

Pantheon Report

Generated at 2019-01-22 06:05:18 (UTC).

Data path: Stanford on `eno1` (*remote*) → AWS California 1 on `ens5` (*local*).

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.stanford.edu` and have been applied to correct the timestamps in logs.

System info:

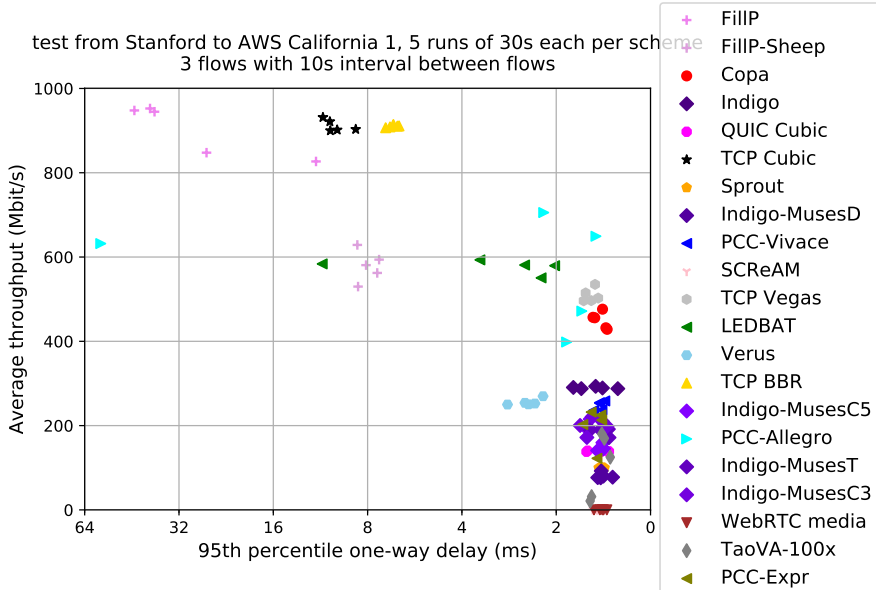
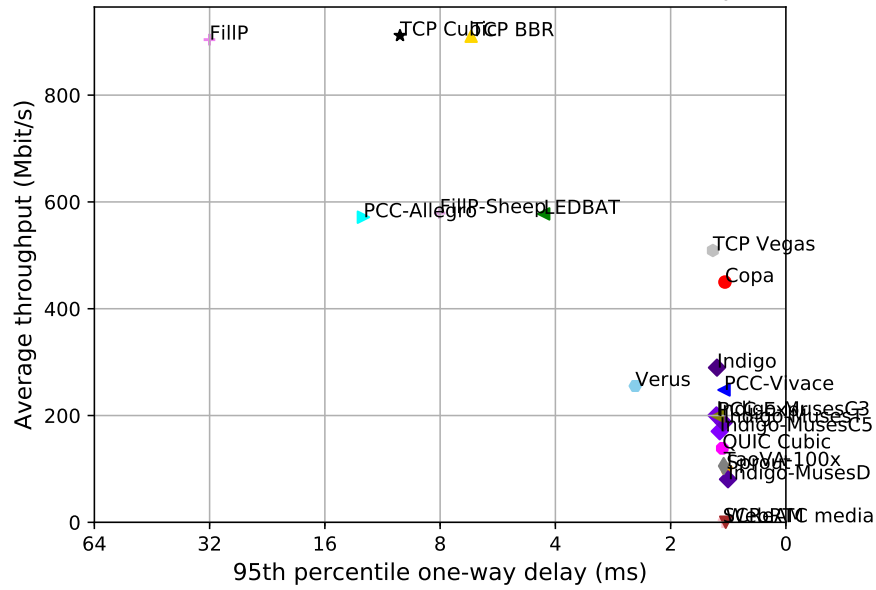
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
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 Stanford to AWS California 1, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



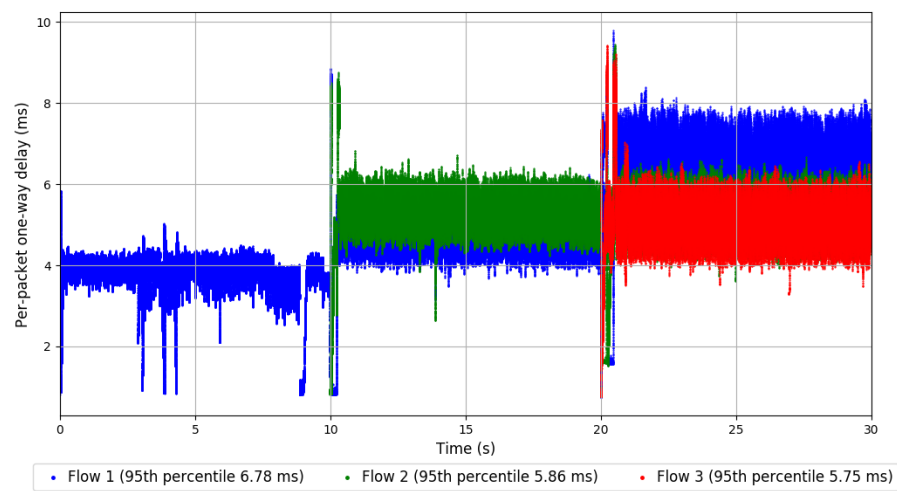
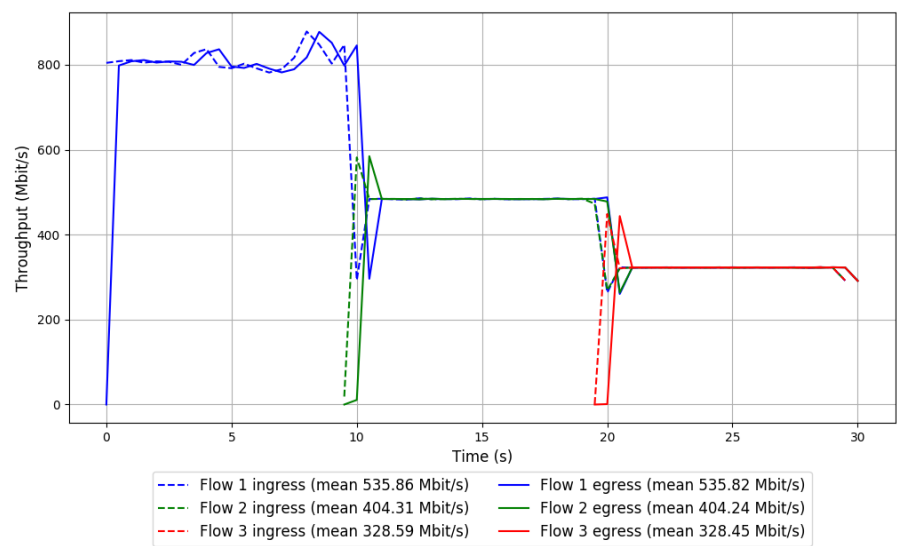
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	531.52	404.90	328.32	6.66	6.20	6.46	0.02	0.03	0.06
Copa	5	264.91	219.06	117.85	1.08	1.03	0.99	0.00	0.01	0.03
TCP Cubic	5	536.89	402.32	320.97	10.61	7.70	7.90	0.02	0.03	0.08
FillP	5	571.90	388.23	222.95	31.97	30.76	22.12	0.14	0.11	0.13
FillP-Sheep	5	421.76	203.62	67.19	8.66	4.63	8.24	0.00	0.00	0.02
Indigo	5	154.79	142.10	122.88	1.16	1.18	1.30	0.01	0.01	0.03
Indigo-MusesC3	5	154.35	58.14	35.19	1.21	1.18	1.15	0.00	0.01	0.01
Indigo-MusesC5	5	110.48	79.52	35.75	1.11	1.17	1.04	0.00	0.00	0.06
Indigo-MusesD	5	56.16	29.73	20.39	1.00	1.00	0.97	0.00	0.01	0.04
Indigo-MusesT	5	139.61	59.39	36.34	1.08	1.05	0.98	0.00	0.00	0.05
LEDBAT	5	353.10	250.69	173.41	4.86	2.18	1.74	0.00	0.01	0.04
PCC-Allegro	5	445.58	137.96	103.77	13.07	1.57	1.36	0.01	0.01	0.02
PCC-Expr	5	145.48	56.32	48.59	1.19	1.13	1.11	0.00	0.00	0.02
QUIC Cubic	5	75.36	66.89	56.77	1.10	1.08	1.07	0.01	0.01	0.01
SCReAM	5	0.22	0.22	0.22	1.10	1.09	1.09	0.00	0.00	0.00
Sprout	5	50.26	50.16	49.88	1.04	1.03	1.04	0.01	0.02	0.04
TaoVA-100x	5	64.21	37.02	50.15	1.07	1.07	1.06	0.01	0.01	0.01
TCP Vegas	5	242.87	274.25	251.27	1.26	1.40	1.46	0.01	0.01	0.02
Verus	5	164.33	97.01	80.15	2.64	1.75	1.56	0.00	0.01	0.01
PCC-Vivace	5	165.51	85.98	76.55	1.05	1.09	1.17	0.00	0.01	0.06
WebRTC media	5	0.05	0.05	0.05	1.20	1.03	1.06	0.00	0.02	0.01

Run 1: Statistics of TCP BBR

Start at: 2019-01-22 02:41:16
End at: 2019-01-22 02:41:46
Local clock offset: 3.205 ms
Remote clock offset: -0.164 ms

Below is generated by plot.py at 2019-01-22 05:17:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 914.58 Mbit/s
95th percentile per-packet one-way delay: 6.619 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 535.82 Mbit/s
95th percentile per-packet one-way delay: 6.783 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 404.24 Mbit/s
95th percentile per-packet one-way delay: 5.864 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 328.45 Mbit/s
95th percentile per-packet one-way delay: 5.748 ms
Loss rate: 0.06%

Run 1: Report of TCP BBR — Data Link

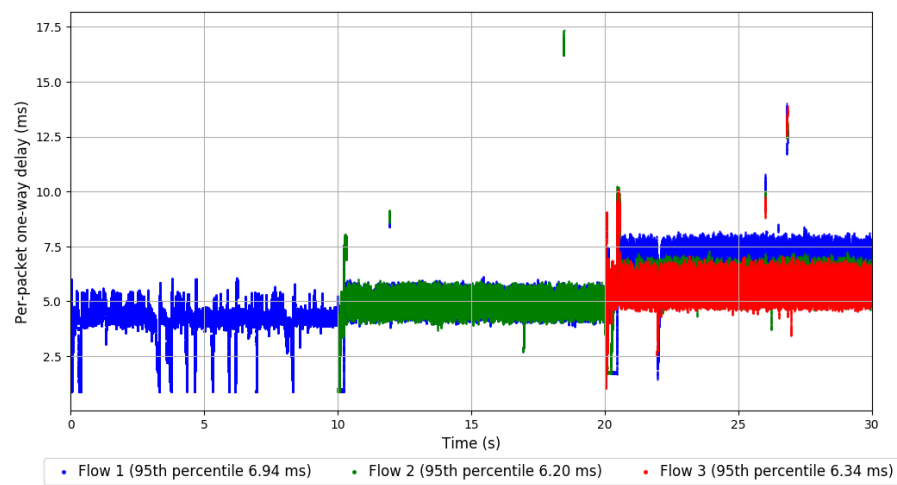
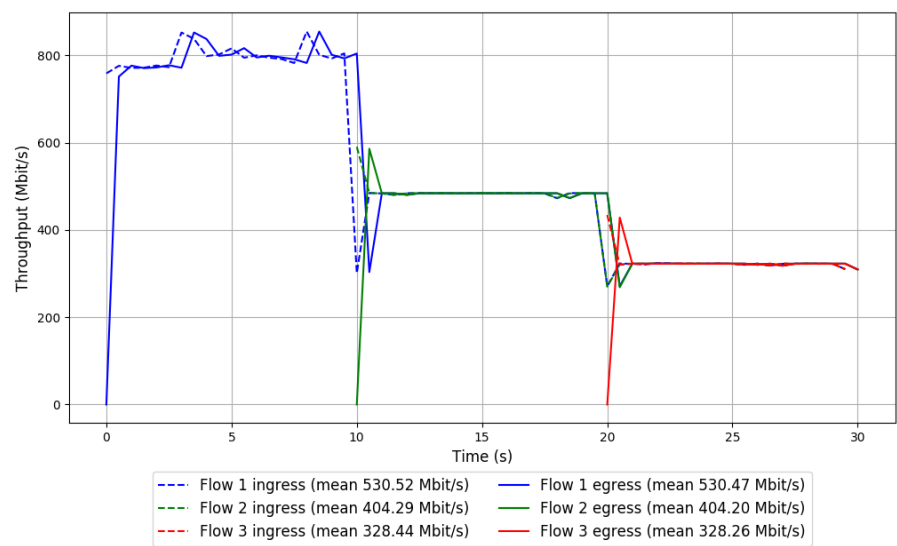


Run 2: Statistics of TCP BBR

Start at: 2019-01-22 03:11:34
End at: 2019-01-22 03:12:04
Local clock offset: 3.504 ms
Remote clock offset: -2.888 ms

Below is generated by plot.py at 2019-01-22 05:17:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 908.80 Mbit/s
95th percentile per-packet one-way delay: 6.787 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 530.47 Mbit/s
95th percentile per-packet one-way delay: 6.936 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 404.20 Mbit/s
95th percentile per-packet one-way delay: 6.200 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 328.26 Mbit/s
95th percentile per-packet one-way delay: 6.344 ms
Loss rate: 0.06%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-01-22 03:41:46

End at: 2019-01-22 03:42:16

Local clock offset: 3.049 ms

Remote clock offset: 5.942 ms

Below is generated by plot.py at 2019-01-22 05:17:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 906.83 Mbit/s

95th percentile per-packet one-way delay: 7.007 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 528.15 Mbit/s

95th percentile per-packet one-way delay: 6.604 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 404.48 Mbit/s

95th percentile per-packet one-way delay: 6.909 ms

Loss rate: 0.03%

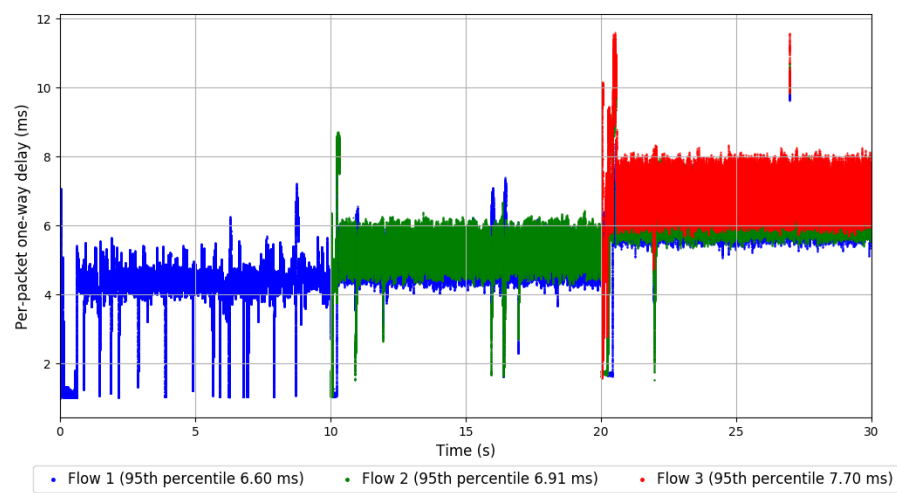
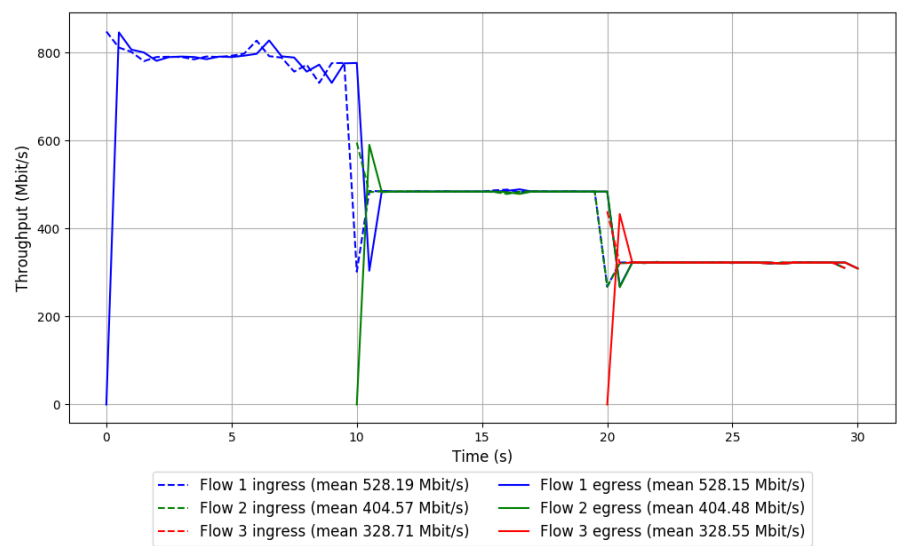
-- Flow 3:

Average throughput: 328.55 Mbit/s

95th percentile per-packet one-way delay: 7.695 ms

Loss rate: 0.07%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-01-22 04:12:06

End at: 2019-01-22 04:12:36

Local clock offset: -0.626 ms

Remote clock offset: -2.45 ms

Below is generated by plot.py at 2019-01-22 05:17:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 911.18 Mbit/s

95th percentile per-packet one-way delay: 6.350 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 532.11 Mbit/s

95th percentile per-packet one-way delay: 6.469 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 405.85 Mbit/s

95th percentile per-packet one-way delay: 5.774 ms

Loss rate: 0.02%

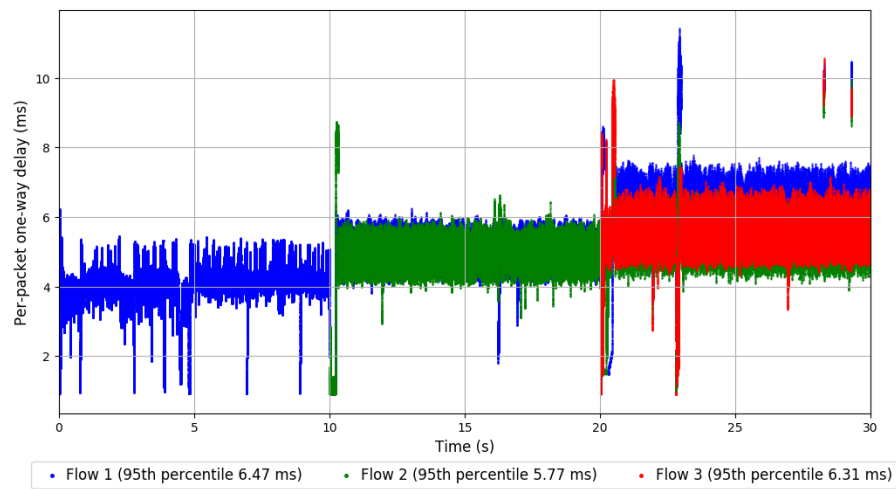
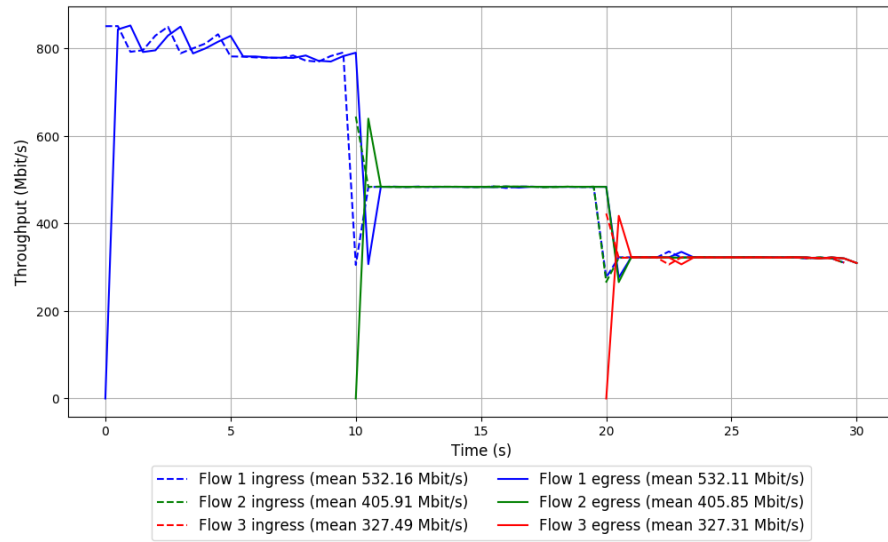
-- Flow 3:

Average throughput: 327.31 Mbit/s

95th percentile per-packet one-way delay: 6.310 ms

Loss rate: 0.07%

Run 4: Report of TCP BBR — Data Link

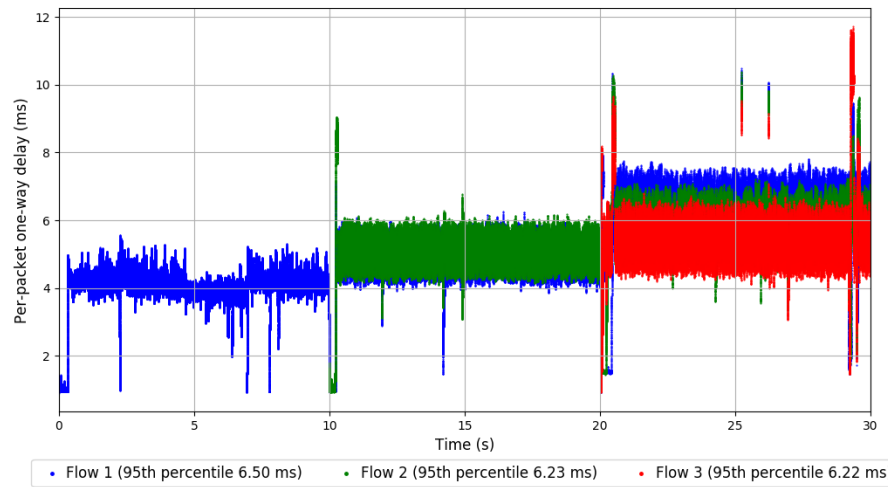
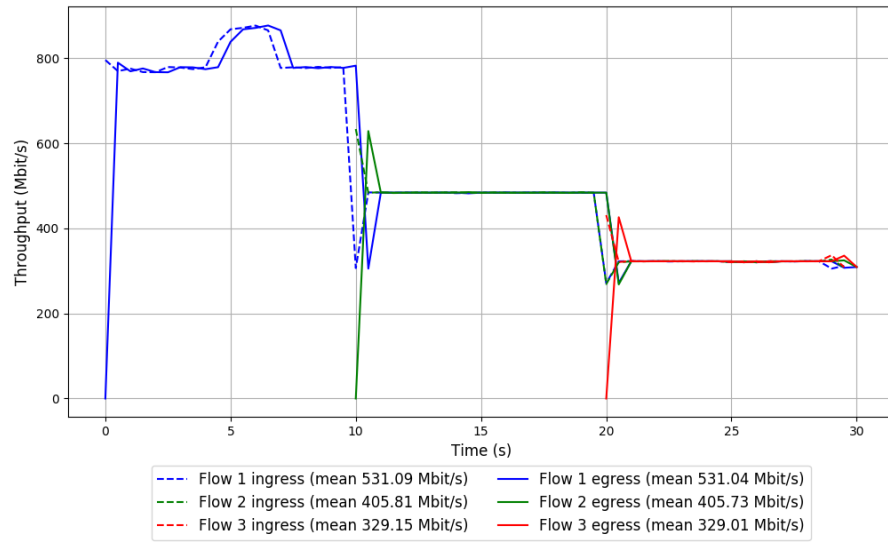


Run 5: Statistics of TCP BBR

Start at: 2019-01-22 04:42:27
End at: 2019-01-22 04:42:57
Local clock offset: 3.25 ms
Remote clock offset: -3.258 ms

Below is generated by plot.py at 2019-01-22 05:17:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 910.64 Mbit/s
95th percentile per-packet one-way delay: 6.427 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 531.04 Mbit/s
95th percentile per-packet one-way delay: 6.499 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 405.73 Mbit/s
95th percentile per-packet one-way delay: 6.231 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 329.01 Mbit/s
95th percentile per-packet one-way delay: 6.224 ms
Loss rate: 0.06%

Run 5: Report of TCP BBR — Data Link

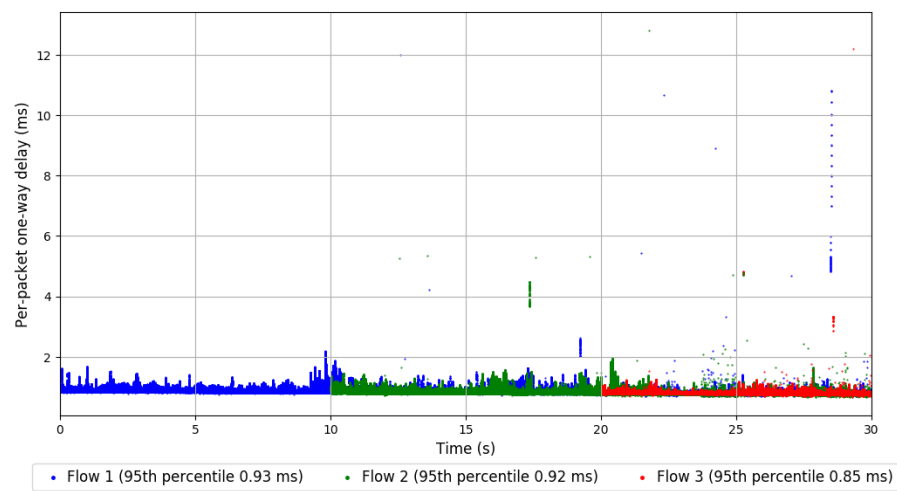
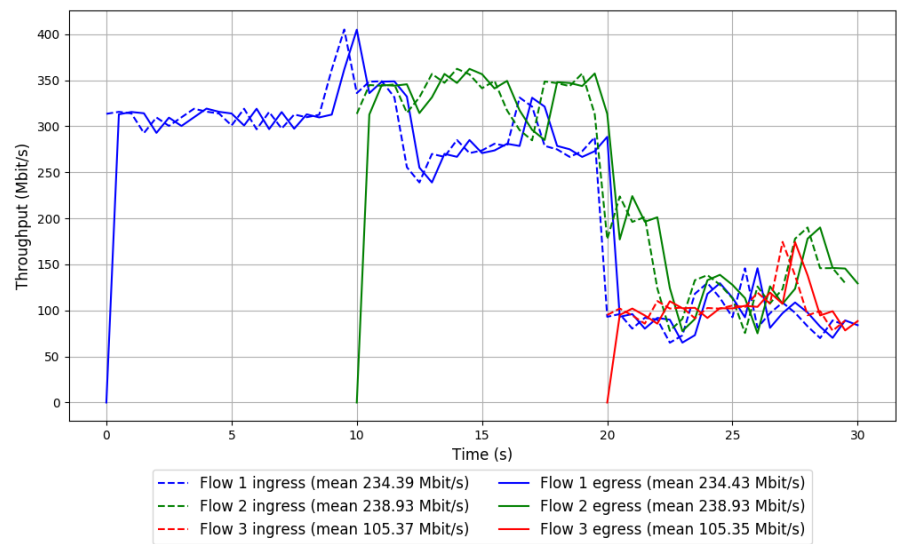


Run 1: Statistics of Copa

Start at: 2019-01-22 02:30:00
End at: 2019-01-22 02:30:30
Local clock offset: 1.304 ms
Remote clock offset: -0.449 ms

Below is generated by plot.py at 2019-01-22 05:17:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 428.48 Mbit/s
95th percentile per-packet one-way delay: 0.920 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 234.43 Mbit/s
95th percentile per-packet one-way delay: 0.928 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 238.93 Mbit/s
95th percentile per-packet one-way delay: 0.920 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 105.35 Mbit/s
95th percentile per-packet one-way delay: 0.846 ms
Loss rate: 0.03%

Run 1: Report of Copa — Data Link

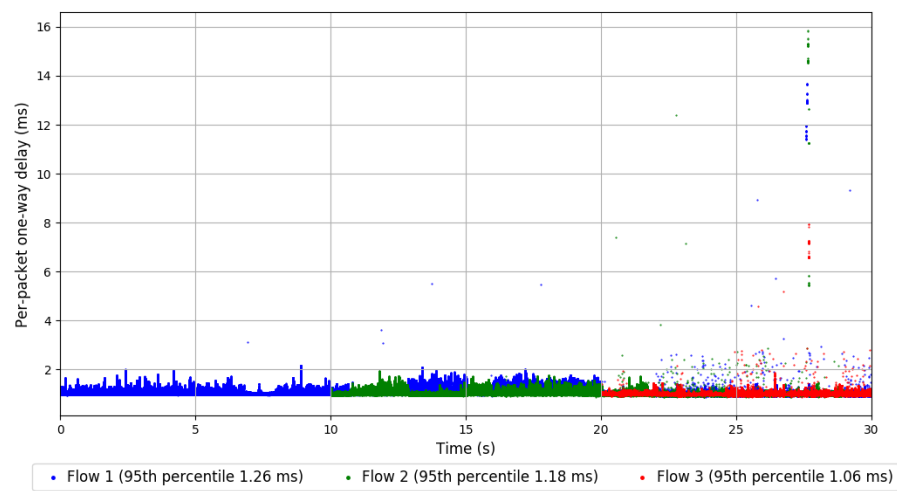
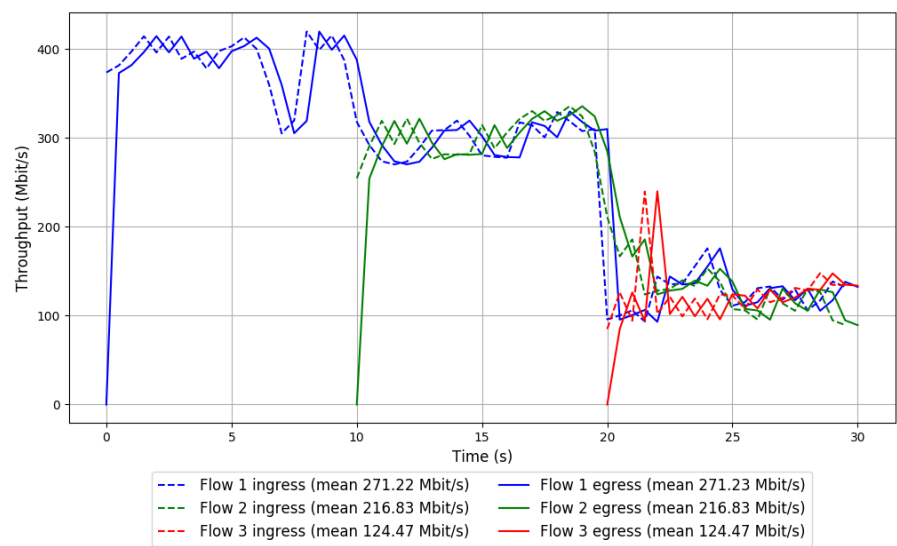


Run 2: Statistics of Copa

Start at: 2019-01-22 03:00:16
End at: 2019-01-22 03:00:46
Local clock offset: 3.387 ms
Remote clock offset: -2.658 ms

Below is generated by plot.py at 2019-01-22 05:17:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 456.97 Mbit/s
95th percentile per-packet one-way delay: 1.220 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 271.23 Mbit/s
95th percentile per-packet one-way delay: 1.259 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 216.83 Mbit/s
95th percentile per-packet one-way delay: 1.177 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 124.47 Mbit/s
95th percentile per-packet one-way delay: 1.056 ms
Loss rate: 0.02%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-01-22 03:30:31

End at: 2019-01-22 03:31:02

Local clock offset: 3.08 ms

Remote clock offset: 3.918 ms

Below is generated by plot.py at 2019-01-22 05:17:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 455.86 Mbit/s

95th percentile per-packet one-way delay: 1.183 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 280.26 Mbit/s

95th percentile per-packet one-way delay: 1.186 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 209.76 Mbit/s

95th percentile per-packet one-way delay: 1.178 ms

Loss rate: 0.00%

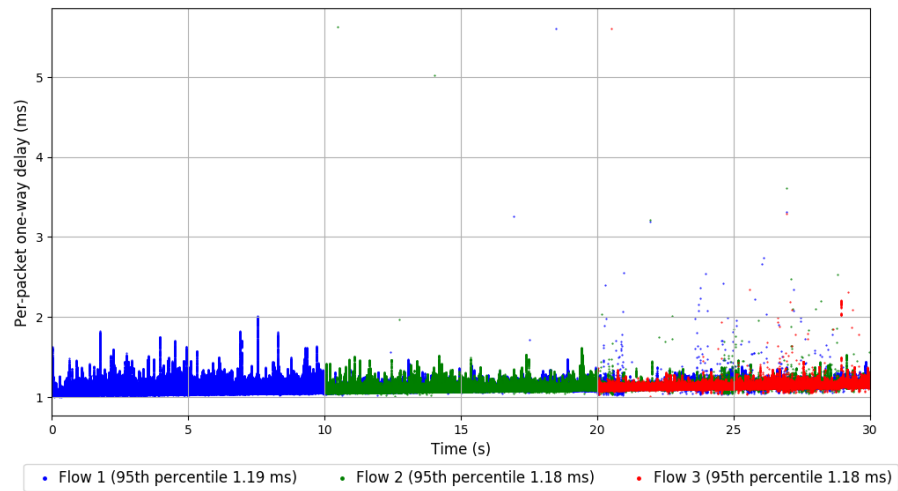
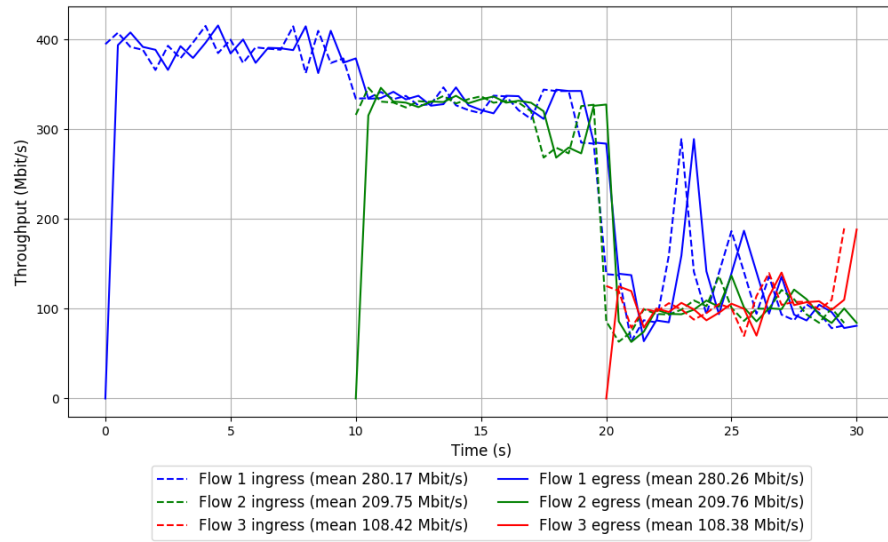
-- Flow 3:

Average throughput: 108.38 Mbit/s

95th percentile per-packet one-way delay: 1.184 ms

Loss rate: 0.06%

Run 3: Report of Copa — Data Link

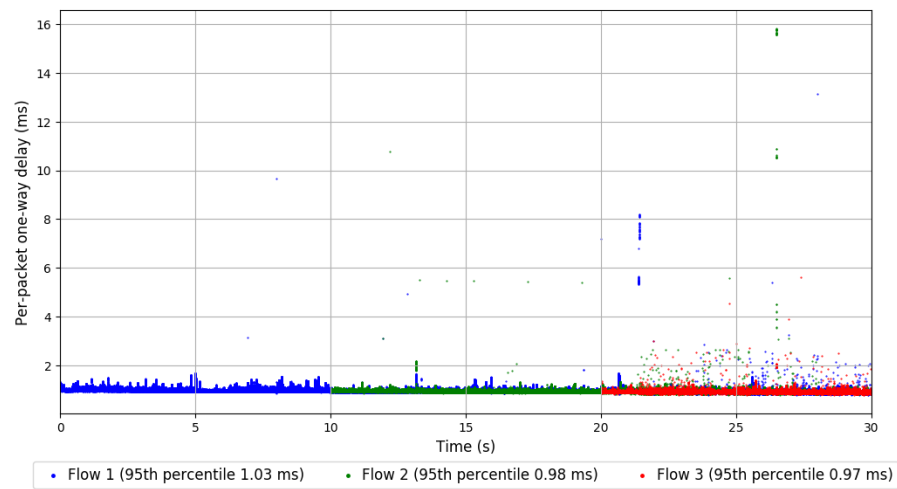
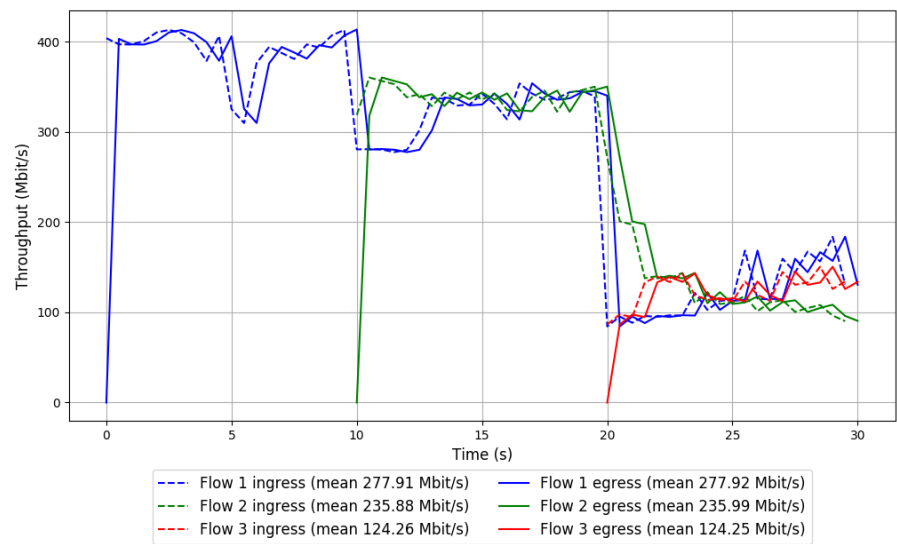


Run 4: Statistics of Copa

Start at: 2019-01-22 04:00:47
End at: 2019-01-22 04:01:17
Local clock offset: 0.309 ms
Remote clock offset: -0.457 ms

Below is generated by plot.py at 2019-01-22 05:25:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 476.25 Mbit/s
95th percentile per-packet one-way delay: 1.018 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 277.92 Mbit/s
95th percentile per-packet one-way delay: 1.035 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 235.99 Mbit/s
95th percentile per-packet one-way delay: 0.979 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.25 Mbit/s
95th percentile per-packet one-way delay: 0.969 ms
Loss rate: 0.02%

Run 4: Report of Copa — Data Link

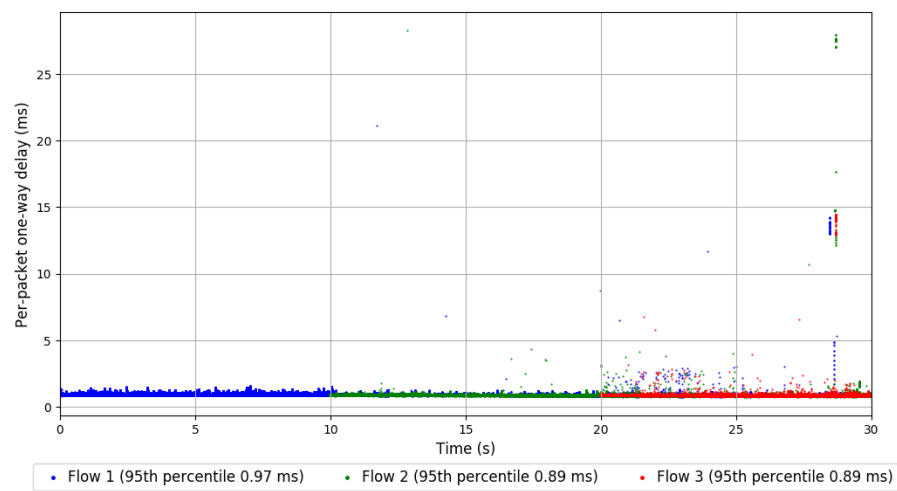
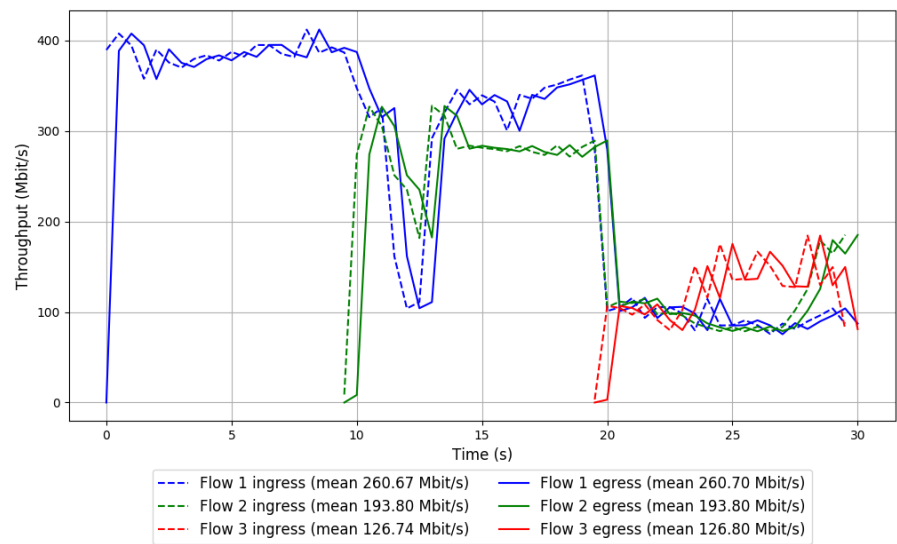


Run 5: Statistics of Copa

Start at: 2019-01-22 04:31:11
End at: 2019-01-22 04:31:41
Local clock offset: 2.335 ms
Remote clock offset: -3.081 ms

Below is generated by plot.py at 2019-01-22 05:25:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 432.12 Mbit/s
95th percentile per-packet one-way delay: 0.947 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 260.70 Mbit/s
95th percentile per-packet one-way delay: 0.971 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.80 Mbit/s
95th percentile per-packet one-way delay: 0.892 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 126.80 Mbit/s
95th percentile per-packet one-way delay: 0.894 ms
Loss rate: 0.00%

Run 5: Report of Copa — Data Link

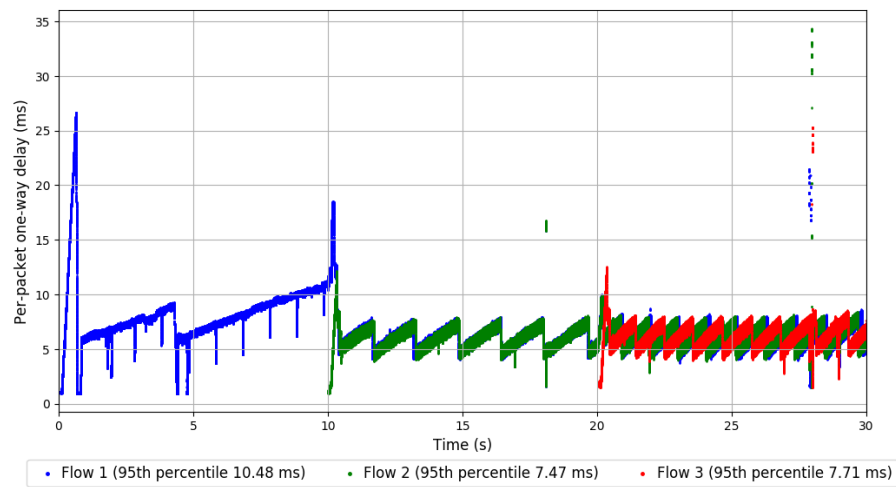
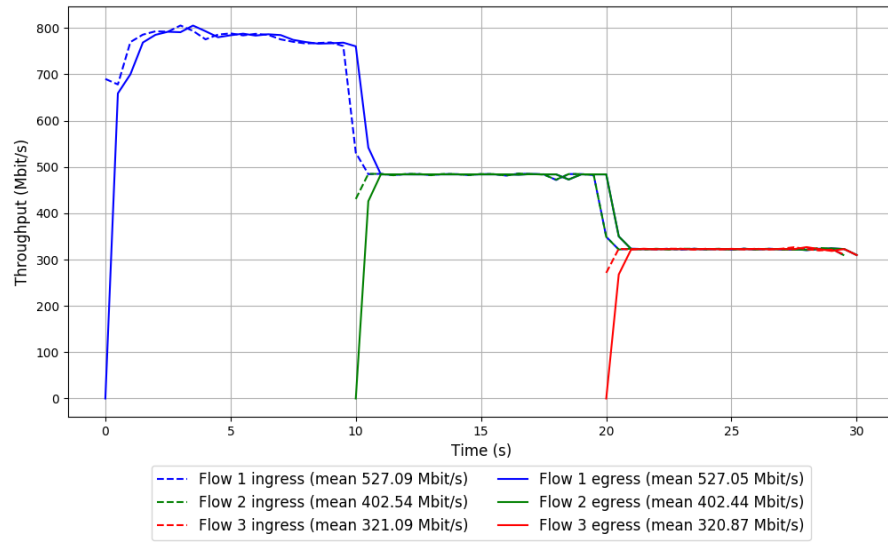


Run 1: Statistics of TCP Cubic

Start at: 2019-01-22 02:57:04
End at: 2019-01-22 02:57:34
Local clock offset: 3.409 ms
Remote clock offset: -2.503 ms

Below is generated by plot.py at 2019-01-22 05:26:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 901.69 Mbit/s
95th percentile per-packet one-way delay: 10.004 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 527.05 Mbit/s
95th percentile per-packet one-way delay: 10.480 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 402.44 Mbit/s
95th percentile per-packet one-way delay: 7.475 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 320.87 Mbit/s
95th percentile per-packet one-way delay: 7.713 ms
Loss rate: 0.08%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-01-22 03:27:18

End at: 2019-01-22 03:27:48

Local clock offset: 3.154 ms

Remote clock offset: 3.112 ms

Below is generated by plot.py at 2019-01-22 05:26:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 899.95 Mbit/s

95th percentile per-packet one-way delay: 10.520 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 525.12 Mbit/s

95th percentile per-packet one-way delay: 10.936 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 402.17 Mbit/s

95th percentile per-packet one-way delay: 7.741 ms

Loss rate: 0.03%

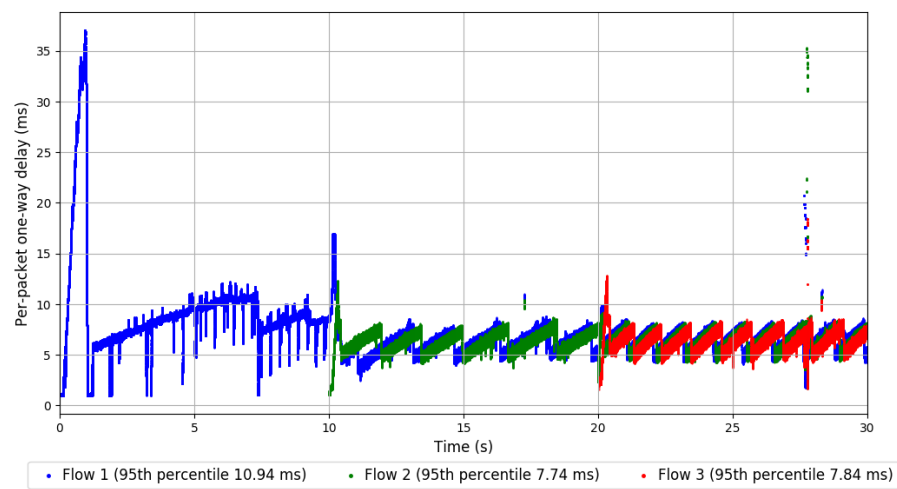
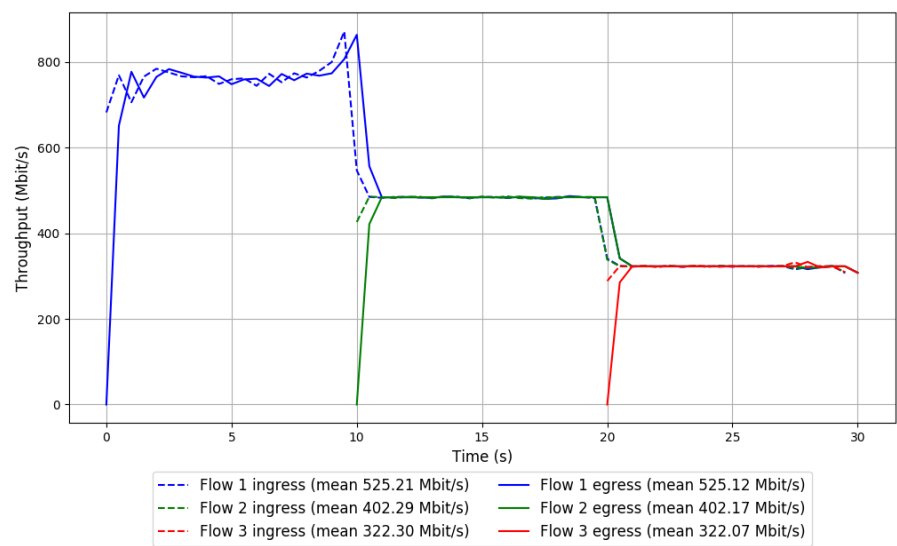
-- Flow 3:

Average throughput: 322.07 Mbit/s

95th percentile per-packet one-way delay: 7.845 ms

Loss rate: 0.09%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2019-01-22 03:57:35

End at: 2019-01-22 03:58:05

Local clock offset: 0.724 ms

Remote clock offset: 0.733 ms

Below is generated by plot.py at 2019-01-22 05:26:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 903.10 Mbit/s

95th percentile per-packet one-way delay: 8.731 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 528.52 Mbit/s

95th percentile per-packet one-way delay: 9.184 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 402.36 Mbit/s

95th percentile per-packet one-way delay: 7.658 ms

Loss rate: 0.03%

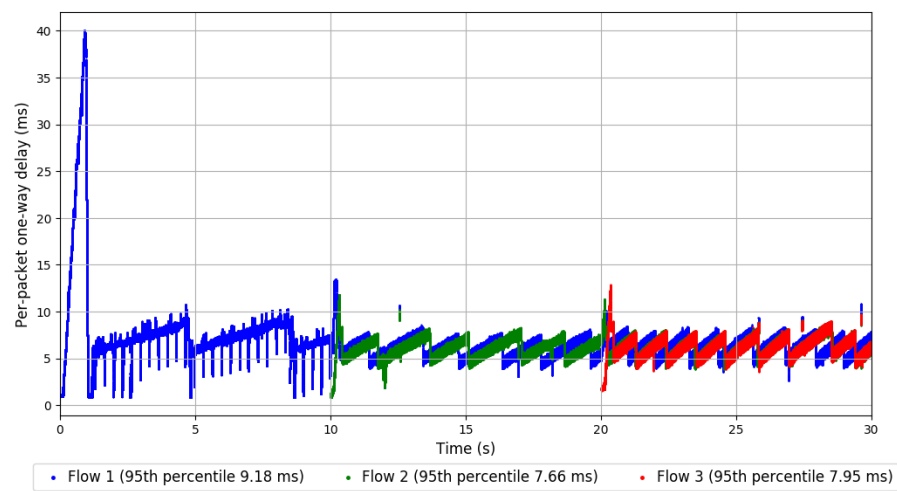
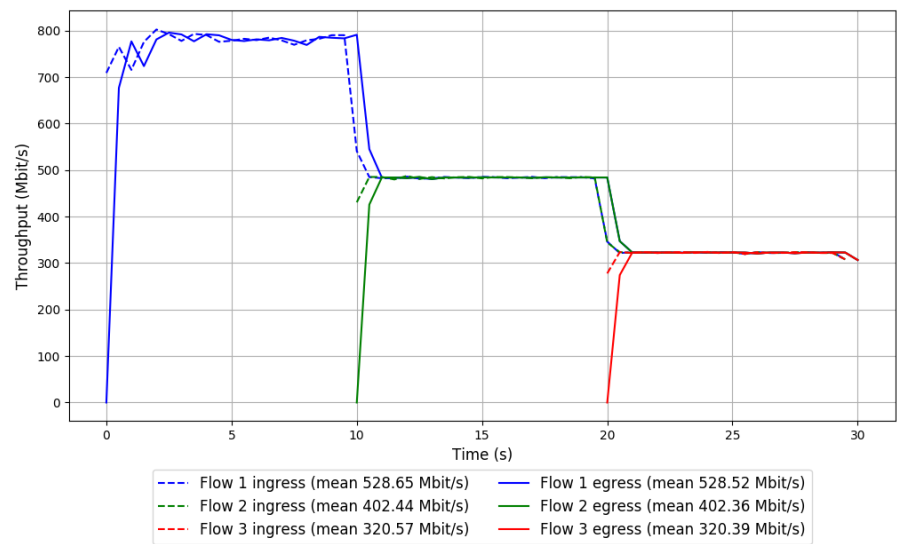
-- Flow 3:

Average throughput: 320.39 Mbit/s

95th percentile per-packet one-way delay: 7.946 ms

Loss rate: 0.08%

Run 3: Report of TCP Cubic — Data Link

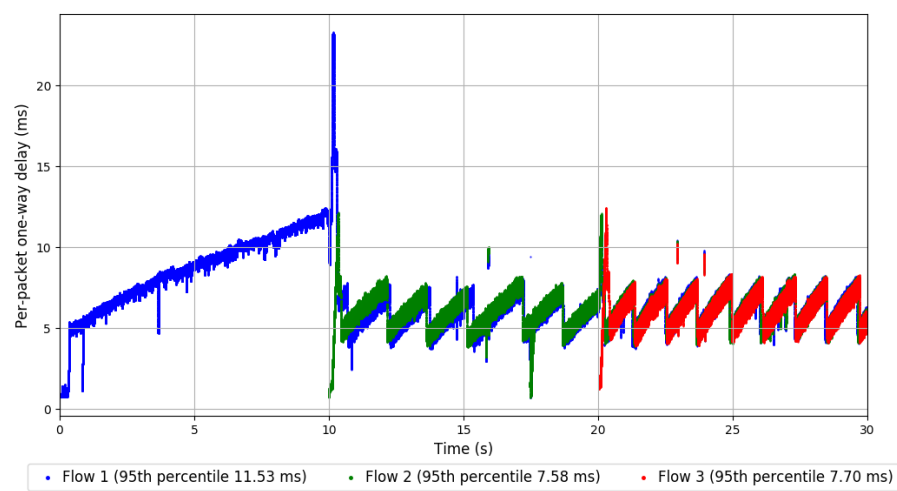
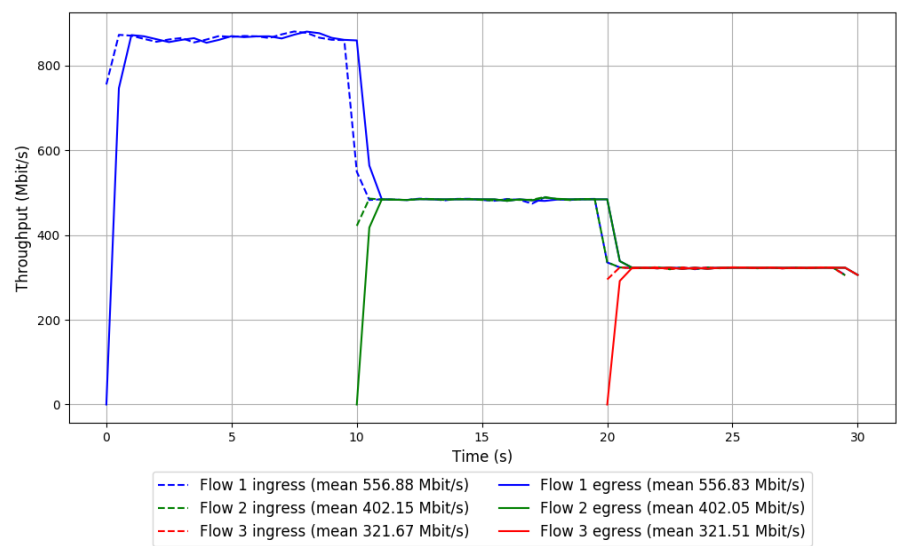


Run 4: Statistics of TCP Cubic

Start at: 2019-01-22 04:27:56
End at: 2019-01-22 04:28:26
Local clock offset: 1.832 ms
Remote clock offset: -3.017 ms

Below is generated by plot.py at 2019-01-22 05:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 931.40 Mbit/s
95th percentile per-packet one-way delay: 11.108 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 556.83 Mbit/s
95th percentile per-packet one-way delay: 11.532 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 402.05 Mbit/s
95th percentile per-packet one-way delay: 7.577 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 321.51 Mbit/s
95th percentile per-packet one-way delay: 7.704 ms
Loss rate: 0.07%

Run 4: Report of TCP Cubic — Data Link

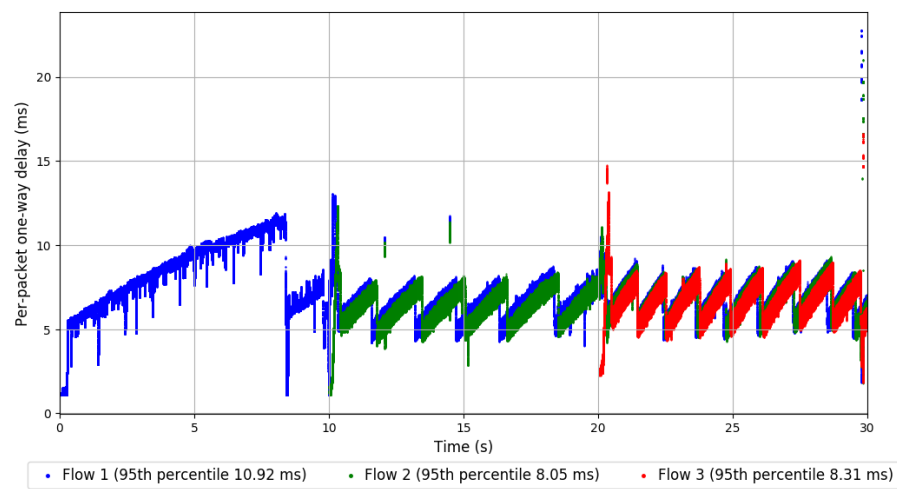
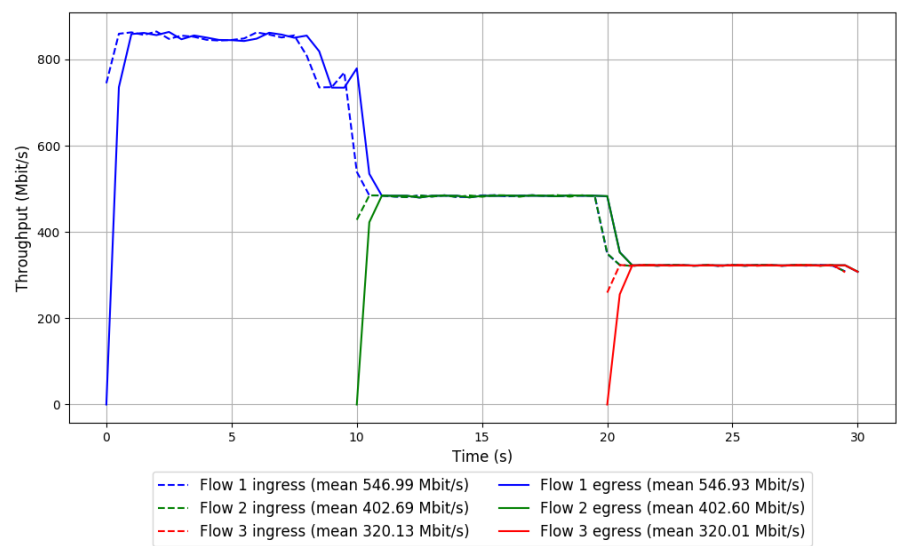


Run 5: Statistics of TCP Cubic

Start at: 2019-01-22 04:58:04
End at: 2019-01-22 04:58:34
Local clock offset: 0.797 ms
Remote clock offset: -3.425 ms

Below is generated by plot.py at 2019-01-22 05:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 921.33 Mbit/s
95th percentile per-packet one-way delay: 10.557 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 546.93 Mbit/s
95th percentile per-packet one-way delay: 10.920 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 402.60 Mbit/s
95th percentile per-packet one-way delay: 8.050 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 320.01 Mbit/s
95th percentile per-packet one-way delay: 8.311 ms
Loss rate: 0.07%

Run 5: Report of TCP Cubic — Data Link

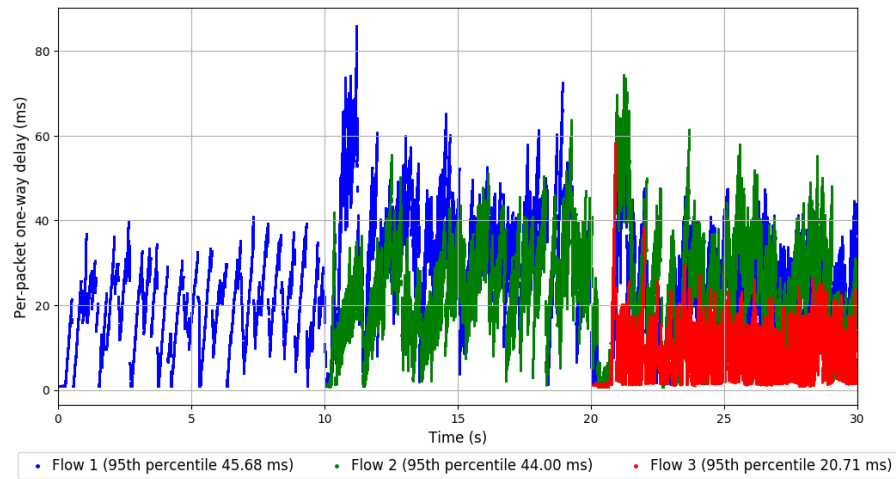
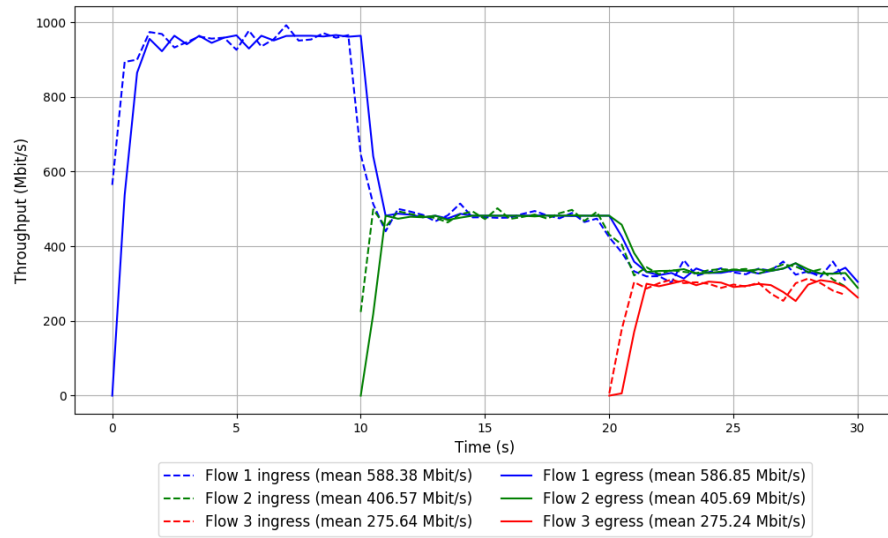


Run 1: Statistics of FillP

Start at: 2019-01-22 02:43:00
End at: 2019-01-22 02:43:30
Local clock offset: 3.384 ms
Remote clock offset: -0.697 ms

Below is generated by plot.py at 2019-01-22 05:29:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 947.82 Mbit/s
95th percentile per-packet one-way delay: 44.418 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 586.85 Mbit/s
95th percentile per-packet one-way delay: 45.680 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 405.69 Mbit/s
95th percentile per-packet one-way delay: 44.002 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 275.24 Mbit/s
95th percentile per-packet one-way delay: 20.713 ms
Loss rate: 0.14%

Run 1: Report of FillP — Data Link

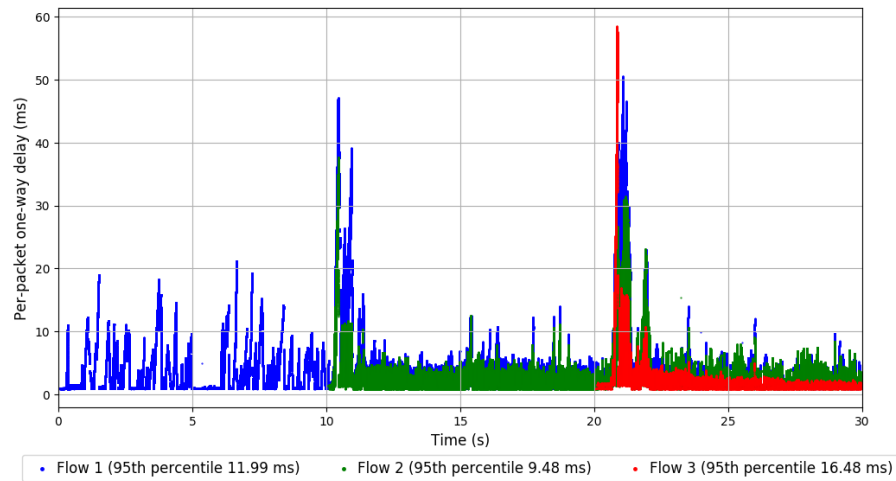
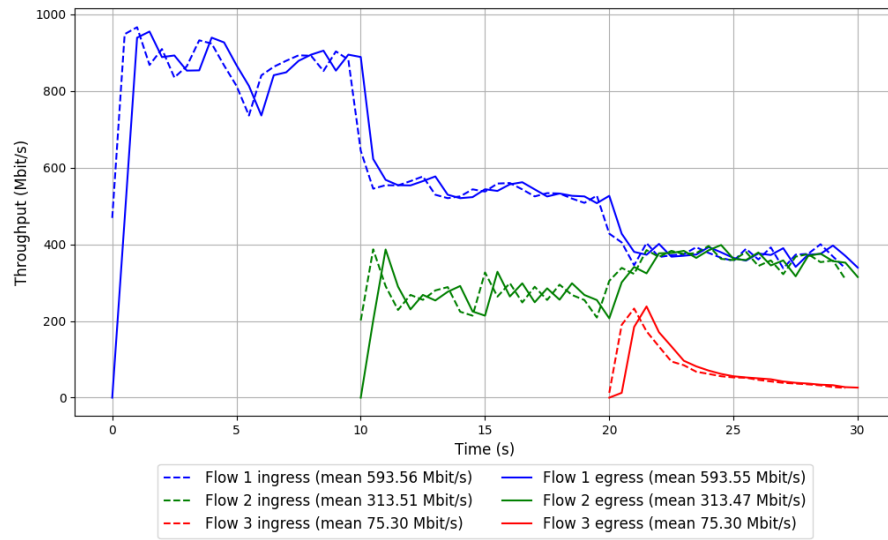


Run 2: Statistics of FillP

Start at: 2019-01-22 03:13:18
End at: 2019-01-22 03:13:48
Local clock offset: 3.553 ms
Remote clock offset: -2.965 ms

Below is generated by plot.py at 2019-01-22 05:36:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 826.80 Mbit/s
95th percentile per-packet one-way delay: 11.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 593.55 Mbit/s
95th percentile per-packet one-way delay: 11.987 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 313.47 Mbit/s
95th percentile per-packet one-way delay: 9.477 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.30 Mbit/s
95th percentile per-packet one-way delay: 16.478 ms
Loss rate: 0.00%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-01-22 03:43:29

End at: 2019-01-22 03:43:59

Local clock offset: 3.058 ms

Remote clock offset: 6.19 ms

Below is generated by plot.py at 2019-01-22 05:38:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 952.47 Mbit/s

95th percentile per-packet one-way delay: 39.592 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 587.46 Mbit/s

95th percentile per-packet one-way delay: 41.501 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 393.48 Mbit/s

95th percentile per-packet one-way delay: 32.679 ms

Loss rate: 0.05%

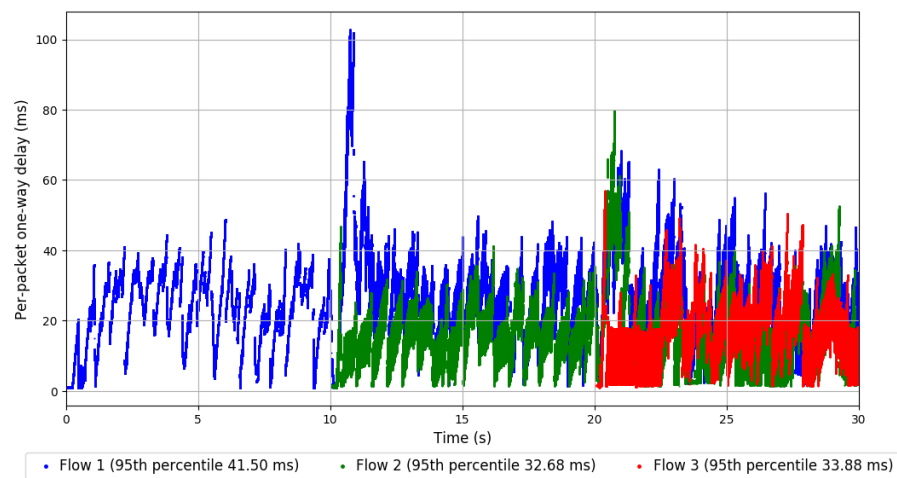
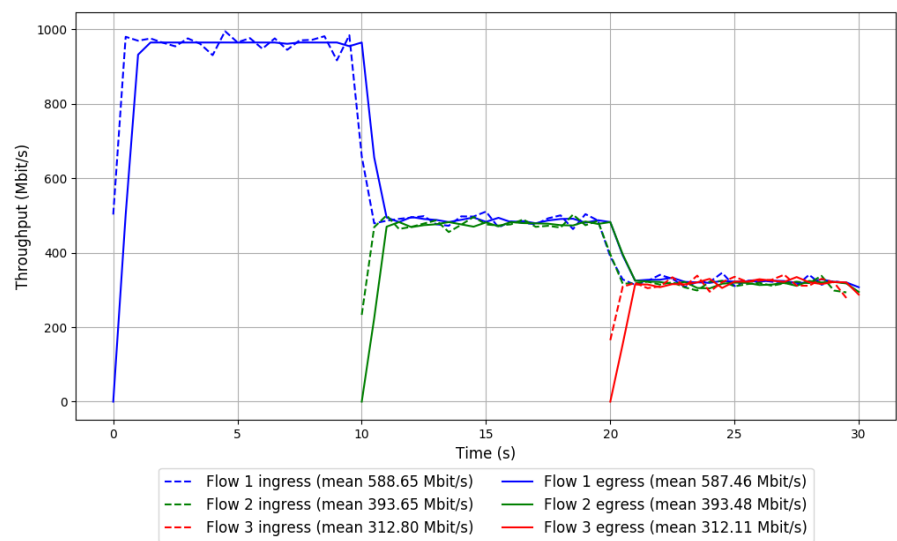
-- Flow 3:

Average throughput: 312.11 Mbit/s

95th percentile per-packet one-way delay: 33.875 ms

Loss rate: 0.15%

Run 3: Report of FillP — Data Link

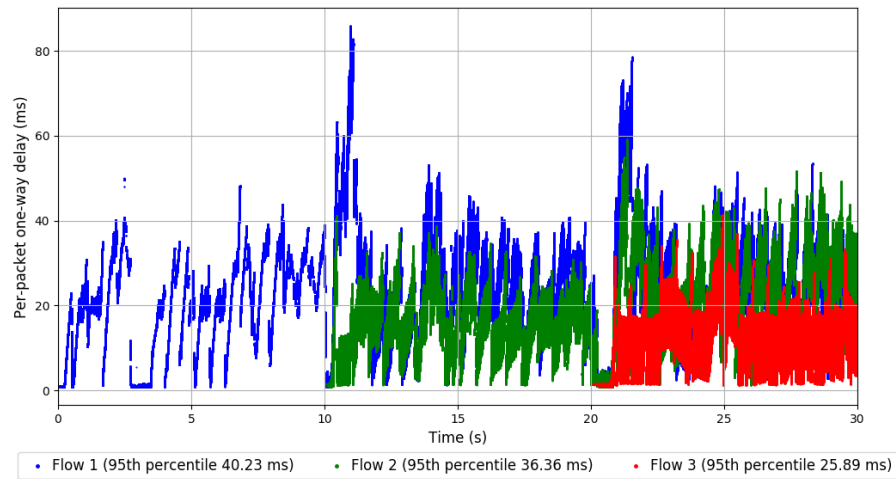
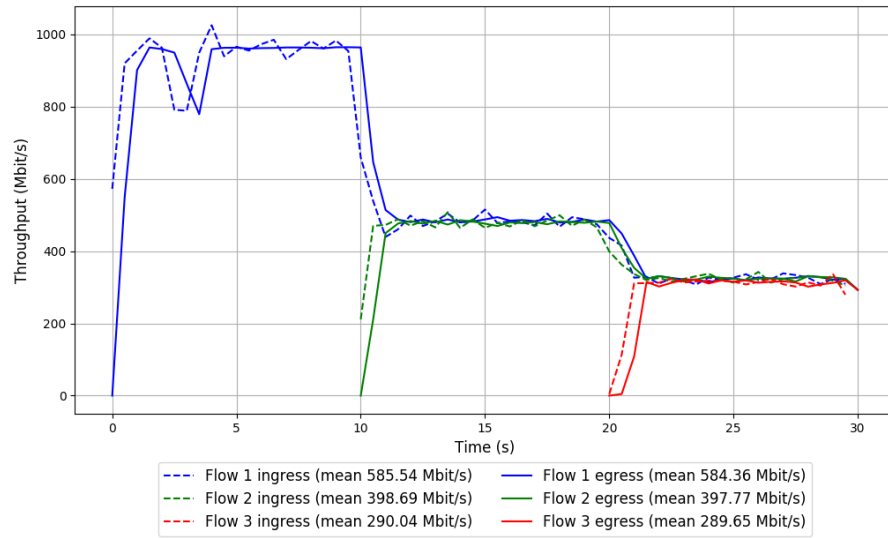


Run 4: Statistics of FillP

Start at: 2019-01-22 04:13:50
End at: 2019-01-22 04:14:20
Local clock offset: -0.718 ms
Remote clock offset: -2.673 ms

Below is generated by plot.py at 2019-01-22 05:38:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 944.79 Mbit/s
95th percentile per-packet one-way delay: 38.305 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 584.36 Mbit/s
95th percentile per-packet one-way delay: 40.225 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 397.77 Mbit/s
95th percentile per-packet one-way delay: 36.356 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 289.65 Mbit/s
95th percentile per-packet one-way delay: 25.895 ms
Loss rate: 0.16%

Run 4: Report of FillP — Data Link

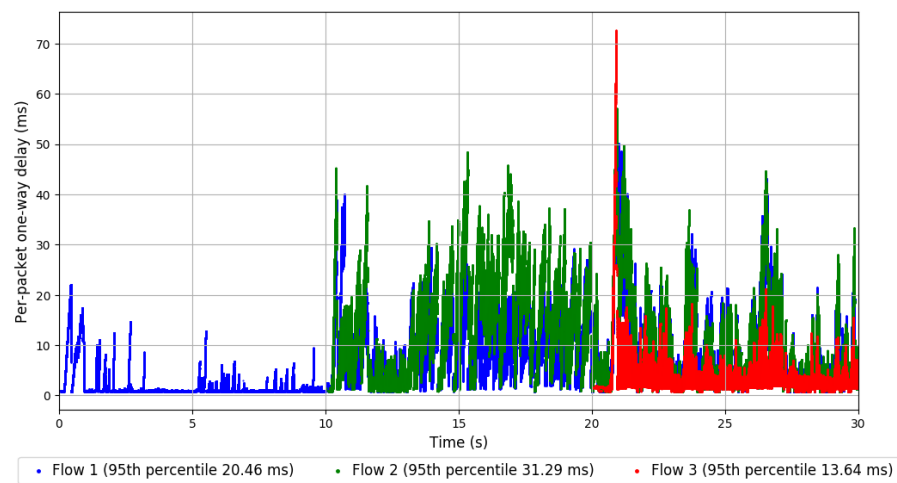
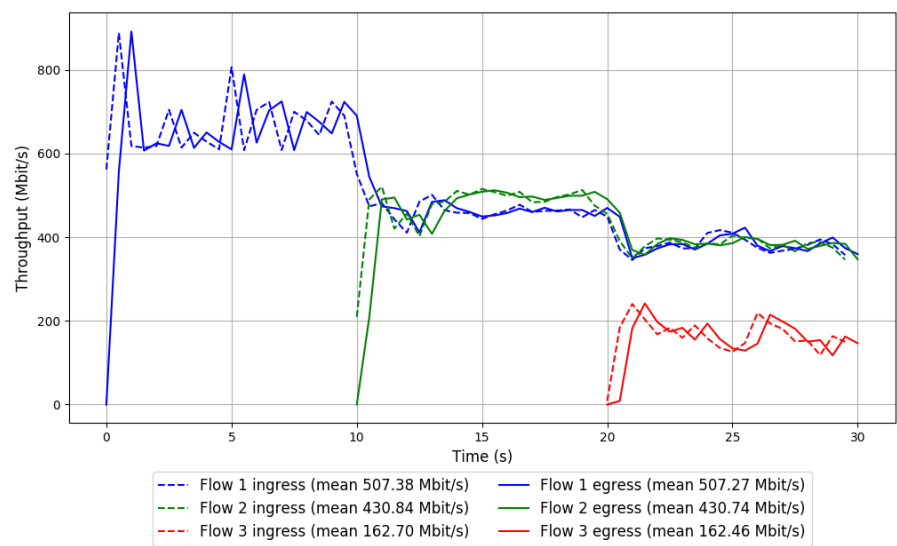


Run 5: Statistics of FillP

Start at: 2019-01-22 04:44:11
End at: 2019-01-22 04:44:41
Local clock offset: 3.341 ms
Remote clock offset: -3.214 ms

Below is generated by plot.py at 2019-01-22 05:38:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 847.66 Mbit/s
95th percentile per-packet one-way delay: 26.137 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 507.27 Mbit/s
95th percentile per-packet one-way delay: 20.459 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 430.74 Mbit/s
95th percentile per-packet one-way delay: 31.292 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 162.46 Mbit/s
95th percentile per-packet one-way delay: 13.645 ms
Loss rate: 0.18%

Run 5: Report of FillP — Data Link

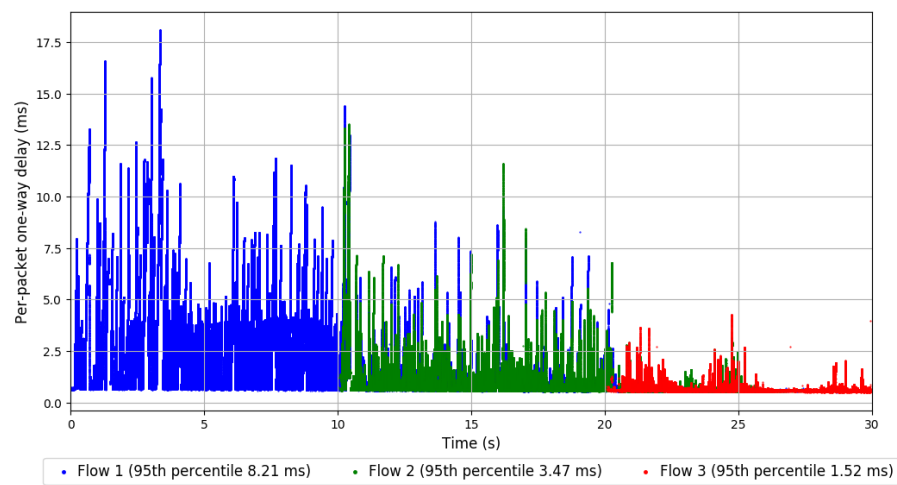
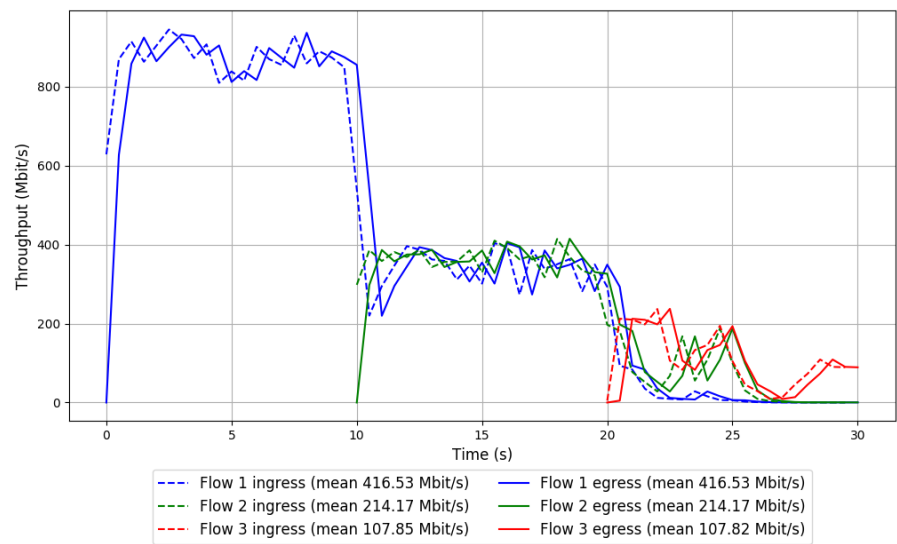


Run 1: Statistics of FillP-Sheep

Start at: 2019-01-22 02:28:30
End at: 2019-01-22 02:29:00
Local clock offset: 0.856 ms
Remote clock offset: -0.409 ms

Below is generated by plot.py at 2019-01-22 05:38:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 593.88 Mbit/s
95th percentile per-packet one-way delay: 7.352 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 416.53 Mbit/s
95th percentile per-packet one-way delay: 8.206 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 214.17 Mbit/s
95th percentile per-packet one-way delay: 3.472 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.82 Mbit/s
95th percentile per-packet one-way delay: 1.516 ms
Loss rate: 0.01%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-01-22 02:58:48

End at: 2019-01-22 02:59:18

Local clock offset: 3.403 ms

Remote clock offset: -2.59 ms

Below is generated by plot.py at 2019-01-22 05:38:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 529.89 Mbit/s

95th percentile per-packet one-way delay: 8.581 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 400.98 Mbit/s

95th percentile per-packet one-way delay: 9.888 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 167.47 Mbit/s

95th percentile per-packet one-way delay: 4.179 ms

Loss rate: 0.00%

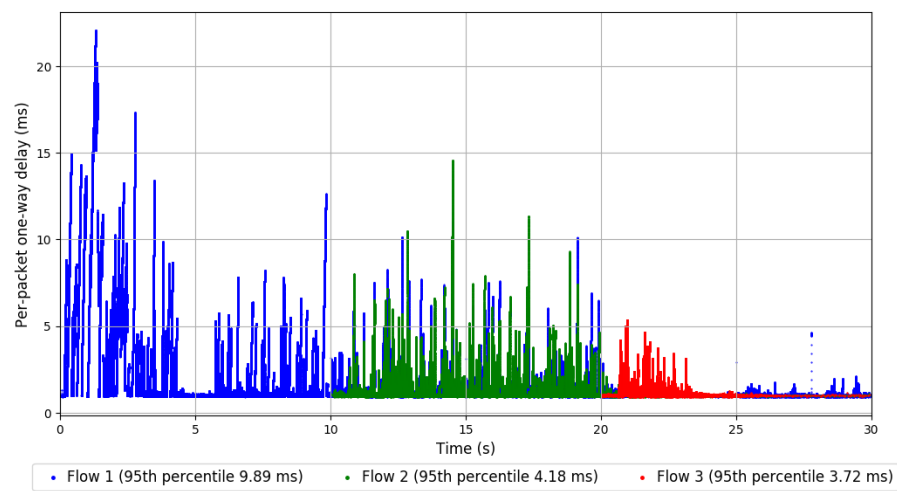
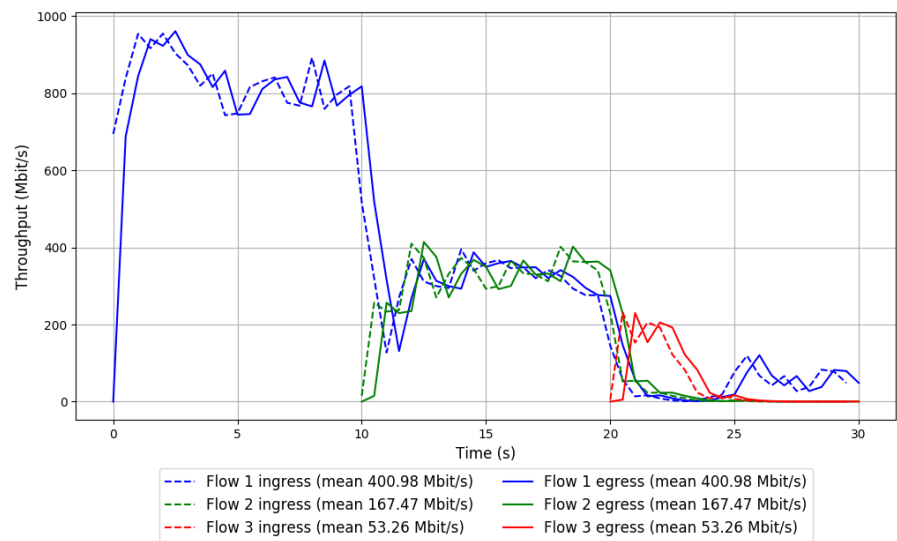
-- Flow 3:

Average throughput: 53.26 Mbit/s

95th percentile per-packet one-way delay: 3.717 ms

Loss rate: 0.00%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-01-22 03:29:01

End at: 2019-01-22 03:29:31

Local clock offset: 3.106 ms

Remote clock offset: 3.643 ms

Below is generated by plot.py at 2019-01-22 05:38:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 628.73 Mbit/s

95th percentile per-packet one-way delay: 8.627 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 451.27 Mbit/s

95th percentile per-packet one-way delay: 8.760 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 246.12 Mbit/s

95th percentile per-packet one-way delay: 7.097 ms

Loss rate: 0.00%

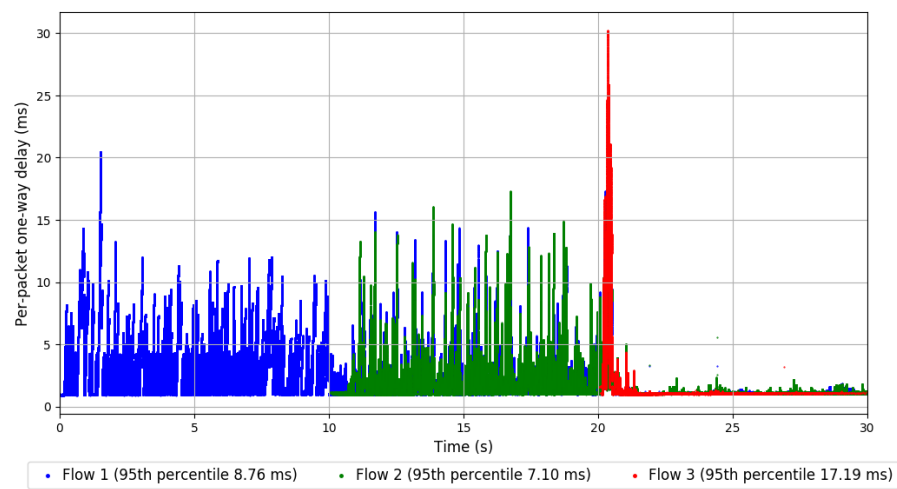
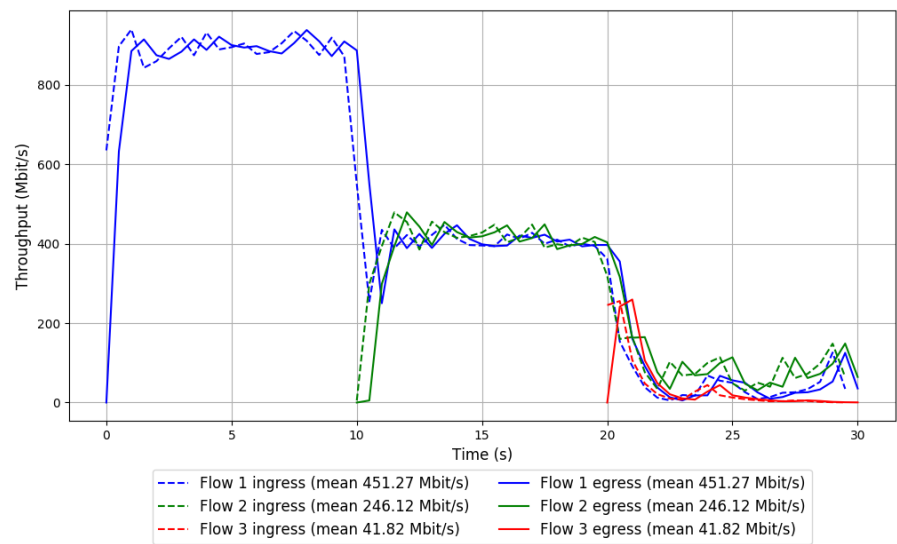
-- Flow 3:

Average throughput: 41.82 Mbit/s

95th percentile per-packet one-way delay: 17.189 ms

Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link

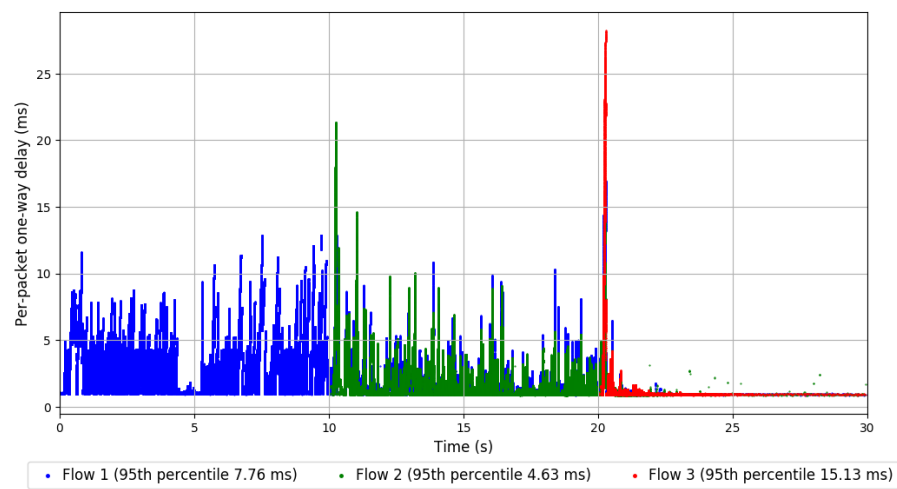
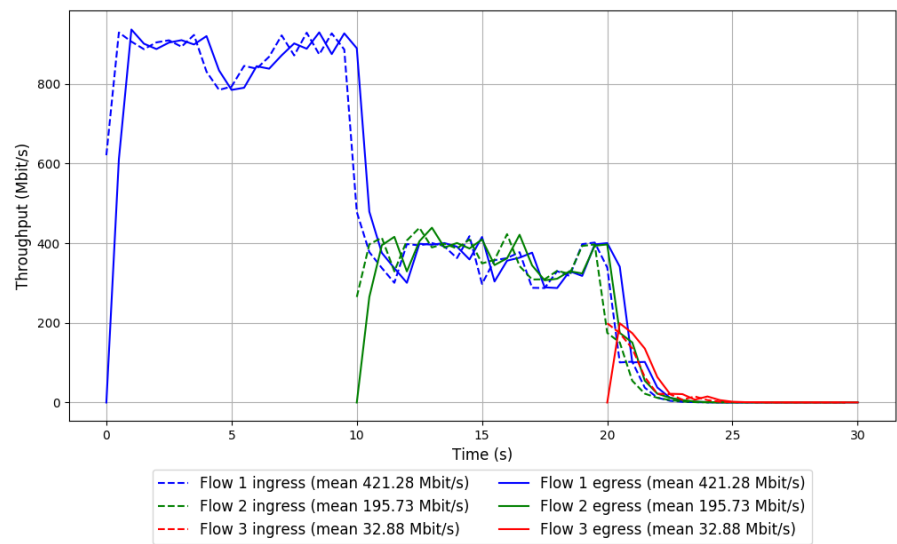


Run 4: Statistics of FillP-Sheep

Start at: 2019-01-22 03:59:18
End at: 2019-01-22 03:59:48
Local clock offset: 0.482 ms
Remote clock offset: -0.009 ms

Below is generated by plot.py at 2019-01-22 05:38:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 562.26 Mbit/s
95th percentile per-packet one-way delay: 7.453 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 421.28 Mbit/s
95th percentile per-packet one-way delay: 7.764 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 195.73 Mbit/s
95th percentile per-packet one-way delay: 4.630 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.88 Mbit/s
95th percentile per-packet one-way delay: 15.128 ms
Loss rate: 0.00%

Run 4: Report of FillP-Sheep — Data Link

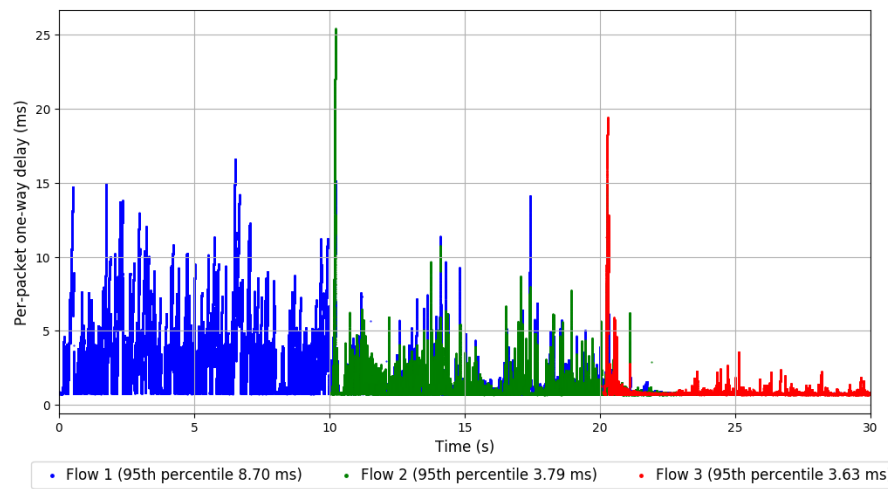
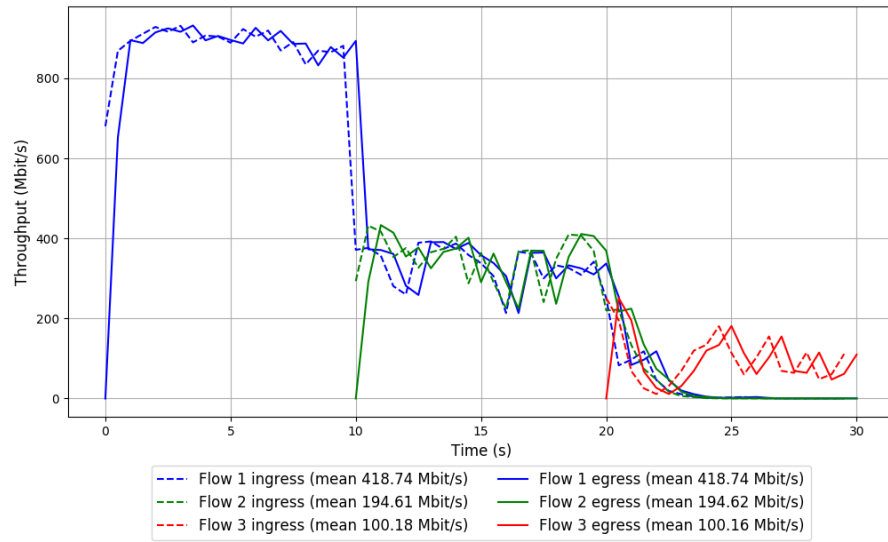


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-22 04:29:41
End at: 2019-01-22 04:30:11
Local clock offset: 2.108 ms
Remote clock offset: -3.033 ms

Below is generated by plot.py at 2019-01-22 05:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 580.79 Mbit/s
95th percentile per-packet one-way delay: 8.094 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 418.74 Mbit/s
95th percentile per-packet one-way delay: 8.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.62 Mbit/s
95th percentile per-packet one-way delay: 3.795 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.16 Mbit/s
95th percentile per-packet one-way delay: 3.632 ms
Loss rate: 0.08%

Run 5: Report of FillP-Sheep — Data Link

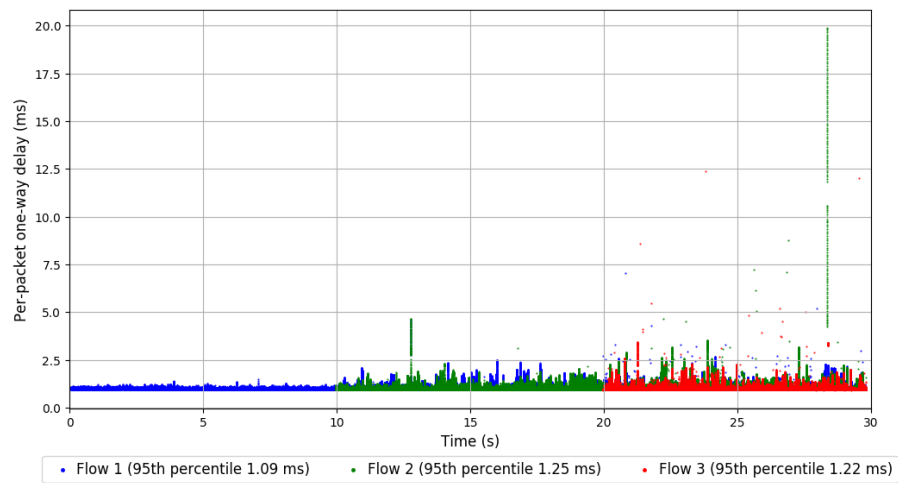
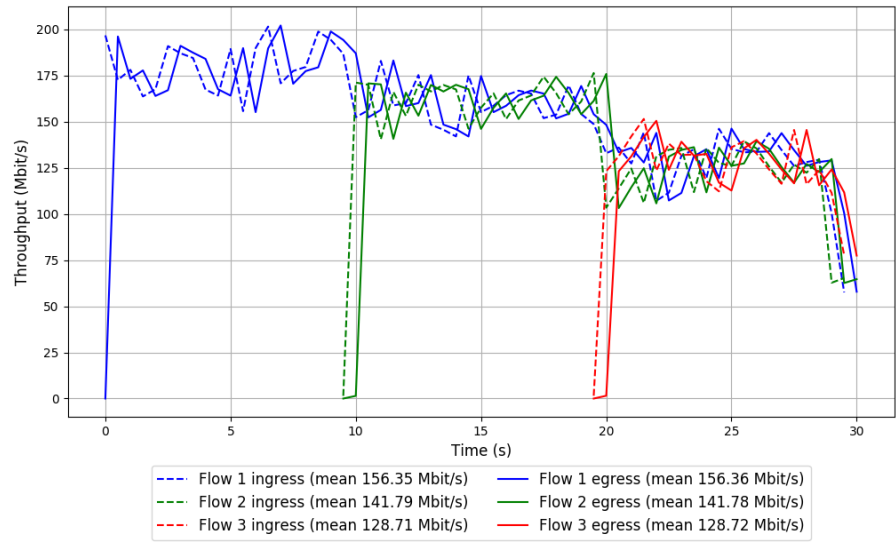


Run 1: Statistics of Indigo

Start at: 2019-01-22 02:48:53
End at: 2019-01-22 02:49:23
Local clock offset: 3.802 ms
Remote clock offset: -1.778 ms

Below is generated by plot.py at 2019-01-22 05:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 293.20 Mbit/s
95th percentile per-packet one-way delay: 1.164 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 156.36 Mbit/s
95th percentile per-packet one-way delay: 1.093 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 141.78 Mbit/s
95th percentile per-packet one-way delay: 1.247 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 128.72 Mbit/s
95th percentile per-packet one-way delay: 1.216 ms
Loss rate: 0.01%

Run 1: Report of Indigo — Data Link

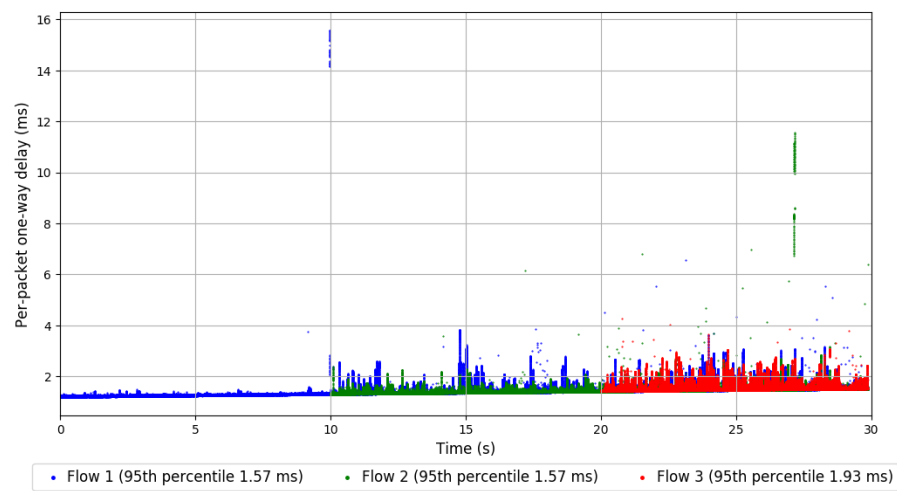
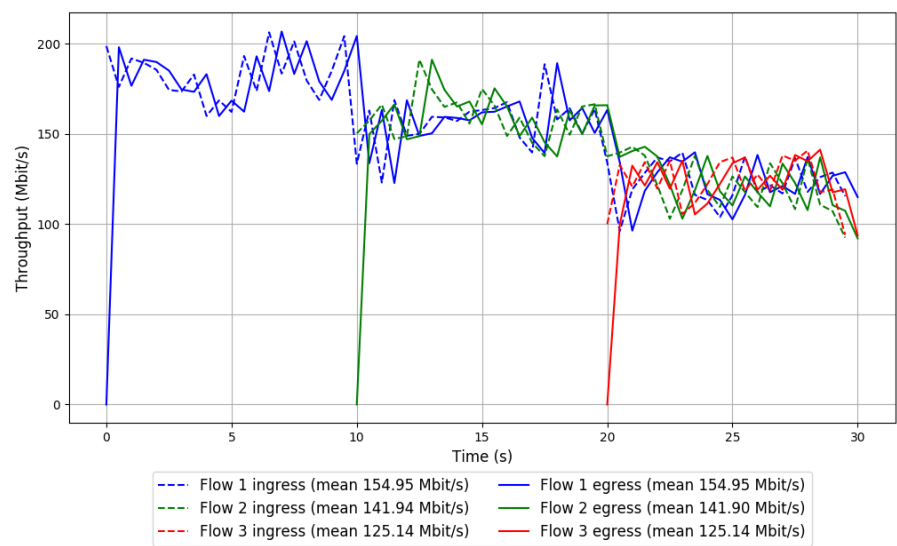


Run 2: Statistics of Indigo

Start at: 2019-01-22 03:19:05
End at: 2019-01-22 03:19:35
Local clock offset: 3.644 ms
Remote clock offset: -0.261 ms

Below is generated by plot.py at 2019-01-22 05:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 290.52 Mbit/s
95th percentile per-packet one-way delay: 1.637 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 154.95 Mbit/s
95th percentile per-packet one-way delay: 1.575 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 141.90 Mbit/s
95th percentile per-packet one-way delay: 1.571 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 125.14 Mbit/s
95th percentile per-packet one-way delay: 1.929 ms
Loss rate: 0.01%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-01-22 03:49:16

End at: 2019-01-22 03:49:46

Local clock offset: 2.808 ms

Remote clock offset: 6.623 ms

Below is generated by plot.py at 2019-01-22 05:41:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.23 Mbit/s

95th percentile per-packet one-way delay: 1.019 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 153.96 Mbit/s

95th percentile per-packet one-way delay: 1.025 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 145.86 Mbit/s

95th percentile per-packet one-way delay: 0.964 ms

Loss rate: 0.02%

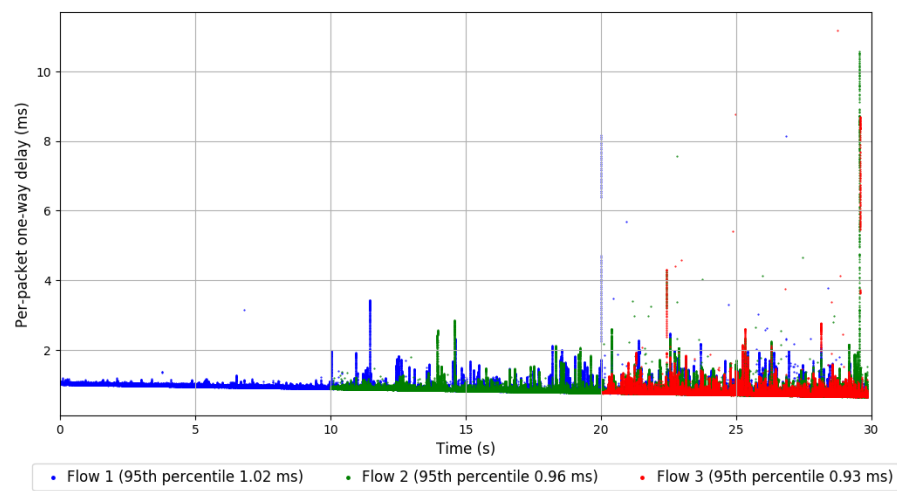
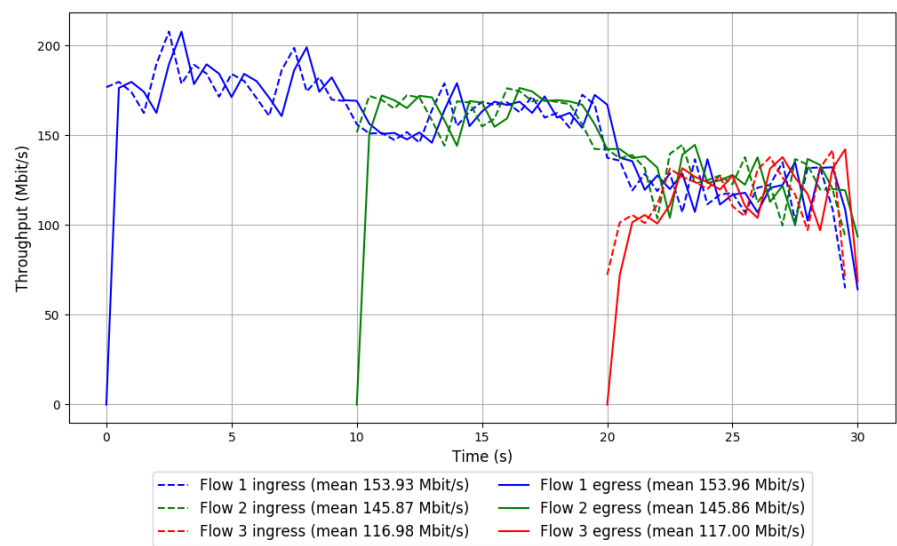
-- Flow 3:

Average throughput: 117.00 Mbit/s

95th percentile per-packet one-way delay: 0.931 ms

Loss rate: 0.03%

Run 3: Report of Indigo — Data Link

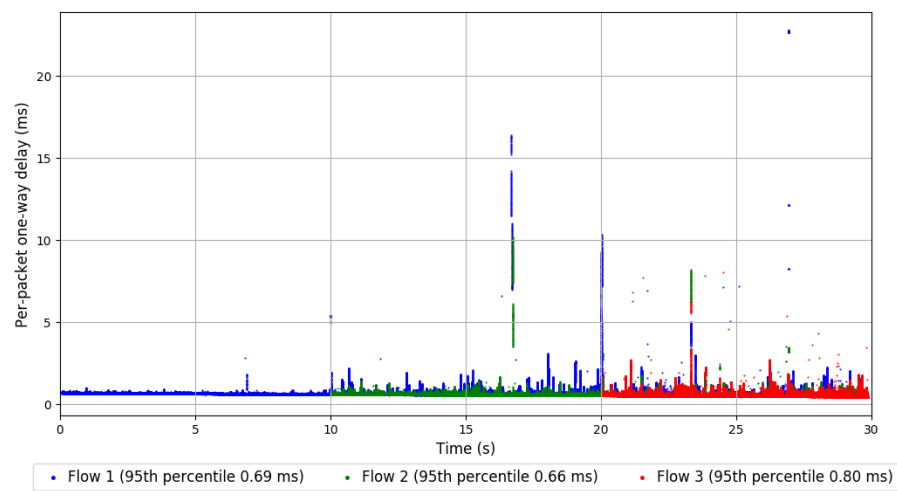
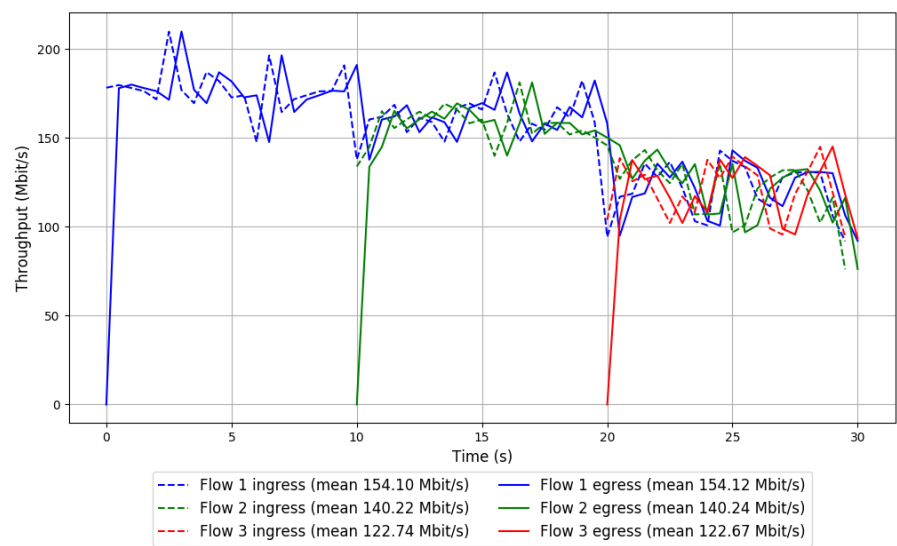


Run 4: Statistics of Indigo

Start at: 2019-01-22 04:19:43
End at: 2019-01-22 04:20:13
Local clock offset: -0.484 ms
Remote clock offset: -2.987 ms

Below is generated by plot.py at 2019-01-22 05:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 287.67 Mbit/s
95th percentile per-packet one-way delay: 0.694 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 154.12 Mbit/s
95th percentile per-packet one-way delay: 0.692 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 140.24 Mbit/s
95th percentile per-packet one-way delay: 0.657 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 122.67 Mbit/s
95th percentile per-packet one-way delay: 0.800 ms
Loss rate: 0.07%

Run 4: Report of Indigo — Data Link

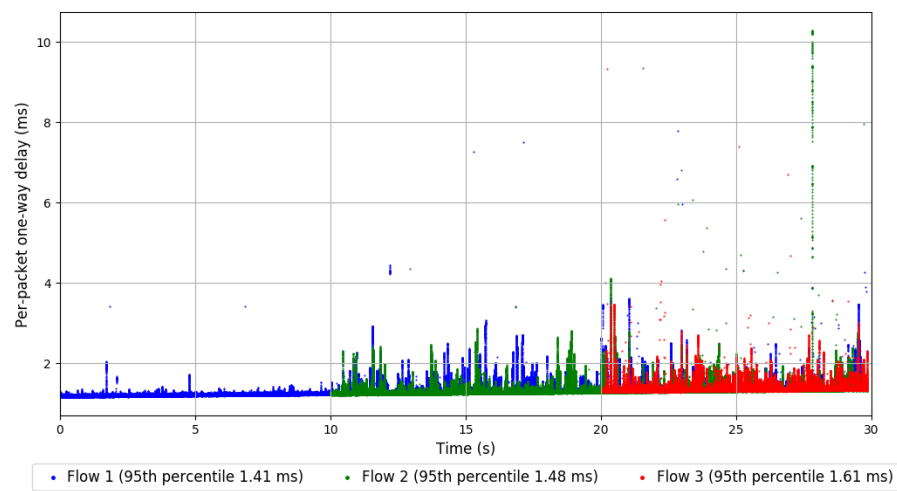
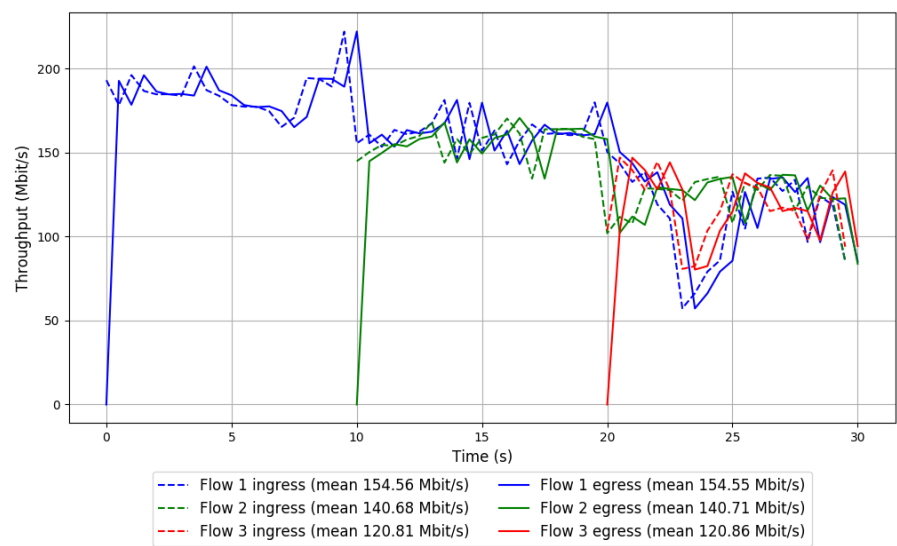


Run 5: Statistics of Indigo

Start at: 2019-01-22 04:49:59
End at: 2019-01-22 04:50:29
Local clock offset: 2.904 ms
Remote clock offset: -3.395 ms

Below is generated by plot.py at 2019-01-22 05:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 287.77 Mbit/s
95th percentile per-packet one-way delay: 1.468 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 154.55 Mbit/s
95th percentile per-packet one-way delay: 1.412 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 140.71 Mbit/s
95th percentile per-packet one-way delay: 1.480 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 120.86 Mbit/s
95th percentile per-packet one-way delay: 1.612 ms
Loss rate: 0.02%

Run 5: Report of Indigo — Data Link

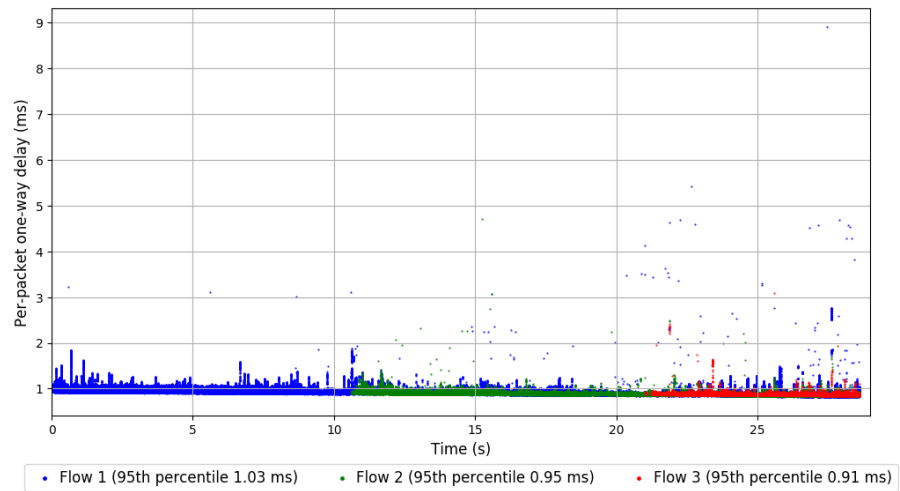
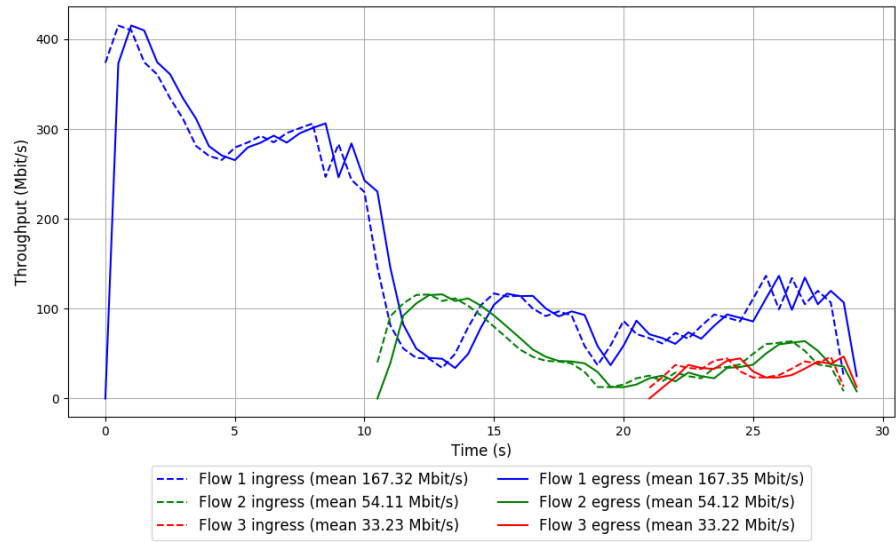


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-22 02:47:33
End at: 2019-01-22 02:48:03
Local clock offset: 3.742 ms
Remote clock offset: -1.658 ms

Below is generated by plot.py at 2019-01-22 05:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 210.14 Mbit/s
95th percentile per-packet one-way delay: 1.023 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.35 Mbit/s
95th percentile per-packet one-way delay: 1.031 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 54.12 Mbit/s
95th percentile per-packet one-way delay: 0.949 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 33.22 Mbit/s
95th percentile per-packet one-way delay: 0.913 ms
Loss rate: 0.06%

Run 1: Report of Indigo-MusesC3 — Data Link

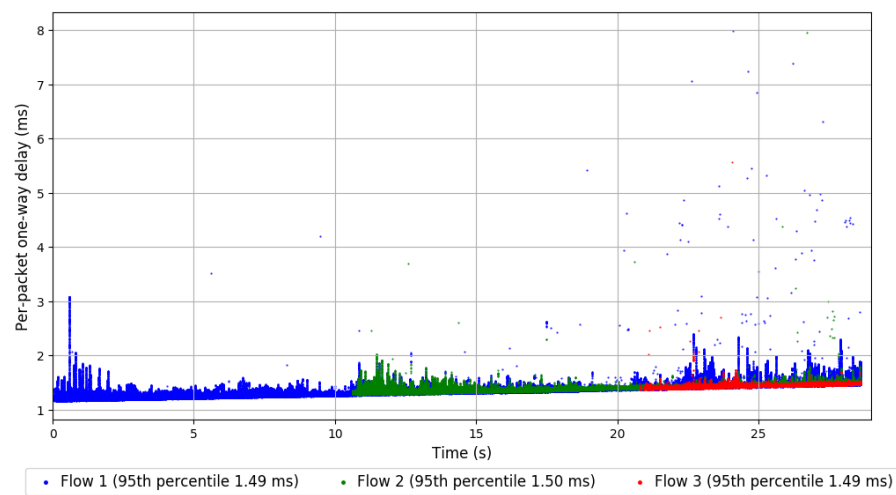
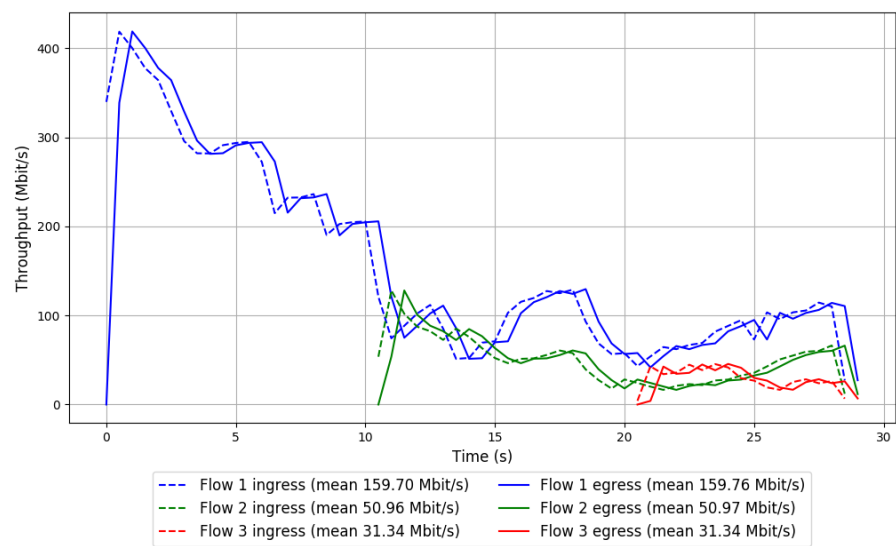


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-22 03:17:45
End at: 2019-01-22 03:18:15
Local clock offset: 3.661 ms
Remote clock offset: -1.063 ms

Below is generated by plot.py at 2019-01-22 05:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 200.32 Mbit/s
95th percentile per-packet one-way delay: 1.494 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 159.76 Mbit/s
95th percentile per-packet one-way delay: 1.488 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.97 Mbit/s
95th percentile per-packet one-way delay: 1.500 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 31.34 Mbit/s
95th percentile per-packet one-way delay: 1.492 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-22 03:47:55

End at: 2019-01-22 03:48:25

Local clock offset: 3.095 ms

Remote clock offset: 6.806 ms

Below is generated by plot.py at 2019-01-22 05:41:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.59 Mbit/s

95th percentile per-packet one-way delay: 1.239 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 177.66 Mbit/s

95th percentile per-packet one-way delay: 1.232 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.74 Mbit/s

95th percentile per-packet one-way delay: 1.241 ms

Loss rate: 0.00%

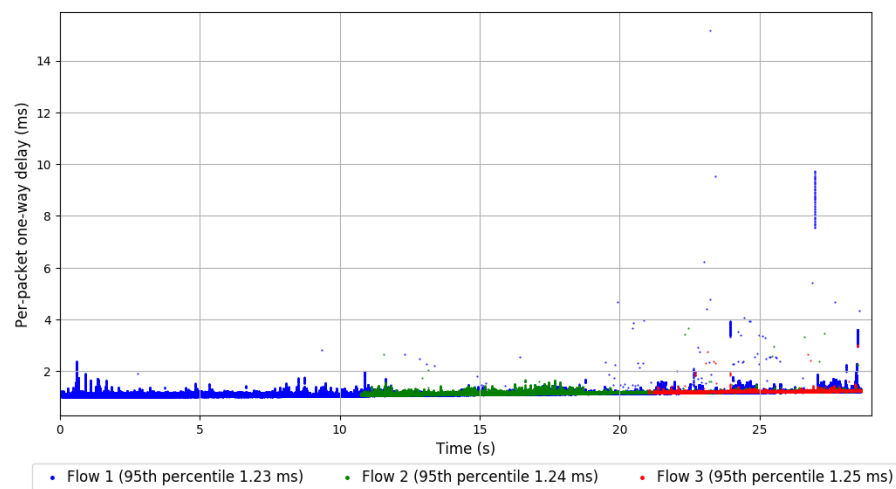
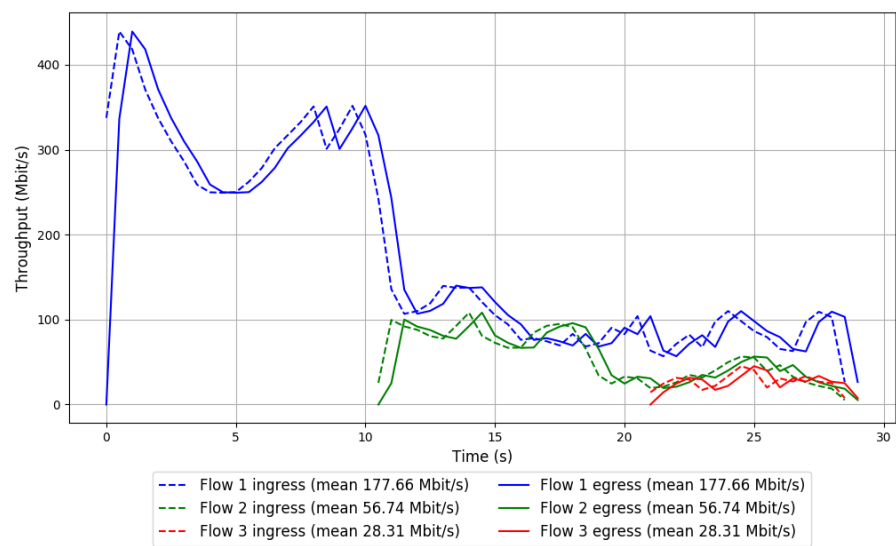
-- Flow 3:

Average throughput: 28.31 Mbit/s

95th percentile per-packet one-way delay: 1.252 ms

Loss rate: 0.00%

Run 3: Report of Indigo-MusesC3 — Data Link

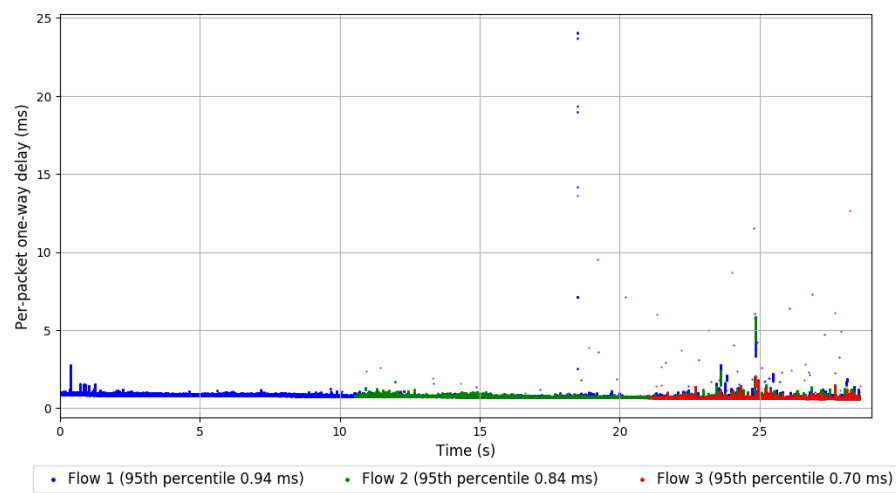
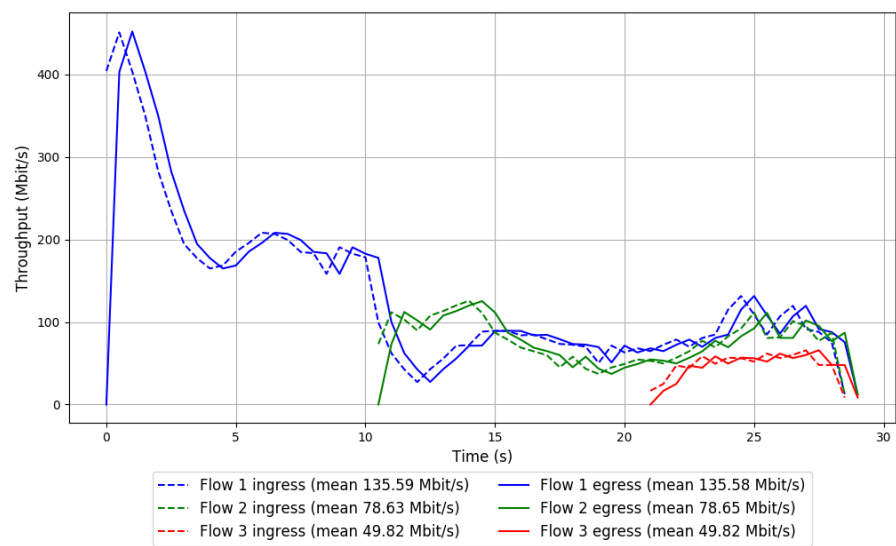


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-22 04:18:23
End at: 2019-01-22 04:18:53
Local clock offset: -0.953 ms
Remote clock offset: -3.011 ms

Below is generated by plot.py at 2019-01-22 05:41:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 198.44 Mbit/s
95th percentile per-packet one-way delay: 0.923 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 135.58 Mbit/s
95th percentile per-packet one-way delay: 0.935 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 78.65 Mbit/s
95th percentile per-packet one-way delay: 0.840 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.82 Mbit/s
95th percentile per-packet one-way delay: 0.705 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC3 — Data Link

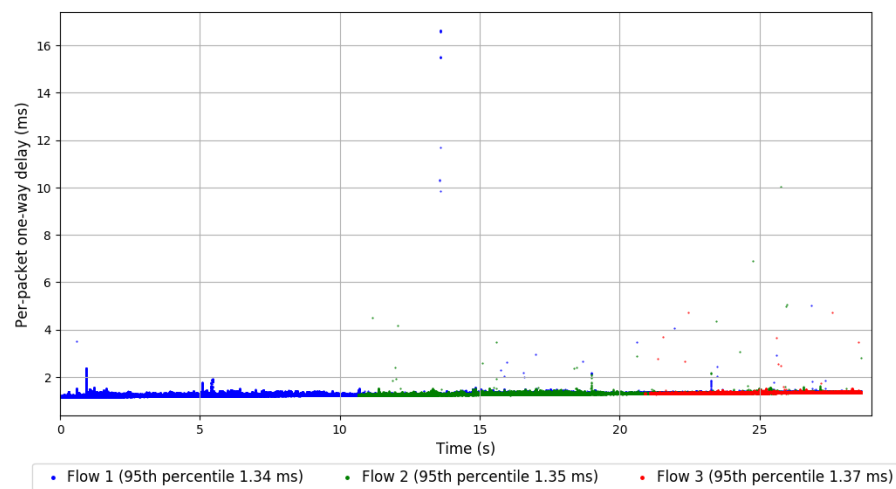
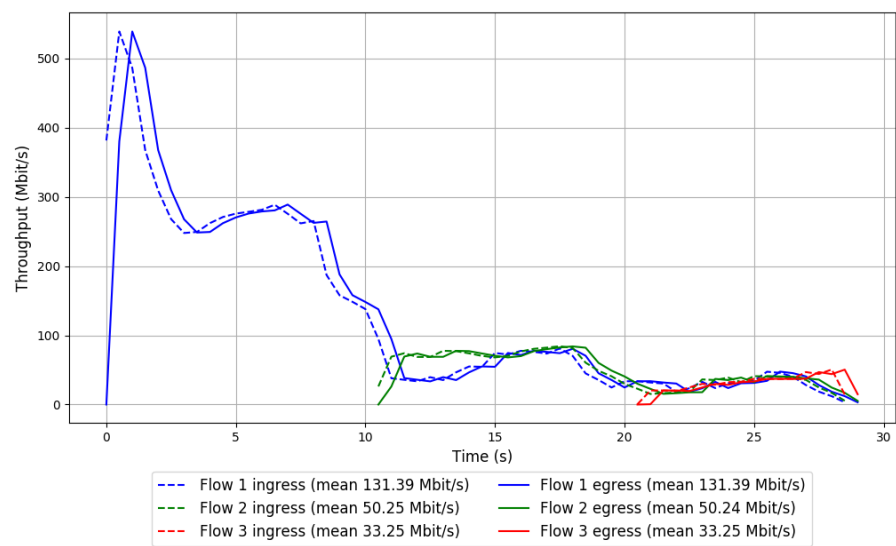


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-22 04:48:40
End at: 2019-01-22 04:49:10
Local clock offset: 3.539 ms
Remote clock offset: -3.244 ms

Below is generated by plot.py at 2019-01-22 05:42:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 171.88 Mbit/s
95th percentile per-packet one-way delay: 1.350 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 131.39 Mbit/s
95th percentile per-packet one-way delay: 1.342 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.24 Mbit/s
95th percentile per-packet one-way delay: 1.354 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 33.25 Mbit/s
95th percentile per-packet one-way delay: 1.373 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesC3 — Data Link

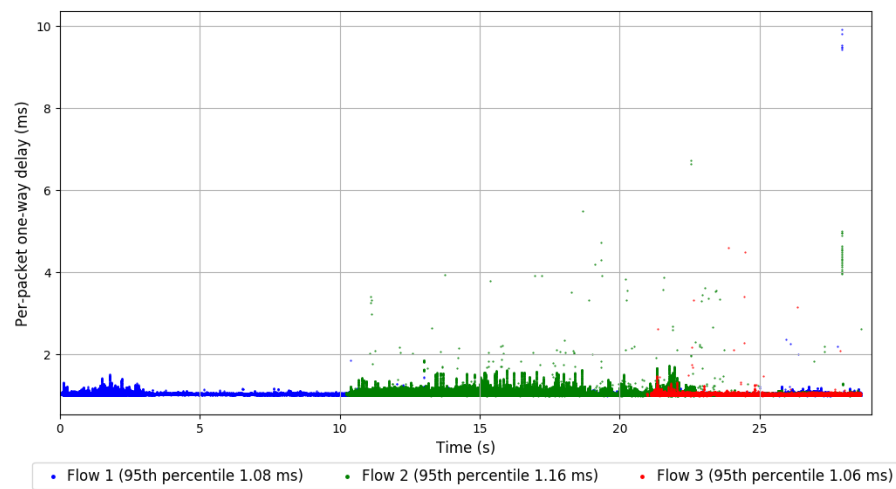
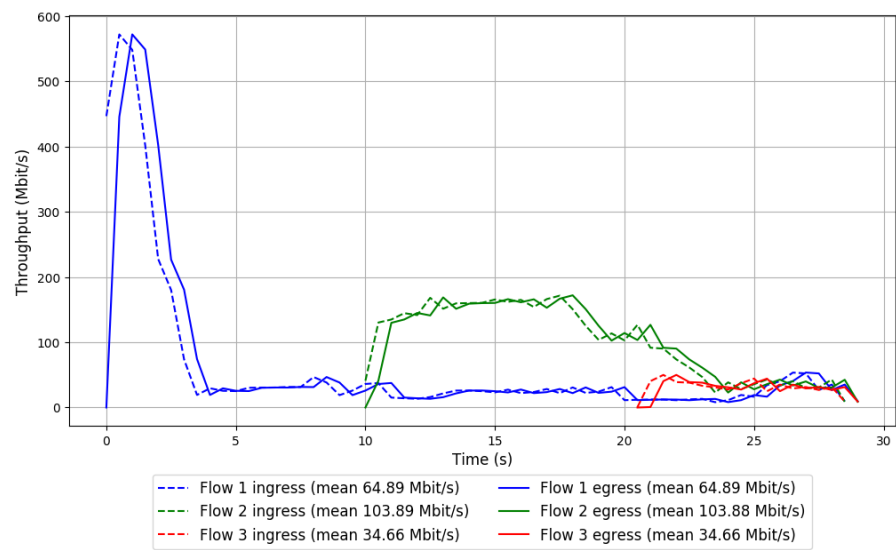


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-22 02:55:46
End at: 2019-01-22 02:56:16
Local clock offset: 3.424 ms
Remote clock offset: -2.482 ms

Below is generated by plot.py at 2019-01-22 05:42:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 140.87 Mbit/s
95th percentile per-packet one-way delay: 1.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 1.076 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 103.88 Mbit/s
95th percentile per-packet one-way delay: 1.160 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 34.66 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-22 03:25:57

End at: 2019-01-22 03:26:27

Local clock offset: 3.204 ms

Remote clock offset: 2.676 ms

Below is generated by plot.py at 2019-01-22 05:43:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.41 Mbit/s

95th percentile per-packet one-way delay: 1.278 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 137.24 Mbit/s

95th percentile per-packet one-way delay: 1.239 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 109.02 Mbit/s

95th percentile per-packet one-way delay: 1.344 ms

Loss rate: 0.00%

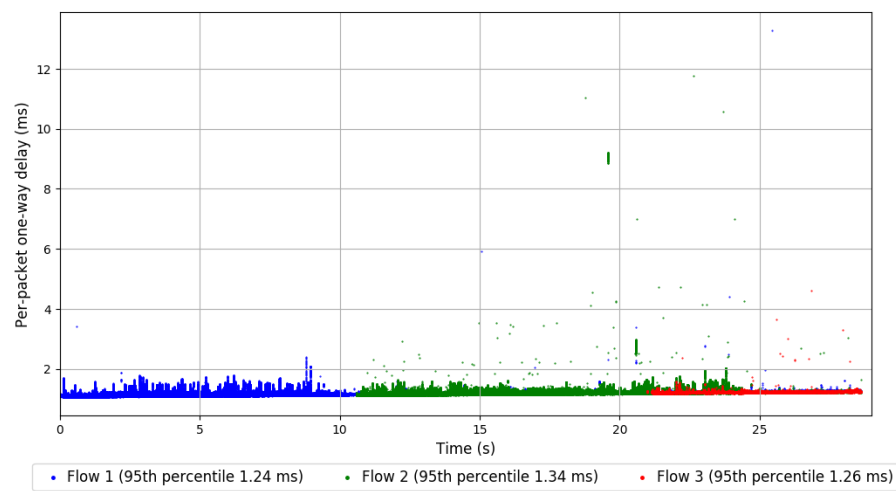
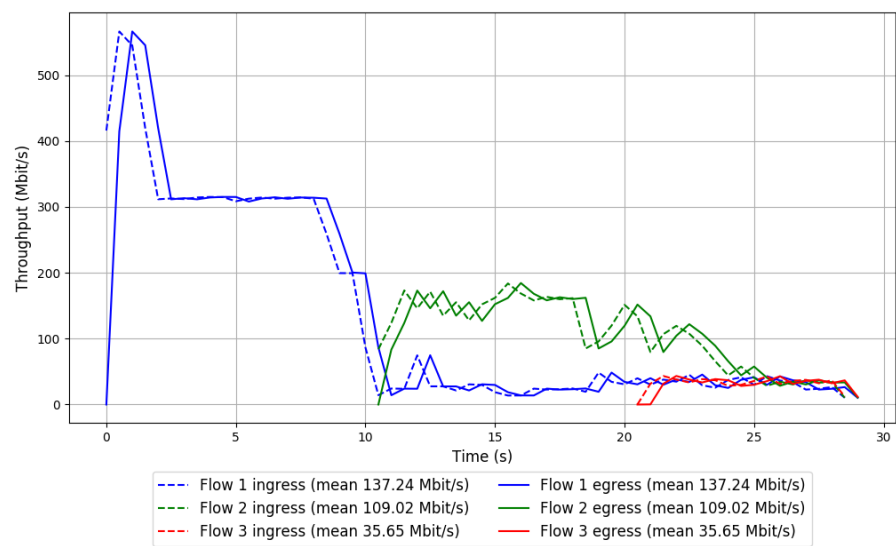
-- Flow 3:

Average throughput: 35.65 Mbit/s

95th percentile per-packet one-way delay: 1.256 ms

Loss rate: 0.09%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-22 03:56:16

End at: 2019-01-22 03:56:46

Local clock offset: 0.98 ms

Remote clock offset: 1.372 ms

Below is generated by plot.py at 2019-01-22 05:43:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.63 Mbit/s

95th percentile per-packet one-way delay: 1.011 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 130.81 Mbit/s

95th percentile per-packet one-way delay: 1.025 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.65 Mbit/s

95th percentile per-packet one-way delay: 0.884 ms

Loss rate: 0.00%

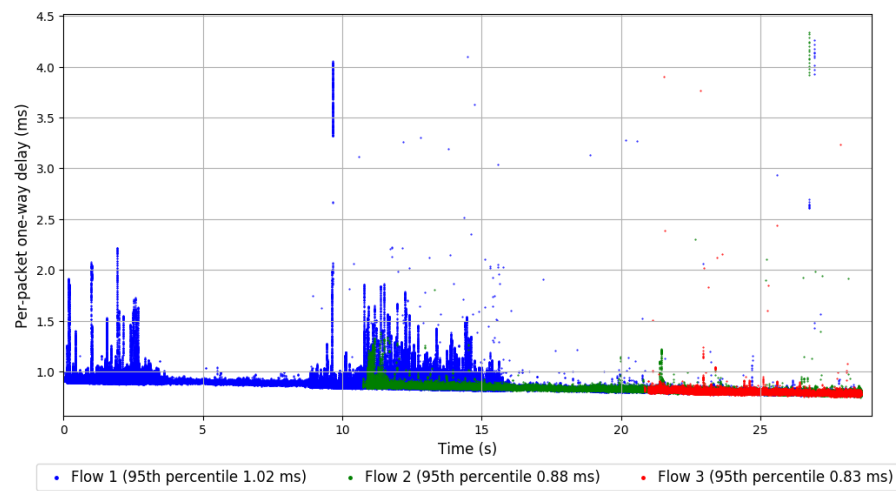
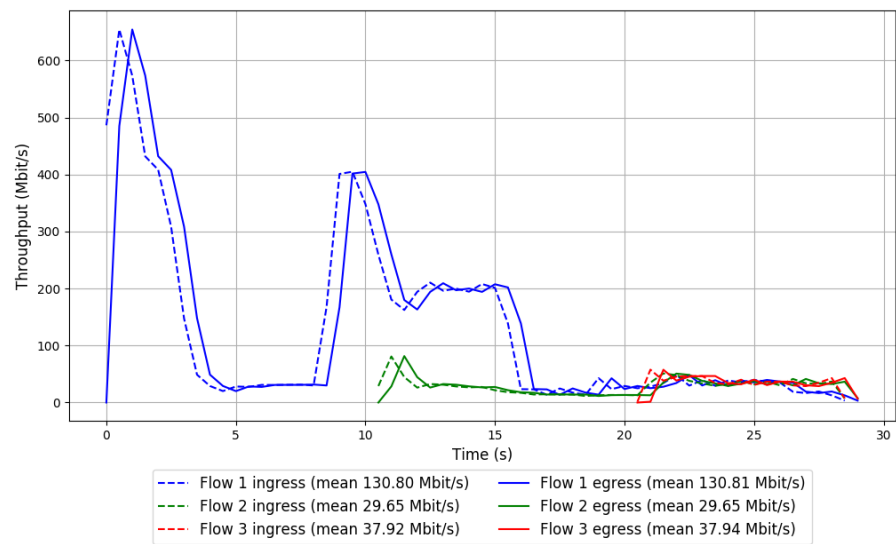
-- Flow 3:

Average throughput: 37.94 Mbit/s

95th percentile per-packet one-way delay: 0.833 ms

Loss rate: 0.05%

Run 3: Report of Indigo-MusesC5 — Data Link

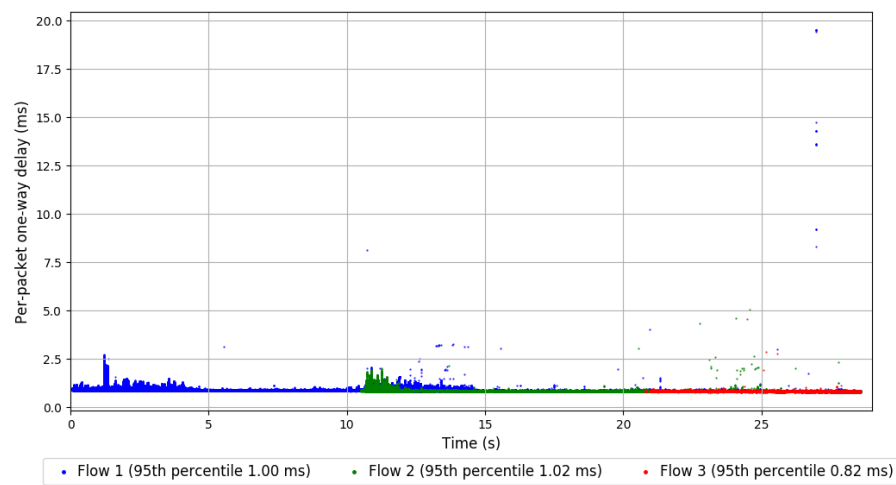
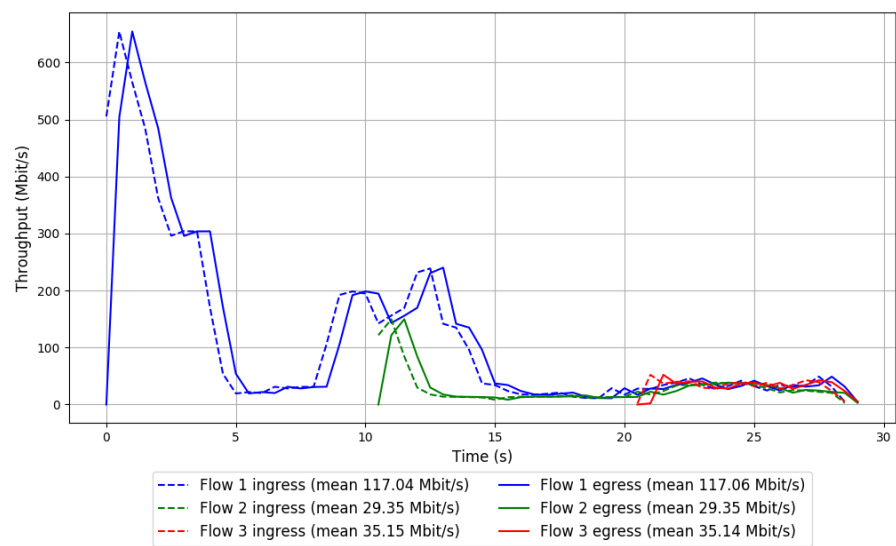


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-22 04:26:38
End at: 2019-01-22 04:27:08
Local clock offset: 1.562 ms
Remote clock offset: -3.143 ms

Below is generated by plot.py at 2019-01-22 05:43:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 145.20 Mbit/s
95th percentile per-packet one-way delay: 0.997 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 117.06 Mbit/s
95th percentile per-packet one-way delay: 1.002 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 1.024 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.14 Mbit/s
95th percentile per-packet one-way delay: 0.825 ms
Loss rate: 0.08%

Run 4: Report of Indigo-MusesC5 — Data Link

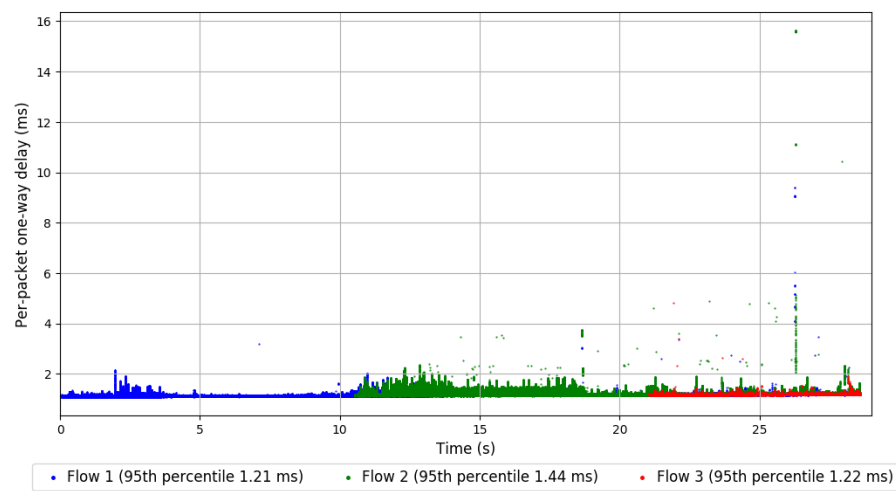
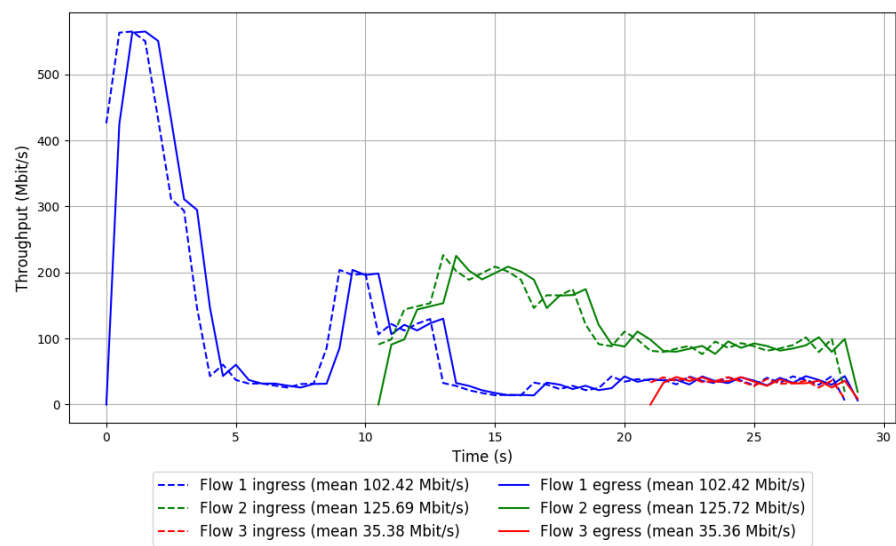


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-22 04:56:44
End at: 2019-01-22 04:57:14
Local clock offset: 1.032 ms
Remote clock offset: -3.469 ms

Below is generated by plot.py at 2019-01-22 05:43:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 191.17 Mbit/s
95th percentile per-packet one-way delay: 1.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 102.42 Mbit/s
95th percentile per-packet one-way delay: 1.205 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 125.72 Mbit/s
95th percentile per-packet one-way delay: 1.438 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.36 Mbit/s
95th percentile per-packet one-way delay: 1.218 ms
Loss rate: 0.08%

Run 5: Report of Indigo-MusesC5 — Data Link

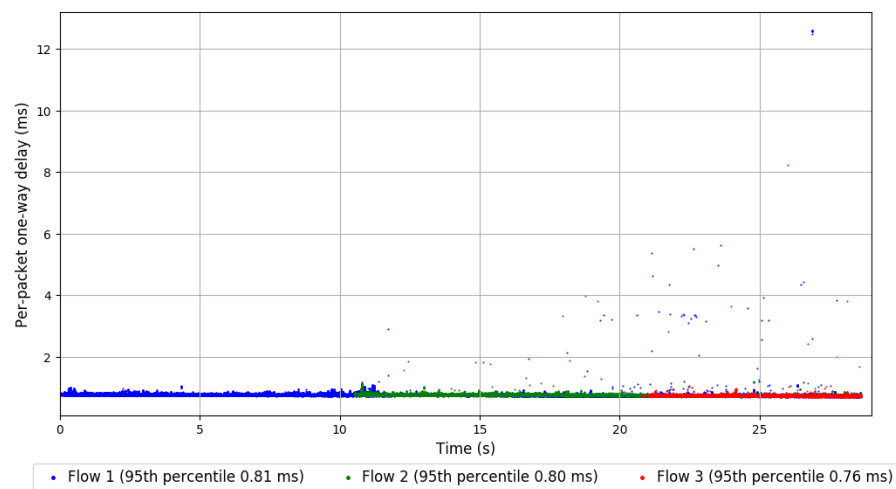
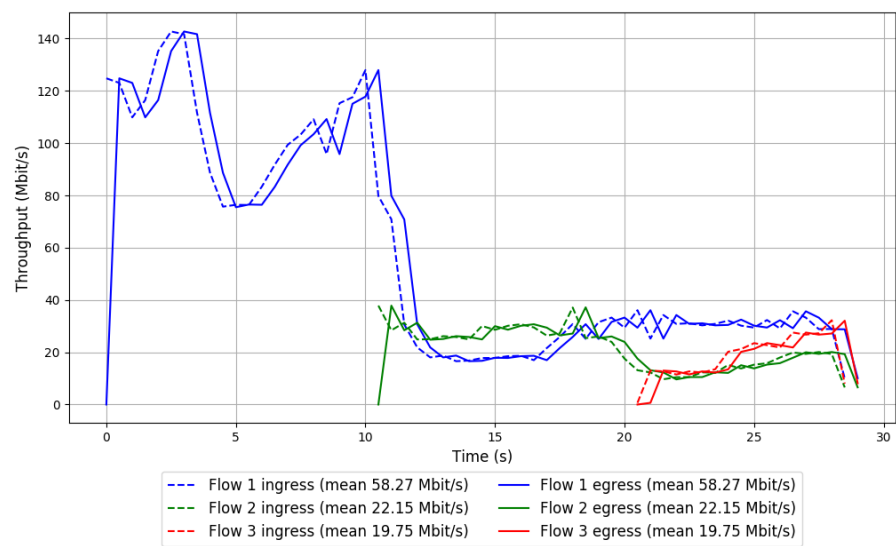


Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-22 02:34:34
End at: 2019-01-22 02:35:04
Local clock offset: 2.283 ms
Remote clock offset: -0.112 ms

Below is generated by plot.py at 2019-01-22 05:43:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.62 Mbit/s
95th percentile per-packet one-way delay: 0.804 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 58.27 Mbit/s
95th percentile per-packet one-way delay: 0.805 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.15 Mbit/s
95th percentile per-packet one-way delay: 0.801 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.75 Mbit/s
95th percentile per-packet one-way delay: 0.763 ms
Loss rate: 0.05%

Run 1: Report of Indigo-MusesD — Data Link

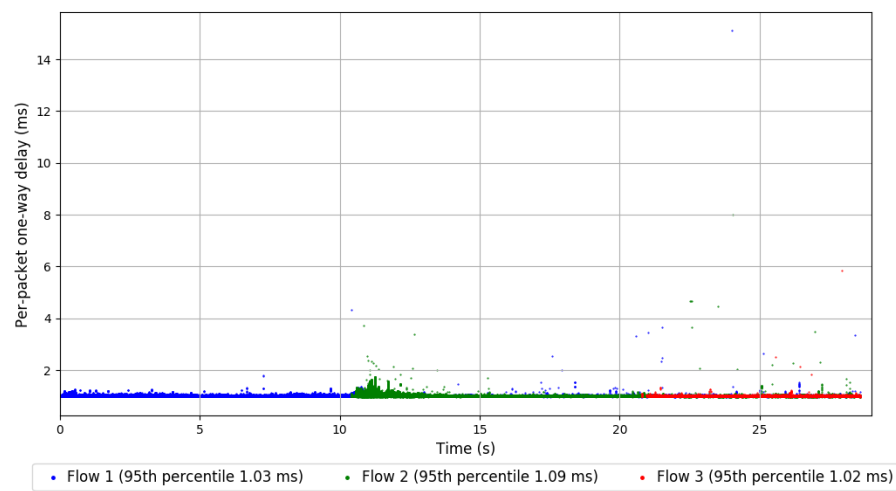
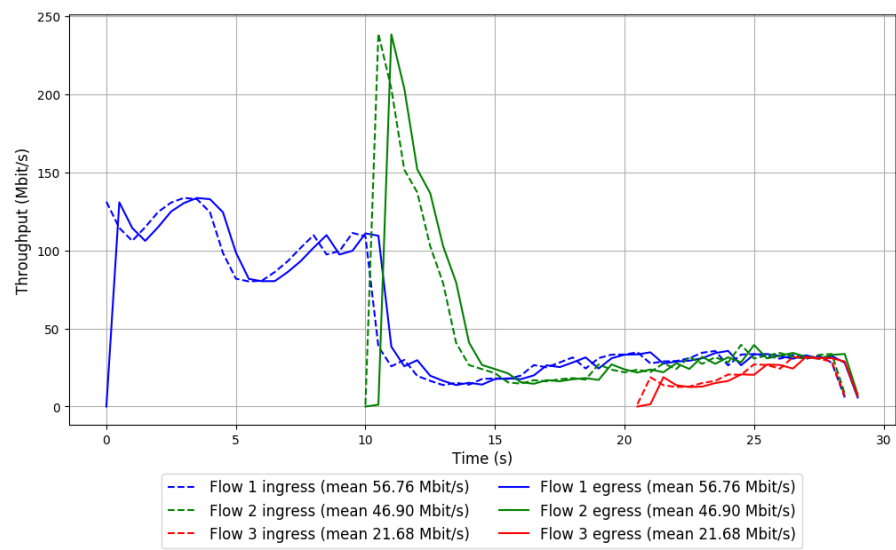


Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-22 03:04:52
End at: 2019-01-22 03:05:22
Local clock offset: 3.409 ms
Remote clock offset: -2.812 ms

Below is generated by plot.py at 2019-01-22 05:43:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 1.045 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 56.76 Mbit/s
95th percentile per-packet one-way delay: 1.035 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.90 Mbit/s
95th percentile per-packet one-way delay: 1.093 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 21.68 Mbit/s
95th percentile per-packet one-way delay: 1.022 ms
Loss rate: 0.01%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-22 03:35:05

End at: 2019-01-22 03:35:35

Local clock offset: 3.039 ms

Remote clock offset: 4.951 ms

Below is generated by plot.py at 2019-01-22 05:43:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.16 Mbit/s

95th percentile per-packet one-way delay: 1.057 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 56.32 Mbit/s

95th percentile per-packet one-way delay: 1.048 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 22.71 Mbit/s

95th percentile per-packet one-way delay: 1.061 ms

Loss rate: 0.01%

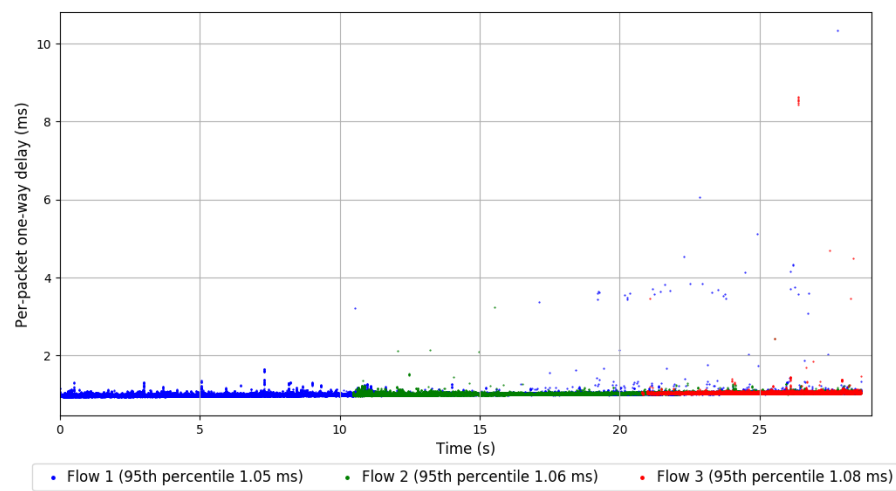
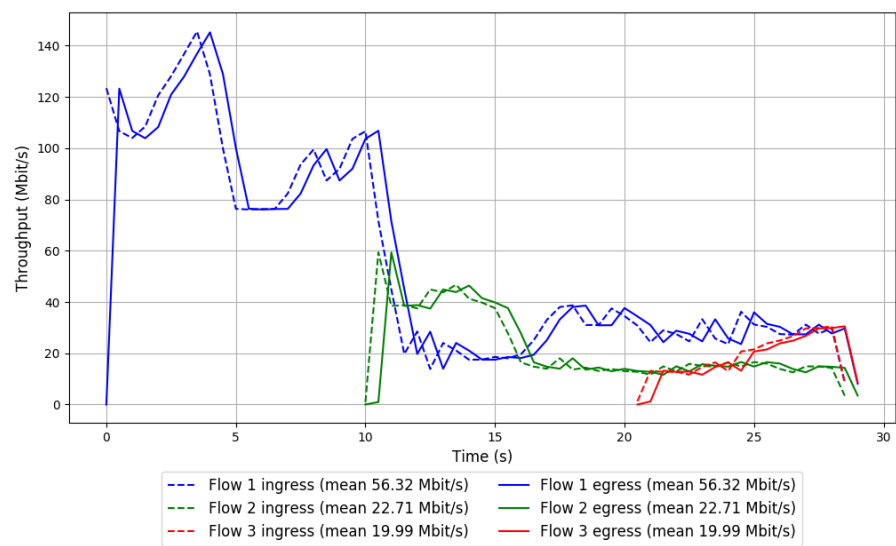
-- Flow 3:

Average throughput: 19.99 Mbit/s

95th percentile per-packet one-way delay: 1.078 ms

Loss rate: 0.06%

Run 3: Report of Indigo-MusesD — Data Link

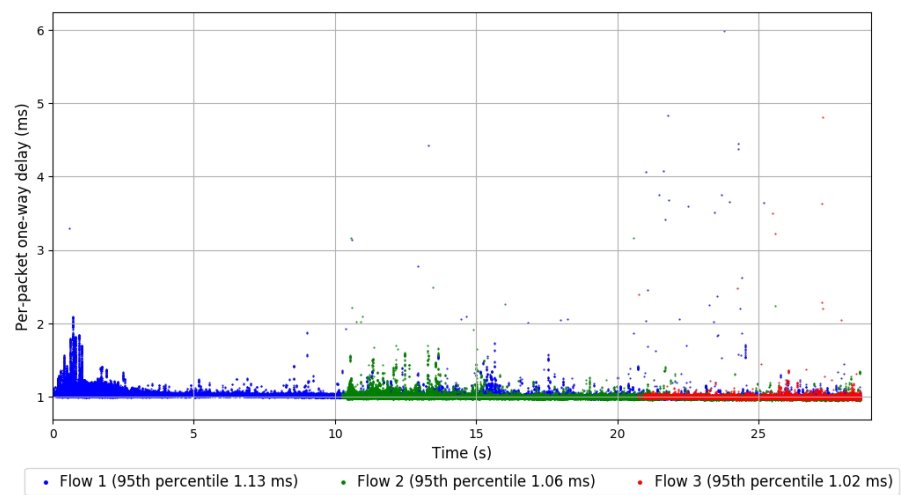
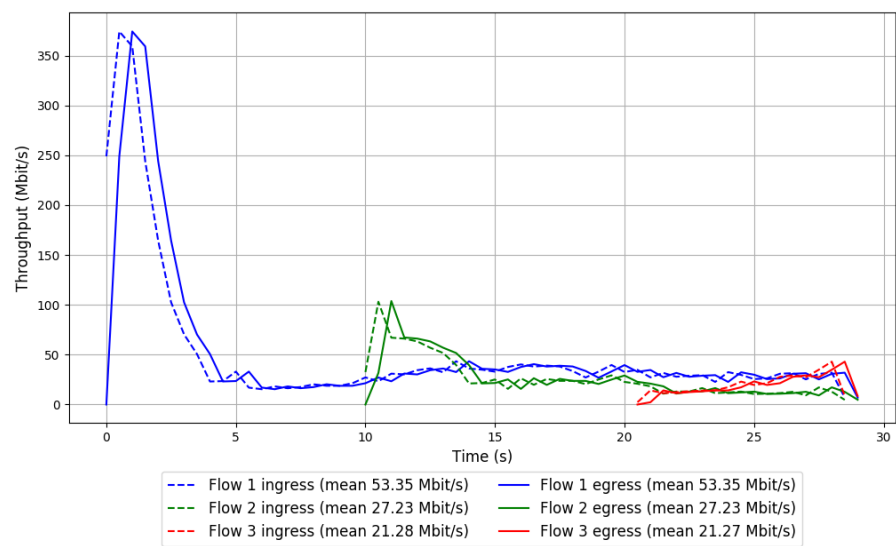


Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-22 04:05:24
End at: 2019-01-22 04:05:54
Local clock offset: -0.169 ms
Remote clock offset: -1.599 ms

Below is generated by plot.py at 2019-01-22 05:43:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.66 Mbit/s
95th percentile per-packet one-way delay: 1.120 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.35 Mbit/s
95th percentile per-packet one-way delay: 1.134 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.23 Mbit/s
95th percentile per-packet one-way delay: 1.061 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.27 Mbit/s
95th percentile per-packet one-way delay: 1.024 ms
Loss rate: 0.07%

Run 4: Report of Indigo-MusesD — Data Link

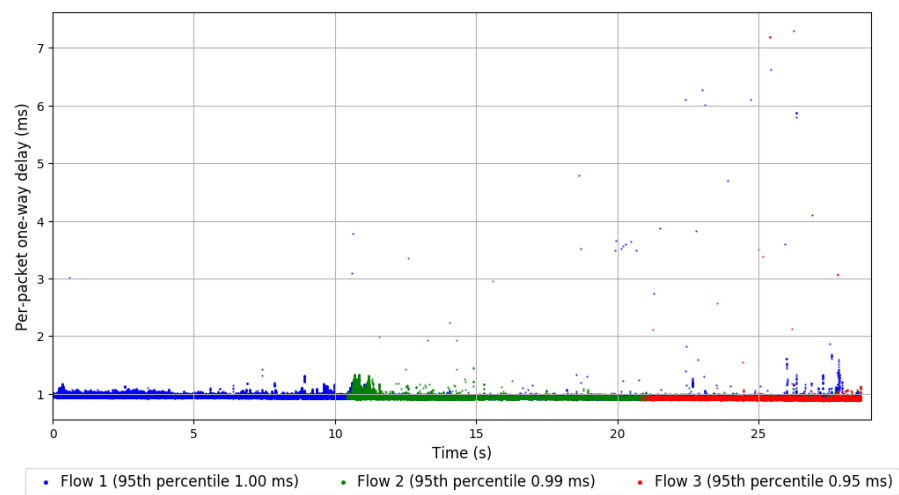
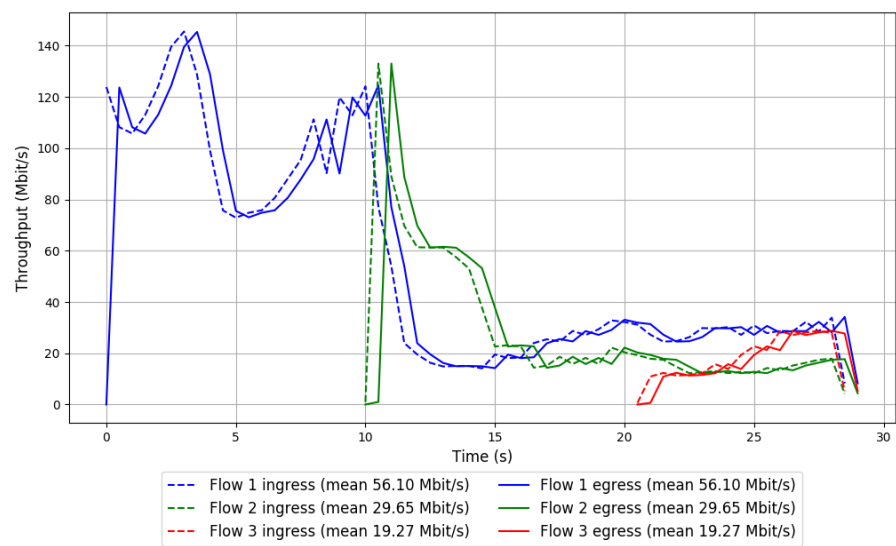


Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-22 04:35:44
End at: 2019-01-22 04:36:14
Local clock offset: 2.796 ms
Remote clock offset: -3.167 ms

Below is generated by plot.py at 2019-01-22 05:43:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.11 Mbit/s
95th percentile per-packet one-way delay: 0.999 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.10 Mbit/s
95th percentile per-packet one-way delay: 1.002 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.65 Mbit/s
95th percentile per-packet one-way delay: 0.988 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.27 Mbit/s
95th percentile per-packet one-way delay: 0.947 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link

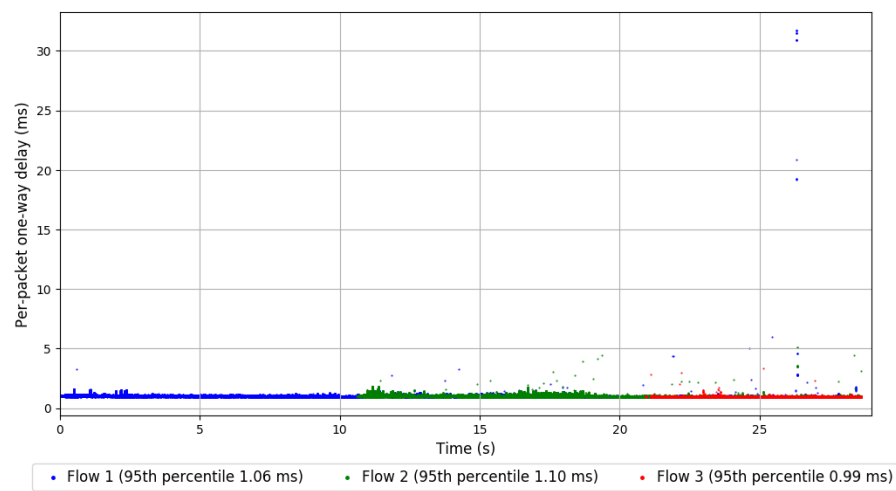
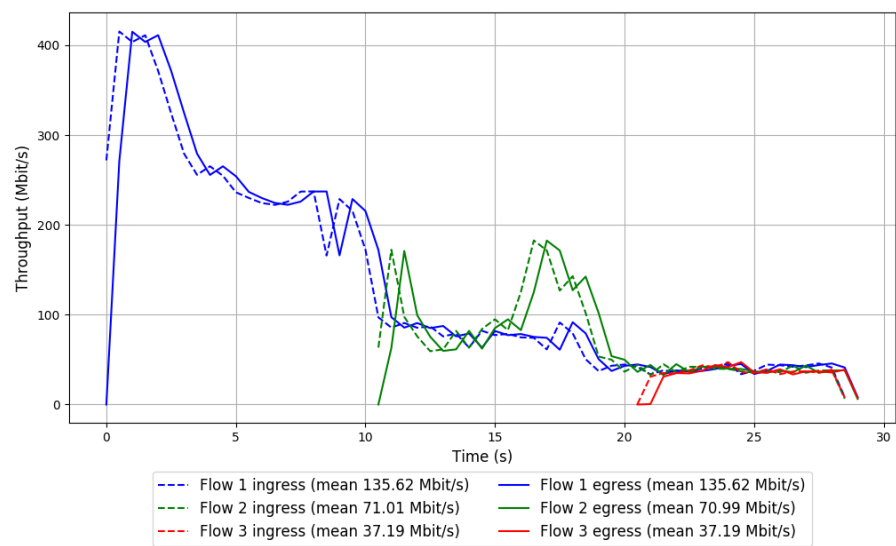


Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-22 02:50:20
End at: 2019-01-22 02:50:50
Local clock offset: 3.689 ms
Remote clock offset: -1.967 ms

Below is generated by plot.py at 2019-01-22 05:44:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 190.24 Mbit/s
95th percentile per-packet one-way delay: 1.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 135.62 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 1.105 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 37.19 Mbit/s
95th percentile per-packet one-way delay: 0.990 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-22 03:20:32

End at: 2019-01-22 03:21:02

Local clock offset: 3.48 ms

Remote clock offset: 0.648 ms

Below is generated by plot.py at 2019-01-22 05:44:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.84 Mbit/s

95th percentile per-packet one-way delay: 1.283 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 142.53 Mbit/s

95th percentile per-packet one-way delay: 1.281 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.70 Mbit/s

95th percentile per-packet one-way delay: 1.289 ms

Loss rate: 0.00%

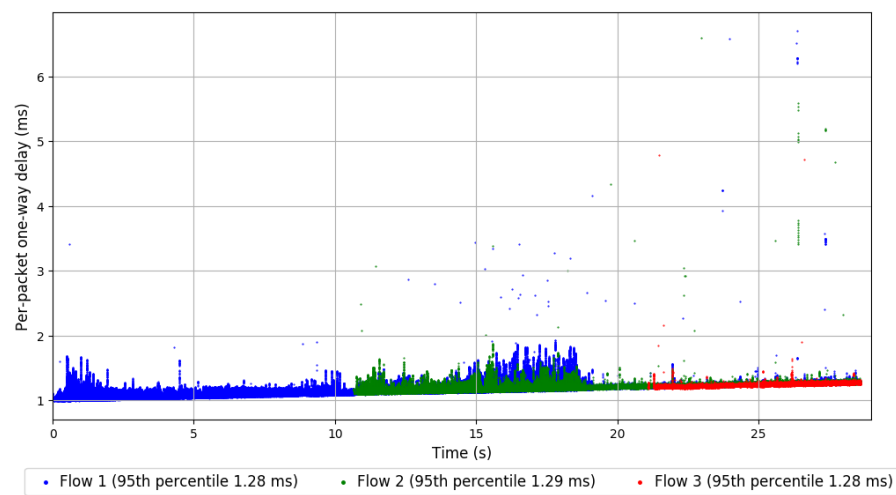
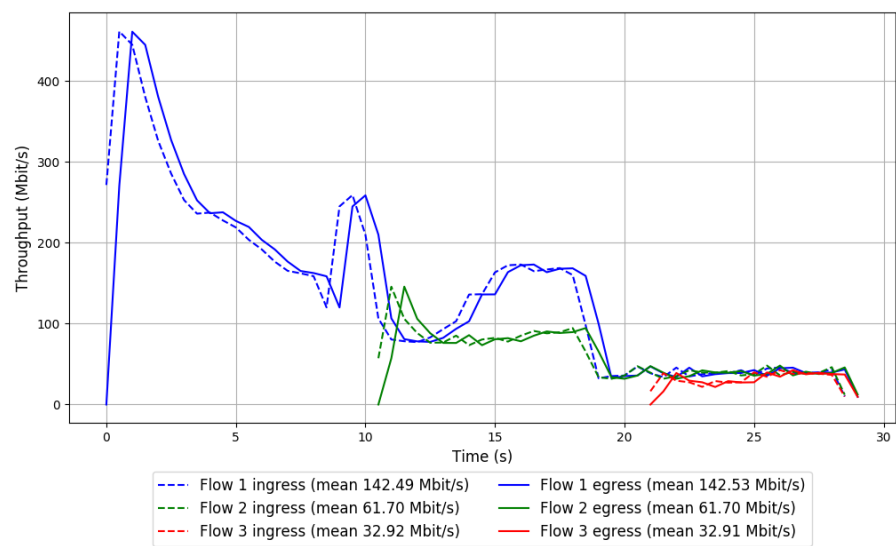
-- Flow 3:

Average throughput: 32.91 Mbit/s

95th percentile per-packet one-way delay: 1.276 ms

Loss rate: 0.09%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-22 03:50:43

End at: 2019-01-22 03:51:13

Local clock offset: 2.312 ms

Remote clock offset: 5.29 ms

Below is generated by plot.py at 2019-01-22 05:44:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.53 Mbit/s

95th percentile per-packet one-way delay: 0.894 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 144.40 Mbit/s

95th percentile per-packet one-way delay: 0.904 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.43 Mbit/s

95th percentile per-packet one-way delay: 0.799 ms

Loss rate: 0.00%

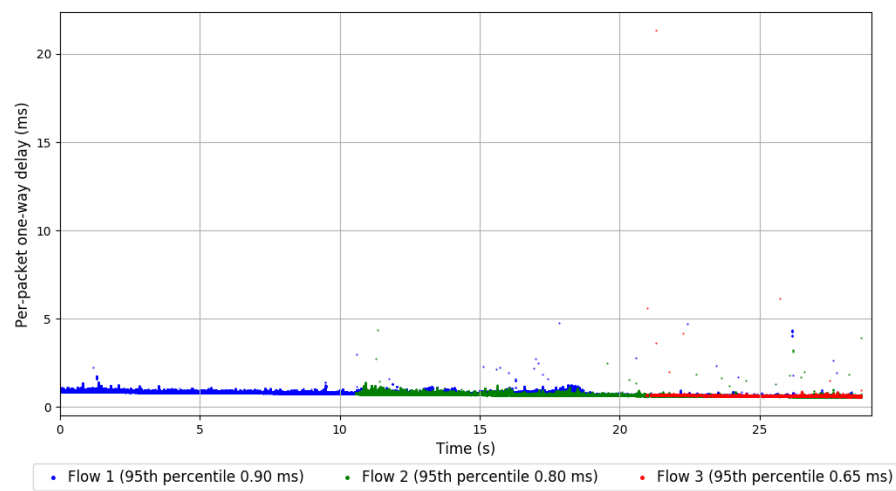
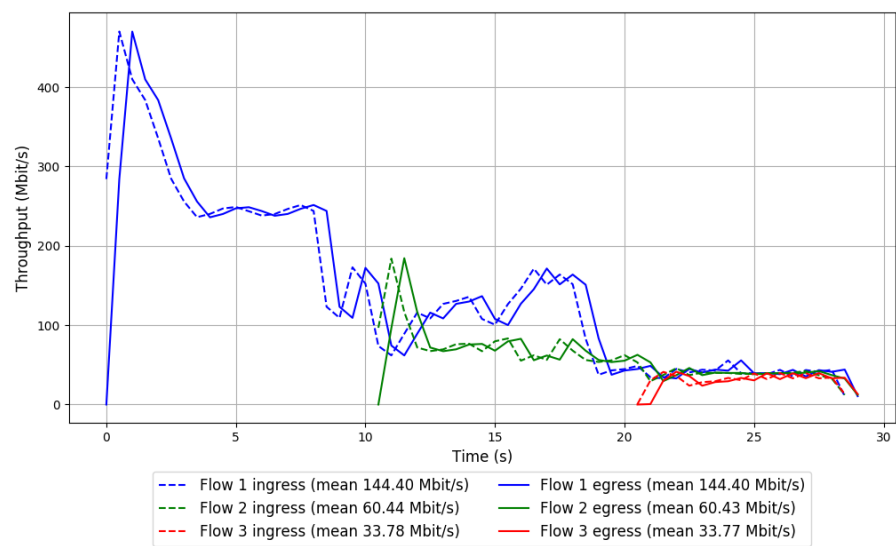
-- Flow 3:

Average throughput: 33.77 Mbit/s

95th percentile per-packet one-way delay: 0.652 ms

Loss rate: 0.06%

Run 3: Report of Indigo-MusesT — Data Link

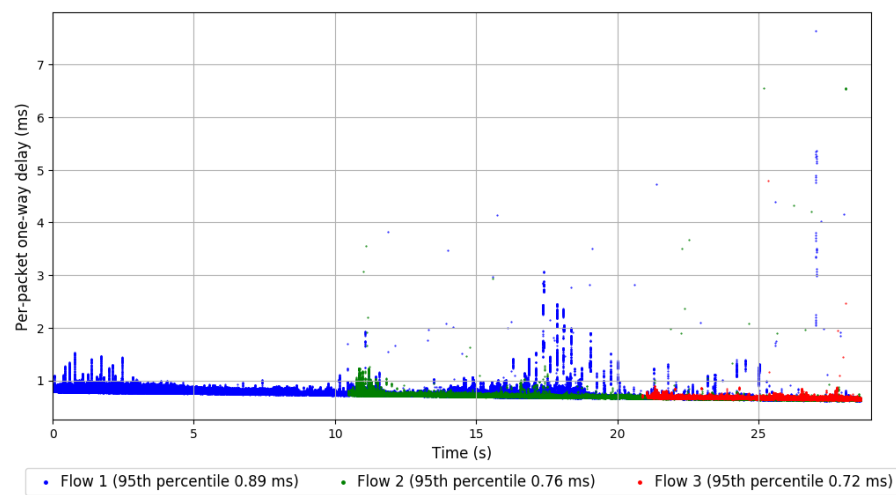
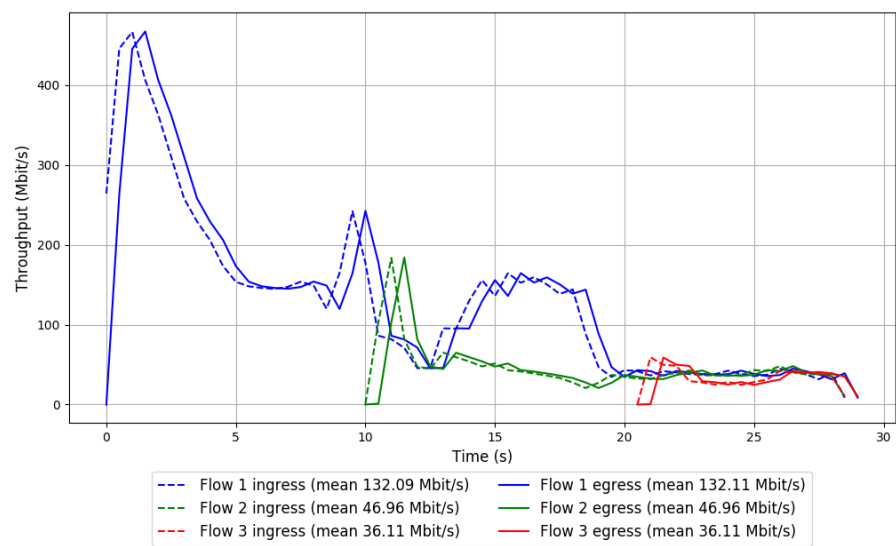


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-22 04:21:09
End at: 2019-01-22 04:21:39
Local clock offset: 0.091 ms
Remote clock offset: -3.139 ms

Below is generated by plot.py at 2019-01-22 05:44:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 171.62 Mbit/s
95th percentile per-packet one-way delay: 0.880 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.11 Mbit/s
95th percentile per-packet one-way delay: 0.891 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.96 Mbit/s
95th percentile per-packet one-way delay: 0.755 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 0.716 ms
Loss rate: 0.07%

Run 4: Report of Indigo-MusesT — Data Link

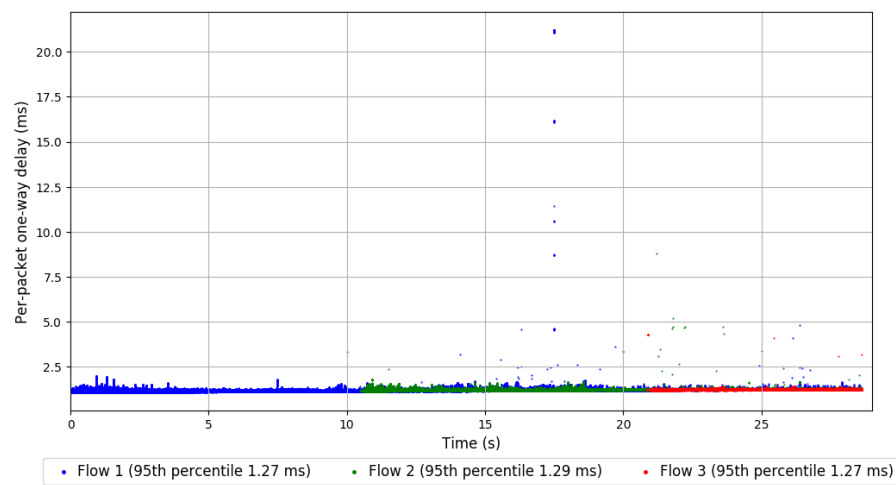
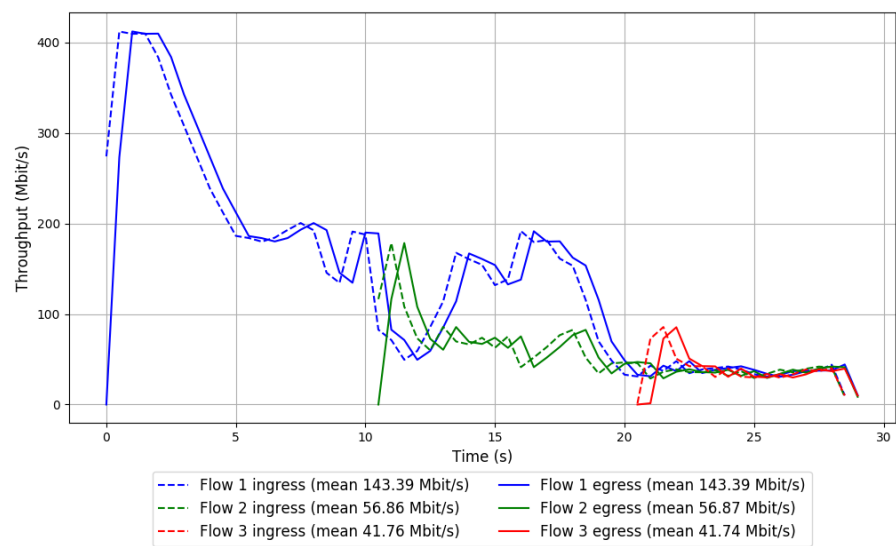


Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-22 04:51:26
End at: 2019-01-22 04:51:56
Local clock offset: 2.461 ms
Remote clock offset: -3.275 ms

Below is generated by plot.py at 2019-01-22 05:44:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 190.67 Mbit/s
95th percentile per-packet one-way delay: 1.275 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 143.39 Mbit/s
95th percentile per-packet one-way delay: 1.270 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.87 Mbit/s
95th percentile per-packet one-way delay: 1.286 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 41.74 Mbit/s
95th percentile per-packet one-way delay: 1.270 ms
Loss rate: 0.04%

Run 5: Report of Indigo-MusesT — Data Link

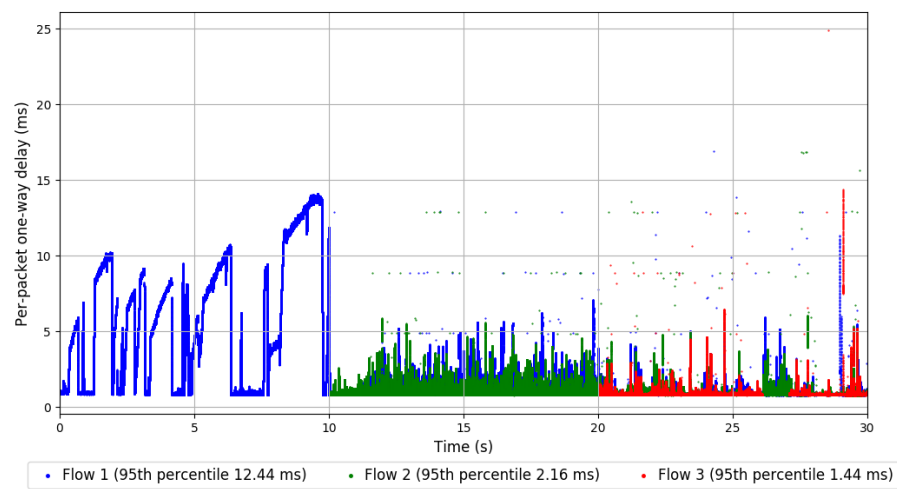
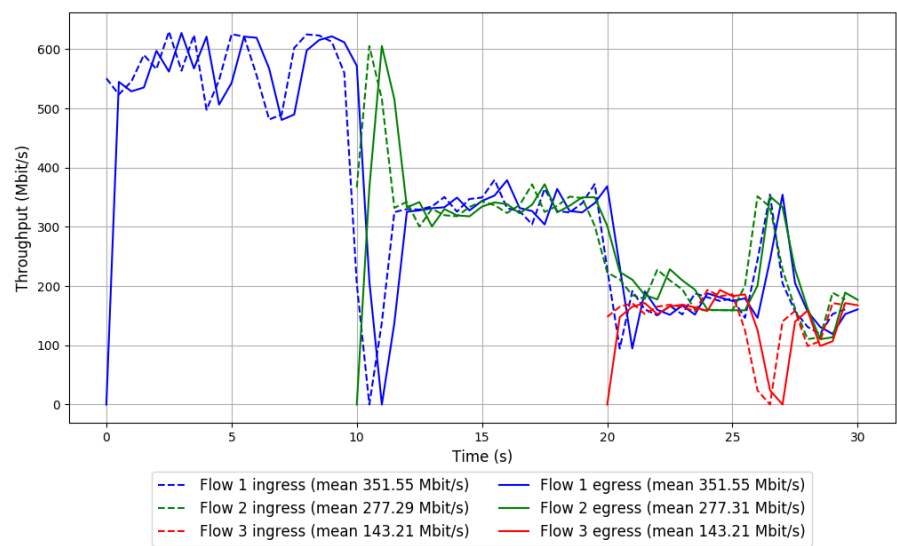


Run 1: Statistics of LEDBAT

Start at: 2019-01-22 02:32:55
End at: 2019-01-22 02:33:25
Local clock offset: 1.981 ms
Remote clock offset: -0.271 ms

Below is generated by plot.py at 2019-01-22 05:49:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 583.70 Mbit/s
95th percentile per-packet one-way delay: 11.172 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 351.55 Mbit/s
95th percentile per-packet one-way delay: 12.441 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 277.31 Mbit/s
95th percentile per-packet one-way delay: 2.163 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 143.21 Mbit/s
95th percentile per-packet one-way delay: 1.439 ms
Loss rate: 0.02%

Run 1: Report of LEDBAT — Data Link

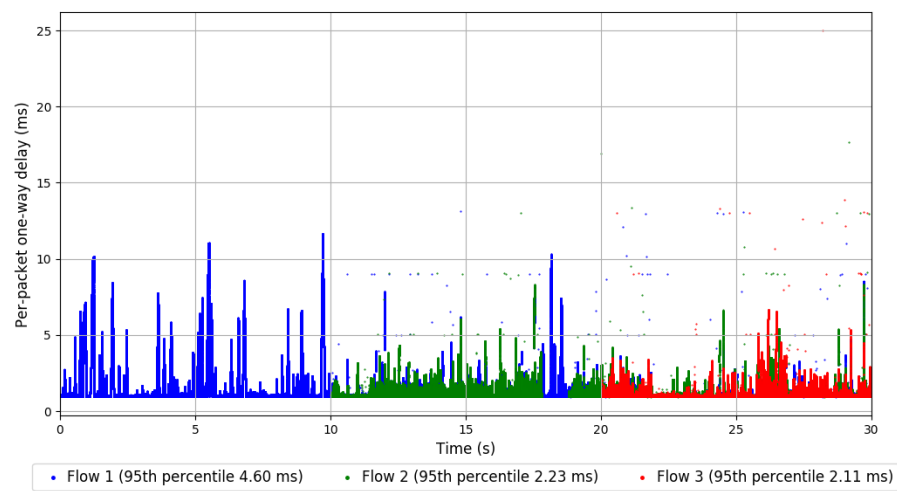
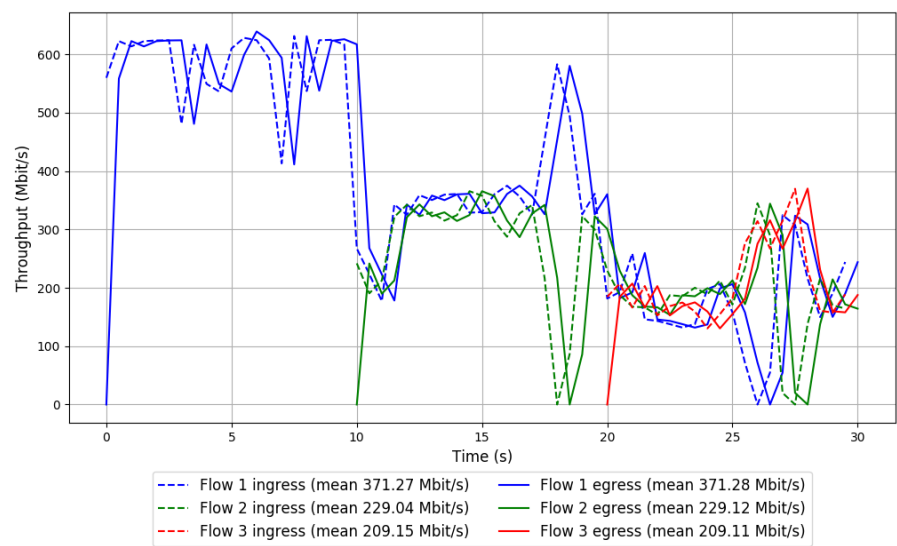


Run 2: Statistics of LEDBAT

Start at: 2019-01-22 03:03:12
End at: 2019-01-22 03:03:42
Local clock offset: 3.39 ms
Remote clock offset: -2.763 ms

Below is generated by plot.py at 2019-01-22 05:49:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 593.24 Mbit/s
95th percentile per-packet one-way delay: 3.505 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 371.28 Mbit/s
95th percentile per-packet one-way delay: 4.600 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 229.12 Mbit/s
95th percentile per-packet one-way delay: 2.231 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 209.11 Mbit/s
95th percentile per-packet one-way delay: 2.111 ms
Loss rate: 0.04%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-01-22 03:33:28

End at: 2019-01-22 03:33:58

Local clock offset: 3.049 ms

Remote clock offset: 4.556 ms

Below is generated by plot.py at 2019-01-22 05:49:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 550.54 Mbit/s

95th percentile per-packet one-way delay: 2.236 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 335.25 Mbit/s

95th percentile per-packet one-way delay: 2.308 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 237.02 Mbit/s

95th percentile per-packet one-way delay: 2.200 ms

Loss rate: 0.00%

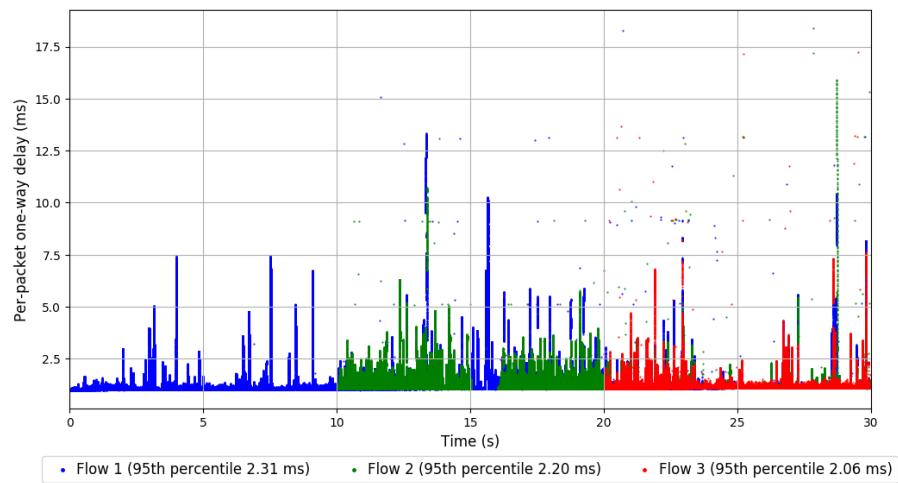
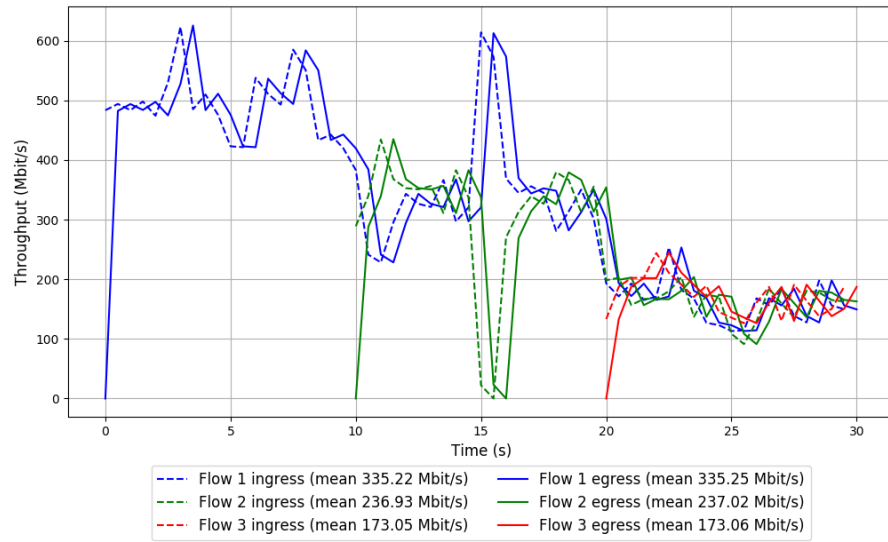
-- Flow 3:

Average throughput: 173.06 Mbit/s

95th percentile per-packet one-way delay: 2.060 ms

Loss rate: 0.01%

Run 3: Report of LEDBAT — Data Link

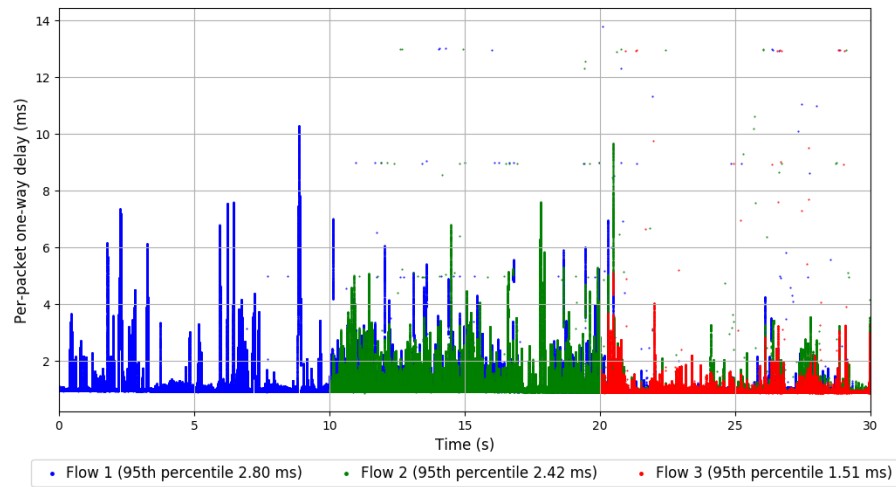
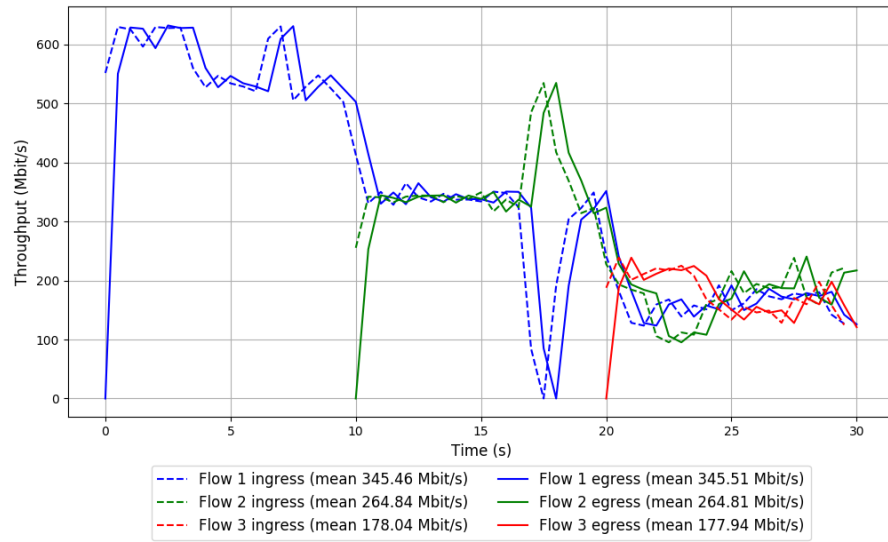


Run 4: Statistics of LEDBAT

Start at: 2019-01-22 04:03:45
End at: 2019-01-22 04:04:15
Local clock offset: -0.034 ms
Remote clock offset: -1.231 ms

Below is generated by plot.py at 2019-01-22 05:51:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 581.04 Mbit/s
95th percentile per-packet one-way delay: 2.524 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 345.51 Mbit/s
95th percentile per-packet one-way delay: 2.796 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 264.81 Mbit/s
95th percentile per-packet one-way delay: 2.422 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 177.94 Mbit/s
95th percentile per-packet one-way delay: 1.513 ms
Loss rate: 0.11%

Run 4: Report of LEDBAT — Data Link

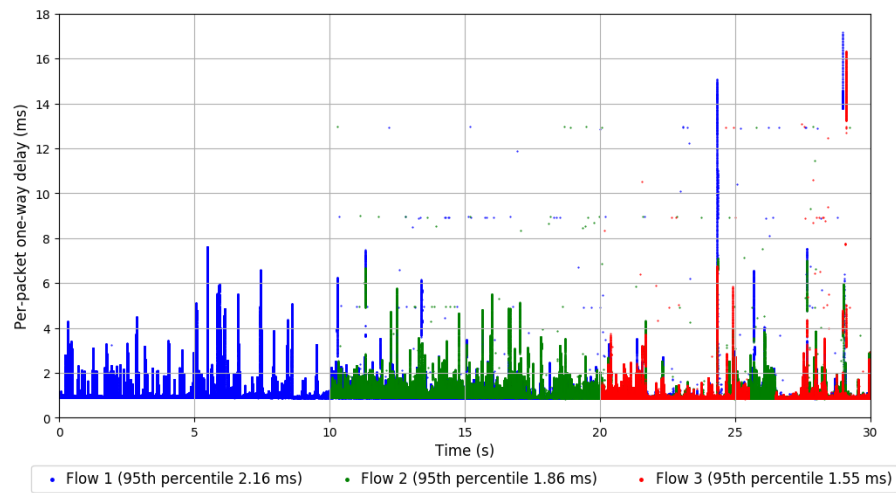
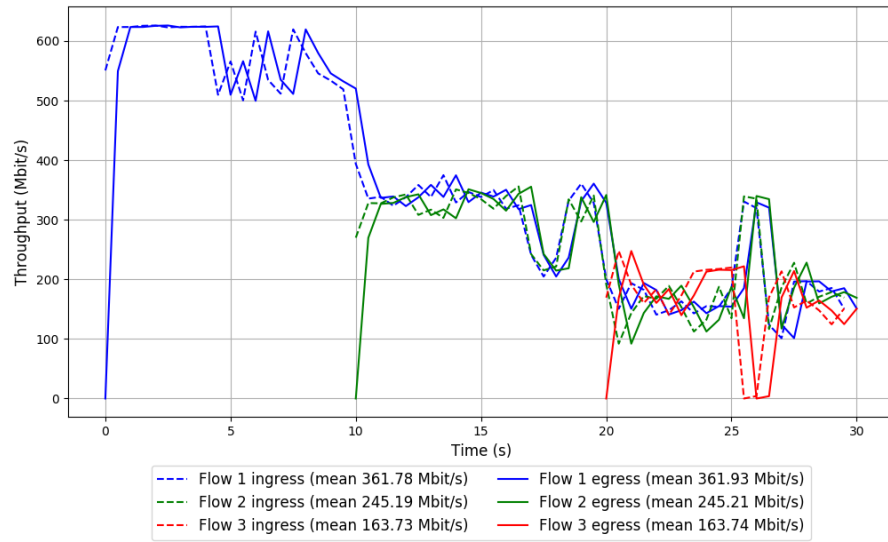


Run 5: Statistics of LEDBAT

Start at: 2019-01-22 04:34:05
End at: 2019-01-22 04:34:35
Local clock offset: 2.651 ms
Remote clock offset: -3.138 ms

Below is generated by plot.py at 2019-01-22 05:51:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 579.47 Mbit/s
95th percentile per-packet one-way delay: 2.024 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 361.93 Mbit/s
95th percentile per-packet one-way delay: 2.161 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 245.21 Mbit/s
95th percentile per-packet one-way delay: 1.865 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 163.74 Mbit/s
95th percentile per-packet one-way delay: 1.552 ms
Loss rate: 0.01%

Run 5: Report of LEDBAT — Data Link

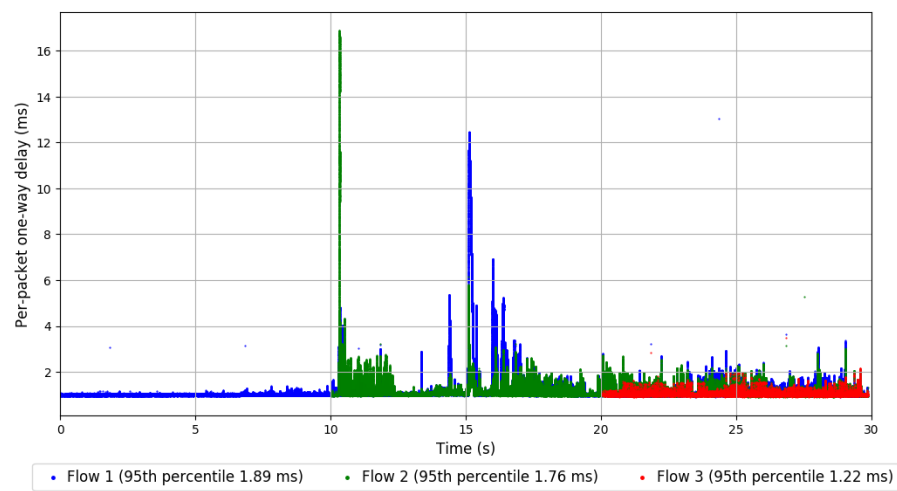
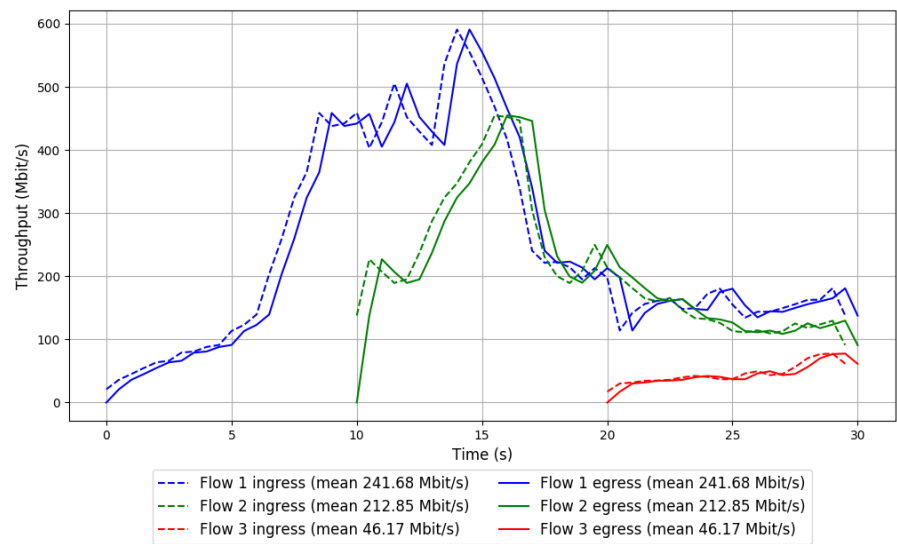


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-22 02:54:23
End at: 2019-01-22 02:54:53
Local clock offset: 3.49 ms
Remote clock offset: -2.381 ms

# Below is generated by plot.py at 2019-01-22 05:51:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.36 Mbit/s
95th percentile per-packet one-way delay: 1.779 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 241.68 Mbit/s
95th percentile per-packet one-way delay: 1.887 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 212.85 Mbit/s
95th percentile per-packet one-way delay: 1.759 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 46.17 Mbit/s
95th percentile per-packet one-way delay: 1.222 ms
Loss rate: 0.03%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-01-22 03:24:26

End at: 2019-01-22 03:24:56

Local clock offset: 3.27 ms

Remote clock offset: 2.275 ms

Below is generated by plot.py at 2019-01-22 05:52:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 705.53 Mbit/s

95th percentile per-packet one-way delay: 2.192 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 607.30 Mbit/s

95th percentile per-packet one-way delay: 2.498 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 94.58 Mbit/s

95th percentile per-packet one-way delay: 1.564 ms

Loss rate: 0.00%

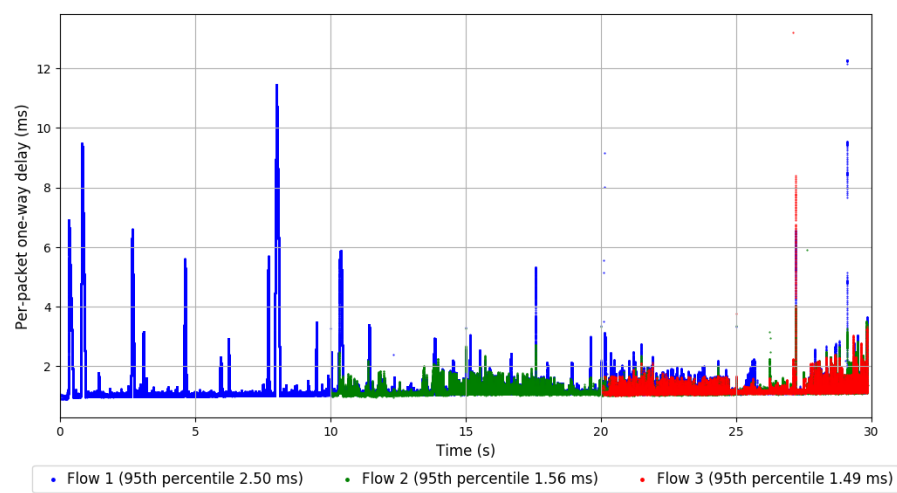
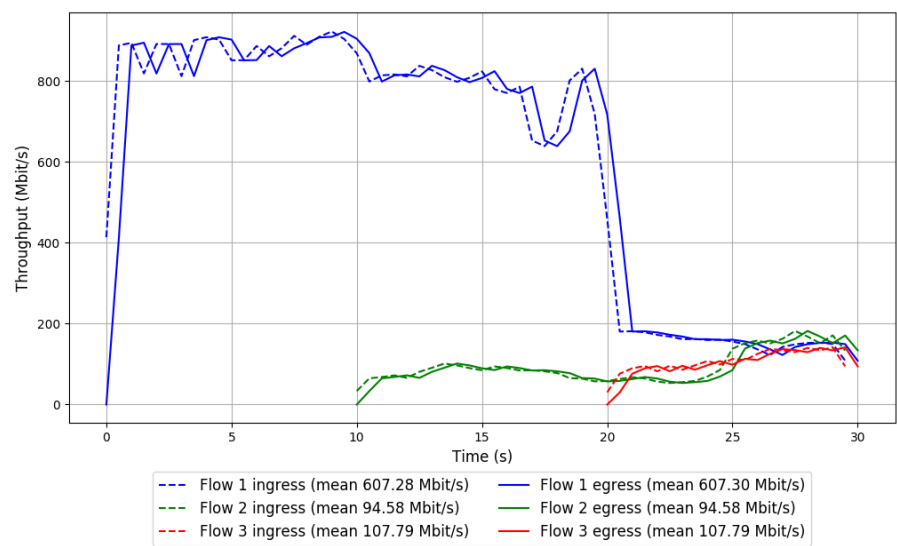
-- Flow 3:

Average throughput: 107.79 Mbit/s

95th percentile per-packet one-way delay: 1.488 ms

Loss rate: 0.02%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-01-22 03:54:46

End at: 2019-01-22 03:55:16

Local clock offset: 1.286 ms

Remote clock offset: 2.187 ms

Below is generated by plot.py at 2019-01-22 05:52:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 649.30 Mbit/s

95th percentile per-packet one-way delay: 1.157 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 528.76 Mbit/s

95th percentile per-packet one-way delay: 1.087 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.02 Mbit/s

95th percentile per-packet one-way delay: 1.175 ms

Loss rate: 0.01%

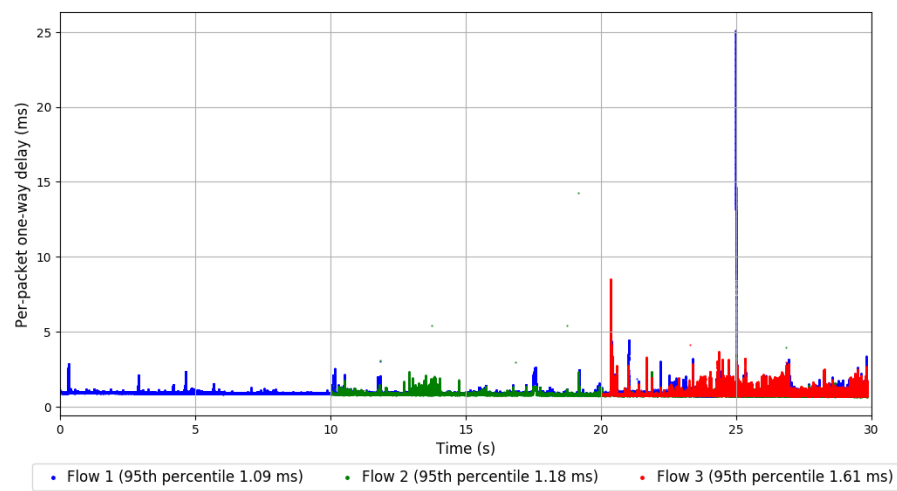
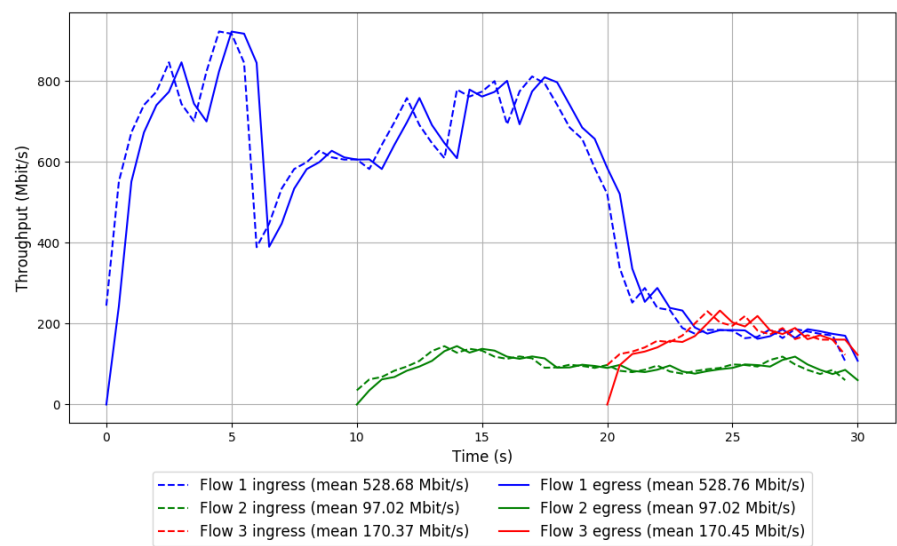
-- Flow 3:

Average throughput: 170.45 Mbit/s

95th percentile per-packet one-way delay: 1.611 ms

Loss rate: 0.00%

Run 3: Report of PCC-Allegro — Data Link

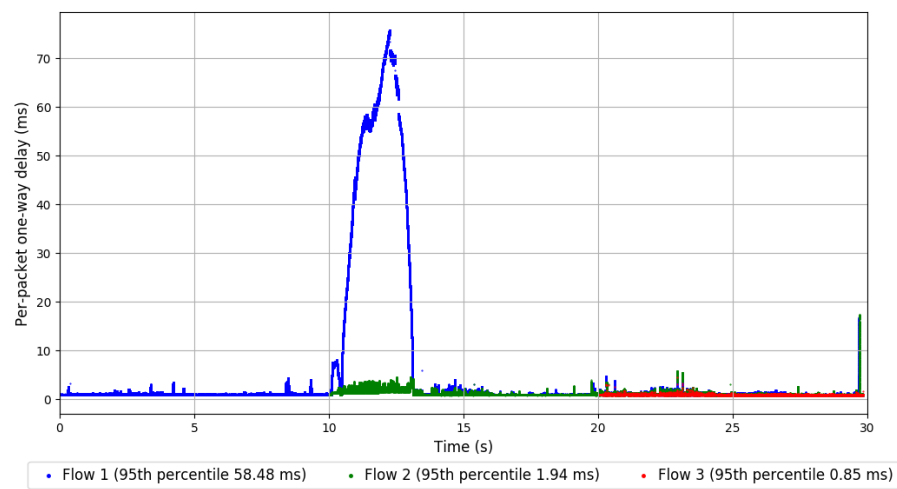
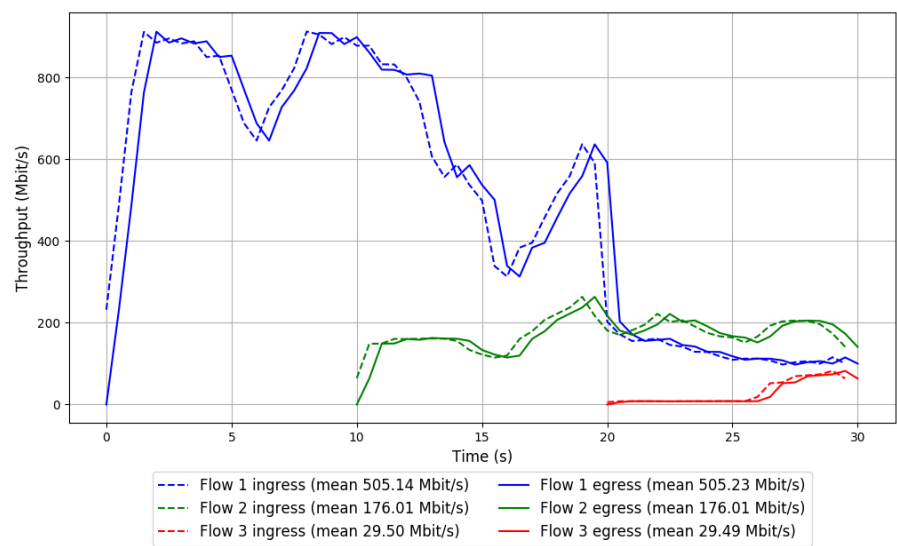


Run 4: Statistics of PCC-Allegro

Start at: 2019-01-22 04:25:09
End at: 2019-01-22 04:25:39
Local clock offset: 1.267 ms
Remote clock offset: -3.165 ms

Below is generated by plot.py at 2019-01-22 05:56:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 631.93 Mbit/s
95th percentile per-packet one-way delay: 56.857 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 505.23 Mbit/s
95th percentile per-packet one-way delay: 58.480 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 176.01 Mbit/s
95th percentile per-packet one-way delay: 1.940 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 0.852 ms
Loss rate: 0.06%

Run 4: Report of PCC-Allegro — Data Link

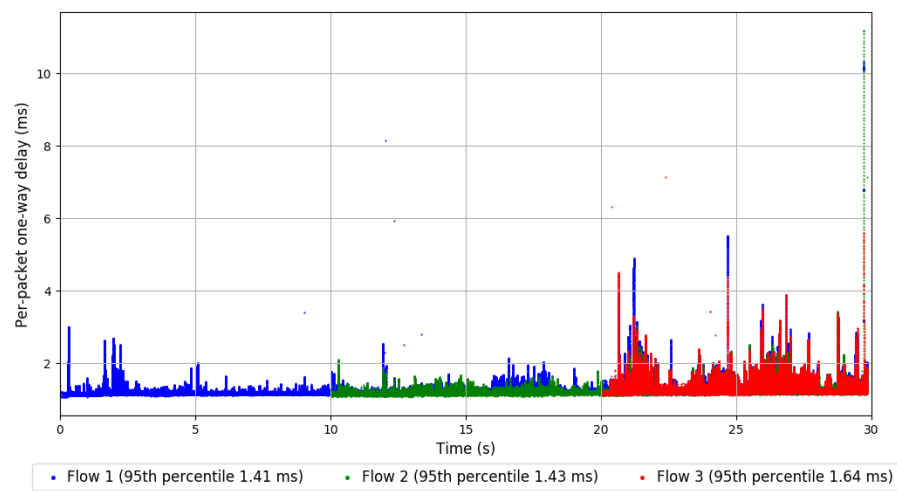
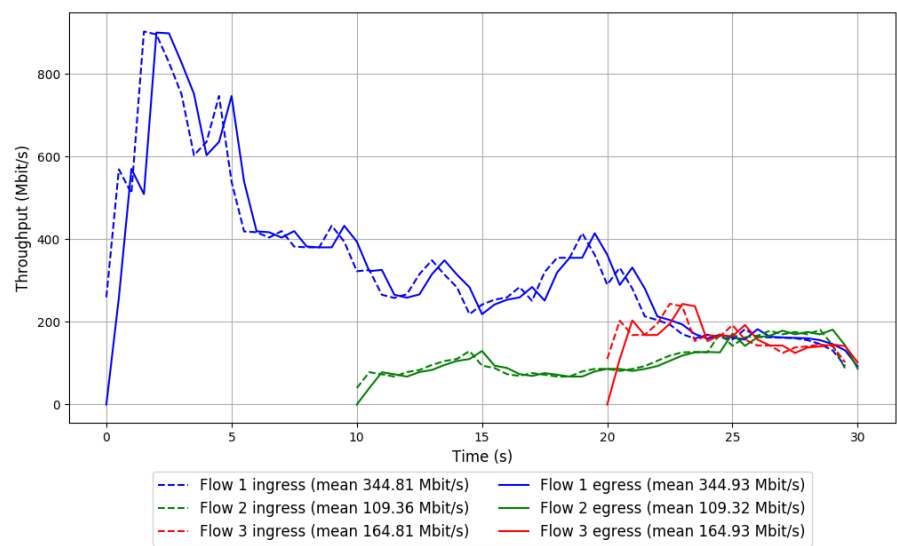


Run 5: Statistics of PCC-Allegro

Start at: 2019-01-22 04:55:19
End at: 2019-01-22 04:55:49
Local clock offset: 1.35 ms
Remote clock offset: -3.434 ms

Below is generated by plot.py at 2019-01-22 05:56:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 471.70 Mbit/s
95th percentile per-packet one-way delay: 1.457 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 344.93 Mbit/s
95th percentile per-packet one-way delay: 1.407 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 109.32 Mbit/s
95th percentile per-packet one-way delay: 1.431 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.93 Mbit/s
95th percentile per-packet one-way delay: 1.643 ms
Loss rate: 0.01%

Run 5: Report of PCC-Allegro — Data Link

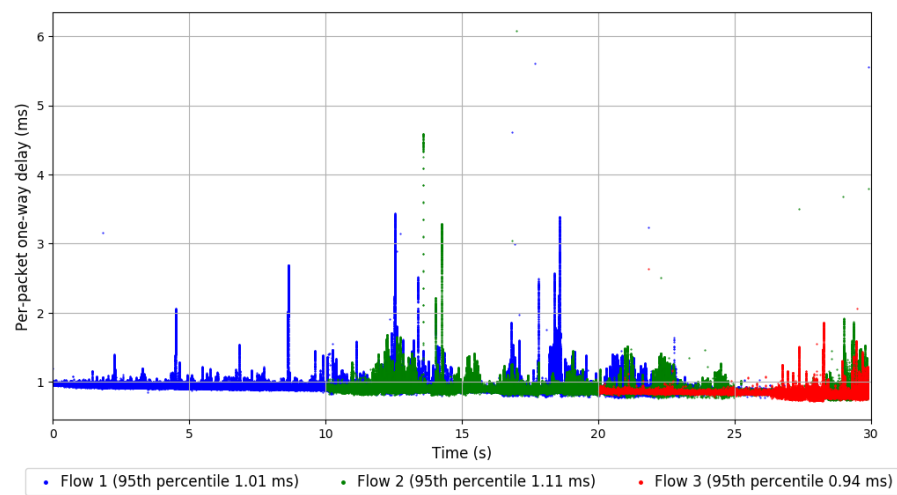
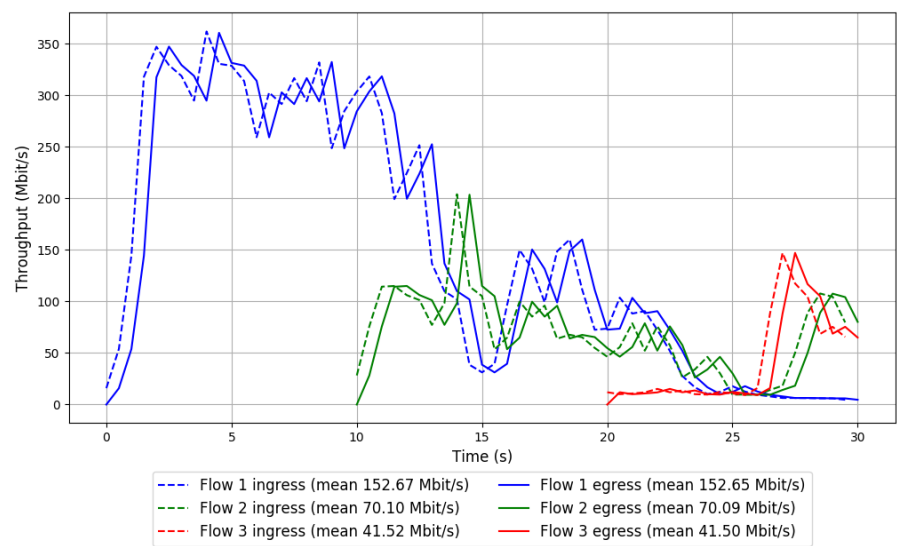


Run 1: Statistics of PCC-Expr

Start at: 2019-01-22 02:46:06
End at: 2019-01-22 02:46:36
Local clock offset: 3.618 ms
Remote clock offset: -1.428 ms

Below is generated by plot.py at 2019-01-22 05:56:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 212.98 Mbit/s
95th percentile per-packet one-way delay: 1.035 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 152.65 Mbit/s
95th percentile per-packet one-way delay: 1.015 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.09 Mbit/s
95th percentile per-packet one-way delay: 1.111 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 41.50 Mbit/s
95th percentile per-packet one-way delay: 0.935 ms
Loss rate: 0.07%

Run 1: Report of PCC-Expr — Data Link

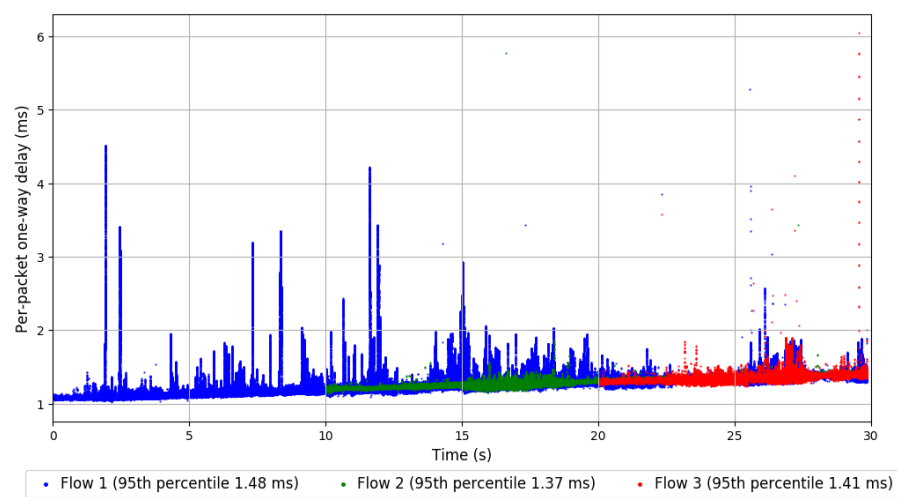
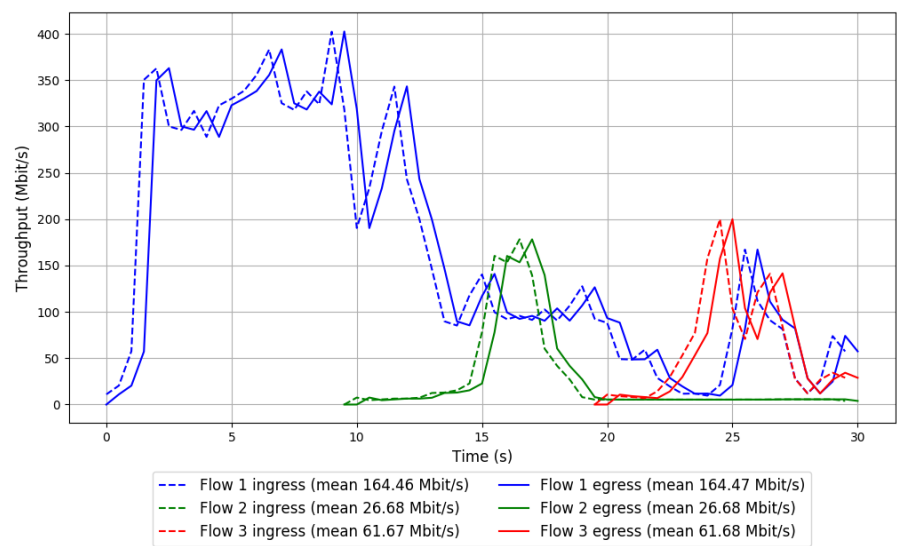


Run 2: Statistics of PCC-Expr

Start at: 2019-01-22 03:16:19
End at: 2019-01-22 03:16:49
Local clock offset: 3.618 ms
Remote clock offset: -1.896 ms

Below is generated by plot.py at 2019-01-22 05:56:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 202.61 Mbit/s
95th percentile per-packet one-way delay: 1.436 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 164.47 Mbit/s
95th percentile per-packet one-way delay: 1.477 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.68 Mbit/s
95th percentile per-packet one-way delay: 1.369 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 61.68 Mbit/s
95th percentile per-packet one-way delay: 1.409 ms
Loss rate: 0.01%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-01-22 03:46:34

End at: 2019-01-22 03:47:04

Local clock offset: 3.091 ms

Remote clock offset: 6.612 ms

Below is generated by plot.py at 2019-01-22 05:56:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.25 Mbit/s

95th percentile per-packet one-way delay: 1.137 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.15 Mbit/s

95th percentile per-packet one-way delay: 1.118 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 172.93 Mbit/s

95th percentile per-packet one-way delay: 1.139 ms

Loss rate: 0.00%

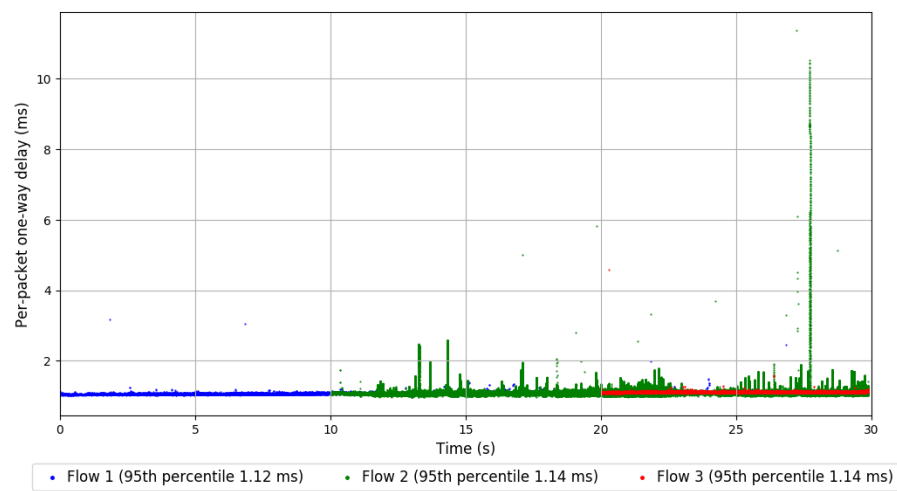
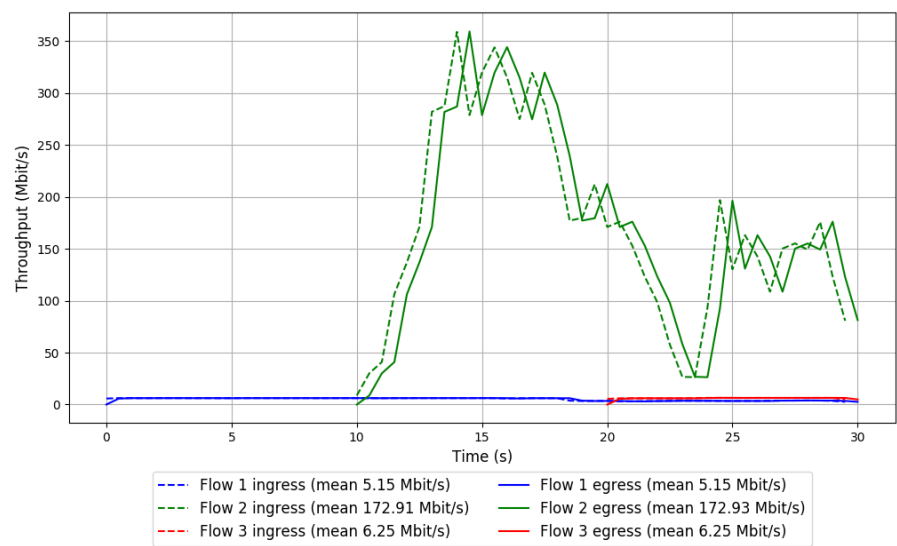
-- Flow 3:

Average throughput: 6.25 Mbit/s

95th percentile per-packet one-way delay: 1.141 ms

Loss rate: 0.02%

Run 3: Report of PCC-Expr — Data Link

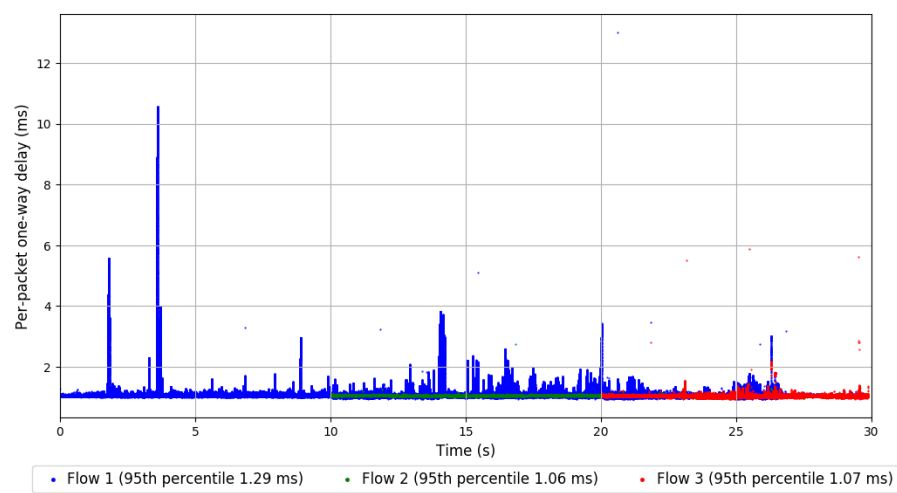
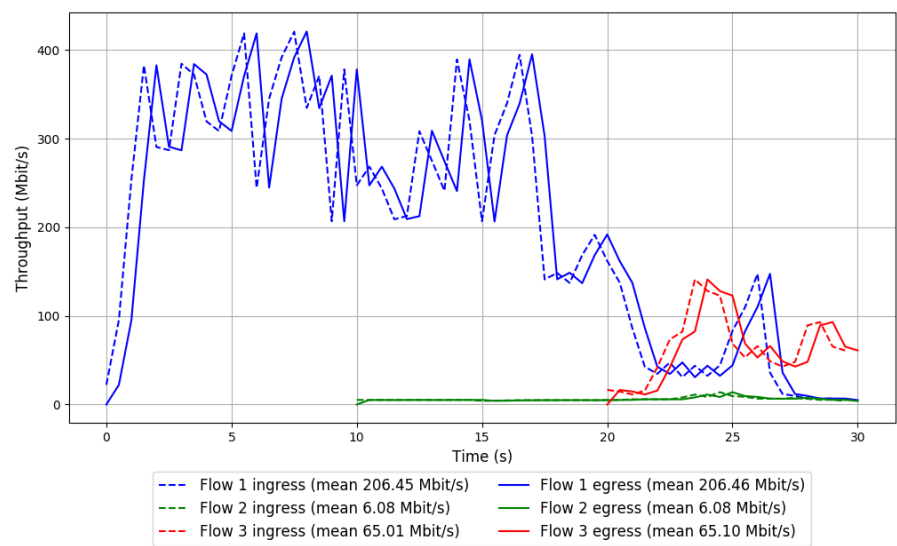


Run 4: Statistics of PCC-Expr

Start at: 2019-01-22 04:16:55
End at: 2019-01-22 04:17:25
Local clock offset: -0.877 ms
Remote clock offset: -2.919 ms

Below is generated by plot.py at 2019-01-22 05:56:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 231.99 Mbit/s
95th percentile per-packet one-way delay: 1.259 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 206.46 Mbit/s
95th percentile per-packet one-way delay: 1.292 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 1.064 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 65.10 Mbit/s
95th percentile per-packet one-way delay: 1.071 ms
Loss rate: 0.01%

Run 4: Report of PCC-Expr — Data Link

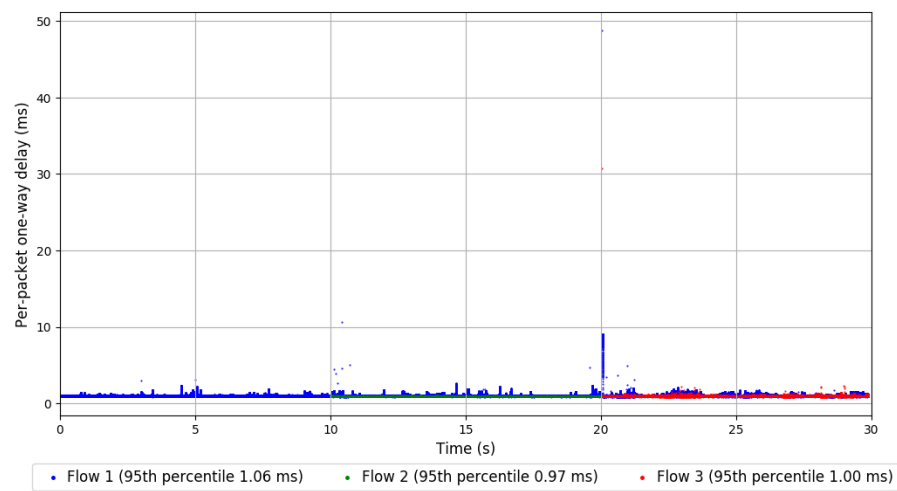
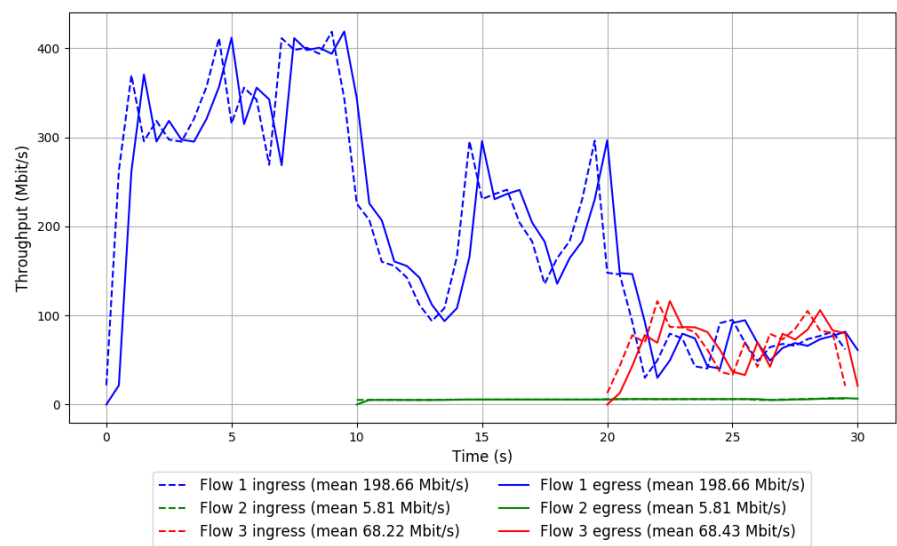


Run 5: Statistics of PCC-Expr

Start at: 2019-01-22 04:47:12
End at: 2019-01-22 04:47:42
Local clock offset: 3.467 ms
Remote clock offset: -3.331 ms

Below is generated by plot.py at 2019-01-22 05:57:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 225.03 Mbit/s
95th percentile per-packet one-way delay: 1.051 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 198.66 Mbit/s
95th percentile per-packet one-way delay: 1.062 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 0.967 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 68.43 Mbit/s
95th percentile per-packet one-way delay: 1.002 ms
Loss rate: 0.00%

Run 5: Report of PCC-Expr — Data Link

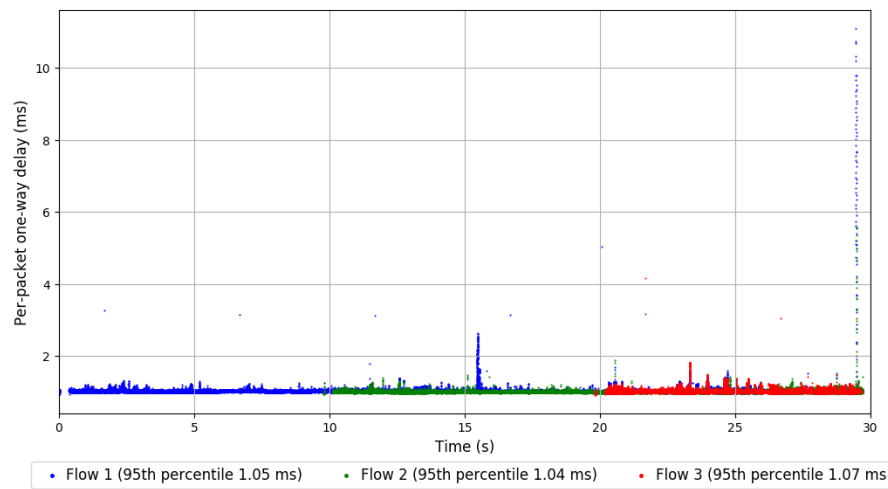
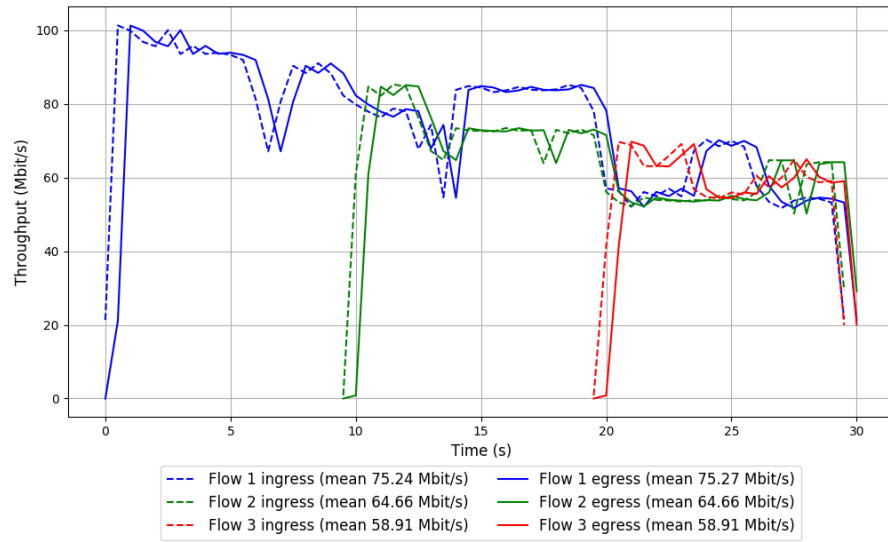


Run 1: Statistics of QUIC Cubic

Start at: 2019-01-22 02:51:40
End at: 2019-01-22 02:52:10
Local clock offset: 3.61 ms
Remote clock offset: -2.137 ms

Below is generated by plot.py at 2019-01-22 05:57:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 138.16 Mbit/s
95th percentile per-packet one-way delay: 1.050 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 75.27 Mbit/s
95th percentile per-packet one-way delay: 1.053 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 64.66 Mbit/s
95th percentile per-packet one-way delay: 1.036 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 58.91 Mbit/s
95th percentile per-packet one-way delay: 1.071 ms
Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-01-22 03:21:52

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

Local clock offset: 3.407 ms

Remote clock offset: 1.153 ms

Below is generated by plot.py at 2019-01-22 05:57:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.99 Mbit/s

95th percentile per-packet one-way delay: 1.358 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 73.32 Mbit/s

95th percentile per-packet one-way delay: 1.348 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 69.98 Mbit/s

95th percentile per-packet one-way delay: 1.368 ms

Loss rate: 0.01%

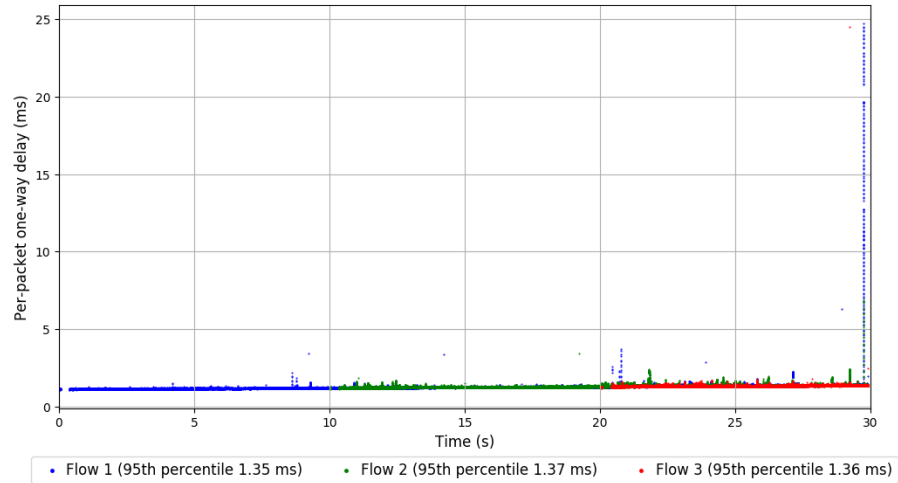
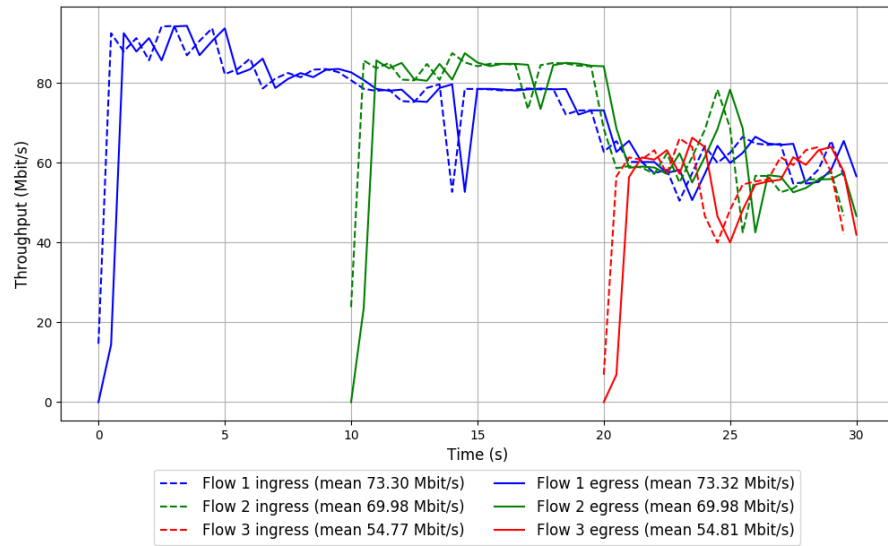
-- Flow 3:

Average throughput: 54.81 Mbit/s

95th percentile per-packet one-way delay: 1.364 ms

Loss rate: 0.02%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-01-22 03:52:03

End at: 2019-01-22 03:52:33

Local clock offset: 1.934 ms

Remote clock offset: 4.111 ms

Below is generated by plot.py at 2019-01-22 05:57:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.04 Mbit/s

95th percentile per-packet one-way delay: 0.883 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 77.46 Mbit/s

95th percentile per-packet one-way delay: 0.888 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 65.23 Mbit/s

95th percentile per-packet one-way delay: 0.840 ms

Loss rate: 0.01%

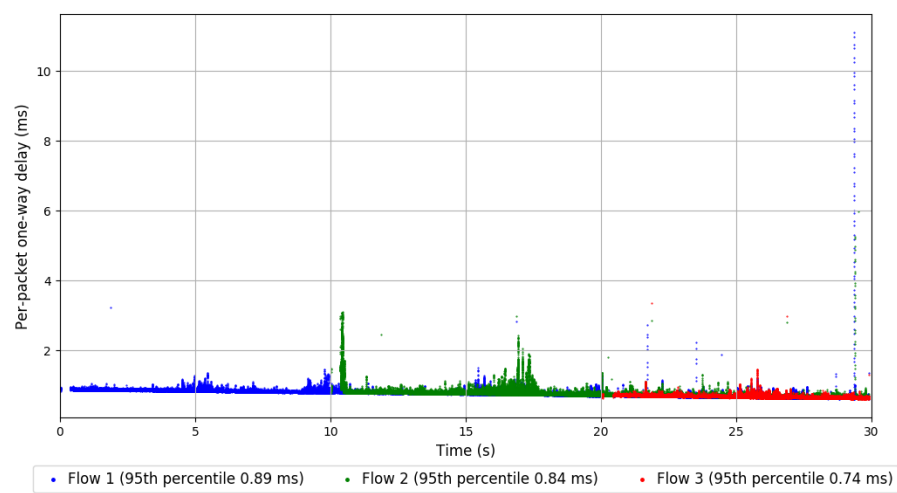
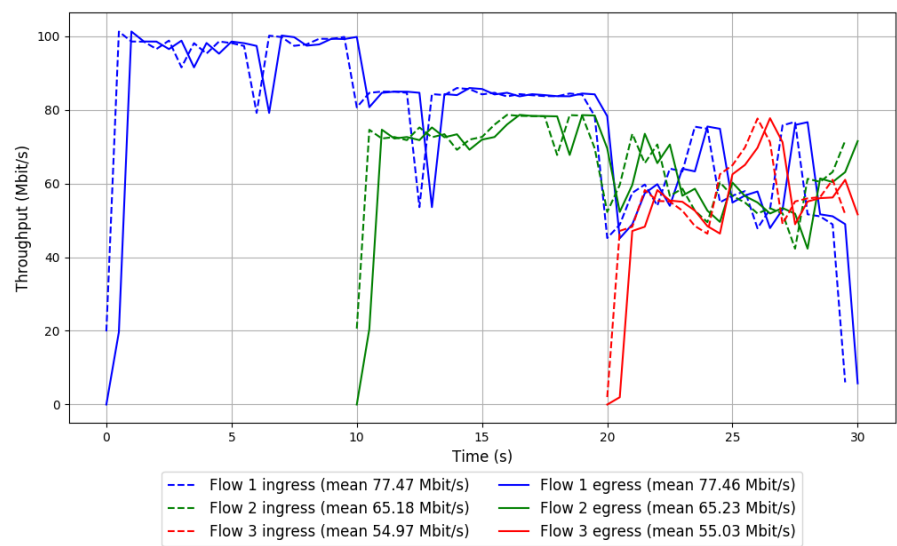
-- Flow 3:

Average throughput: 55.03 Mbit/s

95th percentile per-packet one-way delay: 0.738 ms

Loss rate: 0.01%

Run 3: Report of QUIC Cubic — Data Link

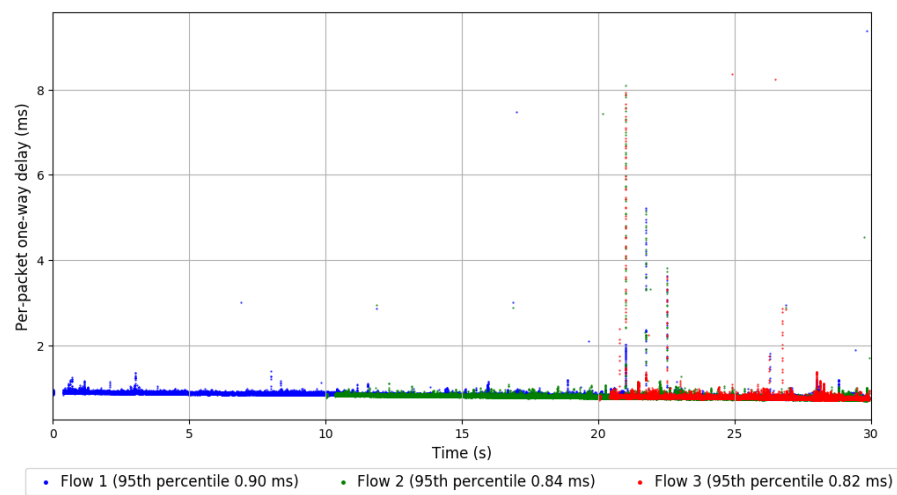
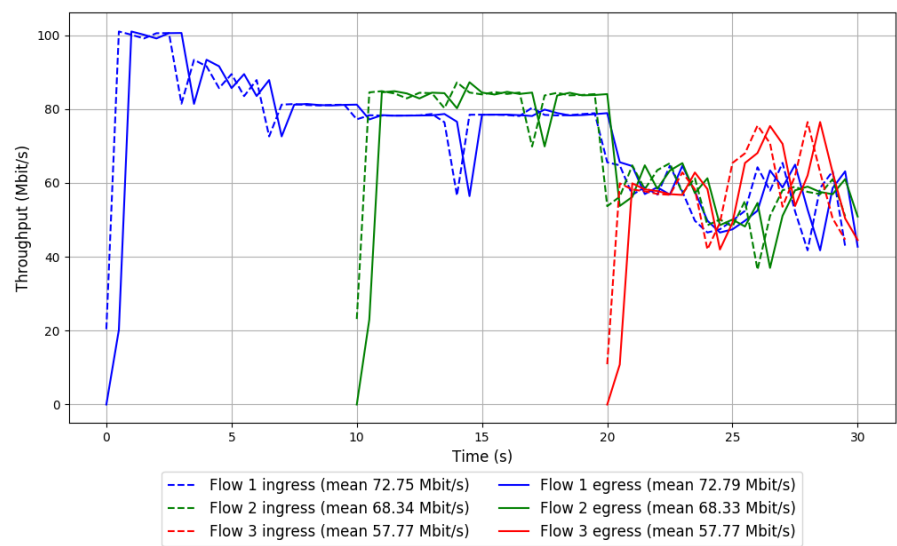


Run 4: Statistics of QUIC Cubic

Start at: 2019-01-22 04:22:29
End at: 2019-01-22 04:22:59
Local clock offset: 0.577 ms
Remote clock offset: -3.196 ms

Below is generated by plot.py at 2019-01-22 05:57:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 137.32 Mbit/s
95th percentile per-packet one-way delay: 0.894 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 72.79 Mbit/s
95th percentile per-packet one-way delay: 0.902 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 68.33 Mbit/s
95th percentile per-packet one-way delay: 0.844 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 57.77 Mbit/s
95th percentile per-packet one-way delay: 0.824 ms
Loss rate: 0.02%

Run 4: Report of QUIC Cubic — Data Link

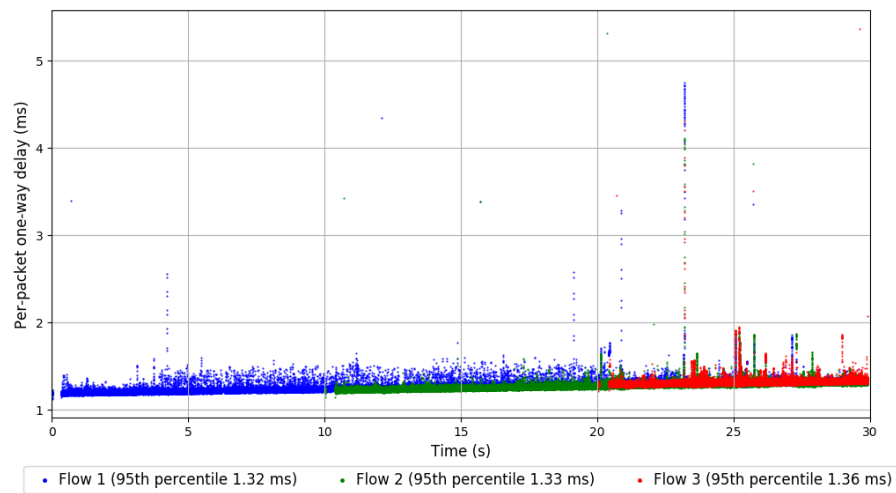
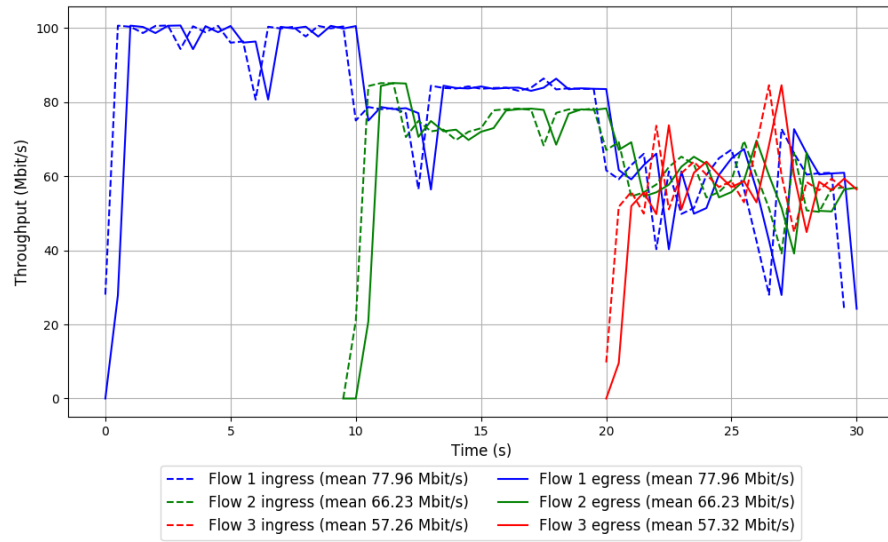


Run 5: Statistics of QUIC Cubic

Start at: 2019-01-22 04:52:45
End at: 2019-01-22 04:53:15
Local clock offset: 2.036 ms
Remote clock offset: -3.403 ms

Below is generated by plot.py at 2019-01-22 05:57:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 140.46 Mbit/s
95th percentile per-packet one-way delay: 1.334 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 77.96 Mbit/s
95th percentile per-packet one-way delay: 1.325 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 66.23 Mbit/s
95th percentile per-packet one-way delay: 1.327 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 57.32 Mbit/s
95th percentile per-packet one-way delay: 1.356 ms
Loss rate: 0.02%

Run 5: Report of QUIC Cubic — Data Link

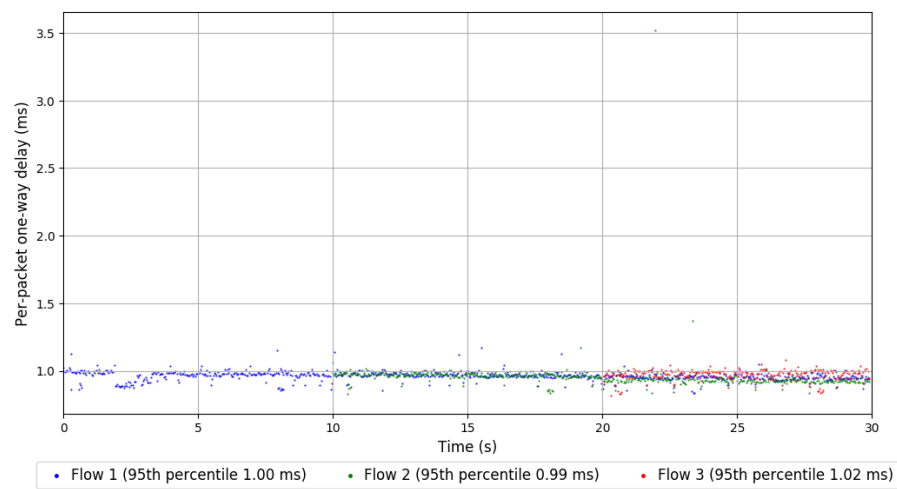
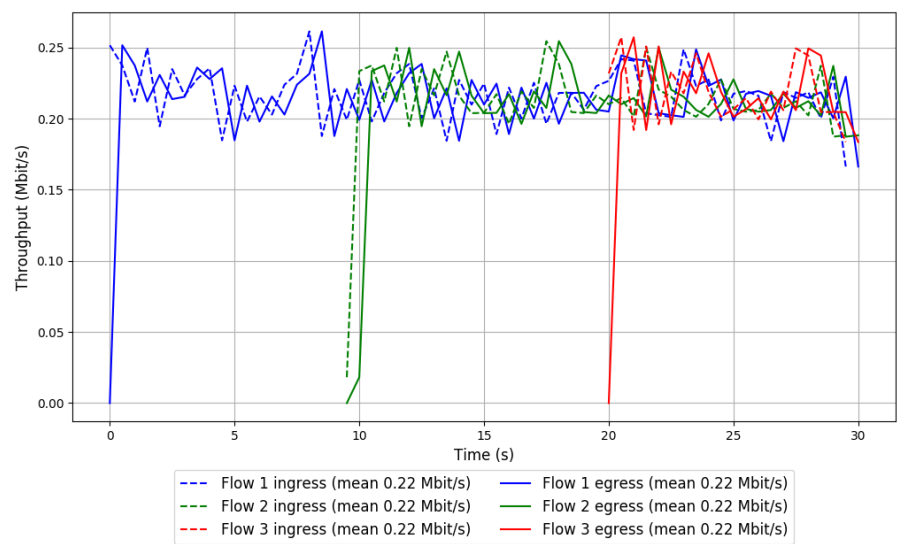


```
Run 1: Statistics of SReAM

Start at: 2019-01-22 02:35:50
End at: 2019-01-22 02:36:20
Local clock offset: 2.476 ms
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2019-01-22 05:57:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.005 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.005 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.992 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.016 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

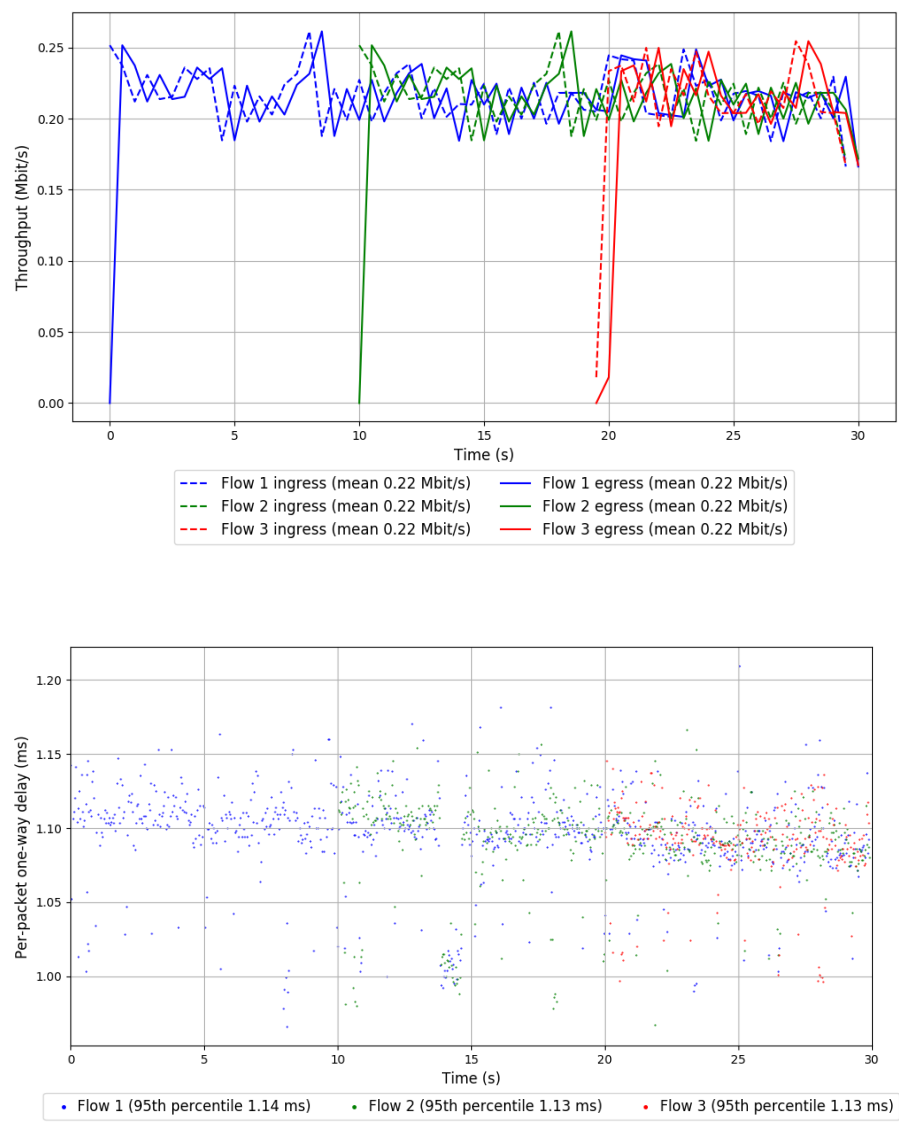


Run 2: Statistics of SReAM

Start at: 2019-01-22 03:06:09
End at: 2019-01-22 03:06:39
Local clock offset: 3.422 ms
Remote clock offset: -2.843 ms

Below is generated by plot.py at 2019-01-22 05:57:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.131 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.137 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.127 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.126 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2019-01-22 03:36:21

End at: 2019-01-22 03:36:51

Local clock offset: 3.033 ms

Remote clock offset: 5.107 ms

Below is generated by plot.py at 2019-01-22 05:57:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 1.227 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.226 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.228 ms

Loss rate: 0.00%

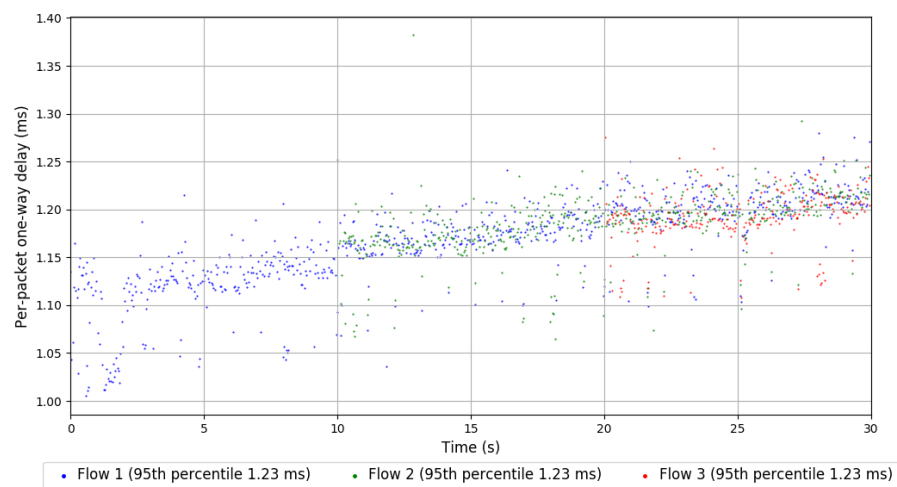
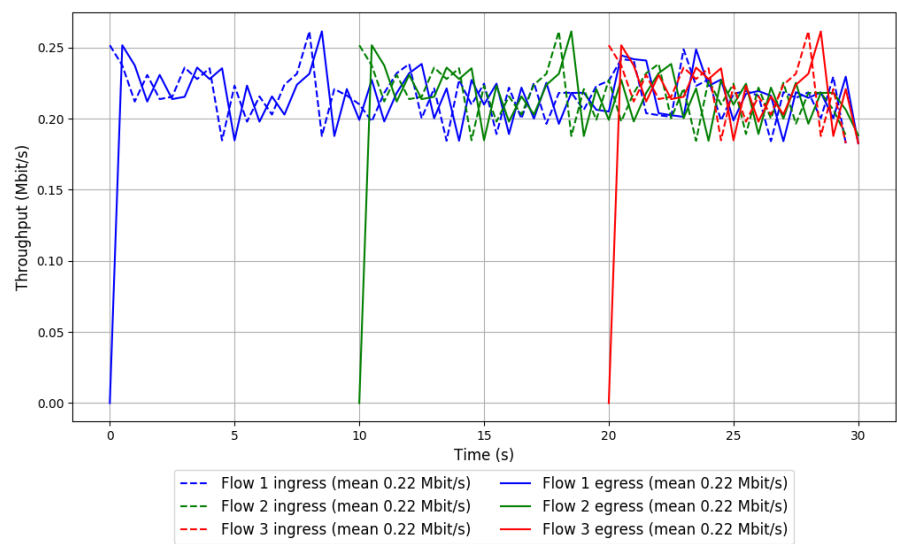
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.232 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2019-01-22 04:06:40

End at: 2019-01-22 04:07:10

Local clock offset: -0.28 ms

Remote clock offset: -1.81 ms

Below is generated by plot.py at 2019-01-22 05:57:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 1.125 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.126 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.120 ms

Loss rate: 0.00%

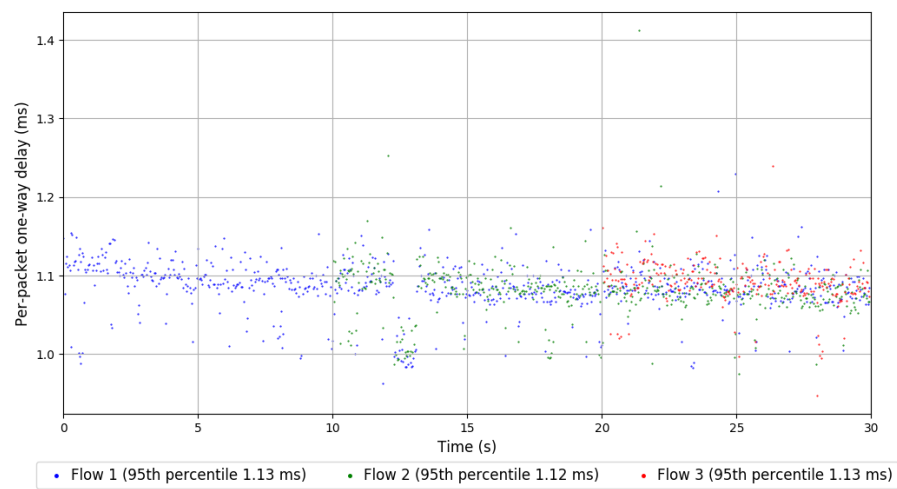
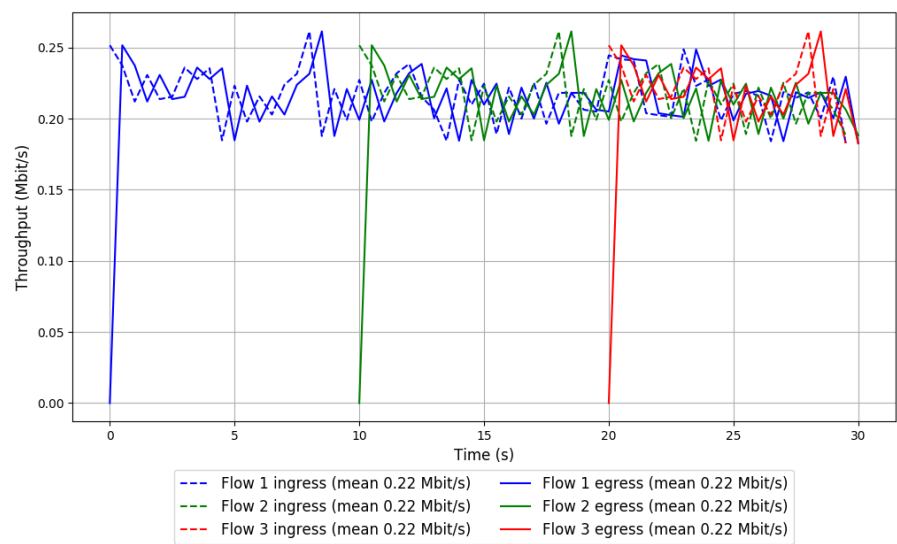
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.130 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

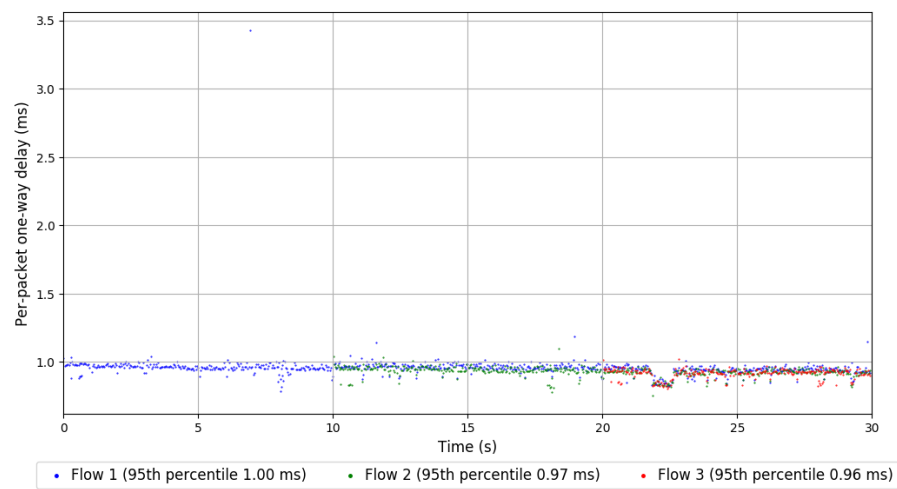
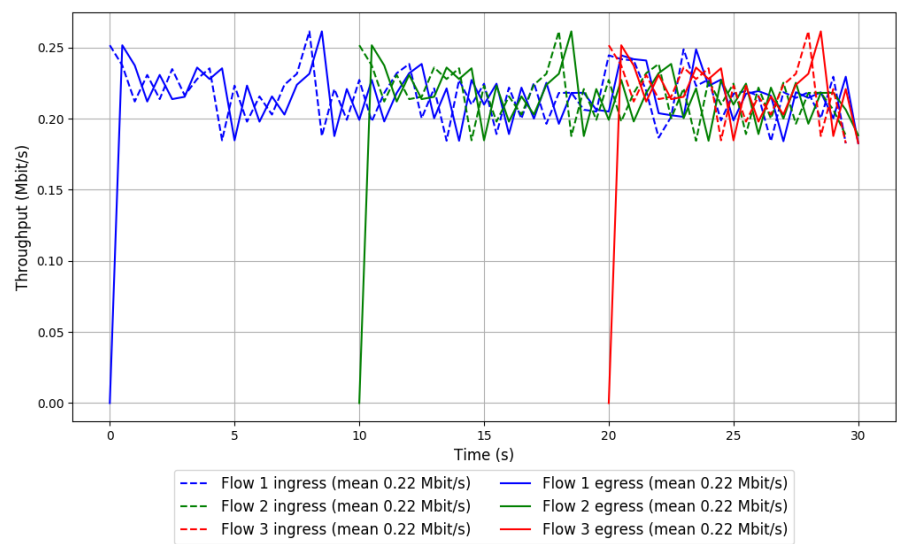


Run 5: Statistics of SReAM

Start at: 2019-01-22 04:37:00
End at: 2019-01-22 04:37:30
Local clock offset: 2.909 ms
Remote clock offset: -3.067 ms

Below is generated by plot.py at 2019-01-22 05:57:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 0.988 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.997 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.972 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.958 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

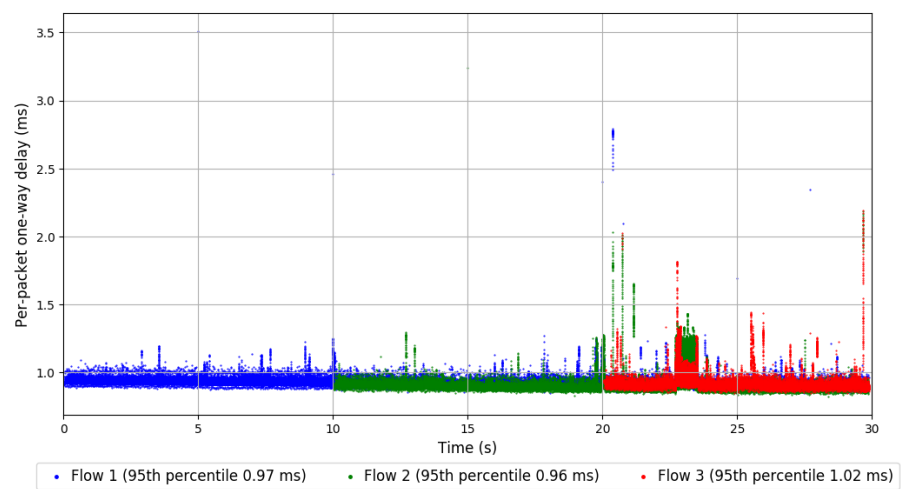
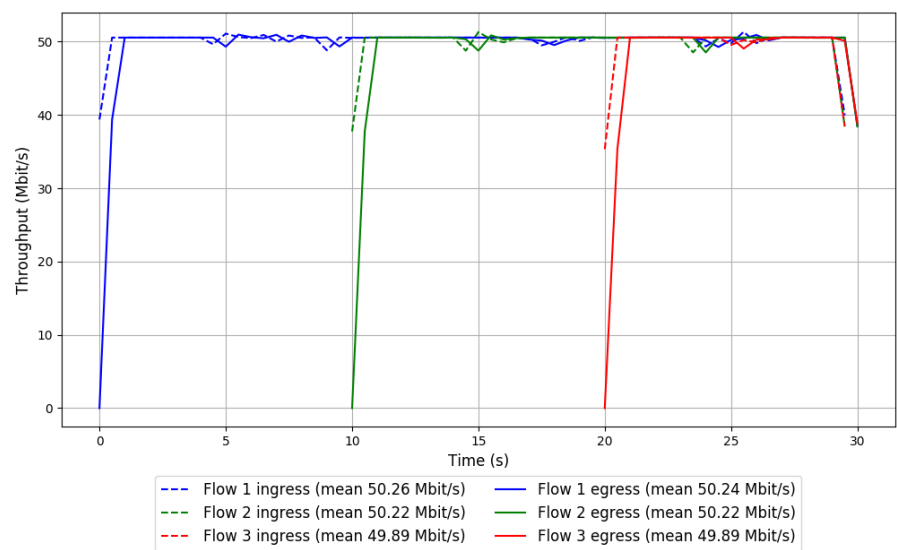


Run 1: Statistics of Sprout

Start at: 2019-01-22 02:38:30
End at: 2019-01-22 02:39:00
Local clock offset: 2.874 ms
Remote clock offset: -0.036 ms

Below is generated by plot.py at 2019-01-22 05:57:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 100.00 Mbit/s
95th percentile per-packet one-way delay: 0.975 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 50.24 Mbit/s
95th percentile per-packet one-way delay: 0.968 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 0.965 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.89 Mbit/s
95th percentile per-packet one-way delay: 1.020 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

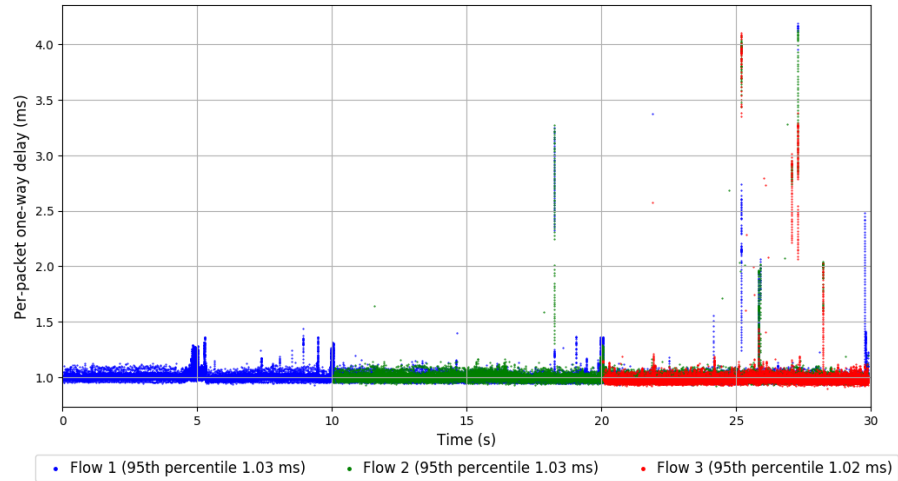
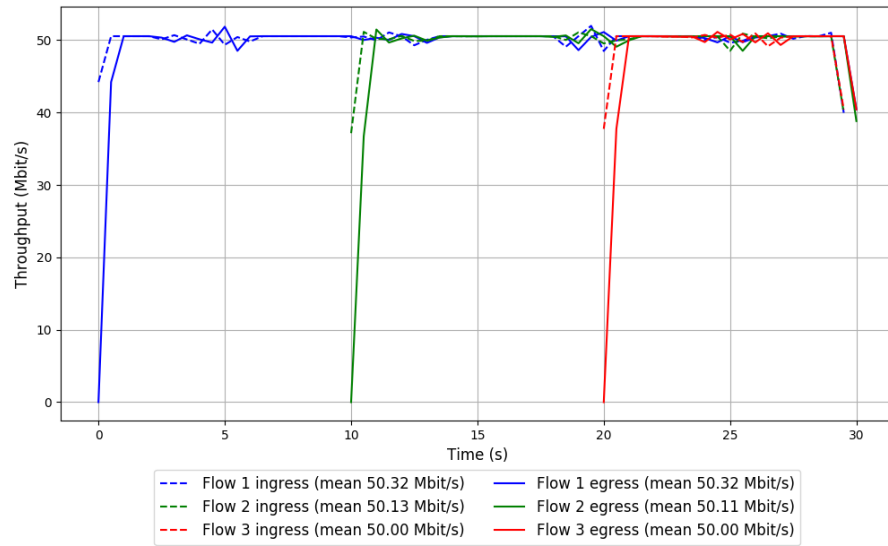


Run 2: Statistics of Sprout

Start at: 2019-01-22 03:08:48
End at: 2019-01-22 03:09:18
Local clock offset: 3.464 ms
Remote clock offset: -2.879 ms

Below is generated by plot.py at 2019-01-22 05:57:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 100.09 Mbit/s
95th percentile per-packet one-way delay: 1.028 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 50.32 Mbit/s
95th percentile per-packet one-way delay: 1.032 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.11 Mbit/s
95th percentile per-packet one-way delay: 1.027 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 50.00 Mbit/s
95th percentile per-packet one-way delay: 1.017 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

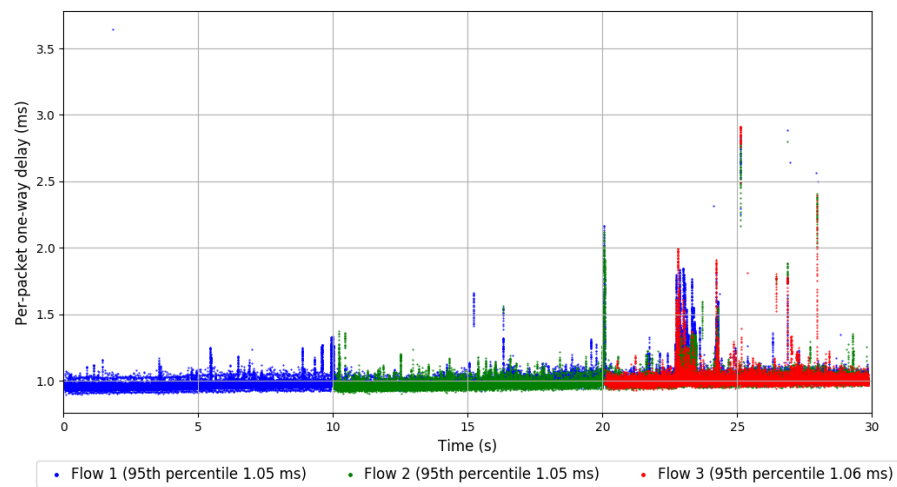
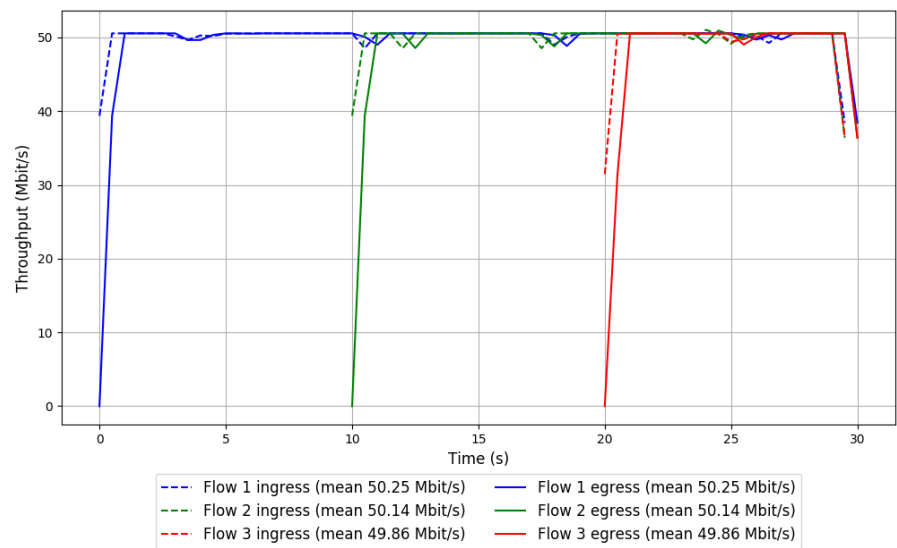


Run 3: Statistics of Sprout

Start at: 2019-01-22 03:39:00
End at: 2019-01-22 03:39:30
Local clock offset: 3.037 ms
Remote clock offset: 5.649 ms

```
# Below is generated by plot.py at 2019-01-22 05:57:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.90 Mbit/s
95th percentile per-packet one-way delay: 1.056 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 1.054 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.14 Mbit/s
95th percentile per-packet one-way delay: 1.054 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.86 Mbit/s
95th percentile per-packet one-way delay: 1.063 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

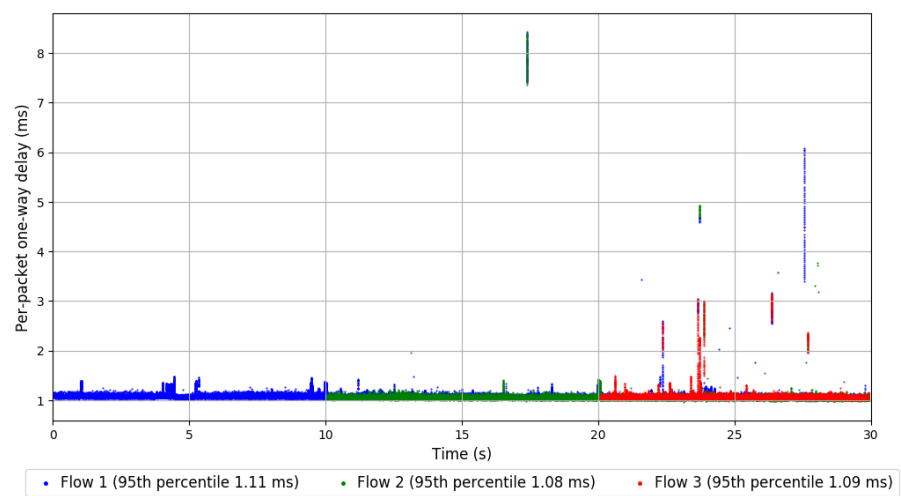
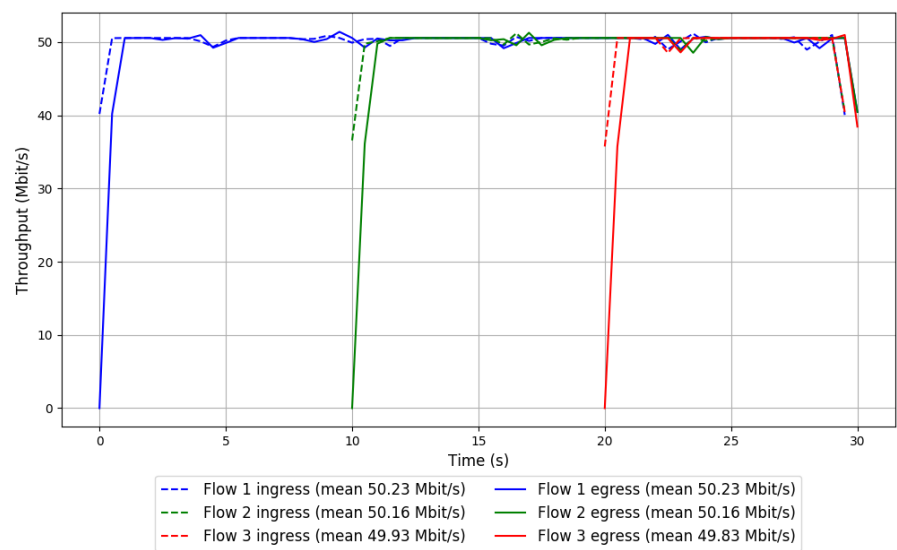


Run 4: Statistics of Sprout

Start at: 2019-01-22 04:09:19
End at: 2019-01-22 04:09:49
Local clock offset: -0.462 ms
Remote clock offset: -2.228 ms

```
# Below is generated by plot.py at 2019-01-22 05:57:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.96 Mbit/s
95th percentile per-packet one-way delay: 1.099 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 50.23 Mbit/s
95th percentile per-packet one-way delay: 1.109 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 1.076 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.83 Mbit/s
95th percentile per-packet one-way delay: 1.092 ms
Loss rate: 0.20%
```

Run 4: Report of Sprout — Data Link

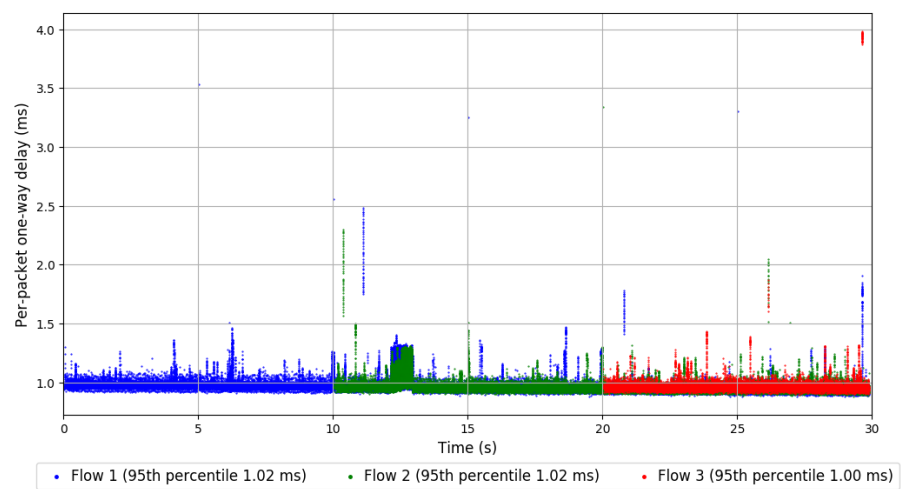
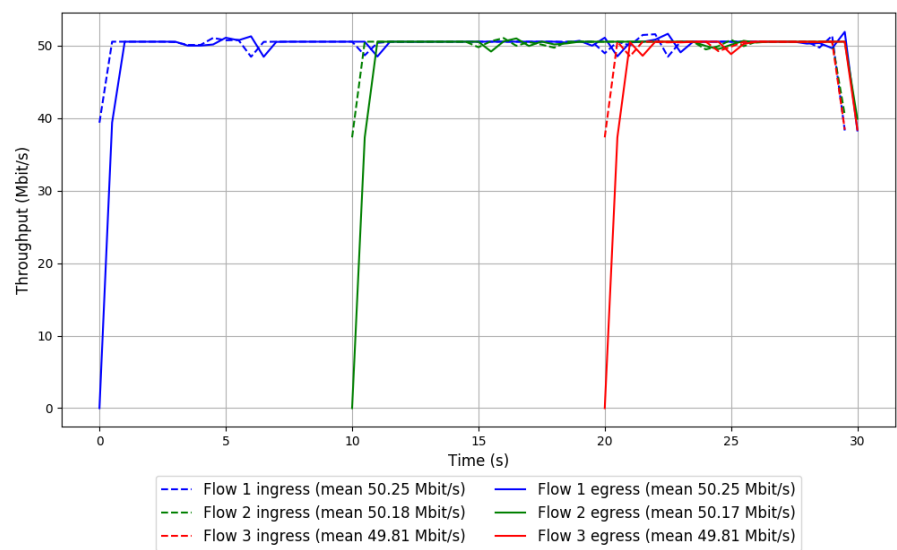


Run 5: Statistics of Sprout

Start at: 2019-01-22 04:39:40
End at: 2019-01-22 04:40:10
Local clock offset: 3.079 ms
Remote clock offset: -3.212 ms

```
# Below is generated by plot.py at 2019-01-22 05:57:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.01 Mbit/s
95th percentile per-packet one-way delay: 1.013 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 1.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.17 Mbit/s
95th percentile per-packet one-way delay: 1.016 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 49.81 Mbit/s
95th percentile per-packet one-way delay: 1.000 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

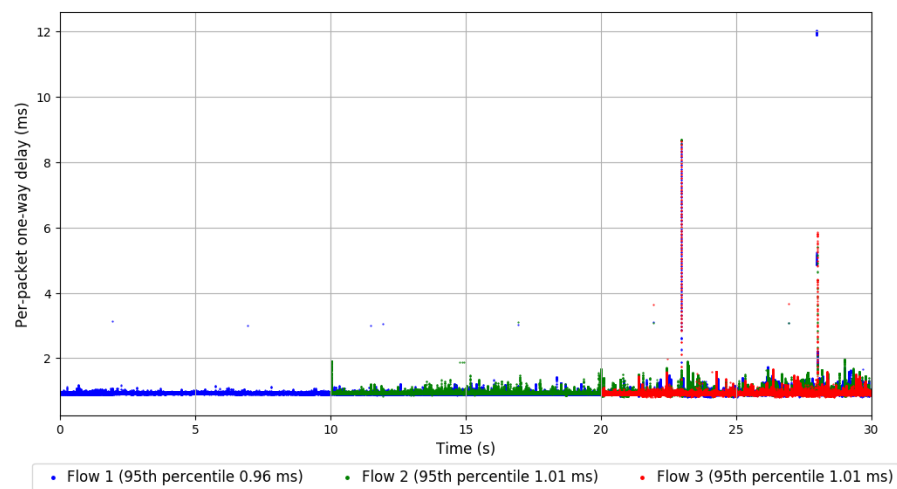
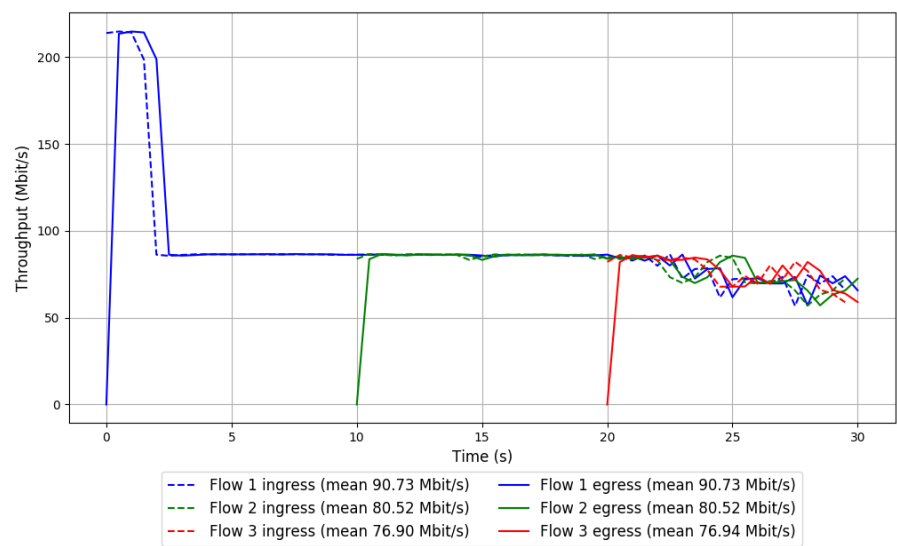


Run 1: Statistics of TaoVA-100x

Start at: 2019-01-22 02:52:58
End at: 2019-01-22 02:53:28
Local clock offset: 3.527 ms
Remote clock offset: -2.194 ms

Below is generated by plot.py at 2019-01-22 05:59:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 169.87 Mbit/s
95th percentile per-packet one-way delay: 0.979 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 90.73 Mbit/s
95th percentile per-packet one-way delay: 0.960 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 80.52 Mbit/s
95th percentile per-packet one-way delay: 1.010 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 76.94 Mbit/s
95th percentile per-packet one-way delay: 1.007 ms
Loss rate: 0.00%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-01-22 03:23:10

End at: 2019-01-22 03:23:40

Local clock offset: 3.311 ms

Remote clock offset: 1.749 ms

Below is generated by plot.py at 2019-01-22 05:59:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.50 Mbit/s

95th percentile per-packet one-way delay: 1.250 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 21.75 Mbit/s

95th percentile per-packet one-way delay: 1.227 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.32 Mbit/s

95th percentile per-packet one-way delay: 1.273 ms

Loss rate: 0.01%

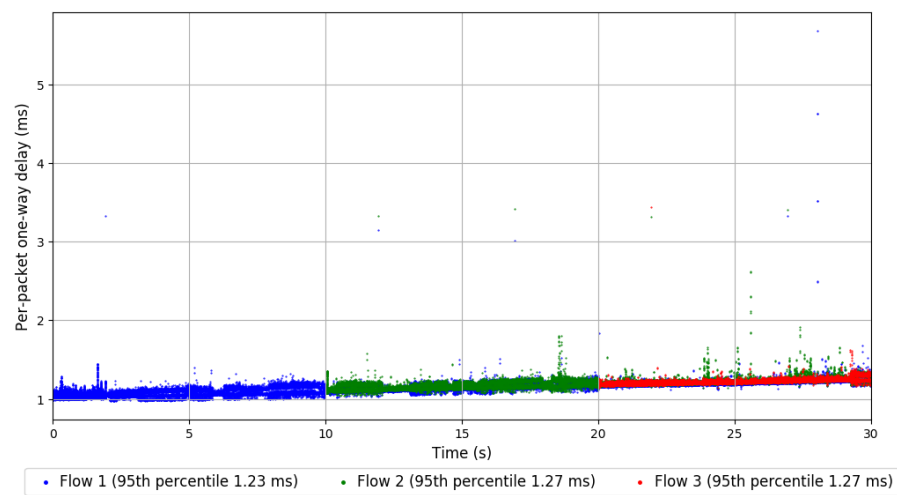
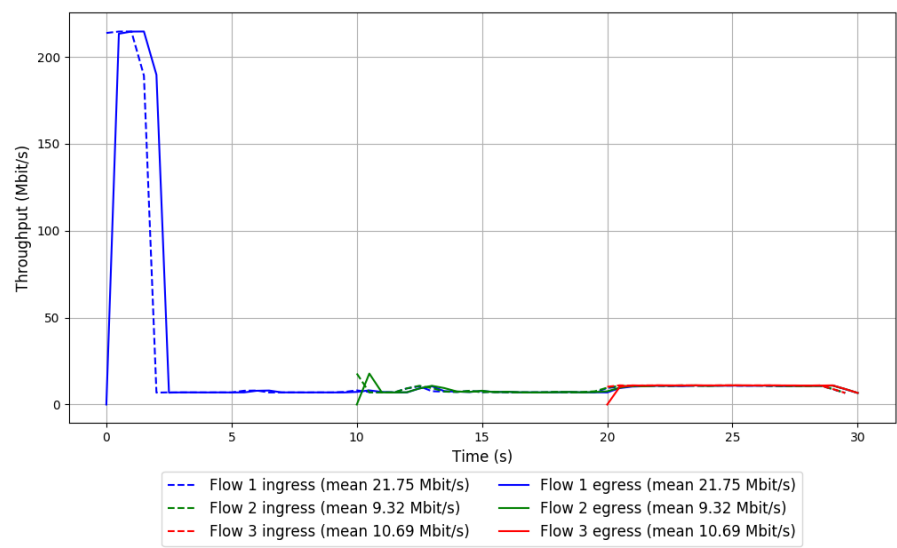
-- Flow 3:

Average throughput: 10.69 Mbit/s

95th percentile per-packet one-way delay: 1.271 ms

Loss rate: 0.01%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-01-22 03:53:21

End at: 2019-01-22 03:53:51

Local clock offset: 1.579 ms

Remote clock offset: 2.976 ms

Below is generated by plot.py at 2019-01-22 05:59:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.07 Mbit/s

95th percentile per-packet one-way delay: 1.033 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 105.11 Mbit/s

95th percentile per-packet one-way delay: 1.041 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.92 Mbit/s

95th percentile per-packet one-way delay: 0.953 ms

Loss rate: 0.01%

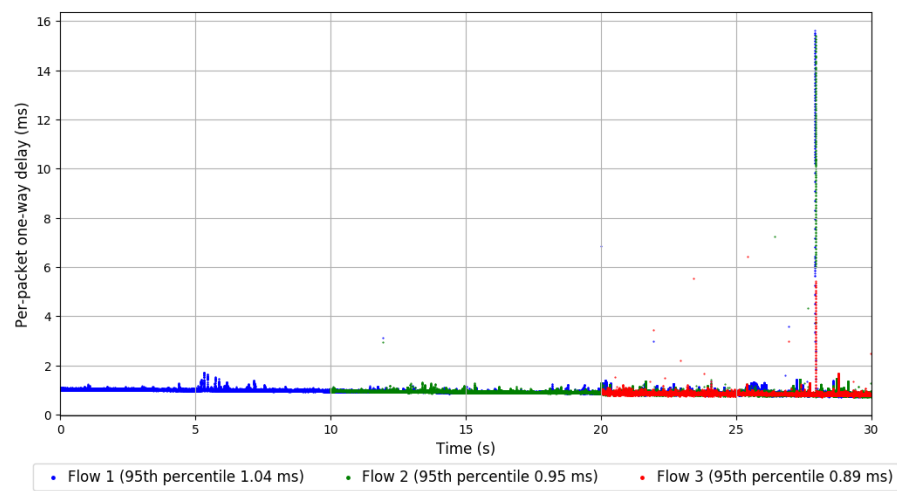
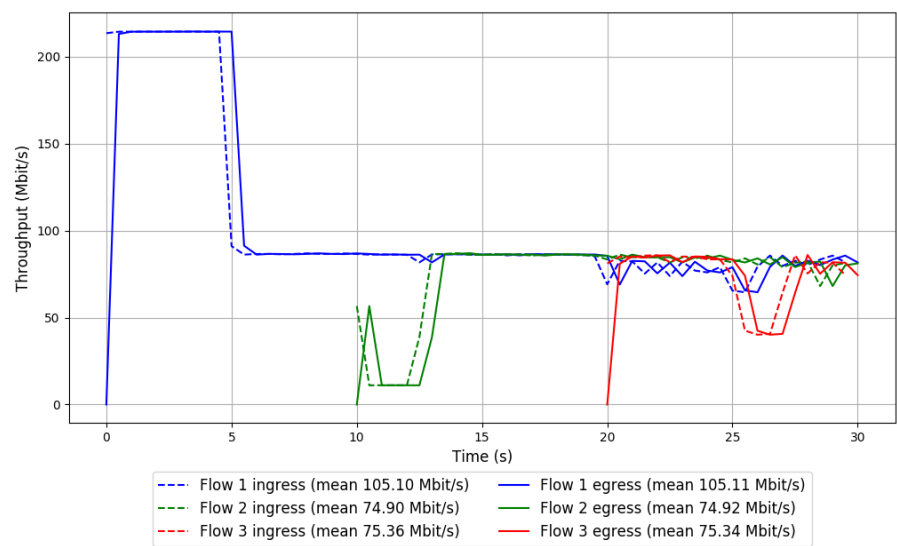
-- Flow 3:

Average throughput: 75.34 Mbit/s

95th percentile per-packet one-way delay: 0.894 ms

Loss rate: 0.02%

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

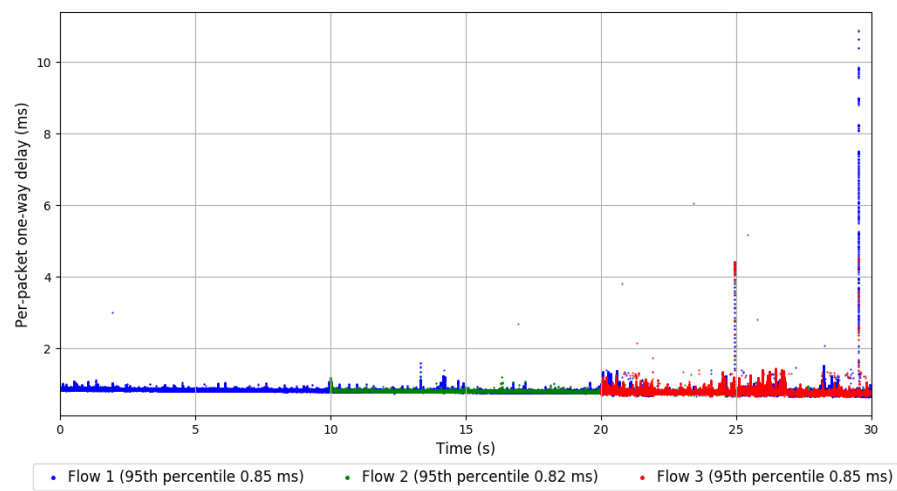
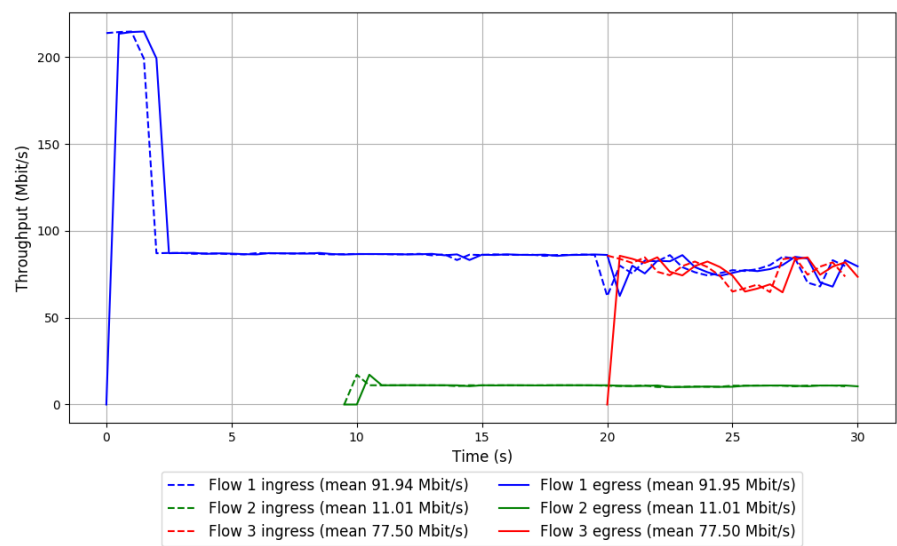


Run 4: Statistics of TaoVA-100x

Start at: 2019-01-22 04:23:47
End at: 2019-01-22 04:24:17
Local clock offset: 0.917 ms
Remote clock offset: -3.178 ms

Below is generated by plot.py at 2019-01-22 05:59:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 125.07 Mbit/s
95th percentile per-packet one-way delay: 0.854 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 91.95 Mbit/s
95th percentile per-packet one-way delay: 0.855 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 11.01 Mbit/s
95th percentile per-packet one-way delay: 0.820 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 77.50 Mbit/s
95th percentile per-packet one-way delay: 0.851 ms
Loss rate: 0.02%

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

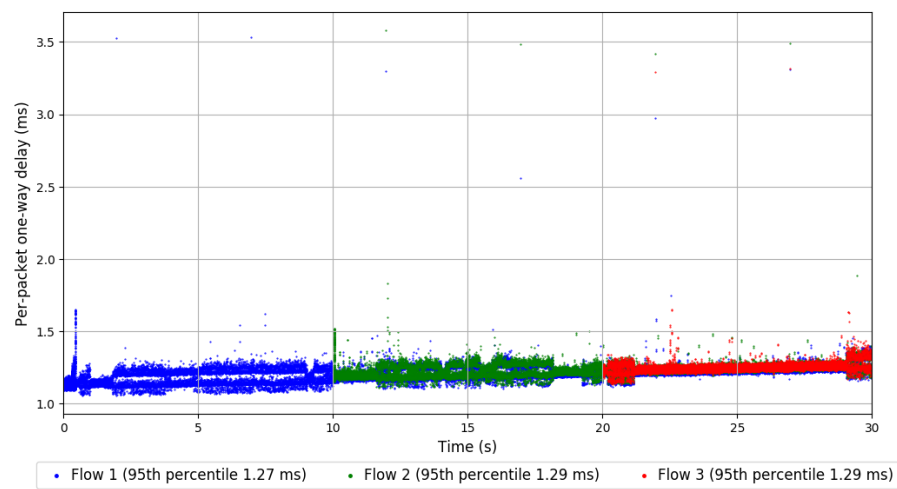
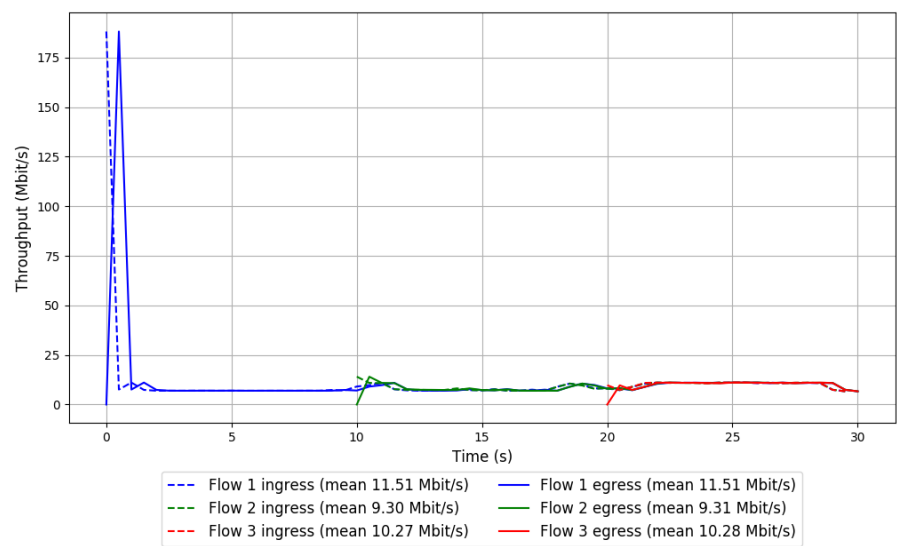


Run 5: Statistics of TaoVA-100x

Start at: 2019-01-22 04:54:04
End at: 2019-01-22 04:54:34
Local clock offset: 1.677 ms
Remote clock offset: -3.386 ms

Below is generated by plot.py at 2019-01-22 05:59:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 21.11 Mbit/s
95th percentile per-packet one-way delay: 1.281 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.51 Mbit/s
95th percentile per-packet one-way delay: 1.269 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 1.292 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 1.291 ms
Loss rate: 0.02%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-01-22 02:39:46

End at: 2019-01-22 02:40:16

Local clock offset: 3.053 ms

Remote clock offset: 0.015 ms

Below is generated by plot.py at 2019-01-22 06:02:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 514.87 Mbit/s

95th percentile per-packet one-way delay: 1.376 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 241.40 Mbit/s

95th percentile per-packet one-way delay: 1.394 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 279.04 Mbit/s

95th percentile per-packet one-way delay: 1.858 ms

Loss rate: 0.01%

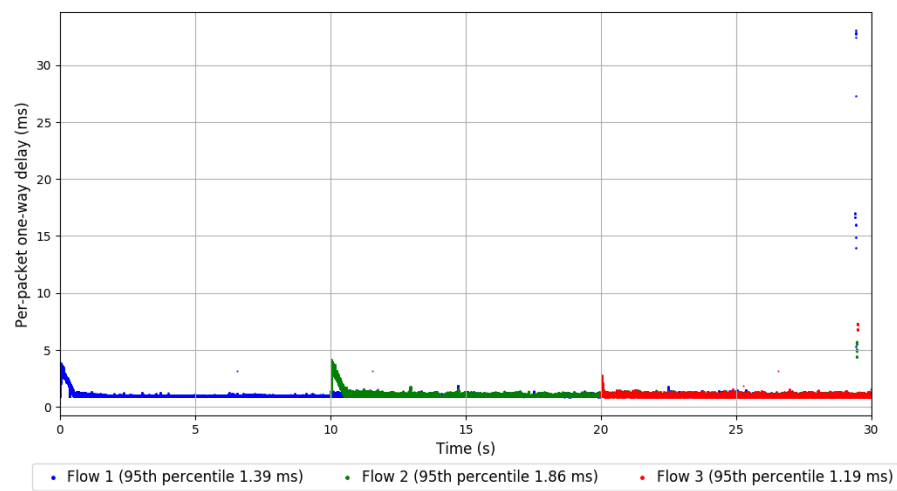
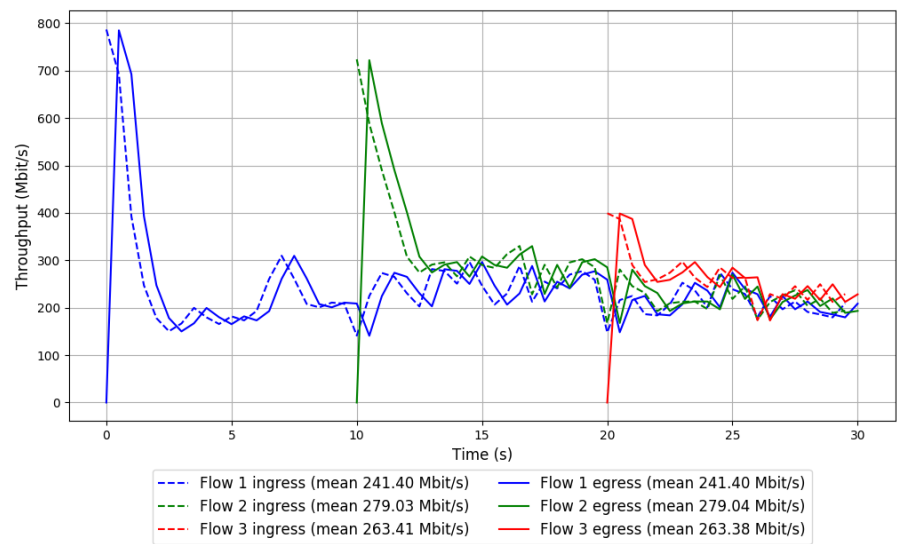
-- Flow 3:

Average throughput: 263.38 Mbit/s

95th percentile per-packet one-way delay: 1.189 ms

Loss rate: 0.02%

Run 1: Report of TCP Vegas — Data Link

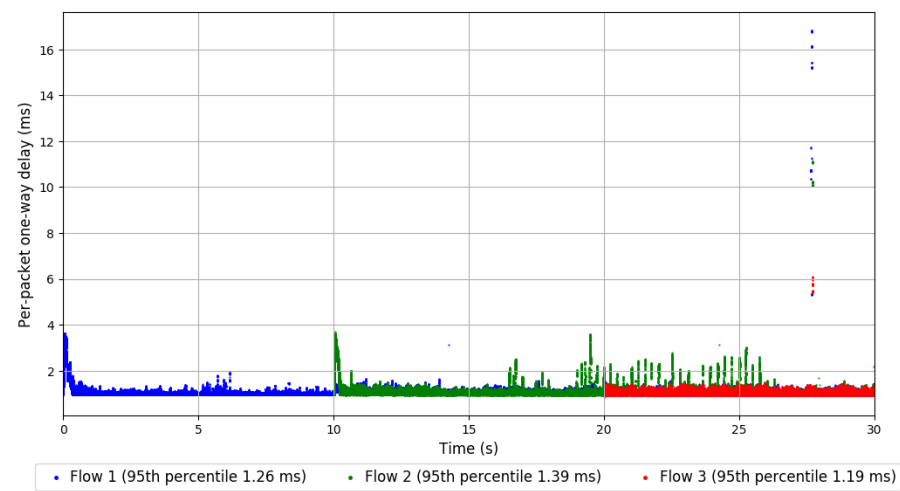
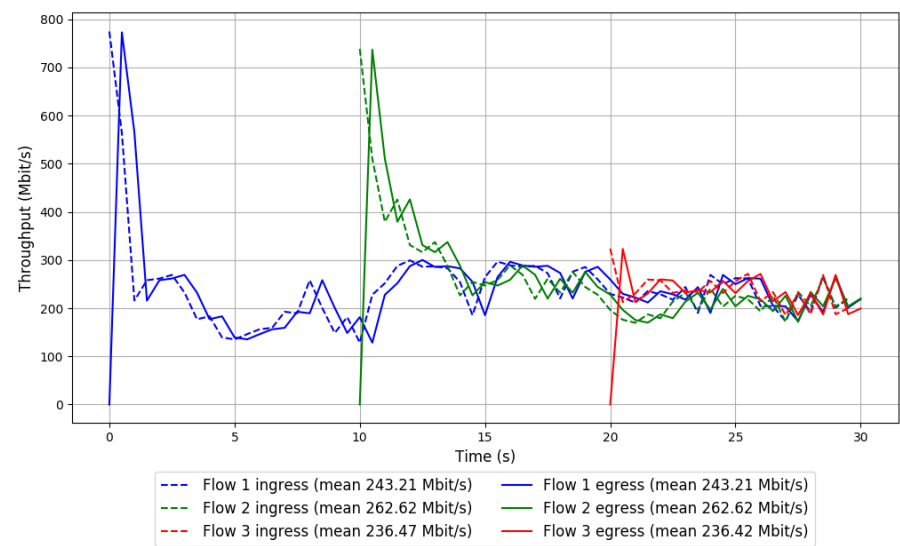


Run 2: Statistics of TCP Vegas

Start at: 2019-01-22 03:10:04
End at: 2019-01-22 03:10:34
Local clock offset: 3.478 ms
Remote clock offset: -2.919 ms

Below is generated by plot.py at 2019-01-22 06:02:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 496.61 Mbit/s
95th percentile per-packet one-way delay: 1.257 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 243.21 Mbit/s
95th percentile per-packet one-way delay: 1.259 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 262.62 Mbit/s
95th percentile per-packet one-way delay: 1.386 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 236.42 Mbit/s
95th percentile per-packet one-way delay: 1.190 ms
Loss rate: 0.02%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-01-22 03:40:16

End at: 2019-01-22 03:40:46

Local clock offset: 3.051 ms

Remote clock offset: 5.71 ms

Below is generated by plot.py at 2019-01-22 06:02:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 496.23 Mbit/s

95th percentile per-packet one-way delay: 1.418 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 221.43 Mbit/s

95th percentile per-packet one-way delay: 1.392 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 273.56 Mbit/s

95th percentile per-packet one-way delay: 1.334 ms

Loss rate: 0.01%

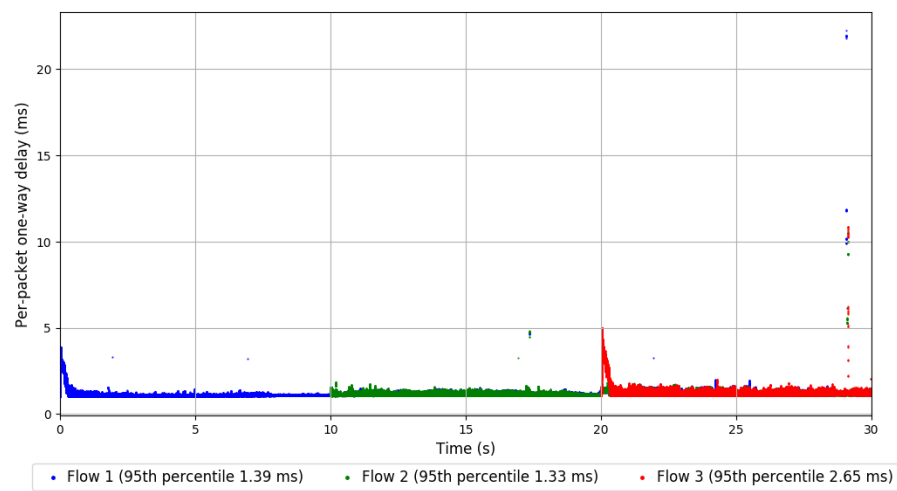
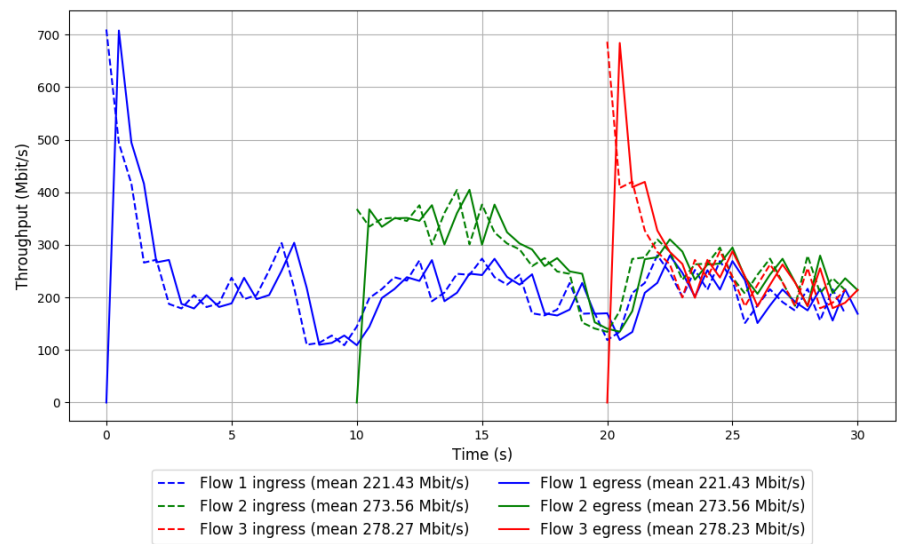
-- Flow 3:

Average throughput: 278.23 Mbit/s

95th percentile per-packet one-way delay: 2.646 ms

Loss rate: 0.02%

Run 3: Report of TCP Vegas — Data Link

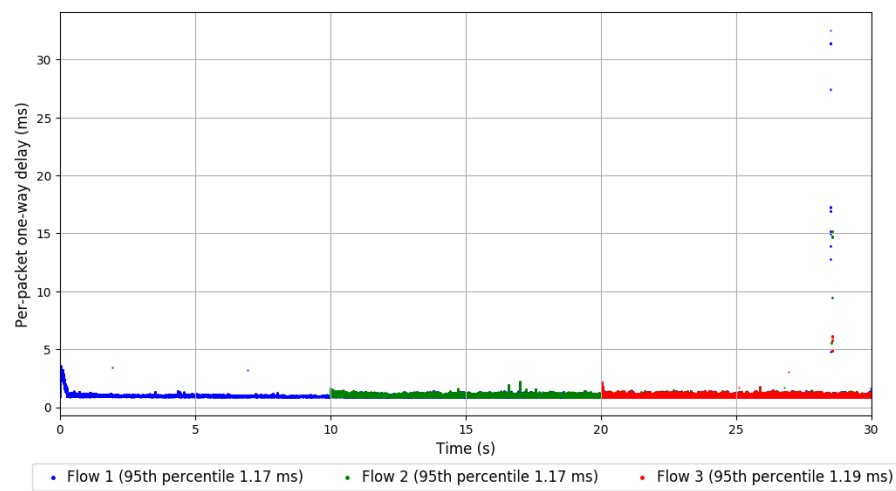
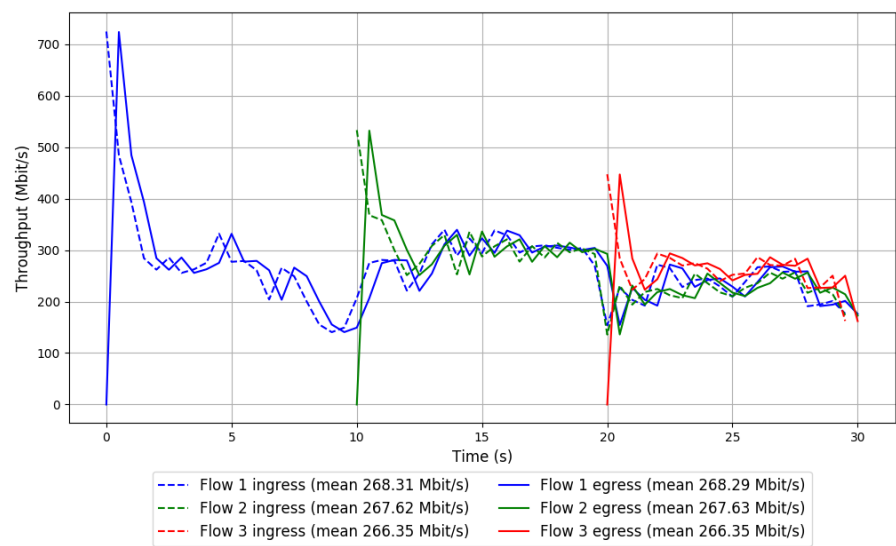


Run 4: Statistics of TCP Vegas

Start at: 2019-01-22 04:10:35
End at: 2019-01-22 04:11:05
Local clock offset: -0.553 ms
Remote clock offset: -2.286 ms

Below is generated by plot.py at 2019-01-22 06:02:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 535.08 Mbit/s
95th percentile per-packet one-way delay: 1.177 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 268.29 Mbit/s
95th percentile per-packet one-way delay: 1.171 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 267.63 Mbit/s
95th percentile per-packet one-way delay: 1.174 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 266.35 Mbit/s
95th percentile per-packet one-way delay: 1.194 ms
Loss rate: 0.02%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-01-22 04:40:56

End at: 2019-01-22 04:41:26

Local clock offset: 3.162 ms

Remote clock offset: -3.14 ms

Below is generated by plot.py at 2019-01-22 06:02:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 502.59 Mbit/s

95th percentile per-packet one-way delay: 1.110 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 240.04 Mbit/s

95th percentile per-packet one-way delay: 1.070 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 288.42 Mbit/s

95th percentile per-packet one-way delay: 1.231 ms

Loss rate: 0.01%

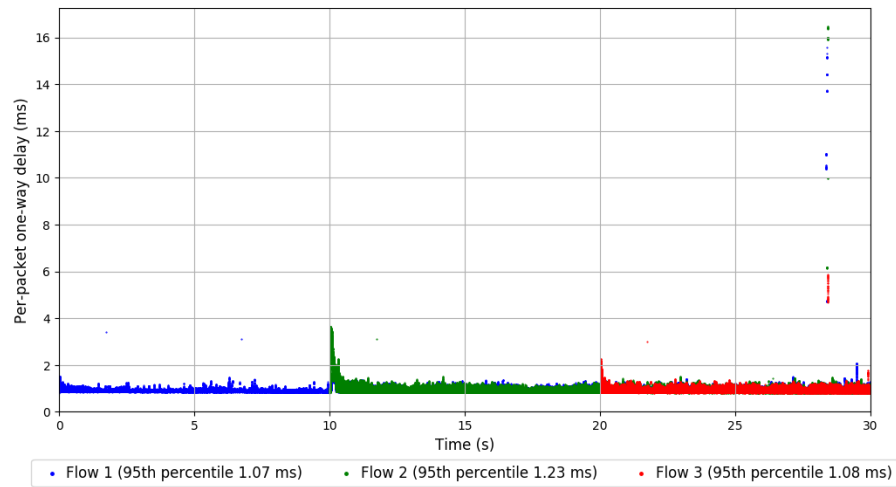
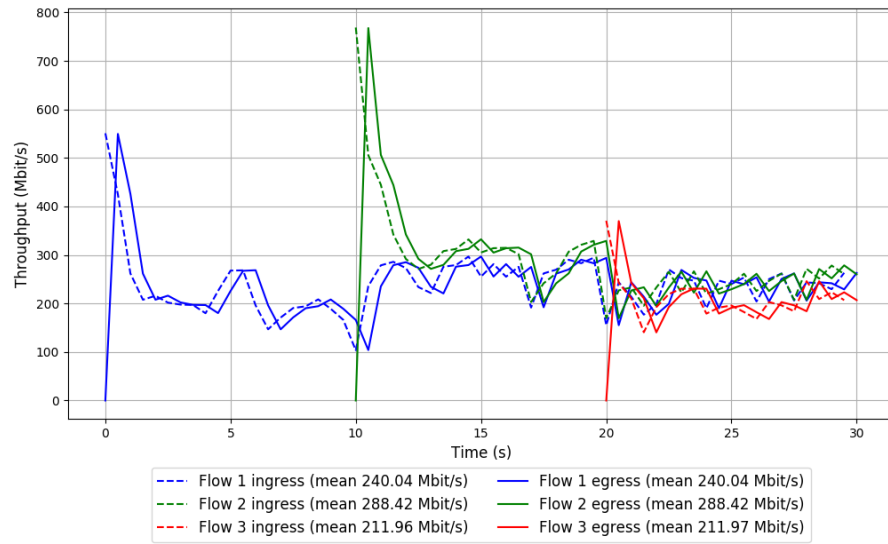
-- Flow 3:

Average throughput: 211.97 Mbit/s

95th percentile per-packet one-way delay: 1.085 ms

Loss rate: 0.02%

Run 5: Report of TCP Vegas — Data Link

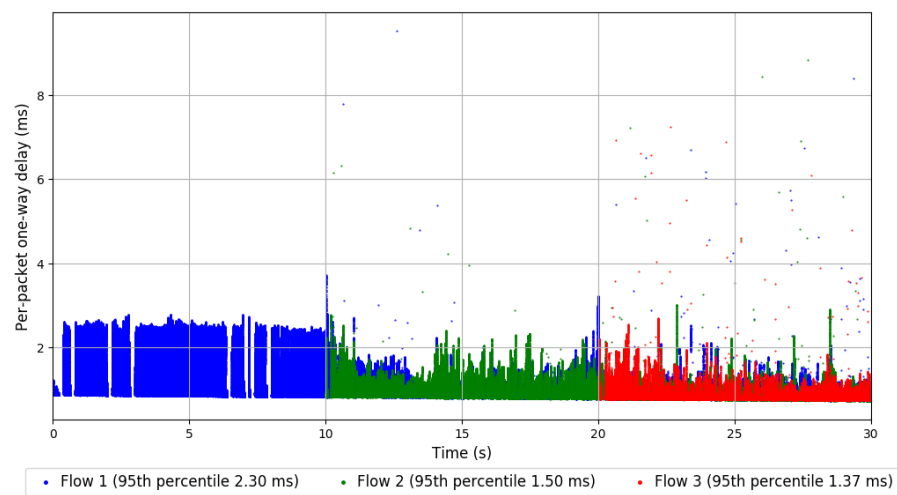
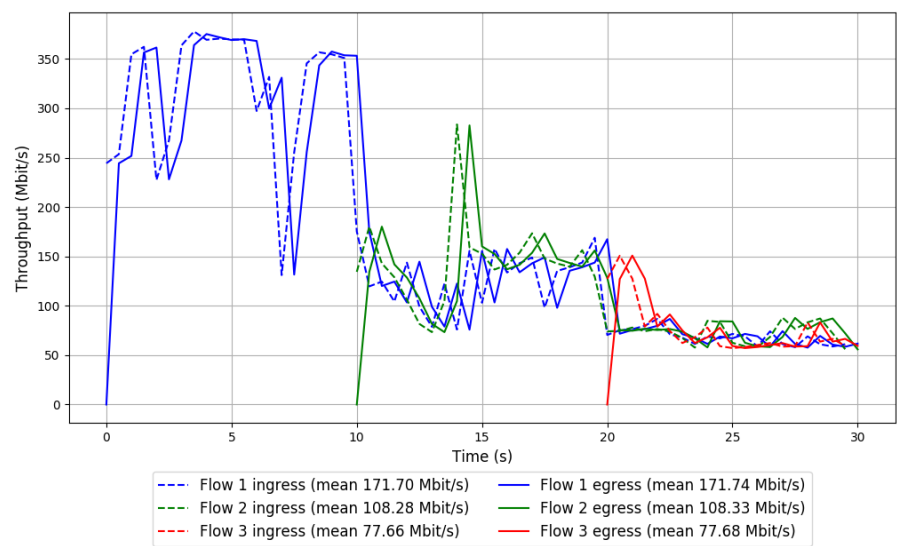


Run 1: Statistics of Verus

Start at: 2019-01-22 02:44:40
End at: 2019-01-22 02:45:10
Local clock offset: 3.519 ms
Remote clock offset: -1.061 ms

Below is generated by plot.py at 2019-01-22 06:02:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 269.72 Mbit/s
95th percentile per-packet one-way delay: 2.203 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.74 Mbit/s
95th percentile per-packet one-way delay: 2.301 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 108.33 Mbit/s
95th percentile per-packet one-way delay: 1.496 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 77.68 Mbit/s
95th percentile per-packet one-way delay: 1.371 ms
Loss rate: 0.00%

Run 1: Report of Verus — Data Link

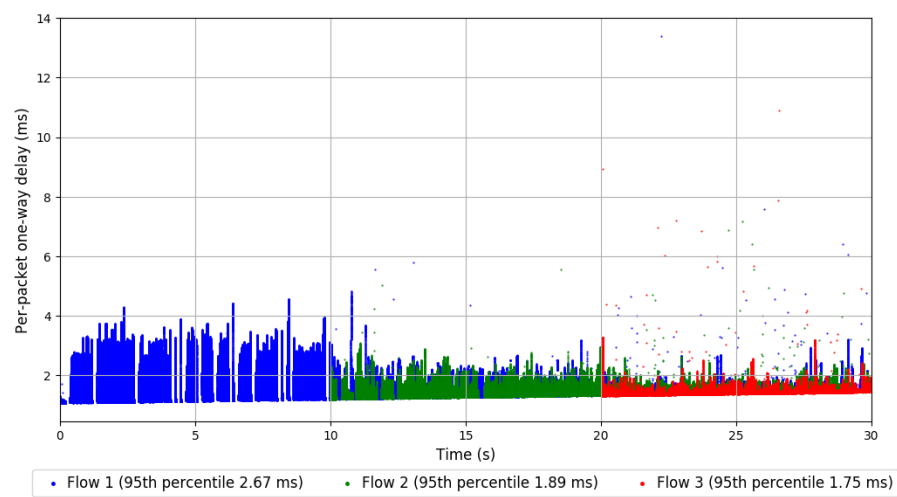
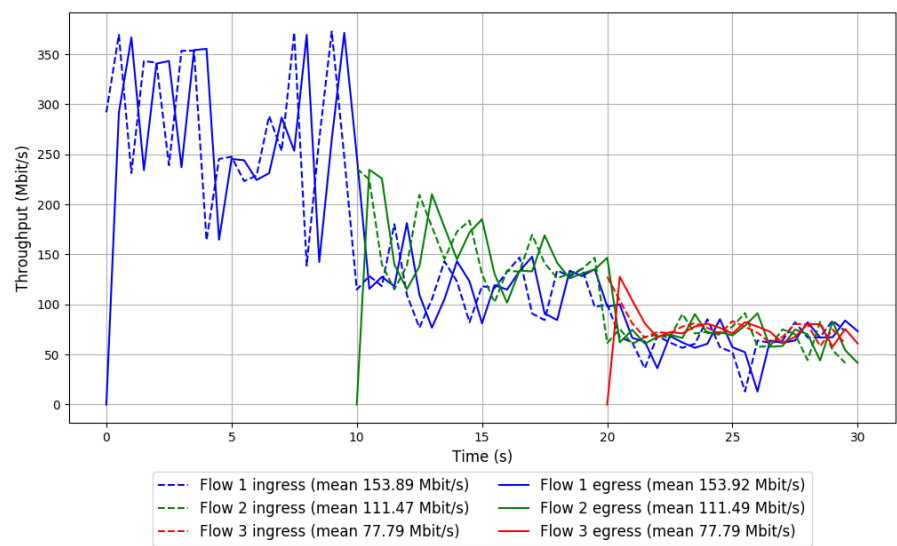


Run 2: Statistics of Verus

Start at: 2019-01-22 03:14:54
End at: 2019-01-22 03:15:24
Local clock offset: 3.594 ms
Remote clock offset: -2.943 ms

Below is generated by plot.py at 2019-01-22 06:02:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 254.01 Mbit/s
95th percentile per-packet one-way delay: 2.517 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 153.92 Mbit/s
95th percentile per-packet one-way delay: 2.672 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 111.49 Mbit/s
95th percentile per-packet one-way delay: 1.887 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 77.79 Mbit/s
95th percentile per-packet one-way delay: 1.745 ms
Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-01-22 03:45:09

End at: 2019-01-22 03:45:39

Local clock offset: 3.08 ms

Remote clock offset: 6.428 ms

Below is generated by plot.py at 2019-01-22 06:03:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.99 Mbit/s

95th percentile per-packet one-way delay: 2.861 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 155.67 Mbit/s

95th percentile per-packet one-way delay: 3.161 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.13 Mbit/s

95th percentile per-packet one-way delay: 1.776 ms

Loss rate: 0.01%

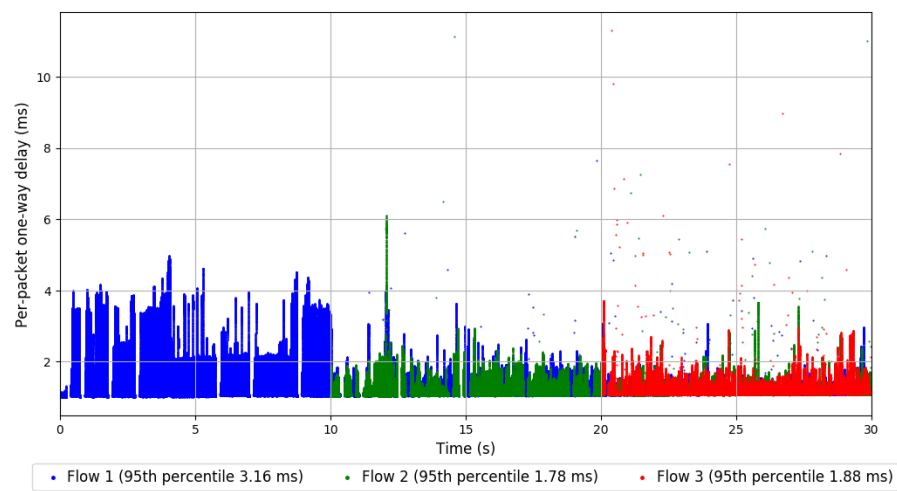
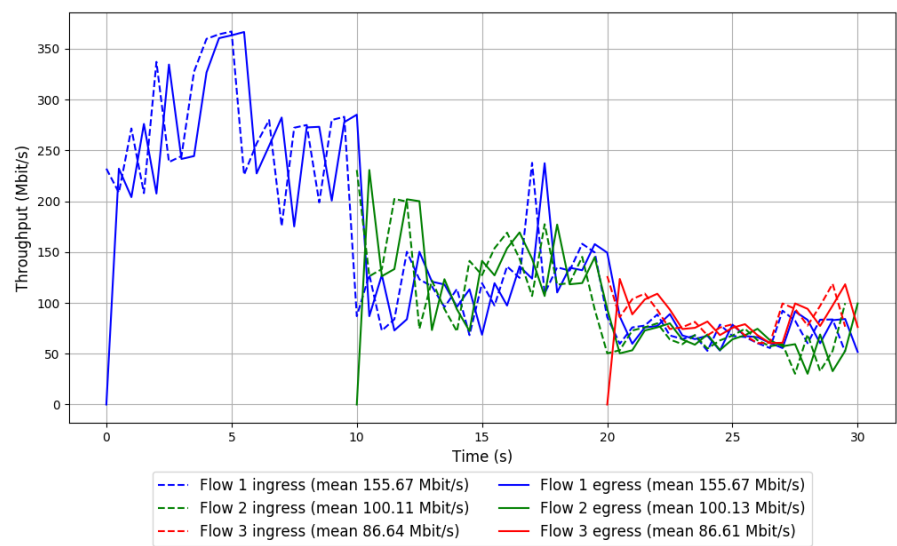
-- Flow 3:

Average throughput: 86.61 Mbit/s

95th percentile per-packet one-way delay: 1.883 ms

Loss rate: 0.05%

Run 3: Report of Verus — Data Link

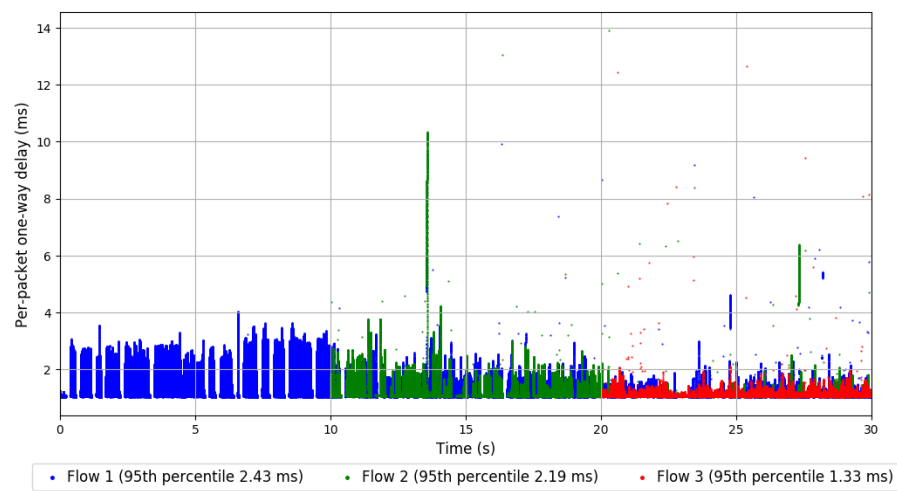
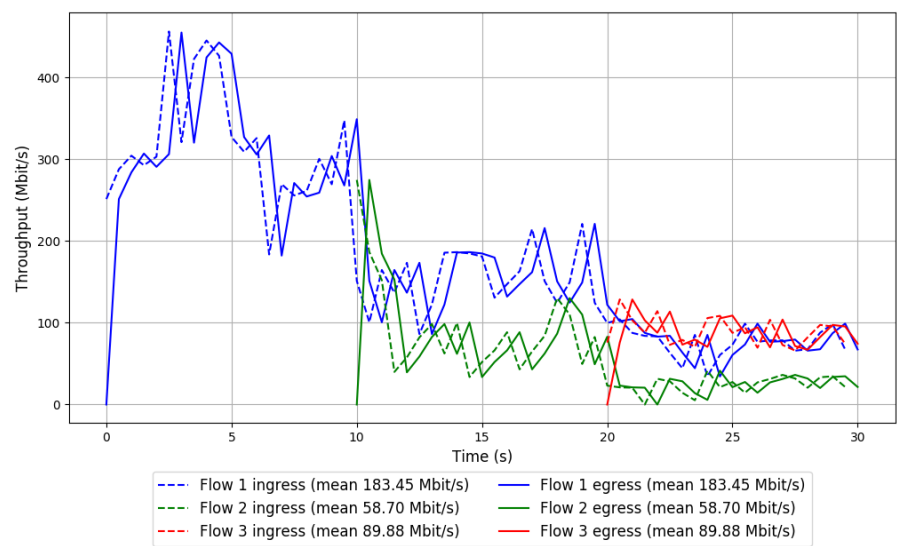


Run 4: Statistics of Verus

Start at: 2019-01-22 04:15:30
End at: 2019-01-22 04:16:00
Local clock offset: -0.801 ms
Remote clock offset: -2.832 ms

Below is generated by plot.py at 2019-01-22 06:04:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 252.39 Mbit/s
95th percentile per-packet one-way delay: 2.339 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.45 Mbit/s
95th percentile per-packet one-way delay: 2.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 2.192 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 89.88 Mbit/s
95th percentile per-packet one-way delay: 1.327 ms
Loss rate: 0.00%

Run 4: Report of Verus — Data Link

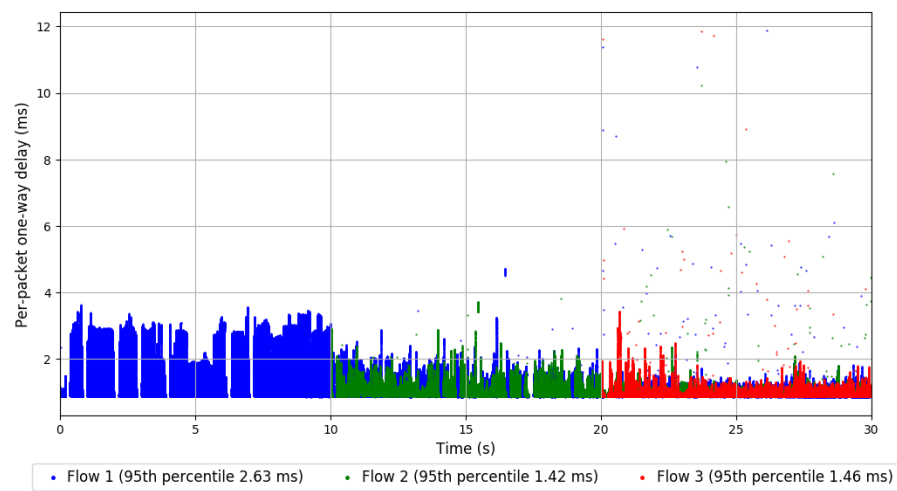
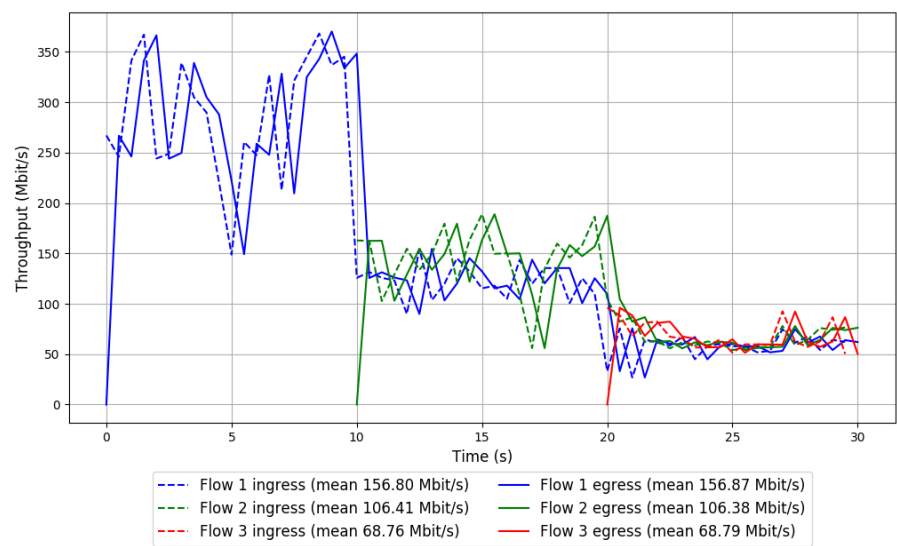


Run 5: Statistics of Verus

Start at: 2019-01-22 04:45:48
End at: 2019-01-22 04:46:18
Local clock offset: 3.406 ms
Remote clock offset: -3.264 ms

Below is generated by plot.py at 2019-01-22 06:04:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 250.48 Mbit/s
95th percentile per-packet one-way delay: 2.452 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 156.87 Mbit/s
95th percentile per-packet one-way delay: 2.632 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 106.38 Mbit/s
95th percentile per-packet one-way delay: 1.423 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 68.79 Mbit/s
95th percentile per-packet one-way delay: 1.459 ms
Loss rate: 0.00%

Run 5: Report of Verus — Data Link

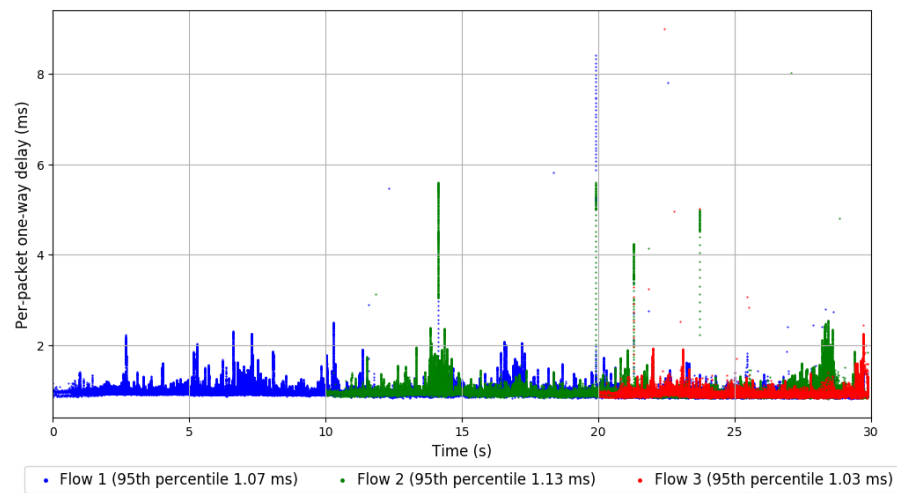
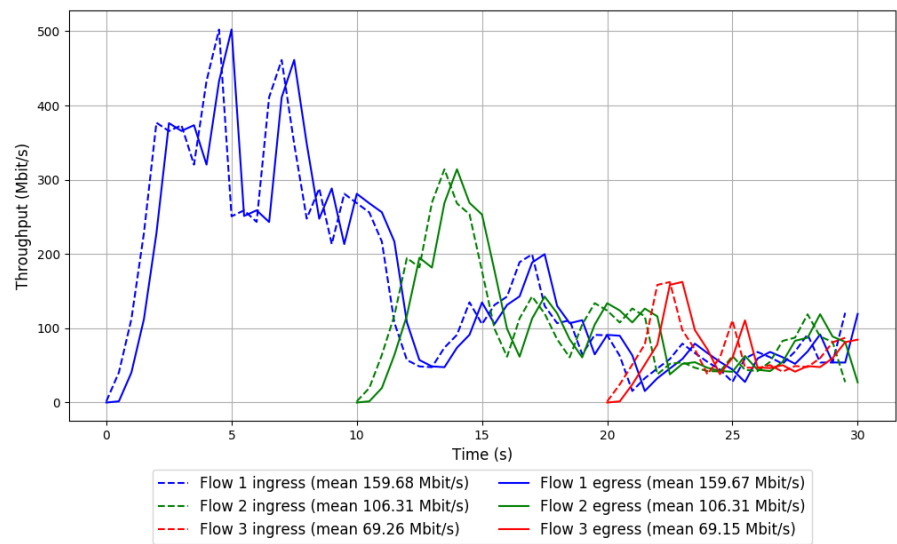


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-22 02:37:04
End at: 2019-01-22 02:37:34
Local clock offset: 2.706 ms
Remote clock offset: -0.133 ms

Below is generated by plot.py at 2019-01-22 06:05:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 253.16 Mbit/s
95th percentile per-packet one-way delay: 1.081 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 159.67 Mbit/s
95th percentile per-packet one-way delay: 1.071 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 106.31 Mbit/s
95th percentile per-packet one-way delay: 1.134 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 69.15 Mbit/s
95th percentile per-packet one-way delay: 1.031 ms
Loss rate: 0.18%

Run 1: Report of PCC-Vivace — Data Link

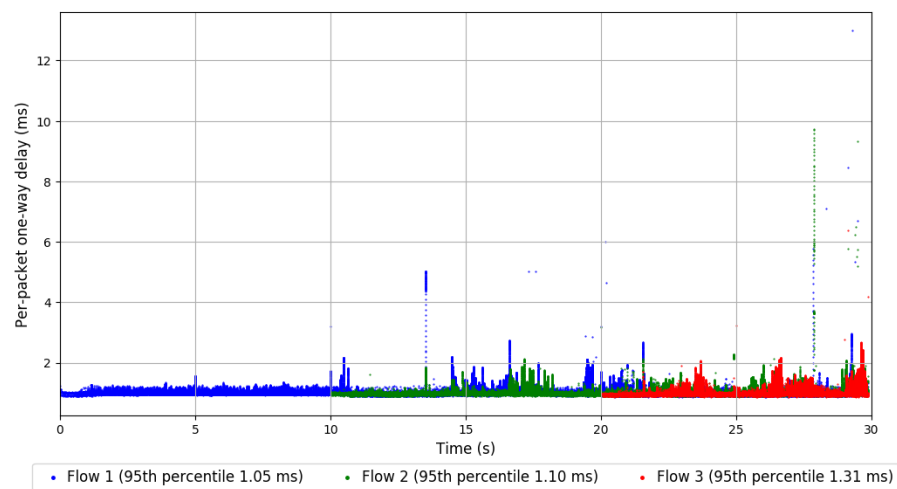
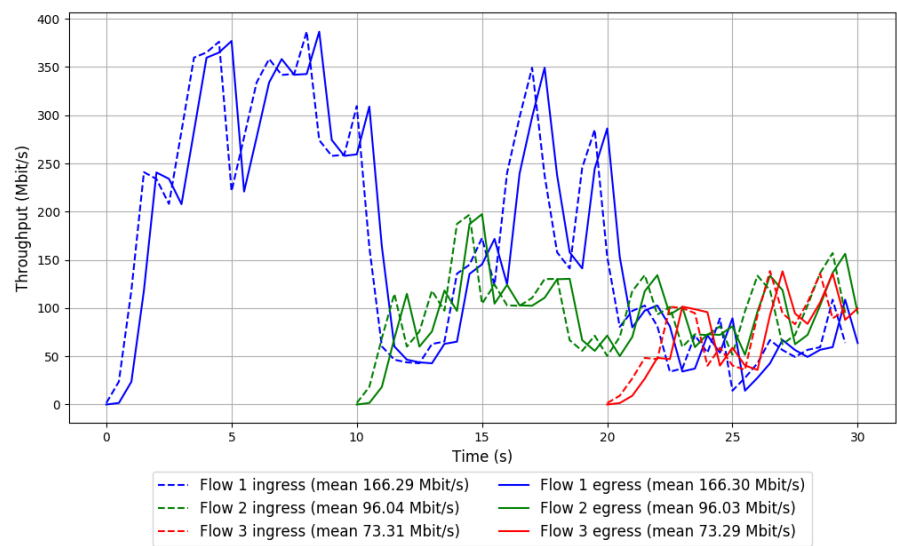


Run 2: Statistics of PCC-Vivace

Start at: 2019-01-22 03:07:22
End at: 2019-01-22 03:07:52
Local clock offset: 3.436 ms
Remote clock offset: -2.873 ms

Below is generated by plot.py at 2019-01-22 06:05:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 254.25 Mbit/s
95th percentile per-packet one-way delay: 1.084 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 166.30 Mbit/s
95th percentile per-packet one-way delay: 1.050 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 1.101 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 73.29 Mbit/s
95th percentile per-packet one-way delay: 1.307 ms
Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-01-22 03:37:35

End at: 2019-01-22 03:38:05

Local clock offset: 3.05 ms

Remote clock offset: 5.384 ms

Below is generated by plot.py at 2019-01-22 06:05:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.06 Mbit/s

95th percentile per-packet one-way delay: 1.205 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 143.95 Mbit/s

95th percentile per-packet one-way delay: 1.159 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 82.08 Mbit/s

95th percentile per-packet one-way delay: 1.163 ms

Loss rate: 0.01%

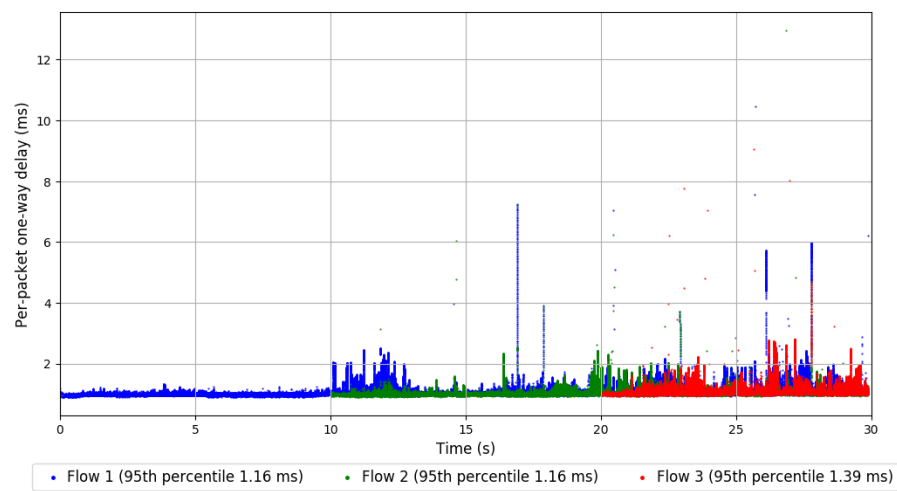
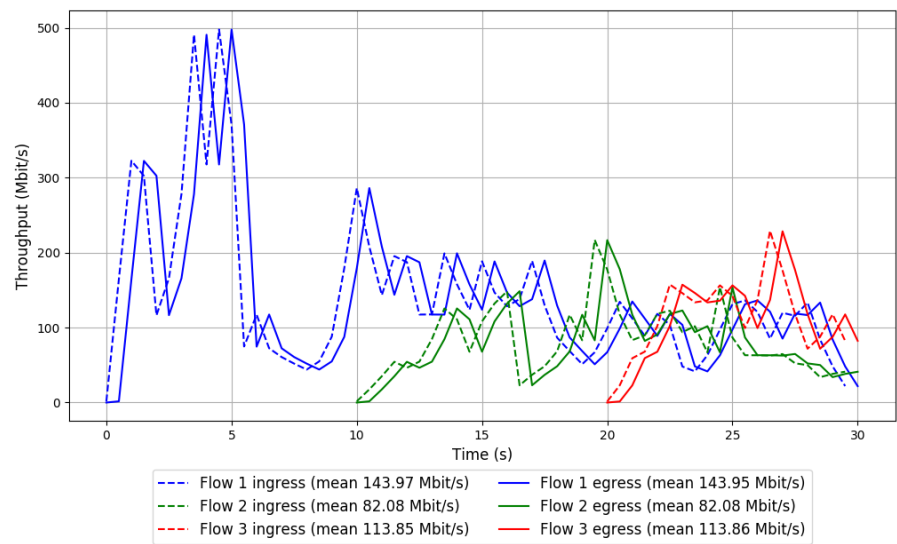
-- Flow 3:

Average throughput: 113.86 Mbit/s

95th percentile per-packet one-way delay: 1.394 ms

Loss rate: 0.02%

Run 3: Report of PCC-Vivace — Data Link

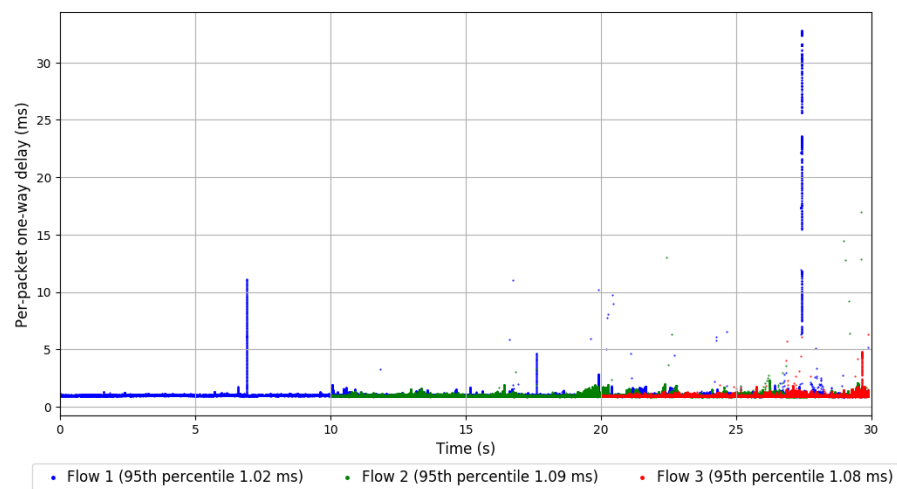
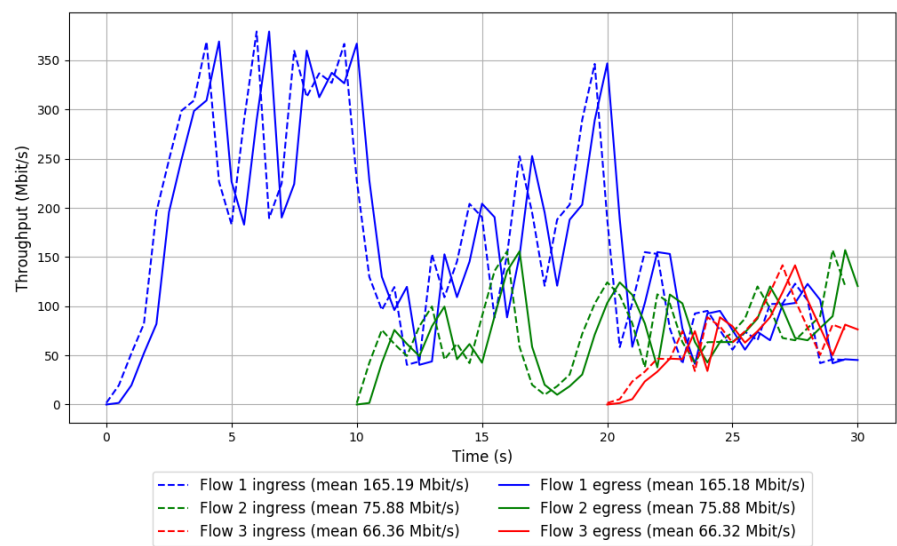


Run 4: Statistics of PCC-Vivace

Start at: 2019-01-22 04:07:54
End at: 2019-01-22 04:08:24
Local clock offset: -0.354 ms
Remote clock offset: -1.974 ms

Below is generated by plot.py at 2019-01-22 06:05:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 237.50 Mbit/s
95th percentile per-packet one-way delay: 1.031 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 165.18 Mbit/s
95th percentile per-packet one-way delay: 1.023 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 75.88 Mbit/s
95th percentile per-packet one-way delay: 1.095 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 66.32 Mbit/s
95th percentile per-packet one-way delay: 1.079 ms
Loss rate: 0.02%

Run 4: Report of PCC-Vivace — Data Link

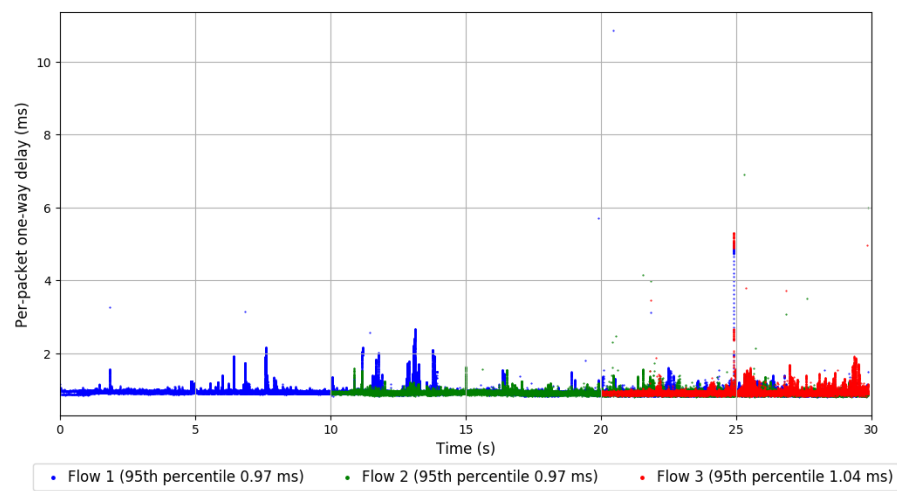
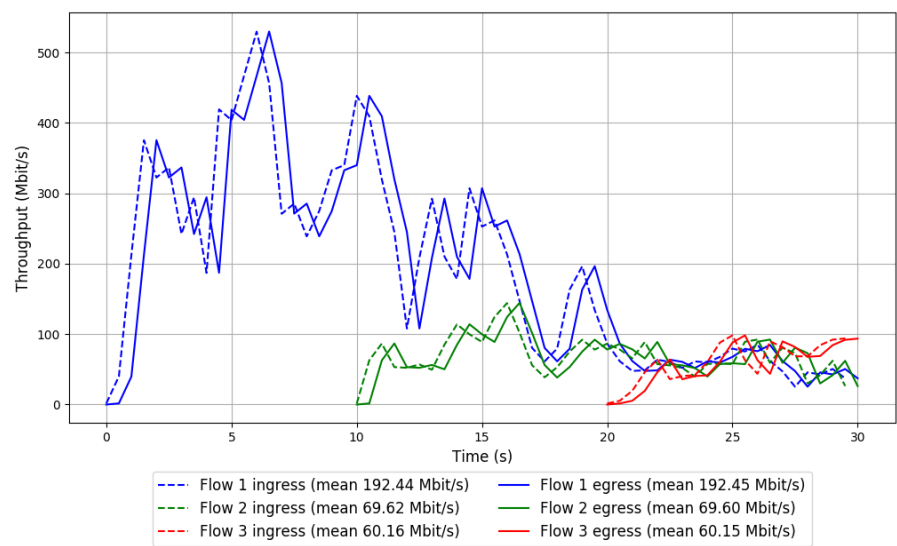


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-22 04:38:14
End at: 2019-01-22 04:38:44
Local clock offset: 2.998 ms
Remote clock offset: -3.172 ms

Below is generated by plot.py at 2019-01-22 06:05:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 258.54 Mbit/s
95th percentile per-packet one-way delay: 0.970 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 192.45 Mbit/s
95th percentile per-packet one-way delay: 0.967 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.60 Mbit/s
95th percentile per-packet one-way delay: 0.969 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 60.15 Mbit/s
95th percentile per-packet one-way delay: 1.044 ms
Loss rate: 0.06%

Run 5: Report of PCC-Vivace — Data Link

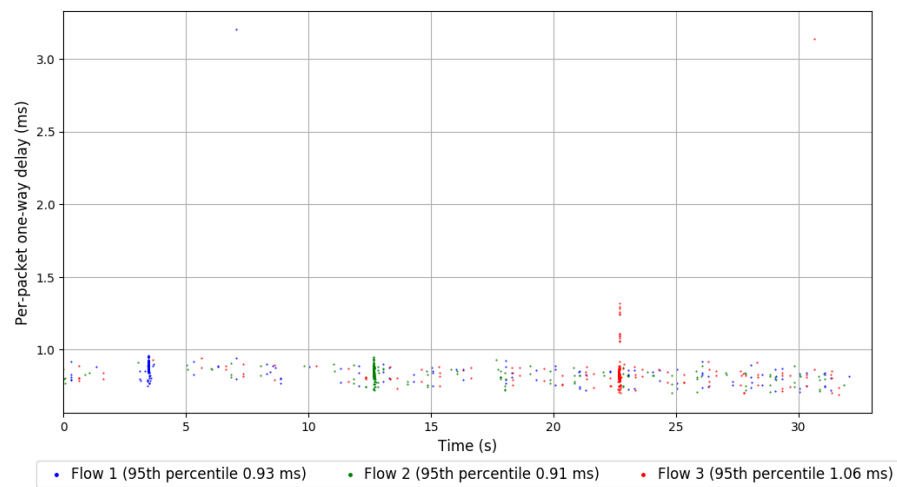
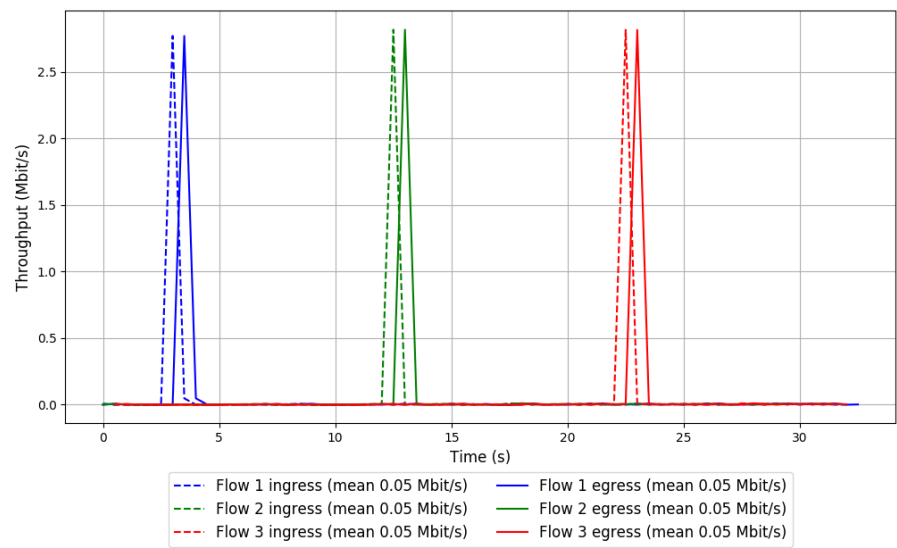


Run 1: Statistics of WebRTC media

Start at: 2019-01-22 02:31:41
End at: 2019-01-22 02:32:11
Local clock offset: 1.757 ms
Remote clock offset: -0.279 ms

Below is generated by plot.py at 2019-01-22 06:05:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 0.927 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.928 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.907 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.062 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

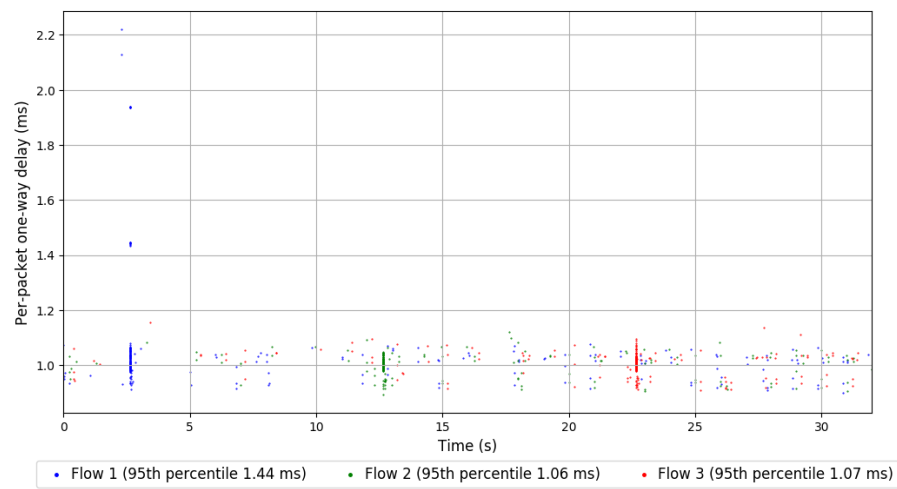
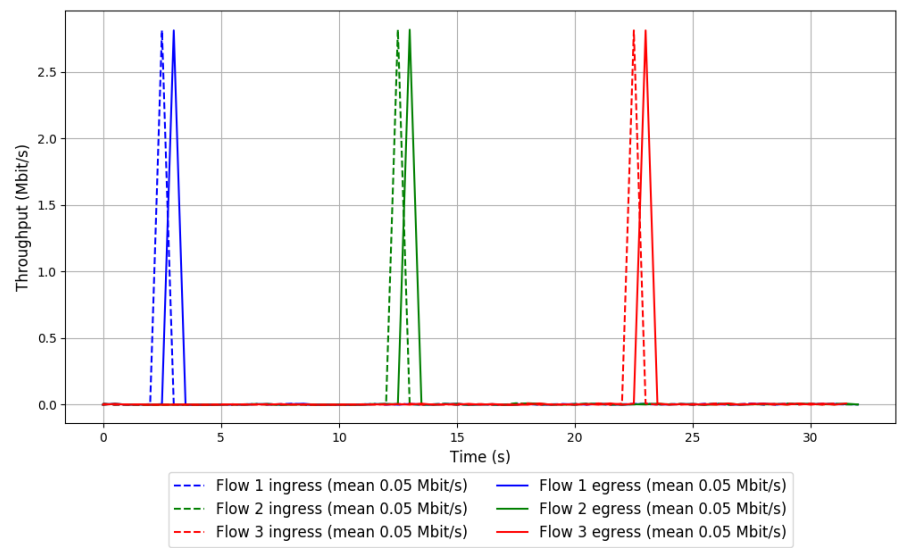


Run 2: Statistics of WebRTC media

Start at: 2019-01-22 03:01:58
End at: 2019-01-22 03:02:28
Local clock offset: 3.393 ms
Remote clock offset: -2.718 ms

Below is generated by plot.py at 2019-01-22 06:05:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 1.074 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.443 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.071 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-01-22 03:32:14

End at: 2019-01-22 03:32:44

Local clock offset: 3.061 ms

Remote clock offset: 4.321 ms

Below is generated by plot.py at 2019-01-22 06:05:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 1.199 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 1.438 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 1.190 ms

Loss rate: 0.00%

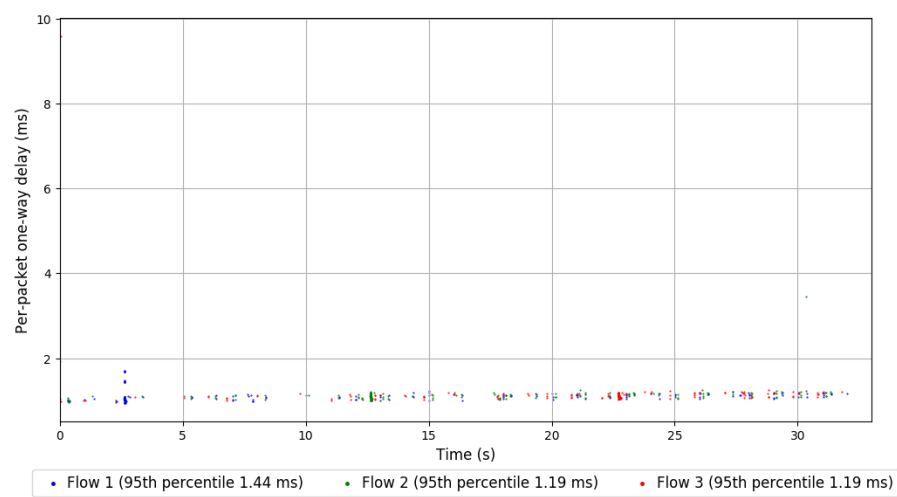
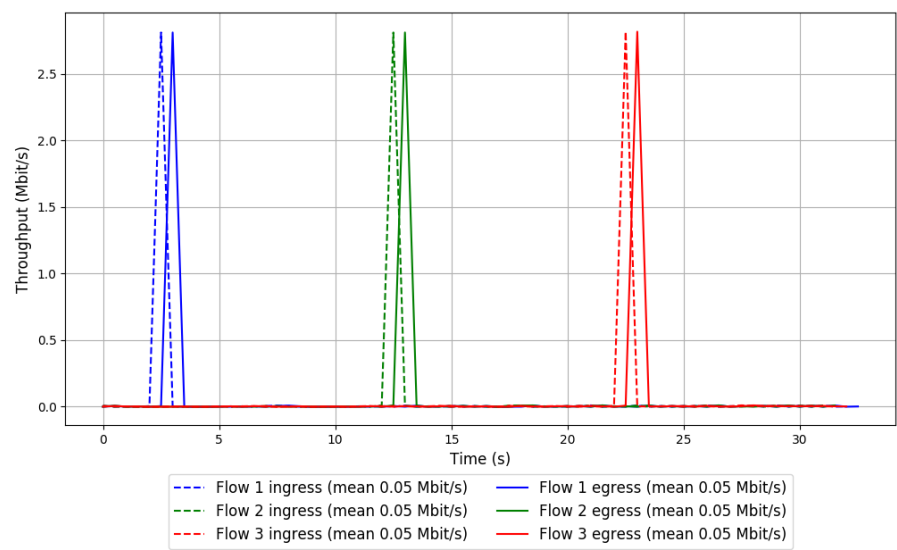
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 1.193 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

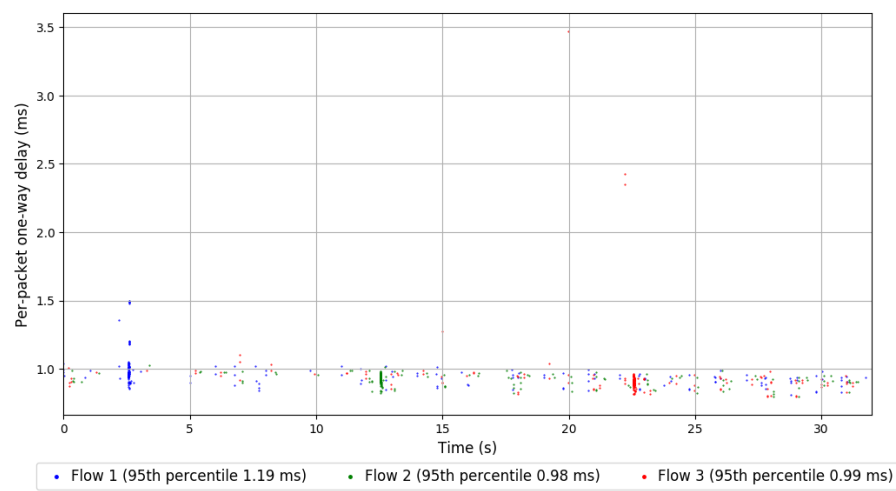
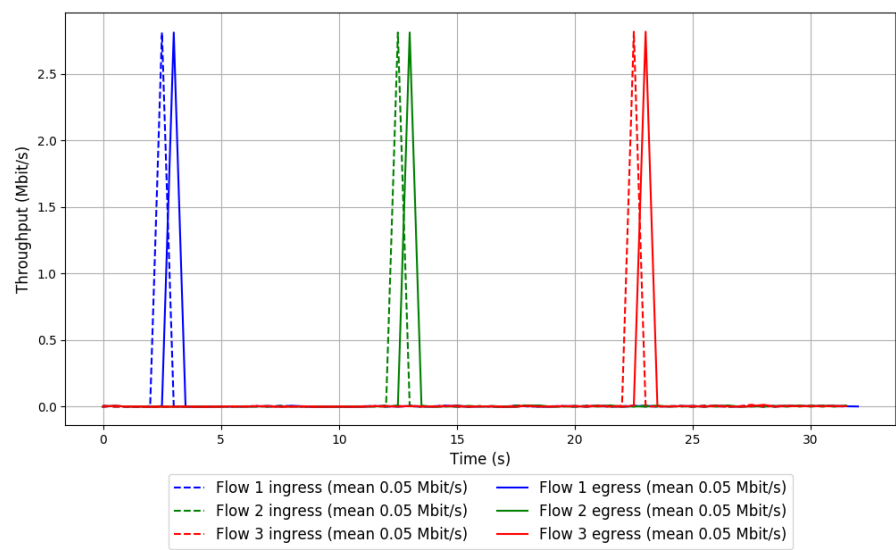


Run 4: Statistics of WebRTC media

Start at: 2019-01-22 04:02:31
End at: 2019-01-22 04:03:01
Local clock offset: 0.08 ms
Remote clock offset: -0.913 ms

Below is generated by plot.py at 2019-01-22 06:05:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 1.023 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.188 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.983 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.987 ms
Loss rate: 0.06%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-22 04:32:52
End at: 2019-01-22 04:33:22
Local clock offset: 2.516 ms
Remote clock offset: -3.141 ms

Below is generated by plot.py at 2019-01-22 06:05:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 0.999 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.997 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.996 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

