

Pantheon Report

Generated at 2019-02-21 06:22:19 (UTC).

Data path: GCE London on **ens4** (*local*) → GCE Iowa on **ens4** (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

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

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

System info:

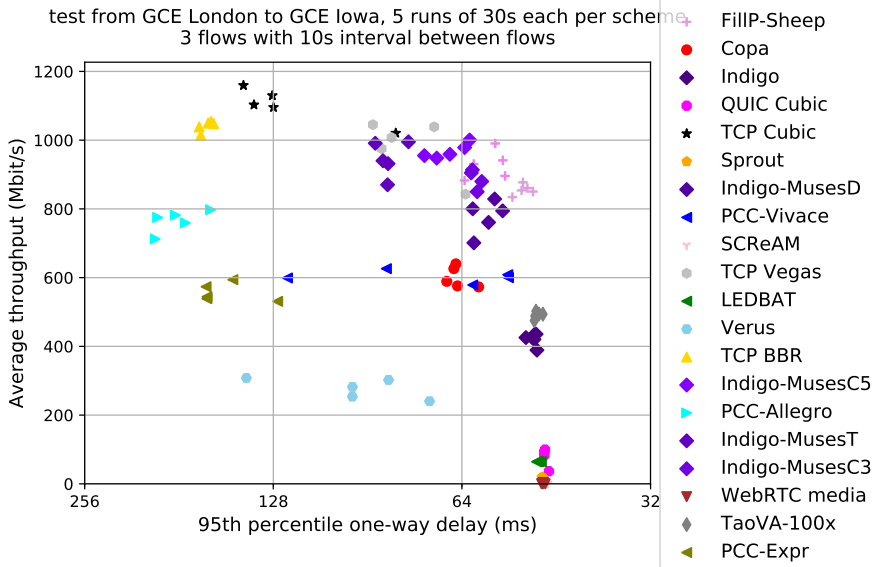
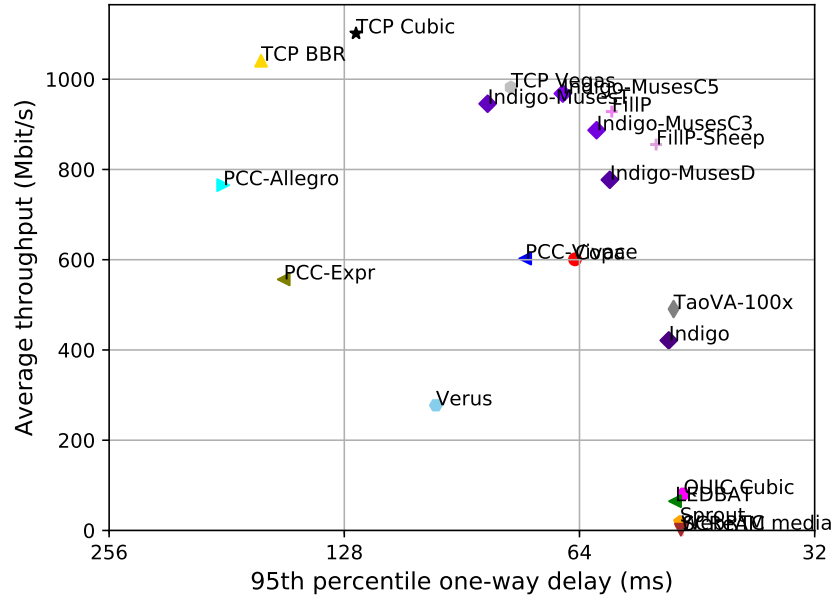
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

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

test from GCE London to GCE Iowa, 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	537.08	522.42	467.73	157.61	156.01	163.06	0.74	1.01	1.25
Copa	5	317.39	294.74	262.32	61.41	64.85	76.89	0.00	0.02	0.05
TCP Cubic	5	589.83	538.03	462.11	115.28	107.39	100.26	0.11	0.21	0.37
FillP	5	590.51	374.73	266.01	59.55	54.12	52.48	0.02	0.00	0.03
FillP-Sheep	5	557.42	324.23	247.48	51.47	50.43	50.24	0.00	0.00	0.02
Indigo	5	222.65	208.93	185.15	48.91	49.37	49.38	0.00	0.00	0.00
Indigo-MusesC3	4	520.56	430.38	320.51	63.24	58.78	50.66	0.00	0.01	0.03
Indigo-MusesC5	5	557.18	477.40	362.18	68.50	68.25	56.04	0.01	0.02	0.02
Indigo-MusesD	5	444.62	397.19	274.43	67.00	50.72	49.42	0.00	0.01	0.02
Indigo-MusesT	5	564.21	457.55	322.46	85.95	76.62	51.92	0.00	0.00	0.00
LEDBAT	5	41.68	27.78	13.98	48.39	48.20	47.55	0.00	0.00	0.00
PCC-Allegro	5	414.66	388.35	281.14	188.59	145.47	110.66	5.77	4.17	0.58
PCC-Expr	5	327.05	267.25	156.17	153.25	144.17	61.05	3.71	1.27	0.22
QUIC Cubic	5	37.78	42.33	45.29	47.21	46.97	47.12	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	47.03	47.08	47.10	0.00	0.00	0.00
Sprout	5	9.67	9.55	9.29	47.36	47.42	47.36	0.00	0.00	0.00
TaoVA-100x	5	247.16	245.90	239.15	48.03	48.85	48.92	0.00	0.00	0.00
TCP Vegas	5	475.14	513.40	496.20	66.31	79.22	76.95	0.02	0.08	0.04
Verus	5	153.31	134.30	106.53	94.55	112.99	82.15	0.42	0.08	0.01
PCC-Vivace	5	358.93	295.80	141.48	82.61	57.32	50.48	0.05	0.00	0.00
WebRTC media	5	0.87	0.57	0.24	47.24	47.48	47.22	0.00	0.01	0.01

Run 1: Statistics of TCP BBR

Start at: 2019-02-21 00:07:19

End at: 2019-02-21 00:07:49

Local clock offset: -0.098 ms

Remote clock offset: 0.163 ms

Below is generated by plot.py at 2019-02-21 03:44:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 1049.62 Mbit/s

95th percentile per-packet one-way delay: 162.584 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 531.92 Mbit/s

95th percentile per-packet one-way delay: 153.285 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 538.56 Mbit/s

95th percentile per-packet one-way delay: 165.198 ms

Loss rate: 1.11%

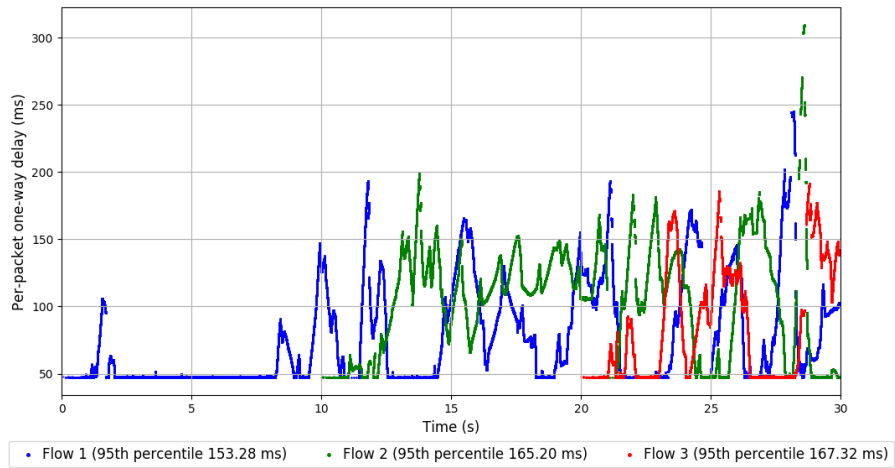
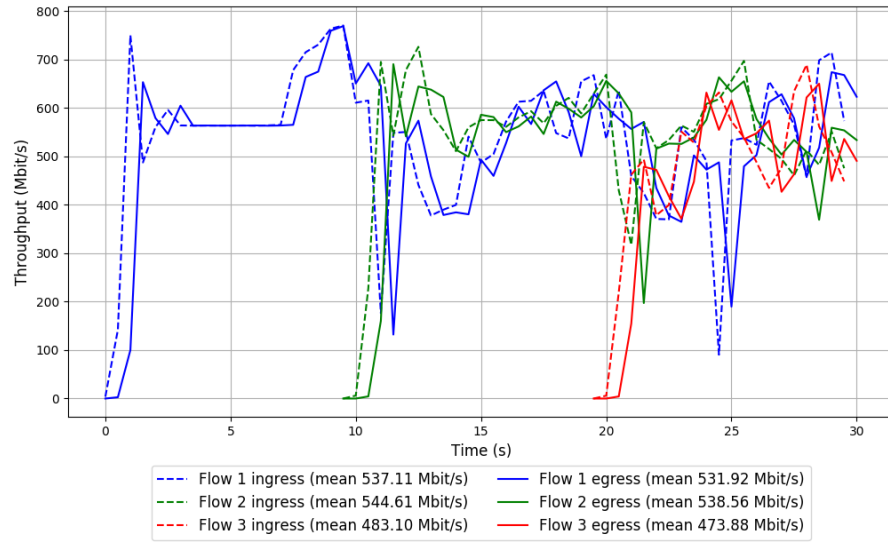
-- Flow 3:

Average throughput: 473.88 Mbit/s

95th percentile per-packet one-way delay: 167.320 ms

Loss rate: 1.90%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-02-21 00:44:14

End at: 2019-02-21 00:44:44

Local clock offset: -0.089 ms

Remote clock offset: 0.082 ms

Below is generated by plot.py at 2019-02-21 03:44:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 1014.23 Mbit/s

95th percentile per-packet one-way delay: 167.068 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 522.77 Mbit/s

95th percentile per-packet one-way delay: 167.160 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 517.34 Mbit/s

95th percentile per-packet one-way delay: 170.975 ms

Loss rate: 0.77%

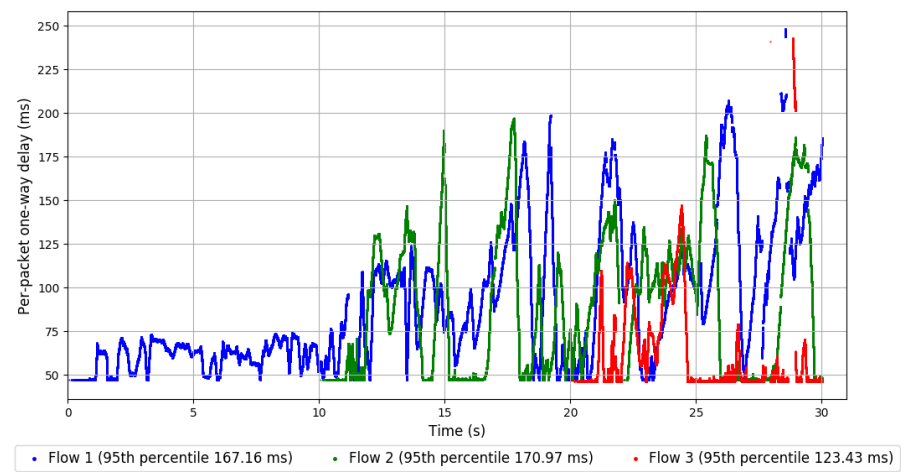
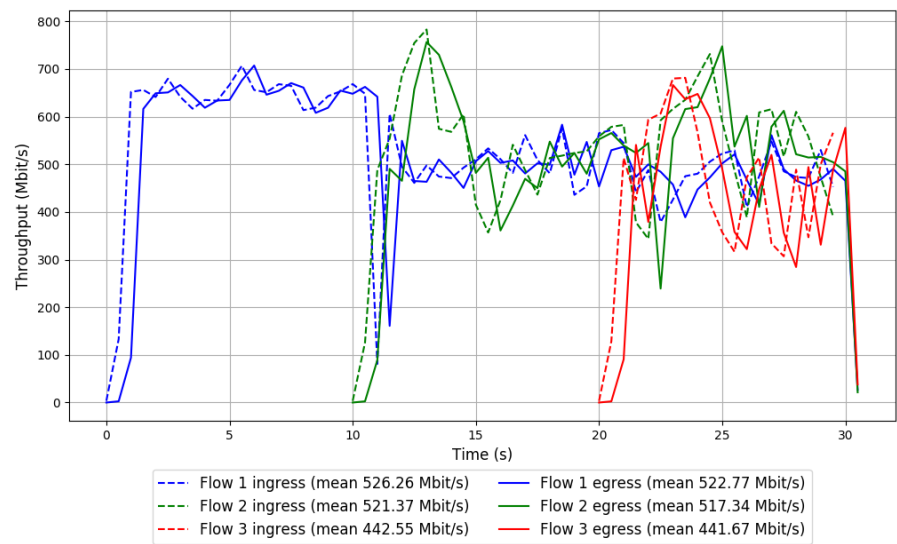
-- Flow 3:

Average throughput: 441.67 Mbit/s

95th percentile per-packet one-way delay: 123.432 ms

Loss rate: 0.20%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-02-21 01:21:01

End at: 2019-02-21 01:21:31

Local clock offset: -0.029 ms

Remote clock offset: 0.016 ms

Below is generated by plot.py at 2019-02-21 03:44:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 1038.49 Mbit/s

95th percentile per-packet one-way delay: 168.033 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 543.54 Mbit/s

95th percentile per-packet one-way delay: 144.518 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 510.16 Mbit/s

95th percentile per-packet one-way delay: 173.889 ms

Loss rate: 2.25%

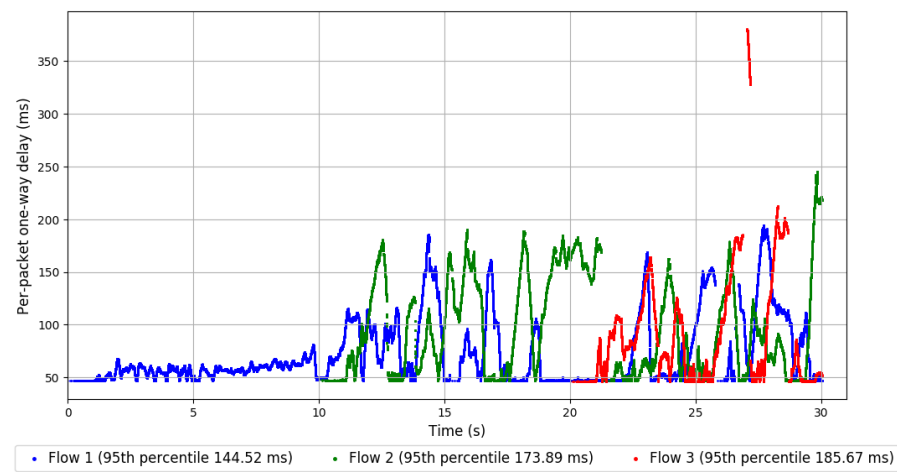
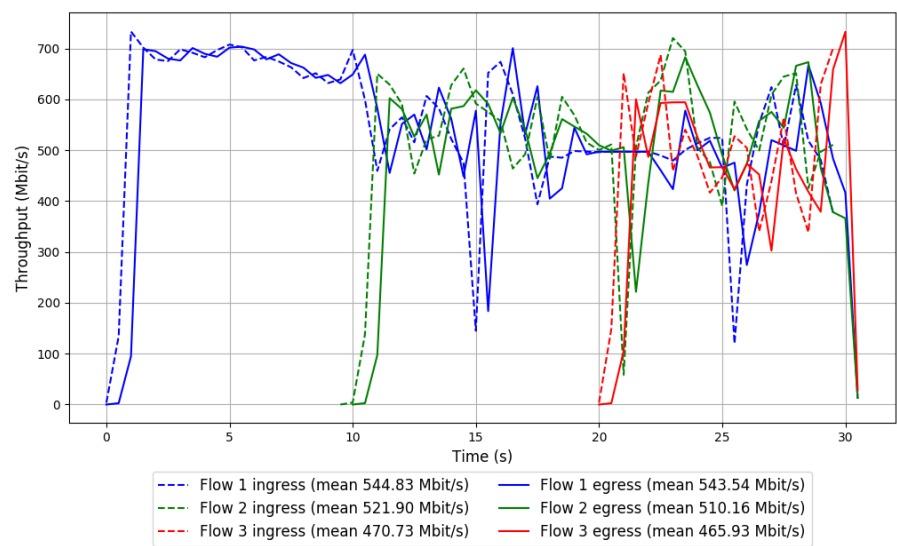
-- Flow 3:

Average throughput: 465.93 Mbit/s

95th percentile per-packet one-way delay: 185.668 ms

Loss rate: 1.00%

Run 3: Report of TCP BBR — Data Link

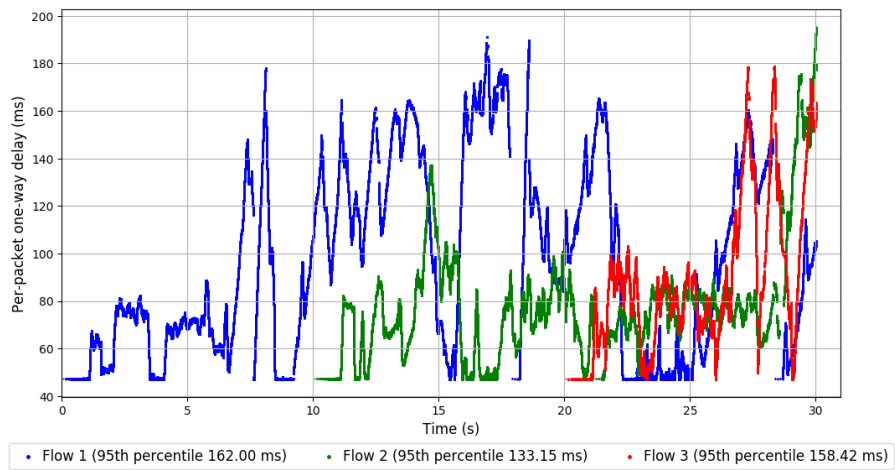
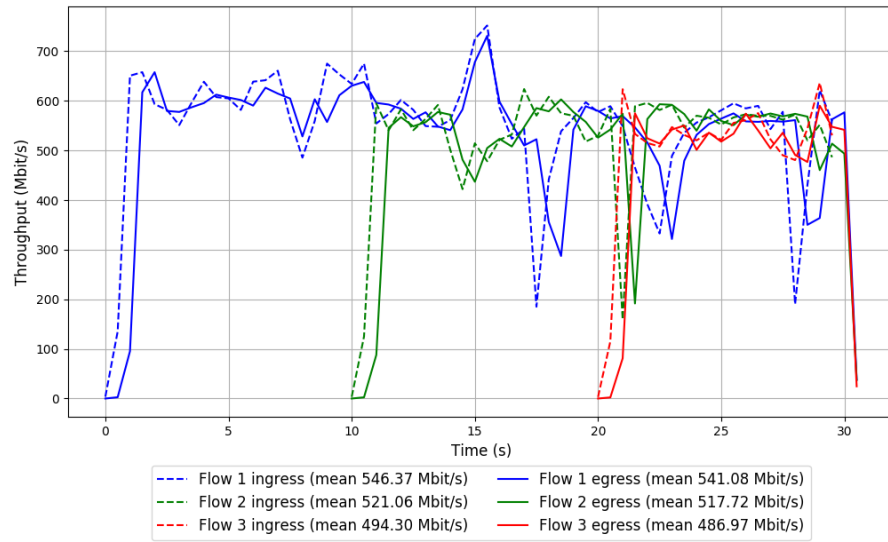


Run 4: Statistics of TCP BBR

Start at: 2019-02-21 01:57:48
End at: 2019-02-21 01:58:18
Local clock offset: -0.094 ms
Remote clock offset: -0.128 ms

Below is generated by plot.py at 2019-02-21 03:44:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 1047.77 Mbit/s
95th percentile per-packet one-way delay: 159.366 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 541.08 Mbit/s
95th percentile per-packet one-way delay: 161.997 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 517.72 Mbit/s
95th percentile per-packet one-way delay: 133.153 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 486.97 Mbit/s
95th percentile per-packet one-way delay: 158.421 ms
Loss rate: 1.48%

Run 4: Report of TCP BBR — Data Link

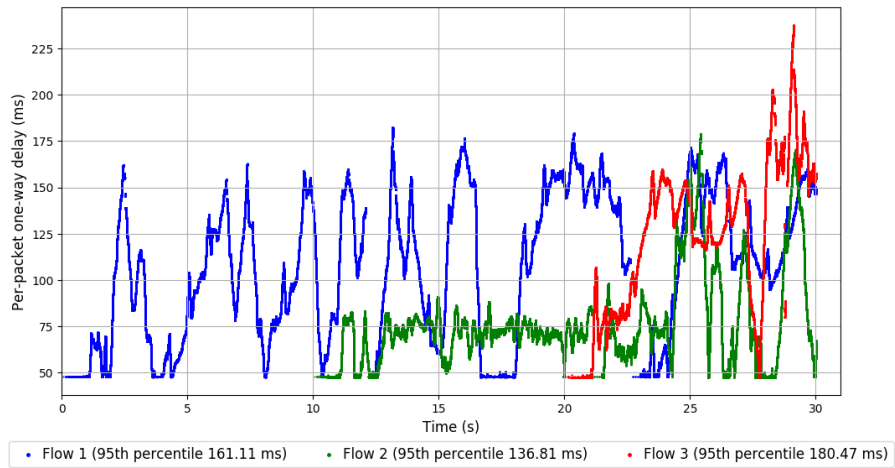
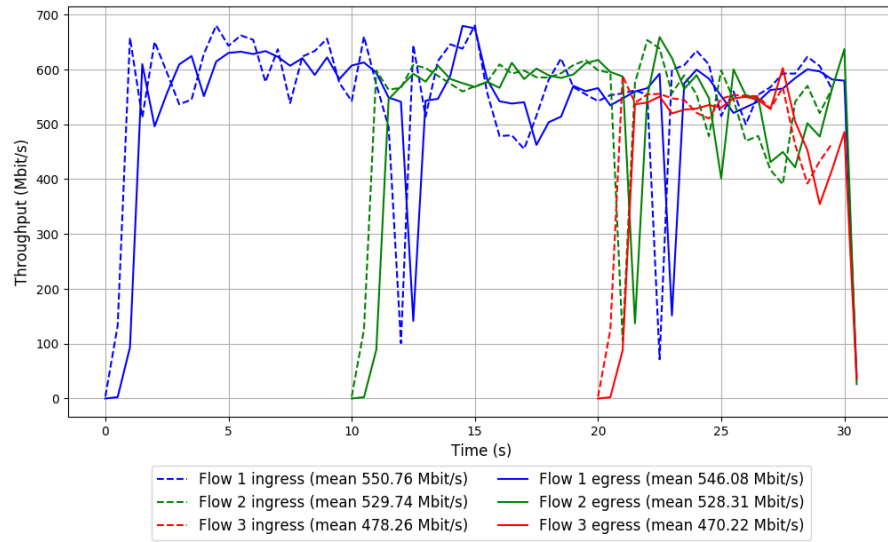


Run 5: Statistics of TCP BBR

Start at: 2019-02-21 02:34:18
End at: 2019-02-21 02:34:48
Local clock offset: -0.403 ms
Remote clock offset: -0.011 ms

Below is generated by plot.py at 2019-02-21 03:44:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 1054.50 Mbit/s
95th percentile per-packet one-way delay: 160.849 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 546.08 Mbit/s
95th percentile per-packet one-way delay: 161.106 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 528.31 Mbit/s
95th percentile per-packet one-way delay: 136.812 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 470.22 Mbit/s
95th percentile per-packet one-way delay: 180.466 ms
Loss rate: 1.68%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-02-21 00:30:11

End at: 2019-02-21 00:30:41

Local clock offset: -0.088 ms

Remote clock offset: 0.045 ms

Below is generated by plot.py at 2019-02-21 03:46:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 626.23 Mbit/s

95th percentile per-packet one-way delay: 65.923 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 310.11 Mbit/s

95th percentile per-packet one-way delay: 64.515 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 336.21 Mbit/s

95th percentile per-packet one-way delay: 66.370 ms

Loss rate: 0.06%

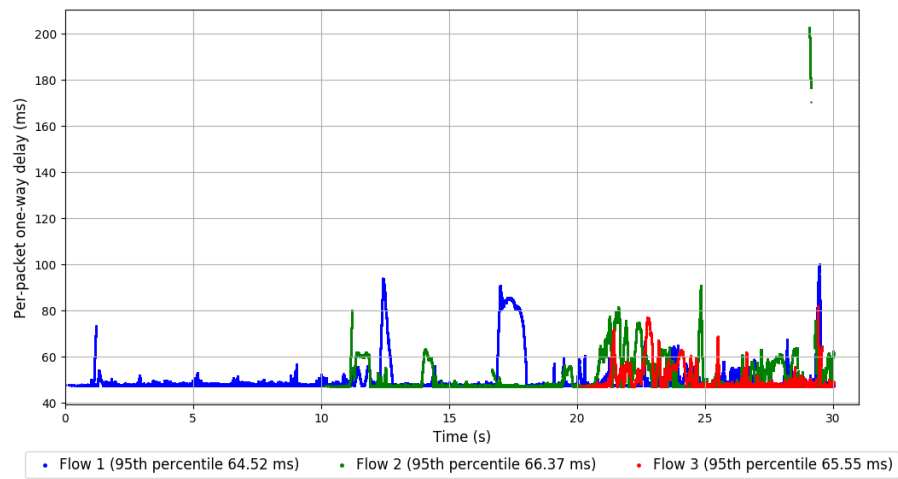
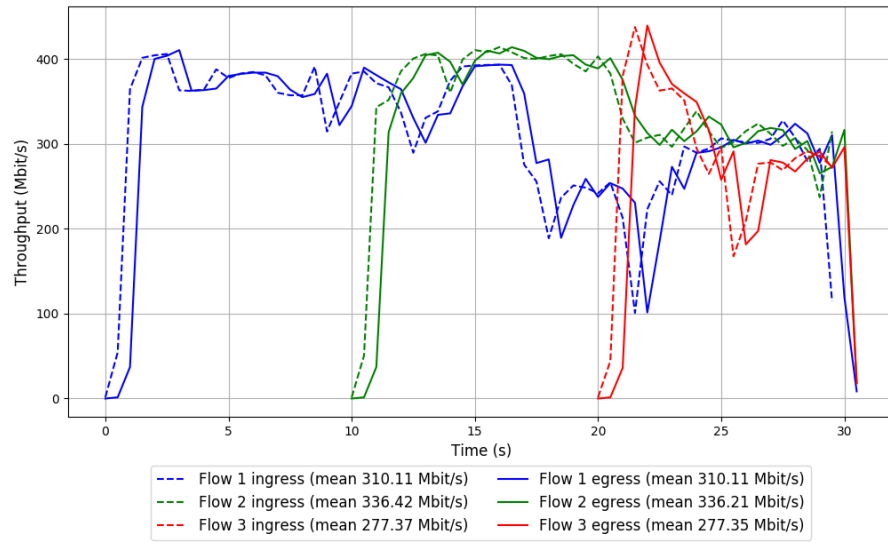
-- Flow 3:

Average throughput: 277.35 Mbit/s

95th percentile per-packet one-way delay: 65.553 ms

Loss rate: 0.02%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-02-21 01:07:00

End at: 2019-02-21 01:07:30

Local clock offset: -0.084 ms

Remote clock offset: 0.043 ms

Below is generated by plot.py at 2019-02-21 03:46:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 589.15 Mbit/s

95th percentile per-packet one-way delay: 67.667 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 309.62 Mbit/s

95th percentile per-packet one-way delay: 61.418 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 292.66 Mbit/s

95th percentile per-packet one-way delay: 67.869 ms

Loss rate: 0.00%

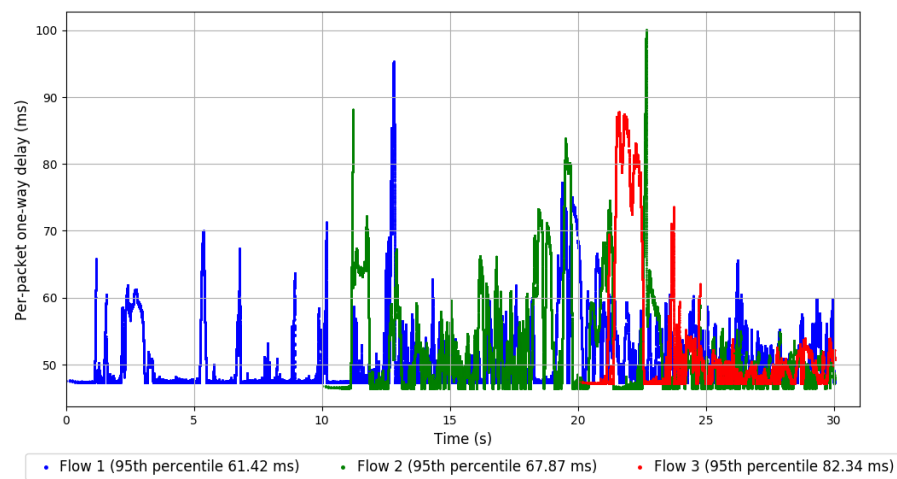
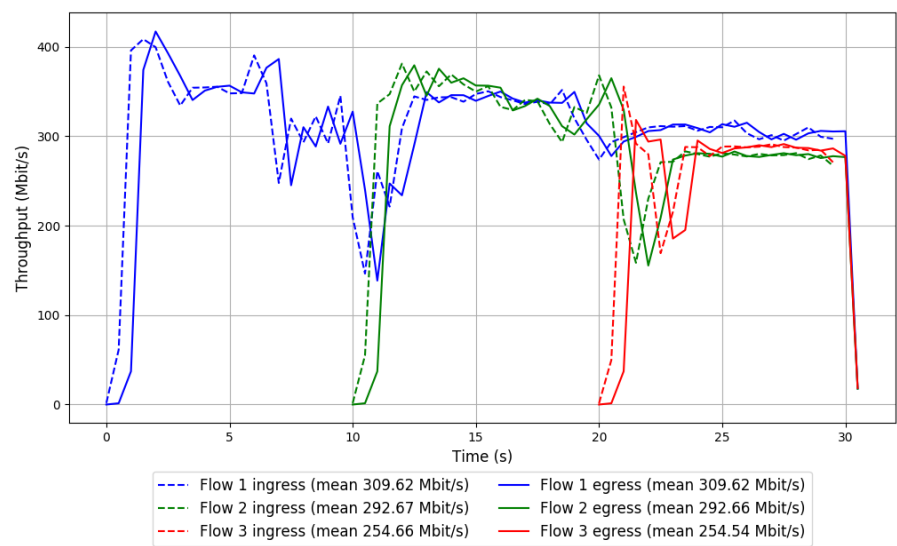
-- Flow 3:

Average throughput: 254.54 Mbit/s

95th percentile per-packet one-way delay: 82.336 ms

Loss rate: 0.04%

Run 2: Report of Copa — Data Link

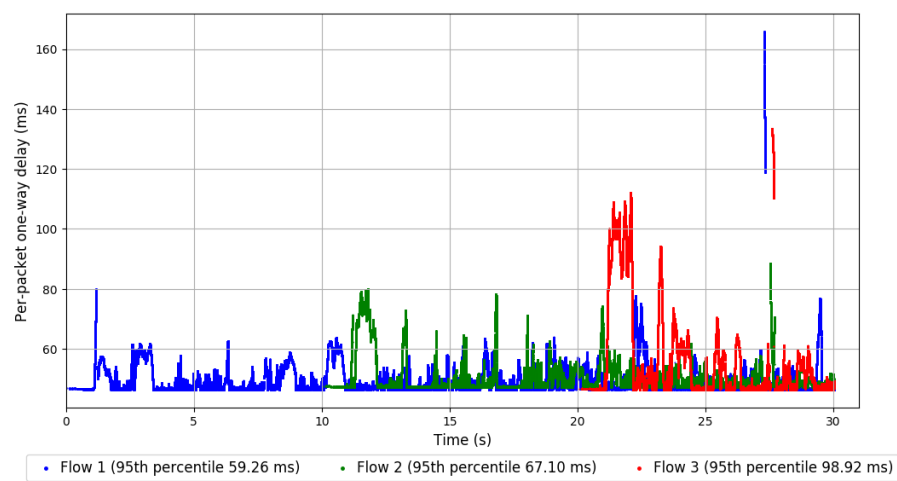
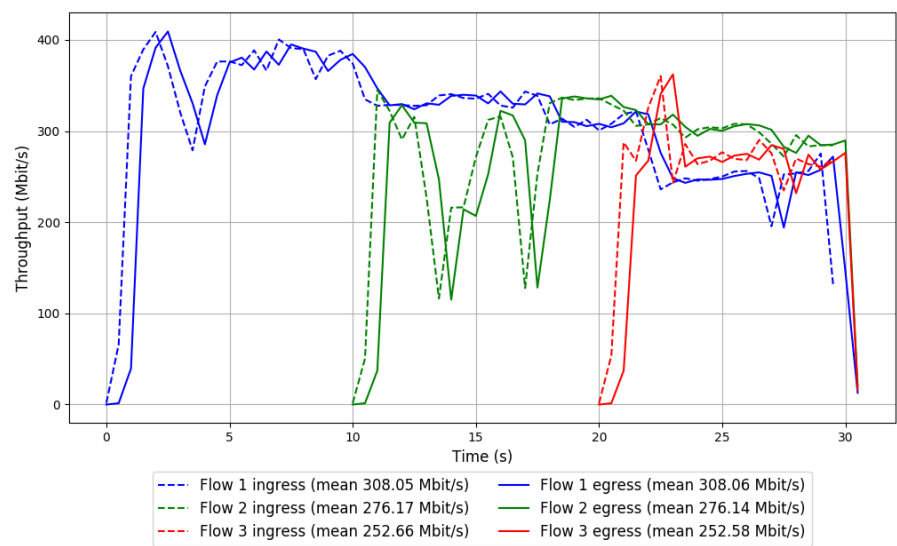


Run 3: Statistics of Copa

Start at: 2019-02-21 01:43:45
End at: 2019-02-21 01:44:15
Local clock offset: -0.098 ms
Remote clock offset: -0.142 ms

Below is generated by plot.py at 2019-02-21 03:46:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 575.92 Mbit/s
95th percentile per-packet one-way delay: 65.037 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 308.06 Mbit/s
95th percentile per-packet one-way delay: 59.257 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 276.14 Mbit/s
95th percentile per-packet one-way delay: 67.102 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 252.58 Mbit/s
95th percentile per-packet one-way delay: 98.916 ms
Loss rate: 0.02%

Run 3: Report of Copa — Data Link

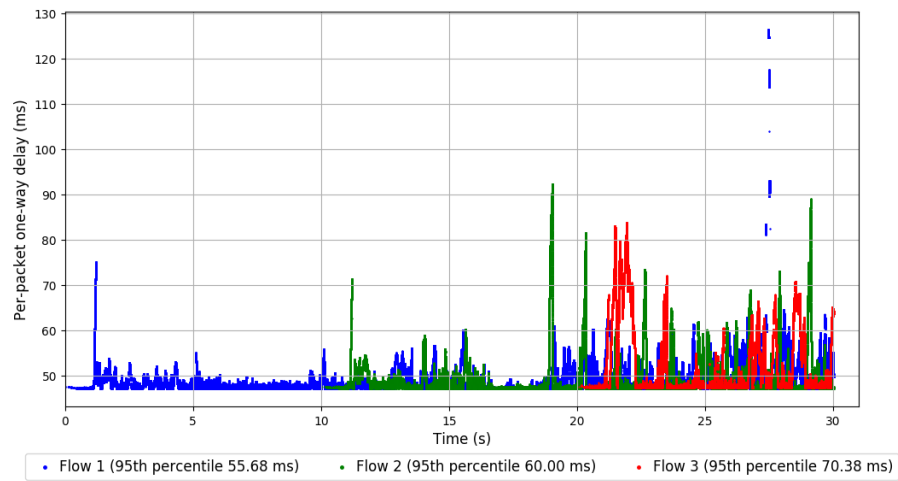
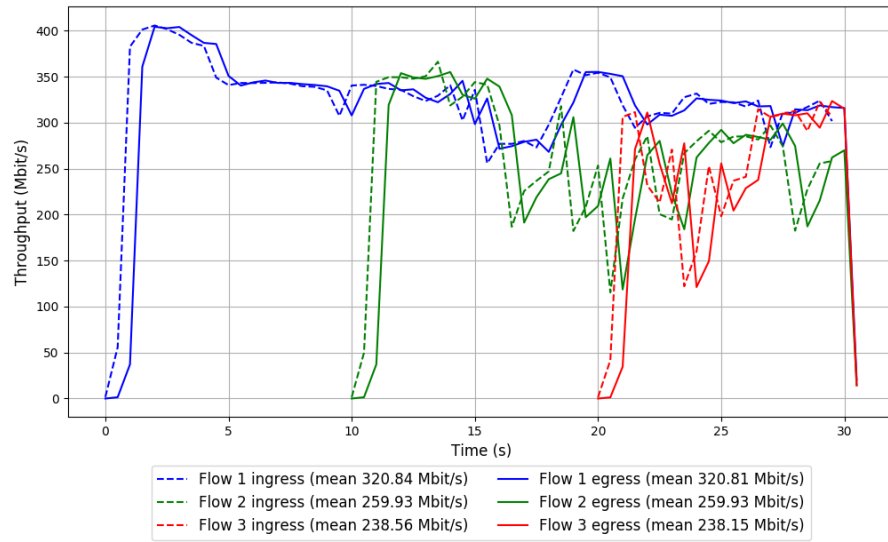


Run 4: Statistics of Copa

Start at: 2019-02-21 02:20:16
End at: 2019-02-21 02:20:46
Local clock offset: -0.055 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-02-21 04:02:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 573.04 Mbit/s
95th percentile per-packet one-way delay: 60.187 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 320.81 Mbit/s
95th percentile per-packet one-way delay: 55.678 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 259.93 Mbit/s
95th percentile per-packet one-way delay: 59.998 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 238.15 Mbit/s
95th percentile per-packet one-way delay: 70.378 ms
Loss rate: 0.17%

Run 4: Report of Copa — Data Link

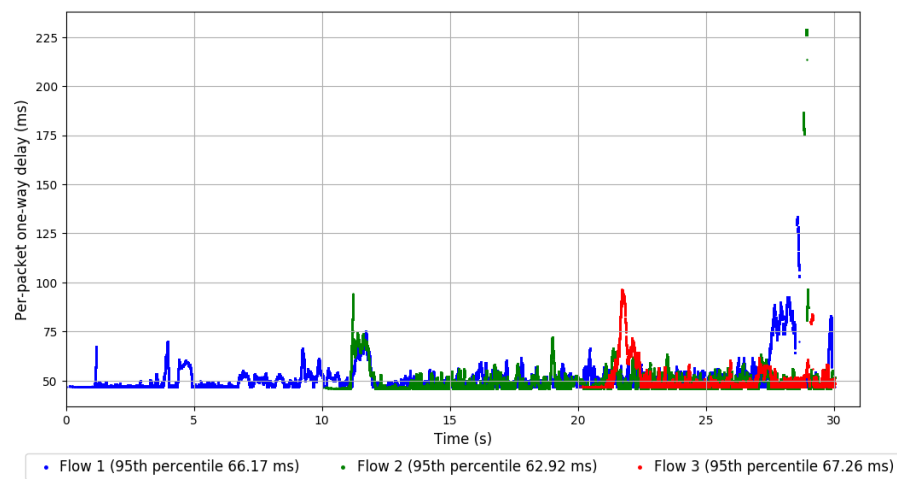
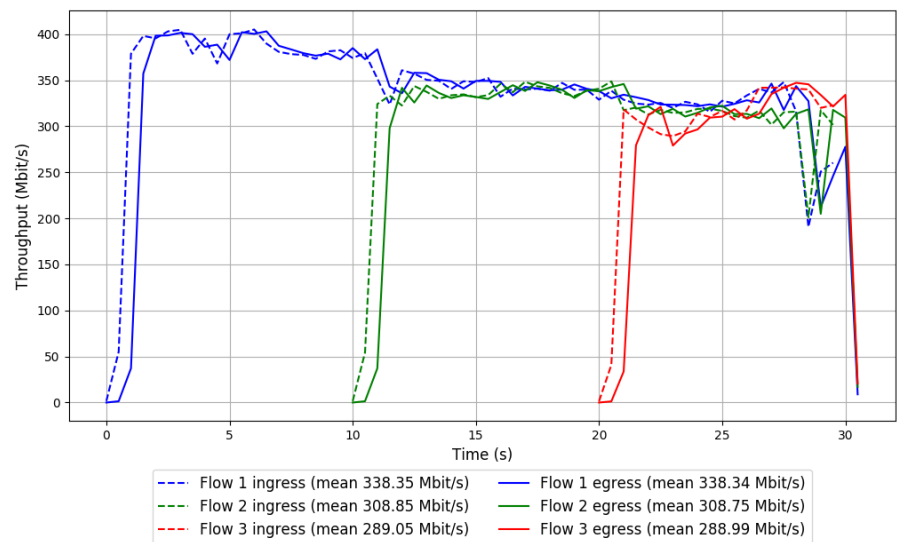


Run 5: Statistics of Copa

Start at: 2019-02-21 02:57:03
End at: 2019-02-21 02:57:33
Local clock offset: 0.31 ms
Remote clock offset: -0.056 ms

Below is generated by plot.py at 2019-02-21 04:05:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 639.98 Mbit/s
95th percentile per-packet one-way delay: 65.432 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 338.34 Mbit/s
95th percentile per-packet one-way delay: 66.170 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 308.75 Mbit/s
95th percentile per-packet one-way delay: 62.924 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 288.99 Mbit/s
95th percentile per-packet one-way delay: 67.260 ms
Loss rate: 0.02%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-02-21 00:24:05

End at: 2019-02-21 00:24:35

Local clock offset: -0.118 ms

Remote clock offset: 0.039 ms

Below is generated by plot.py at 2019-02-21 04:05:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 1129.73 Mbit/s

95th percentile per-packet one-way delay: 128.453 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 597.24 Mbit/s

95th percentile per-packet one-way delay: 132.405 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 575.44 Mbit/s

95th percentile per-packet one-way delay: 97.786 ms

Loss rate: 0.14%

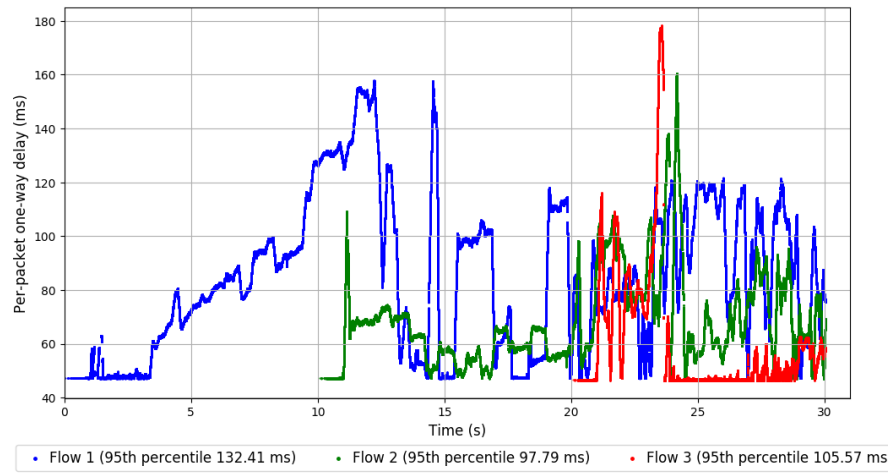
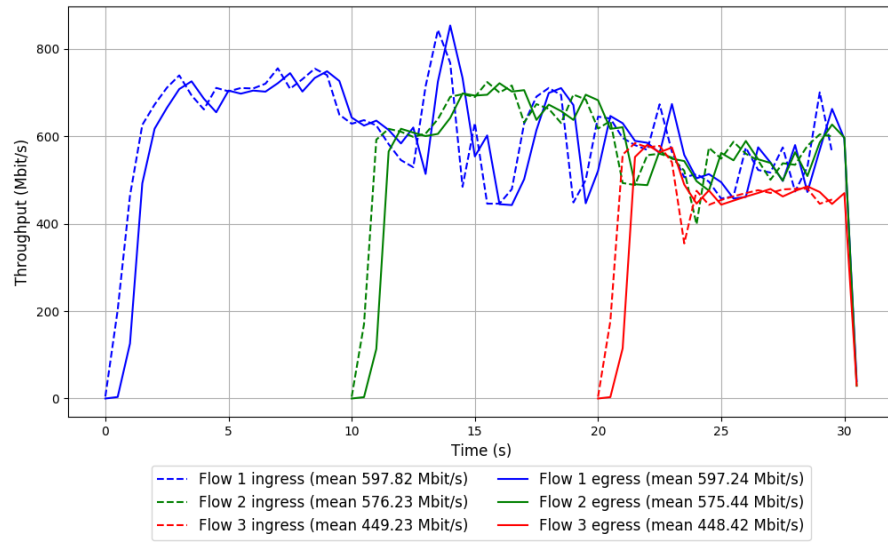
-- Flow 3:

Average throughput: 448.42 Mbit/s

95th percentile per-packet one-way delay: 105.574 ms

Loss rate: 0.16%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-02-21 01:00:55

End at: 2019-02-21 01:01:25

Local clock offset: -0.046 ms

Remote clock offset: 0.037 ms

Below is generated by plot.py at 2019-02-21 04:05:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 1159.36 Mbit/s

95th percentile per-packet one-way delay: 142.838 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 662.80 Mbit/s

95th percentile per-packet one-way delay: 101.725 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 512.53 Mbit/s

95th percentile per-packet one-way delay: 104.373 ms

Loss rate: 0.25%

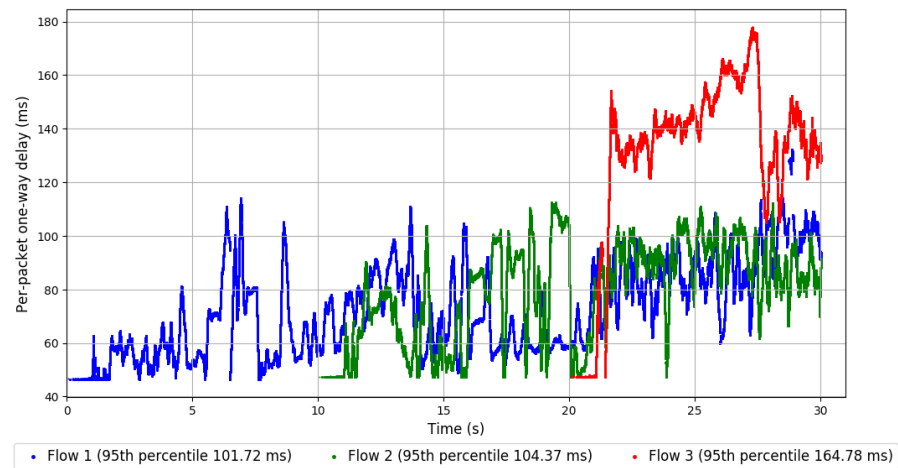
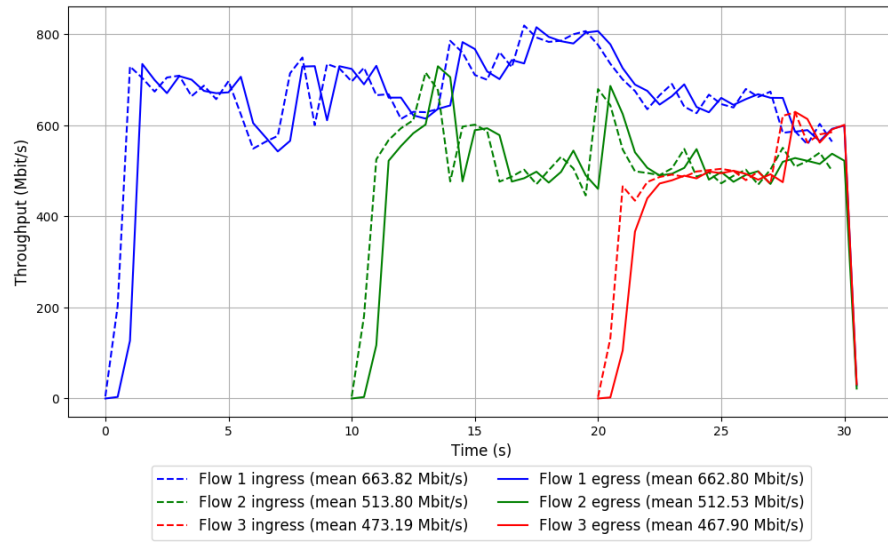
-- Flow 3:

Average throughput: 467.90 Mbit/s

95th percentile per-packet one-way delay: 164.781 ms

Loss rate: 1.11%

Run 2: Report of TCP Cubic — Data Link

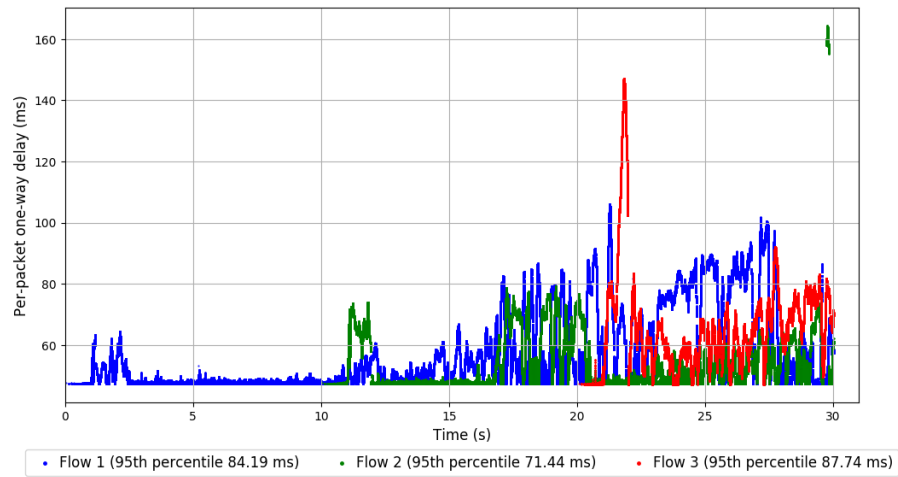
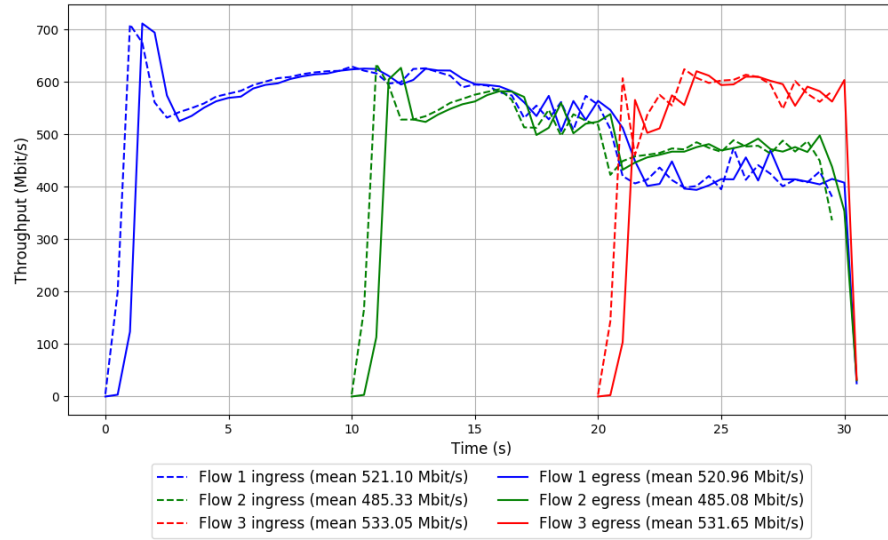


Run 3: Statistics of TCP Cubic

Start at: 2019-02-21 01:37:48
End at: 2019-02-21 01:38:18
Local clock offset: -0.099 ms
Remote clock offset: -0.127 ms

Below is generated by plot.py at 2019-02-21 04:05:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 1020.54 Mbit/s
95th percentile per-packet one-way delay: 81.621 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 520.96 Mbit/s
95th percentile per-packet one-way delay: 84.186 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 485.08 Mbit/s
95th percentile per-packet one-way delay: 71.437 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 531.65 Mbit/s
95th percentile per-packet one-way delay: 87.737 ms
Loss rate: 0.26%

Run 3: Report of TCP Cubic — Data Link

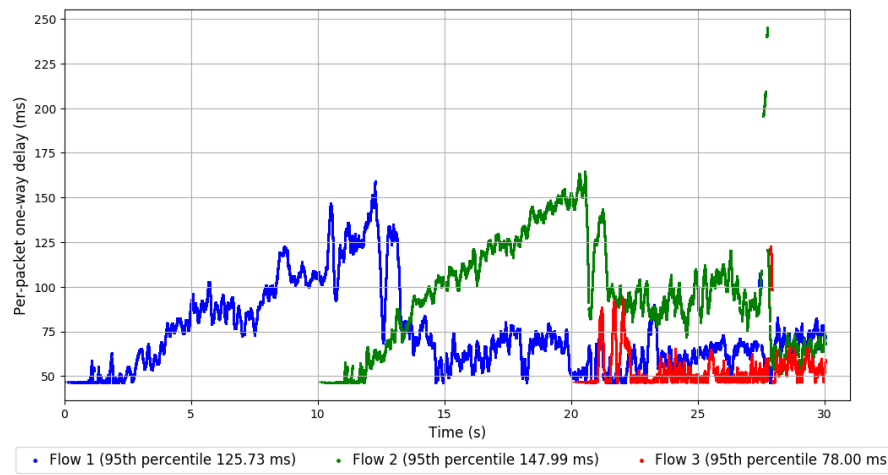
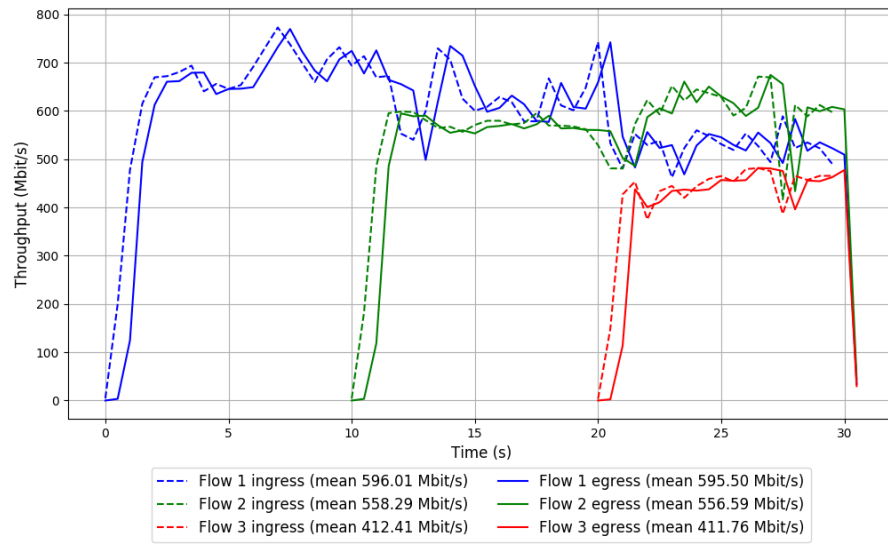


Run 4: Statistics of TCP Cubic

Start at: 2019-02-21 02:14:22
End at: 2019-02-21 02:14:52
Local clock offset: -0.051 ms
Remote clock offset: -0.039 ms

Below is generated by plot.py at 2019-02-21 04:05:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 1102.92 Mbit/s
95th percentile per-packet one-way delay: 137.423 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 595.50 Mbit/s
95th percentile per-packet one-way delay: 125.732 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 556.59 Mbit/s
95th percentile per-packet one-way delay: 147.991 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 411.76 Mbit/s
95th percentile per-packet one-way delay: 77.995 ms
Loss rate: 0.15%

Run 4: Report of TCP Cubic — Data Link

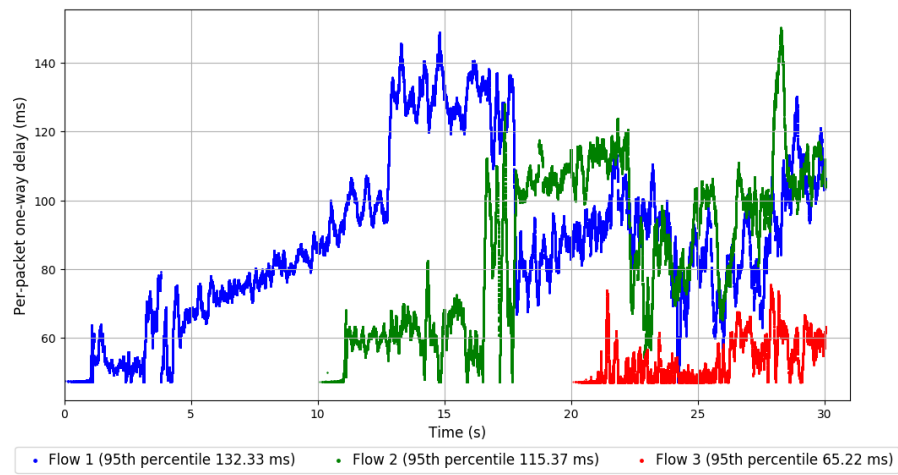
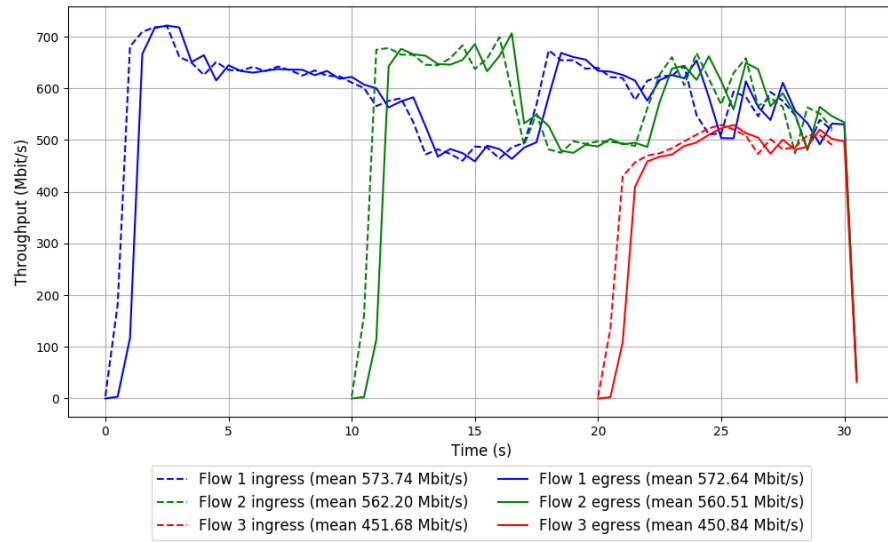


Run 5: Statistics of TCP Cubic

Start at: 2019-02-21 02:50:58
End at: 2019-02-21 02:51:28
Local clock offset: -0.138 ms
Remote clock offset: -0.057 ms

Below is generated by plot.py at 2019-02-21 04:05:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 1095.51 Mbit/s
95th percentile per-packet one-way delay: 127.898 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 572.64 Mbit/s
95th percentile per-packet one-way delay: 132.332 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 560.51 Mbit/s
95th percentile per-packet one-way delay: 115.366 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 450.84 Mbit/s
95th percentile per-packet one-way delay: 65.223 ms
Loss rate: 0.19%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-02-21 00:09:28

End at: 2019-02-21 00:09:58

Local clock offset: -0.07 ms

Remote clock offset: 0.131 ms

Below is generated by plot.py at 2019-02-21 04:06:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 941.37 Mbit/s

95th percentile per-packet one-way delay: 55.071 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 600.73 Mbit/s

95th percentile per-packet one-way delay: 55.629 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 373.20 Mbit/s

95th percentile per-packet one-way delay: 53.302 ms

Loss rate: 0.00%

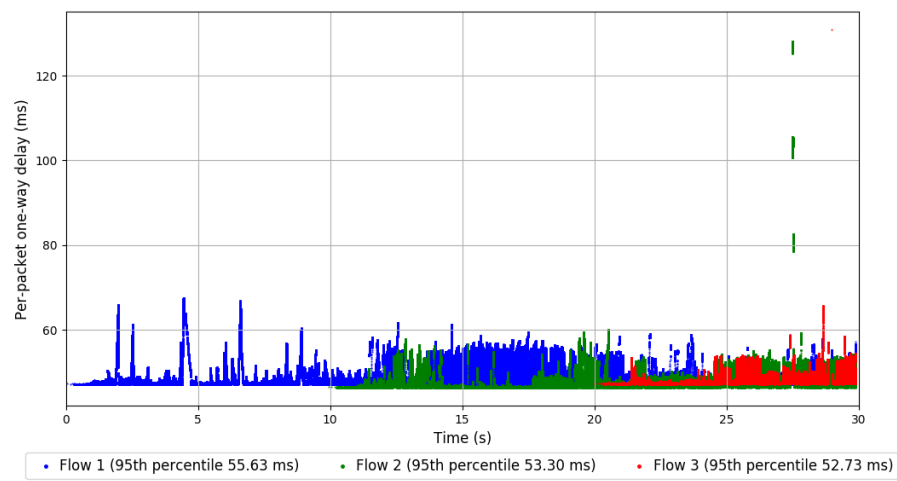
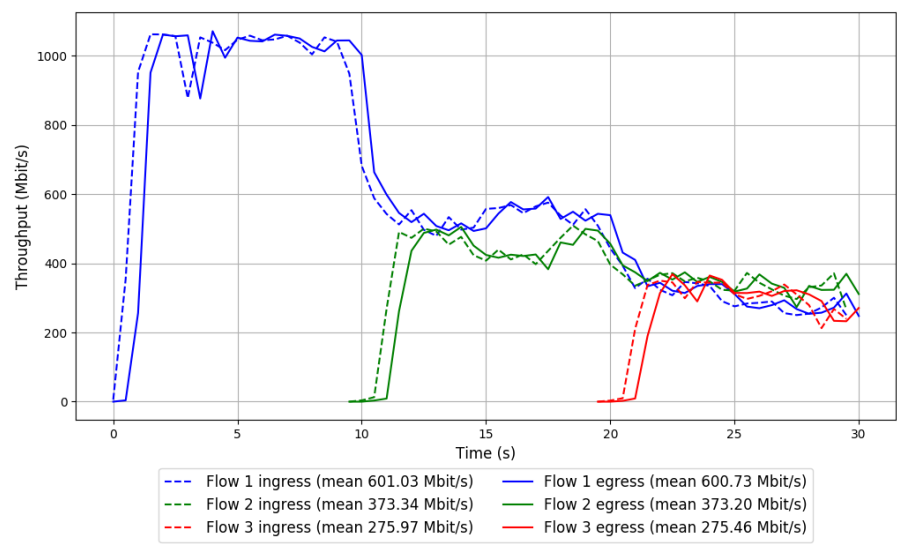
-- Flow 3:

Average throughput: 275.46 Mbit/s

95th percentile per-packet one-way delay: 52.734 ms

Loss rate: 0.17%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-02-21 00:46:19

End at: 2019-02-21 00:46:49

Local clock offset: -0.167 ms

Remote clock offset: 0.078 ms

Below is generated by plot.py at 2019-02-21 04:22:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 930.64 Mbit/s

95th percentile per-packet one-way delay: 61.276 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 608.02 Mbit/s

95th percentile per-packet one-way delay: 63.206 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 366.76 Mbit/s

95th percentile per-packet one-way delay: 59.810 ms

Loss rate: 0.00%

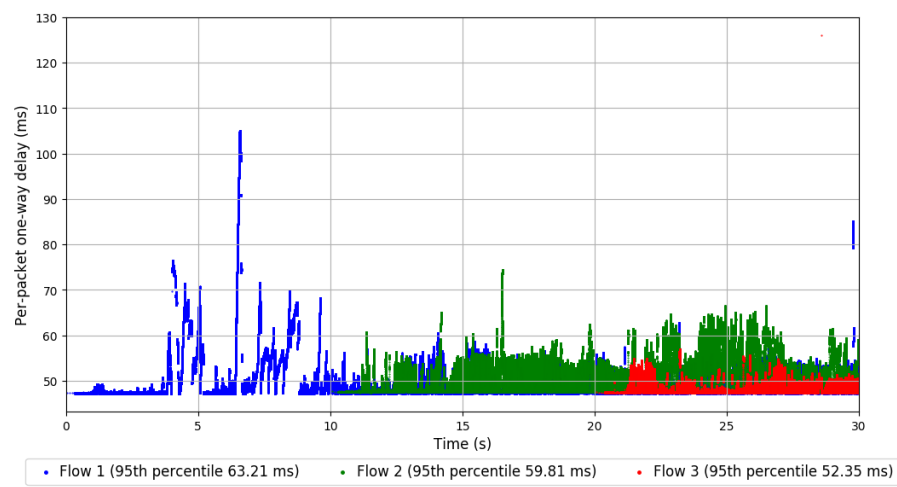
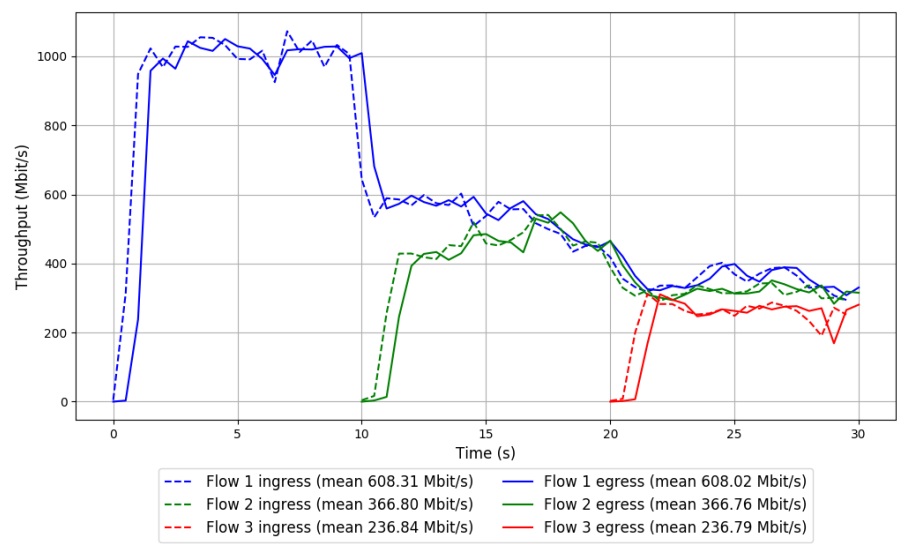
-- Flow 3:

Average throughput: 236.79 Mbit/s

95th percentile per-packet one-way delay: 52.347 ms

Loss rate: 0.00%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-02-21 01:23:07

End at: 2019-02-21 01:23:37

Local clock offset: -0.07 ms

Remote clock offset: -0.03 ms

Below is generated by plot.py at 2019-02-21 04:24:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 990.40 Mbit/s

95th percentile per-packet one-way delay: 56.618 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 615.64 Mbit/s

95th percentile per-packet one-way delay: 59.256 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 420.45 Mbit/s

95th percentile per-packet one-way delay: 48.901 ms

Loss rate: 0.00%

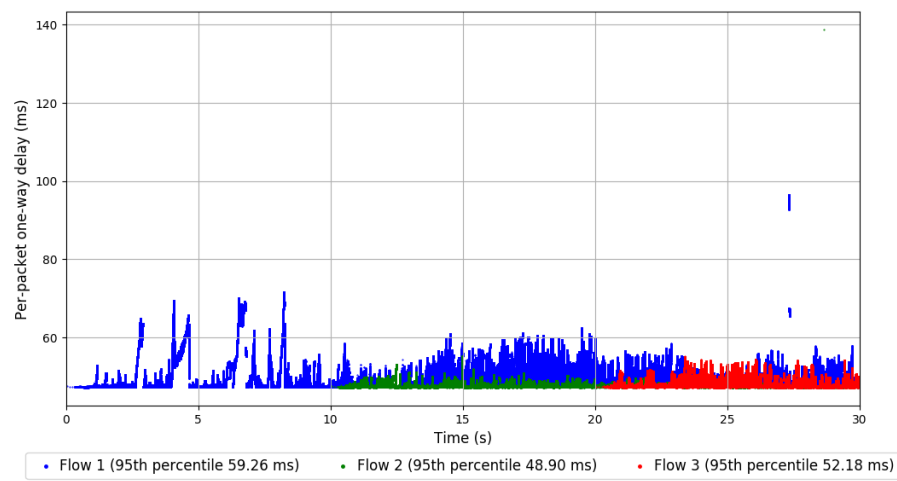
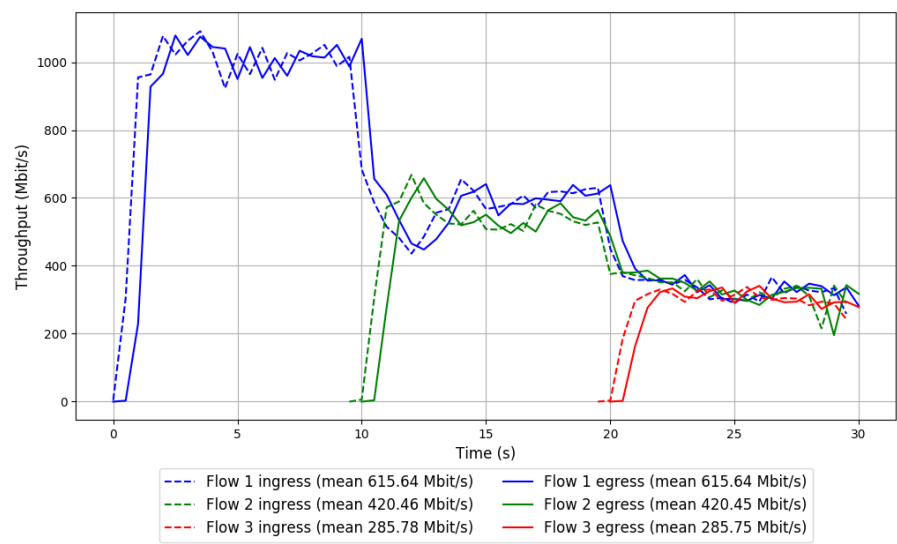
-- Flow 3:

Average throughput: 285.75 Mbit/s

95th percentile per-packet one-way delay: 52.177 ms

Loss rate: 0.00%

Run 3: Report of FillP — Data Link

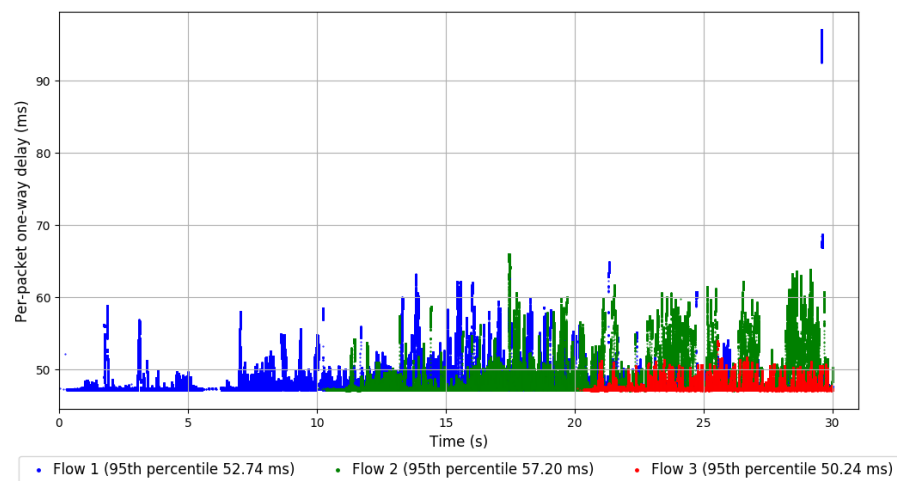
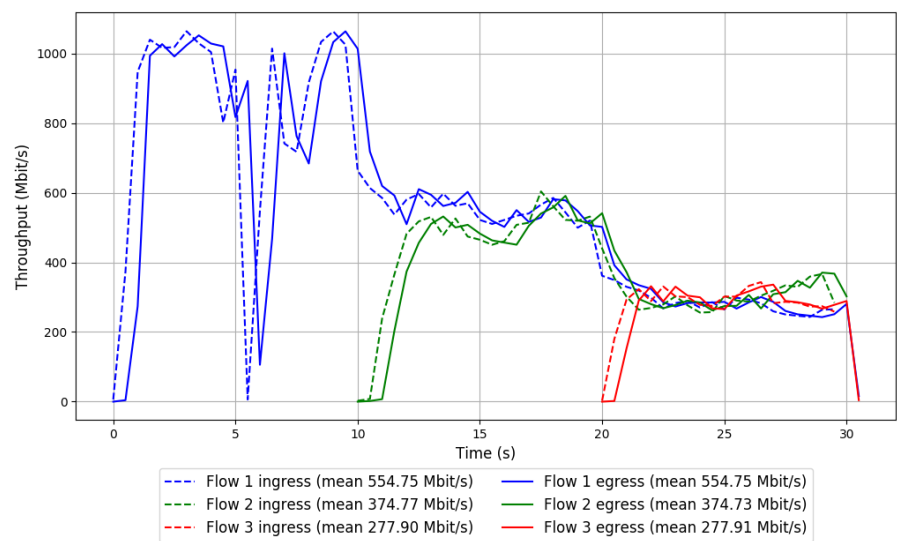


Run 4: Statistics of FillP

Start at: 2019-02-21 01:59:53
End at: 2019-02-21 02:00:23
Local clock offset: -0.086 ms
Remote clock offset: -0.149 ms

Below is generated by plot.py at 2019-02-21 04:24:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 895.96 Mbit/s
95th percentile per-packet one-way delay: 54.609 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 554.75 Mbit/s
95th percentile per-packet one-way delay: 52.744 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 374.73 Mbit/s
95th percentile per-packet one-way delay: 57.204 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 277.91 Mbit/s
95th percentile per-packet one-way delay: 50.237 ms
Loss rate: 0.00%

Run 4: Report of FillP — Data Link

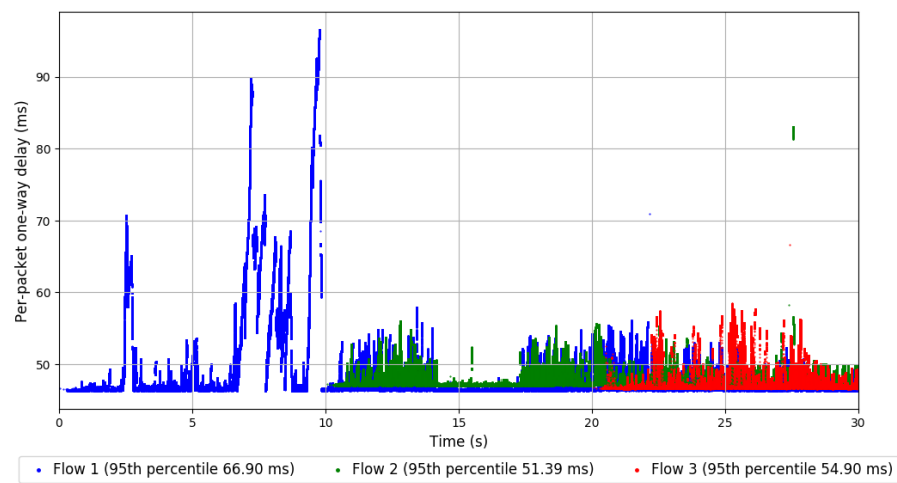
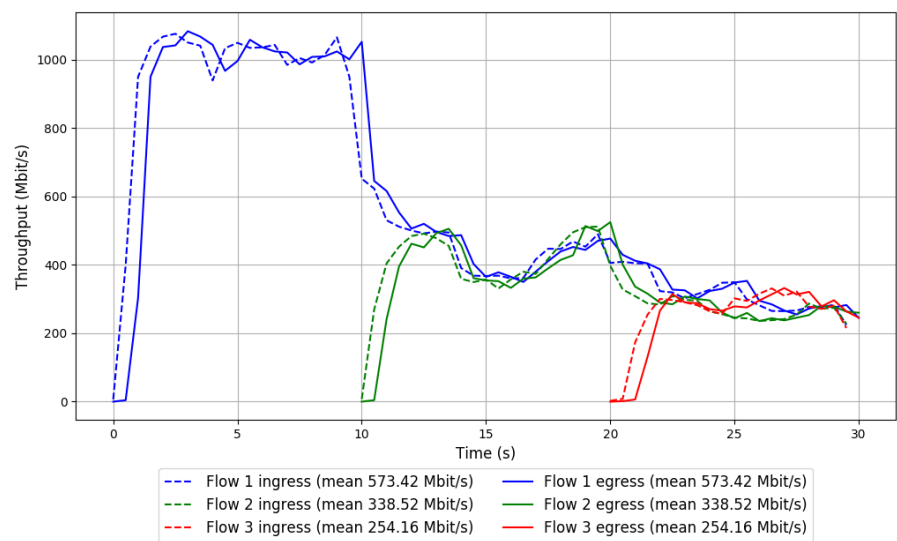


Run 5: Statistics of FillP

Start at: 2019-02-21 02:36:23
End at: 2019-02-21 02:36:53
Local clock offset: -0.047 ms
Remote clock offset: -0.041 ms

Below is generated by plot.py at 2019-02-21 04:24:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 882.72 Mbit/s
95th percentile per-packet one-way delay: 63.369 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 573.42 Mbit/s
95th percentile per-packet one-way delay: 66.898 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 338.52 Mbit/s
95th percentile per-packet one-way delay: 51.386 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 254.16 Mbit/s
95th percentile per-packet one-way delay: 54.901 ms
Loss rate: 0.00%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-02-21 00:16:55

End at: 2019-02-21 00:17:25

Local clock offset: -0.078 ms

Remote clock offset: 0.062 ms

Below is generated by plot.py at 2019-02-21 04:24:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 850.49 Mbit/s

95th percentile per-packet one-way delay: 49.290 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 548.17 Mbit/s

95th percentile per-packet one-way delay: 49.272 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 334.25 Mbit/s

95th percentile per-packet one-way delay: 49.182 ms

Loss rate: 0.00%

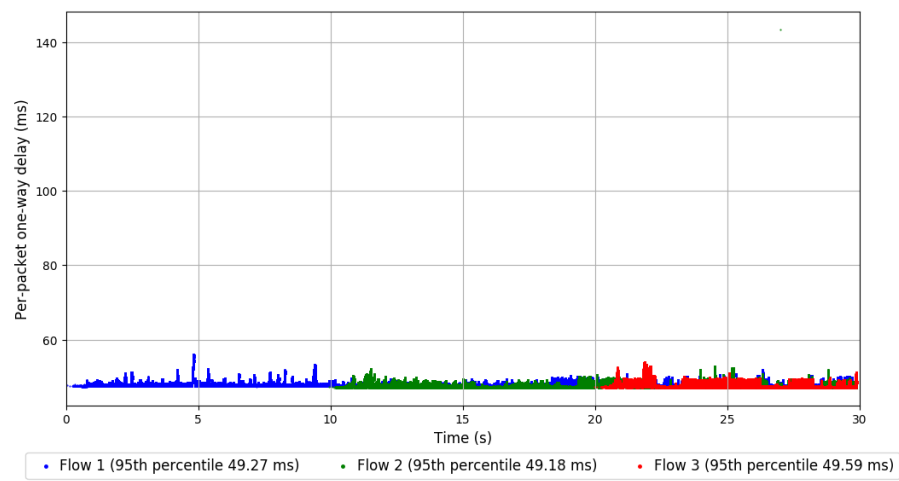
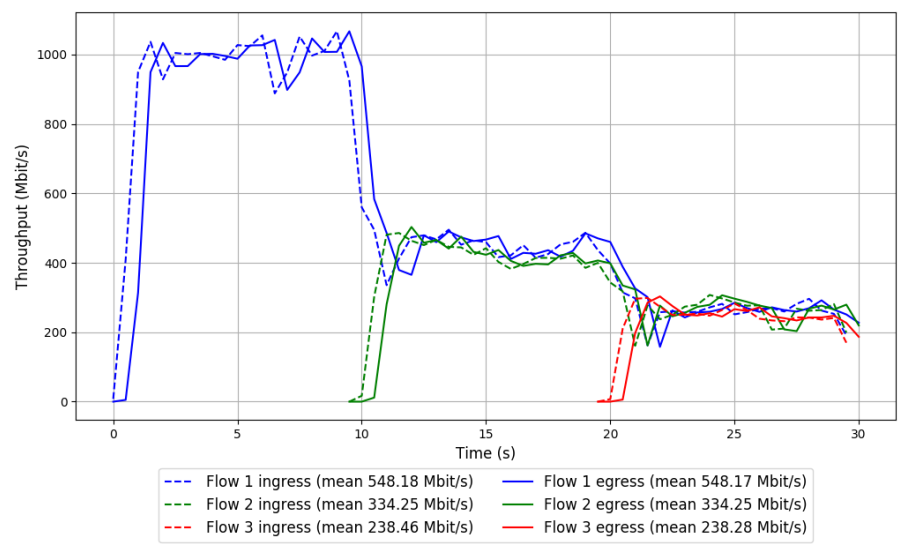
-- Flow 3:

Average throughput: 238.28 Mbit/s

95th percentile per-packet one-way delay: 49.595 ms

Loss rate: 0.08%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-02-21 00:53:48

End at: 2019-02-21 00:54:18

Local clock offset: -0.012 ms

Remote clock offset: 0.032 ms

Below is generated by plot.py at 2019-02-21 04:24:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 860.58 Mbit/s

95th percentile per-packet one-way delay: 50.313 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 563.56 Mbit/s

95th percentile per-packet one-way delay: 50.940 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 328.31 Mbit/s

95th percentile per-packet one-way delay: 48.911 ms

Loss rate: 0.00%

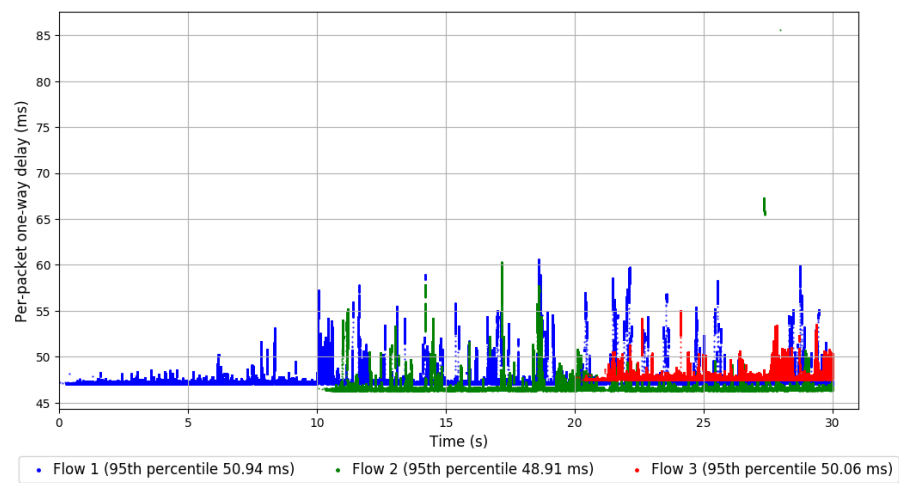
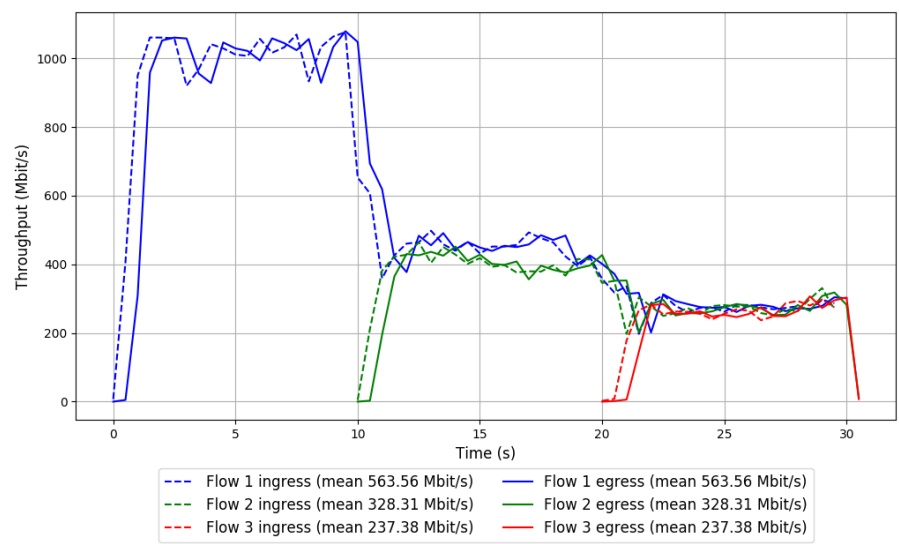
-- Flow 3:

Average throughput: 237.38 Mbit/s

95th percentile per-packet one-way delay: 50.060 ms

Loss rate: 0.00%

Run 2: Report of FillP-Sheep — Data Link

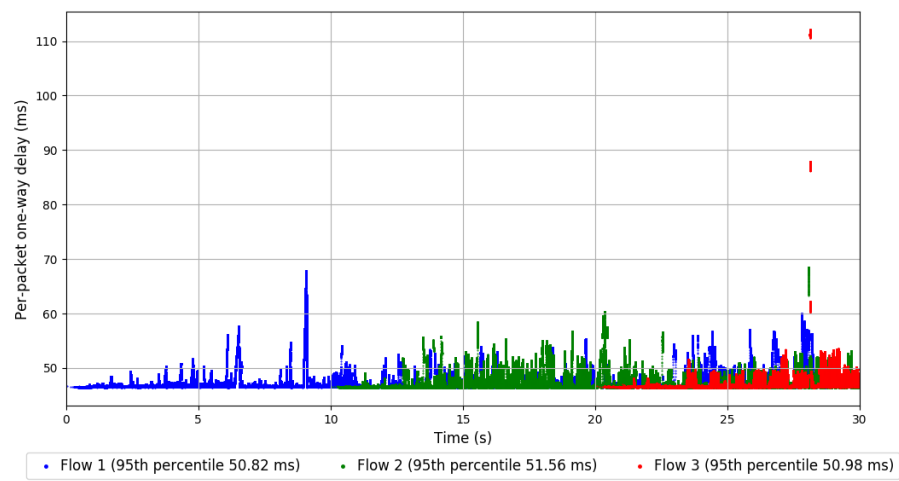
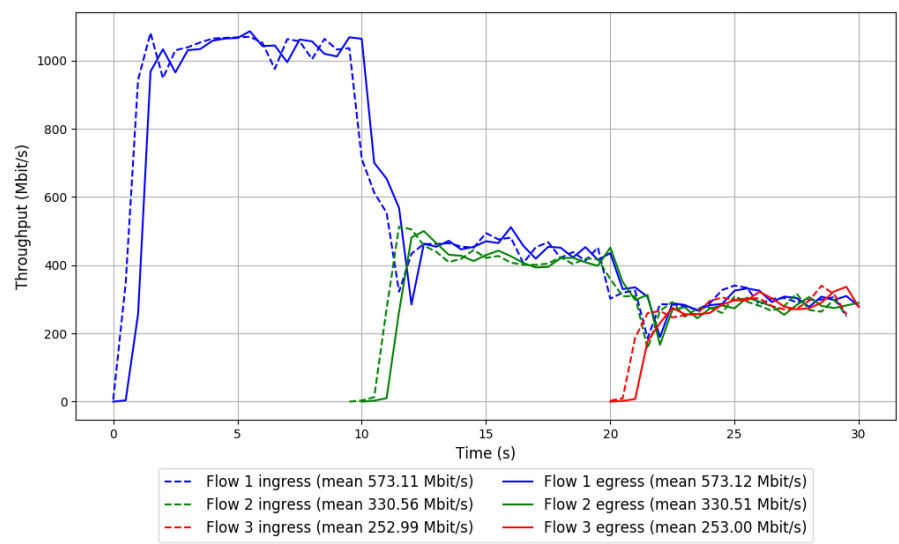


Run 3: Statistics of FillP-Sheep

Start at: 2019-02-21 01:30:44
End at: 2019-02-21 01:31:14
Local clock offset: -0.089 ms
Remote clock offset: -0.115 ms

Below is generated by plot.py at 2019-02-21 04:24:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 877.16 Mbit/s
95th percentile per-packet one-way delay: 51.139 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 573.12 Mbit/s
95th percentile per-packet one-way delay: 50.820 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 330.51 Mbit/s
95th percentile per-packet one-way delay: 51.562 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 253.00 Mbit/s
95th percentile per-packet one-way delay: 50.984 ms
Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link

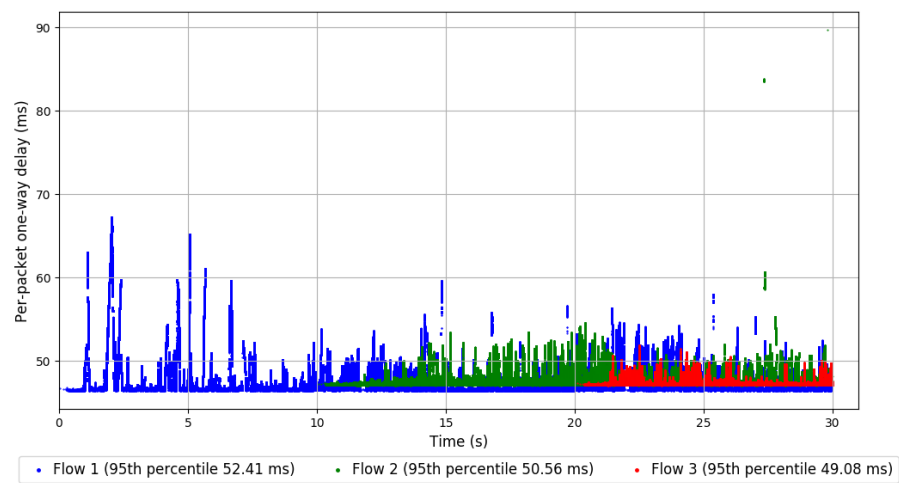
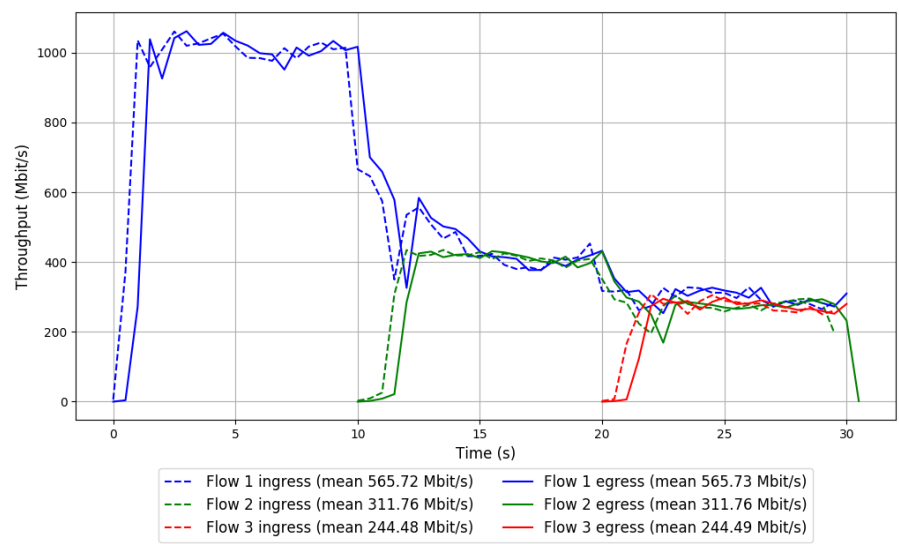


Run 4: Statistics of FillP-Sheep

Start at: 2019-02-21 02:07:16
End at: 2019-02-21 02:07:46
Local clock offset: -0.101 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2019-02-21 04:25:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 853.78 Mbit/s
95th percentile per-packet one-way delay: 51.411 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 565.73 Mbit/s
95th percentile per-packet one-way delay: 52.412 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 311.76 Mbit/s
95th percentile per-packet one-way delay: 50.560 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.49 Mbit/s
95th percentile per-packet one-way delay: 49.077 ms
Loss rate: 0.00%

Run 4: Report of FillP-Sheep — Data Link

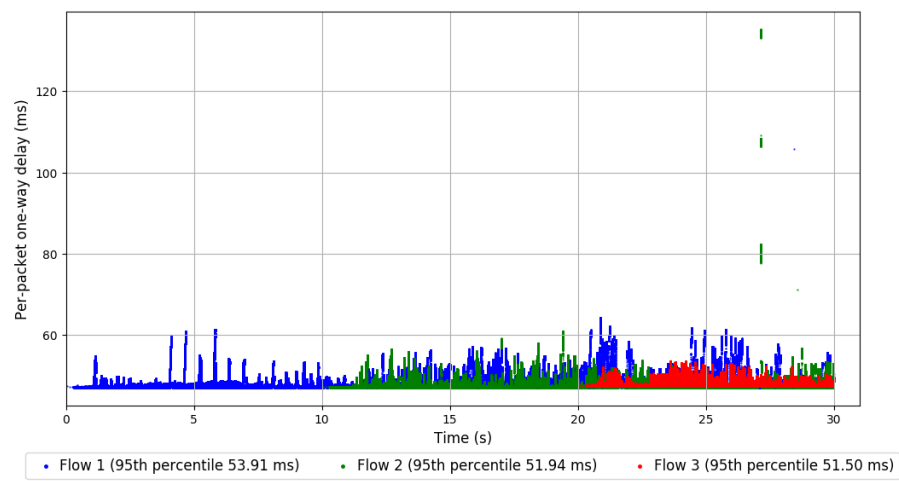
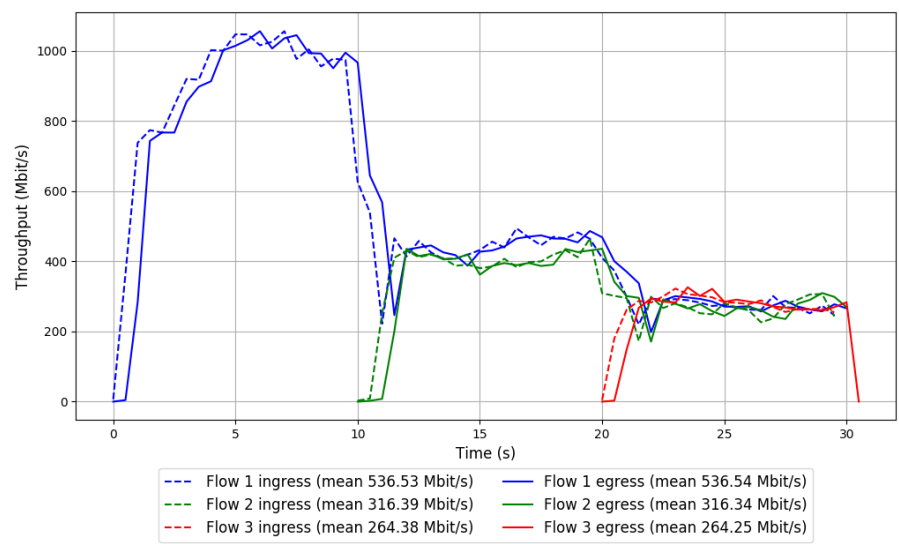


Run 5: Statistics of FillP-Sheep

Start at: 2019-02-21 02:43:51
End at: 2019-02-21 02:44:21
Local clock offset: -0.094 ms
Remote clock offset: -0.025 ms

Below is generated by plot.py at 2019-02-21 04:41:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 834.32 Mbit/s
95th percentile per-packet one-way delay: 53.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 536.54 Mbit/s
95th percentile per-packet one-way delay: 53.915 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 316.34 Mbit/s
95th percentile per-packet one-way delay: 51.942 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 264.25 Mbit/s
95th percentile per-packet one-way delay: 51.501 ms
Loss rate: 0.04%

Run 5: Report of FillP-Sheep — Data Link

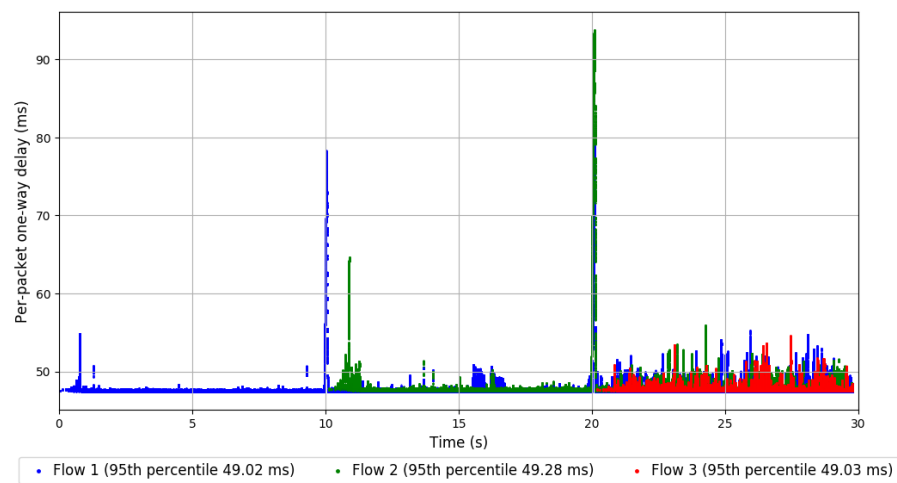
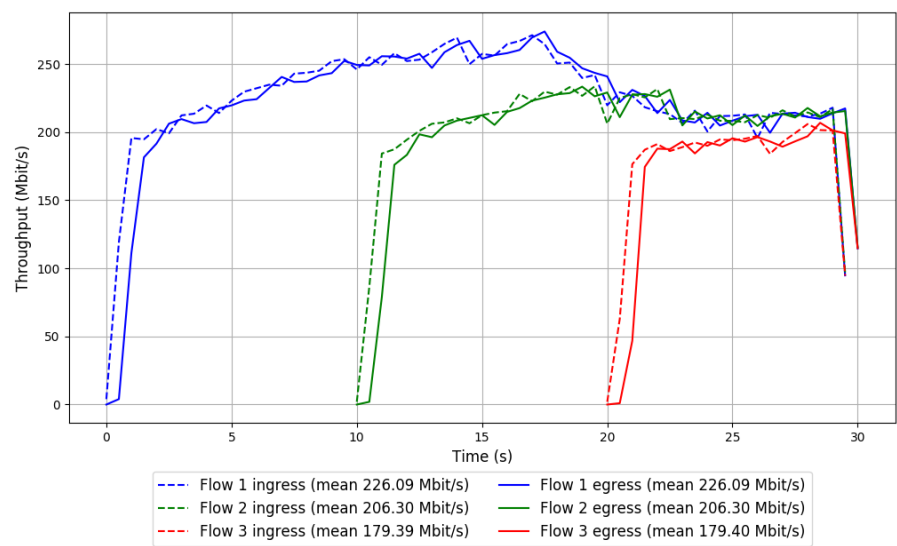


```
Run 1: Statistics of Indigo

Start at: 2019-02-21 00:22:16
End at: 2019-02-21 00:22:46
Local clock offset: -0.471 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-02-21 04:41:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 420.17 Mbit/s
95th percentile per-packet one-way delay: 49.110 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 226.09 Mbit/s
95th percentile per-packet one-way delay: 49.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 206.30 Mbit/s
95th percentile per-packet one-way delay: 49.284 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 179.40 Mbit/s
95th percentile per-packet one-way delay: 49.030 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-02-21 00:59:04

End at: 2019-02-21 00:59:34

Local clock offset: -0.081 ms

Remote clock offset: 0.09 ms

Below is generated by plot.py at 2019-02-21 04:41:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 435.36 Mbit/s

95th percentile per-packet one-way delay: 48.971 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 227.93 Mbit/s

95th percentile per-packet one-way delay: 48.974 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 222.56 Mbit/s

95th percentile per-packet one-way delay: 49.044 ms

Loss rate: 0.00%

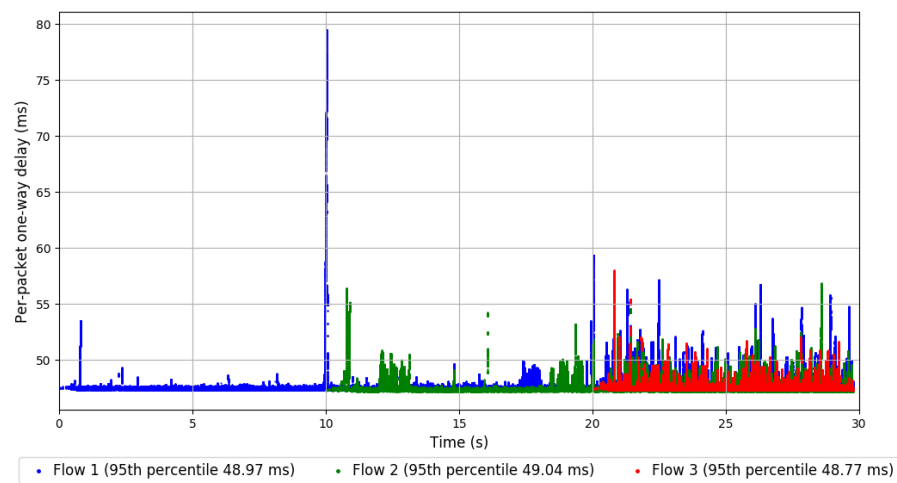
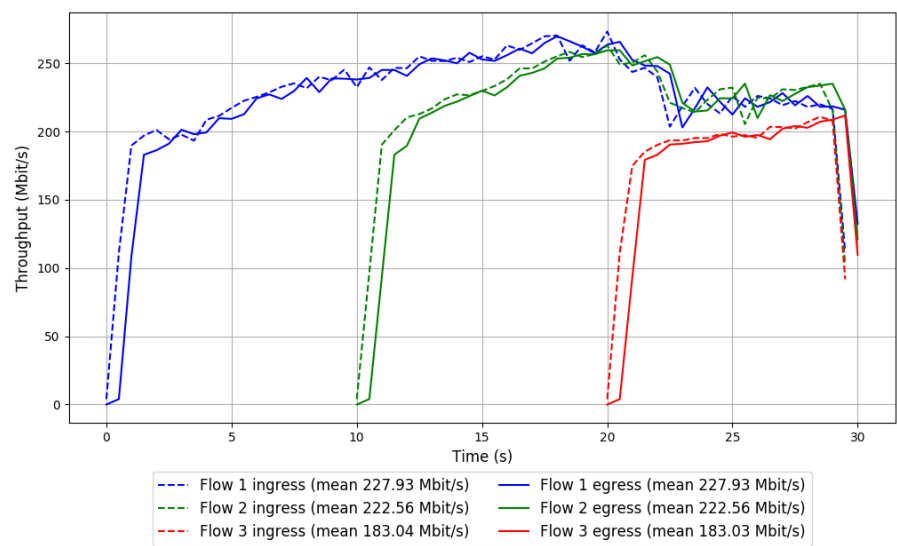
-- Flow 3:

Average throughput: 183.03 Mbit/s

95th percentile per-packet one-way delay: 48.767 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

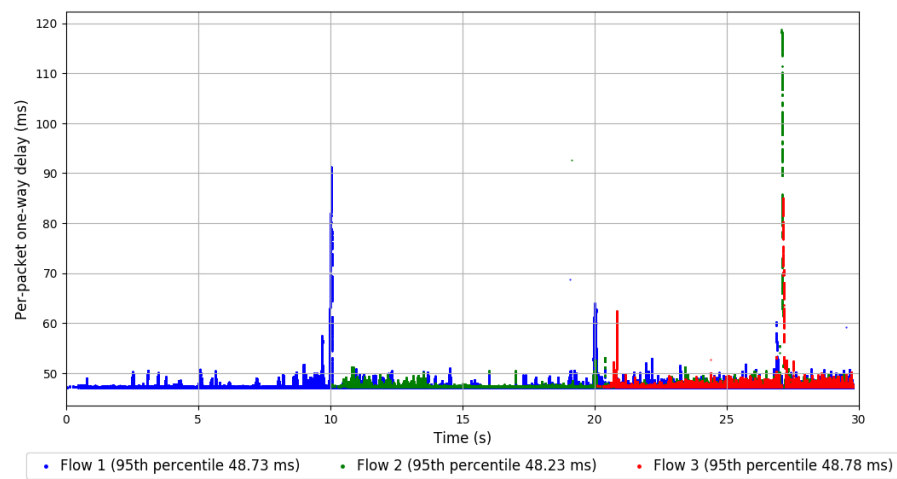
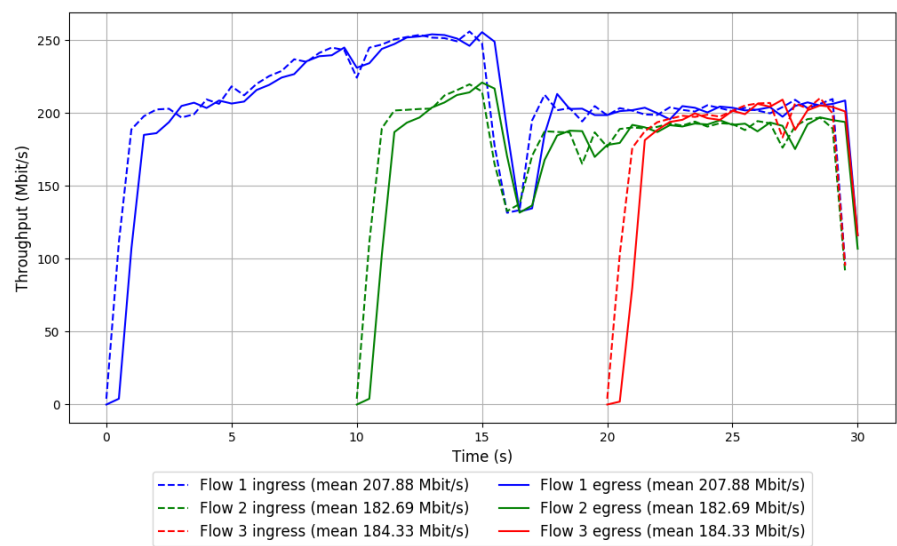


Run 3: Statistics of Indigo

Start at: 2019-02-21 01:36:02
End at: 2019-02-21 01:36:32
Local clock offset: -0.089 ms
Remote clock offset: -0.134 ms

Below is generated by plot.py at 2019-02-21 04:41:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 389.06 Mbit/s
95th percentile per-packet one-way delay: 48.578 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 207.88 Mbit/s
95th percentile per-packet one-way delay: 48.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 182.69 Mbit/s
95th percentile per-packet one-way delay: 48.234 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 184.33 Mbit/s
95th percentile per-packet one-way delay: 48.779 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

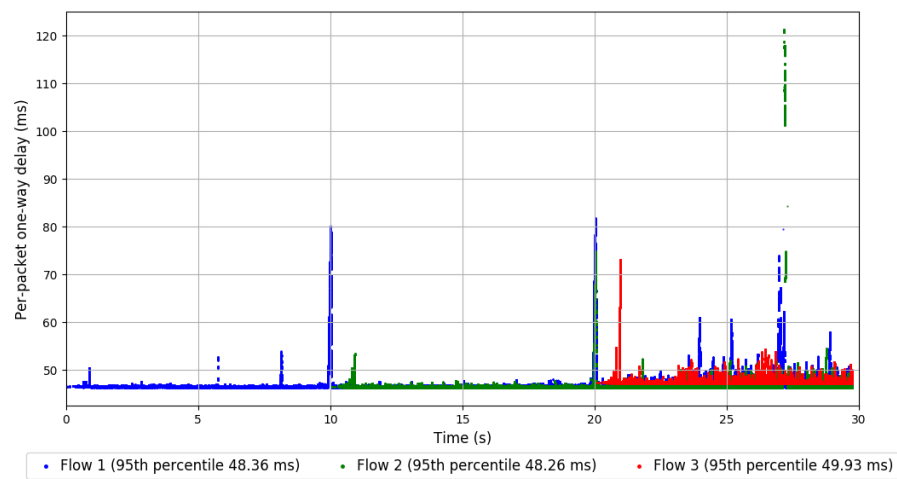
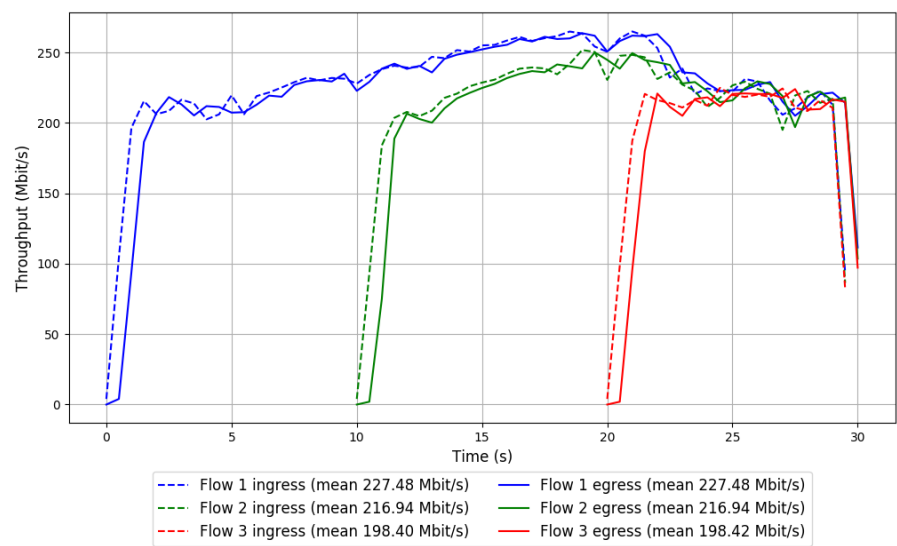


Run 4: Statistics of Indigo

Start at: 2019-02-21 02:12:31
End at: 2019-02-21 02:13:01
Local clock offset: -0.046 ms
Remote clock offset: -0.059 ms

Below is generated by plot.py at 2019-02-21 04:41:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 435.62 Mbit/s
95th percentile per-packet one-way delay: 48.727 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.48 Mbit/s
95th percentile per-packet one-way delay: 48.357 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 216.94 Mbit/s
95th percentile per-packet one-way delay: 48.262 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.42 Mbit/s
95th percentile per-packet one-way delay: 49.932 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

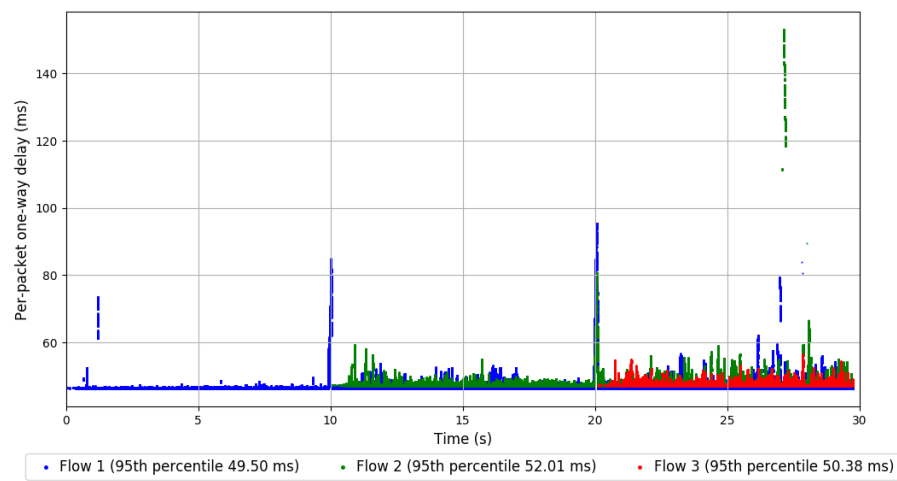
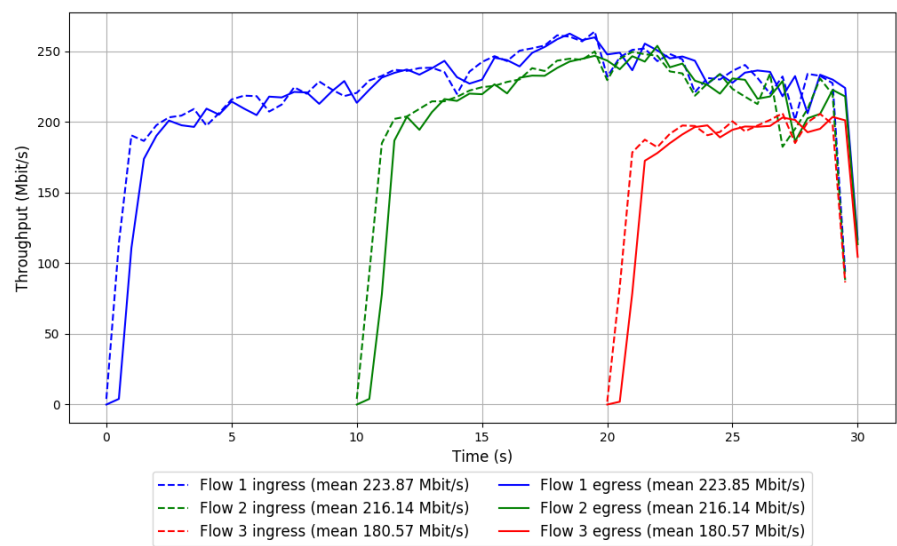


Run 5: Statistics of Indigo

Start at: 2019-02-21 02:49:09
End at: 2019-02-21 02:49:39
Local clock offset: -0.087 ms
Remote clock offset: -0.057 ms

Below is generated by plot.py at 2019-02-21 04:41:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 425.63 Mbit/s
95th percentile per-packet one-way delay: 50.590 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 223.85 Mbit/s
95th percentile per-packet one-way delay: 49.499 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 216.14 Mbit/s
95th percentile per-packet one-way delay: 52.011 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 180.57 Mbit/s
95th percentile per-packet one-way delay: 50.375 ms
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

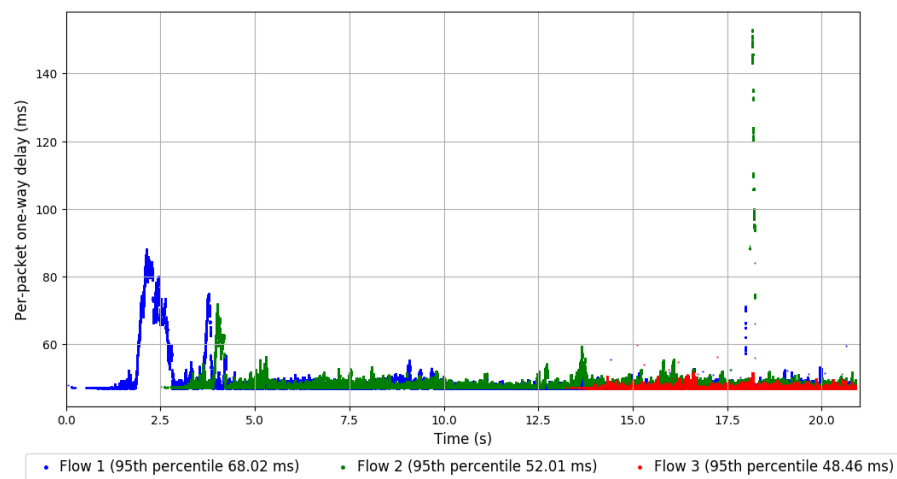
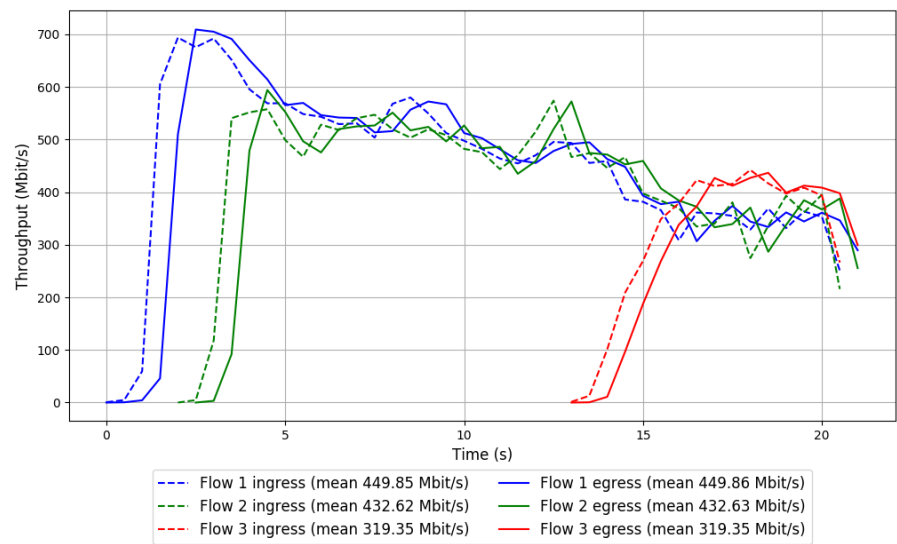
Start at: 2019-02-21 00:04:25

End at: 2019-02-21 00:04:55

Local clock offset: -0.071 ms

Remote clock offset: 0.092 ms

Run 1: Report of Indigo-MusesC3 — Data Link

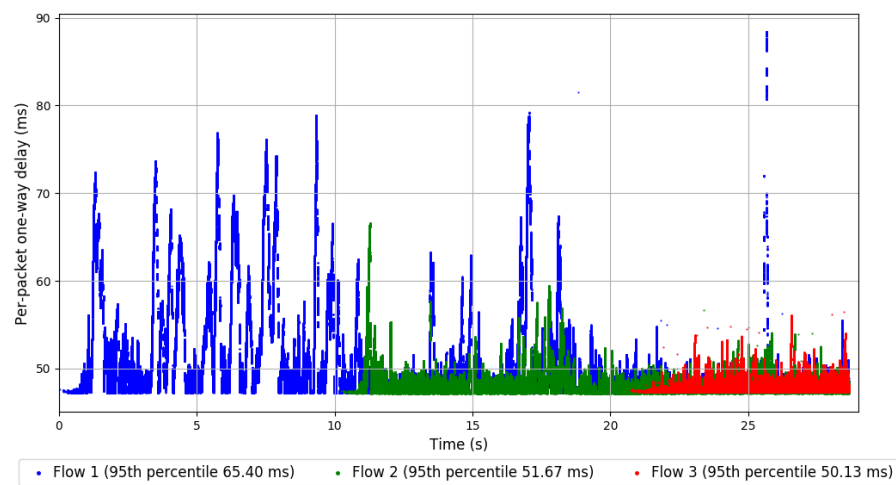
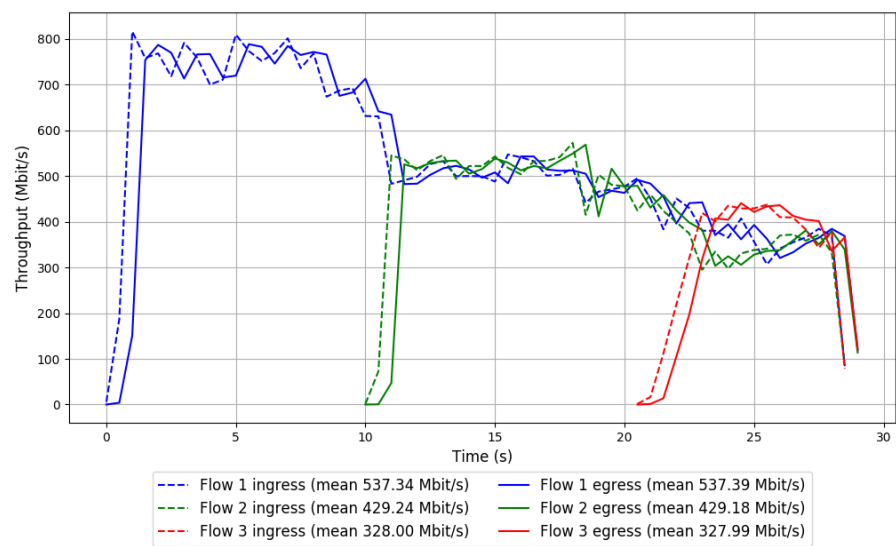


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-02-21 00:41:10
End at: 2019-02-21 00:41:40
Local clock offset: -0.166 ms
Remote clock offset: 0.042 ms

Below is generated by plot.py at 2019-02-21 04:41:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 904.85 Mbit/s
95th percentile per-packet one-way delay: 61.836 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 537.39 Mbit/s
95th percentile per-packet one-way delay: 65.403 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 429.18 Mbit/s
95th percentile per-packet one-way delay: 51.667 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 327.99 Mbit/s
95th percentile per-packet one-way delay: 50.128 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

Start at: 2019-02-21 01:17:59

End at: 2019-02-21 01:18:29

Local clock offset: -0.079 ms

Remote clock offset: 0.063 ms

Below is generated by plot.py at 2019-02-21 04:51:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 879.91 Mbit/s

95th percentile per-packet one-way delay: 59.501 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 504.81 Mbit/s

95th percentile per-packet one-way delay: 64.457 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 431.83 Mbit/s

95th percentile per-packet one-way delay: 56.960 ms

Loss rate: 0.00%

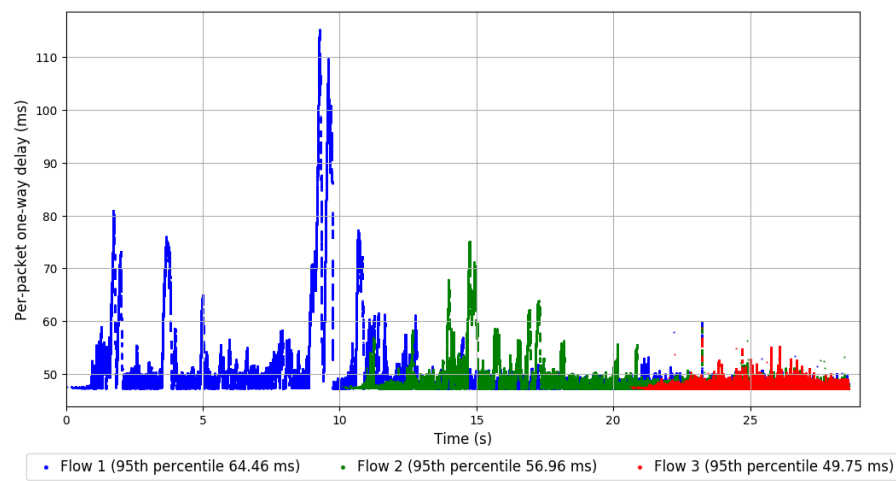
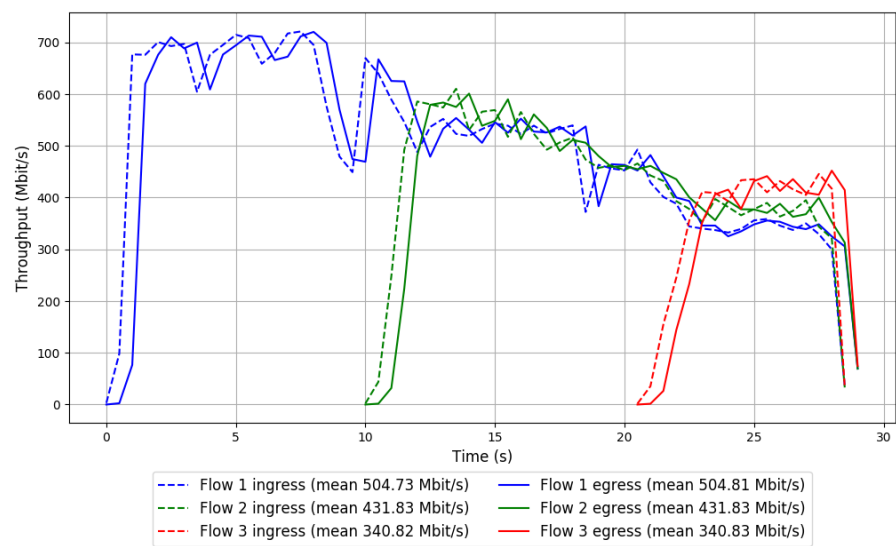
-- Flow 3:

Average throughput: 340.83 Mbit/s

95th percentile per-packet one-way delay: 49.746 ms

Loss rate: 0.00%

Run 3: Report of Indigo-MusesC3 — Data Link

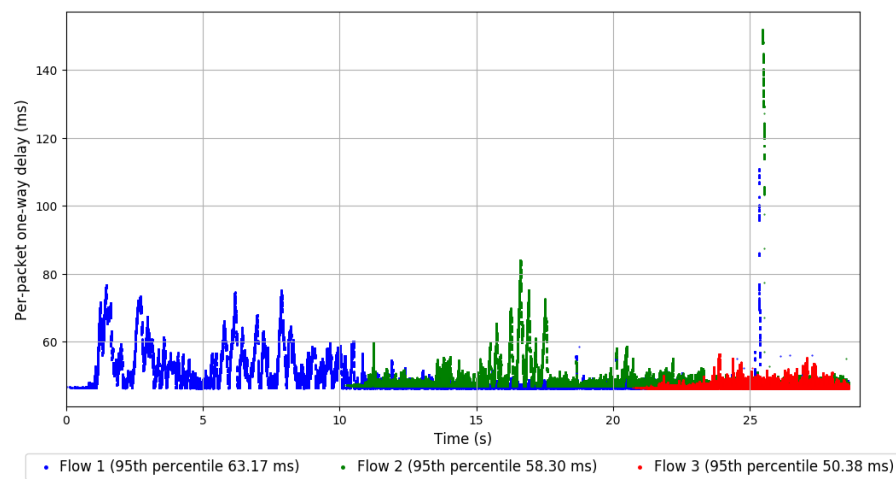
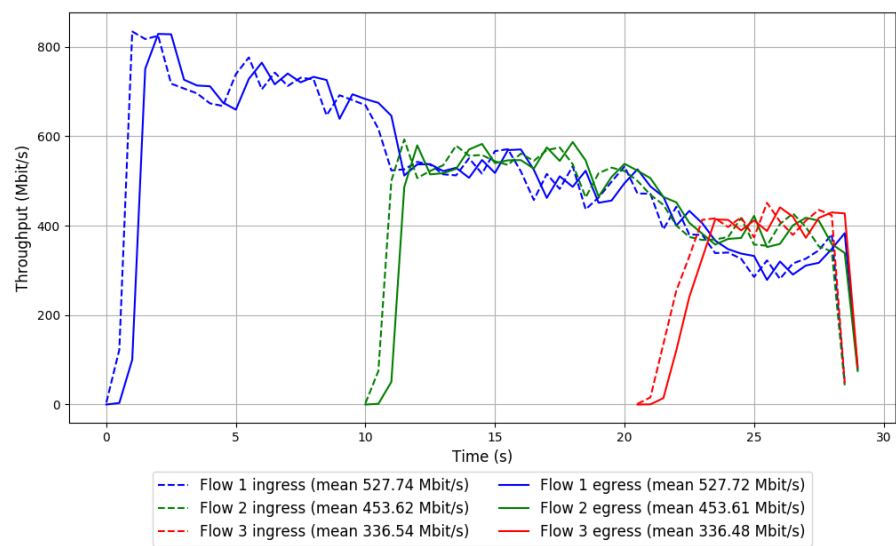


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-02-21 01:54:43
End at: 2019-02-21 01:55:13
Local clock offset: -0.061 ms
Remote clock offset: -0.162 ms

Below is generated by plot.py at 2019-02-21 04:52:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 913.47 Mbit/s
95th percentile per-packet one-way delay: 61.583 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 527.72 Mbit/s
95th percentile per-packet one-way delay: 63.168 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 453.61 Mbit/s
95th percentile per-packet one-way delay: 58.300 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 336.48 Mbit/s
95th percentile per-packet one-way delay: 50.377 ms
Loss rate: 0.04%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-02-21 02:31:16

End at: 2019-02-21 02:31:46

Local clock offset: -0.078 ms

Remote clock offset: 0.001 ms

Below is generated by plot.py at 2019-02-21 04:52:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 849.93 Mbit/s

95th percentile per-packet one-way delay: 60.507 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 512.33 Mbit/s

95th percentile per-packet one-way delay: 59.931 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 406.92 Mbit/s

95th percentile per-packet one-way delay: 68.185 ms

Loss rate: 0.02%

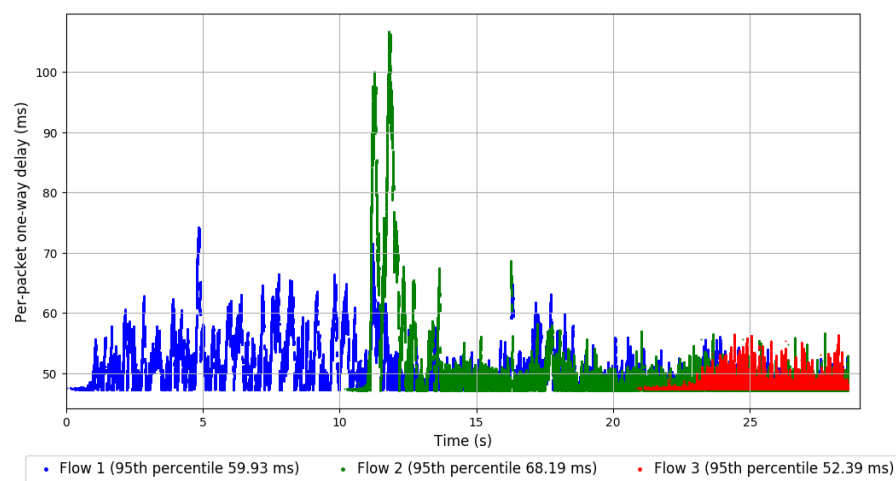
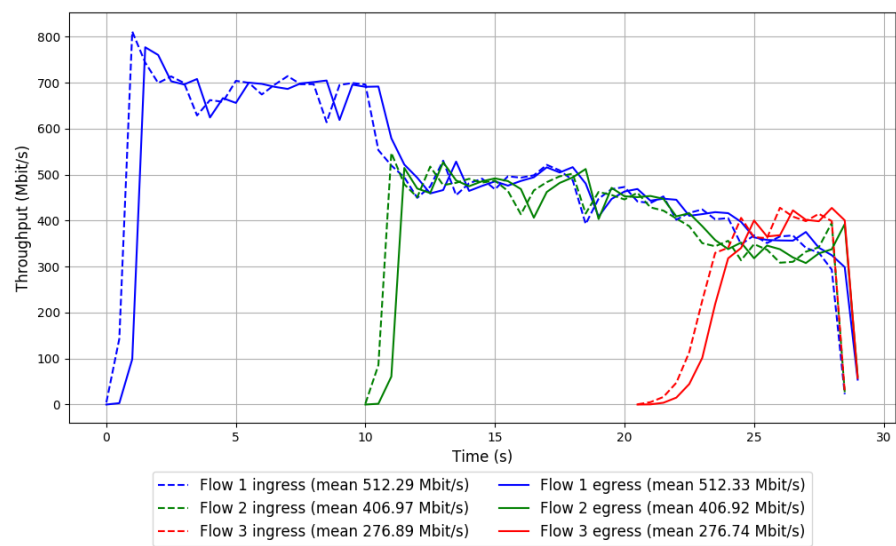
-- Flow 3:

Average throughput: 276.74 Mbit/s

95th percentile per-packet one-way delay: 52.387 ms

Loss rate: 0.08%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-02-21 00:34:44

End at: 2019-02-21 00:35:14

Local clock offset: -0.087 ms

Remote clock offset: 0.046 ms

Below is generated by plot.py at 2019-02-21 04:55:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 955.08 Mbit/s

95th percentile per-packet one-way delay: 73.453 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 532.64 Mbit/s

95th percentile per-packet one-way delay: 77.125 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 486.92 Mbit/s

95th percentile per-packet one-way delay: 73.771 ms

Loss rate: 0.00%

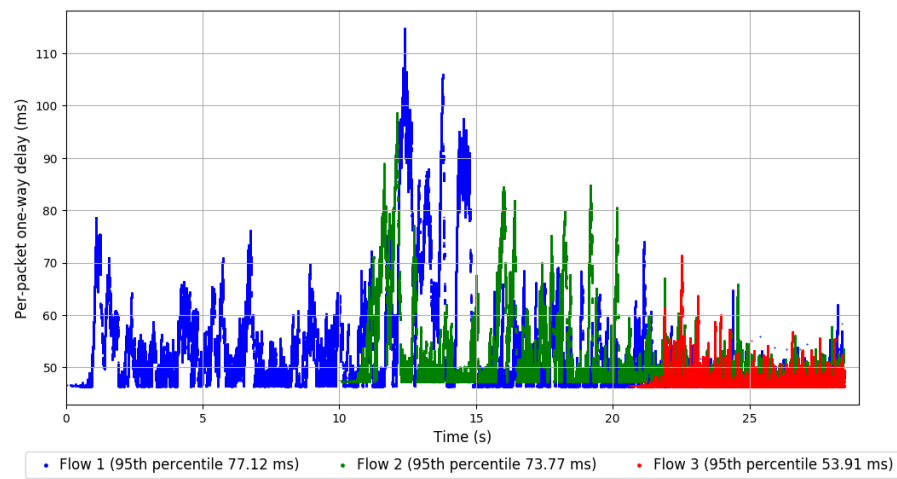
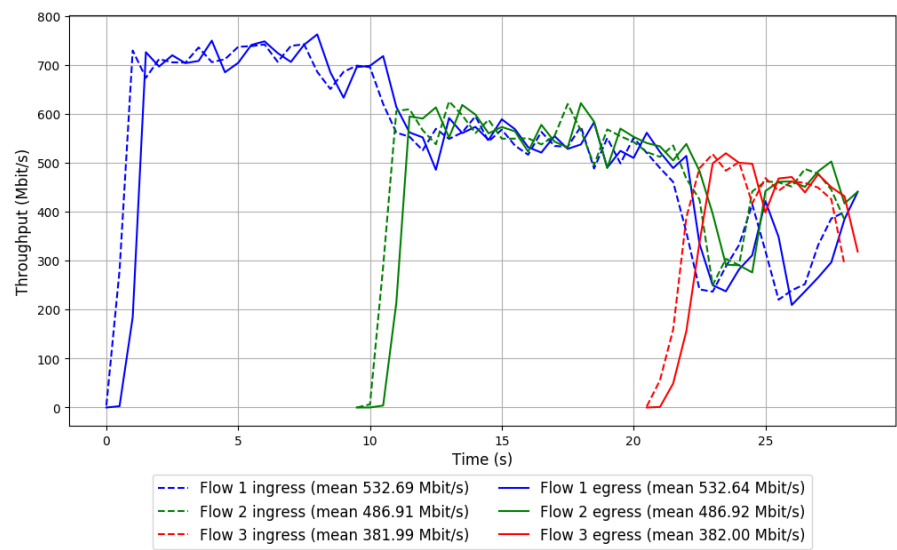
-- Flow 3:

Average throughput: 382.00 Mbit/s

95th percentile per-packet one-way delay: 53.914 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesC5 — Data Link

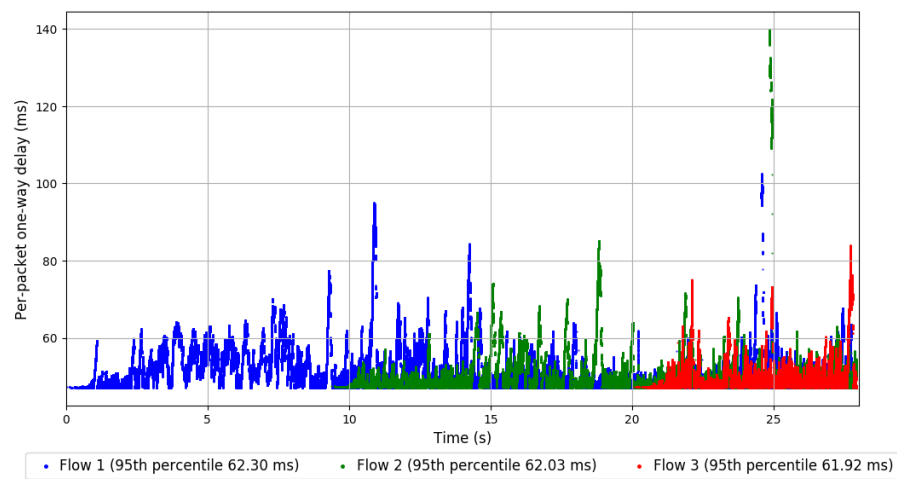
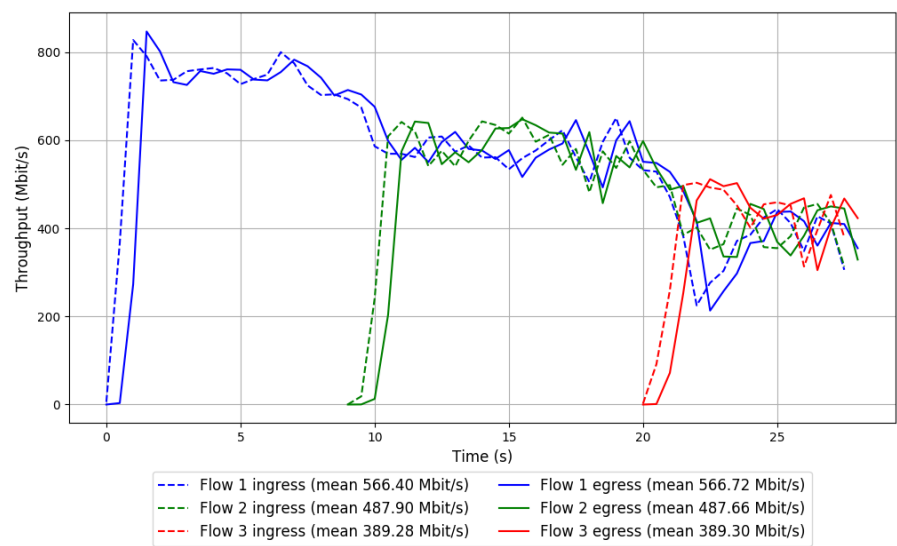


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-02-21 01:11:34
End at: 2019-02-21 01:12:04
Local clock offset: -0.042 ms
Remote clock offset: 0.011 ms

Below is generated by plot.py at 2019-02-21 04:56:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 1000.51 Mbit/s
95th percentile per-packet one-way delay: 62.217 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 566.72 Mbit/s
95th percentile per-packet one-way delay: 62.302 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 487.66 Mbit/s
95th percentile per-packet one-way delay: 62.029 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 389.30 Mbit/s
95th percentile per-packet one-way delay: 61.924 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC5 — Data Link

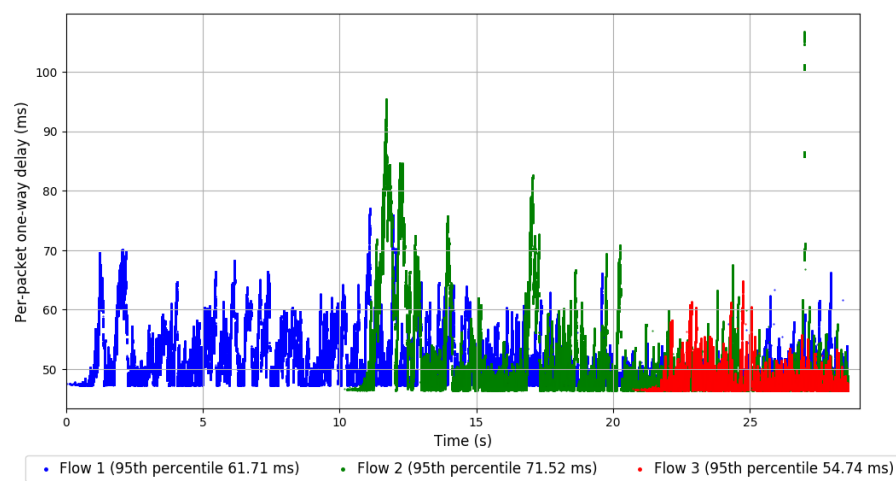
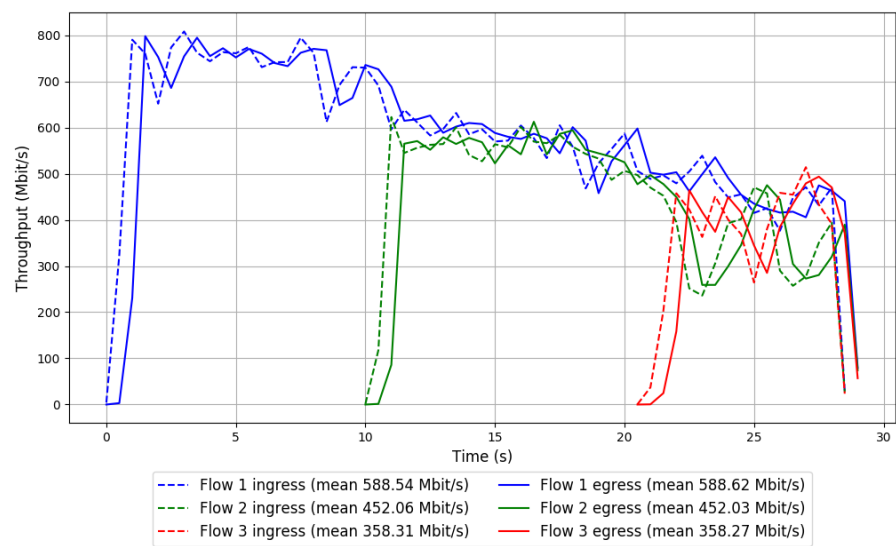


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-02-21 01:48:18
End at: 2019-02-21 01:48:48
Local clock offset: -0.134 ms
Remote clock offset: -0.159 ms

Below is generated by plot.py at 2019-02-21 04:56:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 978.57 Mbit/s
95th percentile per-packet one-way delay: 63.362 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 588.62 Mbit/s
95th percentile per-packet one-way delay: 61.712 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 452.03 Mbit/s
95th percentile per-packet one-way delay: 71.520 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 358.27 Mbit/s
95th percentile per-packet one-way delay: 54.737 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC5 — Data Link

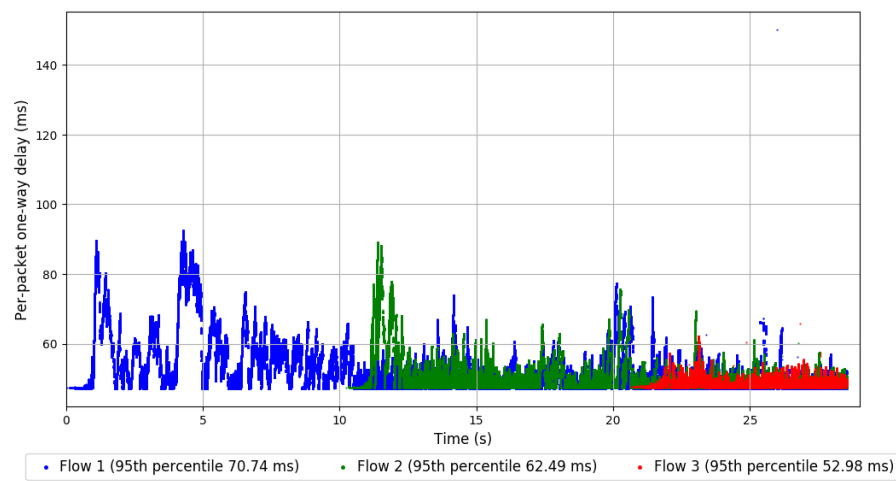
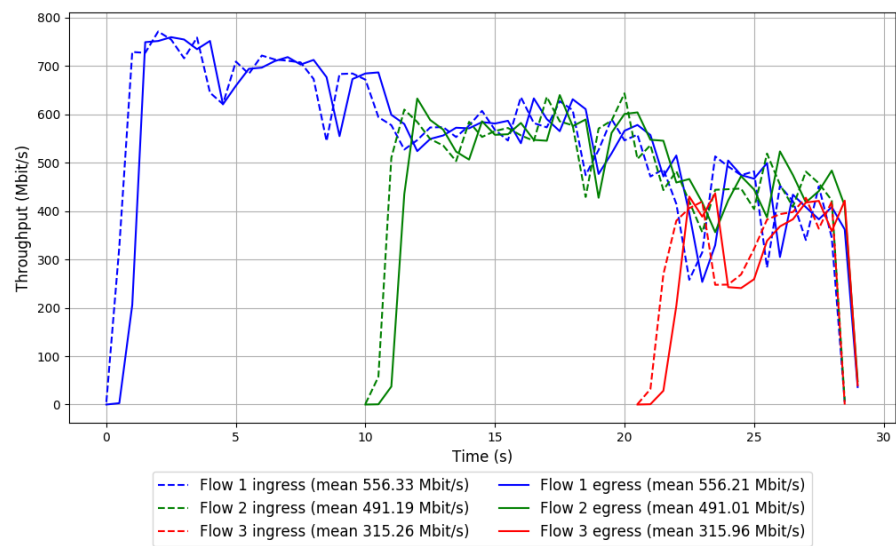


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-02-21 02:24:51
End at: 2019-02-21 02:25:21
Local clock offset: -0.101 ms
Remote clock offset: -0.029 ms

Below is generated by plot.py at 2019-02-21 04:58:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 958.90 Mbit/s
95th percentile per-packet one-way delay: 66.889 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 556.21 Mbit/s
95th percentile per-packet one-way delay: 70.741 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 491.01 Mbit/s
95th percentile per-packet one-way delay: 62.494 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 315.96 Mbit/s
95th percentile per-packet one-way delay: 52.981 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC5 — Data Link

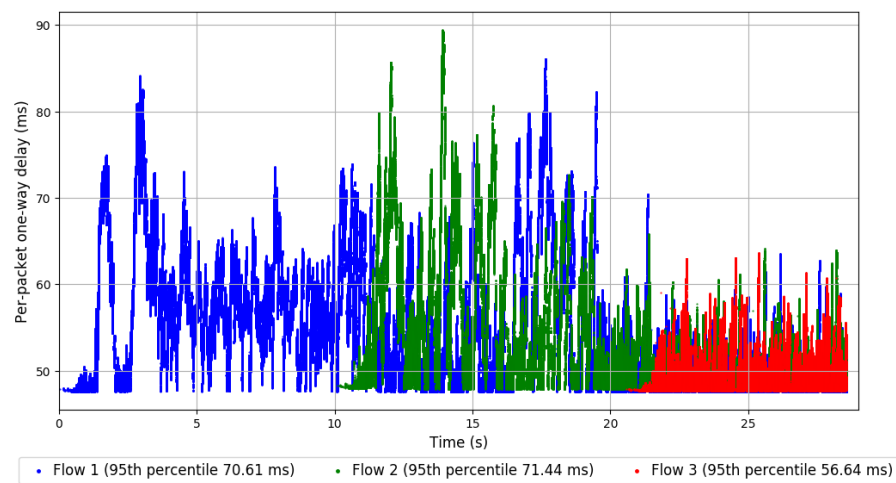
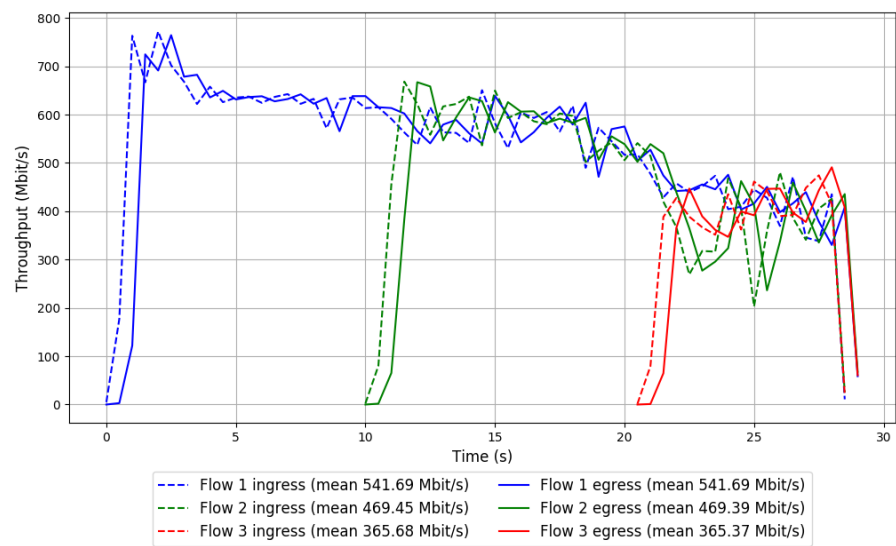


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-02-21 03:01:42
End at: 2019-02-21 03:02:12
Local clock offset: -0.483 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2019-02-21 04:58:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 947.80 Mbit/s
95th percentile per-packet one-way delay: 70.214 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 541.69 Mbit/s
95th percentile per-packet one-way delay: 70.609 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 469.39 Mbit/s
95th percentile per-packet one-way delay: 71.442 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 365.37 Mbit/s
95th percentile per-packet one-way delay: 56.642 ms
Loss rate: 0.11%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-02-21 00:15:07

End at: 2019-02-21 00:15:37

Local clock offset: -0.066 ms

Remote clock offset: 0.039 ms

Below is generated by plot.py at 2019-02-21 05:06:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 800.30 Mbit/s

95th percentile per-packet one-way delay: 61.504 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 447.90 Mbit/s

95th percentile per-packet one-way delay: 73.153 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 416.34 Mbit/s

95th percentile per-packet one-way delay: 49.490 ms

Loss rate: 0.00%

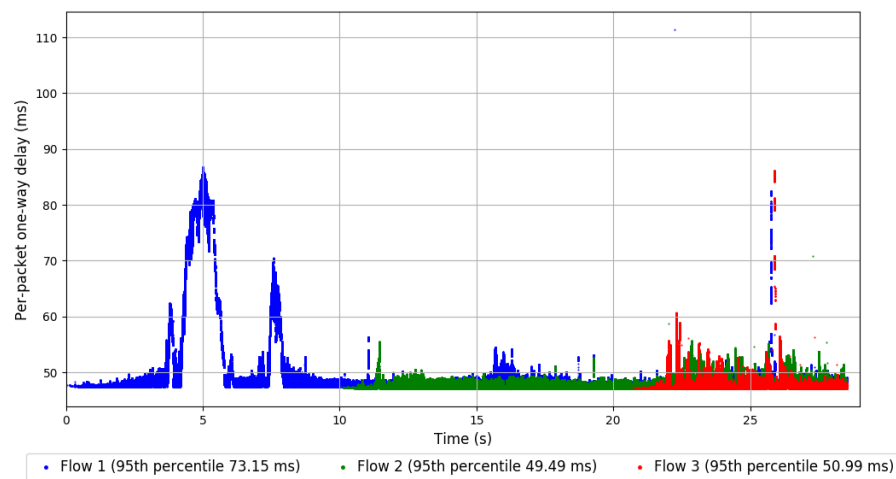
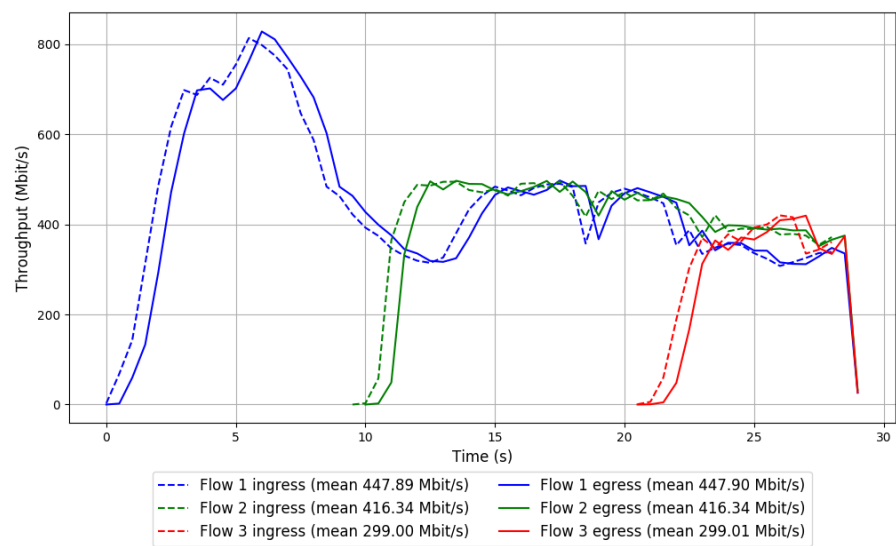
-- Flow 3:

Average throughput: 299.01 Mbit/s

95th percentile per-packet one-way delay: 50.992 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-02-21 00:52:00

End at: 2019-02-21 00:52:30

Local clock offset: 0.305 ms

Remote clock offset: 0.033 ms

Below is generated by plot.py at 2019-02-21 05:06:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 794.39 Mbit/s

95th percentile per-packet one-way delay: 55.110 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 443.23 Mbit/s

95th percentile per-packet one-way delay: 60.181 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 409.50 Mbit/s

95th percentile per-packet one-way delay: 50.521 ms

Loss rate: 0.03%

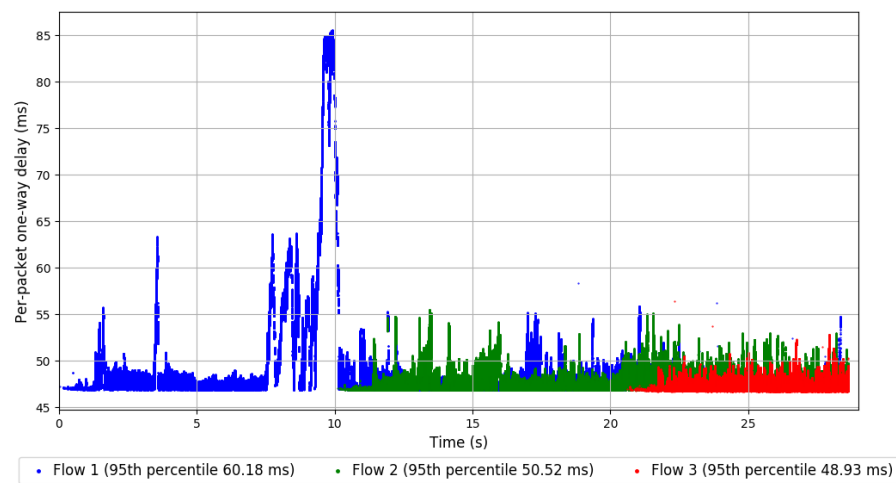
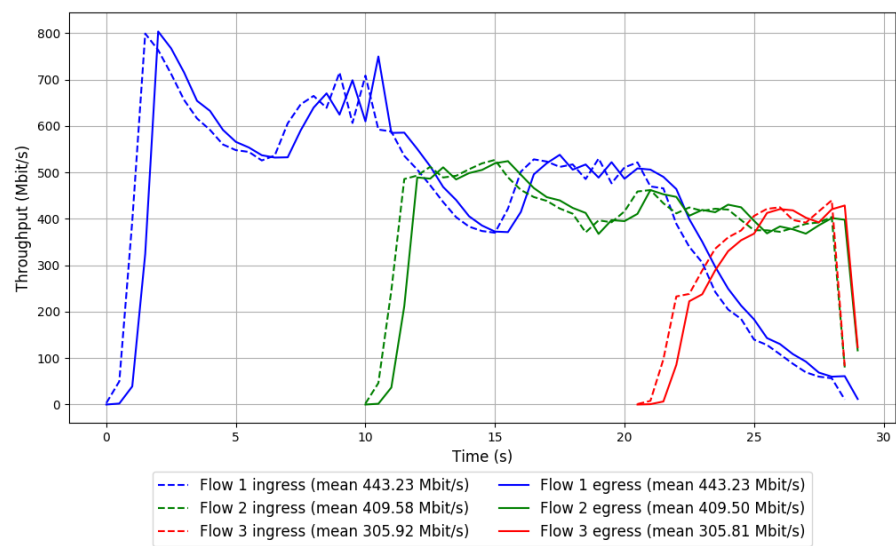
-- Flow 3:

Average throughput: 305.81 Mbit/s

95th percentile per-packet one-way delay: 48.930 ms

Loss rate: 0.05%

Run 2: Report of Indigo-MusesD — Data Link

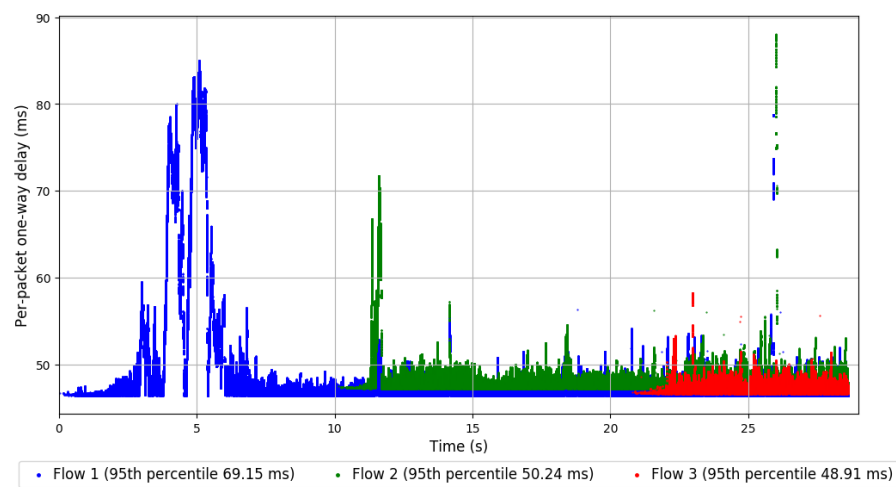
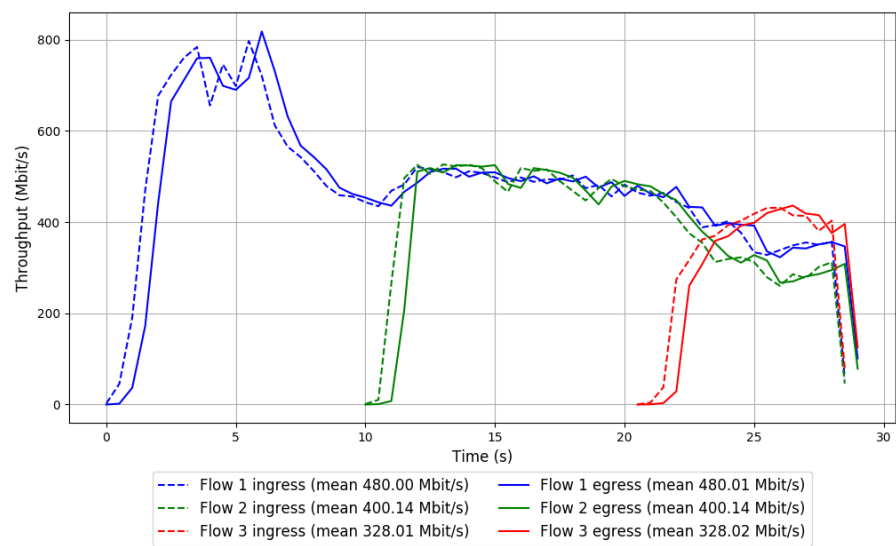


Run 3: Statistics of Indigo-MusesD

Start at: 2019-02-21 01:28:54
End at: 2019-02-21 01:29:24
Local clock offset: -0.04 ms
Remote clock offset: -0.045 ms

Below is generated by plot.py at 2019-02-21 05:07:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 828.87 Mbit/s
95th percentile per-packet one-way delay: 56.749 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 480.01 Mbit/s
95th percentile per-packet one-way delay: 69.147 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 400.14 Mbit/s
95th percentile per-packet one-way delay: 50.244 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 328.02 Mbit/s
95th percentile per-packet one-way delay: 48.912 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-02-21 02:05:32

End at: 2019-02-21 02:06:02

Local clock offset: 0.286 ms

Remote clock offset: -0.08 ms

Below is generated by plot.py at 2019-02-21 05:07:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 701.23 Mbit/s

95th percentile per-packet one-way delay: 61.249 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 436.03 Mbit/s

95th percentile per-packet one-way delay: 69.872 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 349.32 Mbit/s

95th percentile per-packet one-way delay: 52.348 ms

Loss rate: 0.00%

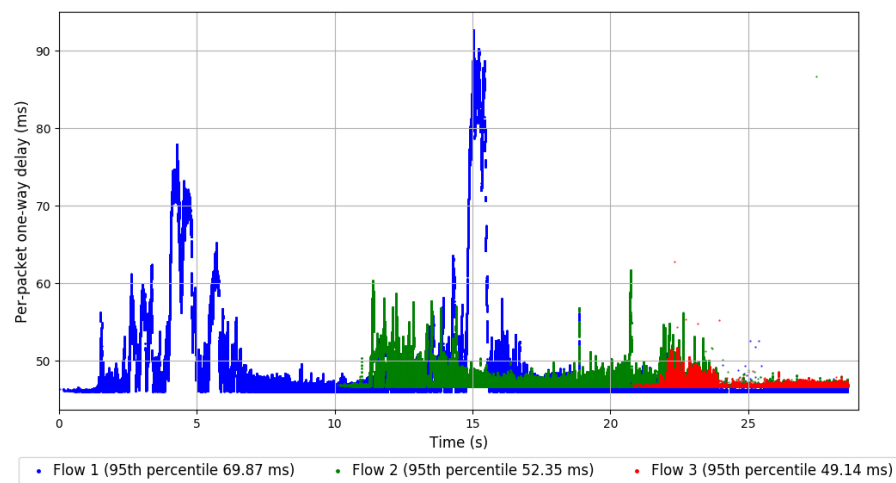
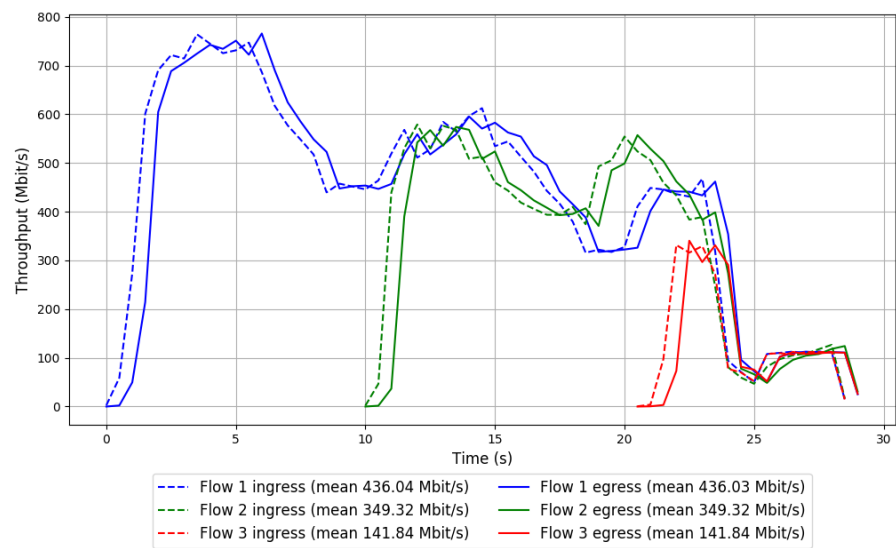
-- Flow 3:

Average throughput: 141.84 Mbit/s

95th percentile per-packet one-way delay: 49.144 ms

Loss rate: 0.00%

Run 4: Report of Indigo-MusesD — Data Link

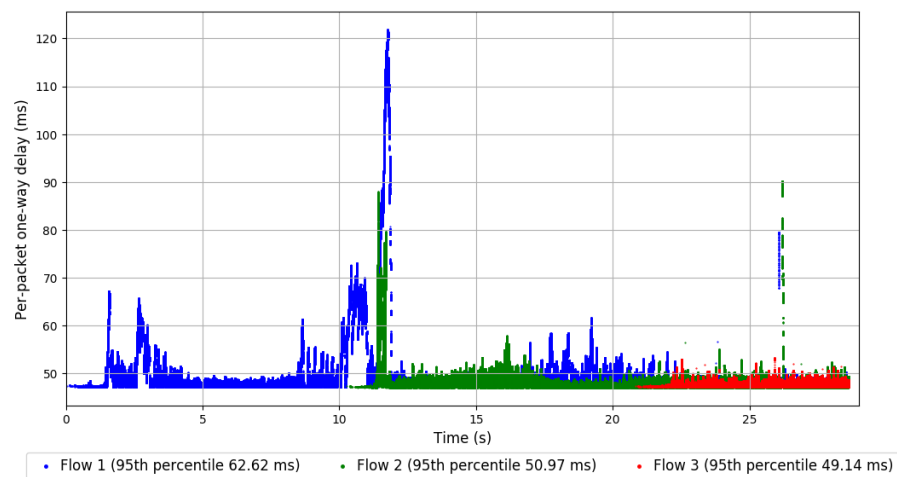
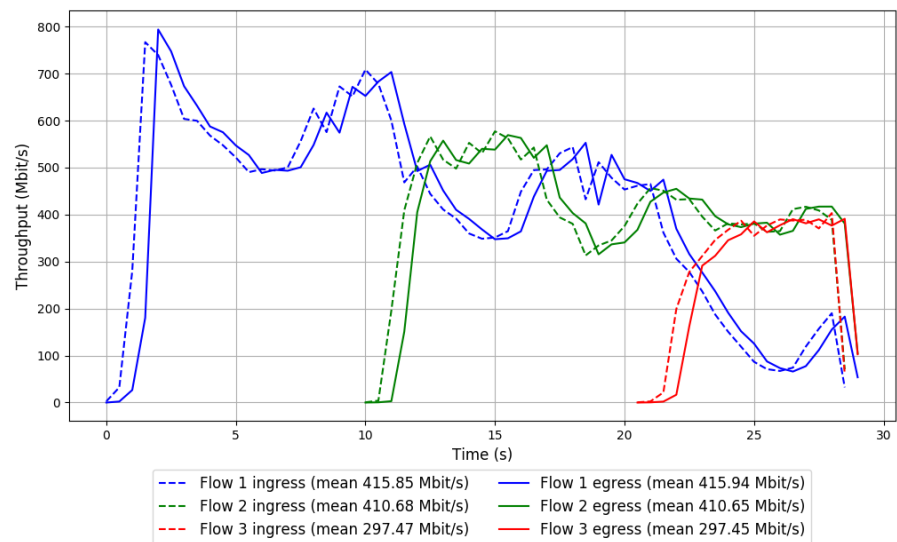


Run 5: Statistics of Indigo-MusesD

Start at: 2019-02-21 02:42:05
End at: 2019-02-21 02:42:35
Local clock offset: -0.064 ms
Remote clock offset: -0.028 ms

Below is generated by plot.py at 2019-02-21 05:10:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 760.77 Mbit/s
95th percentile per-packet one-way delay: 58.029 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 415.94 Mbit/s
95th percentile per-packet one-way delay: 62.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 410.65 Mbit/s
95th percentile per-packet one-way delay: 50.972 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 297.45 Mbit/s
95th percentile per-packet one-way delay: 49.141 ms
Loss rate: 0.03%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-02-21 00:18:40

End at: 2019-02-21 00:19:10

Local clock offset: -0.087 ms

Remote clock offset: 0.07 ms

Below is generated by plot.py at 2019-02-21 05:14:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 991.02 Mbit/s

95th percentile per-packet one-way delay: 88.002 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 584.08 Mbit/s

95th percentile per-packet one-way delay: 85.313 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 480.39 Mbit/s

95th percentile per-packet one-way delay: 114.783 ms

Loss rate: 0.00%

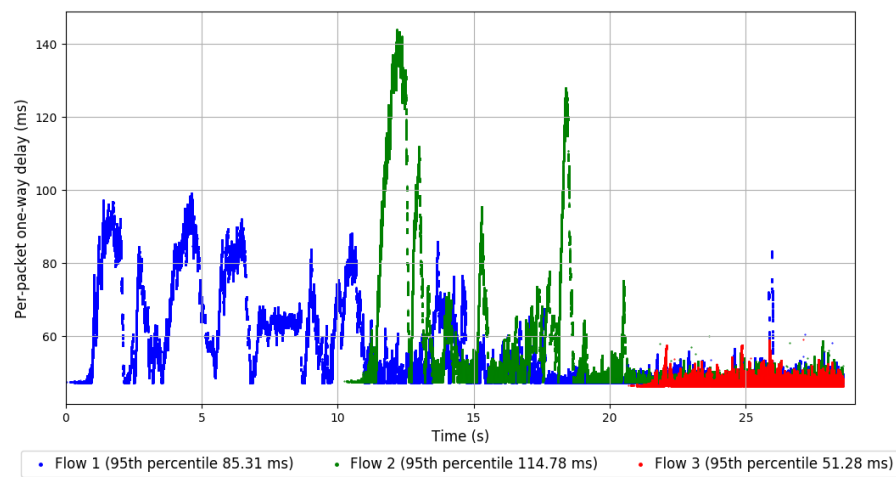
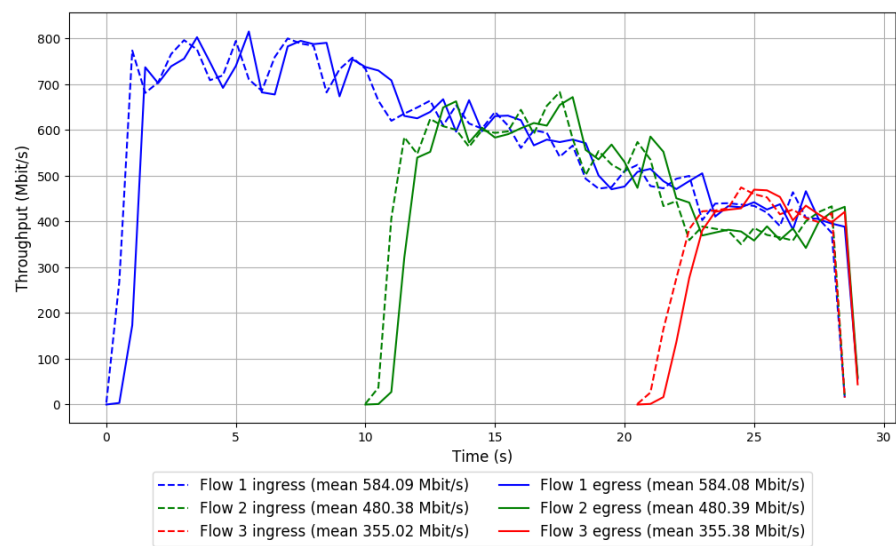
-- Flow 3:

Average throughput: 355.38 Mbit/s

95th percentile per-packet one-way delay: 51.284 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesT — Data Link

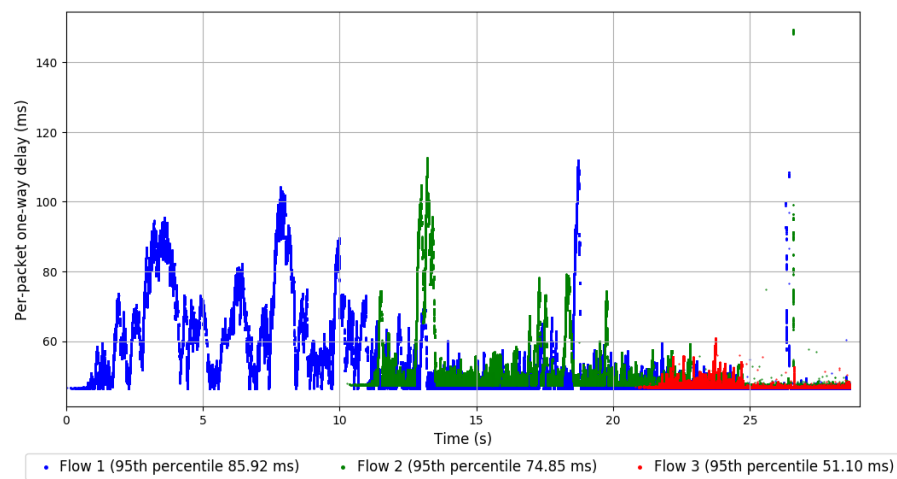
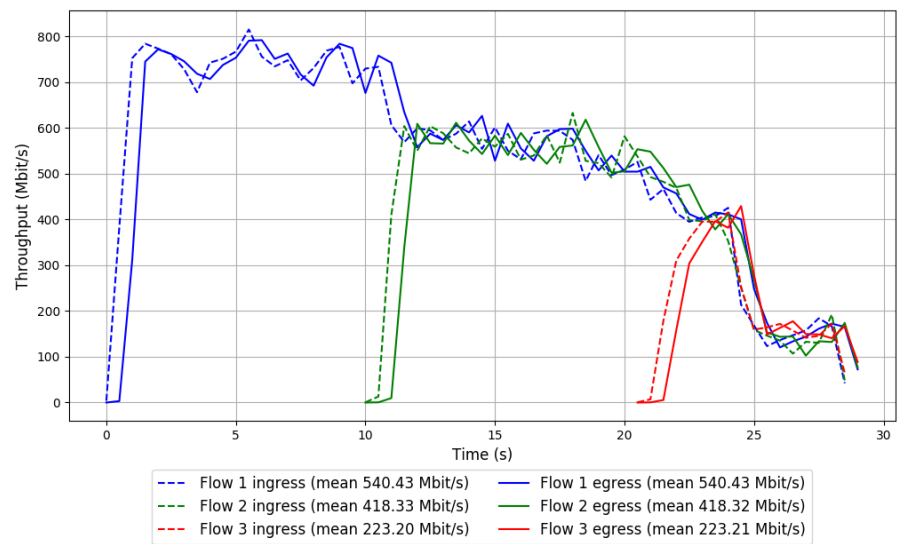


Run 2: Statistics of Indigo-MusesT

Start at: 2019-02-21 00:55:34
End at: 2019-02-21 00:56:04
Local clock offset: -0.077 ms
Remote clock offset: 0.048 ms

Below is generated by plot.py at 2019-02-21 05:14:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 870.26 Mbit/s
95th percentile per-packet one-way delay: 84.114 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 540.43 Mbit/s
95th percentile per-packet one-way delay: 85.920 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 418.32 Mbit/s
95th percentile per-packet one-way delay: 74.853 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 223.21 Mbit/s
95th percentile per-packet one-way delay: 51.104 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesT — Data Link

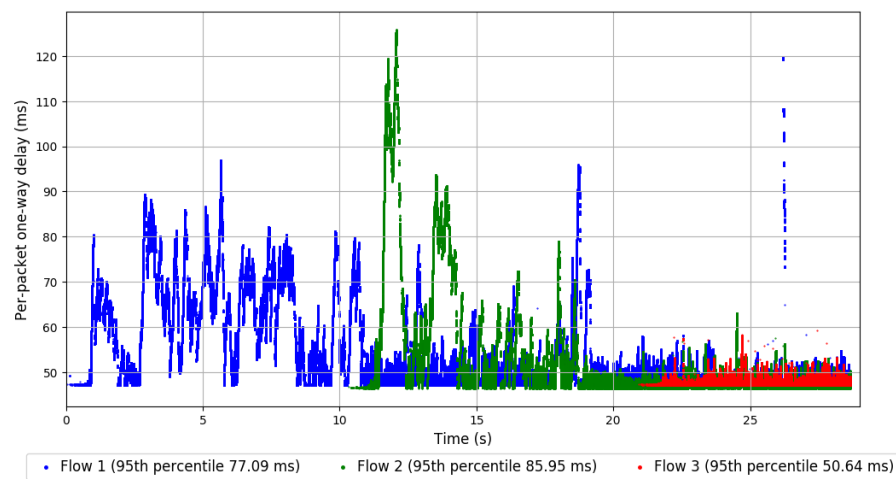
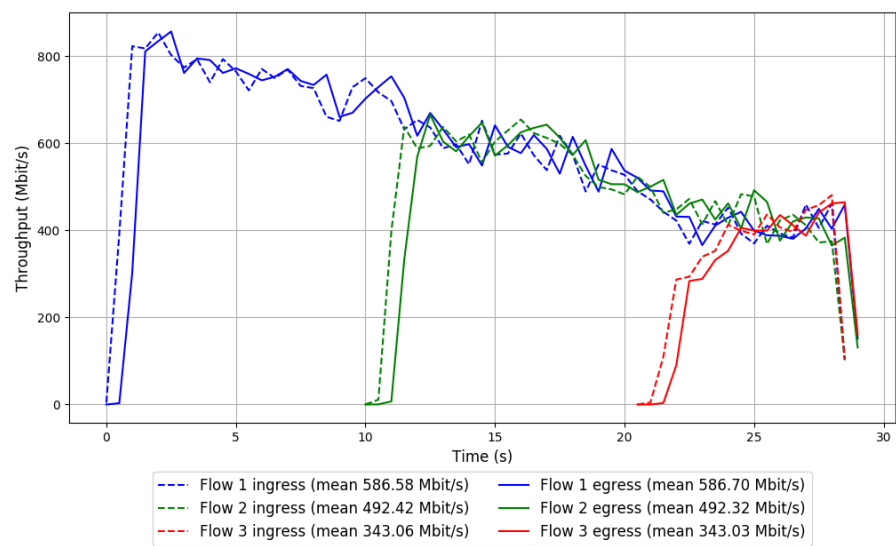


Run 3: Statistics of Indigo-MusesT

Start at: 2019-02-21 01:32:30
End at: 2019-02-21 01:33:00
Local clock offset: -0.052 ms
Remote clock offset: -0.097 ms

Below is generated by plot.py at 2019-02-21 05:15:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 995.27 Mbit/s
95th percentile per-packet one-way delay: 77.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 586.70 Mbit/s
95th percentile per-packet one-way delay: 77.088 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 492.32 Mbit/s
95th percentile per-packet one-way delay: 85.953 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 343.03 Mbit/s
95th percentile per-packet one-way delay: 50.636 ms
Loss rate: 0.02%

Run 3: Report of Indigo-MusesT — Data Link

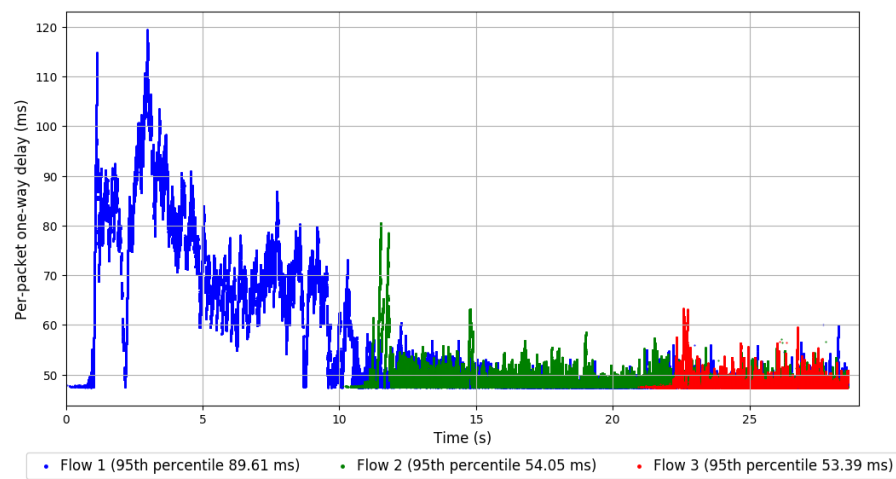
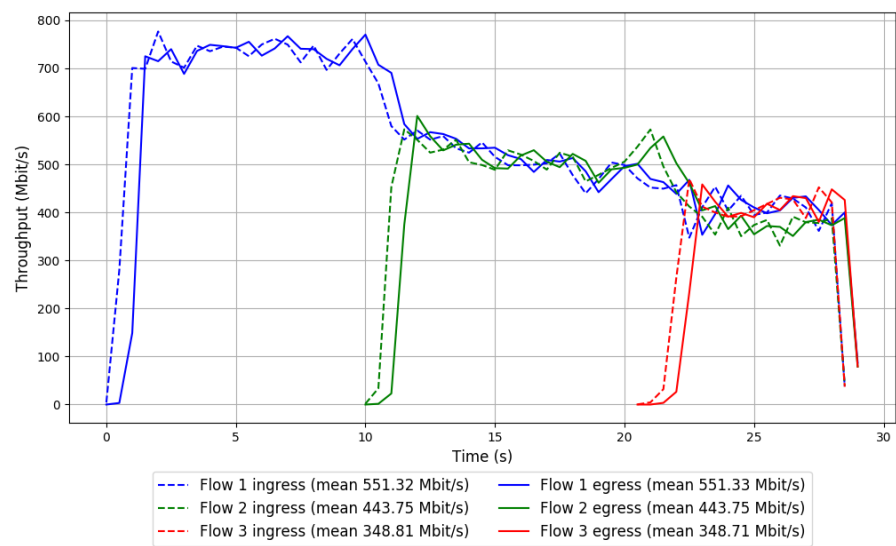


Run 4: Statistics of Indigo-MusesT

Start at: 2019-02-21 02:09:01
End at: 2019-02-21 02:09:31
Local clock offset: -0.414 ms
Remote clock offset: -0.054 ms

Below is generated by plot.py at 2019-02-21 05:22:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 931.61 Mbit/s
95th percentile per-packet one-way delay: 83.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 551.33 Mbit/s
95th percentile per-packet one-way delay: 89.614 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 443.75 Mbit/s
95th percentile per-packet one-way delay: 54.045 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 348.71 Mbit/s
95th percentile per-packet one-way delay: 53.392 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesT — Data Link

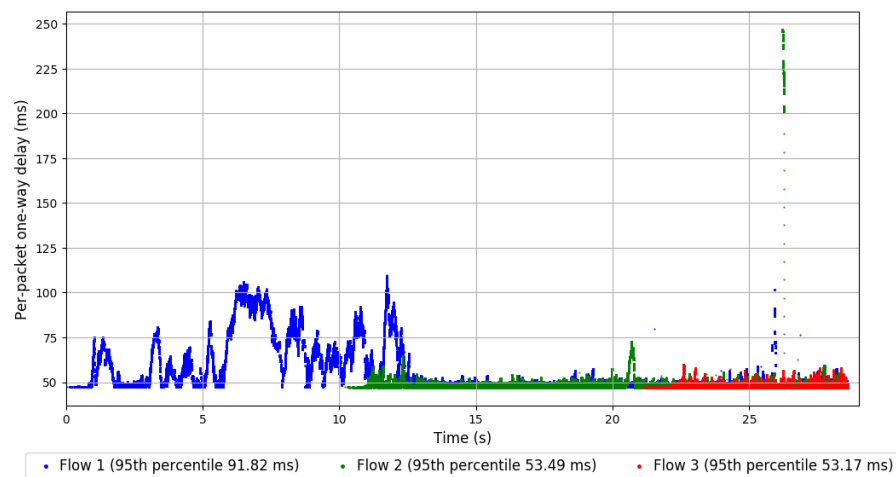
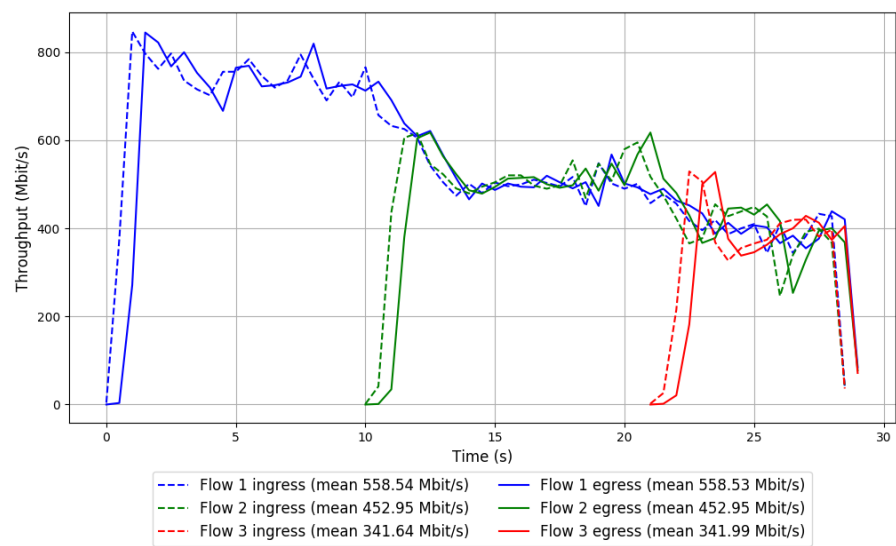


Run 5: Statistics of Indigo-MusesT

Start at: 2019-02-21 02:45:36
End at: 2019-02-21 02:46:06
Local clock offset: -0.117 ms
Remote clock offset: -0.061 ms

Below is generated by plot.py at 2019-02-21 05:22:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 940.08 Mbit/s
95th percentile per-packet one-way delay: 85.535 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 558.53 Mbit/s
95th percentile per-packet one-way delay: 91.819 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 452.95 Mbit/s
95th percentile per-packet one-way delay: 53.486 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 341.99 Mbit/s
95th percentile per-packet one-way delay: 53.166 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesT — Data Link

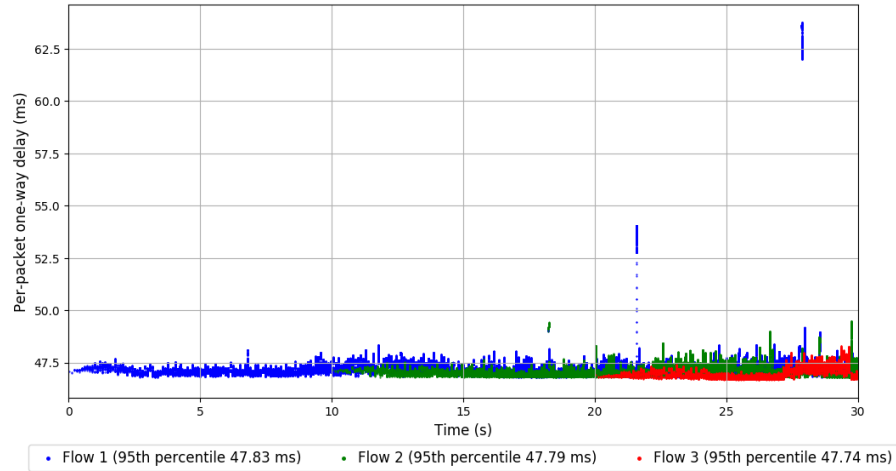
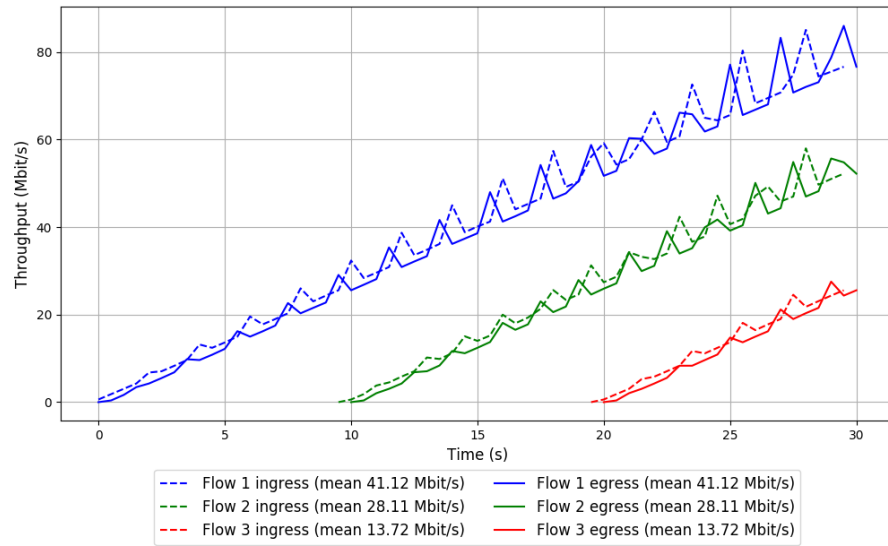


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-21 00:03:07
End at: 2019-02-21 00:03:37
Local clock offset: 0.252 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-02-21 05:22:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.37 Mbit/s
95th percentile per-packet one-way delay: 47.806 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.12 Mbit/s
95th percentile per-packet one-way delay: 47.826 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.11 Mbit/s
95th percentile per-packet one-way delay: 47.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.72 Mbit/s
95th percentile per-packet one-way delay: 47.739 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-02-21 00:39:52

End at: 2019-02-21 00:40:22

Local clock offset: -0.074 ms

Remote clock offset: 0.066 ms

Below is generated by plot.py at 2019-02-21 05:22:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.29 Mbit/s

95th percentile per-packet one-way delay: 48.388 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.09 Mbit/s

95th percentile per-packet one-way delay: 48.545 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.80 Mbit/s

95th percentile per-packet one-way delay: 48.224 ms

Loss rate: 0.00%

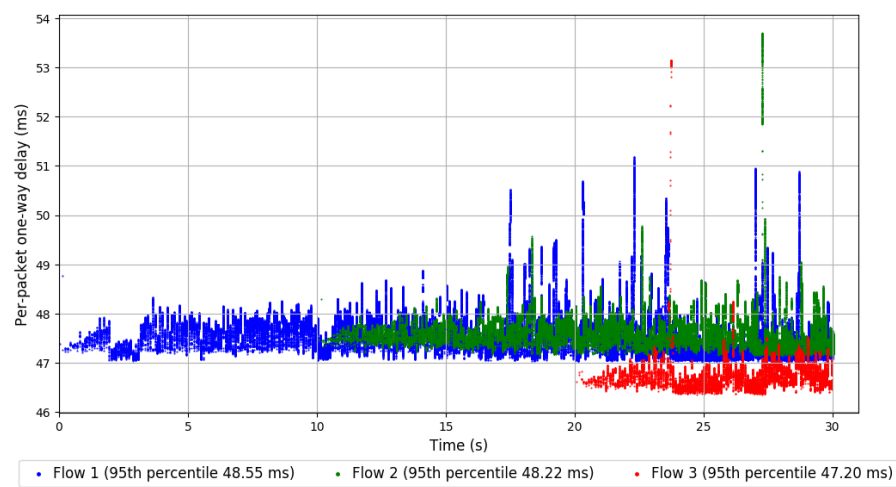
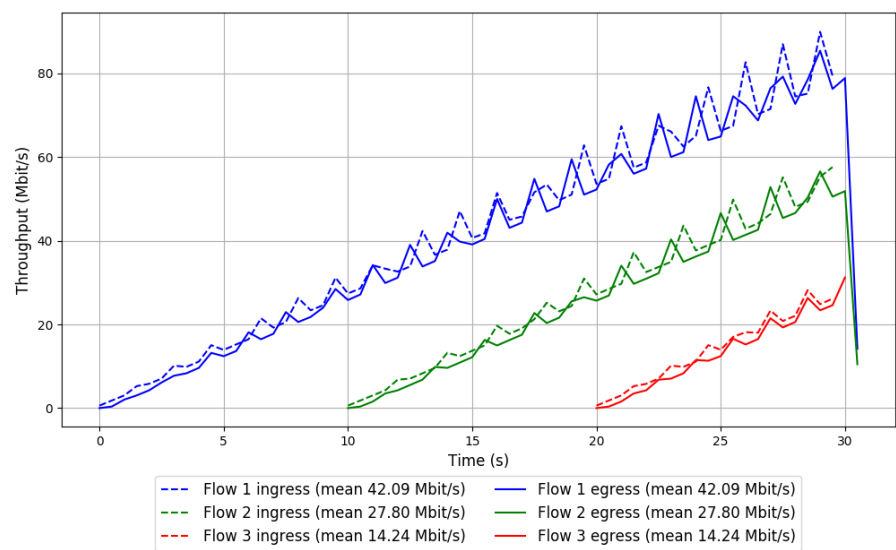
-- Flow 3:

Average throughput: 14.24 Mbit/s

95th percentile per-packet one-way delay: 47.202 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-02-21 01:16:41

End at: 2019-02-21 01:17:11

Local clock offset: -0.084 ms

Remote clock offset: 0.038 ms

Below is generated by plot.py at 2019-02-21 05:22:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.83 Mbit/s

95th percentile per-packet one-way delay: 48.401 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.88 Mbit/s

95th percentile per-packet one-way delay: 48.471 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.58 Mbit/s

95th percentile per-packet one-way delay: 48.411 ms

Loss rate: 0.00%

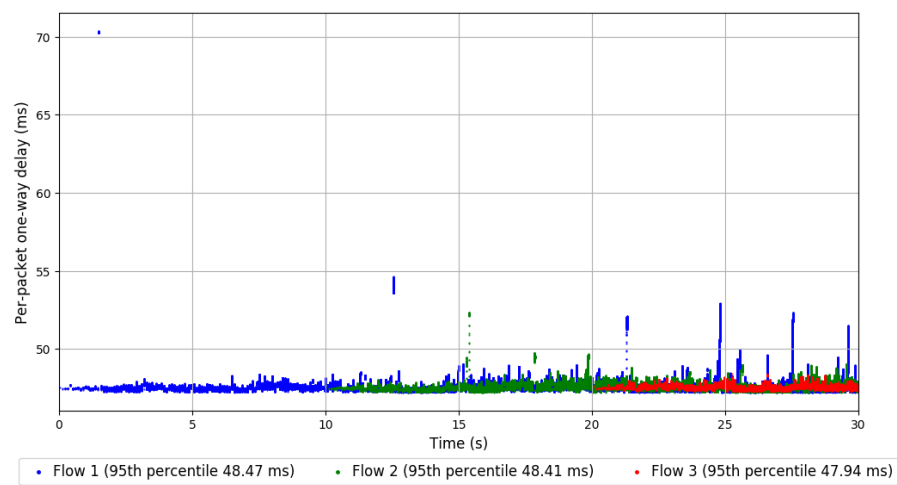
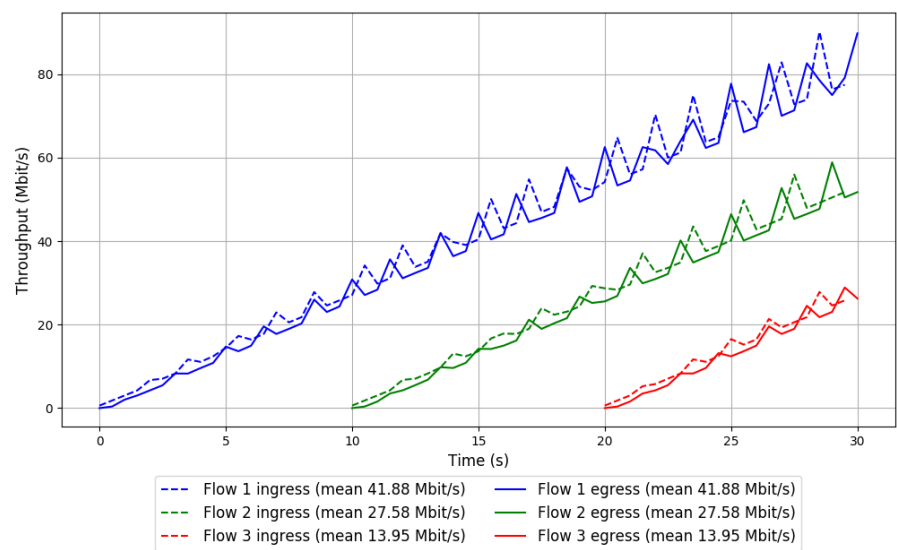
-- Flow 3:

Average throughput: 13.95 Mbit/s

95th percentile per-packet one-way delay: 47.941 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

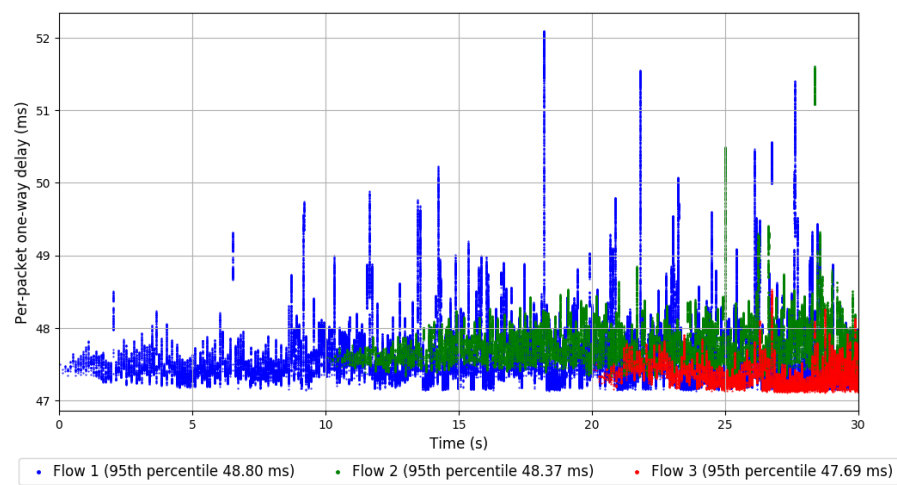
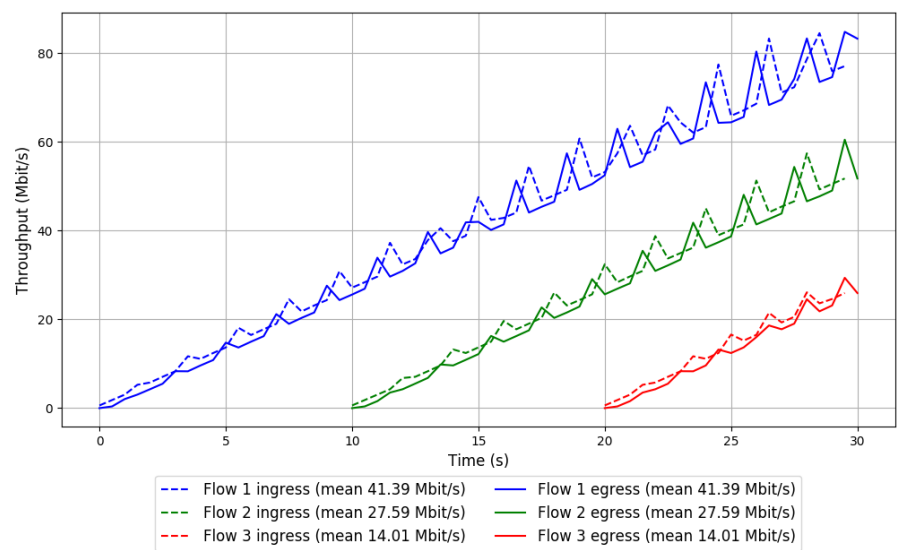


Run 4: Statistics of LEDBAT

Start at: 2019-02-21 01:53:26
End at: 2019-02-21 01:53:56
Local clock offset: -0.109 ms
Remote clock offset: -0.163 ms

Below is generated by plot.py at 2019-02-21 05:22:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.37 Mbit/s
95th percentile per-packet one-way delay: 48.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.39 Mbit/s
95th percentile per-packet one-way delay: 48.799 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.59 Mbit/s
95th percentile per-packet one-way delay: 48.370 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.01 Mbit/s
95th percentile per-packet one-way delay: 47.686 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

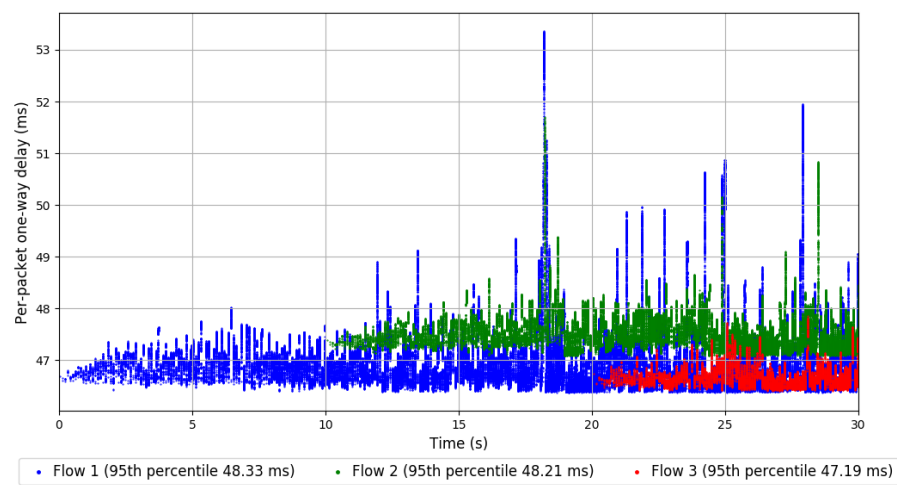
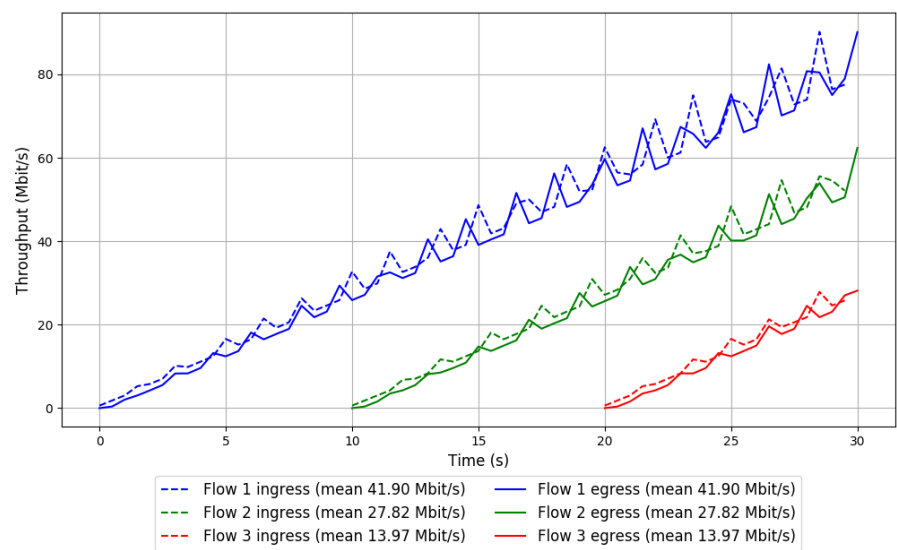


Run 5: Statistics of LEDBAT

Start at: 2019-02-21 02:29:59
End at: 2019-02-21 02:30:29
Local clock offset: -0.102 ms
Remote clock offset: -0.036 ms

Below is generated by plot.py at 2019-02-21 05:22:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 65.03 Mbit/s
95th percentile per-packet one-way delay: 48.213 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.90 Mbit/s
95th percentile per-packet one-way delay: 48.333 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.82 Mbit/s
95th percentile per-packet one-way delay: 48.209 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.97 Mbit/s
95th percentile per-packet one-way delay: 47.192 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

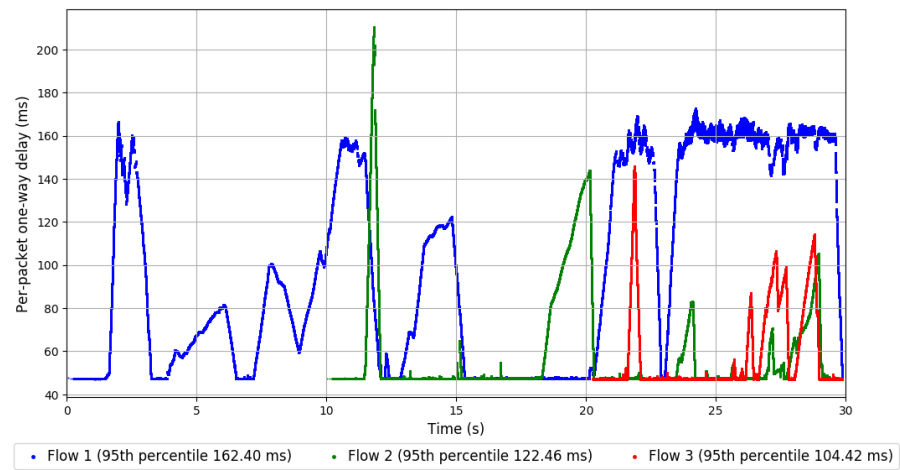
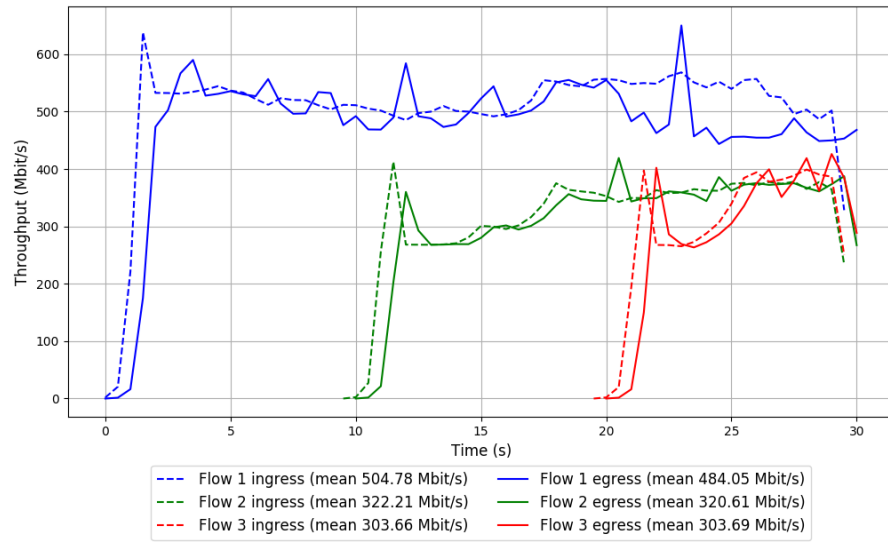


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-02-21 00:01:04
End at: 2019-02-21 00:01:34
Local clock offset: -0.041 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-02-21 05:40:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 797.59 Mbit/s
95th percentile per-packet one-way delay: 161.178 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 484.05 Mbit/s
95th percentile per-packet one-way delay: 162.401 ms
Loss rate: 4.11%
-- Flow 2:
Average throughput: 320.61 Mbit/s
95th percentile per-packet one-way delay: 122.458 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 303.69 Mbit/s
95th percentile per-packet one-way delay: 104.420 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-02-21 00:37:50

End at: 2019-02-21 00:38:20

Local clock offset: -0.103 ms

Remote clock offset: 0.032 ms

Below is generated by plot.py at 2019-02-21 05:41:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 781.82 Mbit/s

95th percentile per-packet one-way delay: 183.370 ms

Loss rate: 7.69%

-- Flow 1:

Average throughput: 421.08 Mbit/s

95th percentile per-packet one-way delay: 190.582 ms

Loss rate: 6.27%

-- Flow 2:

Average throughput: 408.87 Mbit/s

95th percentile per-packet one-way delay: 184.596 ms

Loss rate: 11.90%

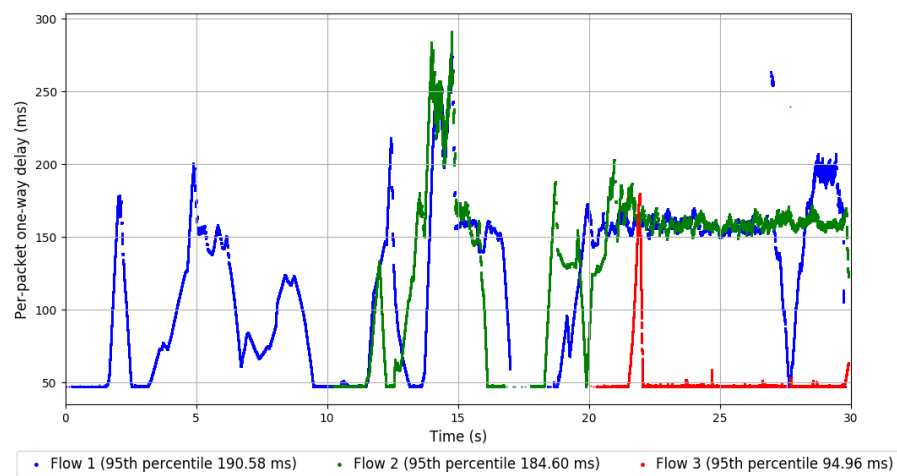
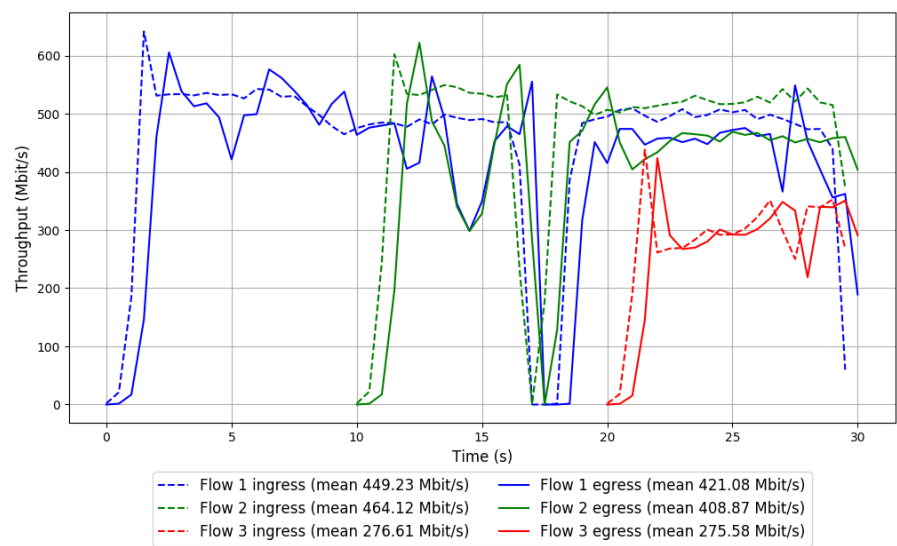
-- Flow 3:

Average throughput: 275.58 Mbit/s

95th percentile per-packet one-way delay: 94.957 ms

Loss rate: 0.37%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-02-21 01:14:41

End at: 2019-02-21 01:15:11

Local clock offset: -0.036 ms

Remote clock offset: 0.075 ms

Below is generated by plot.py at 2019-02-21 05:41:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 759.21 Mbit/s

95th percentile per-packet one-way delay: 176.838 ms

Loss rate: 3.67%

-- Flow 1:

Average throughput: 448.58 Mbit/s

95th percentile per-packet one-way delay: 191.872 ms

Loss rate: 5.84%

-- Flow 2:

Average throughput: 325.50 Mbit/s

95th percentile per-packet one-way delay: 63.249 ms

Loss rate: 0.15%

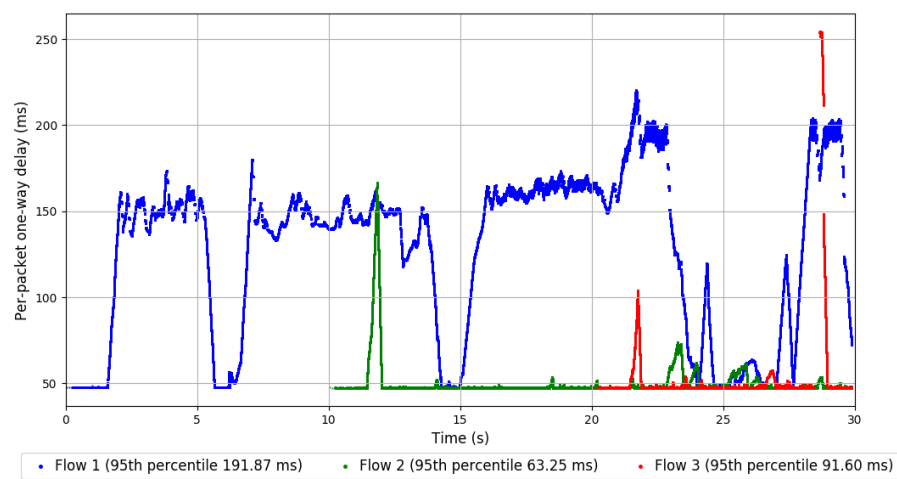
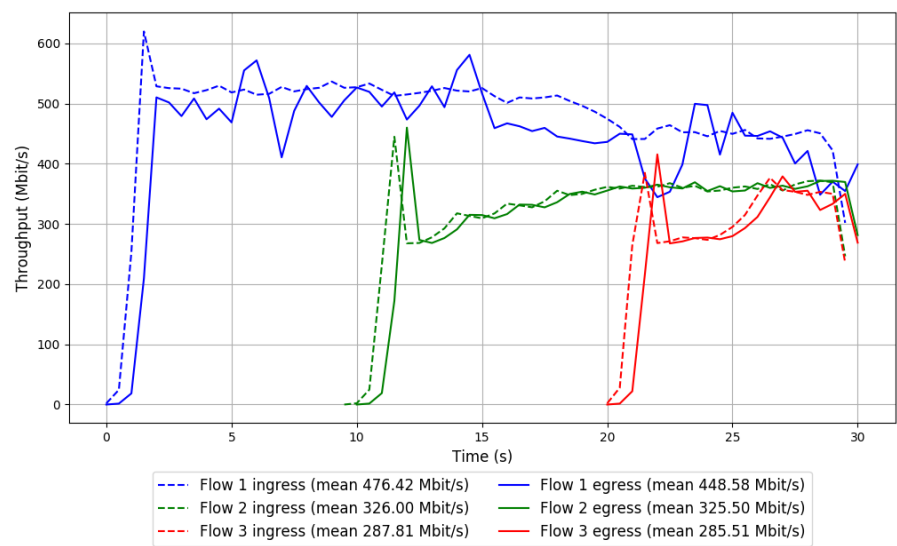
-- Flow 3:

Average throughput: 285.51 Mbit/s

95th percentile per-packet one-way delay: 91.603 ms

Loss rate: 0.80%

Run 3: Report of PCC-Allegro — Data Link

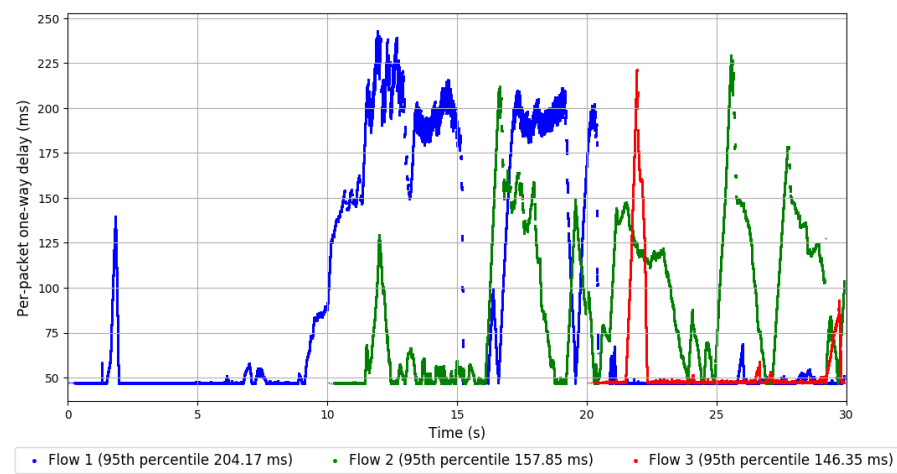
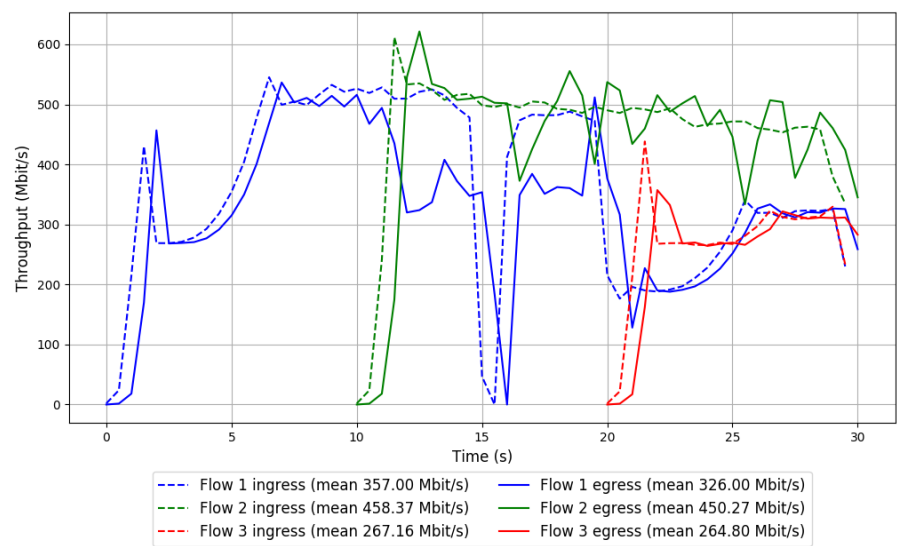


Run 4: Statistics of PCC-Allegro

Start at: 2019-02-21 01:51:28
End at: 2019-02-21 01:51:58
Local clock offset: 0.281 ms
Remote clock offset: -0.178 ms

Below is generated by plot.py at 2019-02-21 05:41:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 712.65 Mbit/s
95th percentile per-packet one-way delay: 197.482 ms
Loss rate: 4.96%
-- Flow 1:
Average throughput: 326.00 Mbit/s
95th percentile per-packet one-way delay: 204.167 ms
Loss rate: 8.68%
-- Flow 2:
Average throughput: 450.27 Mbit/s
95th percentile per-packet one-way delay: 157.851 ms
Loss rate: 1.77%
-- Flow 3:
Average throughput: 264.80 Mbit/s
95th percentile per-packet one-way delay: 146.350 ms
Loss rate: 0.90%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-02-21 02:27:57

End at: 2019-02-21 02:28:27

Local clock offset: -0.04 ms

Remote clock offset: -0.01 ms

Below is generated by plot.py at 2019-02-21 05:41:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 775.05 Mbit/s

95th percentile per-packet one-way delay: 195.757 ms

Loss rate: 4.58%

-- Flow 1:

Average throughput: 393.59 Mbit/s

95th percentile per-packet one-way delay: 193.952 ms

Loss rate: 3.93%

-- Flow 2:

Average throughput: 436.48 Mbit/s

95th percentile per-packet one-way delay: 199.189 ms

Loss rate: 6.55%

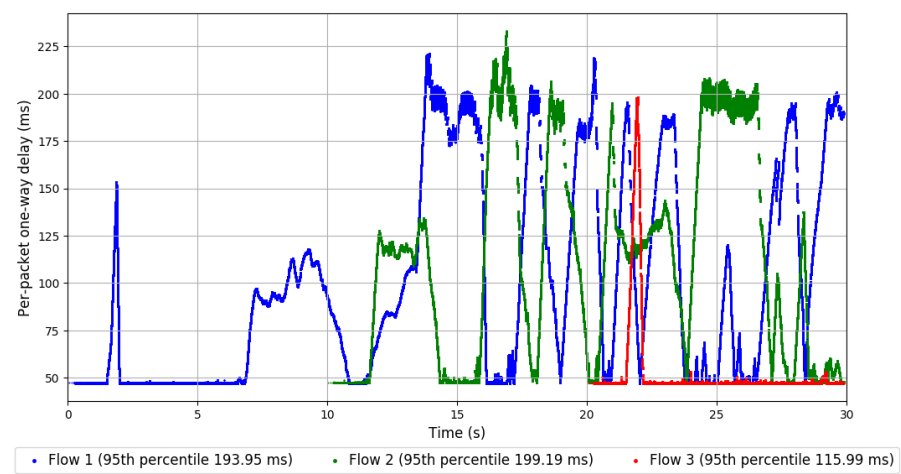
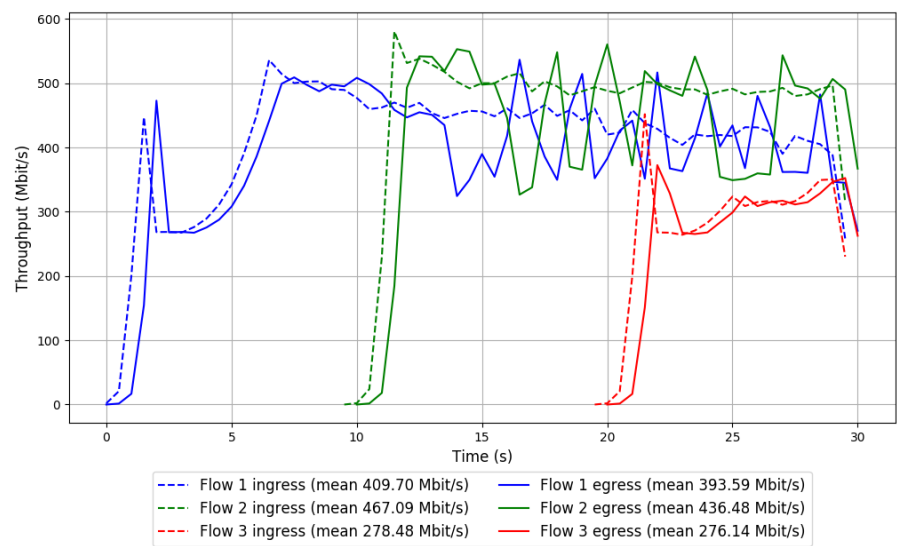
-- Flow 3:

Average throughput: 276.14 Mbit/s

95th percentile per-packet one-way delay: 115.992 ms

Loss rate: 0.84%

Run 5: Report of PCC-Allegro — Data Link

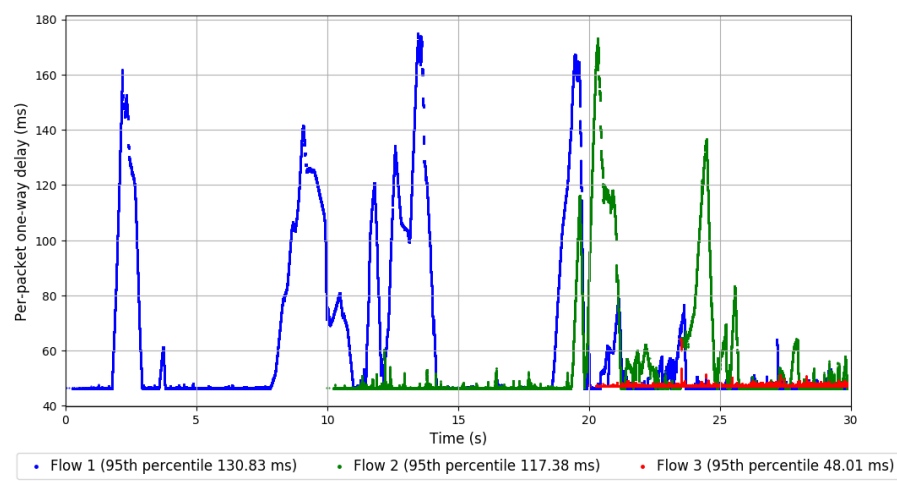
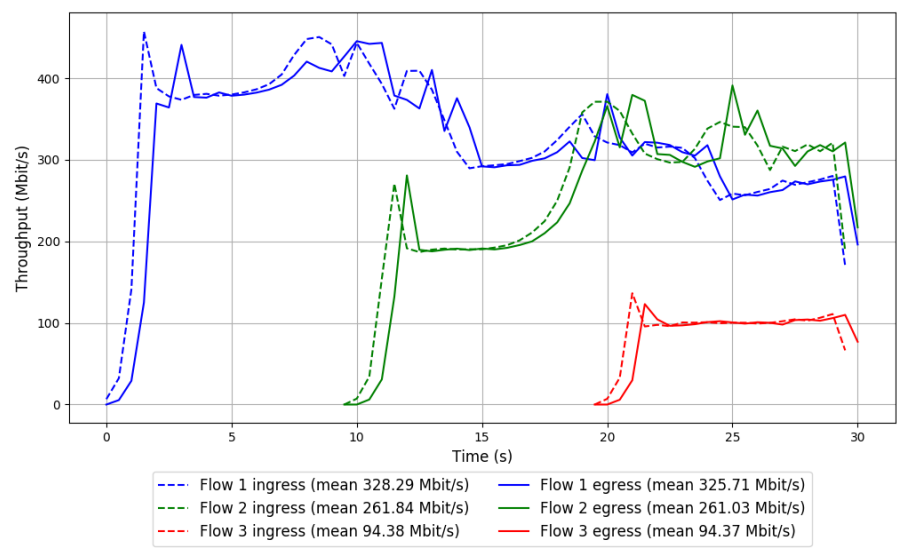


```
Run 1: Statistics of PCC-Expr

Start at: 2019-02-21 00:13:09
End at: 2019-02-21 00:13:39
Local clock offset: -0.089 ms
Remote clock offset: 0.093 ms

# Below is generated by plot.py at 2019-02-21 05:41:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.95 Mbit/s
95th percentile per-packet one-way delay: 125.981 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 325.71 Mbit/s
95th percentile per-packet one-way delay: 130.827 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 261.03 Mbit/s
95th percentile per-packet one-way delay: 117.382 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 94.37 Mbit/s
95th percentile per-packet one-way delay: 48.009 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-02-21 00:49:57

End at: 2019-02-21 00:50:27

Local clock offset: -0.085 ms

Remote clock offset: 0.04 ms

Below is generated by plot.py at 2019-02-21 05:43:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 573.60 Mbit/s

95th percentile per-packet one-way delay: 163.902 ms

Loss rate: 3.57%

-- Flow 1:

Average throughput: 307.38 Mbit/s

95th percentile per-packet one-way delay: 161.816 ms

Loss rate: 4.19%

-- Flow 2:

Average throughput: 303.29 Mbit/s

95th percentile per-packet one-way delay: 173.831 ms

Loss rate: 3.73%

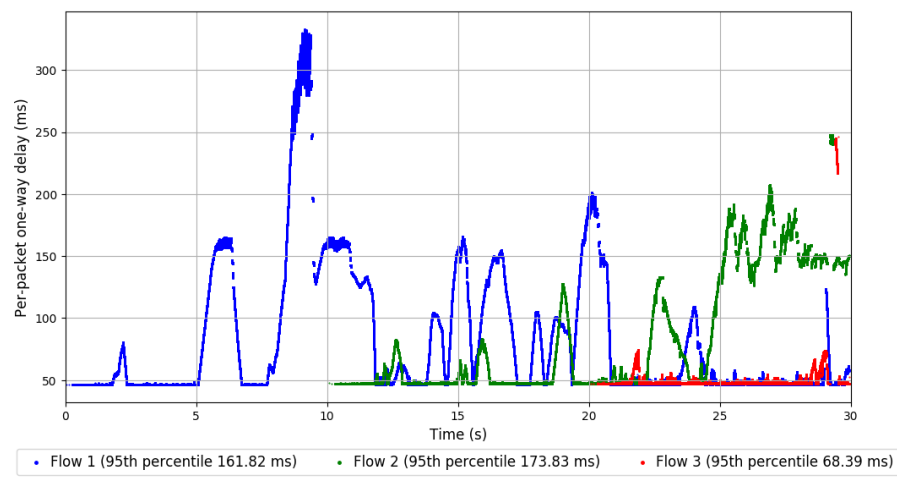
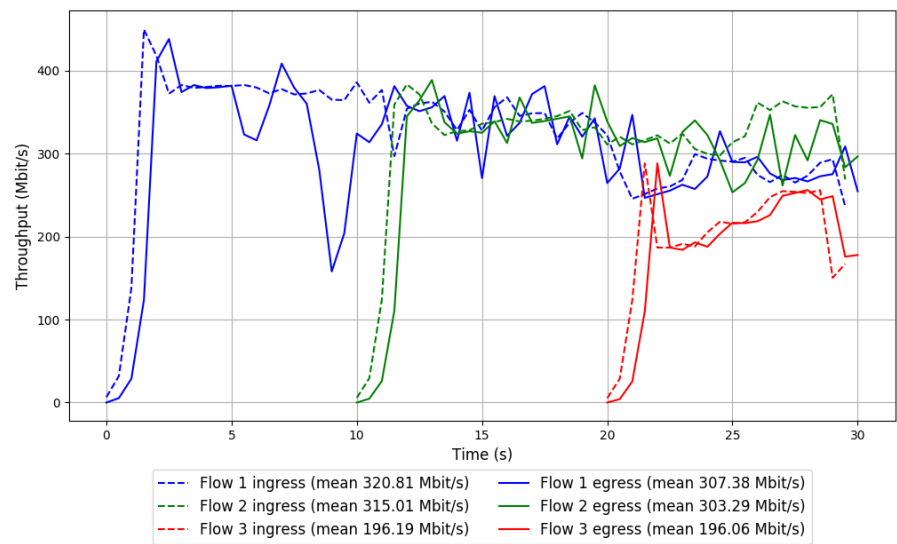
-- Flow 3:

Average throughput: 196.06 Mbit/s

95th percentile per-packet one-way delay: 68.394 ms

Loss rate: 0.03%

Run 2: Report of PCC-Expr — Data Link

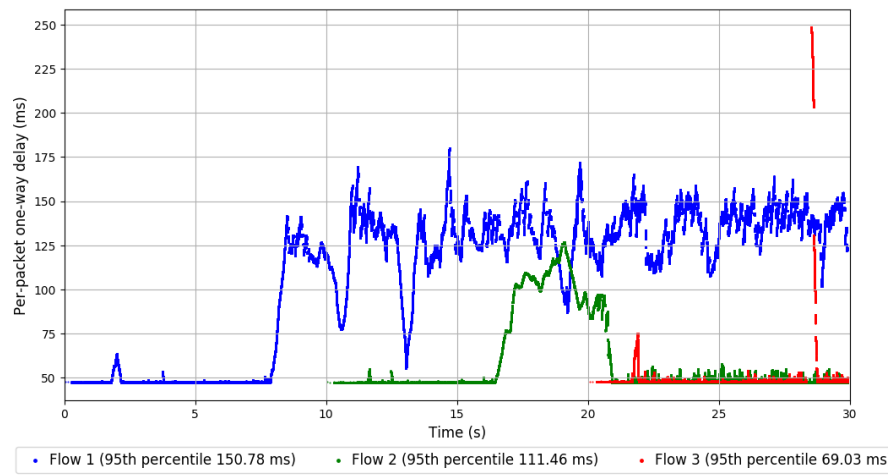
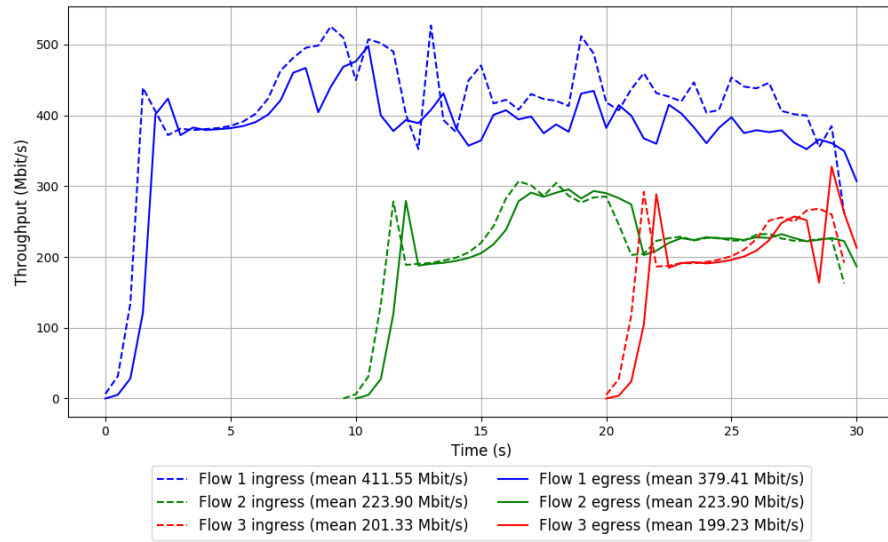


Run 3: Statistics of PCC-Expr

Start at: 2019-02-21 01:26:48
End at: 2019-02-21 01:27:19
Local clock offset: -0.097 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-02-21 05:44:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 594.08 Mbit/s
95th percentile per-packet one-way delay: 148.524 ms
Loss rate: 5.23%
-- Flow 1:
Average throughput: 379.41 Mbit/s
95th percentile per-packet one-way delay: 150.783 ms
Loss rate: 7.81%
-- Flow 2:
Average throughput: 223.90 Mbit/s
95th percentile per-packet one-way delay: 111.457 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 199.23 Mbit/s
95th percentile per-packet one-way delay: 69.029 ms
Loss rate: 1.04%

Run 3: Report of PCC-Expr — Data Link

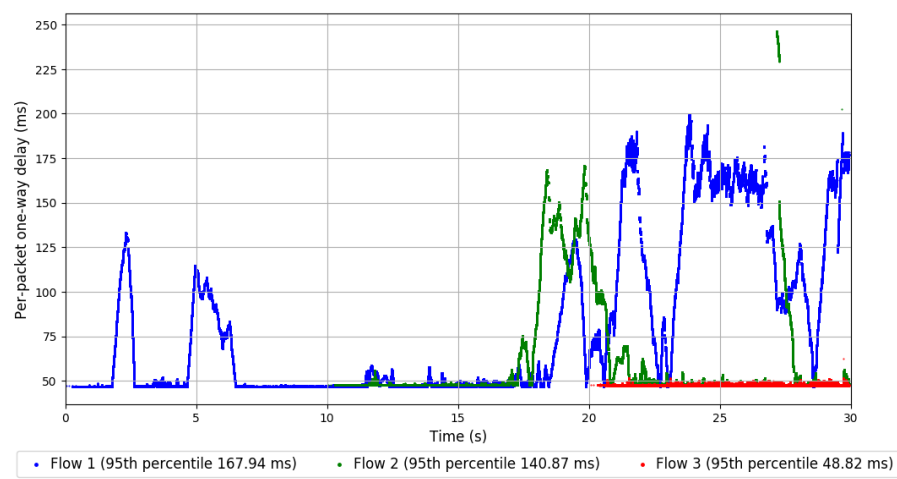
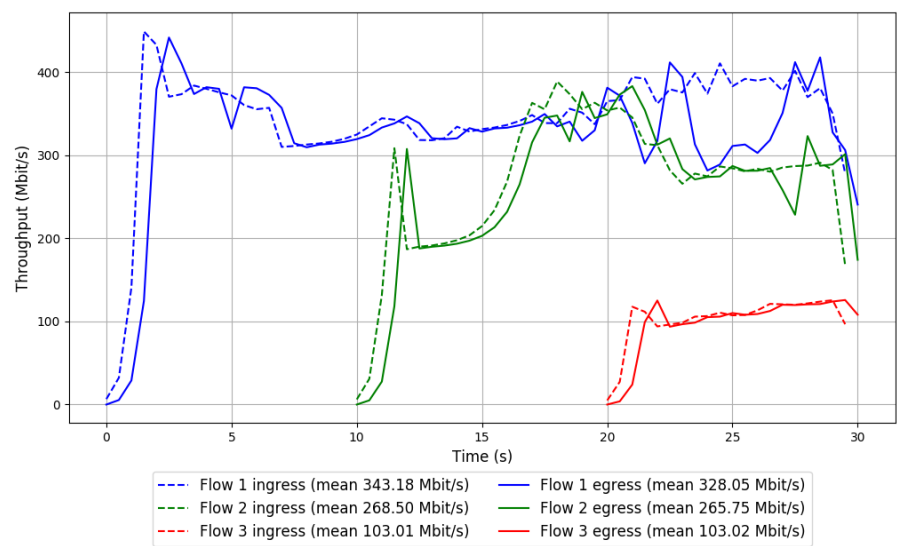


Run 4: Statistics of PCC-Expr

Start at: 2019-02-21 02:03:31
End at: 2019-02-21 02:04:01
Local clock offset: -0.402 ms
Remote clock offset: -0.079 ms

Below is generated by plot.py at 2019-02-21 05:50:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 538.72 Mbit/s
95th percentile per-packet one-way delay: 163.417 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 328.05 Mbit/s
95th percentile per-packet one-way delay: 167.941 ms
Loss rate: 4.41%
-- Flow 2:
Average throughput: 265.75 Mbit/s
95th percentile per-packet one-way delay: 140.868 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 103.02 Mbit/s
95th percentile per-packet one-way delay: 48.824 ms
Loss rate: 0.02%

Run 4: Report of PCC-Expr — Data Link

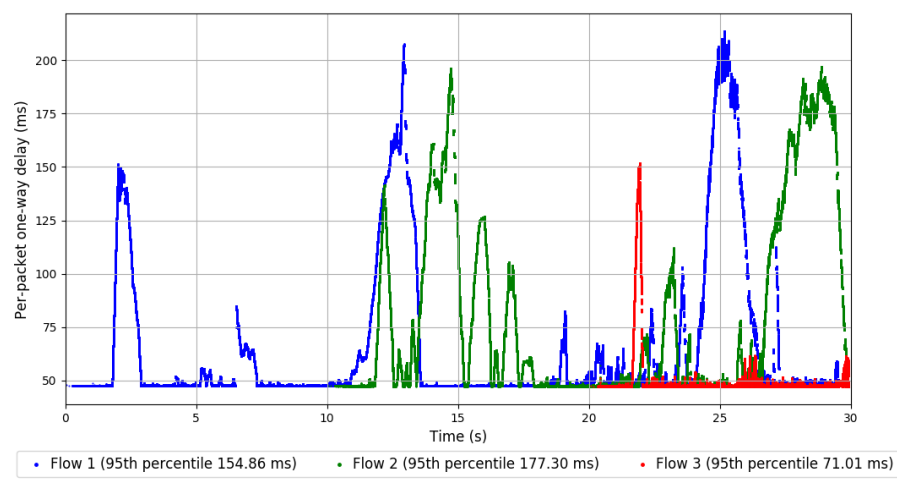
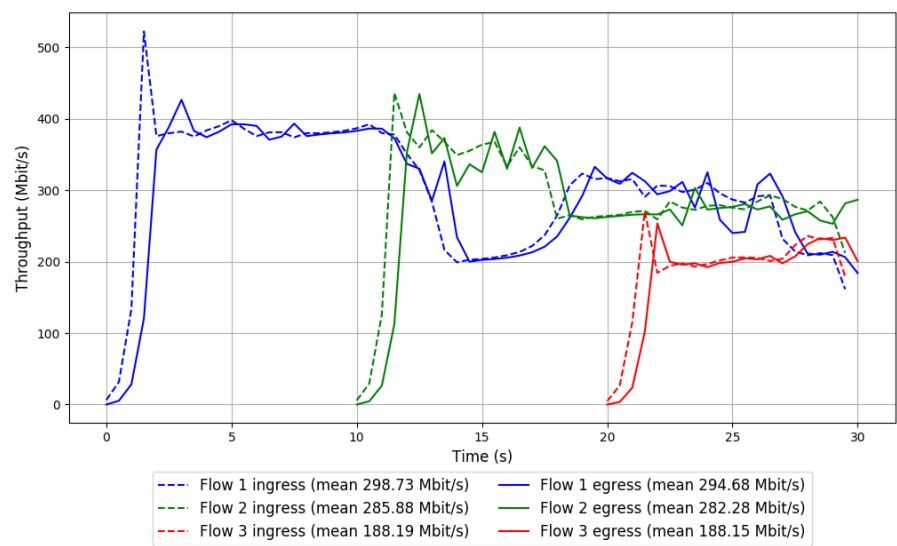


Run 5: Statistics of PCC-Expr

Start at: 2019-02-21 02:40:04
End at: 2019-02-21 02:40:34
Local clock offset: -0.105 ms
Remote clock offset: -0.043 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 544.43 Mbit/s
95th percentile per-packet one-way delay: 163.327 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 294.68 Mbit/s
95th percentile per-packet one-way delay: 154.863 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 282.28 Mbit/s
95th percentile per-packet one-way delay: 177.303 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 188.15 Mbit/s
95th percentile per-packet one-way delay: 71.010 ms
Loss rate: 0.03%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-02-21 00:32:18

End at: 2019-02-21 00:32:48

Local clock offset: -0.123 ms

Remote clock offset: 0.023 ms

Below is generated by plot.py at 2019-02-21 05:57:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.81 Mbit/s

95th percentile per-packet one-way delay: 46.488 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 47.449 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.05 Mbit/s

95th percentile per-packet one-way delay: 46.484 ms

Loss rate: 0.00%

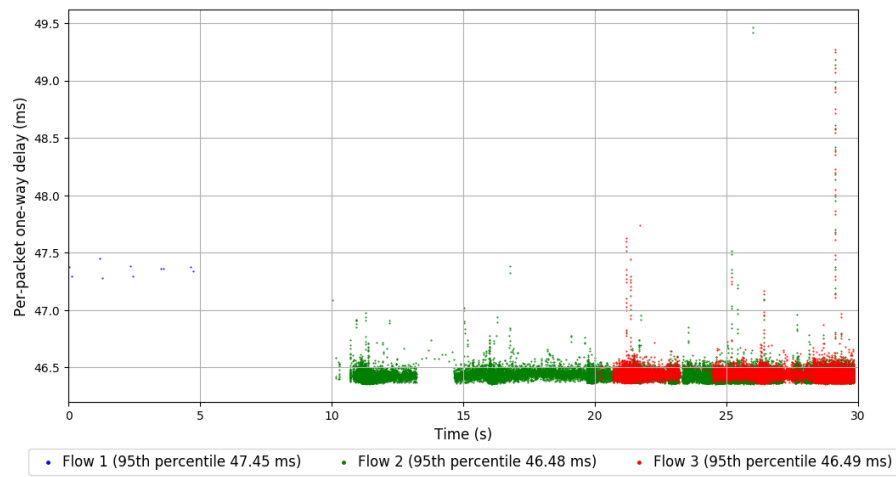
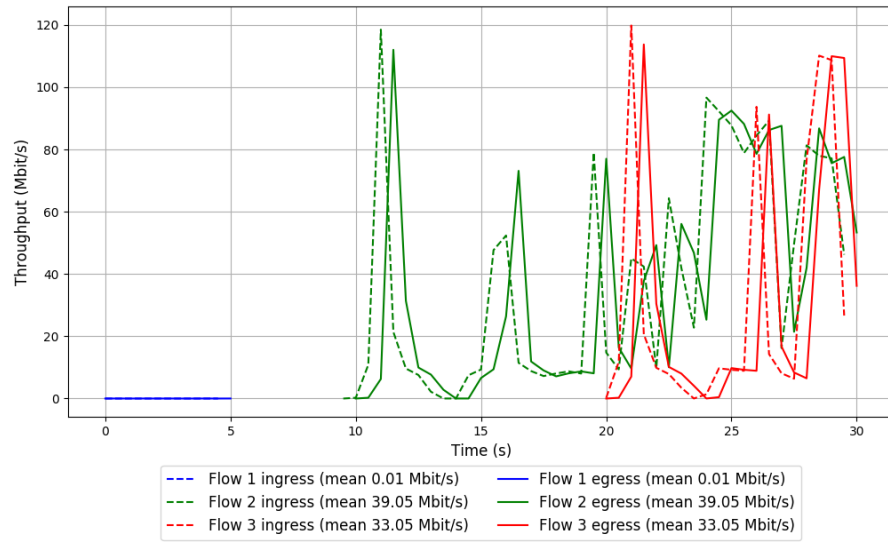
-- Flow 3:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 46.494 ms

Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-02-21 01:09:05

End at: 2019-02-21 01:09:35

Local clock offset: 0.001 ms

Remote clock offset: 0.044 ms

Below is generated by plot.py at 2019-02-21 05:57:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.44 Mbit/s

95th percentile per-packet one-way delay: 47.306 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.09 Mbit/s

95th percentile per-packet one-way delay: 47.290 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.54 Mbit/s

95th percentile per-packet one-way delay: 47.323 ms

Loss rate: 0.00%

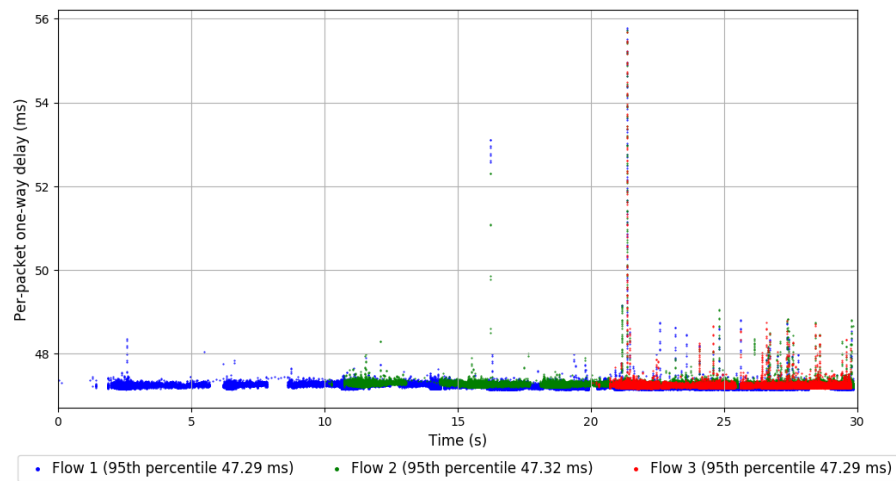
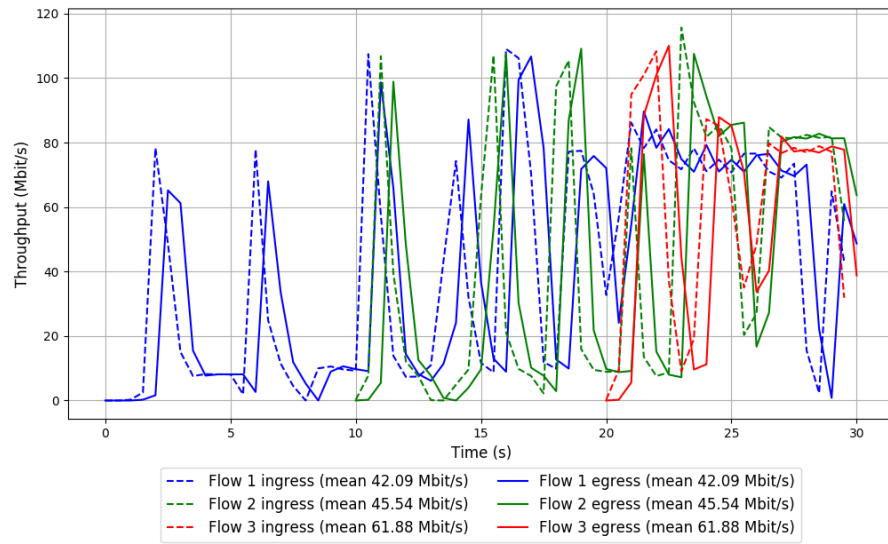
-- Flow 3:

Average throughput: 61.88 Mbit/s

95th percentile per-packet one-way delay: 47.290 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link

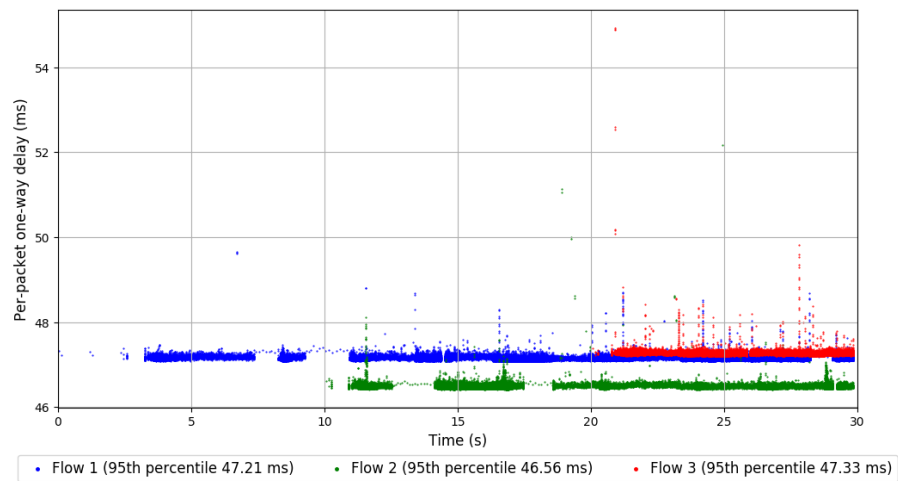
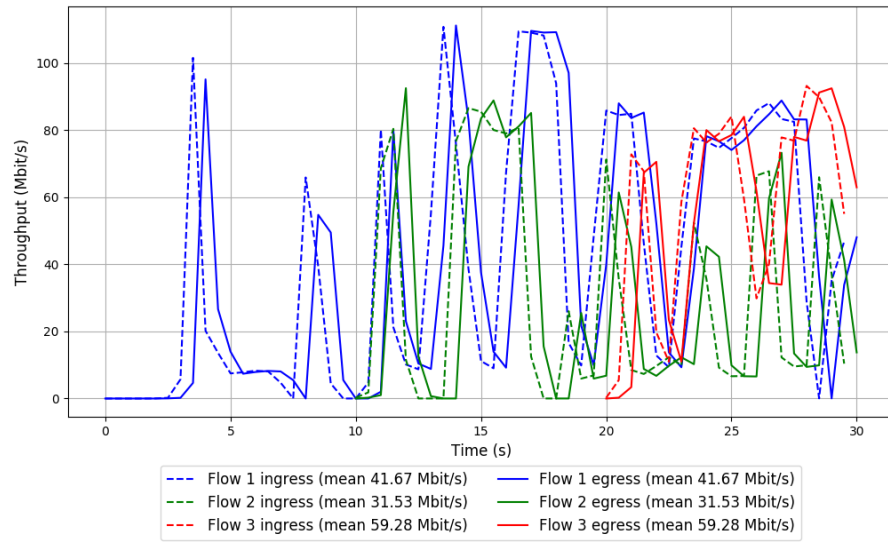


Run 3: Statistics of QUIC Cubic

Start at: 2019-02-21 01:45:50
End at: 2019-02-21 01:46:20
Local clock offset: -0.099 ms
Remote clock offset: -0.155 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.08 Mbit/s
95th percentile per-packet one-way delay: 47.289 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.67 Mbit/s
95th percentile per-packet one-way delay: 47.213 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.53 Mbit/s
95th percentile per-packet one-way delay: 46.556 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.28 Mbit/s
95th percentile per-packet one-way delay: 47.325 ms
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link

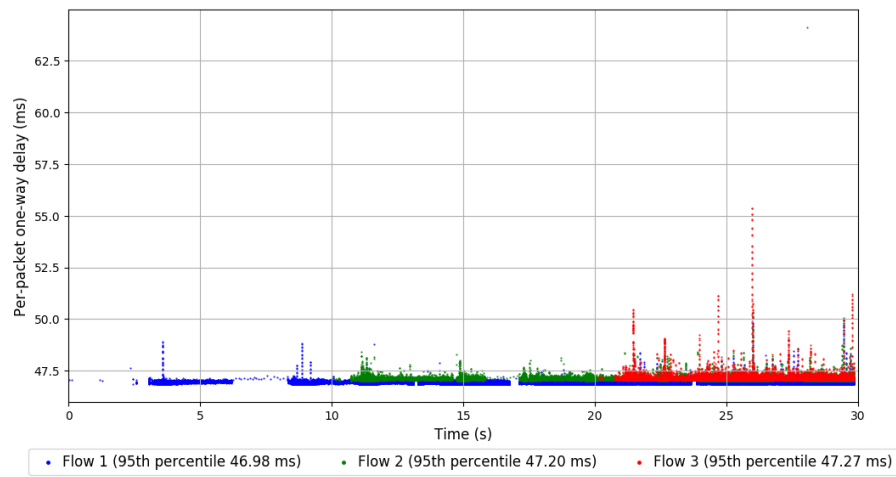
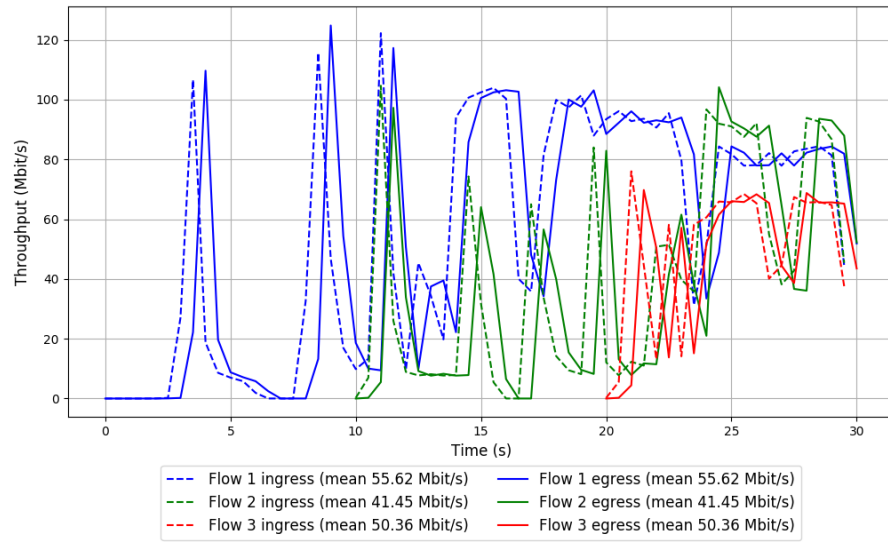


Run 4: Statistics of QUIC Cubic

Start at: 2019-02-21 02:22:21
End at: 2019-02-21 02:22:51
Local clock offset: 0.28 ms
Remote clock offset: -0.009 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 99.62 Mbit/s
95th percentile per-packet one-way delay: 47.166 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.62 Mbit/s
95th percentile per-packet one-way delay: 46.985 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.45 Mbit/s
95th percentile per-packet one-way delay: 47.196 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.36 Mbit/s
95th percentile per-packet one-way delay: 47.275 ms
Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link

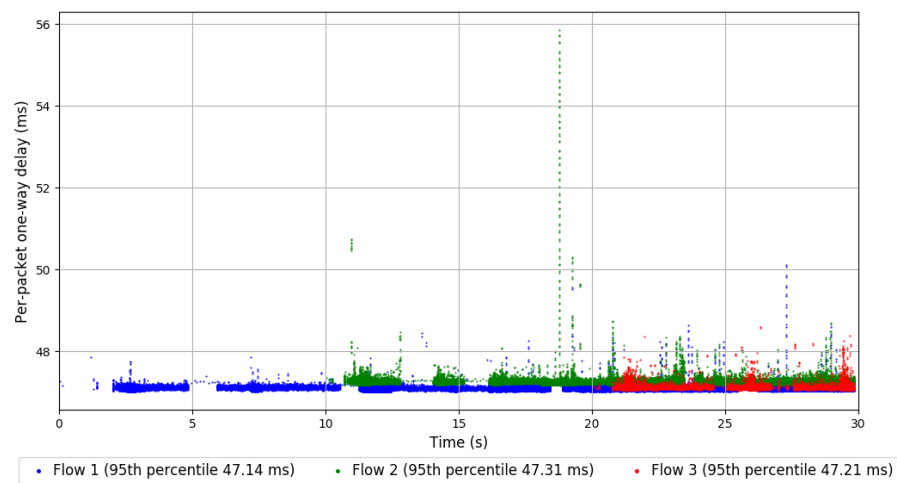
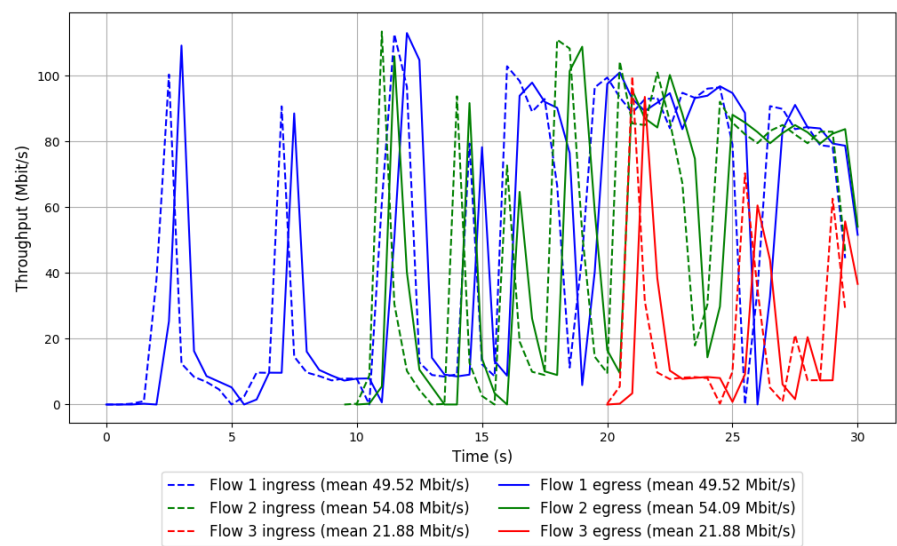


Run 5: Statistics of QUIC Cubic

Start at: 2019-02-21 02:59:13
End at: 2019-02-21 02:59:43
Local clock offset: -0.089 ms
Remote clock offset: -0.061 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.66 Mbit/s
95th percentile per-packet one-way delay: 47.278 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.52 Mbit/s
95th percentile per-packet one-way delay: 47.136 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 54.09 Mbit/s
95th percentile per-packet one-way delay: 47.310 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.88 Mbit/s
95th percentile per-packet one-way delay: 47.207 ms
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link

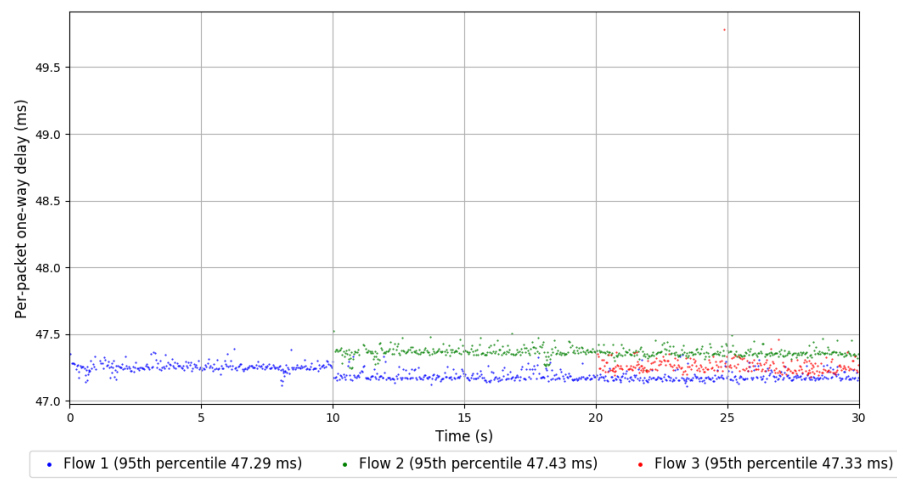
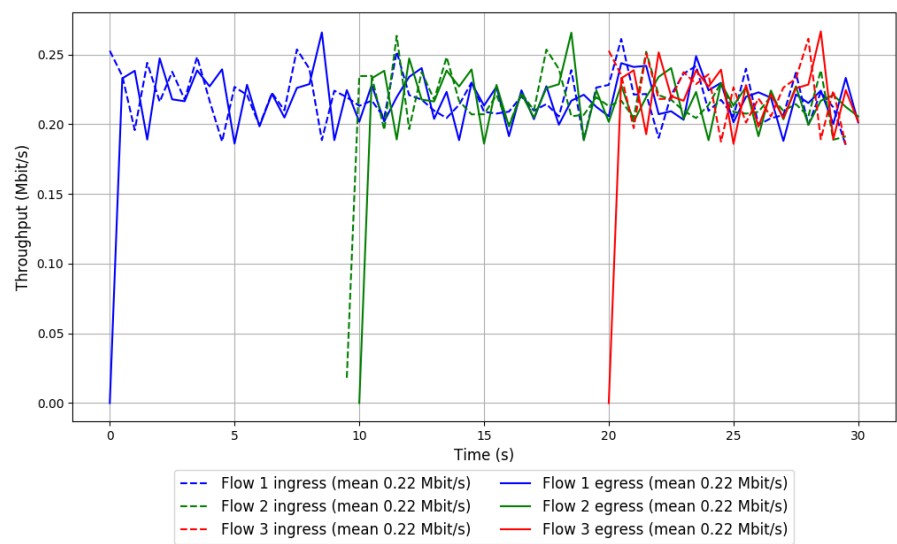


```
Run 1: Statistics of SReAM

Start at: 2019-02-21 00:06:08
End at: 2019-02-21 00:06:38
Local clock offset: -0.096 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-02-21 05:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.397 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.293 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.429 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.332 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2019-02-21 00:43:03

End at: 2019-02-21 00:43:33

Local clock offset: -0.104 ms

Remote clock offset: 0.051 ms

Below is generated by plot.py at 2019-02-21 05:57:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 47.432 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.444 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.425 ms

Loss rate: 0.00%

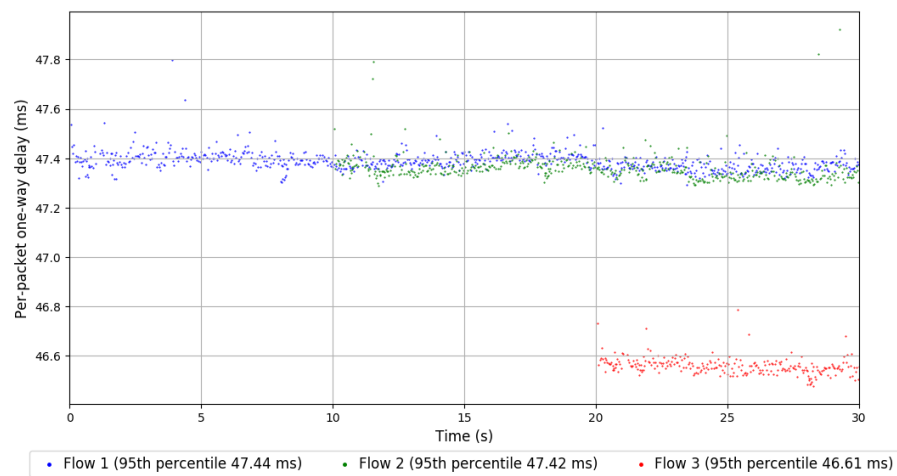
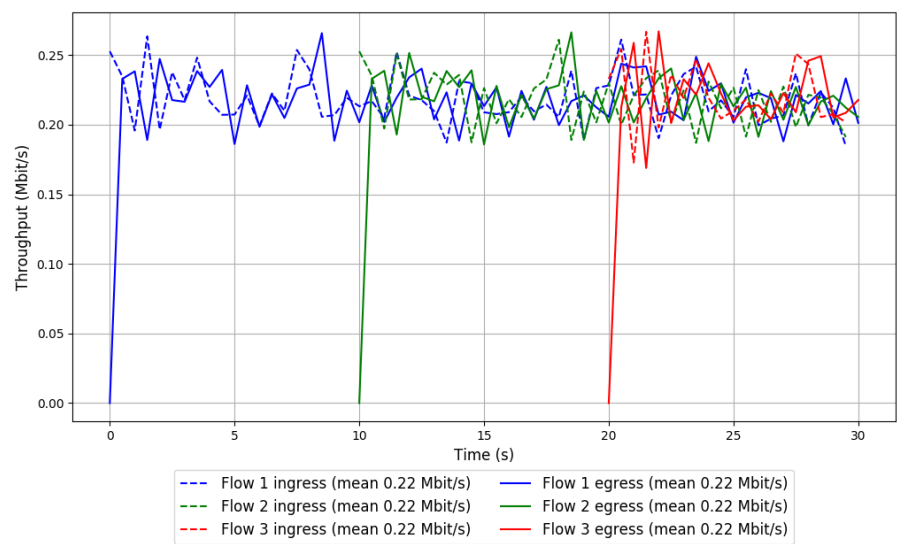
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.607 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

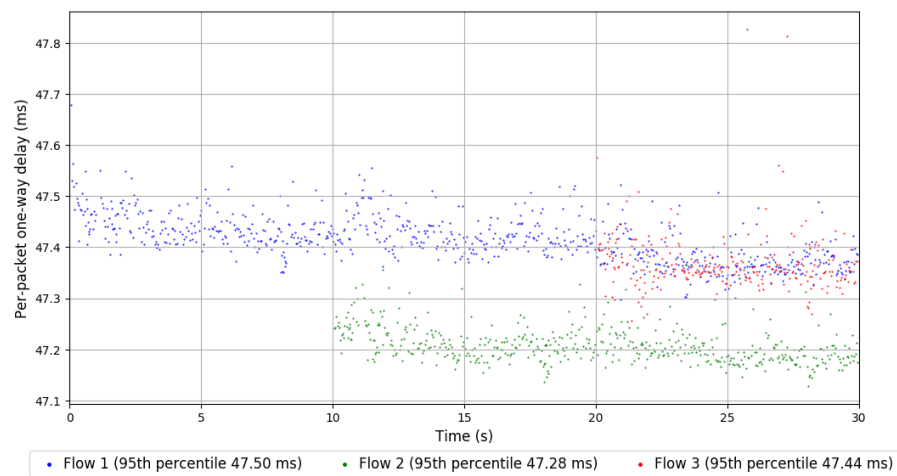
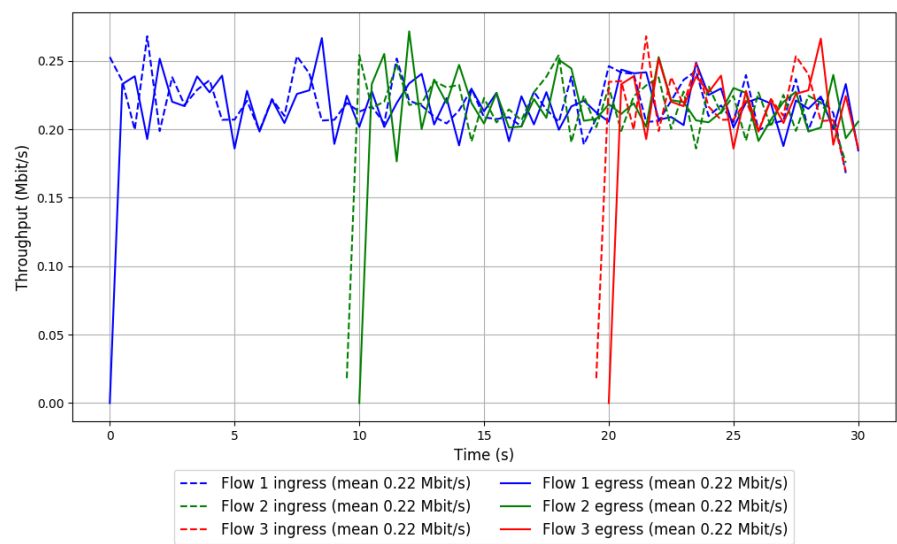


Run 3: Statistics of SReAM

Start at: 2019-02-21 01:19:51
End at: 2019-02-21 01:20:21
Local clock offset: -0.008 ms
Remote clock offset: 0.056 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.482 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.497 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.276 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.443 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

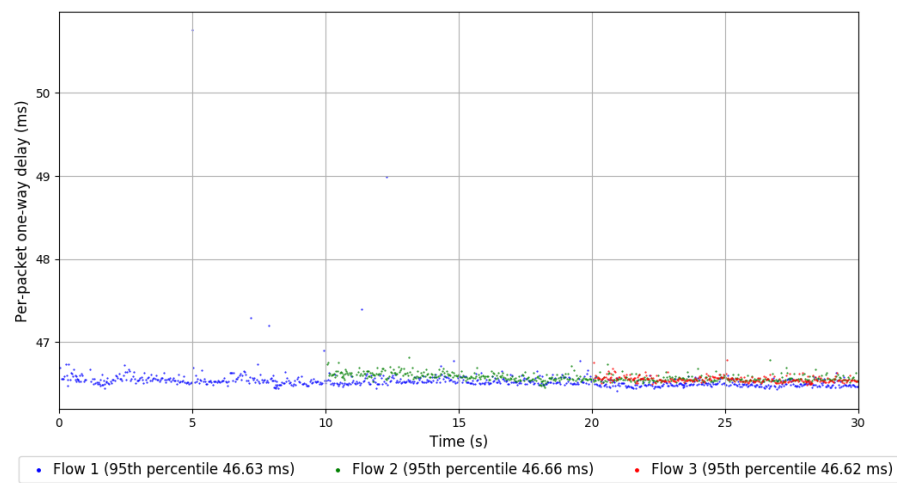
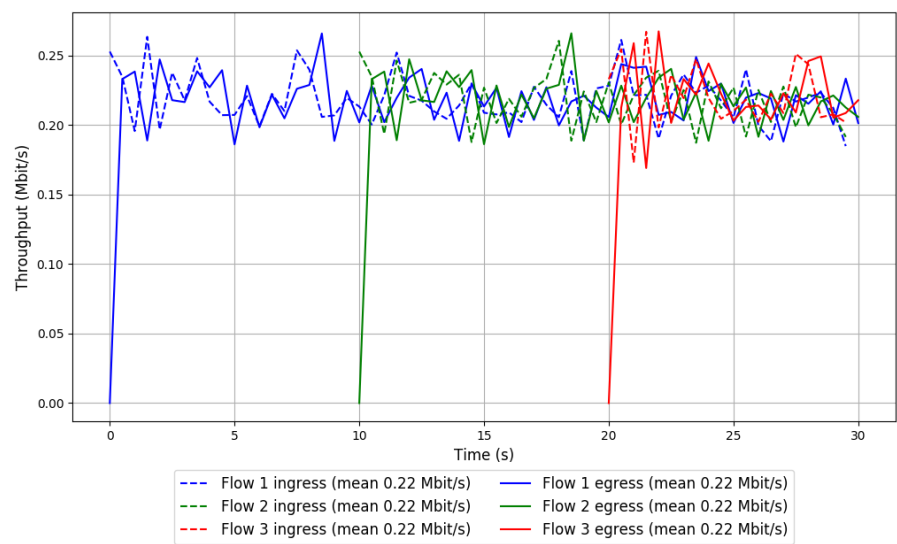


Run 4: Statistics of SReAM

Start at: 2019-02-21 01:56:37
End at: 2019-02-21 01:57:07
Local clock offset: -0.075 ms
Remote clock offset: -0.146 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 46.643 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.629 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.662 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.619 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

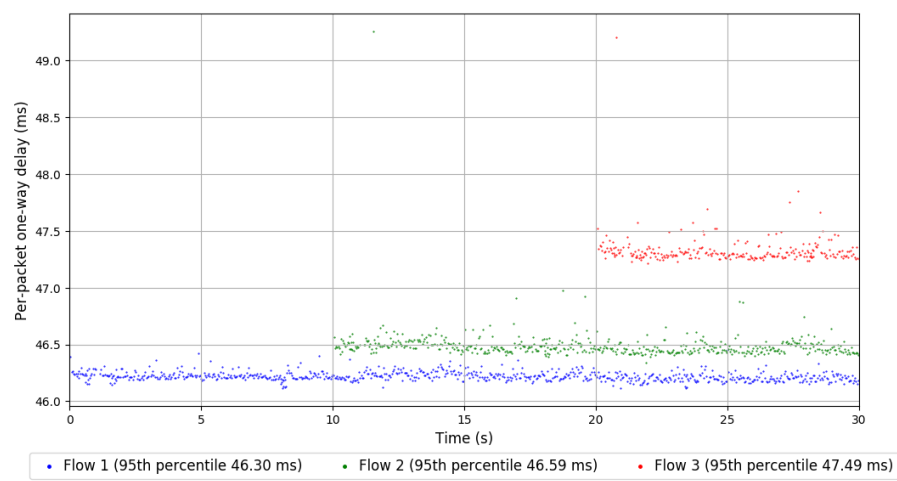
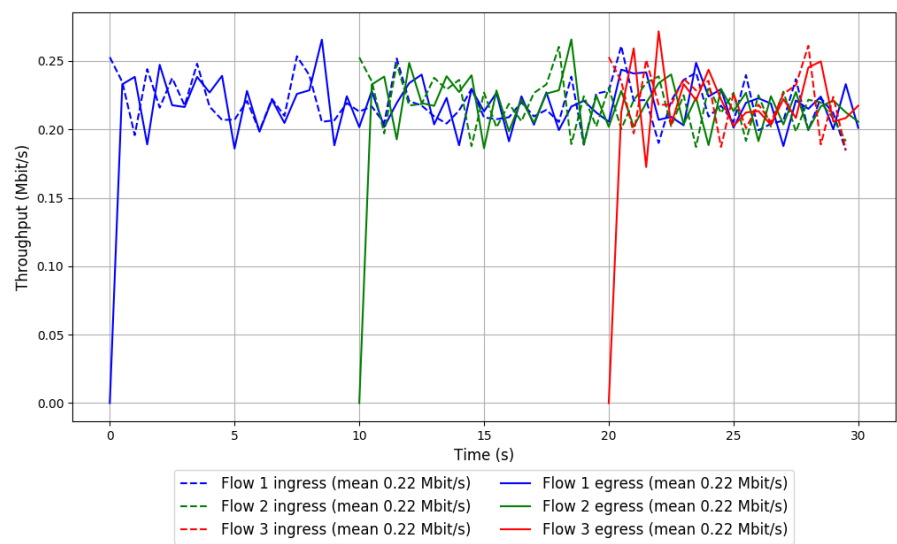


Run 5: Statistics of SReAM

Start at: 2019-02-21 02:33:07
End at: 2019-02-21 02:33:37
Local clock offset: 0.3 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.297 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.594 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.492 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

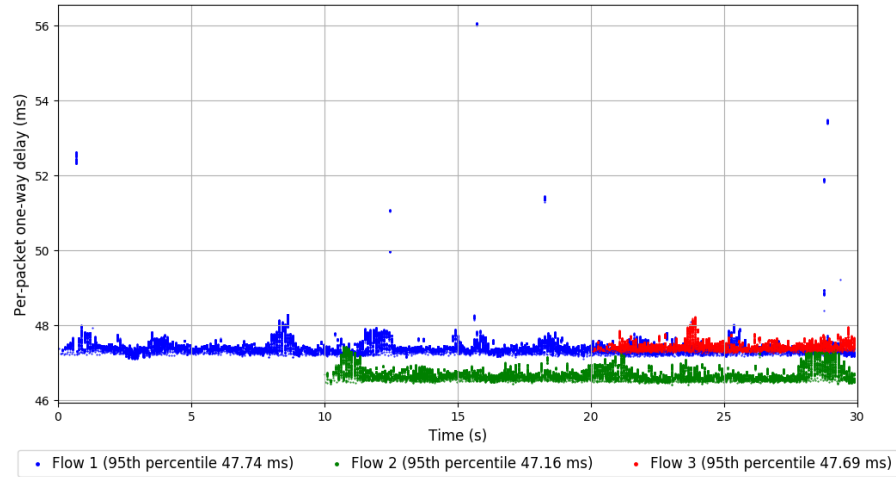
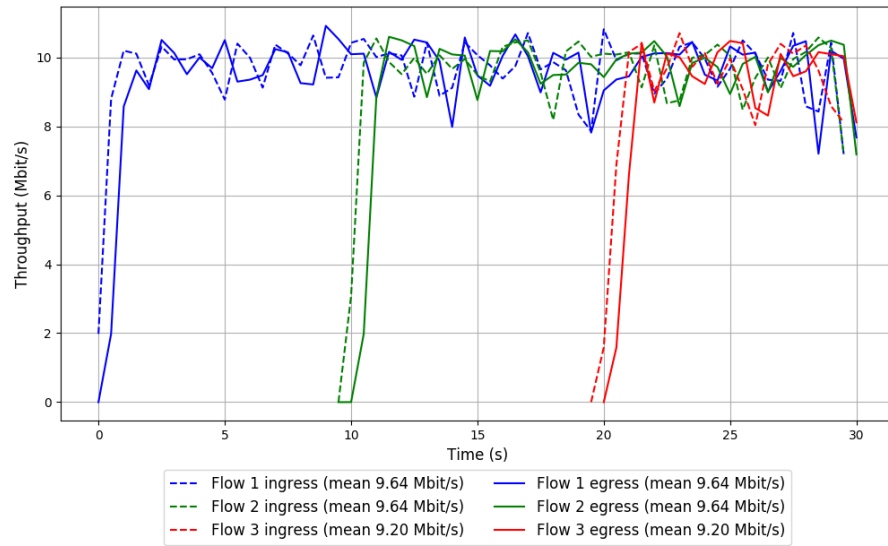


Run 1: Statistics of Sprout

Start at: 2019-02-21 00:33:31
End at: 2019-02-21 00:34:01
Local clock offset: -0.116 ms
Remote clock offset: 0.041 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.10 Mbit/s
95th percentile per-packet one-way delay: 47.651 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 47.745 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 47.155 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.20 Mbit/s
95th percentile per-packet one-way delay: 47.689 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

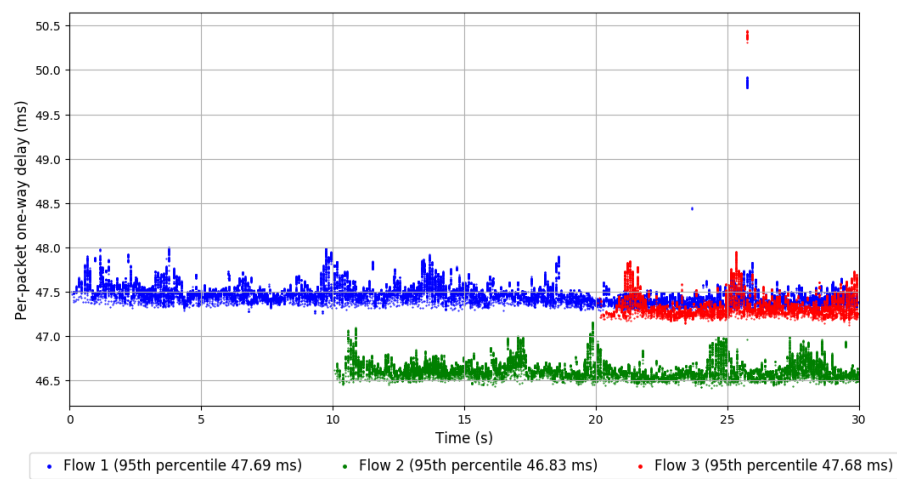
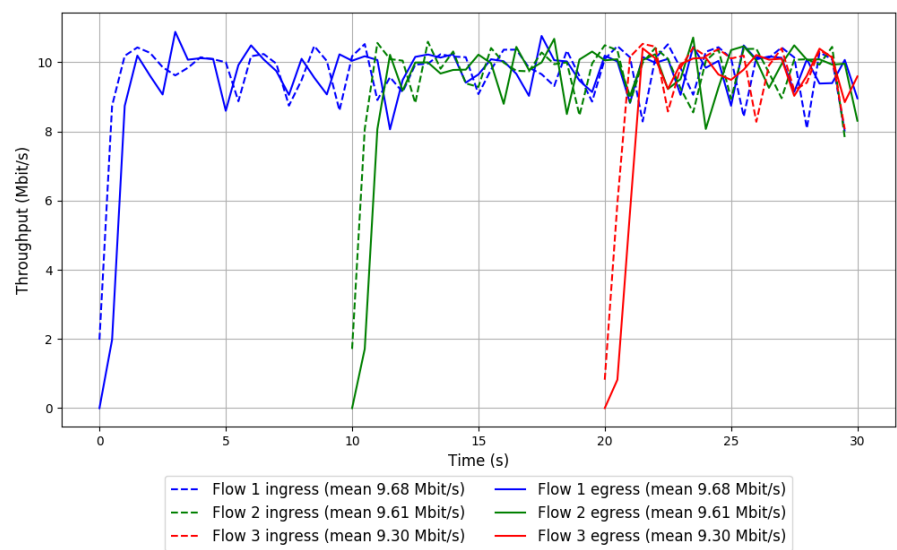


Run 2: Statistics of Sprout

Start at: 2019-02-21 01:10:22
End at: 2019-02-21 01:10:52
Local clock offset: -0.026 ms
Remote clock offset: 0.054 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.14 Mbit/s
95th percentile per-packet one-way delay: 47.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: 47.688 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 46.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 47.681 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

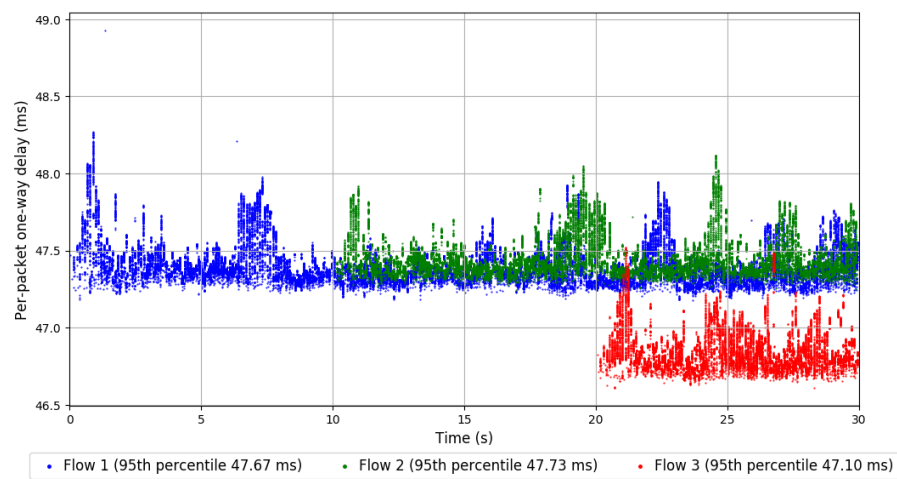
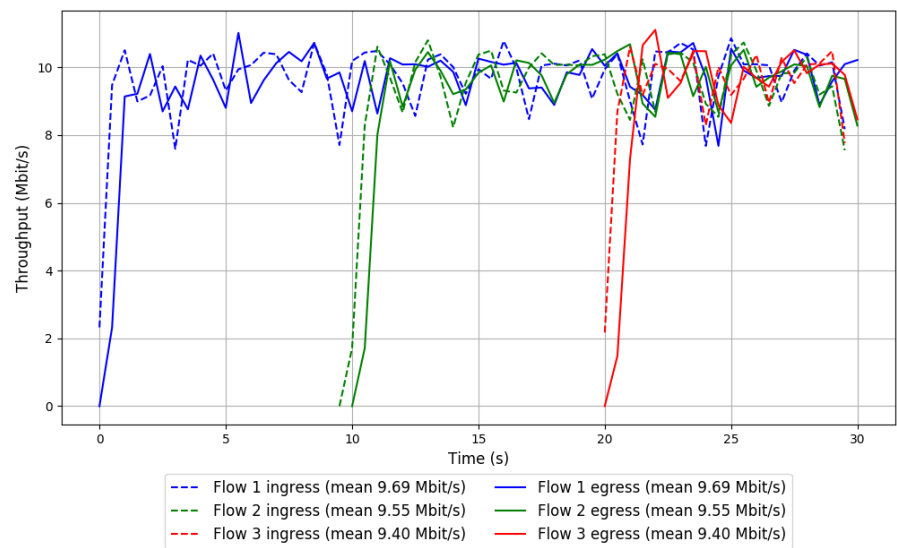


Run 3: Statistics of Sprout

Start at: 2019-02-21 01:47:05
End at: 2019-02-21 01:47:36
Local clock offset: -0.07 ms
Remote clock offset: -0.165 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.13 Mbit/s
95th percentile per-packet one-way delay: 47.670 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 47.668 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 47.730 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 47.103 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

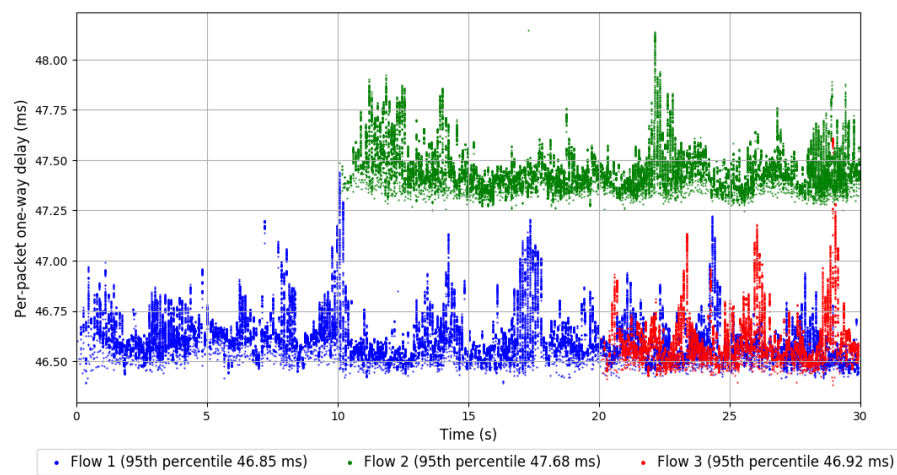
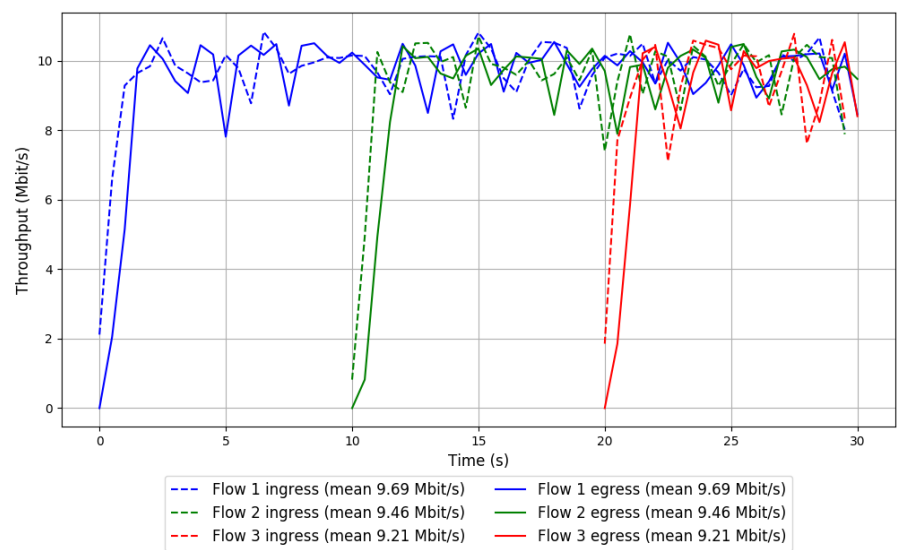


Run 4: Statistics of Sprout

Start at: 2019-02-21 02:23:38
End at: 2019-02-21 02:24:08
Local clock offset: -0.047 ms
Remote clock offset: -0.028 ms

```
# Below is generated by plot.py at 2019-02-21 05:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.00 Mbit/s
95th percentile per-packet one-way delay: 47.544 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 46.847 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.46 Mbit/s
95th percentile per-packet one-way delay: 47.678 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.21 Mbit/s
95th percentile per-packet one-way delay: 46.917 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

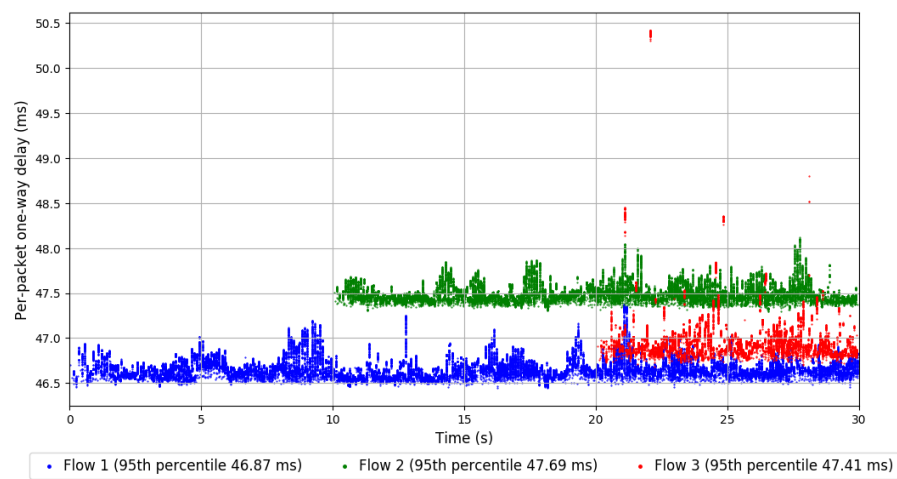
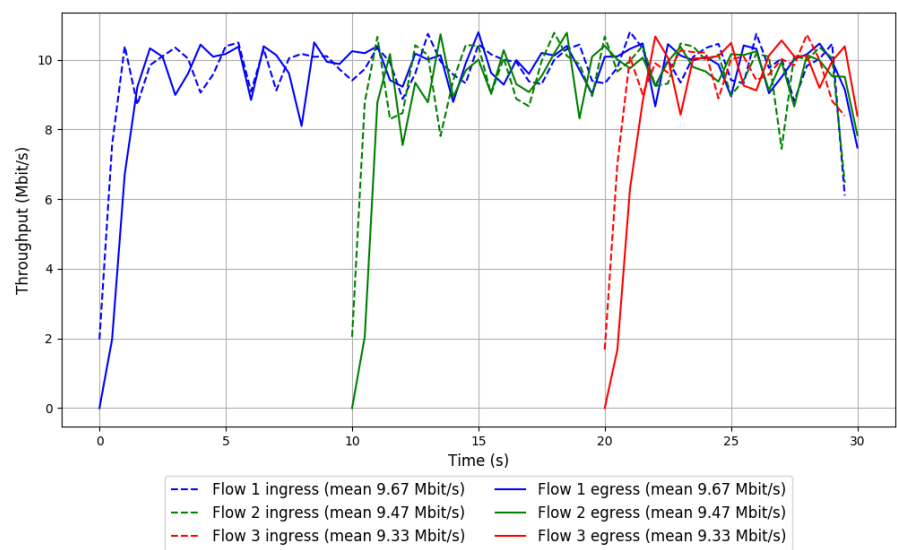


Run 5: Statistics of Sprout

Start at: 2019-02-21 03:00:29
End at: 2019-02-21 03:00:59
Local clock offset: -0.103 ms
Remote clock offset: -0.029 ms

Below is generated by plot.py at 2019-02-21 05:57:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.04 Mbit/s
95th percentile per-packet one-way delay: 47.599 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.67 Mbit/s
95th percentile per-packet one-way delay: 46.868 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 47.685 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 47.408 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

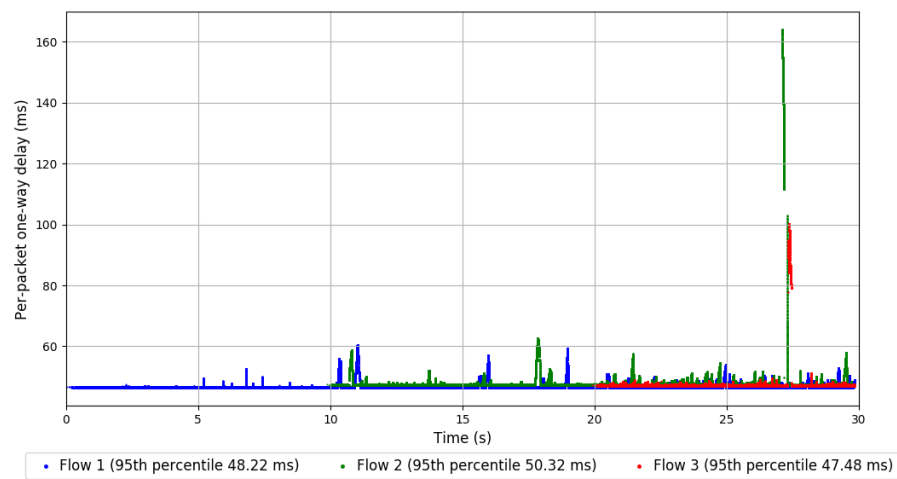
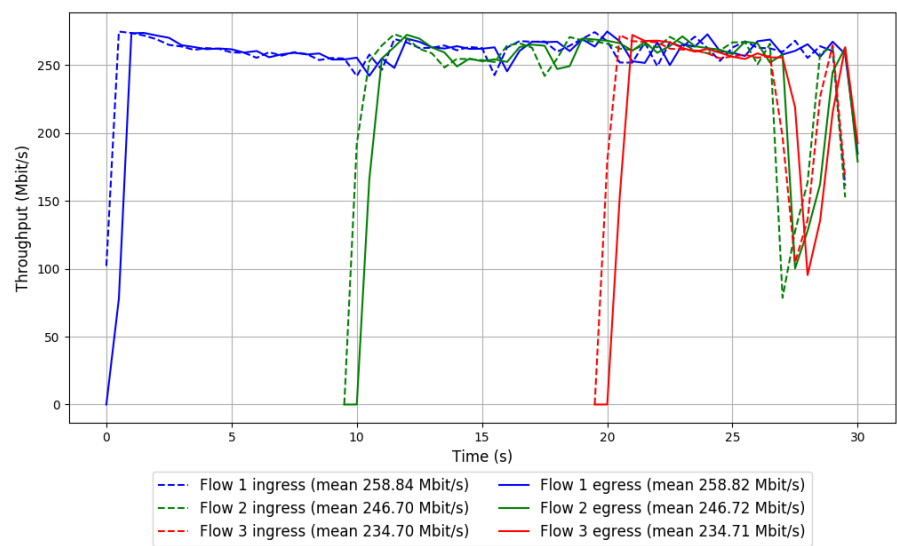


```
Run 1: Statistics of TaoVA-100x

Start at: 2019-02-21 00:28:14
End at: 2019-02-21 00:28:44
Local clock offset: -0.146 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-02-21 06:00:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.47 Mbit/s
95th percentile per-packet one-way delay: 48.754 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 258.82 Mbit/s
95th percentile per-packet one-way delay: 48.222 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 246.72 Mbit/s
95th percentile per-packet one-way delay: 50.316 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.71 Mbit/s
95th percentile per-packet one-way delay: 47.481 ms
Loss rate: 0.00%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-02-21 01:05:05

End at: 2019-02-21 01:05:35

Local clock offset: -0.051 ms

Remote clock offset: 0.017 ms

Below is generated by plot.py at 2019-02-21 06:00:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 475.13 Mbit/s

95th percentile per-packet one-way delay: 49.045 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 231.80 Mbit/s

95th percentile per-packet one-way delay: 47.364 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 239.69 Mbit/s

95th percentile per-packet one-way delay: 50.378 ms

Loss rate: 0.00%

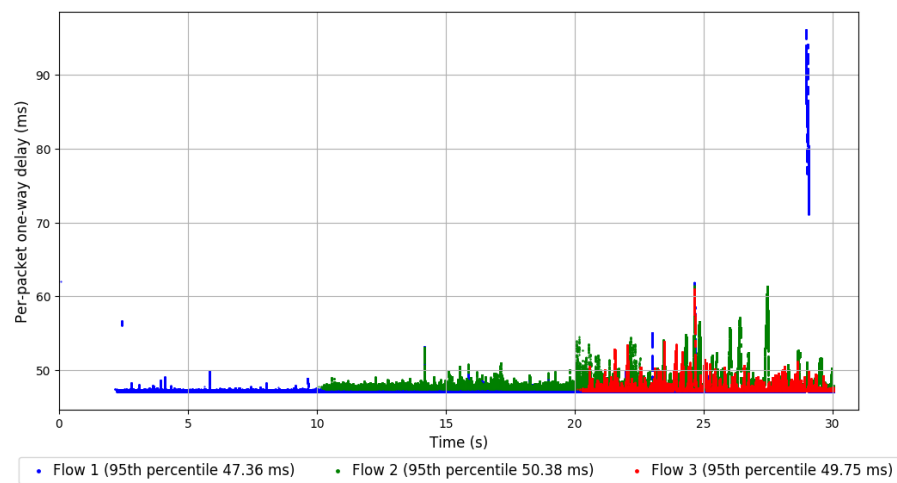
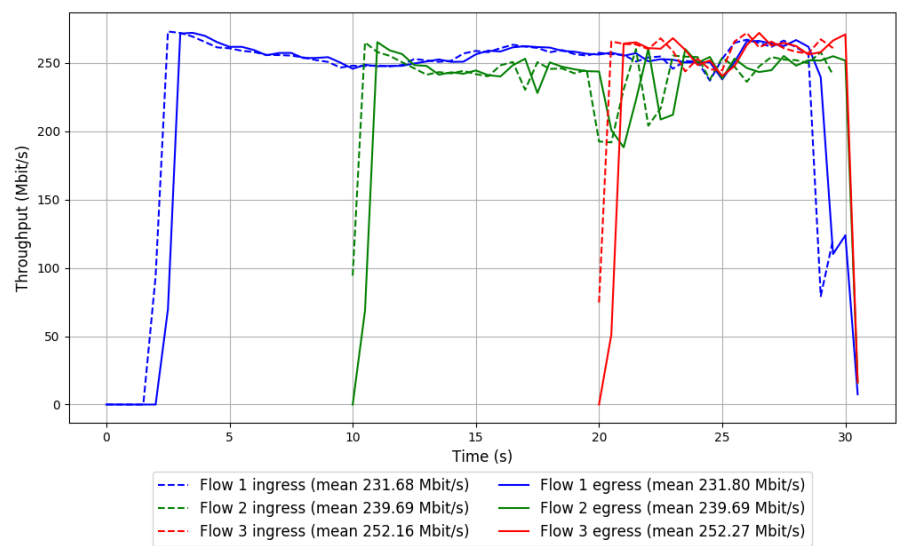
-- Flow 3:

Average throughput: 252.27 Mbit/s

95th percentile per-packet one-way delay: 49.747 ms

Loss rate: 0.00%

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

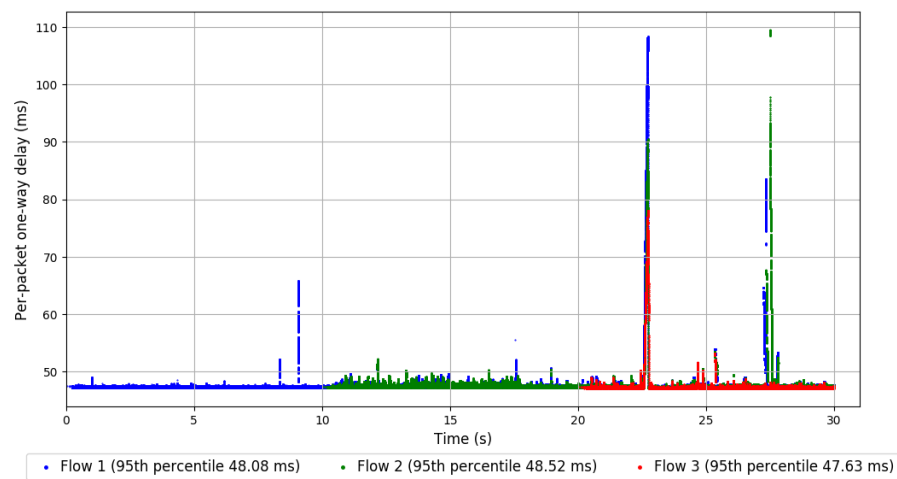
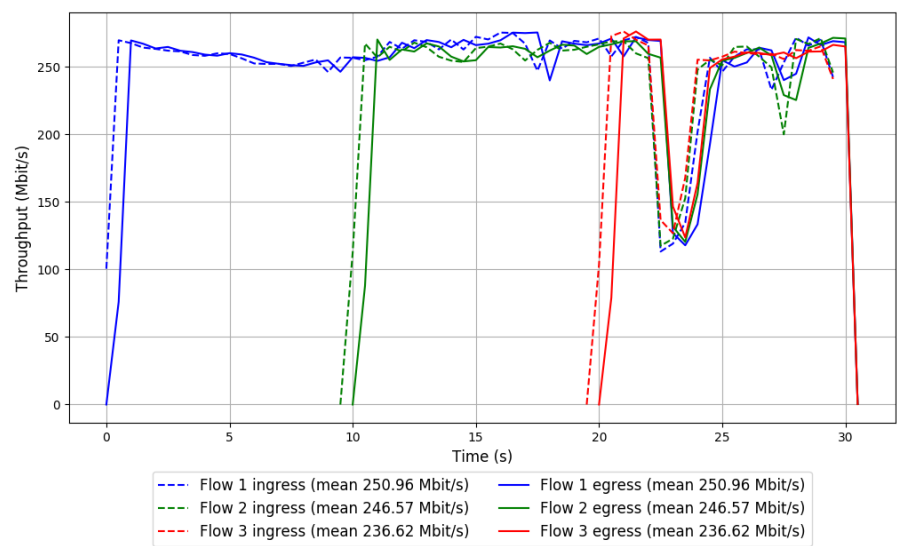


Run 3: Statistics of TaoVA-100x

Start at: 2019-02-21 01:41:48
End at: 2019-02-21 01:42:18
Local clock offset: -0.092 ms
Remote clock offset: -0.167 ms

Below is generated by plot.py at 2019-02-21 06:01:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 494.00 Mbit/s
95th percentile per-packet one-way delay: 48.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 250.96 Mbit/s
95th percentile per-packet one-way delay: 48.082 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 246.57 Mbit/s
95th percentile per-packet one-way delay: 48.525 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 236.62 Mbit/s
95th percentile per-packet one-way delay: 47.626 ms
Loss rate: 0.00%

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

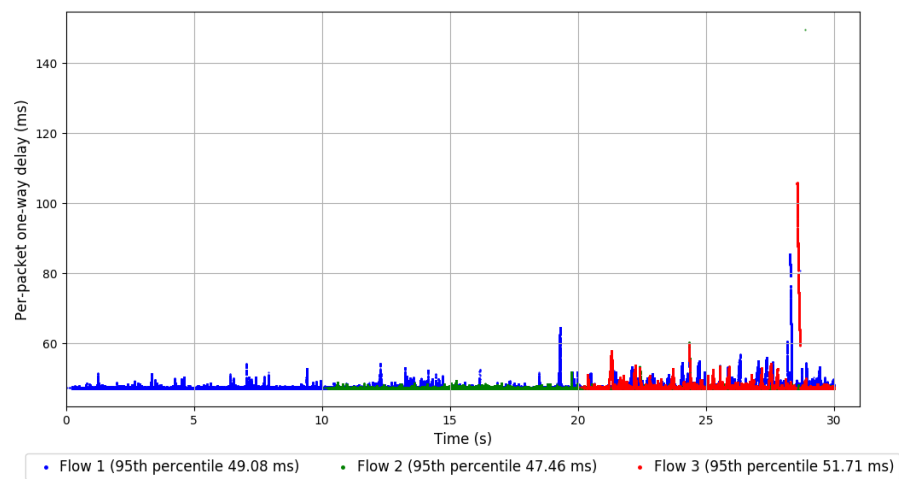
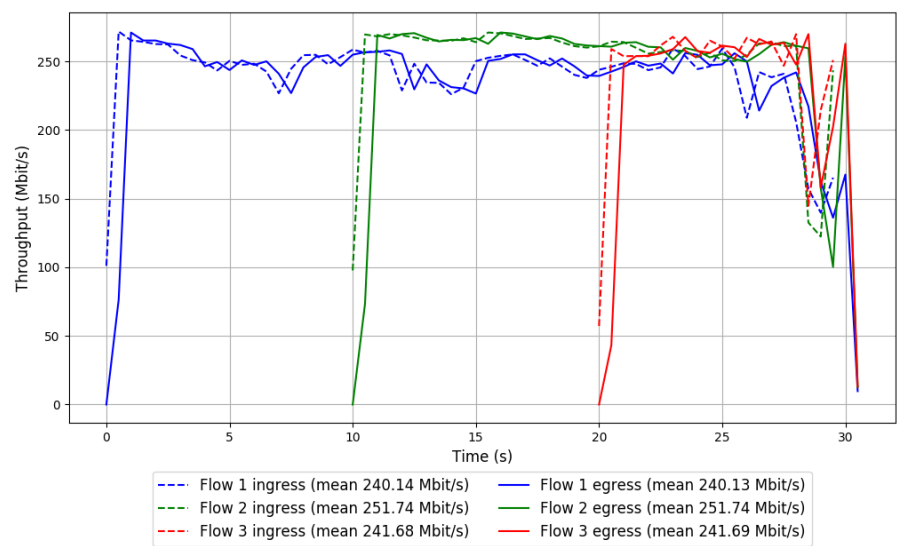


Run 4: Statistics of TaoVA-100x

Start at: 2019-02-21 02:18:20
End at: 2019-02-21 02:18:50
Local clock offset: -0.126 ms
Remote clock offset: -0.004 ms

Below is generated by plot.py at 2019-02-21 06:01:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 488.18 Mbit/s
95th percentile per-packet one-way delay: 48.948 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 240.13 Mbit/s
95th percentile per-packet one-way delay: 49.075 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 251.74 Mbit/s
95th percentile per-packet one-way delay: 47.464 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.69 Mbit/s
95th percentile per-packet one-way delay: 51.714 ms
Loss rate: 0.00%

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

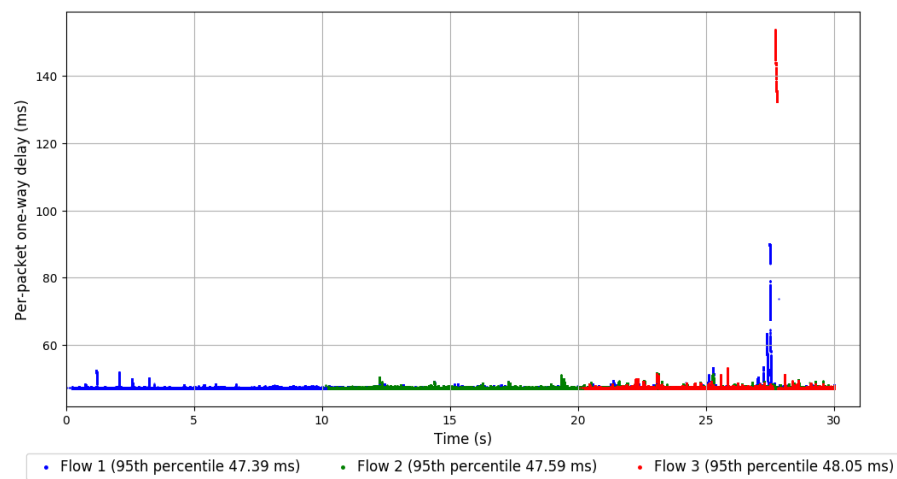
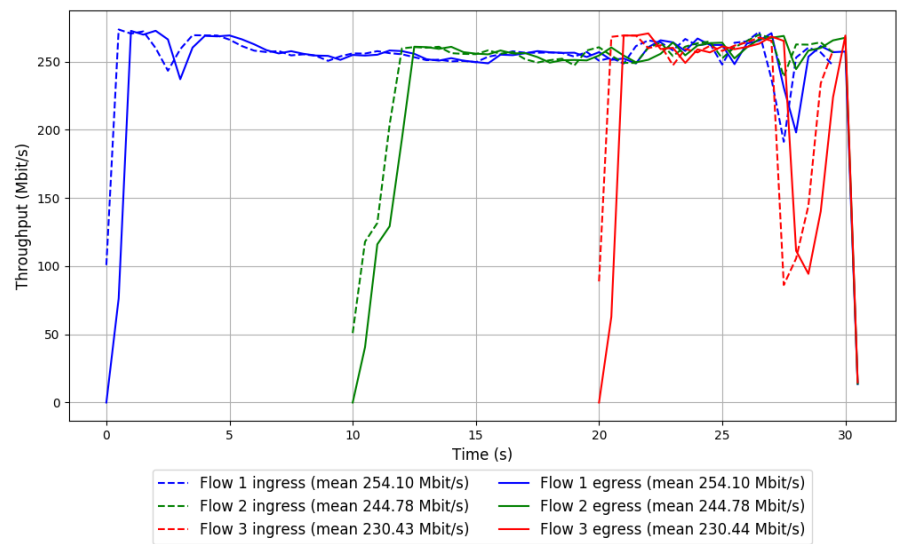


Run 5: Statistics of TaoVA-100x

Start at: 2019-02-21 02:55:06
End at: 2019-02-21 02:55:36
Local clock offset: -0.061 ms
Remote clock offset: -0.054 ms

Below is generated by plot.py at 2019-02-21 06:01:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 493.65 Mbit/s
95th percentile per-packet one-way delay: 47.522 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 254.10 Mbit/s
95th percentile per-packet one-way delay: 47.387 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 244.78 Mbit/s
95th percentile per-packet one-way delay: 47.589 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 230.44 Mbit/s
95th percentile per-packet one-way delay: 48.048 ms
Loss rate: 0.00%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-02-21 00:26:12

End at: 2019-02-21 00:26:42

Local clock offset: -0.084 ms

Remote clock offset: 0.035 ms

Below is generated by plot.py at 2019-02-21 06:03:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 1045.08 Mbit/s

95th percentile per-packet one-way delay: 88.769 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 526.27 Mbit/s

95th percentile per-packet one-way delay: 90.022 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 527.62 Mbit/s

95th percentile per-packet one-way delay: 89.190 ms

Loss rate: 0.25%

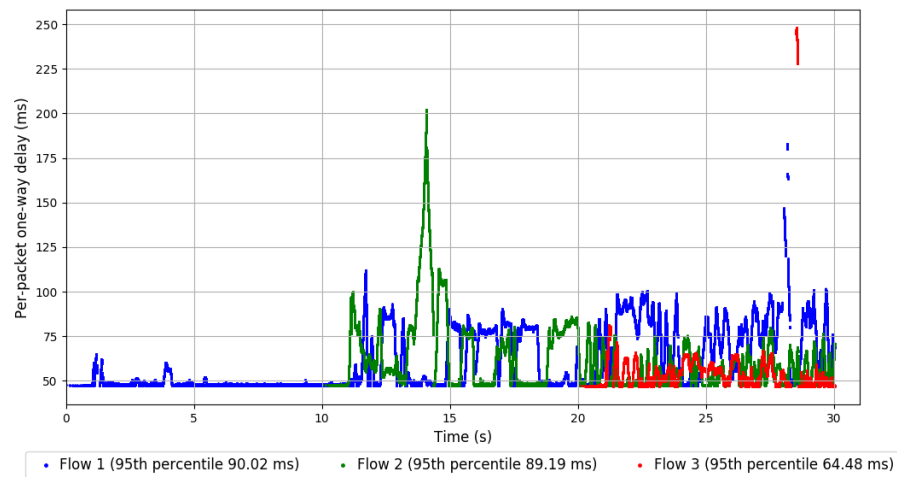
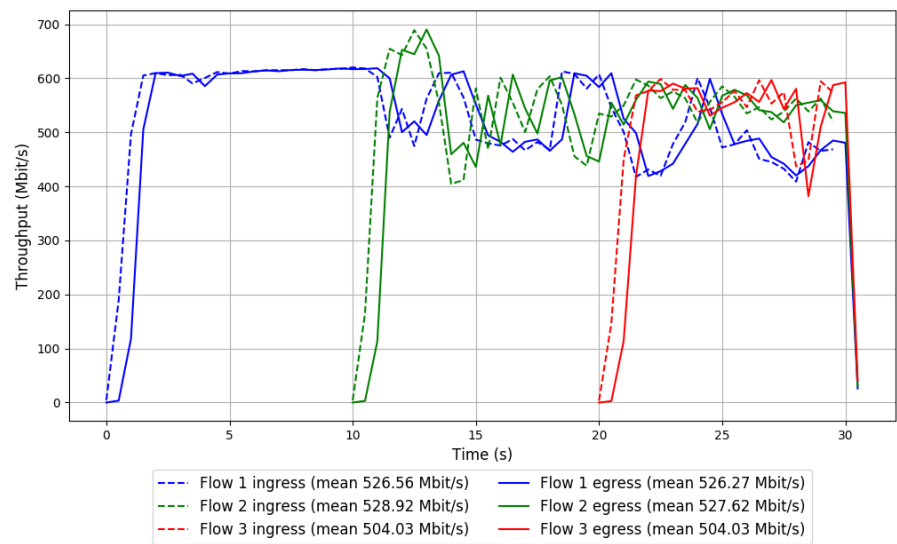
-- Flow 3:

Average throughput: 504.03 Mbit/s

95th percentile per-packet one-way delay: 64.477 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link

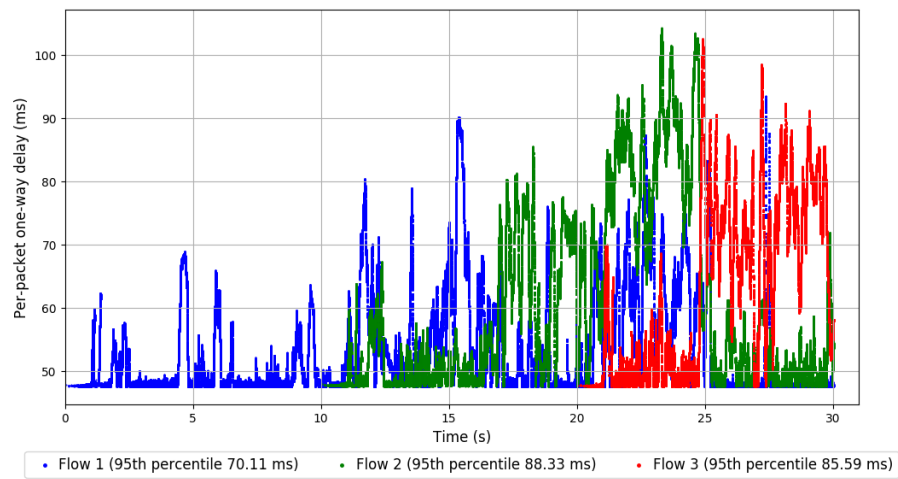
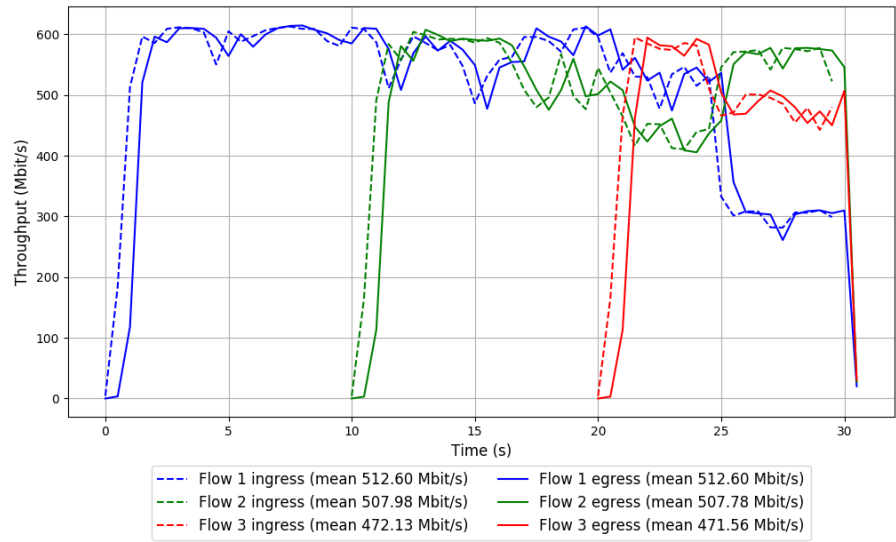


Run 2: Statistics of TCP Vegas

Start at: 2019-02-21 01:03:03
End at: 2019-02-21 01:03:33
Local clock offset: -0.432 ms
Remote clock offset: 0.03 ms

Below is generated by plot.py at 2019-02-21 06:10:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 1007.65 Mbit/s
95th percentile per-packet one-way delay: 82.881 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 512.60 Mbit/s
95th percentile per-packet one-way delay: 70.113 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 507.78 Mbit/s
95th percentile per-packet one-way delay: 88.329 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 471.56 Mbit/s
95th percentile per-packet one-way delay: 85.592 ms
Loss rate: 0.12%

Run 2: Report of TCP Vegas — Data Link

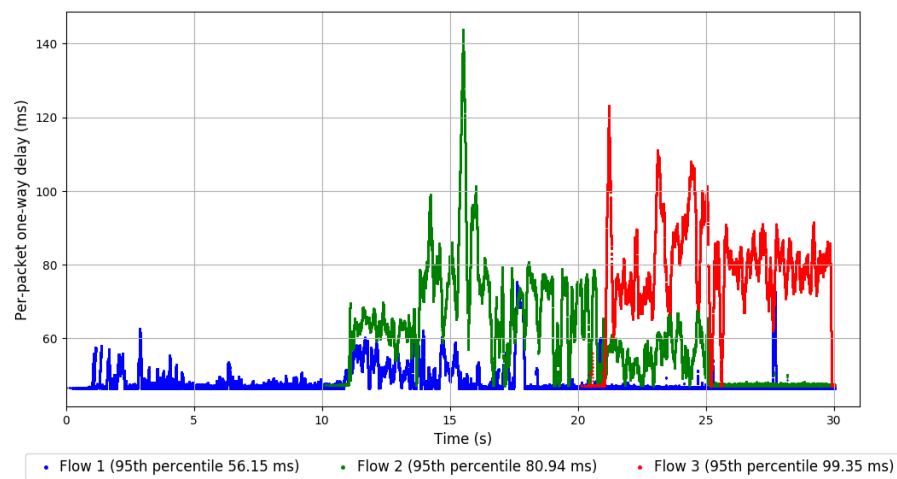
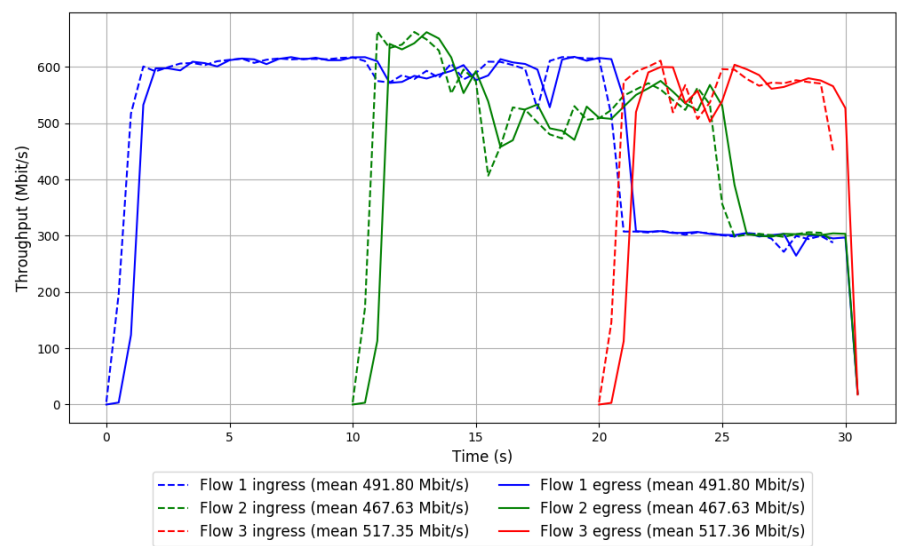


Run 3: Statistics of TCP Vegas

Start at: 2019-02-21 01:39:50
End at: 2019-02-21 01:40:20
Local clock offset: -0.09 ms
Remote clock offset: -0.161 ms

Below is generated by plot.py at 2019-02-21 06:16:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 975.24 Mbit/s
95th percentile per-packet one-way delay: 85.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 491.80 Mbit/s
95th percentile per-packet one-way delay: 56.147 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 467.63 Mbit/s
95th percentile per-packet one-way delay: 80.944 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 517.36 Mbit/s
95th percentile per-packet one-way delay: 99.351 ms
Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-02-21 02:16:28

End at: 2019-02-21 02:16:58

Local clock offset: -0.043 ms

Remote clock offset: -0.02 ms

Below is generated by plot.py at 2019-02-21 06:16:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 842.78 Mbit/s

95th percentile per-packet one-way delay: 63.148 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 306.26 Mbit/s

95th percentile per-packet one-way delay: 47.555 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 540.10 Mbit/s

95th percentile per-packet one-way delay: 66.827 ms

Loss rate: 0.06%

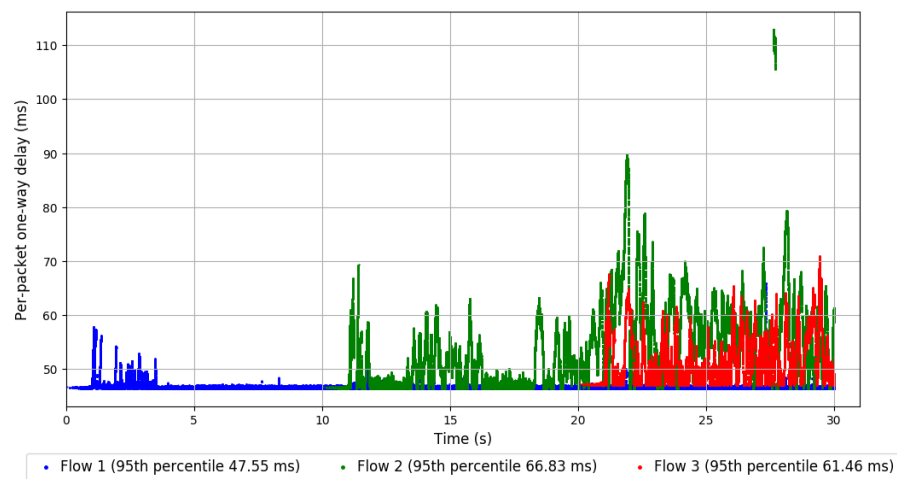
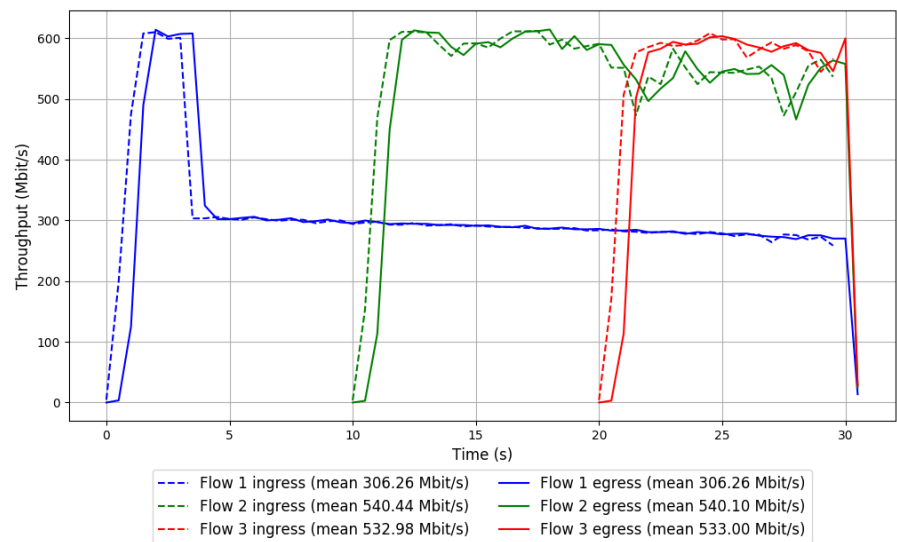
-- Flow 3:

Average throughput: 533.00 Mbit/s

95th percentile per-packet one-way delay: 61.458 ms

Loss rate: 0.01%

Run 4: Report of TCP Vegas — Data Link

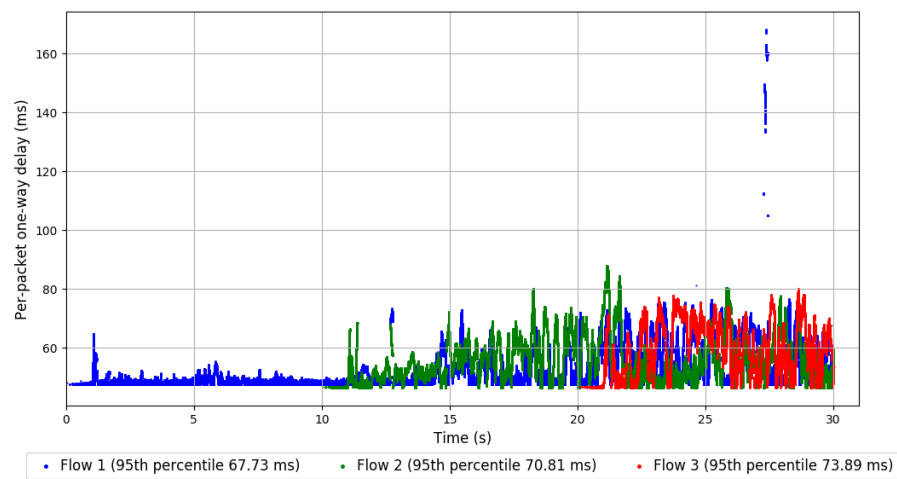
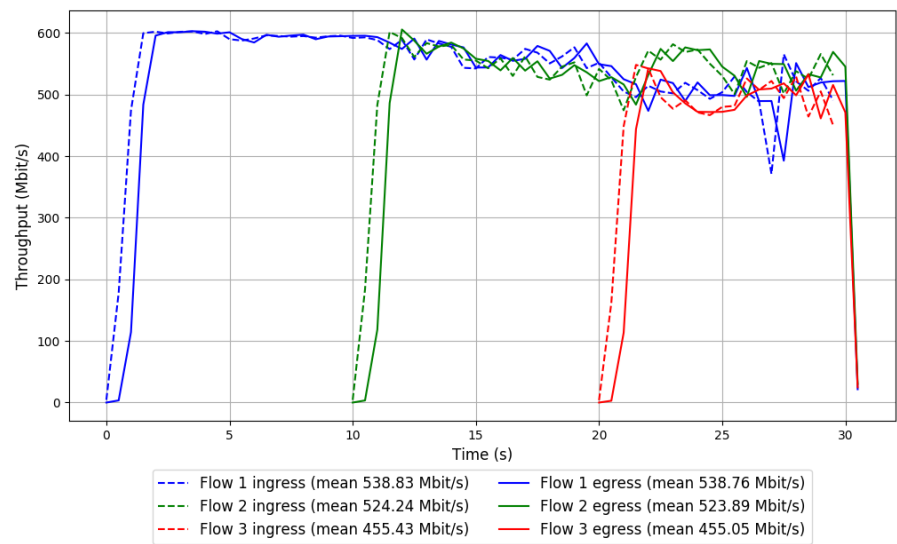


Run 5: Statistics of TCP Vegas

Start at: 2019-02-21 02:53:03
End at: 2019-02-21 02:53:33
Local clock offset: -0.066 ms
Remote clock offset: -0.016 ms

Below is generated by plot.py at 2019-02-21 06:19:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 1038.82 Mbit/s
95th percentile per-packet one-way delay: 70.882 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 538.76 Mbit/s
95th percentile per-packet one-way delay: 67.730 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 523.89 Mbit/s
95th percentile per-packet one-way delay: 70.808 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 455.05 Mbit/s
95th percentile per-packet one-way delay: 73.891 ms
Loss rate: 0.07%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-02-21 00:20:37

End at: 2019-02-21 00:21:07

Local clock offset: -0.107 ms

Remote clock offset: 0.046 ms

Below is generated by plot.py at 2019-02-21 06:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.31 Mbit/s

95th percentile per-packet one-way delay: 83.808 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 181.69 Mbit/s

95th percentile per-packet one-way delay: 84.319 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 126.65 Mbit/s

95th percentile per-packet one-way delay: 161.142 ms

Loss rate: 0.09%

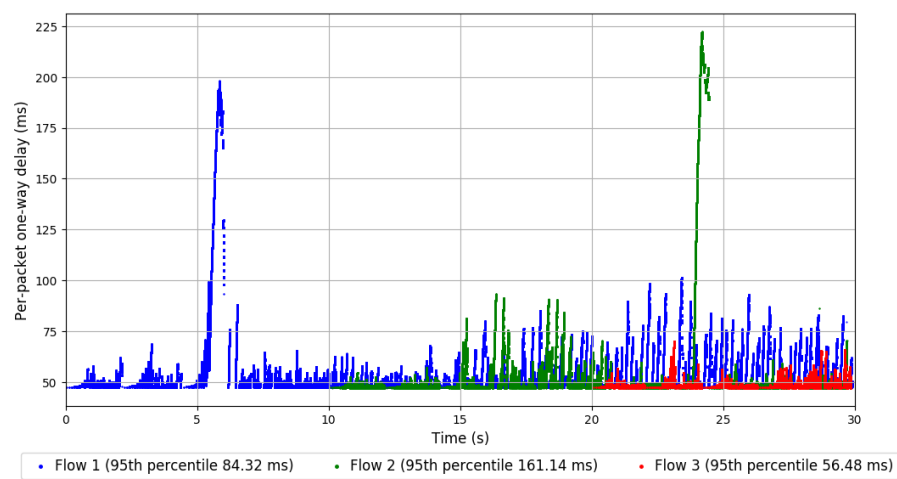
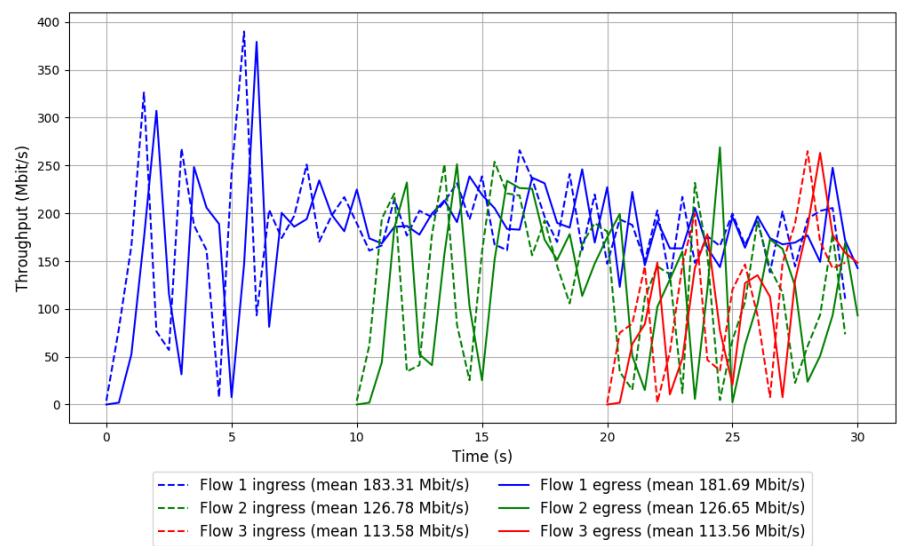
-- Flow 3:

Average throughput: 113.56 Mbit/s

95th percentile per-packet one-way delay: 56.477 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-02-21 00:57:25

End at: 2019-02-21 00:57:55

Local clock offset: -0.09 ms

Remote clock offset: 0.022 ms

Below is generated by plot.py at 2019-02-21 06:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.06 Mbit/s

95th percentile per-packet one-way delay: 141.324 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 173.65 Mbit/s

95th percentile per-packet one-way delay: 143.600 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 144.55 Mbit/s

95th percentile per-packet one-way delay: 142.160 ms

Loss rate: 0.14%

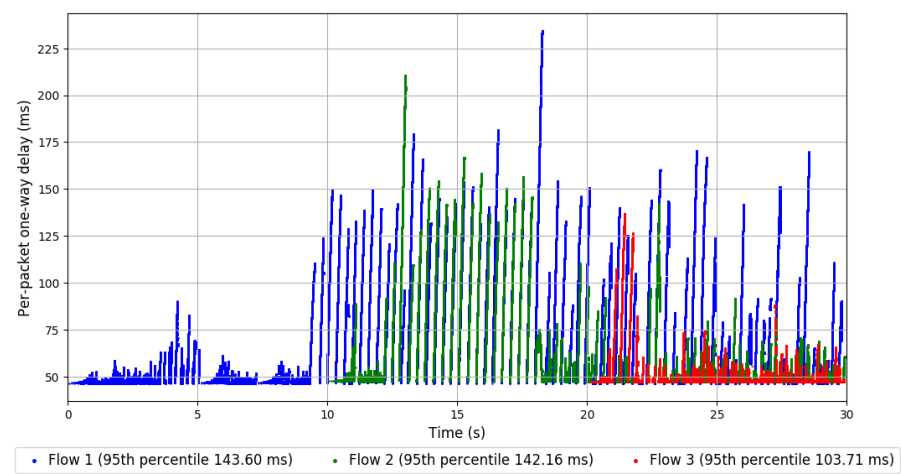
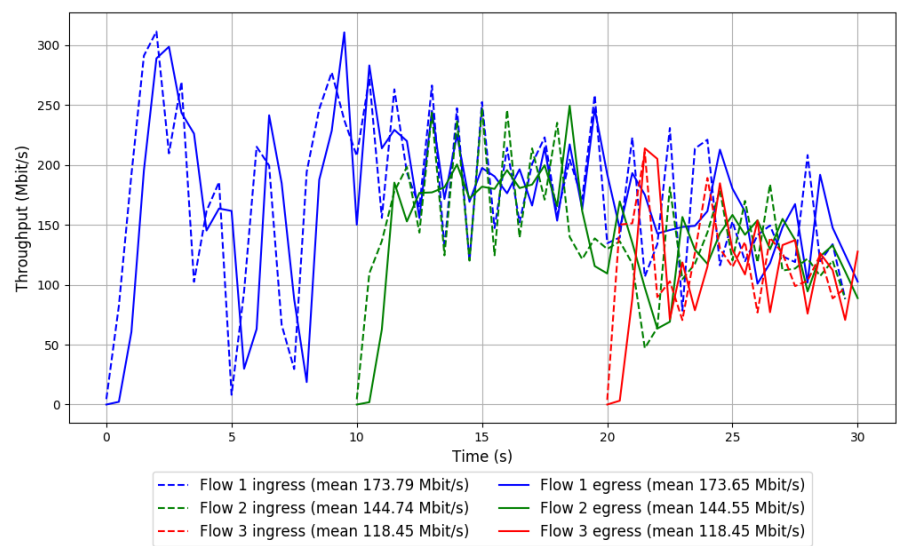
-- Flow 3:

Average throughput: 118.45 Mbit/s

95th percentile per-packet one-way delay: 103.712 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link

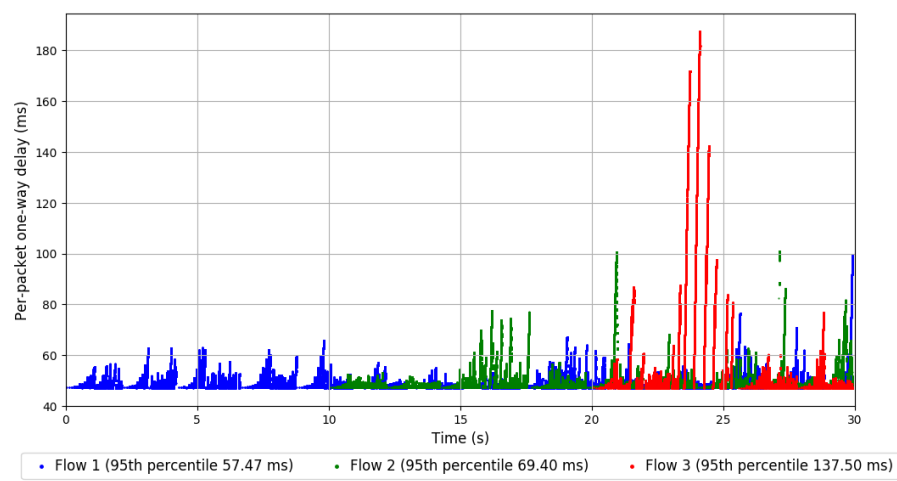
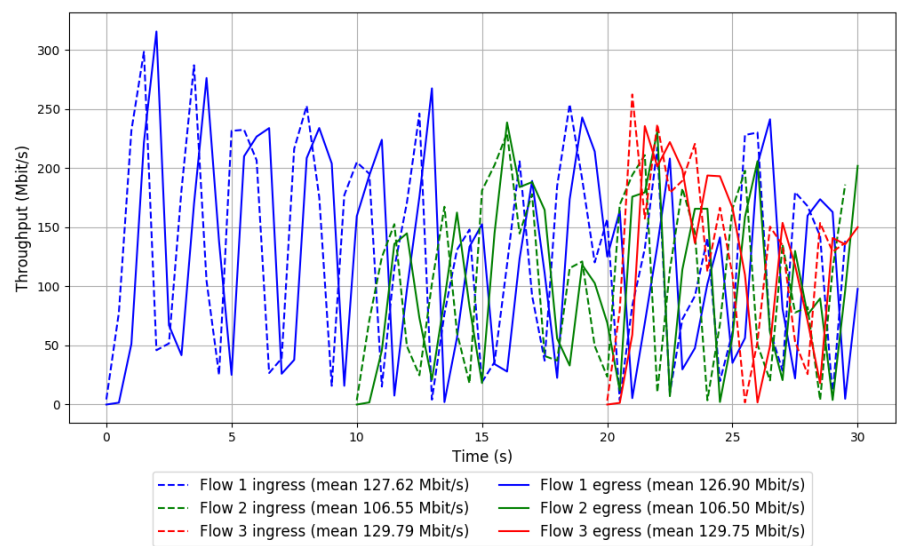


Run 3: Statistics of Verus

Start at: 2019-02-21 01:34:28
End at: 2019-02-21 01:34:58
Local clock offset: -0.059 ms
Remote clock offset: -0.126 ms

Below is generated by plot.py at 2019-02-21 06:19:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 240.50 Mbit/s
95th percentile per-packet one-way delay: 72.090 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 126.90 Mbit/s
95th percentile per-packet one-way delay: 57.468 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 106.50 Mbit/s
95th percentile per-packet one-way delay: 69.402 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 129.75 Mbit/s
95th percentile per-packet one-way delay: 137.495 ms
Loss rate: 0.04%

Run 3: Report of Verus — Data Link

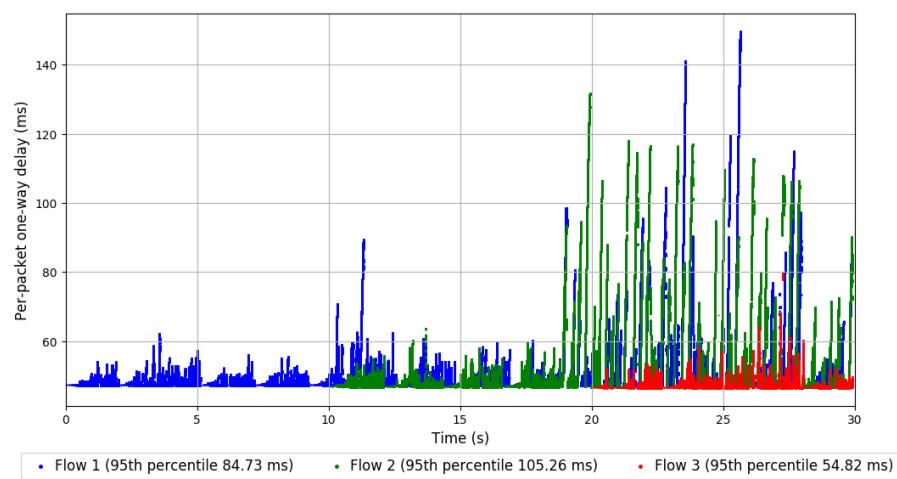
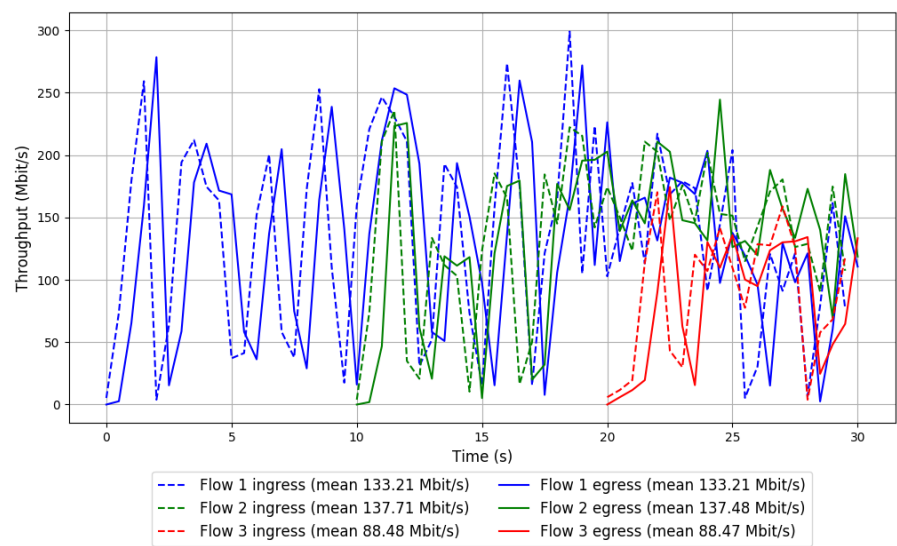


Run 4: Statistics of Verus

Start at: 2019-02-21 02:10:56
End at: 2019-02-21 02:11:26
Local clock offset: -0.108 ms
Remote clock offset: -0.033 ms

Below is generated by plot.py at 2019-02-21 06:19:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 253.74 Mbit/s
95th percentile per-packet one-way delay: 95.716 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 133.21 Mbit/s
95th percentile per-packet one-way delay: 84.733 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 137.48 Mbit/s
95th percentile per-packet one-way delay: 105.260 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 88.47 Mbit/s
95th percentile per-packet one-way delay: 54.819 ms
Loss rate: 0.00%

Run 4: Report of Verus — Data Link

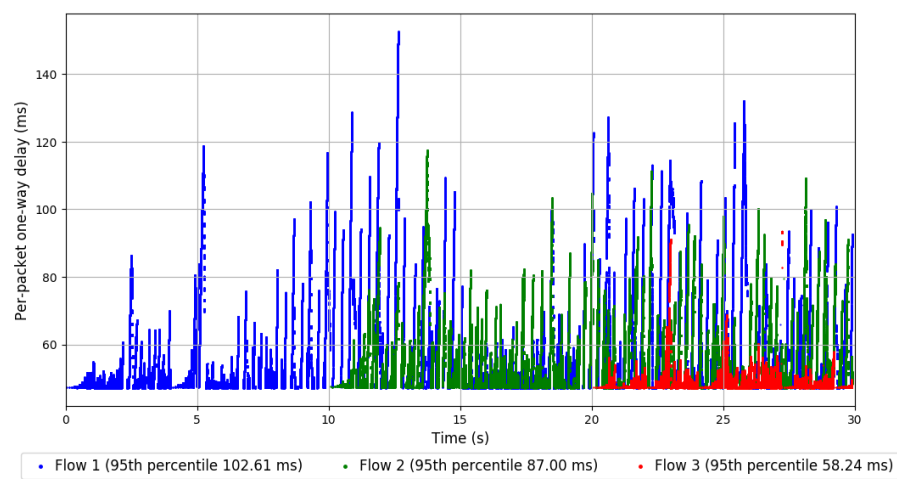
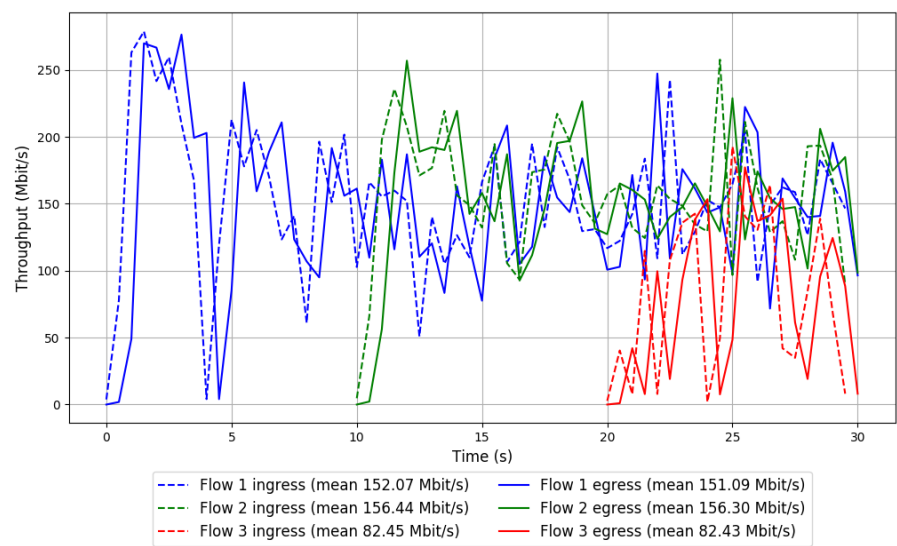


Run 5: Statistics of Verus

Start at: 2019-02-21 02:47:32
End at: 2019-02-21 02:48:02
Local clock offset: -0.086 ms
Remote clock offset: -0.053 ms

Below is generated by plot.py at 2019-02-21 06:19:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 282.05 Mbit/s
95th percentile per-packet one-way delay: 95.685 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 151.09 Mbit/s
95th percentile per-packet one-way delay: 102.612 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 156.30 Mbit/s
95th percentile per-packet one-way delay: 86.997 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 82.43 Mbit/s
95th percentile per-packet one-way delay: 58.239 ms
Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-02-21 00:11:16

End at: 2019-02-21 00:11:46

Local clock offset: -0.101 ms

Remote clock offset: 0.094 ms

Below is generated by plot.py at 2019-02-21 06:21:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 626.09 Mbit/s

95th percentile per-packet one-way delay: 84.485 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 392.16 Mbit/s

95th percentile per-packet one-way delay: 94.155 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 337.37 Mbit/s

95th percentile per-packet one-way delay: 71.573 ms

Loss rate: 0.01%

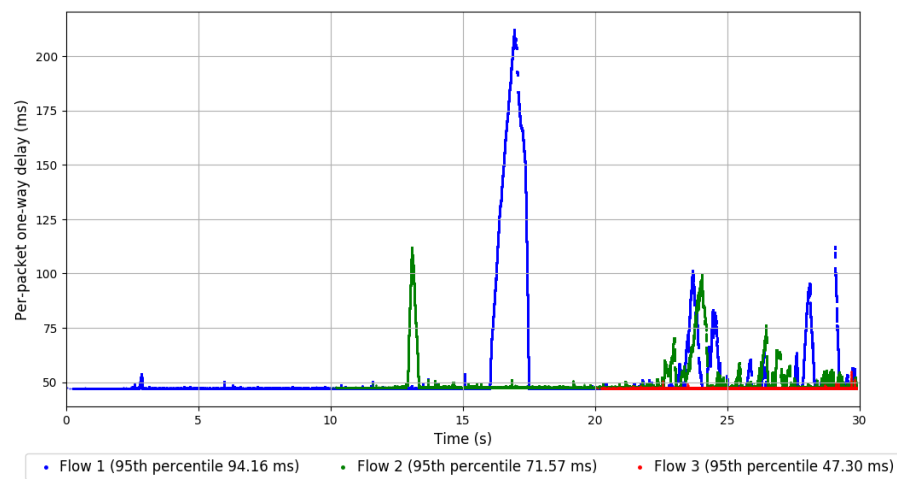
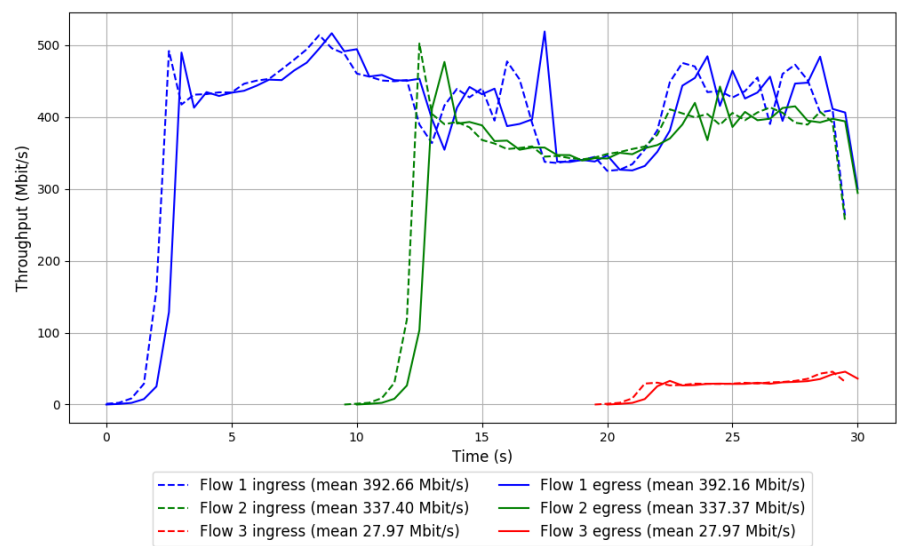
-- Flow 3:

Average throughput: 27.97 Mbit/s

95th percentile per-packet one-way delay: 47.300 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-02-21 00:48:07

End at: 2019-02-21 00:48:37

Local clock offset: -0.09 ms

Remote clock offset: 0.073 ms

Below is generated by plot.py at 2019-02-21 06:21:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 578.64 Mbit/s

95th percentile per-packet one-way delay: 61.518 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 348.60 Mbit/s

95th percentile per-packet one-way delay: 76.723 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 269.57 Mbit/s

95th percentile per-packet one-way delay: 49.539 ms

Loss rate: 0.00%

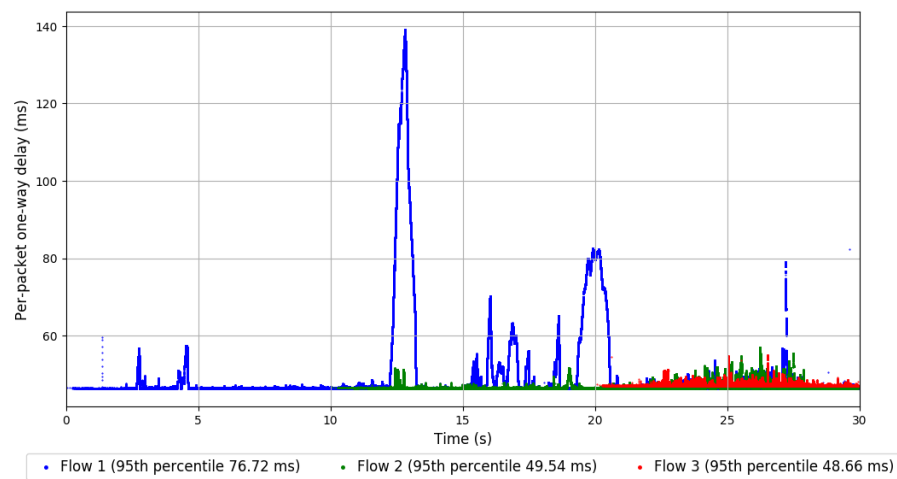
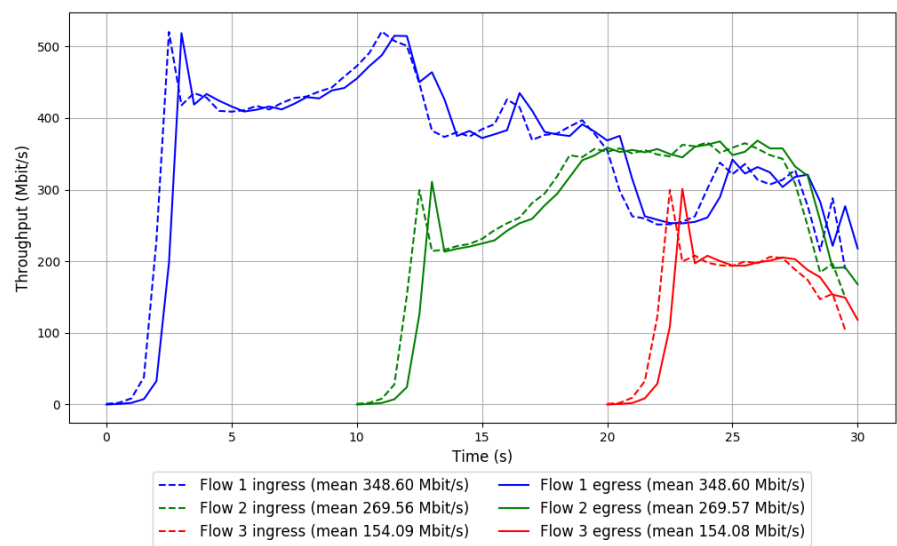
-- Flow 3:

Average throughput: 154.08 Mbit/s

95th percentile per-packet one-way delay: 48.661 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

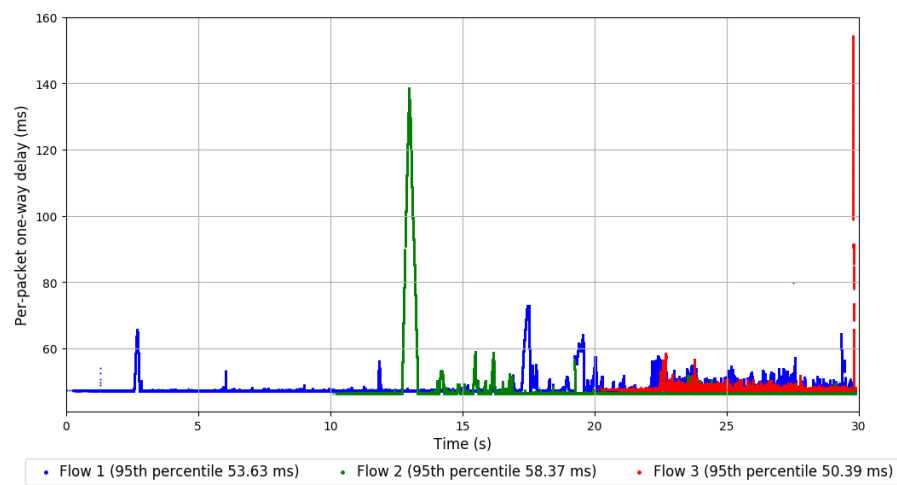
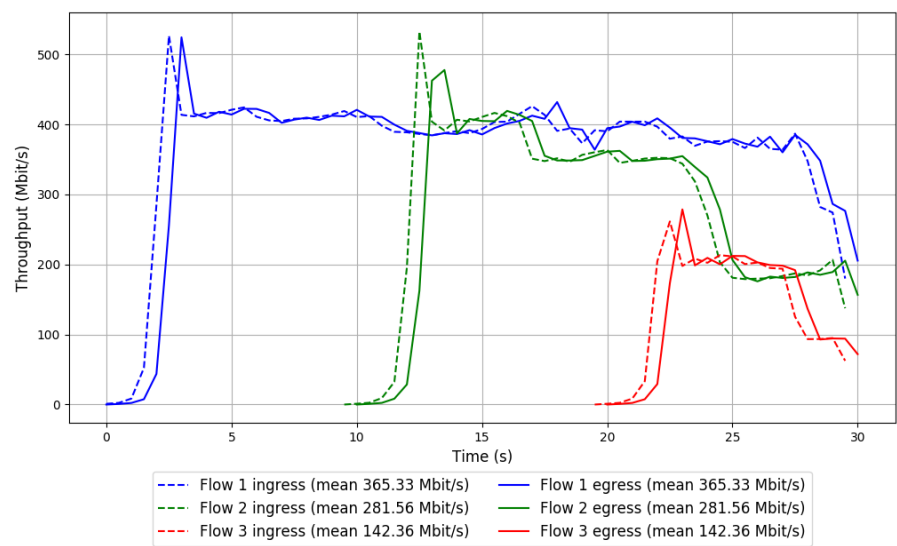


Run 3: Statistics of PCC-Vivace

Start at: 2019-02-21 01:24:58
End at: 2019-02-21 01:25:28
Local clock offset: -0.083 ms
Remote clock offset: -0.043 ms

Below is generated by plot.py at 2019-02-21 06:21:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 599.87 Mbit/s
95th percentile per-packet one-way delay: 53.940 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 365.33 Mbit/s
95th percentile per-packet one-way delay: 53.626 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 281.56 Mbit/s
95th percentile per-packet one-way delay: 58.371 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 142.36 Mbit/s
95th percentile per-packet one-way delay: 50.389 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-02-21 02:01:40

End at: 2019-02-21 02:02:10

Local clock offset: -0.091 ms

Remote clock offset: -0.1 ms

Below is generated by plot.py at 2019-02-21 06:21:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 598.99 Mbit/s

95th percentile per-packet one-way delay: 121.537 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 340.03 Mbit/s

95th percentile per-packet one-way delay: 137.581 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 249.17 Mbit/s

95th percentile per-packet one-way delay: 51.066 ms

Loss rate: 0.00%

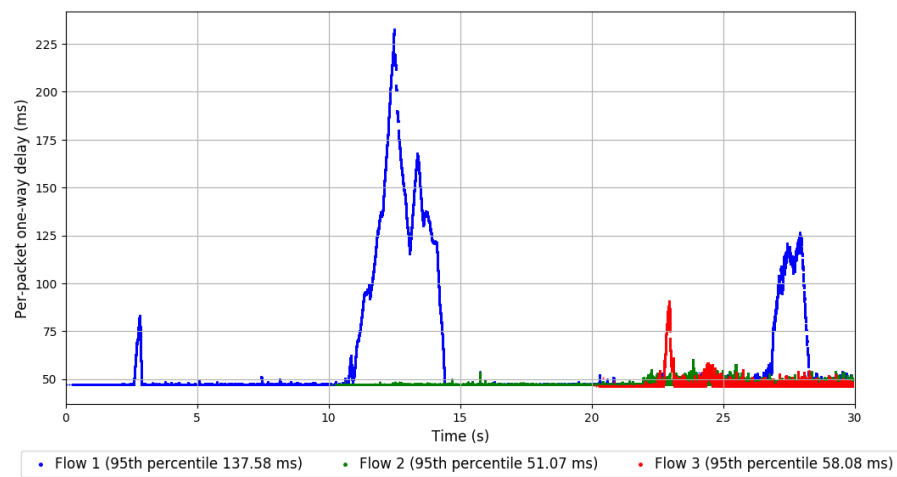
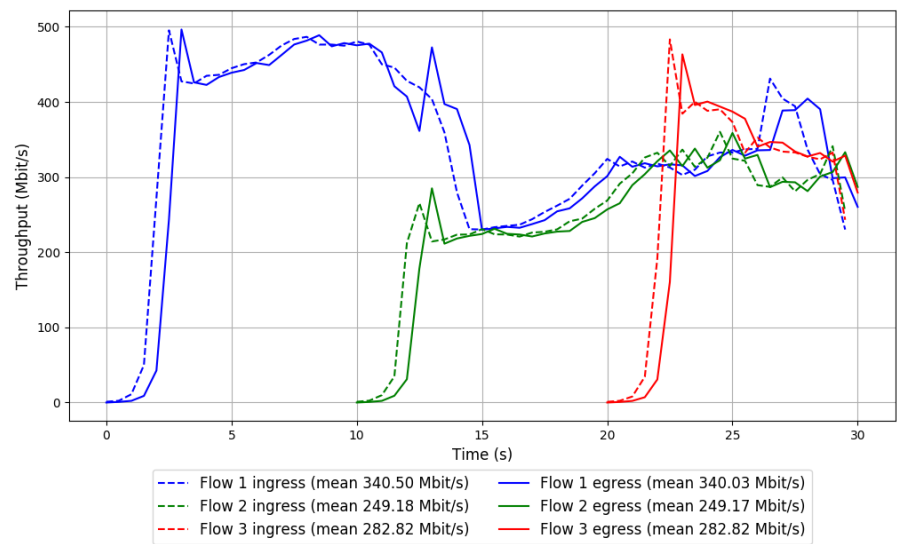
-- Flow 3:

Average throughput: 282.82 Mbit/s

95th percentile per-packet one-way delay: 58.076 ms

Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

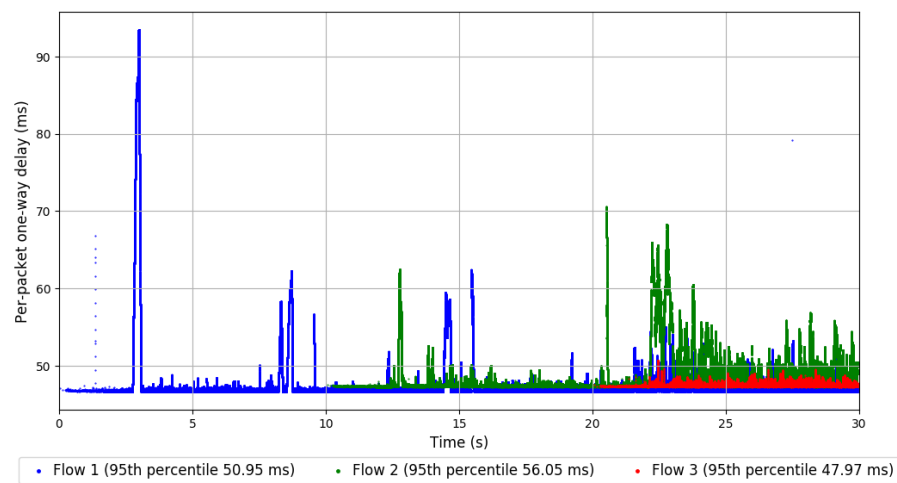
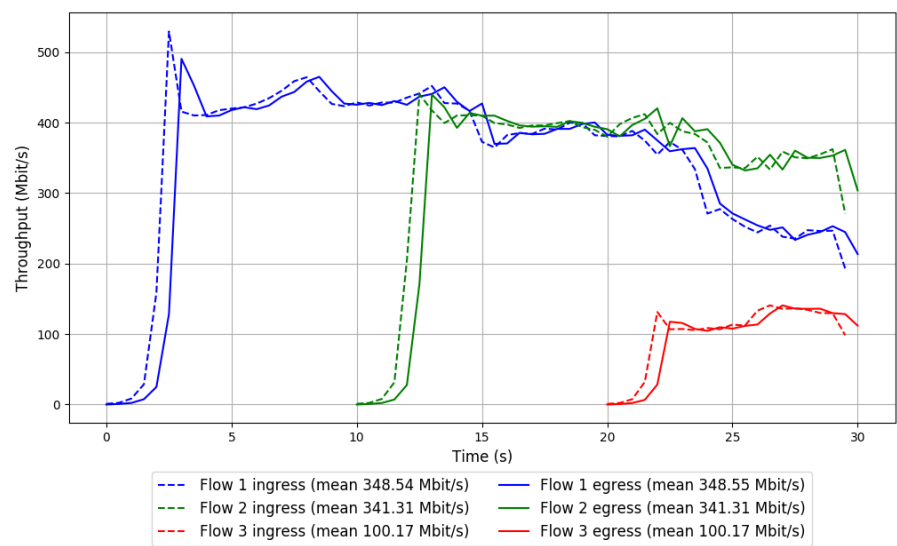


Run 5: Statistics of PCC-Vivace

Start at: 2019-02-21 02:38:13
End at: 2019-02-21 02:38:43
Local clock offset: -0.071 ms
Remote clock offset: -0.011 ms

Below is generated by plot.py at 2019-02-21 06:22:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 608.54 Mbit/s
95th percentile per-packet one-way delay: 54.081 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 348.55 Mbit/s
95th percentile per-packet one-way delay: 50.951 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 341.31 Mbit/s
95th percentile per-packet one-way delay: 56.052 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 100.17 Mbit/s
95th percentile per-packet one-way delay: 47.965 ms
Loss rate: 0.01%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-02-21 00:36:39

End at: 2019-02-21 00:37:09

Local clock offset: -0.1 ms

Remote clock offset: 0.066 ms

Below is generated by plot.py at 2019-02-21 06:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 47.439 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 46.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 47.487 ms

Loss rate: 0.00%

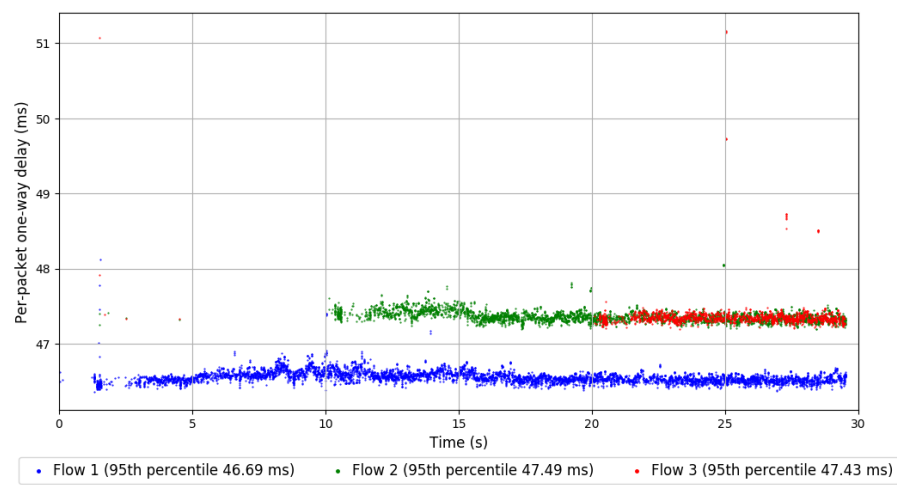
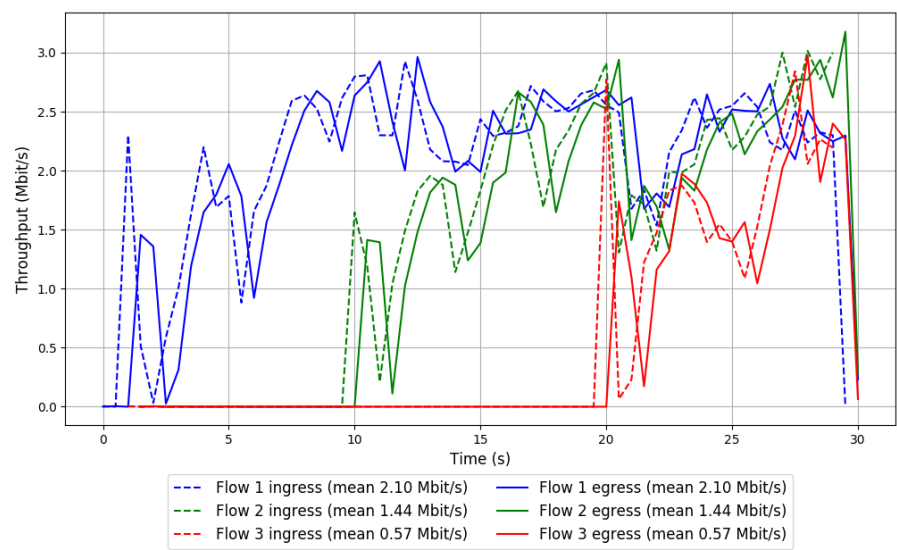
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 47.432 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-02-21 01:13:31

End at: 2019-02-21 01:14:01

Local clock offset: -0.046 ms

Remote clock offset: 0.049 ms

Below is generated by plot.py at 2019-02-21 06:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 47.533 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 47.512 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 47.503 ms

Loss rate: 0.00%

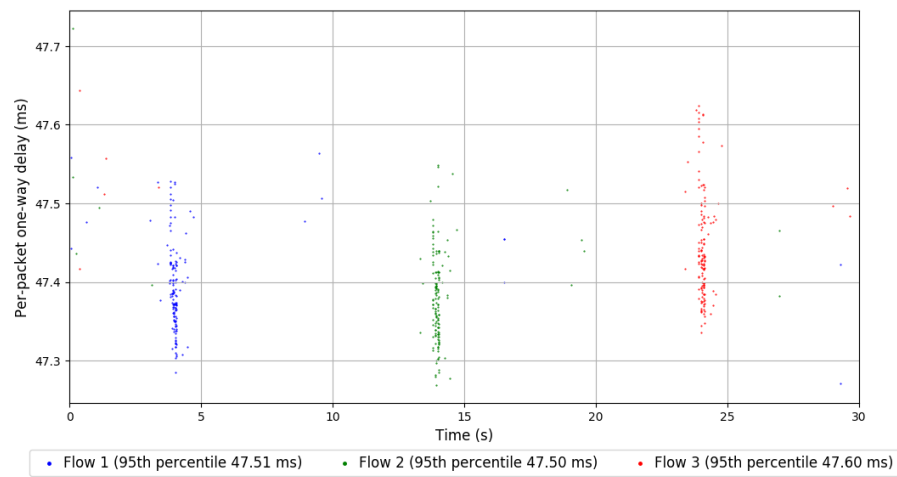
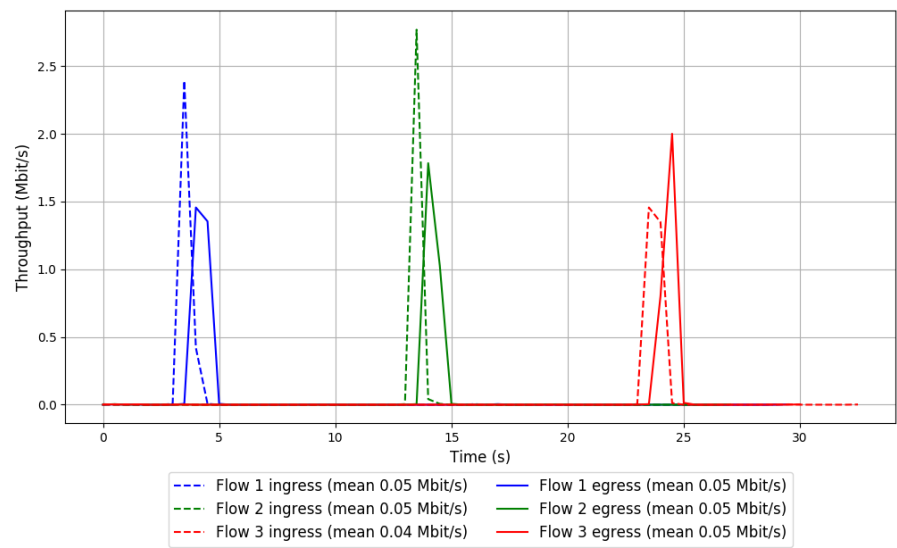
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 47.604 ms

Loss rate: 0.05%

Run 2: Report of WebRTC media — Data Link

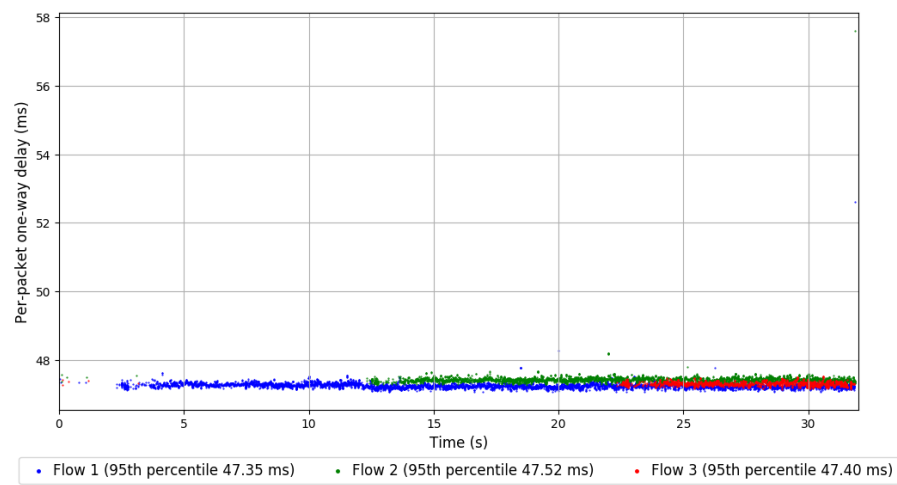
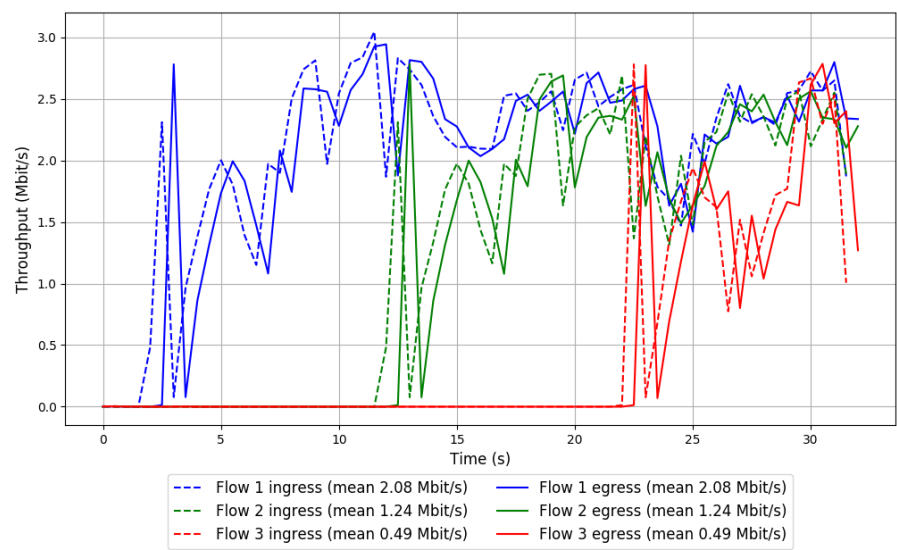


Run 3: Statistics of WebRTC media

Start at: 2019-02-21 01:50:16
End at: 2019-02-21 01:50:46
Local clock offset: -0.111 ms
Remote clock offset: -0.165 ms

Below is generated by plot.py at 2019-02-21 06:22:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 47.478 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 47.353 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 47.520 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 47.400 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

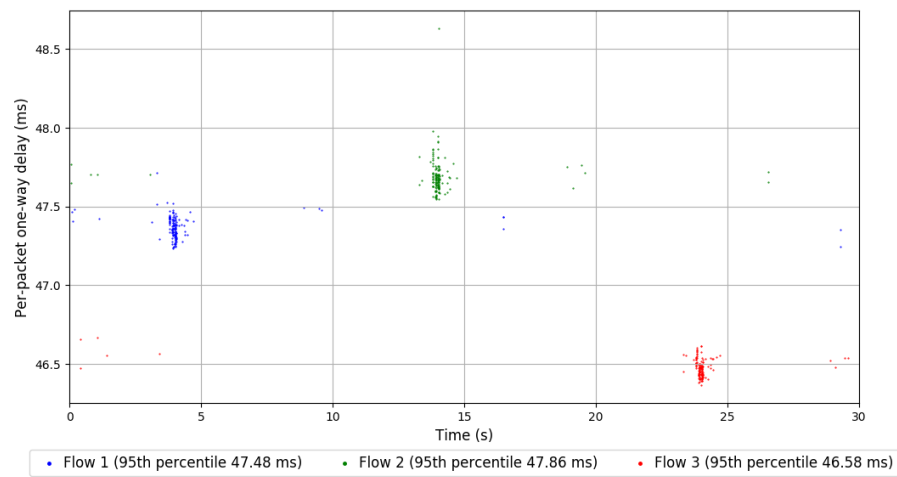
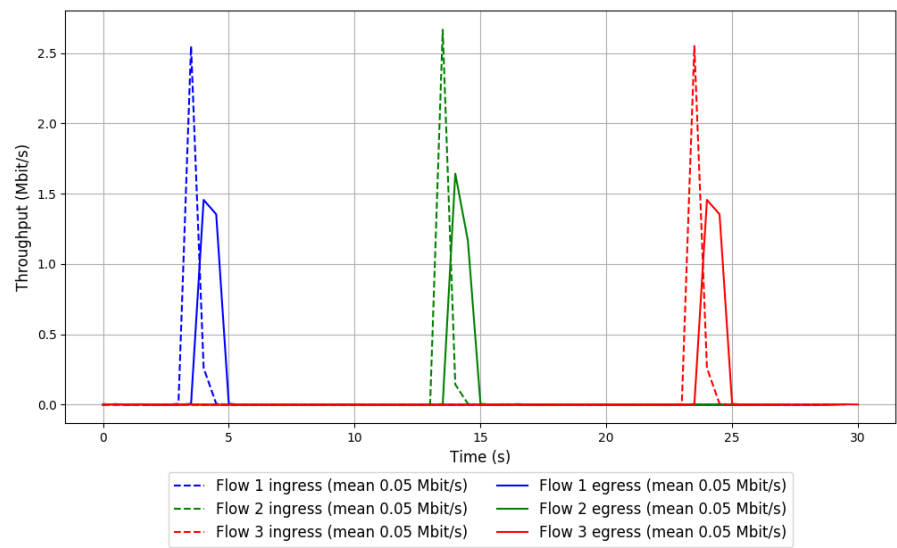


Run 4: Statistics of WebRTC media

Start at: 2019-02-21 02:26:46
End at: 2019-02-21 02:27:16
Local clock offset: -0.049 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-02-21 06:22:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.758 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.475 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.858 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.579 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-02-21 03:03:36
End at: 2019-02-21 03:04:06
Local clock offset: 0.264 ms
Remote clock offset: -0.054 ms

Below is generated by plot.py at 2019-02-21 06:22:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.159 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.057 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.087 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

