

Pantheon Report

Generated at 2019-01-25 23:09:58 (UTC).

Data path: GCE Sydney on **ens4** (*local*) → GCE Tokyo on **ens4** (*remote*).

Repeated the test of 21 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 `time.google.com` and have been applied to correct the timestamps in logs.

System info:

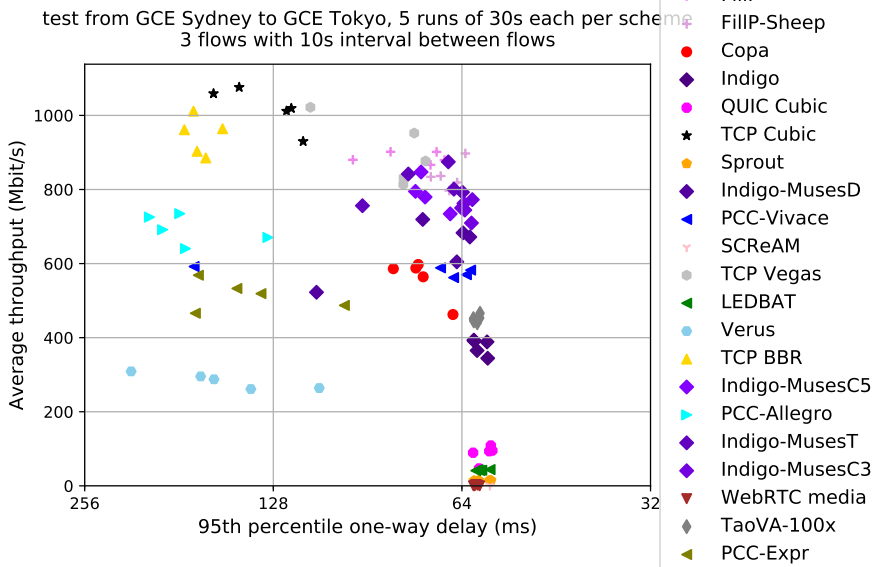
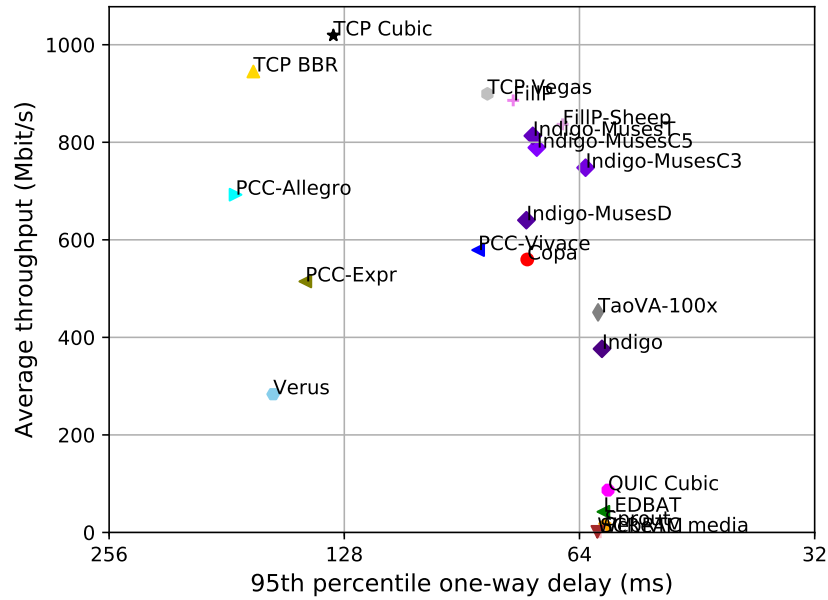
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d
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 GCE Sydney to GCE Tokyo, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



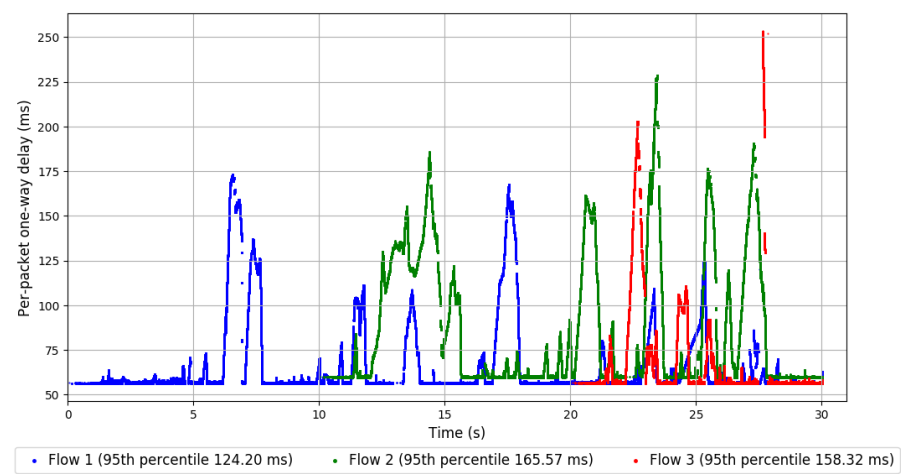
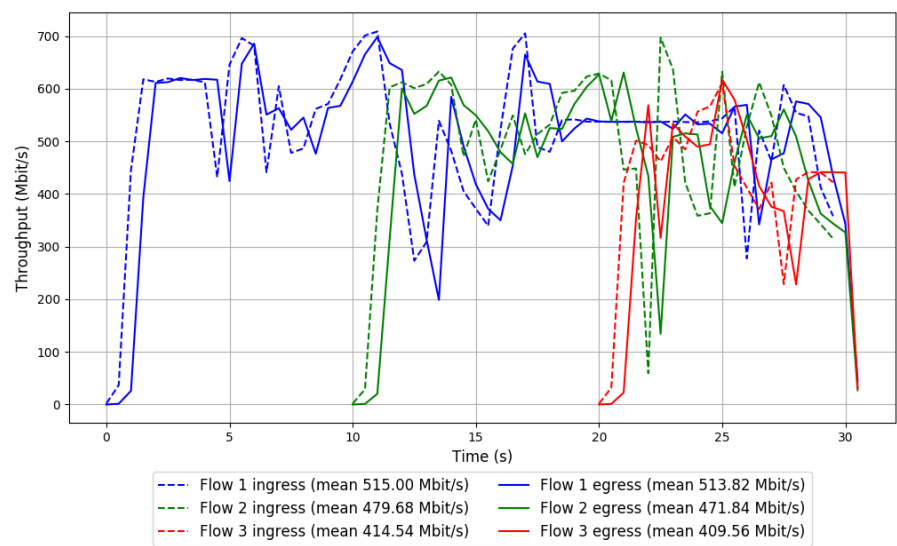
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	488.99	466.77	437.41	162.14	160.55	166.41	0.82	1.15	1.41
Copa	5	294.78	269.37	256.35	72.55	74.70	79.26	0.01	0.05	0.02
TCP Cubic	5	550.54	482.82	442.12	117.51	109.59	123.66	0.06	0.18	0.51
FillP	5	565.09	347.13	271.54	83.17	63.31	61.85	0.11	0.00	0.02
FillP-Sheep	5	538.94	322.97	250.76	70.26	62.92	60.64	0.00	0.02	0.00
Indigo	5	201.17	184.47	164.38	58.09	60.46	59.42	0.00	0.01	0.01
Indigo-MusesC3	5	438.73	366.26	269.22	62.00	62.15	60.06	0.00	0.01	0.02
Indigo-MusesC5	4	484.39	401.23	180.78	72.88	71.54	62.48	0.01	0.02	0.06
Indigo-MusesD	5	457.03	281.52	12.72	76.32	61.40	58.42	0.00	0.00	0.02
Indigo-MusesT	5	481.56	393.45	289.47	78.35	67.39	63.24	0.00	0.02	0.05
LEDBAT	5	27.37	18.13	9.19	58.17	59.28	58.85	0.00	0.00	0.00
PCC-Allegro	5	382.00	352.20	231.35	179.97	135.87	116.52	3.30	1.71	0.47
PCC-Expr	5	293.11	242.29	182.53	141.82	107.26	101.43	1.06	0.31	1.96
QUIC Cubic	5	39.89	47.30	47.29	58.61	57.18	59.28	0.00	0.00	0.01
SCReAM	5	0.22	0.22	0.22	59.52	58.11	58.19	0.00	0.00	0.00
Sprout	5	7.49	7.58	6.66	58.66	58.08	58.10	0.00	0.00	0.00
TaoVA-100x	5	230.37	225.66	212.57	59.72	58.32	59.66	0.00	0.00	0.01
TCP Vegas	5	470.68	458.45	371.92	79.94	75.81	77.79	0.01	0.05	0.20
Verus	5	154.39	151.18	87.60	115.92	156.18	98.89	0.05	1.94	0.71
PCC-Vivace	5	332.35	293.72	155.64	63.24	97.22	60.89	0.00	0.18	0.00
WebRTC media	5	0.44	0.60	0.25	60.01	57.21	59.47	0.02	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-01-25 16:44:26
End at: 2019-01-25 16:44:56
Local clock offset: -0.107 ms
Remote clock offset: -0.627 ms

Below is generated by plot.py at 2019-01-25 20:33:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 964.09 Mbit/s
95th percentile per-packet one-way delay: 154.230 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 513.82 Mbit/s
95th percentile per-packet one-way delay: 124.204 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 471.84 Mbit/s
95th percentile per-packet one-way delay: 165.575 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 409.56 Mbit/s
95th percentile per-packet one-way delay: 158.324 ms
Loss rate: 1.20%

Run 1: Report of TCP BBR — Data Link

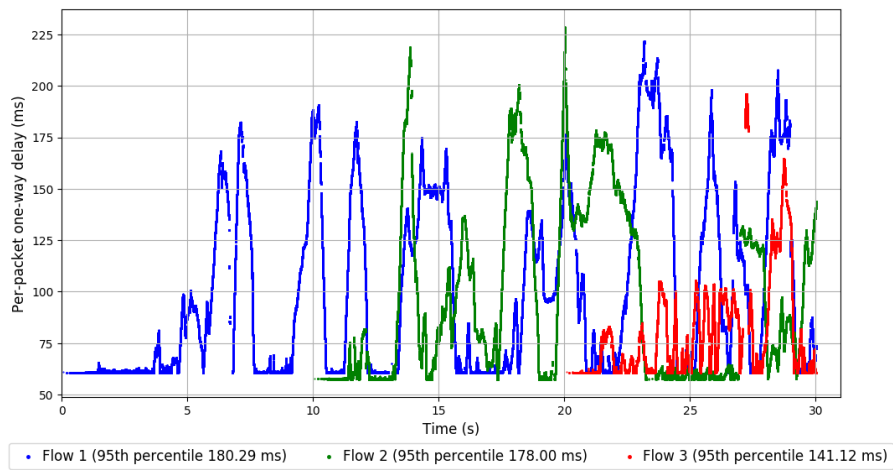
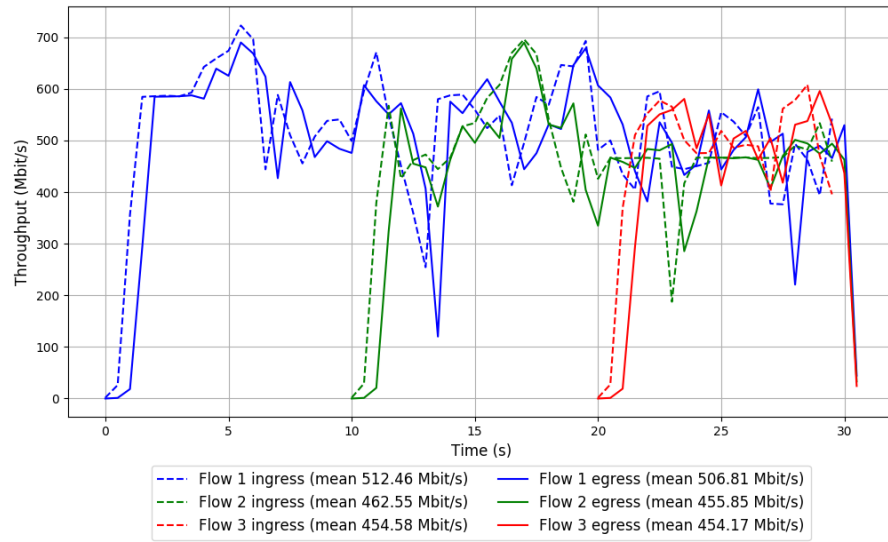


Run 2: Statistics of TCP BBR

Start at: 2019-01-25 17:23:53
End at: 2019-01-25 17:24:23
Local clock offset: -0.384 ms
Remote clock offset: -0.076 ms

Below is generated by plot.py at 2019-01-25 20:33:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 961.35 Mbit/s
95th percentile per-packet one-way delay: 177.471 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 506.81 Mbit/s
95th percentile per-packet one-way delay: 180.293 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 455.85 Mbit/s
95th percentile per-packet one-way delay: 177.998 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 454.17 Mbit/s
95th percentile per-packet one-way delay: 141.125 ms
Loss rate: 0.11%

Run 2: Report of TCP BBR — Data Link

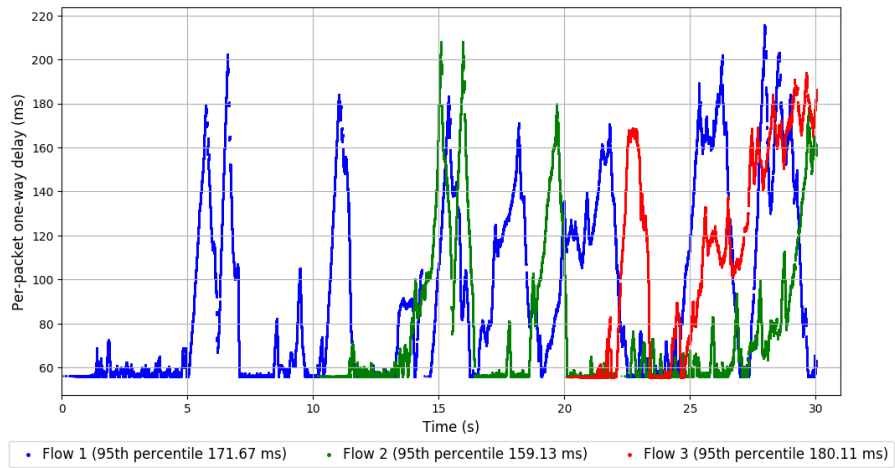
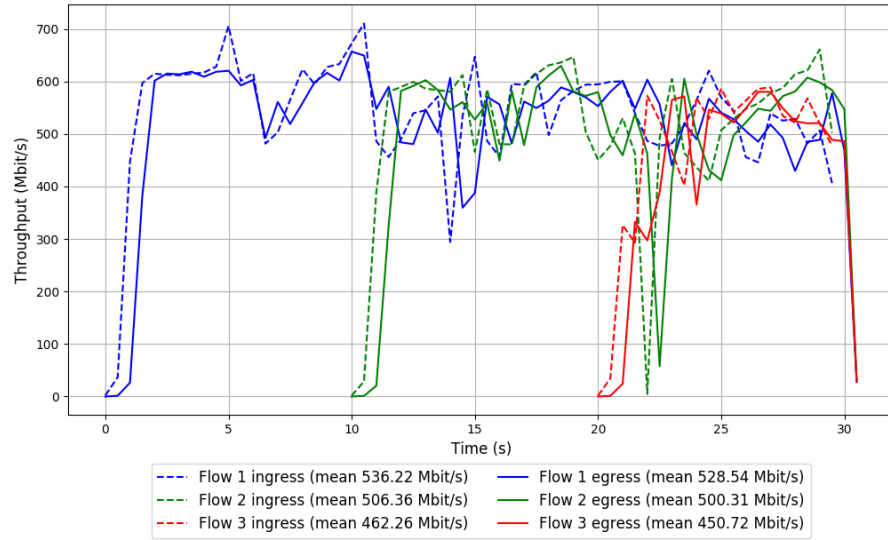


Run 3: Statistics of TCP BBR

Start at: 2019-01-25 18:05:25
End at: 2019-01-25 18:05:55
Local clock offset: 0.294 ms
Remote clock offset: -0.739 ms

Below is generated by plot.py at 2019-01-25 20:34:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 1011.54 Mbit/s
95th percentile per-packet one-way delay: 171.638 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 528.54 Mbit/s
95th percentile per-packet one-way delay: 171.668 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 500.31 Mbit/s
95th percentile per-packet one-way delay: 159.131 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 450.72 Mbit/s
95th percentile per-packet one-way delay: 180.107 ms
Loss rate: 2.47%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-01-25 18:48:09

End at: 2019-01-25 18:48:39

Local clock offset: -0.058 ms

Remote clock offset: 0.0 ms

Below is generated by plot.py at 2019-01-25 20:34:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 885.27 Mbit/s

95th percentile per-packet one-way delay: 164.040 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 462.02 Mbit/s

95th percentile per-packet one-way delay: 169.213 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 410.63 Mbit/s

95th percentile per-packet one-way delay: 124.596 ms

Loss rate: 0.02%

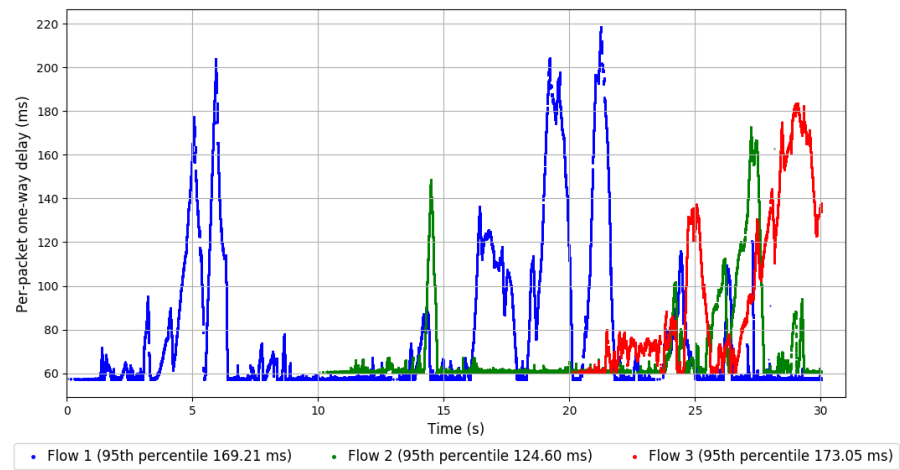
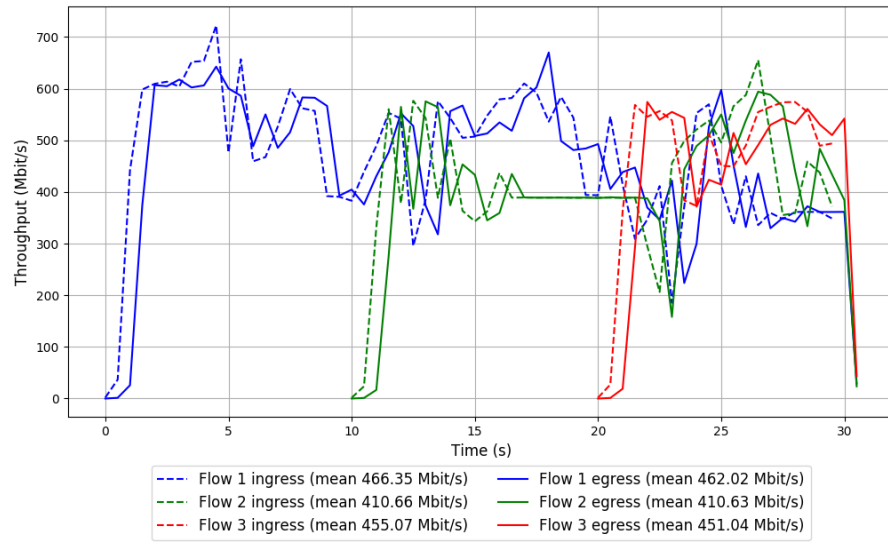
-- Flow 3:

Average throughput: 451.04 Mbit/s

95th percentile per-packet one-way delay: 173.053 ms

Loss rate: 0.91%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2019-01-25 19:29:31

End at: 2019-01-25 19:30:01

Local clock offset: -0.33 ms

Remote clock offset: -0.49 ms

Below is generated by plot.py at 2019-01-25 20:34:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 903.24 Mbit/s

95th percentile per-packet one-way delay: 169.358 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 433.75 Mbit/s

95th percentile per-packet one-way delay: 165.345 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 495.20 Mbit/s

95th percentile per-packet one-way delay: 175.452 ms

Loss rate: 1.44%

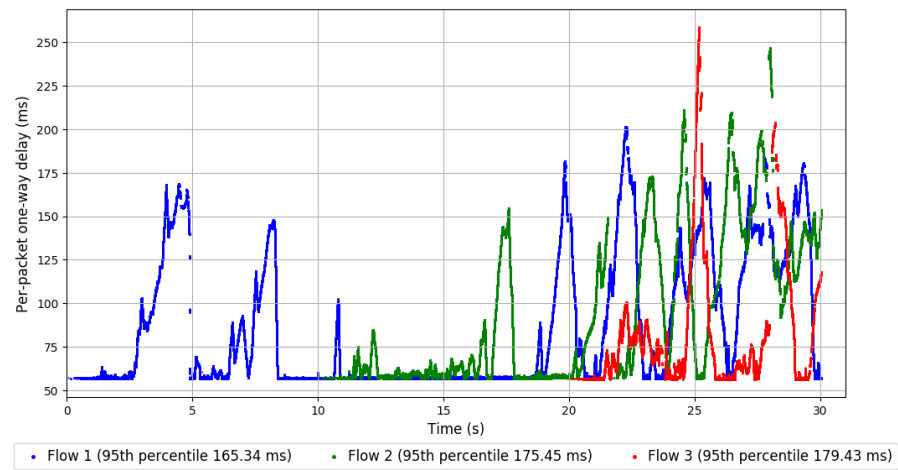
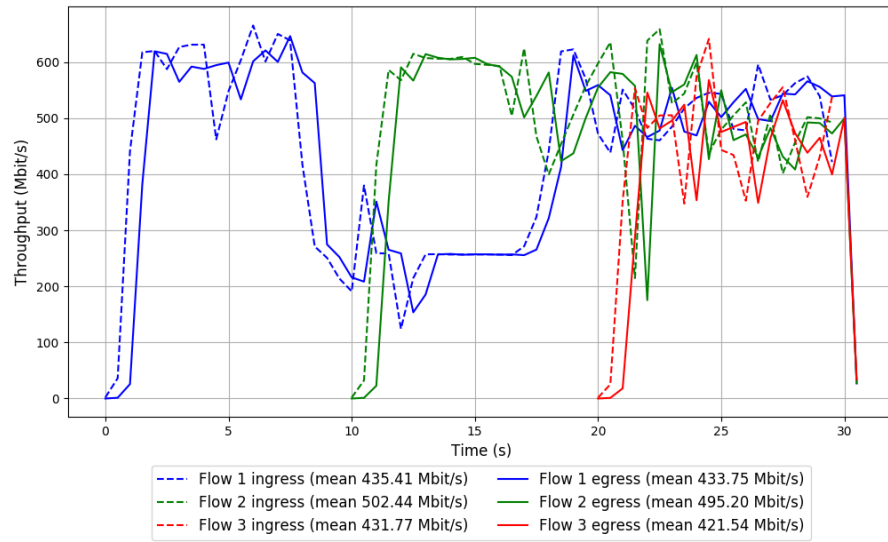
-- Flow 3:

Average throughput: 421.54 Mbit/s

95th percentile per-packet one-way delay: 179.430 ms

Loss rate: 2.35%

Run 5: Report of TCP BBR — Data Link

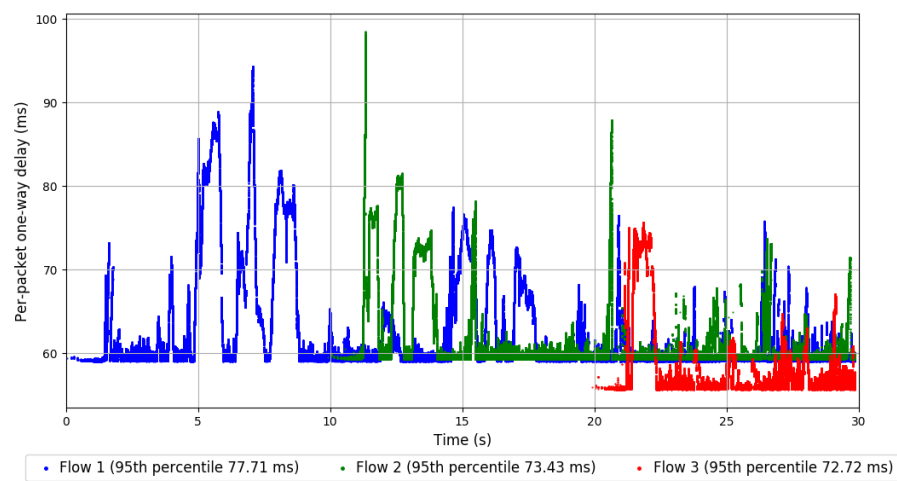
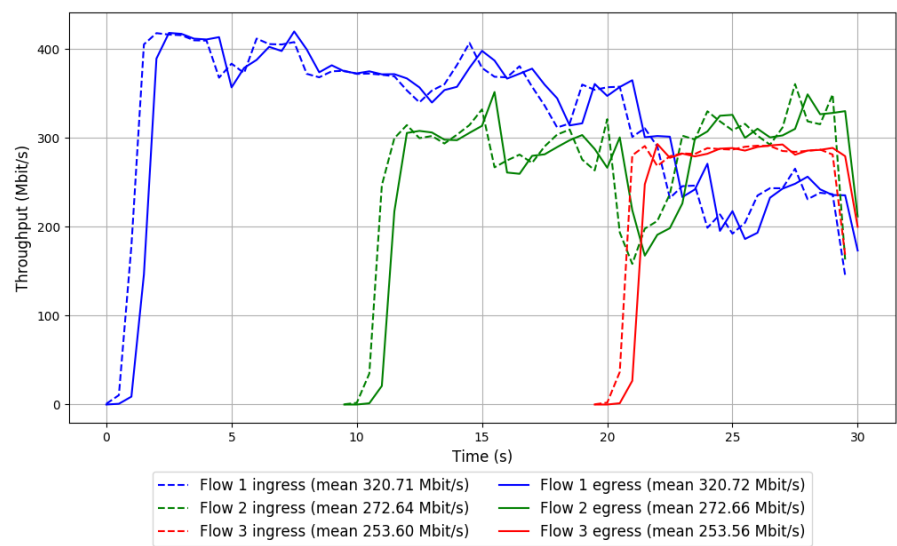


Run 1: Statistics of Copa

Start at: 2019-01-25 16:29:13
End at: 2019-01-25 16:29:43
Local clock offset: -0.141 ms
Remote clock offset: -1.416 ms

Below is generated by plot.py at 2019-01-25 20:35:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 587.98 Mbit/s
95th percentile per-packet one-way delay: 75.801 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 320.72 Mbit/s
95th percentile per-packet one-way delay: 77.714 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 272.66 Mbit/s
95th percentile per-packet one-way delay: 73.426 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 253.56 Mbit/s
95th percentile per-packet one-way delay: 72.720 ms
Loss rate: 0.01%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-01-25 17:08:03

End at: 2019-01-25 17:08:33

Local clock offset: -0.346 ms

Remote clock offset: 0.432 ms

Below is generated by plot.py at 2019-01-25 20:36:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 586.22 Mbit/s

95th percentile per-packet one-way delay: 82.349 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 302.94 Mbit/s

95th percentile per-packet one-way delay: 76.915 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 290.17 Mbit/s

95th percentile per-packet one-way delay: 82.915 ms

Loss rate: 0.05%

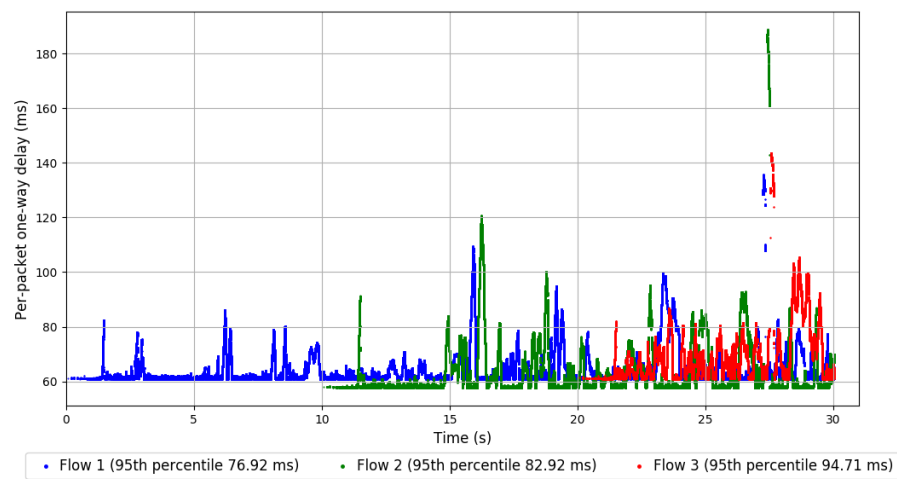
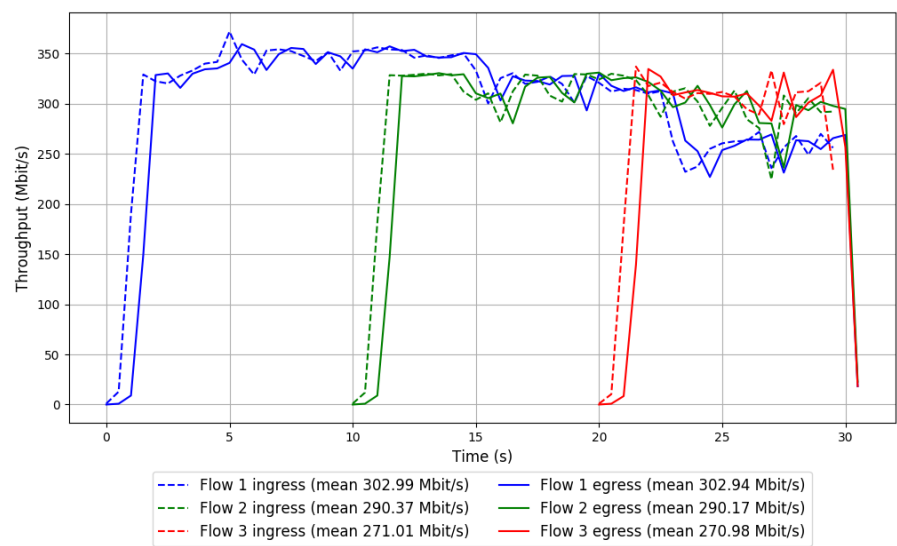
-- Flow 3:

Average throughput: 270.98 Mbit/s

95th percentile per-packet one-way delay: 94.706 ms

Loss rate: 0.01%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-01-25 17:48:45

End at: 2019-01-25 17:49:15

Local clock offset: -0.297 ms

Remote clock offset: 0.147 ms

Below is generated by plot.py at 2019-01-25 20:36:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 564.31 Mbit/s

95th percentile per-packet one-way delay: 73.789 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 283.27 Mbit/s

95th percentile per-packet one-way delay: 67.322 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 288.04 Mbit/s

95th percentile per-packet one-way delay: 77.723 ms

Loss rate: 0.08%

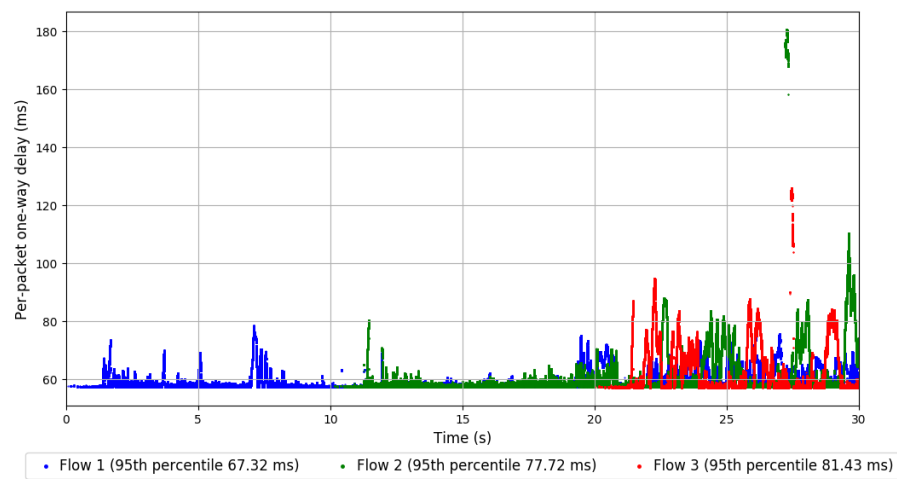
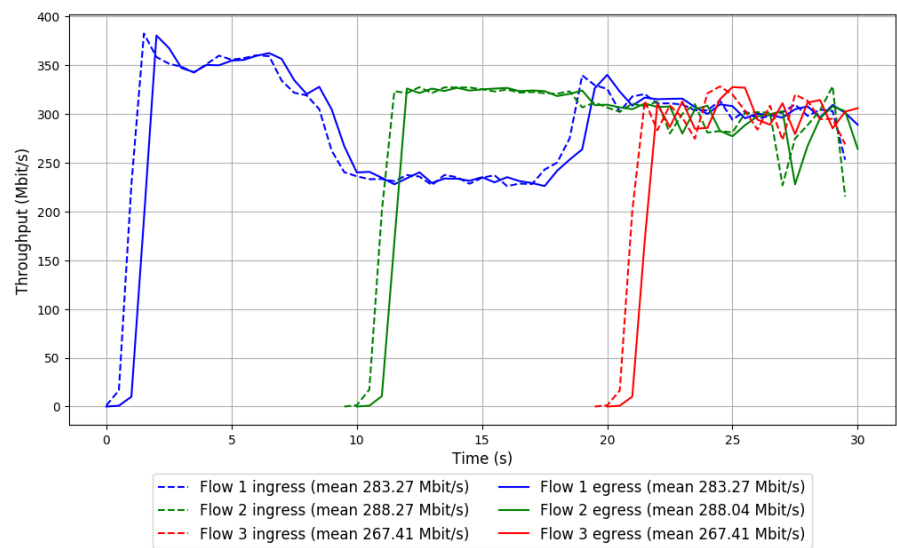
-- Flow 3:

Average throughput: 267.41 Mbit/s

95th percentile per-packet one-way delay: 81.430 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-01-25 18:31:02

End at: 2019-01-25 18:31:32

Local clock offset: 0.416 ms

Remote clock offset: -0.63 ms

Below is generated by plot.py at 2019-01-25 20:54:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 597.50 Mbit/s

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

Loss rate: 0.03%

-- Flow 1:

Average throughput: 315.62 Mbit/s

95th percentile per-packet one-way delay: 71.745 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 298.24 Mbit/s

95th percentile per-packet one-way delay: 73.805 ms

Loss rate: 0.06%

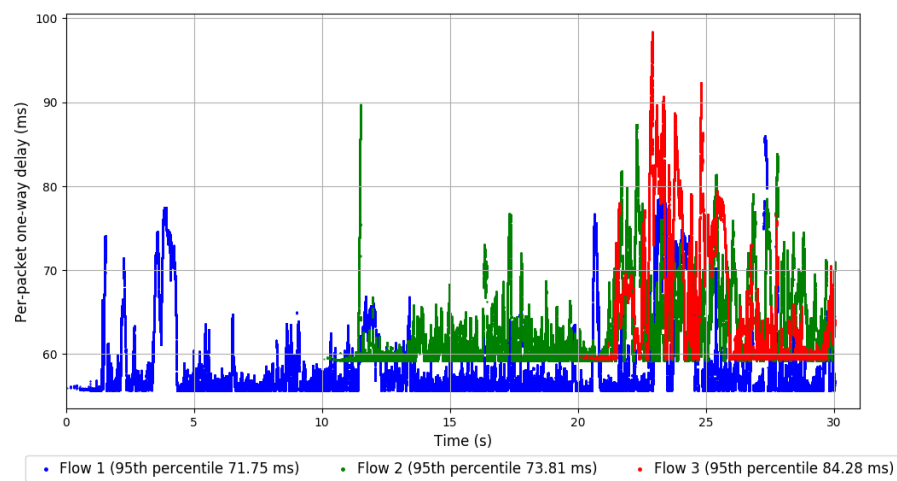
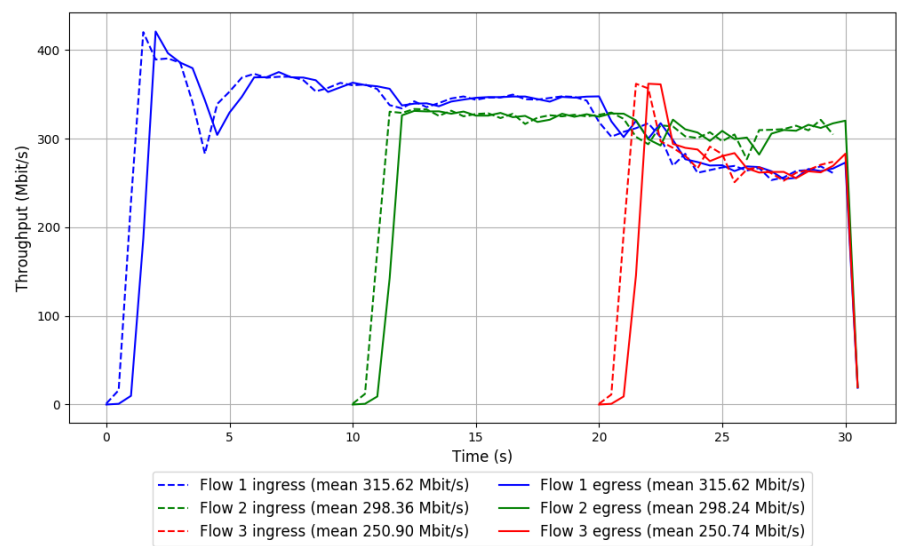
-- Flow 3:

Average throughput: 250.74 Mbit/s

95th percentile per-packet one-way delay: 84.282 ms

Loss rate: 0.09%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-01-25 19:13:12

End at: 2019-01-25 19:13:42

Local clock offset: -0.137 ms

Remote clock offset: 0.702 ms

Below is generated by plot.py at 2019-01-25 20:54:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 462.48 Mbit/s

95th percentile per-packet one-way delay: 66.139 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 251.33 Mbit/s

95th percentile per-packet one-way delay: 69.035 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 197.73 Mbit/s

95th percentile per-packet one-way delay: 65.627 ms

Loss rate: 0.03%

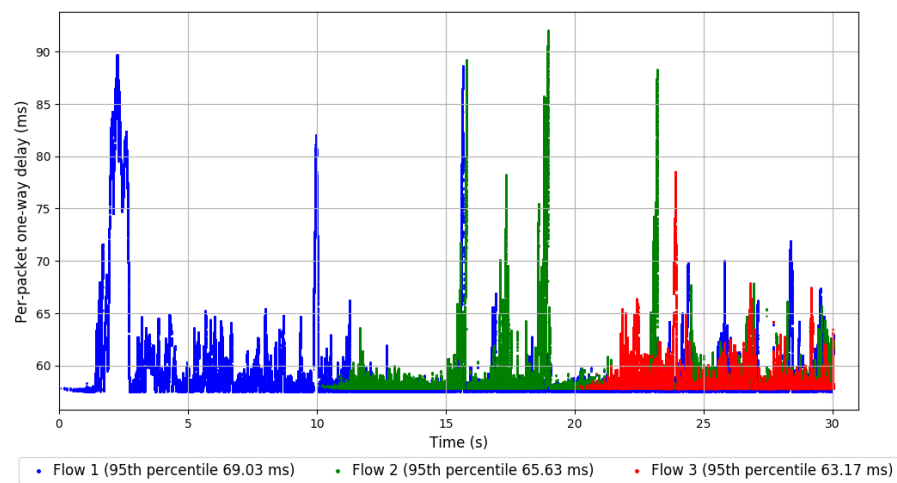
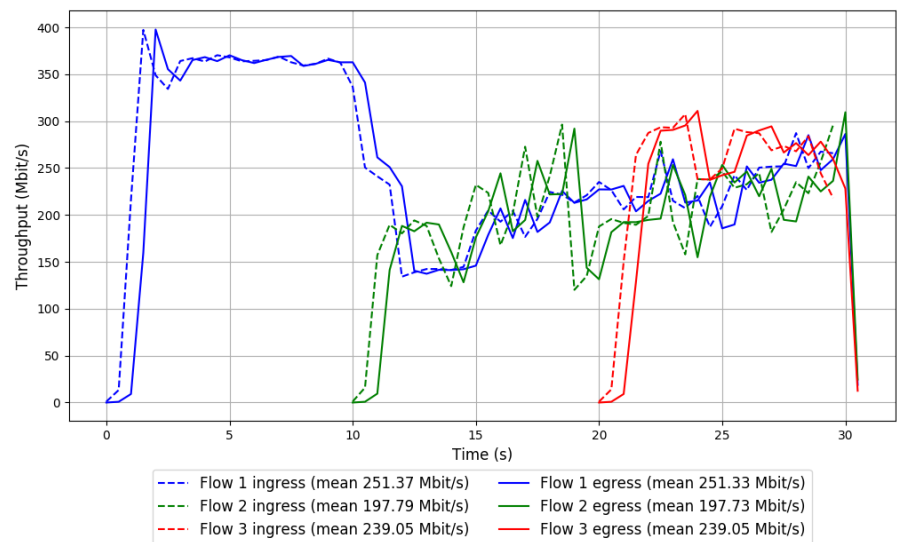
-- Flow 3:

Average throughput: 239.05 Mbit/s

95th percentile per-packet one-way delay: 63.175 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-01-25 16:59:49

End at: 2019-01-25 17:00:19

Local clock offset: 0.289 ms

Remote clock offset: 0.556 ms

Below is generated by plot.py at 2019-01-25 20:54:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 1011.58 Mbit/s

95th percentile per-packet one-way delay: 121.943 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 546.09 Mbit/s

95th percentile per-packet one-way delay: 78.537 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 452.22 Mbit/s

95th percentile per-packet one-way delay: 68.627 ms

Loss rate: 0.01%

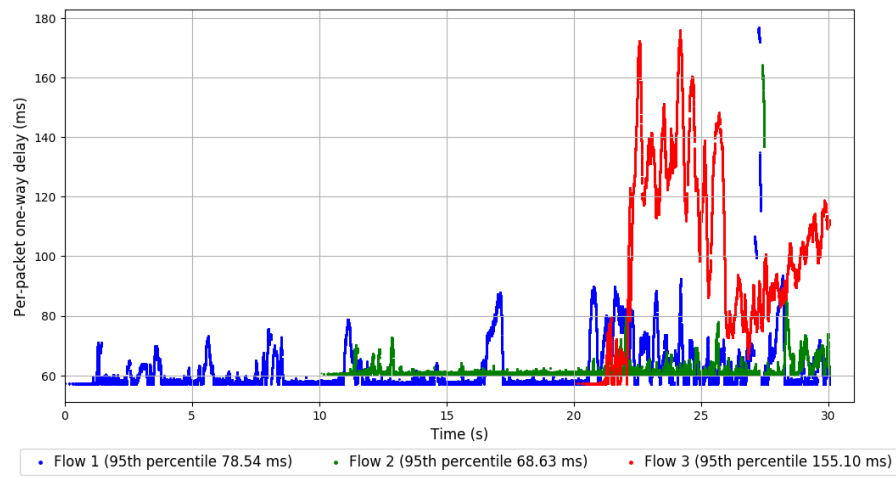
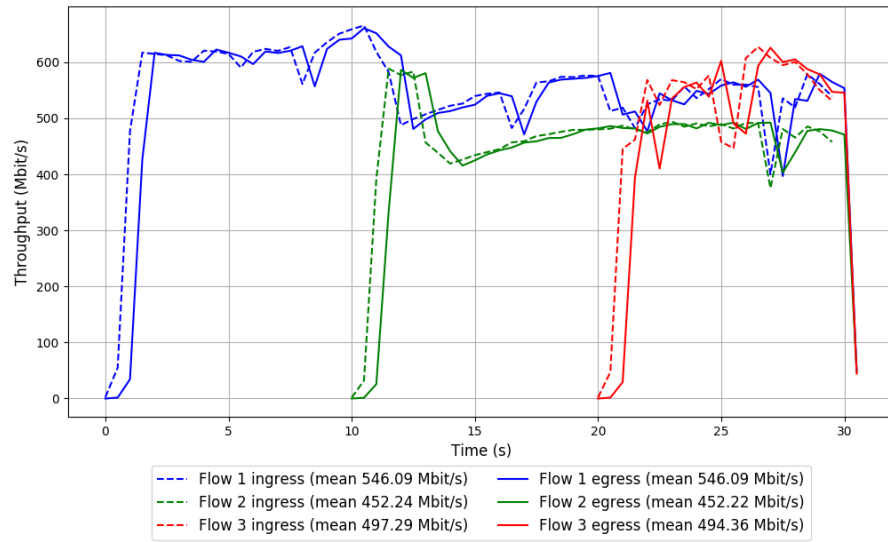
-- Flow 3:

Average throughput: 494.36 Mbit/s

95th percentile per-packet one-way delay: 155.102 ms

Loss rate: 0.58%

Run 1: Report of TCP Cubic — Data Link

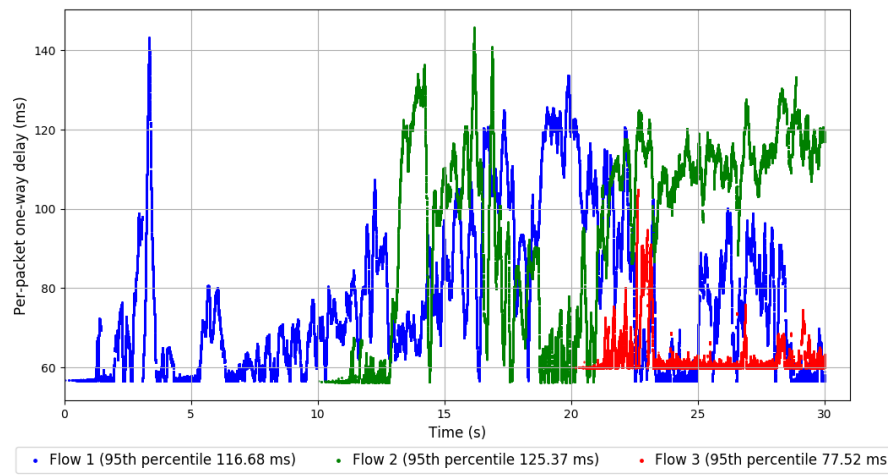
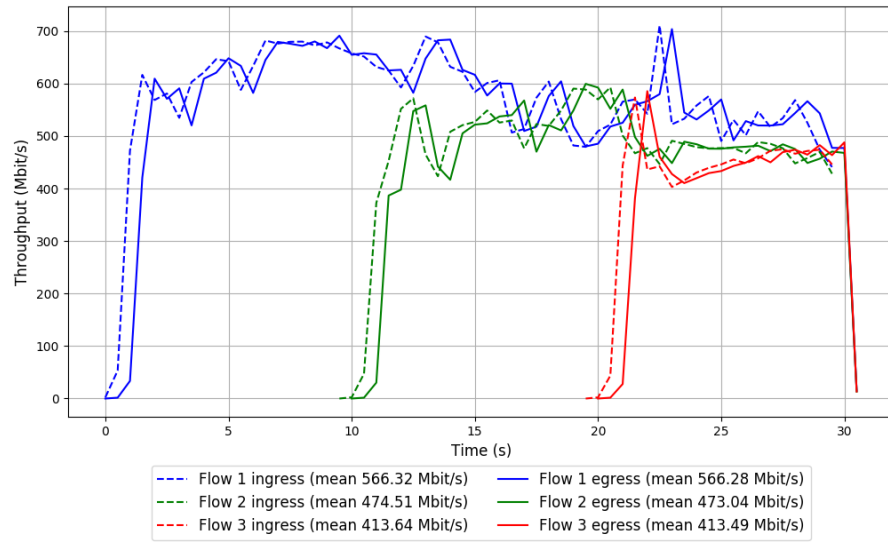


Run 2: Statistics of TCP Cubic

Start at: 2019-01-25 17:39:54
End at: 2019-01-25 17:40:24
Local clock offset: 0.036 ms
Remote clock offset: -0.687 ms

Below is generated by plot.py at 2019-01-25 20:54:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 1019.11 Mbit/s
95th percentile per-packet one-way delay: 119.793 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 566.28 Mbit/s
95th percentile per-packet one-way delay: 116.681 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 473.04 Mbit/s
95th percentile per-packet one-way delay: 125.373 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 413.49 Mbit/s
95th percentile per-packet one-way delay: 77.521 ms
Loss rate: 0.06%

Run 2: Report of TCP Cubic — Data Link

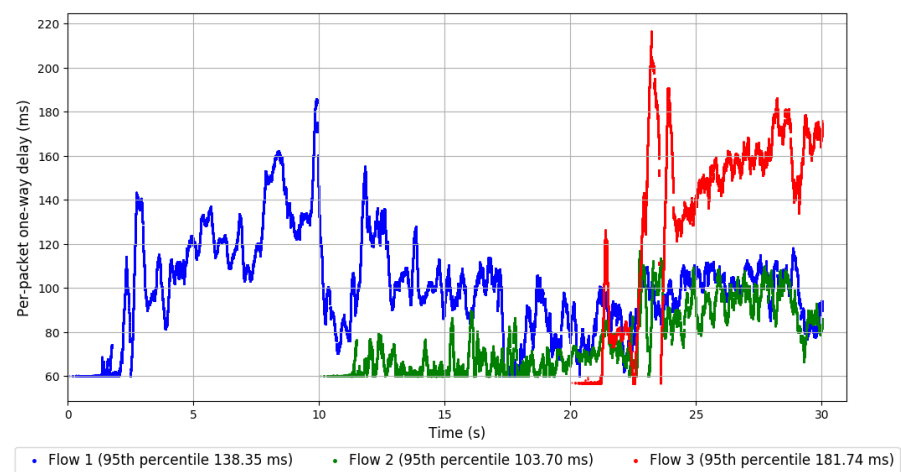
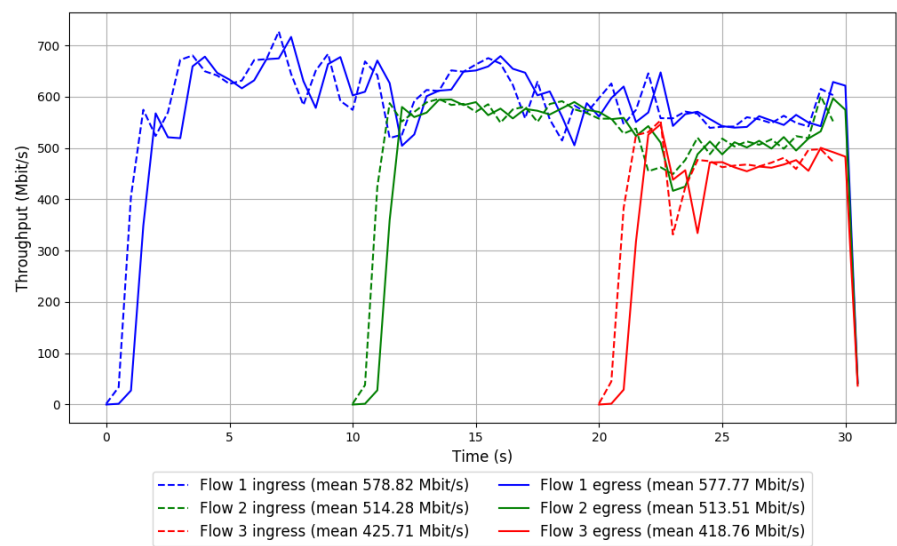


Run 3: Statistics of TCP Cubic

Start at: 2019-01-25 18:22:10
End at: 2019-01-25 18:22:40
Local clock offset: -0.285 ms
Remote clock offset: -0.691 ms

Below is generated by plot.py at 2019-01-25 20:55:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 1058.91 Mbit/s
95th percentile per-packet one-way delay: 159.454 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 577.77 Mbit/s
95th percentile per-packet one-way delay: 138.347 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 513.51 Mbit/s
95th percentile per-packet one-way delay: 103.699 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 418.76 Mbit/s
95th percentile per-packet one-way delay: 181.740 ms
Loss rate: 1.62%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-01-25 19:04:17

End at: 2019-01-25 19:04:47

Local clock offset: -0.09 ms

Remote clock offset: 1.301 ms

Below is generated by plot.py at 2019-01-25 20:56:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1075.93 Mbit/s

95th percentile per-packet one-way delay: 145.085 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 568.69 Mbit/s

95th percentile per-packet one-way delay: 112.919 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 540.68 Mbit/s

95th percentile per-packet one-way delay: 164.782 ms

Loss rate: 0.41%

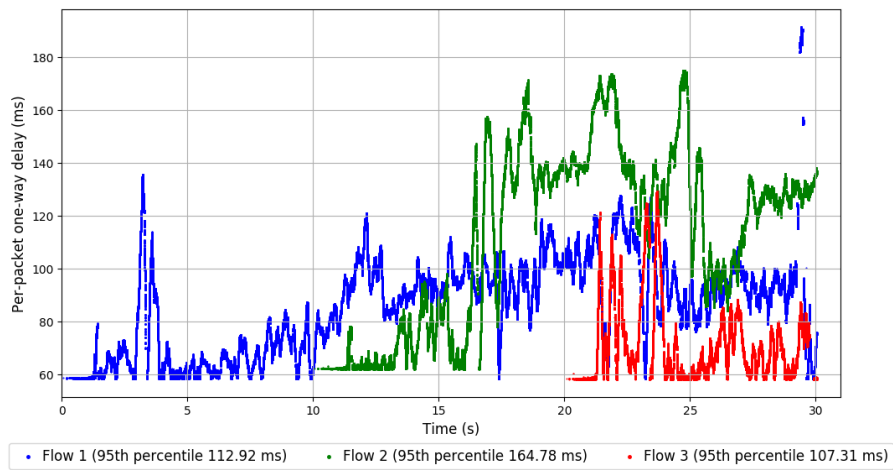
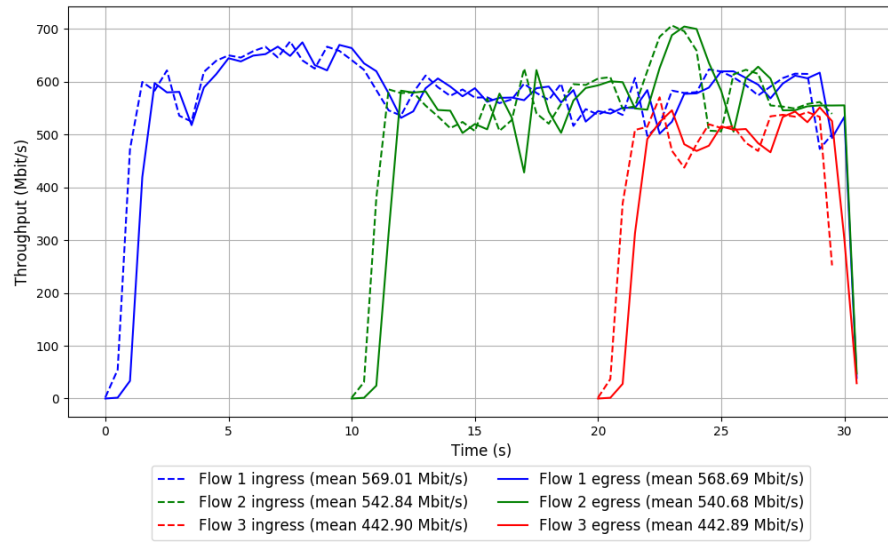
-- Flow 3:

Average throughput: 442.89 Mbit/s

95th percentile per-packet one-way delay: 107.312 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-01-25 19:46:16

End at: 2019-01-25 19:46:46

Local clock offset: -0.148 ms

Remote clock offset: -0.01 ms

Below is generated by plot.py at 2019-01-25 20:56:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 929.81 Mbit/s

95th percentile per-packet one-way delay: 114.702 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 493.87 Mbit/s

95th percentile per-packet one-way delay: 141.051 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 434.63 Mbit/s

95th percentile per-packet one-way delay: 85.484 ms

Loss rate: 0.00%

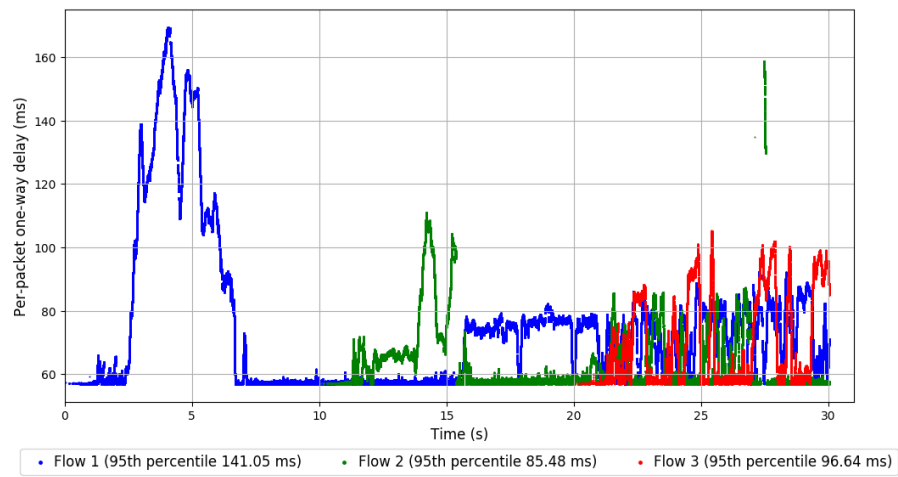
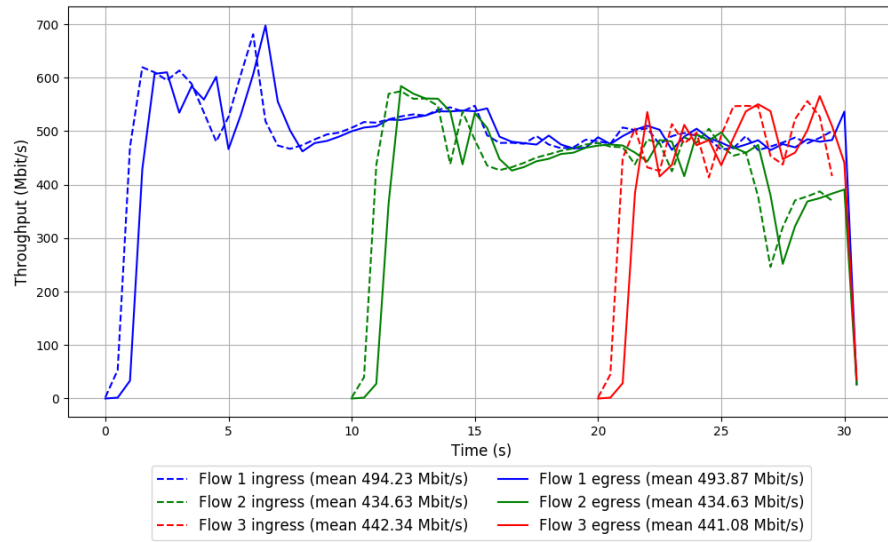
-- Flow 3:

Average throughput: 441.08 Mbit/s

95th percentile per-packet one-way delay: 96.644 ms

Loss rate: 0.28%

Run 5: Report of TCP Cubic — Data Link

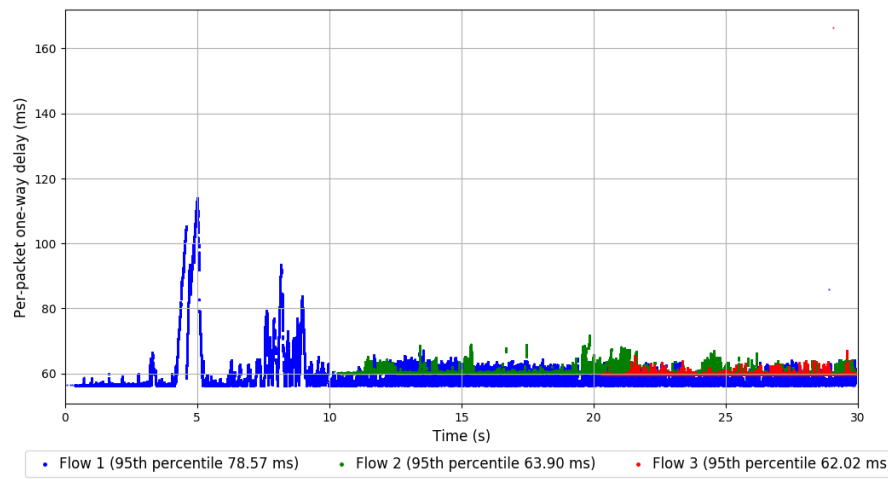
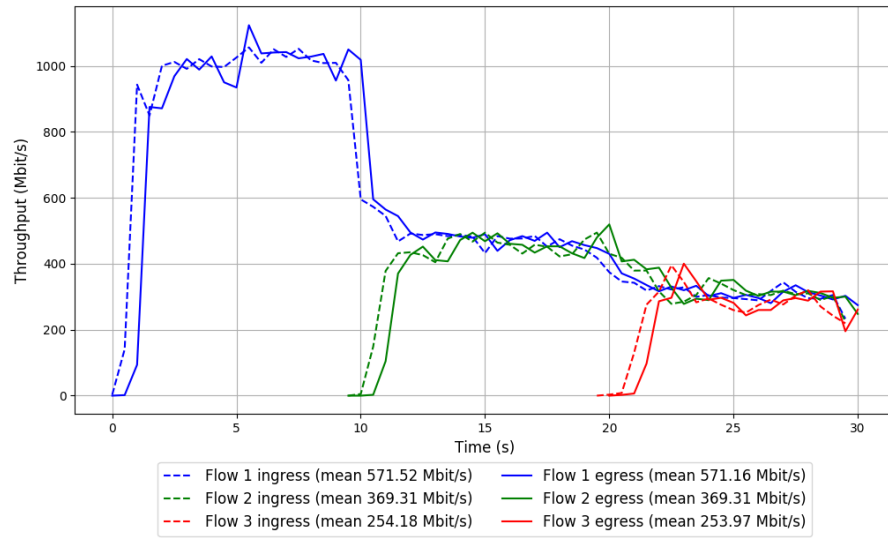


Run 1: Statistics of FillP

Start at: 2019-01-25 17:06:10
End at: 2019-01-25 17:06:40
Local clock offset: -0.147 ms
Remote clock offset: -0.686 ms

Below is generated by plot.py at 2019-01-25 20:57:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 901.56 Mbit/s
95th percentile per-packet one-way delay: 70.233 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 571.16 Mbit/s
95th percentile per-packet one-way delay: 78.566 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 369.31 Mbit/s
95th percentile per-packet one-way delay: 63.899 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 253.97 Mbit/s
95th percentile per-packet one-way delay: 62.023 ms
Loss rate: 0.10%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-01-25 17:46:40

End at: 2019-01-25 17:47:10

Local clock offset: -0.304 ms

Remote clock offset: 1.348 ms

Below is generated by plot.py at 2019-01-25 21:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 879.45 Mbit/s

95th percentile per-packet one-way delay: 68.246 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 573.64 Mbit/s

95th percentile per-packet one-way delay: 69.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 335.75 Mbit/s

95th percentile per-packet one-way delay: 63.161 ms

Loss rate: 0.00%

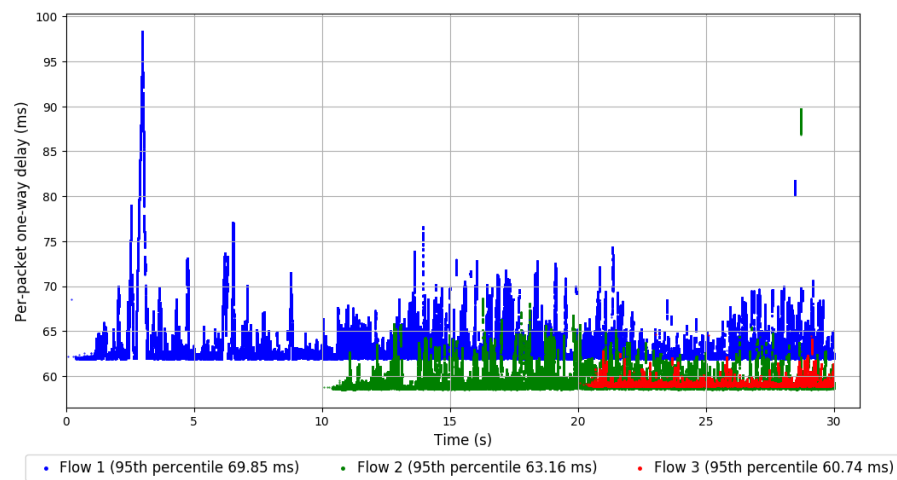
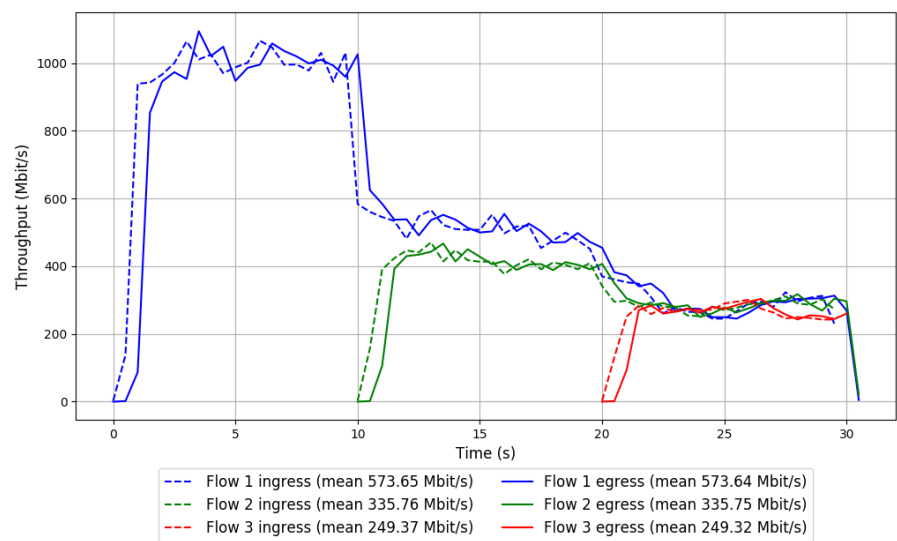
-- Flow 3:

Average throughput: 249.32 Mbit/s

95th percentile per-packet one-way delay: 60.737 ms

Loss rate: 0.00%

Run 2: Report of FillP — Data Link

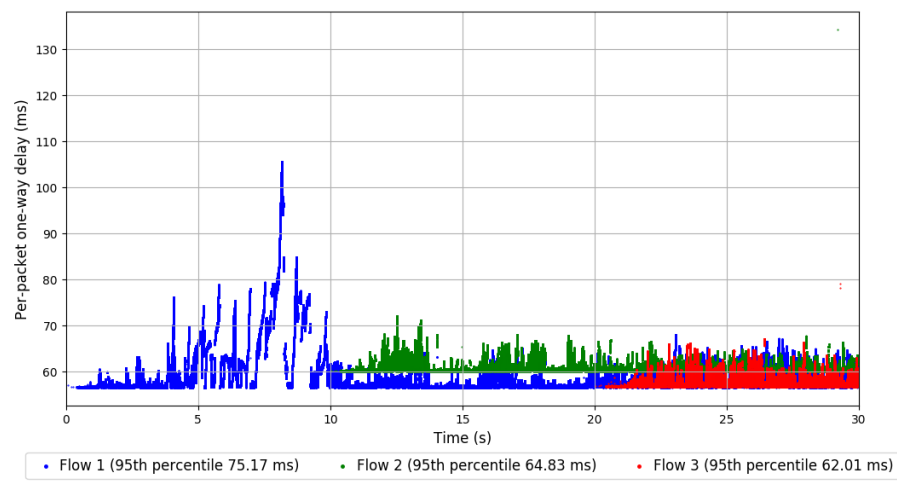
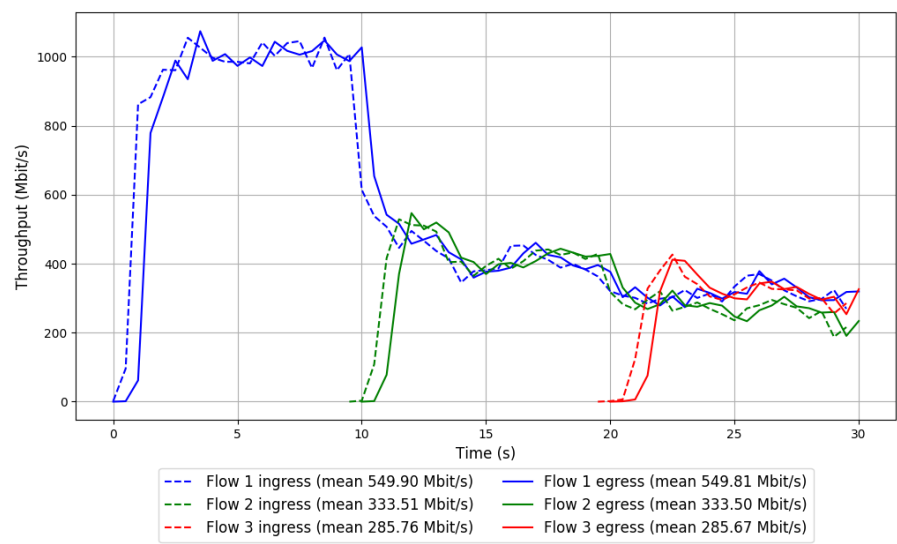


Run 3: Statistics of FillP

Start at: 2019-01-25 18:29:00
End at: 2019-01-25 18:29:30
Local clock offset: -0.199 ms
Remote clock offset: -0.709 ms

Below is generated by plot.py at 2019-01-25 21:14:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 866.55 Mbit/s
95th percentile per-packet one-way delay: 71.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 549.81 Mbit/s
95th percentile per-packet one-way delay: 75.165 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 333.50 Mbit/s
95th percentile per-packet one-way delay: 64.833 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 285.67 Mbit/s
95th percentile per-packet one-way delay: 62.008 ms
Loss rate: 0.00%

Run 3: Report of FillP — Data Link

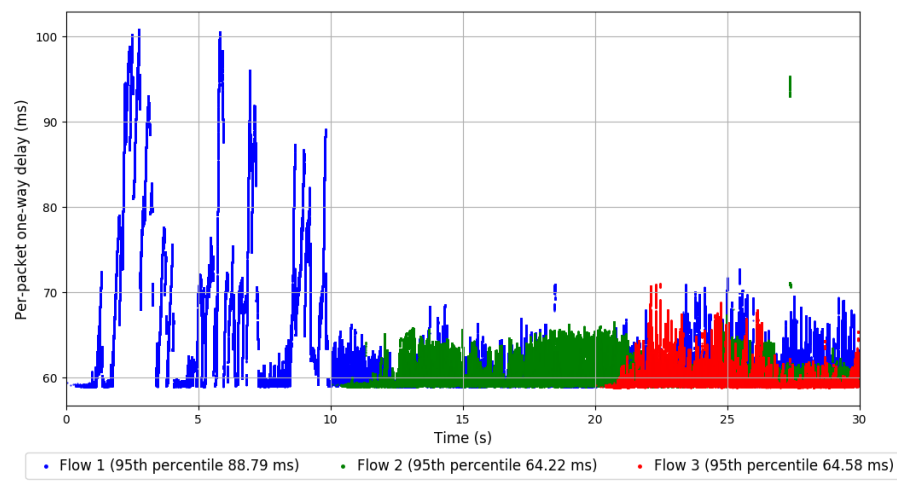
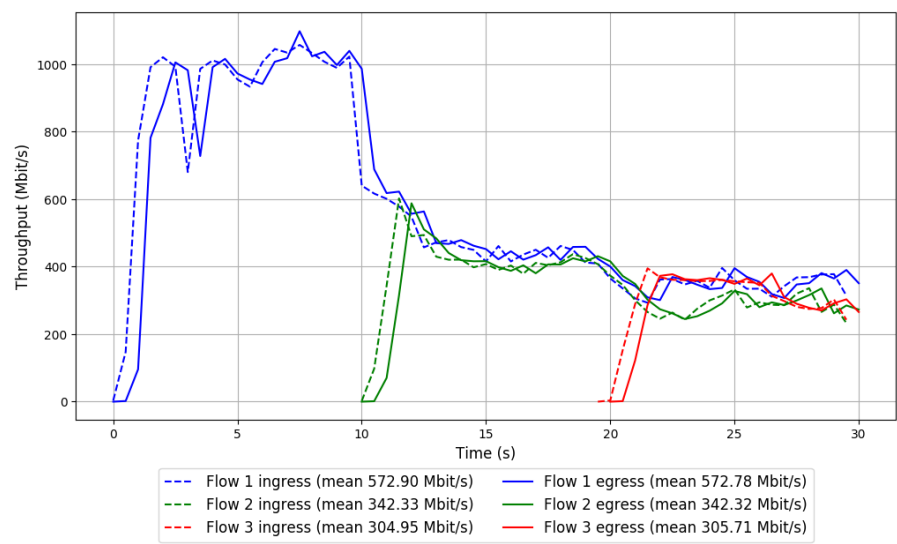


Run 4: Statistics of FillP

Start at: 2019-01-25 19:11:12
End at: 2019-01-25 19:11:42
Local clock offset: 0.289 ms
Remote clock offset: -1.236 ms

Below is generated by plot.py at 2019-01-25 21:15:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 901.81 Mbit/s
95th percentile per-packet one-way delay: 83.188 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 572.78 Mbit/s
95th percentile per-packet one-way delay: 88.787 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 342.32 Mbit/s
95th percentile per-packet one-way delay: 64.220 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 305.71 Mbit/s
95th percentile per-packet one-way delay: 64.581 ms
Loss rate: 0.02%

Run 4: Report of FillP — Data Link

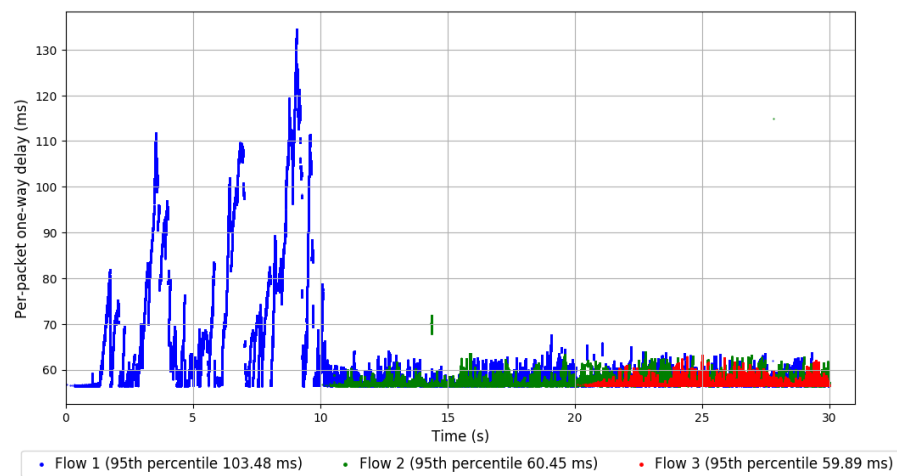
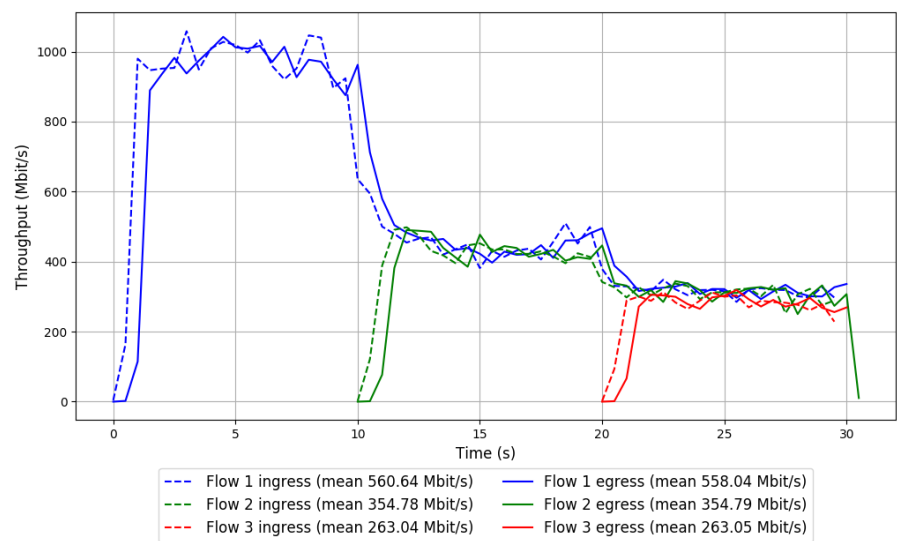


Run 5: Statistics of FillP

Start at: 2019-01-25 19:52:43
End at: 2019-01-25 19:53:13
Local clock offset: 0.149 ms
Remote clock offset: -0.143 ms

Below is generated by plot.py at 2019-01-25 21:15:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 880.21 Mbit/s
95th percentile per-packet one-way delay: 95.546 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 558.04 Mbit/s
95th percentile per-packet one-way delay: 103.478 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 354.79 Mbit/s
95th percentile per-packet one-way delay: 60.447 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 263.05 Mbit/s
95th percentile per-packet one-way delay: 59.893 ms
Loss rate: 0.00%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-01-25 16:41:19

End at: 2019-01-25 16:41:49

Local clock offset: -0.154 ms

Remote clock offset: 1.321 ms

Below is generated by plot.py at 2019-01-25 21:15:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 797.14 Mbit/s

95th percentile per-packet one-way delay: 67.038 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 520.57 Mbit/s

95th percentile per-packet one-way delay: 67.781 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 300.78 Mbit/s

95th percentile per-packet one-way delay: 64.985 ms

Loss rate: 0.06%

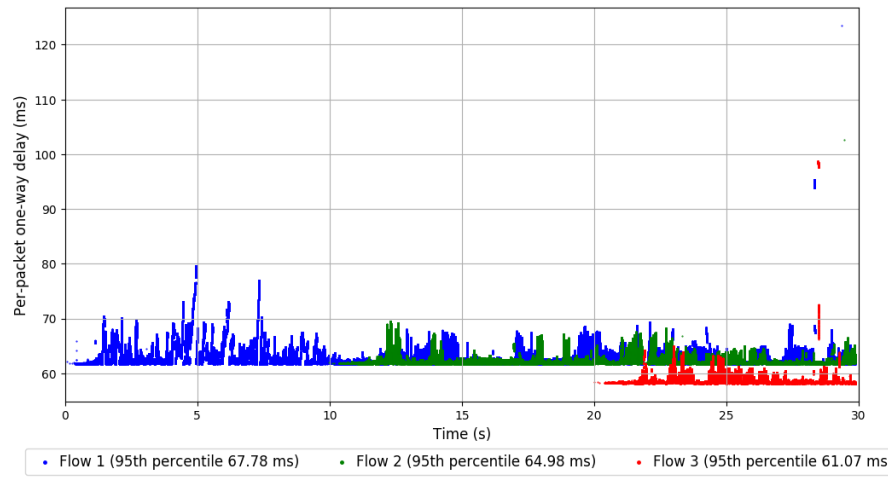
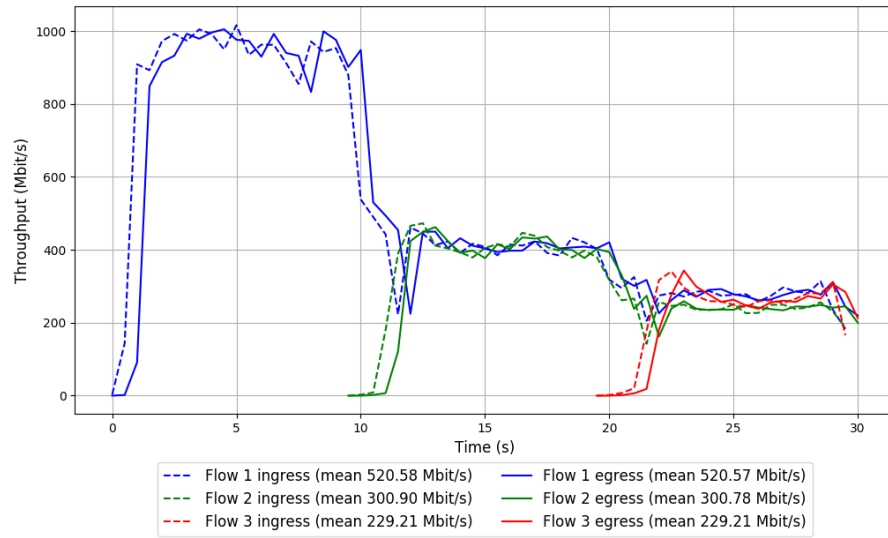
-- Flow 3:

Average throughput: 229.21 Mbit/s

95th percentile per-packet one-way delay: 61.067 ms

Loss rate: 0.00%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-01-25 17:20:46

End at: 2019-01-25 17:21:16

Local clock offset: -0.57 ms

Remote clock offset: 0.537 ms

Below is generated by plot.py at 2019-01-25 21:15:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 818.96 Mbit/s

95th percentile per-packet one-way delay: 65.126 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 526.61 Mbit/s

95th percentile per-packet one-way delay: 69.465 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 321.99 Mbit/s

95th percentile per-packet one-way delay: 60.696 ms

Loss rate: 0.02%

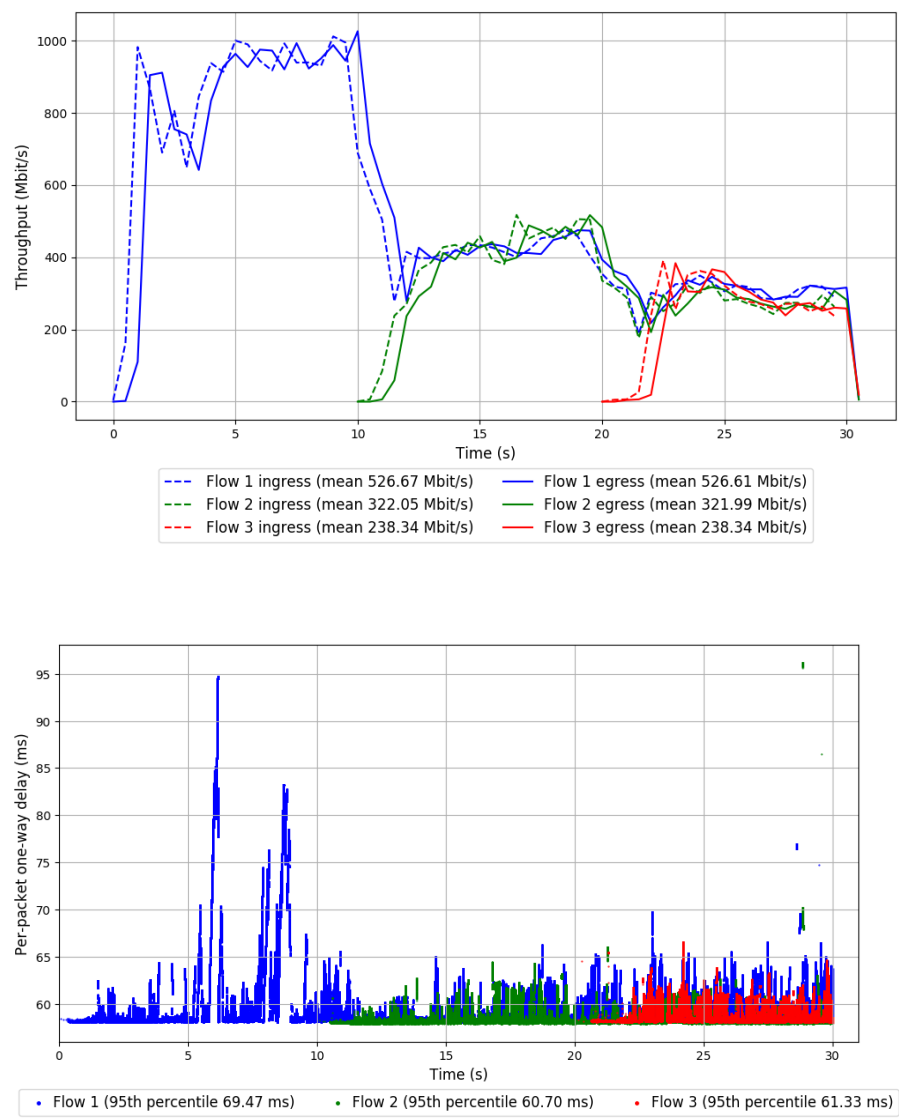
-- Flow 3:

Average throughput: 238.34 Mbit/s

95th percentile per-packet one-way delay: 61.334 ms

Loss rate: 0.00%

Run 2: Report of FillP-Sheep — Data Link

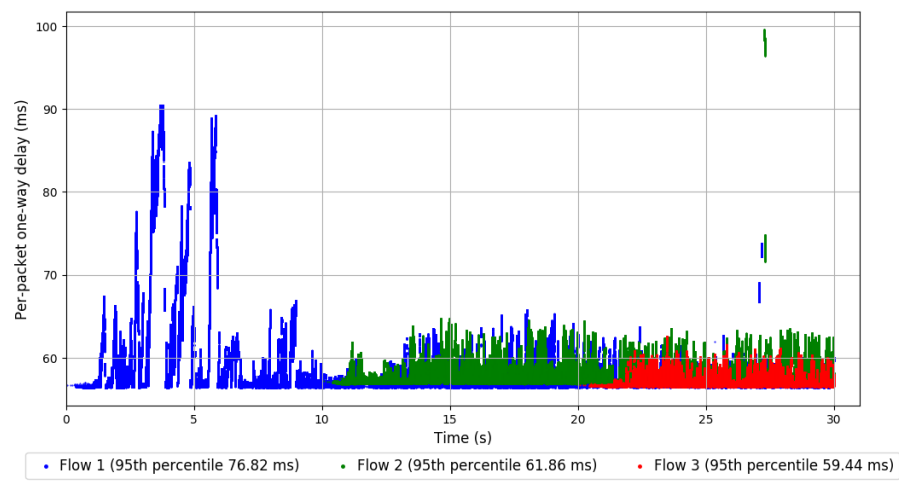
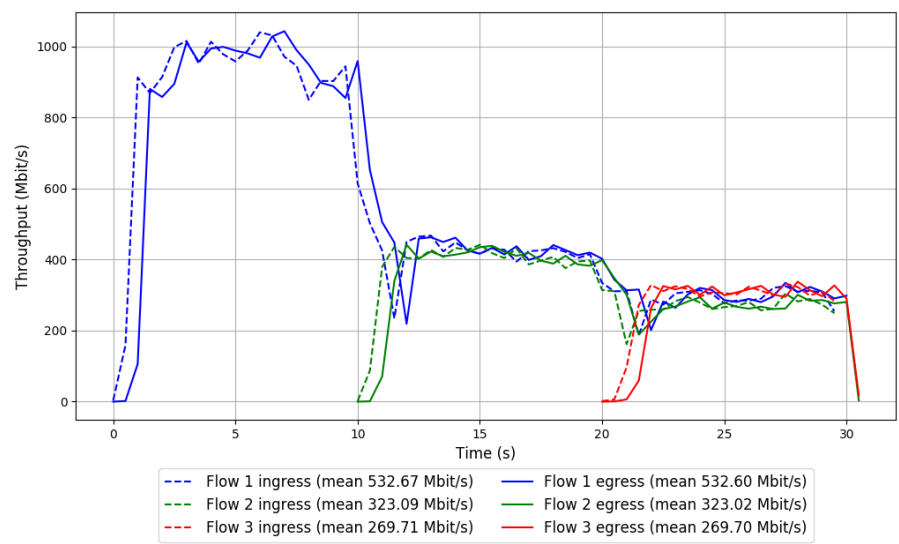


Run 3: Statistics of FillP-Sheep

Start at: 2019-01-25 18:02:14
End at: 2019-01-25 18:02:44
Local clock offset: -0.383 ms
Remote clock offset: -0.738 ms

Below is generated by plot.py at 2019-01-25 21:16:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 836.48 Mbit/s
95th percentile per-packet one-way delay: 69.183 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 532.60 Mbit/s
95th percentile per-packet one-way delay: 76.816 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 323.02 Mbit/s
95th percentile per-packet one-way delay: 61.861 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 269.70 Mbit/s
95th percentile per-packet one-way delay: 59.440 ms
Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-01-25 18:44:48

End at: 2019-01-25 18:45:18

Local clock offset: 0.122 ms

Remote clock offset: 0.035 ms

Below is generated by plot.py at 2019-01-25 21:18:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 897.30 Mbit/s

95th percentile per-packet one-way delay: 63.193 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 574.61 Mbit/s

95th percentile per-packet one-way delay: 63.741 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 352.99 Mbit/s

95th percentile per-packet one-way delay: 62.187 ms

Loss rate: 0.00%

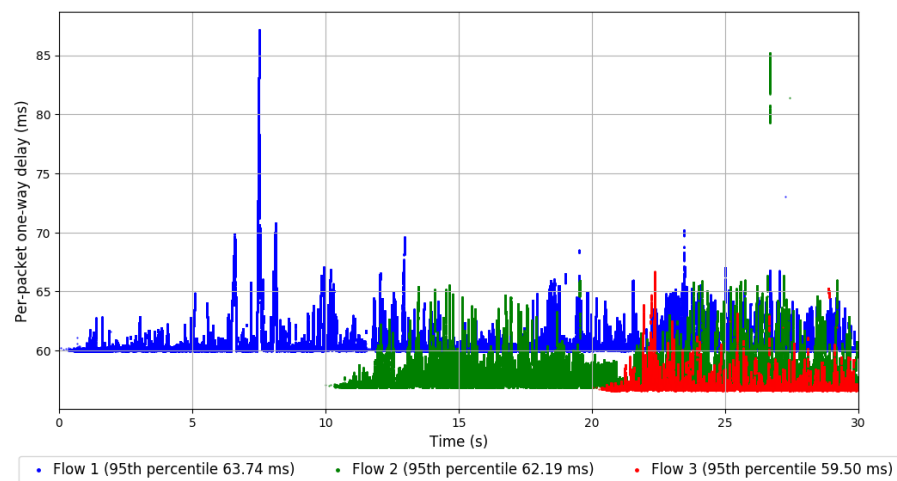
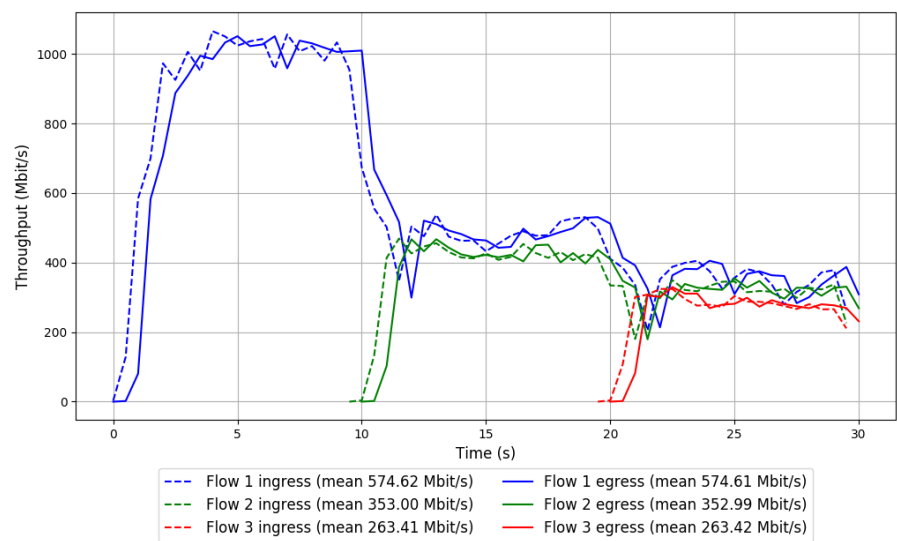
-- Flow 3:

Average throughput: 263.42 Mbit/s

95th percentile per-packet one-way delay: 59.496 ms

Loss rate: 0.00%

Run 4: Report of FillP-Sheep — Data Link

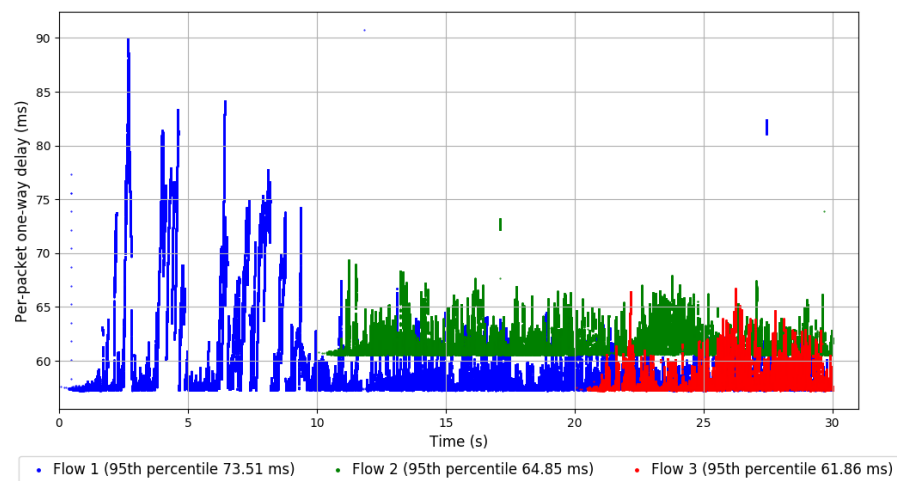
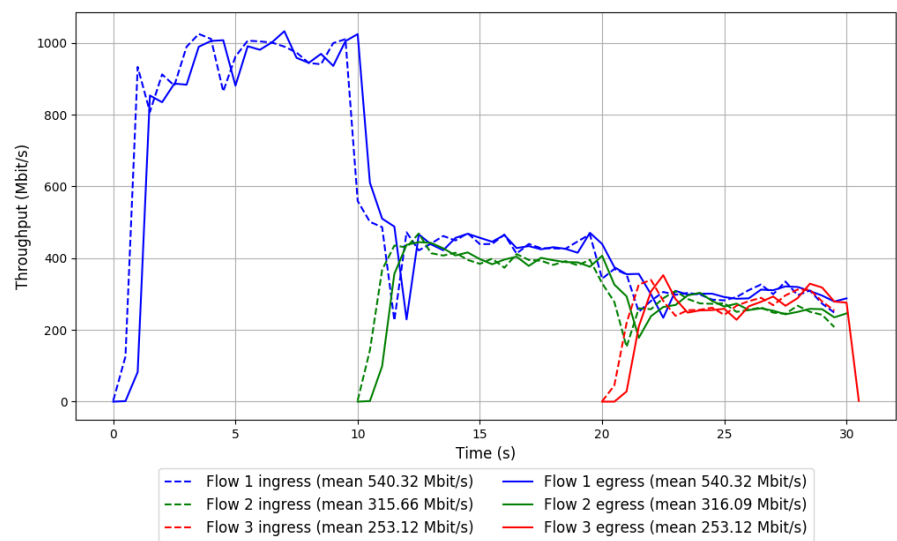


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-25 19:26:15
End at: 2019-01-25 19:26:45
Local clock offset: -0.573 ms
Remote clock offset: -0.254 ms

Below is generated by plot.py at 2019-01-25 21:30:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 834.19 Mbit/s
95th percentile per-packet one-way delay: 71.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 540.32 Mbit/s
95th percentile per-packet one-way delay: 73.509 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 316.09 Mbit/s
95th percentile per-packet one-way delay: 64.847 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 253.12 Mbit/s
95th percentile per-packet one-way delay: 61.856 ms
Loss rate: 0.00%

Run 5: Report of FillP-Sheep — Data Link

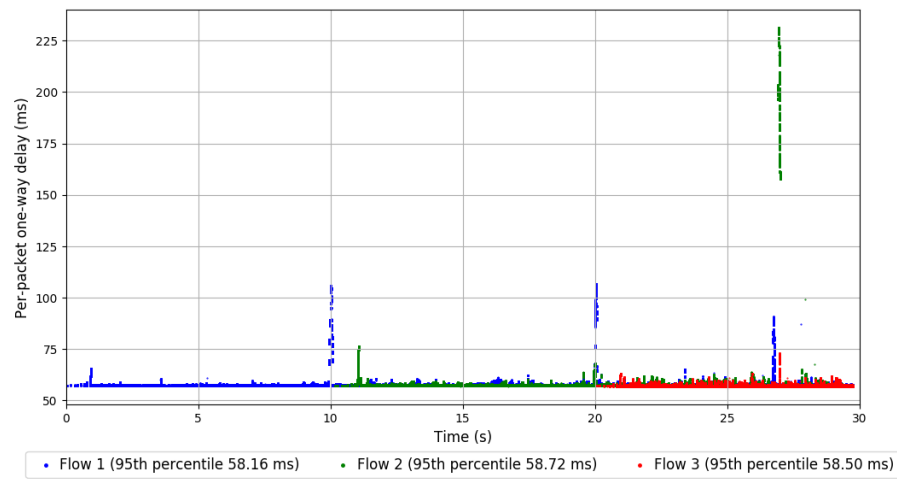
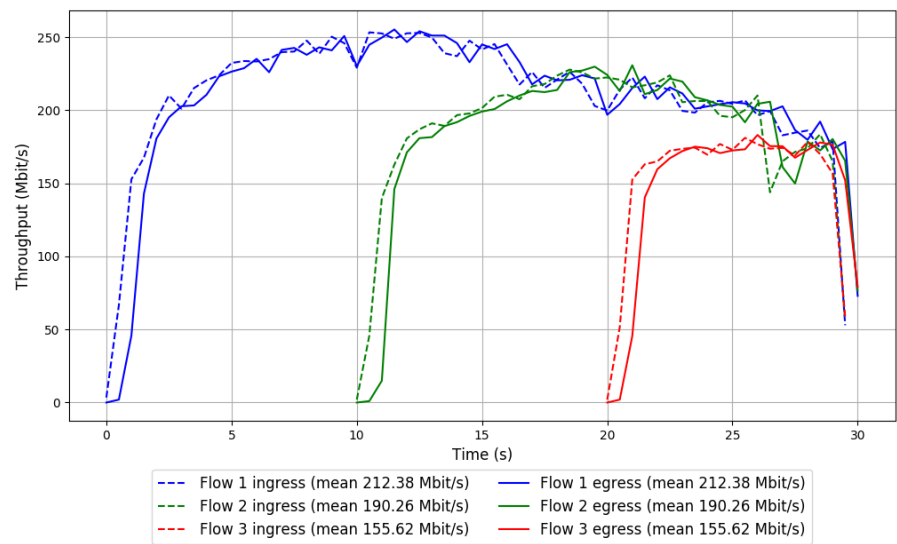


Run 1: Statistics of Indigo

Start at: 2019-01-25 17:04:06
End at: 2019-01-25 17:04:36
Local clock offset: -0.553 ms
Remote clock offset: -0.396 ms

Below is generated by plot.py at 2019-01-25 21:30:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 388.63 Mbit/s
95th percentile per-packet one-way delay: 58.358 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 212.38 Mbit/s
95th percentile per-packet one-way delay: 58.159 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 190.26 Mbit/s
95th percentile per-packet one-way delay: 58.722 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 155.62 Mbit/s
95th percentile per-packet one-way delay: 58.498 ms
Loss rate: 0.00%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-01-25 17:44:38

End at: 2019-01-25 17:45:08

Local clock offset: 0.275 ms

Remote clock offset: 0.424 ms

Below is generated by plot.py at 2019-01-25 21:30:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.44 Mbit/s

95th percentile per-packet one-way delay: 58.214 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 180.84 Mbit/s

95th percentile per-packet one-way delay: 58.010 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 160.54 Mbit/s

95th percentile per-packet one-way delay: 58.179 ms

Loss rate: 0.00%

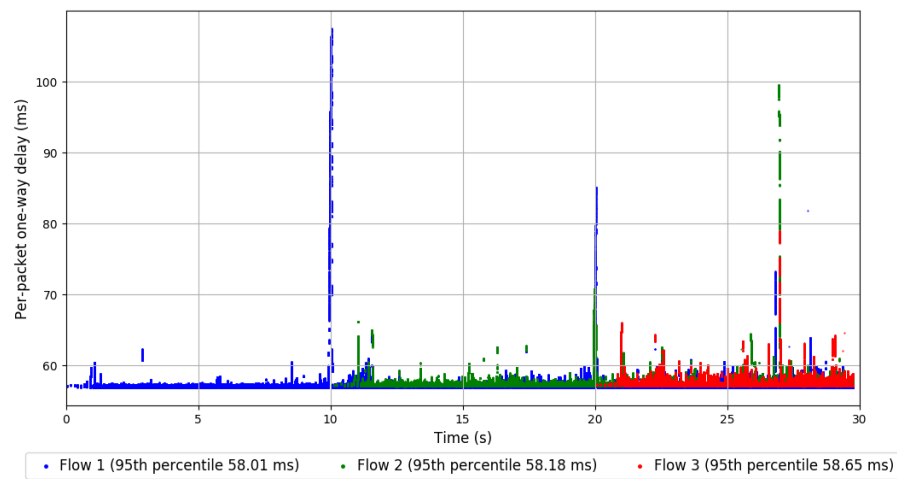
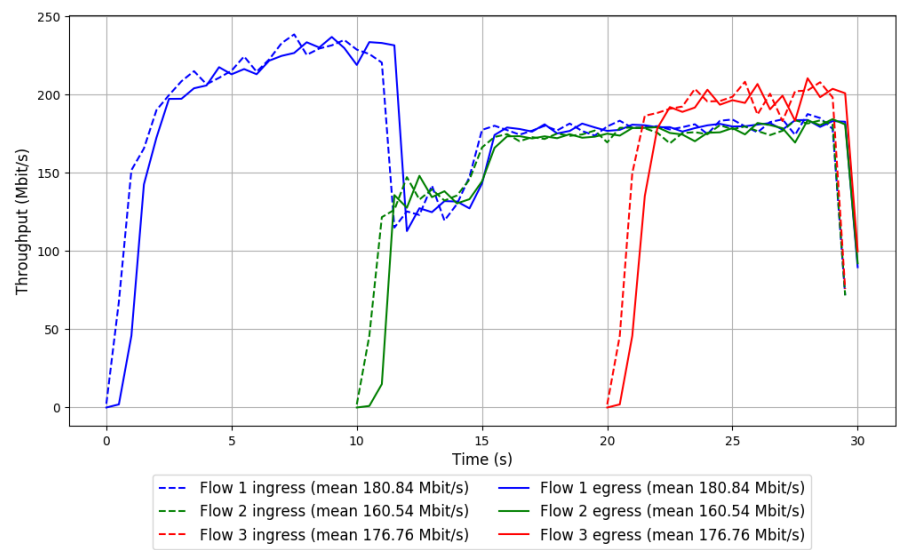
-- Flow 3:

Average throughput: 176.76 Mbit/s

95th percentile per-packet one-way delay: 58.647 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

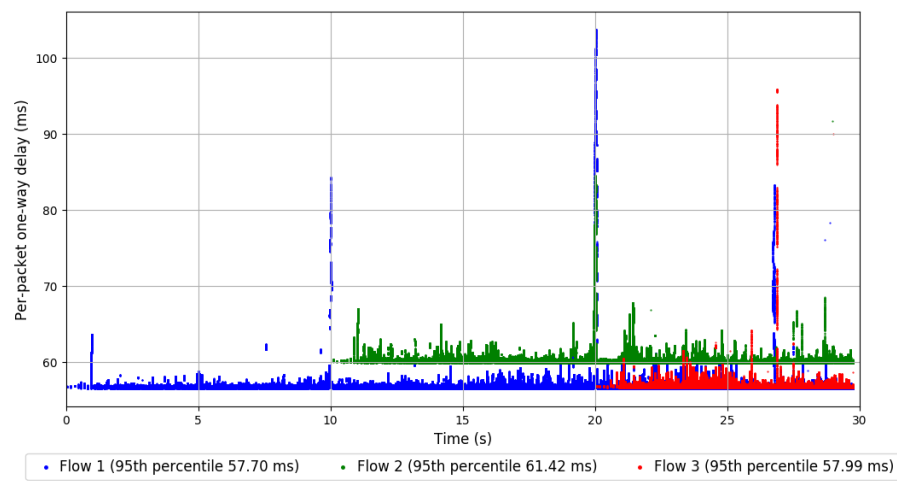
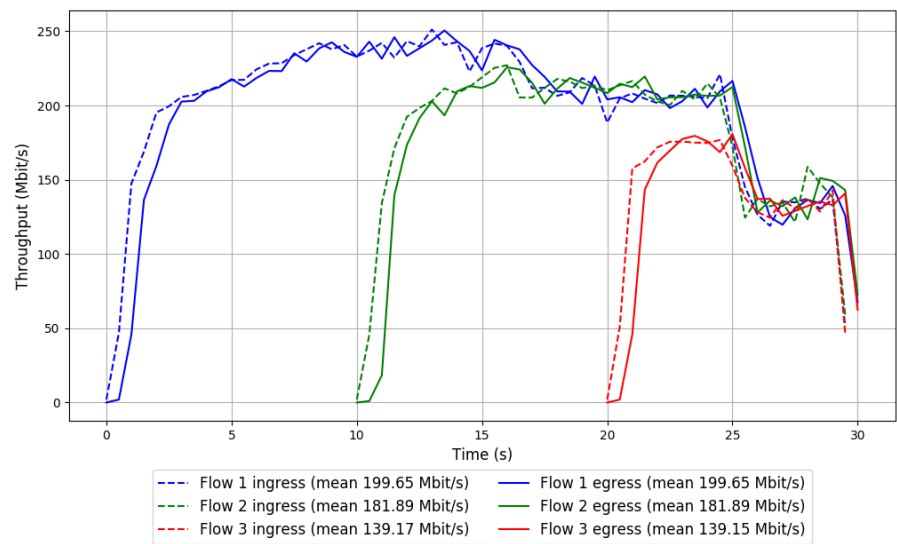


Run 3: Statistics of Indigo

Start at: 2019-01-25 18:26:54
End at: 2019-01-25 18:27:24
Local clock offset: -0.269 ms
Remote clock offset: -0.664 ms

Below is generated by plot.py at 2019-01-25 21:30:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 365.27 Mbit/s
95th percentile per-packet one-way delay: 60.532 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.65 Mbit/s
95th percentile per-packet one-way delay: 57.700 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 181.89 Mbit/s
95th percentile per-packet one-way delay: 61.423 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 139.15 Mbit/s
95th percentile per-packet one-way delay: 57.994 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

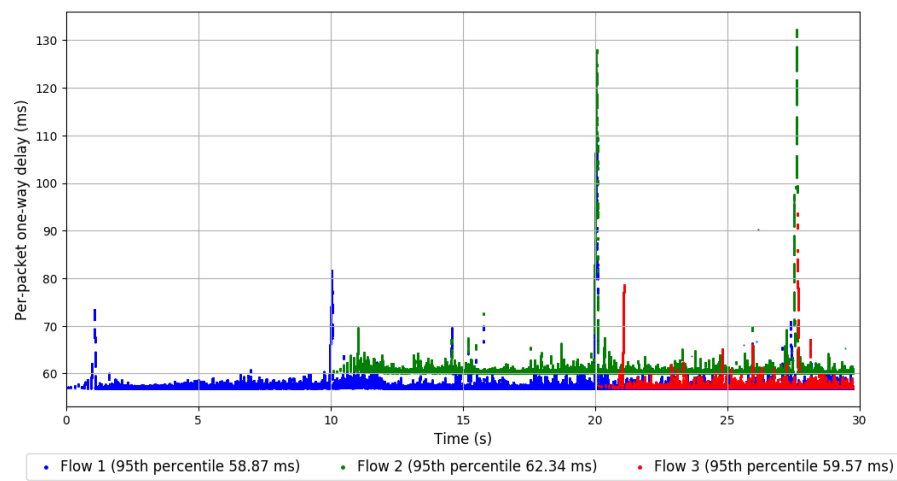
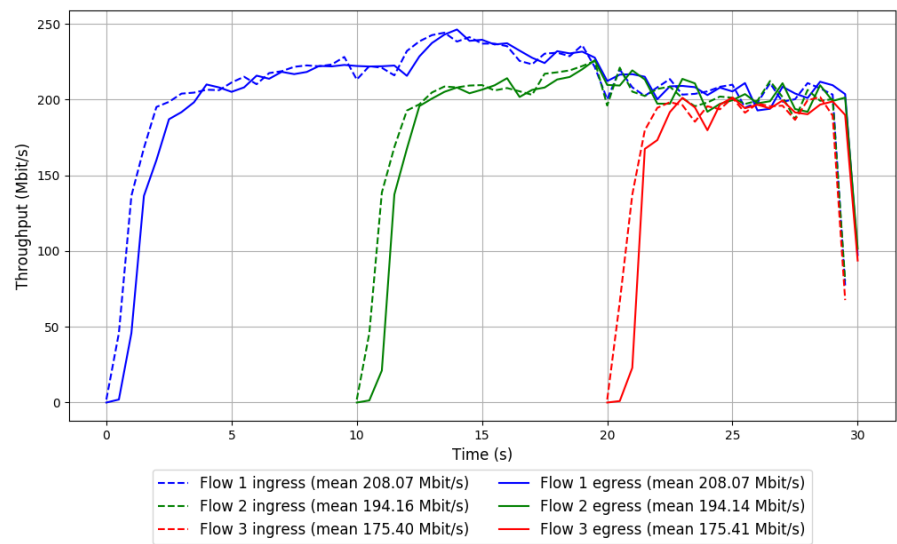


Run 4: Statistics of Indigo

Start at: 2019-01-25 19:08:56
End at: 2019-01-25 19:09:26
Local clock offset: -0.151 ms
Remote clock offset: -0.343 ms

Below is generated by plot.py at 2019-01-25 21:30:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 393.37 Mbit/s
95th percentile per-packet one-way delay: 61.257 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 208.07 Mbit/s
95th percentile per-packet one-way delay: 58.873 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.14 Mbit/s
95th percentile per-packet one-way delay: 62.345 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 175.41 Mbit/s
95th percentile per-packet one-way delay: 59.574 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

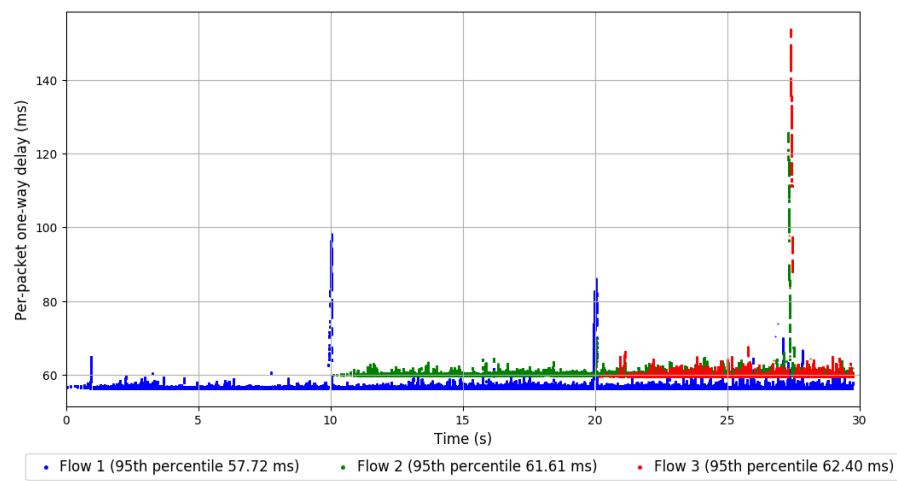
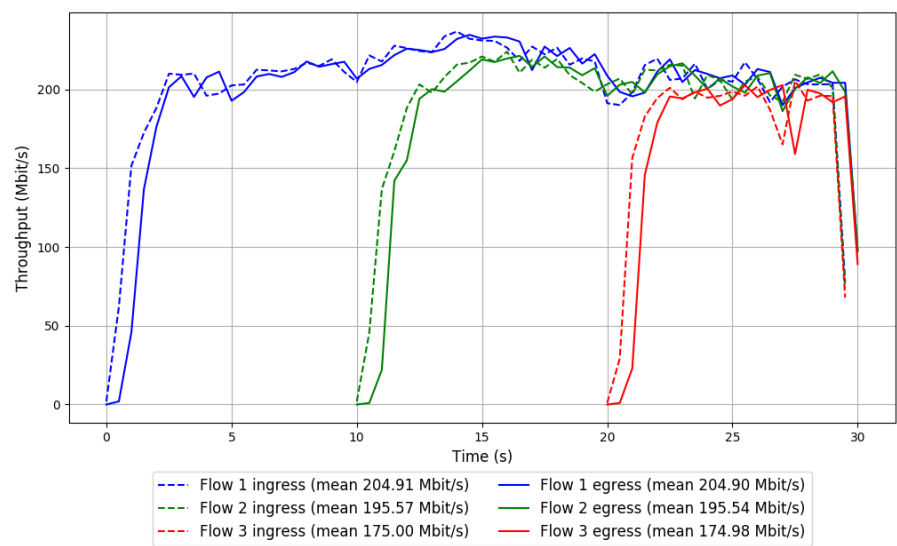


Run 5: Statistics of Indigo

Start at: 2019-01-25 19:50:40
End at: 2019-01-25 19:51:10
Local clock offset: -0.004 ms
Remote clock offset: -0.519 ms

Below is generated by plot.py at 2019-01-25 21:30:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 390.66 Mbit/s
95th percentile per-packet one-way delay: 61.140 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 204.90 Mbit/s
95th percentile per-packet one-way delay: 57.717 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 195.54 Mbit/s
95th percentile per-packet one-way delay: 61.609 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 174.98 Mbit/s
95th percentile per-packet one-way delay: 62.396 ms
Loss rate: 0.03%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-25 17:02:08

End at: 2019-01-25 17:02:38

Local clock offset: -0.405 ms

Remote clock offset: 0.437 ms

Below is generated by plot.py at 2019-01-25 21:31:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 750.21 Mbit/s

95th percentile per-packet one-way delay: 64.078 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 445.39 Mbit/s

95th percentile per-packet one-way delay: 64.988 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 373.55 Mbit/s

95th percentile per-packet one-way delay: 60.158 ms

Loss rate: 0.01%

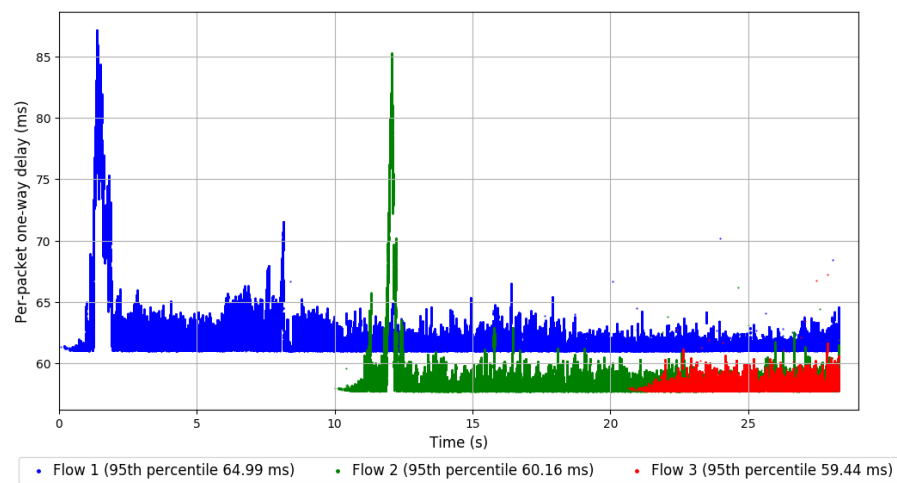
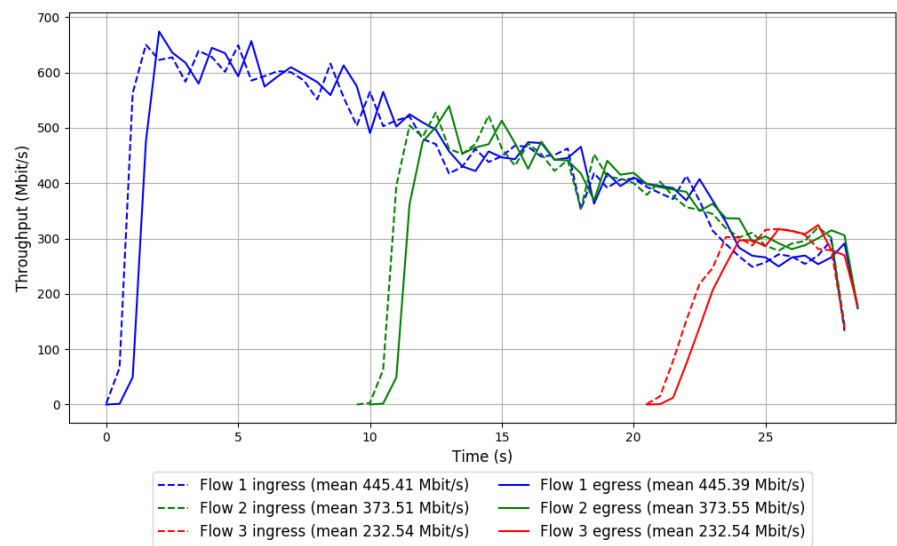
-- Flow 3:

Average throughput: 232.54 Mbit/s

95th percentile per-packet one-way delay: 59.441 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-25 17:42:30

End at: 2019-01-25 17:43:00

Local clock offset: -0.152 ms

Remote clock offset: 0.02 ms

Below is generated by plot.py at 2019-01-25 21:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 762.46 Mbit/s

95th percentile per-packet one-way delay: 63.535 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 446.18 Mbit/s

95th percentile per-packet one-way delay: 64.031 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 362.93 Mbit/s

95th percentile per-packet one-way delay: 59.903 ms

Loss rate: 0.00%

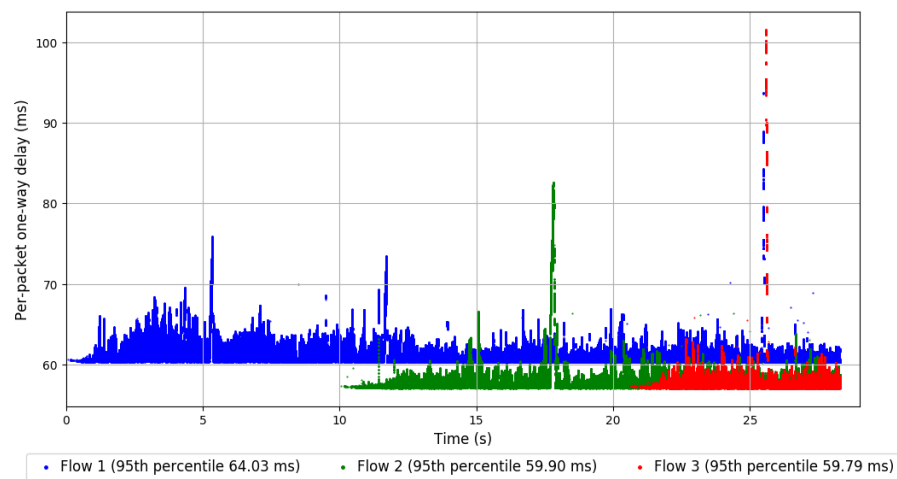
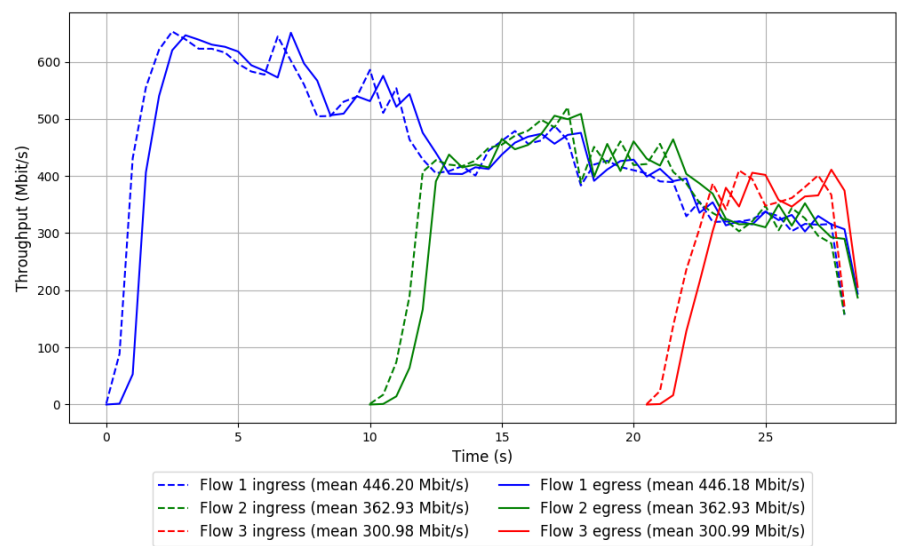
-- Flow 3:

Average throughput: 300.99 Mbit/s

95th percentile per-packet one-way delay: 59.791 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesC3 — Data Link

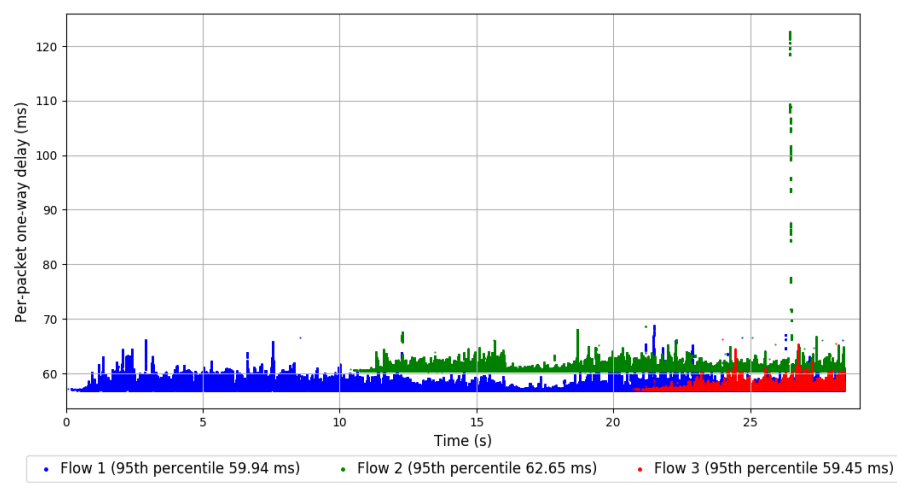
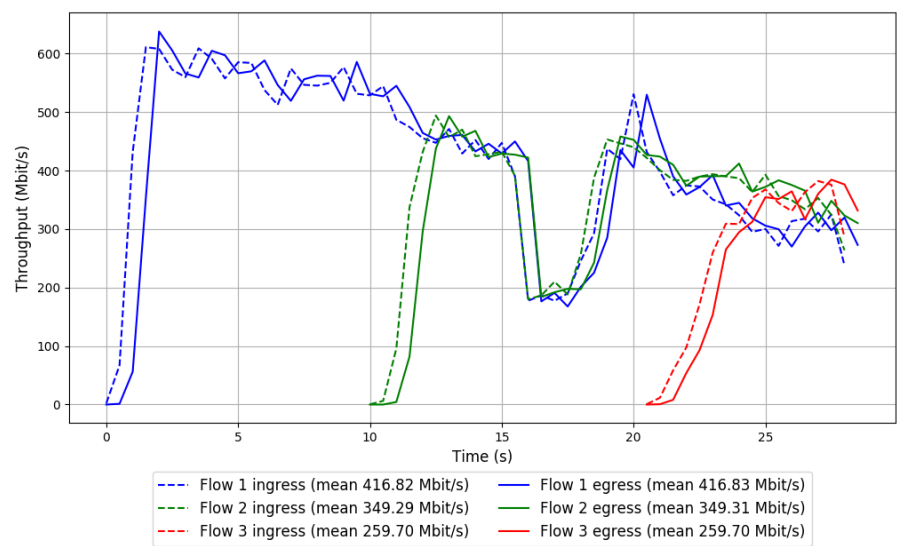


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-25 18:24:54
End at: 2019-01-25 18:25:24
Local clock offset: -0.276 ms
Remote clock offset: -0.441 ms

Below is generated by plot.py at 2019-01-25 21:39:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 709.58 Mbit/s
95th percentile per-packet one-way delay: 61.794 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 416.83 Mbit/s
95th percentile per-packet one-way delay: 59.940 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 349.31 Mbit/s
95th percentile per-packet one-way delay: 62.648 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 259.70 Mbit/s
95th percentile per-packet one-way delay: 59.452 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC3 — Data Link

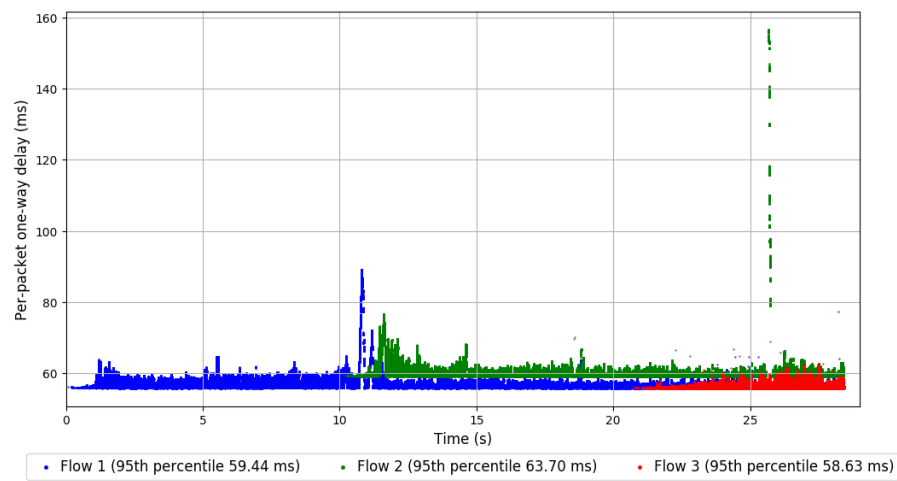
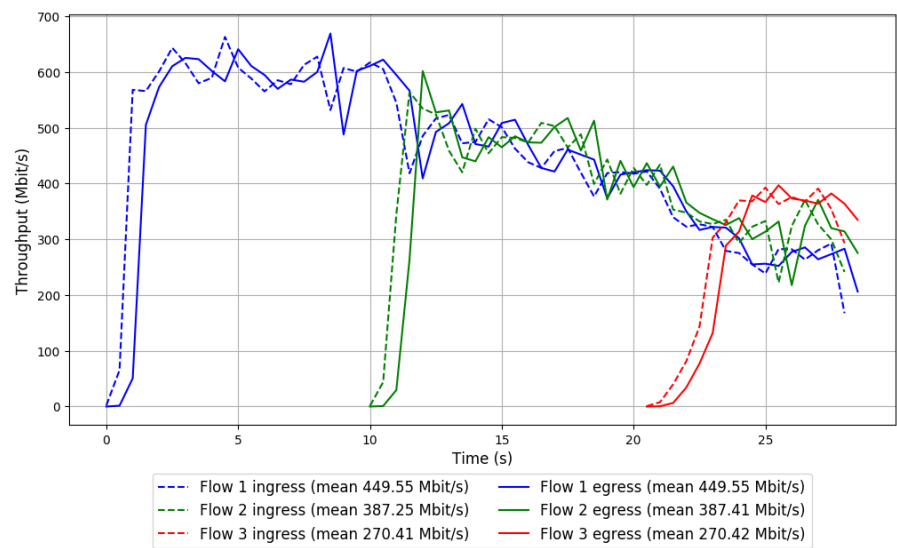


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-25 19:06:48
End at: 2019-01-25 19:07:18
Local clock offset: -0.21 ms
Remote clock offset: -1.392 ms

Below is generated by plot.py at 2019-01-25 21:42:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 772.69 Mbit/s
95th percentile per-packet one-way delay: 61.595 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 449.55 Mbit/s
95th percentile per-packet one-way delay: 59.442 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 387.41 Mbit/s
95th percentile per-packet one-way delay: 63.701 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 270.42 Mbit/s
95th percentile per-packet one-way delay: 58.626 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-25 19:48:31

End at: 2019-01-25 19:49:01

Local clock offset: -0.123 ms

Remote clock offset: 0.105 ms

Below is generated by plot.py at 2019-01-25 21:43:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 744.48 Mbit/s

95th percentile per-packet one-way delay: 63.327 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 435.71 Mbit/s

95th percentile per-packet one-way delay: 61.587 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 358.09 Mbit/s

95th percentile per-packet one-way delay: 64.327 ms

Loss rate: 0.03%

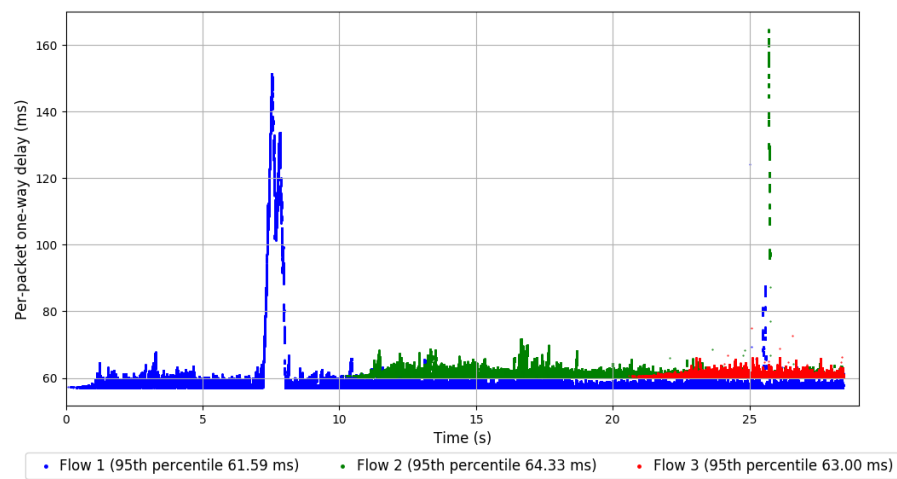
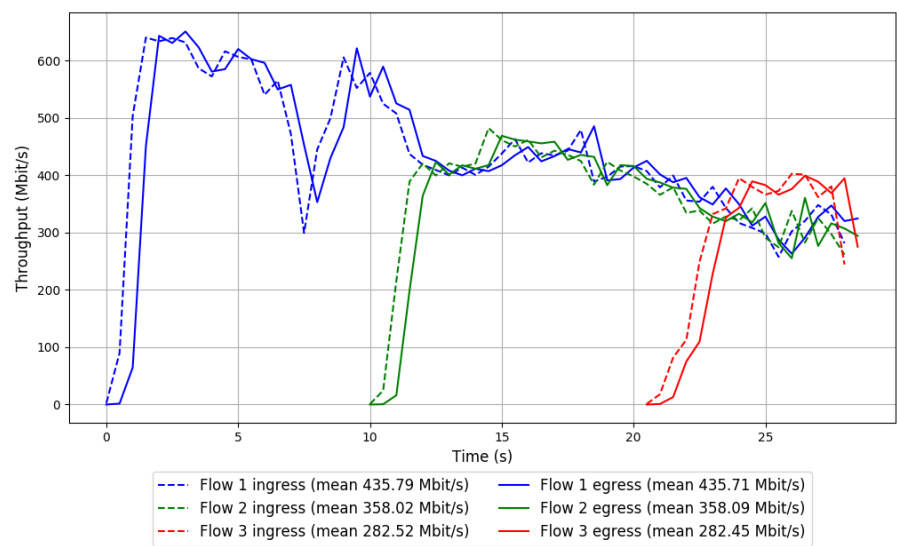
-- Flow 3:

Average throughput: 282.45 Mbit/s

95th percentile per-packet one-way delay: 63.003 ms

Loss rate: 0.08%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

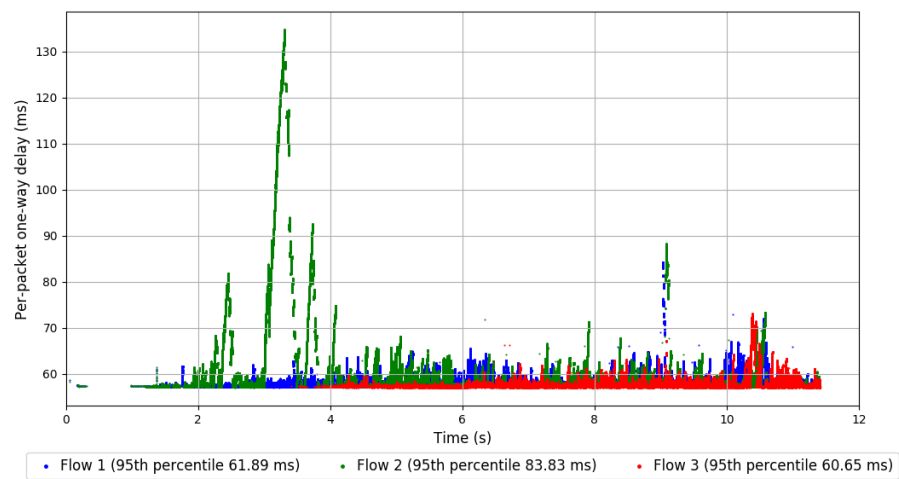
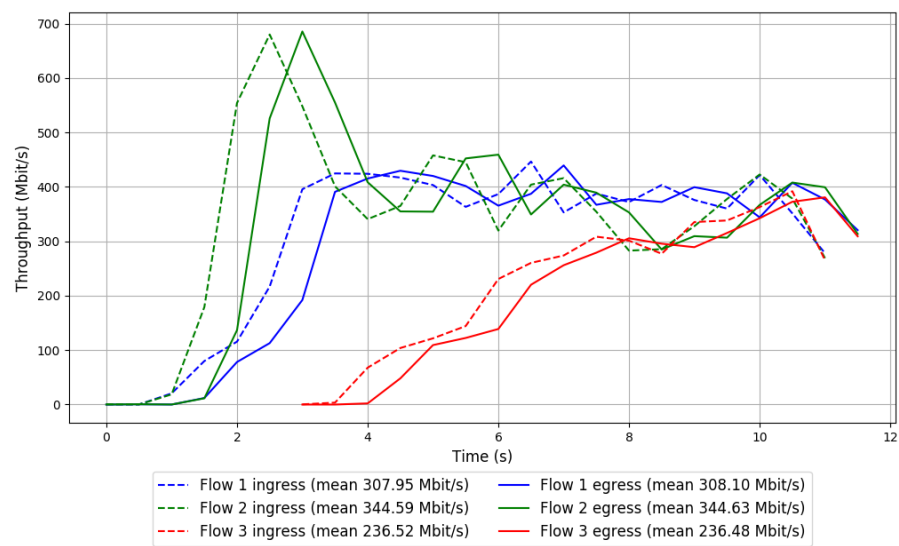
Start at: 2019-01-25 16:33:26

End at: 2019-01-25 16:33:56

Local clock offset: -0.371 ms

Remote clock offset: -0.273 ms

Run 1: Report of Indigo-MusesC5 — Data Link

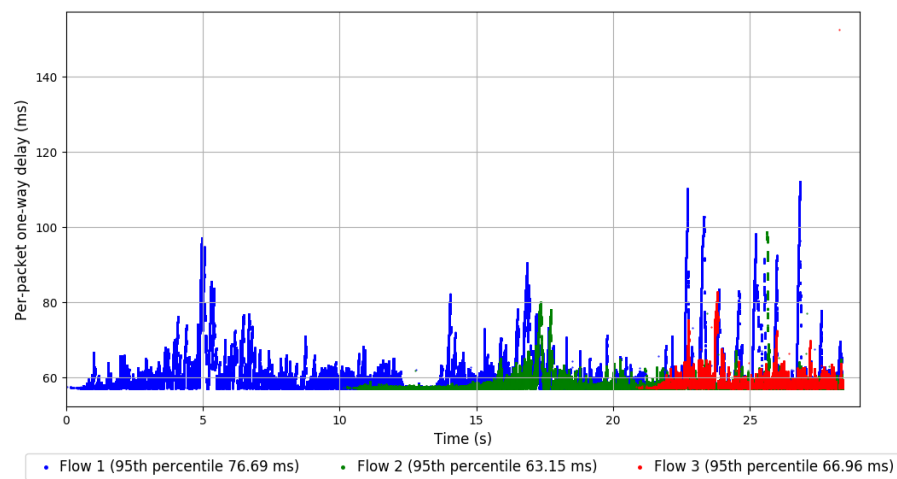
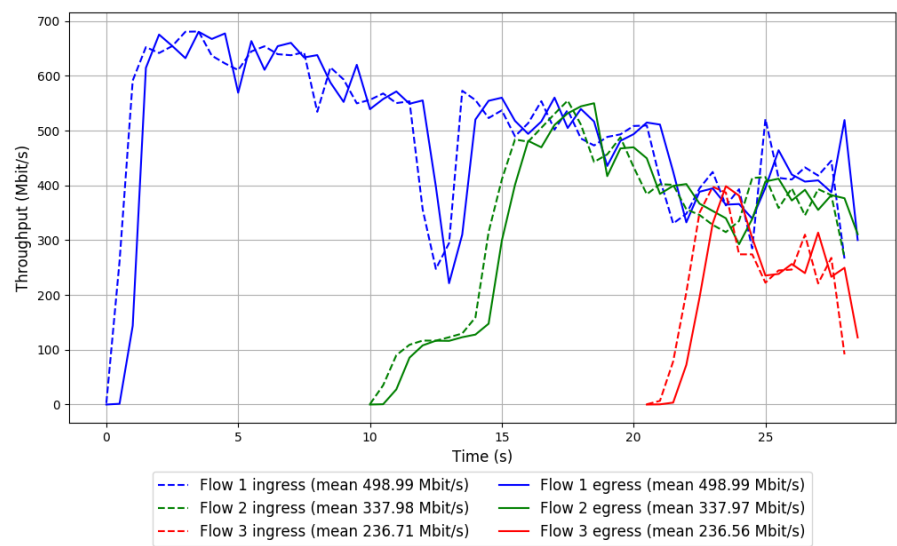


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-25 17:12:25
End at: 2019-01-25 17:12:55
Local clock offset: -0.601 ms
Remote clock offset: -0.286 ms

Below is generated by plot.py at 2019-01-25 21:45:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 779.64 Mbit/s
95th percentile per-packet one-way delay: 73.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 498.99 Mbit/s
95th percentile per-packet one-way delay: 76.687 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 337.97 Mbit/s
95th percentile per-packet one-way delay: 63.151 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 236.56 Mbit/s
95th percentile per-packet one-way delay: 66.962 ms
Loss rate: 0.05%

Run 2: Report of Indigo-MusesC5 — Data Link

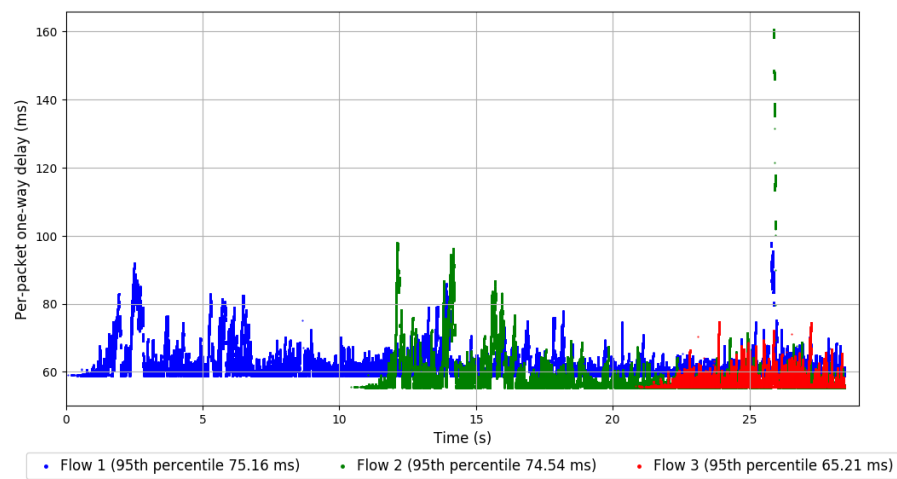
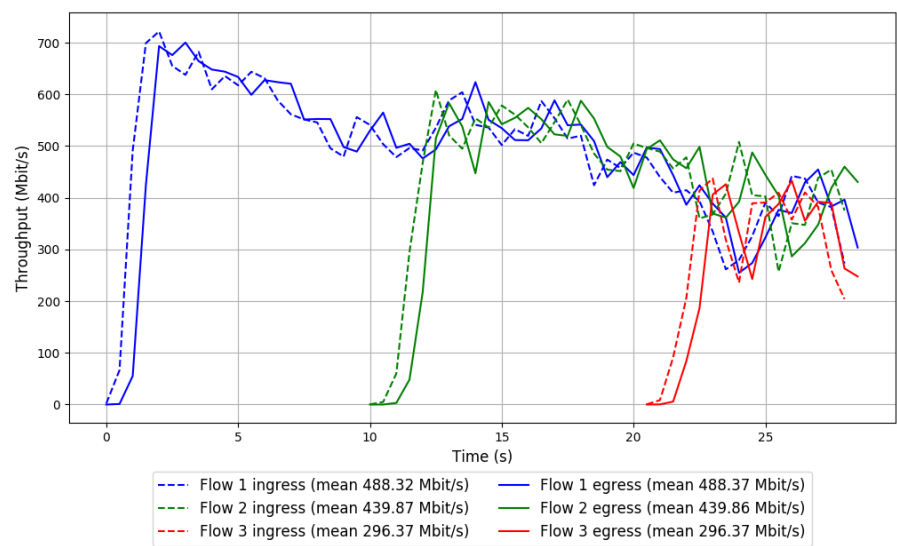


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-25 17:53:26
End at: 2019-01-25 17:53:56
Local clock offset: 0.026 ms
Remote clock offset: -1.362 ms

Below is generated by plot.py at 2019-01-25 21:47:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 847.25 Mbit/s
95th percentile per-packet one-way delay: 74.360 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 488.37 Mbit/s
95th percentile per-packet one-way delay: 75.156 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 439.86 Mbit/s
95th percentile per-packet one-way delay: 74.537 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 296.37 Mbit/s
95th percentile per-packet one-way delay: 65.214 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC5 — Data Link

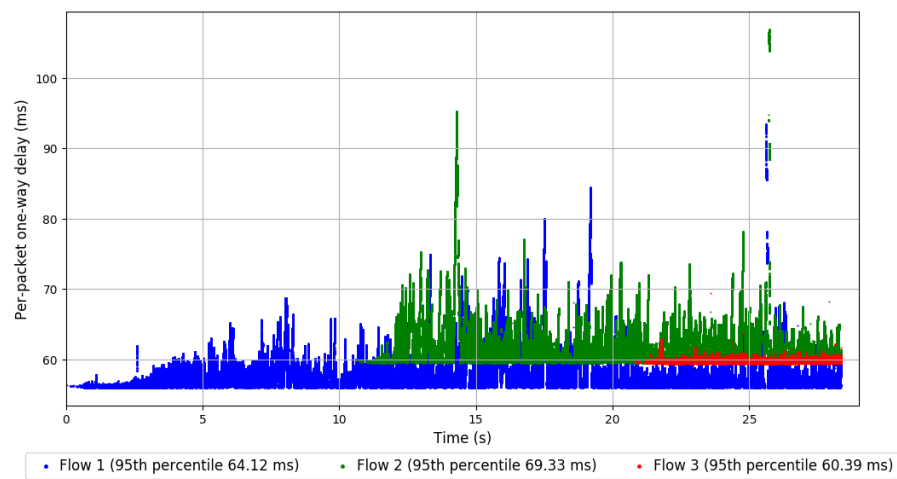
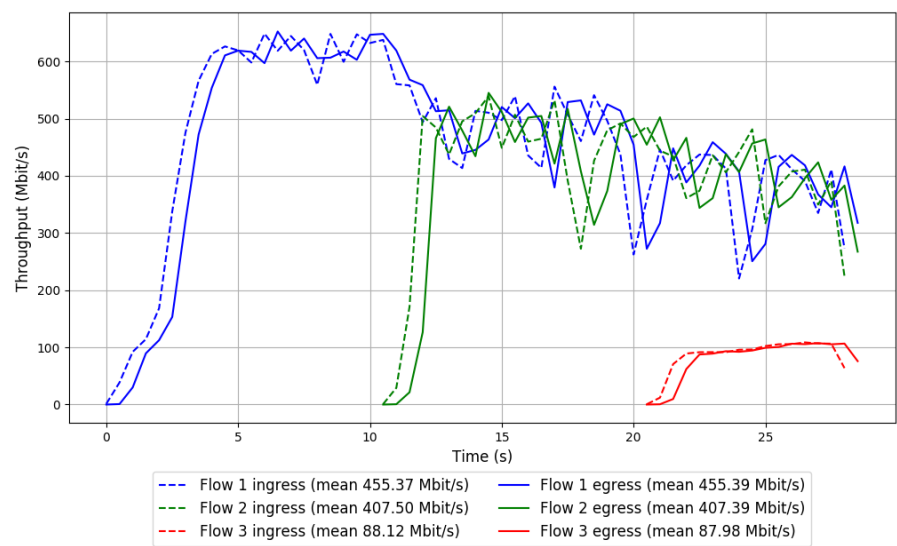


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-25 18:36:23
End at: 2019-01-25 18:36:53
Local clock offset: 0.174 ms
Remote clock offset: -0.676 ms

Below is generated by plot.py at 2019-01-25 21:47:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 734.23 Mbit/s
95th percentile per-packet one-way delay: 66.803 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 455.39 Mbit/s
95th percentile per-packet one-way delay: 64.122 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 407.39 Mbit/s
95th percentile per-packet one-way delay: 69.330 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 87.98 Mbit/s
95th percentile per-packet one-way delay: 60.388 ms
Loss rate: 0.19%

Run 4: Report of Indigo-MusesC5 — Data Link

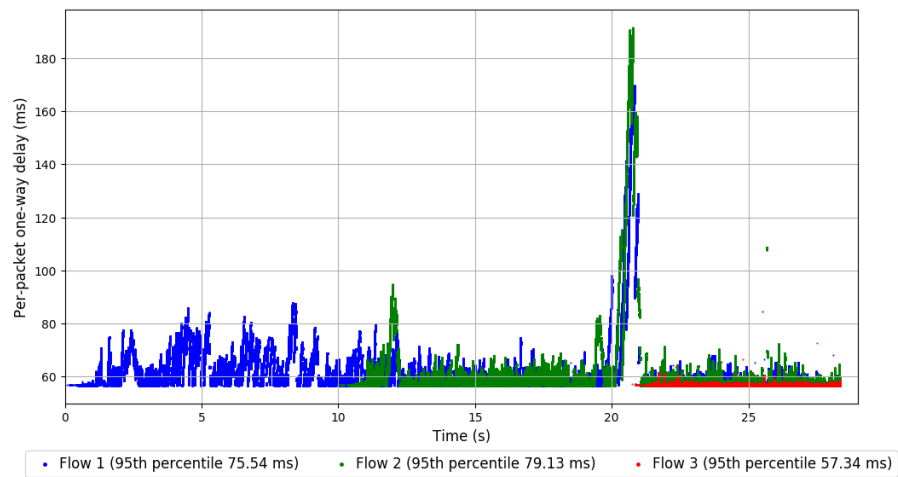
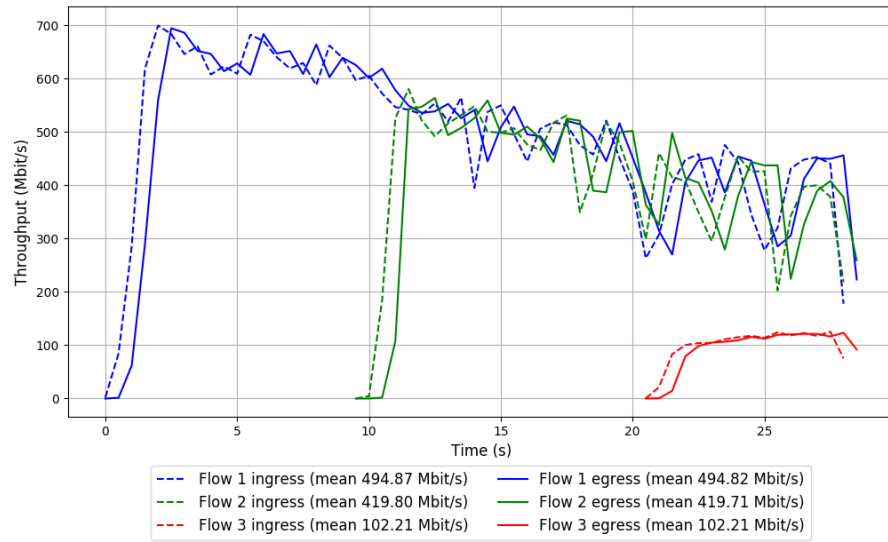


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-25 19:17:46
End at: 2019-01-25 19:18:16
Local clock offset: -0.122 ms
Remote clock offset: -0.531 ms

Below is generated by plot.py at 2019-01-25 21:48:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 794.97 Mbit/s
95th percentile per-packet one-way delay: 75.913 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 494.82 Mbit/s
95th percentile per-packet one-way delay: 75.538 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 419.71 Mbit/s
95th percentile per-packet one-way delay: 79.128 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 102.21 Mbit/s
95th percentile per-packet one-way delay: 57.340 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-25 16:46:50

End at: 2019-01-25 16:47:20

Local clock offset: -0.097 ms

Remote clock offset: 0.028 ms

Below is generated by plot.py at 2019-01-25 21:49:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 671.78 Mbit/s

95th percentile per-packet one-way delay: 62.169 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 444.40 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 349.52 Mbit/s

95th percentile per-packet one-way delay: 59.695 ms

Loss rate: 0.00%

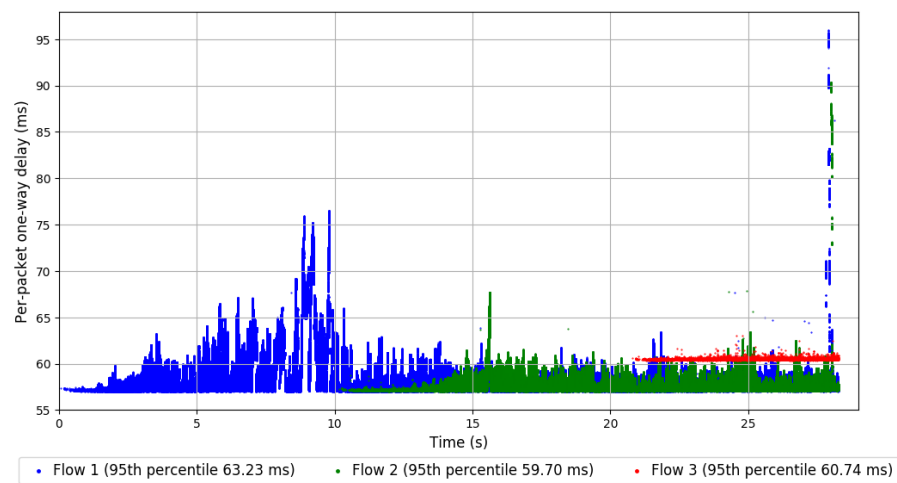
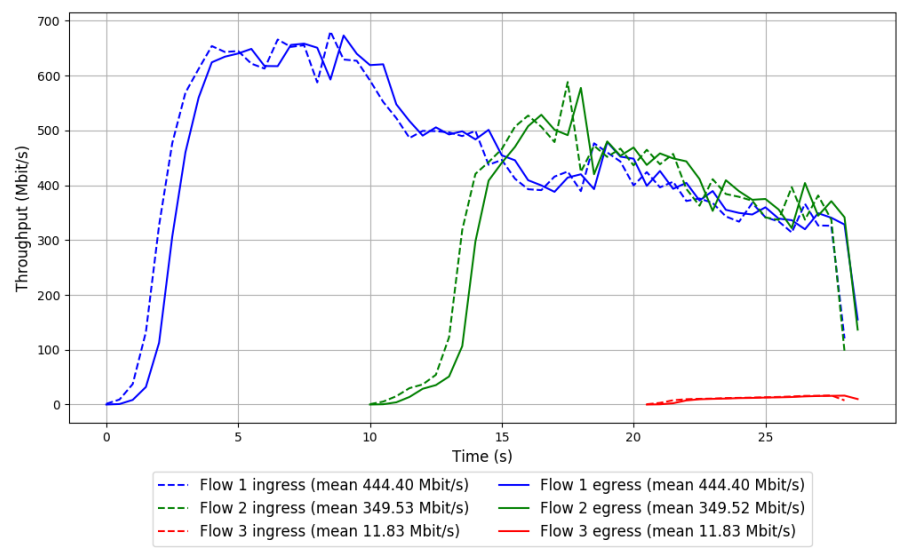
-- Flow 3:

Average throughput: 11.83 Mbit/s

95th percentile per-packet one-way delay: 60.736 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link

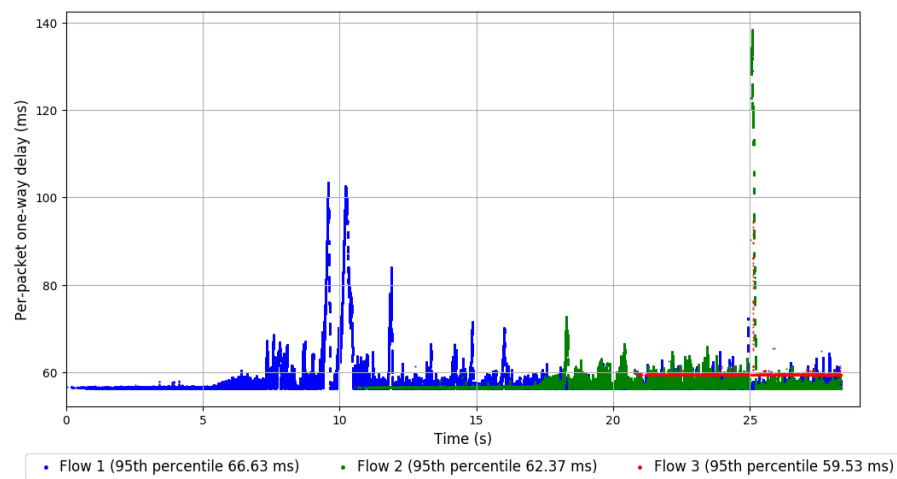
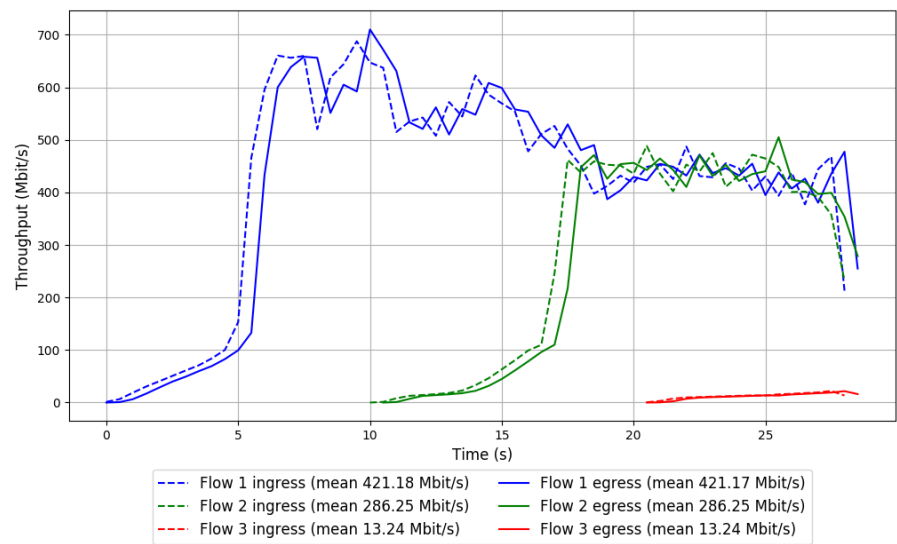


Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-25 17:26:17
End at: 2019-01-25 17:26:47
Local clock offset: -0.015 ms
Remote clock offset: -0.605 ms

Below is generated by plot.py at 2019-01-25 21:52:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 604.65 Mbit/s
95th percentile per-packet one-way delay: 65.210 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 421.17 Mbit/s
95th percentile per-packet one-way delay: 66.631 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 286.25 Mbit/s
95th percentile per-packet one-way delay: 62.372 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.24 Mbit/s
95th percentile per-packet one-way delay: 59.531 ms
Loss rate: 0.09%

Run 2: Report of Indigo-MusesD — Data Link

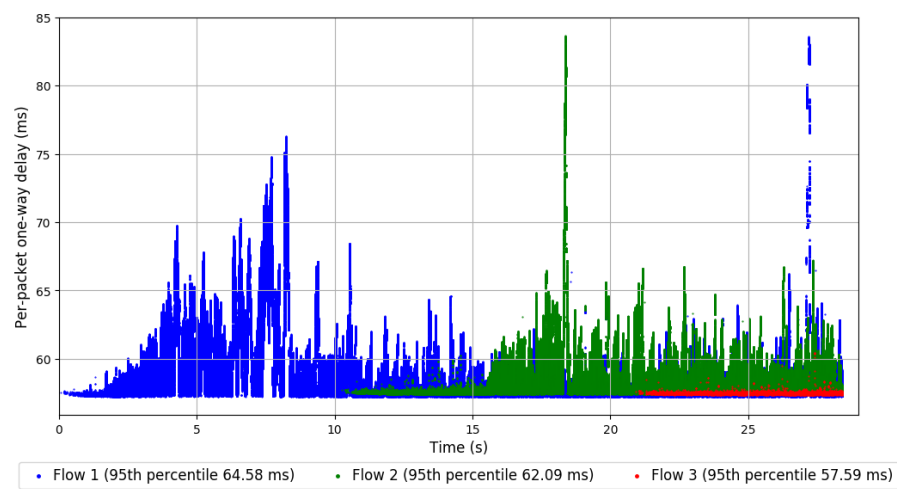
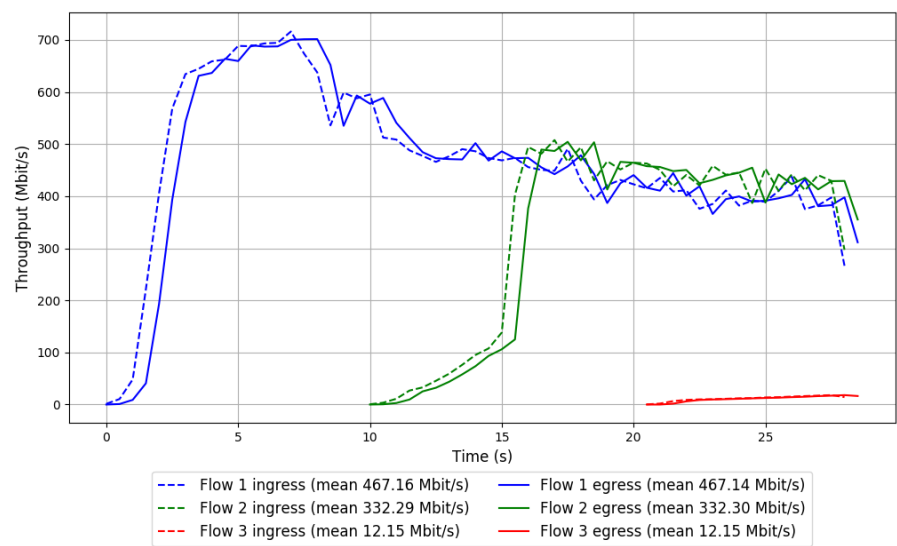


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-25 18:07:59
End at: 2019-01-25 18:08:29
Local clock offset: -0.551 ms
Remote clock offset: -0.109 ms

Below is generated by plot.py at 2019-01-25 21:55:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 683.00 Mbit/s
95th percentile per-packet one-way delay: 63.740 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 467.14 Mbit/s
95th percentile per-packet one-way delay: 64.575 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 332.30 Mbit/s
95th percentile per-packet one-way delay: 62.091 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.15 Mbit/s
95th percentile per-packet one-way delay: 57.595 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-25 18:50:42

End at: 2019-01-25 18:51:12

Local clock offset: 0.066 ms

Remote clock offset: 0.756 ms

Below is generated by plot.py at 2019-01-25 21:55:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 522.55 Mbit/s

95th percentile per-packet one-way delay: 109.210 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 482.57 Mbit/s

95th percentile per-packet one-way delay: 110.575 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.99 Mbit/s

95th percentile per-packet one-way delay: 58.064 ms

Loss rate: 0.00%

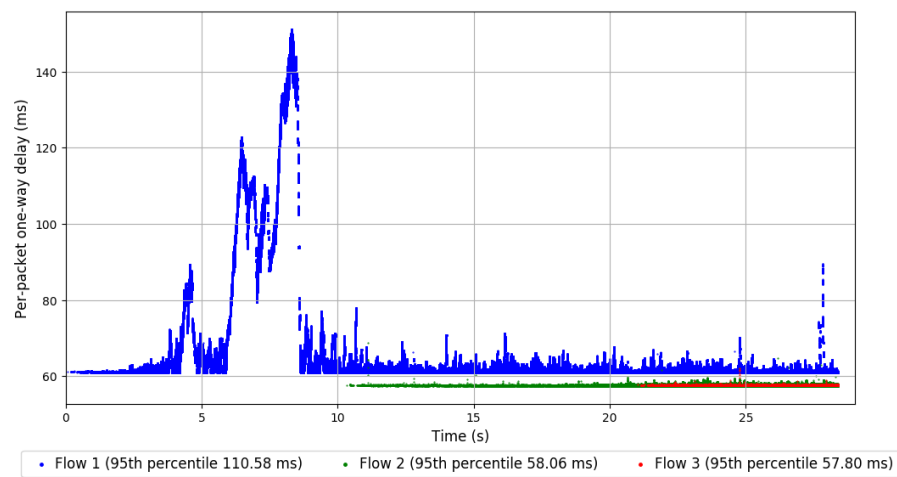
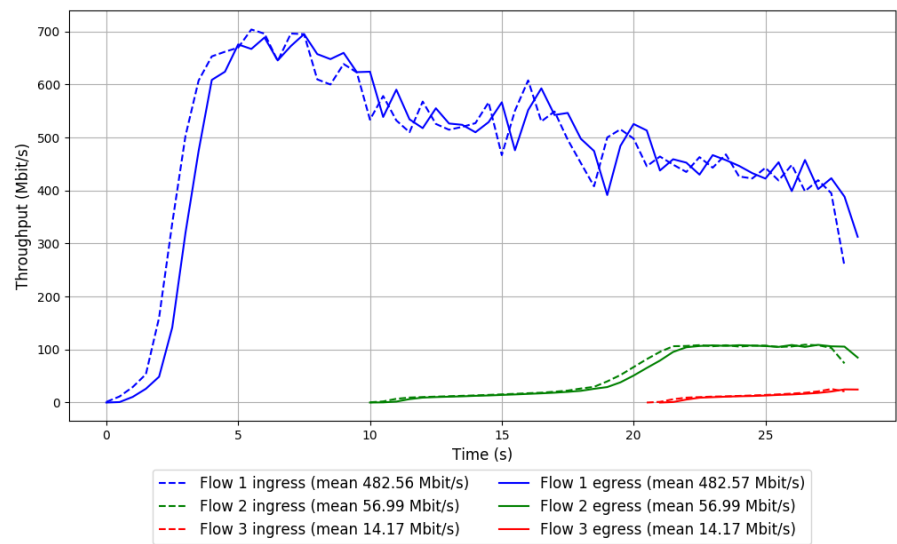
-- Flow 3:

Average throughput: 14.17 Mbit/s

95th percentile per-packet one-way delay: 57.798 ms

Loss rate: 0.00%

Run 4: Report of Indigo-MusesD — Data Link

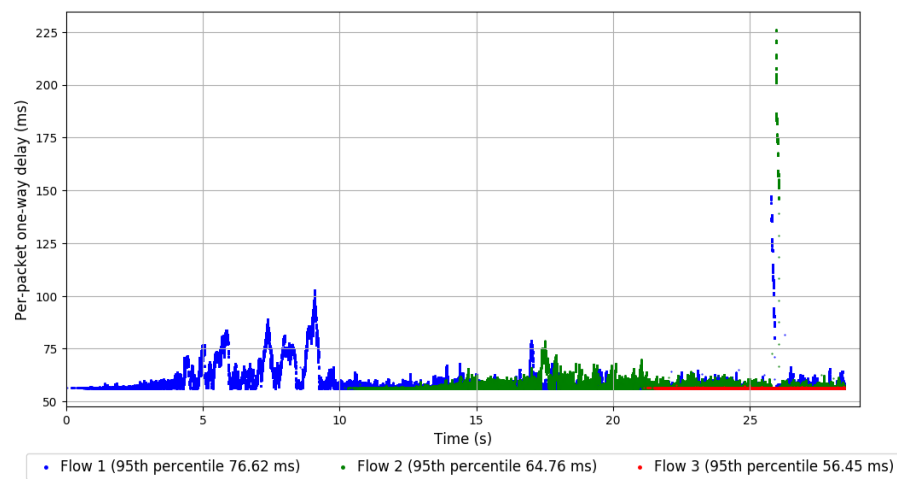
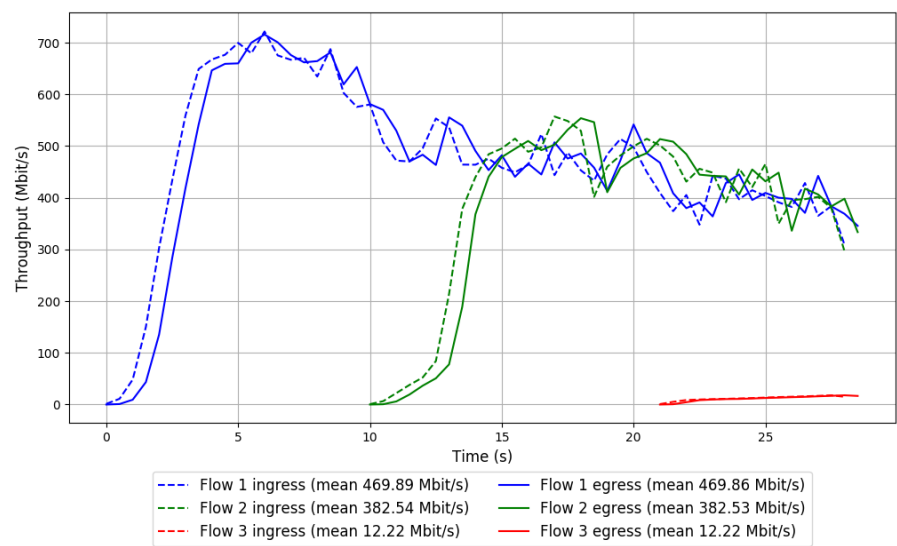


Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-25 19:32:10
End at: 2019-01-25 19:32:40
Local clock offset: 0.245 ms
Remote clock offset: -0.207 ms

Below is generated by plot.py at 2019-01-25 21:59:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 719.21 Mbit/s
95th percentile per-packet one-way delay: 73.910 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 469.86 Mbit/s
95th percentile per-packet one-way delay: 76.616 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 382.53 Mbit/s
95th percentile per-packet one-way delay: 64.763 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.22 Mbit/s
95th percentile per-packet one-way delay: 56.454 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-25 16:39:11

End at: 2019-01-25 16:39:41

Local clock offset: -0.303 ms

Remote clock offset: 1.19 ms

Below is generated by plot.py at 2019-01-25 22:02:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 874.60 Mbit/s

95th percentile per-packet one-way delay: 67.275 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 516.07 Mbit/s

95th percentile per-packet one-way delay: 65.864 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 437.46 Mbit/s

95th percentile per-packet one-way delay: 73.147 ms

Loss rate: 0.06%

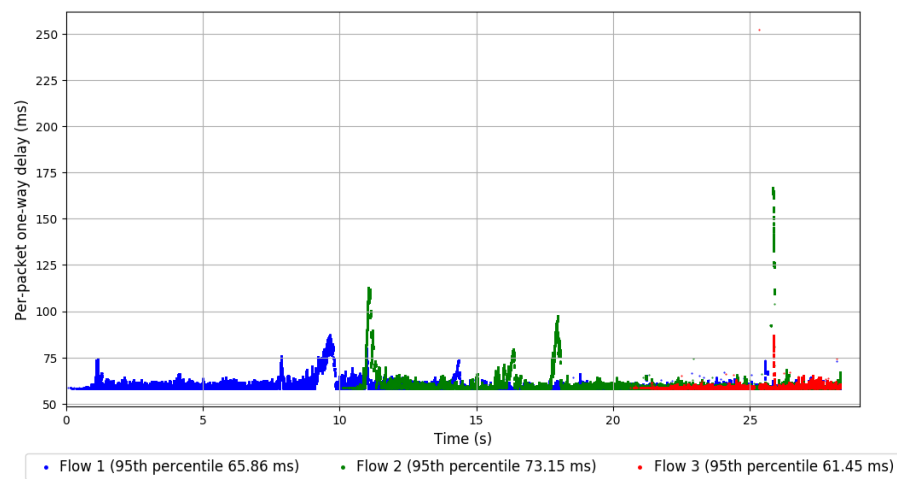
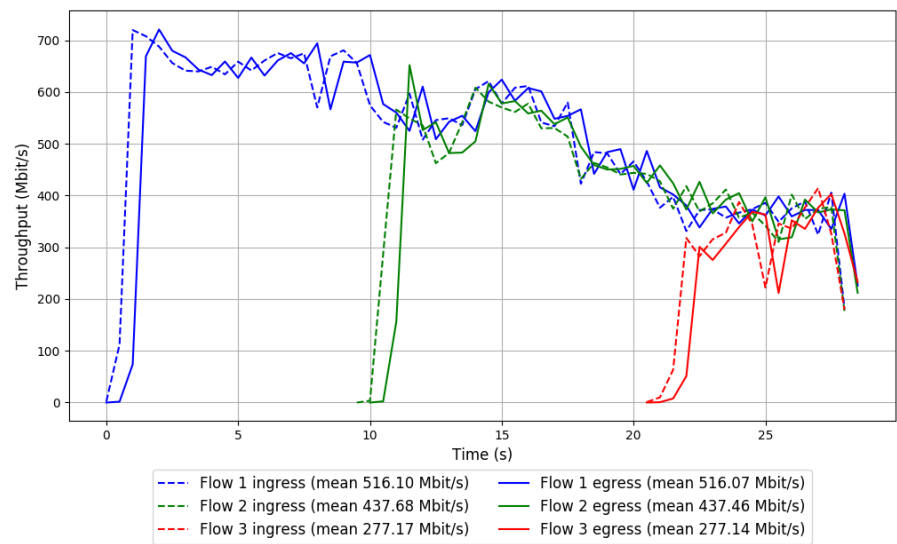
-- Flow 3:

Average throughput: 277.14 Mbit/s

95th percentile per-packet one-way delay: 61.454 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesT — Data Link

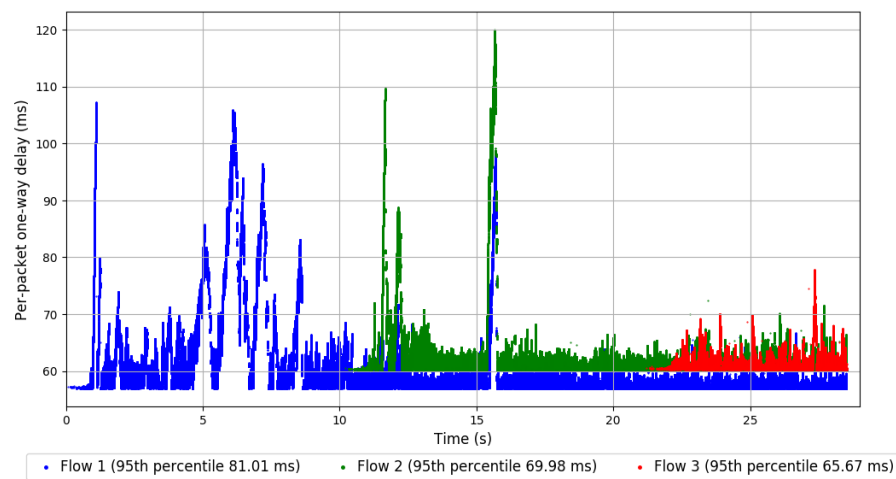
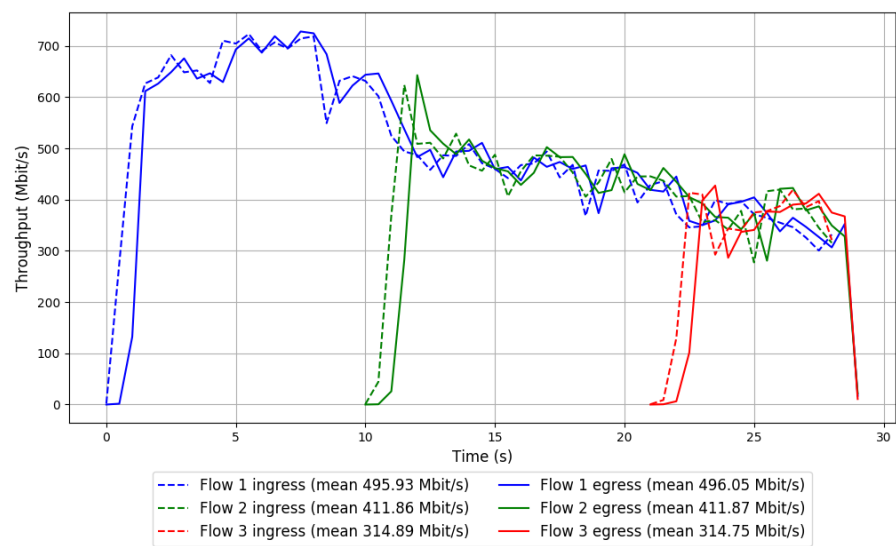


Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-25 17:18:44
End at: 2019-01-25 17:19:14
Local clock offset: -0.162 ms
Remote clock offset: -0.098 ms

Below is generated by plot.py at 2019-01-25 22:04:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 841.87 Mbit/s
95th percentile per-packet one-way delay: 77.928 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 496.05 Mbit/s
95th percentile per-packet one-way delay: 81.008 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 411.87 Mbit/s
95th percentile per-packet one-way delay: 69.985 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 314.75 Mbit/s
95th percentile per-packet one-way delay: 65.669 ms
Loss rate: 0.08%

Run 2: Report of Indigo-MusesT — Data Link

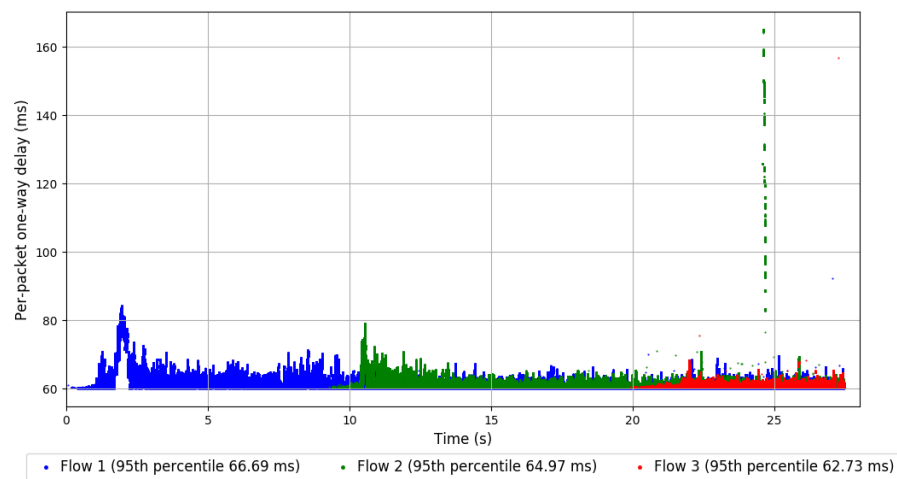
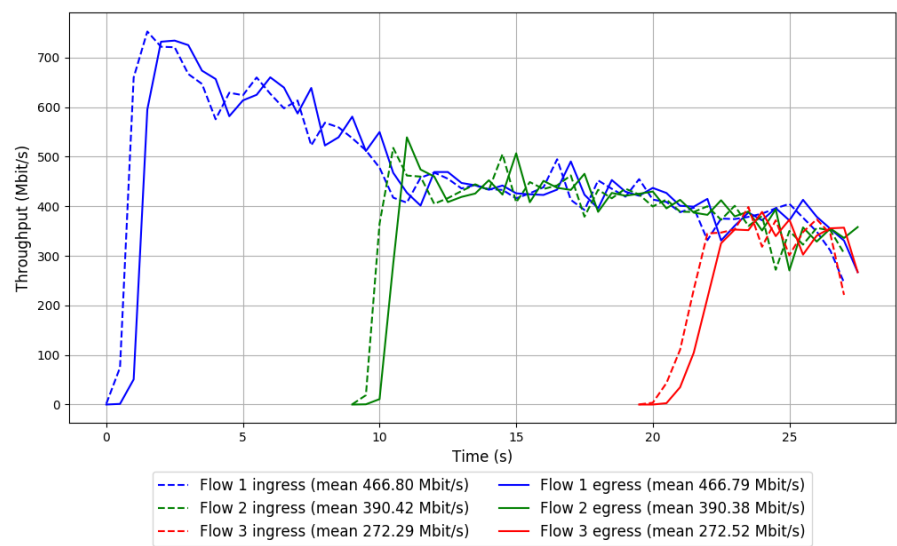


Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-25 17:59:54
End at: 2019-01-25 18:00:24
Local clock offset: -0.133 ms
Remote clock offset: -0.059 ms

Below is generated by plot.py at 2019-01-25 22:04:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 800.92 Mbit/s
95th percentile per-packet one-way delay: 65.916 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 466.79 Mbit/s
95th percentile per-packet one-way delay: 66.691 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 390.38 Mbit/s
95th percentile per-packet one-way delay: 64.966 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 272.52 Mbit/s
95th percentile per-packet one-way delay: 62.733 ms
Loss rate: 0.01%

Run 3: Report of Indigo-MusesT — Data Link

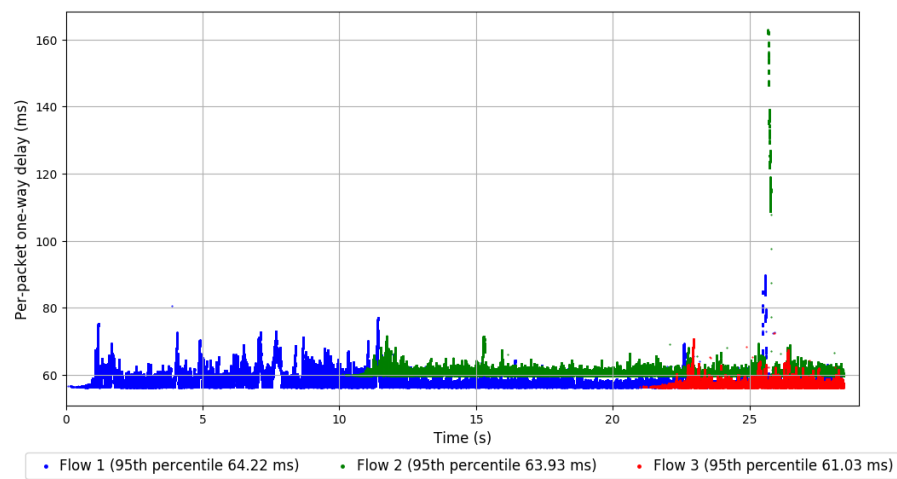
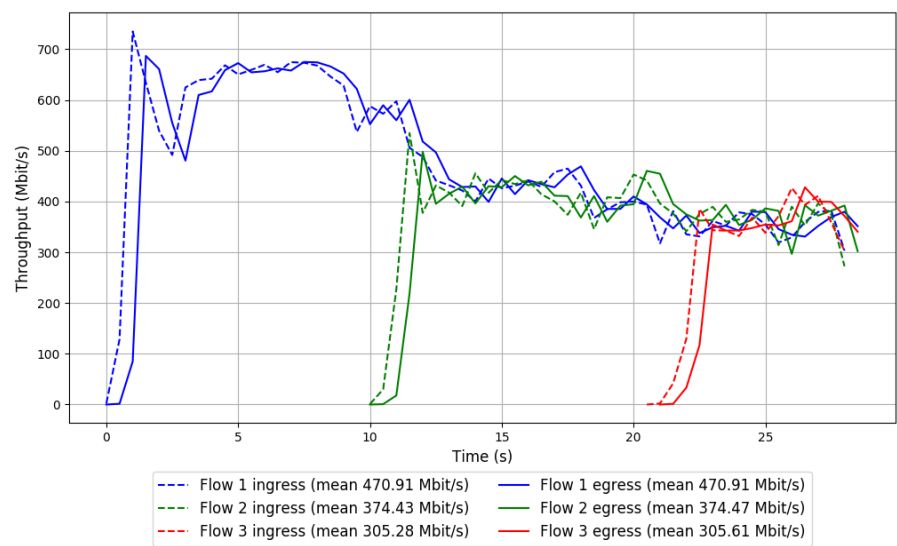


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-25 18:42:49
End at: 2019-01-25 18:43:19
Local clock offset: -0.075 ms
Remote clock offset: -0.752 ms

Below is generated by plot.py at 2019-01-25 22:05:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 792.65 Mbit/s
95th percentile per-packet one-way delay: 63.864 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 470.91 Mbit/s
95th percentile per-packet one-way delay: 64.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 374.47 Mbit/s
95th percentile per-packet one-way delay: 63.930 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 305.61 Mbit/s
95th percentile per-packet one-way delay: 61.031 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-25 19:24:16

End at: 2019-01-25 19:24:46

Local clock offset: 0.101 ms

Remote clock offset: 0.123 ms

Below is generated by plot.py at 2019-01-25 22:07:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 756.25 Mbit/s

95th percentile per-packet one-way delay: 92.243 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 457.96 Mbit/s

95th percentile per-packet one-way delay: 113.971 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 353.07 Mbit/s

95th percentile per-packet one-way delay: 64.906 ms

Loss rate: 0.01%

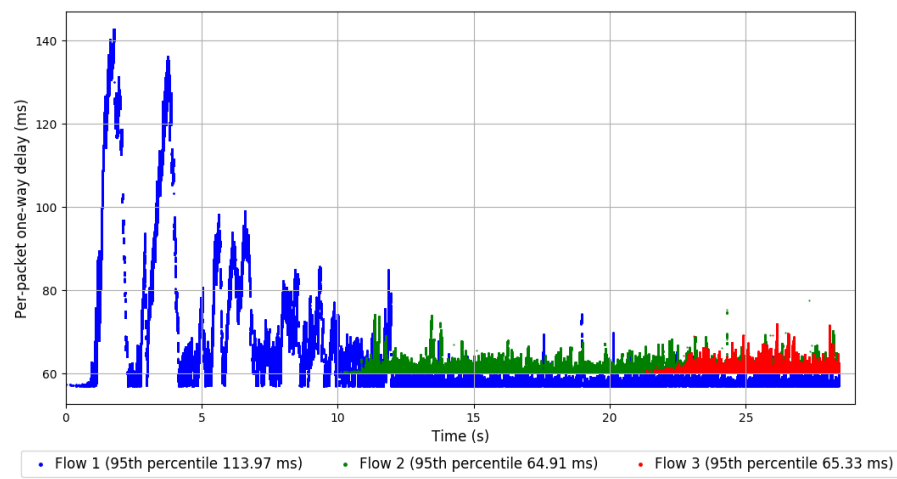
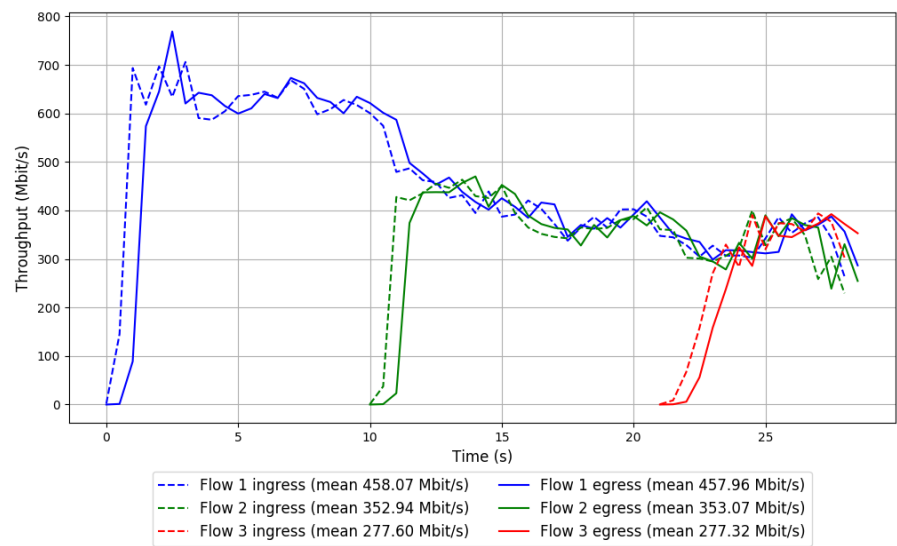
-- Flow 3:

Average throughput: 277.32 Mbit/s

95th percentile per-packet one-way delay: 65.326 ms

Loss rate: 0.14%

Run 5: Report of Indigo-MusesT — Data Link

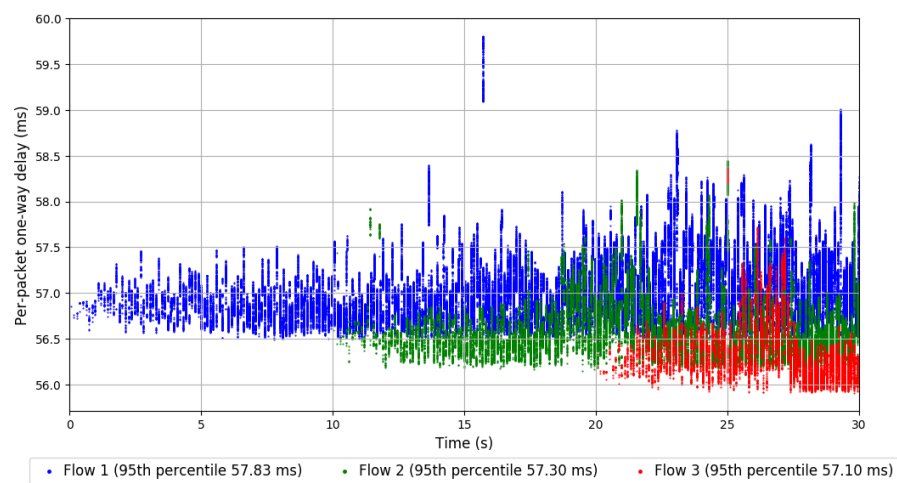
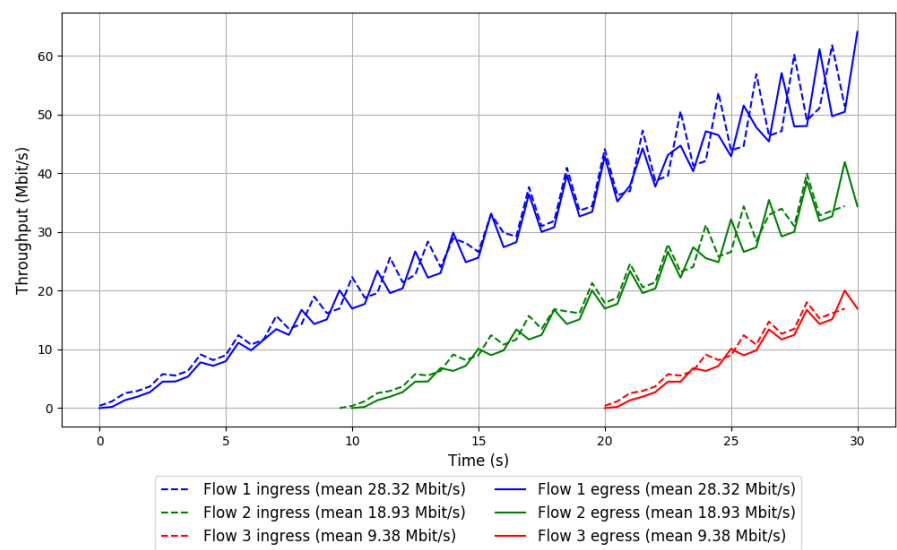


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 16:53:05
End at: 2019-01-25 16:53:35
Local clock offset: 0.007 ms
Remote clock offset: -0.73 ms

# Below is generated by plot.py at 2019-01-25 22:07:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.99 Mbit/s
95th percentile per-packet one-way delay: 57.714 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.32 Mbit/s
95th percentile per-packet one-way delay: 57.826 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.93 Mbit/s
95th percentile per-packet one-way delay: 57.296 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.38 Mbit/s
95th percentile per-packet one-way delay: 57.099 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-01-25 17:32:44

End at: 2019-01-25 17:33:14

Local clock offset: 0.045 ms

Remote clock offset: -0.18 ms

Below is generated by plot.py at 2019-01-25 22:07:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.13 Mbit/s

95th percentile per-packet one-way delay: 60.812 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.91 Mbit/s

95th percentile per-packet one-way delay: 58.024 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.98 Mbit/s

95th percentile per-packet one-way delay: 61.254 ms

Loss rate: 0.00%

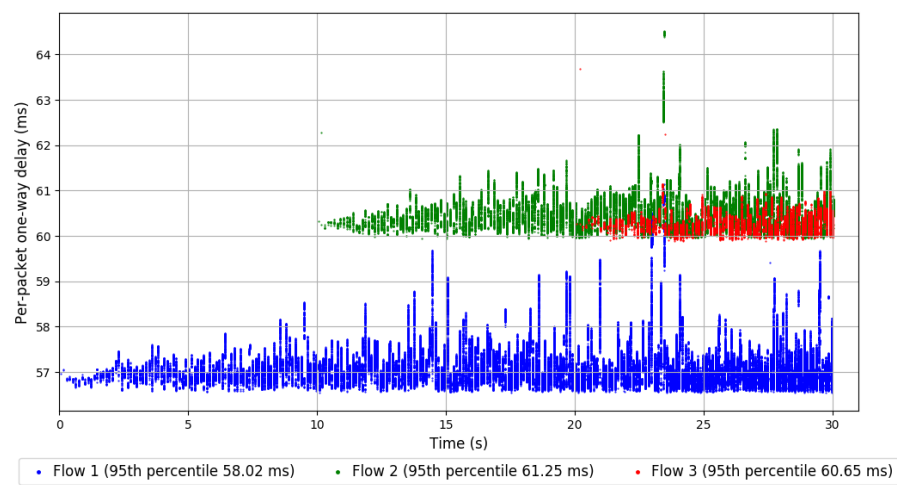
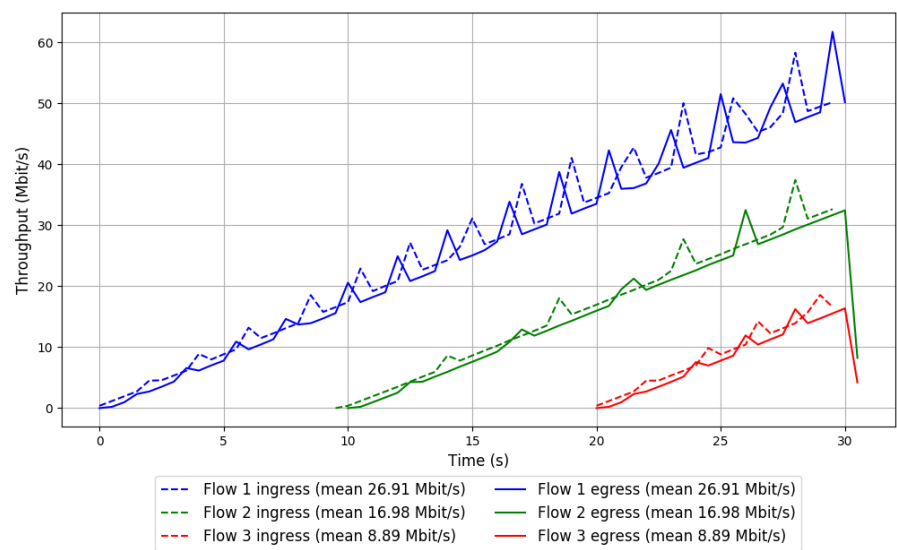
-- Flow 3:

Average throughput: 8.89 Mbit/s

95th percentile per-packet one-way delay: 60.649 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

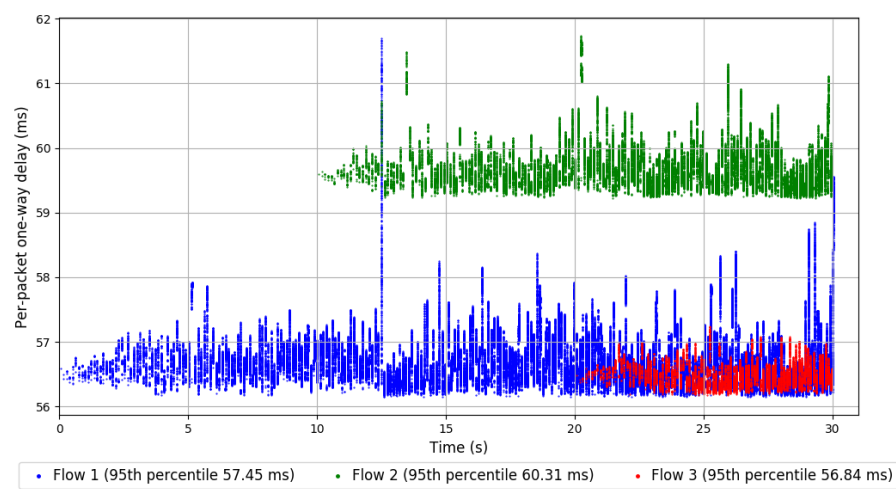
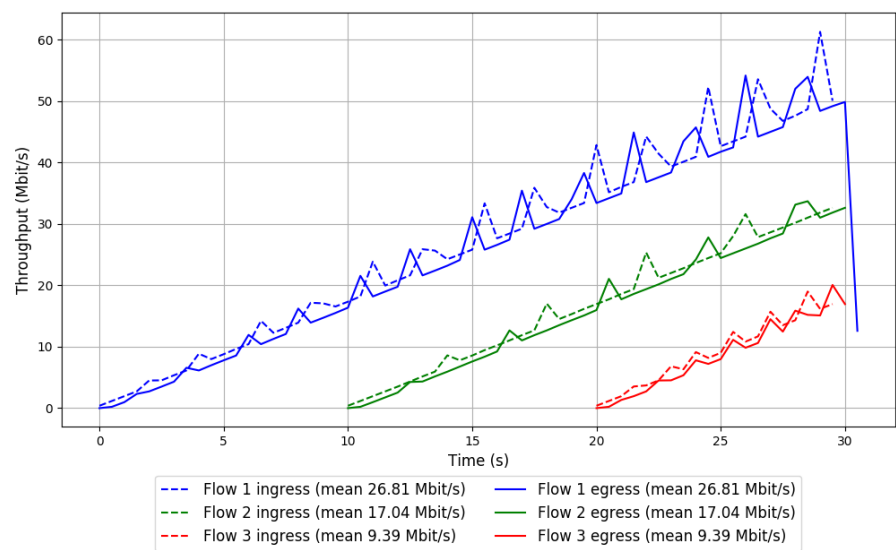


Run 3: Statistics of LEDBAT

Start at: 2019-01-25 18:14:50
End at: 2019-01-25 18:15:20
Local clock offset: 0.079 ms
Remote clock offset: -0.657 ms

Below is generated by plot.py at 2019-01-25 22:07:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 41.20 Mbit/s
95th percentile per-packet one-way delay: 59.917 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.81 Mbit/s
95th percentile per-packet one-way delay: 57.448 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.04 Mbit/s
95th percentile per-packet one-way delay: 60.306 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.39 Mbit/s
95th percentile per-packet one-way delay: 56.845 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-01-25 18:57:11

End at: 2019-01-25 18:57:41

Local clock offset: -0.063 ms

Remote clock offset: -0.15 ms

Below is generated by plot.py at 2019-01-25 22:07:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.71 Mbit/s

95th percentile per-packet one-way delay: 60.300 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 28.20 Mbit/s

95th percentile per-packet one-way delay: 58.008 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.95 Mbit/s

95th percentile per-packet one-way delay: 58.045 ms

Loss rate: 0.00%

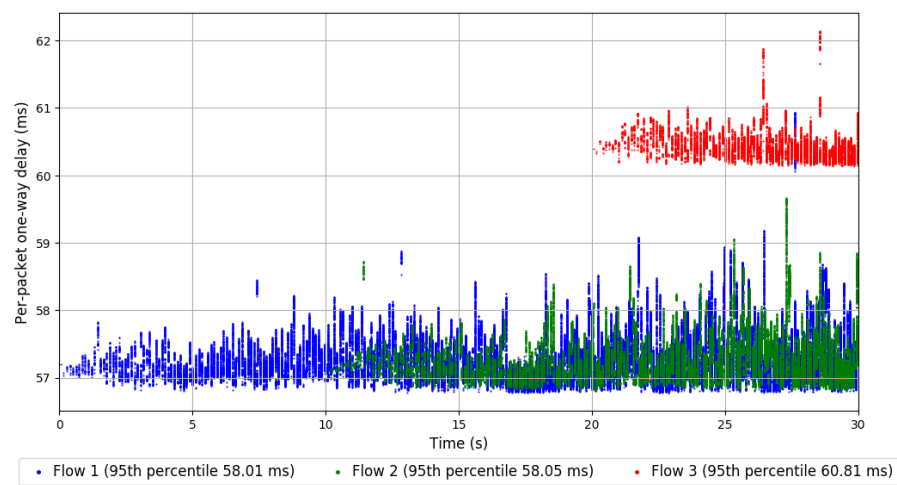
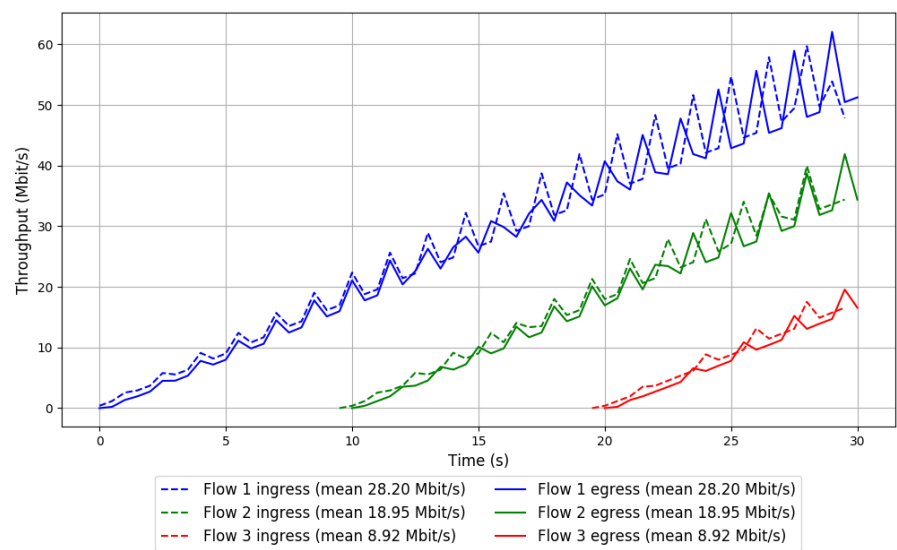
-- Flow 3:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 60.808 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-01-25 19:38:57

End at: 2019-01-25 19:39:27

Local clock offset: -0.595 ms

Remote clock offset: 0.761 ms

Below is generated by plot.py at 2019-01-25 22:07:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.14 Mbit/s

95th percentile per-packet one-way delay: 59.498 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.60 Mbit/s

95th percentile per-packet one-way delay: 59.539 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.76 Mbit/s

95th percentile per-packet one-way delay: 59.491 ms

Loss rate: 0.00%

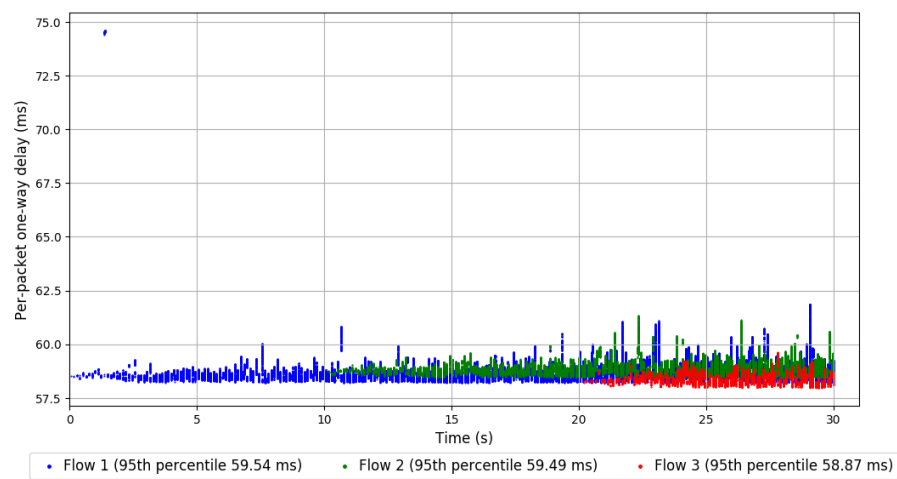
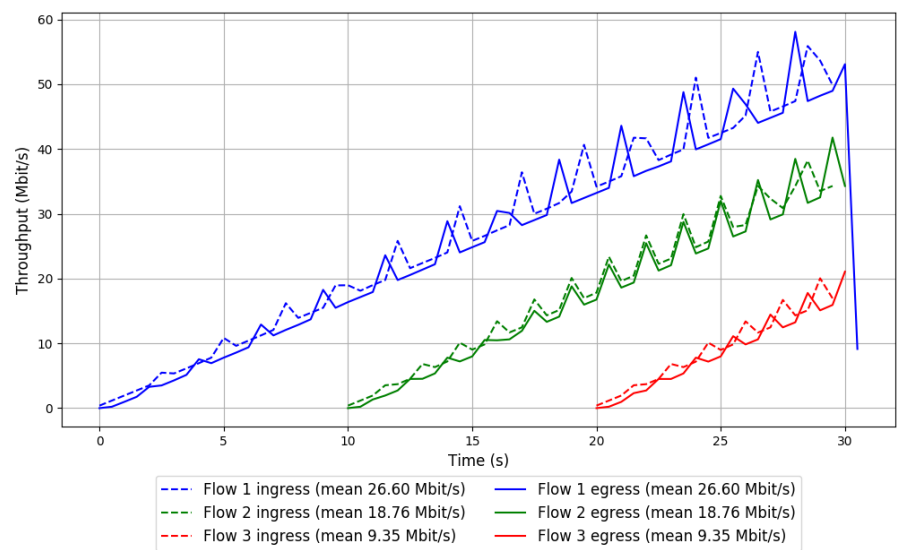
-- Flow 3:

Average throughput: 9.35 Mbit/s

95th percentile per-packet one-way delay: 58.865 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-01-25 16:50:59

End at: 2019-01-25 16:51:29

Local clock offset: -0.101 ms

Remote clock offset: 0.02 ms

Below is generated by plot.py at 2019-01-25 22:27:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 725.46 Mbit/s

95th percentile per-packet one-way delay: 201.733 ms

Loss rate: 5.76%

-- Flow 1:

Average throughput: 355.12 Mbit/s

95th percentile per-packet one-way delay: 198.511 ms

Loss rate: 5.48%

-- Flow 2:

Average throughput: 432.48 Mbit/s

95th percentile per-packet one-way delay: 208.699 ms

Loss rate: 7.61%

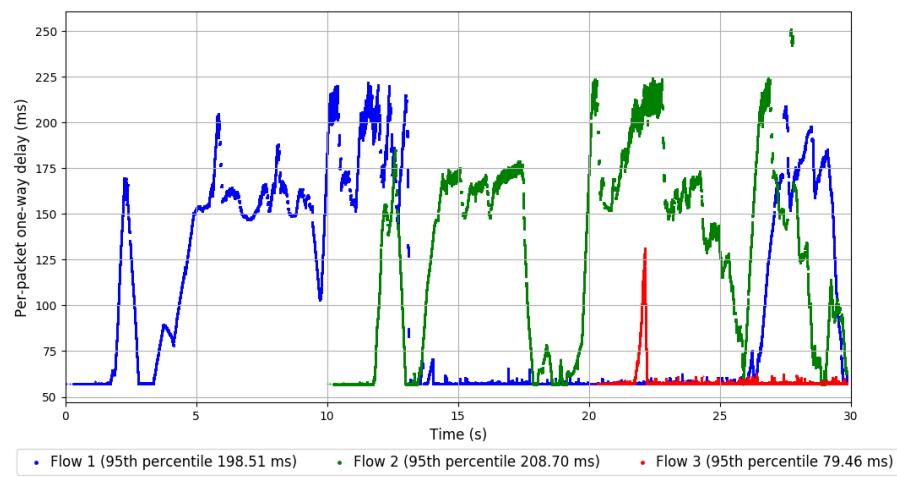
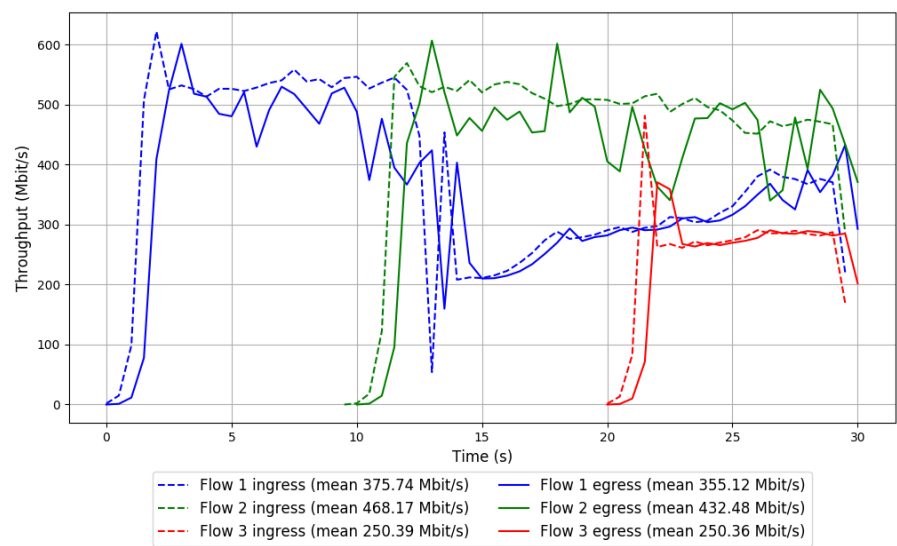
-- Flow 3:

Average throughput: 250.36 Mbit/s

95th percentile per-packet one-way delay: 79.460 ms

Loss rate: 0.02%

Run 1: Report of PCC-Allegro — Data Link

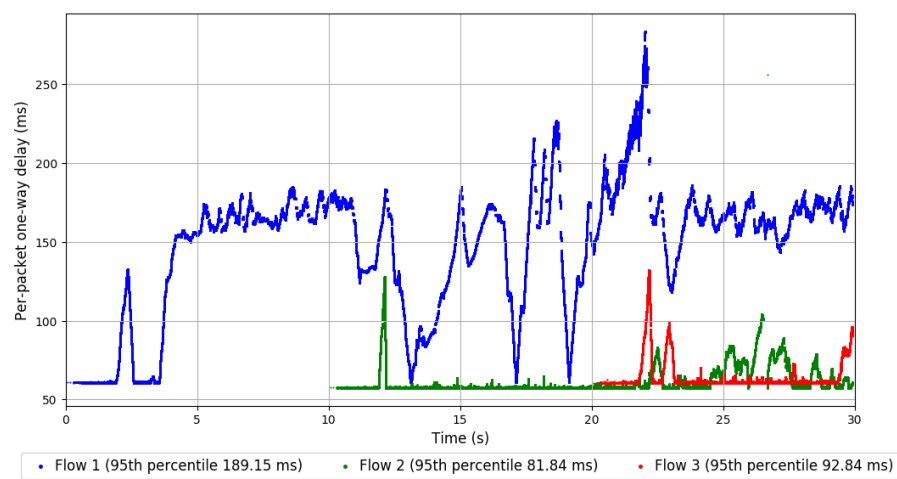
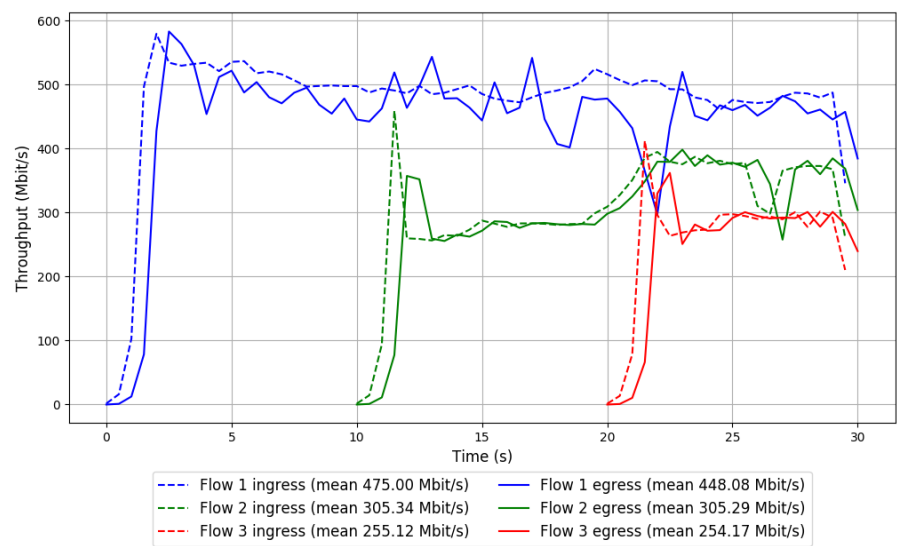


Run 2: Statistics of PCC-Allegro

Start at: 2019-01-25 17:30:19
End at: 2019-01-25 17:30:49
Local clock offset: -0.395 ms
Remote clock offset: -0.191 ms

Below is generated by plot.py at 2019-01-25 22:28:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 734.77 Mbit/s
95th percentile per-packet one-way delay: 180.516 ms
Loss rate: 3.56%
-- Flow 1:
Average throughput: 448.08 Mbit/s
95th percentile per-packet one-way delay: 189.151 ms
Loss rate: 5.65%
-- Flow 2:
Average throughput: 305.29 Mbit/s
95th percentile per-packet one-way delay: 81.845 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 254.17 Mbit/s
95th percentile per-packet one-way delay: 92.845 ms
Loss rate: 0.31%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-01-25 18:12:24

End at: 2019-01-25 18:12:54

Local clock offset: -0.141 ms

Remote clock offset: 0.121 ms

Below is generated by plot.py at 2019-01-25 22:28:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 691.36 Mbit/s

95th percentile per-packet one-way delay: 192.253 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 394.54 Mbit/s

95th percentile per-packet one-way delay: 200.504 ms

Loss rate: 2.84%

-- Flow 2:

Average throughput: 319.32 Mbit/s

95th percentile per-packet one-way delay: 123.490 ms

Loss rate: 0.28%

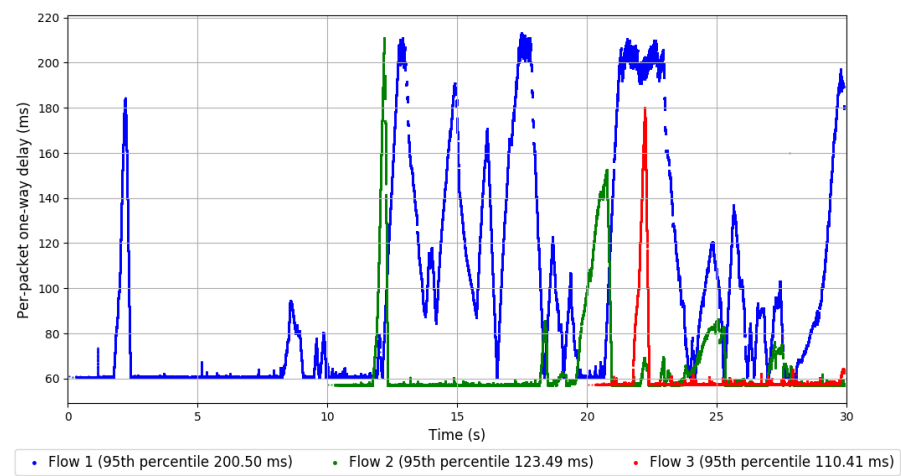
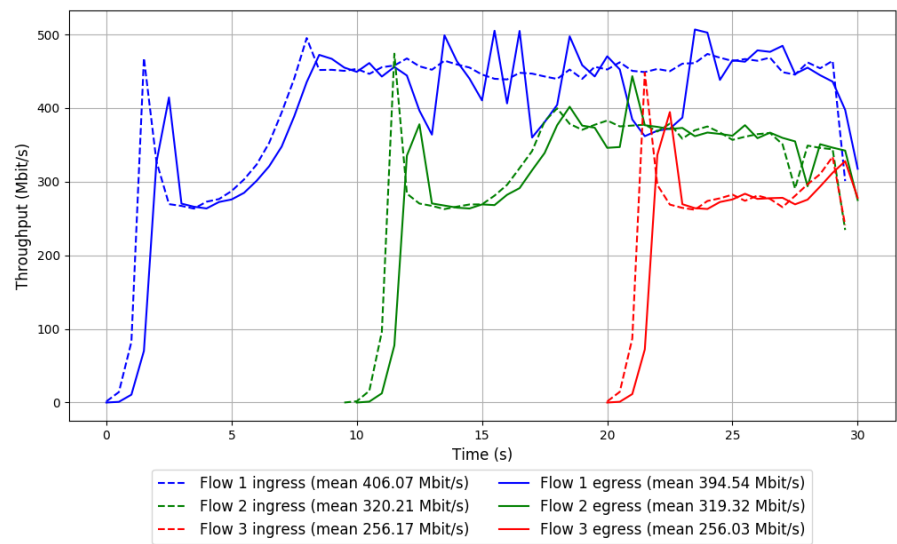
-- Flow 3:

Average throughput: 256.03 Mbit/s

95th percentile per-packet one-way delay: 110.411 ms

Loss rate: 0.04%

Run 3: Report of PCC-Allegro — Data Link

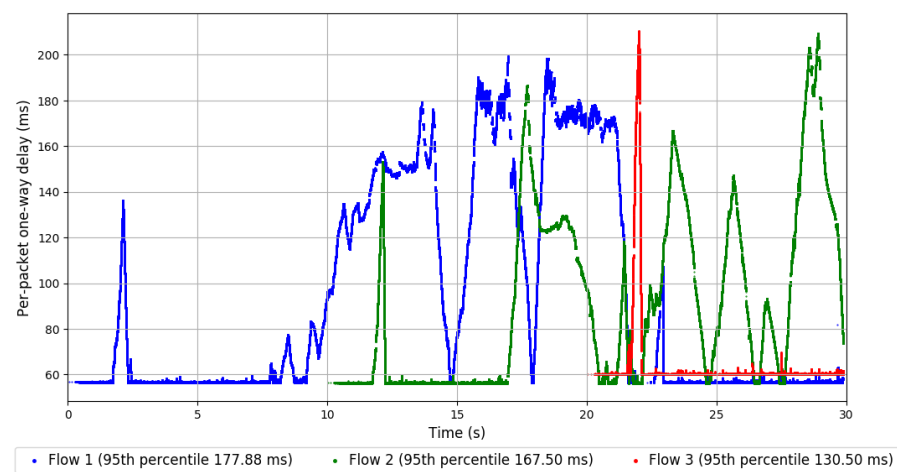
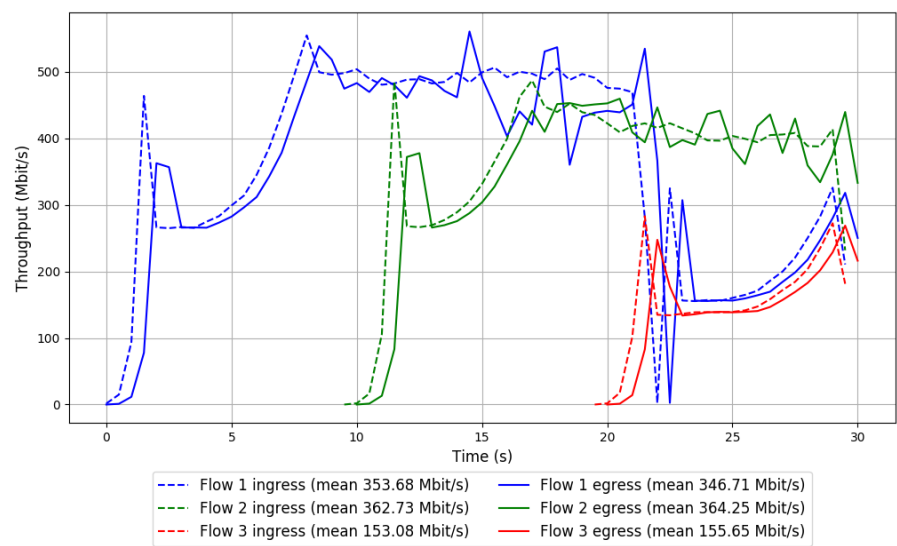


Run 4: Statistics of PCC-Allegro

Start at: 2019-01-25 18:54:52
End at: 2019-01-25 18:55:22
Local clock offset: -0.156 ms
Remote clock offset: -0.651 ms

Below is generated by plot.py at 2019-01-25 22:28:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 640.47 Mbit/s
95th percentile per-packet one-way delay: 176.744 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 346.71 Mbit/s
95th percentile per-packet one-way delay: 177.877 ms
Loss rate: 2.51%
-- Flow 2:
Average throughput: 364.25 Mbit/s
95th percentile per-packet one-way delay: 167.505 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 155.65 Mbit/s
95th percentile per-packet one-way delay: 130.502 ms
Loss rate: 0.01%

Run 4: Report of PCC-Allegro — Data Link

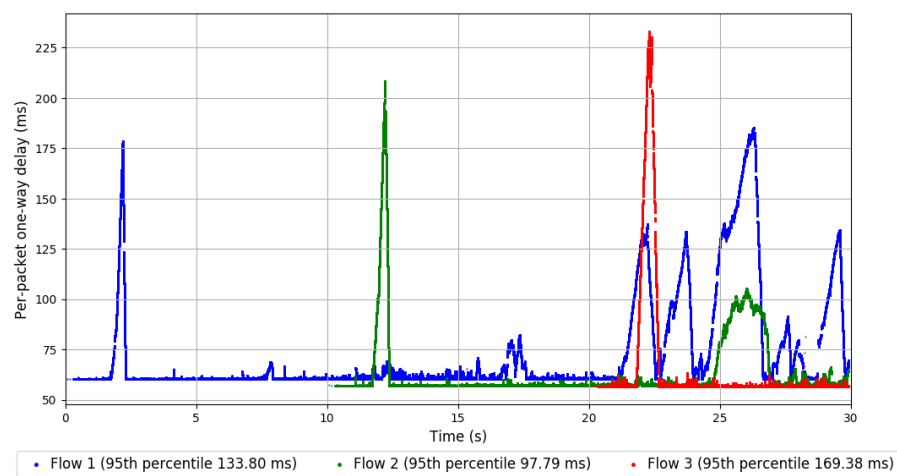
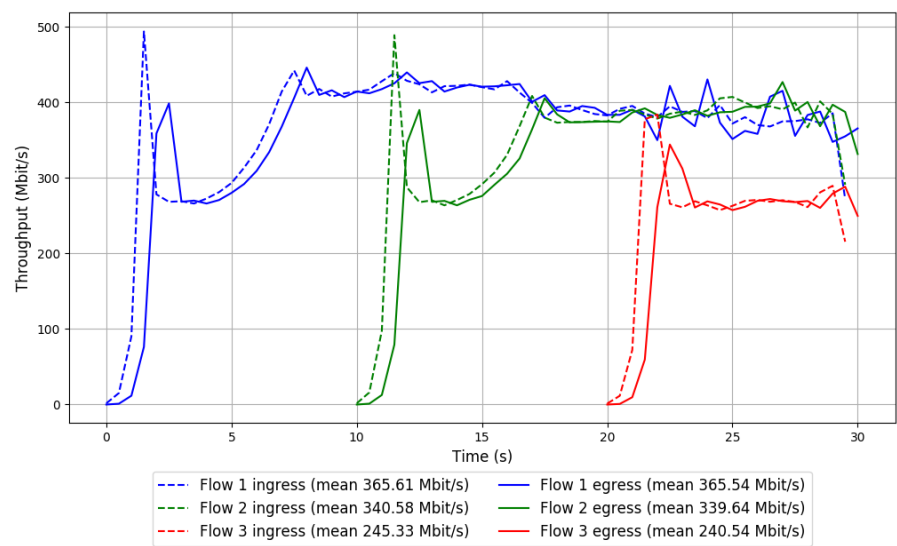


Run 5: Statistics of PCC-Allegro

Start at: 2019-01-25 19:36:40
End at: 2019-01-25 19:37:10
Local clock offset: -0.191 ms
Remote clock offset: -0.079 ms

Below is generated by plot.py at 2019-01-25 22:30:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 670.54 Mbit/s
95th percentile per-packet one-way delay: 130.538 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 365.54 Mbit/s
95th percentile per-packet one-way delay: 133.803 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 339.64 Mbit/s
95th percentile per-packet one-way delay: 97.787 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 240.54 Mbit/s
95th percentile per-packet one-way delay: 169.378 ms
Loss rate: 1.96%

Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2019-01-25 16:48:46

End at: 2019-01-25 16:49:16

Local clock offset: -0.558 ms

Remote clock offset: -1.4 ms

Below is generated by plot.py at 2019-01-25 22:30:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 568.57 Mbit/s

95th percentile per-packet one-way delay: 168.595 ms

Loss rate: 2.77%

-- Flow 1:

Average throughput: 325.61 Mbit/s

95th percentile per-packet one-way delay: 162.680 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 225.38 Mbit/s

95th percentile per-packet one-way delay: 67.385 ms

Loss rate: 0.00%

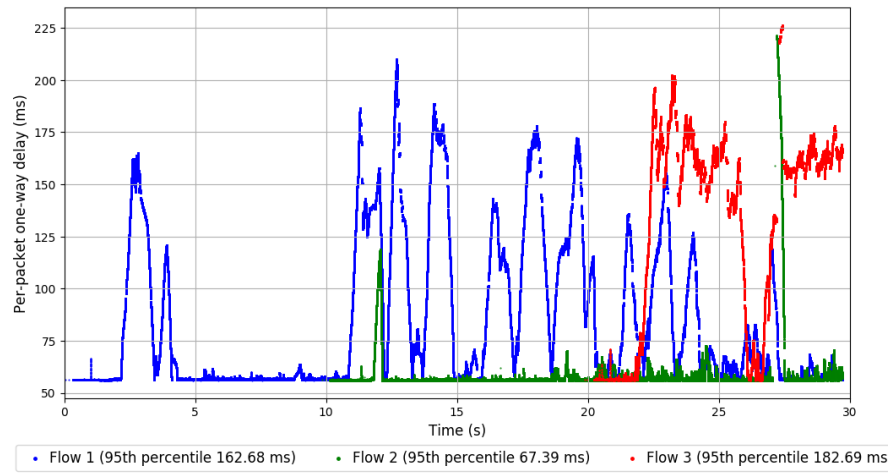
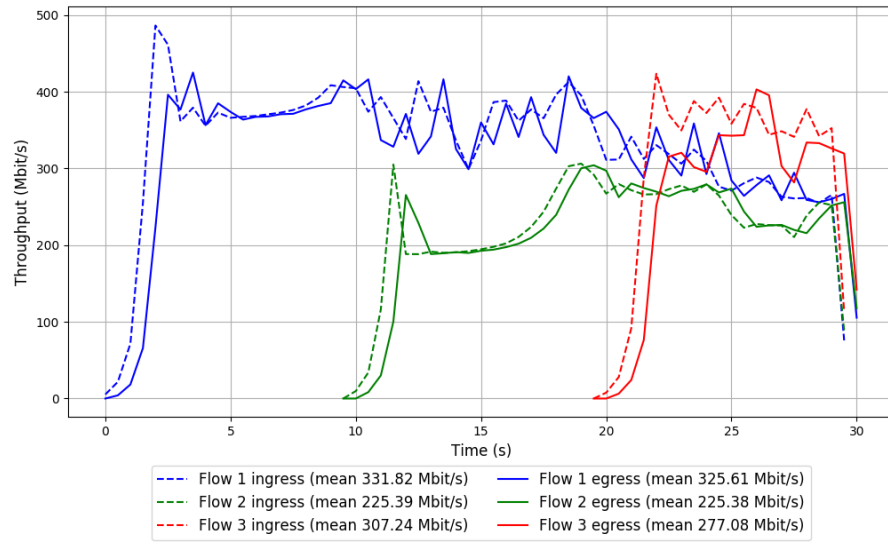
-- Flow 3:

Average throughput: 277.08 Mbit/s

95th percentile per-packet one-way delay: 182.692 ms

Loss rate: 9.79%

Run 1: Report of PCC-Expr — Data Link

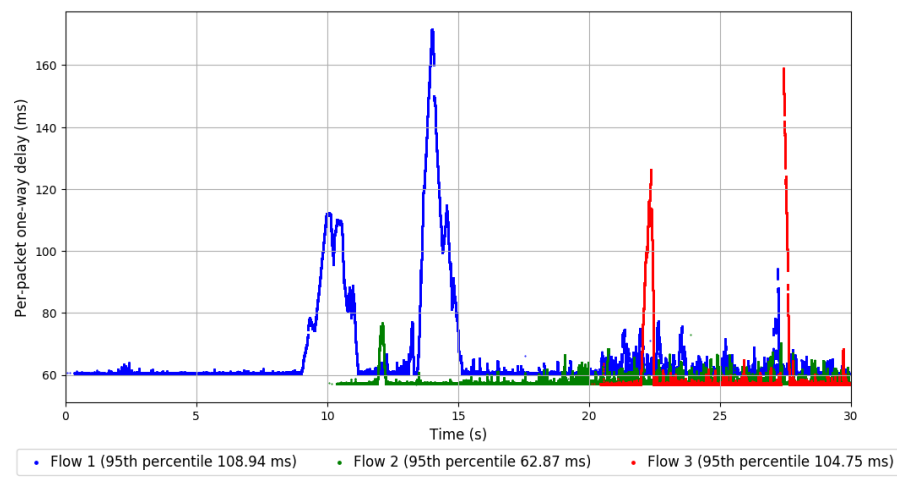
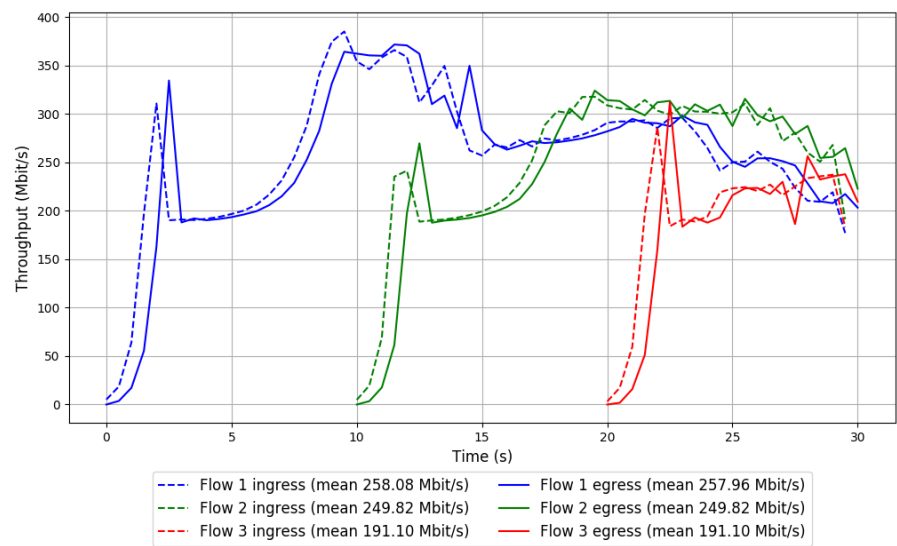


Run 2: Statistics of PCC-Expr

Start at: 2019-01-25 17:28:08
End at: 2019-01-25 17:28:38
Local clock offset: -0.12 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2019-01-25 22:30:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 487.10 Mbit/s
95th percentile per-packet one-way delay: 98.584 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 257.96 Mbit/s
95th percentile per-packet one-way delay: 108.936 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 249.82 Mbit/s
95th percentile per-packet one-way delay: 62.869 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.10 Mbit/s
95th percentile per-packet one-way delay: 104.754 ms
Loss rate: 0.00%

Run 2: Report of PCC-Expr — Data Link

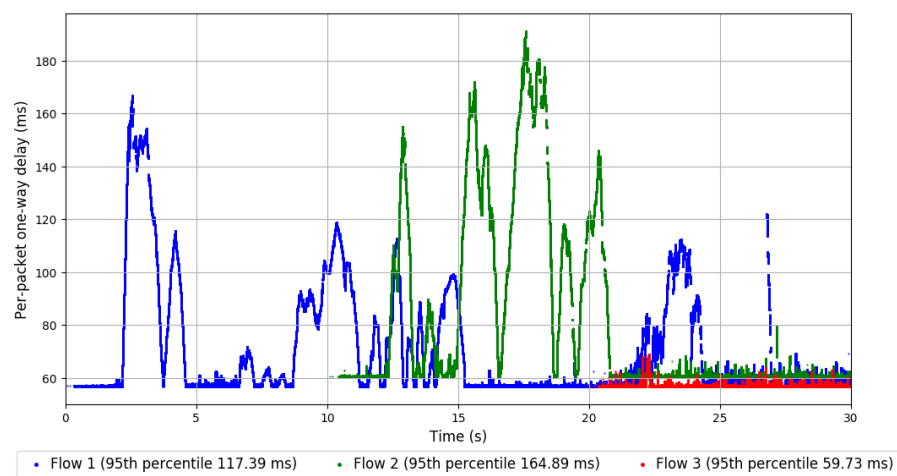
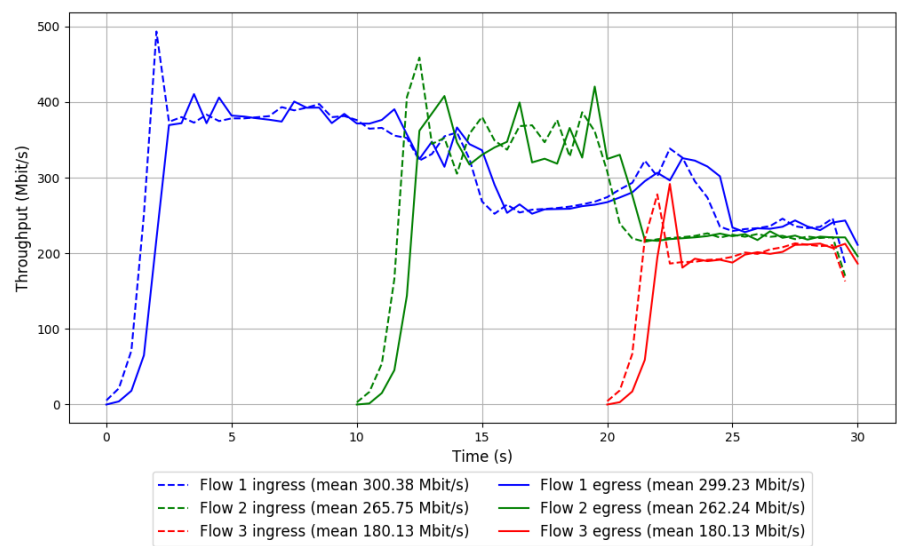


Run 3: Statistics of PCC-Expr

Start at: 2019-01-25 18:10:02
End at: 2019-01-25 18:10:32
Local clock offset: -0.089 ms
Remote clock offset: -0.233 ms

Below is generated by plot.py at 2019-01-25 22:30:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 532.77 Mbit/s
95th percentile per-packet one-way delay: 146.337 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 299.23 Mbit/s
95th percentile per-packet one-way delay: 117.387 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 262.24 Mbit/s
95th percentile per-packet one-way delay: 164.893 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 180.13 Mbit/s
95th percentile per-packet one-way delay: 59.725 ms
Loss rate: 0.00%

Run 3: Report of PCC-Expr — Data Link

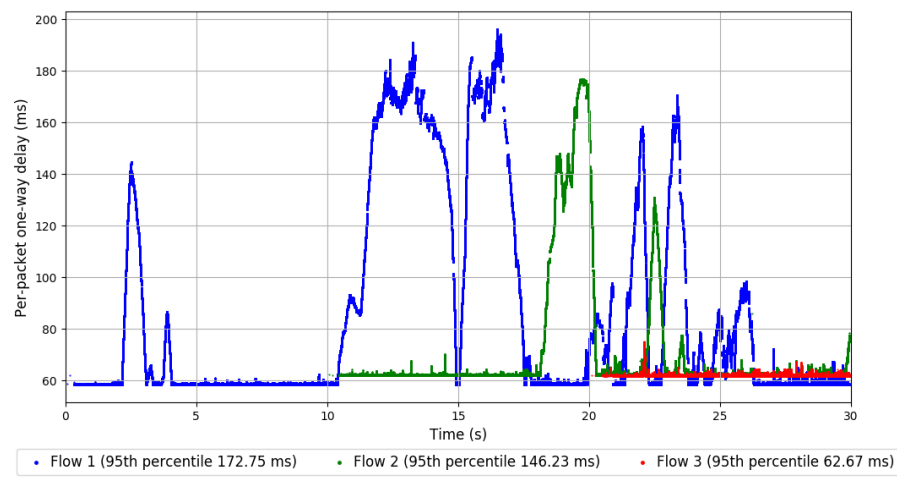
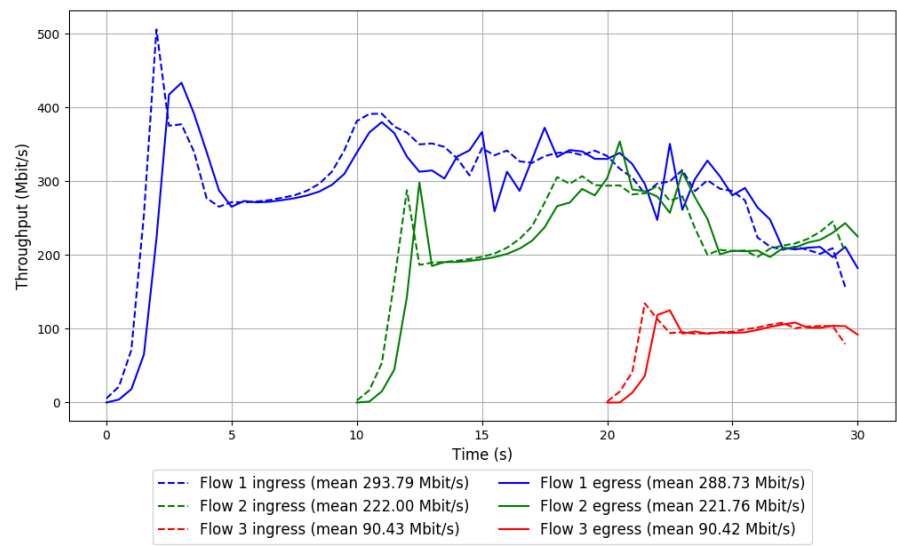


```
Run 4: Statistics of PCC-Expr

Start at: 2019-01-25 18:52:35
End at: 2019-01-25 18:53:05
Local clock offset: -0.297 ms
Remote clock offset: 1.106 ms

# Below is generated by plot.py at 2019-01-25 22:38:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 465.87 Mbit/s
95th percentile per-packet one-way delay: 170.479 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 288.73 Mbit/s
95th percentile per-packet one-way delay: 172.752 ms
Loss rate: 1.74%
-- Flow 2:
Average throughput: 221.76 Mbit/s
95th percentile per-packet one-way delay: 146.230 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 90.42 Mbit/s
95th percentile per-packet one-way delay: 62.666 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Expr — Data Link

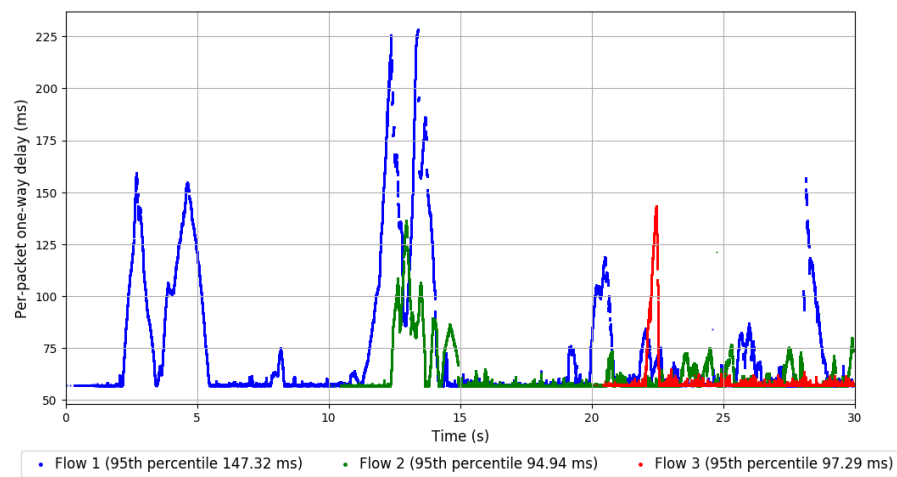
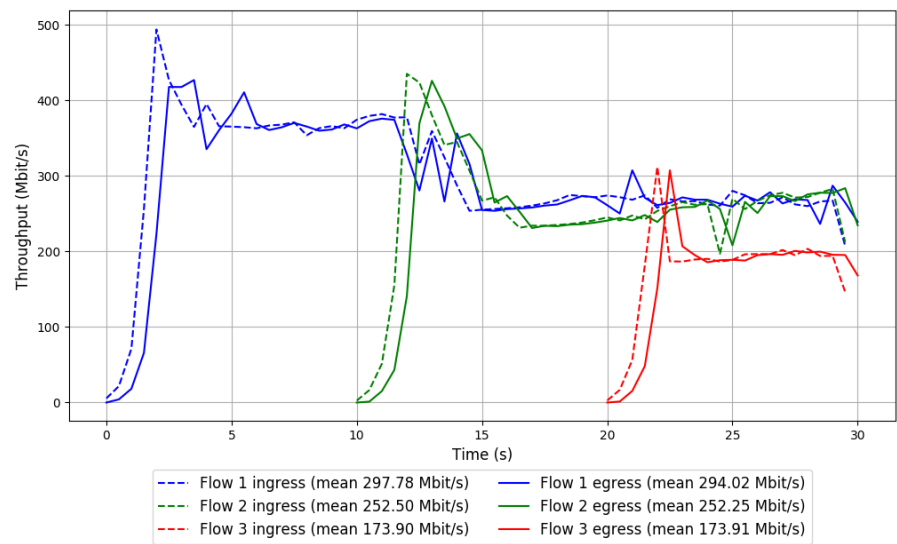


Run 5: Statistics of PCC-Expr

Start at: 2019-01-25 19:34:13
End at: 2019-01-25 19:34:43
Local clock offset: -0.121 ms
Remote clock offset: -0.004 ms

Below is generated by plot.py at 2019-01-25 22:44:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 518.95 Mbit/s
95th percentile per-packet one-way delay: 133.946 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 294.02 Mbit/s
95th percentile per-packet one-way delay: 147.324 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 252.25 Mbit/s
95th percentile per-packet one-way delay: 94.939 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 173.91 Mbit/s
95th percentile per-packet one-way delay: 97.289 ms
Loss rate: 0.00%

Run 5: Report of PCC-Expr — Data Link

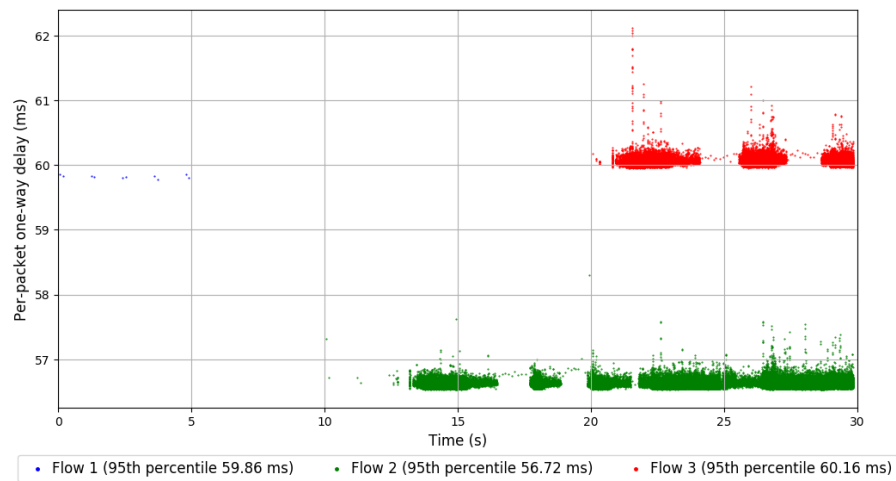
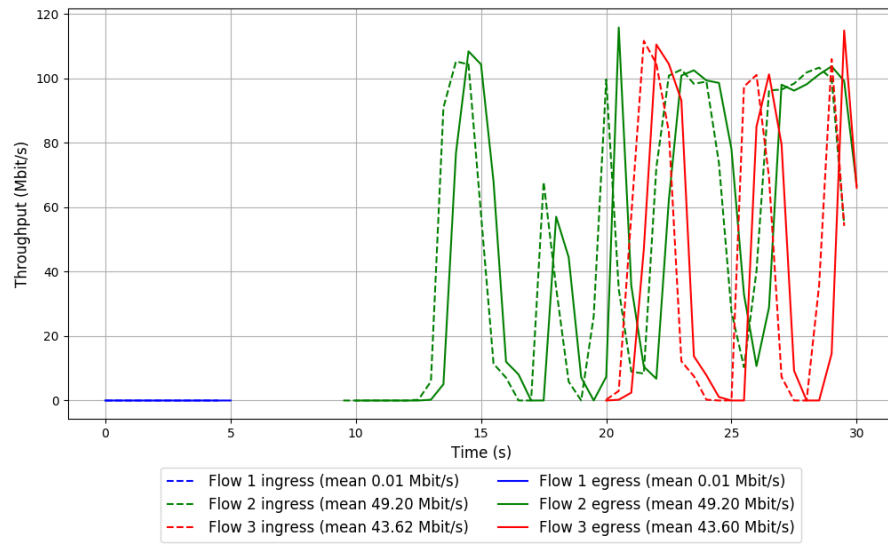


Run 1: Statistics of QUIC Cubic

Start at: 2019-01-25 16:58:34
End at: 2019-01-25 16:59:04
Local clock offset: -0.01 ms
Remote clock offset: -0.315 ms

Below is generated by plot.py at 2019-01-25 22:44:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 46.98 Mbit/s
95th percentile per-packet one-way delay: 60.104 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 59.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.20 Mbit/s
95th percentile per-packet one-way delay: 56.716 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.60 Mbit/s
95th percentile per-packet one-way delay: 60.161 ms
Loss rate: 0.07%

Run 1: Report of QUIC Cubic — Data Link

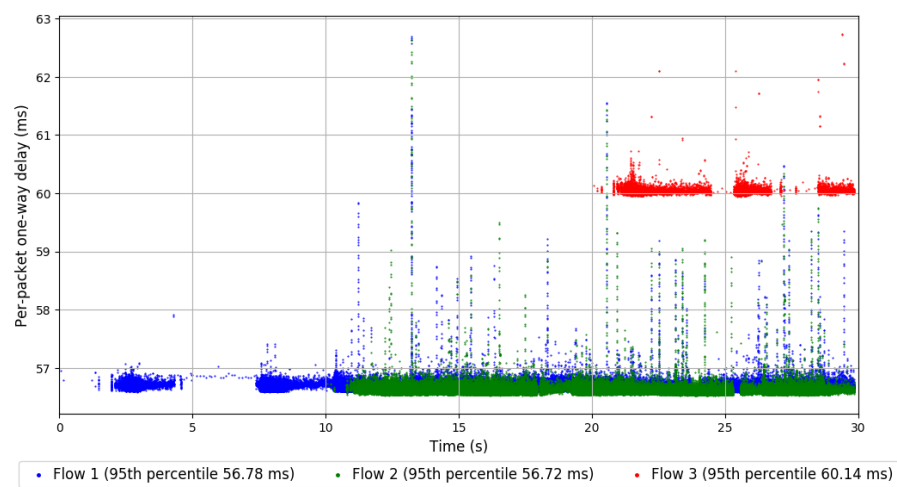
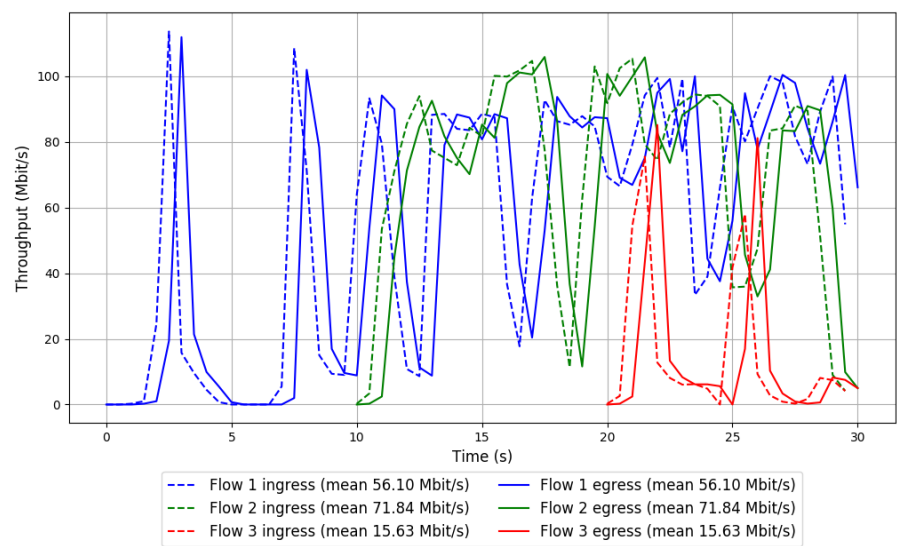


Run 2: Statistics of QUIC Cubic

Start at: 2019-01-25 17:38:33
End at: 2019-01-25 17:39:03
Local clock offset: 0.251 ms
Remote clock offset: -0.006 ms

Below is generated by plot.py at 2019-01-25 22:44:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 108.92 Mbit/s
95th percentile per-packet one-way delay: 57.552 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.10 Mbit/s
95th percentile per-packet one-way delay: 56.777 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.84 Mbit/s
95th percentile per-packet one-way delay: 56.724 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.63 Mbit/s
95th percentile per-packet one-way delay: 60.139 ms
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link

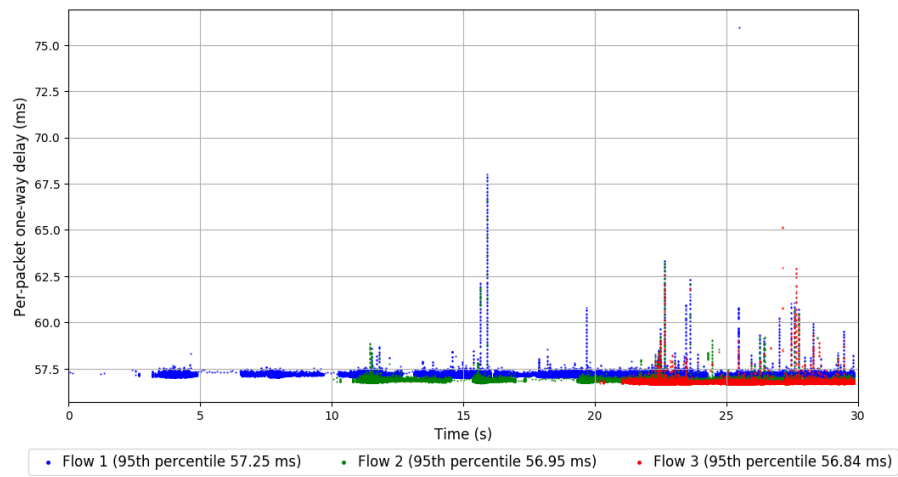
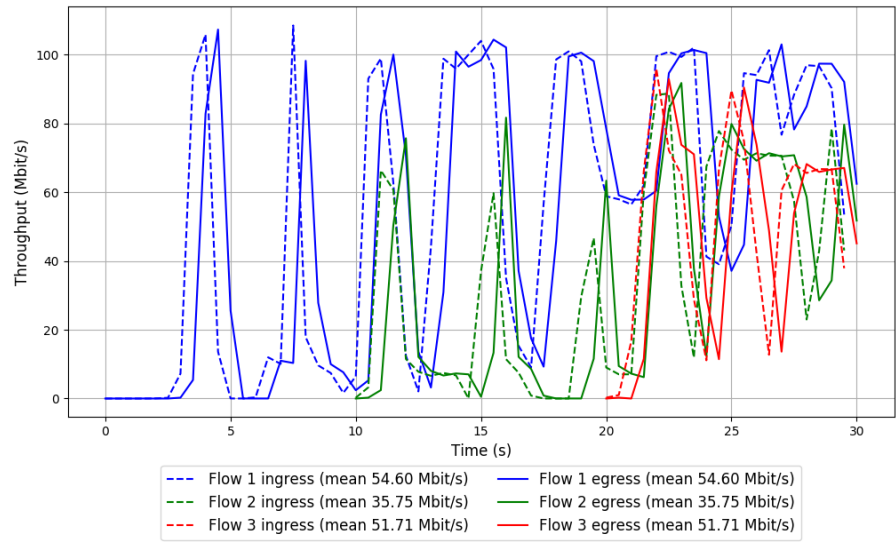


Run 3: Statistics of QUIC Cubic

Start at: 2019-01-25 18:20:49
End at: 2019-01-25 18:21:19
Local clock offset: -0.029 ms
Remote clock offset: -0.268 ms

Below is generated by plot.py at 2019-01-25 22:44:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.29 Mbit/s
95th percentile per-packet one-way delay: 57.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.60 Mbit/s
95th percentile per-packet one-way delay: 57.253 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.75 Mbit/s
95th percentile per-packet one-way delay: 56.953 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.71 Mbit/s
95th percentile per-packet one-way delay: 56.840 ms
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-01-25 19:02:57

End at: 2019-01-25 19:03:27

Local clock offset: 0.173 ms

Remote clock offset: 0.853 ms

Below is generated by plot.py at 2019-01-25 22:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.45 Mbit/s

95th percentile per-packet one-way delay: 57.880 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 57.899 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.06 Mbit/s

95th percentile per-packet one-way delay: 57.874 ms

Loss rate: 0.00%

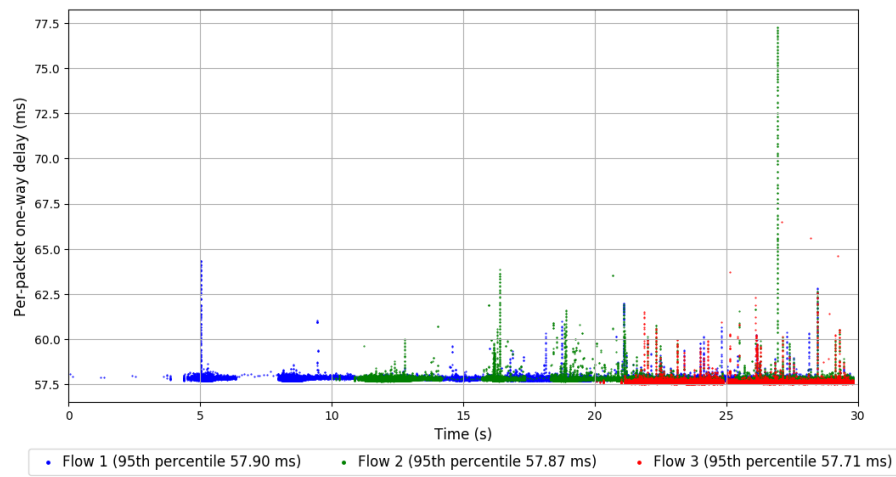
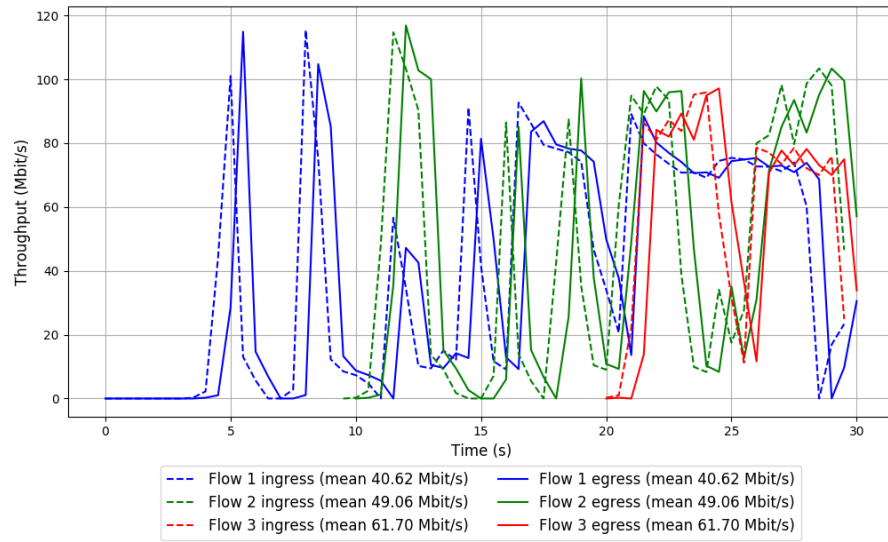
-- Flow 3:

Average throughput: 61.70 Mbit/s

95th percentile per-packet one-way delay: 57.712 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-01-25 19:44:56

End at: 2019-01-25 19:45:26

Local clock offset: -0.177 ms

Remote clock offset: 0.699 ms

Below is generated by plot.py at 2019-01-25 22:45:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.38 Mbit/s

95th percentile per-packet one-way delay: 61.419 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 48.10 Mbit/s

95th percentile per-packet one-way delay: 61.247 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 30.66 Mbit/s

95th percentile per-packet one-way delay: 57.635 ms

Loss rate: 0.00%

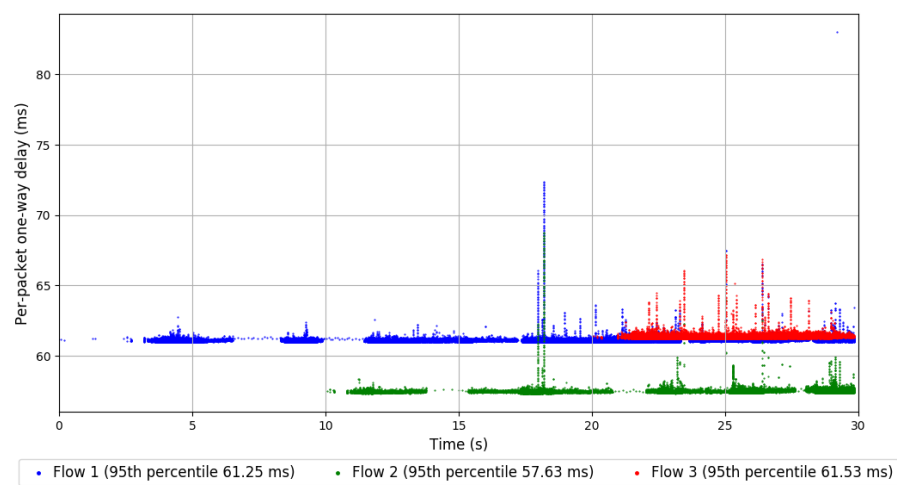
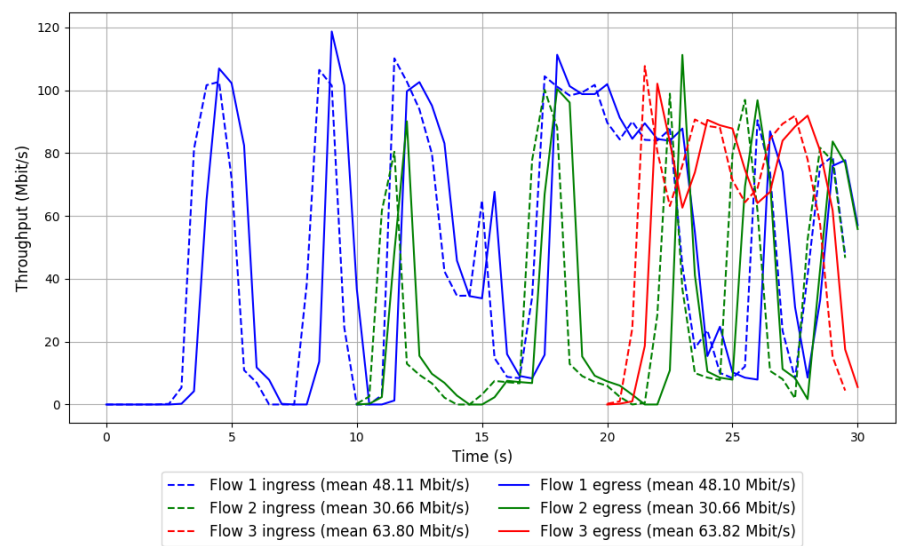
-- Flow 3:

Average throughput: 63.82 Mbit/s

95th percentile per-packet one-way delay: 61.533 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

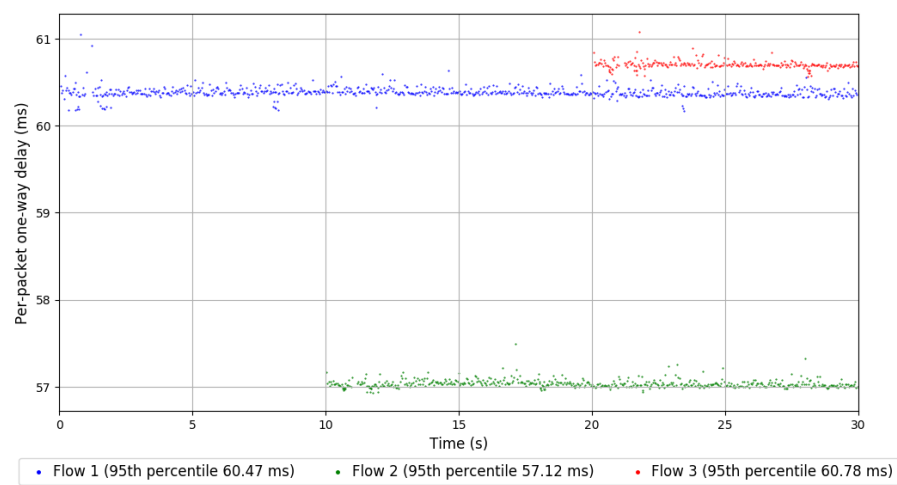
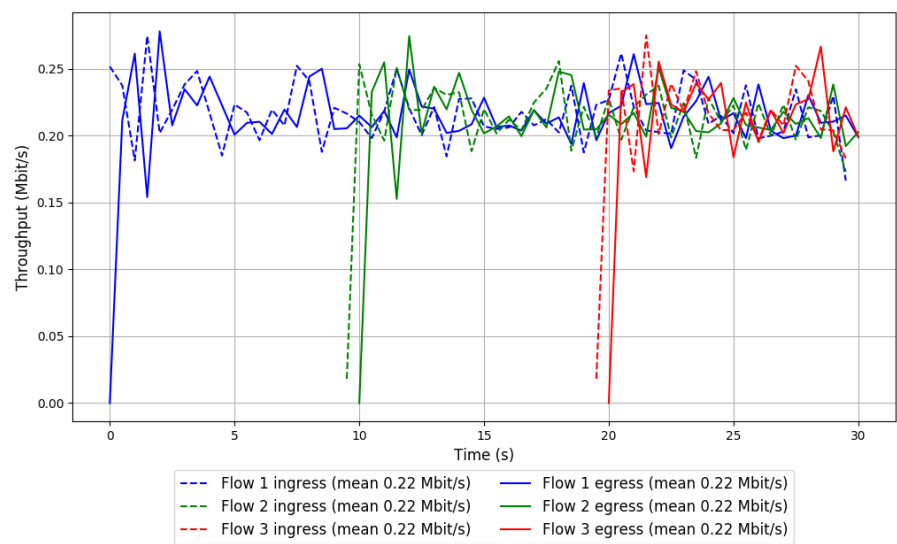


```
Run 1: Statistics of SReAM

Start at: 2019-01-25 16:43:14
End at: 2019-01-25 16:43:44
Local clock offset: -0.127 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2019-01-25 22:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 60.710 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.471 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.121 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.780 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

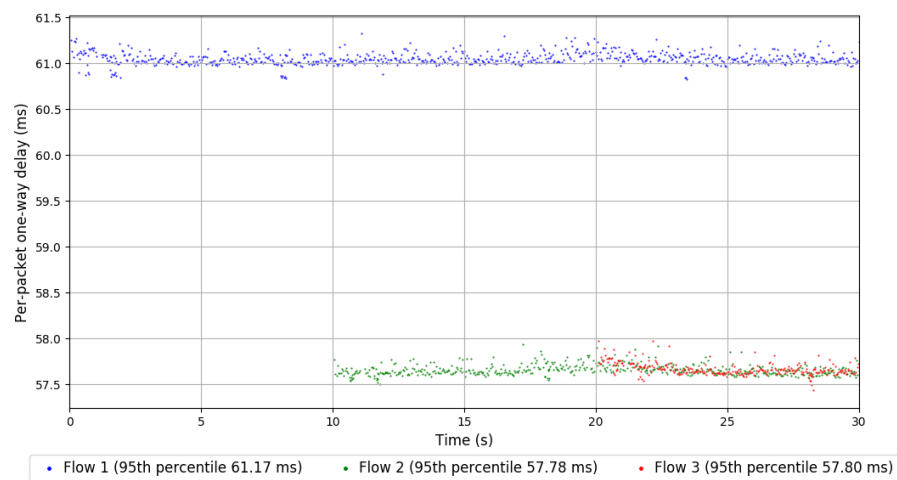
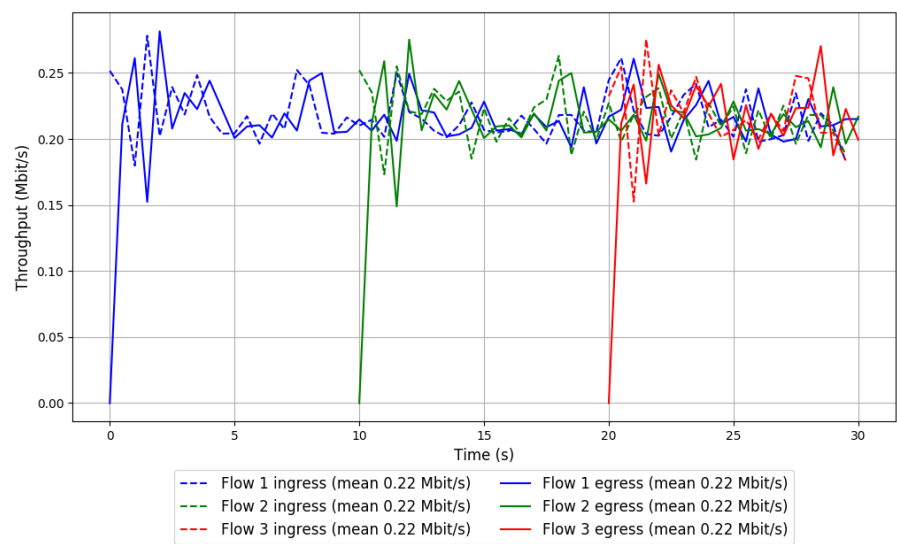


Run 2: Statistics of SReAM

Start at: 2019-01-25 17:22:41
End at: 2019-01-25 17:23:11
Local clock offset: -0.049 ms
Remote clock offset: 0.567 ms

Below is generated by plot.py at 2019-01-25 22:45:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 61.136 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.168 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.776 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.796 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2019-01-25 18:04:14

End at: 2019-01-25 18:04:44

Local clock offset: 0.05 ms

Remote clock offset: 0.637 ms

Below is generated by plot.py at 2019-01-25 22:45:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 57.738 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.715 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.768 ms

Loss rate: 0.00%

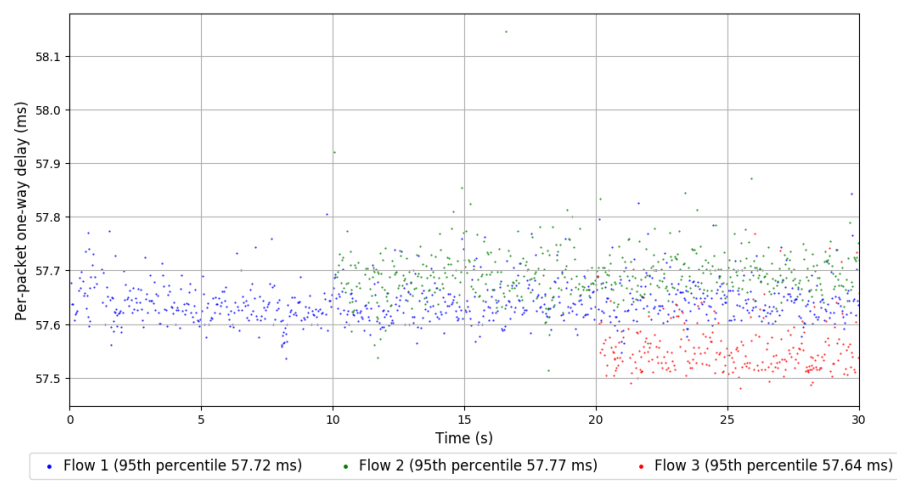
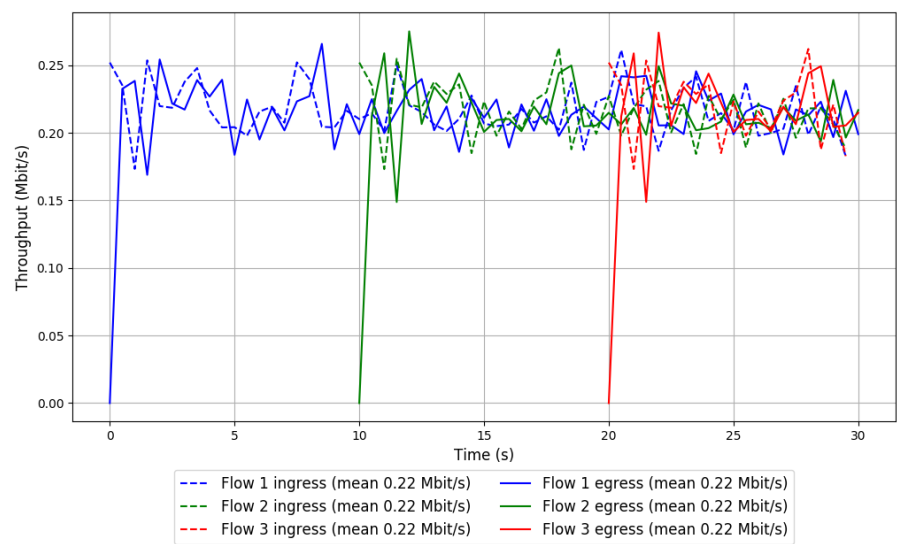
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.643 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

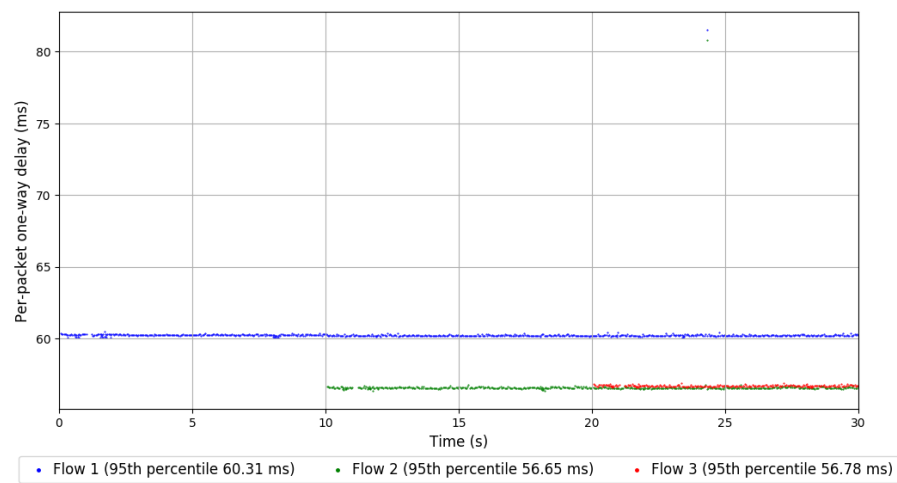
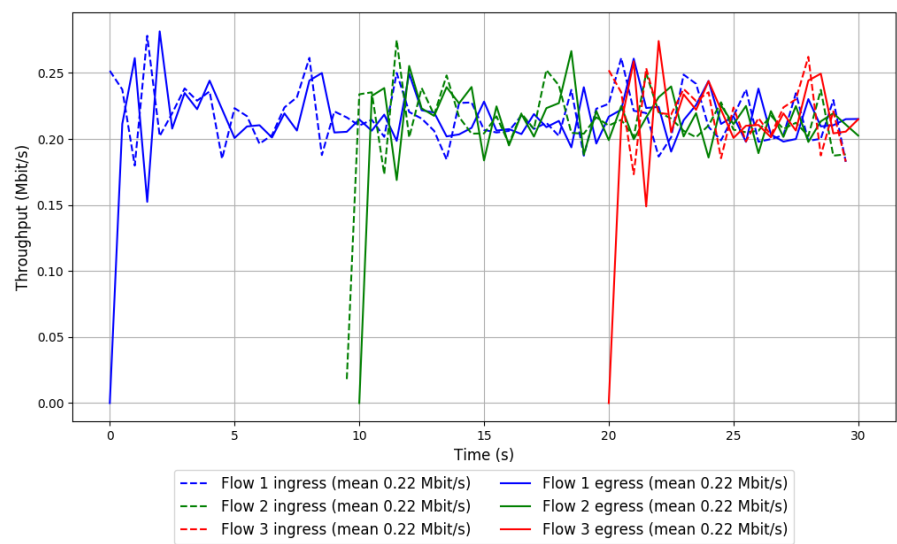


Run 4: Statistics of SReAM

Start at: 2019-01-25 18:46:57
End at: 2019-01-25 18:47:27
Local clock offset: -0.278 ms
Remote clock offset: -0.673 ms

Below is generated by plot.py at 2019-01-25 22:45:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 60.286 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.309 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.648 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.779 ms
Loss rate: 0.00%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2019-01-25 19:28:18

End at: 2019-01-25 19:28:48

Local clock offset: -0.161 ms

Remote clock offset: 0.663 ms

Below is generated by plot.py at 2019-01-25 22:45:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 61.191 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.945 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.221 ms

Loss rate: 0.00%

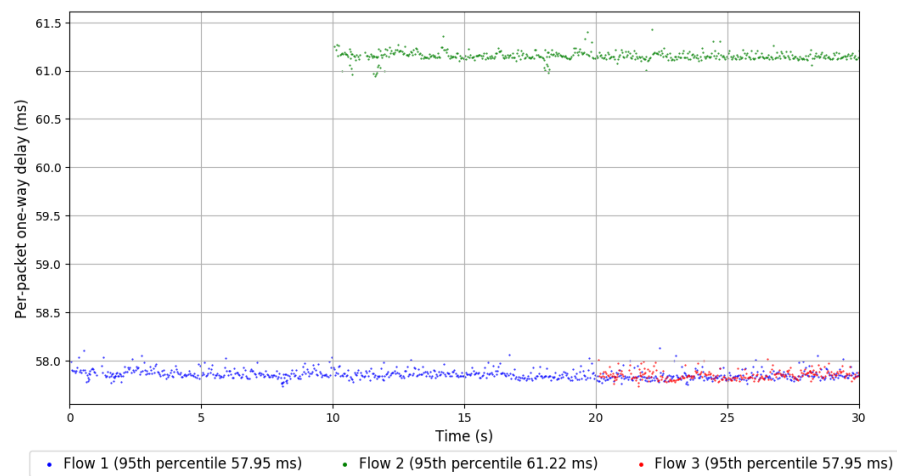
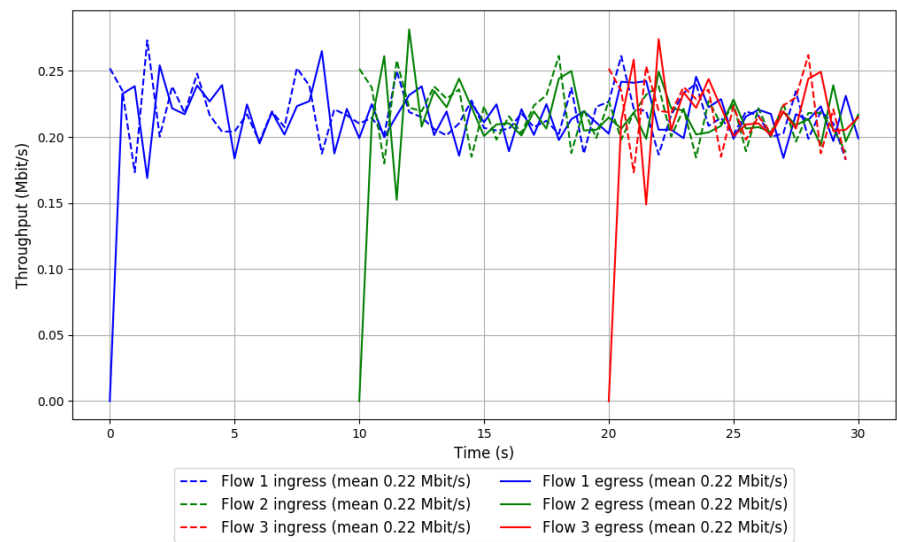
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.947 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

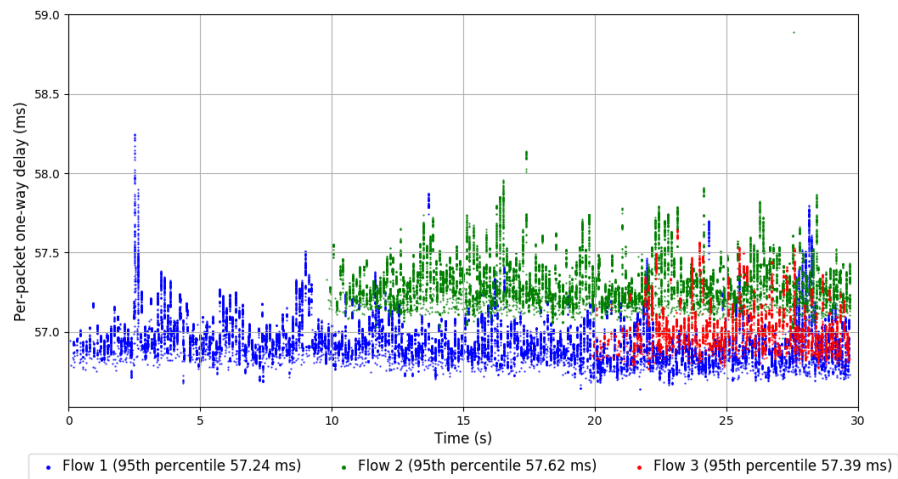
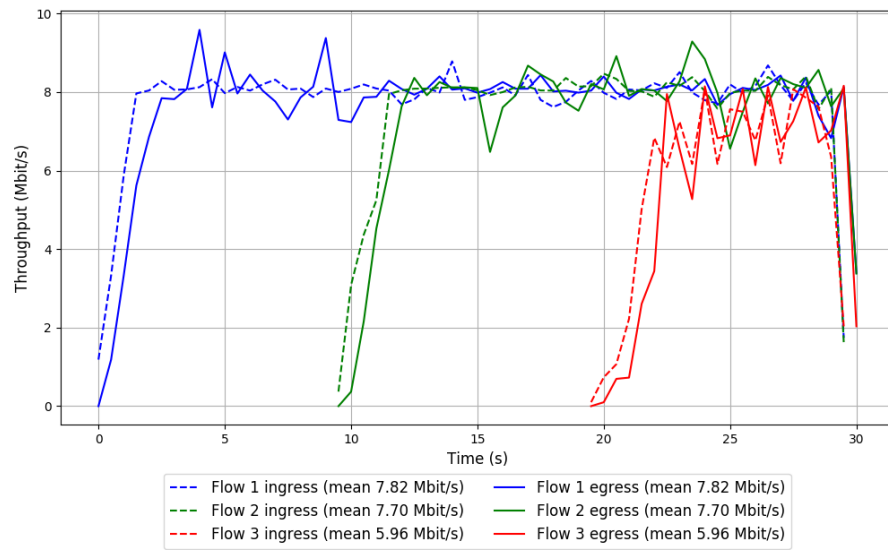


Run 1: Statistics of Sprout

Start at: 2019-01-25 16:34:57
End at: 2019-01-25 16:35:27
Local clock offset: 0.297 ms
Remote clock offset: -0.009 ms

Below is generated by plot.py at 2019-01-25 22:45:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 14.97 Mbit/s
95th percentile per-packet one-way delay: 57.491 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 57.236 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 57.617 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.96 Mbit/s
95th percentile per-packet one-way delay: 57.394 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

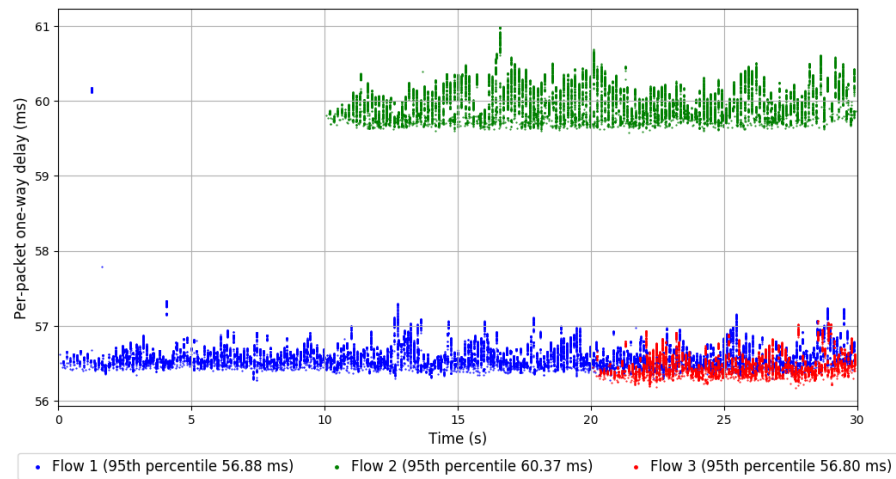
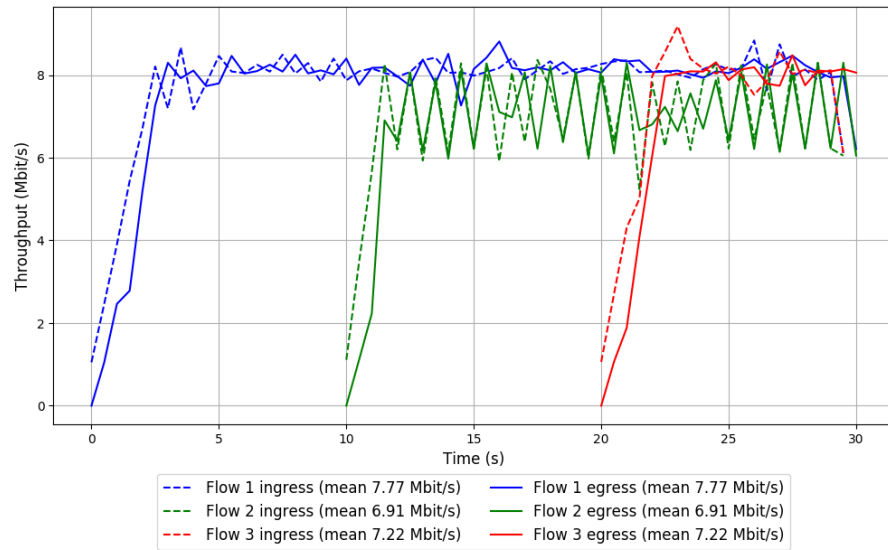


Run 2: Statistics of Sprout

Start at: 2019-01-25 17:14:27
End at: 2019-01-25 17:14:57
Local clock offset: -0.027 ms
Remote clock offset: -0.728 ms

Below is generated by plot.py at 2019-01-25 22:45:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 14.74 Mbit/s
95th percentile per-packet one-way delay: 60.234 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 56.875 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.91 Mbit/s
95th percentile per-packet one-way delay: 60.373 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 56.797 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

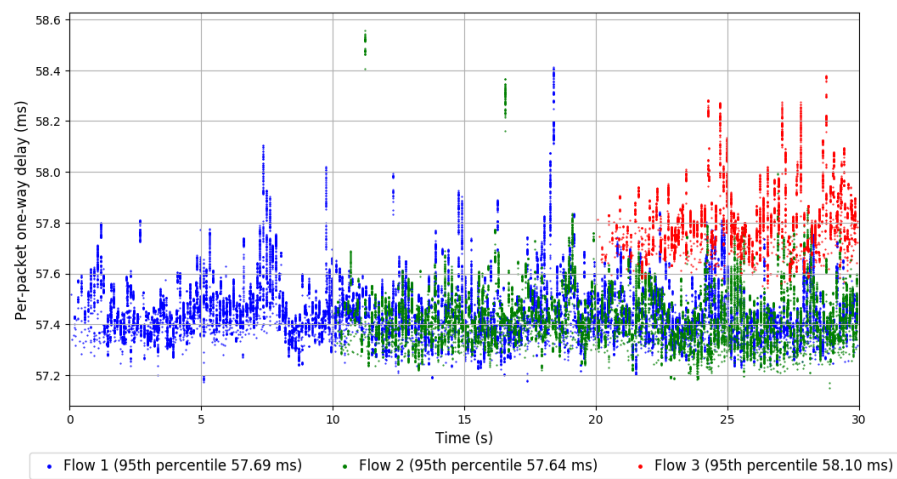
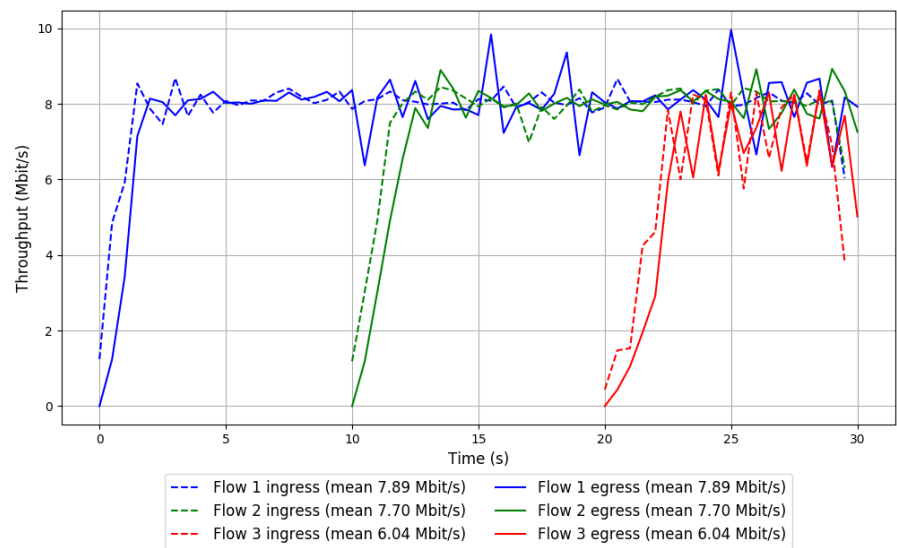


Run 3: Statistics of Sprout

Start at: 2019-01-25 17:55:32
End at: 2019-01-25 17:56:02
Local clock offset: -0.138 ms
Remote clock offset: 0.115 ms

```
# Below is generated by plot.py at 2019-01-25 22:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.99 Mbit/s
95th percentile per-packet one-way delay: 57.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.89 Mbit/s
95th percentile per-packet one-way delay: 57.686 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 57.636 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 58.100 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

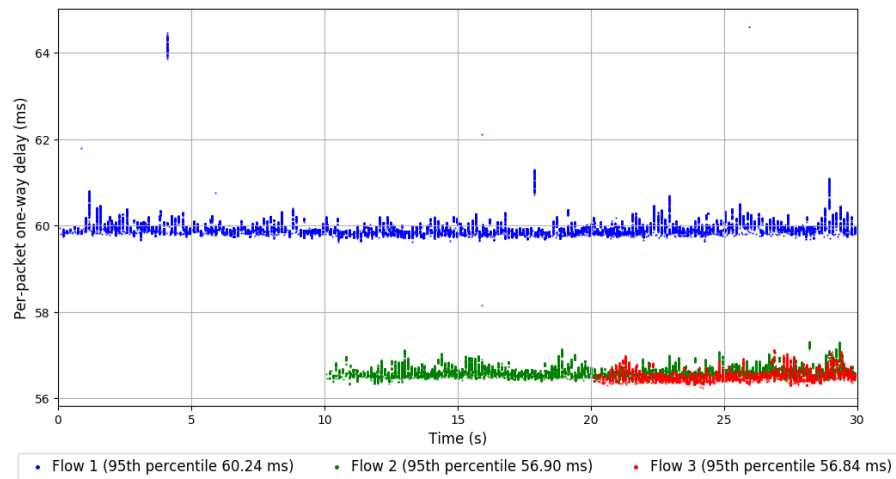
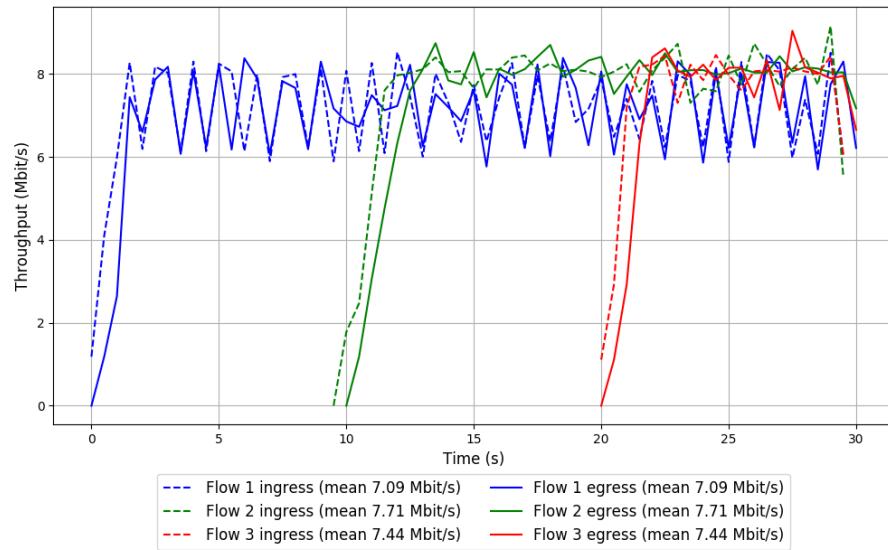


Run 4: Statistics of Sprout

Start at: 2019-01-25 18:38:36
End at: 2019-01-25 18:39:06
Local clock offset: 0.206 ms
Remote clock offset: -0.568 ms

```
# Below is generated by plot.py at 2019-01-25 22:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.66 Mbit/s
95th percentile per-packet one-way delay: 60.143 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 60.236 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 56.896 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 56.842 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

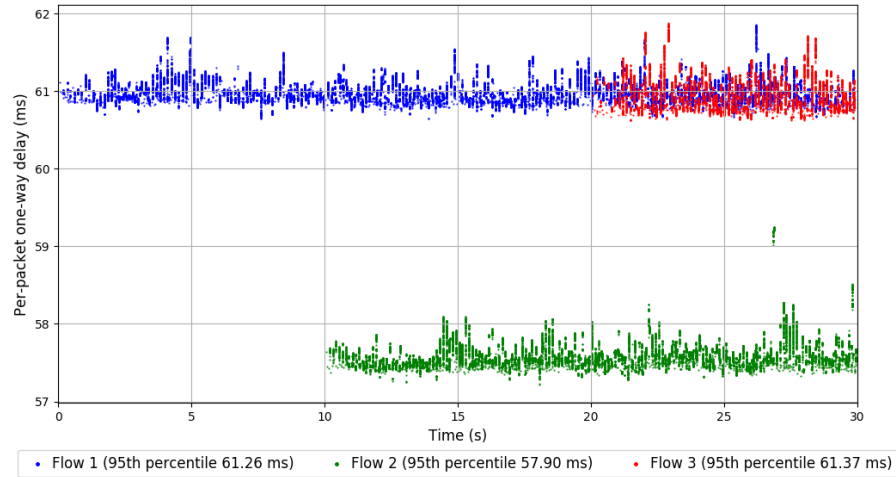
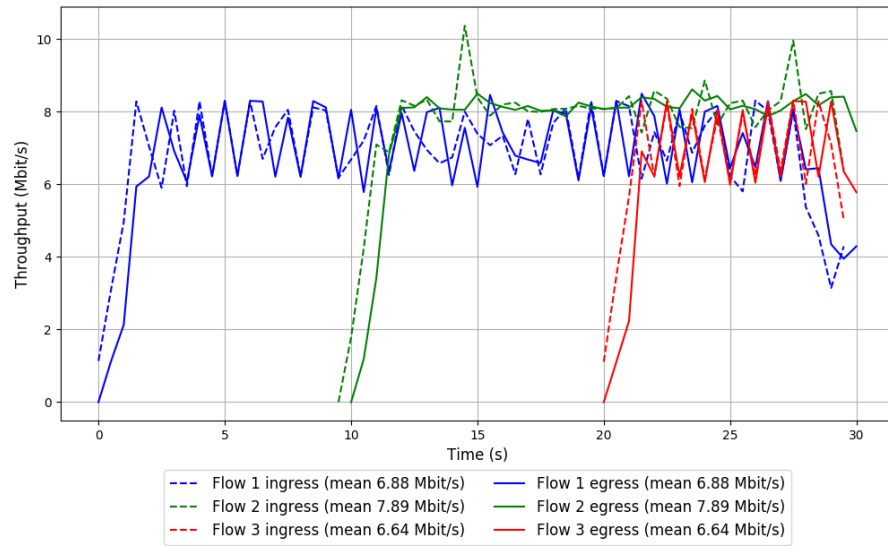


Run 5: Statistics of Sprout

Start at: 2019-01-25 19:20:00
End at: 2019-01-25 19:20:30
Local clock offset: -0.164 ms
Remote clock offset: 0.135 ms

Below is generated by plot.py at 2019-01-25 22:45:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 14.31 Mbit/s
95th percentile per-packet one-way delay: 61.226 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 61.255 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.89 Mbit/s
95th percentile per-packet one-way delay: 57.900 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 61.372 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

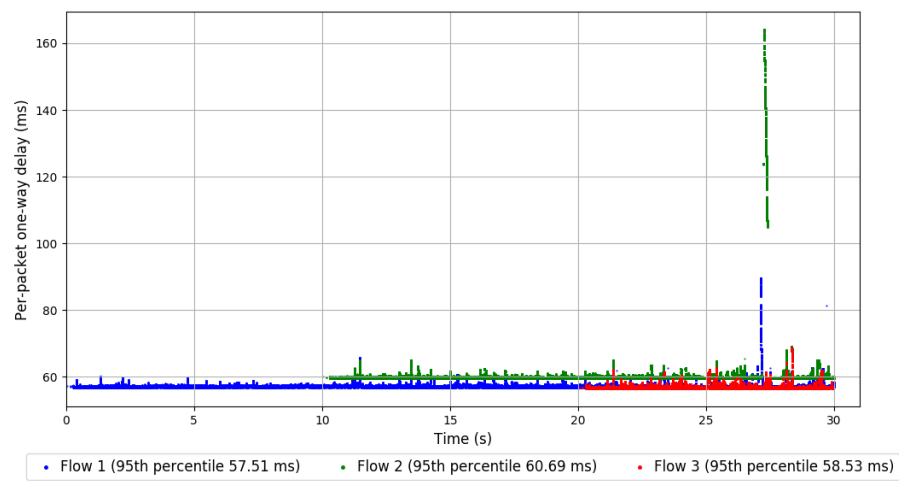
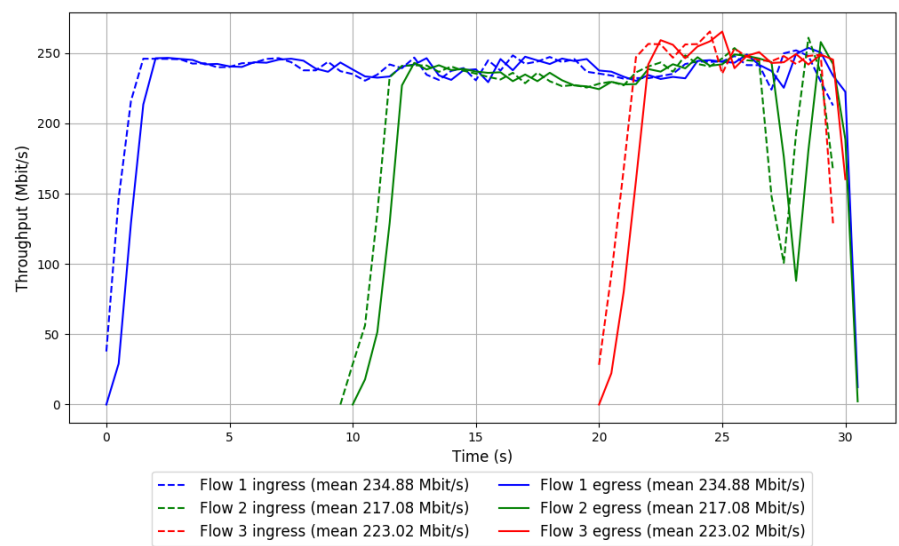


Run 1: Statistics of TaoVA-100x

Start at: 2019-01-25 16:54:23
End at: 2019-01-25 16:54:53
Local clock offset: -0.53 ms
Remote clock offset: -0.891 ms

Below is generated by plot.py at 2019-01-25 22:47:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 453.18 Mbit/s
95th percentile per-packet one-way delay: 59.950 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.88 Mbit/s
95th percentile per-packet one-way delay: 57.508 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 217.08 Mbit/s
95th percentile per-packet one-way delay: 60.685 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 223.02 Mbit/s
95th percentile per-packet one-way delay: 58.533 ms
Loss rate: 0.00%

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

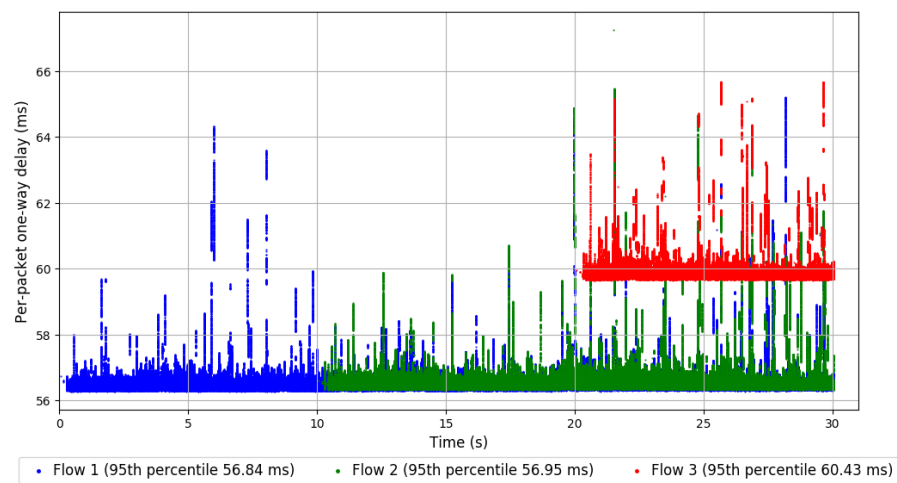
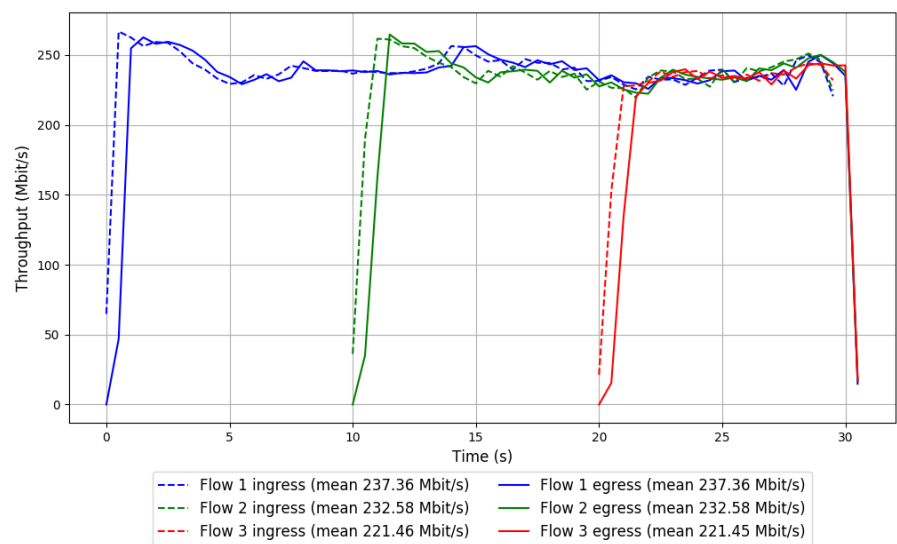


Run 2: Statistics of TaoVA-100x

Start at: 2019-01-25 17:34:02
End at: 2019-01-25 17:34:32
Local clock offset: 0.234 ms
Remote clock offset: -0.272 ms

Below is generated by plot.py at 2019-01-25 22:47:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 465.79 Mbit/s
95th percentile per-packet one-way delay: 59.881 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 237.36 Mbit/s
95th percentile per-packet one-way delay: 56.843 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 232.58 Mbit/s
95th percentile per-packet one-way delay: 56.952 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 221.45 Mbit/s
95th percentile per-packet one-way delay: 60.432 ms
Loss rate: 0.03%

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

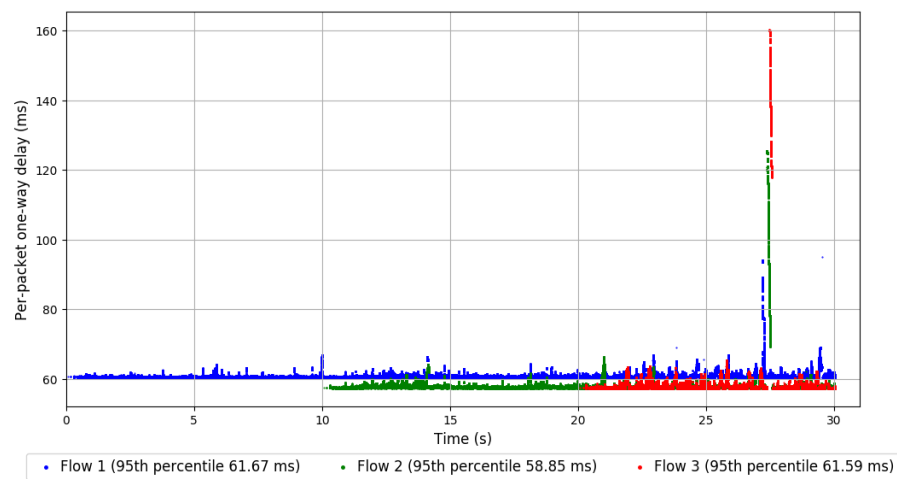
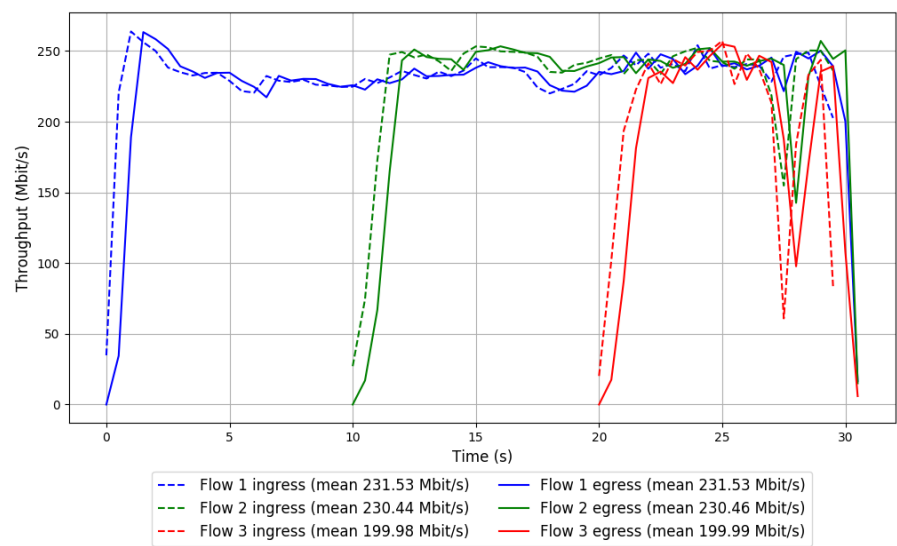


Run 3: Statistics of TaoVA-100x

Start at: 2019-01-25 18:16:10
End at: 2019-01-25 18:16:40
Local clock offset: -0.551 ms
Remote clock offset: -0.192 ms

Below is generated by plot.py at 2019-01-25 22:47:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 451.41 Mbit/s
95th percentile per-packet one-way delay: 61.346 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 231.53 Mbit/s
95th percentile per-packet one-way delay: 61.667 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 230.46 Mbit/s
95th percentile per-packet one-way delay: 58.850 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 199.99 Mbit/s
95th percentile per-packet one-way delay: 61.585 ms
Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-01-25 18:58:28

End at: 2019-01-25 18:58:58

Local clock offset: -0.275 ms

Remote clock offset: -0.31 ms

Below is generated by plot.py at 2019-01-25 22:47:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 445.35 Mbit/s

95th percentile per-packet one-way delay: 61.275 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 226.14 Mbit/s

95th percentile per-packet one-way delay: 61.943 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 223.51 Mbit/s

95th percentile per-packet one-way delay: 57.897 ms

Loss rate: 0.00%

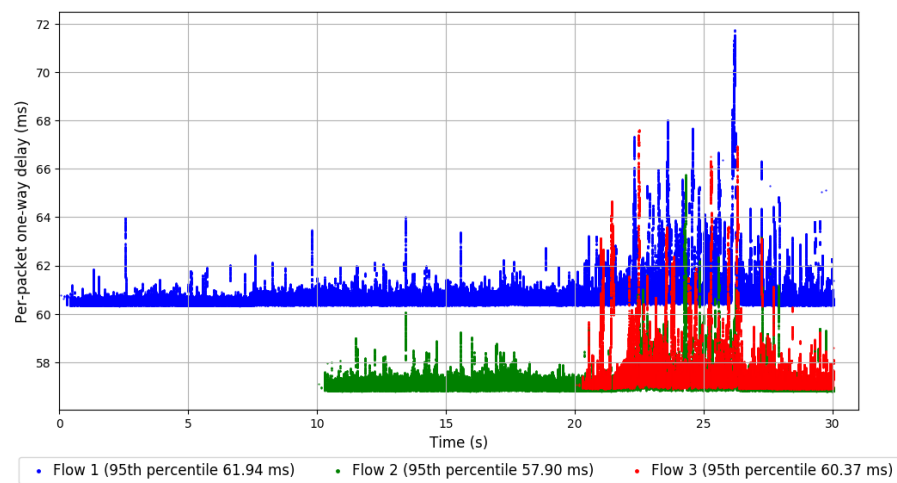
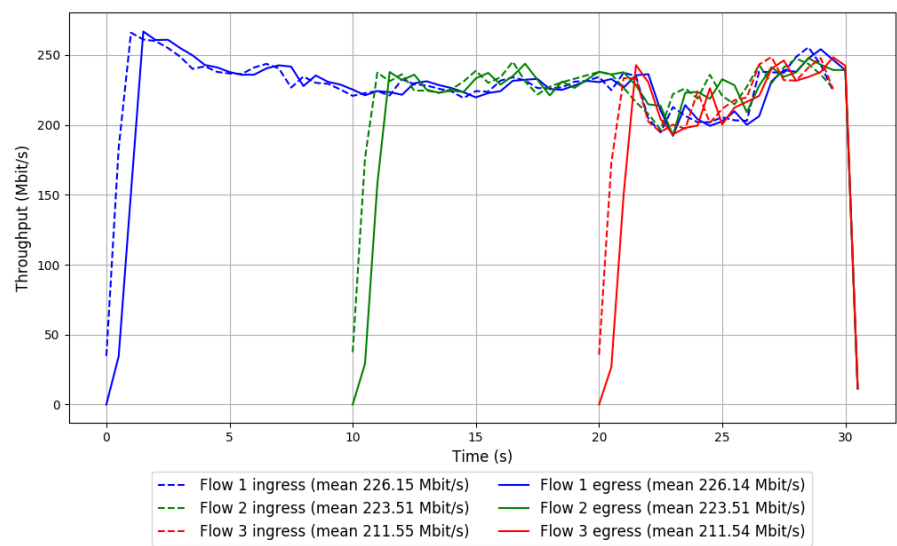
-- Flow 3:

Average throughput: 211.54 Mbit/s

95th percentile per-packet one-way delay: 60.370 ms

Loss rate: 0.01%

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

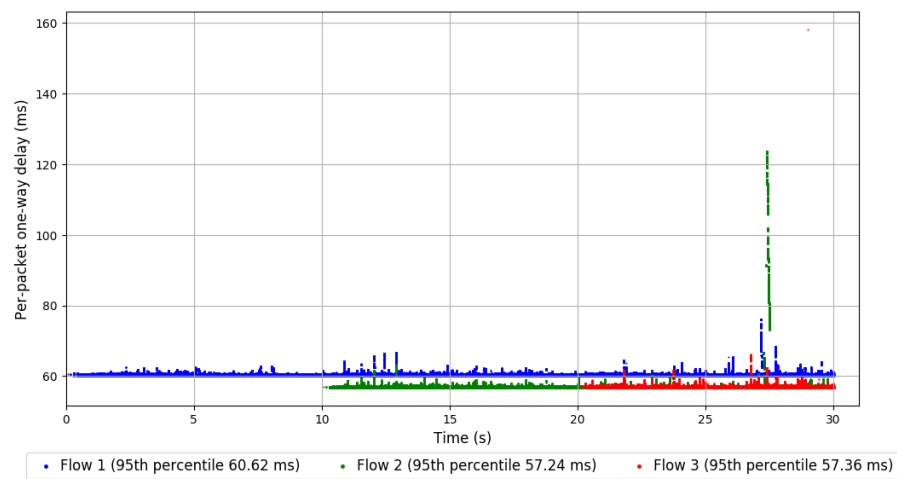
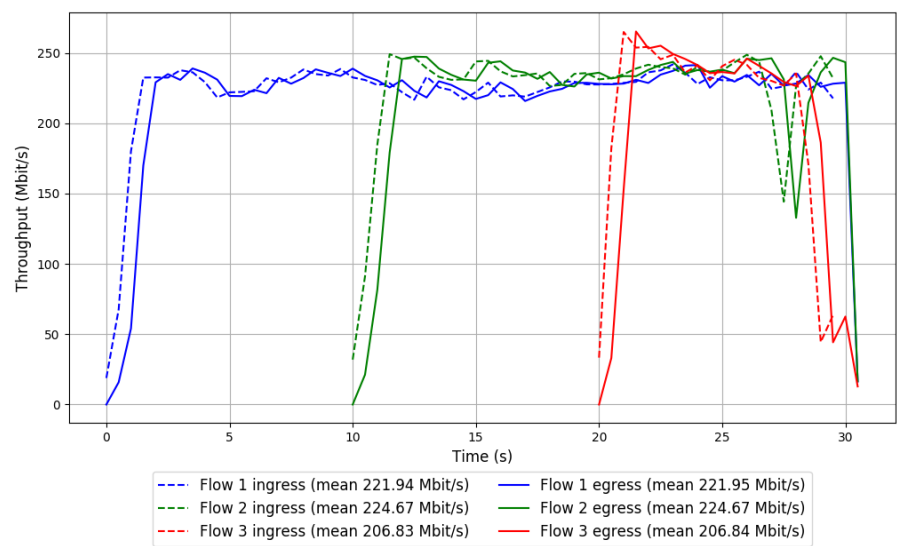


Run 5: Statistics of TaoVA-100x

Start at: 2019-01-25 19:40:17
End at: 2019-01-25 19:40:47
Local clock offset: -0.119 ms
Remote clock offset: -0.038 ms

Below is generated by plot.py at 2019-01-25 22:47:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 440.35 Mbit/s
95th percentile per-packet one-way delay: 60.497 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.95 Mbit/s
95th percentile per-packet one-way delay: 60.622 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 224.67 Mbit/s
95th percentile per-packet one-way delay: 57.240 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 206.84 Mbit/s
95th percentile per-packet one-way delay: 57.363 ms
Loss rate: 0.00%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-01-25 16:31:20

End at: 2019-01-25 16:31:50

Local clock offset: -0.225 ms

Remote clock offset: 0.055 ms

Below is generated by plot.py at 2019-01-25 22:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 952.27 Mbit/s

95th percentile per-packet one-way delay: 76.261 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 505.86 Mbit/s

95th percentile per-packet one-way delay: 68.848 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 498.12 Mbit/s

95th percentile per-packet one-way delay: 82.544 ms

Loss rate: 0.21%

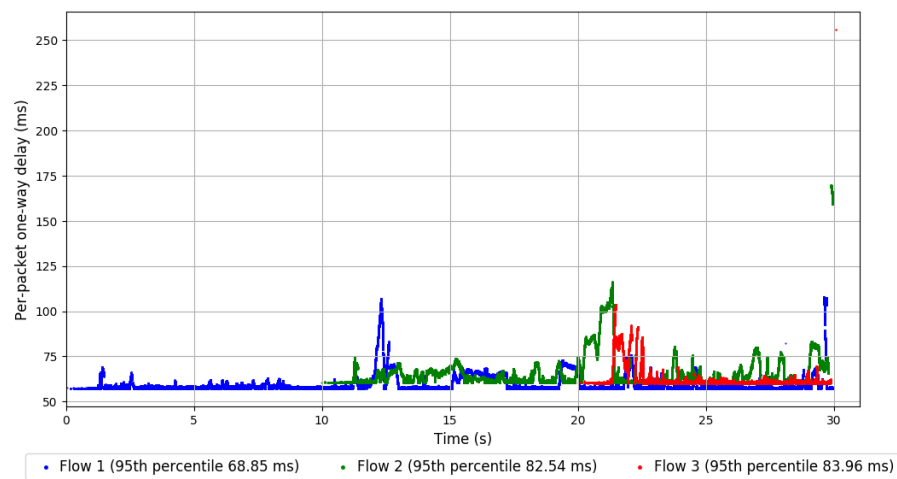
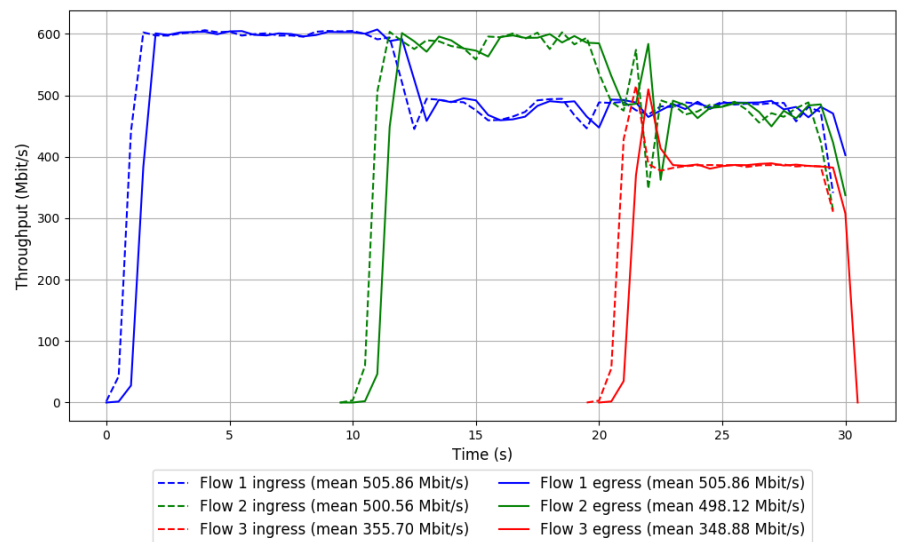
-- Flow 3:

Average throughput: 348.88 Mbit/s

95th percentile per-packet one-way delay: 83.964 ms

Loss rate: 0.71%

Run 1: Report of TCP Vegas — Data Link

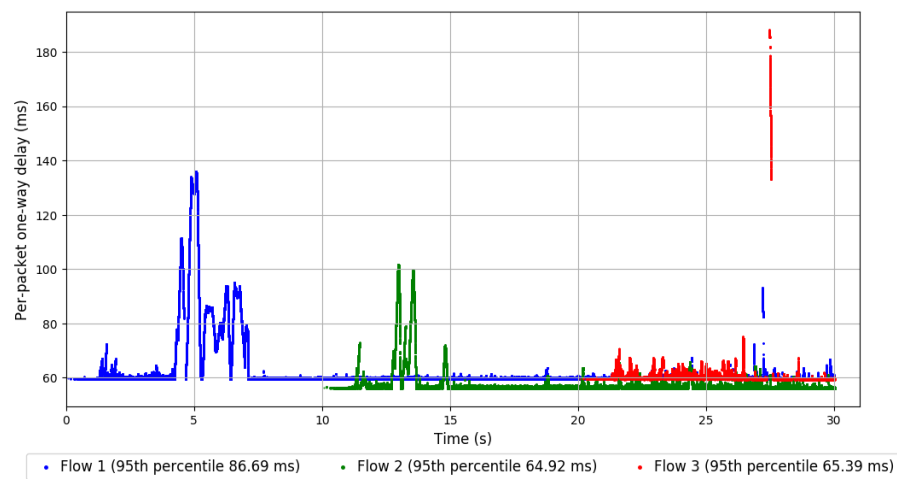
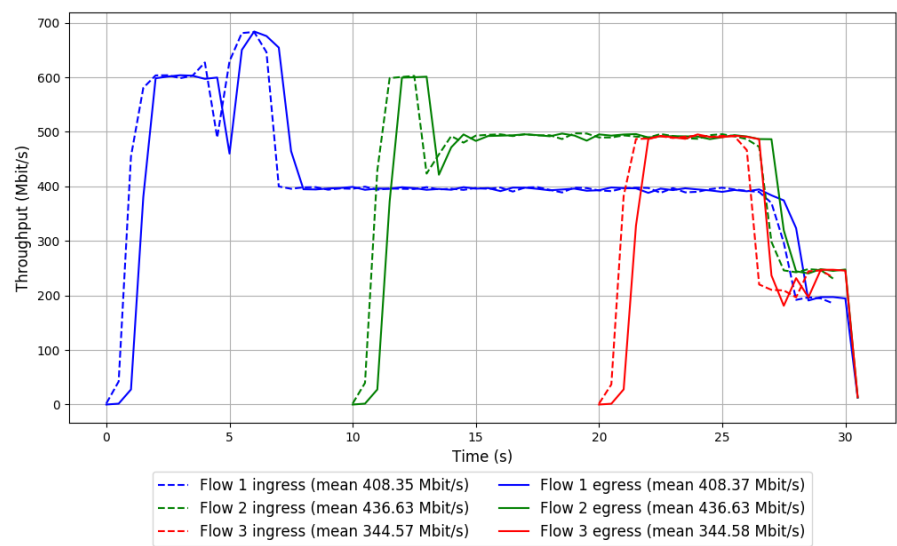


Run 2: Statistics of TCP Vegas

Start at: 2019-01-25 17:10:22
End at: 2019-01-25 17:10:52
Local clock offset: -0.013 ms
Remote clock offset: -0.847 ms

Below is generated by plot.py at 2019-01-25 22:56:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 813.65 Mbit/s
95th percentile per-packet one-way delay: 79.380 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 408.37 Mbit/s
95th percentile per-packet one-way delay: 86.685 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 436.63 Mbit/s
95th percentile per-packet one-way delay: 64.919 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 344.58 Mbit/s
95th percentile per-packet one-way delay: 65.391 ms
Loss rate: 0.03%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-01-25 17:51:13

End at: 2019-01-25 17:51:43

Local clock offset: -0.322 ms

Remote clock offset: 0.153 ms

Below is generated by plot.py at 2019-01-25 23:02:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 876.95 Mbit/s

95th percentile per-packet one-way delay: 73.163 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 465.74 Mbit/s

95th percentile per-packet one-way delay: 65.644 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 449.79 Mbit/s

95th percentile per-packet one-way delay: 81.403 ms

Loss rate: 0.02%

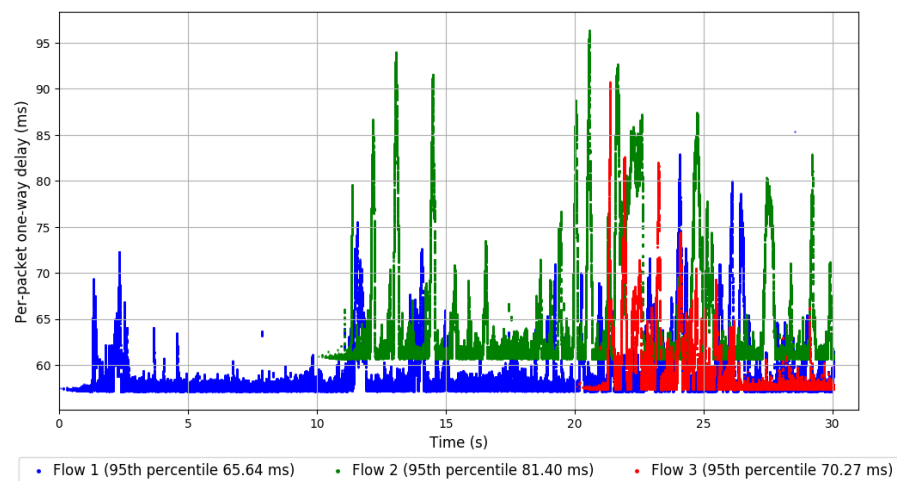
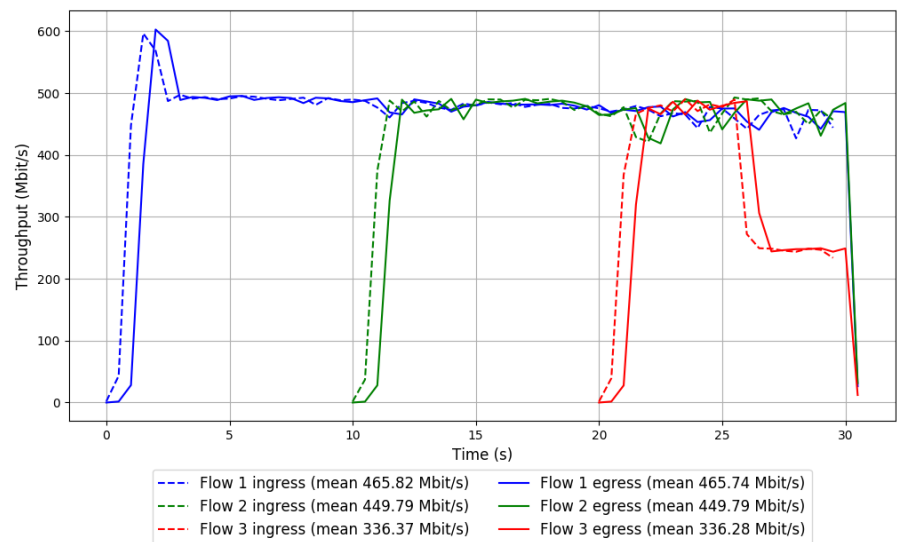
-- Flow 3:

Average throughput: 336.28 Mbit/s

95th percentile per-packet one-way delay: 70.271 ms

Loss rate: 0.01%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-01-25 18:33:45

End at: 2019-01-25 18:34:15

Local clock offset: 0.012 ms

Remote clock offset: 0.928 ms

Below is generated by plot.py at 2019-01-25 23:07:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 1021.98 Mbit/s

95th percentile per-packet one-way delay: 111.683 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 578.79 Mbit/s

95th percentile per-packet one-way delay: 116.499 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 453.06 Mbit/s

95th percentile per-packet one-way delay: 65.519 ms

Loss rate: 0.02%

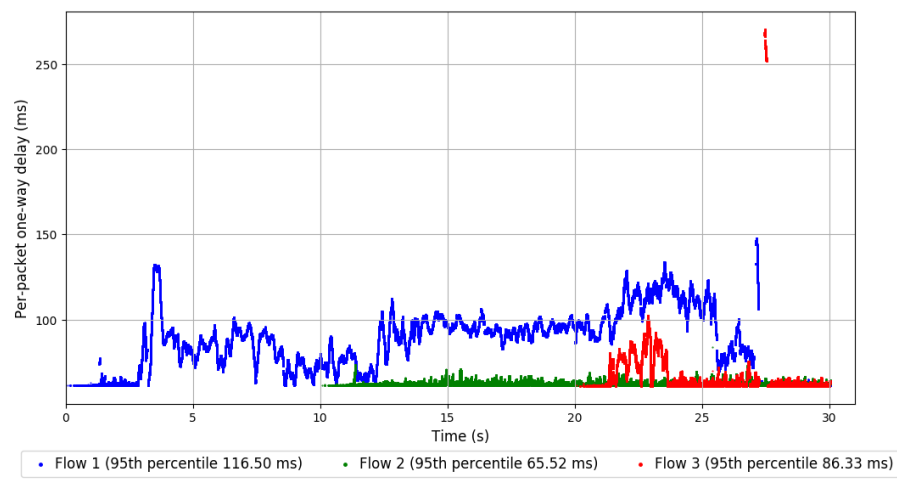
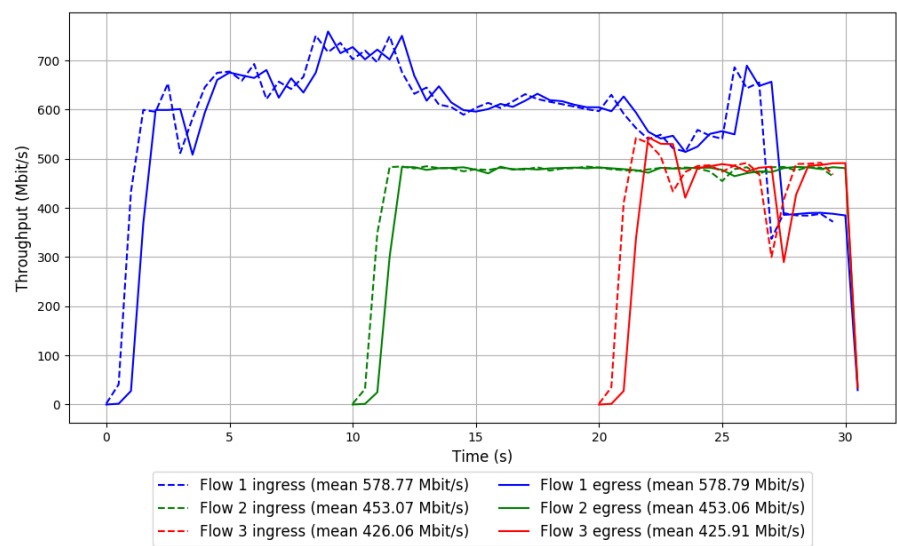
-- Flow 3:

Average throughput: 425.91 Mbit/s

95th percentile per-packet one-way delay: 86.327 ms

Loss rate: 0.06%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-01-25 19:15:32

End at: 2019-01-25 19:16:02

Local clock offset: -0.132 ms

Remote clock offset: 0.579 ms

Below is generated by plot.py at 2019-01-25 23:07:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 831.69 Mbit/s

95th percentile per-packet one-way delay: 79.282 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 394.62 Mbit/s

95th percentile per-packet one-way delay: 62.000 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 454.66 Mbit/s

95th percentile per-packet one-way delay: 84.687 ms

Loss rate: 0.01%

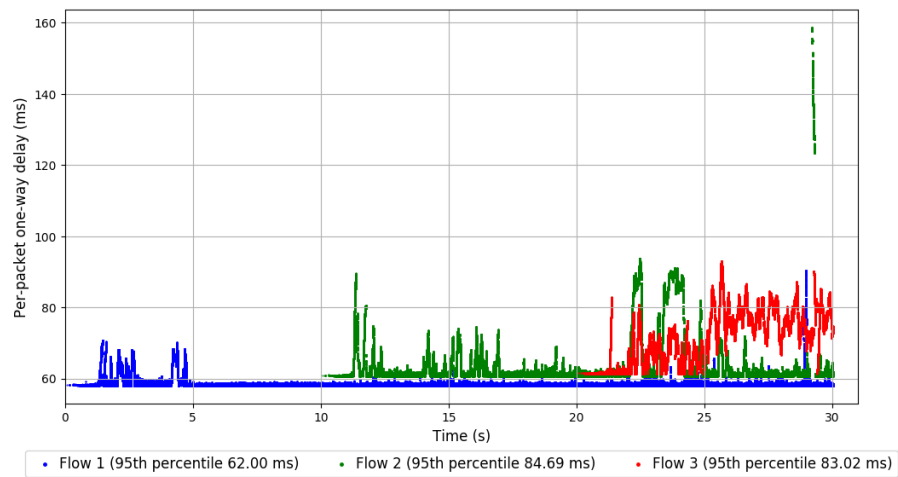
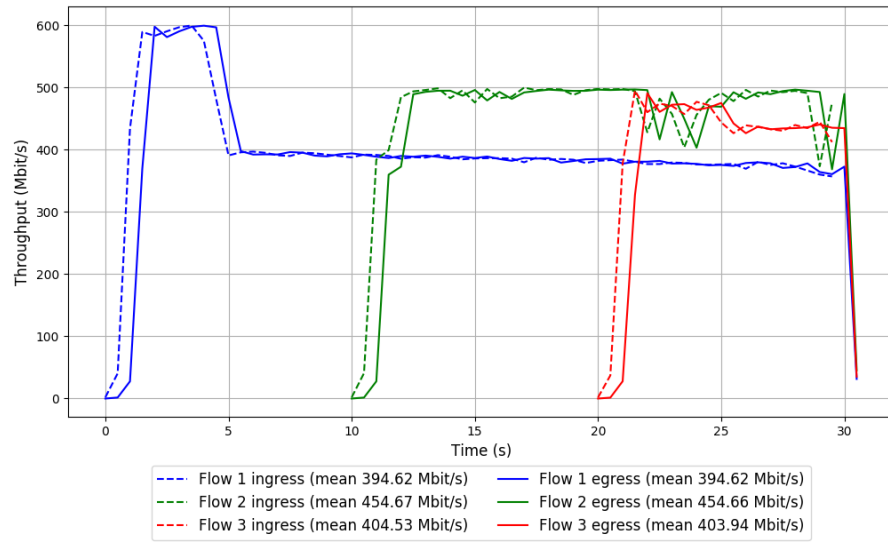
-- Flow 3:

Average throughput: 403.94 Mbit/s

95th percentile per-packet one-way delay: 83.017 ms

Loss rate: 0.17%

Run 5: Report of TCP Vegas — Data Link

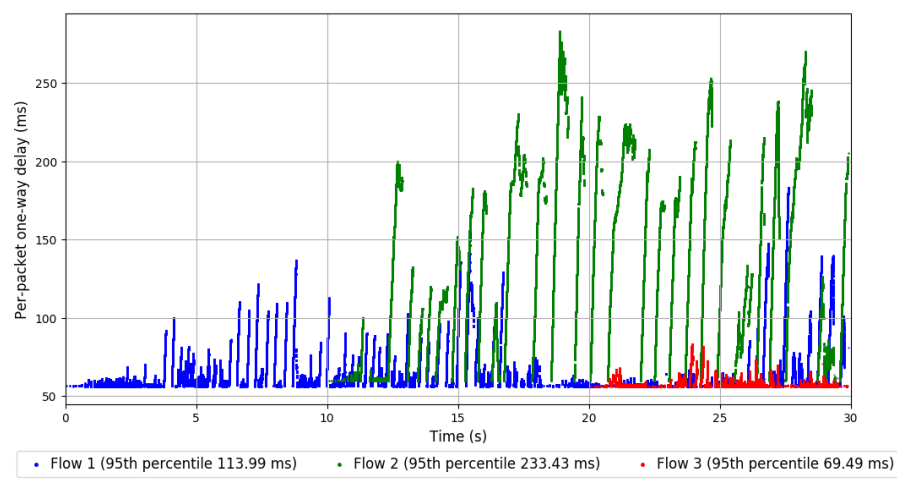
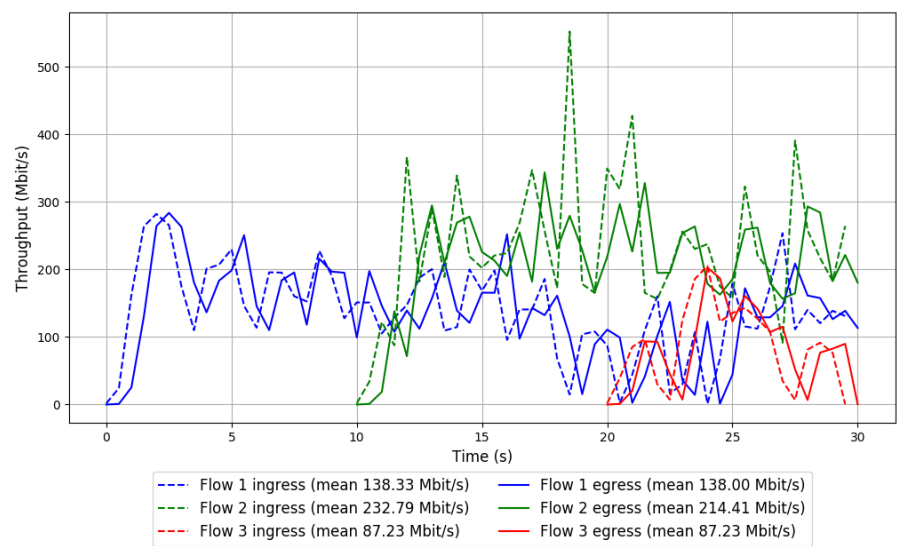


Run 1: Statistics of Verus

Start at: 2019-01-25 16:36:11
End at: 2019-01-25 16:36:41
Local clock offset: 0.319 ms
Remote clock offset: -0.344 ms

Below is generated by plot.py at 2019-01-25 23:07:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 308.98 Mbit/s
95th percentile per-packet one-way delay: 215.822 ms
Loss rate: 3.90%
-- Flow 1:
Average throughput: 138.00 Mbit/s
95th percentile per-packet one-way delay: 113.994 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 214.41 Mbit/s
95th percentile per-packet one-way delay: 233.430 ms
Loss rate: 7.90%
-- Flow 3:
Average throughput: 87.23 Mbit/s
95th percentile per-packet one-way delay: 69.491 ms
Loss rate: 0.00%

Run 1: Report of Verus — Data Link

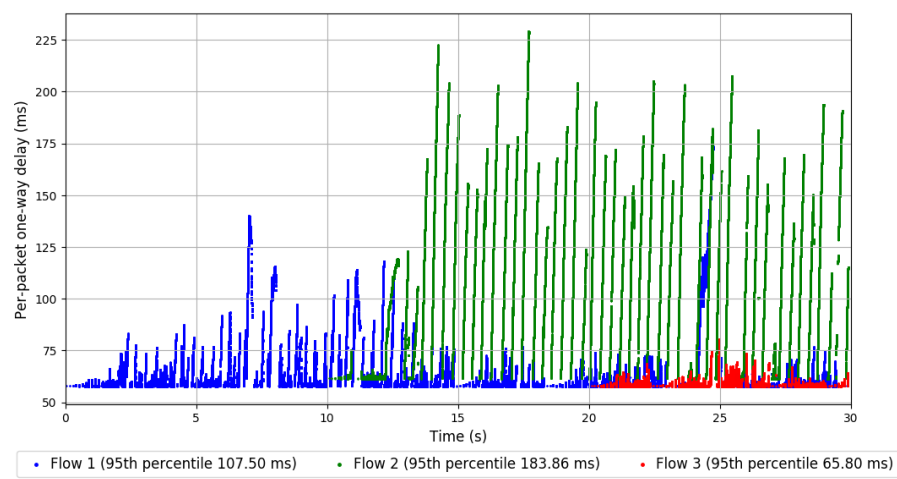
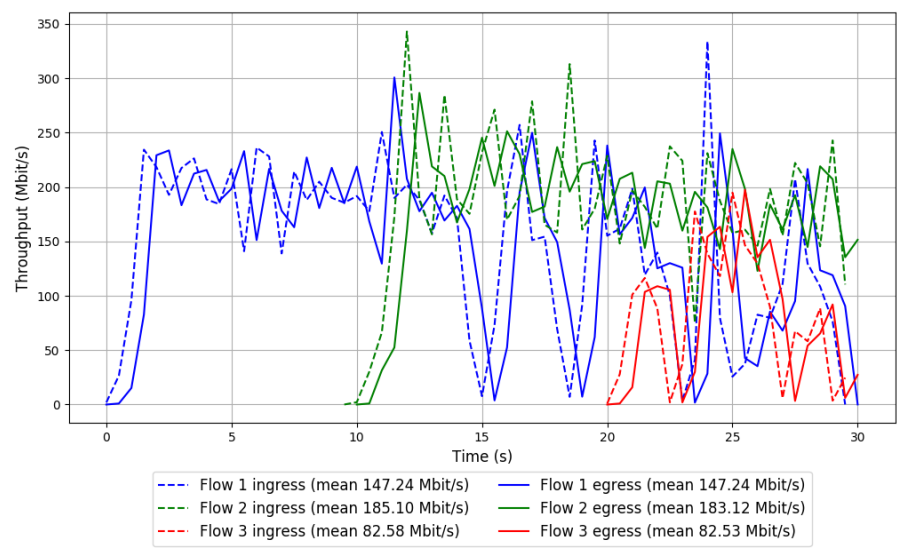


Run 2: Statistics of Verus

Start at: 2019-01-25 17:15:42
End at: 2019-01-25 17:16:12
Local clock offset: -0.188 ms
Remote clock offset: 0.603 ms

Below is generated by plot.py at 2019-01-25 23:07:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 295.51 Mbit/s
95th percentile per-packet one-way delay: 167.155 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 147.24 Mbit/s
95th percentile per-packet one-way delay: 107.496 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 183.12 Mbit/s
95th percentile per-packet one-way delay: 183.858 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 82.53 Mbit/s
95th percentile per-packet one-way delay: 65.804 ms
Loss rate: 0.00%

Run 2: Report of Verus — Data Link

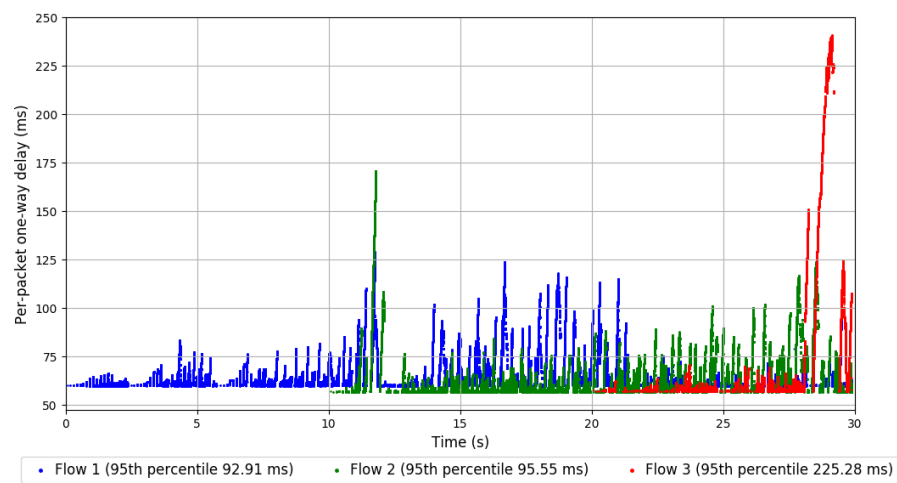
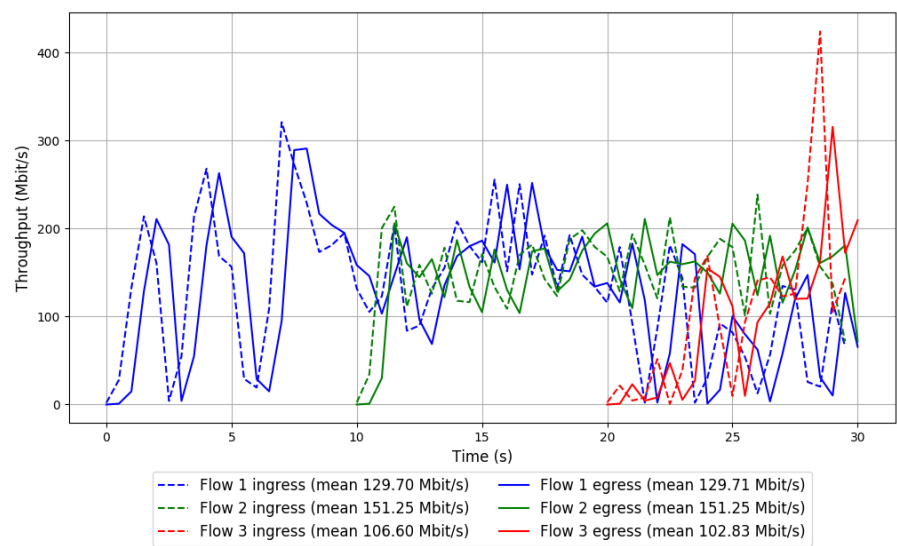


Run 3: Statistics of Verus

Start at: 2019-01-25 17:56:46
End at: 2019-01-25 17:57:16
Local clock offset: -0.416 ms
Remote clock offset: -0.631 ms

Below is generated by plot.py at 2019-01-25 23:07:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 264.01 Mbit/s
95th percentile per-packet one-way delay: 108.108 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 129.71 Mbit/s
95th percentile per-packet one-way delay: 92.912 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 151.25 Mbit/s
95th percentile per-packet one-way delay: 95.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 102.83 Mbit/s
95th percentile per-packet one-way delay: 225.280 ms
Loss rate: 3.53%

Run 3: Report of Verus — Data Link

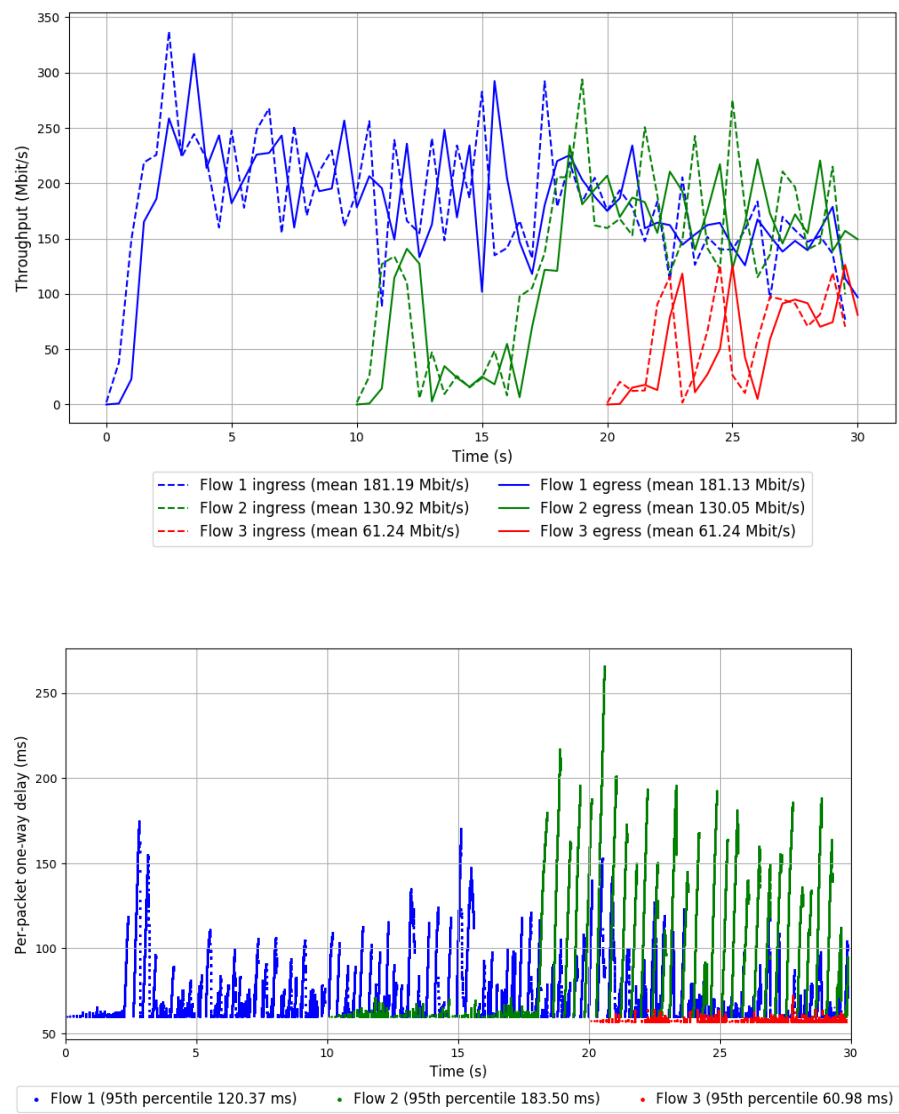


Run 4: Statistics of Verus

Start at: 2019-01-25 18:39:50
End at: 2019-01-25 18:40:20
Local clock offset: 0.187 ms
Remote clock offset: -0.145 ms

Below is generated by plot.py at 2019-01-25 23:07:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 287.61 Mbit/s
95th percentile per-packet one-way delay: 159.172 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 181.13 Mbit/s
95th percentile per-packet one-way delay: 120.370 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 130.05 Mbit/s
95th percentile per-packet one-way delay: 183.501 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 61.24 Mbit/s
95th percentile per-packet one-way delay: 60.977 ms
Loss rate: 0.00%

Run 4: Report of Verus — Data Link

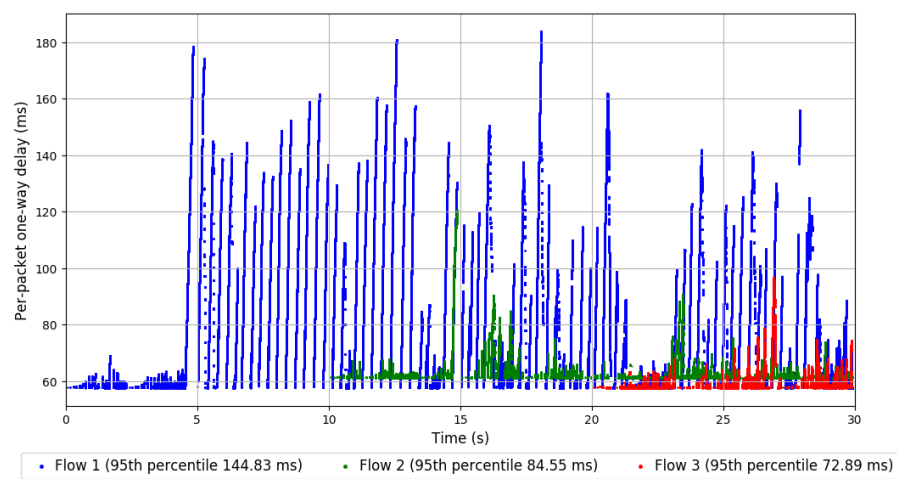
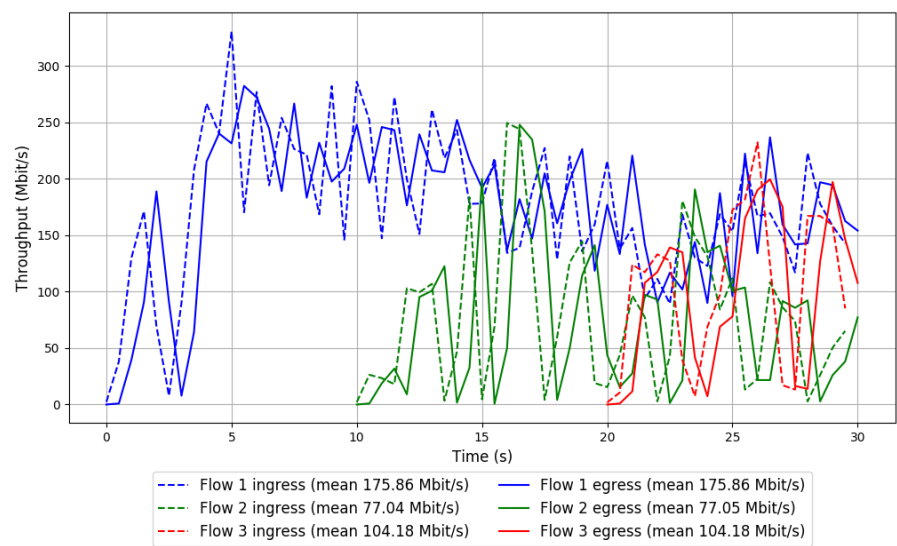


Run 5: Statistics of Verus

Start at: 2019-01-25 19:21:14
End at: 2019-01-25 19:21:44
Local clock offset: -0.117 ms
Remote clock offset: 0.696 ms

Below is generated by plot.py at 2019-01-25 23:07:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 261.31 Mbit/s
95th percentile per-packet one-way delay: 138.997 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 175.86 Mbit/s
95th percentile per-packet one-way delay: 144.829 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 77.05 Mbit/s
95th percentile per-packet one-way delay: 84.549 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 104.18 Mbit/s
95th percentile per-packet one-way delay: 72.890 ms
Loss rate: 0.00%

Run 5: Report of Verus — Data Link

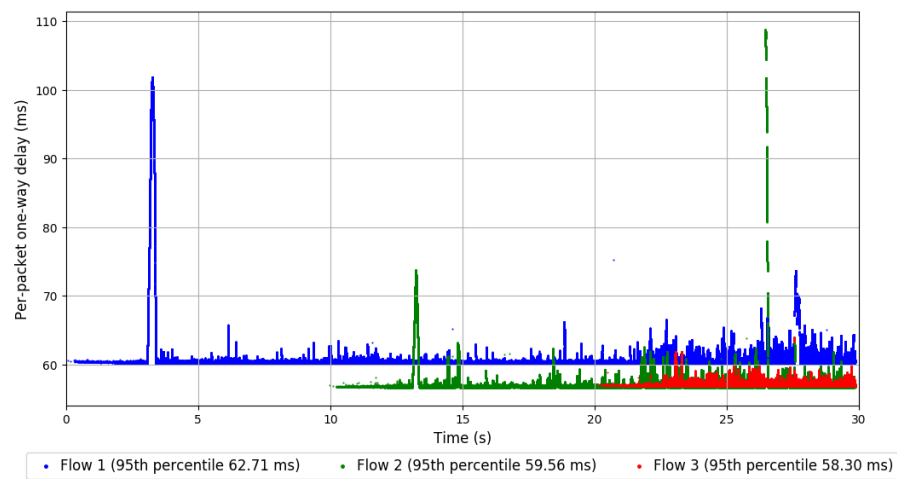
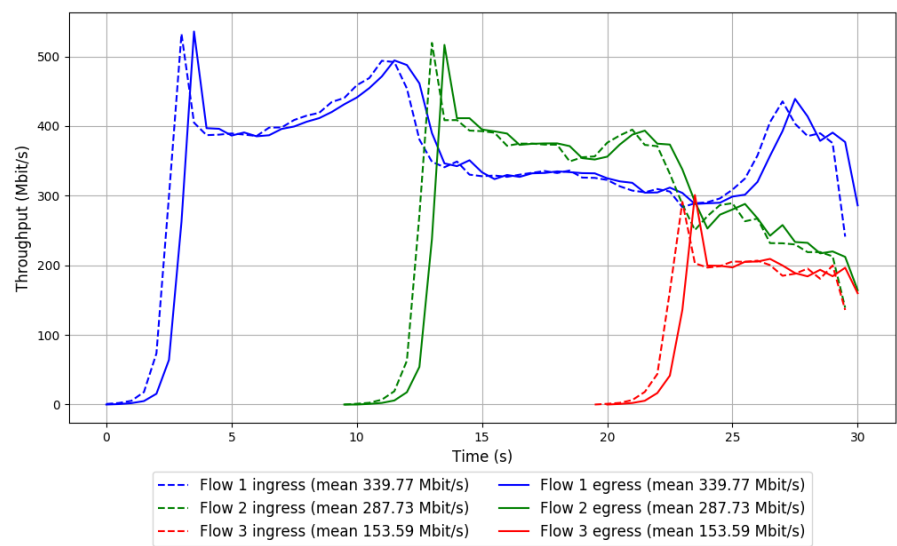


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-25 16:56:31
End at: 2019-01-25 16:57:01
Local clock offset: -0.062 ms
Remote clock offset: -0.066 ms

Below is generated by plot.py at 2019-01-25 23:08:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 582.40 Mbit/s
95th percentile per-packet one-way delay: 61.992 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 339.77 Mbit/s
95th percentile per-packet one-way delay: 62.710 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 287.73 Mbit/s
95th percentile per-packet one-way delay: 59.561 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.59 Mbit/s
95th percentile per-packet one-way delay: 58.302 ms
Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

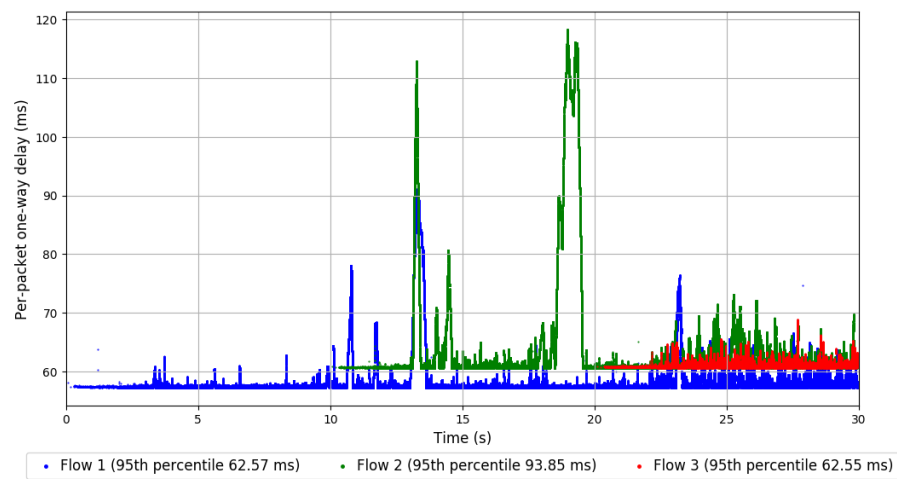
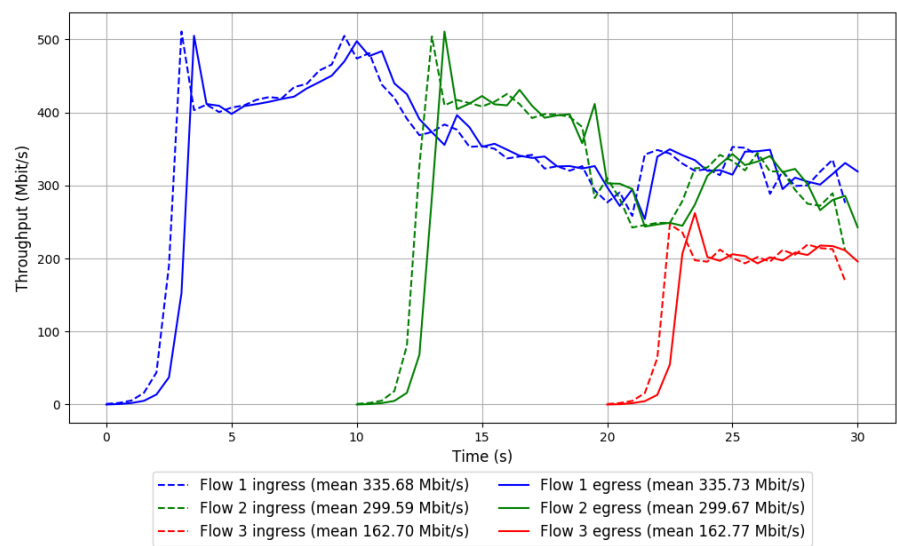


Run 2: Statistics of PCC-Vivace

Start at: 2019-01-25 17:36:26
End at: 2019-01-25 17:36:56
Local clock offset: -0.436 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-01-25 23:09:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 588.44 Mbit/s
95th percentile per-packet one-way delay: 69.238 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 335.73 Mbit/s
95th percentile per-packet one-way delay: 62.568 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 299.67 Mbit/s
95th percentile per-packet one-way delay: 93.853 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 162.77 Mbit/s
95th percentile per-packet one-way delay: 62.546 ms
Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

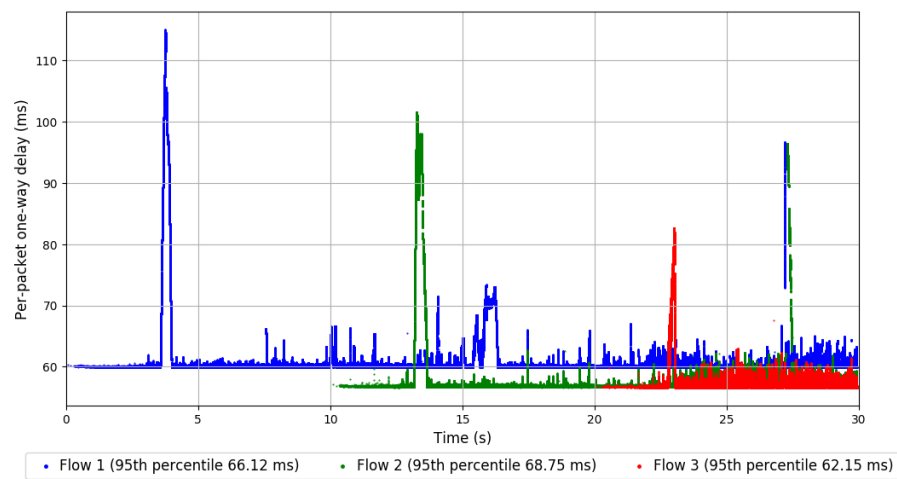
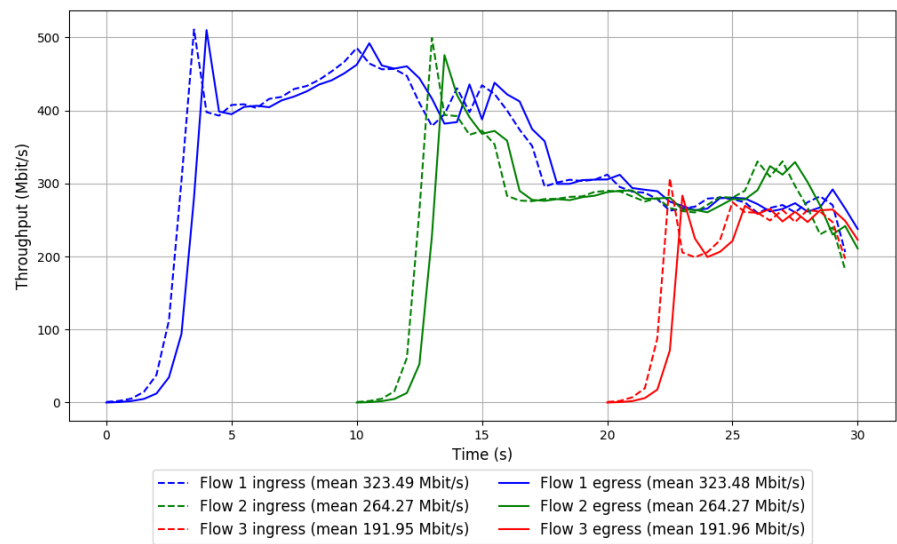


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-25 18:18:33
End at: 2019-01-25 18:19:03
Local clock offset: -0.286 ms
Remote clock offset: -0.632 ms

Below is generated by plot.py at 2019-01-25 23:09:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 562.18 Mbit/s
95th percentile per-packet one-way delay: 65.989 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 323.48 Mbit/s
95th percentile per-packet one-way delay: 66.123 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 264.27 Mbit/s
95th percentile per-packet one-way delay: 68.753 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.96 Mbit/s
95th percentile per-packet one-way delay: 62.148 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-01-25 19:00:37

End at: 2019-01-25 19:01:07

Local clock offset: 0.061 ms

Remote clock offset: 1.067 ms

Below is generated by plot.py at 2019-01-25 23:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 569.98 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 333.43 Mbit/s

95th percentile per-packet one-way delay: 63.228 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 273.26 Mbit/s

95th percentile per-packet one-way delay: 62.092 ms

Loss rate: 0.00%

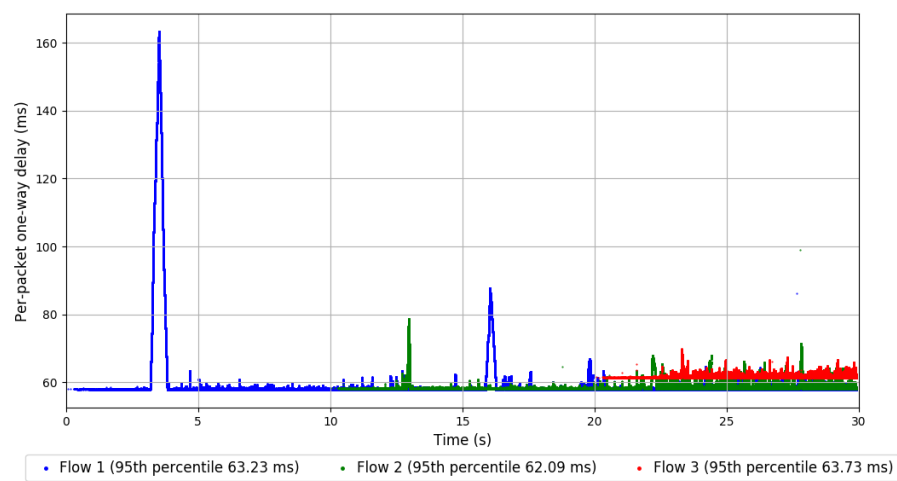
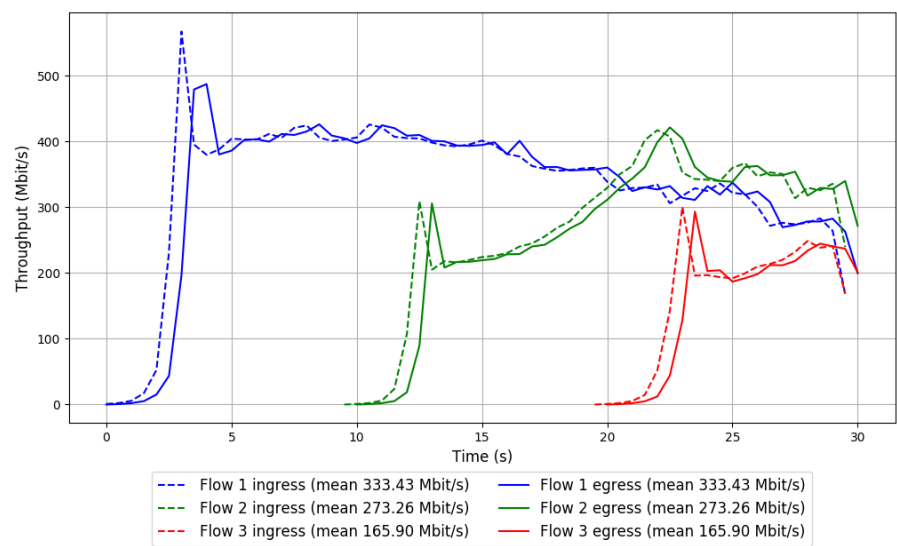
-- Flow 3:

Average throughput: 165.90 Mbit/s

95th percentile per-packet one-way delay: 63.732 ms

Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-01-25 19:42:41

End at: 2019-01-25 19:43:11

Local clock offset: -0.174 ms

Remote clock offset: 0.048 ms

Below is generated by plot.py at 2019-01-25 23:09:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 592.00 Mbit/s

95th percentile per-packet one-way delay: 171.247 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 329.36 Mbit/s

95th percentile per-packet one-way delay: 61.585 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 343.66 Mbit/s

95th percentile per-packet one-way delay: 201.849 ms

Loss rate: 0.88%

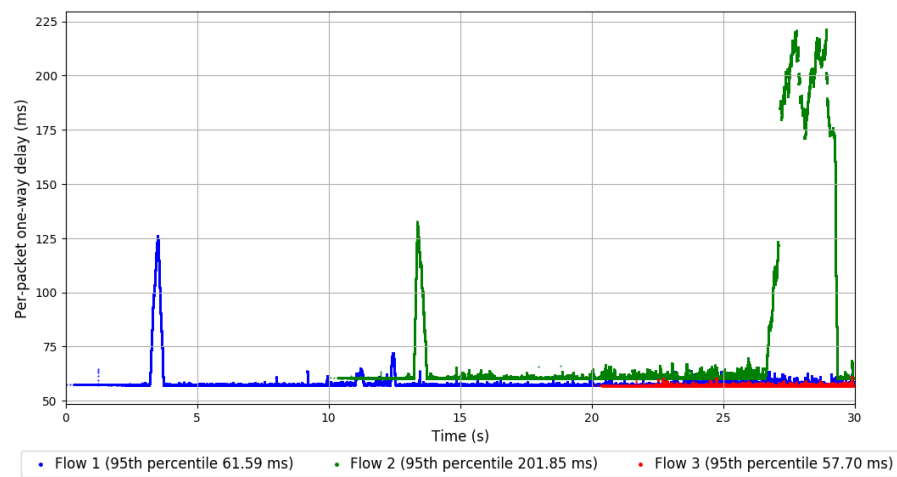
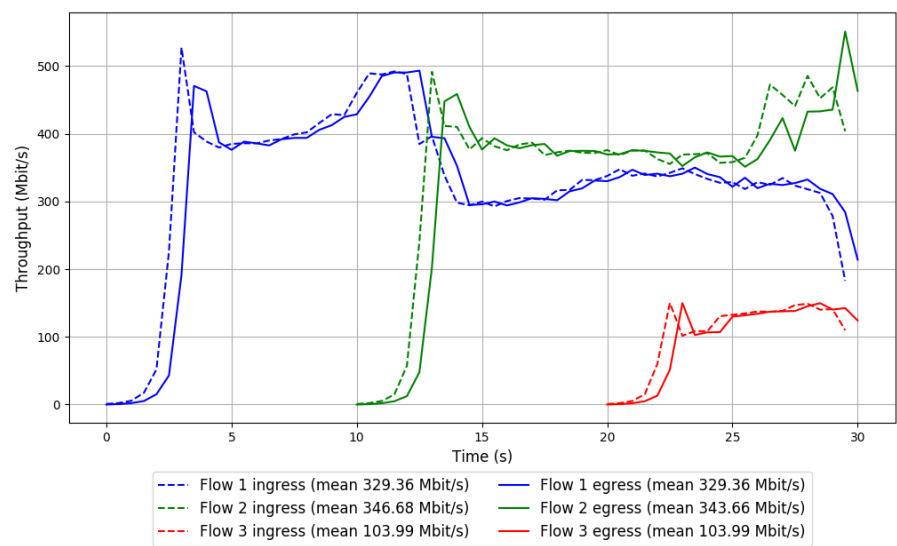
-- Flow 3:

Average throughput: 103.99 Mbit/s

95th percentile per-packet one-way delay: 57.697 ms

Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link

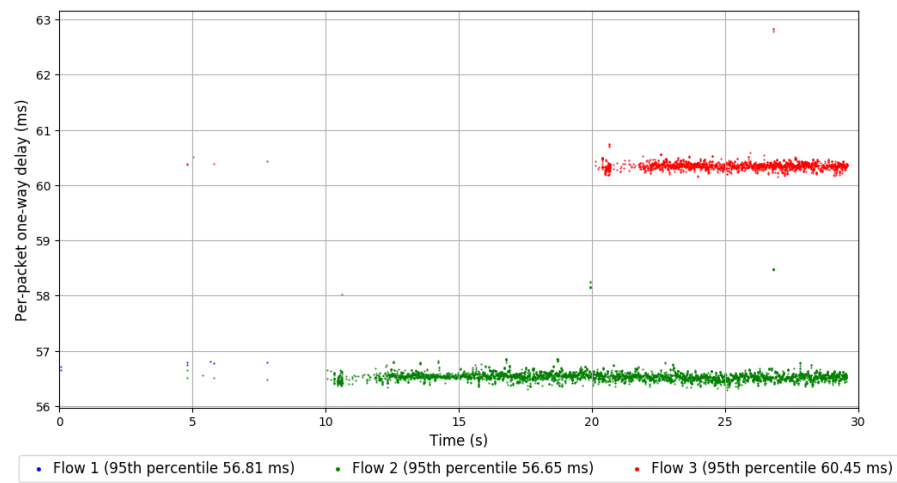
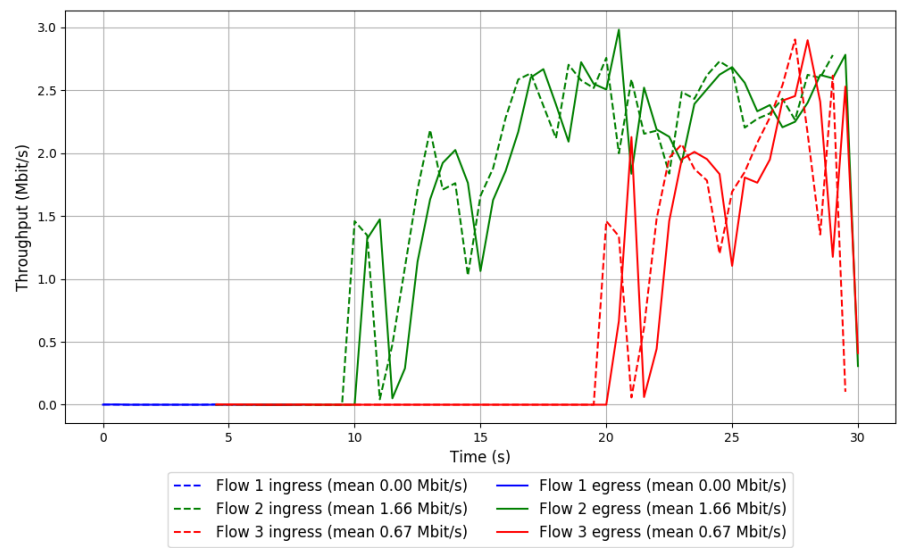


Run 1: Statistics of WebRTC media

Start at: 2019-01-25 16:37:59
End at: 2019-01-25 16:38:29
Local clock offset: -0.366 ms
Remote clock offset: -0.739 ms

Below is generated by plot.py at 2019-01-25 23:09:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 60.399 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 56.813 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 56.653 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 60.450 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-01-25 17:17:32

End at: 2019-01-25 17:18:02

Local clock offset: -0.169 ms

Remote clock offset: -0.65 ms

Below is generated by plot.py at 2019-01-25 23:09:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 59.967 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

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

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 56.677 ms

Loss rate: 0.00%

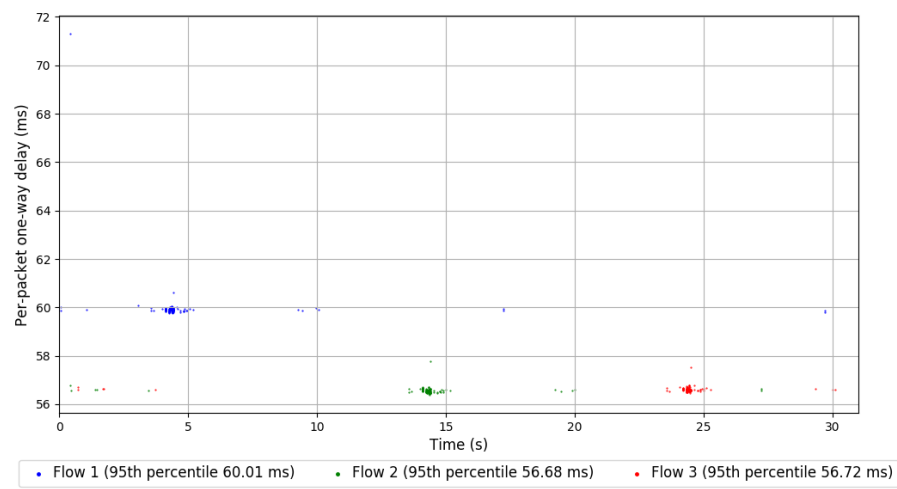
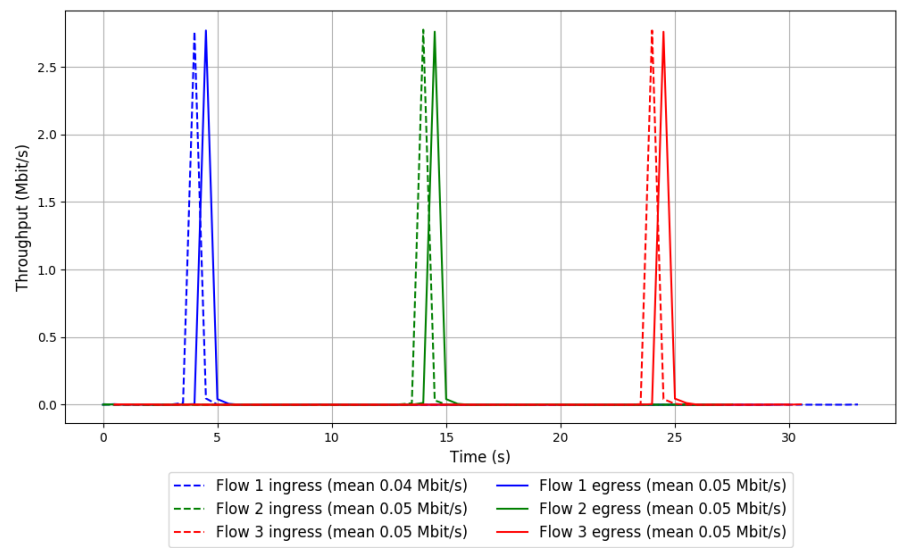
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 56.720 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-01-25 17:58:42

End at: 2019-01-25 17:59:12

Local clock offset: -0.166 ms

Remote clock offset: 0.145 ms

Below is generated by plot.py at 2019-01-25 23:09:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 61.062 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 60.952 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 57.442 ms

Loss rate: 0.00%

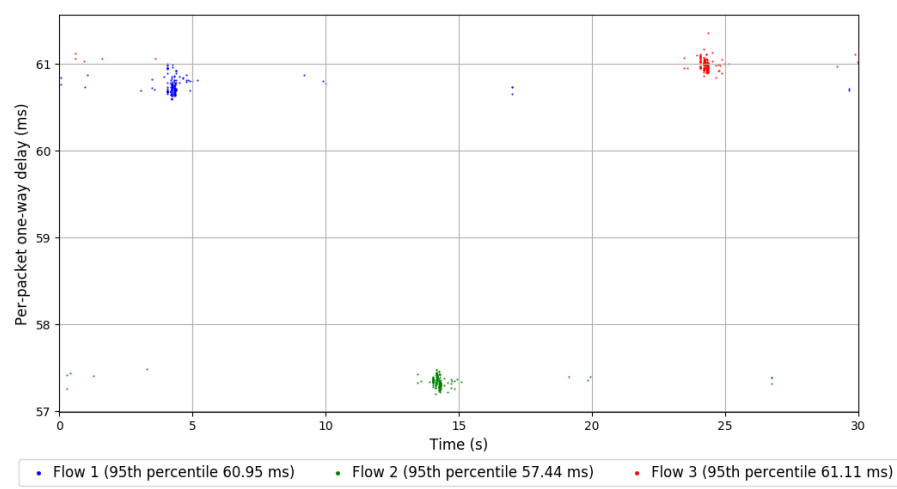
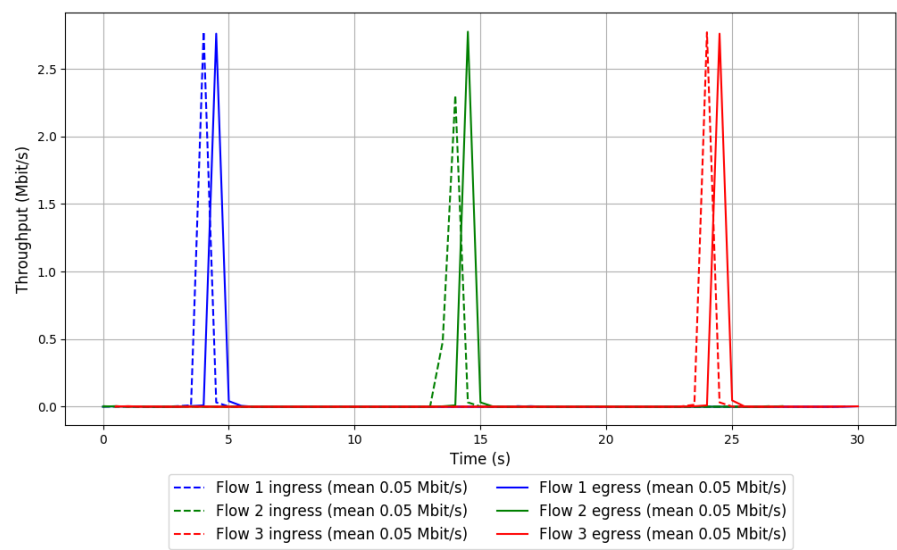
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 61.108 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-01-25 18:41:36

End at: 2019-01-25 18:42:06

Local clock offset: -0.392 ms

Remote clock offset: 0.02 ms

Below is generated by plot.py at 2019-01-25 23:09:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 60.810 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 60.848 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 57.545 ms

Loss rate: 0.00%

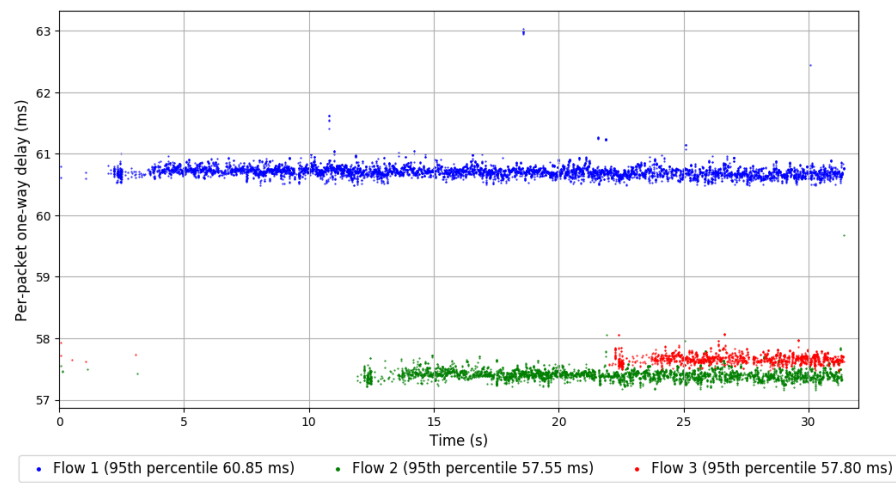
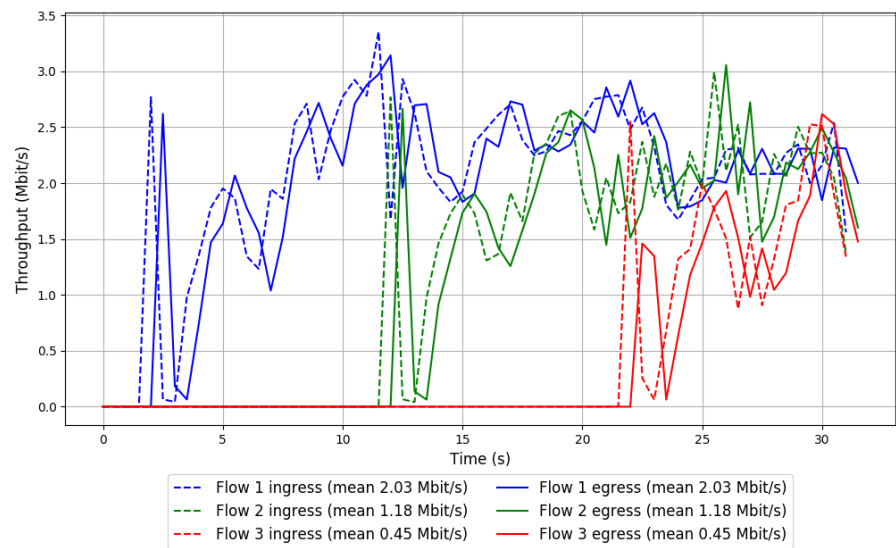
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 57.799 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-25 19:23:04

End at: 2019-01-25 19:23:34

Local clock offset: 0.12 ms

Remote clock offset: 0.717 ms

Below is generated by plot.py at 2019-01-25 23:09:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 61.340 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 61.407 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 57.748 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 61.260 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

