

Pantheon Report

Generated at 2019-06-29 01:27:14 (UTC).

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

Repeated the test of 22 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:

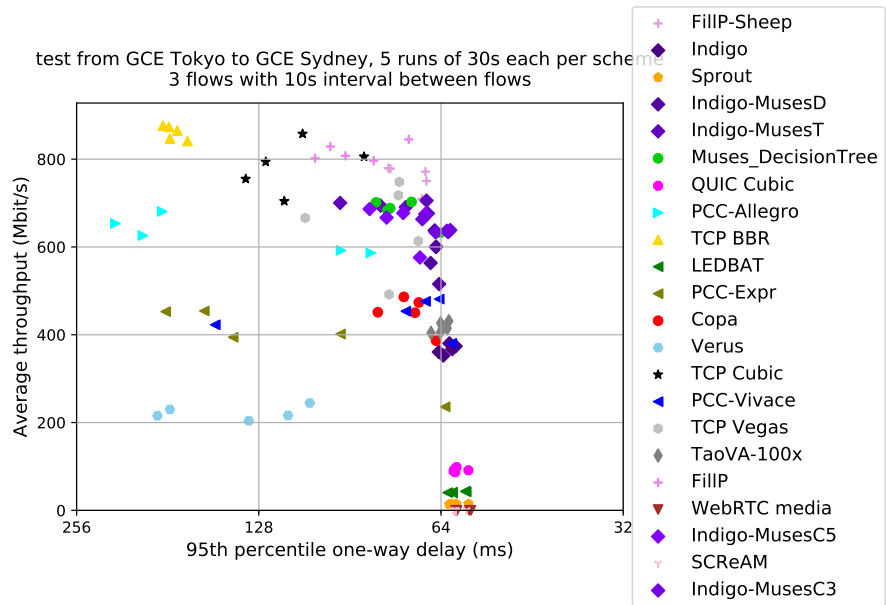
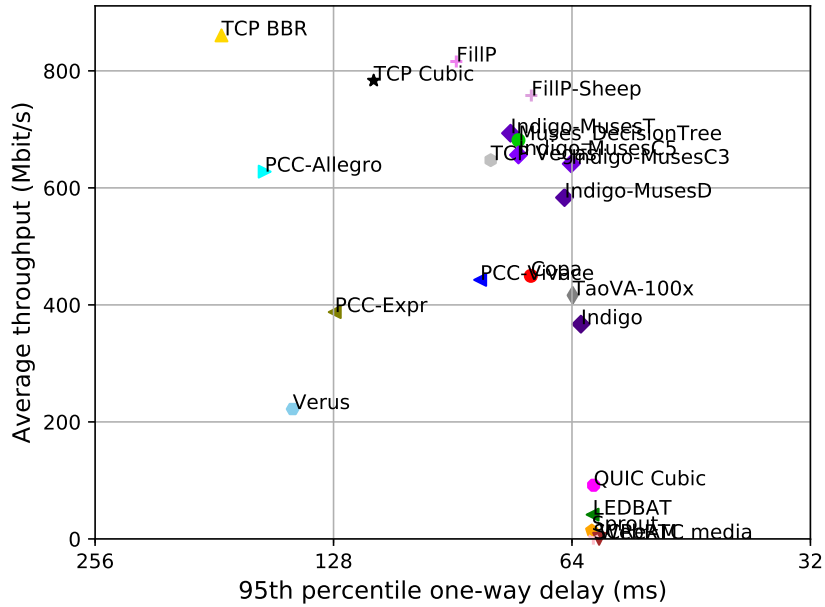
```
Linux 4.15.0-1032-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 11c9498ecb1596b02ccd896791a02d03172af7ed
M helpers/__init__.pyc
M helpers/context.pyc
M helpers/utils.pyc
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 Tokyo to GCE Sydney, 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	457.84	422.32	370.13	174.22	156.02	169.96	1.14	1.01	2.28
Copa	5	232.91	225.55	202.81	69.17	72.68	77.88	0.43	0.72	1.26
TCP Cubic	5	384.17	430.58	343.02	98.27	105.48	101.90	0.42	0.72	1.35
FillP	5	512.17	333.66	250.69	96.38	63.26	62.67	0.77	0.49	1.36
FillP-Sheep	5	478.20	308.28	228.79	76.19	62.73	61.80	0.32	0.56	1.36
Indigo	5	200.23	175.87	153.72	62.32	62.53	60.88	0.48	0.64	1.34
Indigo-MusesC3	5	389.57	316.46	209.35	65.83	61.97	60.72	0.34	0.66	2.85
Indigo-MusesC5	5	424.84	328.60	91.69	76.84	70.57	58.70	0.29	0.52	1.89
Indigo-MusesD	5	367.44	279.12	155.92	66.90	63.26	60.20	0.37	0.54	2.37
Indigo-MusesT	5	425.04	351.44	185.91	80.60	67.91	60.91	0.39	0.78	2.44
LEDBAT	5	26.63	17.98	8.91	59.78	59.59	58.81	0.79	1.18	2.37
Muses_DecisionTree	5	418.33	359.63	83.18	76.21	71.85	59.23	0.46	0.52	1.49
PCC-Allegro	5	353.47	290.68	249.37	158.05	114.99	137.94	3.83	1.60	1.88
PCC-Expr	5	227.59	191.55	101.03	136.39	85.69	72.17	1.74	1.03	2.70
QUIC Cubic	5	53.72	43.41	26.92	59.46	58.73	58.90	0.60	0.89	2.11
SCReAM	5	0.22	0.22	0.22	58.21	58.91	58.04	0.38	0.61	1.09
Sprout	5	7.40	7.25	6.84	59.20	58.59	59.81	0.31	0.67	1.19
TaoVA-100x	5	214.74	205.28	197.59	62.21	64.35	65.98	0.44	0.70	1.55
TCP Vegas	5	330.35	295.66	365.61	70.68	81.80	91.47	0.32	0.56	1.33
Verus	5	120.71	104.74	96.60	149.54	111.37	137.71	1.02	0.53	1.96
PCC-Vivace	5	269.95	214.96	92.29	73.09	103.33	59.40	0.49	1.01	2.23
WebRTC media	5	0.05	0.05	0.05	57.79	57.85	58.56	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-06-28 19:57:49

End at: 2019-06-28 19:58:19

Local clock offset: -0.086 ms

Remote clock offset: 0.068 ms

Below is generated by plot.py at 2019-06-28 23:04:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 865.12 Mbit/s

95th percentile per-packet one-way delay: 174.514 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 473.49 Mbit/s

95th percentile per-packet one-way delay: 172.075 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 400.96 Mbit/s

95th percentile per-packet one-way delay: 183.909 ms

Loss rate: 2.02%

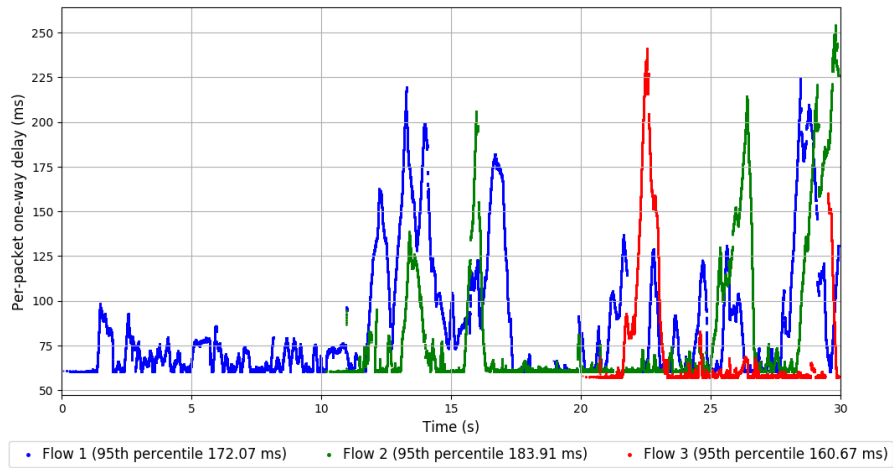
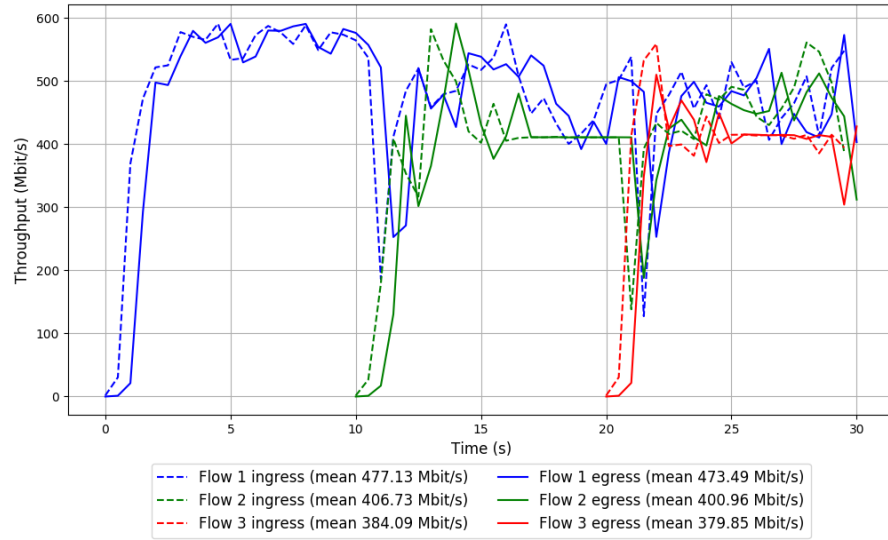
-- Flow 3:

Average throughput: 379.85 Mbit/s

95th percentile per-packet one-way delay: 160.669 ms

Loss rate: 2.29%

Run 1: Report of TCP BBR — Data Link

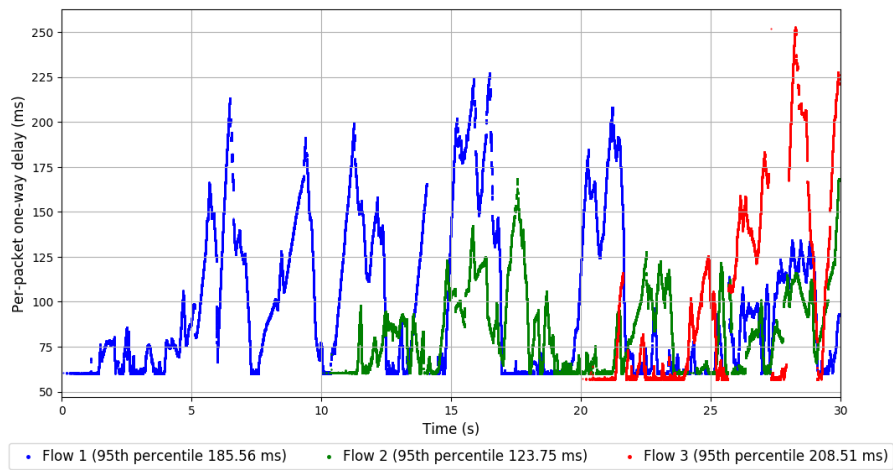
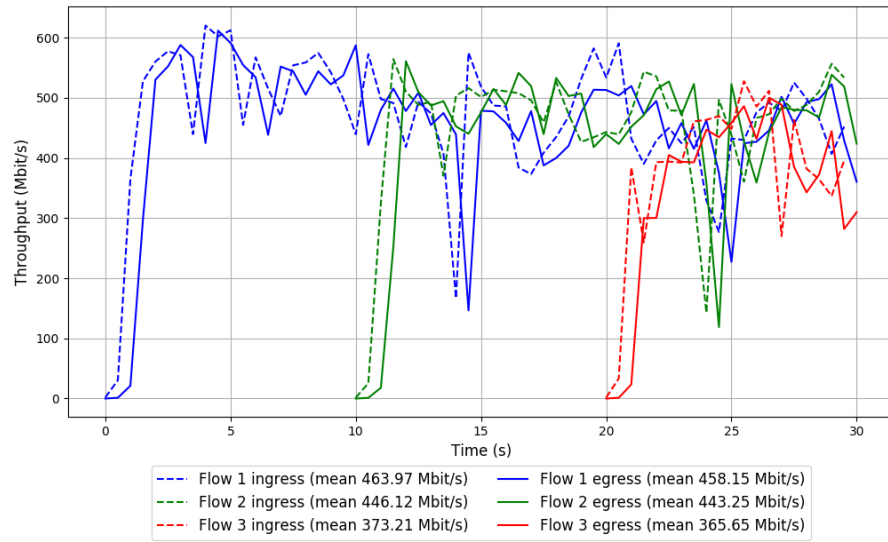


Run 2: Statistics of TCP BBR

Start at: 2019-06-28 20:34:31
End at: 2019-06-28 20:35:01
Local clock offset: -0.235 ms
Remote clock offset: -0.076 ms

Below is generated by plot.py at 2019-06-28 23:04:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 873.46 Mbit/s
95th percentile per-packet one-way delay: 180.175 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 458.15 Mbit/s
95th percentile per-packet one-way delay: 185.557 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 443.25 Mbit/s
95th percentile per-packet one-way delay: 123.748 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 365.65 Mbit/s
95th percentile per-packet one-way delay: 208.515 ms
Loss rate: 3.20%

Run 2: Report of TCP BBR — Data Link

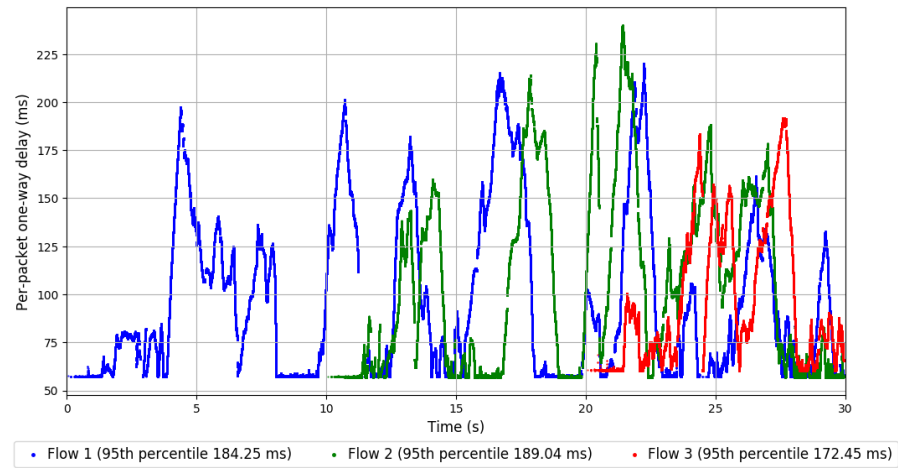
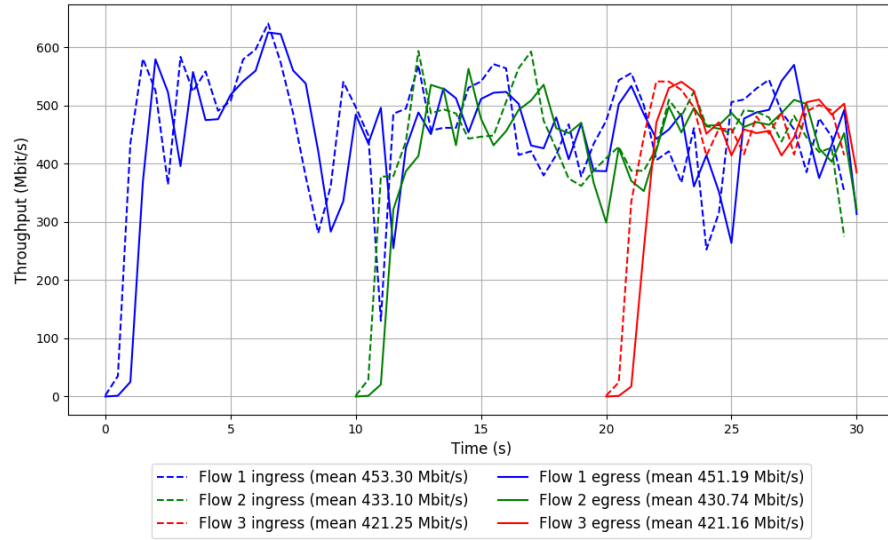


Run 3: Statistics of TCP BBR

Start at: 2019-06-28 21:11:32
End at: 2019-06-28 21:12:02
Local clock offset: -0.061 ms
Remote clock offset: -0.193 ms

Below is generated by plot.py at 2019-06-28 23:04:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 876.45 Mbit/s
95th percentile per-packet one-way delay: 184.353 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 451.19 Mbit/s
95th percentile per-packet one-way delay: 184.249 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 430.74 Mbit/s
95th percentile per-packet one-way delay: 189.041 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 421.16 Mbit/s
95th percentile per-packet one-way delay: 172.447 ms
Loss rate: 1.25%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-06-28 21:48:30

End at: 2019-06-28 21:49:00

Local clock offset: -0.239 ms

Remote clock offset: 0.296 ms

Below is generated by plot.py at 2019-06-28 23:04:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 841.28 Mbit/s

95th percentile per-packet one-way delay: 167.884 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 455.58 Mbit/s

95th percentile per-packet one-way delay: 180.255 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 426.13 Mbit/s

95th percentile per-packet one-way delay: 131.784 ms

Loss rate: 0.65%

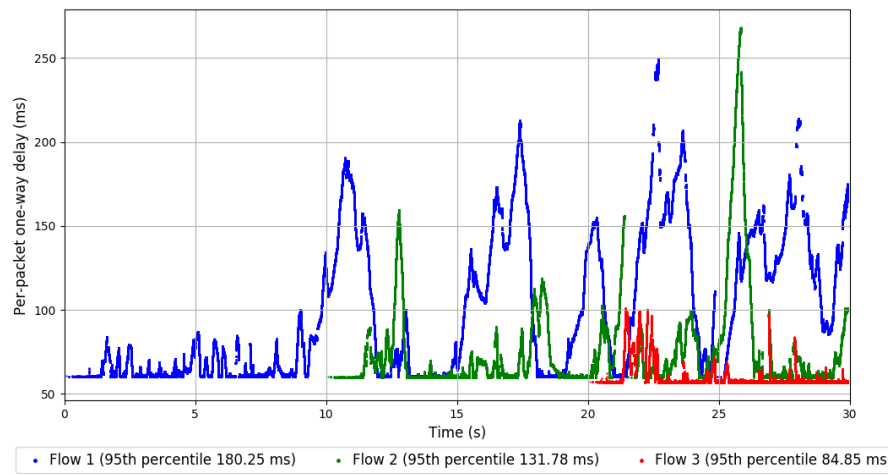
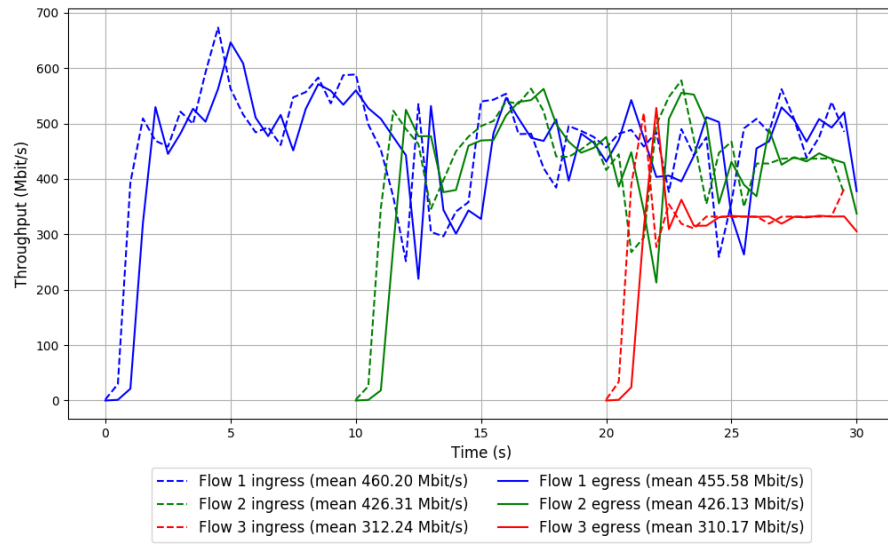
-- Flow 3:

Average throughput: 310.17 Mbit/s

95th percentile per-packet one-way delay: 84.846 ms

Loss rate: 1.85%

Run 4: Report of TCP BBR — Data Link

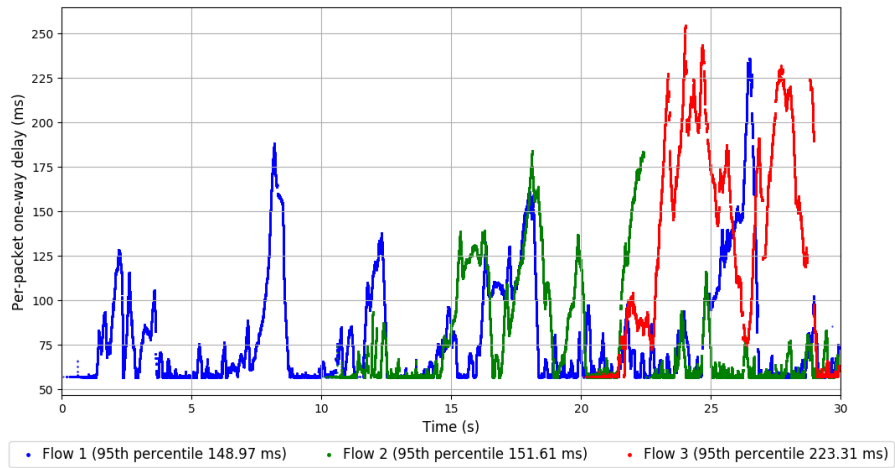
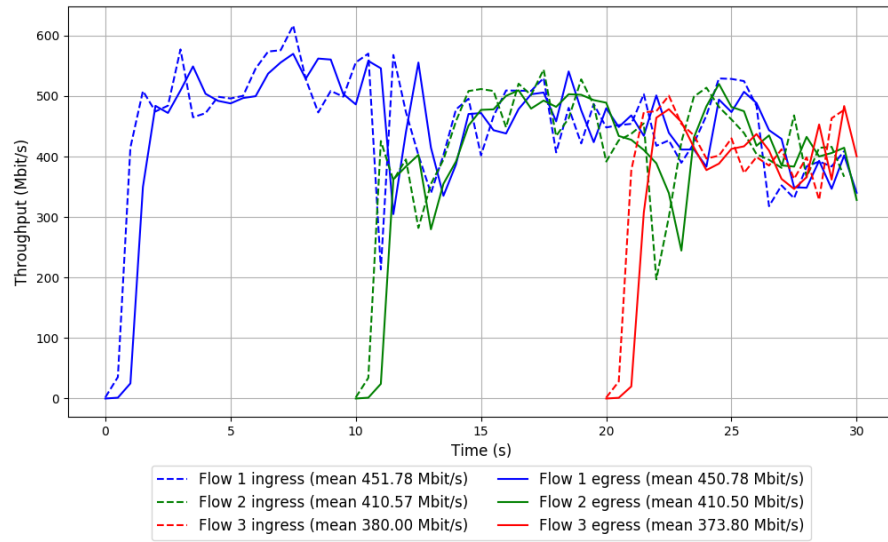


Run 5: Statistics of TCP BBR

Start at: 2019-06-28 22:25:33
End at: 2019-06-28 22:26:03
Local clock offset: 0.091 ms
Remote clock offset: -0.078 ms

Below is generated by plot.py at 2019-06-28 23:04:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 846.96 Mbit/s
95th percentile per-packet one-way delay: 179.490 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 450.78 Mbit/s
95th percentile per-packet one-way delay: 148.966 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 410.50 Mbit/s
95th percentile per-packet one-way delay: 151.614 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 373.80 Mbit/s
95th percentile per-packet one-way delay: 223.307 ms
Loss rate: 2.81%

Run 5: Report of TCP BBR — Data Link

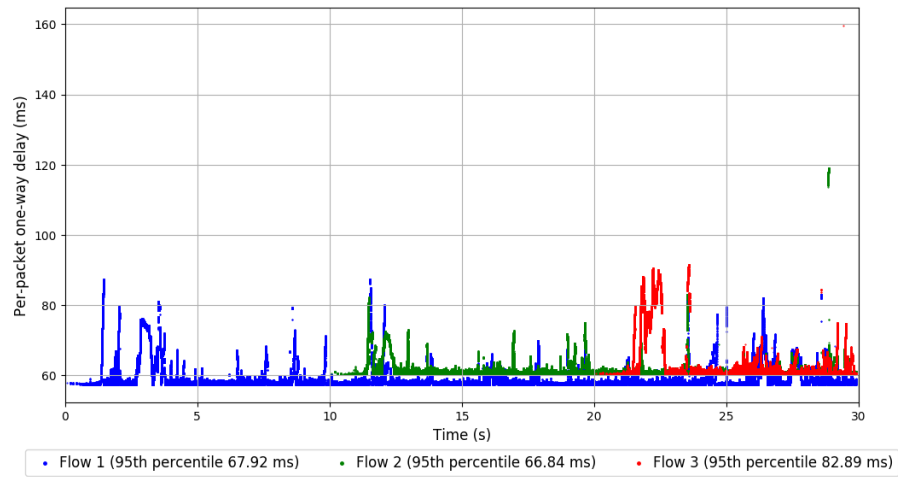
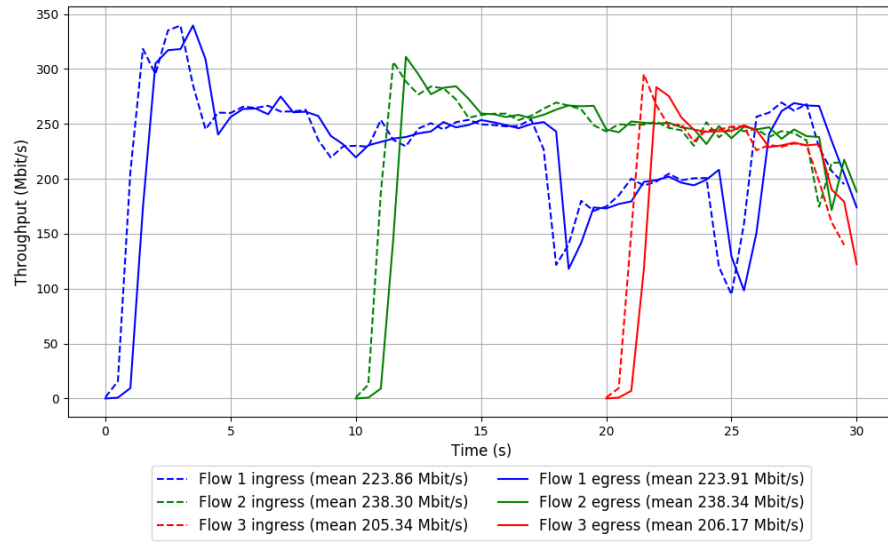


Run 1: Statistics of Copa

Start at: 2019-06-28 19:43:28
End at: 2019-06-28 19:43:58
Local clock offset: 0.079 ms
Remote clock offset: -0.048 ms

Below is generated by plot.py at 2019-06-28 23:04:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 450.26 Mbit/s
95th percentile per-packet one-way delay: 70.671 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 223.91 Mbit/s
95th percentile per-packet one-way delay: 67.915 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 238.34 Mbit/s
95th percentile per-packet one-way delay: 66.842 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 206.17 Mbit/s
95th percentile per-packet one-way delay: 82.888 ms
Loss rate: 0.82%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-06-28 20:20:01

End at: 2019-06-28 20:20:31

Local clock offset: 0.097 ms

Remote clock offset: 0.111 ms

Below is generated by plot.py at 2019-06-28 23:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 486.22 Mbit/s

95th percentile per-packet one-way delay: 73.728 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 255.74 Mbit/s

95th percentile per-packet one-way delay: 71.910 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 243.46 Mbit/s

95th percentile per-packet one-way delay: 72.039 ms

Loss rate: 0.63%

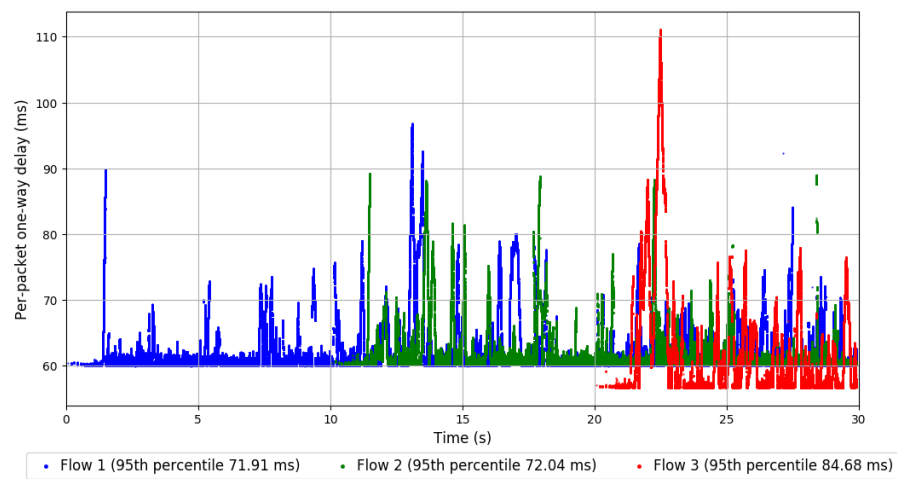
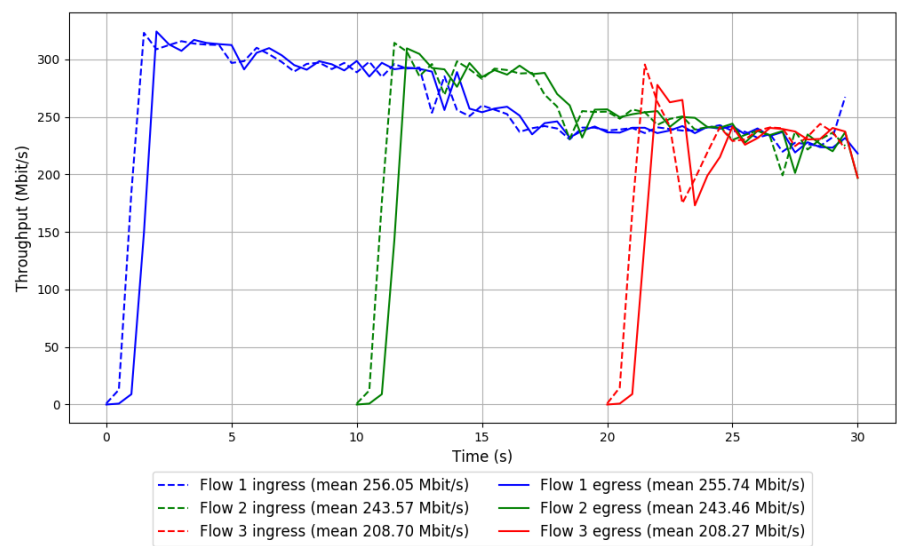
-- Flow 3:

Average throughput: 208.27 Mbit/s

95th percentile per-packet one-way delay: 84.684 ms

Loss rate: 1.36%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-06-28 20:57:07

End at: 2019-06-28 20:57:37

Local clock offset: -0.234 ms

Remote clock offset: -0.24 ms

Below is generated by plot.py at 2019-06-28 23:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 451.33 Mbit/s

95th percentile per-packet one-way delay: 81.388 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 241.50 Mbit/s

95th percentile per-packet one-way delay: 79.092 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 226.33 Mbit/s

95th percentile per-packet one-way delay: 86.402 ms

Loss rate: 0.72%

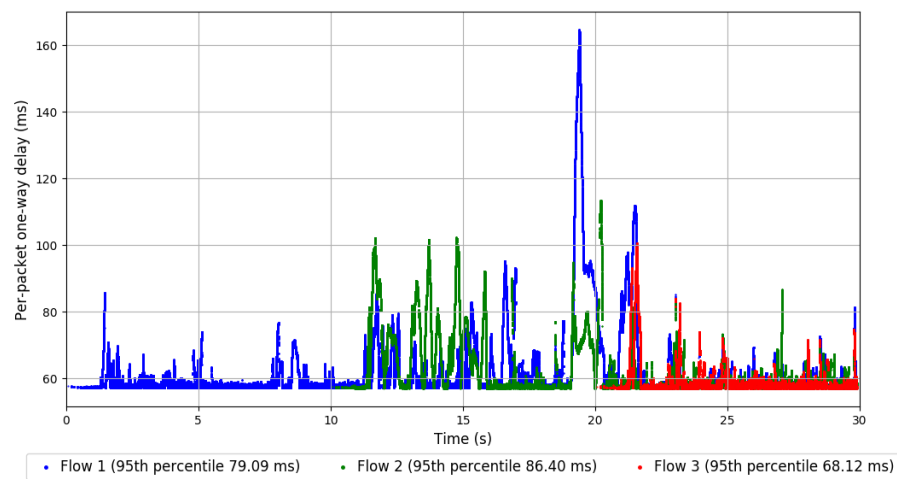
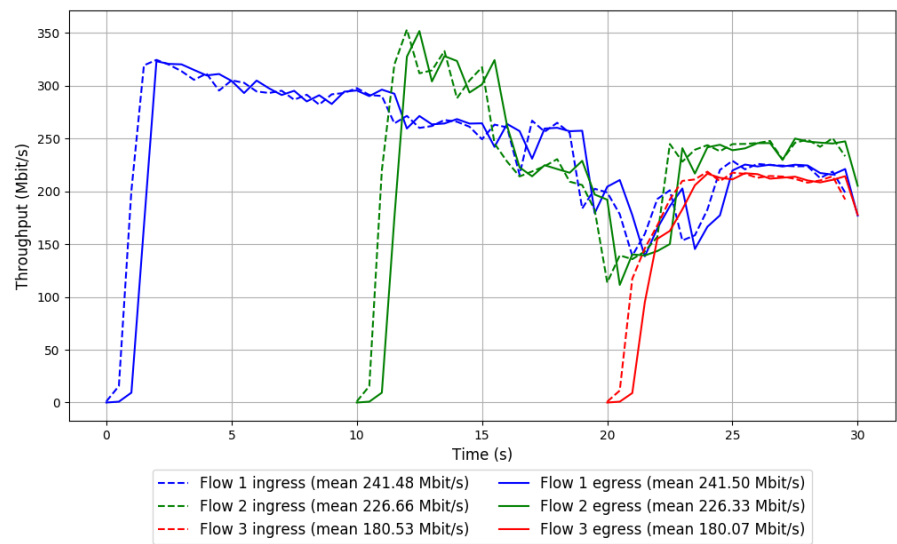
-- Flow 3:

Average throughput: 180.07 Mbit/s

95th percentile per-packet one-way delay: 68.124 ms

Loss rate: 1.43%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-06-28 21:34:16

End at: 2019-06-28 21:34:46

Local clock offset: 0.414 ms

Remote clock offset: -0.03 ms

Below is generated by plot.py at 2019-06-28 23:17:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 386.70 Mbit/s

95th percentile per-packet one-way delay: 65.209 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 186.01 Mbit/s

95th percentile per-packet one-way delay: 60.633 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 192.08 Mbit/s

95th percentile per-packet one-way delay: 67.611 ms

Loss rate: 0.95%

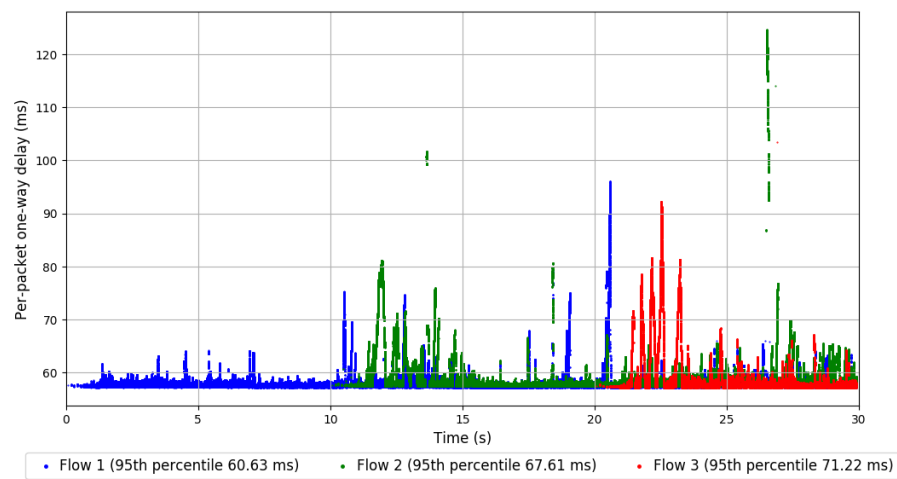
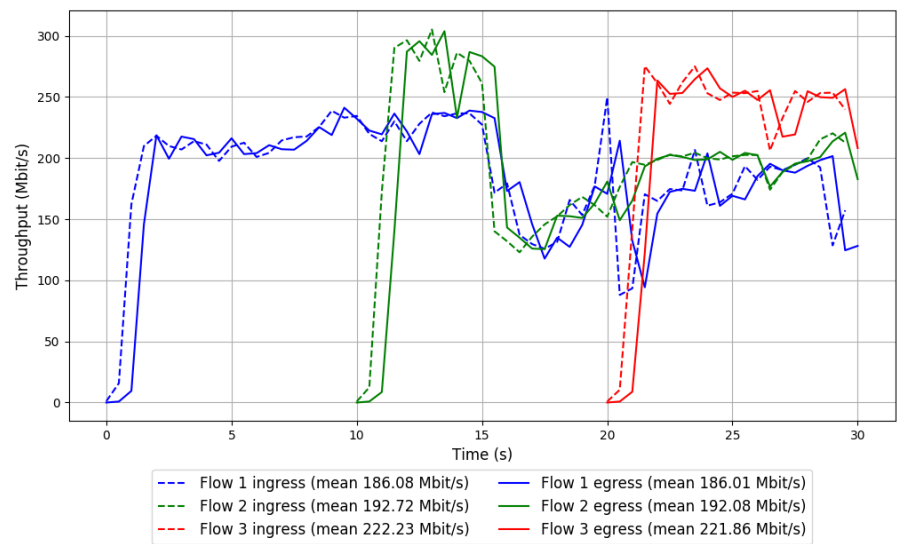
-- Flow 3:

Average throughput: 221.86 Mbit/s

95th percentile per-packet one-way delay: 71.215 ms

Loss rate: 1.35%

Run 4: Report of Copa — Data Link

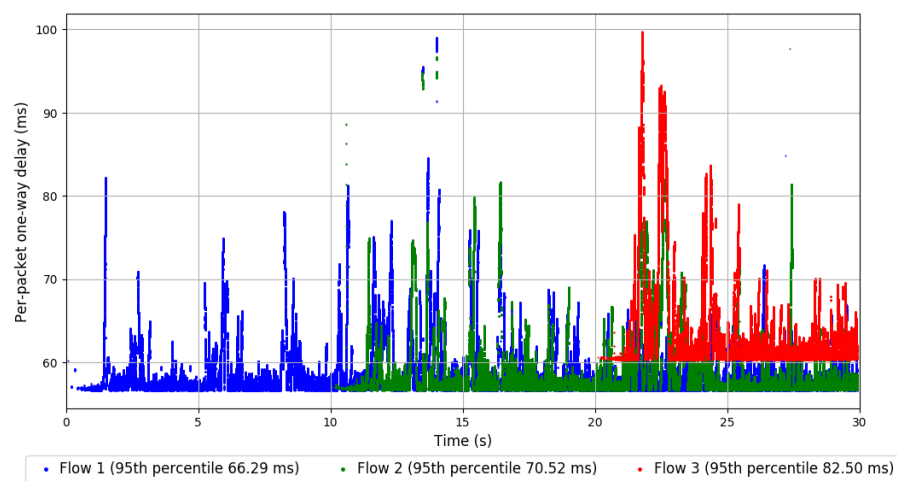
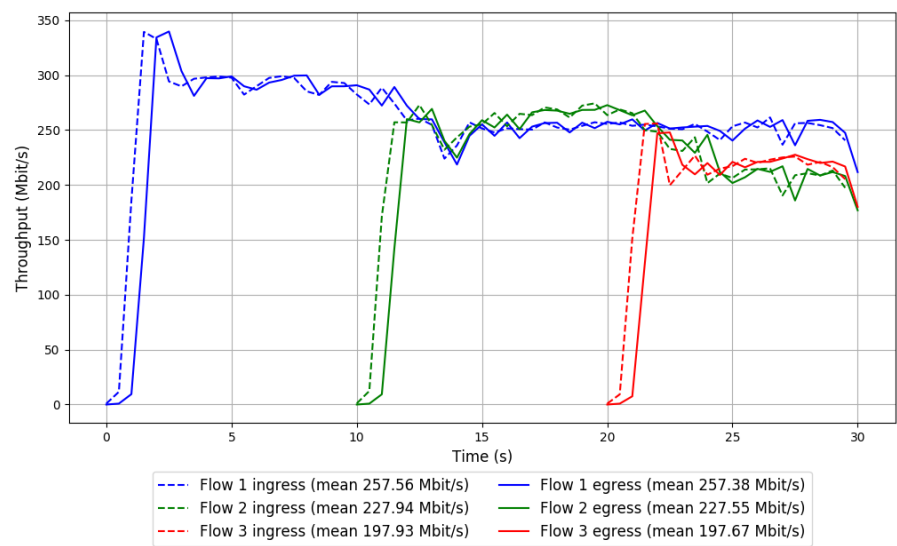


Run 5: Statistics of Copa

Start at: 2019-06-28 22:11:16
End at: 2019-06-28 22:11:46
Local clock offset: -0.146 ms
Remote clock offset: -0.101 ms

Below is generated by plot.py at 2019-06-28 23:20:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 473.65 Mbit/s
95th percentile per-packet one-way delay: 69.644 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 257.38 Mbit/s
95th percentile per-packet one-way delay: 66.288 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 227.55 Mbit/s
95th percentile per-packet one-way delay: 70.521 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 197.67 Mbit/s
95th percentile per-packet one-way delay: 82.498 ms
Loss rate: 1.32%

Run 5: Report of Copa — Data Link

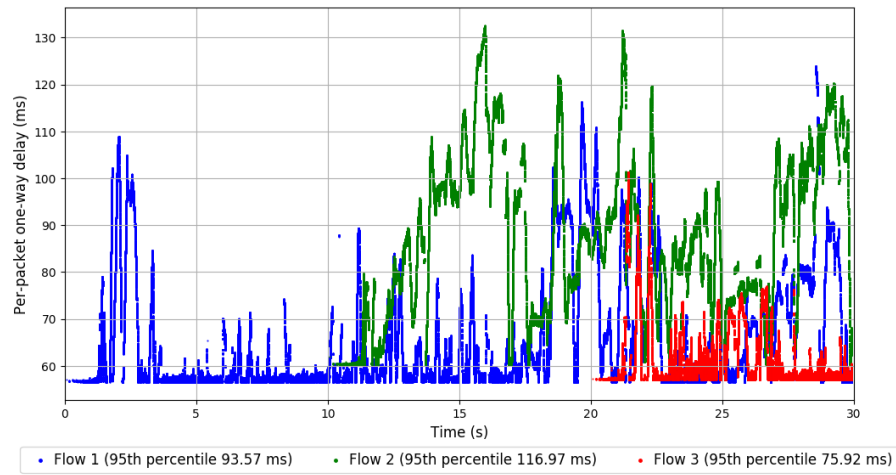
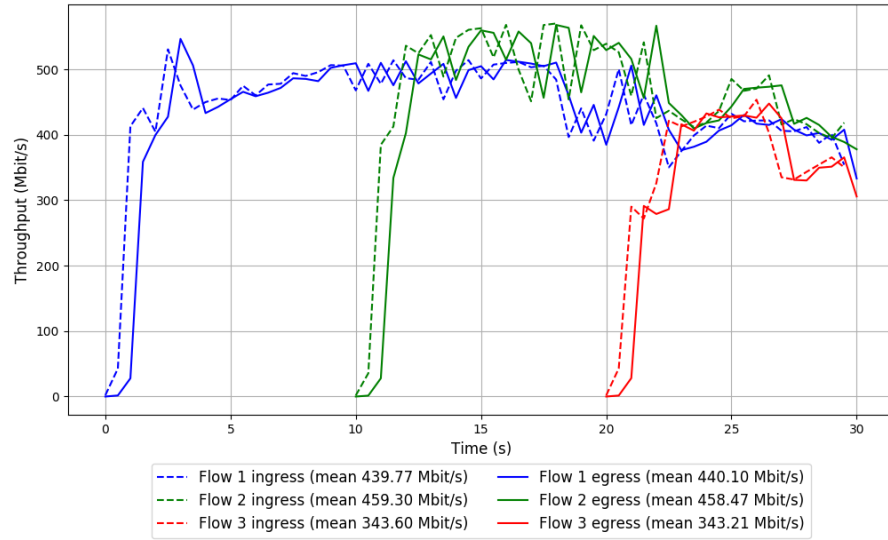


Run 1: Statistics of TCP Cubic

Start at: 2019-06-28 19:27:13
End at: 2019-06-28 19:27:43
Local clock offset: -0.27 ms
Remote clock offset: -0.177 ms

Below is generated by plot.py at 2019-06-28 23:20:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 857.78 Mbit/s
95th percentile per-packet one-way delay: 108.359 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 440.10 Mbit/s
95th percentile per-packet one-way delay: 93.568 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 458.47 Mbit/s
95th percentile per-packet one-way delay: 116.965 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 343.21 Mbit/s
95th percentile per-packet one-way delay: 75.918 ms
Loss rate: 1.26%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-06-28 20:03:51

End at: 2019-06-28 20:04:21

Local clock offset: -0.431 ms

Remote clock offset: 0.228 ms

Below is generated by plot.py at 2019-06-28 23:20:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 704.35 Mbit/s

95th percentile per-packet one-way delay: 116.174 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 245.76 Mbit/s

95th percentile per-packet one-way delay: 58.855 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 498.02 Mbit/s

95th percentile per-packet one-way delay: 122.007 ms

Loss rate: 0.84%

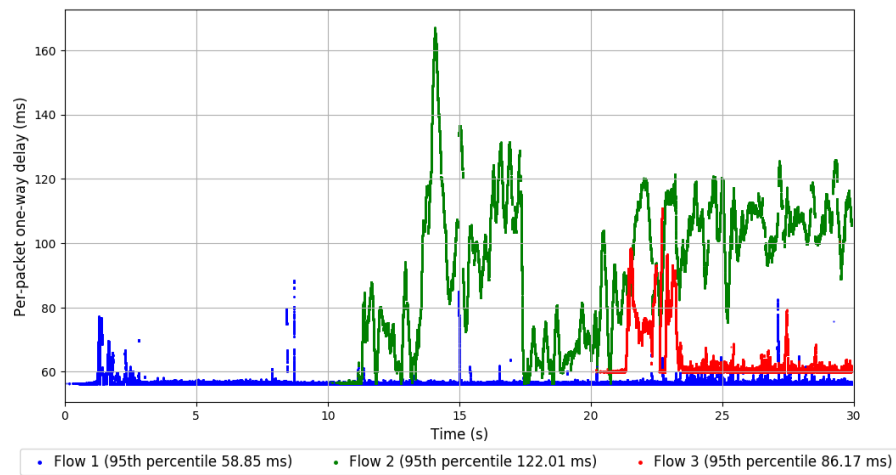
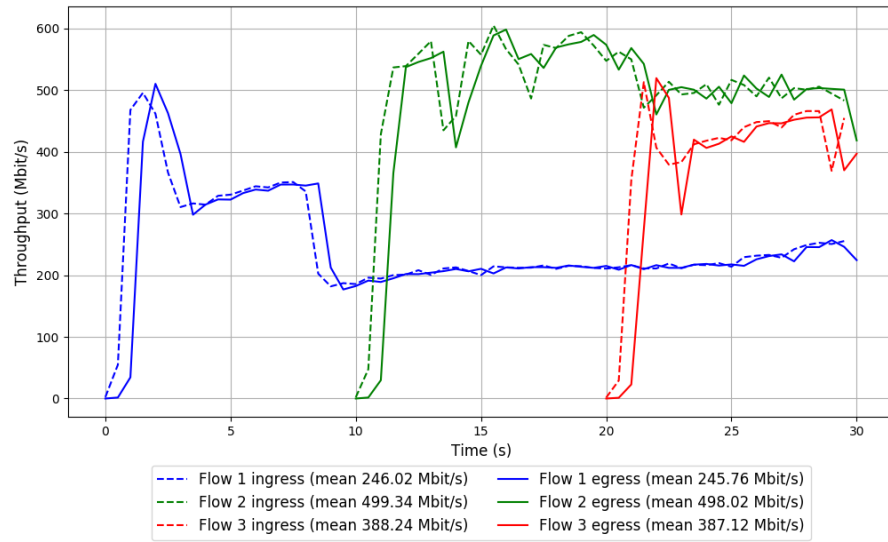
-- Flow 3:

Average throughput: 387.12 Mbit/s

95th percentile per-packet one-way delay: 86.171 ms

Loss rate: 1.50%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2019-06-28 20:40:50

End at: 2019-06-28 20:41:20

Local clock offset: 0.001 ms

Remote clock offset: 0.166 ms

Below is generated by plot.py at 2019-06-28 23:20:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 794.05 Mbit/s

95th percentile per-packet one-way delay: 124.681 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 406.65 Mbit/s

95th percentile per-packet one-way delay: 110.617 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 418.12 Mbit/s

95th percentile per-packet one-way delay: 109.028 ms

Loss rate: 0.66%

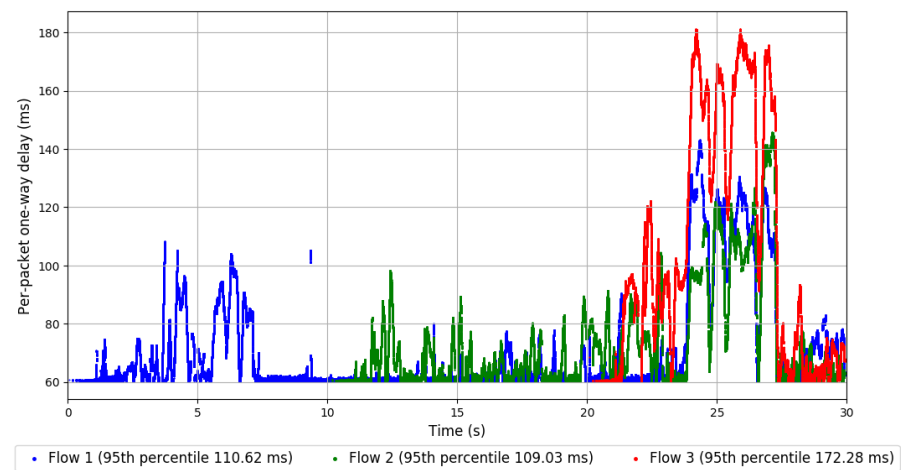
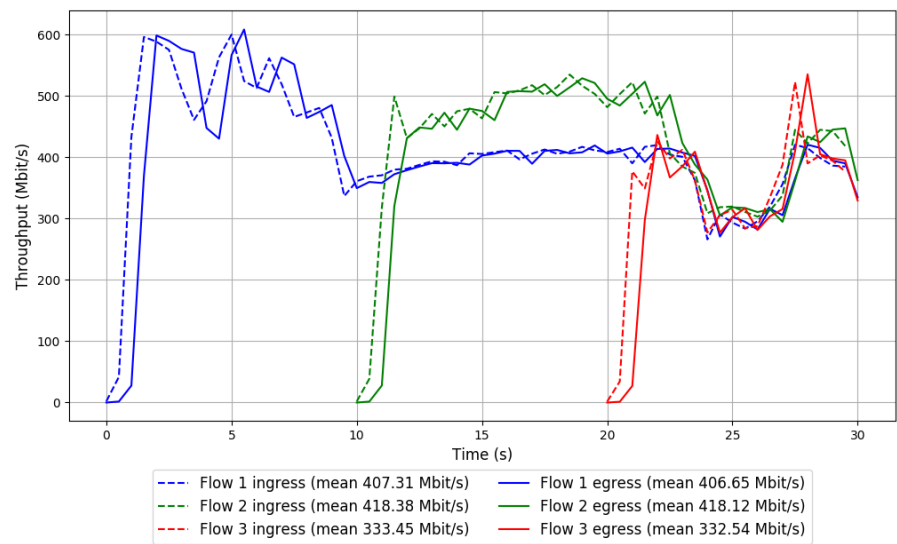
-- Flow 3:

Average throughput: 332.54 Mbit/s

95th percentile per-packet one-way delay: 172.283 ms

Loss rate: 1.53%

Run 3: Report of TCP Cubic — Data Link

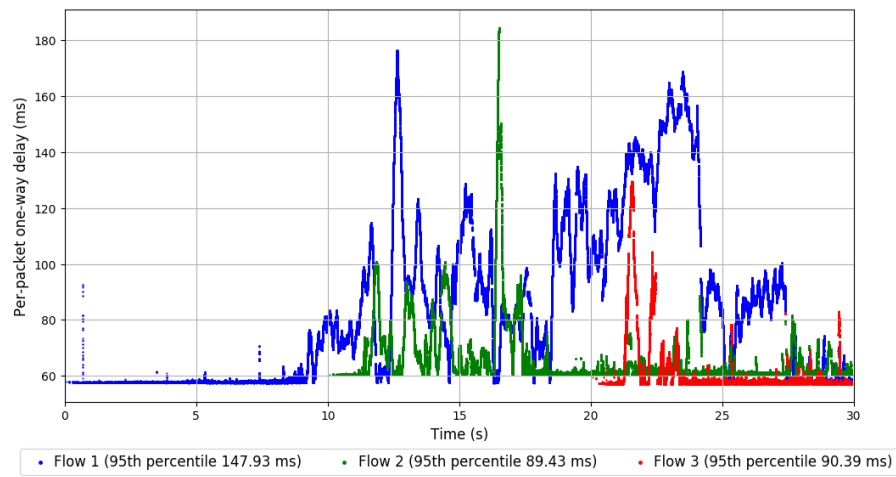
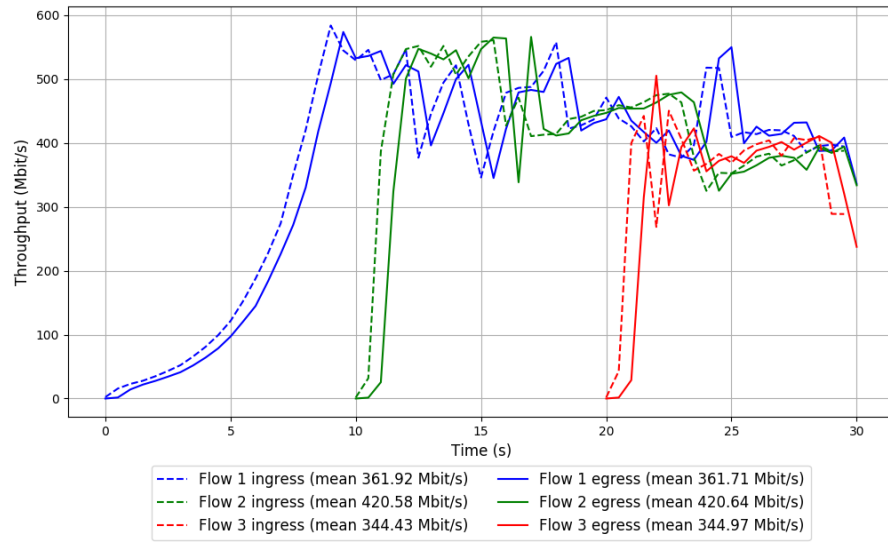


Run 4: Statistics of TCP Cubic

Start at: 2019-06-28 21:17:56
End at: 2019-06-28 21:18:26
Local clock offset: -0.037 ms
Remote clock offset: -0.458 ms

Below is generated by plot.py at 2019-06-28 23:20:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 754.95 Mbit/s
95th percentile per-packet one-way delay: 134.539 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 361.71 Mbit/s
95th percentile per-packet one-way delay: 147.930 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 420.64 Mbit/s
95th percentile per-packet one-way delay: 89.434 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 344.97 Mbit/s
95th percentile per-packet one-way delay: 90.385 ms
Loss rate: 1.02%

Run 4: Report of TCP Cubic — Data Link

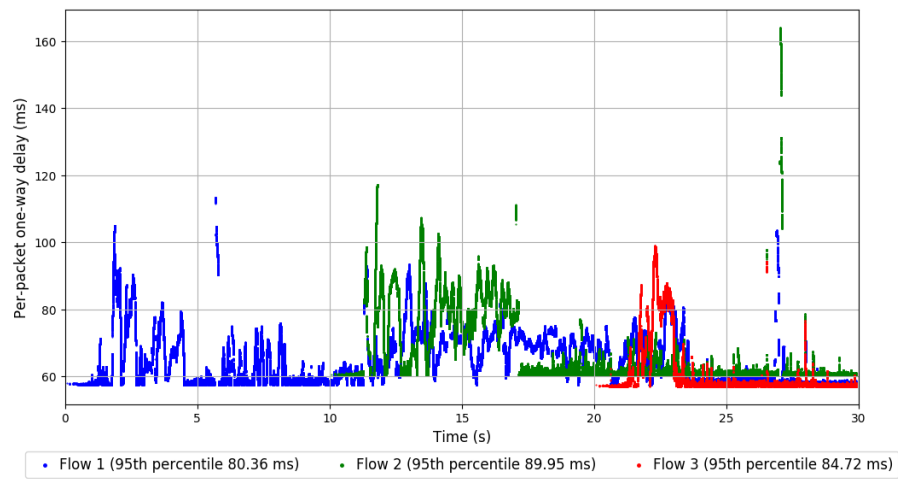
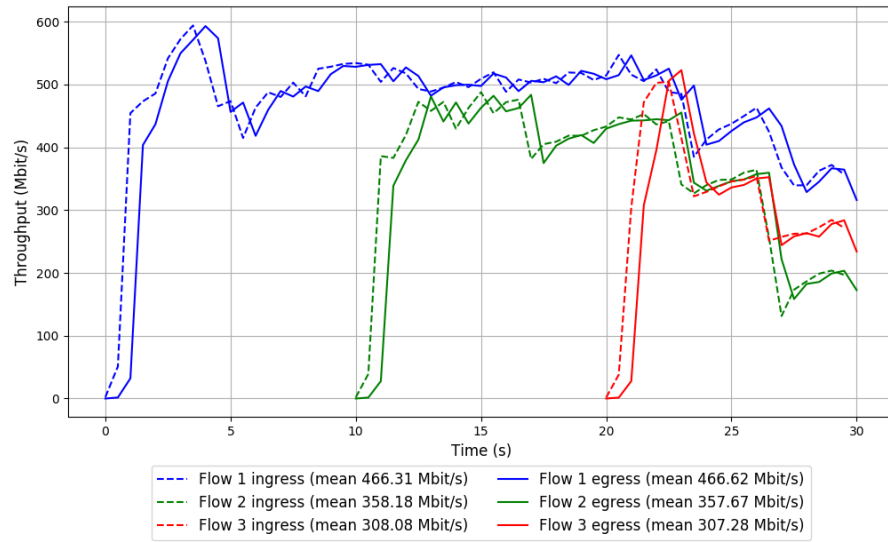


Run 5: Statistics of TCP Cubic

Start at: 2019-06-28 21:55:03
End at: 2019-06-28 21:55:33
Local clock offset: 0.184 ms
Remote clock offset: -0.139 ms

Below is generated by plot.py at 2019-06-28 23:20:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 805.64 Mbit/s
95th percentile per-packet one-way delay: 85.766 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 466.62 Mbit/s
95th percentile per-packet one-way delay: 80.358 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 357.67 Mbit/s
95th percentile per-packet one-way delay: 89.946 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 307.28 Mbit/s
95th percentile per-packet one-way delay: 84.720 ms
Loss rate: 1.43%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-06-28 19:36:53

End at: 2019-06-28 19:37:23

Local clock offset: 0.172 ms

Remote clock offset: -1.07 ms

Below is generated by plot.py at 2019-06-28 23:23:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 807.48 Mbit/s

95th percentile per-packet one-way delay: 92.055 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 498.98 Mbit/s

95th percentile per-packet one-way delay: 105.520 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 339.40 Mbit/s

95th percentile per-packet one-way delay: 60.309 ms

Loss rate: 0.41%

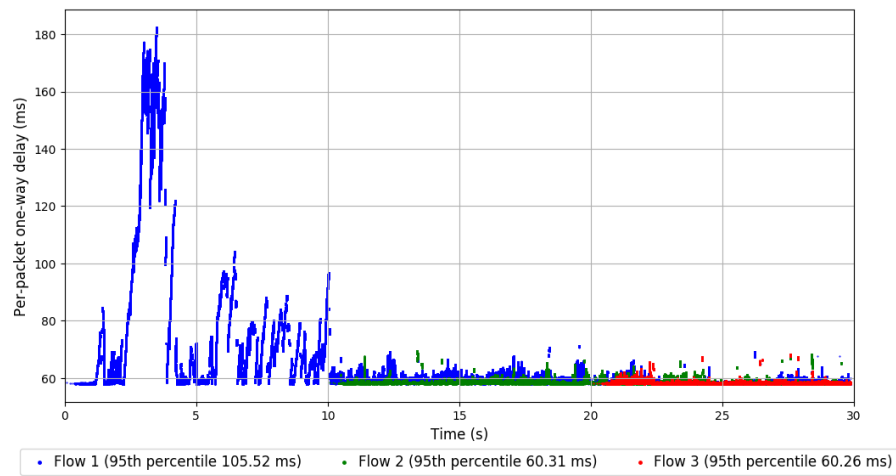
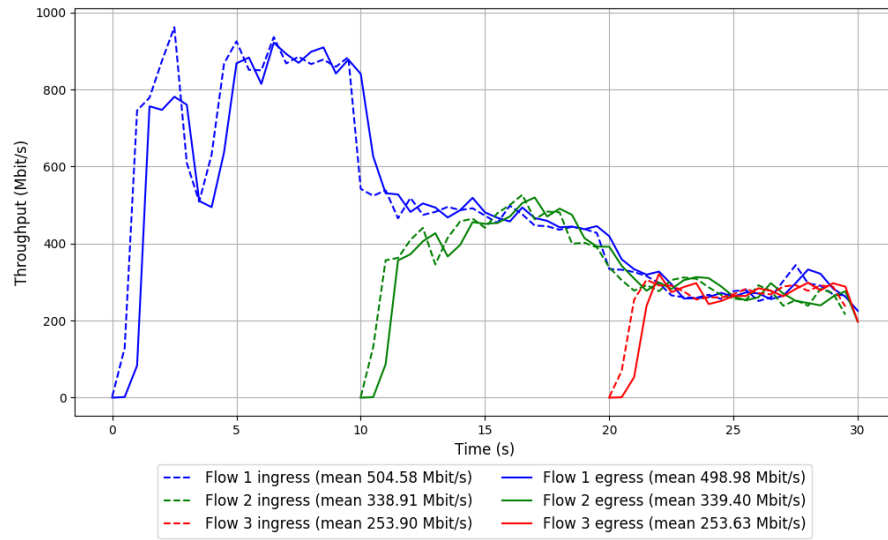
-- Flow 3:

Average throughput: 253.63 Mbit/s

95th percentile per-packet one-way delay: 60.257 ms

Loss rate: 1.36%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-06-28 20:13:20

End at: 2019-06-28 20:13:50

Local clock offset: 0.298 ms

Remote clock offset: 0.147 ms

Below is generated by plot.py at 2019-06-28 23:36:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 802.13 Mbit/s

95th percentile per-packet one-way delay: 103.333 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 498.38 Mbit/s

95th percentile per-packet one-way delay: 110.486 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 327.12 Mbit/s

95th percentile per-packet one-way delay: 62.197 ms

Loss rate: 0.52%

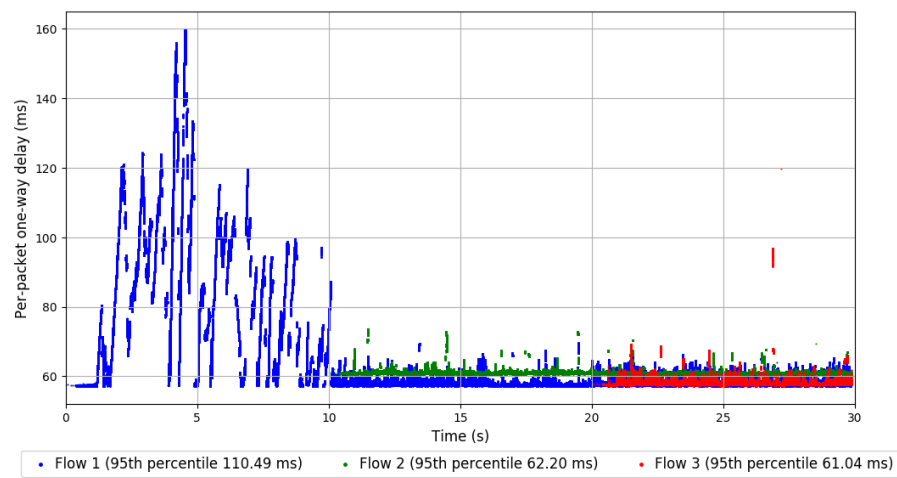
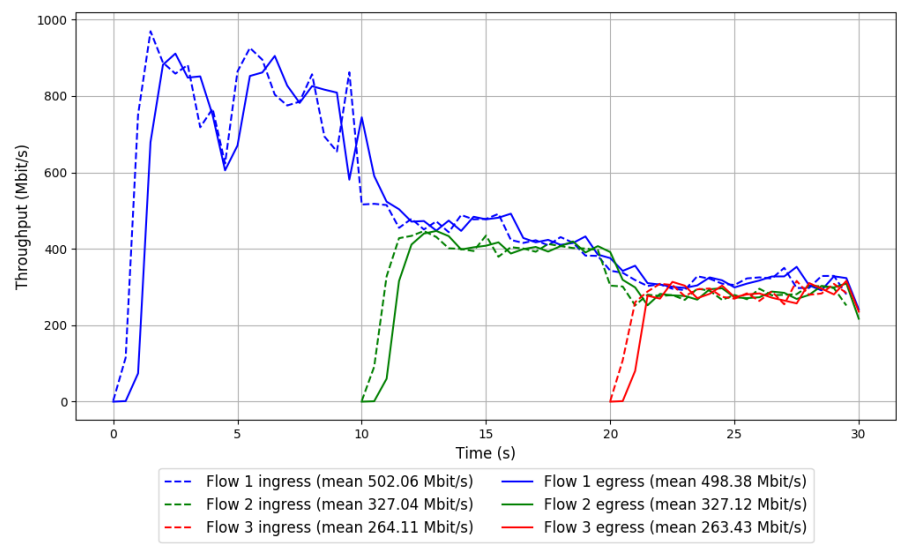
-- Flow 3:

Average throughput: 263.43 Mbit/s

95th percentile per-packet one-way delay: 61.040 ms

Loss rate: 1.36%

Run 2: Report of FillP — Data Link

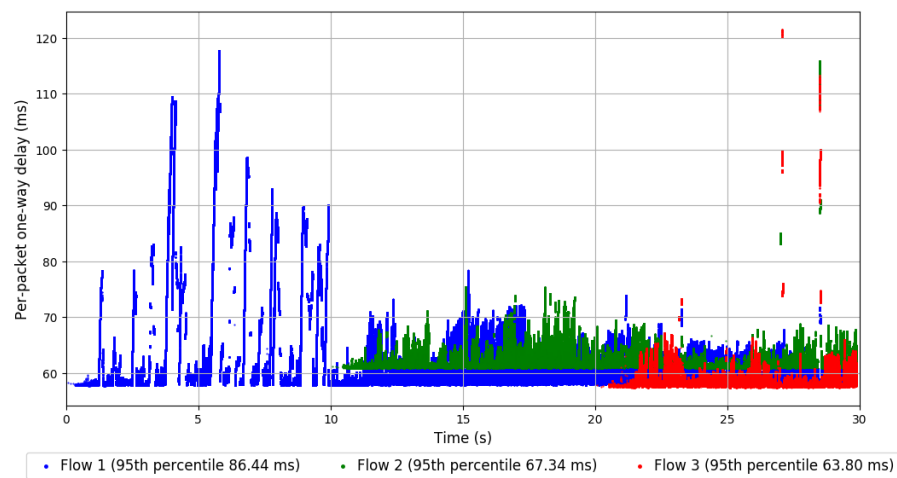
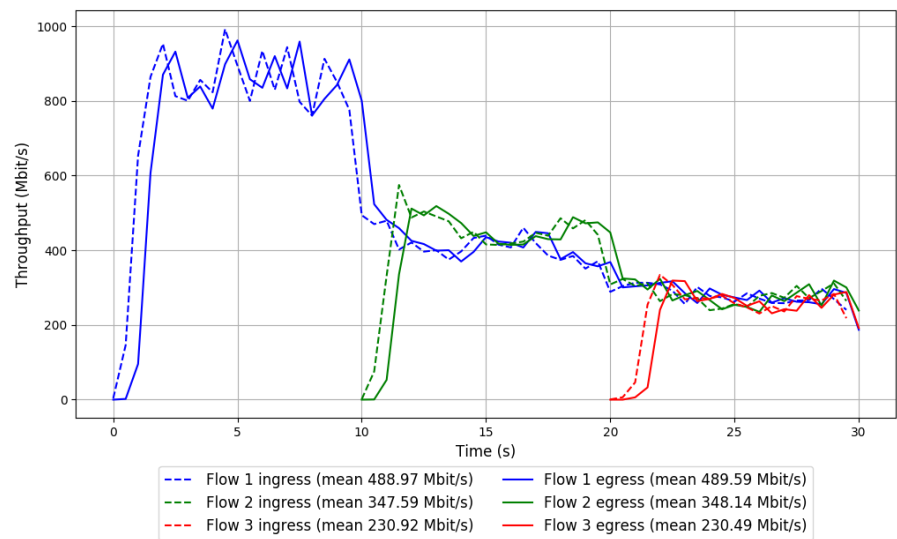


Run 3: Statistics of FillP

Start at: 2019-06-28 20:50:28
End at: 2019-06-28 20:50:58
Local clock offset: -0.064 ms
Remote clock offset: -0.852 ms

Below is generated by plot.py at 2019-06-28 23:36:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 796.53 Mbit/s
95th percentile per-packet one-way delay: 82.676 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 489.59 Mbit/s
95th percentile per-packet one-way delay: 86.441 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 348.14 Mbit/s
95th percentile per-packet one-way delay: 67.336 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 230.49 Mbit/s
95th percentile per-packet one-way delay: 63.795 ms
Loss rate: 1.25%

Run 3: Report of FillP — Data Link

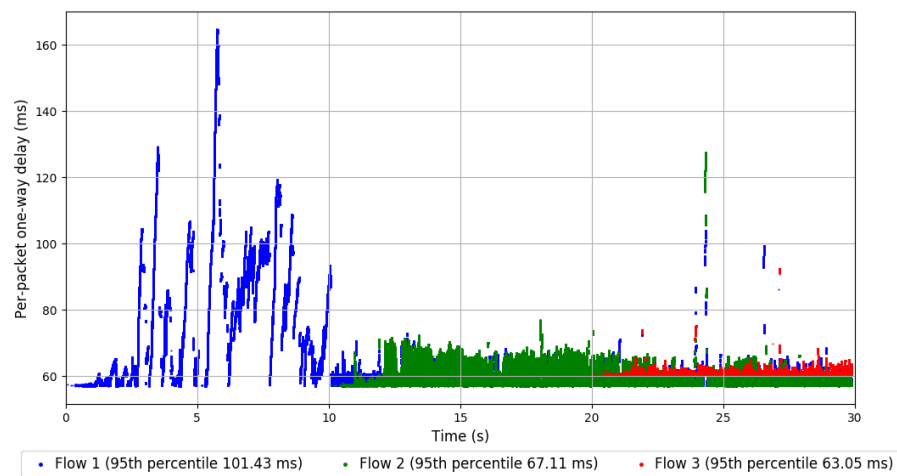
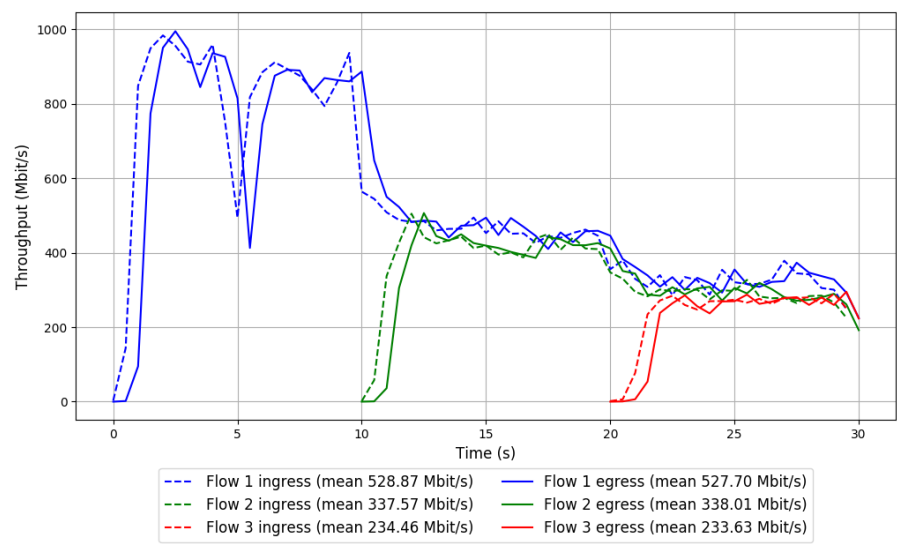


Run 4: Statistics of FillP

Start at: 2019-06-28 21:27:33
End at: 2019-06-28 21:28:03
Local clock offset: -0.191 ms
Remote clock offset: -0.051 ms

Below is generated by plot.py at 2019-06-28 23:38:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 828.70 Mbit/s
95th percentile per-packet one-way delay: 97.490 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 527.70 Mbit/s
95th percentile per-packet one-way delay: 101.434 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 338.01 Mbit/s
95th percentile per-packet one-way delay: 67.112 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 233.63 Mbit/s
95th percentile per-packet one-way delay: 63.050 ms
Loss rate: 1.44%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-06-28 22:04:37

End at: 2019-06-28 22:05:07

Local clock offset: 0.049 ms

Remote clock offset: 0.003 ms

Below is generated by plot.py at 2019-06-28 23:39:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 845.01 Mbit/s

95th percentile per-packet one-way delay: 72.353 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 546.19 Mbit/s

95th percentile per-packet one-way delay: 78.034 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 315.62 Mbit/s

95th percentile per-packet one-way delay: 59.345 ms

Loss rate: 0.56%

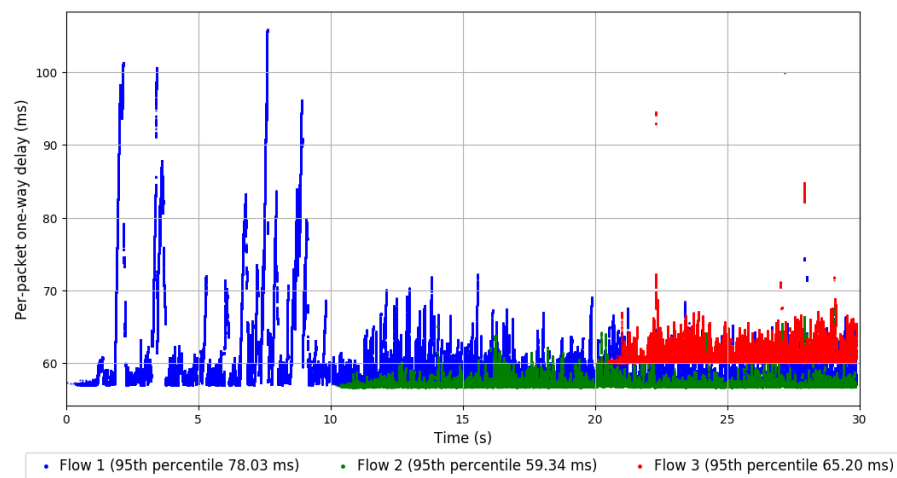
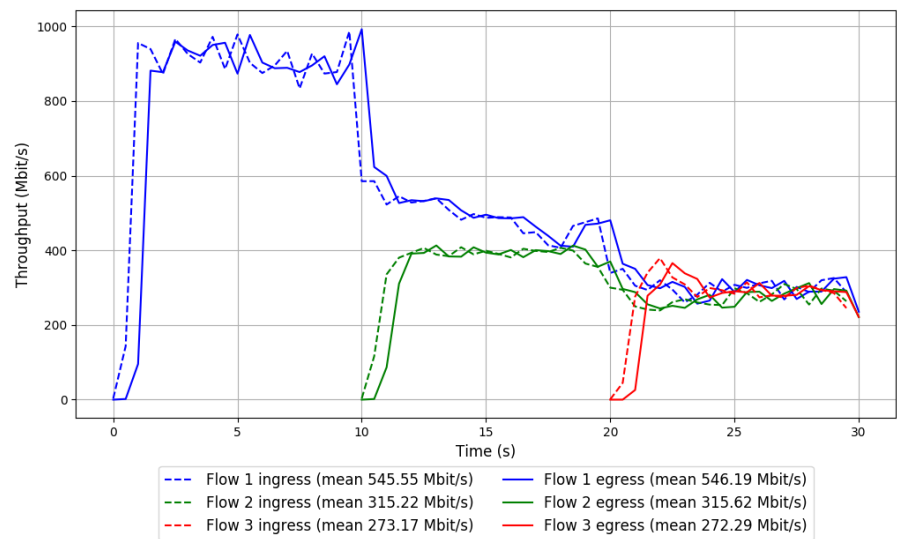
-- Flow 3:

Average throughput: 272.29 Mbit/s

95th percentile per-packet one-way delay: 65.205 ms

Loss rate: 1.37%

Run 5: Report of FillP — Data Link

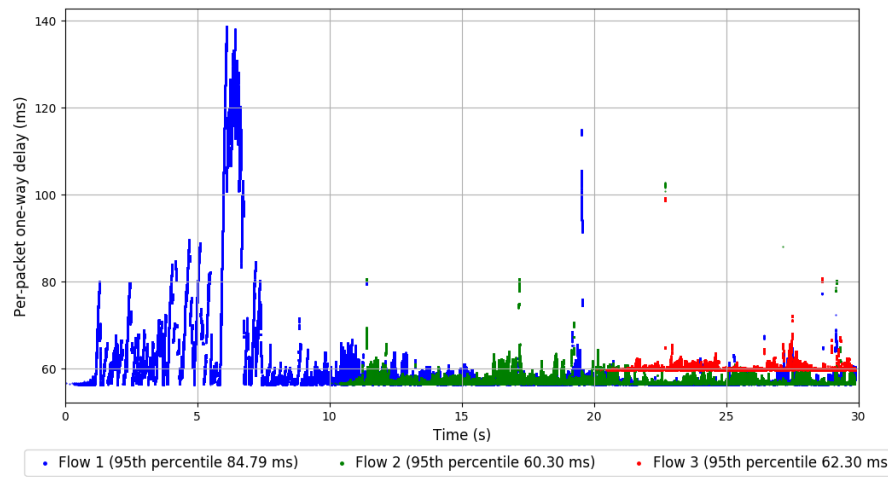
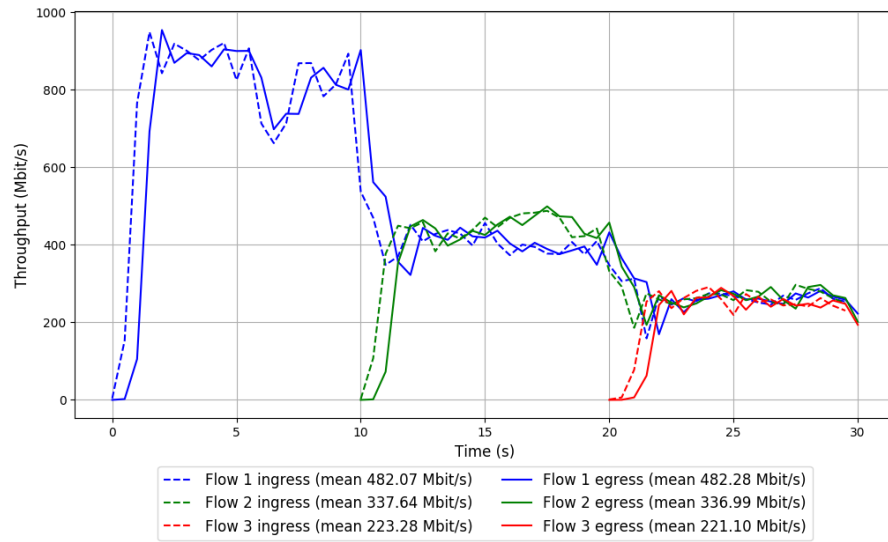


Run 1: Statistics of FillP-Sheep

Start at: 2019-06-28 19:35:07
End at: 2019-06-28 19:35:37
Local clock offset: -0.448 ms
Remote clock offset: -0.151 ms

Below is generated by plot.py at 2019-06-28 23:39:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 778.43 Mbit/s
95th percentile per-packet one-way delay: 77.601 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 482.28 Mbit/s
95th percentile per-packet one-way delay: 84.786 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 336.99 Mbit/s
95th percentile per-packet one-way delay: 60.305 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 221.10 Mbit/s
95th percentile per-packet one-way delay: 62.302 ms
Loss rate: 2.11%

Run 1: Report of FillP-Sheep — Data Link

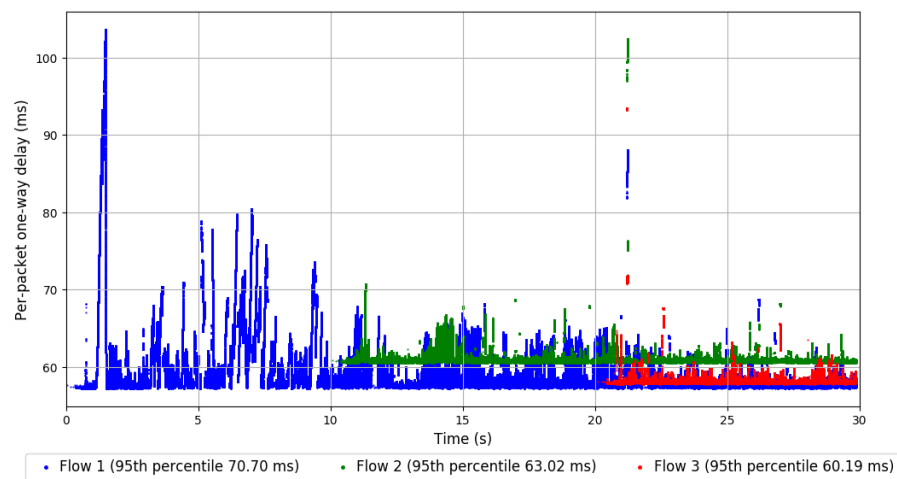
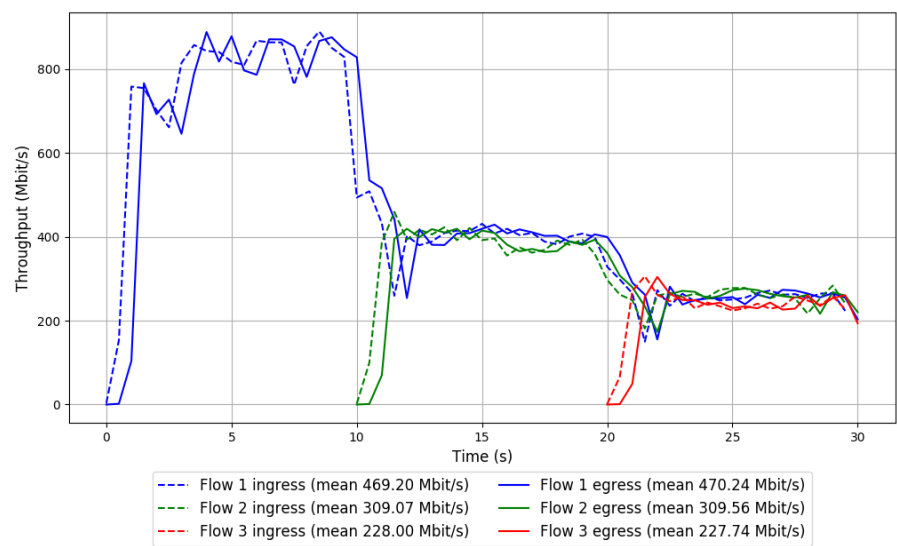


Run 2: Statistics of FillP-Sheep

Start at: 2019-06-28 20:11:36
End at: 2019-06-28 20:12:06
Local clock offset: 0.16 ms
Remote clock offset: -0.305 ms

Below is generated by plot.py at 2019-06-28 23:39:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 750.31 Mbit/s
95th percentile per-packet one-way delay: 67.634 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 470.24 Mbit/s
95th percentile per-packet one-way delay: 70.703 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 309.56 Mbit/s
95th percentile per-packet one-way delay: 63.020 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 227.74 Mbit/s
95th percentile per-packet one-way delay: 60.186 ms
Loss rate: 1.18%

Run 2: Report of FillP-Sheep — Data Link

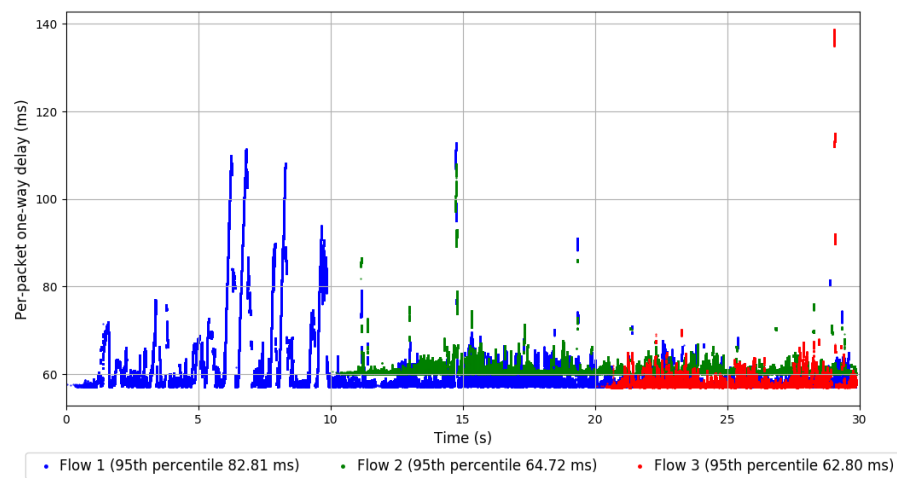
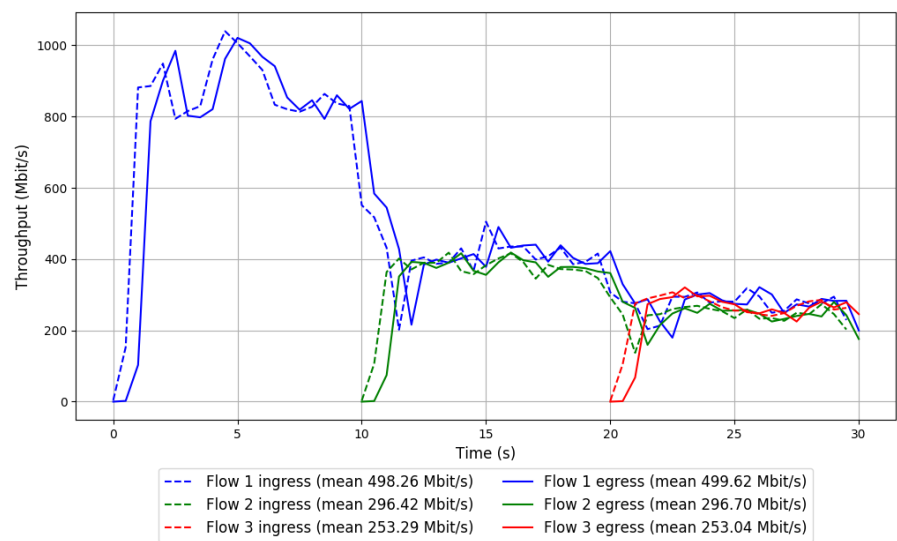


Run 3: Statistics of FillP-Sheep

Start at: 2019-06-28 20:48:42
End at: 2019-06-28 20:49:12
Local clock offset: -0.303 ms
Remote clock offset: -0.118 ms

Below is generated by plot.py at 2019-06-28 23:39:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 779.40 Mbit/s
95th percentile per-packet one-way delay: 78.211 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 499.62 Mbit/s
95th percentile per-packet one-way delay: 82.808 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 296.70 Mbit/s
95th percentile per-packet one-way delay: 64.718 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 253.04 Mbit/s
95th percentile per-packet one-way delay: 62.796 ms
Loss rate: 1.19%

Run 3: Report of FillP-Sheep — Data Link

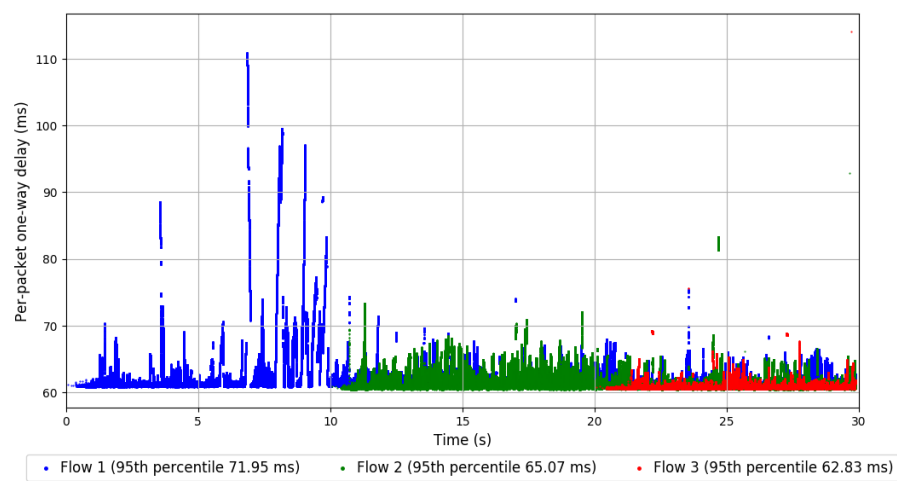
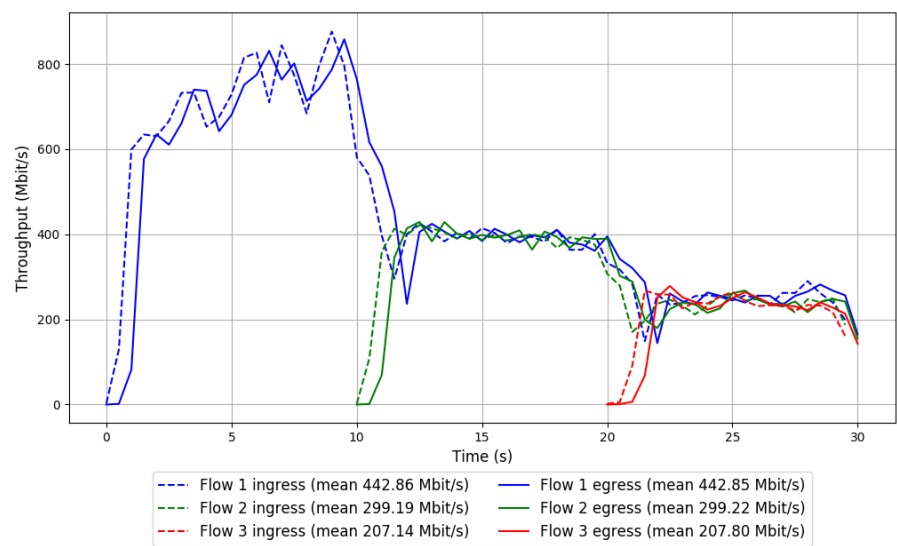


Run 4: Statistics of FillP-Sheep

Start at: 2019-06-28 21:25:50
End at: 2019-06-28 21:26:20
Local clock offset: 0.239 ms
Remote clock offset: -0.206 ms

```
# Below is generated by plot.py at 2019-06-28 23:41:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 709.74 Mbit/s
95th percentile per-packet one-way delay: 68.797 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 442.85 Mbit/s
95th percentile per-packet one-way delay: 71.952 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 299.22 Mbit/s
95th percentile per-packet one-way delay: 65.066 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 207.80 Mbit/s
95th percentile per-packet one-way delay: 62.828 ms
Loss rate: 1.11%
```

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-06-28 22:02:53

End at: 2019-06-28 22:03:23

Local clock offset: -0.143 ms

Remote clock offset: 0.078 ms

Below is generated by plot.py at 2019-06-28 23:55:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 771.55 Mbit/s

95th percentile per-packet one-way delay: 67.905 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 496.01 Mbit/s

95th percentile per-packet one-way delay: 70.725 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 298.95 Mbit/s

95th percentile per-packet one-way delay: 60.523 ms

Loss rate: 0.47%

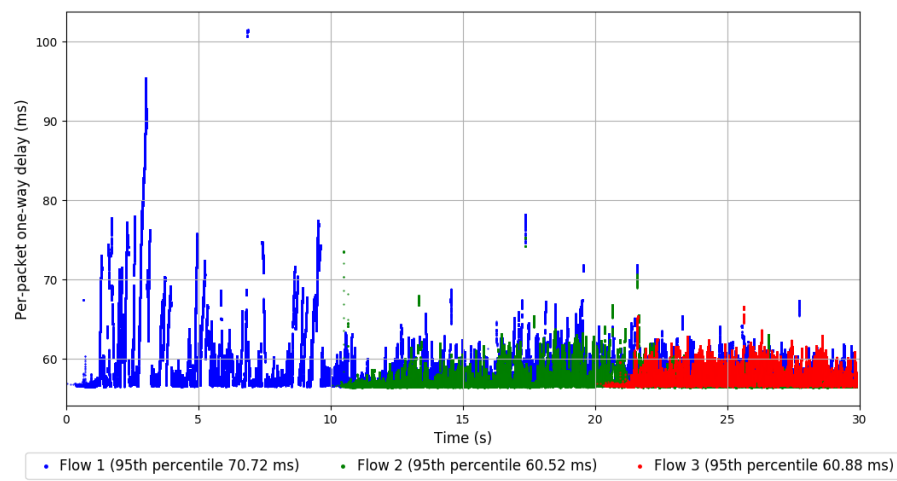
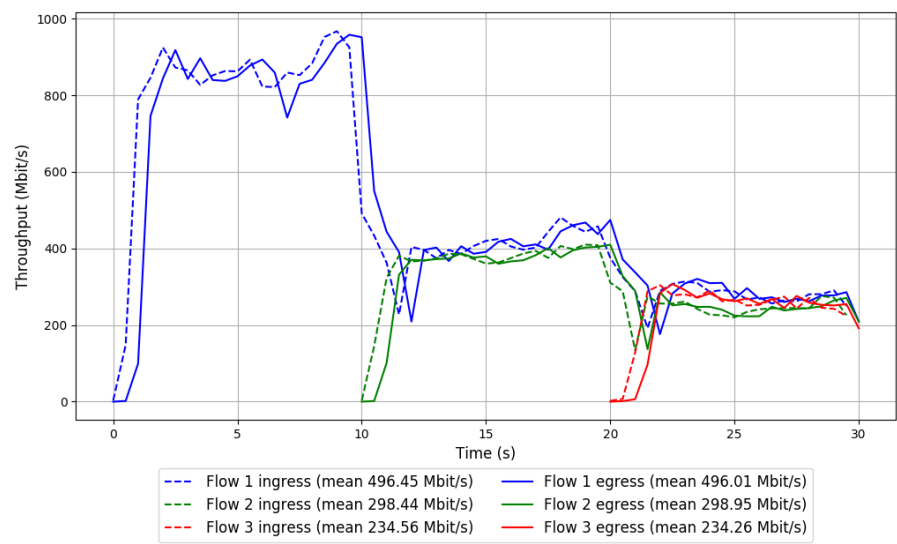
-- Flow 3:

Average throughput: 234.26 Mbit/s

95th percentile per-packet one-way delay: 60.882 ms

Loss rate: 1.19%

Run 5: Report of FillP-Sheep — Data Link

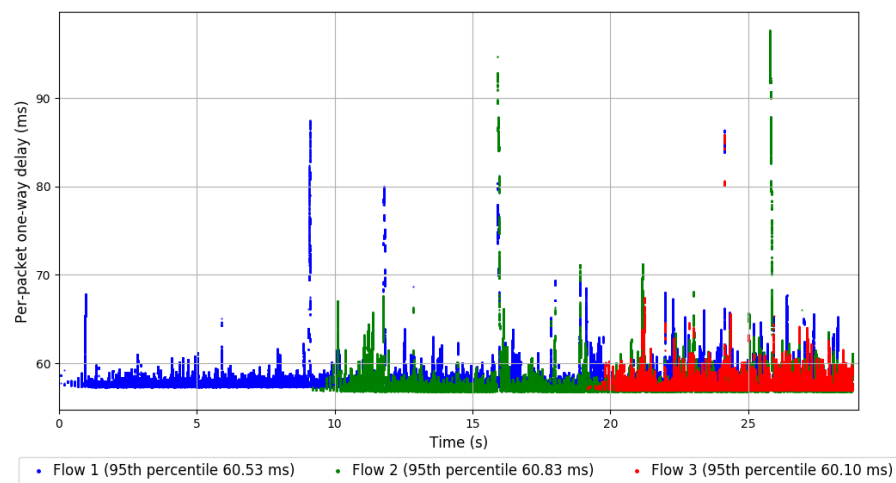
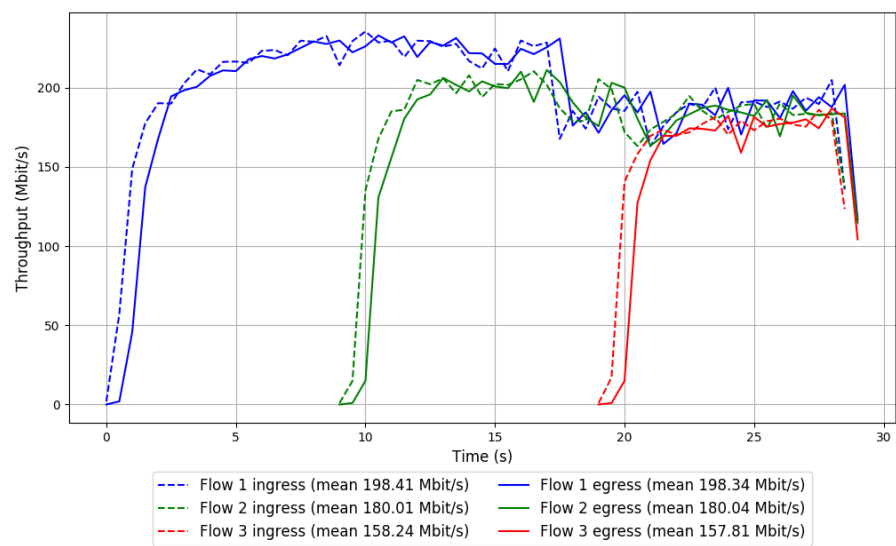


Run 1: Statistics of Indigo

Start at: 2019-06-28 19:47:05
End at: 2019-06-28 19:47:35
Local clock offset: -0.107 ms
Remote clock offset: -0.146 ms

Below is generated by plot.py at 2019-06-28 23:55:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 373.99 Mbit/s
95th percentile per-packet one-way delay: 60.531 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 198.34 Mbit/s
95th percentile per-packet one-way delay: 60.529 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 180.04 Mbit/s
95th percentile per-packet one-way delay: 60.828 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 157.81 Mbit/s
95th percentile per-packet one-way delay: 60.100 ms
Loss rate: 1.48%

Run 1: Report of Indigo — Data Link

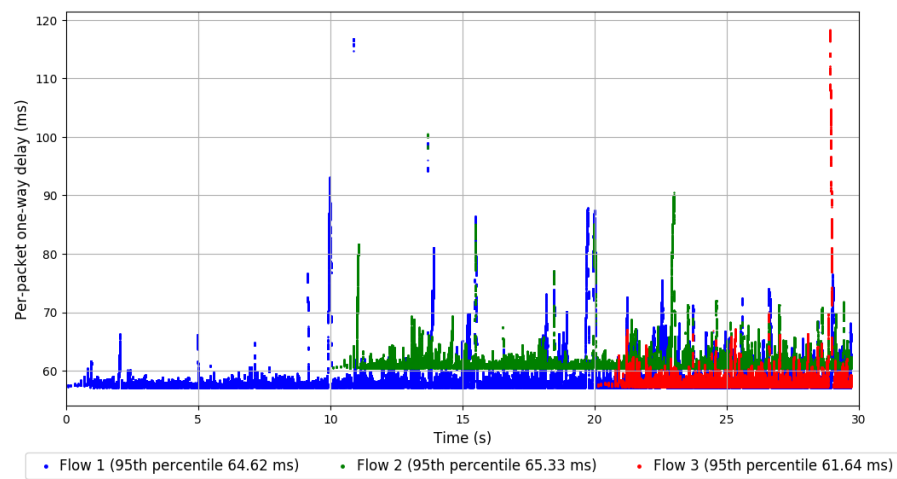
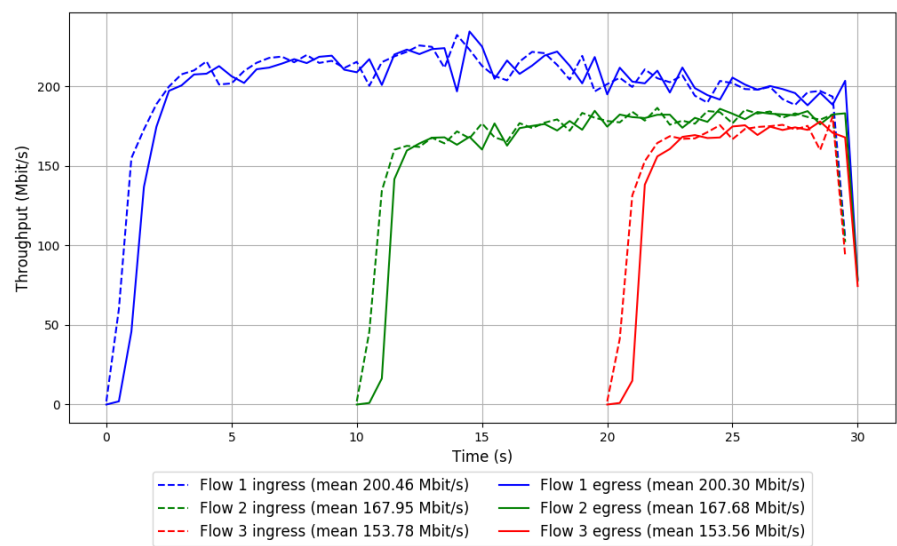


Run 2: Statistics of Indigo

Start at: 2019-06-28 20:23:46
End at: 2019-06-28 20:24:16
Local clock offset: 0.016 ms
Remote clock offset: -0.045 ms

Below is generated by plot.py at 2019-06-28 23:55:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 360.81 Mbit/s
95th percentile per-packet one-way delay: 64.532 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 200.30 Mbit/s
95th percentile per-packet one-way delay: 64.624 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 167.68 Mbit/s
95th percentile per-packet one-way delay: 65.325 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 153.56 Mbit/s
95th percentile per-packet one-way delay: 61.641 ms
Loss rate: 1.37%

Run 2: Report of Indigo — Data Link

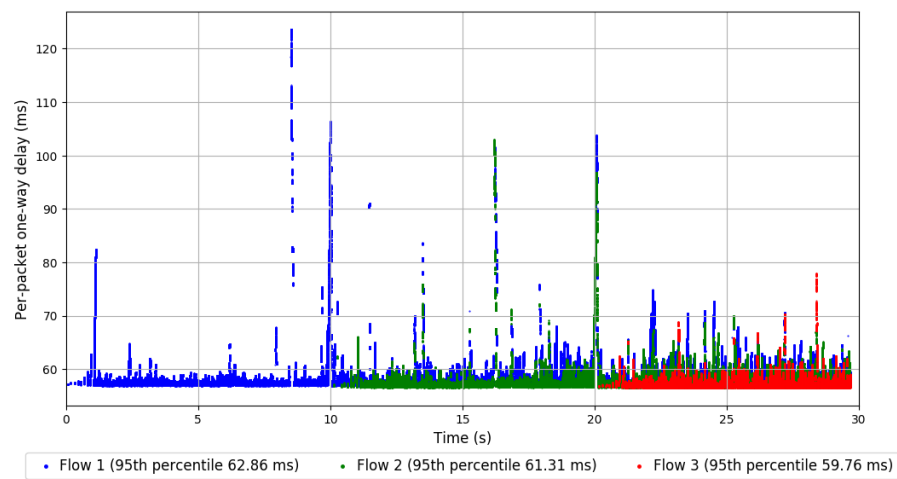
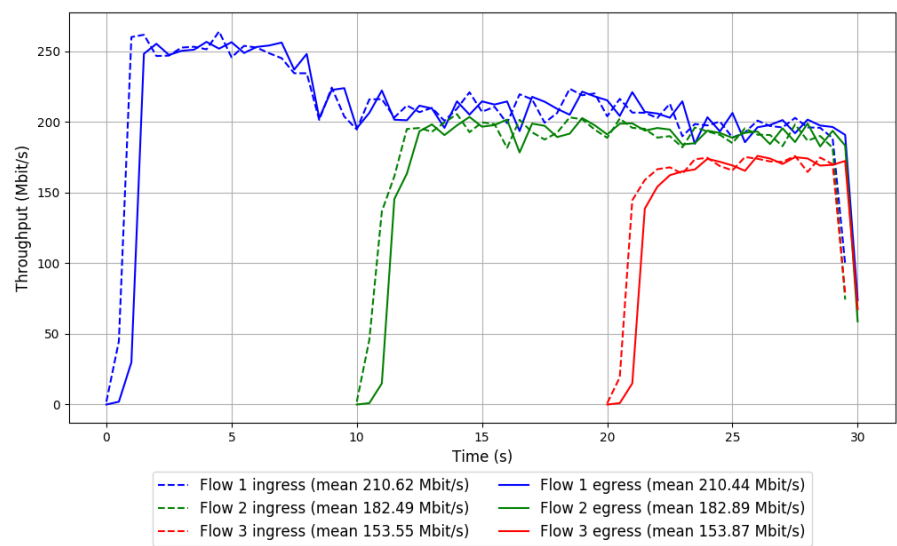


Run 3: Statistics of Indigo

Start at: 2019-06-28 21:00:48
End at: 2019-06-28 21:01:18
Local clock offset: -0.272 ms
Remote clock offset: -0.254 ms

Below is generated by plot.py at 2019-06-28 23:55:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 380.46 Mbit/s
95th percentile per-packet one-way delay: 61.973 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 210.44 Mbit/s
95th percentile per-packet one-way delay: 62.856 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 182.89 Mbit/s
95th percentile per-packet one-way delay: 61.314 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 153.87 Mbit/s
95th percentile per-packet one-way delay: 59.761 ms
Loss rate: 1.03%

Run 3: Report of Indigo — Data Link

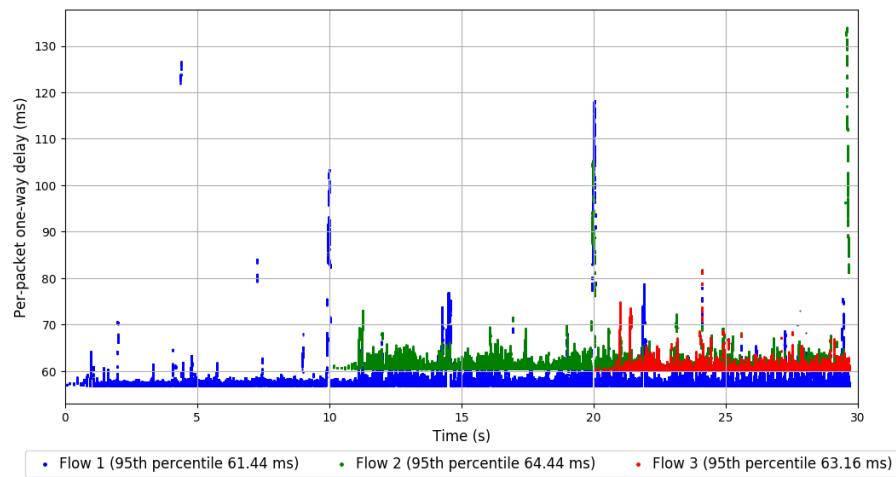
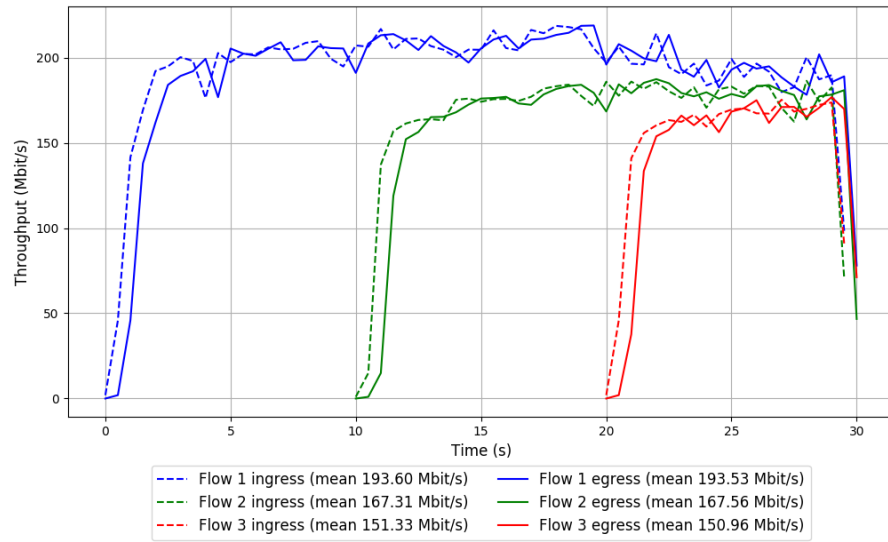


Run 4: Statistics of Indigo

Start at: 2019-06-28 21:37:52
End at: 2019-06-28 21:38:22
Local clock offset: 0.02 ms
Remote clock offset: -0.093 ms

Below is generated by plot.py at 2019-06-28 23:55:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 352.60 Mbit/s
95th percentile per-packet one-way delay: 63.447 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 193.53 Mbit/s
95th percentile per-packet one-way delay: 61.438 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 167.56 Mbit/s
95th percentile per-packet one-way delay: 64.444 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 150.96 Mbit/s
95th percentile per-packet one-way delay: 63.164 ms
Loss rate: 1.48%

Run 4: Report of Indigo — Data Link

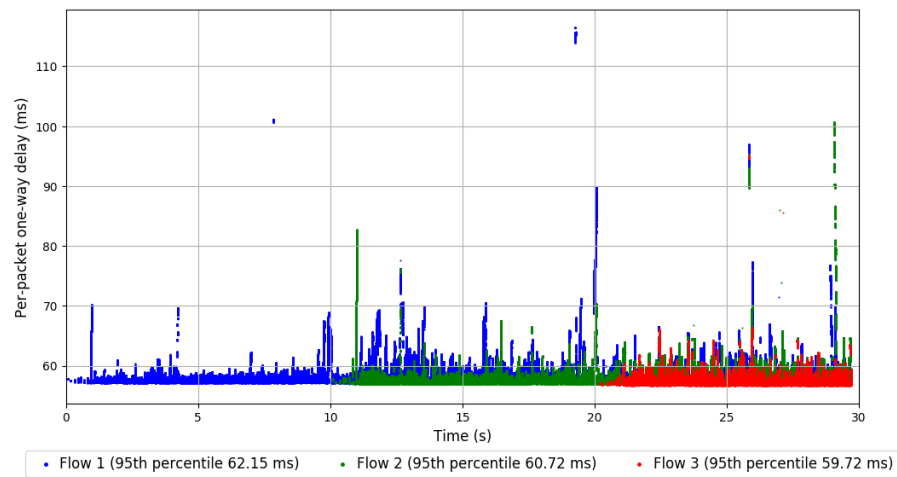
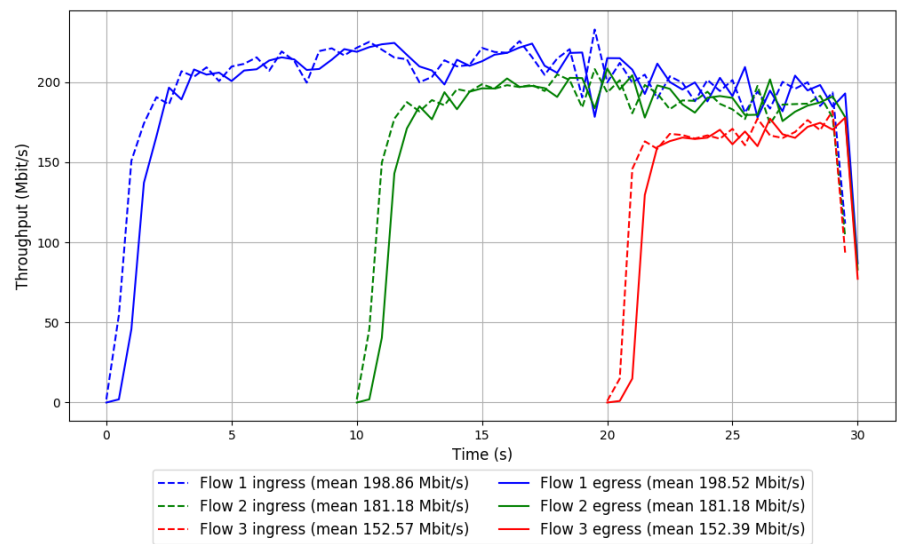


Run 5: Statistics of Indigo

Start at: 2019-06-28 22:15:01
End at: 2019-06-28 22:15:31
Local clock offset: -0.175 ms
Remote clock offset: -0.227 ms

Below is generated by plot.py at 2019-06-28 23:55:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 367.39 Mbit/s
95th percentile per-packet one-way delay: 61.326 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 198.52 Mbit/s
95th percentile per-packet one-way delay: 62.149 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 60.721 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 152.39 Mbit/s
95th percentile per-packet one-way delay: 59.721 ms
Loss rate: 1.33%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-06-28 19:54:17

End at: 2019-06-28 19:54:47

Local clock offset: 0.172 ms

Remote clock offset: 0.036 ms

Below is generated by plot.py at 2019-06-28 23:55:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 633.85 Mbit/s

95th percentile per-packet one-way delay: 62.290 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 398.52 Mbit/s

95th percentile per-packet one-way delay: 64.036 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 287.86 Mbit/s

95th percentile per-packet one-way delay: 59.940 ms

Loss rate: 0.84%

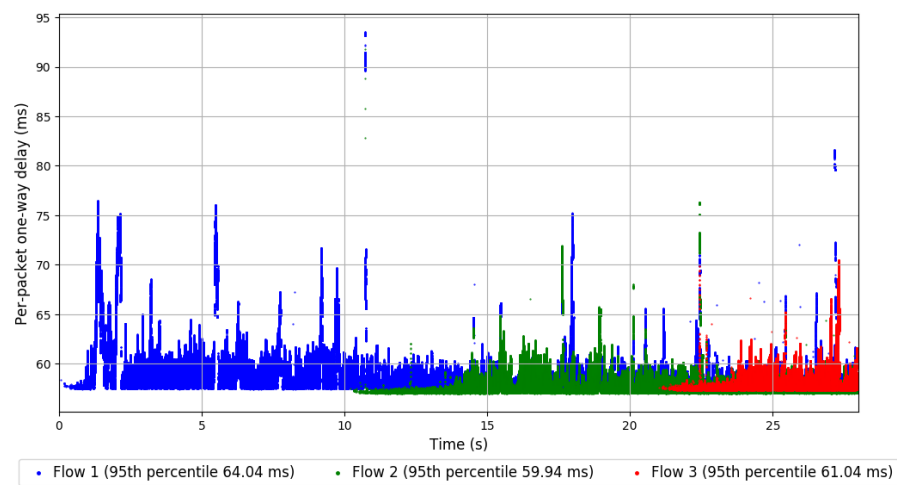
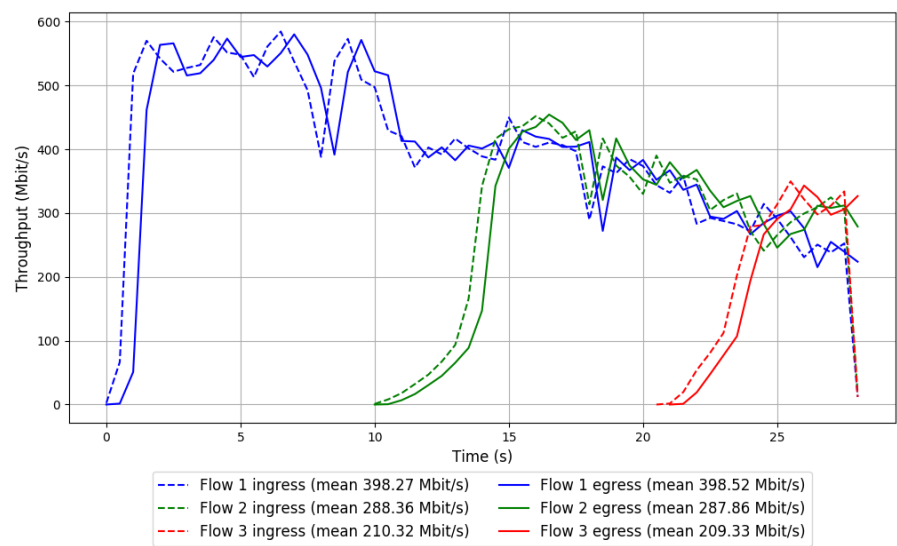
-- Flow 3:

Average throughput: 209.33 Mbit/s

95th percentile per-packet one-way delay: 61.037 ms

Loss rate: 2.13%

Run 1: Report of Indigo-MusesC3 — Data Link

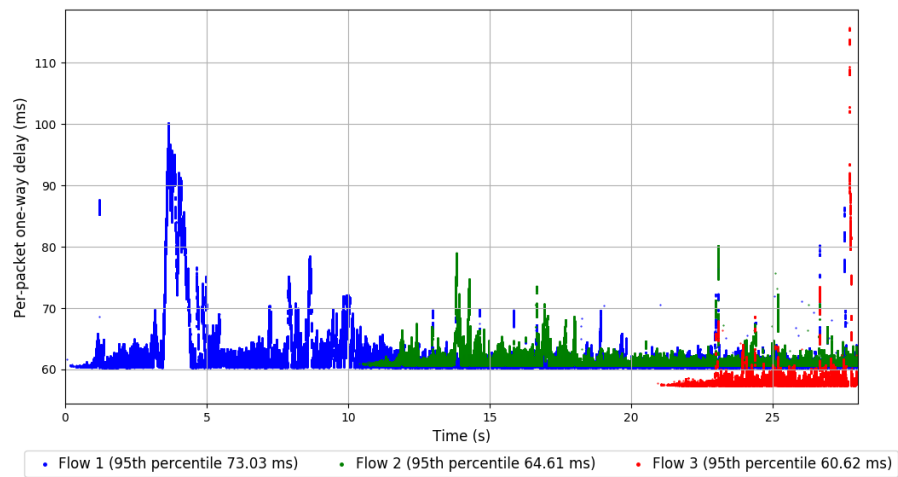
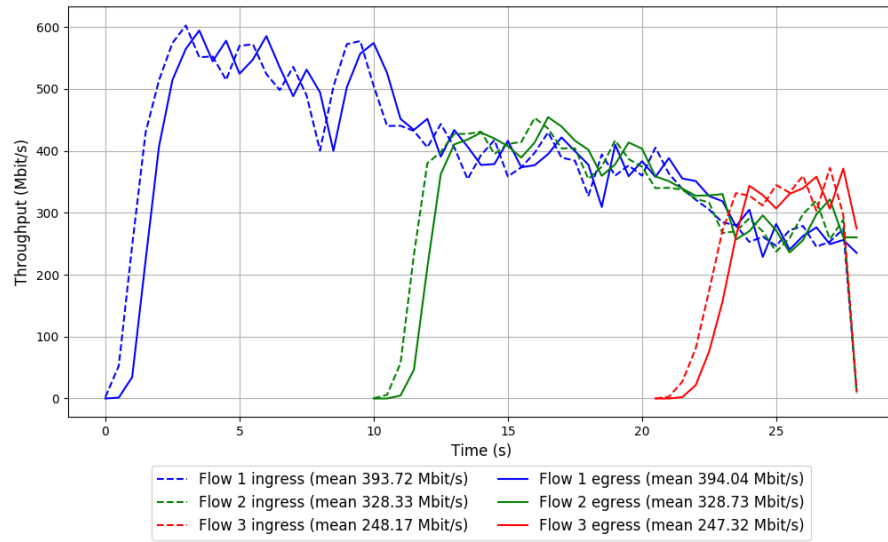


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-06-28 20:30:57
End at: 2019-06-28 20:31:27
Local clock offset: -0.033 ms
Remote clock offset: -0.168 ms

Below is generated by plot.py at 2019-06-28 23:55:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 663.21 Mbit/s
95th percentile per-packet one-way delay: 68.710 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 394.04 Mbit/s
95th percentile per-packet one-way delay: 73.028 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 328.73 Mbit/s
95th percentile per-packet one-way delay: 64.612 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 247.32 Mbit/s
95th percentile per-packet one-way delay: 60.619 ms
Loss rate: 1.98%

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

Start at: 2019-06-28 21:07:57

End at: 2019-06-28 21:08:27

Local clock offset: 0.393 ms

Remote clock offset: -0.73 ms

Below is generated by plot.py at 2019-06-29 00:03:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 633.36 Mbit/s

95th percentile per-packet one-way delay: 65.321 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 383.39 Mbit/s

95th percentile per-packet one-way delay: 67.019 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 315.64 Mbit/s

95th percentile per-packet one-way delay: 61.553 ms

Loss rate: 0.72%

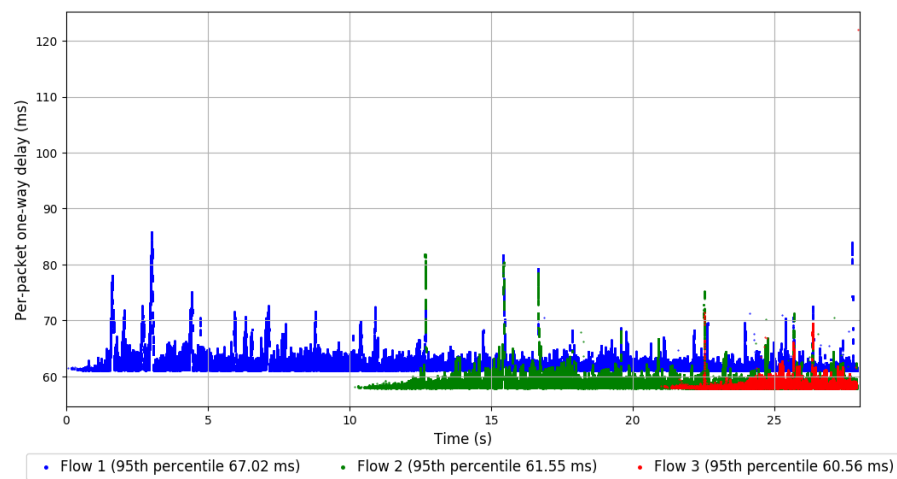
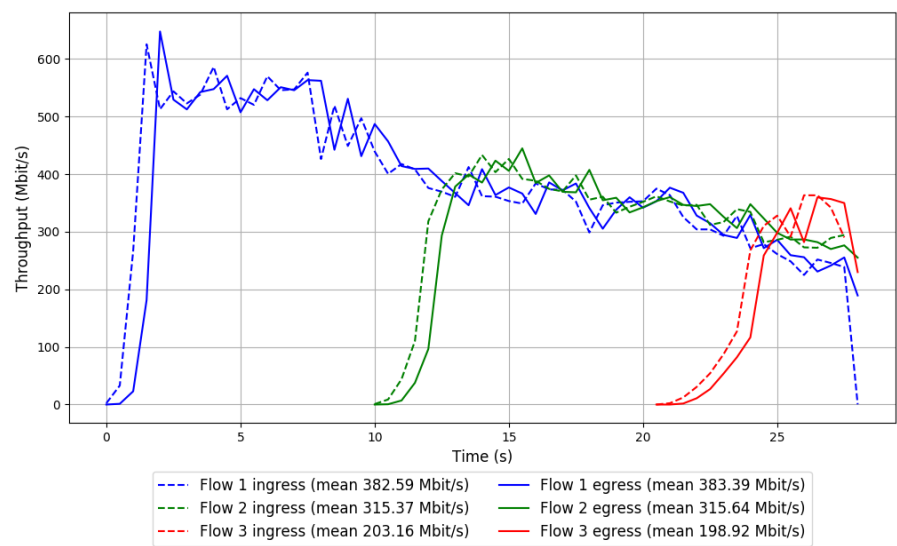
-- Flow 3:

Average throughput: 198.92 Mbit/s

95th percentile per-packet one-way delay: 60.560 ms

Loss rate: 3.54%

Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-06-28 21:45:00

End at: 2019-06-28 21:45:30

Local clock offset: 0.049 ms

Remote clock offset: 0.062 ms

Below is generated by plot.py at 2019-06-29 00:03:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 638.47 Mbit/s

95th percentile per-packet one-way delay: 61.790 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 382.43 Mbit/s

95th percentile per-packet one-way delay: 62.344 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 335.13 Mbit/s

95th percentile per-packet one-way delay: 61.321 ms

Loss rate: 0.60%

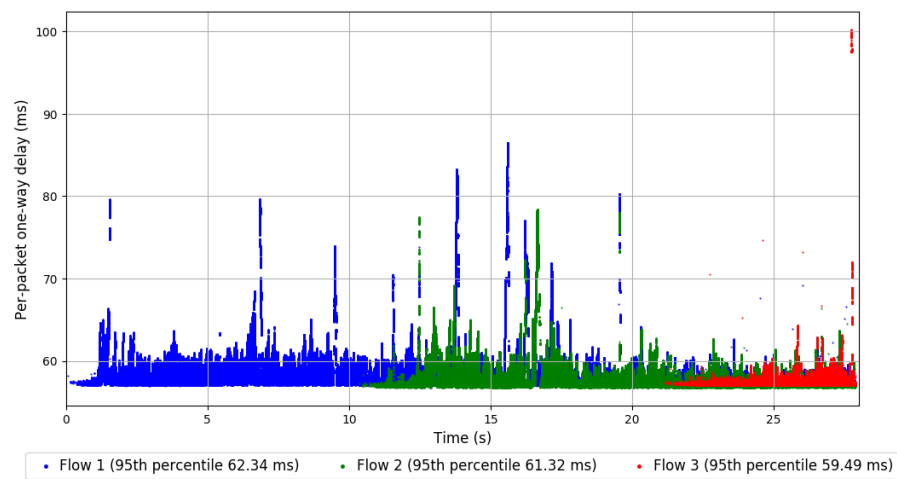
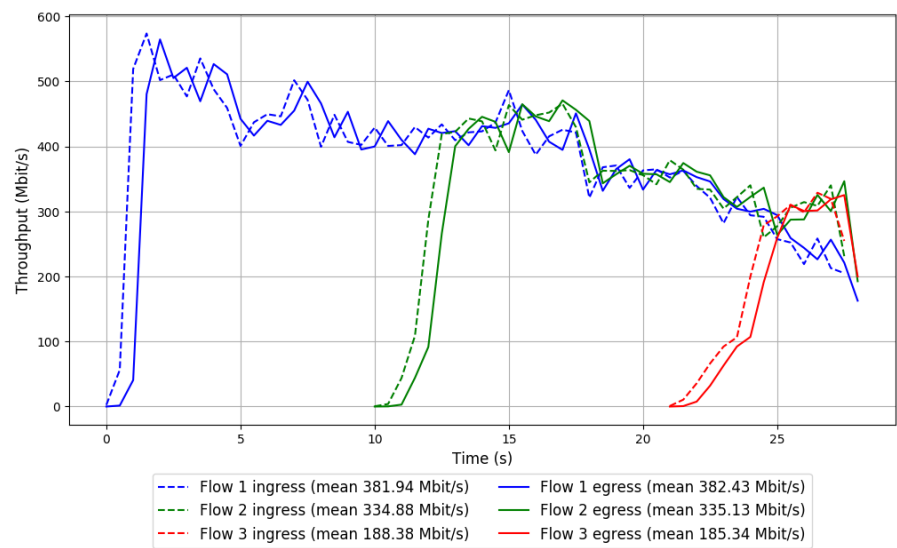
-- Flow 3:

Average throughput: 185.34 Mbit/s

95th percentile per-packet one-way delay: 59.492 ms

Loss rate: 3.31%

Run 4: Report of Indigo-MusesC3 — Data Link

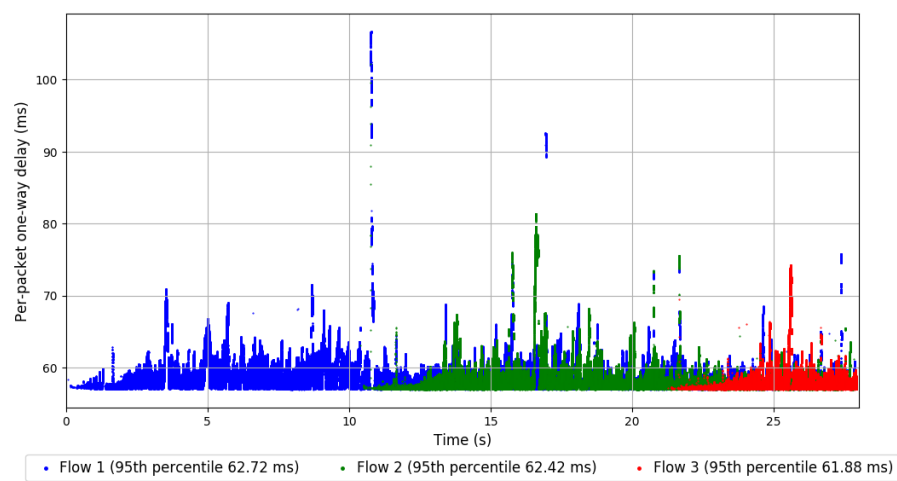
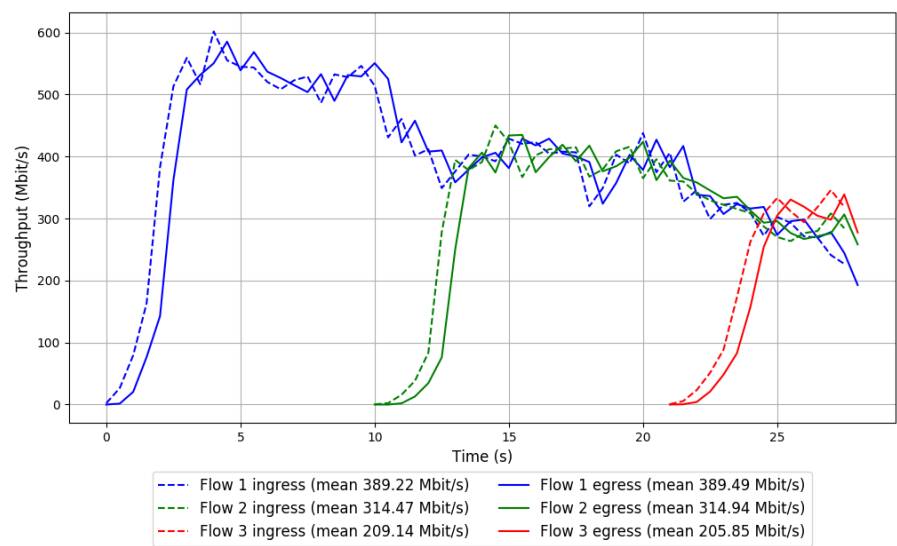


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-06-28 22:22:11
End at: 2019-06-28 22:22:41
Local clock offset: 0.295 ms
Remote clock offset: -0.018 ms

Below is generated by plot.py at 2019-06-29 00:03:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 636.85 Mbit/s
95th percentile per-packet one-way delay: 62.603 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 389.49 Mbit/s
95th percentile per-packet one-way delay: 62.721 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 314.94 Mbit/s
95th percentile per-packet one-way delay: 62.425 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 205.85 Mbit/s
95th percentile per-packet one-way delay: 61.877 ms
Loss rate: 3.28%

Run 5: Report of Indigo-MusesC3 — Data Link

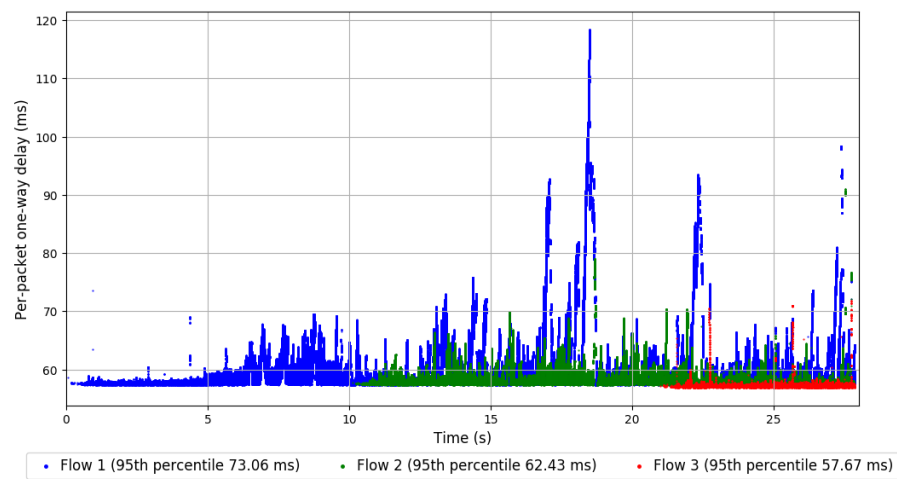
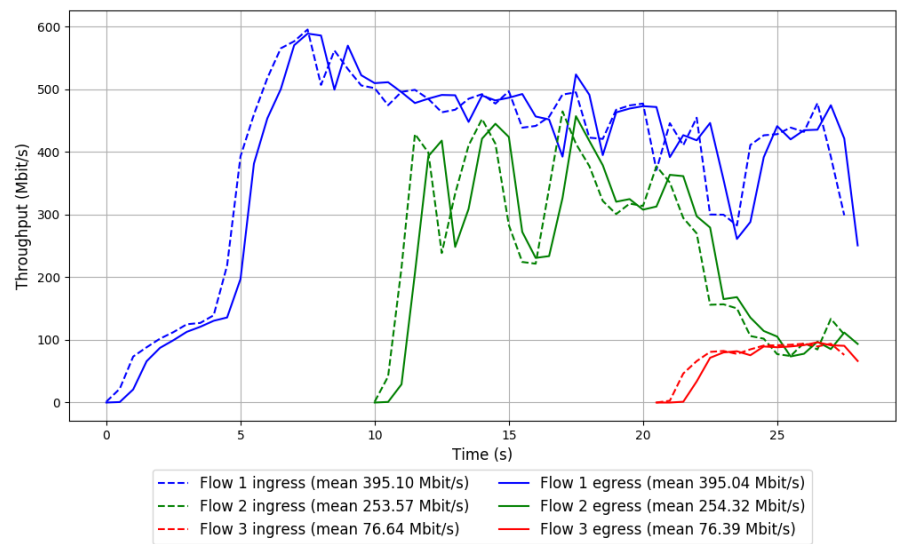


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-06-28 19:45:24
End at: 2019-06-28 19:45:54
Local clock offset: 0.085 ms
Remote clock offset: -0.043 ms

Below is generated by plot.py at 2019-06-29 00:03:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 575.99 Mbit/s
95th percentile per-packet one-way delay: 69.339 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 395.04 Mbit/s
95th percentile per-packet one-way delay: 73.065 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 254.32 Mbit/s
95th percentile per-packet one-way delay: 62.431 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 76.39 Mbit/s
95th percentile per-packet one-way delay: 57.672 ms
Loss rate: 2.06%

Run 1: Report of Indigo-MusesC5 — Data Link

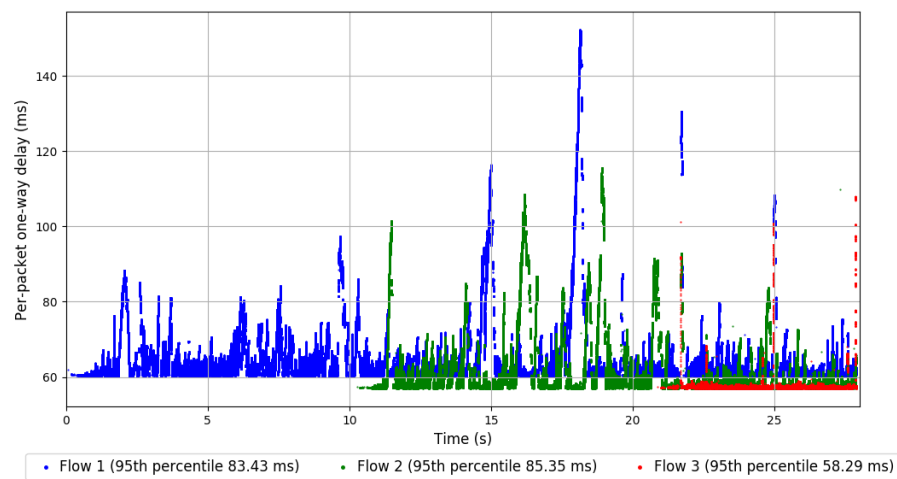
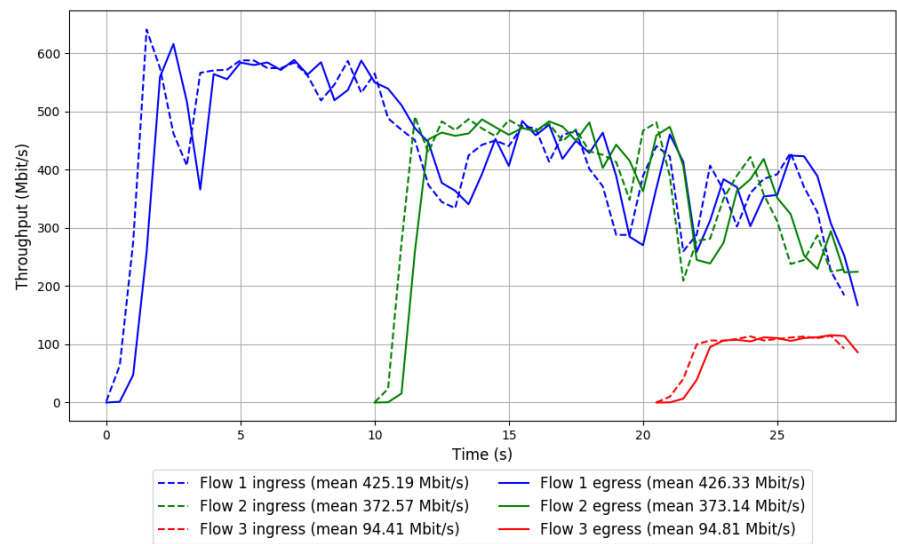


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-06-28 20:22:00
End at: 2019-06-28 20:22:30
Local clock offset: -0.089 ms
Remote clock offset: -0.187 ms

Below is generated by plot.py at 2019-06-29 00:06:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 686.42 Mbit/s
95th percentile per-packet one-way delay: 83.976 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 426.33 Mbit/s
95th percentile per-packet one-way delay: 83.429 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 373.14 Mbit/s
95th percentile per-packet one-way delay: 85.351 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 58.291 ms
Loss rate: 1.27%

Run 2: Report of Indigo-MusesC5 — Data Link

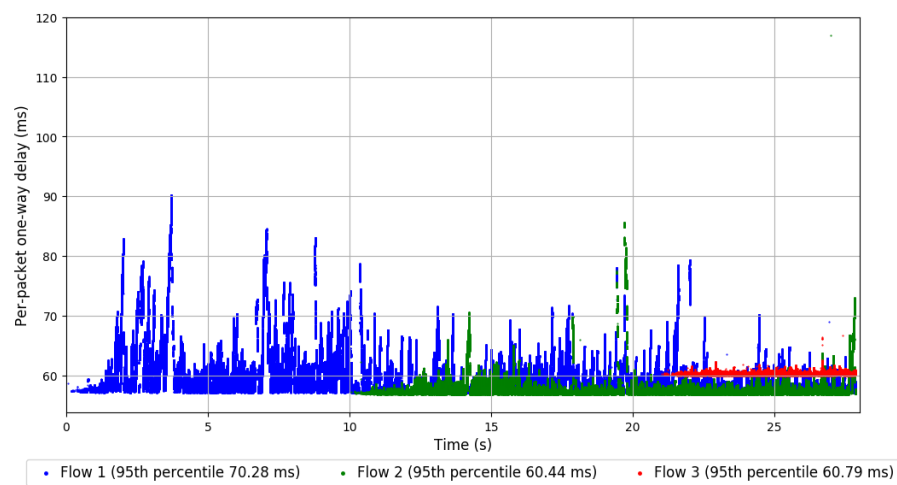
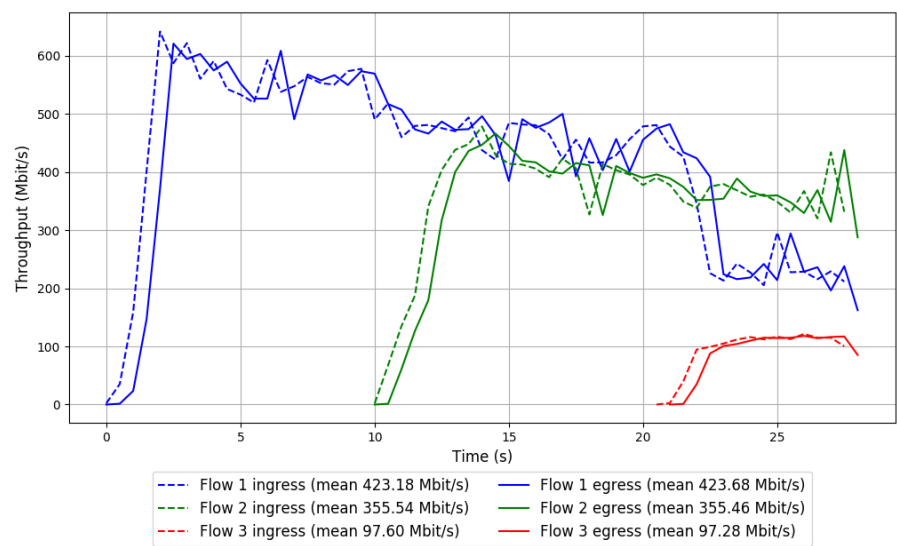


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-06-28 20:59:03
End at: 2019-06-28 20:59:33
Local clock offset: -0.055 ms
Remote clock offset: -0.137 ms

Below is generated by plot.py at 2019-06-29 00:06:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 674.95 Mbit/s
95th percentile per-packet one-way delay: 67.963 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 423.68 Mbit/s
95th percentile per-packet one-way delay: 70.275 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 355.46 Mbit/s
95th percentile per-packet one-way delay: 60.435 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 97.28 Mbit/s
95th percentile per-packet one-way delay: 60.790 ms
Loss rate: 2.05%

Run 3: Report of Indigo-MusesC5 — Data Link

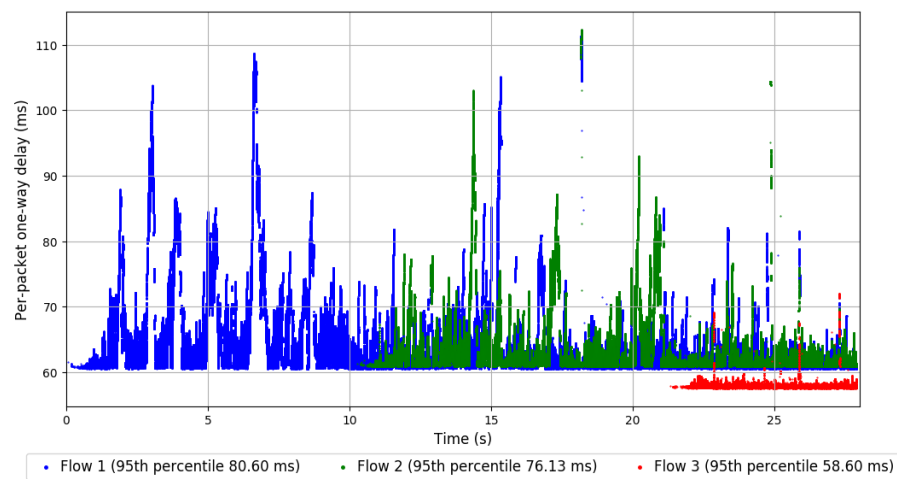
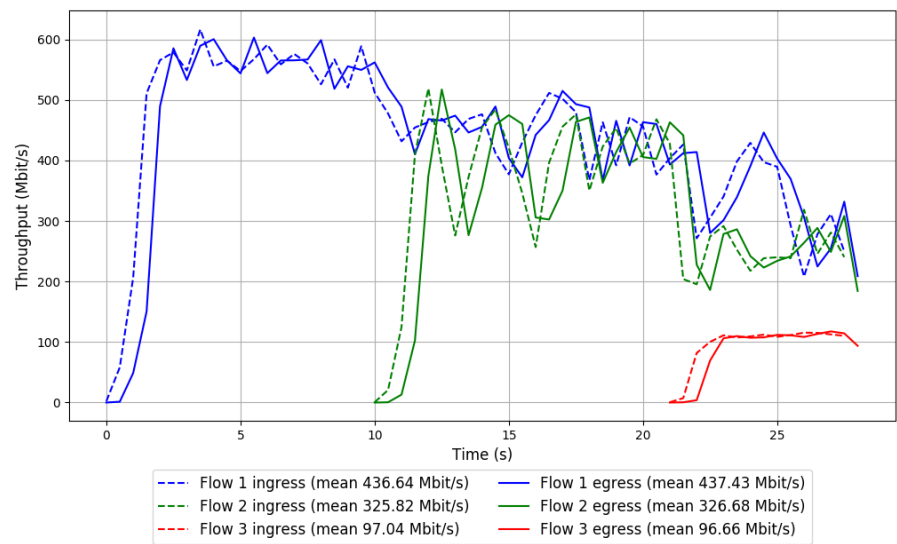


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-06-28 21:36:07
End at: 2019-06-28 21:36:37
Local clock offset: -0.222 ms
Remote clock offset: -0.692 ms

Below is generated by plot.py at 2019-06-29 00:08:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 666.85 Mbit/s
95th percentile per-packet one-way delay: 78.723 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 437.43 Mbit/s
95th percentile per-packet one-way delay: 80.600 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 326.68 Mbit/s
95th percentile per-packet one-way delay: 76.133 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 96.66 Mbit/s
95th percentile per-packet one-way delay: 58.604 ms
Loss rate: 2.22%

Run 4: Report of Indigo-MusesC5 — Data Link

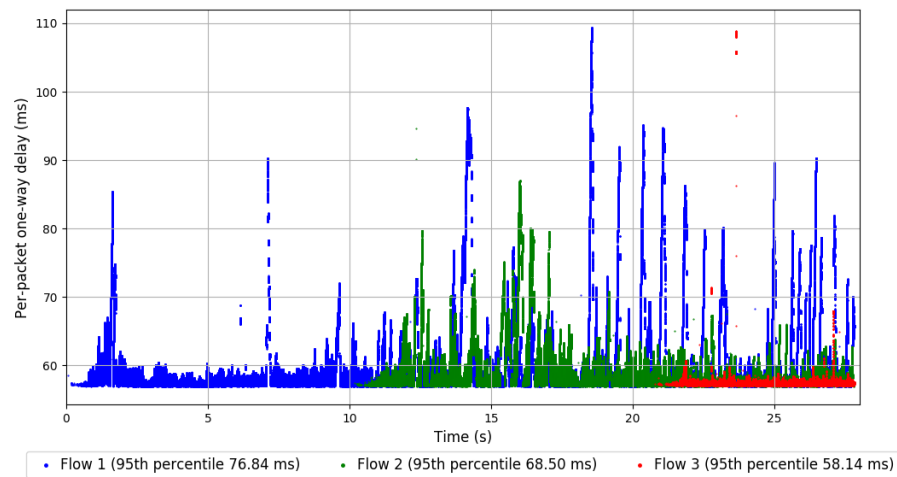
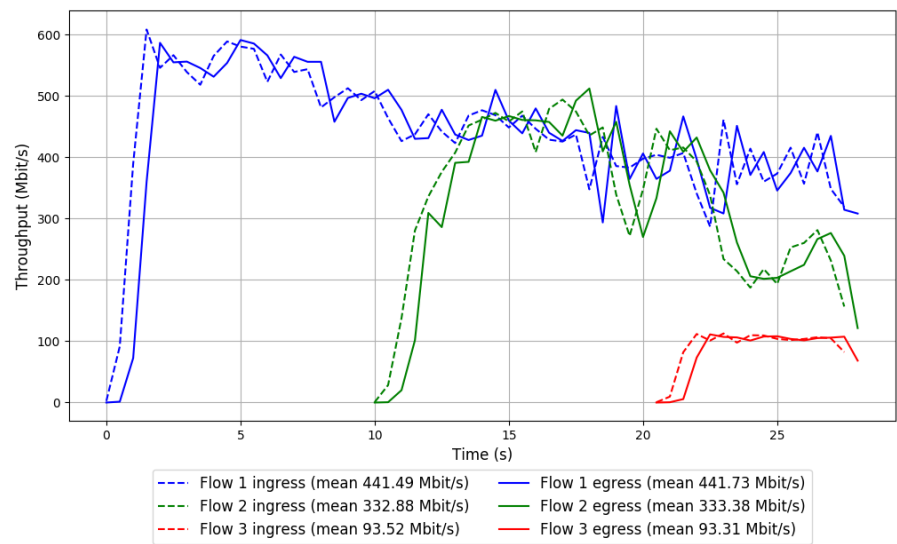


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-06-28 22:13:15
End at: 2019-06-28 22:13:45
Local clock offset: 0.207 ms
Remote clock offset: -0.167 ms

Below is generated by plot.py at 2019-06-29 00:08:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 677.25 Mbit/s
95th percentile per-packet one-way delay: 73.898 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 441.73 Mbit/s
95th percentile per-packet one-way delay: 76.841 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 333.38 Mbit/s
95th percentile per-packet one-way delay: 68.495 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 93.31 Mbit/s
95th percentile per-packet one-way delay: 58.143 ms
Loss rate: 1.87%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-06-28 19:48:52

End at: 2019-06-28 19:49:22

Local clock offset: -0.232 ms

Remote clock offset: 0.11 ms

Below is generated by plot.py at 2019-06-29 00:14:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 600.55 Mbit/s

95th percentile per-packet one-way delay: 65.186 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 372.07 Mbit/s

95th percentile per-packet one-way delay: 66.479 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 282.52 Mbit/s

95th percentile per-packet one-way delay: 63.600 ms

Loss rate: 0.23%

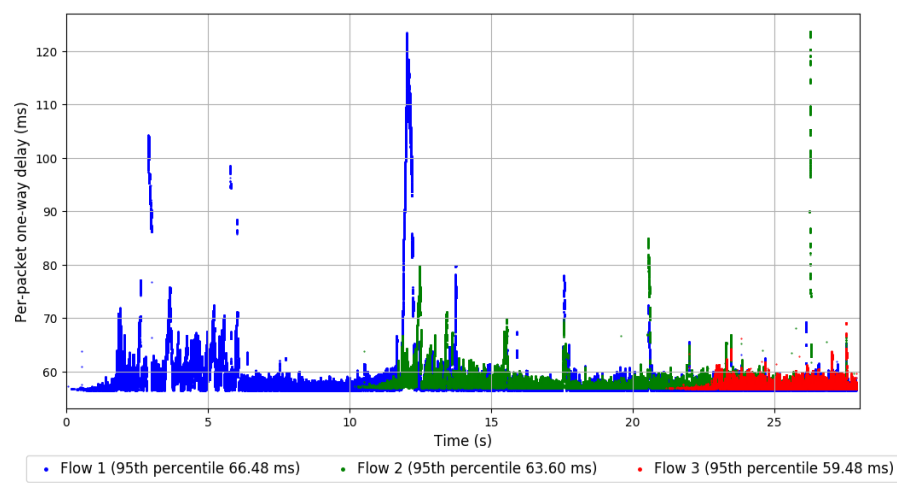
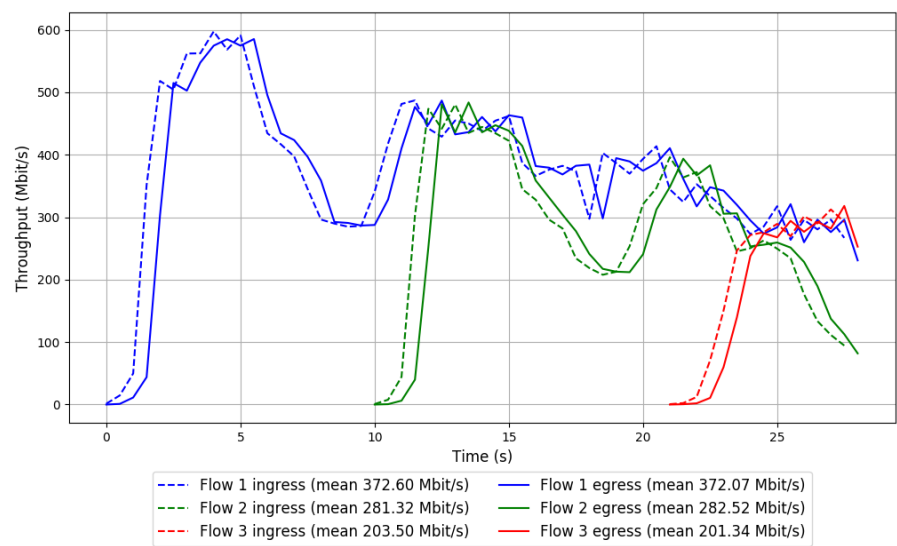
-- Flow 3:

Average throughput: 201.34 Mbit/s

95th percentile per-packet one-way delay: 59.482 ms

Loss rate: 2.76%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-06-28 20:25:33

End at: 2019-06-28 20:26:03

Local clock offset: 0.385 ms

Remote clock offset: 0.064 ms

Below is generated by plot.py at 2019-06-29 00:15:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 637.69 Mbit/s

95th percentile per-packet one-way delay: 65.551 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 372.90 Mbit/s

95th percentile per-packet one-way delay: 66.818 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 323.36 Mbit/s

95th percentile per-packet one-way delay: 62.536 ms

Loss rate: 0.76%

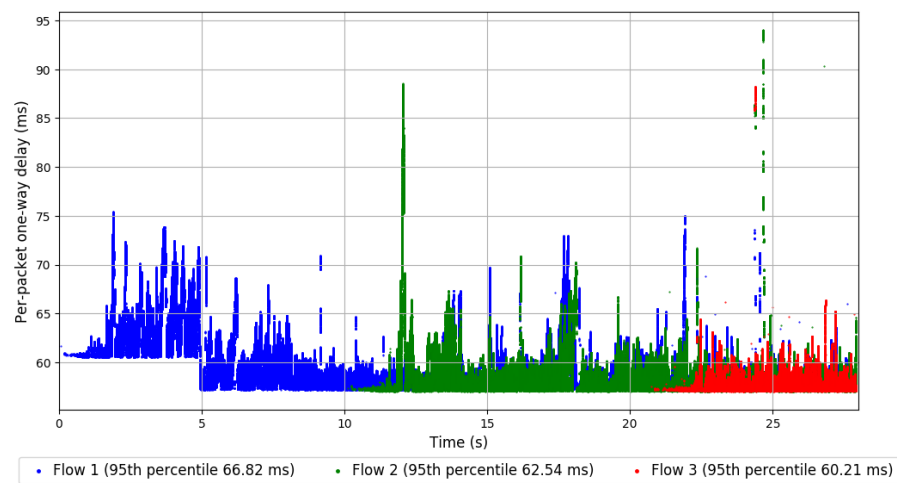
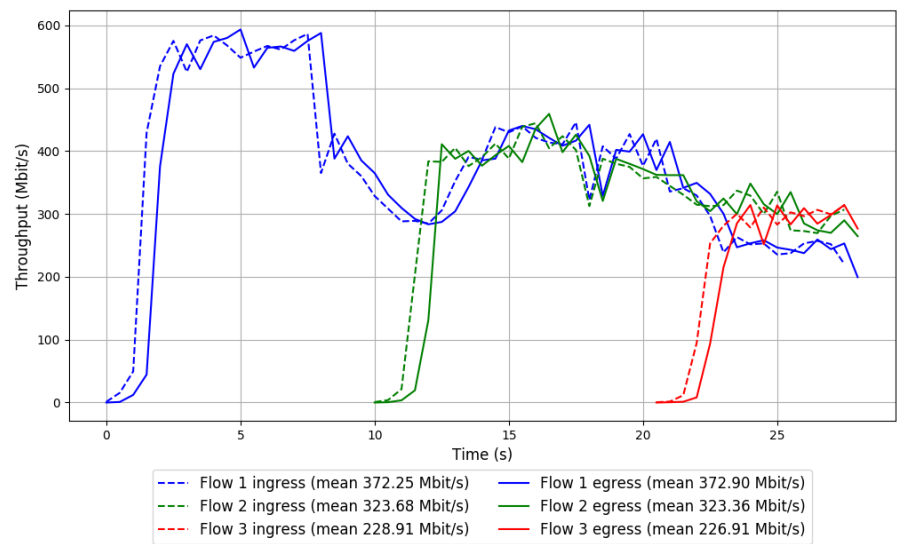
-- Flow 3:

Average throughput: 226.91 Mbit/s

95th percentile per-packet one-way delay: 60.213 ms

Loss rate: 2.49%

Run 2: Report of Indigo-MusesD — Data Link

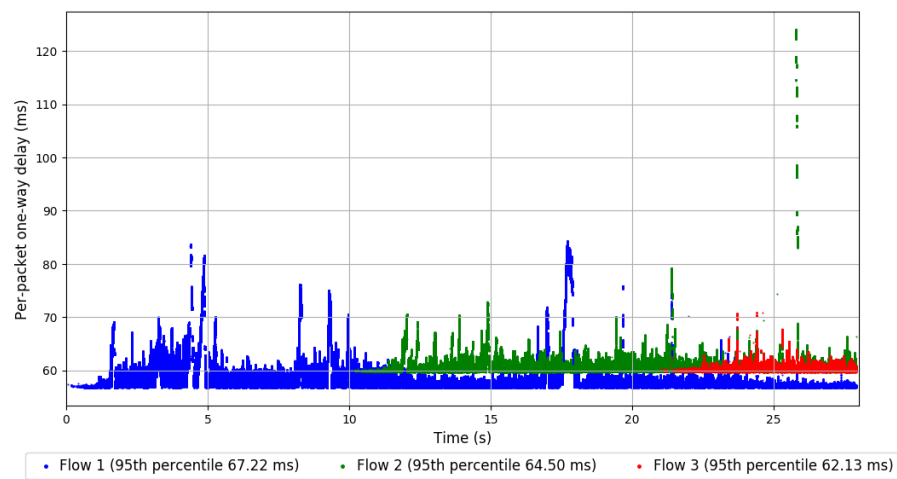
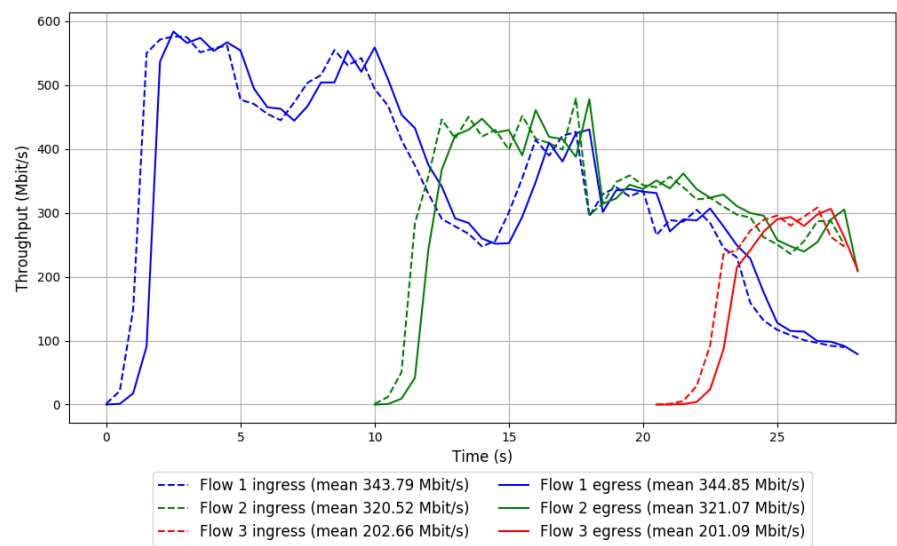


Run 3: Statistics of Indigo-MusesD

Start at: 2019-06-28 21:02:38
End at: 2019-06-28 21:03:08
Local clock offset: -0.454 ms
Remote clock offset: -0.218 ms

Below is generated by plot.py at 2019-06-29 00:15:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 600.02 Mbit/s
95th percentile per-packet one-way delay: 65.256 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 344.85 Mbit/s
95th percentile per-packet one-way delay: 67.223 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 321.07 Mbit/s
95th percentile per-packet one-way delay: 64.497 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 201.09 Mbit/s
95th percentile per-packet one-way delay: 62.129 ms
Loss rate: 2.52%

Run 3: Report of Indigo-MusesD — Data Link

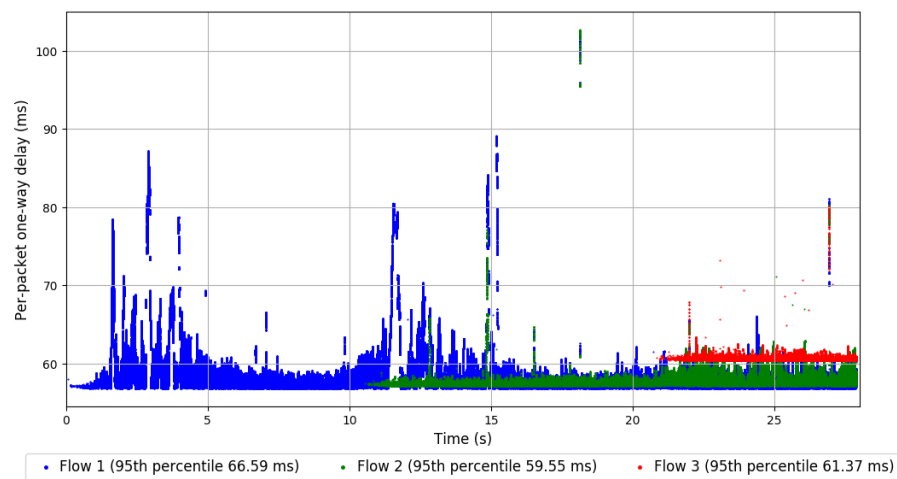
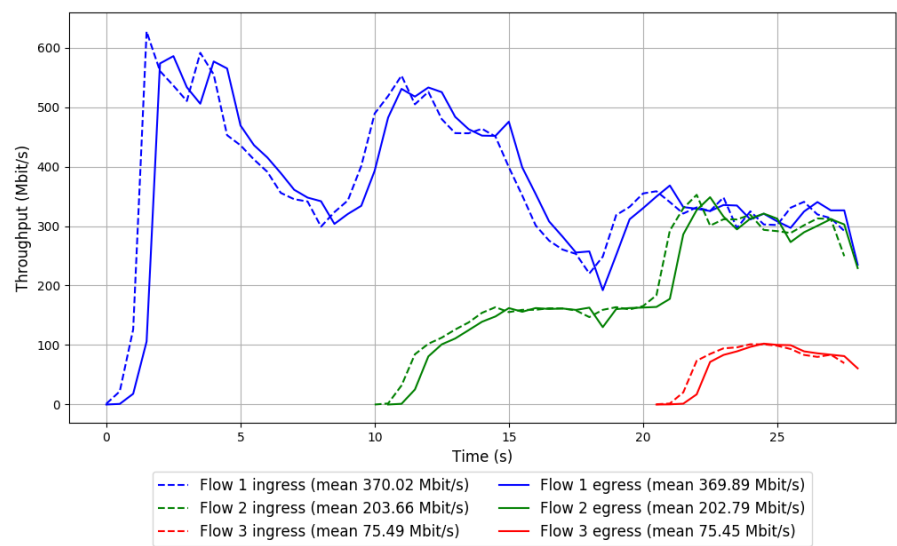


Run 4: Statistics of Indigo-MusesD

Start at: 2019-06-28 21:39:40
End at: 2019-06-28 21:40:10
Local clock offset: 0.048 ms
Remote clock offset: -0.044 ms

Below is generated by plot.py at 2019-06-29 00:15:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 515.42 Mbit/s
95th percentile per-packet one-way delay: 64.457 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 369.89 Mbit/s
95th percentile per-packet one-way delay: 66.590 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 202.79 Mbit/s
95th percentile per-packet one-way delay: 59.553 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 75.45 Mbit/s
95th percentile per-packet one-way delay: 61.371 ms
Loss rate: 1.80%

Run 4: Report of Indigo-MusesD — Data Link

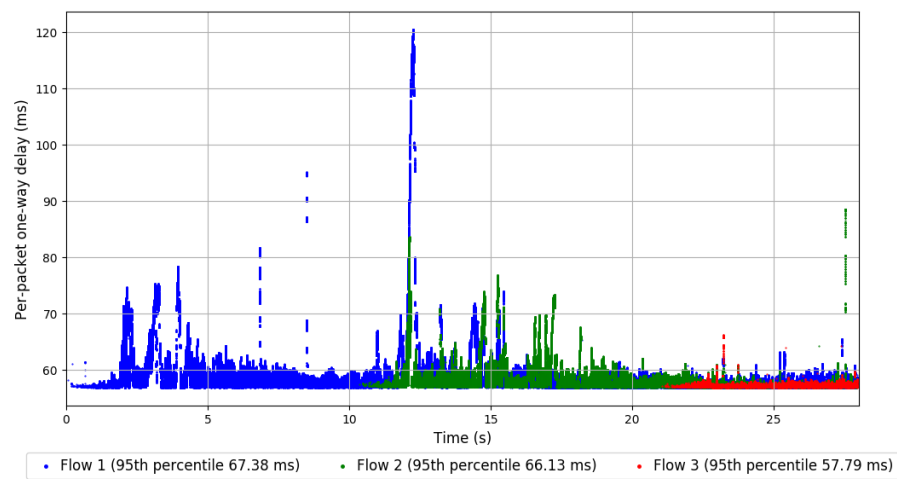
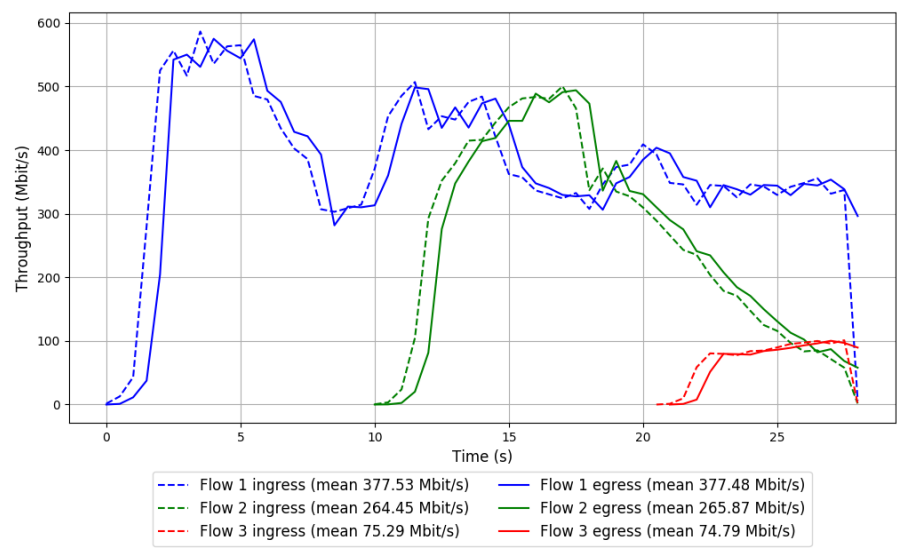


Run 5: Statistics of Indigo-MusesD

Start at: 2019-06-28 22:16:49
End at: 2019-06-28 22:17:19
Local clock offset: 0.232 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2019-06-29 00:16:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 563.56 Mbit/s
95th percentile per-packet one-way delay: 66.583 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 377.48 Mbit/s
95th percentile per-packet one-way delay: 67.383 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 265.87 Mbit/s
95th percentile per-packet one-way delay: 66.130 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 74.79 Mbit/s
95th percentile per-packet one-way delay: 57.790 ms
Loss rate: 2.28%

Run 5: Report of Indigo-MusesD — Data Link

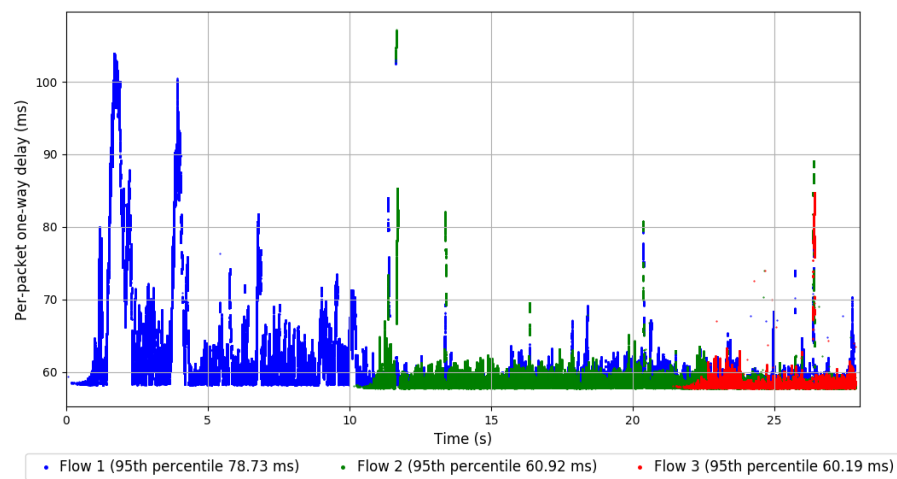
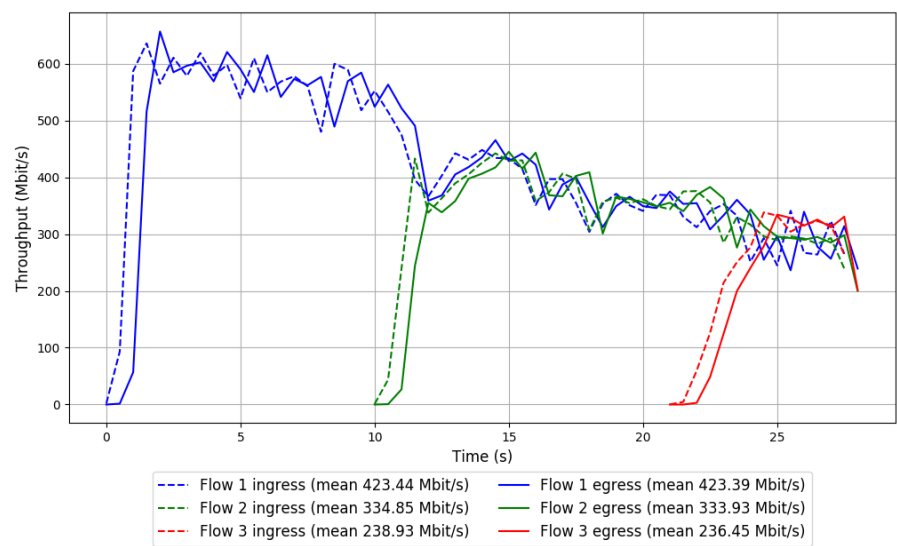


Run 1: Statistics of Indigo-MusesT

Start at: 2019-06-28 19:30:46
End at: 2019-06-28 19:31:16
Local clock offset: 0.193 ms
Remote clock offset: -0.887 ms

Below is generated by plot.py at 2019-06-29 00:19:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 690.71 Mbit/s
95th percentile per-packet one-way delay: 73.183 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 423.39 Mbit/s
95th percentile per-packet one-way delay: 78.735 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 333.93 Mbit/s
95th percentile per-packet one-way delay: 60.920 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 236.45 Mbit/s
95th percentile per-packet one-way delay: 60.188 ms
Loss rate: 2.71%

Run 1: Report of Indigo-MusesT — Data Link

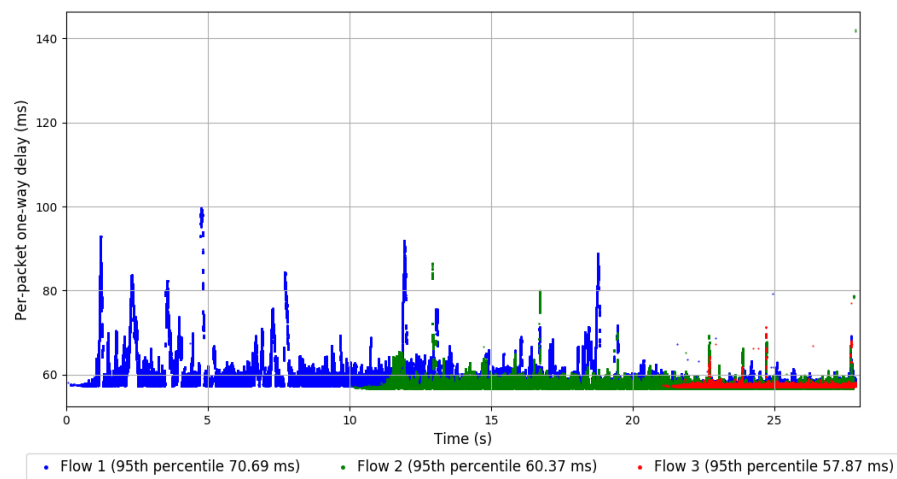
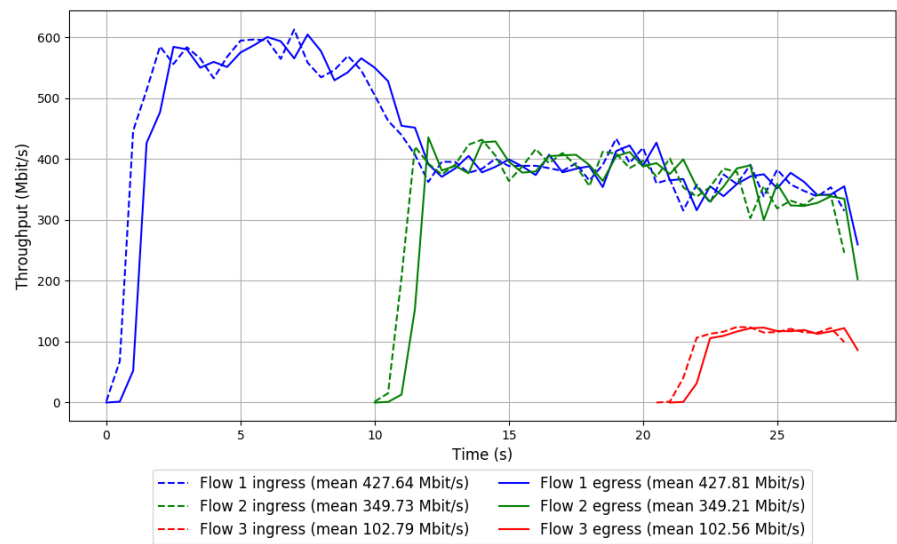


Run 2: Statistics of Indigo-MusesT

Start at: 2019-06-28 20:07:15
End at: 2019-06-28 20:07:45
Local clock offset: -0.182 ms
Remote clock offset: -0.084 ms

Below is generated by plot.py at 2019-06-29 00:21:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 676.39 Mbit/s
95th percentile per-packet one-way delay: 67.286 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 427.81 Mbit/s
95th percentile per-packet one-way delay: 70.690 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 349.21 Mbit/s
95th percentile per-packet one-way delay: 60.374 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 102.56 Mbit/s
95th percentile per-packet one-way delay: 57.867 ms
Loss rate: 1.91%

Run 2: Report of Indigo-MusesT — Data Link

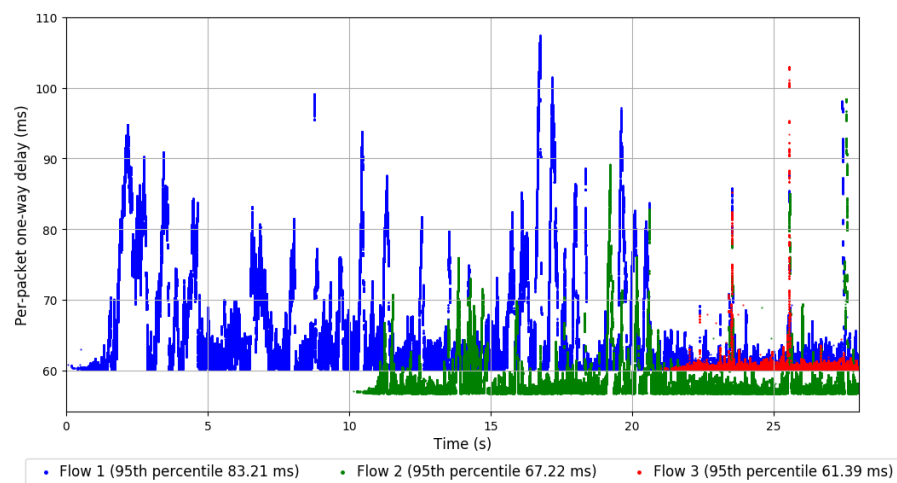
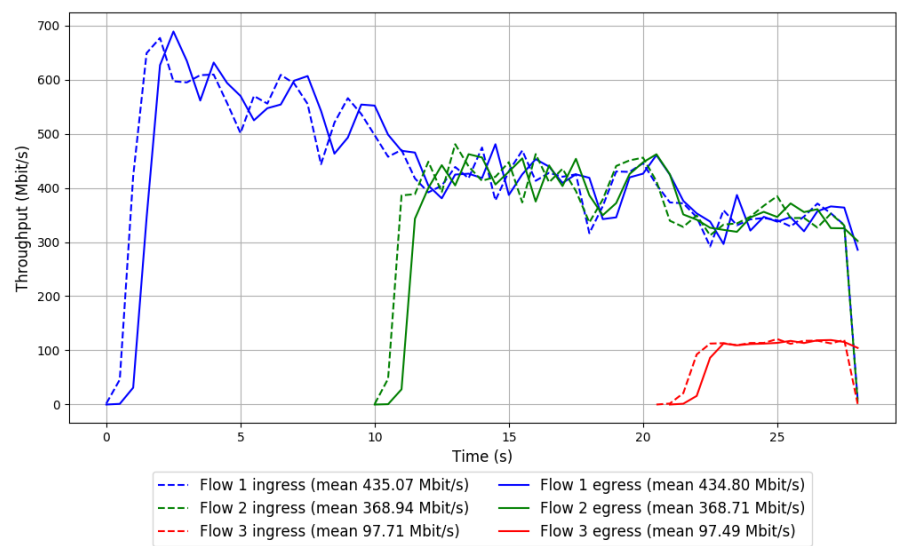


Run 3: Statistics of Indigo-MusesT

Start at: 2019-06-28 20:44:19
End at: 2019-06-28 20:44:49
Local clock offset: -0.369 ms
Remote clock offset: -0.057 ms

Below is generated by plot.py at 2019-06-29 00:21:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 694.15 Mbit/s
95th percentile per-packet one-way delay: 80.572 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 434.80 Mbit/s
95th percentile per-packet one-way delay: 83.210 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 368.71 Mbit/s
95th percentile per-packet one-way delay: 67.220 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 61.389 ms
Loss rate: 1.99%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-06-28 21:21:27

End at: 2019-06-28 21:21:57

Local clock offset: 0.158 ms

Remote clock offset: -0.88 ms

Below is generated by plot.py at 2019-06-29 00:26:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 700.31 Mbit/s

95th percentile per-packet one-way delay: 93.938 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 417.40 Mbit/s

95th percentile per-packet one-way delay: 100.314 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 352.35 Mbit/s

95th percentile per-packet one-way delay: 86.413 ms

Loss rate: 0.82%

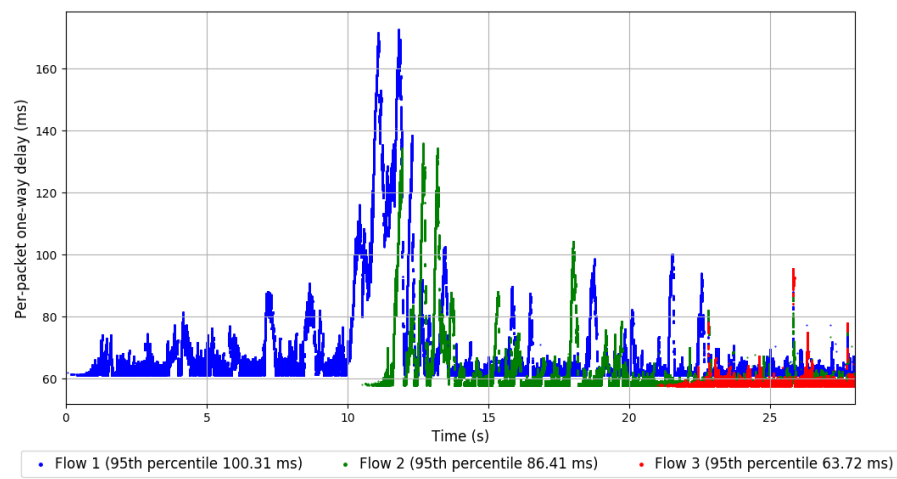
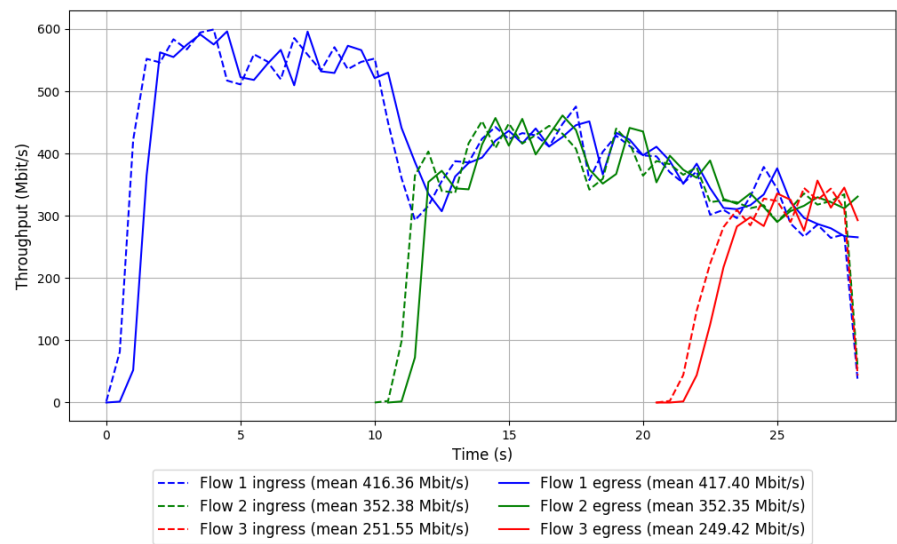
-- Flow 3:

Average throughput: 249.42 Mbit/s

95th percentile per-packet one-way delay: 63.717 ms

Loss rate: 2.92%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-06-28 21:58:31

End at: 2019-06-28 21:59:01

Local clock offset: -0.381 ms

Remote clock offset: 0.085 ms

Below is generated by plot.py at 2019-06-29 00:27:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 705.59 Mbit/s

95th percentile per-packet one-way delay: 67.631 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 421.81 Mbit/s

95th percentile per-packet one-way delay: 70.046 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 353.01 Mbit/s

95th percentile per-packet one-way delay: 64.647 ms

Loss rate: 0.68%

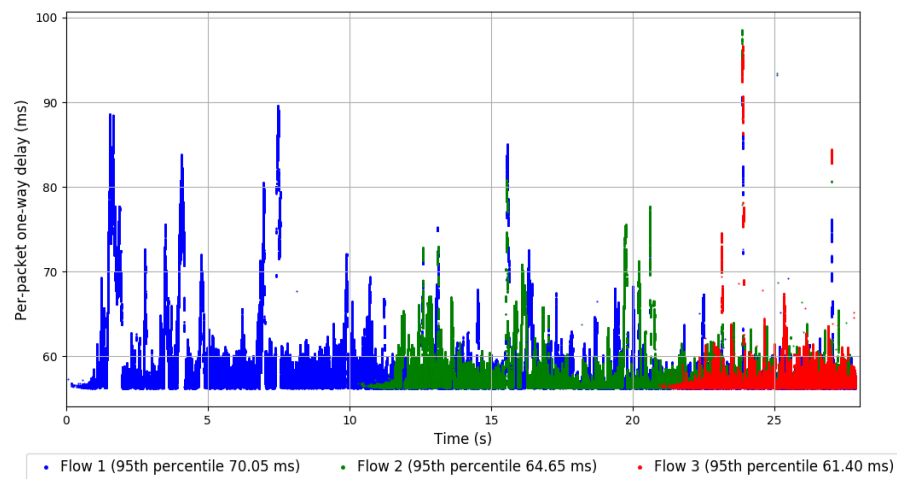
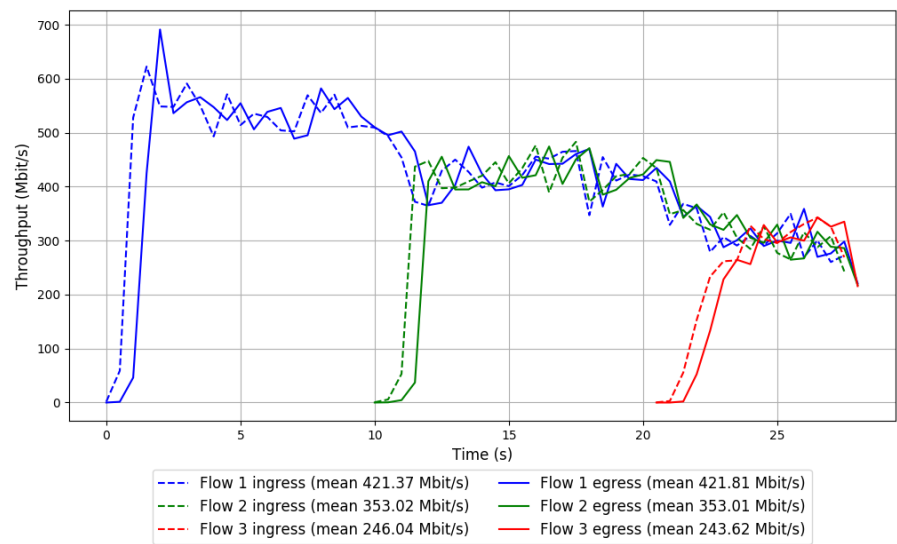
-- Flow 3:

Average throughput: 243.62 Mbit/s

95th percentile per-packet one-way delay: 61.400 ms

Loss rate: 2.66%

Run 5: Report of Indigo-MusesT — Data Link

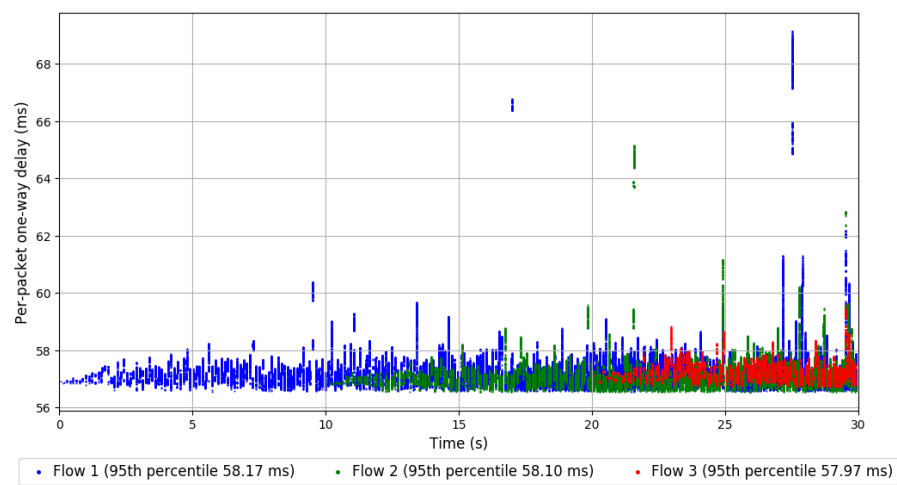
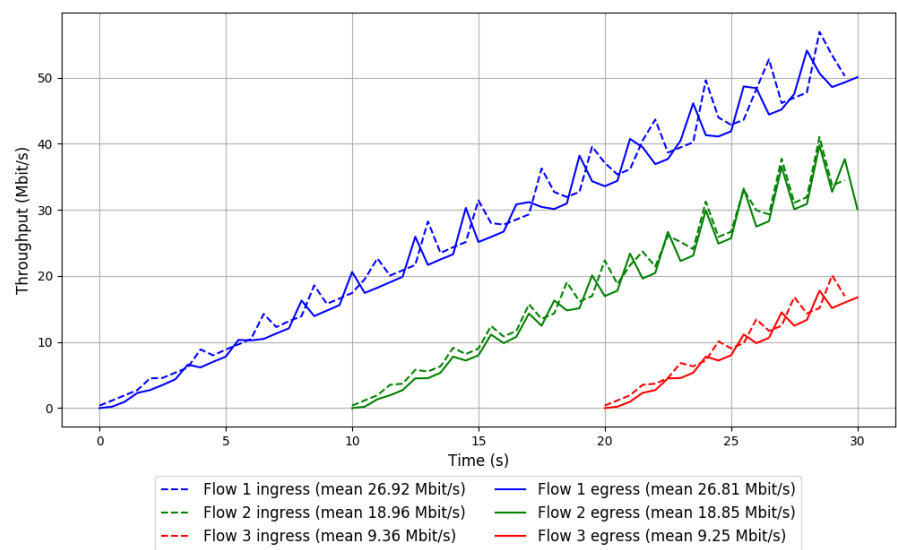


```
Run 1: Statistics of LEDBAT

Start at: 2019-06-28 19:32:32
End at: 2019-06-28 19:33:02
Local clock offset: -0.161 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2019-06-29 00:27:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.35 Mbit/s
95th percentile per-packet one-way delay: 58.145 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 26.81 Mbit/s
95th percentile per-packet one-way delay: 58.172 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 18.85 Mbit/s
95th percentile per-packet one-way delay: 58.101 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 57.969 ms
Loss rate: 2.32%
```

Run 1: Report of LEDBAT — Data Link

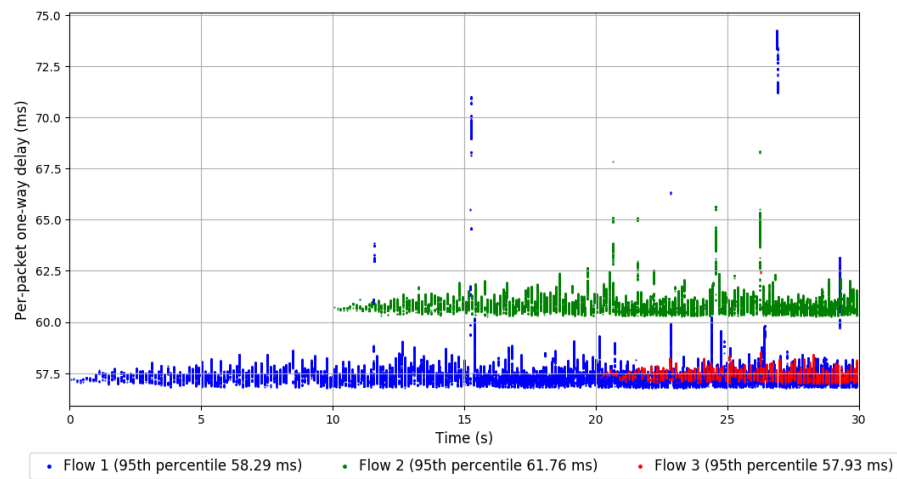
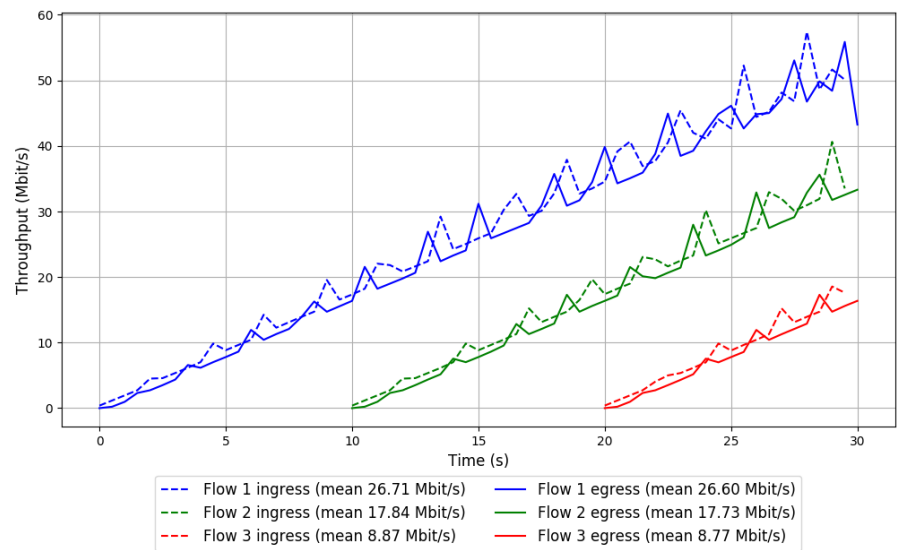


Run 2: Statistics of LEDBAT

Start at: 2019-06-28 20:09:00
End at: 2019-06-28 20:09:30
Local clock offset: -0.251 ms
Remote clock offset: -0.081 ms

Below is generated by plot.py at 2019-06-29 00:27:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 41.28 Mbit/s
95th percentile per-packet one-way delay: 61.260 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 26.60 Mbit/s
95th percentile per-packet one-way delay: 58.290 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 17.73 Mbit/s
95th percentile per-packet one-way delay: 61.755 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 57.932 ms
Loss rate: 2.38%

Run 2: Report of LEDBAT — Data Link

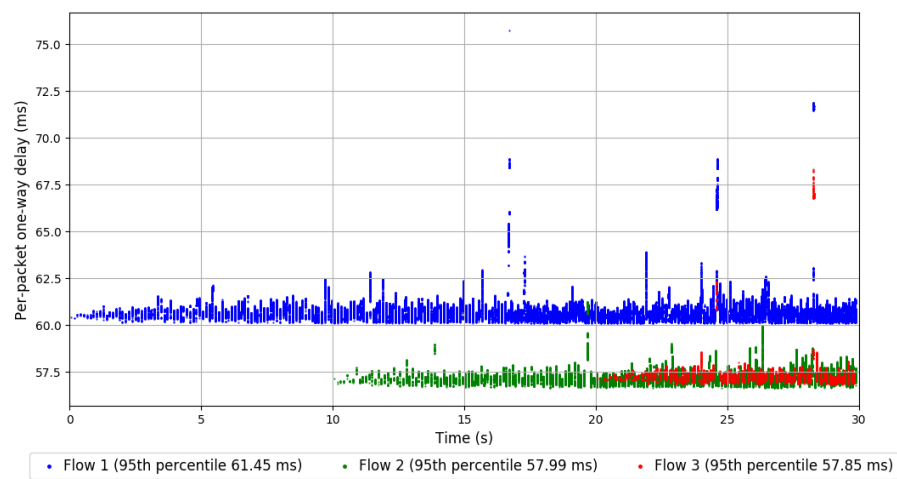
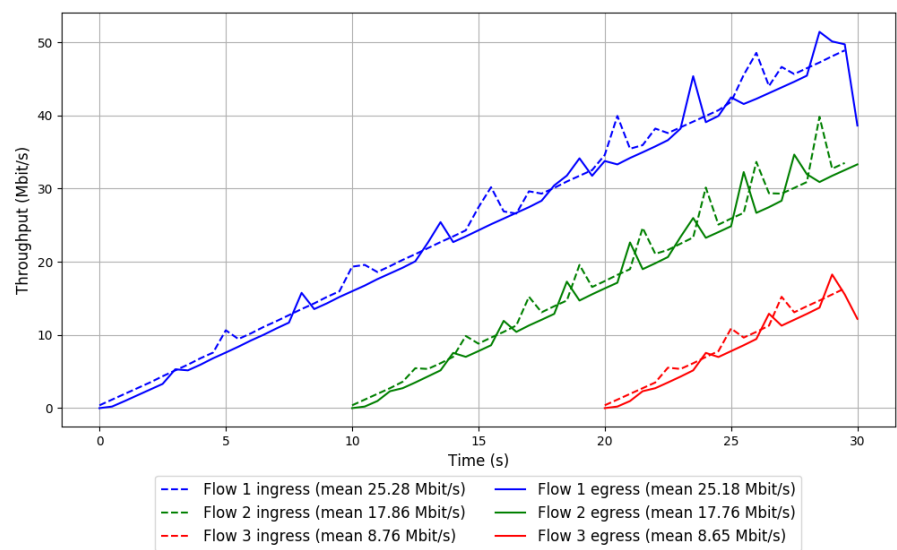


Run 3: Statistics of LEDBAT

Start at: 2019-06-28 20:46:07
End at: 2019-06-28 20:46:37
Local clock offset: -0.468 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2019-06-29 00:27:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 39.80 Mbit/s
95th percentile per-packet one-way delay: 61.241 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 25.18 Mbit/s
95th percentile per-packet one-way delay: 61.449 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 17.76 Mbit/s
95th percentile per-packet one-way delay: 57.990 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 57.853 ms
Loss rate: 2.41%

Run 3: Report of LEDBAT — Data Link

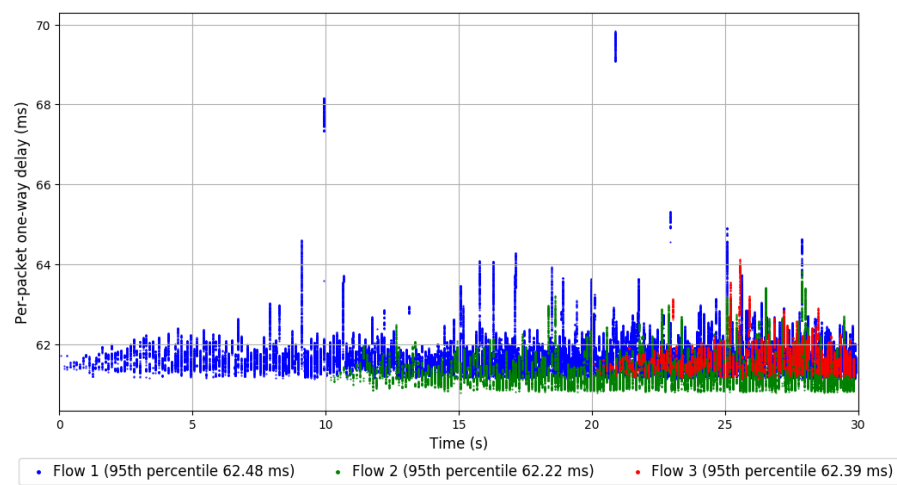
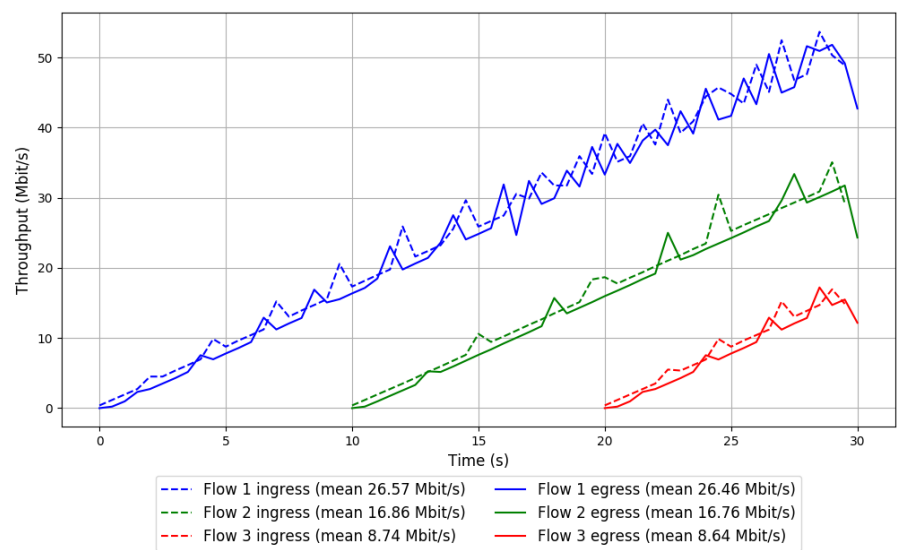


Run 4: Statistics of LEDBAT

Start at: 2019-06-28 21:23:14
End at: 2019-06-28 21:23:44
Local clock offset: -0.1 ms
Remote clock offset: -1.035 ms

Below is generated by plot.py at 2019-06-29 00:27:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 40.37 Mbit/s
95th percentile per-packet one-way delay: 62.396 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 26.46 Mbit/s
95th percentile per-packet one-way delay: 62.476 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 16.76 Mbit/s
95th percentile per-packet one-way delay: 62.220 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 8.64 Mbit/s
95th percentile per-packet one-way delay: 62.393 ms
Loss rate: 2.42%

Run 4: Report of LEDBAT — Data Link

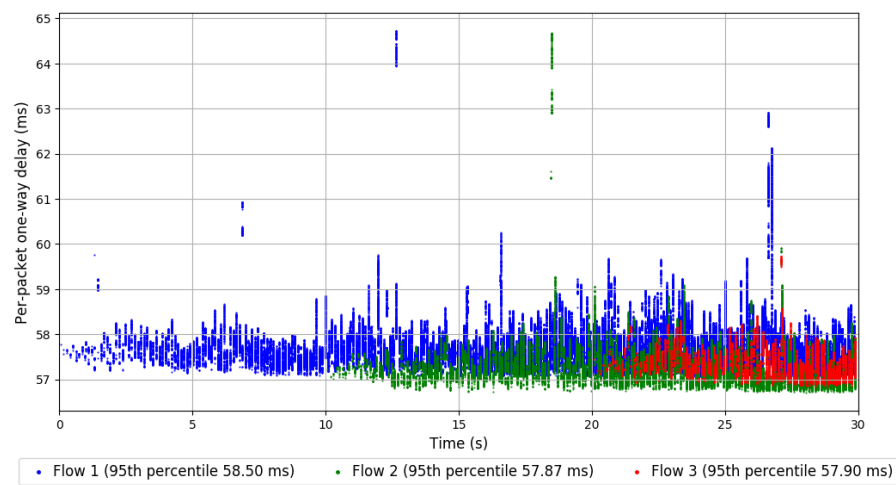
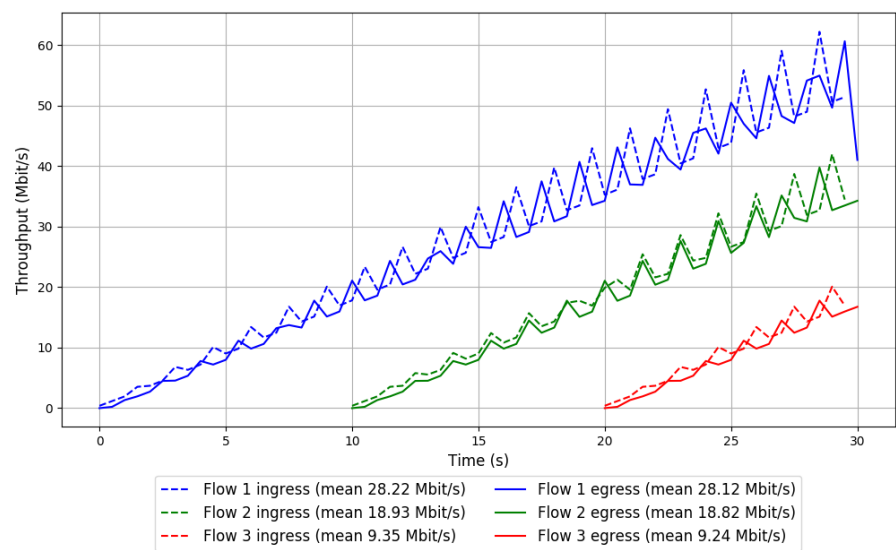


Run 5: Statistics of LEDBAT

Start at: 2019-06-28 22:00:18
End at: 2019-06-28 22:00:48
Local clock offset: 0.069 ms
Remote clock offset: -0.064 ms

Below is generated by plot.py at 2019-06-29 00:27:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 43.63 Mbit/s
95th percentile per-packet one-way delay: 58.345 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 28.12 Mbit/s
95th percentile per-packet one-way delay: 58.503 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 18.82 Mbit/s
95th percentile per-packet one-way delay: 57.874 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 9.24 Mbit/s
95th percentile per-packet one-way delay: 57.902 ms
Loss rate: 2.32%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Muses_DecisionTree

Start at: 2019-06-28 19:50:34

End at: 2019-06-28 19:51:04

Local clock offset: 0.191 ms

Remote clock offset: 0.04 ms

Below is generated by plot.py at 2019-06-29 00:32:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 688.29 Mbit/s

95th percentile per-packet one-way delay: 77.663 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 434.31 Mbit/s

95th percentile per-packet one-way delay: 77.662 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 350.23 Mbit/s

95th percentile per-packet one-way delay: 79.548 ms

Loss rate: 0.41%

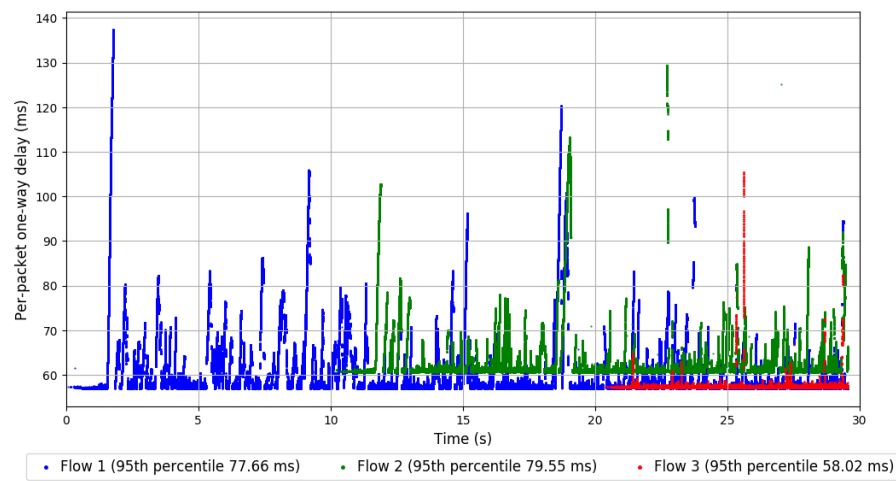
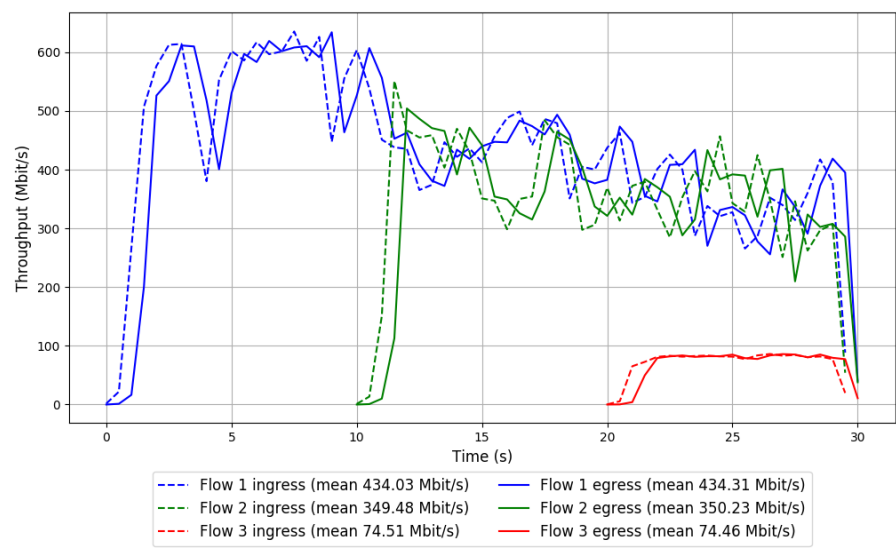
-- Flow 3:

Average throughput: 74.46 Mbit/s

95th percentile per-packet one-way delay: 58.023 ms

Loss rate: 1.37%

Run 1: Report of Muses_DecisionTree — Data Link



Run 2: Statistics of Muses_DecisionTree

Start at: 2019-06-28 20:27:17

End at: 2019-06-28 20:27:47

Local clock offset: 0.162 ms

Remote clock offset: -0.18 ms

Below is generated by plot.py at 2019-06-29 00:32:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 702.55 Mbit/s

95th percentile per-packet one-way delay: 71.580 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 441.77 Mbit/s

95th percentile per-packet one-way delay: 75.086 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 356.01 Mbit/s

95th percentile per-packet one-way delay: 62.602 ms

Loss rate: 0.78%

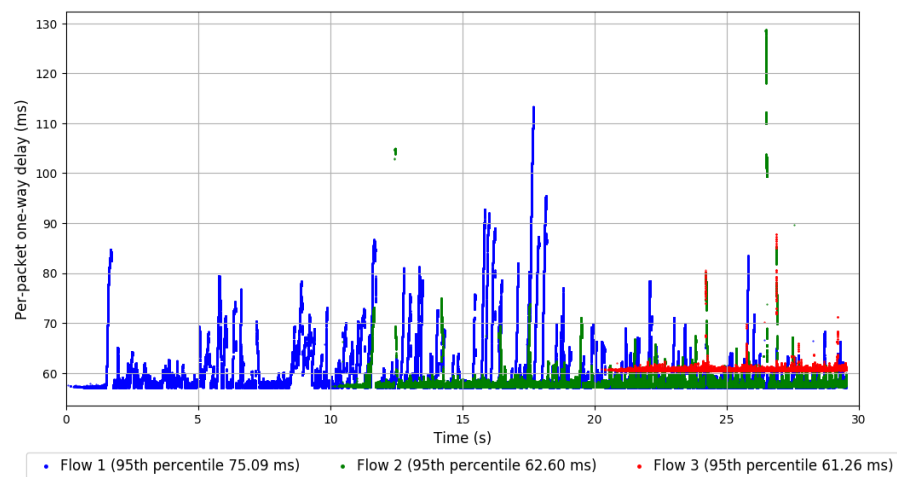
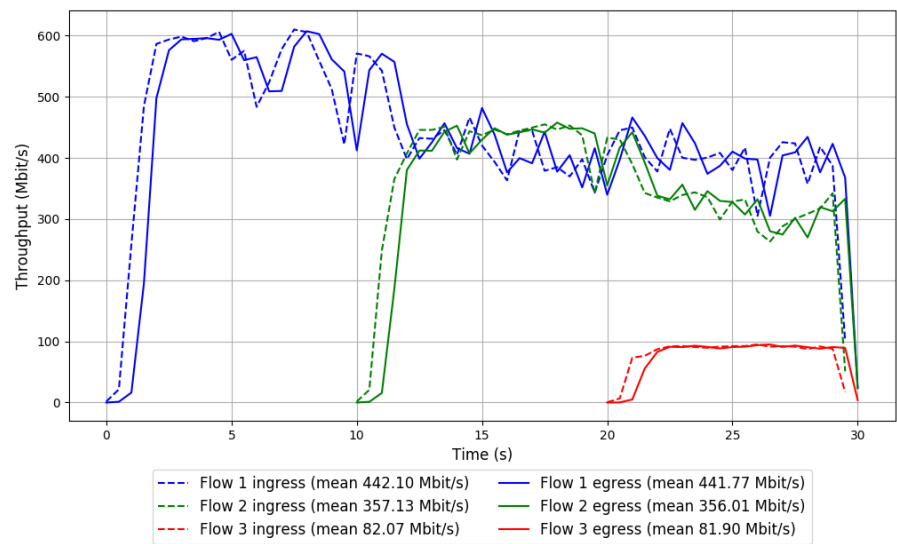
-- Flow 3:

Average throughput: 81.90 Mbit/s

95th percentile per-packet one-way delay: 61.257 ms

Loss rate: 1.51%

Run 2: Report of Muses_DecisionTree — Data Link

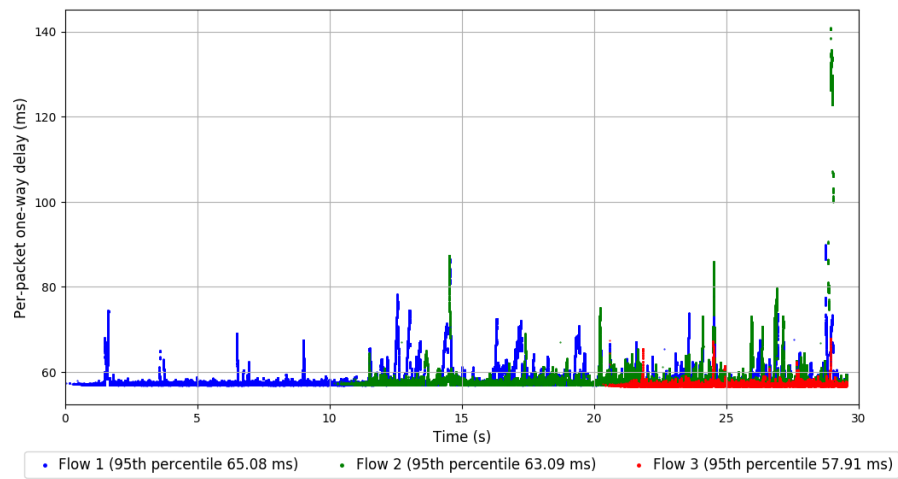
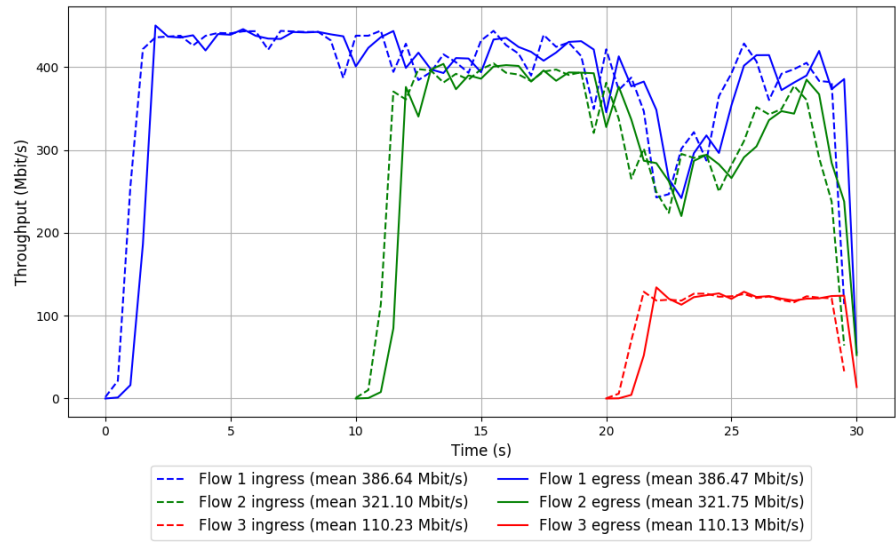


Run 3: Statistics of Muses_DecisionTree

Start at: 2019-06-28 21:04:20
End at: 2019-06-28 21:04:50
Local clock offset: -0.046 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-06-29 00:32:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 632.39 Mbit/s
95th percentile per-packet one-way delay: 64.170 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 386.47 Mbit/s
95th percentile per-packet one-way delay: 65.083 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 321.75 Mbit/s
95th percentile per-packet one-way delay: 63.092 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 110.13 Mbit/s
95th percentile per-packet one-way delay: 57.913 ms
Loss rate: 1.39%

Run 3: Report of Muses_DecisionTree — Data Link



Run 4: Statistics of Muses_DecisionTree

Start at: 2019-06-28 21:41:18

End at: 2019-06-28 21:41:48

Local clock offset: 0.455 ms

Remote clock offset: 0.081 ms

Below is generated by plot.py at 2019-06-29 00:33:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 683.42 Mbit/s

95th percentile per-packet one-way delay: 78.516 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 410.97 Mbit/s

95th percentile per-packet one-way delay: 78.843 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 391.89 Mbit/s

95th percentile per-packet one-way delay: 78.827 ms

Loss rate: 0.71%

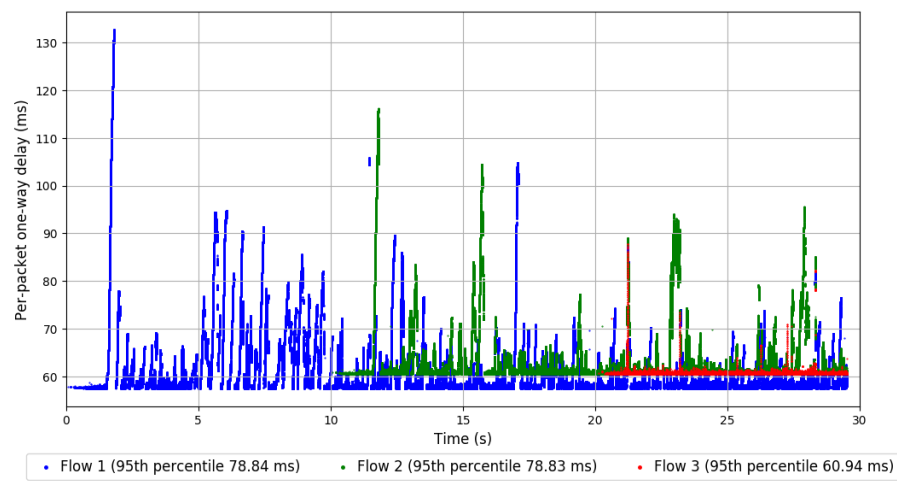
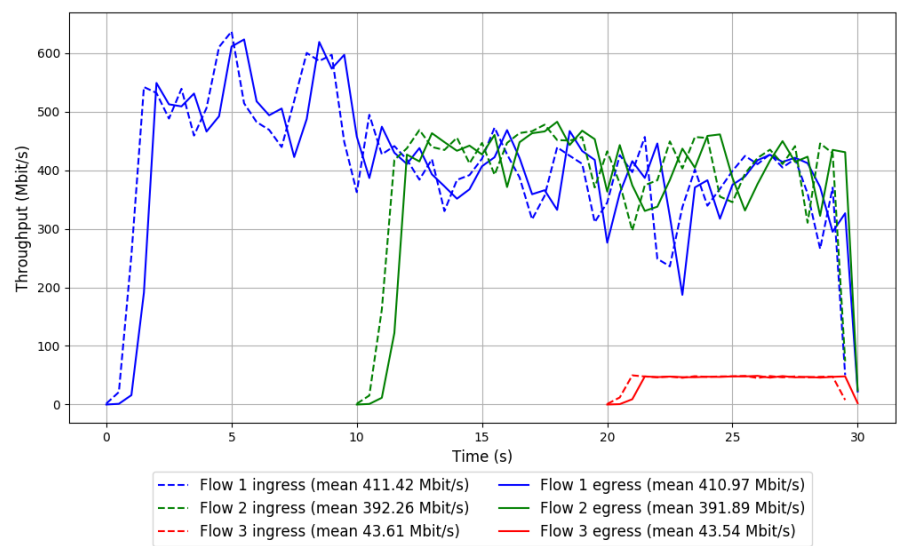
-- Flow 3:

Average throughput: 43.54 Mbit/s

95th percentile per-packet one-way delay: 60.941 ms

Loss rate: 1.40%

Run 4: Report of Muses_DecisionTree — Data Link

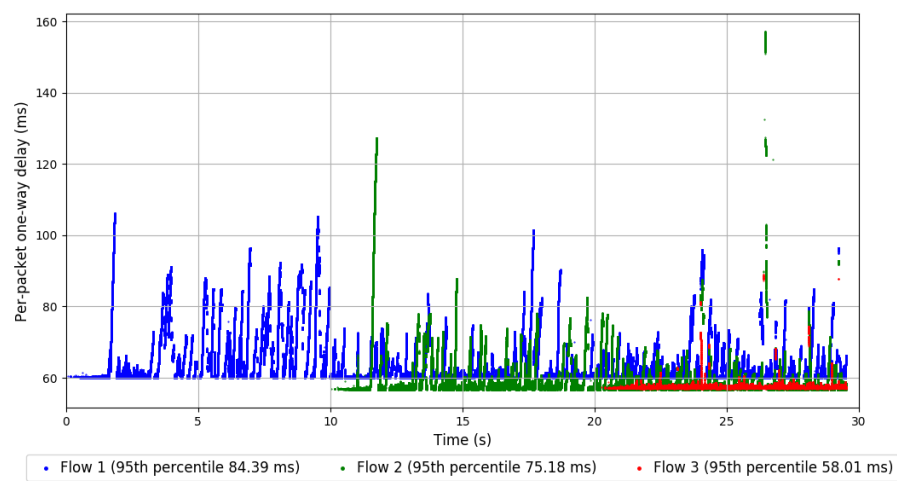
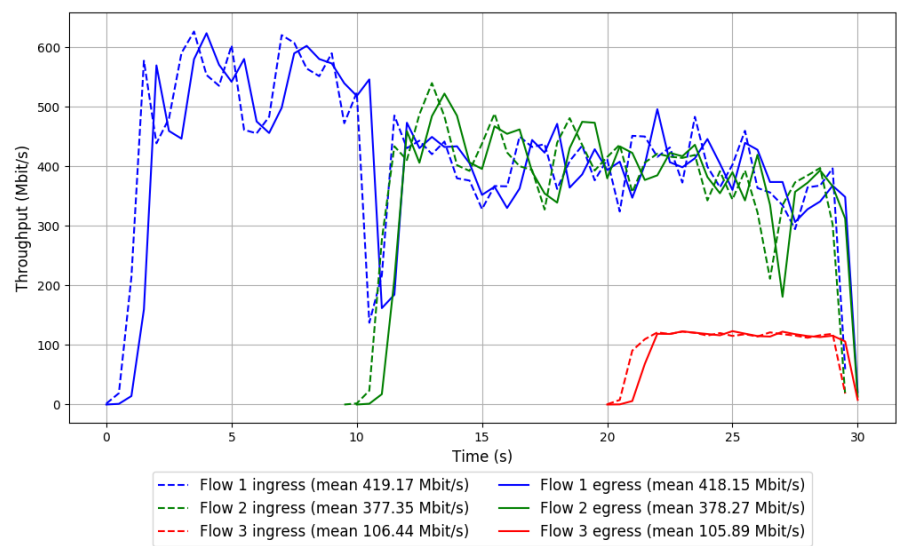


Run 5: Statistics of Muses_DecisionTree

Start at: 2019-06-28 22:18:30
End at: 2019-06-28 22:19:00
Local clock offset: -0.237 ms
Remote clock offset: -0.128 ms

Below is generated by plot.py at 2019-06-29 00:35:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 701.48 Mbit/s
95th percentile per-packet one-way delay: 81.945 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 418.15 Mbit/s
95th percentile per-packet one-way delay: 84.395 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 378.27 Mbit/s
95th percentile per-packet one-way delay: 75.179 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 105.89 Mbit/s
95th percentile per-packet one-way delay: 58.012 ms
Loss rate: 1.78%

Run 5: Report of Muses_DecisionTree — Data Link

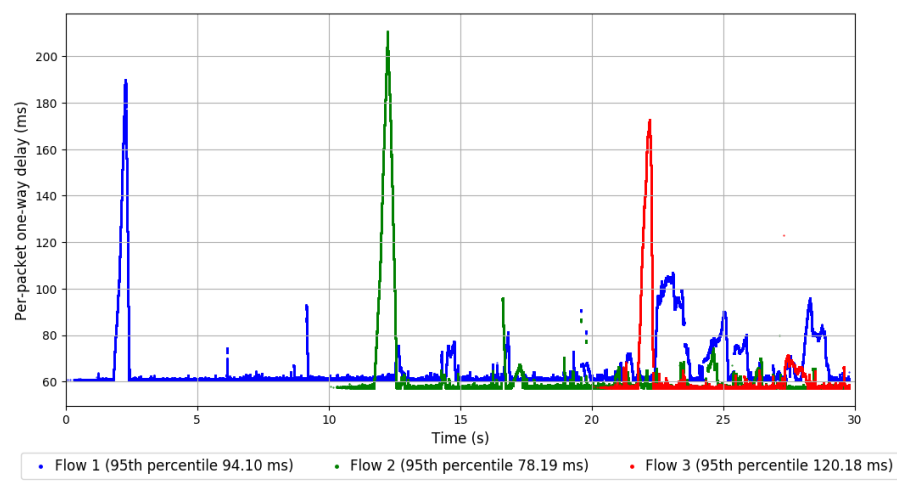
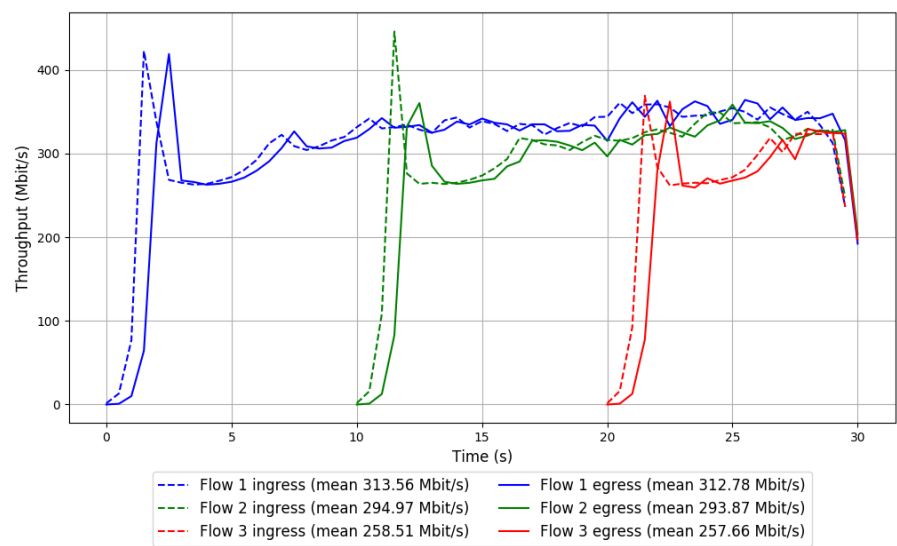


Run 1: Statistics of PCC-Allegro

Start at: 2019-06-28 19:38:40
End at: 2019-06-28 19:39:10
Local clock offset: -0.027 ms
Remote clock offset: -0.604 ms

Below is generated by plot.py at 2019-06-29 00:43:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 592.14 Mbit/s
95th percentile per-packet one-way delay: 93.603 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 312.78 Mbit/s
95th percentile per-packet one-way delay: 94.100 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 293.87 Mbit/s
95th percentile per-packet one-way delay: 78.190 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 257.66 Mbit/s
95th percentile per-packet one-way delay: 120.177 ms
Loss rate: 1.52%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-06-28 20:15:07

End at: 2019-06-28 20:15:37

Local clock offset: -0.075 ms

Remote clock offset: 0.135 ms

Below is generated by plot.py at 2019-06-29 00:53:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 653.38 Mbit/s

95th percentile per-packet one-way delay: 220.862 ms

Loss rate: 6.52%

-- Flow 1:

Average throughput: 377.61 Mbit/s

95th percentile per-packet one-way delay: 228.577 ms

Loss rate: 9.95%

-- Flow 2:

Average throughput: 289.39 Mbit/s

95th percentile per-packet one-way delay: 99.142 ms

Loss rate: 1.29%

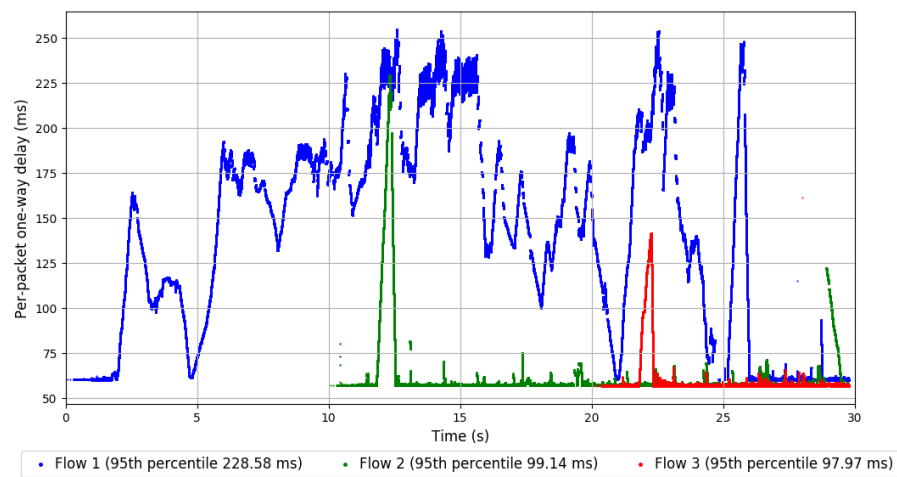
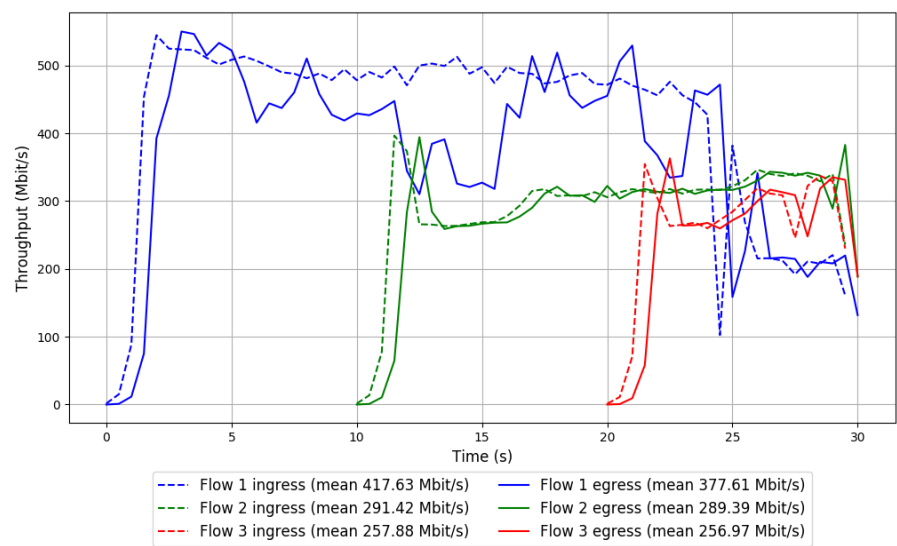
-- Flow 3:

Average throughput: 256.97 Mbit/s

95th percentile per-packet one-way delay: 97.965 ms

Loss rate: 1.55%

Run 2: Report of PCC-Allegro — Data Link

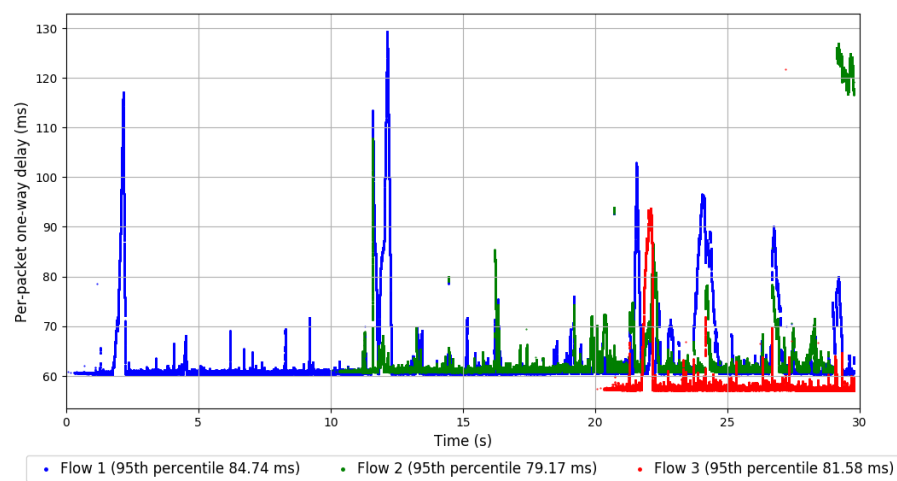
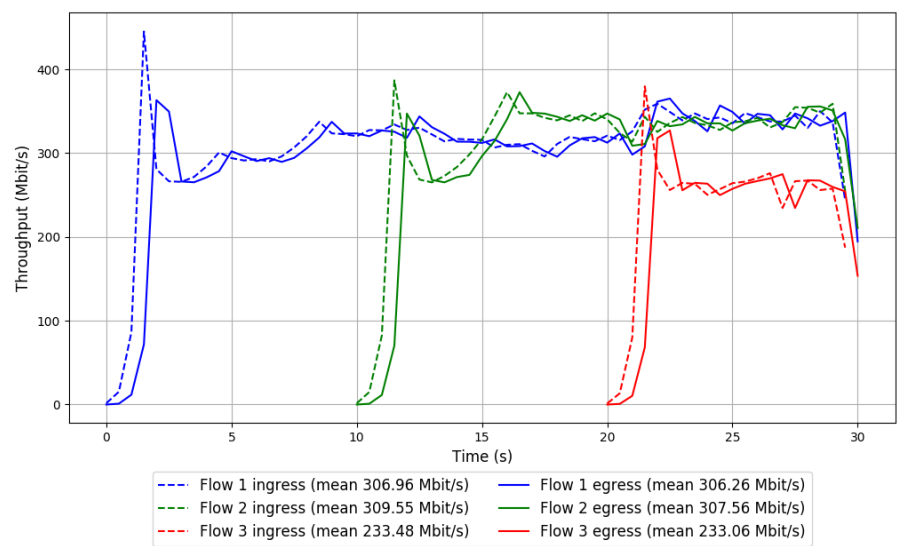


Run 3: Statistics of PCC-Allegro

Start at: 2019-06-28 20:52:15
End at: 2019-06-28 20:52:45
Local clock offset: 0.183 ms
Remote clock offset: -0.098 ms

Below is generated by plot.py at 2019-06-29 00:53:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 586.41 Mbit/s
95th percentile per-packet one-way delay: 83.589 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 306.26 Mbit/s
95th percentile per-packet one-way delay: 84.742 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 307.56 Mbit/s
95th percentile per-packet one-way delay: 79.168 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 233.06 Mbit/s
95th percentile per-packet one-way delay: 81.576 ms
Loss rate: 1.39%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-06-28 21:29:21

End at: 2019-06-28 21:29:51

Local clock offset: 0.472 ms

Remote clock offset: 0.176 ms

Below is generated by plot.py at 2019-06-29 00:56:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 625.95 Mbit/s

95th percentile per-packet one-way delay: 198.913 ms

Loss rate: 4.72%

-- Flow 1:

Average throughput: 357.38 Mbit/s

95th percentile per-packet one-way delay: 187.664 ms

Loss rate: 5.47%

-- Flow 2:

Average throughput: 290.55 Mbit/s

95th percentile per-packet one-way delay: 240.078 ms

Loss rate: 3.88%

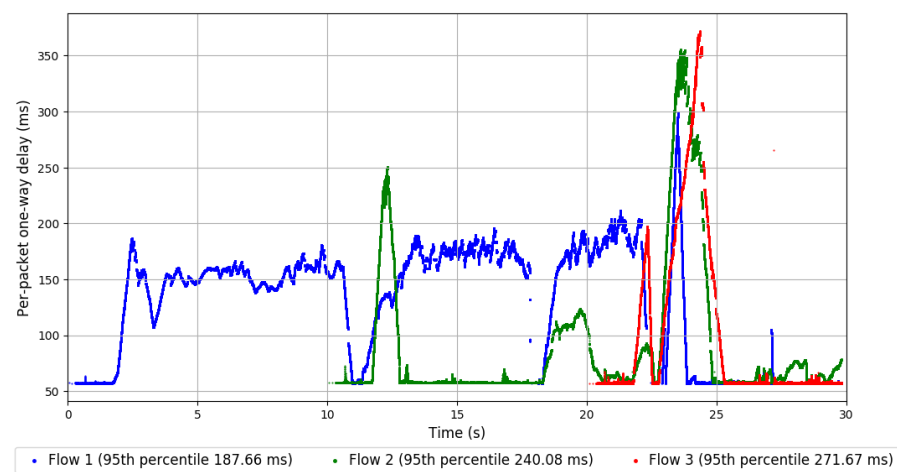
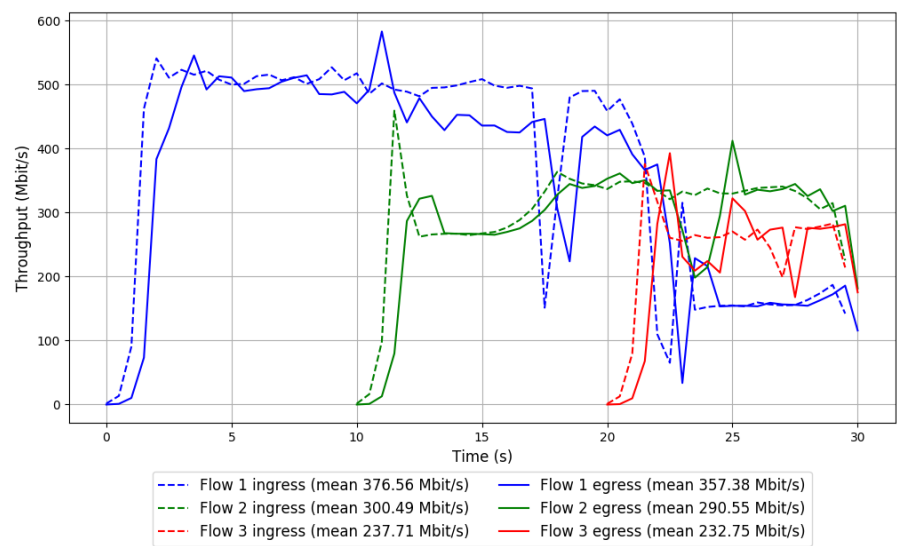
-- Flow 3:

Average throughput: 232.75 Mbit/s

95th percentile per-packet one-way delay: 271.667 ms

Loss rate: 3.27%

Run 4: Report of PCC-Allegro — Data Link

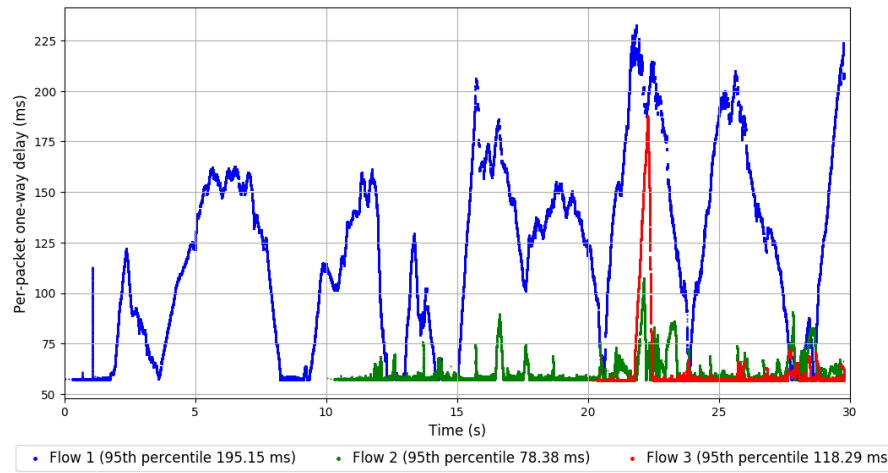
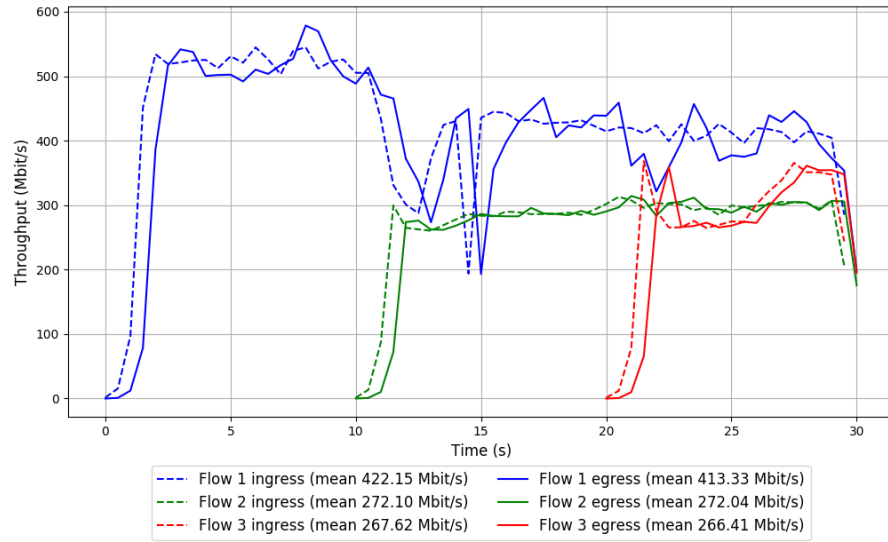


Run 5: Statistics of PCC-Allegro

Start at: 2019-06-28 22:06:26
End at: 2019-06-28 22:06:56
Local clock offset: -0.005 ms
Remote clock offset: -0.145 ms

Below is generated by plot.py at 2019-06-29 00:59:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 680.84 Mbit/s
95th percentile per-packet one-way delay: 184.862 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 413.33 Mbit/s
95th percentile per-packet one-way delay: 195.147 ms
Loss rate: 2.46%
-- Flow 2:
Average throughput: 272.04 Mbit/s
95th percentile per-packet one-way delay: 78.377 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 266.41 Mbit/s
95th percentile per-packet one-way delay: 118.290 ms
Loss rate: 1.67%

Run 5: Report of PCC-Allegro — Data Link

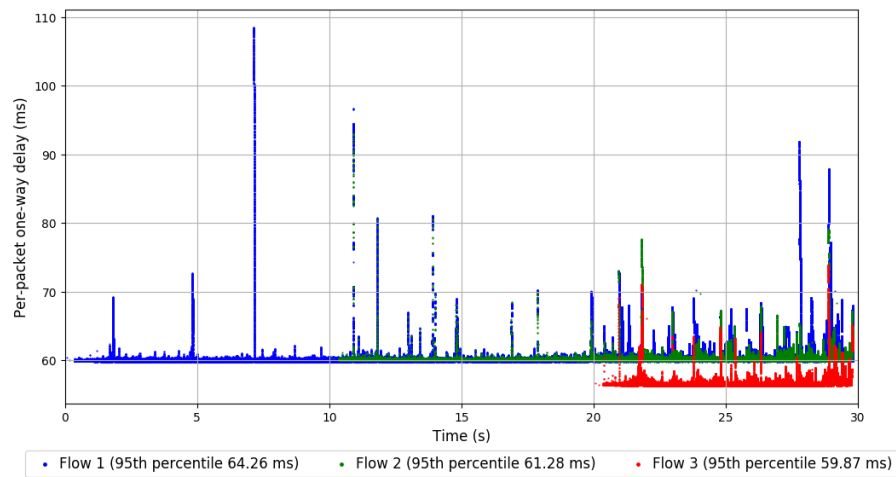
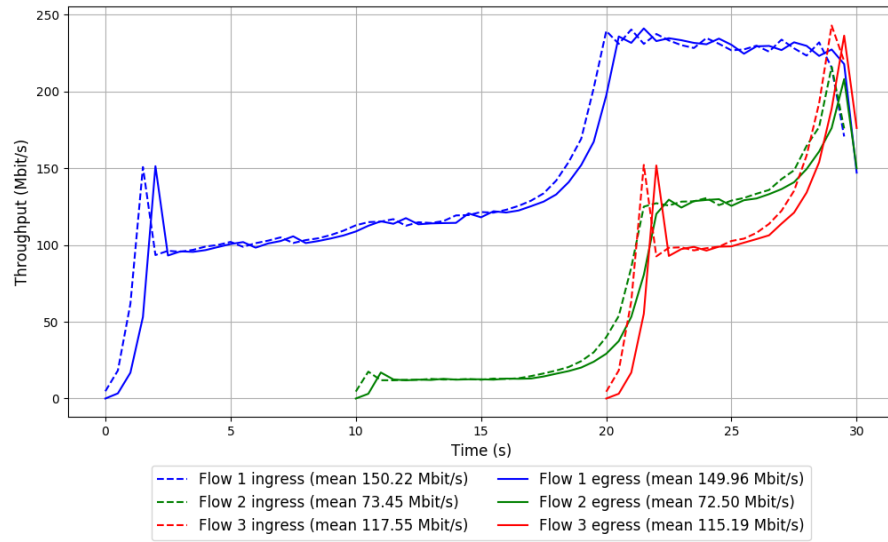


```
Run 1: Statistics of PCC-Expr

Start at: 2019-06-28 19:59:50
End at: 2019-06-28 20:00:20
Local clock offset: -0.427 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2019-06-29 00:59:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.83 Mbit/s
95th percentile per-packet one-way delay: 62.994 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 149.96 Mbit/s
95th percentile per-packet one-way delay: 64.260 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 72.50 Mbit/s
95th percentile per-packet one-way delay: 61.278 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 115.19 Mbit/s
95th percentile per-packet one-way delay: 59.867 ms
Loss rate: 3.18%
```

Run 1: Report of PCC-Expr — Data Link

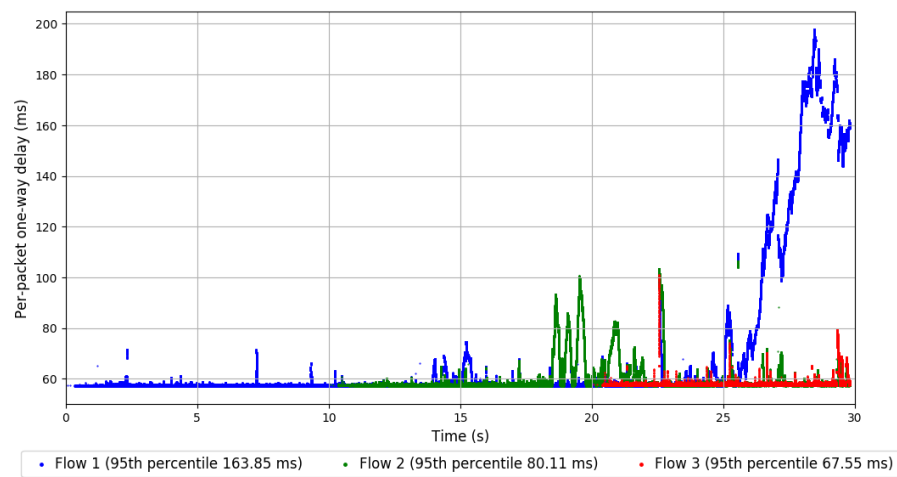
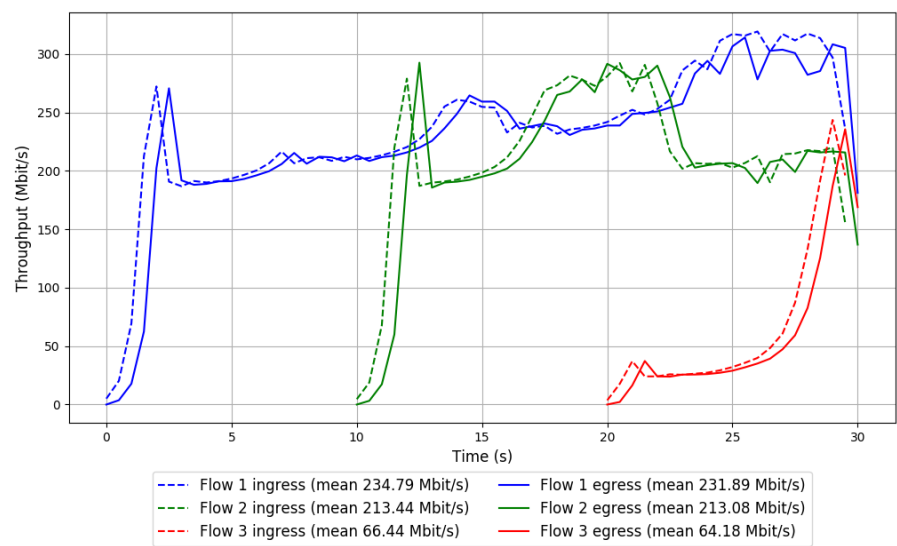


Run 2: Statistics of PCC-Expr

Start at: 2019-06-28 20:36:34
End at: 2019-06-28 20:37:04
Local clock offset: 0.321 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-06-29 00:59:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 394.32 Mbit/s
95th percentile per-packet one-way delay: 141.082 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 231.89 Mbit/s
95th percentile per-packet one-way delay: 163.855 ms
Loss rate: 1.62%
-- Flow 2:
Average throughput: 213.08 Mbit/s
95th percentile per-packet one-way delay: 80.109 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 64.18 Mbit/s
95th percentile per-packet one-way delay: 67.546 ms
Loss rate: 4.55%

Run 2: Report of PCC-Expr — Data Link

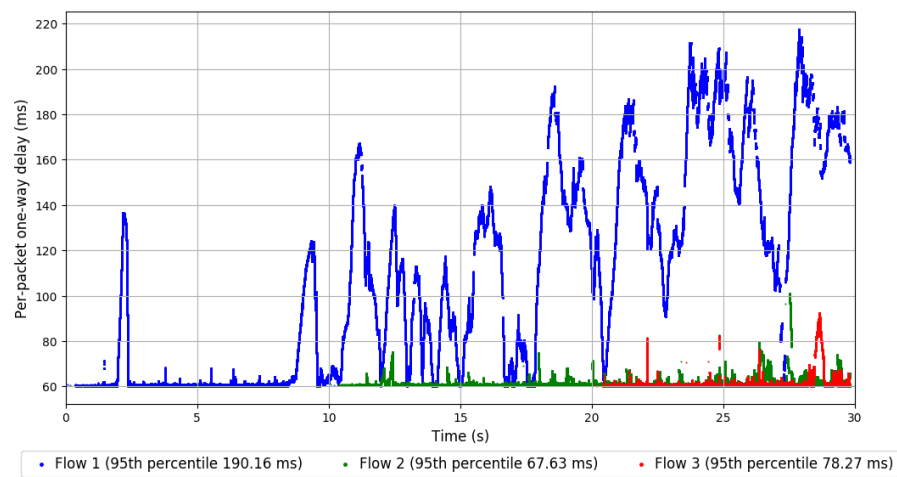
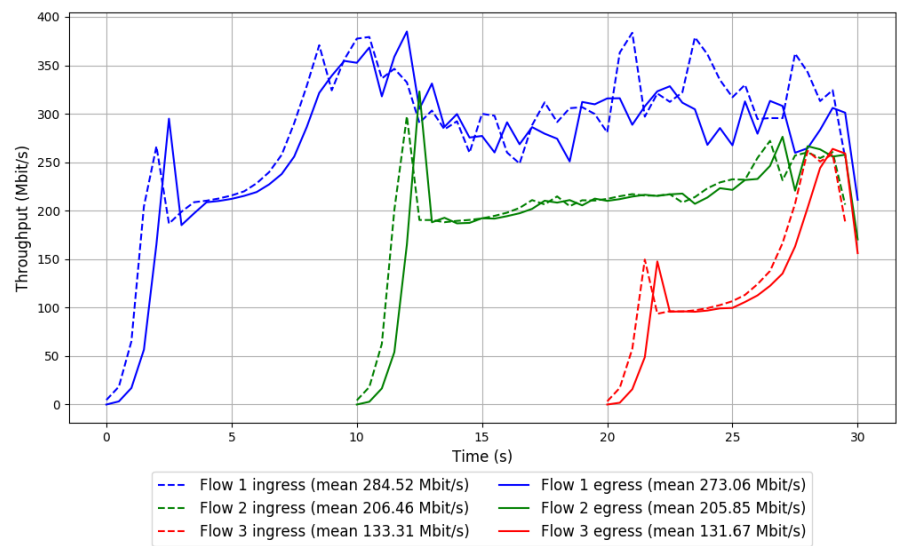


Run 3: Statistics of PCC-Expr

Start at: 2019-06-28 21:13:35
End at: 2019-06-28 21:14:05
Local clock offset: 0.239 ms
Remote clock offset: -0.161 ms

Below is generated by plot.py at 2019-06-29 00:59:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 452.72 Mbit/s
95th percentile per-packet one-way delay: 182.405 ms
Loss rate: 3.20%
-- Flow 1:
Average throughput: 273.06 Mbit/s
95th percentile per-packet one-way delay: 190.156 ms
Loss rate: 4.42%
-- Flow 2:
Average throughput: 205.85 Mbit/s
95th percentile per-packet one-way delay: 67.626 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 131.67 Mbit/s
95th percentile per-packet one-way delay: 78.266 ms
Loss rate: 2.47%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-06-28 21:50:47

End at: 2019-06-28 21:51:17

Local clock offset: 0.448 ms

Remote clock offset: 0.088 ms

Below is generated by plot.py at 2019-06-29 00:59:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.60 Mbit/s

95th percentile per-packet one-way delay: 93.824 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 194.98 Mbit/s

95th percentile per-packet one-way delay: 104.743 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 230.45 Mbit/s

95th percentile per-packet one-way delay: 67.921 ms

Loss rate: 0.72%

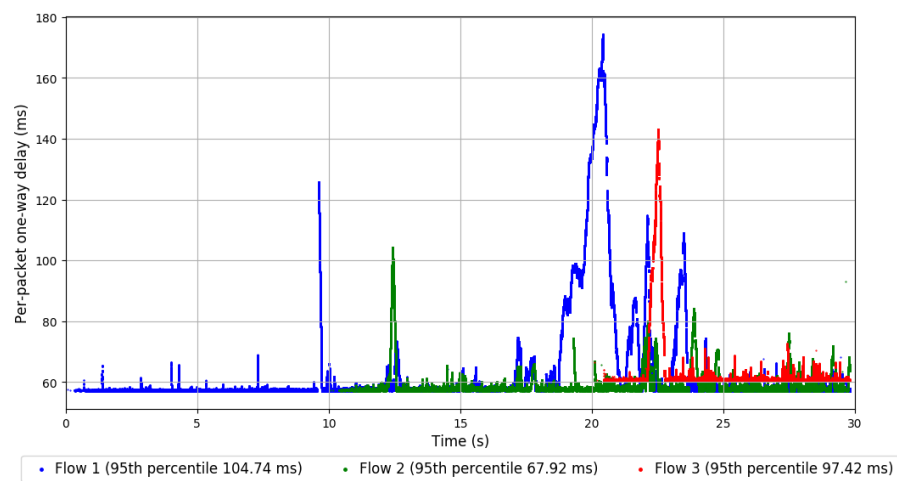
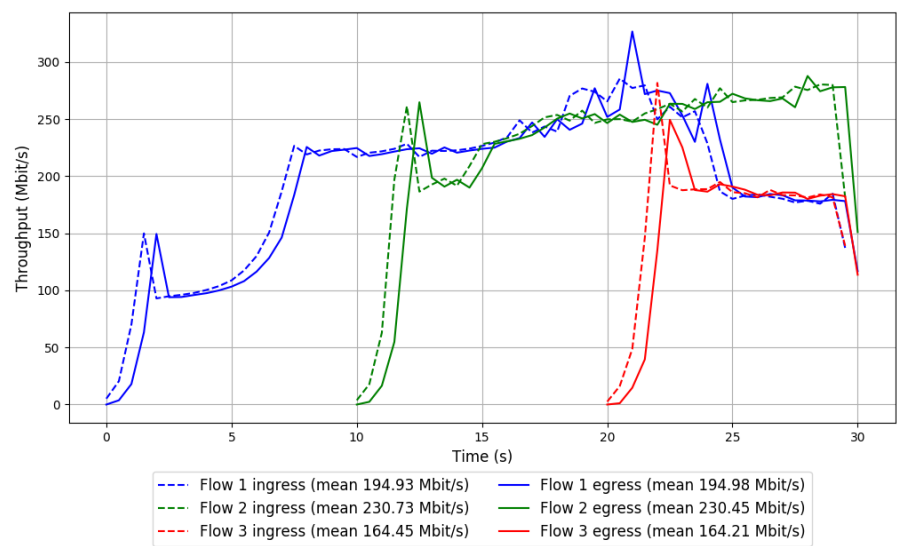
-- Flow 3:

Average throughput: 164.21 Mbit/s

95th percentile per-packet one-way delay: 97.415 ms

Loss rate: 1.44%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-06-28 22:27:36

End at: 2019-06-28 22:28:06

Local clock offset: 0.454 ms

Remote clock offset: 0.04 ms

Below is generated by plot.py at 2019-06-29 01:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 454.25 Mbit/s

95th percentile per-packet one-way delay: 157.491 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 288.04 Mbit/s

95th percentile per-packet one-way delay: 158.941 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 235.86 Mbit/s

95th percentile per-packet one-way delay: 151.520 ms

Loss rate: 0.88%

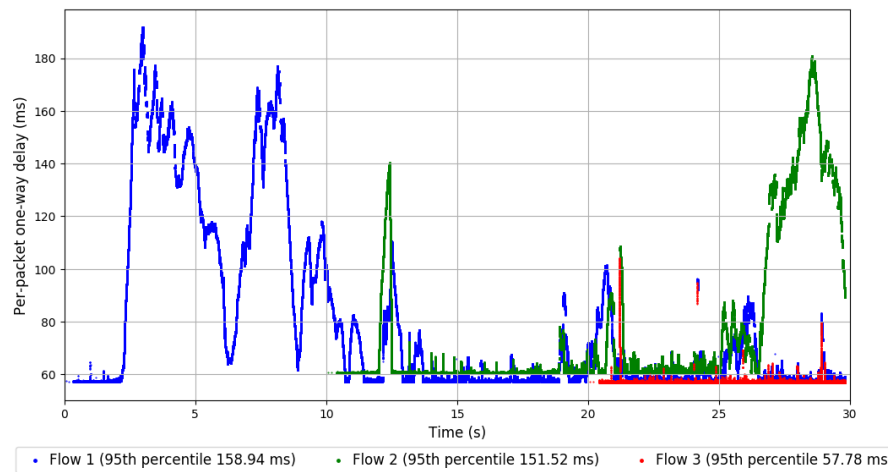
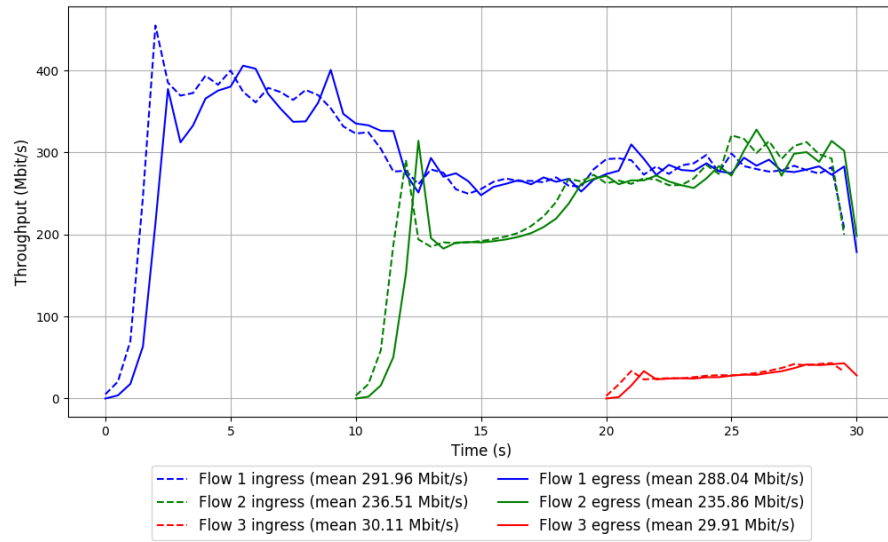
-- Flow 3:

Average throughput: 29.91 Mbit/s

95th percentile per-packet one-way delay: 57.779 ms

Loss rate: 1.87%

Run 5: Report of PCC-Expr — Data Link

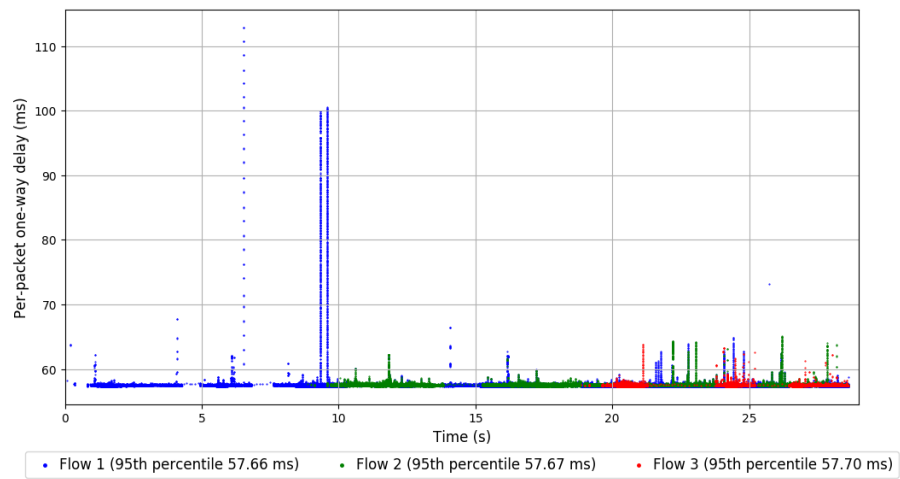
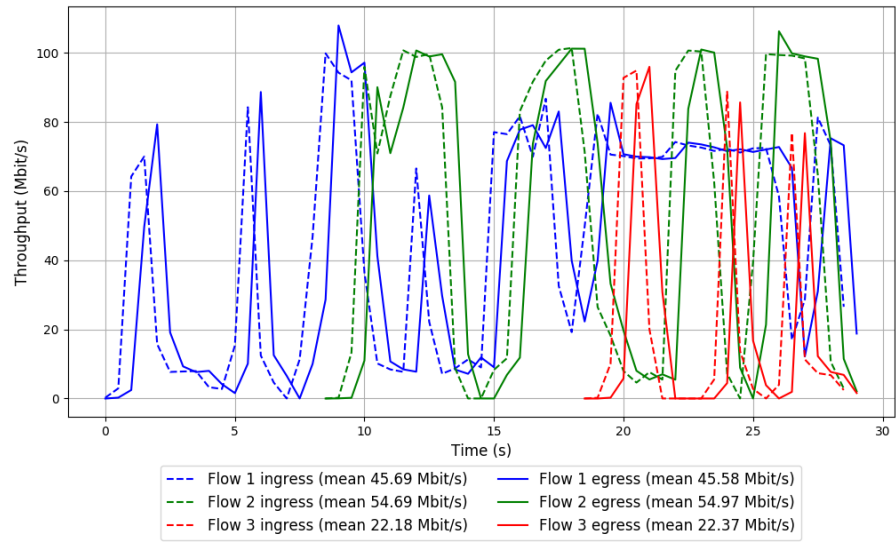


Run 1: Statistics of QUIC Cubic

Start at: 2019-06-28 19:33:49
End at: 2019-06-28 19:34:19
Local clock offset: -0.186 ms
Remote clock offset: -0.924 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.26 Mbit/s
95th percentile per-packet one-way delay: 57.669 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 45.58 Mbit/s
95th percentile per-packet one-way delay: 57.661 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 54.97 Mbit/s
95th percentile per-packet one-way delay: 57.673 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 22.37 Mbit/s
95th percentile per-packet one-way delay: 57.701 ms
Loss rate: 0.36%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-06-28 20:10:17

End at: 2019-06-28 20:10:47

Local clock offset: -0.33 ms

Remote clock offset: 0.034 ms

Below is generated by plot.py at 2019-06-29 01:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.60 Mbit/s

95th percentile per-packet one-way delay: 60.329 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 63.70 Mbit/s

95th percentile per-packet one-way delay: 60.182 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 41.83 Mbit/s

95th percentile per-packet one-way delay: 60.405 ms

Loss rate: 1.03%

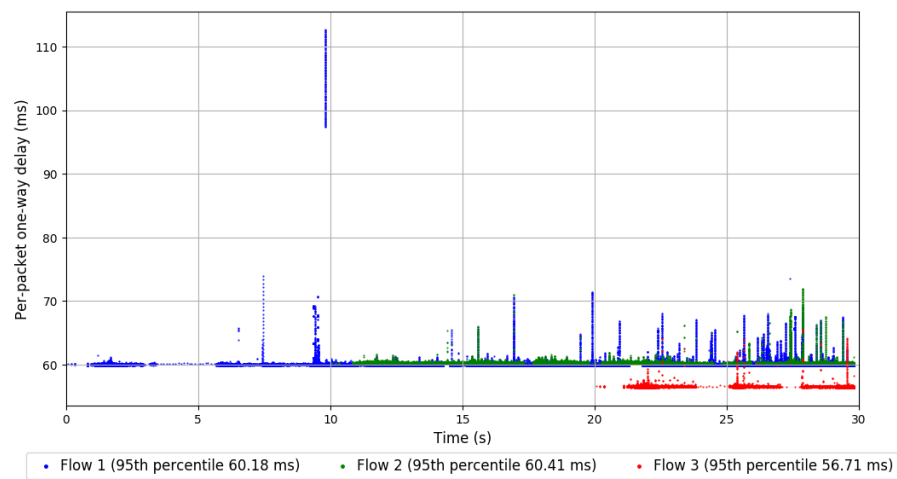
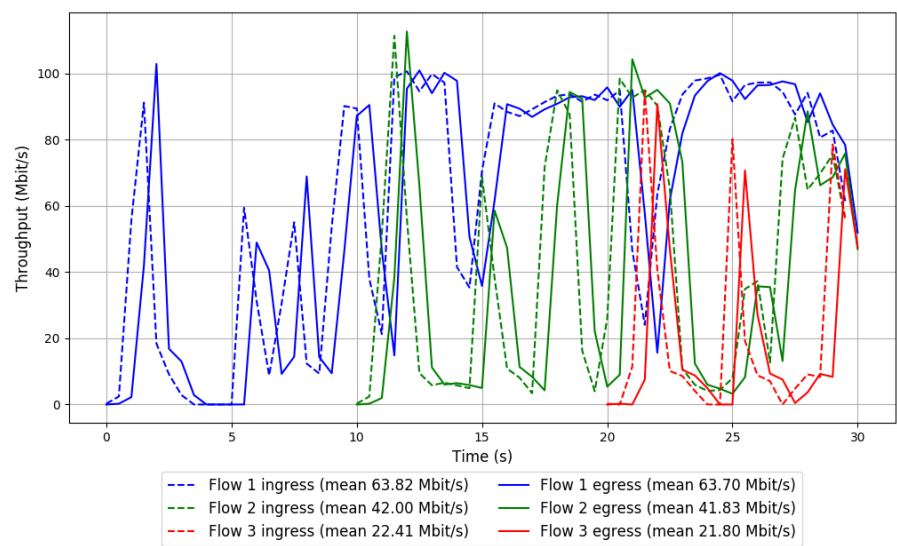
-- Flow 3:

Average throughput: 21.80 Mbit/s

95th percentile per-packet one-way delay: 56.707 ms

Loss rate: 3.91%

Run 2: Report of QUIC Cubic — Data Link

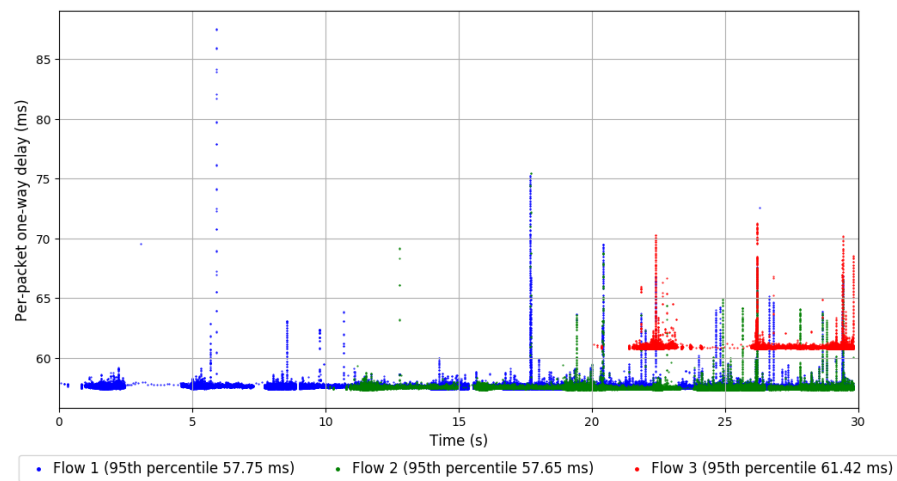
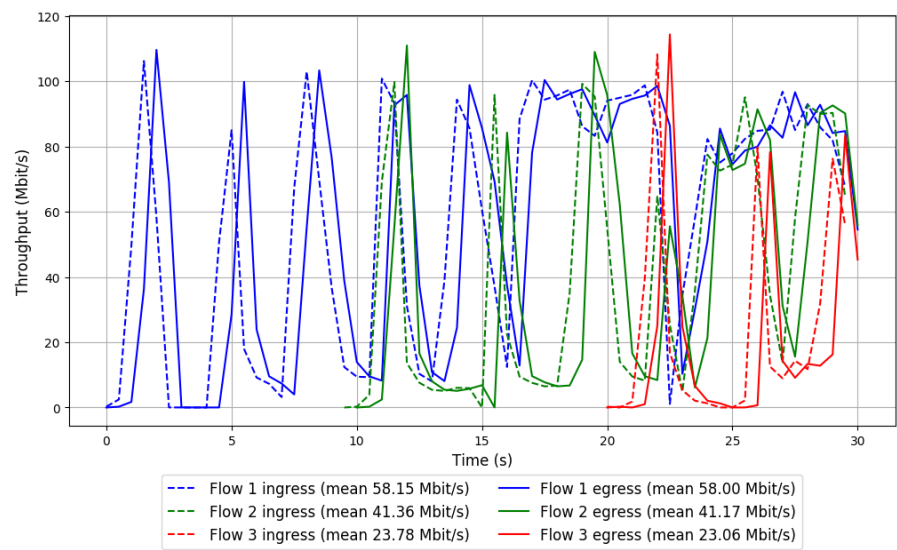


Run 3: Statistics of QUIC Cubic

Start at: 2019-06-28 20:47:24
End at: 2019-06-28 20:47:54
Local clock offset: 0.09 ms
Remote clock offset: -0.215 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 60.852 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 58.00 Mbit/s
95th percentile per-packet one-way delay: 57.747 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 41.17 Mbit/s
95th percentile per-packet one-way delay: 57.651 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 23.06 Mbit/s
95th percentile per-packet one-way delay: 61.423 ms
Loss rate: 4.22%

Run 3: Report of QUIC Cubic — Data Link

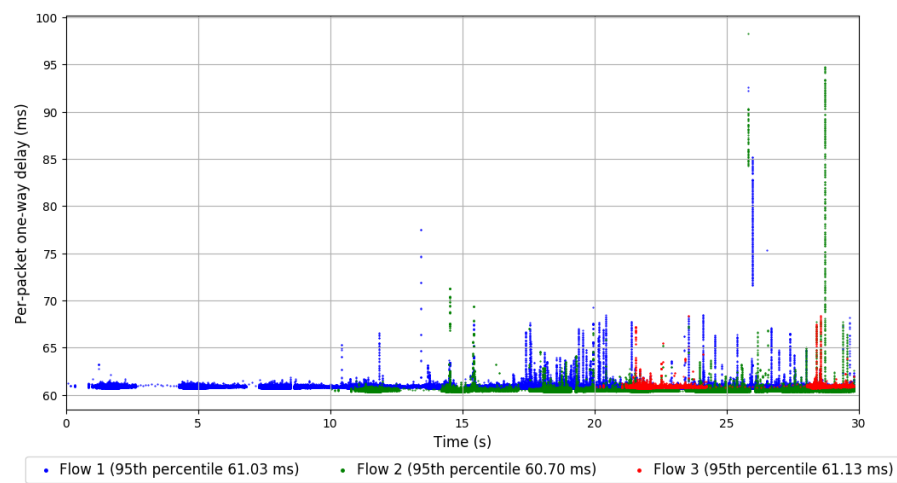
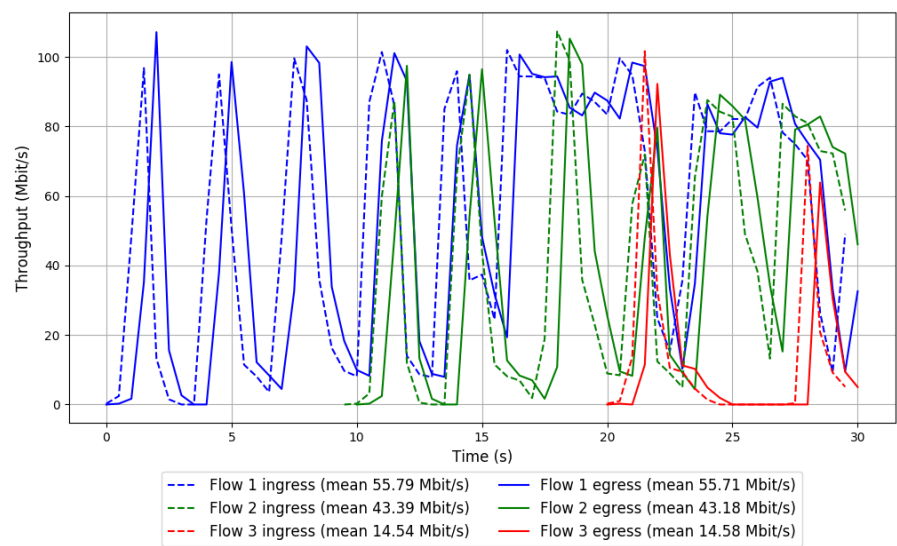


Run 4: Statistics of QUIC Cubic

Start at: 2019-06-28 21:24:31
End at: 2019-06-28 21:25:01
Local clock offset: 0.376 ms
Remote clock offset: -0.099 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.18 Mbit/s
95th percentile per-packet one-way delay: 61.010 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 55.71 Mbit/s
95th percentile per-packet one-way delay: 61.034 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 43.18 Mbit/s
95th percentile per-packet one-way delay: 60.701 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 14.58 Mbit/s
95th percentile per-packet one-way delay: 61.130 ms
Loss rate: 0.40%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-06-28 22:01:35

End at: 2019-06-28 22:02:05

Local clock offset: 0.223 ms

Remote clock offset: -0.08 ms

Below is generated by plot.py at 2019-06-29 01:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.78 Mbit/s

95th percentile per-packet one-way delay: 60.619 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 45.61 Mbit/s

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

Loss rate: 0.66%

-- Flow 2:

Average throughput: 35.91 Mbit/s

95th percentile per-packet one-way delay: 57.242 ms

Loss rate: 1.24%

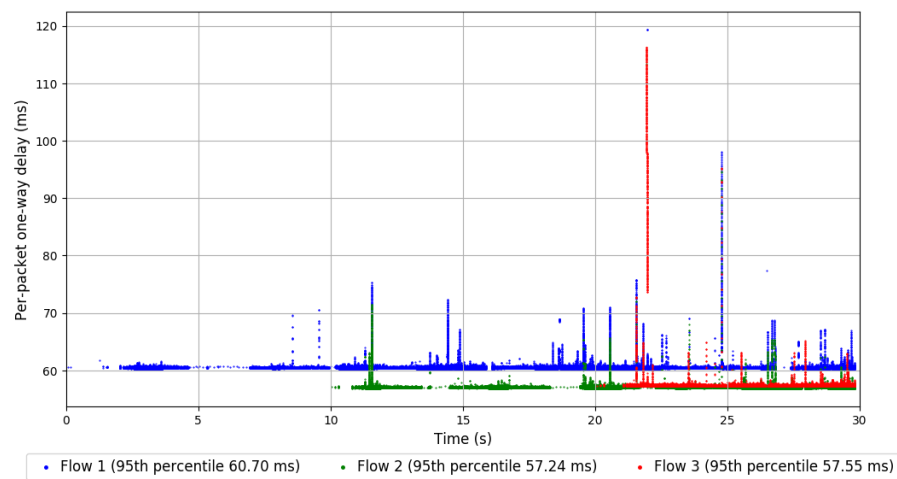
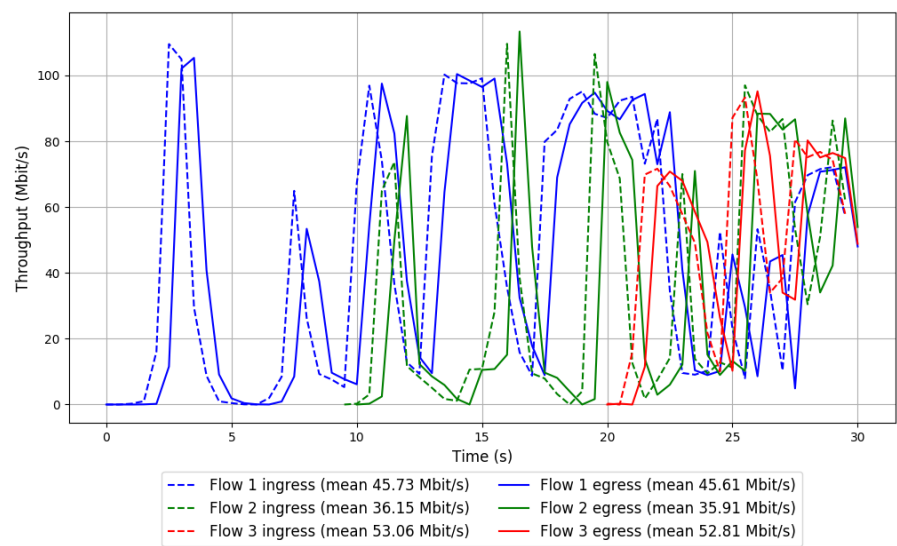
-- Flow 3:

Average throughput: 52.81 Mbit/s

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

Loss rate: 1.67%

Run 5: Report of QUIC Cubic — Data Link

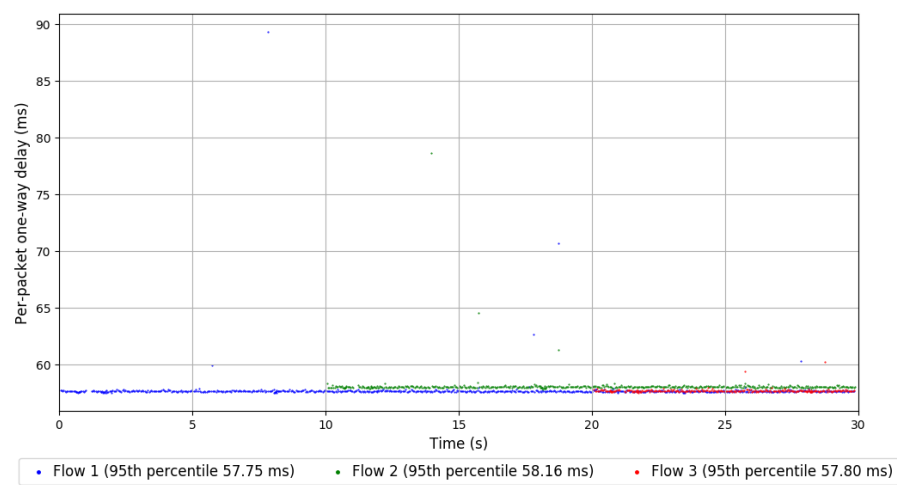
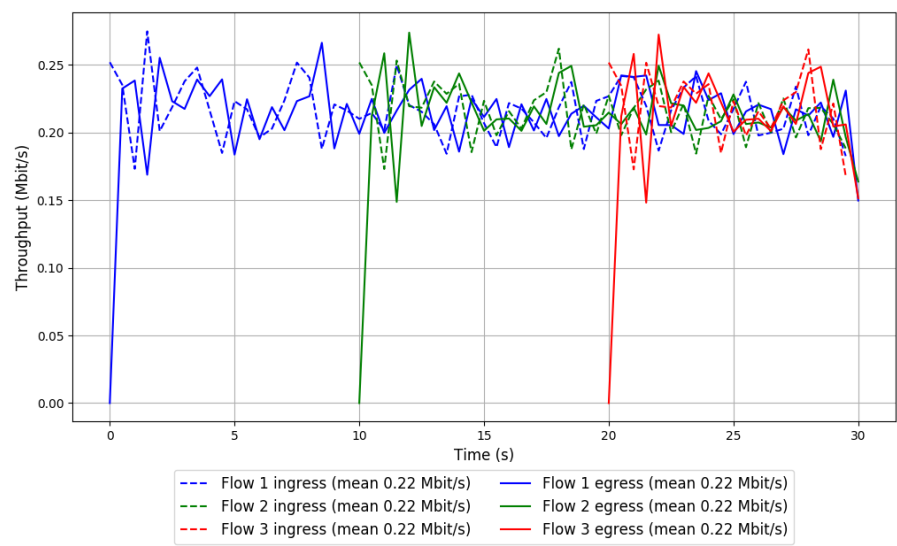


Run 1: Statistics of SCReAM

Start at: 2019-06-28 19:42:16
End at: 2019-06-28 19:42:46
Local clock offset: 0.415 ms
Remote clock offset: -0.189 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 58.084 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.750 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.161 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.799 ms
Loss rate: 1.11%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2019-06-28 20:18:49

End at: 2019-06-28 20:19:19

Local clock offset: 0.322 ms

Remote clock offset: 0.047 ms

Below is generated by plot.py at 2019-06-29 01:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 61.054 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.090 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.598 ms

Loss rate: 0.61%

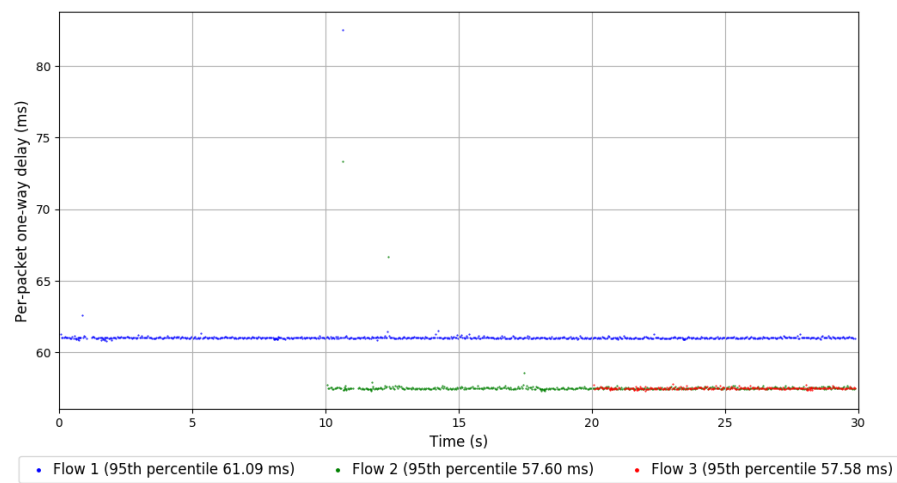
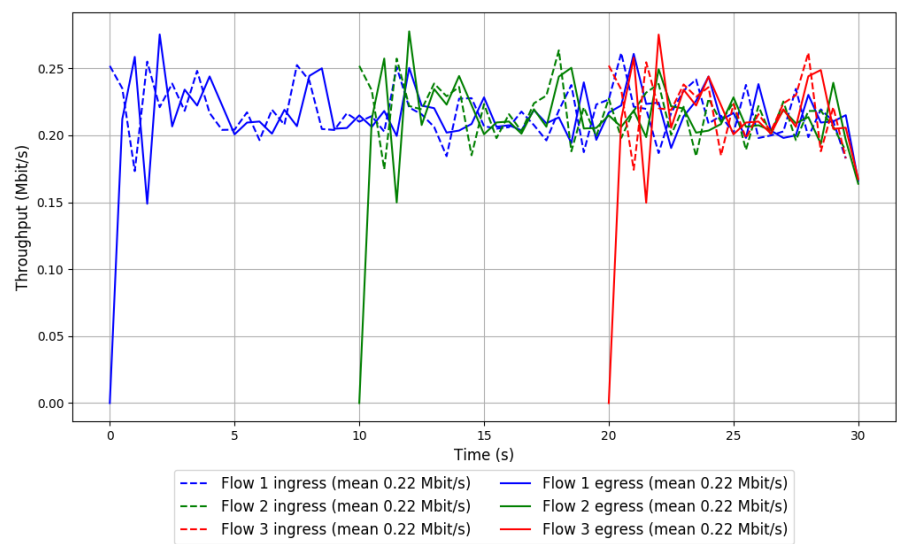
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.582 ms

Loss rate: 1.09%

Run 2: Report of SReAM — Data Link

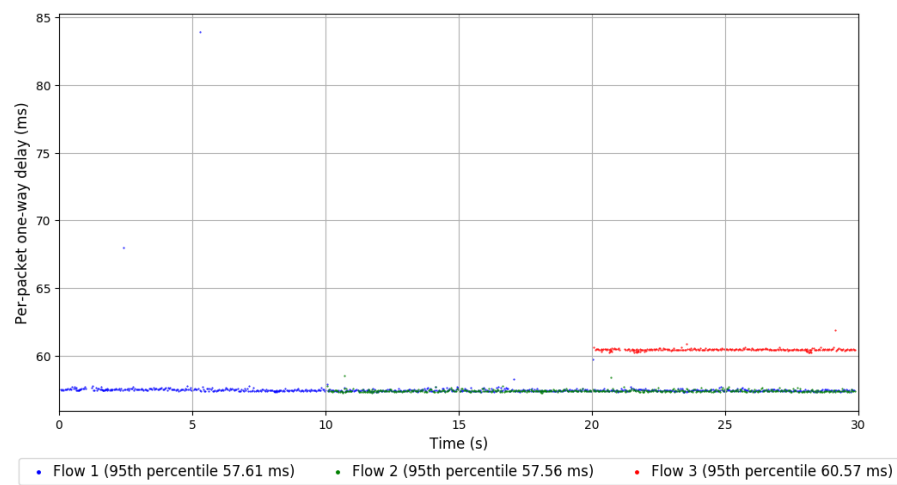
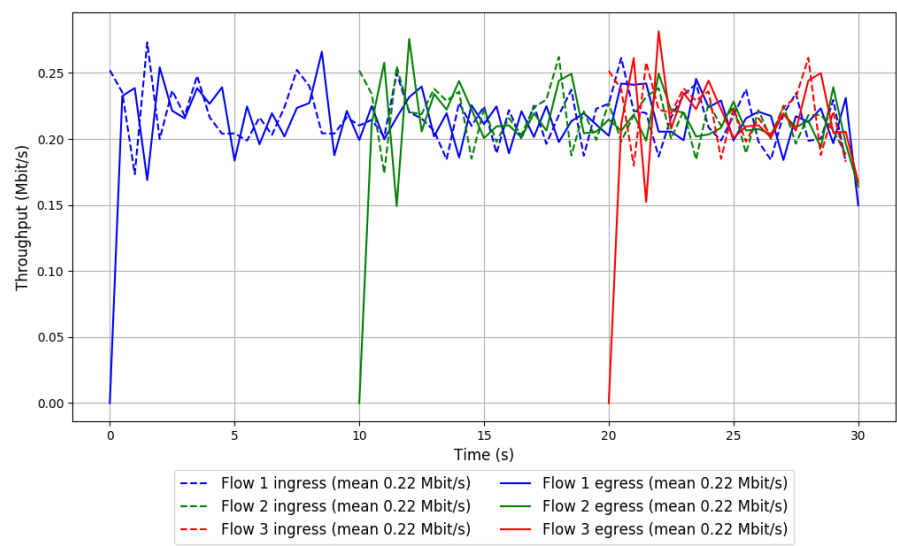


Run 3: Statistics of SReAM

Start at: 2019-06-28 20:55:54
End at: 2019-06-28 20:56:24
Local clock offset: 0.017 ms
Remote clock offset: -0.074 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 60.482 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.608 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.562 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.570 ms
Loss rate: 1.08%

Run 3: Report of SReAM — Data Link

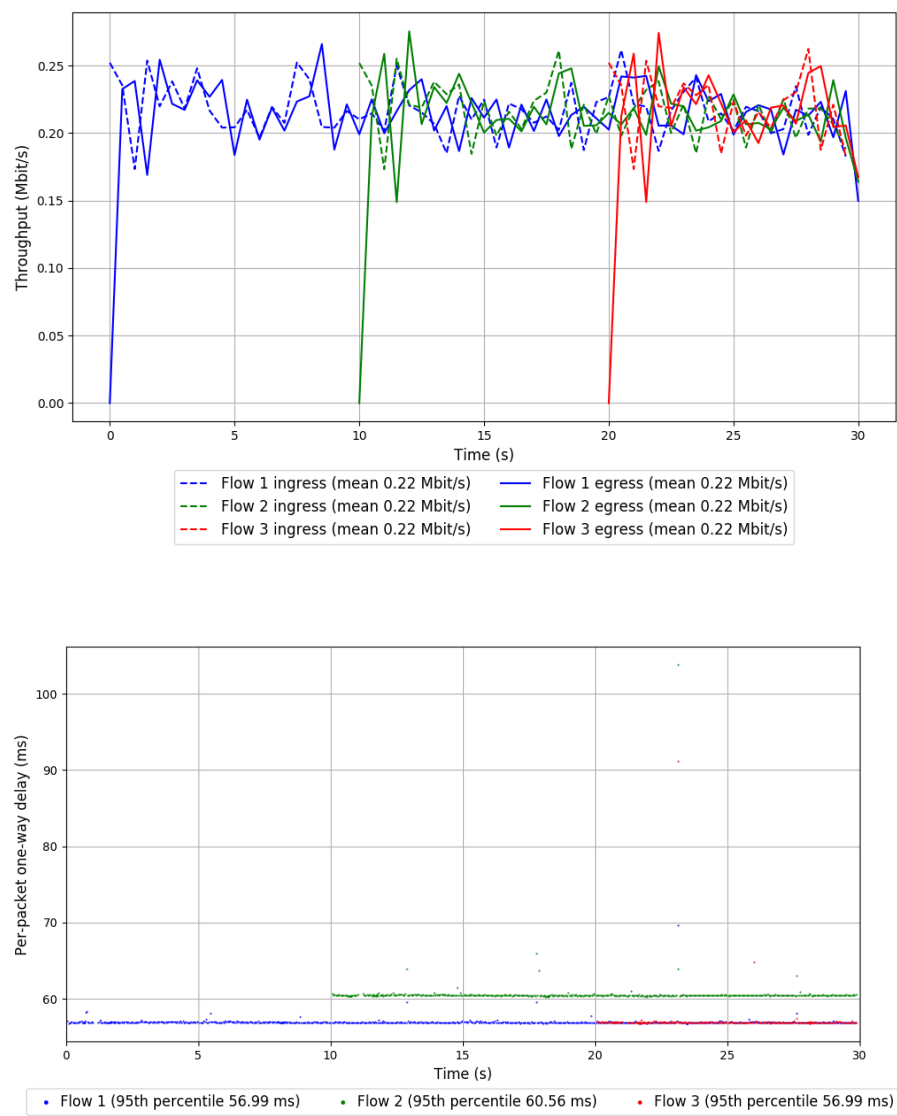


Run 4: Statistics of SReAM

Start at: 2019-06-28 21:33:04
End at: 2019-06-28 21:33:34
Local clock offset: -0.384 ms
Remote clock offset: -0.206 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 60.480 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.994 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.560 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.992 ms
Loss rate: 1.09%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2019-06-28 22:10:04

End at: 2019-06-28 22:10:34

Local clock offset: 0.239 ms

Remote clock offset: 0.001 ms

Below is generated by plot.py at 2019-06-29 01:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 60.610 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.629 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.663 ms

Loss rate: 0.61%

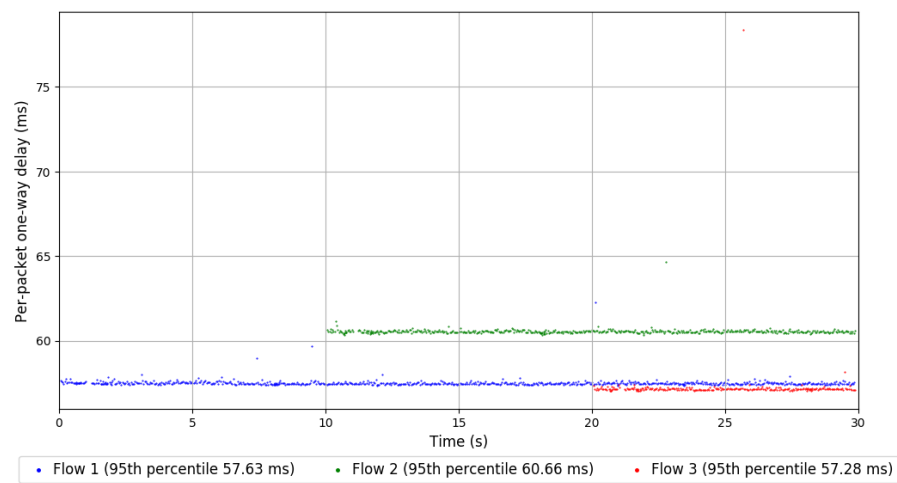
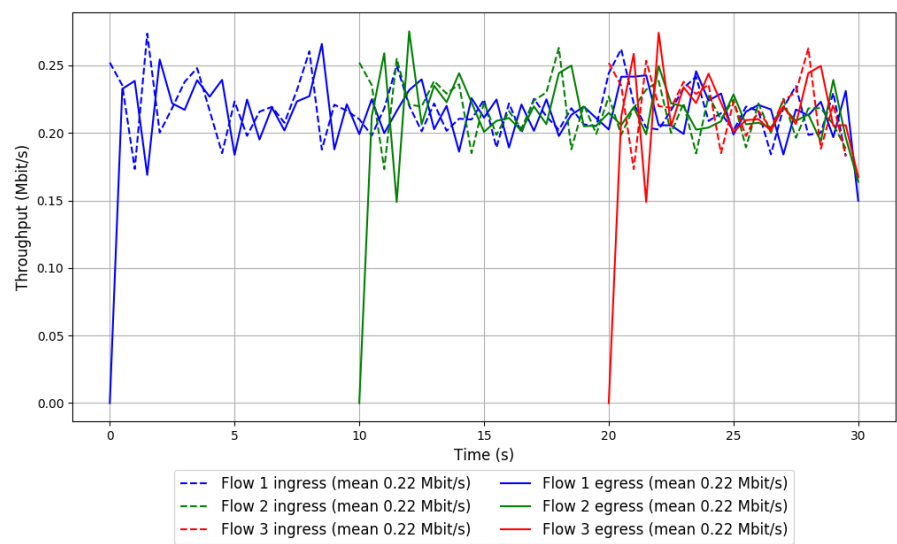
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.277 ms

Loss rate: 1.09%

Run 5: Report of SReAM — Data Link

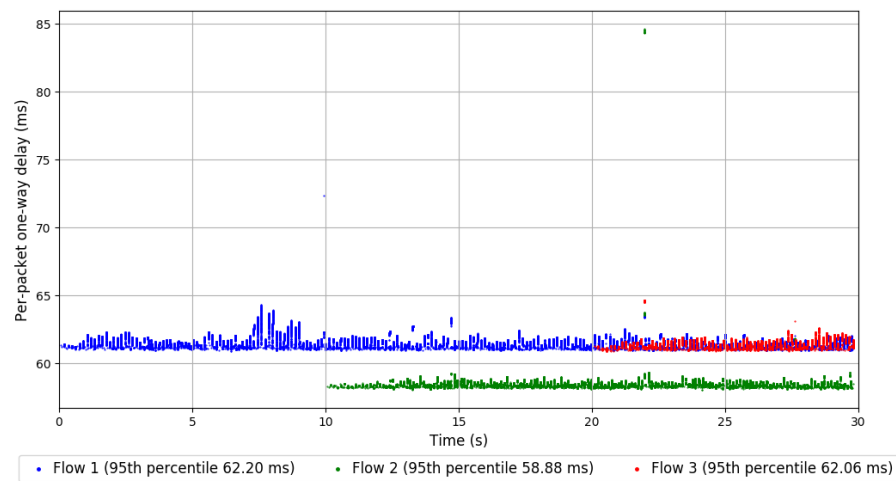
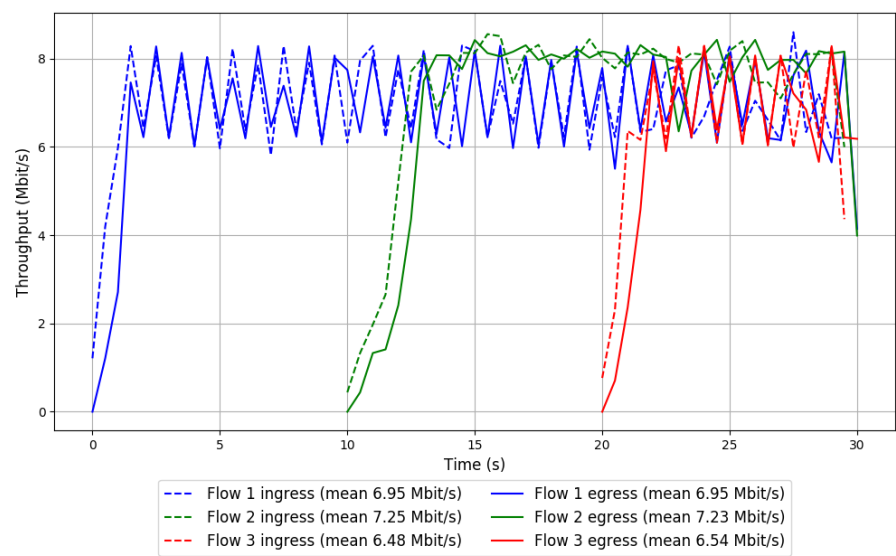


Run 1: Statistics of Sprout

Start at: 2019-06-28 19:24:47
End at: 2019-06-28 19:25:17
Local clock offset: -0.031 ms
Remote clock offset: -0.953 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 13.87 Mbit/s
95th percentile per-packet one-way delay: 62.049 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 62.201 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 58.875 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 62.057 ms
Loss rate: 0.19%

Run 1: Report of Sprout — Data Link

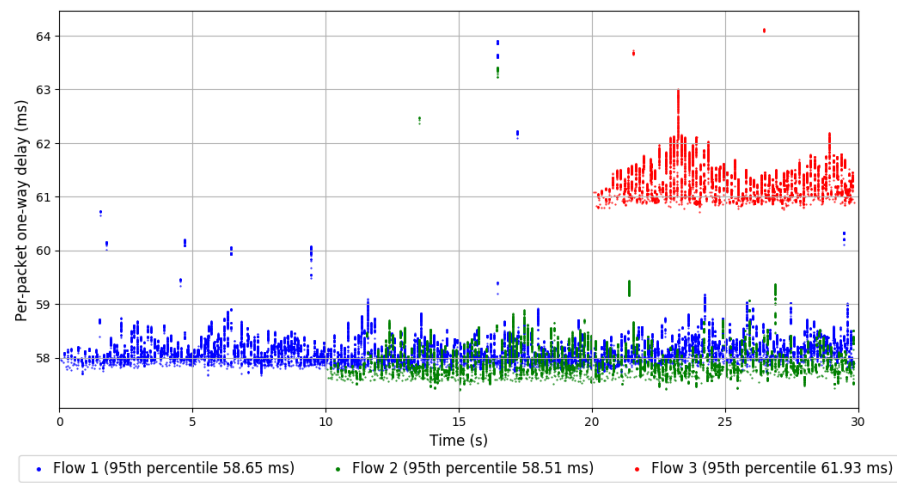
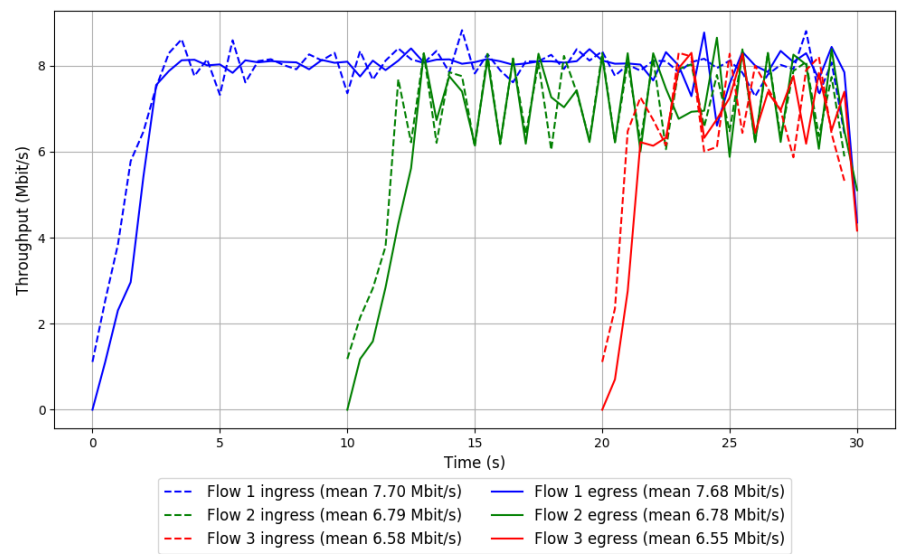


Run 2: Statistics of Sprout

Start at: 2019-06-28 20:01:25
End at: 2019-06-28 20:01:55
Local clock offset: 0.189 ms
Remote clock offset: -0.075 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 14.33 Mbit/s
95th percentile per-packet one-way delay: 61.448 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 58.651 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 58.512 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 61.930 ms
Loss rate: 1.51%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2019-06-28 20:38:24

End at: 2019-06-28 20:38:54

Local clock offset: -0.497 ms

Remote clock offset: 0.188 ms

Below is generated by plot.py at 2019-06-29 01:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.90 Mbit/s

95th percentile per-packet one-way delay: 60.605 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 7.01 Mbit/s

95th percentile per-packet one-way delay: 60.435 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.89 Mbit/s

95th percentile per-packet one-way delay: 60.752 ms

Loss rate: 0.70%

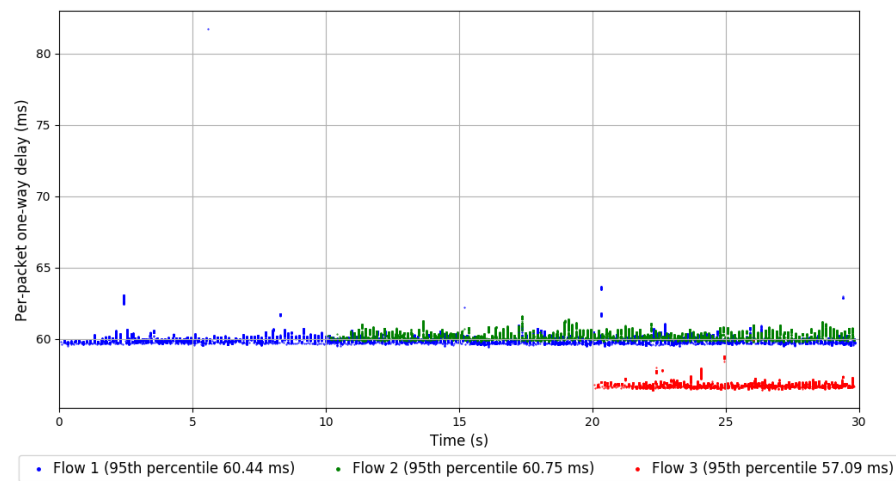
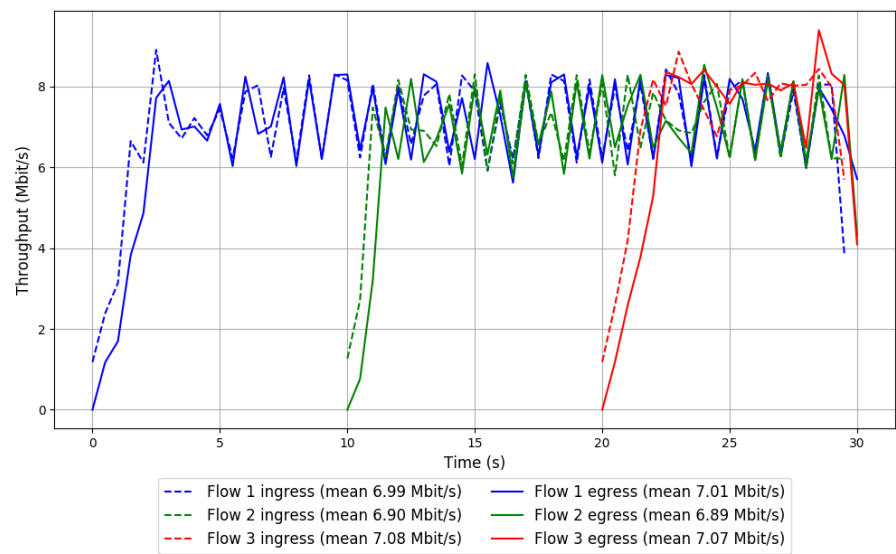
-- Flow 3:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 57.089 ms

Loss rate: 1.32%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2019-06-28 21:15:30

End at: 2019-06-28 21:16:00

Local clock offset: -0.07 ms

Remote clock offset: 0.065 ms

Below is generated by plot.py at 2019-06-29 01:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.06 Mbit/s

95th percentile per-packet one-way delay: 57.645 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 57.691 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 57.668 ms

Loss rate: 0.65%

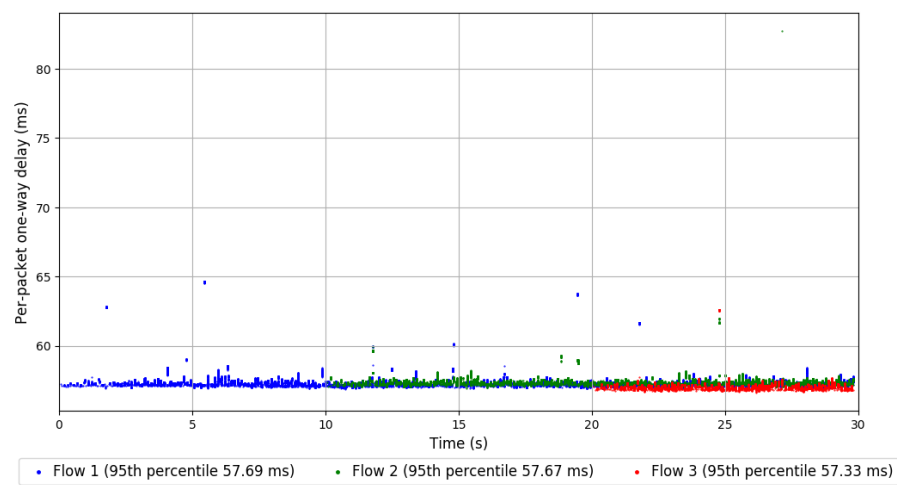
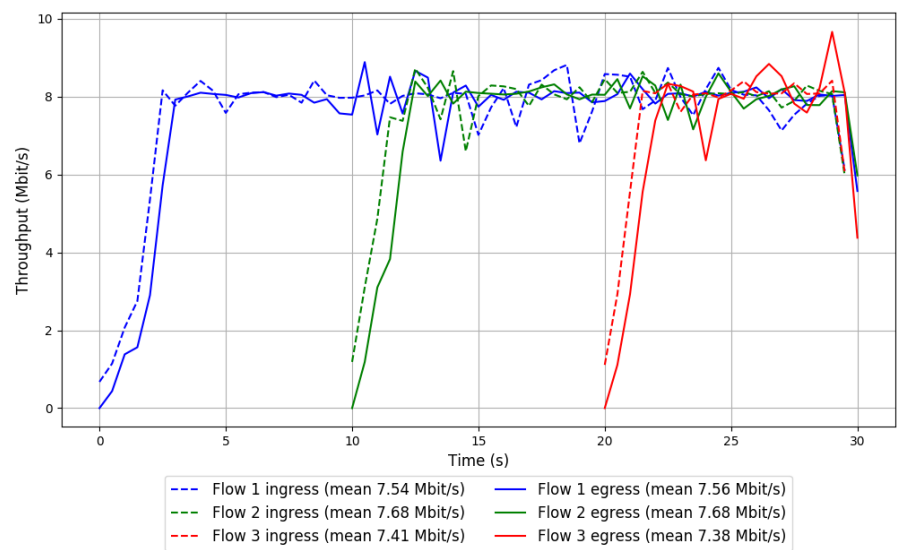
-- Flow 3:

Average throughput: 7.38 Mbit/s

95th percentile per-packet one-way delay: 57.329 ms

Loss rate: 1.37%

Run 4: Report of Sprout — Data Link

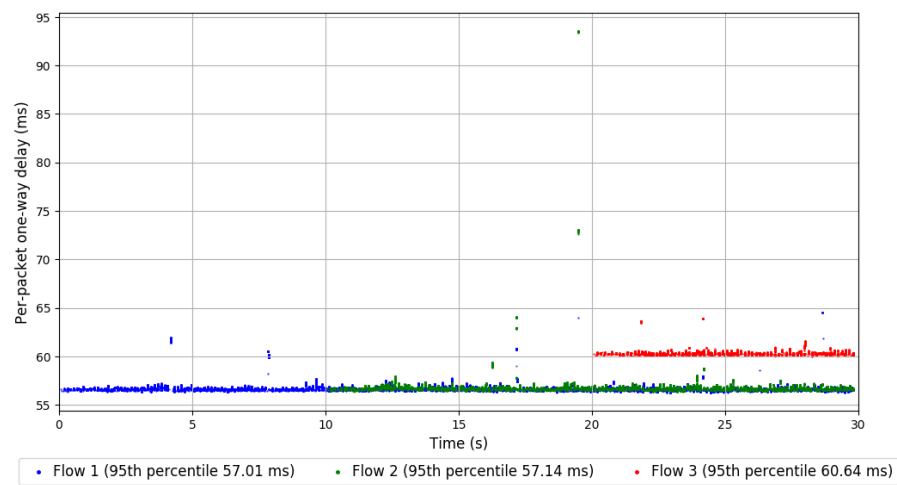
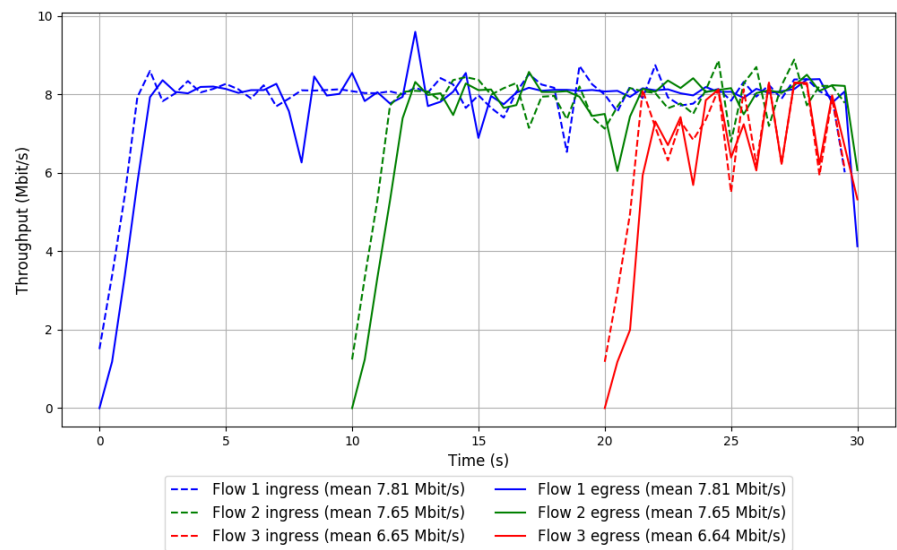


Run 5: Statistics of Sprout

Start at: 2019-06-28 21:52:37
End at: 2019-06-28 21:53:07
Local clock offset: -0.389 ms
Remote clock offset: 0.075 ms

Below is generated by plot.py at 2019-06-29 01:02:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 15.06 Mbit/s
95th percentile per-packet one-way delay: 60.360 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 57.014 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 57.137 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 60.638 ms
Loss rate: 1.54%

Run 5: Report of Sprout — Data Link

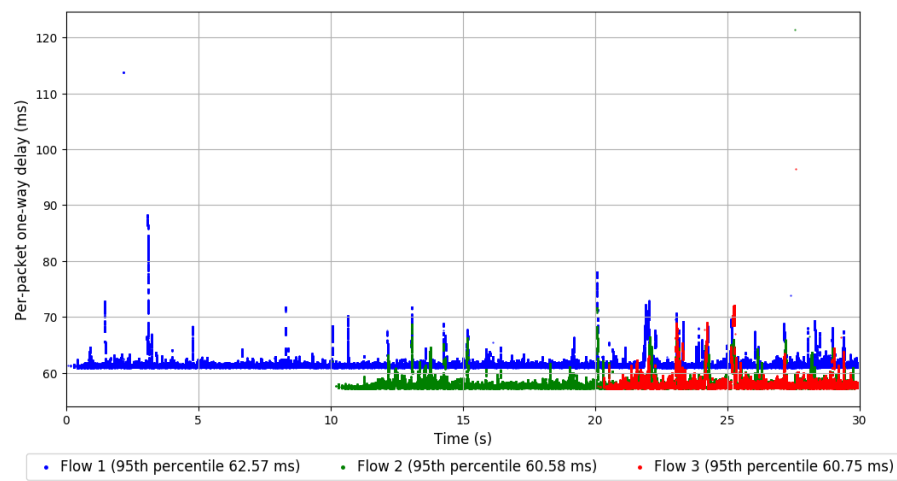
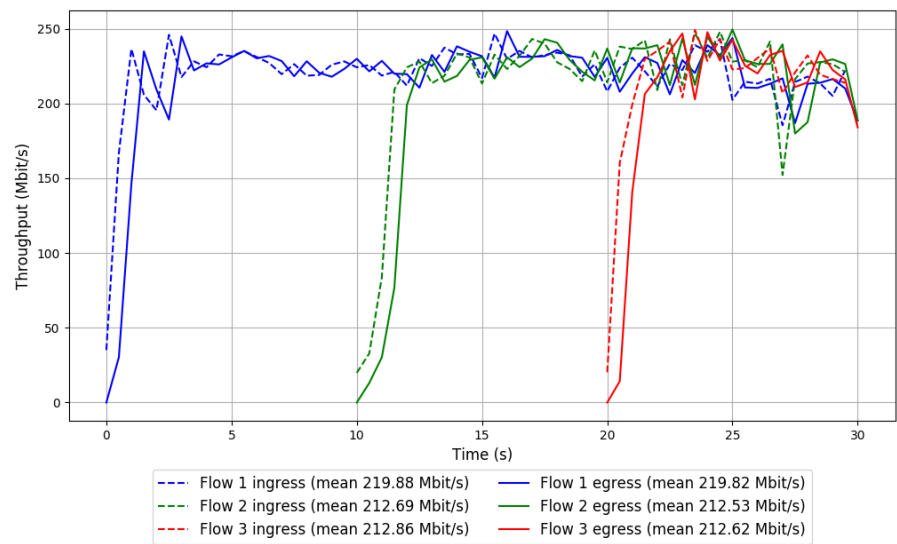


```
Run 1: Statistics of TaoVA-100x

Start at: 2019-06-28 19:52:21
End at: 2019-06-28 19:52:51
Local clock offset: -0.063 ms
Remote clock offset: -0.523 ms

# Below is generated by plot.py at 2019-06-29 01:11:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 431.06 Mbit/s
95th percentile per-packet one-way delay: 62.123 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 219.82 Mbit/s
95th percentile per-packet one-way delay: 62.570 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 212.53 Mbit/s
95th percentile per-packet one-way delay: 60.583 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 212.62 Mbit/s
95th percentile per-packet one-way delay: 60.747 ms
Loss rate: 1.30%
```

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

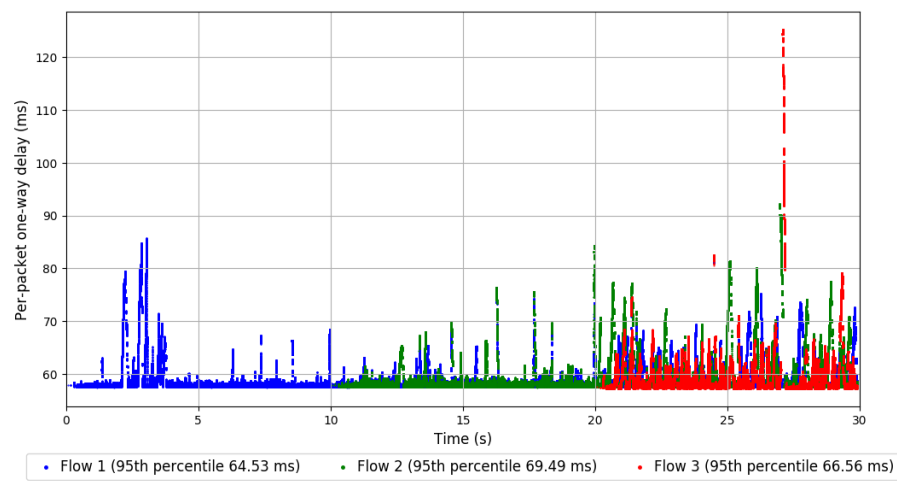
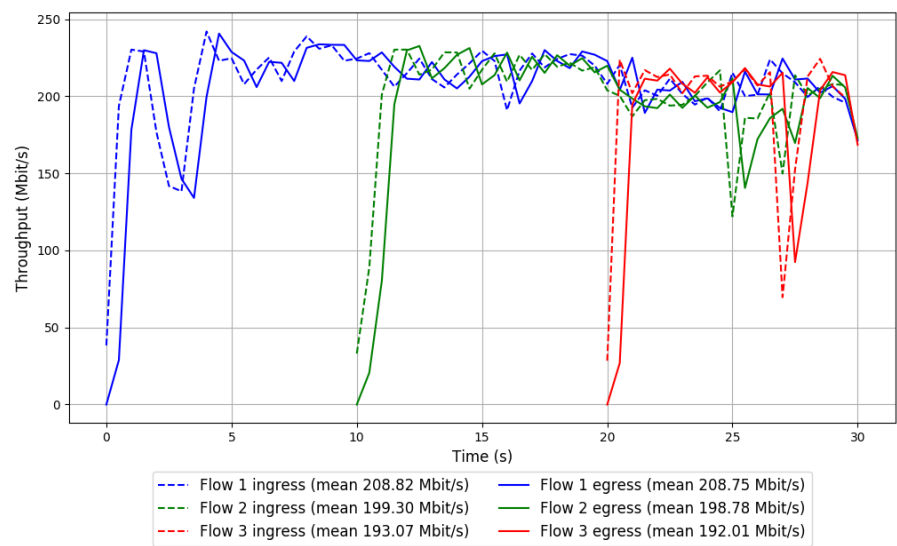


Run 2: Statistics of TaoVA-100x

Start at: 2019-06-28 20:29:05
End at: 2019-06-28 20:29:35
Local clock offset: 0.37 ms
Remote clock offset: -0.046 ms

Below is generated by plot.py at 2019-06-29 01:11:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 404.24 Mbit/s
95th percentile per-packet one-way delay: 66.486 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 208.75 Mbit/s
95th percentile per-packet one-way delay: 64.529 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 198.78 Mbit/s
95th percentile per-packet one-way delay: 69.493 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 192.01 Mbit/s
95th percentile per-packet one-way delay: 66.558 ms
Loss rate: 1.72%

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

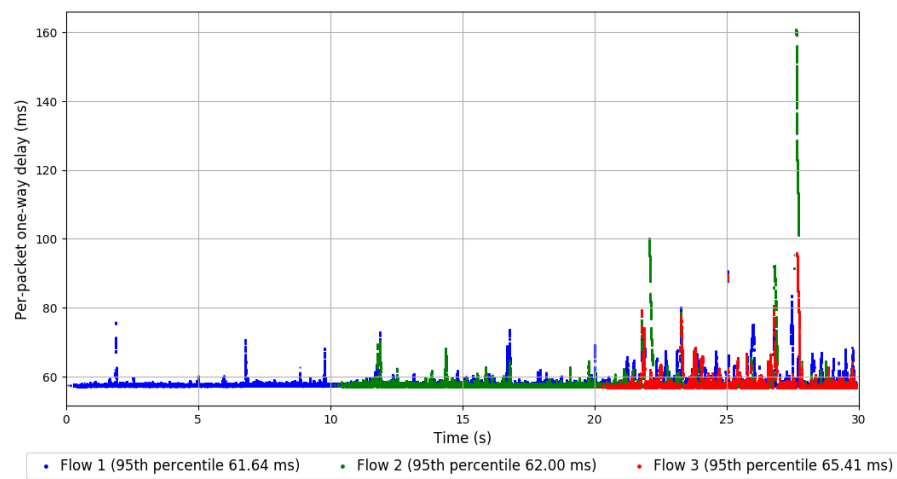
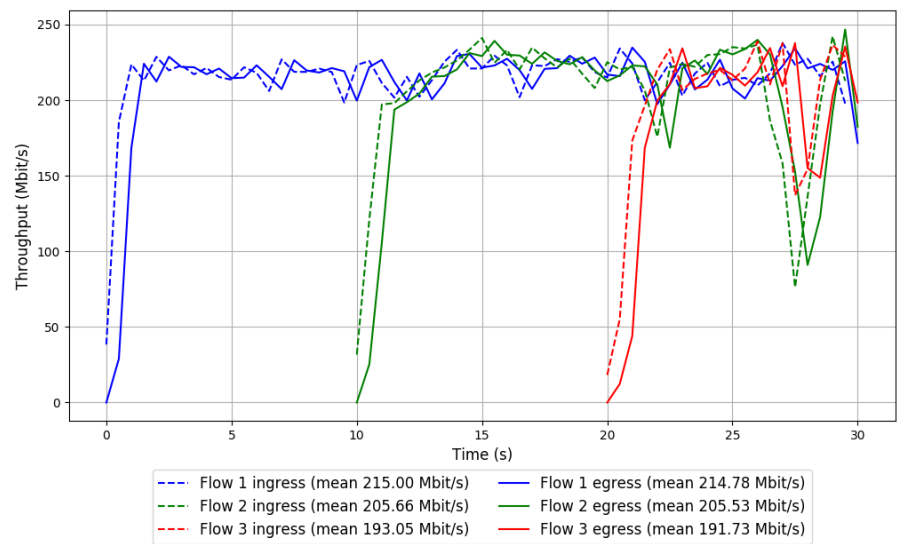


Run 3: Statistics of TaoVA-100x

Start at: 2019-06-28 21:06:05
End at: 2019-06-28 21:06:35
Local clock offset: -0.04 ms
Remote clock offset: -0.153 ms

Below is generated by plot.py at 2019-06-29 01:11:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 414.68 Mbit/s
95th percentile per-packet one-way delay: 62.505 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 214.78 Mbit/s
95th percentile per-packet one-way delay: 61.643 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 205.53 Mbit/s
95th percentile per-packet one-way delay: 62.003 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 191.73 Mbit/s
95th percentile per-packet one-way delay: 65.410 ms
Loss rate: 1.87%

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

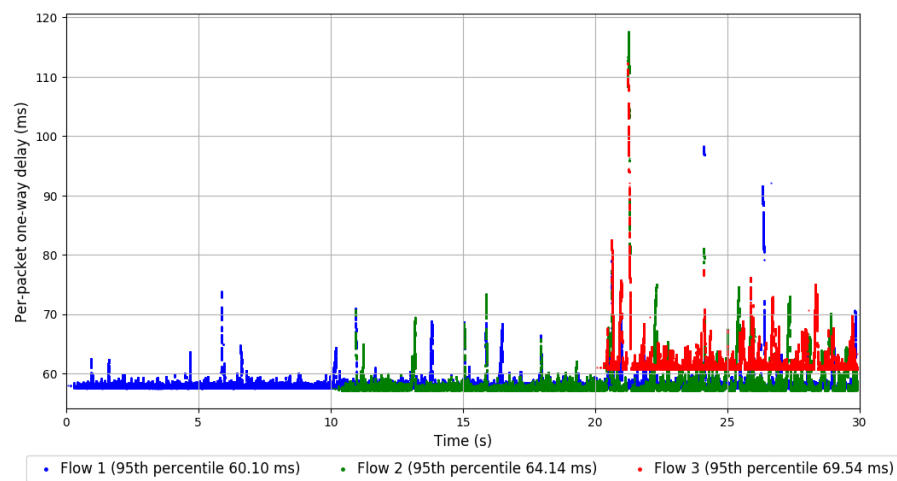
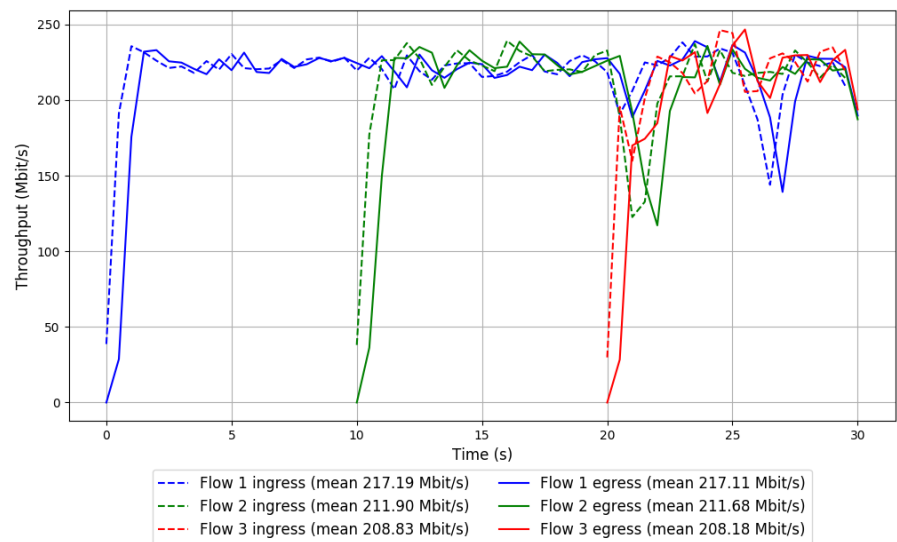


Run 4: Statistics of TaoVA-100x

Start at: 2019-06-28 21:43:06
End at: 2019-06-28 21:43:36
Local clock offset: 0.378 ms
Remote clock offset: -0.029 ms

Below is generated by plot.py at 2019-06-29 01:11:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 426.39 Mbit/s
95th percentile per-packet one-way delay: 64.094 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 217.11 Mbit/s
95th percentile per-packet one-way delay: 60.105 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 211.68 Mbit/s
95th percentile per-packet one-way delay: 64.143 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 208.18 Mbit/s
95th percentile per-packet one-way delay: 69.544 ms
Loss rate: 1.52%

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

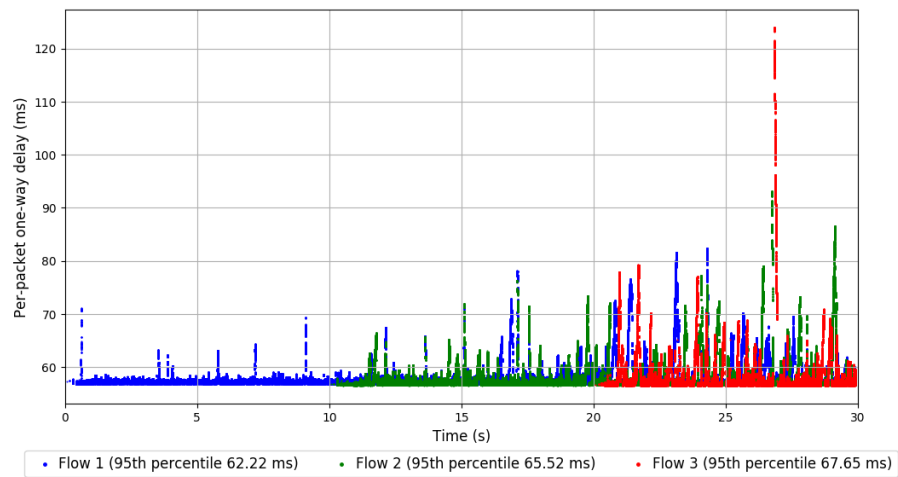
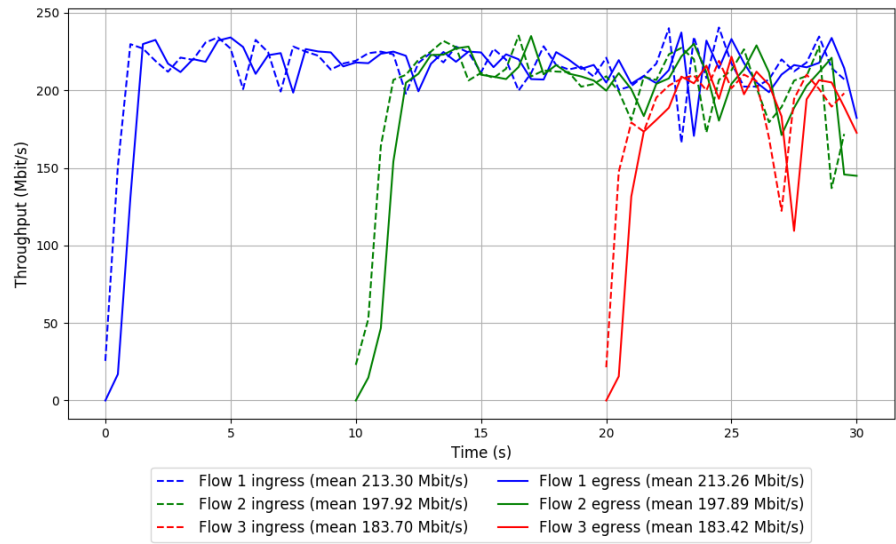


Run 5: Statistics of TaoVA-100x

Start at: 2019-06-28 22:20:19
End at: 2019-06-28 22:20:49
Local clock offset: -0.192 ms
Remote clock offset: -0.111 ms

Below is generated by plot.py at 2019-06-29 01:12:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 405.26 Mbit/s
95th percentile per-packet one-way delay: 64.178 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 213.26 Mbit/s
95th percentile per-packet one-way delay: 62.222 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 197.89 Mbit/s
95th percentile per-packet one-way delay: 65.522 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 183.42 Mbit/s
95th percentile per-packet one-way delay: 67.647 ms
Loss rate: 1.34%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-06-28 19:56:01

End at: 2019-06-28 19:56:31

Local clock offset: -0.219 ms

Remote clock offset: 0.11 ms

Below is generated by plot.py at 2019-06-29 01:12:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 666.21 Mbit/s

95th percentile per-packet one-way delay: 107.280 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 256.35 Mbit/s

95th percentile per-packet one-way delay: 73.783 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 429.93 Mbit/s

95th percentile per-packet one-way delay: 101.778 ms

Loss rate: 0.43%

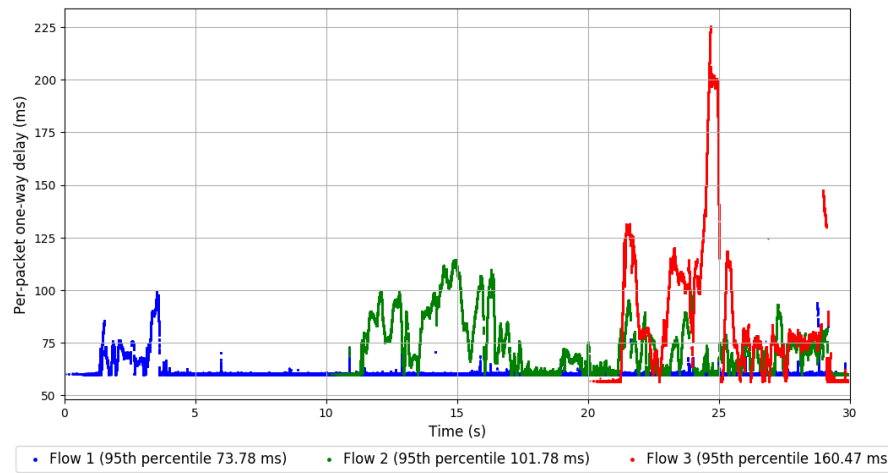
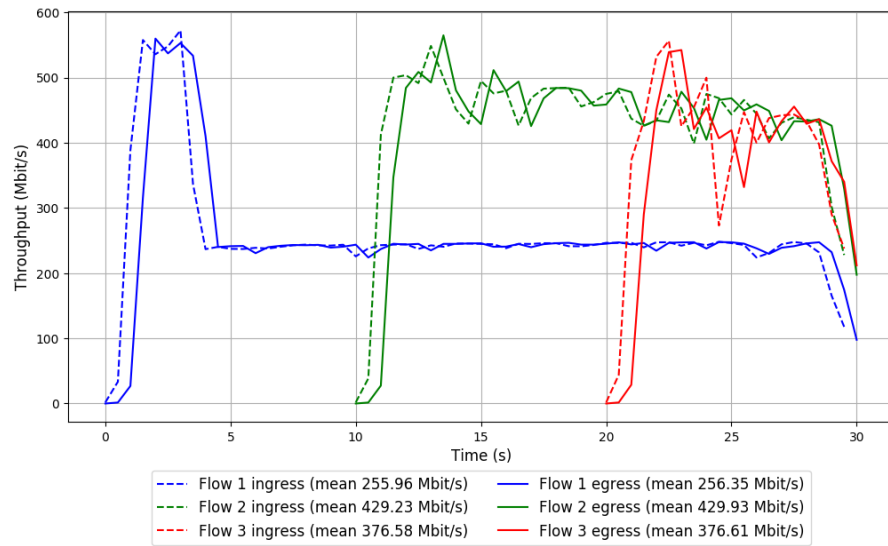
-- Flow 3:

Average throughput: 376.61 Mbit/s

95th percentile per-packet one-way delay: 160.468 ms

Loss rate: 1.14%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-06-28 20:32:42

End at: 2019-06-28 20:33:12

Local clock offset: -0.384 ms

Remote clock offset: 0.072 ms

Below is generated by plot.py at 2019-06-29 01:14:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 717.49 Mbit/s

95th percentile per-packet one-way delay: 75.267 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 438.52 Mbit/s

95th percentile per-packet one-way delay: 80.972 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 307.94 Mbit/s

95th percentile per-packet one-way delay: 66.118 ms

Loss rate: 0.58%

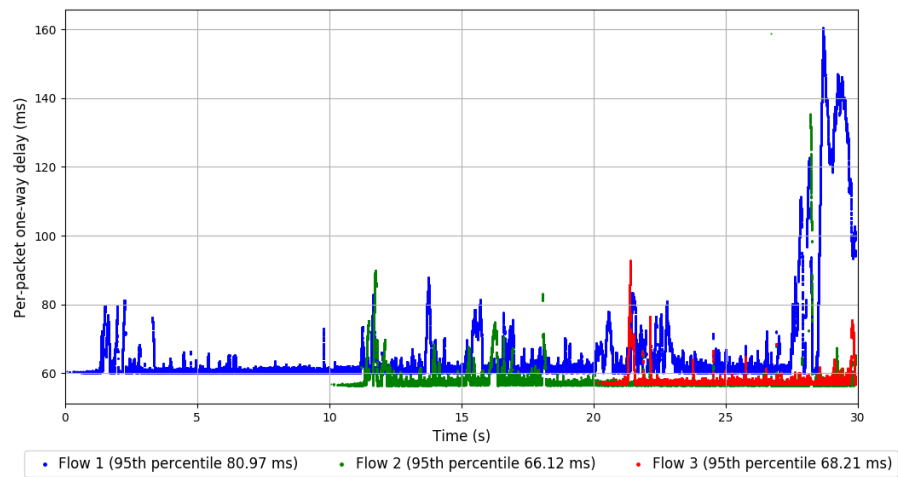
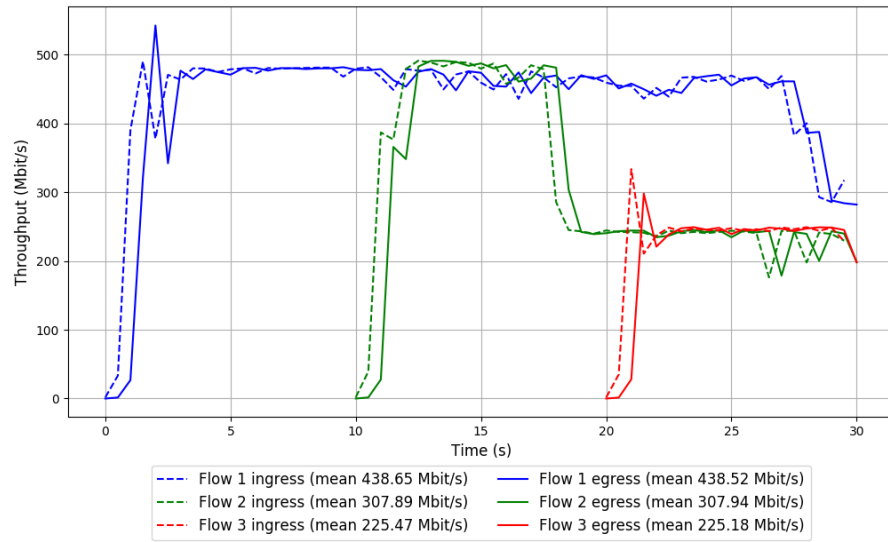
-- Flow 3:

Average throughput: 225.18 Mbit/s

95th percentile per-packet one-way delay: 68.213 ms

Loss rate: 1.31%

Run 2: Report of TCP Vegas — Data Link

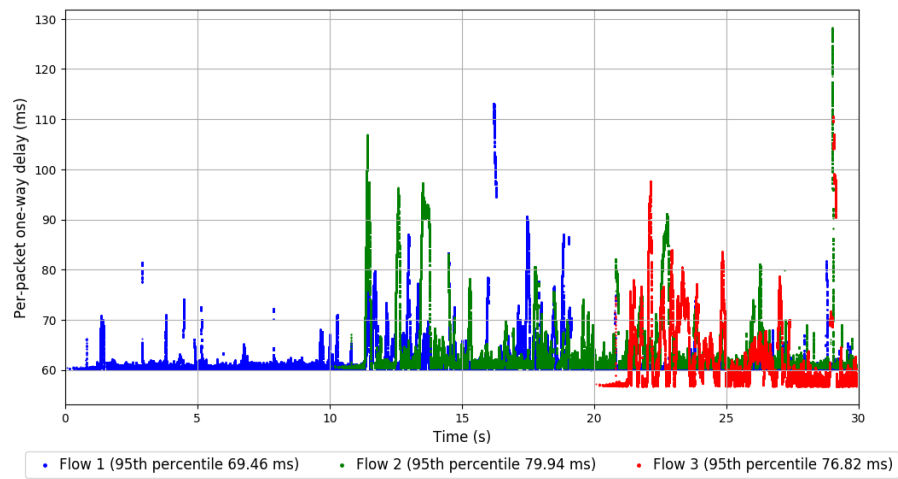
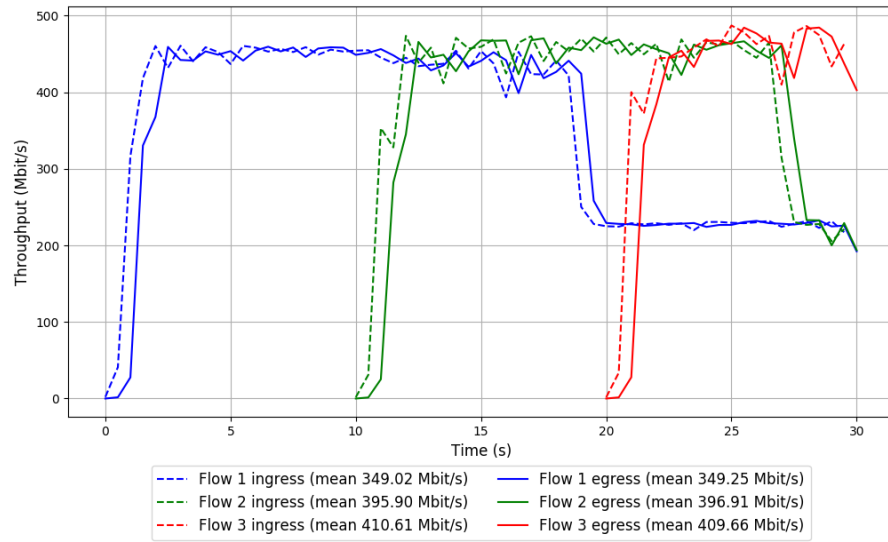


Run 3: Statistics of TCP Vegas

Start at: 2019-06-28 21:09:41
End at: 2019-06-28 21:10:11
Local clock offset: -0.214 ms
Remote clock offset: -0.249 ms

Below is generated by plot.py at 2019-06-29 01:19:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 748.14 Mbit/s
95th percentile per-packet one-way delay: 75.004 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 349.25 Mbit/s
95th percentile per-packet one-way delay: 69.461 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 396.91 Mbit/s
95th percentile per-packet one-way delay: 79.935 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 409.66 Mbit/s
95th percentile per-packet one-way delay: 76.818 ms
Loss rate: 1.41%

Run 3: Report of TCP Vegas — Data Link

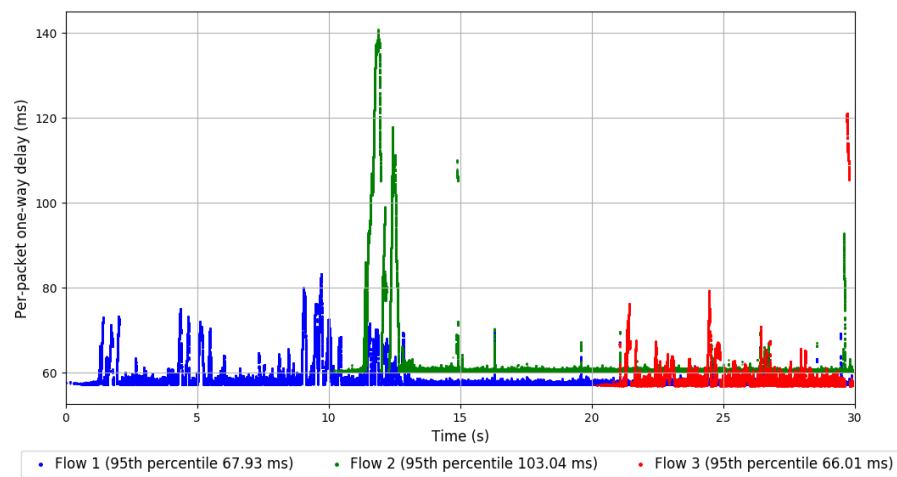
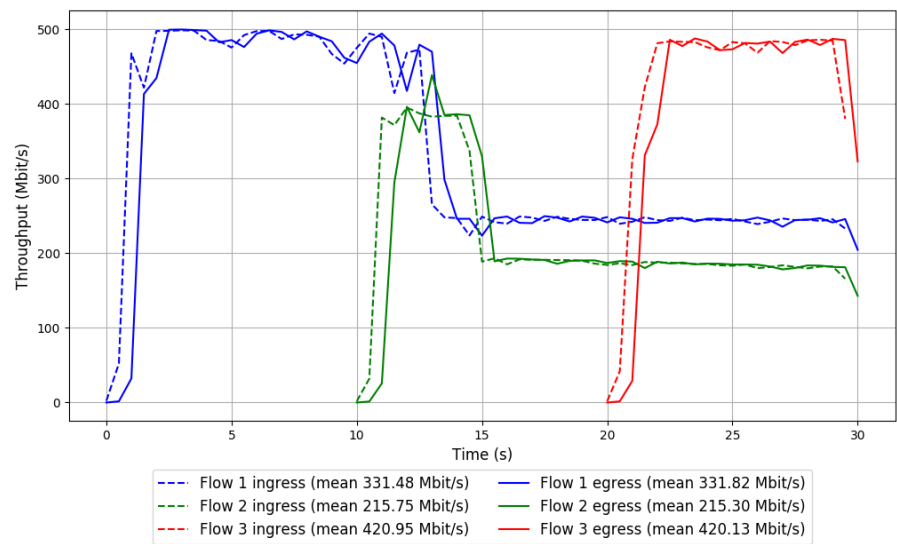


Run 4: Statistics of TCP Vegas

Start at: 2019-06-28 21:46:45
End at: 2019-06-28 21:47:15
Local clock offset: 0.027 ms
Remote clock offset: -0.115 ms

Below is generated by plot.py at 2019-06-29 01:23:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 613.37 Mbit/s
95th percentile per-packet one-way delay: 69.789 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 331.82 Mbit/s
95th percentile per-packet one-way delay: 67.931 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 215.30 Mbit/s
95th percentile per-packet one-way delay: 103.039 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 420.13 Mbit/s
95th percentile per-packet one-way delay: 66.009 ms
Loss rate: 1.34%

Run 4: Report of TCP Vegas — Data Link

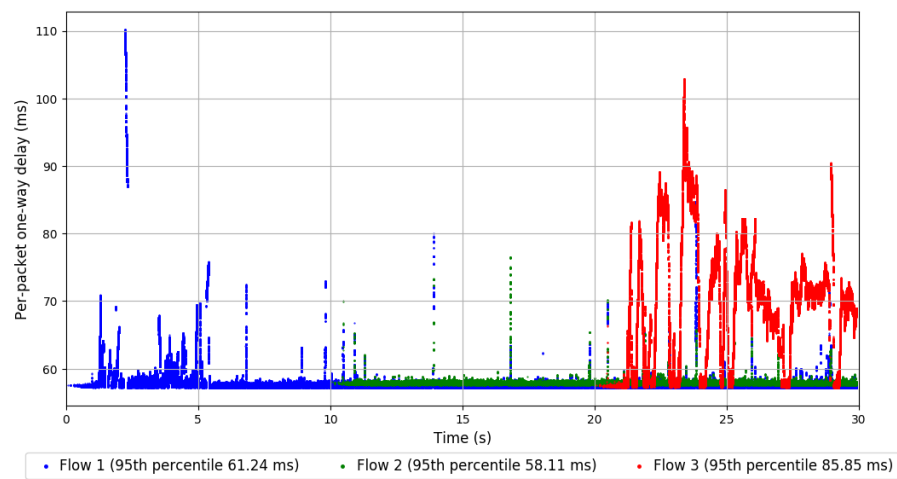
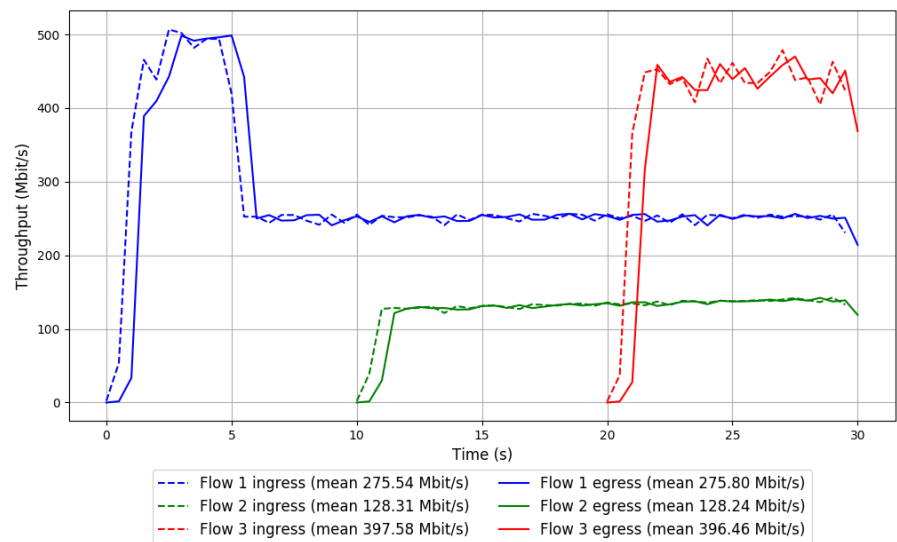


Run 5: Statistics of TCP Vegas

Start at: 2019-06-28 22:23:55
End at: 2019-06-28 22:24:25
Local clock offset: 0.497 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2019-06-29 01:23:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 491.69 Mbit/s
95th percentile per-packet one-way delay: 77.972 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 275.80 Mbit/s
95th percentile per-packet one-way delay: 61.237 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 128.24 Mbit/s
95th percentile per-packet one-way delay: 58.114 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 396.46 Mbit/s
95th percentile per-packet one-way delay: 85.852 ms
Loss rate: 1.46%

Run 5: Report of TCP Vegas — Data Link

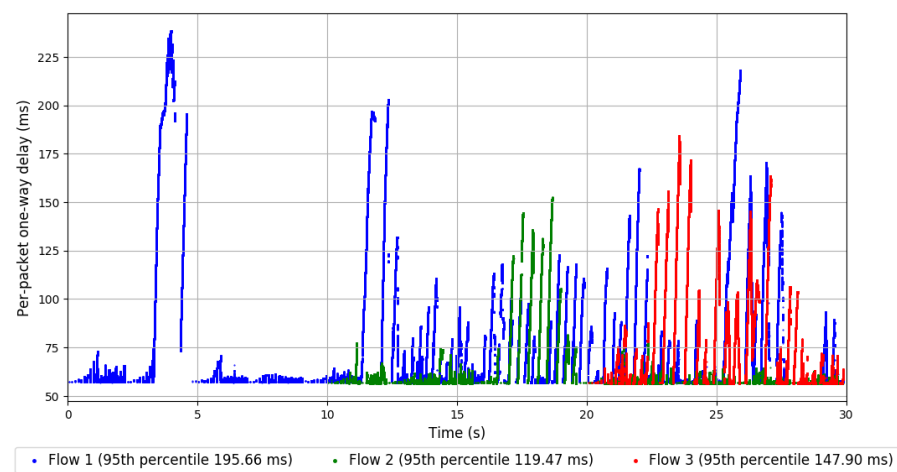
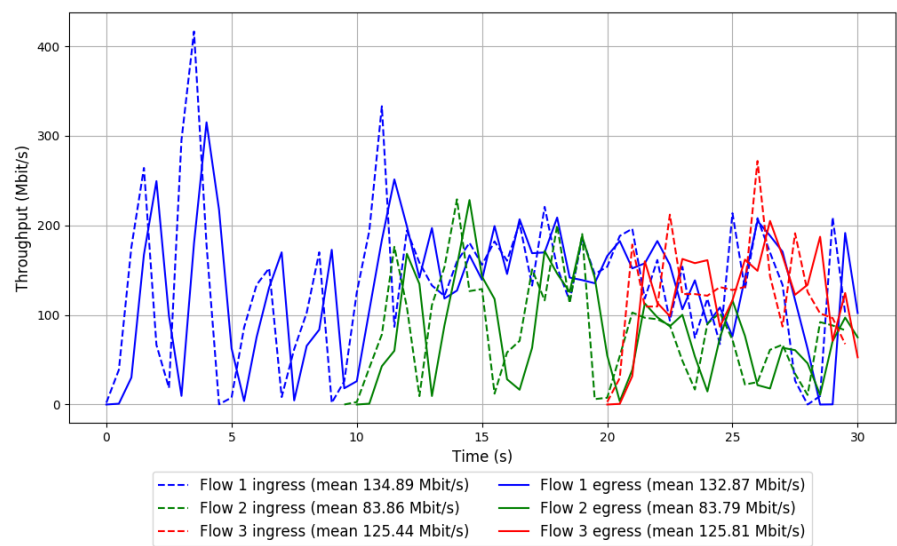


Run 1: Statistics of Verus

Start at: 2019-06-28 19:29:10
End at: 2019-06-28 19:29:40
Local clock offset: -0.46 ms
Remote clock offset: -0.314 ms

Below is generated by plot.py at 2019-06-29 01:23:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 229.88 Mbit/s
95th percentile per-packet one-way delay: 179.511 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 132.87 Mbit/s
95th percentile per-packet one-way delay: 195.662 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 83.79 Mbit/s
95th percentile per-packet one-way delay: 119.472 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 125.81 Mbit/s
95th percentile per-packet one-way delay: 147.895 ms
Loss rate: 0.90%

Run 1: Report of Verus — Data Link

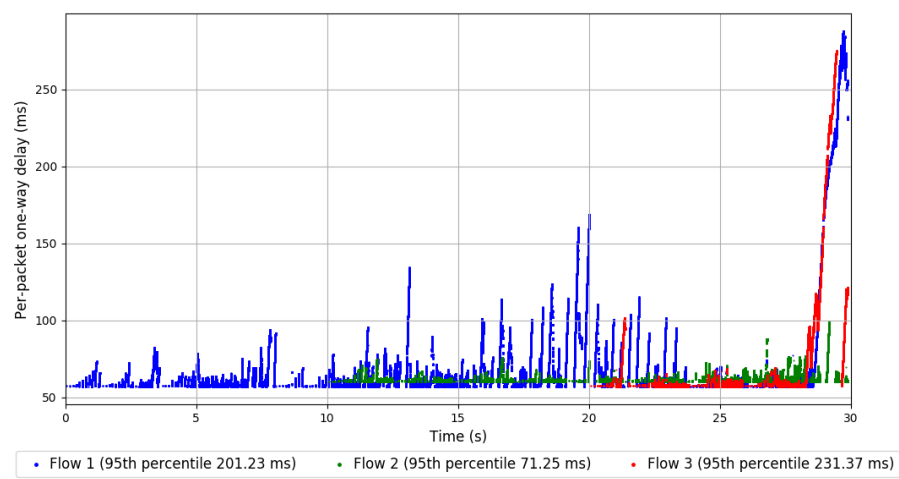
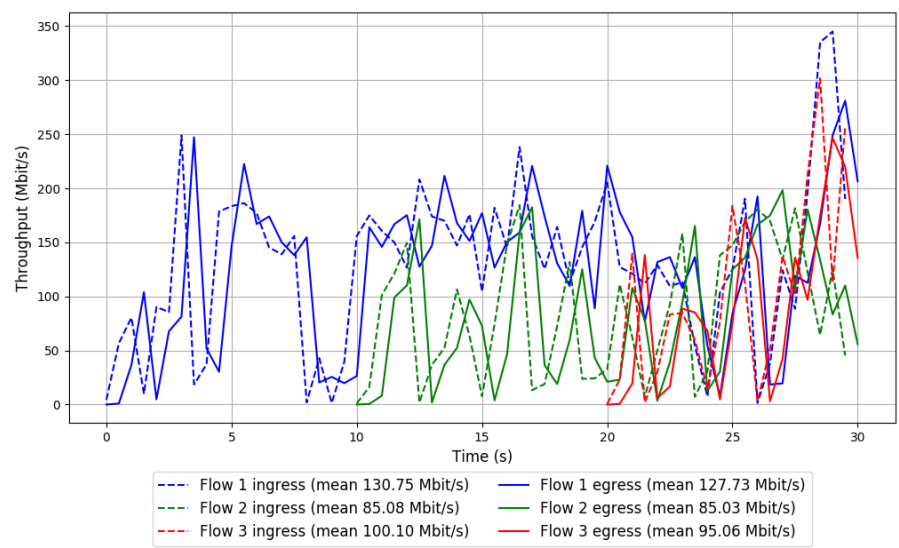


Run 2: Statistics of Verus

Start at: 2019-06-28 20:05:41
End at: 2019-06-28 20:06:11
Local clock offset: -0.054 ms
Remote clock offset: 0.213 ms

Below is generated by plot.py at 2019-06-29 01:23:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 215.47 Mbit/s
95th percentile per-packet one-way delay: 188.234 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 127.73 Mbit/s
95th percentile per-packet one-way delay: 201.229 ms
Loss rate: 2.09%
-- Flow 2:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 71.253 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 95.06 Mbit/s
95th percentile per-packet one-way delay: 231.372 ms
Loss rate: 6.17%

Run 2: Report of Verus — Data Link

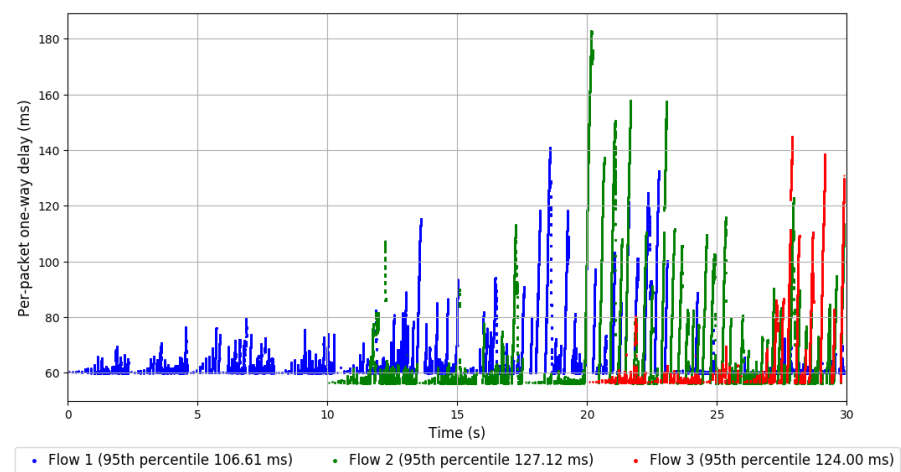
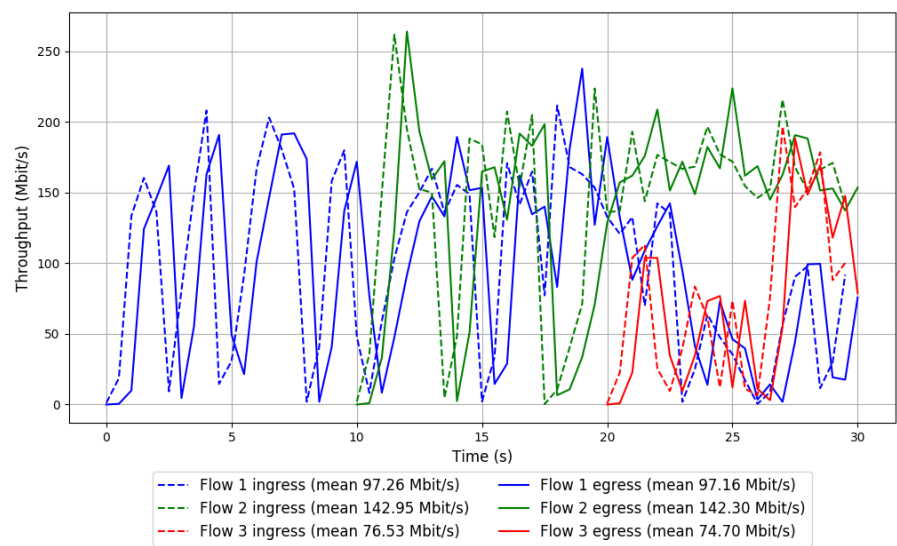


Run 3: Statistics of Verus

Start at: 2019-06-28 20:42:45
End at: 2019-06-28 20:43:15
Local clock offset: -0.439 ms
Remote clock offset: -0.019 ms

Below is generated by plot.py at 2019-06-29 01:23:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 216.30 Mbit/s
95th percentile per-packet one-way delay: 114.516 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 106.615 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 142.30 Mbit/s
95th percentile per-packet one-way delay: 127.122 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 74.70 Mbit/s
95th percentile per-packet one-way delay: 123.997 ms
Loss rate: 2.01%

Run 3: Report of Verus — Data Link

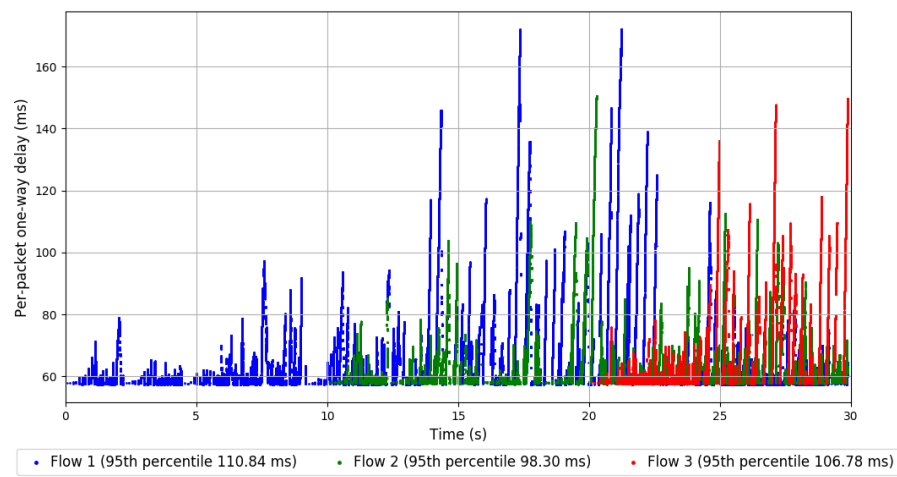
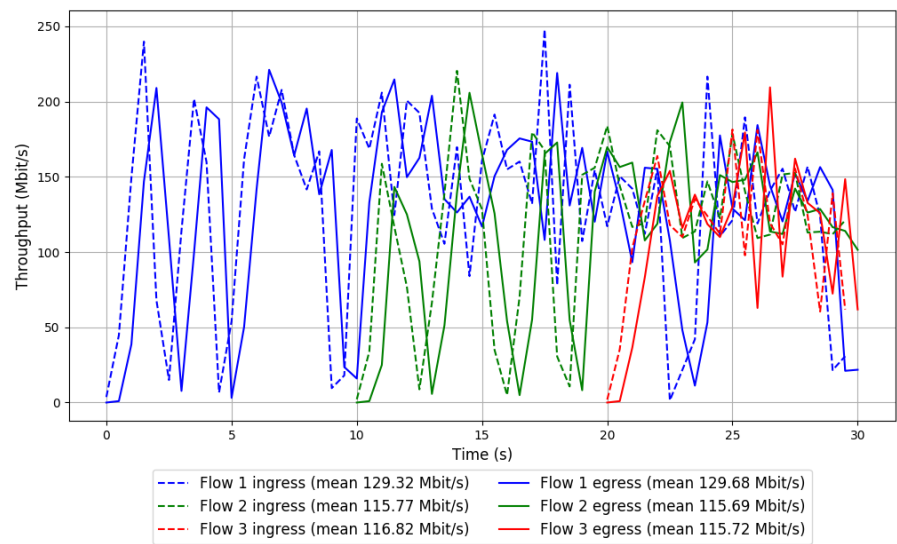


Run 4: Statistics of Verus

Start at: 2019-06-28 21:19:49
End at: 2019-06-28 21:20:19
Local clock offset: -0.199 ms
Remote clock offset: -0.809 ms

Below is generated by plot.py at 2019-06-29 01:23:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 244.48 Mbit/s
95th percentile per-packet one-way delay: 105.452 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 129.68 Mbit/s
95th percentile per-packet one-way delay: 110.838 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 115.69 Mbit/s
95th percentile per-packet one-way delay: 98.301 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 115.72 Mbit/s
95th percentile per-packet one-way delay: 106.780 ms
Loss rate: 0.00%

Run 4: Report of Verus — Data Link

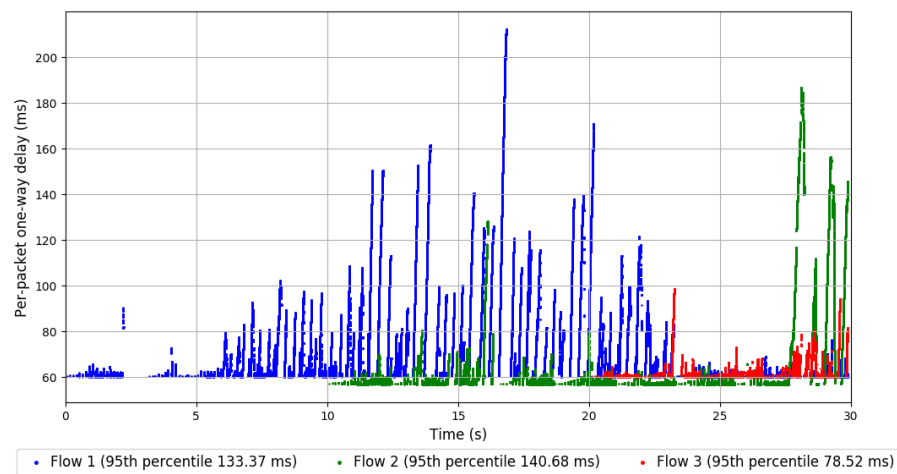
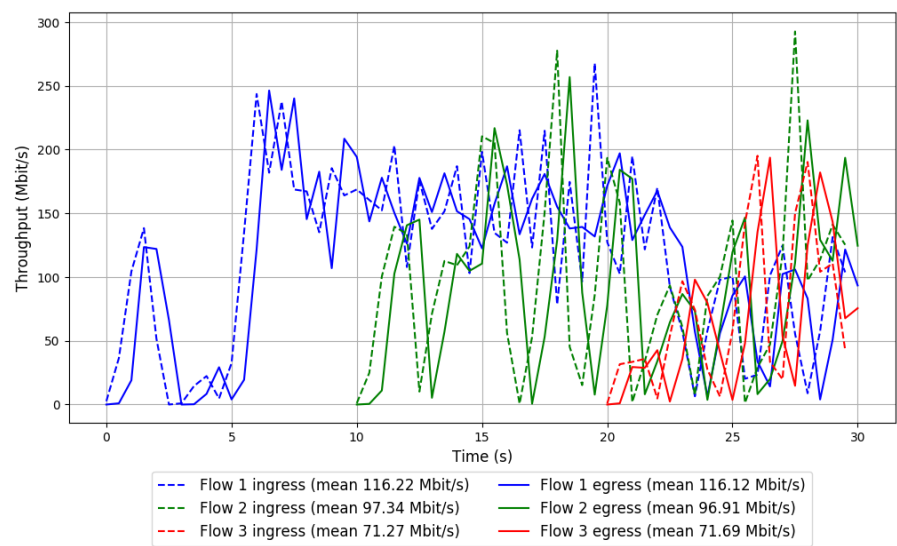


Run 5: Statistics of Verus

Start at: 2019-06-28 21:56:58
End at: 2019-06-28 21:57:28
Local clock offset: -0.341 ms
Remote clock offset: -0.153 ms

Below is generated by plot.py at 2019-06-29 01:23:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 204.01 Mbit/s
95th percentile per-packet one-way delay: 132.957 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 116.12 Mbit/s
95th percentile per-packet one-way delay: 133.366 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 96.91 Mbit/s
95th percentile per-packet one-way delay: 140.684 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 71.69 Mbit/s
95th percentile per-packet one-way delay: 78.515 ms
Loss rate: 0.72%

Run 5: Report of Verus — Data Link

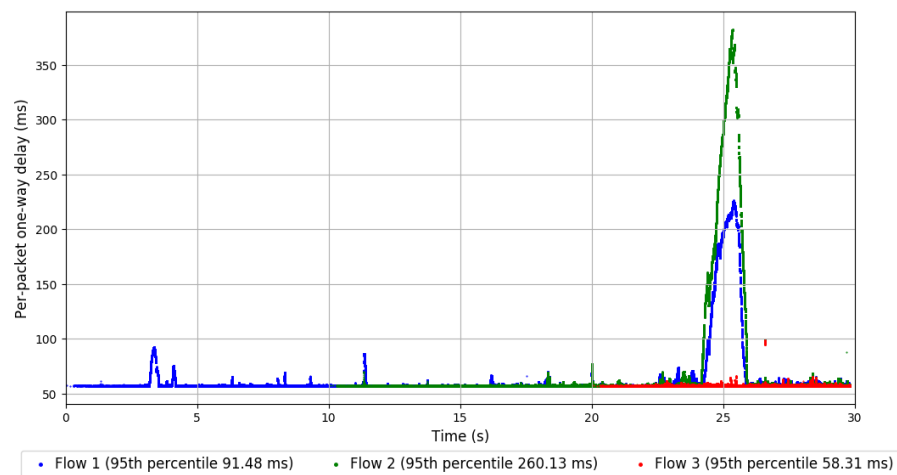
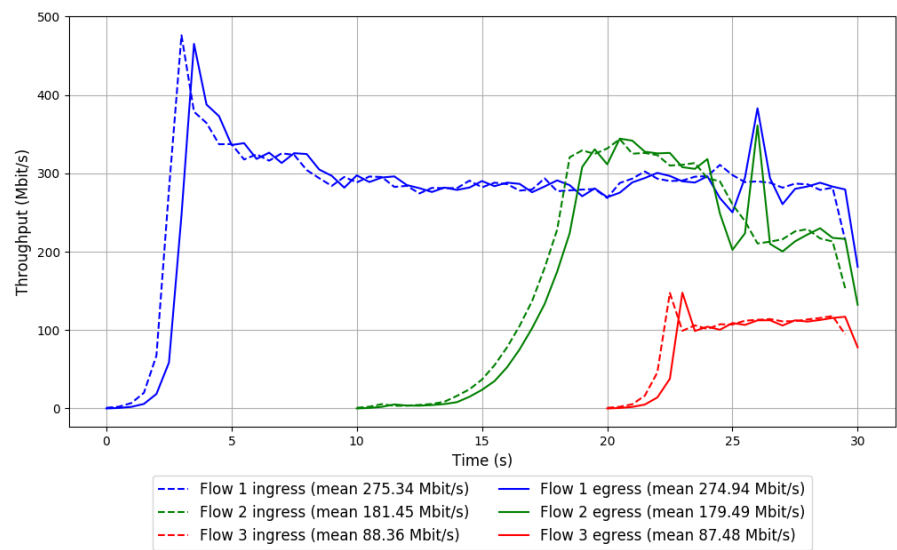


Run 1: Statistics of PCC-Vivace

Start at: 2019-06-28 19:40:33
End at: 2019-06-28 19:41:03
Local clock offset: 0.18 ms
Remote clock offset: -0.122 ms

Below is generated by plot.py at 2019-06-29 01:26:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 422.73 Mbit/s
95th percentile per-packet one-way delay: 151.037 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 274.94 Mbit/s
95th percentile per-packet one-way delay: 91.483 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 179.49 Mbit/s
95th percentile per-packet one-way delay: 260.130 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 87.48 Mbit/s
95th percentile per-packet one-way delay: 58.310 ms
Loss rate: 2.20%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-06-28 20:17:05

End at: 2019-06-28 20:17:35

Local clock offset: -0.439 ms

Remote clock offset: 0.005 ms

Below is generated by plot.py at 2019-06-29 01:26:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.60 Mbit/s

95th percentile per-packet one-way delay: 73.167 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 260.72 Mbit/s

95th percentile per-packet one-way delay: 73.780 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 275.21 Mbit/s

95th percentile per-packet one-way delay: 72.743 ms

Loss rate: 0.91%

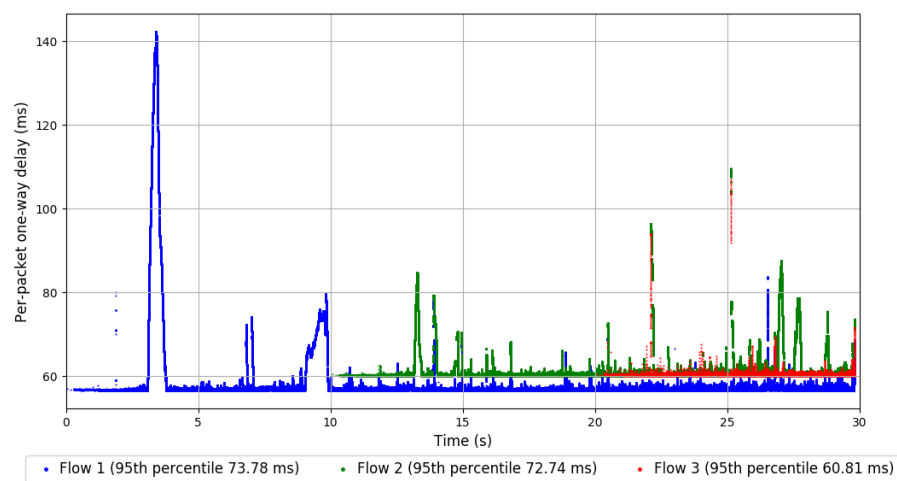
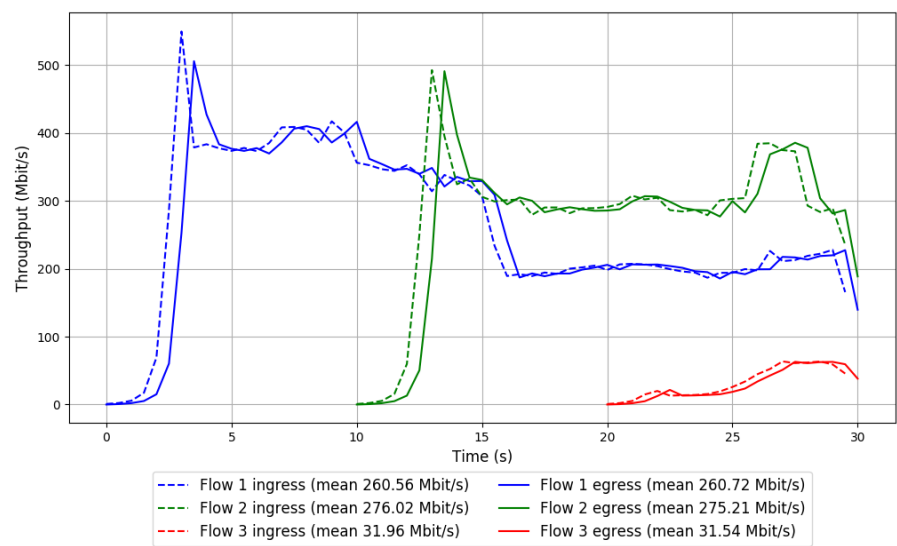
-- Flow 3:

Average throughput: 31.54 Mbit/s

95th percentile per-packet one-way delay: 60.813 ms

Loss rate: 2.54%

Run 2: Report of PCC-Vivace — Data Link

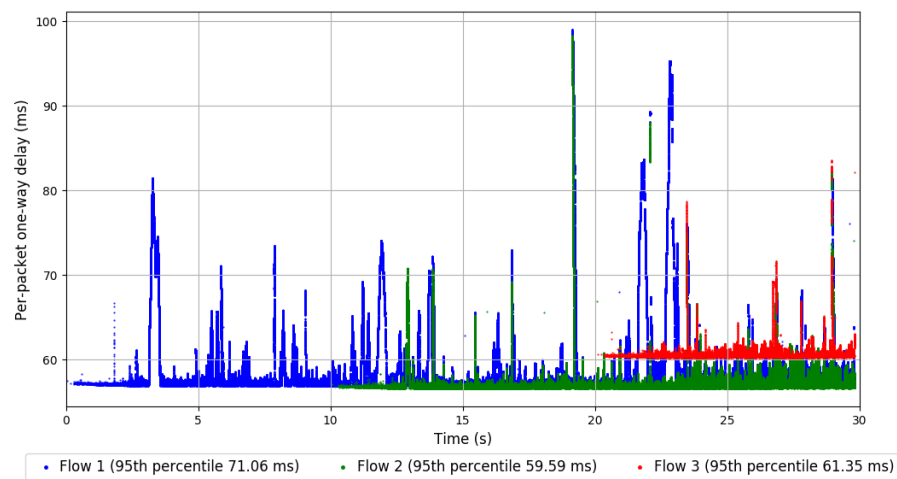
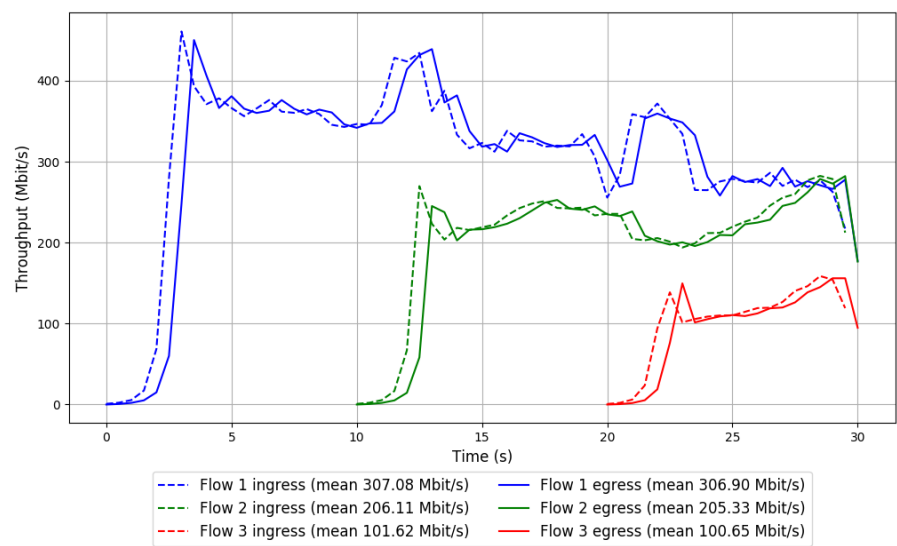


Run 3: Statistics of PCC-Vivace

Start at: 2019-06-28 20:54:08
End at: 2019-06-28 20:54:38
Local clock offset: -0.217 ms
Remote clock offset: -0.091 ms

Below is generated by plot.py at 2019-06-29 01:27:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 476.02 Mbit/s
95th percentile per-packet one-way delay: 67.875 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 306.90 Mbit/s
95th percentile per-packet one-way delay: 71.056 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 205.33 Mbit/s
95th percentile per-packet one-way delay: 59.588 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 100.65 Mbit/s
95th percentile per-packet one-way delay: 61.354 ms
Loss rate: 2.19%

Run 3: Report of PCC-Vivace — Data Link

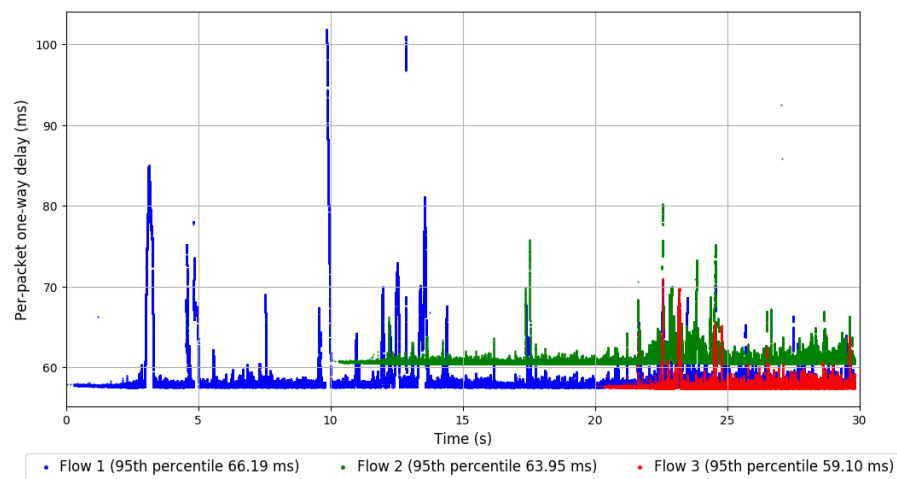
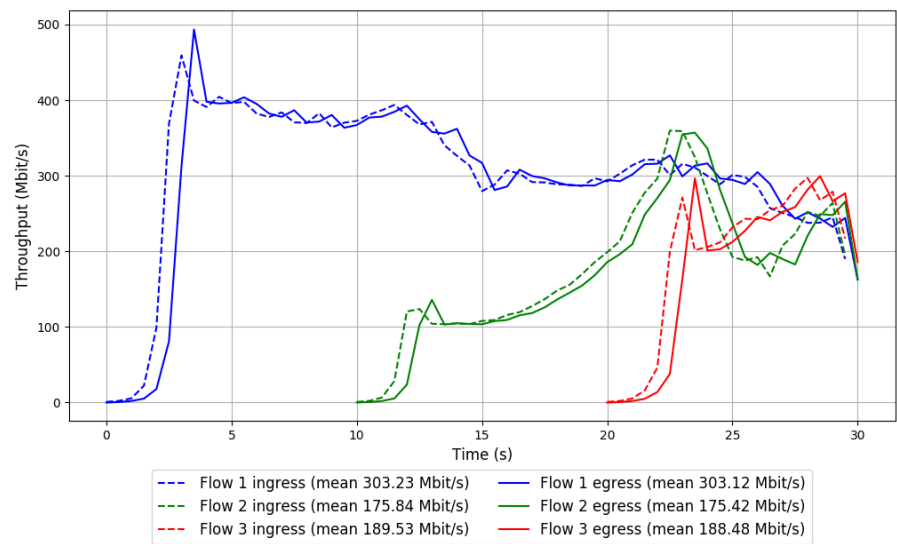


Run 4: Statistics of PCC-Vivace

Start at: 2019-06-28 21:31:17
End at: 2019-06-28 21:31:47
Local clock offset: 0.041 ms
Remote clock offset: -0.405 ms

Below is generated by plot.py at 2019-06-29 01:27:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 481.21 Mbit/s
95th percentile per-packet one-way delay: 64.439 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 303.12 Mbit/s
95th percentile per-packet one-way delay: 66.194 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 175.42 Mbit/s
95th percentile per-packet one-way delay: 63.954 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 188.48 Mbit/s
95th percentile per-packet one-way delay: 59.100 ms
Loss rate: 1.75%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-06-28 22:08:24

End at: 2019-06-28 22:08:54

Local clock offset: 0.052 ms

Remote clock offset: 0.031 ms

Below is generated by plot.py at 2019-06-29 01:27:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.36 Mbit/s

95th percentile per-packet one-way delay: 61.413 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 204.08 Mbit/s

95th percentile per-packet one-way delay: 62.923 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 239.35 Mbit/s

95th percentile per-packet one-way delay: 60.228 ms

Loss rate: 0.64%

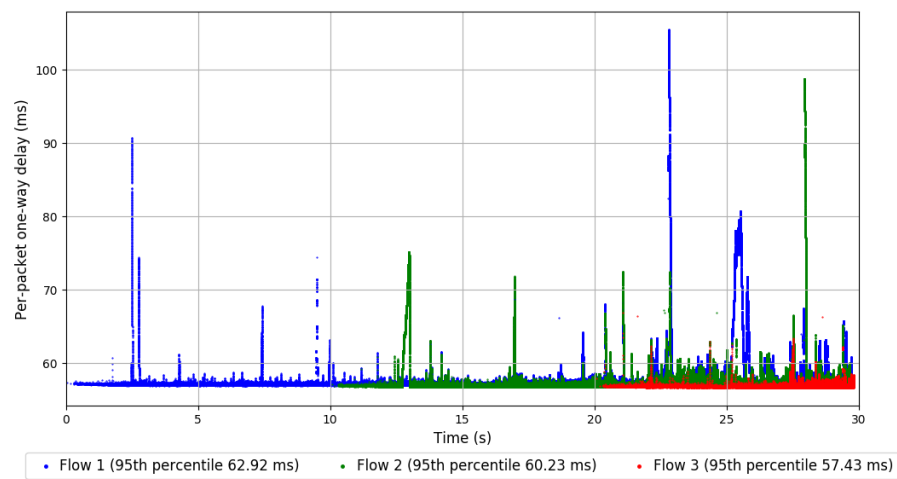
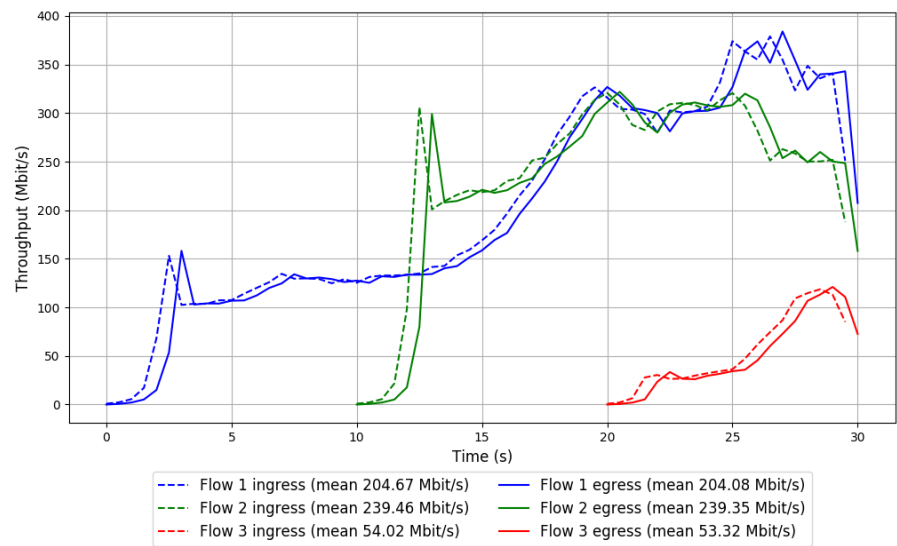
-- Flow 3:

Average throughput: 53.32 Mbit/s

95th percentile per-packet one-way delay: 57.426 ms

Loss rate: 2.49%

Run 5: Report of PCC-Vivace — Data Link

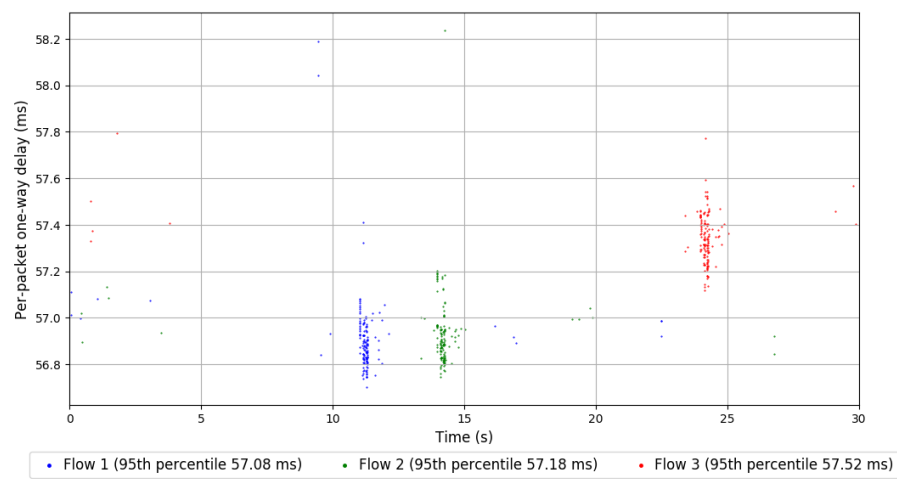
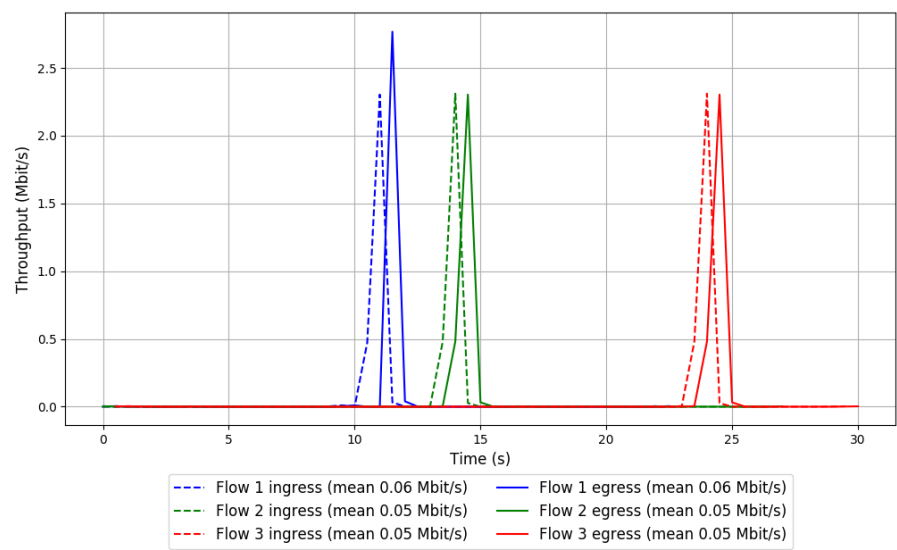


Run 1: Statistics of WebRTC media

Start at: 2019-06-28 19:26:01
End at: 2019-06-28 19:26:31
Local clock offset: -0.28 ms
Remote clock offset: -0.271 ms

Below is generated by plot.py at 2019-06-29 01:27:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 57.457 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 57.078 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.176 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.522 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

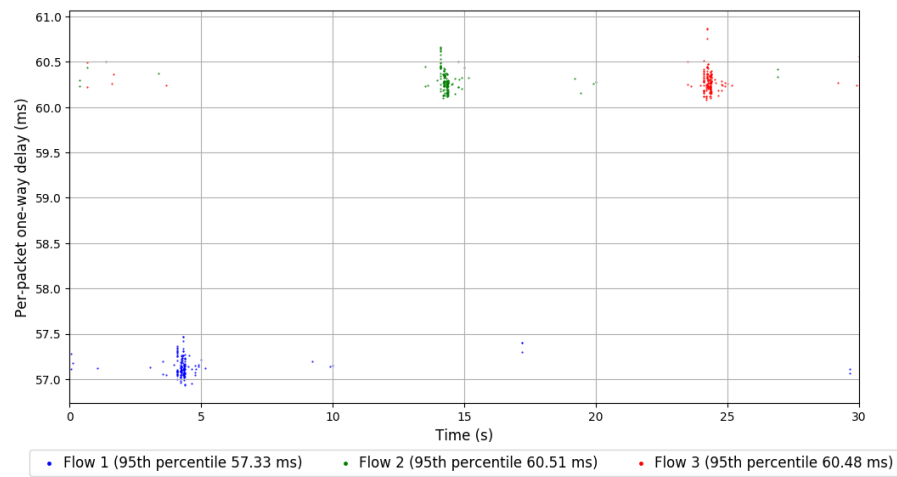
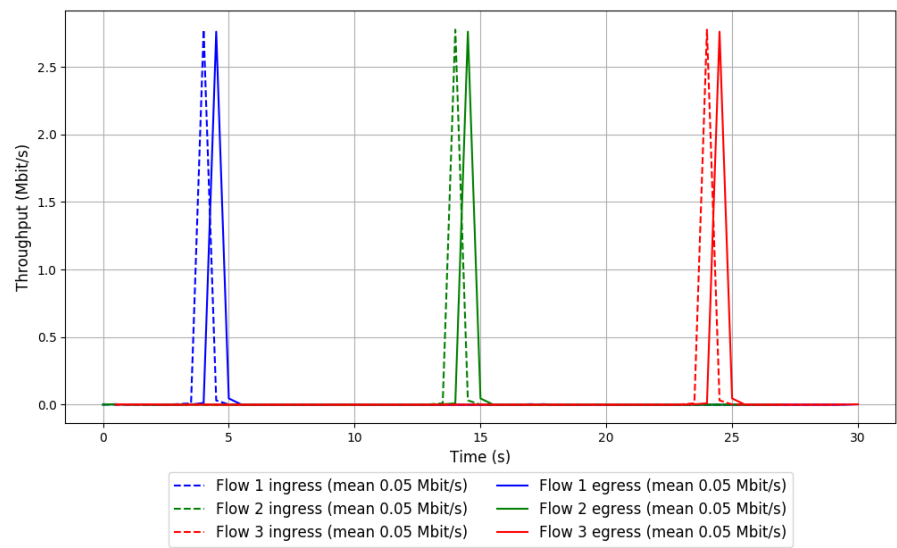


Run 2: Statistics of WebRTC media

Start at: 2019-06-28 20:02:39
End at: 2019-06-28 20:03:09
Local clock offset: -0.137 ms
Remote clock offset: -0.065 ms

Below is generated by plot.py at 2019-06-29 01:27:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.451 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.334 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.508 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.479 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

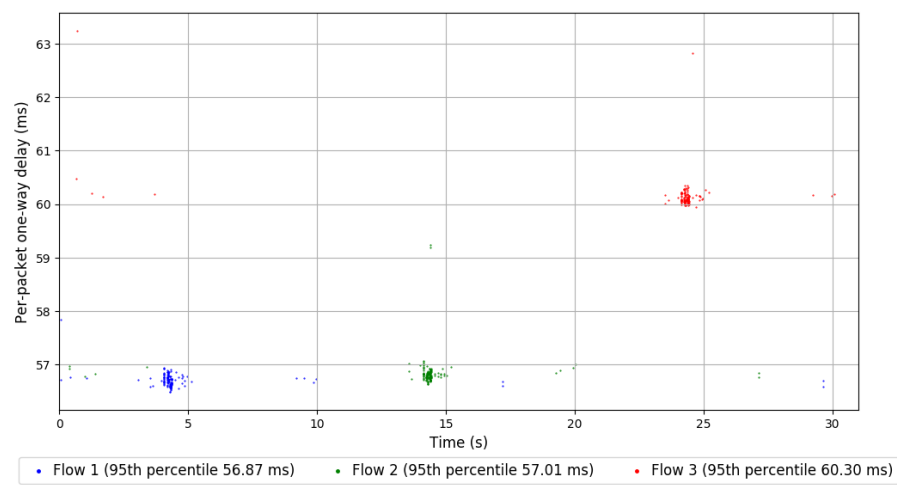
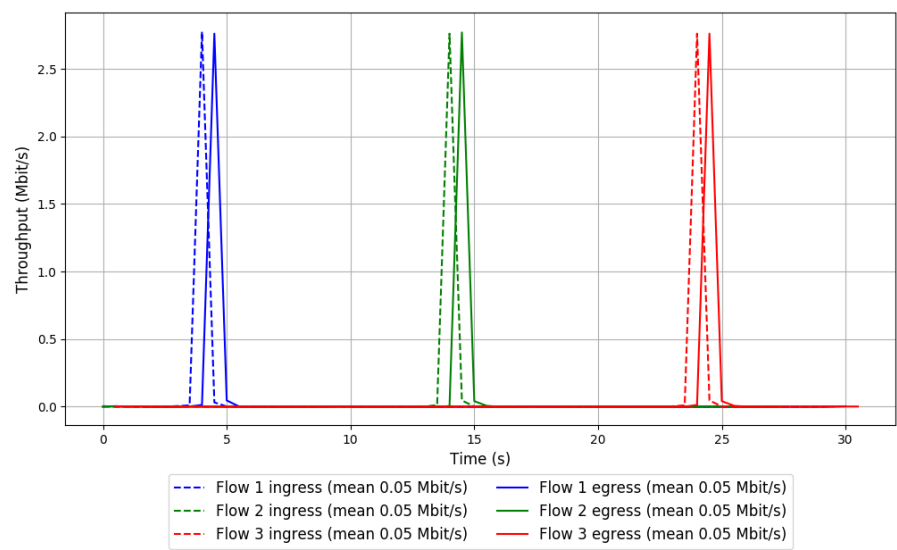


Run 3: Statistics of WebRTC media

Start at: 2019-06-28 20:39:38
End at: 2019-06-28 20:40:08
Local clock offset: -0.327 ms
Remote clock offset: -0.074 ms

Below is generated by plot.py at 2019-06-29 01:27:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.208 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.865 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.005 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.298 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

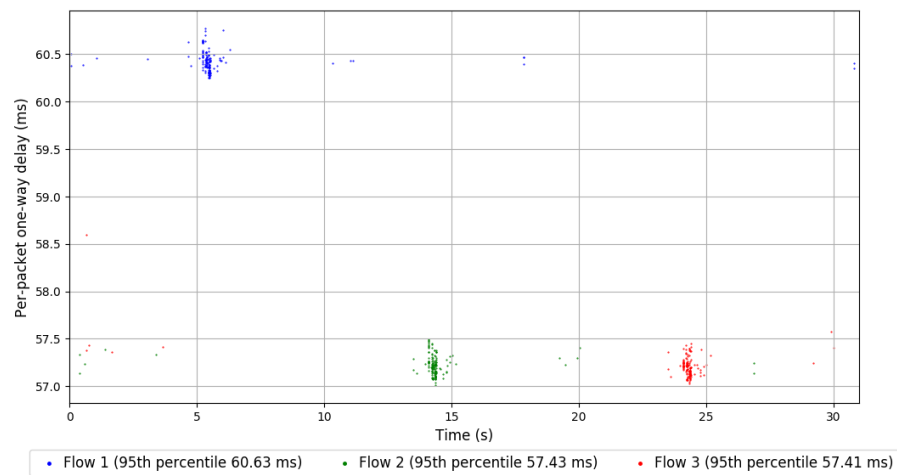
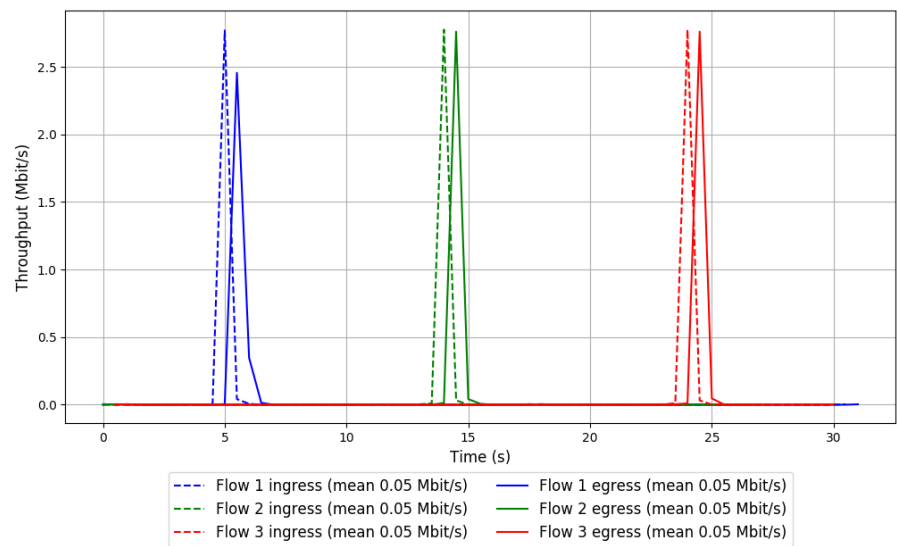


Run 4: Statistics of WebRTC media

Start at: 2019-06-28 21:16:44
End at: 2019-06-28 21:17:14
Local clock offset: -0.06 ms
Remote clock offset: -0.314 ms

Below is generated by plot.py at 2019-06-29 01:27:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.513 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.630 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.433 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.407 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-06-28 21:53:51

End at: 2019-06-28 21:54:21

Local clock offset: -0.102 ms

Remote clock offset: 0.003 ms

Below is generated by plot.py at 2019-06-29 01:27:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 57.111 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 57.050 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 57.134 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 57.091 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

