

Pantheon Report

Generated at 2019-05-30 04:14:46 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

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

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

System info:

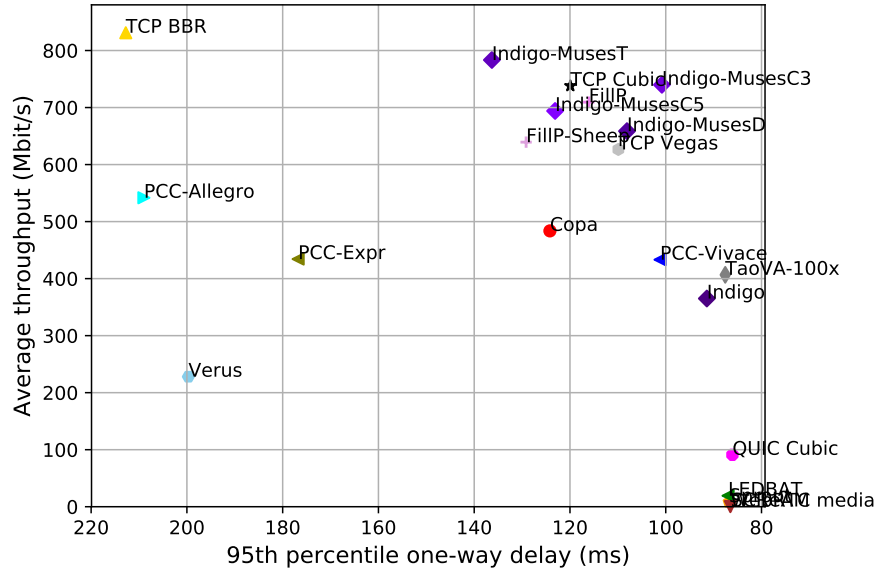
```
Linux 4.15.0-1029-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

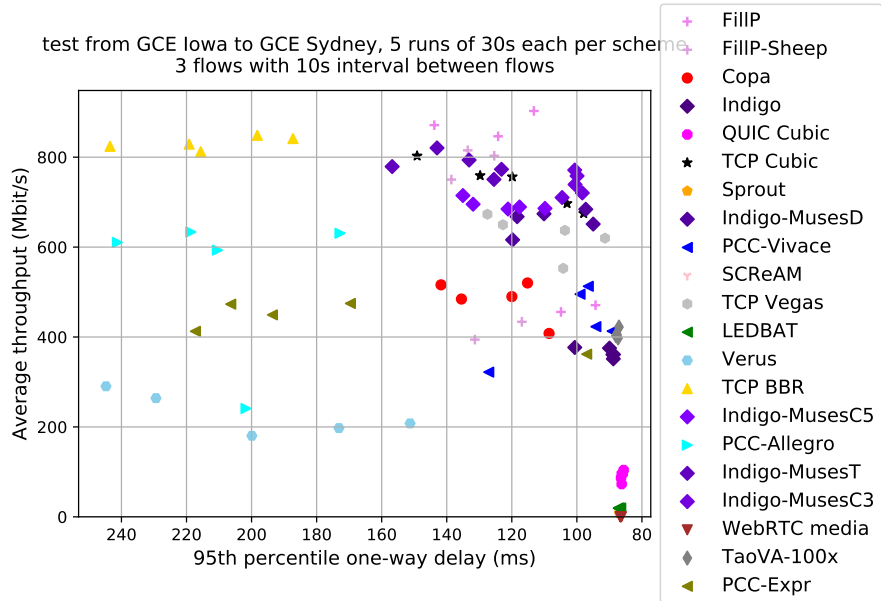
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
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 Sydney, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Iowa to GCE Sydney, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	454.64	392.12	353.28	205.88	217.38	200.37	2.01	2.99	4.11
Copa	5	249.47	242.09	223.92	121.99	131.46	115.57	0.67	0.99	2.17
TCP Cubic	5	378.15	365.21	357.47	106.49	121.14	144.64	0.54	0.78	1.87
FillP	5	374.26	371.32	271.95	129.38	92.23	91.41	1.42	0.78	2.06
FillP-Sheep	5	345.09	325.46	239.44	149.32	89.85	89.75	1.52	0.76	1.98
Indigo	5	195.37	178.16	156.08	90.19	92.89	91.72	0.55	0.80	2.06
Indigo-MusesC3	5	438.14	358.99	267.47	104.15	97.85	91.20	0.42	0.82	2.64
Indigo-MusesC5	5	425.53	349.83	168.41	122.98	121.52	89.39	0.50	1.20	3.00
Indigo-MusesD	5	402.77	297.25	254.31	112.31	95.34	92.24	0.53	0.77	3.24
Indigo-MusesT	5	471.25	386.33	245.13	151.75	109.24	92.02	0.57	0.75	3.02
LEDBAT	5	12.49	8.29	4.02	87.09	86.79	86.51	1.15	1.74	3.51
PCC-Allegro	5	281.75	275.72	237.48	186.14	167.60	181.42	4.19	3.31	3.11
PCC-Expr	5	243.89	219.77	136.99	173.63	159.79	101.81	2.01	3.80	2.31
QUIC Cubic	5	54.54	41.48	26.02	86.03	85.90	85.98	0.92	1.56	1.66
SCReAM	5	0.22	0.22	0.22	86.44	86.23	86.19	0.51	0.91	1.77
Sprout	5	4.49	4.00	3.07	86.79	86.78	86.53	0.67	1.16	2.84
TaoVA-100x	5	211.20	198.84	193.16	87.25	87.91	87.92	0.62	0.96	1.95
TCP Vegas	5	329.44	294.70	308.77	110.57	99.72	113.05	0.44	0.90	1.78
Verus	5	135.17	112.48	56.12	221.09	168.58	103.09	2.16	1.48	1.76
PCC-Vivace	5	262.27	190.30	137.36	104.88	98.44	99.03	0.66	1.12	3.24
WebRTC media	5	0.05	0.05	0.05	86.56	86.43	86.21	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-05-29 22:39:48

End at: 2019-05-29 22:40:18

Local clock offset: 1.204 ms

Remote clock offset: 0.193 ms

Below is generated by plot.py at 2019-05-30 02:07:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 812.22 Mbit/s

95th percentile per-packet one-way delay: 215.625 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 464.16 Mbit/s

95th percentile per-packet one-way delay: 198.284 ms

Loss rate: 2.00%

-- Flow 2:

Average throughput: 362.89 Mbit/s

95th percentile per-packet one-way delay: 235.041 ms

Loss rate: 3.48%

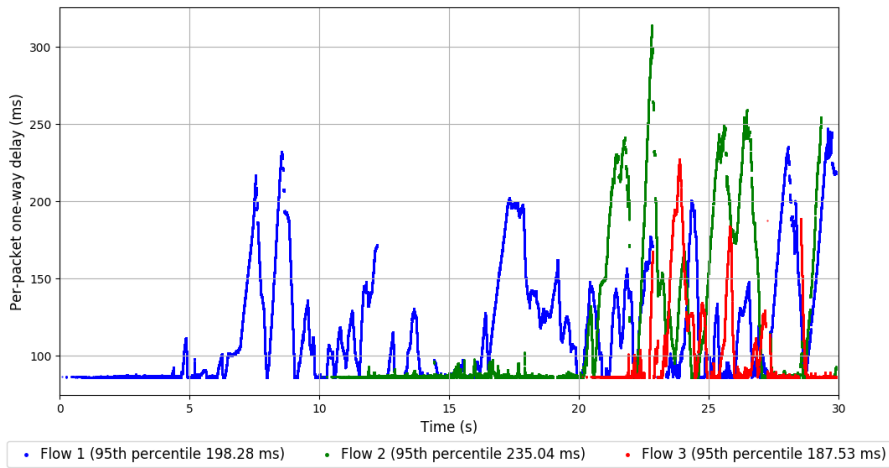
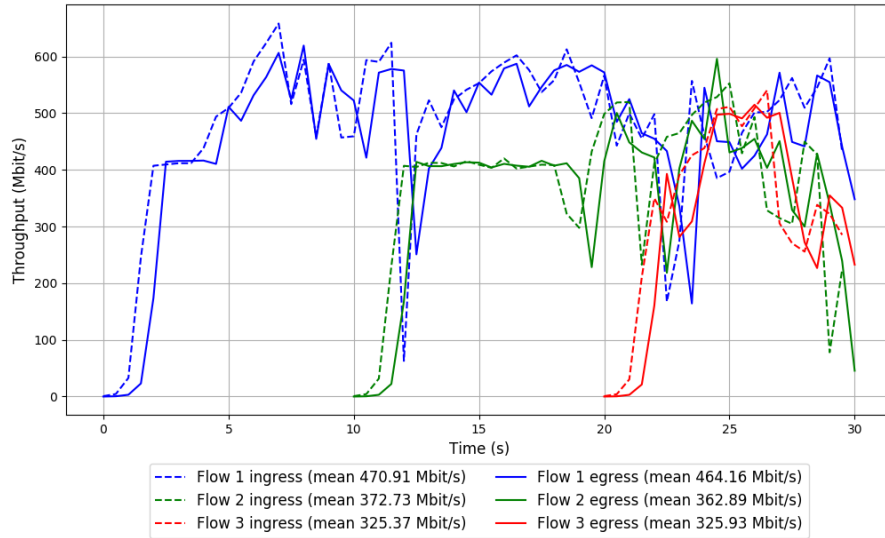
-- Flow 3:

Average throughput: 325.93 Mbit/s

95th percentile per-packet one-way delay: 187.530 ms

Loss rate: 1.57%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-05-29 23:16:14
End at: 2019-05-29 23:16:44
Local clock offset: 0.192 ms
Remote clock offset: -0.007 ms

Below is generated by plot.py at 2019-05-30 02:08:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 841.49 Mbit/s
95th percentile per-packet one-way delay: 187.273 ms
Loss rate: 1.61%

-- Flow 1:

Average throughput: 450.88 Mbit/s
95th percentile per-packet one-way delay: 184.424 ms
Loss rate: 0.84%

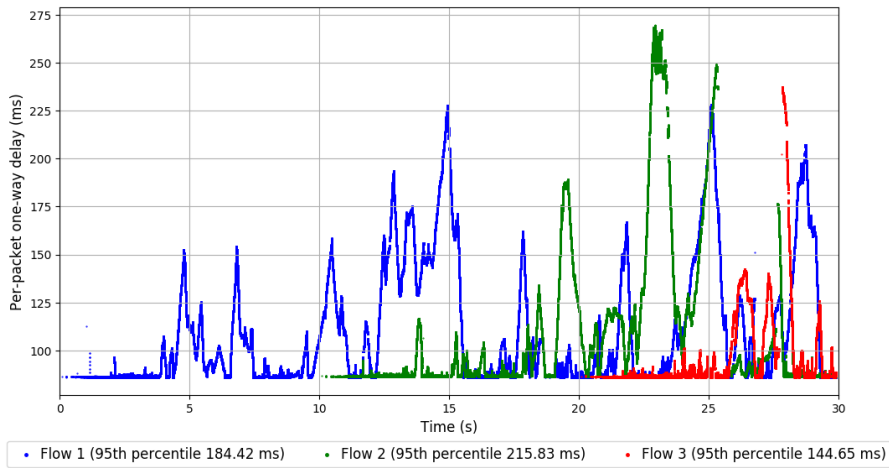
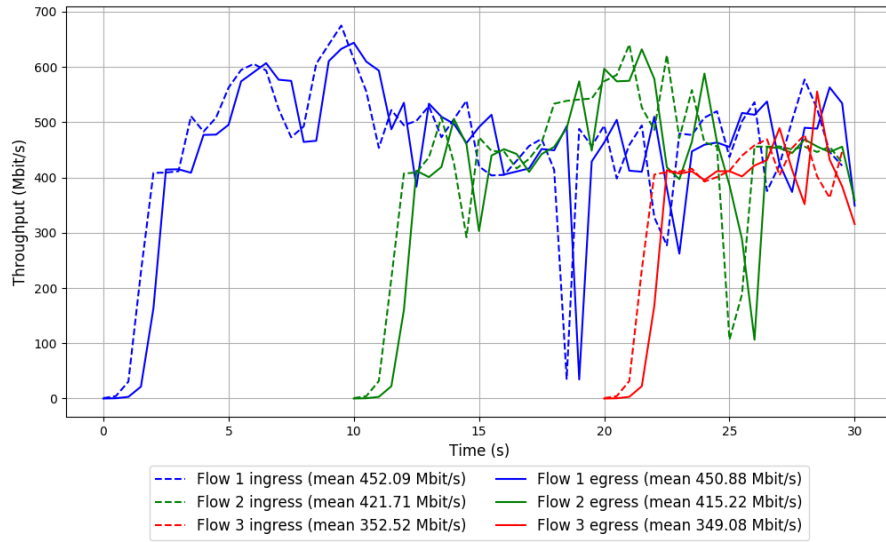
-- Flow 2:

Average throughput: 415.22 Mbit/s
95th percentile per-packet one-way delay: 215.833 ms
Loss rate: 2.39%

-- Flow 3:

Average throughput: 349.08 Mbit/s
95th percentile per-packet one-way delay: 144.651 ms
Loss rate: 2.69%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-05-29 23:51:51

End at: 2019-05-29 23:52:21

Local clock offset: 0.317 ms

Remote clock offset: 0.064 ms

Below is generated by plot.py at 2019-05-30 02:08:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 829.05 Mbit/s

95th percentile per-packet one-way delay: 219.196 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 440.94 Mbit/s

95th percentile per-packet one-way delay: 202.219 ms

Loss rate: 1.76%

-- Flow 2:

Average throughput: 411.18 Mbit/s

95th percentile per-packet one-way delay: 227.969 ms

Loss rate: 2.11%

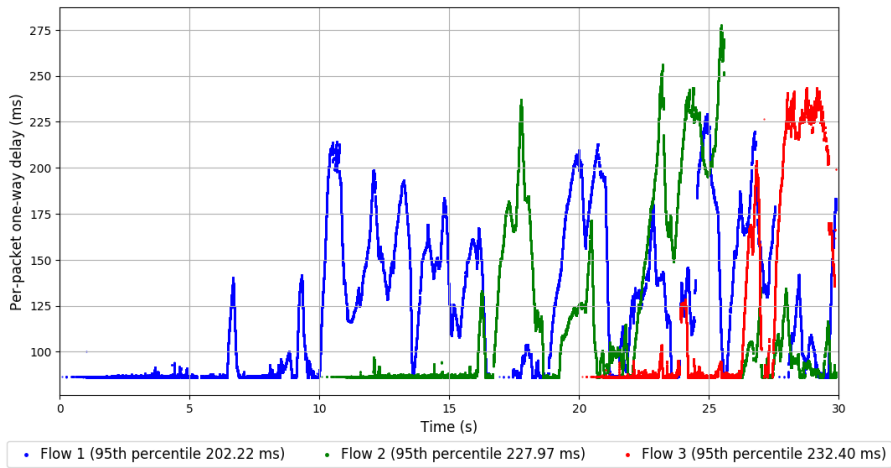
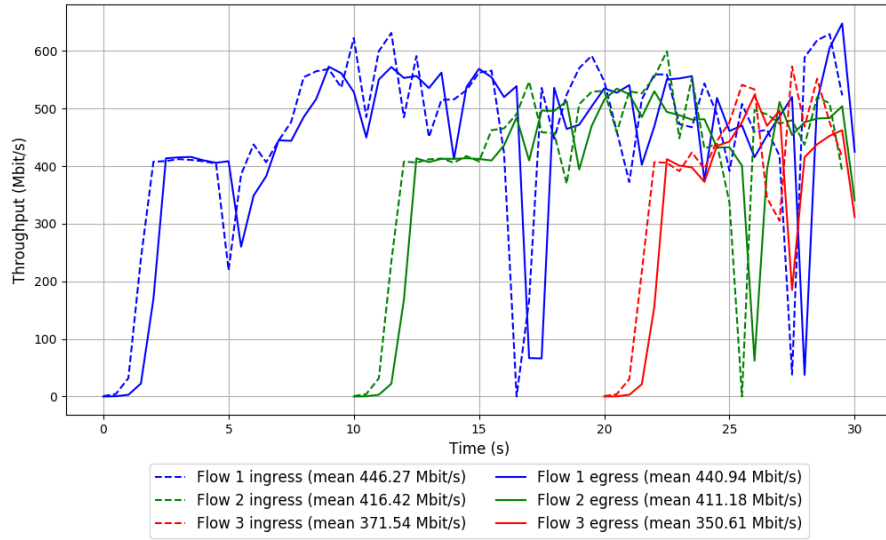
-- Flow 3:

Average throughput: 350.61 Mbit/s

95th percentile per-packet one-way delay: 232.398 ms

Loss rate: 7.18%

Run 3: Report of TCP BBR — Data Link

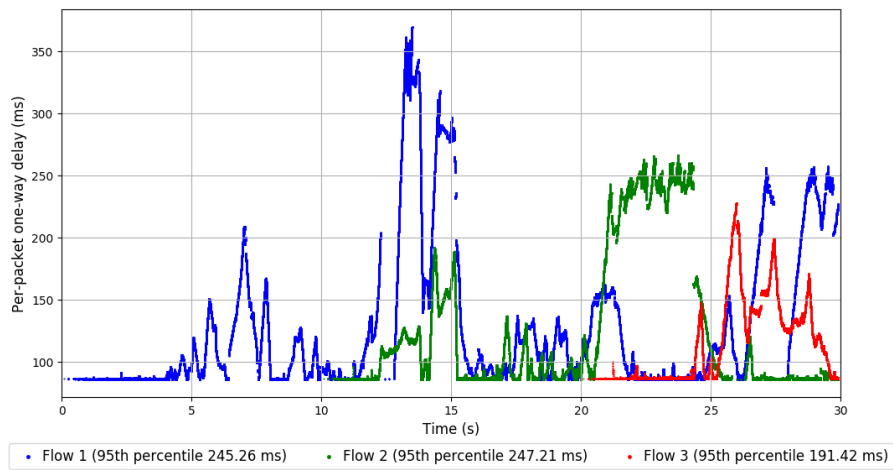
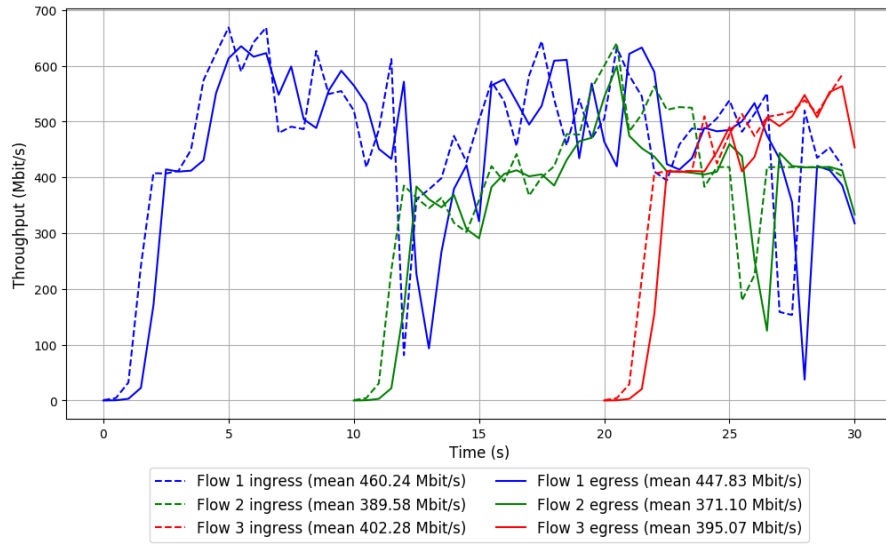


Run 4: Statistics of TCP BBR

Start at: 2019-05-30 00:28:39
End at: 2019-05-30 00:29:09
Local clock offset: 0.42 ms
Remote clock offset: -0.079 ms

```
# Below is generated by plot.py at 2019-05-30 02:08:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 824.19 Mbit/s
95th percentile per-packet one-way delay: 243.515 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 447.83 Mbit/s
95th percentile per-packet one-way delay: 245.265 ms
Loss rate: 3.26%
-- Flow 2:
Average throughput: 371.10 Mbit/s
95th percentile per-packet one-way delay: 247.211 ms
Loss rate: 5.57%
-- Flow 3:
Average throughput: 395.07 Mbit/s
95th percentile per-packet one-way delay: 191.417 ms
Loss rate: 3.49%
```

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2019-05-30 01:05:23
End at: 2019-05-30 01:05:53
Local clock offset: -0.175 ms
Remote clock offset: -0.066 ms

Below is generated by plot.py at 2019-05-30 02:08:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 848.73 Mbit/s
95th percentile per-packet one-way delay: 198.225 ms
Loss rate: 2.41%

-- Flow 1:

Average throughput: 469.37 Mbit/s
95th percentile per-packet one-way delay: 199.225 ms
Loss rate: 2.18%

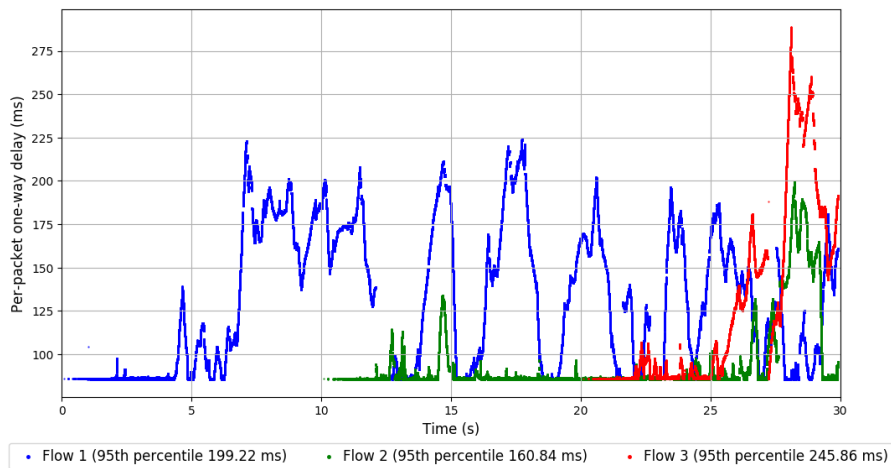
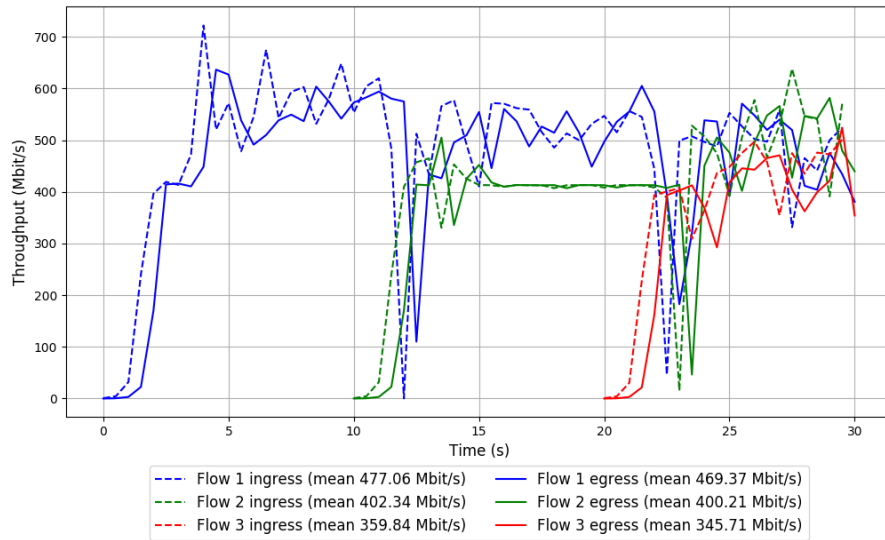
-- Flow 2:

Average throughput: 400.21 Mbit/s
95th percentile per-packet one-way delay: 160.836 ms
Loss rate: 1.39%

-- Flow 3:

Average throughput: 345.71 Mbit/s
95th percentile per-packet one-way delay: 245.863 ms
Loss rate: 5.60%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-05-29 22:37:43

End at: 2019-05-29 22:38:13

Local clock offset: 0.92 ms

Remote clock offset: 0.106 ms

Below is generated by plot.py at 2019-05-30 02:09:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 489.90 Mbit/s

95th percentile per-packet one-way delay: 119.983 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 260.48 Mbit/s

95th percentile per-packet one-way delay: 119.803 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 234.31 Mbit/s

95th percentile per-packet one-way delay: 125.554 ms

Loss rate: 1.07%

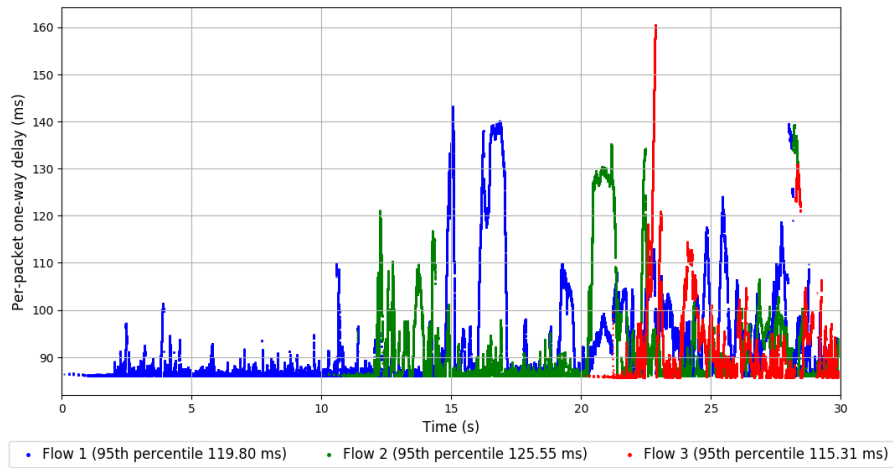
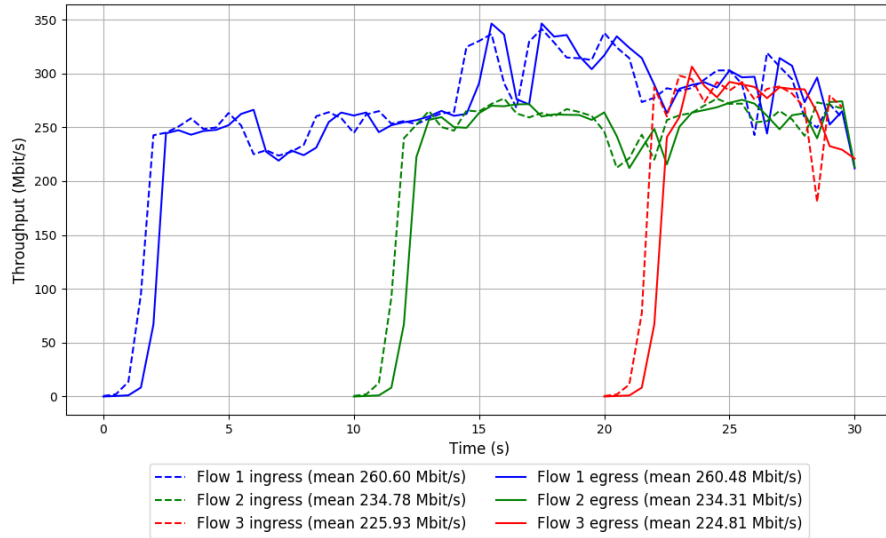
-- Flow 3:

Average throughput: 224.81 Mbit/s

95th percentile per-packet one-way delay: 115.306 ms

Loss rate: 2.22%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-05-29 23:14:07

End at: 2019-05-29 23:14:37

Local clock offset: -0.002 ms

Remote clock offset: 0.021 ms

Below is generated by plot.py at 2019-05-30 02:10:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 520.22 Mbit/s

95th percentile per-packet one-way delay: 115.171 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 269.59 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 262.91 Mbit/s

95th percentile per-packet one-way delay: 131.134 ms

Loss rate: 0.93%

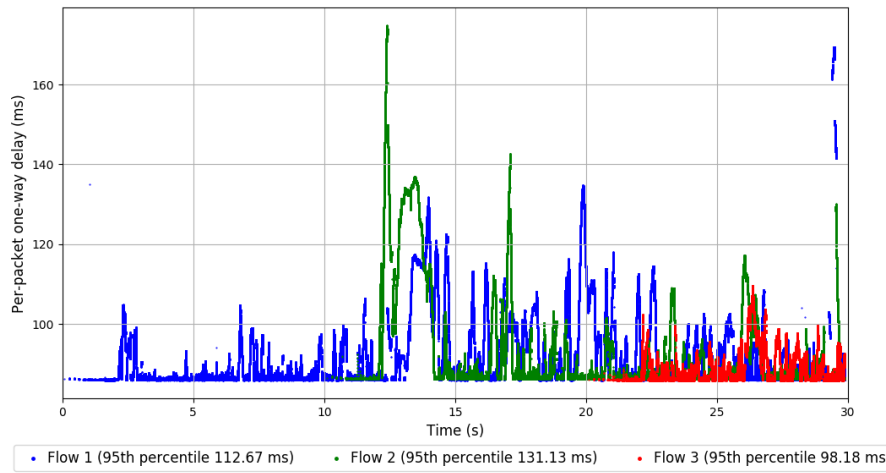
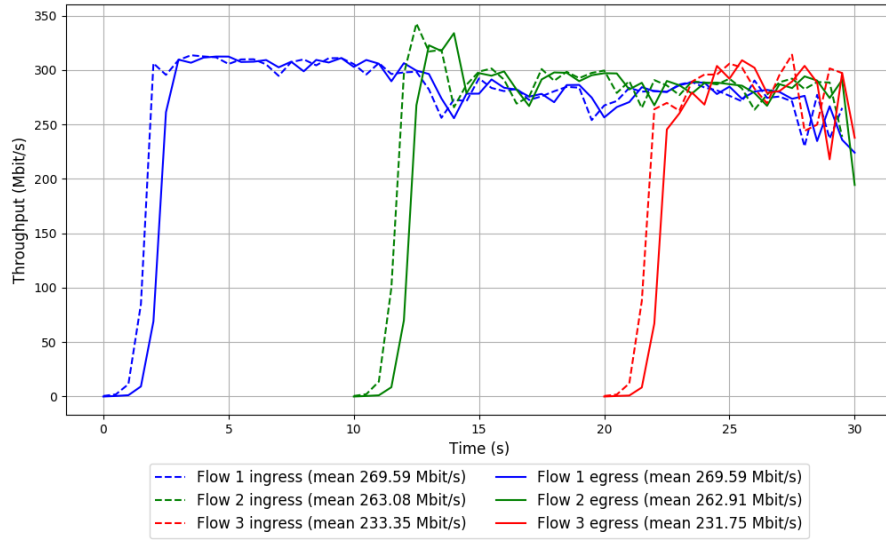
-- Flow 3:

Average throughput: 231.75 Mbit/s

95th percentile per-packet one-way delay: 98.178 ms

Loss rate: 2.39%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-05-29 23:49:54

End at: 2019-05-29 23:50:24

Local clock offset: -0.047 ms

Remote clock offset: 0.053 ms

Below is generated by plot.py at 2019-05-30 02:10:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 407.92 Mbit/s

95th percentile per-packet one-way delay: 108.550 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 199.76 Mbit/s

95th percentile per-packet one-way delay: 98.783 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 219.48 Mbit/s

95th percentile per-packet one-way delay: 116.982 ms

Loss rate: 0.90%

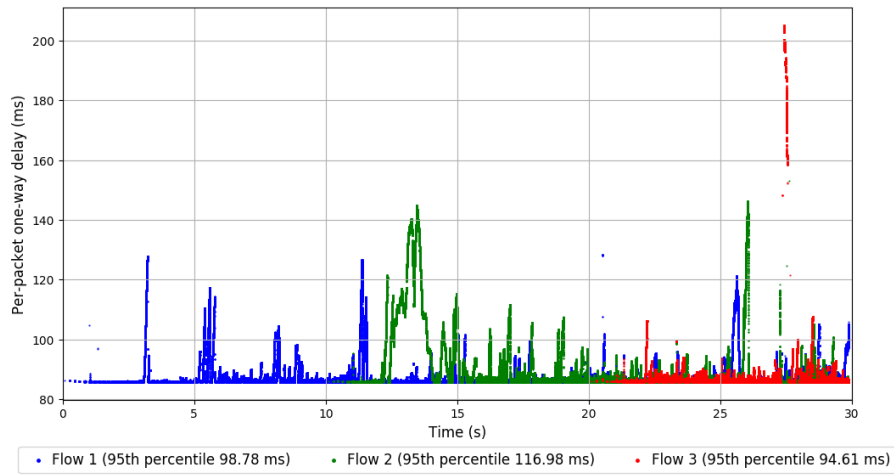
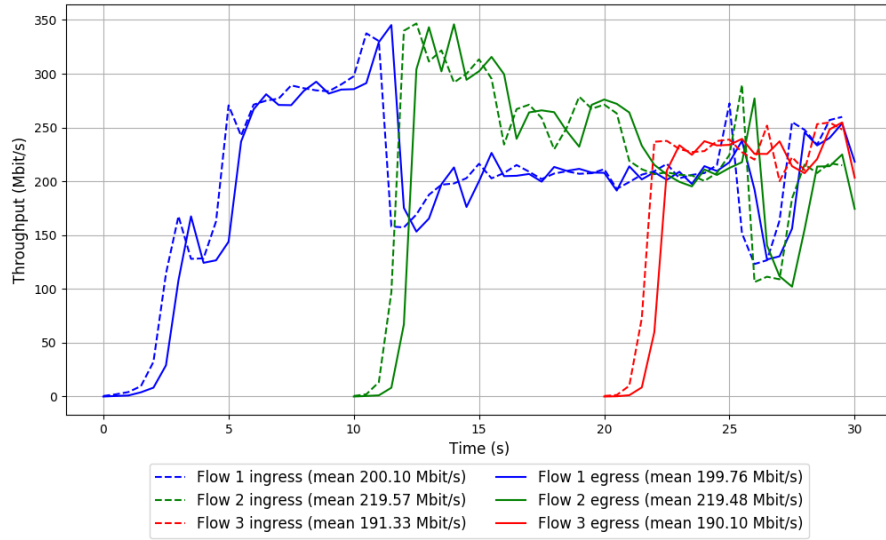
-- Flow 3:

Average throughput: 190.10 Mbit/s

95th percentile per-packet one-way delay: 94.609 ms

Loss rate: 2.36%

Run 3: Report of Copa — Data Link

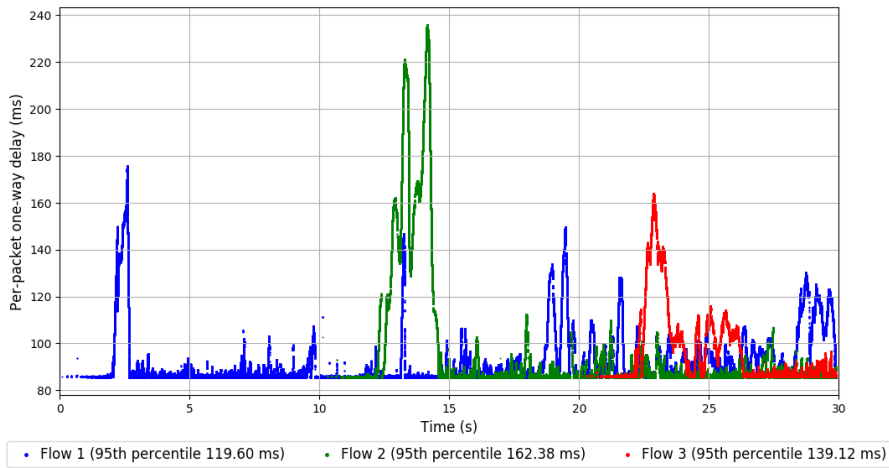
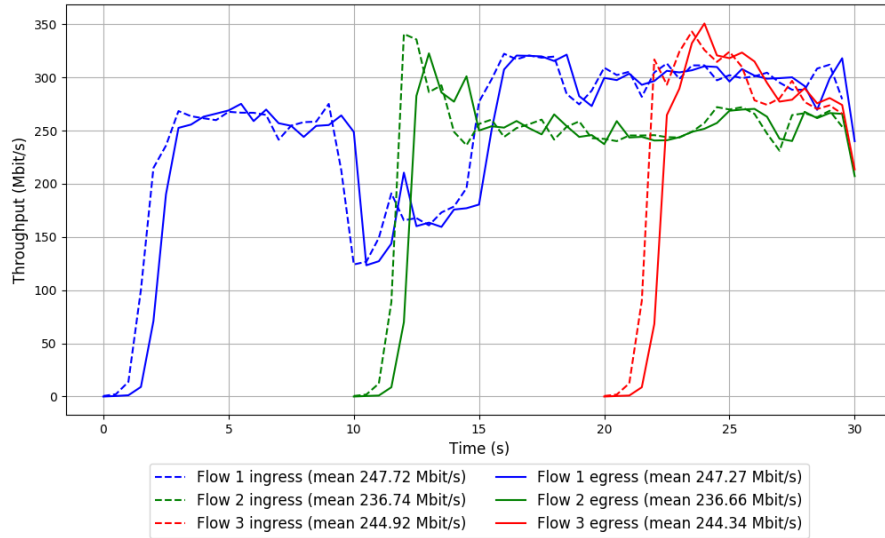


Run 4: Statistics of Copa

Start at: 2019-05-30 00:26:35
End at: 2019-05-30 00:27:05
Local clock offset: -0.314 ms
Remote clock offset: -0.086 ms

```
# Below is generated by plot.py at 2019-05-30 02:23:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.46 Mbit/s
95th percentile per-packet one-way delay: 135.484 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 247.27 Mbit/s
95th percentile per-packet one-way delay: 119.598 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 236.66 Mbit/s
95th percentile per-packet one-way delay: 162.381 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 244.34 Mbit/s
95th percentile per-packet one-way delay: 139.115 ms
Loss rate: 1.97%
```

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-05-30 01:03:16
End at: 2019-05-30 01:03:46
Local clock offset: 0.094 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2019-05-30 02:25:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 516.05 Mbit/s
95th percentile per-packet one-way delay: 141.762 ms
Loss rate: 0.97%

-- Flow 1:

Average throughput: 270.24 Mbit/s
95th percentile per-packet one-way delay: 159.085 ms
Loss rate: 0.64%

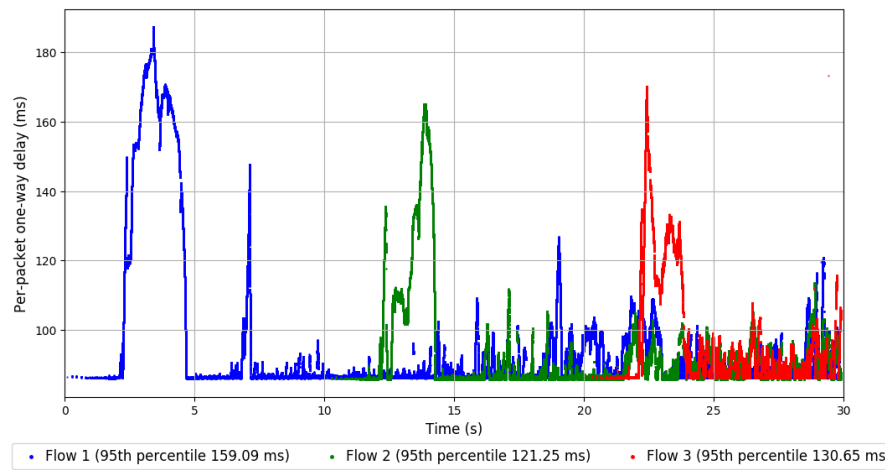
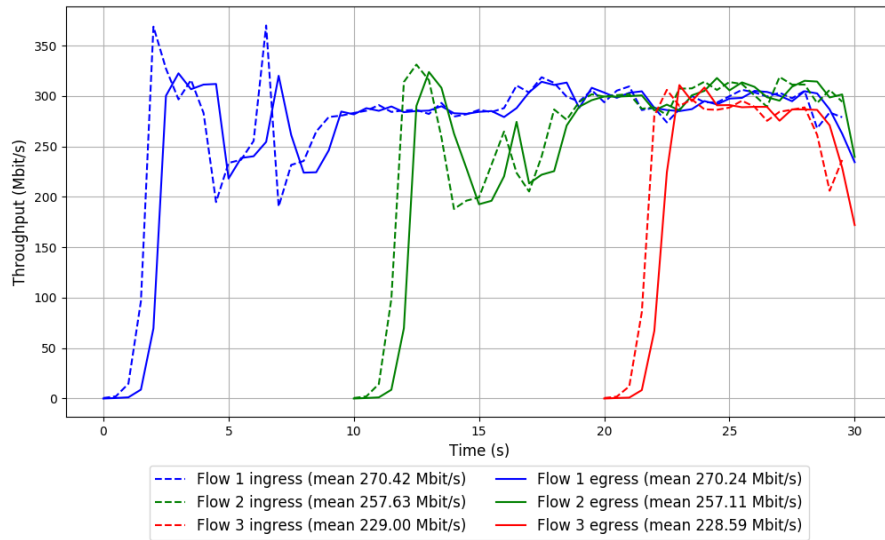
-- Flow 2:

Average throughput: 257.11 Mbit/s
95th percentile per-packet one-way delay: 121.252 ms
Loss rate: 1.06%

-- Flow 3:

Average throughput: 228.59 Mbit/s
95th percentile per-packet one-way delay: 130.649 ms
Loss rate: 1.91%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-05-29 22:41:53

End at: 2019-05-29 22:42:23

Local clock offset: 0.824 ms

Remote clock offset: 0.096 ms

Below is generated by plot.py at 2019-05-30 02:25:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 802.83 Mbit/s

95th percentile per-packet one-way delay: 149.114 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 442.54 Mbit/s

95th percentile per-packet one-way delay: 136.399 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 359.73 Mbit/s

95th percentile per-packet one-way delay: 117.125 ms

Loss rate: 0.68%

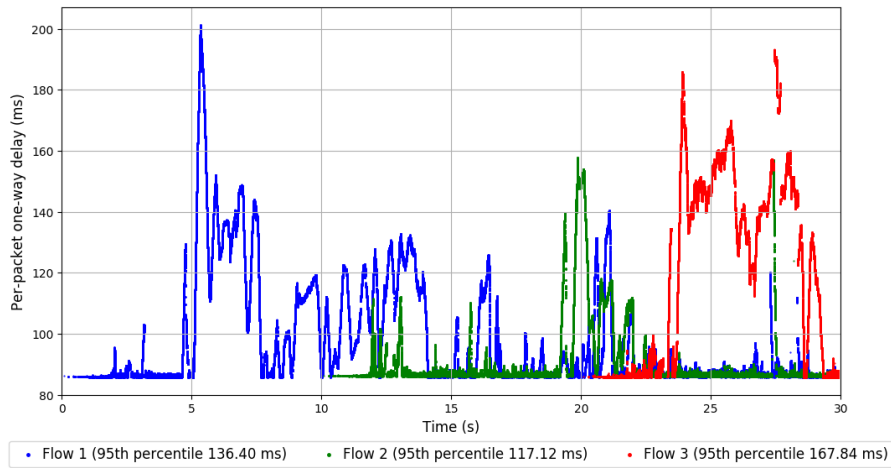
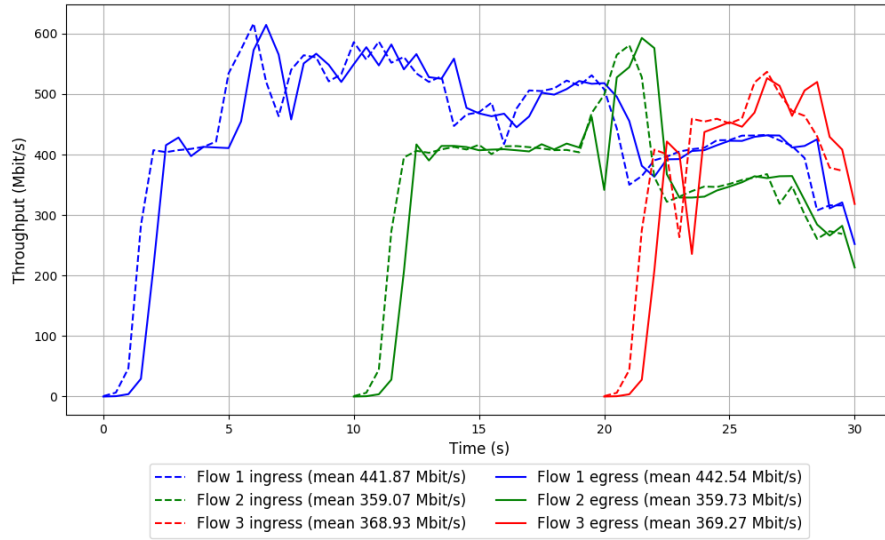
-- Flow 3:

Average throughput: 369.27 Mbit/s

95th percentile per-packet one-way delay: 167.845 ms

Loss rate: 1.64%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-05-29 23:18:20

End at: 2019-05-29 23:18:50

Local clock offset: -0.2 ms

Remote clock offset: 0.025 ms

Below is generated by plot.py at 2019-05-30 02:25:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 674.89 Mbit/s

95th percentile per-packet one-way delay: 97.899 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 318.31 Mbit/s

95th percentile per-packet one-way delay: 87.384 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 368.85 Mbit/s

95th percentile per-packet one-way delay: 95.270 ms

Loss rate: 0.98%

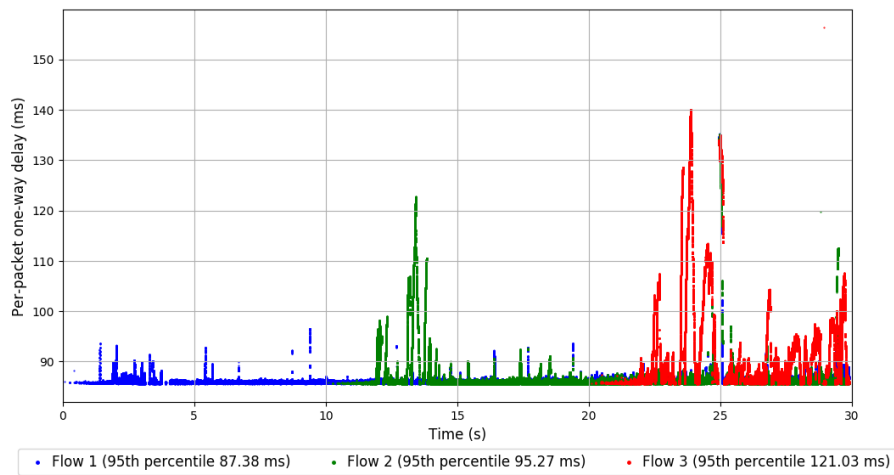
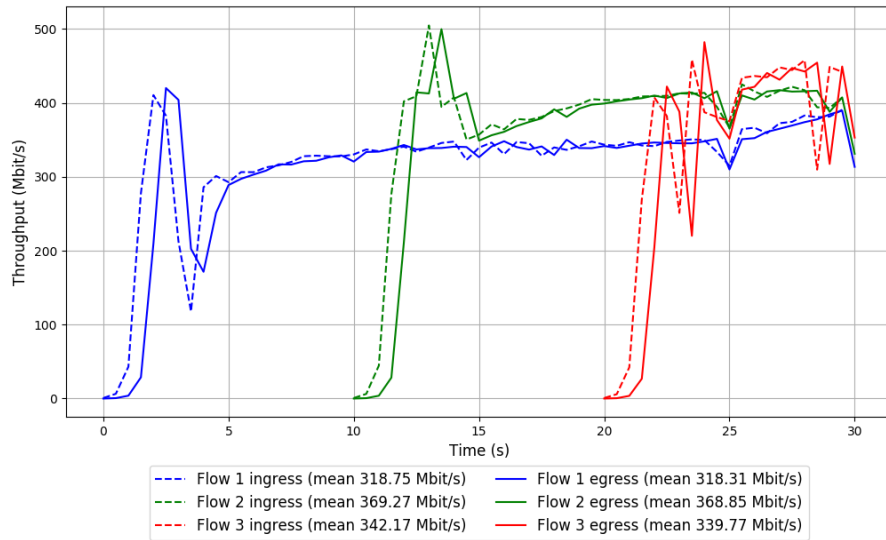
-- Flow 3:

Average throughput: 339.77 Mbit/s

95th percentile per-packet one-way delay: 121.031 ms

Loss rate: 2.41%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2019-05-29 23:53:58

End at: 2019-05-29 23:54:28

Local clock offset: 0.031 ms

Remote clock offset: 0.055 ms

Below is generated by plot.py at 2019-05-30 02:25:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 759.05 Mbit/s

95th percentile per-packet one-way delay: 129.735 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 409.91 Mbit/s

95th percentile per-packet one-way delay: 110.964 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 348.78 Mbit/s

95th percentile per-packet one-way delay: 143.858 ms

Loss rate: 0.82%

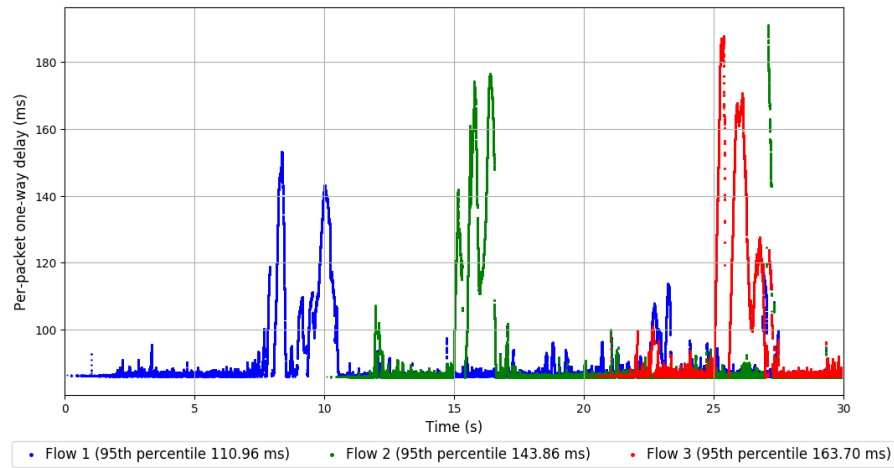
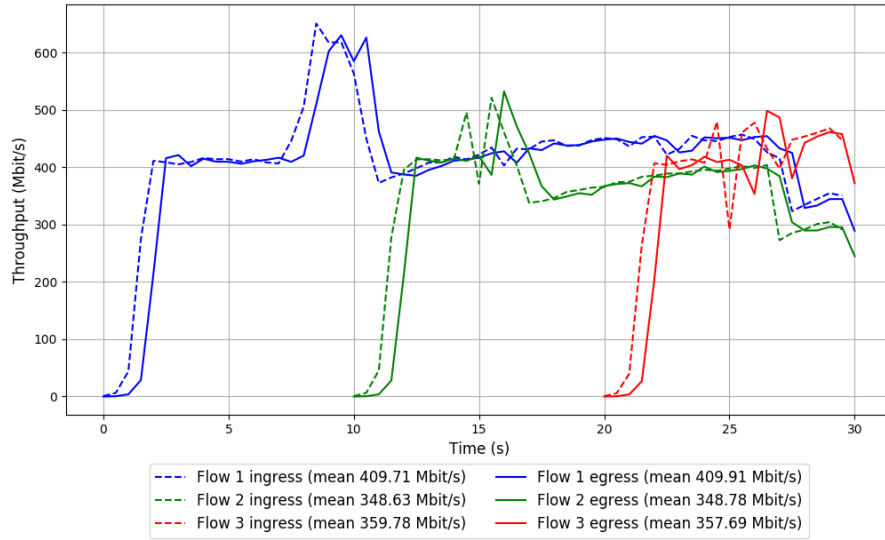
-- Flow 3:

Average throughput: 357.69 Mbit/s

95th percentile per-packet one-way delay: 163.702 ms

Loss rate: 2.30%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-05-30 00:30:45
End at: 2019-05-30 00:31:15
Local clock offset: 0.387 ms
Remote clock offset: -0.077 ms

Below is generated by plot.py at 2019-05-30 02:25:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 696.89 Mbit/s
95th percentile per-packet one-way delay: 103.021 ms
Loss rate: 0.74%

-- Flow 1:

Average throughput: 349.87 Mbit/s
95th percentile per-packet one-way delay: 100.812 ms
Loss rate: 0.51%

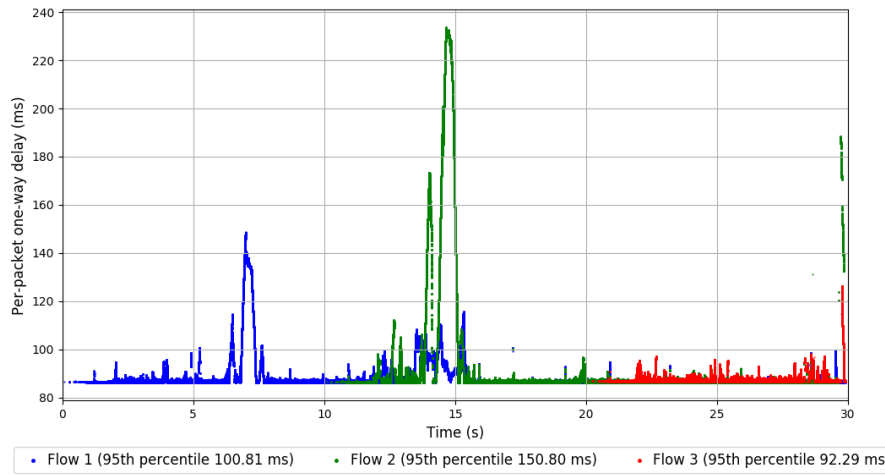
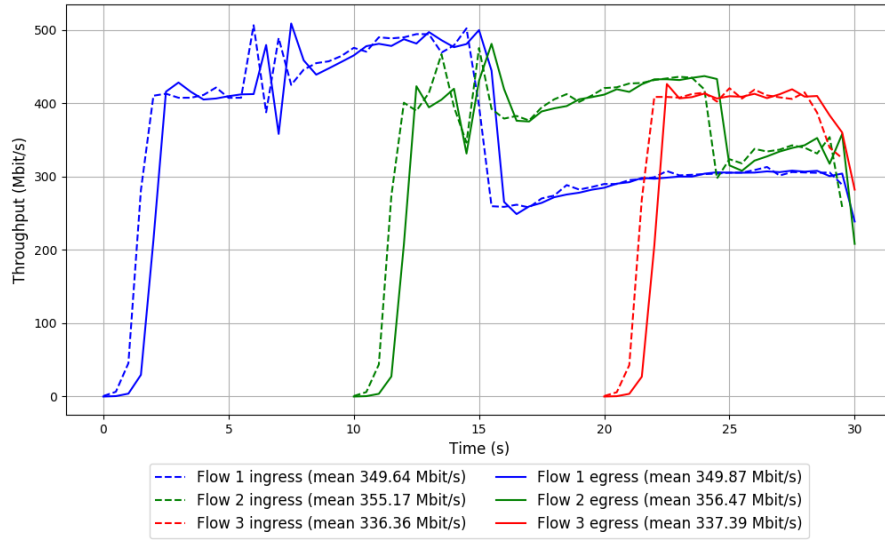
-- Flow 2:

Average throughput: 356.47 Mbit/s
95th percentile per-packet one-way delay: 150.804 ms
Loss rate: 0.76%

-- Flow 3:

Average throughput: 337.39 Mbit/s
95th percentile per-packet one-way delay: 92.287 ms
Loss rate: 1.44%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-05-30 01:07:31
End at: 2019-05-30 01:08:01
Local clock offset: -0.201 ms
Remote clock offset: -0.063 ms

Below is generated by plot.py at 2019-05-30 02:25:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 756.37 Mbit/s
95th percentile per-packet one-way delay: 119.851 ms
Loss rate: 0.74%

-- Flow 1:

Average throughput: 370.11 Mbit/s
95th percentile per-packet one-way delay: 96.885 ms
Loss rate: 0.50%

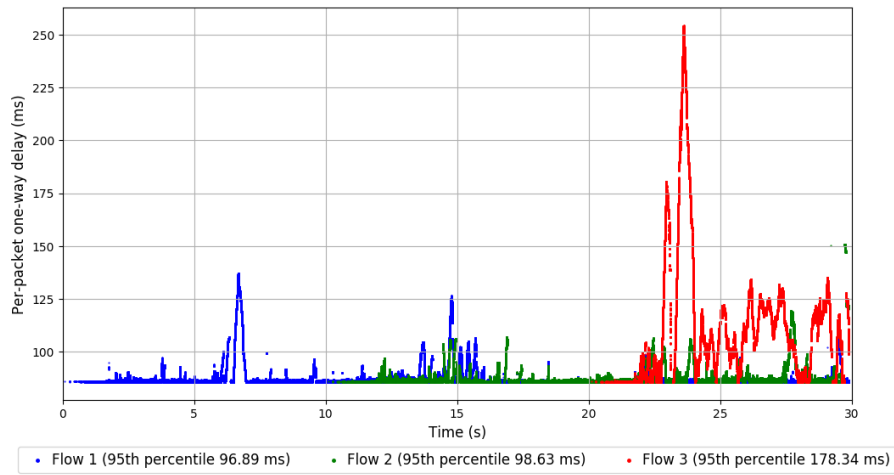
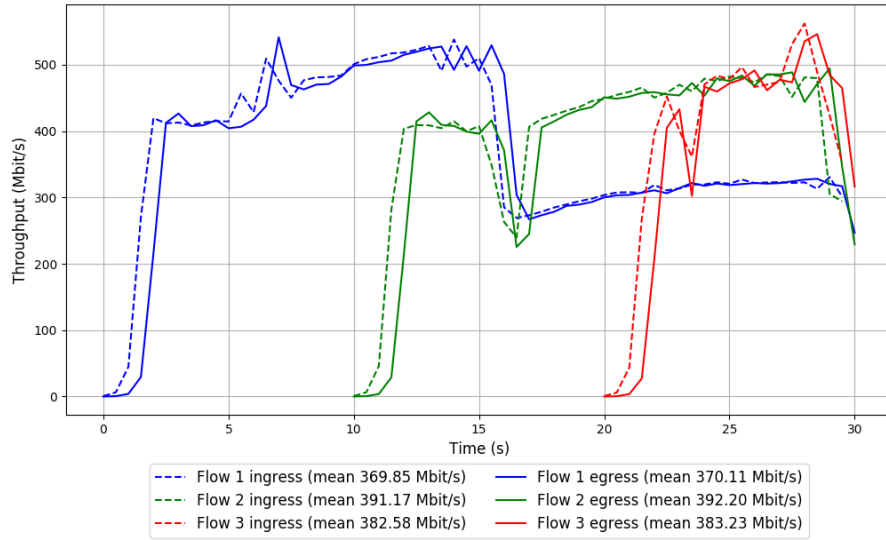
-- Flow 2:

Average throughput: 392.20 Mbit/s
95th percentile per-packet one-way delay: 98.629 ms
Loss rate: 0.67%

-- Flow 3:

Average throughput: 383.23 Mbit/s
95th percentile per-packet one-way delay: 178.343 ms
Loss rate: 1.57%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-05-29 22:48:48

End at: 2019-05-29 22:49:18

Local clock offset: -0.021 ms

Remote clock offset: 0.032 ms

Below is generated by plot.py at 2019-05-30 02:30:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 871.29 Mbit/s

95th percentile per-packet one-way delay: 143.814 ms

Loss rate: 2.74%

-- Flow 1:

Average throughput: 542.22 Mbit/s

95th percentile per-packet one-way delay: 153.588 ms

Loss rate: 3.68%

-- Flow 2:

Average throughput: 355.52 Mbit/s

95th percentile per-packet one-way delay: 93.336 ms

Loss rate: 0.87%

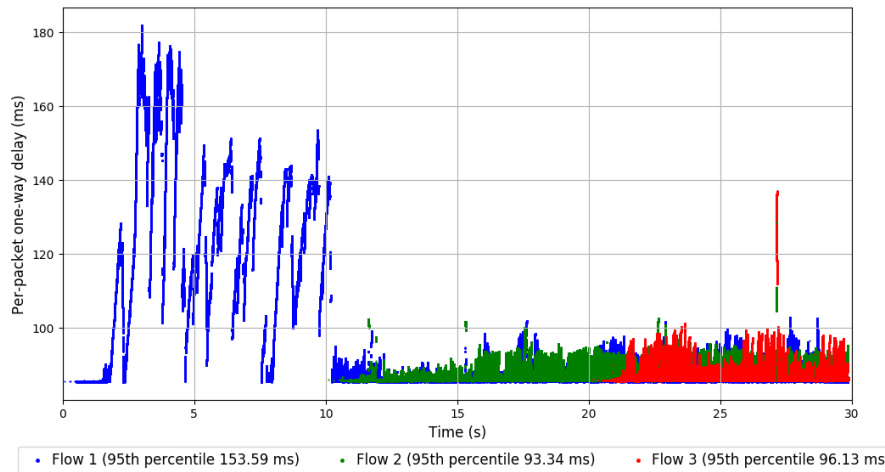
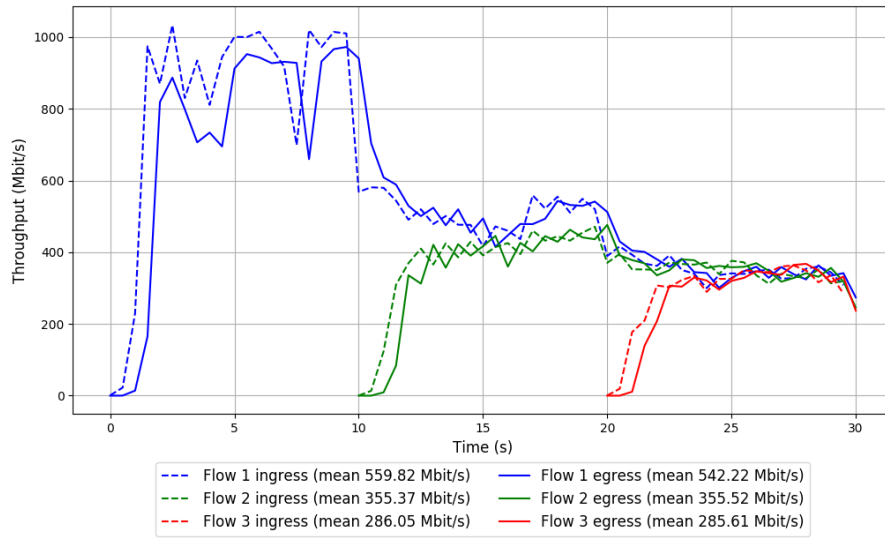
-- Flow 3:

Average throughput: 285.61 Mbit/s

95th percentile per-packet one-way delay: 96.126 ms

Loss rate: 1.91%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-05-29 23:25:14
End at: 2019-05-29 23:25:44
Local clock offset: -0.248 ms
Remote clock offset: 0.023 ms

Below is generated by plot.py at 2019-05-30 02:30:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 470.85 Mbit/s
95th percentile per-packet one-way delay: 94.271 ms
Loss rate: 0.85%

-- Flow 1:

Average throughput: 119.61 Mbit/s
95th percentile per-packet one-way delay: 107.683 ms
Loss rate: 0.01%

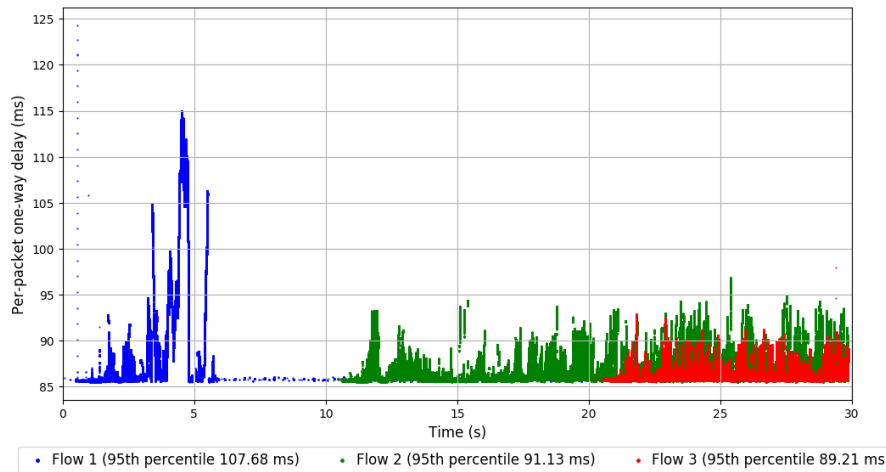
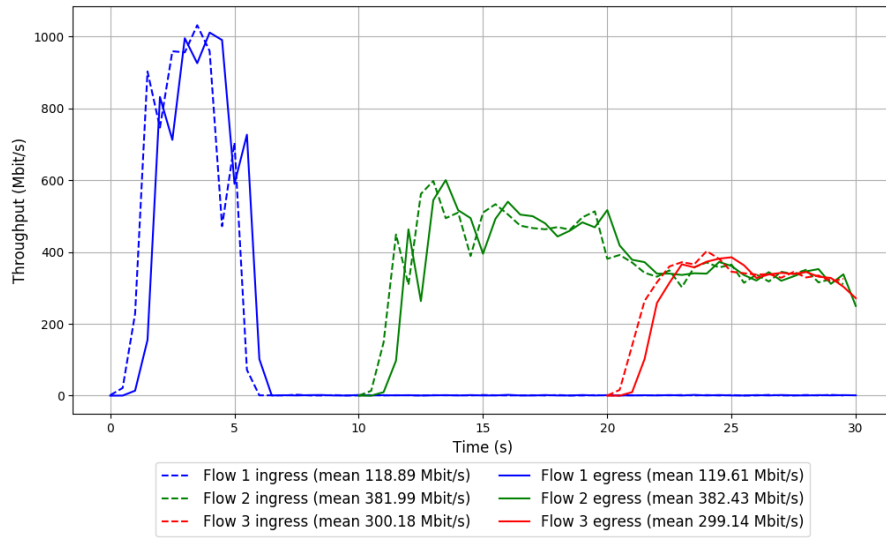
-- Flow 2:

Average throughput: 382.43 Mbit/s
95th percentile per-packet one-way delay: 91.130 ms
Loss rate: 0.77%

-- Flow 3:

Average throughput: 299.14 Mbit/s
95th percentile per-packet one-way delay: 89.211 ms
Loss rate: 2.08%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-05-30 00:01:03

End at: 2019-05-30 00:01:33

Local clock offset: 0.046 ms

Remote clock offset: 0.005 ms

Below is generated by plot.py at 2019-05-30 02:39:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 846.43 Mbit/s

95th percentile per-packet one-way delay: 124.202 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 509.02 Mbit/s

95th percentile per-packet one-way delay: 134.040 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 378.55 Mbit/s

95th percentile per-packet one-way delay: 92.999 ms

Loss rate: 0.69%

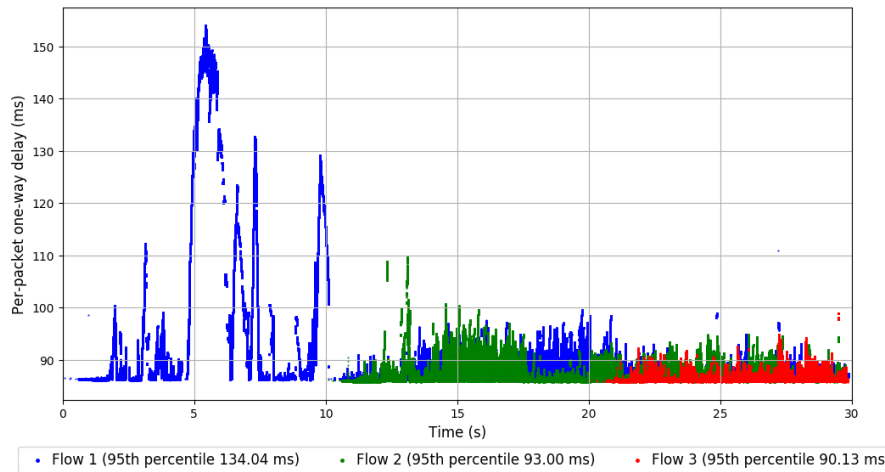
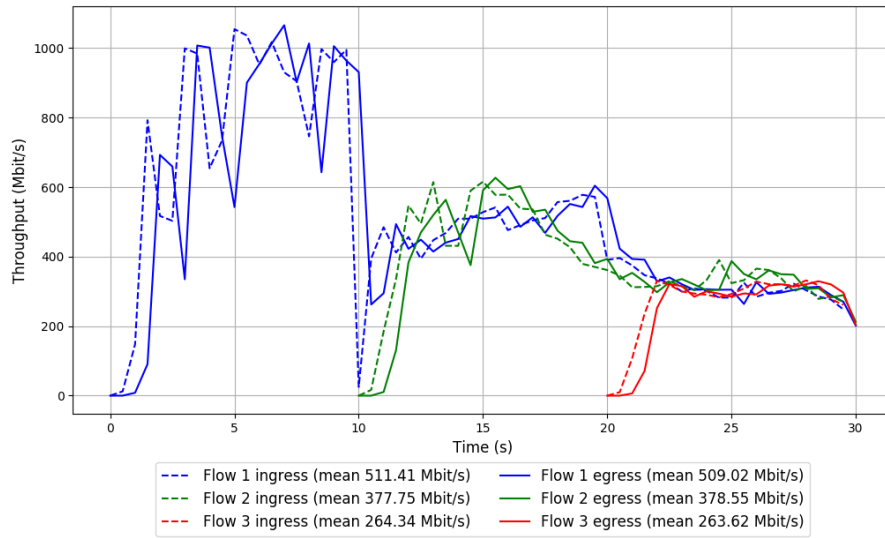
-- Flow 3:

Average throughput: 263.62 Mbit/s

95th percentile per-packet one-way delay: 90.132 ms

Loss rate: 2.08%

Run 3: Report of FillP — Data Link

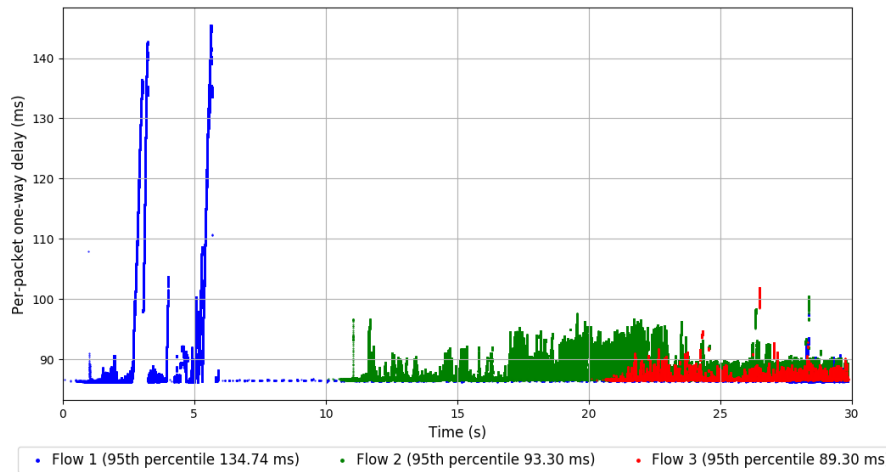
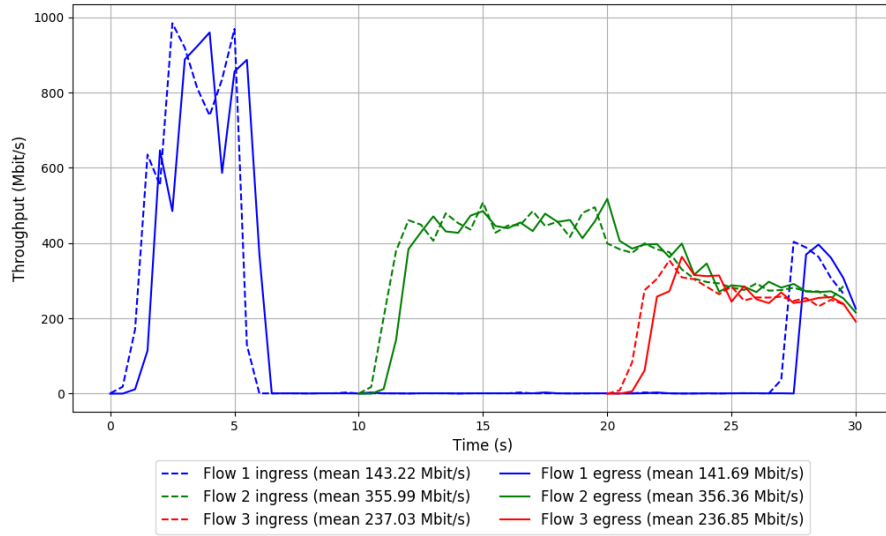


Run 4: Statistics of FillP

Start at: 2019-05-30 00:37:48
End at: 2019-05-30 00:38:18
Local clock offset: 0.353 ms
Remote clock offset: -0.125 ms

```
# Below is generated by plot.py at 2019-05-30 02:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.77 Mbit/s
95th percentile per-packet one-way delay: 104.887 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 141.69 Mbit/s
95th percentile per-packet one-way delay: 134.737 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 356.36 Mbit/s
95th percentile per-packet one-way delay: 93.300 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 236.85 Mbit/s
95th percentile per-packet one-way delay: 89.295 ms
Loss rate: 1.82%
```

Run 4: Report of FillP — Data Link

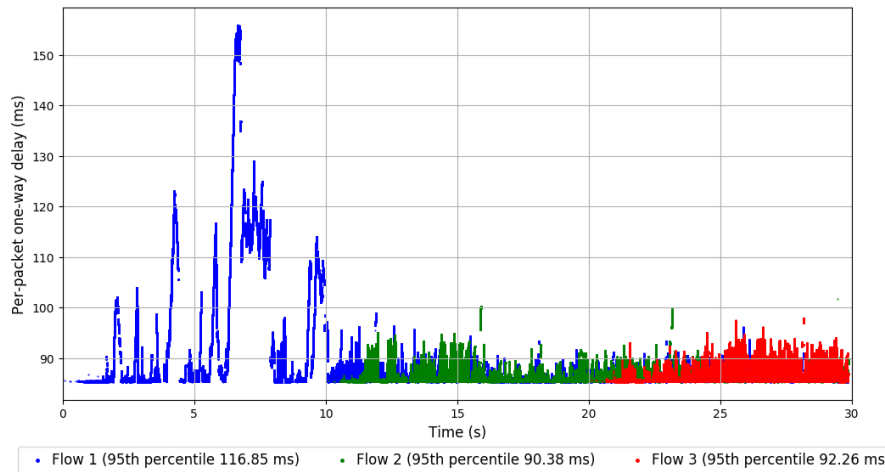
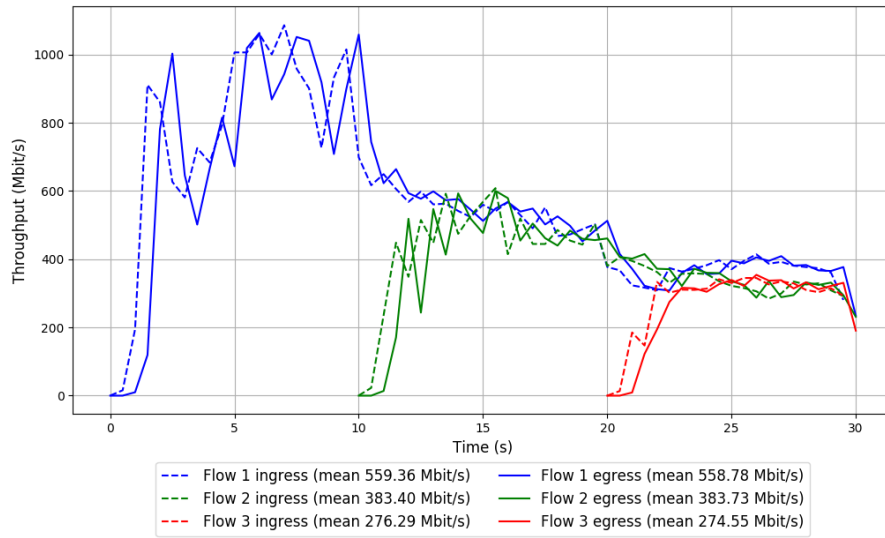


Run 5: Statistics of FillP

Start at: 2019-05-30 01:14:40
End at: 2019-05-30 01:15:10
Local clock offset: -0.36 ms
Remote clock offset: -0.067 ms

```
# Below is generated by plot.py at 2019-05-30 02:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 902.80 Mbit/s
95th percentile per-packet one-way delay: 113.218 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 558.78 Mbit/s
95th percentile per-packet one-way delay: 116.853 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 383.73 Mbit/s
95th percentile per-packet one-way delay: 90.376 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 274.55 Mbit/s
95th percentile per-packet one-way delay: 92.263 ms
Loss rate: 2.42%
```

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-05-29 22:36:08

End at: 2019-05-29 22:36:38

Local clock offset: 0.677 ms

Remote clock offset: 0.066 ms

Below is generated by plot.py at 2019-05-30 02:43:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.90 Mbit/s

95th percentile per-packet one-way delay: 116.907 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 125.10 Mbit/s

95th percentile per-packet one-way delay: 129.825 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 339.40 Mbit/s

95th percentile per-packet one-way delay: 89.224 ms

Loss rate: 0.80%

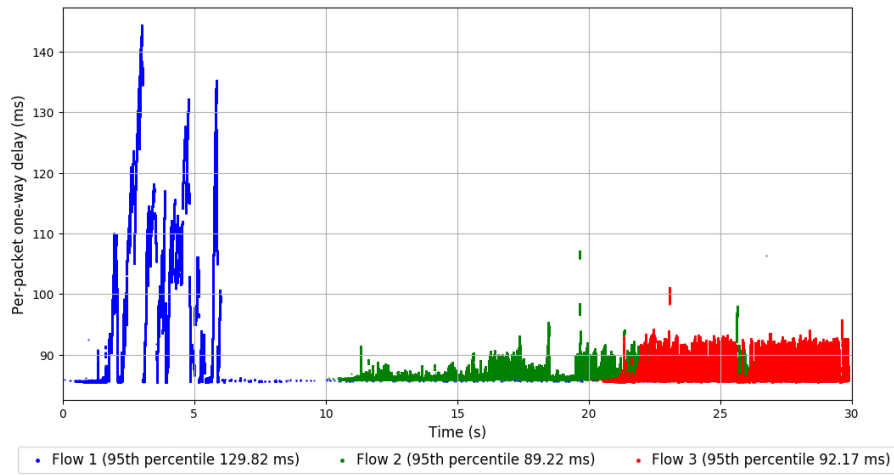
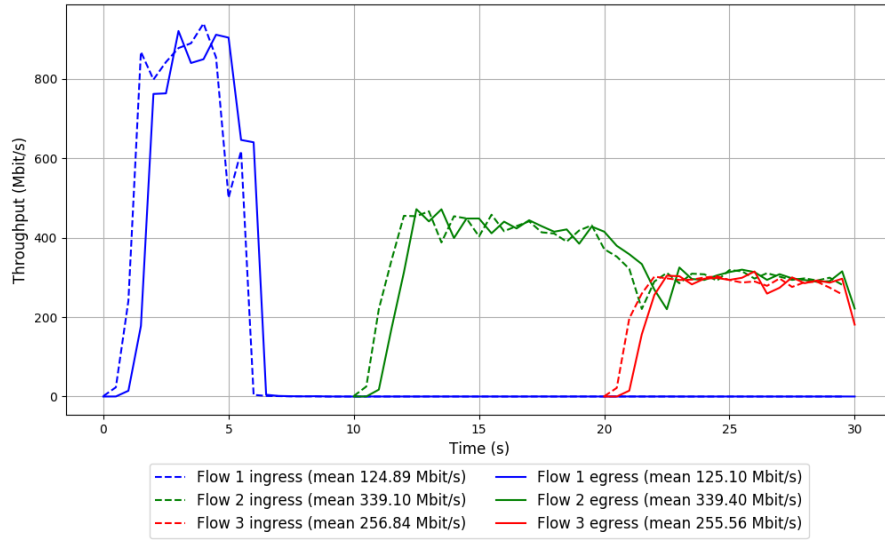
-- Flow 3:

Average throughput: 255.56 Mbit/s

95th percentile per-packet one-way delay: 92.167 ms

Loss rate: 2.02%

Run 1: Report of FillP-Sheep — Data Link

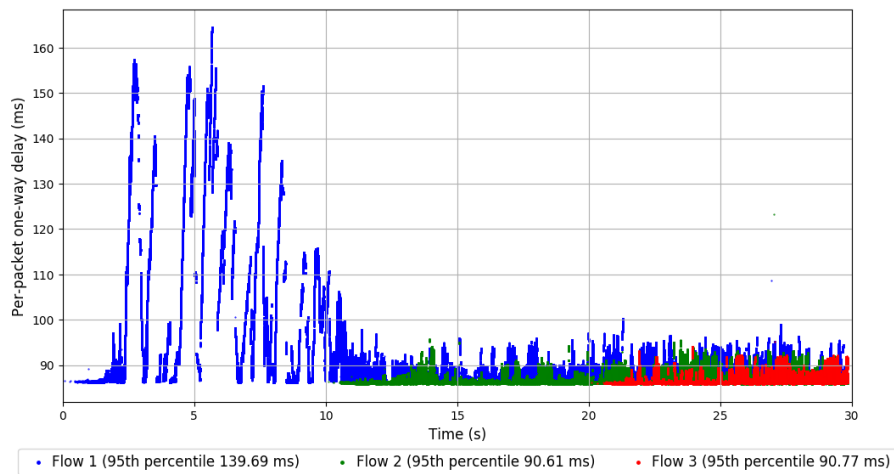
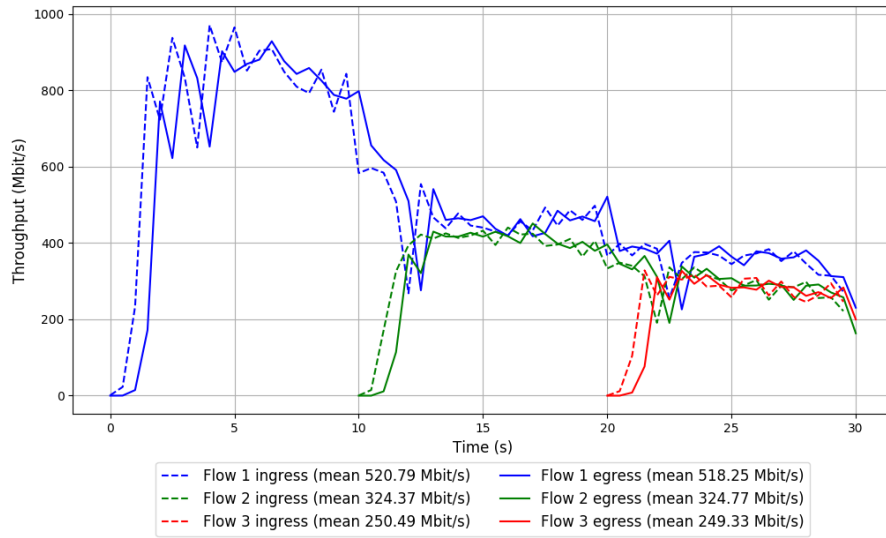


Run 2: Statistics of FillP-Sheep

Start at: 2019-05-29 23:12:16
End at: 2019-05-29 23:12:46
Local clock offset: 0.054 ms
Remote clock offset: -0.027 ms

```
# Below is generated by plot.py at 2019-05-30 02:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 815.14 Mbit/s
95th percentile per-packet one-way delay: 133.549 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 518.25 Mbit/s
95th percentile per-packet one-way delay: 139.687 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 324.77 Mbit/s
95th percentile per-packet one-way delay: 90.613 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 249.33 Mbit/s
95th percentile per-packet one-way delay: 90.770 ms
Loss rate: 1.98%
```

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-05-29 23:48:21

End at: 2019-05-29 23:48:51

Local clock offset: 0.319 ms

Remote clock offset: 0.071 ms

Below is generated by plot.py at 2019-05-30 02:43:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.20 Mbit/s

95th percentile per-packet one-way delay: 131.355 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 103.67 Mbit/s

95th percentile per-packet one-way delay: 182.419 ms

Loss rate: 3.96%

-- Flow 2:

Average throughput: 323.37 Mbit/s

95th percentile per-packet one-way delay: 89.609 ms

Loss rate: 0.80%

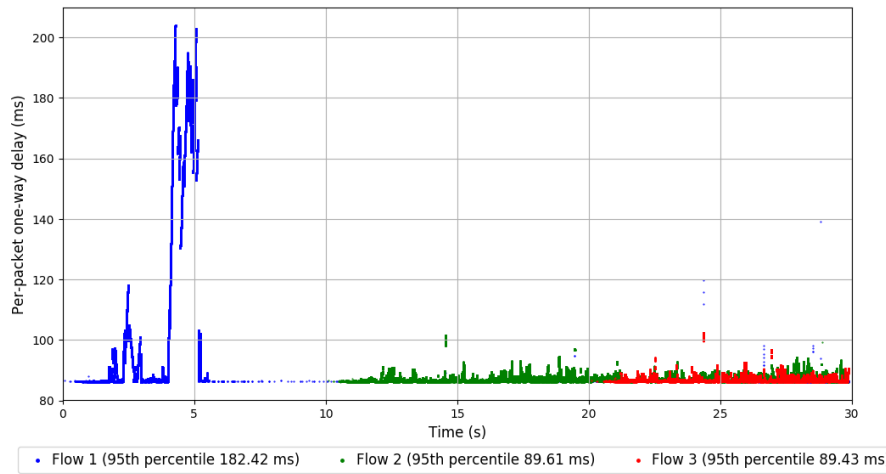
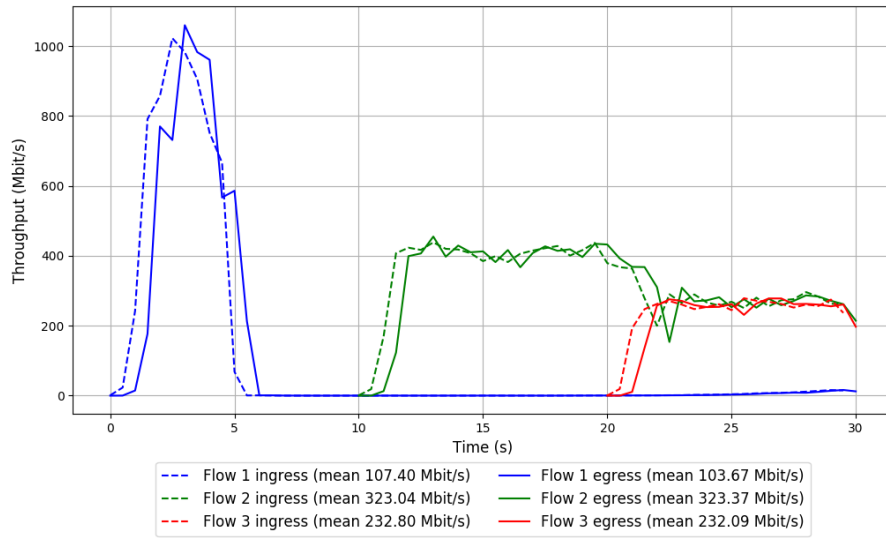
-- Flow 3:

Average throughput: 232.09 Mbit/s

95th percentile per-packet one-way delay: 89.433 ms

Loss rate: 2.05%

Run 3: Report of FillP-Sheep — Data Link

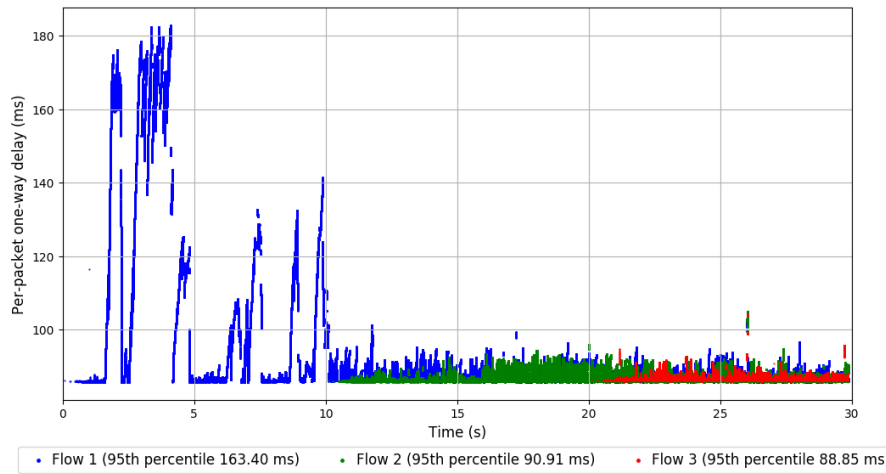
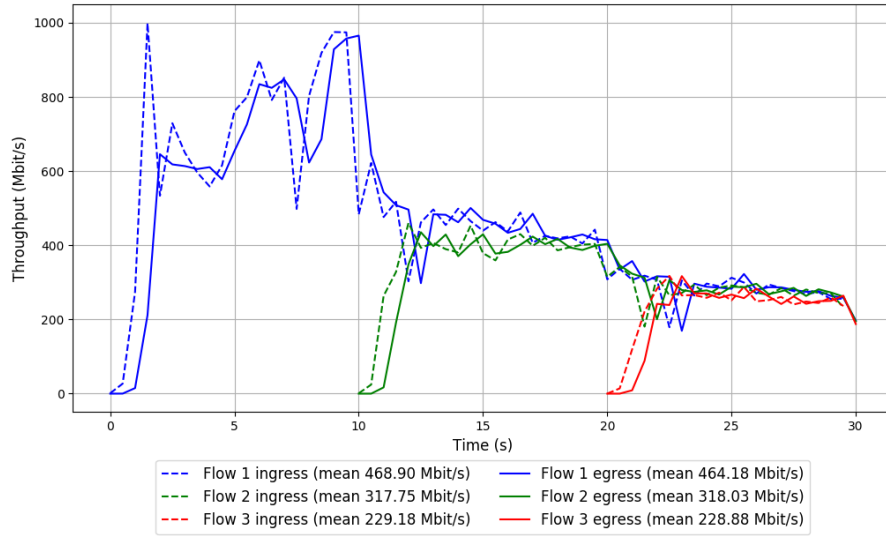


Run 4: Statistics of FillP-Sheep

Start at: 2019-05-30 00:24:46
End at: 2019-05-30 00:25:16
Local clock offset: -0.034 ms
Remote clock offset: -0.057 ms

```
# Below is generated by plot.py at 2019-05-30 02:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 750.21 Mbit/s
95th percentile per-packet one-way delay: 138.586 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 464.18 Mbit/s
95th percentile per-packet one-way delay: 163.404 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 318.03 Mbit/s
95th percentile per-packet one-way delay: 90.911 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 228.88 Mbit/s
95th percentile per-packet one-way delay: 88.850 ms
Loss rate: 1.88%
```

Run 4: Report of FillP-Sheep — Data Link

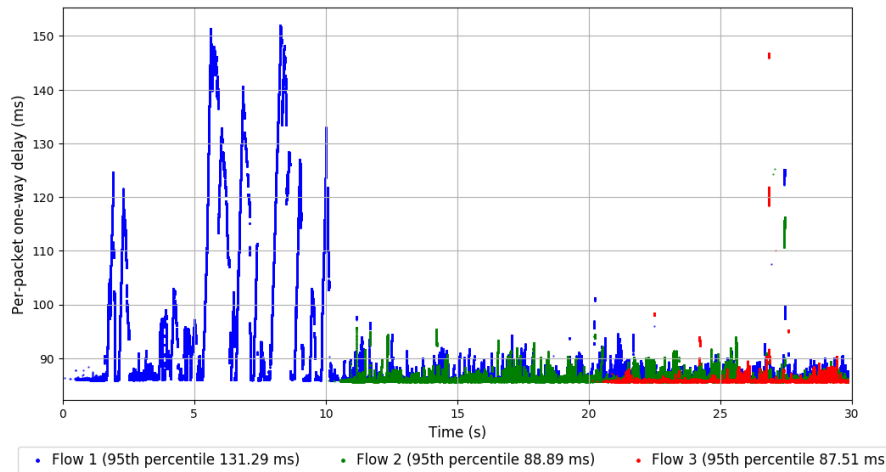
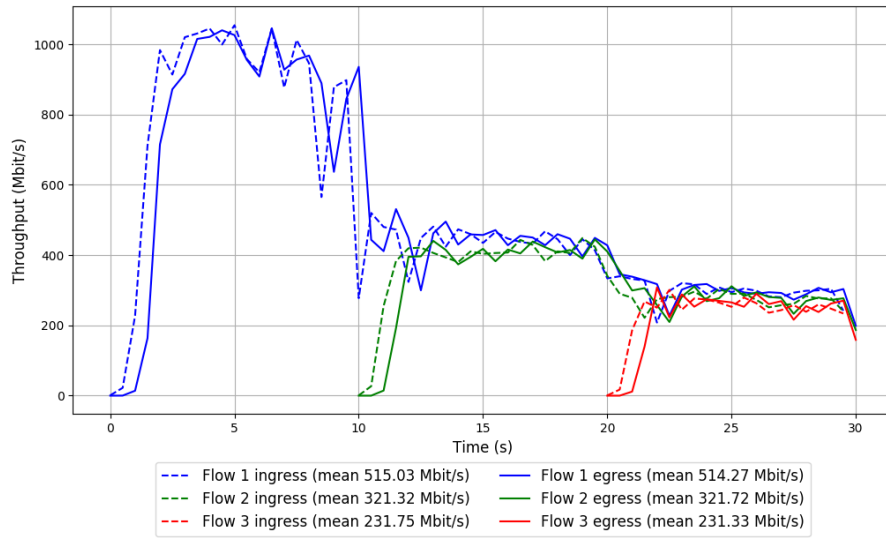


Run 5: Statistics of FillP-Sheep

Start at: 2019-05-30 01:01:25
End at: 2019-05-30 01:01:55
Local clock offset: -0.194 ms
Remote clock offset: -0.104 ms

```
# Below is generated by plot.py at 2019-05-30 02:49:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 803.18 Mbit/s
95th percentile per-packet one-way delay: 125.401 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 514.27 Mbit/s
95th percentile per-packet one-way delay: 131.290 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 321.72 Mbit/s
95th percentile per-packet one-way delay: 88.894 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 231.33 Mbit/s
95th percentile per-packet one-way delay: 87.512 ms
Loss rate: 1.96%
```

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2019-05-29 22:46:58

End at: 2019-05-29 22:47:28

Local clock offset: 0.88 ms

Remote clock offset: 0.024 ms

Below is generated by plot.py at 2019-05-30 02:49:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.16 Mbit/s

95th percentile per-packet one-way delay: 88.745 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 185.56 Mbit/s

95th percentile per-packet one-way delay: 88.086 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 175.24 Mbit/s

95th percentile per-packet one-way delay: 89.066 ms

Loss rate: 0.81%

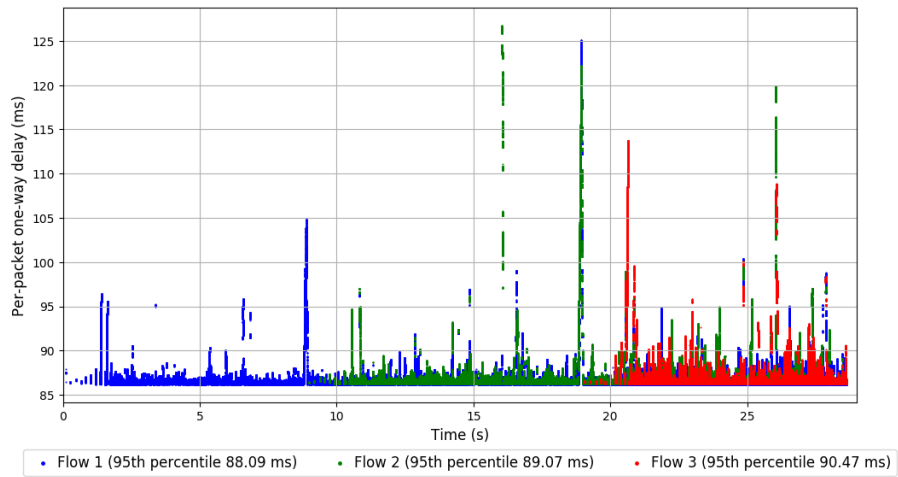
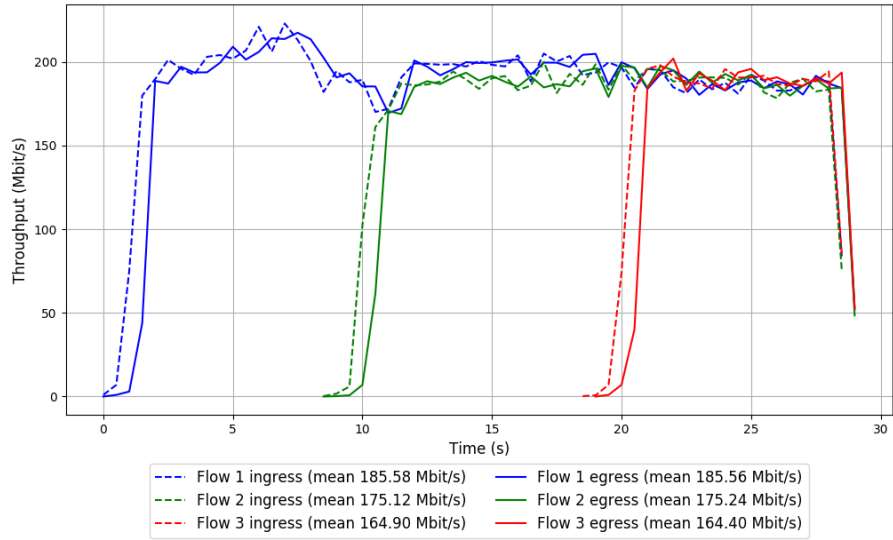
-- Flow 3:

Average throughput: 164.40 Mbit/s

95th percentile per-packet one-way delay: 90.473 ms

Loss rate: 2.07%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-05-29 23:23:23

End at: 2019-05-29 23:23:53

Local clock offset: -0.015 ms

Remote clock offset: 0.068 ms

Below is generated by plot.py at 2019-05-30 02:49:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 351.44 Mbit/s

95th percentile per-packet one-way delay: 88.795 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 189.37 Mbit/s

95th percentile per-packet one-way delay: 88.898 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 170.54 Mbit/s

95th percentile per-packet one-way delay: 88.906 ms

Loss rate: 0.87%

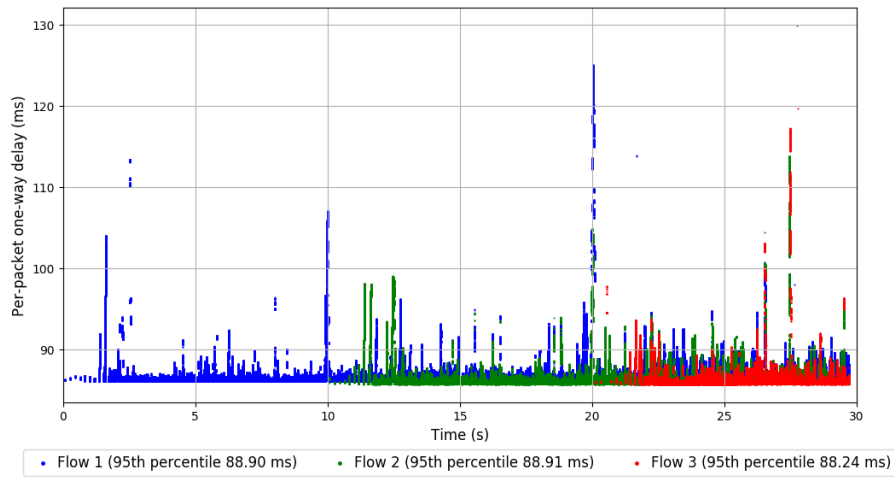
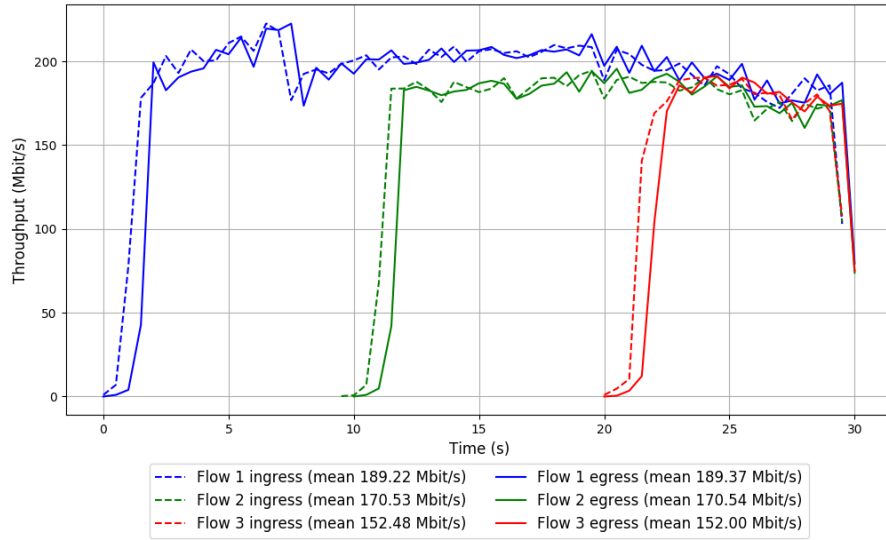
-- Flow 3:

Average throughput: 152.00 Mbit/s

95th percentile per-packet one-way delay: 88.236 ms

Loss rate: 2.06%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-05-29 23:59:10

End at: 2019-05-29 23:59:40

Local clock offset: 0.001 ms

Remote clock offset: 0.003 ms

Below is generated by plot.py at 2019-05-30 02:49:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.93 Mbit/s

95th percentile per-packet one-way delay: 88.927 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 198.36 Mbit/s

95th percentile per-packet one-way delay: 89.102 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 174.34 Mbit/s

95th percentile per-packet one-way delay: 88.738 ms

Loss rate: 0.88%

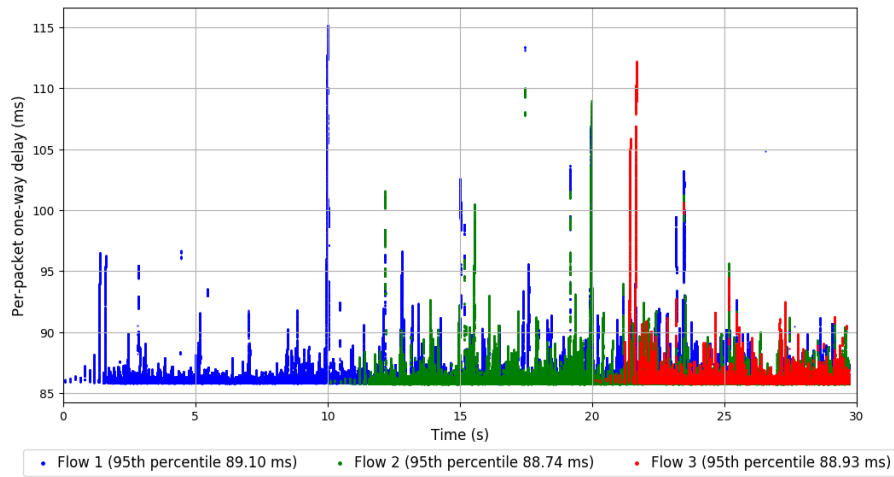
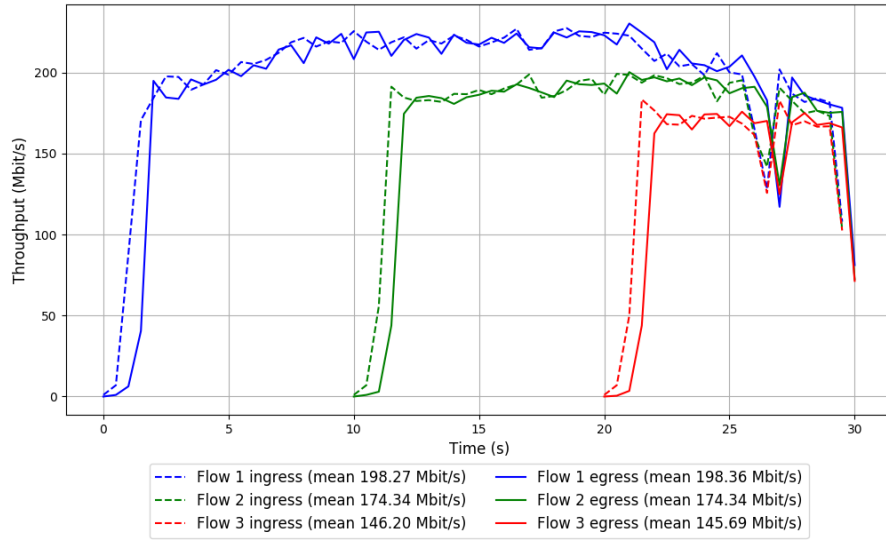
-- Flow 3:

Average throughput: 145.69 Mbit/s

95th percentile per-packet one-way delay: 88.927 ms

Loss rate: 2.06%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2019-05-30 00:35:55
End at: 2019-05-30 00:36:25
Local clock offset: -0.484 ms
Remote clock offset: -0.108 ms

Below is generated by plot.py at 2019-05-30 02:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.26 Mbit/s
95th percentile per-packet one-way delay: 89.976 ms
Loss rate: 0.79%

-- Flow 1:

Average throughput: 199.58 Mbit/s
95th percentile per-packet one-way delay: 90.376 ms
Loss rate: 0.58%

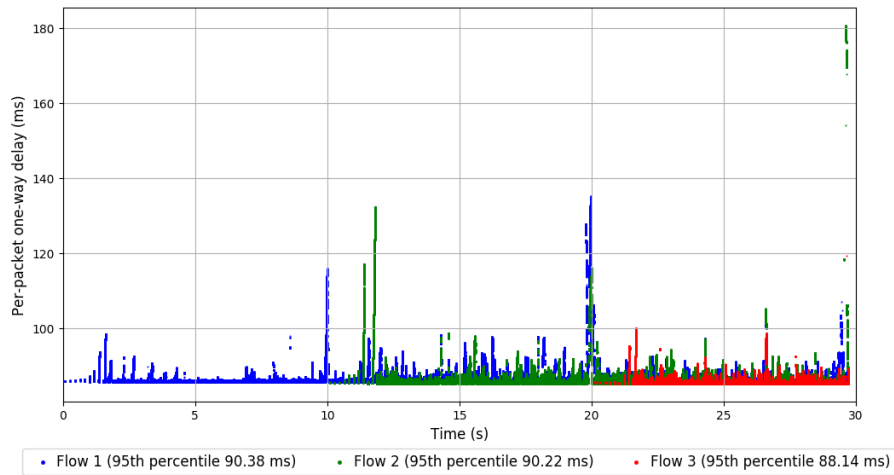
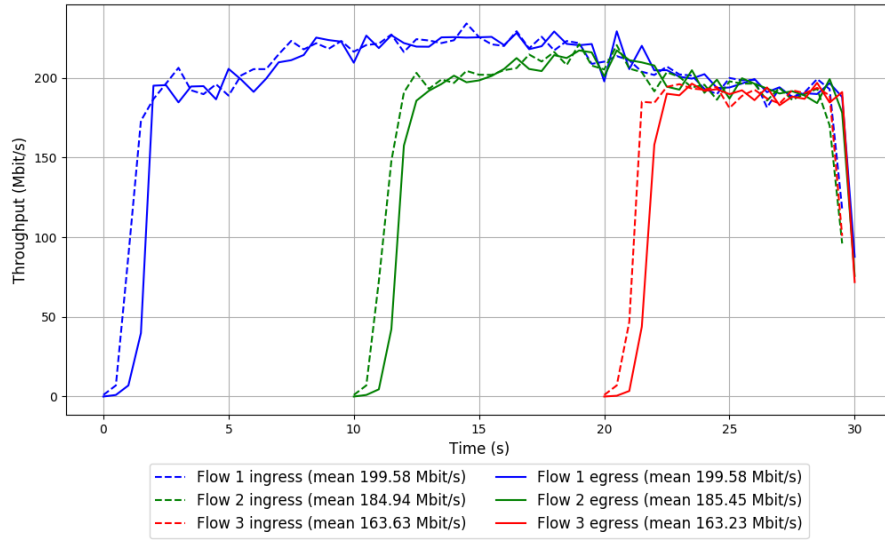
-- Flow 2:

Average throughput: 185.45 Mbit/s
95th percentile per-packet one-way delay: 90.215 ms
Loss rate: 0.59%

-- Flow 3:

Average throughput: 163.23 Mbit/s
95th percentile per-packet one-way delay: 88.135 ms
Loss rate: 2.00%

Run 4: Report of Indigo — Data Link

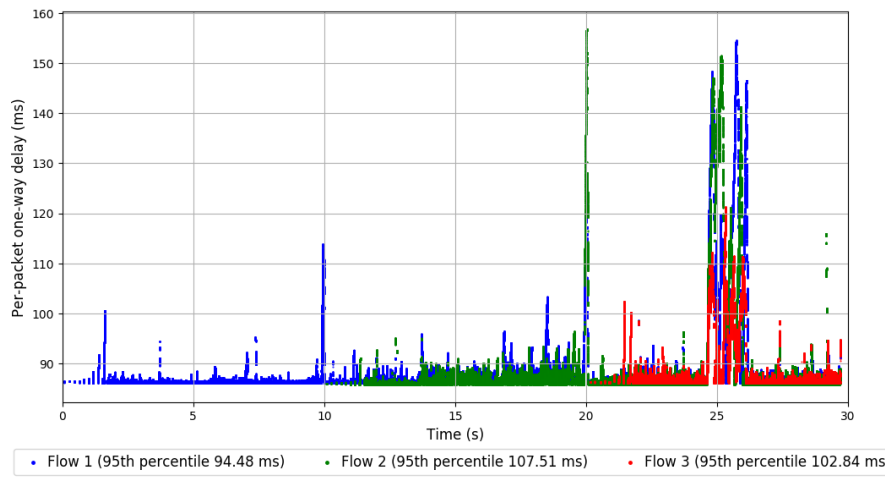
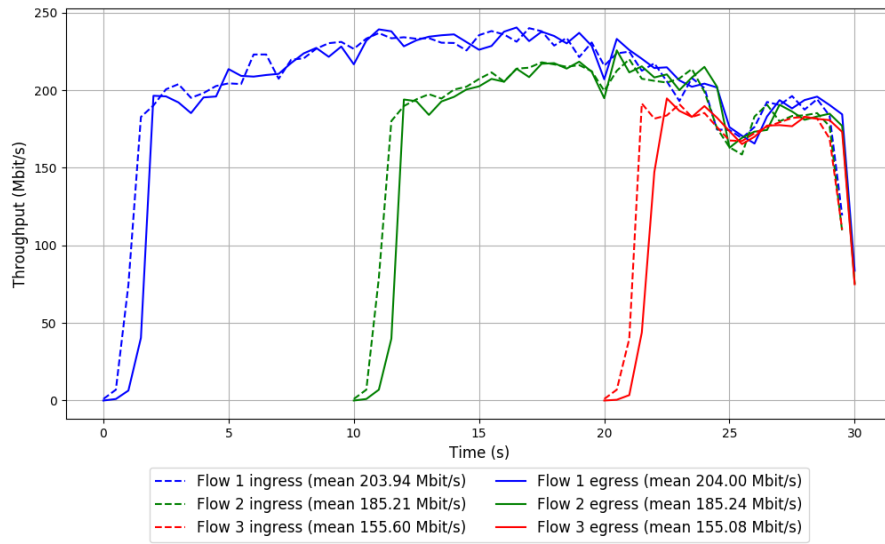


Run 5: Statistics of Indigo

Start at: 2019-05-30 01:12:46
End at: 2019-05-30 01:13:16
Local clock offset: 0.036 ms
Remote clock offset: -0.074 ms

```
# Below is generated by plot.py at 2019-05-30 02:55:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.75 Mbit/s
95th percentile per-packet one-way delay: 100.650 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 204.00 Mbit/s
95th percentile per-packet one-way delay: 94.483 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 185.24 Mbit/s
95th percentile per-packet one-way delay: 107.507 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 155.08 Mbit/s
95th percentile per-packet one-way delay: 102.840 ms
Loss rate: 2.10%
```

Run 5: Report of Indigo — Data Link

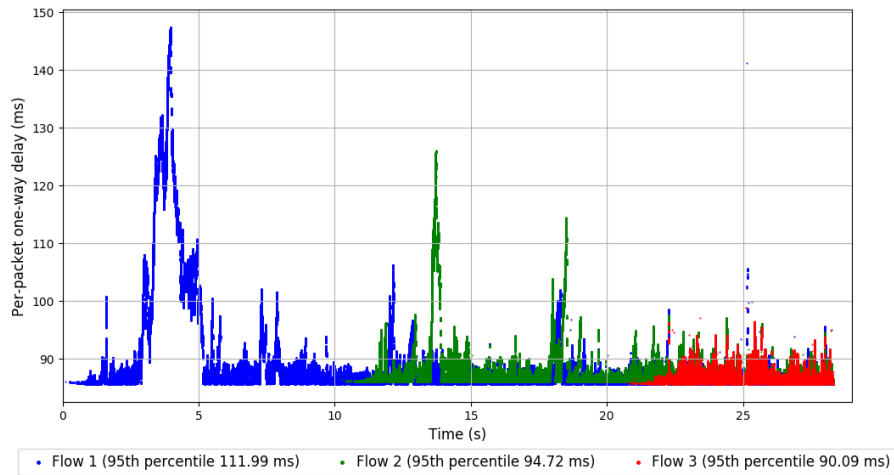
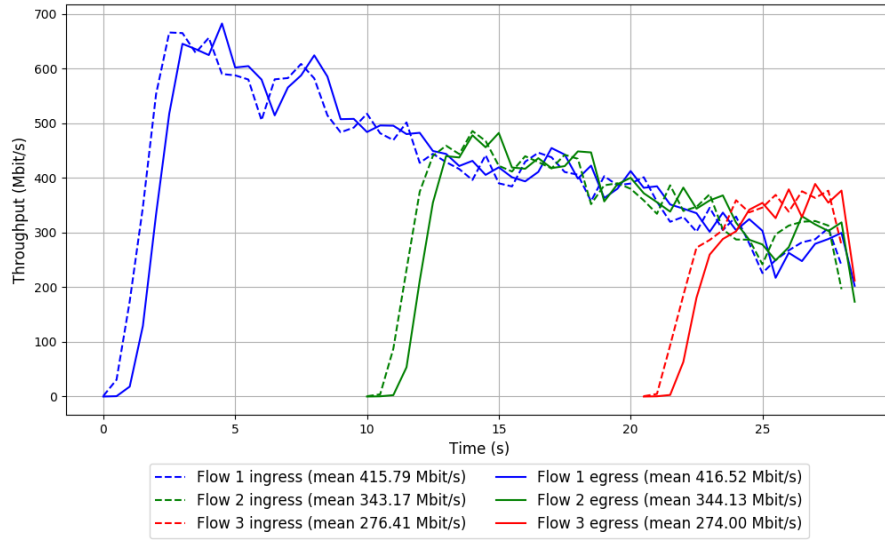


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-05-29 22:59:18
End at: 2019-05-29 22:59:48
Local clock offset: -0.092 ms
Remote clock offset: -0.017 ms

Below is generated by plot.py at 2019-05-30 02:56:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 710.27 Mbit/s
95th percentile per-packet one-way delay: 104.539 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 416.52 Mbit/s
95th percentile per-packet one-way delay: 111.992 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 344.13 Mbit/s
95th percentile per-packet one-way delay: 94.723 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 274.00 Mbit/s
95th percentile per-packet one-way delay: 90.094 ms
Loss rate: 3.00%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-05-29 23:35:13

End at: 2019-05-29 23:35:43

Local clock offset: -0.016 ms

Remote clock offset: 0.074 ms

Below is generated by plot.py at 2019-05-30 02:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 739.23 Mbit/s

95th percentile per-packet one-way delay: 100.562 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 438.98 Mbit/s

95th percentile per-packet one-way delay: 102.555 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 355.03 Mbit/s

95th percentile per-packet one-way delay: 99.626 ms

Loss rate: 0.88%

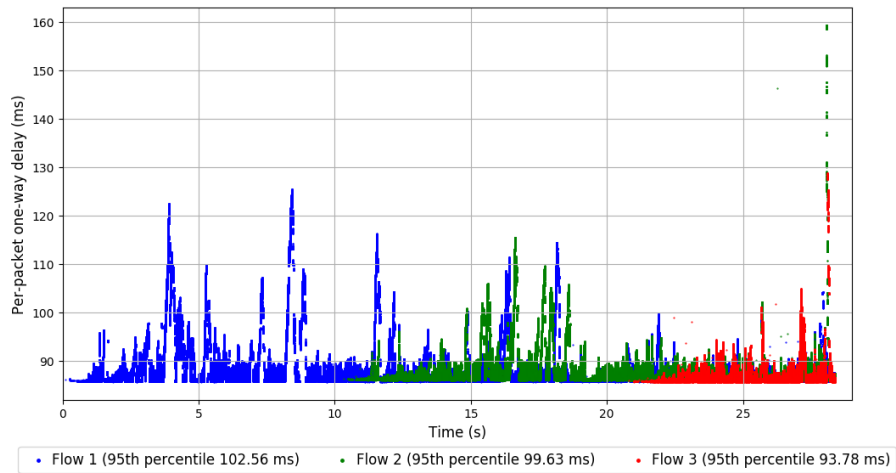
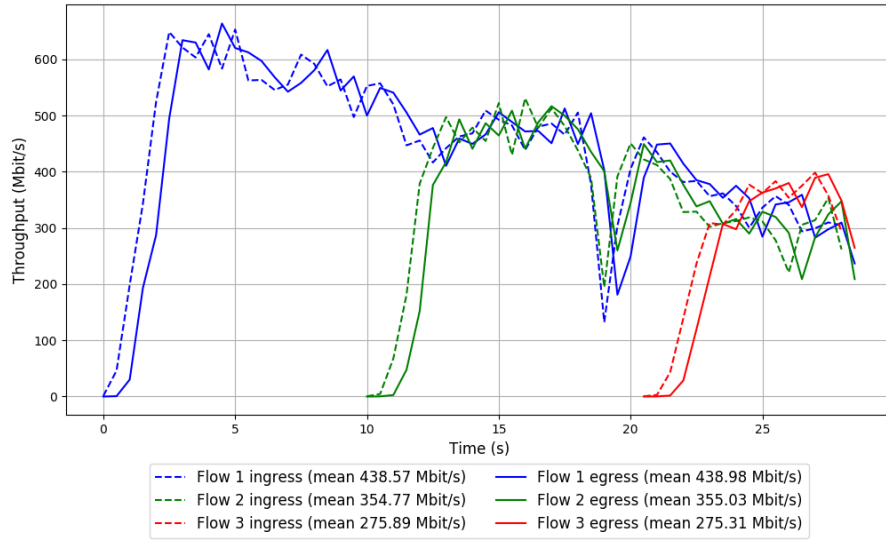
-- Flow 3:

Average throughput: 275.31 Mbit/s

95th percentile per-packet one-way delay: 93.782 ms

Loss rate: 2.43%

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

Start at: 2019-05-30 00:11:41
End at: 2019-05-30 00:12:11
Local clock offset: 0.036 ms
Remote clock offset: -0.017 ms

Below is generated by plot.py at 2019-05-30 03:00:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 758.26 Mbit/s
95th percentile per-packet one-way delay: 99.936 ms
Loss rate: 0.73%

-- Flow 1:

Average throughput: 447.10 Mbit/s
95th percentile per-packet one-way delay: 104.497 ms
Loss rate: 0.48%

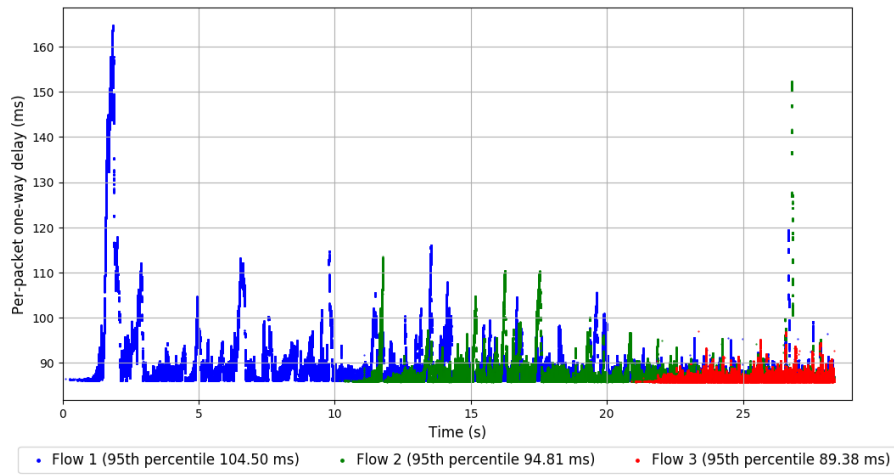
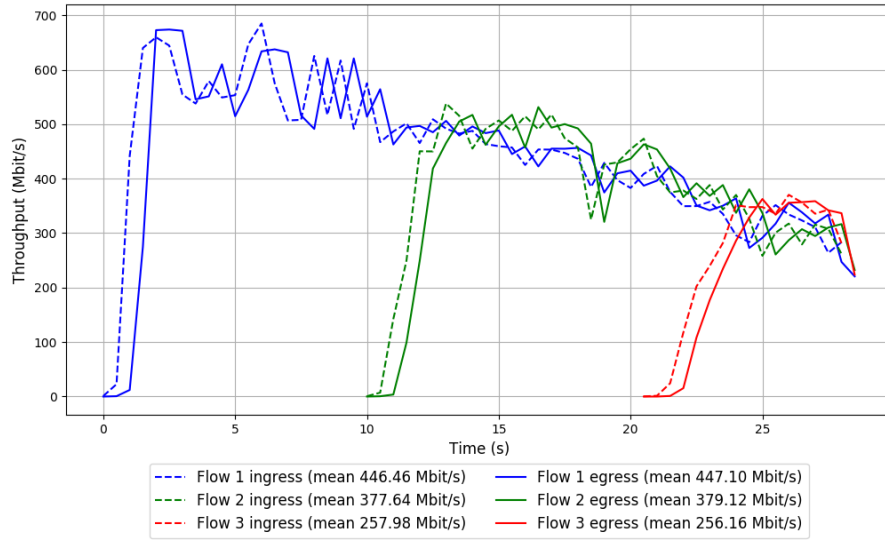
-- Flow 2:

Average throughput: 379.12 Mbit/s
95th percentile per-packet one-way delay: 94.814 ms
Loss rate: 0.55%

-- Flow 3:

Average throughput: 256.16 Mbit/s
95th percentile per-packet one-way delay: 89.381 ms
Loss rate: 2.95%

Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-05-30 00:48:15
End at: 2019-05-30 00:48:45
Local clock offset: 0.121 ms
Remote clock offset: -0.129 ms

Below is generated by plot.py at 2019-05-30 03:02:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 771.28 Mbit/s
95th percentile per-packet one-way delay: 100.658 ms
Loss rate: 0.72%

-- Flow 1:

Average throughput: 459.35 Mbit/s
95th percentile per-packet one-way delay: 105.162 ms
Loss rate: 0.35%

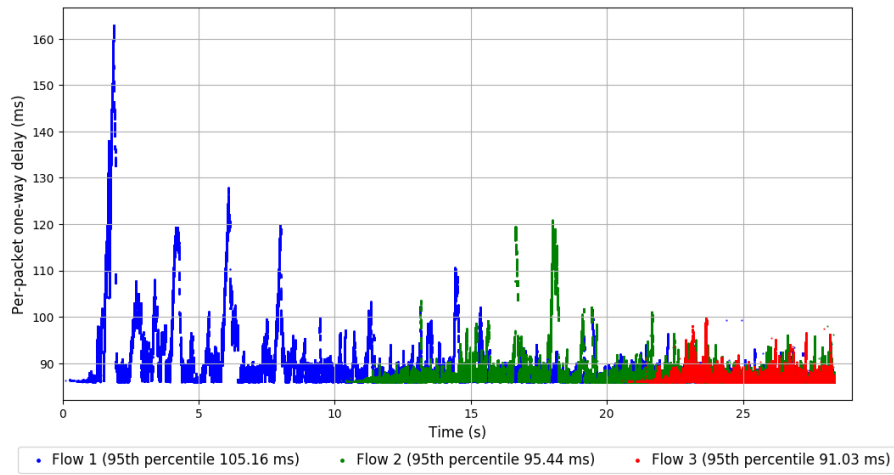
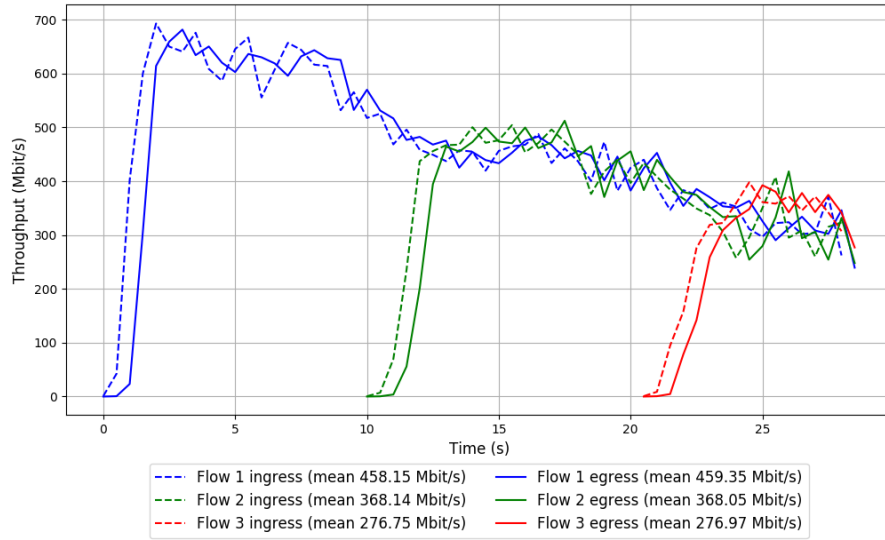
-- Flow 2:

Average throughput: 368.05 Mbit/s
95th percentile per-packet one-way delay: 95.443 ms
Loss rate: 0.97%

-- Flow 3:

Average throughput: 276.97 Mbit/s
95th percentile per-packet one-way delay: 91.034 ms
Loss rate: 2.09%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-05-30 01:25:27
End at: 2019-05-30 01:25:57
Local clock offset: -0.356 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-05-30 03:02:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 720.43 Mbit/s
95th percentile per-packet one-way delay: 98.329 ms
Loss rate: 0.79%

-- Flow 1:

Average throughput: 428.75 Mbit/s
95th percentile per-packet one-way delay: 96.549 ms
Loss rate: 0.34%

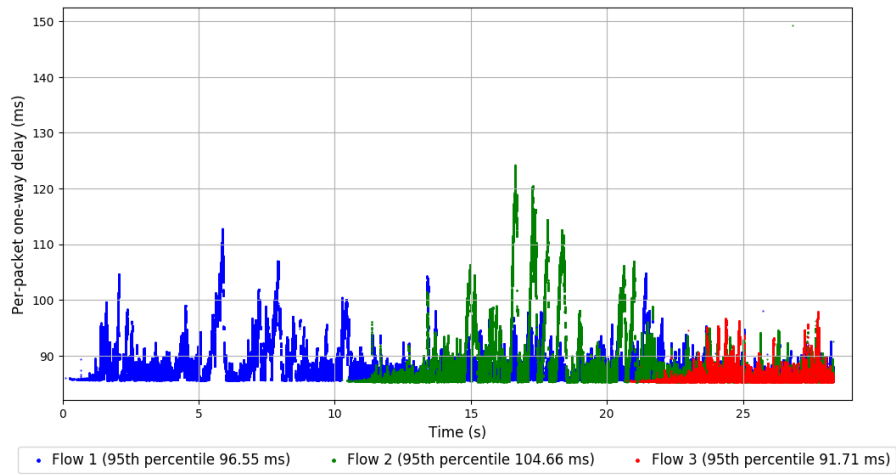
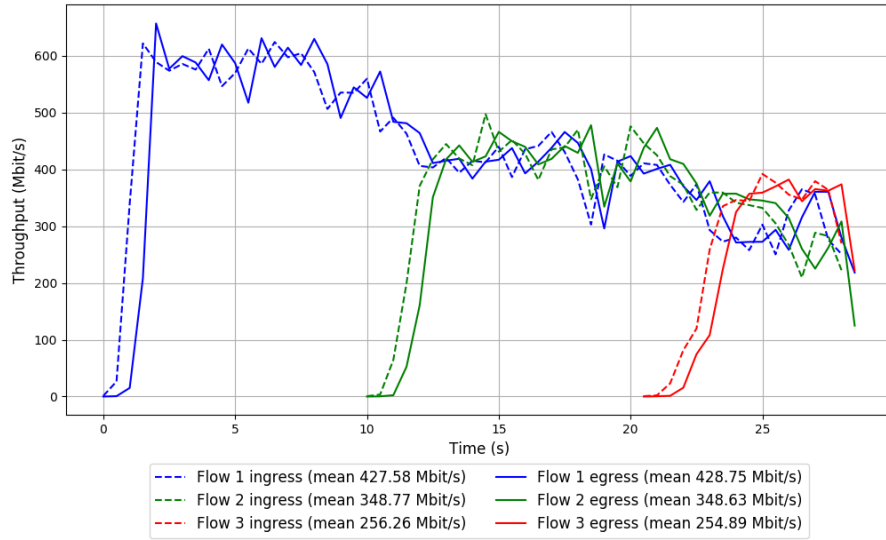
-- Flow 2:

Average throughput: 348.63 Mbit/s
95th percentile per-packet one-way delay: 104.664 ms
Loss rate: 1.02%

-- Flow 3:

Average throughput: 254.89 Mbit/s
95th percentile per-packet one-way delay: 91.714 ms
Loss rate: 2.75%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-05-29 22:57:27

End at: 2019-05-29 22:57:57

Local clock offset: 0.127 ms

Remote clock offset: 0.026 ms

Below is generated by plot.py at 2019-05-30 03:02:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 695.39 Mbit/s

95th percentile per-packet one-way delay: 131.898 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 408.48 Mbit/s

95th percentile per-packet one-way delay: 149.447 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 347.52 Mbit/s

95th percentile per-packet one-way delay: 105.171 ms

Loss rate: 1.93%

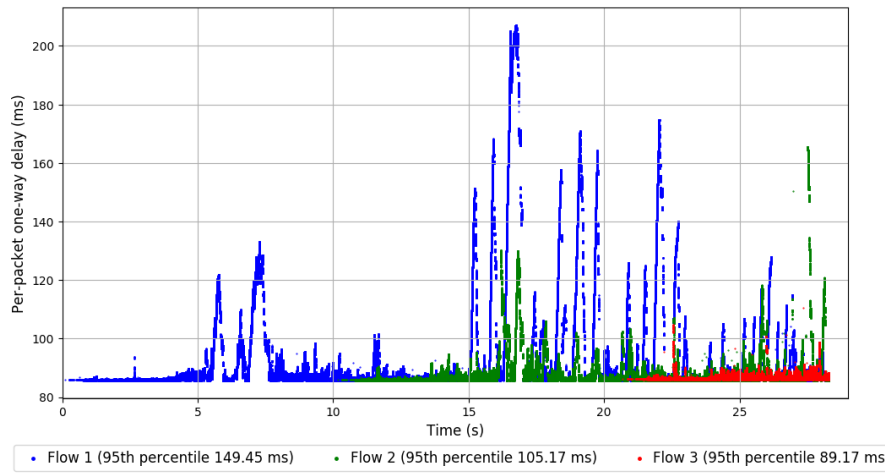
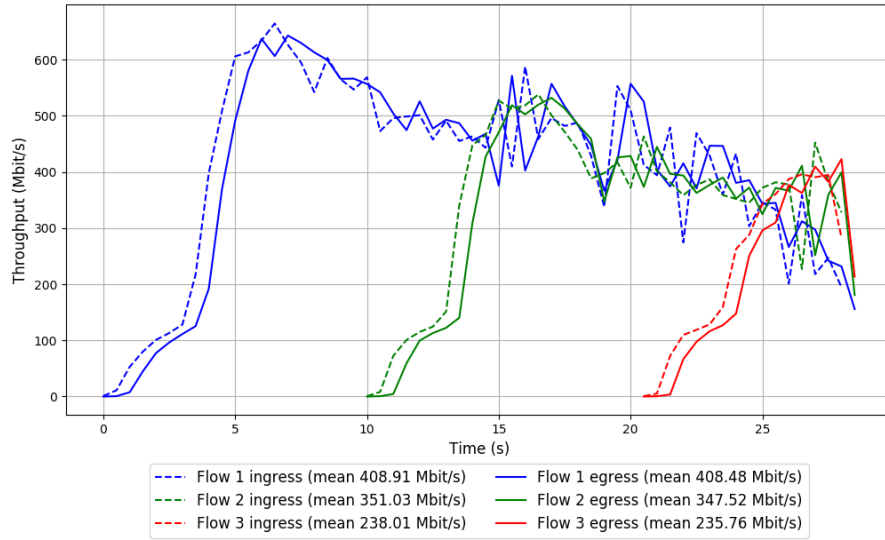
-- Flow 3:

Average throughput: 235.76 Mbit/s

95th percentile per-packet one-way delay: 89.172 ms

Loss rate: 3.15%

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

Start at: 2019-05-29 23:33:21

End at: 2019-05-29 23:33:51

Local clock offset: -0.02 ms

Remote clock offset: 0.044 ms

Below is generated by plot.py at 2019-05-30 03:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 714.70 Mbit/s

95th percentile per-packet one-way delay: 135.028 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 441.89 Mbit/s

95th percentile per-packet one-way delay: 114.712 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 380.68 Mbit/s

95th percentile per-packet one-way delay: 152.109 ms

Loss rate: 1.10%

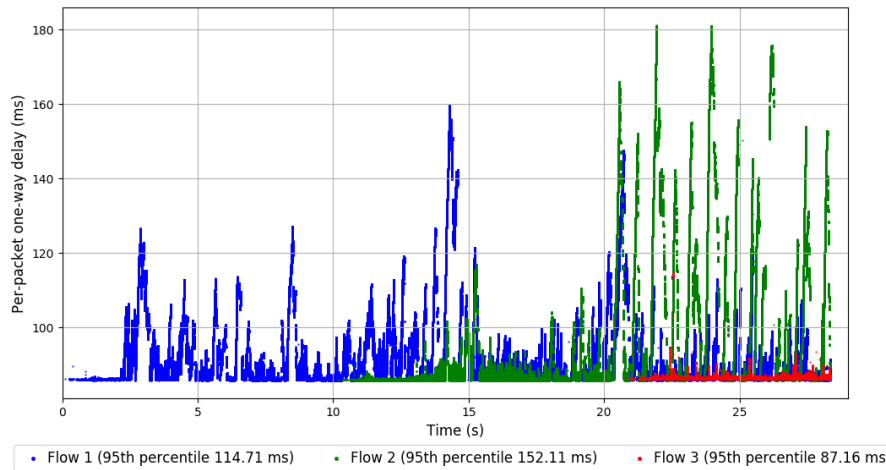
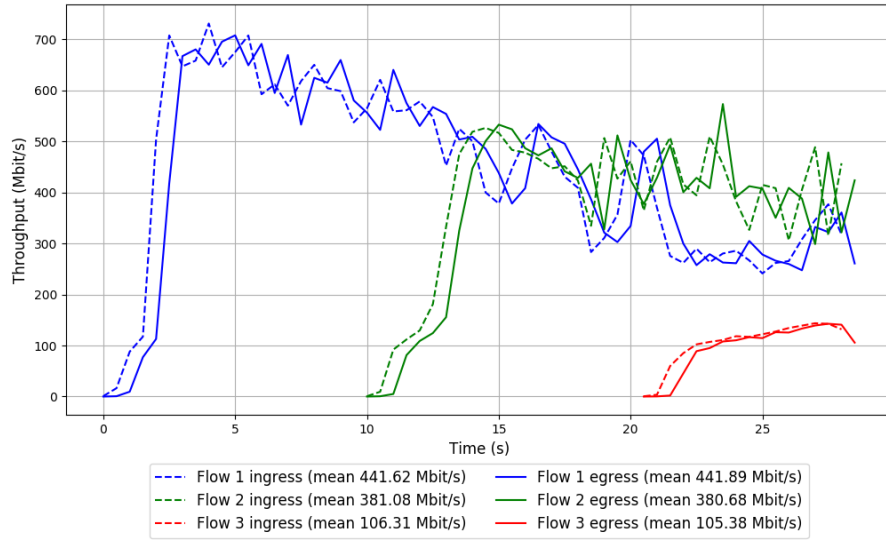
-- Flow 3:

Average throughput: 105.38 Mbit/s

95th percentile per-packet one-way delay: 87.158 ms

Loss rate: 3.12%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-05-30 00:09:51
End at: 2019-05-30 00:10:21
Local clock offset: -0.374 ms
Remote clock offset: -0.036 ms

Below is generated by plot.py at 2019-05-30 03:08:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 686.08 Mbit/s
95th percentile per-packet one-way delay: 109.812 ms
Loss rate: 0.76%

-- Flow 1:

Average throughput: 420.92 Mbit/s
95th percentile per-packet one-way delay: 104.903 ms
Loss rate: 0.32%

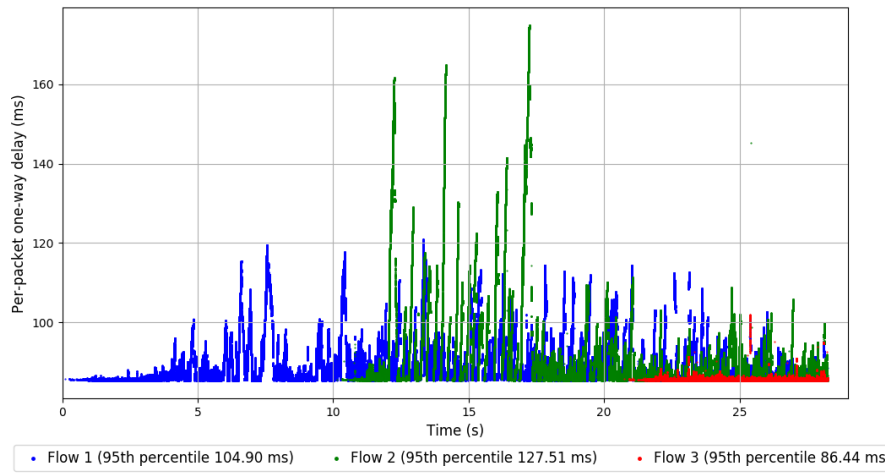
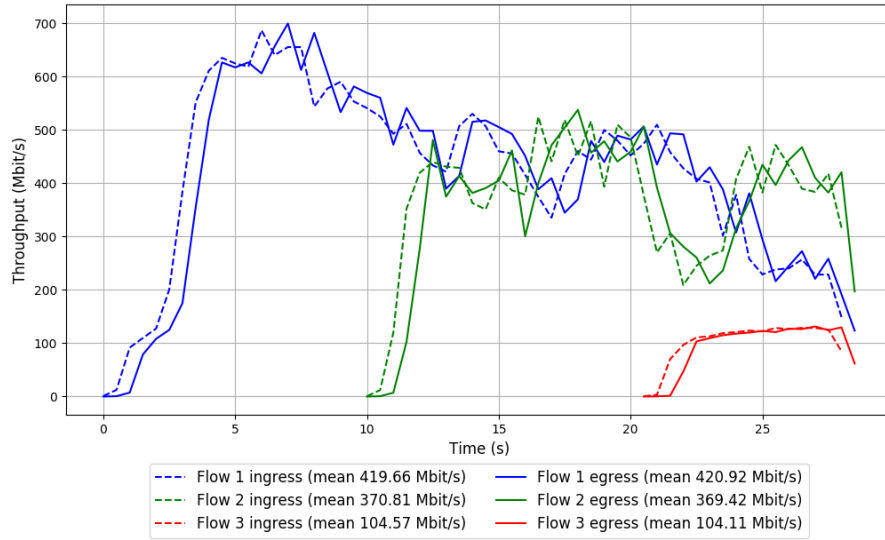
-- Flow 2:

Average throughput: 369.42 Mbit/s
95th percentile per-packet one-way delay: 127.512 ms
Loss rate: 1.31%

-- Flow 3:

Average throughput: 104.11 Mbit/s
95th percentile per-packet one-way delay: 86.441 ms
Loss rate: 2.74%

Run 3: Report of Indigo-MusesC5 — Data Link

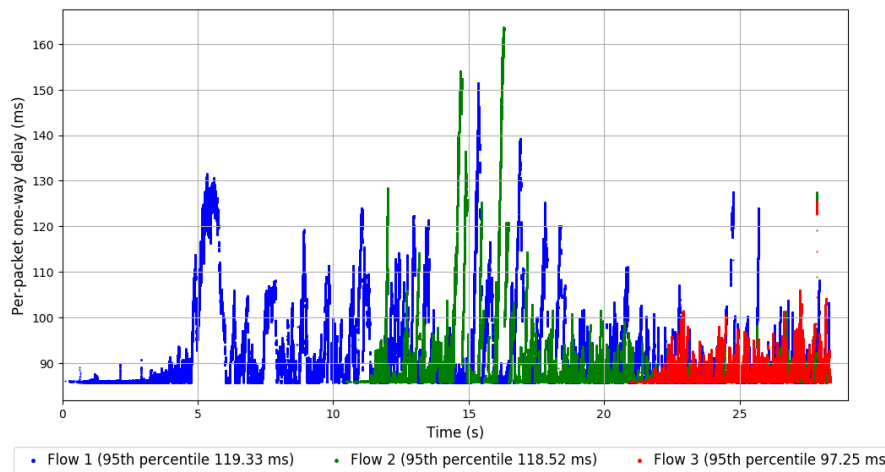
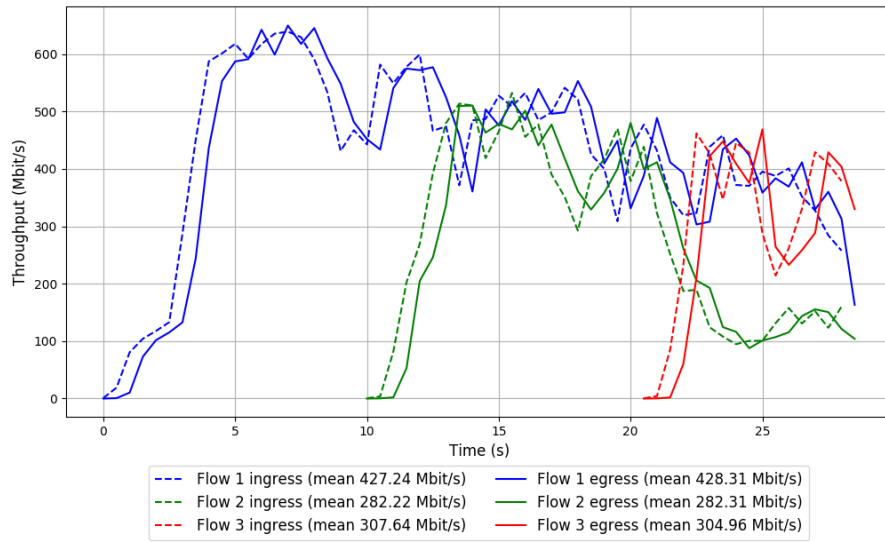


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-05-30 00:46:23
End at: 2019-05-30 00:46:53
Local clock offset: -0.101 ms
Remote clock offset: -0.113 ms

```
# Below is generated by plot.py at 2019-05-30 03:09:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 689.22 Mbit/s
95th percentile per-packet one-way delay: 117.634 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 428.31 Mbit/s
95th percentile per-packet one-way delay: 119.335 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 282.31 Mbit/s
95th percentile per-packet one-way delay: 118.517 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 304.96 Mbit/s
95th percentile per-packet one-way delay: 97.250 ms
Loss rate: 2.92%
```

Run 4: Report of Indigo-MusesC5 — Data Link

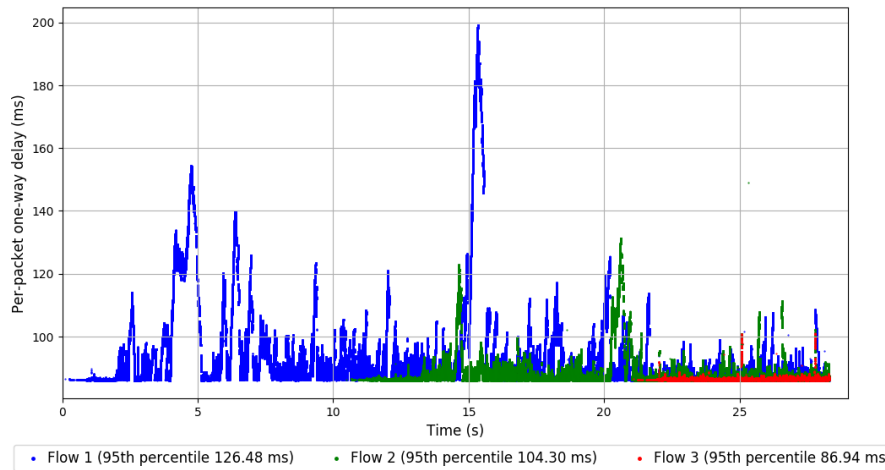
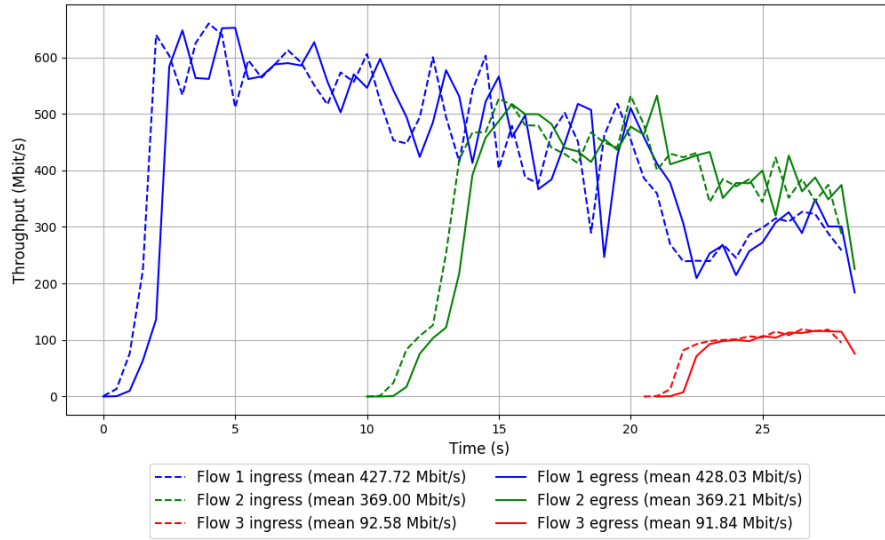


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-05-30 01:23:35
End at: 2019-05-30 01:24:05
Local clock offset: 0.359 ms
Remote clock offset: -0.037 ms

```
# Below is generated by plot.py at 2019-05-30 03:12:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 684.71 Mbit/s
95th percentile per-packet one-way delay: 121.168 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 428.03 Mbit/s
95th percentile per-packet one-way delay: 126.480 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 369.21 Mbit/s
95th percentile per-packet one-way delay: 104.298 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 91.84 Mbit/s
95th percentile per-packet one-way delay: 86.942 ms
Loss rate: 3.09%
```

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-05-29 23:04:20

End at: 2019-05-29 23:04:50

Local clock offset: 0.276 ms

Remote clock offset: 0.004 ms

Below is generated by plot.py at 2019-05-30 03:12:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 684.14 Mbit/s

95th percentile per-packet one-way delay: 97.267 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 401.42 Mbit/s

95th percentile per-packet one-way delay: 98.546 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 343.38 Mbit/s

95th percentile per-packet one-way delay: 96.218 ms

Loss rate: 0.82%

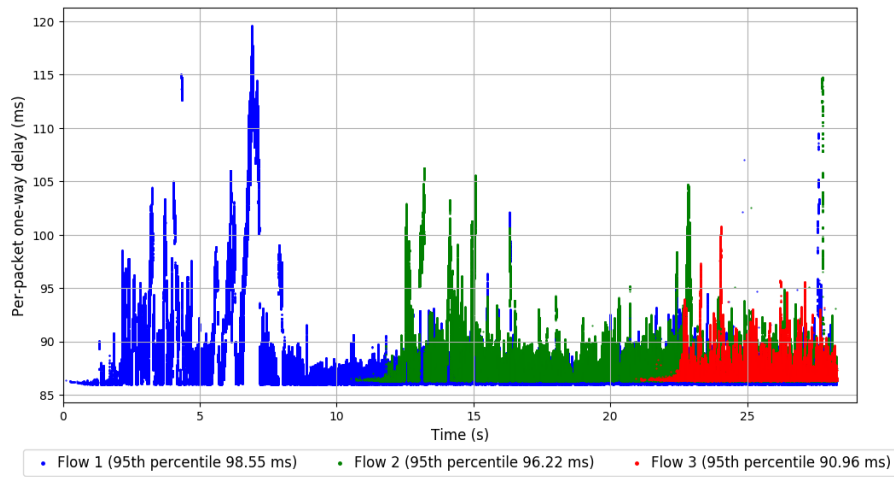
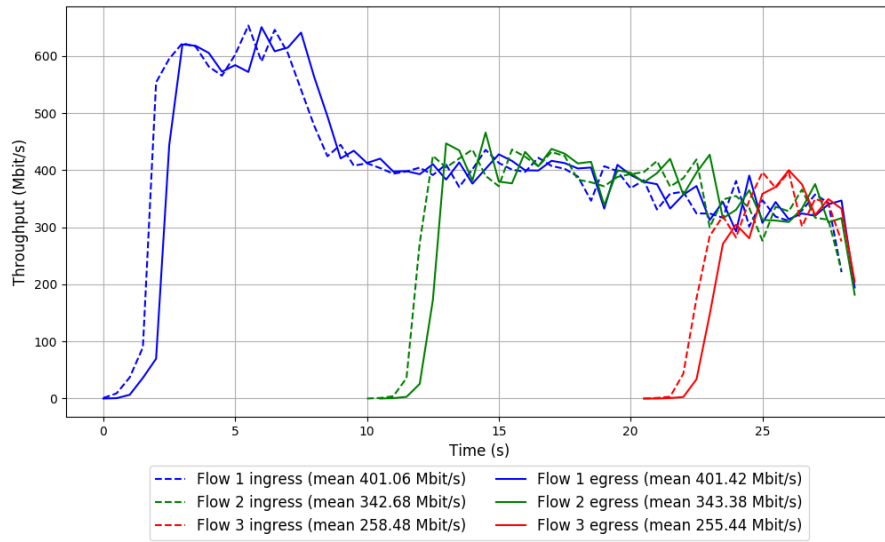
-- Flow 3:

Average throughput: 255.44 Mbit/s

95th percentile per-packet one-way delay: 90.957 ms

Loss rate: 3.43%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-05-29 23:40:17

End at: 2019-05-29 23:40:47

Local clock offset: -0.071 ms

Remote clock offset: 0.075 ms

Below is generated by plot.py at 2019-05-30 03:13:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 616.18 Mbit/s

95th percentile per-packet one-way delay: 119.764 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 377.22 Mbit/s

95th percentile per-packet one-way delay: 127.008 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 265.49 Mbit/s

95th percentile per-packet one-way delay: 93.674 ms

Loss rate: 0.35%

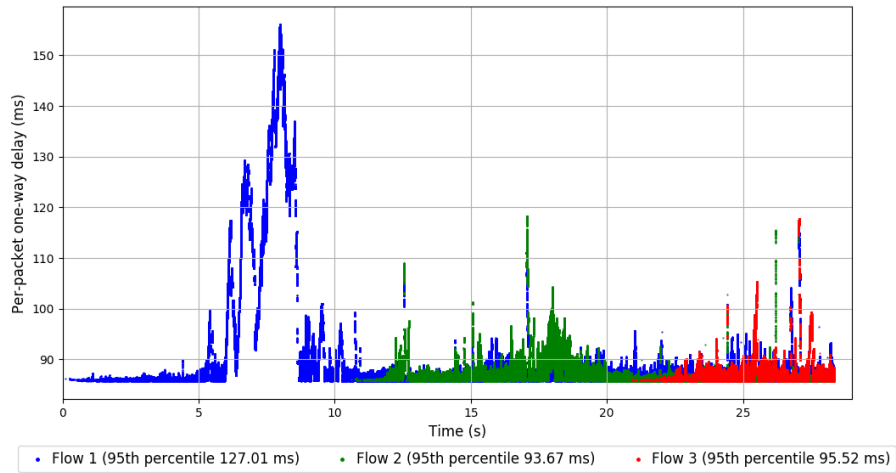
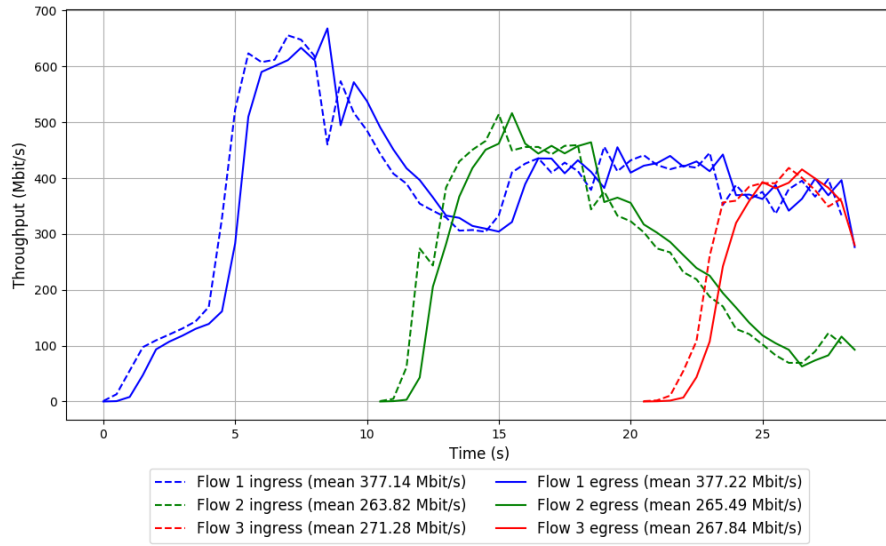
-- Flow 3:

Average throughput: 267.84 Mbit/s

95th percentile per-packet one-way delay: 95.516 ms

Loss rate: 3.45%

Run 2: Report of Indigo-MusesD — Data Link

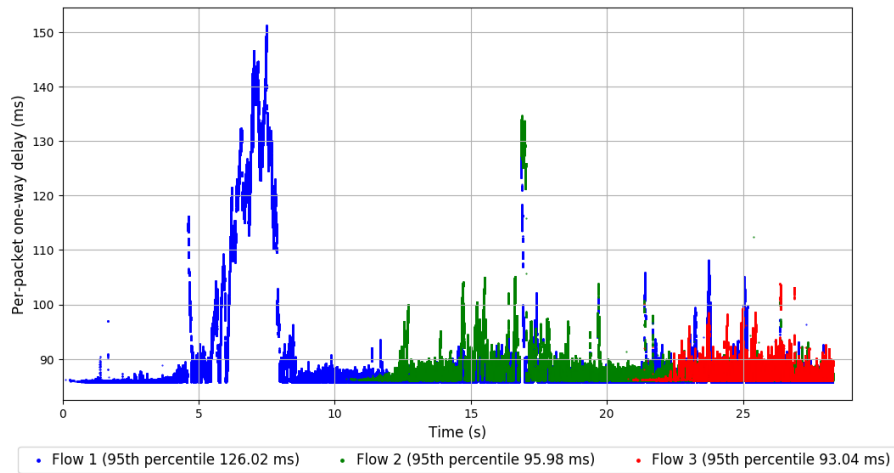
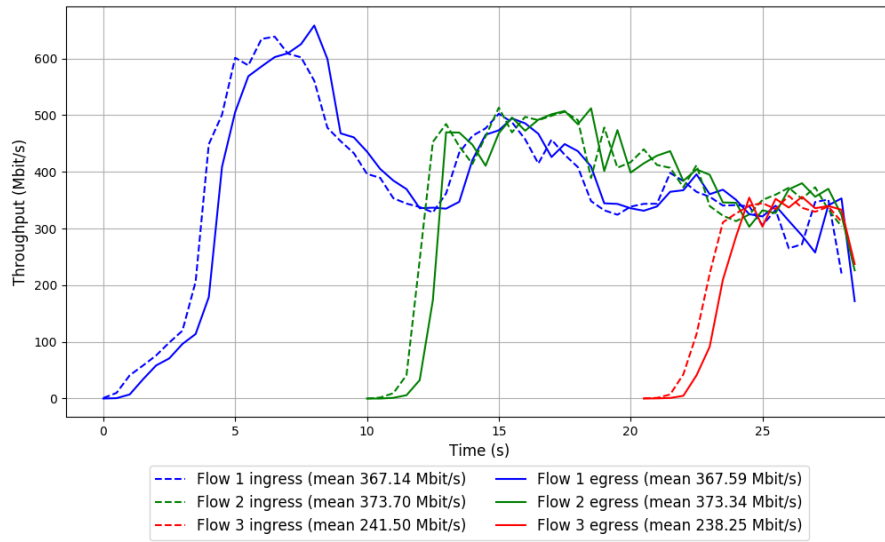


Run 3: Statistics of Indigo-MusesD

Start at: 2019-05-30 00:16:47
End at: 2019-05-30 00:17:17
Local clock offset: -0.042 ms
Remote clock offset: -0.026 ms

```
# Below is generated by plot.py at 2019-05-30 03:14:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 667.68 Mbit/s
95th percentile per-packet one-way delay: 118.364 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 367.59 Mbit/s
95th percentile per-packet one-way delay: 126.021 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 373.34 Mbit/s
95th percentile per-packet one-way delay: 95.980 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 238.25 Mbit/s
95th percentile per-packet one-way delay: 93.036 ms
Loss rate: 3.59%
```

Run 3: Report of Indigo-MusesD — Data Link

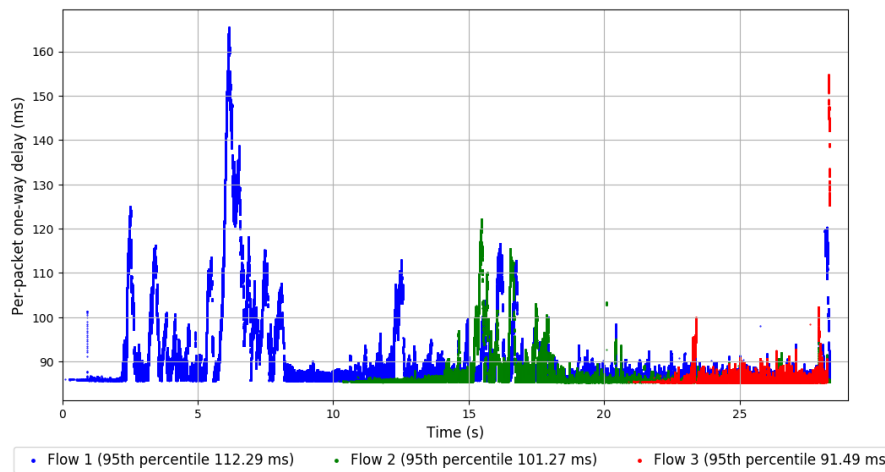
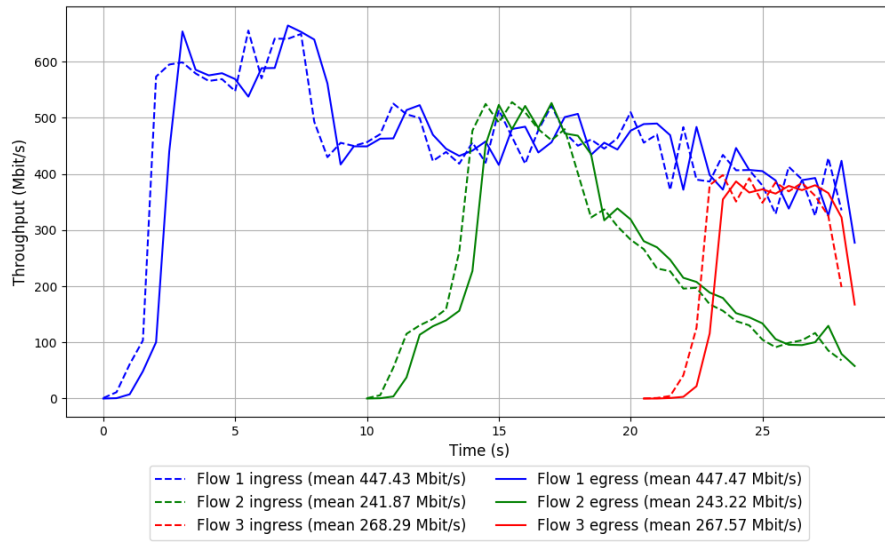


Run 4: Statistics of Indigo-MusesD

Start at: 2019-05-30 00:53:23
End at: 2019-05-30 00:53:53
Local clock offset: -0.496 ms
Remote clock offset: -0.143 ms

```
# Below is generated by plot.py at 2019-05-30 03:15:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 674.00 Mbit/s
95th percentile per-packet one-way delay: 110.110 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 447.47 Mbit/s
95th percentile per-packet one-way delay: 112.292 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 243.22 Mbit/s
95th percentile per-packet one-way delay: 101.270 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 267.57 Mbit/s
95th percentile per-packet one-way delay: 91.489 ms
Loss rate: 2.27%
```

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-05-30 01:30:30

End at: 2019-05-30 01:31:00

Local clock offset: 0.141 ms

Remote clock offset: -0.04 ms

Below is generated by plot.py at 2019-05-30 03:19:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 651.17 Mbit/s

95th percentile per-packet one-way delay: 94.979 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 420.16 Mbit/s

95th percentile per-packet one-way delay: 97.682 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 260.81 Mbit/s

95th percentile per-packet one-way delay: 89.578 ms

Loss rate: 1.33%

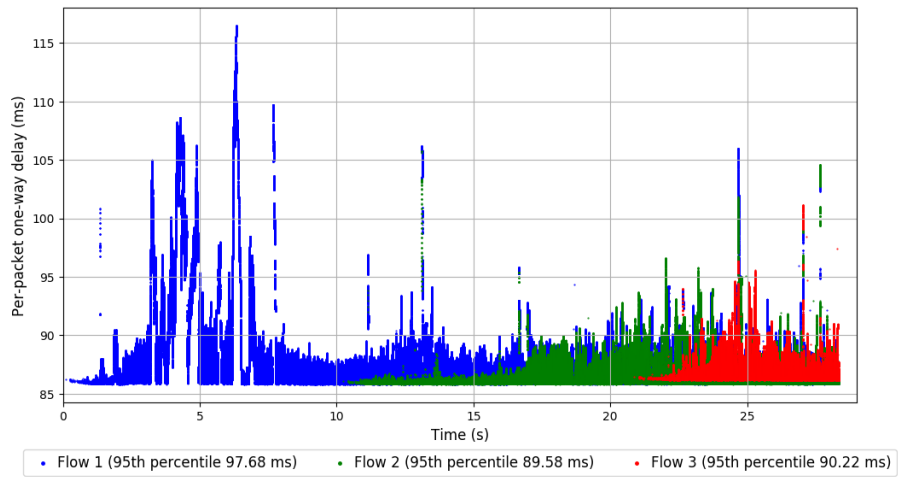
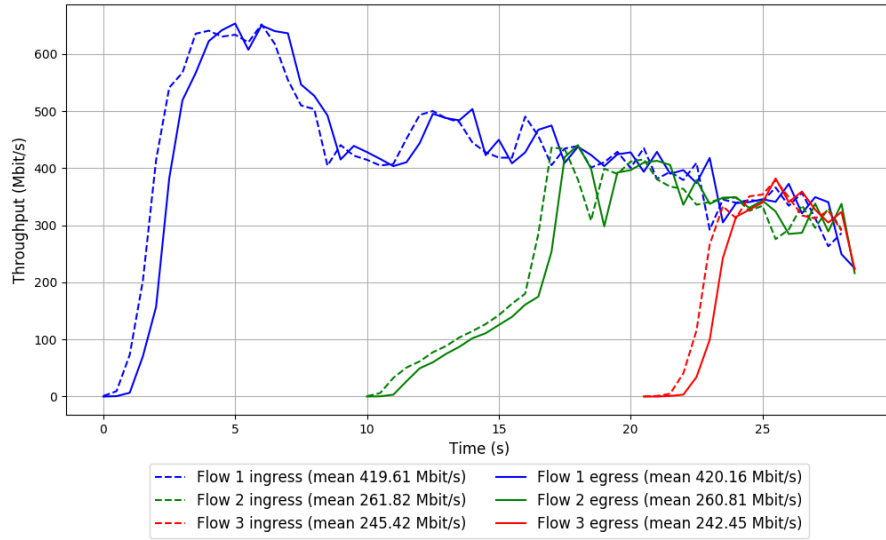
-- Flow 3:

Average throughput: 242.45 Mbit/s

95th percentile per-packet one-way delay: 90.216 ms

Loss rate: 3.45%

Run 5: Report of Indigo-MusesD — Data Link

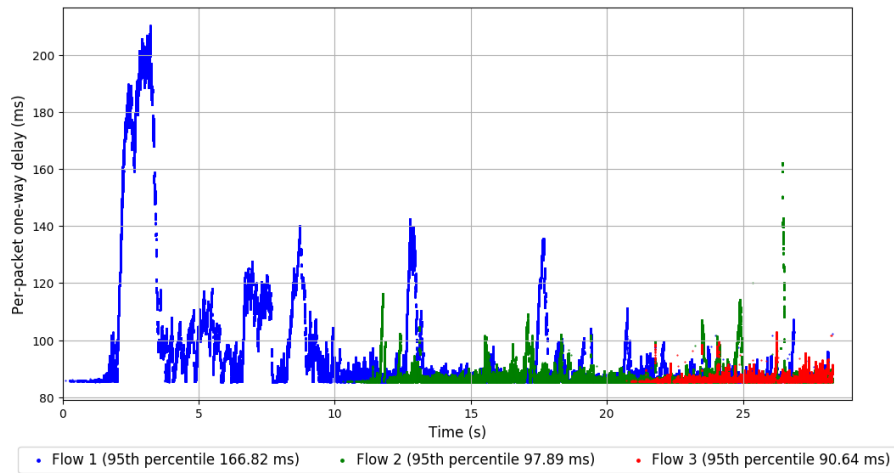
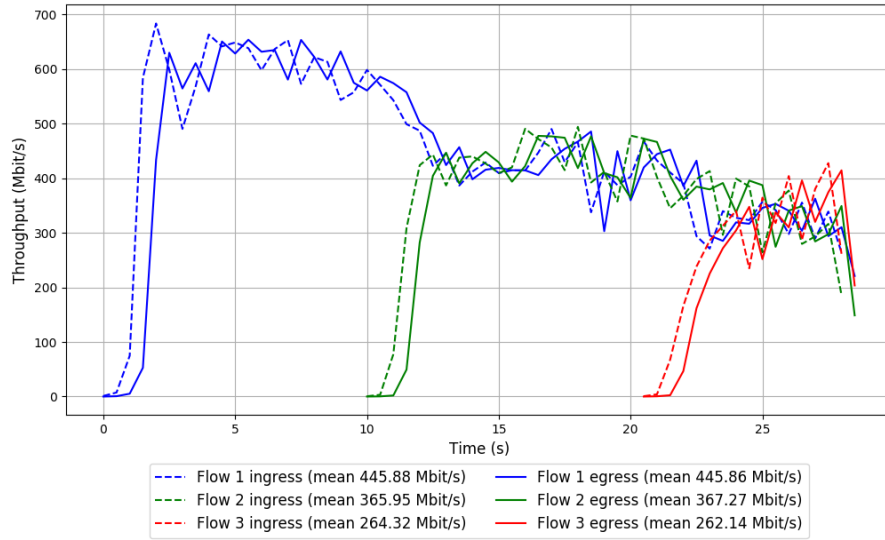


Run 1: Statistics of Indigo-MuseST

Start at: 2019-05-29 23:06:10
End at: 2019-05-29 23:06:40
Local clock offset: -0.36 ms
Remote clock offset: -0.006 ms

Below is generated by plot.py at 2019-05-30 03:22:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 750.53 Mbit/s
95th percentile per-packet one-way delay: 125.487 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 445.86 Mbit/s
95th percentile per-packet one-way delay: 166.819 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 367.27 Mbit/s
95th percentile per-packet one-way delay: 97.890 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 262.14 Mbit/s
95th percentile per-packet one-way delay: 90.644 ms
Loss rate: 3.06%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MuseST

Start at: 2019-05-29 23:42:05

End at: 2019-05-29 23:42:35

Local clock offset: 0.162 ms

Remote clock offset: 0.059 ms

Below is generated by plot.py at 2019-05-30 03:23:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 773.07 Mbit/s

95th percentile per-packet one-way delay: 123.177 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 484.67 Mbit/s

95th percentile per-packet one-way delay: 128.594 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 407.78 Mbit/s

95th percentile per-packet one-way delay: 110.107 ms

Loss rate: 0.73%

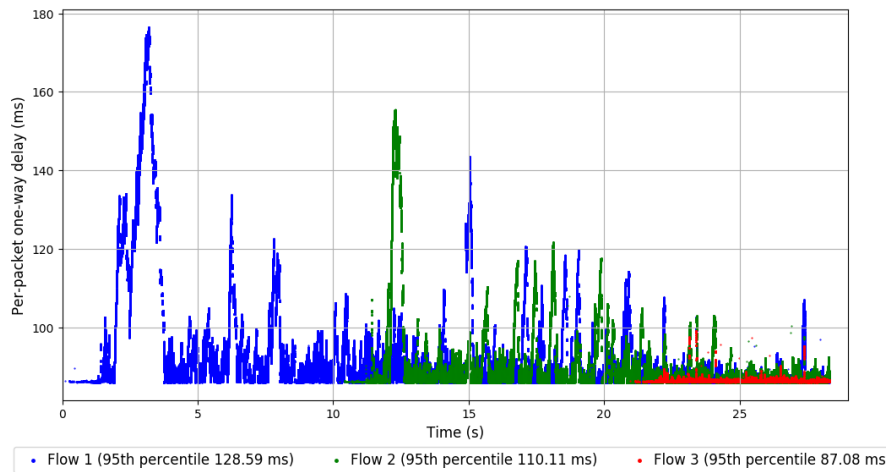
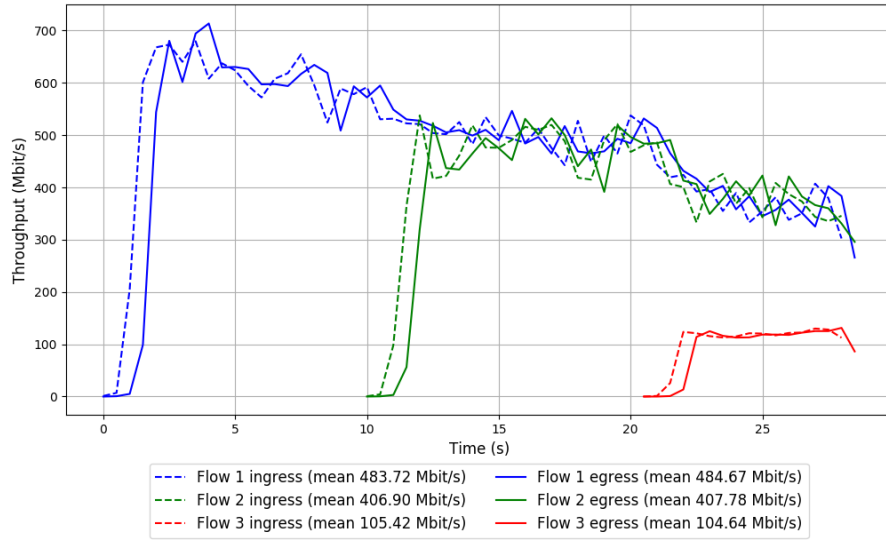
-- Flow 3:

Average throughput: 104.64 Mbit/s

95th percentile per-packet one-way delay: 87.083 ms

Loss rate: 3.01%

Run 2: Report of Indigo-MusesT — Data Link

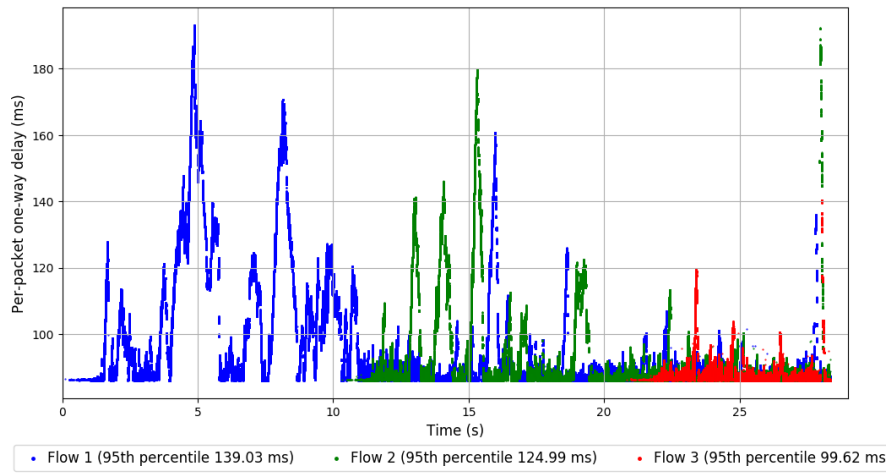
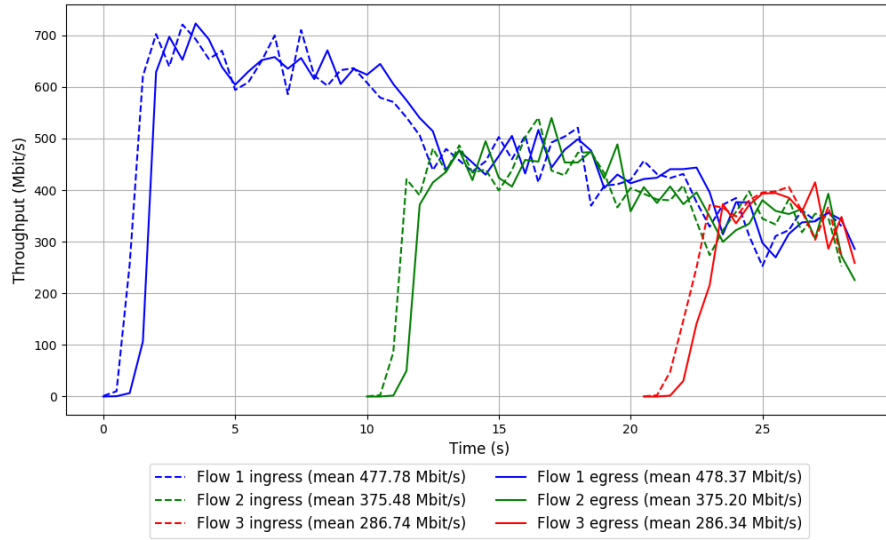


Run 3: Statistics of Indigo-MuseST

Start at: 2019-05-30 00:18:37
End at: 2019-05-30 00:19:07
Local clock offset: -0.042 ms
Remote clock offset: -0.007 ms

```
# Below is generated by plot.py at 2019-05-30 03:26:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 793.66 Mbit/s
95th percentile per-packet one-way delay: 133.127 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 478.37 Mbit/s
95th percentile per-packet one-way delay: 139.034 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 375.20 Mbit/s
95th percentile per-packet one-way delay: 124.990 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 286.34 Mbit/s
95th percentile per-packet one-way delay: 99.624 ms
Loss rate: 2.35%
```

Run 3: Report of Indigo-MusesT — Data Link

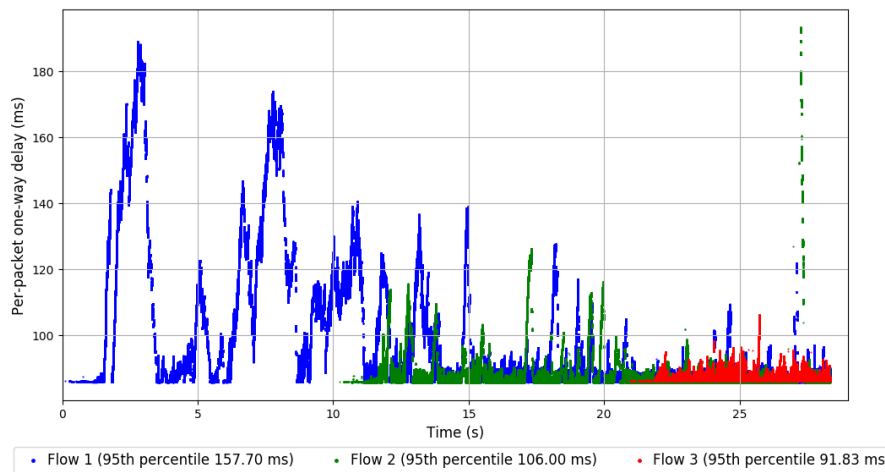
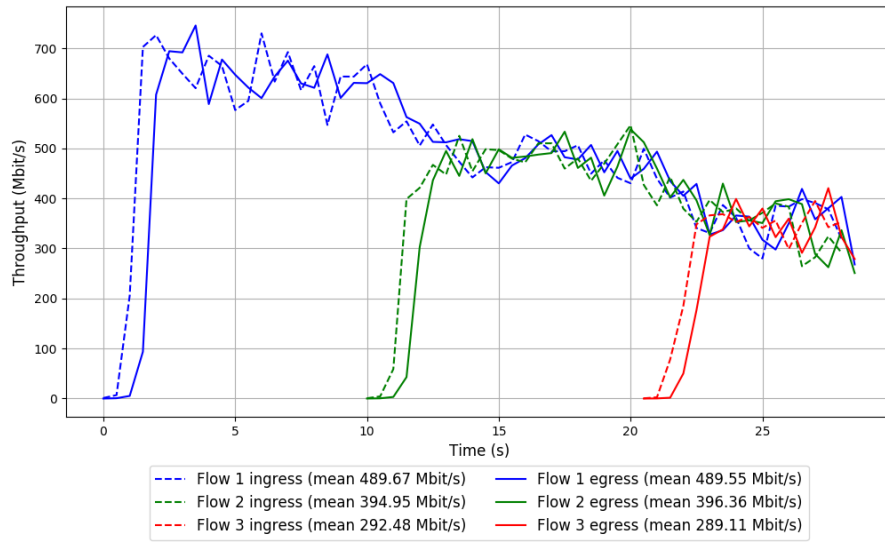


Run 4: Statistics of Indigo-MuseST

Start at: 2019-05-30 00:55:13
End at: 2019-05-30 00:55:43
Local clock offset: -0.189 ms
Remote clock offset: -0.119 ms

```
# Below is generated by plot.py at 2019-05-30 03:27:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 820.57 Mbit/s
95th percentile per-packet one-way delay: 142.989 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 489.55 Mbit/s
95th percentile per-packet one-way delay: 157.702 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 396.36 Mbit/s
95th percentile per-packet one-way delay: 106.001 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 289.11 Mbit/s
95th percentile per-packet one-way delay: 91.832 ms
Loss rate: 3.37%
```

Run 4: Report of Indigo-MusesT — Data Link

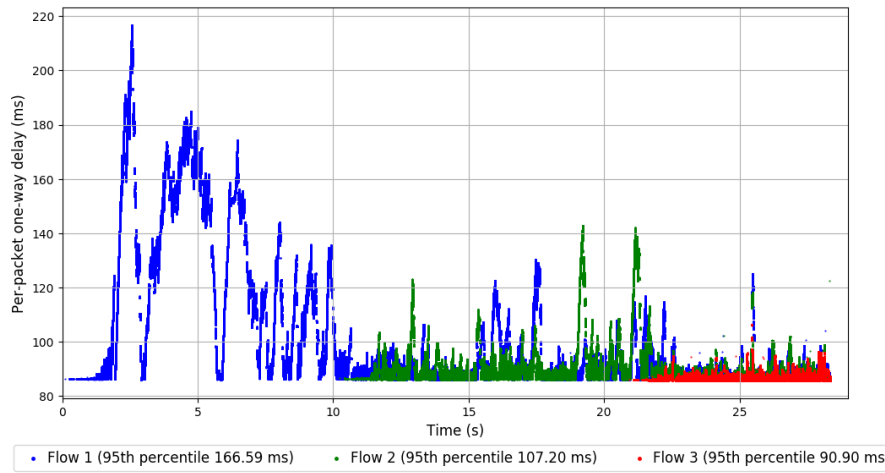
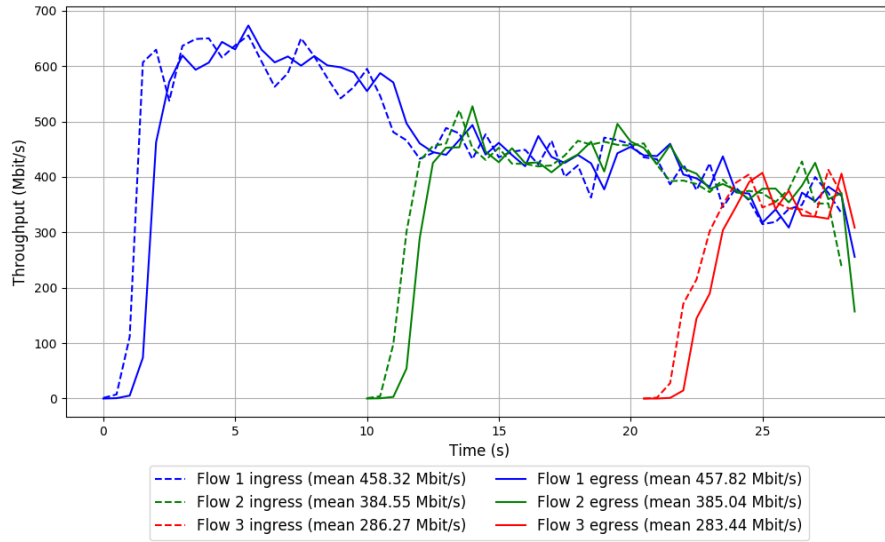


Run 5: Statistics of Indigo-MuseST

Start at: 2019-05-30 01:32:20
End at: 2019-05-30 01:32:50
Local clock offset: 0.098 ms
Remote clock offset: -0.043 ms

```
# Below is generated by plot.py at 2019-05-30 03:27:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 779.10 Mbit/s
95th percentile per-packet one-way delay: 156.781 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 457.82 Mbit/s
95th percentile per-packet one-way delay: 166.586 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 385.04 Mbit/s
95th percentile per-packet one-way delay: 107.199 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 283.44 Mbit/s
95th percentile per-packet one-way delay: 90.900 ms
Loss rate: 3.29%
```

Run 5: Report of Indigo-MusesT — Data Link



Run 1: Statistics of LEDBAT

Start at: 2019-05-29 22:54:19

End at: 2019-05-29 22:54:49

Local clock offset: -0.16 ms

Remote clock offset: 0.053 ms

Below is generated by plot.py at 2019-05-30 03:27:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.35 Mbit/s

95th percentile per-packet one-way delay: 86.525 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 12.54 Mbit/s

95th percentile per-packet one-way delay: 86.605 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 8.29 Mbit/s

95th percentile per-packet one-way delay: 86.469 ms

Loss rate: 1.74%

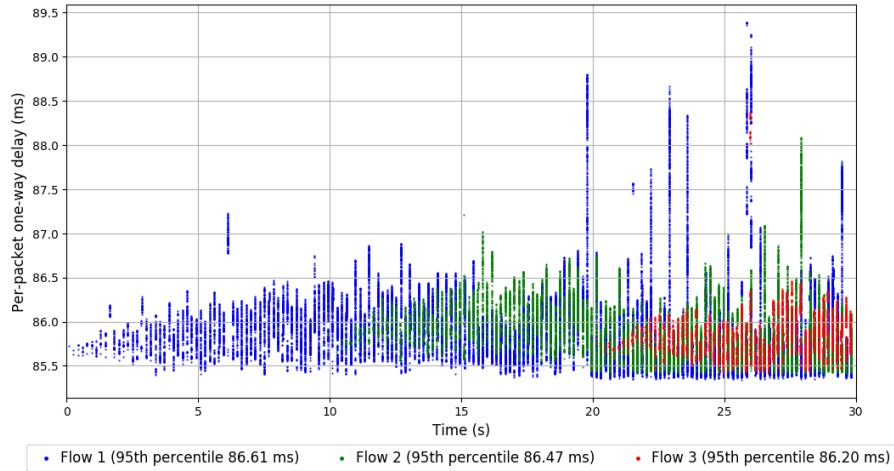
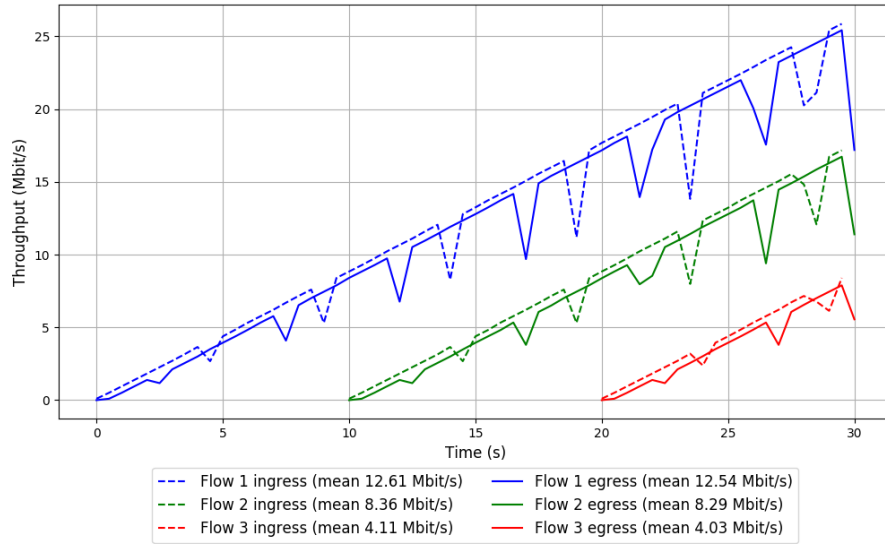
-- Flow 3:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 86.198 ms

Loss rate: 3.52%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-05-29 23:30:19

End at: 2019-05-29 23:30:49

Local clock offset: -0.194 ms

Remote clock offset: 0.099 ms

Below is generated by plot.py at 2019-05-30 03:27:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.18 Mbit/s

95th percentile per-packet one-way delay: 87.105 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 12.39 Mbit/s

95th percentile per-packet one-way delay: 87.270 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 8.29 Mbit/s

95th percentile per-packet one-way delay: 86.688 ms

Loss rate: 1.73%

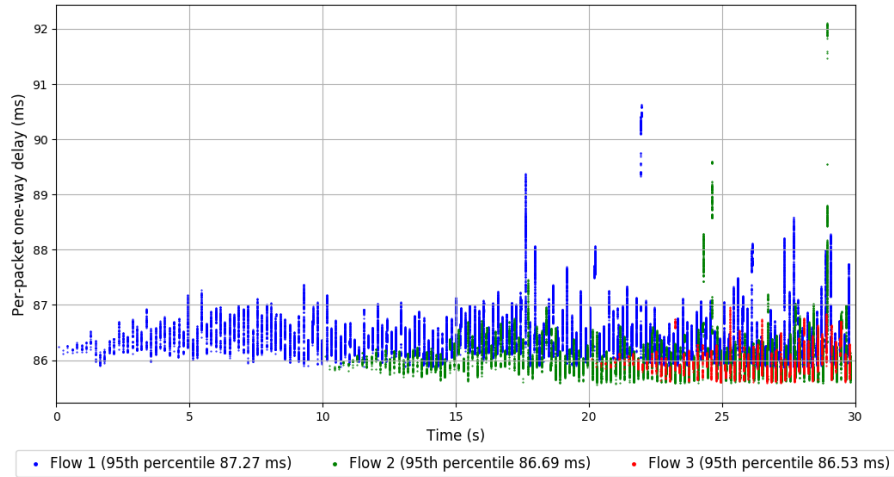
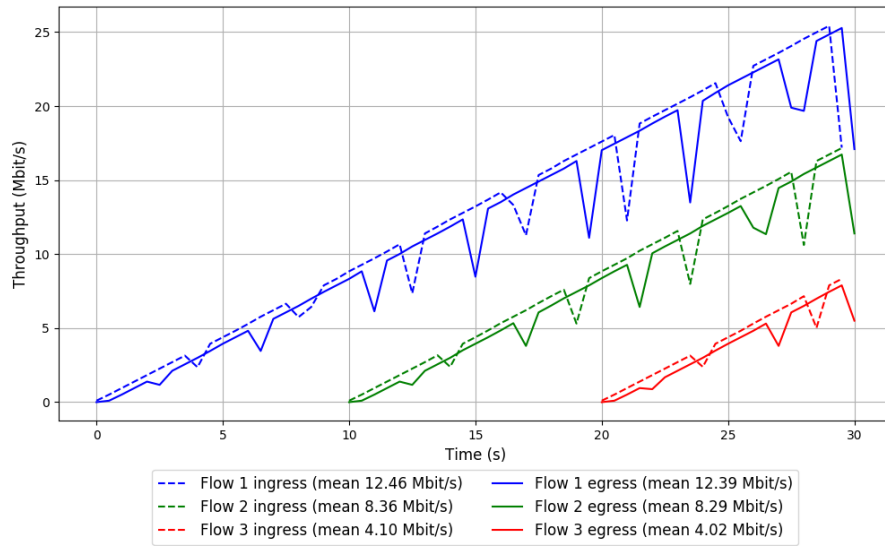
-- Flow 3:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 86.527 ms

Loss rate: 3.50%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-05-30 00:06:41
End at: 2019-05-30 00:07:11
Local clock offset: -0.287 ms
Remote clock offset: -0.032 ms

Below is generated by plot.py at 2019-05-30 03:27:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.27 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 1.49%

-- Flow 1:

Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 1.15%

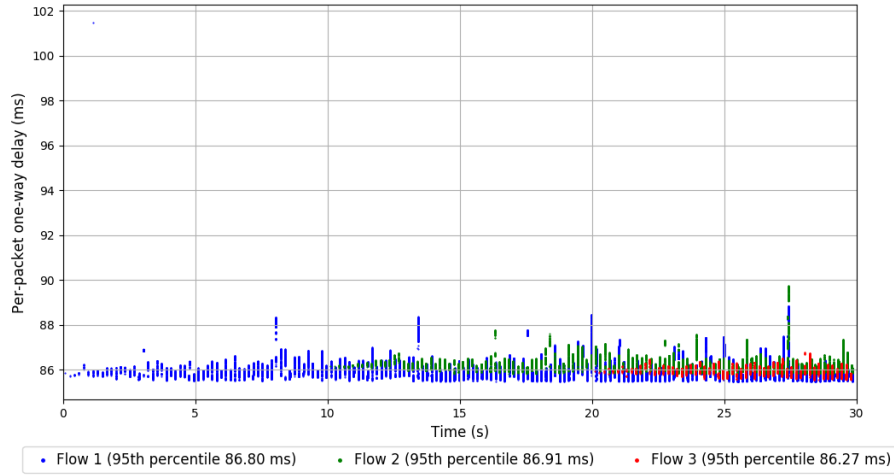
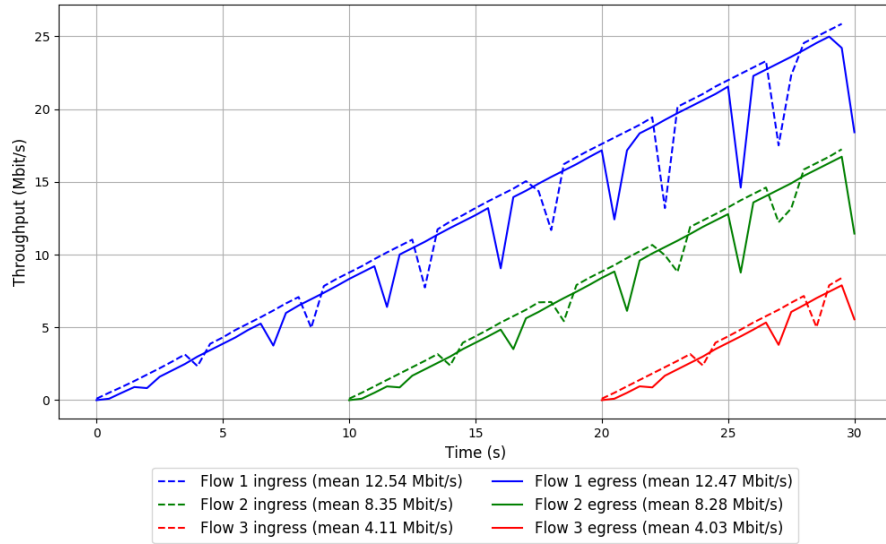
-- Flow 2:

Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 86.908 ms
Loss rate: 1.74%

-- Flow 3:

Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 86.270 ms
Loss rate: 3.52%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-05-30 00:43:13
End at: 2019-05-30 00:43:43
Local clock offset: 0.114 ms
Remote clock offset: -0.102 ms

Below is generated by plot.py at 2019-05-30 03:27:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.34 Mbit/s
95th percentile per-packet one-way delay: 87.217 ms
Loss rate: 1.48%

-- Flow 1:

Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 87.247 ms
Loss rate: 1.15%

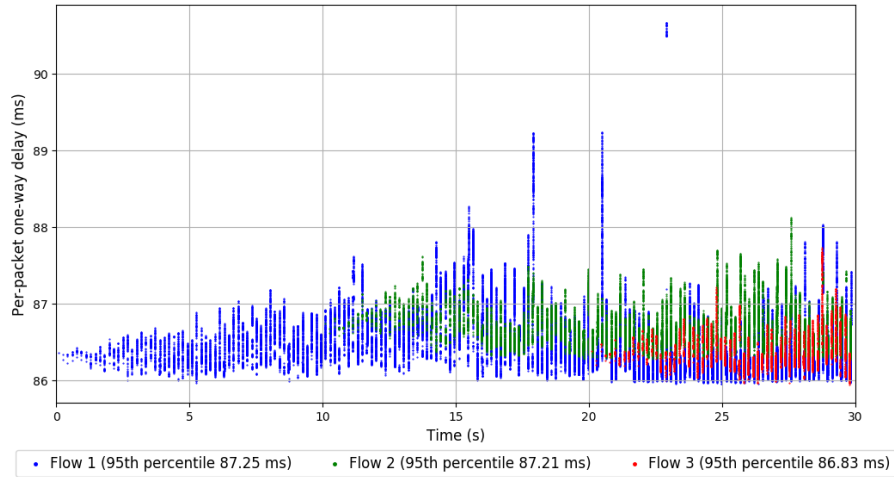
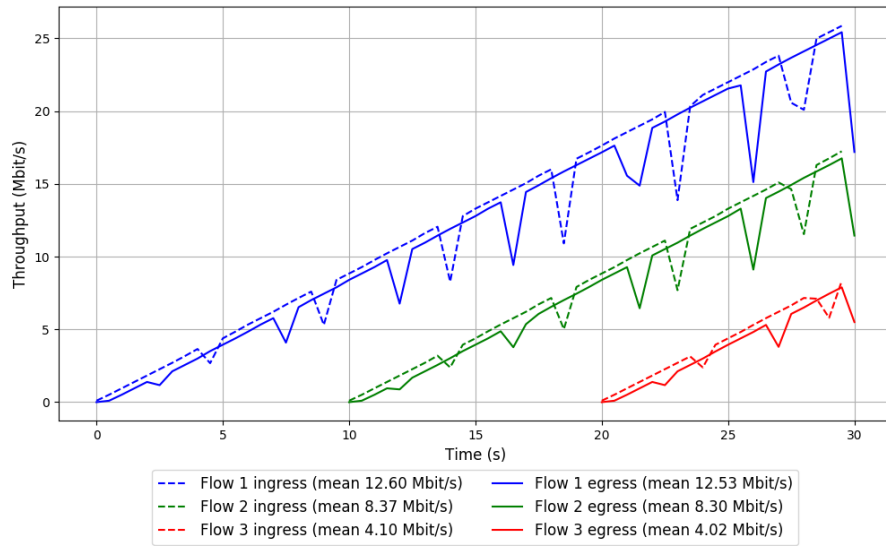
-- Flow 2:

Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 87.210 ms
Loss rate: 1.74%

-- Flow 3:

Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 86.825 ms
Loss rate: 3.50%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-05-30 01:20:29
End at: 2019-05-30 01:20:59
Local clock offset: 0.082 ms
Remote clock offset: -0.054 ms

Below is generated by plot.py at 2019-05-30 03:27:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.33 Mbit/s
95th percentile per-packet one-way delay: 87.289 ms
Loss rate: 1.48%

-- Flow 1:

Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 87.520 ms
Loss rate: 1.15%

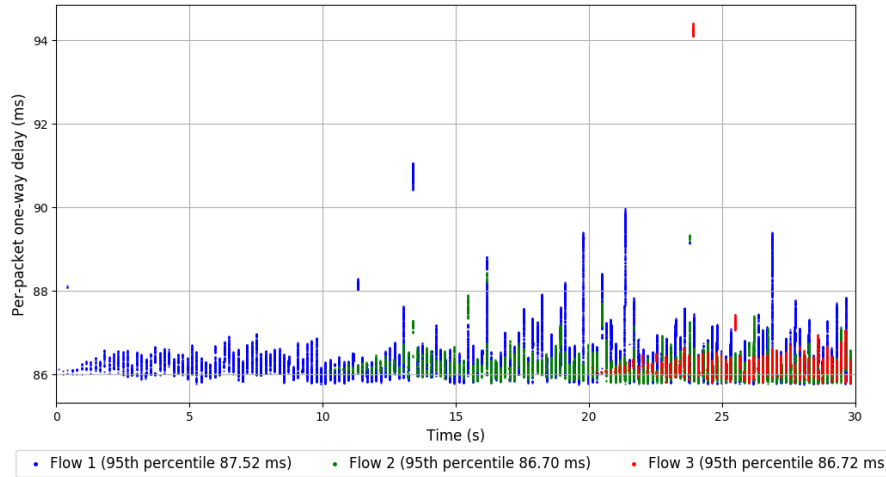
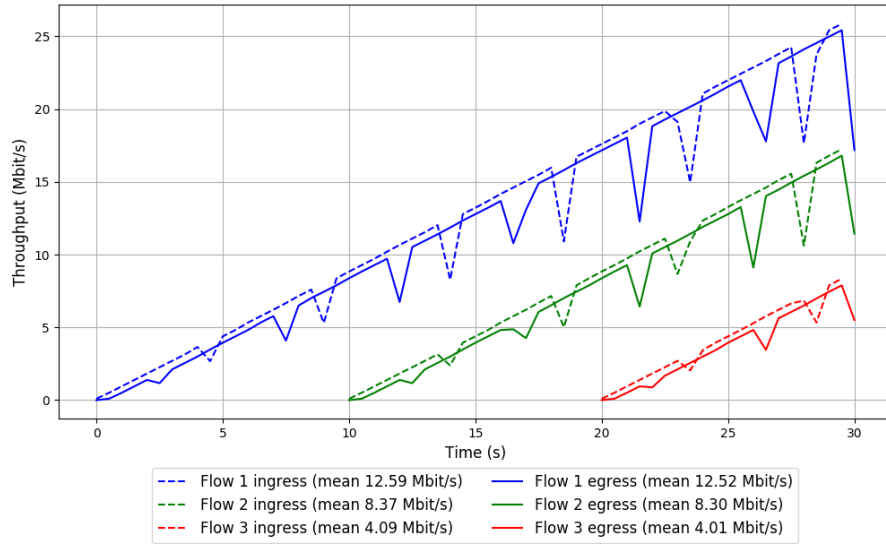
-- Flow 2:

Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 86.700 ms
Loss rate: 1.74%

-- Flow 3:

Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 86.718 ms
Loss rate: 3.53%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-05-29 22:50:42
End at: 2019-05-29 22:51:12
Local clock offset: 0.568 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-05-30 03:38:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 593.28 Mbit/s
95th percentile per-packet one-way delay: 210.502 ms
Loss rate: 2.05%

-- Flow 1:

Average throughput: 320.44 Mbit/s
95th percentile per-packet one-way delay: 235.823 ms
Loss rate: 1.82%

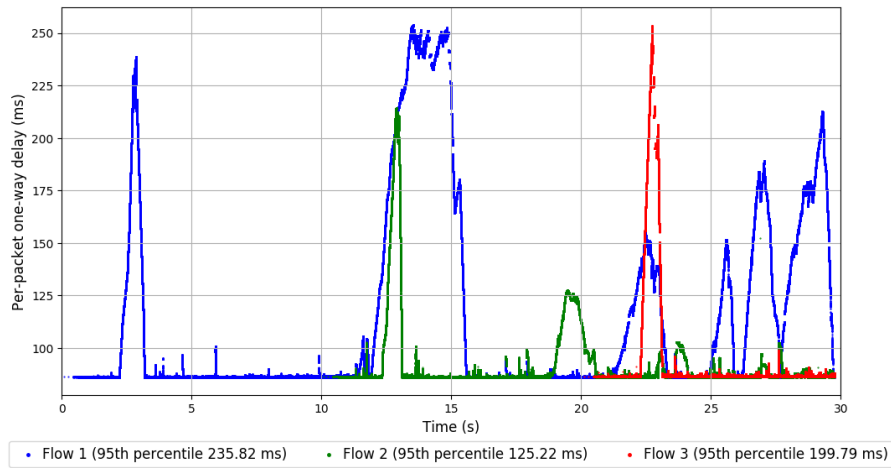
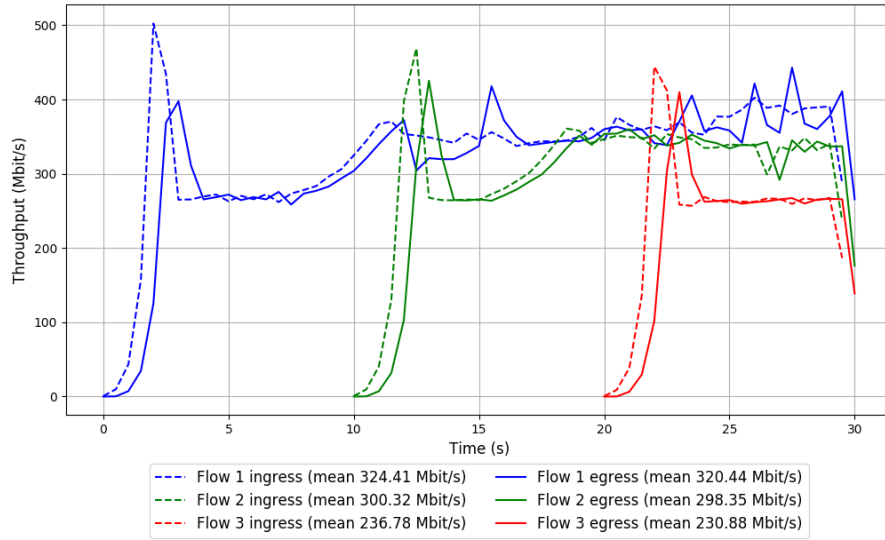
-- Flow 2:

Average throughput: 298.35 Mbit/s
95th percentile per-packet one-way delay: 125.217 ms
Loss rate: 1.56%

-- Flow 3:

Average throughput: 230.88 Mbit/s
95th percentile per-packet one-way delay: 199.790 ms
Loss rate: 4.28%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-05-29 23:26:52

End at: 2019-05-29 23:27:22

Local clock offset: 0.135 ms

Remote clock offset: 0.039 ms

Below is generated by plot.py at 2019-05-30 03:38:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 240.96 Mbit/s

95th percentile per-packet one-way delay: 201.699 ms

Loss rate: 4.69%

-- Flow 1:

Average throughput: 28.98 Mbit/s

95th percentile per-packet one-way delay: 86.256 ms

Loss rate: 5.46%

-- Flow 2:

Average throughput: 200.32 Mbit/s

95th percentile per-packet one-way delay: 206.378 ms

Loss rate: 5.71%

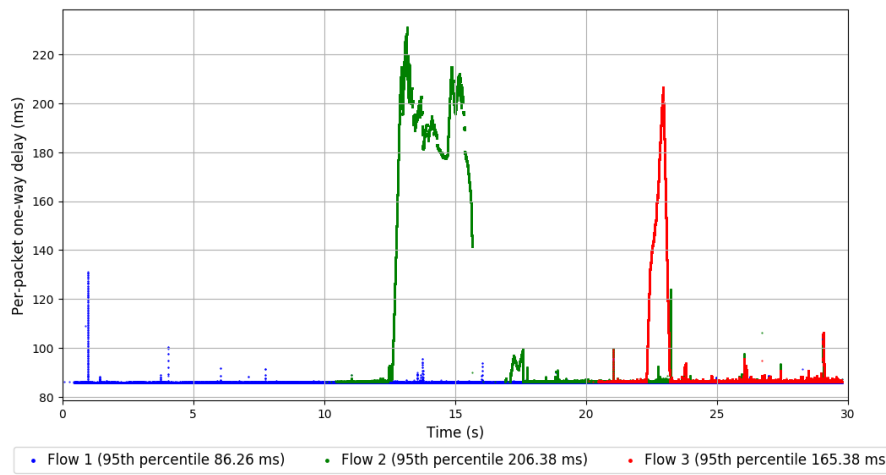
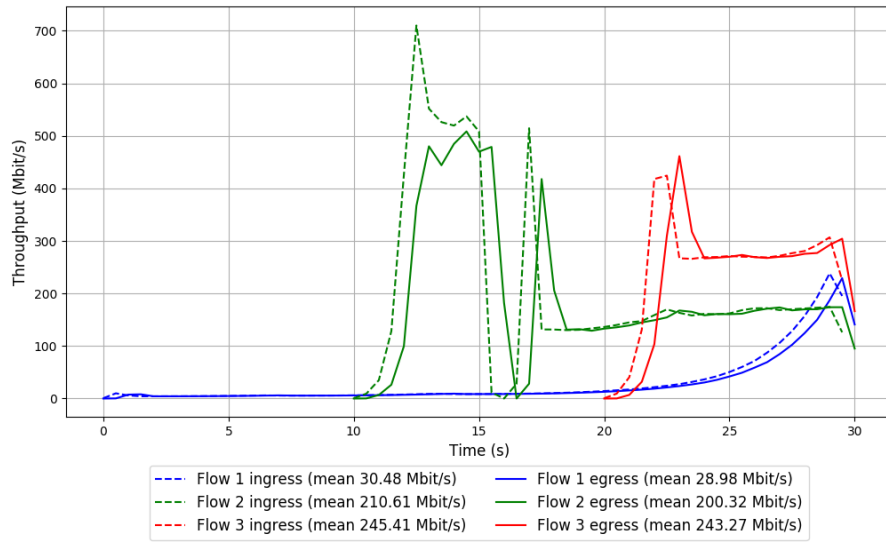
-- Flow 3:

Average throughput: 243.27 Mbit/s

95th percentile per-packet one-way delay: 165.384 ms

Loss rate: 2.62%

Run 2: Report of PCC-Allegro — Data Link

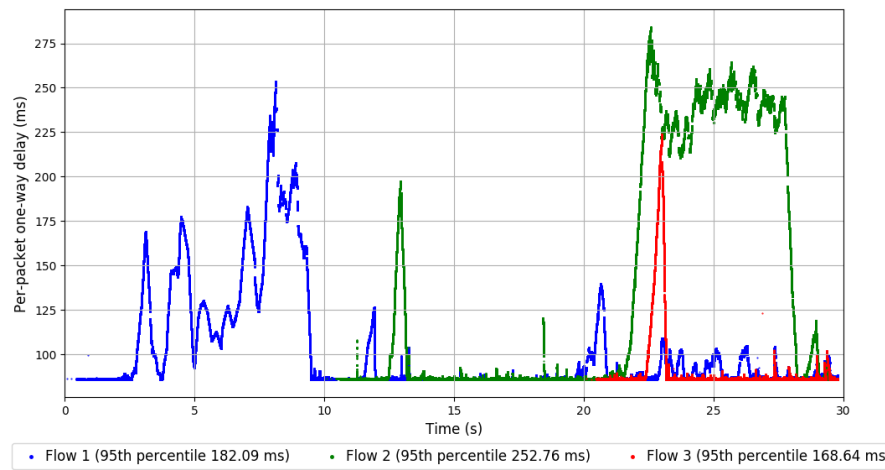
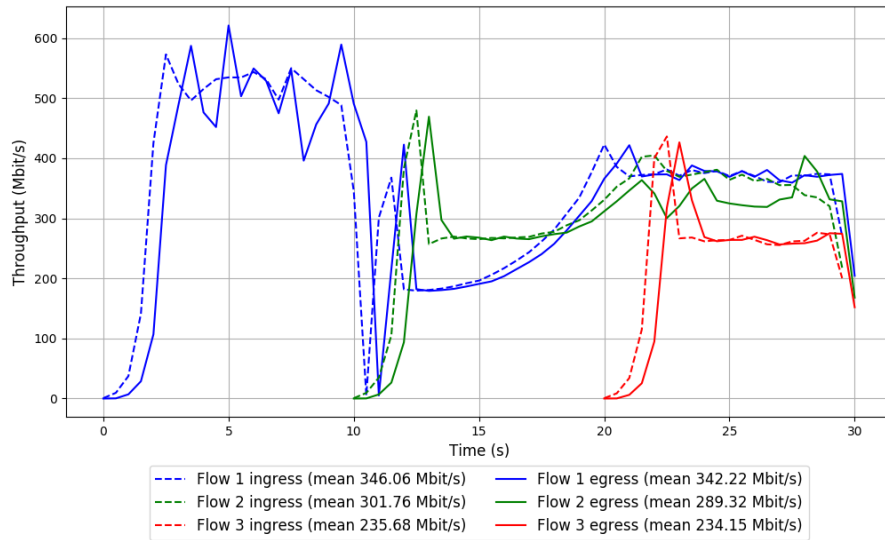


Run 3: Statistics of PCC-Allegro

Start at: 2019-05-30 00:02:56
End at: 2019-05-30 00:03:26
Local clock offset: -0.019 ms
Remote clock offset: -0.019 ms

```
# Below is generated by plot.py at 2019-05-30 03:42:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 610.28 Mbit/s
95th percentile per-packet one-way delay: 241.204 ms
Loss rate: 2.82%
-- Flow 1:
Average throughput: 342.22 Mbit/s
95th percentile per-packet one-way delay: 182.088 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 289.32 Mbit/s
95th percentile per-packet one-way delay: 252.764 ms
Loss rate: 4.95%
-- Flow 3:
Average throughput: 234.15 Mbit/s
95th percentile per-packet one-way delay: 168.643 ms
Loss rate: 2.37%
```

Run 3: Report of PCC-Allegro — Data Link

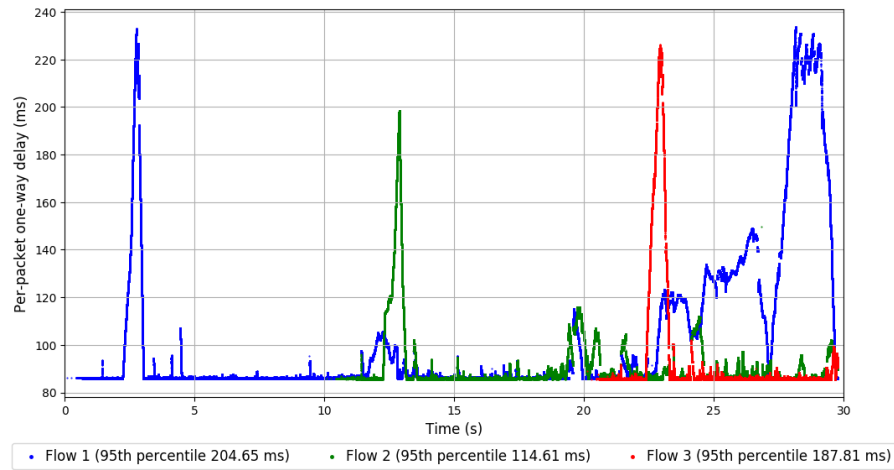
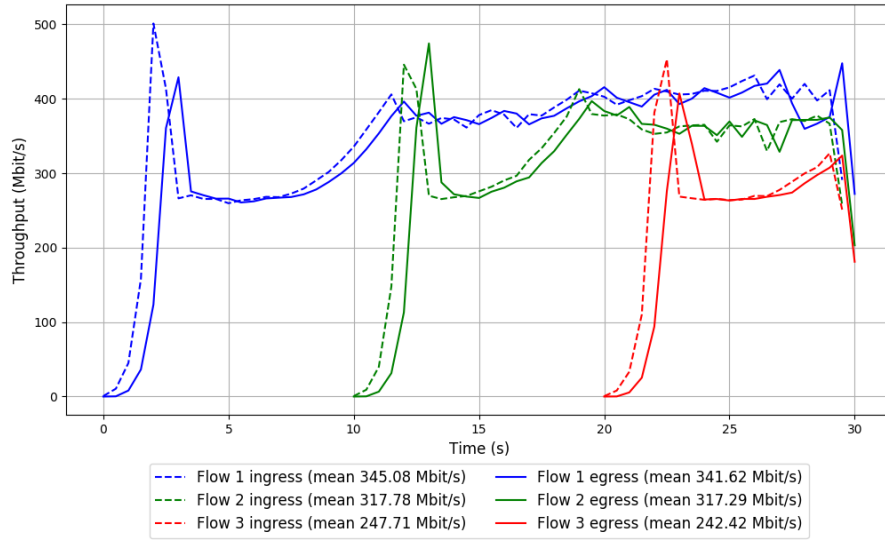


Run 4: Statistics of PCC-Allegro

Start at: 2019-05-30 00:39:25
End at: 2019-05-30 00:39:55
Local clock offset: -0.243 ms
Remote clock offset: -0.097 ms

```
# Below is generated by plot.py at 2019-05-30 03:45:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 630.77 Mbit/s
95th percentile per-packet one-way delay: 172.815 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 341.62 Mbit/s
95th percentile per-packet one-way delay: 204.646 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 317.29 Mbit/s
95th percentile per-packet one-way delay: 114.610 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 242.42 Mbit/s
95th percentile per-packet one-way delay: 187.808 ms
Loss rate: 3.89%
```

Run 4: Report of PCC-Allegro — Data Link

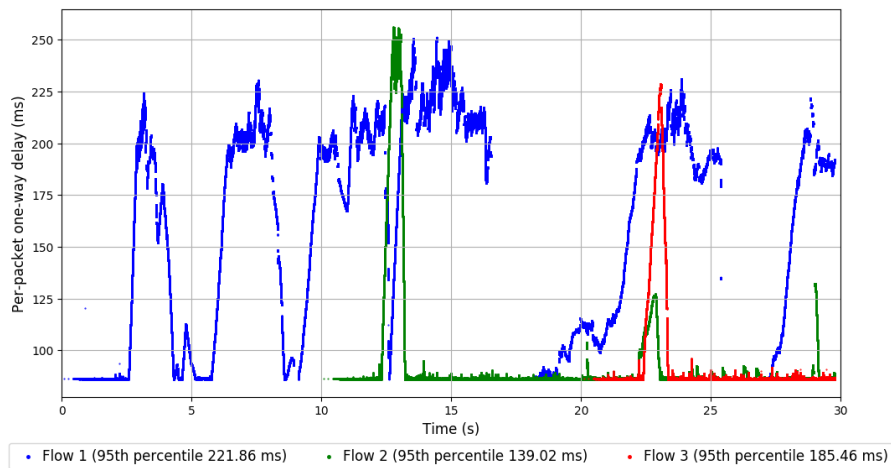
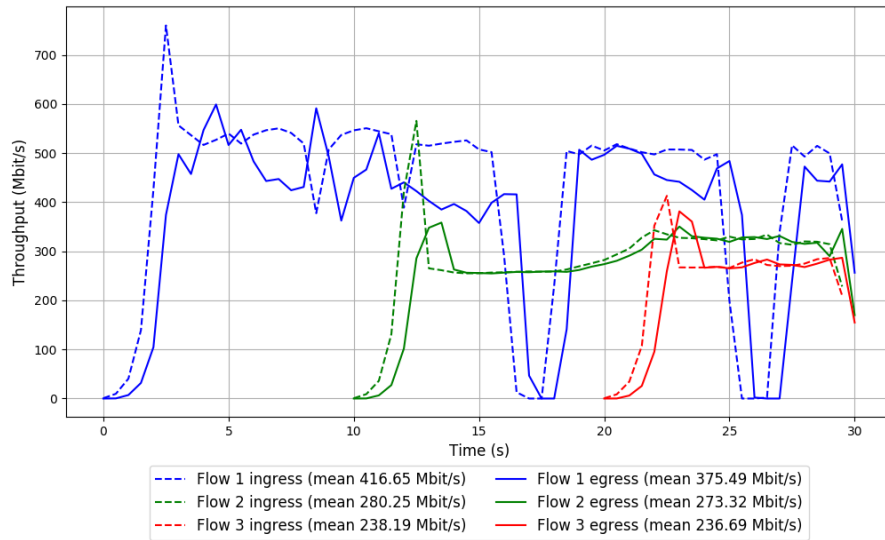


Run 5: Statistics of PCC-Allegro

Start at: 2019-05-30 01:16:35
End at: 2019-05-30 01:17:05
Local clock offset: 0.063 ms
Remote clock offset: -0.039 ms

```
# Below is generated by plot.py at 2019-05-30 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 633.60 Mbit/s
95th percentile per-packet one-way delay: 218.669 ms
Loss rate: 7.54%
-- Flow 1:
Average throughput: 375.49 Mbit/s
95th percentile per-packet one-way delay: 221.863 ms
Loss rate: 10.40%
-- Flow 2:
Average throughput: 273.32 Mbit/s
95th percentile per-packet one-way delay: 139.018 ms
Loss rate: 3.32%
-- Flow 3:
Average throughput: 236.69 Mbit/s
95th percentile per-packet one-way delay: 185.456 ms
Loss rate: 2.37%
```

Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2019-05-29 22:43:52

End at: 2019-05-29 22:44:22

Local clock offset: 0.412 ms

Remote clock offset: 0.087 ms

Below is generated by plot.py at 2019-05-30 03:47:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.86 Mbit/s

95th percentile per-packet one-way delay: 96.994 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 209.03 Mbit/s

95th percentile per-packet one-way delay: 101.424 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 185.77 Mbit/s

95th percentile per-packet one-way delay: 91.991 ms

Loss rate: 1.13%

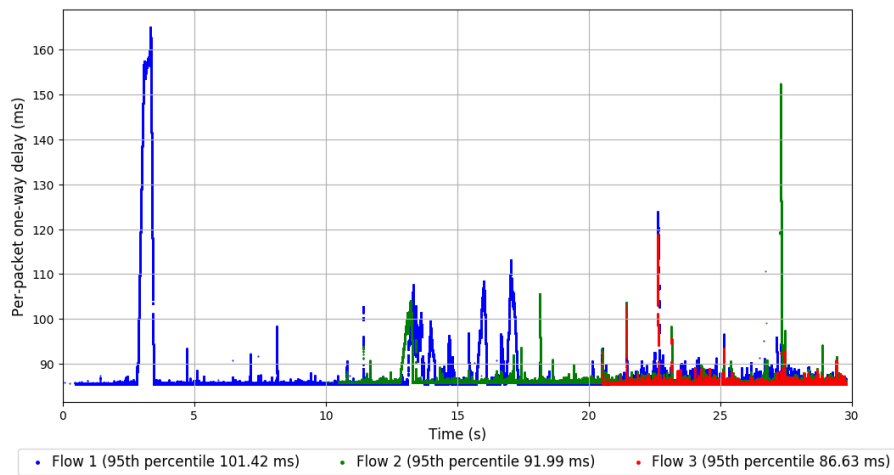
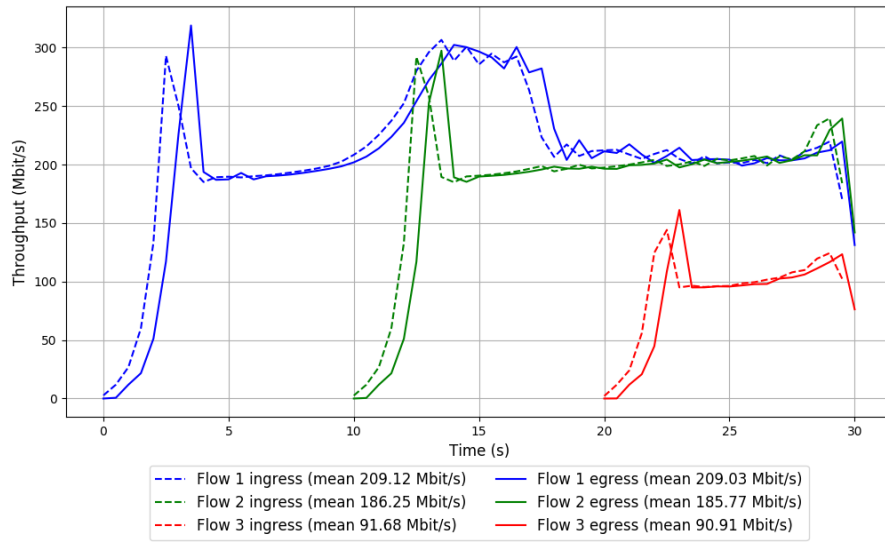
-- Flow 3:

Average throughput: 90.91 Mbit/s

95th percentile per-packet one-way delay: 86.630 ms

Loss rate: 2.65%

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-05-29 23:20:13

End at: 2019-05-29 23:20:43

Local clock offset: -0.029 ms

Remote clock offset: 0.004 ms

Below is generated by plot.py at 2019-05-30 03:47:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 412.75 Mbit/s

95th percentile per-packet one-way delay: 217.266 ms

Loss rate: 3.76%

-- Flow 1:

Average throughput: 236.26 Mbit/s

95th percentile per-packet one-way delay: 171.329 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 221.36 Mbit/s

95th percentile per-packet one-way delay: 225.247 ms

Loss rate: 8.48%

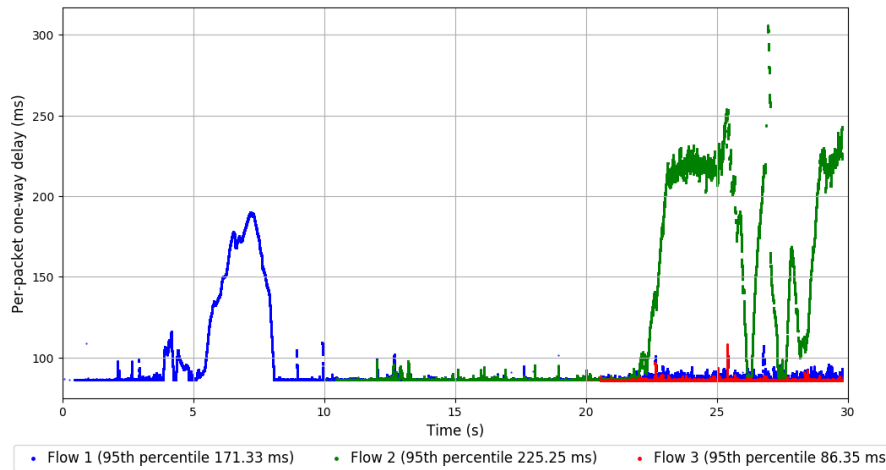
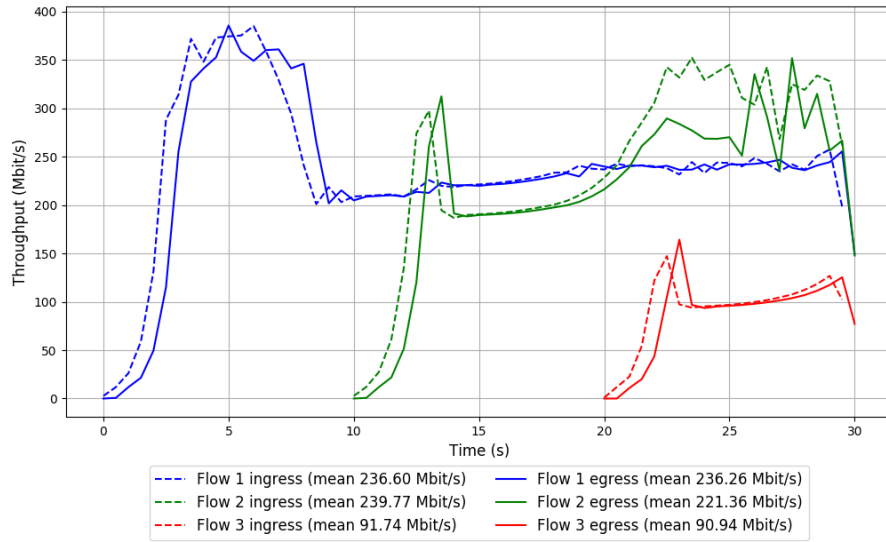
-- Flow 3:

Average throughput: 90.94 Mbit/s

95th percentile per-packet one-way delay: 86.349 ms

Loss rate: 2.60%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-05-29 23:55:57

End at: 2019-05-29 23:56:27

Local clock offset: -0.343 ms

Remote clock offset: 0.008 ms

Below is generated by plot.py at 2019-05-30 03:47:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 449.23 Mbit/s

95th percentile per-packet one-way delay: 193.585 ms

Loss rate: 3.08%

-- Flow 1:

Average throughput: 271.68 Mbit/s

95th percentile per-packet one-way delay: 196.443 ms

Loss rate: 3.81%

-- Flow 2:

Average throughput: 186.48 Mbit/s

95th percentile per-packet one-way delay: 144.568 ms

Loss rate: 1.91%

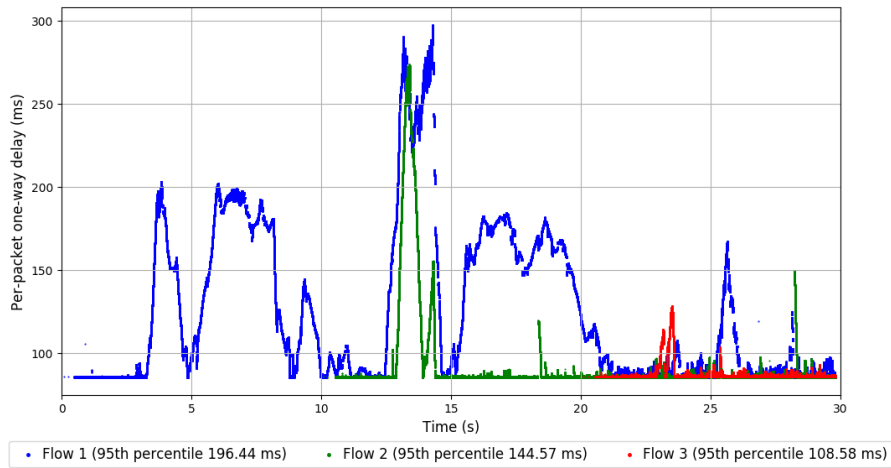
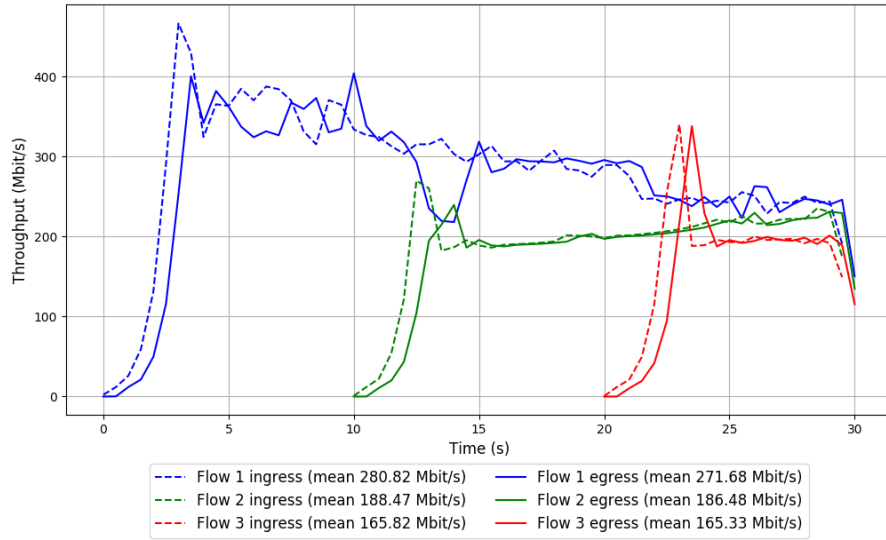
-- Flow 3:

Average throughput: 165.33 Mbit/s

95th percentile per-packet one-way delay: 108.579 ms

Loss rate: 2.05%

Run 3: Report of PCC-Expr — Data Link

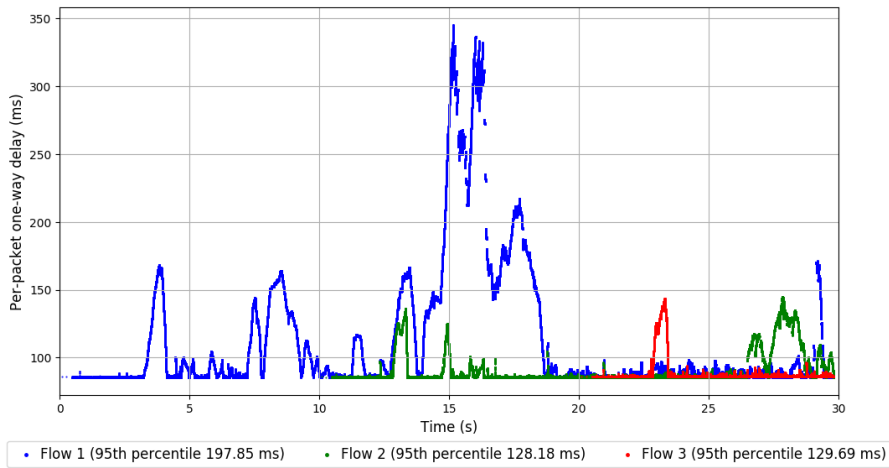
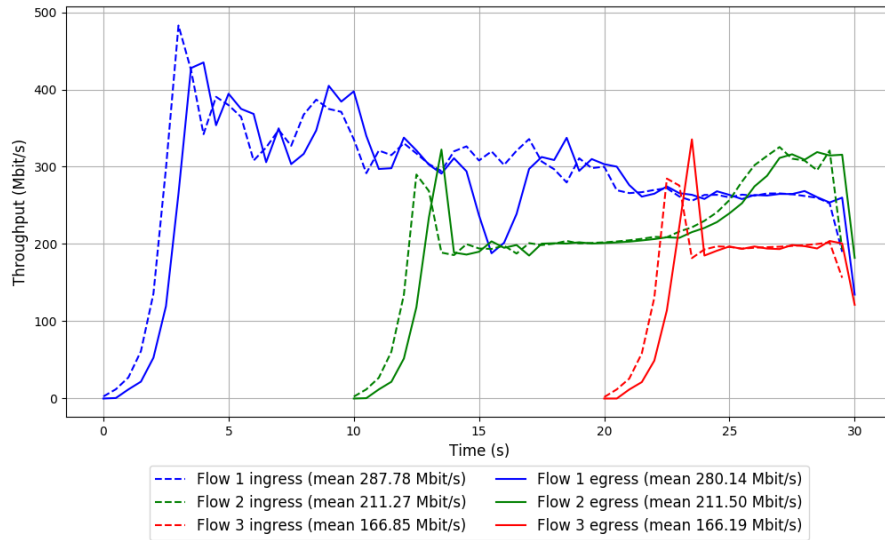


Run 4: Statistics of PCC-Expr

Start at: 2019-05-30 00:32:39
End at: 2019-05-30 00:33:09
Local clock offset: -0.266 ms
Remote clock offset: -0.061 ms

```
# Below is generated by plot.py at 2019-05-30 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 474.63 Mbit/s
95th percentile per-packet one-way delay: 169.619 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 280.14 Mbit/s
95th percentile per-packet one-way delay: 197.853 ms
Loss rate: 3.22%
-- Flow 2:
Average throughput: 211.50 Mbit/s
95th percentile per-packet one-way delay: 128.175 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 166.19 Mbit/s
95th percentile per-packet one-way delay: 129.688 ms
Loss rate: 2.15%
```

Run 4: Report of PCC-Expr — Data Link

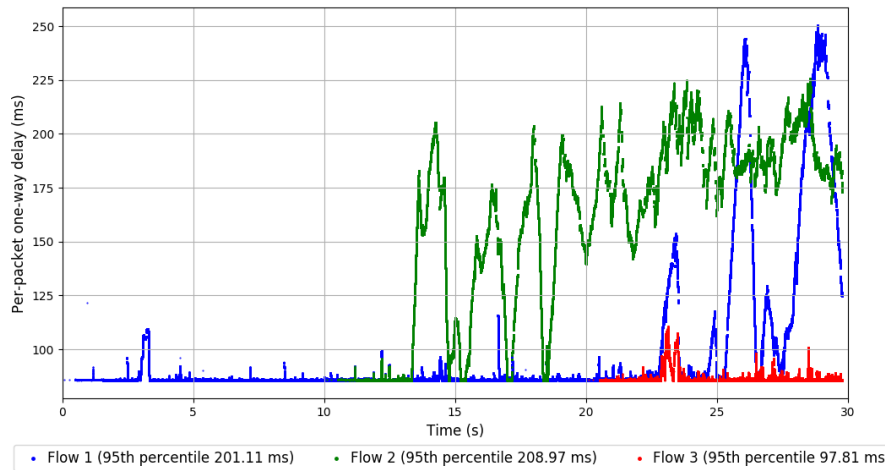
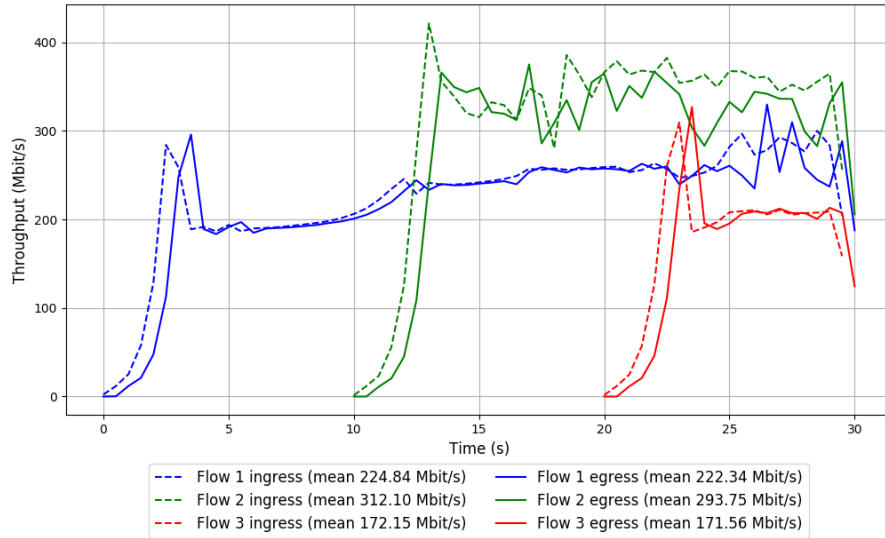


Run 5: Statistics of PCC-Expr

Start at: 2019-05-30 01:09:28
End at: 2019-05-30 01:09:58
Local clock offset: -0.149 ms
Remote clock offset: -0.041 ms

```
# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.05 Mbit/s
95th percentile per-packet one-way delay: 206.406 ms
Loss rate: 3.86%
-- Flow 1:
Average throughput: 222.34 Mbit/s
95th percentile per-packet one-way delay: 201.111 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 293.75 Mbit/s
95th percentile per-packet one-way delay: 208.970 ms
Loss rate: 6.70%
-- Flow 3:
Average throughput: 171.56 Mbit/s
95th percentile per-packet one-way delay: 97.812 ms
Loss rate: 2.09%
```

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-05-29 22:34:47

End at: 2019-05-29 22:35:17

Local clock offset: 0.553 ms

Remote clock offset: 0.064 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.10 Mbit/s

95th percentile per-packet one-way delay: 85.622 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 55.73 Mbit/s

95th percentile per-packet one-way delay: 85.604 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 60.55 Mbit/s

95th percentile per-packet one-way delay: 85.627 ms

Loss rate: 0.50%

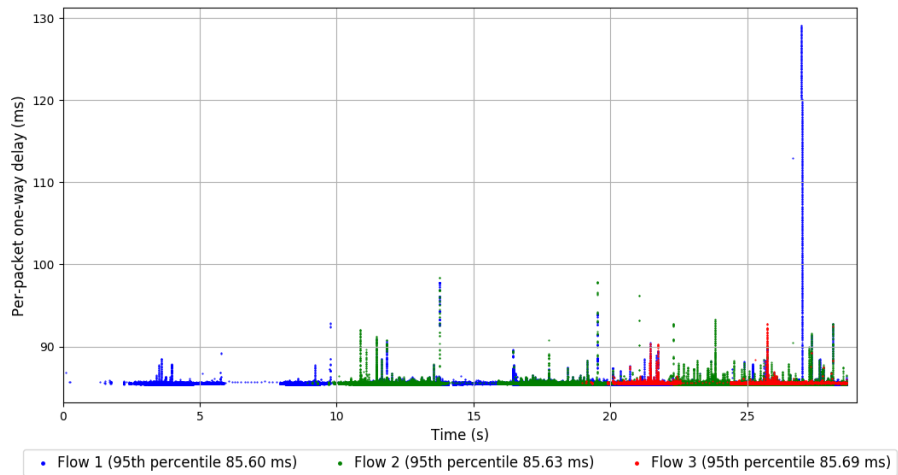
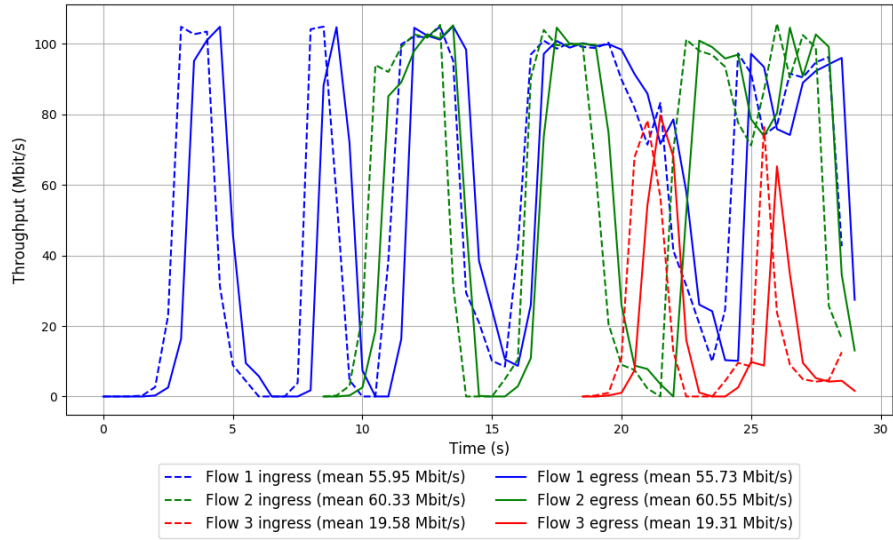
-- Flow 3:

Average throughput: 19.31 Mbit/s

95th percentile per-packet one-way delay: 85.685 ms

Loss rate: 3.09%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-05-29 23:10:55

End at: 2019-05-29 23:11:25

Local clock offset: -0.002 ms

Remote clock offset: 0.067 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.05 Mbit/s

95th percentile per-packet one-way delay: 86.214 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 56.80 Mbit/s

95th percentile per-packet one-way delay: 86.243 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 42.30 Mbit/s

95th percentile per-packet one-way delay: 85.921 ms

Loss rate: 1.63%

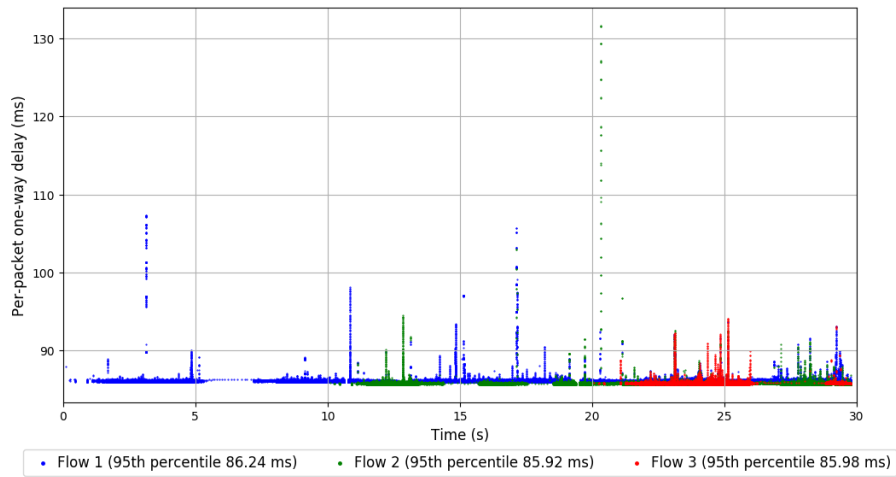
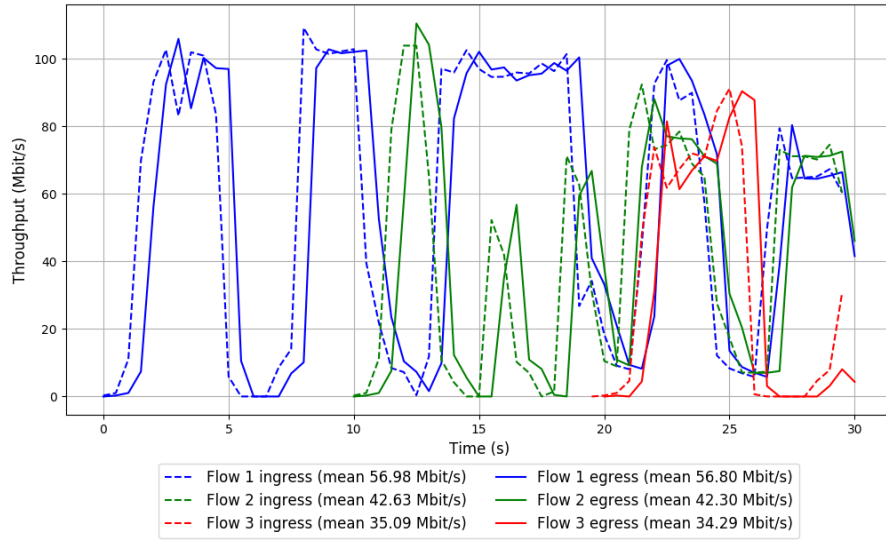
-- Flow 3:

Average throughput: 34.29 Mbit/s

95th percentile per-packet one-way delay: 85.984 ms

Loss rate: 4.01%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-05-29 23:47:01

End at: 2019-05-29 23:47:31

Local clock offset: 0.196 ms

Remote clock offset: 0.141 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.89 Mbit/s

95th percentile per-packet one-way delay: 86.228 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 49.20 Mbit/s

95th percentile per-packet one-way delay: 86.250 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 24.45 Mbit/s

95th percentile per-packet one-way delay: 86.132 ms

Loss rate: 2.60%

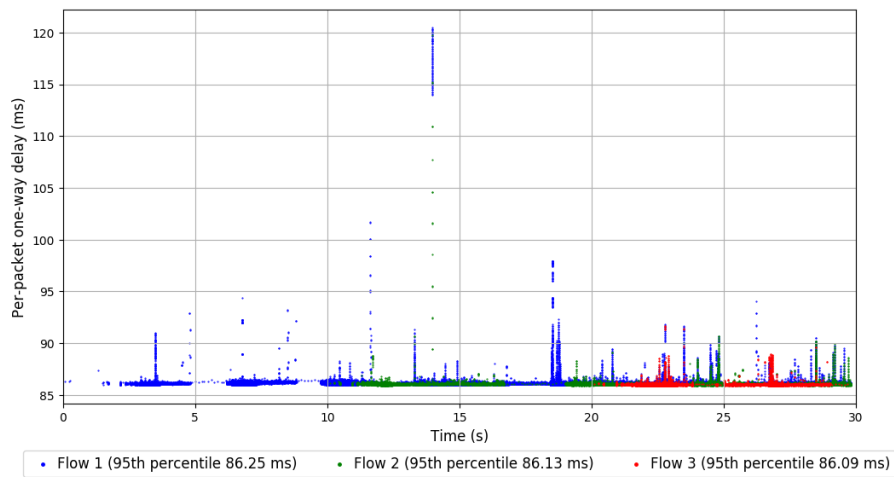
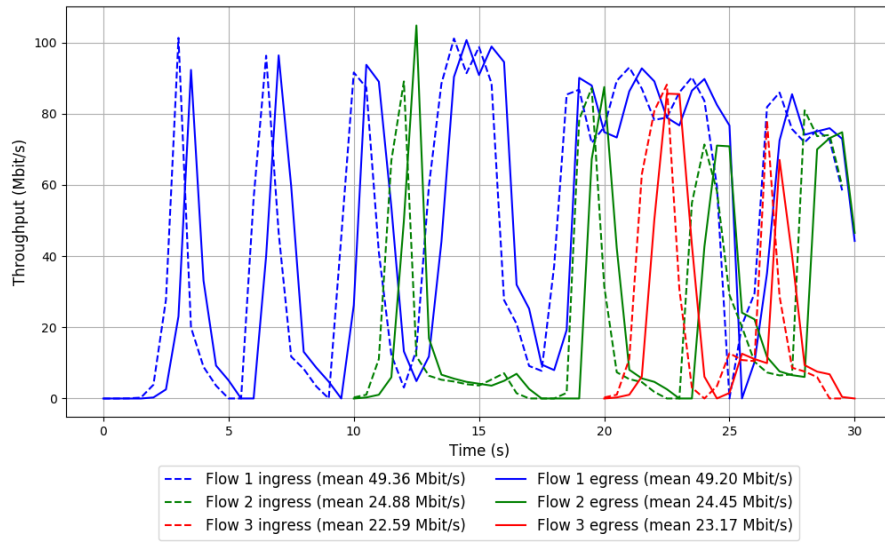
-- Flow 3:

Average throughput: 23.17 Mbit/s

95th percentile per-packet one-way delay: 86.089 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-05-30 00:23:25

End at: 2019-05-30 00:23:55

Local clock offset: 0.162 ms

Remote clock offset: -0.048 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.26 Mbit/s

95th percentile per-packet one-way delay: 86.431 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 50.05 Mbit/s

95th percentile per-packet one-way delay: 86.458 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 44.15 Mbit/s

95th percentile per-packet one-way delay: 86.137 ms

Loss rate: 1.46%

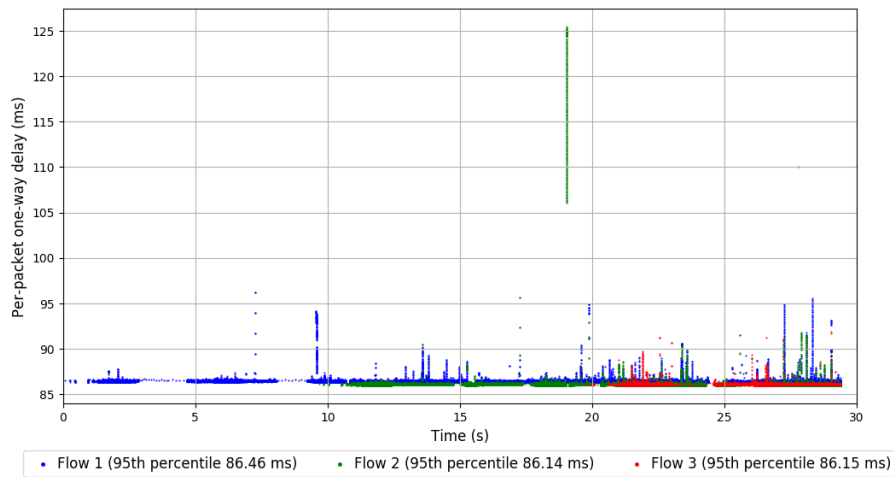
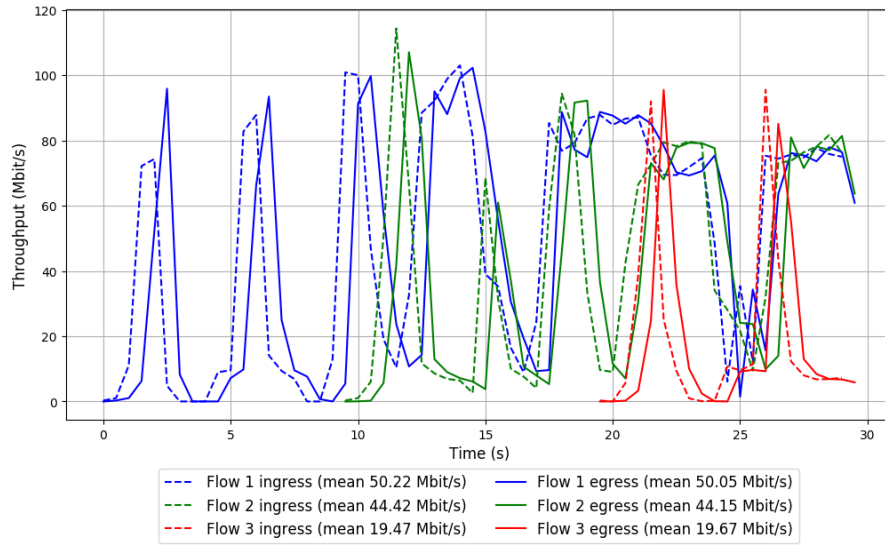
-- Flow 3:

Average throughput: 19.67 Mbit/s

95th percentile per-packet one-way delay: 86.148 ms

Loss rate: 0.68%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-05-30 01:00:04
End at: 2019-05-30 01:00:34
Local clock offset: -0.332 ms
Remote clock offset: -0.137 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 85.902 ms
Loss rate: 1.02%

-- Flow 1:

Average throughput: 60.92 Mbit/s
95th percentile per-packet one-way delay: 85.619 ms
Loss rate: 0.88%

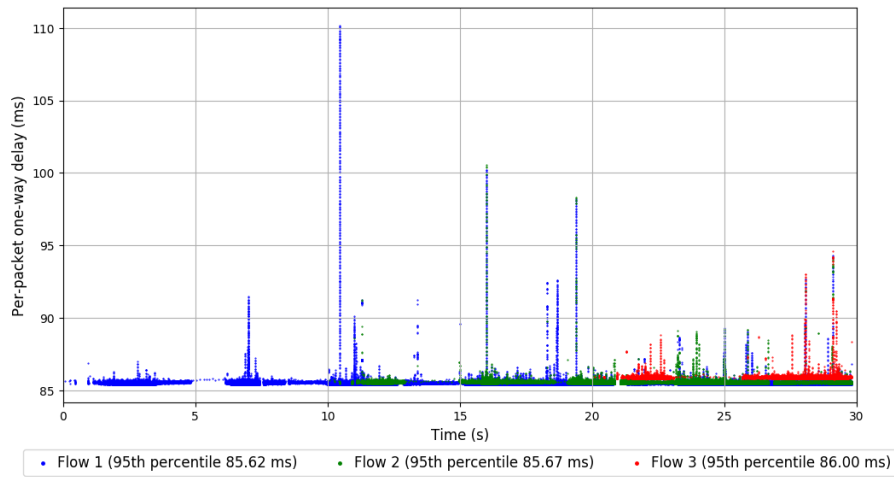
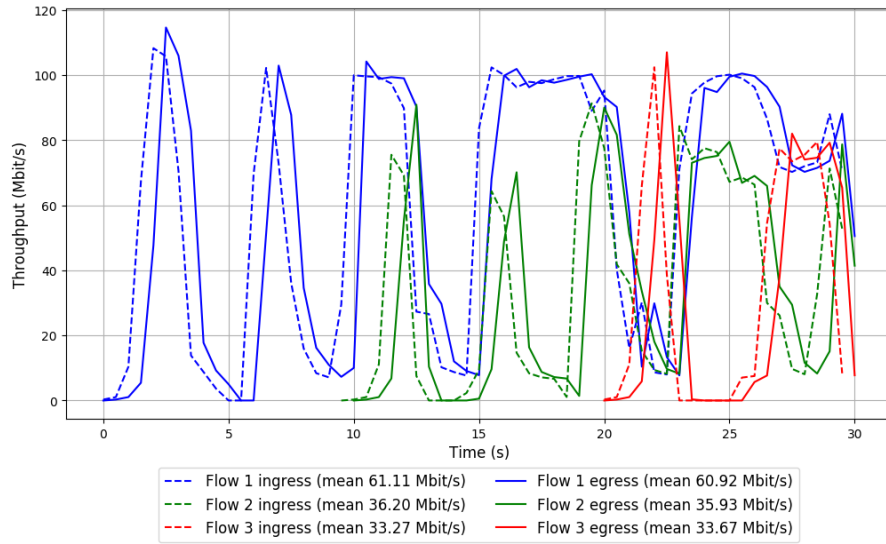
-- Flow 2:

Average throughput: 35.93 Mbit/s
95th percentile per-packet one-way delay: 85.674 ms
Loss rate: 1.59%

-- Flow 3:

Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 85.998 ms
Loss rate: 0.50%

Run 5: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2019-05-29 23:03:06

End at: 2019-05-29 23:03:36

Local clock offset: -0.162 ms

Remote clock offset: 0.017 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.241 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.282 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.906 ms

Loss rate: 1.04%

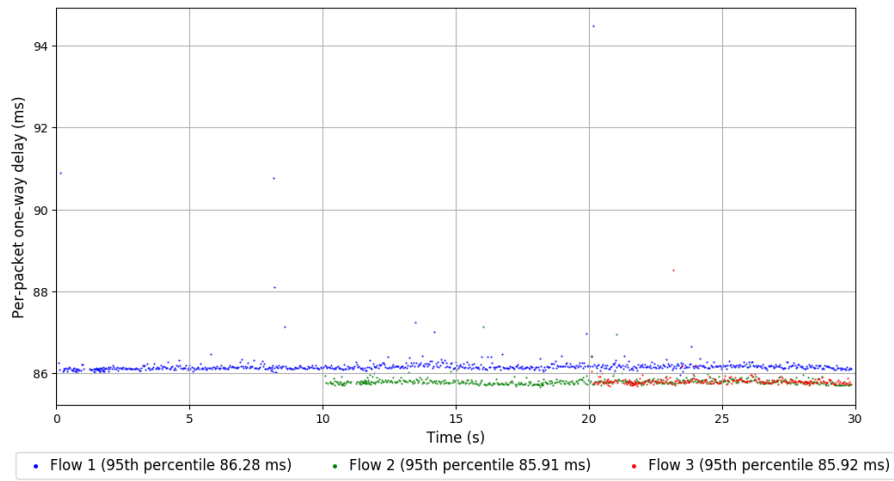
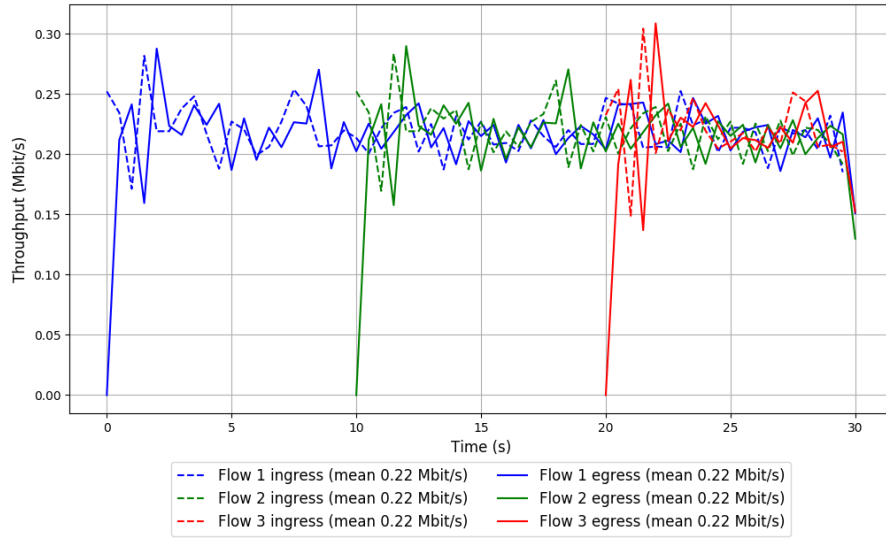
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.920 ms

Loss rate: 1.85%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2019-05-29 23:39:03

End at: 2019-05-29 23:39:33

Local clock offset: 0.365 ms

Remote clock offset: 0.124 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.449 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.467 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.422 ms

Loss rate: 0.82%

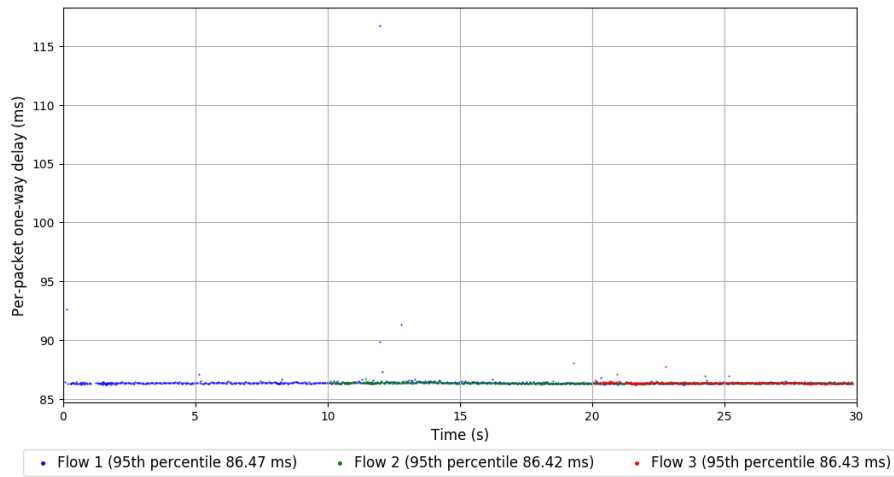
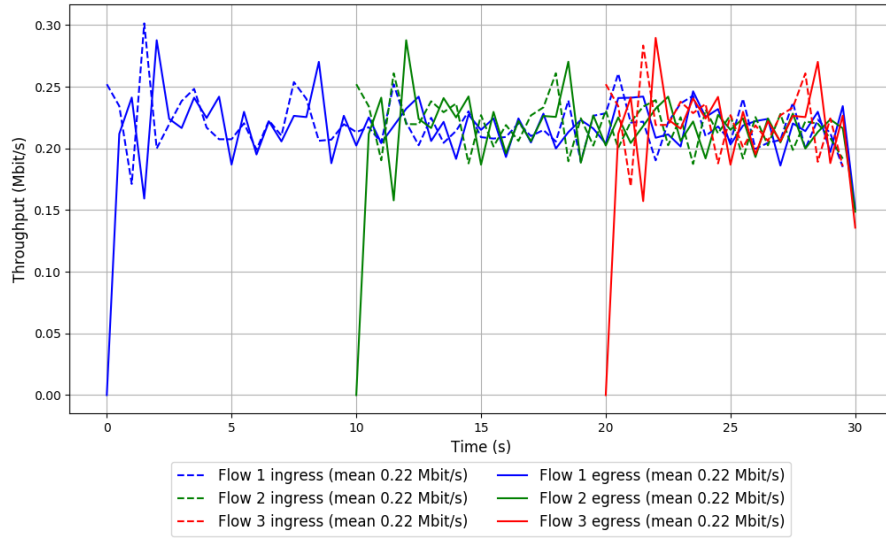
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.429 ms

Loss rate: 1.85%

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2019-05-30 00:15:32
End at: 2019-05-30 00:16:02
Local clock offset: -0.049 ms
Remote clock offset: -0.036 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.121 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.129 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.118 ms

Loss rate: 0.82%

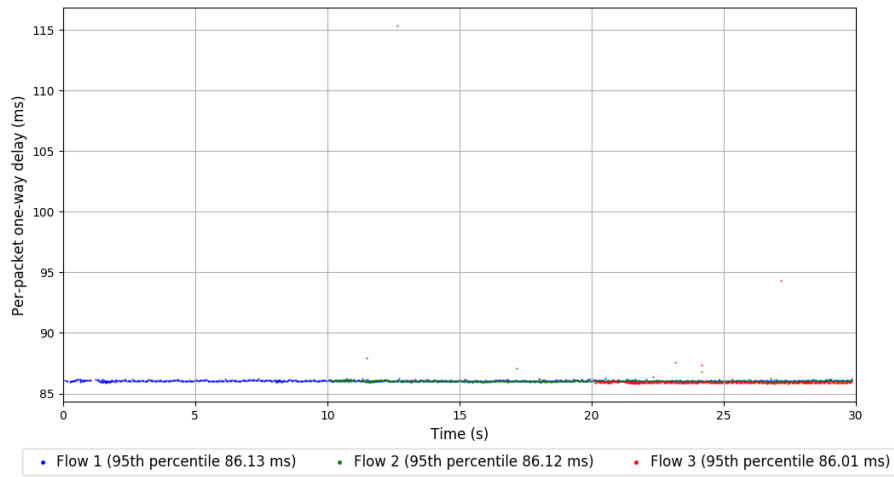
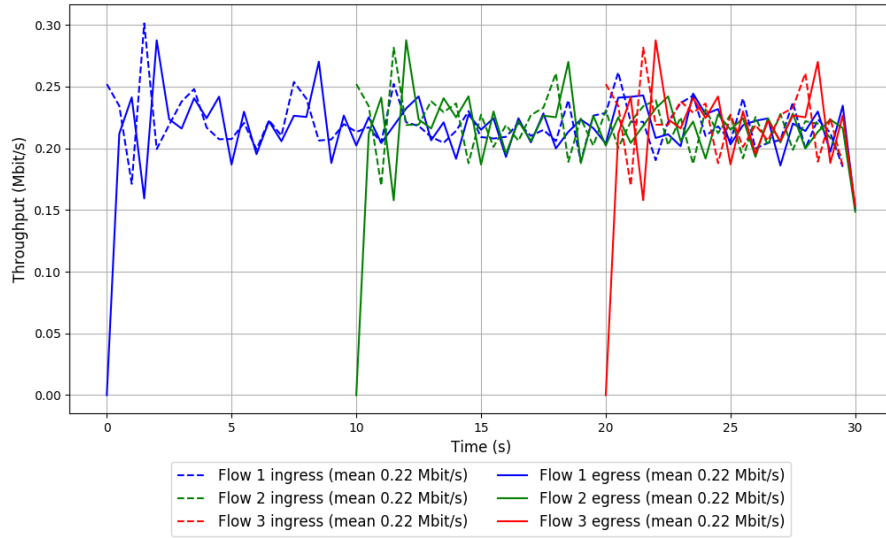
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.011 ms

Loss rate: 1.46%

Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2019-05-30 00:52:09
End at: 2019-05-30 00:52:39
Local clock offset: 0.248 ms
Remote clock offset: -0.104 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.706 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.738 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.472 ms

Loss rate: 1.04%

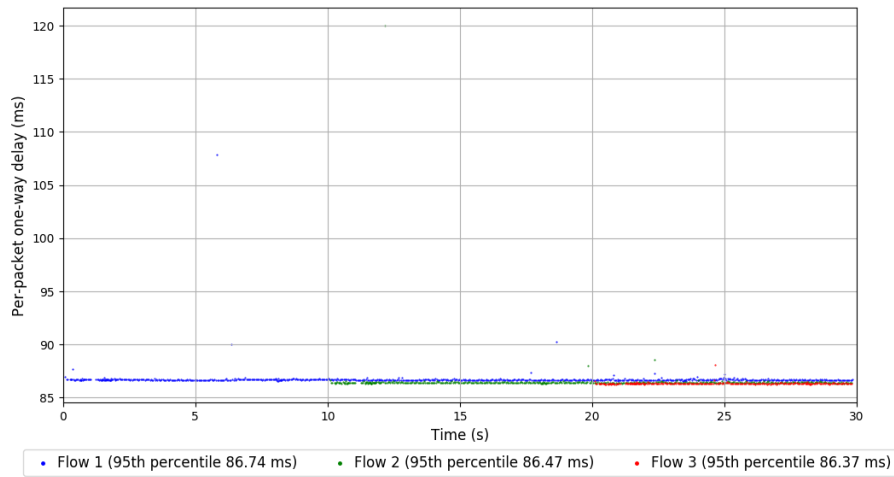
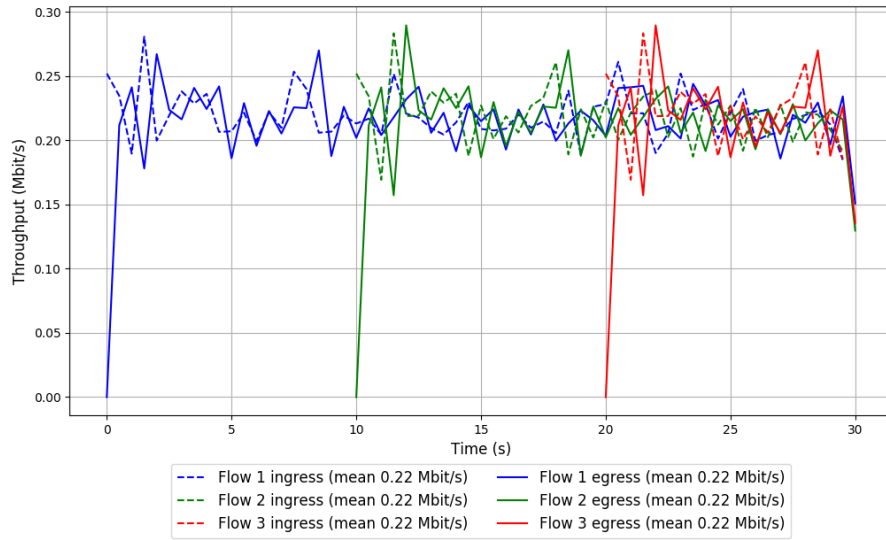
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.374 ms

Loss rate: 1.85%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2019-05-30 01:29:16

End at: 2019-05-30 01:29:46

Local clock offset: 0.247 ms

Remote clock offset: 0.014 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.572 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.609 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.211 ms

Loss rate: 0.82%

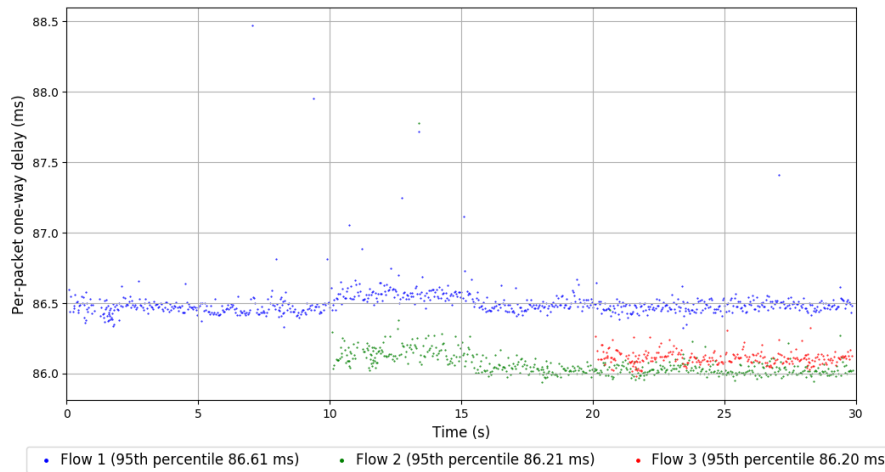
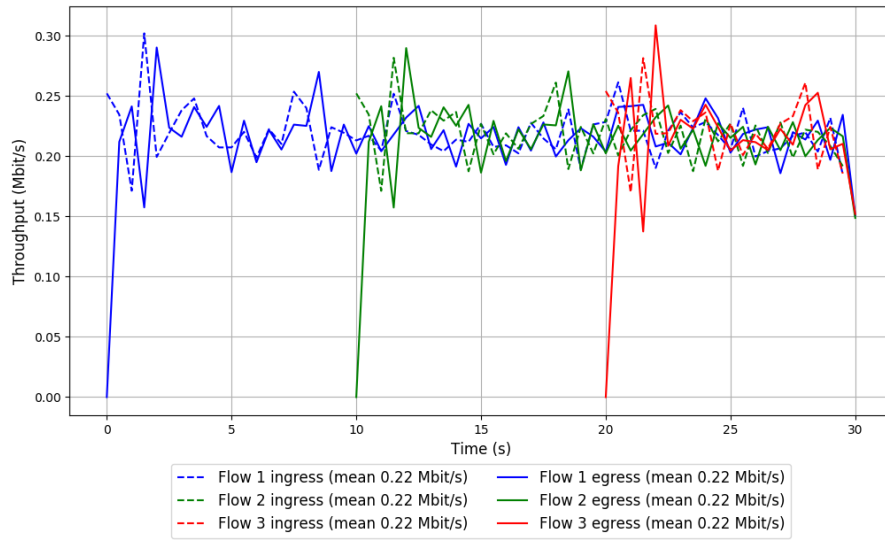
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.202 ms

Loss rate: 1.85%

Run 5: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-05-29 23:09:39
End at: 2019-05-29 23:10:09
Local clock offset: -0.018 ms
Remote clock offset: -0.012 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 86.972 ms
Loss rate: 1.06%

-- Flow 1:

Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 86.866 ms
Loss rate: 0.75%

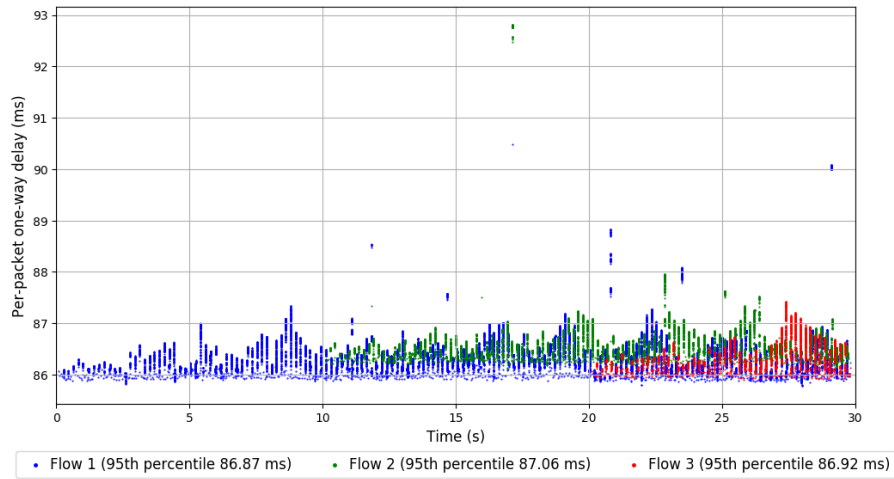
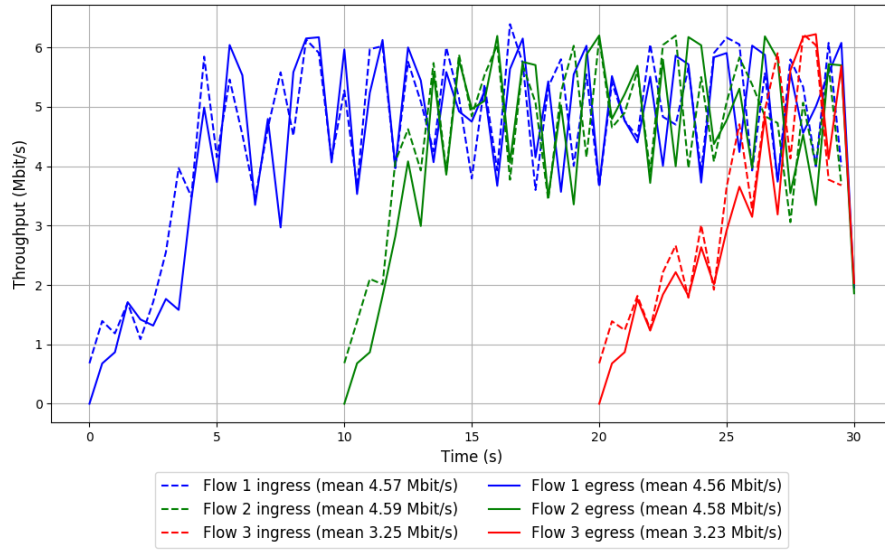
-- Flow 2:

Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 87.057 ms
Loss rate: 1.00%

-- Flow 3:

Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 86.920 ms
Loss rate: 2.56%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2019-05-29 23:45:45

End at: 2019-05-29 23:46:15

Local clock offset: -0.069 ms

Remote clock offset: 0.047 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 86.816 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 86.881 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 4.55 Mbit/s

95th percentile per-packet one-way delay: 86.663 ms

Loss rate: 1.23%

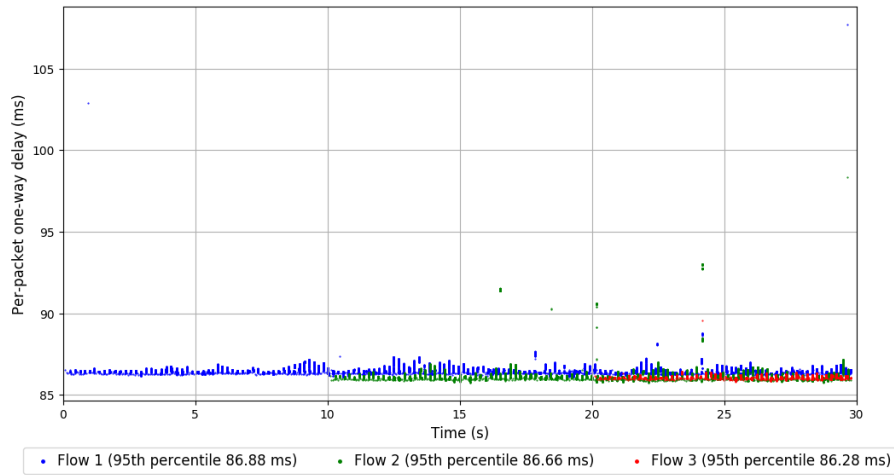
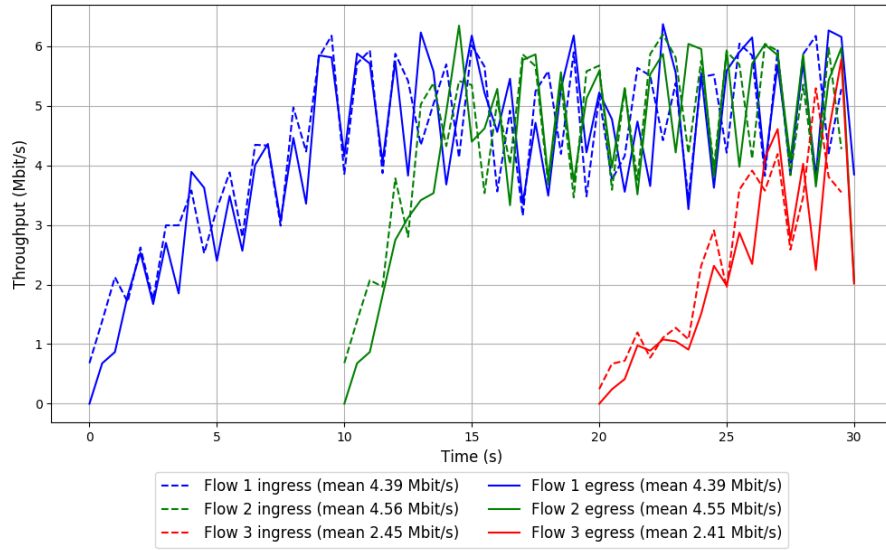
-- Flow 3:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 86.275 ms

Loss rate: 3.18%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2019-05-30 00:22:10
End at: 2019-05-30 00:22:40
Local clock offset: -0.254 ms
Remote clock offset: -0.006 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.09 Mbit/s

95th percentile per-packet one-way delay: 86.745 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 86.823 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 86.666 ms

Loss rate: 1.28%

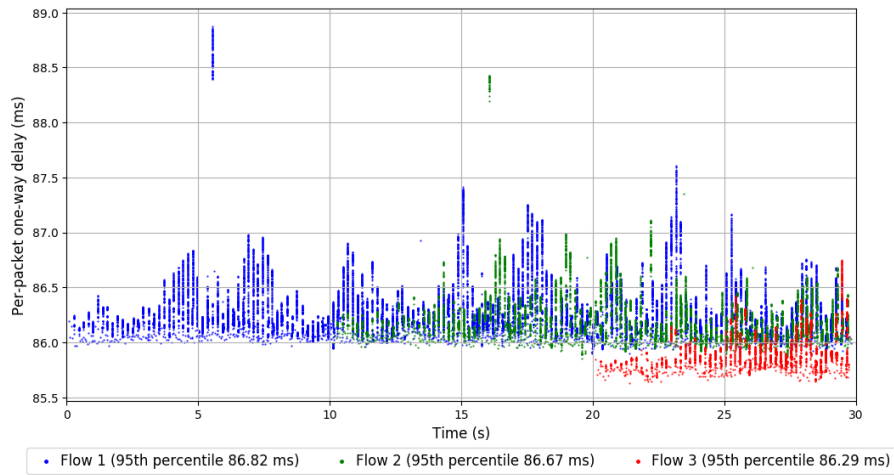
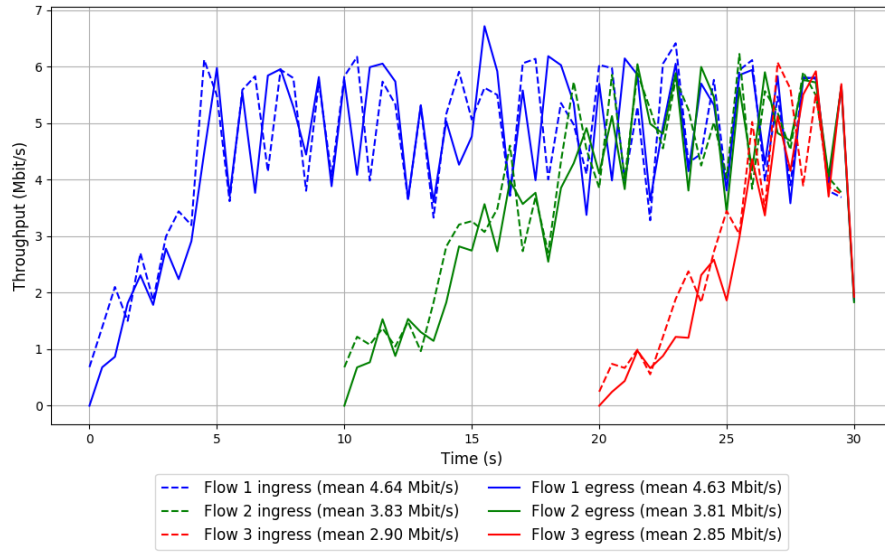
-- Flow 3:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 86.293 ms

Loss rate: 3.20%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2019-05-30 00:58:49
End at: 2019-05-30 00:59:19
Local clock offset: 0.016 ms
Remote clock offset: -0.092 ms

Below is generated by plot.py at 2019-05-30 03:56:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 86.706 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 86.621 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 86.810 ms

Loss rate: 0.78%

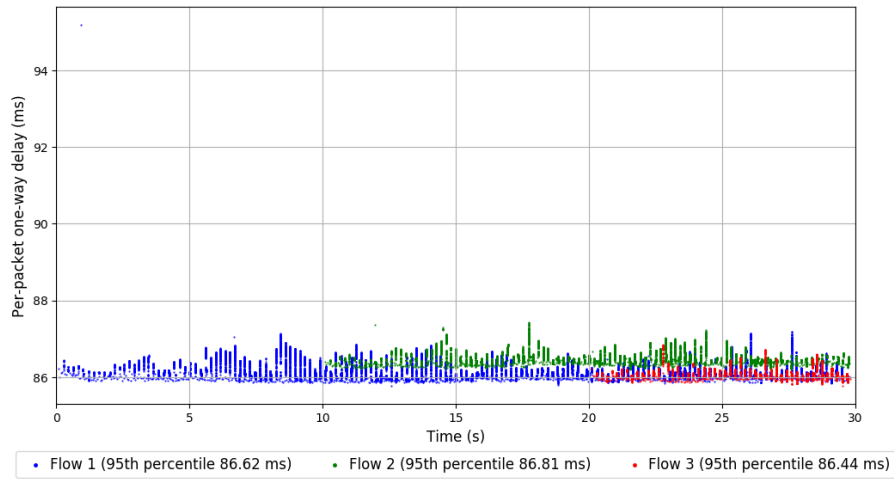
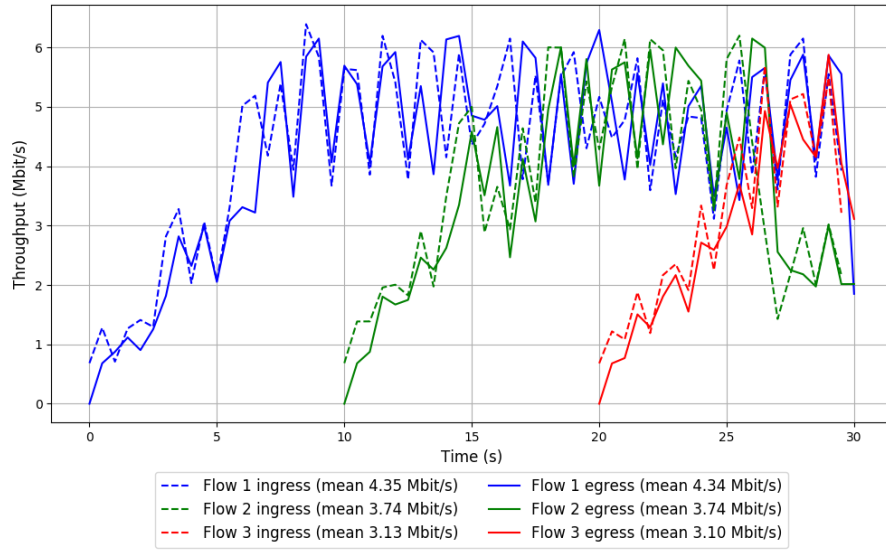
-- Flow 3:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 86.445 ms

Loss rate: 2.50%

Run 4: Report of Sprout — Data Link

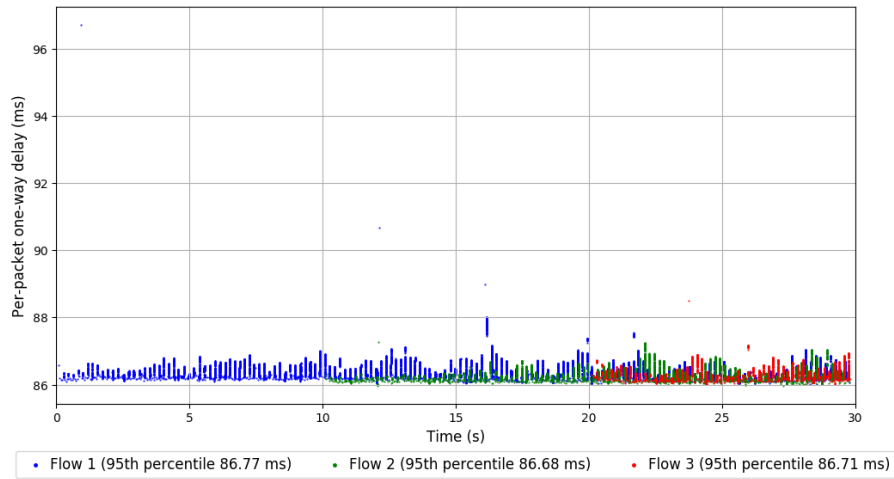
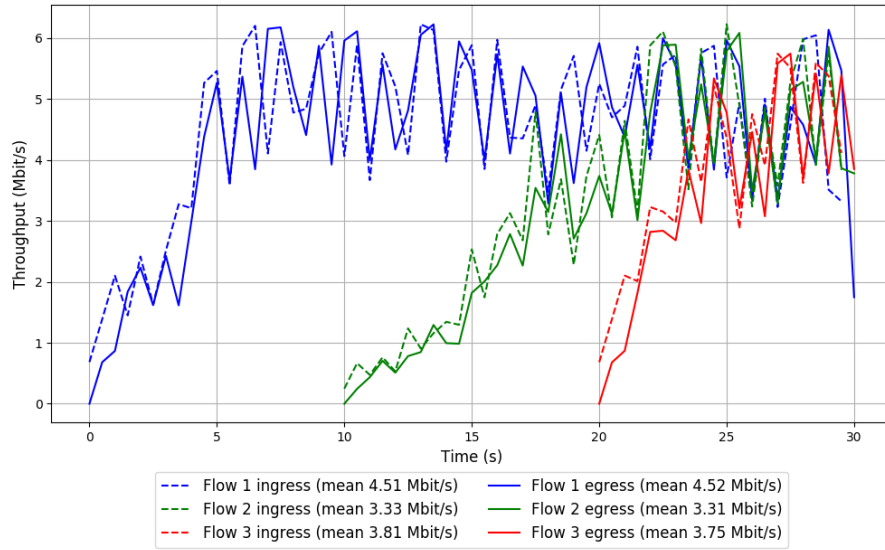


Run 5: Statistics of Sprout

Start at: 2019-05-30 01:35:59
End at: 2019-05-30 01:36:29
Local clock offset: 0.234 ms
Remote clock offset: -0.055 ms

```
# Below is generated by plot.py at 2019-05-30 03:56:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 86.745 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 86.774 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 86.684 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 86.712 ms
Loss rate: 2.76%
```

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-05-29 23:01:10

End at: 2019-05-29 23:01:40

Local clock offset: 0.028 ms

Remote clock offset: 0.004 ms

Below is generated by plot.py at 2019-05-30 03:58:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 397.94 Mbit/s

95th percentile per-packet one-way delay: 87.321 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 208.64 Mbit/s

95th percentile per-packet one-way delay: 86.951 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 190.64 Mbit/s

95th percentile per-packet one-way delay: 88.131 ms

Loss rate: 1.04%

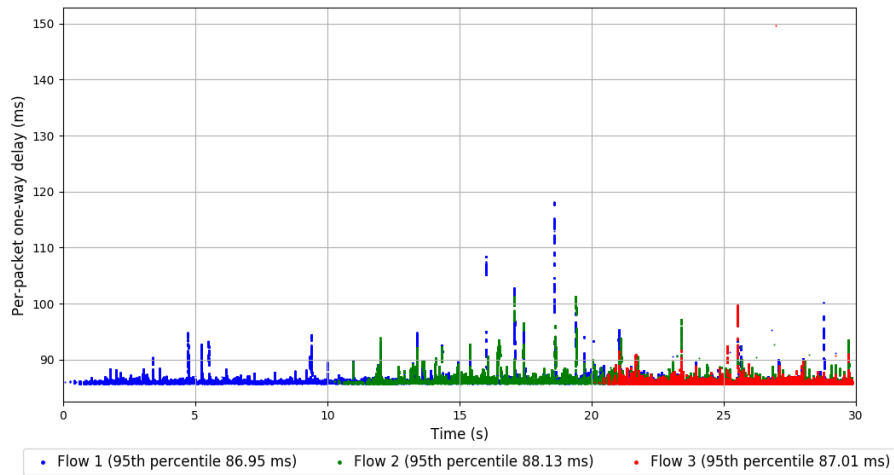
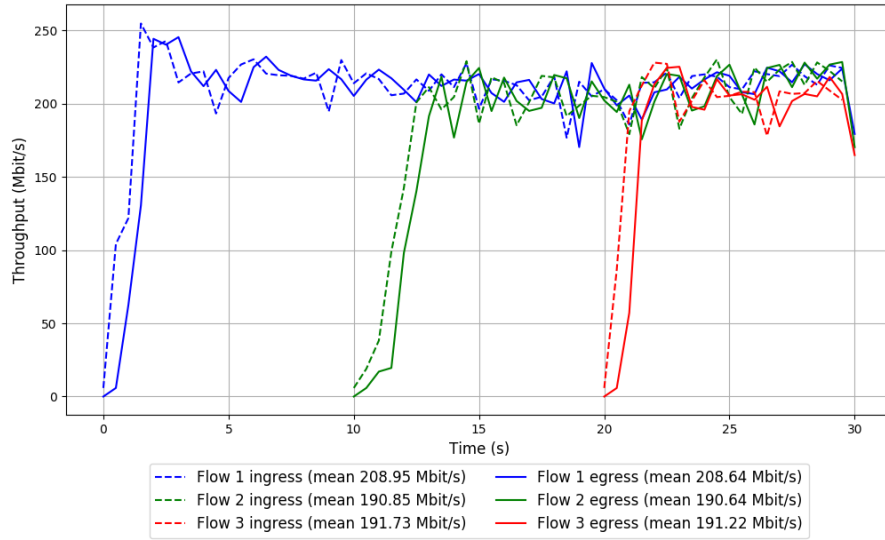
-- Flow 3:

Average throughput: 191.22 Mbit/s

95th percentile per-packet one-way delay: 87.008 ms

Loss rate: 1.97%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-05-29 23:37:06

End at: 2019-05-29 23:37:36

Local clock offset: -0.02 ms

Remote clock offset: 0.092 ms

Below is generated by plot.py at 2019-05-30 03:59:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 404.46 Mbit/s

95th percentile per-packet one-way delay: 87.779 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 211.77 Mbit/s

95th percentile per-packet one-way delay: 87.073 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 196.21 Mbit/s

95th percentile per-packet one-way delay: 87.672 ms

Loss rate: 1.00%

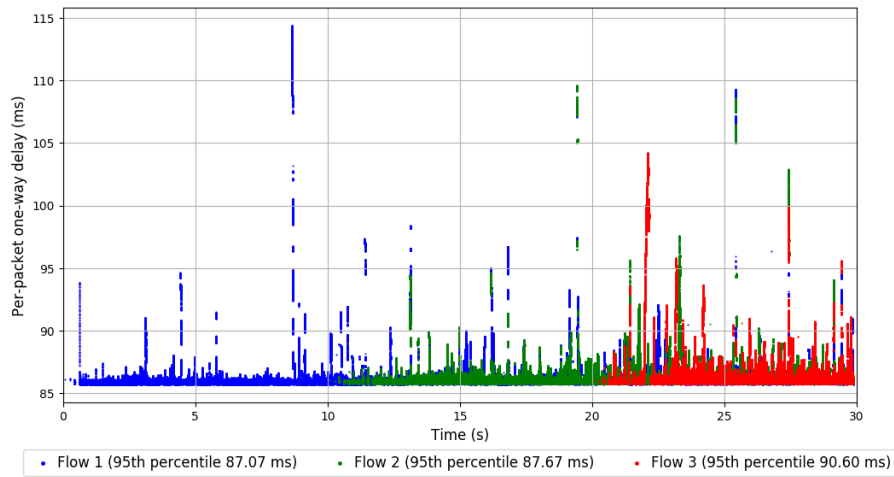
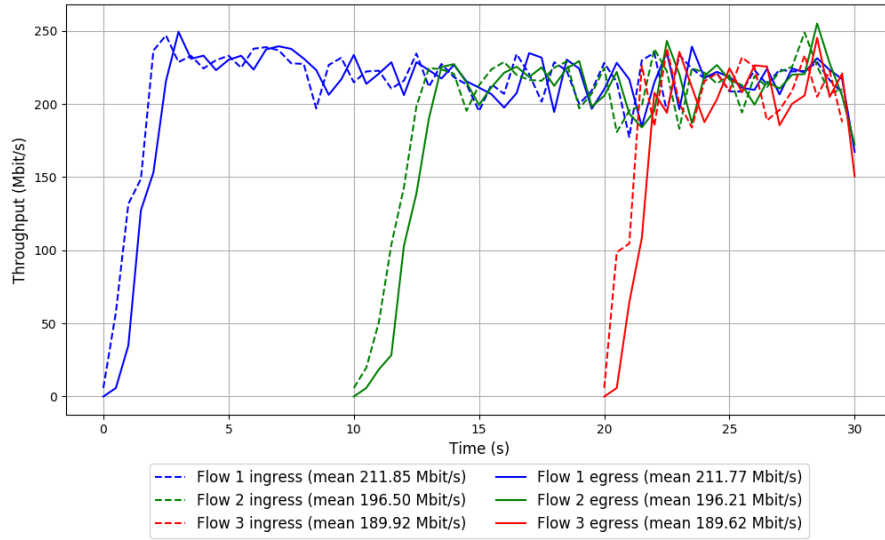
-- Flow 3:

Average throughput: 189.62 Mbit/s

95th percentile per-packet one-way delay: 90.601 ms

Loss rate: 1.90%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-05-30 00:13:36
End at: 2019-05-30 00:14:06
Local clock offset: -0.258 ms
Remote clock offset: -0.035 ms

Below is generated by plot.py at 2019-05-30 03:59:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.00 Mbit/s
95th percentile per-packet one-way delay: 88.000 ms
Loss rate: 0.91%

-- Flow 1:

Average throughput: 211.17 Mbit/s
95th percentile per-packet one-way delay: 87.897 ms
Loss rate: 0.58%

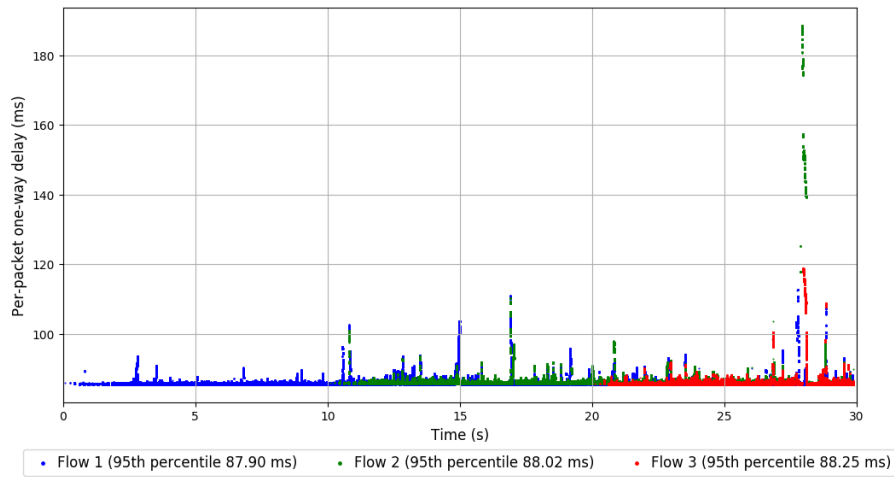
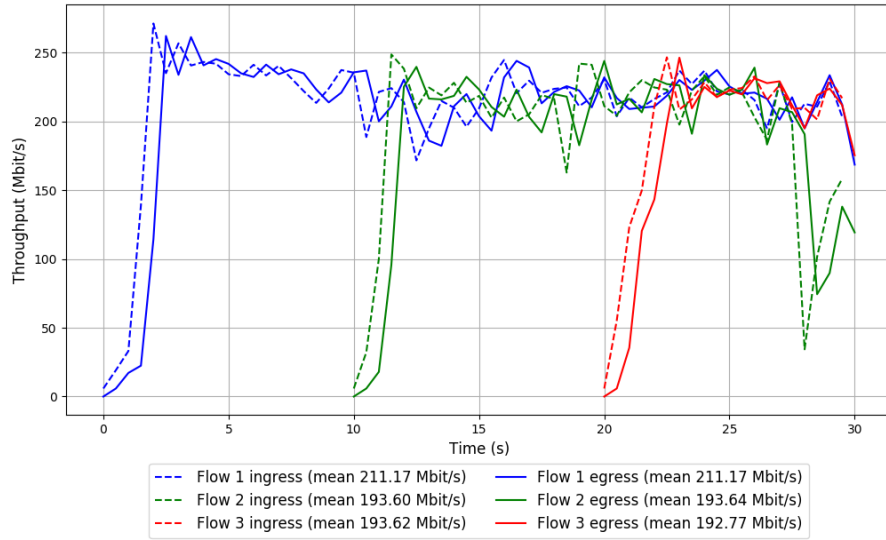
-- Flow 2:

Average throughput: 193.64 Mbit/s
95th percentile per-packet one-way delay: 88.015 ms
Loss rate: 0.84%

-- Flow 3:

Average throughput: 192.77 Mbit/s
95th percentile per-packet one-way delay: 88.248 ms
Loss rate: 2.16%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-05-30 00:50:11
End at: 2019-05-30 00:50:41
Local clock offset: -0.09 ms
Remote clock offset: -0.154 ms

Below is generated by plot.py at 2019-05-30 04:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 422.12 Mbit/s
95th percentile per-packet one-way delay: 87.054 ms
Loss rate: 0.90%

-- Flow 1:

Average throughput: 216.65 Mbit/s
95th percentile per-packet one-way delay: 86.892 ms
Loss rate: 0.59%

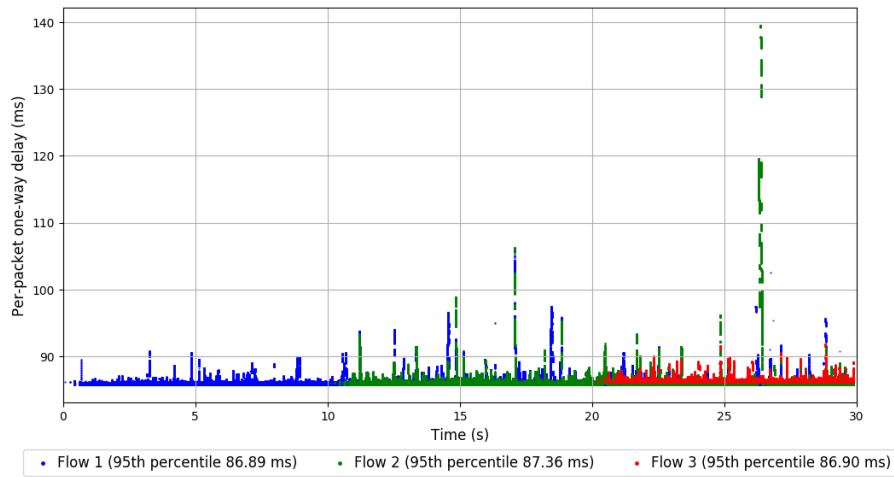
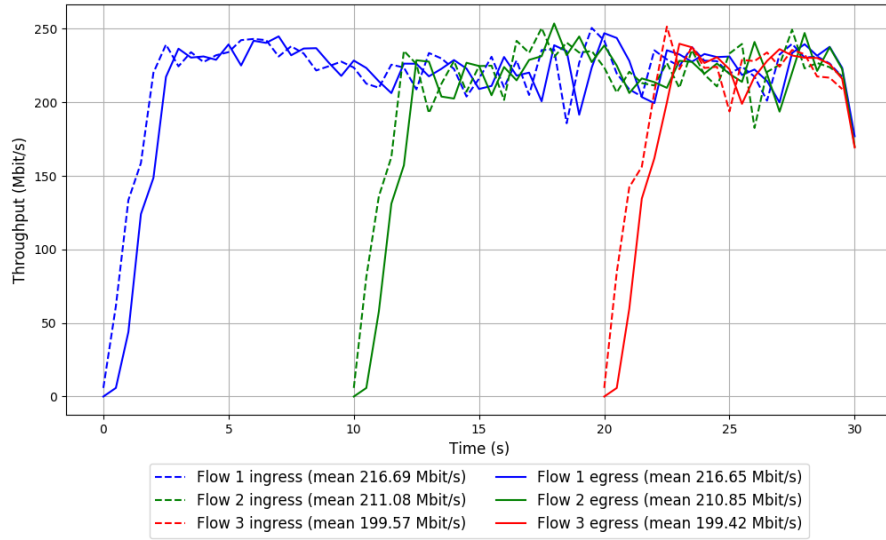
-- Flow 2:

Average throughput: 210.85 Mbit/s
95th percentile per-packet one-way delay: 87.362 ms
Loss rate: 0.95%

-- Flow 3:

Average throughput: 199.42 Mbit/s
95th percentile per-packet one-way delay: 86.904 ms
Loss rate: 1.81%

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

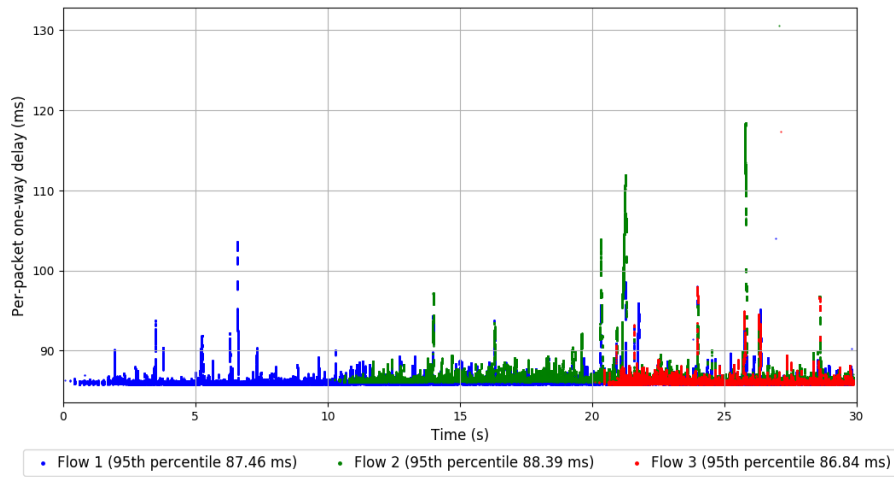
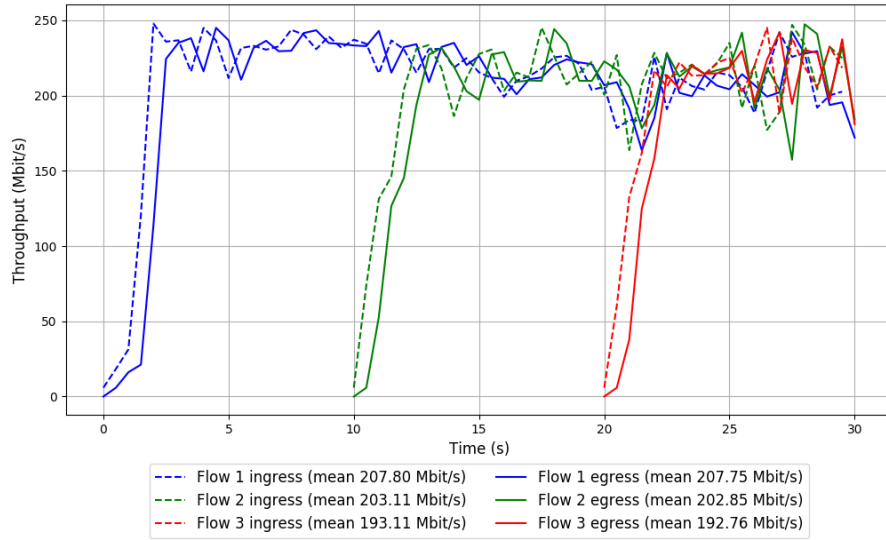


Run 5: Statistics of TaoVA-100x

Start at: 2019-05-30 01:27:19
End at: 2019-05-30 01:27:49
Local clock offset: 0.096 ms
Remote clock offset: -0.064 ms

```
# Below is generated by plot.py at 2019-05-30 04:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.75 Mbit/s
95th percentile per-packet one-way delay: 87.716 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 207.75 Mbit/s
95th percentile per-packet one-way delay: 87.456 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 202.85 Mbit/s
95th percentile per-packet one-way delay: 88.394 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 192.76 Mbit/s
95th percentile per-packet one-way delay: 86.838 ms
Loss rate: 1.93%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2019-05-29 22:55:36
End at: 2019-05-29 22:56:06
Local clock offset: 0.318 ms
Remote clock offset: -0.012 ms

Below is generated by plot.py at 2019-05-30 04:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 649.74 Mbit/s
95th percentile per-packet one-way delay: 122.739 ms
Loss rate: 0.89%

-- Flow 1:

Average throughput: 342.39 Mbit/s
95th percentile per-packet one-way delay: 117.492 ms
Loss rate: 0.55%

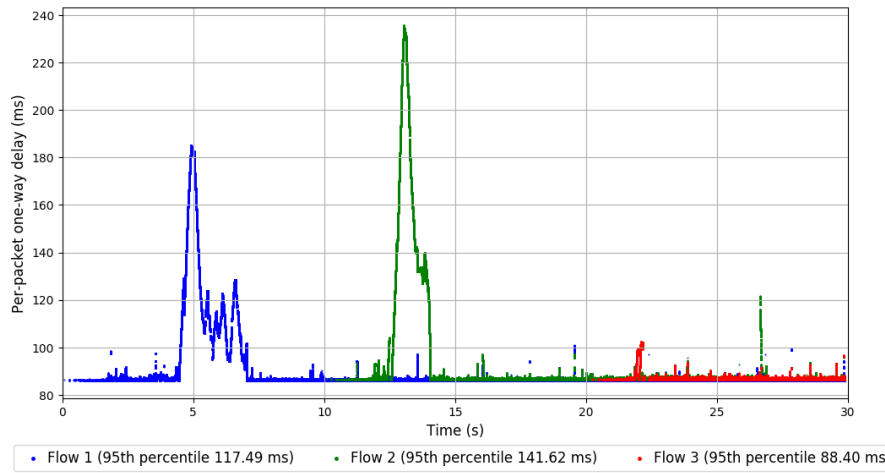
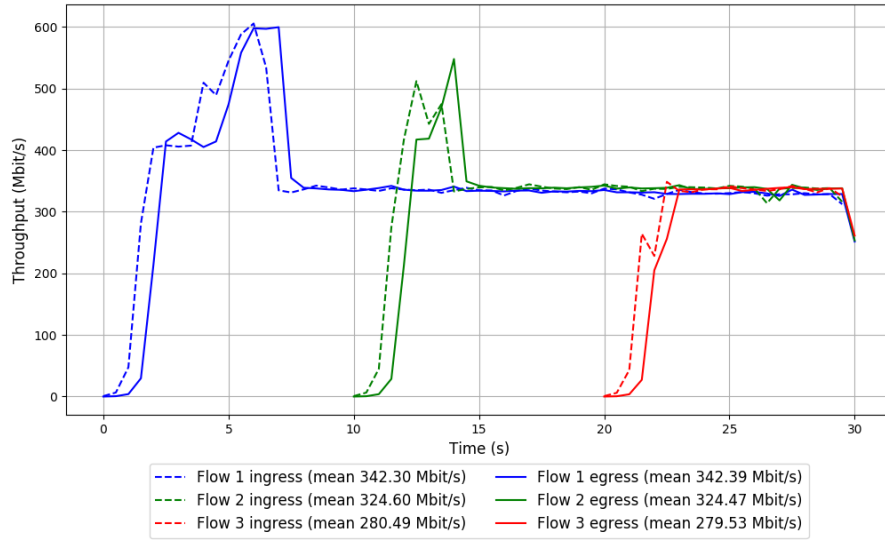
-- Flow 2:

Average throughput: 324.47 Mbit/s
95th percentile per-packet one-way delay: 141.620 ms
Loss rate: 0.91%

-- Flow 3:

Average throughput: 279.53 Mbit/s
95th percentile per-packet one-way delay: 88.396 ms
Loss rate: 2.09%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-05-29 23:31:36

End at: 2019-05-29 23:32:06

Local clock offset: -0.224 ms

Remote clock offset: 0.103 ms

Below is generated by plot.py at 2019-05-30 04:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 552.74 Mbit/s

95th percentile per-packet one-way delay: 104.206 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 279.97 Mbit/s

95th percentile per-packet one-way delay: 94.160 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 253.44 Mbit/s

95th percentile per-packet one-way delay: 90.612 ms

Loss rate: 0.90%

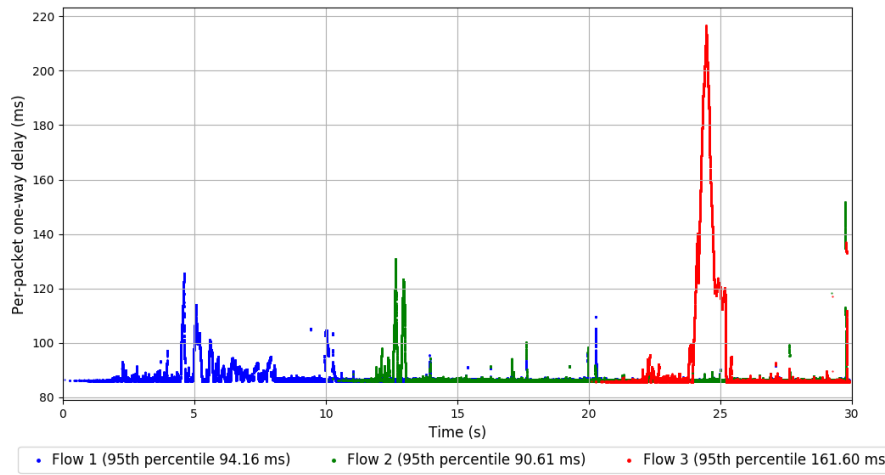
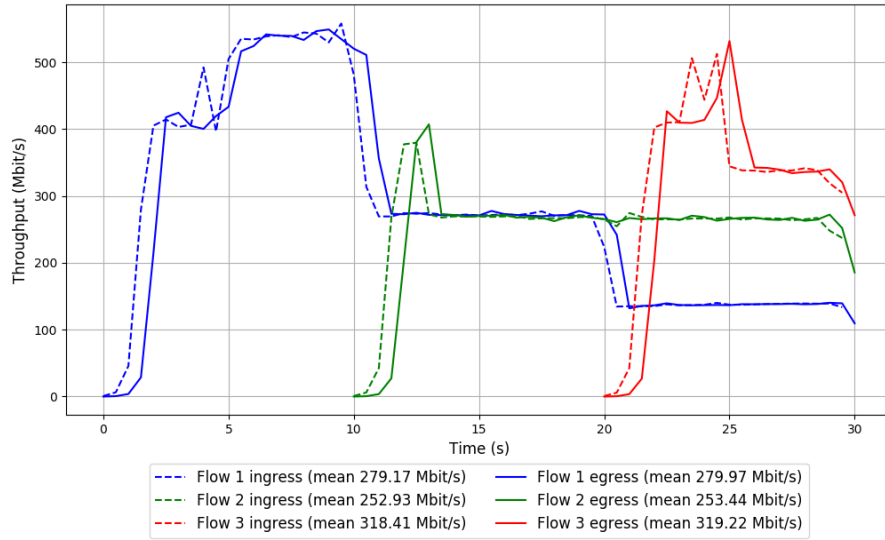
-- Flow 3:

Average throughput: 319.22 Mbit/s

95th percentile per-packet one-way delay: 161.598 ms

Loss rate: 1.48%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-05-30 00:07:59
End at: 2019-05-30 00:08:29
Local clock offset: 0.117 ms
Remote clock offset: -0.008 ms

Below is generated by plot.py at 2019-05-30 04:09:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 637.25 Mbit/s
95th percentile per-packet one-way delay: 103.681 ms
Loss rate: 0.65%

-- Flow 1:

Average throughput: 342.62 Mbit/s
95th percentile per-packet one-way delay: 110.435 ms
Loss rate: 0.32%

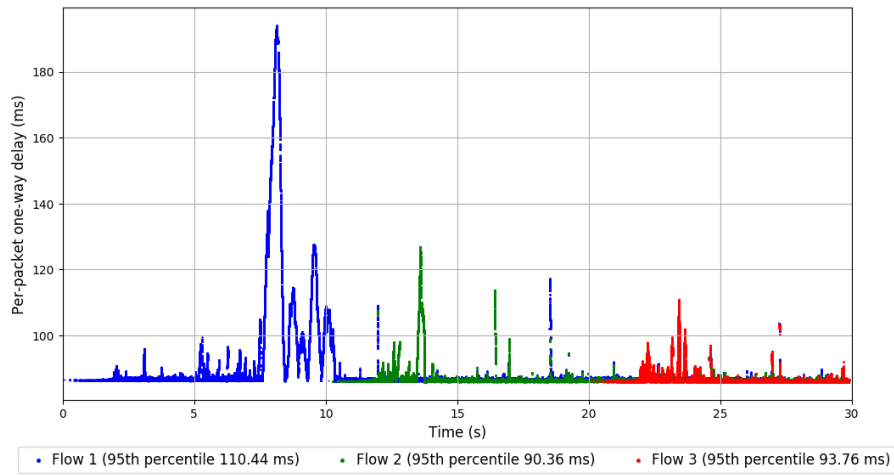
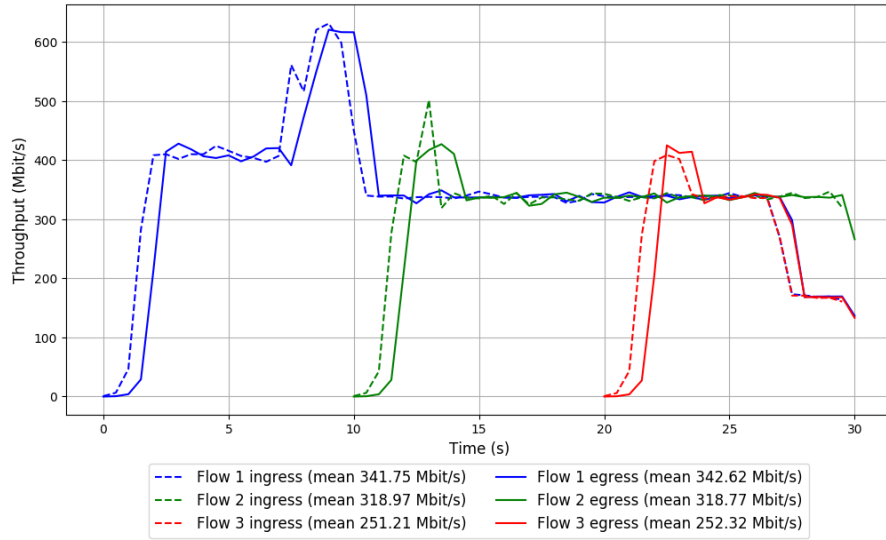
-- Flow 2:

Average throughput: 318.77 Mbit/s
95th percentile per-packet one-way delay: 90.364 ms
Loss rate: 0.92%

-- Flow 3:

Average throughput: 252.32 Mbit/s
95th percentile per-packet one-way delay: 93.764 ms
Loss rate: 1.29%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-05-30 00:44:30
End at: 2019-05-30 00:45:00
Local clock offset: -0.362 ms
Remote clock offset: -0.109 ms

Below is generated by plot.py at 2019-05-30 04:11:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 673.12 Mbit/s
95th percentile per-packet one-way delay: 127.502 ms
Loss rate: 0.77%

-- Flow 1:

Average throughput: 384.63 Mbit/s
95th percentile per-packet one-way delay: 141.056 ms
Loss rate: 0.55%

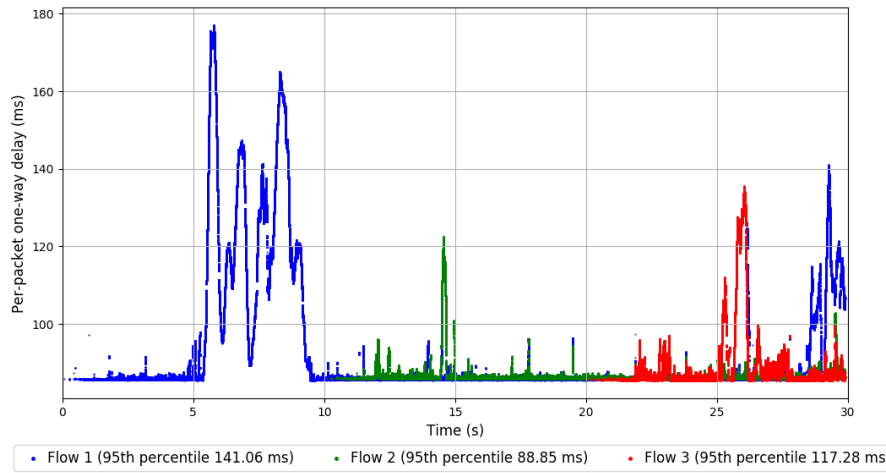
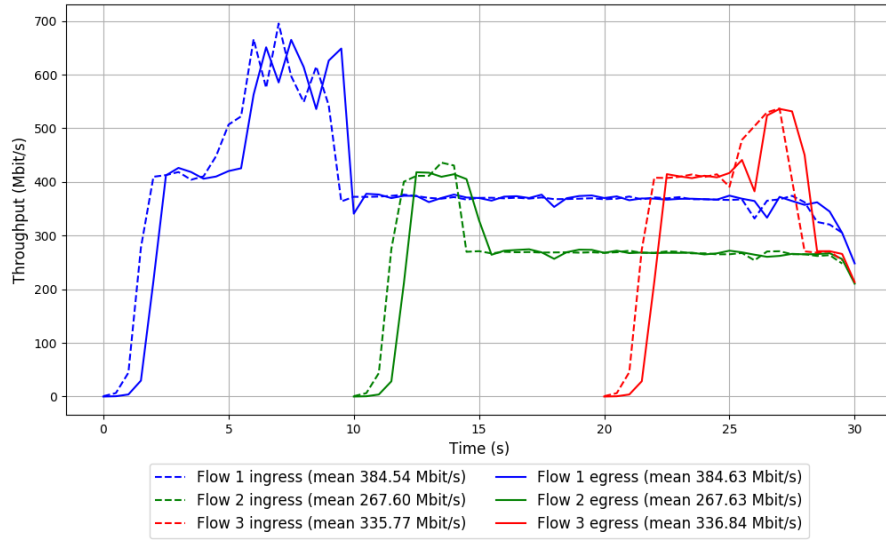
-- Flow 2:

Average throughput: 267.63 Mbit/s
95th percentile per-packet one-way delay: 88.853 ms
Loss rate: 0.85%

-- Flow 3:

Average throughput: 336.84 Mbit/s
95th percentile per-packet one-way delay: 117.283 ms
Loss rate: 1.40%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-05-30 01:21:46
End at: 2019-05-30 01:22:16
Local clock offset: -0.408 ms
Remote clock offset: -0.045 ms

Below is generated by plot.py at 2019-05-30 04:11:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 619.86 Mbit/s
95th percentile per-packet one-way delay: 91.355 ms
Loss rate: 1.05%

-- Flow 1:

Average throughput: 297.60 Mbit/s
95th percentile per-packet one-way delay: 89.722 ms
Loss rate: 0.51%

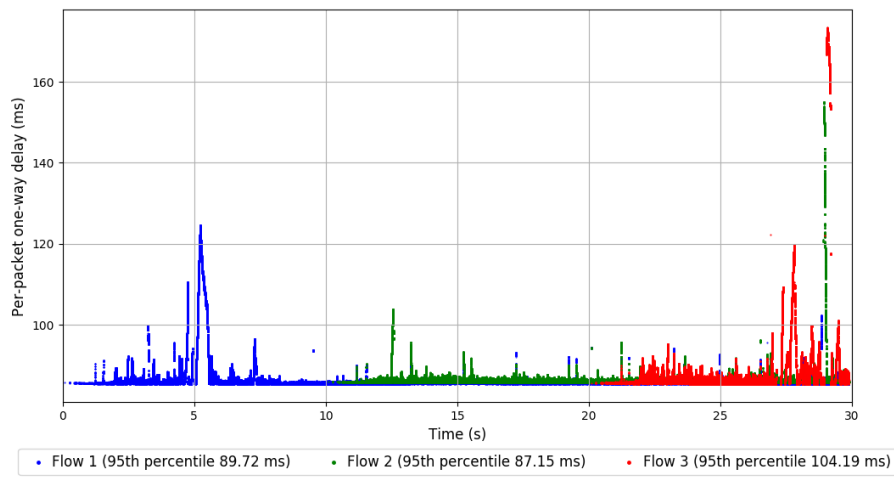
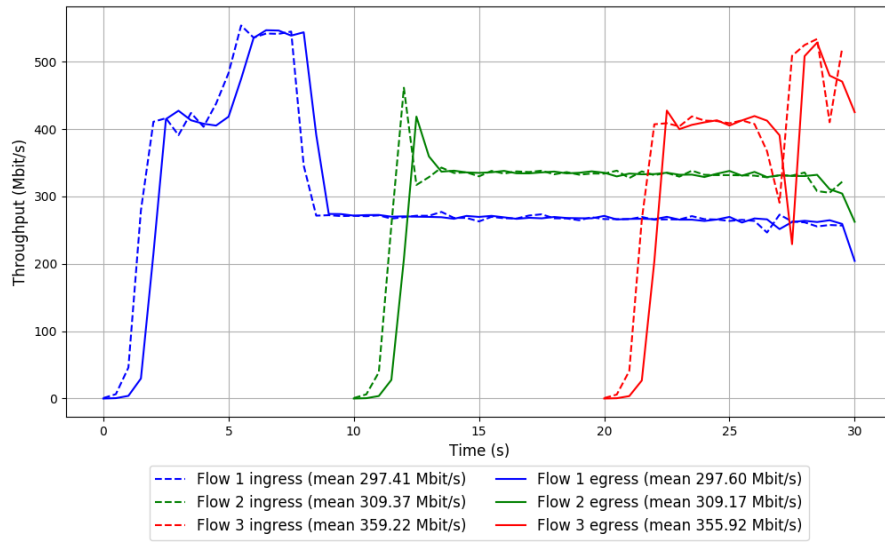
-- Flow 2:

Average throughput: 309.17 Mbit/s
95th percentile per-packet one-way delay: 87.146 ms
Loss rate: 0.93%

-- Flow 3:

Average throughput: 355.92 Mbit/s
95th percentile per-packet one-way delay: 104.194 ms
Loss rate: 2.62%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-05-29 23:08:04

End at: 2019-05-29 23:08:34

Local clock offset: 0.018 ms

Remote clock offset: 0.026 ms

Below is generated by plot.py at 2019-05-30 04:11:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.32 Mbit/s

95th percentile per-packet one-way delay: 199.905 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 89.94 Mbit/s

95th percentile per-packet one-way delay: 230.647 ms

Loss rate: 2.27%

-- Flow 2:

Average throughput: 76.27 Mbit/s

95th percentile per-packet one-way delay: 126.624 ms

Loss rate: 2.15%

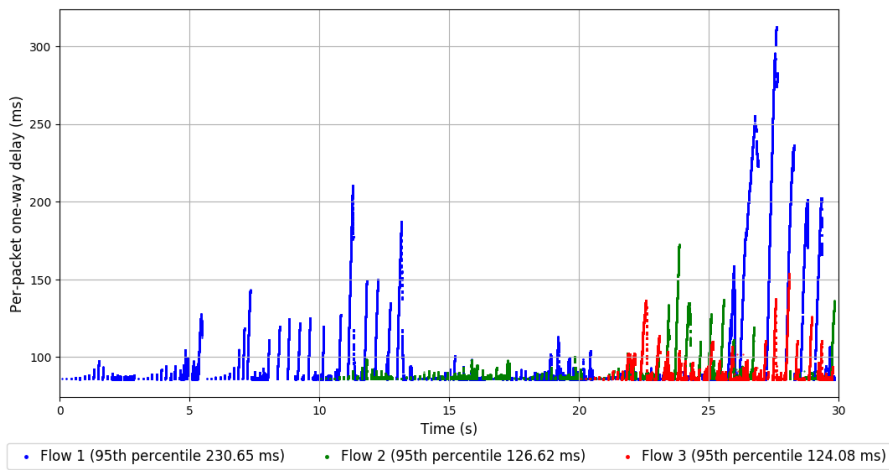
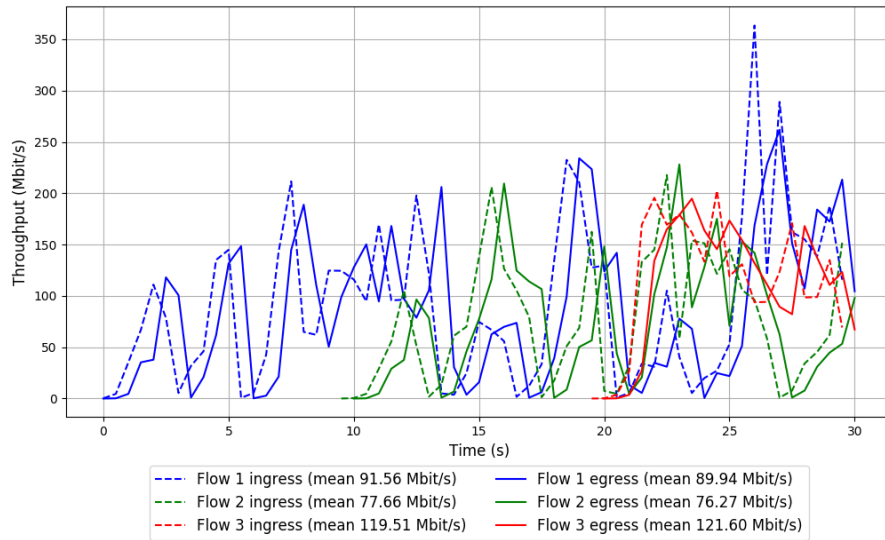
-- Flow 3:

Average throughput: 121.60 Mbit/s

95th percentile per-packet one-way delay: 124.082 ms

Loss rate: 0.58%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-05-29 23:44:00

End at: 2019-05-29 23:44:30

Local clock offset: 0.393 ms

Remote clock offset: 0.136 ms

Below is generated by plot.py at 2019-05-30 04:11:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.41 Mbit/s

95th percentile per-packet one-way delay: 244.748 ms

Loss rate: 3.25%

-- Flow 1:

Average throughput: 171.22 Mbit/s

95th percentile per-packet one-way delay: 240.801 ms

Loss rate: 3.97%

-- Flow 2:

Average throughput: 163.06 Mbit/s

95th percentile per-packet one-way delay: 251.944 ms

Loss rate: 2.28%

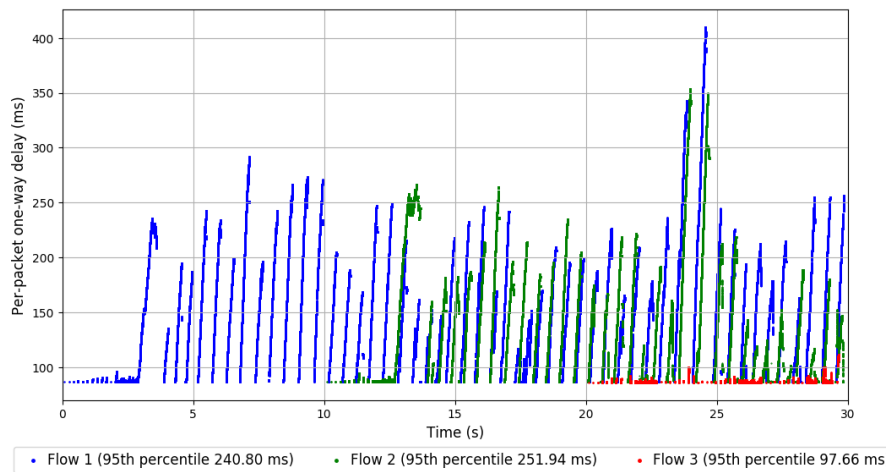
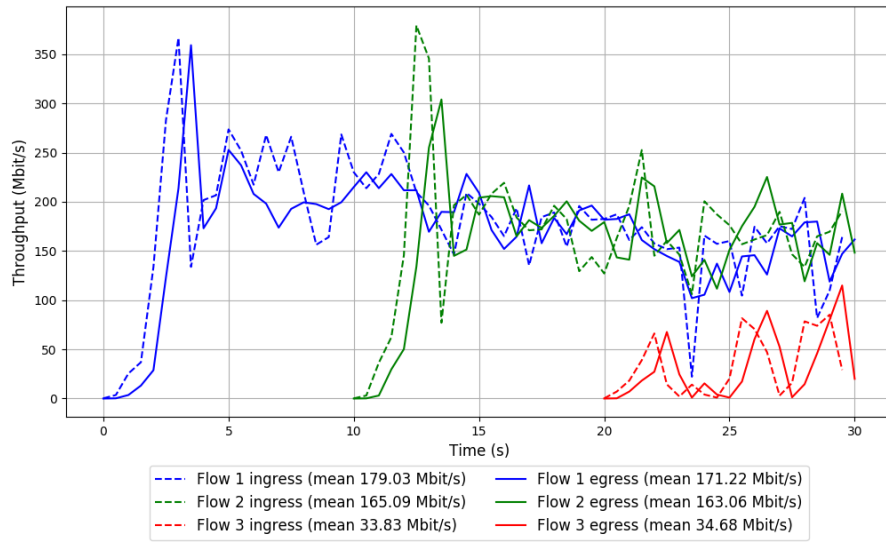
-- Flow 3:

Average throughput: 34.68 Mbit/s

95th percentile per-packet one-way delay: 97.661 ms

Loss rate: 1.35%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-05-30 00:20:33

End at: 2019-05-30 00:21:03

Local clock offset: 0.012 ms

Remote clock offset: 0.003 ms

Below is generated by plot.py at 2019-05-30 04:11:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 197.45 Mbit/s

95th percentile per-packet one-way delay: 173.150 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 133.23 Mbit/s

95th percentile per-packet one-way delay: 233.310 ms

Loss rate: 2.00%

-- Flow 2:

Average throughput: 73.95 Mbit/s

95th percentile per-packet one-way delay: 133.083 ms

Loss rate: 2.09%

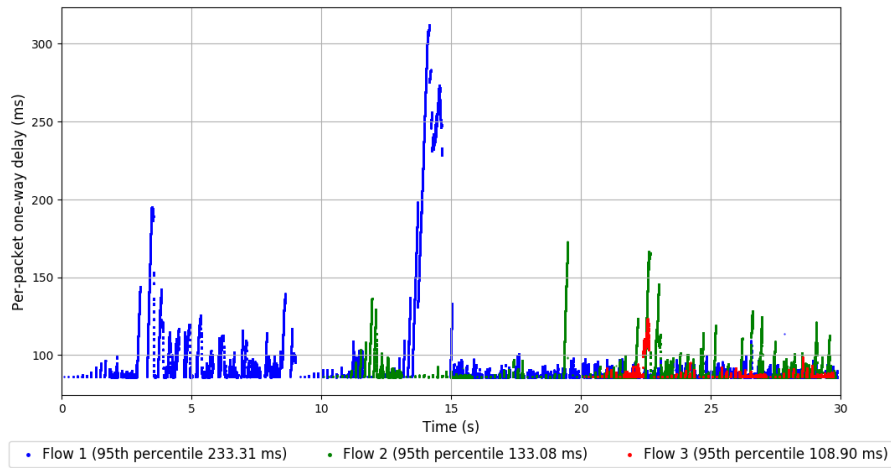
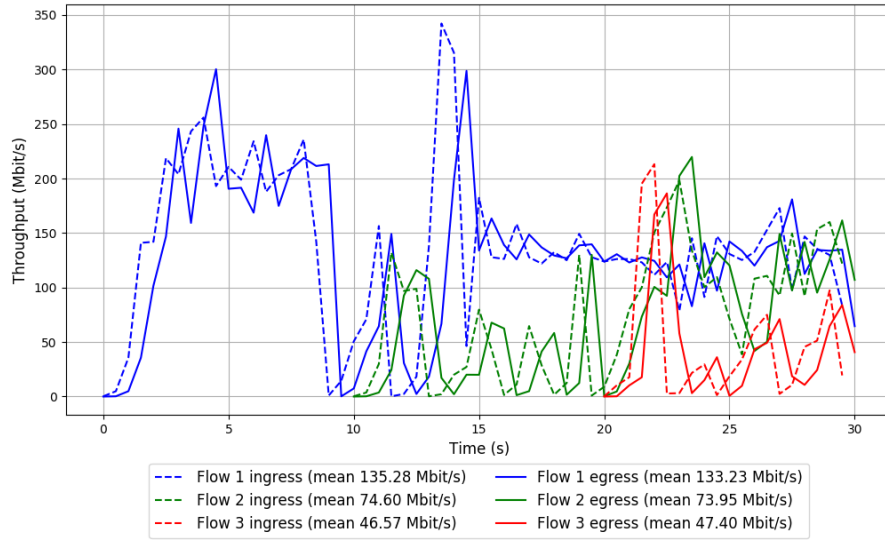
-- Flow 3:

Average throughput: 47.40 Mbit/s

95th percentile per-packet one-way delay: 108.902 ms

Loss rate: 0.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-05-30 00:57:11
End at: 2019-05-30 00:57:41
Local clock offset: -0.104 ms
Remote clock offset: -0.139 ms

Below is generated by plot.py at 2019-05-30 04:11:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 207.89 Mbit/s
95th percentile per-packet one-way delay: 151.268 ms
Loss rate: 0.22%

-- Flow 1:

Average throughput: 111.94 Mbit/s
95th percentile per-packet one-way delay: 161.844 ms
Loss rate: 0.16%

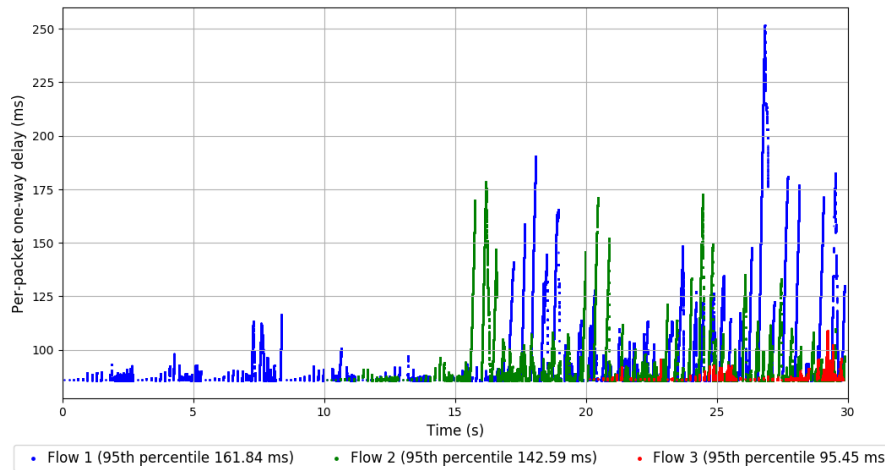
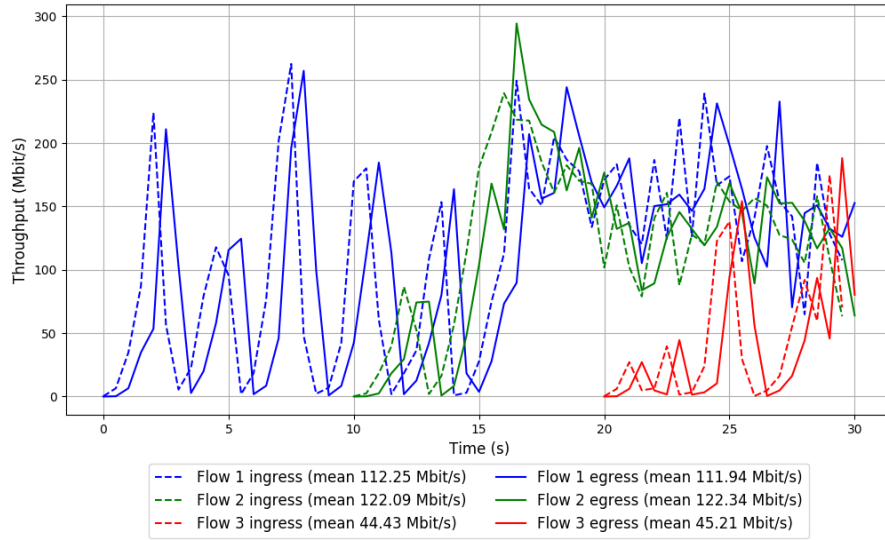
-- Flow 2:

Average throughput: 122.34 Mbit/s
95th percentile per-packet one-way delay: 142.588 ms
Loss rate: 0.33%

-- Flow 3:

Average throughput: 45.21 Mbit/s
95th percentile per-packet one-way delay: 95.455 ms
Loss rate: 0.01%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-05-30 01:34:16

End at: 2019-05-30 01:34:46

Local clock offset: -0.347 ms

Remote clock offset: 0.01 ms

Below is generated by plot.py at 2019-05-30 04:11:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 264.04 Mbit/s

95th percentile per-packet one-way delay: 229.391 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 169.52 Mbit/s

95th percentile per-packet one-way delay: 238.856 ms

Loss rate: 2.42%

-- Flow 2:

Average throughput: 126.79 Mbit/s

95th percentile per-packet one-way delay: 188.684 ms

Loss rate: 0.54%

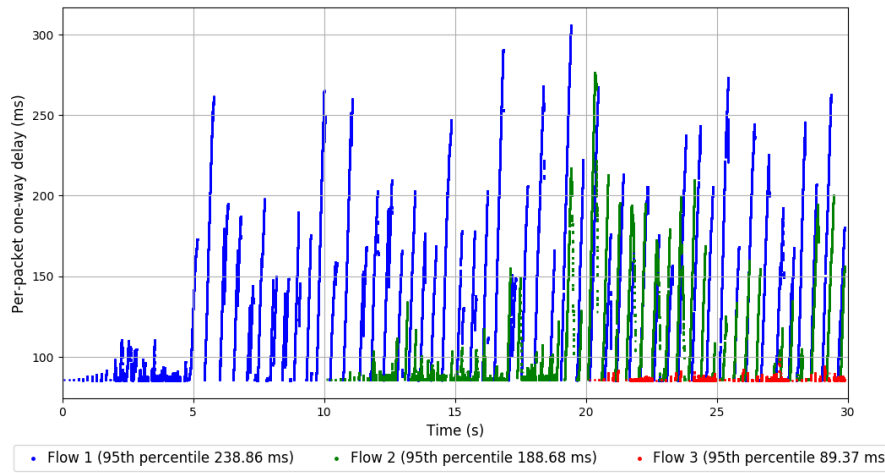
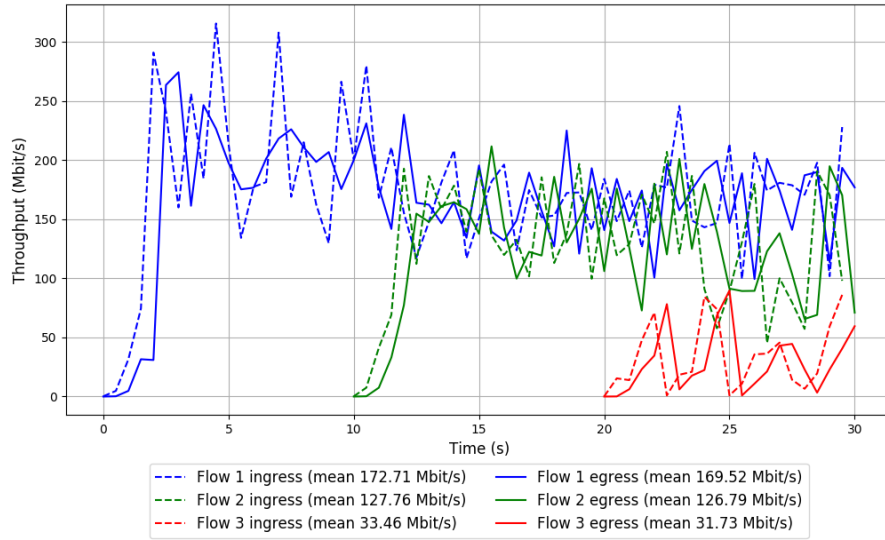
-- Flow 3:

Average throughput: 31.73 Mbit/s

95th percentile per-packet one-way delay: 89.374 ms

Loss rate: 6.85%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-05-29 22:52:40

End at: 2019-05-29 22:53:10

Local clock offset: 0.246 ms

Remote clock offset: 0.041 ms

Below is generated by plot.py at 2019-05-30 04:12:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.87 Mbit/s

95th percentile per-packet one-way delay: 127.095 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 189.67 Mbit/s

95th percentile per-packet one-way delay: 119.557 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 187.48 Mbit/s

95th percentile per-packet one-way delay: 137.020 ms

Loss rate: 1.19%

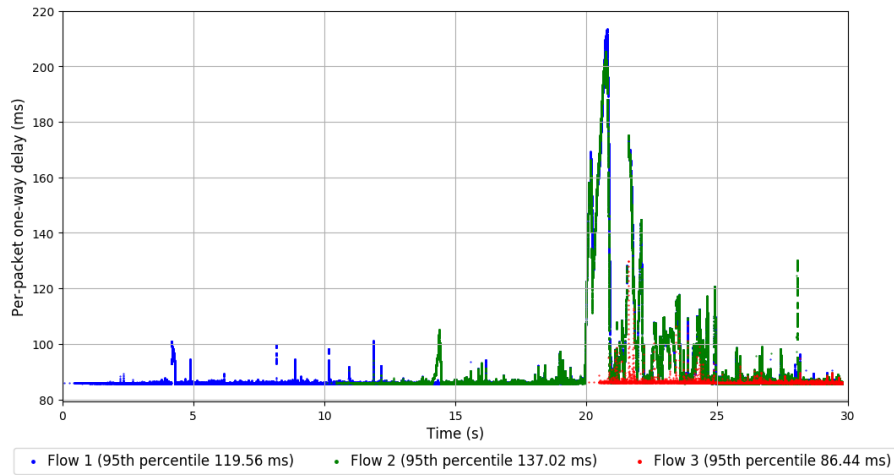
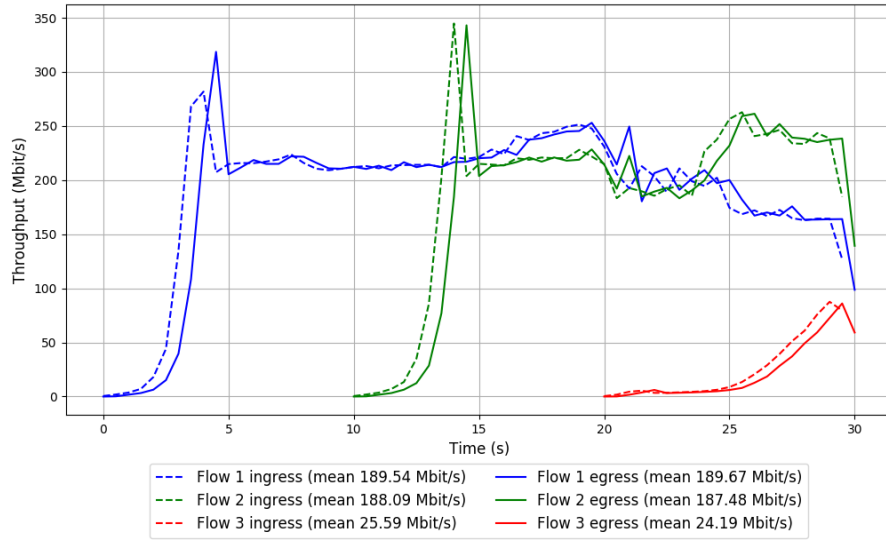
-- Flow 3:

Average throughput: 24.19 Mbit/s

95th percentile per-packet one-way delay: 86.438 ms

Loss rate: 7.16%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-05-29 23:28:25

End at: 2019-05-29 23:28:55

Local clock offset: 0.4 ms

Remote clock offset: 0.072 ms

Below is generated by plot.py at 2019-05-30 04:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 512.88 Mbit/s

95th percentile per-packet one-way delay: 96.504 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 287.74 Mbit/s

95th percentile per-packet one-way delay: 107.418 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 269.14 Mbit/s

95th percentile per-packet one-way delay: 91.597 ms

Loss rate: 1.12%

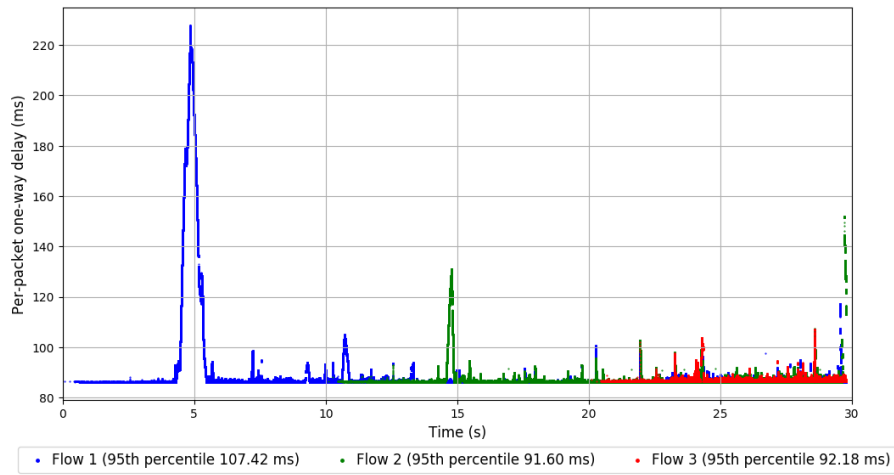
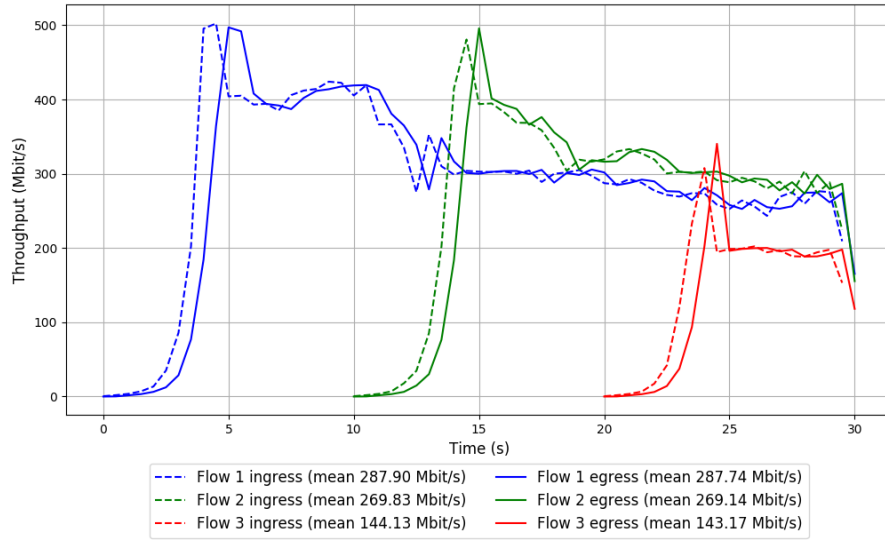
-- Flow 3:

Average throughput: 143.17 Mbit/s

95th percentile per-packet one-way delay: 92.177 ms

Loss rate: 2.41%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-05-30 00:04:55
End at: 2019-05-30 00:05:25
Local clock offset: -0.04 ms
Remote clock offset: -0.027 ms

Below is generated by plot.py at 2019-05-30 04:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 413.02 Mbit/s
95th percentile per-packet one-way delay: 89.163 ms
Loss rate: 1.11%

-- Flow 1:

Average throughput: 228.12 Mbit/s
95th percentile per-packet one-way delay: 88.239 ms
Loss rate: 0.89%

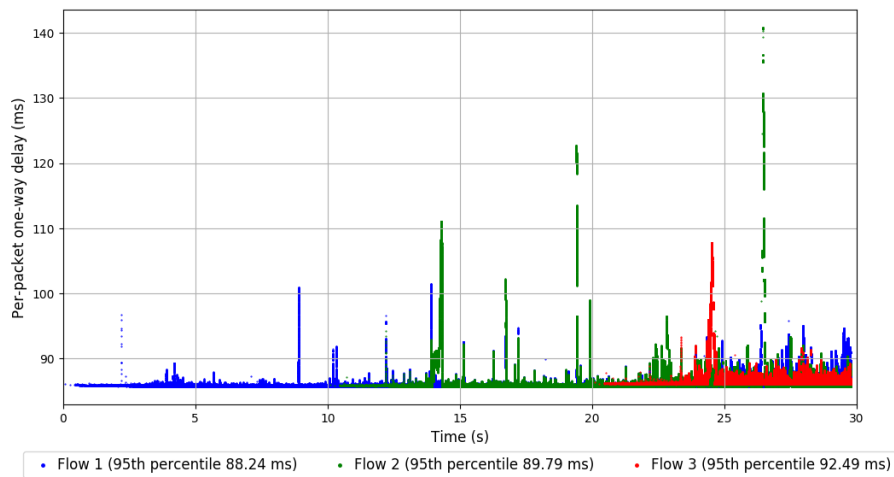
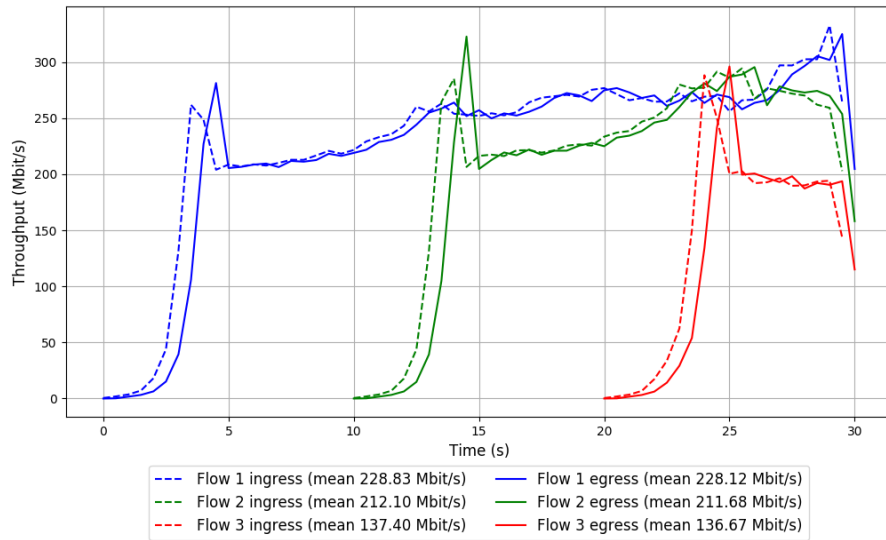
-- Flow 2:

Average throughput: 211.68 Mbit/s
95th percentile per-packet one-way delay: 89.790 ms
Loss rate: 1.07%

-- Flow 3:

Average throughput: 136.67 Mbit/s
95th percentile per-packet one-way delay: 92.491 ms
Loss rate: 2.31%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-05-30 00:41:26
End at: 2019-05-30 00:41:56
Local clock offset: -0.121 ms
Remote clock offset: -0.113 ms

Below is generated by plot.py at 2019-05-30 04:14:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 423.08 Mbit/s
95th percentile per-packet one-way delay: 94.163 ms
Loss rate: 1.00%

-- Flow 1:

Average throughput: 295.26 Mbit/s
95th percentile per-packet one-way delay: 111.311 ms
Loss rate: 0.68%

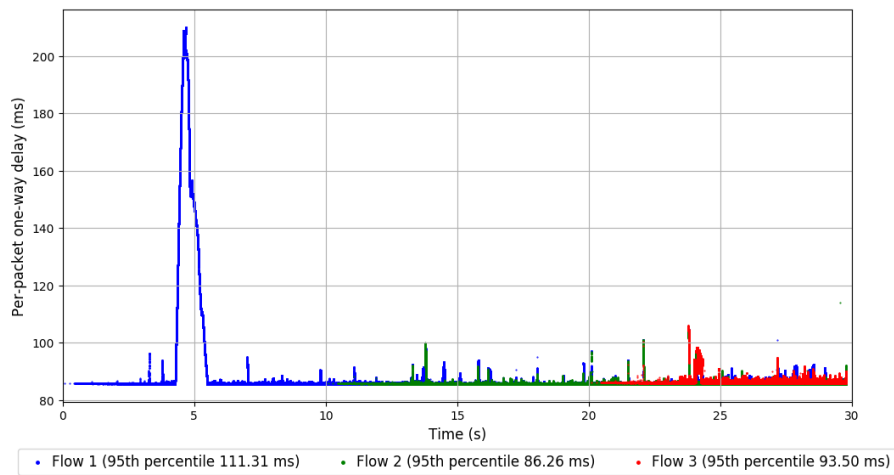
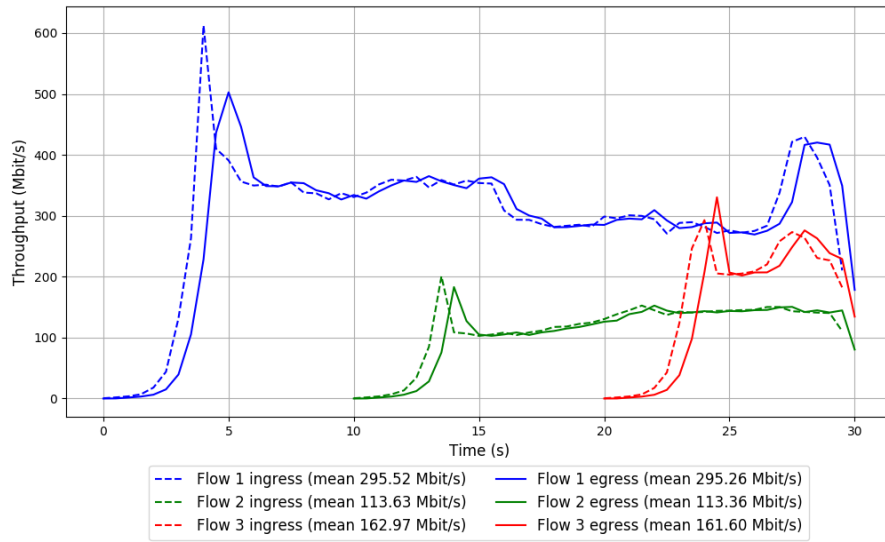
-- Flow 2:

Average throughput: 113.36 Mbit/s
95th percentile per-packet one-way delay: 86.256 ms
Loss rate: 1.12%

-- Flow 3:

Average throughput: 161.60 Mbit/s
95th percentile per-packet one-way delay: 93.501 ms
Loss rate: 2.63%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-05-30 01:18:37
End at: 2019-05-30 01:19:07
Local clock offset: 0.06 ms
Remote clock offset: -0.061 ms

Below is generated by plot.py at 2019-05-30 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 495.22 Mbit/s
95th percentile per-packet one-way delay: 99.030 ms
Loss rate: 0.87%

-- Flow 1:

Average throughput: 310.54 Mbit/s
95th percentile per-packet one-way delay: 97.877 ms
Loss rate: 0.60%

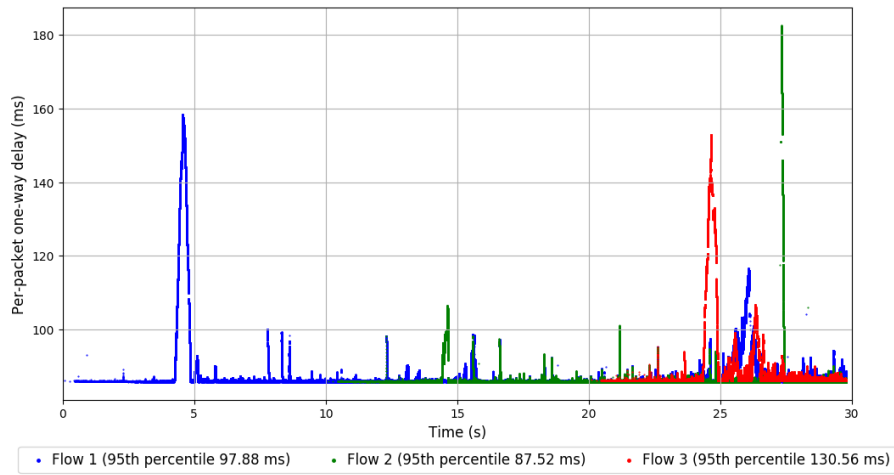
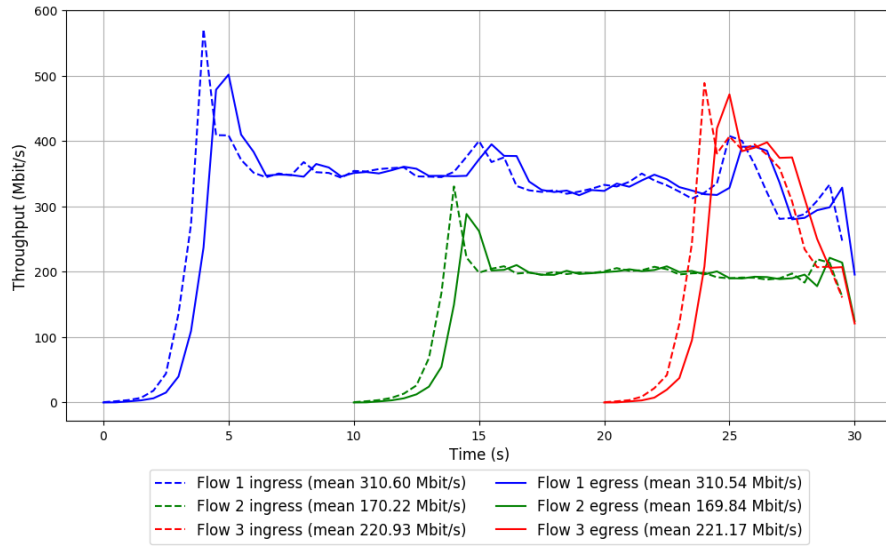
-- Flow 2:

Average throughput: 169.84 Mbit/s
95th percentile per-packet one-way delay: 87.522 ms
Loss rate: 1.09%

-- Flow 3:

Average throughput: 221.17 Mbit/s
95th percentile per-packet one-way delay: 130.562 ms
Loss rate: 1.71%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-05-29 22:45:43

End at: 2019-05-29 22:46:13

Local clock offset: 0.723 ms

Remote clock offset: 0.049 ms

Below is generated by plot.py at 2019-05-30 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 86.590 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 86.291 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.639 ms

Loss rate: 0.00%

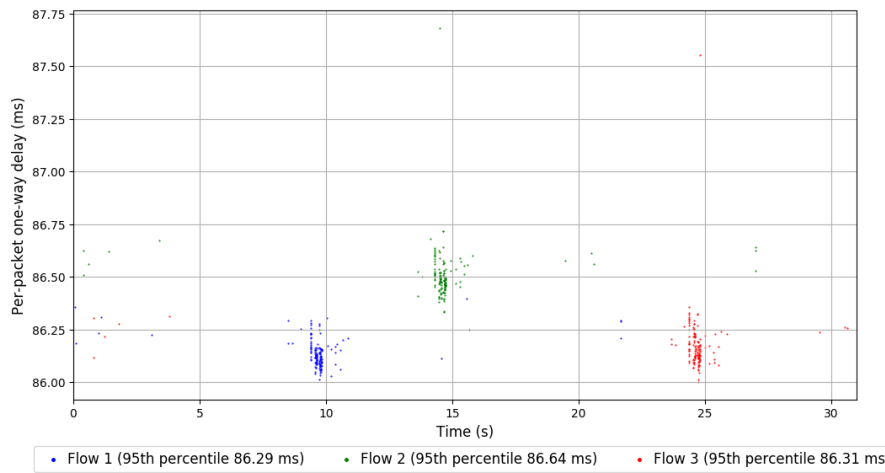
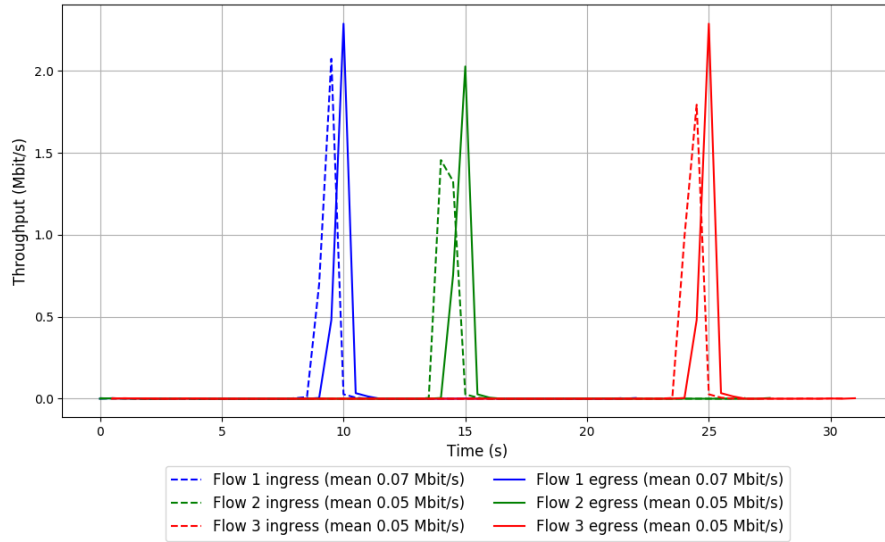
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.311 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-05-29 23:22:09

End at: 2019-05-29 23:22:39

Local clock offset: -0.027 ms

Remote clock offset: 0.005 ms

Below is generated by plot.py at 2019-05-30 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 86.366 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.092 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.418 ms

Loss rate: 0.00%

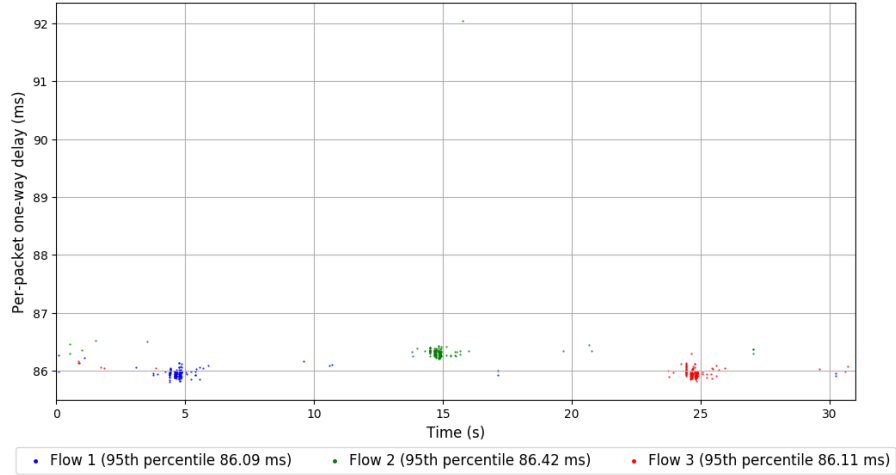
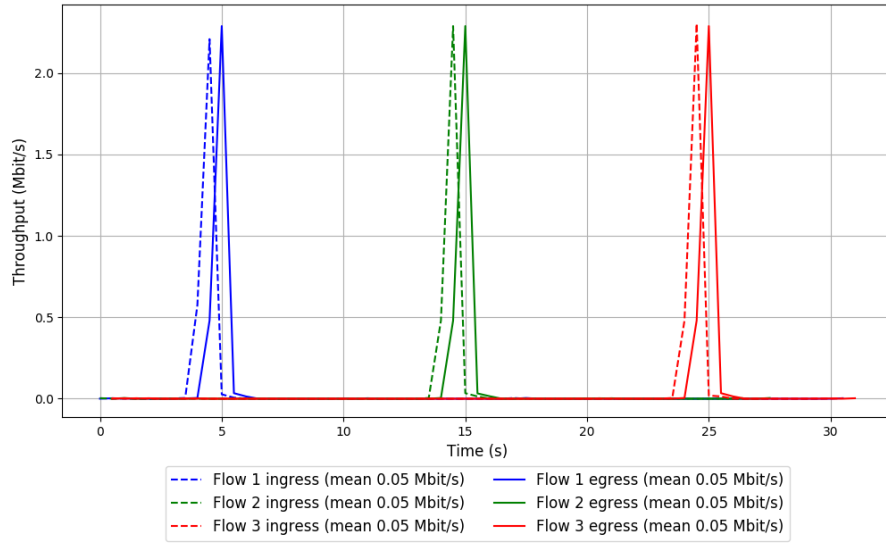
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.114 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-05-29 23:57:56

End at: 2019-05-29 23:58:26

Local clock offset: -0.039 ms

Remote clock offset: 0.032 ms

Below is generated by plot.py at 2019-05-30 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 86.421 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 87.274 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.012 ms

Loss rate: 0.00%

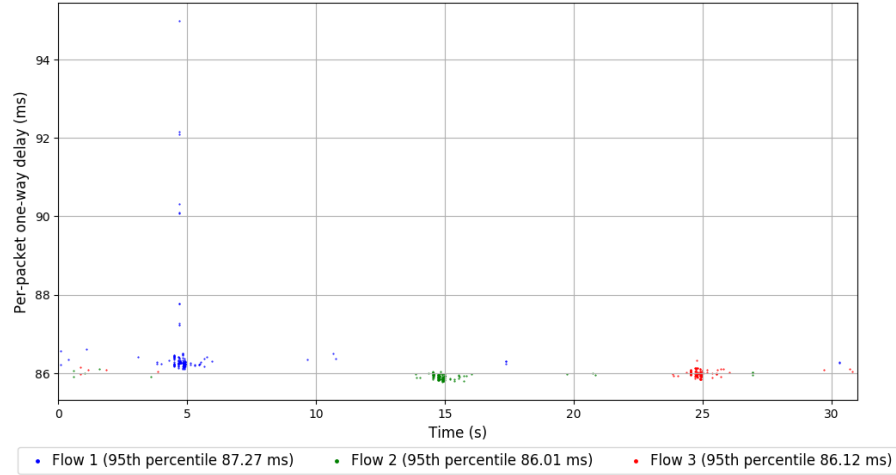
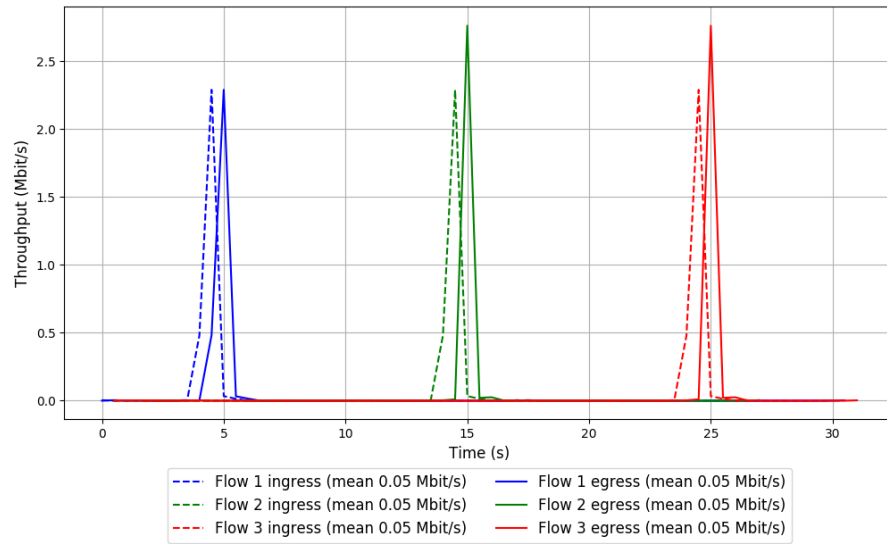
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.118 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-05-30 00:34:41
End at: 2019-05-30 00:35:11
Local clock offset: 0.208 ms
Remote clock offset: -0.096 ms

Below is generated by plot.py at 2019-05-30 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 86.662 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.719 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.458 ms

Loss rate: 0.00%

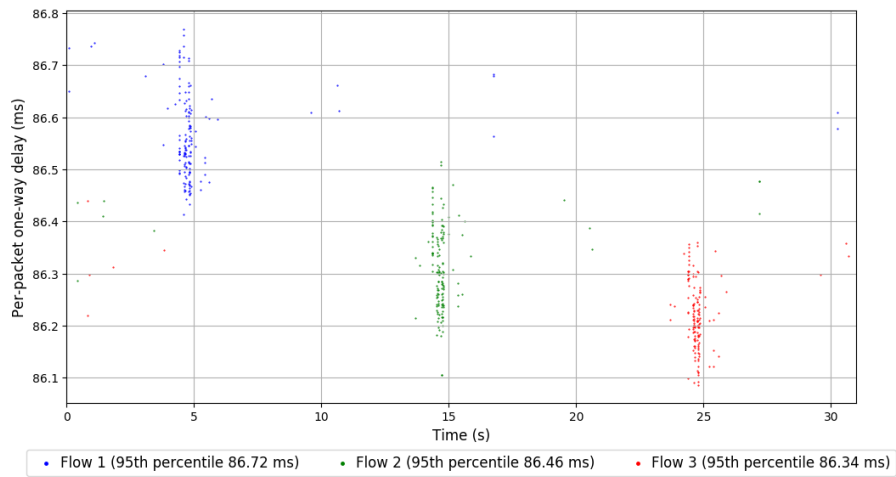
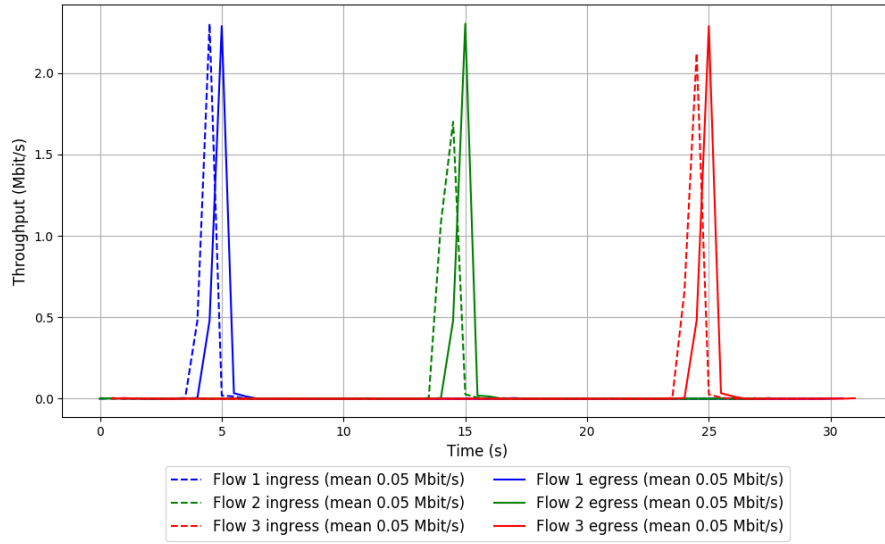
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.344 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-05-30 01:11:32
End at: 2019-05-30 01:12:02
Local clock offset: 0.061 ms
Remote clock offset: -0.036 ms

Below is generated by plot.py at 2019-05-30 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.503 ms
Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.425 ms
Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.645 ms
Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.142 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

