

Pantheon Report

Generated at 2019-01-22 15:44:46 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

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

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

System info:

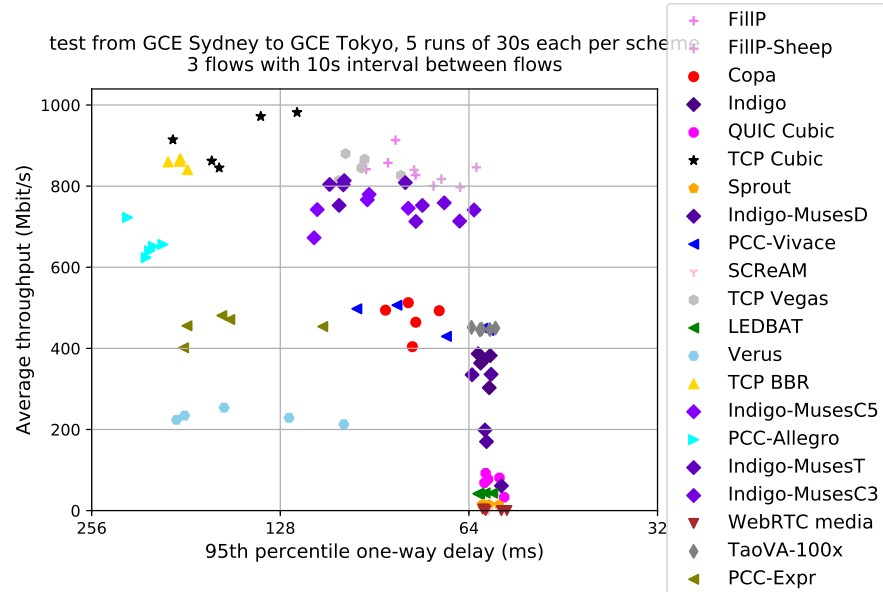
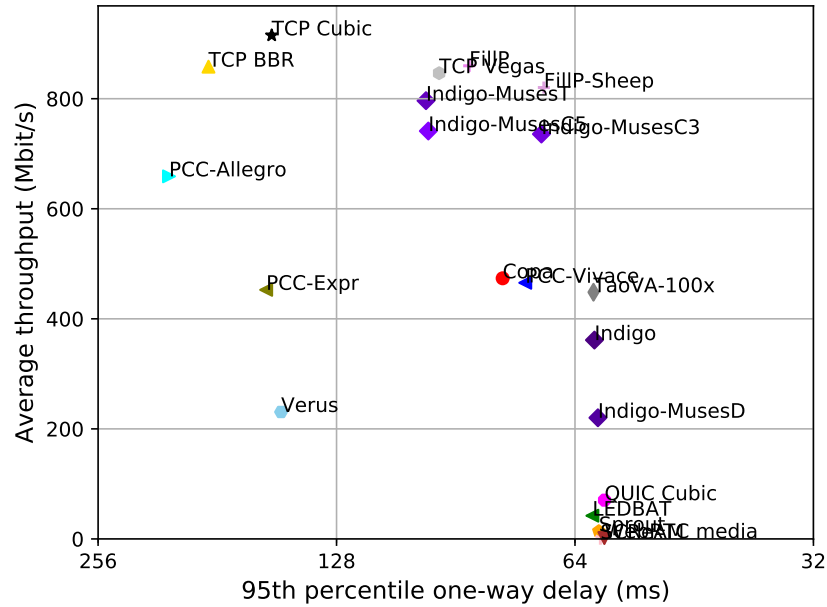
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from GCE Sydney to GCE Tokyo, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



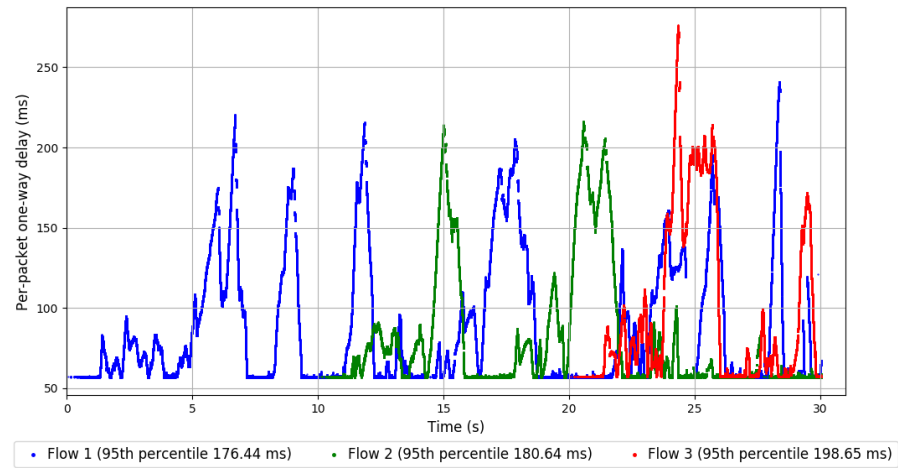
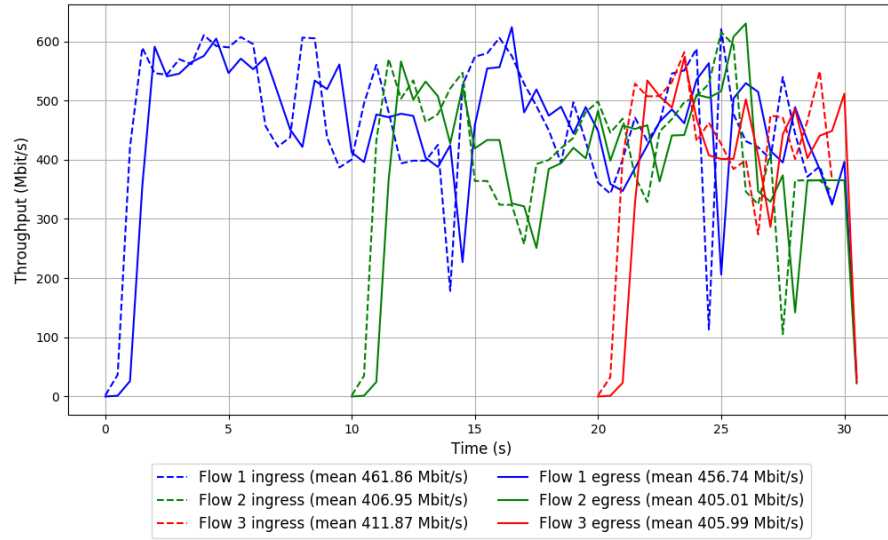
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	454.75	405.80	401.24	185.88	184.66	181.05	1.01	1.01	1.13
Copa	5	243.90	248.01	194.53	73.85	81.11	97.77	0.03	0.01	0.05
TCP Cubic	5	500.65	424.91	395.54	150.68	140.61	138.98	0.17	0.07	0.45
FillP	5	551.64	338.27	250.16	92.57	61.72	61.03	0.12	0.01	0.05
FillP-Sheep	5	524.25	329.98	230.72	73.69	59.52	60.71	0.02	0.00	0.00
Indigo	5	180.28	194.86	161.02	60.20	59.32	59.37	0.01	0.01	0.01
Indigo-MusesC3	5	437.26	365.36	240.39	71.70	68.82	62.73	0.01	0.01	0.05
Indigo-MusesC5	5	463.48	394.48	92.19	103.85	82.45	58.82	0.03	0.03	0.07
Indigo-MusesD	5	126.98	132.91	27.81	59.99	57.86	57.04	0.01	0.00	0.00
Indigo-MusesT	5	476.61	385.10	276.29	104.30	87.03	69.54	0.02	0.01	0.05
LEDBAT	5	27.42	17.89	8.96	59.55	60.62	59.65	0.00	0.00	0.17
PCC-Allegro	5	372.44	298.77	268.32	215.63	118.34	150.26	9.54	1.64	2.66
PCC-Expr	5	255.13	227.91	139.24	135.61	150.76	87.13	1.01	2.29	0.02
QUIC Cubic	5	36.20	38.62	26.29	58.01	57.41	58.63	0.01	0.00	0.00
SCReAM	5	0.22	0.22	0.22	58.78	59.26	57.43	0.00	0.00	0.07
Sprout	5	7.30	6.98	6.69	58.97	59.11	57.91	0.00	0.00	0.00
TaoVA-100x	5	231.51	222.63	205.28	59.92	60.53	63.37	0.00	0.00	0.03
TCP Vegas	5	451.32	412.72	361.78	91.02	93.45	93.94	0.08	0.05	0.12
Verus	5	133.28	98.83	97.32	142.61	120.50	99.56	0.78	0.13	0.09
PCC-Vivace	5	260.44	231.81	154.30	97.35	60.75	69.36	0.04	0.00	0.01
WebRTC media	5	0.82	0.53	0.23	56.75	58.03	58.22	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-01-22 09:11:23
End at: 2019-01-22 09:11:53
Local clock offset: -0.067 ms
Remote clock offset: -0.199 ms

Below is generated by plot.py at 2019-01-22 12:47:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 861.30 Mbit/s
95th percentile per-packet one-way delay: 185.009 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 456.74 Mbit/s
95th percentile per-packet one-way delay: 176.438 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 405.01 Mbit/s
95th percentile per-packet one-way delay: 180.637 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 405.99 Mbit/s
95th percentile per-packet one-way delay: 198.654 ms
Loss rate: 1.42%

Run 1: Report of TCP BBR — Data Link

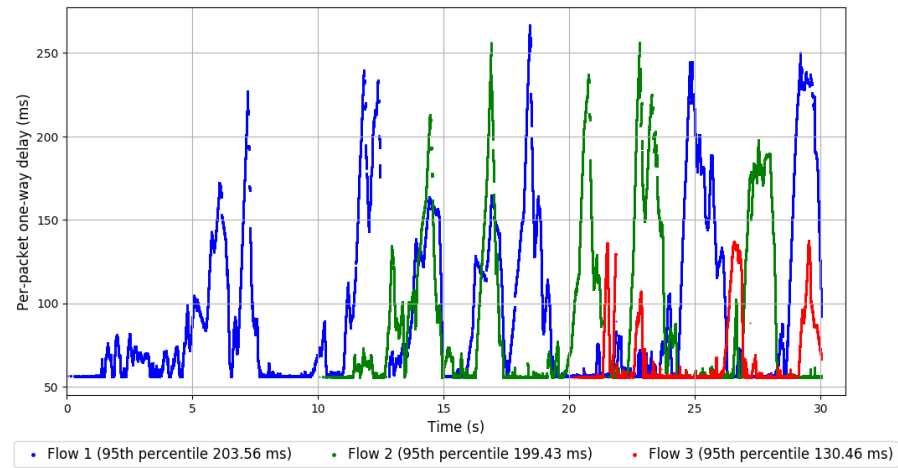
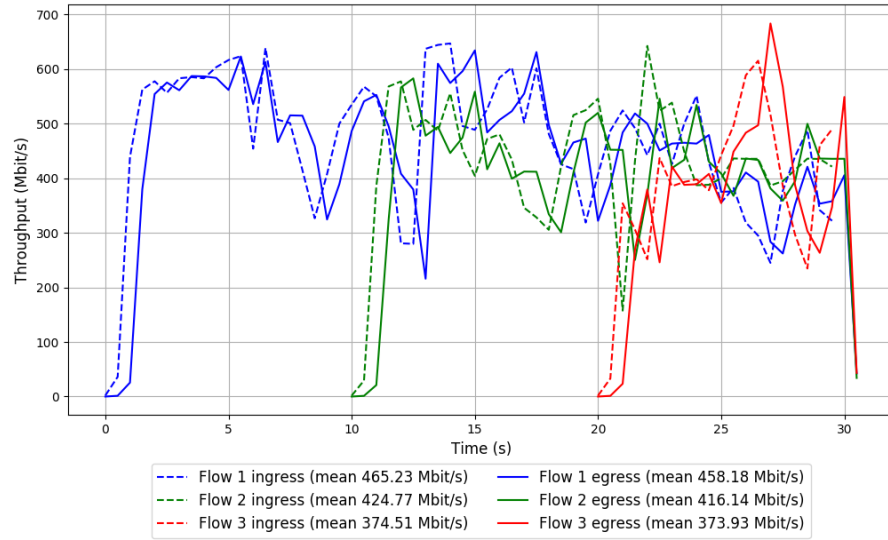


Run 2: Statistics of TCP BBR

Start at: 2019-01-22 09:49:29
End at: 2019-01-22 09:49:59
Local clock offset: -0.222 ms
Remote clock offset: -1.514 ms

Below is generated by plot.py at 2019-01-22 12:47:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 859.66 Mbit/s
95th percentile per-packet one-way delay: 193.293 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 458.18 Mbit/s
95th percentile per-packet one-way delay: 203.564 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 416.14 Mbit/s
95th percentile per-packet one-way delay: 199.429 ms
Loss rate: 2.03%
-- Flow 3:
Average throughput: 373.93 Mbit/s
95th percentile per-packet one-way delay: 130.464 ms
Loss rate: 0.16%

Run 2: Report of TCP BBR — Data Link

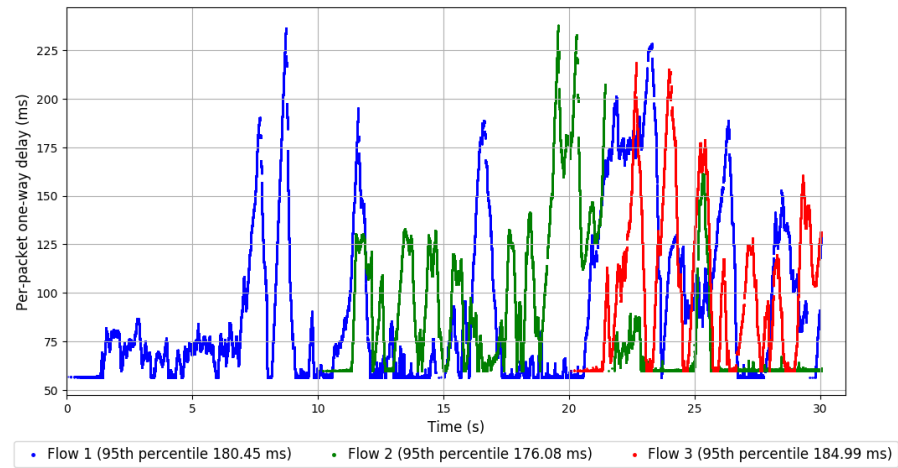
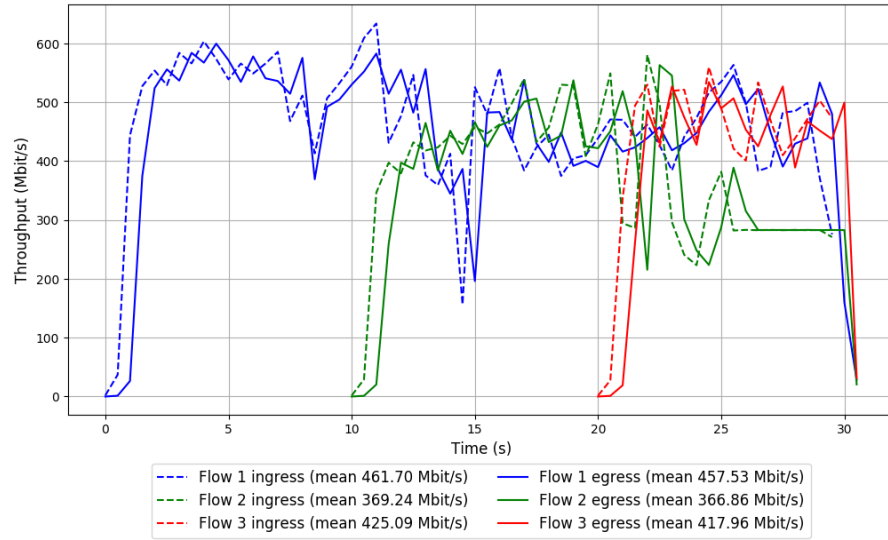


Run 3: Statistics of TCP BBR

Start at: 2019-01-22 10:28:44
End at: 2019-01-22 10:29:14
Local clock offset: -0.152 ms
Remote clock offset: -0.588 ms

Below is generated by plot.py at 2019-01-22 12:47:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 840.64 Mbit/s
95th percentile per-packet one-way delay: 180.007 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 457.53 Mbit/s
95th percentile per-packet one-way delay: 180.446 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 366.86 Mbit/s
95th percentile per-packet one-way delay: 176.079 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 417.96 Mbit/s
95th percentile per-packet one-way delay: 184.992 ms
Loss rate: 1.71%

Run 3: Report of TCP BBR — Data Link

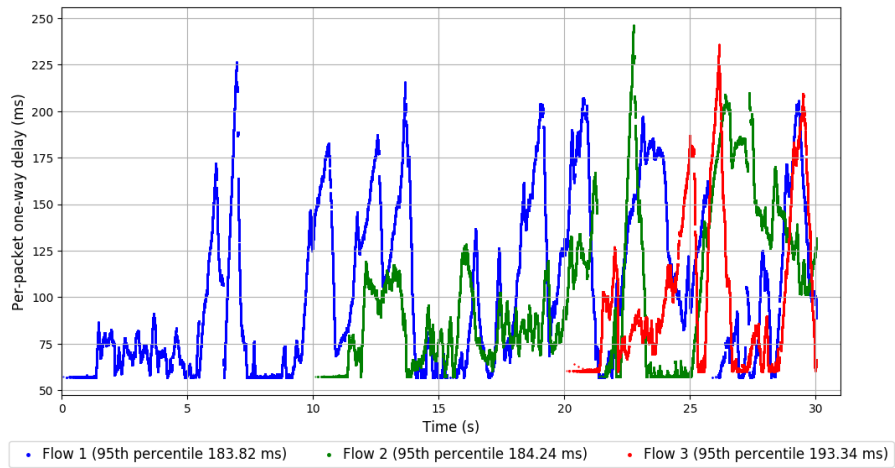
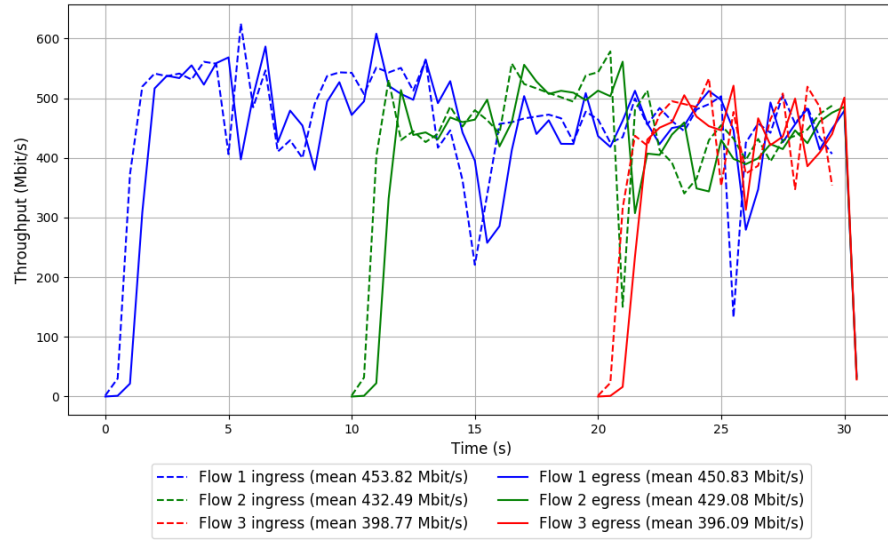


Run 4: Statistics of TCP BBR

Start at: 2019-01-22 11:07:27
End at: 2019-01-22 11:07:57
Local clock offset: -0.21 ms
Remote clock offset: -0.294 ms

Below is generated by plot.py at 2019-01-22 12:47:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 868.01 Mbit/s
95th percentile per-packet one-way delay: 184.857 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 450.83 Mbit/s
95th percentile per-packet one-way delay: 183.821 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 429.08 Mbit/s
95th percentile per-packet one-way delay: 184.243 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 396.09 Mbit/s
95th percentile per-packet one-way delay: 193.345 ms
Loss rate: 0.70%

Run 4: Report of TCP BBR — Data Link

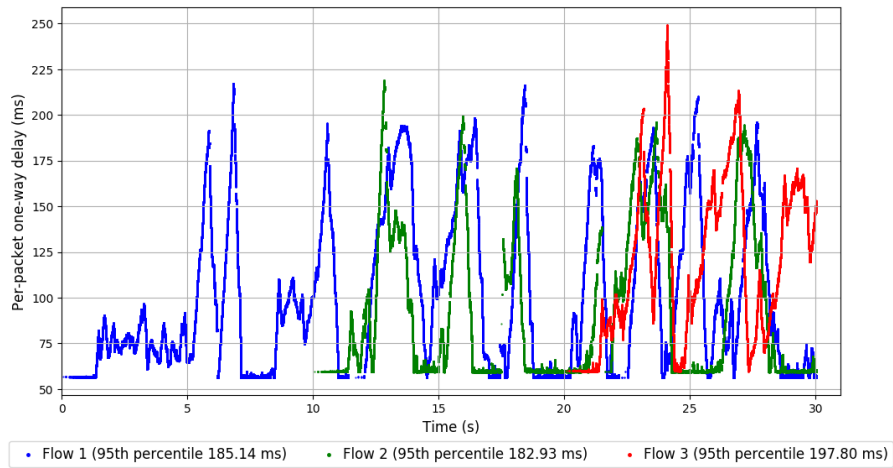
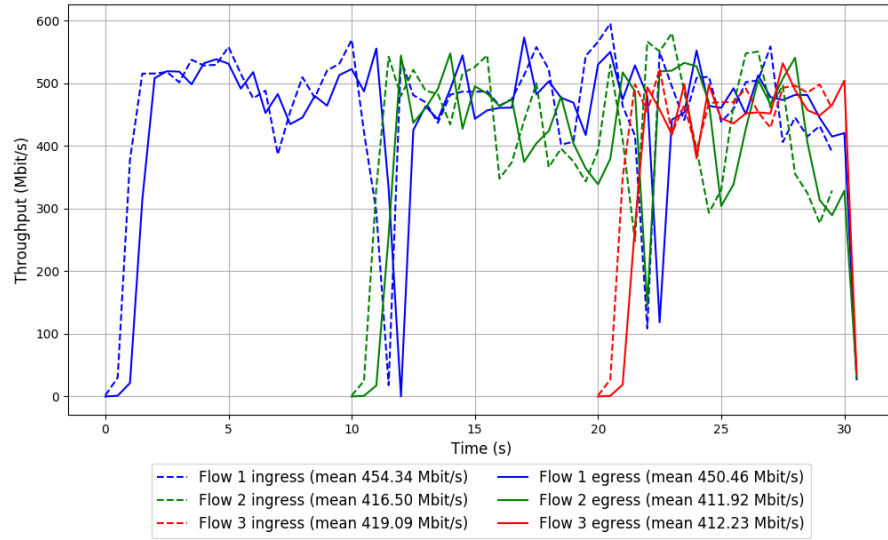


Run 5: Statistics of TCP BBR

Start at: 2019-01-22 11:47:00
End at: 2019-01-22 11:47:30
Local clock offset: -0.018 ms
Remote clock offset: -0.863 ms

Below is generated by plot.py at 2019-01-22 12:47:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 861.69 Mbit/s
95th percentile per-packet one-way delay: 185.455 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 450.46 Mbit/s
95th percentile per-packet one-way delay: 185.140 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 411.92 Mbit/s
95th percentile per-packet one-way delay: 182.934 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 412.23 Mbit/s
95th percentile per-packet one-way delay: 197.804 ms
Loss rate: 1.66%

Run 5: Report of TCP BBR — Data Link

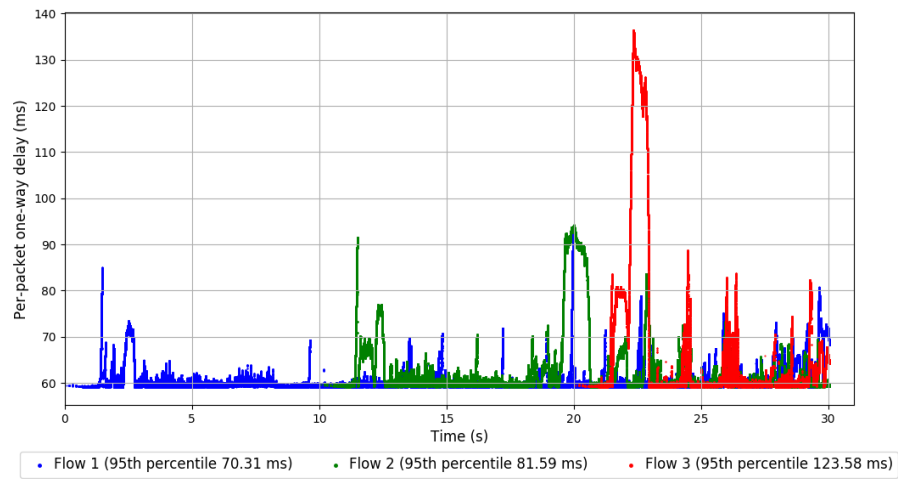
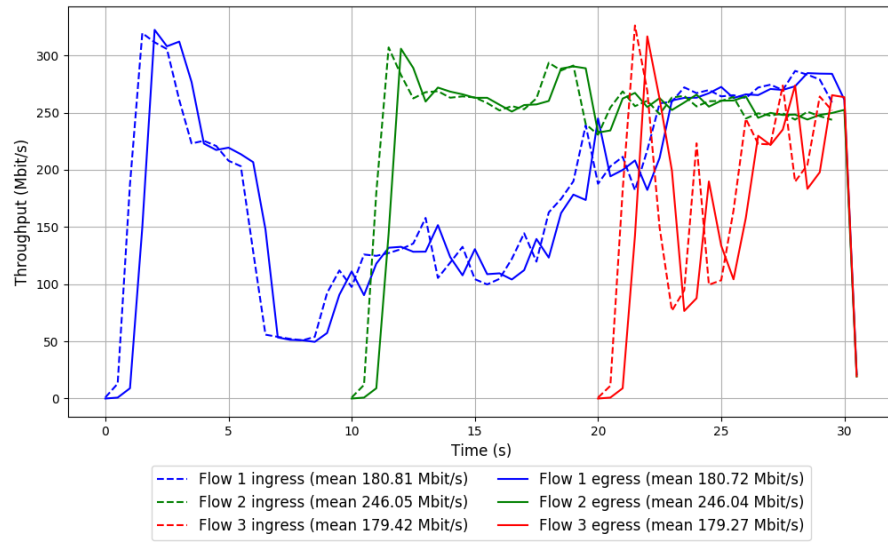


Run 1: Statistics of Copa

Start at: 2019-01-22 09:05:22
End at: 2019-01-22 09:05:52
Local clock offset: -0.333 ms
Remote clock offset: -1.381 ms

Below is generated by plot.py at 2019-01-22 12:47:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 404.15 Mbit/s
95th percentile per-packet one-way delay: 78.778 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 180.72 Mbit/s
95th percentile per-packet one-way delay: 70.315 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 246.04 Mbit/s
95th percentile per-packet one-way delay: 81.592 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 179.27 Mbit/s
95th percentile per-packet one-way delay: 123.579 ms
Loss rate: 0.10%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-01-22 09:43:16

End at: 2019-01-22 09:43:46

Local clock offset: -0.049 ms

Remote clock offset: 0.617 ms

Below is generated by plot.py at 2019-01-22 12:48:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 494.23 Mbit/s

95th percentile per-packet one-way delay: 86.950 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 248.57 Mbit/s

95th percentile per-packet one-way delay: 78.433 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 258.46 Mbit/s

95th percentile per-packet one-way delay: 87.920 ms

Loss rate: 0.01%

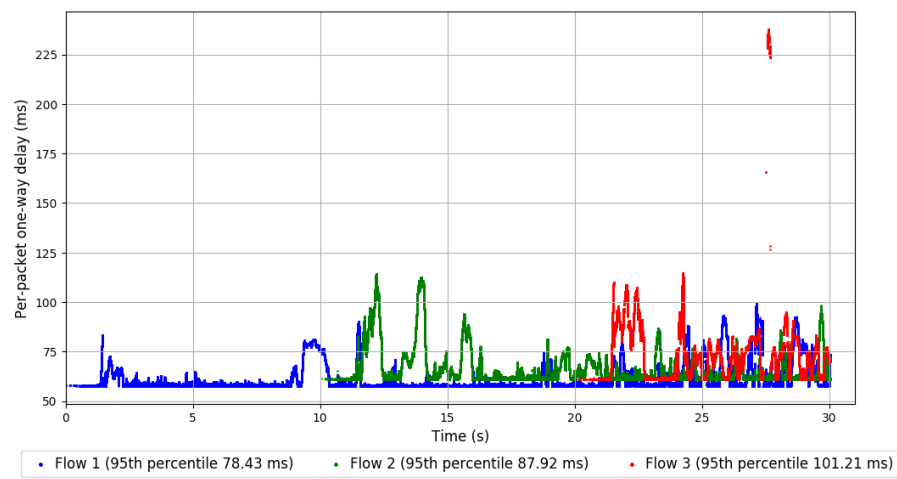
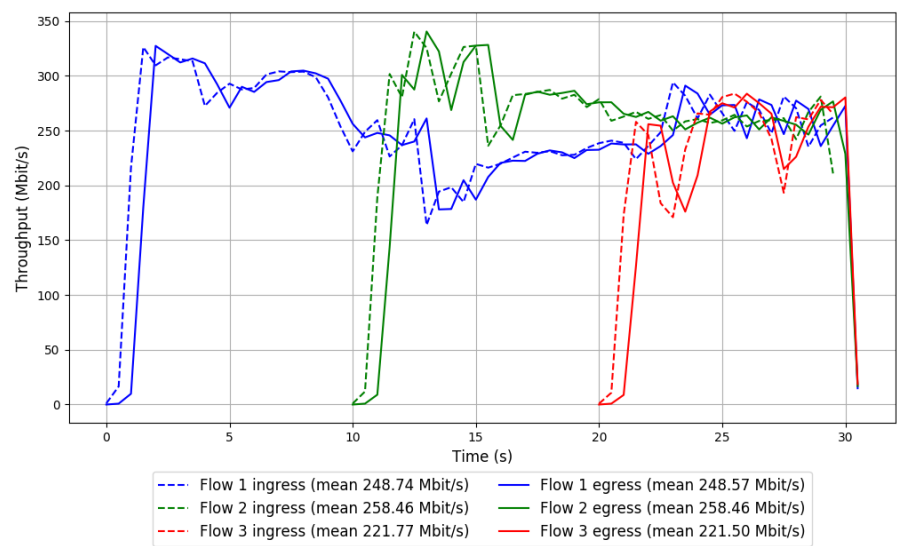
-- Flow 3:

Average throughput: 221.50 Mbit/s

95th percentile per-packet one-way delay: 101.206 ms

Loss rate: 0.15%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-01-22 10:22:29

End at: 2019-01-22 10:22:59

Local clock offset: -0.11 ms

Remote clock offset: -0.79 ms

Below is generated by plot.py at 2019-01-22 12:48:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 492.83 Mbit/s

95th percentile per-packet one-way delay: 71.384 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 262.31 Mbit/s

95th percentile per-packet one-way delay: 69.735 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 259.25 Mbit/s

95th percentile per-packet one-way delay: 70.300 ms

Loss rate: 0.03%

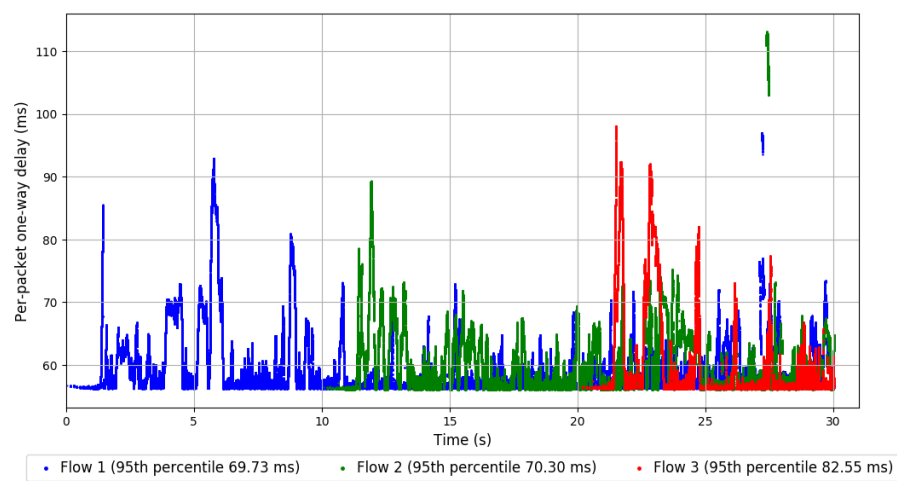
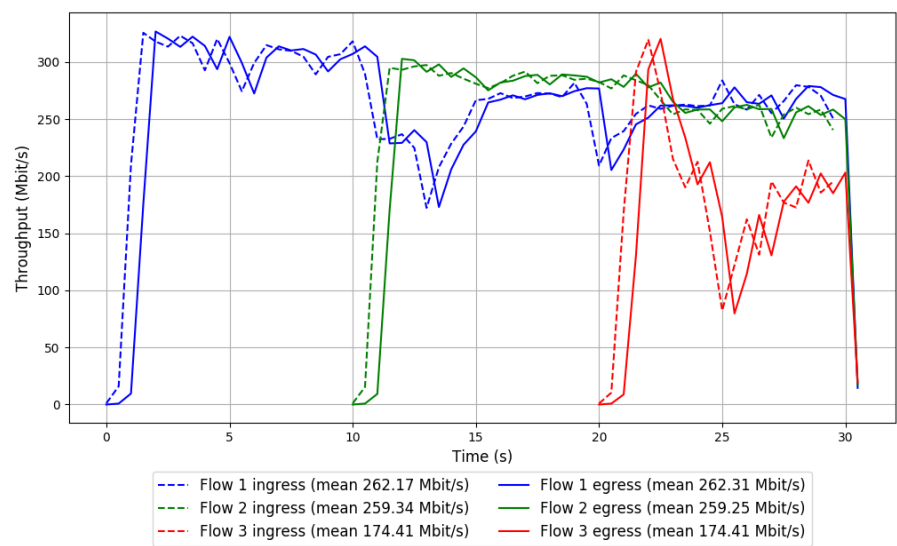
-- Flow 3:

Average throughput: 174.41 Mbit/s

95th percentile per-packet one-way delay: 82.551 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-01-22 11:01:03

End at: 2019-01-22 11:01:33

Local clock offset: -0.029 ms

Remote clock offset: -0.18 ms

Below is generated by plot.py at 2019-01-22 13:08:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 512.63 Mbit/s

95th percentile per-packet one-way delay: 79.965 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 285.35 Mbit/s

95th percentile per-packet one-way delay: 75.527 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 246.68 Mbit/s

95th percentile per-packet one-way delay: 82.610 ms

Loss rate: 0.00%

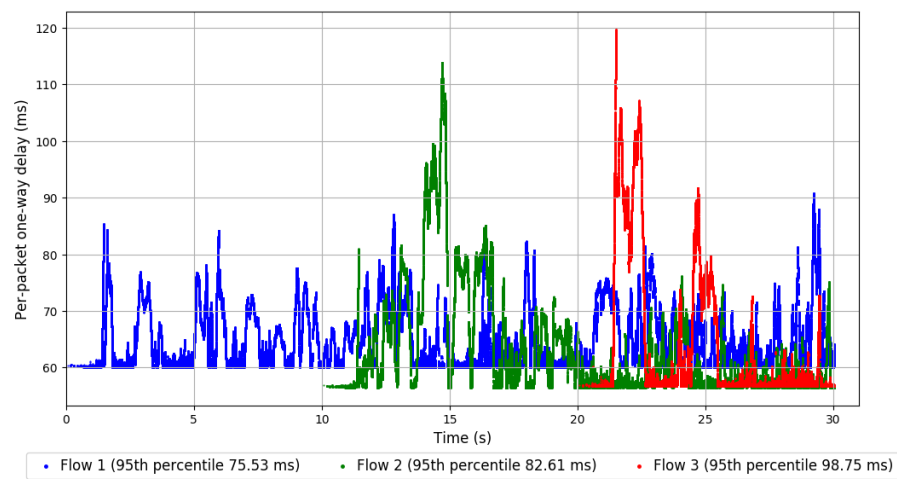
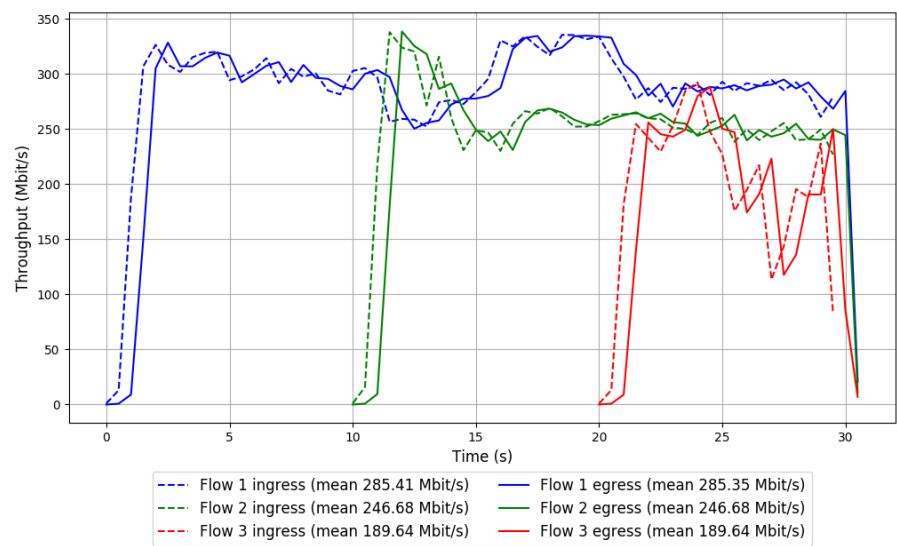
-- Flow 3:

Average throughput: 189.64 Mbit/s

95th percentile per-packet one-way delay: 98.754 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-01-22 11:40:15

End at: 2019-01-22 11:40:45

Local clock offset: -0.02 ms

Remote clock offset: -0.84 ms

Below is generated by plot.py at 2019-01-22 13:08:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 464.38 Mbit/s

95th percentile per-packet one-way delay: 77.804 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 242.56 Mbit/s

95th percentile per-packet one-way delay: 75.260 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 229.61 Mbit/s

95th percentile per-packet one-way delay: 83.124 ms

Loss rate: 0.01%

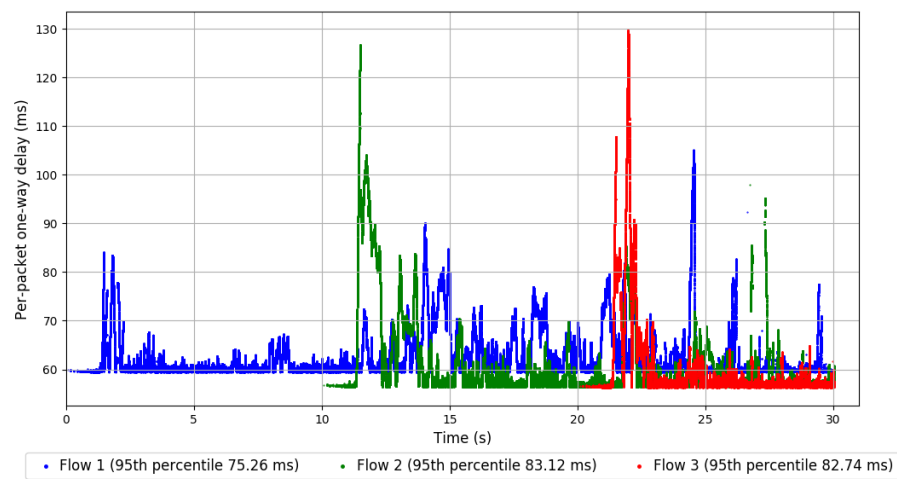
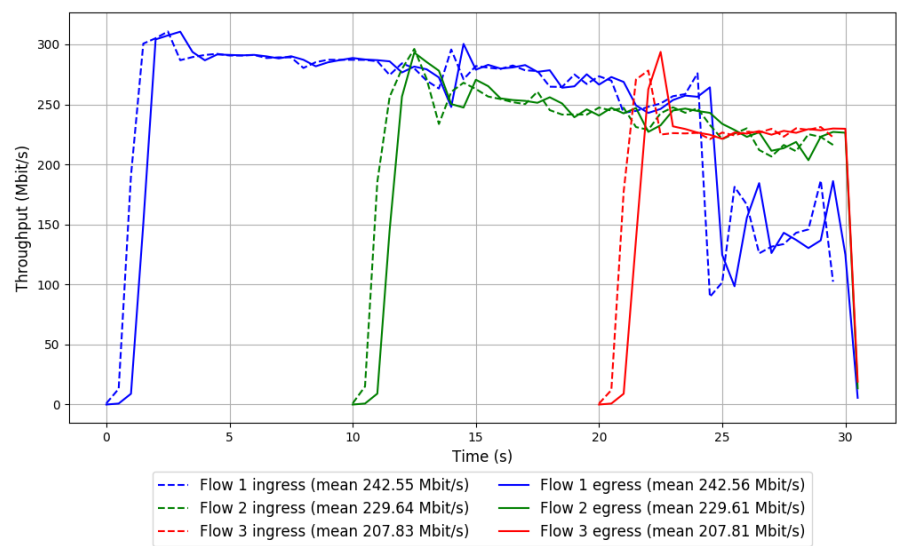
-- Flow 3:

Average throughput: 207.81 Mbit/s

95th percentile per-packet one-way delay: 82.742 ms

Loss rate: 0.01%

Run 5: Report of Copa — Data Link

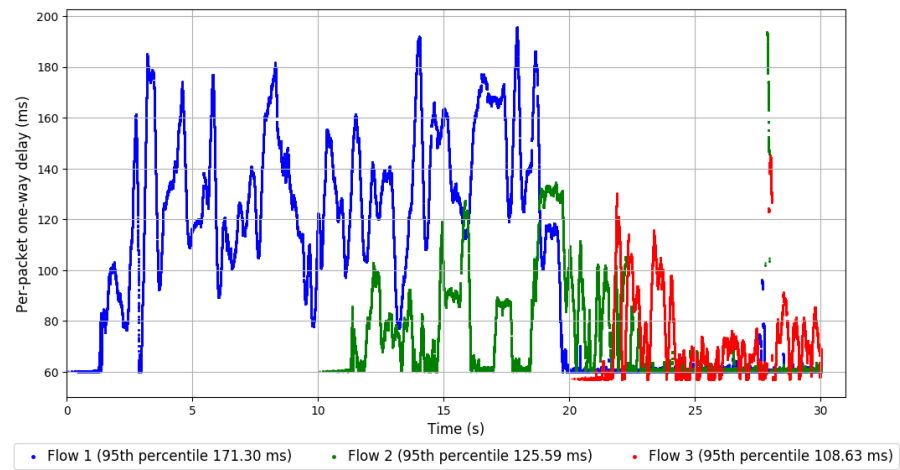
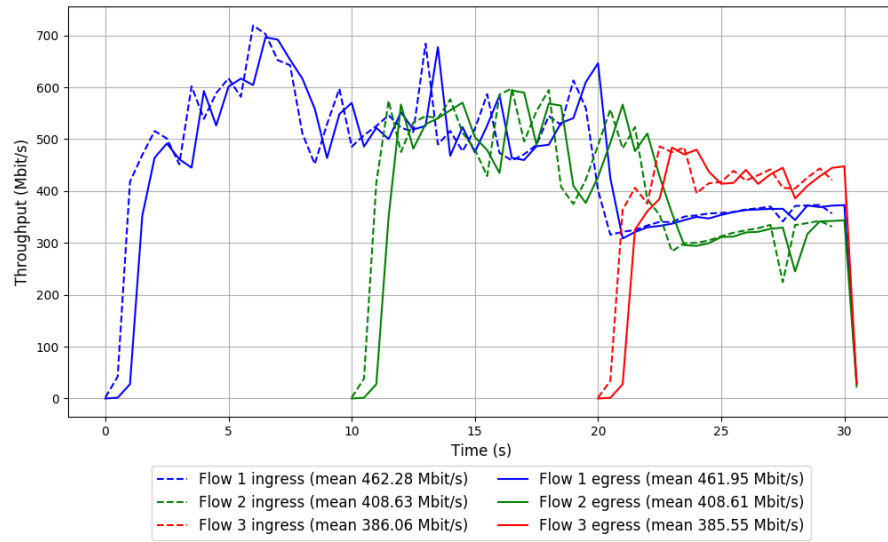


Run 1: Statistics of TCP Cubic

Start at: 2019-01-22 09:27:14
End at: 2019-01-22 09:27:44
Local clock offset: 0.121 ms
Remote clock offset: -0.079 ms

Below is generated by plot.py at 2019-01-22 13:08:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 862.19 Mbit/s
95th percentile per-packet one-way delay: 164.685 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 461.95 Mbit/s
95th percentile per-packet one-way delay: 171.301 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 408.61 Mbit/s
95th percentile per-packet one-way delay: 125.590 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 385.55 Mbit/s
95th percentile per-packet one-way delay: 108.631 ms
Loss rate: 0.13%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-01-22 10:06:07

End at: 2019-01-22 10:06:37

Local clock offset: -0.003 ms

Remote clock offset: 0.043 ms

Below is generated by plot.py at 2019-01-22 13:11:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 981.79 Mbit/s

95th percentile per-packet one-way delay: 120.354 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 549.61 Mbit/s

95th percentile per-packet one-way delay: 118.075 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 442.40 Mbit/s

95th percentile per-packet one-way delay: 122.575 ms

Loss rate: 0.02%

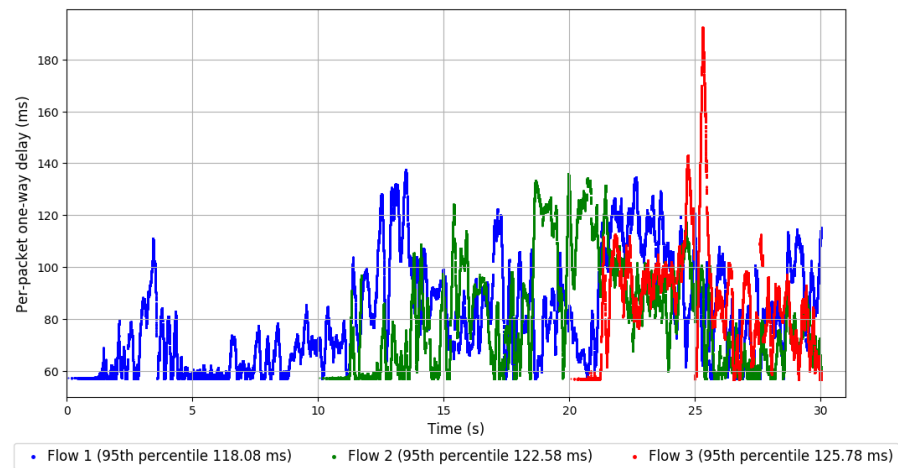
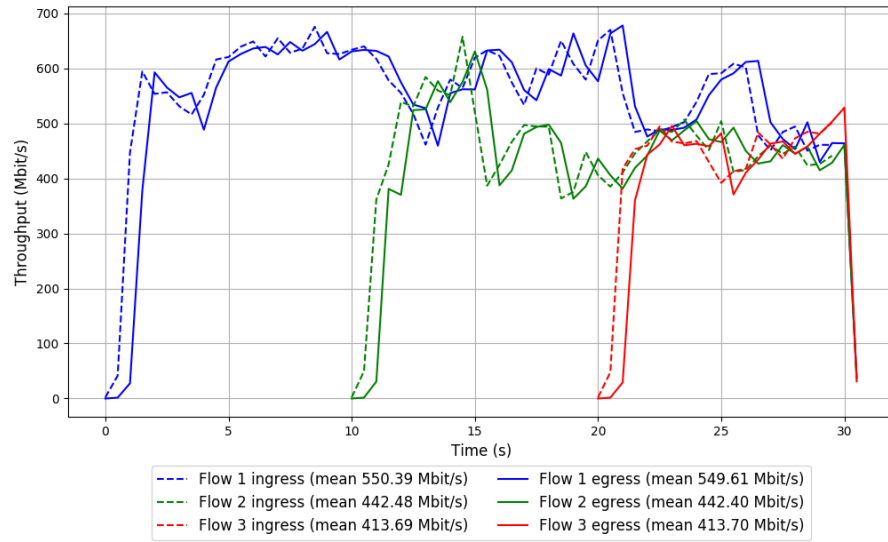
-- Flow 3:

Average throughput: 413.70 Mbit/s

95th percentile per-packet one-way delay: 125.784 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link

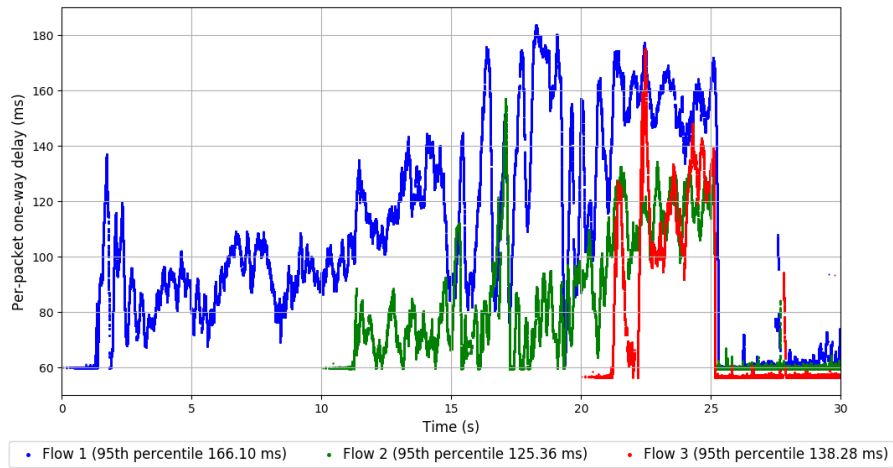
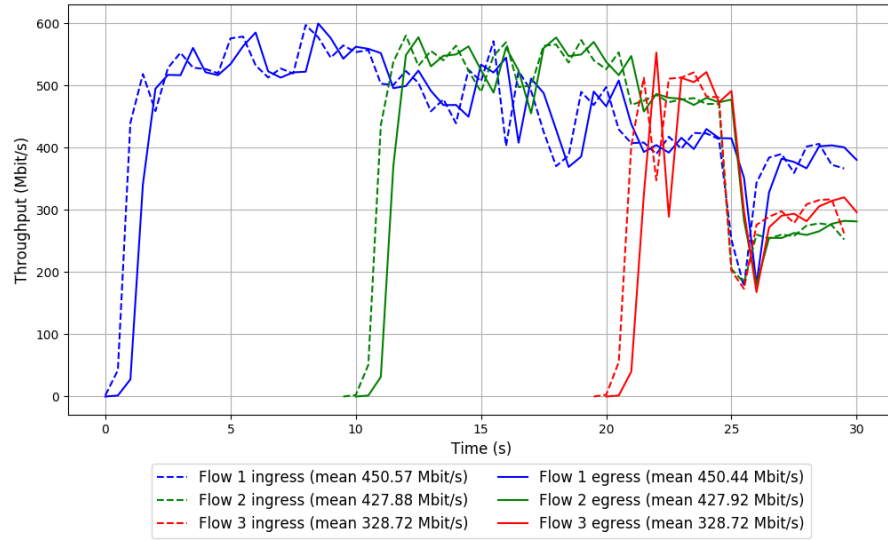


Run 3: Statistics of TCP Cubic

Start at: 2019-01-22 10:45:18
End at: 2019-01-22 10:45:48
Local clock offset: -0.146 ms
Remote clock offset: -0.506 ms

Below is generated by plot.py at 2019-01-22 13:11:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 845.12 Mbit/s
95th percentile per-packet one-way delay: 160.225 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 450.44 Mbit/s
95th percentile per-packet one-way delay: 166.096 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 427.92 Mbit/s
95th percentile per-packet one-way delay: 125.360 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 328.72 Mbit/s
95th percentile per-packet one-way delay: 138.279 ms
Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link

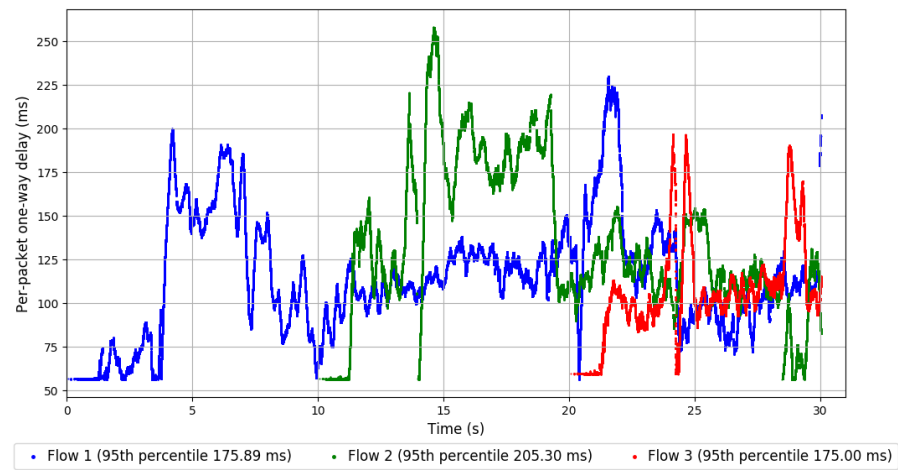
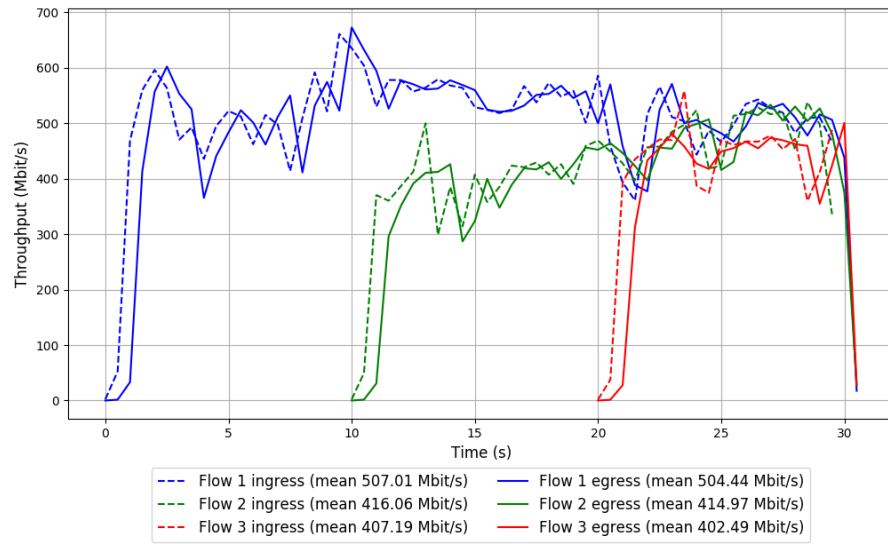


Run 4: Statistics of TCP Cubic

Start at: 2019-01-22 11:23:53
End at: 2019-01-22 11:24:23
Local clock offset: 0.017 ms
Remote clock offset: -0.498 ms

Below is generated by plot.py at 2019-01-22 13:11:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 914.50 Mbit/s
95th percentile per-packet one-way delay: 189.958 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 504.44 Mbit/s
95th percentile per-packet one-way delay: 175.889 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 414.97 Mbit/s
95th percentile per-packet one-way delay: 205.298 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 402.49 Mbit/s
95th percentile per-packet one-way delay: 175.001 ms
Loss rate: 1.19%

Run 4: Report of TCP Cubic — Data Link

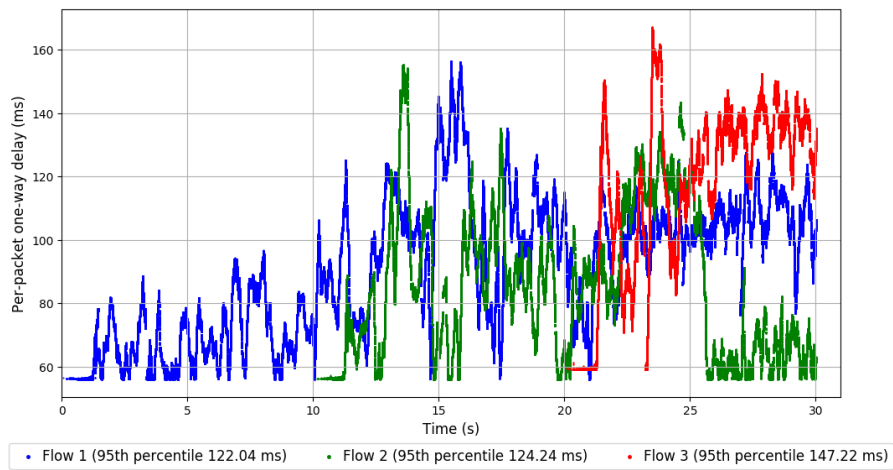
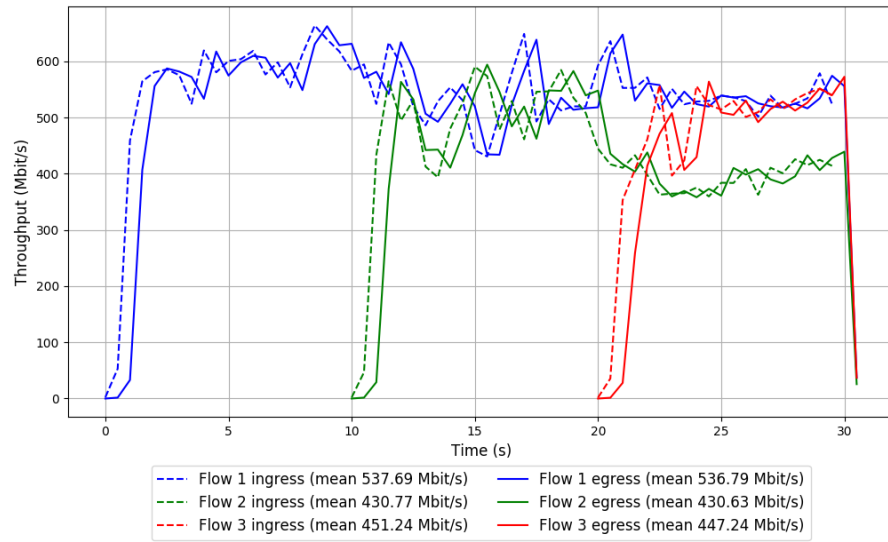


Run 5: Statistics of TCP Cubic

Start at: 2019-01-22 12:02:57
End at: 2019-01-22 12:03:27
Local clock offset: 0.438 ms
Remote clock offset: -0.885 ms

Below is generated by plot.py at 2019-01-22 13:12:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 971.96 Mbit/s
95th percentile per-packet one-way delay: 137.538 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 536.79 Mbit/s
95th percentile per-packet one-way delay: 122.038 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 430.63 Mbit/s
95th percentile per-packet one-way delay: 124.240 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 447.24 Mbit/s
95th percentile per-packet one-way delay: 147.221 ms
Loss rate: 0.93%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-01-22 09:17:48

End at: 2019-01-22 09:18:18

Local clock offset: -0.062 ms

Remote clock offset: 0.206 ms

Below is generated by plot.py at 2019-01-22 13:13:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 841.76 Mbit/s

95th percentile per-packet one-way delay: 93.378 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 529.36 Mbit/s

95th percentile per-packet one-way delay: 97.190 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 349.36 Mbit/s

95th percentile per-packet one-way delay: 65.443 ms

Loss rate: 0.01%

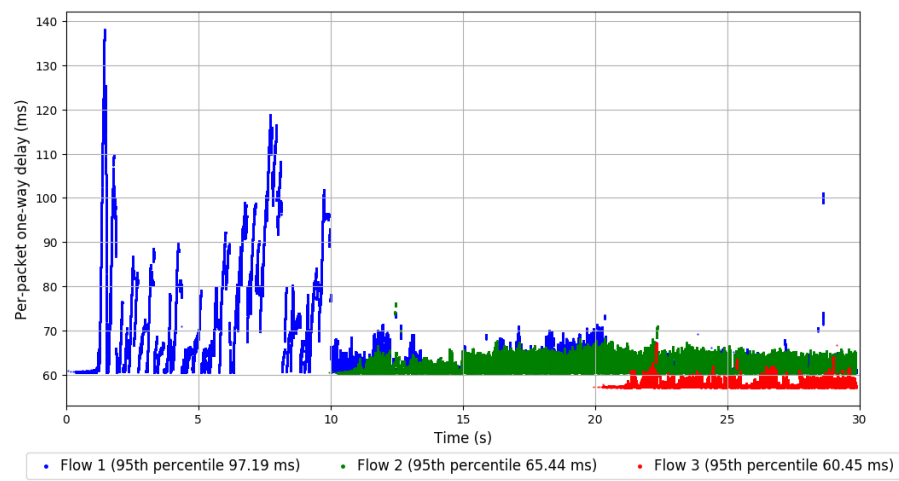
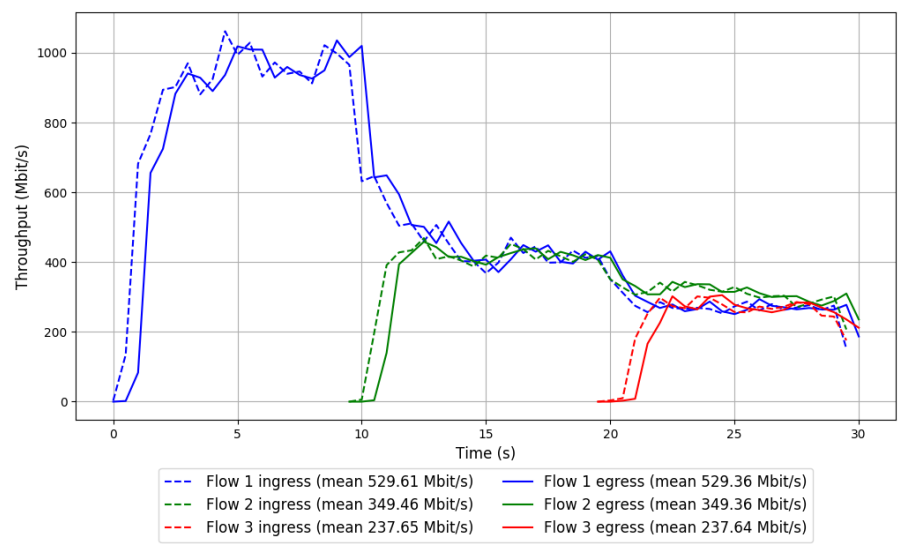
-- Flow 3:

Average throughput: 237.64 Mbit/s

95th percentile per-packet one-way delay: 60.450 ms

Loss rate: 0.00%

Run 1: Report of FillP — Data Link

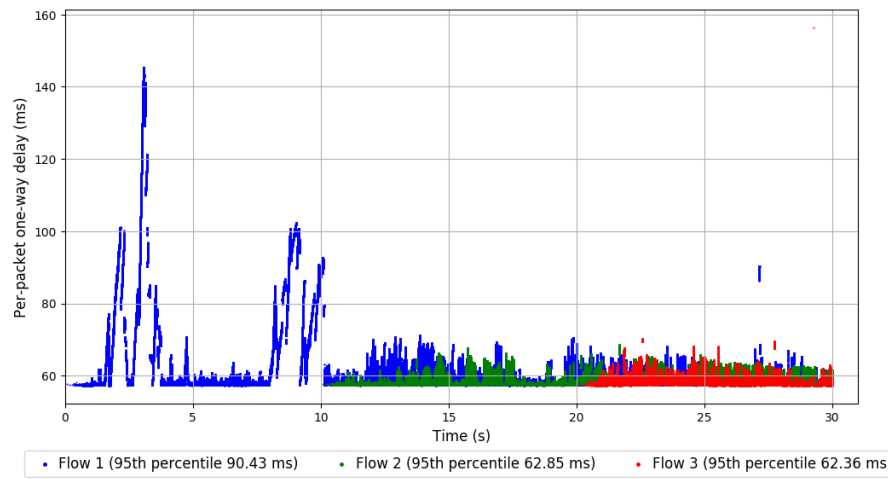
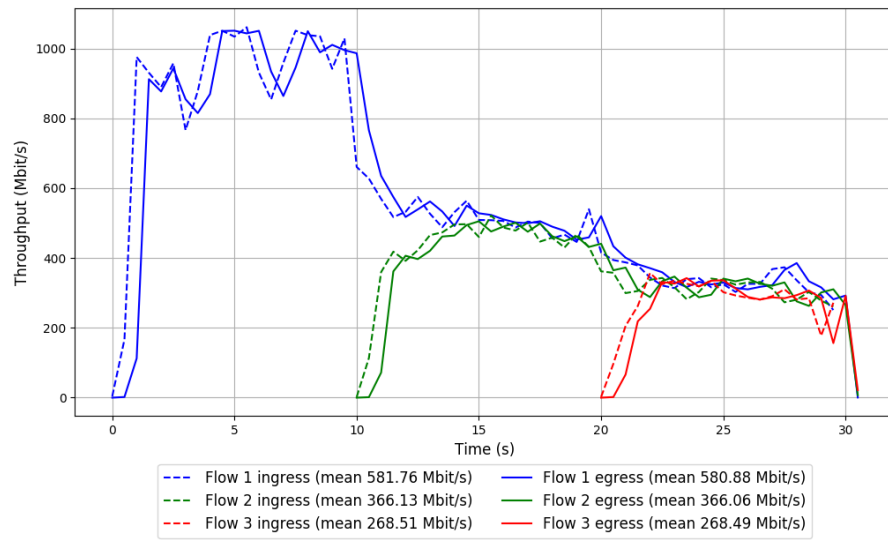


Run 2: Statistics of FillP

Start at: 2019-01-22 09:56:07
End at: 2019-01-22 09:56:37
Local clock offset: -0.482 ms
Remote clock offset: -0.104 ms

Below is generated by plot.py at 2019-01-22 13:35:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 913.56 Mbit/s
95th percentile per-packet one-way delay: 83.808 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 580.88 Mbit/s
95th percentile per-packet one-way delay: 90.432 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 366.06 Mbit/s
95th percentile per-packet one-way delay: 62.850 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 268.49 Mbit/s
95th percentile per-packet one-way delay: 62.362 ms
Loss rate: 0.01%

Run 2: Report of FillP — Data Link

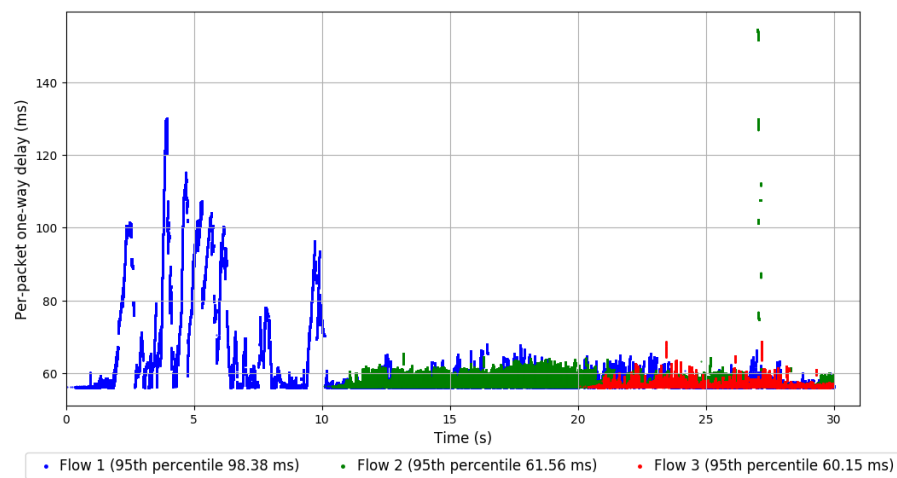
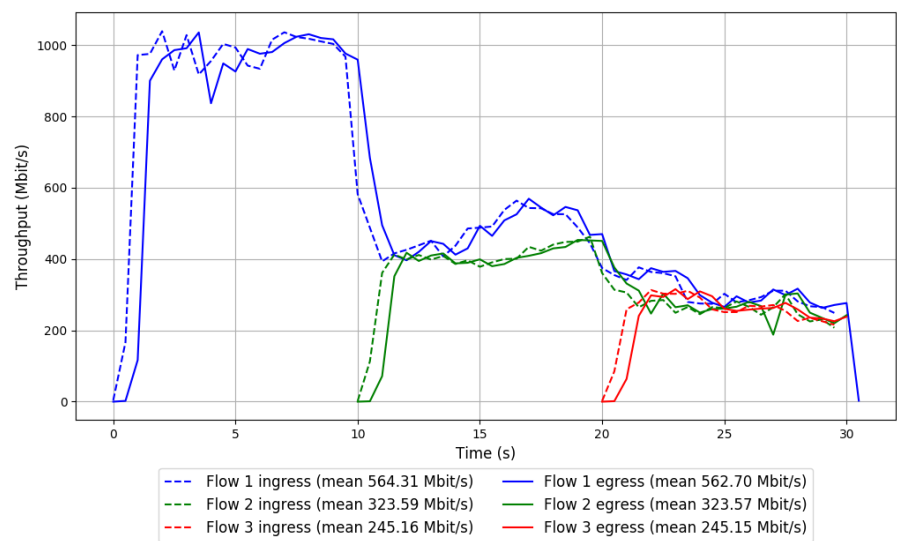


Run 3: Statistics of FillP

Start at: 2019-01-22 10:35:17
End at: 2019-01-22 10:35:47
Local clock offset: 0.039 ms
Remote clock offset: -0.761 ms

Below is generated by plot.py at 2019-01-22 13:35:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 859.03 Mbit/s
95th percentile per-packet one-way delay: 94.016 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 562.70 Mbit/s
95th percentile per-packet one-way delay: 98.376 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 323.57 Mbit/s
95th percentile per-packet one-way delay: 61.564 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 245.15 Mbit/s
95th percentile per-packet one-way delay: 60.150 ms
Loss rate: 0.00%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-01-22 11:13:45

End at: 2019-01-22 11:14:15

Local clock offset: -0.145 ms

Remote clock offset: -1.33 ms

Below is generated by plot.py at 2019-01-22 13:35:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 827.16 Mbit/s

95th percentile per-packet one-way delay: 77.850 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 526.51 Mbit/s

95th percentile per-packet one-way delay: 80.824 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 328.30 Mbit/s

95th percentile per-packet one-way delay: 59.813 ms

Loss rate: 0.01%

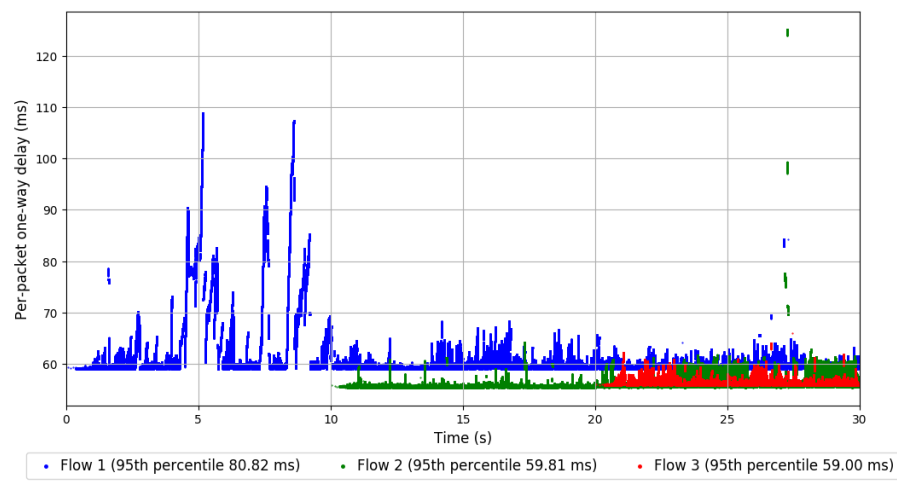
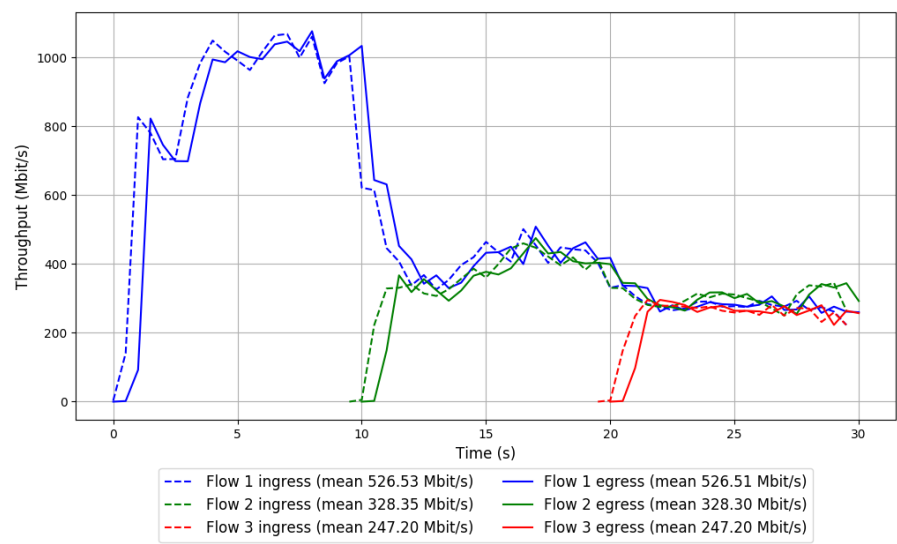
-- Flow 3:

Average throughput: 247.20 Mbit/s

95th percentile per-packet one-way delay: 59.001 ms

Loss rate: 0.00%

Run 4: Report of FillP — Data Link

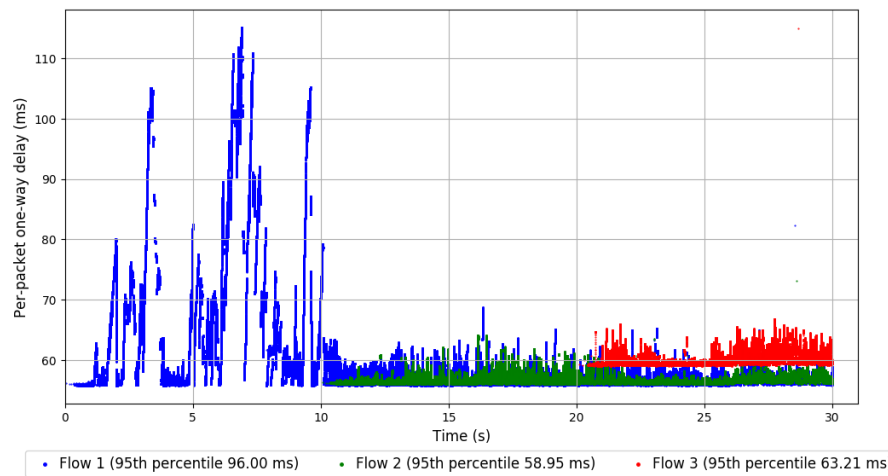
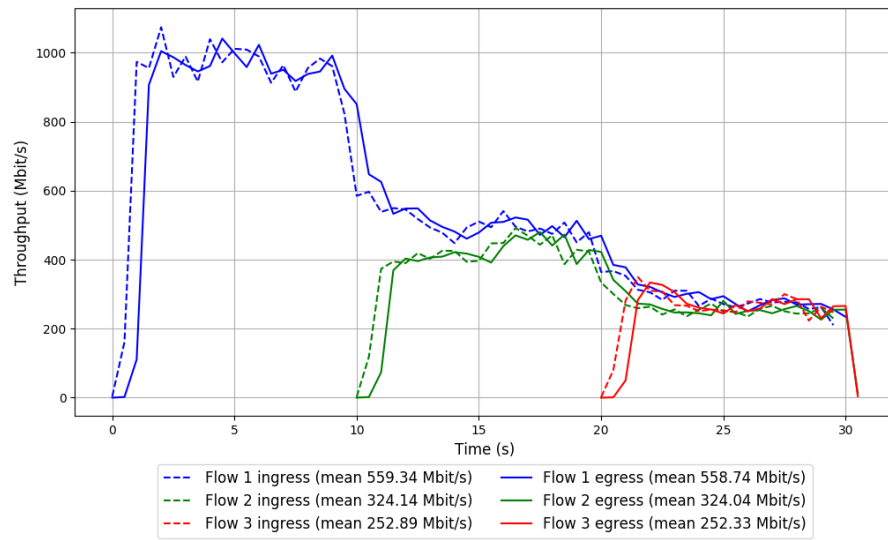


Run 5: Statistics of FillP

Start at: 2019-01-22 11:53:22
End at: 2019-01-22 11:53:52
Local clock offset: -0.475 ms
Remote clock offset: -1.753 ms

Below is generated by plot.py at 2019-01-22 13:35:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 857.57 Mbit/s
95th percentile per-packet one-way delay: 86.176 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 558.74 Mbit/s
95th percentile per-packet one-way delay: 96.005 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 324.04 Mbit/s
95th percentile per-packet one-way delay: 58.945 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 252.33 Mbit/s
95th percentile per-packet one-way delay: 63.211 ms
Loss rate: 0.25%

Run 5: Report of FillP — Data Link

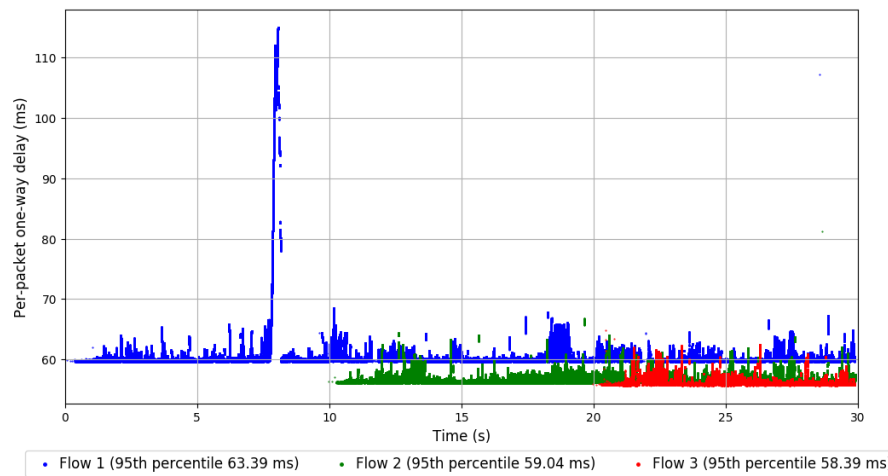
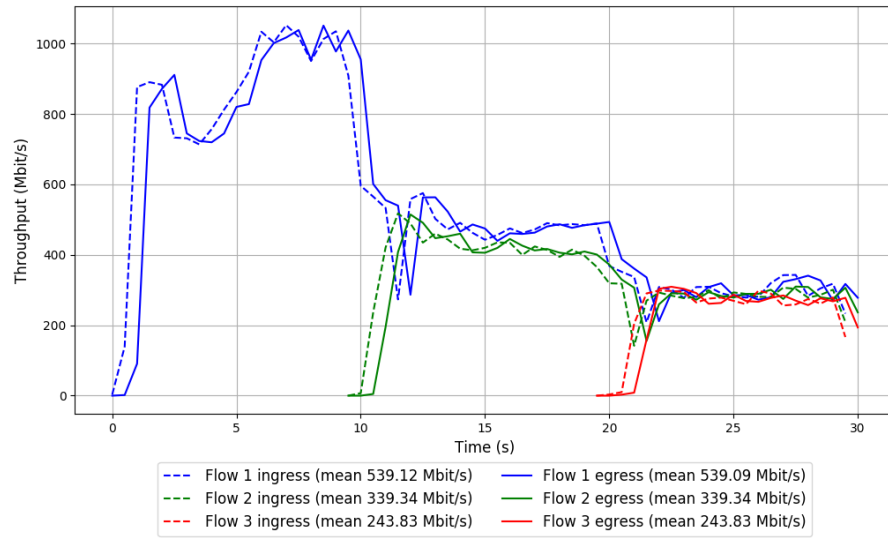


Run 1: Statistics of FillP-Sheep

Start at: 2019-01-22 09:32:16
End at: 2019-01-22 09:32:46
Local clock offset: 0.21 ms
Remote clock offset: -0.773 ms

Below is generated by plot.py at 2019-01-22 13:35:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 846.28 Mbit/s
95th percentile per-packet one-way delay: 62.257 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 539.09 Mbit/s
95th percentile per-packet one-way delay: 63.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 339.34 Mbit/s
95th percentile per-packet one-way delay: 59.040 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 243.83 Mbit/s
95th percentile per-packet one-way delay: 58.392 ms
Loss rate: 0.00%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-01-22 10:11:16

End at: 2019-01-22 10:11:46

Local clock offset: 0.016 ms

Remote clock offset: 0.755 ms

Below is generated by plot.py at 2019-01-22 13:35:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 797.30 Mbit/s

95th percentile per-packet one-way delay: 66.095 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 513.63 Mbit/s

95th percentile per-packet one-way delay: 69.592 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 317.55 Mbit/s

95th percentile per-packet one-way delay: 59.927 ms

Loss rate: 0.00%

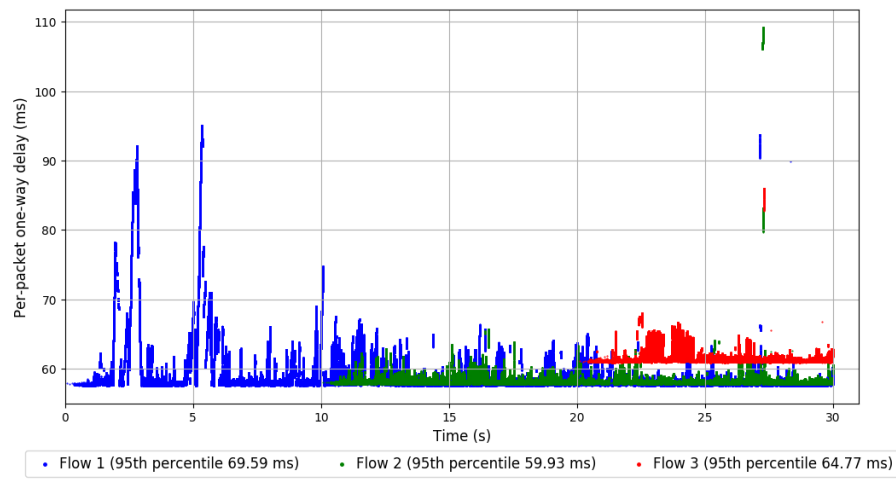
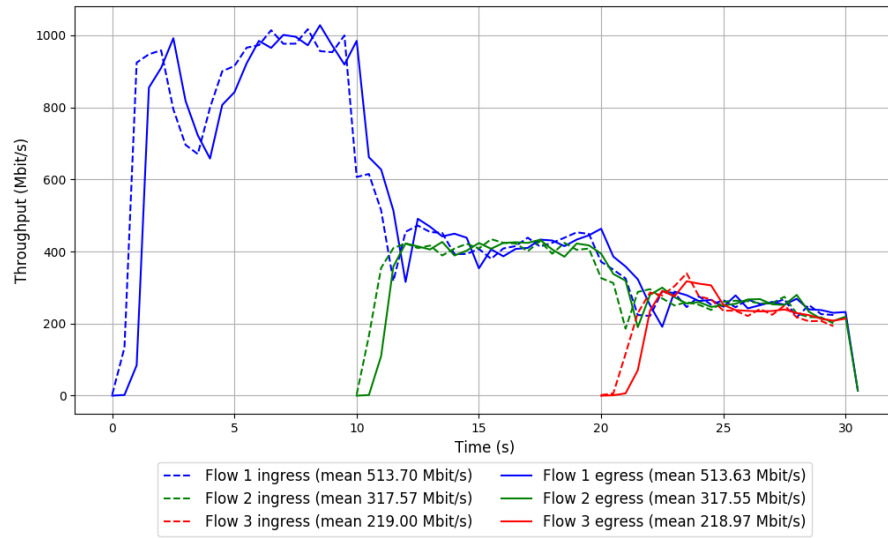
-- Flow 3:

Average throughput: 218.97 Mbit/s

95th percentile per-packet one-way delay: 64.766 ms

Loss rate: 0.01%

Run 2: Report of FillP-Sheep — Data Link

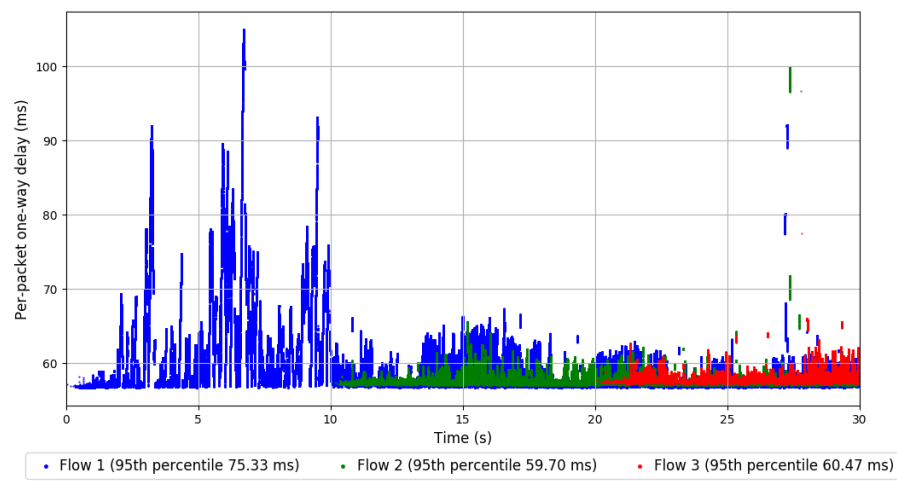
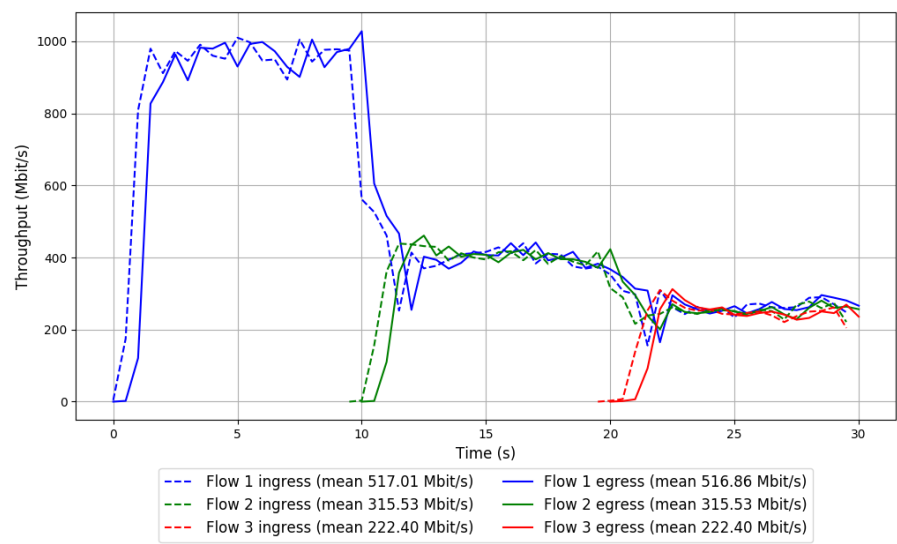


Run 3: Statistics of FillP-Sheep

Start at: 2019-01-22 10:50:24
End at: 2019-01-22 10:50:54
Local clock offset: -0.609 ms
Remote clock offset: -0.611 ms

Below is generated by plot.py at 2019-01-22 13:35:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 800.51 Mbit/s
95th percentile per-packet one-way delay: 72.888 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 516.86 Mbit/s
95th percentile per-packet one-way delay: 75.325 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 315.53 Mbit/s
95th percentile per-packet one-way delay: 59.700 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 222.40 Mbit/s
95th percentile per-packet one-way delay: 60.466 ms
Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link

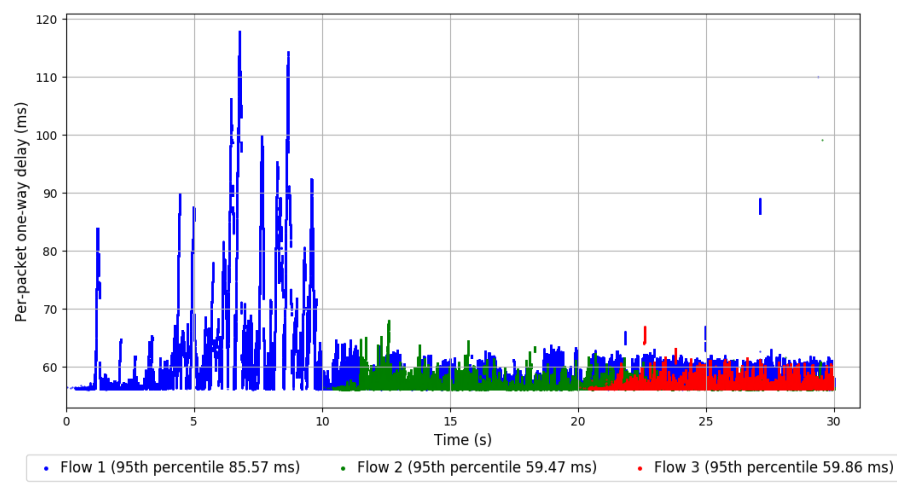
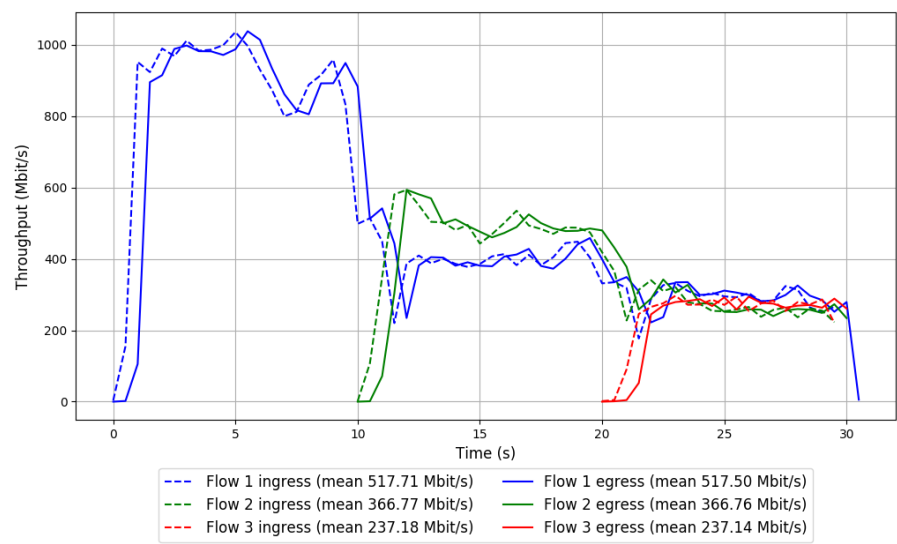


Run 4: Statistics of FillP-Sheep

Start at: 2019-01-22 11:28:58
End at: 2019-01-22 11:29:28
Local clock offset: -0.594 ms
Remote clock offset: -1.304 ms

Below is generated by plot.py at 2019-01-22 13:38:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 839.98 Mbit/s
95th percentile per-packet one-way delay: 78.266 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 517.50 Mbit/s
95th percentile per-packet one-way delay: 85.572 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 366.76 Mbit/s
95th percentile per-packet one-way delay: 59.470 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 237.14 Mbit/s
95th percentile per-packet one-way delay: 59.856 ms
Loss rate: 0.01%

Run 4: Report of FillP-Sheep — Data Link

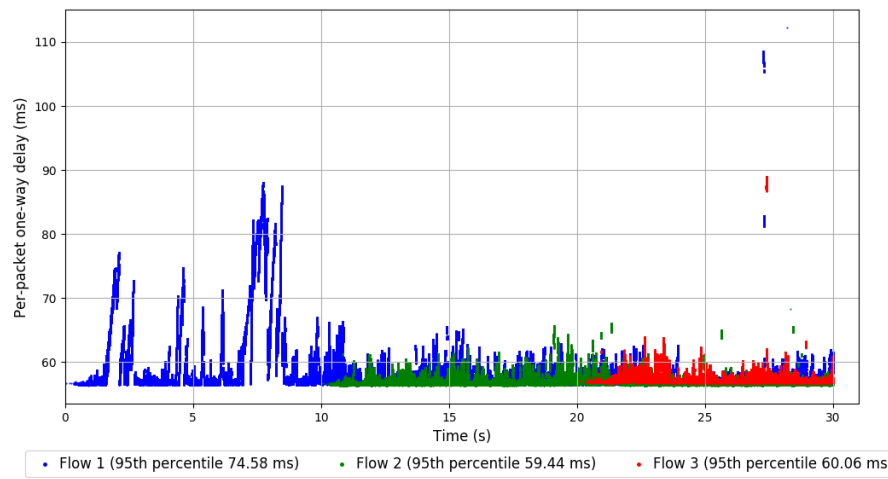
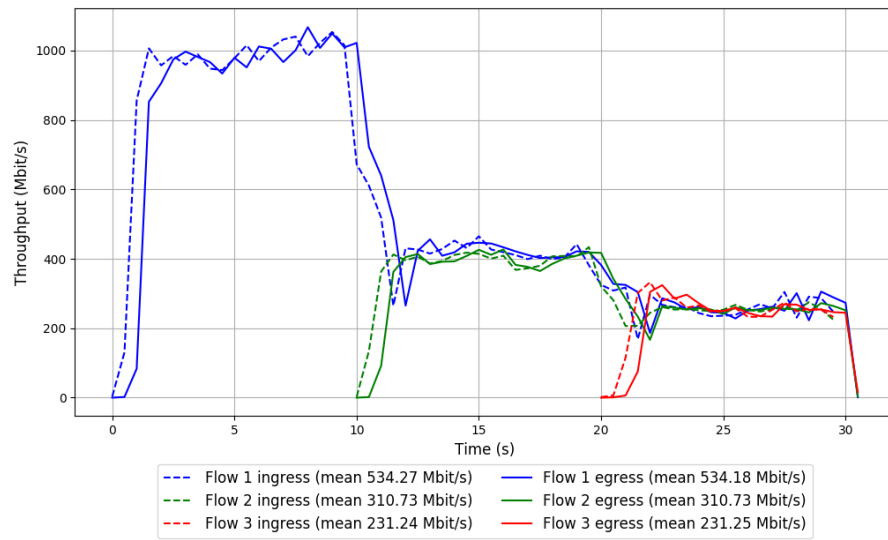


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-22 12:08:01
End at: 2019-01-22 12:08:31
Local clock offset: 0.07 ms
Remote clock offset: -0.819 ms

Below is generated by plot.py at 2019-01-22 13:57:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 817.44 Mbit/s
95th percentile per-packet one-way delay: 70.812 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 534.18 Mbit/s
95th percentile per-packet one-way delay: 74.579 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 310.73 Mbit/s
95th percentile per-packet one-way delay: 59.438 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 231.25 Mbit/s
95th percentile per-packet one-way delay: 60.065 ms
Loss rate: 0.00%

Run 5: Report of FillP-Sheep — Data Link

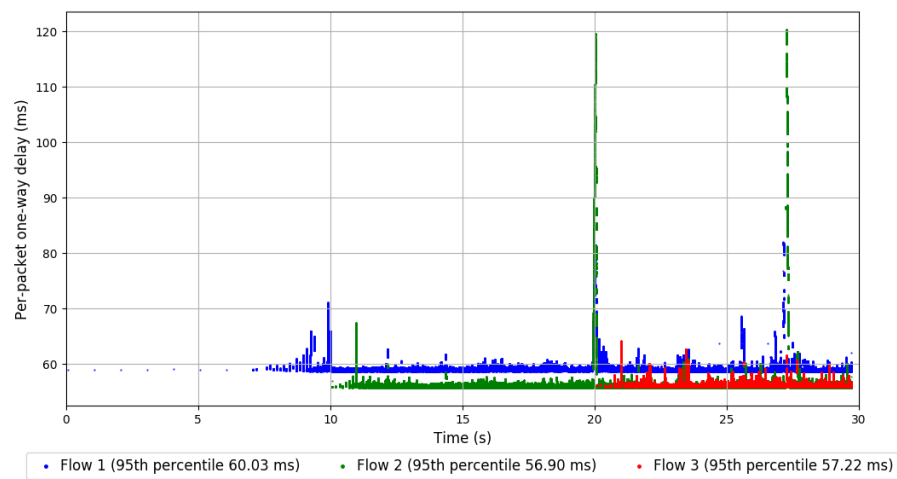
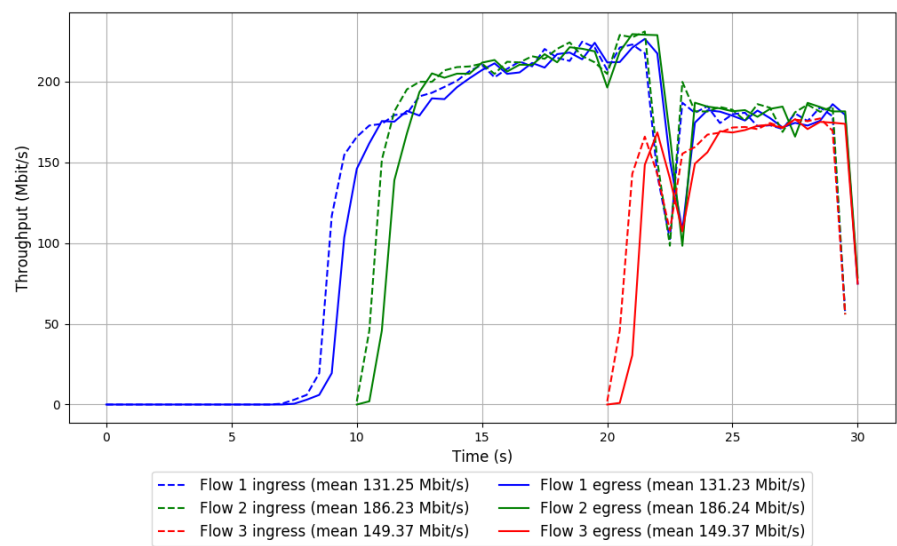


Run 1: Statistics of Indigo

Start at: 2019-01-22 08:56:45
End at: 2019-01-22 08:57:15
Local clock offset: 0.182 ms
Remote clock offset: -1.144 ms

Below is generated by plot.py at 2019-01-22 13:57:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 302.95 Mbit/s
95th percentile per-packet one-way delay: 59.389 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 131.23 Mbit/s
95th percentile per-packet one-way delay: 60.034 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 186.24 Mbit/s
95th percentile per-packet one-way delay: 56.898 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 149.37 Mbit/s
95th percentile per-packet one-way delay: 57.215 ms
Loss rate: 0.00%

Run 1: Report of Indigo — Data Link

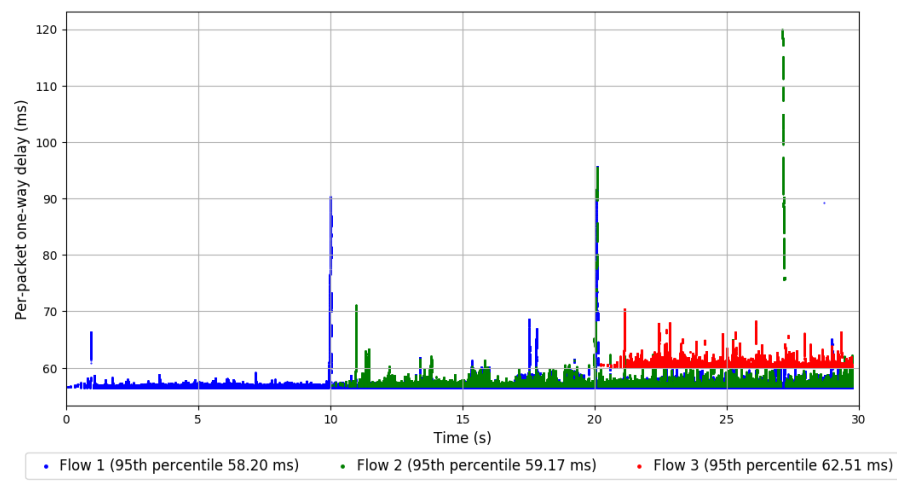
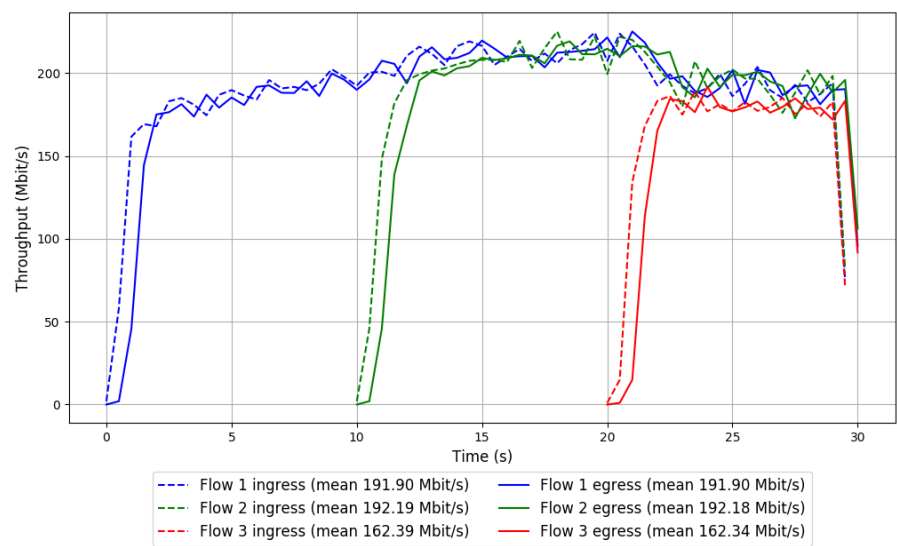


Run 2: Statistics of Indigo

Start at: 2019-01-22 09:34:20
End at: 2019-01-22 09:34:50
Local clock offset: 0.025 ms
Remote clock offset: -0.273 ms

Below is generated by plot.py at 2019-01-22 13:57:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 371.29 Mbit/s
95th percentile per-packet one-way delay: 60.685 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 191.90 Mbit/s
95th percentile per-packet one-way delay: 58.201 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.18 Mbit/s
95th percentile per-packet one-way delay: 59.166 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.34 Mbit/s
95th percentile per-packet one-way delay: 62.511 ms
Loss rate: 0.05%

Run 2: Report of Indigo — Data Link

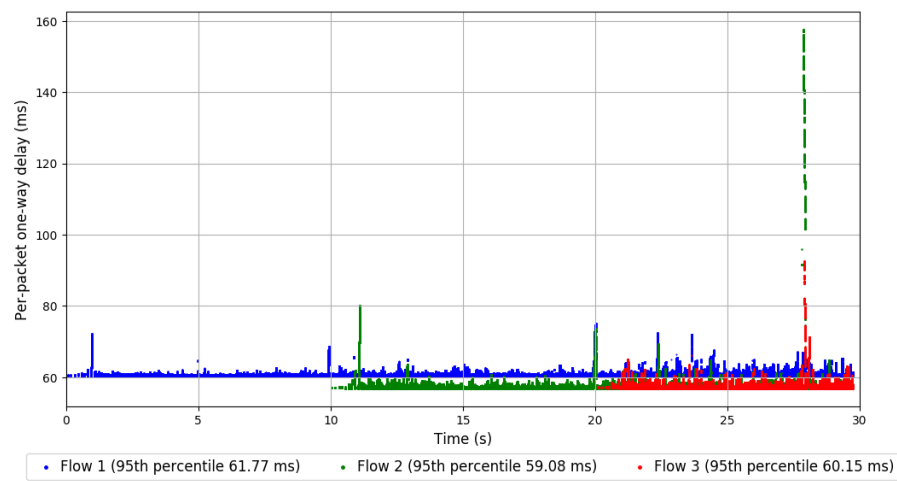
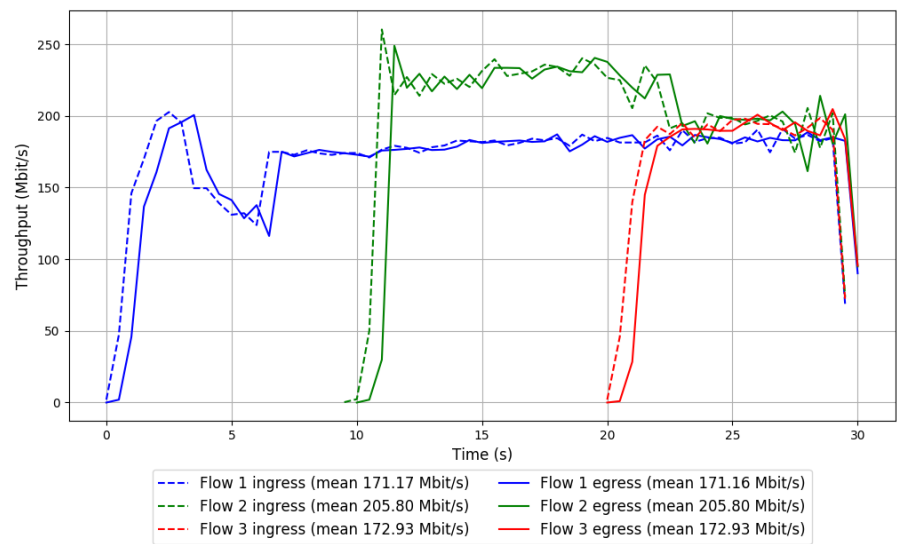


Run 3: Statistics of Indigo

Start at: 2019-01-22 10:13:18
End at: 2019-01-22 10:13:48
Local clock offset: -0.45 ms
Remote clock offset: -0.465 ms

Below is generated by plot.py at 2019-01-22 13:57:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 363.69 Mbit/s
95th percentile per-packet one-way delay: 61.306 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 171.16 Mbit/s
95th percentile per-packet one-way delay: 61.772 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 205.80 Mbit/s
95th percentile per-packet one-way delay: 59.081 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.93 Mbit/s
95th percentile per-packet one-way delay: 60.149 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

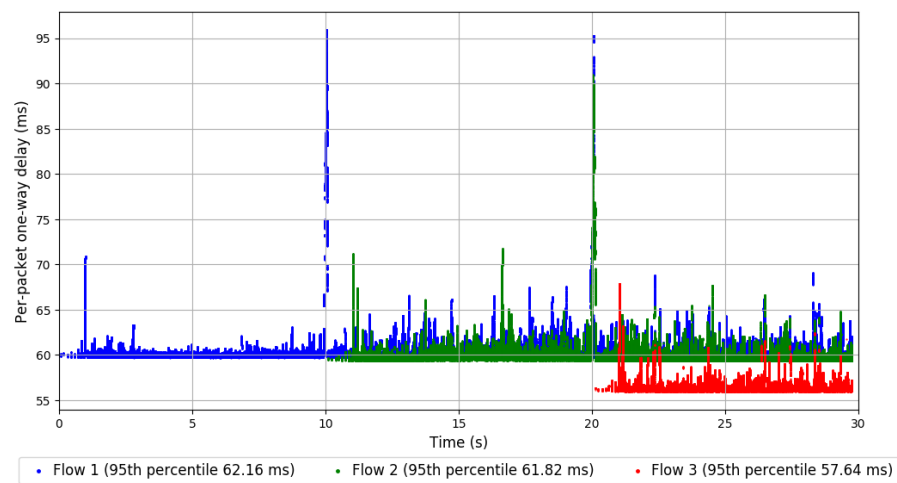
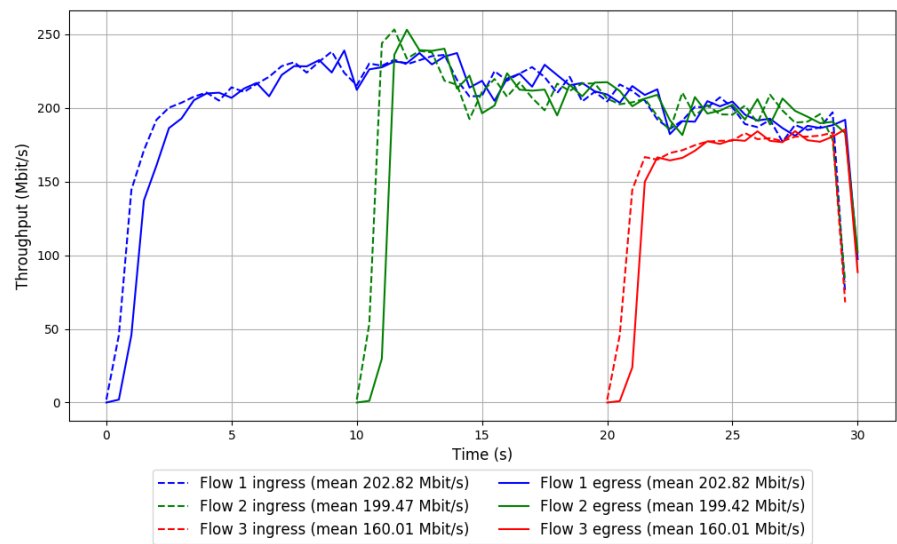


Run 4: Statistics of Indigo

Start at: 2019-01-22 10:52:21
End at: 2019-01-22 10:52:51
Local clock offset: 0.257 ms
Remote clock offset: -0.581 ms

Below is generated by plot.py at 2019-01-22 13:57:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 386.70 Mbit/s
95th percentile per-packet one-way delay: 61.855 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 202.82 Mbit/s
95th percentile per-packet one-way delay: 62.165 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 199.42 Mbit/s
95th percentile per-packet one-way delay: 61.819 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 160.01 Mbit/s
95th percentile per-packet one-way delay: 57.641 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

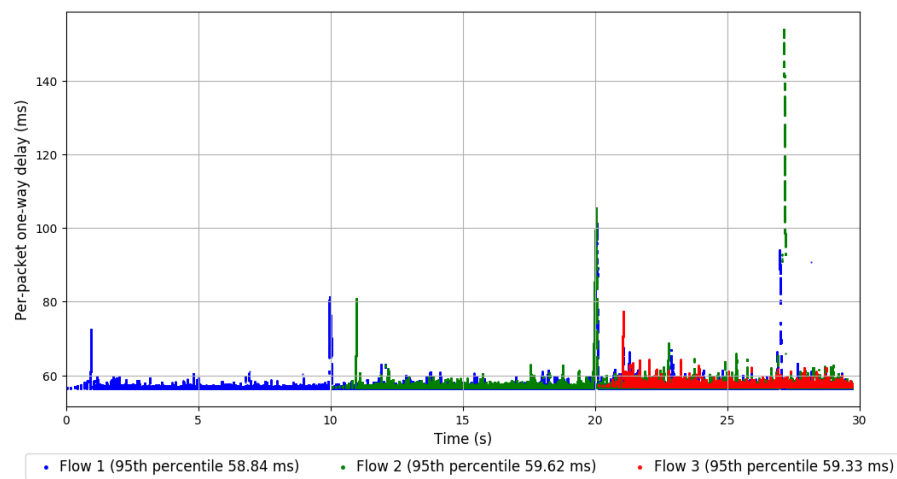
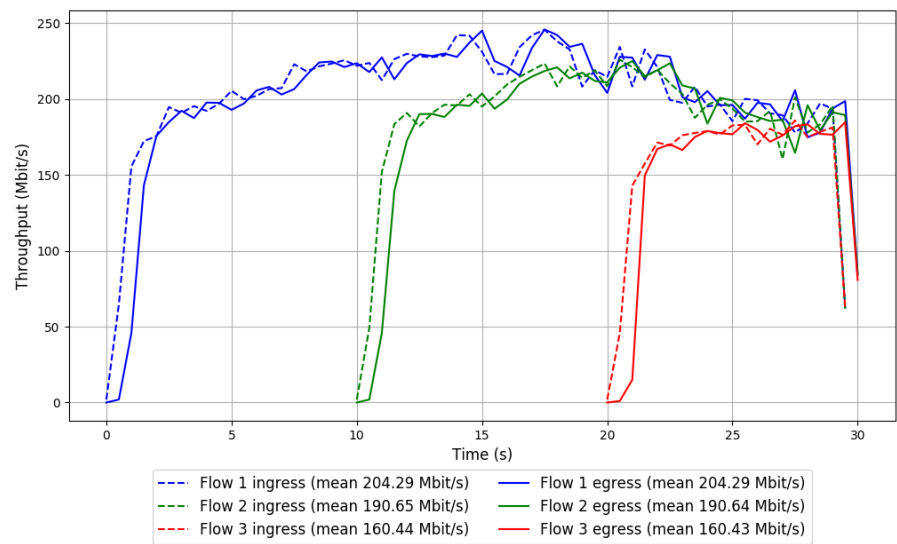


Run 5: Statistics of Indigo

Start at: 2019-01-22 11:31:03
End at: 2019-01-22 11:31:33
Local clock offset: 0.061 ms
Remote clock offset: -0.052 ms

Below is generated by plot.py at 2019-01-22 13:57:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 382.30 Mbit/s
95th percentile per-packet one-way delay: 59.185 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 204.29 Mbit/s
95th percentile per-packet one-way delay: 58.842 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 190.64 Mbit/s
95th percentile per-packet one-way delay: 59.621 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 160.43 Mbit/s
95th percentile per-packet one-way delay: 59.332 ms
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-22 09:07:28

End at: 2019-01-22 09:07:58

Local clock offset: -0.101 ms

Remote clock offset: 0.65 ms

Below is generated by plot.py at 2019-01-22 13:57:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 713.55 Mbit/s

95th percentile per-packet one-way delay: 66.220 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 420.32 Mbit/s

95th percentile per-packet one-way delay: 68.231 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 351.89 Mbit/s

95th percentile per-packet one-way delay: 64.356 ms

Loss rate: 0.00%

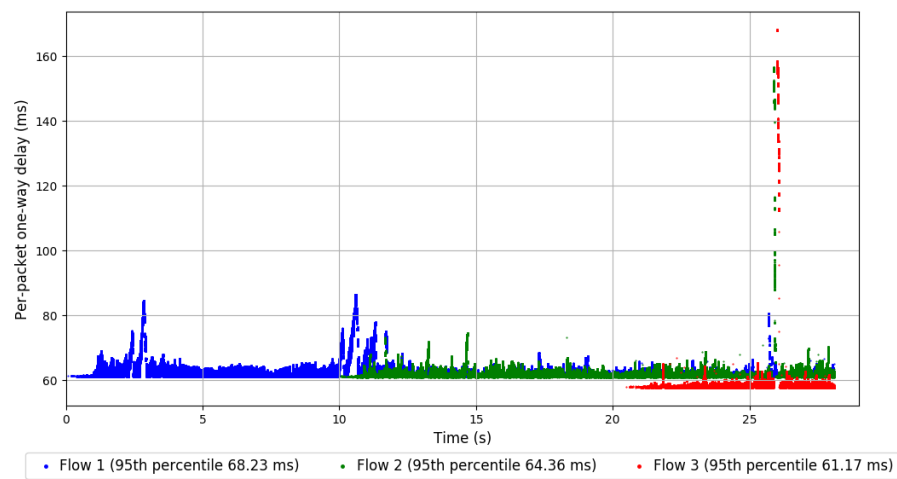
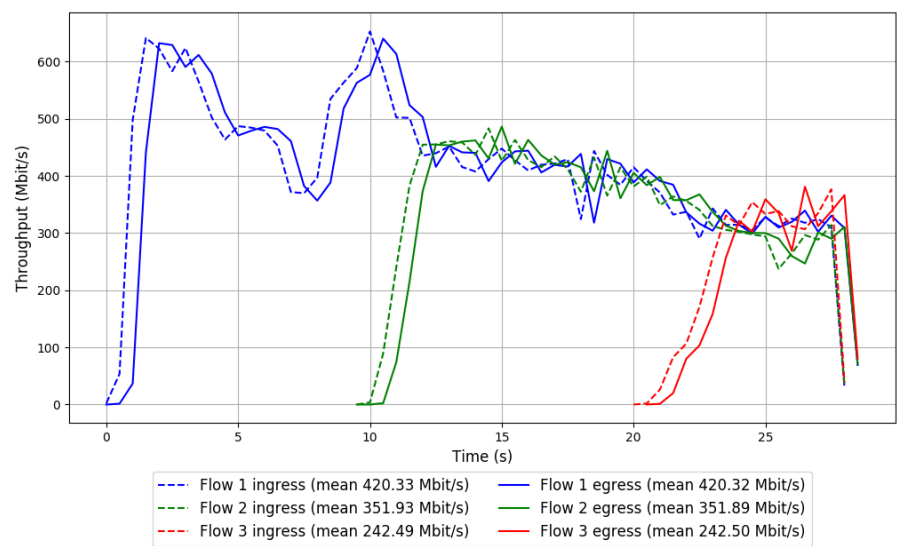
-- Flow 3:

Average throughput: 242.50 Mbit/s

95th percentile per-packet one-way delay: 61.174 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesC3 — Data Link

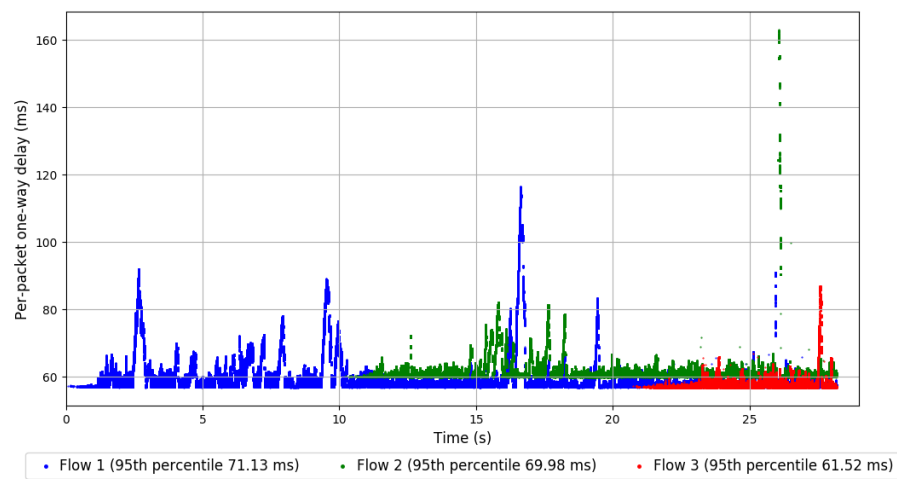
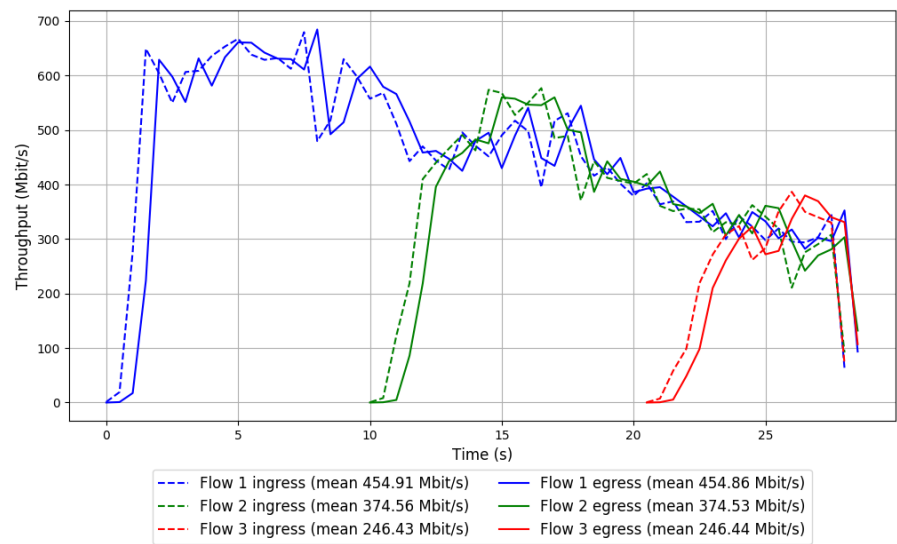


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-22 09:45:24
End at: 2019-01-22 09:45:54
Local clock offset: 0.126 ms
Remote clock offset: -0.105 ms

Below is generated by plot.py at 2019-01-22 13:57:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 758.80 Mbit/s
95th percentile per-packet one-way delay: 70.075 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 454.86 Mbit/s
95th percentile per-packet one-way delay: 71.128 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 374.53 Mbit/s
95th percentile per-packet one-way delay: 69.978 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 246.44 Mbit/s
95th percentile per-packet one-way delay: 61.523 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC3 — Data Link

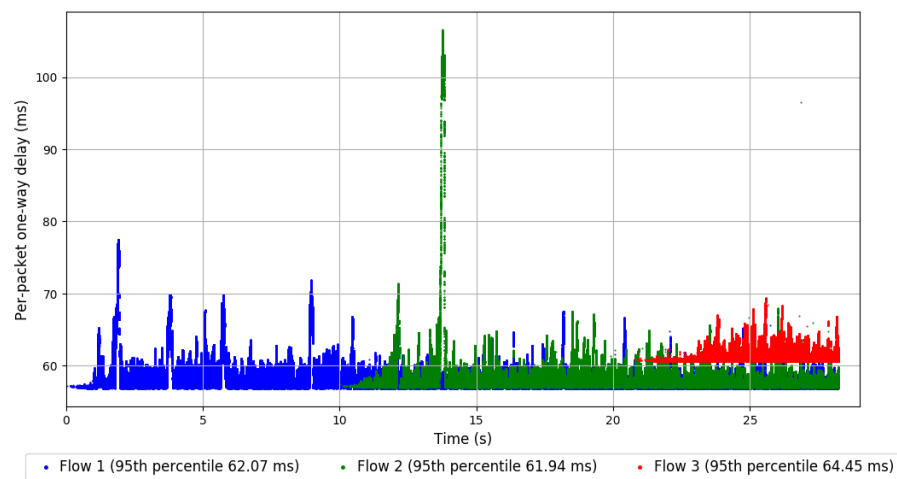
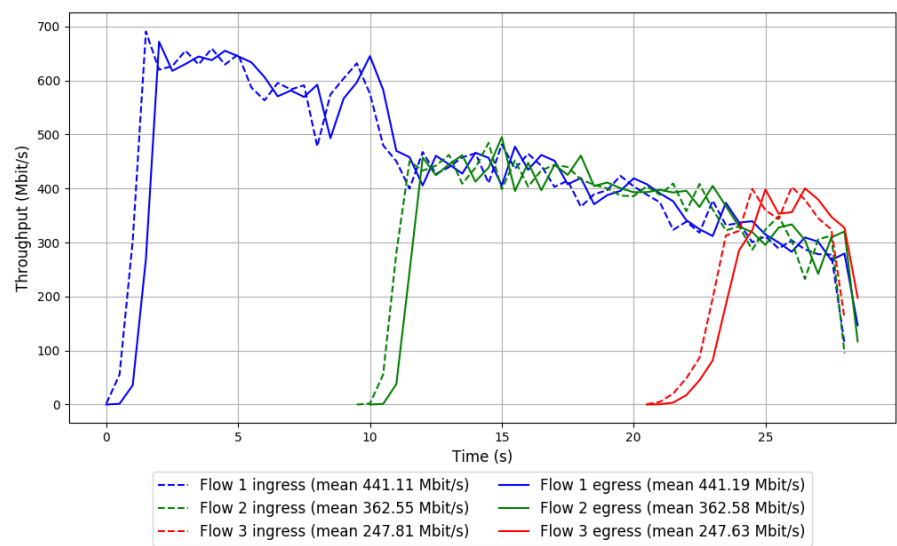


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-22 10:24:41
End at: 2019-01-22 10:25:11
Local clock offset: -0.313 ms
Remote clock offset: -0.258 ms

Below is generated by plot.py at 2019-01-22 14:04:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 741.23 Mbit/s
95th percentile per-packet one-way delay: 62.805 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 441.19 Mbit/s
95th percentile per-packet one-way delay: 62.071 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 362.58 Mbit/s
95th percentile per-packet one-way delay: 61.940 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 247.63 Mbit/s
95th percentile per-packet one-way delay: 64.451 ms
Loss rate: 0.11%

Run 3: Report of Indigo-MusesC3 — Data Link

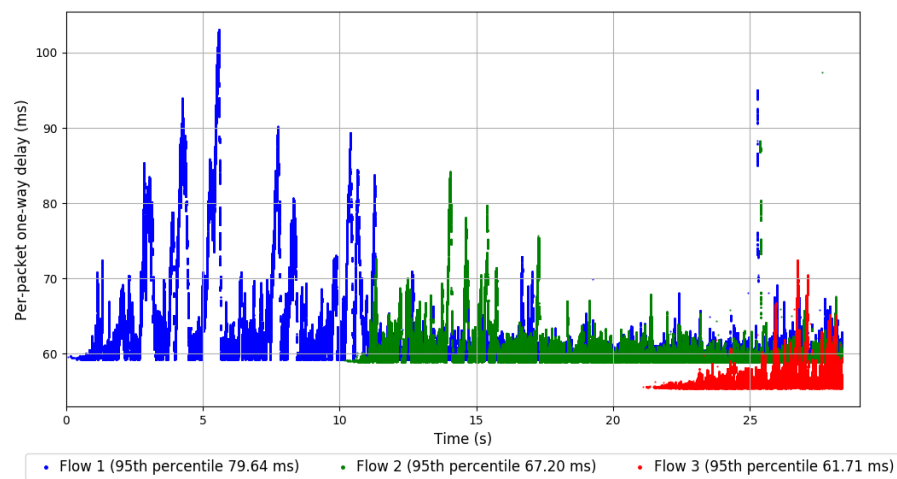
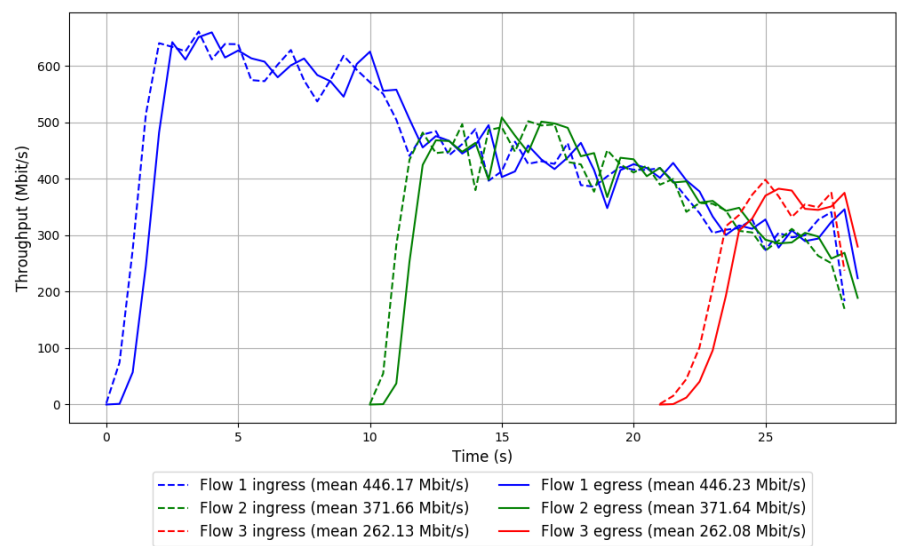


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-22 11:03:10
End at: 2019-01-22 11:03:40
Local clock offset: -0.196 ms
Remote clock offset: -1.532 ms

Below is generated by plot.py at 2019-01-22 14:09:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 752.48 Mbit/s
95th percentile per-packet one-way delay: 75.930 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 446.23 Mbit/s
95th percentile per-packet one-way delay: 79.635 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 371.64 Mbit/s
95th percentile per-packet one-way delay: 67.204 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 262.08 Mbit/s
95th percentile per-packet one-way delay: 61.708 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-22 11:42:31

End at: 2019-01-22 11:43:01

Local clock offset: 0.114 ms

Remote clock offset: 0.531 ms

Below is generated by plot.py at 2019-01-22 14:09:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 712.89 Mbit/s

95th percentile per-packet one-way delay: 77.782 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 423.71 Mbit/s

95th percentile per-packet one-way delay: 77.444 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 366.14 Mbit/s

95th percentile per-packet one-way delay: 80.608 ms

Loss rate: 0.00%

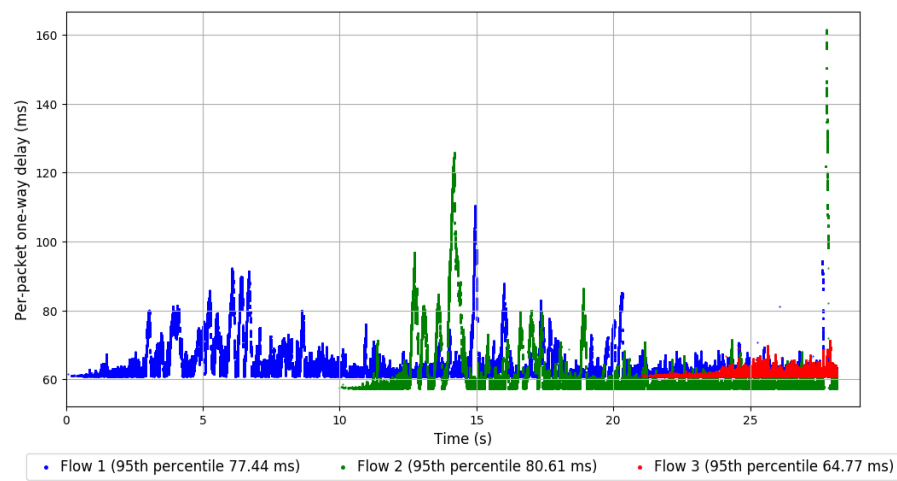
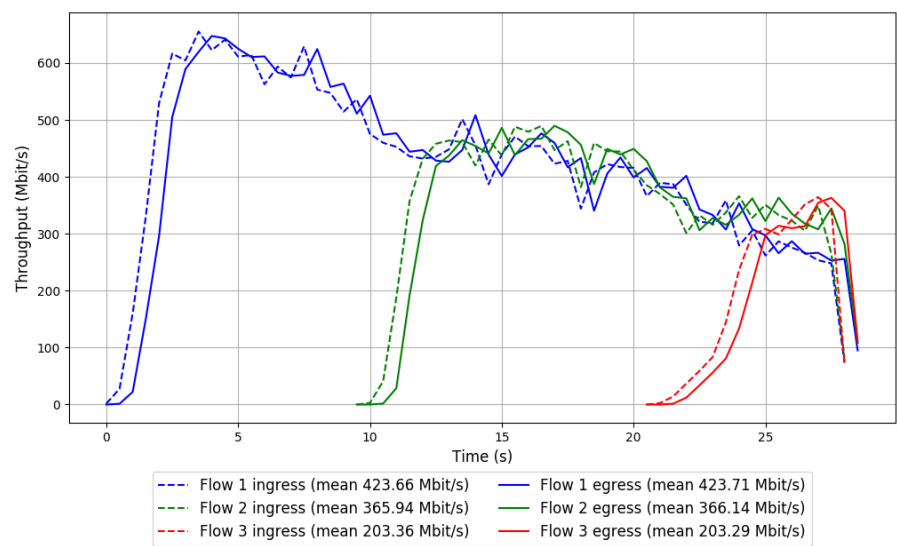
-- Flow 3:

Average throughput: 203.29 Mbit/s

95th percentile per-packet one-way delay: 64.771 ms

Loss rate: 0.16%

Run 5: Report of Indigo-MusesC3 — Data Link

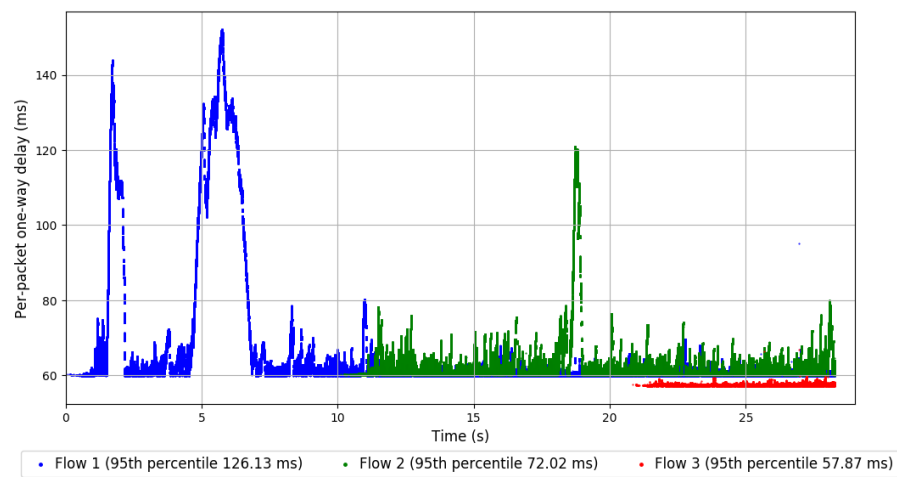
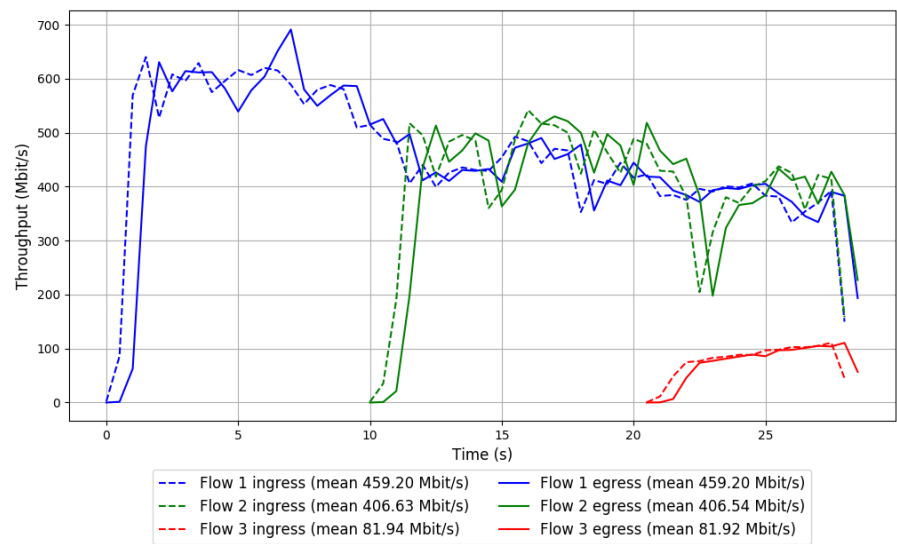


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-22 09:13:39
End at: 2019-01-22 09:14:09
Local clock offset: -0.114 ms
Remote clock offset: -0.265 ms

Below is generated by plot.py at 2019-01-22 14:10:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 742.22 Mbit/s
95th percentile per-packet one-way delay: 111.760 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 459.20 Mbit/s
95th percentile per-packet one-way delay: 126.131 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 406.54 Mbit/s
95th percentile per-packet one-way delay: 72.022 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 81.92 Mbit/s
95th percentile per-packet one-way delay: 57.872 ms
Loss rate: 0.01%

Run 1: Report of Indigo-MusesC5 — Data Link

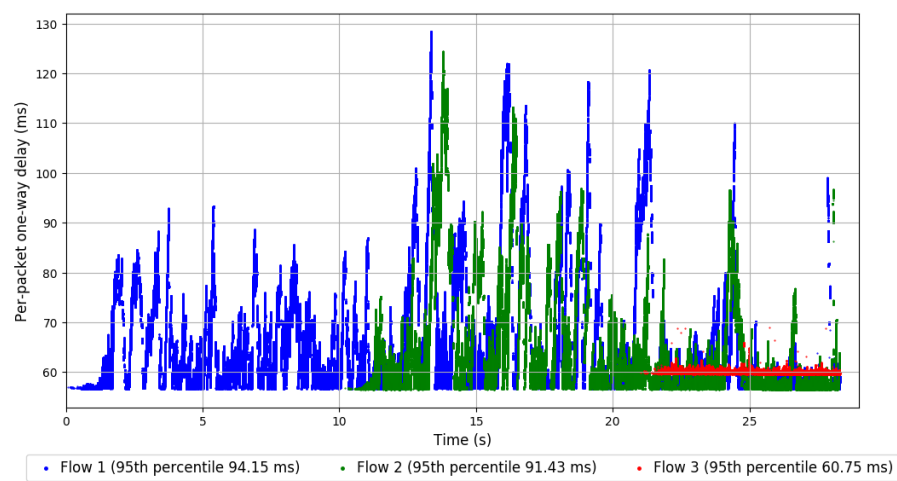
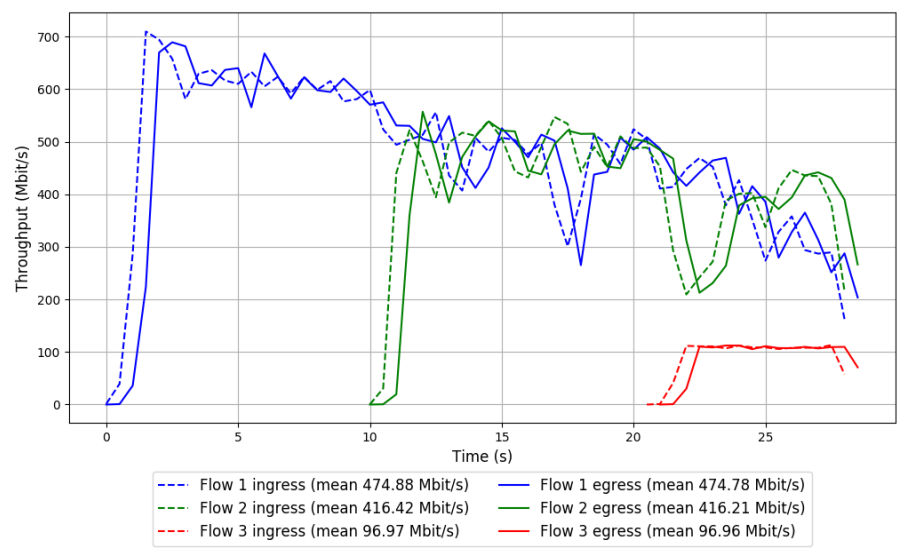


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-22 09:51:52
End at: 2019-01-22 09:52:22
Local clock offset: -0.254 ms
Remote clock offset: -0.644 ms

Below is generated by plot.py at 2019-01-22 14:12:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 766.39 Mbit/s
95th percentile per-packet one-way delay: 92.966 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 474.78 Mbit/s
95th percentile per-packet one-way delay: 94.153 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 416.21 Mbit/s
95th percentile per-packet one-way delay: 91.432 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 96.96 Mbit/s
95th percentile per-packet one-way delay: 60.746 ms
Loss rate: 0.04%

Run 2: Report of Indigo-MusesC5 — Data Link

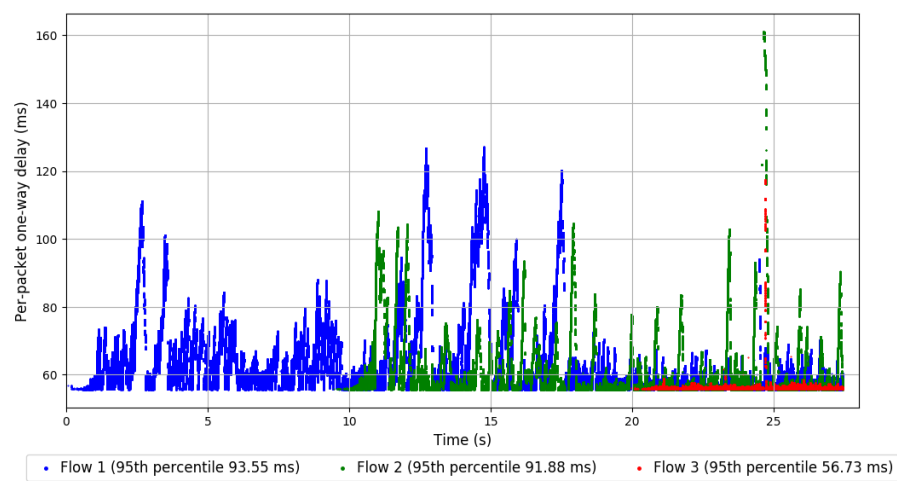
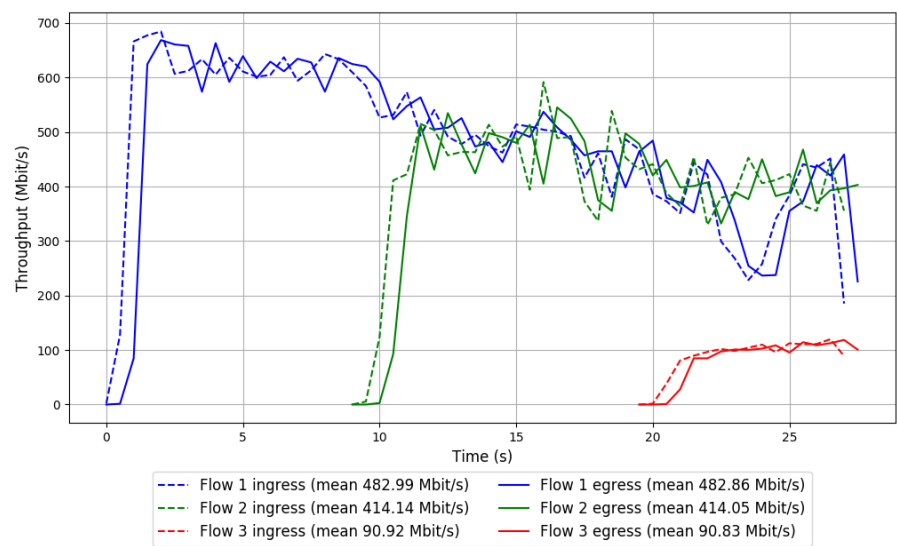


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-22 10:31:09
End at: 2019-01-22 10:31:39
Local clock offset: -0.161 ms
Remote clock offset: -1.433 ms

Below is generated by plot.py at 2019-01-22 14:12:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 779.65 Mbit/s
95th percentile per-packet one-way delay: 92.360 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 482.86 Mbit/s
95th percentile per-packet one-way delay: 93.548 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 414.05 Mbit/s
95th percentile per-packet one-way delay: 91.877 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 90.83 Mbit/s
95th percentile per-packet one-way delay: 56.728 ms
Loss rate: 0.12%

Run 3: Report of Indigo-MusesC5 — Data Link

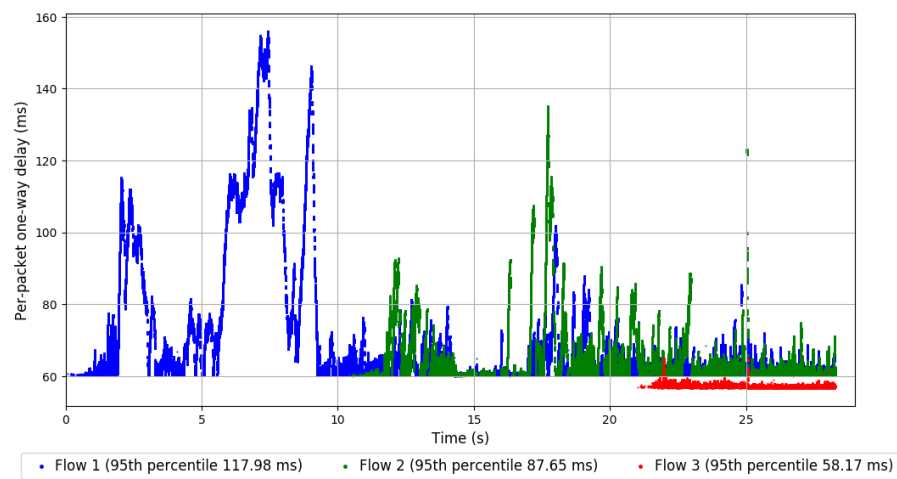
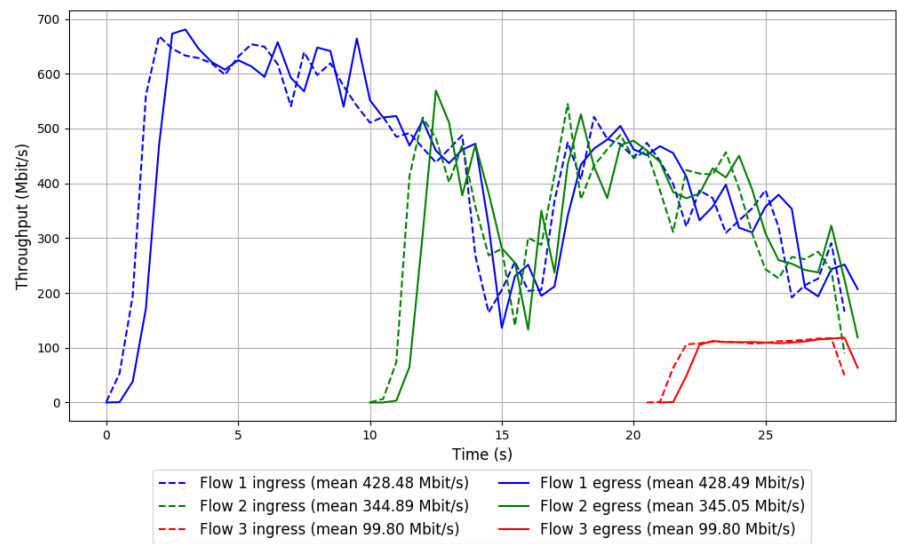


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-22 11:09:38
End at: 2019-01-22 11:10:08
Local clock offset: -0.257 ms
Remote clock offset: -0.343 ms

Below is generated by plot.py at 2019-01-22 14:13:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 672.67 Mbit/s
95th percentile per-packet one-way delay: 113.051 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 428.49 Mbit/s
95th percentile per-packet one-way delay: 117.980 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 345.05 Mbit/s
95th percentile per-packet one-way delay: 87.650 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 99.80 Mbit/s
95th percentile per-packet one-way delay: 58.172 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC5 — Data Link

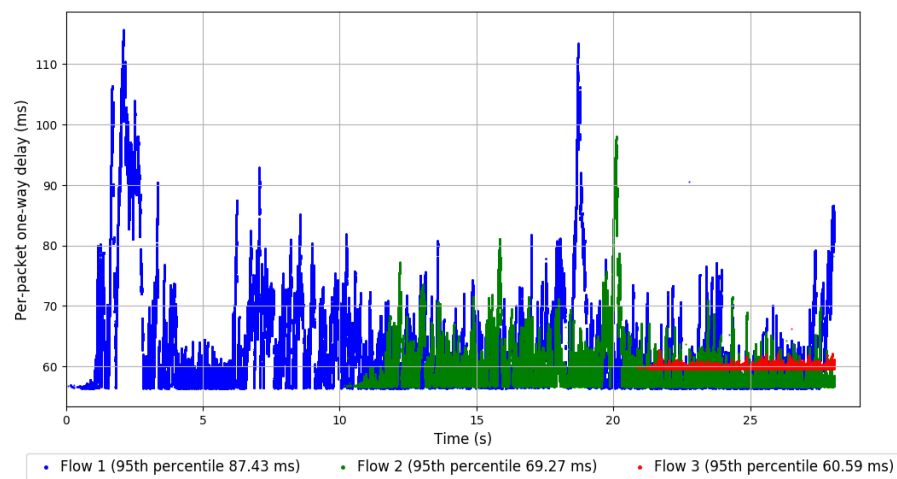
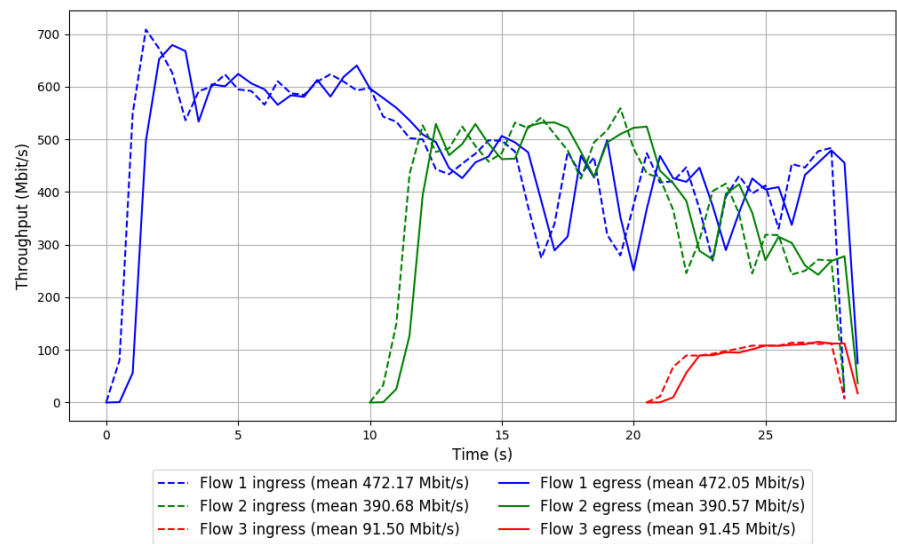


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-22 11:49:21
End at: 2019-01-22 11:49:51
Local clock offset: -0.008 ms
Remote clock offset: -0.867 ms

Below is generated by plot.py at 2019-01-22 14:16:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 745.52 Mbit/s
95th percentile per-packet one-way delay: 79.987 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 472.05 Mbit/s
95th percentile per-packet one-way delay: 87.432 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 390.57 Mbit/s
95th percentile per-packet one-way delay: 69.274 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 91.45 Mbit/s
95th percentile per-packet one-way delay: 60.586 ms
Loss rate: 0.18%

Run 5: Report of Indigo-MusesC5 — Data Link

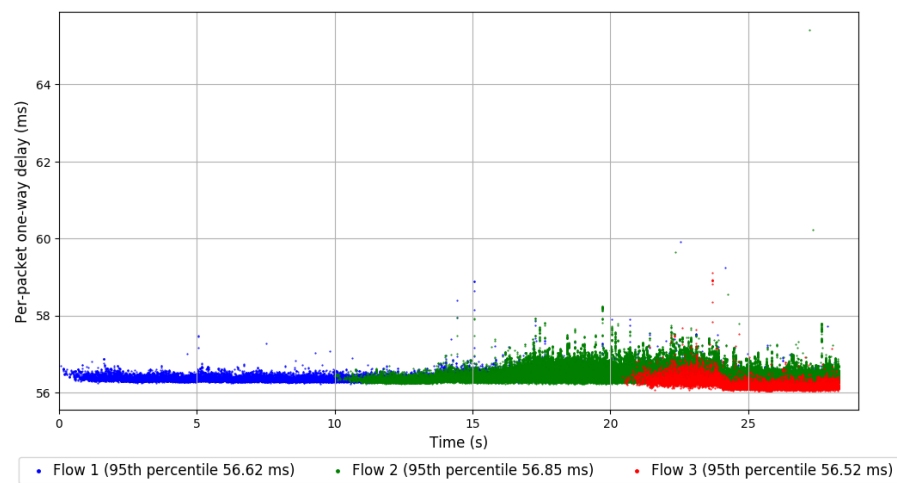
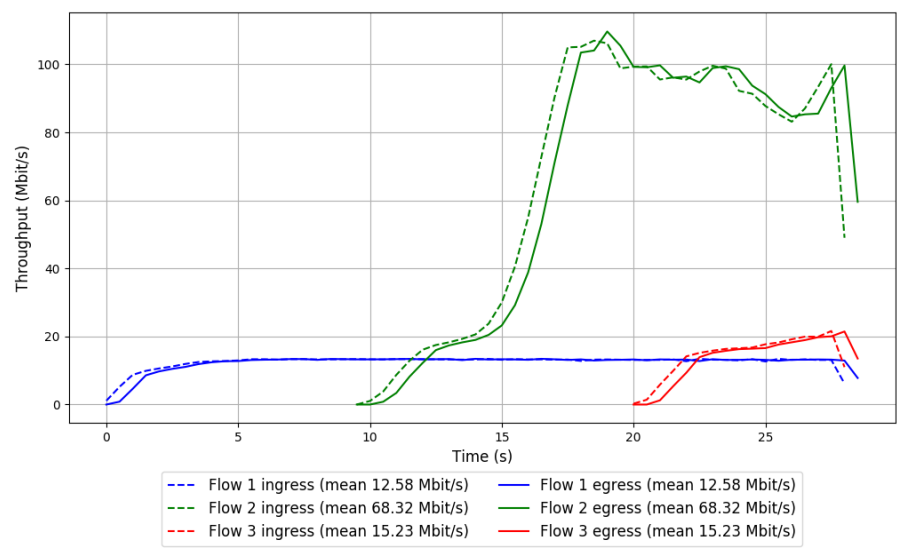


Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-22 09:25:58
End at: 2019-01-22 09:26:28
Local clock offset: -0.001 ms
Remote clock offset: -0.803 ms

Below is generated by plot.py at 2019-01-22 14:16:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.16 Mbit/s
95th percentile per-packet one-way delay: 56.800 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 56.618 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.32 Mbit/s
95th percentile per-packet one-way delay: 56.847 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.23 Mbit/s
95th percentile per-packet one-way delay: 56.524 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-22 10:04:42

End at: 2019-01-22 10:05:12

Local clock offset: 0.061 ms

Remote clock offset: 0.358 ms

Below is generated by plot.py at 2019-01-22 14:16:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.67 Mbit/s

95th percentile per-packet one-way delay: 60.333 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.22 Mbit/s

95th percentile per-packet one-way delay: 60.525 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 270.10 Mbit/s

95th percentile per-packet one-way delay: 59.161 ms

Loss rate: 0.00%

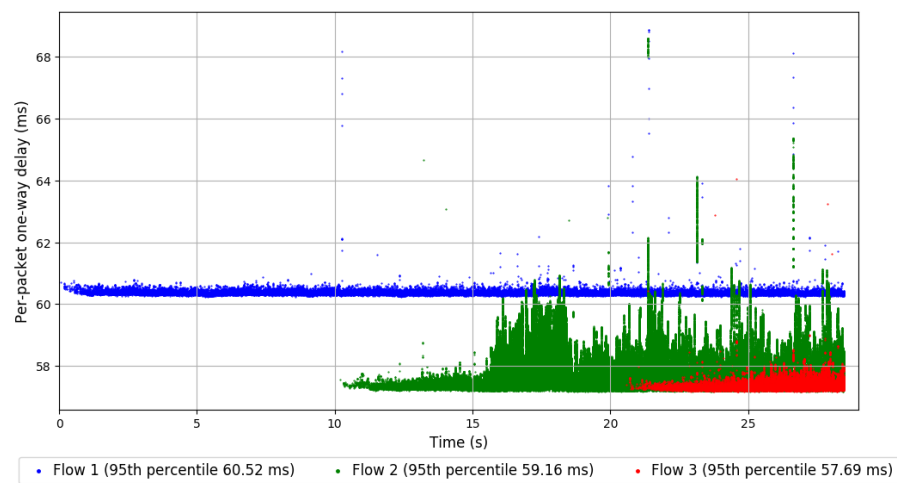
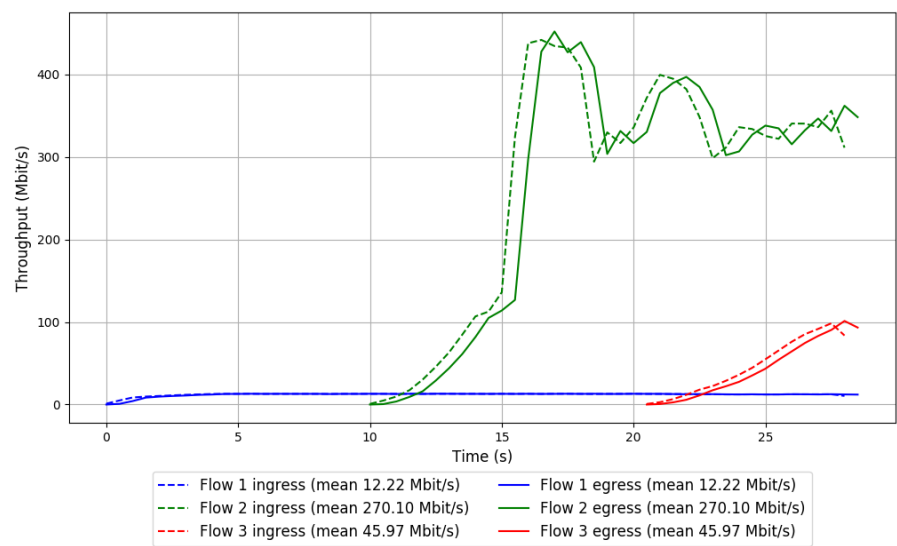
-- Flow 3:

Average throughput: 45.97 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-22 10:43:45

End at: 2019-01-22 10:44:15

Local clock offset: 0.24 ms

Remote clock offset: 0.63 ms

Below is generated by plot.py at 2019-01-22 14:17:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 334.95 Mbit/s

95th percentile per-packet one-way delay: 63.262 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 275.23 Mbit/s

95th percentile per-packet one-way delay: 63.457 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 71.40 Mbit/s

95th percentile per-packet one-way delay: 57.966 ms

Loss rate: 0.00%

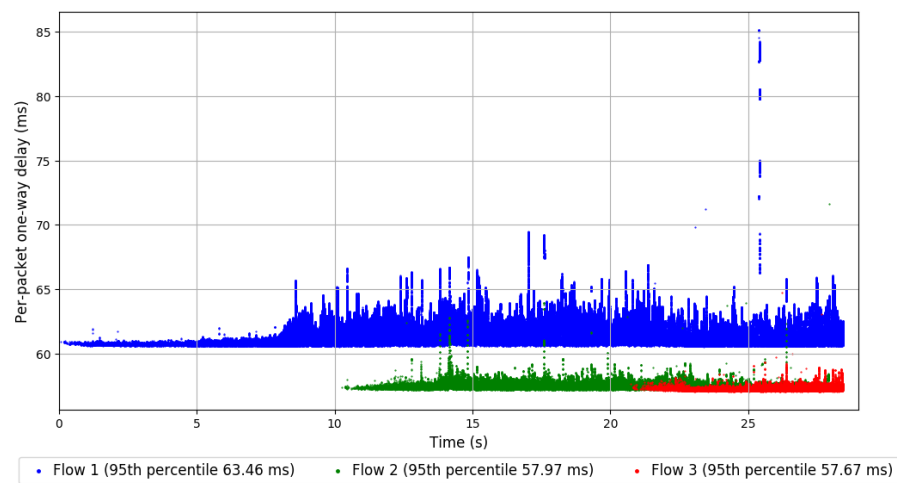
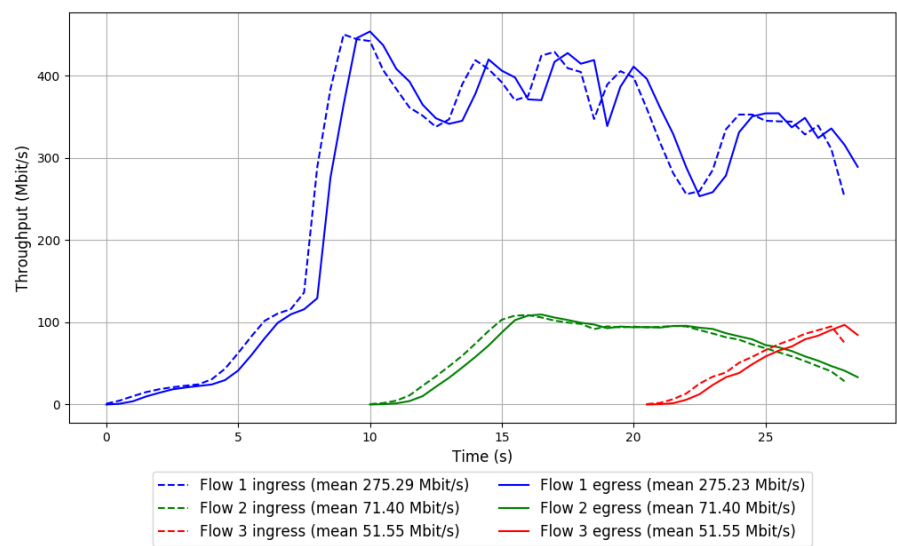
-- Flow 3:

Average throughput: 51.55 Mbit/s

95th percentile per-packet one-way delay: 57.666 ms

Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link

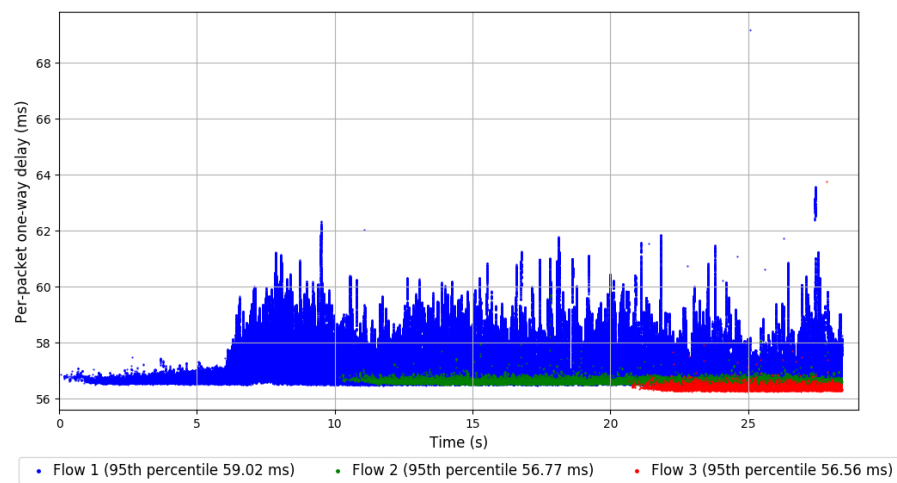
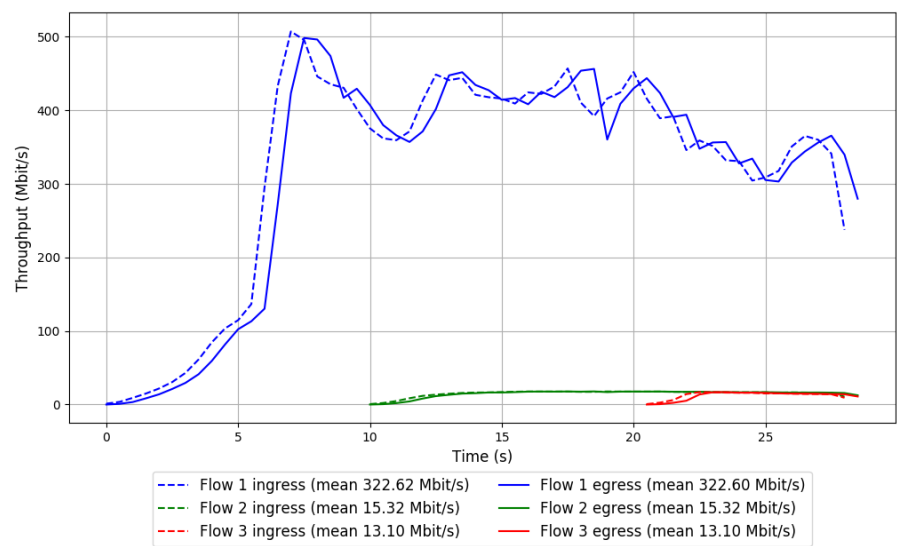


Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-22 11:22:17
End at: 2019-01-22 11:22:47
Local clock offset: -0.131 ms
Remote clock offset: -0.463 ms

Below is generated by plot.py at 2019-01-22 14:17:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 336.02 Mbit/s
95th percentile per-packet one-way delay: 58.989 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 322.60 Mbit/s
95th percentile per-packet one-way delay: 59.015 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 15.32 Mbit/s
95th percentile per-packet one-way delay: 56.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 56.560 ms
Loss rate: 0.01%

Run 4: Report of Indigo-MusesD — Data Link

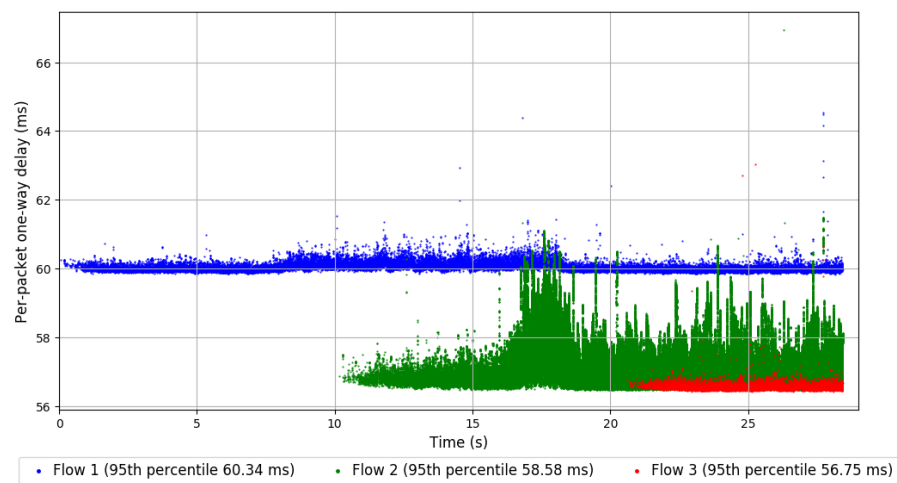
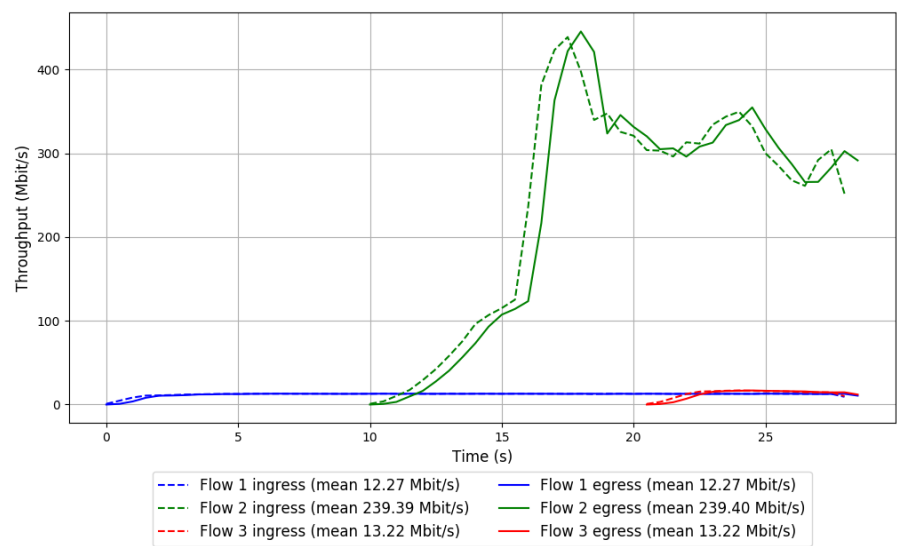


Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-22 12:01:34
End at: 2019-01-22 12:02:04
Local clock offset: 0.01 ms
Remote clock offset: -0.829 ms

Below is generated by plot.py at 2019-01-22 14:17:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 170.07 Mbit/s
95th percentile per-packet one-way delay: 59.993 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.27 Mbit/s
95th percentile per-packet one-way delay: 60.344 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 239.40 Mbit/s
95th percentile per-packet one-way delay: 58.577 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.22 Mbit/s
95th percentile per-packet one-way delay: 56.751 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link

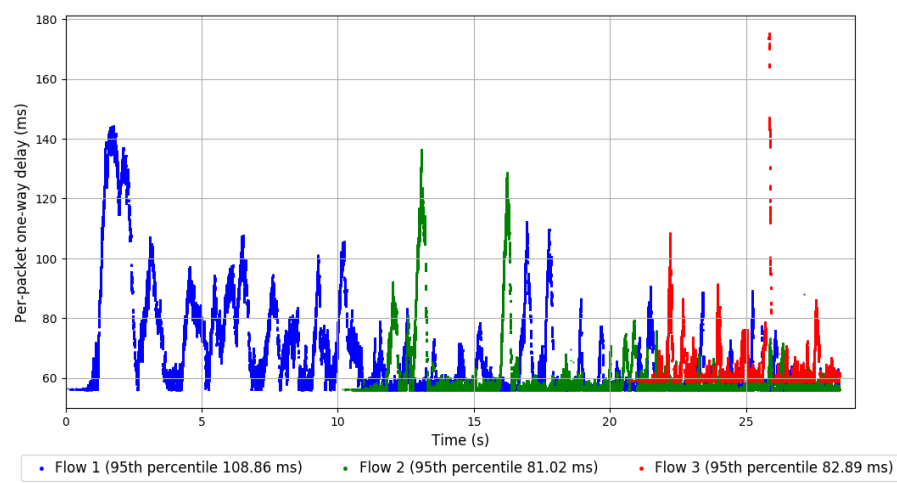
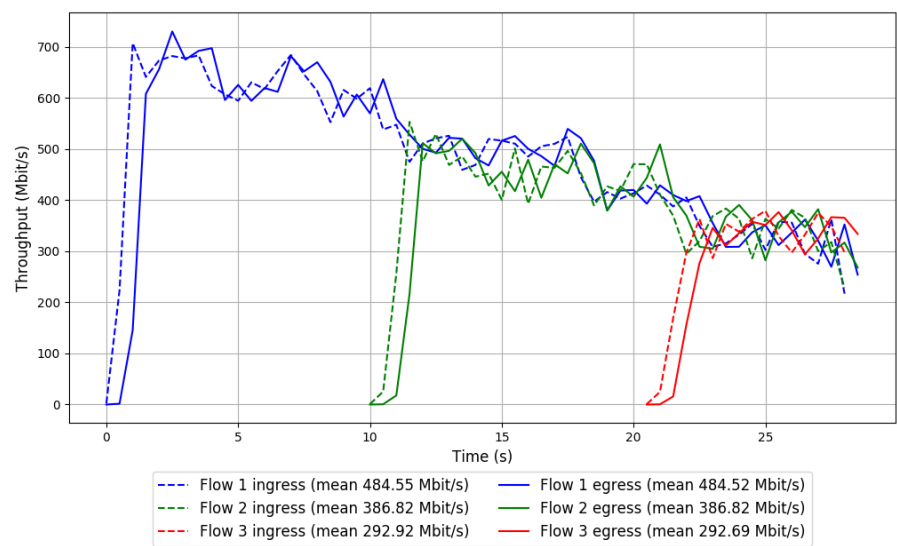


Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-22 09:19:38
End at: 2019-01-22 09:20:08
Local clock offset: 0.422 ms
Remote clock offset: -0.709 ms

Below is generated by plot.py at 2019-01-22 14:30:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 813.65 Mbit/s
95th percentile per-packet one-way delay: 101.180 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 484.52 Mbit/s
95th percentile per-packet one-way delay: 108.858 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 386.82 Mbit/s
95th percentile per-packet one-way delay: 81.018 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 292.69 Mbit/s
95th percentile per-packet one-way delay: 82.894 ms
Loss rate: 0.09%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-22 09:58:05

End at: 2019-01-22 09:58:35

Local clock offset: 0.16 ms

Remote clock offset: 0.071 ms

Below is generated by plot.py at 2019-01-22 14:30:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 808.68 Mbit/s

95th percentile per-packet one-way delay: 80.856 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 479.71 Mbit/s

95th percentile per-packet one-way delay: 81.451 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 397.32 Mbit/s

95th percentile per-packet one-way delay: 81.135 ms

Loss rate: 0.02%

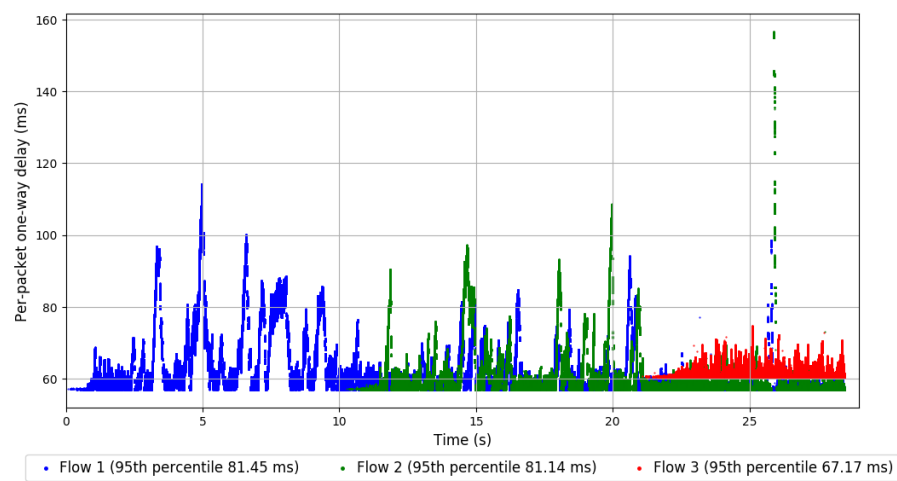
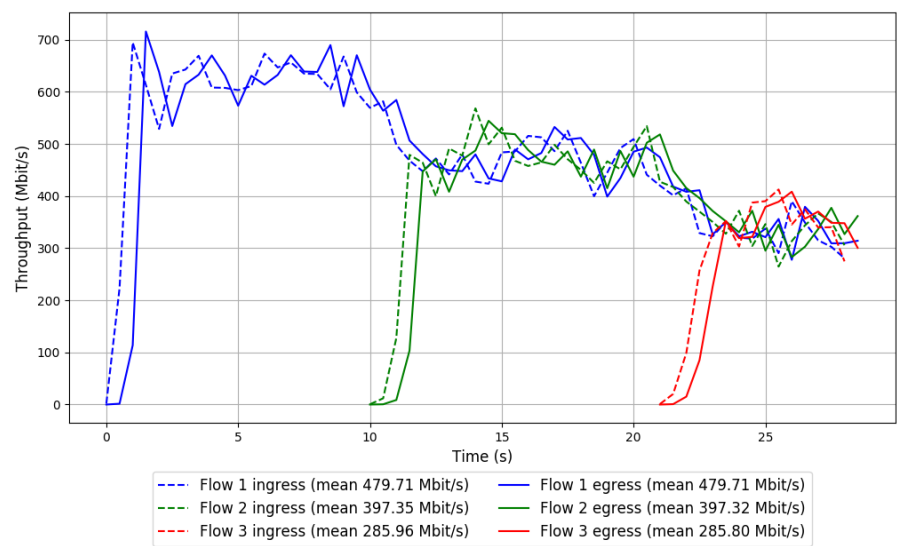
-- Flow 3:

Average throughput: 285.80 Mbit/s

95th percentile per-packet one-way delay: 67.168 ms

Loss rate: 0.12%

Run 2: Report of Indigo-MusesT — Data Link

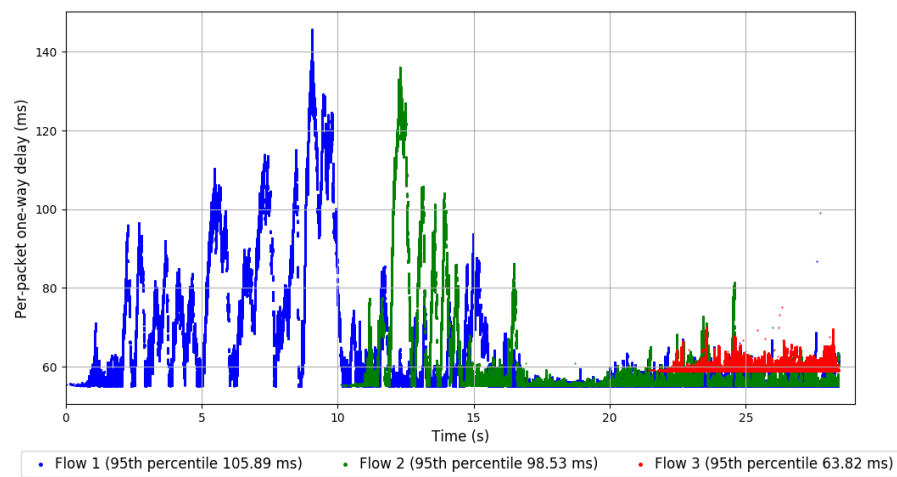
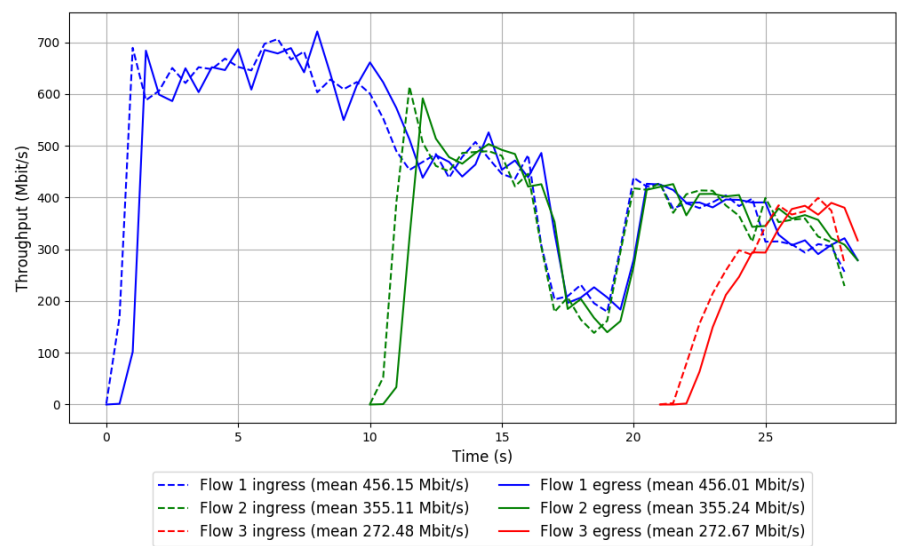


Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-22 10:37:19
End at: 2019-01-22 10:37:49
Local clock offset: 0.252 ms
Remote clock offset: -1.357 ms

Below is generated by plot.py at 2019-01-22 14:30:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 752.56 Mbit/s
95th percentile per-packet one-way delay: 103.128 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 456.01 Mbit/s
95th percentile per-packet one-way delay: 105.887 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 355.24 Mbit/s
95th percentile per-packet one-way delay: 98.528 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 272.67 Mbit/s
95th percentile per-packet one-way delay: 63.824 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesT — Data Link

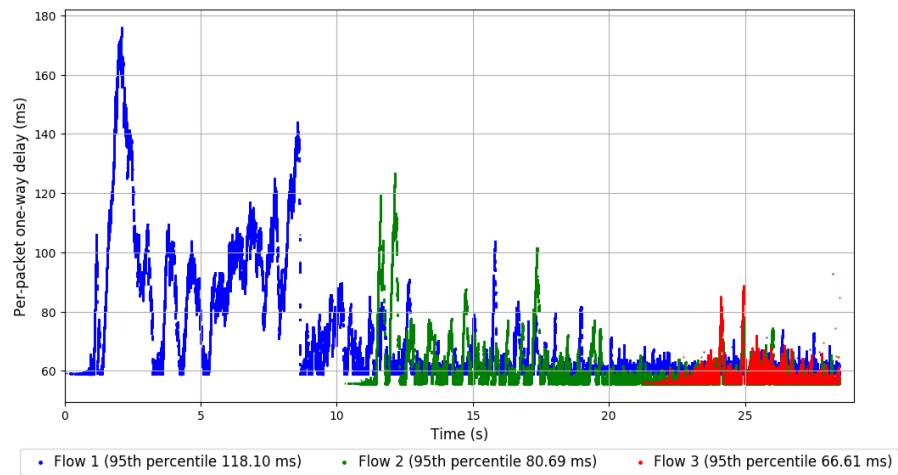
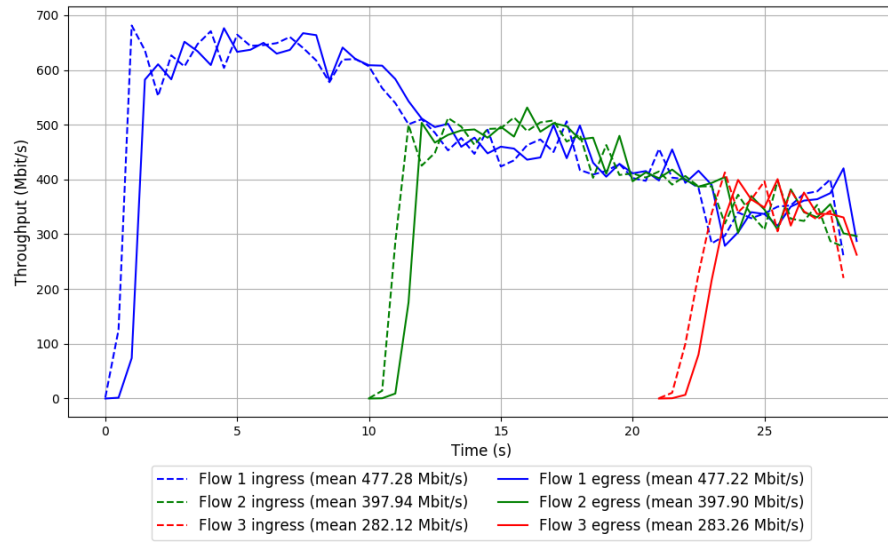


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-22 11:15:42
End at: 2019-01-22 11:16:12
Local clock offset: -0.134 ms
Remote clock offset: -1.329 ms

Below is generated by plot.py at 2019-01-22 14:31:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 804.03 Mbit/s
95th percentile per-packet one-way delay: 106.779 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 477.22 Mbit/s
95th percentile per-packet one-way delay: 118.099 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 397.90 Mbit/s
95th percentile per-packet one-way delay: 80.695 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 283.26 Mbit/s
95th percentile per-packet one-way delay: 66.614 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesT — Data Link

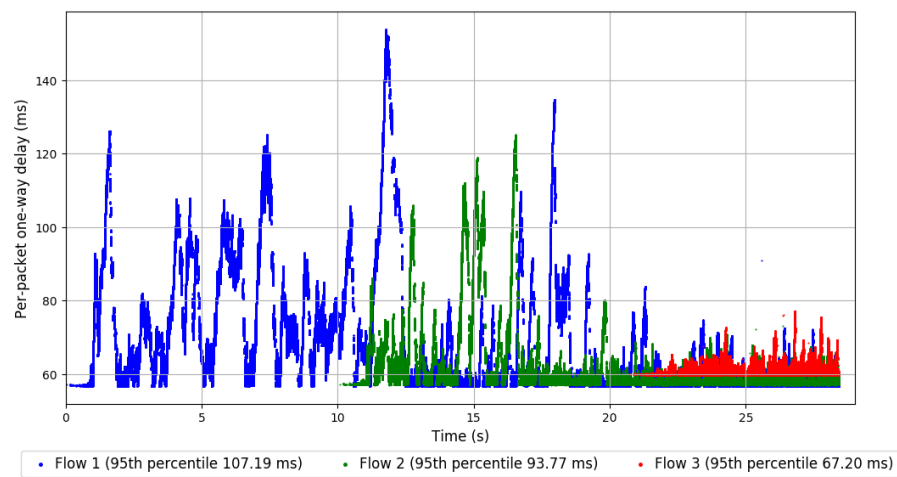
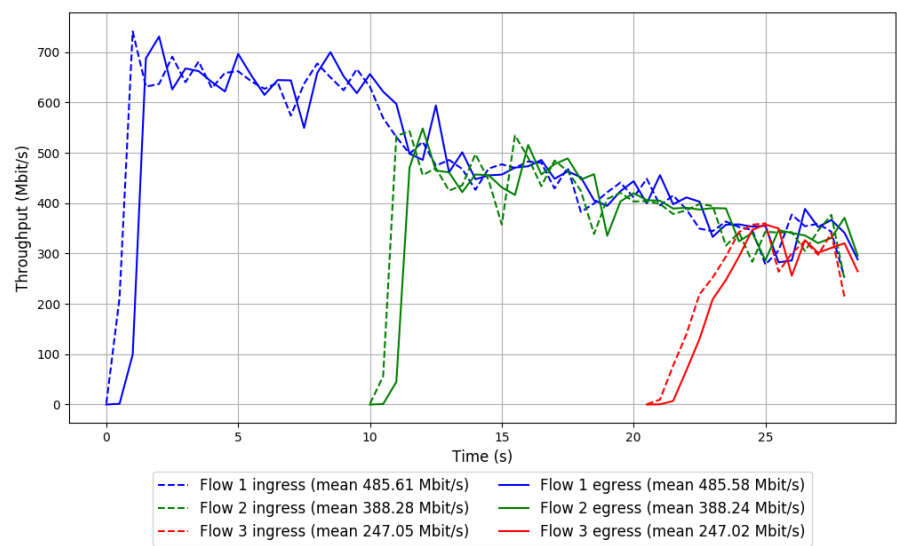


Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-22 11:55:13
End at: 2019-01-22 11:55:43
Local clock offset: -0.171 ms
Remote clock offset: -0.725 ms

Below is generated by plot.py at 2019-01-22 14:32:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 803.25 Mbit/s
95th percentile per-packet one-way delay: 101.540 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 485.58 Mbit/s
95th percentile per-packet one-way delay: 107.192 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 388.24 Mbit/s
95th percentile per-packet one-way delay: 93.773 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 247.02 Mbit/s
95th percentile per-packet one-way delay: 67.202 ms
Loss rate: 0.03%

Run 5: Report of Indigo-MusesT — Data Link

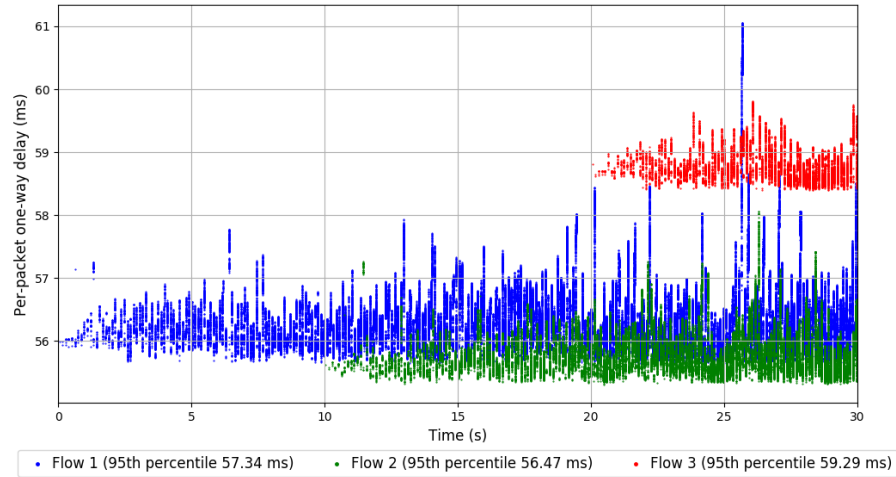
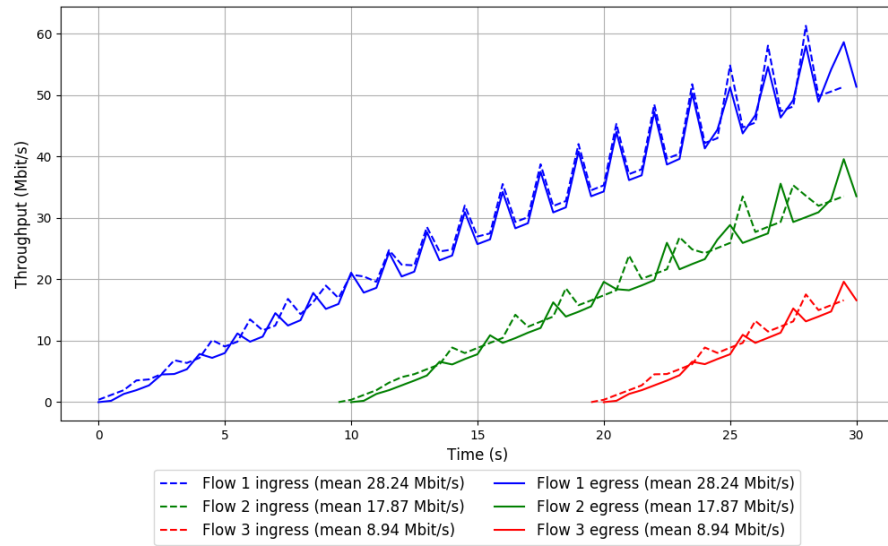


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-22 08:58:28
End at: 2019-01-22 08:58:58
Local clock offset: 0.187 ms
Remote clock offset: -1.378 ms

# Below is generated by plot.py at 2019-01-22 14:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.07 Mbit/s
95th percentile per-packet one-way delay: 58.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.24 Mbit/s
95th percentile per-packet one-way delay: 57.336 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.87 Mbit/s
95th percentile per-packet one-way delay: 56.465 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.94 Mbit/s
95th percentile per-packet one-way delay: 59.294 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-01-22 09:36:18

End at: 2019-01-22 09:36:48

Local clock offset: -0.311 ms

Remote clock offset: 0.155 ms

Below is generated by plot.py at 2019-01-22 14:32:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.93 Mbit/s

95th percentile per-packet one-way delay: 61.831 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.96 Mbit/s

95th percentile per-packet one-way delay: 59.007 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.89 Mbit/s

95th percentile per-packet one-way delay: 62.218 ms

Loss rate: 0.00%

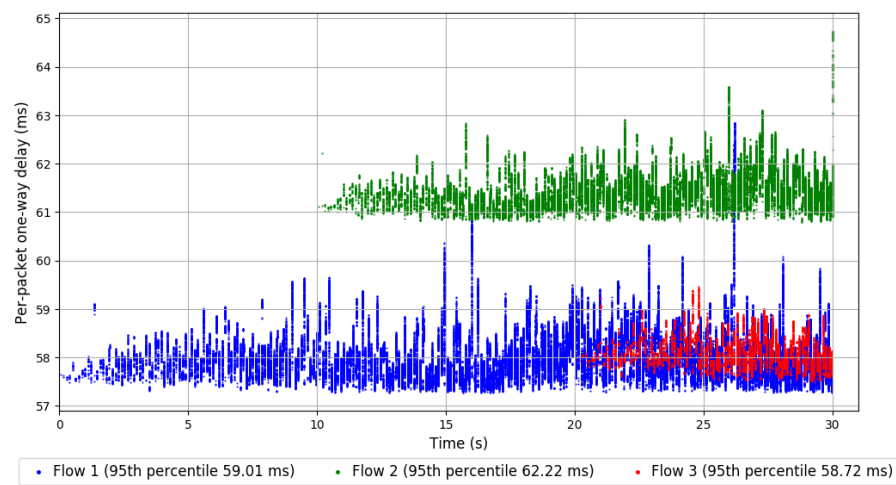
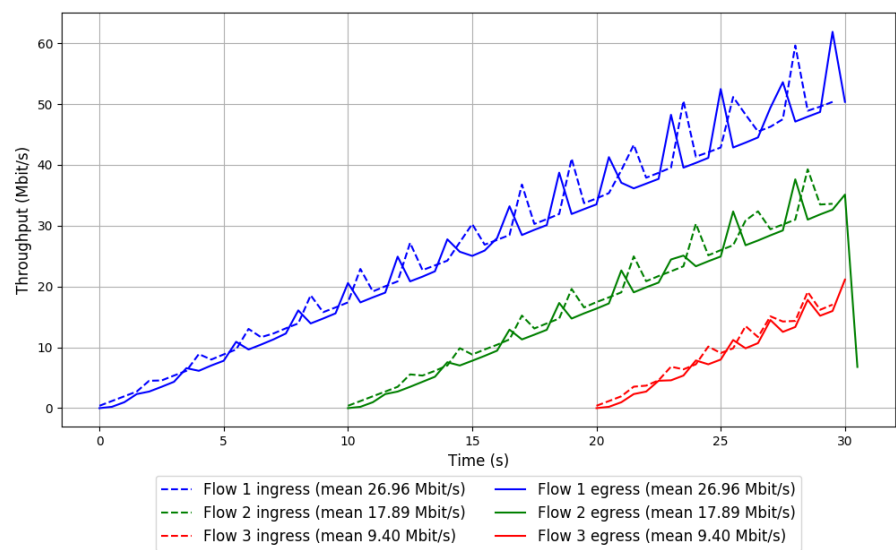
-- Flow 3:

Average throughput: 9.40 Mbit/s

95th percentile per-packet one-way delay: 58.723 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

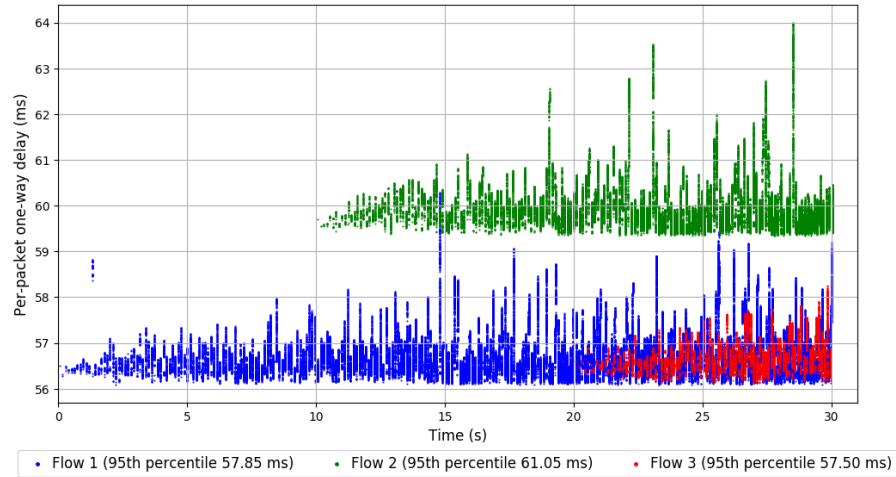
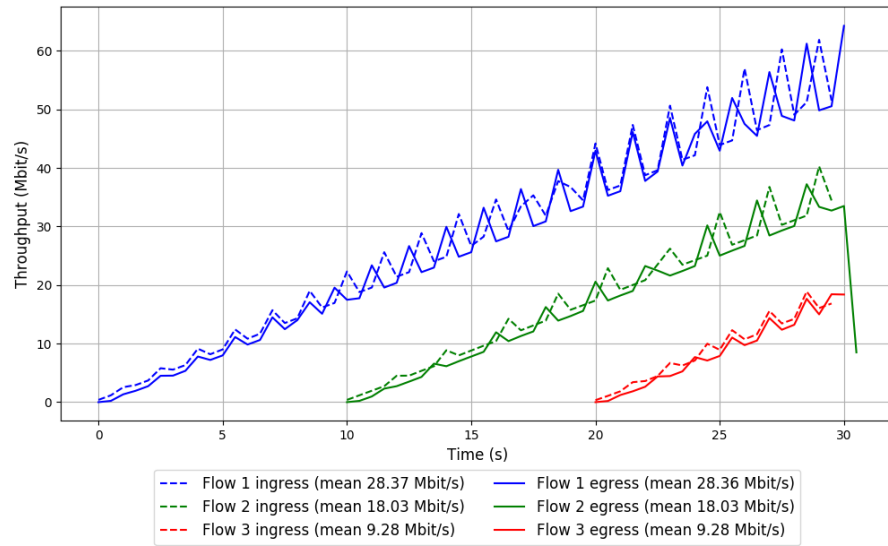


Run 3: Statistics of LEDBAT

Start at: 2019-01-22 10:15:17
End at: 2019-01-22 10:15:47
Local clock offset: 0.184 ms
Remote clock offset: -0.735 ms

Below is generated by plot.py at 2019-01-22 14:32:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 43.40 Mbit/s
95th percentile per-packet one-way delay: 60.296 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.36 Mbit/s
95th percentile per-packet one-way delay: 57.848 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.03 Mbit/s
95th percentile per-packet one-way delay: 61.046 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.28 Mbit/s
95th percentile per-packet one-way delay: 57.499 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

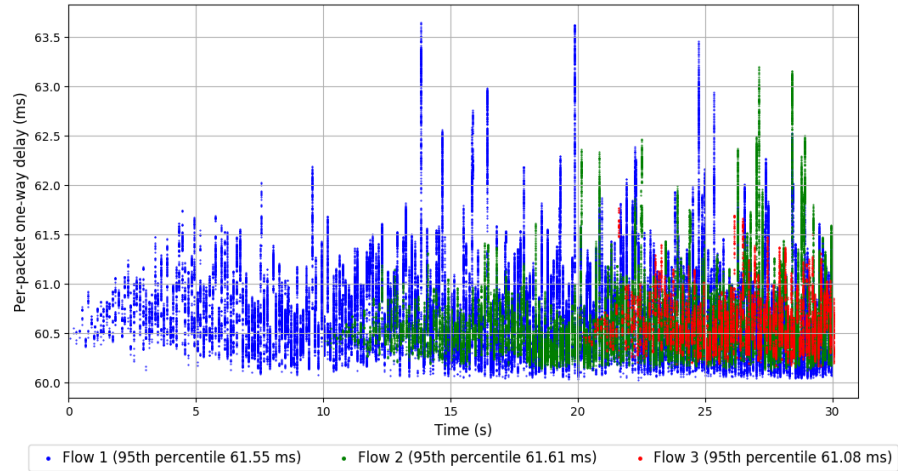
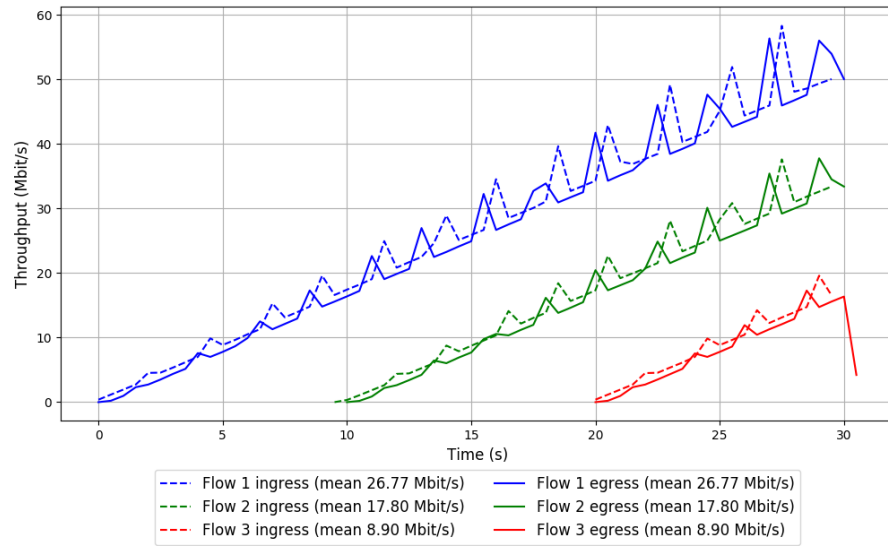


Run 4: Statistics of LEDBAT

Start at: 2019-01-22 10:54:25
End at: 2019-01-22 10:54:55
Local clock offset: -0.202 ms
Remote clock offset: -0.352 ms

Below is generated by plot.py at 2019-01-22 14:32:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 41.49 Mbit/s
95th percentile per-packet one-way delay: 61.542 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.77 Mbit/s
95th percentile per-packet one-way delay: 61.555 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.80 Mbit/s
95th percentile per-packet one-way delay: 61.613 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.90 Mbit/s
95th percentile per-packet one-way delay: 61.078 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-01-22 11:33:04

End at: 2019-01-22 11:33:34

Local clock offset: -0.138 ms

Remote clock offset: 0.041 ms

Below is generated by plot.py at 2019-01-22 14:32:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.34 Mbit/s

95th percentile per-packet one-way delay: 61.926 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 26.76 Mbit/s

95th percentile per-packet one-way delay: 62.014 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.88 Mbit/s

95th percentile per-packet one-way delay: 61.759 ms

Loss rate: 0.00%

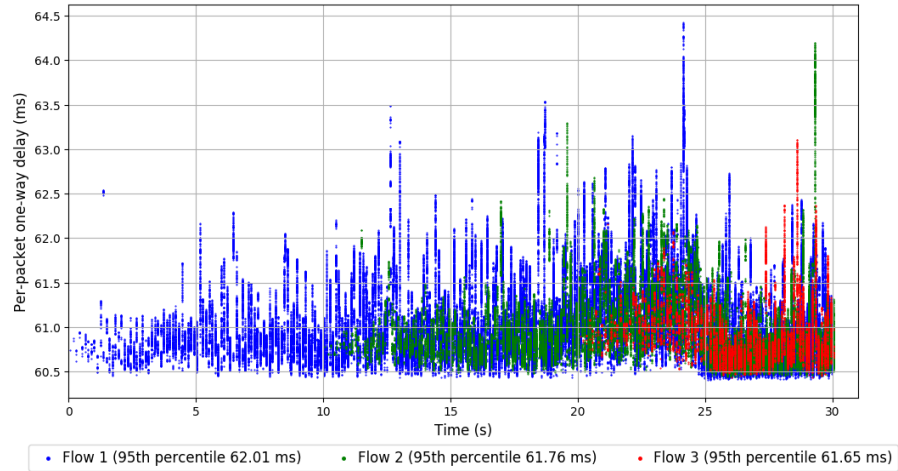
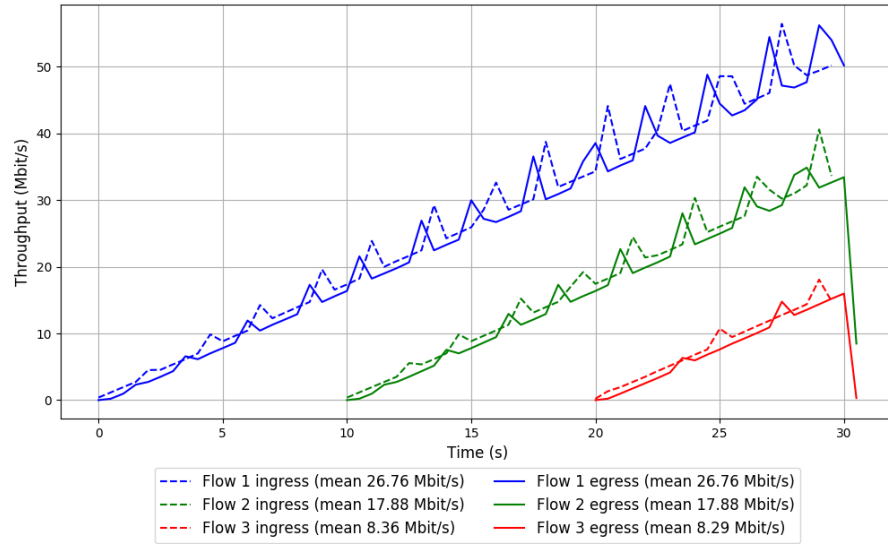
-- Flow 3:

Average throughput: 8.29 Mbit/s

95th percentile per-packet one-way delay: 61.648 ms

Loss rate: 0.85%

Run 5: Report of LEDBAT — Data Link

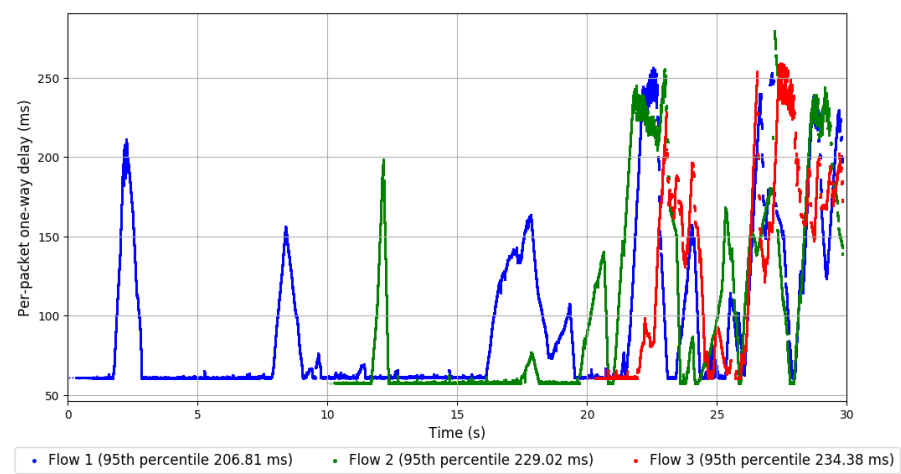
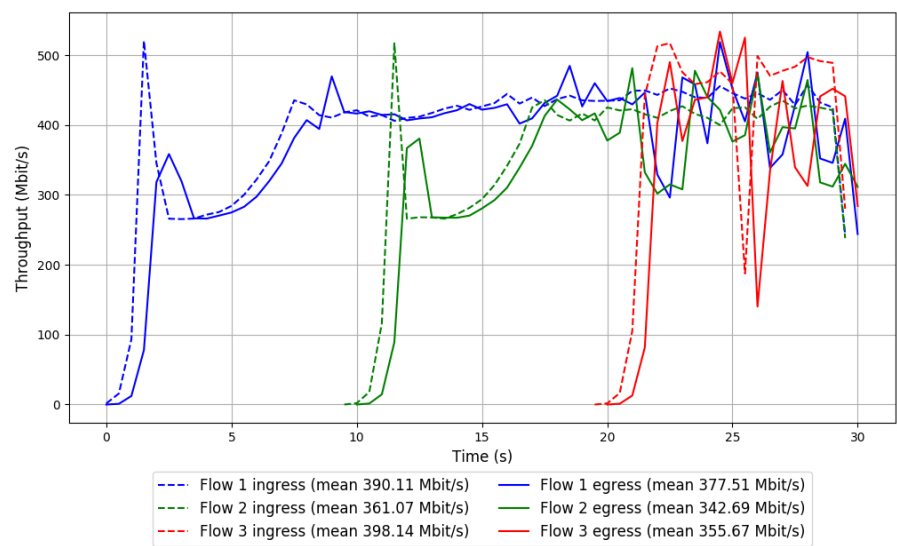


Run 1: Statistics of PCC-Allegro

Start at: 2019-01-22 08:59:45
End at: 2019-01-22 09:00:15
Local clock offset: -0.485 ms
Remote clock offset: -0.055 ms

Below is generated by plot.py at 2019-01-22 14:55:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 722.83 Mbit/s
95th percentile per-packet one-way delay: 224.284 ms
Loss rate: 5.10%
-- Flow 1:
Average throughput: 377.51 Mbit/s
95th percentile per-packet one-way delay: 206.807 ms
Loss rate: 3.24%
-- Flow 2:
Average throughput: 342.69 Mbit/s
95th percentile per-packet one-way delay: 229.022 ms
Loss rate: 5.09%
-- Flow 3:
Average throughput: 355.67 Mbit/s
95th percentile per-packet one-way delay: 234.380 ms
Loss rate: 10.69%

Run 1: Report of PCC-Allegro — Data Link

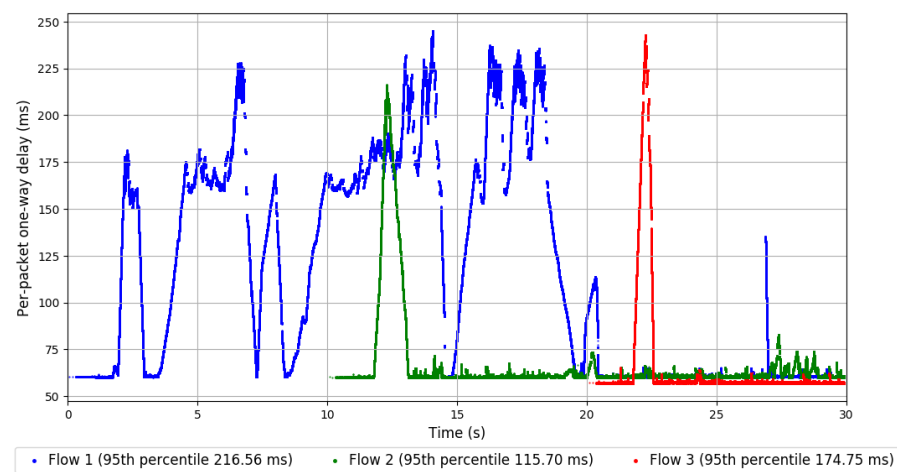
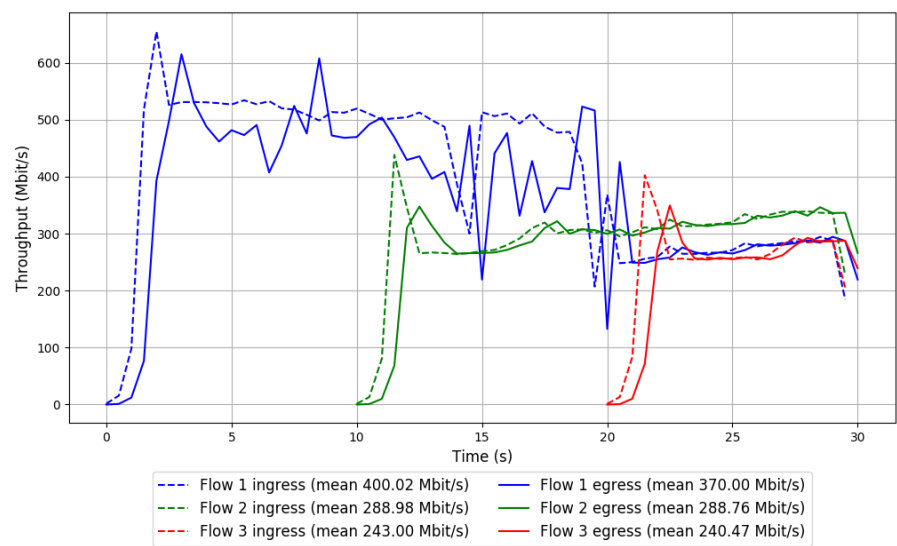


Run 2: Statistics of PCC-Allegro

Start at: 2019-01-22 09:37:35
End at: 2019-01-22 09:38:05
Local clock offset: -0.343 ms
Remote clock offset: -0.568 ms

Below is generated by plot.py at 2019-01-22 14:55:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 640.45 Mbit/s
95th percentile per-packet one-way delay: 206.856 ms
Loss rate: 4.91%
-- Flow 1:
Average throughput: 370.00 Mbit/s
95th percentile per-packet one-way delay: 216.564 ms
Loss rate: 7.72%
-- Flow 2:
Average throughput: 288.76 Mbit/s
95th percentile per-packet one-way delay: 115.701 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 240.47 Mbit/s
95th percentile per-packet one-way delay: 174.754 ms
Loss rate: 1.69%

Run 2: Report of PCC-Allegro — Data Link

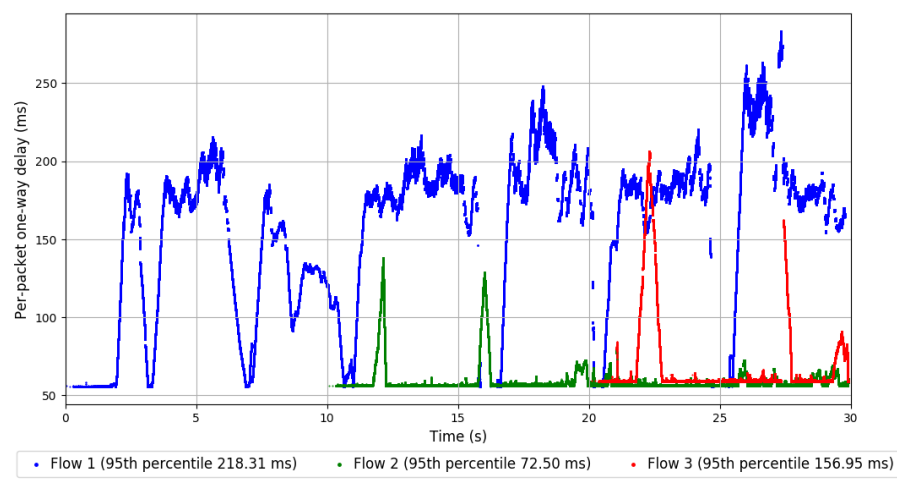
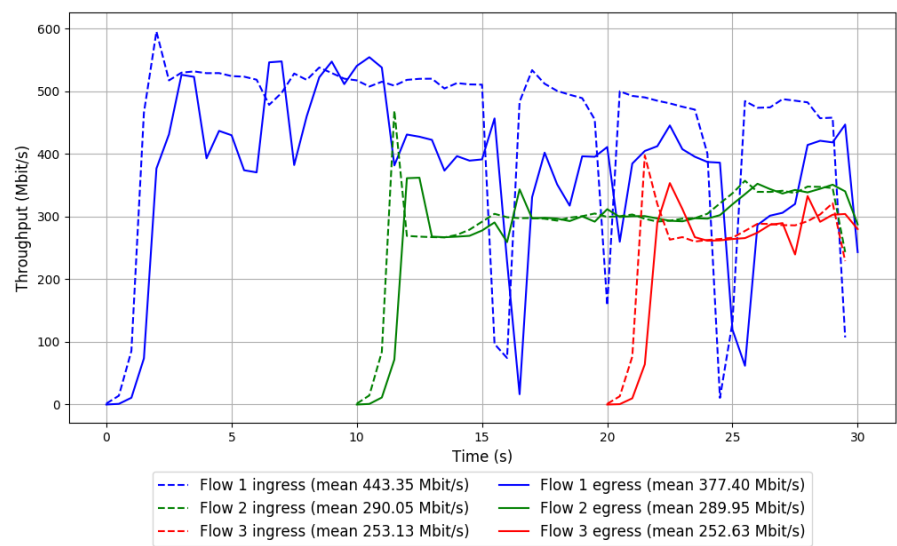


Run 3: Statistics of PCC-Allegro

Start at: 2019-01-22 10:16:35
End at: 2019-01-22 10:17:05
Local clock offset: -0.149 ms
Remote clock offset: -1.155 ms

Below is generated by plot.py at 2019-01-22 14:55:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 651.23 Mbit/s
95th percentile per-packet one-way delay: 203.858 ms
Loss rate: 8.98%
-- Flow 1:
Average throughput: 377.40 Mbit/s
95th percentile per-packet one-way delay: 218.308 ms
Loss rate: 14.57%
-- Flow 2:
Average throughput: 289.95 Mbit/s
95th percentile per-packet one-way delay: 72.496 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 252.63 Mbit/s
95th percentile per-packet one-way delay: 156.949 ms
Loss rate: 0.22%

Run 3: Report of PCC-Allegro — Data Link

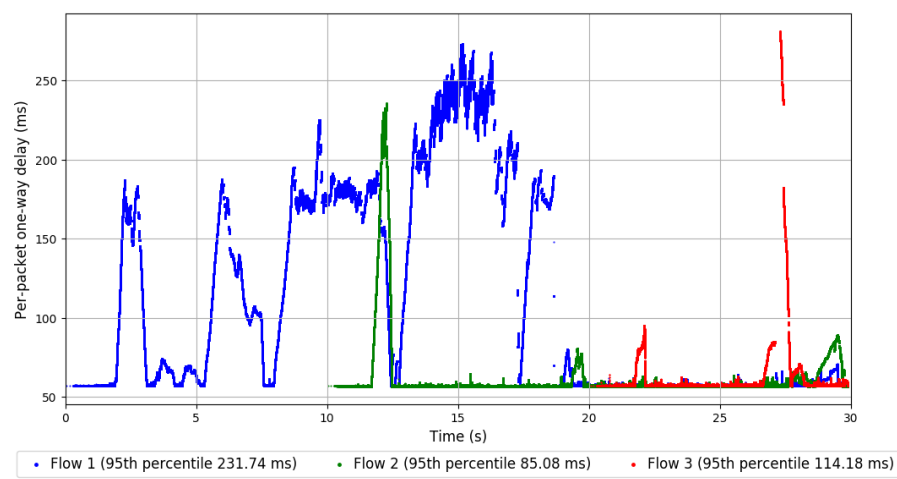
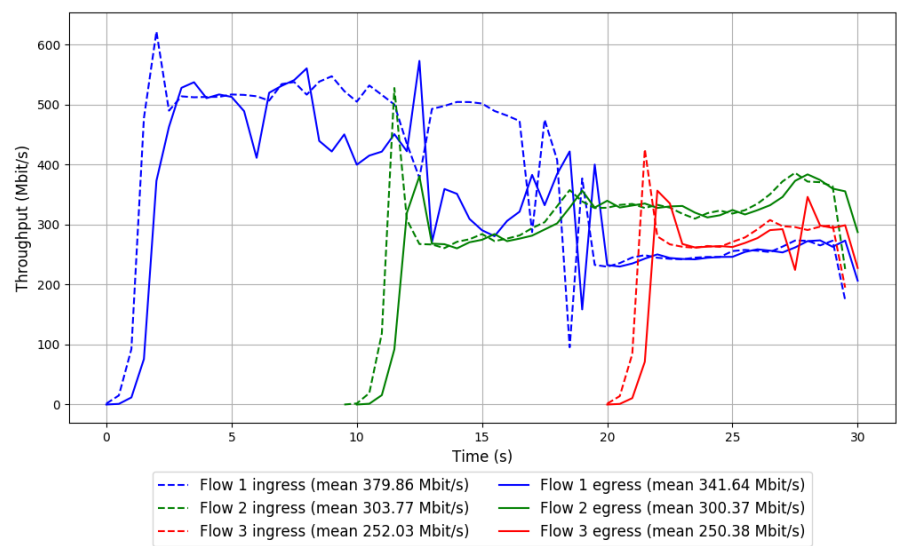


Run 4: Statistics of PCC-Allegro

Start at: 2019-01-22 10:55:42
End at: 2019-01-22 10:56:12
Local clock offset: -0.347 ms
Remote clock offset: -0.497 ms

Below is generated by plot.py at 2019-01-22 15:01:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 623.87 Mbit/s
95th percentile per-packet one-way delay: 209.503 ms
Loss rate: 6.18%
-- Flow 1:
Average throughput: 341.64 Mbit/s
95th percentile per-packet one-way delay: 231.738 ms
Loss rate: 10.07%
-- Flow 2:
Average throughput: 300.37 Mbit/s
95th percentile per-packet one-way delay: 85.085 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 250.38 Mbit/s
95th percentile per-packet one-way delay: 114.184 ms
Loss rate: 0.68%

Run 4: Report of PCC-Allegro — Data Link

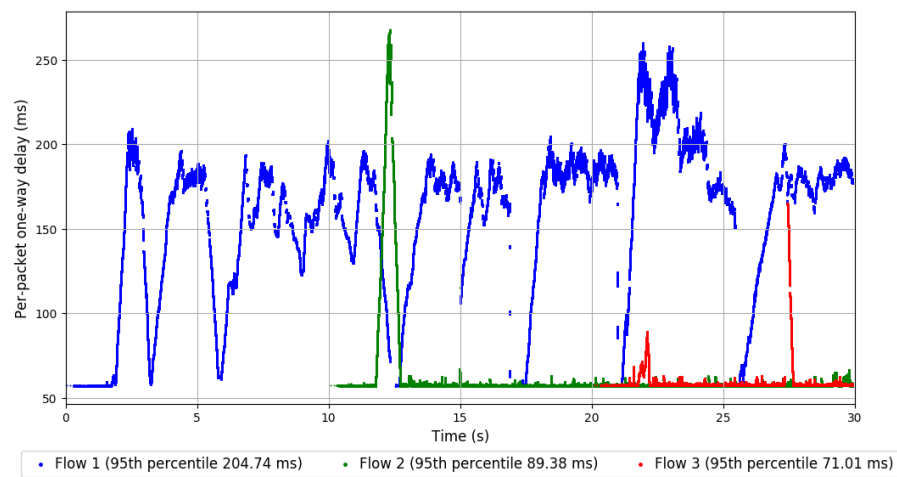
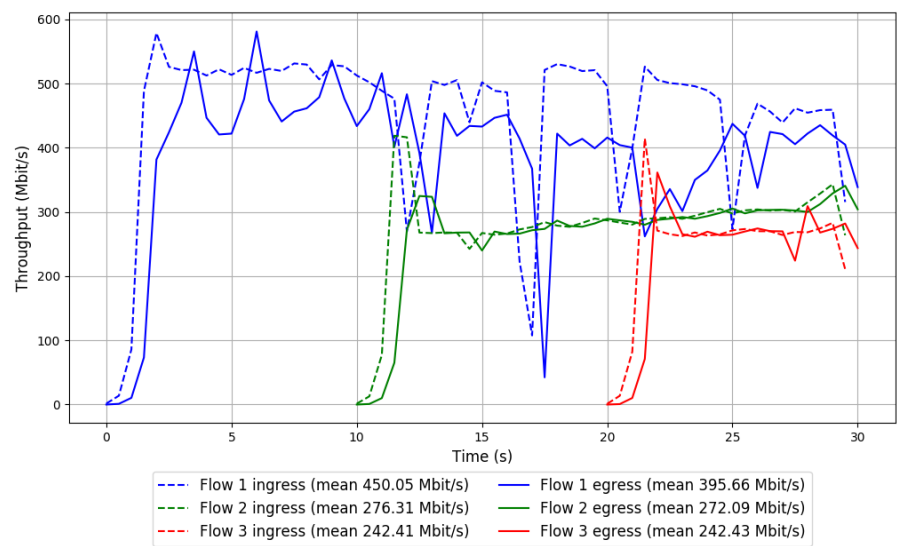


Run 5: Statistics of PCC-Allegro

Start at: 2019-01-22 11:34:23
End at: 2019-01-22 11:34:53
Local clock offset: -0.363 ms
Remote clock offset: -0.407 ms

Below is generated by plot.py at 2019-01-22 15:02:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 656.18 Mbit/s
95th percentile per-packet one-way delay: 197.045 ms
Loss rate: 8.02%
-- Flow 1:
Average throughput: 395.66 Mbit/s
95th percentile per-packet one-way delay: 204.739 ms
Loss rate: 12.08%
-- Flow 2:
Average throughput: 272.09 Mbit/s
95th percentile per-packet one-way delay: 89.381 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 242.43 Mbit/s
95th percentile per-packet one-way delay: 71.008 ms
Loss rate: 0.00%

Run 5: Report of PCC-Allegro — Data Link

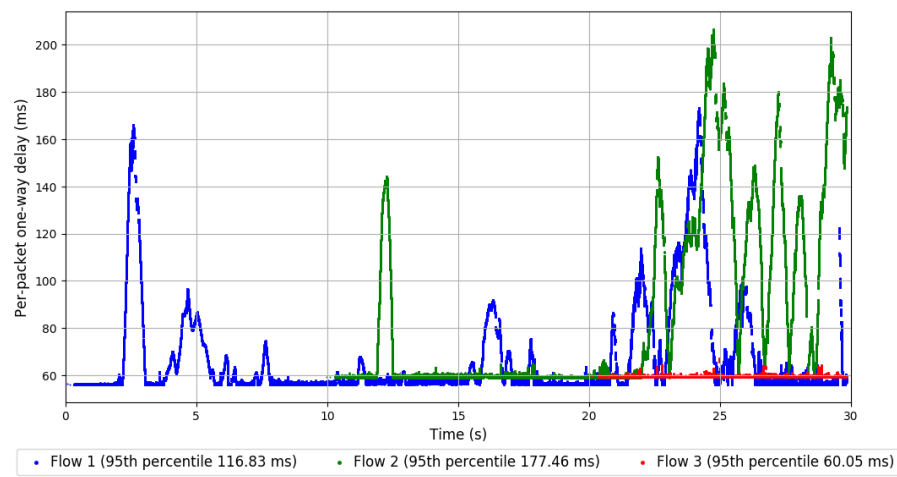
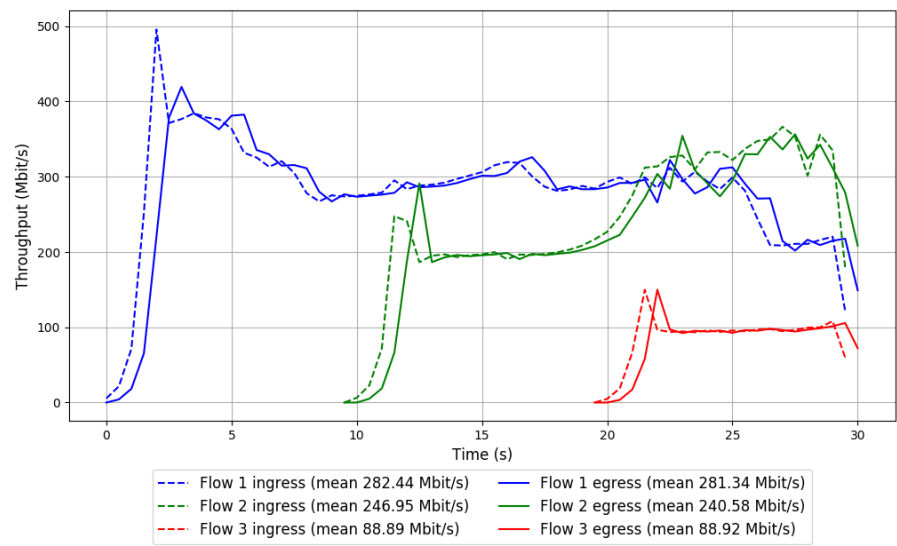


Run 1: Statistics of PCC-Expr

Start at: 2019-01-22 09:15:44
End at: 2019-01-22 09:16:14
Local clock offset: -0.066 ms
Remote clock offset: -1.288 ms

Below is generated by plot.py at 2019-01-22 15:02:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 471.19 Mbit/s
95th percentile per-packet one-way delay: 154.124 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 281.34 Mbit/s
95th percentile per-packet one-way delay: 116.833 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 240.58 Mbit/s
95th percentile per-packet one-way delay: 177.460 ms
Loss rate: 2.59%
-- Flow 3:
Average throughput: 88.92 Mbit/s
95th percentile per-packet one-way delay: 60.051 ms
Loss rate: 0.04%

Run 1: Report of PCC-Expr — Data Link

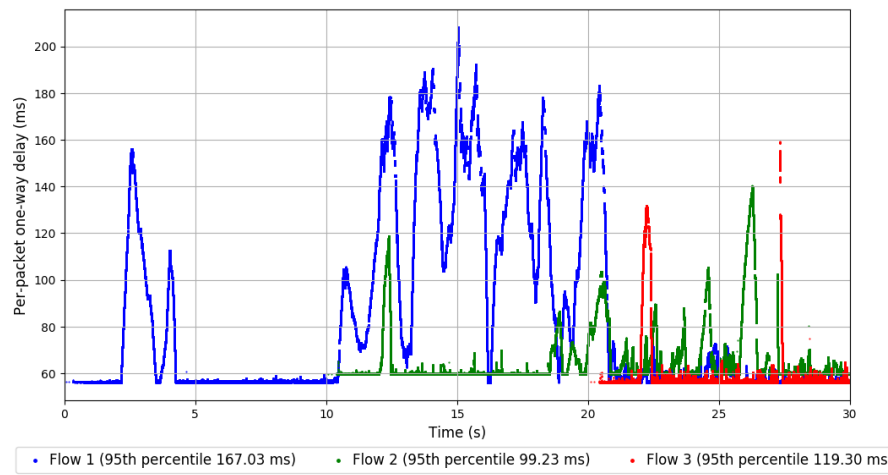
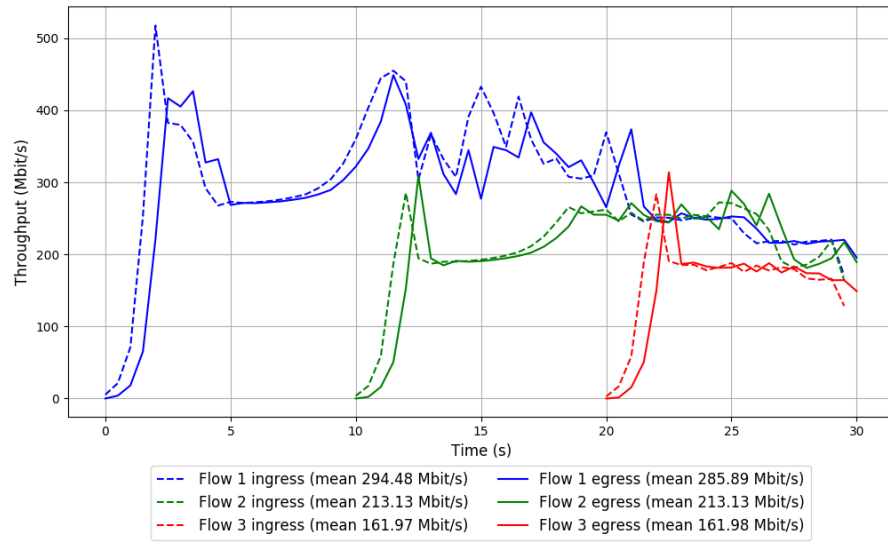


Run 2: Statistics of PCC-Expr

Start at: 2019-01-22 09:53:53
End at: 2019-01-22 09:54:23
Local clock offset: 0.228 ms
Remote clock offset: -0.543 ms

Below is generated by plot.py at 2019-01-22 15:02:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 480.90 Mbit/s
95th percentile per-packet one-way delay: 158.686 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 285.89 Mbit/s
95th percentile per-packet one-way delay: 167.029 ms
Loss rate: 2.92%
-- Flow 2:
Average throughput: 213.13 Mbit/s
95th percentile per-packet one-way delay: 99.232 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 161.98 Mbit/s
95th percentile per-packet one-way delay: 119.302 ms
Loss rate: 0.00%

Run 2: Report of PCC-Expr — Data Link

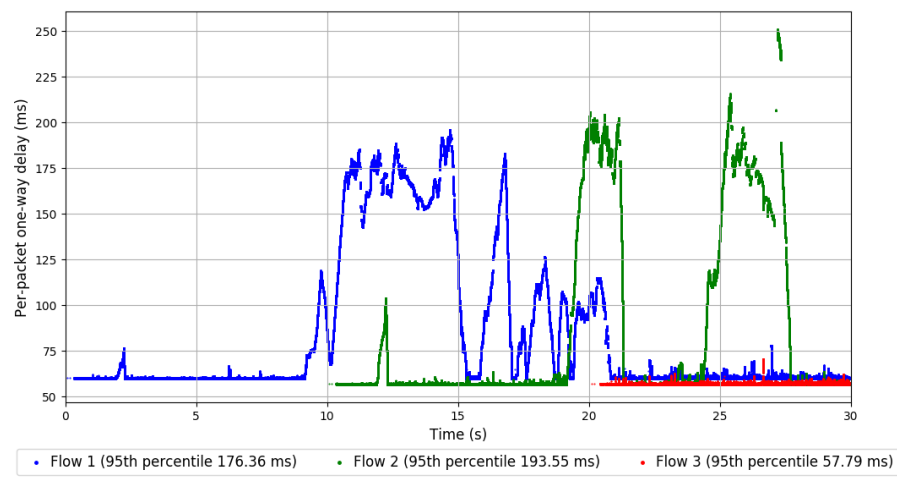
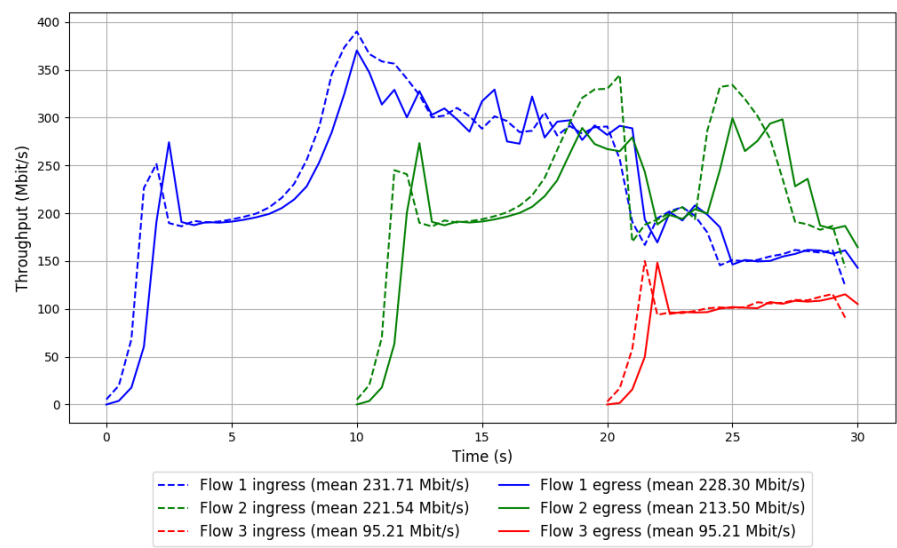


Run 3: Statistics of PCC-Expr

Start at: 2019-01-22 10:33:13
End at: 2019-01-22 10:33:43
Local clock offset: 0.006 ms
Remote clock offset: -0.413 ms

Below is generated by plot.py at 2019-01-22 15:02:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 401.64 Mbit/s
95th percentile per-packet one-way delay: 182.644 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 228.30 Mbit/s
95th percentile per-packet one-way delay: 176.362 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 213.50 Mbit/s
95th percentile per-packet one-way delay: 193.548 ms
Loss rate: 3.63%
-- Flow 3:
Average throughput: 95.21 Mbit/s
95th percentile per-packet one-way delay: 57.793 ms
Loss rate: 0.00%

Run 3: Report of PCC-Expr — Data Link

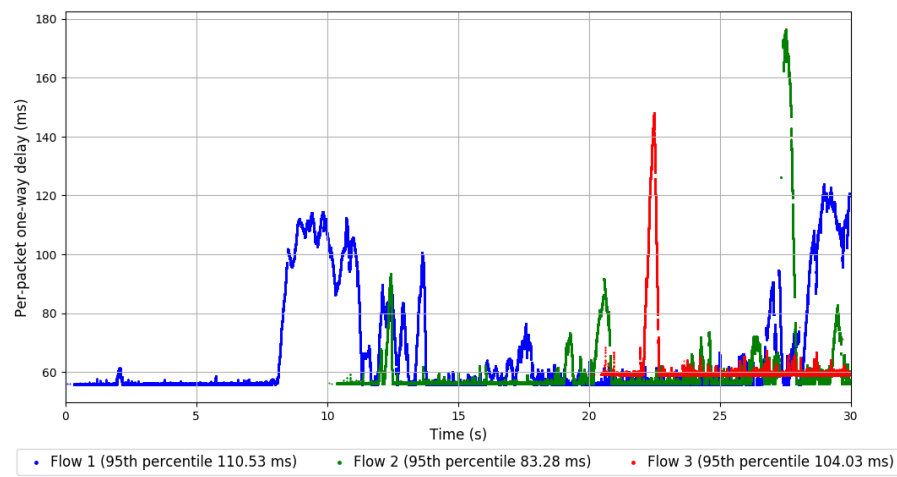
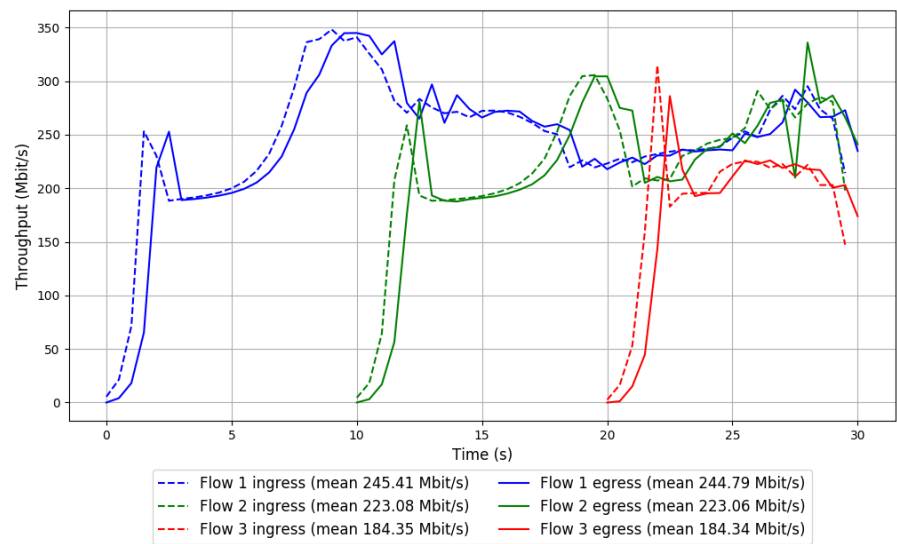


Run 4: Statistics of PCC-Expr

Start at: 2019-01-22 11:11:37
End at: 2019-01-22 11:12:07
Local clock offset: -0.149 ms
Remote clock offset: -1.342 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 453.86 Mbit/s
95th percentile per-packet one-way delay: 109.525 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 244.79 Mbit/s
95th percentile per-packet one-way delay: 110.535 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 223.06 Mbit/s
95th percentile per-packet one-way delay: 83.280 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 184.34 Mbit/s
95th percentile per-packet one-way delay: 104.026 ms
Loss rate: 0.02%

Run 4: Report of PCC-Expr — Data Link

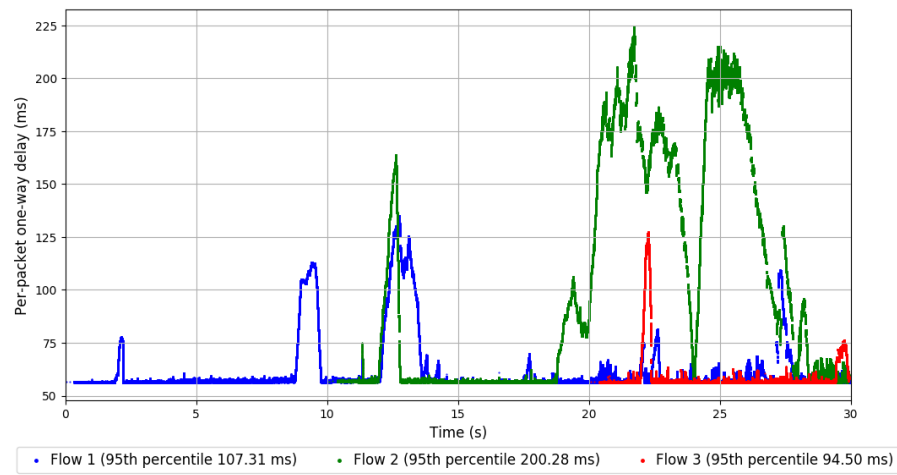
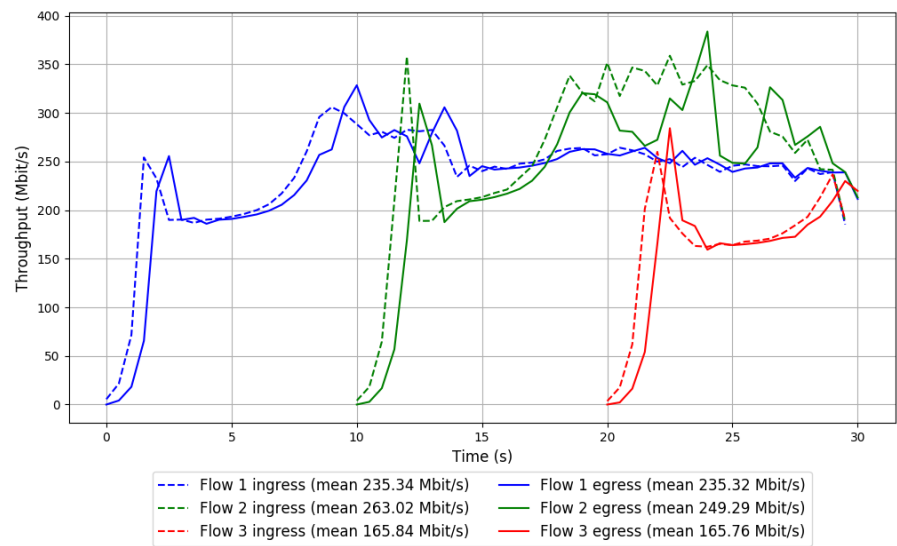


Run 5: Statistics of PCC-Expr

Start at: 2019-01-22 11:51:18
End at: 2019-01-22 11:51:48
Local clock offset: 0.141 ms
Remote clock offset: -0.723 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 455.67 Mbit/s
95th percentile per-packet one-way delay: 180.361 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 235.32 Mbit/s
95th percentile per-packet one-way delay: 107.310 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 249.29 Mbit/s
95th percentile per-packet one-way delay: 200.283 ms
Loss rate: 5.21%
-- Flow 3:
Average throughput: 165.76 Mbit/s
95th percentile per-packet one-way delay: 94.496 ms
Loss rate: 0.05%

Run 5: Report of PCC-Expr — Data Link

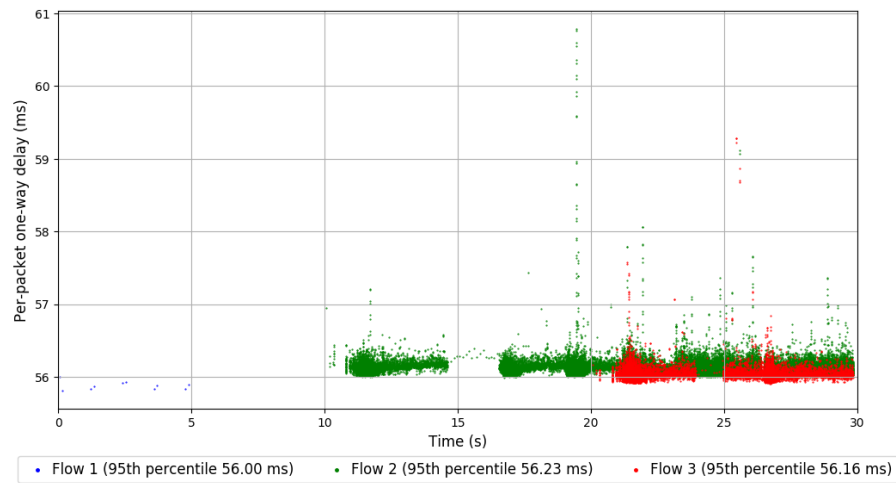
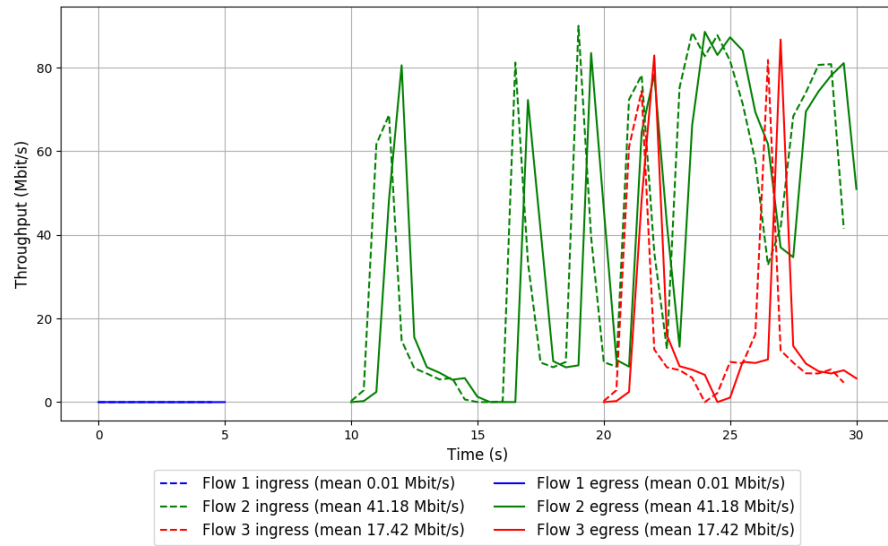


Run 1: Statistics of QUIC Cubic

Start at: 2019-01-22 09:24:43
End at: 2019-01-22 09:25:13
Local clock offset: 0.117 ms
Remote clock offset: -0.886 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 33.06 Mbit/s
95th percentile per-packet one-way delay: 56.221 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.002 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.18 Mbit/s
95th percentile per-packet one-way delay: 56.228 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.42 Mbit/s
95th percentile per-packet one-way delay: 56.162 ms
Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link

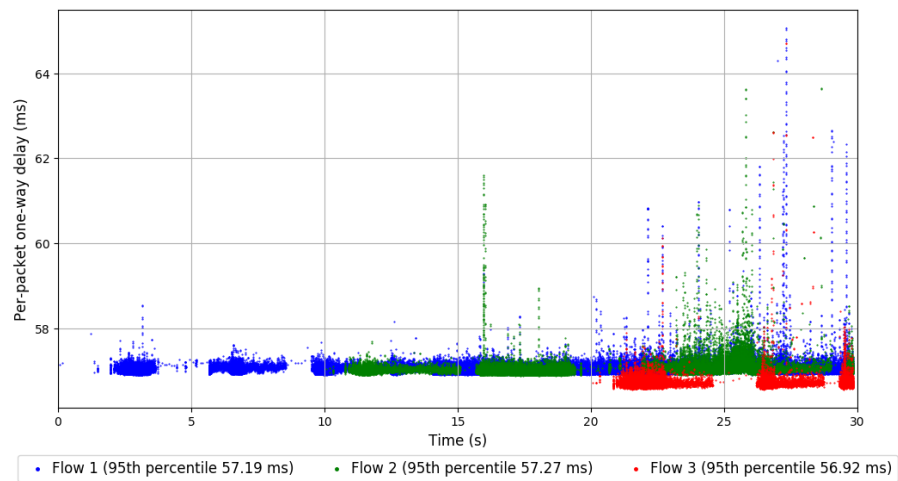
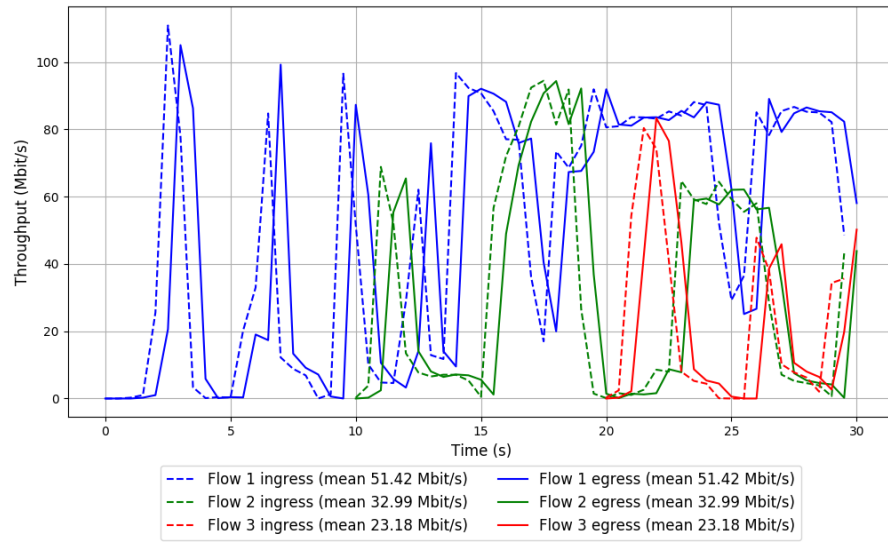


Run 2: Statistics of QUIC Cubic

Start at: 2019-01-22 10:03:23
End at: 2019-01-22 10:03:53
Local clock offset: 0.026 ms
Remote clock offset: -0.055 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.92 Mbit/s
95th percentile per-packet one-way delay: 57.198 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.42 Mbit/s
95th percentile per-packet one-way delay: 57.189 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 57.268 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.18 Mbit/s
95th percentile per-packet one-way delay: 56.918 ms
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-01-22 10:42:28

End at: 2019-01-22 10:42:58

Local clock offset: -0.554 ms

Remote clock offset: -0.43 ms

Below is generated by plot.py at 2019-01-22 15:13:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.54 Mbit/s

95th percentile per-packet one-way delay: 60.439 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.81 Mbit/s

95th percentile per-packet one-way delay: 57.313 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.16 Mbit/s

95th percentile per-packet one-way delay: 57.247 ms

Loss rate: 0.00%

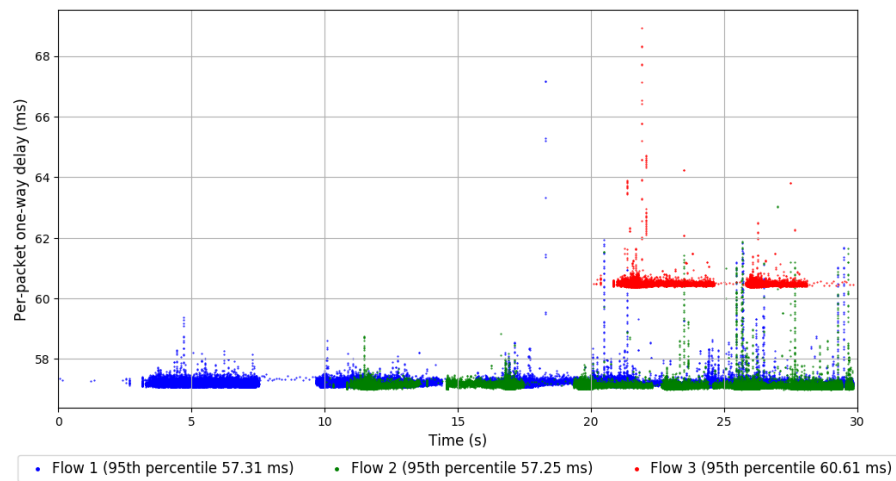
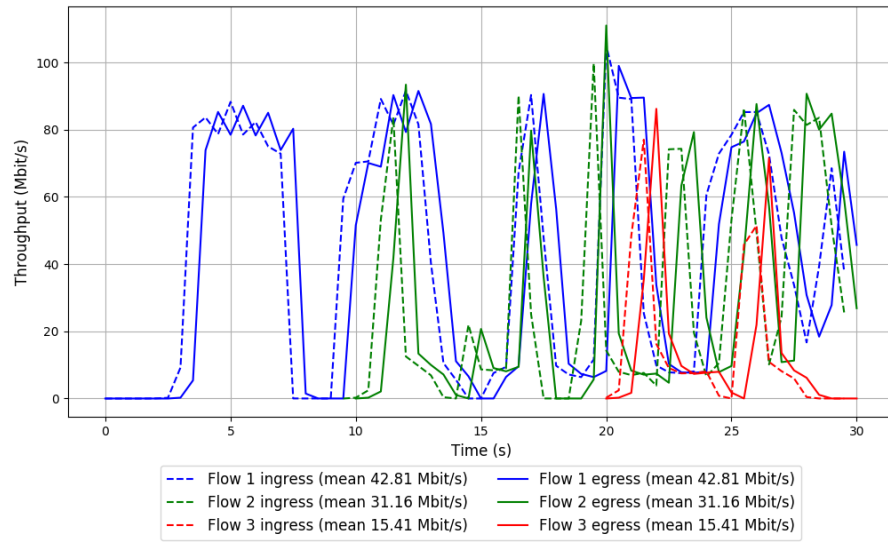
-- Flow 3:

Average throughput: 15.41 Mbit/s

95th percentile per-packet one-way delay: 60.609 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link

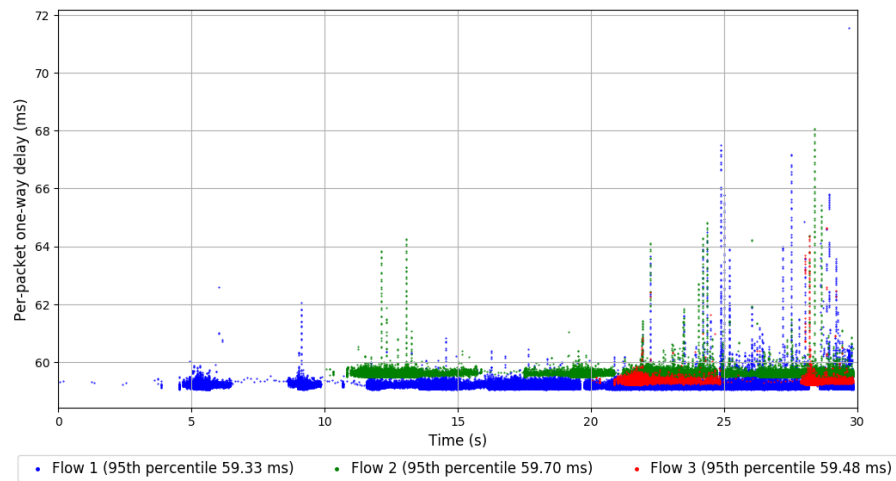
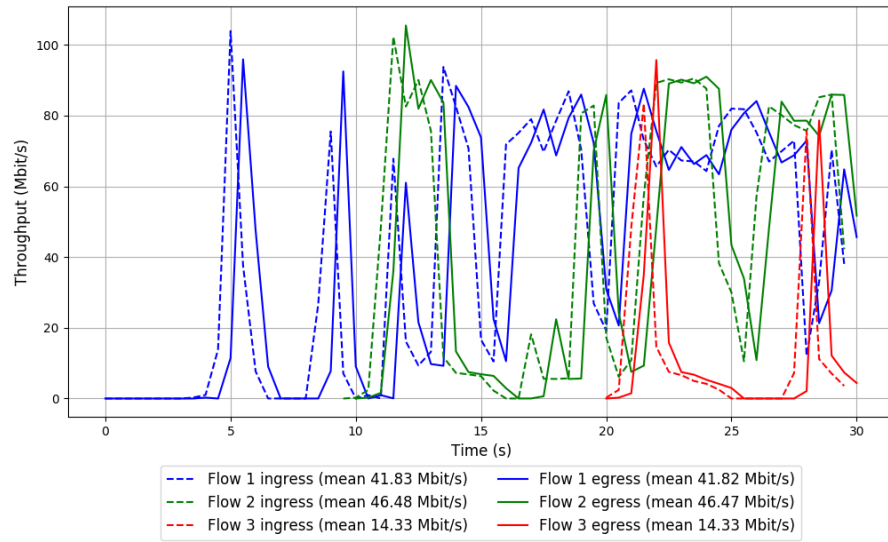


Run 4: Statistics of QUIC Cubic

Start at: 2019-01-22 11:20:57
End at: 2019-01-22 11:21:27
Local clock offset: 0.254 ms
Remote clock offset: -0.547 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.38 Mbit/s
95th percentile per-packet one-way delay: 59.652 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 41.82 Mbit/s
95th percentile per-packet one-way delay: 59.328 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 46.47 Mbit/s
95th percentile per-packet one-way delay: 59.701 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 14.33 Mbit/s
95th percentile per-packet one-way delay: 59.476 ms
Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link

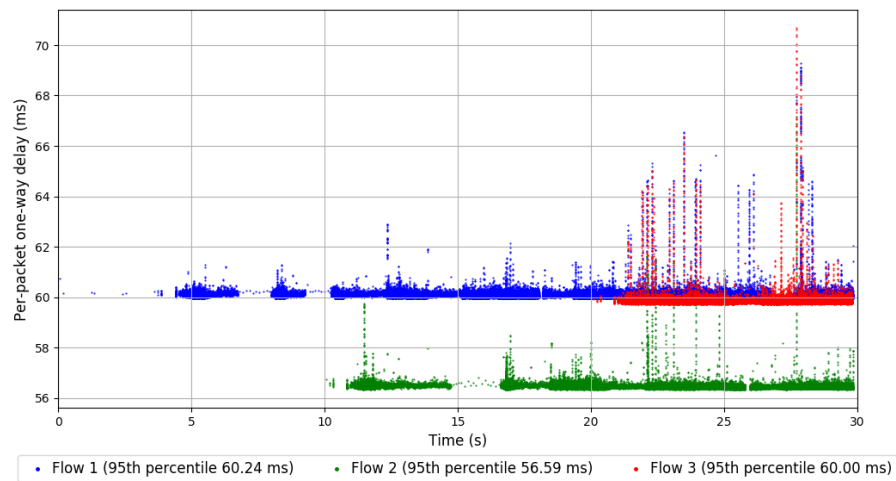
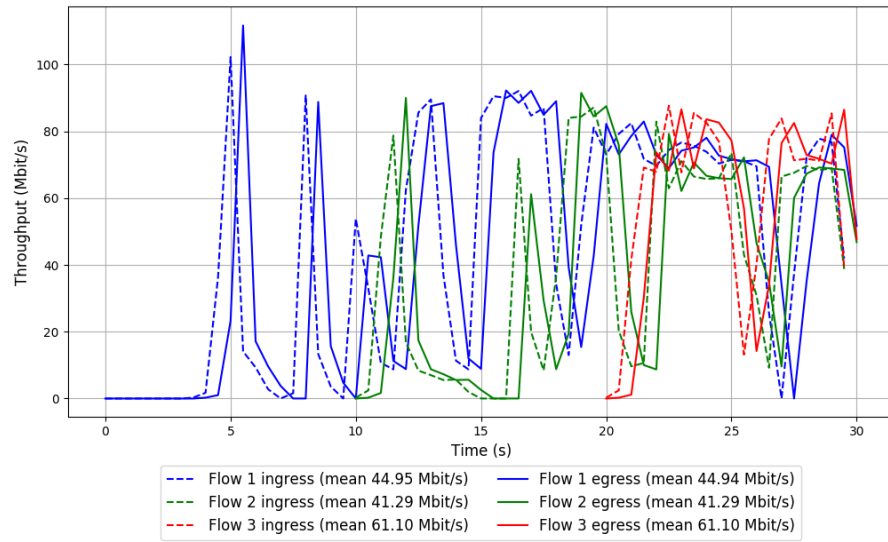


Run 5: Statistics of QUIC Cubic

Start at: 2019-01-22 12:00:15
End at: 2019-01-22 12:00:45
Local clock offset: 0.01 ms
Remote clock offset: -0.932 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 60.185 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 44.94 Mbit/s
95th percentile per-packet one-way delay: 60.238 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 41.29 Mbit/s
95th percentile per-packet one-way delay: 56.594 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 61.10 Mbit/s
95th percentile per-packet one-way delay: 60.003 ms
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

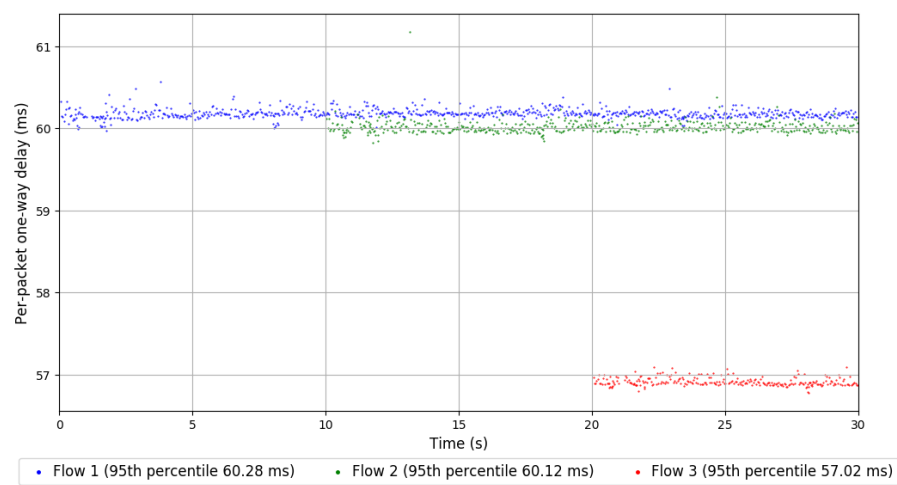
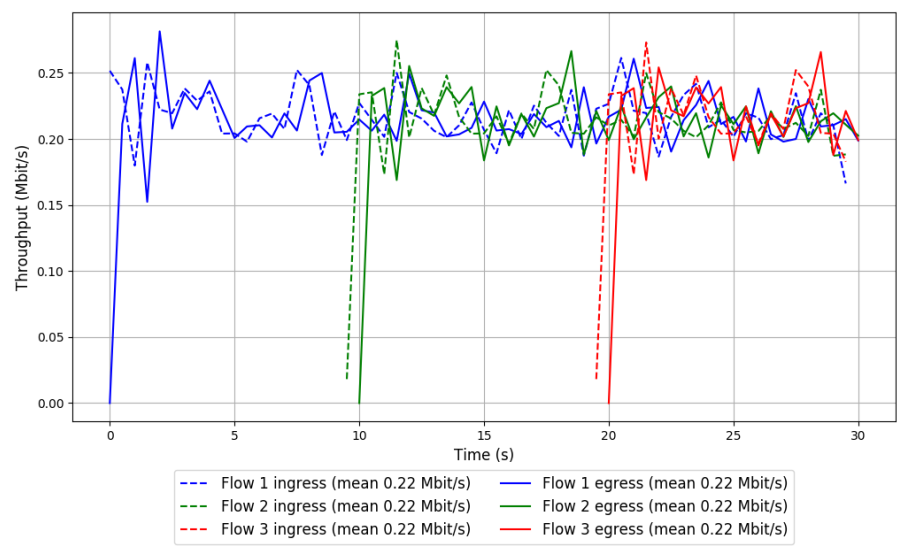


```
Run 1: Statistics of SReAM

Start at: 2019-01-22 09:21:40
End at: 2019-01-22 09:22:10
Local clock offset: 0.025 ms
Remote clock offset: -0.182 ms

# Below is generated by plot.py at 2019-01-22 15:13:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 60.254 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.284 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.125 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.015 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

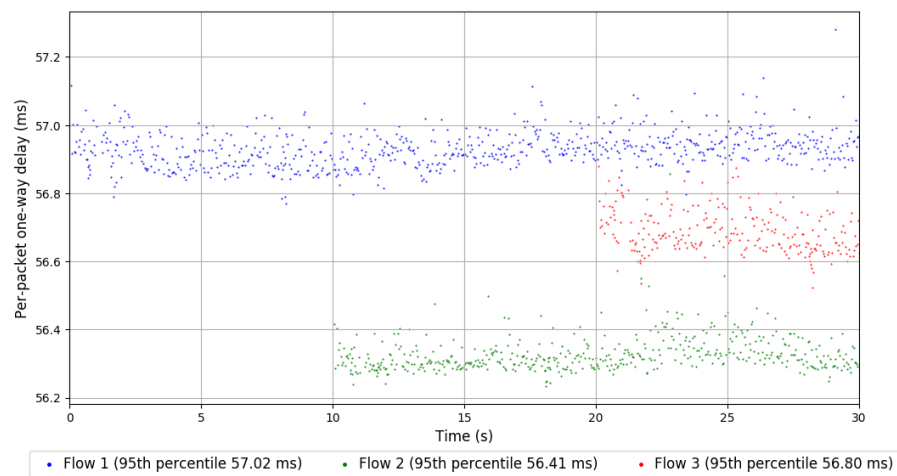
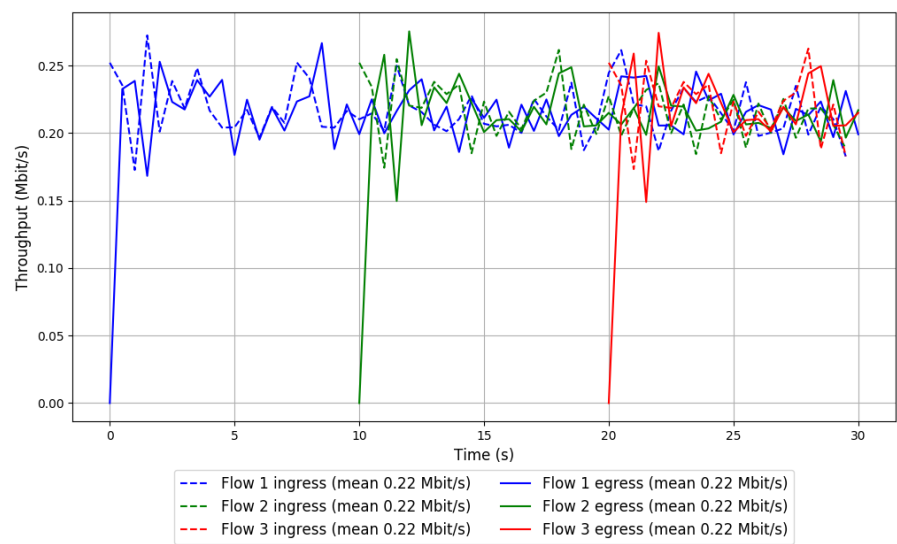


Run 2: Statistics of SReAM

Start at: 2019-01-22 10:00:17
End at: 2019-01-22 10:00:47
Local clock offset: -0.259 ms
Remote clock offset: -0.816 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.994 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.016 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.415 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.802 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

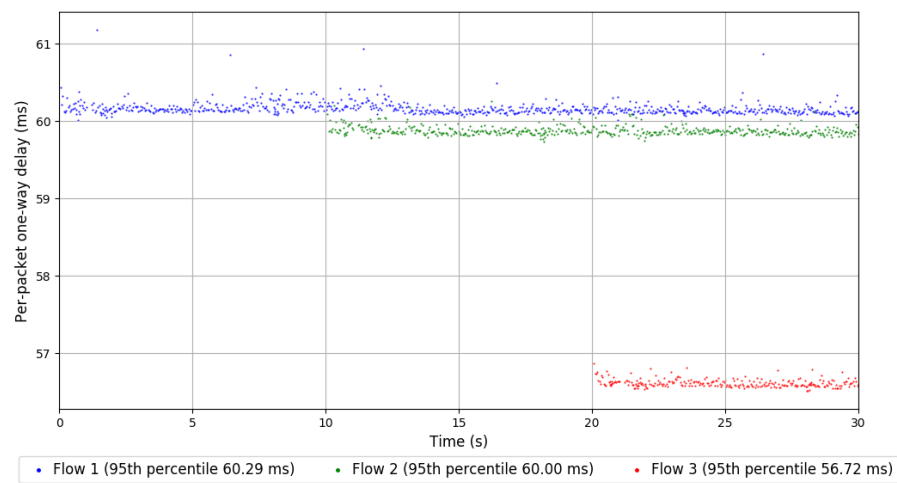
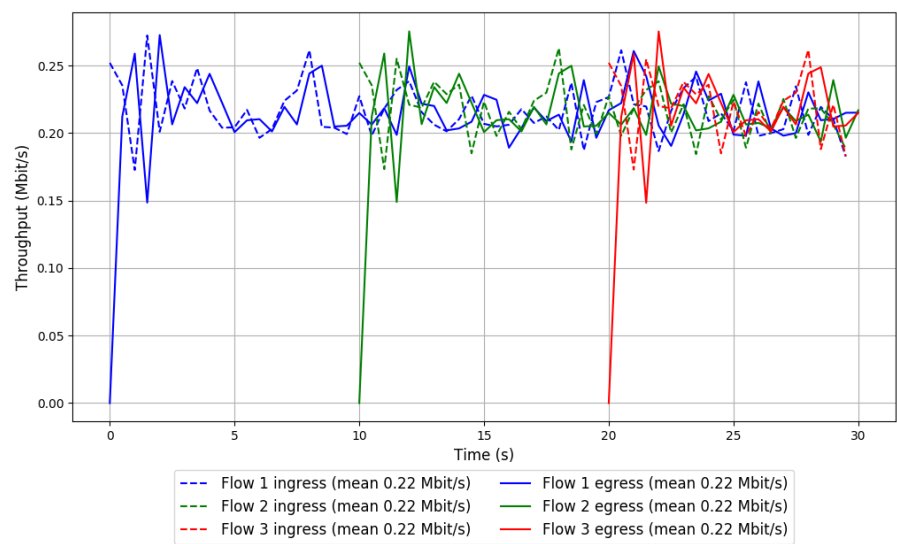


Run 3: Statistics of SReAM

Start at: 2019-01-22 10:39:20
End at: 2019-01-22 10:39:50
Local clock offset: -0.243 ms
Remote clock offset: -0.827 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 60.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.291 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.999 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.717 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

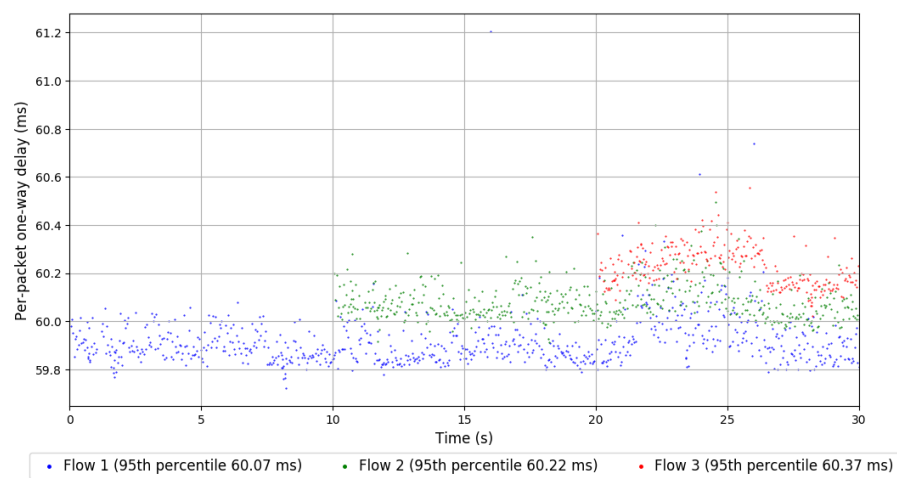
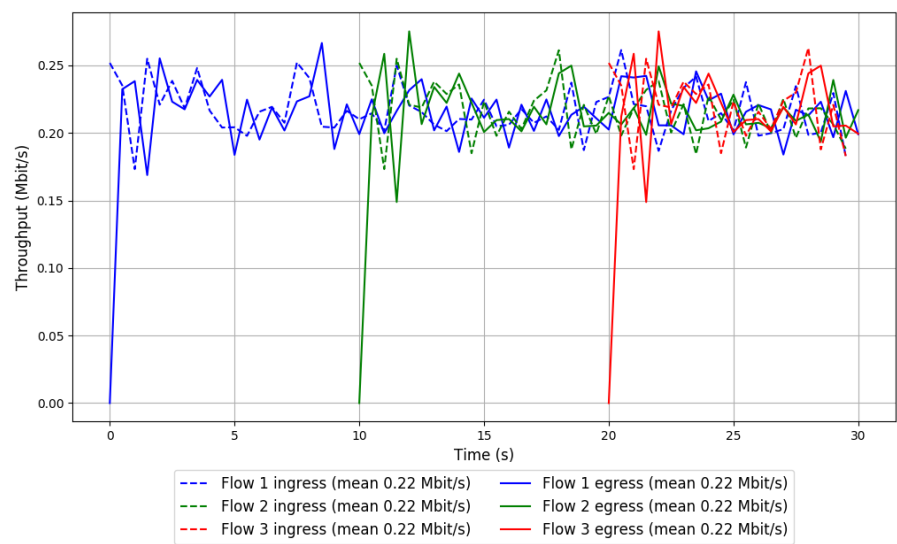


Run 4: Statistics of SCReAM

Start at: 2019-01-22 11:17:45
End at: 2019-01-22 11:18:15
Local clock offset: -0.407 ms
Remote clock offset: -0.634 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 60.284 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.074 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.222 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.365 ms
Loss rate: 0.35%

Run 4: Report of SReAM — Data Link

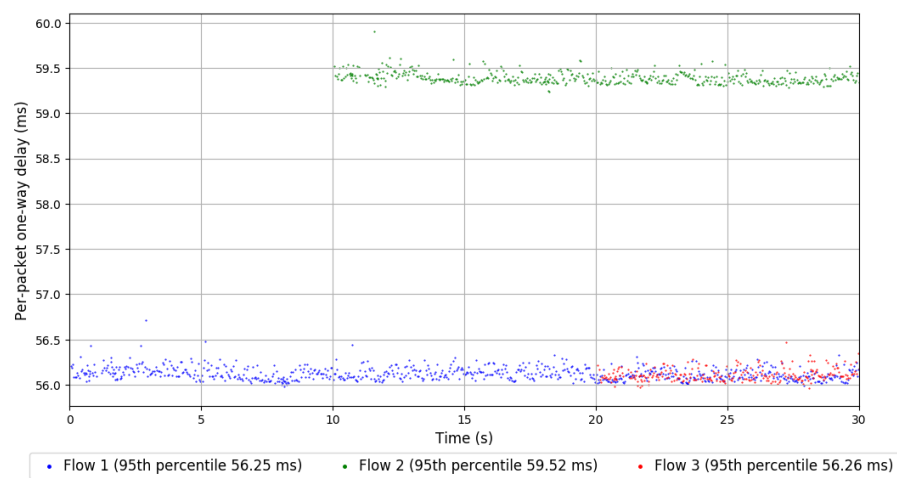
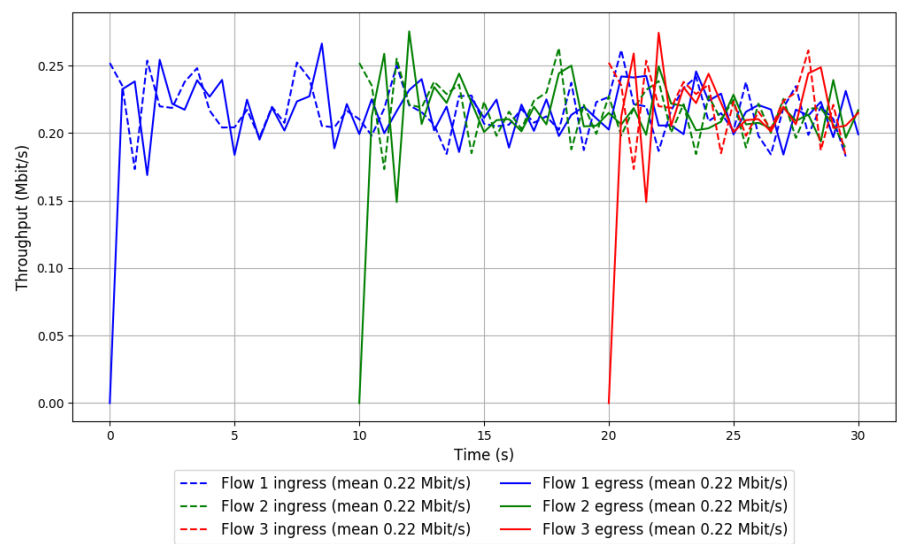


Run 5: Statistics of SReAM

Start at: 2019-01-22 11:57:09
End at: 2019-01-22 11:57:39
Local clock offset: -0.209 ms
Remote clock offset: -1.644 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 59.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.249 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.517 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.257 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

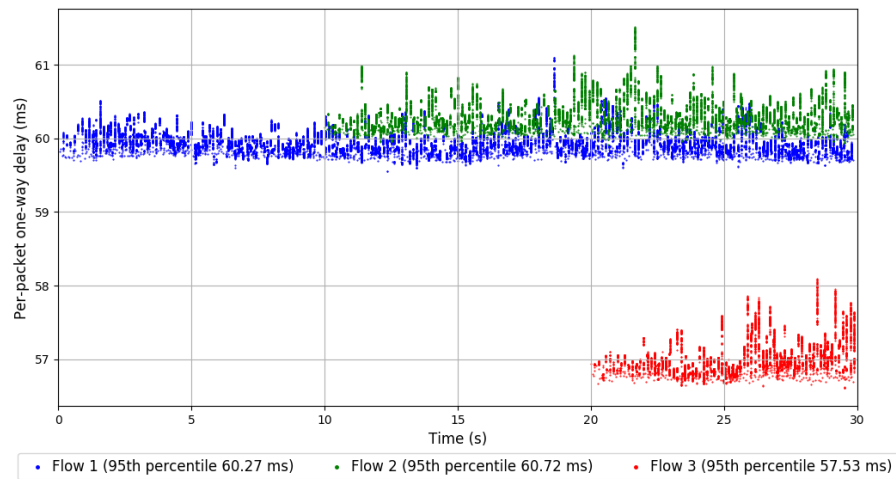
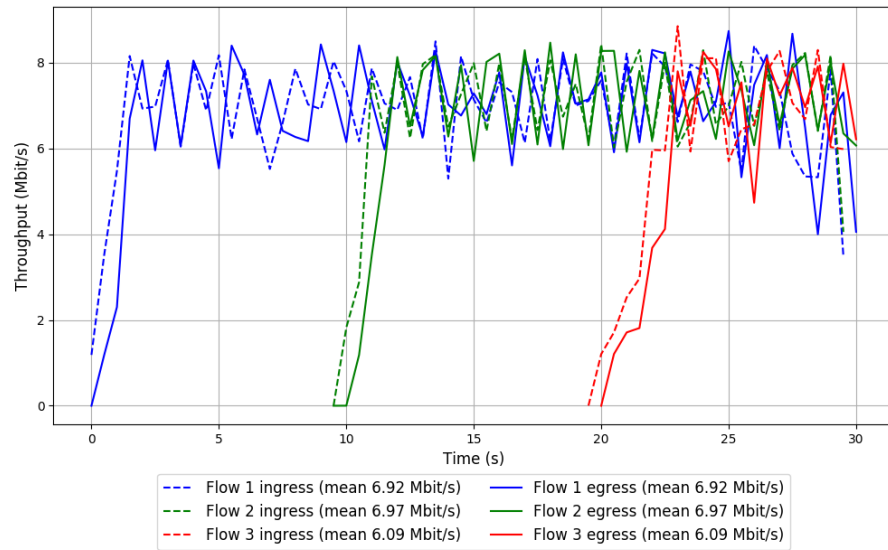


Run 1: Statistics of Sprout

Start at: 2019-01-22 09:04:09
End at: 2019-01-22 09:04:39
Local clock offset: -0.021 ms
Remote clock offset: -0.69 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 13.57 Mbit/s
95th percentile per-packet one-way delay: 60.535 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 60.268 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 60.723 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.09 Mbit/s
95th percentile per-packet one-way delay: 57.531 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

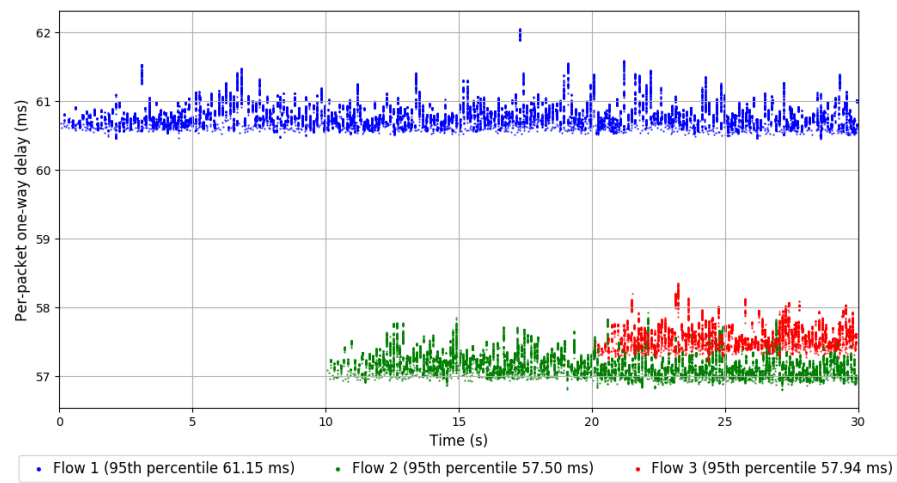
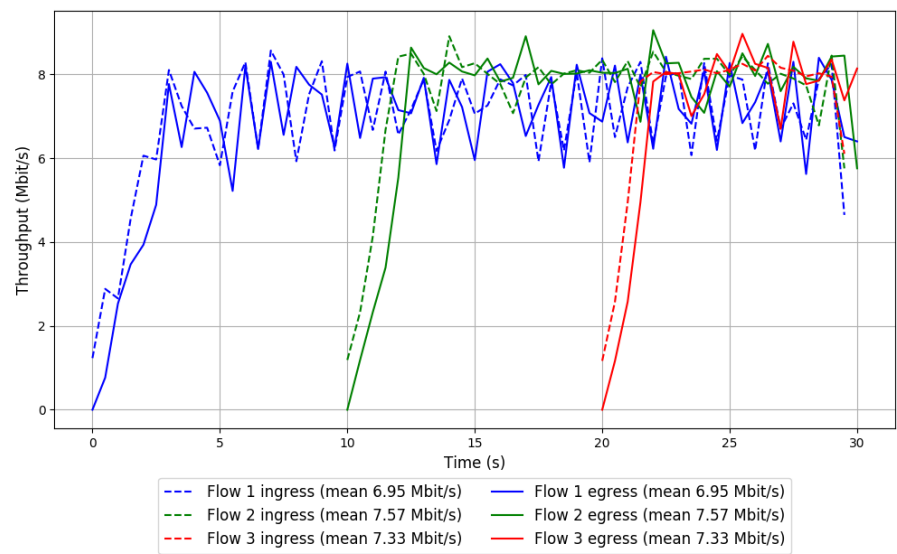


Run 2: Statistics of Sprout

Start at: 2019-01-22 09:42:02
End at: 2019-01-22 09:42:32
Local clock offset: 0.201 ms
Remote clock offset: 0.266 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 14.39 Mbit/s
95th percentile per-packet one-way delay: 61.032 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 61.154 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 57.502 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.33 Mbit/s
95th percentile per-packet one-way delay: 57.942 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

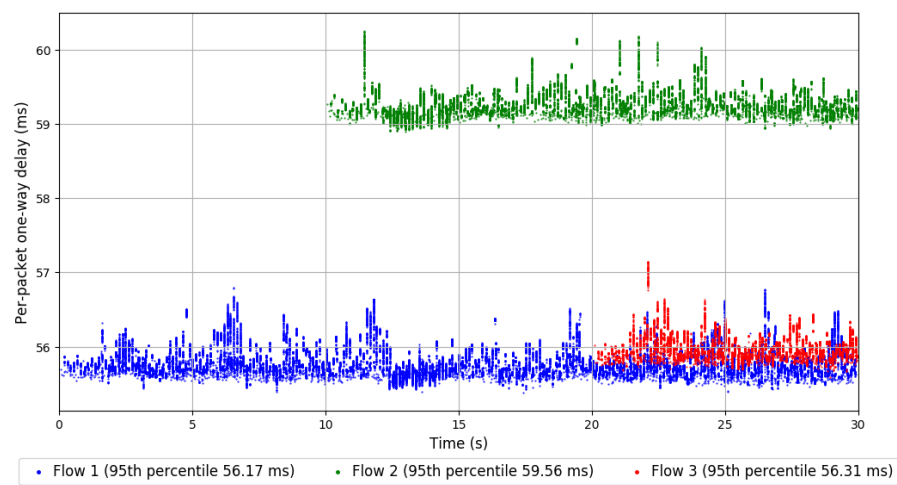
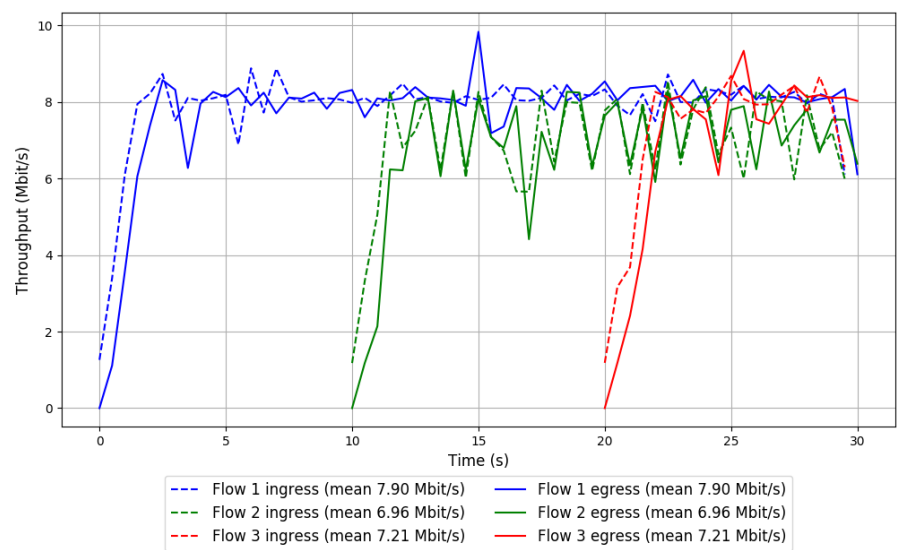


Run 3: Statistics of Sprout

Start at: 2019-01-22 10:21:15
End at: 2019-01-22 10:21:45
Local clock offset: 0.097 ms
Remote clock offset: -1.301 ms

```
# Below is generated by plot.py at 2019-01-22 15:13:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.89 Mbit/s
95th percentile per-packet one-way delay: 59.422 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 56.173 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 59.563 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 56.311 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

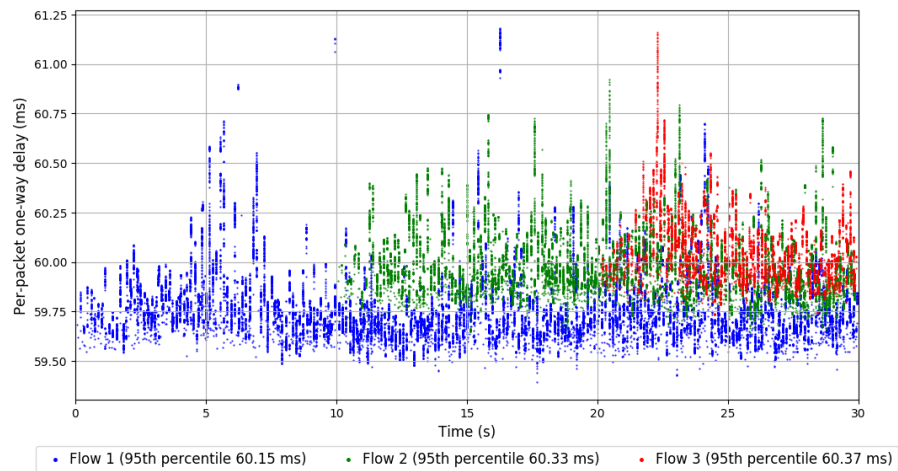
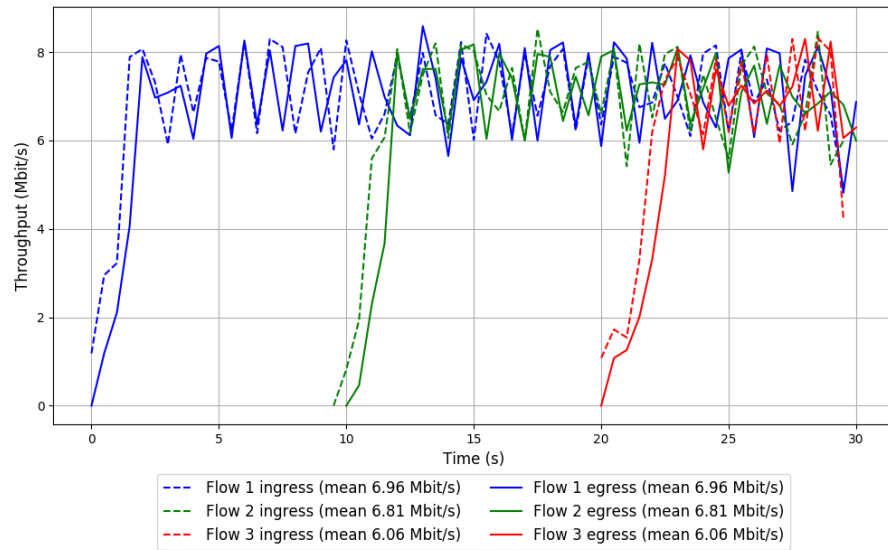


Run 4: Statistics of Sprout

Start at: 2019-01-22 10:59:49
End at: 2019-01-22 11:00:19
Local clock offset: -0.023 ms
Remote clock offset: -0.609 ms

```
# Below is generated by plot.py at 2019-01-22 15:13:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.48 Mbit/s
95th percentile per-packet one-way delay: 60.289 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 60.151 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 60.327 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 60.373 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

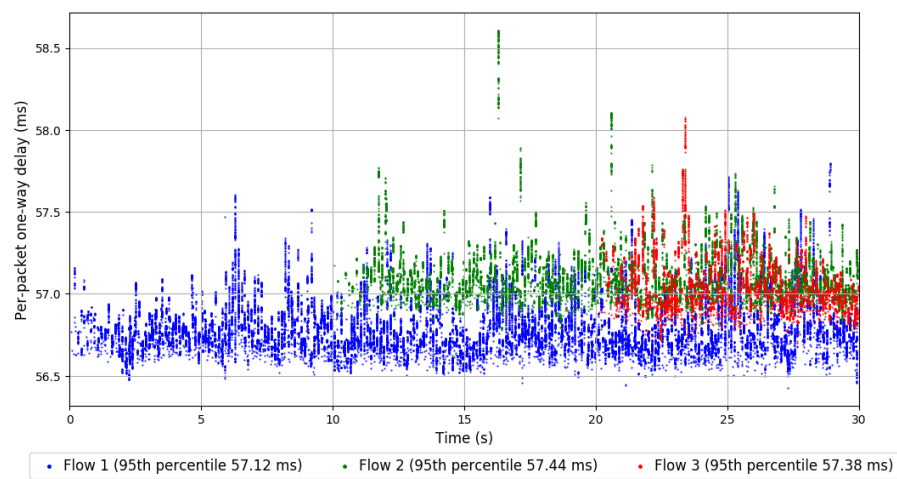
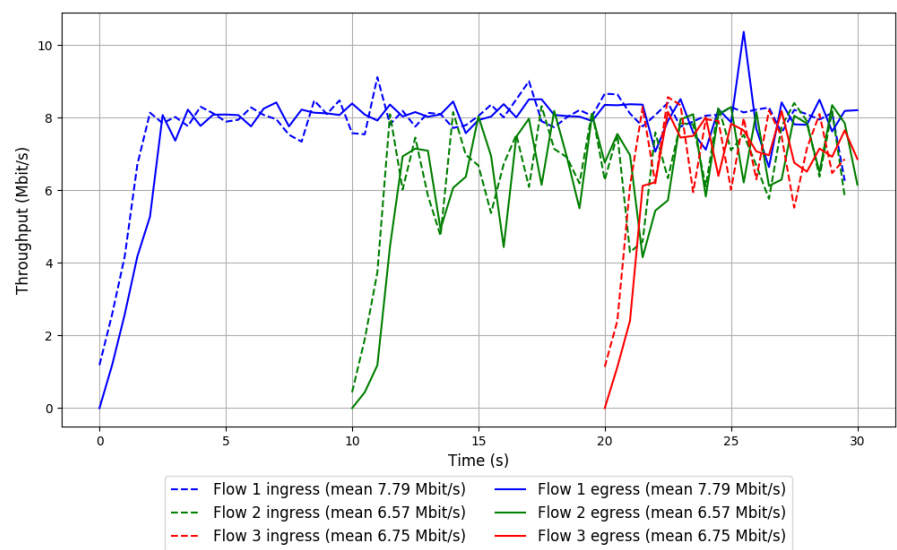


Run 5: Statistics of Sprout

Start at: 2019-01-22 11:39:01
End at: 2019-01-22 11:39:31
Local clock offset: 0.342 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2019-01-22 15:13:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 14.37 Mbit/s
95th percentile per-packet one-way delay: 57.318 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 57.123 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.57 Mbit/s
95th percentile per-packet one-way delay: 57.442 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 57.378 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

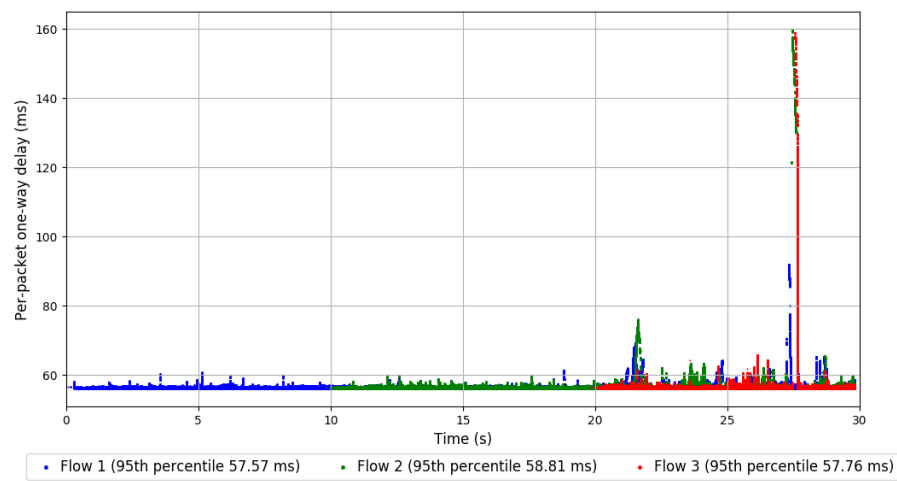
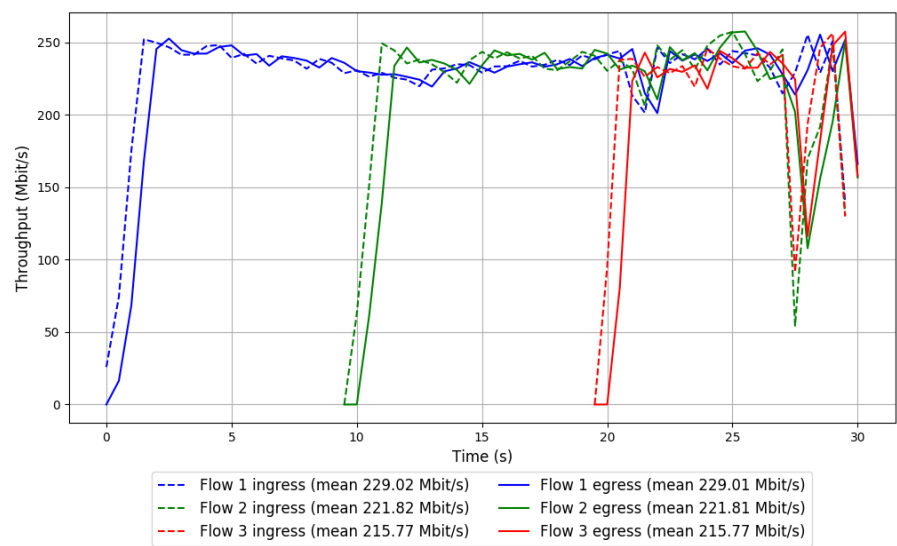


Run 1: Statistics of TaoVA-100x

Start at: 2019-01-22 09:01:56
End at: 2019-01-22 09:02:26
Local clock offset: -0.076 ms
Remote clock offset: -0.879 ms

Below is generated by plot.py at 2019-01-22 15:18:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 450.03 Mbit/s
95th percentile per-packet one-way delay: 58.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.01 Mbit/s
95th percentile per-packet one-way delay: 57.568 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 221.81 Mbit/s
95th percentile per-packet one-way delay: 58.815 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 215.77 Mbit/s
95th percentile per-packet one-way delay: 57.762 ms
Loss rate: 0.00%

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

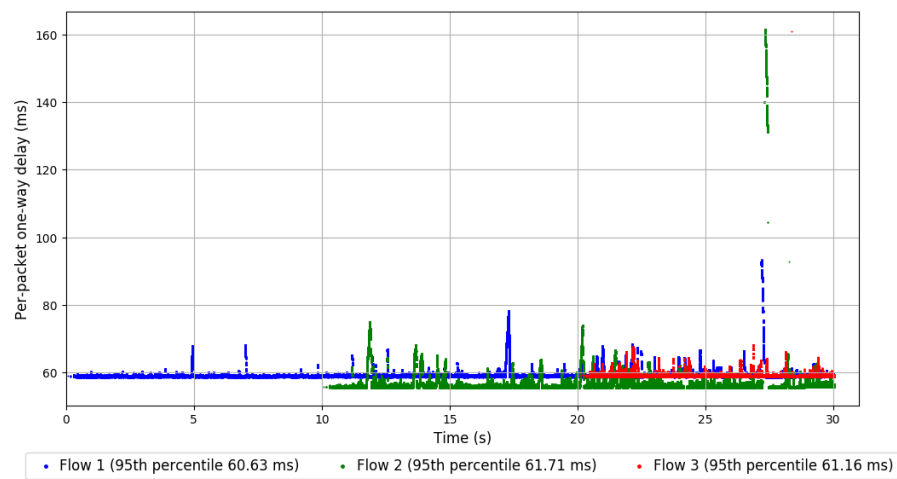
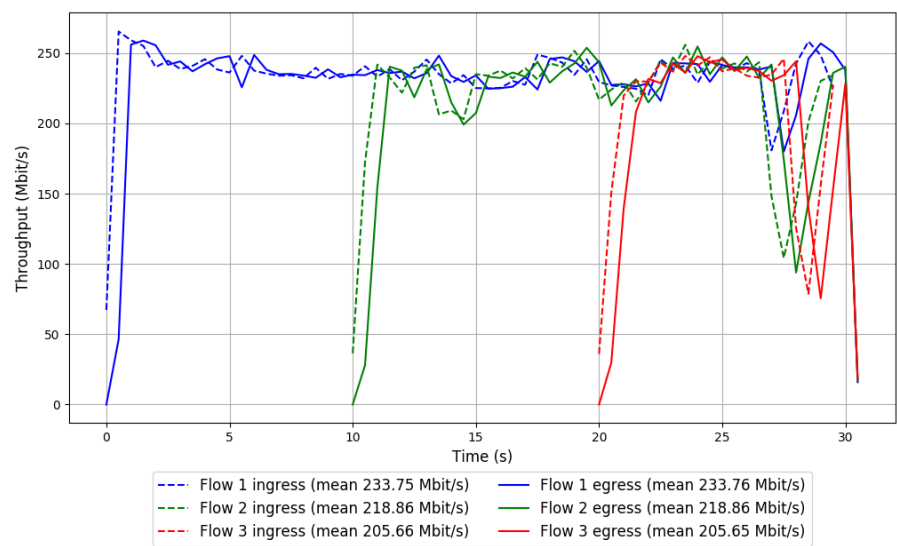


Run 2: Statistics of TaoVA-100x

Start at: 2019-01-22 09:39:47
End at: 2019-01-22 09:40:17
Local clock offset: -0.056 ms
Remote clock offset: -1.394 ms

Below is generated by plot.py at 2019-01-22 15:18:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 447.81 Mbit/s
95th percentile per-packet one-way delay: 61.093 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 233.76 Mbit/s
95th percentile per-packet one-way delay: 60.634 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 218.86 Mbit/s
95th percentile per-packet one-way delay: 61.708 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 205.65 Mbit/s
95th percentile per-packet one-way delay: 61.155 ms
Loss rate: 0.03%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-01-22 10:18:51

End at: 2019-01-22 10:19:21

Local clock offset: -0.373 ms

Remote clock offset: 0.694 ms

Below is generated by plot.py at 2019-01-22 15:18:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 451.88 Mbit/s

95th percentile per-packet one-way delay: 63.380 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 233.86 Mbit/s

95th percentile per-packet one-way delay: 61.508 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 229.82 Mbit/s

95th percentile per-packet one-way delay: 60.353 ms

Loss rate: 0.00%

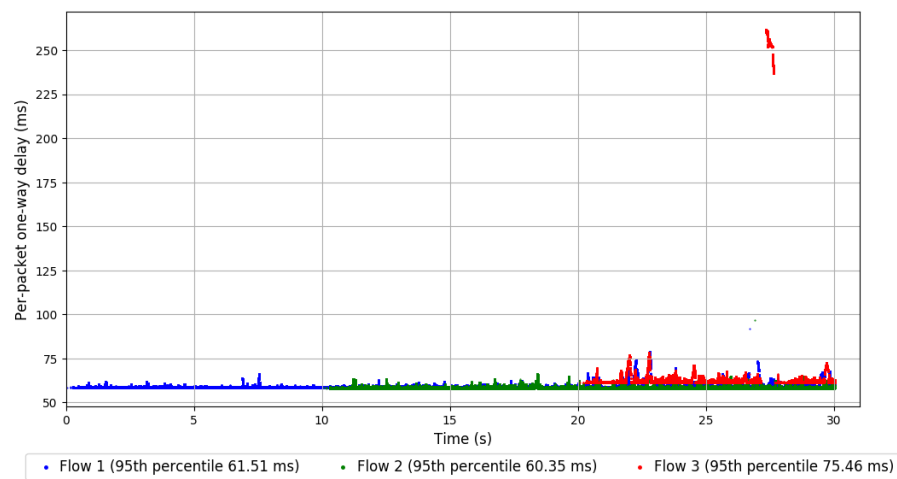
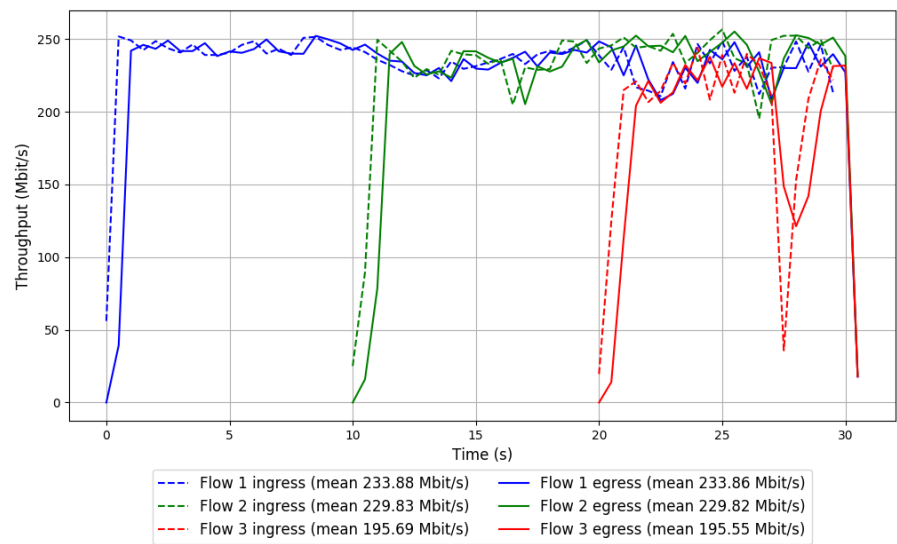
-- Flow 3:

Average throughput: 195.55 Mbit/s

95th percentile per-packet one-way delay: 75.461 ms

Loss rate: 0.10%

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

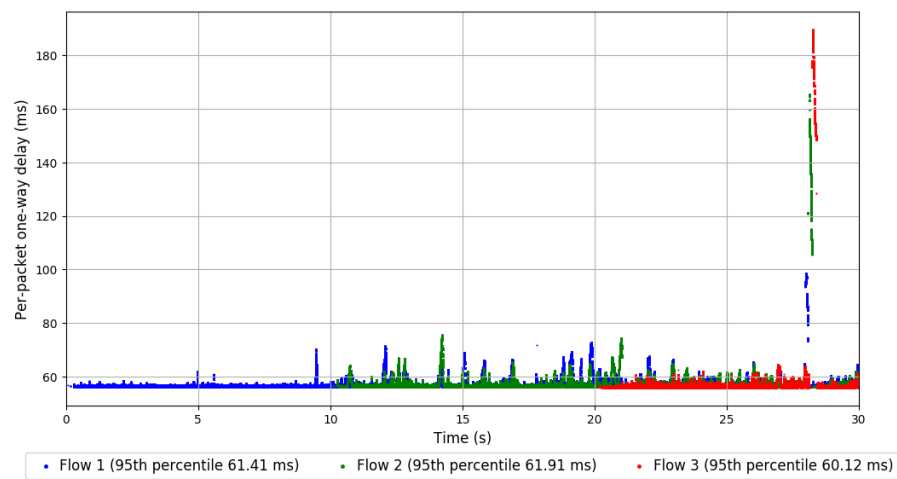
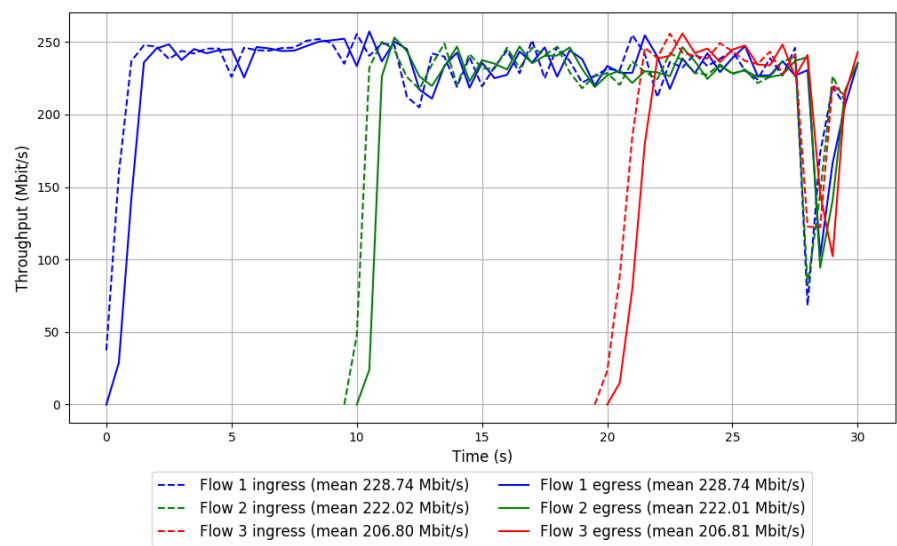


Run 4: Statistics of TaoVA-100x

Start at: 2019-01-22 10:57:49
End at: 2019-01-22 10:58:19
Local clock offset: 0.09 ms
Remote clock offset: -0.691 ms

Below is generated by plot.py at 2019-01-22 15:18:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 445.53 Mbit/s
95th percentile per-packet one-way delay: 61.477 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 228.74 Mbit/s
95th percentile per-packet one-way delay: 61.411 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 222.01 Mbit/s
95th percentile per-packet one-way delay: 61.913 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 206.81 Mbit/s
95th percentile per-packet one-way delay: 60.119 ms
Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-01-22 11:36:44

End at: 2019-01-22 11:37:14

Local clock offset: -0.481 ms

Remote clock offset: -0.08 ms

Below is generated by plot.py at 2019-01-22 15:22:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.43 Mbit/s

95th percentile per-packet one-way delay: 59.259 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 232.18 Mbit/s

95th percentile per-packet one-way delay: 58.489 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 220.63 Mbit/s

95th percentile per-packet one-way delay: 59.851 ms

Loss rate: 0.00%

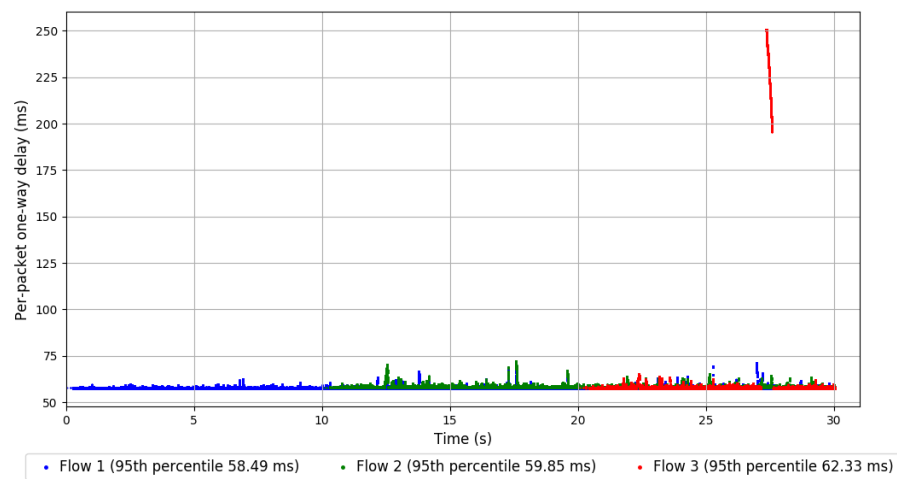
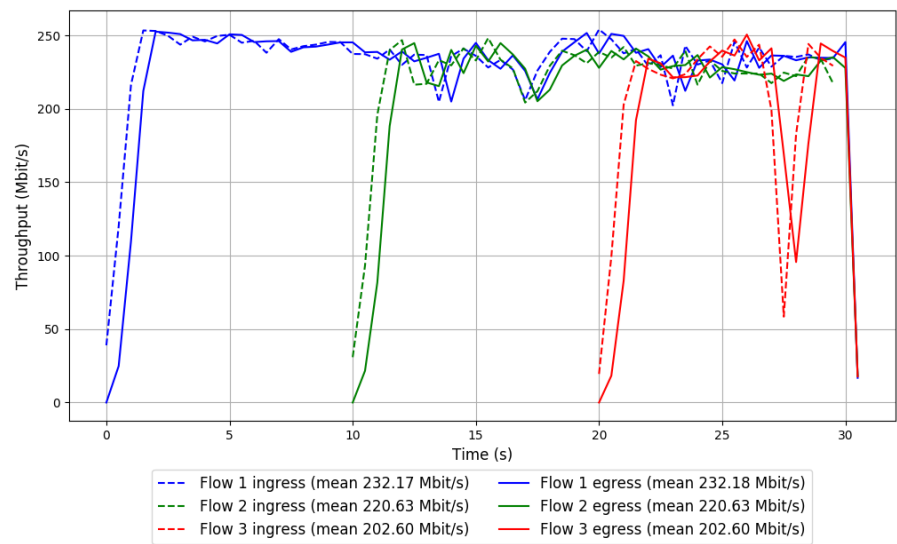
-- Flow 3:

Average throughput: 202.60 Mbit/s

95th percentile per-packet one-way delay: 62.332 ms

Loss rate: 0.00%

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

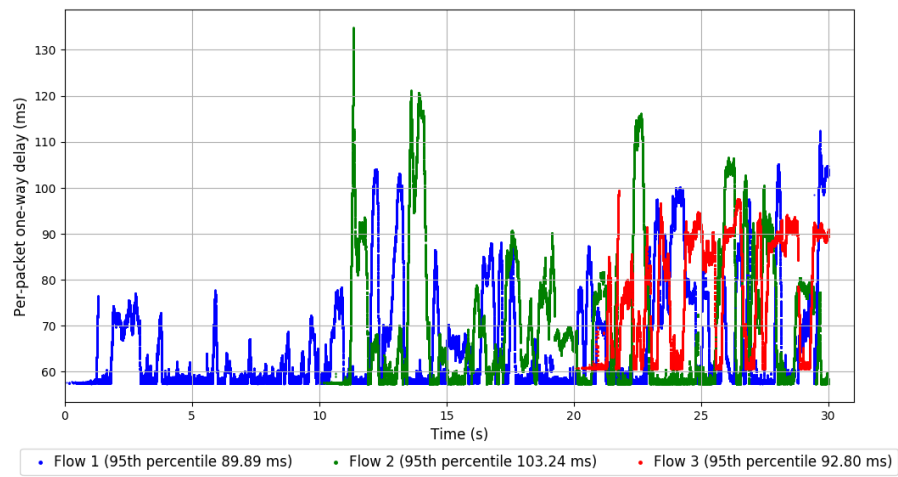
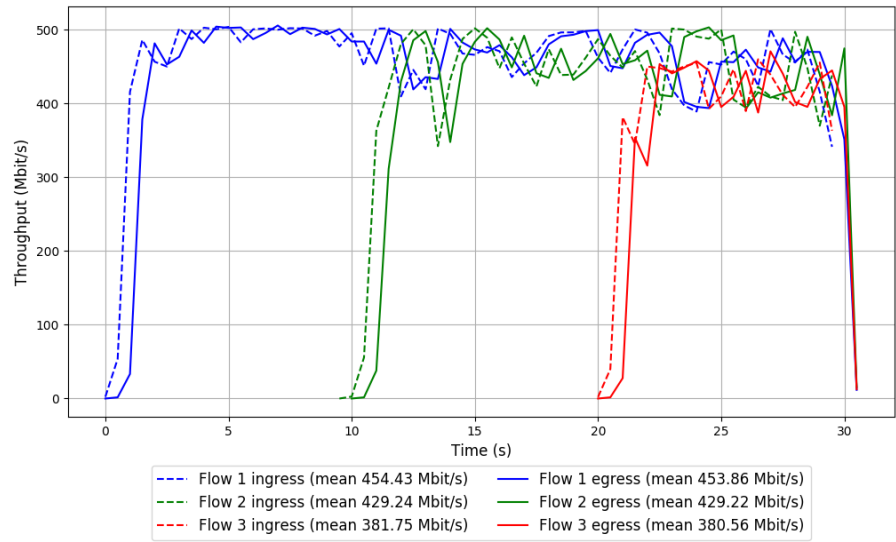


Run 1: Statistics of TCP Vegas

Start at: 2019-01-22 09:09:24
End at: 2019-01-22 09:09:54
Local clock offset: -0.479 ms
Remote clock offset: -0.131 ms

Below is generated by plot.py at 2019-01-22 15:24:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 866.43 Mbit/s
95th percentile per-packet one-way delay: 93.900 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 453.86 Mbit/s
95th percentile per-packet one-way delay: 89.893 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 429.22 Mbit/s
95th percentile per-packet one-way delay: 103.243 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 380.56 Mbit/s
95th percentile per-packet one-way delay: 92.795 ms
Loss rate: 0.34%

Run 1: Report of TCP Vegas — Data Link

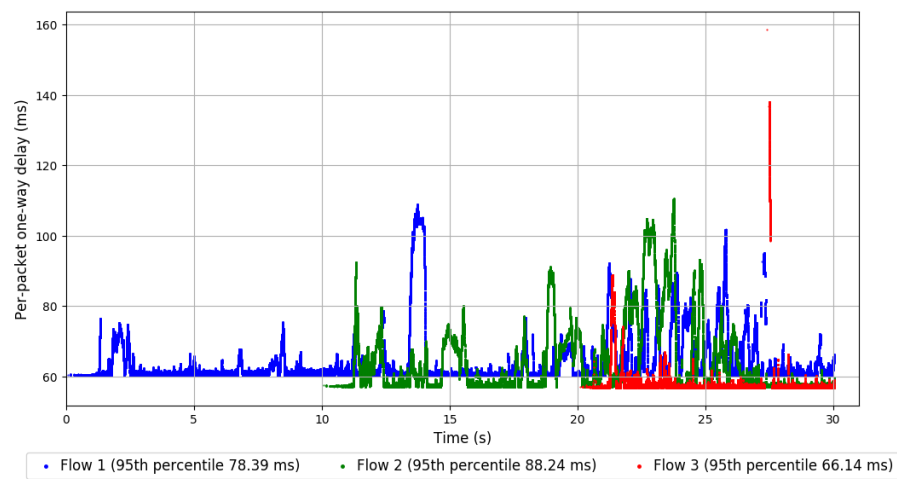
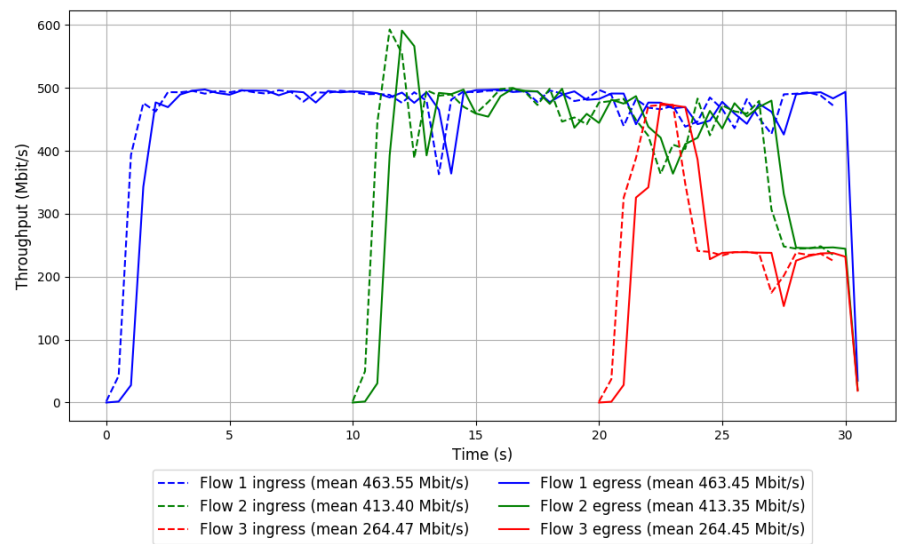


Run 2: Statistics of TCP Vegas

Start at: 2019-01-22 09:47:19
End at: 2019-01-22 09:47:49
Local clock offset: -0.076 ms
Remote clock offset: -0.274 ms

Below is generated by plot.py at 2019-01-22 15:34:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 826.48 Mbit/s
95th percentile per-packet one-way delay: 82.180 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 463.45 Mbit/s
95th percentile per-packet one-way delay: 78.393 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 413.35 Mbit/s
95th percentile per-packet one-way delay: 88.240 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 264.45 Mbit/s
95th percentile per-packet one-way delay: 66.138 ms
Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-01-22 10:26:35

End at: 2019-01-22 10:27:05

Local clock offset: -0.126 ms

Remote clock offset: 0.29 ms

Below is generated by plot.py at 2019-01-22 15:36:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 880.14 Mbit/s

95th percentile per-packet one-way delay: 100.711 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 466.07 Mbit/s

95th percentile per-packet one-way delay: 90.826 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 431.23 Mbit/s

95th percentile per-packet one-way delay: 84.289 ms

Loss rate: 0.14%

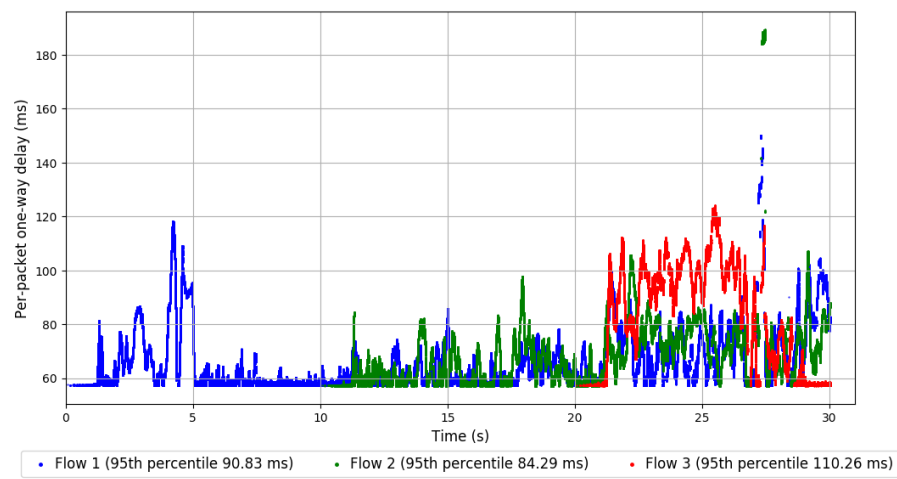
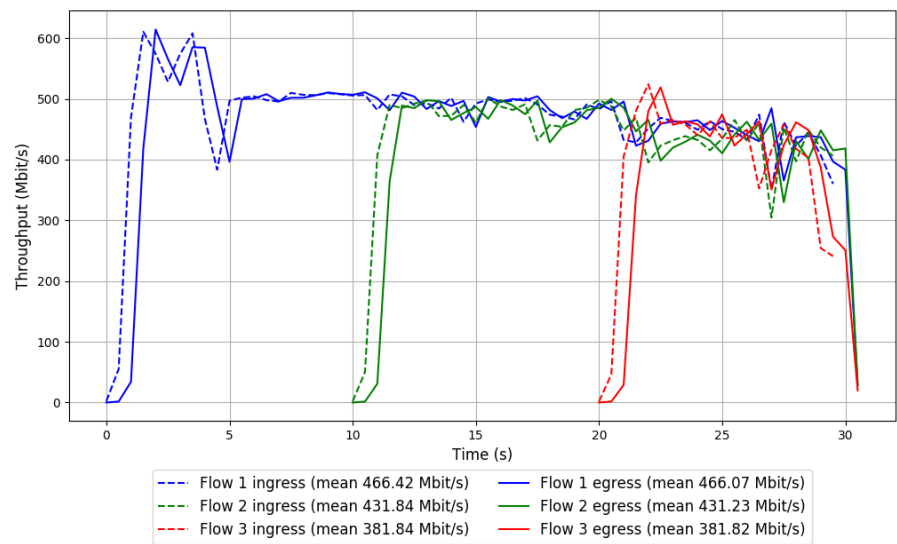
-- Flow 3:

Average throughput: 381.82 Mbit/s

95th percentile per-packet one-way delay: 110.259 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link

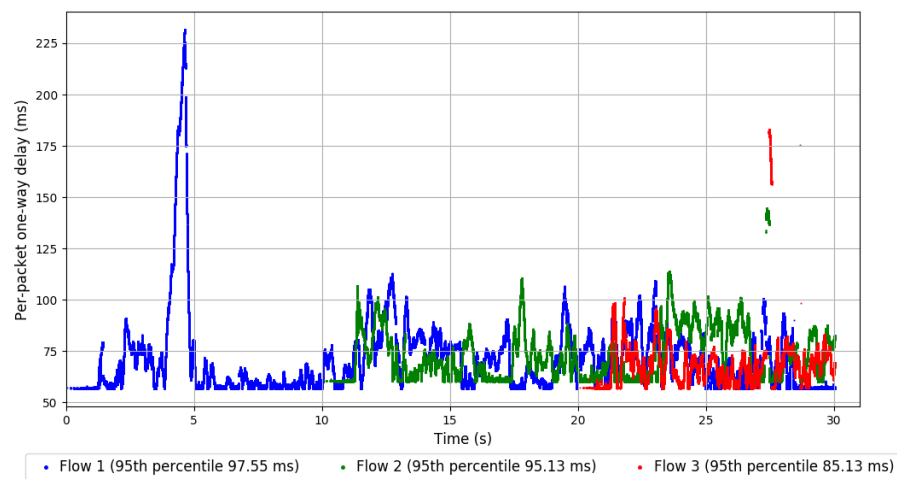
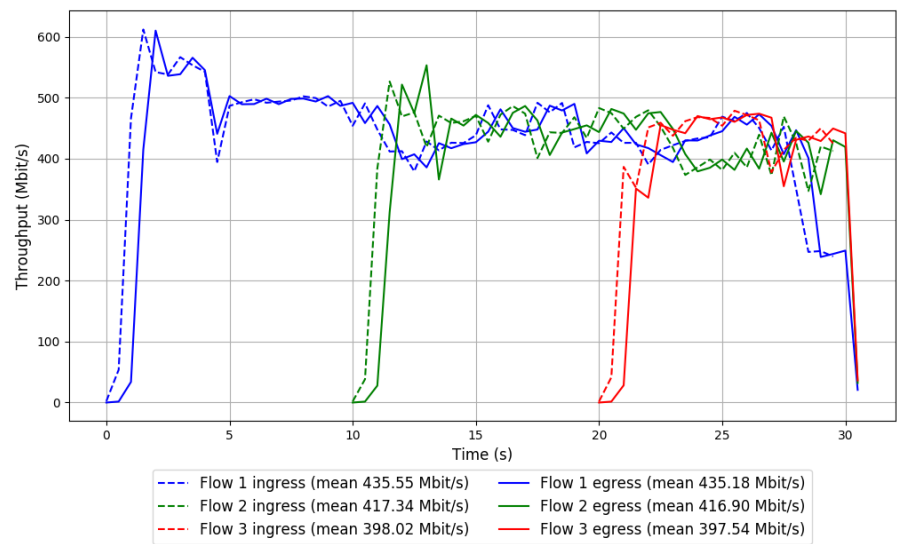


Run 4: Statistics of TCP Vegas

Start at: 2019-01-22 11:05:05
End at: 2019-01-22 11:05:35
Local clock offset: 0.014 ms
Remote clock offset: -0.013 ms

Below is generated by plot.py at 2019-01-22 15:41:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 844.85 Mbit/s
95th percentile per-packet one-way delay: 95.006 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 435.18 Mbit/s
95th percentile per-packet one-way delay: 97.548 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 416.90 Mbit/s
95th percentile per-packet one-way delay: 95.126 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 397.54 Mbit/s
95th percentile per-packet one-way delay: 85.131 ms
Loss rate: 0.12%

Run 4: Report of TCP Vegas — Data Link

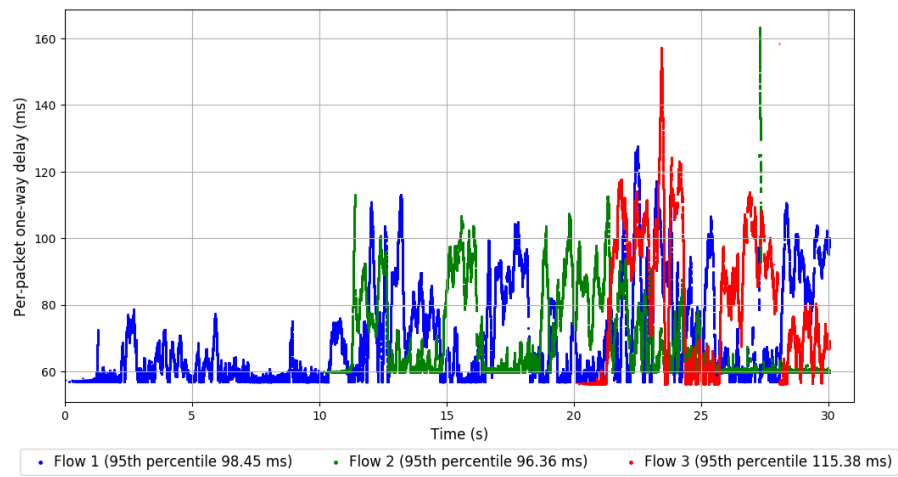
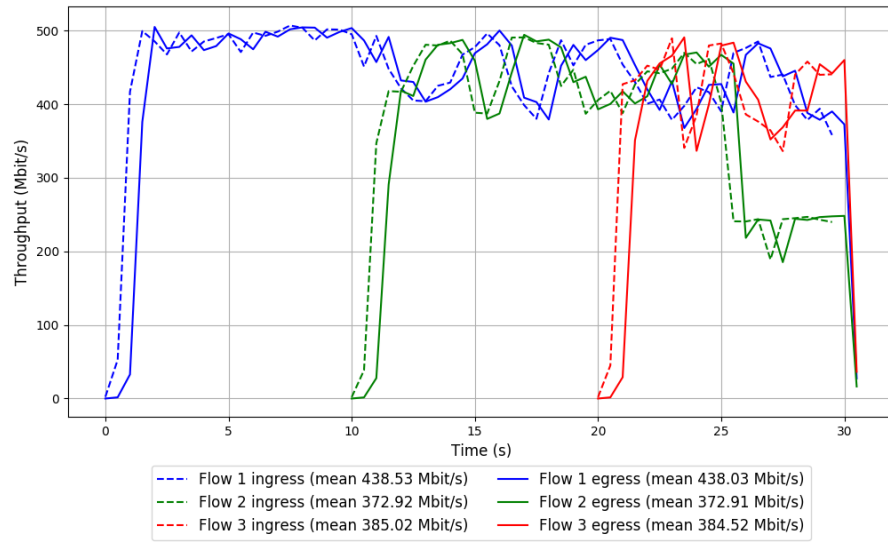


Run 5: Statistics of TCP Vegas

Start at: 2019-01-22 11:44:37
End at: 2019-01-22 11:45:07
Local clock offset: -0.277 ms
Remote clock offset: -0.964 ms

Below is generated by plot.py at 2019-01-22 15:41:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 814.11 Mbit/s
95th percentile per-packet one-way delay: 103.177 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 438.03 Mbit/s
95th percentile per-packet one-way delay: 98.451 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 372.91 Mbit/s
95th percentile per-packet one-way delay: 96.360 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 384.52 Mbit/s
95th percentile per-packet one-way delay: 115.378 ms
Loss rate: 0.13%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-01-22 09:30:33

End at: 2019-01-22 09:31:03

Local clock offset: 0.353 ms

Remote clock offset: 0.083 ms

Below is generated by plot.py at 2019-01-22 15:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.69 Mbit/s

95th percentile per-packet one-way delay: 123.946 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 140.33 Mbit/s

95th percentile per-packet one-way delay: 122.017 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 98.71 Mbit/s

95th percentile per-packet one-way delay: 138.511 ms

Loss rate: 0.65%

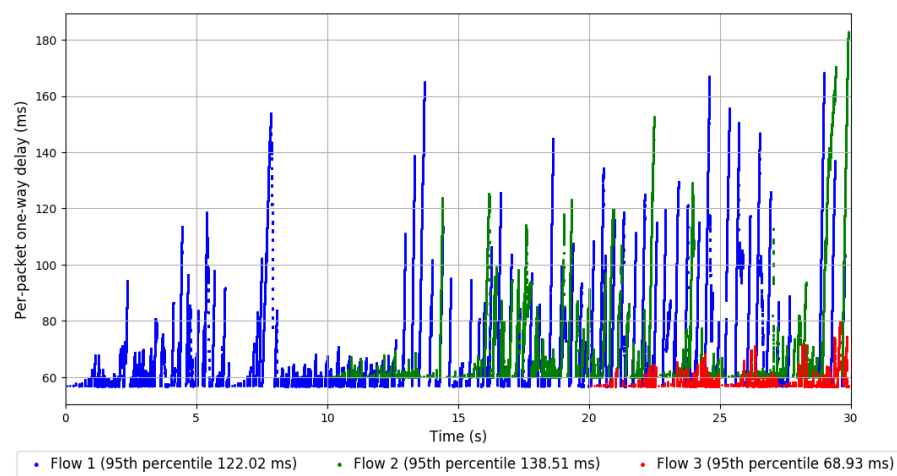
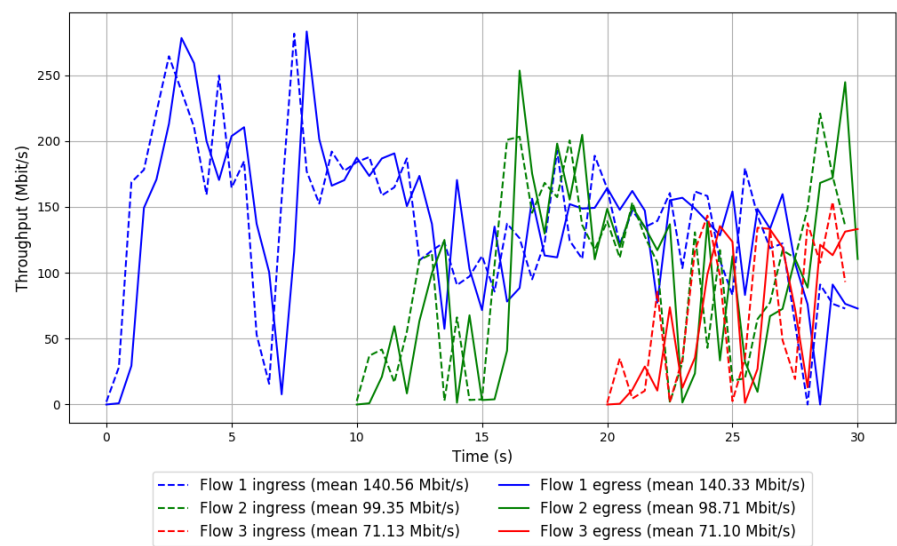
-- Flow 3:

Average throughput: 71.10 Mbit/s

95th percentile per-packet one-way delay: 68.926 ms

Loss rate: 0.04%

Run 1: Report of Verus — Data Link

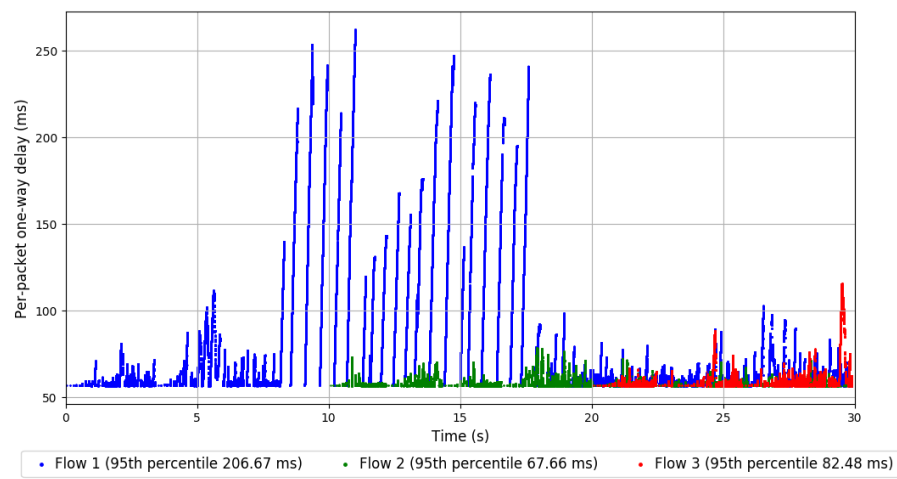
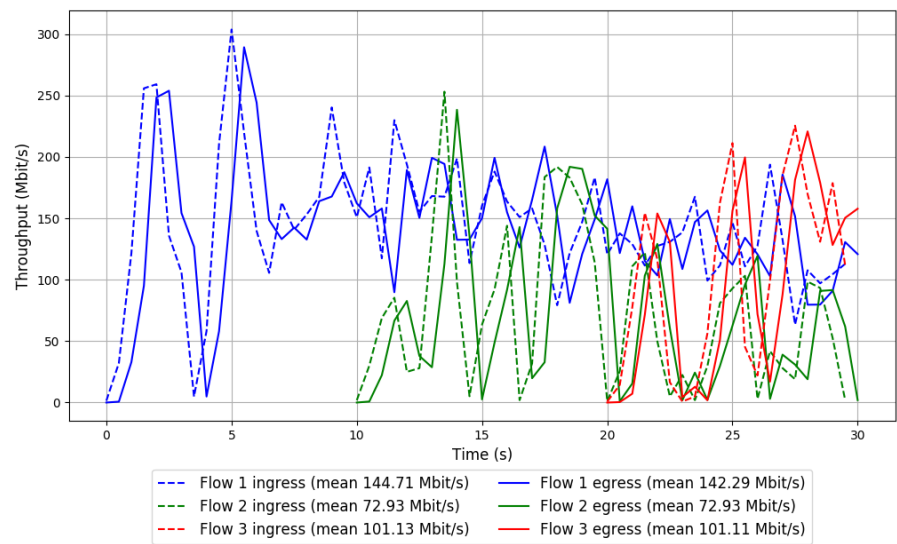


Run 2: Statistics of Verus

Start at: 2019-01-22 10:09:35
End at: 2019-01-22 10:10:05
Local clock offset: 0.318 ms
Remote clock offset: -0.051 ms

Below is generated by plot.py at 2019-01-22 15:41:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 223.82 Mbit/s
95th percentile per-packet one-way delay: 187.393 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 142.29 Mbit/s
95th percentile per-packet one-way delay: 206.674 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 67.656 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 101.11 Mbit/s
95th percentile per-packet one-way delay: 82.485 ms
Loss rate: 0.02%

Run 2: Report of Verus — Data Link

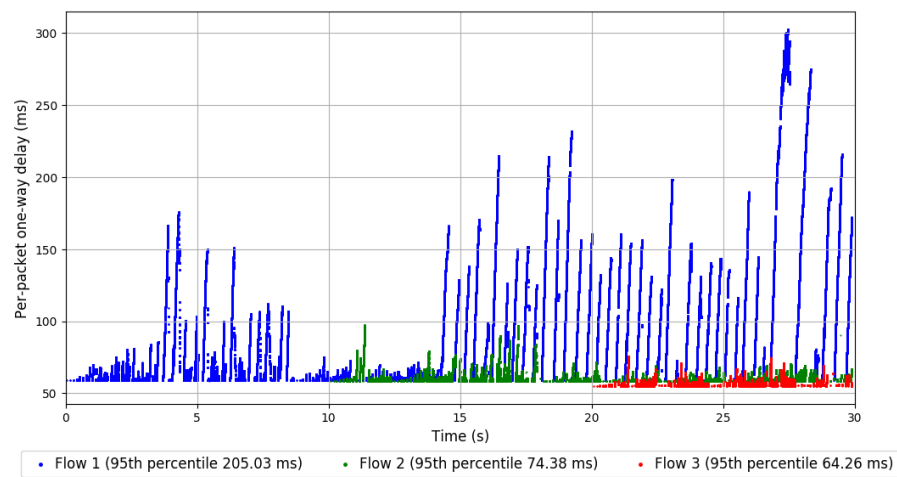
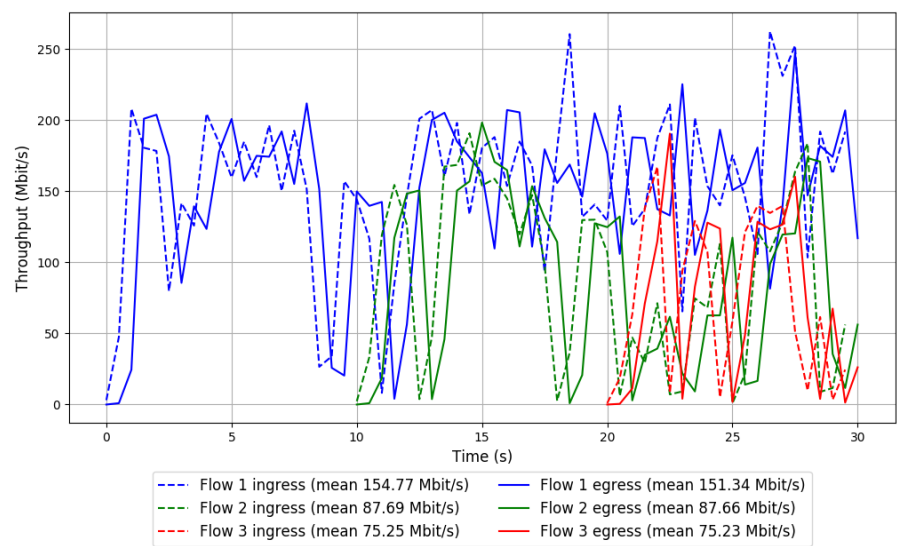


Run 3: Statistics of Verus

Start at: 2019-01-22 10:48:44
End at: 2019-01-22 10:49:14
Local clock offset: 0.068 ms
Remote clock offset: -1.601 ms

Below is generated by plot.py at 2019-01-22 15:41:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 234.31 Mbit/s
95th percentile per-packet one-way delay: 181.959 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 151.34 Mbit/s
95th percentile per-packet one-way delay: 205.032 ms
Loss rate: 2.23%
-- Flow 2:
Average throughput: 87.66 Mbit/s
95th percentile per-packet one-way delay: 74.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.23 Mbit/s
95th percentile per-packet one-way delay: 64.256 ms
Loss rate: 0.03%

Run 3: Report of Verus — Data Link

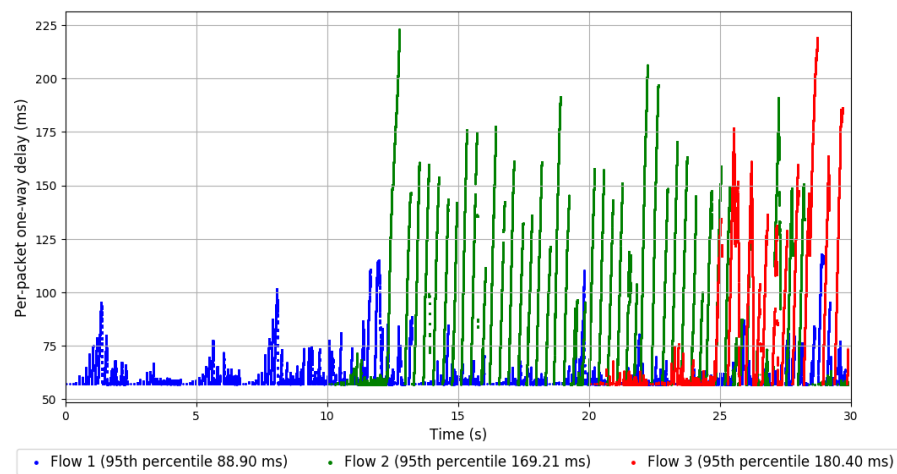
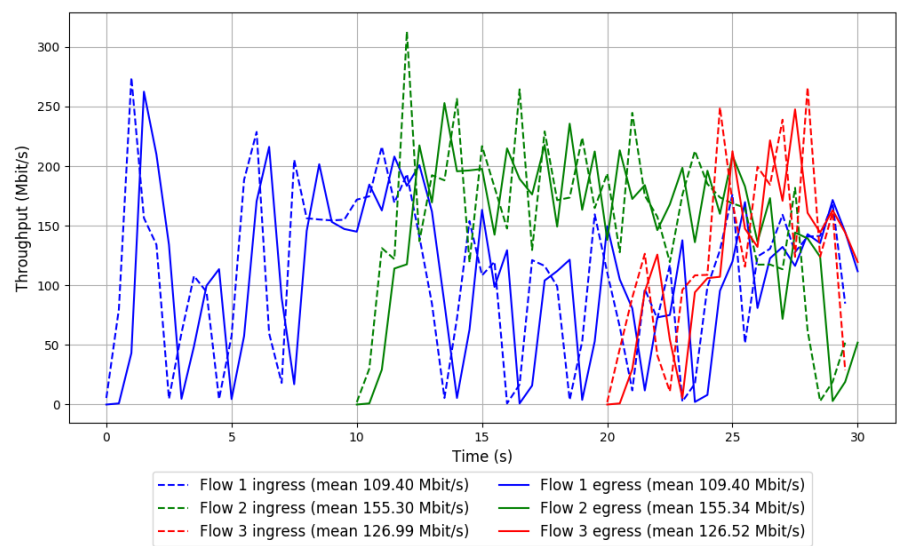


Run 4: Statistics of Verus

Start at: 2019-01-22 11:27:14
End at: 2019-01-22 11:27:44
Local clock offset: 0.012 ms
Remote clock offset: -0.002 ms

Below is generated by plot.py at 2019-01-22 15:41:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 253.95 Mbit/s
95th percentile per-packet one-way delay: 157.386 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 109.40 Mbit/s
95th percentile per-packet one-way delay: 88.897 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 155.34 Mbit/s
95th percentile per-packet one-way delay: 169.211 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.52 Mbit/s
95th percentile per-packet one-way delay: 180.403 ms
Loss rate: 0.36%

Run 4: Report of Verus — Data Link

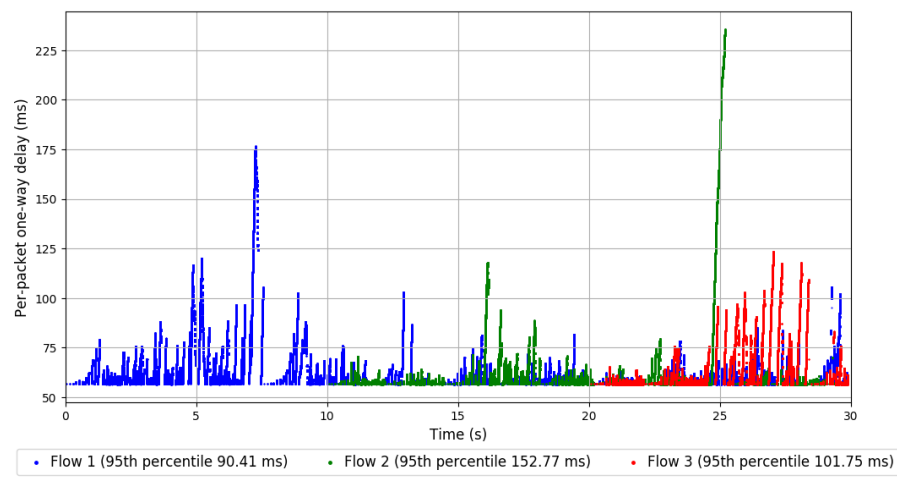
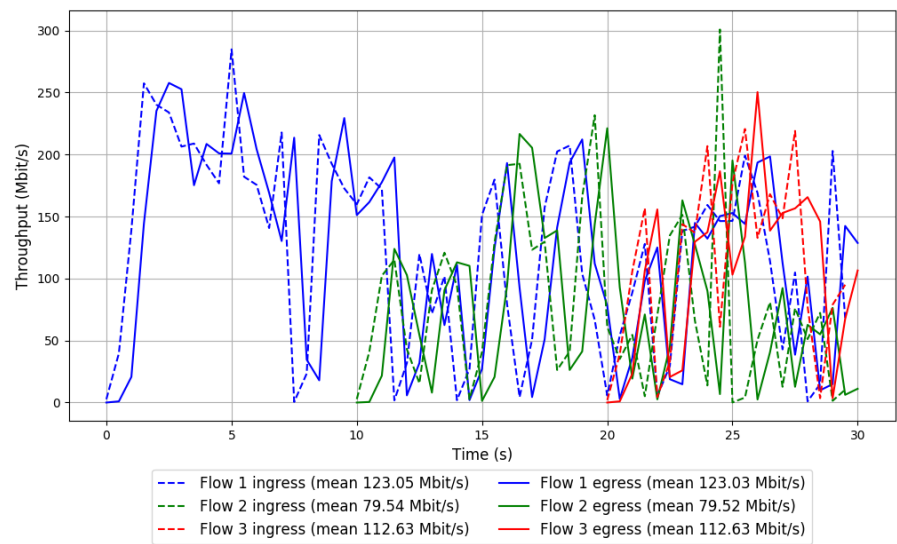


Run 5: Statistics of Verus

Start at: 2019-01-22 12:06:24
End at: 2019-01-22 12:06:54
Local clock offset: -0.257 ms
Remote clock offset: -1.096 ms

Below is generated by plot.py at 2019-01-22 15:41:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 212.79 Mbit/s
95th percentile per-packet one-way delay: 101.338 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 123.03 Mbit/s
95th percentile per-packet one-way delay: 90.408 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 79.52 Mbit/s
95th percentile per-packet one-way delay: 152.770 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 112.63 Mbit/s
95th percentile per-packet one-way delay: 101.753 ms
Loss rate: 0.00%

Run 5: Report of Verus — Data Link

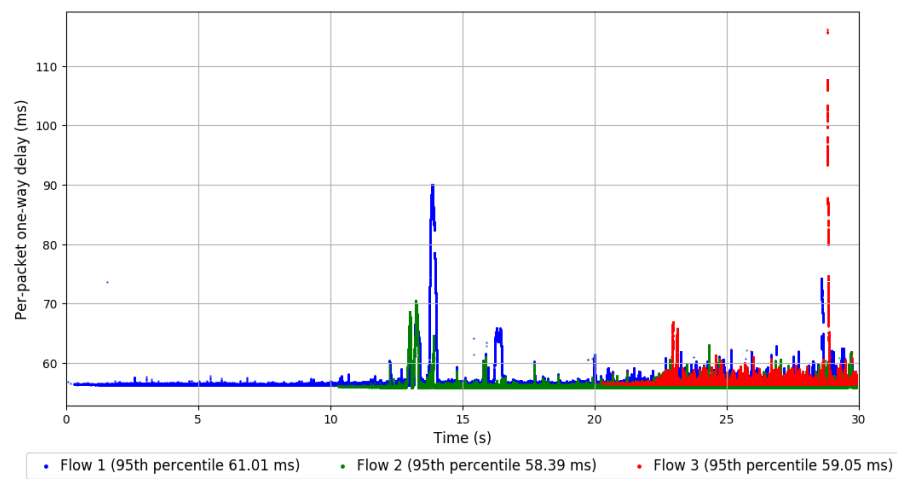
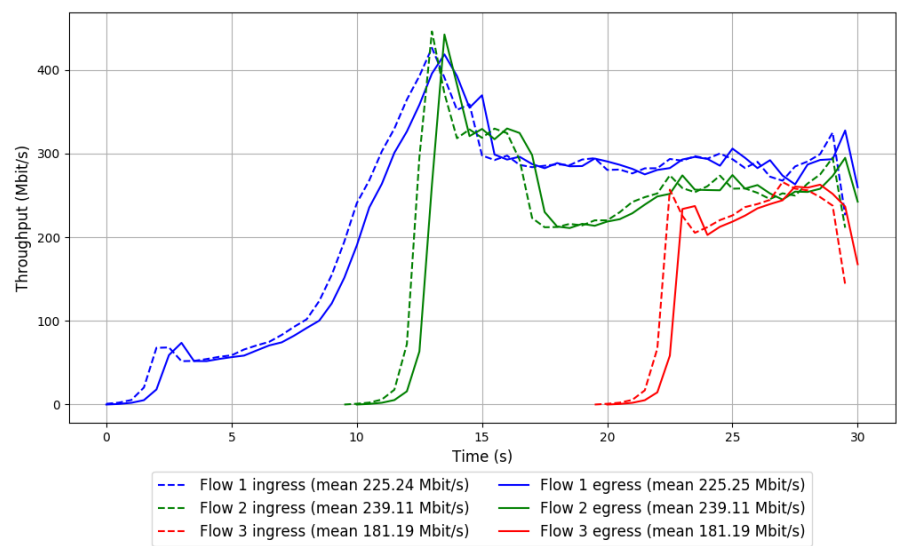


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-22 09:22:52
End at: 2019-01-22 09:23:22
Local clock offset: 0.098 ms
Remote clock offset: -0.731 ms

Below is generated by plot.py at 2019-01-22 15:41:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 444.21 Mbit/s
95th percentile per-packet one-way delay: 59.501 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.25 Mbit/s
95th percentile per-packet one-way delay: 61.010 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 239.11 Mbit/s
95th percentile per-packet one-way delay: 58.394 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 181.19 Mbit/s
95th percentile per-packet one-way delay: 59.053 ms
Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

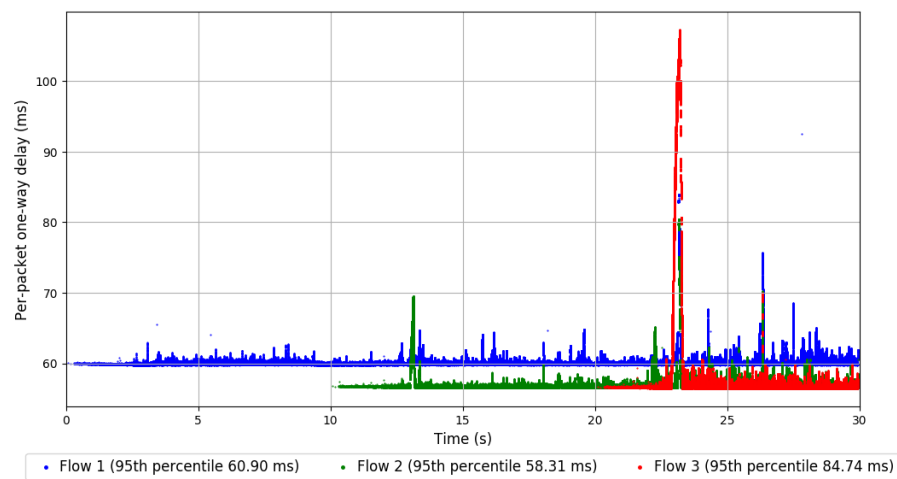
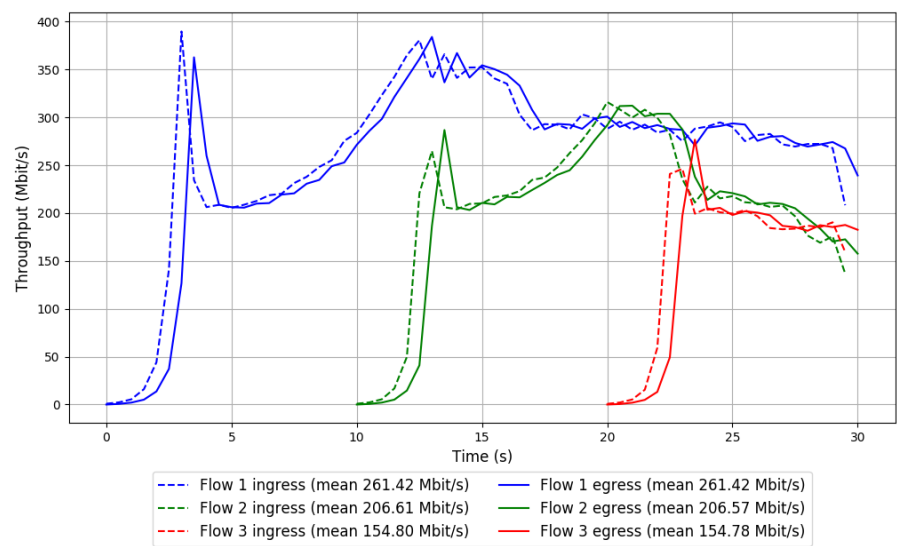


Run 2: Statistics of PCC-Vivace

Start at: 2019-01-22 10:01:29
End at: 2019-01-22 10:01:59
Local clock offset: 0.092 ms
Remote clock offset: -0.316 ms

Below is generated by plot.py at 2019-01-22 15:43:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 449.75 Mbit/s
95th percentile per-packet one-way delay: 60.757 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 261.42 Mbit/s
95th percentile per-packet one-way delay: 60.899 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 206.57 Mbit/s
95th percentile per-packet one-way delay: 58.308 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 154.78 Mbit/s
95th percentile per-packet one-way delay: 84.737 ms
Loss rate: 0.01%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-01-22 10:40:32

End at: 2019-01-22 10:41:02

Local clock offset: -0.597 ms

Remote clock offset: 0.12 ms

Below is generated by plot.py at 2019-01-22 15:43:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.56 Mbit/s

95th percentile per-packet one-way delay: 69.525 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 248.98 Mbit/s

95th percentile per-packet one-way delay: 73.505 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 226.52 Mbit/s

95th percentile per-packet one-way delay: 68.219 ms

Loss rate: 0.00%

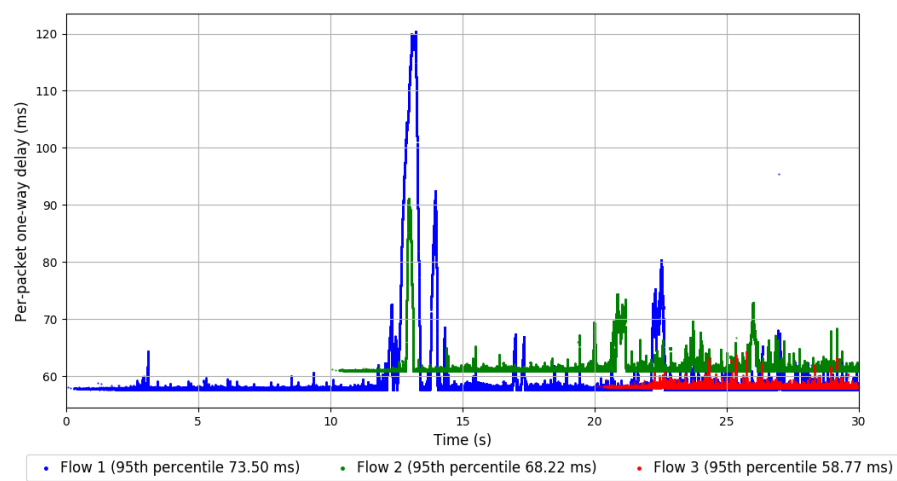
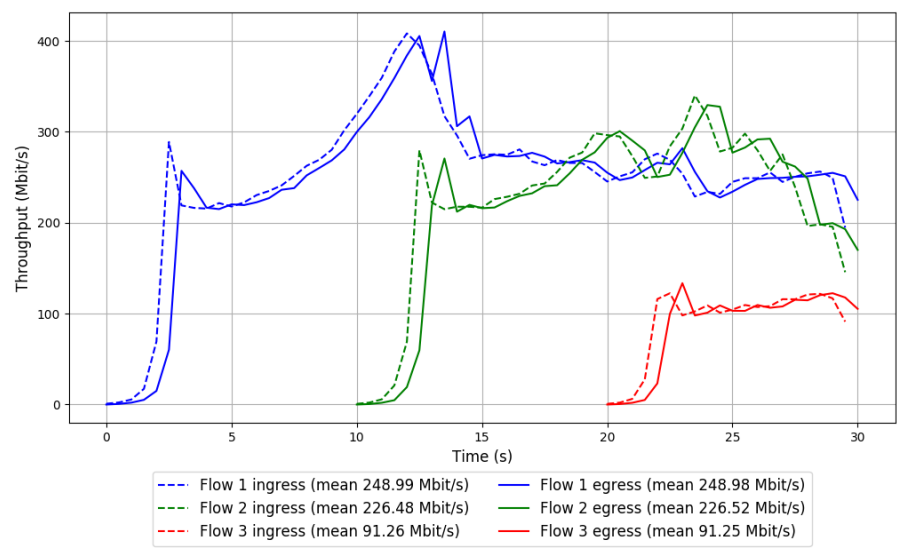
-- Flow 3:

Average throughput: 91.25 Mbit/s

95th percentile per-packet one-way delay: 58.767 ms

Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link

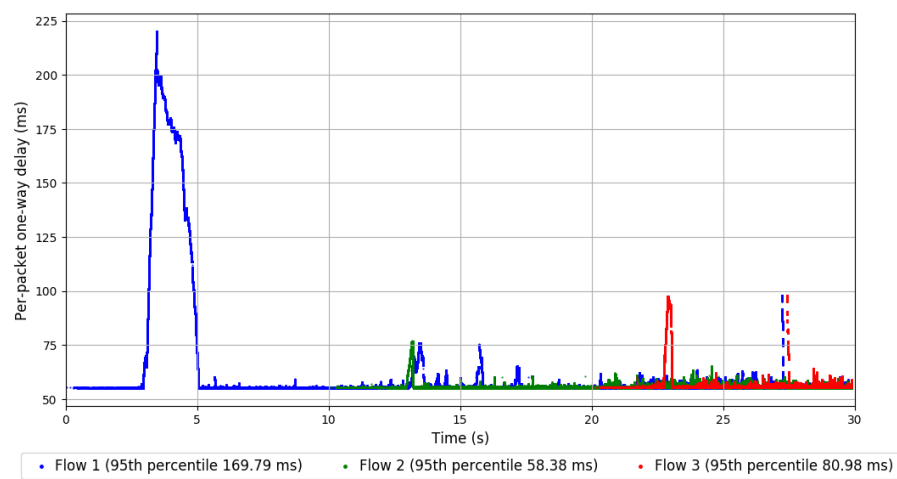
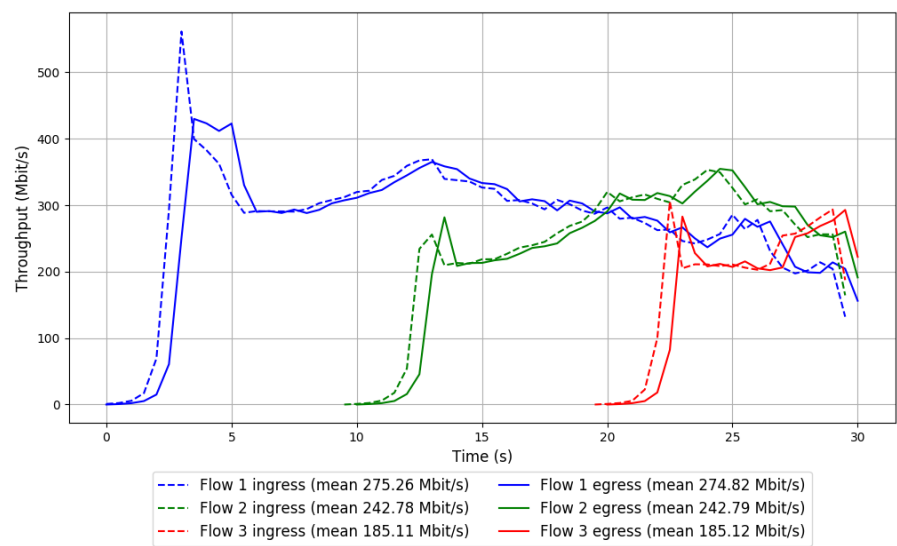


Run 4: Statistics of PCC-Vivace

Start at: 2019-01-22 11:18:57
End at: 2019-01-22 11:19:27
Local clock offset: 0.069 ms
Remote clock offset: -1.492 ms

Below is generated by plot.py at 2019-01-22 15:44:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 497.52 Mbit/s
95th percentile per-packet one-way delay: 96.636 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 274.82 Mbit/s
95th percentile per-packet one-way delay: 169.786 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 242.79 Mbit/s
95th percentile per-packet one-way delay: 58.383 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 185.12 Mbit/s
95th percentile per-packet one-way delay: 80.979 ms
Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

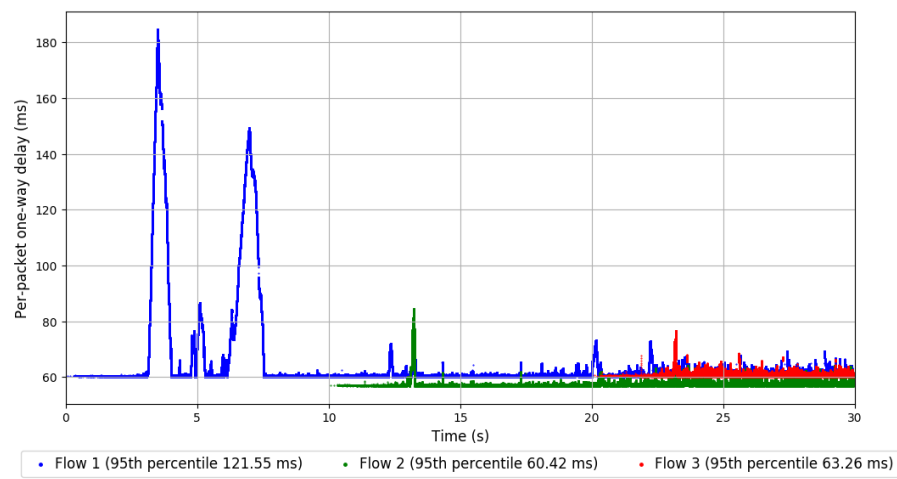
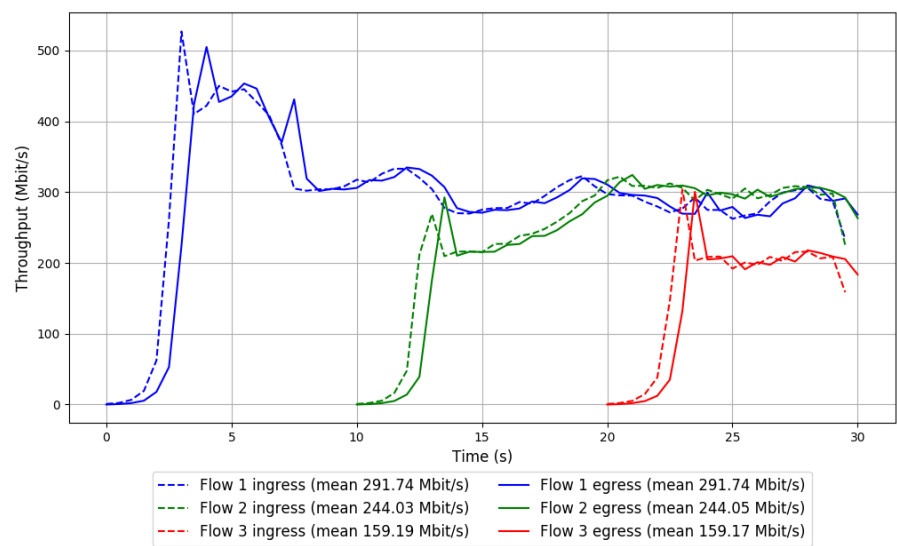


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-22 11:58:21
End at: 2019-01-22 11:58:51
Local clock offset: -0.011 ms
Remote clock offset: -0.386 ms

Below is generated by plot.py at 2019-01-22 15:44:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 506.42 Mbit/s
95th percentile per-packet one-way delay: 83.379 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 291.74 Mbit/s
95th percentile per-packet one-way delay: 121.551 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 244.05 Mbit/s
95th percentile per-packet one-way delay: 60.421 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.17 Mbit/s
95th percentile per-packet one-way delay: 63.261 ms
Loss rate: 0.04%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-01-22 09:29:20

End at: 2019-01-22 09:29:50

Local clock offset: -0.073 ms

Remote clock offset: 0.193 ms

Below is generated by plot.py at 2019-01-22 15:44:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 60.821 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 57.685 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 60.889 ms

Loss rate: 0.00%

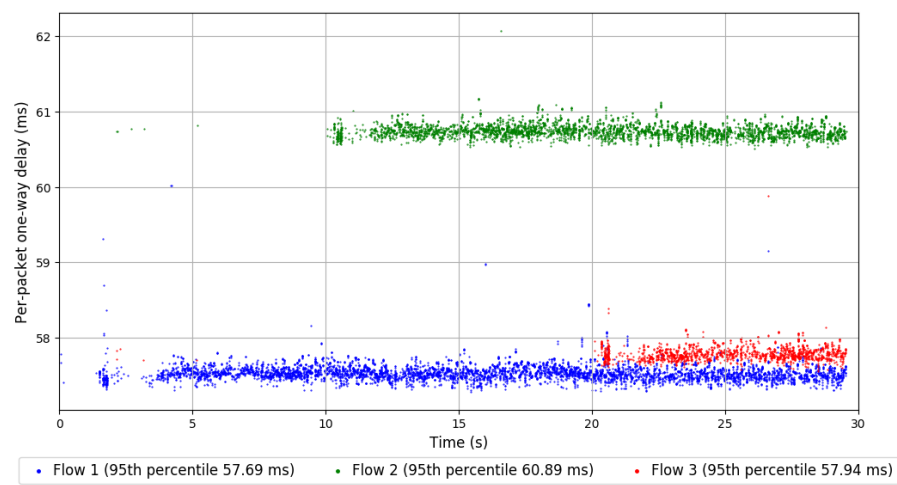
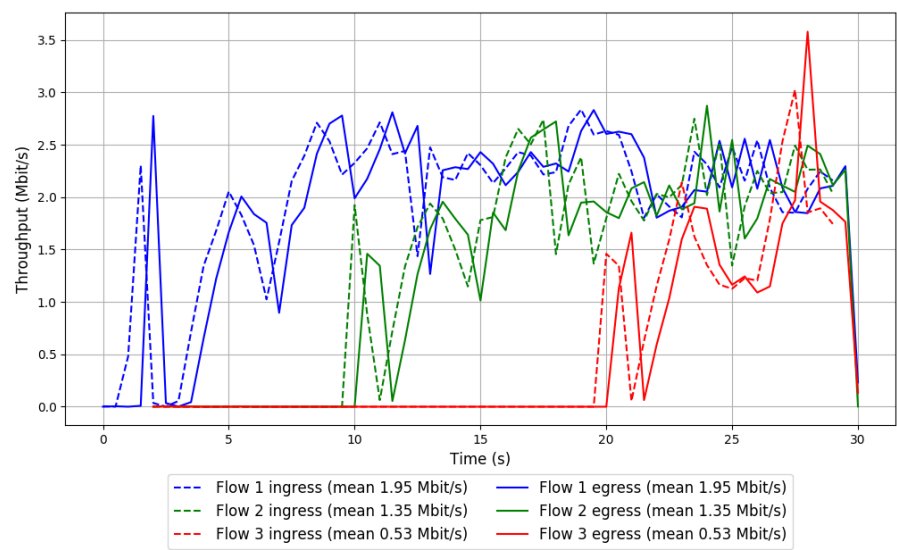
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 57.941 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

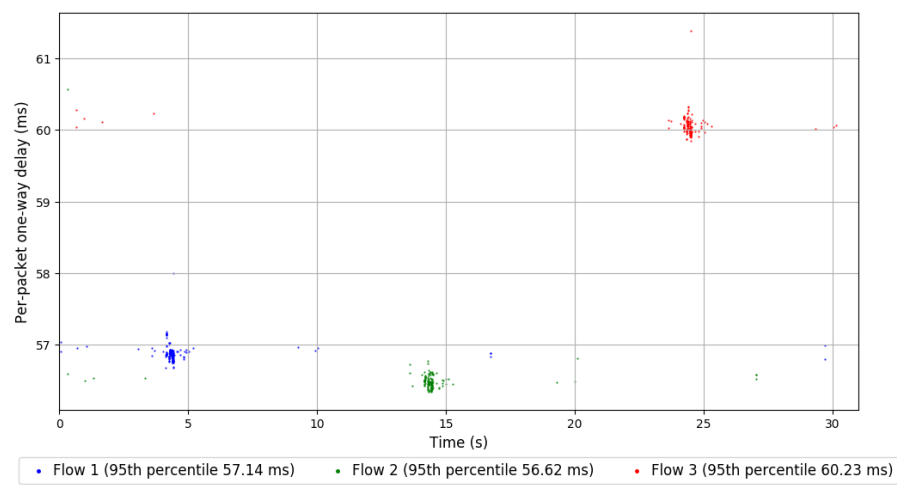
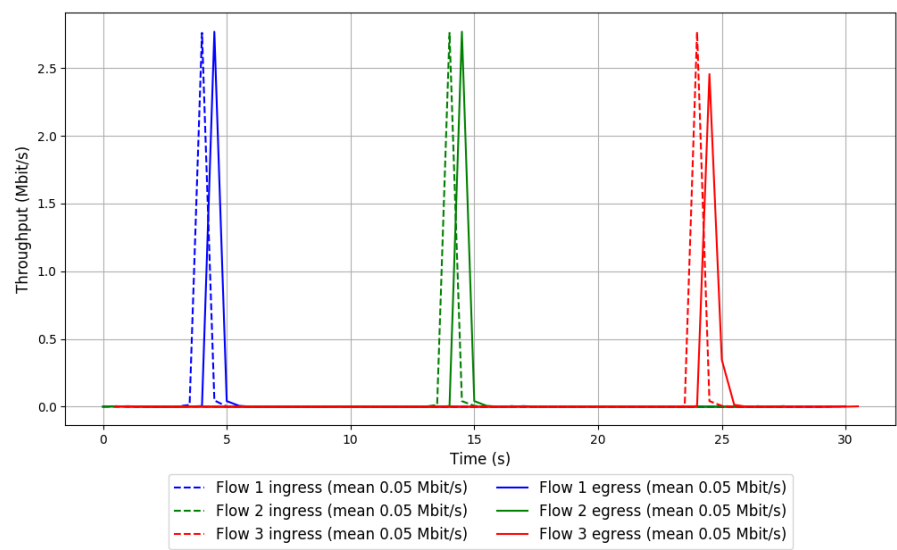


Run 2: Statistics of WebRTC media

Start at: 2019-01-22 10:08:23
End at: 2019-01-22 10:08:53
Local clock offset: -0.265 ms
Remote clock offset: -0.641 ms

Below is generated by plot.py at 2019-01-22 15:44:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.159 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.137 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.618 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.232 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

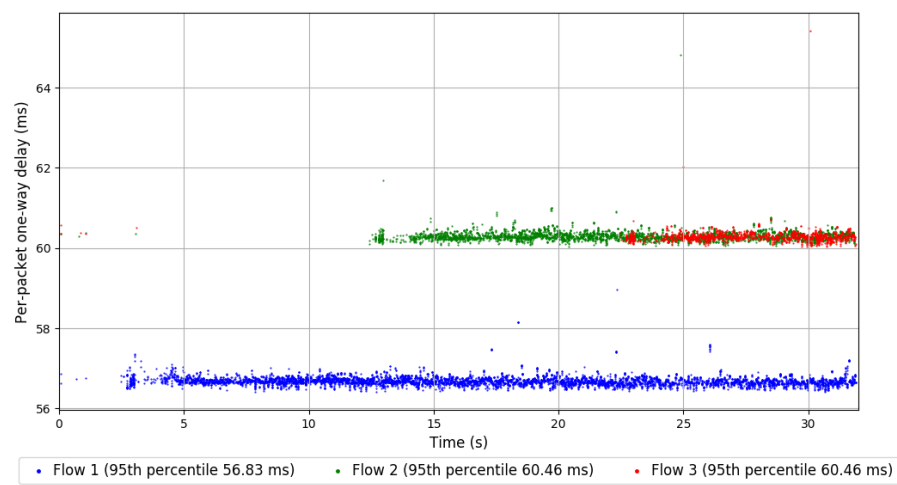
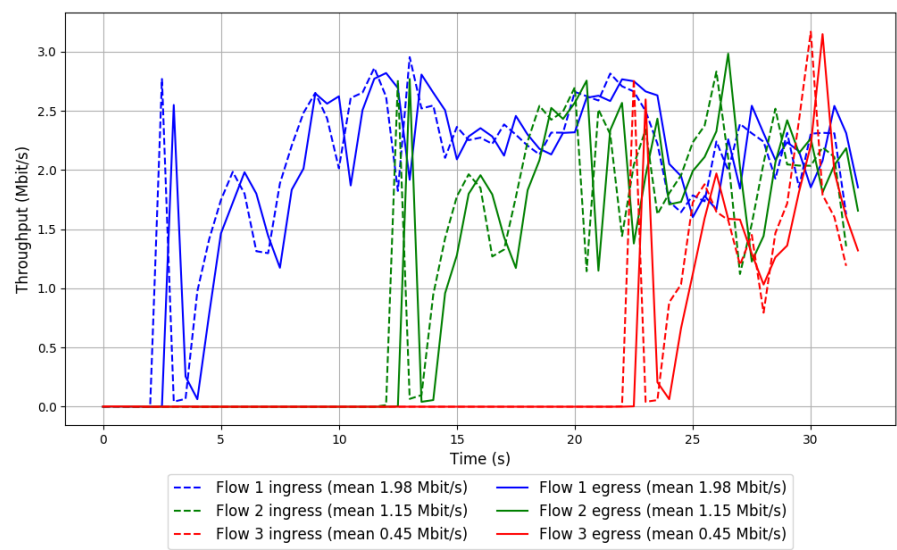


Run 3: Statistics of WebRTC media

Start at: 2019-01-22 10:47:31
End at: 2019-01-22 10:48:01
Local clock offset: 0.279 ms
Remote clock offset: -0.248 ms

Below is generated by plot.py at 2019-01-22 15:44:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 60.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 56.834 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 60.458 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 60.462 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

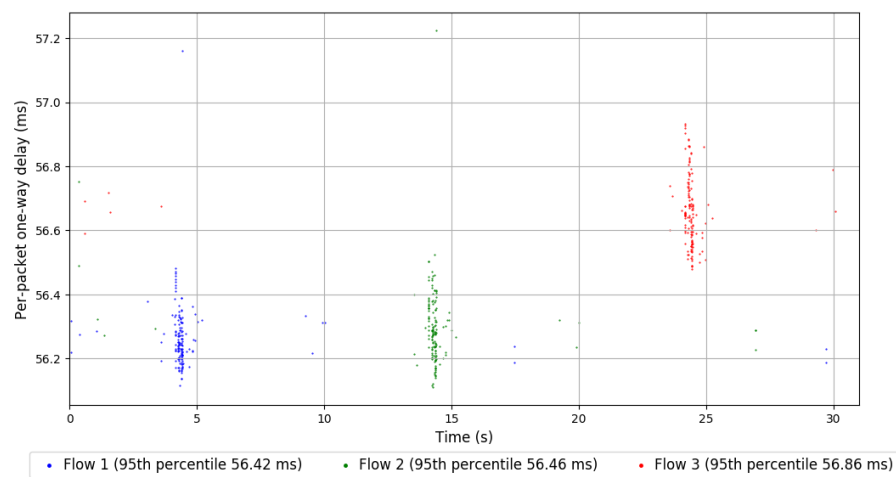
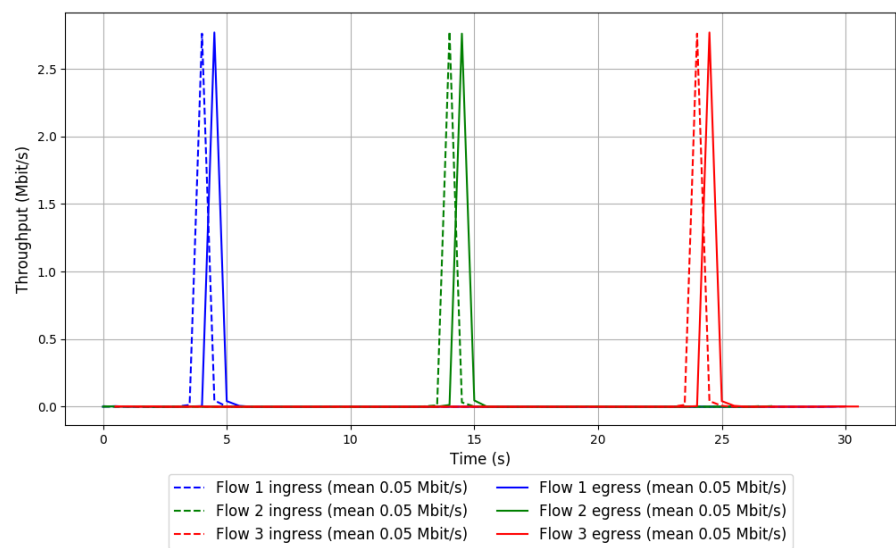


Run 4: Statistics of WebRTC media

Start at: 2019-01-22 11:26:02
End at: 2019-01-22 11:26:32
Local clock offset: -0.526 ms
Remote clock offset: -1.278 ms

Below is generated by plot.py at 2019-01-22 15:44:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 56.781 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.421 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.460 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.863 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-22 12:05:12
End at: 2019-01-22 12:05:42
Local clock offset: 0.433 ms
Remote clock offset: -1.639 ms

Below is generated by plot.py at 2019-01-22 15:44:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 55.664 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 55.664 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 55.718 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 55.625 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

