

## Pantheon Report

Generated at 2019-05-30 03:30:10 (UTC).

Data path: AWS India 2 on `ens5` (*local*) → Saudi Arabia on `enp2s0` (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

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

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

### System info:

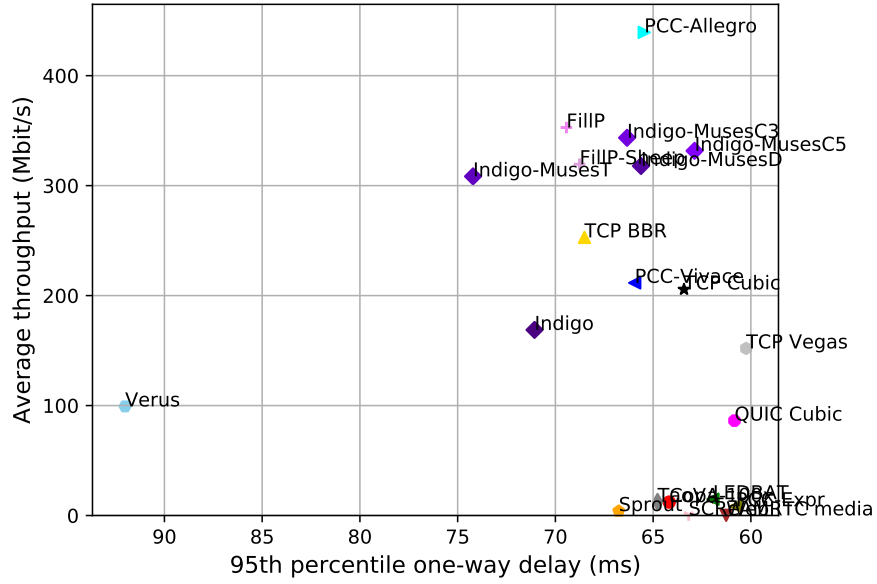
```
Linux 4.15.0-1035-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

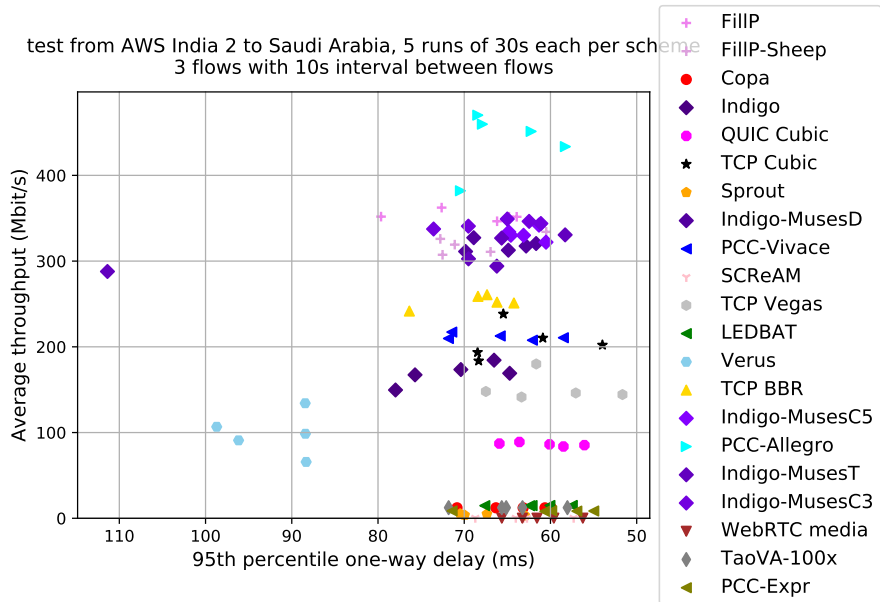
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
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 AWS India 2 to Saudi Arabia, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS India 2 to Saudi Arabia, 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	211.49	48.53	30.46	69.59	63.14	63.44	13.01	21.58	23.83
Copa	5	8.28	5.55	0.76	64.53	63.63	64.86	67.87	77.56	89.71
TCP Cubic	5	114.60	89.08	95.20	63.13	63.68	63.36	1.66	1.52	1.74
FillP	5	241.31	118.64	98.50	69.42	68.43	68.76	22.62	24.81	25.56
FillP-Sheep	5	230.91	80.31	106.14	68.08	67.90	68.61	14.64	10.86	15.77
Indigo	5	77.98	101.52	74.03	71.01	72.63	66.48	9.35	16.57	27.99
Indigo-MusesC3	5	334.97	8.11	11.67	66.15	65.17	65.69	13.20	9.95	9.27
Indigo-MusesC5	5	330.80	0.90	0.92	62.88	63.09	63.56	26.45	29.80	30.37
Indigo-MusesD	5	287.40	27.70	42.65	65.76	65.24	64.19	12.91	9.86	11.41
Indigo-MusesT	5	274.49	39.56	30.50	74.43	64.84	64.75	11.07	8.36	6.70
LEDBAT	5	9.58	6.37	3.11	62.06	61.31	60.79	0.01	0.00	0.00
PCC-Allegro	5	390.58	45.51	56.22	64.73	65.53	64.53	5.43	2.81	3.57
PCC-Expr	5	0.01	10.37	4.72	58.99	60.76	60.78	82.28	31.54	29.40
QUIC Cubic	5	51.37	38.90	28.05	59.52	60.80	60.80	0.00	0.03	0.00
SCReAM	5	0.22	0.22	0.22	61.69	61.82	62.36	0.00	0.00	0.00
Sprout	5	2.04	2.21	1.69	65.88	66.35	64.81	0.00	0.00	0.00
TaoVA-100x	5	6.67	5.36	7.34	68.52	61.84	61.66	38.15	51.46	89.84
TCP Vegas	5	81.09	80.20	52.42	60.44	59.59	60.71	1.68	1.70	2.83
Verus	5	74.57	25.80	25.13	93.90	76.87	70.68	57.29	32.82	33.51
PCC-Vivace	5	181.22	39.06	13.34	66.01	64.89	65.77	1.96	0.79	0.76
WebRTC media	5	0.05	0.05	0.05	61.64	60.92	61.75	0.00	0.00	0.00



Run 1: Statistics of TCP BBR

Start at: 2019-05-30 00:38:55  
End at: 2019-05-30 00:39:25  
Local clock offset: 4.116 ms  
Remote clock offset: -36.494 ms

# Below is generated by plot.py at 2019-05-30 03:04:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 251.16 Mbit/s  
95th percentile per-packet one-way delay: 64.240 ms  
Loss rate: 13.45%

-- Flow 1:

Average throughput: 207.29 Mbit/s  
95th percentile per-packet one-way delay: 64.871 ms  
Loss rate: 11.78%

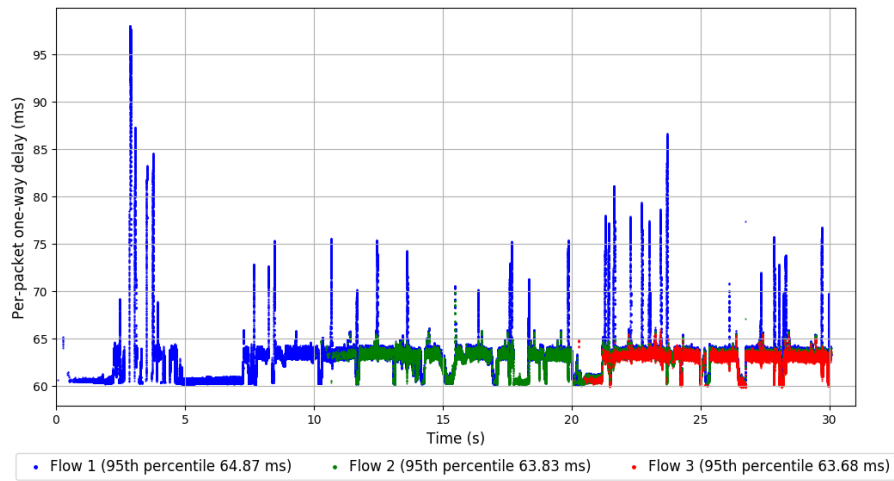
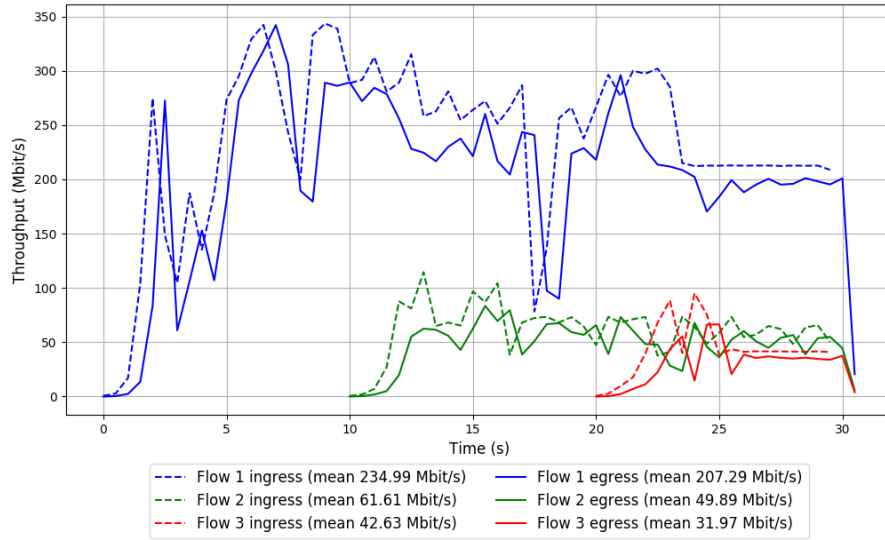
-- Flow 2:

Average throughput: 49.89 Mbit/s  
95th percentile per-packet one-way delay: 63.832 ms  
Loss rate: 19.03%

-- Flow 3:

Average throughput: 31.97 Mbit/s  
95th percentile per-packet one-way delay: 63.682 ms  
Loss rate: 24.98%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-05-30 01:09:25  
End at: 2019-05-30 01:09:55  
Local clock offset: 1.465 ms  
Remote clock offset: -40.454 ms

# Below is generated by plot.py at 2019-05-30 03:04:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 252.12 Mbit/s  
95th percentile per-packet one-way delay: 66.199 ms  
Loss rate: 15.26%

-- Flow 1:

Average throughput: 209.37 Mbit/s  
95th percentile per-packet one-way delay: 67.235 ms  
Loss rate: 12.82%

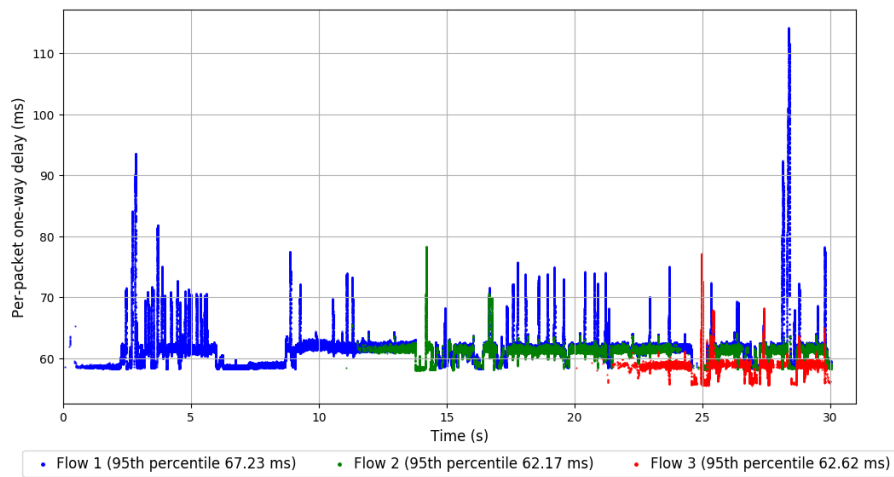
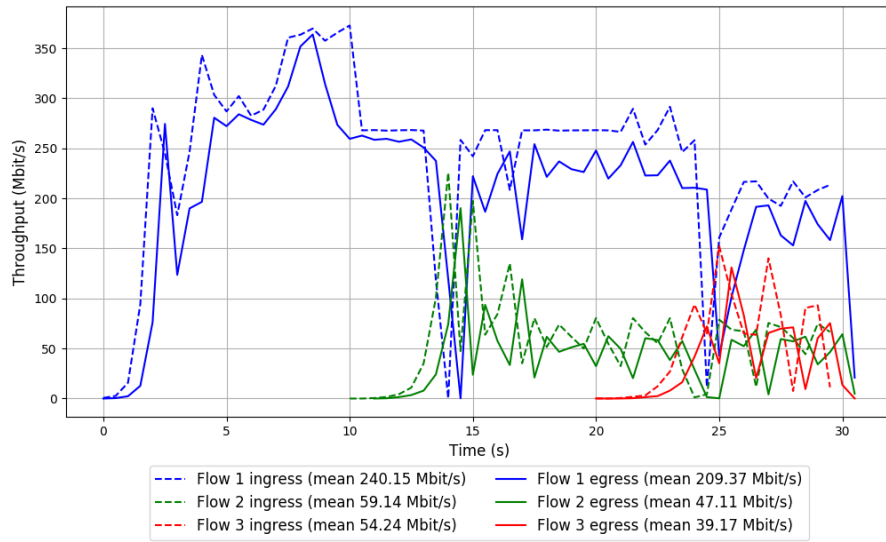
-- Flow 2:

Average throughput: 47.11 Mbit/s  
95th percentile per-packet one-way delay: 62.166 ms  
Loss rate: 24.42%

-- Flow 3:

Average throughput: 39.17 Mbit/s  
95th percentile per-packet one-way delay: 62.617 ms  
Loss rate: 27.80%

## Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-05-30 01:39:55  
End at: 2019-05-30 01:40:25  
Local clock offset: -1.679 ms  
Remote clock offset: -38.281 ms

# Below is generated by plot.py at 2019-05-30 03:04:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 241.74 Mbit/s  
95th percentile per-packet one-way delay: 76.364 ms  
Loss rate: 13.52%

-- Flow 1:

Average throughput: 215.47 Mbit/s  
95th percentile per-packet one-way delay: 76.948 ms  
Loss rate: 12.55%

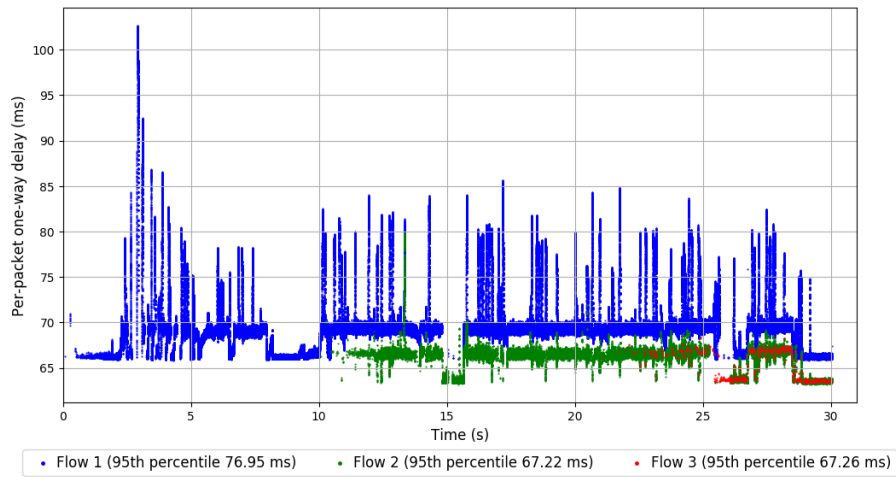
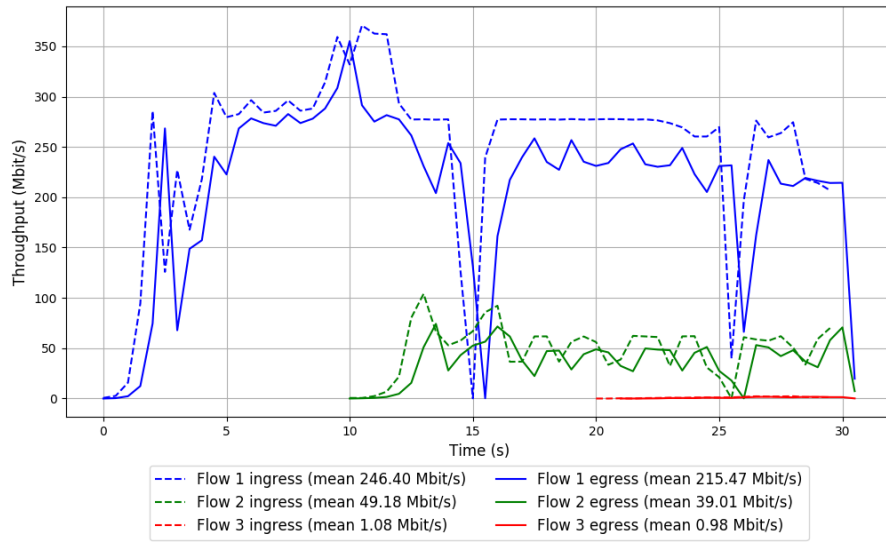
-- Flow 2:

Average throughput: 39.01 Mbit/s  
95th percentile per-packet one-way delay: 67.219 ms  
Loss rate: 20.69%

-- Flow 3:

Average throughput: 0.98 Mbit/s  
95th percentile per-packet one-way delay: 67.260 ms  
Loss rate: 18.68%

### Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-05-30 02:10:19  
End at: 2019-05-30 02:10:49  
Local clock offset: -1.643 ms  
Remote clock offset: -44.446 ms

# Below is generated by plot.py at 2019-05-30 03:04:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 260.82 Mbit/s  
95th percentile per-packet one-way delay: 67.358 ms  
Loss rate: 17.75%

-- Flow 1:

Average throughput: 210.03 Mbit/s  
95th percentile per-packet one-way delay: 68.709 ms  
Loss rate: 15.72%

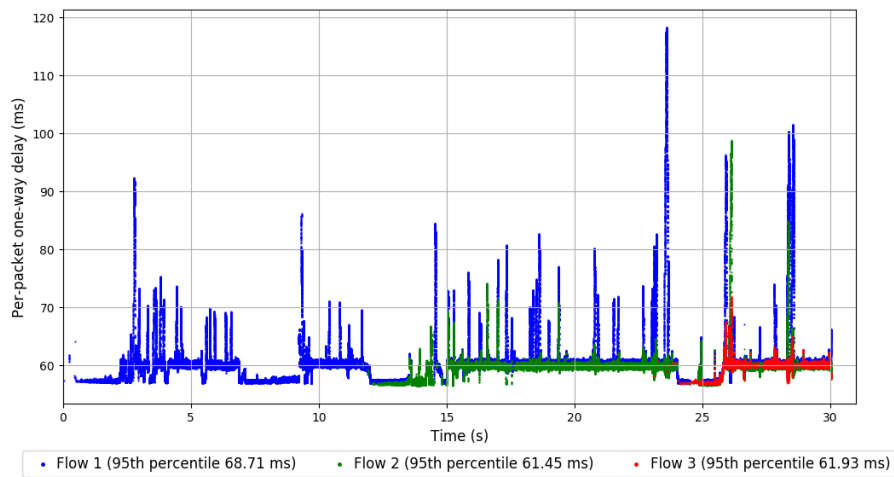
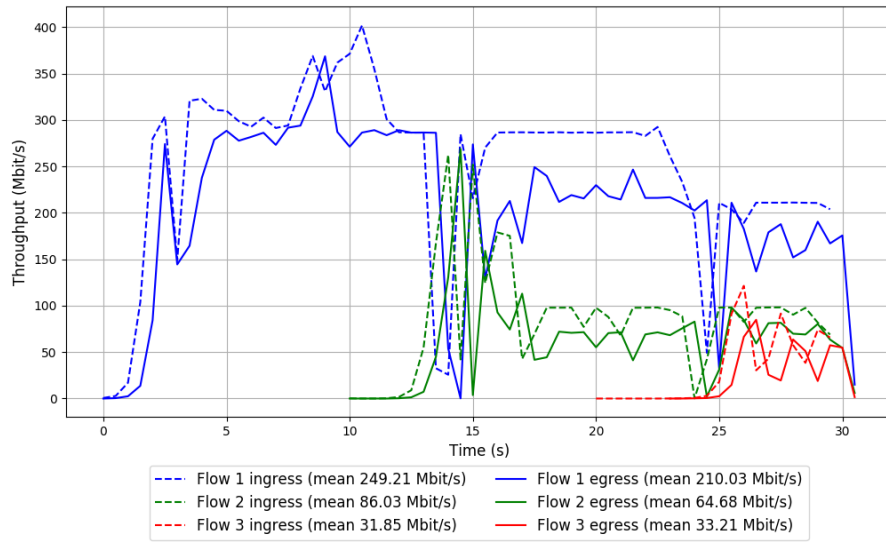
-- Flow 2:

Average throughput: 64.68 Mbit/s  
95th percentile per-packet one-way delay: 61.452 ms  
Loss rate: 24.82%

-- Flow 3:

Average throughput: 33.21 Mbit/s  
95th percentile per-packet one-way delay: 61.932 ms  
Loss rate: 27.31%

### Run 4: Report of TCP BBR — Data Link





Run 5: Statistics of TCP BBR

Start at: 2019-05-30 02:40:43  
End at: 2019-05-30 02:41:13  
Local clock offset: -1.473 ms  
Remote clock offset: -42.803 ms

# Below is generated by plot.py at 2019-05-30 03:04:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 258.88 Mbit/s  
95th percentile per-packet one-way delay: 68.407 ms  
Loss rate: 13.51%

-- Flow 1:

Average throughput: 215.29 Mbit/s  
95th percentile per-packet one-way delay: 70.179 ms  
Loss rate: 12.20%

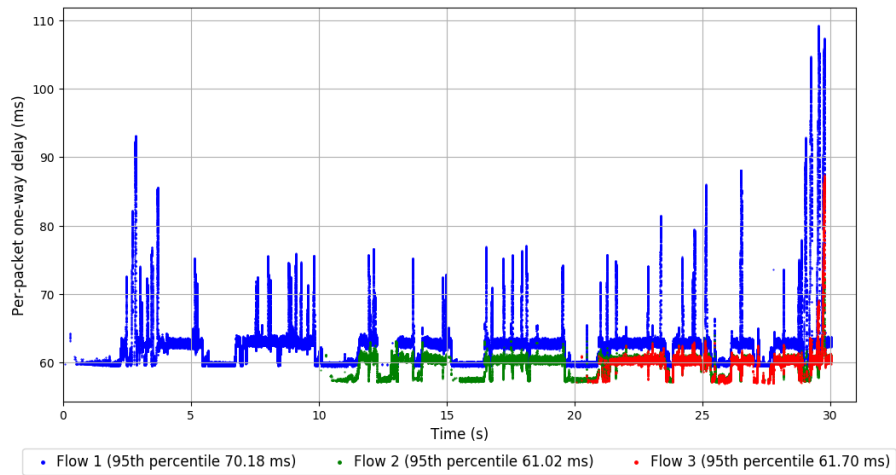
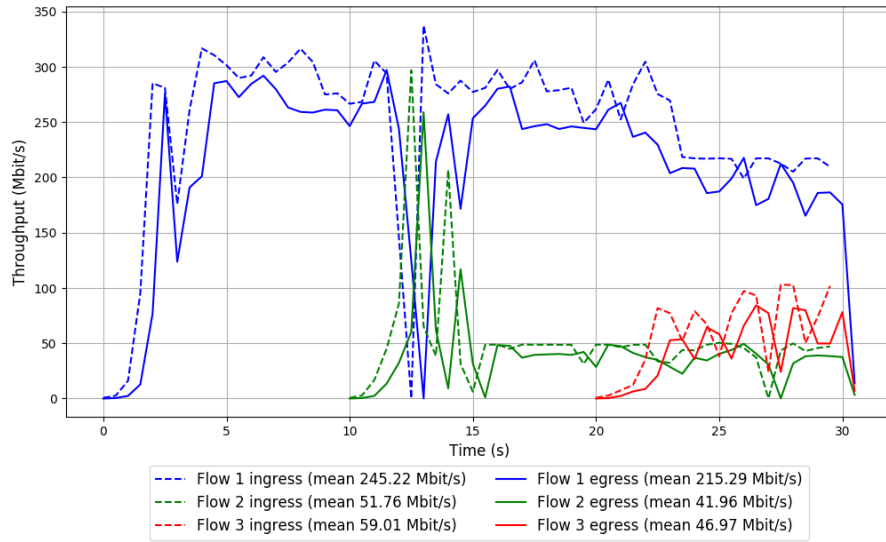
-- Flow 2:

Average throughput: 41.96 Mbit/s  
95th percentile per-packet one-way delay: 61.020 ms  
Loss rate: 18.93%

-- Flow 3:

Average throughput: 46.97 Mbit/s  
95th percentile per-packet one-way delay: 61.701 ms  
Loss rate: 20.37%

### Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-05-30 00:53:05  
End at: 2019-05-30 00:53:35  
Local clock offset: 1.477 ms  
Remote clock offset: -36.069 ms

# Below is generated by plot.py at 2019-05-30 03:04:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.20 Mbit/s  
95th percentile per-packet one-way delay: 63.172 ms  
Loss rate: 71.39%

-- Flow 1:

Average throughput: 8.46 Mbit/s  
95th percentile per-packet one-way delay: 63.284 ms  
Loss rate: 67.52%

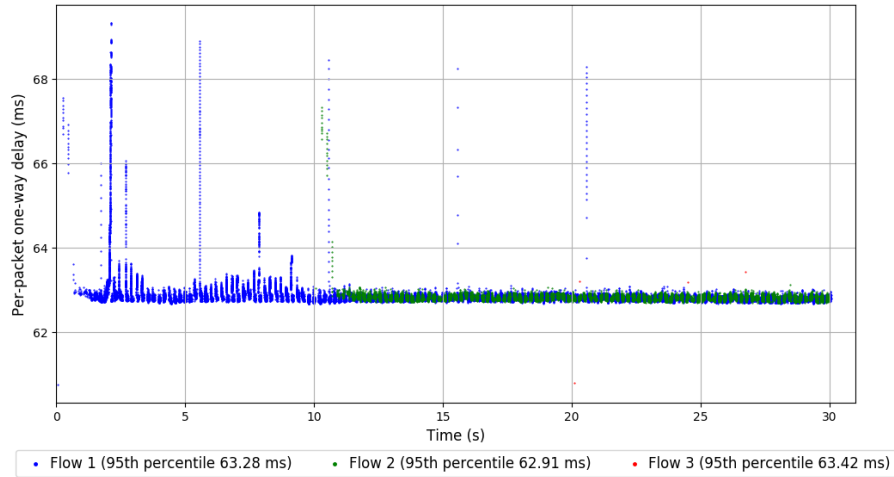
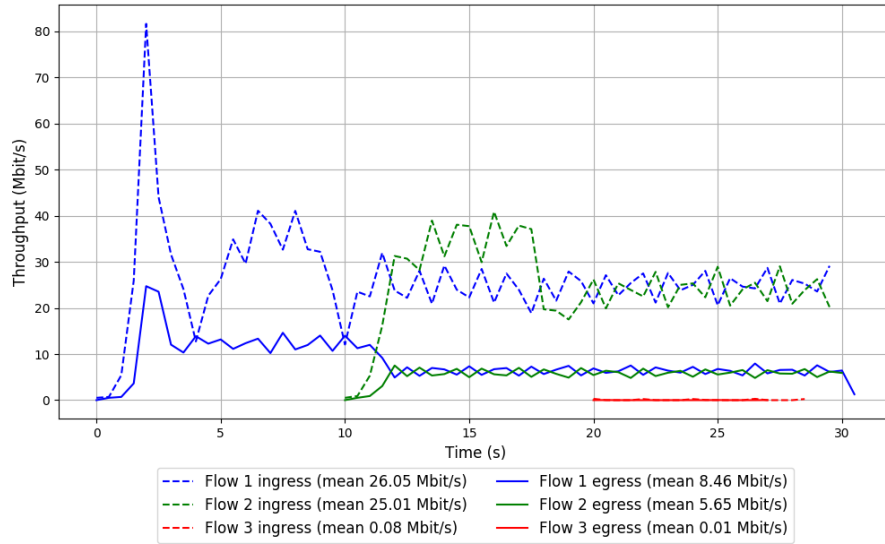
-- Flow 2:

Average throughput: 5.65 Mbit/s  
95th percentile per-packet one-way delay: 62.914 ms  
Loss rate: 77.43%

-- Flow 3:

Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 63.416 ms  
Loss rate: 94.50%

# Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-05-30 01:23:33  
End at: 2019-05-30 01:24:03  
Local clock offset: -1.828 ms  
Remote clock offset: -42.861 ms

# Below is generated by plot.py at 2019-05-30 03:04:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.20 Mbit/s  
95th percentile per-packet one-way delay: 60.641 ms  
Loss rate: 72.81%

-- Flow 1:

Average throughput: 8.46 Mbit/s  
95th percentile per-packet one-way delay: 60.915 ms  
Loss rate: 67.02%

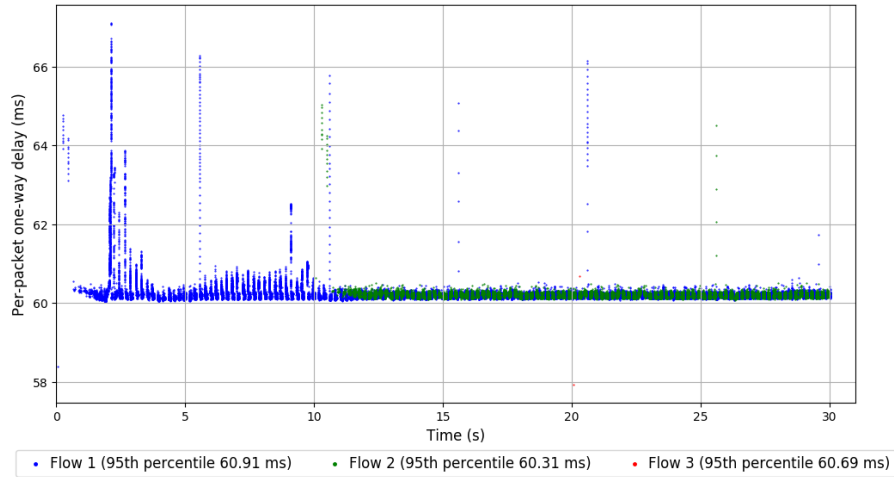
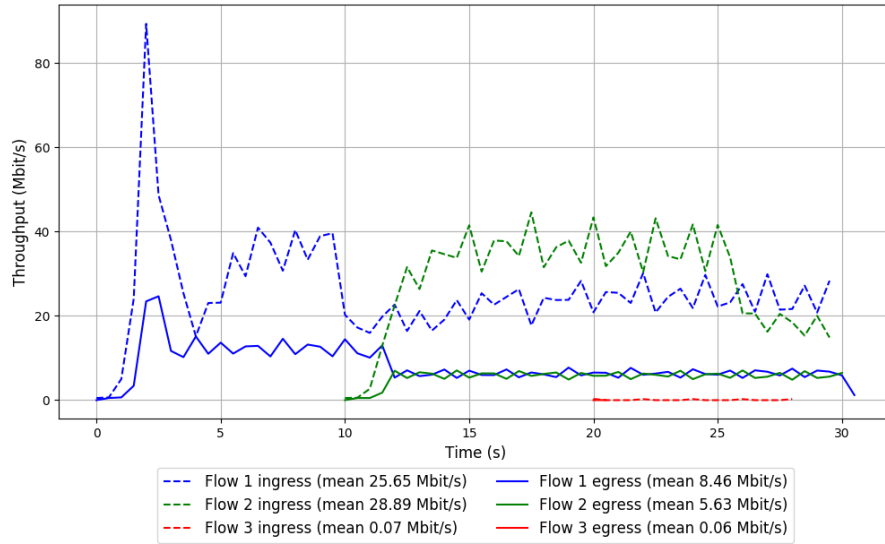
-- Flow 2:

Average throughput: 5.63 Mbit/s  
95th percentile per-packet one-way delay: 60.311 ms  
Loss rate: 80.53%

-- Flow 3:

Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 60.685 ms  
Loss rate: 97.92%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-05-30 01:54:00  
End at: 2019-05-30 01:54:30  
Local clock offset: -2.341 ms  
Remote clock offset: -34.64 ms

# Below is generated by plot.py at 2019-05-30 03:04:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.23 Mbit/s  
95th percentile per-packet one-way delay: 70.837 ms  
Loss rate: 72.31%

-- Flow 1:

Average throughput: 8.49 Mbit/s  
95th percentile per-packet one-way delay: 71.073 ms  
Loss rate: 68.75%

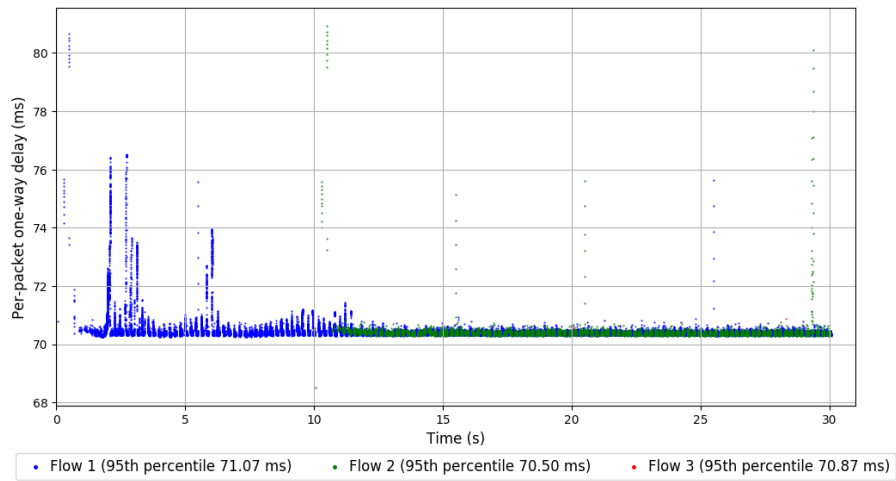
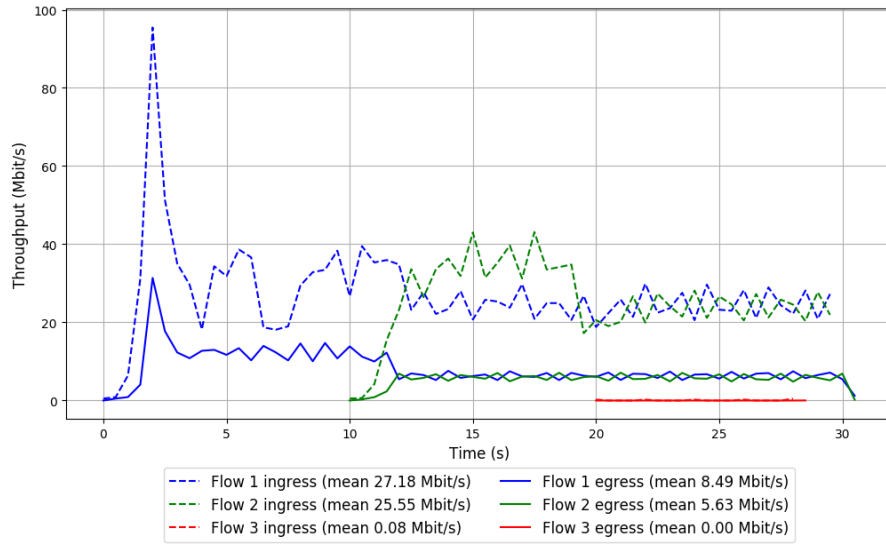
-- Flow 2:

Average throughput: 5.63 Mbit/s  
95th percentile per-packet one-way delay: 70.495 ms  
Loss rate: 77.98%

-- Flow 3:

Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 70.867 ms  
Loss rate: 98.16%

### Run 3: Report of Copa — Data Link





Run 4: Statistics of Copa

Start at: 2019-05-30 02:24:25  
End at: 2019-05-30 02:24:55  
Local clock offset: -1.994 ms  
Remote clock offset: -38.726 ms

# Below is generated by plot.py at 2019-05-30 03:04:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.24 Mbit/s  
95th percentile per-packet one-way delay: 66.324 ms  
Loss rate: 71.64%

-- Flow 1:

Average throughput: 8.44 Mbit/s  
95th percentile per-packet one-way delay: 66.839 ms  
Loss rate: 67.88%

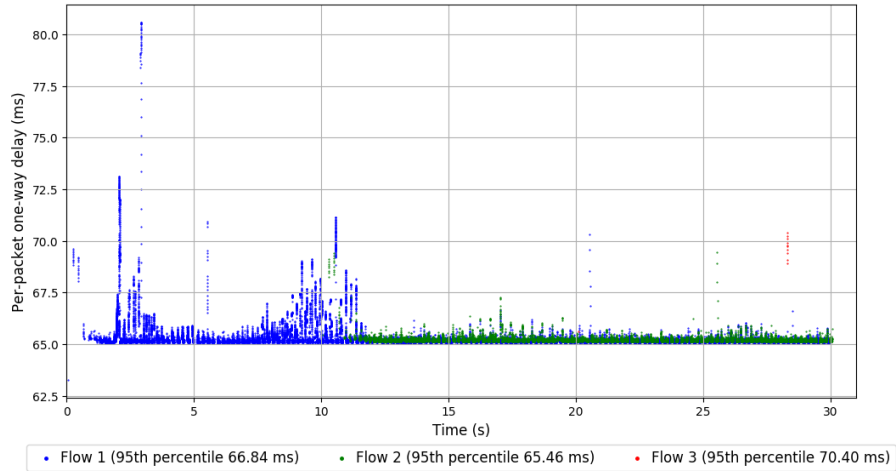
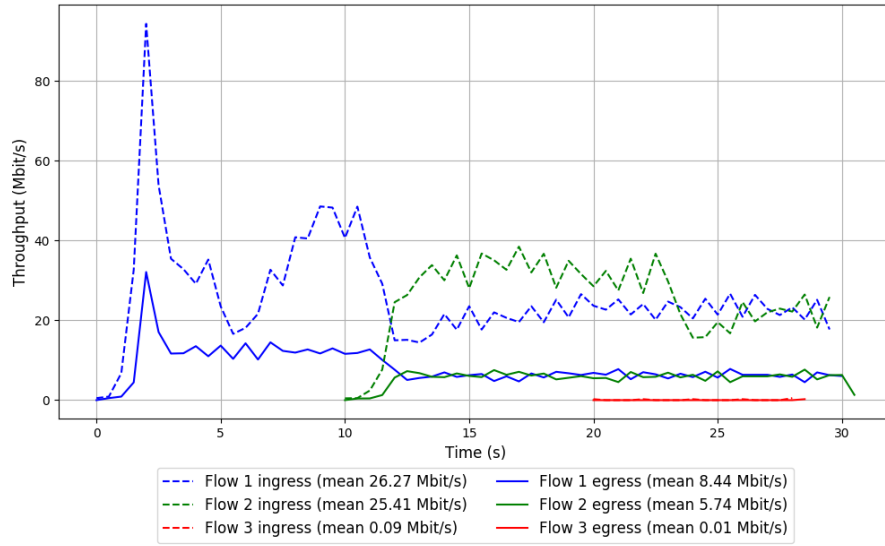
-- Flow 2:

Average throughput: 5.74 Mbit/s  
95th percentile per-packet one-way delay: 65.459 ms  
Loss rate: 77.43%

-- Flow 3:

Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 70.397 ms  
Loss rate: 83.49%

### Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-05-30 02:54:50  
End at: 2019-05-30 02:55:20  
Local clock offset: 1.065 ms  
Remote clock offset: -40.075 ms

# Below is generated by plot.py at 2019-05-30 03:04:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.19 Mbit/s  
95th percentile per-packet one-way delay: 59.914 ms  
Loss rate: 70.88%

-- Flow 1:

Average throughput: 7.56 Mbit/s  
95th percentile per-packet one-way delay: 60.535 ms  
Loss rate: 68.16%

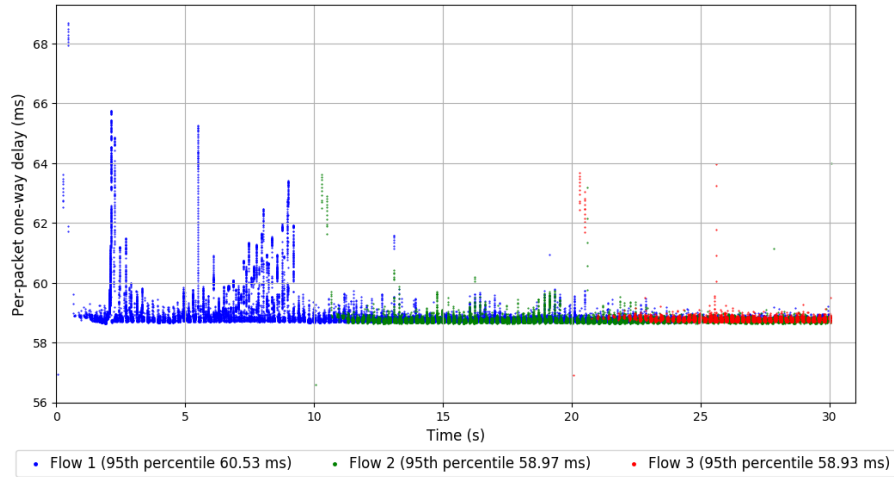
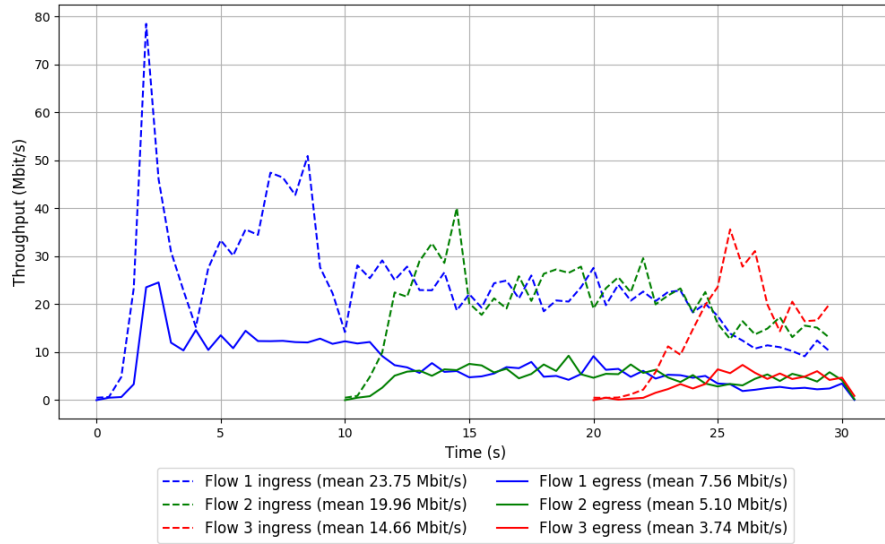
-- Flow 2:

Average throughput: 5.10 Mbit/s  
95th percentile per-packet one-way delay: 58.968 ms  
Loss rate: 74.43%

-- Flow 3:

Average throughput: 3.74 Mbit/s  
95th percentile per-packet one-way delay: 58.927 ms  
Loss rate: 74.46%

### Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-05-30 00:46:24  
End at: 2019-05-30 00:46:54  
Local clock offset: 3.38 ms  
Remote clock offset: -44.694 ms

# Below is generated by plot.py at 2019-05-30 03:04:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 202.13 Mbit/s  
95th percentile per-packet one-way delay: 53.973 ms  
Loss rate: 1.65%

-- Flow 1:

Average throughput: 98.76 Mbit/s  
95th percentile per-packet one-way delay: 53.823 ms  
Loss rate: 1.67%

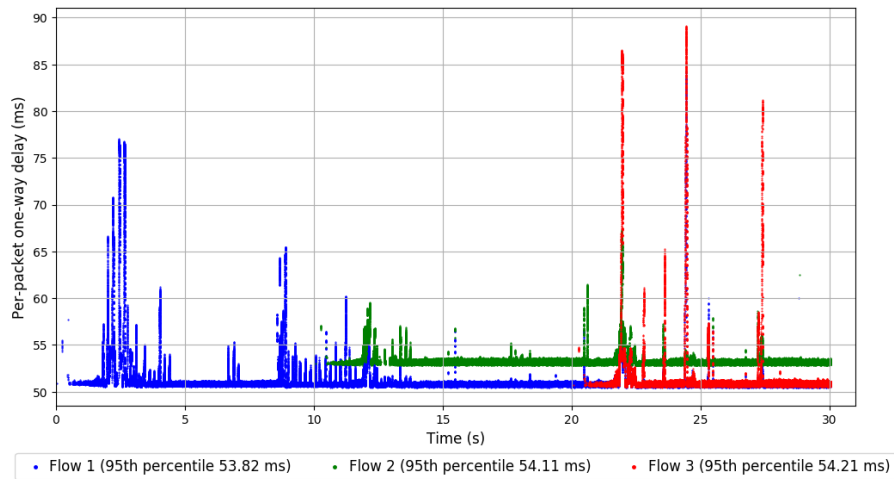
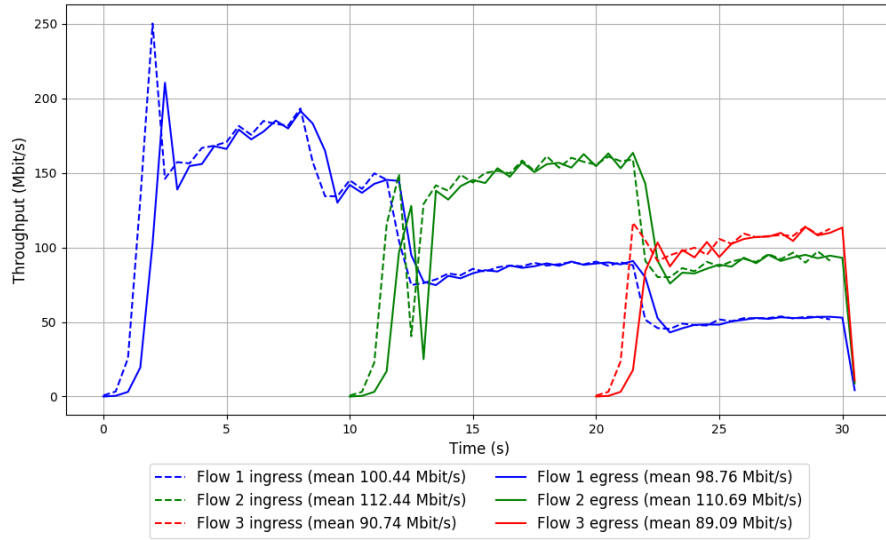
-- Flow 2:

Average throughput: 110.69 Mbit/s  
95th percentile per-packet one-way delay: 54.109 ms  
Loss rate: 1.57%

-- Flow 3:

Average throughput: 89.09 Mbit/s  
95th percentile per-packet one-way delay: 54.208 ms  
Loss rate: 1.82%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-05-30 01:16:52  
End at: 2019-05-30 01:17:22  
Local clock offset: -1.43 ms  
Remote clock offset: -37.284 ms

# Below is generated by plot.py at 2019-05-30 03:04:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 238.34 Mbit/s  
95th percentile per-packet one-way delay: 65.464 ms  
Loss rate: 1.24%

-- Flow 1:

Average throughput: 180.36 Mbit/s  
95th percentile per-packet one-way delay: 64.407 ms  
Loss rate: 1.21%

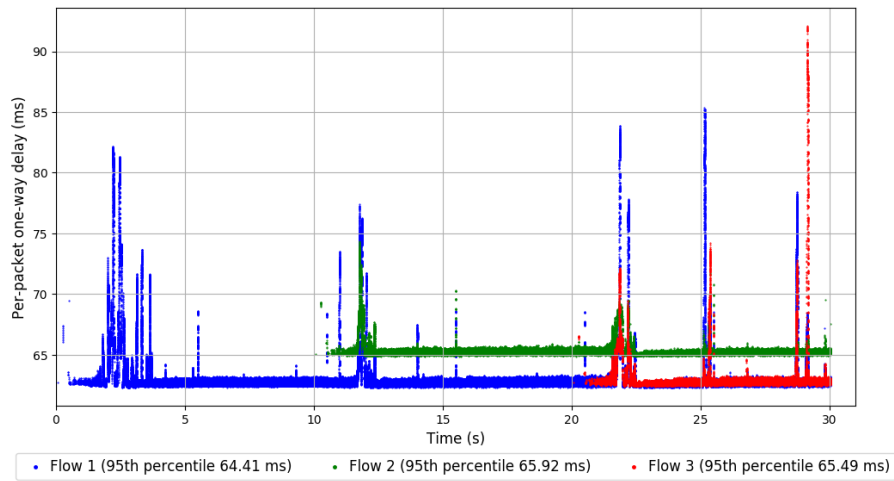
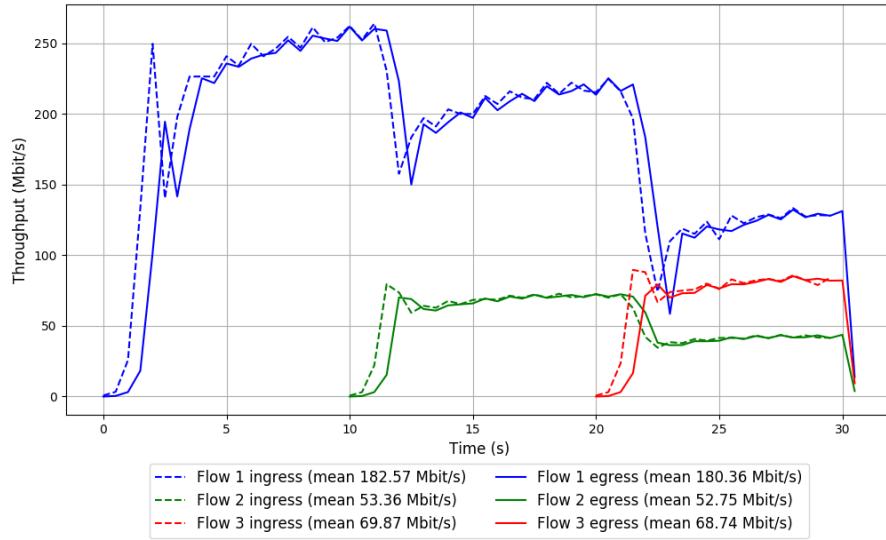
-- Flow 2:

Average throughput: 52.75 Mbit/s  
95th percentile per-packet one-way delay: 65.920 ms  
Loss rate: 1.14%

-- Flow 3:

Average throughput: 68.74 Mbit/s  
95th percentile per-packet one-way delay: 65.486 ms  
Loss rate: 1.63%

Run 2: Report of TCP Cubic — Data Link





Run 3: Statistics of TCP Cubic

Start at: 2019-05-30 01:47:20  
End at: 2019-05-30 01:47:50  
Local clock offset: 2.973 ms  
Remote clock offset: -39.828 ms

# Below is generated by plot.py at 2019-05-30 03:04:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 210.29 Mbit/s  
95th percentile per-packet one-way delay: 60.884 ms  
Loss rate: 1.66%

-- Flow 1:

Average throughput: 111.11 Mbit/s  
95th percentile per-packet one-way delay: 61.037 ms  
Loss rate: 1.71%

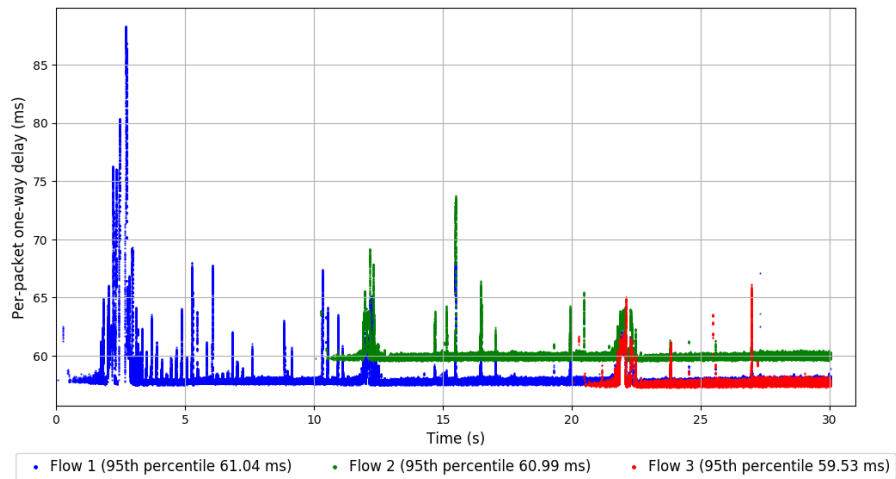
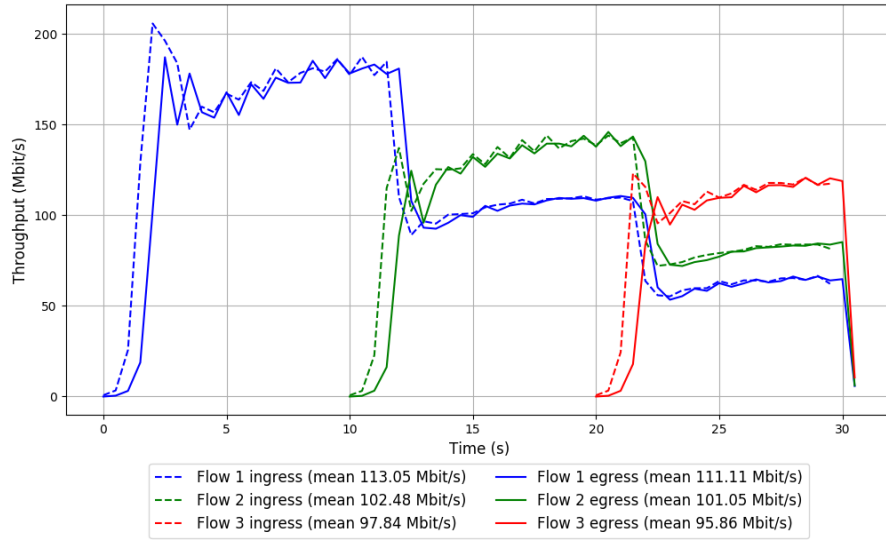
-- Flow 2:

Average throughput: 101.05 Mbit/s  
95th percentile per-packet one-way delay: 60.993 ms  
Loss rate: 1.42%

-- Flow 3:

Average throughput: 95.86 Mbit/s  
95th percentile per-packet one-way delay: 59.531 ms  
Loss rate: 2.02%

### Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-05-30 02:17:47  
End at: 2019-05-30 02:18:17  
Local clock offset: -1.522 ms  
Remote clock offset: -36.558 ms

# Below is generated by plot.py at 2019-05-30 03:05:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 183.64 Mbit/s  
95th percentile per-packet one-way delay: 68.326 ms  
Loss rate: 1.98%

-- Flow 1:

Average throughput: 78.59 Mbit/s  
95th percentile per-packet one-way delay: 67.647 ms  
Loss rate: 2.25%

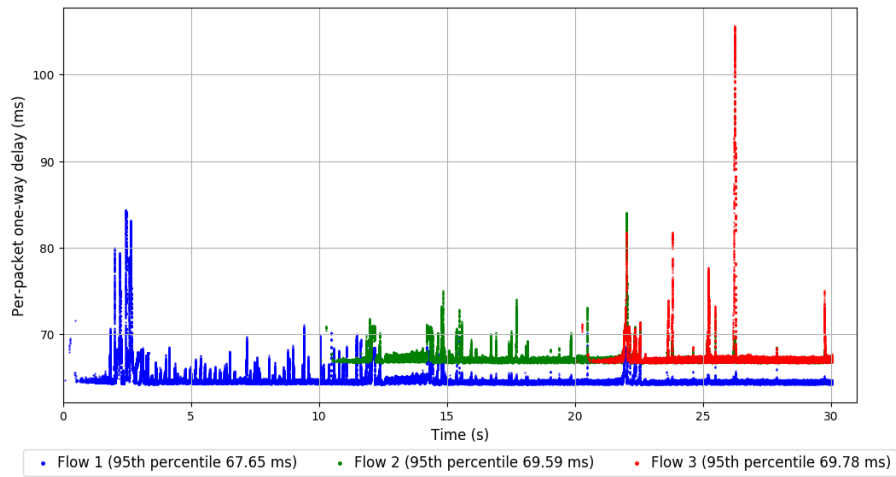
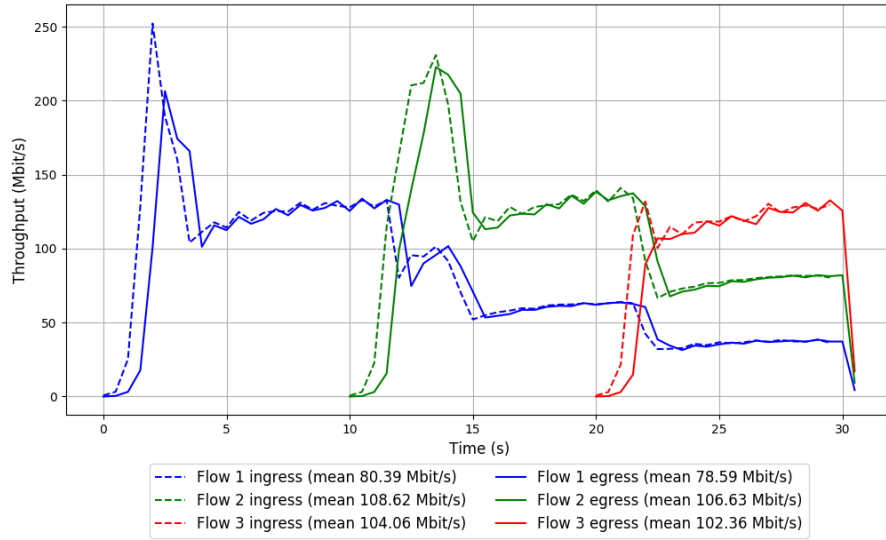
-- Flow 2:

Average throughput: 106.63 Mbit/s  
95th percentile per-packet one-way delay: 69.590 ms  
Loss rate: 1.83%

-- Flow 3:

Average throughput: 102.36 Mbit/s  
95th percentile per-packet one-way delay: 69.784 ms  
Loss rate: 1.64%

### Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-05-30 02:48:09  
End at: 2019-05-30 02:48:39  
Local clock offset: -2.23 ms  
Remote clock offset: -34.717 ms

# Below is generated by plot.py at 2019-05-30 03:05:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 193.61 Mbit/s  
95th percentile per-packet one-way delay: 68.453 ms  
Loss rate: 1.54%

-- Flow 1:

Average throughput: 104.19 Mbit/s  
95th percentile per-packet one-way delay: 68.712 ms  
Loss rate: 1.48%

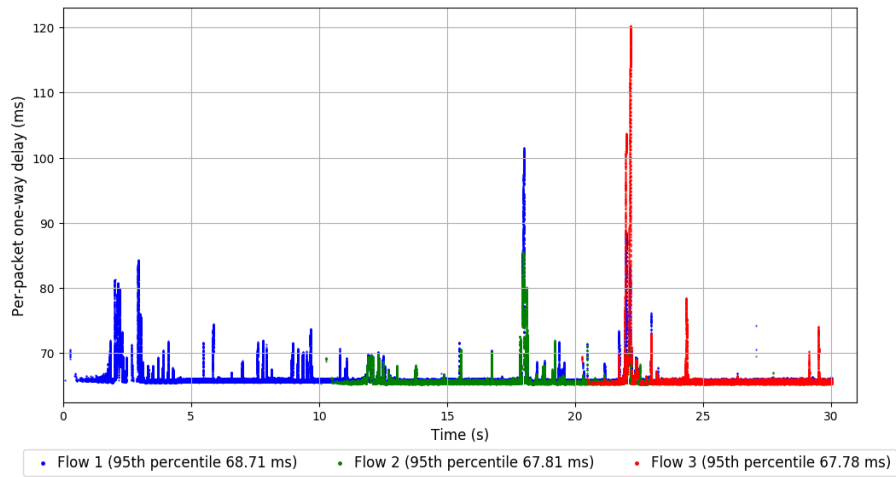
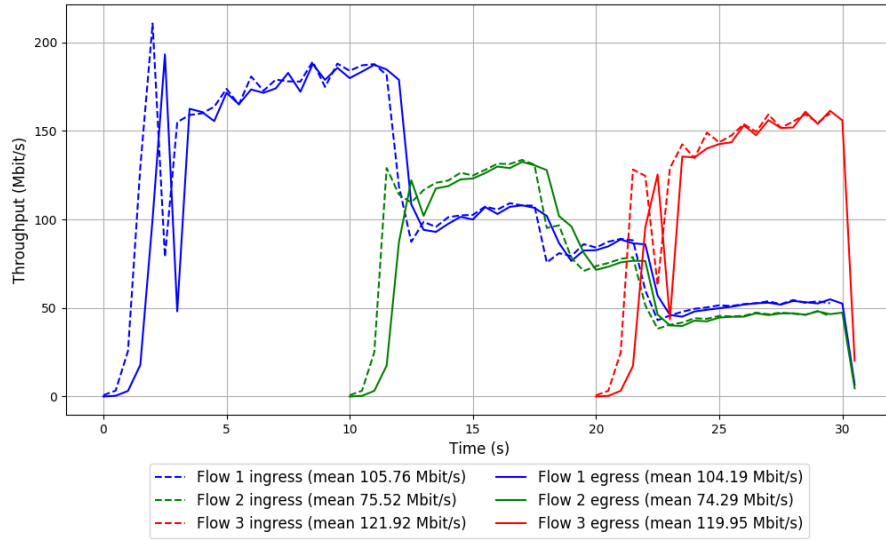
-- Flow 2:

Average throughput: 74.29 Mbit/s  
95th percentile per-packet one-way delay: 67.812 ms  
Loss rate: 1.62%

-- Flow 3:

Average throughput: 119.95 Mbit/s  
95th percentile per-packet one-way delay: 67.784 ms  
Loss rate: 1.61%

### Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-05-30 00:54:25  
End at: 2019-05-30 00:54:55  
Local clock offset: 2.169 ms  
Remote clock offset: -36.47 ms

# Below is generated by plot.py at 2019-05-30 03:09:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 351.74 Mbit/s  
95th percentile per-packet one-way delay: 64.811 ms  
Loss rate: 22.59%

-- Flow 1:

Average throughput: 225.73 Mbit/s  
95th percentile per-packet one-way delay: 64.382 ms  
Loss rate: 22.57%

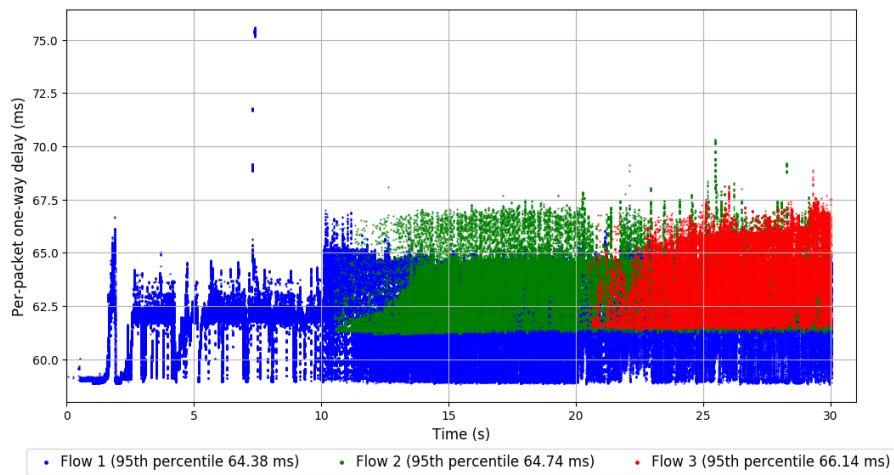
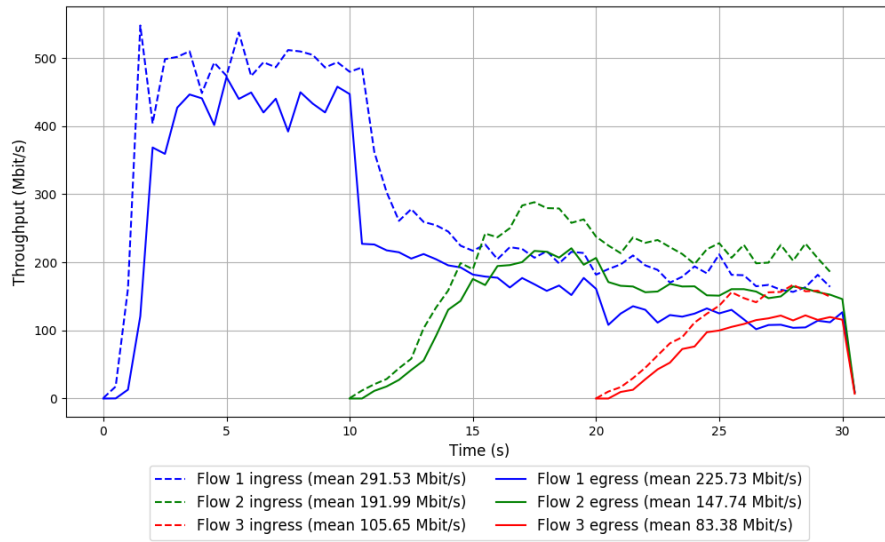
-- Flow 2:

Average throughput: 147.74 Mbit/s  
95th percentile per-packet one-way delay: 64.744 ms  
Loss rate: 23.05%

-- Flow 3:

Average throughput: 83.38 Mbit/s  
95th percentile per-packet one-way delay: 66.144 ms  
Loss rate: 21.05%

### Run 1: Report of FillP — Data Link





Run 2: Statistics of FillP

Start at: 2019-05-30 01:24:53  
End at: 2019-05-30 01:25:23  
Local clock offset: -8.599 ms  
Remote clock offset: -35.062 ms

# Below is generated by plot.py at 2019-05-30 03:09:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 351.88 Mbit/s  
95th percentile per-packet one-way delay: 79.647 ms  
Loss rate: 23.11%

-- Flow 1:

Average throughput: 243.71 Mbit/s  
95th percentile per-packet one-way delay: 79.847 ms  
Loss rate: 22.04%

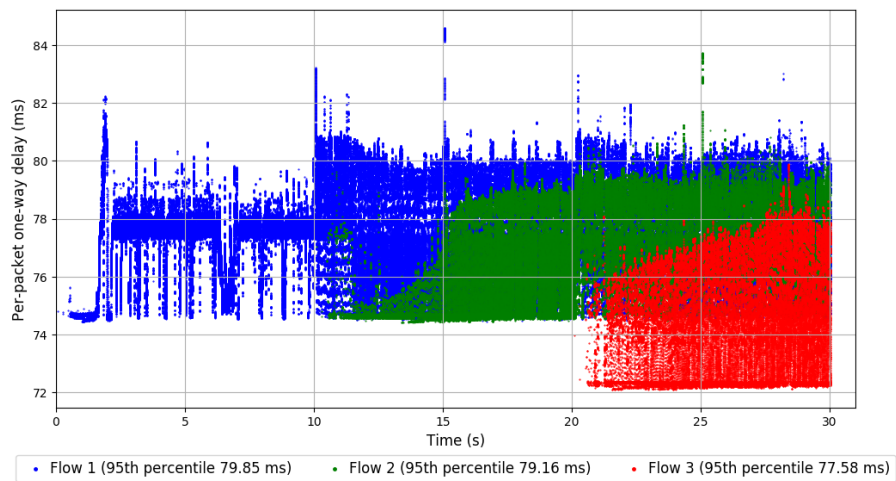
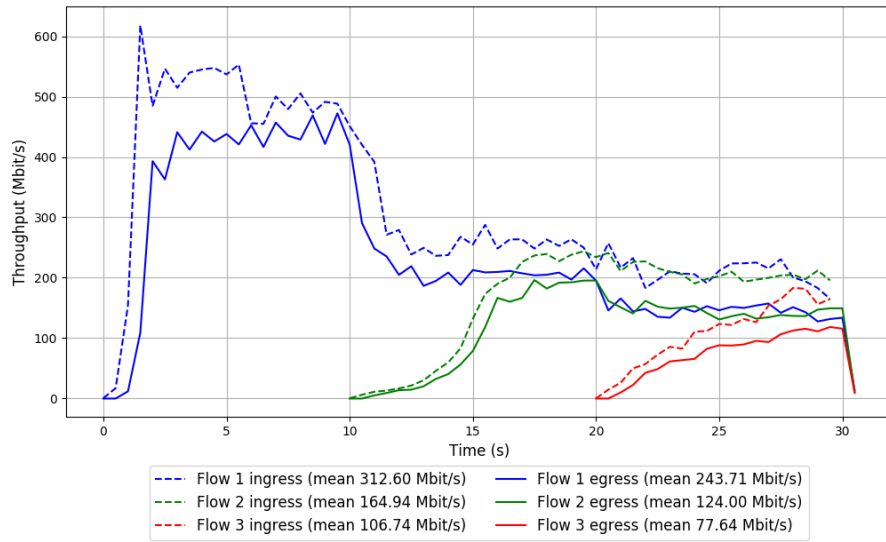
-- Flow 2:

Average throughput: 124.00 Mbit/s  
95th percentile per-packet one-way delay: 79.158 ms  
Loss rate: 24.81%

-- Flow 3:

Average throughput: 77.64 Mbit/s  
95th percentile per-packet one-way delay: 77.575 ms  
Loss rate: 27.27%

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-05-30 01:55:19  
End at: 2019-05-30 01:55:49  
Local clock offset: 3.234 ms  
Remote clock offset: -40.365 ms

# Below is generated by plot.py at 2019-05-30 03:09:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 351.68 Mbit/s  
95th percentile per-packet one-way delay: 63.916 ms  
Loss rate: 23.59%

-- Flow 1:

Average throughput: 244.10 Mbit/s  
95th percentile per-packet one-way delay: 64.065 ms  
Loss rate: 22.33%

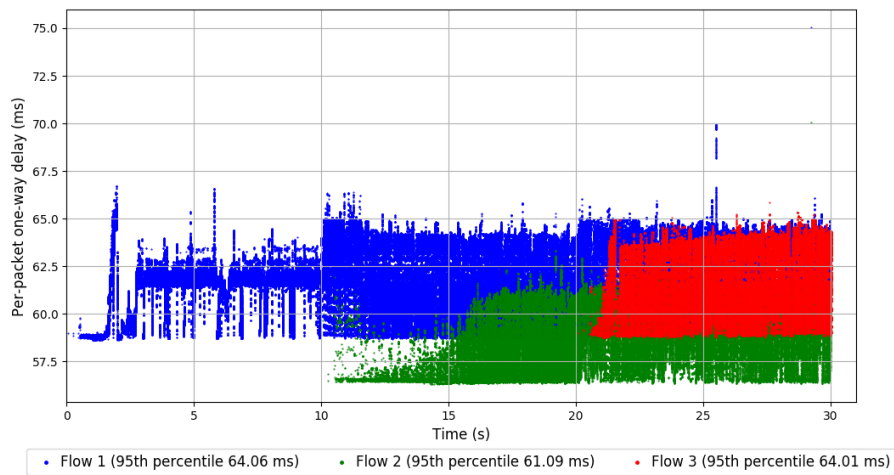
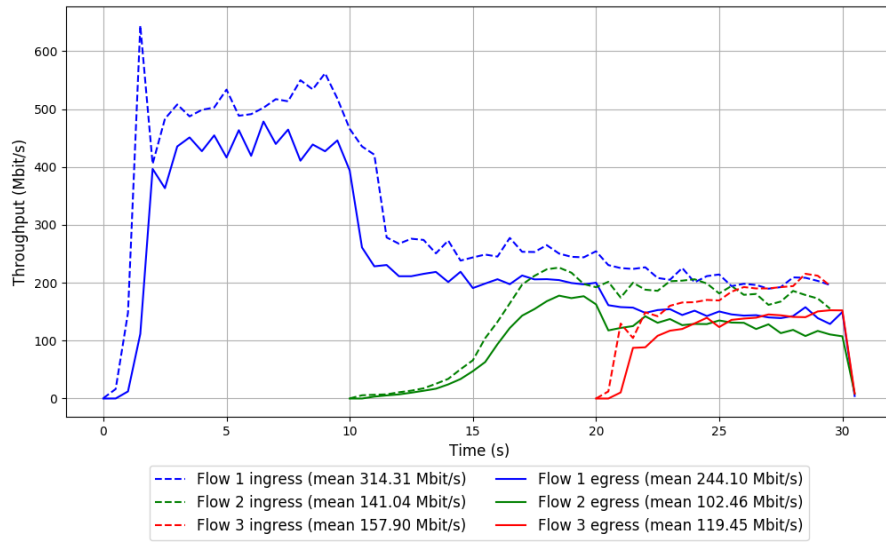
-- Flow 2:

Average throughput: 102.46 Mbit/s  
95th percentile per-packet one-way delay: 61.095 ms  
Loss rate: 27.37%

-- Flow 3:

Average throughput: 119.45 Mbit/s  
95th percentile per-packet one-way delay: 64.013 ms  
Loss rate: 24.34%

### Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-05-30 02:25:45  
End at: 2019-05-30 02:26:15  
Local clock offset: -2.117 ms  
Remote clock offset: -33.904 ms

# Below is generated by plot.py at 2019-05-30 03:09:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 362.39 Mbit/s  
95th percentile per-packet one-way delay: 72.620 ms  
Loss rate: 24.28%

-- Flow 1:

Average throughput: 248.72 Mbit/s  
95th percentile per-packet one-way delay: 72.396 ms  
Loss rate: 24.07%

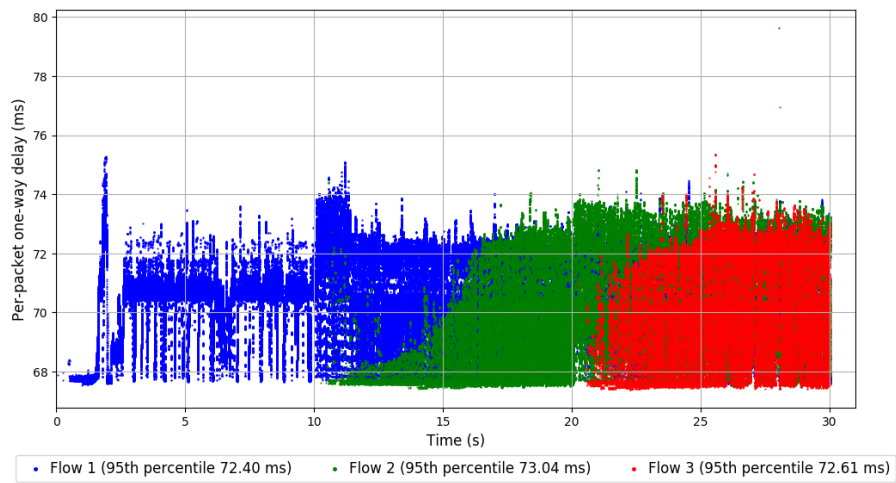
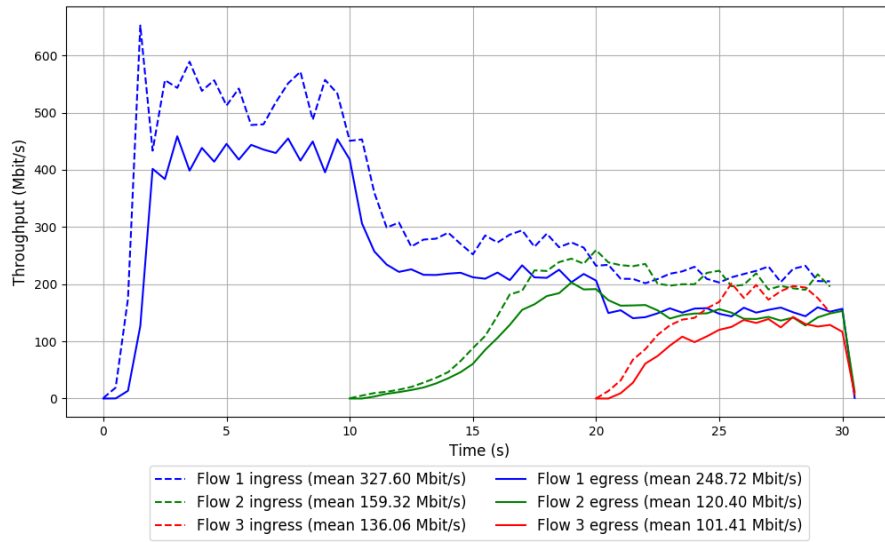
-- Flow 2:

Average throughput: 120.40 Mbit/s  
95th percentile per-packet one-way delay: 73.040 ms  
Loss rate: 24.44%

-- Flow 3:

Average throughput: 101.41 Mbit/s  
95th percentile per-packet one-way delay: 72.614 ms  
Loss rate: 25.48%

### Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-05-30 02:56:09  
End at: 2019-05-30 02:56:39  
Local clock offset: 1.274 ms  
Remote clock offset: -37.272 ms

# Below is generated by plot.py at 2019-05-30 03:09:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 346.48 Mbit/s  
95th percentile per-packet one-way delay: 66.190 ms  
Loss rate: 23.41%

-- Flow 1:

Average throughput: 244.27 Mbit/s  
95th percentile per-packet one-way delay: 66.390 ms  
Loss rate: 22.10%

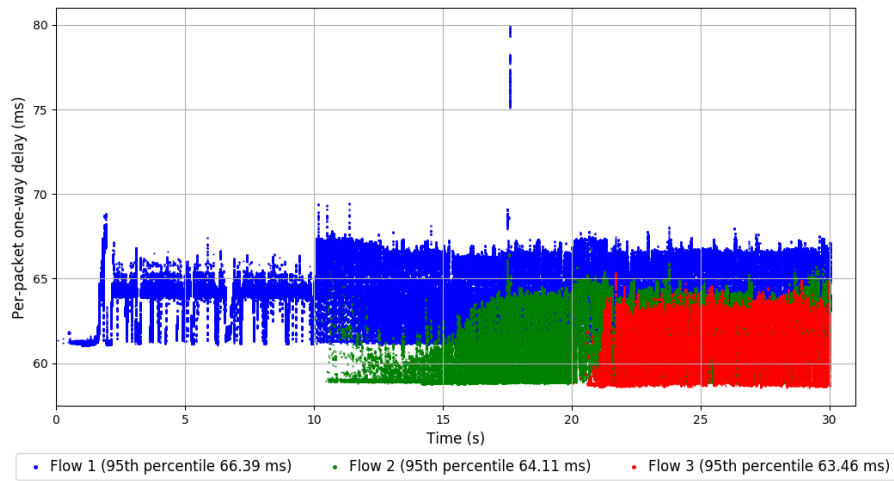
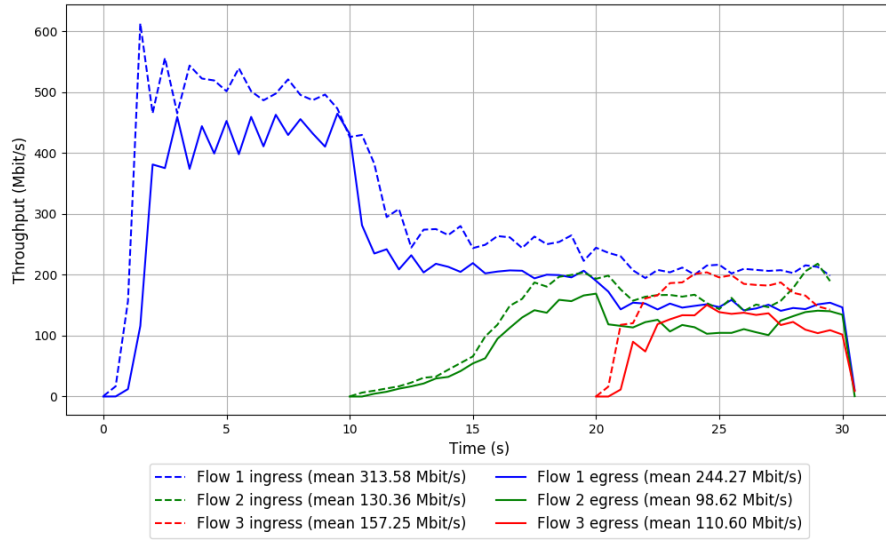
-- Flow 2:

Average throughput: 98.62 Mbit/s  
95th percentile per-packet one-way delay: 64.113 ms  
Loss rate: 24.36%

-- Flow 3:

Average throughput: 110.60 Mbit/s  
95th percentile per-packet one-way delay: 63.462 ms  
Loss rate: 29.67%

### Run 5: Report of FillP — Data Link





Run 1: Statistics of FillP-Sheep

Start at: 2019-05-30 00:37:23  
End at: 2019-05-30 00:37:53  
Local clock offset: 0.742 ms  
Remote clock offset: -40.137 ms

# Below is generated by plot.py at 2019-05-30 03:09:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 310.82 Mbit/s  
95th percentile per-packet one-way delay: 66.948 ms  
Loss rate: 13.85%

-- Flow 1:

Average throughput: 231.04 Mbit/s  
95th percentile per-packet one-way delay: 67.115 ms  
Loss rate: 14.20%

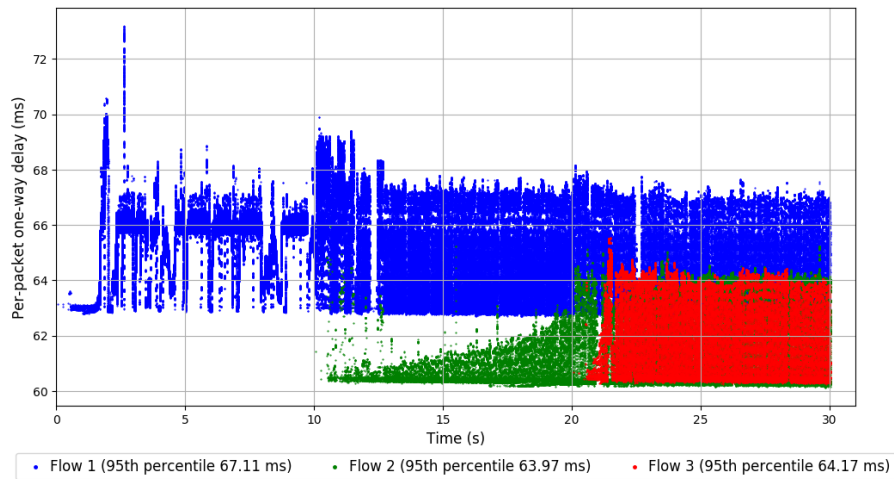
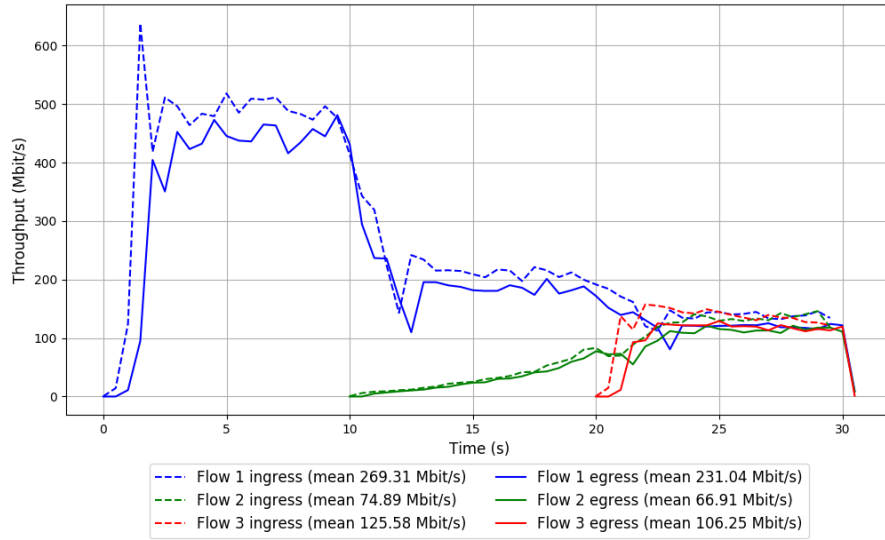
-- Flow 2:

Average throughput: 66.91 Mbit/s  
95th percentile per-packet one-way delay: 63.973 ms  
Loss rate: 10.66%

-- Flow 3:

Average throughput: 106.25 Mbit/s  
95th percentile per-packet one-way delay: 64.168 ms  
Loss rate: 15.38%

# Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-05-30 01:07:53  
End at: 2019-05-30 01:08:23  
Local clock offset: 0.43 ms  
Remote clock offset: -40.346 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 334.14 Mbit/s  
95th percentile per-packet one-way delay: 60.493 ms  
Loss rate: 13.73%

-- Flow 1:

Average throughput: 237.76 Mbit/s  
95th percentile per-packet one-way delay: 59.914 ms  
Loss rate: 13.80%

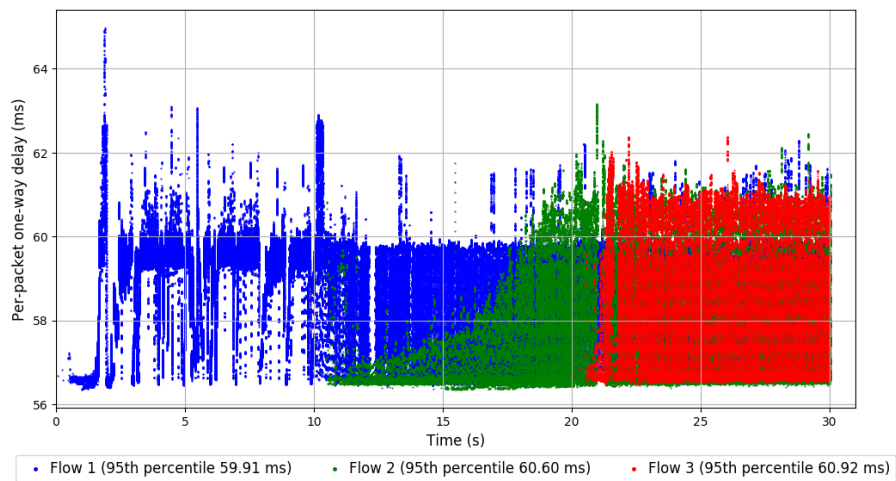
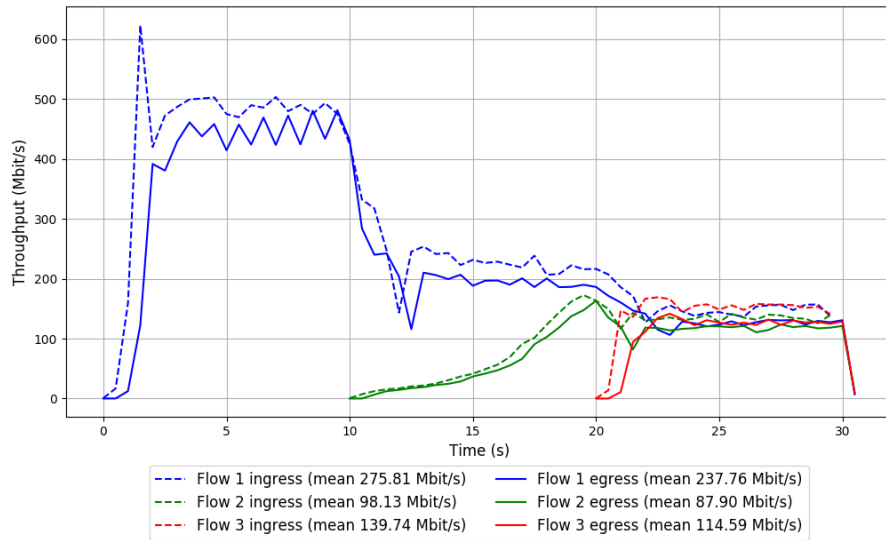
-- Flow 2:

Average throughput: 87.90 Mbit/s  
95th percentile per-packet one-way delay: 60.596 ms  
Loss rate: 10.44%

-- Flow 3:

Average throughput: 114.59 Mbit/s  
95th percentile per-packet one-way delay: 60.925 ms  
Loss rate: 18.00%

## Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-05-30 01:38:23  
End at: 2019-05-30 01:38:53  
Local clock offset: -0.622 ms  
Remote clock offset: -35.135 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 307.36 Mbit/s  
95th percentile per-packet one-way delay: 72.514 ms  
Loss rate: 15.39%

-- Flow 1:

Average throughput: 230.91 Mbit/s  
95th percentile per-packet one-way delay: 72.481 ms  
Loss rate: 15.89%

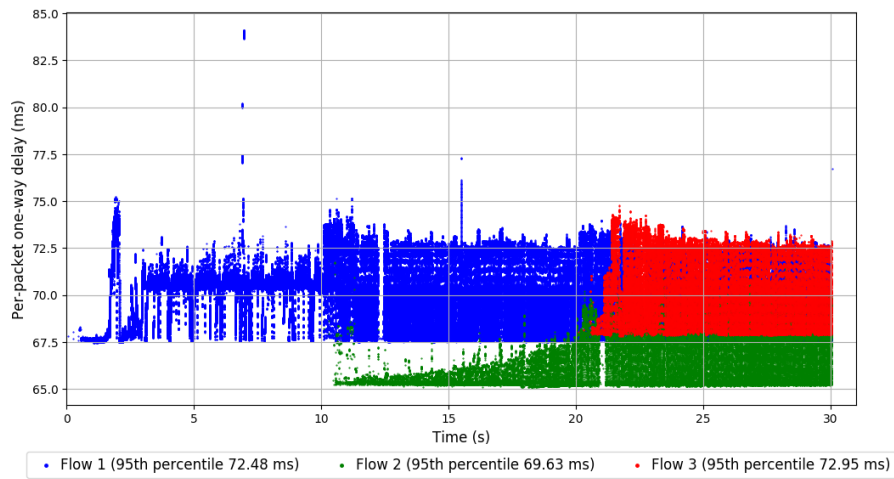
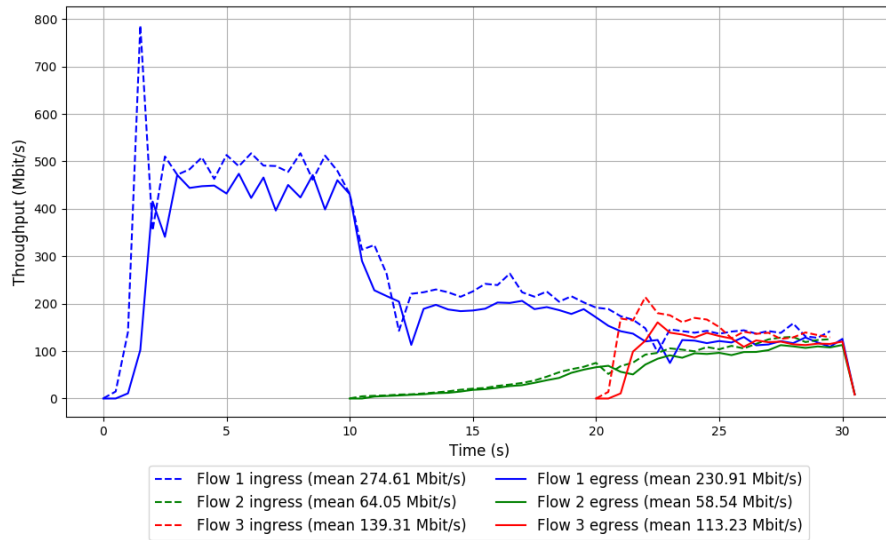
-- Flow 2:

Average throughput: 58.54 Mbit/s  
95th percentile per-packet one-way delay: 69.631 ms  
Loss rate: 8.61%

-- Flow 3:

Average throughput: 113.23 Mbit/s  
95th percentile per-packet one-way delay: 72.950 ms  
Loss rate: 18.69%

### Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-05-30 02:08:47  
End at: 2019-05-30 02:09:17  
Local clock offset: -1.388 ms  
Remote clock offset: -36.355 ms

# Below is generated by plot.py at 2019-05-30 03:13:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 319.20 Mbit/s  
95th percentile per-packet one-way delay: 71.100 ms  
Loss rate: 13.90%

-- Flow 1:

Average throughput: 225.31 Mbit/s  
95th percentile per-packet one-way delay: 69.559 ms  
Loss rate: 13.98%

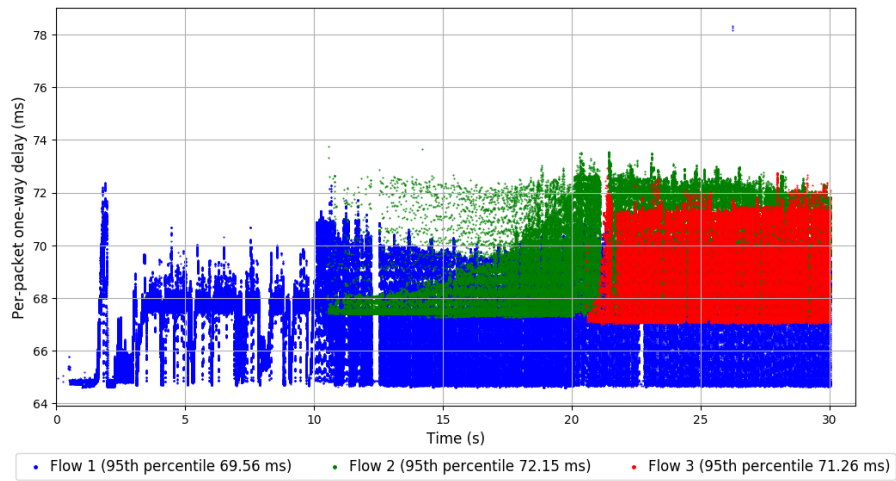
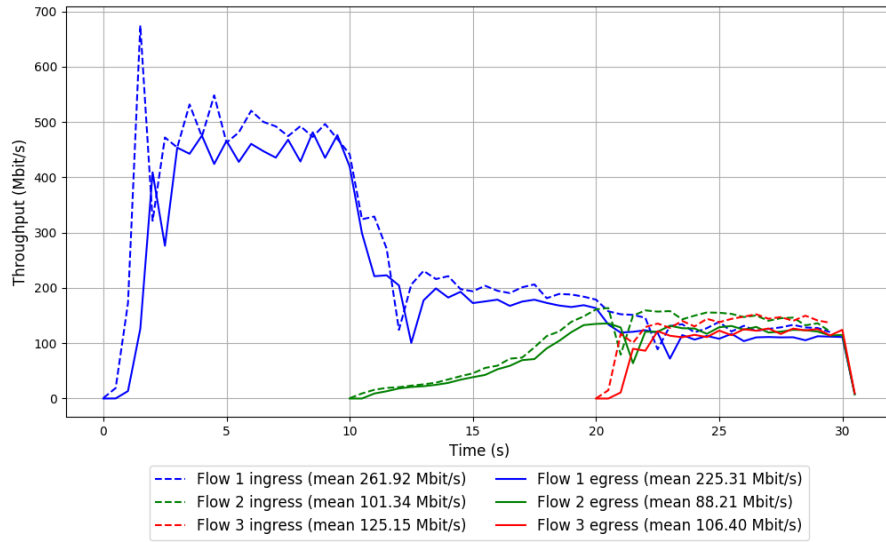
-- Flow 2:

Average throughput: 88.21 Mbit/s  
95th percentile per-packet one-way delay: 72.152 ms  
Loss rate: 12.95%

-- Flow 3:

Average throughput: 106.40 Mbit/s  
95th percentile per-packet one-way delay: 71.262 ms  
Loss rate: 14.94%

### Run 4: Report of FillP-Sheep — Data Link





Run 5: Statistics of FillP-Sheep

Start at: 2019-05-30 02:39:10  
End at: 2019-05-30 02:39:40  
Local clock offset: -9.386 ms  
Remote clock offset: -41.476 ms

# Below is generated by plot.py at 2019-05-30 03:13:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 325.92 Mbit/s  
95th percentile per-packet one-way delay: 72.774 ms  
Loss rate: 14.29%

-- Flow 1:

Average throughput: 229.53 Mbit/s  
95th percentile per-packet one-way delay: 71.322 ms  
Loss rate: 15.33%

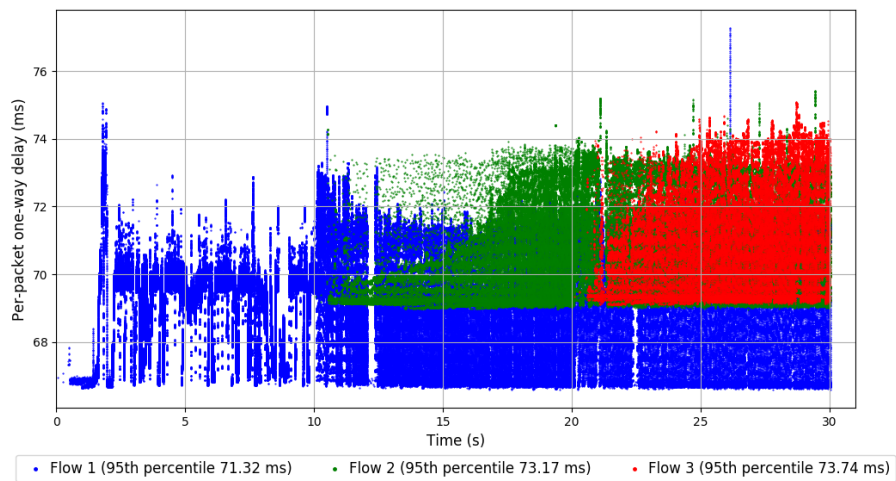
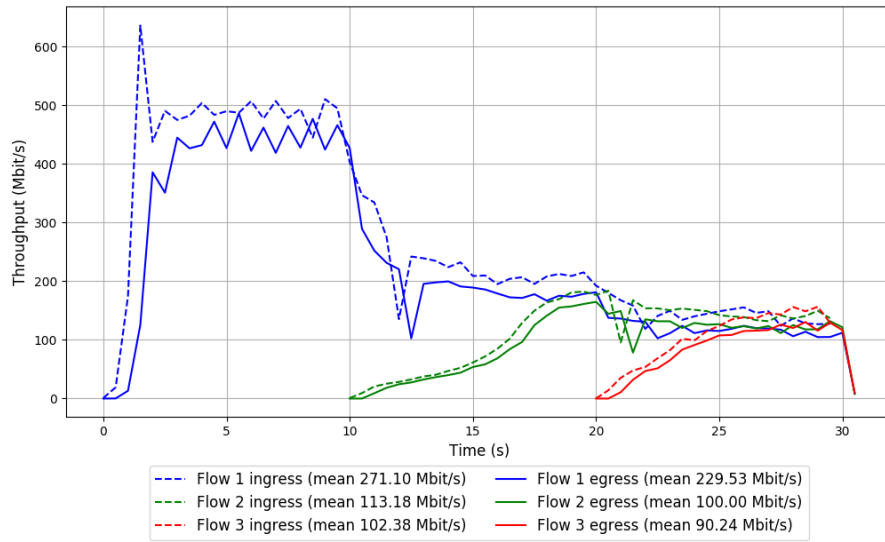
-- Flow 2:

Average throughput: 100.00 Mbit/s  
95th percentile per-packet one-way delay: 73.168 ms  
Loss rate: 11.64%

-- Flow 3:

Average throughput: 90.24 Mbit/s  
95th percentile per-packet one-way delay: 73.744 ms  
Loss rate: 11.83%

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2019-05-30 00:40:29  
End at: 2019-05-30 00:40:59  
Local clock offset: -0.463 ms  
Remote clock offset: -40.909 ms

# Below is generated by plot.py at 2019-05-30 03:13:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 173.49 Mbit/s  
95th percentile per-packet one-way delay: 70.390 ms  
Loss rate: 16.30%

-- Flow 1:

Average throughput: 89.36 Mbit/s  
95th percentile per-packet one-way delay: 65.796 ms  
Loss rate: 12.07%

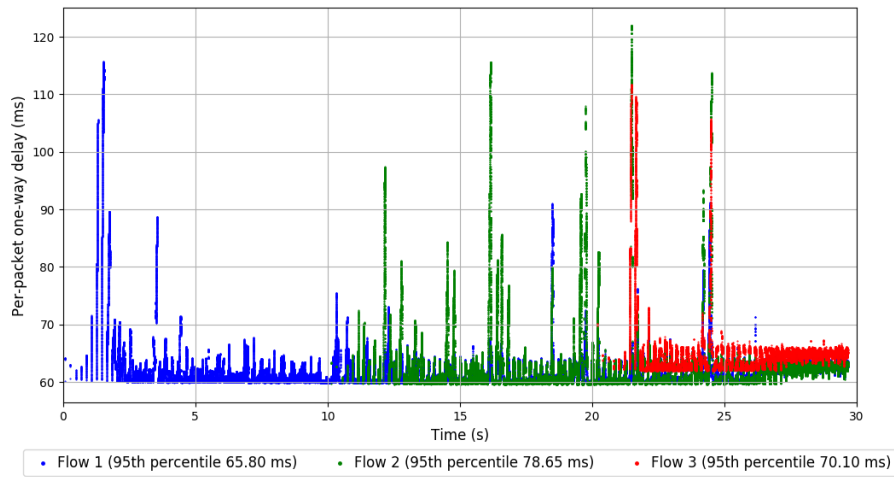
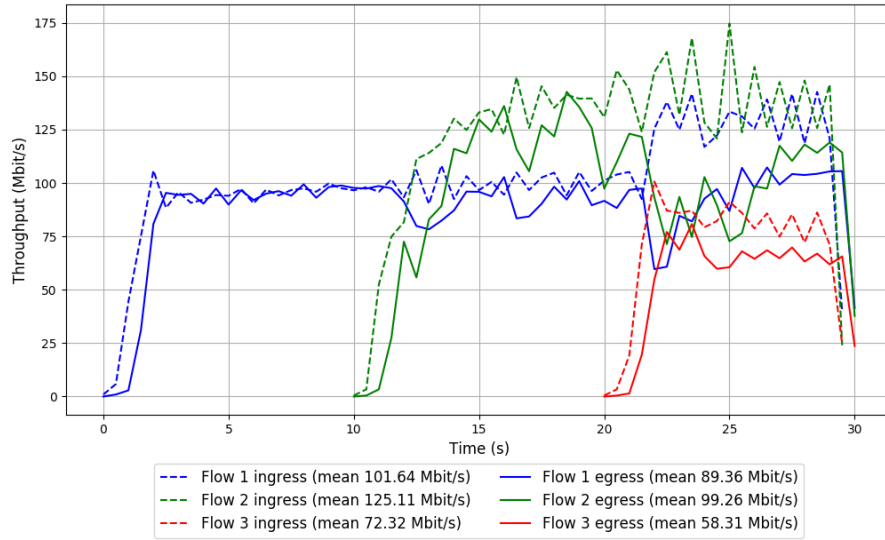
-- Flow 2:

Average throughput: 99.26 Mbit/s  
95th percentile per-packet one-way delay: 78.650 ms  
Loss rate: 20.65%

-- Flow 3:

Average throughput: 58.31 Mbit/s  
95th percentile per-packet one-way delay: 70.098 ms  
Loss rate: 19.42%

# Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-05-30 01:10:59  
End at: 2019-05-30 01:11:29  
Local clock offset: -2.762 ms  
Remote clock offset: -39.916 ms

# Below is generated by plot.py at 2019-05-30 03:13:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 184.41 Mbit/s  
95th percentile per-packet one-way delay: 66.541 ms  
Loss rate: 14.28%

-- Flow 1:

Average throughput: 79.52 Mbit/s  
95th percentile per-packet one-way delay: 68.175 ms  
Loss rate: 7.27%

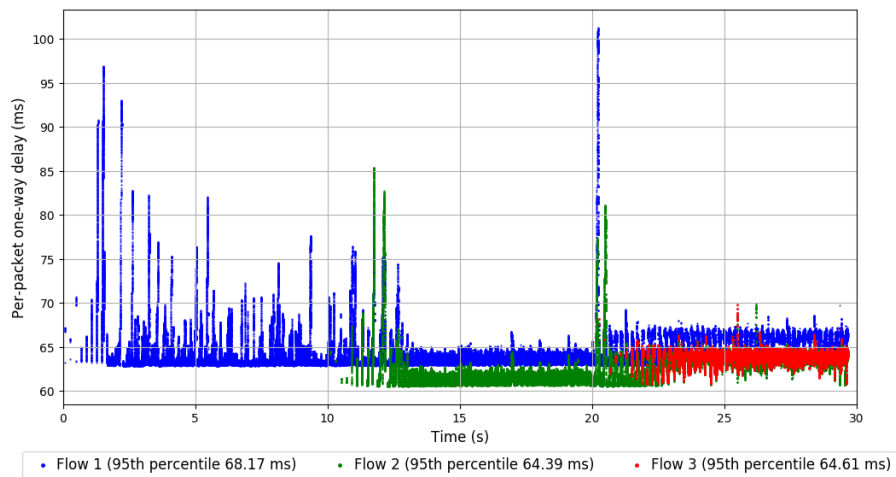
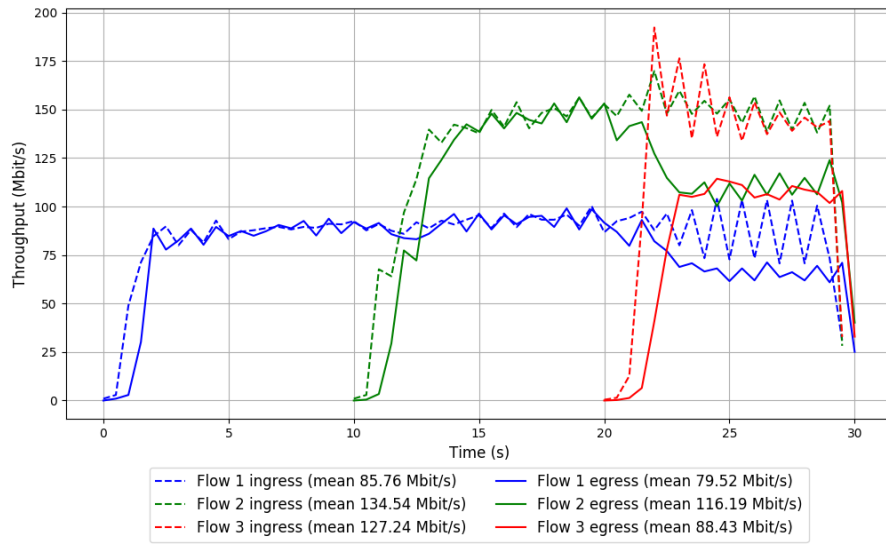
-- Flow 2:

Average throughput: 116.19 Mbit/s  
95th percentile per-packet one-way delay: 64.395 ms  
Loss rate: 13.64%

-- Flow 3:

Average throughput: 88.43 Mbit/s  
95th percentile per-packet one-way delay: 64.607 ms  
Loss rate: 30.53%

## Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-05-30 01:41:27  
End at: 2019-05-30 01:41:57  
Local clock offset: -1.316 ms  
Remote clock offset: -47.578 ms

# Below is generated by plot.py at 2019-05-30 03:13:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 169.14 Mbit/s  
95th percentile per-packet one-way delay: 64.730 ms  
Loss rate: 18.69%

-- Flow 1:

Average throughput: 76.13 Mbit/s  
95th percentile per-packet one-way delay: 65.614 ms  
Loss rate: 9.80%

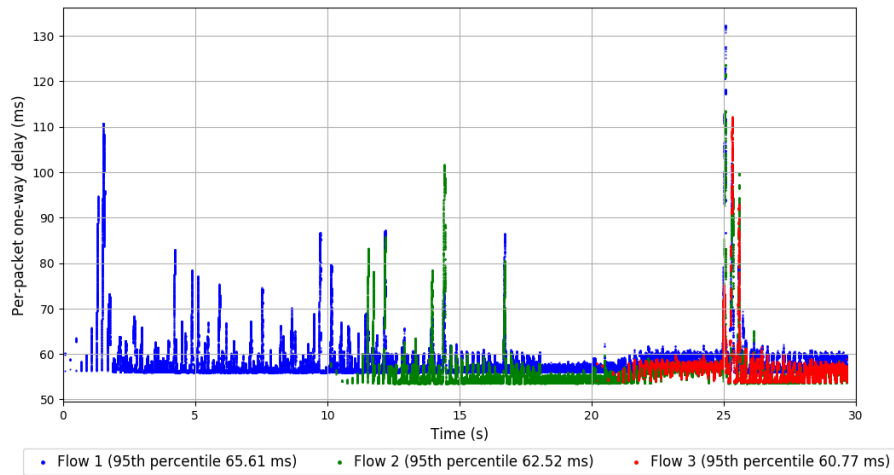
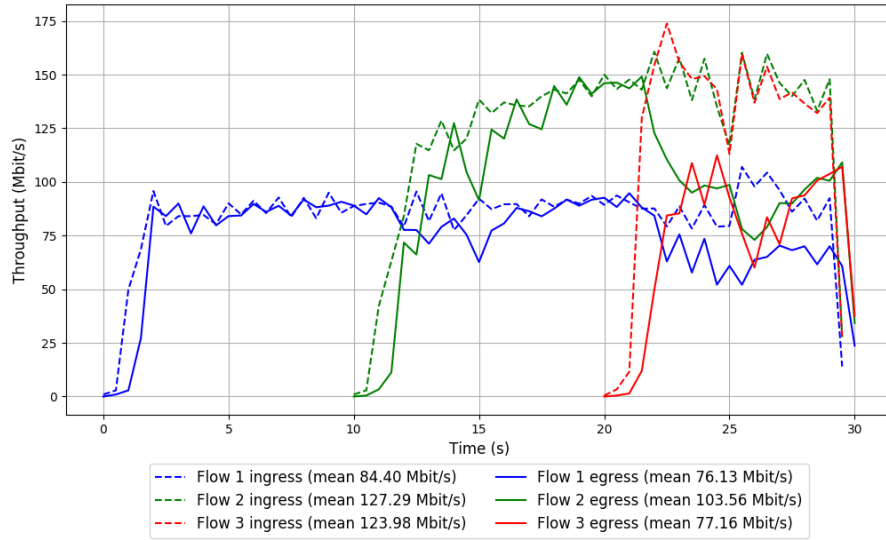
-- Flow 2:

Average throughput: 103.56 Mbit/s  
95th percentile per-packet one-way delay: 62.524 ms  
Loss rate: 18.64%

-- Flow 3:

Average throughput: 77.16 Mbit/s  
95th percentile per-packet one-way delay: 60.772 ms  
Loss rate: 37.73%

### Run 3: Report of Indigo — Data Link



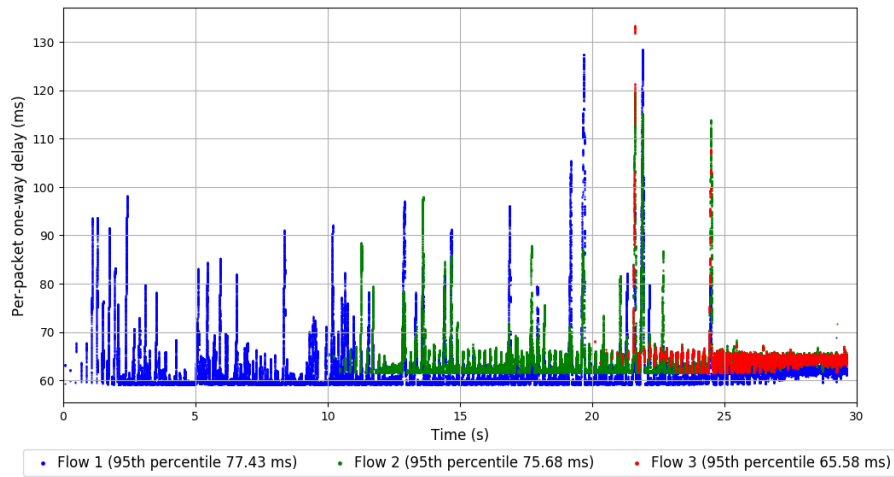
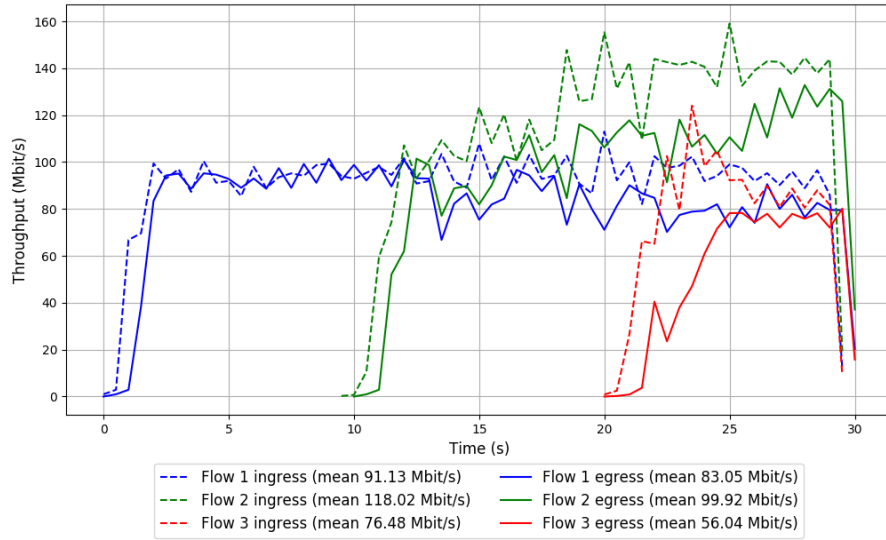


Run 4: Statistics of Indigo

Start at: 2019-05-30 02:11:54  
End at: 2019-05-30 02:12:24  
Local clock offset: 3.289 ms  
Remote clock offset: -37.195 ms

```
# Below is generated by plot.py at 2019-05-30 03:13:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 167.30 Mbit/s
95th percentile per-packet one-way delay: 75.706 ms
Loss rate: 13.74%
-- Flow 1:
Average throughput: 83.05 Mbit/s
95th percentile per-packet one-way delay: 77.432 ms
Loss rate: 8.86%
-- Flow 2:
Average throughput: 99.92 Mbit/s
95th percentile per-packet one-way delay: 75.679 ms
Loss rate: 15.33%
-- Flow 3:
Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: 65.580 ms
Loss rate: 26.72%
```

### Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-05-30 02:42:17  
End at: 2019-05-30 02:42:47  
Local clock offset: -2.067 ms  
Remote clock offset: -35.778 ms

# Below is generated by plot.py at 2019-05-30 03:13:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 149.64 Mbit/s  
95th percentile per-packet one-way delay: 77.970 ms  
Loss rate: 14.77%

-- Flow 1:

Average throughput: 61.84 Mbit/s  
95th percentile per-packet one-way delay: 78.050 ms  
Loss rate: 8.73%

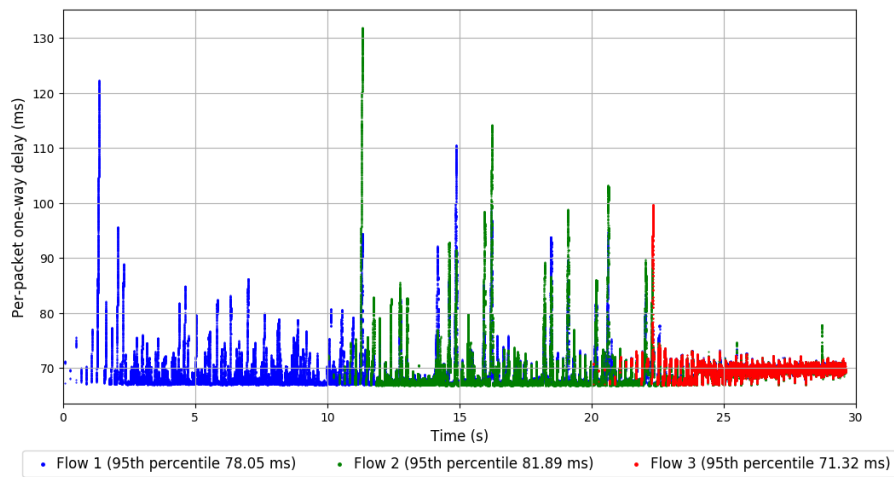
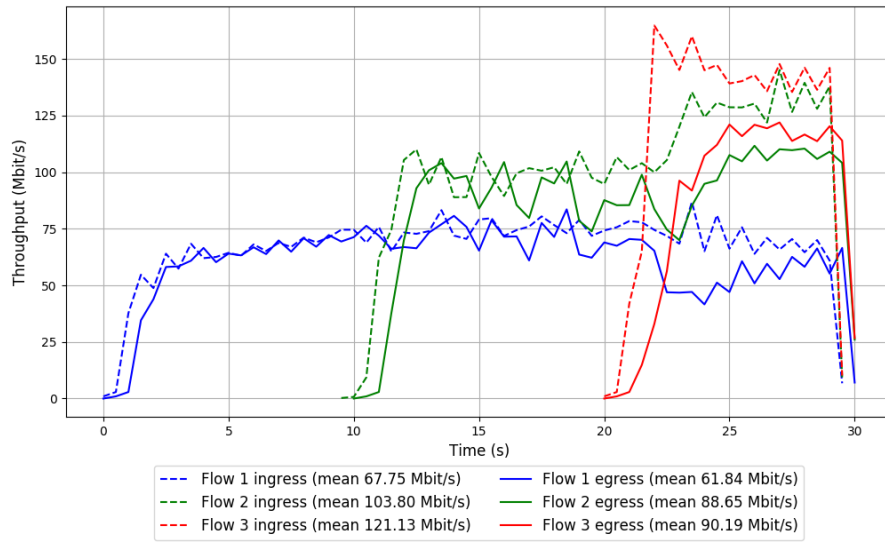
-- Flow 2:

Average throughput: 88.65 Mbit/s  
95th percentile per-packet one-way delay: 81.887 ms  
Loss rate: 14.61%

-- Flow 3:

Average throughput: 90.19 Mbit/s  
95th percentile per-packet one-way delay: 71.320 ms  
Loss rate: 25.53%

### Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-05-30 00:35:48  
End at: 2019-05-30 00:36:18  
Local clock offset: 5.749 ms  
Remote clock offset: -39.337 ms

# Below is generated by plot.py at 2019-05-30 03:14:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 346.35 Mbit/s  
95th percentile per-packet one-way delay: 62.476 ms  
Loss rate: 12.46%

-- Flow 1:

Average throughput: 336.99 Mbit/s  
95th percentile per-packet one-way delay: 62.482 ms  
Loss rate: 12.52%

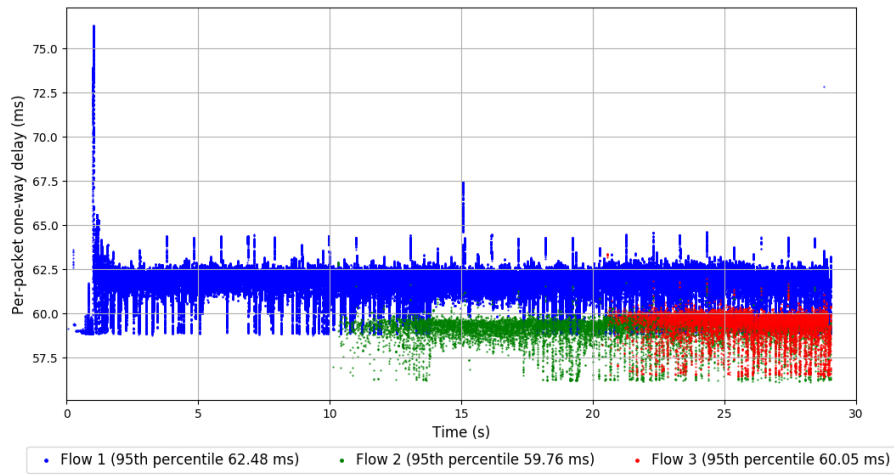
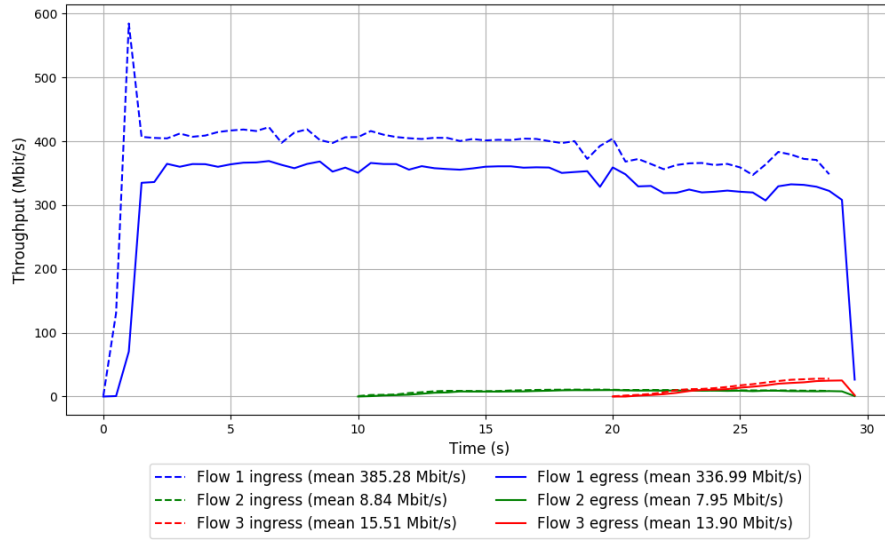
-- Flow 2:

Average throughput: 7.95 Mbit/s  
95th percentile per-packet one-way delay: 59.758 ms  
Loss rate: 10.03%

-- Flow 3:

Average throughput: 13.90 Mbit/s  
95th percentile per-packet one-way delay: 60.052 ms  
Loss rate: 10.38%

# Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-05-30 01:06:18  
End at: 2019-05-30 01:06:48  
Local clock offset: -3.874 ms  
Remote clock offset: -34.307 ms

# Below is generated by plot.py at 2019-05-30 03:15:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 337.43 Mbit/s  
95th percentile per-packet one-way delay: 73.556 ms  
Loss rate: 14.24%

-- Flow 1:

Average throughput: 329.82 Mbit/s  
95th percentile per-packet one-way delay: 73.636 ms  
Loss rate: 14.32%

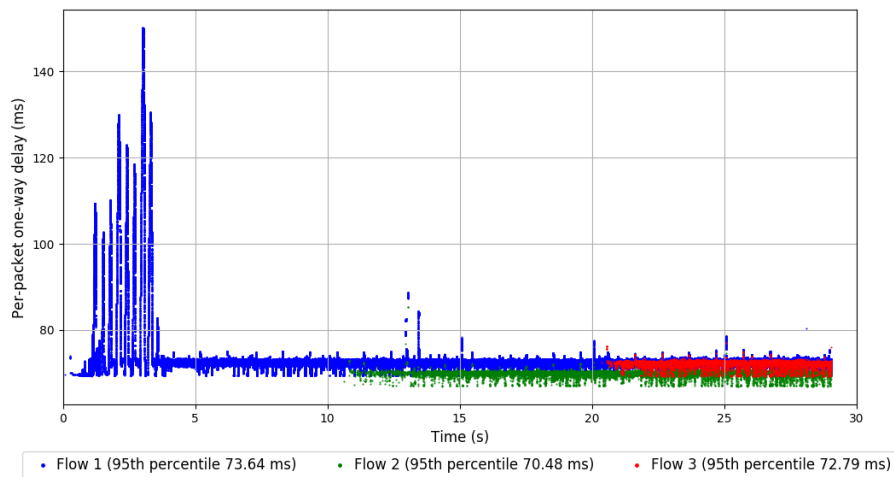
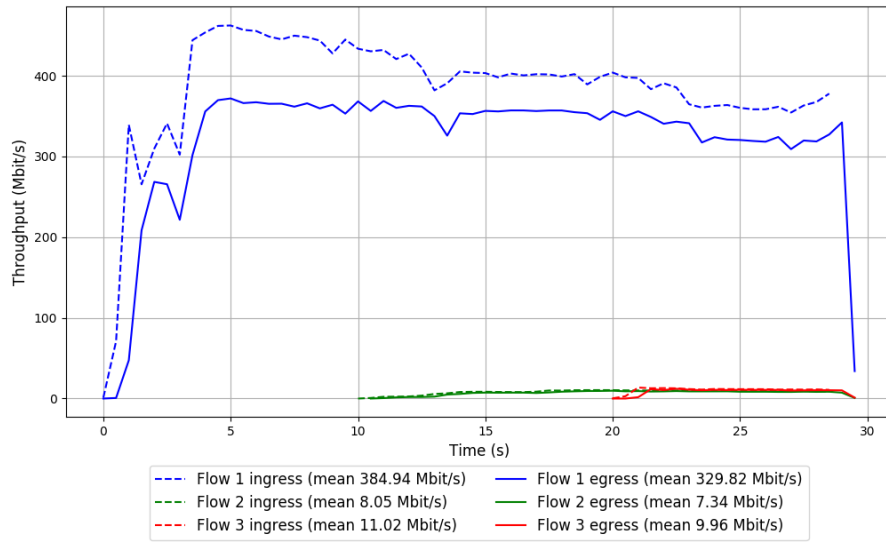
-- Flow 2:

Average throughput: 7.34 Mbit/s  
95th percentile per-packet one-way delay: 70.485 ms  
Loss rate: 11.25%

-- Flow 3:

Average throughput: 9.96 Mbit/s  
95th percentile per-packet one-way delay: 72.787 ms  
Loss rate: 9.67%

## Run 2: Report of Indigo-MusesC3 — Data Link





Run 3: Statistics of Indigo-MusesC3

Start at: 2019-05-30 01:36:48  
End at: 2019-05-30 01:37:18  
Local clock offset: -2.13 ms  
Remote clock offset: -47.097 ms

# Below is generated by plot.py at 2019-05-30 03:15:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 343.84 Mbit/s  
95th percentile per-packet one-way delay: 61.112 ms  
Loss rate: 13.13%

-- Flow 1:

Average throughput: 333.18 Mbit/s  
95th percentile per-packet one-way delay: 61.119 ms  
Loss rate: 13.27%

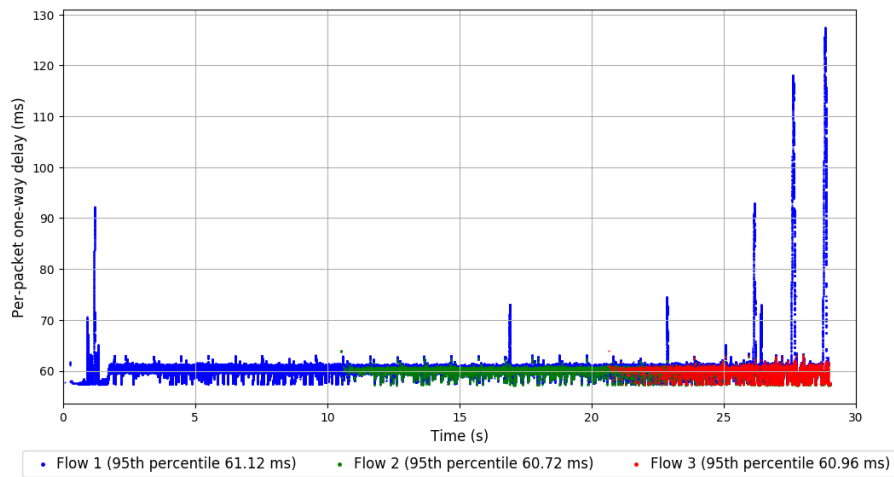
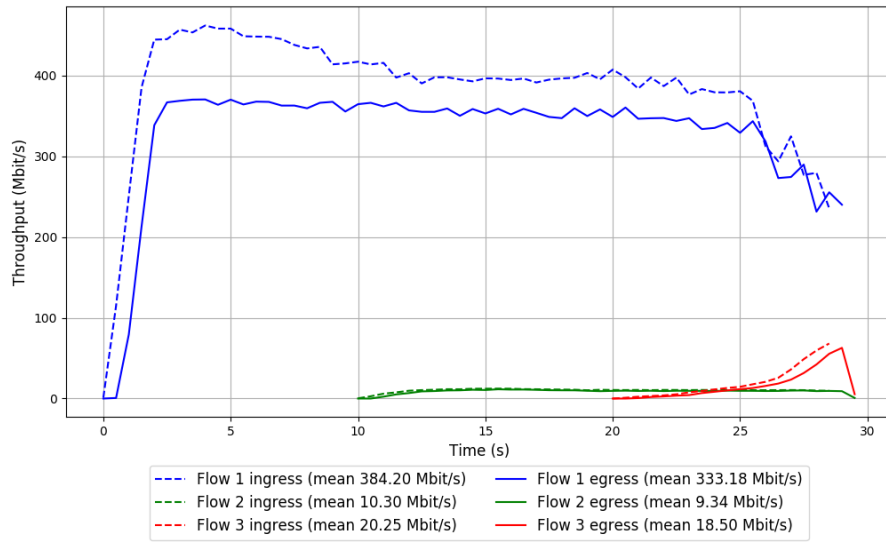
-- Flow 2:

Average throughput: 9.34 Mbit/s  
95th percentile per-packet one-way delay: 60.722 ms  
Loss rate: 9.26%

-- Flow 3:

Average throughput: 18.50 Mbit/s  
95th percentile per-packet one-way delay: 60.964 ms  
Loss rate: 8.70%

### Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-05-30 02:07:12  
End at: 2019-05-30 02:07:42  
Local clock offset: 3.391 ms  
Remote clock offset: -37.595 ms

# Below is generated by plot.py at 2019-05-30 03:15:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 349.09 Mbit/s  
95th percentile per-packet one-way delay: 65.008 ms  
Loss rate: 12.24%

-- Flow 1:

Average throughput: 341.03 Mbit/s  
95th percentile per-packet one-way delay: 65.012 ms  
Loss rate: 12.31%

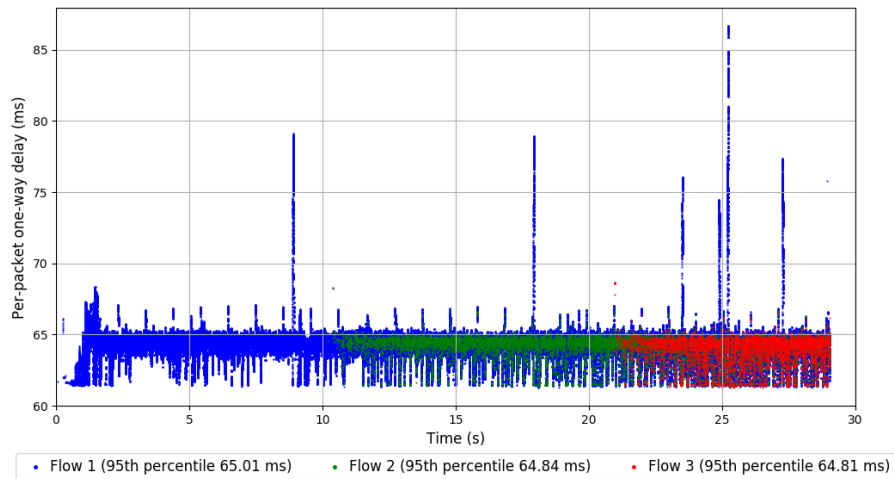
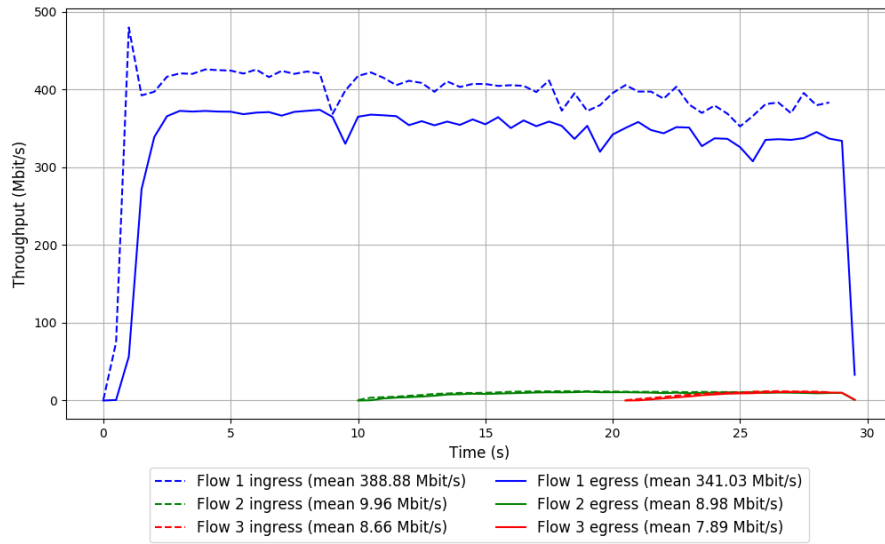
-- Flow 2:

Average throughput: 8.98 Mbit/s  
95th percentile per-packet one-way delay: 64.845 ms  
Loss rate: 9.83%

-- Flow 3:

Average throughput: 7.89 Mbit/s  
95th percentile per-packet one-way delay: 64.811 ms  
Loss rate: 8.85%

### Run 4: Report of Indigo-MusesC3 — Data Link

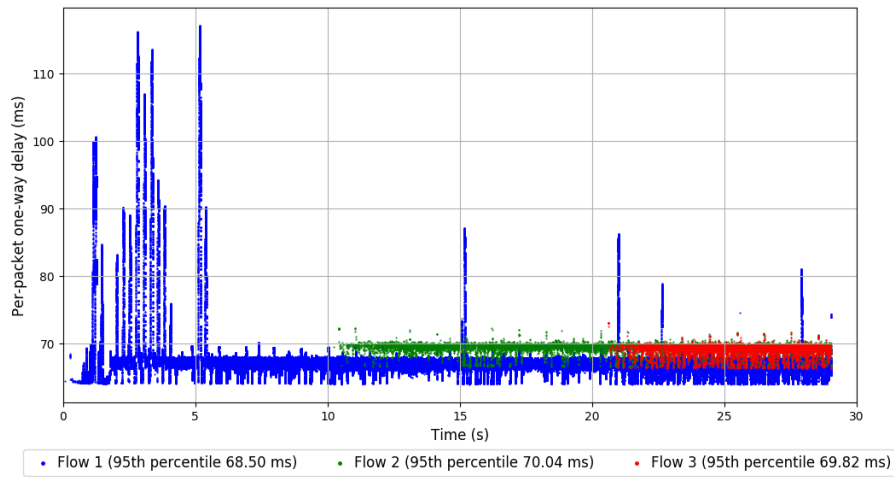
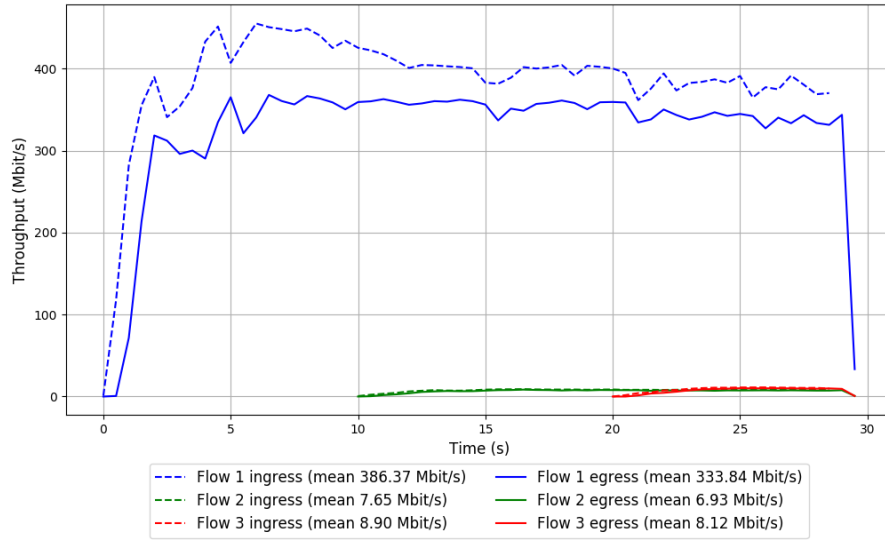


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-05-30 02:37:34  
End at: 2019-05-30 02:38:04  
Local clock offset: -1.76 ms  
Remote clock offset: -36.802 ms

```
# Below is generated by plot.py at 2019-05-30 03:15:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.75 Mbit/s
95th percentile per-packet one-way delay: 69.520 ms
Loss rate: 13.50%
-- Flow 1:
Average throughput: 333.84 Mbit/s
95th percentile per-packet one-way delay: 68.499 ms
Loss rate: 13.59%
-- Flow 2:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 70.044 ms
Loss rate: 9.39%
-- Flow 3:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 69.818 ms
Loss rate: 8.77%
```

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-05-30 00:34:15  
End at: 2019-05-30 00:34:45  
Local clock offset: 6.097 ms  
Remote clock offset: -34.71 ms

# Below is generated by plot.py at 2019-05-30 03:16:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 330.13 Mbit/s  
95th percentile per-packet one-way delay: 64.599 ms  
Loss rate: 25.83%

-- Flow 1:

Average throughput: 329.48 Mbit/s  
95th percentile per-packet one-way delay: 64.599 ms  
Loss rate: 25.82%

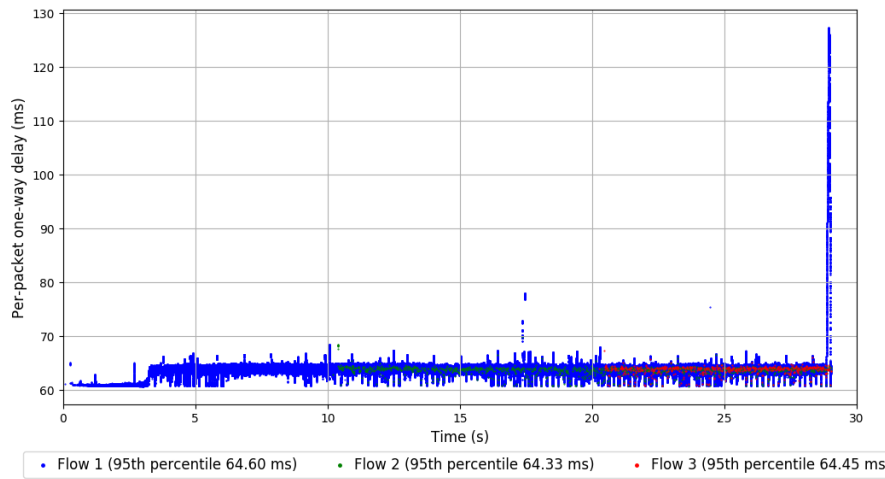
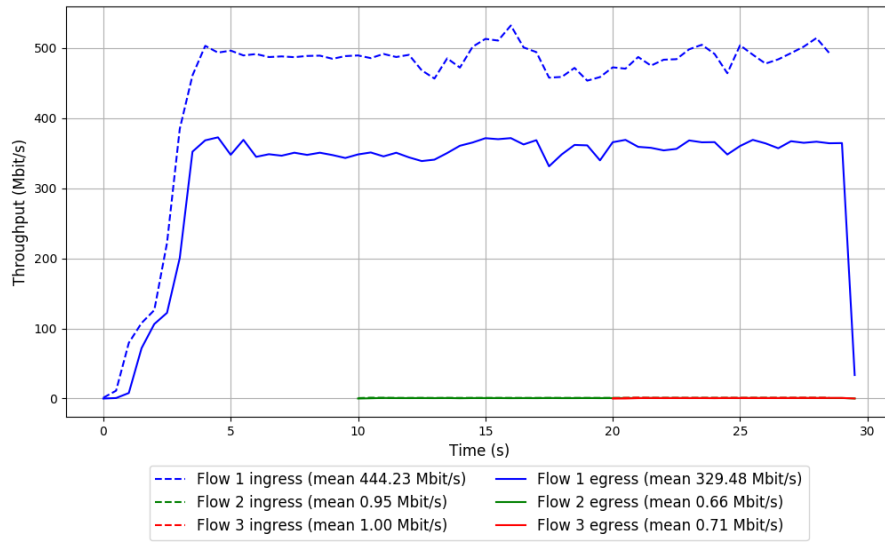
-- Flow 2:

Average throughput: 0.66 Mbit/s  
95th percentile per-packet one-way delay: 64.326 ms  
Loss rate: 30.32%

-- Flow 3:

Average throughput: 0.71 Mbit/s  
95th percentile per-packet one-way delay: 64.453 ms  
Loss rate: 29.71%

# Run 1: Report of Indigo-MusesC5 — Data Link





Run 2: Statistics of Indigo-MusesC5

Start at: 2019-05-30 01:04:44  
End at: 2019-05-30 01:05:14  
Local clock offset: 1.484 ms  
Remote clock offset: -39.175 ms

# Below is generated by plot.py at 2019-05-30 03:17:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 322.06 Mbit/s  
95th percentile per-packet one-way delay: 60.517 ms  
Loss rate: 25.53%

-- Flow 1:

Average throughput: 321.29 Mbit/s  
95th percentile per-packet one-way delay: 60.513 ms  
Loss rate: 25.52%

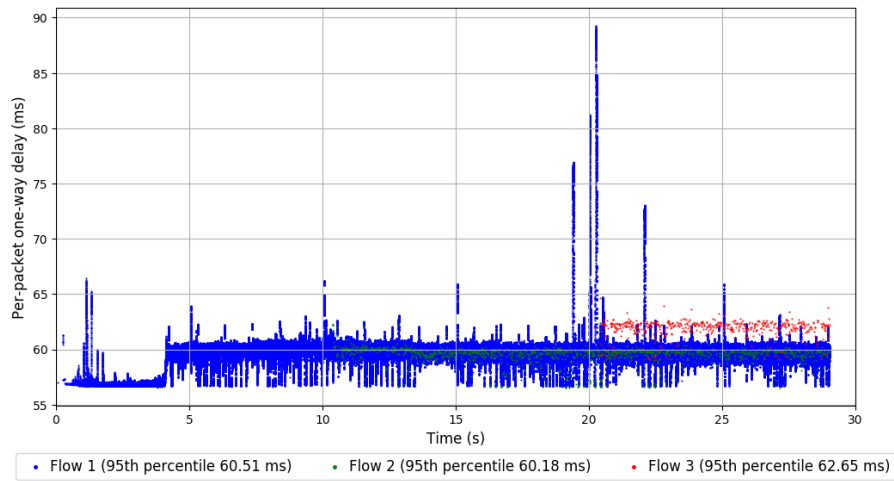
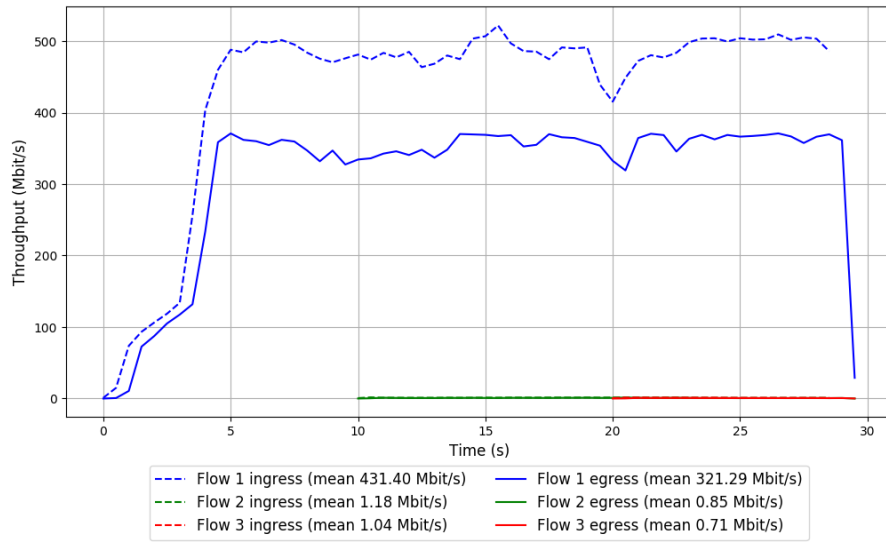
-- Flow 2:

Average throughput: 0.85 Mbit/s  
95th percentile per-packet one-way delay: 60.180 ms  
Loss rate: 28.06%

-- Flow 3:

Average throughput: 0.71 Mbit/s  
95th percentile per-packet one-way delay: 62.646 ms  
Loss rate: 31.68%

## Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-05-30 01:35:14  
End at: 2019-05-30 01:35:44  
Local clock offset: -1.776 ms  
Remote clock offset: -43.798 ms

# Below is generated by plot.py at 2019-05-30 03:18:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 341.94 Mbit/s  
95th percentile per-packet one-way delay: 61.335 ms  
Loss rate: 27.79%

-- Flow 1:

Average throughput: 341.24 Mbit/s  
95th percentile per-packet one-way delay: 61.330 ms  
Loss rate: 27.78%

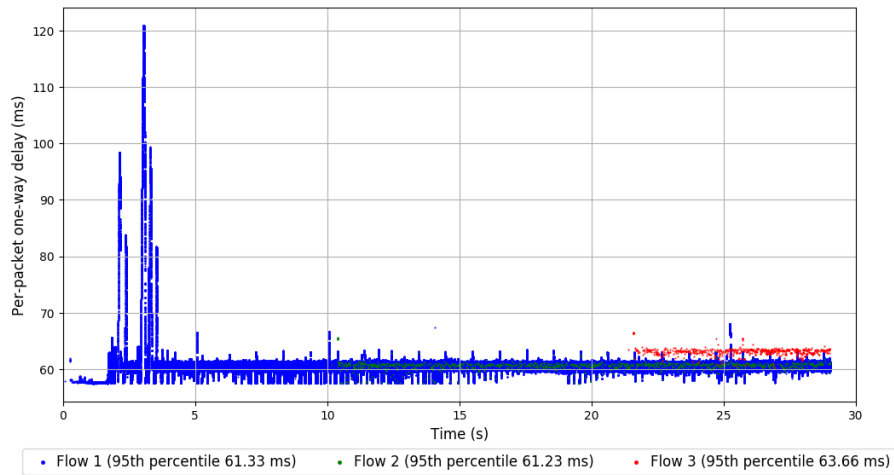
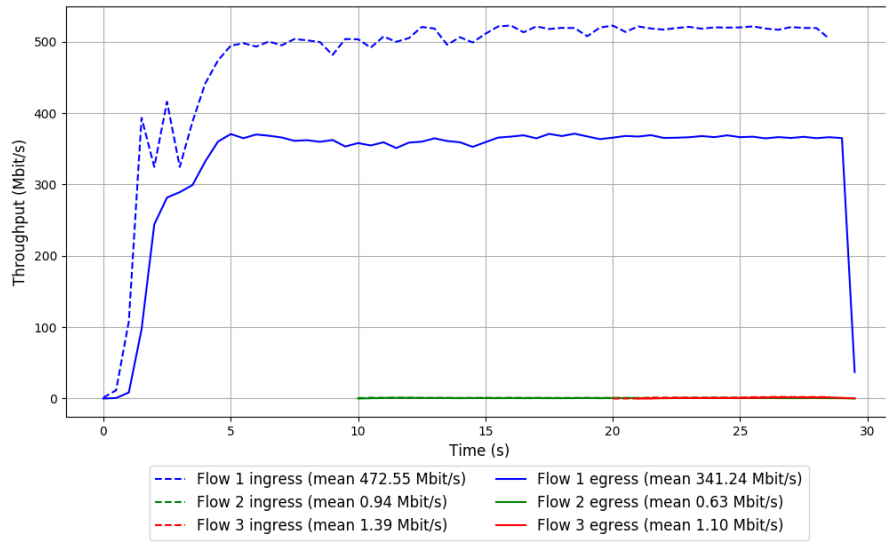
-- Flow 2:

Average throughput: 0.63 Mbit/s  
95th percentile per-packet one-way delay: 61.228 ms  
Loss rate: 32.72%

-- Flow 3:

Average throughput: 1.10 Mbit/s  
95th percentile per-packet one-way delay: 63.661 ms  
Loss rate: 30.59%

### Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-05-30 02:05:38  
End at: 2019-05-30 02:06:08  
Local clock offset: -2.357 ms  
Remote clock offset: -43.876 ms

# Below is generated by plot.py at 2019-05-30 03:18:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 334.02 Mbit/s  
95th percentile per-packet one-way delay: 64.835 ms  
Loss rate: 27.81%

-- Flow 1:

Average throughput: 332.99 Mbit/s  
95th percentile per-packet one-way delay: 64.836 ms  
Loss rate: 27.81%

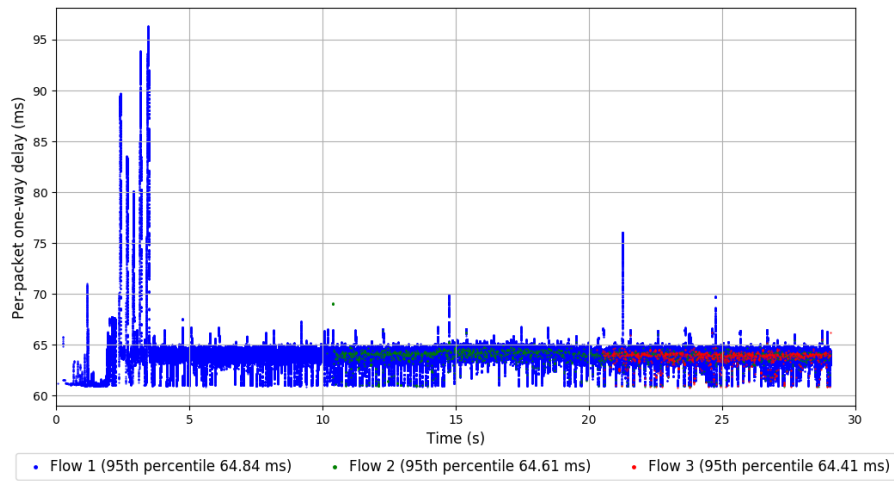
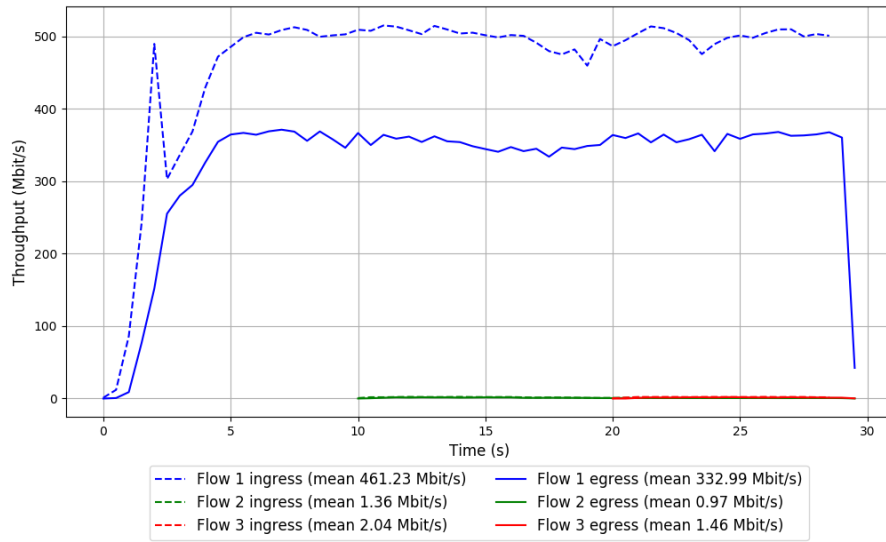
-- Flow 2:

Average throughput: 0.97 Mbit/s  
95th percentile per-packet one-way delay: 64.610 ms  
Loss rate: 28.95%

-- Flow 3:

Average throughput: 1.46 Mbit/s  
95th percentile per-packet one-way delay: 64.413 ms  
Loss rate: 28.65%

### Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-05-30 02:36:01  
End at: 2019-05-30 02:36:31  
Local clock offset: 3.689 ms  
Remote clock offset: -36.521 ms

# Below is generated by plot.py at 2019-05-30 03:19:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 330.09 Mbit/s  
95th percentile per-packet one-way delay: 63.121 ms  
Loss rate: 25.31%

-- Flow 1:

Average throughput: 329.00 Mbit/s  
95th percentile per-packet one-way delay: 63.108 ms  
Loss rate: 25.30%

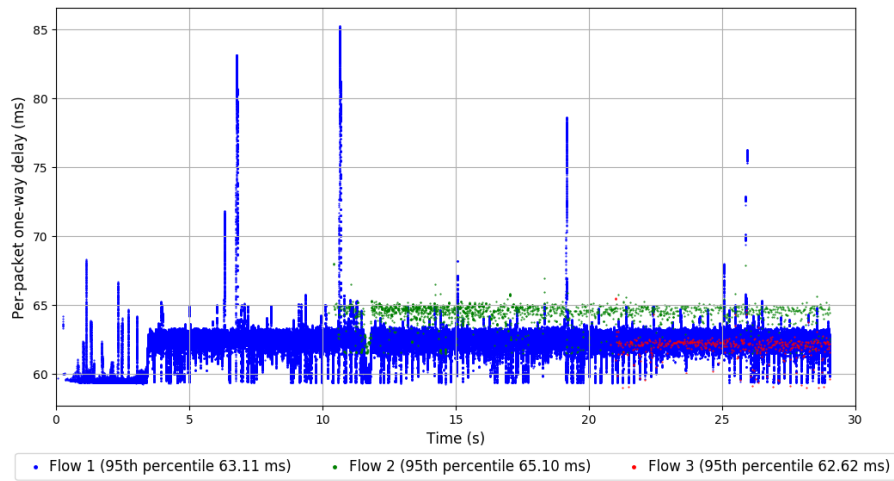
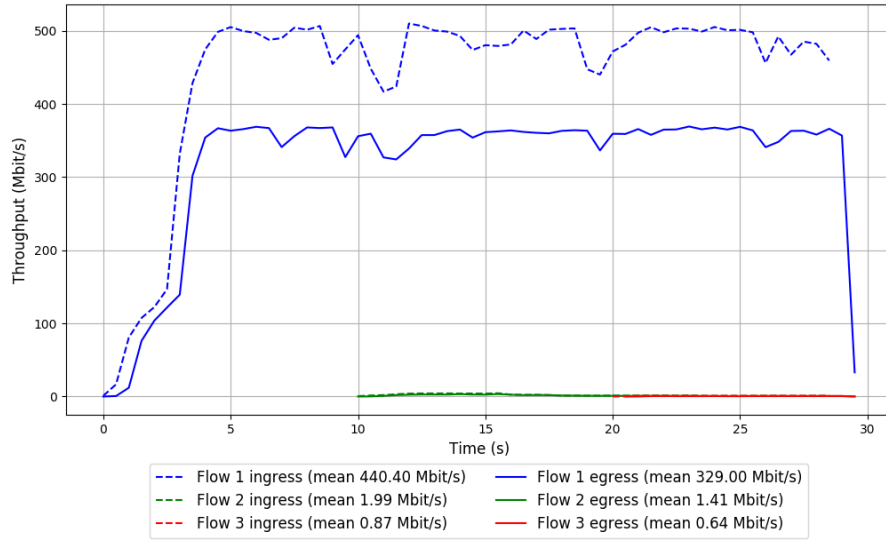
-- Flow 2:

Average throughput: 1.41 Mbit/s  
95th percentile per-packet one-way delay: 65.096 ms  
Loss rate: 28.95%

-- Flow 3:

Average throughput: 0.64 Mbit/s  
95th percentile per-packet one-way delay: 62.623 ms  
Loss rate: 31.20%

### Run 5: Report of Indigo-MusesC5 — Data Link





Run 1: Statistics of Indigo-MusesD

Start at: 2019-05-30 00:44:50  
End at: 2019-05-30 00:45:20  
Local clock offset: 2.734 ms  
Remote clock offset: -37.078 ms

# Below is generated by plot.py at 2019-05-30 03:19:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 312.72 Mbit/s  
95th percentile per-packet one-way delay: 64.884 ms  
Loss rate: 11.41%

-- Flow 1:

Average throughput: 252.61 Mbit/s  
95th percentile per-packet one-way delay: 62.997 ms  
Loss rate: 12.19%

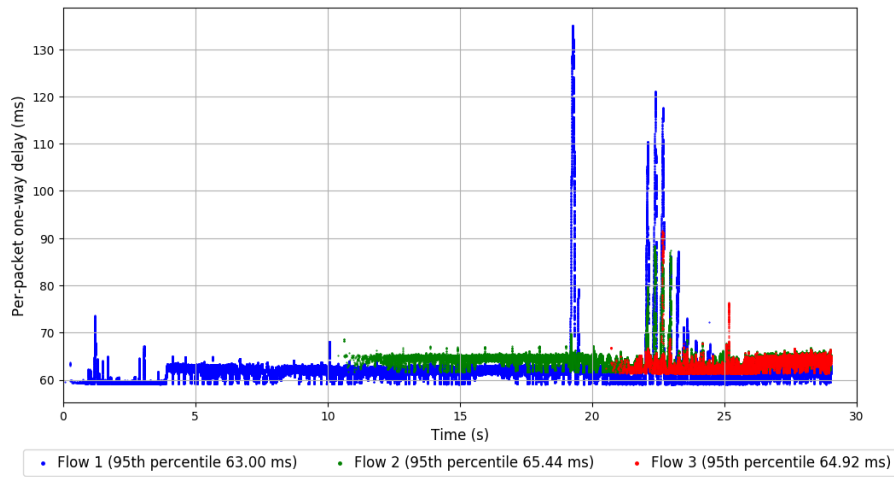
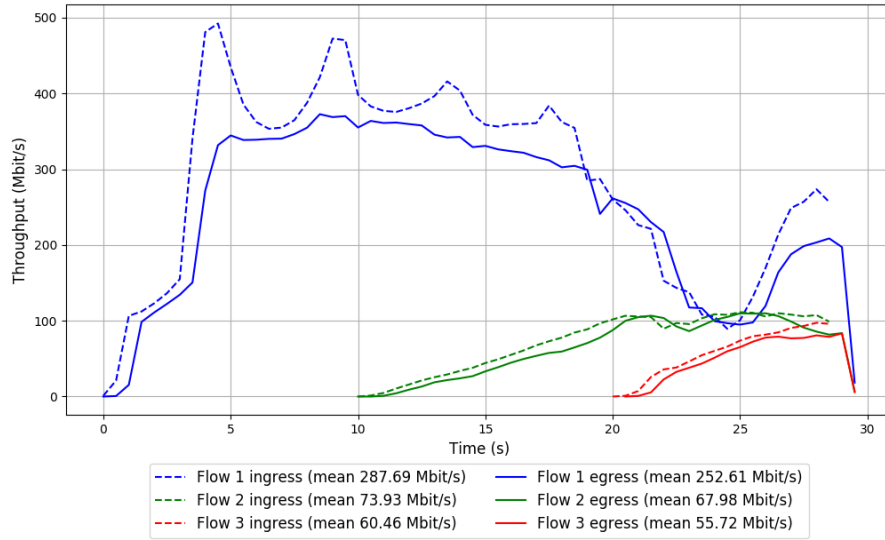
-- Flow 2:

Average throughput: 67.98 Mbit/s  
95th percentile per-packet one-way delay: 65.444 ms  
Loss rate: 8.06%

-- Flow 3:

Average throughput: 55.72 Mbit/s  
95th percentile per-packet one-way delay: 64.922 ms  
Loss rate: 7.82%

# Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-05-30 01:15:17  
End at: 2019-05-30 01:15:47  
Local clock offset: 2.578 ms  
Remote clock offset: -41.799 ms

# Below is generated by plot.py at 2019-05-30 03:19:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 320.48 Mbit/s  
95th percentile per-packet one-way delay: 61.665 ms  
Loss rate: 12.98%

-- Flow 1:

Average throughput: 295.77 Mbit/s  
95th percentile per-packet one-way delay: 63.216 ms  
Loss rate: 12.97%

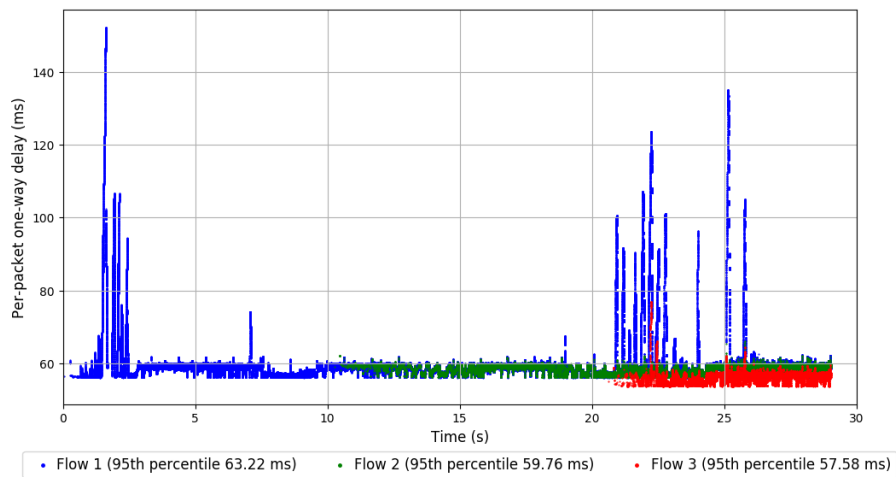
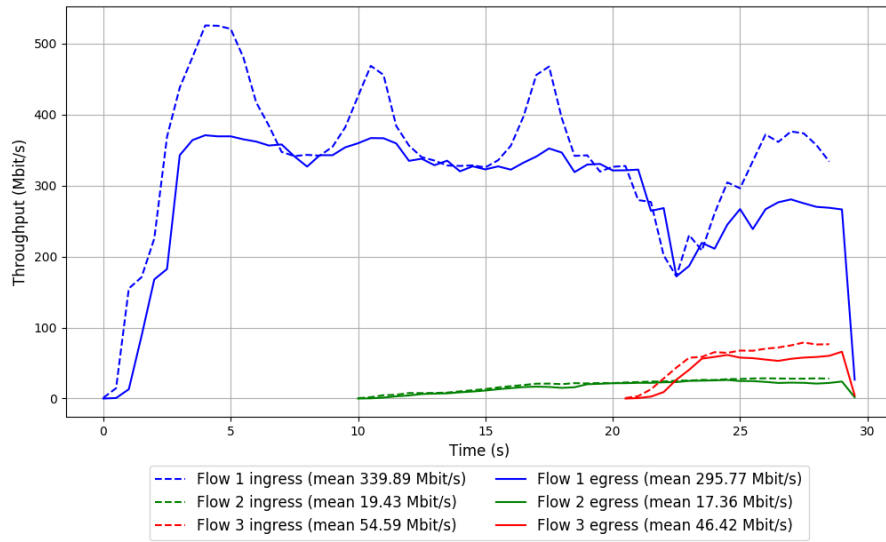
-- Flow 2:

Average throughput: 17.36 Mbit/s  
95th percentile per-packet one-way delay: 59.757 ms  
Loss rate: 10.64%

-- Flow 3:

Average throughput: 46.42 Mbit/s  
95th percentile per-packet one-way delay: 57.576 ms  
Loss rate: 14.96%

## Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-05-30 01:45:45  
End at: 2019-05-30 01:46:15  
Local clock offset: -1.633 ms  
Remote clock offset: -43.625 ms

# Below is generated by plot.py at 2019-05-30 03:19:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 317.55 Mbit/s  
95th percentile per-packet one-way delay: 62.824 ms  
Loss rate: 12.56%

-- Flow 1:

Average throughput: 297.18 Mbit/s  
95th percentile per-packet one-way delay: 62.147 ms  
Loss rate: 12.75%

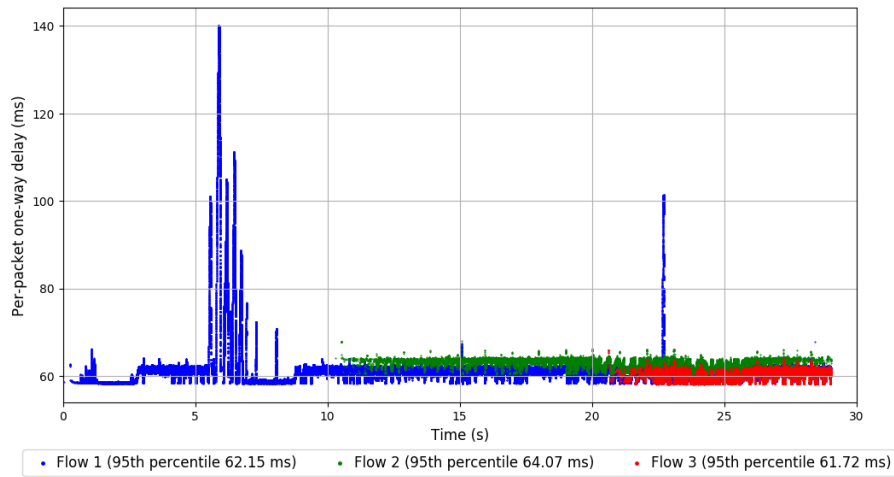
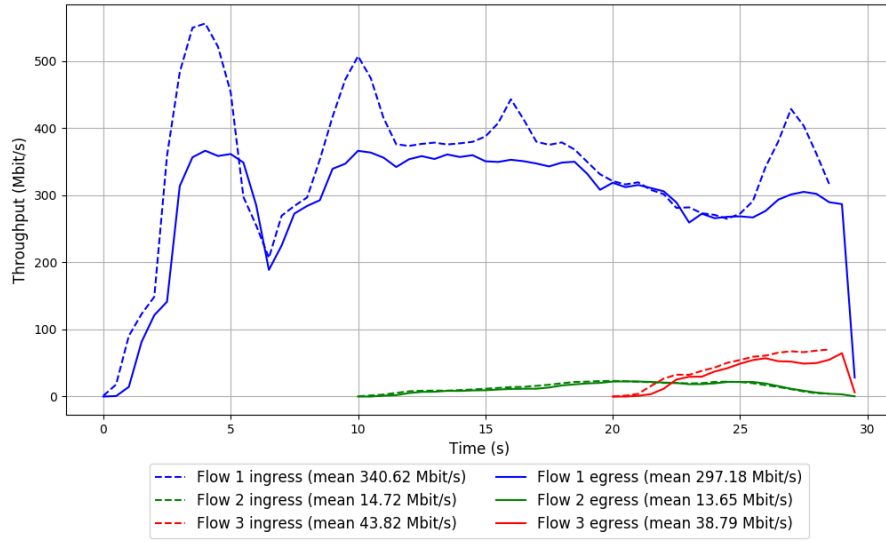
-- Flow 2:

Average throughput: 13.65 Mbit/s  
95th percentile per-packet one-way delay: 64.073 ms  
Loss rate: 7.26%

-- Flow 3:

Average throughput: 38.79 Mbit/s  
95th percentile per-packet one-way delay: 61.717 ms  
Loss rate: 11.47%

### Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-05-30 02:16:13  
End at: 2019-05-30 02:16:43  
Local clock offset: 2.361 ms  
Remote clock offset: -35.001 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 311.20 Mbit/s  
95th percentile per-packet one-way delay: 69.842 ms  
Loss rate: 13.01%

-- Flow 1:

Average throughput: 278.06 Mbit/s  
95th percentile per-packet one-way delay: 71.525 ms  
Loss rate: 13.30%

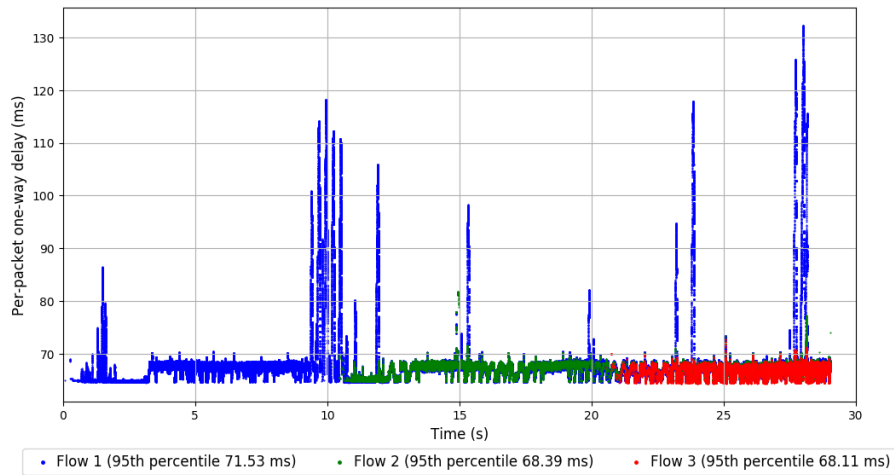
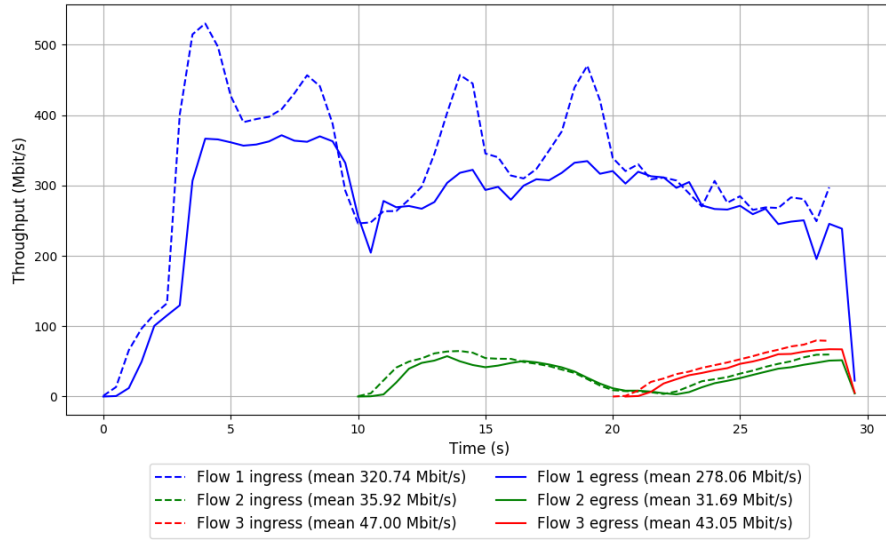
-- Flow 2:

Average throughput: 31.69 Mbit/s  
95th percentile per-packet one-way delay: 68.385 ms  
Loss rate: 11.77%

-- Flow 3:

Average throughput: 43.05 Mbit/s  
95th percentile per-packet one-way delay: 68.113 ms  
Loss rate: 8.42%

### Run 4: Report of Indigo-MusesD — Data Link





Run 5: Statistics of Indigo-MusesD

Start at: 2019-05-30 02:46:34  
End at: 2019-05-30 02:47:04  
Local clock offset: -2.674 ms  
Remote clock offset: -37.818 ms

# Below is generated by plot.py at 2019-05-30 03:21:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 327.29 Mbit/s  
95th percentile per-packet one-way delay: 68.899 ms  
Loss rate: 13.36%

-- Flow 1:

Average throughput: 313.40 Mbit/s  
95th percentile per-packet one-way delay: 68.907 ms  
Loss rate: 13.36%

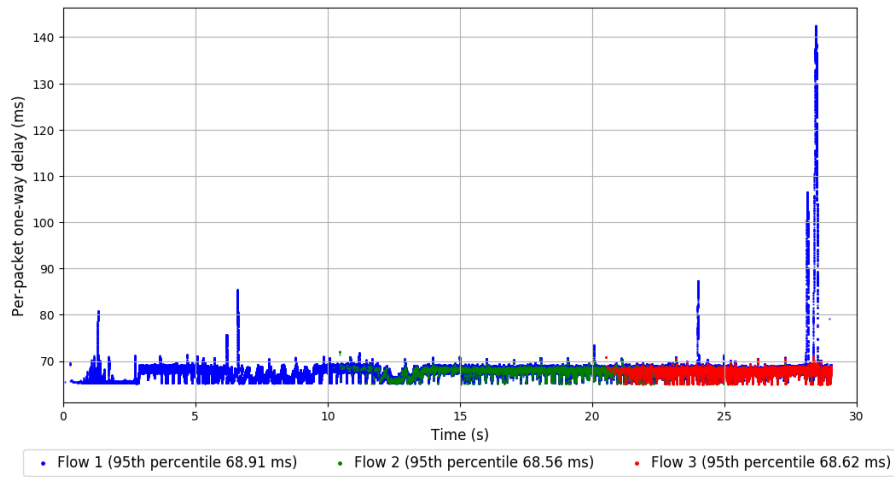
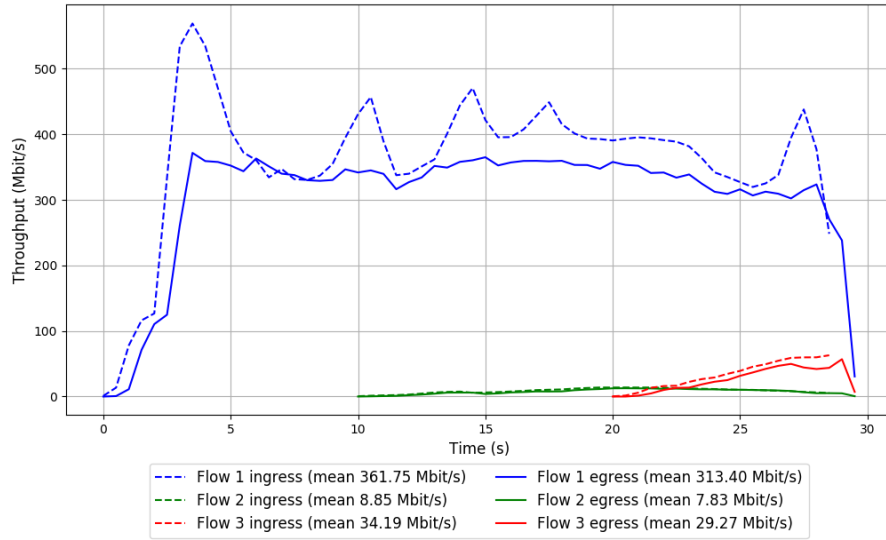
-- Flow 2:

Average throughput: 7.83 Mbit/s  
95th percentile per-packet one-way delay: 68.560 ms  
Loss rate: 11.58%

-- Flow 3:

Average throughput: 29.27 Mbit/s  
95th percentile per-packet one-way delay: 68.622 ms  
Loss rate: 14.37%

Run 5: Report of Indigo-MusesD — Data Link

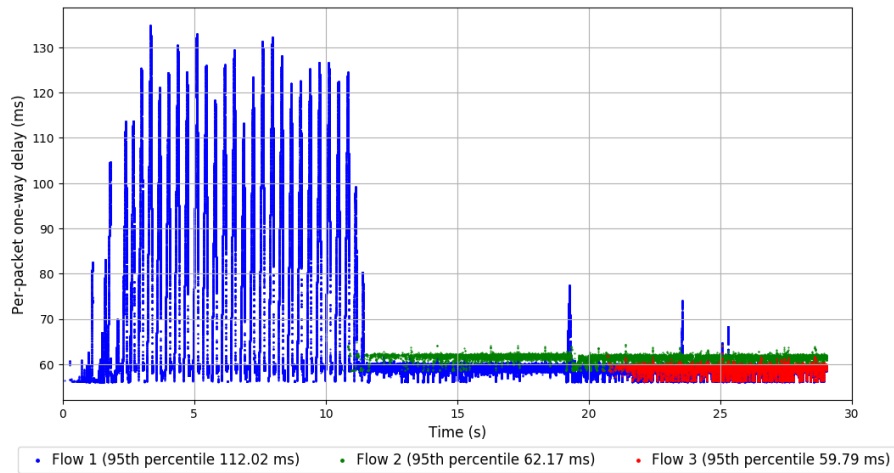
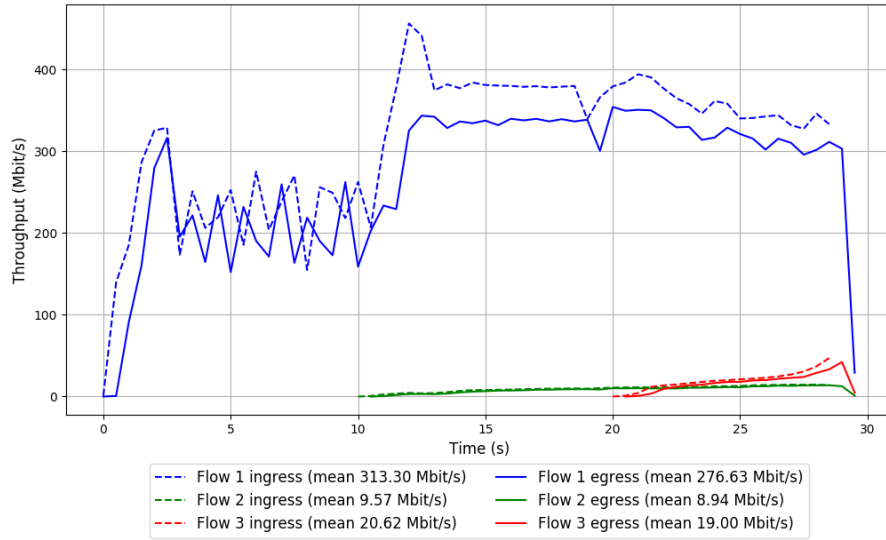


Run 1: Statistics of Indigo-MuseST

Start at: 2019-05-30 00:27:01  
End at: 2019-05-30 00:27:31  
Local clock offset: 4.119 ms  
Remote clock offset: -40.748 ms

# Below is generated by plot.py at 2019-05-30 03:21:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 287.89 Mbit/s  
95th percentile per-packet one-way delay: 111.376 ms  
Loss rate: 11.57%  
-- Flow 1:  
Average throughput: 276.63 Mbit/s  
95th percentile per-packet one-way delay: 112.018 ms  
Loss rate: 11.70%  
-- Flow 2:  
Average throughput: 8.94 Mbit/s  
95th percentile per-packet one-way delay: 62.170 ms  
Loss rate: 9.04%  
-- Flow 3:  
Average throughput: 19.00 Mbit/s  
95th percentile per-packet one-way delay: 59.792 ms  
Loss rate: 7.92%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MuseST

Start at: 2019-05-30 00:57:26  
End at: 2019-05-30 00:57:56  
Local clock offset: 1.347 ms  
Remote clock offset: -43.84 ms

# Below is generated by plot.py at 2019-05-30 03:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 330.59 Mbit/s  
95th percentile per-packet one-way delay: 58.297 ms  
Loss rate: 10.87%

-- Flow 1:

Average throughput: 267.56 Mbit/s  
95th percentile per-packet one-way delay: 57.516 ms  
Loss rate: 11.31%

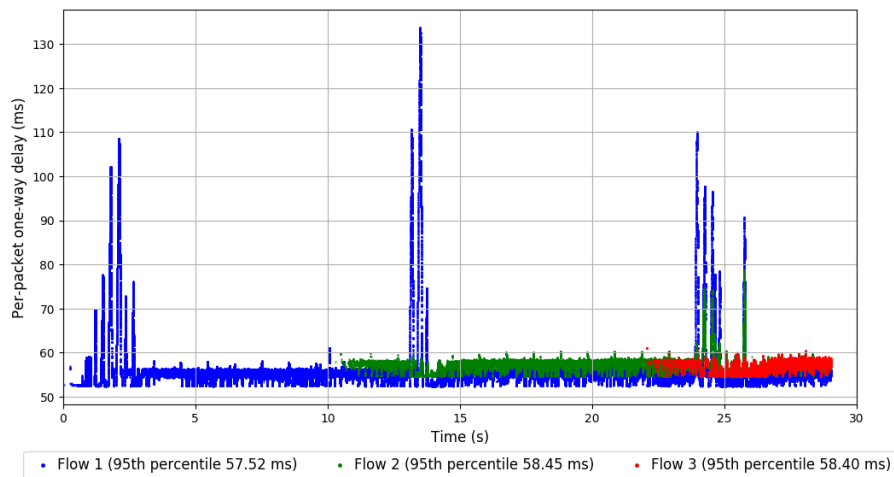
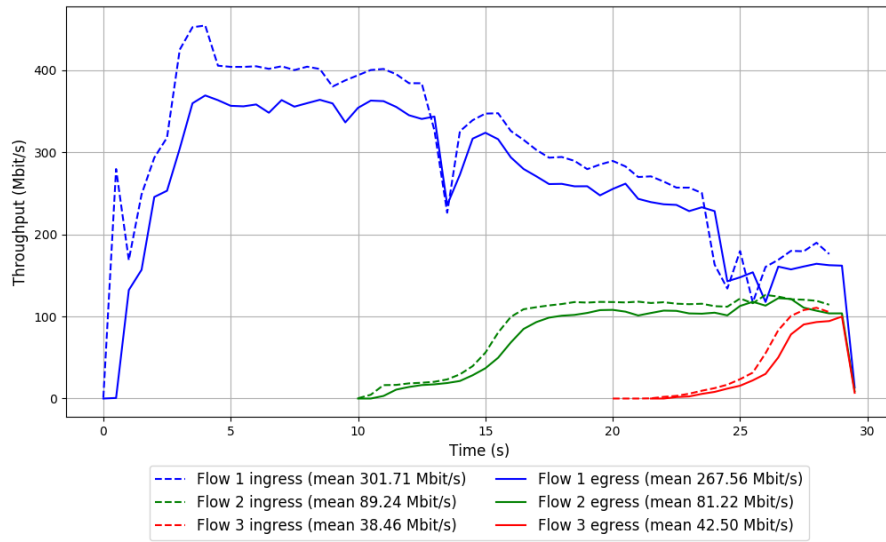
-- Flow 2:

Average throughput: 81.22 Mbit/s  
95th percentile per-packet one-way delay: 58.454 ms  
Loss rate: 8.98%

-- Flow 3:

Average throughput: 42.50 Mbit/s  
95th percentile per-packet one-way delay: 58.398 ms  
Loss rate: 8.62%

## Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MuseST

Start at: 2019-05-30 01:27:58  
End at: 2019-05-30 01:28:28  
Local clock offset: 3.322 ms  
Remote clock offset: -42.337 ms

# Below is generated by plot.py at 2019-05-30 03:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 326.82 Mbit/s  
95th percentile per-packet one-way delay: 65.666 ms  
Loss rate: 11.19%

-- Flow 1:

Average throughput: 272.92 Mbit/s  
95th percentile per-packet one-way delay: 68.147 ms  
Loss rate: 11.63%

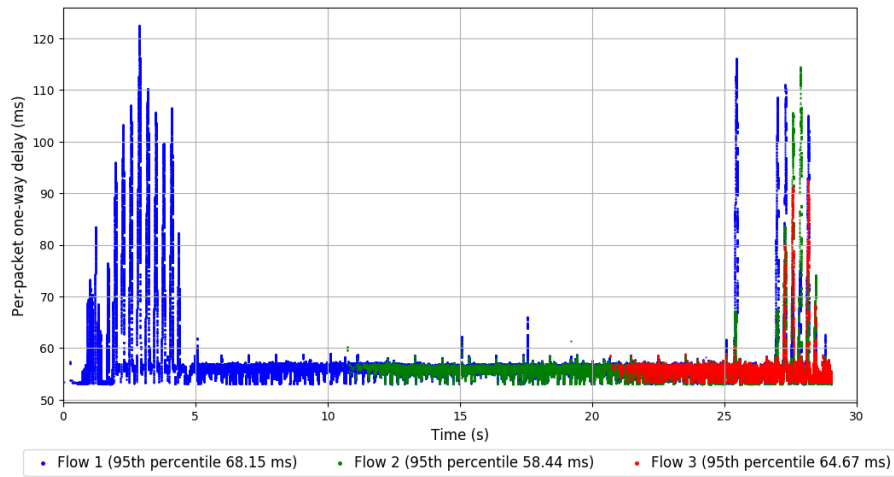
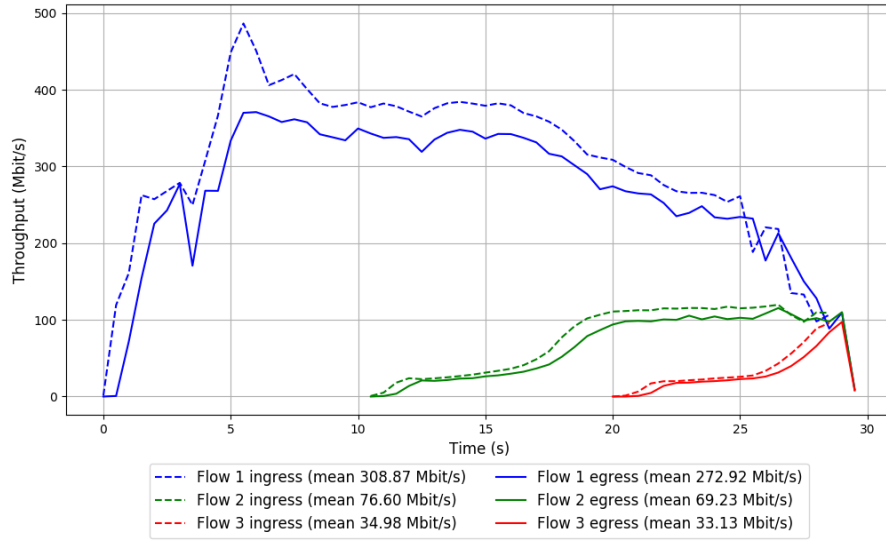
-- Flow 2:

Average throughput: 69.23 Mbit/s  
95th percentile per-packet one-way delay: 58.443 ms  
Loss rate: 9.63%

-- Flow 3:

Average throughput: 33.13 Mbit/s  
95th percentile per-packet one-way delay: 64.673 ms  
Loss rate: 5.33%

### Run 3: Report of Indigo-MusesT — Data Link



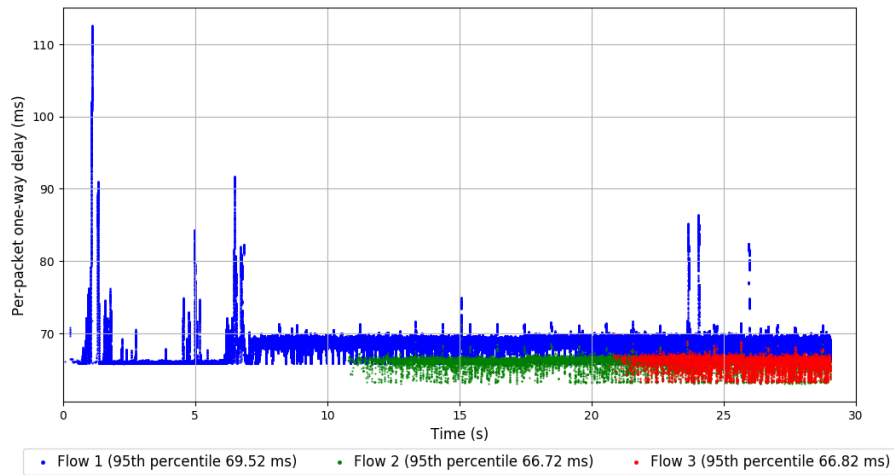
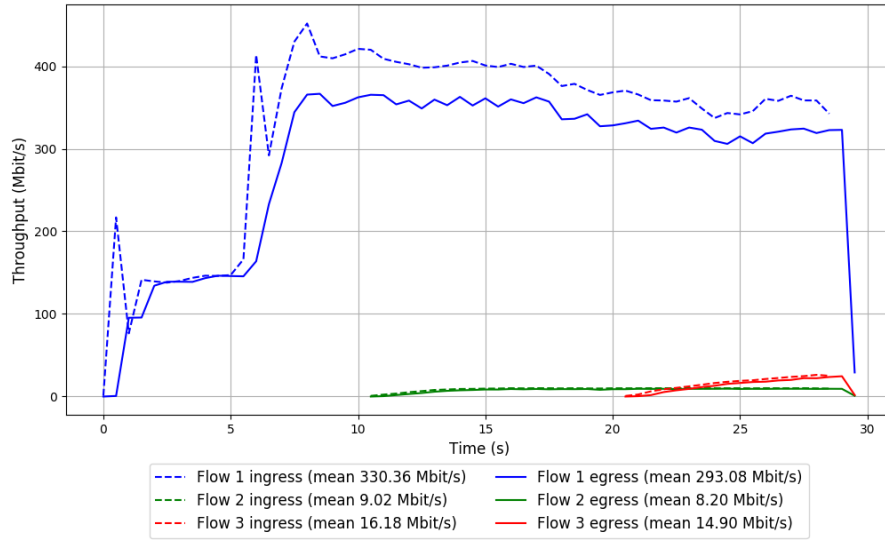


Run 4: Statistics of Indigo-MuseST

Start at: 2019-05-30 01:58:21  
End at: 2019-05-30 01:58:51  
Local clock offset: -1.551 ms  
Remote clock offset: -38.353 ms

```
# Below is generated by plot.py at 2019-05-30 03:22:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.62 Mbit/s
95th percentile per-packet one-way delay: 69.508 ms
Loss rate: 11.20%
-- Flow 1:
Average throughput: 293.08 Mbit/s
95th percentile per-packet one-way delay: 69.519 ms
Loss rate: 11.29%
-- Flow 2:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 66.715 ms
Loss rate: 9.07%
-- Flow 3:
Average throughput: 14.90 Mbit/s
95th percentile per-packet one-way delay: 66.819 ms
Loss rate: 7.90%
```

### Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MuseST

Start at: 2019-05-30 02:28:44  
End at: 2019-05-30 02:29:14  
Local clock offset: -1.501 ms  
Remote clock offset: -44.152 ms

# Below is generated by plot.py at 2019-05-30 03:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 294.09 Mbit/s  
95th percentile per-packet one-way delay: 66.223 ms  
Loss rate: 8.92%

-- Flow 1:

Average throughput: 262.25 Mbit/s  
95th percentile per-packet one-way delay: 64.929 ms  
Loss rate: 9.43%

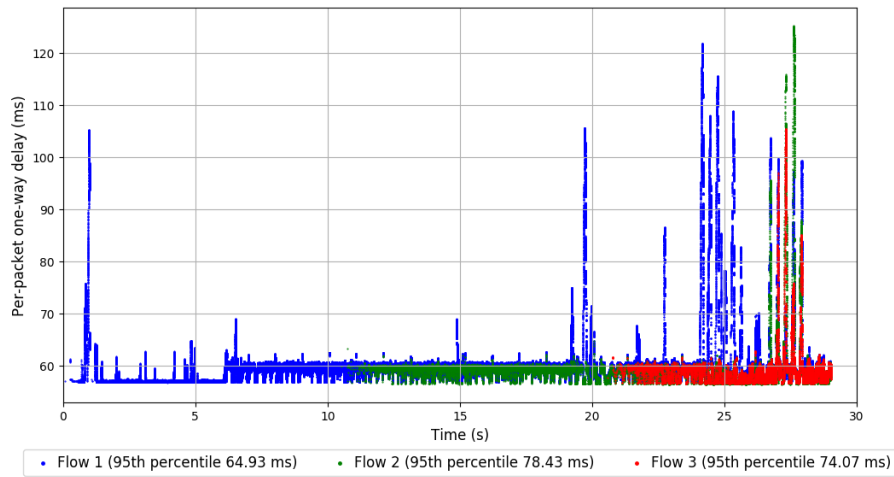
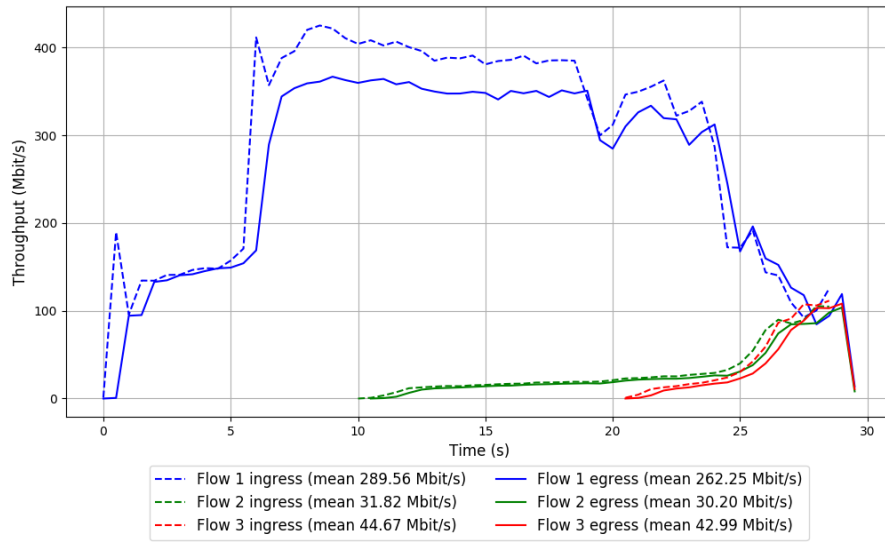
-- Flow 2:

Average throughput: 30.20 Mbit/s  
95th percentile per-packet one-way delay: 78.433 ms  
Loss rate: 5.07%

-- Flow 3:

Average throughput: 42.99 Mbit/s  
95th percentile per-packet one-way delay: 74.072 ms  
Loss rate: 3.75%

### Run 5: Report of Indigo-MusesT — Data Link



Run 1: Statistics of LEDBAT

Start at: 2019-05-30 00:28:34  
End at: 2019-05-30 00:29:04  
Local clock offset: 4.564 ms  
Remote clock offset: -38.233 ms

# Below is generated by plot.py at 2019-05-30 03:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.66 Mbit/s  
95th percentile per-packet one-way delay: 62.411 ms  
Loss rate: 0.04%

-- Flow 1:

Average throughput: 9.42 Mbit/s  
95th percentile per-packet one-way delay: 63.082 ms  
Loss rate: 0.06%

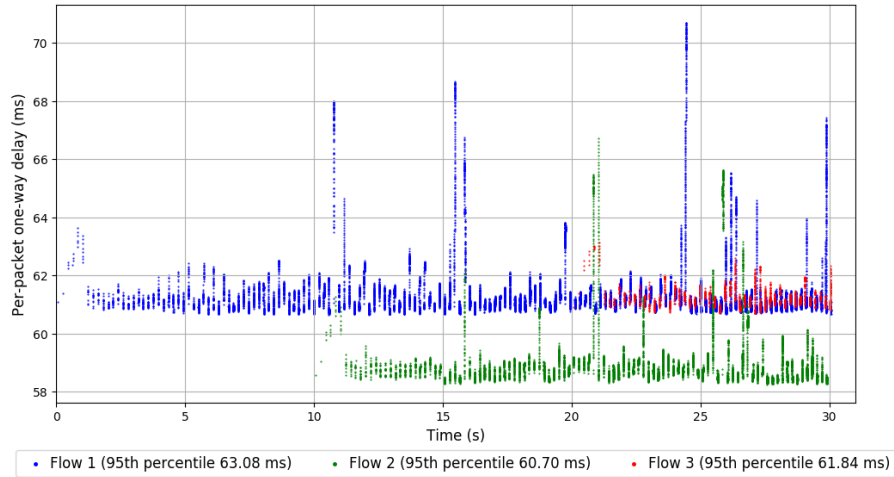
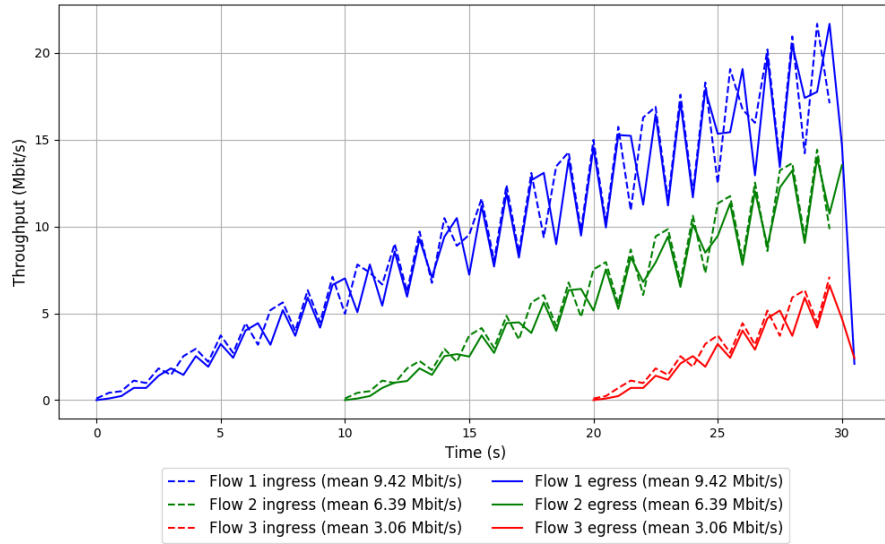
-- Flow 2:

Average throughput: 6.39 Mbit/s  
95th percentile per-packet one-way delay: 60.698 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 3.06 Mbit/s  
95th percentile per-packet one-way delay: 61.845 ms  
Loss rate: 0.00%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-05-30 00:59:01  
End at: 2019-05-30 00:59:31  
Local clock offset: -2.585 ms  
Remote clock offset: -41.997 ms

# Below is generated by plot.py at 2019-05-30 03:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.81 Mbit/s  
95th percentile per-packet one-way delay: 62.136 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.64 Mbit/s  
95th percentile per-packet one-way delay: 61.698 ms  
Loss rate: 0.00%

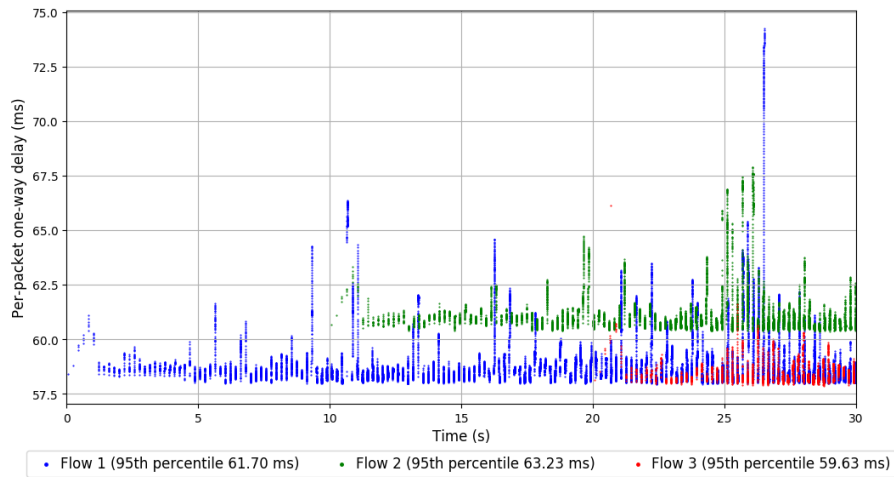
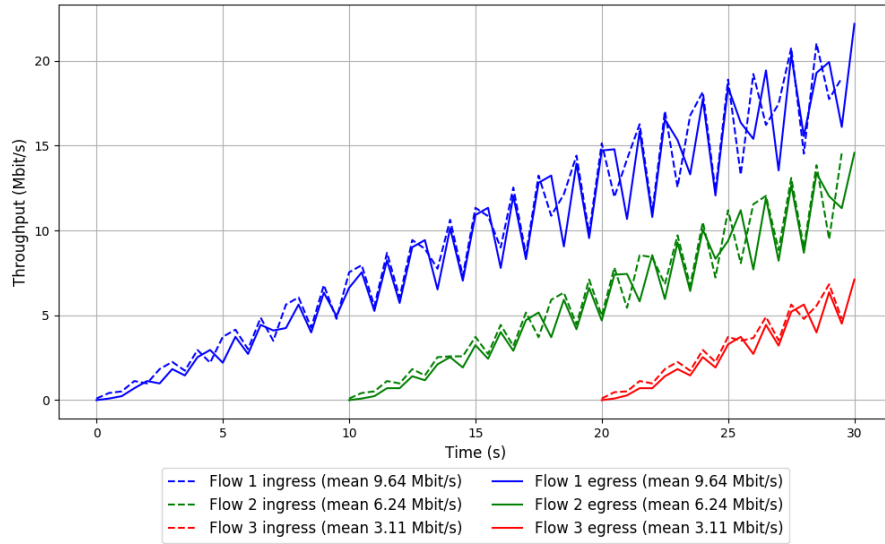
-- Flow 2:

Average throughput: 6.24 Mbit/s  
95th percentile per-packet one-way delay: 63.234 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 3.11 Mbit/s  
95th percentile per-packet one-way delay: 59.630 ms  
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link





Run 3: Statistics of LEDBAT

Start at: 2019-05-30 01:29:32  
End at: 2019-05-30 01:30:02  
Local clock offset: 2.796 ms  
Remote clock offset: -39.17 ms

# Below is generated by plot.py at 2019-05-30 03:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.96 Mbit/s  
95th percentile per-packet one-way delay: 60.068 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.71 Mbit/s  
95th percentile per-packet one-way delay: 59.697 ms  
Loss rate: 0.00%

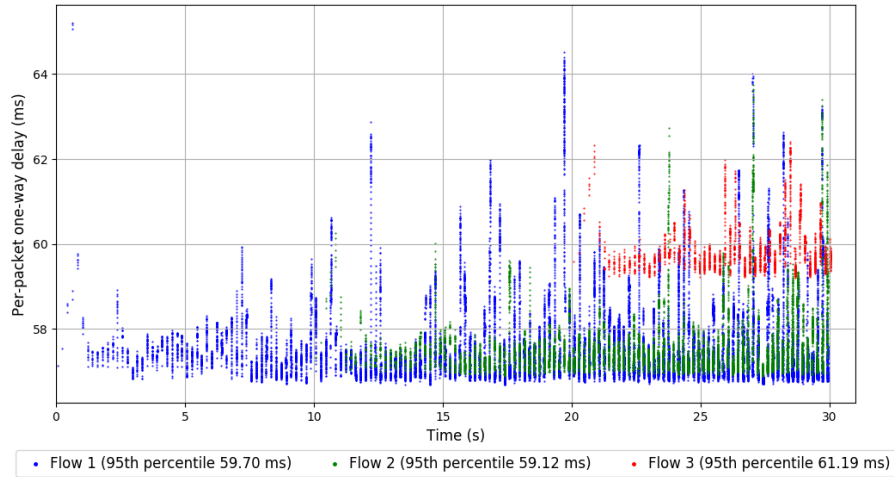
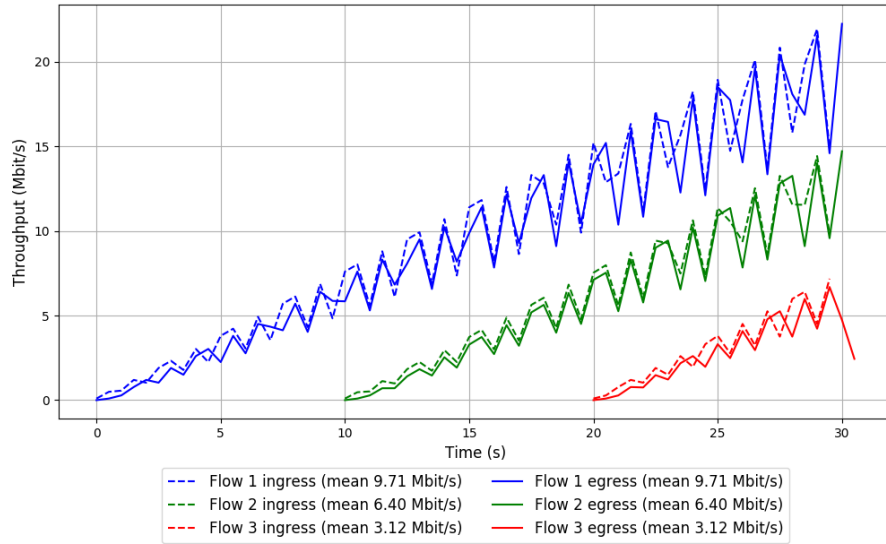
-- Flow 2:

Average throughput: 6.40 Mbit/s  
95th percentile per-packet one-way delay: 59.119 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 3.12 Mbit/s  
95th percentile per-packet one-way delay: 61.191 ms  
Loss rate: 0.00%

### Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-05-30 01:59:55  
End at: 2019-05-30 02:00:25  
Local clock offset: 3.059 ms  
Remote clock offset: -42.367 ms

# Below is generated by plot.py at 2019-05-30 03:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.98 Mbit/s  
95th percentile per-packet one-way delay: 57.474 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.69 Mbit/s  
95th percentile per-packet one-way delay: 57.915 ms  
Loss rate: 0.00%

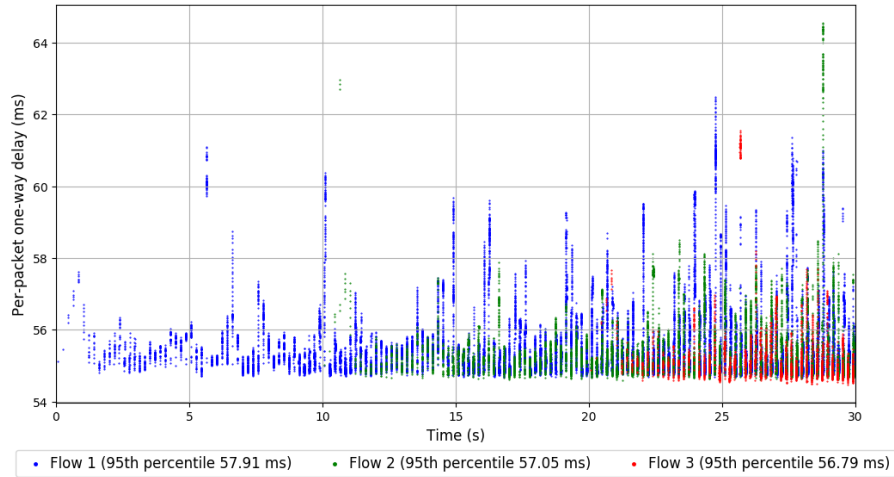
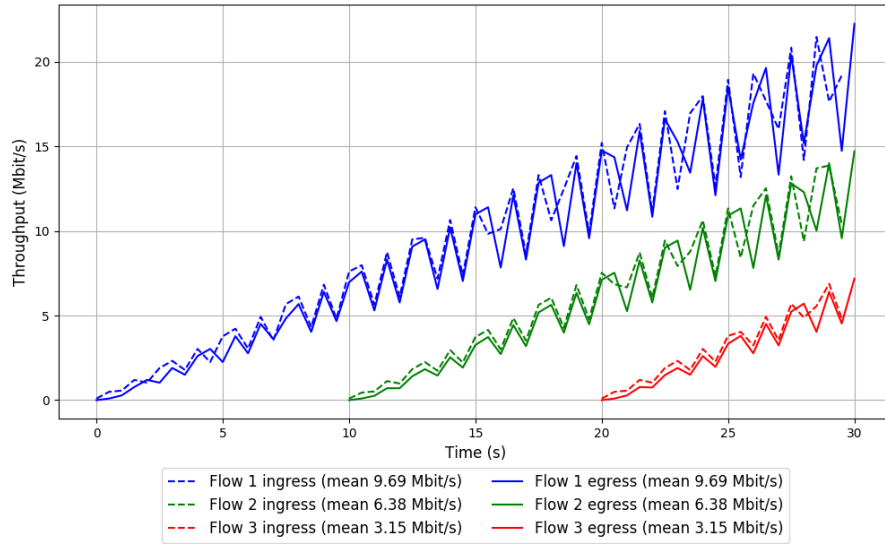
-- Flow 2:

Average throughput: 6.38 Mbit/s  
95th percentile per-packet one-way delay: 57.047 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 3.15 Mbit/s  
95th percentile per-packet one-way delay: 56.794 ms  
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-05-30 02:30:18  
End at: 2019-05-30 02:30:48  
Local clock offset: -1.961 ms  
Remote clock offset: -38.303 ms

# Below is generated by plot.py at 2019-05-30 03:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.73 Mbit/s  
95th percentile per-packet one-way delay: 67.619 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.43 Mbit/s  
95th percentile per-packet one-way delay: 67.891 ms  
Loss rate: 0.00%

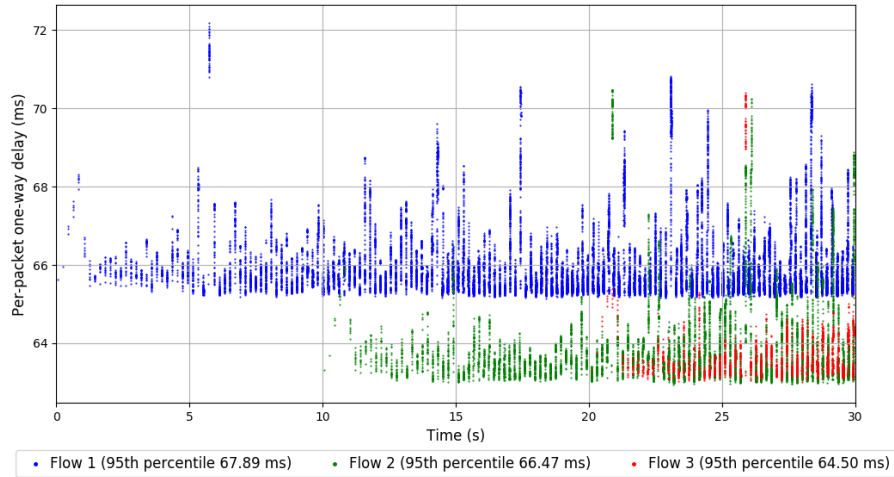
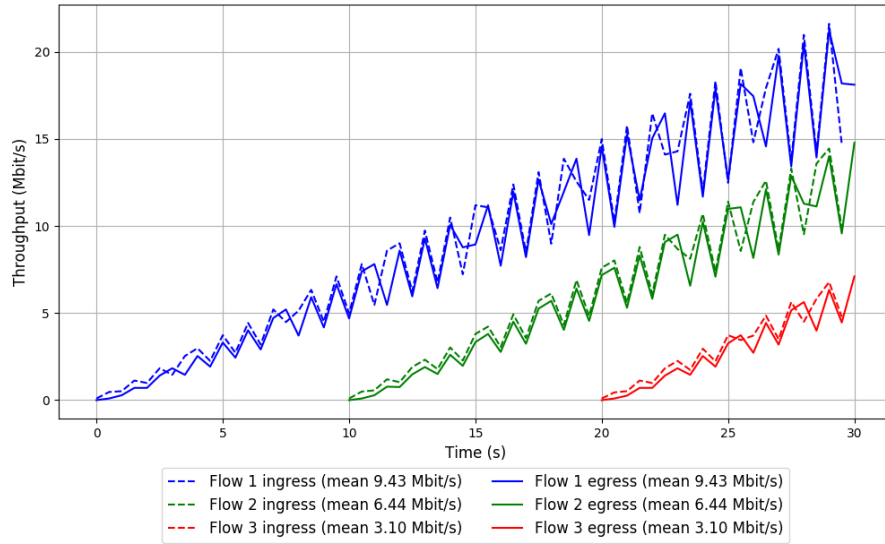
-- Flow 2:

Average throughput: 6.44 Mbit/s  
95th percentile per-packet one-way delay: 66.472 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 3.10 Mbit/s  
95th percentile per-packet one-way delay: 64.505 ms  
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-05-30 00:32:42  
End at: 2019-05-30 00:33:12  
Local clock offset: 0.473 ms  
Remote clock offset: -36.252 ms

# Below is generated by plot.py at 2019-05-30 03:24:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 382.03 Mbit/s  
95th percentile per-packet one-way delay: 70.440 ms  
Loss rate: 5.25%

-- Flow 1:

Average throughput: 308.92 Mbit/s  
95th percentile per-packet one-way delay: 70.593 ms  
Loss rate: 5.72%

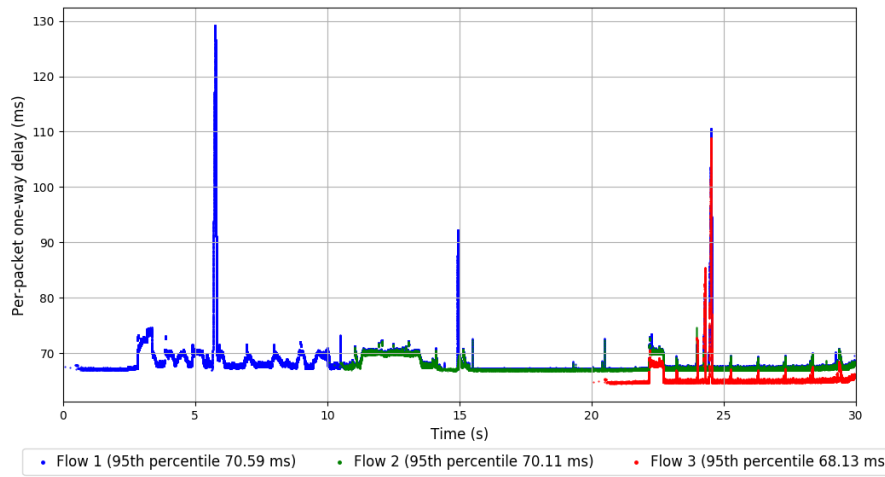
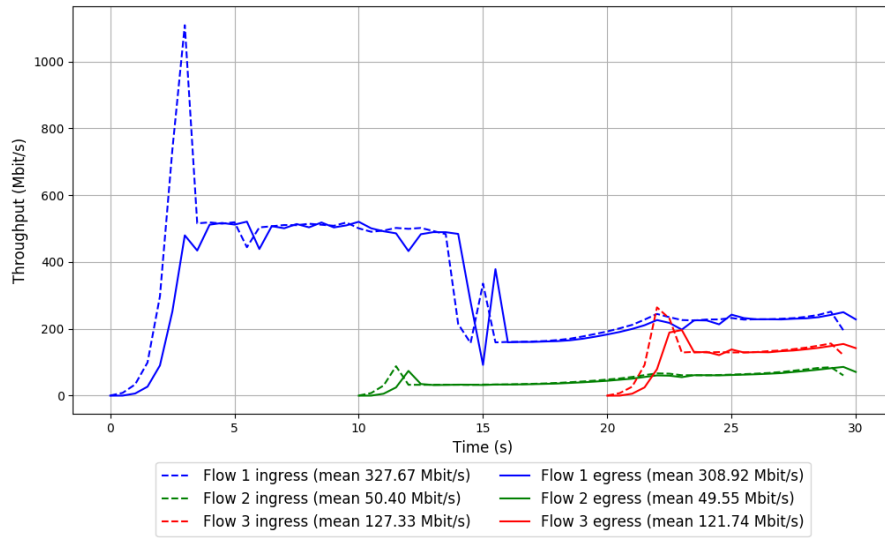
-- Flow 2:

Average throughput: 49.55 Mbit/s  
95th percentile per-packet one-way delay: 70.110 ms  
Loss rate: 1.70%

-- Flow 3:

Average throughput: 121.74 Mbit/s  
95th percentile per-packet one-way delay: 68.133 ms  
Loss rate: 4.38%

### Run 1: Report of PCC-Allegro — Data Link





Run 2: Statistics of PCC-Allegro

Start at: 2019-05-30 01:03:09  
End at: 2019-05-30 01:03:39  
Local clock offset: -3.435 ms  
Remote clock offset: -37.904 ms

# Below is generated by plot.py at 2019-05-30 03:26:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 470.20 Mbit/s  
95th percentile per-packet one-way delay: 68.427 ms  
Loss rate: 5.18%

-- Flow 1:

Average throughput: 429.22 Mbit/s  
95th percentile per-packet one-way delay: 68.446 ms  
Loss rate: 5.28%

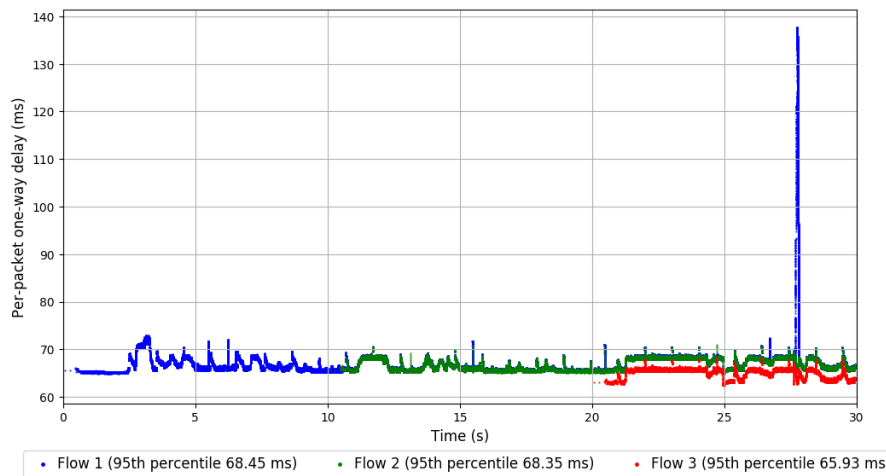
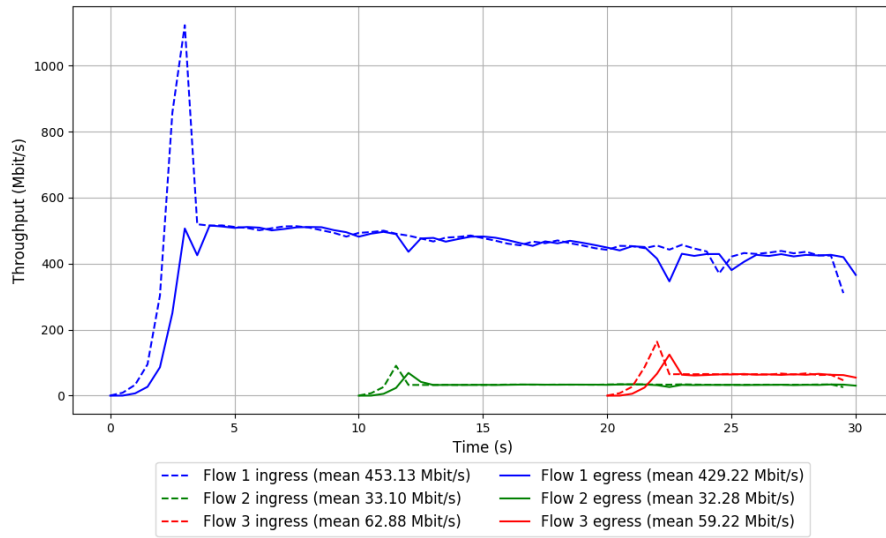
-- Flow 2:

Average throughput: 32.28 Mbit/s  
95th percentile per-packet one-way delay: 68.353 ms  
Loss rate: 2.48%

-- Flow 3:

Average throughput: 59.22 Mbit/s  
95th percentile per-packet one-way delay: 65.929 ms  
Loss rate: 5.81%

## Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-05-30 01:33:40  
End at: 2019-05-30 01:34:10  
Local clock offset: -1.121 ms  
Remote clock offset: -38.029 ms

# Below is generated by plot.py at 2019-05-30 03:27:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 459.72 Mbit/s  
95th percentile per-packet one-way delay: 67.895 ms  
Loss rate: 5.50%

-- Flow 1:

Average throughput: 413.99 Mbit/s  
95th percentile per-packet one-way delay: 65.922 ms  
Loss rate: 5.73%

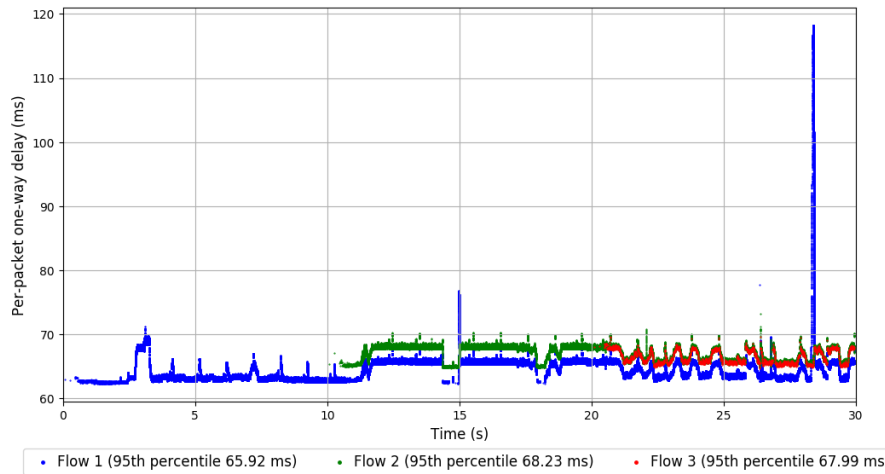
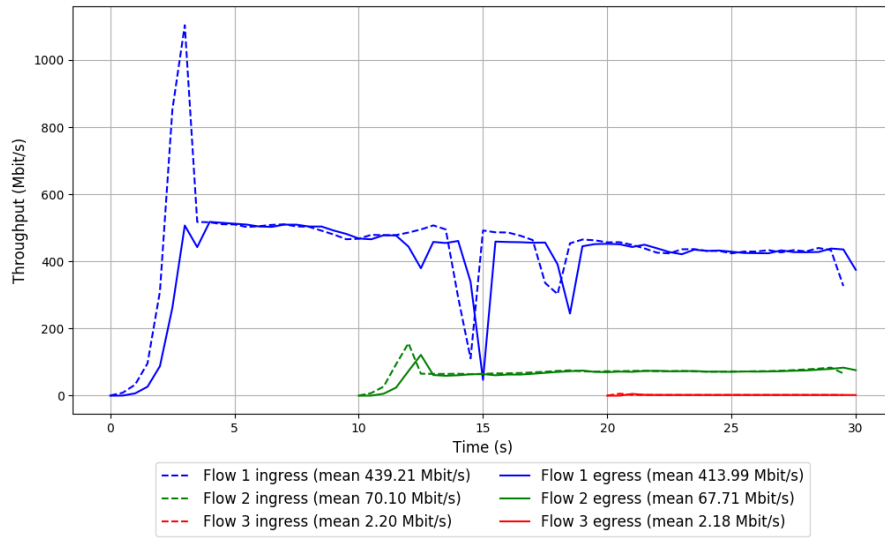
-- Flow 2:

Average throughput: 67.71 Mbit/s  
95th percentile per-packet one-way delay: 68.230 ms  
Loss rate: 3.40%

-- Flow 3:

Average throughput: 2.18 Mbit/s  
95th percentile per-packet one-way delay: 67.988 ms  
Loss rate: 1.33%

### Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-05-30 02:04:04

End at: 2019-05-30 02:04:34

Local clock offset: 3.562 ms

Remote clock offset: -38.052 ms

# Below is generated by plot.py at 2019-05-30 03:27:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 451.28 Mbit/s

95th percentile per-packet one-way delay: 62.239 ms

Loss rate: 4.81%

-- Flow 1:

Average throughput: 430.36 Mbit/s

95th percentile per-packet one-way delay: 62.117 ms

Loss rate: 4.89%

-- Flow 2:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 61.791 ms

Loss rate: 2.91%

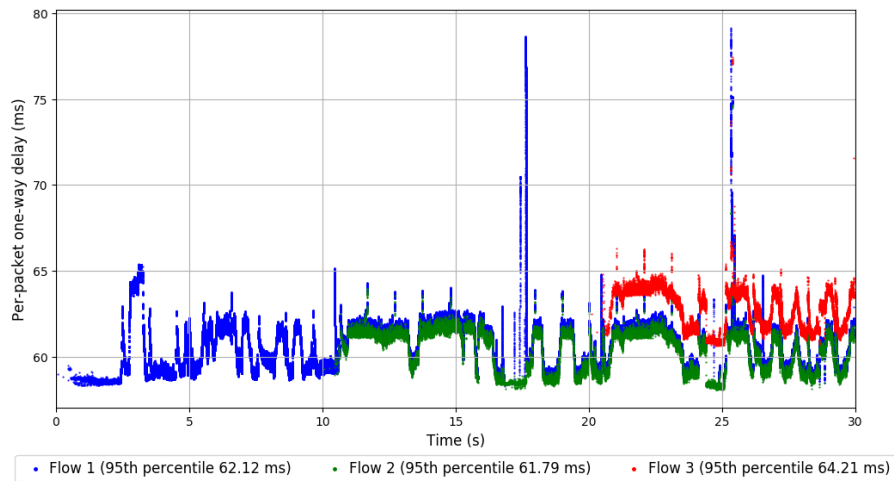
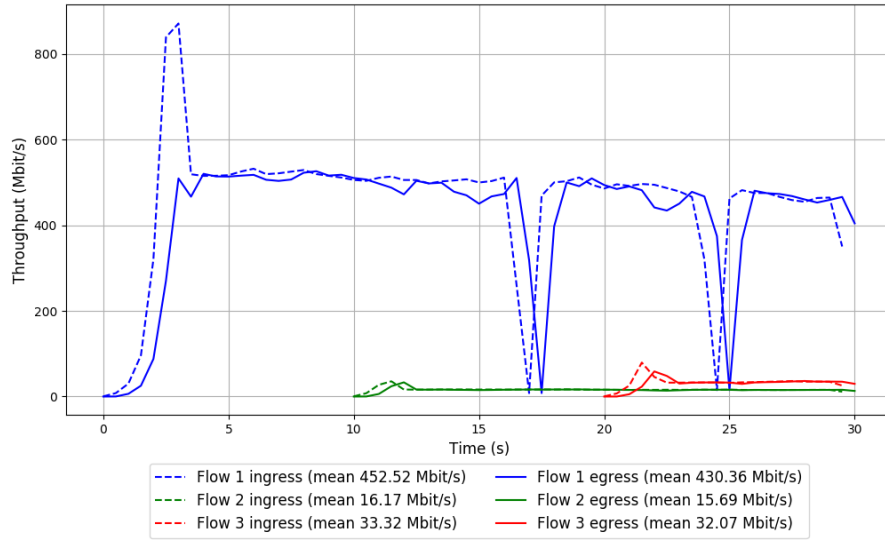
-- Flow 3:

Average throughput: 32.07 Mbit/s

95th percentile per-packet one-way delay: 64.207 ms

Loss rate: 3.68%

### Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-05-30 02:34:27

End at: 2019-05-30 02:34:57

Local clock offset: 2.273 ms

Remote clock offset: -43.563 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 433.55 Mbit/s

95th percentile per-packet one-way delay: 58.270 ms

Loss rate: 5.23%

-- Flow 1:

Average throughput: 370.41 Mbit/s

95th percentile per-packet one-way delay: 56.593 ms

Loss rate: 5.55%

-- Flow 2:

Average throughput: 62.30 Mbit/s

95th percentile per-packet one-way delay: 59.163 ms

Loss rate: 3.58%

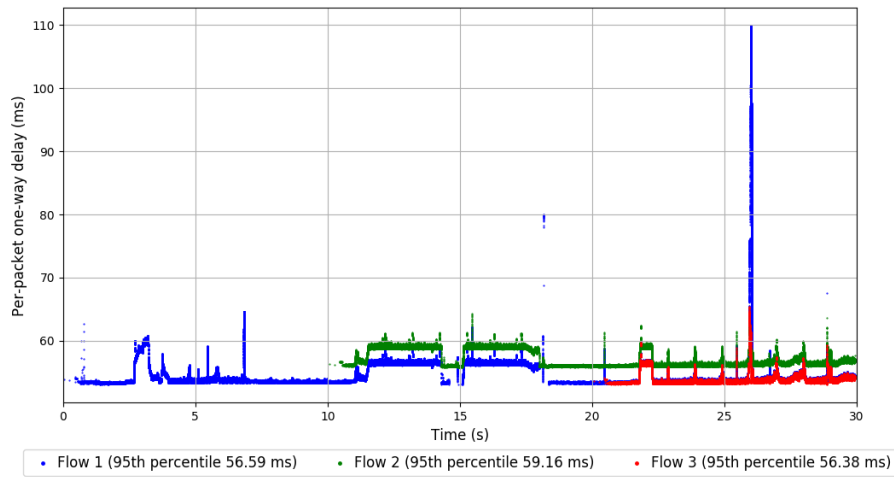
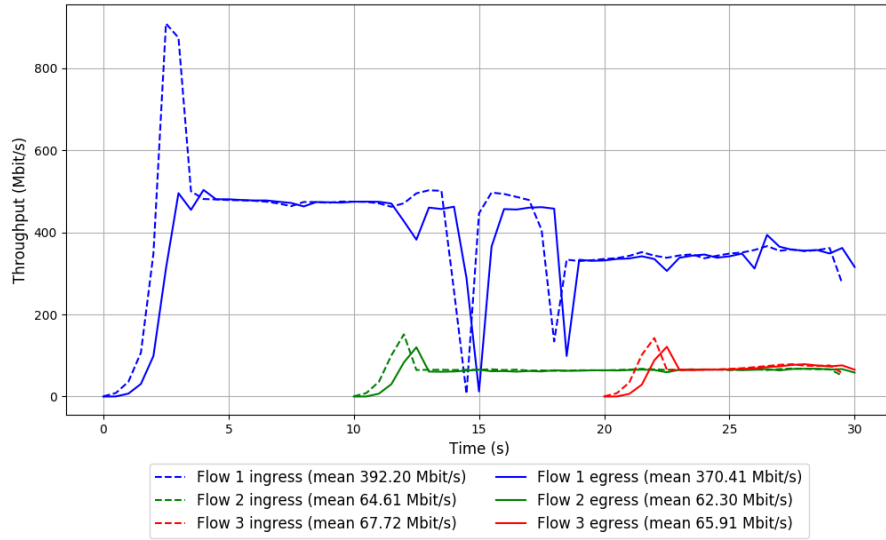
-- Flow 3:

Average throughput: 65.91 Mbit/s

95th percentile per-packet one-way delay: 56.375 ms

Loss rate: 2.67%

### Run 5: Report of PCC-Allegro — Data Link





Run 1: Statistics of PCC-Expr

Start at: 2019-05-30 00:49:08  
End at: 2019-05-30 00:49:38  
Local clock offset: -1.832 ms  
Remote clock offset: -42.849 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.67 Mbit/s  
95th percentile per-packet one-way delay: 59.861 ms  
Loss rate: 32.02%

-- Flow 1:

Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 57.496 ms  
Loss rate: 85.71%

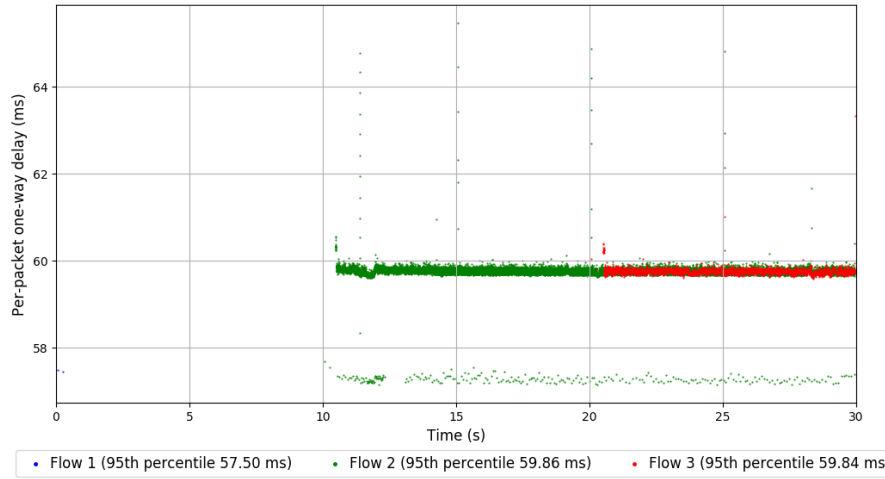
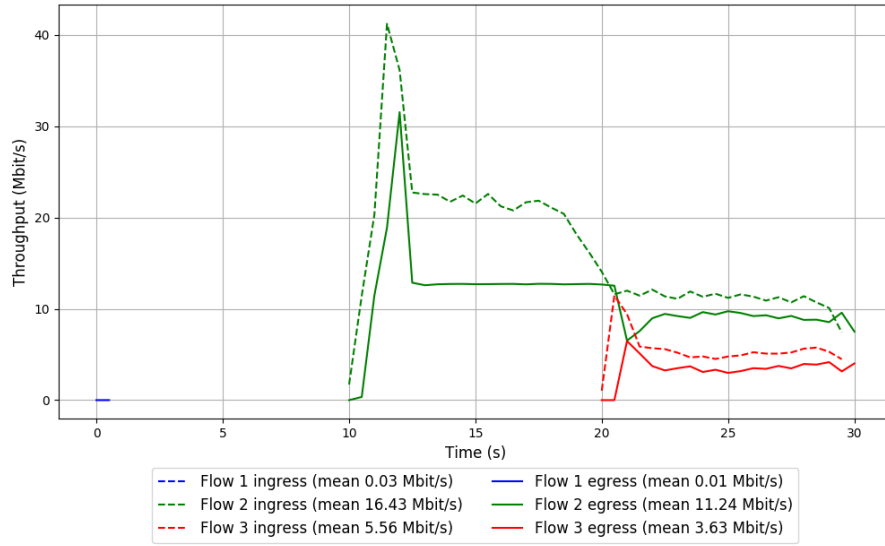
-- Flow 2:

Average throughput: 11.24 Mbit/s  
95th percentile per-packet one-way delay: 59.863 ms  
Loss rate: 31.57%

-- Flow 3:

Average throughput: 3.63 Mbit/s  
95th percentile per-packet one-way delay: 59.838 ms  
Loss rate: 34.68%

# Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-05-30 01:19:38  
End at: 2019-05-30 01:20:08  
Local clock offset: -1.199 ms  
Remote clock offset: -41.725 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.07 Mbit/s  
95th percentile per-packet one-way delay: 60.662 ms  
Loss rate: 29.68%

-- Flow 1:

Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 58.461 ms  
Loss rate: 85.71%

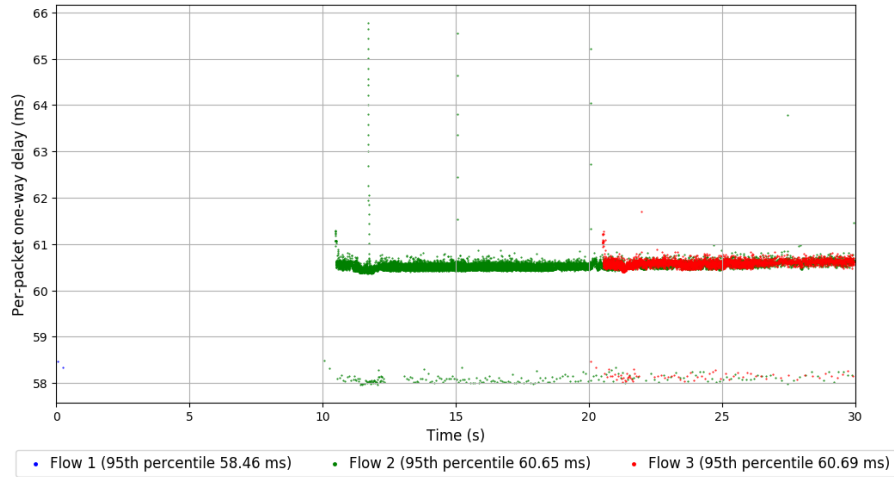
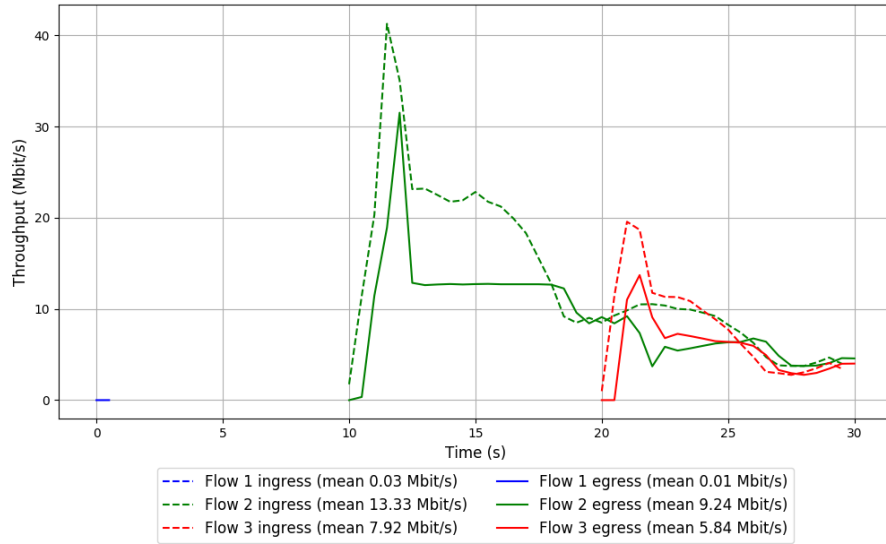
-- Flow 2:

Average throughput: 9.24 Mbit/s  
95th percentile per-packet one-way delay: 60.648 ms  
Loss rate: 30.69%

-- Flow 3:

Average throughput: 5.84 Mbit/s  
95th percentile per-packet one-way delay: 60.690 ms  
Loss rate: 26.25%

## Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-05-30 01:50:04  
End at: 2019-05-30 01:50:34  
Local clock offset: 2.365 ms  
Remote clock offset: -45.444 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.49 Mbit/s  
95th percentile per-packet one-way delay: 54.982 ms  
Loss rate: 31.85%

-- Flow 1:

Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 55.167 ms  
Loss rate: 80.00%

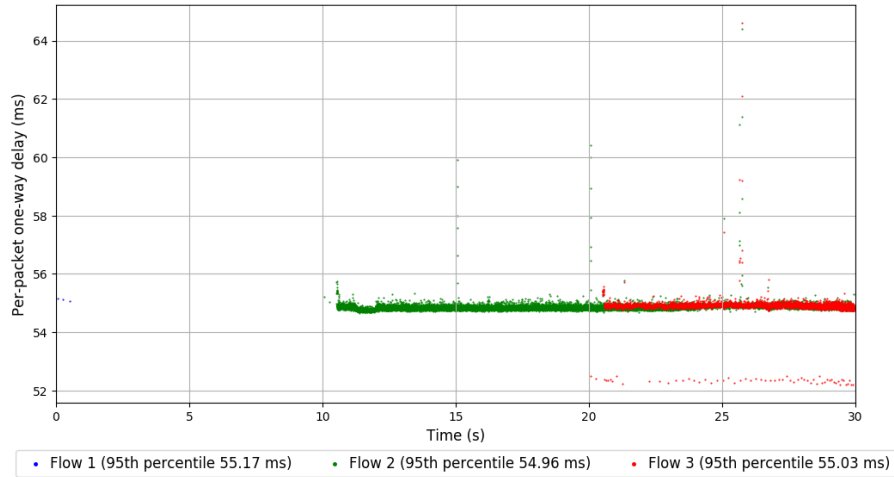
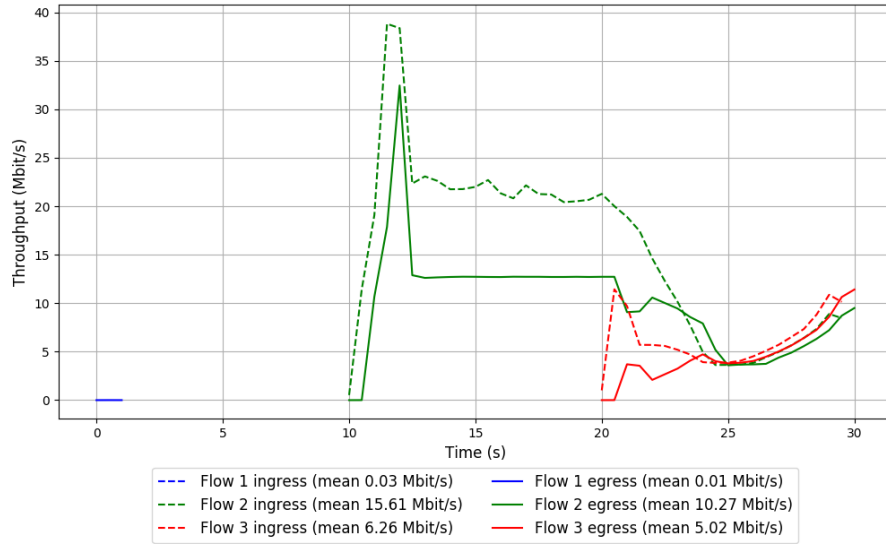
-- Flow 2:

Average throughput: 10.27 Mbit/s  
95th percentile per-packet one-way delay: 54.959 ms  
Loss rate: 34.24%

-- Flow 3:

Average throughput: 5.02 Mbit/s  
95th percentile per-packet one-way delay: 55.026 ms  
Loss rate: 19.81%

### Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-05-30 02:20:29  
End at: 2019-05-30 02:20:59  
Local clock offset: -1.619 ms  
Remote clock offset: -46.786 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.38 Mbit/s  
95th percentile per-packet one-way delay: 56.945 ms  
Loss rate: 32.11%

-- Flow 1:

Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 54.705 ms  
Loss rate: 80.00%

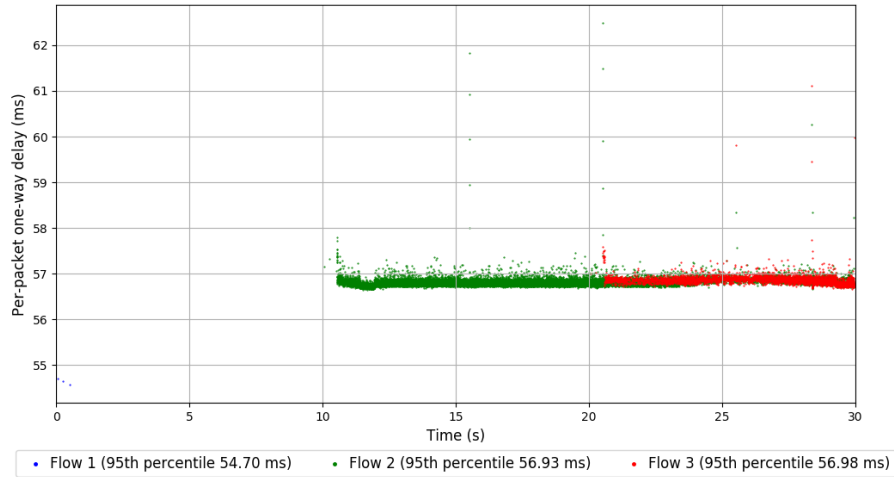
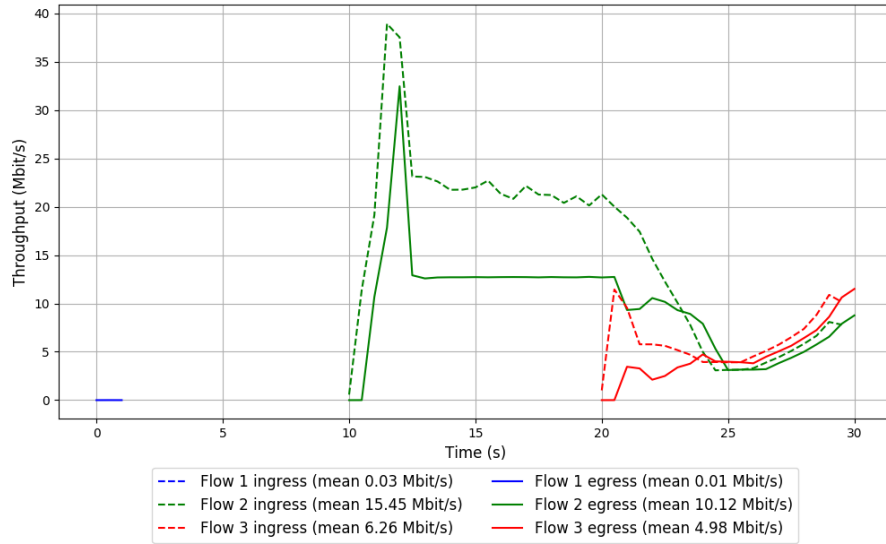
-- Flow 2:

Average throughput: 10.12 Mbit/s  
95th percentile per-packet one-way delay: 56.931 ms  
Loss rate: 34.46%

-- Flow 3:

Average throughput: 4.98 Mbit/s  
95th percentile per-packet one-way delay: 56.975 ms  
Loss rate: 20.47%

### Run 4: Report of PCC-Expr — Data Link





Run 5: Statistics of PCC-Expr

Start at: 2019-05-30 02:50:52  
End at: 2019-05-30 02:51:22  
Local clock offset: -3.419 ms  
Remote clock offset: -32.219 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.65 Mbit/s  
95th percentile per-packet one-way delay: 71.411 ms  
Loss rate: 30.60%

-- Flow 1:

Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 69.143 ms  
Loss rate: 80.00%

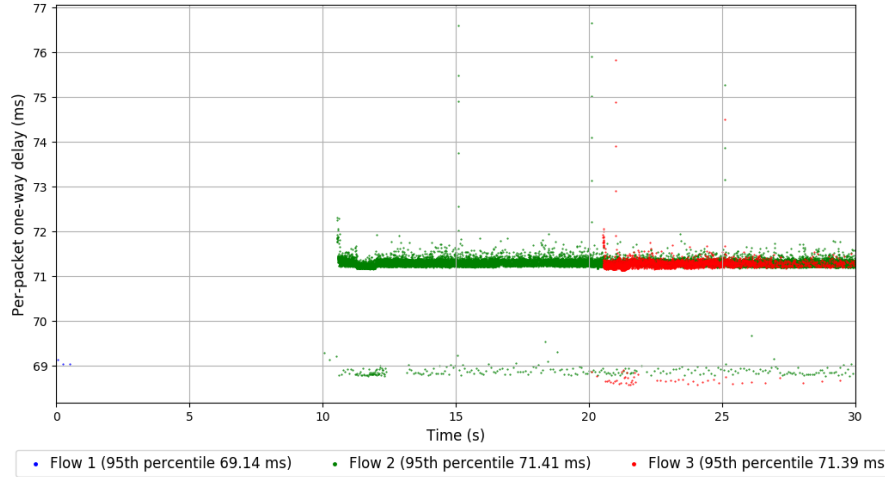
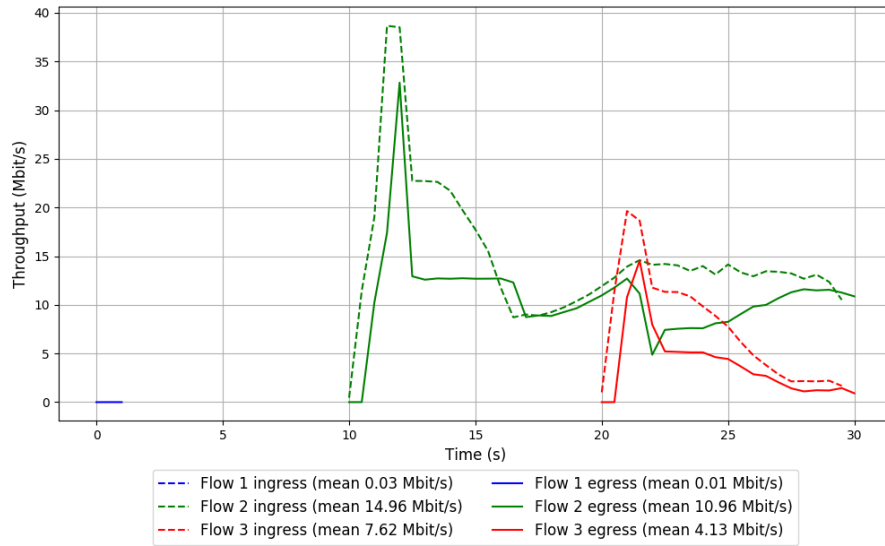
-- Flow 2:

Average throughput: 10.96 Mbit/s  
95th percentile per-packet one-way delay: 71.414 ms  
Loss rate: 26.76%

-- Flow 3:

Average throughput: 4.13 Mbit/s  
95th percentile per-packet one-way delay: 71.391 ms  
Loss rate: 45.79%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-05-30 00:41:59  
End at: 2019-05-30 00:42:29  
Local clock offset: -1.044 ms  
Remote clock offset: -40.957 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 89.01 Mbit/s  
95th percentile per-packet one-way delay: 63.602 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.12 Mbit/s  
95th percentile per-packet one-way delay: 64.230 ms  
Loss rate: 0.00%

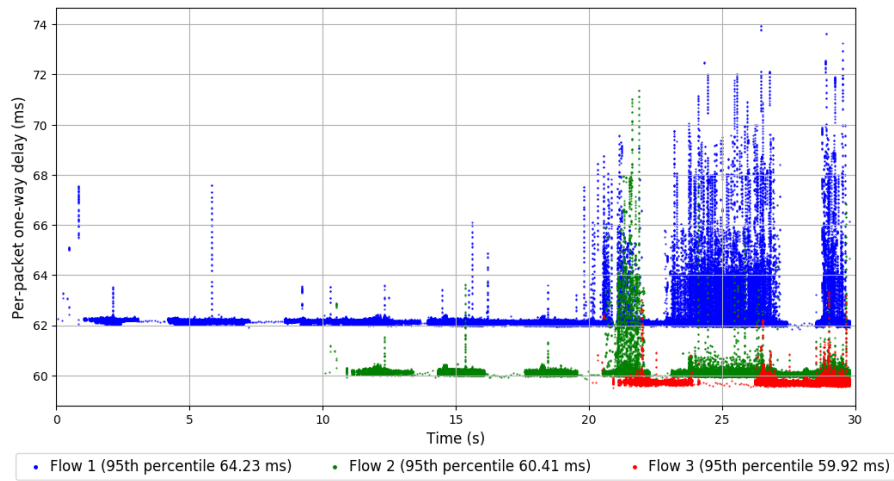
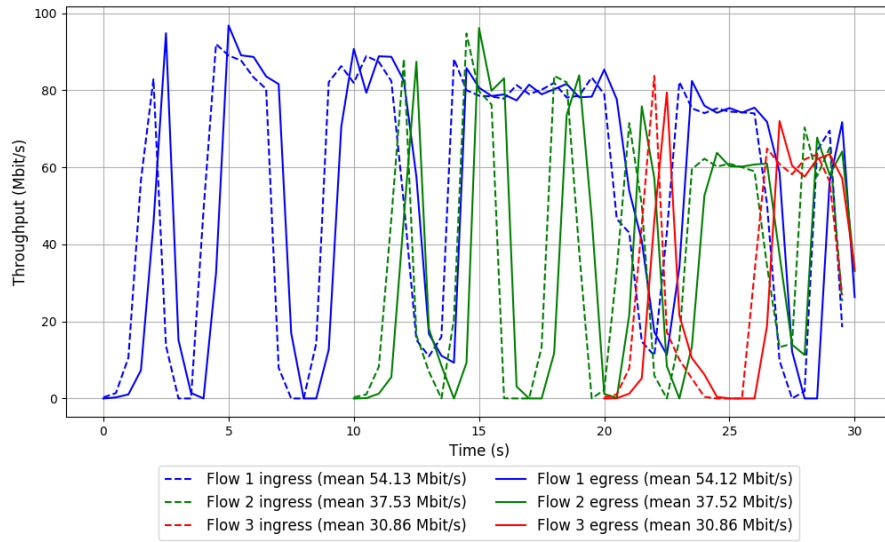
-- Flow 2:

Average throughput: 37.52 Mbit/s  
95th percentile per-packet one-way delay: 60.406 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 30.86 Mbit/s  
95th percentile per-packet one-way delay: 59.916 ms  
Loss rate: 0.00%

# Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-05-30 01:12:29  
End at: 2019-05-30 01:13:00  
Local clock offset: 1.849 ms  
Remote clock offset: -32.866 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.17 Mbit/s  
95th percentile per-packet one-way delay: 65.922 ms  
Loss rate: 0.01%

-- Flow 1:

Average throughput: 54.18 Mbit/s  
95th percentile per-packet one-way delay: 63.501 ms  
Loss rate: 0.00%

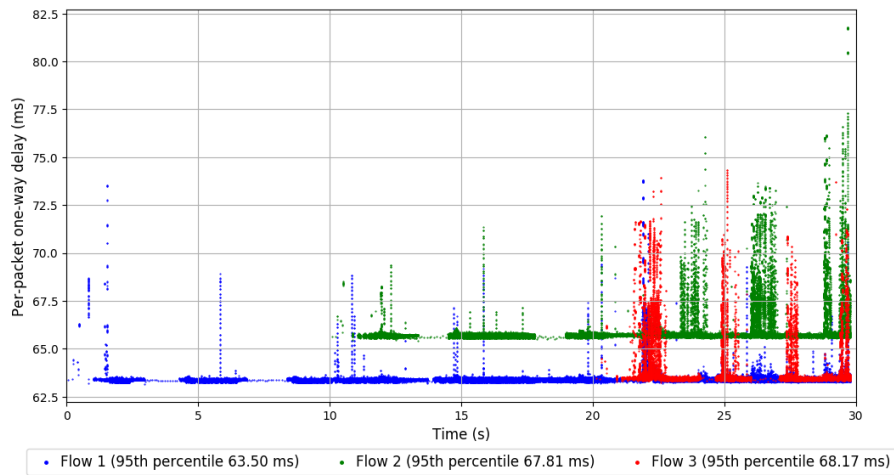
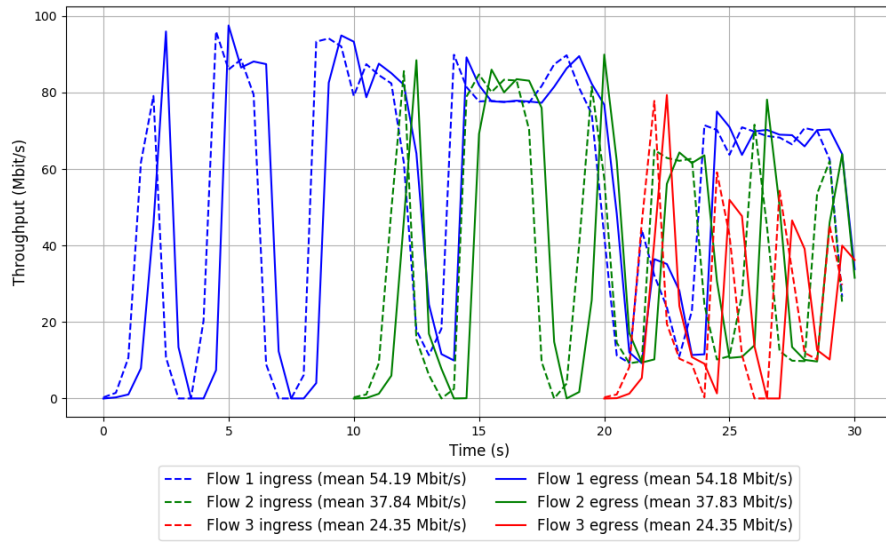
-- Flow 2:

Average throughput: 37.83 Mbit/s  
95th percentile per-packet one-way delay: 67.815 ms  
Loss rate: 0.03%

-- Flow 3:

Average throughput: 24.35 Mbit/s  
95th percentile per-packet one-way delay: 68.168 ms  
Loss rate: 0.00%

## Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-05-30 01:42:57  
End at: 2019-05-30 01:43:27  
Local clock offset: 2.912 ms  
Remote clock offset: -41.148 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 83.74 Mbit/s  
95th percentile per-packet one-way delay: 58.497 ms  
Loss rate: 0.04%

-- Flow 1:

Average throughput: 46.29 Mbit/s  
95th percentile per-packet one-way delay: 56.278 ms  
Loss rate: 0.00%

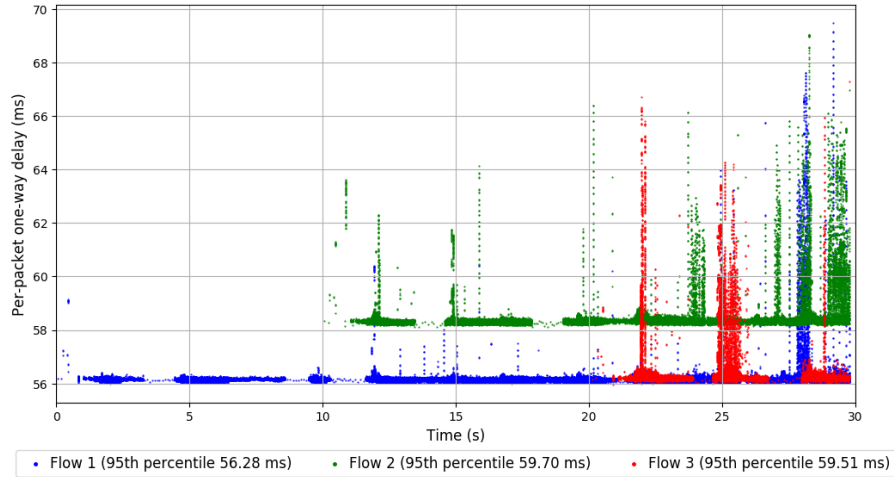
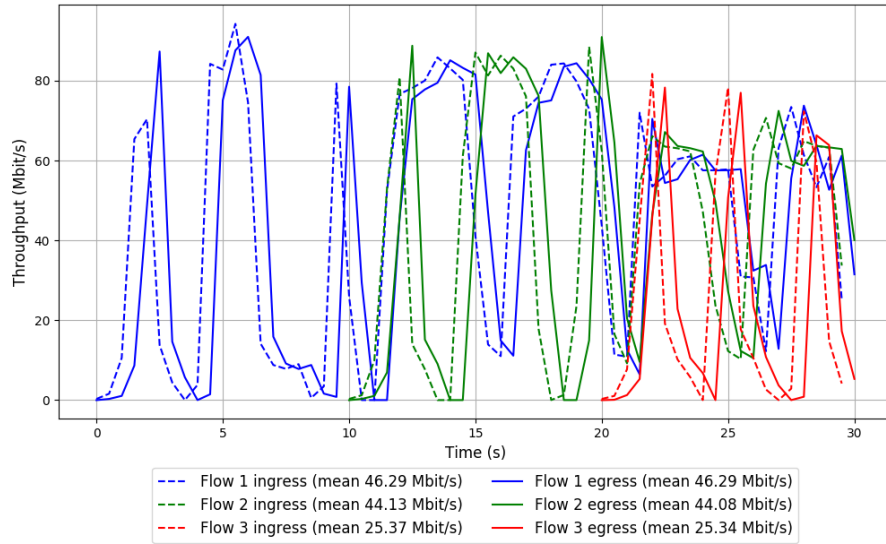
-- Flow 2:

Average throughput: 44.08 Mbit/s  
95th percentile per-packet one-way delay: 59.698 ms  
Loss rate: 0.12%

-- Flow 3:

Average throughput: 25.34 Mbit/s  
95th percentile per-packet one-way delay: 59.506 ms  
Loss rate: 0.00%

### Run 3: Report of QUIC Cubic — Data Link





Run 4: Statistics of QUIC Cubic

Start at: 2019-05-30 02:13:25  
End at: 2019-05-30 02:13:55  
Local clock offset: 2.618 ms  
Remote clock offset: -43.34 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.32 Mbit/s  
95th percentile per-packet one-way delay: 56.062 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.73 Mbit/s  
95th percentile per-packet one-way delay: 53.816 ms  
Loss rate: 0.00%

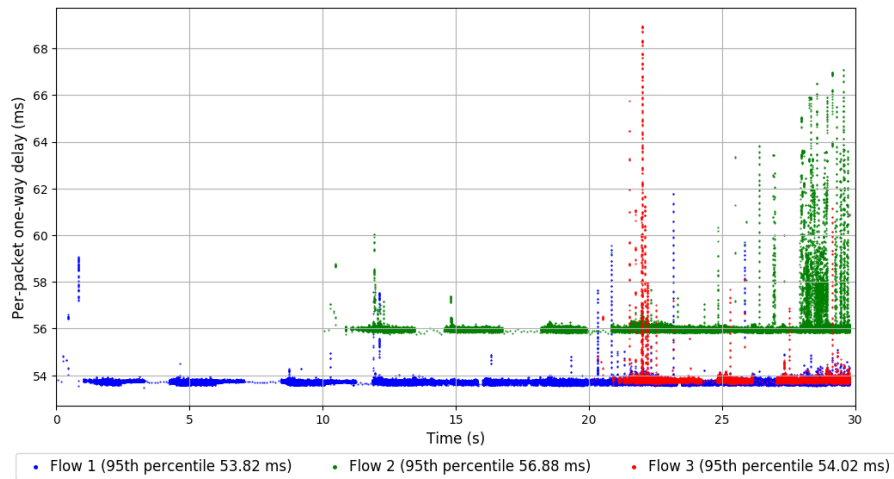
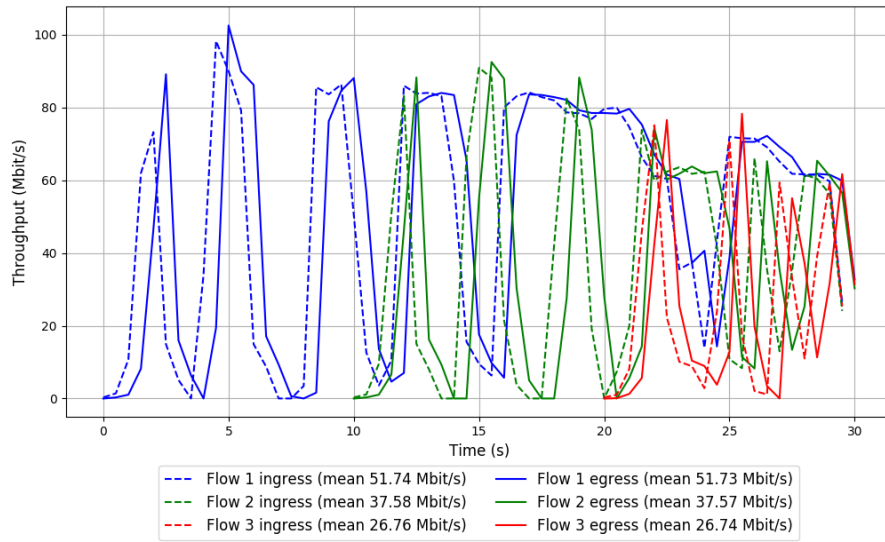
-- Flow 2:

Average throughput: 37.57 Mbit/s  
95th percentile per-packet one-way delay: 56.877 ms  
Loss rate: 0.01%

-- Flow 3:

Average throughput: 26.74 Mbit/s  
95th percentile per-packet one-way delay: 54.017 ms  
Loss rate: 0.00%

### Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-05-30 02:43:45  
End at: 2019-05-30 02:44:15  
Local clock offset: -2.208 ms  
Remote clock offset: -43.442 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.25 Mbit/s  
95th percentile per-packet one-way delay: 60.107 ms  
Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.55 Mbit/s  
95th percentile per-packet one-way delay: 59.789 ms  
Loss rate: 0.02%

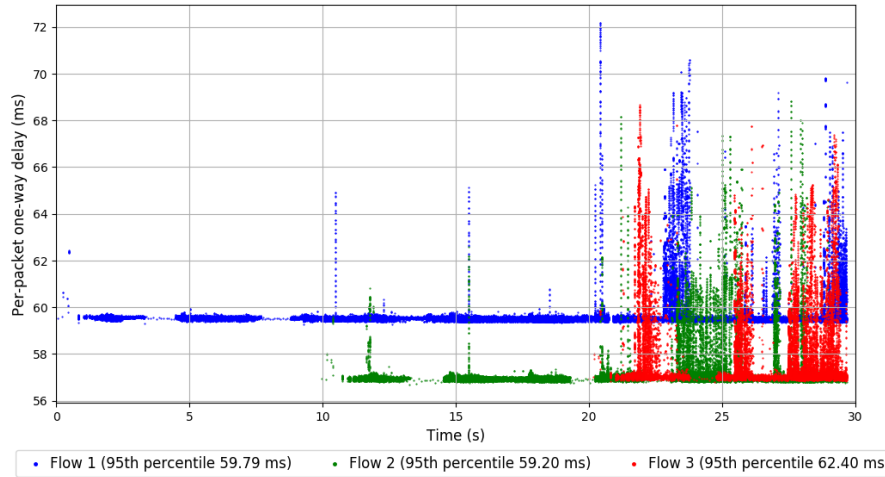
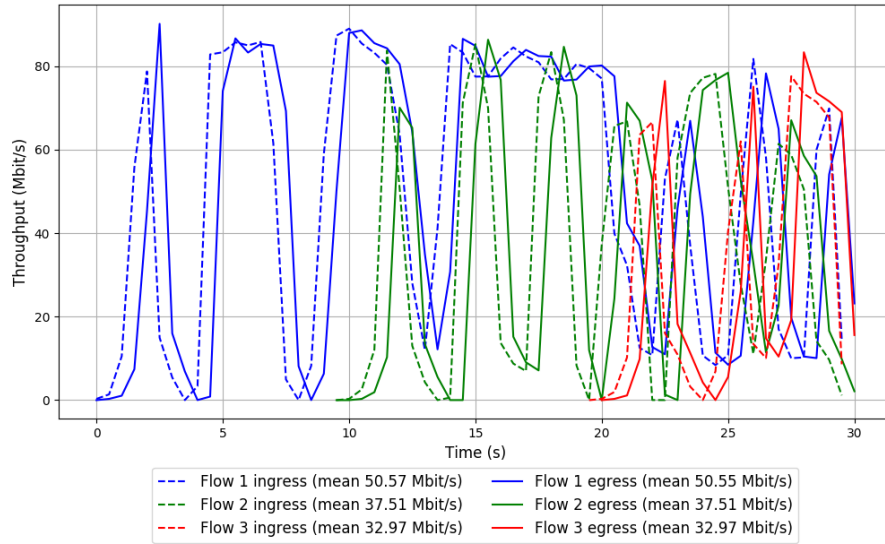
-- Flow 2:

Average throughput: 37.51 Mbit/s  
95th percentile per-packet one-way delay: 59.200 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 32.97 Mbit/s  
95th percentile per-packet one-way delay: 62.395 ms  
Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2019-05-30 00:31:26  
End at: 2019-05-30 00:31:56  
Local clock offset: 0.151 ms  
Remote clock offset: -46.573 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 57.309 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.763 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 55.016 ms

Loss rate: 0.00%

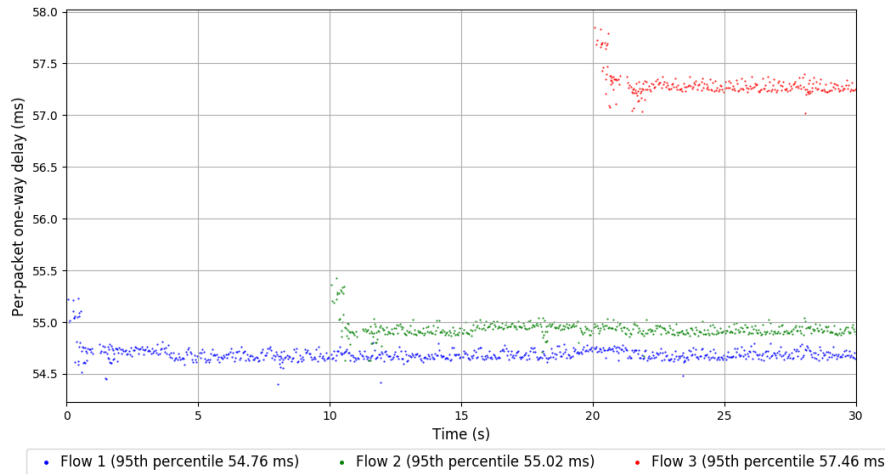
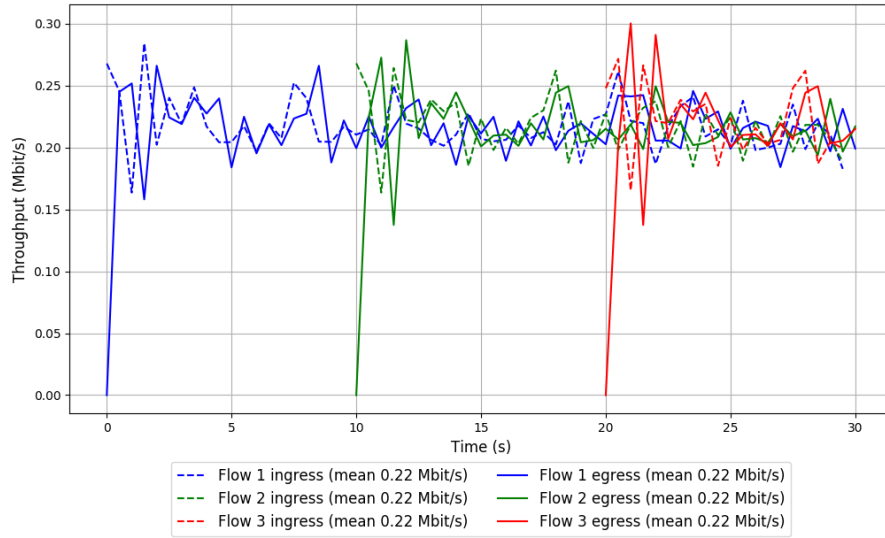
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.460 ms

Loss rate: 0.00%

### Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2019-05-30 01:01:53  
End at: 2019-05-30 01:02:23  
Local clock offset: -3.619 ms  
Remote clock offset: -34.927 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 68.717 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.213 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 68.749 ms

Loss rate: 0.00%

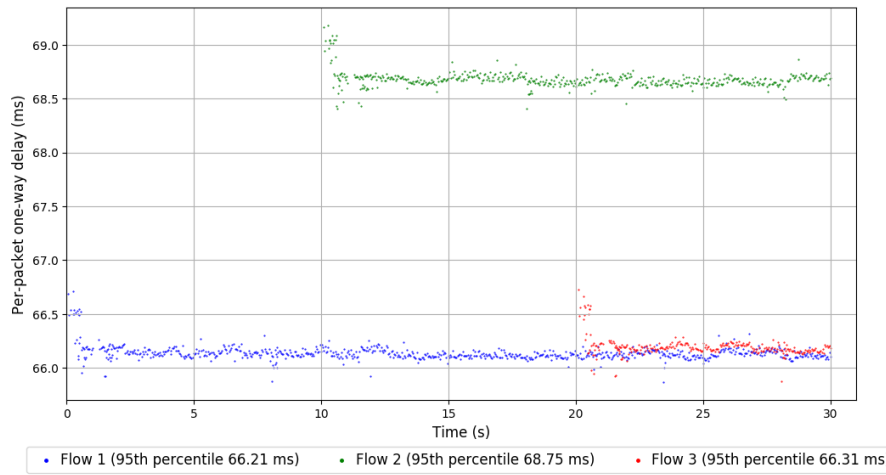
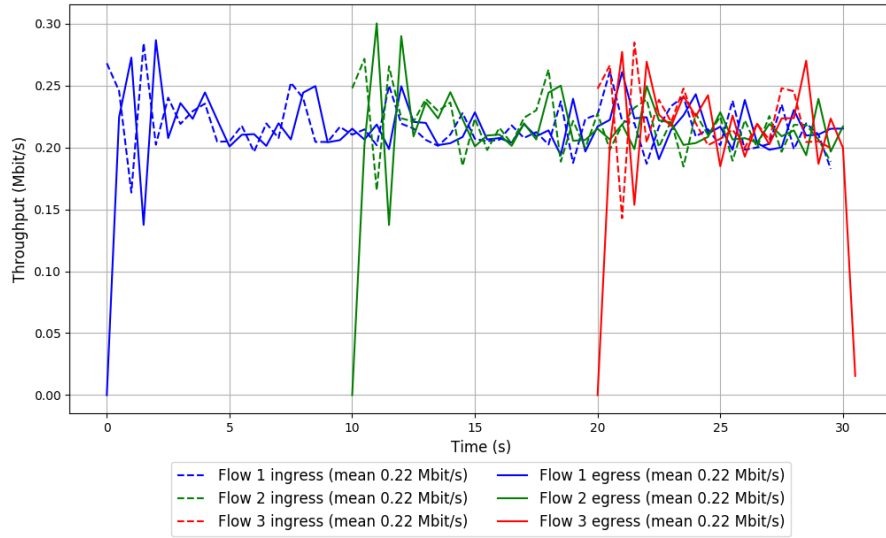
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.308 ms

Loss rate: 0.00%

## Run 2: Report of SCReAM — Data Link





Run 3: Statistics of SCReAM

Start at: 2019-05-30 01:32:24  
End at: 2019-05-30 01:32:54  
Local clock offset: -2.149 ms  
Remote clock offset: -39.928 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 64.021 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 61.773 ms  
Loss rate: 0.00%

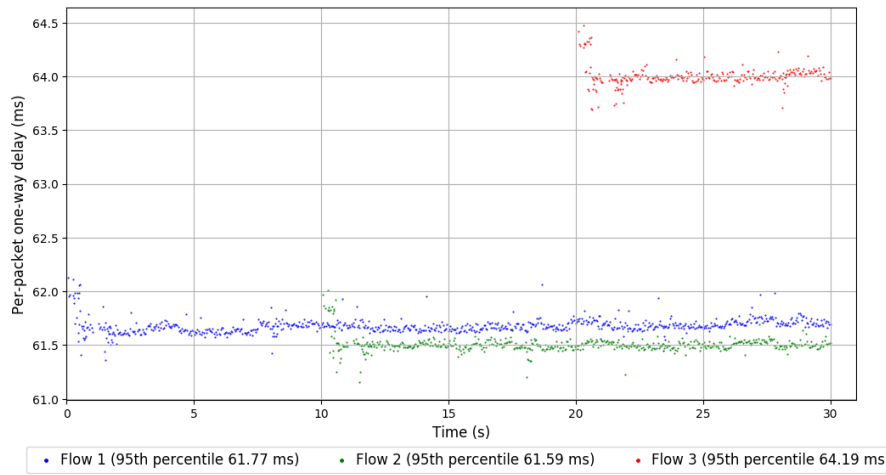
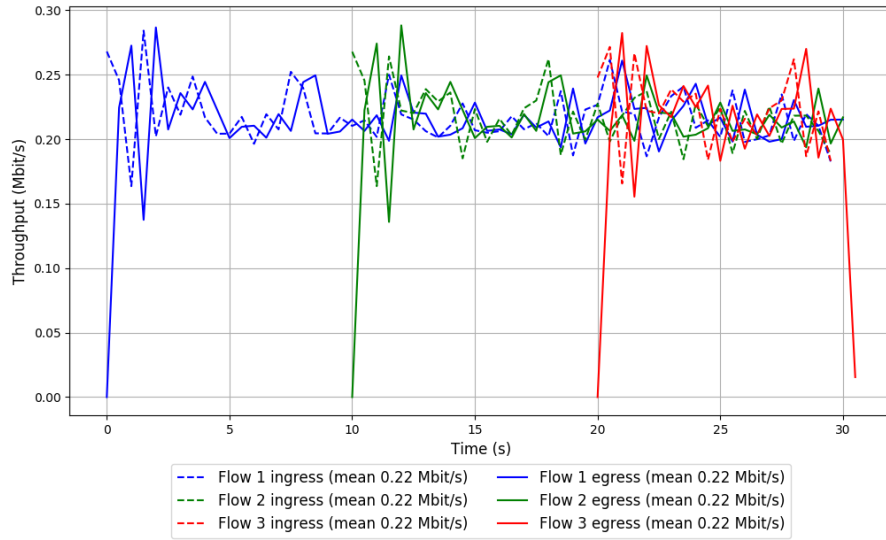
-- Flow 2:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 61.586 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 64.190 ms  
Loss rate: 0.00%

### Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2019-05-30 02:02:47  
End at: 2019-05-30 02:03:17  
Local clock offset: 2.844 ms  
Remote clock offset: -34.418 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 63.142 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 62.961 ms  
Loss rate: 0.00%

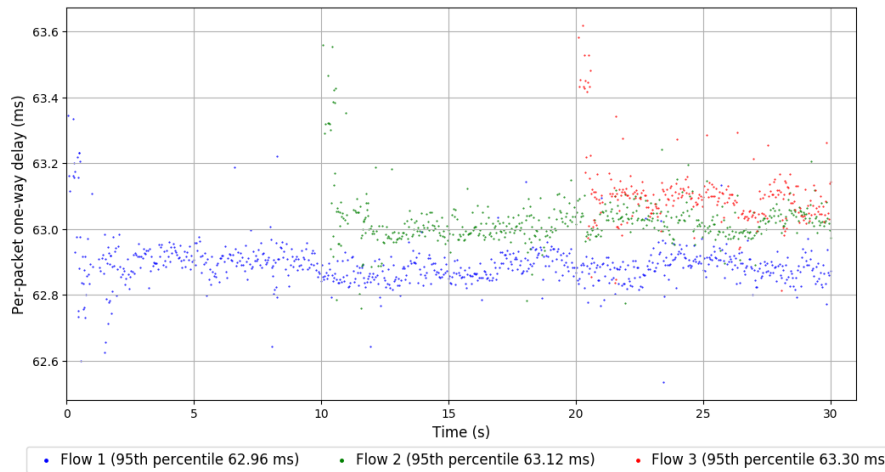
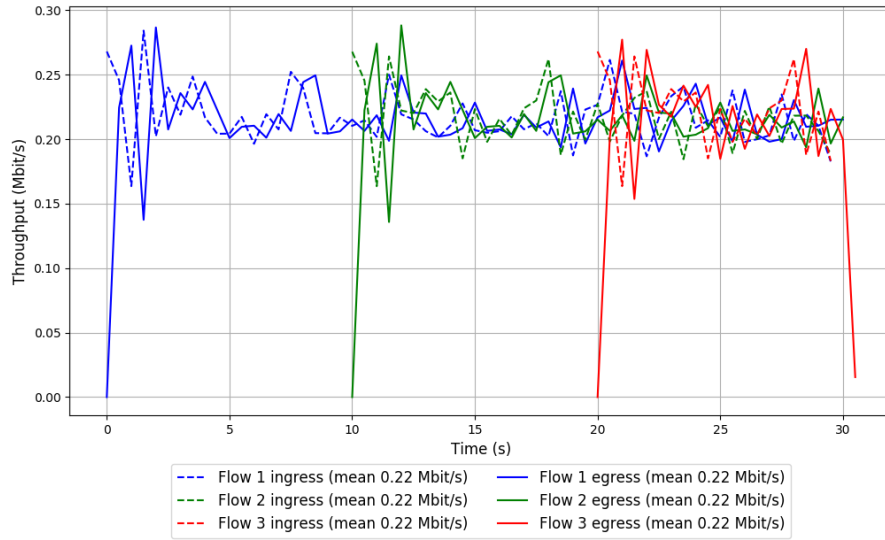
-- Flow 2:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 63.119 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 63.295 ms  
Loss rate: 0.00%

### Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2019-05-30 02:33:11  
End at: 2019-05-30 02:33:41  
Local clock offset: 3.148 ms  
Remote clock offset: -36.036 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 62.729 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 62.763 ms  
Loss rate: 0.00%

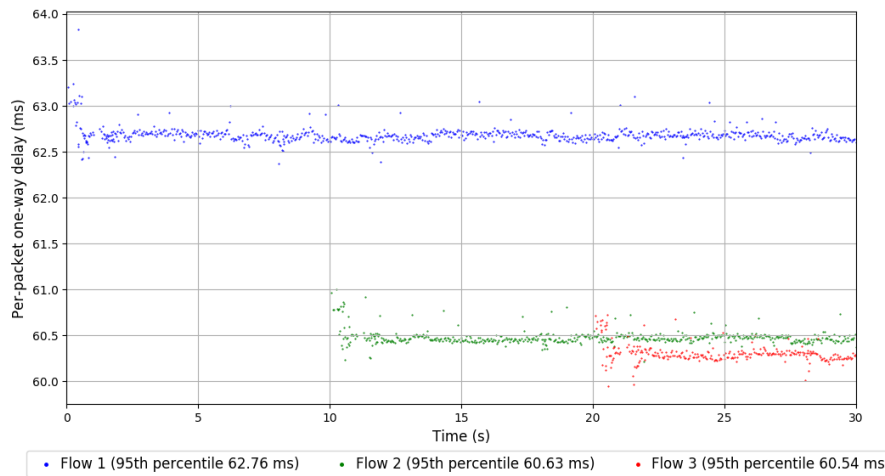
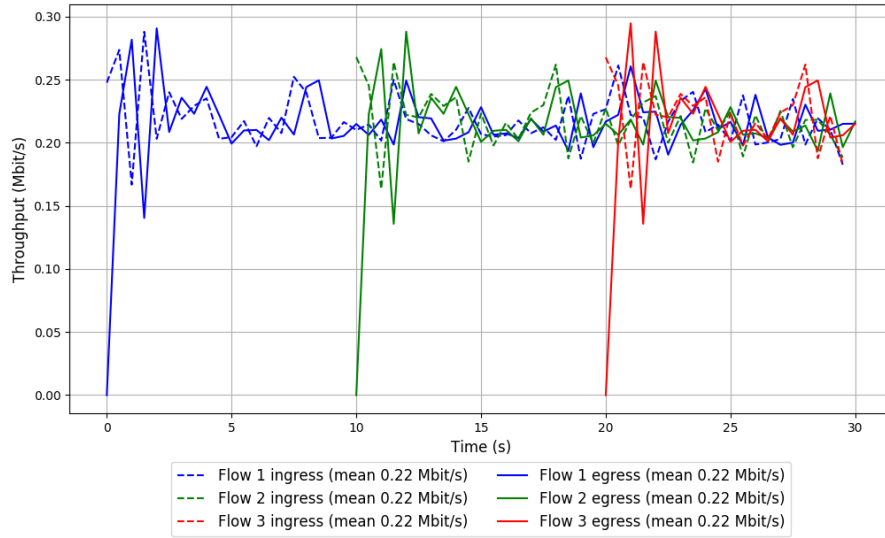
-- Flow 2:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.628 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 60.539 ms  
Loss rate: 0.00%

### Run 5: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-05-30 00:51:48  
End at: 2019-05-30 00:52:18  
Local clock offset: -2.22 ms  
Remote clock offset: -40.604 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.55 Mbit/s  
95th percentile per-packet one-way delay: 63.031 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.05 Mbit/s  
95th percentile per-packet one-way delay: 61.049 ms  
Loss rate: 0.00%

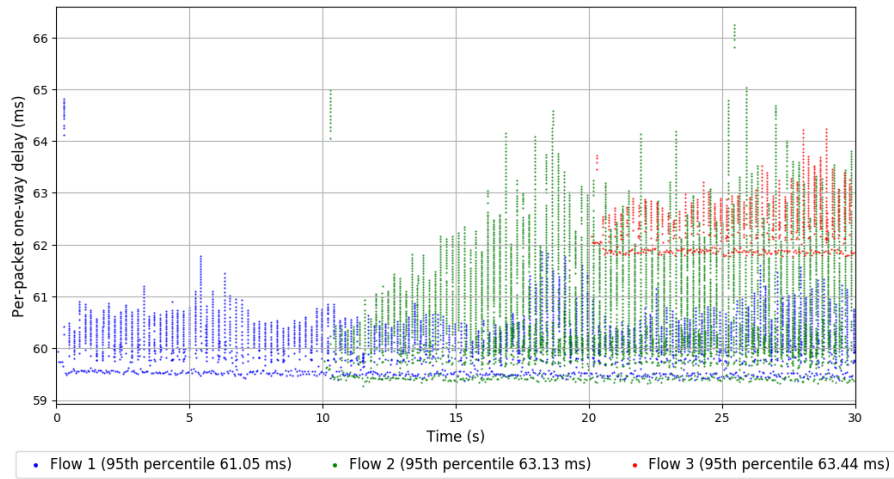
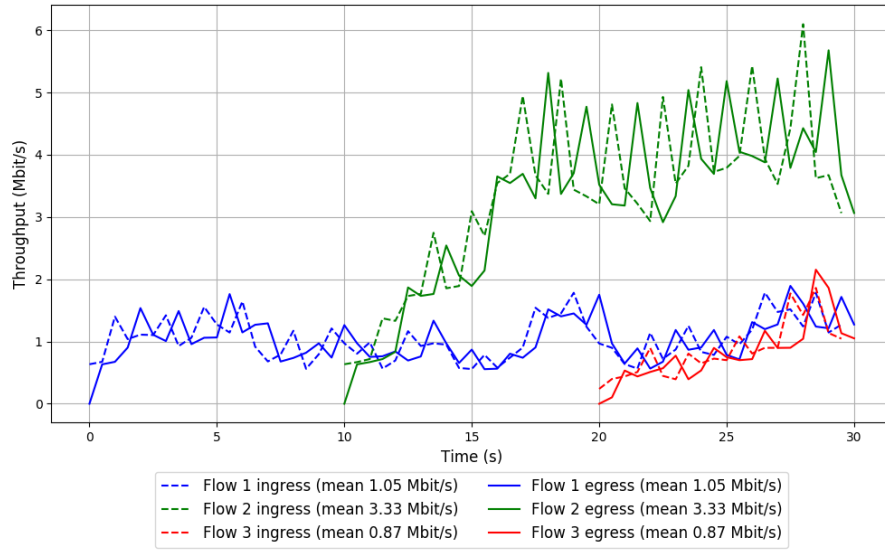
-- Flow 2:

Average throughput: 3.33 Mbit/s  
95th percentile per-packet one-way delay: 63.134 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.87 Mbit/s  
95th percentile per-packet one-way delay: 63.440 ms  
Loss rate: 0.00%

# Run 1: Report of Sprout — Data Link





Run 2: Statistics of Sprout

Start at: 2019-05-30 01:22:16  
End at: 2019-05-30 01:22:46  
Local clock offset: -1.54 ms  
Remote clock offset: -40.651 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.85 Mbit/s  
95th percentile per-packet one-way delay: 62.978 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.71 Mbit/s  
95th percentile per-packet one-way delay: 62.423 ms  
Loss rate: 0.00%

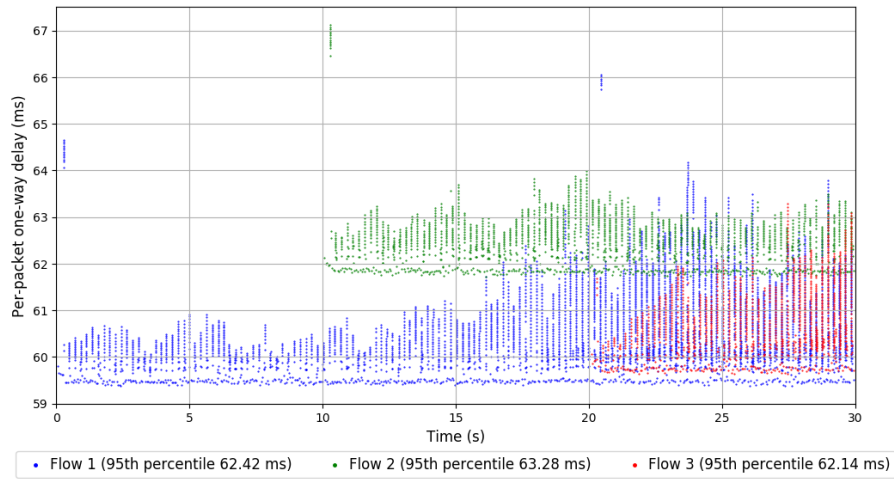
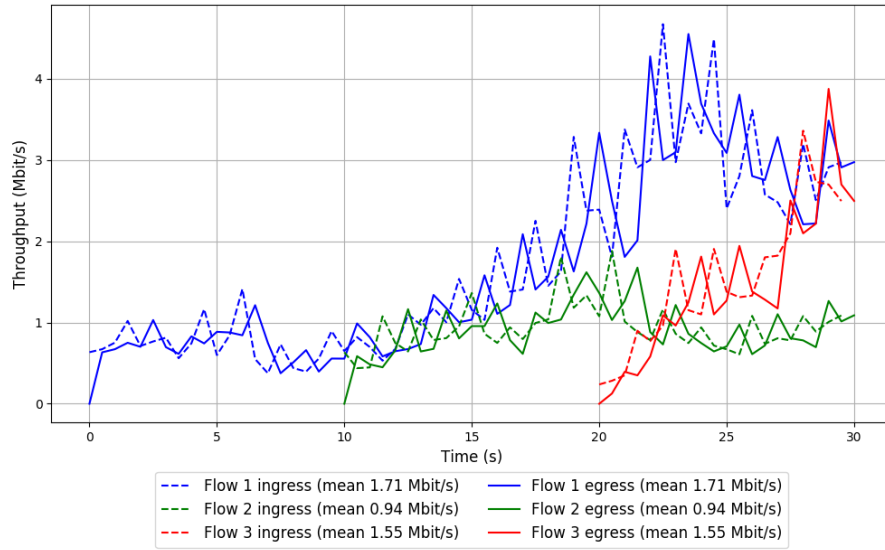
-- Flow 2:

Average throughput: 0.94 Mbit/s  
95th percentile per-packet one-way delay: 63.283 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 1.55 Mbit/s  
95th percentile per-packet one-way delay: 62.139 ms  
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2019-05-30 01:52:43  
End at: 2019-05-30 01:53:13  
Local clock offset: -1.383 ms  
Remote clock offset: -36.587 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s  
95th percentile per-packet one-way delay: 69.958 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.76 Mbit/s  
95th percentile per-packet one-way delay: 67.884 ms  
Loss rate: 0.00%

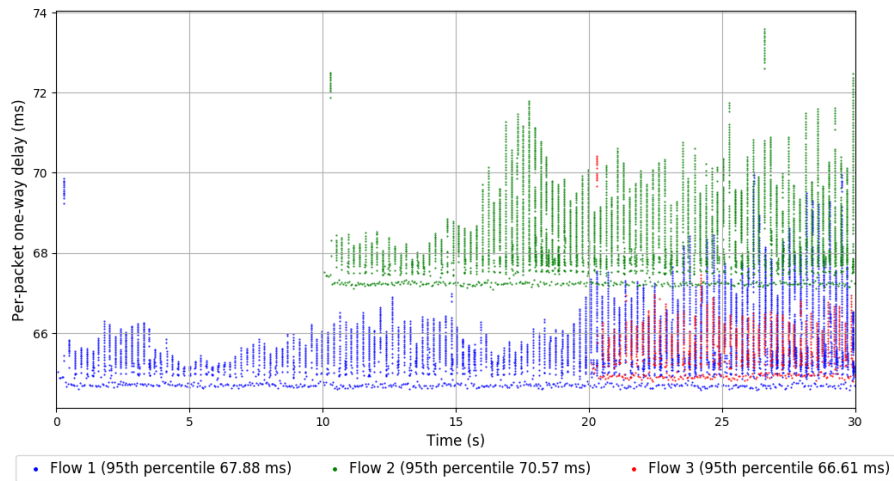
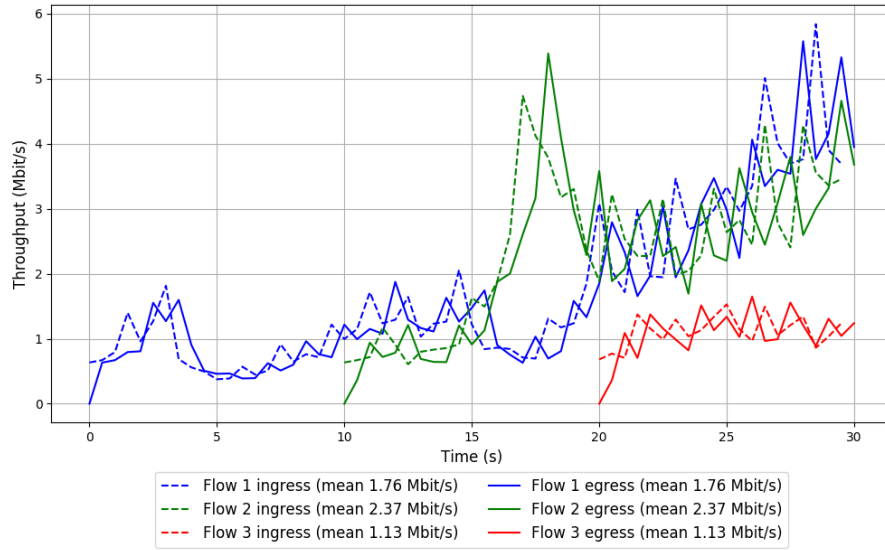
-- Flow 2:

Average throughput: 2.37 Mbit/s  
95th percentile per-packet one-way delay: 70.573 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 1.13 Mbit/s  
95th percentile per-packet one-way delay: 66.607 ms  
Loss rate: 0.00%

### Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2019-05-30 02:23:08  
End at: 2019-05-30 02:23:38  
Local clock offset: 2.827 ms  
Remote clock offset: -35.317 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.99 Mbit/s  
95th percentile per-packet one-way delay: 67.371 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.04 Mbit/s  
95th percentile per-packet one-way delay: 67.756 ms  
Loss rate: 0.00%

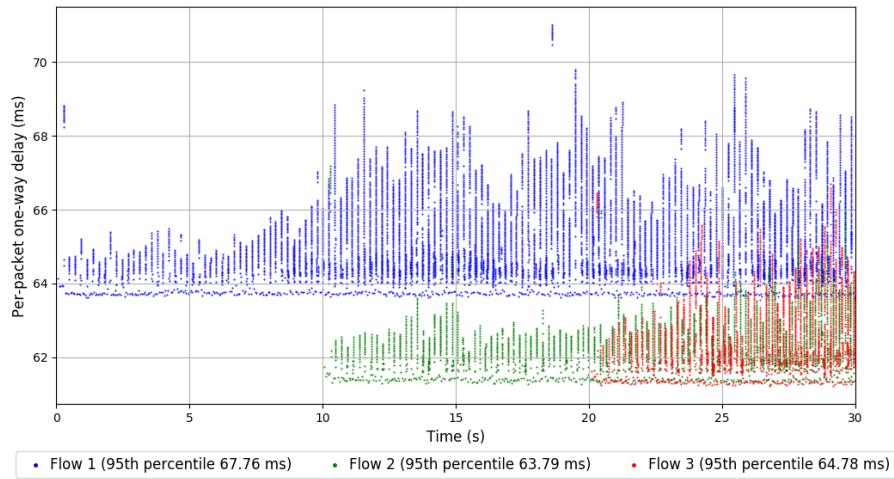
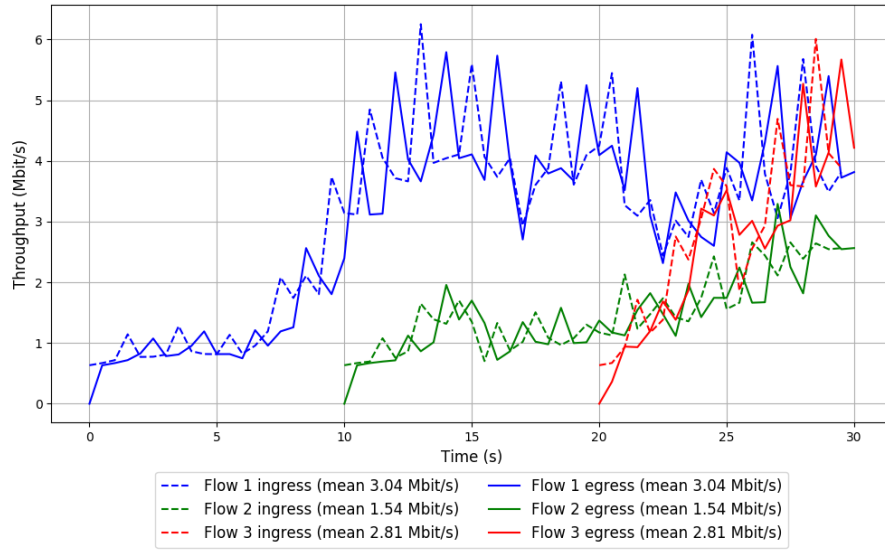
-- Flow 2:

Average throughput: 1.54 Mbit/s  
95th percentile per-packet one-way delay: 63.787 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 2.81 Mbit/s  
95th percentile per-packet one-way delay: 64.781 ms  
Loss rate: 0.00%

### Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2019-05-30 02:53:32  
End at: 2019-05-30 02:54:02  
Local clock offset: -2.981 ms  
Remote clock offset: -36.082 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.26 Mbit/s  
95th percentile per-packet one-way delay: 70.467 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.66 Mbit/s  
95th percentile per-packet one-way delay: 70.308 ms  
Loss rate: 0.00%

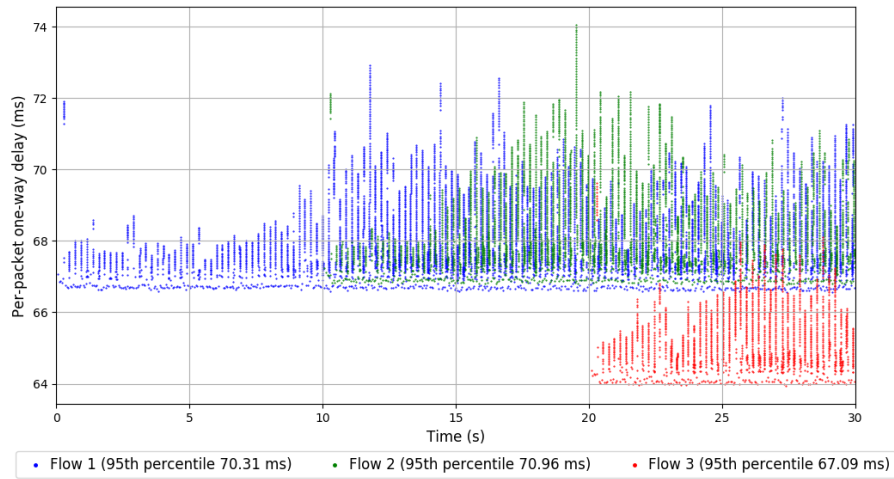
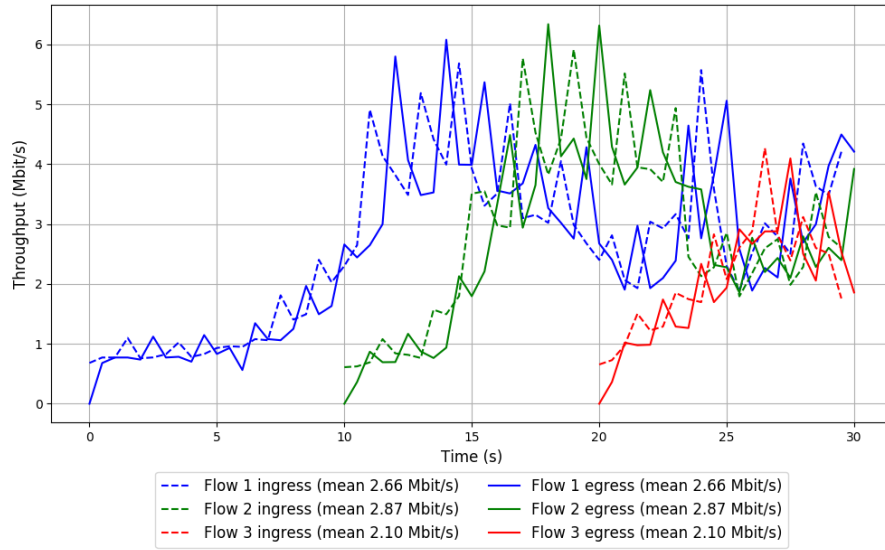
-- Flow 2:

Average throughput: 2.87 Mbit/s  
95th percentile per-packet one-way delay: 70.956 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 2.10 Mbit/s  
95th percentile per-packet one-way delay: 67.095 ms  
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link





Run 1: Statistics of TaoVA-100x

Start at: 2019-05-30 00:50:26  
End at: 2019-05-30 00:50:56  
Local clock offset: -1.48 ms  
Remote clock offset: -41.55 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.36 Mbit/s  
95th percentile per-packet one-way delay: 63.243 ms  
Loss rate: 91.76%

-- Flow 1:

Average throughput: 5.66 Mbit/s  
95th percentile per-packet one-way delay: 68.228 ms  
Loss rate: 46.56%

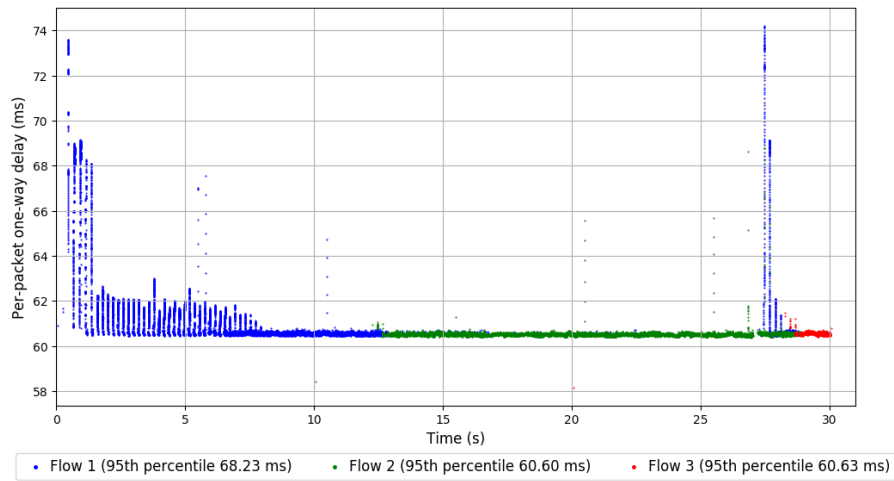
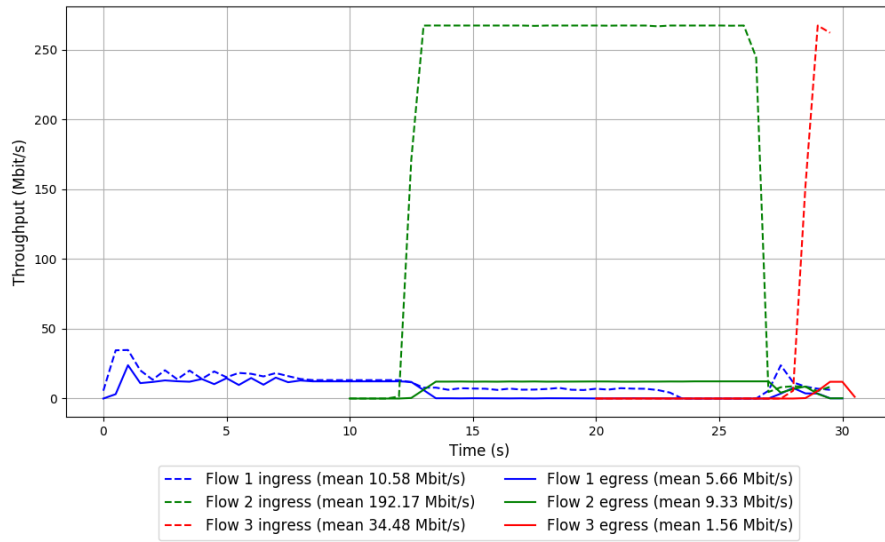
-- Flow 2:

Average throughput: 9.33 Mbit/s  
95th percentile per-packet one-way delay: 60.597 ms  
Loss rate: 95.16%

-- Flow 3:

Average throughput: 1.56 Mbit/s  
95th percentile per-packet one-way delay: 60.634 ms  
Loss rate: 95.49%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-05-30 01:20:57  
End at: 2019-05-30 01:21:27  
Local clock offset: -1.464 ms  
Remote clock offset: -39.608 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.40 Mbit/s  
95th percentile per-packet one-way delay: 65.649 ms  
Loss rate: 38.64%

-- Flow 1:

Average throughput: 7.67 Mbit/s  
95th percentile per-packet one-way delay: 68.554 ms  
Loss rate: 29.48%

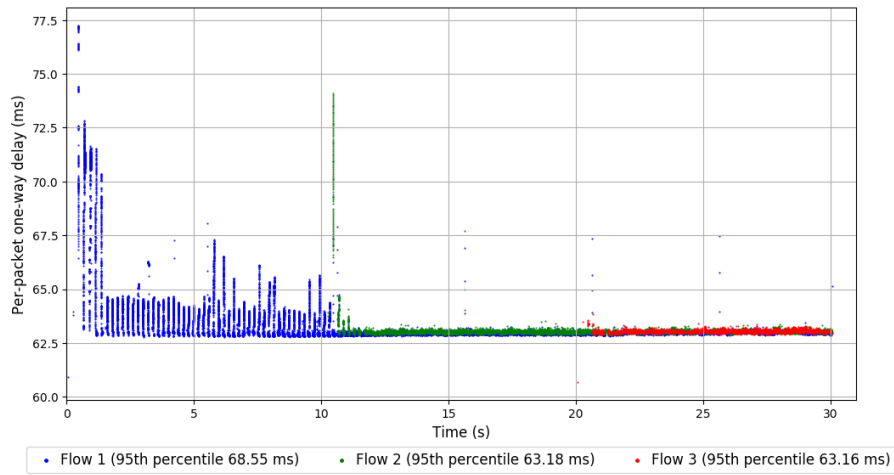
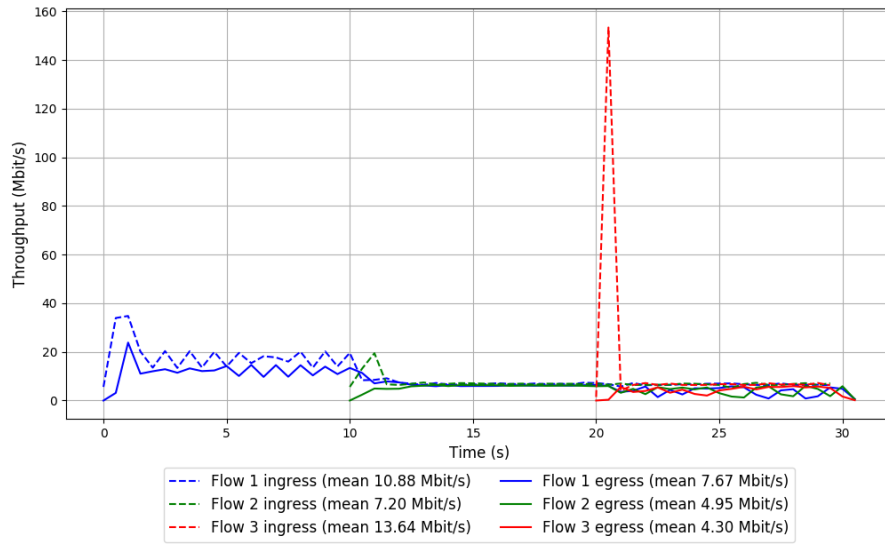
-- Flow 2:

Average throughput: 4.95 Mbit/s  
95th percentile per-packet one-way delay: 63.179 ms  
Loss rate: 31.20%

-- Flow 3:

Average throughput: 4.30 Mbit/s  
95th percentile per-packet one-way delay: 63.157 ms  
Loss rate: 68.49%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-05-30 01:51:22  
End at: 2019-05-30 01:51:52  
Local clock offset: 2.945 ms  
Remote clock offset: -37.866 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.39 Mbit/s  
95th percentile per-packet one-way delay: 65.133 ms  
Loss rate: 87.44%

-- Flow 1:

Average throughput: 6.55 Mbit/s  
95th percentile per-packet one-way delay: 68.281 ms  
Loss rate: 39.59%

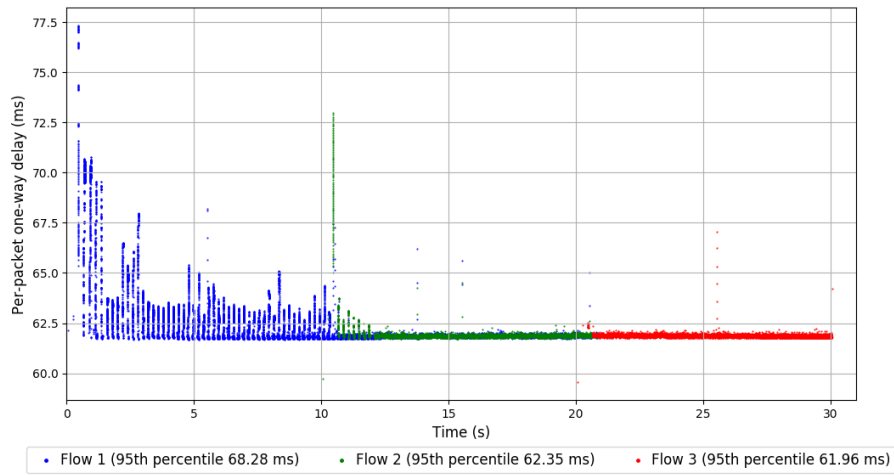
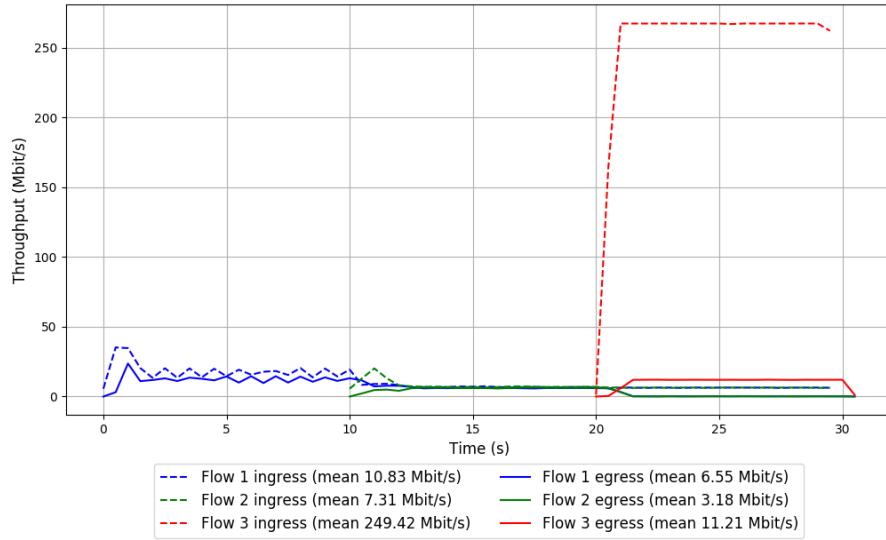
-- Flow 2:

Average throughput: 3.18 Mbit/s  
95th percentile per-packet one-way delay: 62.348 ms  
Loss rate: 56.49%

-- Flow 3:

Average throughput: 11.21 Mbit/s  
95th percentile per-packet one-way delay: 61.964 ms  
Loss rate: 95.50%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-05-30 02:21:47  
End at: 2019-05-30 02:22:17  
Local clock offset: -2.191 ms  
Remote clock offset: -36.417 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.40 Mbit/s  
95th percentile per-packet one-way delay: 71.811 ms  
Loss rate: 87.21%

-- Flow 1:

Average throughput: 6.60 Mbit/s  
95th percentile per-packet one-way delay: 75.252 ms  
Loss rate: 39.38%

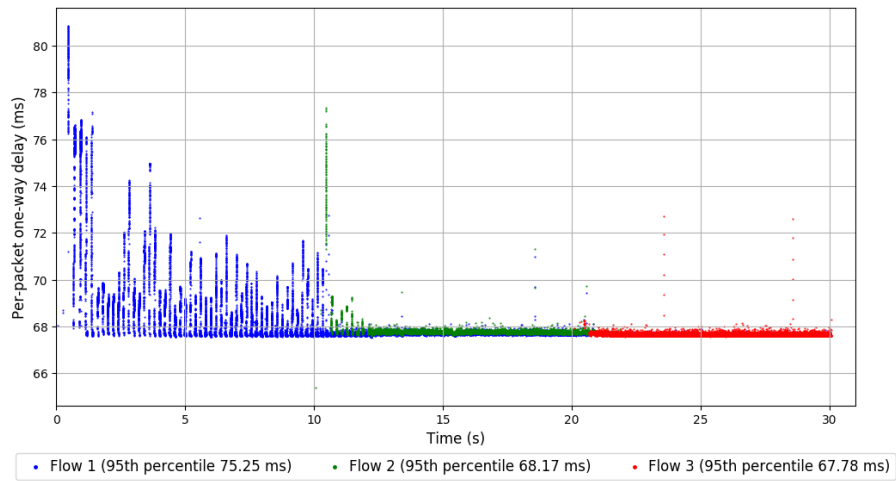
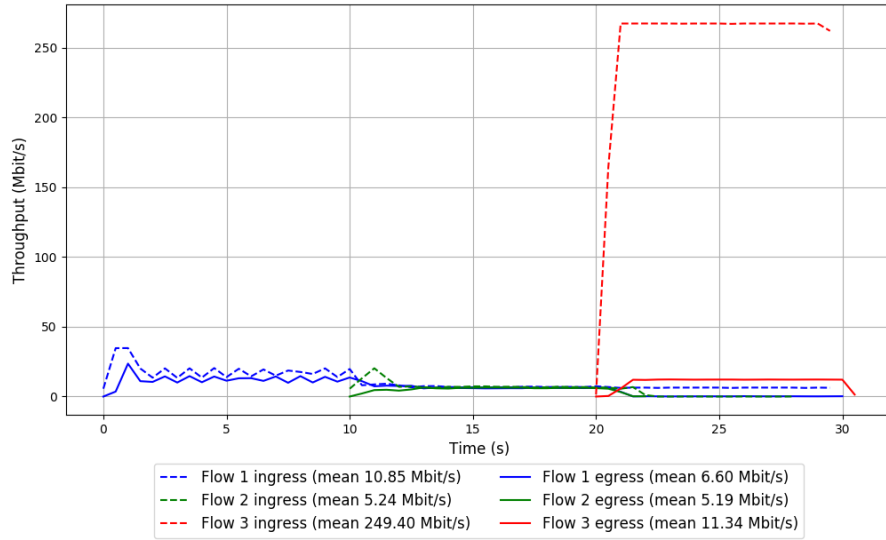
-- Flow 2:

Average throughput: 5.19 Mbit/s  
95th percentile per-packet one-way delay: 68.169 ms  
Loss rate: 34.97%

-- Flow 3:

Average throughput: 11.34 Mbit/s  
95th percentile per-packet one-way delay: 67.778 ms  
Loss rate: 95.46%

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





Run 5: Statistics of TaoVA-100x

Start at: 2019-05-30 02:52:11  
End at: 2019-05-30 02:52:41  
Local clock offset: 1.886 ms  
Remote clock offset: -43.486 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.41 Mbit/s  
95th percentile per-packet one-way delay: 58.035 ms  
Loss rate: 80.34%

-- Flow 1:

Average throughput: 6.88 Mbit/s  
95th percentile per-packet one-way delay: 62.298 ms  
Loss rate: 35.76%

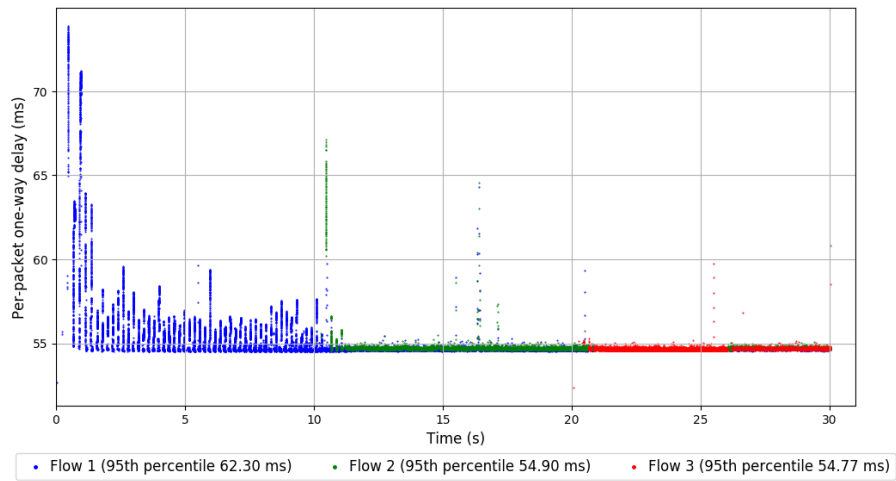
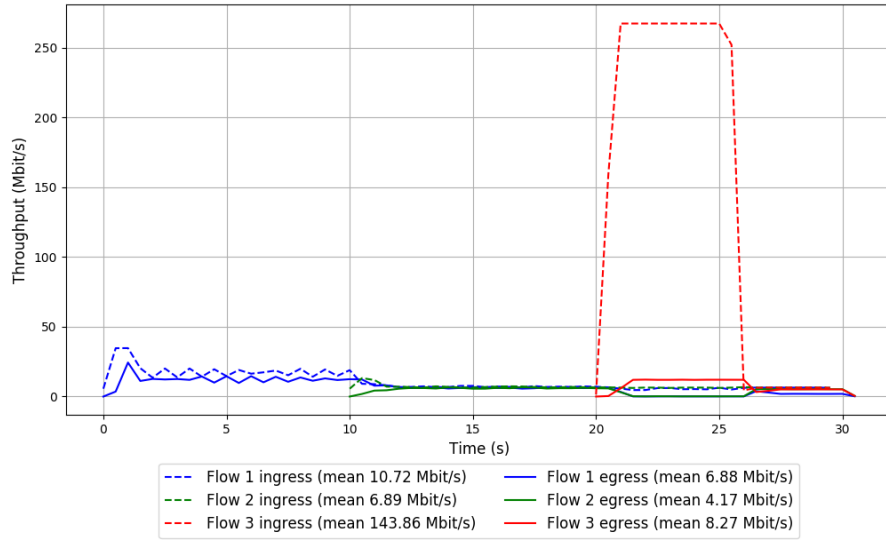
-- Flow 2:

Average throughput: 4.17 Mbit/s  
95th percentile per-packet one-way delay: 54.895 ms  
Loss rate: 39.47%

-- Flow 3:

Average throughput: 8.27 Mbit/s  
95th percentile per-packet one-way delay: 54.773 ms  
Loss rate: 94.25%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-05-30 00:43:22  
End at: 2019-05-30 00:43:52  
Local clock offset: -1.764 ms  
Remote clock offset: -42.379 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 179.98 Mbit/s  
95th percentile per-packet one-way delay: 61.650 ms  
Loss rate: 1.46%

-- Flow 1:

Average throughput: 120.00 Mbit/s  
95th percentile per-packet one-way delay: 61.839 ms  
Loss rate: 1.22%

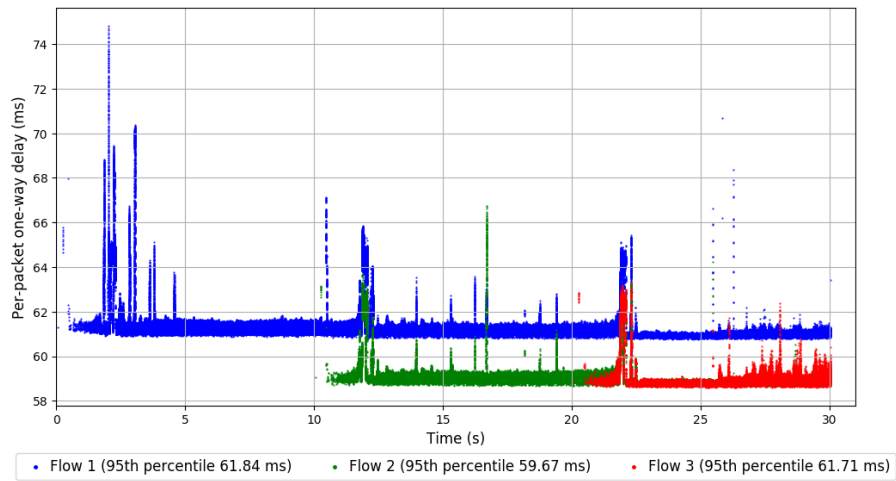
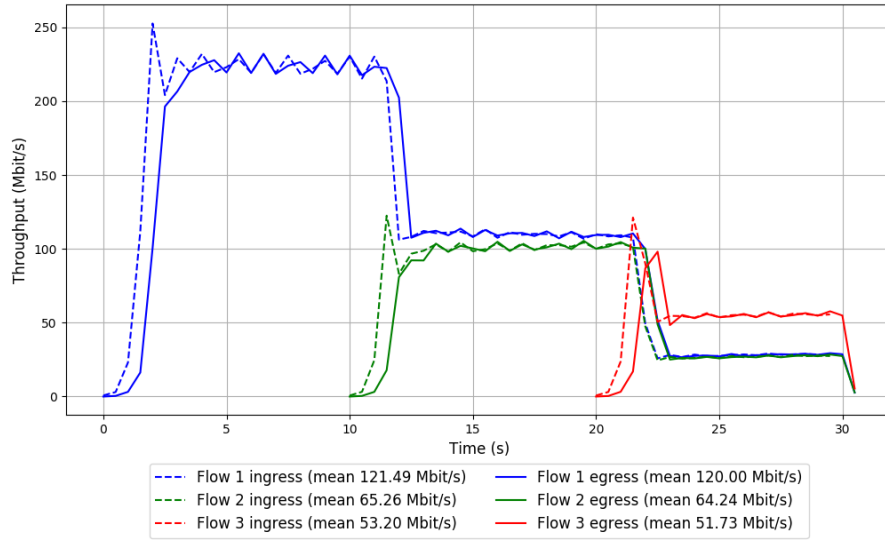
-- Flow 2:

Average throughput: 64.24 Mbit/s  
95th percentile per-packet one-way delay: 59.668 ms  
Loss rate: 1.57%

-- Flow 3:

Average throughput: 51.73 Mbit/s  
95th percentile per-packet one-way delay: 61.706 ms  
Loss rate: 2.75%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-05-30 01:13:52  
End at: 2019-05-30 01:14:22  
Local clock offset: 1.849 ms  
Remote clock offset: -38.003 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 141.43 Mbit/s  
95th percentile per-packet one-way delay: 63.357 ms  
Loss rate: 2.09%

-- Flow 1:

Average throughput: 53.22 Mbit/s  
95th percentile per-packet one-way delay: 63.480 ms  
Loss rate: 2.16%

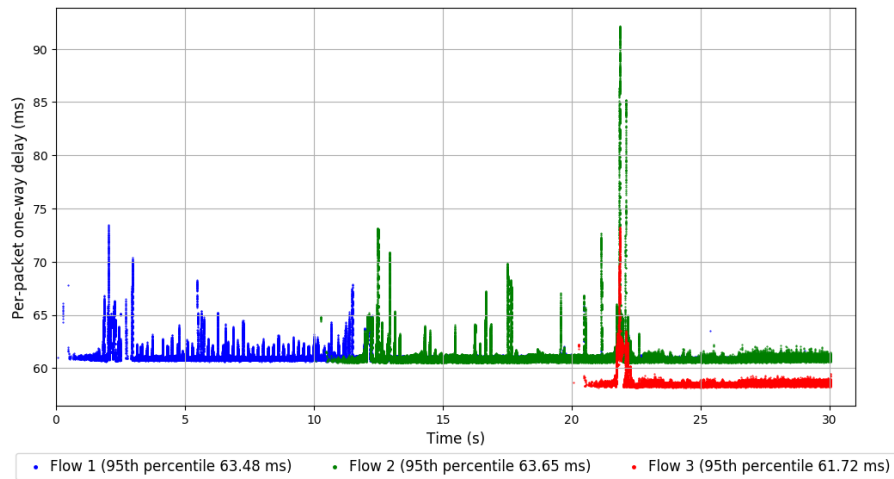
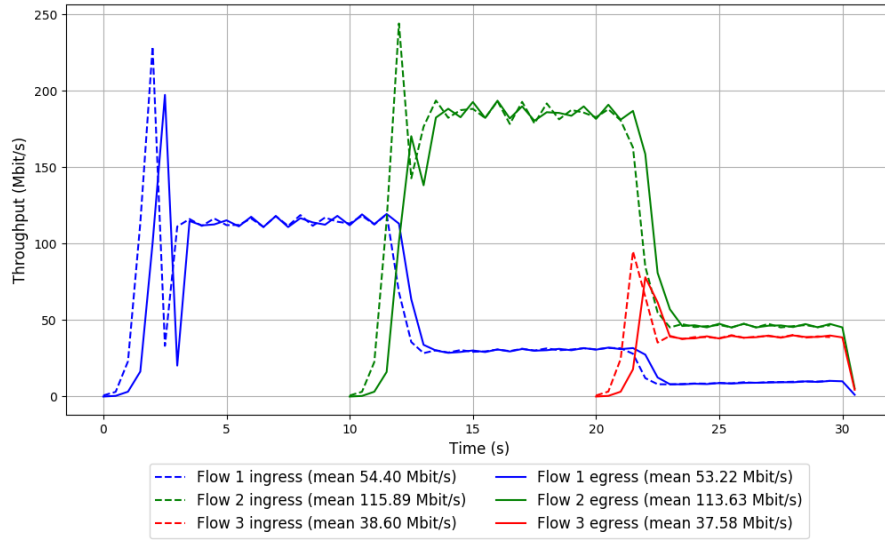
-- Flow 2:

Average throughput: 113.63 Mbit/s  
95th percentile per-packet one-way delay: 63.650 ms  
Loss rate: 1.95%

-- Flow 3:

Average throughput: 37.58 Mbit/s  
95th percentile per-packet one-way delay: 61.723 ms  
Loss rate: 2.64%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-05-30 01:44:20  
End at: 2019-05-30 01:44:50  
Local clock offset: 3.138 ms  
Remote clock offset: -34.205 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 147.90 Mbit/s  
95th percentile per-packet one-way delay: 67.491 ms  
Loss rate: 1.80%

-- Flow 1:

Average throughput: 65.83 Mbit/s  
95th percentile per-packet one-way delay: 68.428 ms  
Loss rate: 1.76%

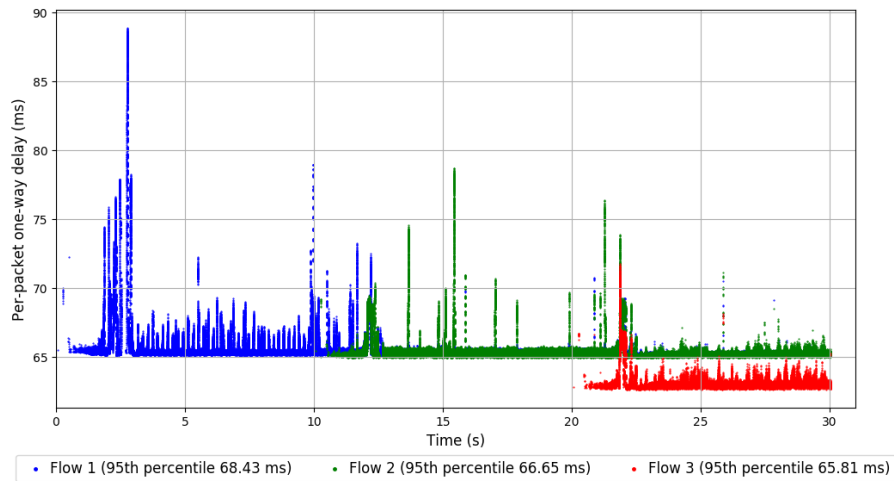
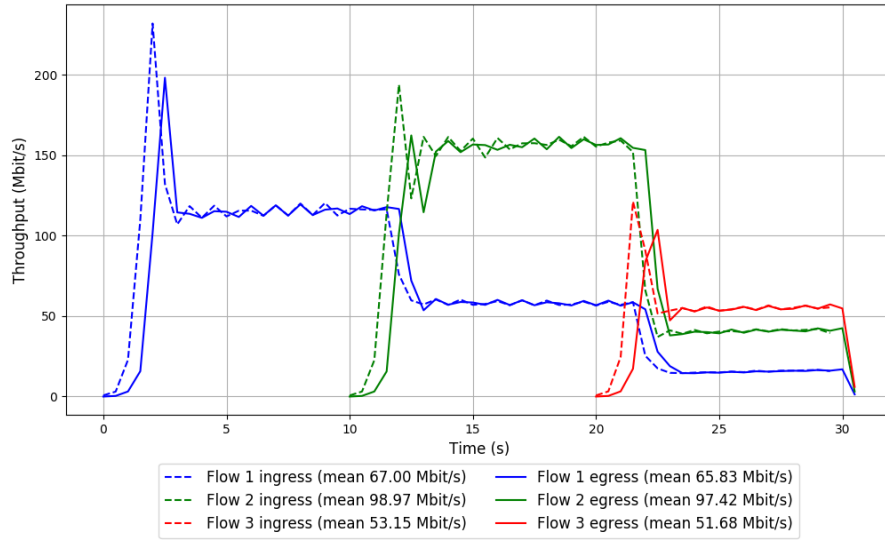
-- Flow 2:

Average throughput: 97.42 Mbit/s  
95th percentile per-packet one-way delay: 66.646 ms  
Loss rate: 1.59%

-- Flow 3:

Average throughput: 51.68 Mbit/s  
95th percentile per-packet one-way delay: 65.806 ms  
Loss rate: 2.75%

### Run 3: Report of TCP Vegas — Data Link





Run 4: Statistics of TCP Vegas

Start at: 2019-05-30 02:14:47  
End at: 2019-05-30 02:15:17  
Local clock offset: 2.922 ms  
Remote clock offset: -45.058 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 146.15 Mbit/s  
95th percentile per-packet one-way delay: 57.066 ms  
Loss rate: 1.73%

-- Flow 1:

Average throughput: 65.93 Mbit/s  
95th percentile per-packet one-way delay: 56.939 ms  
Loss rate: 1.86%

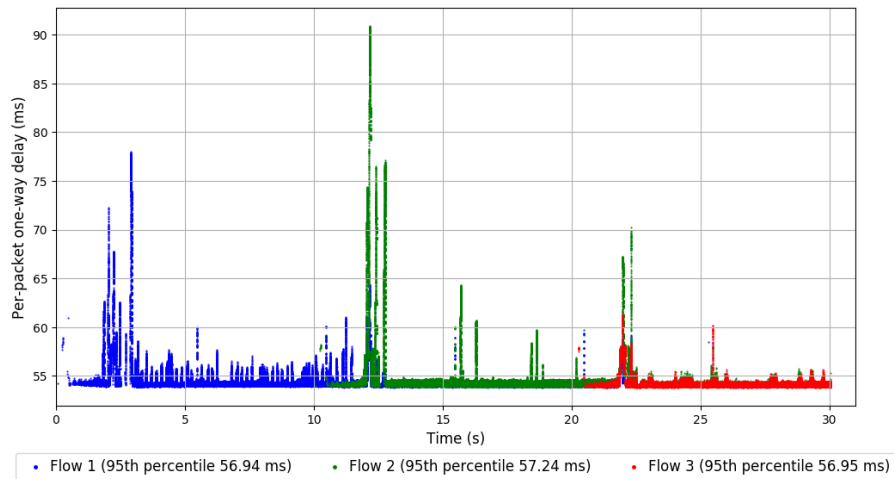
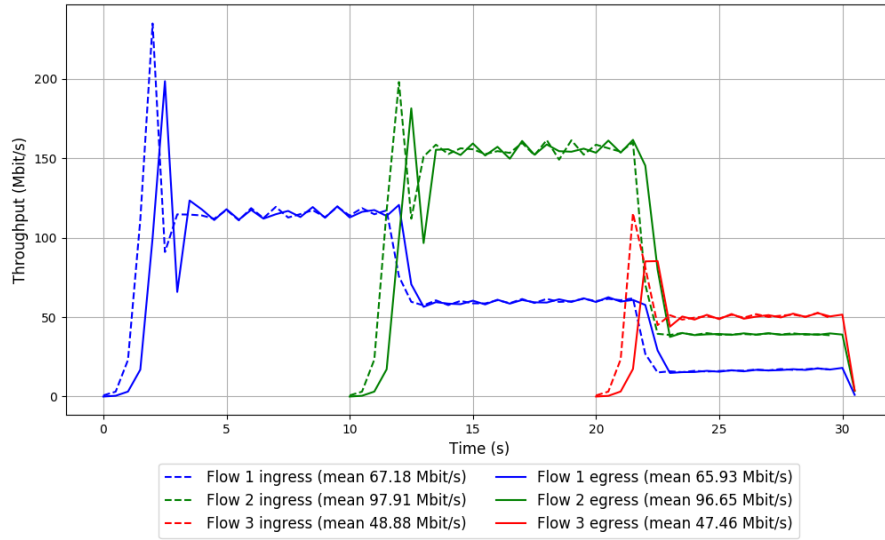
-- Flow 2:

Average throughput: 96.65 Mbit/s  
95th percentile per-packet one-way delay: 57.242 ms  
Loss rate: 1.29%

-- Flow 3:

Average throughput: 47.46 Mbit/s  
95th percentile per-packet one-way delay: 56.952 ms  
Loss rate: 2.91%

### Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-05-30 02:45:08  
End at: 2019-05-30 02:45:38  
Local clock offset: 1.806 ms  
Remote clock offset: -47.745 ms

# Below is generated by plot.py at 2019-05-30 03:28:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 144.32 Mbit/s  
95th percentile per-packet one-way delay: 51.650 ms  
Loss rate: 1.80%

-- Flow 1:

Average throughput: 100.48 Mbit/s  
95th percentile per-packet one-way delay: 51.497 ms  
Loss rate: 1.42%

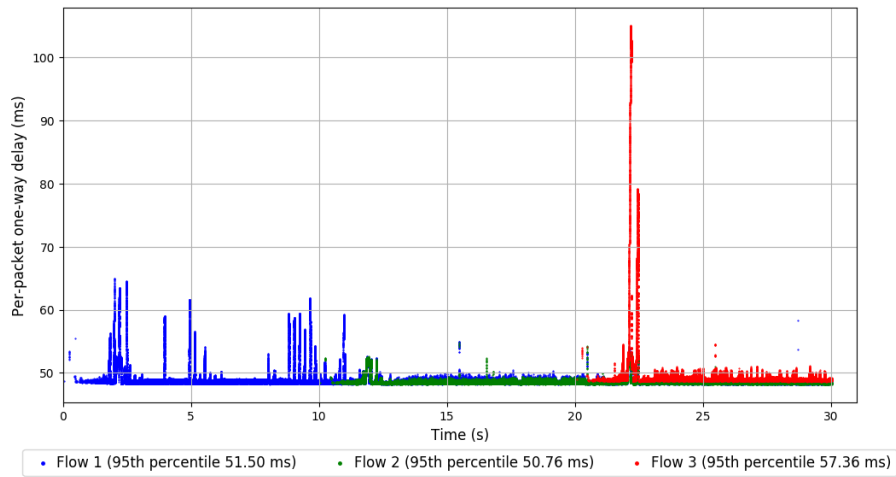
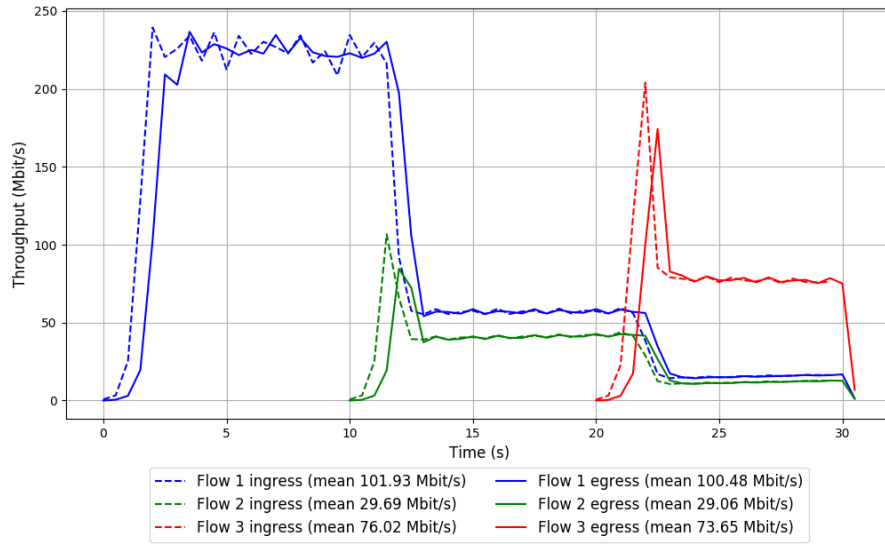
-- Flow 2:

Average throughput: 29.06 Mbit/s  
95th percentile per-packet one-way delay: 50.759 ms  
Loss rate: 2.11%

-- Flow 3:

Average throughput: 73.65 Mbit/s  
95th percentile per-packet one-way delay: 57.361 ms  
Loss rate: 3.11%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-05-30 00:25:33  
End at: 2019-05-30 00:26:03  
Local clock offset: 4.1 ms  
Remote clock offset: -34.303 ms

# Below is generated by plot.py at 2019-05-30 03:28:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 106.72 Mbit/s  
95th percentile per-packet one-way delay: 98.705 ms  
Loss rate: 66.79%

-- Flow 1:

Average throughput: 90.73 Mbit/s  
95th percentile per-packet one-way delay: 99.890 ms  
Loss rate: 68.68%

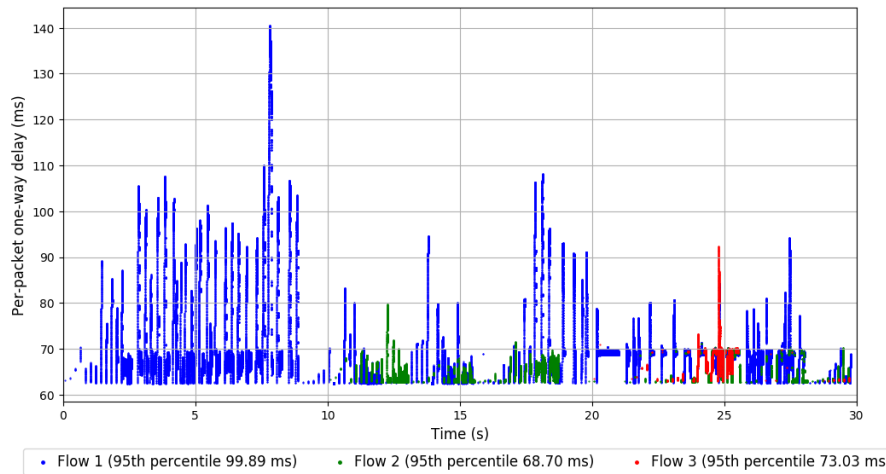
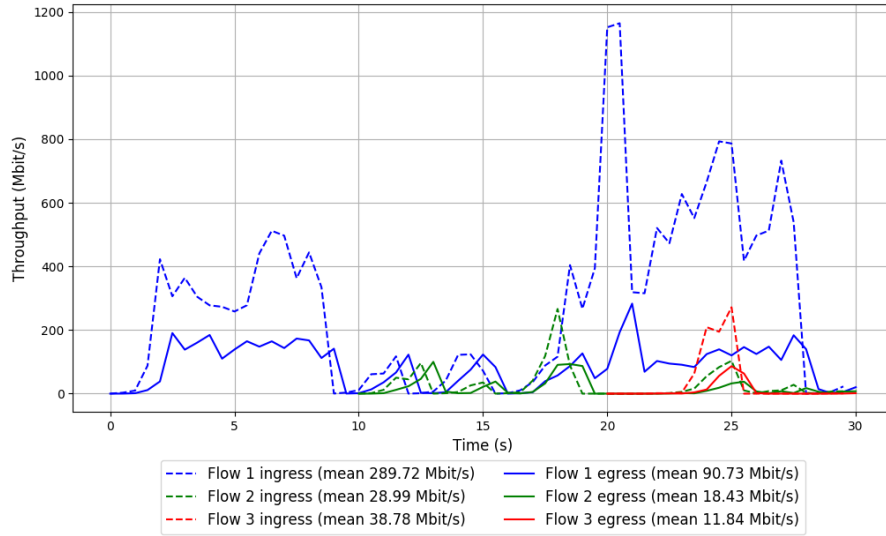
-- Flow 2:

Average throughput: 18.43 Mbit/s  
95th percentile per-packet one-way delay: 68.703 ms  
Loss rate: 36.40%

-- Flow 3:

Average throughput: 11.84 Mbit/s  
95th percentile per-packet one-way delay: 73.029 ms  
Loss rate: 69.45%

### Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-05-30 00:55:59  
End at: 2019-05-30 00:56:29  
Local clock offset: 1.684 ms  
Remote clock offset: -31.514 ms

# Below is generated by plot.py at 2019-05-30 03:28:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 98.59 Mbit/s  
95th percentile per-packet one-way delay: 88.416 ms  
Loss rate: 48.67%

-- Flow 1:

Average throughput: 67.95 Mbit/s  
95th percentile per-packet one-way delay: 91.013 ms  
Loss rate: 52.30%

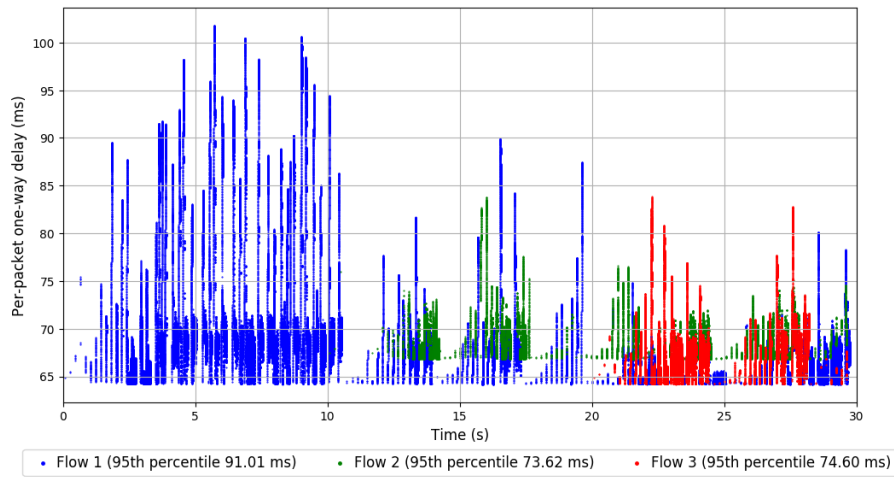
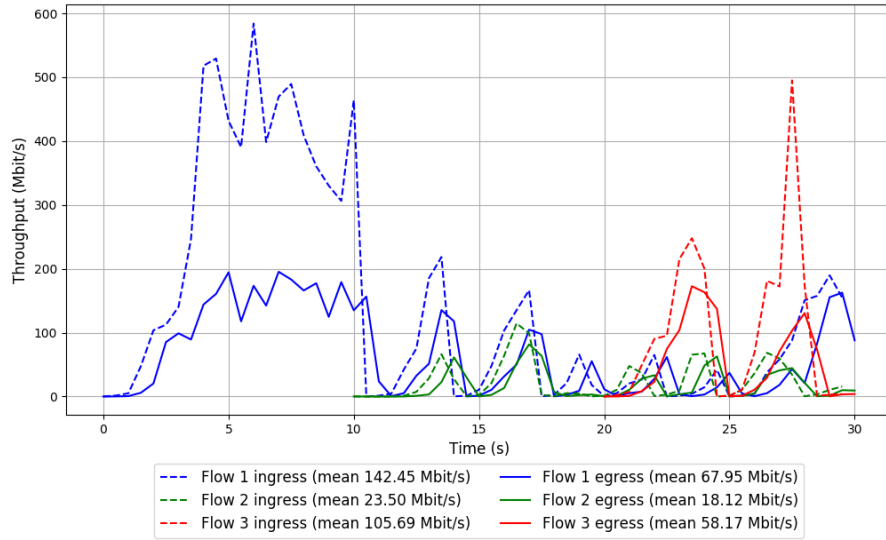
-- Flow 2:

Average throughput: 18.12 Mbit/s  
95th percentile per-packet one-way delay: 73.616 ms  
Loss rate: 23.68%

-- Flow 3:

Average throughput: 58.17 Mbit/s  
95th percentile per-packet one-way delay: 74.602 ms  
Loss rate: 44.94%

## Run 2: Report of Verus — Data Link





Run 3: Statistics of Verus

Start at: 2019-05-30 01:26:27  
End at: 2019-05-30 01:26:57  
Local clock offset: -1.632 ms  
Remote clock offset: -39.153 ms

# Below is generated by plot.py at 2019-05-30 03:29:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 134.20 Mbit/s  
95th percentile per-packet one-way delay: 88.443 ms  
Loss rate: 53.54%

-- Flow 1:

Average throughput: 121.09 Mbit/s  
95th percentile per-packet one-way delay: 89.146 ms  
Loss rate: 55.79%

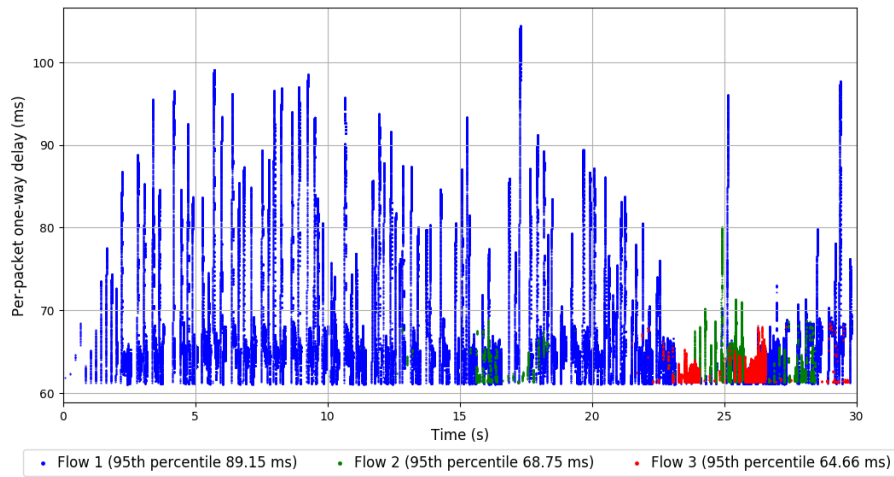
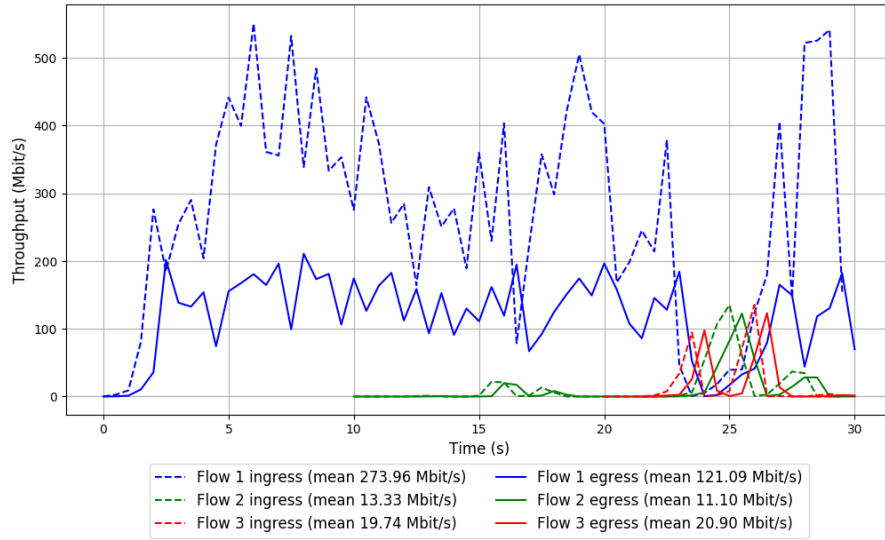
-- Flow 2:

Average throughput: 11.10 Mbit/s  
95th percentile per-packet one-way delay: 68.753 ms  
Loss rate: 16.72%

-- Flow 3:

Average throughput: 20.90 Mbit/s  
95th percentile per-packet one-way delay: 64.660 ms  
Loss rate: 5.66%

### Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-05-30 01:56:55  
End at: 2019-05-30 01:57:25  
Local clock offset: 2.989 ms  
Remote clock offset: -35.554 ms

# Below is generated by plot.py at 2019-05-30 03:29:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 90.90 Mbit/s  
95th percentile per-packet one-way delay: 96.168 ms  
Loss rate: 65.18%

-- Flow 1:

Average throughput: 49.86 Mbit/s  
95th percentile per-packet one-way delay: 96.763 ms  
Loss rate: 65.98%

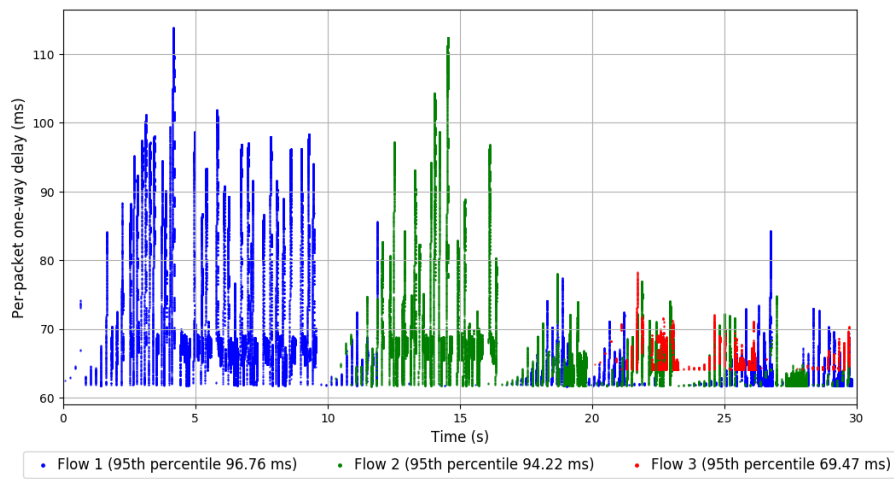
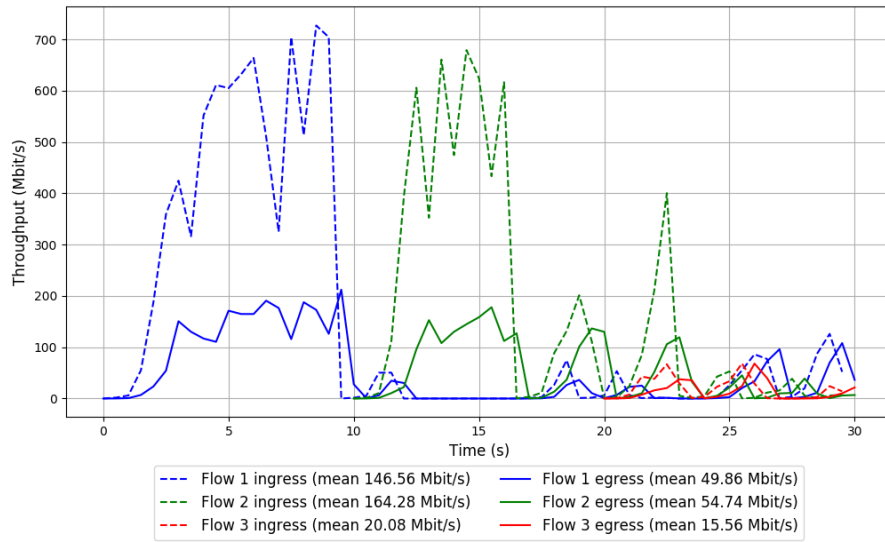
-- Flow 2:

Average throughput: 54.74 Mbit/s  
95th percentile per-packet one-way delay: 94.222 ms  
Loss rate: 66.67%

-- Flow 3:

Average throughput: 15.56 Mbit/s  
95th percentile per-packet one-way delay: 69.473 ms  
Loss rate: 22.52%

### Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-05-30 02:27:21  
End at: 2019-05-30 02:27:51  
Local clock offset: 3.379 ms  
Remote clock offset: -34.176 ms

# Below is generated by plot.py at 2019-05-30 03:29:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 65.74 Mbit/s  
95th percentile per-packet one-way delay: 88.332 ms  
Loss rate: 37.75%

-- Flow 1:

Average throughput: 43.21 Mbit/s  
95th percentile per-packet one-way delay: 92.708 ms  
Loss rate: 43.71%

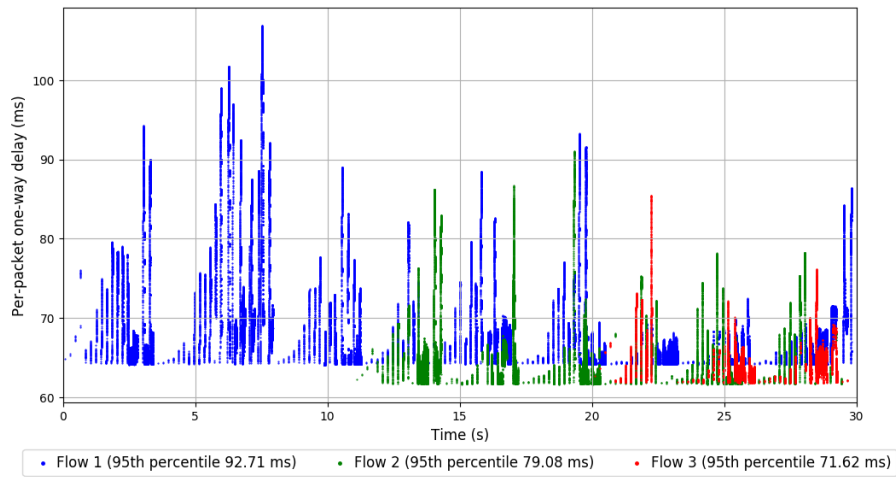
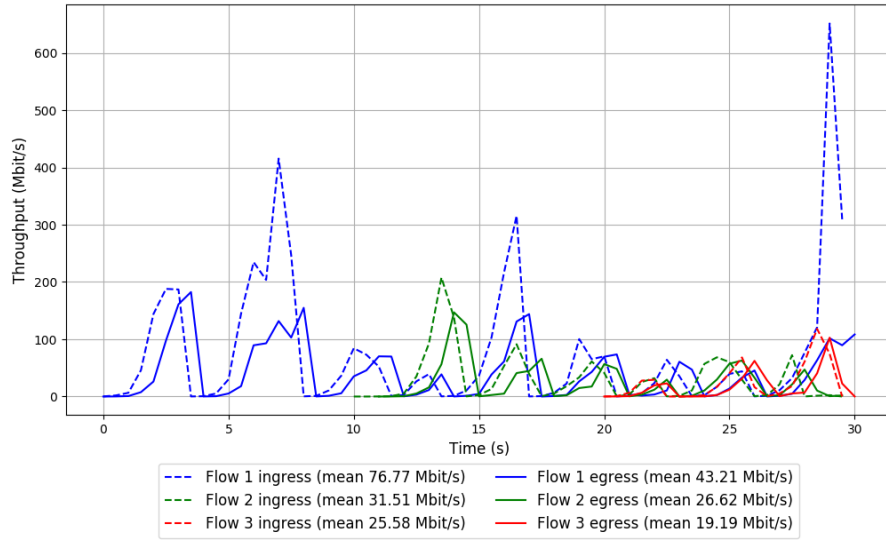
-- Flow 2:

Average throughput: 26.62 Mbit/s  
95th percentile per-packet one-way delay: 79.076 ms  
Loss rate: 20.65%

-- Flow 3:

Average throughput: 19.19 Mbit/s  
95th percentile per-packet one-way delay: 71.625 ms  
Loss rate: 24.99%

### Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-05-30 00:29:53  
End at: 2019-05-30 00:30:23  
Local clock offset: 0.545 ms  
Remote clock offset: -35.093 ms

# Below is generated by plot.py at 2019-05-30 03:29:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 217.18 Mbit/s  
95th percentile per-packet one-way delay: 71.445 ms  
Loss rate: 1.81%

-- Flow 1:

Average throughput: 177.35 Mbit/s  
95th percentile per-packet one-way delay: 71.484 ms  
Loss rate: 1.80%

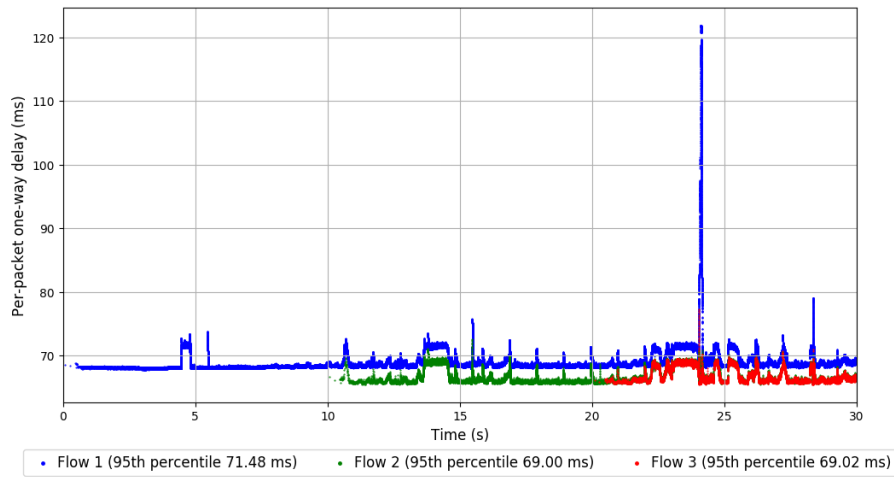
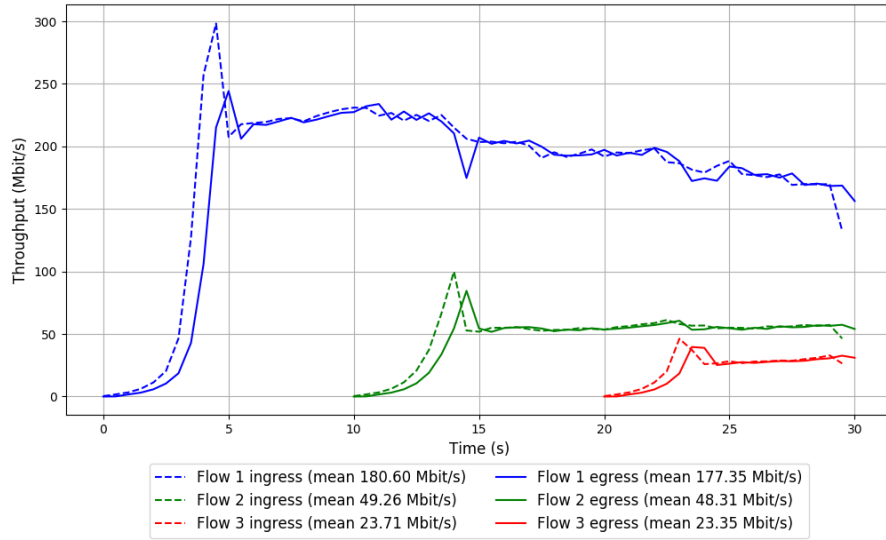
-- Flow 2:

Average throughput: 48.31 Mbit/s  
95th percentile per-packet one-way delay: 69.004 ms  
Loss rate: 1.93%

-- Flow 3:

Average throughput: 23.35 Mbit/s  
95th percentile per-packet one-way delay: 69.017 ms  
Loss rate: 1.51%

### Run 1: Report of PCC-Vivace — Data Link





Run 2: Statistics of PCC-Vivace

Start at: 2019-05-30 01:00:20  
End at: 2019-05-30 01:00:50  
Local clock offset: 0.984 ms  
Remote clock offset: -40.006 ms

# Below is generated by plot.py at 2019-05-30 03:29:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 207.72 Mbit/s  
95th percentile per-packet one-way delay: 62.099 ms  
Loss rate: 1.43%

-- Flow 1:

Average throughput: 176.36 Mbit/s  
95th percentile per-packet one-way delay: 62.096 ms  
Loss rate: 1.48%

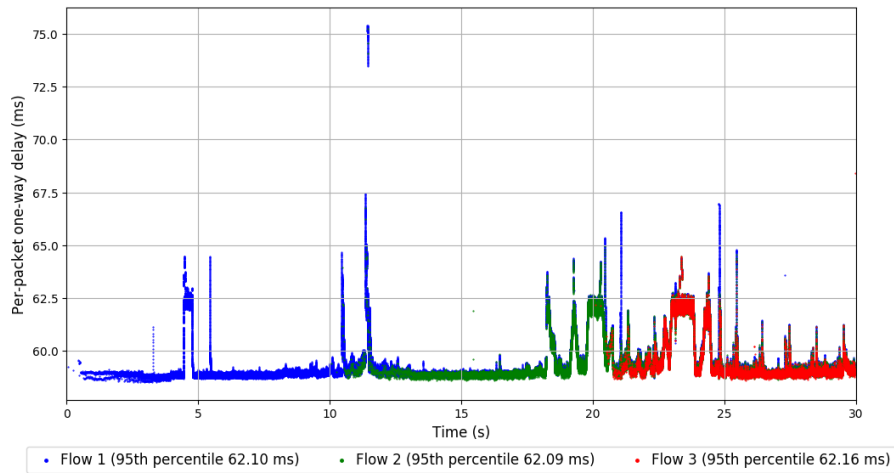
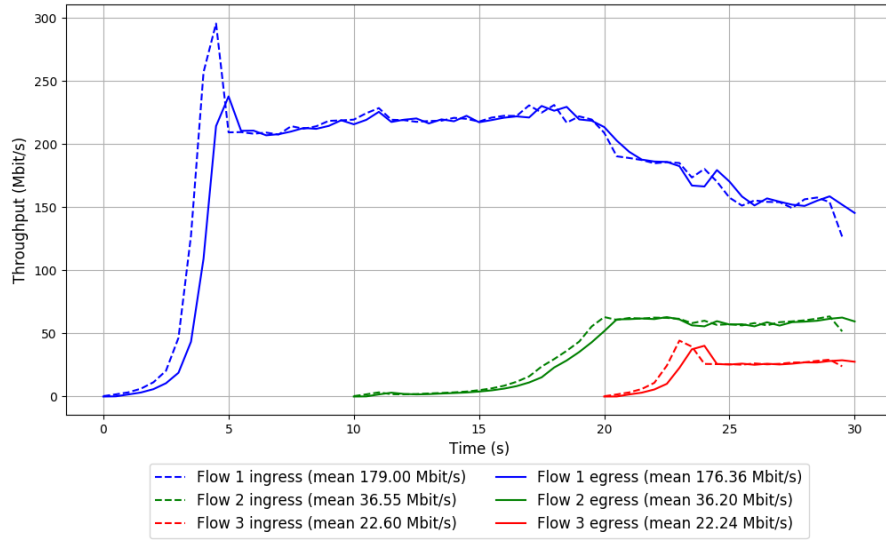
-- Flow 2:

Average throughput: 36.20 Mbit/s  
95th percentile per-packet one-way delay: 62.094 ms  
Loss rate: 0.98%

-- Flow 3:

Average throughput: 22.24 Mbit/s  
95th percentile per-packet one-way delay: 62.155 ms  
Loss rate: 1.55%

## Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-05-30 01:30:52  
End at: 2019-05-30 01:31:22  
Local clock offset: -0.704 ms  
Remote clock offset: -46.447 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 210.60 Mbit/s  
95th percentile per-packet one-way delay: 58.506 ms  
Loss rate: 1.10%

-- Flow 1:

Average throughput: 180.39 Mbit/s  
95th percentile per-packet one-way delay: 58.765 ms  
Loss rate: 1.24%

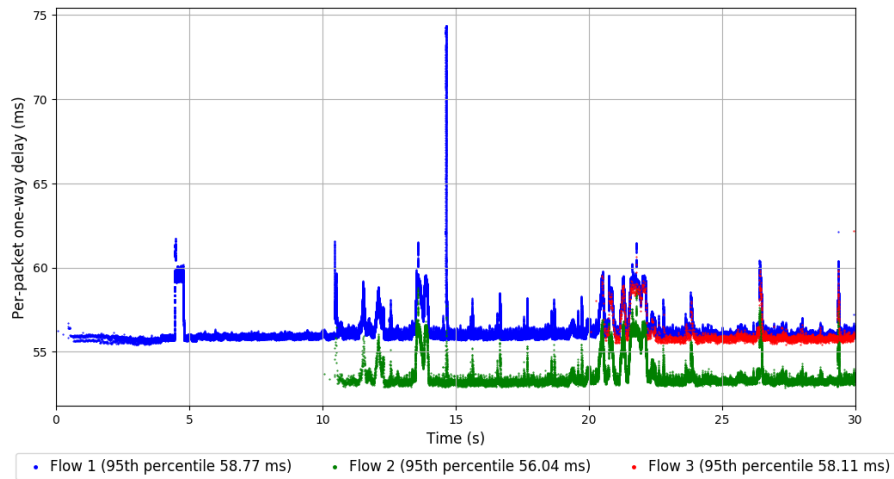
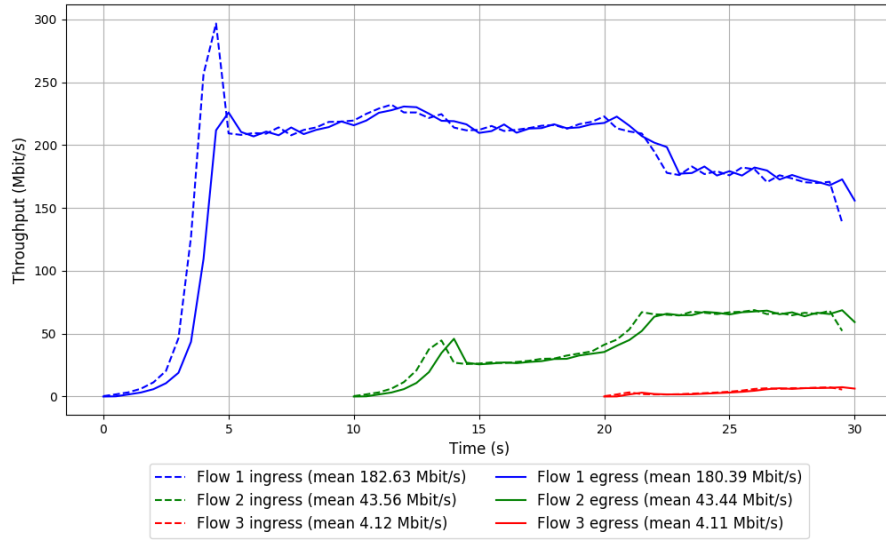
-- Flow 2:

Average throughput: 43.44 Mbit/s  
95th percentile per-packet one-way delay: 56.042 ms  
Loss rate: 0.30%

-- Flow 3:

Average throughput: 4.11 Mbit/s  
95th percentile per-packet one-way delay: 58.114 ms  
Loss rate: 0.24%

### Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-05-30 02:01:15  
End at: 2019-05-30 02:01:45  
Local clock offset: -2.274 ms  
Remote clock offset: -34.097 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 209.72 Mbit/s  
95th percentile per-packet one-way delay: 71.835 ms  
Loss rate: 1.15%

-- Flow 1:

Average throughput: 181.90 Mbit/s  
95th percentile per-packet one-way delay: 71.788 ms  
Loss rate: 1.24%

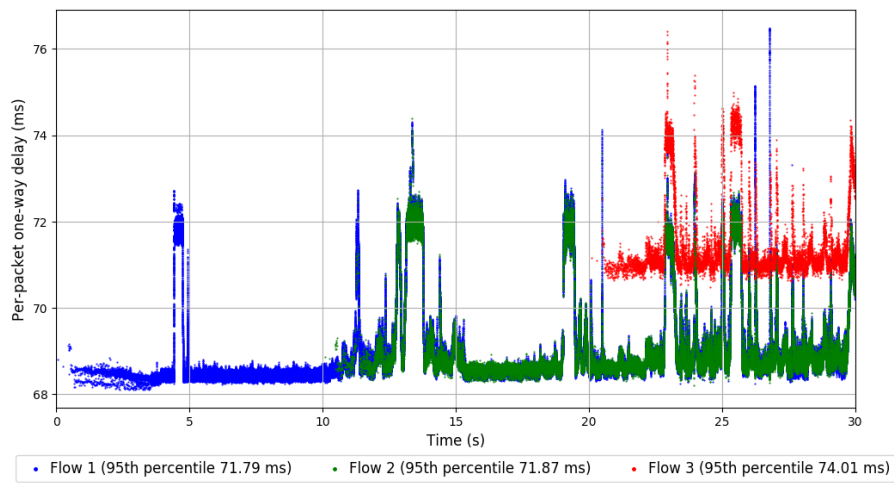
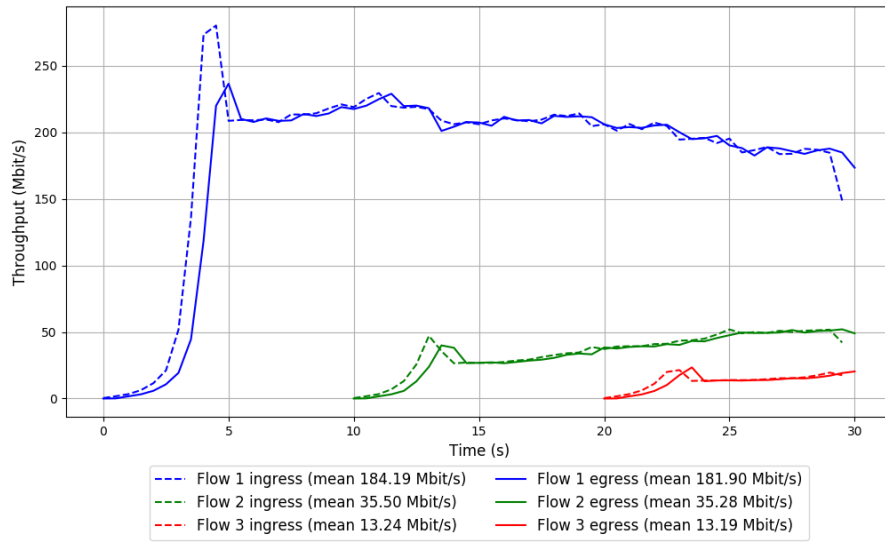
-- Flow 2:

Average throughput: 35.28 Mbit/s  
95th percentile per-packet one-way delay: 71.874 ms  
Loss rate: 0.60%

-- Flow 3:

Average throughput: 13.19 Mbit/s  
95th percentile per-packet one-way delay: 74.013 ms  
Loss rate: 0.39%

### Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-05-30 02:31:38  
End at: 2019-05-30 02:32:08  
Local clock offset: -2.379 ms  
Remote clock offset: -41.365 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 212.67 Mbit/s  
95th percentile per-packet one-way delay: 65.830 ms  
Loss rate: 3.64%

-- Flow 1:

Average throughput: 190.09 Mbit/s  
95th percentile per-packet one-way delay: 65.910 ms  
Loss rate: 4.04%

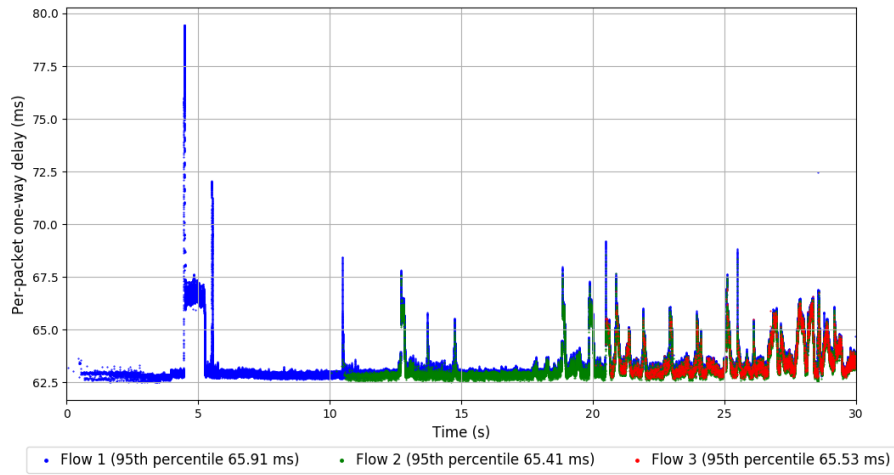
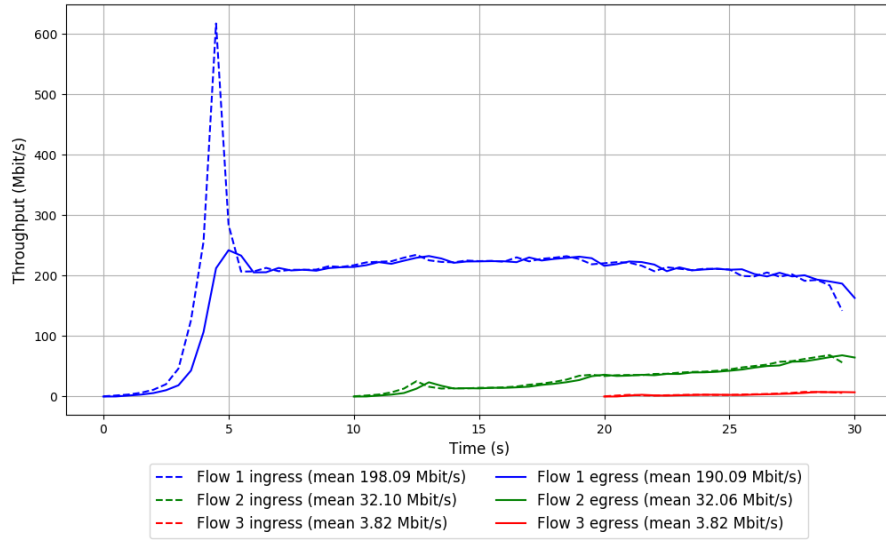
-- Flow 2:

Average throughput: 32.06 Mbit/s  
95th percentile per-packet one-way delay: 65.413 ms  
Loss rate: 0.12%

-- Flow 3:

Average throughput: 3.82 Mbit/s  
95th percentile per-packet one-way delay: 65.529 ms  
Loss rate: 0.12%

Run 5: Report of PCC-Vivace — Data Link





Run 1: Statistics of WebRTC media

Start at: 2019-05-30 00:47:53  
End at: 2019-05-30 00:48:23  
Local clock offset: 2.569 ms  
Remote clock offset: -41.473 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 59.608 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 58.090 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 60.546 ms

Loss rate: 0.00%

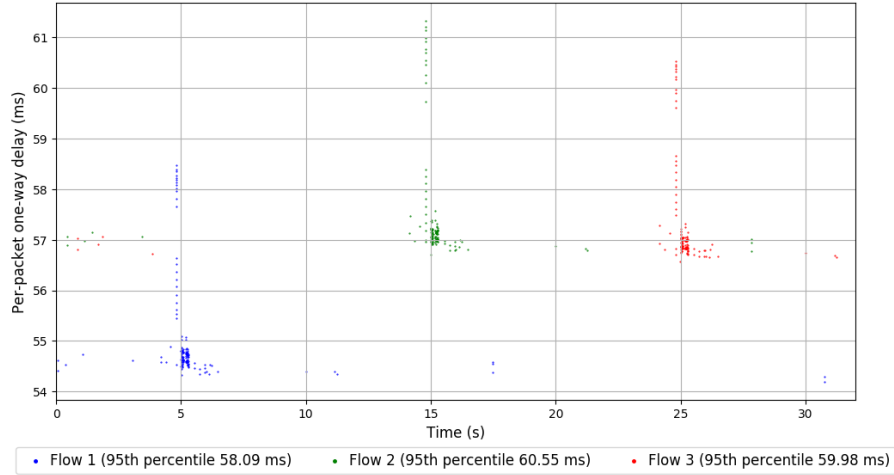
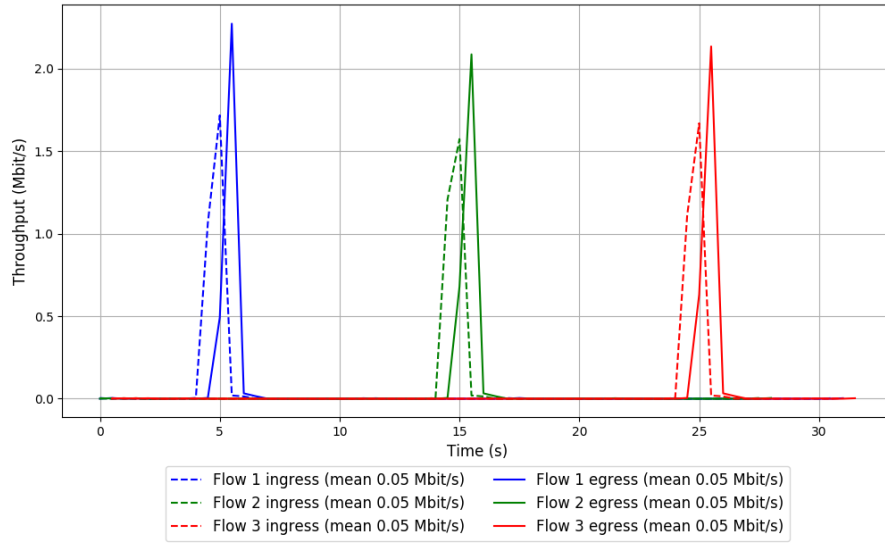
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 59.976 ms

Loss rate: 0.00%

# Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-05-30 01:18:22  
End at: 2019-05-30 01:18:52  
Local clock offset: -1.492 ms  
Remote clock offset: -39.943 ms

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

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 65.644 ms  
Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 65.877 ms  
Loss rate: 0.00%

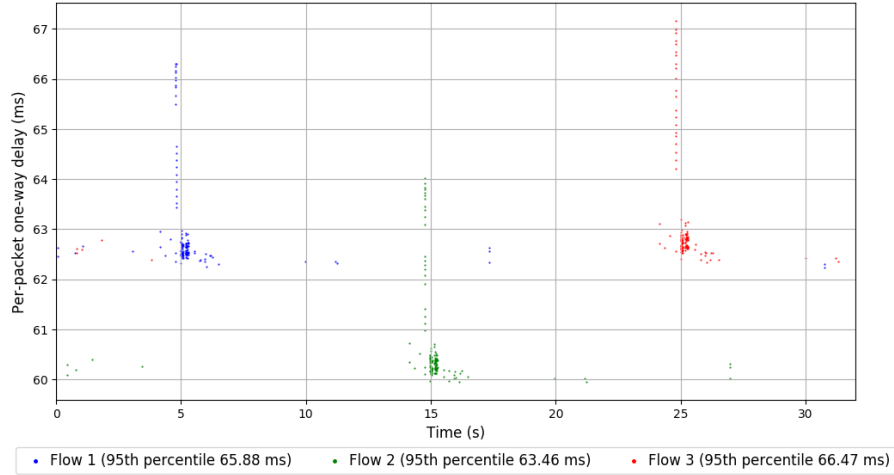
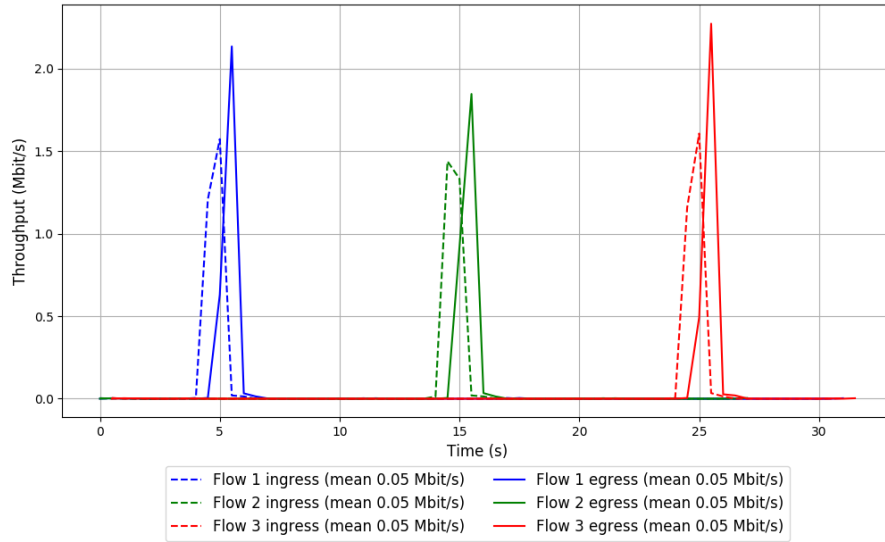
-- Flow 2:

Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 63.456 ms  
Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 66.468 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

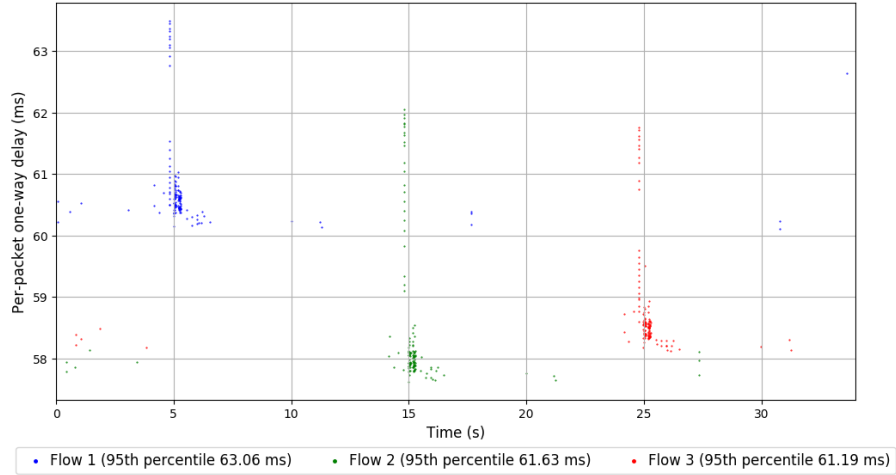
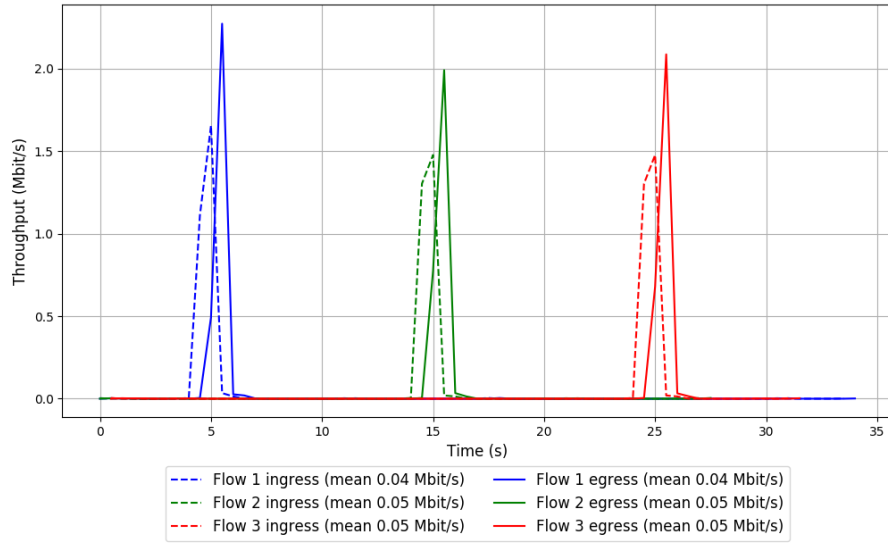


Run 3: Statistics of WebRTC media

Start at: 2019-05-30 01:48:48  
End at: 2019-05-30 01:49:18  
Local clock offset: 2.214 ms  
Remote clock offset: -40.03 ms

```
# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 61.563 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 63.060 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 61.630 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 61.193 ms
Loss rate: 0.00%
```

### Run 3: Report of WebRTC media — Data Link

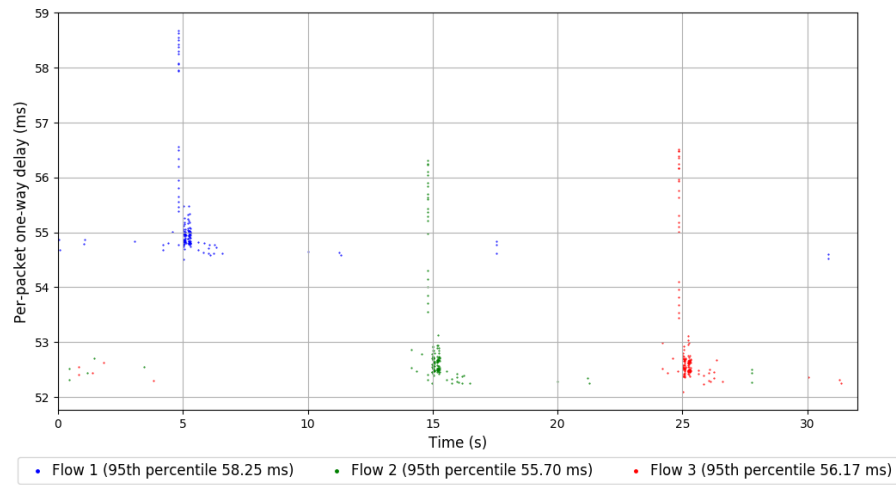
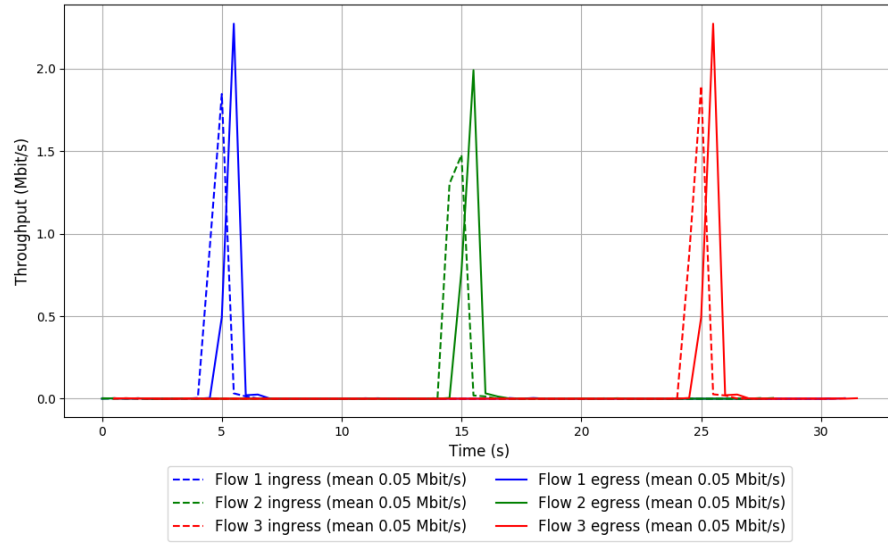


Run 4: Statistics of WebRTC media

Start at: 2019-05-30 02:19:13  
End at: 2019-05-30 02:19:44  
Local clock offset: 2.996 ms  
Remote clock offset: -44.211 ms

```
# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 56.249 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.249 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 55.696 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.171 ms
Loss rate: 0.00%
```

#### Run 4: Report of WebRTC media — Data Link





Run 5: Statistics of WebRTC media

Start at: 2019-05-30 02:49:37  
End at: 2019-05-30 02:50:07  
Local clock offset: 1.688 ms  
Remote clock offset: -36.753 ms

```
# Below is generated by plot.py at 2019-05-30 03:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.258 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.933 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.286 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.937 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

