

Pantheon Report

Generated at 2019-02-05 23:07:35 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

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

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

System info:

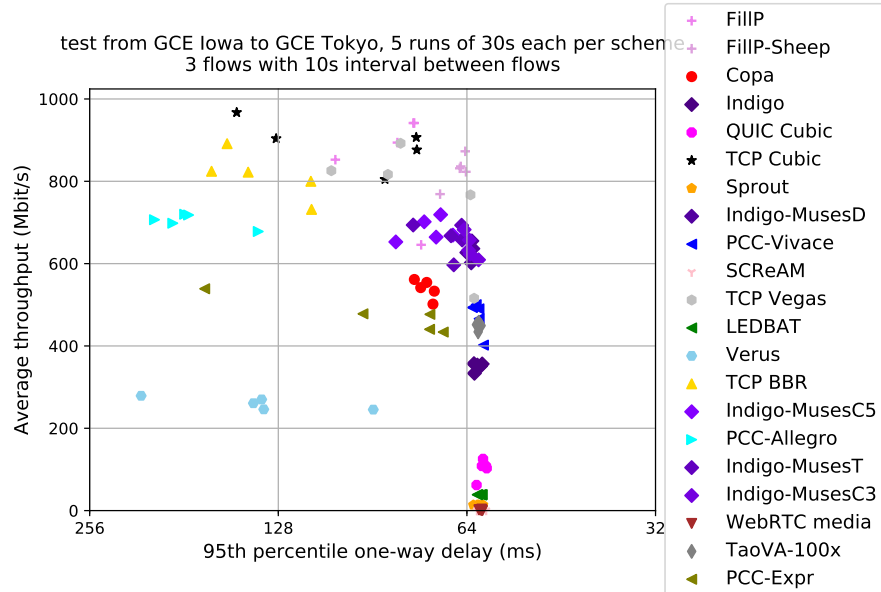
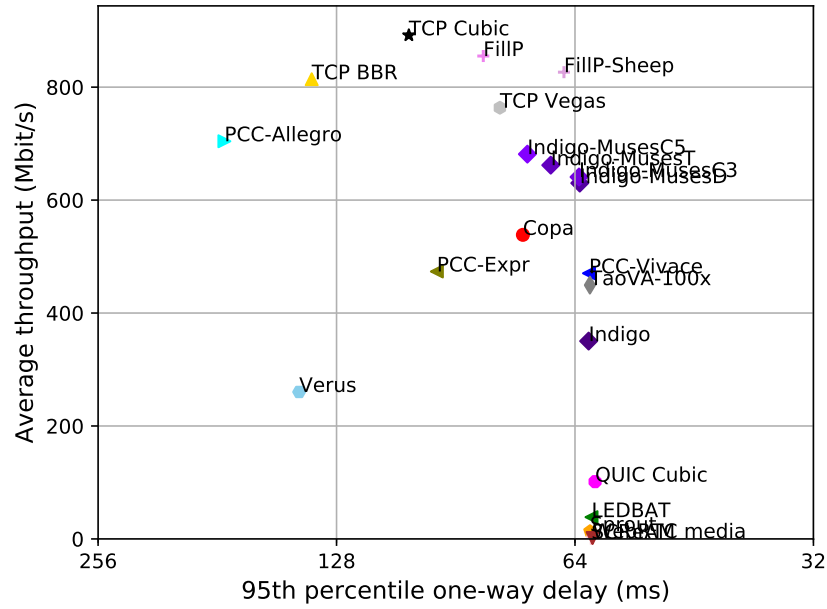
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/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 Iowa to GCE Tokyo, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



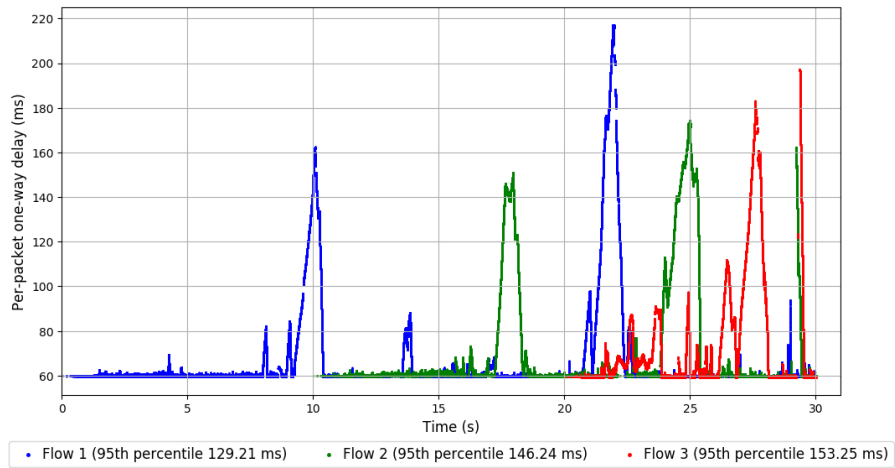
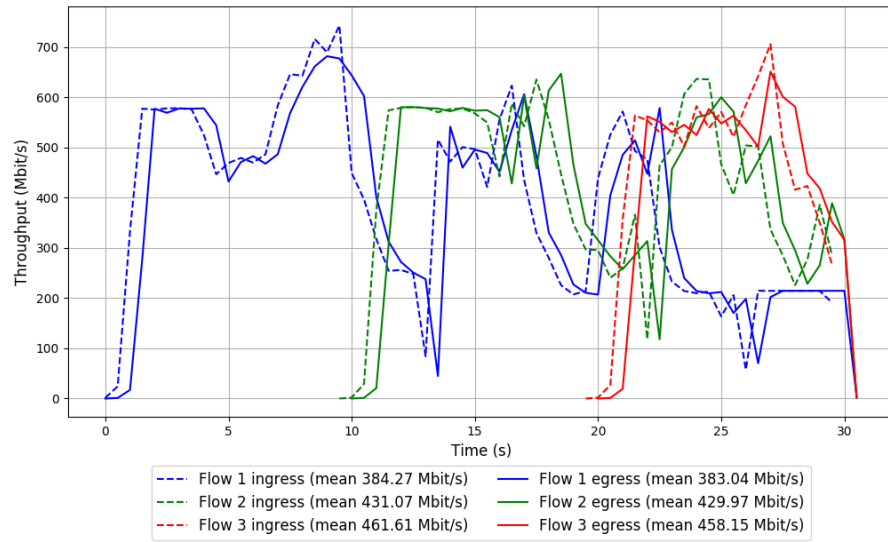
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	402.25	410.33	416.72	131.66	128.24	166.46	0.25	0.44	1.23
Copa	5	283.33	268.37	229.78	72.90	80.26	75.69	0.01	0.06	0.05
TCP Cubic	5	461.67	444.68	402.99	88.75	93.78	78.49	0.01	0.01	0.05
FillP	5	529.90	356.94	263.37	93.40	64.66	62.79	0.21	0.00	0.00
FillP-Sheep	5	529.92	323.76	244.45	67.15	64.74	63.68	0.01	0.00	0.00
Indigo	5	190.42	170.89	144.25	61.43	61.48	61.91	0.00	0.00	0.00
Indigo-MusesC3	5	387.91	304.96	206.85	63.56	62.36	62.18	0.00	0.00	0.00
Indigo-MusesC5	5	439.61	340.32	91.99	76.22	64.85	60.47	0.01	0.00	0.00
Indigo-MusesD	4	382.70	295.07	196.73	63.52	62.32	61.60	0.00	0.00	0.00
Indigo-MusesT	5	427.78	326.44	99.29	72.79	62.72	61.20	0.00	0.00	0.00
LEDBAT	5	24.98	16.34	8.25	61.04	60.84	60.84	0.00	0.00	0.00
PCC-Allegro	5	408.22	321.99	247.63	181.71	128.42	100.57	4.86	0.39	0.07
PCC-Expr	5	272.34	228.67	148.87	104.88	85.70	87.31	0.31	0.16	0.70
QUIC Cubic	5	47.23	60.39	43.16	60.36	60.32	60.33	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	60.95	61.04	60.85	0.00	0.00	0.00
Sprout	5	6.99	6.86	6.61	61.27	61.29	61.19	0.00	0.00	0.00
TaoVA-100x	5	227.51	224.28	217.12	60.93	61.42	61.75	0.00	0.00	0.00
TCP Vegas	5	364.13	399.14	401.68	62.24	75.61	79.42	0.00	0.00	0.01
Verus	5	134.55	155.35	69.83	121.62	150.26	77.26	0.03	0.57	0.00
PCC-Vivace	5	281.73	217.97	132.67	61.57	66.50	61.01	0.02	0.05	0.09
WebRTC media	5	0.83	0.61	0.25	60.76	60.70	60.81	0.00	0.00	0.01

Run 1: Statistics of TCP BBR

Start at: 2019-02-05 17:14:43
End at: 2019-02-05 17:15:13
Local clock offset: 0.08 ms
Remote clock offset: -1.145 ms

Below is generated by plot.py at 2019-02-05 20:41:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 822.25 Mbit/s
95th percentile per-packet one-way delay: 142.982 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 383.04 Mbit/s
95th percentile per-packet one-way delay: 129.211 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 429.97 Mbit/s
95th percentile per-packet one-way delay: 146.238 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 458.15 Mbit/s
95th percentile per-packet one-way delay: 153.252 ms
Loss rate: 0.75%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-02-05 17:49:54

End at: 2019-02-05 17:50:25

Local clock offset: 0.019 ms

Remote clock offset: 0.127 ms

Below is generated by plot.py at 2019-02-05 20:41:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 800.03 Mbit/s

95th percentile per-packet one-way delay: 113.559 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 401.33 Mbit/s

95th percentile per-packet one-way delay: 117.704 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 379.75 Mbit/s

95th percentile per-packet one-way delay: 71.726 ms

Loss rate: 0.00%

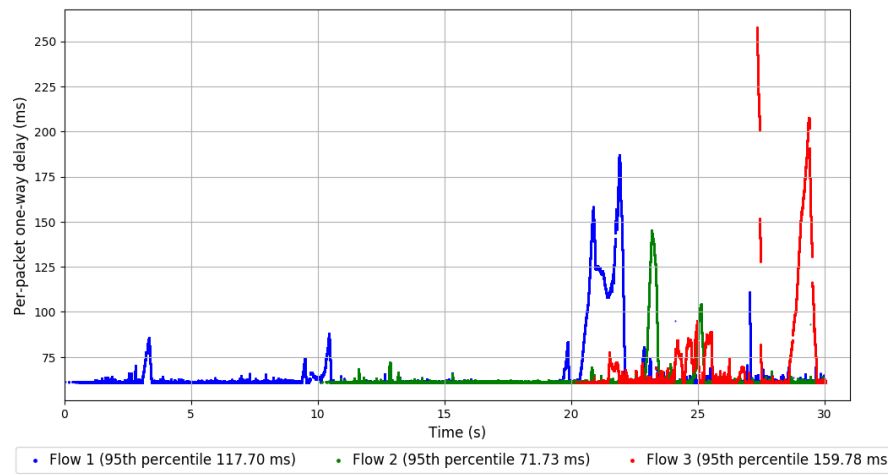
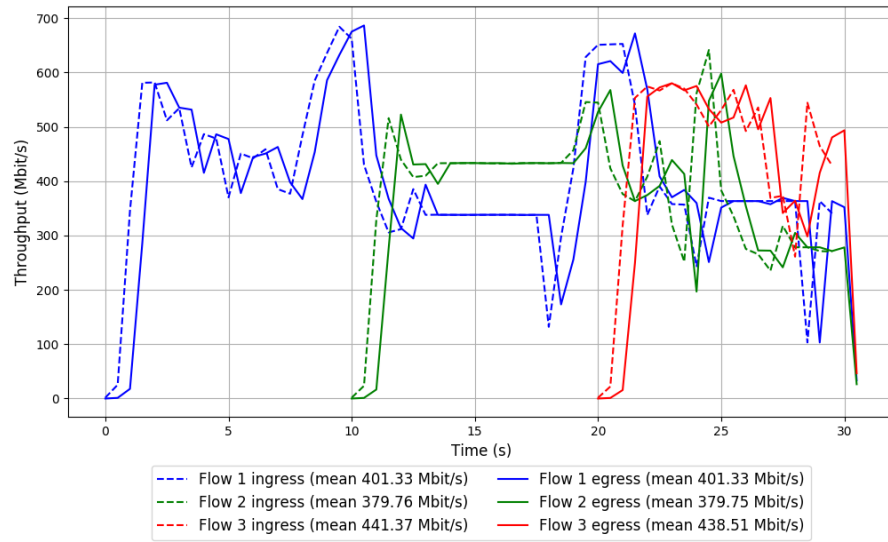
-- Flow 3:

Average throughput: 438.51 Mbit/s

95th percentile per-packet one-way delay: 159.777 ms

Loss rate: 0.65%

Run 2: Report of TCP BBR — Data Link

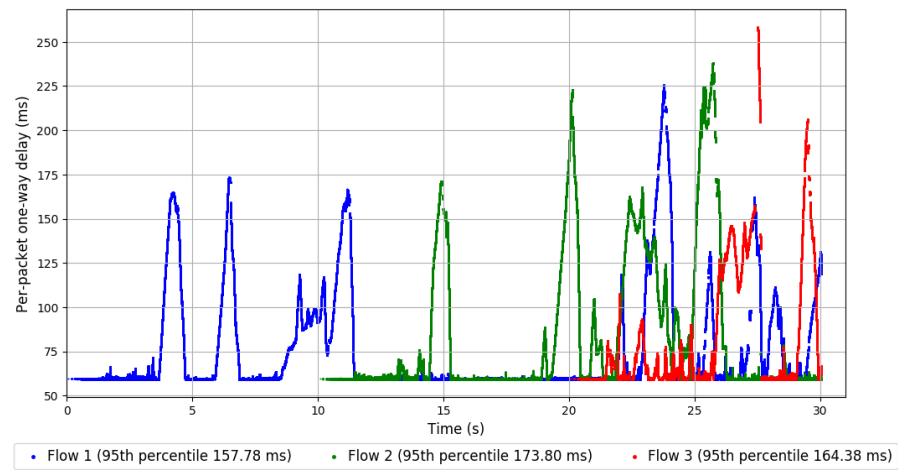
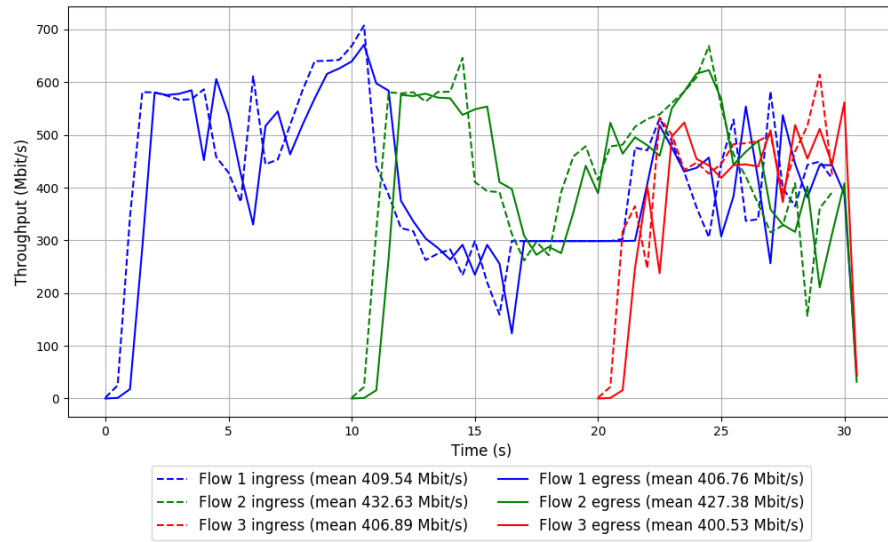


Run 3: Statistics of TCP BBR

Start at: 2019-02-05 18:25:41
End at: 2019-02-05 18:26:11
Local clock offset: -0.011 ms
Remote clock offset: -1.532 ms

Below is generated by plot.py at 2019-02-05 20:42:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 824.38 Mbit/s
95th percentile per-packet one-way delay: 163.591 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 406.76 Mbit/s
95th percentile per-packet one-way delay: 157.781 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 427.38 Mbit/s
95th percentile per-packet one-way delay: 173.798 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 400.53 Mbit/s
95th percentile per-packet one-way delay: 164.382 ms
Loss rate: 1.56%

Run 3: Report of TCP BBR — Data Link

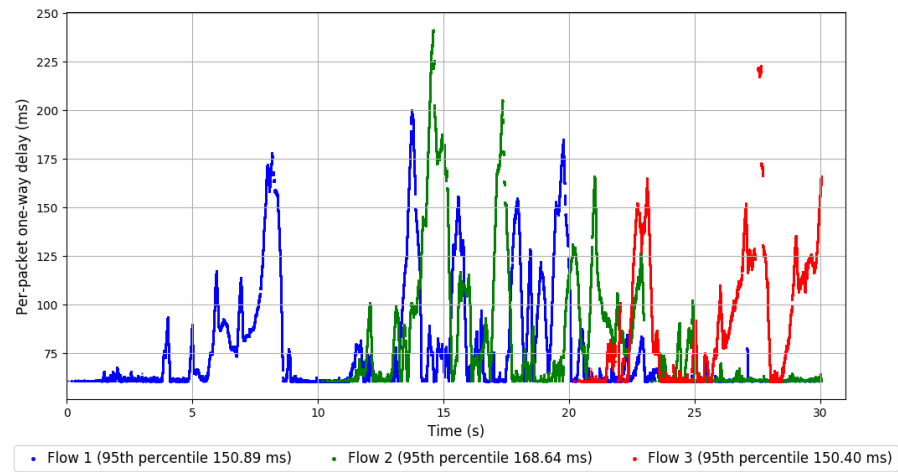
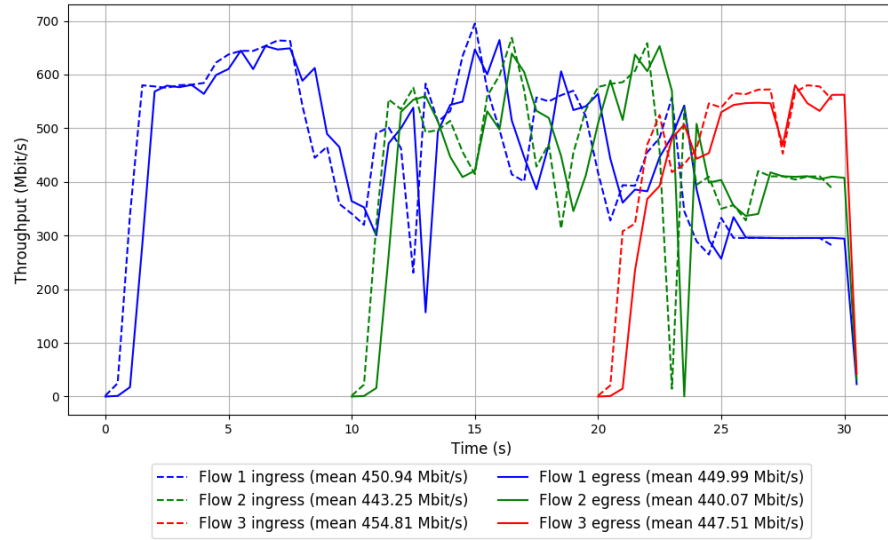


Run 4: Statistics of TCP BBR

Start at: 2019-02-05 19:01:28
End at: 2019-02-05 19:01:58
Local clock offset: -0.095 ms
Remote clock offset: -0.116 ms

Below is generated by plot.py at 2019-02-05 20:43:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 891.46 Mbit/s
95th percentile per-packet one-way delay: 154.494 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 449.99 Mbit/s
95th percentile per-packet one-way delay: 150.889 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 440.07 Mbit/s
95th percentile per-packet one-way delay: 168.641 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 447.51 Mbit/s
95th percentile per-packet one-way delay: 150.402 ms
Loss rate: 1.59%

Run 4: Report of TCP BBR — Data Link

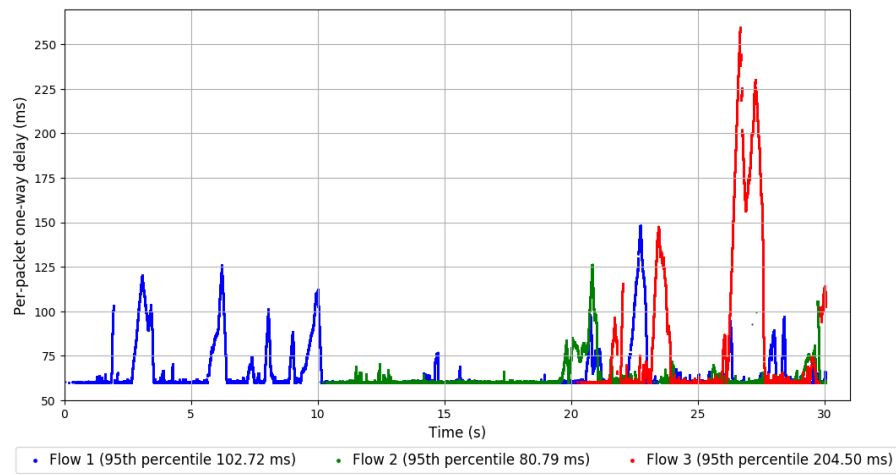
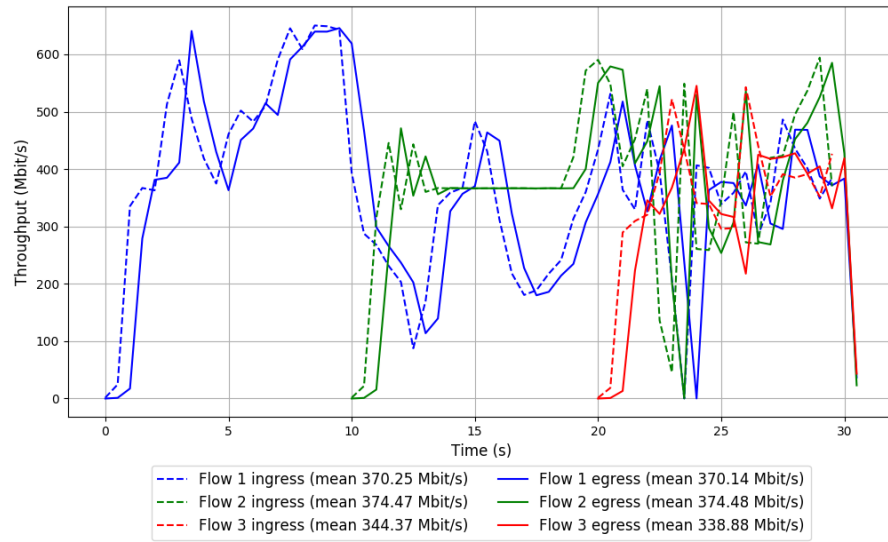


Run 5: Statistics of TCP BBR

Start at: 2019-02-05 19:37:17
End at: 2019-02-05 19:37:47
Local clock offset: -0.06 ms
Remote clock offset: -1.087 ms

Below is generated by plot.py at 2019-02-05 20:43:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 731.78 Mbit/s
95th percentile per-packet one-way delay: 113.282 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 370.14 Mbit/s
95th percentile per-packet one-way delay: 102.720 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 374.48 Mbit/s
95th percentile per-packet one-way delay: 80.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 338.88 Mbit/s
95th percentile per-packet one-way delay: 204.498 ms
Loss rate: 1.59%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-02-05 17:30:53

End at: 2019-02-05 17:31:23

Local clock offset: 0.043 ms

Remote clock offset: 0.001 ms

Below is generated by plot.py at 2019-02-05 20:45:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 533.07 Mbit/s

95th percentile per-packet one-way delay: 72.146 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 287.59 Mbit/s

95th percentile per-packet one-way delay: 70.476 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 245.64 Mbit/s

95th percentile per-packet one-way delay: 72.620 ms

Loss rate: 0.08%

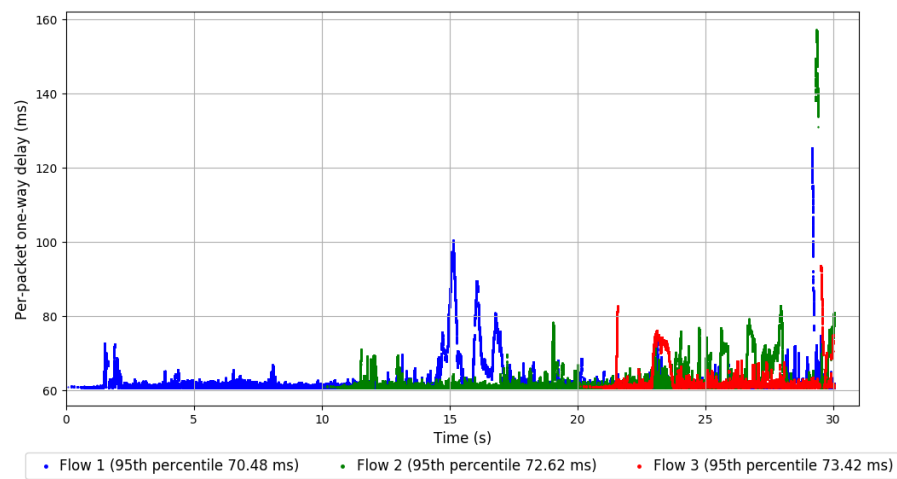
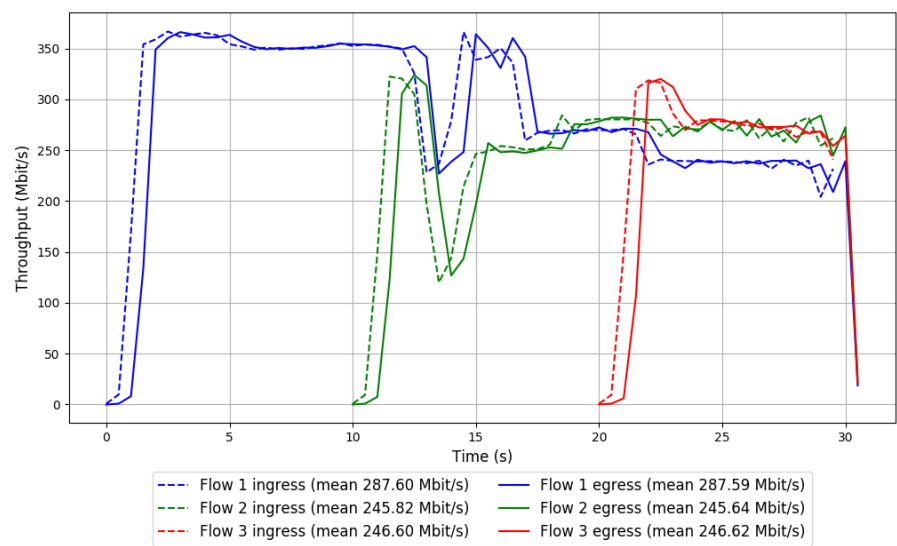
-- Flow 3:

Average throughput: 246.62 Mbit/s

95th percentile per-packet one-way delay: 73.420 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link

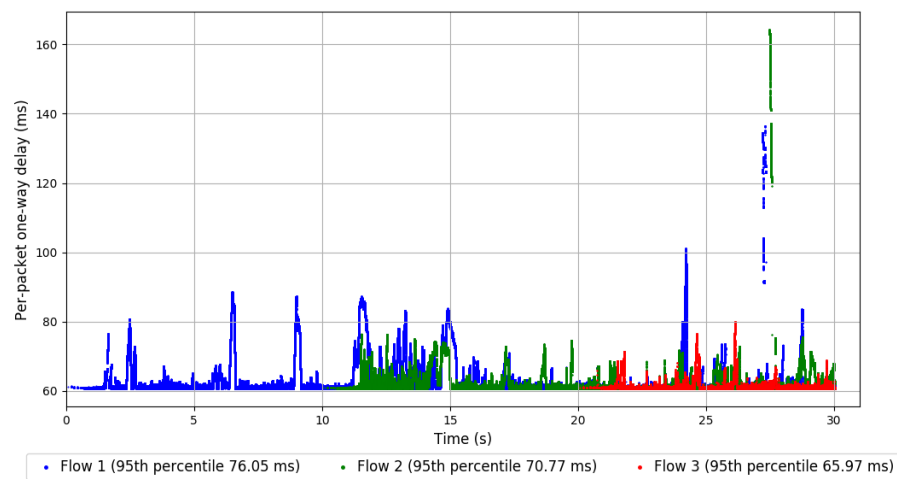
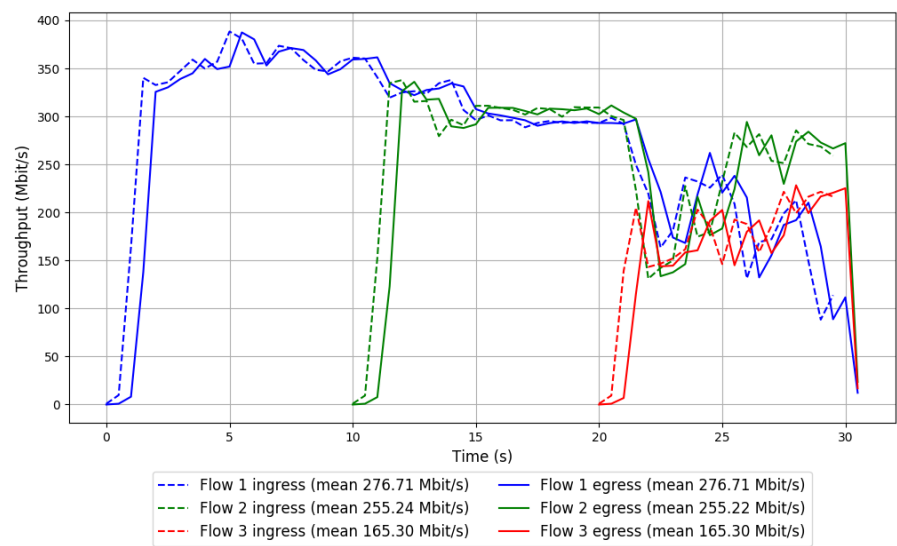


Run 2: Statistics of Copa

Start at: 2019-02-05 18:06:53
End at: 2019-02-05 18:07:23
Local clock offset: -0.002 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2019-02-05 20:45:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 501.66 Mbit/s
95th percentile per-packet one-way delay: 72.507 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 276.71 Mbit/s
95th percentile per-packet one-way delay: 76.047 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 255.22 Mbit/s
95th percentile per-packet one-way delay: 70.765 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.30 Mbit/s
95th percentile per-packet one-way delay: 65.968 ms
Loss rate: 0.00%

Run 2: Report of Copa — Data Link

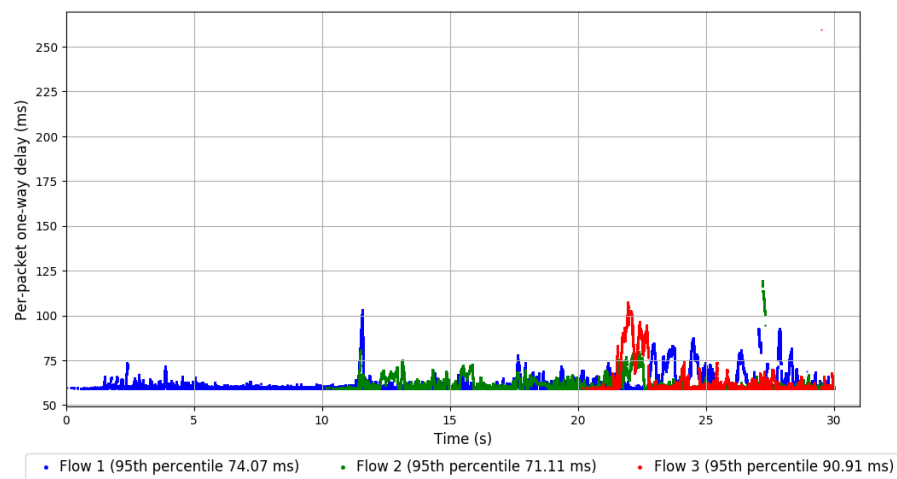
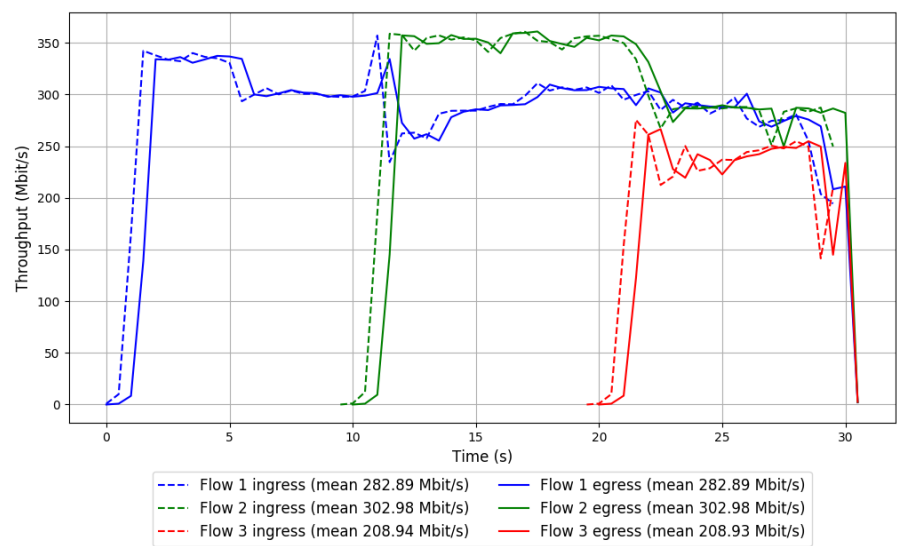


Run 3: Statistics of Copa

Start at: 2019-02-05 18:42:41
End at: 2019-02-05 18:43:11
Local clock offset: -0.029 ms
Remote clock offset: -1.439 ms

Below is generated by plot.py at 2019-02-05 20:46:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 554.36 Mbit/s
95th percentile per-packet one-way delay: 74.187 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 282.89 Mbit/s
95th percentile per-packet one-way delay: 74.066 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 302.98 Mbit/s
95th percentile per-packet one-way delay: 71.112 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 208.93 Mbit/s
95th percentile per-packet one-way delay: 90.912 ms
Loss rate: 0.00%

Run 3: Report of Copa — Data Link

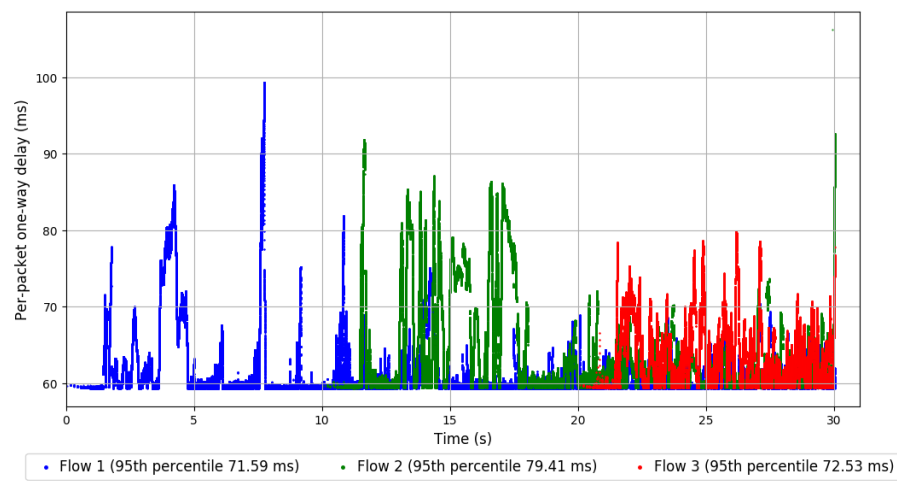
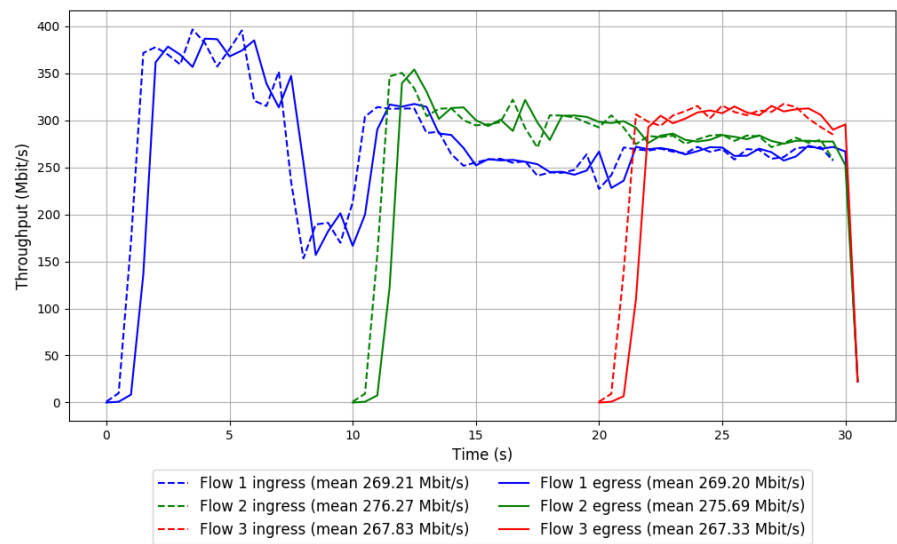


Run 4: Statistics of Copa

Start at: 2019-02-05 19:18:27
End at: 2019-02-05 19:18:57
Local clock offset: -0.061 ms
Remote clock offset: -1.436 ms

Below is generated by plot.py at 2019-02-05 21:00:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 541.69 Mbit/s
95th percentile per-packet one-way delay: 75.842 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 269.20 Mbit/s
95th percentile per-packet one-way delay: 71.594 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 275.69 Mbit/s
95th percentile per-packet one-way delay: 79.405 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 267.33 Mbit/s
95th percentile per-packet one-way delay: 72.535 ms
Loss rate: 0.17%

Run 4: Report of Copa — Data Link

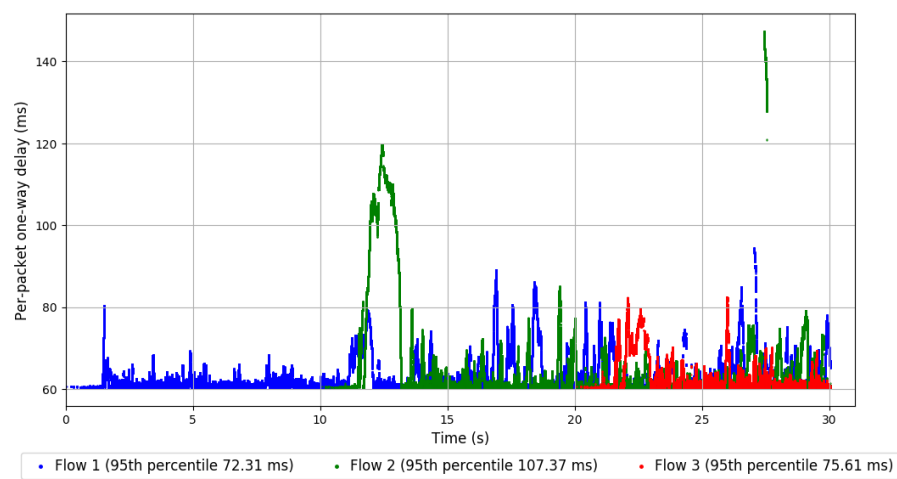
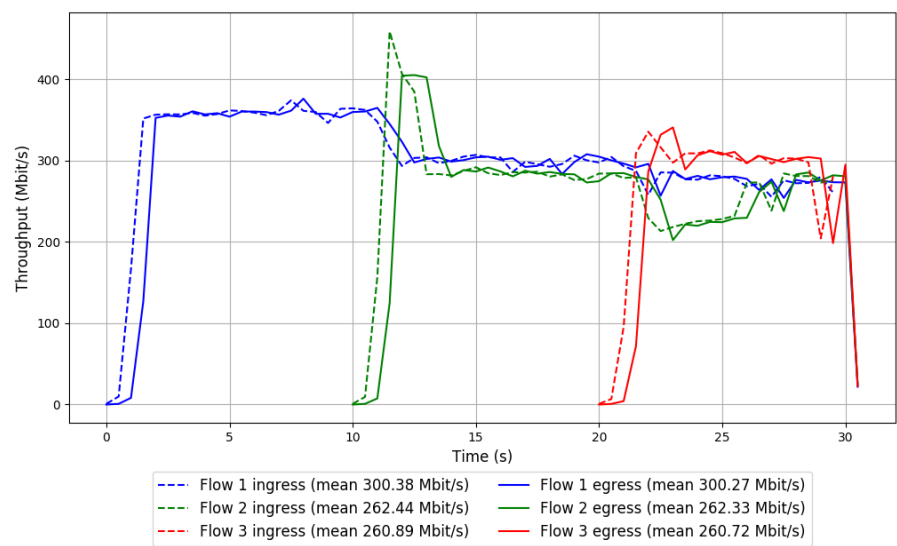


Run 5: Statistics of Copa

Start at: 2019-02-05 19:54:12
End at: 2019-02-05 19:54:42
Local clock offset: -0.044 ms
Remote clock offset: -0.383 ms

Below is generated by plot.py at 2019-02-05 21:02:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 561.52 Mbit/s
95th percentile per-packet one-way delay: 77.637 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 300.27 Mbit/s
95th percentile per-packet one-way delay: 72.313 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 262.33 Mbit/s
95th percentile per-packet one-way delay: 107.374 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 260.72 Mbit/s
95th percentile per-packet one-way delay: 75.609 ms
Loss rate: 0.08%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-02-05 17:25:29

End at: 2019-02-05 17:25:59

Local clock offset: 0.151 ms

Remote clock offset: 1.271 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 804.81 Mbit/s

95th percentile per-packet one-way delay: 86.487 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 351.30 Mbit/s

95th percentile per-packet one-way delay: 63.067 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 459.58 Mbit/s

95th percentile per-packet one-way delay: 65.583 ms

Loss rate: 0.00%

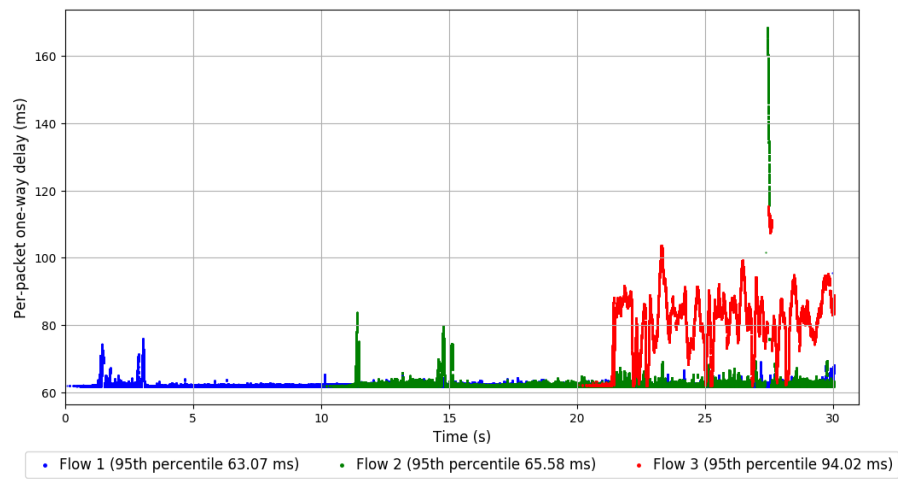
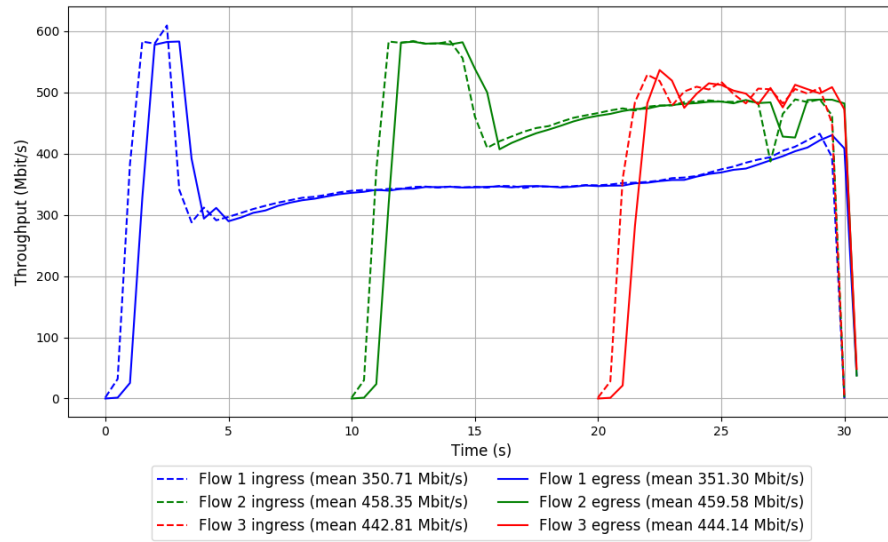
-- Flow 3:

Average throughput: 444.14 Mbit/s

95th percentile per-packet one-way delay: 94.021 ms

Loss rate: 0.13%

Run 1: Report of TCP Cubic — Data Link

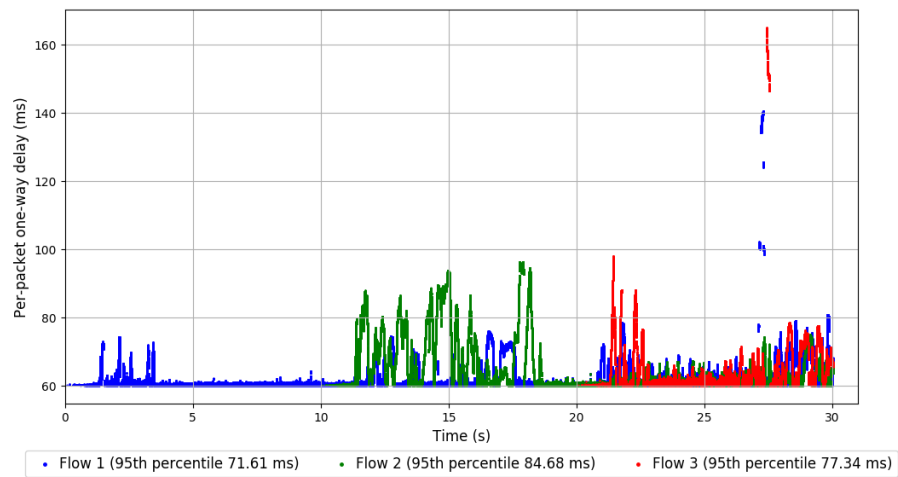
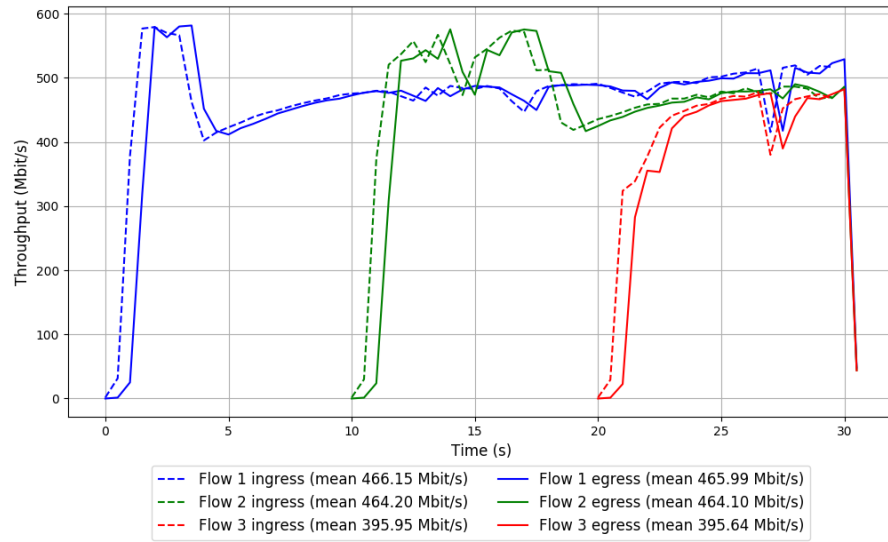


Run 2: Statistics of TCP Cubic

Start at: 2019-02-05 18:01:20
End at: 2019-02-05 18:01:50
Local clock offset: 0.017 ms
Remote clock offset: -0.669 ms

Below is generated by plot.py at 2019-02-05 21:02:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 906.76 Mbit/s
95th percentile per-packet one-way delay: 77.093 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 465.99 Mbit/s
95th percentile per-packet one-way delay: 71.613 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 464.10 Mbit/s
95th percentile per-packet one-way delay: 84.680 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 395.64 Mbit/s
95th percentile per-packet one-way delay: 77.340 ms
Loss rate: 0.07%

Run 2: Report of TCP Cubic — Data Link

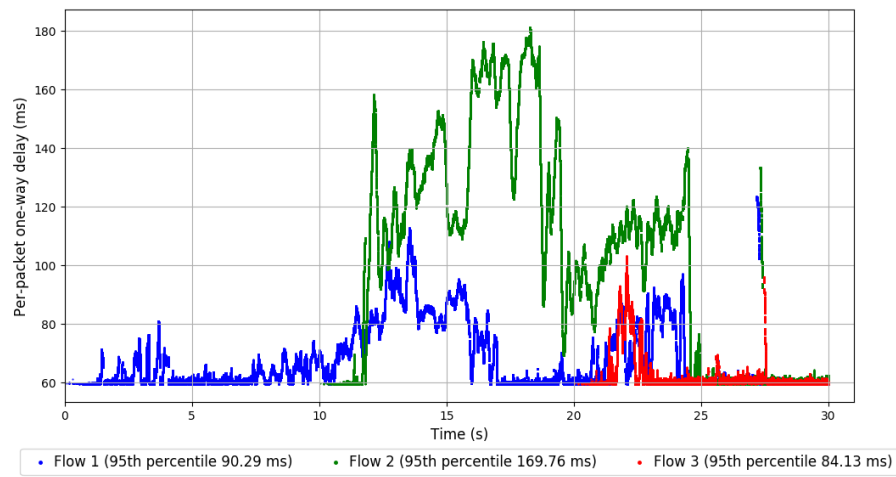
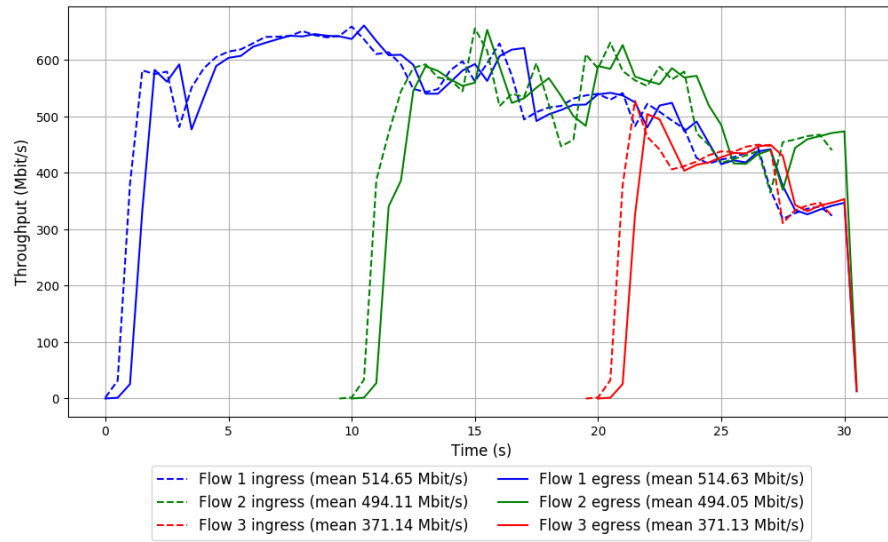


Run 3: Statistics of TCP Cubic

Start at: 2019-02-05 18:37:06
End at: 2019-02-05 18:37:36
Local clock offset: -0.039 ms
Remote clock offset: -1.318 ms

Below is generated by plot.py at 2019-02-05 21:03:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 967.26 Mbit/s
95th percentile per-packet one-way delay: 149.158 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 514.63 Mbit/s
95th percentile per-packet one-way delay: 90.292 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 494.05 Mbit/s
95th percentile per-packet one-way delay: 169.760 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 371.13 Mbit/s
95th percentile per-packet one-way delay: 84.132 ms
Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link

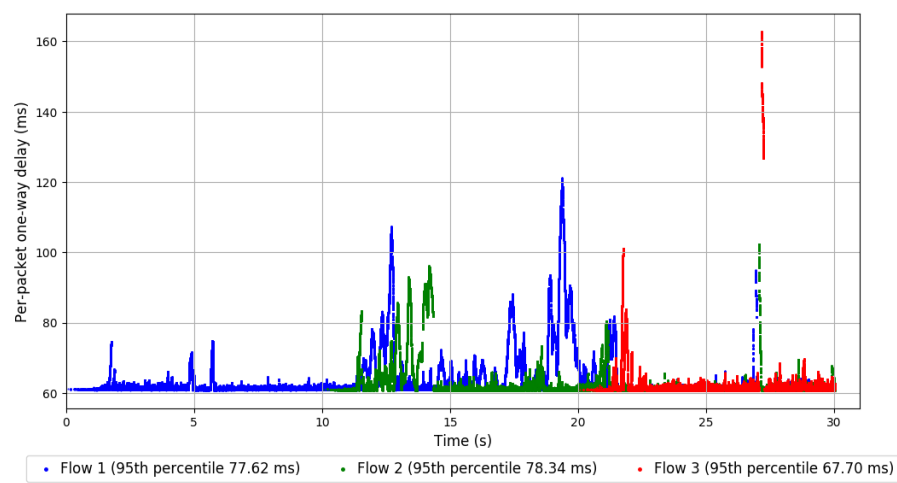
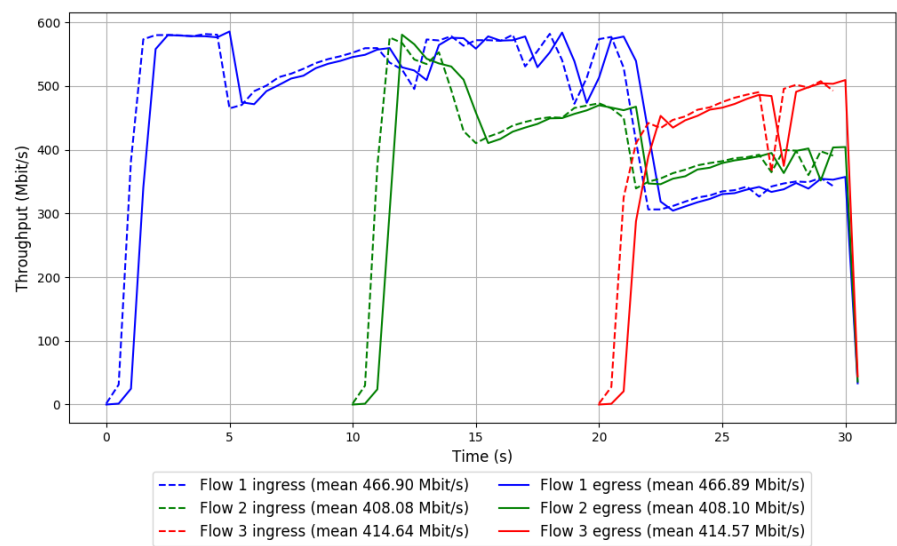


Run 4: Statistics of TCP Cubic

Start at: 2019-02-05 19:13:01
End at: 2019-02-05 19:13:31
Local clock offset: -0.057 ms
Remote clock offset: -0.067 ms

Below is generated by plot.py at 2019-02-05 21:03:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 876.49 Mbit/s
95th percentile per-packet one-way delay: 76.938 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 466.89 Mbit/s
95th percentile per-packet one-way delay: 77.624 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 408.10 Mbit/s
95th percentile per-packet one-way delay: 78.344 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 414.57 Mbit/s
95th percentile per-packet one-way delay: 67.705 ms
Loss rate: 0.01%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-02-05 19:48:40

End at: 2019-02-05 19:49:10

Local clock offset: -0.084 ms

Remote clock offset: 0.038 ms

Below is generated by plot.py at 2019-02-05 21:03:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 903.77 Mbit/s

95th percentile per-packet one-way delay: 129.020 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 509.54 Mbit/s

95th percentile per-packet one-way delay: 141.150 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 397.59 Mbit/s

95th percentile per-packet one-way delay: 70.552 ms

Loss rate: 0.00%

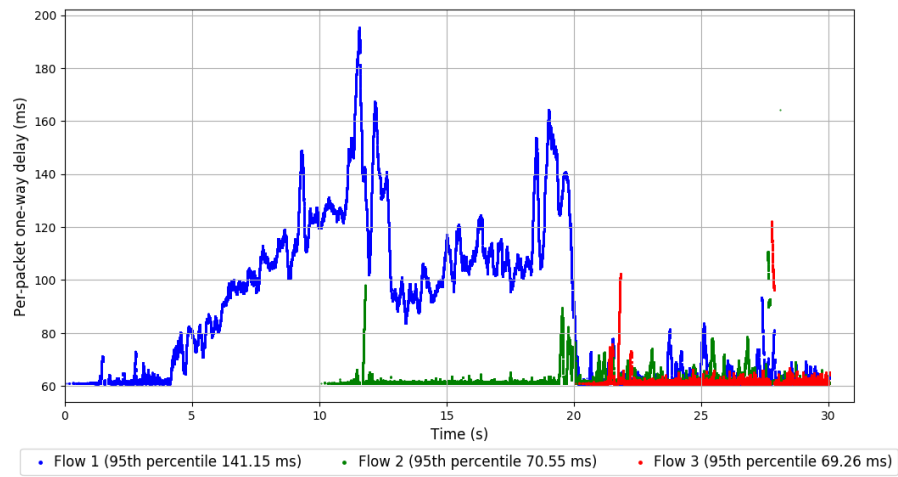
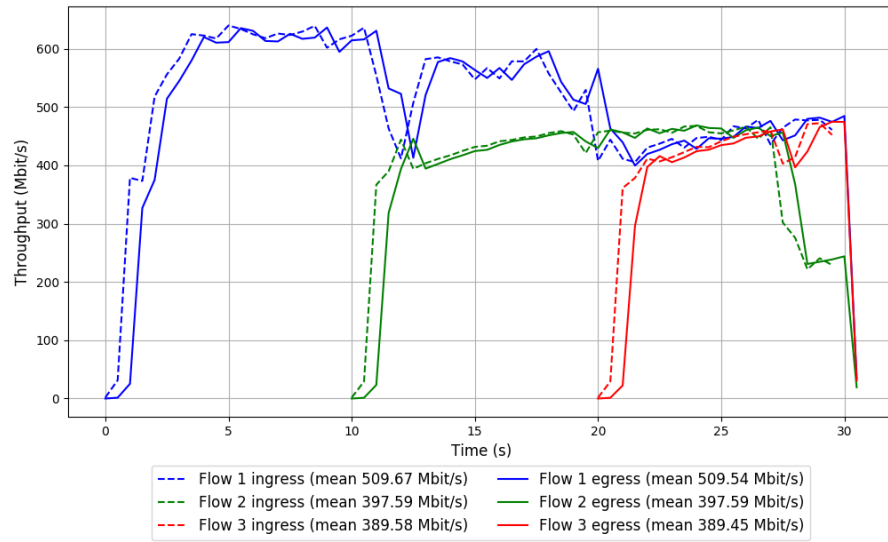
-- Flow 3:

Average throughput: 389.45 Mbit/s

95th percentile per-packet one-way delay: 69.264 ms

Loss rate: 0.04%

Run 5: Report of TCP Cubic — Data Link

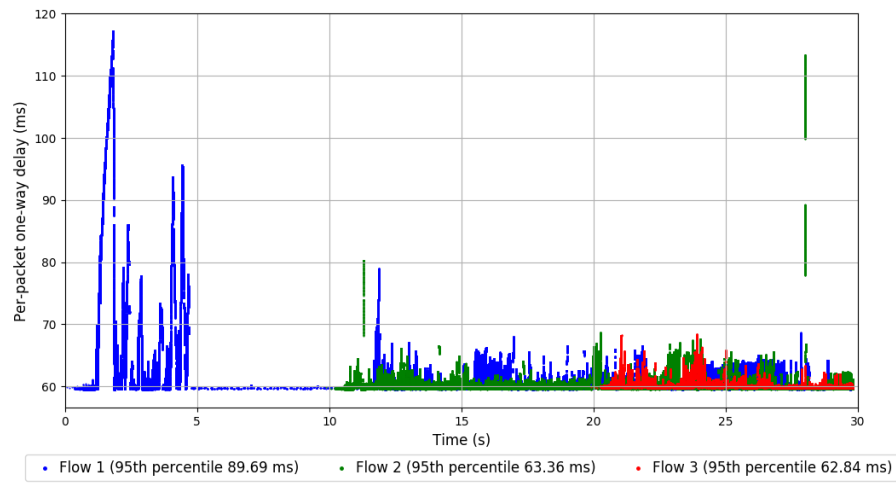
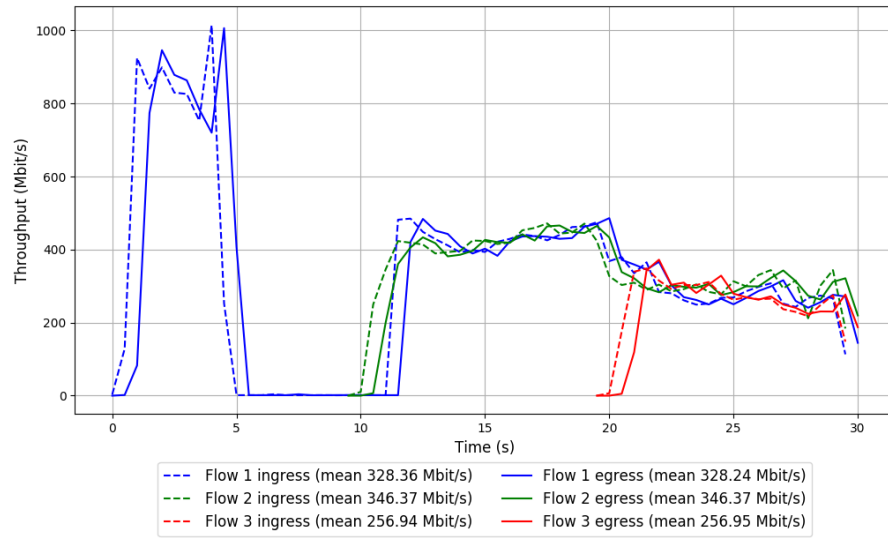


Run 1: Statistics of FillP

Start at: 2019-02-05 17:22:37
End at: 2019-02-05 17:23:07
Local clock offset: 0.088 ms
Remote clock offset: -1.081 ms

Below is generated by plot.py at 2019-02-05 21:03:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 645.68 Mbit/s
95th percentile per-packet one-way delay: 75.723 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 328.24 Mbit/s
95th percentile per-packet one-way delay: 89.691 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 346.37 Mbit/s
95th percentile per-packet one-way delay: 63.359 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 256.95 Mbit/s
95th percentile per-packet one-way delay: 62.843 ms
Loss rate: 0.00%

Run 1: Report of FillP — Data Link

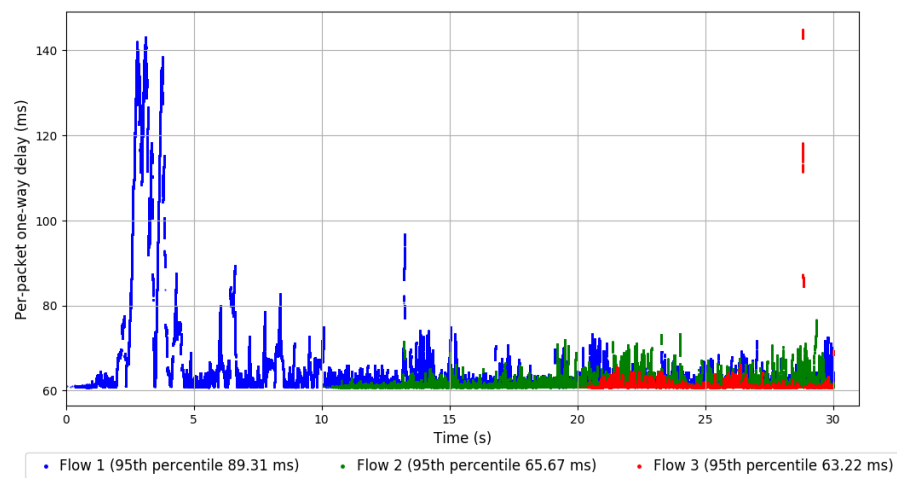
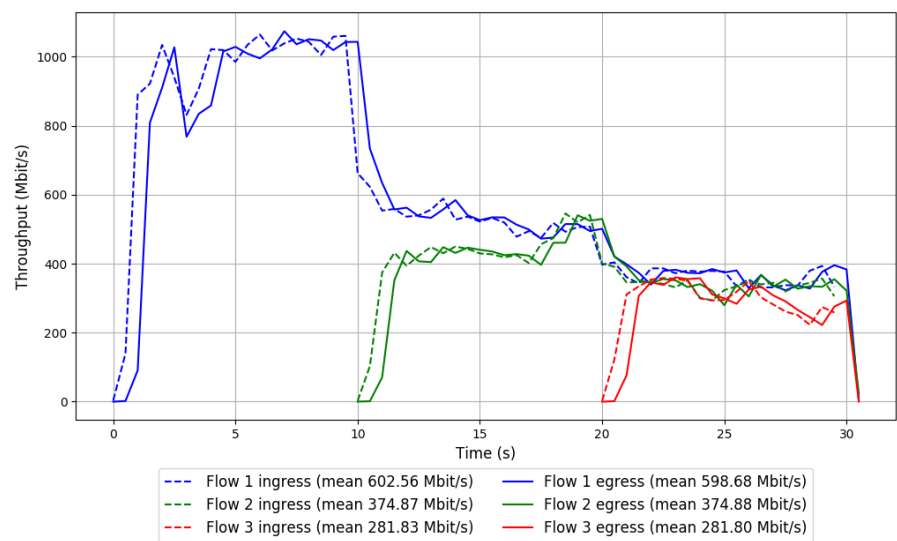


Run 2: Statistics of FillP

Start at: 2019-02-05 17:58:16
End at: 2019-02-05 17:58:46
Local clock offset: 0.016 ms
Remote clock offset: -0.042 ms

Below is generated by plot.py at 2019-02-05 21:21:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 941.61 Mbit/s
95th percentile per-packet one-way delay: 77.677 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 598.68 Mbit/s
95th percentile per-packet one-way delay: 89.311 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 374.88 Mbit/s
95th percentile per-packet one-way delay: 65.665 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 281.80 Mbit/s
95th percentile per-packet one-way delay: 63.224 ms
Loss rate: 0.00%

Run 2: Report of FillP — Data Link

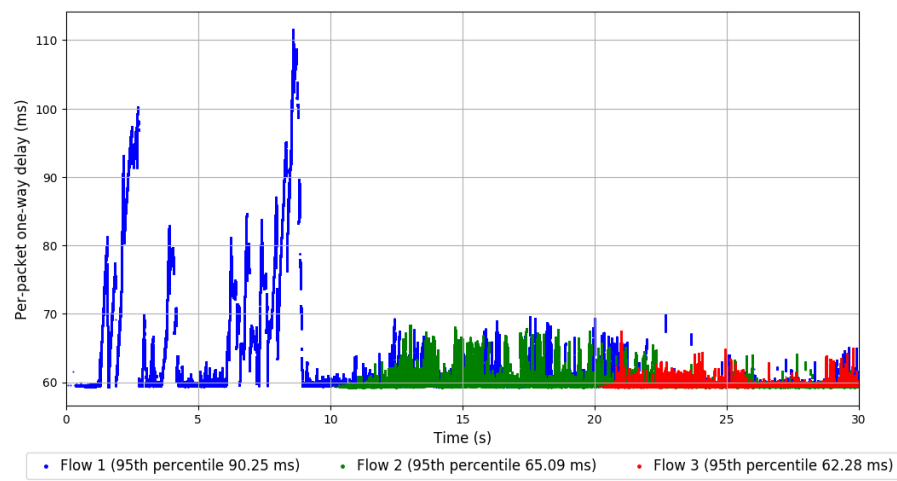
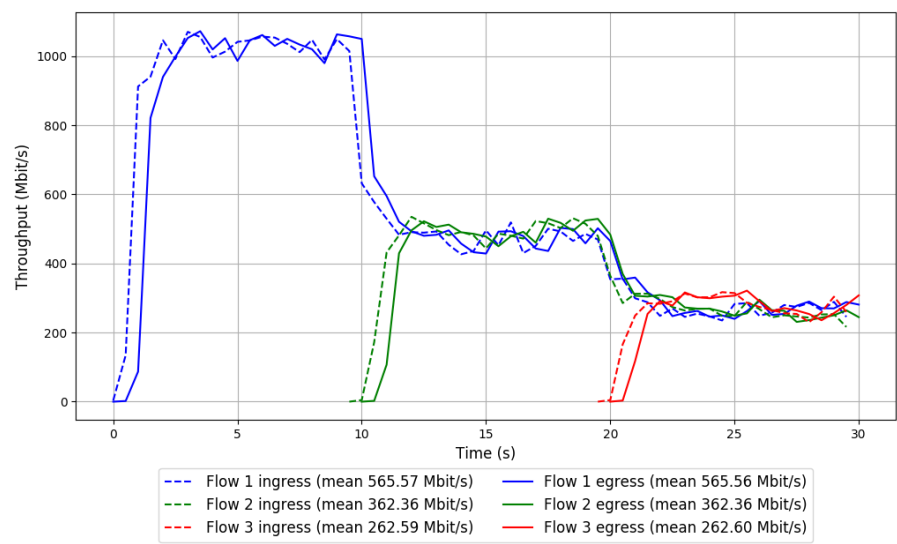


Run 3: Statistics of FillP

Start at: 2019-02-05 18:34:04
End at: 2019-02-05 18:34:34
Local clock offset: -0.011 ms
Remote clock offset: -1.475 ms

Below is generated by plot.py at 2019-02-05 21:22:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 894.06 Mbit/s
95th percentile per-packet one-way delay: 82.628 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 565.56 Mbit/s
95th percentile per-packet one-way delay: 90.245 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 362.36 Mbit/s
95th percentile per-packet one-way delay: 65.086 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 262.60 Mbit/s
95th percentile per-packet one-way delay: 62.281 ms
Loss rate: 0.00%

Run 3: Report of FillP — Data Link

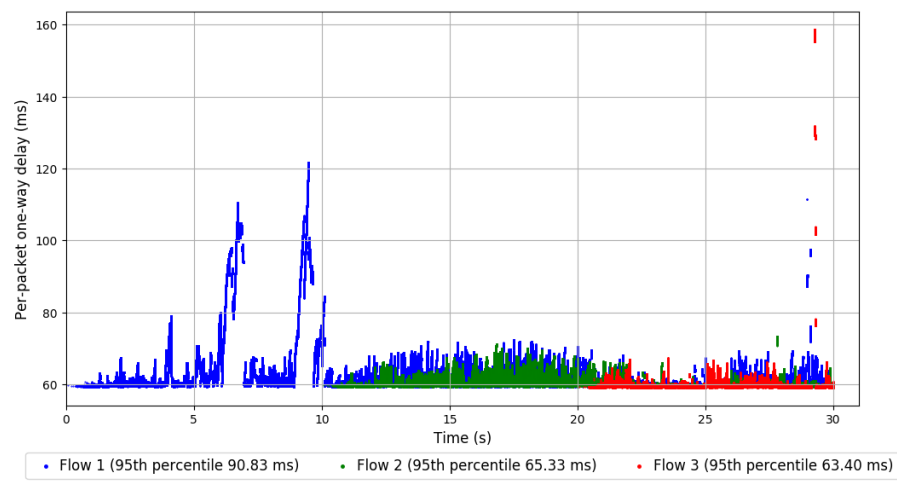
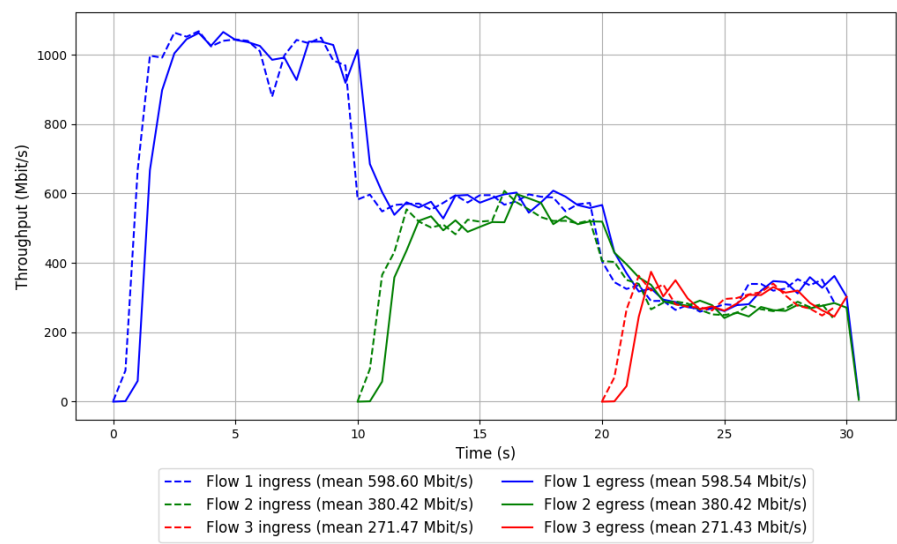


Run 4: Statistics of FillP

Start at: 2019-02-05 19:09:56
End at: 2019-02-05 19:10:26
Local clock offset: -0.054 ms
Remote clock offset: -1.538 ms

Below is generated by plot.py at 2019-02-05 21:23:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 941.58 Mbit/s
95th percentile per-packet one-way delay: 77.926 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 598.54 Mbit/s
95th percentile per-packet one-way delay: 90.835 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 380.42 Mbit/s
95th percentile per-packet one-way delay: 65.326 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 271.43 Mbit/s
95th percentile per-packet one-way delay: 63.398 ms
Loss rate: 0.00%

Run 4: Report of FillP — Data Link

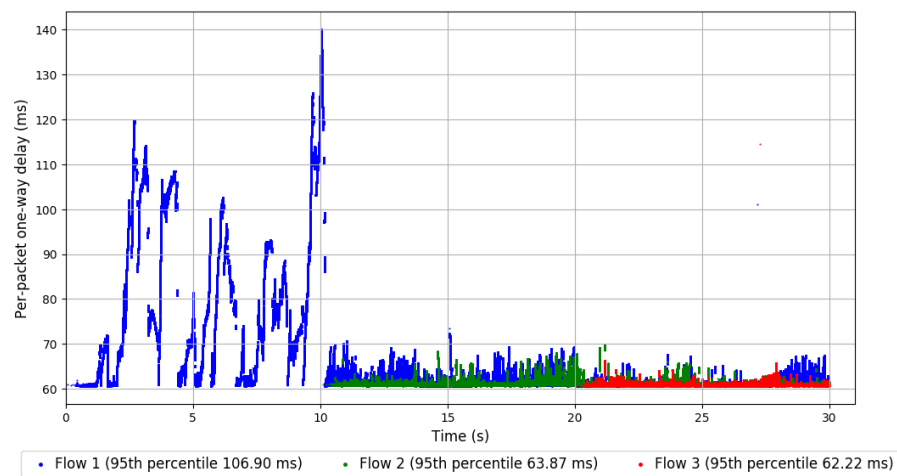
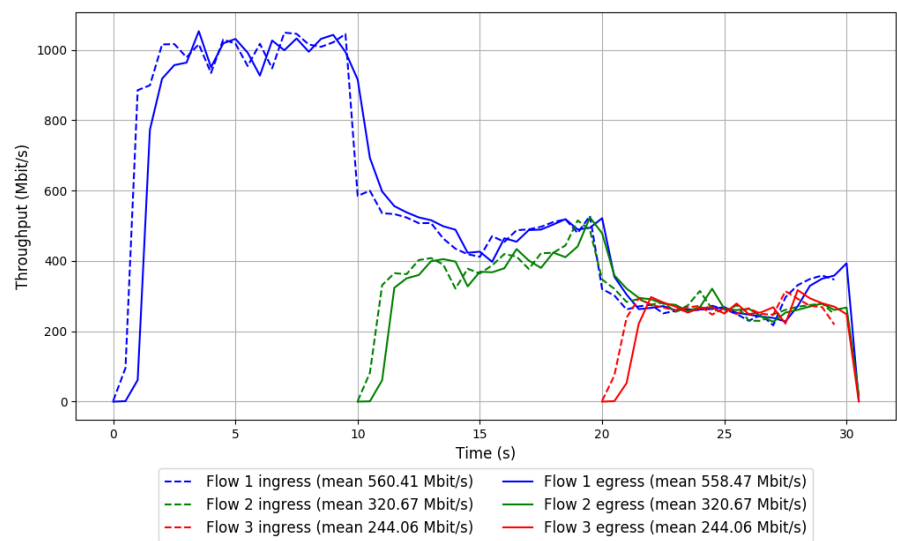


Run 5: Statistics of FillP

Start at: 2019-02-05 19:45:40
End at: 2019-02-05 19:46:10
Local clock offset: -0.042 ms
Remote clock offset: -0.072 ms

Below is generated by plot.py at 2019-02-05 21:23:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 852.54 Mbit/s
95th percentile per-packet one-way delay: 103.788 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 558.47 Mbit/s
95th percentile per-packet one-way delay: 106.901 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 320.67 Mbit/s
95th percentile per-packet one-way delay: 63.867 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.06 Mbit/s
95th percentile per-packet one-way delay: 62.216 ms
Loss rate: 0.00%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-02-05 17:32:56

End at: 2019-02-05 17:33:26

Local clock offset: 0.043 ms

Remote clock offset: 0.16 ms

Below is generated by plot.py at 2019-02-05 21:23:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 831.58 Mbit/s

95th percentile per-packet one-way delay: 65.704 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 539.13 Mbit/s

95th percentile per-packet one-way delay: 66.099 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 309.91 Mbit/s

95th percentile per-packet one-way delay: 65.859 ms

Loss rate: 0.00%

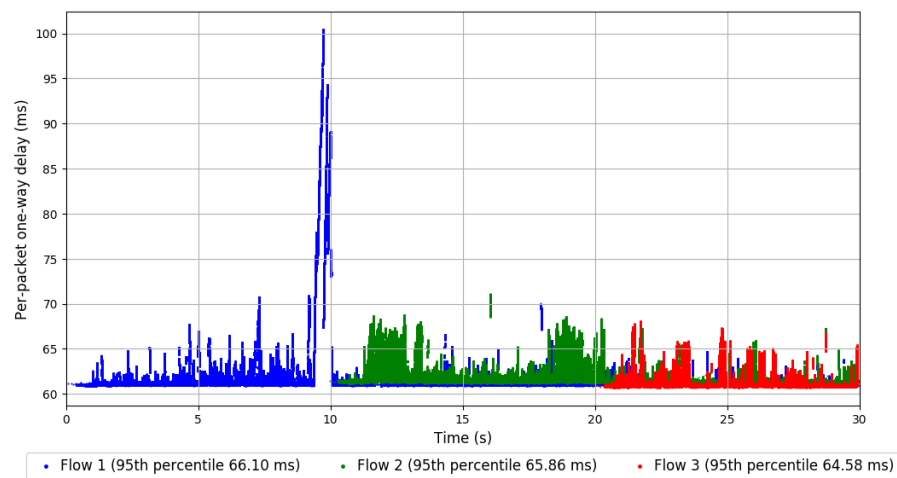
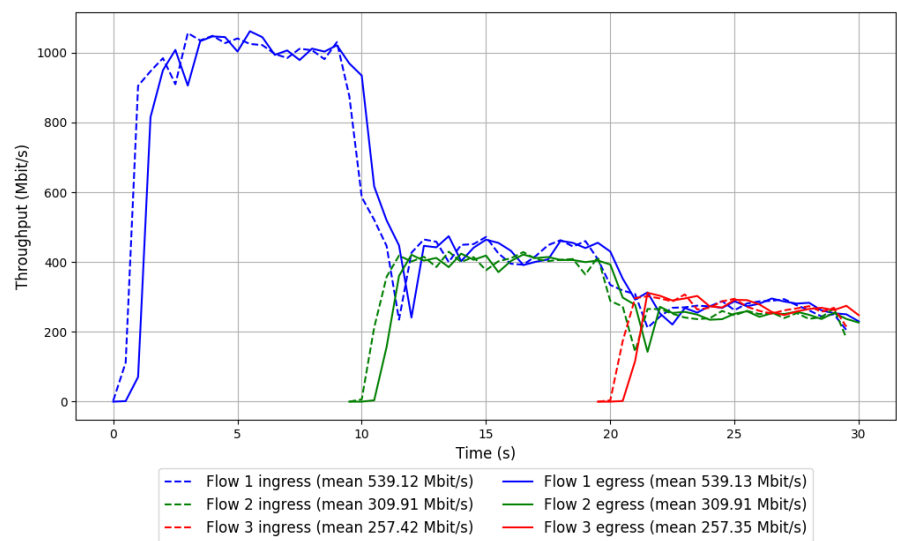
-- Flow 3:

Average throughput: 257.35 Mbit/s

95th percentile per-packet one-way delay: 64.584 ms

Loss rate: 0.00%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-02-05 18:08:53

End at: 2019-02-05 18:09:23

Local clock offset: -0.009 ms

Remote clock offset: 0.181 ms

Below is generated by plot.py at 2019-02-05 21:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 872.85 Mbit/s

95th percentile per-packet one-way delay: 64.397 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 575.63 Mbit/s

95th percentile per-packet one-way delay: 64.941 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 323.51 Mbit/s

95th percentile per-packet one-way delay: 63.463 ms

Loss rate: 0.00%

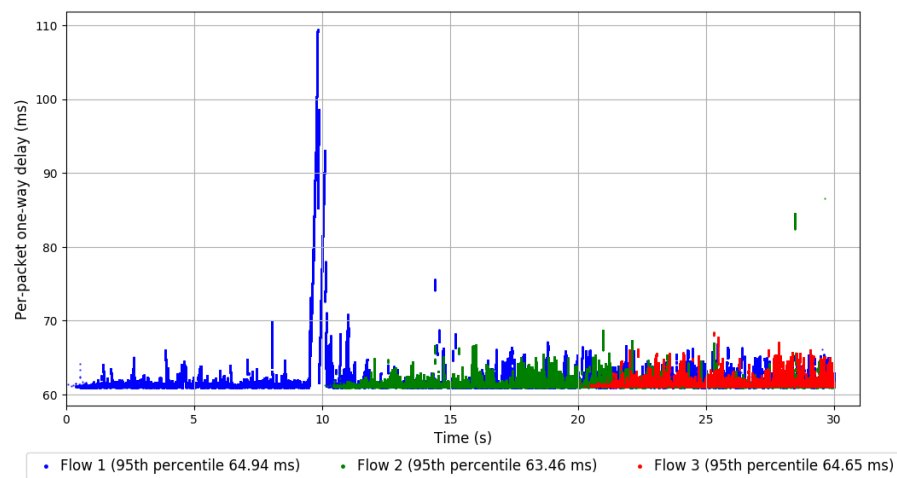
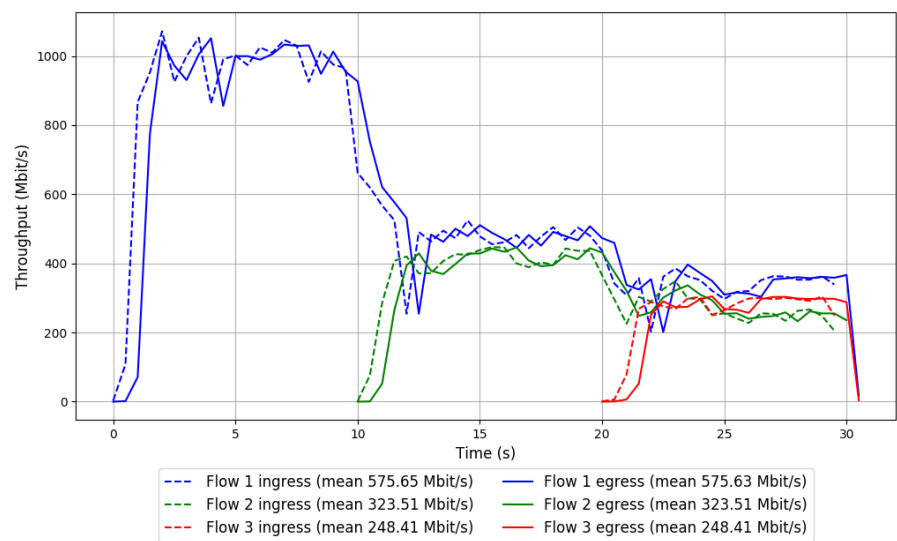
-- Flow 3:

Average throughput: 248.41 Mbit/s

95th percentile per-packet one-way delay: 64.649 ms

Loss rate: 0.00%

Run 2: Report of FillP-Sheep — Data Link

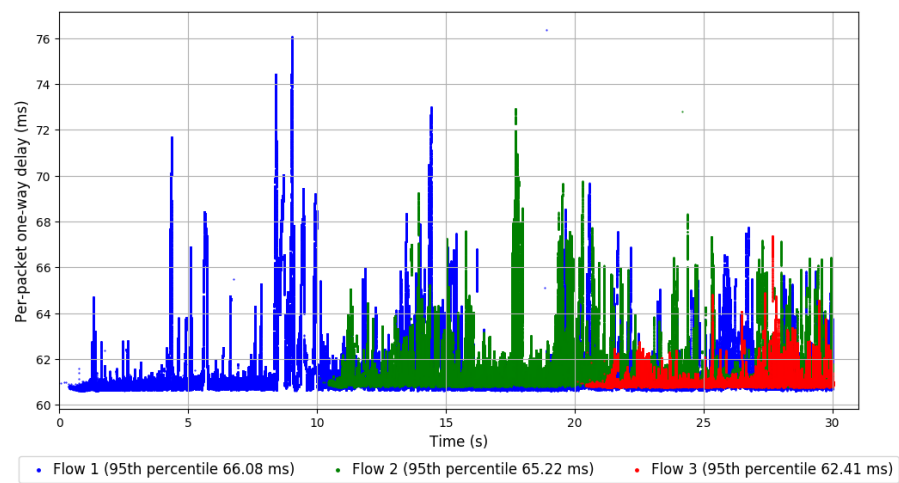
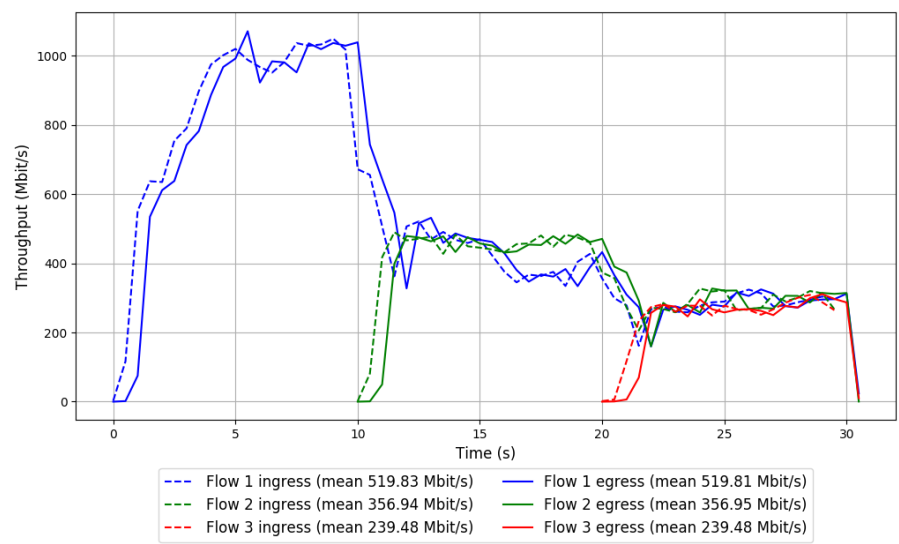


Run 3: Statistics of FillP-Sheep

Start at: 2019-02-05 18:44:47
End at: 2019-02-05 18:45:17
Local clock offset: -0.098 ms
Remote clock offset: -0.123 ms

Below is generated by plot.py at 2019-02-05 21:23:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 836.16 Mbit/s
95th percentile per-packet one-way delay: 65.462 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 519.81 Mbit/s
95th percentile per-packet one-way delay: 66.082 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 356.95 Mbit/s
95th percentile per-packet one-way delay: 65.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 239.48 Mbit/s
95th percentile per-packet one-way delay: 62.406 ms
Loss rate: 0.00%

Run 3: Report of FillP-Sheep — Data Link

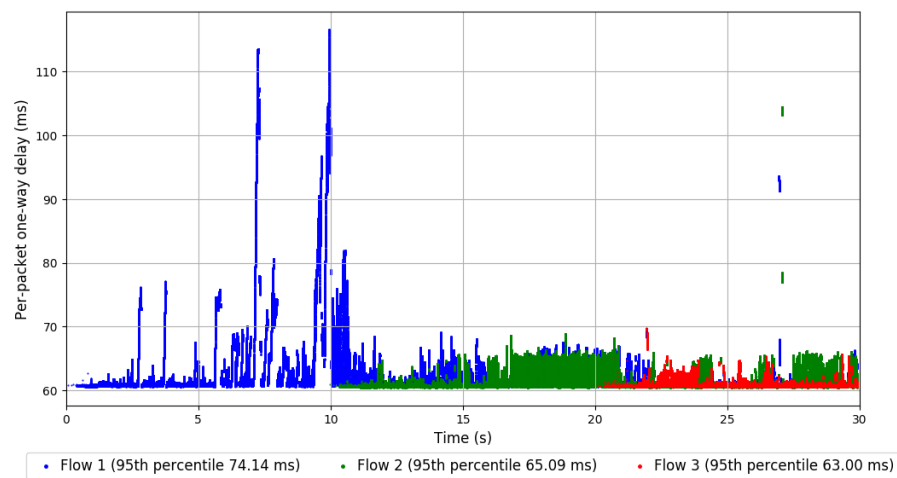
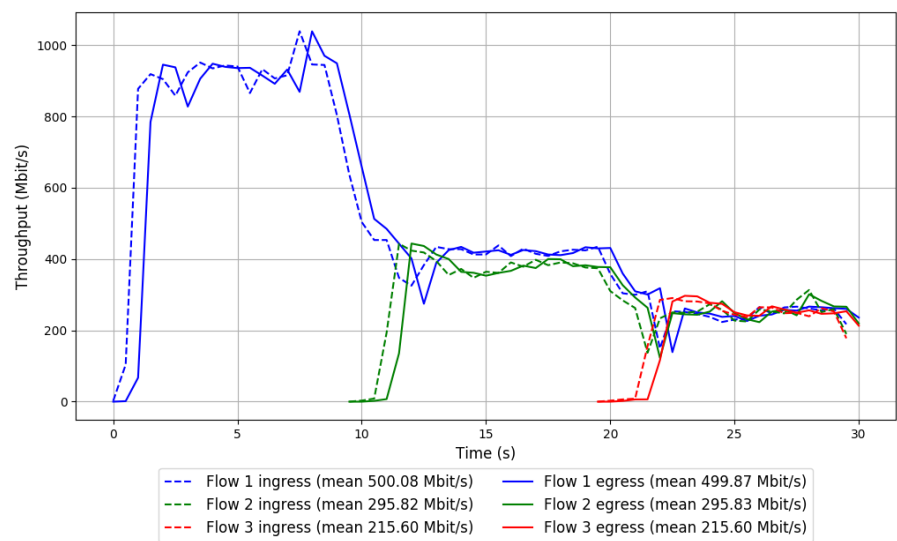


Run 4: Statistics of FillP-Sheep

Start at: 2019-02-05 19:20:31
End at: 2019-02-05 19:21:01
Local clock offset: -0.059 ms
Remote clock offset: -0.222 ms

Below is generated by plot.py at 2019-02-05 21:23:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 768.85 Mbit/s
95th percentile per-packet one-way delay: 70.634 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 499.87 Mbit/s
95th percentile per-packet one-way delay: 74.139 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 295.83 Mbit/s
95th percentile per-packet one-way delay: 65.091 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 215.60 Mbit/s
95th percentile per-packet one-way delay: 63.003 ms
Loss rate: 0.00%

Run 4: Report of FillP-Sheep — Data Link

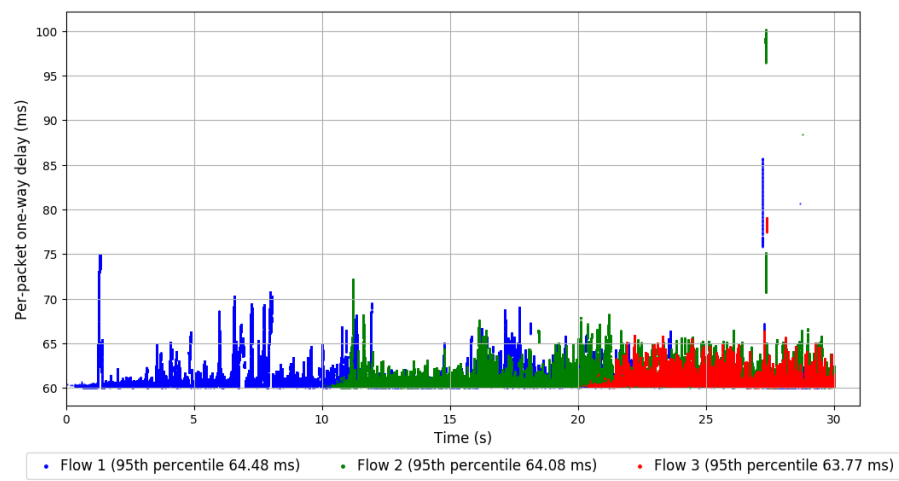
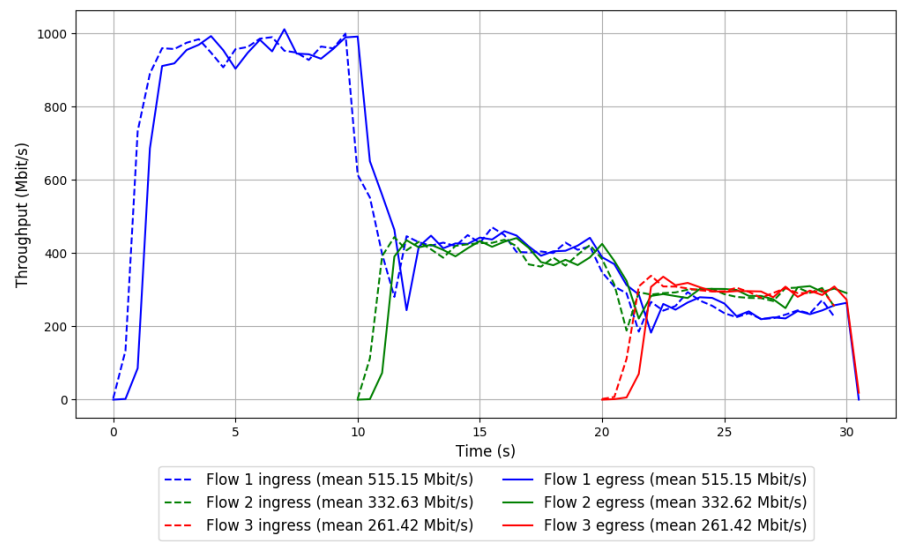


Run 5: Statistics of FillP-Sheep

Start at: 2019-02-05 19:56:18
End at: 2019-02-05 19:56:48
Local clock offset: -0.054 ms
Remote clock offset: -0.609 ms

Below is generated by plot.py at 2019-02-05 21:40:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 823.09 Mbit/s
95th percentile per-packet one-way delay: 64.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 515.15 Mbit/s
95th percentile per-packet one-way delay: 64.481 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 332.62 Mbit/s
95th percentile per-packet one-way delay: 64.080 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 261.42 Mbit/s
95th percentile per-packet one-way delay: 63.774 ms
Loss rate: 0.00%

Run 5: Report of FillP-Sheep — Data Link

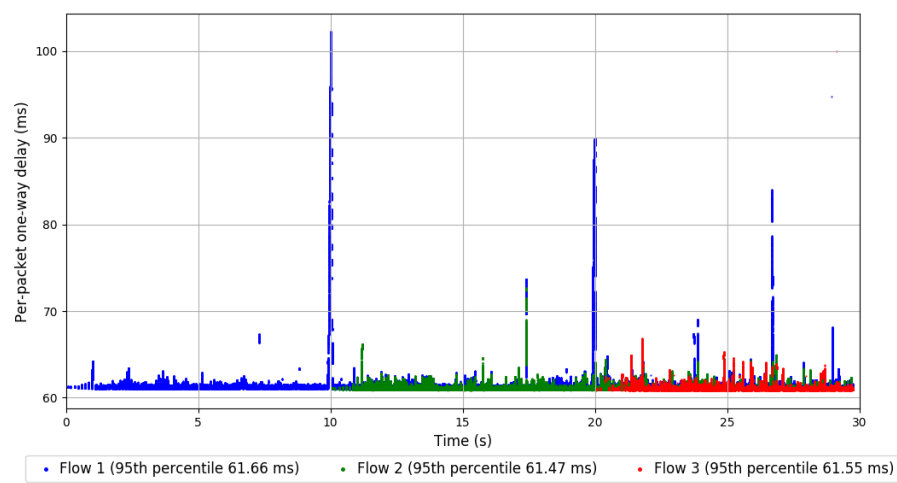
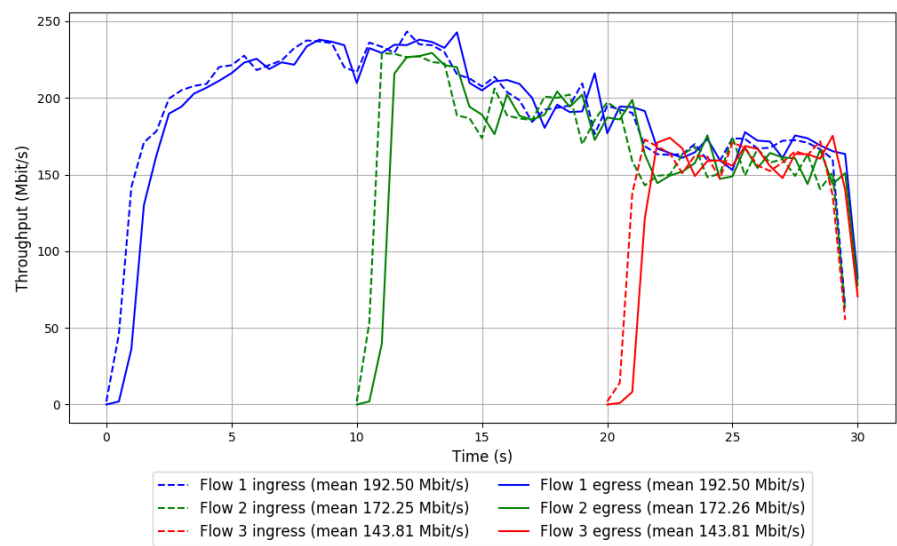


```
Run 1: Statistics of Indigo

Start at: 2019-02-05 17:29:07
End at: 2019-02-05 17:29:37
Local clock offset: 0.033 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2019-02-05 21:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.49 Mbit/s
95th percentile per-packet one-way delay: 61.586 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 192.50 Mbit/s
95th percentile per-packet one-way delay: 61.657 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 172.26 Mbit/s
95th percentile per-packet one-way delay: 61.469 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 143.81 Mbit/s
95th percentile per-packet one-way delay: 61.547 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

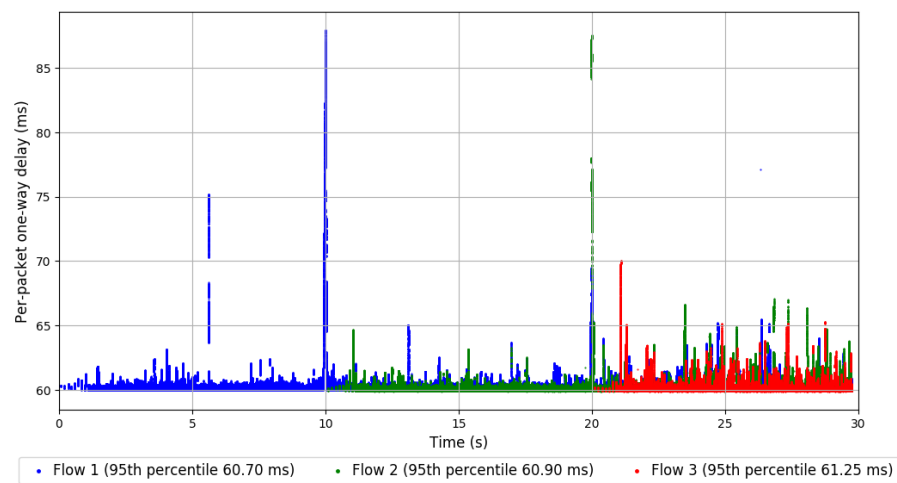
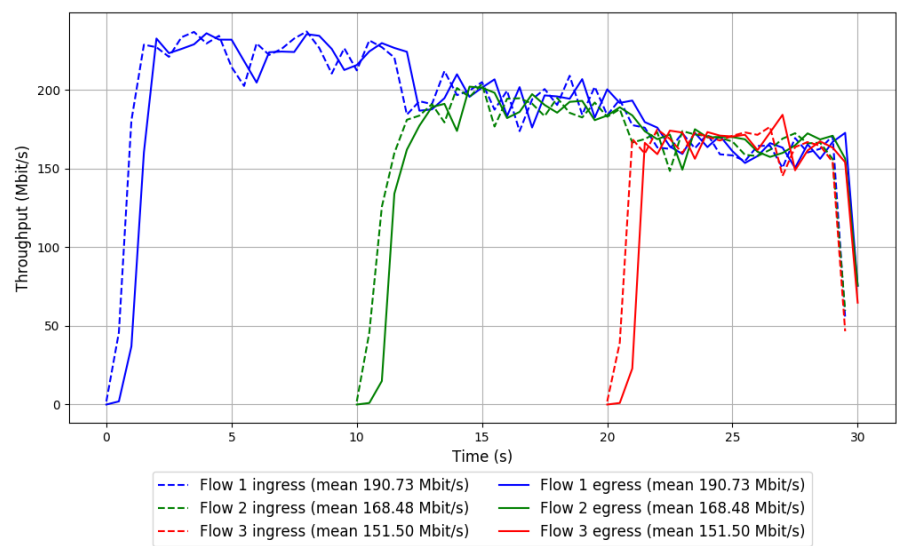


Run 2: Statistics of Indigo

Start at: 2019-02-05 18:05:07
End at: 2019-02-05 18:05:37
Local clock offset: -0.002 ms
Remote clock offset: -0.837 ms

Below is generated by plot.py at 2019-02-05 21:40:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 351.36 Mbit/s
95th percentile per-packet one-way delay: 60.847 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 190.73 Mbit/s
95th percentile per-packet one-way delay: 60.699 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 168.48 Mbit/s
95th percentile per-packet one-way delay: 60.901 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 151.50 Mbit/s
95th percentile per-packet one-way delay: 61.251 ms
Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

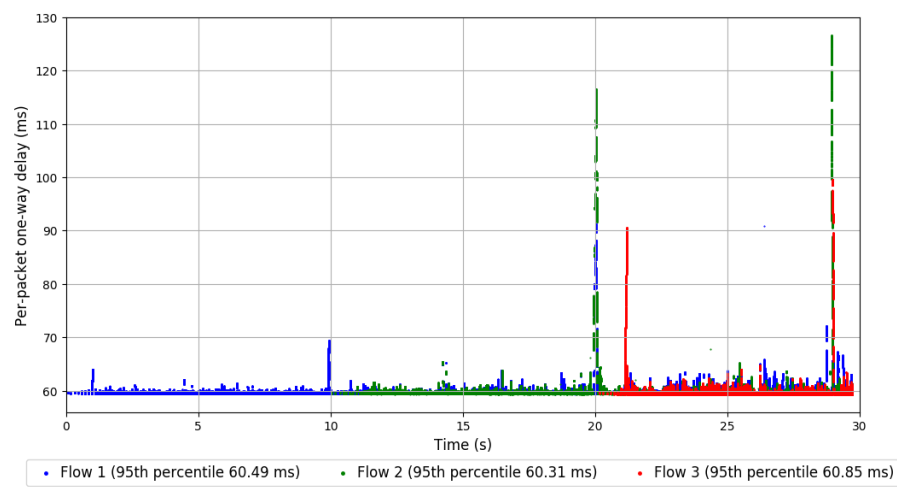
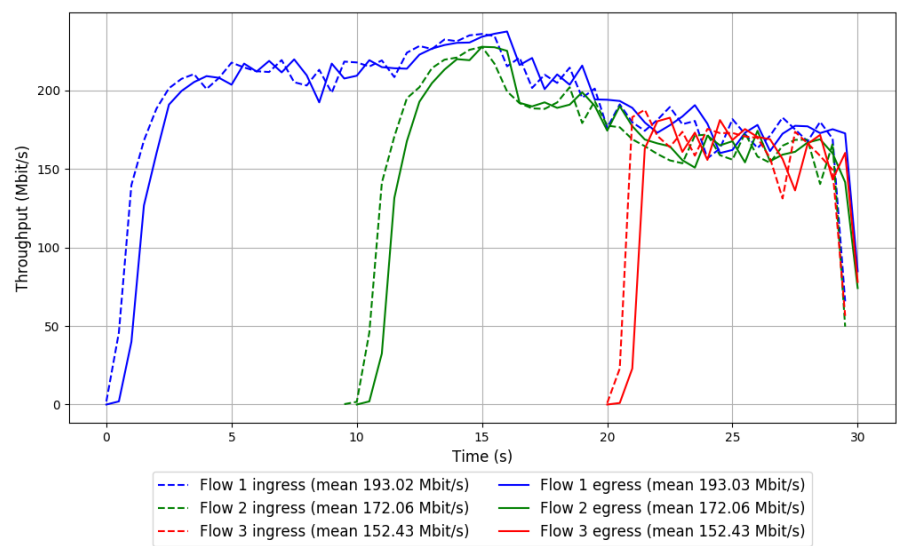


Run 3: Statistics of Indigo

Start at: 2019-02-05 18:40:55
End at: 2019-02-05 18:41:25
Local clock offset: -0.029 ms
Remote clock offset: -1.453 ms

Below is generated by plot.py at 2019-02-05 21:40:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 356.25 Mbit/s
95th percentile per-packet one-way delay: 60.501 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.03 Mbit/s
95th percentile per-packet one-way delay: 60.495 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 172.06 Mbit/s
95th percentile per-packet one-way delay: 60.312 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 152.43 Mbit/s
95th percentile per-packet one-way delay: 60.852 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2019-02-05 19:16:40

End at: 2019-02-05 19:17:10

Local clock offset: -0.039 ms

Remote clock offset: 0.577 ms

Below is generated by plot.py at 2019-02-05 21:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.01 Mbit/s

95th percentile per-packet one-way delay: 62.363 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 192.24 Mbit/s

95th percentile per-packet one-way delay: 62.224 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.34 Mbit/s

95th percentile per-packet one-way delay: 62.584 ms

Loss rate: 0.00%

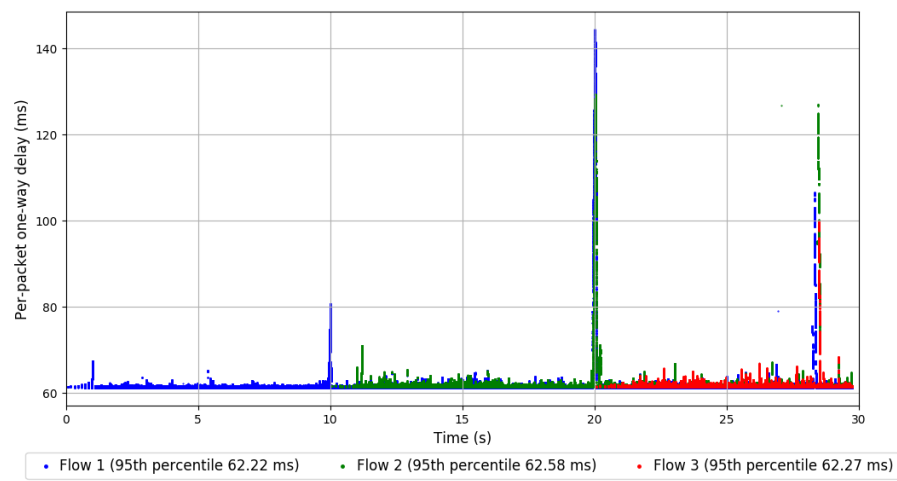
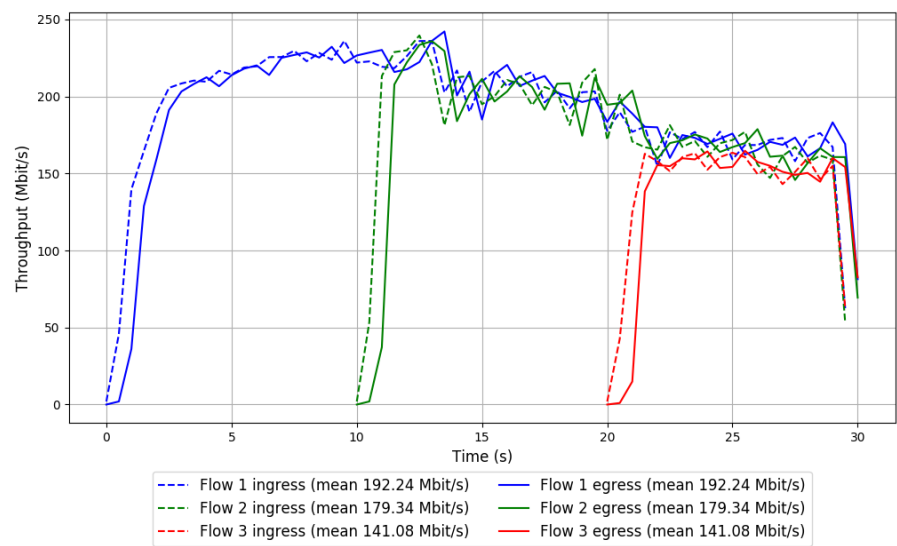
-- Flow 3:

Average throughput: 141.08 Mbit/s

95th percentile per-packet one-way delay: 62.273 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-02-05 19:52:27

End at: 2019-02-05 19:52:57

Local clock offset: -0.06 ms

Remote clock offset: 0.006 ms

Below is generated by plot.py at 2019-02-05 21:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.57 Mbit/s

95th percentile per-packet one-way delay: 62.255 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 183.62 Mbit/s

95th percentile per-packet one-way delay: 62.079 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 162.31 Mbit/s

95th percentile per-packet one-way delay: 62.122 ms

Loss rate: 0.00%

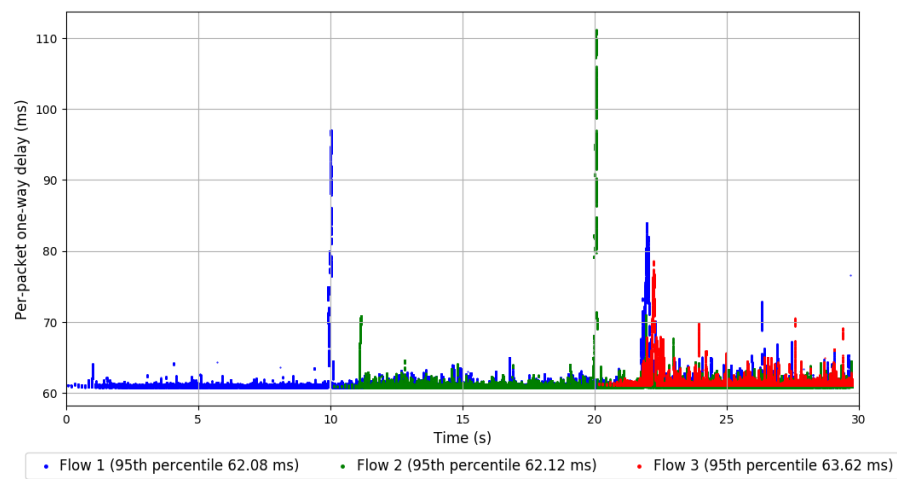
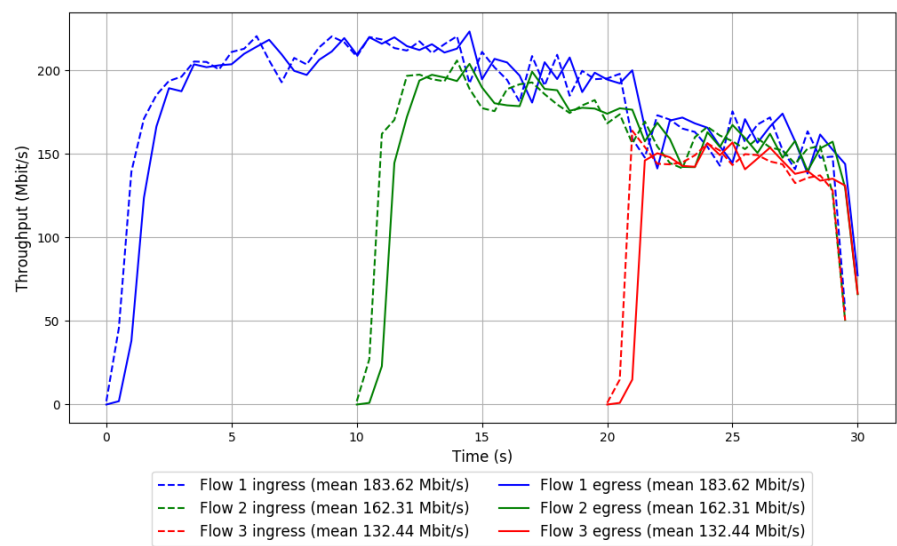
-- Flow 3:

Average throughput: 132.44 Mbit/s

95th percentile per-packet one-way delay: 63.620 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-02-05 17:20:52

End at: 2019-02-05 17:21:22

Local clock offset: 0.099 ms

Remote clock offset: 1.55 ms

Below is generated by plot.py at 2019-02-05 21:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 682.57 Mbit/s

95th percentile per-packet one-way delay: 64.650 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 412.07 Mbit/s

95th percentile per-packet one-way delay: 65.175 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 318.50 Mbit/s

95th percentile per-packet one-way delay: 62.957 ms

Loss rate: 0.00%

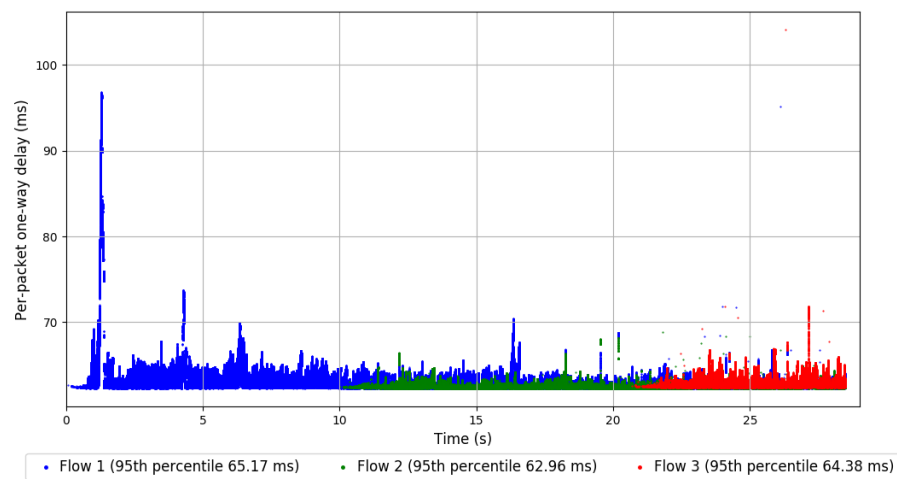
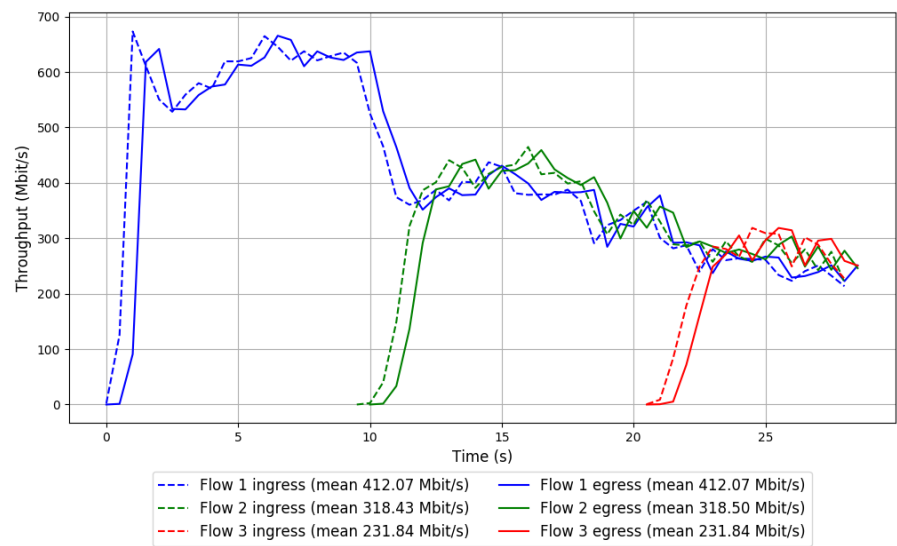
-- Flow 3:

Average throughput: 231.84 Mbit/s

95th percentile per-packet one-way delay: 64.379 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-02-05 17:56:33

End at: 2019-02-05 17:57:03

Local clock offset: 0.011 ms

Remote clock offset: 0.639 ms

Below is generated by plot.py at 2019-02-05 21:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 632.20 Mbit/s

95th percentile per-packet one-way delay: 63.621 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 379.08 Mbit/s

95th percentile per-packet one-way delay: 63.999 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 303.94 Mbit/s

95th percentile per-packet one-way delay: 62.634 ms

Loss rate: 0.00%

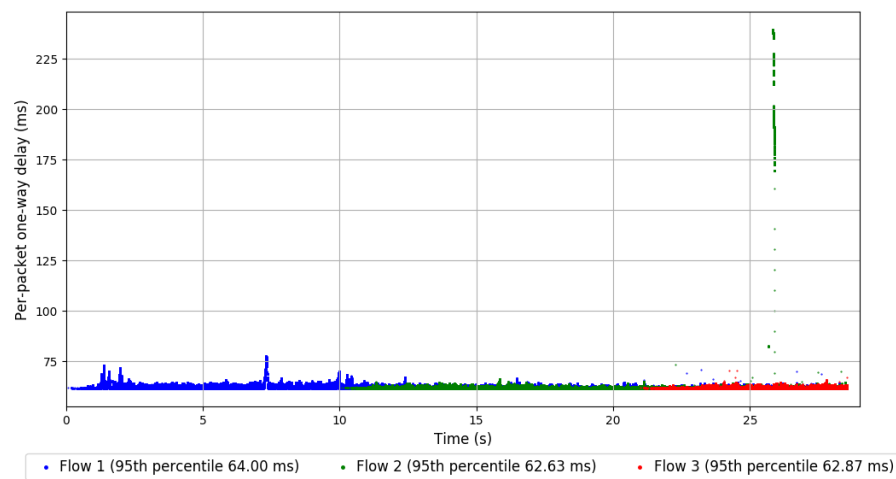
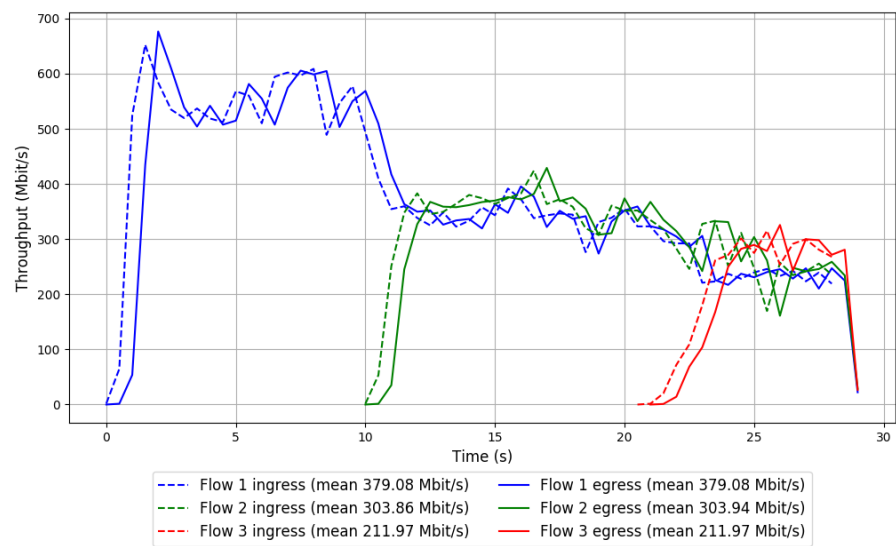
-- Flow 3:

Average throughput: 211.97 Mbit/s

95th percentile per-packet one-way delay: 62.866 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesC3 — Data Link

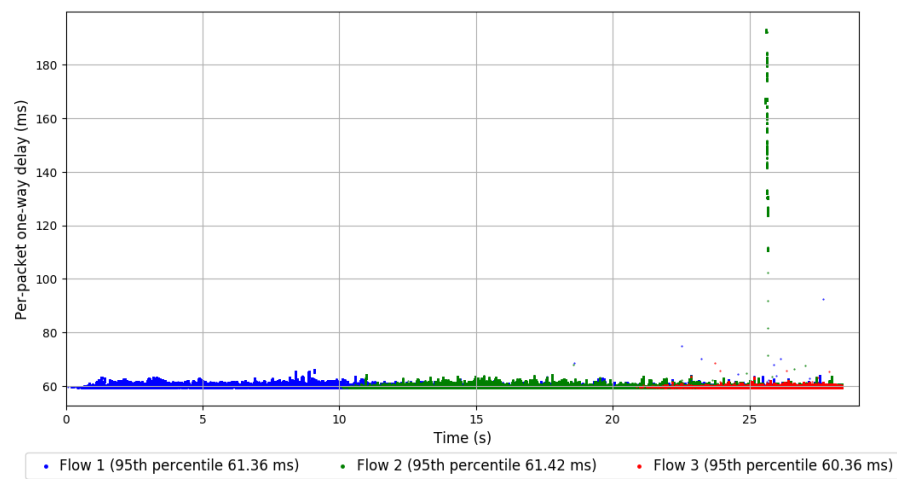
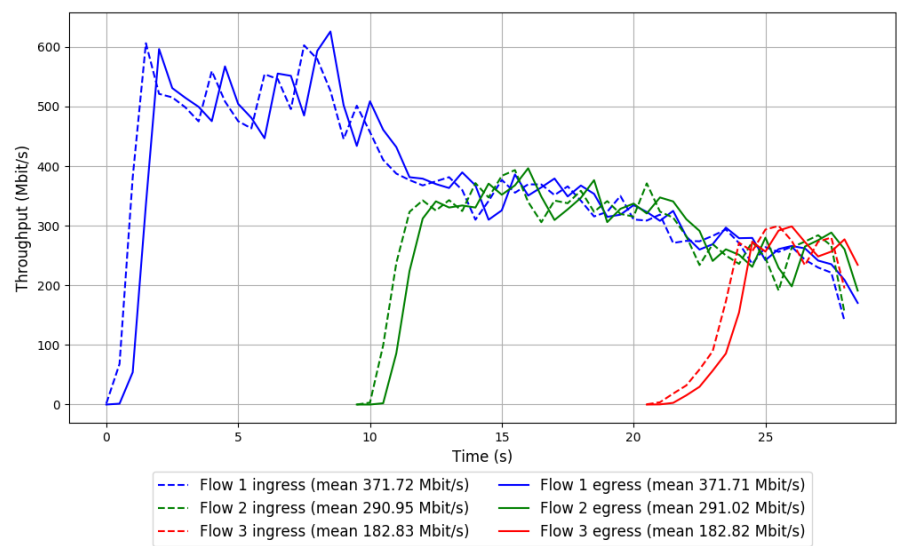


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-02-05 18:32:22
End at: 2019-02-05 18:32:52
Local clock offset: -0.008 ms
Remote clock offset: -1.382 ms

Below is generated by plot.py at 2019-02-05 21:47:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 609.22 Mbit/s
95th percentile per-packet one-way delay: 61.320 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 371.71 Mbit/s
95th percentile per-packet one-way delay: 61.356 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 291.02 Mbit/s
95th percentile per-packet one-way delay: 61.418 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 182.82 Mbit/s
95th percentile per-packet one-way delay: 60.357 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC3 — Data Link

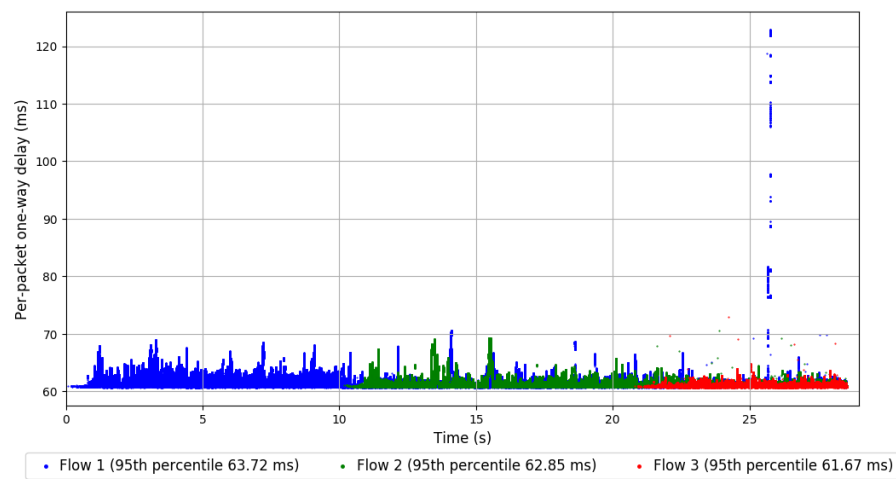
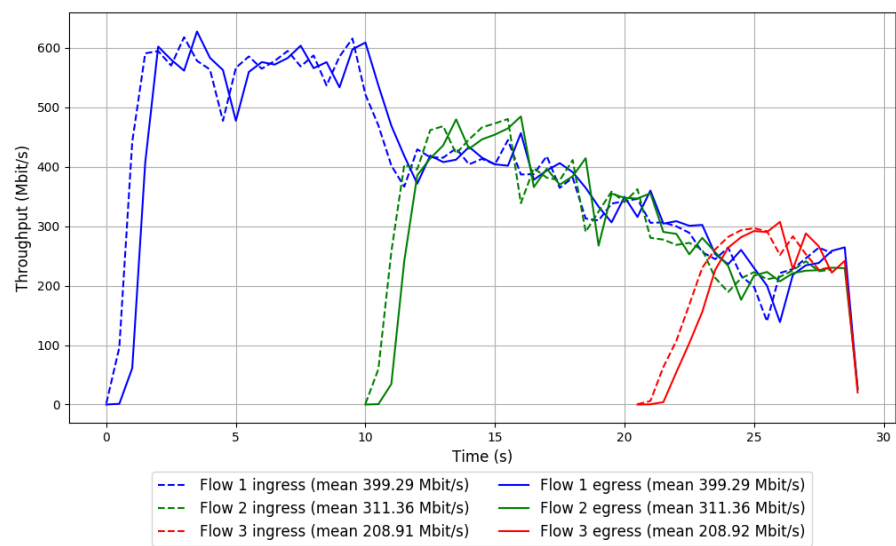


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-02-05 19:08:11
End at: 2019-02-05 19:08:41
Local clock offset: -0.033 ms
Remote clock offset: -0.133 ms

Below is generated by plot.py at 2019-02-05 21:48:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 657.24 Mbit/s
95th percentile per-packet one-way delay: 63.431 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 399.29 Mbit/s
95th percentile per-packet one-way delay: 63.724 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 311.36 Mbit/s
95th percentile per-packet one-way delay: 62.852 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 208.92 Mbit/s
95th percentile per-packet one-way delay: 61.668 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC3 — Data Link

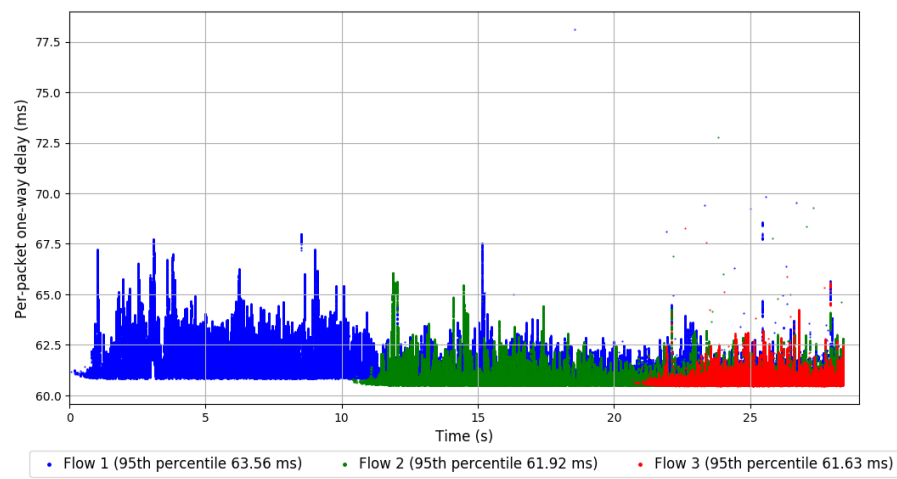
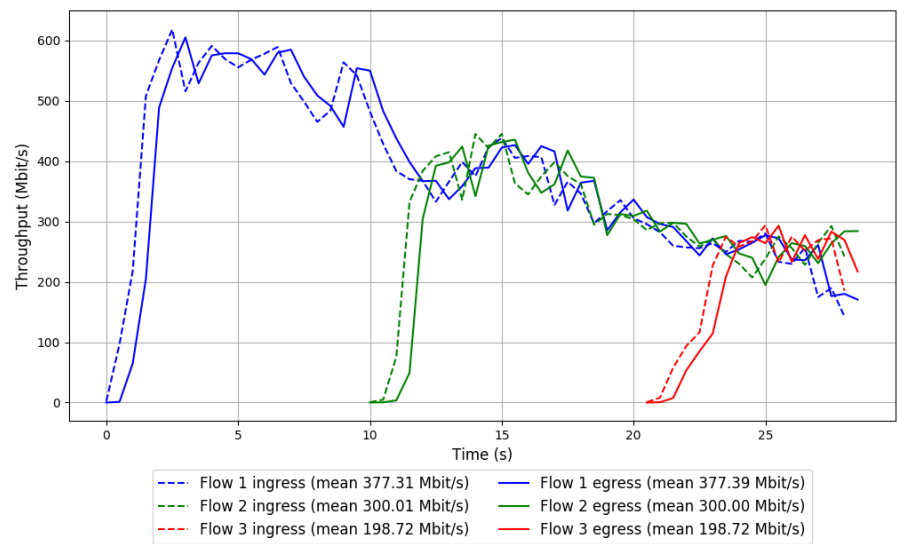


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-02-05 19:43:56
End at: 2019-02-05 19:44:26
Local clock offset: -0.054 ms
Remote clock offset: -0.226 ms

Below is generated by plot.py at 2019-02-05 21:48:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 623.35 Mbit/s
95th percentile per-packet one-way delay: 63.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 377.39 Mbit/s
95th percentile per-packet one-way delay: 63.563 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 300.00 Mbit/s
95th percentile per-packet one-way delay: 61.919 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.72 Mbit/s
95th percentile per-packet one-way delay: 61.626 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesC3 — Data Link

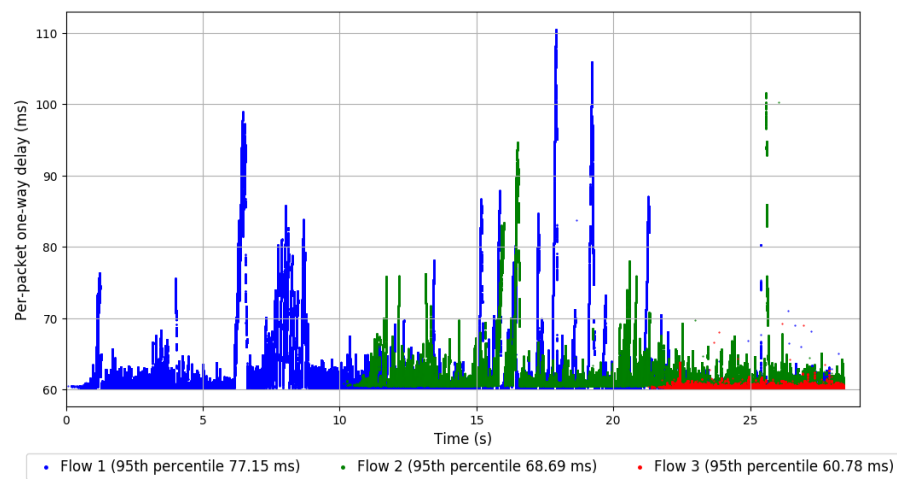
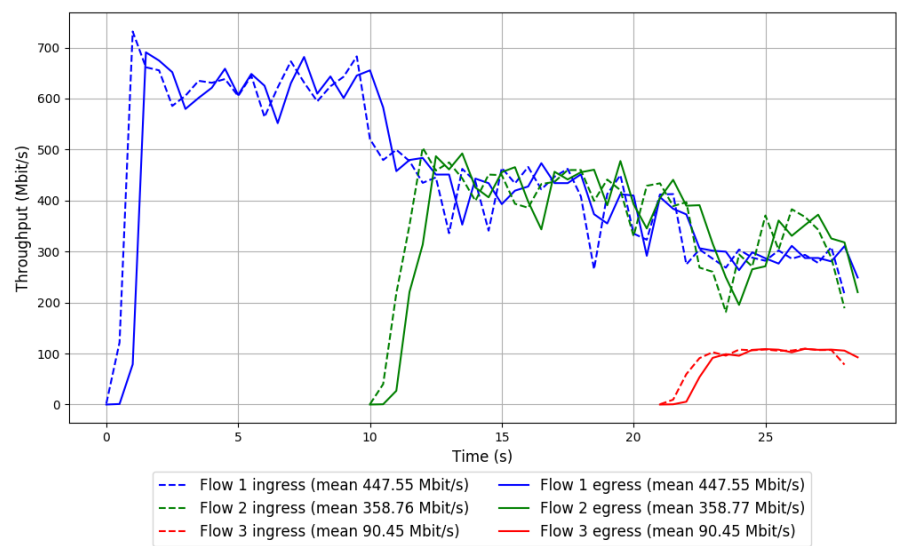


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-02-05 17:34:43
End at: 2019-02-05 17:35:13
Local clock offset: 0.022 ms
Remote clock offset: -0.561 ms

Below is generated by plot.py at 2019-02-05 21:49:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 701.64 Mbit/s
95th percentile per-packet one-way delay: 74.873 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 447.55 Mbit/s
95th percentile per-packet one-way delay: 77.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 358.77 Mbit/s
95th percentile per-packet one-way delay: 68.692 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.45 Mbit/s
95th percentile per-packet one-way delay: 60.785 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesC5 — Data Link

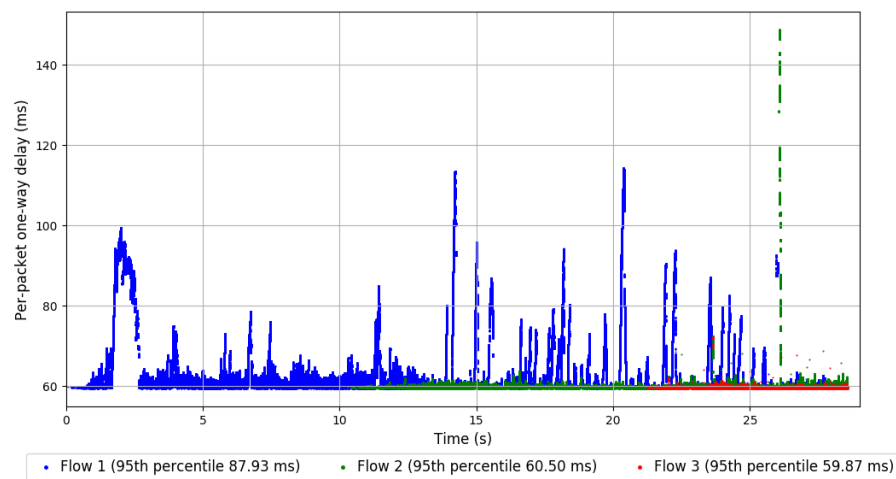
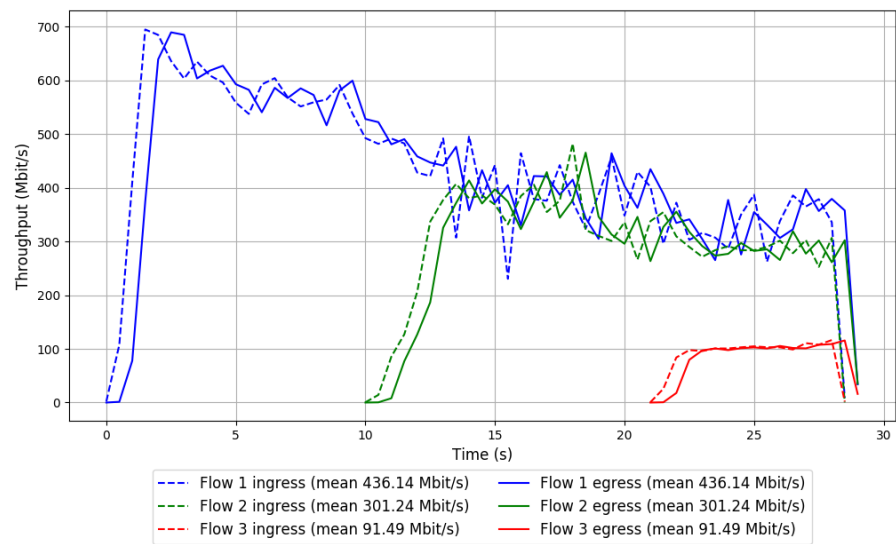


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-02-05 18:10:42
End at: 2019-02-05 18:11:12
Local clock offset: -0.019 ms
Remote clock offset: -1.385 ms

Below is generated by plot.py at 2019-02-05 21:49:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 652.75 Mbit/s
95th percentile per-packet one-way delay: 83.117 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 436.14 Mbit/s
95th percentile per-packet one-way delay: 87.933 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 301.24 Mbit/s
95th percentile per-packet one-way delay: 60.501 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 59.865 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesC5 — Data Link

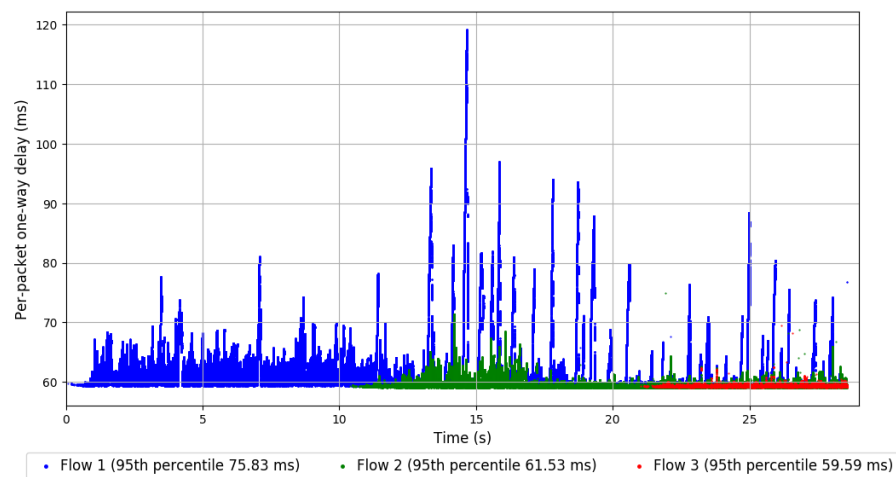
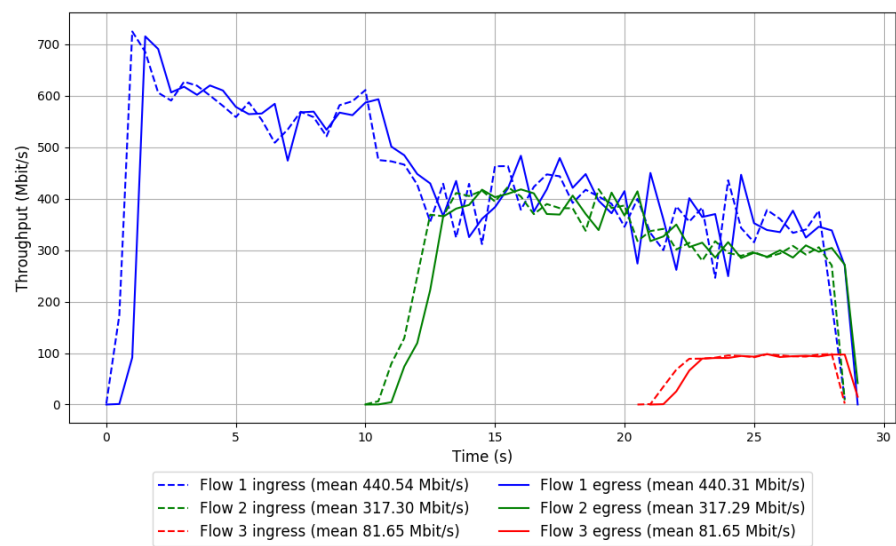


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-02-05 18:46:34
End at: 2019-02-05 18:47:04
Local clock offset: -0.069 ms
Remote clock offset: -1.534 ms

Below is generated by plot.py at 2019-02-05 21:49:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 664.39 Mbit/s
95th percentile per-packet one-way delay: 71.662 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 440.31 Mbit/s
95th percentile per-packet one-way delay: 75.831 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 317.29 Mbit/s
95th percentile per-packet one-way delay: 61.529 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 81.65 Mbit/s
95th percentile per-packet one-way delay: 59.595 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesC5 — Data Link

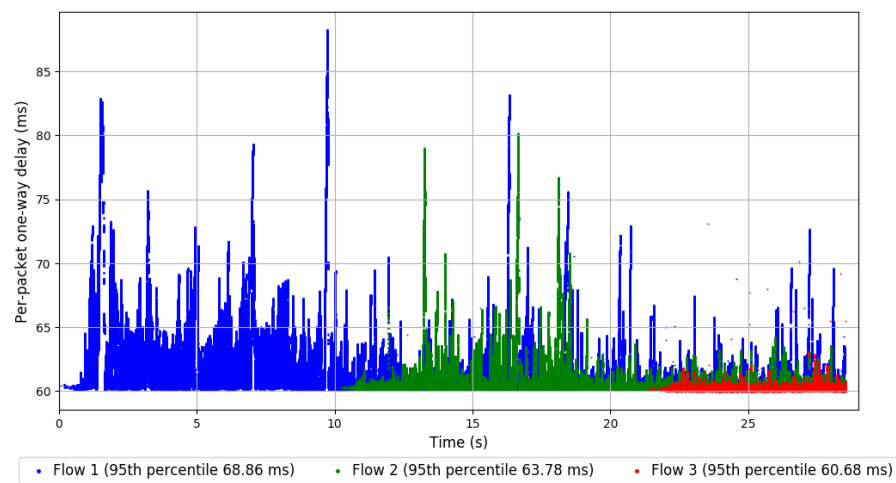
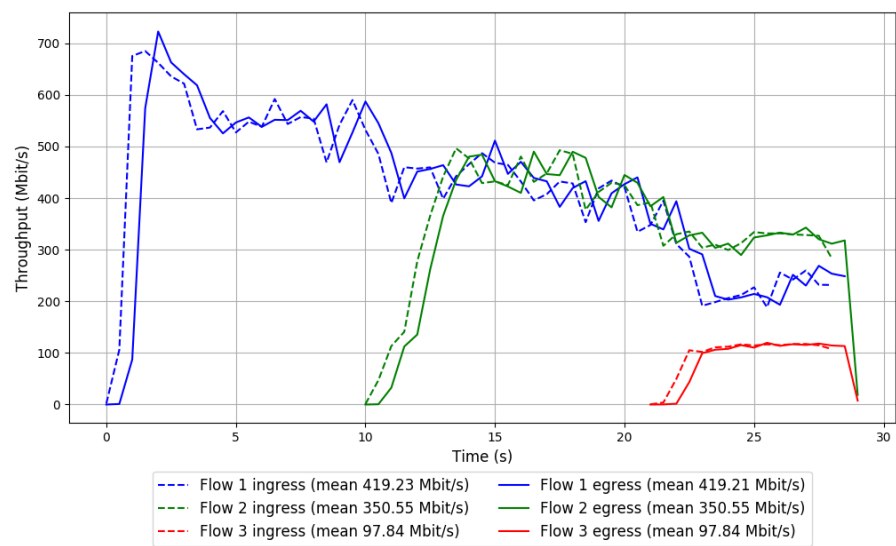


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-02-05 19:22:16
End at: 2019-02-05 19:22:46
Local clock offset: -0.049 ms
Remote clock offset: -0.695 ms

Below is generated by plot.py at 2019-02-05 21:50:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 669.30 Mbit/s
95th percentile per-packet one-way delay: 67.369 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 419.21 Mbit/s
95th percentile per-packet one-way delay: 68.863 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 350.55 Mbit/s
95th percentile per-packet one-way delay: 63.780 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 97.84 Mbit/s
95th percentile per-packet one-way delay: 60.677 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-02-05 19:58:05

End at: 2019-02-05 19:58:35

Local clock offset: -0.091 ms

Remote clock offset: 0.064 ms

Below is generated by plot.py at 2019-02-05 21:55:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 718.90 Mbit/s

95th percentile per-packet one-way delay: 70.487 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 454.86 Mbit/s

95th percentile per-packet one-way delay: 71.329 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 373.76 Mbit/s

95th percentile per-packet one-way delay: 69.731 ms

Loss rate: 0.00%

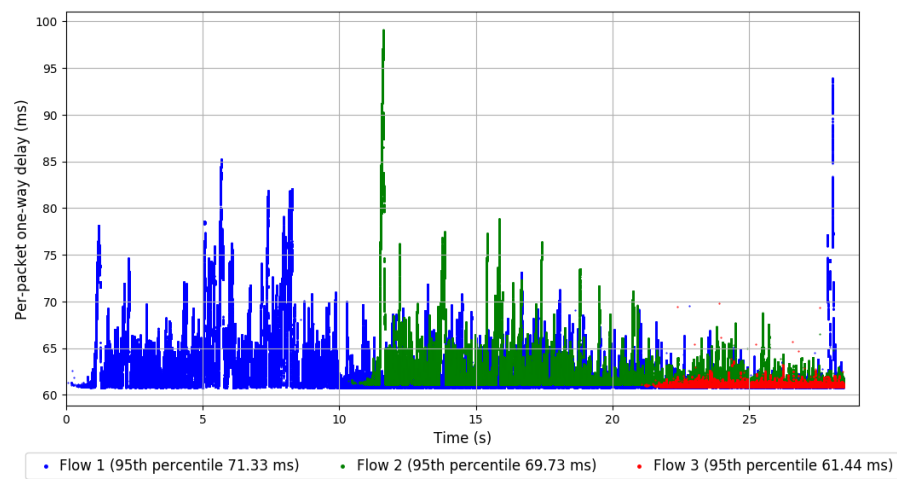
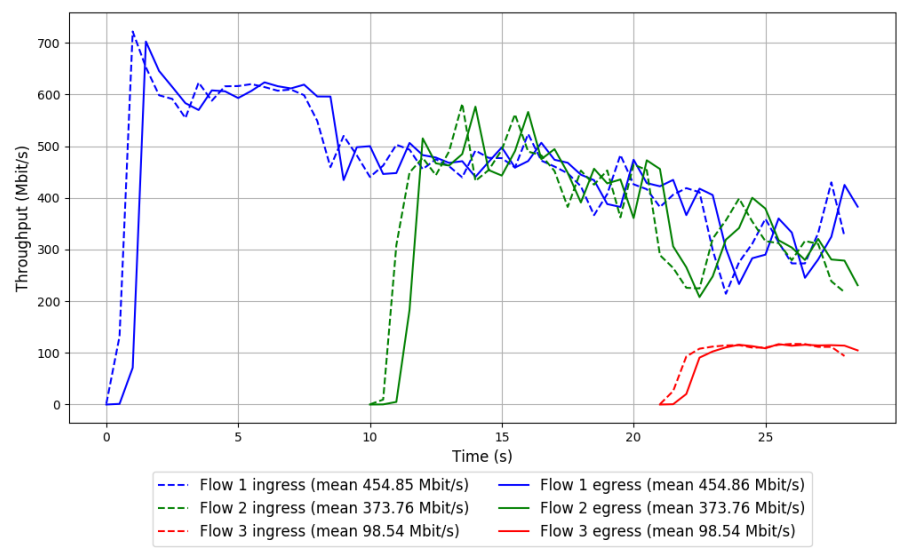
-- Flow 3:

Average throughput: 98.54 Mbit/s

95th percentile per-packet one-way delay: 61.440 ms

Loss rate: 0.00%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

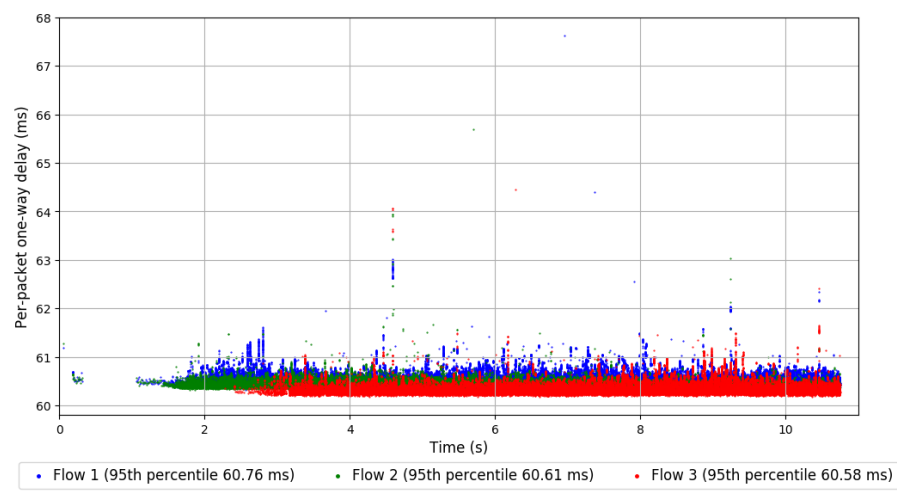
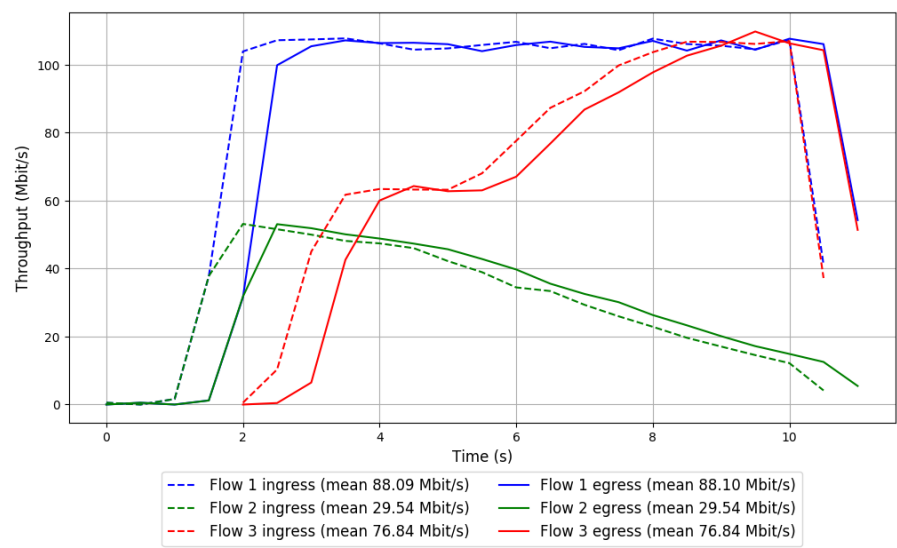
Start at: 2019-02-05 17:17:59

End at: 2019-02-05 17:18:29

Local clock offset: 0.09 ms

Remote clock offset: -0.41 ms

Run 1: Report of Indigo-MusesD — Data Link

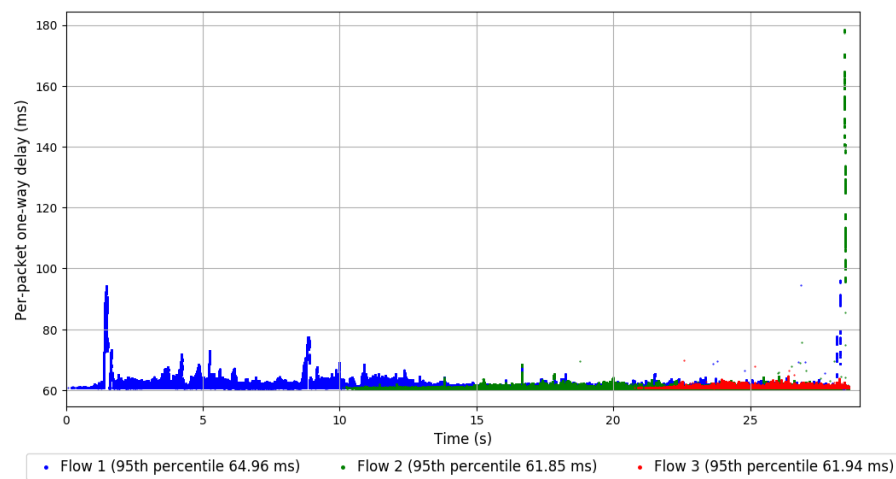
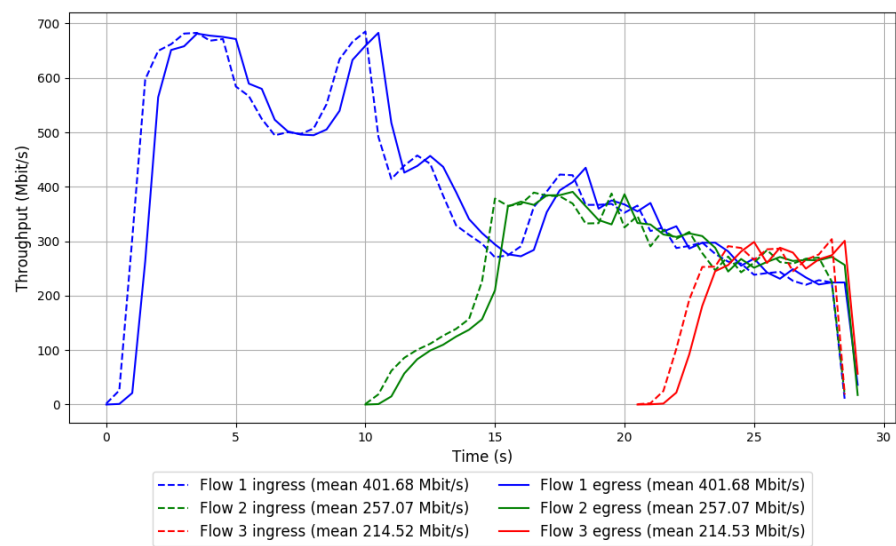


Run 2: Statistics of Indigo-MusesD

Start at: 2019-02-05 17:53:13
End at: 2019-02-05 17:53:43
Local clock offset: 0.04 ms
Remote clock offset: -0.125 ms

Below is generated by plot.py at 2019-02-05 22:00:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 627.01 Mbit/s
95th percentile per-packet one-way delay: 64.026 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 401.68 Mbit/s
95th percentile per-packet one-way delay: 64.964 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 257.07 Mbit/s
95th percentile per-packet one-way delay: 61.853 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 214.53 Mbit/s
95th percentile per-packet one-way delay: 61.935 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesD — Data Link

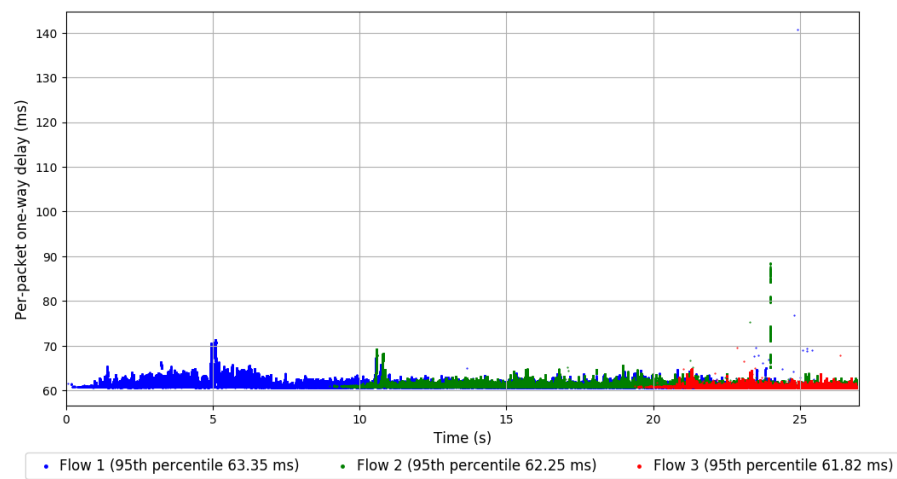
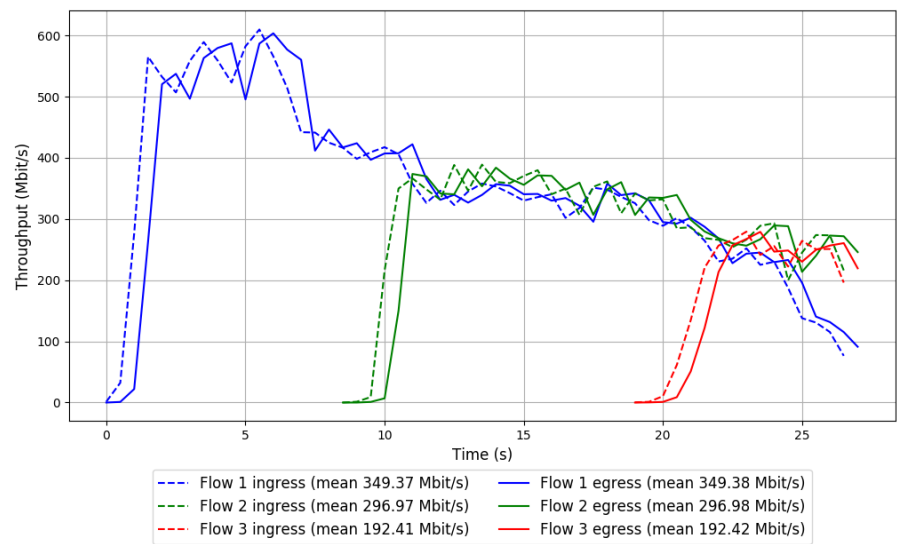


Run 3: Statistics of Indigo-MusesD

Start at: 2019-02-05 18:29:02
End at: 2019-02-05 18:29:32
Local clock offset: -0.052 ms
Remote clock offset: -0.129 ms

Below is generated by plot.py at 2019-02-05 22:00:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 601.83 Mbit/s
95th percentile per-packet one-way delay: 62.993 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 349.38 Mbit/s
95th percentile per-packet one-way delay: 63.347 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 296.98 Mbit/s
95th percentile per-packet one-way delay: 62.247 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 192.42 Mbit/s
95th percentile per-packet one-way delay: 61.820 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link

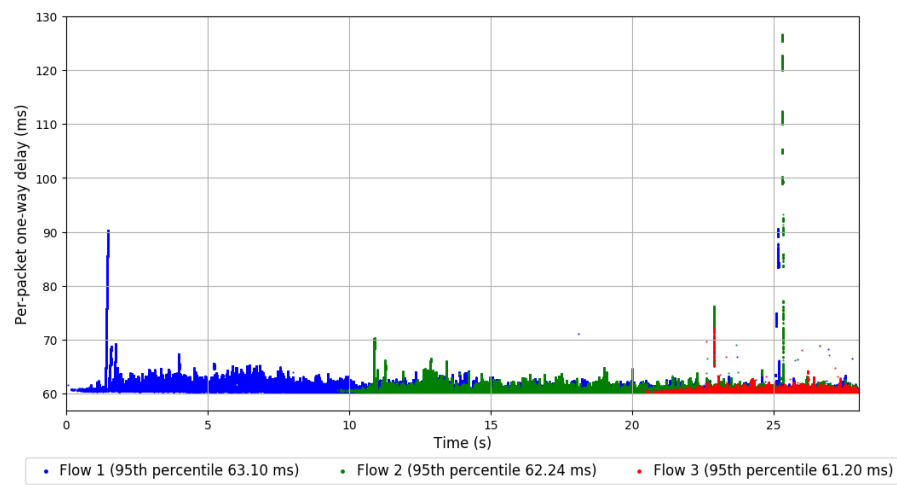
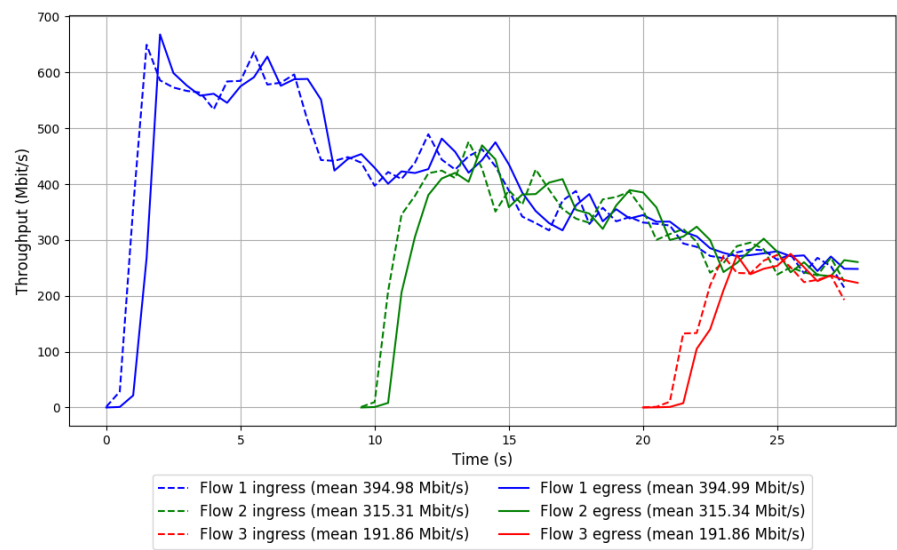


Run 4: Statistics of Indigo-MusesD

Start at: 2019-02-05 19:04:49
End at: 2019-02-05 19:05:19
Local clock offset: -0.053 ms
Remote clock offset: -0.398 ms

Below is generated by plot.py at 2019-02-05 22:01:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 655.05 Mbit/s
95th percentile per-packet one-way delay: 62.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 394.99 Mbit/s
95th percentile per-packet one-way delay: 63.097 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 315.34 Mbit/s
95th percentile per-packet one-way delay: 62.244 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.86 Mbit/s
95th percentile per-packet one-way delay: 61.199 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-02-05 19:40:33

End at: 2019-02-05 19:41:03

Local clock offset: -0.047 ms

Remote clock offset: -0.83 ms

Below is generated by plot.py at 2019-02-05 22:01:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 636.42 Mbit/s

95th percentile per-packet one-way delay: 62.615 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 384.76 Mbit/s

95th percentile per-packet one-way delay: 62.673 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 310.89 Mbit/s

95th percentile per-packet one-way delay: 62.951 ms

Loss rate: 0.00%

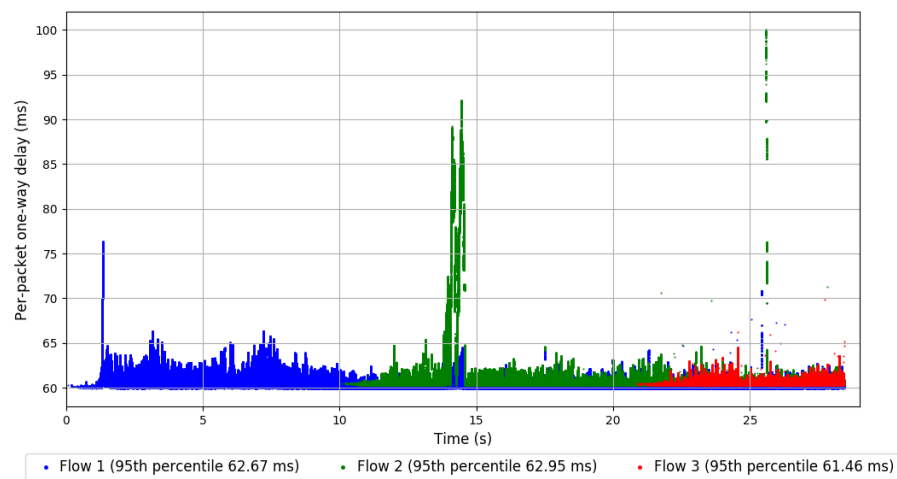
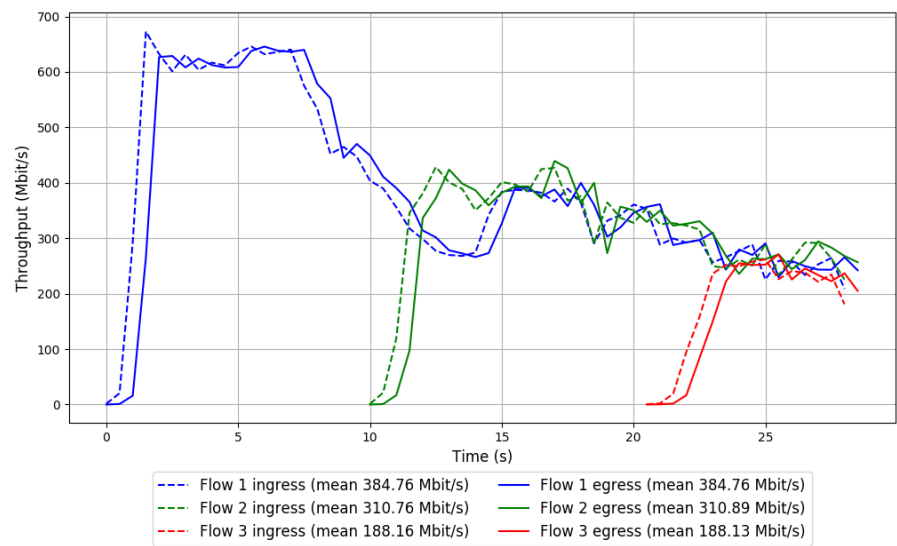
-- Flow 3:

Average throughput: 188.13 Mbit/s

95th percentile per-packet one-way delay: 61.457 ms

Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-02-05 17:39:40

End at: 2019-02-05 17:40:10

Local clock offset: 0.004 ms

Remote clock offset: -0.22 ms

Below is generated by plot.py at 2019-02-05 22:03:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 693.26 Mbit/s

95th percentile per-packet one-way delay: 65.256 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 450.22 Mbit/s

95th percentile per-packet one-way delay: 66.059 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 336.66 Mbit/s

95th percentile per-packet one-way delay: 62.469 ms

Loss rate: 0.00%

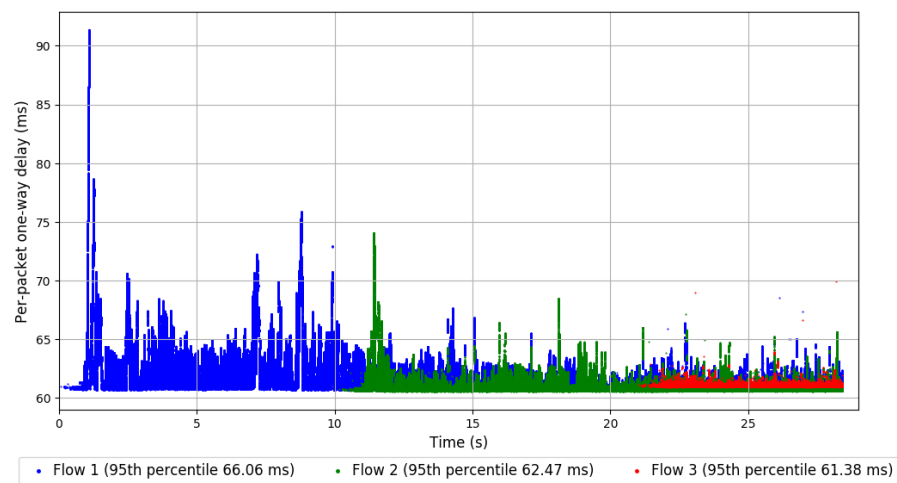
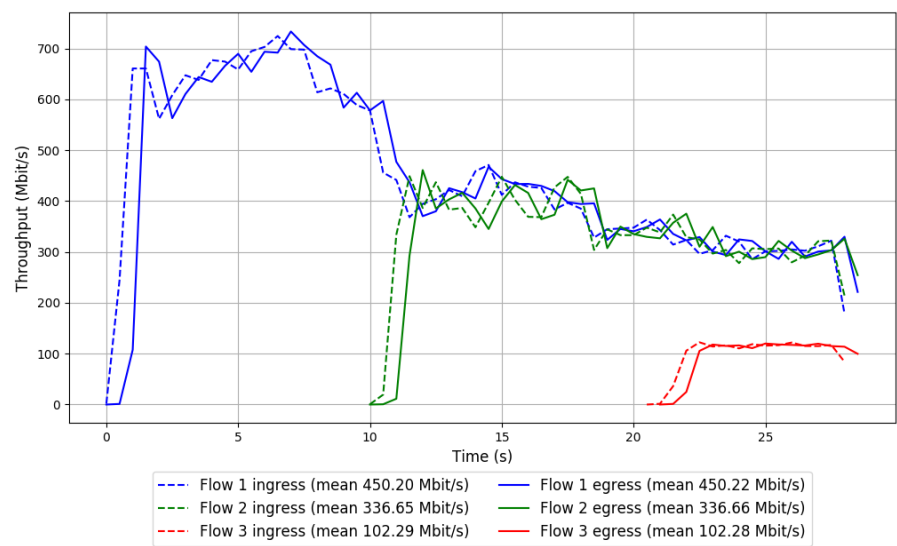
-- Flow 3:

Average throughput: 102.28 Mbit/s

95th percentile per-packet one-way delay: 61.377 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-02-05 18:15:35

End at: 2019-02-05 18:16:05

Local clock offset: -0.014 ms

Remote clock offset: 0.037 ms

Below is generated by plot.py at 2019-02-05 22:03:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 657.45 Mbit/s

95th percentile per-packet one-way delay: 65.124 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 431.12 Mbit/s

95th percentile per-packet one-way delay: 65.629 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 316.13 Mbit/s

95th percentile per-packet one-way delay: 63.097 ms

Loss rate: 0.00%

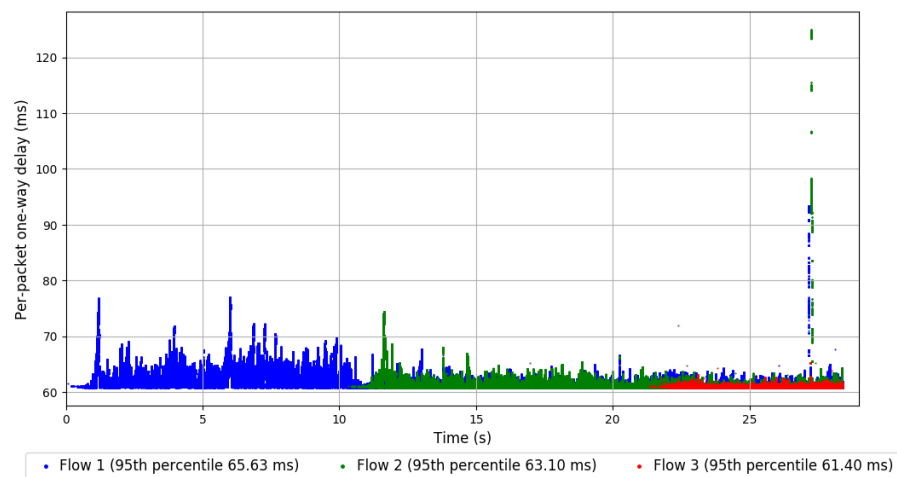
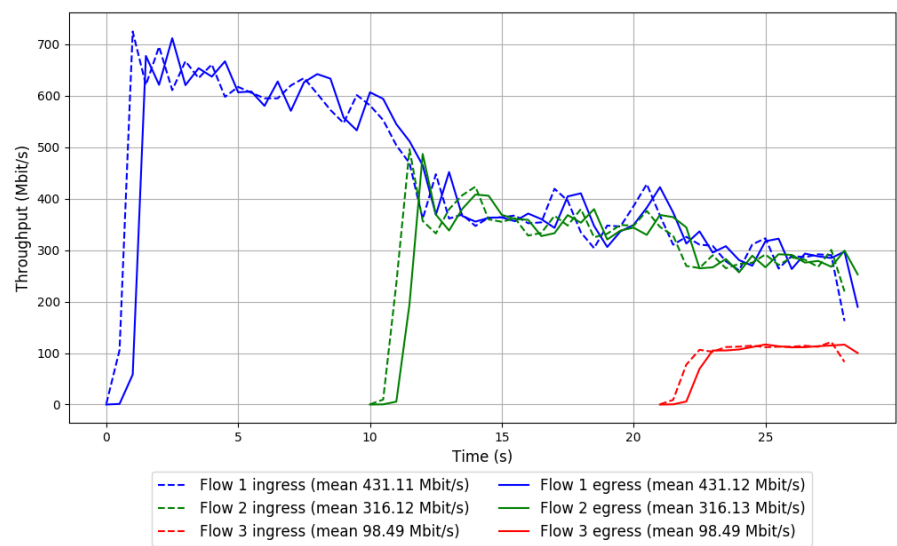
-- Flow 3:

Average throughput: 98.49 Mbit/s

95th percentile per-packet one-way delay: 61.397 ms

Loss rate: 0.00%

Run 2: Report of Indigo-MusesT — Data Link

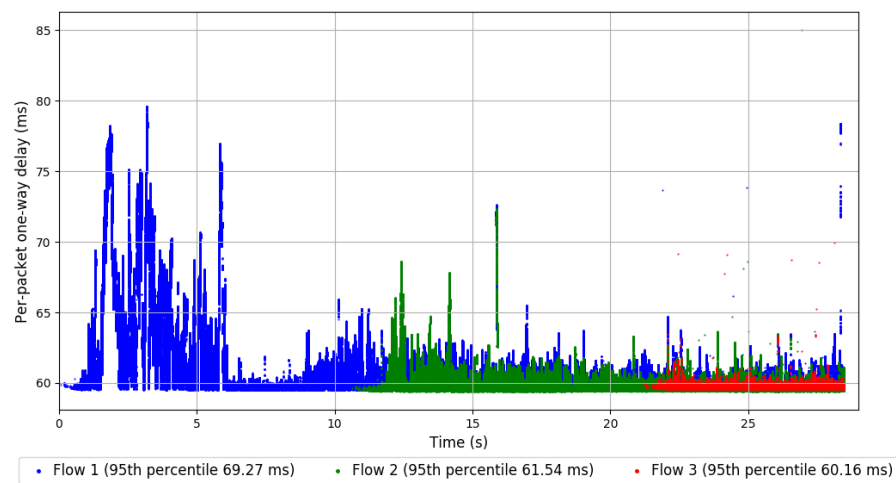
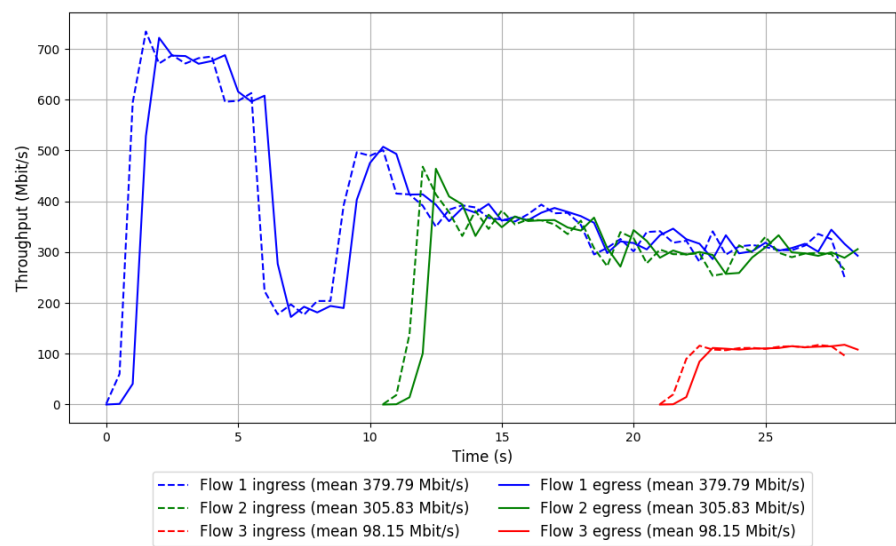


Run 3: Statistics of Indigo-MusesT

Start at: 2019-02-05 18:51:25
End at: 2019-02-05 18:51:55
Local clock offset: -0.076 ms
Remote clock offset: -1.373 ms

Below is generated by plot.py at 2019-02-05 22:03:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 597.07 Mbit/s
95th percentile per-packet one-way delay: 67.171 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 379.79 Mbit/s
95th percentile per-packet one-way delay: 69.274 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 305.83 Mbit/s
95th percentile per-packet one-way delay: 61.537 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.15 Mbit/s
95th percentile per-packet one-way delay: 60.165 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesT — Data Link

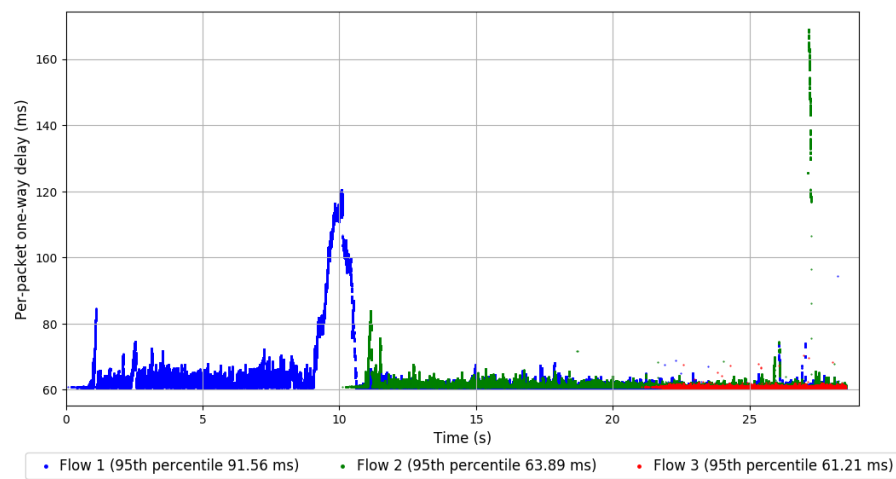
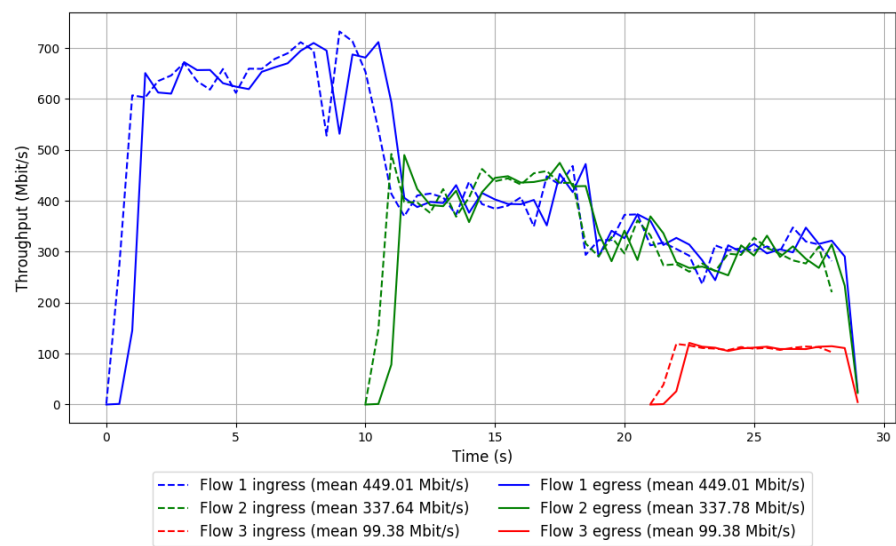


Run 4: Statistics of Indigo-MusesT

Start at: 2019-02-05 19:27:07
End at: 2019-02-05 19:27:37
Local clock offset: -0.089 ms
Remote clock offset: -0.194 ms

Below is generated by plot.py at 2019-02-05 22:08:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 693.79 Mbit/s
95th percentile per-packet one-way delay: 77.967 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 449.01 Mbit/s
95th percentile per-packet one-way delay: 91.563 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 337.78 Mbit/s
95th percentile per-packet one-way delay: 63.886 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.38 Mbit/s
95th percentile per-packet one-way delay: 61.212 ms
Loss rate: 0.00%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-02-05 20:02:44

End at: 2019-02-05 20:03:14

Local clock offset: -0.063 ms

Remote clock offset: 0.028 ms

Below is generated by plot.py at 2019-02-05 22:10:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 667.71 Mbit/s

95th percentile per-packet one-way delay: 67.852 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 428.78 Mbit/s

95th percentile per-packet one-way delay: 71.443 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 335.82 Mbit/s

95th percentile per-packet one-way delay: 62.608 ms

Loss rate: 0.00%

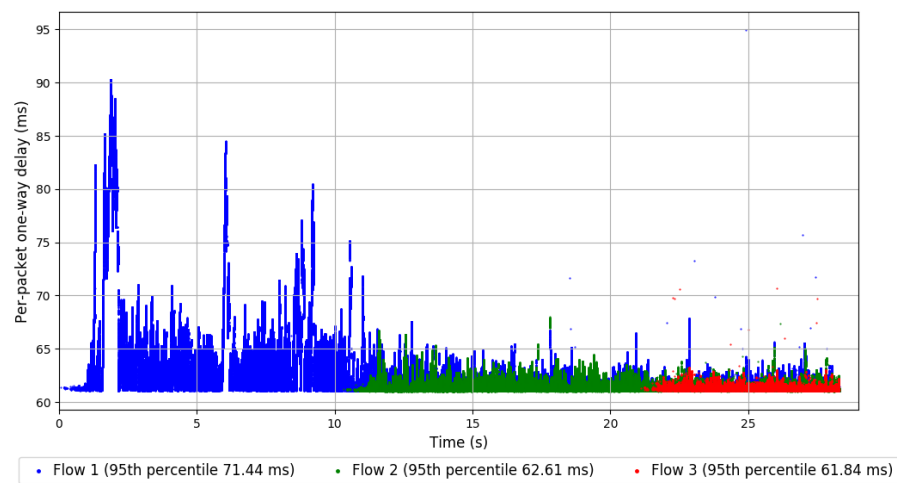
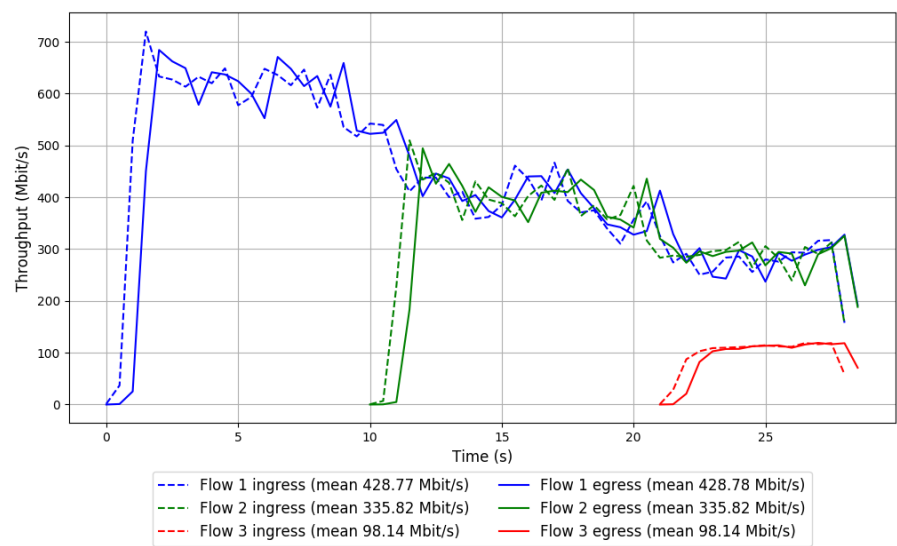
-- Flow 3:

Average throughput: 98.14 Mbit/s

95th percentile per-packet one-way delay: 61.836 ms

Loss rate: 0.00%

Run 5: Report of Indigo-MusesT — Data Link

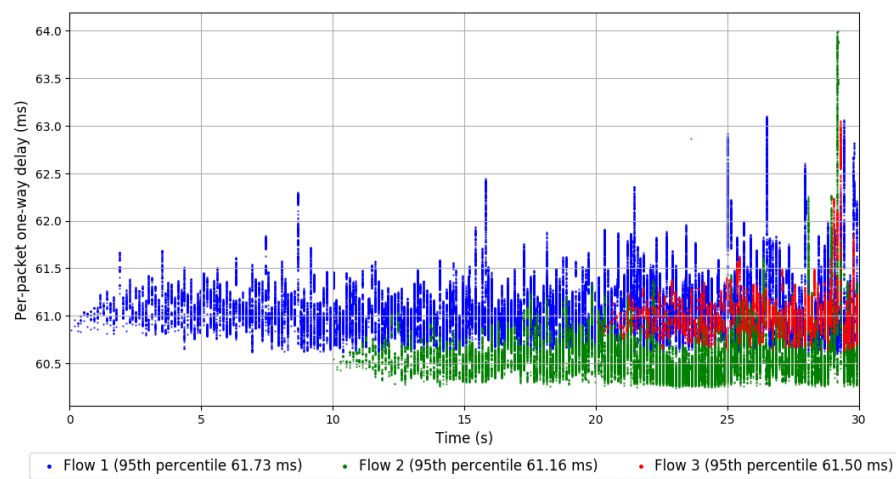
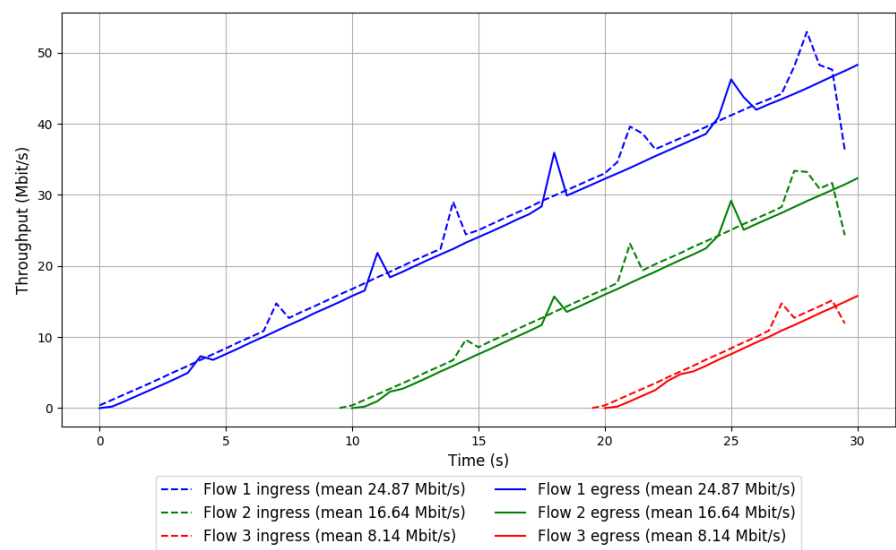


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-05 17:41:26
End at: 2019-02-05 17:41:56
Local clock offset: 0.029 ms
Remote clock offset: -0.495 ms

# Below is generated by plot.py at 2019-02-05 22:10:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.64 Mbit/s
95th percentile per-packet one-way delay: 61.631 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.87 Mbit/s
95th percentile per-packet one-way delay: 61.729 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.64 Mbit/s
95th percentile per-packet one-way delay: 61.162 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 61.503 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-02-05 18:17:20

End at: 2019-02-05 18:17:50

Local clock offset: 0.032 ms

Remote clock offset: -0.17 ms

Below is generated by plot.py at 2019-02-05 22:10:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.79 Mbit/s

95th percentile per-packet one-way delay: 61.455 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 25.04 Mbit/s

95th percentile per-packet one-way delay: 61.505 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.64 Mbit/s

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

Loss rate: 0.00%

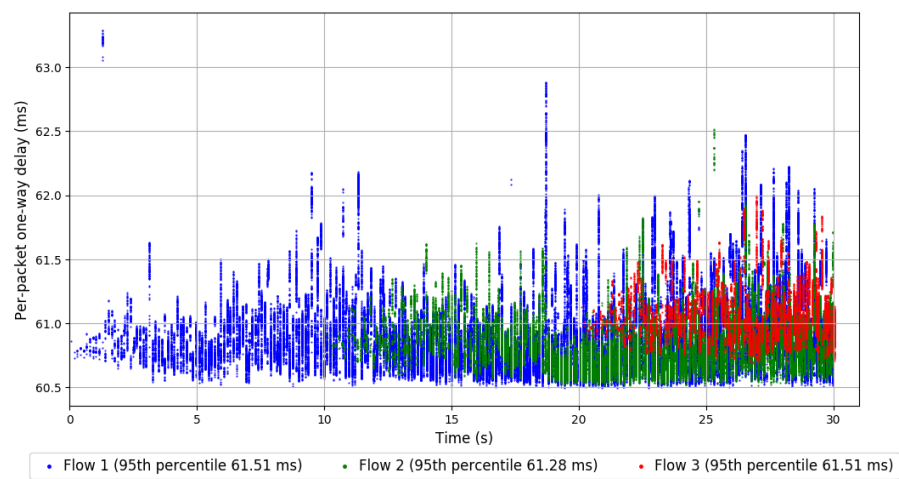
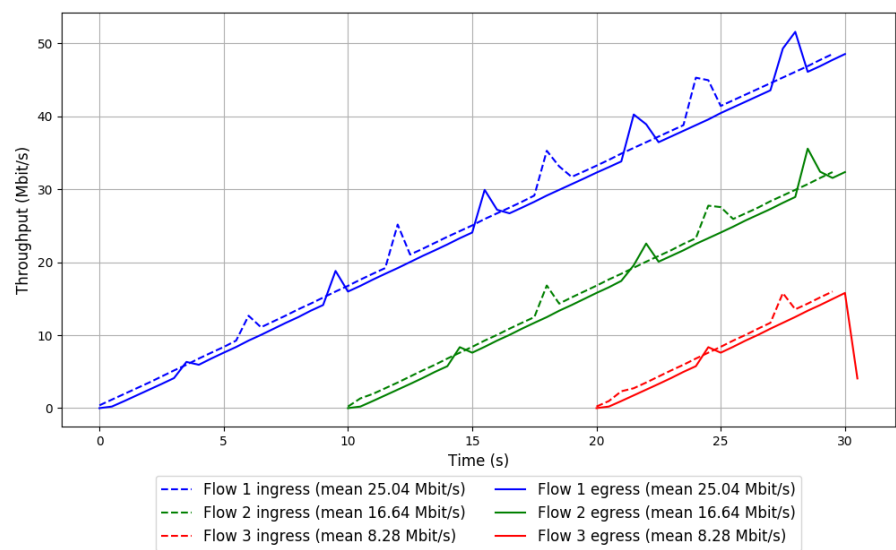
-- Flow 3:

Average throughput: 8.28 Mbit/s

95th percentile per-packet one-way delay: 61.506 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

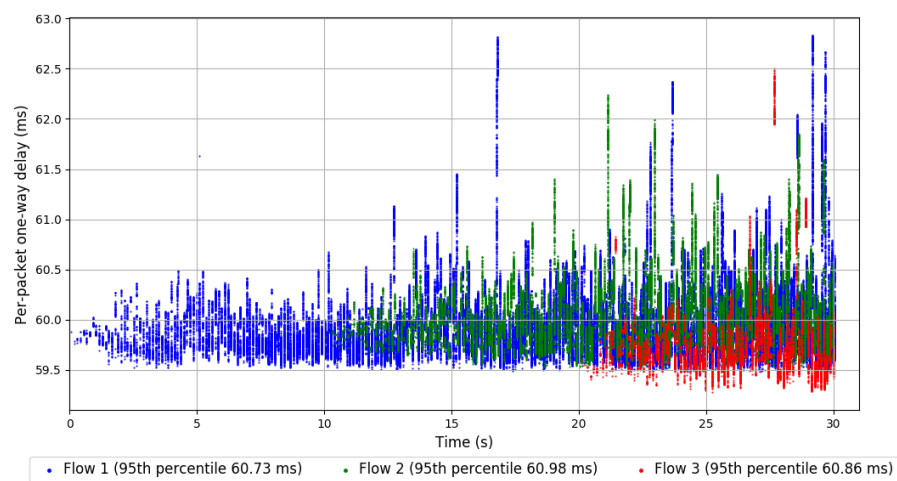
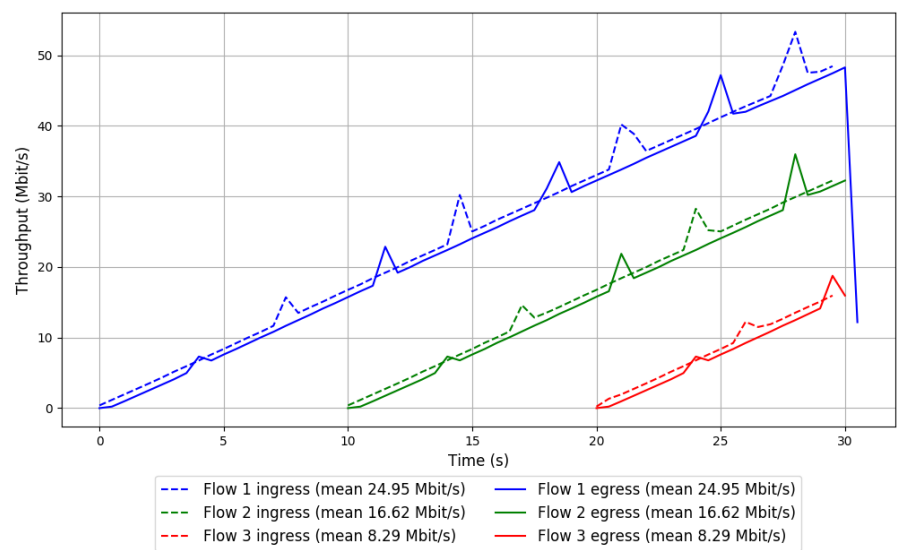


Run 3: Statistics of LEDBAT

Start at: 2019-02-05 18:53:07
End at: 2019-02-05 18:53:37
Local clock offset: -0.048 ms
Remote clock offset: -1.338 ms

Below is generated by plot.py at 2019-02-05 22:10:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 60.814 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 60.728 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.62 Mbit/s
95th percentile per-packet one-way delay: 60.975 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 60.859 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

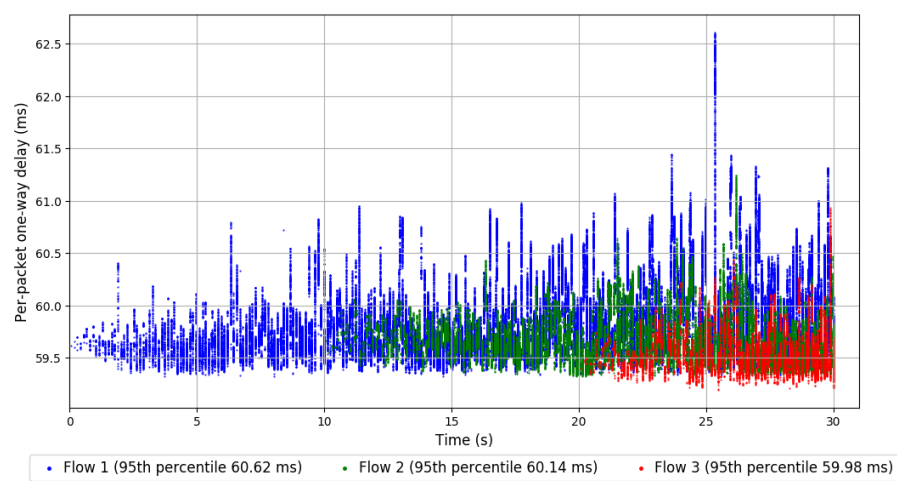
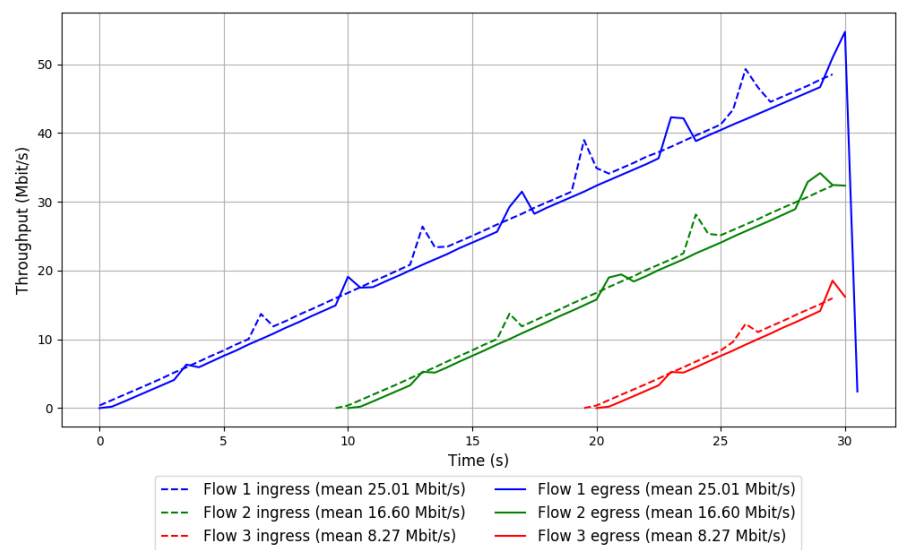


Run 4: Statistics of LEDBAT

Start at: 2019-02-05 19:28:53
End at: 2019-02-05 19:29:23
Local clock offset: -0.057 ms
Remote clock offset: -1.572 ms

Below is generated by plot.py at 2019-02-05 22:10:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 38.81 Mbit/s
95th percentile per-packet one-way delay: 60.505 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 60.623 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.60 Mbit/s
95th percentile per-packet one-way delay: 60.141 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 59.984 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-02-05 20:04:29

End at: 2019-02-05 20:04:59

Local clock offset: -0.076 ms

Remote clock offset: -1.24 ms

Below is generated by plot.py at 2019-02-05 22:10:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.88 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 25.04 Mbit/s

95th percentile per-packet one-way delay: 60.611 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.20 Mbit/s

95th percentile per-packet one-way delay: 60.662 ms

Loss rate: 0.00%

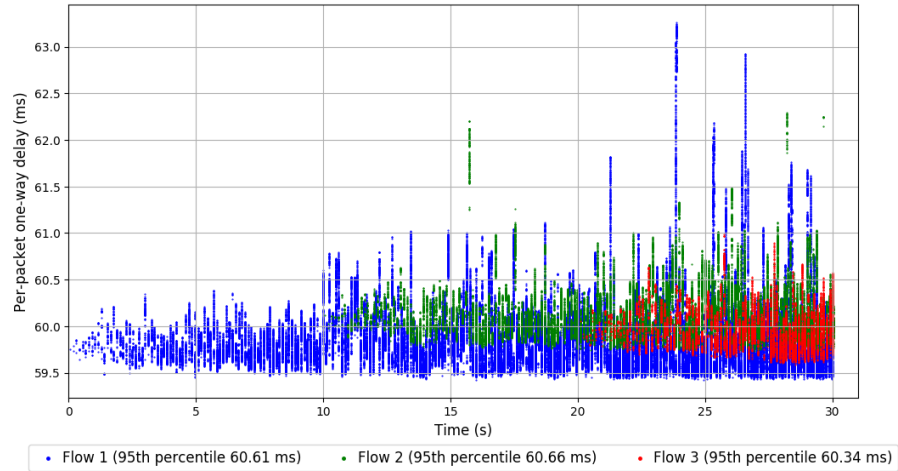
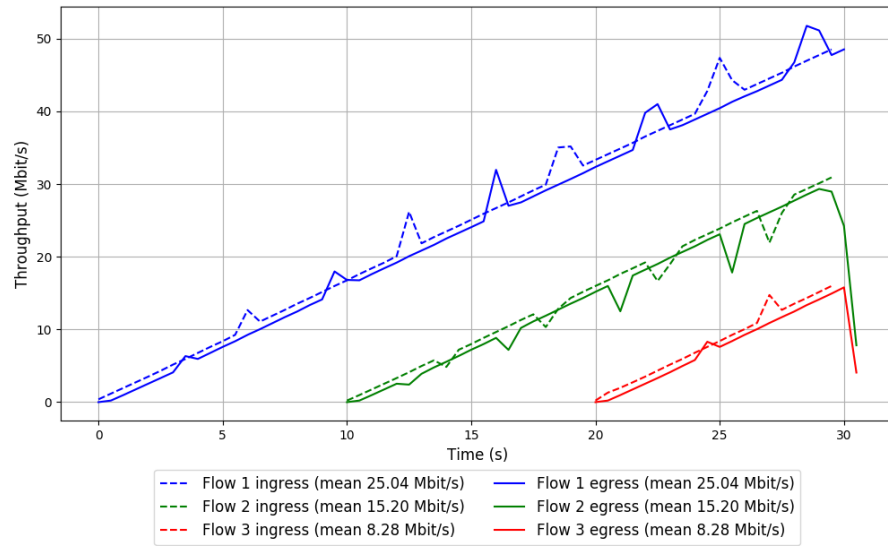
-- Flow 3:

Average throughput: 8.28 Mbit/s

95th percentile per-packet one-way delay: 60.337 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

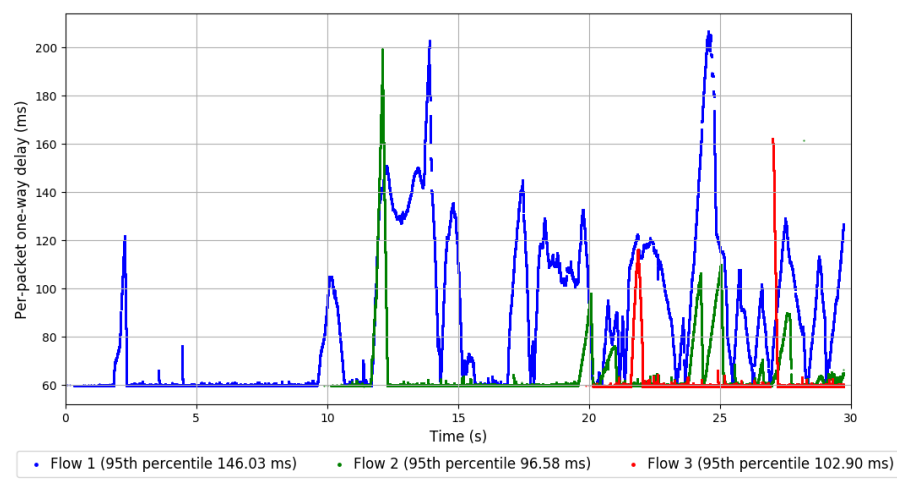
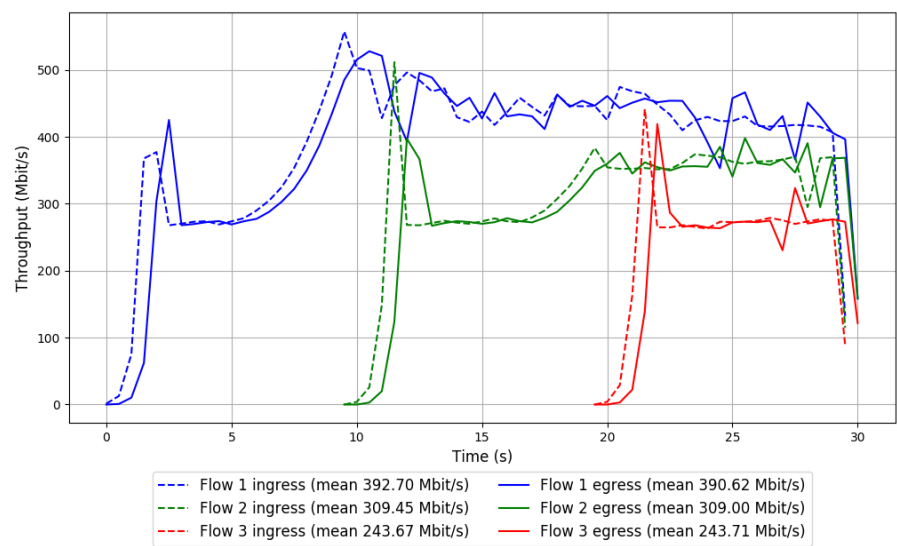


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-02-05 17:10:50
End at: 2019-02-05 17:11:20
Local clock offset: 0.062 ms
Remote clock offset: -1.138 ms

# Below is generated by plot.py at 2019-02-05 22:27:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 678.06 Mbit/s
95th percentile per-packet one-way delay: 137.779 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 390.62 Mbit/s
95th percentile per-packet one-way delay: 146.034 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 309.00 Mbit/s
95th percentile per-packet one-way delay: 96.581 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 243.71 Mbit/s
95th percentile per-packet one-way delay: 102.899 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-02-05 17:45:58

End at: 2019-02-05 17:46:28

Local clock offset: 0.066 ms

Remote clock offset: -0.02 ms

Below is generated by plot.py at 2019-02-05 22:29:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 706.65 Mbit/s

95th percentile per-packet one-way delay: 201.744 ms

Loss rate: 4.27%

-- Flow 1:

Average throughput: 407.89 Mbit/s

95th percentile per-packet one-way delay: 206.734 ms

Loss rate: 7.17%

-- Flow 2:

Average throughput: 320.04 Mbit/s

95th percentile per-packet one-way delay: 130.842 ms

Loss rate: 0.01%

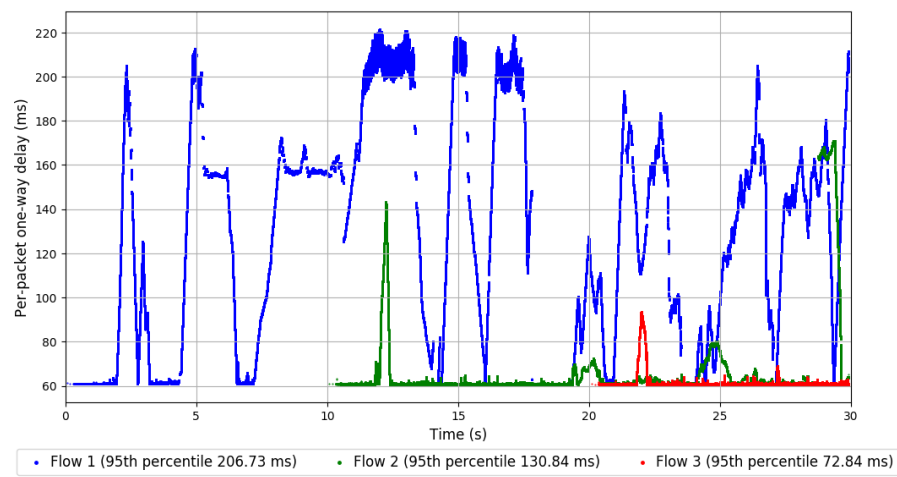
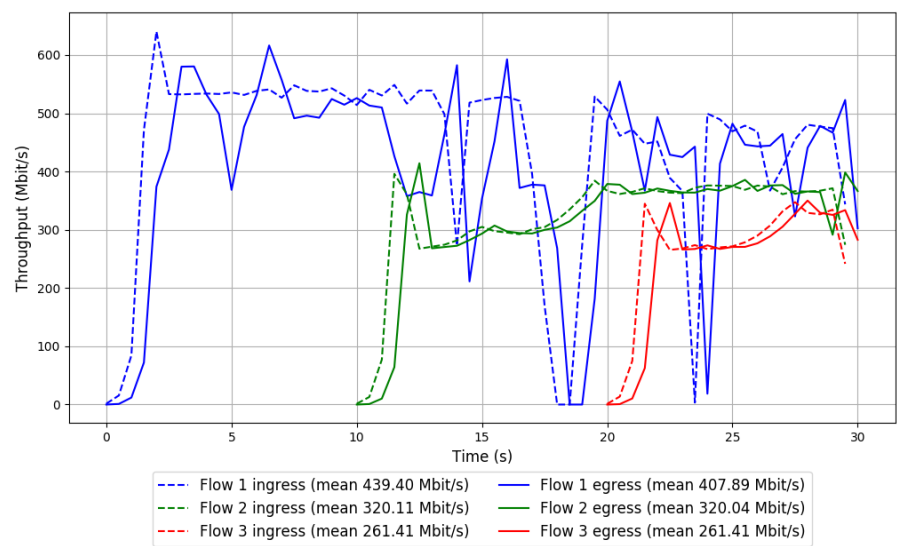
-- Flow 3:

Average throughput: 261.41 Mbit/s

95th percentile per-packet one-way delay: 72.842 ms

Loss rate: 0.00%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-02-05 18:21:44

End at: 2019-02-05 18:22:14

Local clock offset: -0.012 ms

Remote clock offset: -1.48 ms

Below is generated by plot.py at 2019-02-05 22:30:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 718.09 Mbit/s

95th percentile per-packet one-way delay: 177.976 ms

Loss rate: 3.39%

-- Flow 1:

Average throughput: 434.65 Mbit/s

95th percentile per-packet one-way delay: 181.776 ms

Loss rate: 5.44%

-- Flow 2:

Average throughput: 305.28 Mbit/s

95th percentile per-packet one-way delay: 65.099 ms

Loss rate: 0.01%

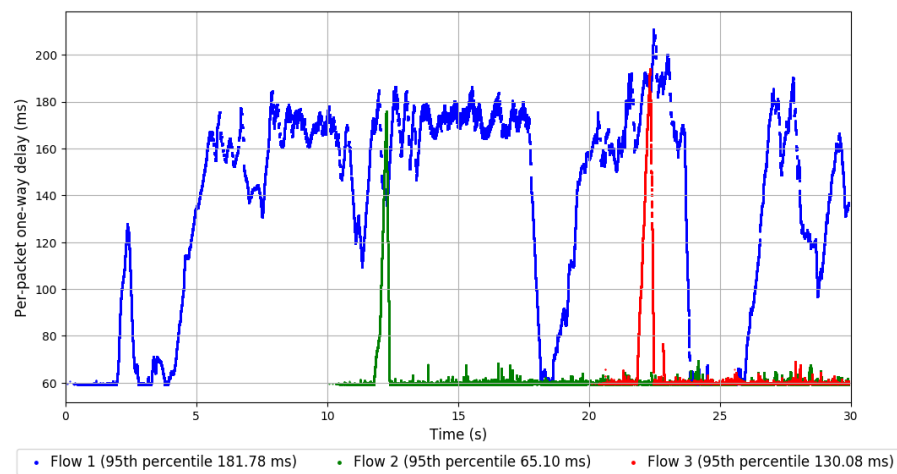
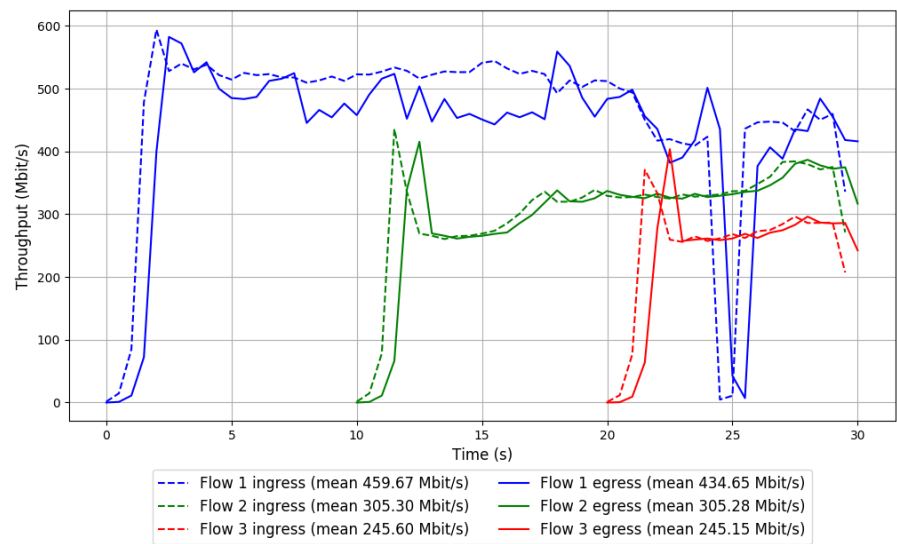
-- Flow 3:

Average throughput: 245.15 Mbit/s

95th percentile per-packet one-way delay: 130.076 ms

Loss rate: 0.19%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-02-05 18:57:31

End at: 2019-02-05 18:58:01

Local clock offset: -0.091 ms

Remote clock offset: 0.055 ms

Below is generated by plot.py at 2019-02-05 22:30:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 698.12 Mbit/s

95th percentile per-packet one-way delay: 188.609 ms

Loss rate: 4.48%

-- Flow 1:

Average throughput: 388.64 Mbit/s

95th percentile per-packet one-way delay: 196.272 ms

Loss rate: 7.57%

-- Flow 2:

Average throughput: 340.56 Mbit/s

95th percentile per-packet one-way delay: 150.515 ms

Loss rate: 0.33%

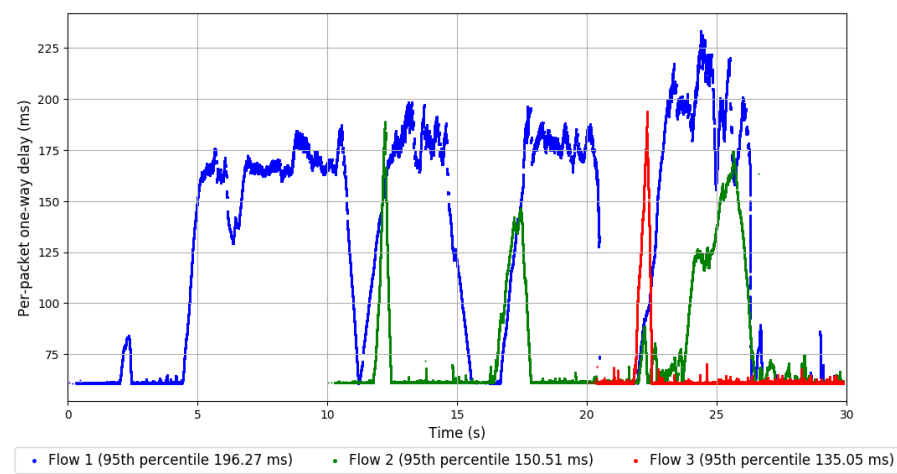
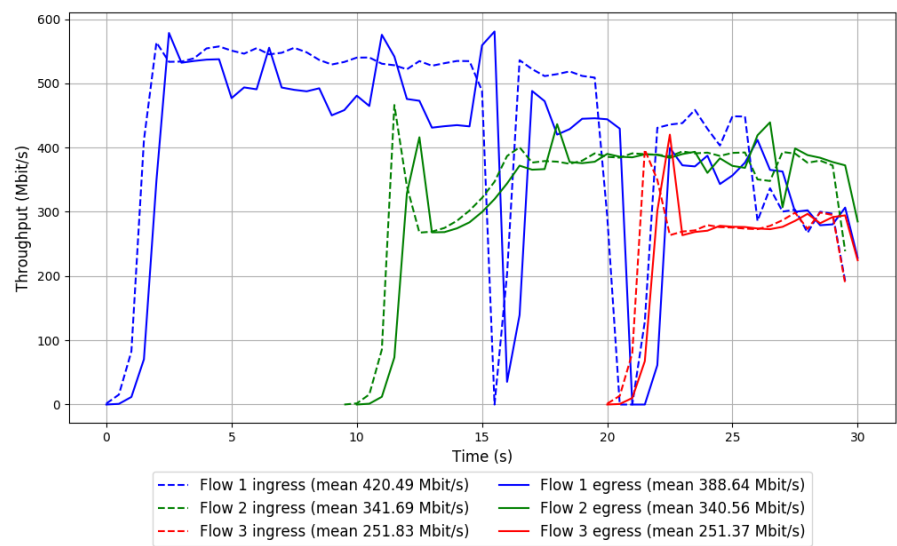
-- Flow 3:

Average throughput: 251.37 Mbit/s

95th percentile per-packet one-way delay: 135.047 ms

Loss rate: 0.18%

Run 4: Report of PCC-Allegro — Data Link

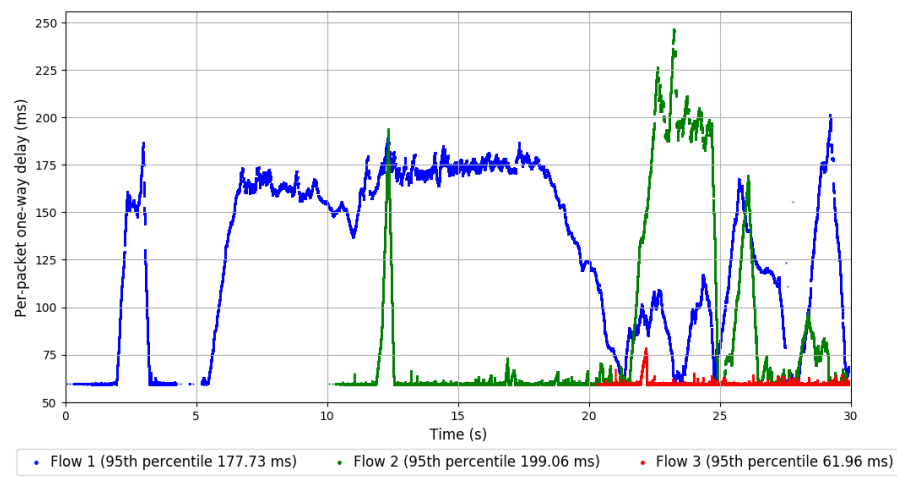
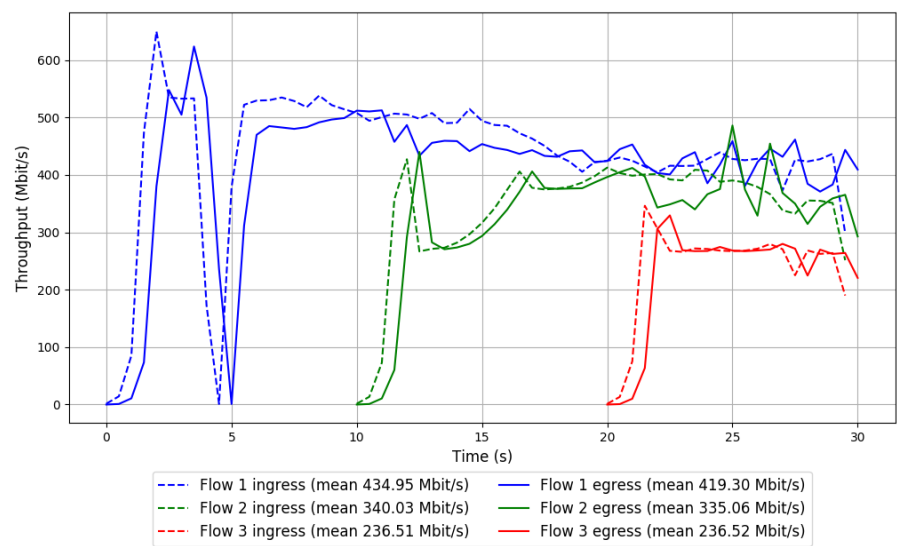


Run 5: Statistics of PCC-Allegro

Start at: 2019-02-05 19:33:22
End at: 2019-02-05 19:33:52
Local clock offset: -0.048 ms
Remote clock offset: -1.437 ms

Below is generated by plot.py at 2019-02-05 22:30:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 719.99 Mbit/s
95th percentile per-packet one-way delay: 180.542 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 419.30 Mbit/s
95th percentile per-packet one-way delay: 177.734 ms
Loss rate: 3.60%
-- Flow 2:
Average throughput: 335.06 Mbit/s
95th percentile per-packet one-way delay: 199.058 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 236.52 Mbit/s
95th percentile per-packet one-way delay: 61.961 ms
Loss rate: 0.00%

Run 5: Report of PCC-Allegro — Data Link

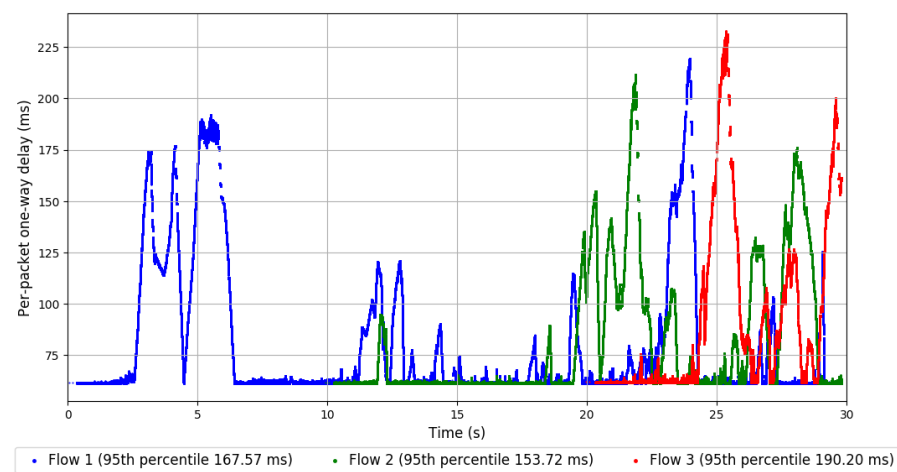
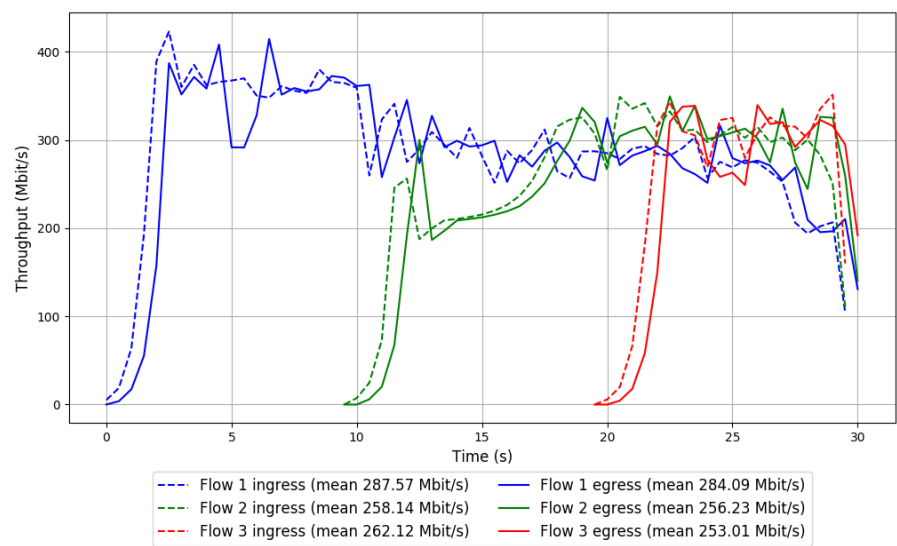


```
Run 1: Statistics of PCC-Expr

Start at: 2019-02-05 17:42:42
End at: 2019-02-05 17:43:12
Local clock offset: 0.031 ms
Remote clock offset: 0.59 ms

# Below is generated by plot.py at 2019-02-05 22:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 538.93 Mbit/s
95th percentile per-packet one-way delay: 167.772 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 284.09 Mbit/s
95th percentile per-packet one-way delay: 167.567 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 256.23 Mbit/s
95th percentile per-packet one-way delay: 153.720 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 253.01 Mbit/s
95th percentile per-packet one-way delay: 190.202 ms
Loss rate: 3.47%
```

Run 1: Report of PCC-Expr — Data Link

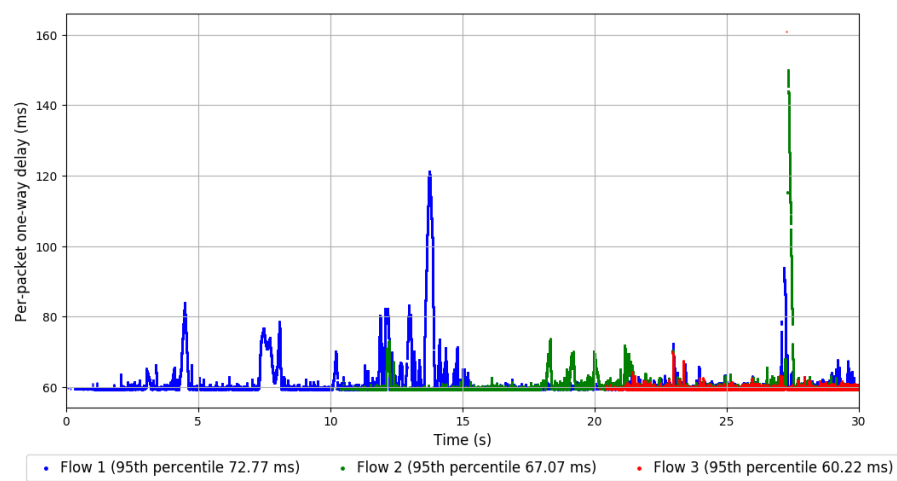
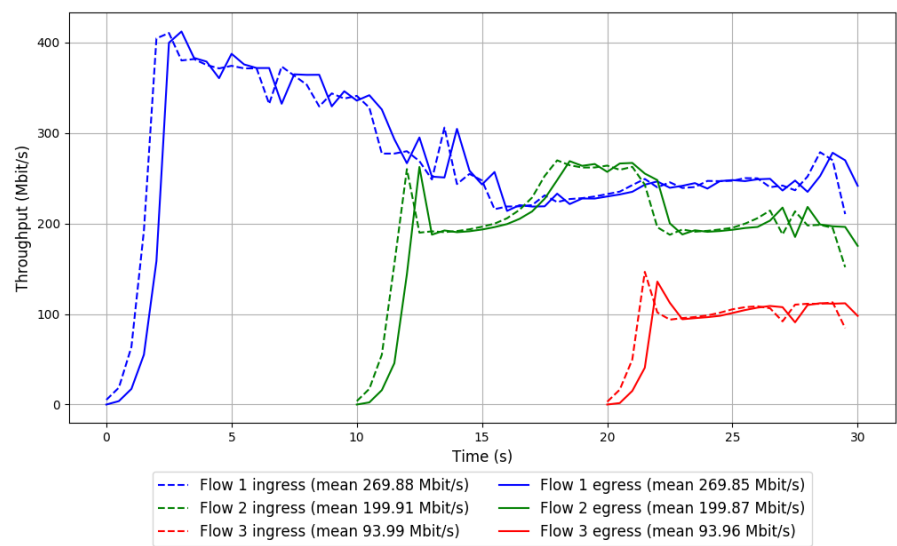


Run 2: Statistics of PCC-Expr

Start at: 2019-02-05 18:18:36
End at: 2019-02-05 18:19:06
Local clock offset: 0.0 ms
Remote clock offset: -1.411 ms

Below is generated by plot.py at 2019-02-05 22:30:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 433.73 Mbit/s
95th percentile per-packet one-way delay: 69.822 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 269.85 Mbit/s
95th percentile per-packet one-way delay: 72.769 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 199.87 Mbit/s
95th percentile per-packet one-way delay: 67.066 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 93.96 Mbit/s
95th percentile per-packet one-way delay: 60.224 ms
Loss rate: 0.03%

Run 2: Report of PCC-Expr — Data Link

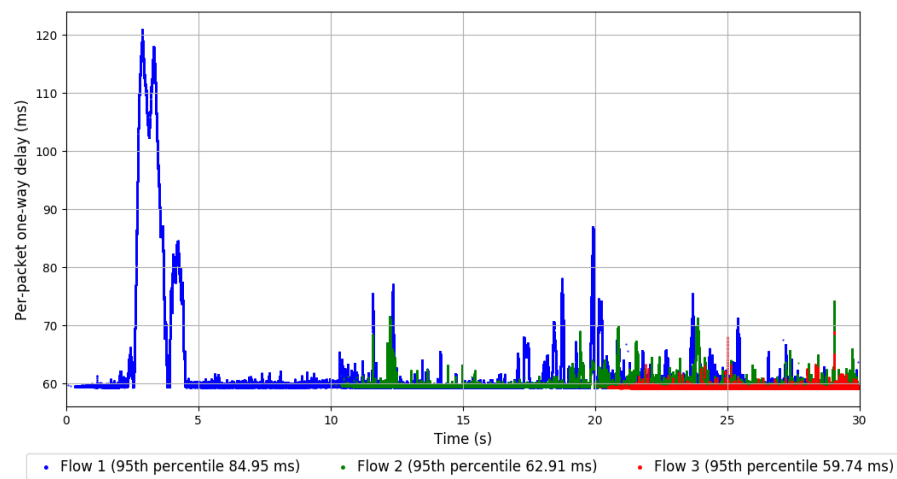
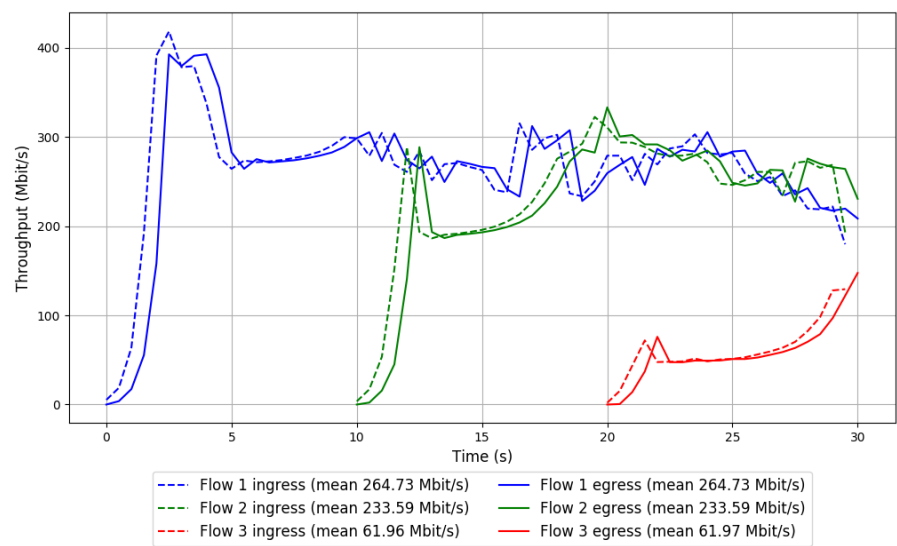


Run 3: Statistics of PCC-Expr

Start at: 2019-02-05 18:54:23
End at: 2019-02-05 18:54:53
Local clock offset: -0.091 ms
Remote clock offset: -1.496 ms

Below is generated by plot.py at 2019-02-05 22:30:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 440.41 Mbit/s
95th percentile per-packet one-way delay: 73.419 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 264.73 Mbit/s
95th percentile per-packet one-way delay: 84.951 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 233.59 Mbit/s
95th percentile per-packet one-way delay: 62.913 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 61.97 Mbit/s
95th percentile per-packet one-way delay: 59.739 ms
Loss rate: 0.00%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-02-05 19:30:10

End at: 2019-02-05 19:30:40

Local clock offset: -0.051 ms

Remote clock offset: -0.19 ms

Below is generated by plot.py at 2019-02-05 22:39:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 478.08 Mbit/s

95th percentile per-packet one-way delay: 93.776 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 266.91 Mbit/s

95th percentile per-packet one-way delay: 117.370 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 235.39 Mbit/s

95th percentile per-packet one-way delay: 79.209 ms

Loss rate: 0.00%

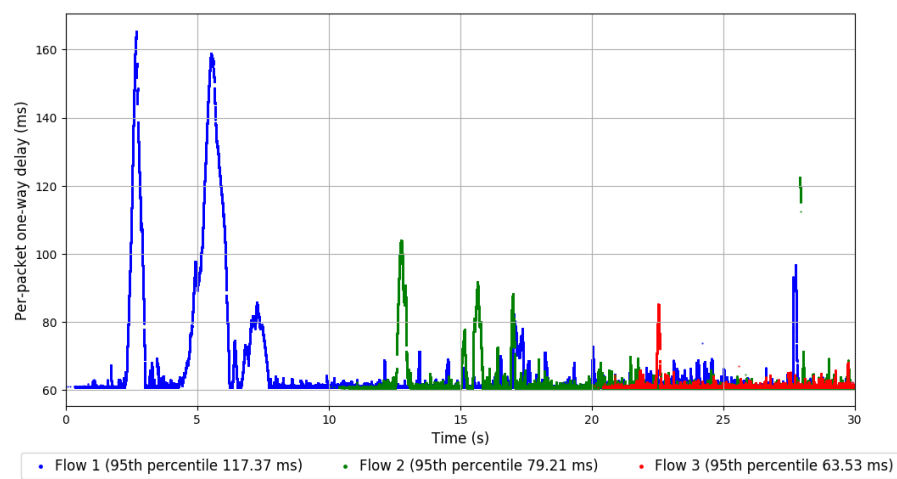
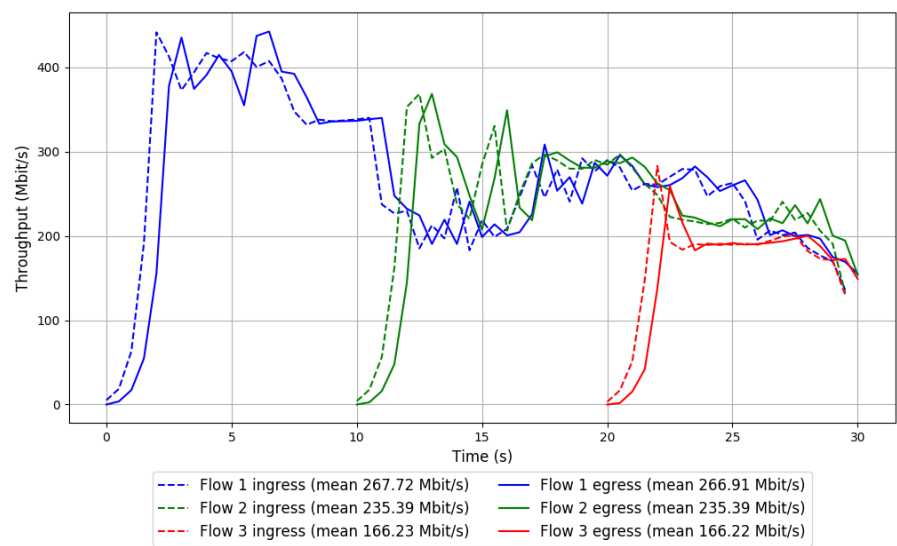
-- Flow 3:

Average throughput: 166.22 Mbit/s

95th percentile per-packet one-way delay: 63.532 ms

Loss rate: 0.00%

Run 4: Report of PCC-Expr — Data Link

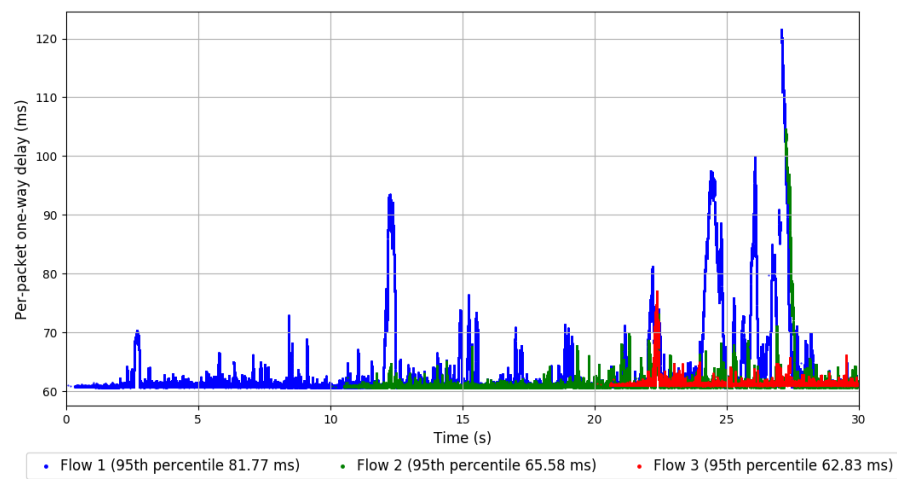
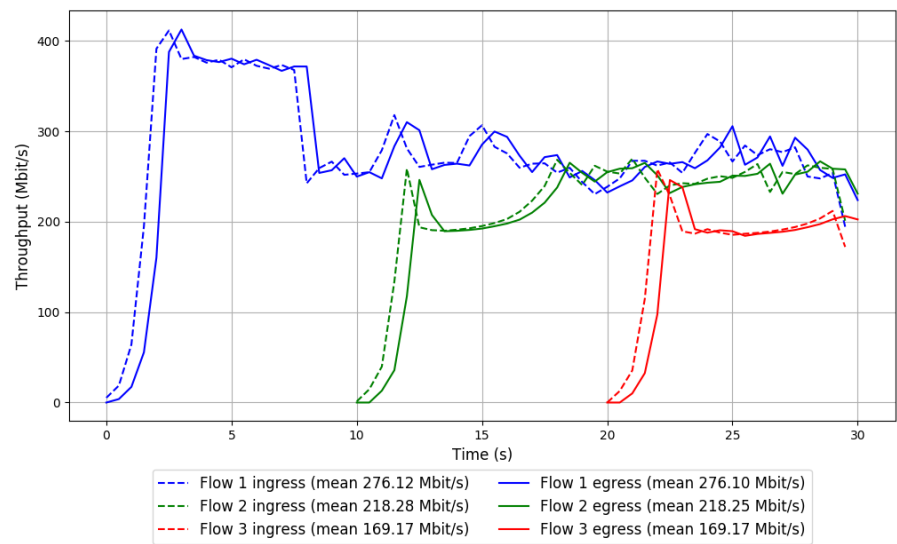


Run 5: Statistics of PCC-Expr

Start at: 2019-02-05 20:05:45
End at: 2019-02-05 20:06:15
Local clock offset: -0.073 ms
Remote clock offset: -0.048 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 476.75 Mbit/s
95th percentile per-packet one-way delay: 73.335 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 276.10 Mbit/s
95th percentile per-packet one-way delay: 81.767 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 218.25 Mbit/s
95th percentile per-packet one-way delay: 65.581 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 169.17 Mbit/s
95th percentile per-packet one-way delay: 62.829 ms
Loss rate: 0.02%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-02-05 17:16:43

End at: 2019-02-05 17:17:13

Local clock offset: 0.092 ms

Remote clock offset: 0.844 ms

Below is generated by plot.py at 2019-02-05 22:43:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.09 Mbit/s

95th percentile per-packet one-way delay: 61.770 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 61.925 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.90 Mbit/s

95th percentile per-packet one-way delay: 61.799 ms

Loss rate: 0.00%

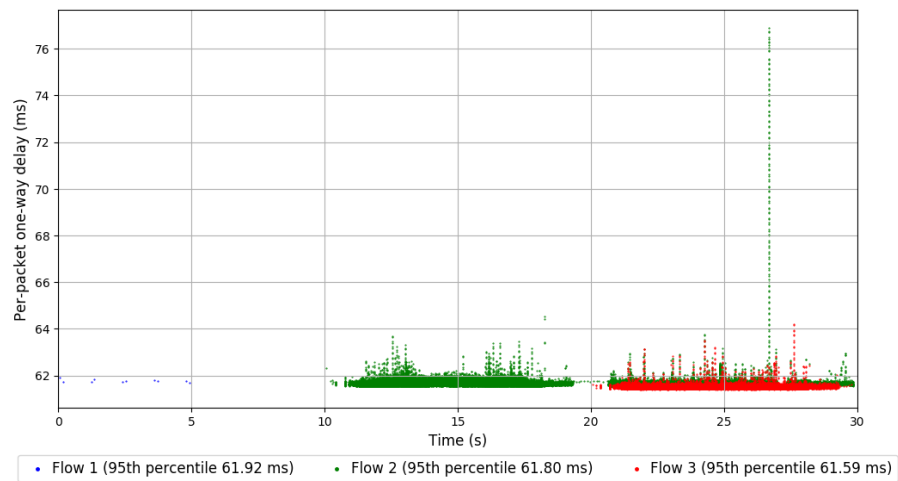
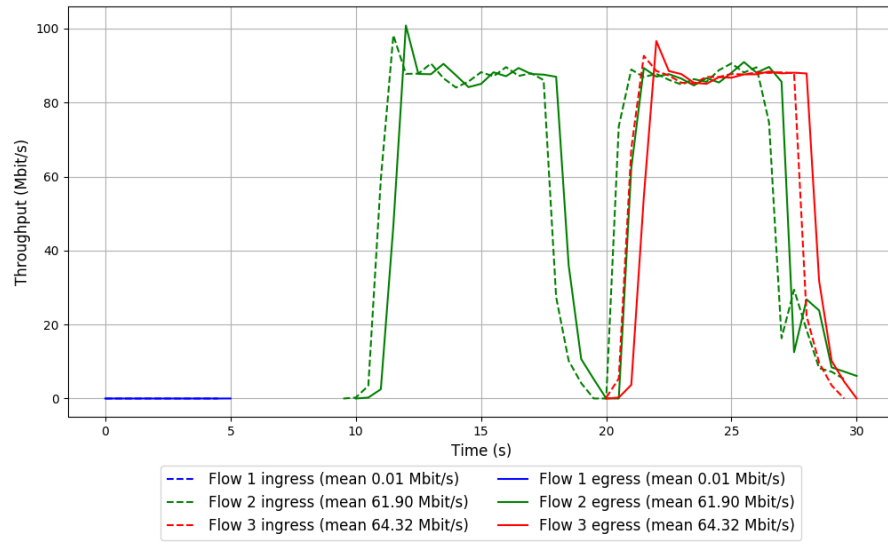
-- Flow 3:

Average throughput: 64.32 Mbit/s

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

Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link

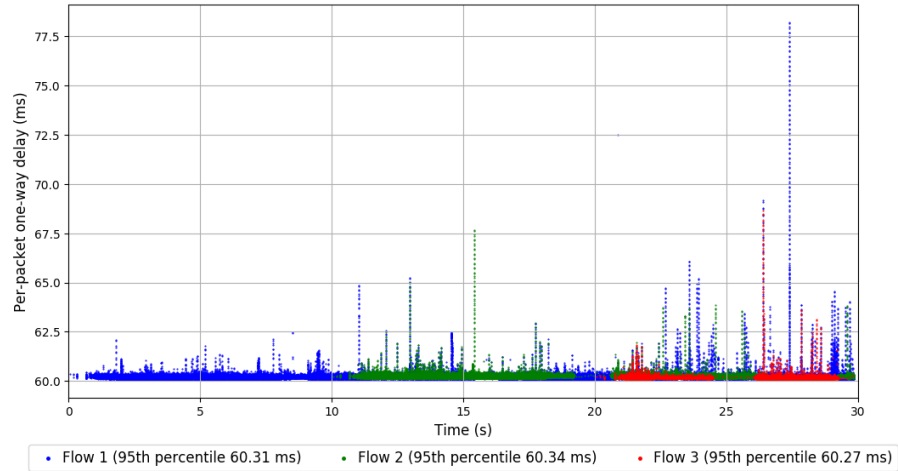
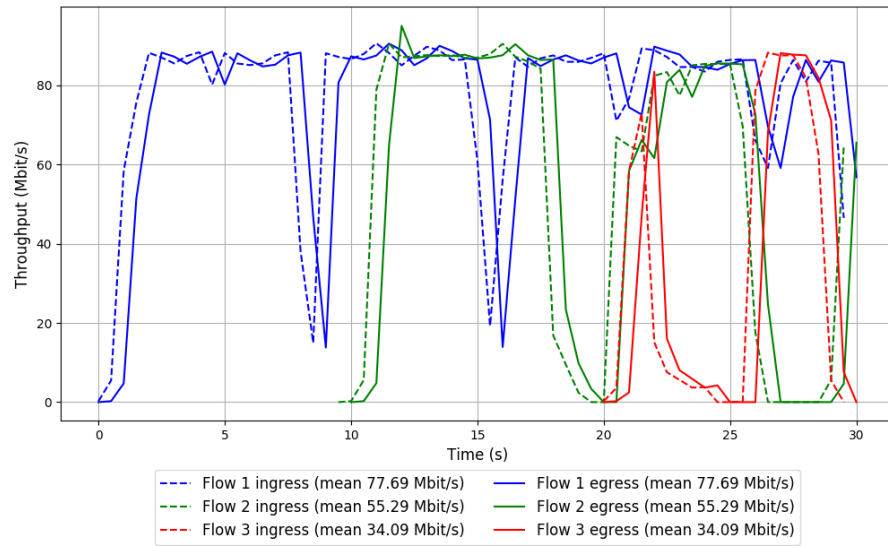


Run 2: Statistics of QUIC Cubic

Start at: 2019-02-05 17:51:53
End at: 2019-02-05 17:52:23
Local clock offset: 0.062 ms
Remote clock offset: -0.678 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 125.55 Mbit/s
95th percentile per-packet one-way delay: 60.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.69 Mbit/s
95th percentile per-packet one-way delay: 60.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.29 Mbit/s
95th percentile per-packet one-way delay: 60.336 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.09 Mbit/s
95th percentile per-packet one-way delay: 60.266 ms
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link

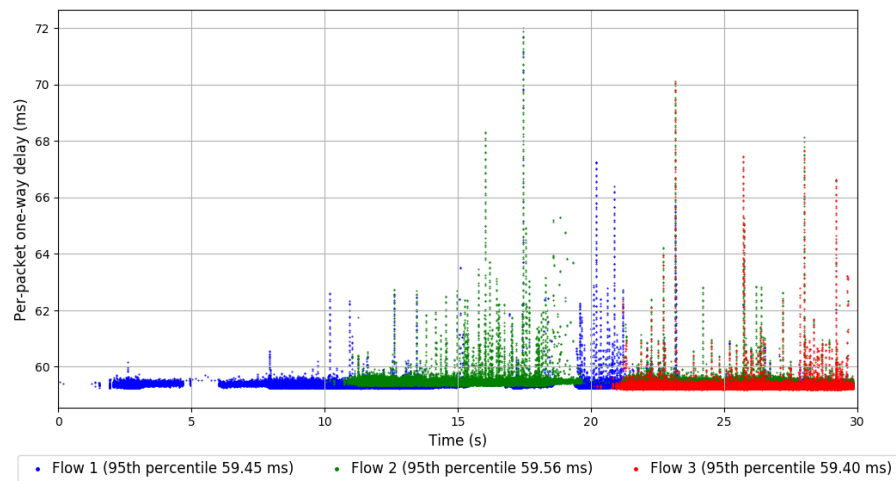
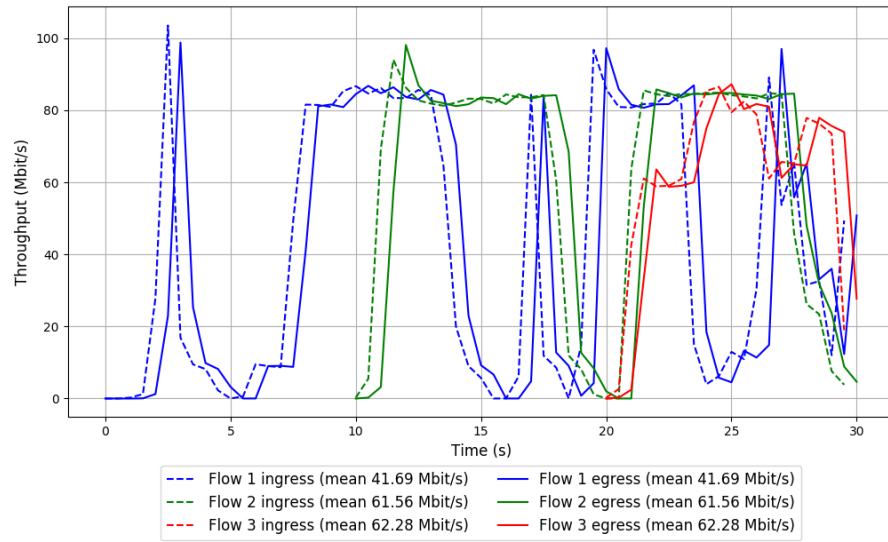


Run 3: Statistics of QUIC Cubic

Start at: 2019-02-05 18:27:42
End at: 2019-02-05 18:28:12
Local clock offset: 0.04 ms
Remote clock offset: -1.498 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 102.90 Mbit/s
95th percentile per-packet one-way delay: 59.513 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.69 Mbit/s
95th percentile per-packet one-way delay: 59.451 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.56 Mbit/s
95th percentile per-packet one-way delay: 59.562 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.28 Mbit/s
95th percentile per-packet one-way delay: 59.397 ms
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link

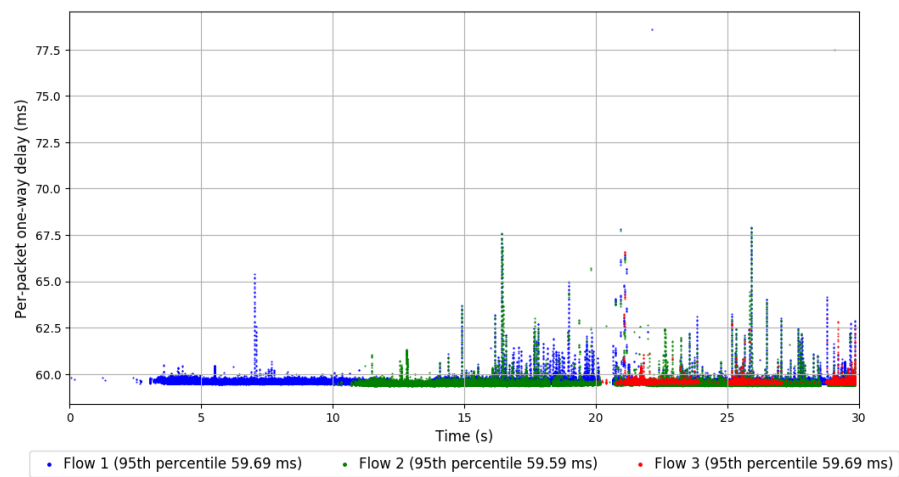
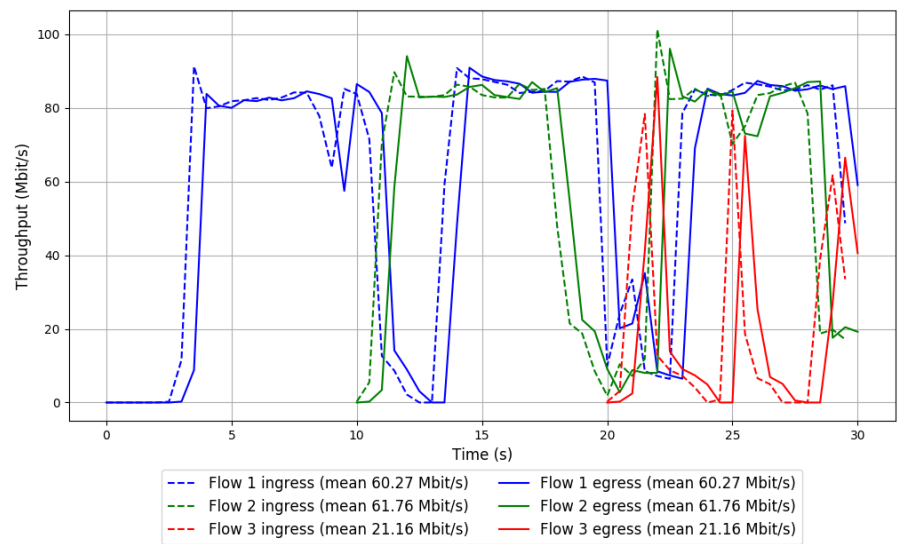


Run 4: Statistics of QUIC Cubic

Start at: 2019-02-05 19:03:30
End at: 2019-02-05 19:04:00
Local clock offset: -0.082 ms
Remote clock offset: -1.407 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 108.19 Mbit/s
95th percentile per-packet one-way delay: 59.670 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.27 Mbit/s
95th percentile per-packet one-way delay: 59.690 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 59.594 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.16 Mbit/s
95th percentile per-packet one-way delay: 59.687 ms
Loss rate: 0.01%

Run 4: Report of QUIC Cubic — Data Link

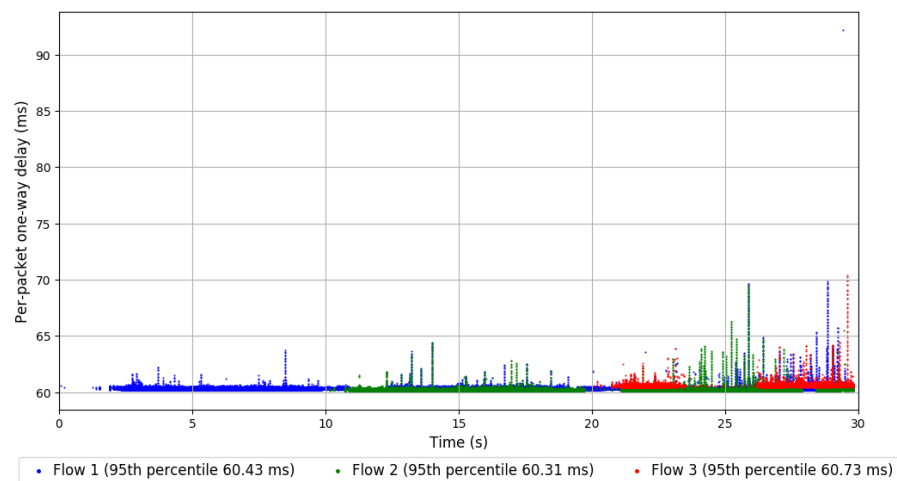
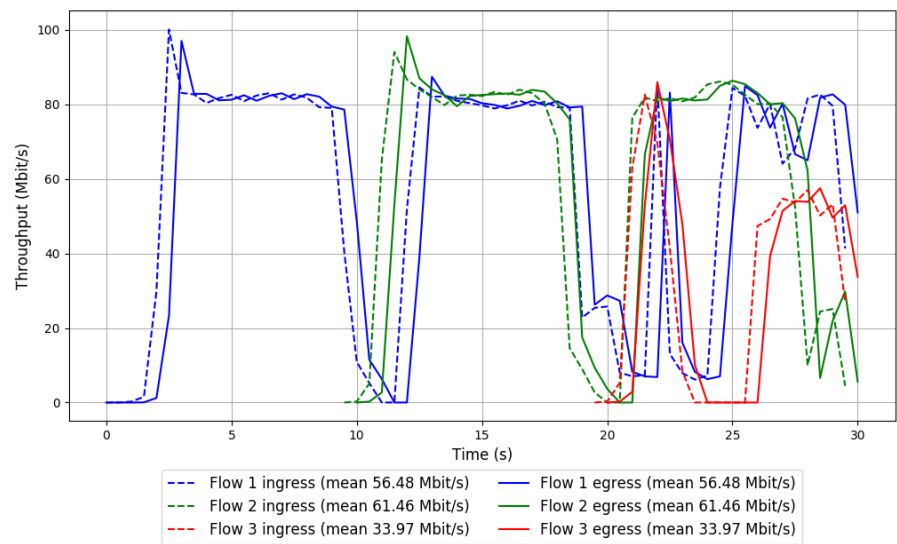


Run 5: Statistics of QUIC Cubic

Start at: 2019-02-05 19:39:14
End at: 2019-02-05 19:39:44
Local clock offset: -0.064 ms
Remote clock offset: -0.651 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 108.45 Mbit/s
95th percentile per-packet one-way delay: 60.569 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.48 Mbit/s
95th percentile per-packet one-way delay: 60.433 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.46 Mbit/s
95th percentile per-packet one-way delay: 60.306 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.97 Mbit/s
95th percentile per-packet one-way delay: 60.725 ms
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 1: Statistics of SReAM

Start at: 2019-02-05 17:24:17

End at: 2019-02-05 17:24:47

Local clock offset: 0.064 ms

Remote clock offset: -0.47 ms

Below is generated by plot.py at 2019-02-05 22:43:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 60.741 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.714 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.766 ms

Loss rate: 0.00%

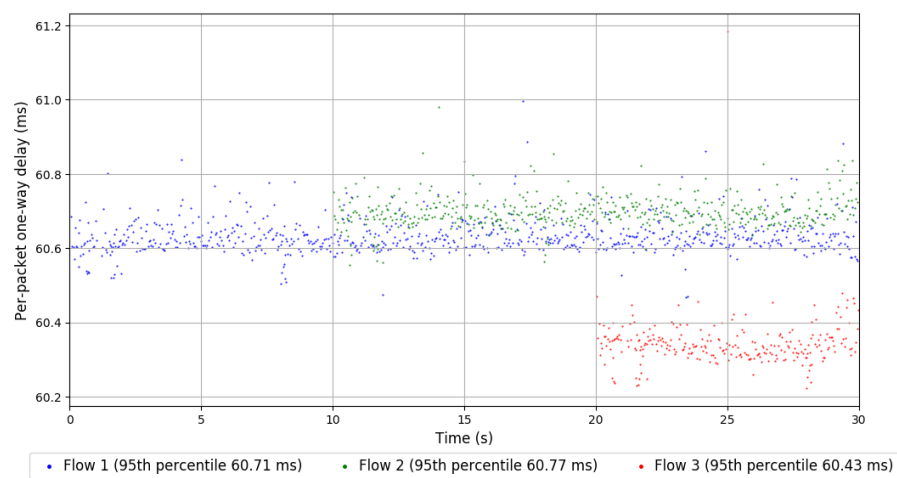
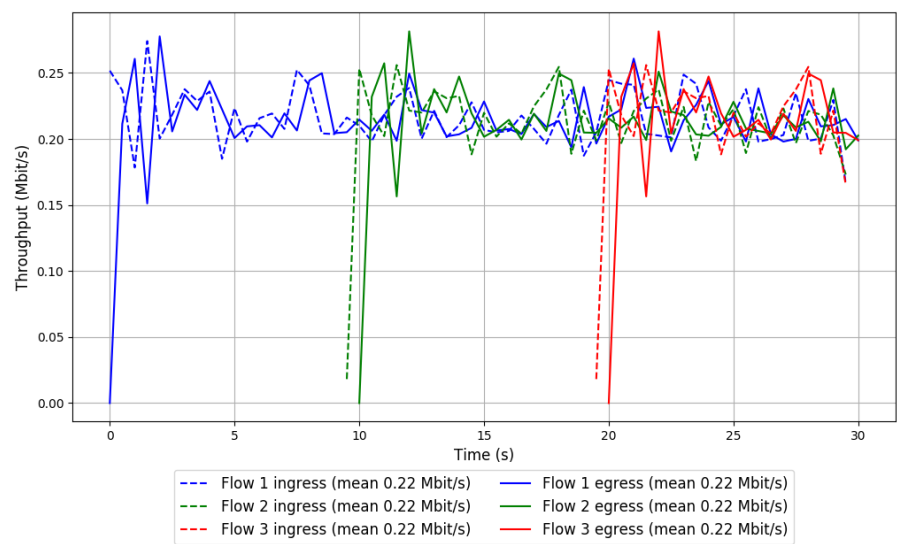
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.433 ms

Loss rate: 0.00%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2019-02-05 18:00:08

End at: 2019-02-05 18:00:38

Local clock offset: 0.012 ms

Remote clock offset: 0.291 ms

Below is generated by plot.py at 2019-02-05 22:43:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 61.644 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.343 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.679 ms

Loss rate: 0.00%

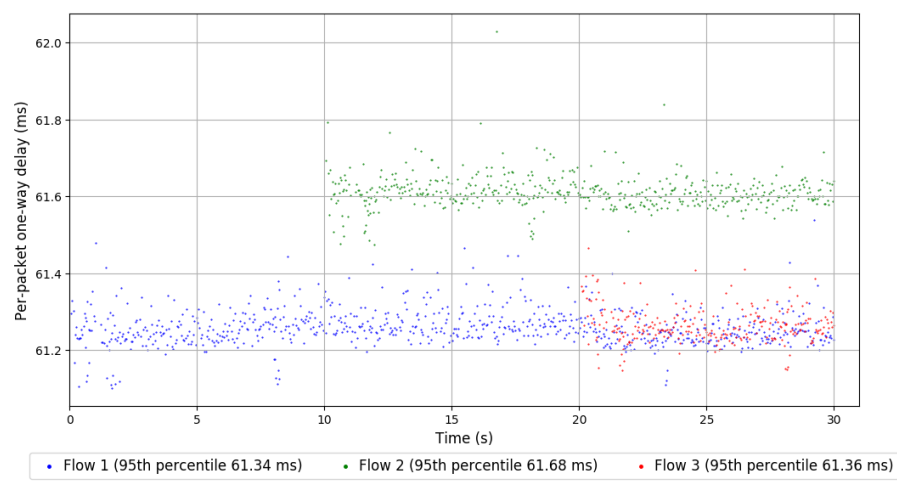
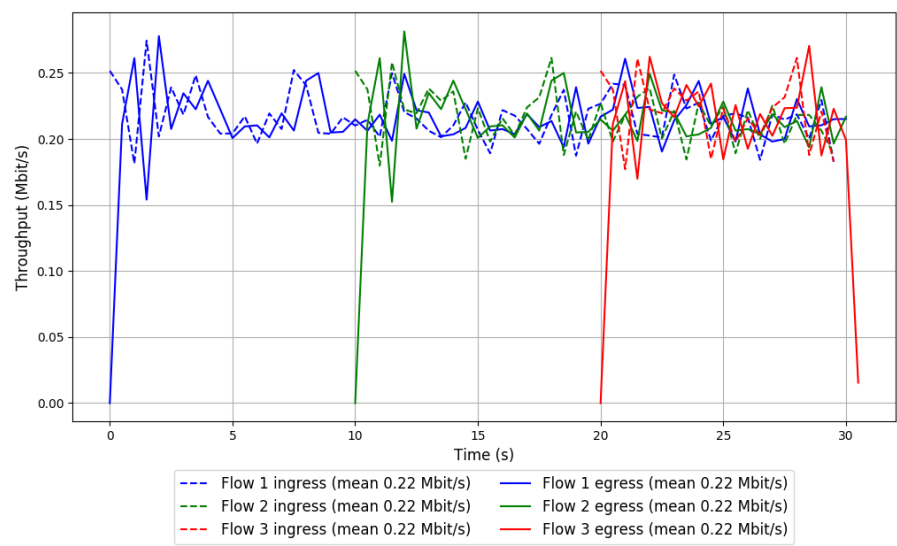
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.356 ms

Loss rate: 0.00%

Run 2: Report of SCReAM — Data Link

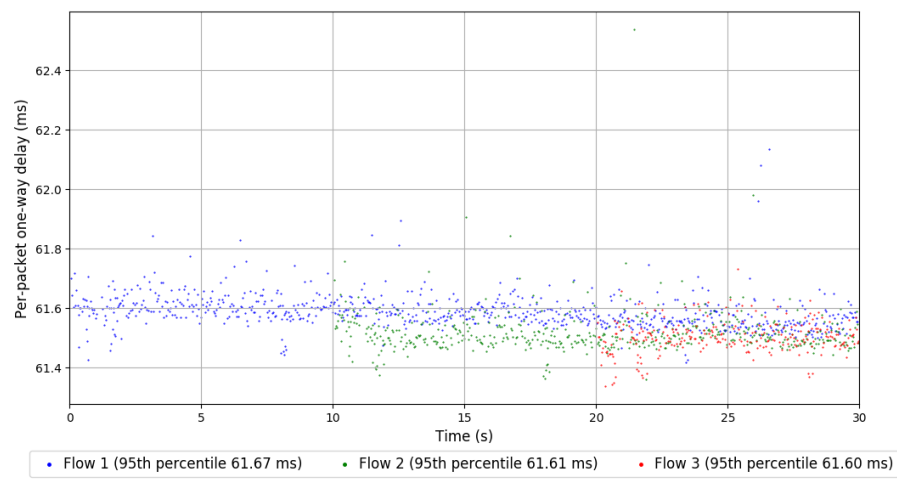
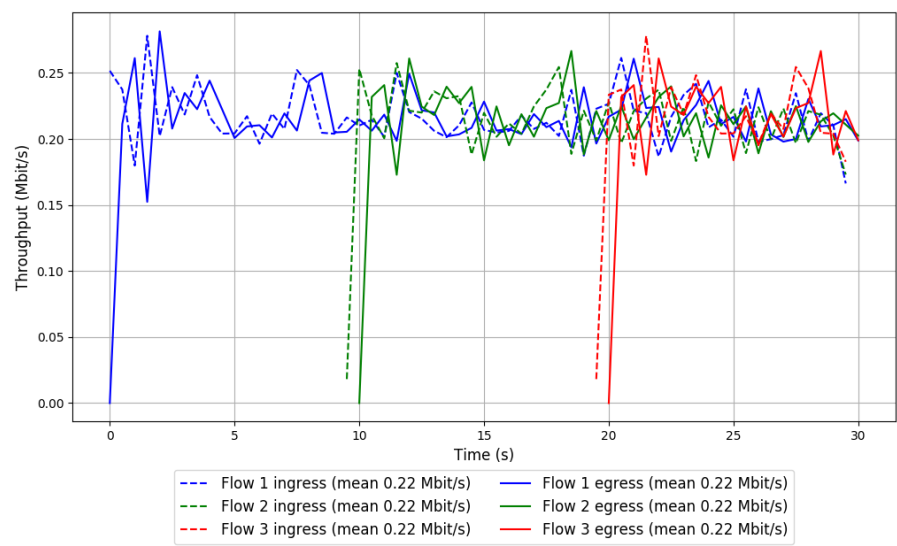


Run 3: Statistics of SReAM

Start at: 2019-02-05 18:35:54
End at: 2019-02-05 18:36:24
Local clock offset: -0.09 ms
Remote clock offset: 0.469 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 61.657 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.675 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.614 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.602 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

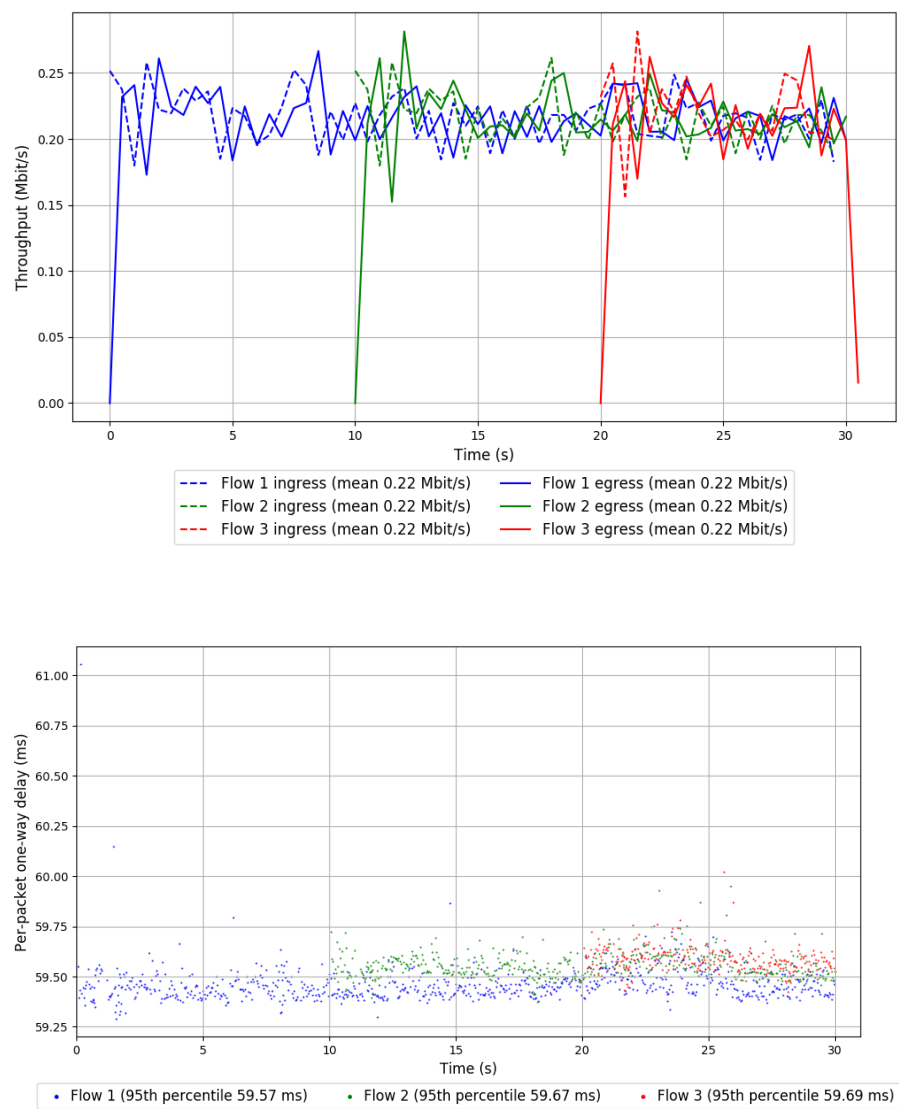


Run 4: Statistics of SReAM

Start at: 2019-02-05 19:11:48
End at: 2019-02-05 19:12:18
Local clock offset: -0.052 ms
Remote clock offset: -1.539 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 59.643 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.570 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.666 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.690 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2019-02-05 19:47:28

End at: 2019-02-05 19:47:58

Local clock offset: -0.089 ms

Remote clock offset: 0.034 ms

Below is generated by plot.py at 2019-02-05 22:43:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 61.478 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.473 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.492 ms

Loss rate: 0.00%

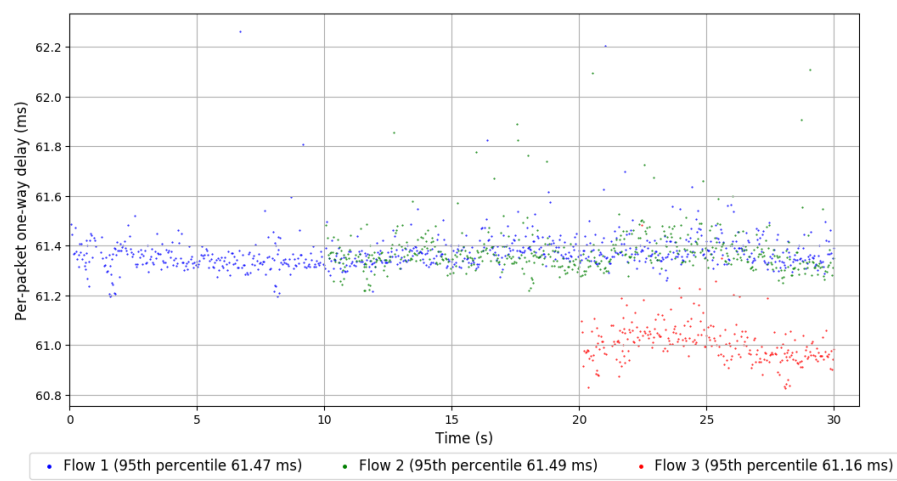
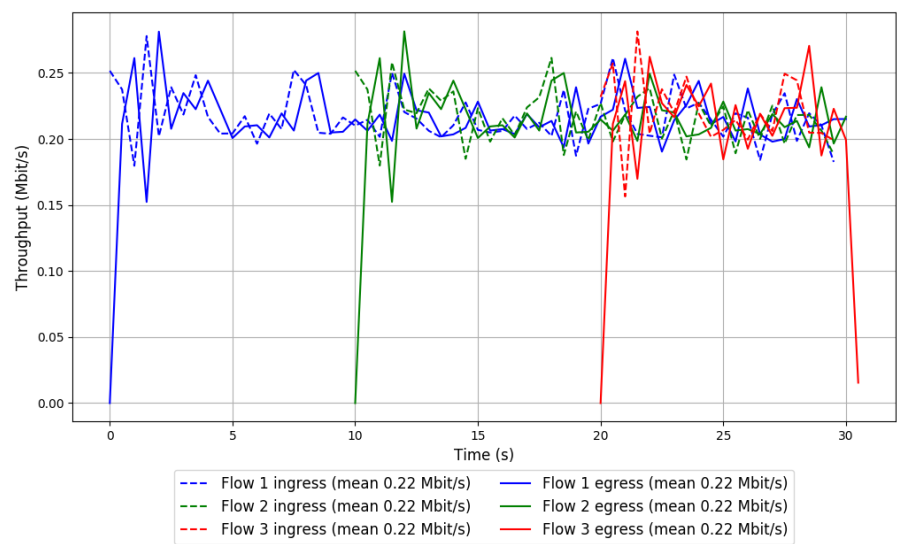
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.161 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-02-05 17:44:44

End at: 2019-02-05 17:45:14

Local clock offset: 0.024 ms

Remote clock offset: 0.682 ms

Below is generated by plot.py at 2019-02-05 22:43:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.70 Mbit/s

95th percentile per-packet one-way delay: 62.500 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.97 Mbit/s

95th percentile per-packet one-way delay: 62.455 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.82 Mbit/s

95th percentile per-packet one-way delay: 62.545 ms

Loss rate: 0.00%

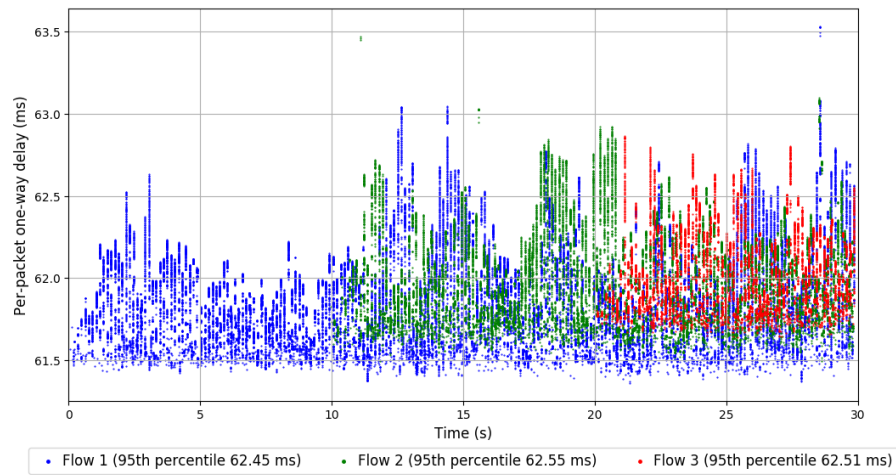
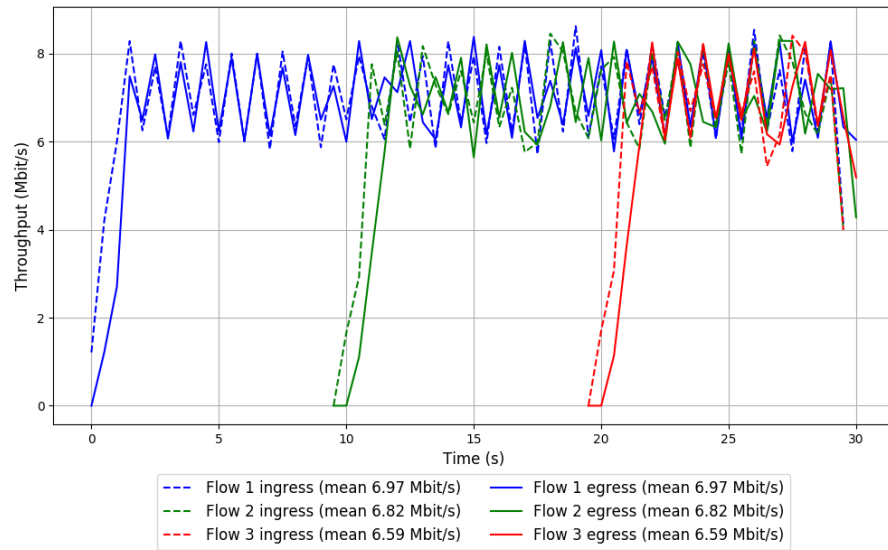
-- Flow 3:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 62.514 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

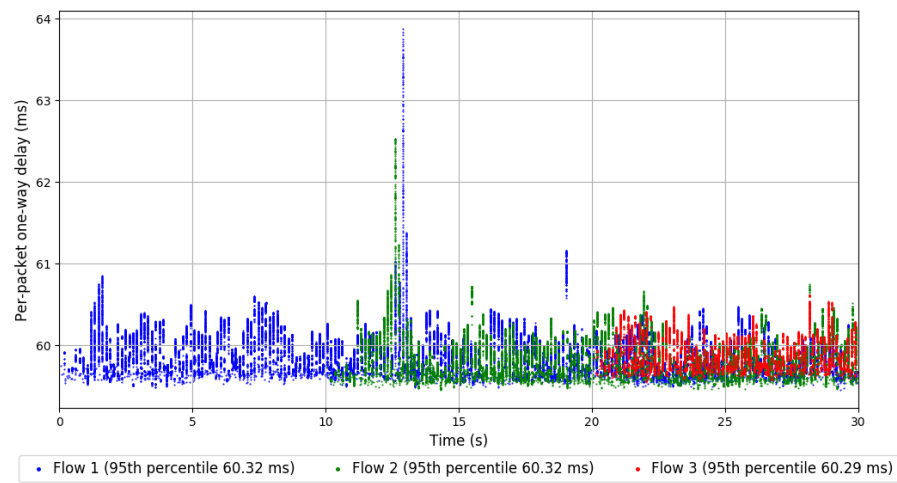
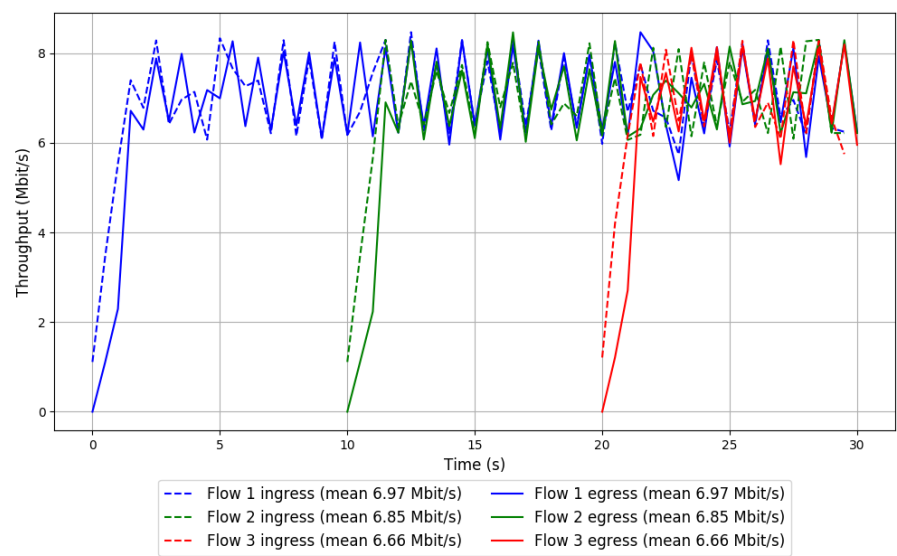


Run 2: Statistics of Sprout

Start at: 2019-02-05 18:20:30
End at: 2019-02-05 18:21:00
Local clock offset: -0.004 ms
Remote clock offset: -1.402 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 13.71 Mbit/s
95th percentile per-packet one-way delay: 60.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 60.324 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 60.324 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 60.291 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

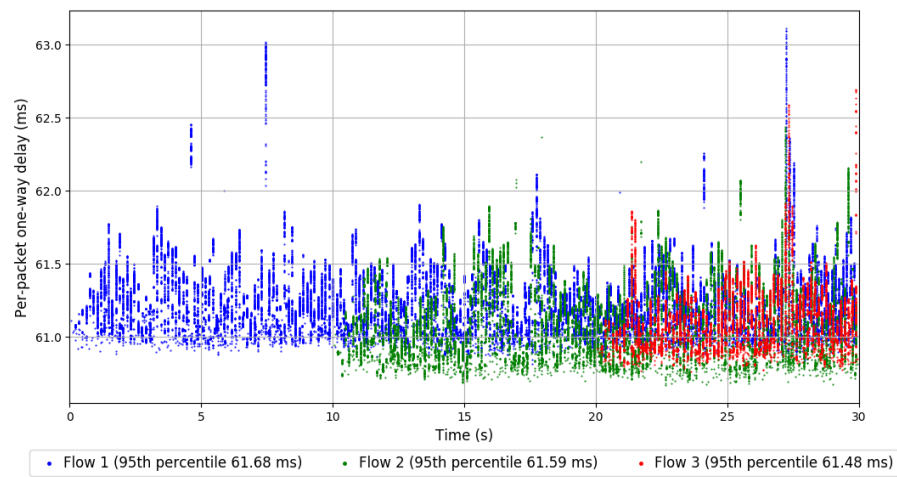
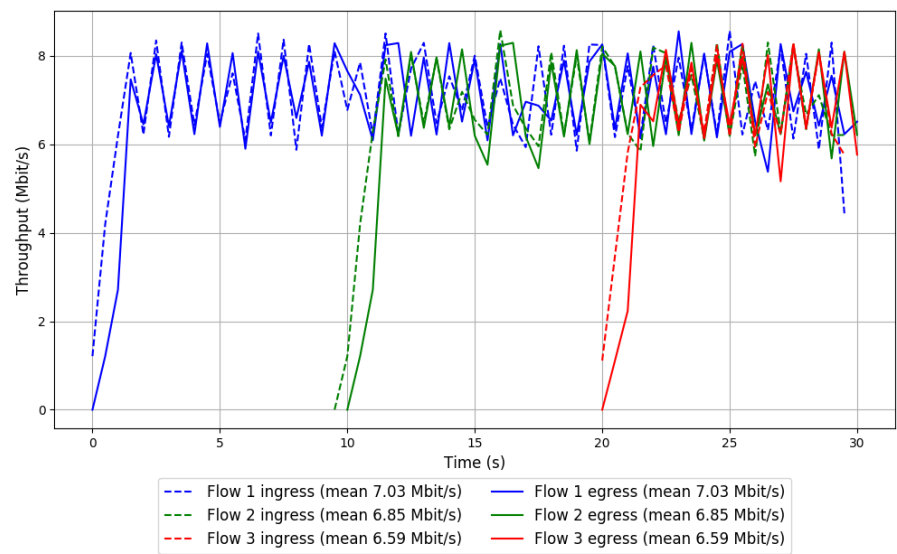


Run 3: Statistics of Sprout

Start at: 2019-02-05 18:56:17
End at: 2019-02-05 18:56:47
Local clock offset: -0.072 ms
Remote clock offset: -0.042 ms

Below is generated by plot.py at 2019-02-05 22:43:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 13.75 Mbit/s
95th percentile per-packet one-way delay: 61.633 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.03 Mbit/s
95th percentile per-packet one-way delay: 61.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 61.589 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 61.478 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

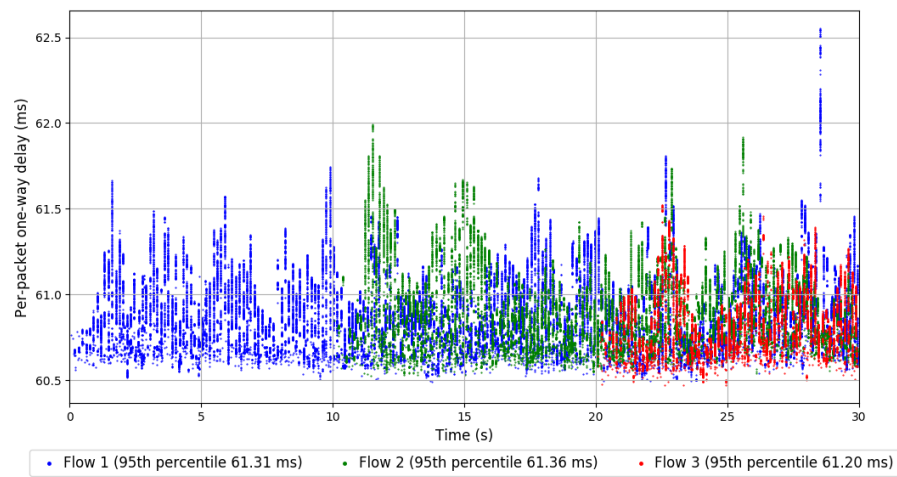
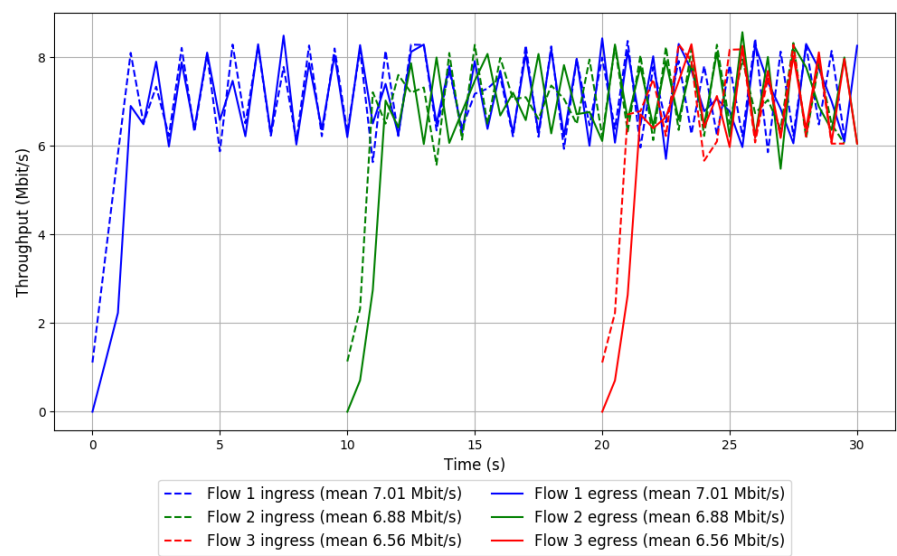


Run 4: Statistics of Sprout

Start at: 2019-02-05 19:32:08
End at: 2019-02-05 19:32:38
Local clock offset: -0.063 ms
Remote clock offset: -0.385 ms

```
# Below is generated by plot.py at 2019-02-05 22:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.75 Mbit/s
95th percentile per-packet one-way delay: 61.314 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 61.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 61.361 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 61.198 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

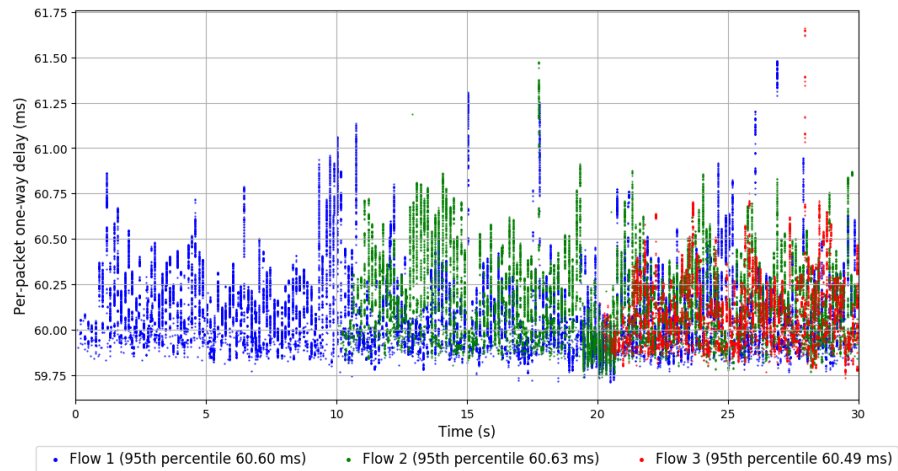
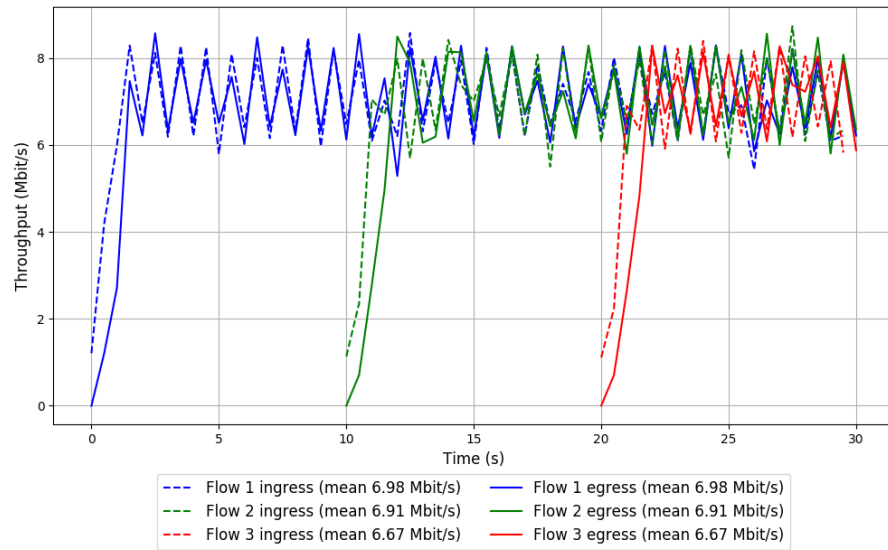


Run 5: Statistics of Sprout

Start at: 2019-02-05 20:07:42
End at: 2019-02-05 20:08:12
Local clock offset: -0.057 ms
Remote clock offset: -1.324 ms

```
# Below is generated by plot.py at 2019-02-05 22:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.76 Mbit/s
95th percentile per-packet one-way delay: 60.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 60.599 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.91 Mbit/s
95th percentile per-packet one-way delay: 60.628 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 60.490 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

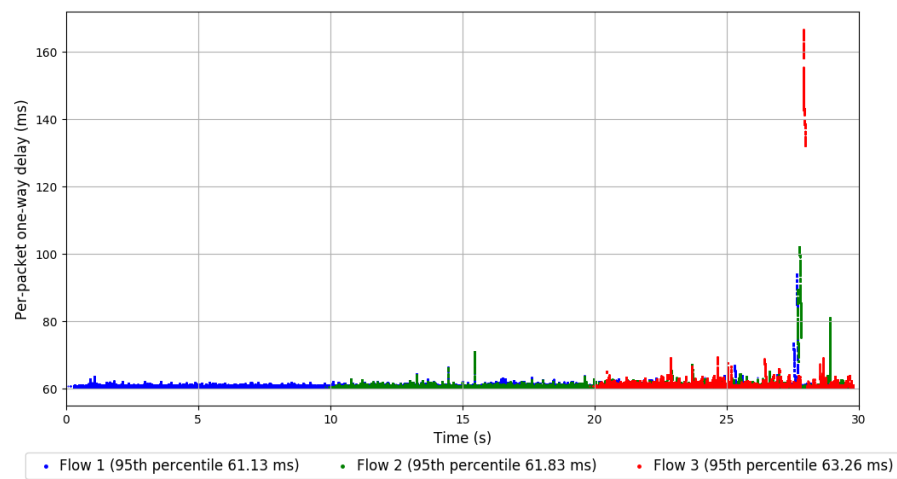
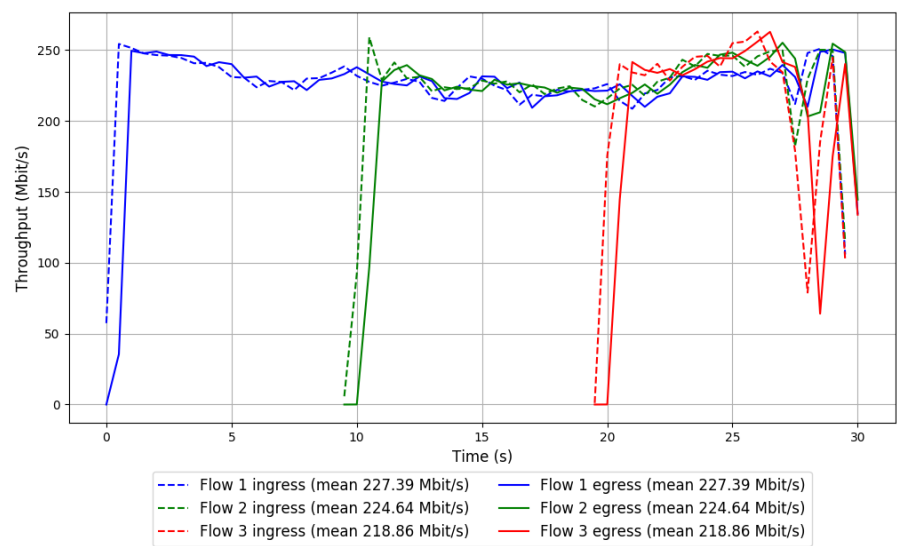


```
Run 1: Statistics of TaoVA-100x

Start at: 2019-02-05 17:12:47
End at: 2019-02-05 17:13:17
Local clock offset: 0.179 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-02-05 22:48:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.73 Mbit/s
95th percentile per-packet one-way delay: 61.790 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.39 Mbit/s
95th percentile per-packet one-way delay: 61.126 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 224.64 Mbit/s
95th percentile per-packet one-way delay: 61.825 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 218.86 Mbit/s
95th percentile per-packet one-way delay: 63.261 ms
Loss rate: 0.00%
```

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

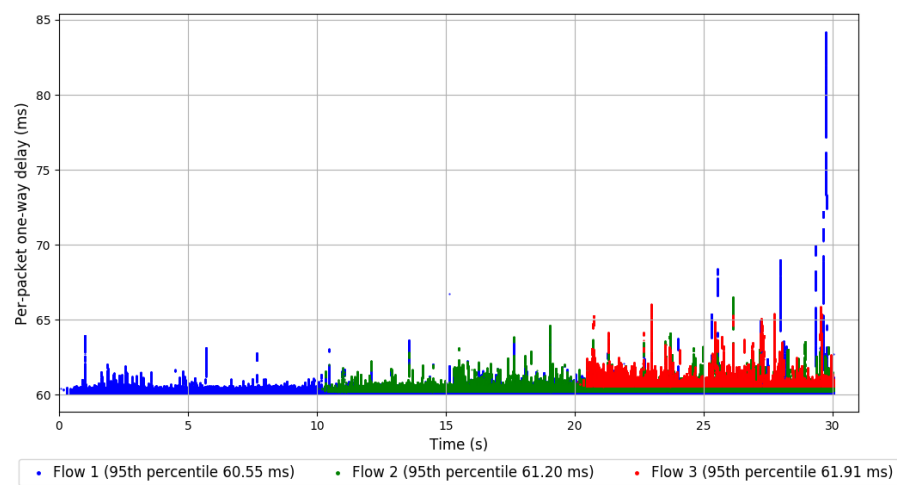
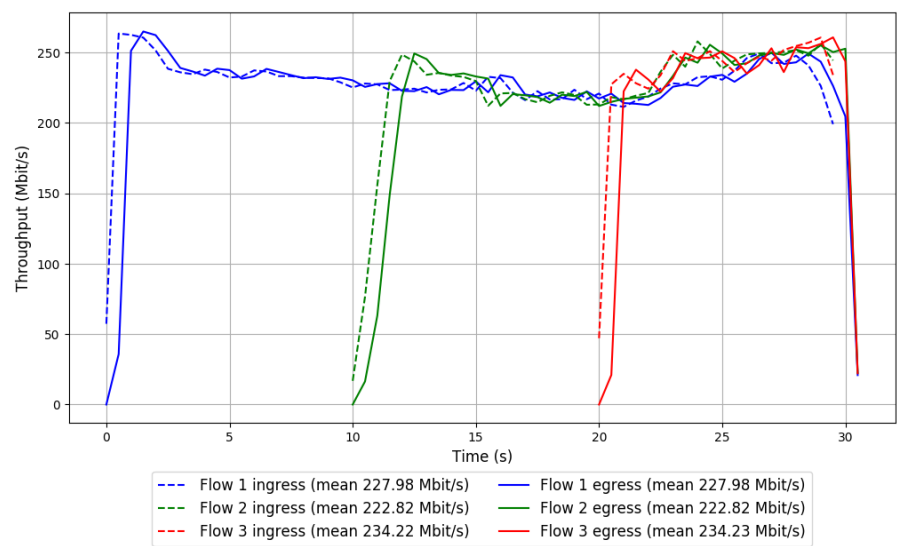


Run 2: Statistics of TaoVA-100x

Start at: 2019-02-05 17:47:59
End at: 2019-02-05 17:48:29
Local clock offset: 0.03 ms
Remote clock offset: -0.563 ms

Below is generated by plot.py at 2019-02-05 22:48:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 454.13 Mbit/s
95th percentile per-packet one-way delay: 61.169 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.98 Mbit/s
95th percentile per-packet one-way delay: 60.546 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 222.82 Mbit/s
95th percentile per-packet one-way delay: 61.196 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.23 Mbit/s
95th percentile per-packet one-way delay: 61.913 ms
Loss rate: 0.00%

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

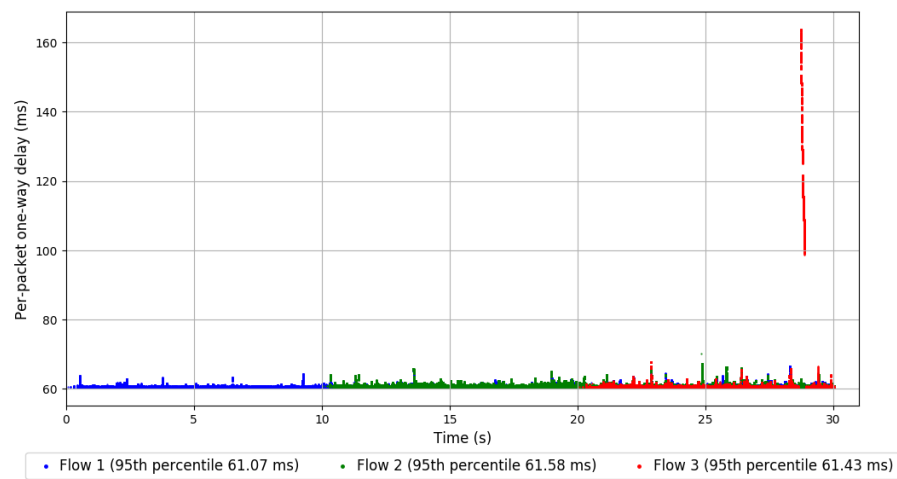
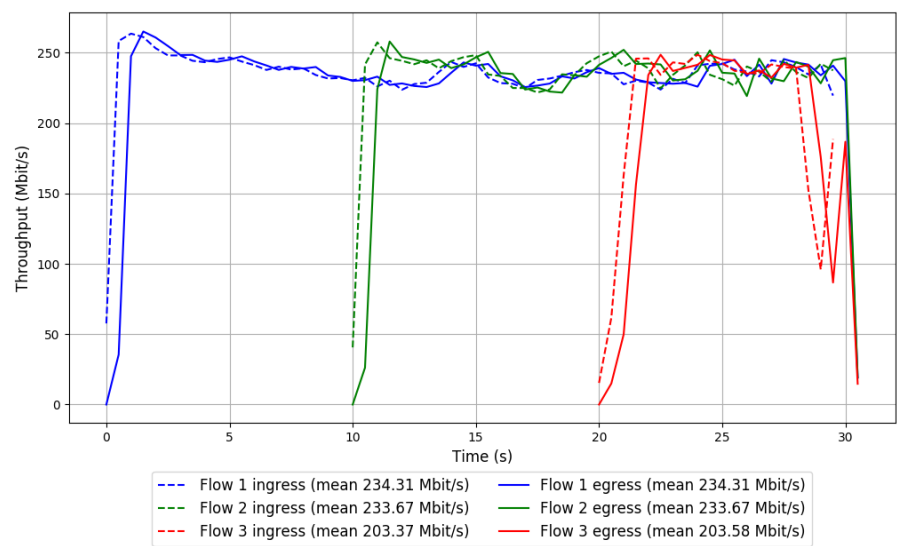


Run 3: Statistics of TaoVA-100x

Start at: 2019-02-05 18:23:45
End at: 2019-02-05 18:24:15
Local clock offset: 0.011 ms
Remote clock offset: -0.398 ms

Below is generated by plot.py at 2019-02-05 22:49:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 457.50 Mbit/s
95th percentile per-packet one-way delay: 61.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.31 Mbit/s
95th percentile per-packet one-way delay: 61.070 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 233.67 Mbit/s
95th percentile per-packet one-way delay: 61.575 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 203.58 Mbit/s
95th percentile per-packet one-way delay: 61.434 ms
Loss rate: 0.01%

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

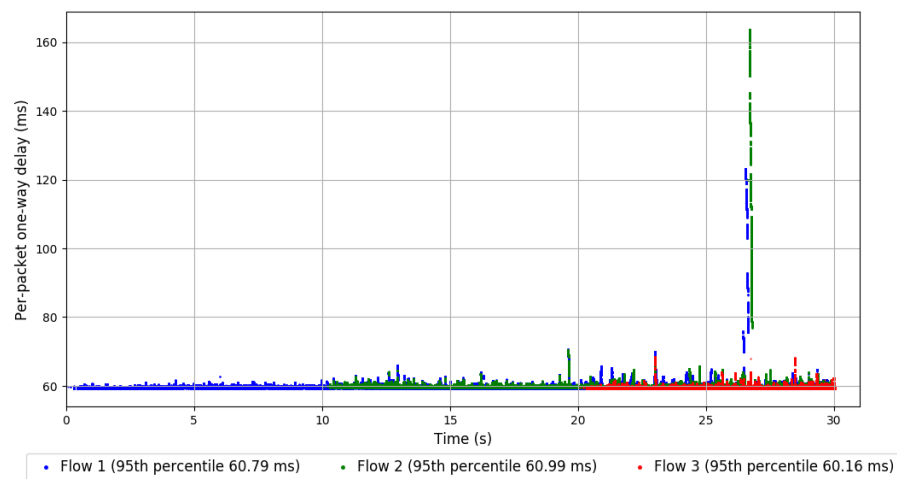
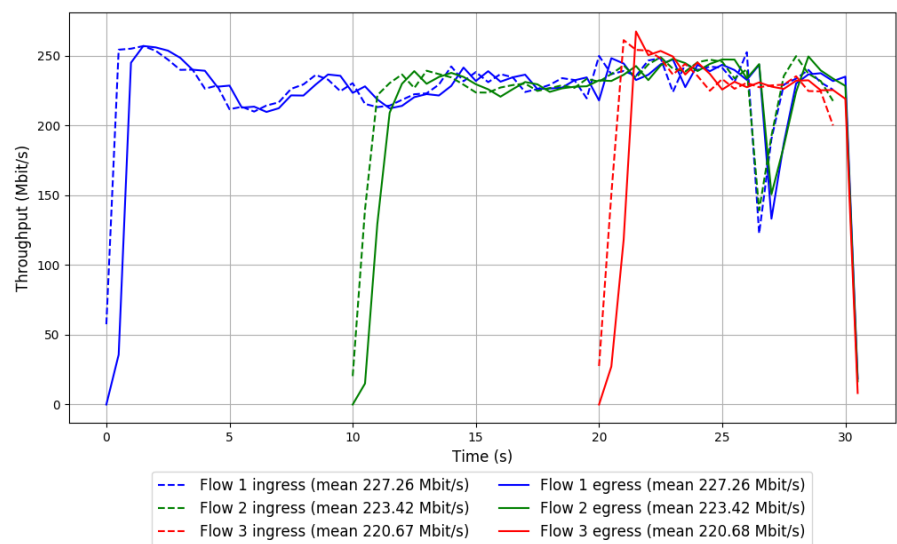


Run 4: Statistics of TaoVA-100x

Start at: 2019-02-05 18:59:32
End at: 2019-02-05 19:00:02
Local clock offset: 0.031 ms
Remote clock offset: -1.372 ms

Below is generated by plot.py at 2019-02-05 22:49:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 449.42 Mbit/s
95th percentile per-packet one-way delay: 60.756 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.26 Mbit/s
95th percentile per-packet one-way delay: 60.792 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 223.42 Mbit/s
95th percentile per-packet one-way delay: 60.990 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 220.68 Mbit/s
95th percentile per-packet one-way delay: 60.156 ms
Loss rate: 0.00%

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

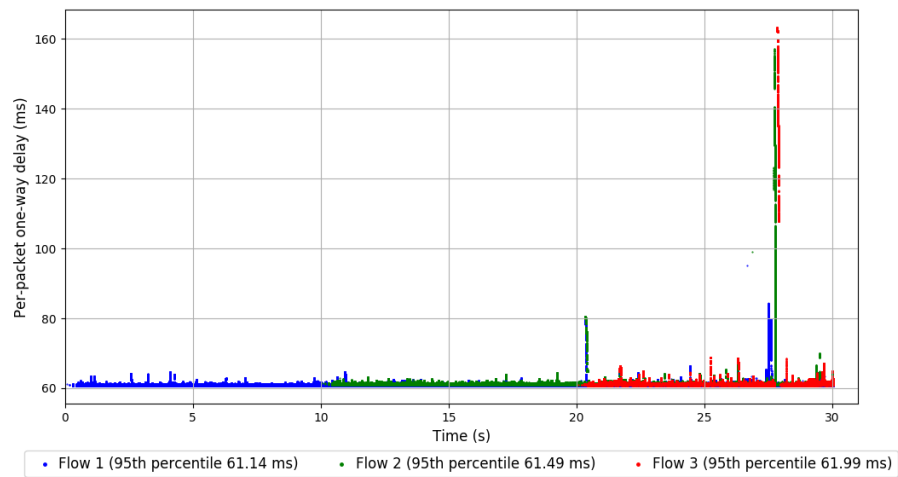
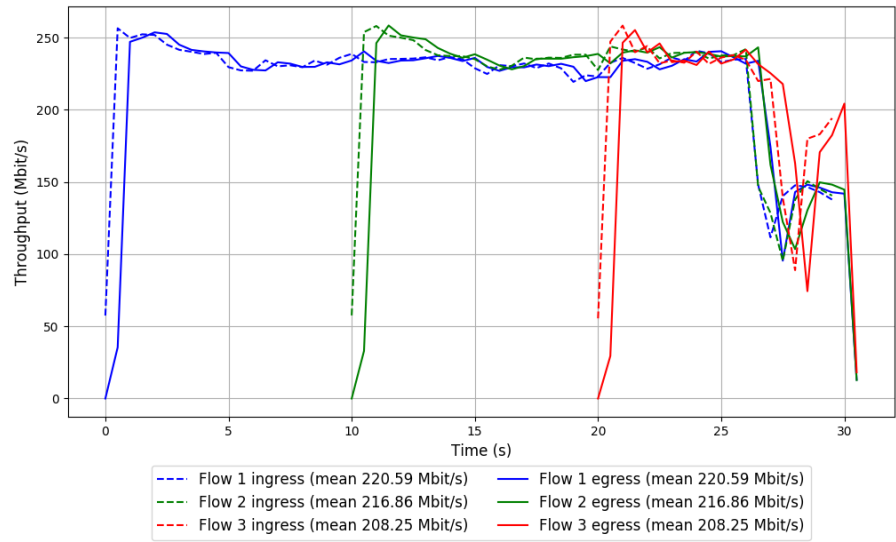


Run 5: Statistics of TaoVA-100x

Start at: 2019-02-05 19:35:23
End at: 2019-02-05 19:35:53
Local clock offset: -0.049 ms
Remote clock offset: -0.182 ms

Below is generated by plot.py at 2019-02-05 22:49:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 434.28 Mbit/s
95th percentile per-packet one-way delay: 61.412 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.59 Mbit/s
95th percentile per-packet one-way delay: 61.136 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 216.86 Mbit/s
95th percentile per-packet one-way delay: 61.490 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 208.25 Mbit/s
95th percentile per-packet one-way delay: 61.995 ms
Loss rate: 0.00%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-02-05 17:37:42

End at: 2019-02-05 17:38:12

Local clock offset: 0.004 ms

Remote clock offset: -1.5 ms

Below is generated by plot.py at 2019-02-05 22:50:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 892.34 Mbit/s

95th percentile per-packet one-way delay: 81.674 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 453.40 Mbit/s

95th percentile per-packet one-way delay: 62.565 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 446.27 Mbit/s

95th percentile per-packet one-way delay: 64.301 ms

Loss rate: 0.02%

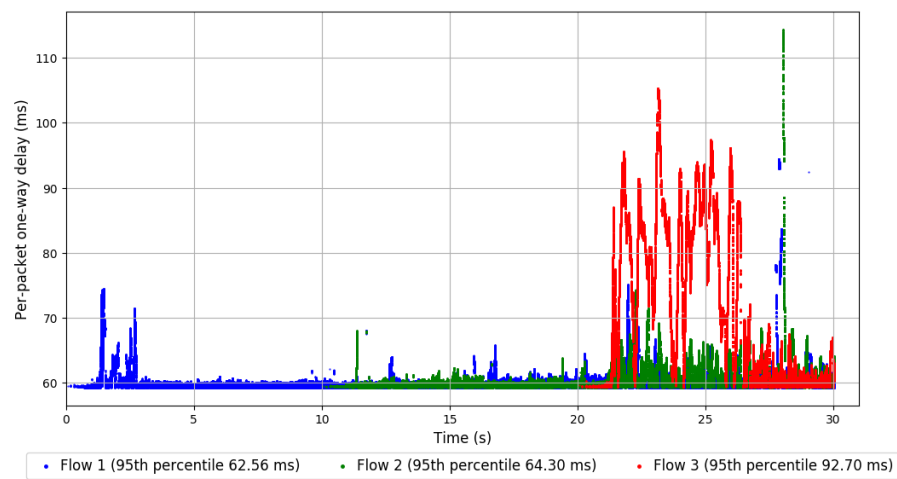
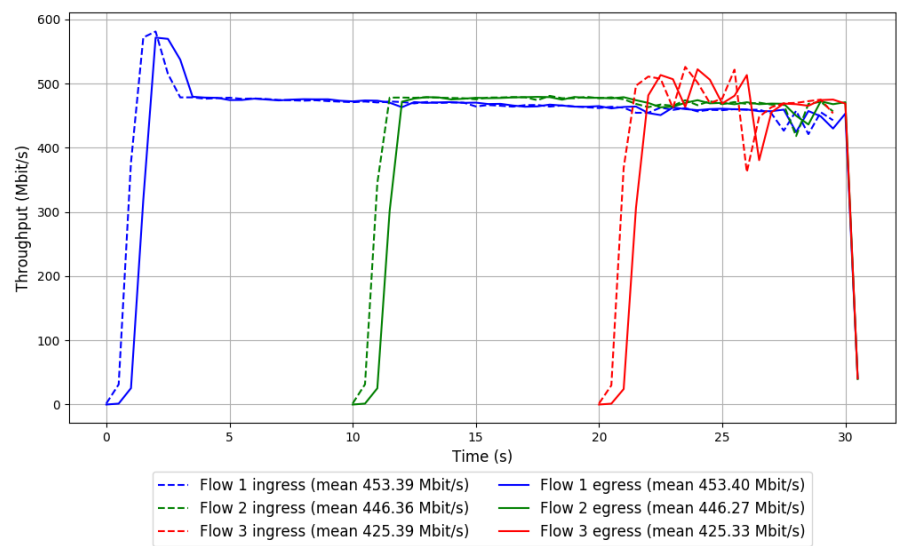
-- Flow 3:

Average throughput: 425.33 Mbit/s

95th percentile per-packet one-way delay: 92.702 ms

Loss rate: 0.01%

Run 1: Report of TCP Vegas — Data Link

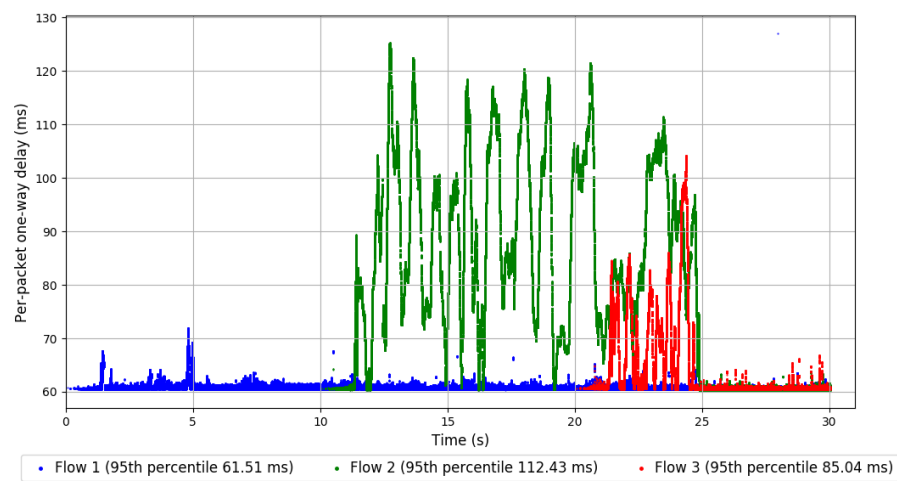
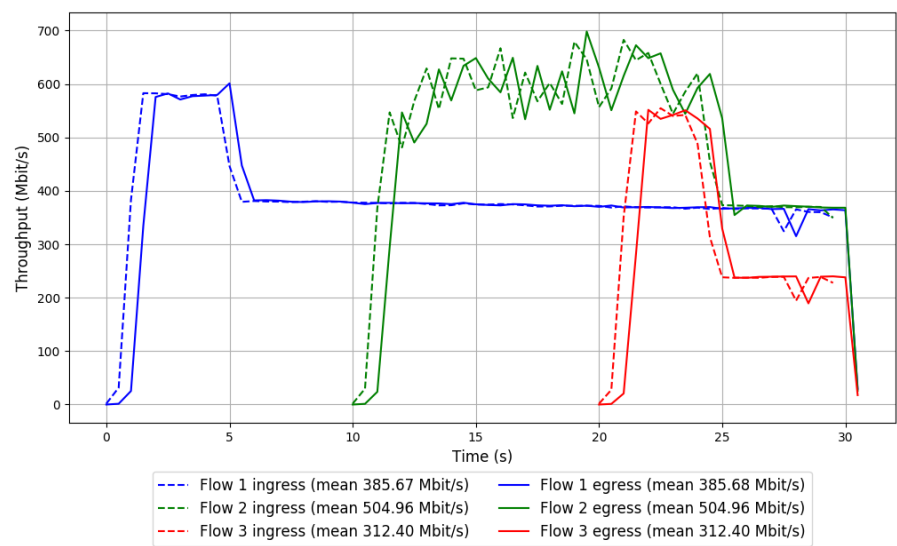


Run 2: Statistics of TCP Vegas

Start at: 2019-02-05 18:13:40
End at: 2019-02-05 18:14:10
Local clock offset: 0.006 ms
Remote clock offset: -0.412 ms

Below is generated by plot.py at 2019-02-05 22:58:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 825.77 Mbit/s
95th percentile per-packet one-way delay: 105.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 385.68 Mbit/s
95th percentile per-packet one-way delay: 61.507 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 504.96 Mbit/s
95th percentile per-packet one-way delay: 112.433 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 312.40 Mbit/s
95th percentile per-packet one-way delay: 85.037 ms
Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-02-05 18:49:32

End at: 2019-02-05 18:50:02

Local clock offset: -0.07 ms

Remote clock offset: 0.492 ms

Below is generated by plot.py at 2019-02-05 23:00:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 816.71 Mbit/s

95th percentile per-packet one-way delay: 85.563 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 377.92 Mbit/s

95th percentile per-packet one-way delay: 62.965 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 439.39 Mbit/s

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

Loss rate: 0.00%

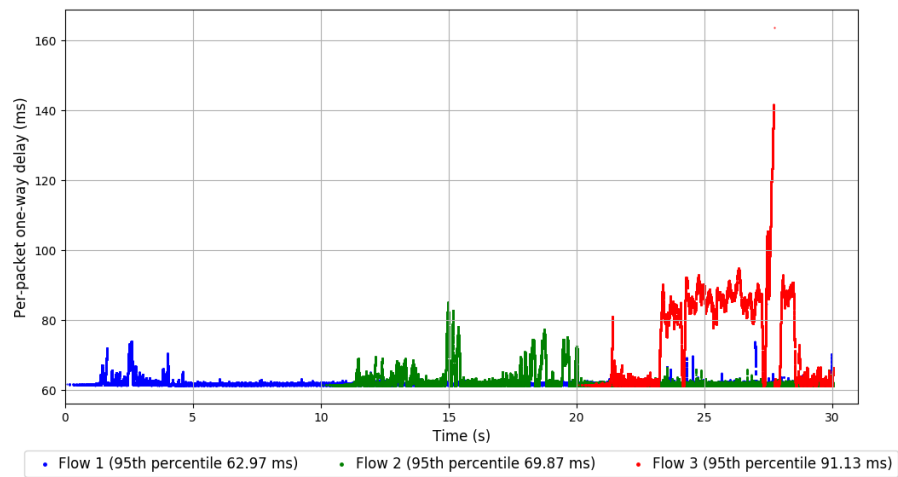
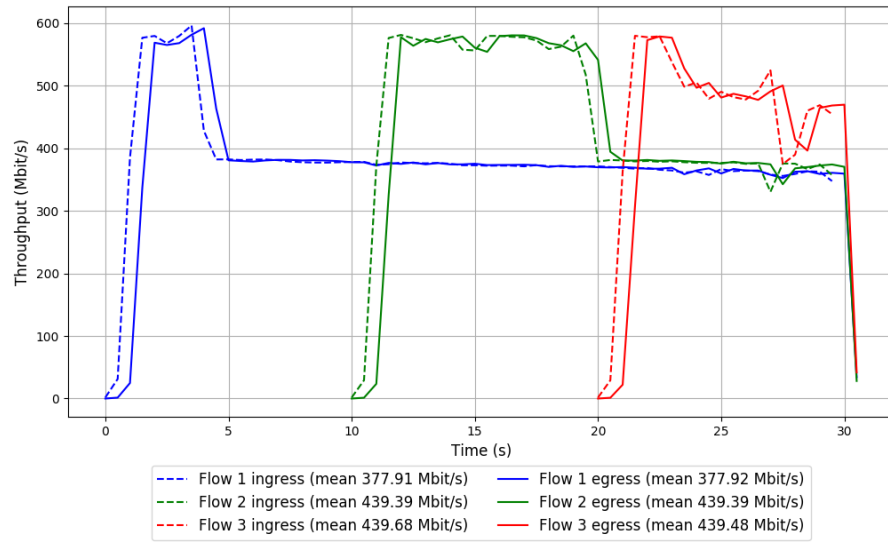
-- Flow 3:

Average throughput: 439.48 Mbit/s

95th percentile per-packet one-way delay: 91.126 ms

Loss rate: 0.04%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-02-05 19:25:14

End at: 2019-02-05 19:25:44

Local clock offset: -0.046 ms

Remote clock offset: -1.52 ms

Below is generated by plot.py at 2019-02-05 23:03:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 767.13 Mbit/s

95th percentile per-packet one-way delay: 63.167 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 401.61 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 340.56 Mbit/s

95th percentile per-packet one-way delay: 71.001 ms

Loss rate: 0.00%

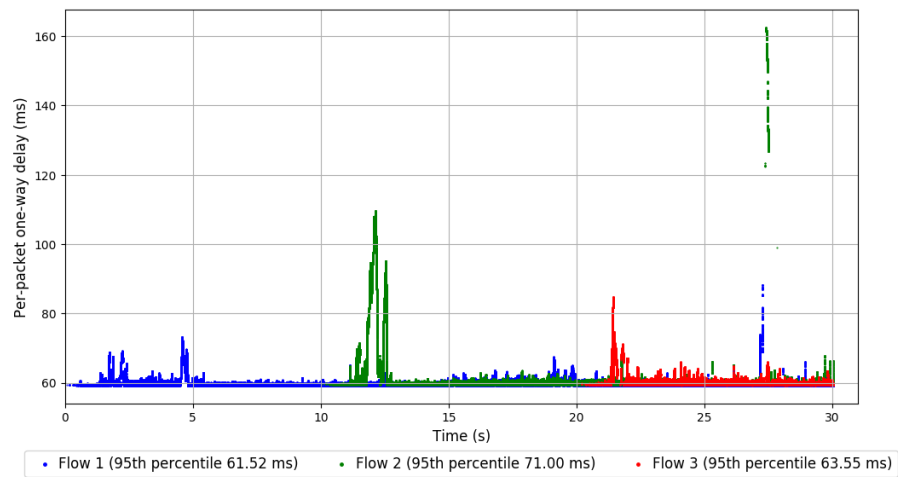
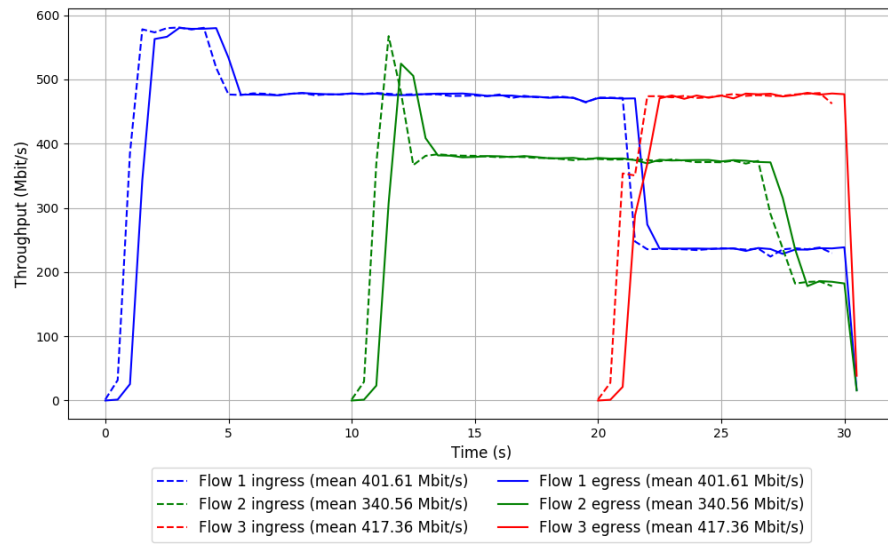
-- Flow 3:

Average throughput: 417.36 Mbit/s

95th percentile per-packet one-way delay: 63.545 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link

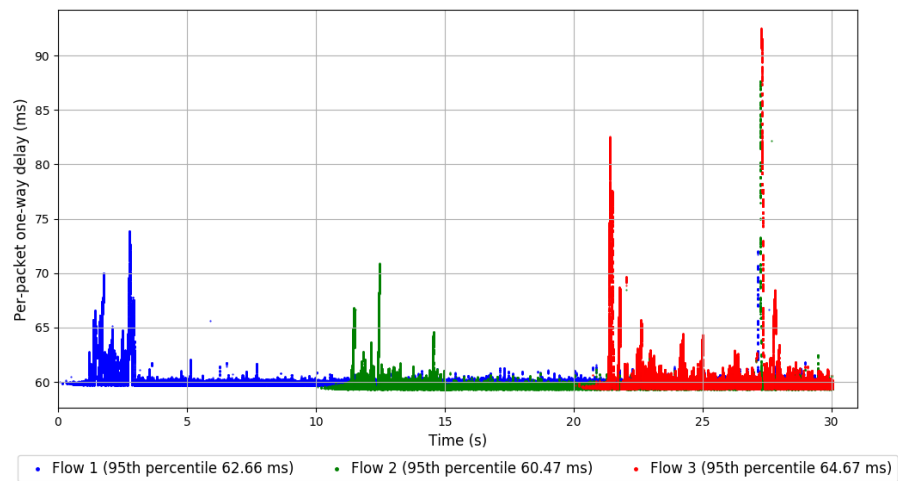
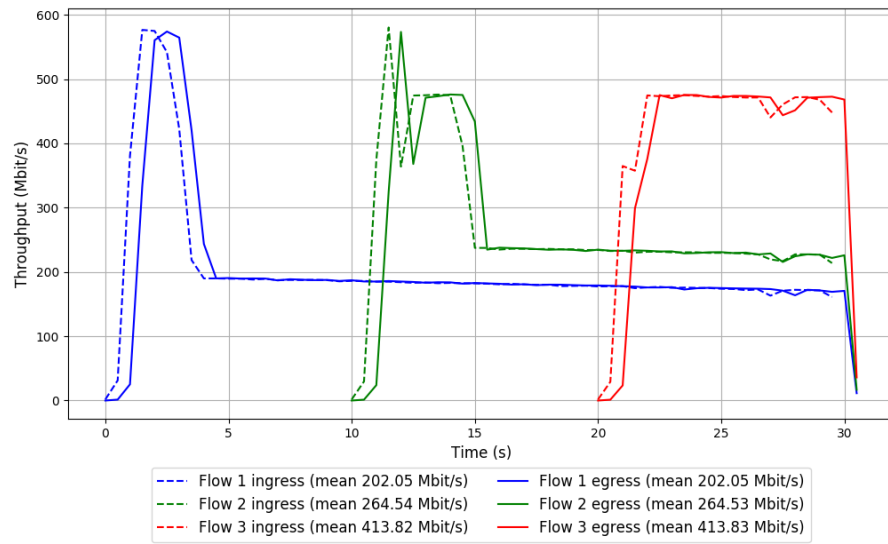


Run 5: Statistics of TCP Vegas

Start at: 2019-02-05 20:01:05
End at: 2019-02-05 20:01:35
Local clock offset: -0.036 ms
Remote clock offset: -1.365 ms

Below is generated by plot.py at 2019-02-05 23:03:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 515.80 Mbit/s
95th percentile per-packet one-way delay: 62.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.05 Mbit/s
95th percentile per-packet one-way delay: 62.664 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 264.53 Mbit/s
95th percentile per-packet one-way delay: 60.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 413.83 Mbit/s
95th percentile per-packet one-way delay: 64.672 ms
Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-02-05 17:19:15

End at: 2019-02-05 17:19:45

Local clock offset: 0.124 ms

Remote clock offset: 0.29 ms

Below is generated by plot.py at 2019-02-05 23:03:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.01 Mbit/s

95th percentile per-packet one-way delay: 135.023 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 123.10 Mbit/s

95th percentile per-packet one-way delay: 110.711 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.42 Mbit/s

95th percentile per-packet one-way delay: 149.558 ms

Loss rate: 0.00%

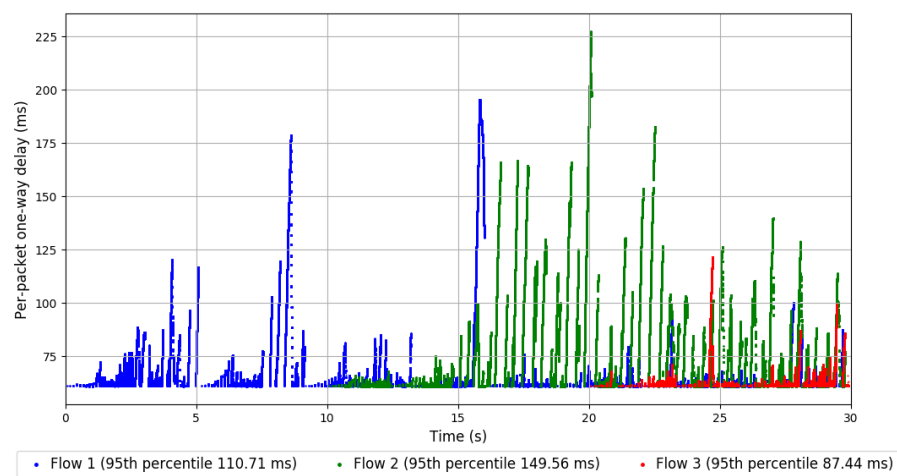
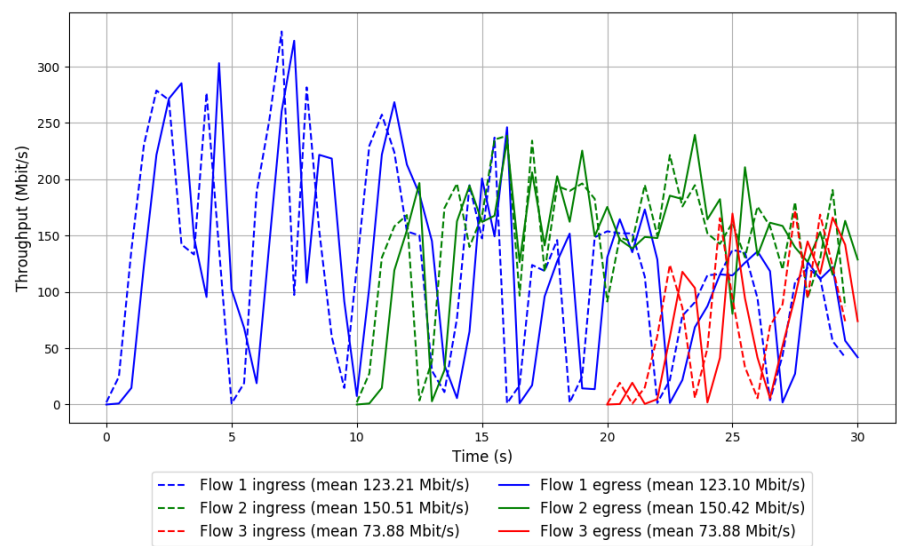
-- Flow 3:

Average throughput: 73.88 Mbit/s

95th percentile per-packet one-way delay: 87.441 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-02-05 17:54:56

End at: 2019-02-05 17:55:26

Local clock offset: 0.05 ms

Remote clock offset: -0.1 ms

Below is generated by plot.py at 2019-02-05 23:03:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 245.36 Mbit/s

95th percentile per-packet one-way delay: 90.284 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 117.08 Mbit/s

95th percentile per-packet one-way delay: 87.959 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 127.32 Mbit/s

95th percentile per-packet one-way delay: 89.572 ms

Loss rate: 0.00%

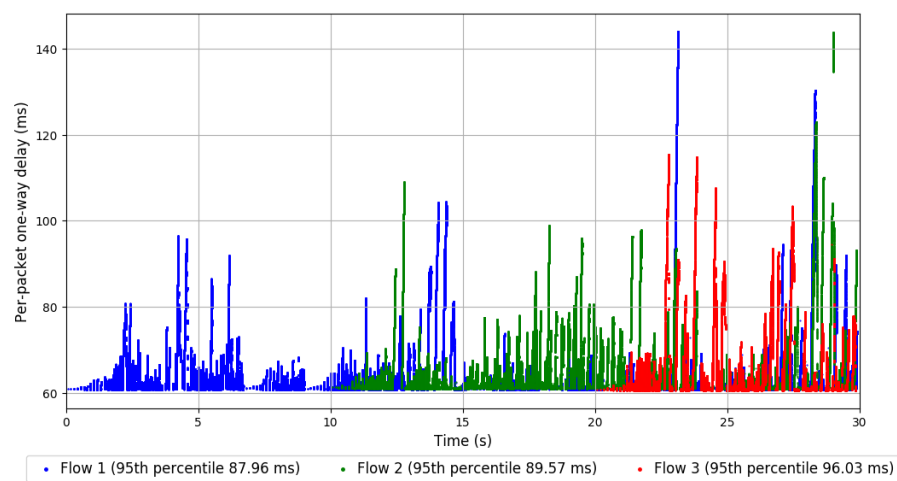
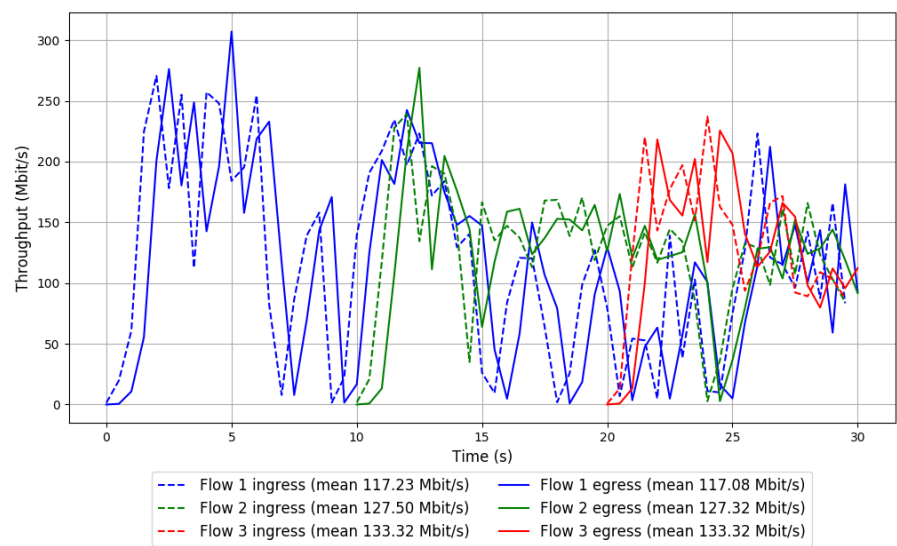
-- Flow 3:

Average throughput: 133.32 Mbit/s

95th percentile per-packet one-way delay: 96.034 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link

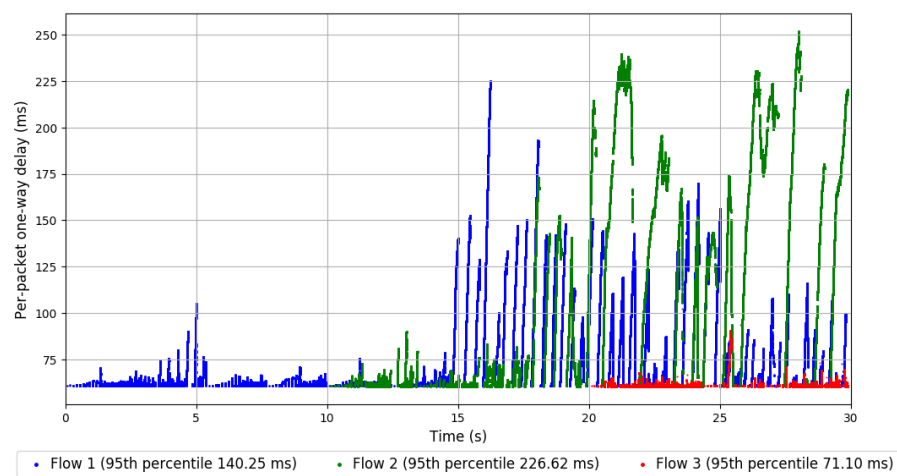
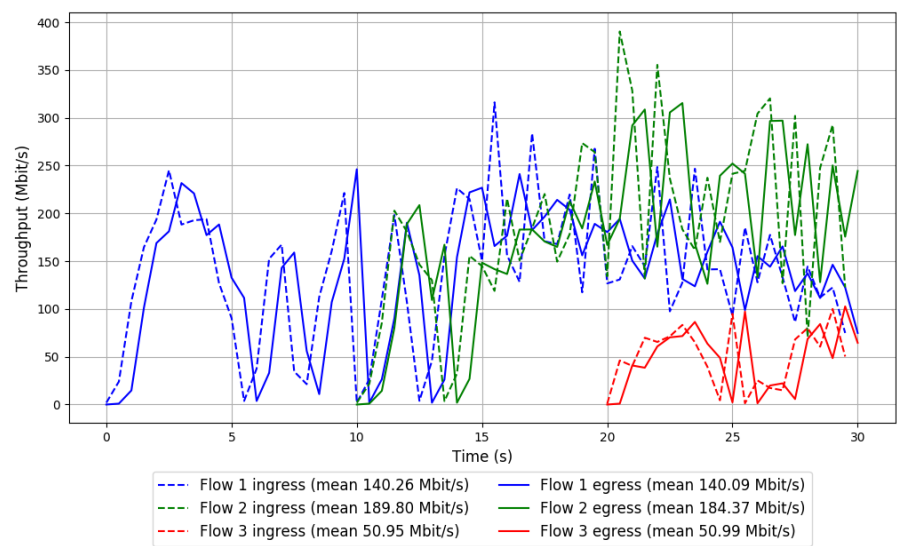


Run 3: Statistics of Verus

Start at: 2019-02-05 18:30:42
End at: 2019-02-05 18:31:12
Local clock offset: -0.057 ms
Remote clock offset: -0.389 ms

Below is generated by plot.py at 2019-02-05 23:03:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 278.93 Mbit/s
95th percentile per-packet one-way delay: 211.887 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 140.09 Mbit/s
95th percentile per-packet one-way delay: 140.249 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 184.37 Mbit/s
95th percentile per-packet one-way delay: 226.615 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 71.102 ms
Loss rate: 0.00%

Run 3: Report of Verus — Data Link

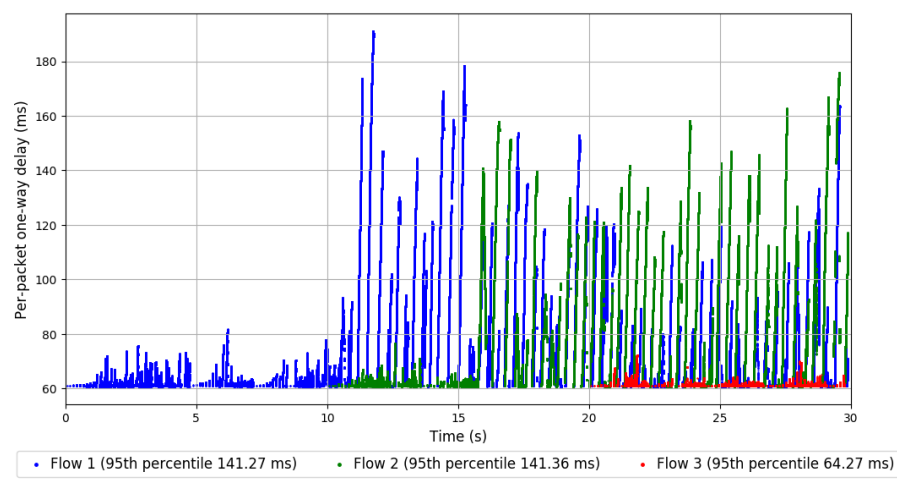
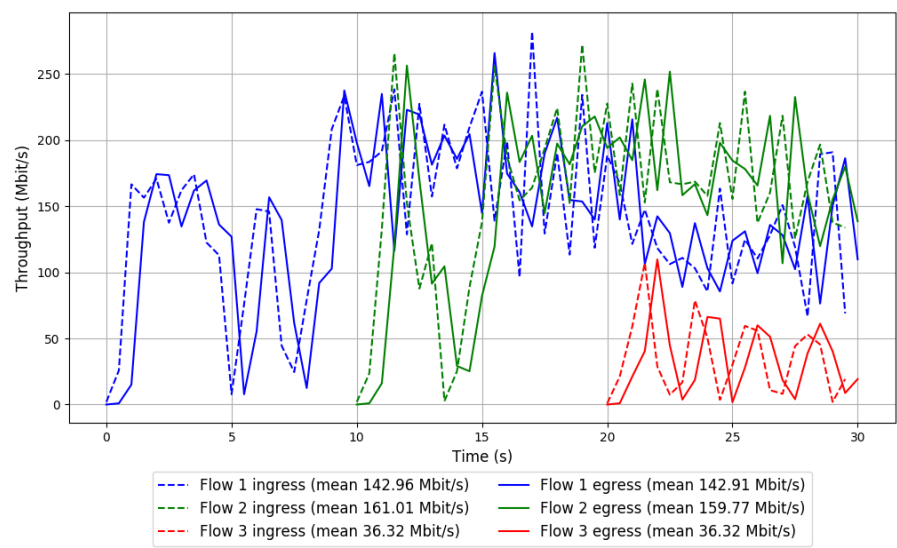


Run 4: Statistics of Verus

Start at: 2019-02-05 19:06:33
End at: 2019-02-05 19:07:03
Local clock offset: -0.014 ms
Remote clock offset: 0.05 ms

Below is generated by plot.py at 2019-02-05 23:03:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 260.87 Mbit/s
95th percentile per-packet one-way delay: 140.270 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 142.91 Mbit/s
95th percentile per-packet one-way delay: 141.267 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 159.77 Mbit/s
95th percentile per-packet one-way delay: 141.359 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 36.32 Mbit/s
95th percentile per-packet one-way delay: 64.270 ms
Loss rate: 0.00%

Run 4: Report of Verus — Data Link

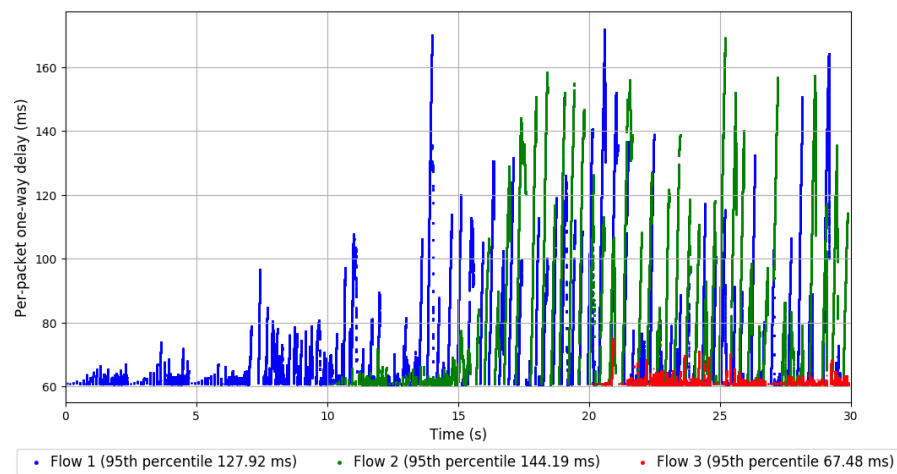
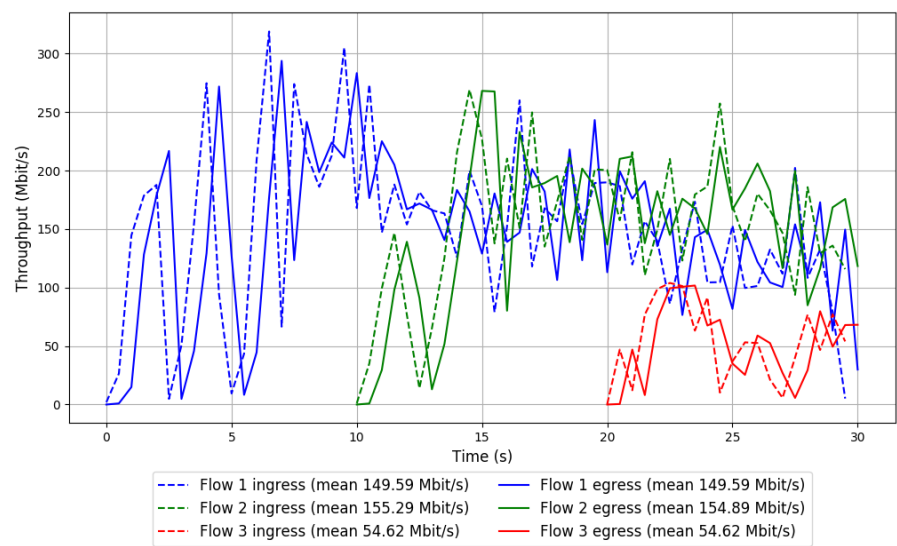


Run 5: Statistics of Verus

Start at: 2019-02-05 19:42:17
End at: 2019-02-05 19:42:47
Local clock offset: -0.06 ms
Remote clock offset: -0.013 ms

Below is generated by plot.py at 2019-02-05 23:07:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 270.08 Mbit/s
95th percentile per-packet one-way delay: 136.056 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.59 Mbit/s
95th percentile per-packet one-way delay: 127.916 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 154.89 Mbit/s
95th percentile per-packet one-way delay: 144.191 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.62 Mbit/s
95th percentile per-packet one-way delay: 67.476 ms
Loss rate: 0.00%

Run 5: Report of Verus — Data Link

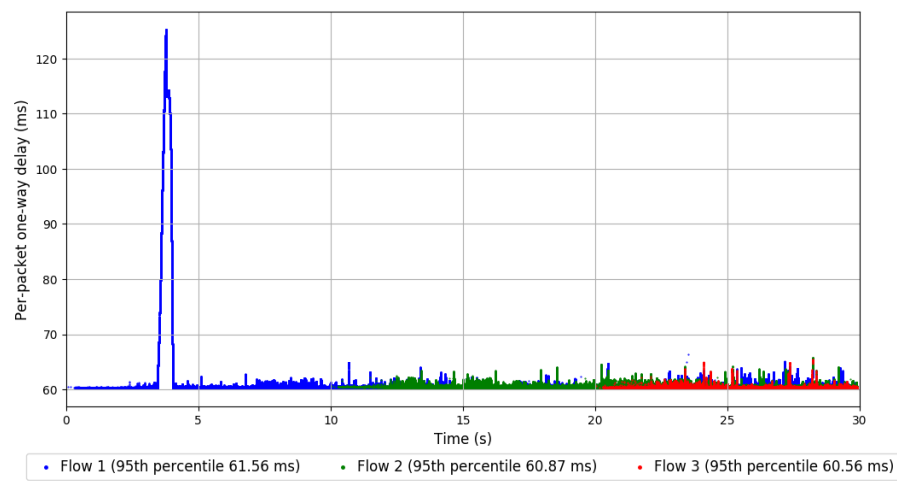
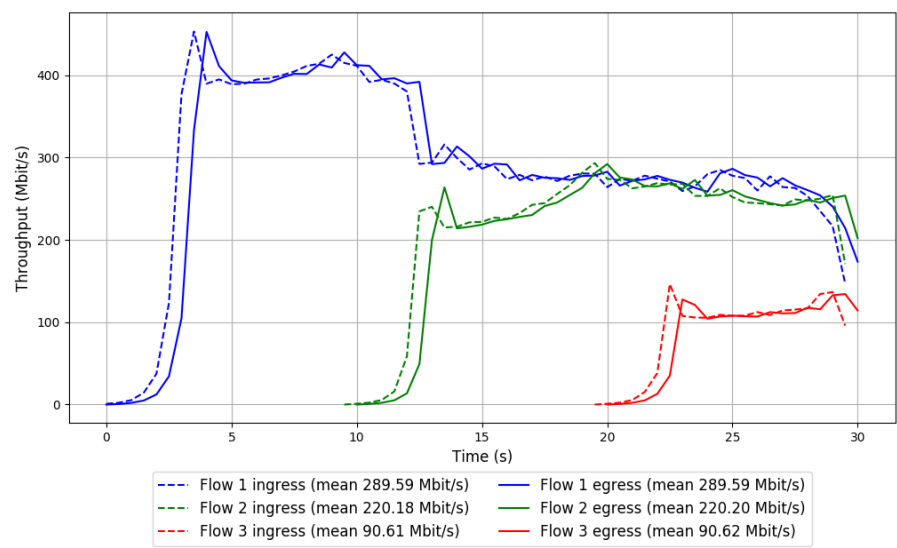


Run 1: Statistics of PCC-Vivace

Start at: 2019-02-05 17:27:22
End at: 2019-02-05 17:27:52
Local clock offset: 0.054 ms
Remote clock offset: -0.434 ms

Below is generated by plot.py at 2019-02-05 23:07:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 466.17 Mbit/s
95th percentile per-packet one-way delay: 61.194 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 289.59 Mbit/s
95th percentile per-packet one-way delay: 61.561 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 220.20 Mbit/s
95th percentile per-packet one-way delay: 60.865 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.62 Mbit/s
95th percentile per-packet one-way delay: 60.562 ms
Loss rate: 0.01%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-02-05 18:03:19

End at: 2019-02-05 18:03:49

Local clock offset: 0.037 ms

Remote clock offset: 0.005 ms

Below is generated by plot.py at 2019-02-05 23:07:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 500.30 Mbit/s

95th percentile per-packet one-way delay: 61.862 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 282.04 Mbit/s

95th percentile per-packet one-way delay: 61.843 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 250.74 Mbit/s

95th percentile per-packet one-way delay: 61.879 ms

Loss rate: 0.00%

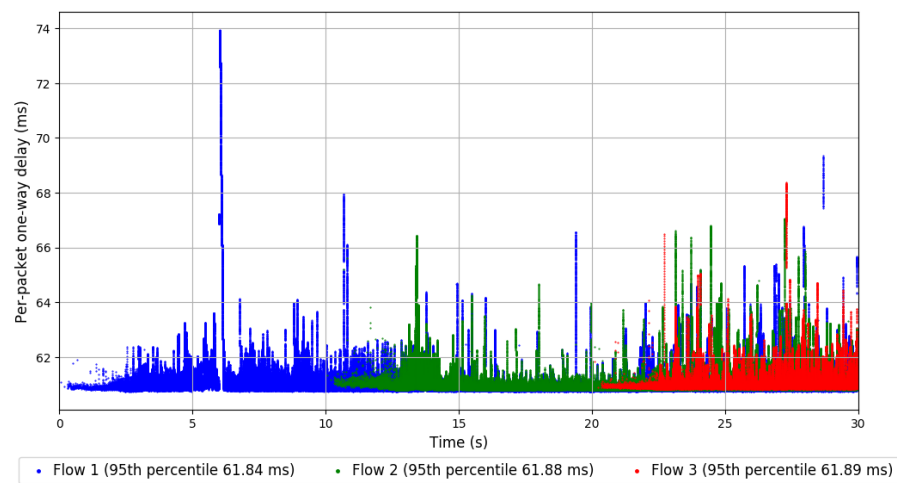
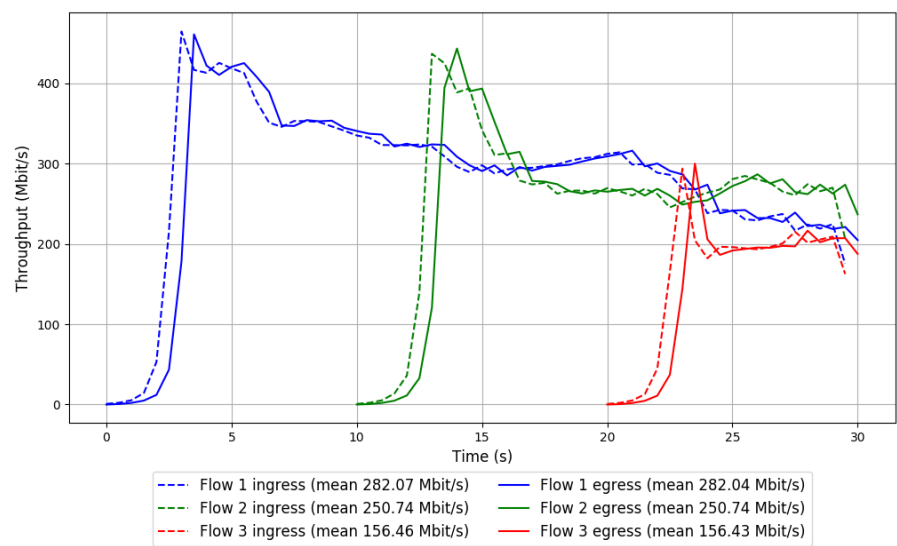
-- Flow 3:

Average throughput: 156.43 Mbit/s

95th percentile per-packet one-way delay: 61.889 ms

Loss rate: 0.01%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-02-05 18:39:08

End at: 2019-02-05 18:39:38

Local clock offset: -0.073 ms

Remote clock offset: 0.34 ms

Below is generated by plot.py at 2019-02-05 23:07:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 493.37 Mbit/s

95th percentile per-packet one-way delay: 62.725 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 311.01 Mbit/s

95th percentile per-packet one-way delay: 62.366 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 195.08 Mbit/s

95th percentile per-packet one-way delay: 87.958 ms

Loss rate: 0.00%

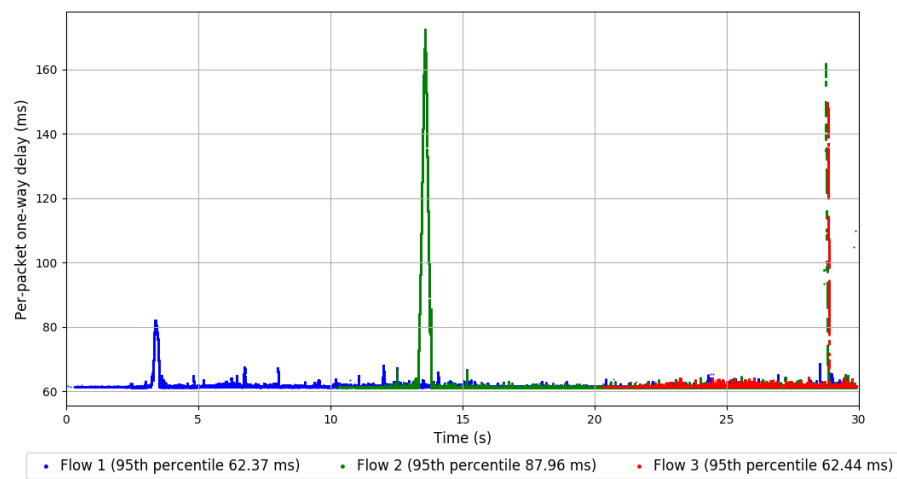
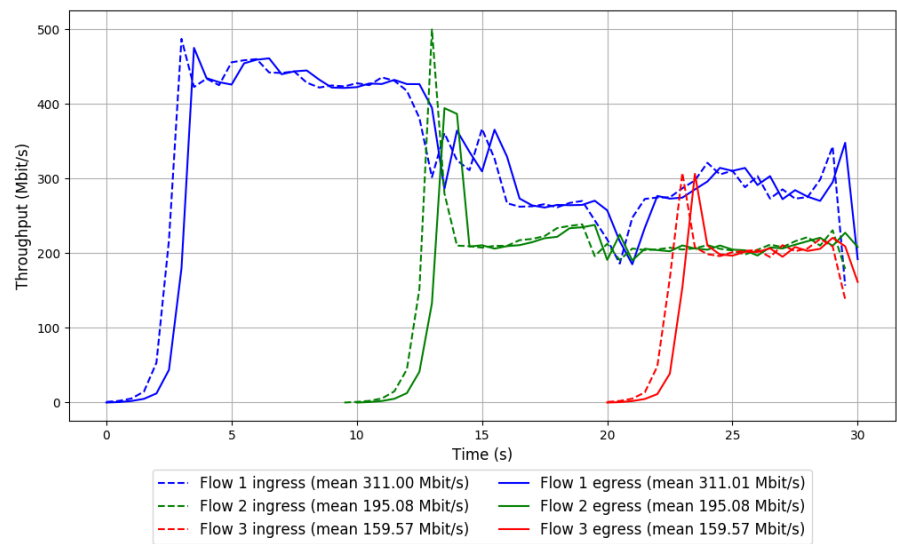
-- Flow 3:

Average throughput: 159.57 Mbit/s

95th percentile per-packet one-way delay: 62.436 ms

Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link

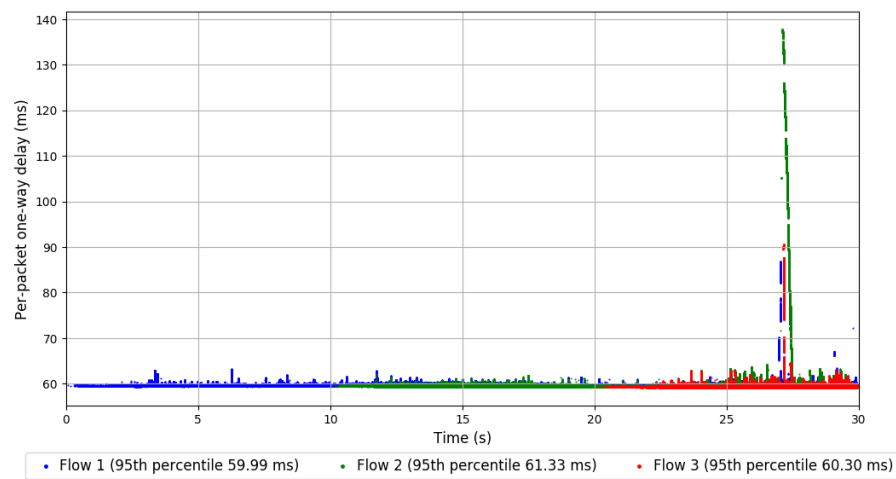
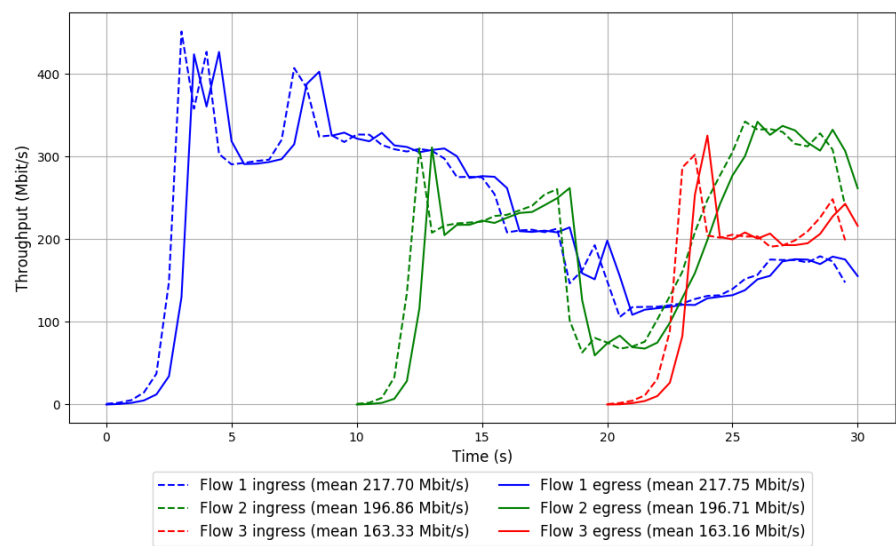


Run 4: Statistics of PCC-Vivace

Start at: 2019-02-05 19:14:59
End at: 2019-02-05 19:15:29
Local clock offset: -0.041 ms
Remote clock offset: -1.437 ms

Below is generated by plot.py at 2019-02-05 23:07:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 402.05 Mbit/s
95th percentile per-packet one-way delay: 60.233 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 217.75 Mbit/s
95th percentile per-packet one-way delay: 59.995 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 196.71 Mbit/s
95th percentile per-packet one-way delay: 61.334 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 163.16 Mbit/s
95th percentile per-packet one-way delay: 60.299 ms
Loss rate: 0.42%

Run 4: Report of PCC-Vivace — Data Link

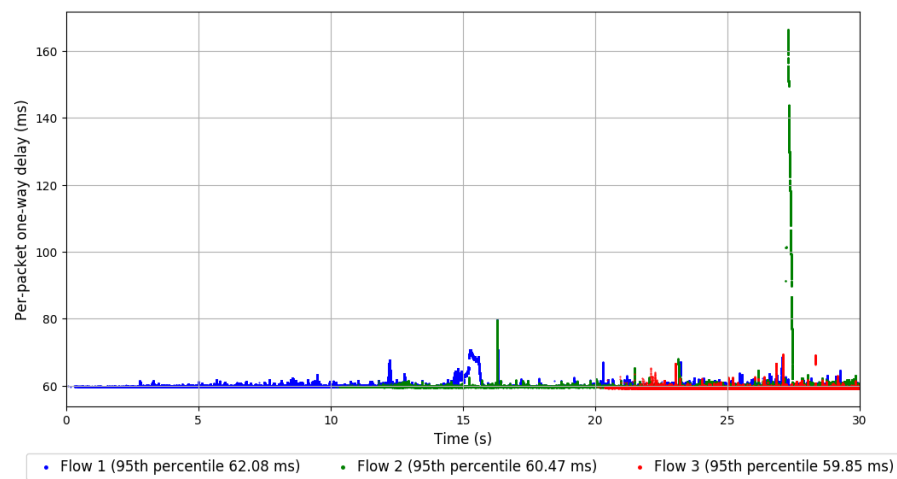
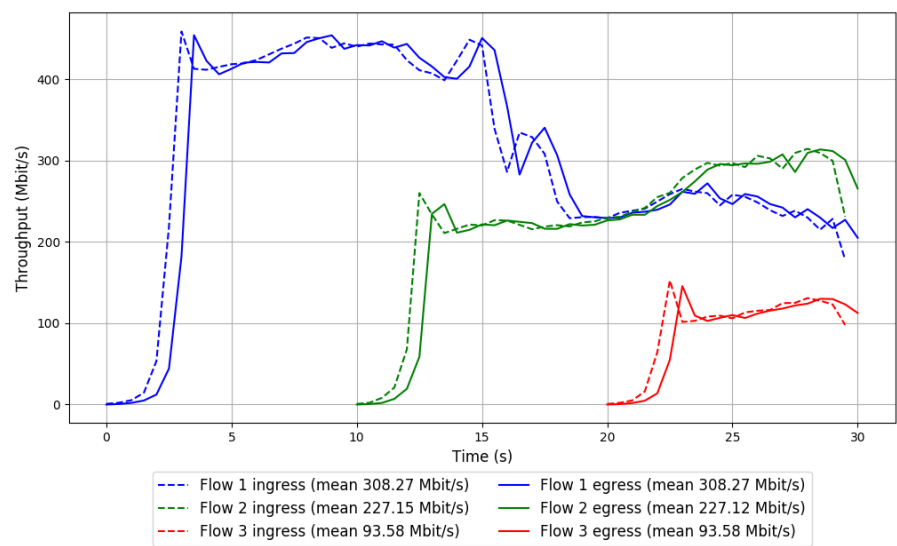


Run 5: Statistics of PCC-Vivace

Start at: 2019-02-05 19:50:39
End at: 2019-02-05 19:51:09
Local clock offset: -0.048 ms
Remote clock offset: -1.433 ms

Below is generated by plot.py at 2019-02-05 23:07:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 490.13 Mbit/s
95th percentile per-packet one-way delay: 61.235 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 308.27 Mbit/s
95th percentile per-packet one-way delay: 62.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 227.12 Mbit/s
95th percentile per-packet one-way delay: 60.474 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 93.58 Mbit/s
95th percentile per-packet one-way delay: 59.855 ms
Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-02-05 17:36:30

End at: 2019-02-05 17:37:00

Local clock offset: -0.002 ms

Remote clock offset: 0.108 ms

Below is generated by plot.py at 2019-02-05 23:07:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 61.232 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 61.263 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 61.237 ms

Loss rate: 0.02%

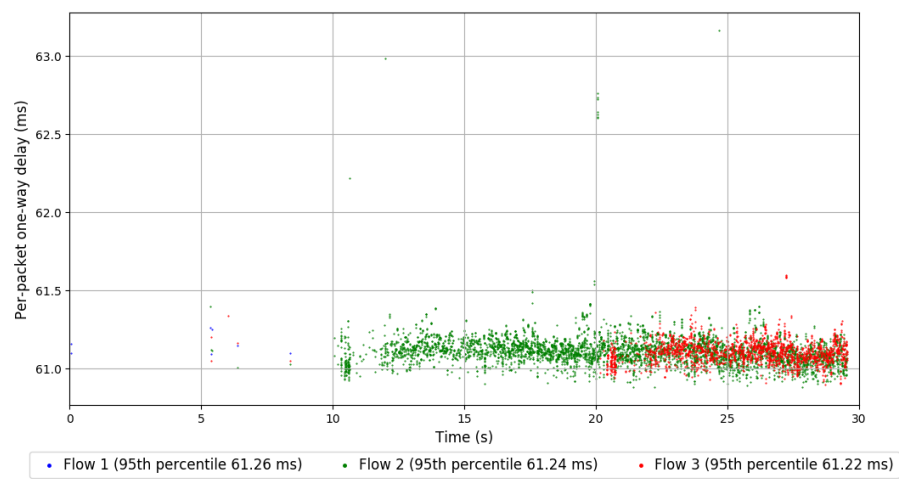
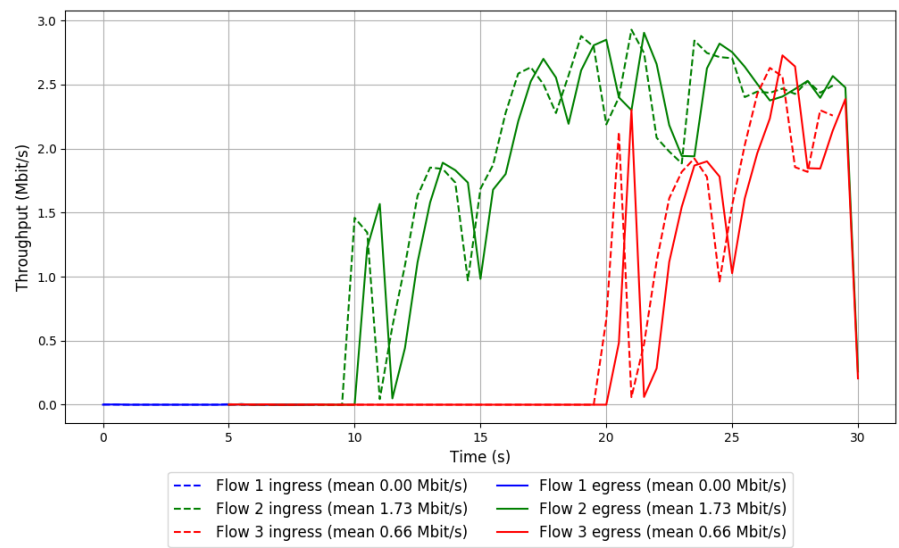
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 61.218 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

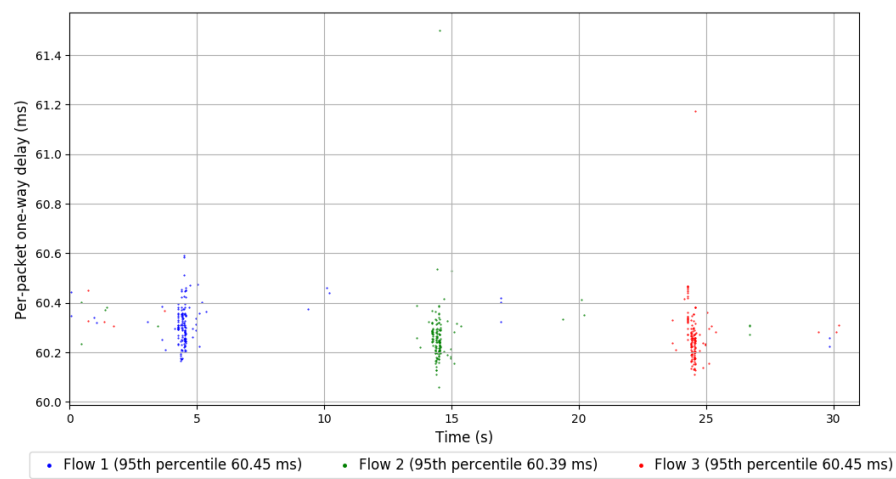
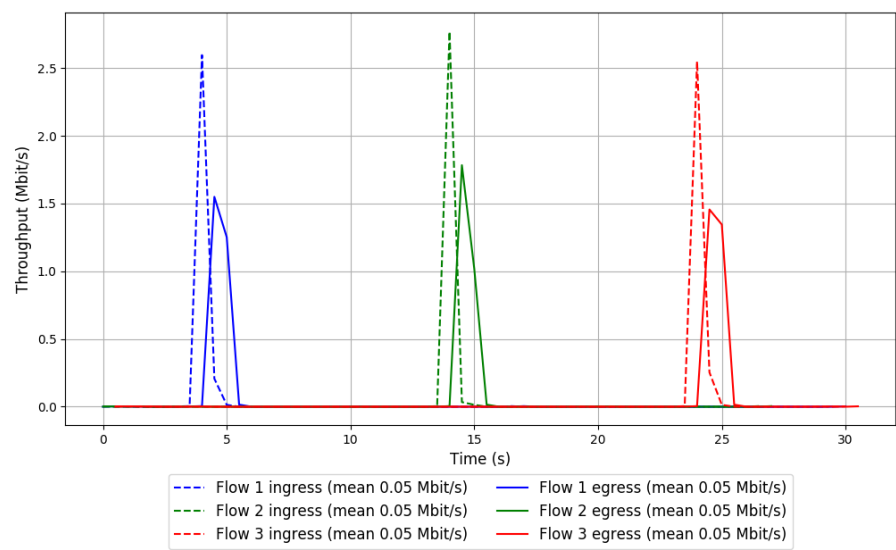


Run 2: Statistics of WebRTC media

Start at: 2019-02-05 18:12:28
End at: 2019-02-05 18:12:58
Local clock offset: -0.014 ms
Remote clock offset: -0.698 ms

Below is generated by plot.py at 2019-02-05 23:07:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.445 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.450 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.388 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.447 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

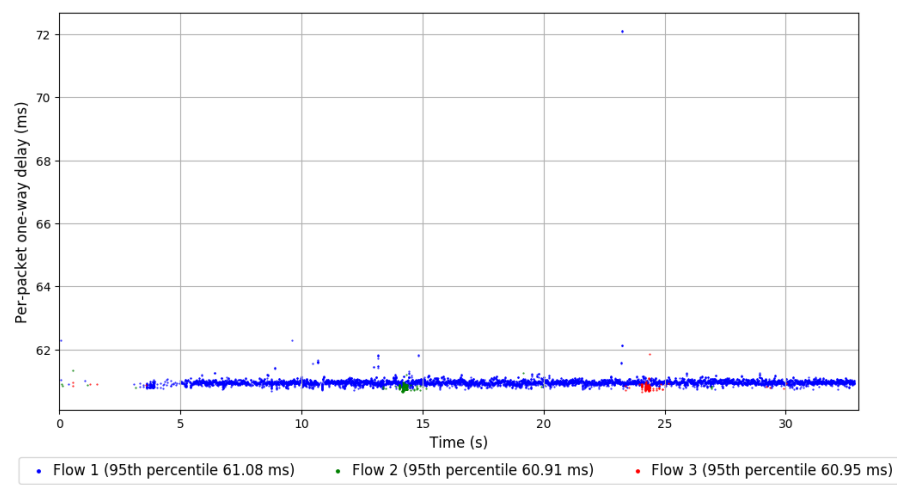
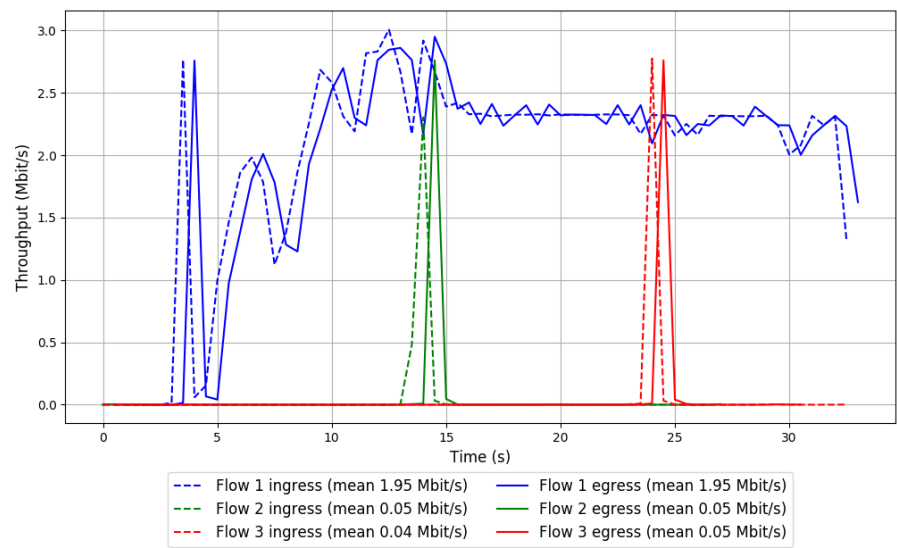


Run 3: Statistics of WebRTC media

Start at: 2019-02-05 18:48:19
End at: 2019-02-05 18:48:49
Local clock offset: -0.041 ms
Remote clock offset: -0.142 ms

Below is generated by plot.py at 2019-02-05 23:07:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 61.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 61.077 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.912 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.946 ms
Loss rate: 0.05%

Run 3: Report of WebRTC media — Data Link

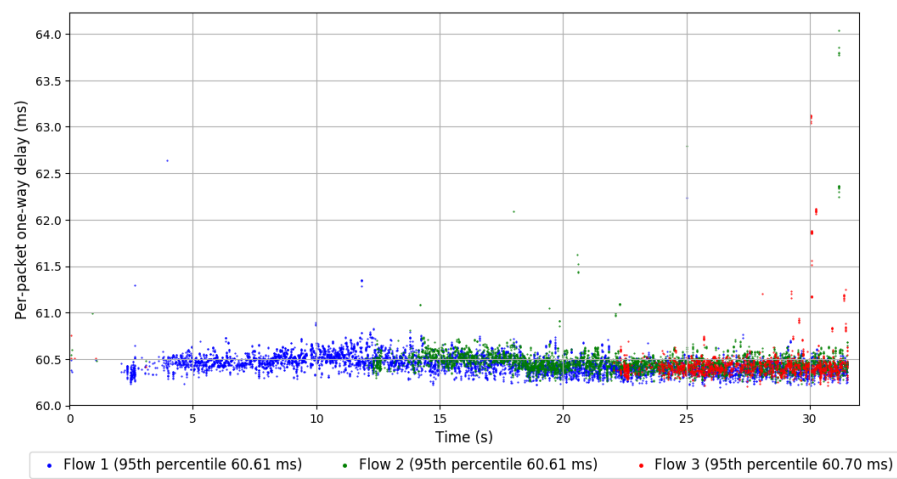
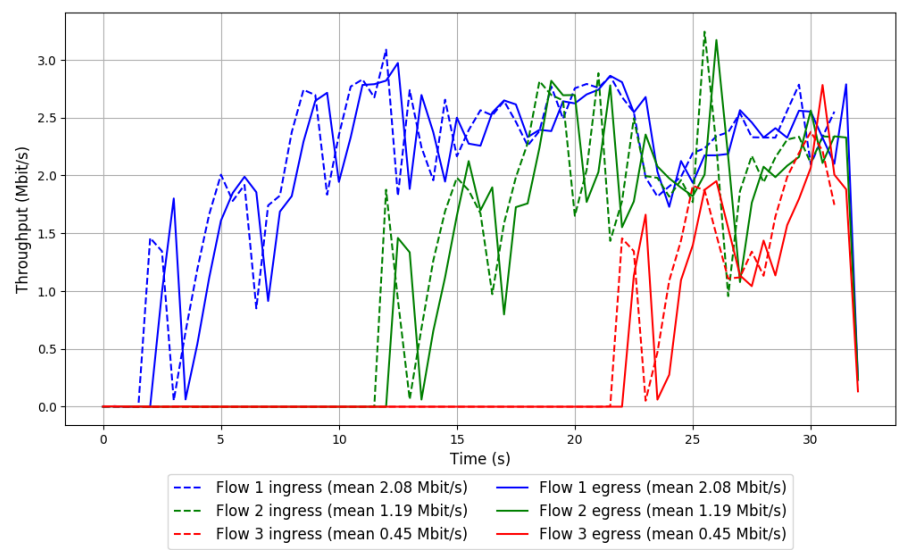


Run 4: Statistics of WebRTC media

Start at: 2019-02-05 19:24:01
End at: 2019-02-05 19:24:31
Local clock offset: -0.045 ms
Remote clock offset: -0.546 ms

Below is generated by plot.py at 2019-02-05 23:07:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 60.611 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 60.610 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 60.609 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 60.696 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-02-05 19:59:52
End at: 2019-02-05 20:00:22
Local clock offset: -0.058 ms
Remote clock offset: -0.641 ms

Below is generated by plot.py at 2019-02-05 23:07:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.722 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.390 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.373 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.754 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

