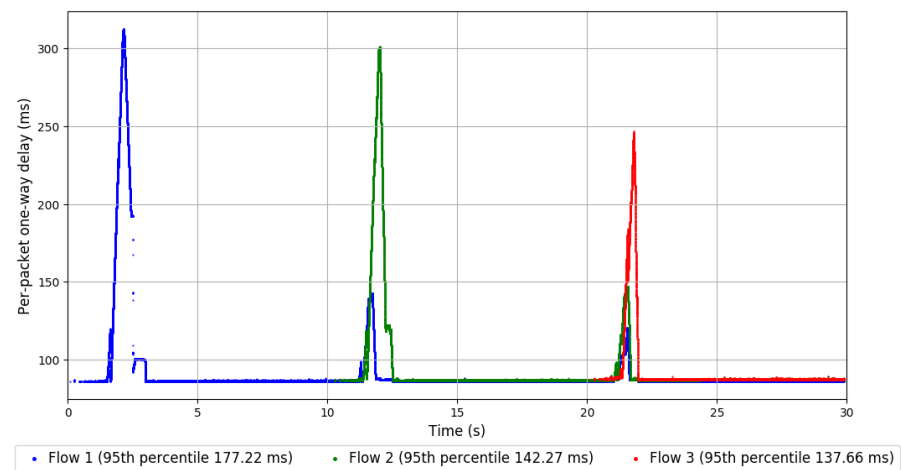
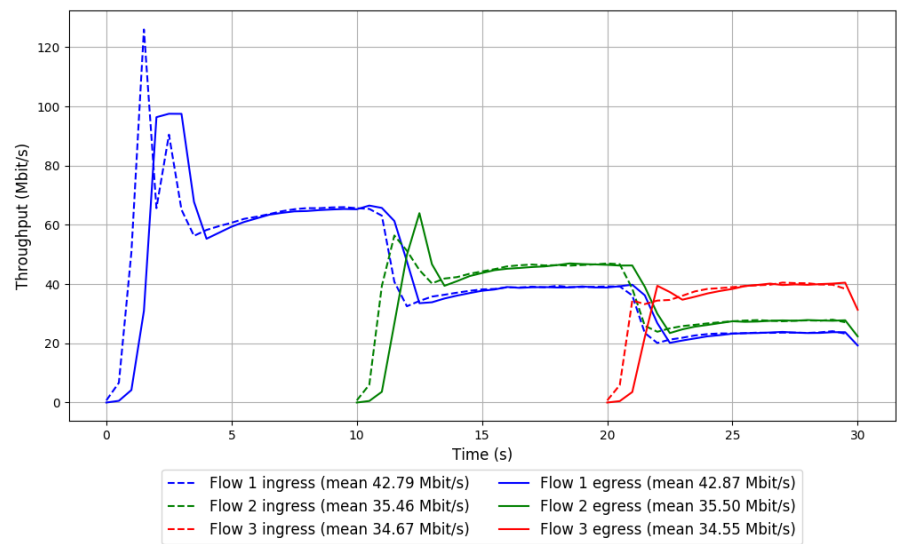


Run 4: Statistics of TCP Cubic

Start at: 2018-12-20 09:22:16
End at: 2018-12-20 09:22:46
Local clock offset: -6.915 ms
Remote clock offset: 10.369 ms

Below is generated by plot.py at 2018-12-20 09:58:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.80 Mbit/s
95th percentile per-packet one-way delay: 147.695 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 42.87 Mbit/s
95th percentile per-packet one-way delay: 177.225 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 35.50 Mbit/s
95th percentile per-packet one-way delay: 142.271 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 34.55 Mbit/s
95th percentile per-packet one-way delay: 137.664 ms
Loss rate: 2.05%

Run 4: Report of TCP Cubic — Data Link

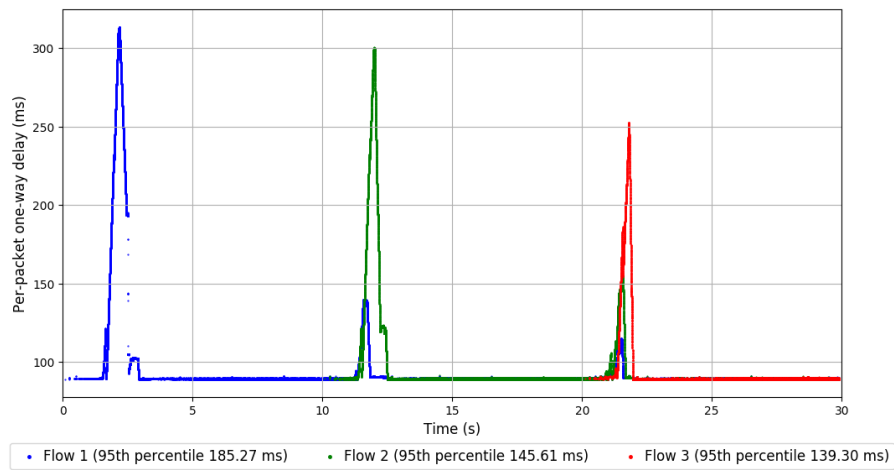
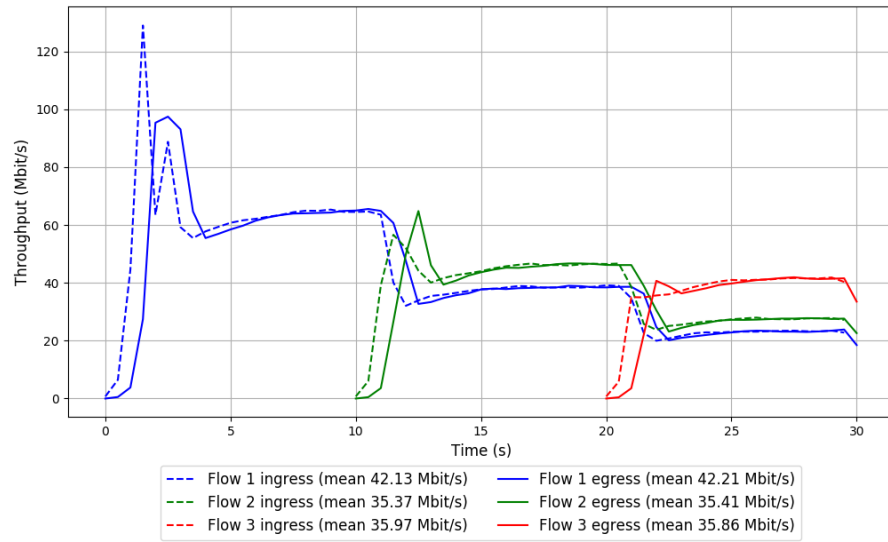


Run 5: Statistics of TCP Cubic

Start at: 2018-12-20 09:46:41
End at: 2018-12-20 09:47:11
Local clock offset: -1.99 ms
Remote clock offset: 10.367 ms

Below is generated by plot.py at 2018-12-20 09:58:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.51 Mbit/s
95th percentile per-packet one-way delay: 153.075 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 42.21 Mbit/s
95th percentile per-packet one-way delay: 185.274 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 35.41 Mbit/s
95th percentile per-packet one-way delay: 145.609 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 35.86 Mbit/s
95th percentile per-packet one-way delay: 139.304 ms
Loss rate: 2.04%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-12-20 08:03:28

End at: 2018-12-20 08:03:58

Local clock offset: -5.542 ms

Remote clock offset: 2.885 ms

Below is generated by plot.py at 2018-12-20 09:58:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 264.842 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 57.39 Mbit/s

95th percentile per-packet one-way delay: 275.347 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 39.41 Mbit/s

95th percentile per-packet one-way delay: 252.342 ms

Loss rate: 2.58%

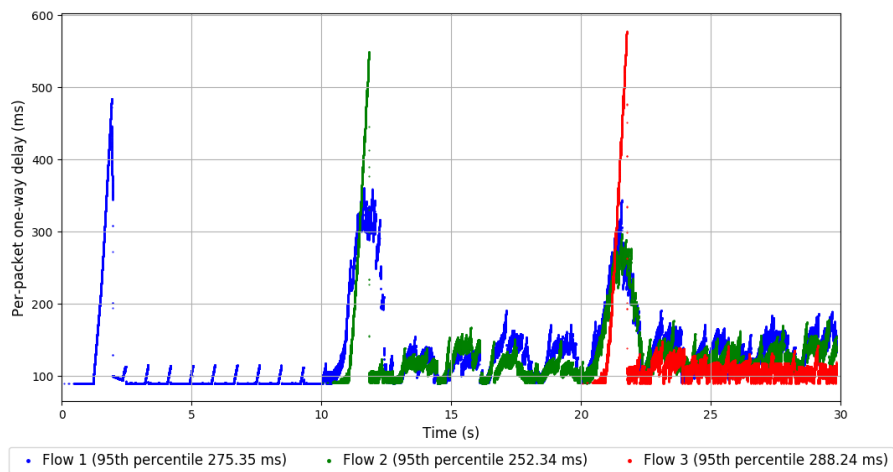
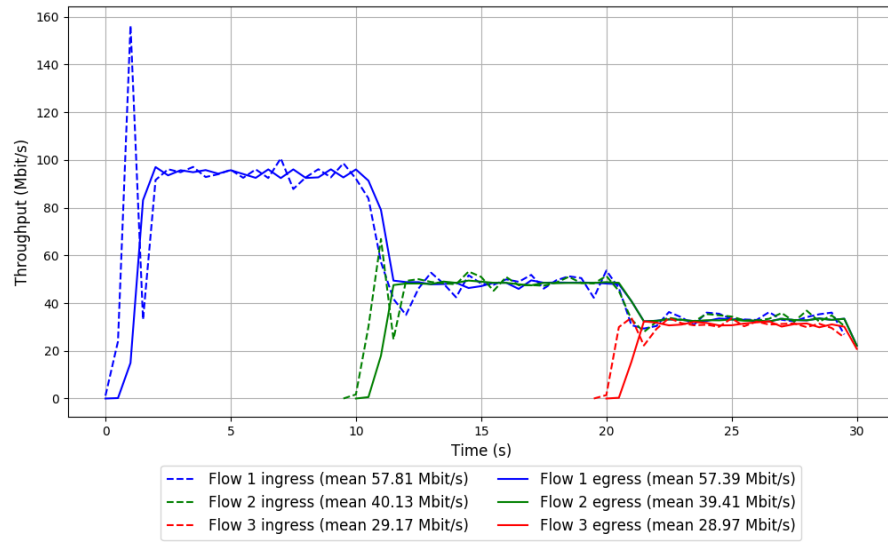
-- Flow 3:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 288.241 ms

Loss rate: 2.24%

Run 1: Report of FillP — Data Link

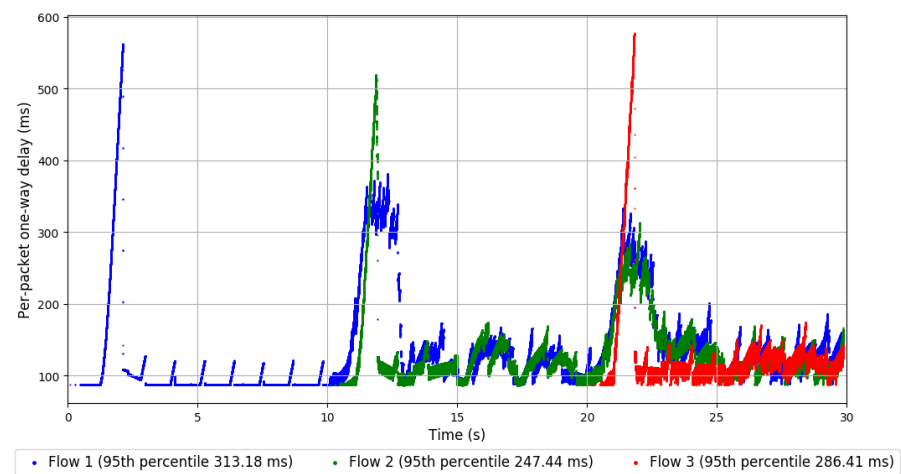
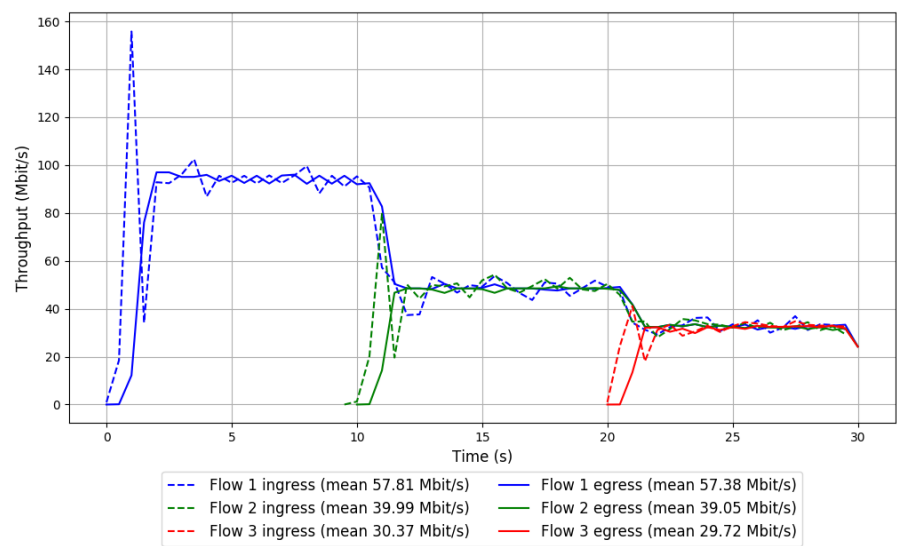


Run 2: Statistics of FillP

Start at: 2018-12-20 08:28:14
End at: 2018-12-20 08:28:44
Local clock offset: -6.38 ms
Remote clock offset: 5.152 ms

Below is generated by plot.py at 2018-12-20 09:58:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.08 Mbit/s
95th percentile per-packet one-way delay: 296.093 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 57.38 Mbit/s
95th percentile per-packet one-way delay: 313.183 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 39.05 Mbit/s
95th percentile per-packet one-way delay: 247.437 ms
Loss rate: 3.12%
-- Flow 3:
Average throughput: 29.72 Mbit/s
95th percentile per-packet one-way delay: 286.408 ms
Loss rate: 3.80%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-12-20 08:52:41

End at: 2018-12-20 08:53:11

Local clock offset: -6.624 ms

Remote clock offset: 2.307 ms

Below is generated by plot.py at 2018-12-20 09:58:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.11 Mbit/s

95th percentile per-packet one-way delay: 289.232 ms

Loss rate: 2.42%

-- Flow 1:

Average throughput: 57.76 Mbit/s

95th percentile per-packet one-way delay: 306.474 ms

Loss rate: 2.37%

-- Flow 2:

Average throughput: 38.93 Mbit/s

95th percentile per-packet one-way delay: 218.700 ms

Loss rate: 2.39%

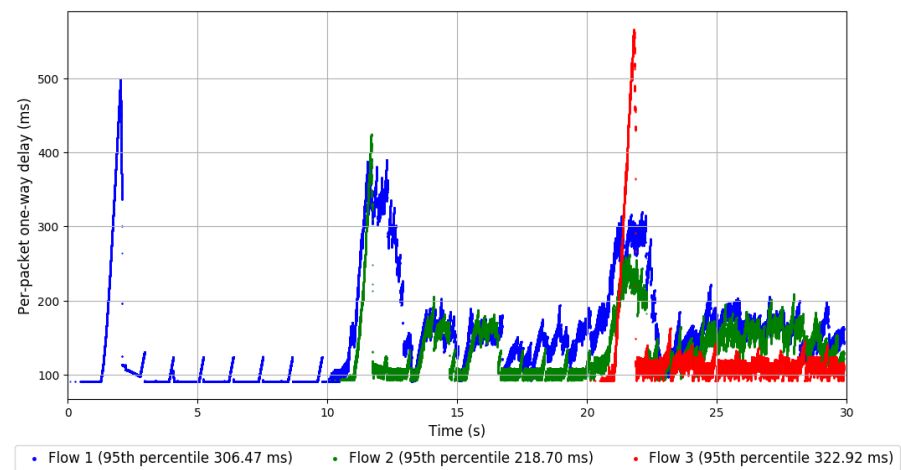
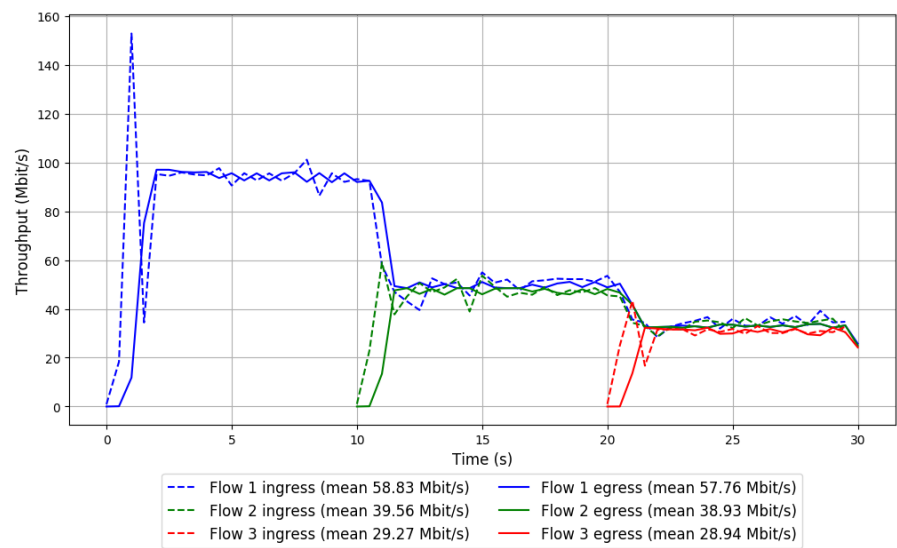
-- Flow 3:

Average throughput: 28.94 Mbit/s

95th percentile per-packet one-way delay: 322.923 ms

Loss rate: 2.82%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-12-20 09:17:06

End at: 2018-12-20 09:17:36

Local clock offset: -6.947 ms

Remote clock offset: 8.28 ms

Below is generated by plot.py at 2018-12-20 09:58:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.06 Mbit/s

95th percentile per-packet one-way delay: 308.280 ms

Loss rate: 2.22%

-- Flow 1:

Average throughput: 57.09 Mbit/s

95th percentile per-packet one-way delay: 309.665 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 300.881 ms

Loss rate: 4.52%

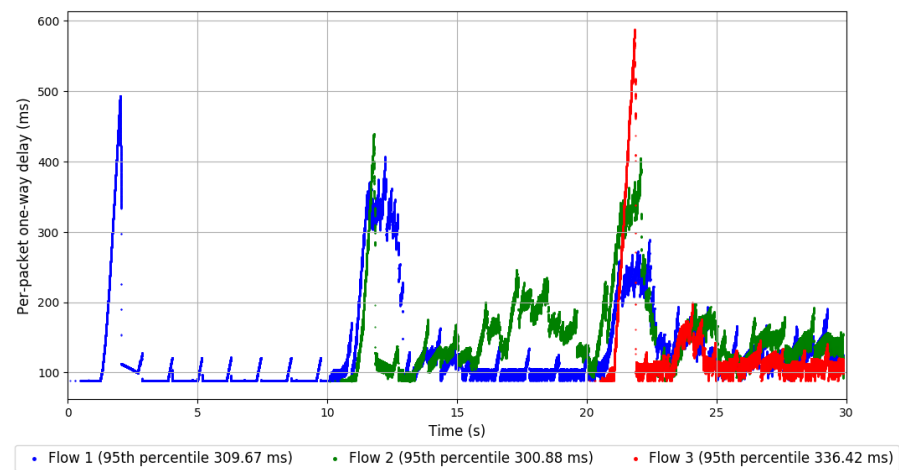
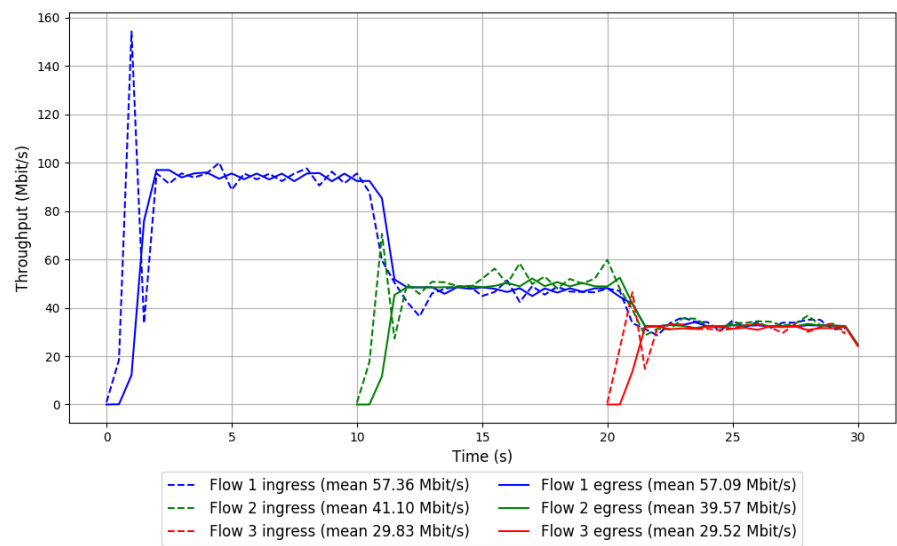
-- Flow 3:

Average throughput: 29.52 Mbit/s

95th percentile per-packet one-way delay: 336.421 ms

Loss rate: 2.73%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-12-20 09:41:31

End at: 2018-12-20 09:42:01

Local clock offset: -3.626 ms

Remote clock offset: 9.762 ms

Below is generated by plot.py at 2018-12-20 09:59:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.21 Mbit/s

95th percentile per-packet one-way delay: 302.702 ms

Loss rate: 2.49%

-- Flow 1:

Average throughput: 57.99 Mbit/s

95th percentile per-packet one-way delay: 327.348 ms

Loss rate: 2.80%

-- Flow 2:

Average throughput: 38.18 Mbit/s

95th percentile per-packet one-way delay: 220.431 ms

Loss rate: 1.31%

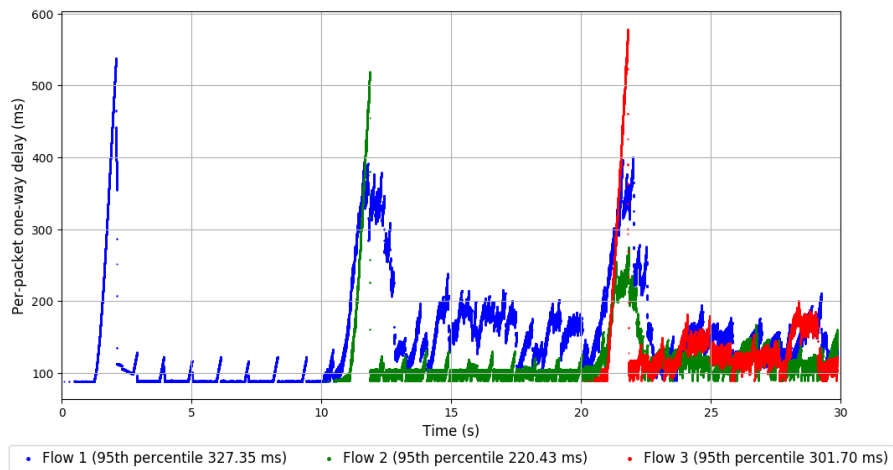
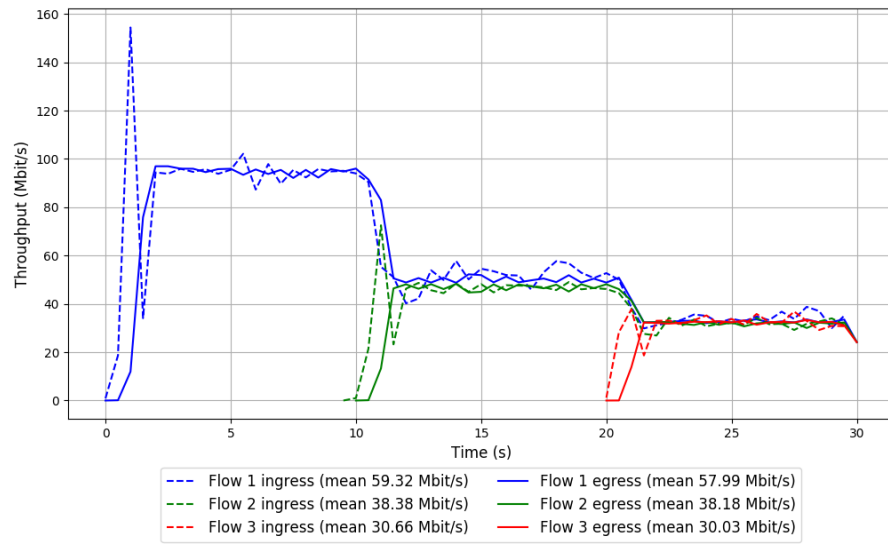
-- Flow 3:

Average throughput: 30.03 Mbit/s

95th percentile per-packet one-way delay: 301.698 ms

Loss rate: 3.66%

Run 5: Report of FillP — Data Link

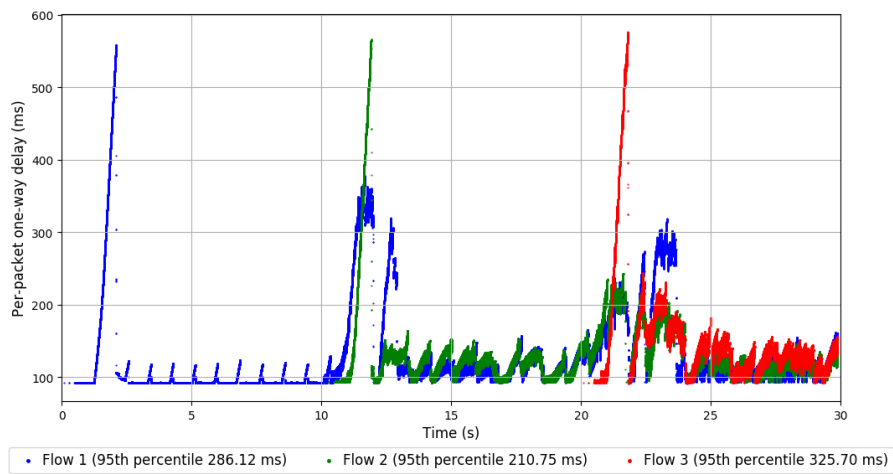
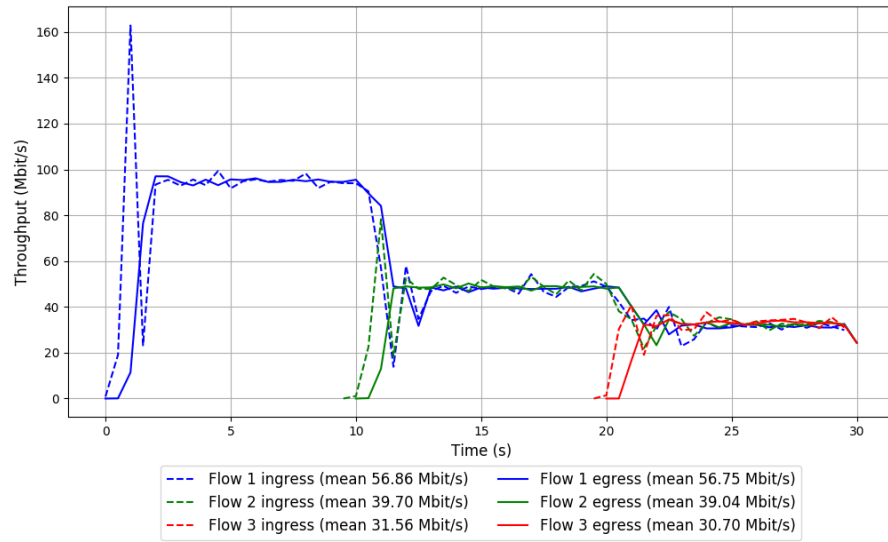


Run 1: Statistics of FillP-Sheep

Start at: 2018-12-20 07:59:33
End at: 2018-12-20 08:00:03
Local clock offset: -5.63 ms
Remote clock offset: -0.241 ms

Below is generated by plot.py at 2018-12-20 09:59:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 274.742 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 56.75 Mbit/s
95th percentile per-packet one-way delay: 286.117 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 39.04 Mbit/s
95th percentile per-packet one-way delay: 210.746 ms
Loss rate: 2.47%
-- Flow 3:
Average throughput: 30.70 Mbit/s
95th percentile per-packet one-way delay: 325.700 ms
Loss rate: 4.38%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2018-12-20 08:24:19

End at: 2018-12-20 08:24:49

Local clock offset: -6.367 ms

Remote clock offset: 4.961 ms

Below is generated by plot.py at 2018-12-20 09:59:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.90 Mbit/s

95th percentile per-packet one-way delay: 289.996 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 57.39 Mbit/s

95th percentile per-packet one-way delay: 306.754 ms

Loss rate: 1.36%

-- Flow 2:

Average throughput: 38.27 Mbit/s

95th percentile per-packet one-way delay: 206.412 ms

Loss rate: 1.60%

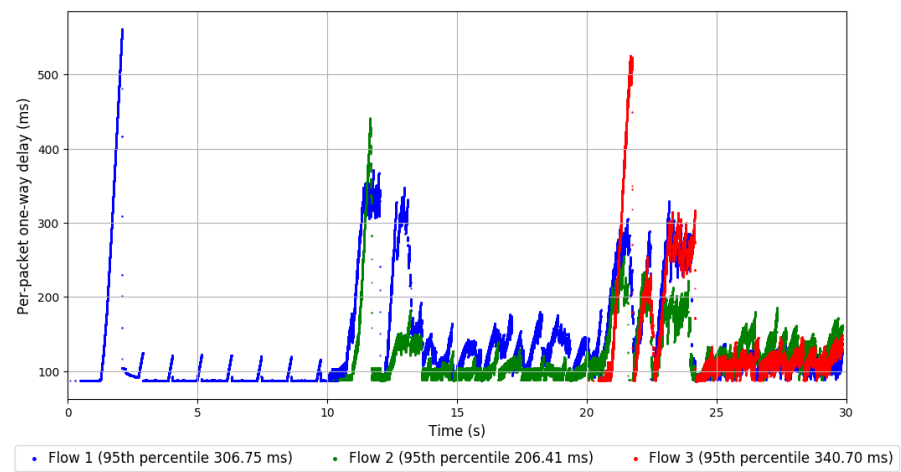
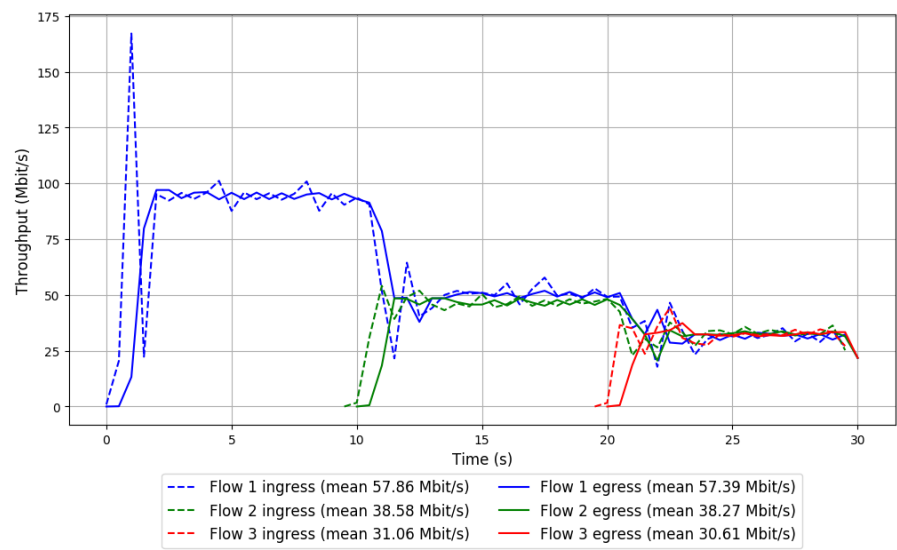
-- Flow 3:

Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 340.704 ms

Loss rate: 3.11%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2018-12-20 08:48:46

End at: 2018-12-20 08:49:16

Local clock offset: -7.271 ms

Remote clock offset: 0.998 ms

Below is generated by plot.py at 2018-12-20 09:59:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.08 Mbit/s

95th percentile per-packet one-way delay: 282.872 ms

Loss rate: 1.79%

-- Flow 1:

Average throughput: 56.69 Mbit/s

95th percentile per-packet one-way delay: 299.475 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 39.55 Mbit/s

95th percentile per-packet one-way delay: 222.887 ms

Loss rate: 3.15%

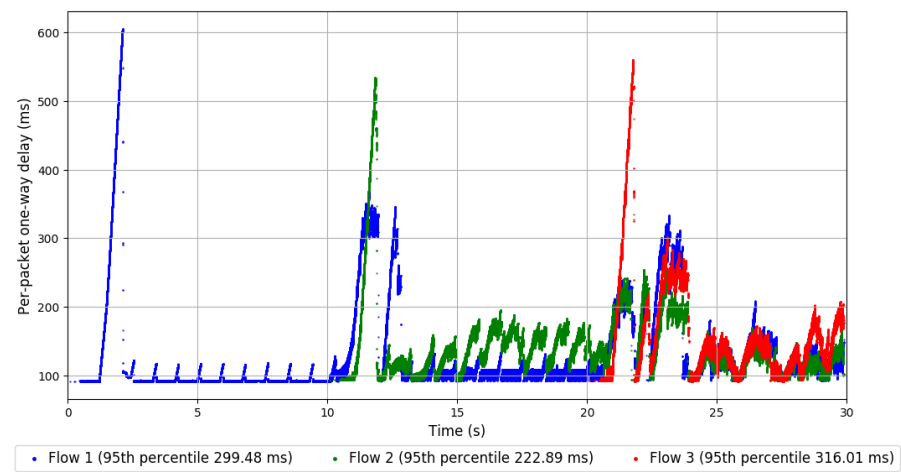
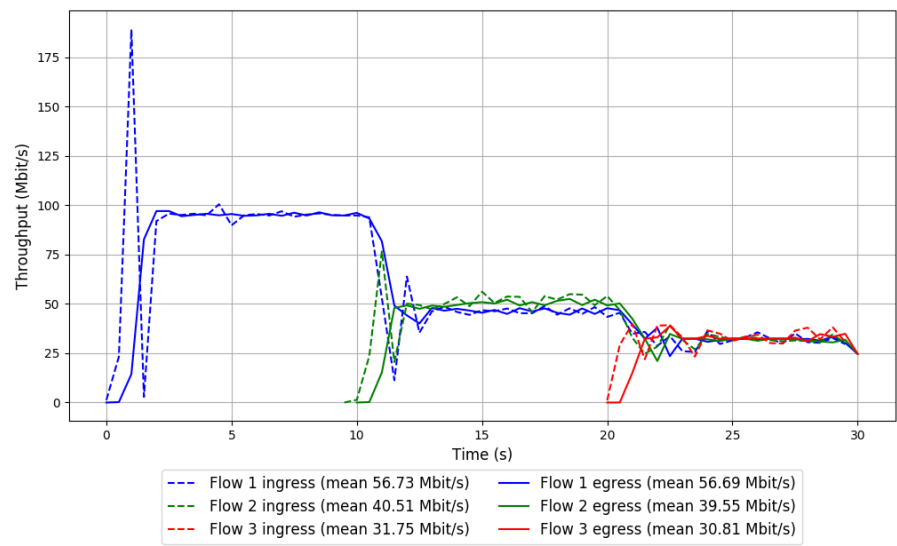
-- Flow 3:

Average throughput: 30.81 Mbit/s

95th percentile per-packet one-way delay: 316.007 ms

Loss rate: 4.55%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2018-12-20 09:13:12

End at: 2018-12-20 09:13:42

Local clock offset: -6.866 ms

Remote clock offset: 7.752 ms

Below is generated by plot.py at 2018-12-20 09:59:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.87 Mbit/s

95th percentile per-packet one-way delay: 277.948 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 56.61 Mbit/s

95th percentile per-packet one-way delay: 285.399 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 39.43 Mbit/s

95th percentile per-packet one-way delay: 249.579 ms

Loss rate: 2.00%

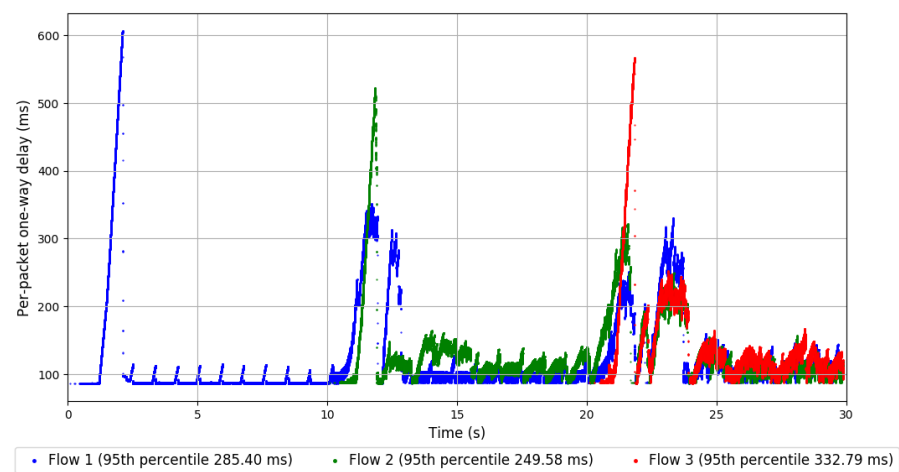
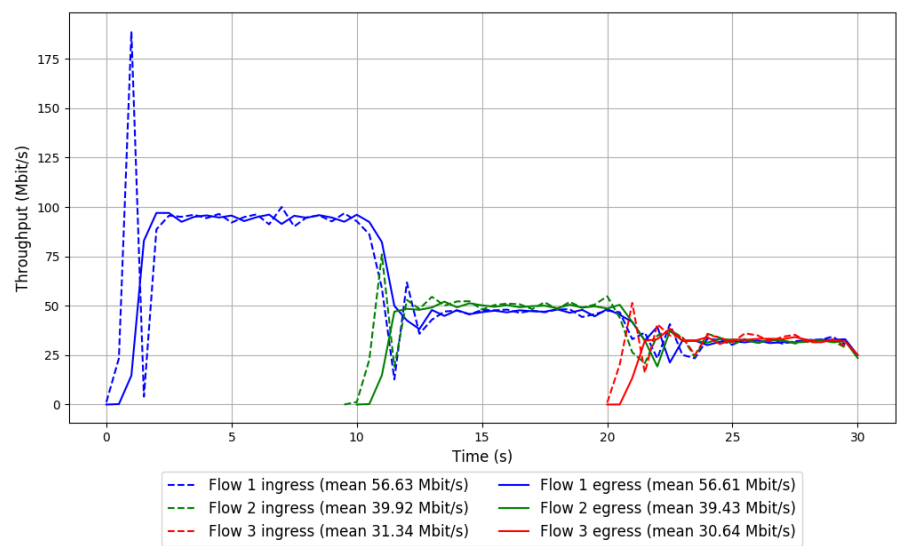
-- Flow 3:

Average throughput: 30.64 Mbit/s

95th percentile per-packet one-way delay: 332.791 ms

Loss rate: 3.68%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2018-12-20 09:37:37

End at: 2018-12-20 09:38:07

Local clock offset: -6.228 ms

Remote clock offset: 6.531 ms

Below is generated by plot.py at 2018-12-20 09:59:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.84 Mbit/s

95th percentile per-packet one-way delay: 263.764 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 56.76 Mbit/s

95th percentile per-packet one-way delay: 279.697 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 39.25 Mbit/s

95th percentile per-packet one-way delay: 215.159 ms

Loss rate: 1.72%

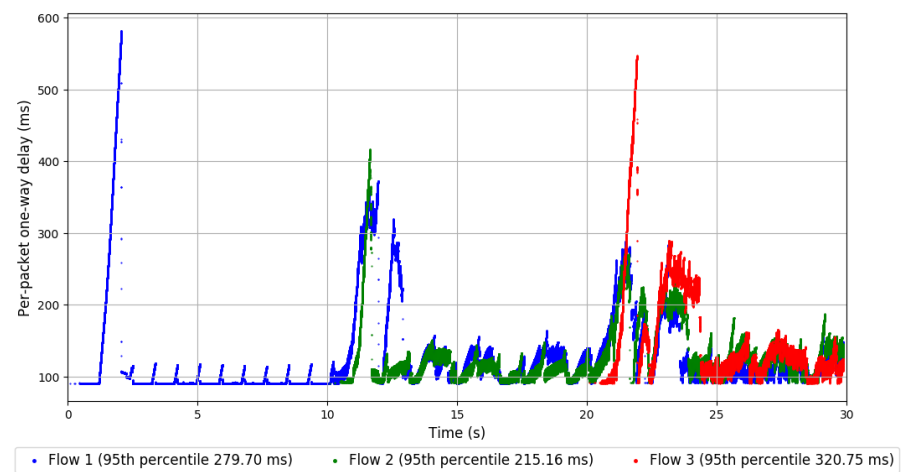
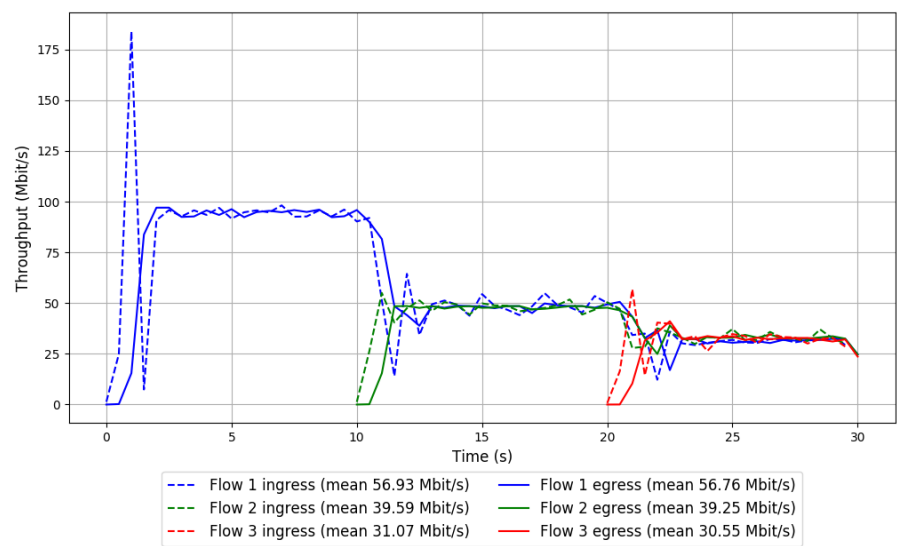
-- Flow 3:

Average throughput: 30.55 Mbit/s

95th percentile per-packet one-way delay: 320.754 ms

Loss rate: 3.24%

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2018-12-20 08:04:45

End at: 2018-12-20 08:05:15

Local clock offset: -5.532 ms

Remote clock offset: 4.117 ms

Below is generated by plot.py at 2018-12-20 09:59:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.84 Mbit/s

95th percentile per-packet one-way delay: 370.607 ms

Loss rate: 4.67%

-- Flow 1:

Average throughput: 58.43 Mbit/s

95th percentile per-packet one-way delay: 396.565 ms

Loss rate: 6.26%

-- Flow 2:

Average throughput: 38.95 Mbit/s

95th percentile per-packet one-way delay: 153.102 ms

Loss rate: 1.59%

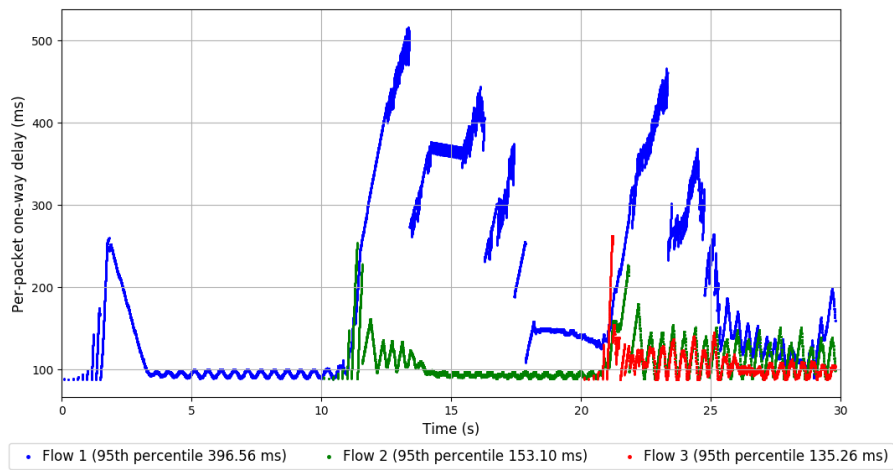
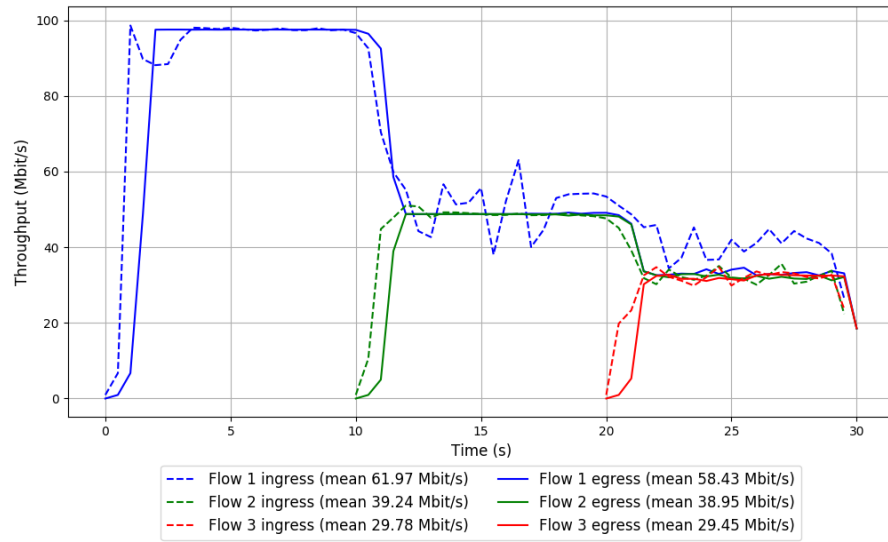
-- Flow 3:

Average throughput: 29.45 Mbit/s

95th percentile per-packet one-way delay: 135.257 ms

Loss rate: 2.83%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-12-20 08:29:32

End at: 2018-12-20 08:30:02

Local clock offset: -5.636 ms

Remote clock offset: 3.983 ms

Below is generated by plot.py at 2018-12-20 09:59:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.86 Mbit/s

95th percentile per-packet one-way delay: 382.561 ms

Loss rate: 7.37%

-- Flow 1:

Average throughput: 58.68 Mbit/s

95th percentile per-packet one-way delay: 415.340 ms

Loss rate: 10.49%

-- Flow 2:

Average throughput: 38.62 Mbit/s

95th percentile per-packet one-way delay: 169.547 ms

Loss rate: 1.26%

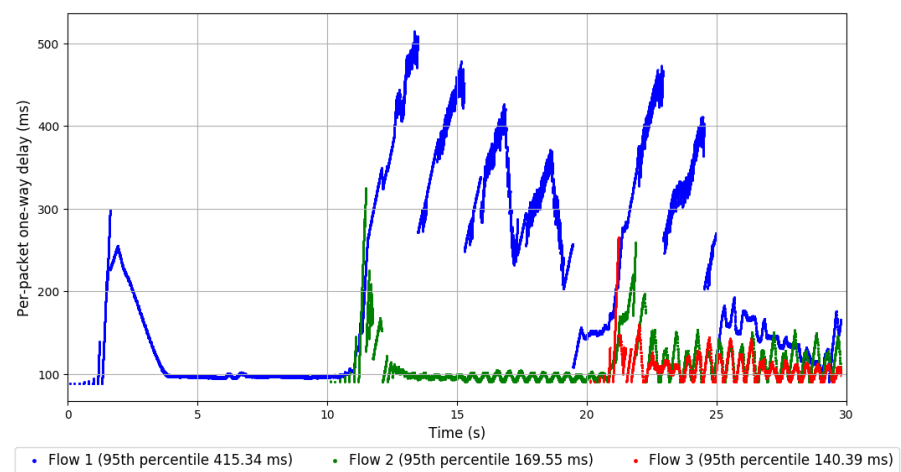
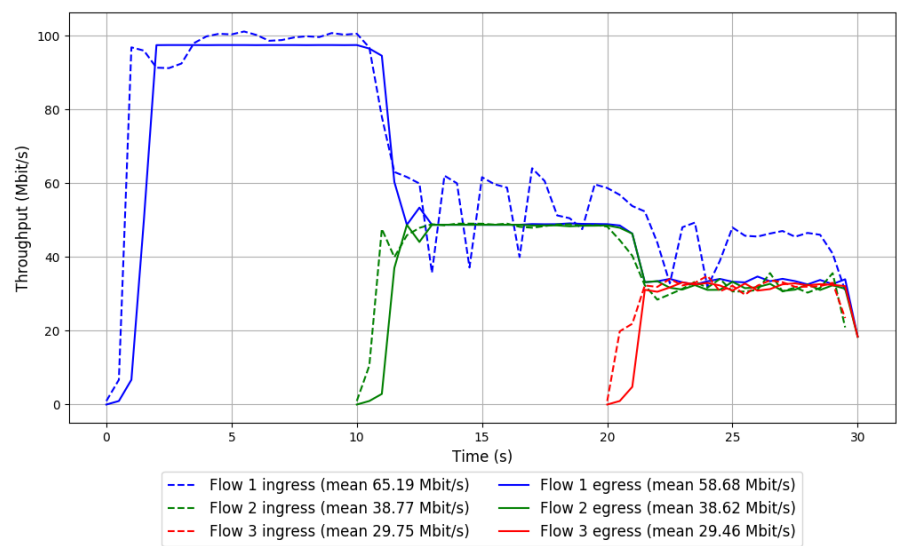
-- Flow 3:

Average throughput: 29.46 Mbit/s

95th percentile per-packet one-way delay: 140.387 ms

Loss rate: 2.71%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-12-20 08:53:58

End at: 2018-12-20 08:54:28

Local clock offset: -7.418 ms

Remote clock offset: 6.351 ms

Below is generated by plot.py at 2018-12-20 10:00:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.88 Mbit/s

95th percentile per-packet one-way delay: 379.594 ms

Loss rate: 6.53%

-- Flow 1:

Average throughput: 58.44 Mbit/s

95th percentile per-packet one-way delay: 402.543 ms

Loss rate: 8.86%

-- Flow 2:

Average throughput: 39.03 Mbit/s

95th percentile per-packet one-way delay: 164.005 ms

Loss rate: 2.19%

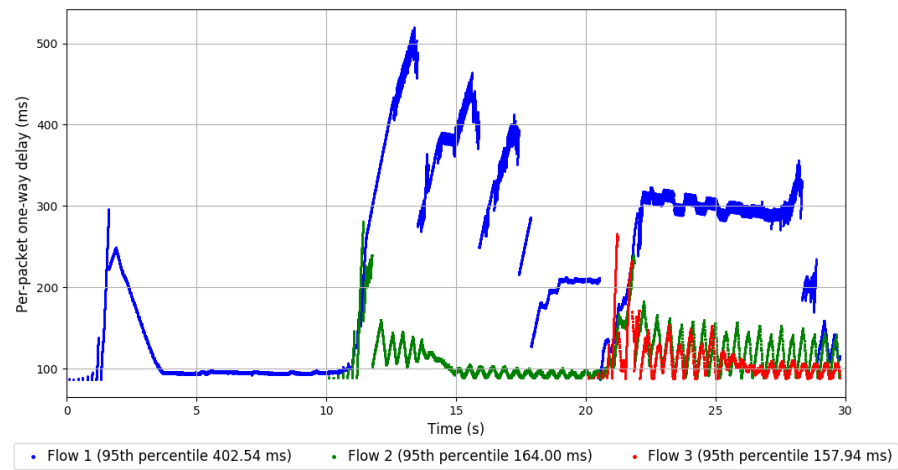
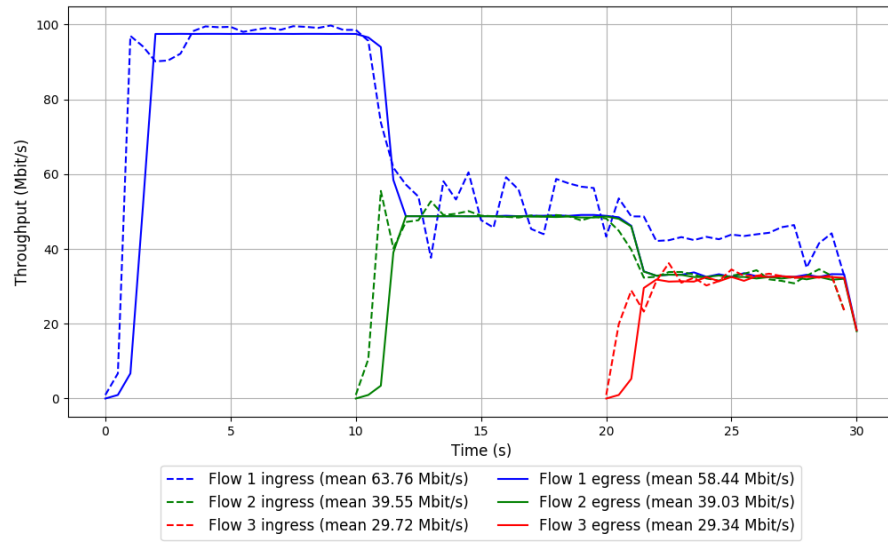
-- Flow 3:

Average throughput: 29.34 Mbit/s

95th percentile per-packet one-way delay: 157.945 ms

Loss rate: 3.02%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-12-20 09:18:24

End at: 2018-12-20 09:18:54

Local clock offset: -7.656 ms

Remote clock offset: 8.606 ms

Below is generated by plot.py at 2018-12-20 10:00:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.83 Mbit/s

95th percentile per-packet one-way delay: 381.072 ms

Loss rate: 6.14%

-- Flow 1:

Average throughput: 58.42 Mbit/s

95th percentile per-packet one-way delay: 420.992 ms

Loss rate: 8.55%

-- Flow 2:

Average throughput: 38.74 Mbit/s

95th percentile per-packet one-way delay: 145.748 ms

Loss rate: 1.33%

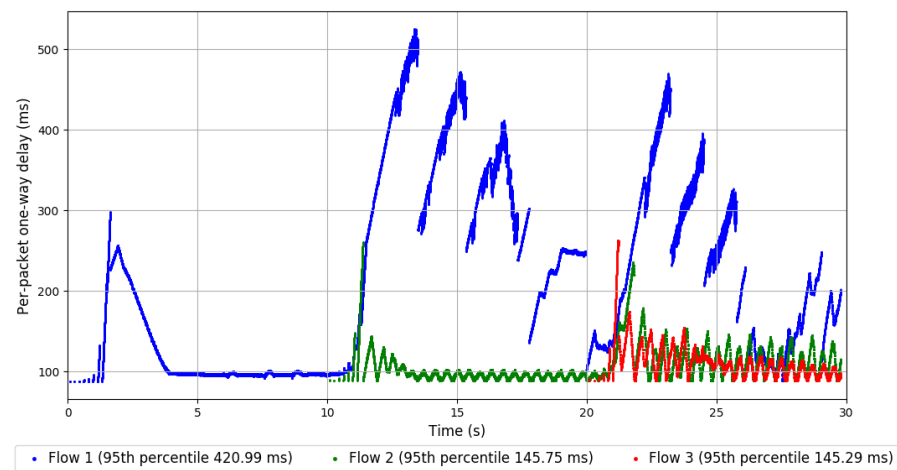
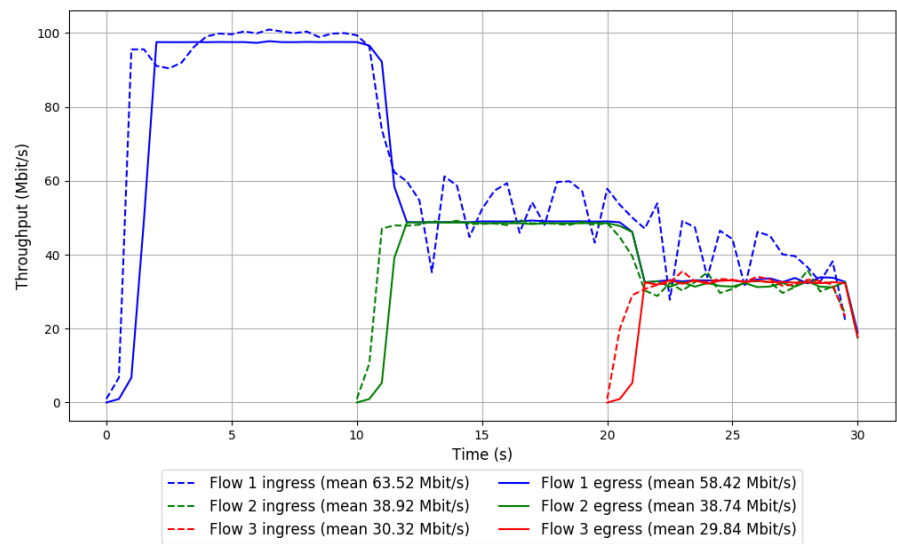
-- Flow 3:

Average throughput: 29.84 Mbit/s

95th percentile per-packet one-way delay: 145.291 ms

Loss rate: 3.30%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-12-20 09:42:48

End at: 2018-12-20 09:43:18

Local clock offset: -3.162 ms

Remote clock offset: 7.254 ms

Below is generated by plot.py at 2018-12-20 10:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.84 Mbit/s

95th percentile per-packet one-way delay: 429.602 ms

Loss rate: 3.92%

-- Flow 1:

Average throughput: 58.39 Mbit/s

95th percentile per-packet one-way delay: 458.284 ms

Loss rate: 4.99%

-- Flow 2:

Average throughput: 38.97 Mbit/s

95th percentile per-packet one-way delay: 159.567 ms

Loss rate: 1.35%

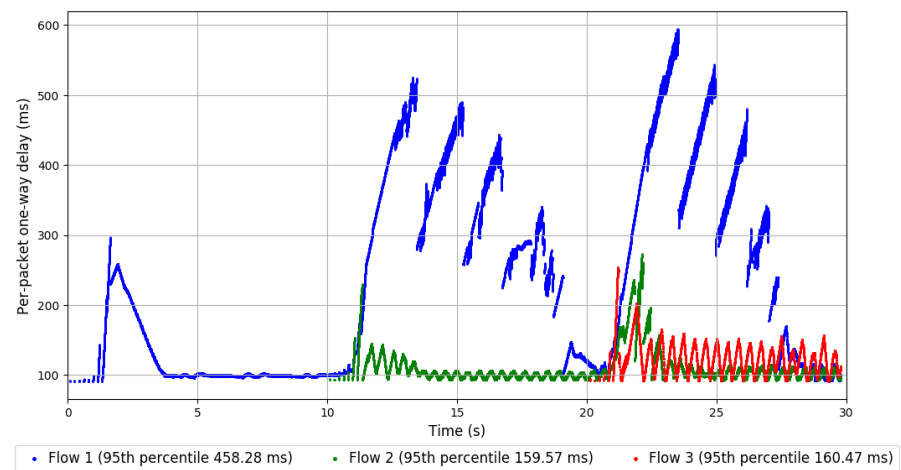
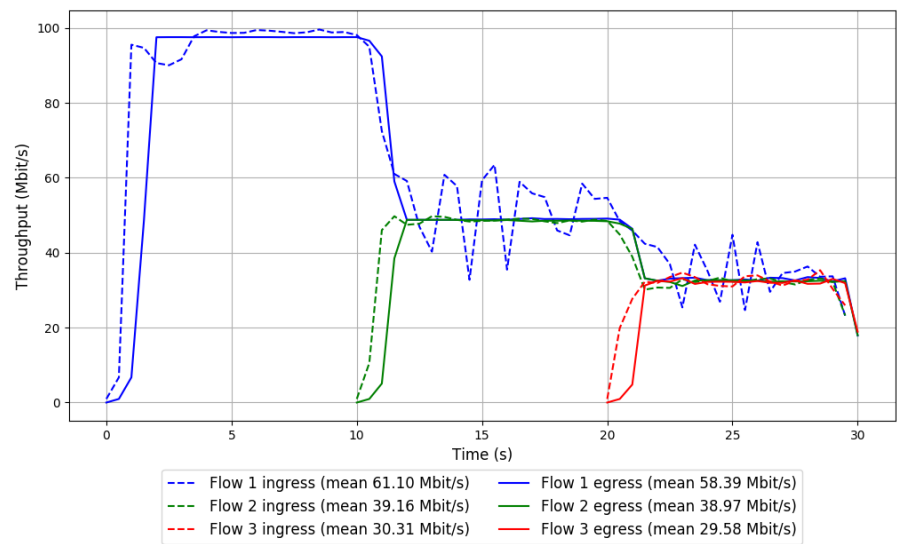
-- Flow 3:

Average throughput: 29.58 Mbit/s

95th percentile per-packet one-way delay: 160.470 ms

Loss rate: 4.11%

Run 5: Report of Indigo — Data Link

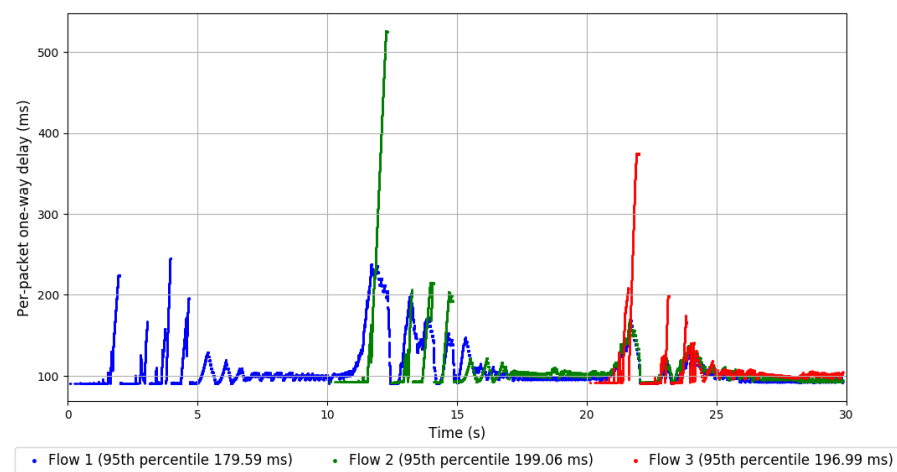
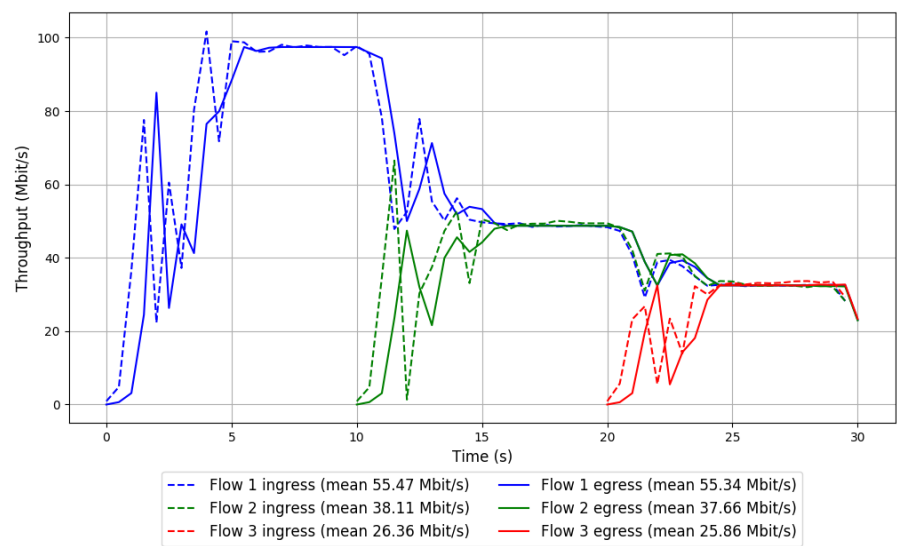


Run 1: Statistics of Indigo-MusesD

Start at: 2018-12-20 07:54:28
End at: 2018-12-20 07:54:58
Local clock offset: -6.421 ms
Remote clock offset: -0.317 ms

Below is generated by plot.py at 2018-12-20 10:00:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.78 Mbit/s
95th percentile per-packet one-way delay: 190.116 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 55.34 Mbit/s
95th percentile per-packet one-way delay: 179.589 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 37.66 Mbit/s
95th percentile per-packet one-way delay: 199.055 ms
Loss rate: 2.04%
-- Flow 3:
Average throughput: 25.86 Mbit/s
95th percentile per-packet one-way delay: 196.988 ms
Loss rate: 3.71%

Run 1: Report of Indigo-MusesD — Data Link

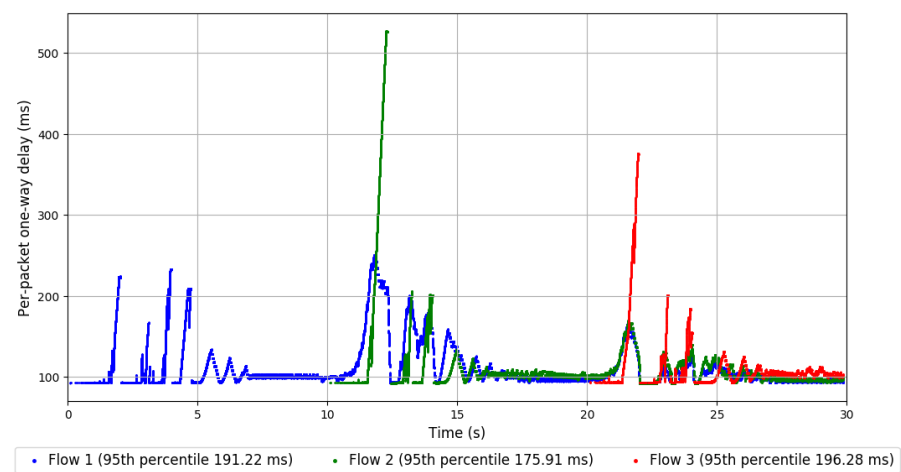
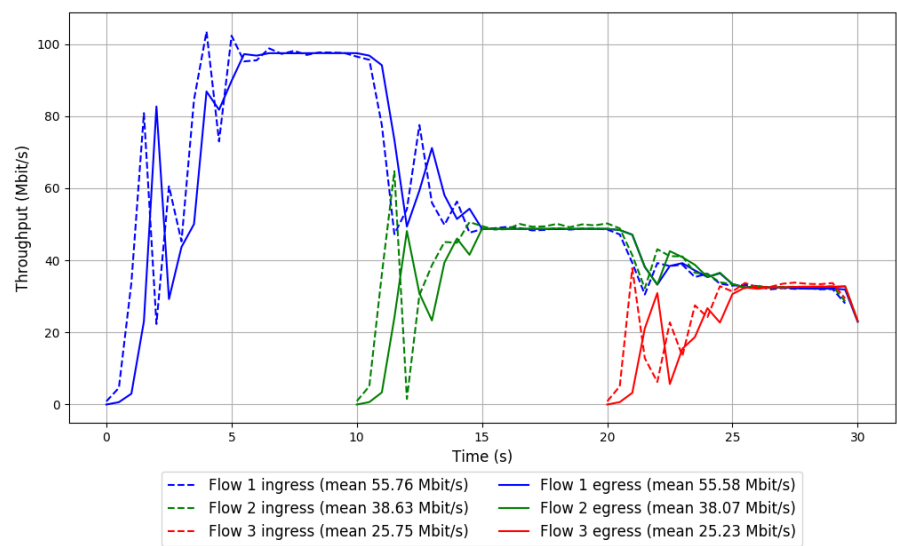


Run 2: Statistics of Indigo-MusesD

Start at: 2018-12-20 08:19:13
End at: 2018-12-20 08:19:43
Local clock offset: -6.364 ms
Remote clock offset: -0.382 ms

Below is generated by plot.py at 2018-12-20 10:00:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.12 Mbit/s
95th percentile per-packet one-way delay: 189.732 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 55.58 Mbit/s
95th percentile per-packet one-way delay: 191.219 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 38.07 Mbit/s
95th percentile per-packet one-way delay: 175.906 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 25.23 Mbit/s
95th percentile per-packet one-way delay: 196.285 ms
Loss rate: 3.75%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2018-12-20 08:43:41

End at: 2018-12-20 08:44:11

Local clock offset: -7.052 ms

Remote clock offset: 0.671 ms

Below is generated by plot.py at 2018-12-20 10:00:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.68 Mbit/s

95th percentile per-packet one-way delay: 190.595 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 56.27 Mbit/s

95th percentile per-packet one-way delay: 186.351 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 36.46 Mbit/s

95th percentile per-packet one-way delay: 203.343 ms

Loss rate: 1.90%

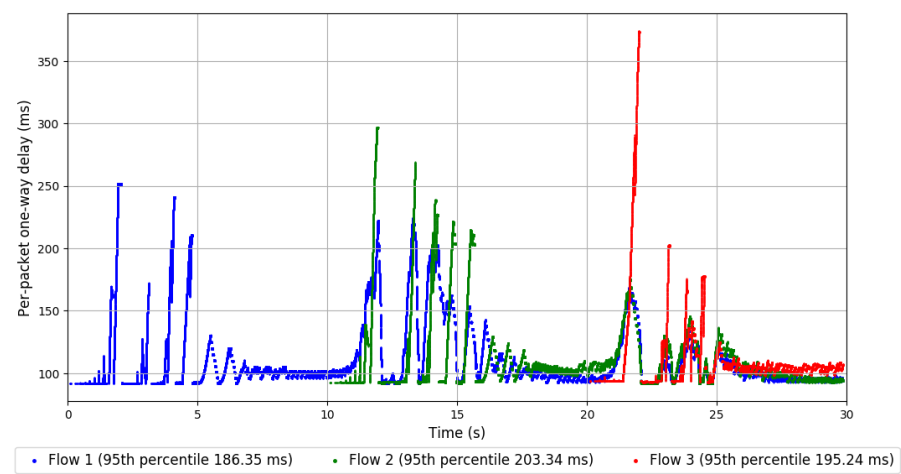
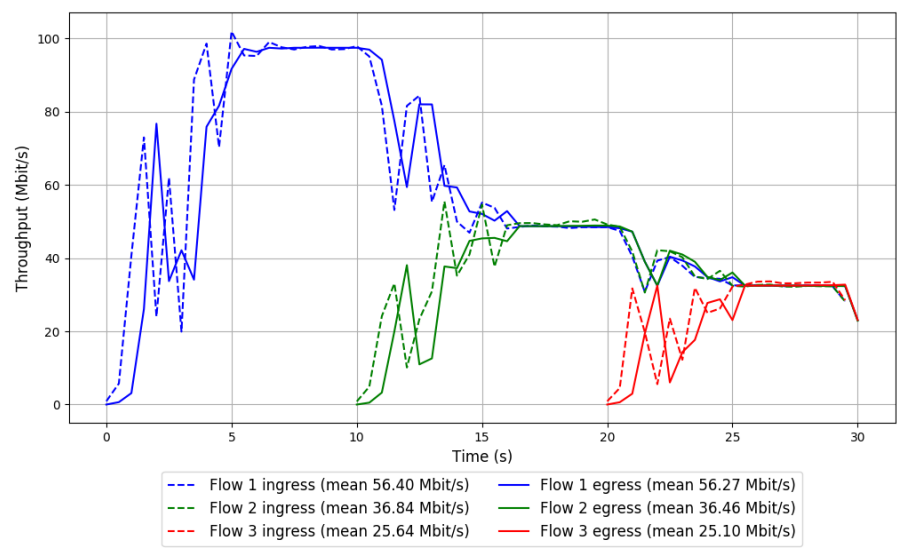
-- Flow 3:

Average throughput: 25.10 Mbit/s

95th percentile per-packet one-way delay: 195.235 ms

Loss rate: 3.83%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2018-12-20 09:08:07

End at: 2018-12-20 09:08:37

Local clock offset: -7.696 ms

Remote clock offset: 2.901 ms

Below is generated by plot.py at 2018-12-20 10:00:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.67 Mbit/s

95th percentile per-packet one-way delay: 190.628 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 55.39 Mbit/s

95th percentile per-packet one-way delay: 192.865 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 37.78 Mbit/s

95th percentile per-packet one-way delay: 164.962 ms

Loss rate: 1.37%

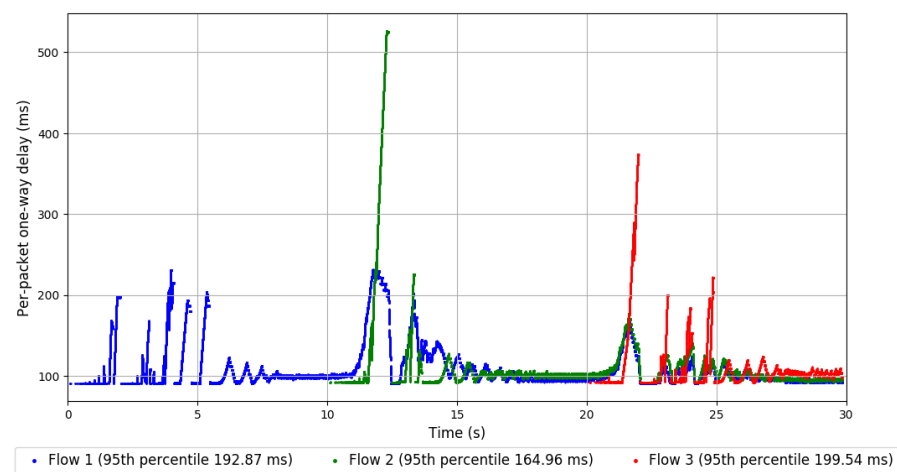
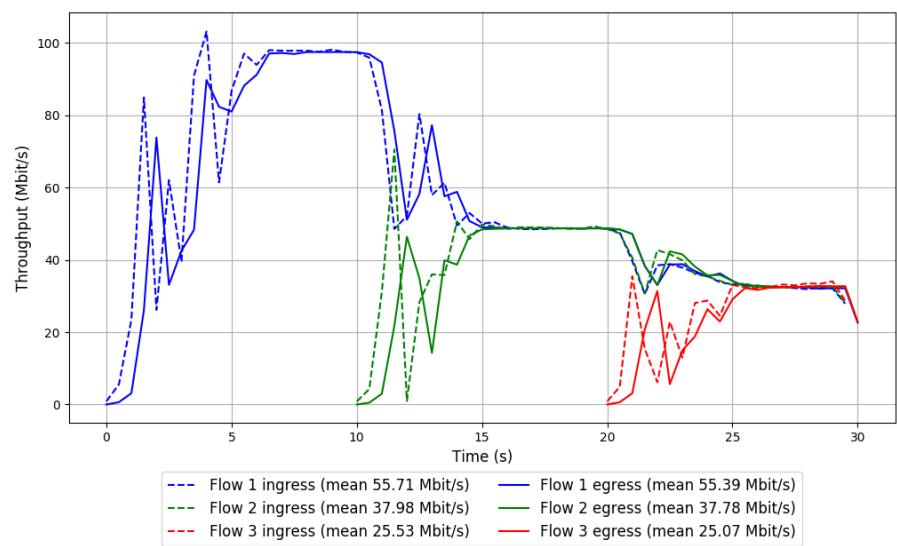
-- Flow 3:

Average throughput: 25.07 Mbit/s

95th percentile per-packet one-way delay: 199.542 ms

Loss rate: 3.47%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2018-12-20 09:32:32

End at: 2018-12-20 09:33:02

Local clock offset: -7.037 ms

Remote clock offset: 6.286 ms

Below is generated by plot.py at 2018-12-20 10:01:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.51 Mbit/s

95th percentile per-packet one-way delay: 202.709 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 56.06 Mbit/s

95th percentile per-packet one-way delay: 207.392 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 38.22 Mbit/s

95th percentile per-packet one-way delay: 183.197 ms

Loss rate: 2.06%

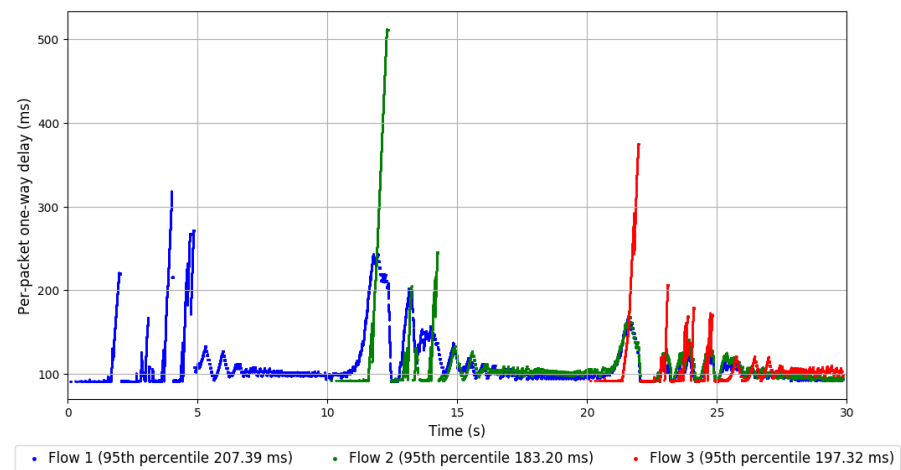
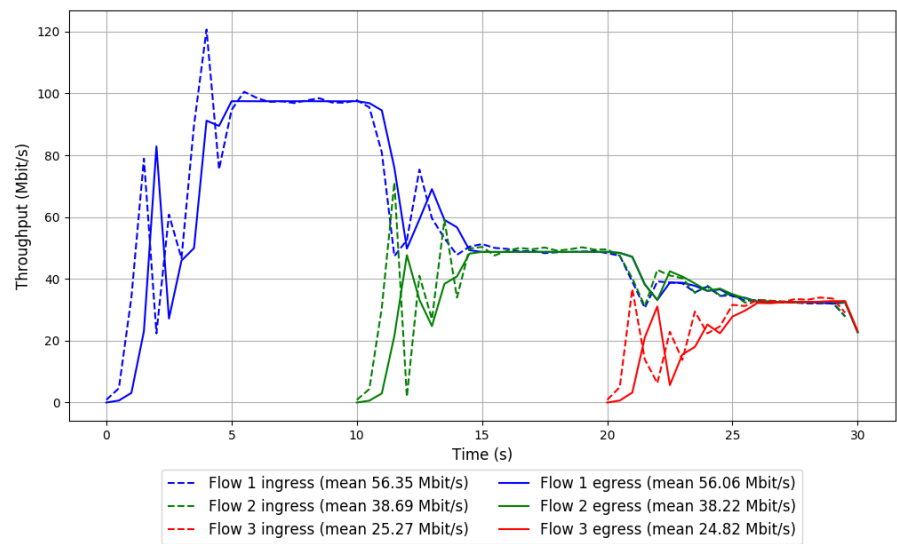
-- Flow 3:

Average throughput: 24.82 Mbit/s

95th percentile per-packet one-way delay: 197.325 ms

Loss rate: 3.47%

Run 5: Report of Indigo-MusesD — Data Link

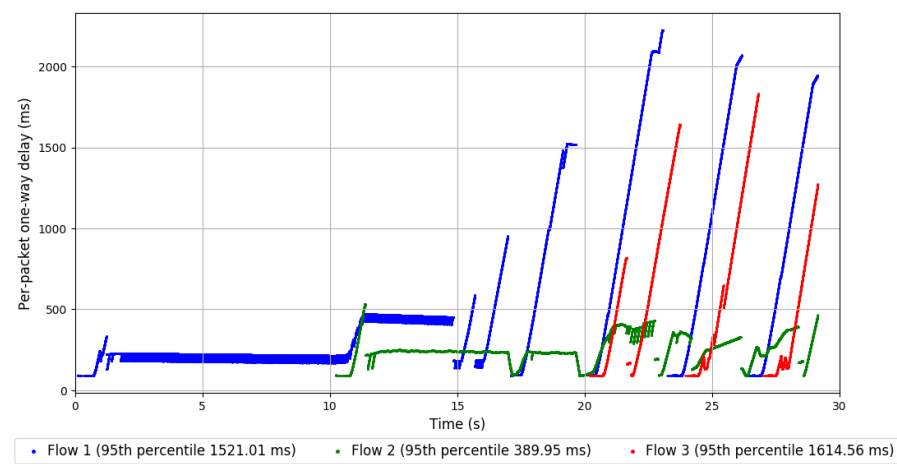
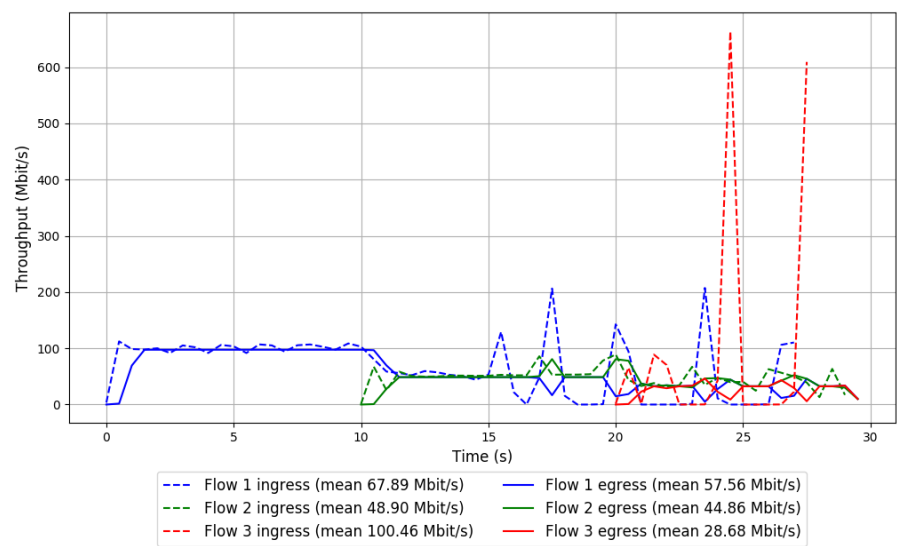


Run 1: Statistics of Indigo-MusesT

Start at: 2018-12-20 07:53:10
End at: 2018-12-20 07:53:40
Local clock offset: -6.469 ms
Remote clock offset: -0.306 ms

Below is generated by plot.py at 2018-12-20 10:01:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 1443.888 ms
Loss rate: 22.04%
-- Flow 1:
Average throughput: 57.56 Mbit/s
95th percentile per-packet one-way delay: 1521.010 ms
Loss rate: 9.45%
-- Flow 2:
Average throughput: 44.86 Mbit/s
95th percentile per-packet one-way delay: 389.952 ms
Loss rate: 9.10%
-- Flow 3:
Average throughput: 28.68 Mbit/s
95th percentile per-packet one-way delay: 1614.555 ms
Loss rate: 67.17%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2018-12-20 08:17:54

End at: 2018-12-20 08:18:24

Local clock offset: -6.352 ms

Remote clock offset: 0.778 ms

Below is generated by plot.py at 2018-12-20 10:01:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.59 Mbit/s

95th percentile per-packet one-way delay: 1337.549 ms

Loss rate: 25.54%

-- Flow 1:

Average throughput: 58.00 Mbit/s

95th percentile per-packet one-way delay: 1490.044 ms

Loss rate: 16.41%

-- Flow 2:

Average throughput: 42.00 Mbit/s

95th percentile per-packet one-way delay: 1137.506 ms

Loss rate: 27.82%

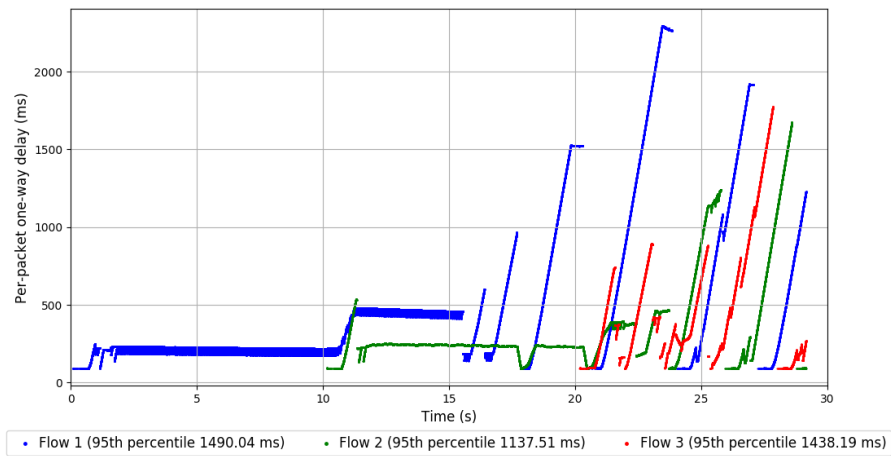
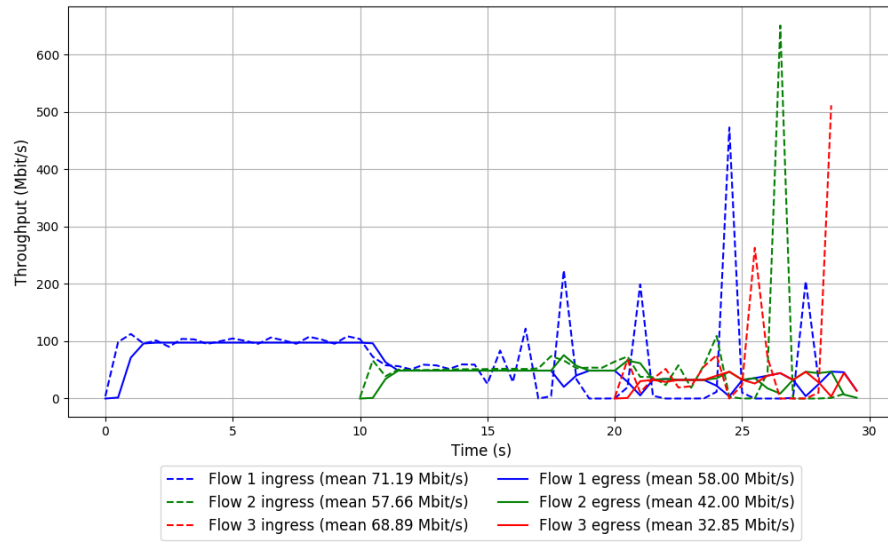
-- Flow 3:

Average throughput: 32.85 Mbit/s

95th percentile per-packet one-way delay: 1438.191 ms

Loss rate: 51.61%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2018-12-20 08:42:23

End at: 2018-12-20 08:42:53

Local clock offset: -6.973 ms

Remote clock offset: 6.693 ms

Below is generated by plot.py at 2018-12-20 10:01:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.15 Mbit/s

95th percentile per-packet one-way delay: 1190.059 ms

Loss rate: 42.85%

-- Flow 1:

Average throughput: 55.13 Mbit/s

95th percentile per-packet one-way delay: 1213.747 ms

Loss rate: 32.90%

-- Flow 2:

Average throughput: 37.38 Mbit/s

95th percentile per-packet one-way delay: 1193.162 ms

Loss rate: 58.83%

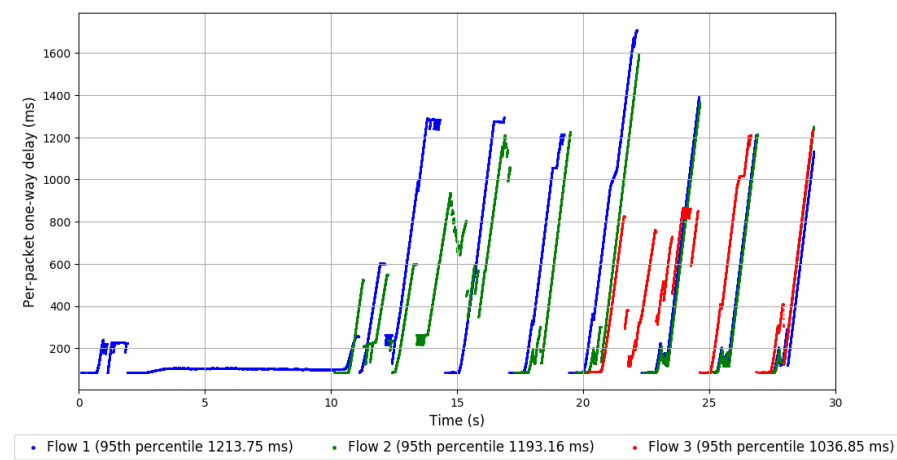
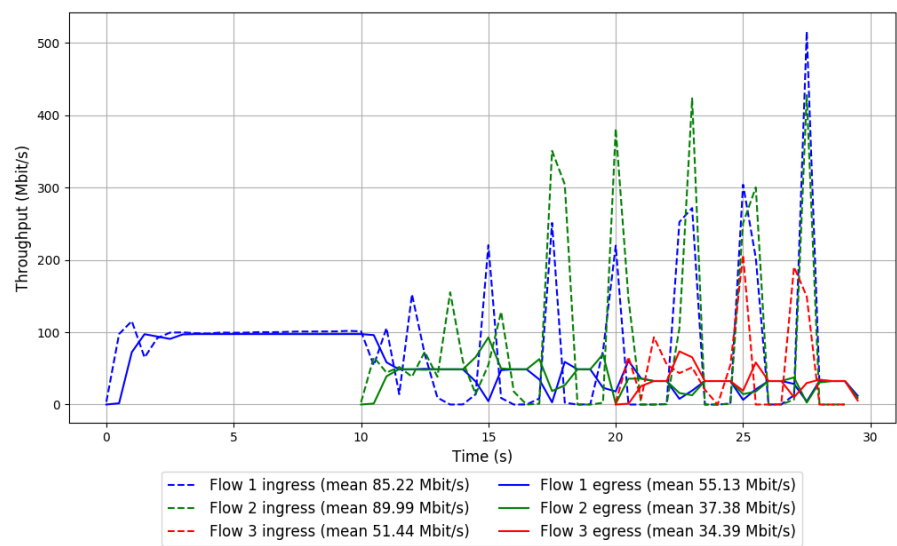
-- Flow 3:

Average throughput: 34.39 Mbit/s

95th percentile per-packet one-way delay: 1036.854 ms

Loss rate: 34.77%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2018-12-20 09:06:48

End at: 2018-12-20 09:07:18

Local clock offset: -6.872 ms

Remote clock offset: 2.734 ms

Below is generated by plot.py at 2018-12-20 10:01:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 1286.096 ms

Loss rate: 33.96%

-- Flow 1:

Average throughput: 59.29 Mbit/s

95th percentile per-packet one-way delay: 1013.143 ms

Loss rate: 13.82%

-- Flow 2:

Average throughput: 35.90 Mbit/s

95th percentile per-packet one-way delay: 1744.737 ms

Loss rate: 55.17%

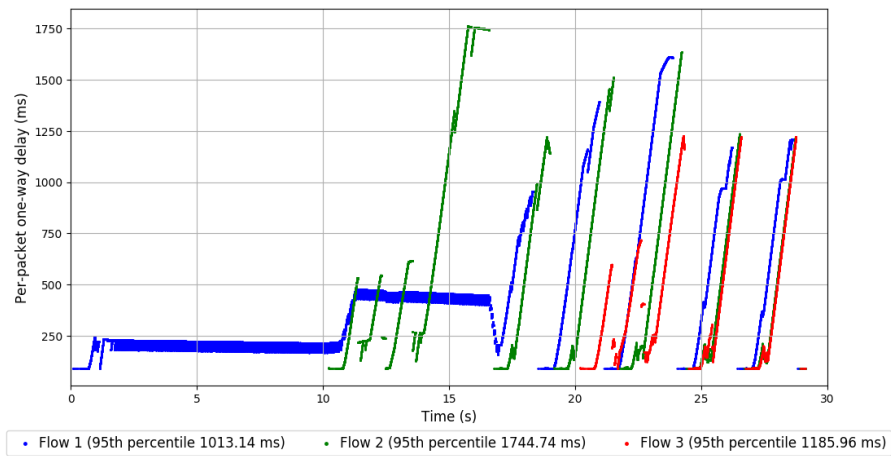
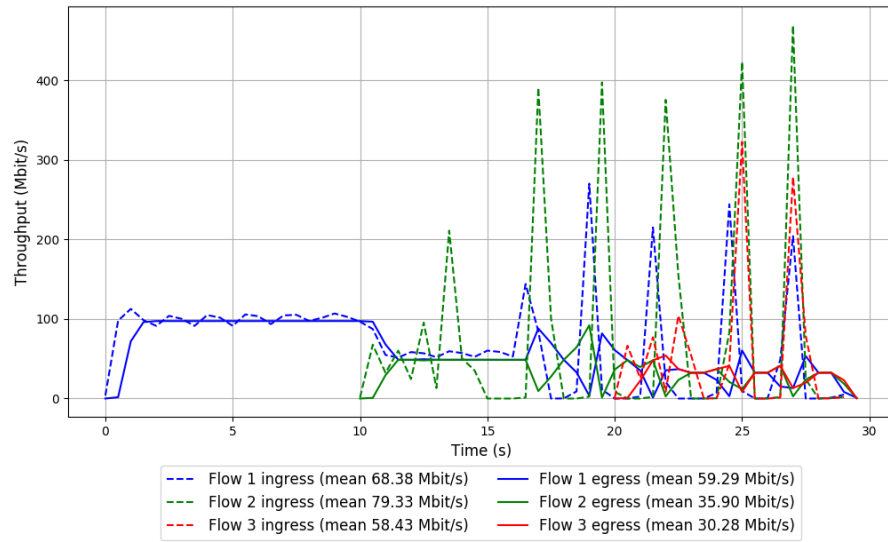
-- Flow 3:

Average throughput: 30.28 Mbit/s

95th percentile per-packet one-way delay: 1185.959 ms

Loss rate: 49.15%

Run 4: Report of Indigo-MusesT — Data Link

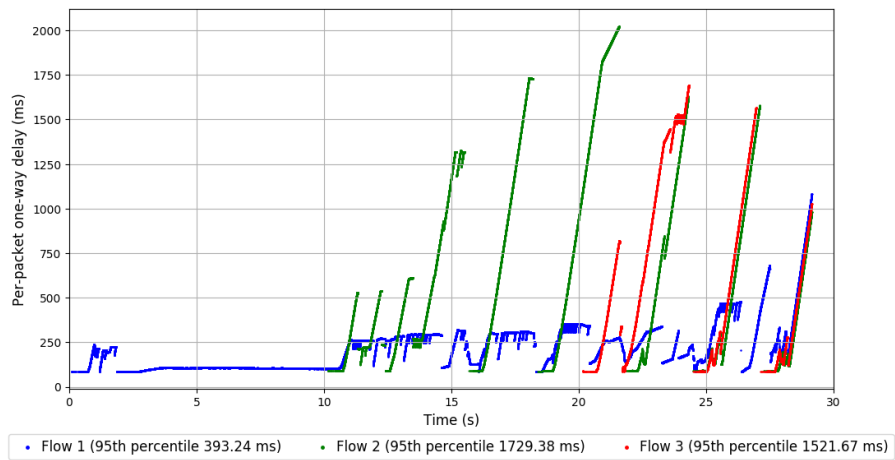
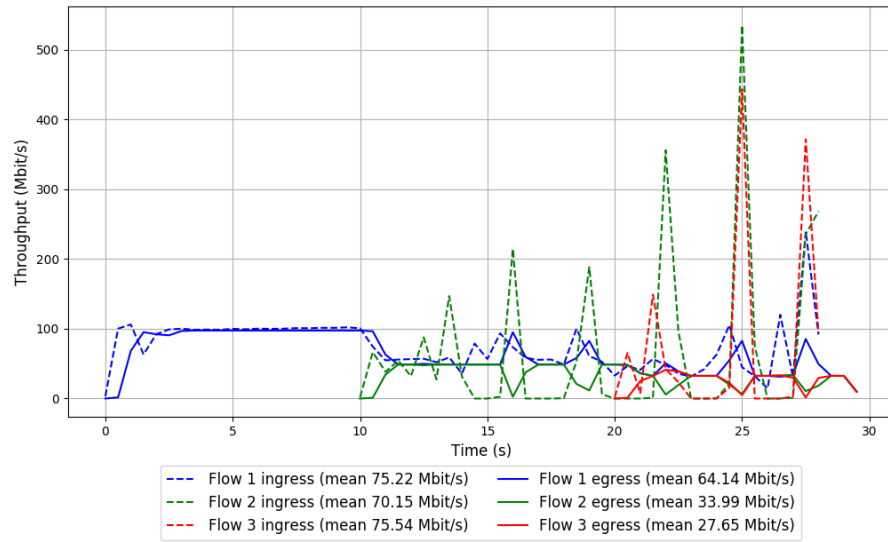


Run 5: Statistics of Indigo-MusesT

Start at: 2018-12-20 09:31:13
End at: 2018-12-20 09:31:43
Local clock offset: -7.782 ms
Remote clock offset: 10.142 ms

Below is generated by plot.py at 2018-12-20 10:02:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.91 Mbit/s
95th percentile per-packet one-way delay: 1318.424 ms
Loss rate: 30.87%
-- Flow 1:
Average throughput: 64.14 Mbit/s
95th percentile per-packet one-way delay: 393.237 ms
Loss rate: 11.71%
-- Flow 2:
Average throughput: 33.99 Mbit/s
95th percentile per-packet one-way delay: 1729.375 ms
Loss rate: 49.18%
-- Flow 3:
Average throughput: 27.65 Mbit/s
95th percentile per-packet one-way delay: 1521.675 ms
Loss rate: 59.15%

Run 5: Report of Indigo-MusesT — Data Link

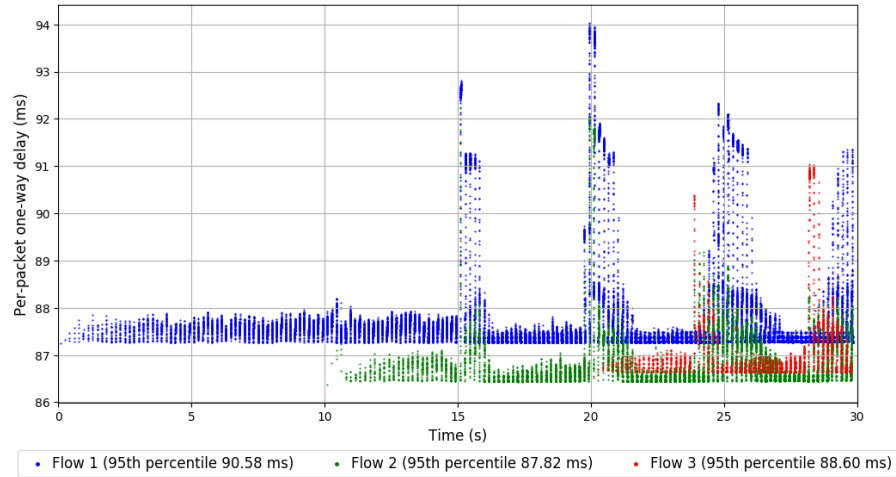
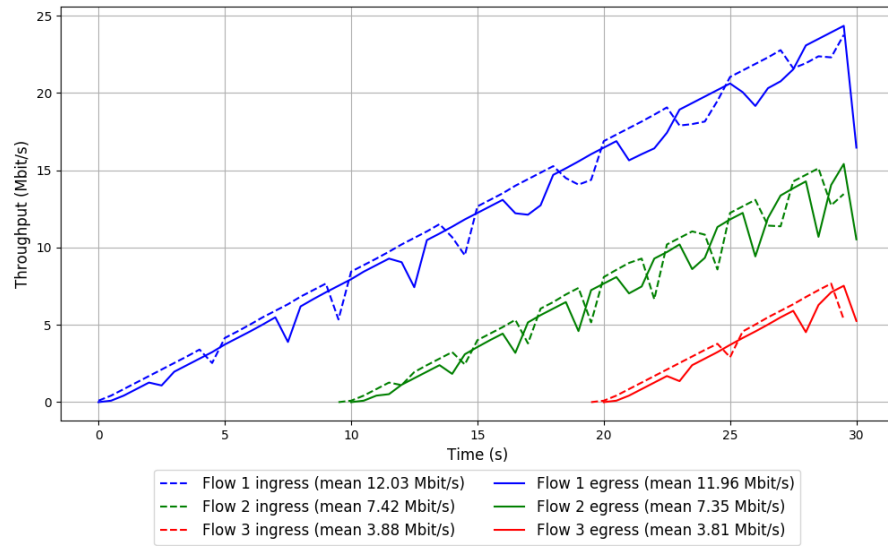



```
Run 1: Statistics of LEDBAT

Start at: 2018-12-20 08:15:07
End at: 2018-12-20 08:15:37
Local clock offset: -6.404 ms
Remote clock offset: 4.666 ms

# Below is generated by plot.py at 2018-12-20 10:02:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.07 Mbit/s
95th percentile per-packet one-way delay: 89.247 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 90.581 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 87.821 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 88.598 ms
Loss rate: 3.53%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-12-20 08:39:50

End at: 2018-12-20 08:40:20

Local clock offset: -6.809 ms

Remote clock offset: 4.553 ms

Below is generated by plot.py at 2018-12-20 10:02:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.15 Mbit/s

95th percentile per-packet one-way delay: 89.684 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 11.70 Mbit/s

95th percentile per-packet one-way delay: 89.453 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 89.841 ms

Loss rate: 1.75%

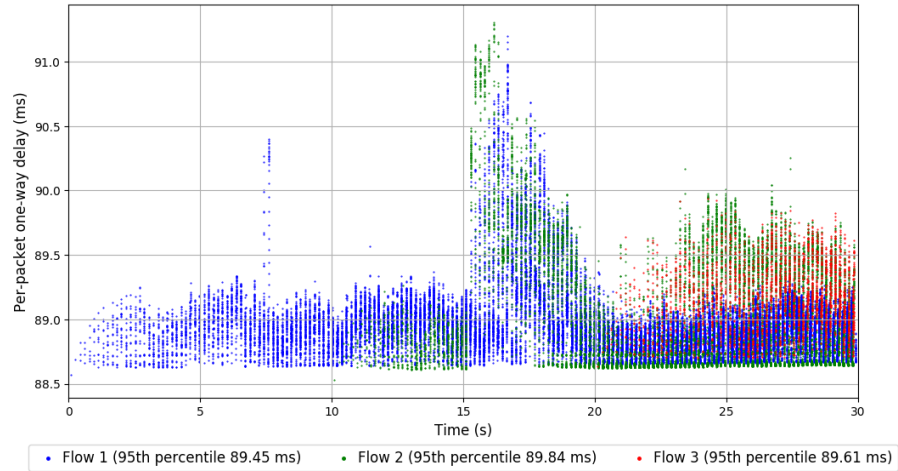
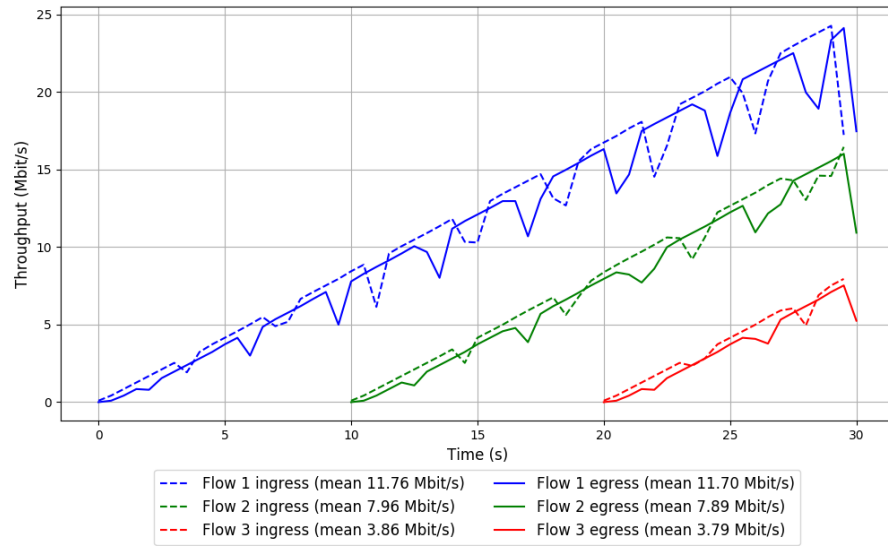
-- Flow 3:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 89.611 ms

Loss rate: 3.53%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-12-20 09:04:15

End at: 2018-12-20 09:04:45

Local clock offset: -6.886 ms

Remote clock offset: 7.682 ms

Below is generated by plot.py at 2018-12-20 10:02:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.34 Mbit/s

95th percentile per-packet one-way delay: 87.602 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 87.558 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 87.796 ms

Loss rate: 1.72%

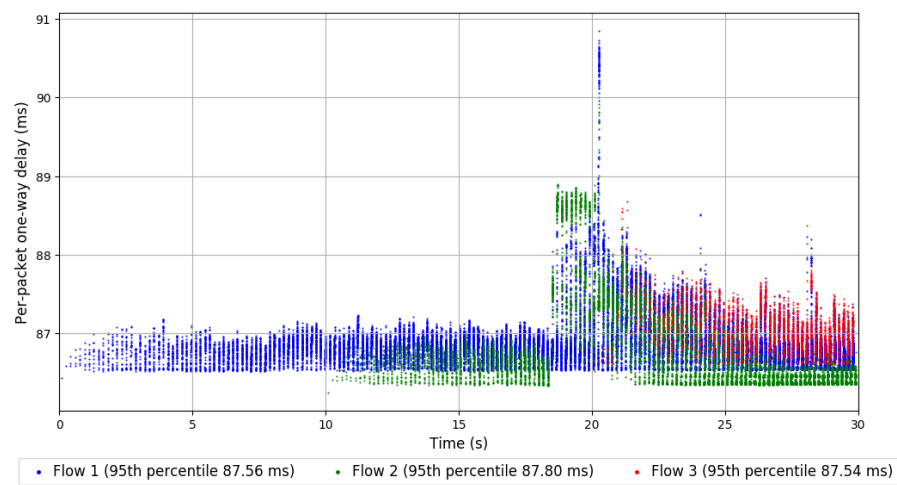
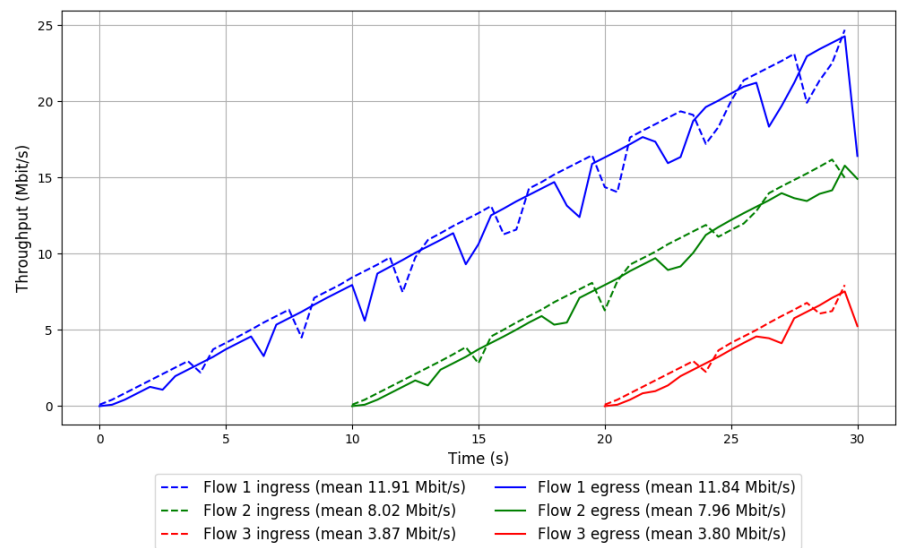
-- Flow 3:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 87.542 ms

Loss rate: 3.54%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-12-20 09:28:40

End at: 2018-12-20 09:29:10

Local clock offset: -7.007 ms

Remote clock offset: 4.823 ms

Below is generated by plot.py at 2018-12-20 10:02:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.43 Mbit/s

95th percentile per-packet one-way delay: 94.409 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 11.98 Mbit/s

95th percentile per-packet one-way delay: 94.342 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 94.502 ms

Loss rate: 1.75%

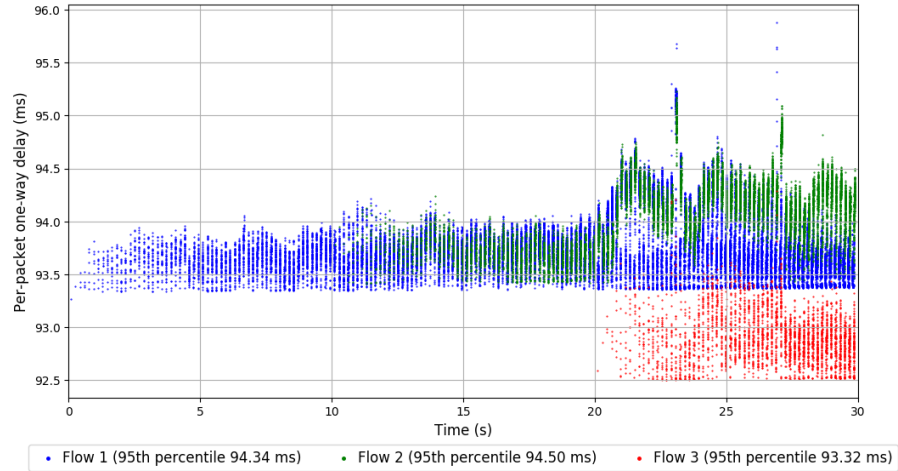
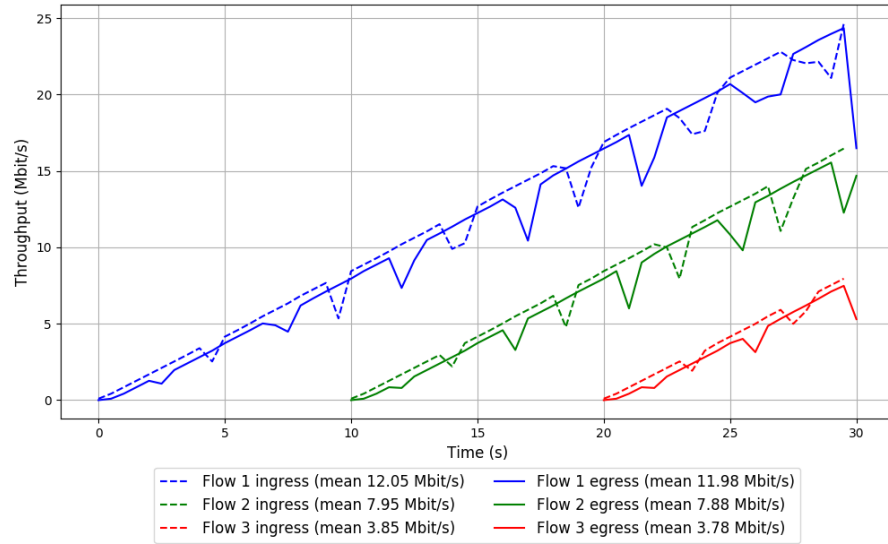
-- Flow 3:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 93.322 ms

Loss rate: 3.53%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-12-20 09:53:05

End at: 2018-12-20 09:53:35

Local clock offset: -0.723 ms

Remote clock offset: 7.904 ms

Below is generated by plot.py at 2018-12-20 10:02:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.42 Mbit/s

95th percentile per-packet one-way delay: 92.704 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 92.713 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 92.635 ms

Loss rate: 1.74%

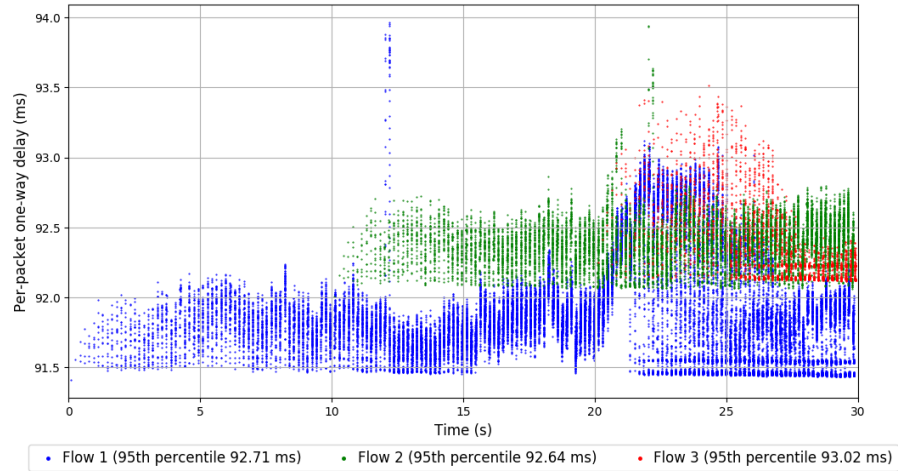
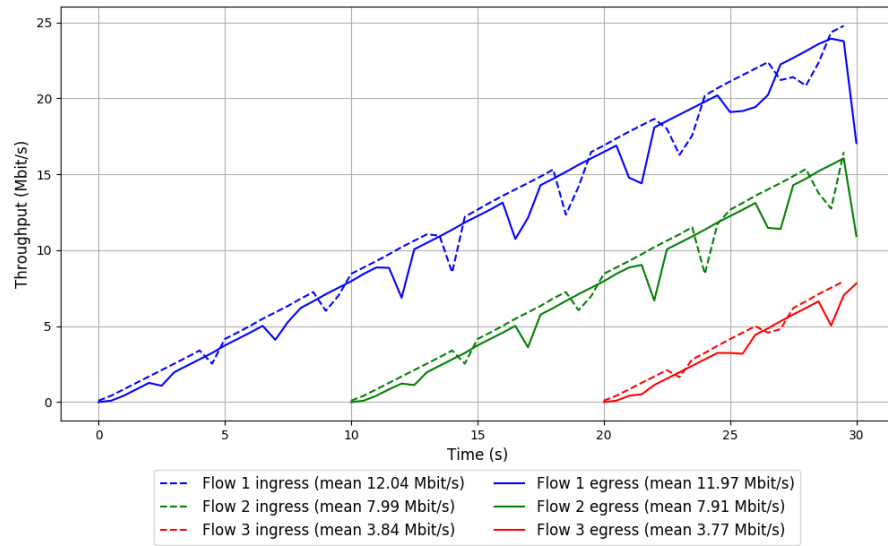
-- Flow 3:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 93.017 ms

Loss rate: 3.53%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-12-20 07:57:03

End at: 2018-12-20 07:57:33

Local clock offset: -5.623 ms

Remote clock offset: 3.798 ms

Below is generated by plot.py at 2018-12-20 10:02:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.43 Mbit/s

95th percentile per-packet one-way delay: 1408.787 ms

Loss rate: 23.27%

-- Flow 1:

Average throughput: 56.25 Mbit/s

95th percentile per-packet one-way delay: 1452.963 ms

Loss rate: 25.76%

-- Flow 2:

Average throughput: 34.04 Mbit/s

95th percentile per-packet one-way delay: 1087.299 ms

Loss rate: 16.88%

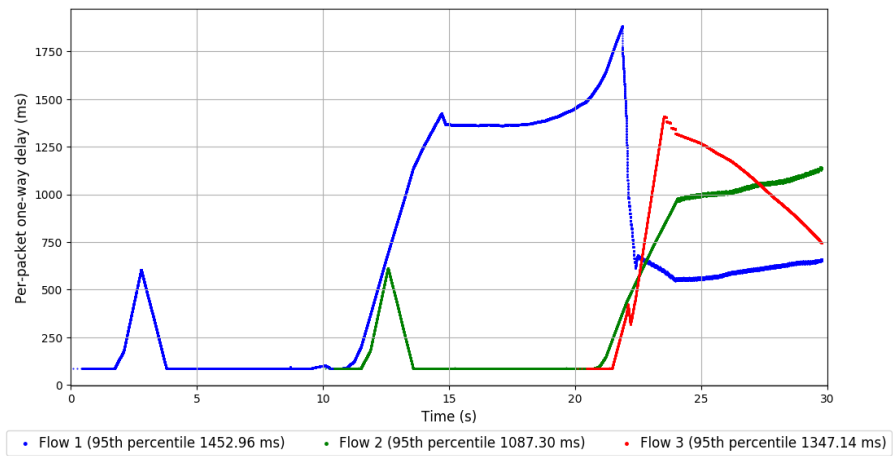
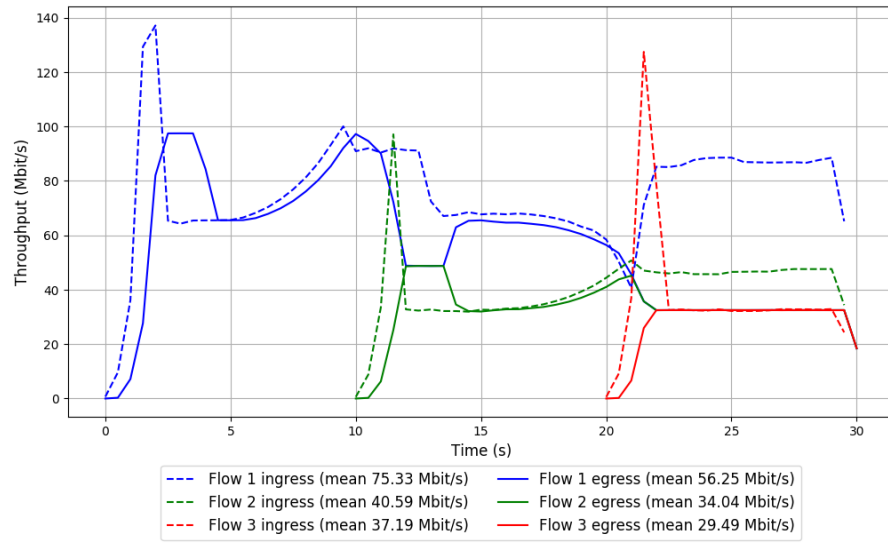
-- Flow 3:

Average throughput: 29.49 Mbit/s

95th percentile per-packet one-way delay: 1347.139 ms

Loss rate: 22.07%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-12-20 08:21:49

End at: 2018-12-20 08:22:19

Local clock offset: -6.352 ms

Remote clock offset: 0.919 ms

Below is generated by plot.py at 2018-12-20 10:02:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.80 Mbit/s

95th percentile per-packet one-way delay: 1443.488 ms

Loss rate: 23.36%

-- Flow 1:

Average throughput: 55.33 Mbit/s

95th percentile per-packet one-way delay: 1496.808 ms

Loss rate: 26.77%

-- Flow 2:

Average throughput: 34.41 Mbit/s

95th percentile per-packet one-way delay: 1186.044 ms

Loss rate: 15.02%

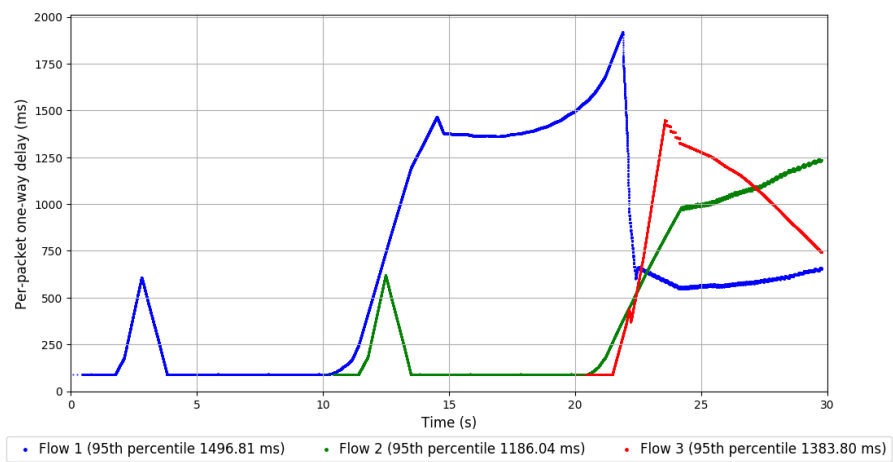
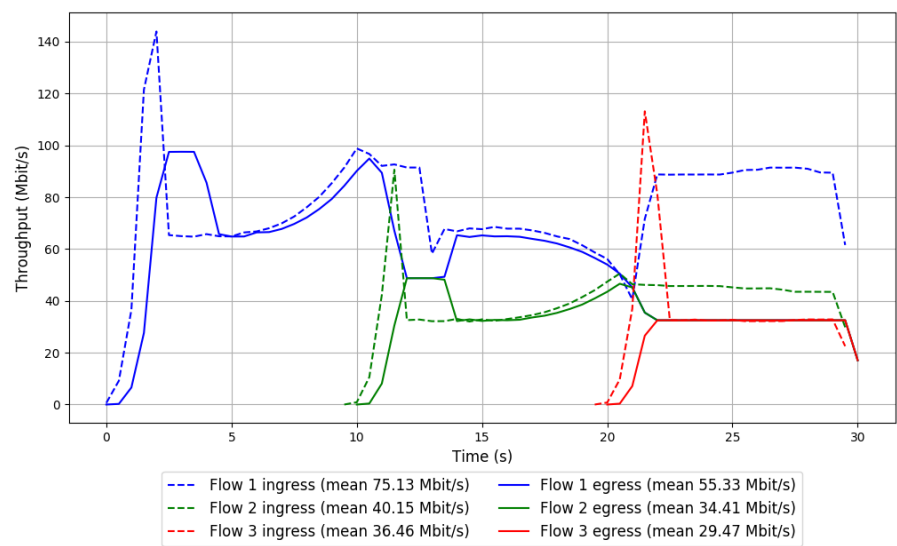
-- Flow 3:

Average throughput: 29.47 Mbit/s

95th percentile per-packet one-way delay: 1383.799 ms

Loss rate: 20.60%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-12-20 08:46:16

End at: 2018-12-20 08:46:46

Local clock offset: -6.409 ms

Remote clock offset: 0.824 ms

Below is generated by plot.py at 2018-12-20 10:02:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.56 Mbit/s

95th percentile per-packet one-way delay: 1495.995 ms

Loss rate: 22.77%

-- Flow 1:

Average throughput: 53.71 Mbit/s

95th percentile per-packet one-way delay: 1598.842 ms

Loss rate: 26.07%

-- Flow 2:

Average throughput: 35.04 Mbit/s

95th percentile per-packet one-way delay: 1150.073 ms

Loss rate: 14.71%

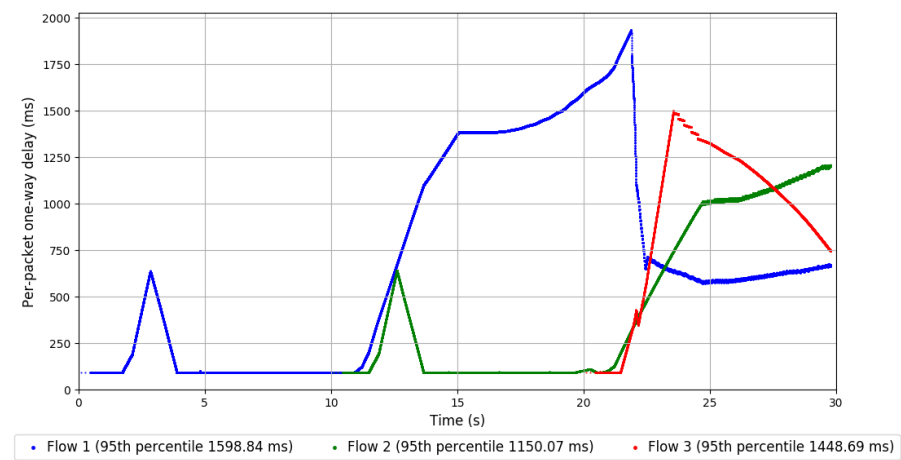
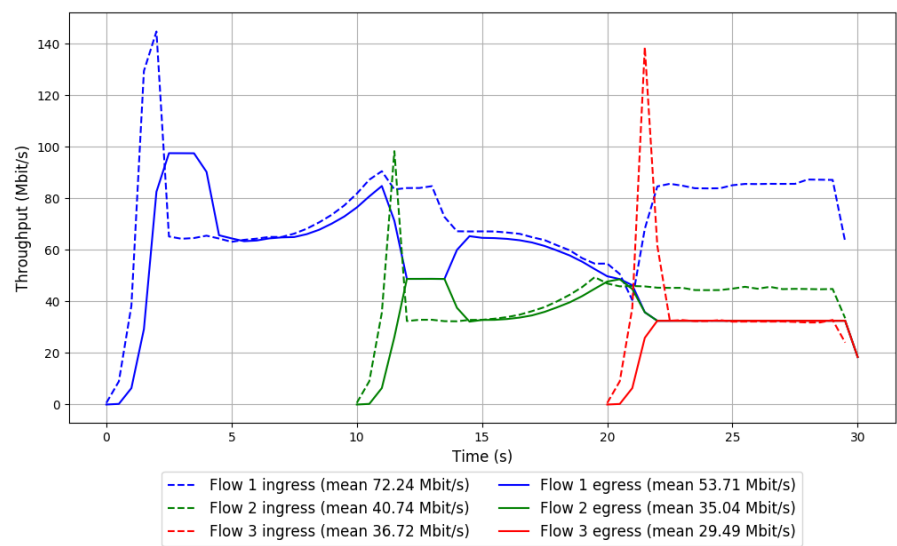
-- Flow 3:

Average throughput: 29.49 Mbit/s

95th percentile per-packet one-way delay: 1448.695 ms

Loss rate: 21.09%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-12-20 09:10:42

End at: 2018-12-20 09:11:12

Local clock offset: -6.868 ms

Remote clock offset: 1.66 ms

Below is generated by plot.py at 2018-12-20 10:02:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.47 Mbit/s

95th percentile per-packet one-way delay: 1482.301 ms

Loss rate: 22.99%

-- Flow 1:

Average throughput: 53.77 Mbit/s

95th percentile per-packet one-way delay: 1571.038 ms

Loss rate: 25.58%

-- Flow 2:

Average throughput: 34.83 Mbit/s

95th percentile per-packet one-way delay: 1080.213 ms

Loss rate: 16.18%

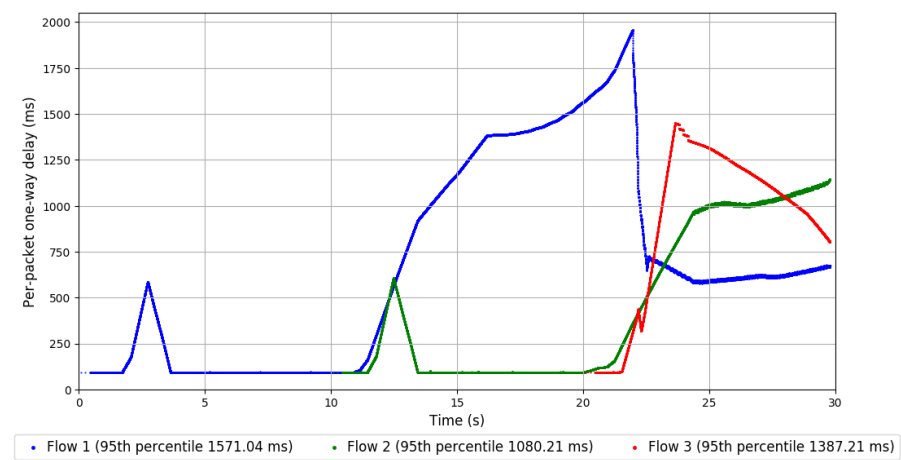
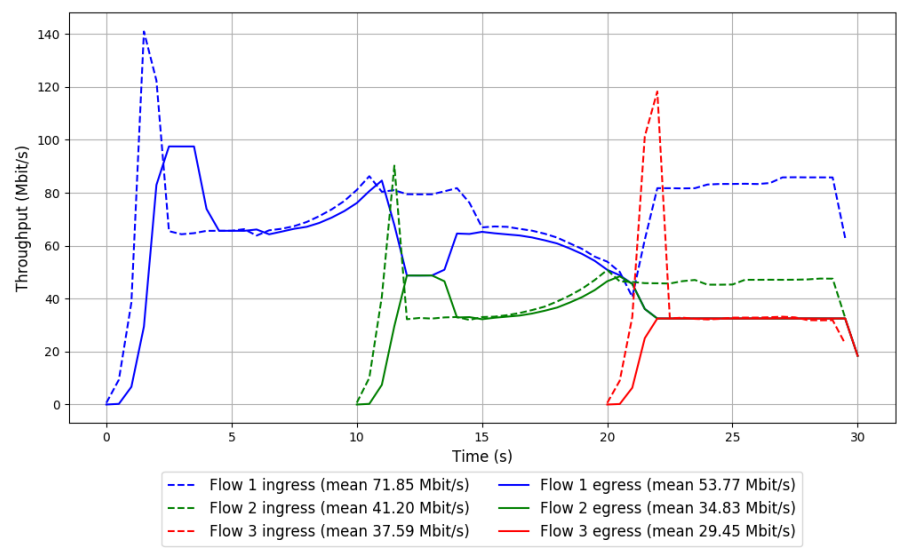
-- Flow 3:

Average throughput: 29.45 Mbit/s

95th percentile per-packet one-way delay: 1387.209 ms

Loss rate: 23.02%

Run 4: Report of PCC-Allegro — Data Link

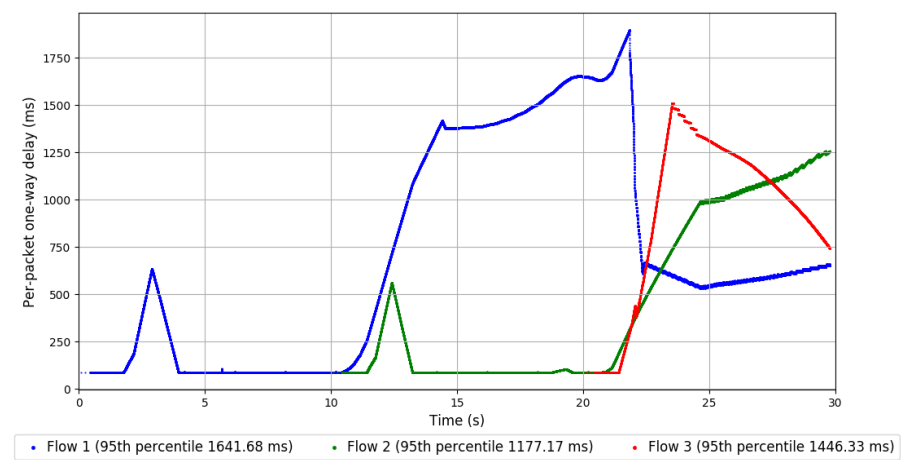
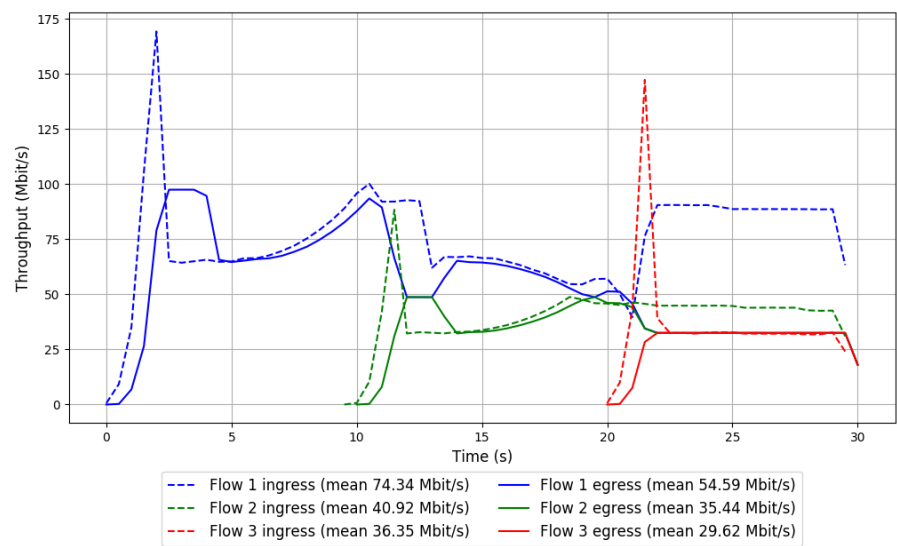


Run 5: Statistics of PCC-Allegro

Start at: 2018-12-20 09:35:07
End at: 2018-12-20 09:35:37
Local clock offset: -7.88 ms
Remote clock offset: 10.796 ms

Below is generated by plot.py at 2018-12-20 10:02:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.77 Mbit/s
95th percentile per-packet one-way delay: 1586.721 ms
Loss rate: 23.15%
-- Flow 1:
Average throughput: 54.59 Mbit/s
95th percentile per-packet one-way delay: 1641.681 ms
Loss rate: 26.99%
-- Flow 2:
Average throughput: 35.44 Mbit/s
95th percentile per-packet one-way delay: 1177.167 ms
Loss rate: 14.12%
-- Flow 3:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 1446.329 ms
Loss rate: 19.89%

Run 5: Report of PCC-Allegro — Data Link

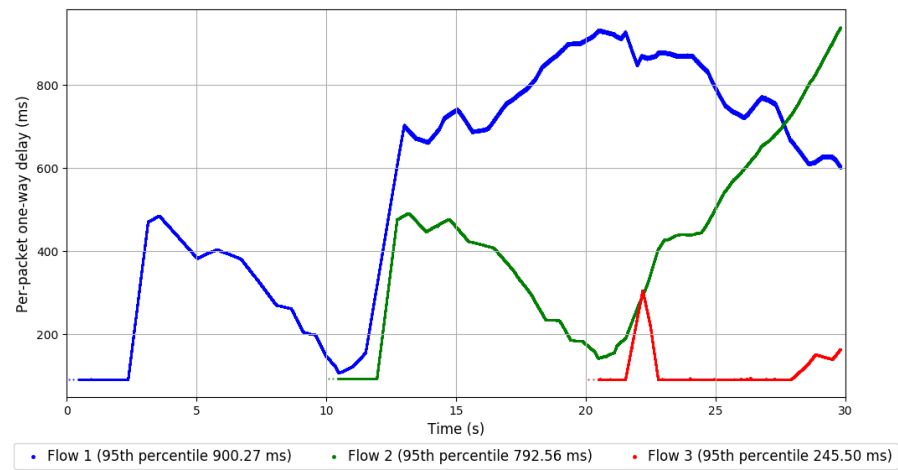
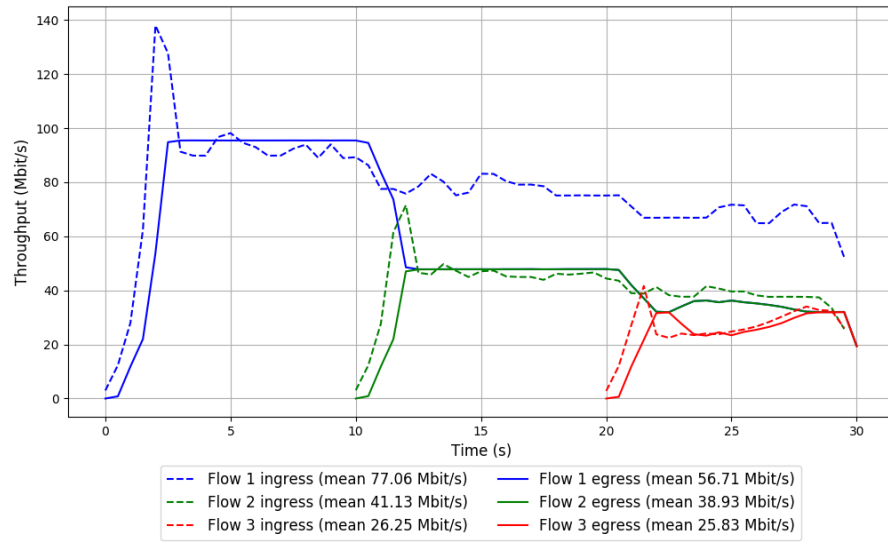


```
Run 1: Statistics of PCC-Expr

Start at: 2018-12-20 08:00:50
End at: 2018-12-20 08:01:20
Local clock offset: -6.327 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-12-20 10:03:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.97 Mbit/s
95th percentile per-packet one-way delay: 878.358 ms
Loss rate: 20.03%
-- Flow 1:
Average throughput: 56.71 Mbit/s
95th percentile per-packet one-way delay: 900.275 ms
Loss rate: 26.84%
-- Flow 2:
Average throughput: 38.93 Mbit/s
95th percentile per-packet one-way delay: 792.560 ms
Loss rate: 6.16%
-- Flow 3:
Average throughput: 25.83 Mbit/s
95th percentile per-packet one-way delay: 245.496 ms
Loss rate: 3.29%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-12-20 08:25:36

End at: 2018-12-20 08:26:06

Local clock offset: -5.624 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2018-12-20 10:03:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.96 Mbit/s

95th percentile per-packet one-way delay: 836.873 ms

Loss rate: 21.30%

-- Flow 1:

Average throughput: 56.69 Mbit/s

95th percentile per-packet one-way delay: 835.878 ms

Loss rate: 28.25%

-- Flow 2:

Average throughput: 38.99 Mbit/s

95th percentile per-packet one-way delay: 910.843 ms

Loss rate: 7.25%

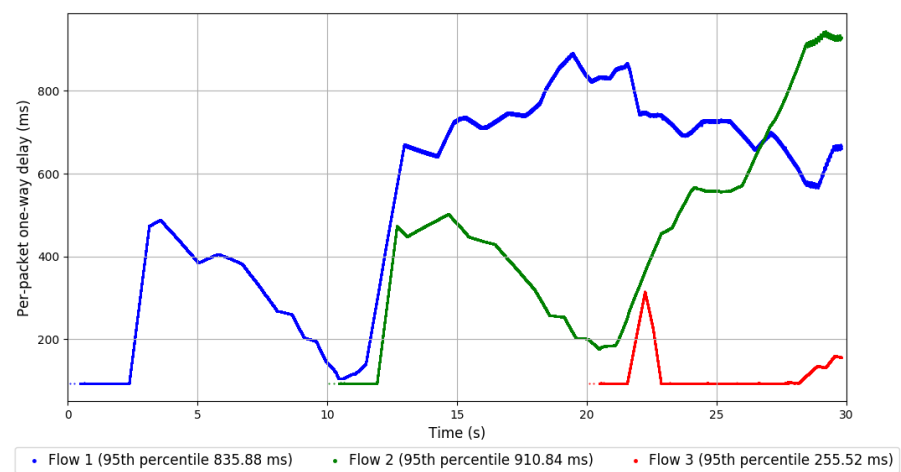
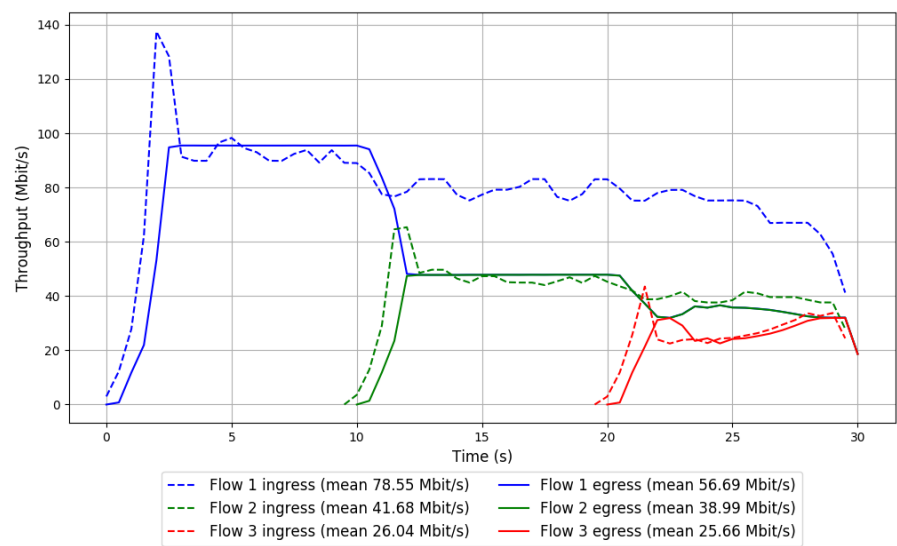
-- Flow 3:

Average throughput: 25.66 Mbit/s

95th percentile per-packet one-way delay: 255.517 ms

Loss rate: 3.18%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-12-20 08:50:03

End at: 2018-12-20 08:50:33

Local clock offset: -6.537 ms

Remote clock offset: 6.171 ms

Below is generated by plot.py at 2018-12-20 10:04:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.95 Mbit/s

95th percentile per-packet one-way delay: 898.162 ms

Loss rate: 17.99%

-- Flow 1:

Average throughput: 56.67 Mbit/s

95th percentile per-packet one-way delay: 907.097 ms

Loss rate: 23.69%

-- Flow 2:

Average throughput: 38.95 Mbit/s

95th percentile per-packet one-way delay: 858.437 ms

Loss rate: 7.42%

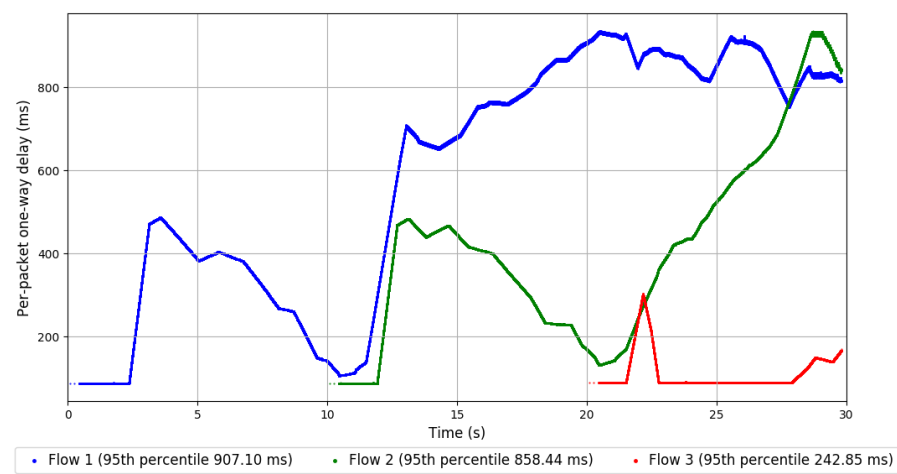
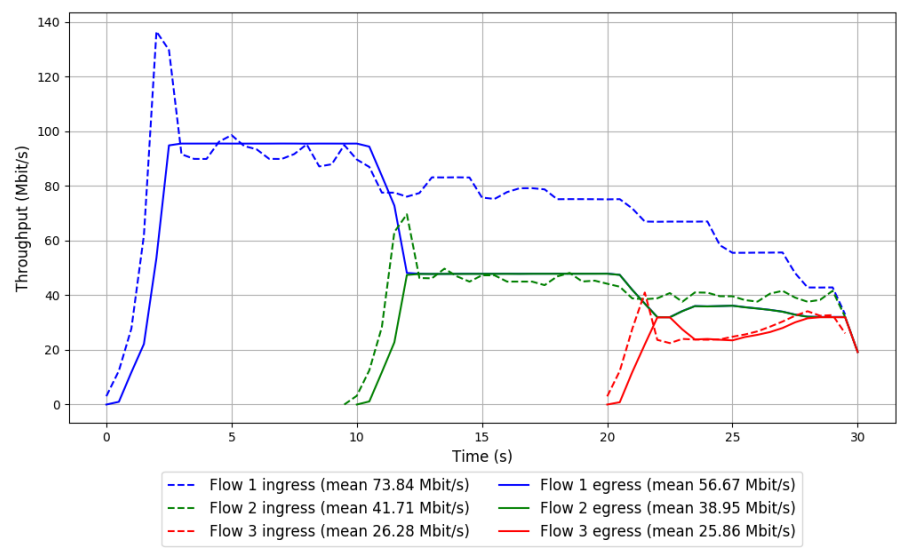
-- Flow 3:

Average throughput: 25.86 Mbit/s

95th percentile per-packet one-way delay: 242.851 ms

Loss rate: 3.29%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-12-20 09:14:29

End at: 2018-12-20 09:14:59

Local clock offset: -7.695 ms

Remote clock offset: 6.794 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.91 Mbit/s

95th percentile per-packet one-way delay: 903.510 ms

Loss rate: 18.61%

-- Flow 1:

Average throughput: 56.53 Mbit/s

95th percentile per-packet one-way delay: 923.139 ms

Loss rate: 24.85%

-- Flow 2:

Average throughput: 38.56 Mbit/s

95th percentile per-packet one-way delay: 869.424 ms

Loss rate: 6.94%

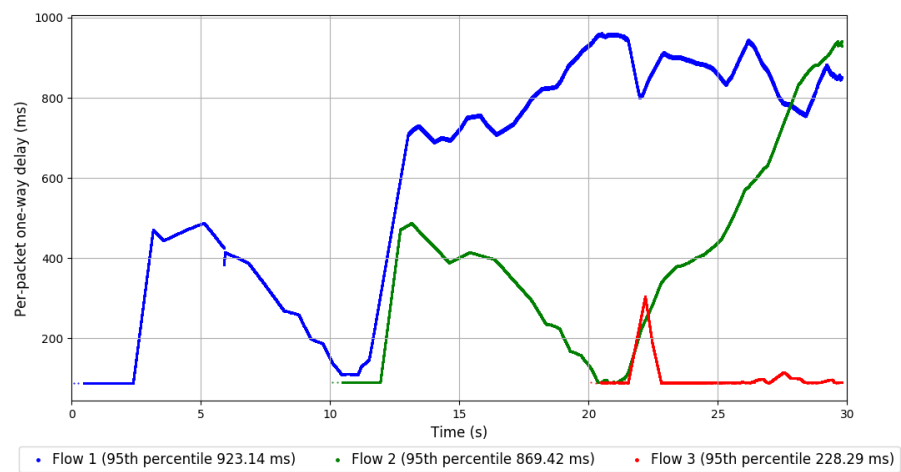
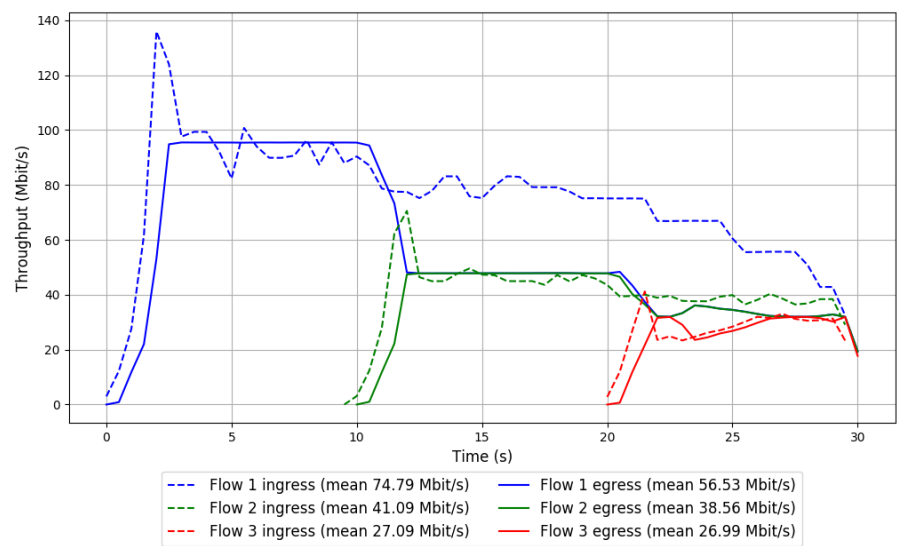
-- Flow 3:

Average throughput: 26.99 Mbit/s

95th percentile per-packet one-way delay: 228.293 ms

Loss rate: 2.10%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-12-20 09:38:54

End at: 2018-12-20 09:39:24

Local clock offset: -5.489 ms

Remote clock offset: 5.707 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.95 Mbit/s

95th percentile per-packet one-way delay: 1329.613 ms

Loss rate: 9.19%

-- Flow 1:

Average throughput: 56.66 Mbit/s

95th percentile per-packet one-way delay: 1369.346 ms

Loss rate: 11.41%

-- Flow 2:

Average throughput: 38.94 Mbit/s

95th percentile per-packet one-way delay: 812.835 ms

Loss rate: 5.72%

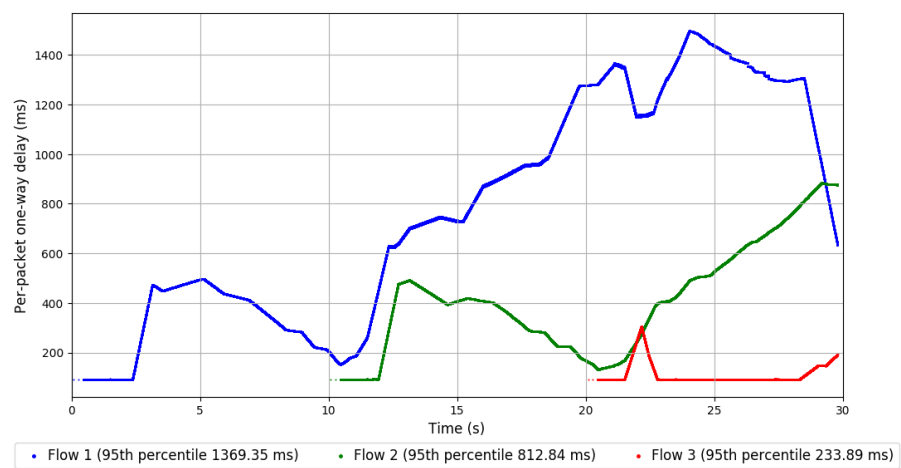
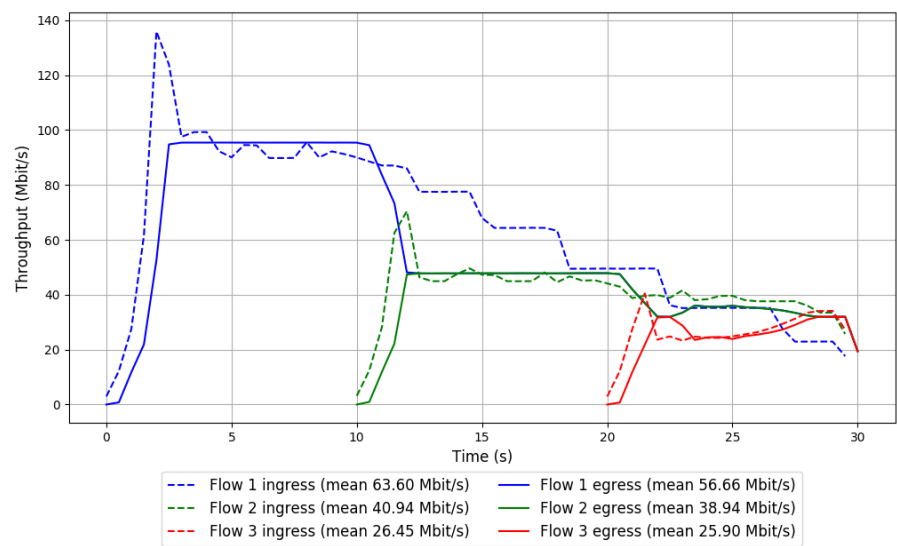
-- Flow 3:

Average throughput: 25.90 Mbit/s

95th percentile per-packet one-way delay: 233.887 ms

Loss rate: 3.79%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-12-20 08:02:12

End at: 2018-12-20 08:02:42

Local clock offset: -5.56 ms

Remote clock offset: 4.073 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.69 Mbit/s

95th percentile per-packet one-way delay: 189.238 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 38.72 Mbit/s

95th percentile per-packet one-way delay: 140.815 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 15.43 Mbit/s

95th percentile per-packet one-way delay: 308.386 ms

Loss rate: 1.11%

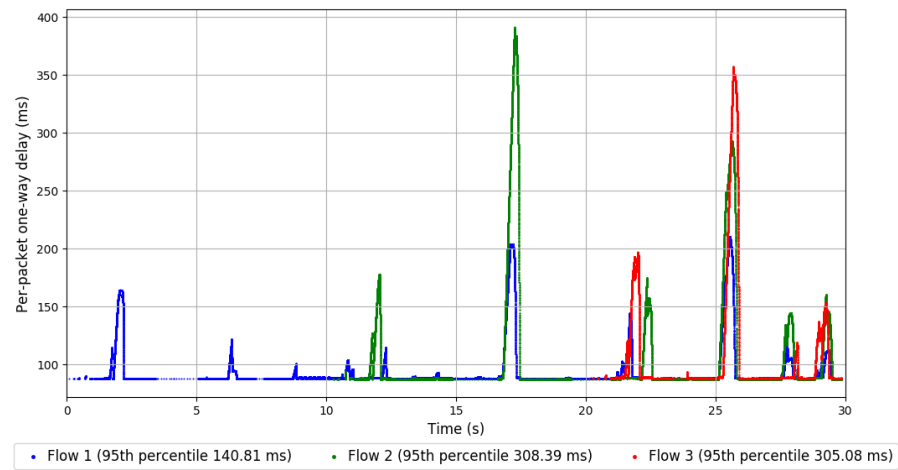
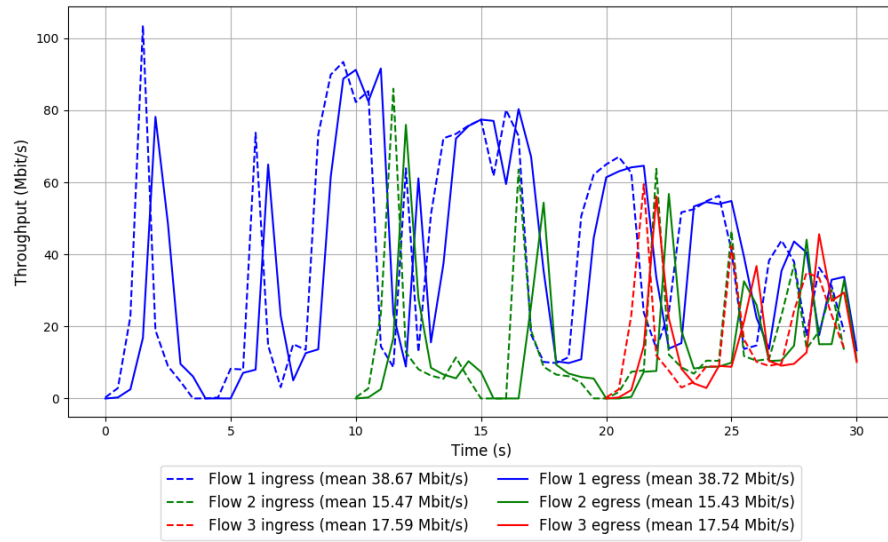
-- Flow 3:

Average throughput: 17.54 Mbit/s

95th percentile per-packet one-way delay: 305.083 ms

Loss rate: 2.02%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-12-20 08:26:58

End at: 2018-12-20 08:27:28

Local clock offset: -6.434 ms

Remote clock offset: 5.047 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.35 Mbit/s

95th percentile per-packet one-way delay: 193.927 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 35.18 Mbit/s

95th percentile per-packet one-way delay: 135.210 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 23.07 Mbit/s

95th percentile per-packet one-way delay: 199.041 ms

Loss rate: 1.21%

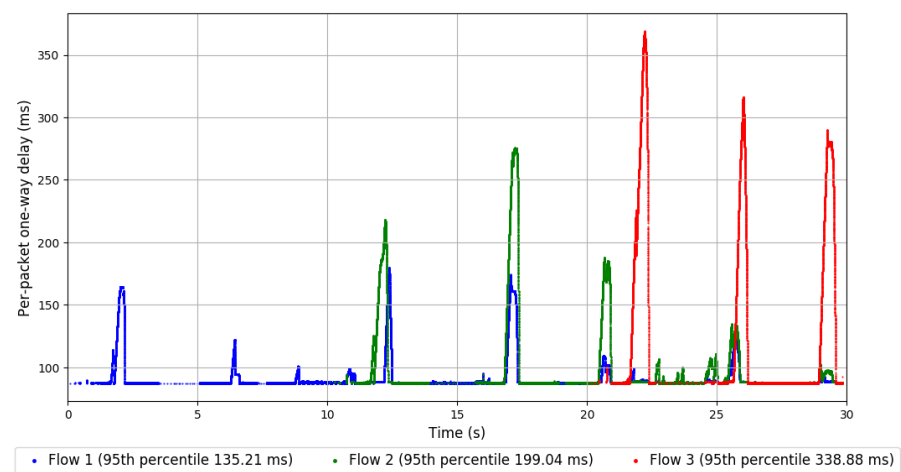
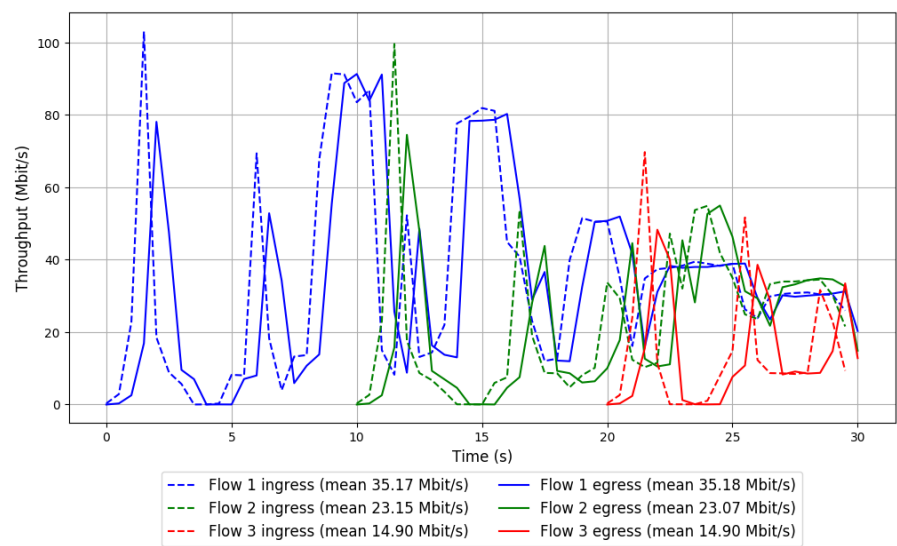
-- Flow 3:

Average throughput: 14.90 Mbit/s

95th percentile per-packet one-way delay: 338.883 ms

Loss rate: 1.71%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-12-20 08:51:25

End at: 2018-12-20 08:51:55

Local clock offset: -6.593 ms

Remote clock offset: 7.285 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.38 Mbit/s

95th percentile per-packet one-way delay: 184.372 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 37.16 Mbit/s

95th percentile per-packet one-way delay: 114.596 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 21.08 Mbit/s

95th percentile per-packet one-way delay: 187.058 ms

Loss rate: 1.38%

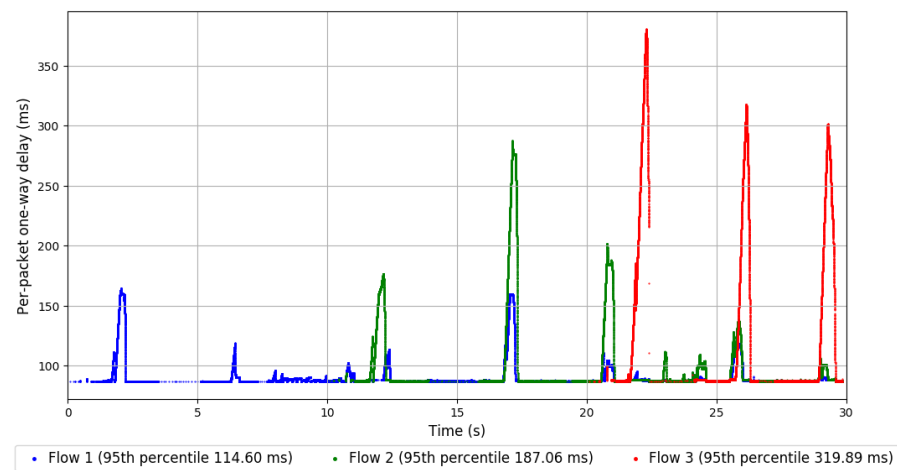
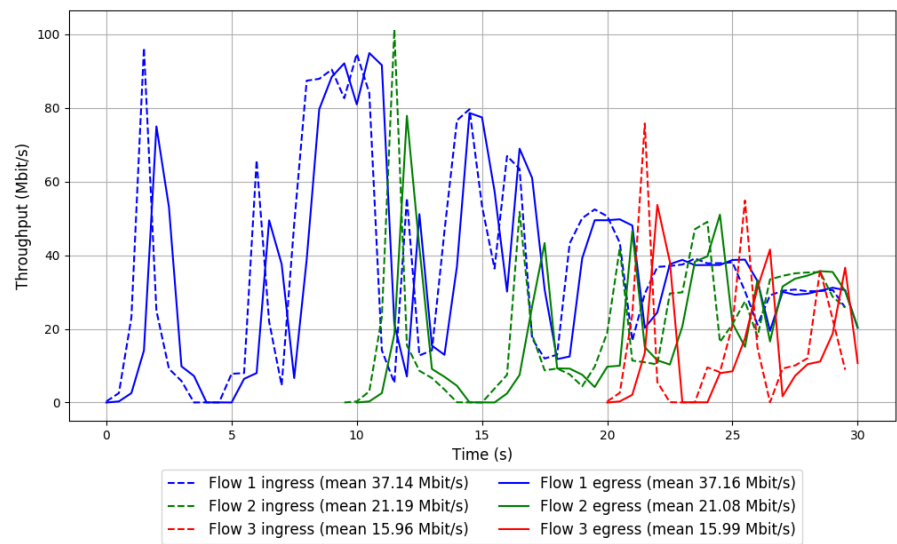
-- Flow 3:

Average throughput: 15.99 Mbit/s

95th percentile per-packet one-way delay: 319.895 ms

Loss rate: 1.48%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-12-20 09:15:50

End at: 2018-12-20 09:16:20

Local clock offset: -6.875 ms

Remote clock offset: 3.019 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 145.344 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 32.39 Mbit/s

95th percentile per-packet one-way delay: 128.853 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 25.38 Mbit/s

95th percentile per-packet one-way delay: 167.669 ms

Loss rate: 1.18%

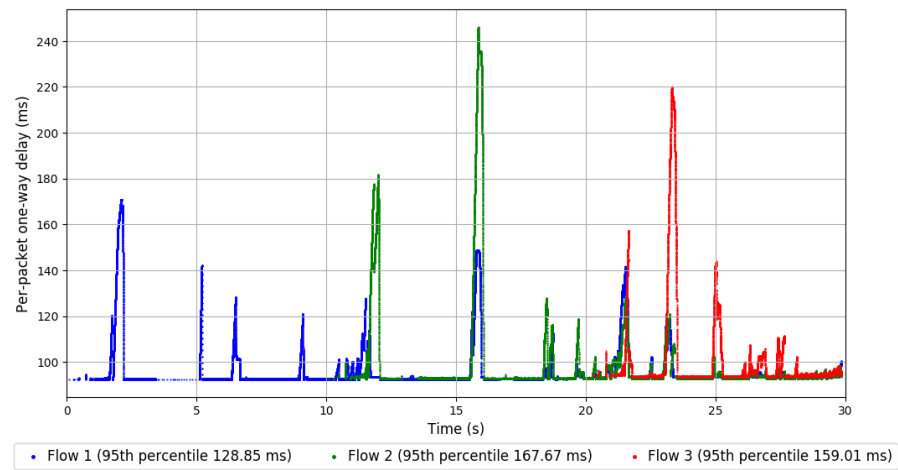
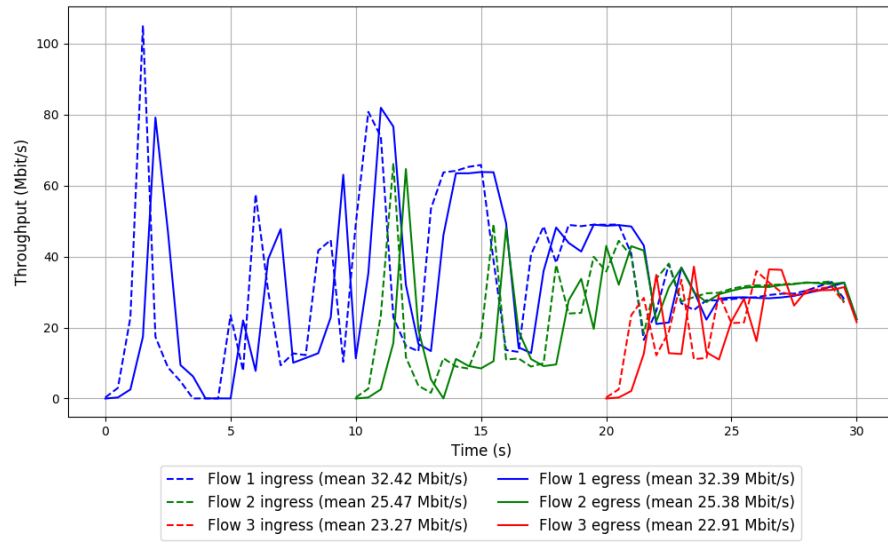
-- Flow 3:

Average throughput: 22.91 Mbit/s

95th percentile per-packet one-way delay: 159.009 ms

Loss rate: 3.22%

Run 4: Report of QUIC Cubic — Data Link

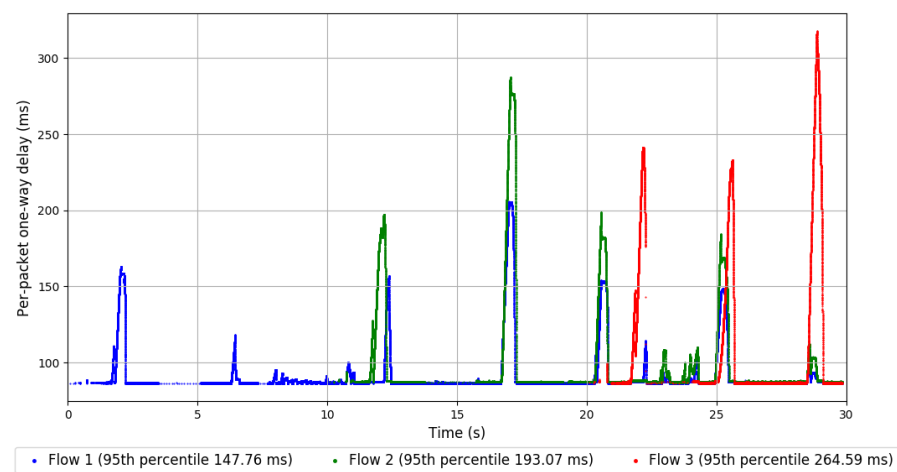
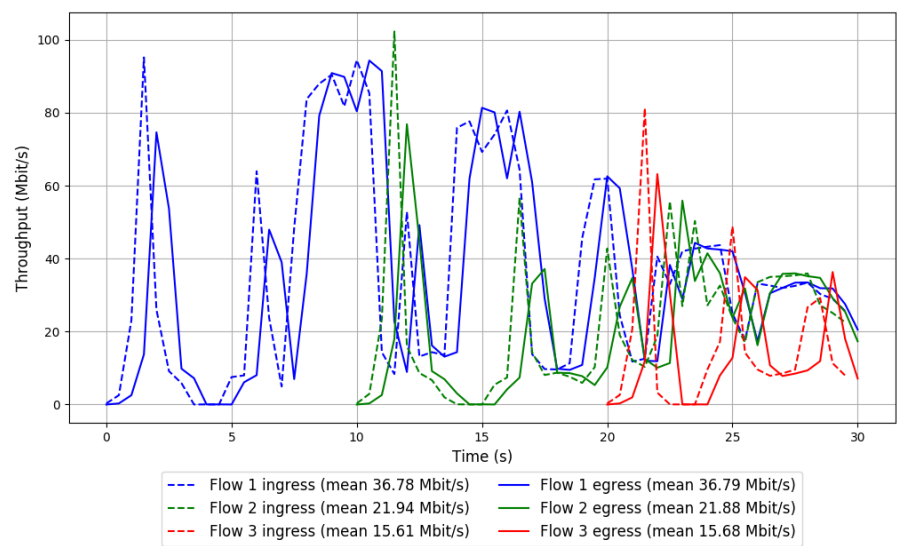


Run 5: Statistics of QUIC Cubic

Start at: 2018-12-20 09:40:15
End at: 2018-12-20 09:40:45
Local clock offset: -4.919 ms
Remote clock offset: 10.987 ms

Below is generated by plot.py at 2018-12-20 10:04:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 185.414 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 36.79 Mbit/s
95th percentile per-packet one-way delay: 147.759 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 21.88 Mbit/s
95th percentile per-packet one-way delay: 193.069 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 15.68 Mbit/s
95th percentile per-packet one-way delay: 264.594 ms
Loss rate: 1.29%

Run 5: Report of QUIC Cubic — Data Link

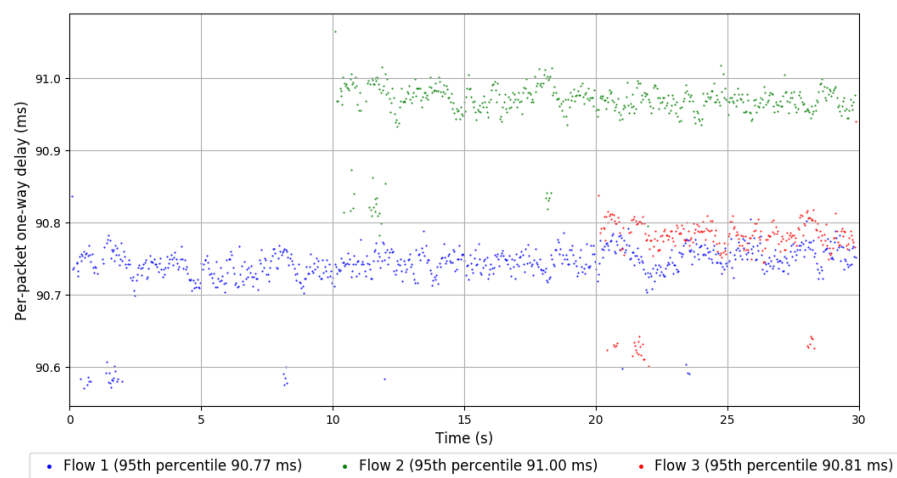
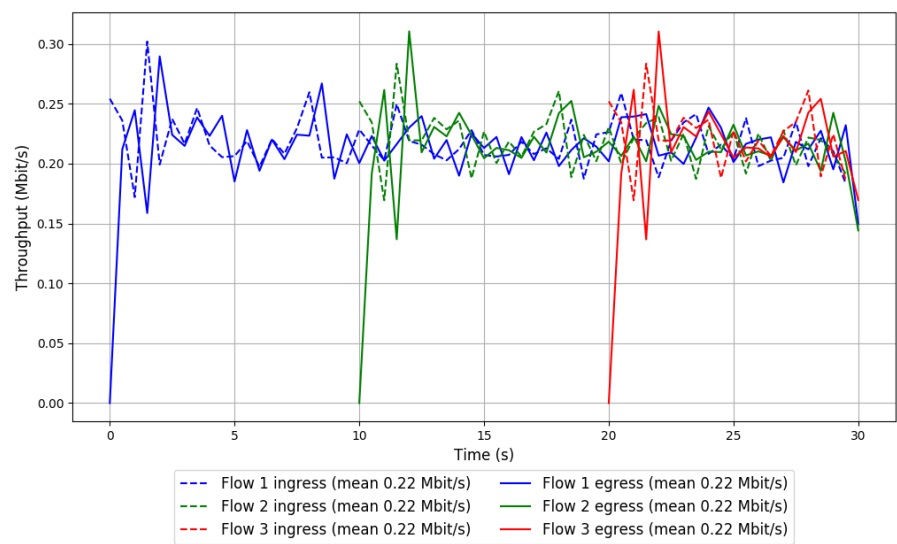



```
Run 1: Statistics of SReAM

Start at: 2018-12-20 08:07:24
End at: 2018-12-20 08:07:54
Local clock offset: -6.302 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-12-20 10:04:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 90.988 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.773 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.999 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.810 ms
Loss rate: 1.46%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2018-12-20 08:32:12

End at: 2018-12-20 08:32:42

Local clock offset: -6.39 ms

Remote clock offset: 5.318 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.528 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.643 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.538 ms

Loss rate: 0.82%

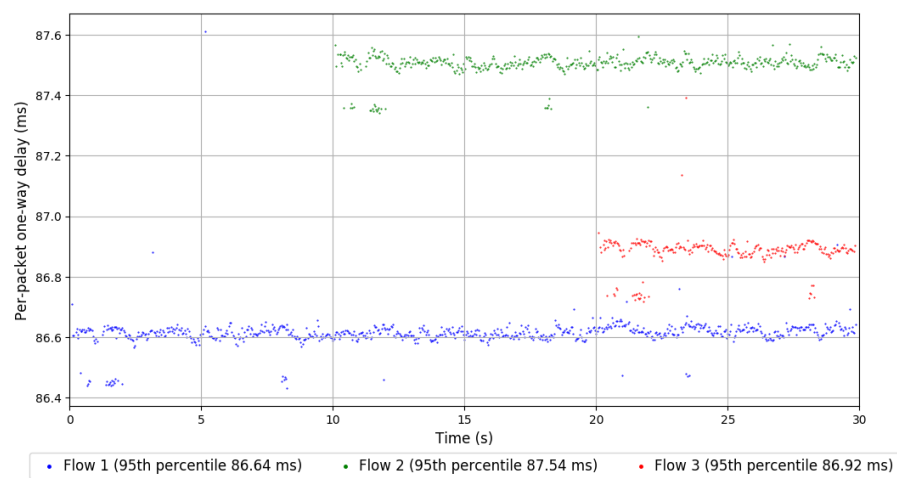
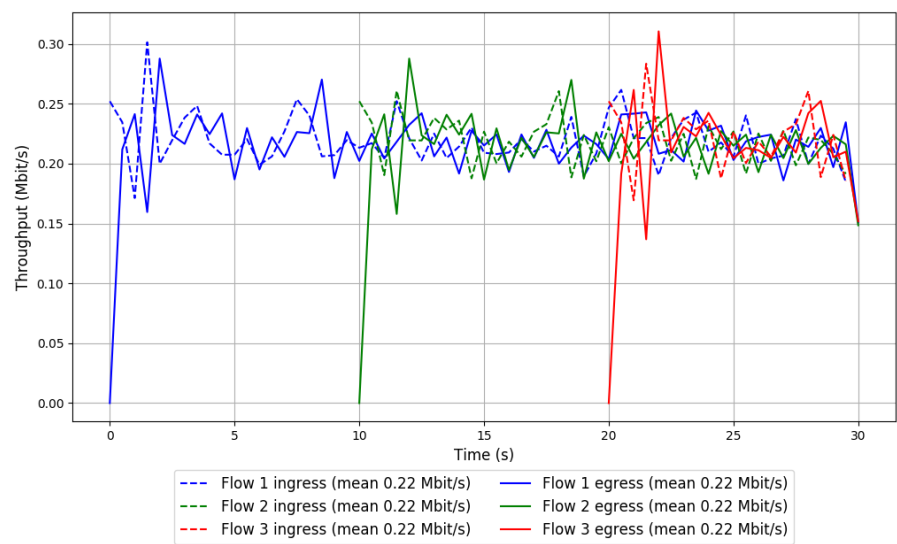
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.919 ms

Loss rate: 1.85%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-12-20 08:56:38

End at: 2018-12-20 08:57:08

Local clock offset: -7.488 ms

Remote clock offset: 5.2 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 88.731 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.652 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.976 ms

Loss rate: 1.03%

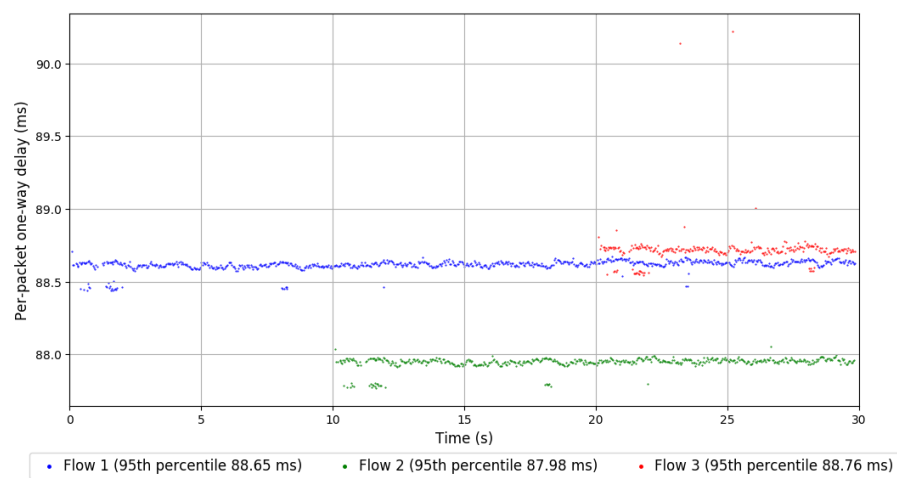
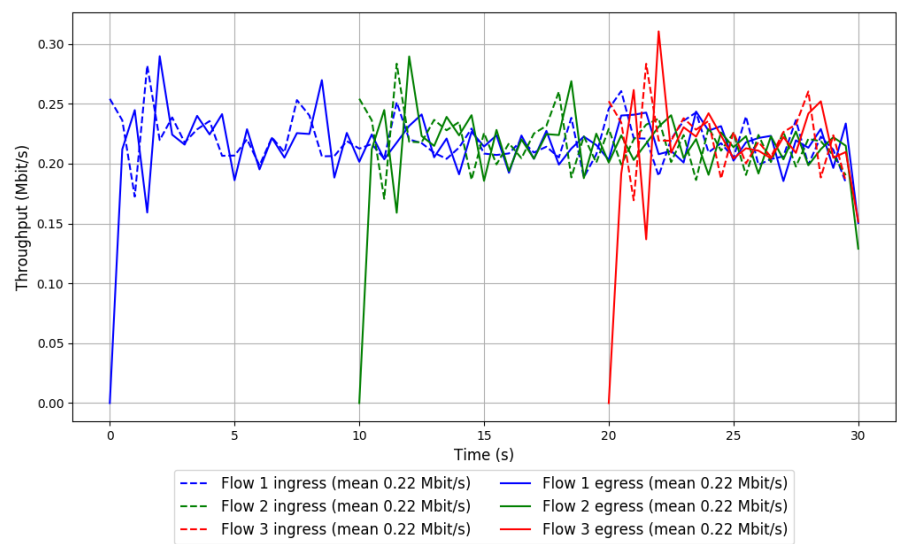
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.758 ms

Loss rate: 1.85%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-12-20 09:21:04

End at: 2018-12-20 09:21:34

Local clock offset: -6.976 ms

Remote clock offset: 9.102 ms

Below is generated by plot.py at 2018-12-20 10:04:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 88.246 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.494 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.258 ms

Loss rate: 0.82%

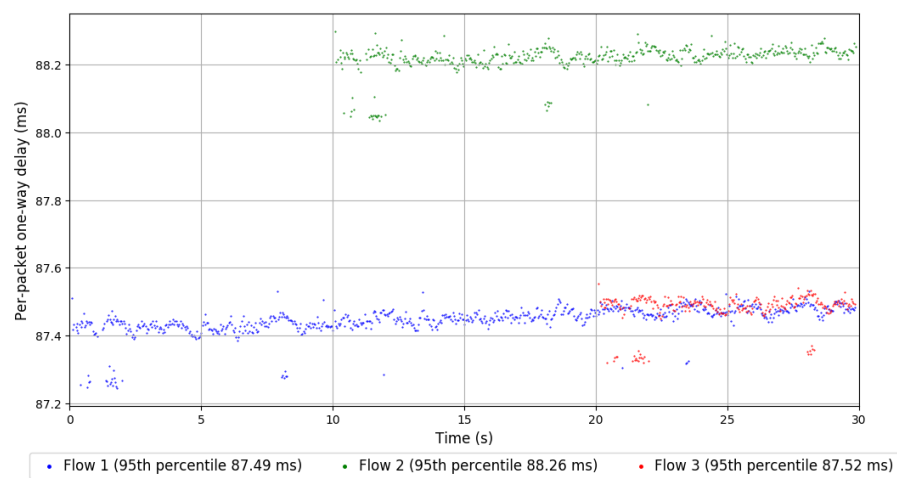
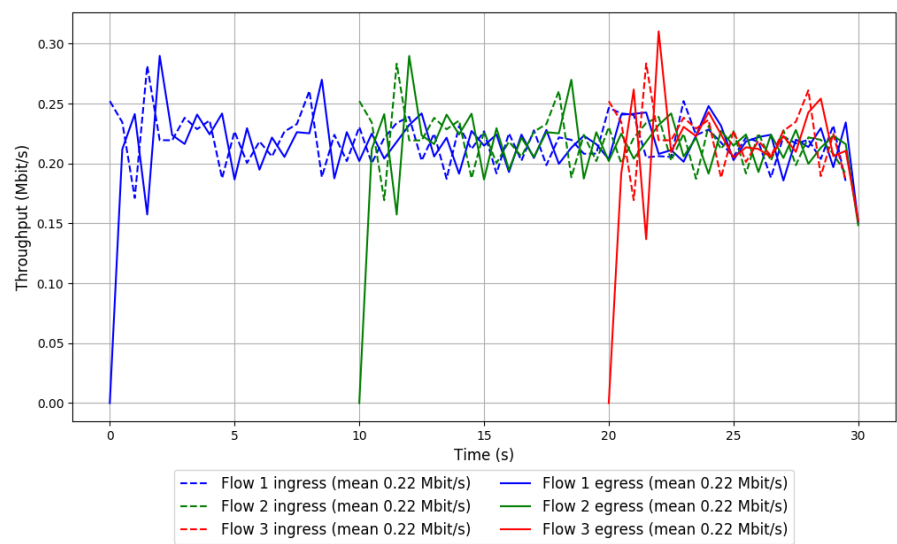
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.518 ms

Loss rate: 1.85%

Run 4: Report of SReAM — Data Link

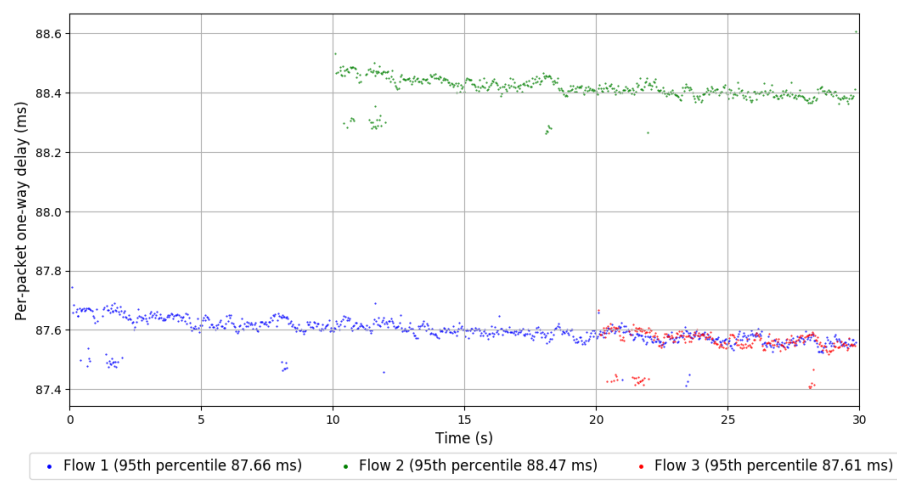
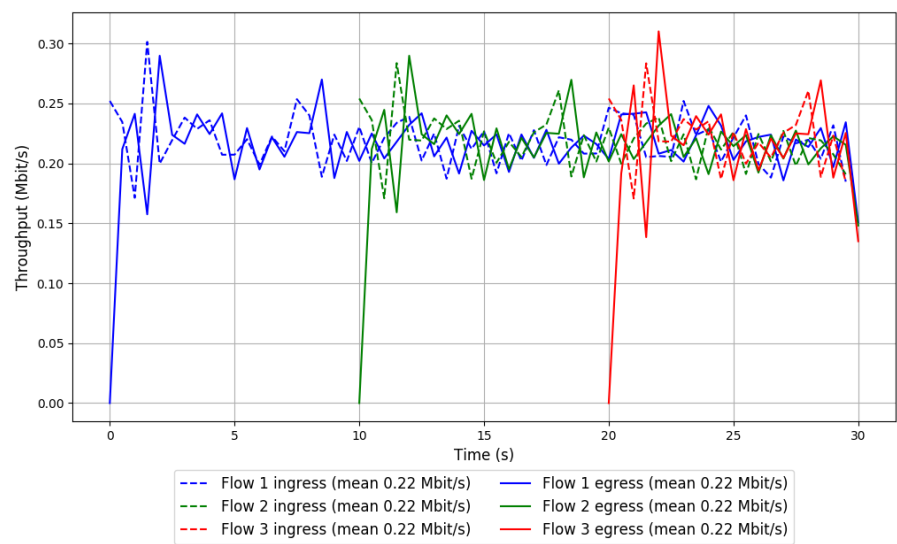


Run 5: Statistics of SReAM

Start at: 2018-12-20 09:45:28
End at: 2018-12-20 09:45:58
Local clock offset: -3.056 ms
Remote clock offset: 10.165 ms

Below is generated by plot.py at 2018-12-20 10:04:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 88.448 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.660 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 88.470 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.606 ms
Loss rate: 1.85%

Run 5: Report of SReAM — Data Link

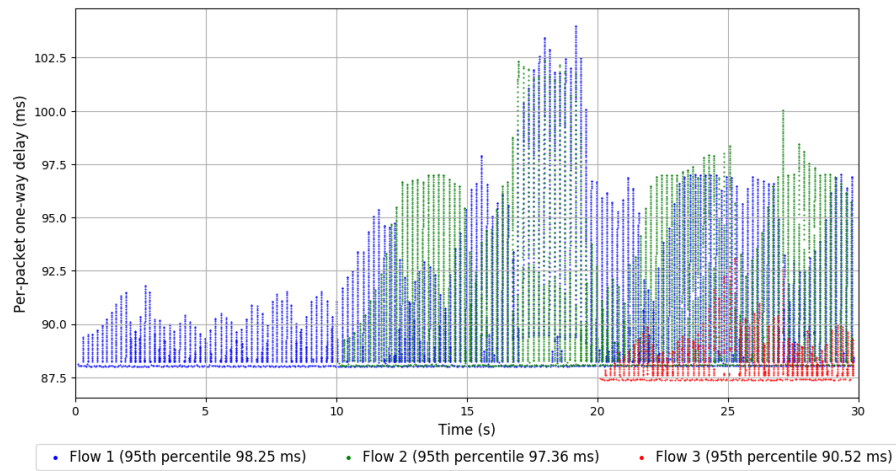
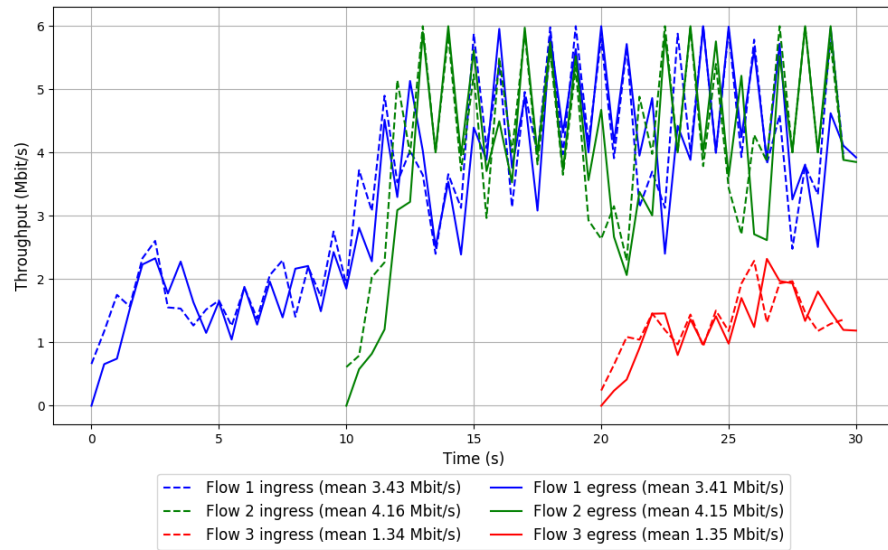


Run 1: Statistics of Sprout

Start at: 2018-12-20 07:58:20
End at: 2018-12-20 07:58:50
Local clock offset: -5.591 ms
Remote clock offset: 3.832 ms

Below is generated by plot.py at 2018-12-20 10:04:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 97.409 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 98.250 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 97.363 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 90.522 ms
Loss rate: 1.03%

Run 1: Report of Sprout — Data Link

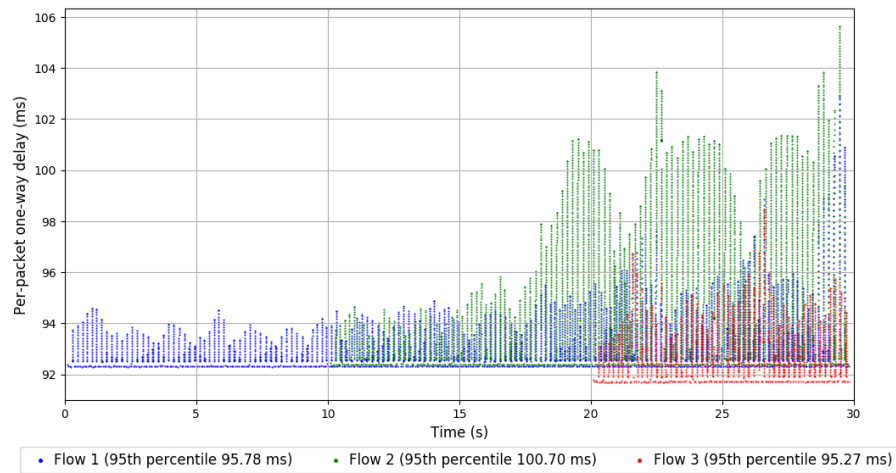
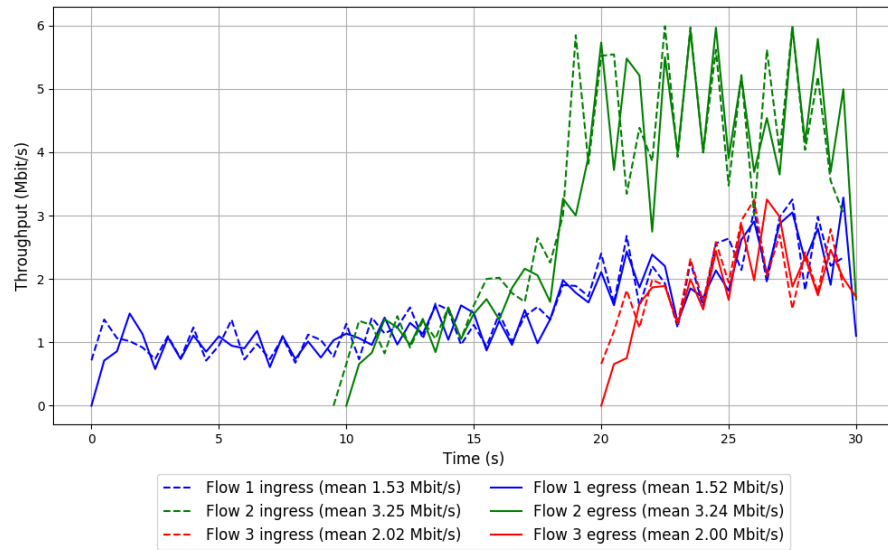


Run 2: Statistics of Sprout

Start at: 2018-12-20 08:23:06
End at: 2018-12-20 08:23:36
Local clock offset: -6.441 ms
Remote clock offset: -0.162 ms

```
# Below is generated by plot.py at 2018-12-20 10:04:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 99.850 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 95.782 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 100.702 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 95.270 ms
Loss rate: 2.34%
```

Run 2: Report of Sprout — Data Link

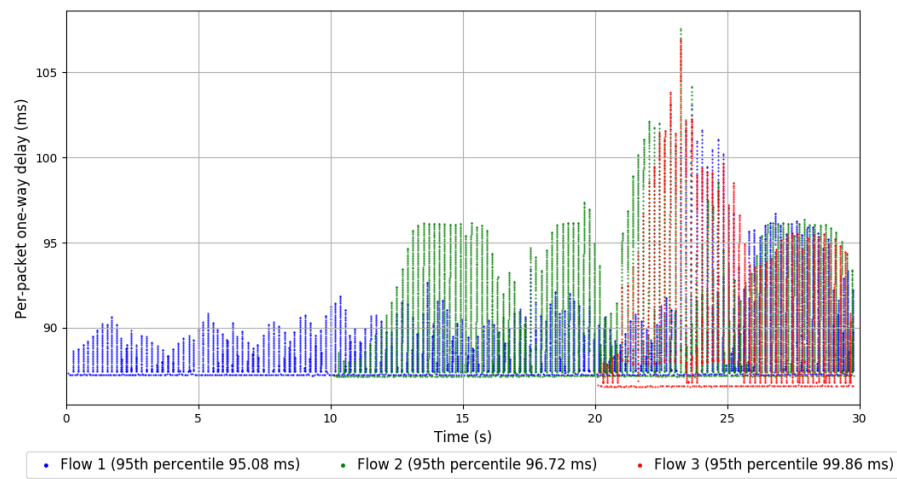
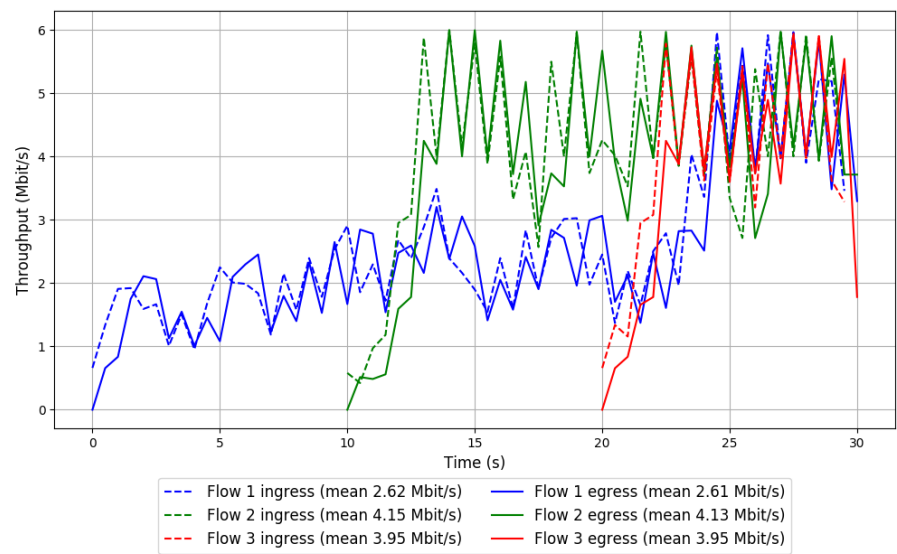


Run 3: Statistics of Sprout

Start at: 2018-12-20 08:47:33
End at: 2018-12-20 08:48:03
Local clock offset: -7.297 ms
Remote clock offset: 5.999 ms

```
# Below is generated by plot.py at 2018-12-20 10:04:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 97.143 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 95.085 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 96.725 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 99.862 ms
Loss rate: 1.93%
```

Run 3: Report of Sprout — Data Link

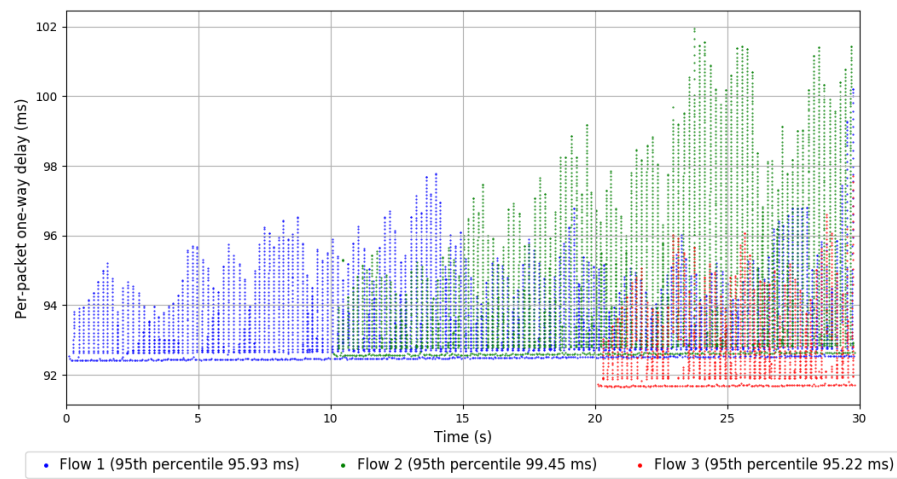
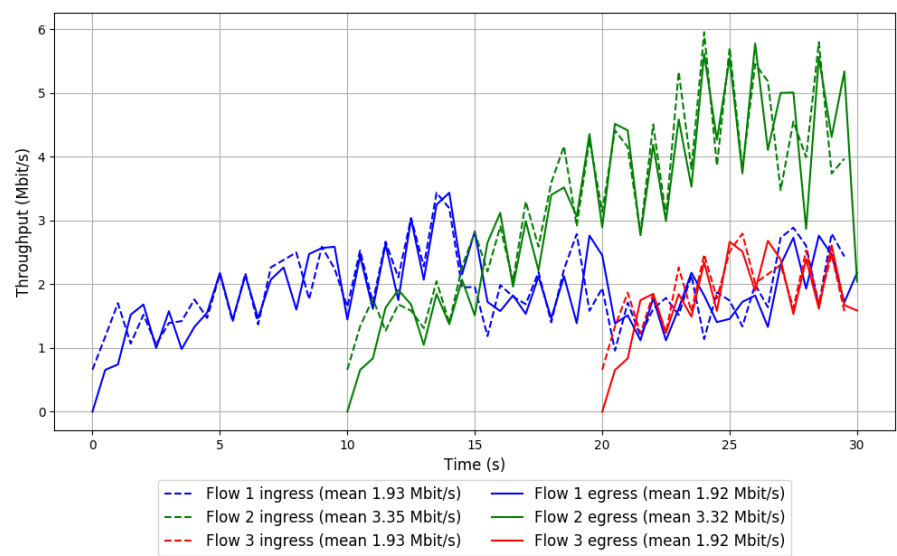


Run 4: Statistics of Sprout

Start at: 2018-12-20 09:11:59
End at: 2018-12-20 09:12:29
Local clock offset: -7.695 ms
Remote clock offset: 2.034 ms

```
# Below is generated by plot.py at 2018-12-20 10:04:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 98.259 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 95.933 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 3.32 Mbit/s
95th percentile per-packet one-way delay: 99.446 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 95.219 ms
Loss rate: 2.09%
```

Run 4: Report of Sprout — Data Link

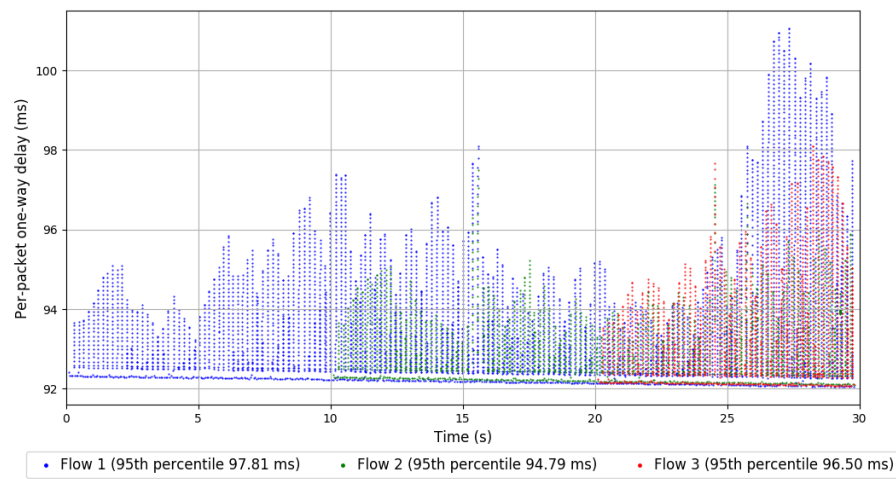
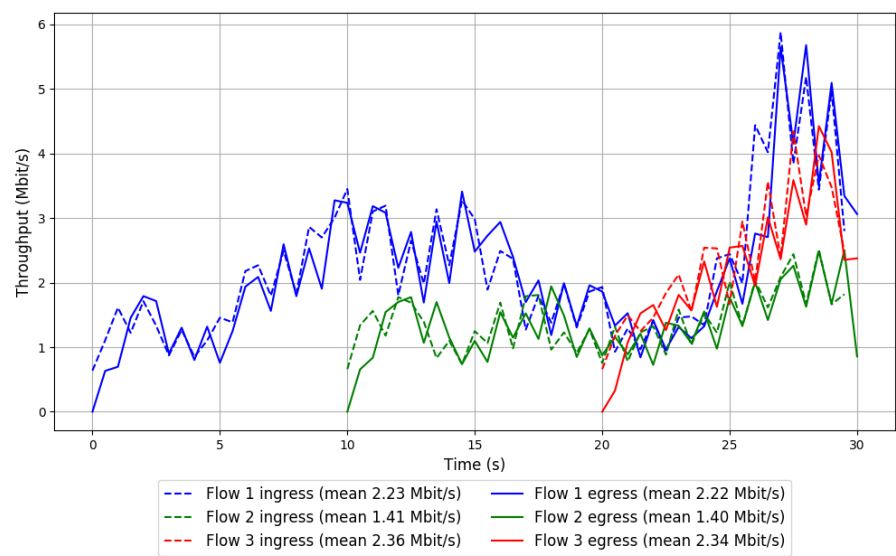


Run 5: Statistics of Sprout

Start at: 2018-12-20 09:36:24
End at: 2018-12-20 09:36:54
Local clock offset: -6.985 ms
Remote clock offset: 5.307 ms

Below is generated by plot.py at 2018-12-20 10:04:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 96.946 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 97.813 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 94.792 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 96.501 ms
Loss rate: 2.65%

Run 5: Report of Sprout — Data Link

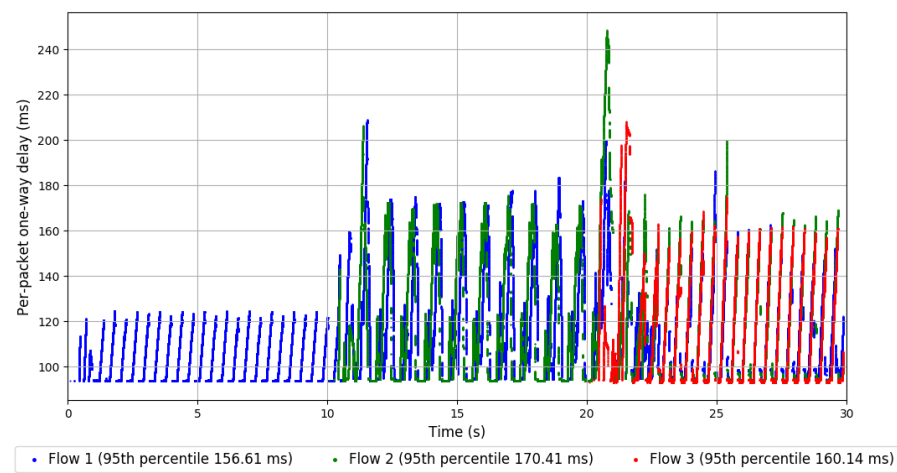
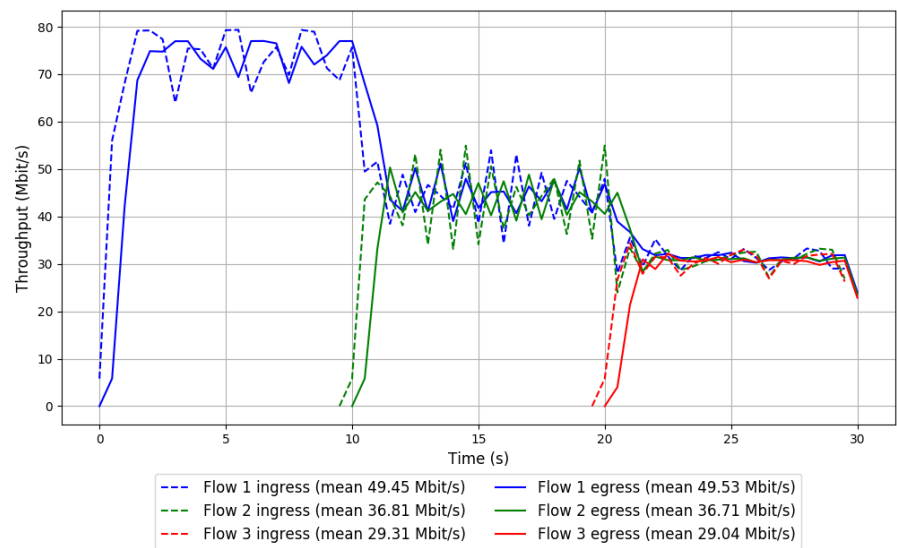


Run 1: Statistics of TaoVA-100x

Start at: 2018-12-20 08:06:04
End at: 2018-12-20 08:06:34
Local clock offset: -5.525 ms
Remote clock offset: -1.108 ms

Below is generated by plot.py at 2018-12-20 10:05:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.49 Mbit/s
95th percentile per-packet one-way delay: 163.101 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 49.53 Mbit/s
95th percentile per-packet one-way delay: 156.611 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 36.71 Mbit/s
95th percentile per-packet one-way delay: 170.412 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 29.04 Mbit/s
95th percentile per-packet one-way delay: 160.142 ms
Loss rate: 2.34%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-12-20 08:30:51

End at: 2018-12-20 08:31:21

Local clock offset: -6.461 ms

Remote clock offset: 0.288 ms

Below is generated by plot.py at 2018-12-20 10:05:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.53 Mbit/s

95th percentile per-packet one-way delay: 159.714 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 49.62 Mbit/s

95th percentile per-packet one-way delay: 158.714 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 37.72 Mbit/s

95th percentile per-packet one-way delay: 163.351 ms

Loss rate: 0.73%

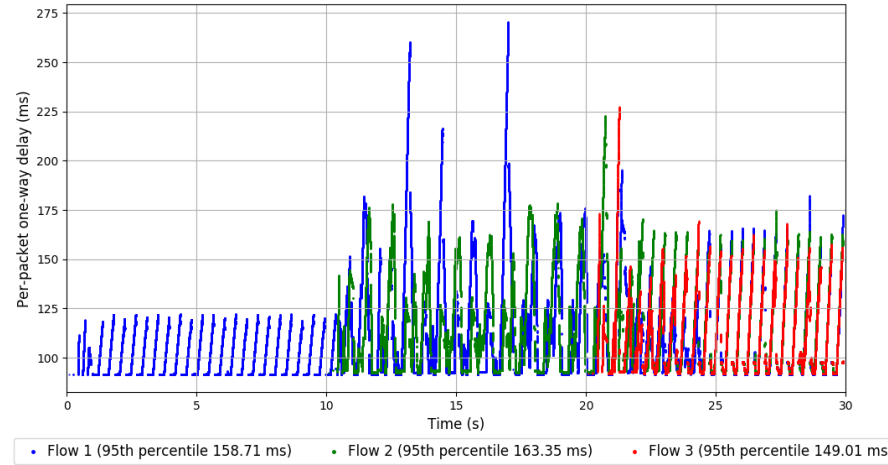
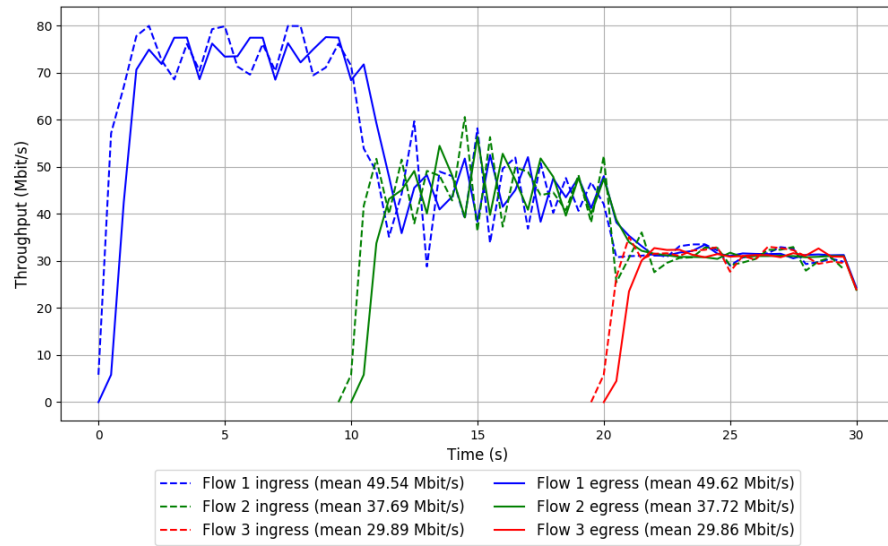
-- Flow 3:

Average throughput: 29.86 Mbit/s

95th percentile per-packet one-way delay: 149.011 ms

Loss rate: 1.82%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-12-20 08:55:17

End at: 2018-12-20 08:55:47

Local clock offset: -6.778 ms

Remote clock offset: 5.23 ms

Below is generated by plot.py at 2018-12-20 10:05:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.04 Mbit/s

95th percentile per-packet one-way delay: 154.356 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 48.51 Mbit/s

95th percentile per-packet one-way delay: 152.978 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 37.19 Mbit/s

95th percentile per-packet one-way delay: 162.788 ms

Loss rate: 1.00%

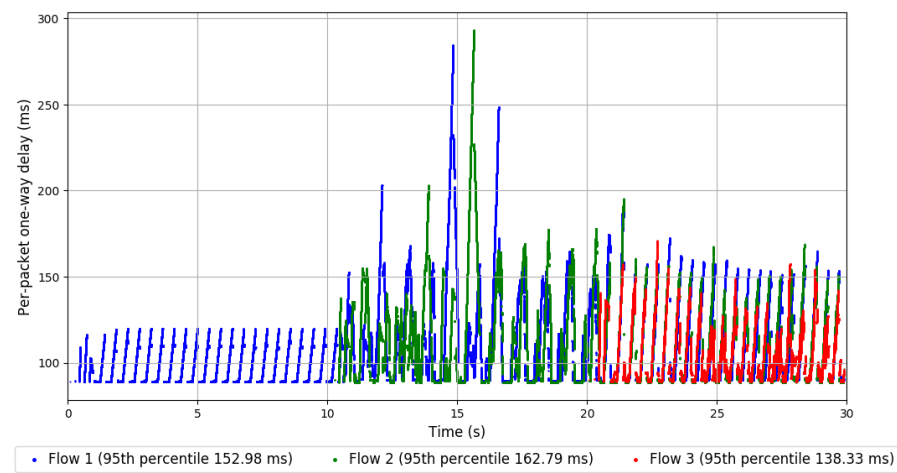
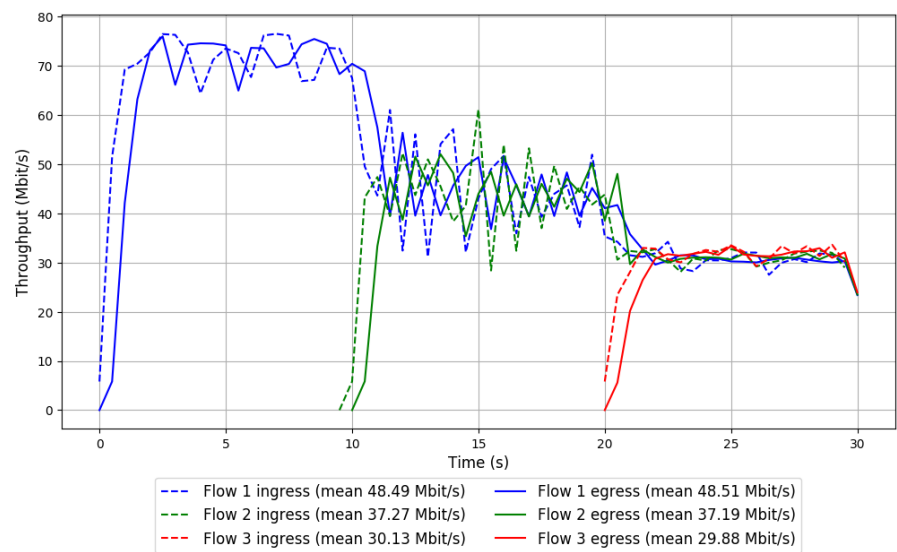
-- Flow 3:

Average throughput: 29.88 Mbit/s

95th percentile per-packet one-way delay: 138.328 ms

Loss rate: 2.42%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-12-20 09:19:43

End at: 2018-12-20 09:20:13

Local clock offset: -7.68 ms

Remote clock offset: 4.902 ms

Below is generated by plot.py at 2018-12-20 10:05:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.83 Mbit/s

95th percentile per-packet one-way delay: 158.277 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 49.35 Mbit/s

95th percentile per-packet one-way delay: 153.675 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 37.18 Mbit/s

95th percentile per-packet one-way delay: 169.250 ms

Loss rate: 0.83%

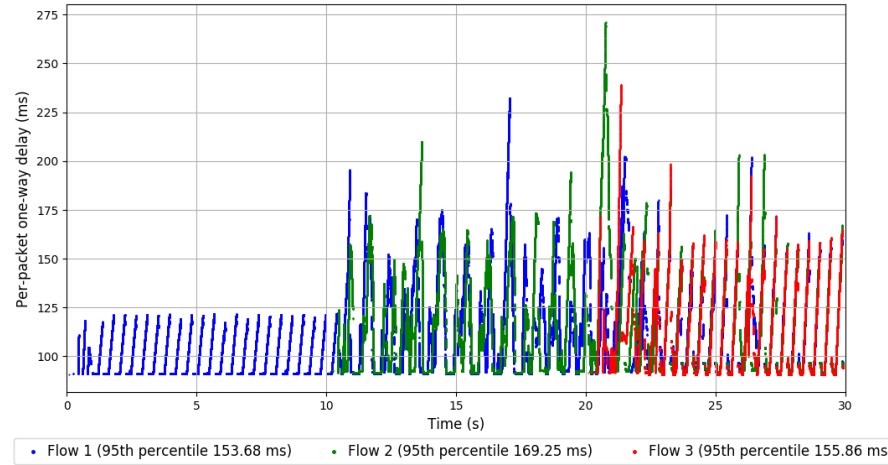
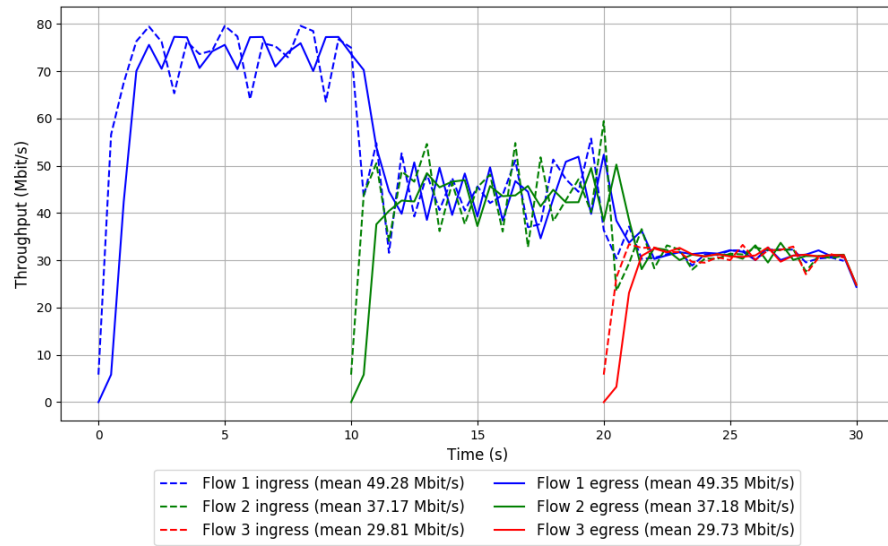
-- Flow 3:

Average throughput: 29.73 Mbit/s

95th percentile per-packet one-way delay: 155.861 ms

Loss rate: 1.98%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-12-20 09:44:07

End at: 2018-12-20 09:44:37

Local clock offset: -2.718 ms

Remote clock offset: 7.396 ms

Below is generated by plot.py at 2018-12-20 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.59 Mbit/s

95th percentile per-packet one-way delay: 157.793 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 49.75 Mbit/s

95th percentile per-packet one-way delay: 153.189 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 38.22 Mbit/s

95th percentile per-packet one-way delay: 165.129 ms

Loss rate: 0.72%

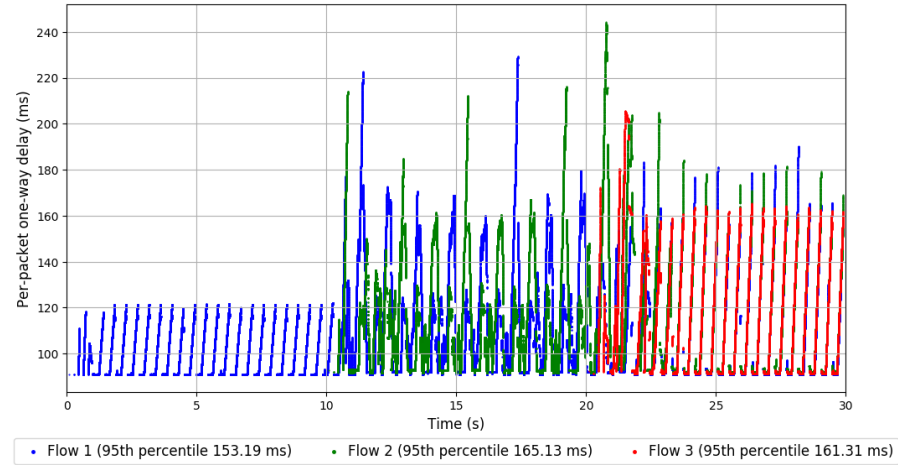
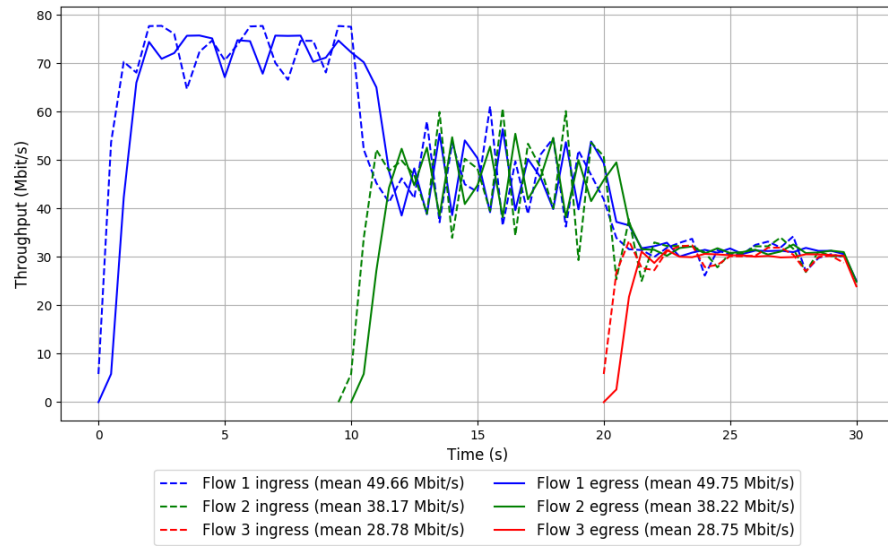
-- Flow 3:

Average throughput: 28.75 Mbit/s

95th percentile per-packet one-way delay: 161.311 ms

Loss rate: 1.84%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-12-20 08:13:46

End at: 2018-12-20 08:14:16

Local clock offset: -5.579 ms

Remote clock offset: 0.564 ms

Below is generated by plot.py at 2018-12-20 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.08 Mbit/s

95th percentile per-packet one-way delay: 158.034 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 35.38 Mbit/s

95th percentile per-packet one-way delay: 183.576 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 33.96 Mbit/s

95th percentile per-packet one-way delay: 115.488 ms

Loss rate: 0.99%

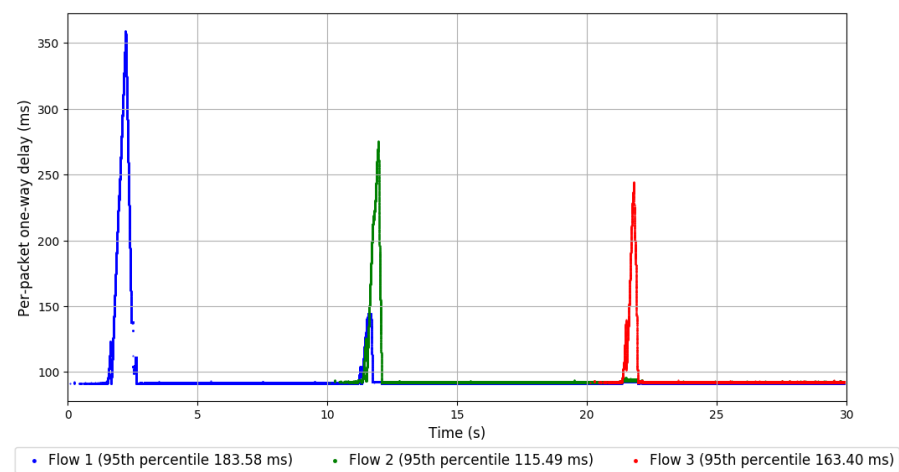
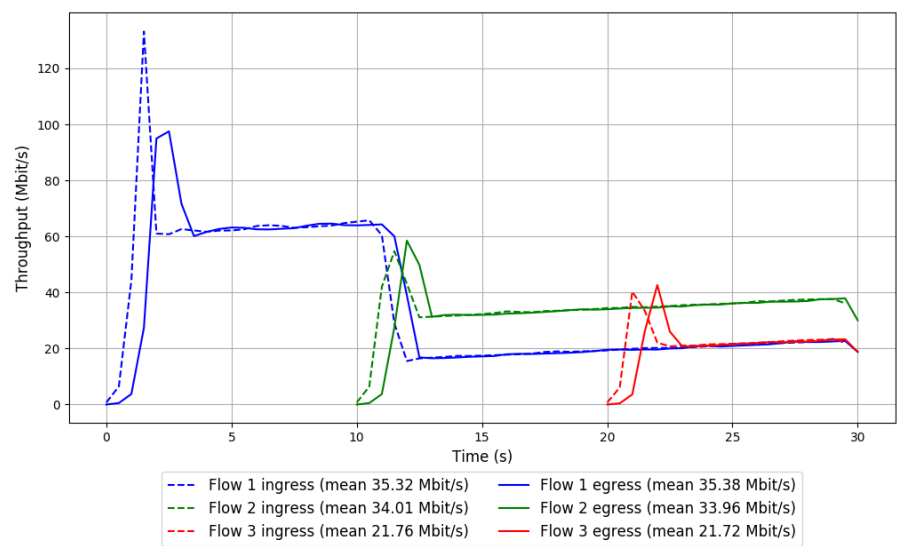
-- Flow 3:

Average throughput: 21.72 Mbit/s

95th percentile per-packet one-way delay: 163.395 ms

Loss rate: 1.93%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-12-20 08:38:34

End at: 2018-12-20 08:39:04

Local clock offset: -6.72 ms

Remote clock offset: 4.475 ms

Below is generated by plot.py at 2018-12-20 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.99 Mbit/s

95th percentile per-packet one-way delay: 166.524 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 36.83 Mbit/s

95th percentile per-packet one-way delay: 171.932 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 22.92 Mbit/s

95th percentile per-packet one-way delay: 158.884 ms

Loss rate: 1.61%

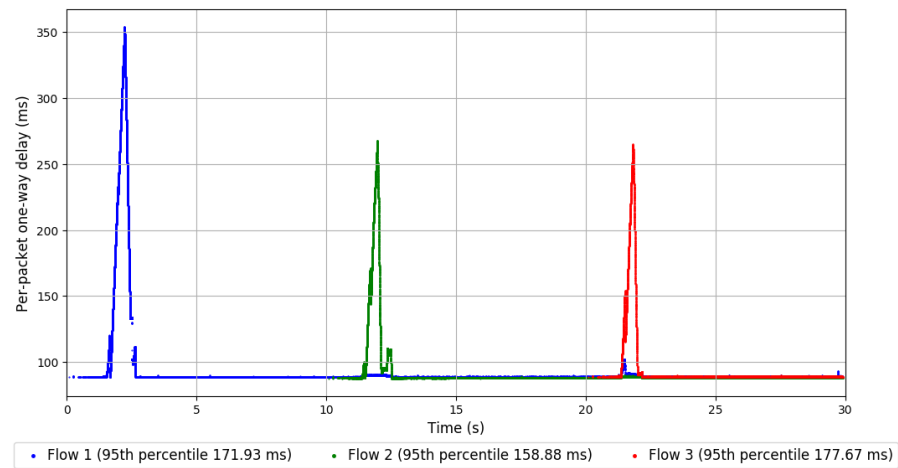
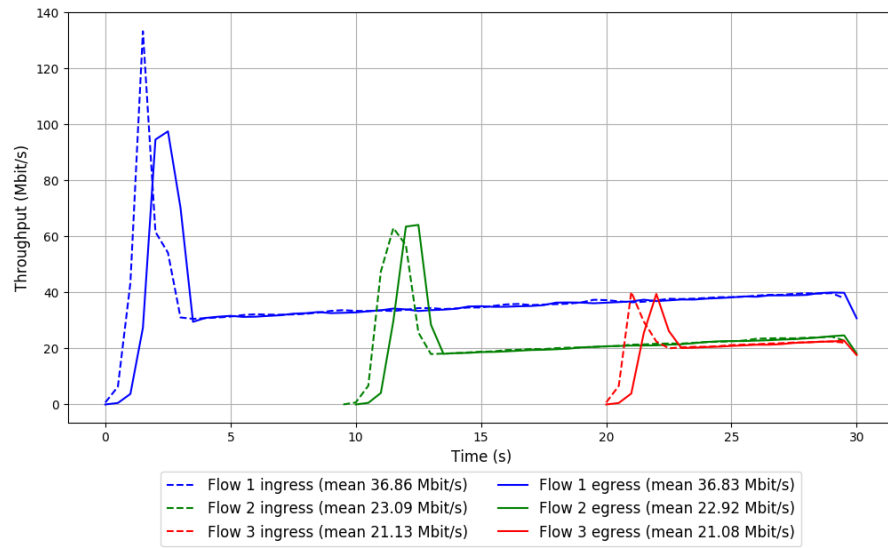
-- Flow 3:

Average throughput: 21.08 Mbit/s

95th percentile per-packet one-way delay: 177.671 ms

Loss rate: 1.95%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-12-20 09:02:59

End at: 2018-12-20 09:03:29

Local clock offset: -7.606 ms

Remote clock offset: 2.596 ms

Below is generated by plot.py at 2018-12-20 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.89 Mbit/s

95th percentile per-packet one-way delay: 187.655 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 29.48 Mbit/s

95th percentile per-packet one-way delay: 210.502 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 27.07 Mbit/s

95th percentile per-packet one-way delay: 168.629 ms

Loss rate: 0.69%

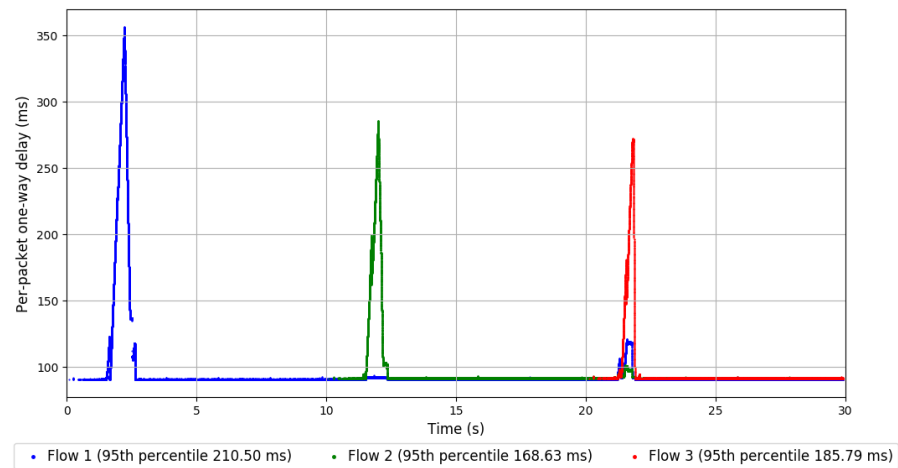
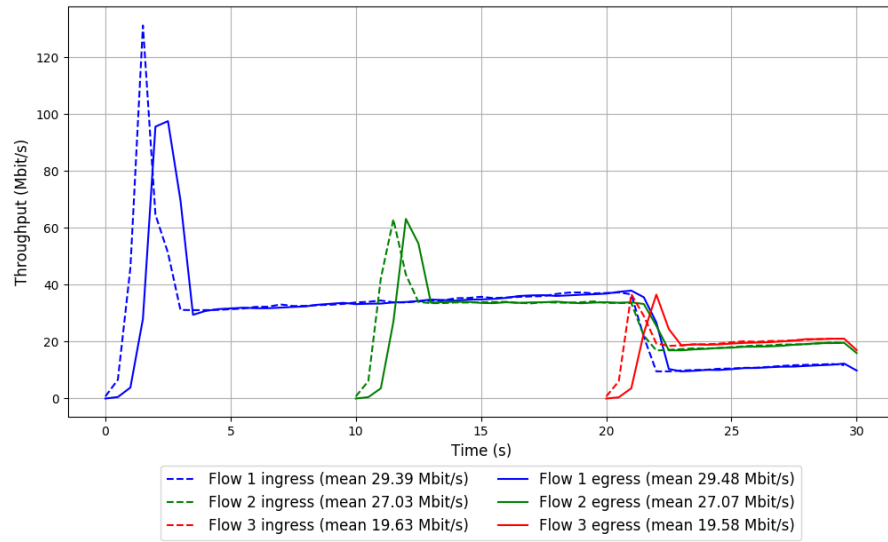
-- Flow 3:

Average throughput: 19.58 Mbit/s

95th percentile per-packet one-way delay: 185.794 ms

Loss rate: 1.94%

Run 3: Report of TCP Vegas — Data Link

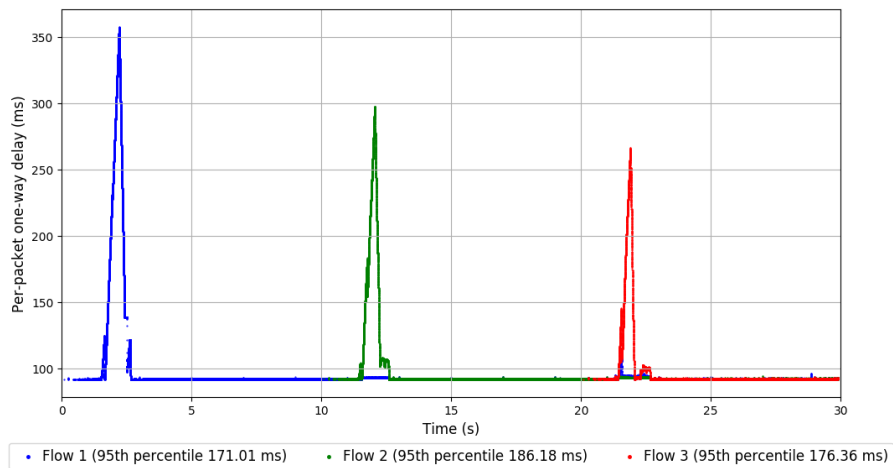
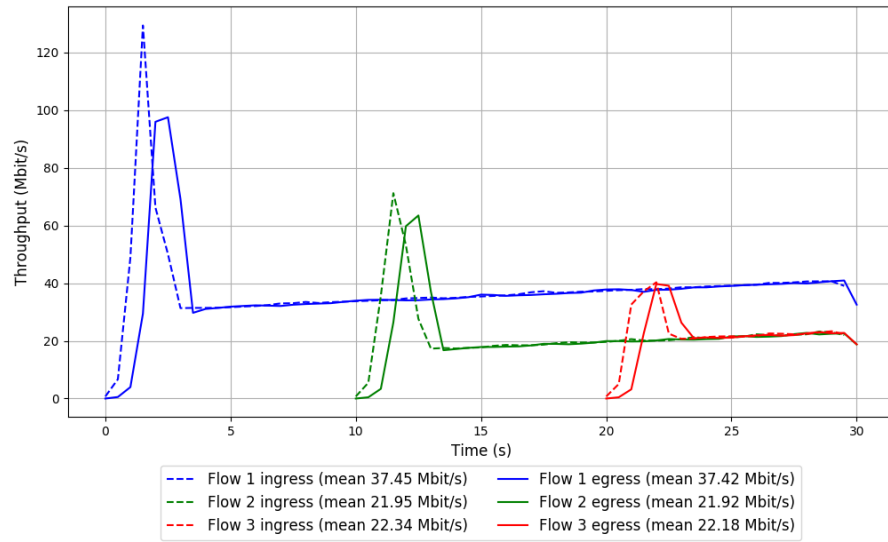


Run 4: Statistics of TCP Vegas

Start at: 2018-12-20 09:27:24
End at: 2018-12-20 09:27:54
Local clock offset: -6.98 ms
Remote clock offset: 5.8 ms

```
# Below is generated by plot.py at 2018-12-20 10:05:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.27 Mbit/s
95th percentile per-packet one-way delay: 177.757 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 37.42 Mbit/s
95th percentile per-packet one-way delay: 171.007 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 21.92 Mbit/s
95th percentile per-packet one-way delay: 186.184 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 22.18 Mbit/s
95th percentile per-packet one-way delay: 176.362 ms
Loss rate: 2.41%
```

Run 4: Report of TCP Vegas — Data Link

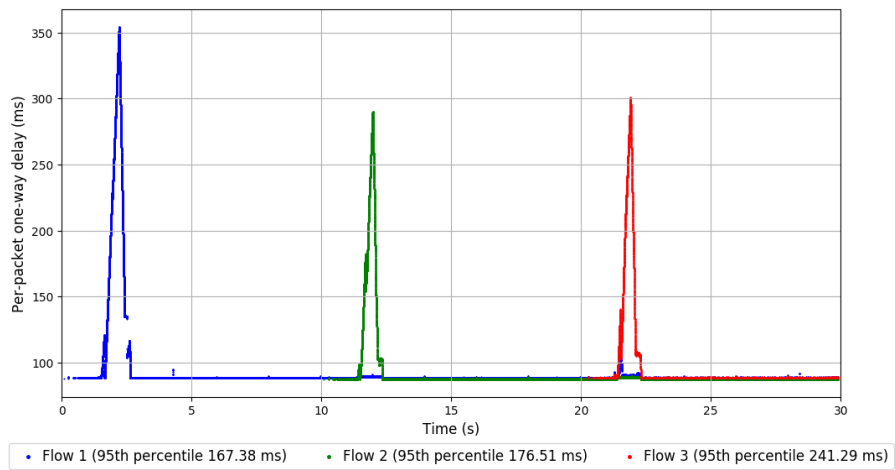
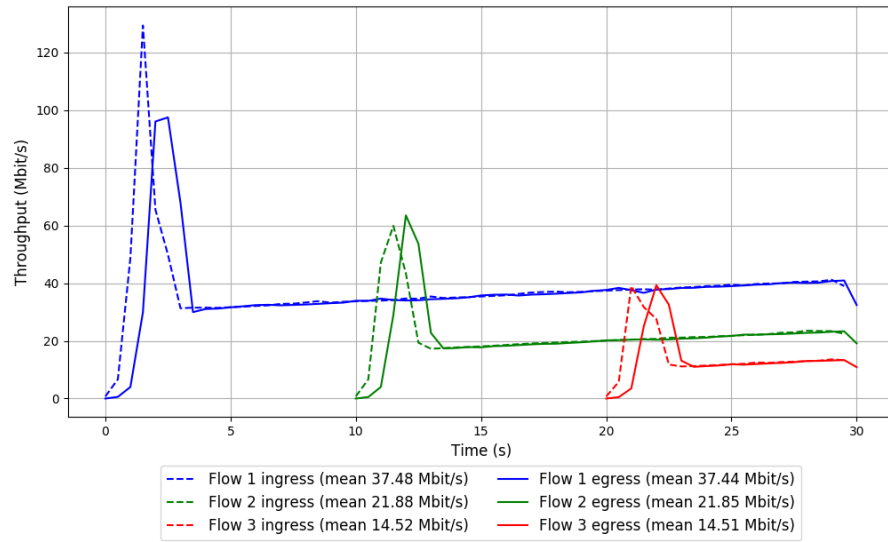


Run 5: Statistics of TCP Vegas

Start at: 2018-12-20 09:51:49
End at: 2018-12-20 09:52:19
Local clock offset: -0.928 ms
Remote clock offset: 11.685 ms

Below is generated by plot.py at 2018-12-20 10:05:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 56.72 Mbit/s
95th percentile per-packet one-way delay: 182.626 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 37.44 Mbit/s
95th percentile per-packet one-way delay: 167.377 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 21.85 Mbit/s
95th percentile per-packet one-way delay: 176.507 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 14.51 Mbit/s
95th percentile per-packet one-way delay: 241.289 ms
Loss rate: 1.82%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-12-20 07:55:46

End at: 2018-12-20 07:56:16

Local clock offset: -5.629 ms

Remote clock offset: 2.484 ms

Below is generated by plot.py at 2018-12-20 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.71 Mbit/s

95th percentile per-packet one-way delay: 273.039 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 40.24 Mbit/s

95th percentile per-packet one-way delay: 254.577 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 34.89 Mbit/s

95th percentile per-packet one-way delay: 283.776 ms

Loss rate: 1.76%

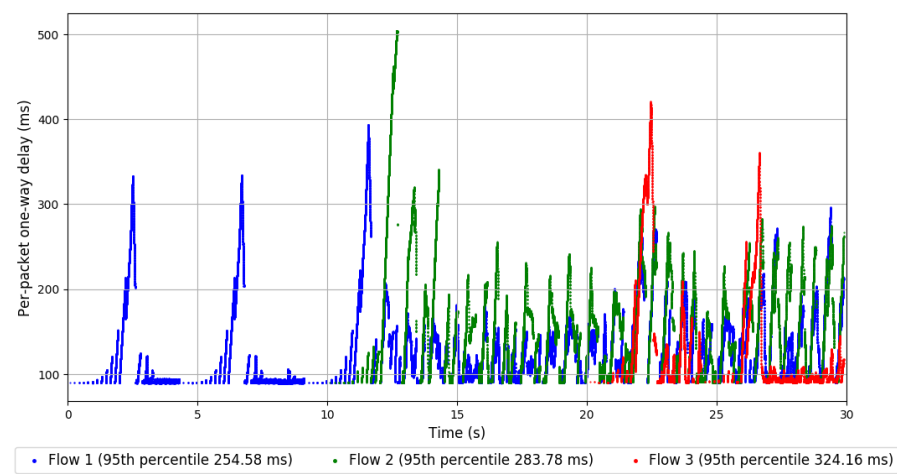
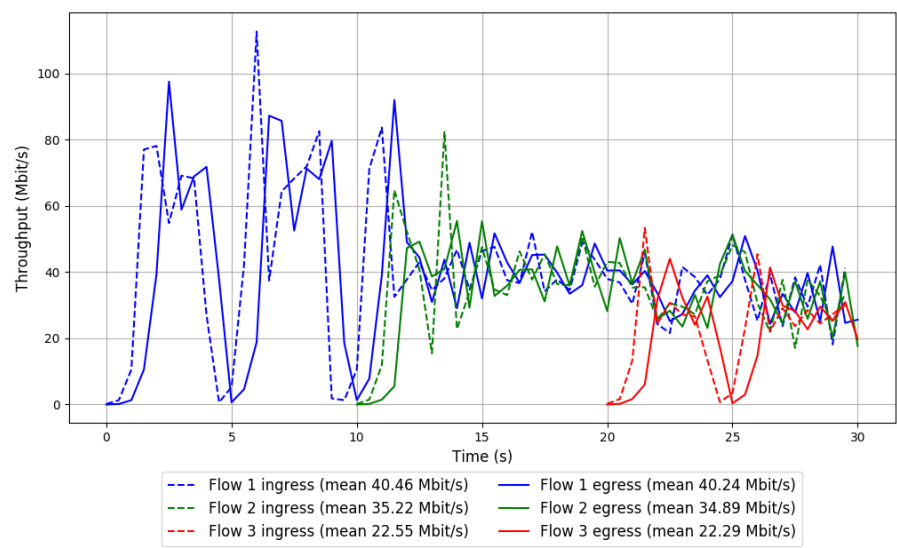
-- Flow 3:

Average throughput: 22.29 Mbit/s

95th percentile per-packet one-way delay: 324.161 ms

Loss rate: 2.83%

Run 1: Report of Verus — Data Link

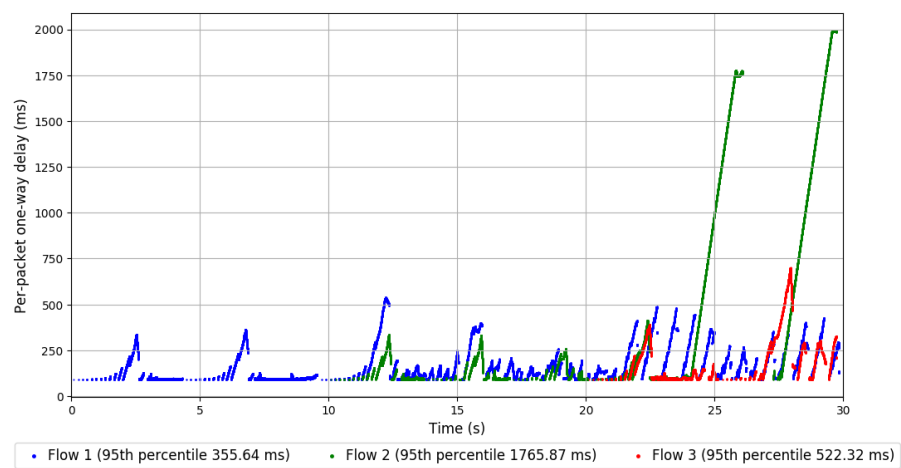
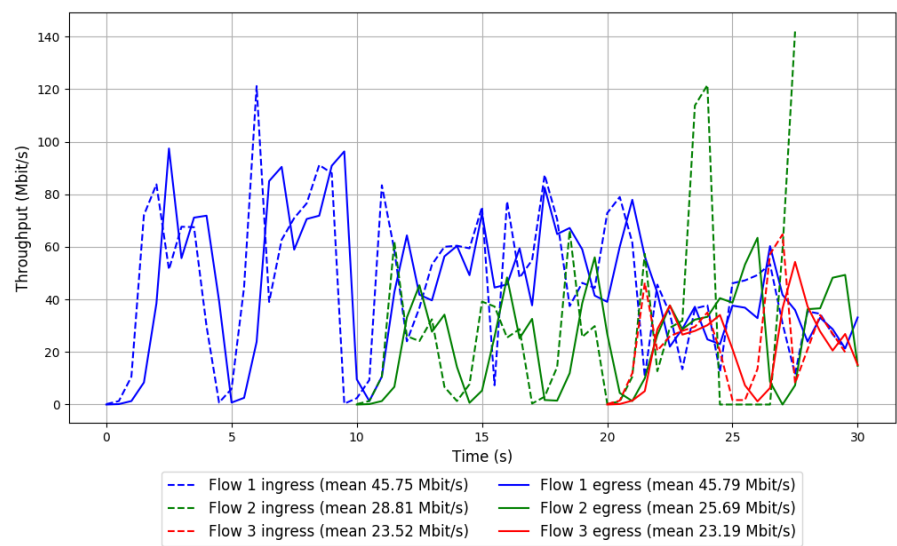


Run 2: Statistics of Verus

Start at: 2018-12-20 08:20:31
End at: 2018-12-20 08:21:01
Local clock offset: -5.593 ms
Remote clock offset: 0.845 ms

Below is generated by plot.py at 2018-12-20 10:06:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 70.26 Mbit/s
95th percentile per-packet one-way delay: 1125.271 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 45.79 Mbit/s
95th percentile per-packet one-way delay: 355.639 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 25.69 Mbit/s
95th percentile per-packet one-way delay: 1765.873 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 23.19 Mbit/s
95th percentile per-packet one-way delay: 522.317 ms
Loss rate: 4.70%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-12-20 08:44:59

End at: 2018-12-20 08:45:29

Local clock offset: -6.416 ms

Remote clock offset: 0.581 ms

Below is generated by plot.py at 2018-12-20 10:06:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.42 Mbit/s

95th percentile per-packet one-way delay: 273.134 ms

Loss rate: 2.28%

-- Flow 1:

Average throughput: 46.49 Mbit/s

95th percentile per-packet one-way delay: 275.128 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 22.33 Mbit/s

95th percentile per-packet one-way delay: 275.561 ms

Loss rate: 4.12%

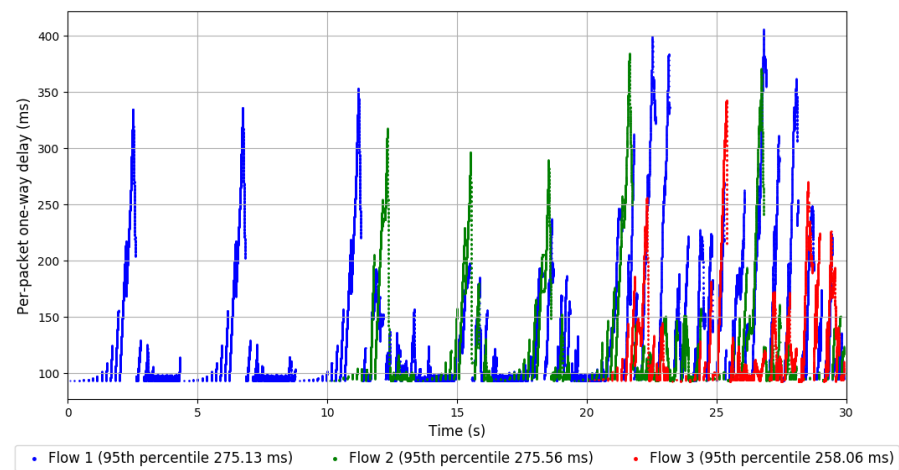
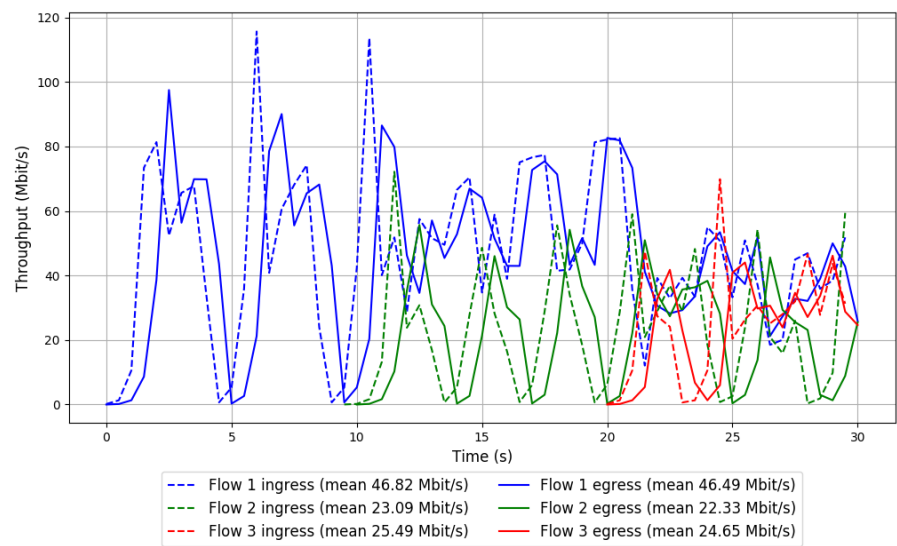
-- Flow 3:

Average throughput: 24.65 Mbit/s

95th percentile per-packet one-way delay: 258.056 ms

Loss rate: 4.46%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-12-20 09:09:24

End at: 2018-12-20 09:09:54

Local clock offset: -7.63 ms

Remote clock offset: 2.882 ms

Below is generated by plot.py at 2018-12-20 10:06:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.18 Mbit/s

95th percentile per-packet one-way delay: 395.887 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 39.81 Mbit/s

95th percentile per-packet one-way delay: 254.598 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 34.31 Mbit/s

95th percentile per-packet one-way delay: 257.566 ms

Loss rate: 1.16%

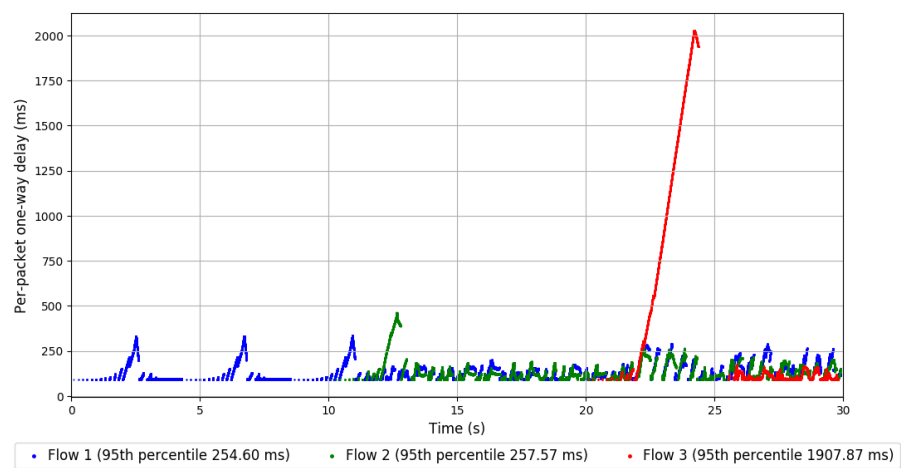
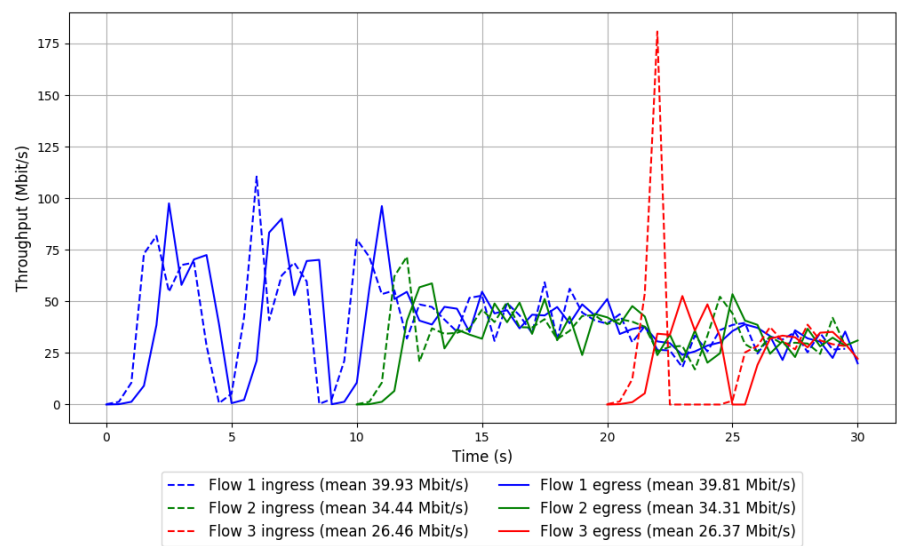
-- Flow 3:

Average throughput: 26.37 Mbit/s

95th percentile per-packet one-way delay: 1907.870 ms

Loss rate: 2.86%

Run 4: Report of Verus — Data Link

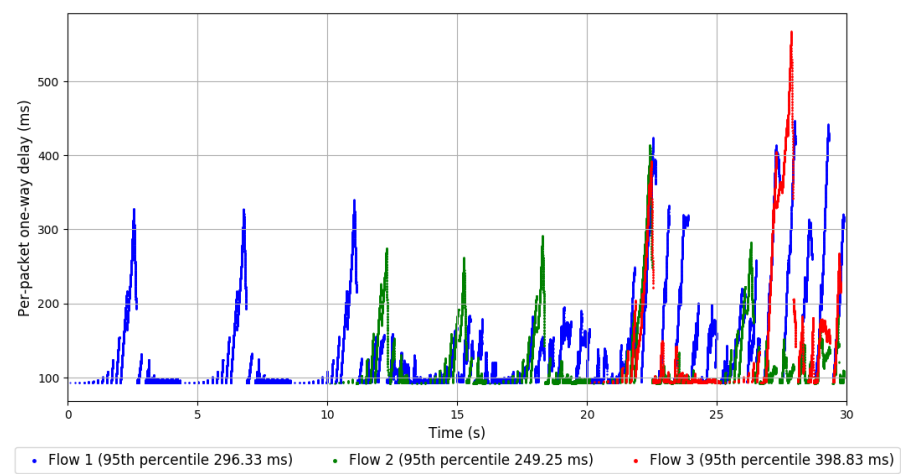
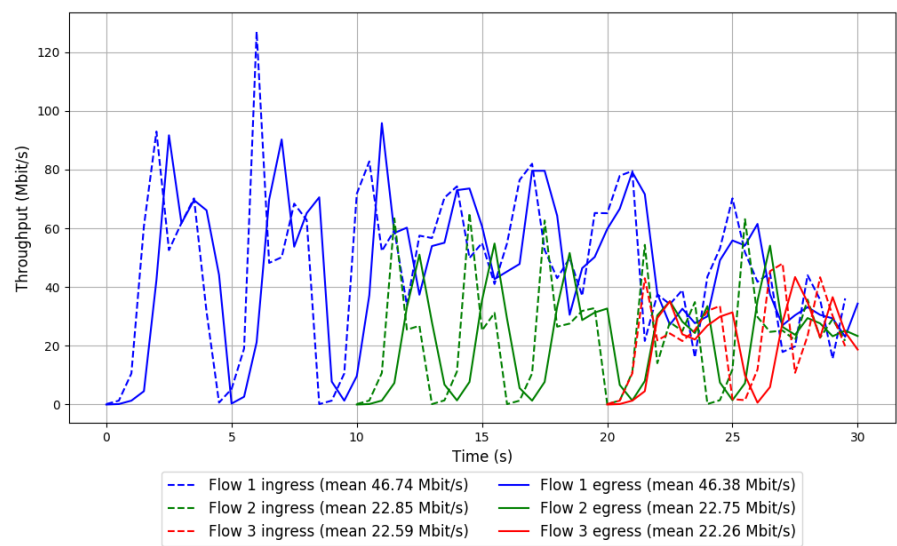


Run 5: Statistics of Verus

Start at: 2018-12-20 09:33:49
End at: 2018-12-20 09:34:19
Local clock offset: -7.869 ms
Remote clock offset: 5.354 ms

Below is generated by plot.py at 2018-12-20 10:06:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 68.71 Mbit/s
95th percentile per-packet one-way delay: 304.558 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 46.38 Mbit/s
95th percentile per-packet one-way delay: 296.334 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 22.75 Mbit/s
95th percentile per-packet one-way delay: 249.254 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 22.26 Mbit/s
95th percentile per-packet one-way delay: 398.829 ms
Loss rate: 4.29%

Run 5: Report of Verus — Data Link

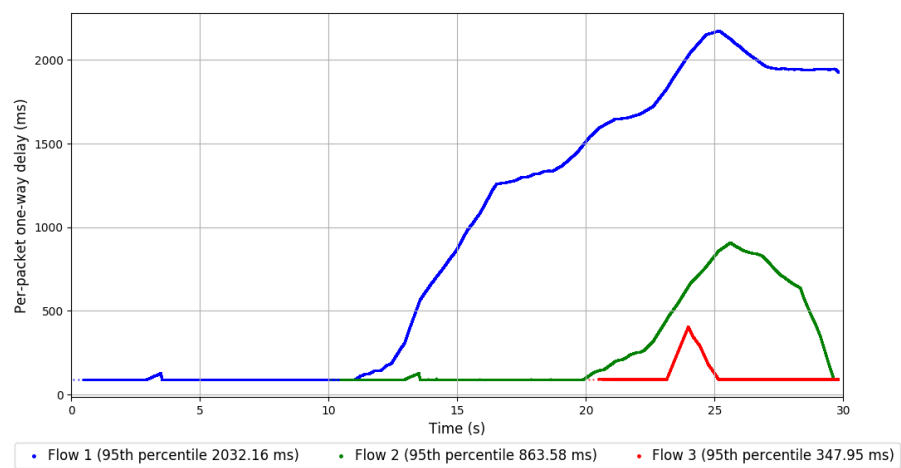
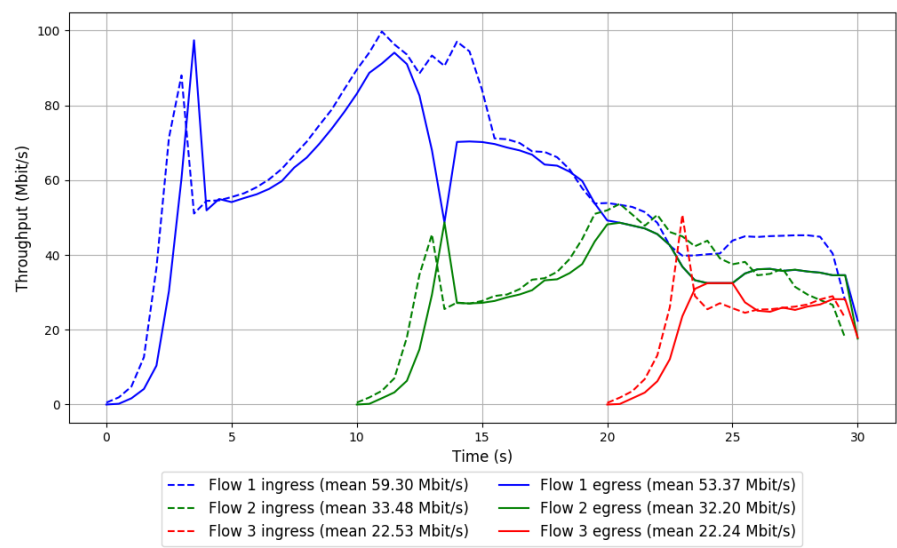


Run 1: Statistics of PCC-Vivace

Start at: 2018-12-20 07:51:51
End at: 2018-12-20 07:52:21
Local clock offset: -5.722 ms
Remote clock offset: -0.532 ms

Below is generated by plot.py at 2018-12-20 10:06:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.98 Mbit/s
95th percentile per-packet one-way delay: 1951.397 ms
Loss rate: 8.41%
-- Flow 1:
Average throughput: 53.37 Mbit/s
95th percentile per-packet one-way delay: 2032.158 ms
Loss rate: 10.51%
-- Flow 2:
Average throughput: 32.20 Mbit/s
95th percentile per-packet one-way delay: 863.575 ms
Loss rate: 4.62%
-- Flow 3:
Average throughput: 22.24 Mbit/s
95th percentile per-packet one-way delay: 347.951 ms
Loss rate: 3.01%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-12-20 08:16:21

End at: 2018-12-20 08:16:51

Local clock offset: -6.336 ms

Remote clock offset: 3.414 ms

Below is generated by plot.py at 2018-12-20 10:06:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.92 Mbit/s

95th percentile per-packet one-way delay: 1956.747 ms

Loss rate: 4.59%

-- Flow 1:

Average throughput: 51.88 Mbit/s

95th percentile per-packet one-way delay: 2053.879 ms

Loss rate: 5.43%

-- Flow 2:

Average throughput: 29.78 Mbit/s

95th percentile per-packet one-way delay: 546.127 ms

Loss rate: 2.95%

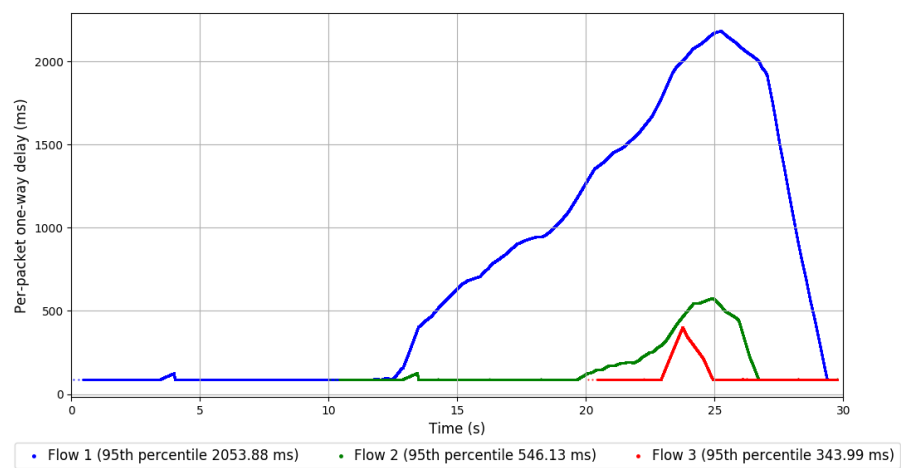
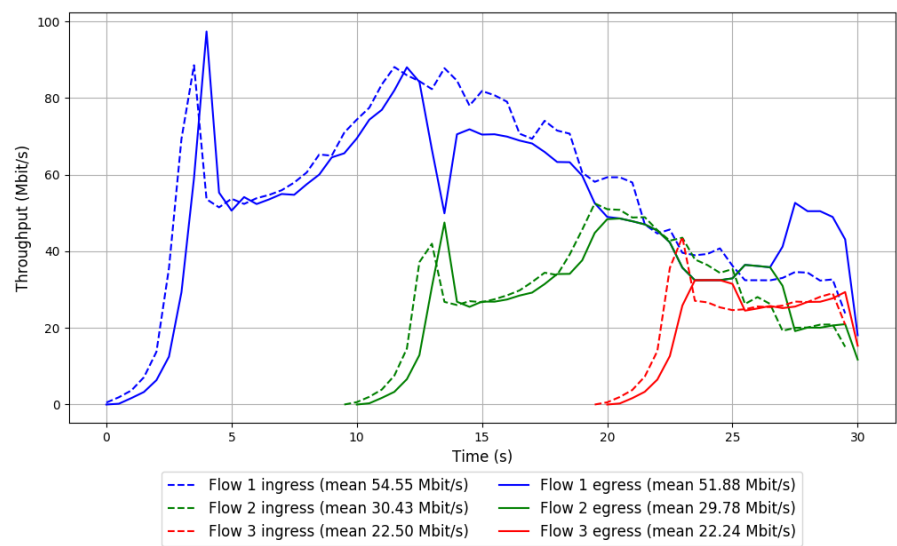
-- Flow 3:

Average throughput: 22.24 Mbit/s

95th percentile per-packet one-way delay: 343.985 ms

Loss rate: 2.90%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-12-20 08:41:04

End at: 2018-12-20 08:41:34

Local clock offset: -6.912 ms

Remote clock offset: 4.424 ms

Below is generated by plot.py at 2018-12-20 10:06:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.61 Mbit/s

95th percentile per-packet one-way delay: 1974.859 ms

Loss rate: 5.82%

-- Flow 1:

Average throughput: 49.63 Mbit/s

95th percentile per-packet one-way delay: 548.925 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 32.73 Mbit/s

95th percentile per-packet one-way delay: 2190.005 ms

Loss rate: 14.90%

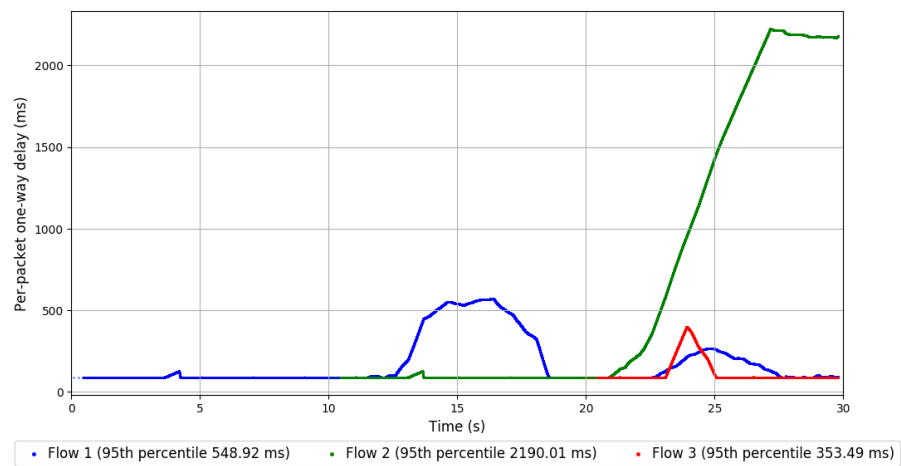
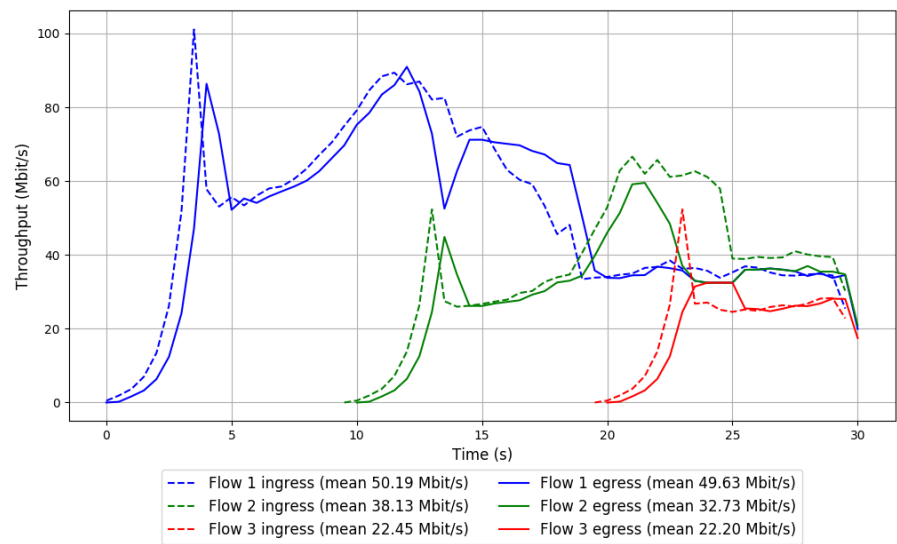
-- Flow 3:

Average throughput: 22.20 Mbit/s

95th percentile per-packet one-way delay: 353.488 ms

Loss rate: 2.86%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-12-20 09:05:29

End at: 2018-12-20 09:05:59

Local clock offset: -6.882 ms

Remote clock offset: 1.563 ms

Below is generated by plot.py at 2018-12-20 10:06:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.42 Mbit/s

95th percentile per-packet one-way delay: 1985.490 ms

Loss rate: 8.31%

-- Flow 1:

Average throughput: 49.93 Mbit/s

95th percentile per-packet one-way delay: 2067.375 ms

Loss rate: 10.48%

-- Flow 2:

Average throughput: 31.94 Mbit/s

95th percentile per-packet one-way delay: 848.295 ms

Loss rate: 4.63%

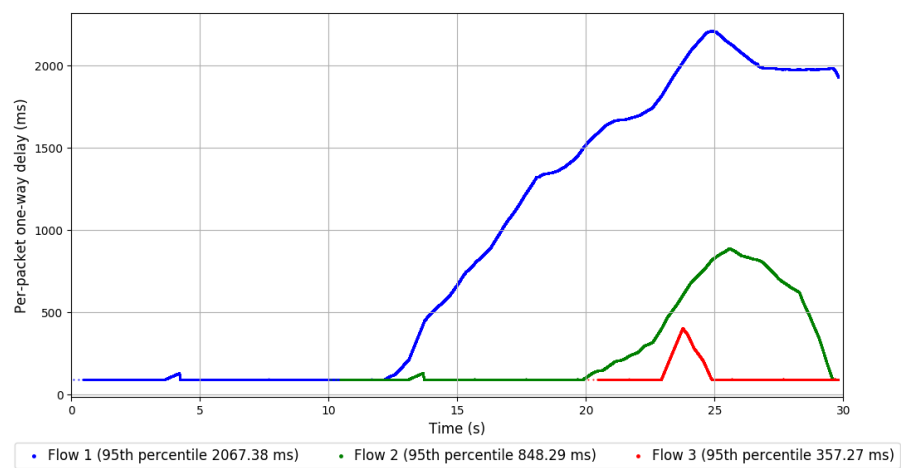
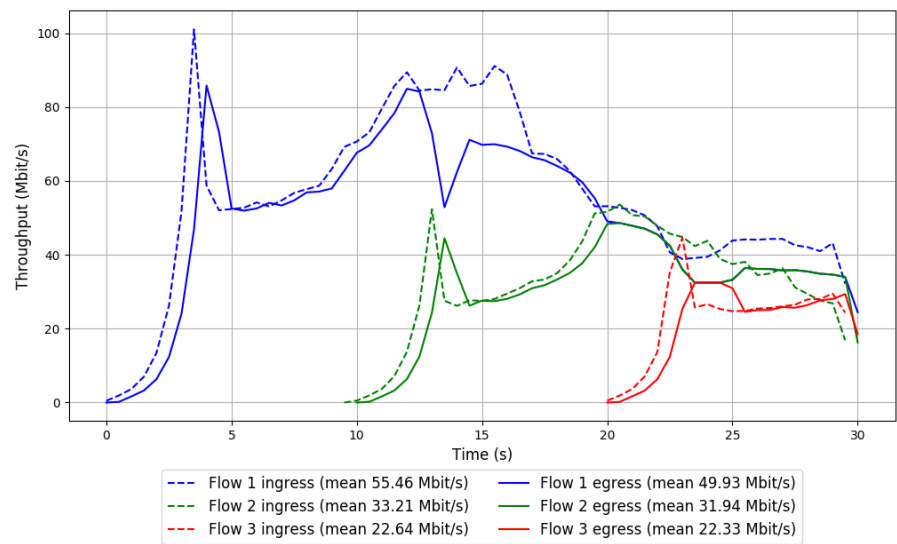
-- Flow 3:

Average throughput: 22.33 Mbit/s

95th percentile per-packet one-way delay: 357.267 ms

Loss rate: 3.06%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-12-20 09:29:55

End at: 2018-12-20 09:30:25

Local clock offset: -7.751 ms

Remote clock offset: 5.861 ms

Below is generated by plot.py at 2018-12-20 10:06:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.78 Mbit/s

95th percentile per-packet one-way delay: 736.854 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 50.90 Mbit/s

95th percentile per-packet one-way delay: 731.856 ms

Loss rate: 2.65%

-- Flow 2:

Average throughput: 32.02 Mbit/s

95th percentile per-packet one-way delay: 794.588 ms

Loss rate: 3.96%

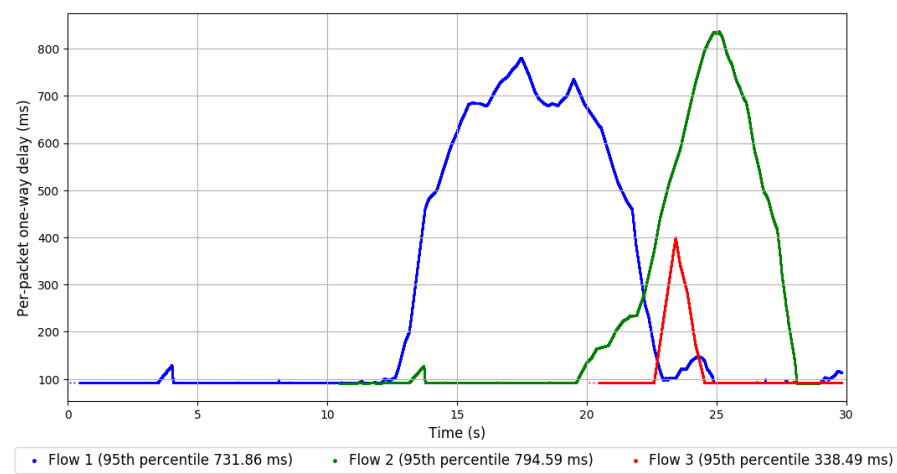
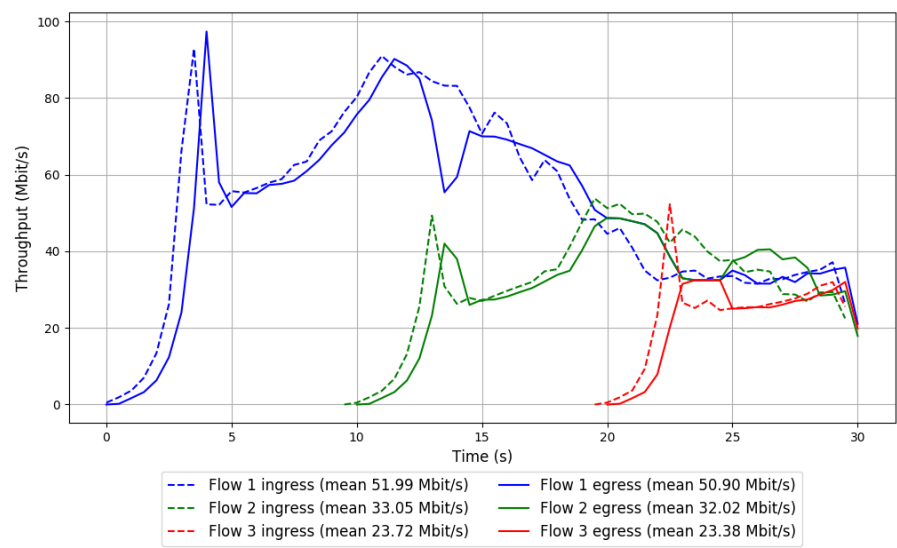
-- Flow 3:

Average throughput: 23.38 Mbit/s

95th percentile per-packet one-way delay: 338.491 ms

Loss rate: 3.16%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-12-20 08:11:14

End at: 2018-12-20 08:11:44

Local clock offset: -5.565 ms

Remote clock offset: 4.392 ms

Below is generated by plot.py at 2018-12-20 10:06:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 88.737 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 88.699 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 88.815 ms

Loss rate: 0.39%

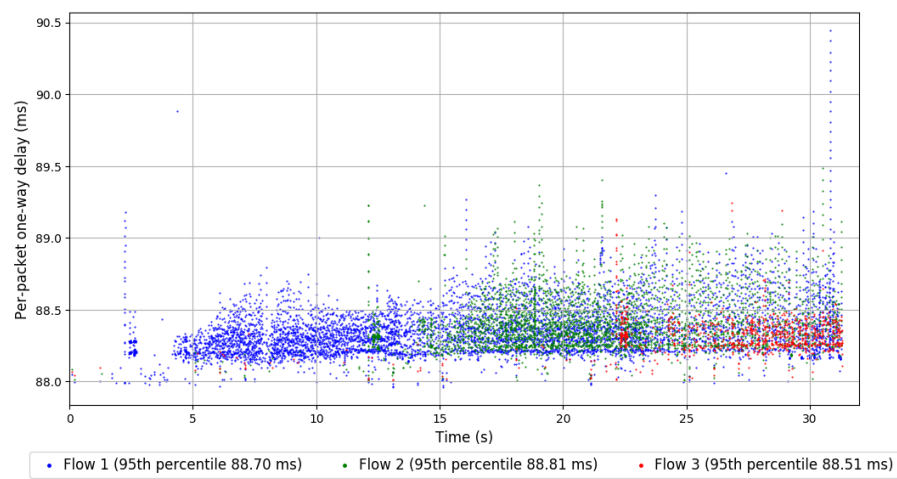
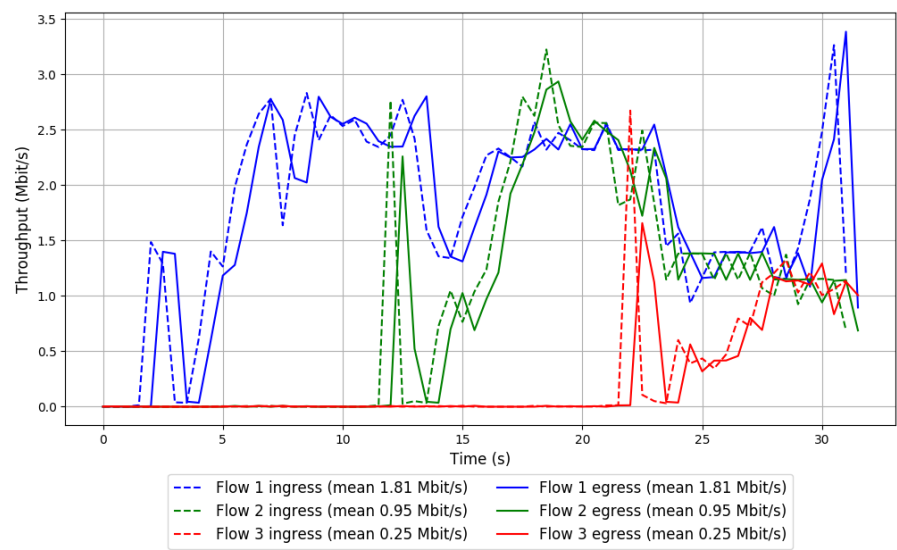
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 88.511 ms

Loss rate: 2.54%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-12-20 08:36:02

End at: 2018-12-20 08:36:32

Local clock offset: -6.566 ms

Remote clock offset: 5.78 ms

Below is generated by plot.py at 2018-12-20 10:06:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 87.182 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 87.057 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 0.90 Mbit/s

95th percentile per-packet one-way delay: 87.276 ms

Loss rate: 1.10%

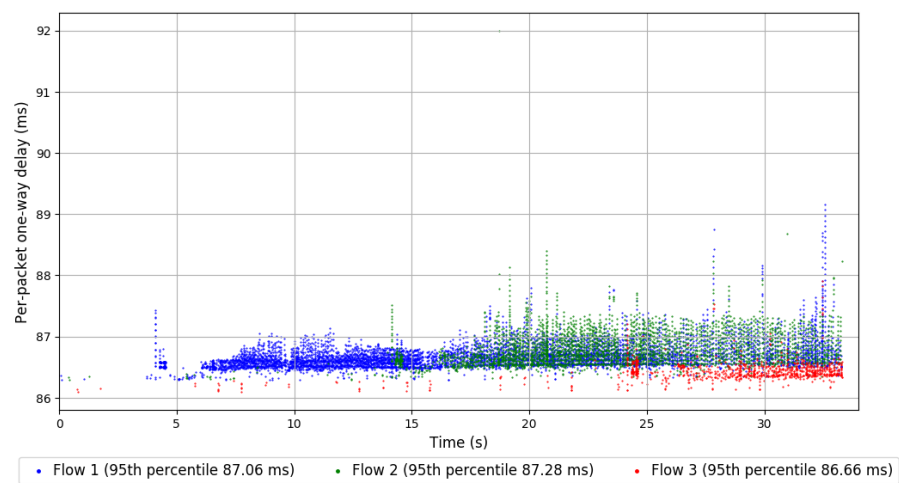
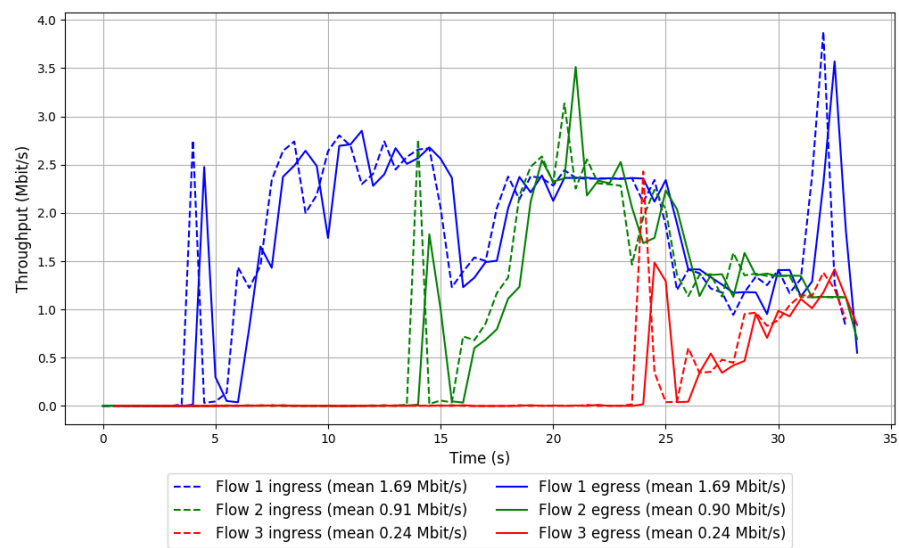
-- Flow 3:

Average throughput: 0.24 Mbit/s

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

Loss rate: 2.01%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-12-20 09:00:28

End at: 2018-12-20 09:00:58

Local clock offset: -7.571 ms

Remote clock offset: 5.246 ms

Below is generated by plot.py at 2018-12-20 10:06:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.86 Mbit/s

95th percentile per-packet one-way delay: 89.113 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 88.401 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 0.94 Mbit/s

95th percentile per-packet one-way delay: 89.291 ms

Loss rate: 0.75%

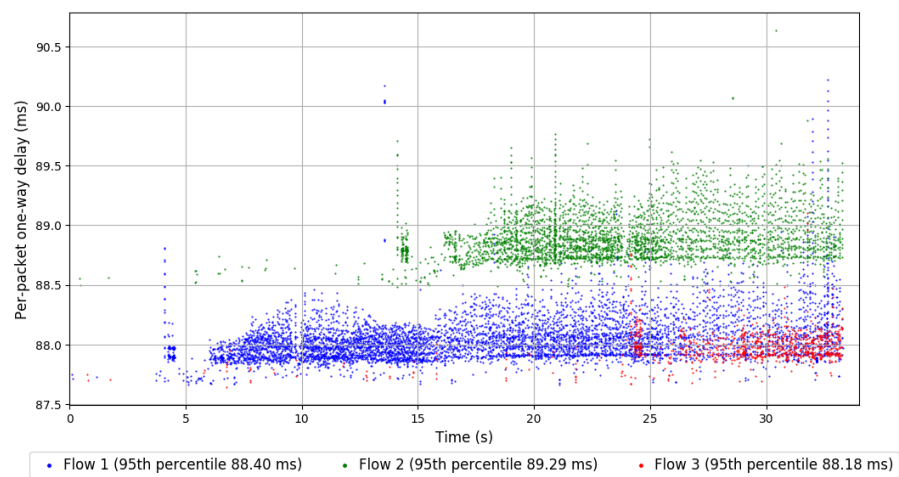
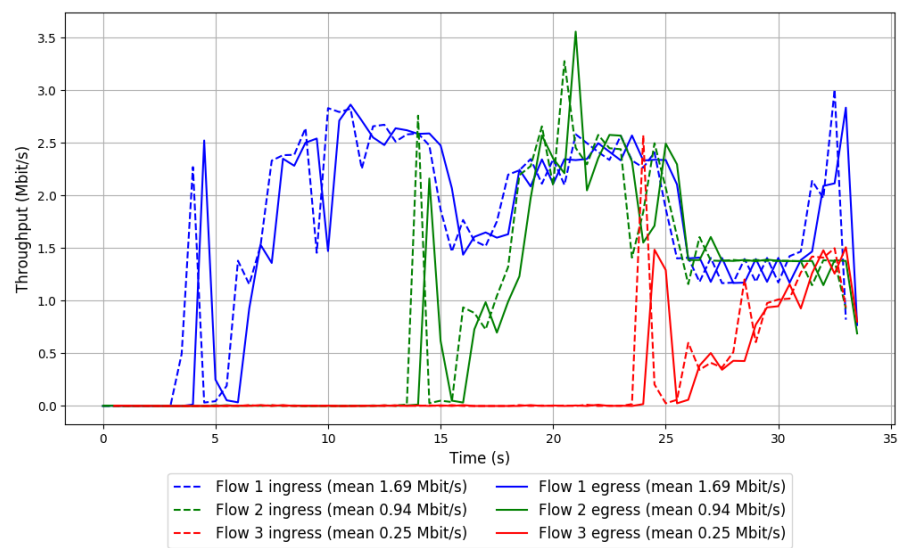
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 88.177 ms

Loss rate: 2.69%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-12-20 09:24:53

End at: 2018-12-20 09:25:23

Local clock offset: -7.709 ms

Remote clock offset: 4.512 ms

Below is generated by plot.py at 2018-12-20 10:06:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 92.910 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 92.346 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 93.106 ms

Loss rate: 0.75%

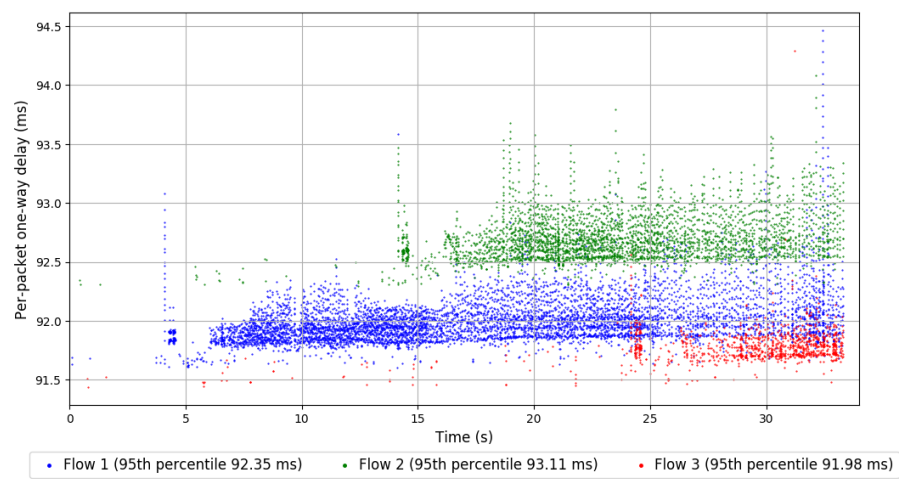
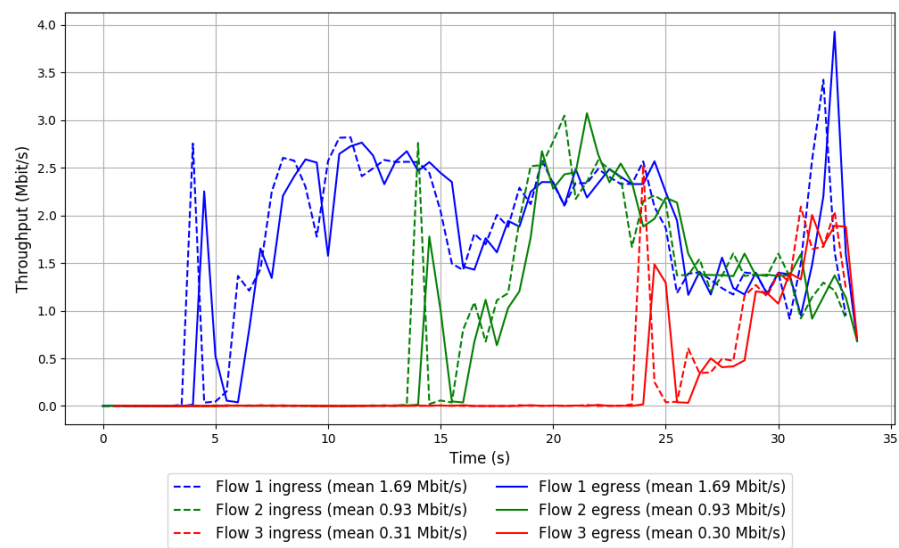
-- Flow 3:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 91.984 ms

Loss rate: 3.64%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-12-20 09:49:18
End at: 2018-12-20 09:49:48
Local clock offset: -2.155 ms
Remote clock offset: 12.685 ms

Below is generated by plot.py at 2018-12-20 10:06:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 86.783 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 86.741 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 86.865 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 86.303 ms
Loss rate: 1.82%

Run 5: Report of WebRTC media — Data Link

