

Pantheon Report

Generated at 2019-01-25 04:42:41 (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:

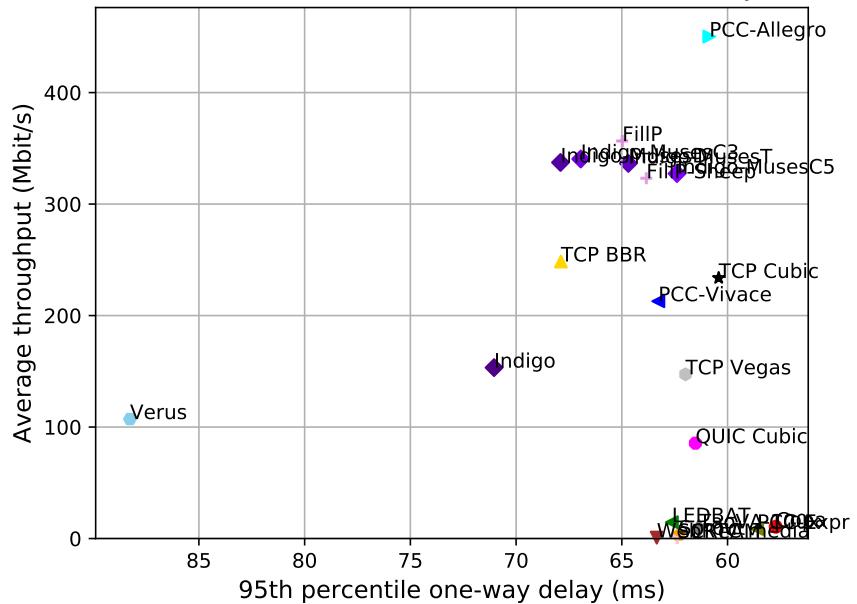
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

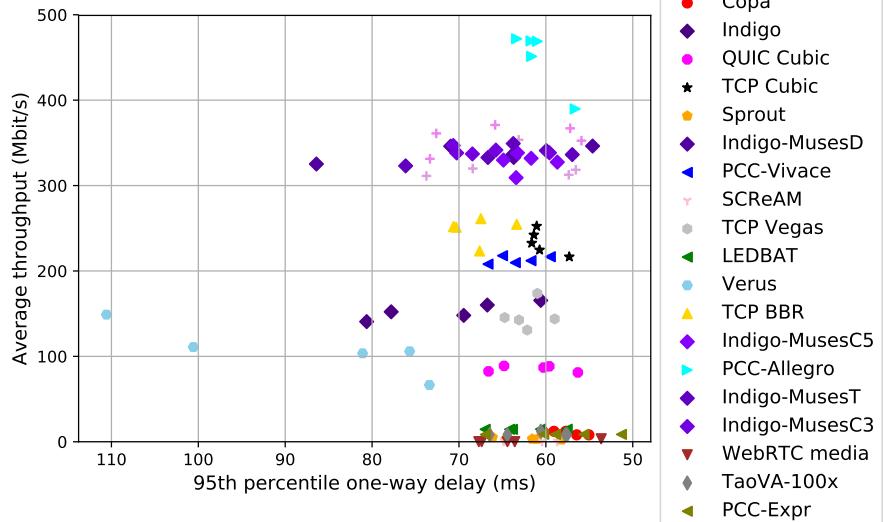
```
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
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-quic @ 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



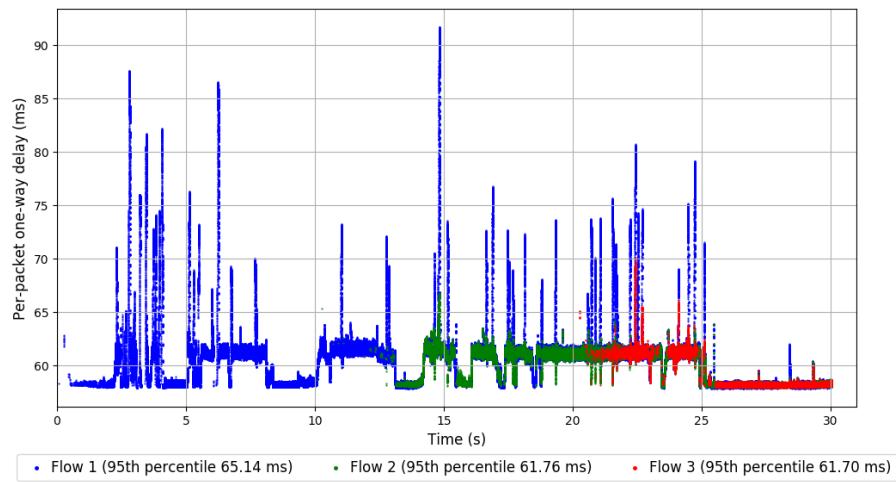
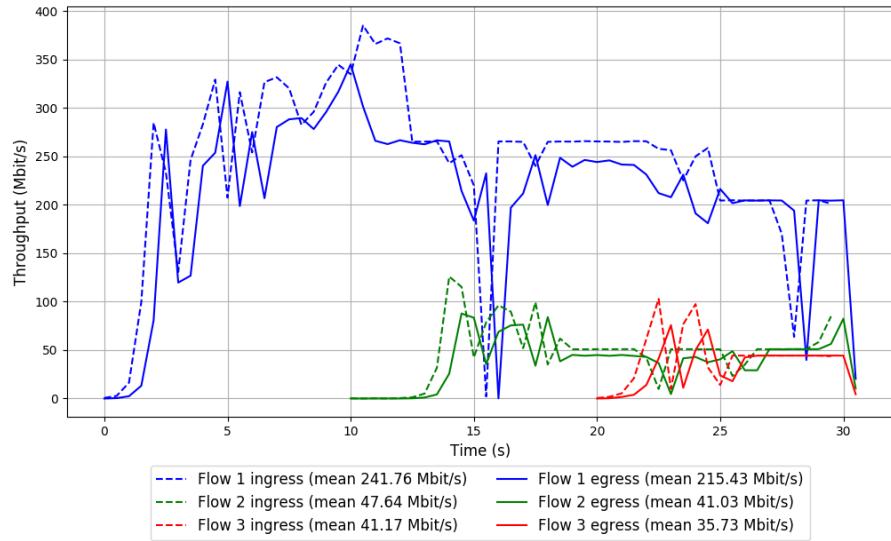
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	205.15	43.54	43.84	69.43	64.37	63.75	11.27	16.75	19.45
Copa	5	5.22	7.01	2.10	57.56	57.64	58.95	78.99	72.76	85.57
TCP Cubic	5	157.42	77.53	74.10	60.93	58.64	57.94	1.29	1.02	1.45
FillP	5	239.83	128.26	95.33	64.22	65.54	64.67	22.23	24.52	24.21
FillP-Sheep	5	232.78	84.22	103.67	63.36	63.65	63.55	14.46	10.78	15.23
Indigo	5	84.43	66.24	78.02	70.98	70.58	74.77	6.55	9.88	18.04
Indigo-MusesC3	5	331.25	9.72	9.78	66.60	66.65	67.67	12.53	9.15	8.83
Indigo-MusesC5	5	326.36	0.71	1.70	62.39	60.42	60.45	26.30	31.19	28.33
Indigo-MusesD	5	336.66	0.74	0.64	67.92	62.39	62.39	28.68	32.74	32.09
Indigo-MusesT	5	294.80	43.71	44.04	64.39	64.32	63.93	11.07	9.32	8.60
LEDBAT	5	9.43	6.31	3.07	62.56	61.93	60.55	0.00	0.00	0.00
PCC-Allegro	5	385.87	81.27	31.28	60.89	60.73	60.27	5.55	2.27	3.16
PCC-Expr	5	0.01	9.79	6.39	58.91	58.60	58.61	83.43	31.20	26.36
QUIC Cubic	5	49.92	40.32	27.26	61.02	61.87	64.15	0.00	0.02	0.01
SCReAM	5	0.22	0.22	0.22	61.91	60.60	61.40	0.00	0.00	0.00
Sprout	5	1.73	1.76	1.40	61.70	61.57	62.20	0.08	0.00	0.34
TaoVA-100x	5	1.63	8.78	4.89	58.74	62.47	56.77	82.05	25.47	25.58
TCP Vegas	5	81.70	52.48	92.16	62.18	60.65	62.99	1.43	2.20	2.72
Verus	5	65.19	57.83	11.48	88.89	87.96	64.08	51.16	54.89	37.98
PCC-Vivace	5	185.09	35.18	13.22	63.34	62.16	62.14	1.37	0.91	1.18
WebRTC media	5	0.42	0.28	0.12	63.66	62.97	63.61	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-25 01:32:17
End at: 2019-01-25 01:32:47
Local clock offset: 0.607 ms
Remote clock offset: -38.799 ms

# Below is generated by plot.py at 2019-01-25 04:18:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 254.64 Mbit/s
95th percentile per-packet one-way delay: 63.359 ms
Loss rate: 11.33%
-- Flow 1:
Average throughput: 215.43 Mbit/s
95th percentile per-packet one-way delay: 65.135 ms
Loss rate: 10.89%
-- Flow 2:
Average throughput: 41.03 Mbit/s
95th percentile per-packet one-way delay: 61.757 ms
Loss rate: 13.87%
-- Flow 3:
Average throughput: 35.73 Mbit/s
95th percentile per-packet one-way delay: 61.701 ms
Loss rate: 13.24%
```

Run 1: Report of TCP BBR — Data Link

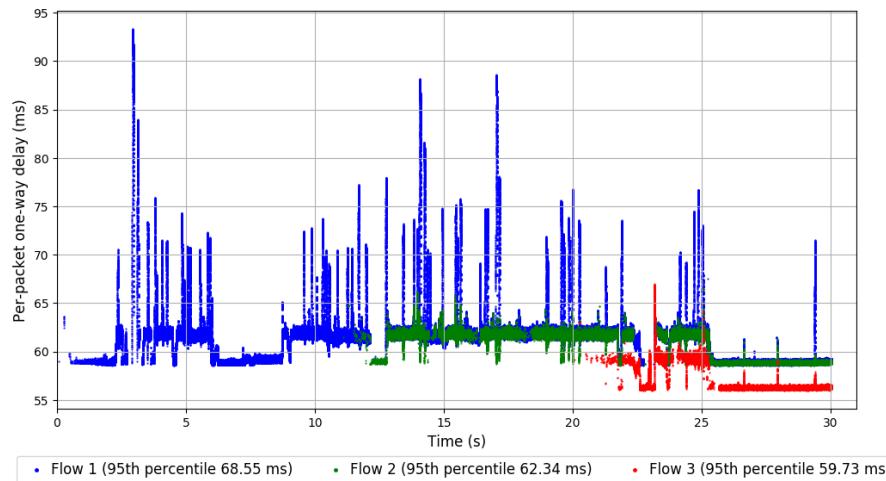
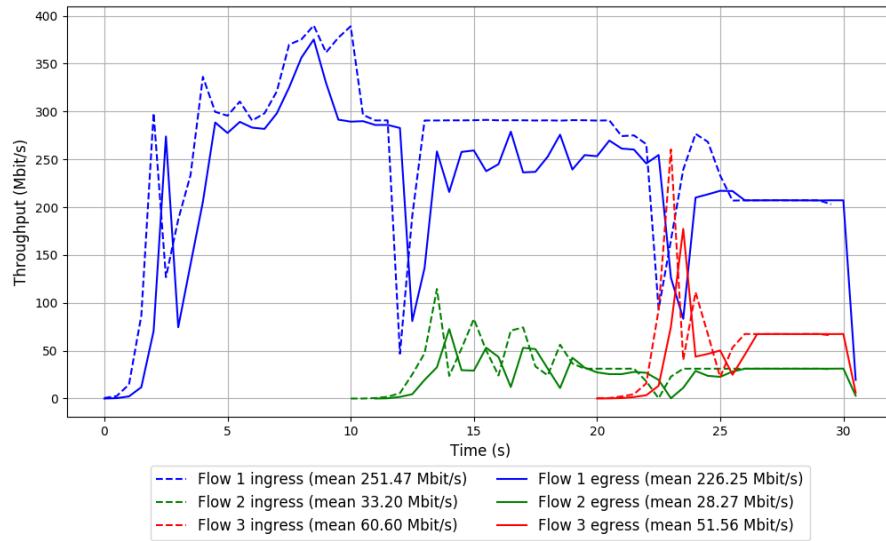


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-25 02:03:04
End at: 2019-01-25 02:03:34
Local clock offset: 0.004 ms
Remote clock offset: -41.037 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.26 Mbit/s
95th percentile per-packet one-way delay: 67.478 ms
Loss rate: 11.06%
-- Flow 1:
Average throughput: 226.25 Mbit/s
95th percentile per-packet one-way delay: 68.550 ms
Loss rate: 10.03%
-- Flow 2:
Average throughput: 28.27 Mbit/s
95th percentile per-packet one-way delay: 62.342 ms
Loss rate: 19.23%
-- Flow 3:
Average throughput: 51.56 Mbit/s
95th percentile per-packet one-way delay: 59.729 ms
Loss rate: 14.95%
```

Run 2: Report of TCP BBR — Data Link

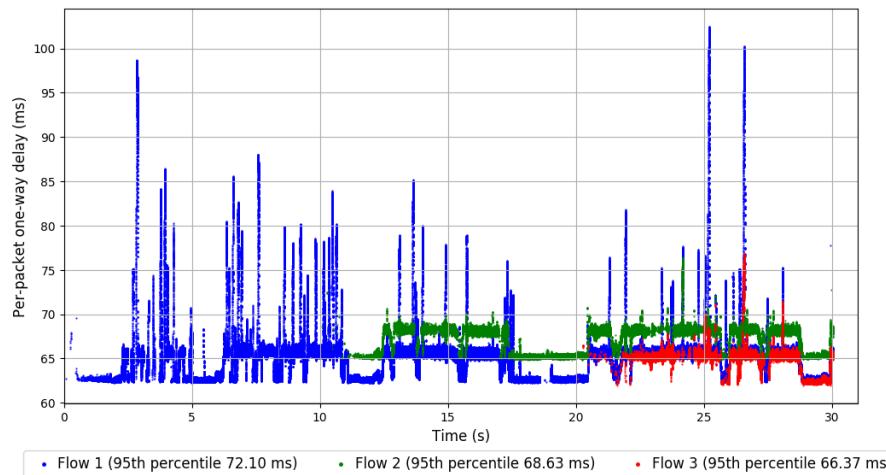
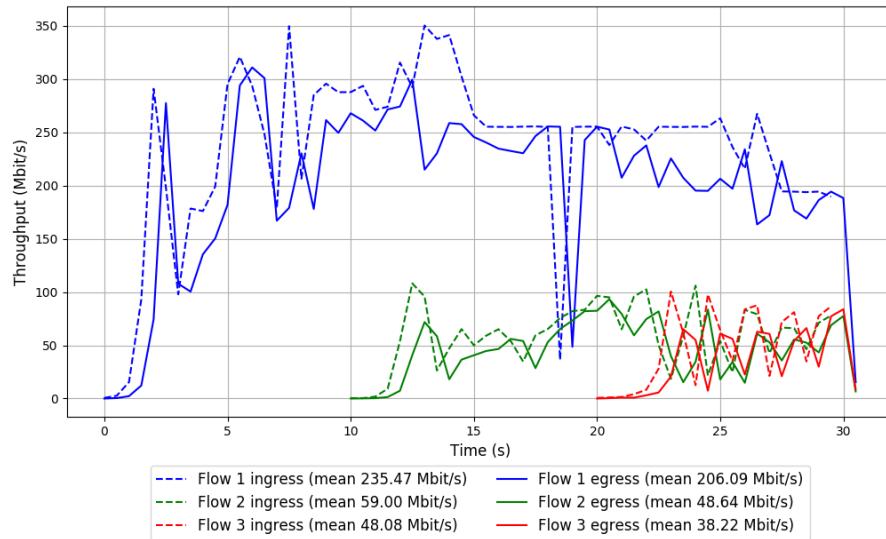


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-25 02:44:17
End at: 2019-01-25 02:44:47
Local clock offset: 1.125 ms
Remote clock offset: -34.133 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.21 Mbit/s
95th percentile per-packet one-way delay: 70.318 ms
Loss rate: 13.60%
-- Flow 1:
Average throughput: 206.09 Mbit/s
95th percentile per-packet one-way delay: 72.100 ms
Loss rate: 12.47%
-- Flow 2:
Average throughput: 48.64 Mbit/s
95th percentile per-packet one-way delay: 68.627 ms
Loss rate: 17.57%
-- Flow 3:
Average throughput: 38.22 Mbit/s
95th percentile per-packet one-way delay: 66.367 ms
Loss rate: 20.49%
```

Run 3: Report of TCP BBR — Data Link

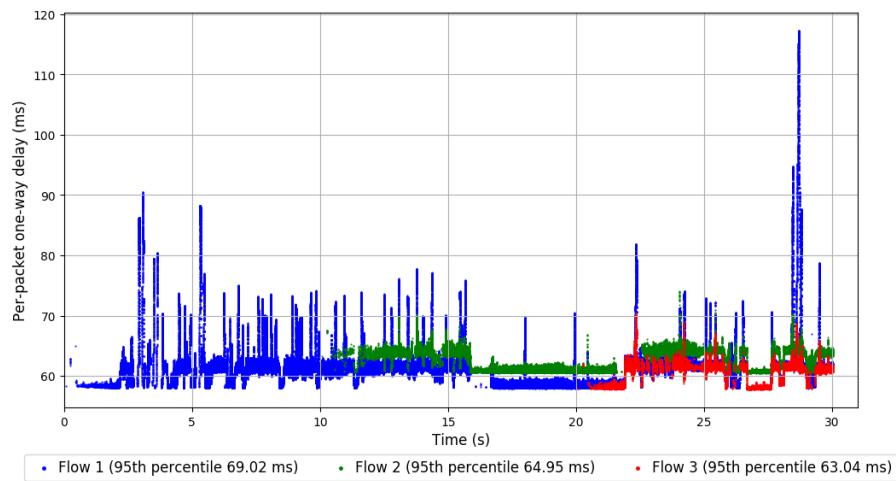
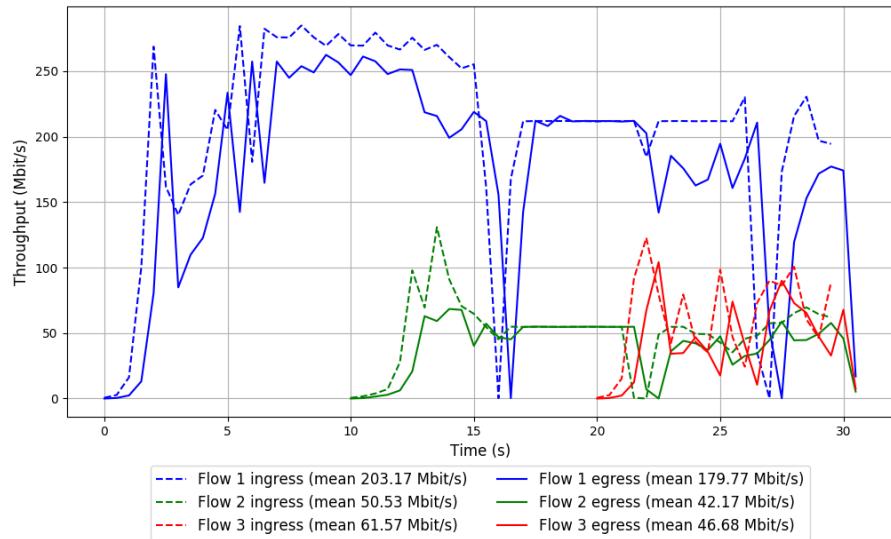


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-25 03:15:20
End at: 2019-01-25 03:15:50
Local clock offset: 0.1 ms
Remote clock offset: -40.554 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.38 Mbit/s
95th percentile per-packet one-way delay: 67.625 ms
Loss rate: 13.18%
-- Flow 1:
Average throughput: 179.77 Mbit/s
95th percentile per-packet one-way delay: 69.021 ms
Loss rate: 11.51%
-- Flow 2:
Average throughput: 42.17 Mbit/s
95th percentile per-packet one-way delay: 64.954 ms
Loss rate: 16.55%
-- Flow 3:
Average throughput: 46.68 Mbit/s
95th percentile per-packet one-way delay: 63.044 ms
Loss rate: 24.16%
```

Run 4: Report of TCP BBR — Data Link

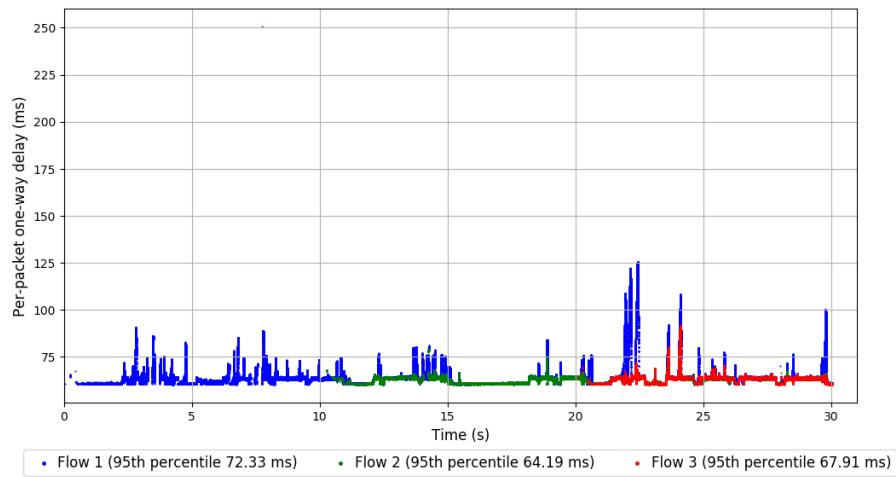
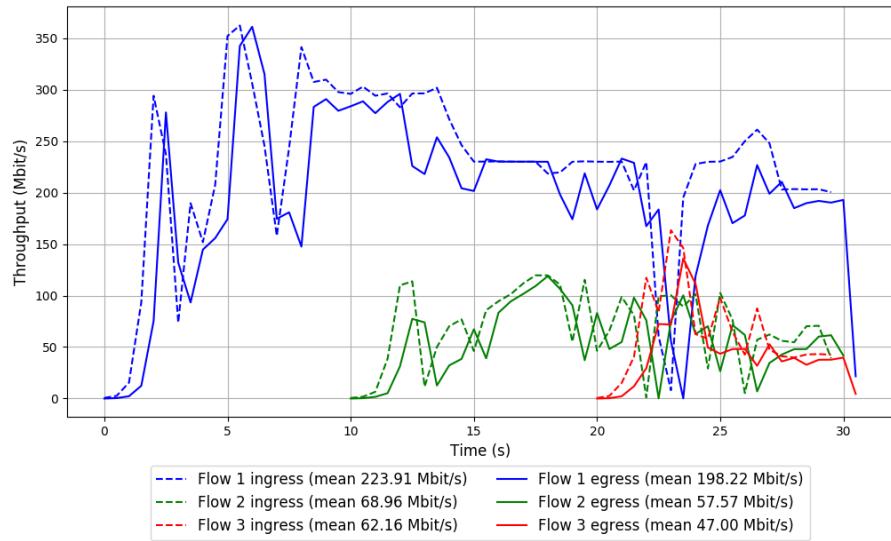


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-25 04:02:41
End at: 2019-01-25 04:03:11
Local clock offset: -2.071 ms
Remote clock offset: -40.41 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.06 Mbit/s
95th percentile per-packet one-way delay: 70.623 ms
Loss rate: 13.19%
-- Flow 1:
Average throughput: 198.22 Mbit/s
95th percentile per-packet one-way delay: 72.325 ms
Loss rate: 11.47%
-- Flow 2:
Average throughput: 57.57 Mbit/s
95th percentile per-packet one-way delay: 64.188 ms
Loss rate: 16.53%
-- Flow 3:
Average throughput: 47.00 Mbit/s
95th percentile per-packet one-way delay: 67.913 ms
Loss rate: 24.42%
```

Run 5: Report of TCP BBR — Data Link

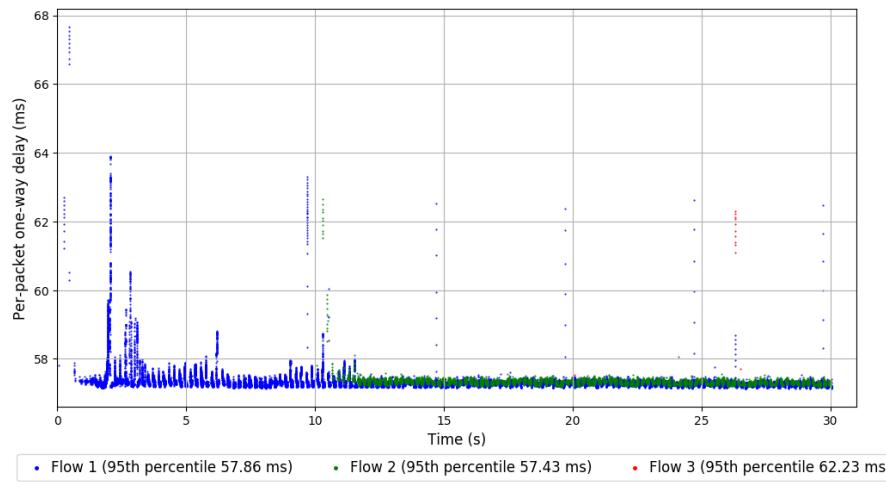
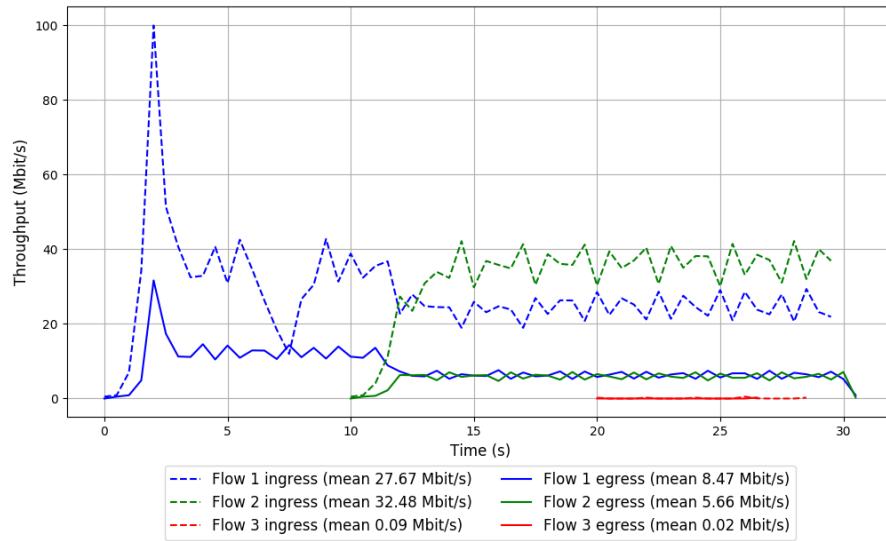


Run 1: Statistics of Copa

```
Start at: 2019-01-25 01:28:05
End at: 2019-01-25 01:28:35
Local clock offset: 0.311 ms
Remote clock offset: -40.143 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 57.710 ms
Loss rate: 75.17%
-- Flow 1:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 57.856 ms
Loss rate: 69.39%
-- Flow 2:
Average throughput: 5.66 Mbit/s
95th percentile per-packet one-way delay: 57.426 ms
Loss rate: 82.56%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 62.234 ms
Loss rate: 82.43%
```

Run 1: Report of Copa — Data Link

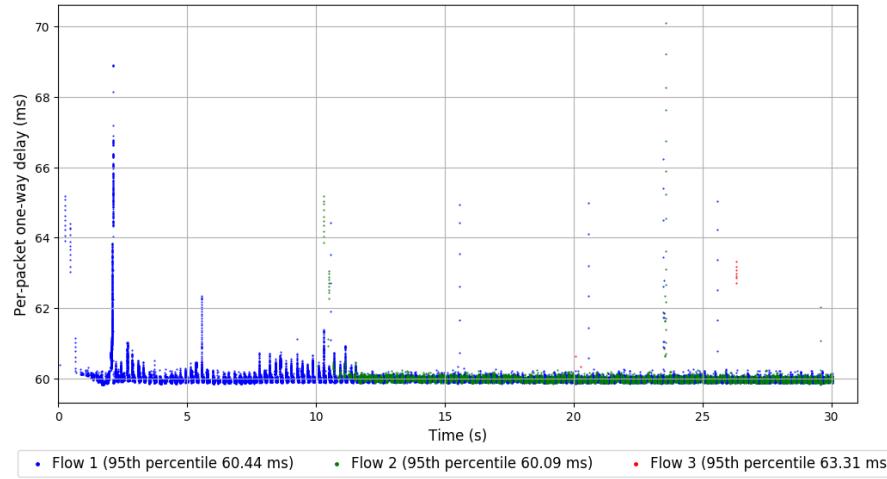
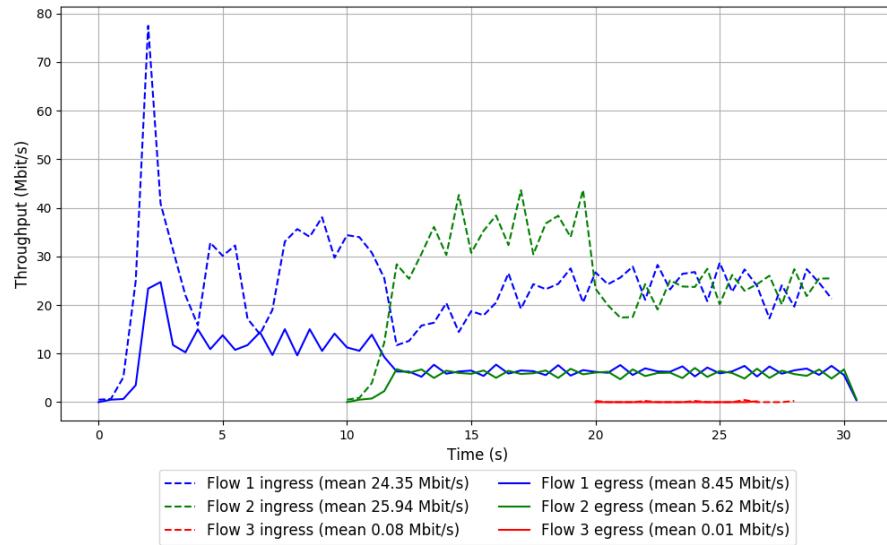


Run 2: Statistics of Copa

```
Start at: 2019-01-25 01:58:37
End at: 2019-01-25 01:59:07
Local clock offset: -2.86 ms
Remote clock offset: -39.263 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 60.340 ms
Loss rate: 70.71%
-- Flow 1:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 60.441 ms
Loss rate: 65.29%
-- Flow 2:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 60.091 ms
Loss rate: 78.34%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 63.314 ms
Loss rate: 87.67%
```

Run 2: Report of Copa — Data Link

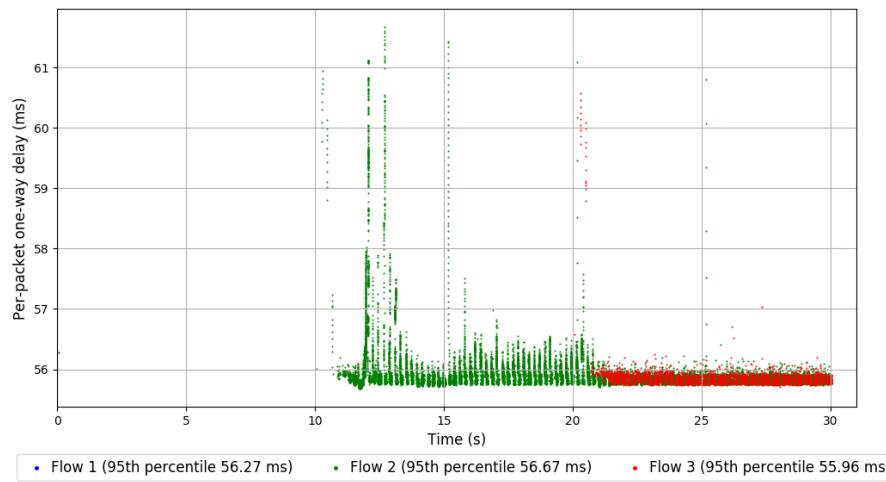
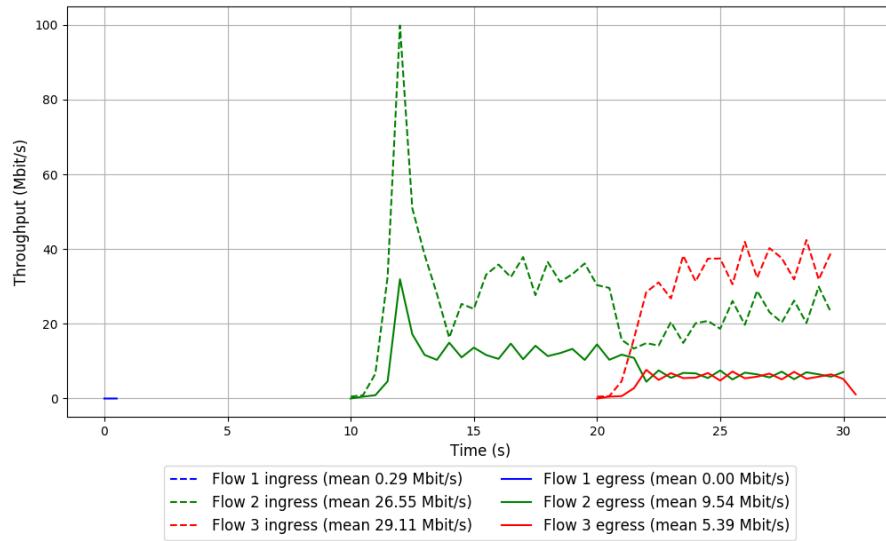


Run 3: Statistics of Copa

```
Start at: 2019-01-25 02:39:58
End at: 2019-01-25 02:40:28
Local clock offset: 0.39 ms
Remote clock offset: -41.321 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 56.452 ms
Loss rate: 70.25%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 56.275 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 56.674 ms
Loss rate: 64.08%
-- Flow 3:
Average throughput: 5.39 Mbit/s
95th percentile per-packet one-way delay: 55.957 ms
Loss rate: 81.50%
```

Run 3: Report of Copa — Data Link

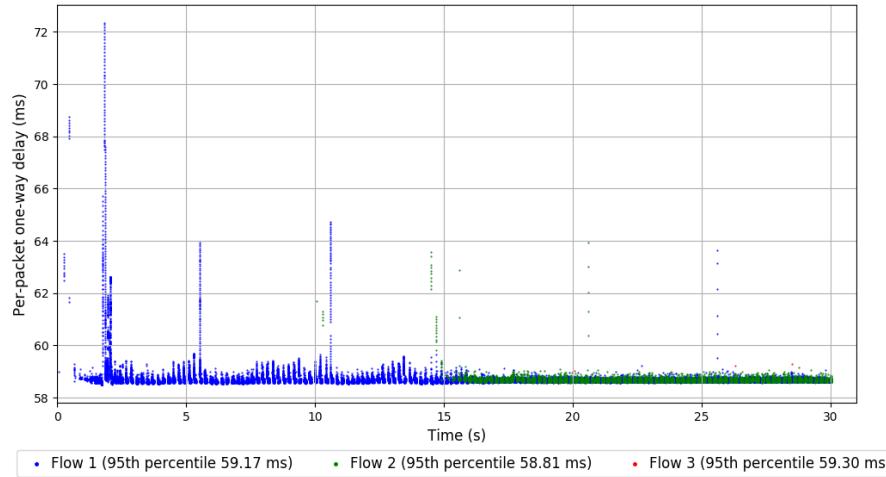
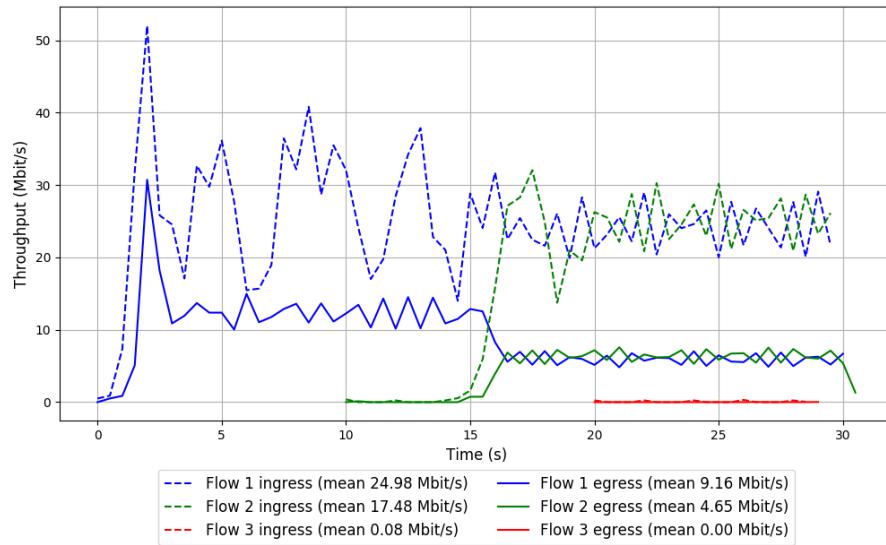


Run 4: Statistics of Copa

```
Start at: 2019-01-25 03:10:55
End at: 2019-01-25 03:11:25
Local clock offset: 1.035 ms
Remote clock offset: -38.709 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 59.070 ms
Loss rate: 66.55%
-- Flow 1:
Average throughput: 9.16 Mbit/s
95th percentile per-packet one-way delay: 59.171 ms
Loss rate: 63.34%
-- Flow 2:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 58.807 ms
Loss rate: 73.37%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 59.298 ms
Loss rate: 96.21%
```

Run 4: Report of Copa — Data Link

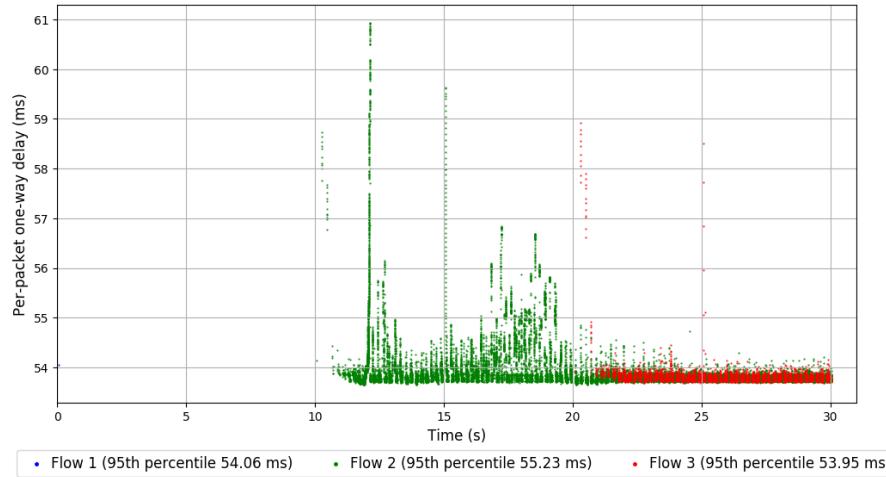
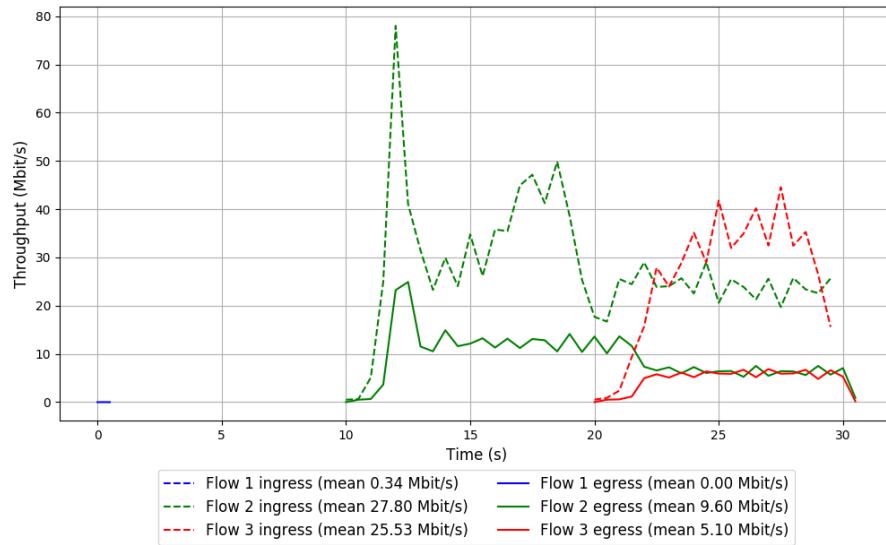


Run 5: Statistics of Copa

```
Start at: 2019-01-25 03:52:45
End at: 2019-01-25 03:53:15
Local clock offset: -0.467 ms
Remote clock offset: -45.225 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.09 Mbit/s
95th percentile per-packet one-way delay: 55.048 ms
Loss rate: 70.04%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 54.059 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 55.227 ms
Loss rate: 65.46%
-- Flow 3:
Average throughput: 5.10 Mbit/s
95th percentile per-packet one-way delay: 53.946 ms
Loss rate: 80.02%
```

Run 5: Report of Copa — Data Link

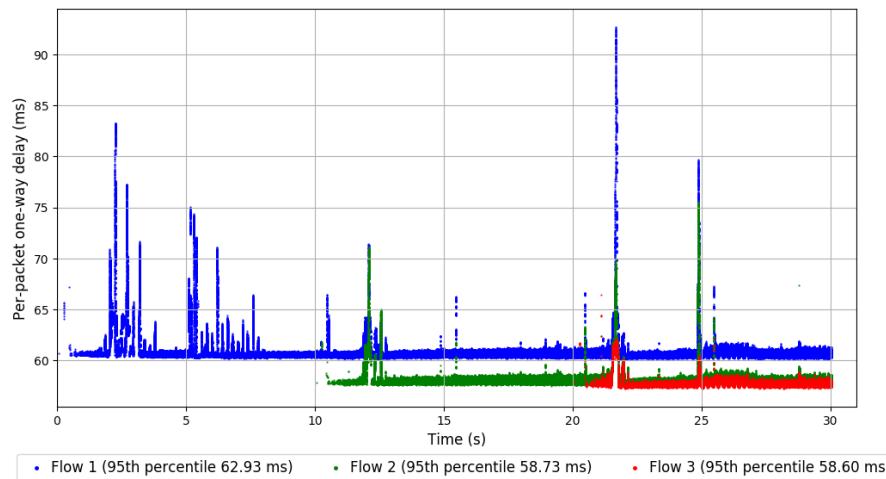
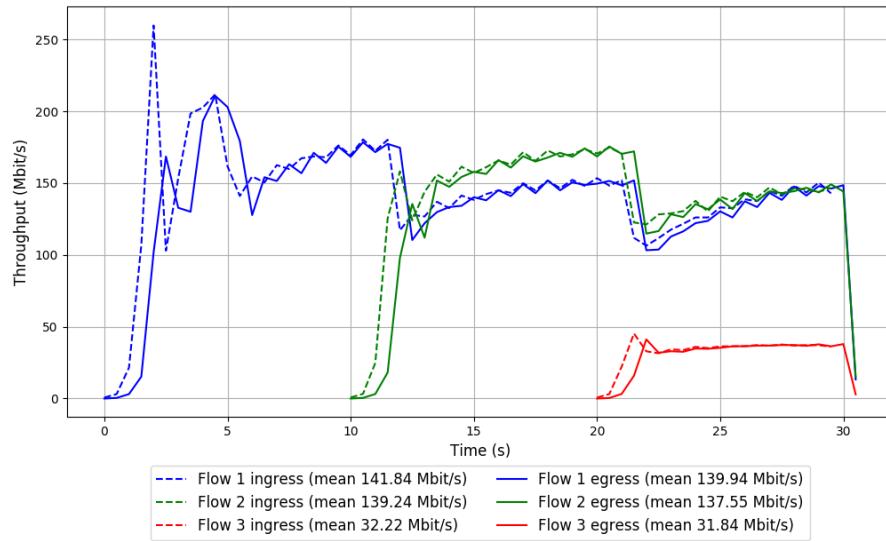


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-25 01:14:57
End at: 2019-01-25 01:15:27
Local clock offset: 2.418 ms
Remote clock offset: -39.938 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 242.23 Mbit/s
95th percentile per-packet one-way delay: 61.383 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 139.94 Mbit/s
95th percentile per-packet one-way delay: 62.933 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 137.55 Mbit/s
95th percentile per-packet one-way delay: 58.728 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 58.602 ms
Loss rate: 1.16%
```

Run 1: Report of TCP Cubic — Data Link

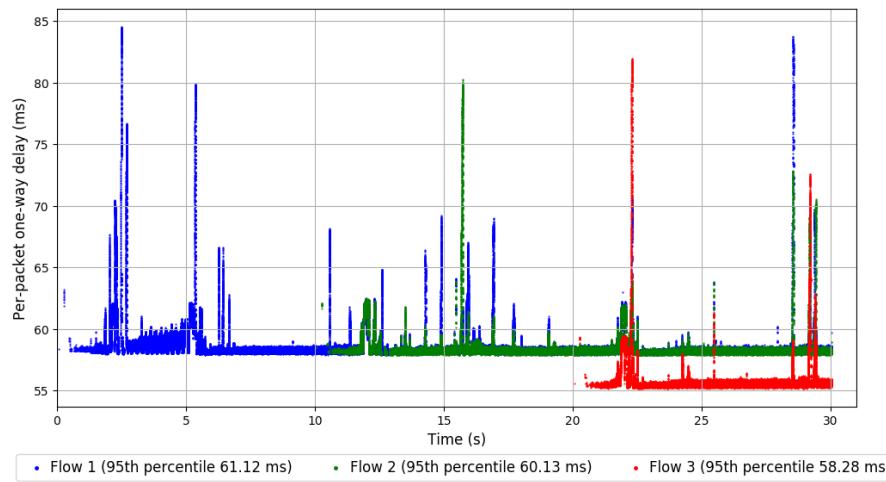
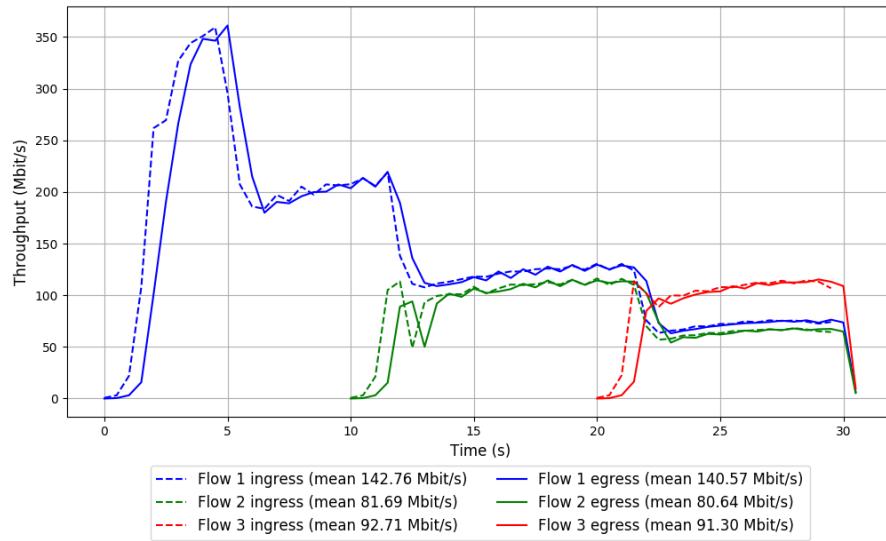


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-25 01:45:23
End at: 2019-01-25 01:45:53
Local clock offset: -2.099 ms
Remote clock offset: -43.615 ms

# Below is generated by plot.py at 2019-01-25 04:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 224.64 Mbit/s
95th percentile per-packet one-way delay: 60.725 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 140.57 Mbit/s
95th percentile per-packet one-way delay: 61.121 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 80.64 Mbit/s
95th percentile per-packet one-way delay: 60.134 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 91.30 Mbit/s
95th percentile per-packet one-way delay: 58.278 ms
Loss rate: 1.51%
```

Run 2: Report of TCP Cubic — Data Link

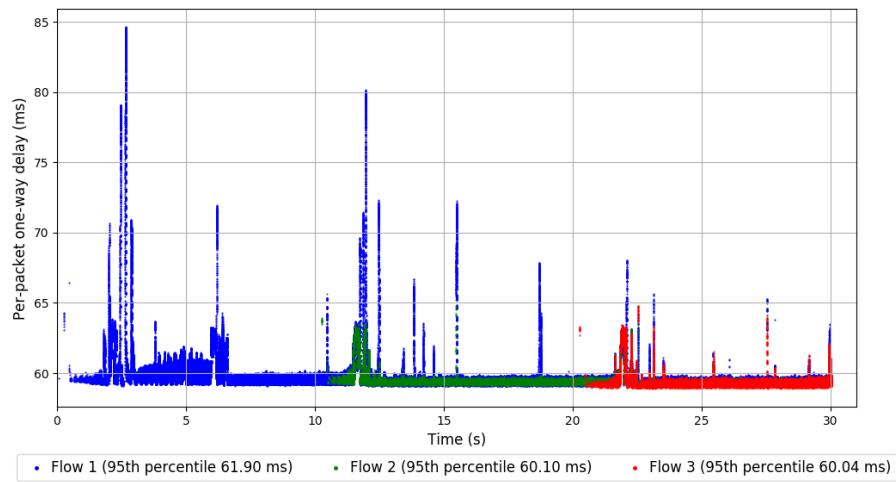
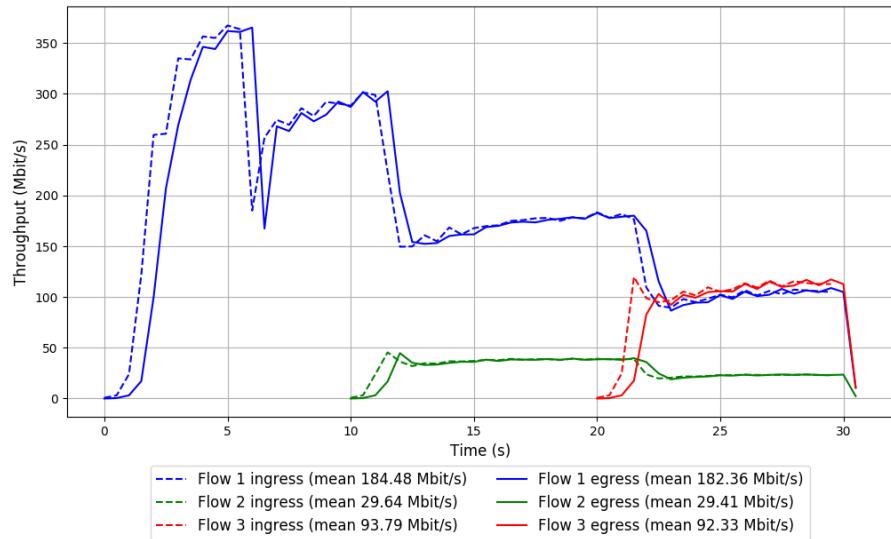


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-25 02:21:44
End at: 2019-01-25 02:22:14
Local clock offset: -2.17 ms
Remote clock offset: -40.6 ms

# Below is generated by plot.py at 2019-01-25 04:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 232.69 Mbit/s
95th percentile per-packet one-way delay: 61.624 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 182.36 Mbit/s
95th percentile per-packet one-way delay: 61.900 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 29.41 Mbit/s
95th percentile per-packet one-way delay: 60.105 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 92.33 Mbit/s
95th percentile per-packet one-way delay: 60.038 ms
Loss rate: 1.56%
```

Run 3: Report of TCP Cubic — Data Link

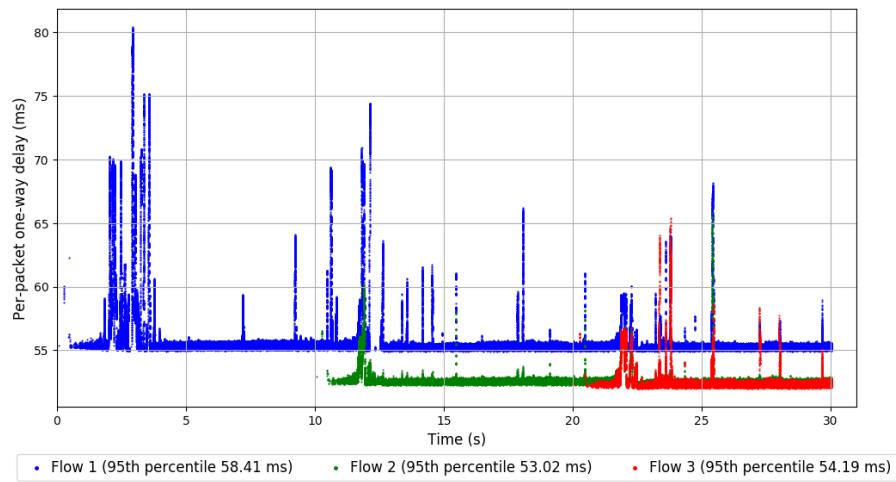
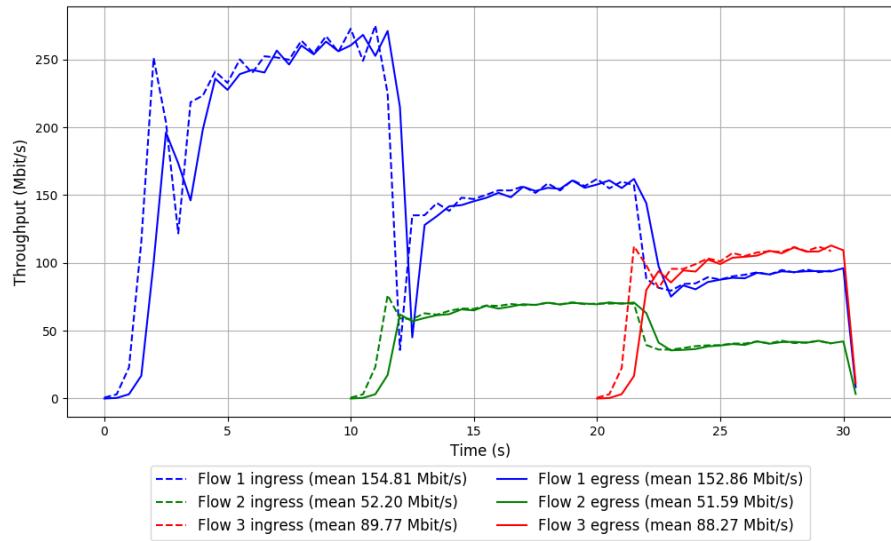


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-25 02:57:28
End at: 2019-01-25 02:57:58
Local clock offset: -0.294 ms
Remote clock offset: -45.42 ms

# Below is generated by plot.py at 2019-01-25 04:20:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.58 Mbit/s
95th percentile per-packet one-way delay: 57.304 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 152.86 Mbit/s
95th percentile per-packet one-way delay: 58.415 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 51.59 Mbit/s
95th percentile per-packet one-way delay: 53.025 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 54.192 ms
Loss rate: 1.67%
```

Run 4: Report of TCP Cubic — Data Link

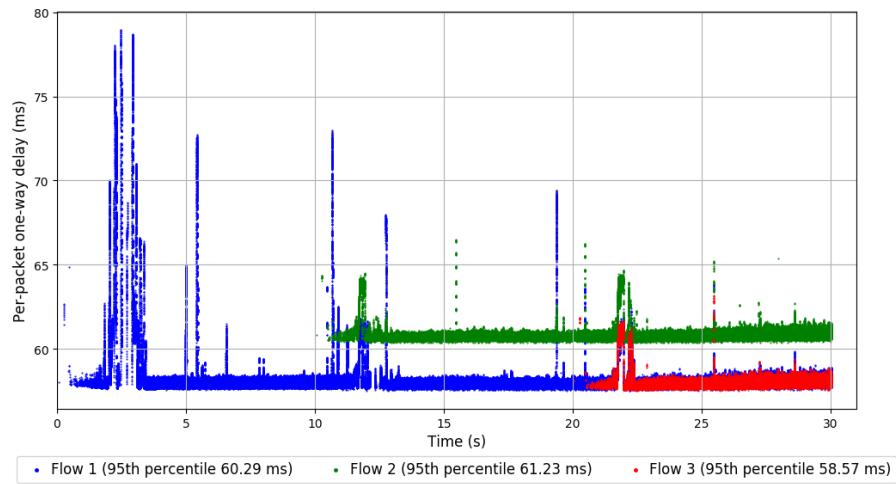
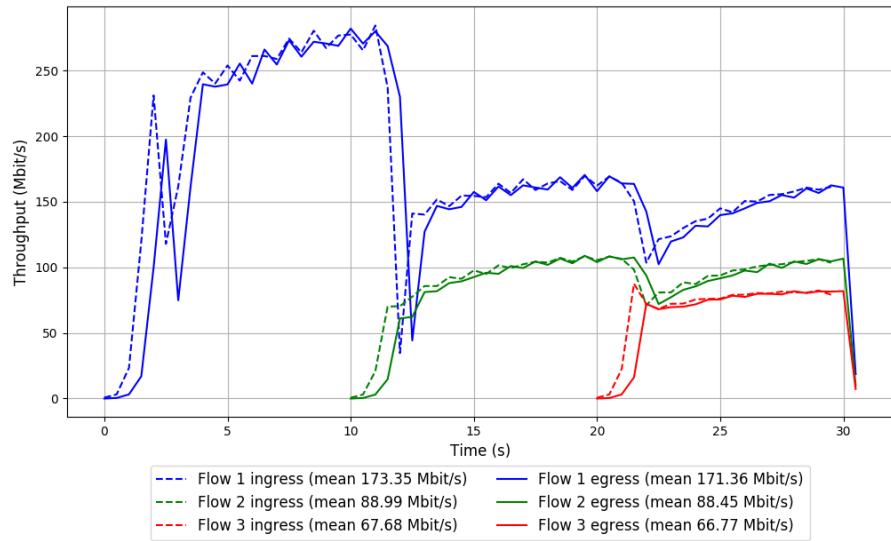


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-25 03:28:24
End at: 2019-01-25 03:28:54
Local clock offset: -1.083 ms
Remote clock offset: -42.08 ms

# Below is generated by plot.py at 2019-01-25 04:20:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.48 Mbit/s
95th percentile per-packet one-way delay: 61.061 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 171.36 Mbit/s
95th percentile per-packet one-way delay: 60.286 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 88.45 Mbit/s
95th percentile per-packet one-way delay: 61.231 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 66.77 Mbit/s
95th percentile per-packet one-way delay: 58.573 ms
Loss rate: 1.34%
```

Run 5: Report of TCP Cubic — Data Link

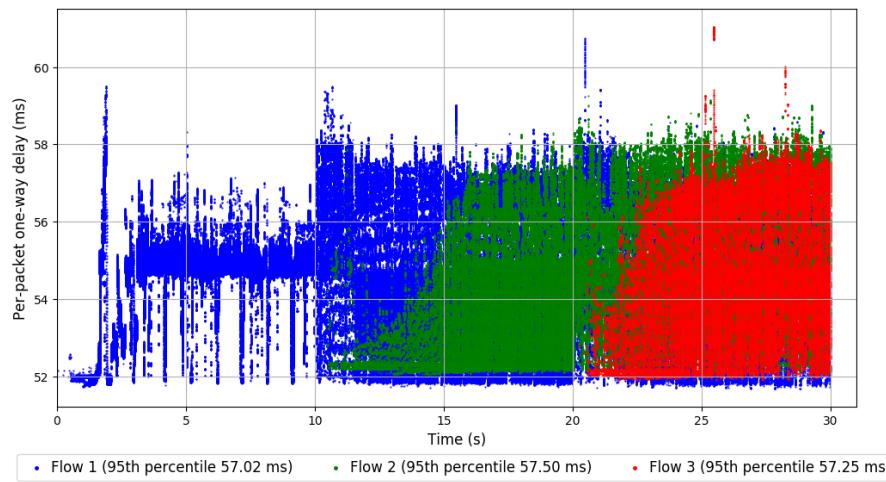
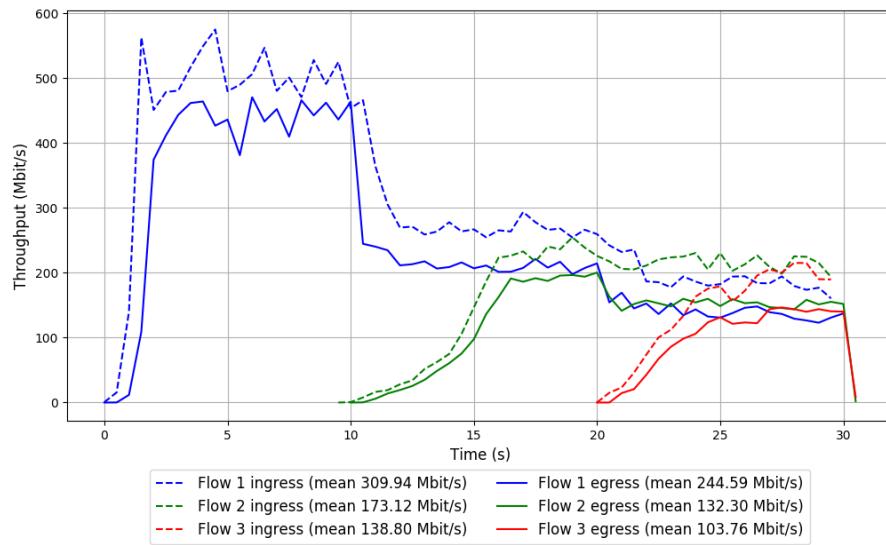


```
Run 1: Statistics of FillP

Start at: 2019-01-25 01:19:37
End at: 2019-01-25 01:20:07
Local clock offset: 2.032 ms
Remote clock offset: -44.923 ms

# Below is generated by plot.py at 2019-01-25 04:23:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.03 Mbit/s
95th percentile per-packet one-way delay: 57.201 ms
Loss rate: 22.10%
-- Flow 1:
Average throughput: 244.59 Mbit/s
95th percentile per-packet one-way delay: 57.022 ms
Loss rate: 21.08%
-- Flow 2:
Average throughput: 132.30 Mbit/s
95th percentile per-packet one-way delay: 57.502 ms
Loss rate: 23.59%
-- Flow 3:
Average throughput: 103.76 Mbit/s
95th percentile per-packet one-way delay: 57.253 ms
Loss rate: 25.21%
```

Run 1: Report of FillP — Data Link

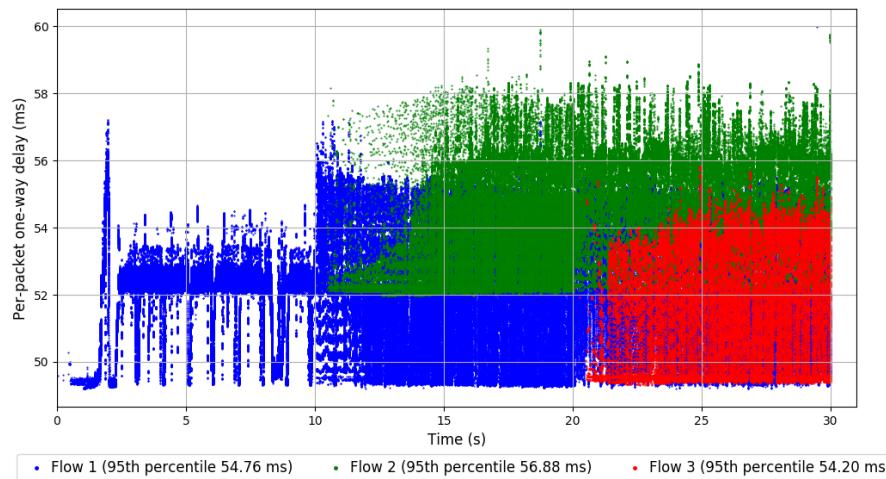
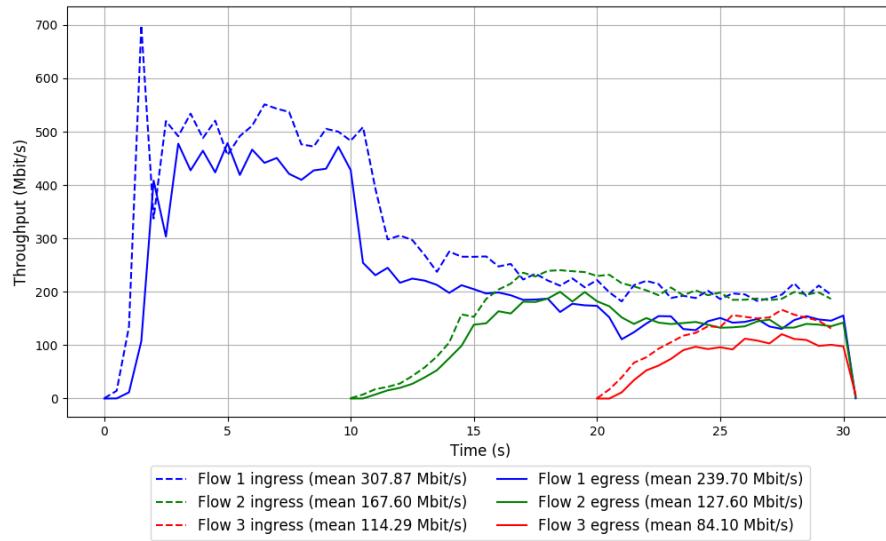


Run 2: Statistics of FillP

```
Start at: 2019-01-25 01:50:00
End at: 2019-01-25 01:50:30
Local clock offset: 0.134 ms
Remote clock offset: -47.118 ms

# Below is generated by plot.py at 2019-01-25 04:23:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.56 Mbit/s
95th percentile per-packet one-way delay: 55.904 ms
Loss rate: 22.91%
-- Flow 1:
Average throughput: 239.70 Mbit/s
95th percentile per-packet one-way delay: 54.755 ms
Loss rate: 22.14%
-- Flow 2:
Average throughput: 127.60 Mbit/s
95th percentile per-packet one-way delay: 56.878 ms
Loss rate: 23.85%
-- Flow 3:
Average throughput: 84.10 Mbit/s
95th percentile per-packet one-way delay: 54.205 ms
Loss rate: 26.43%
```

Run 2: Report of FillP — Data Link

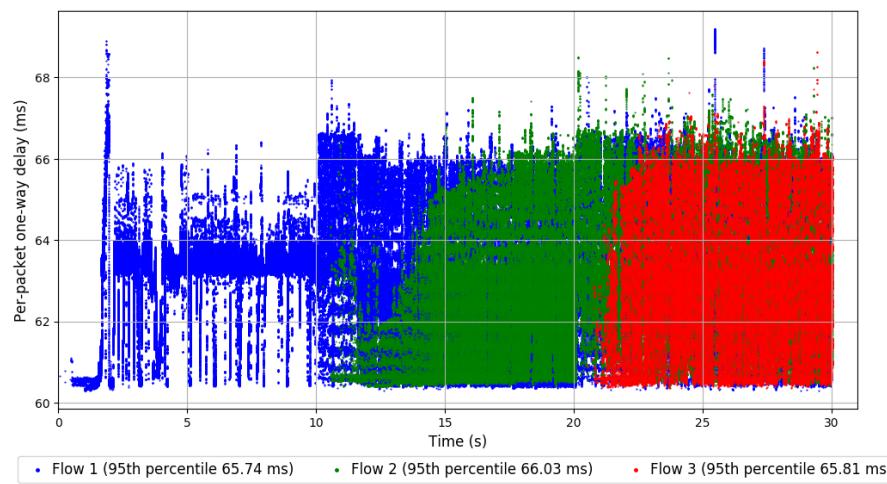
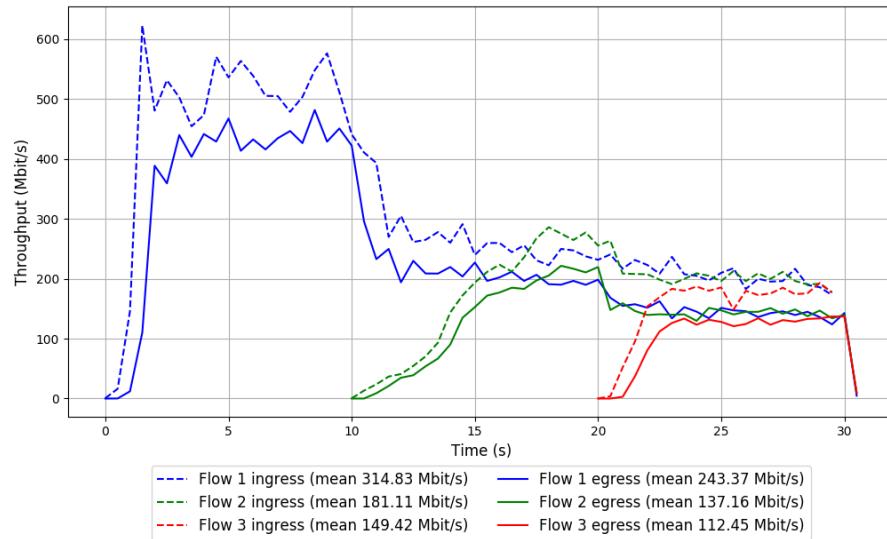


```
Run 3: Statistics of FillP
```

```
Start at: 2019-01-25 02:26:24
End at: 2019-01-25 02:26:54
Local clock offset: -0.548 ms
Remote clock offset: -40.233 ms

# Below is generated by plot.py at 2019-01-25 04:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.97 Mbit/s
95th percentile per-packet one-way delay: 65.839 ms
Loss rate: 23.46%
-- Flow 1:
Average throughput: 243.37 Mbit/s
95th percentile per-packet one-way delay: 65.737 ms
Loss rate: 22.69%
-- Flow 2:
Average throughput: 137.16 Mbit/s
95th percentile per-packet one-way delay: 66.026 ms
Loss rate: 24.27%
-- Flow 3:
Average throughput: 112.45 Mbit/s
95th percentile per-packet one-way delay: 65.808 ms
Loss rate: 26.39%
```

Run 3: Report of FillP — Data Link

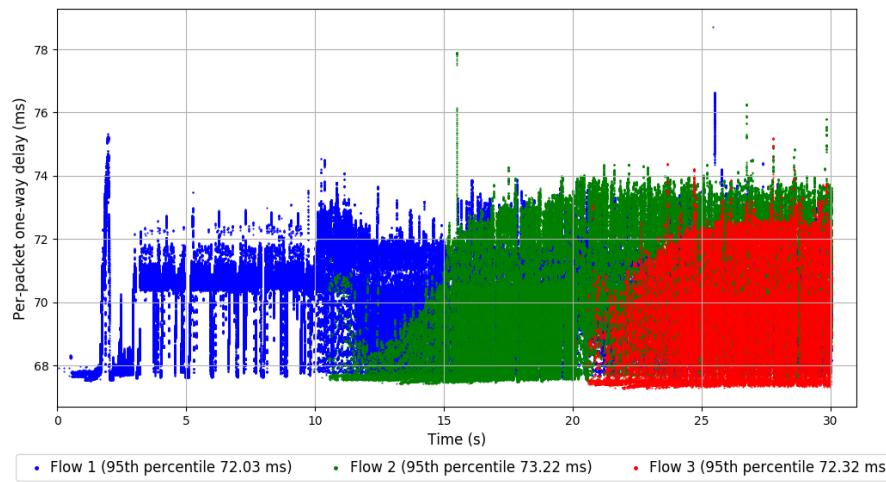
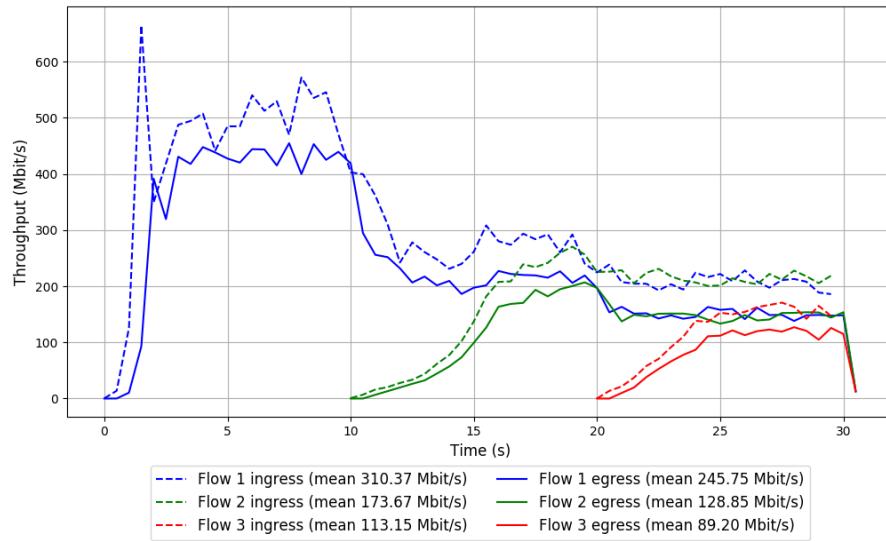


Run 4: Statistics of FillP

```
Start at: 2019-01-25 03:02:08
End at: 2019-01-25 03:02:39
Local clock offset: -2.369 ms
Remote clock offset: -32.545 ms

# Below is generated by plot.py at 2019-01-25 04:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.08 Mbit/s
95th percentile per-packet one-way delay: 72.616 ms
Loss rate: 22.09%
-- Flow 1:
Average throughput: 245.75 Mbit/s
95th percentile per-packet one-way delay: 72.033 ms
Loss rate: 20.82%
-- Flow 2:
Average throughput: 128.85 Mbit/s
95th percentile per-packet one-way delay: 73.221 ms
Loss rate: 25.80%
-- Flow 3:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 72.316 ms
Loss rate: 21.15%
```

Run 4: Report of FillP — Data Link

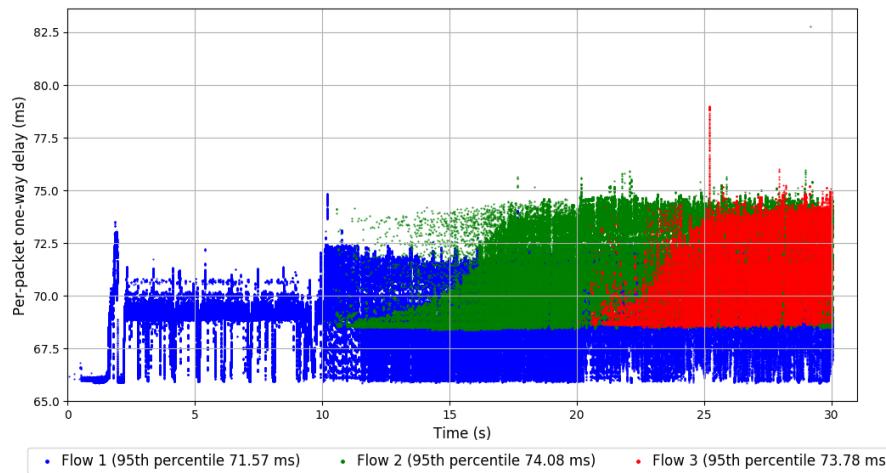
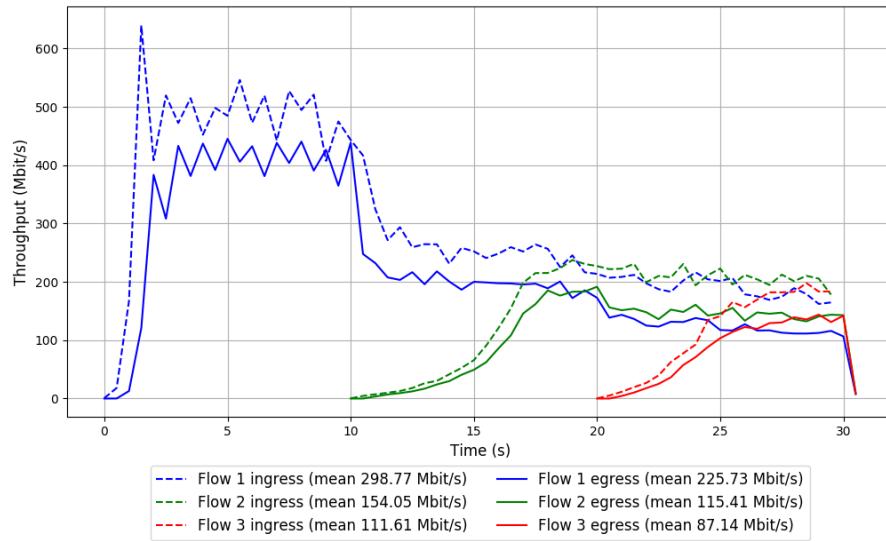


```
Run 5: Statistics of FillP
```

```
Start at: 2019-01-25 03:33:05
End at: 2019-01-25 03:33:35
Local clock offset: -1.753 ms
Remote clock offset: -34.345 ms

# Below is generated by plot.py at 2019-01-25 04:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.33 Mbit/s
95th percentile per-packet one-way delay: 73.342 ms
Loss rate: 24.37%
-- Flow 1:
Average throughput: 225.73 Mbit/s
95th percentile per-packet one-way delay: 71.568 ms
Loss rate: 24.44%
-- Flow 2:
Average throughput: 115.41 Mbit/s
95th percentile per-packet one-way delay: 74.080 ms
Loss rate: 25.07%
-- Flow 3:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 73.782 ms
Loss rate: 21.88%
```

Run 5: Report of FillP — Data Link

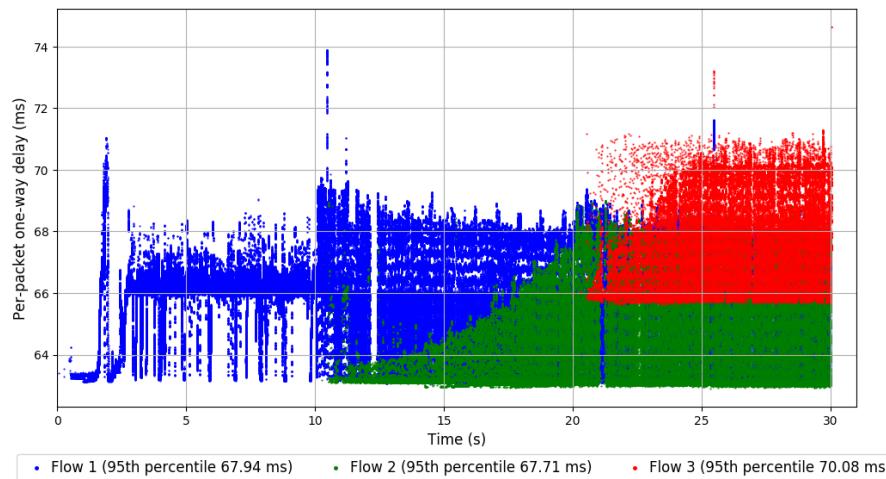
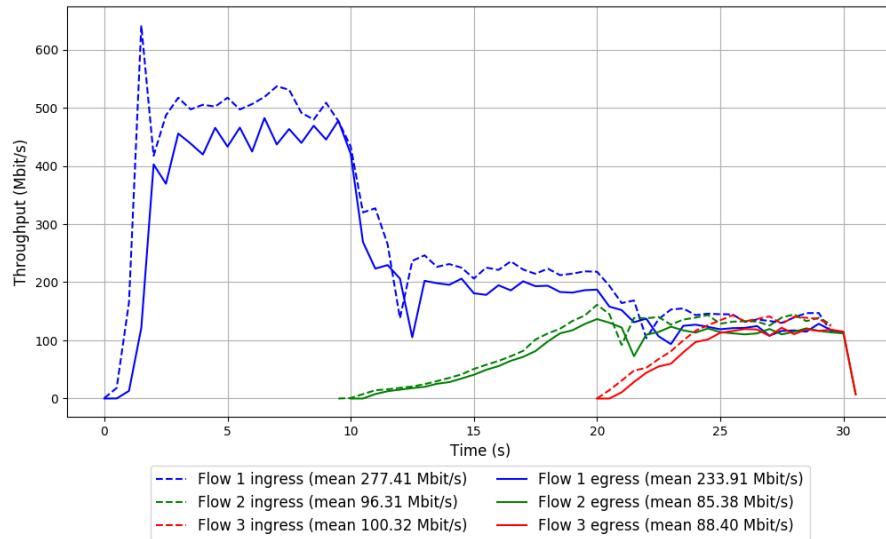


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-01-25 01:11:51
End at: 2019-01-25 01:12:21
Local clock offset: 0.463 ms
Remote clock offset: -37.332 ms

# Below is generated by plot.py at 2019-01-25 04:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.90 Mbit/s
95th percentile per-packet one-way delay: 68.413 ms
Loss rate: 14.60%
-- Flow 1:
Average throughput: 233.91 Mbit/s
95th percentile per-packet one-way delay: 67.935 ms
Loss rate: 15.68%
-- Flow 2:
Average throughput: 85.38 Mbit/s
95th percentile per-packet one-way delay: 67.708 ms
Loss rate: 11.35%
-- Flow 3:
Average throughput: 88.40 Mbit/s
95th percentile per-packet one-way delay: 70.077 ms
Loss rate: 11.83%
```

Run 1: Report of FillP-Sheep — Data Link

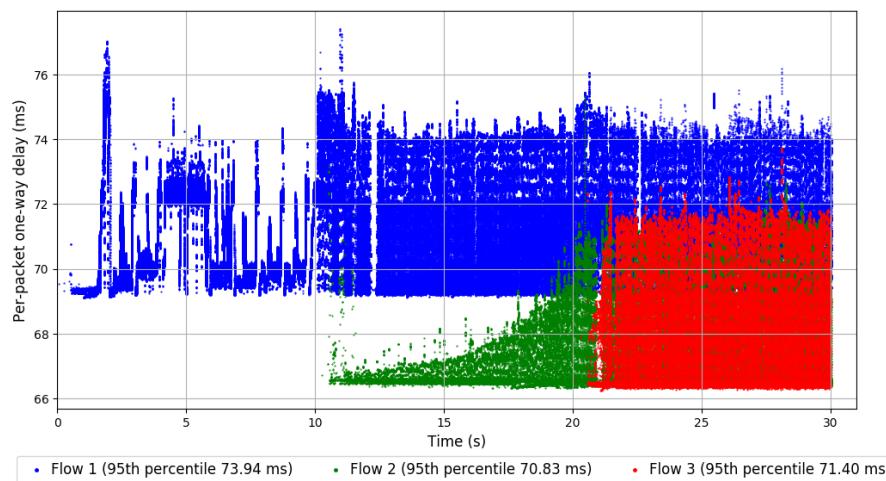
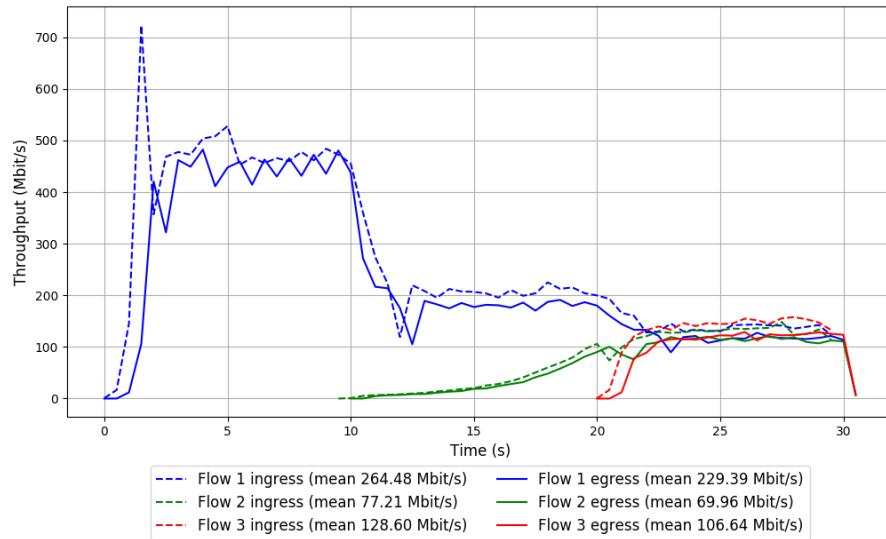


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-25 01:42:16
End at: 2019-01-25 01:42:46
Local clock offset: -2.741 ms
Remote clock offset: -32.932 ms

# Below is generated by plot.py at 2019-01-25 04:24:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.31 Mbit/s
95th percentile per-packet one-way delay: 73.746 ms
Loss rate: 13.16%
-- Flow 1:
Average throughput: 229.39 Mbit/s
95th percentile per-packet one-way delay: 73.943 ms
Loss rate: 13.26%
-- Flow 2:
Average throughput: 69.96 Mbit/s
95th percentile per-packet one-way delay: 70.829 ms
Loss rate: 9.40%
-- Flow 3:
Average throughput: 106.64 Mbit/s
95th percentile per-packet one-way delay: 71.404 ms
Loss rate: 17.08%
```

Run 2: Report of FillP-Sheep — Data Link

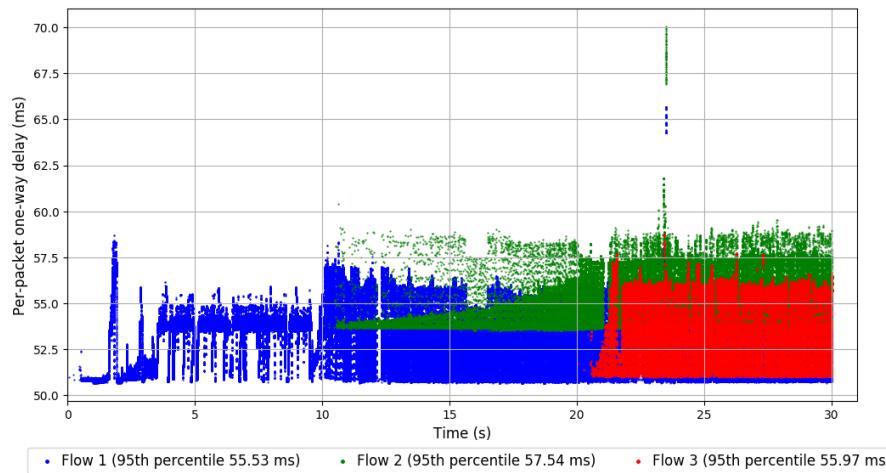
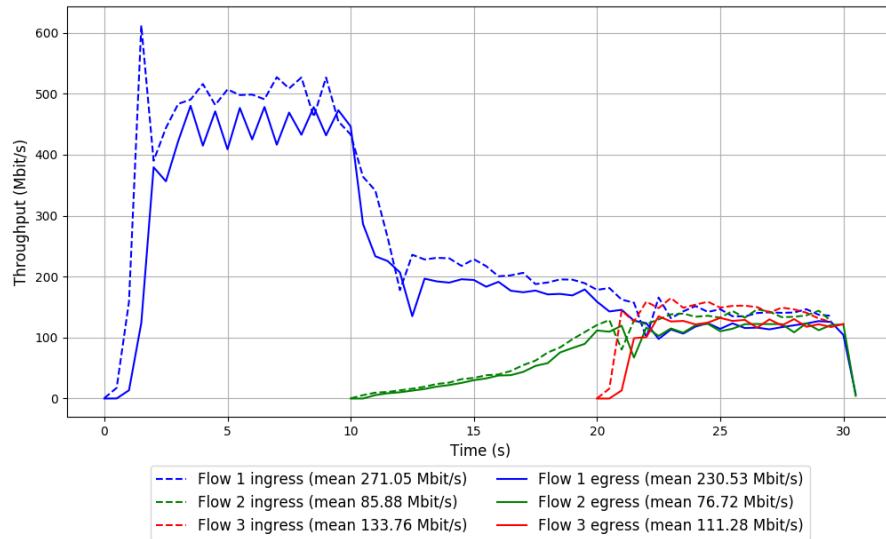


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-25 02:18:36
End at: 2019-01-25 02:19:06
Local clock offset: -0.235 ms
Remote clock offset: -46.977 ms

# Below is generated by plot.py at 2019-01-25 04:25:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 318.44 Mbit/s
95th percentile per-packet one-way delay: 56.553 ms
Loss rate: 14.52%
-- Flow 1:
Average throughput: 230.53 Mbit/s
95th percentile per-packet one-way delay: 55.529 ms
Loss rate: 14.95%
-- Flow 2:
Average throughput: 76.72 Mbit/s
95th percentile per-packet one-way delay: 57.537 ms
Loss rate: 10.68%
-- Flow 3:
Average throughput: 111.28 Mbit/s
95th percentile per-packet one-way delay: 55.969 ms
Loss rate: 16.80%
```

Run 3: Report of FillP-Sheep — Data Link

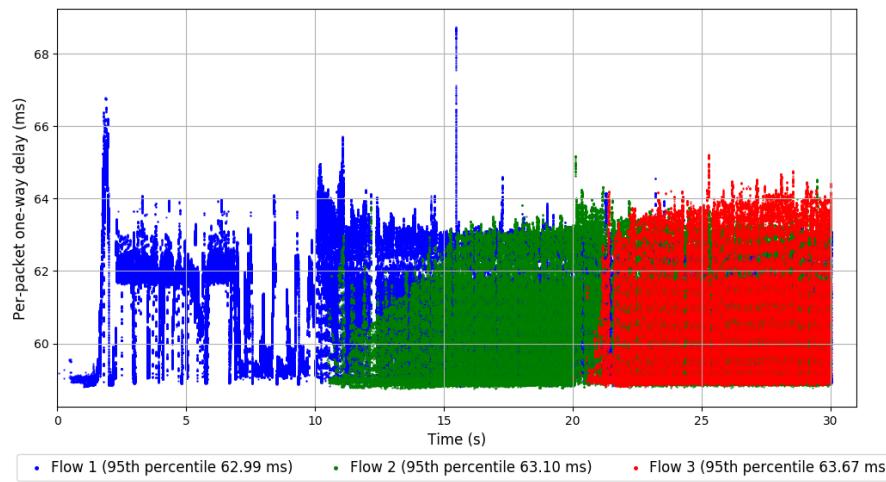
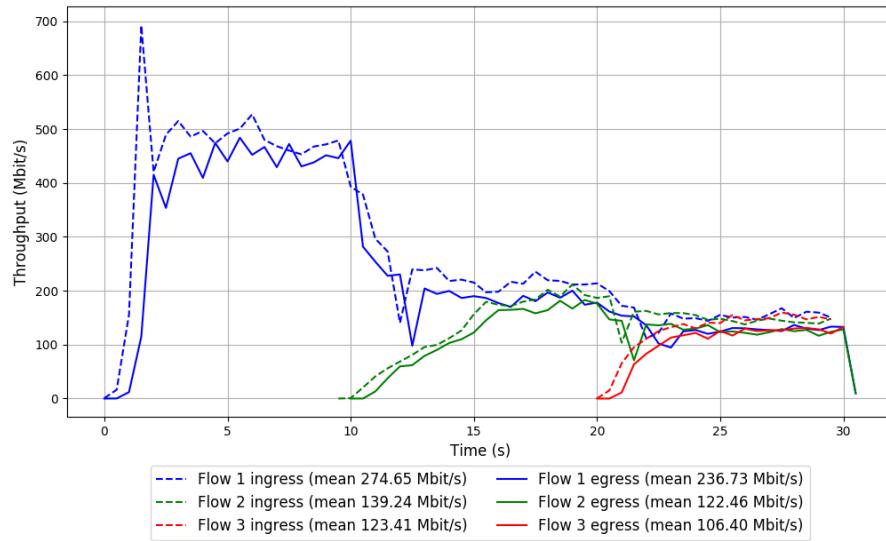


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-25 02:54:18
End at: 2019-01-25 02:54:48
Local clock offset: -0.86 ms
Remote clock offset: -39.26 ms

# Below is generated by plot.py at 2019-01-25 04:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.54 Mbit/s
95th percentile per-packet one-way delay: 63.129 ms
Loss rate: 13.41%
-- Flow 1:
Average throughput: 236.73 Mbit/s
95th percentile per-packet one-way delay: 62.989 ms
Loss rate: 13.81%
-- Flow 2:
Average throughput: 122.46 Mbit/s
95th percentile per-packet one-way delay: 63.099 ms
Loss rate: 12.05%
-- Flow 3:
Average throughput: 106.40 Mbit/s
95th percentile per-packet one-way delay: 63.668 ms
Loss rate: 13.78%
```

Run 4: Report of FillP-Sheep — Data Link

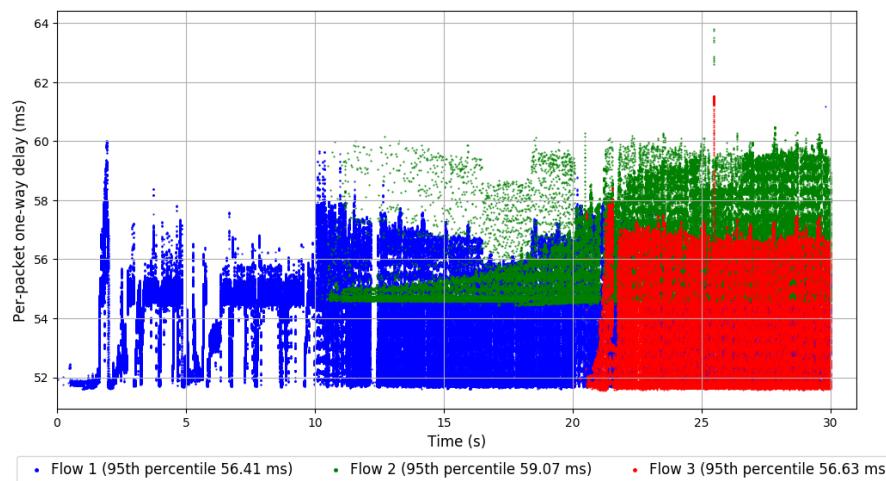
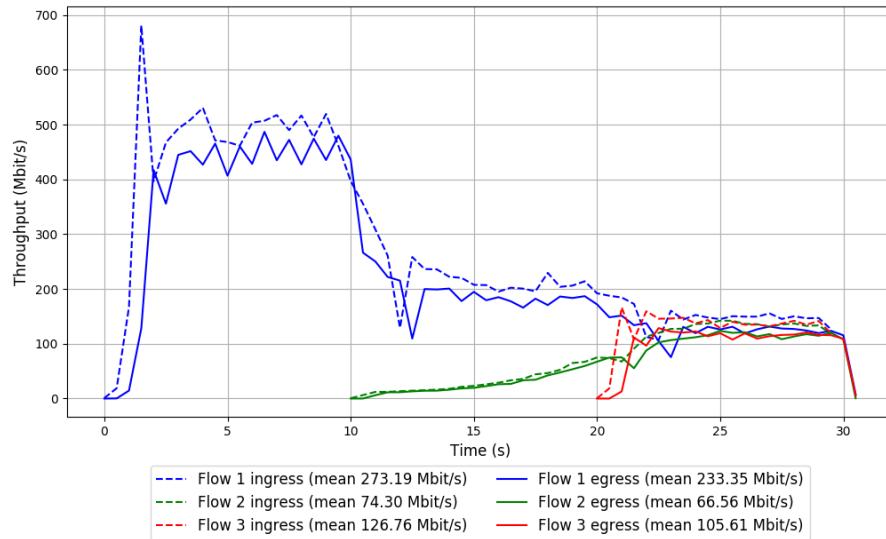


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-25 03:25:17
End at: 2019-01-25 03:25:47
Local clock offset: 0.602 ms
Remote clock offset: -46.12 ms

# Below is generated by plot.py at 2019-01-25 04:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.64 Mbit/s
95th percentile per-packet one-way delay: 57.366 ms
Loss rate: 14.26%
-- Flow 1:
Average throughput: 233.35 Mbit/s
95th percentile per-packet one-way delay: 56.411 ms
Loss rate: 14.58%
-- Flow 2:
Average throughput: 66.56 Mbit/s
95th percentile per-packet one-way delay: 59.066 ms
Loss rate: 10.40%
-- Flow 3:
Average throughput: 105.61 Mbit/s
95th percentile per-packet one-way delay: 56.633 ms
Loss rate: 16.68%
```

Run 5: Report of FillP-Sheep — Data Link

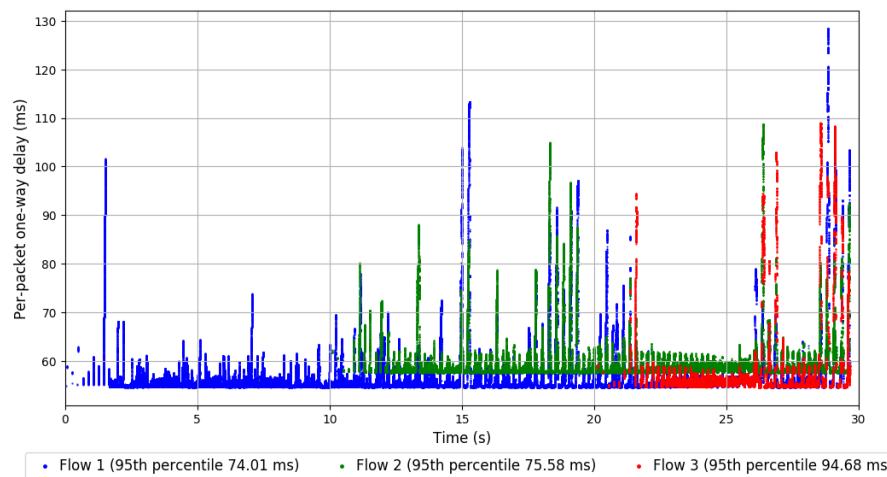
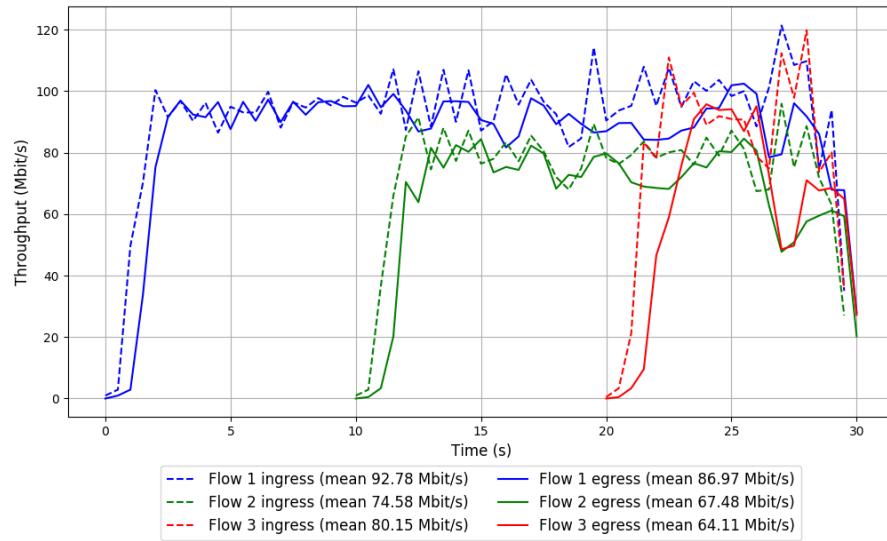


Run 1: Statistics of Indigo

```
Start at: 2019-01-25 01:29:24
End at: 2019-01-25 01:29:54
Local clock offset: -0.853 ms
Remote clock offset: -43.505 ms

# Below is generated by plot.py at 2019-01-25 04:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 152.18 Mbit/s
95th percentile per-packet one-way delay: 77.801 ms
Loss rate: 9.32%
-- Flow 1:
Average throughput: 86.97 Mbit/s
95th percentile per-packet one-way delay: 74.010 ms
Loss rate: 6.24%
-- Flow 2:
Average throughput: 67.48 Mbit/s
95th percentile per-packet one-way delay: 75.577 ms
Loss rate: 9.51%
-- Flow 3:
Average throughput: 64.11 Mbit/s
95th percentile per-packet one-way delay: 94.680 ms
Loss rate: 20.01%
```

Run 1: Report of Indigo — Data Link

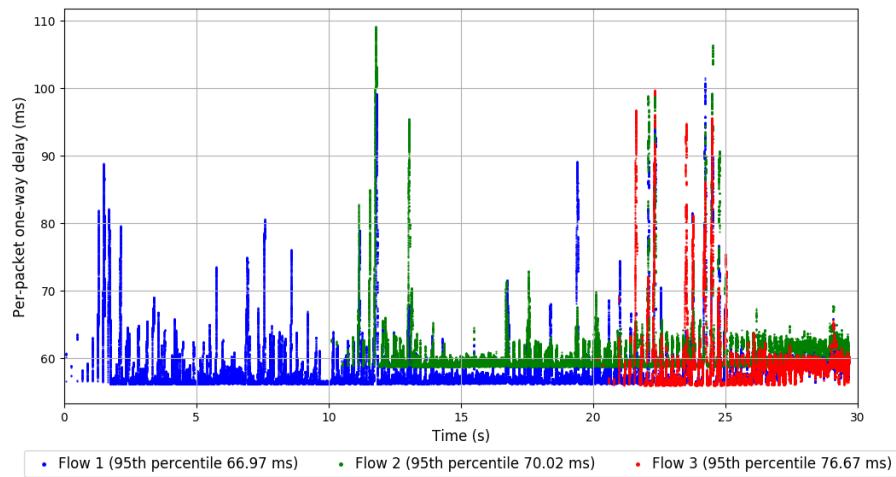
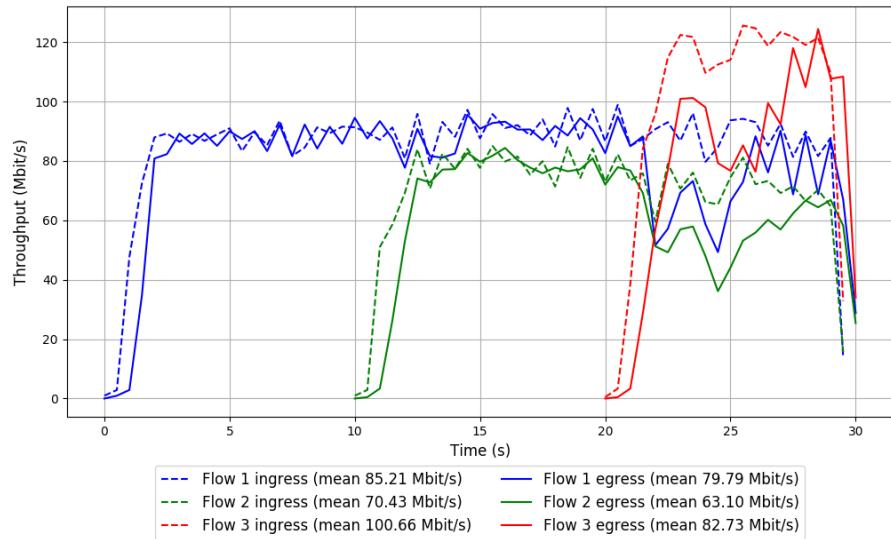


Run 2: Statistics of Indigo

```
Start at: 2019-01-25 01:59:56
End at: 2019-01-25 02:00:26
Local clock offset: -1.984 ms
Remote clock offset: -42.314 ms

# Below is generated by plot.py at 2019-01-25 04:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.98 Mbit/s
95th percentile per-packet one-way delay: 69.455 ms
Loss rate: 9.76%
-- Flow 1:
Average throughput: 79.79 Mbit/s
95th percentile per-packet one-way delay: 66.965 ms
Loss rate: 6.35%
-- Flow 2:
Average throughput: 63.10 Mbit/s
95th percentile per-packet one-way delay: 70.022 ms
Loss rate: 10.41%
-- Flow 3:
Average throughput: 82.73 Mbit/s
95th percentile per-packet one-way delay: 76.671 ms
Loss rate: 17.82%
```

Run 2: Report of Indigo — Data Link

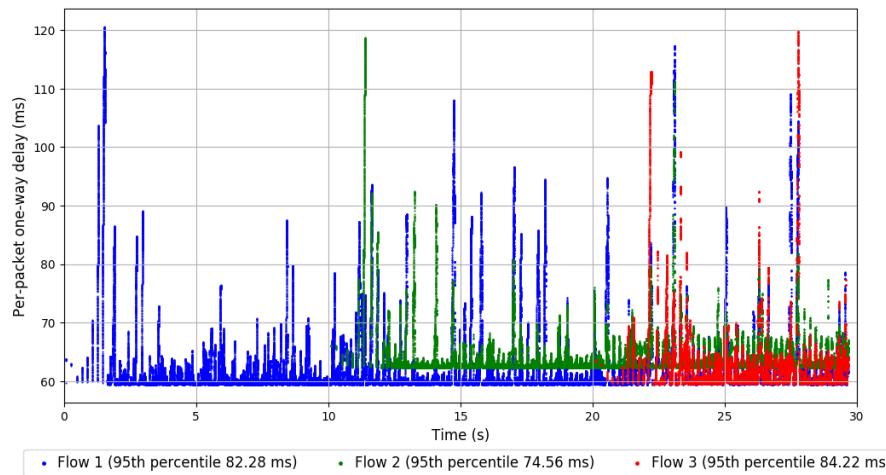
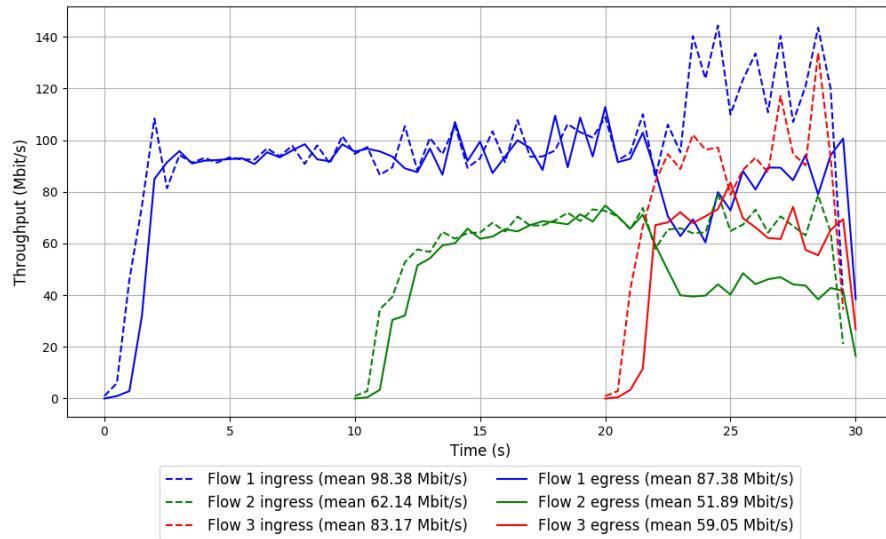


Run 3: Statistics of Indigo

```
Start at: 2019-01-25 02:41:18
End at: 2019-01-25 02:41:48
Local clock offset: -2.466 ms
Remote clock offset: -40.259 ms

# Below is generated by plot.py at 2019-01-25 04:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.69 Mbit/s
95th percentile per-packet one-way delay: 80.626 ms
Loss rate: 15.37%
-- Flow 1:
Average throughput: 87.38 Mbit/s
95th percentile per-packet one-way delay: 82.277 ms
Loss rate: 11.18%
-- Flow 2:
Average throughput: 51.89 Mbit/s
95th percentile per-packet one-way delay: 74.561 ms
Loss rate: 16.50%
-- Flow 3:
Average throughput: 59.05 Mbit/s
95th percentile per-packet one-way delay: 84.218 ms
Loss rate: 29.01%
```

Run 3: Report of Indigo — Data Link

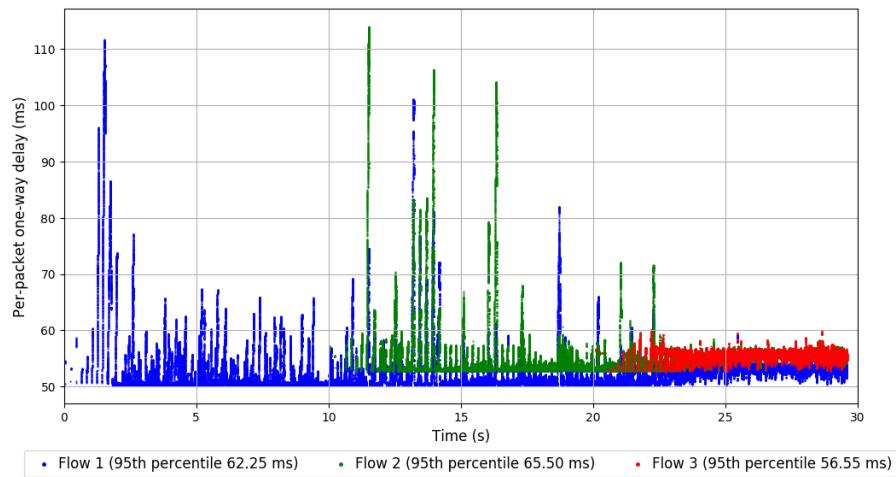
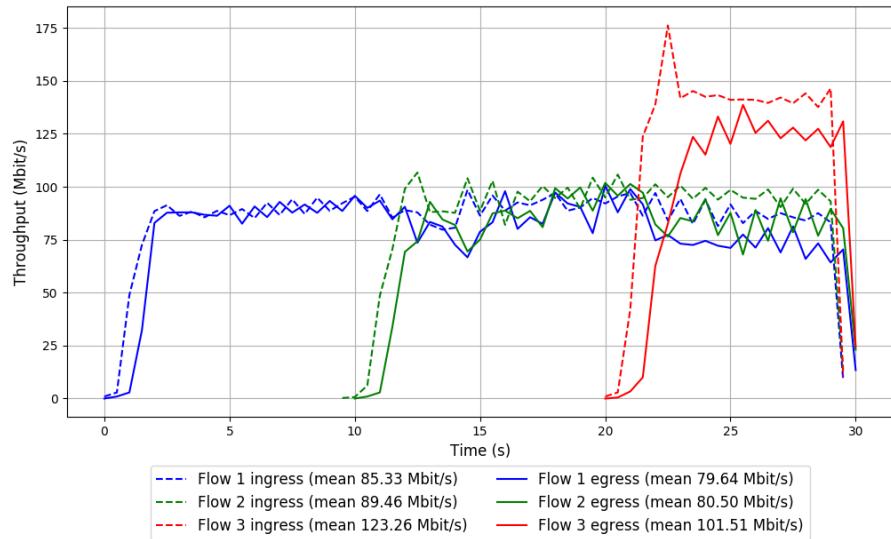


Run 4: Statistics of Indigo

```
Start at: 2019-01-25 03:12:14
End at: 2019-01-25 03:12:44
Local clock offset: 0.925 ms
Remote clock offset: -47.297 ms

# Below is generated by plot.py at 2019-01-25 04:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.53 Mbit/s
95th percentile per-packet one-way delay: 60.589 ms
Loss rate: 10.11%
-- Flow 1:
Average throughput: 79.64 Mbit/s
95th percentile per-packet one-way delay: 62.250 ms
Loss rate: 6.66%
-- Flow 2:
Average throughput: 80.50 Mbit/s
95th percentile per-packet one-way delay: 65.501 ms
Loss rate: 10.01%
-- Flow 3:
Average throughput: 101.51 Mbit/s
95th percentile per-packet one-way delay: 56.545 ms
Loss rate: 17.67%
```

Run 4: Report of Indigo — Data Link

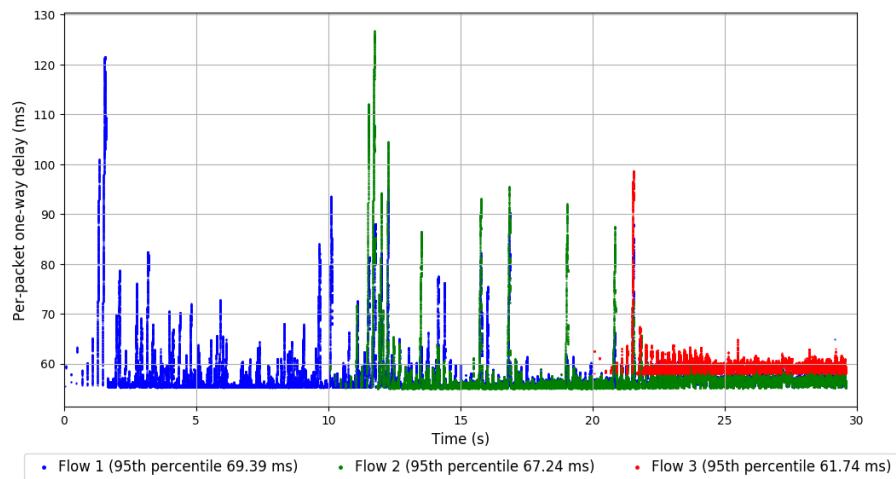
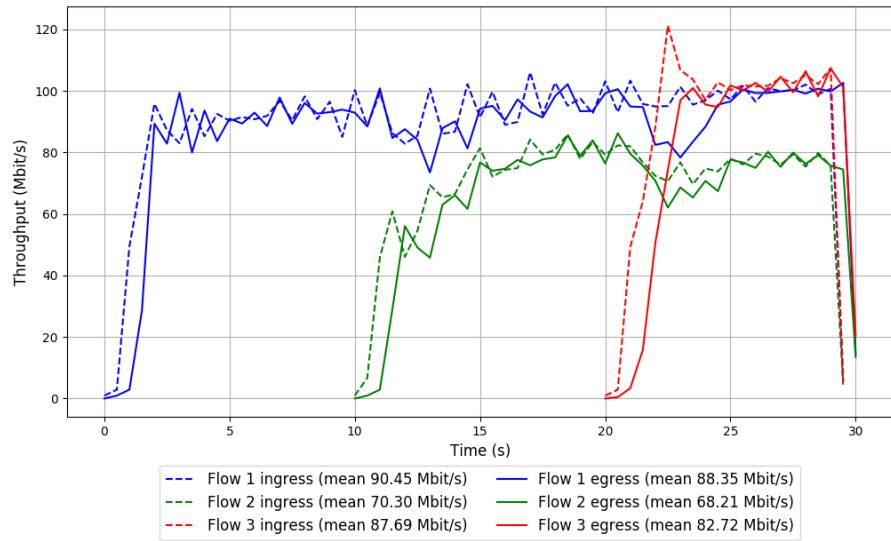


Run 5: Statistics of Indigo

```
Start at: 2019-01-25 03:59:29
End at: 2019-01-25 03:59:59
Local clock offset: -1.66 ms
Remote clock offset: -45.024 ms

# Below is generated by plot.py at 2019-01-25 04:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 160.10 Mbit/s
95th percentile per-packet one-way delay: 66.739 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 88.35 Mbit/s
95th percentile per-packet one-way delay: 69.386 ms
Loss rate: 2.31%
-- Flow 2:
Average throughput: 68.21 Mbit/s
95th percentile per-packet one-way delay: 67.244 ms
Loss rate: 2.98%
-- Flow 3:
Average throughput: 82.72 Mbit/s
95th percentile per-packet one-way delay: 61.736 ms
Loss rate: 5.67%
```

Run 5: Report of Indigo — Data Link

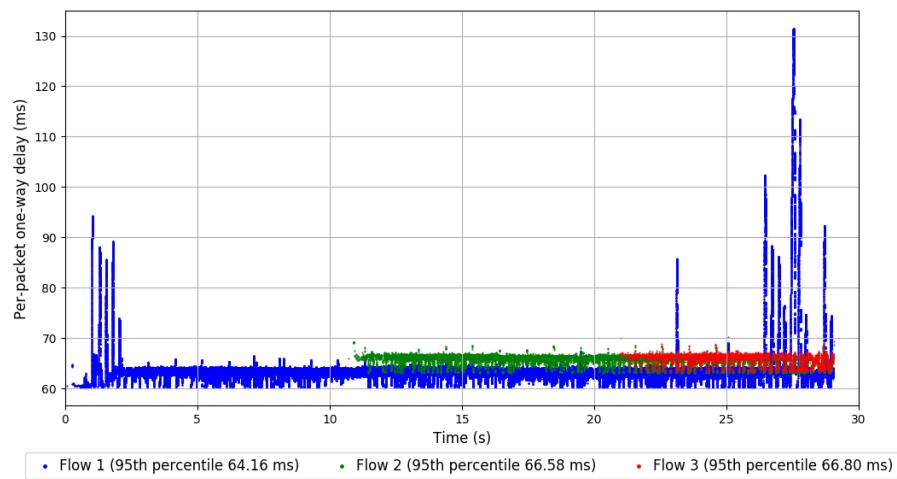
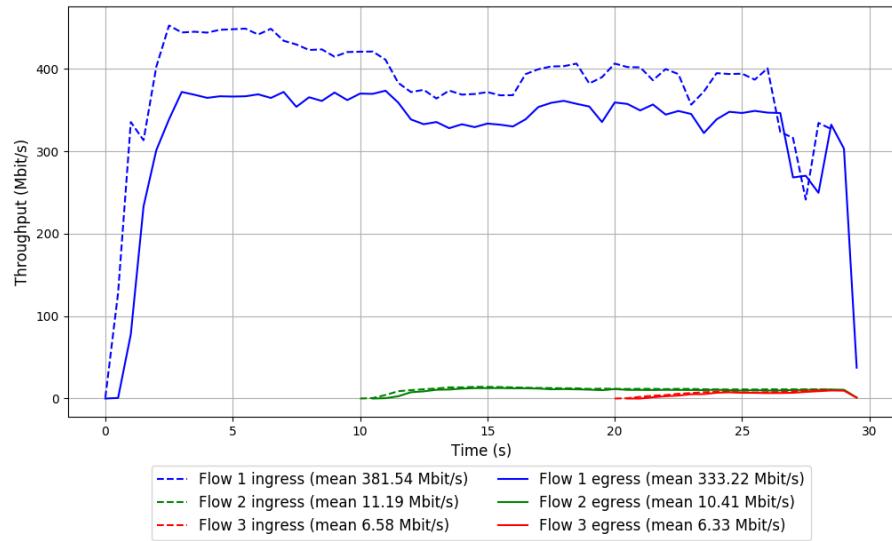


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 01:33:51
End at: 2019-01-25 01:34:21
Local clock offset: -1.32 ms
Remote clock offset: -38.179 ms

# Below is generated by plot.py at 2019-01-25 04:28:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.55 Mbit/s
95th percentile per-packet one-way delay: 65.753 ms
Loss rate: 12.58%
-- Flow 1:
Average throughput: 333.22 Mbit/s
95th percentile per-packet one-way delay: 64.155 ms
Loss rate: 12.65%
-- Flow 2:
Average throughput: 10.41 Mbit/s
95th percentile per-packet one-way delay: 66.584 ms
Loss rate: 9.40%
-- Flow 3:
Average throughput: 6.33 Mbit/s
95th percentile per-packet one-way delay: 66.795 ms
Loss rate: 9.22%
```

Run 1: Report of Indigo-MusesC3 — Data Link

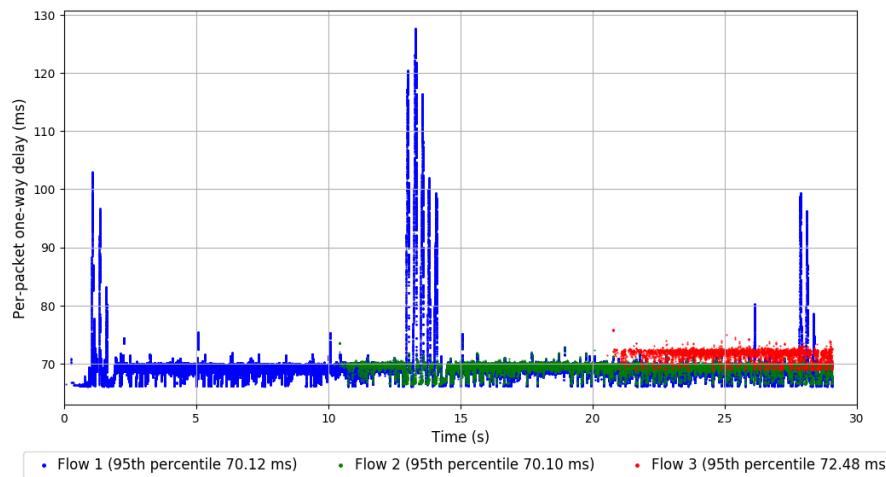
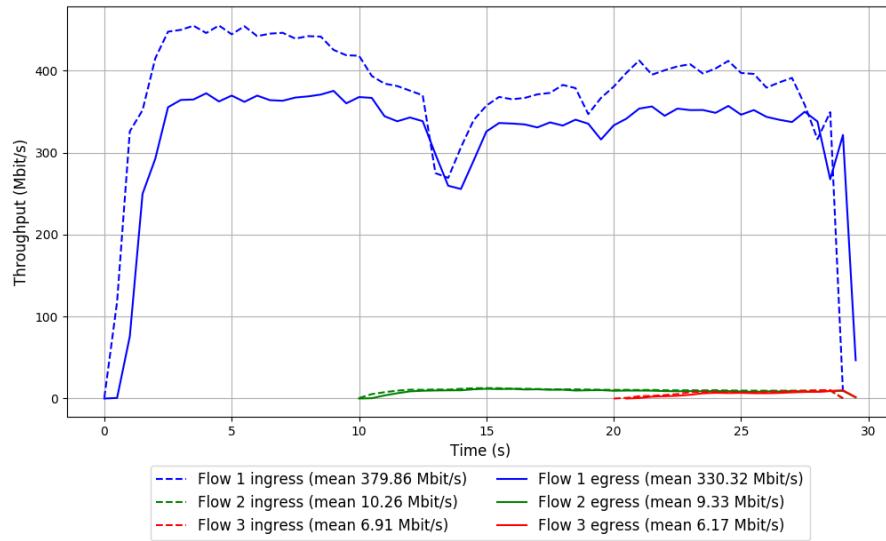


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 02:10:11
End at: 2019-01-25 02:10:41
Local clock offset: -2.531 ms
Remote clock offset: -33.757 ms

# Below is generated by plot.py at 2019-01-25 04:28:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.18 Mbit/s
95th percentile per-packet one-way delay: 70.263 ms
Loss rate: 12.96%
-- Flow 1:
Average throughput: 330.32 Mbit/s
95th percentile per-packet one-way delay: 70.125 ms
Loss rate: 13.04%
-- Flow 2:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 70.103 ms
Loss rate: 9.06%
-- Flow 3:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 72.485 ms
Loss rate: 10.69%
```

Run 2: Report of Indigo-MusesC3 — Data Link

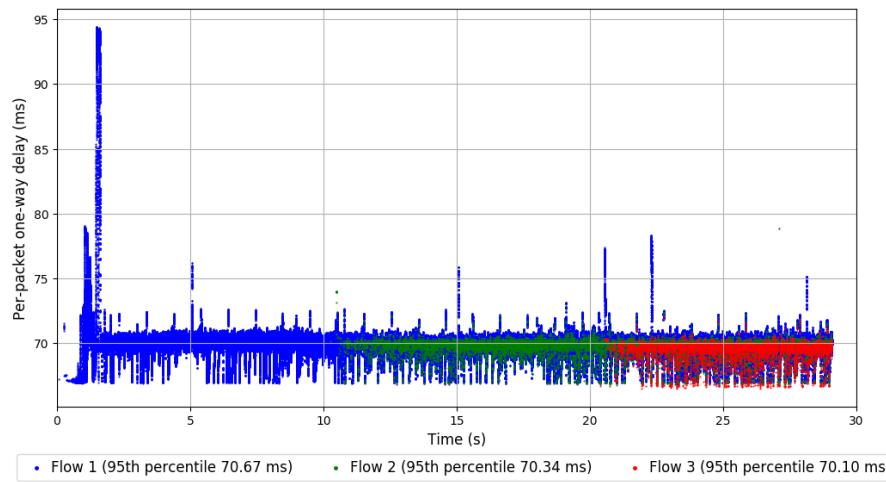
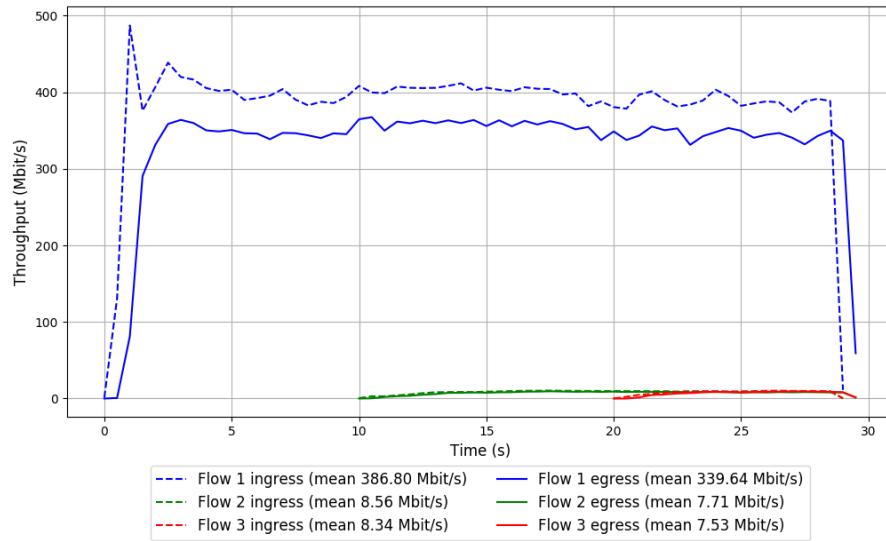


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 02:45:52
End at: 2019-01-25 02:46:22
Local clock offset: -1.521 ms
Remote clock offset: -32.07 ms

# Below is generated by plot.py at 2019-01-25 04:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.89 Mbit/s
95th percentile per-packet one-way delay: 70.660 ms
Loss rate: 12.14%
-- Flow 1:
Average throughput: 339.64 Mbit/s
95th percentile per-packet one-way delay: 70.665 ms
Loss rate: 12.18%
-- Flow 2:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 70.338 ms
Loss rate: 9.93%
-- Flow 3:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 70.097 ms
Loss rate: 9.74%
```

Run 3: Report of Indigo-MusesC3 — Data Link

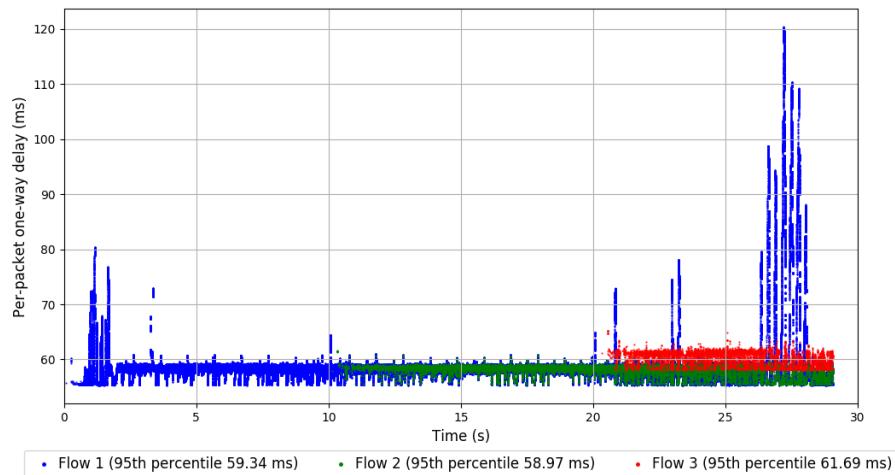
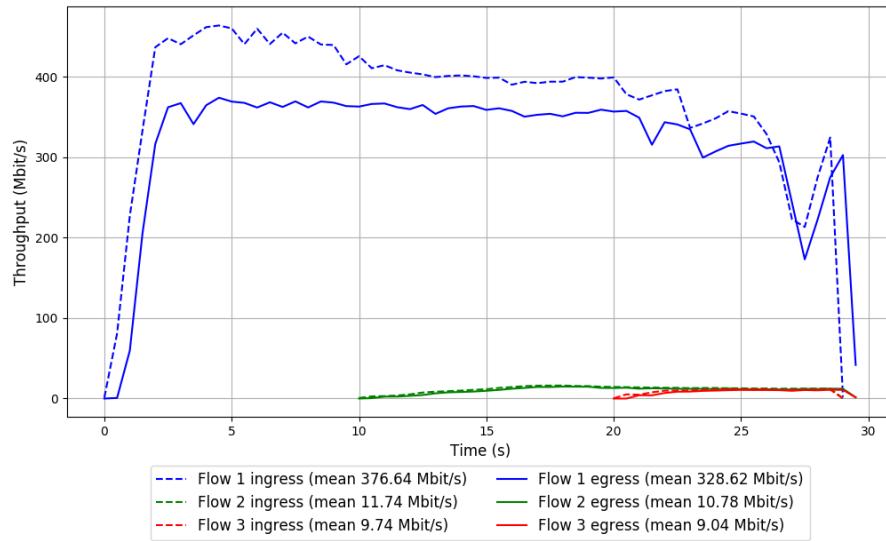


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 03:16:53
End at: 2019-01-25 03:17:23
Local clock offset: -1.606 ms
Remote clock offset: -44.83 ms

# Below is generated by plot.py at 2019-01-25 04:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.35 Mbit/s
95th percentile per-packet one-way delay: 59.588 ms
Loss rate: 12.62%
-- Flow 1:
Average throughput: 328.62 Mbit/s
95th percentile per-packet one-way delay: 59.336 ms
Loss rate: 12.75%
-- Flow 2:
Average throughput: 10.78 Mbit/s
95th percentile per-packet one-way delay: 58.965 ms
Loss rate: 8.20%
-- Flow 3:
Average throughput: 9.04 Mbit/s
95th percentile per-packet one-way delay: 61.692 ms
Loss rate: 7.16%
```

Run 4: Report of Indigo-MusesC3 — Data Link

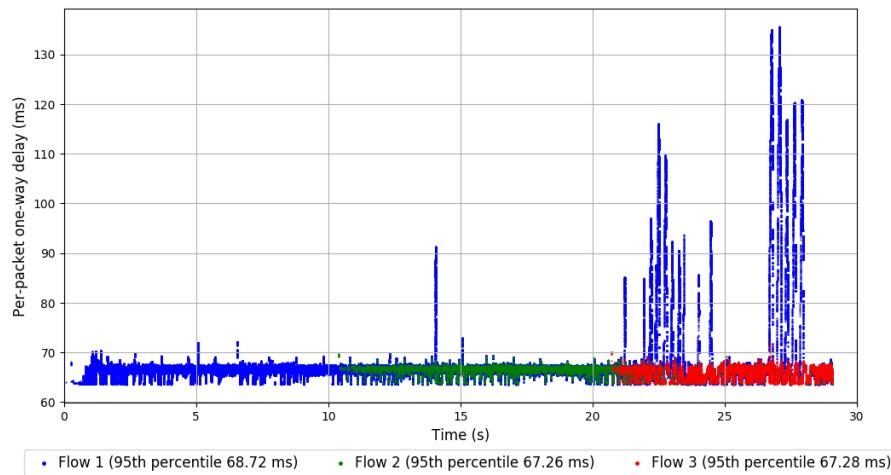
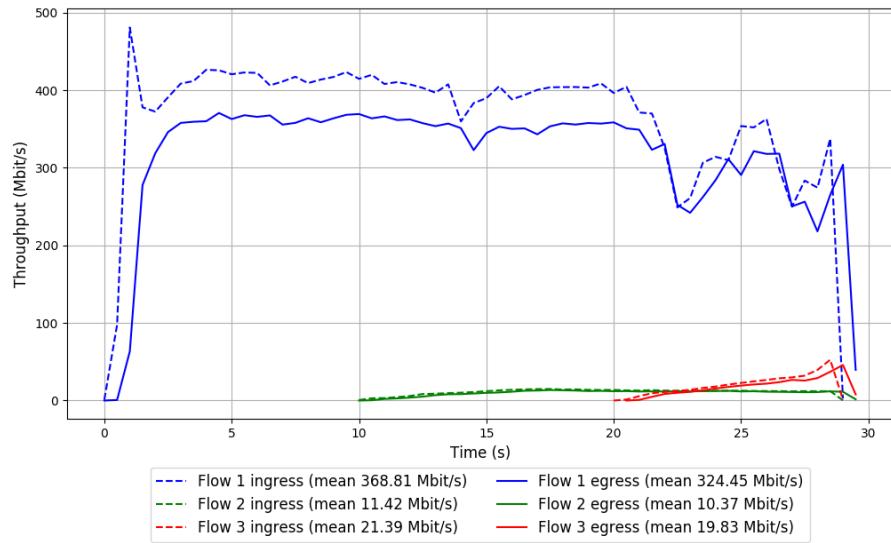


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 04:09:42
End at: 2019-01-25 04:10:12
Local clock offset: -1.579 ms
Remote clock offset: -36.767 ms

# Below is generated by plot.py at 2019-01-25 04:28:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.05 Mbit/s
95th percentile per-packet one-way delay: 68.453 ms
Loss rate: 11.89%
-- Flow 1:
Average throughput: 324.45 Mbit/s
95th percentile per-packet one-way delay: 68.715 ms
Loss rate: 12.02%
-- Flow 2:
Average throughput: 10.37 Mbit/s
95th percentile per-packet one-way delay: 67.260 ms
Loss rate: 9.16%
-- Flow 3:
Average throughput: 19.83 Mbit/s
95th percentile per-packet one-way delay: 67.279 ms
Loss rate: 7.32%
```

Run 5: Report of Indigo-MusesC3 — Data Link

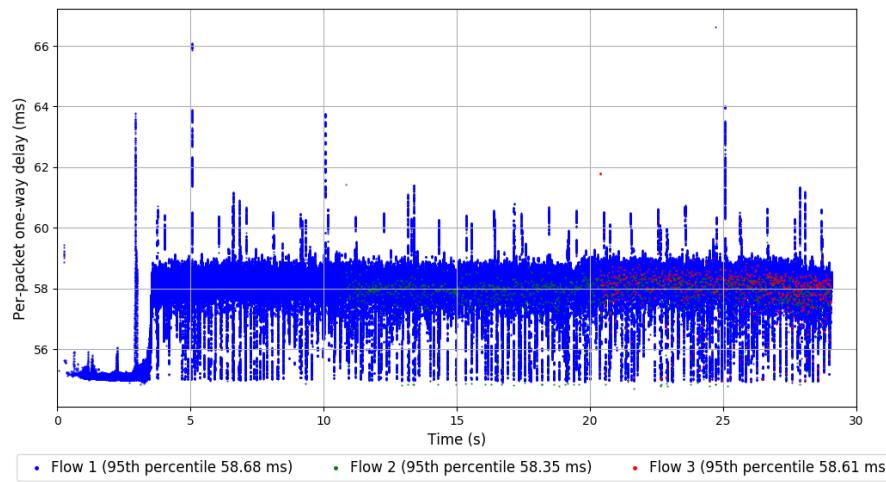
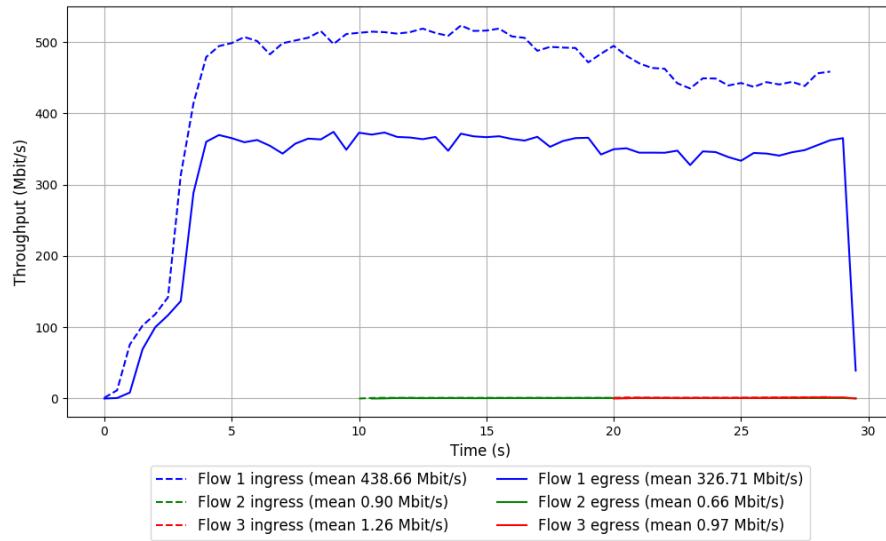


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-01-25 01:25:14
End at: 2019-01-25 01:25:44
Local clock offset: -1.546 ms
Remote clock offset: -44.538 ms

# Below is generated by plot.py at 2019-01-25 04:29:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.43 Mbit/s
95th percentile per-packet one-way delay: 58.683 ms
Loss rate: 25.52%
-- Flow 1:
Average throughput: 326.71 Mbit/s
95th percentile per-packet one-way delay: 58.684 ms
Loss rate: 25.51%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 58.348 ms
Loss rate: 28.71%
-- Flow 3:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 58.606 ms
Loss rate: 23.23%
```

Run 1: Report of Indigo-MusesC5 — Data Link

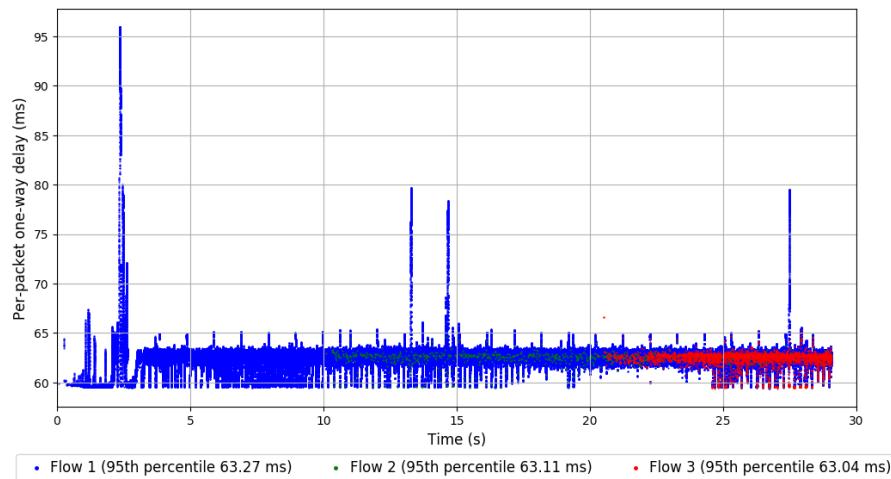
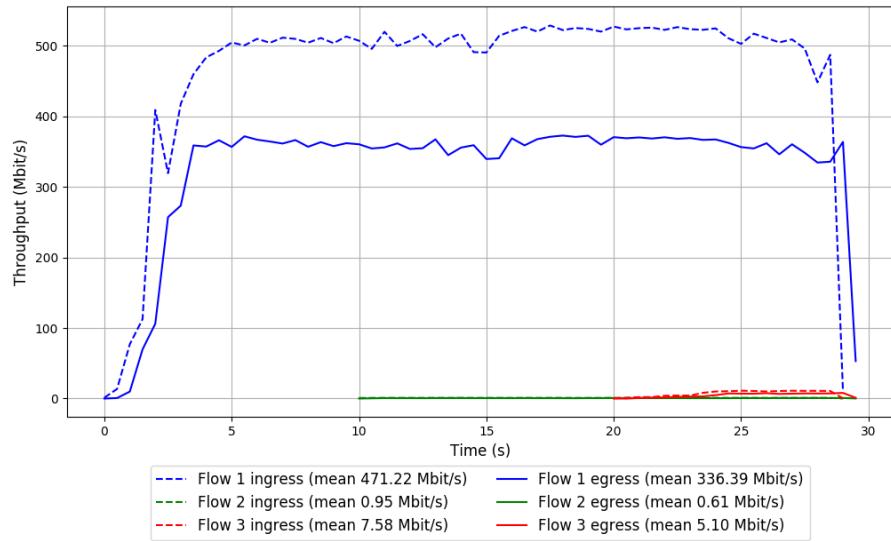


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 01:55:42
End at: 2019-01-25 01:56:12
Local clock offset: -1.513 ms
Remote clock offset: -38.702 ms

# Below is generated by plot.py at 2019-01-25 04:30:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.33 Mbit/s
95th percentile per-packet one-way delay: 63.274 ms
Loss rate: 28.64%
-- Flow 1:
Average throughput: 336.39 Mbit/s
95th percentile per-packet one-way delay: 63.274 ms
Loss rate: 28.61%
-- Flow 2:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 63.112 ms
Loss rate: 35.81%
-- Flow 3:
Average throughput: 5.10 Mbit/s
95th percentile per-packet one-way delay: 63.043 ms
Loss rate: 32.77%
```

Run 2: Report of Indigo-MusesC5 — Data Link

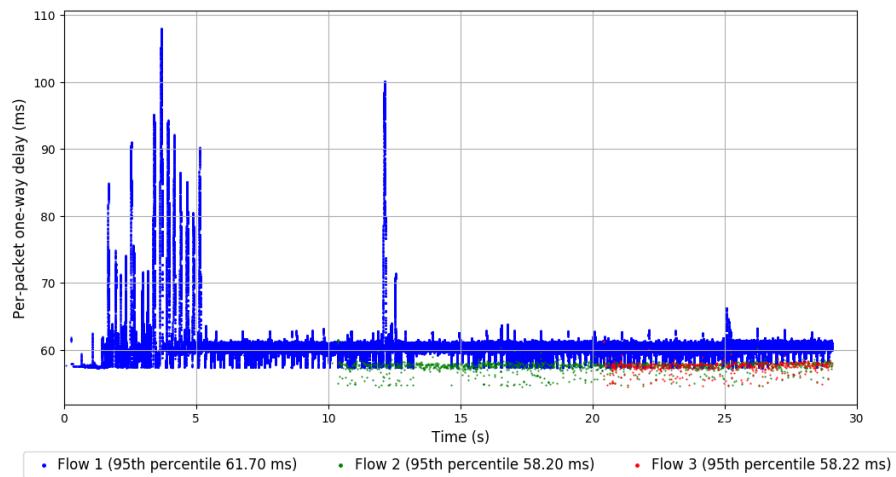
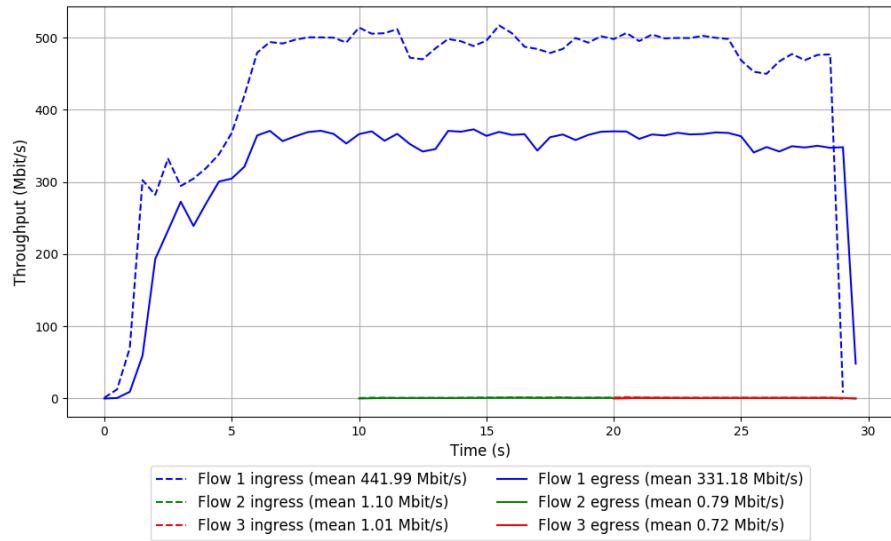


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 02:31:59
End at: 2019-01-25 02:32:29
Local clock offset: 0.379 ms
Remote clock offset: -42.513 ms

# Below is generated by plot.py at 2019-01-25 04:31:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.91 Mbit/s
95th percentile per-packet one-way delay: 61.696 ms
Loss rate: 25.07%
-- Flow 1:
Average throughput: 331.18 Mbit/s
95th percentile per-packet one-way delay: 61.704 ms
Loss rate: 25.06%
-- Flow 2:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 58.197 ms
Loss rate: 27.85%
-- Flow 3:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 58.217 ms
Loss rate: 28.38%
```

Run 3: Report of Indigo-MusesC5 — Data Link

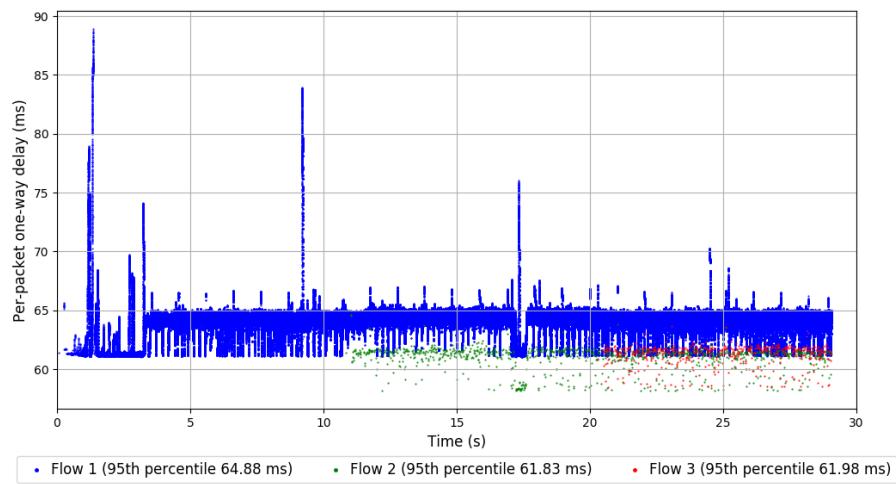
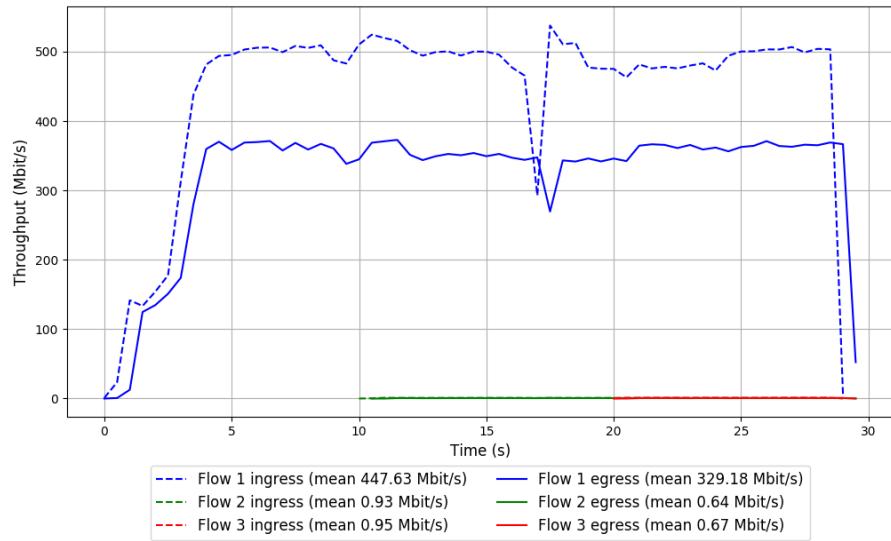


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 03:08:04
End at: 2019-01-25 03:08:34
Local clock offset: 0.354 ms
Remote clock offset: -39.553 ms

# Below is generated by plot.py at 2019-01-25 04:32:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.79 Mbit/s
95th percentile per-packet one-way delay: 64.881 ms
Loss rate: 26.47%
-- Flow 1:
Average throughput: 329.18 Mbit/s
95th percentile per-packet one-way delay: 64.881 ms
Loss rate: 26.46%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 61.825 ms
Loss rate: 32.35%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 61.980 ms
Loss rate: 29.87%
```

Run 4: Report of Indigo-MusesC5 — Data Link

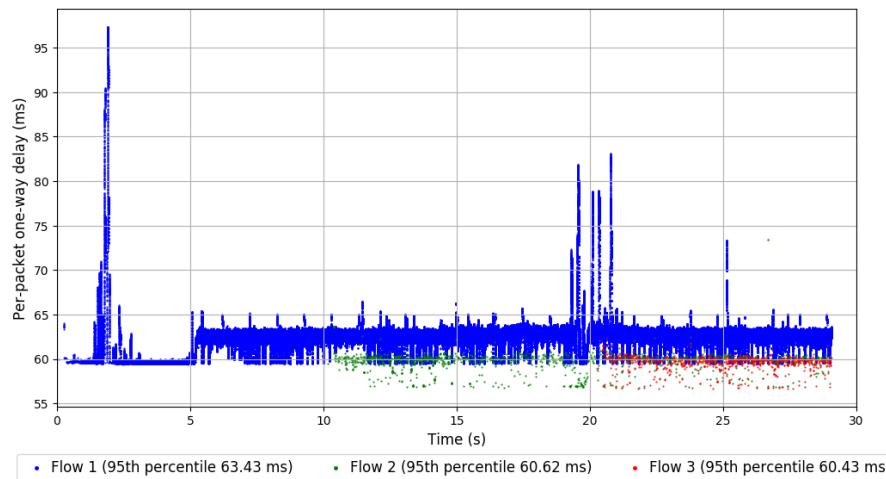
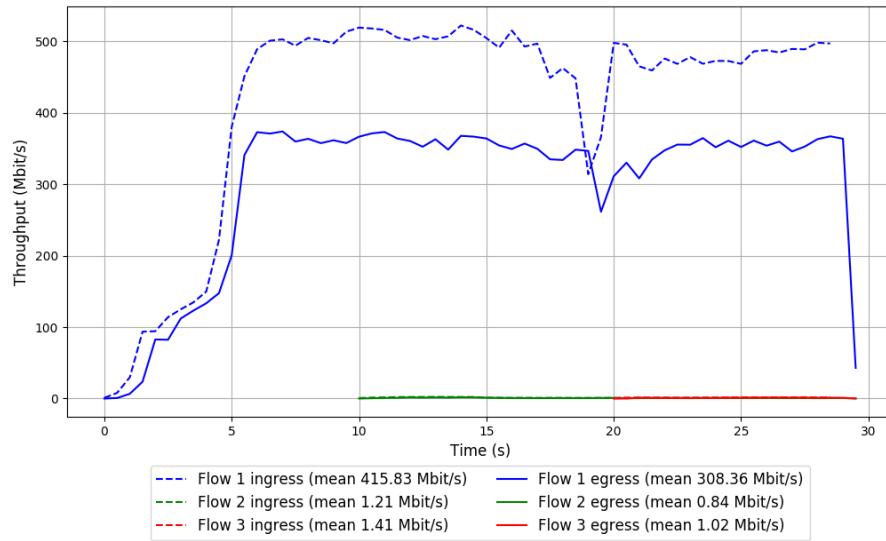


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 03:49:40
End at: 2019-01-25 03:50:10
Local clock offset: -1.106 ms
Remote clock offset: -42.81 ms

# Below is generated by plot.py at 2019-01-25 04:32:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.22 Mbit/s
95th percentile per-packet one-way delay: 63.425 ms
Loss rate: 25.85%
-- Flow 1:
Average throughput: 308.36 Mbit/s
95th percentile per-packet one-way delay: 63.426 ms
Loss rate: 25.84%
-- Flow 2:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 60.621 ms
Loss rate: 31.21%
-- Flow 3:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 60.427 ms
Loss rate: 27.40%
```

Run 5: Report of Indigo-MusesC5 — Data Link

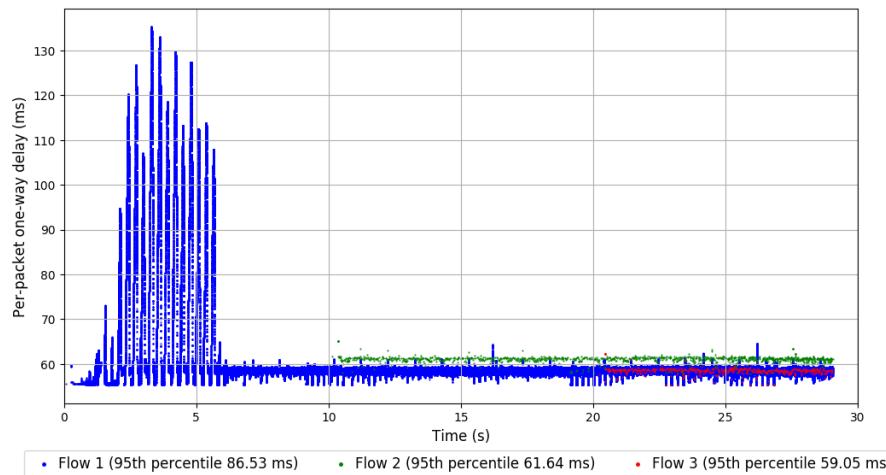
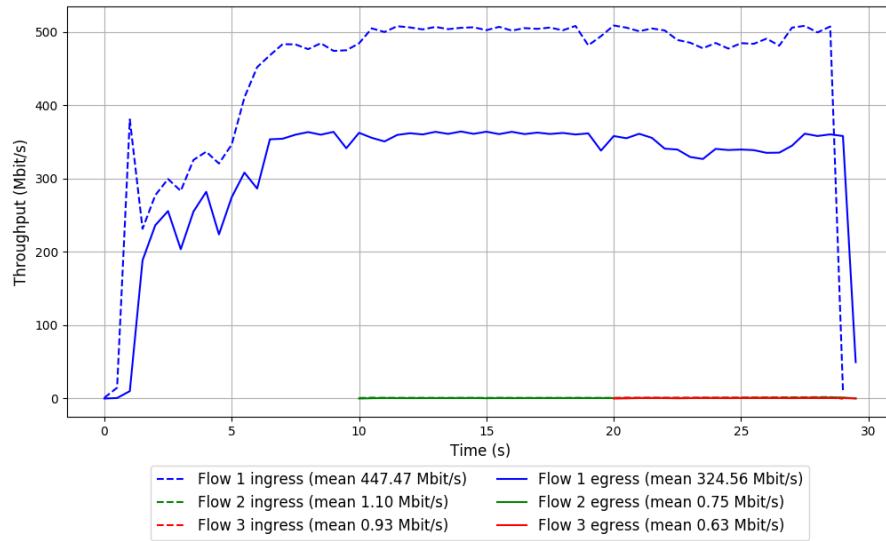


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 01:18:03
End at: 2019-01-25 01:18:33
Local clock offset: -0.5 ms
Remote clock offset: -44.496 ms

# Below is generated by plot.py at 2019-01-25 04:32:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.25 Mbit/s
95th percentile per-packet one-way delay: 86.410 ms
Loss rate: 27.47%
-- Flow 1:
Average throughput: 324.56 Mbit/s
95th percentile per-packet one-way delay: 86.526 ms
Loss rate: 27.46%
-- Flow 2:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 61.642 ms
Loss rate: 31.42%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 59.054 ms
Loss rate: 32.34%
```

Run 1: Report of Indigo-MusesD — Data Link

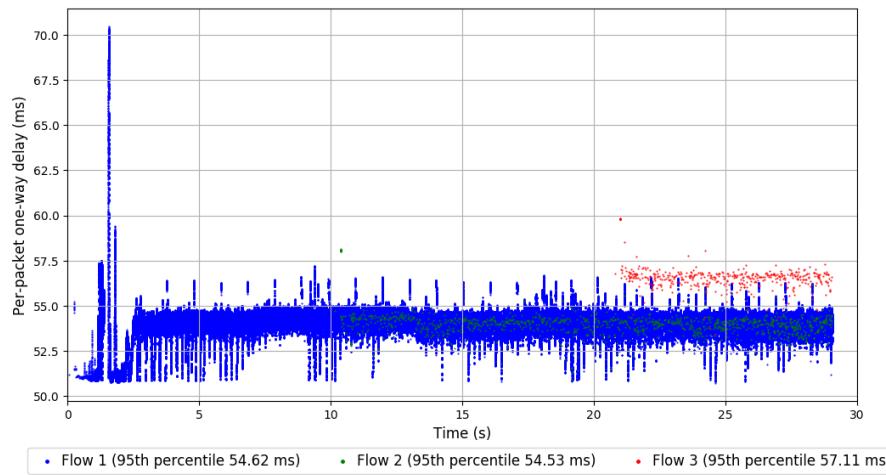
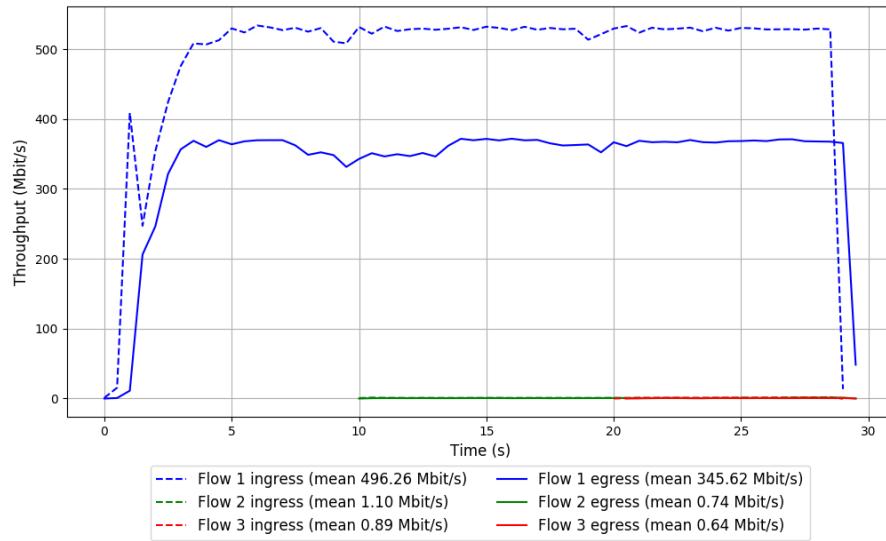


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 01:48:26
End at: 2019-01-25 01:48:56
Local clock offset: -0.788 ms
Remote clock offset: -46.824 ms

# Below is generated by plot.py at 2019-01-25 04:32:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.28 Mbit/s
95th percentile per-packet one-way delay: 54.622 ms
Loss rate: 30.35%
-- Flow 1:
Average throughput: 345.62 Mbit/s
95th percentile per-packet one-way delay: 54.620 ms
Loss rate: 30.35%
-- Flow 2:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 54.529 ms
Loss rate: 32.96%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 57.109 ms
Loss rate: 32.19%
```

Run 2: Report of Indigo-MusesD — Data Link

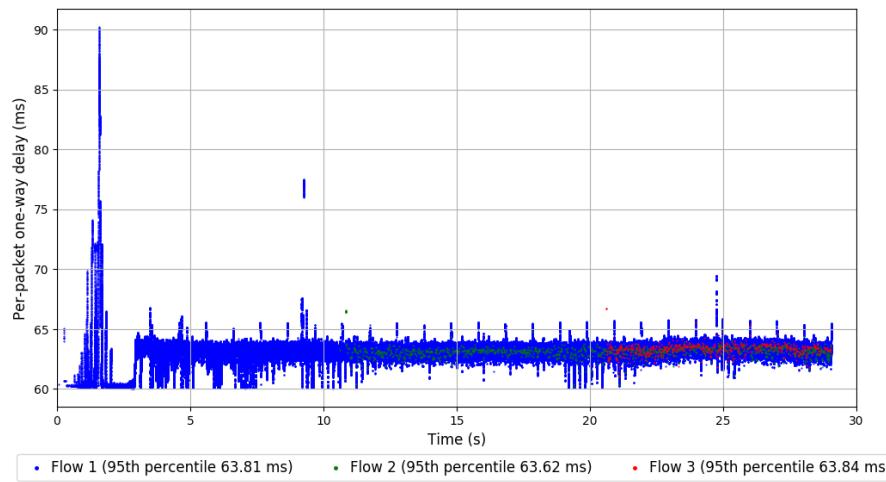
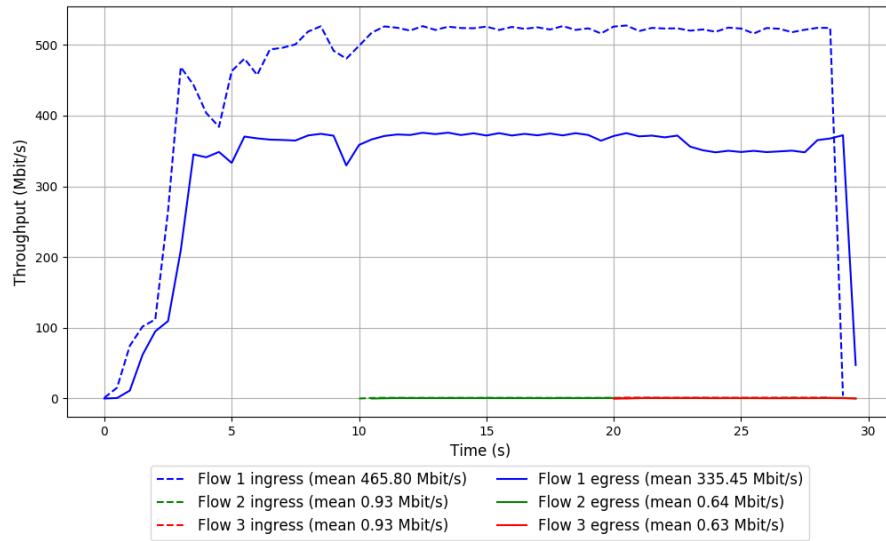


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 02:24:49
End at: 2019-01-25 02:25:19
Local clock offset: 0.128 ms
Remote clock offset: -37.421 ms

# Below is generated by plot.py at 2019-01-25 04:32:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.04 Mbit/s
95th percentile per-packet one-way delay: 63.811 ms
Loss rate: 27.99%
-- Flow 1:
Average throughput: 335.45 Mbit/s
95th percentile per-packet one-way delay: 63.811 ms
Loss rate: 27.98%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 63.619 ms
Loss rate: 32.52%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 63.840 ms
Loss rate: 32.75%
```

Run 3: Report of Indigo-MusesD — Data Link

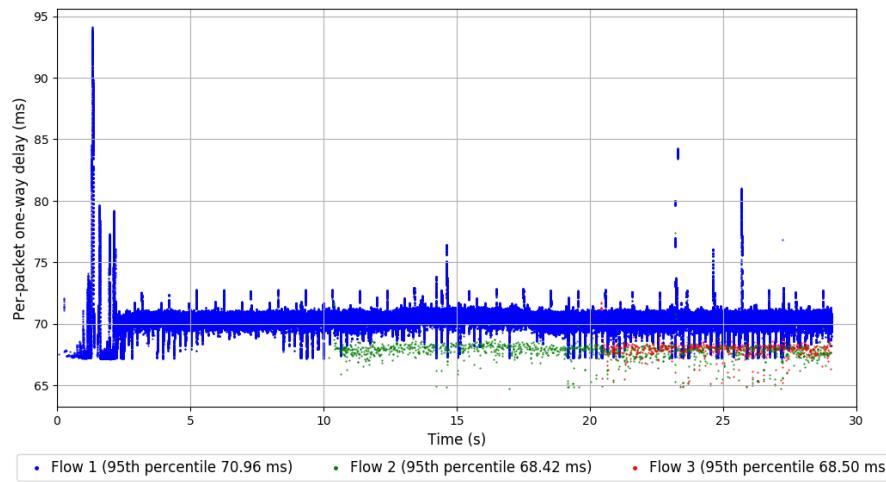
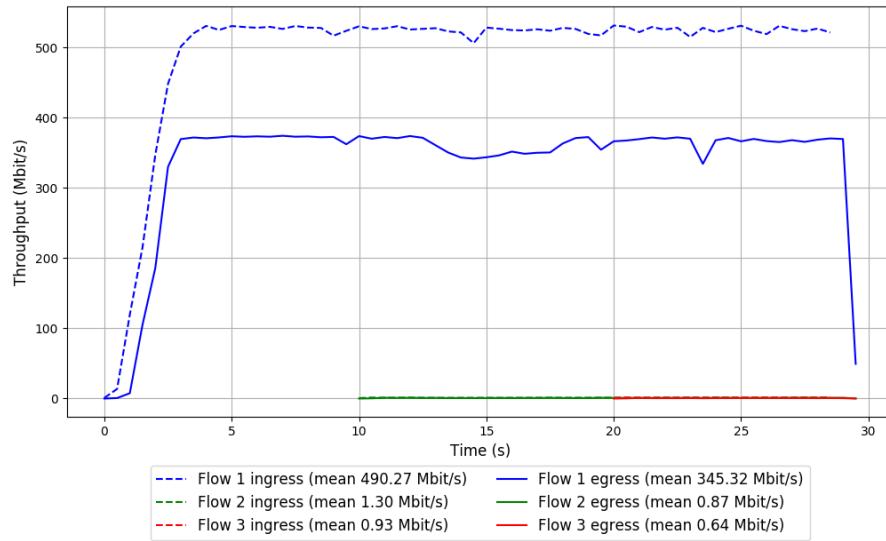


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 03:00:33
End at: 2019-01-25 03:01:03
Local clock offset: -0.727 ms
Remote clock offset: -33.864 ms

# Below is generated by plot.py at 2019-01-25 04:33:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.08 Mbit/s
95th percentile per-packet one-way delay: 70.957 ms
Loss rate: 29.56%
-- Flow 1:
Average throughput: 345.32 Mbit/s
95th percentile per-packet one-way delay: 70.958 ms
Loss rate: 29.56%
-- Flow 2:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 68.419 ms
Loss rate: 32.95%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 68.499 ms
Loss rate: 31.10%
```

Run 4: Report of Indigo-MusesD — Data Link

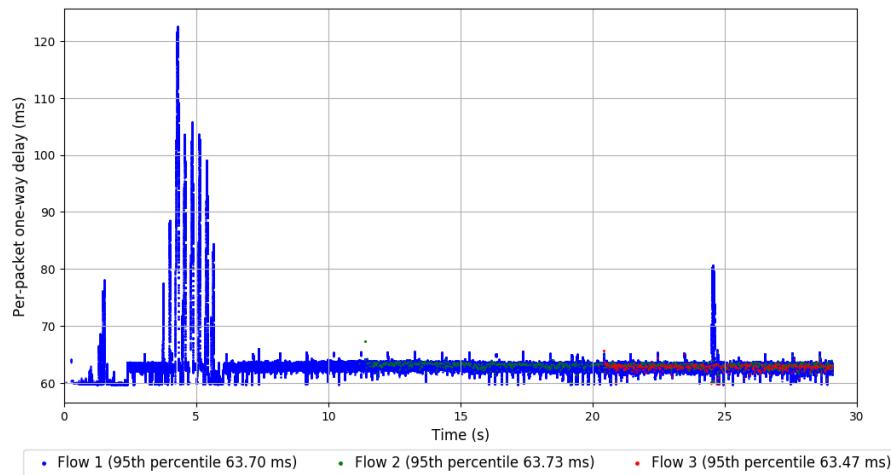
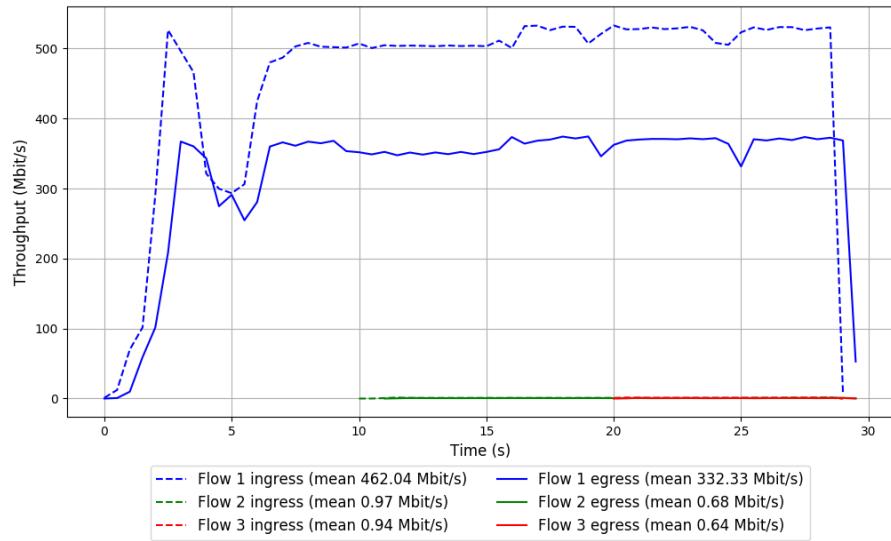


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 03:31:31
End at: 2019-01-25 03:32:01
Local clock offset: -1.925 ms
Remote clock offset: -40.646 ms

# Below is generated by plot.py at 2019-01-25 04:34:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.94 Mbit/s
95th percentile per-packet one-way delay: 63.700 ms
Loss rate: 28.08%
-- Flow 1:
Average throughput: 332.33 Mbit/s
95th percentile per-packet one-way delay: 63.700 ms
Loss rate: 28.07%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 63.729 ms
Loss rate: 33.85%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 63.471 ms
Loss rate: 32.07%
```

Run 5: Report of Indigo-MusesD — Data Link

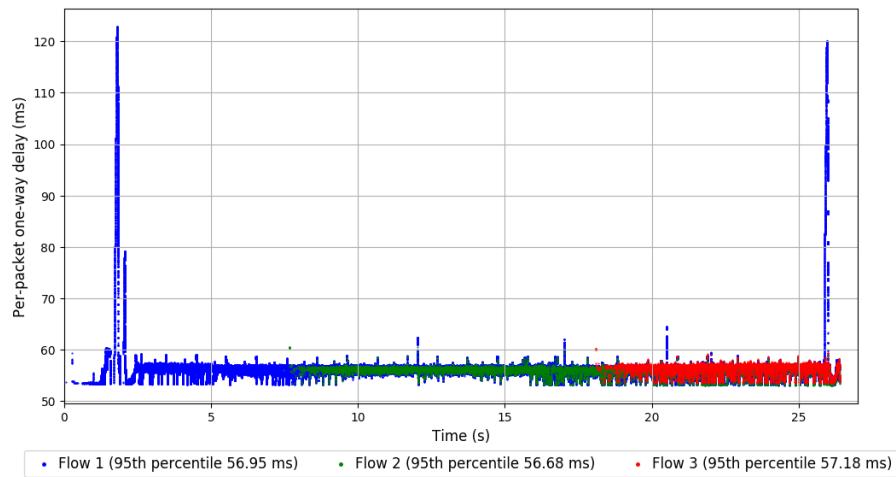
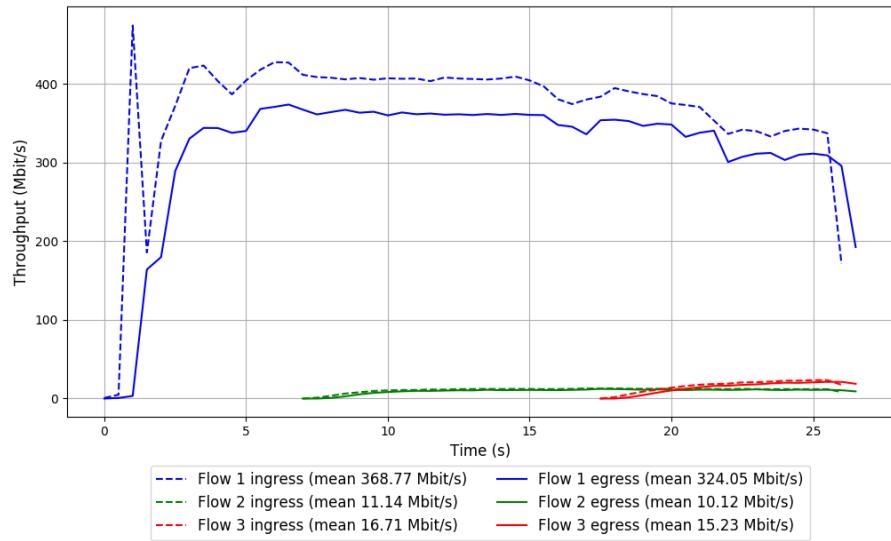


```
Run 1: Statistics of Indigo-MusesT
```

```
Start at: 2019-01-25 01:13:23
End at: 2019-01-25 01:13:53
Local clock offset: 2.64 ms
Remote clock offset: -44.57 ms

# Below is generated by plot.py at 2019-01-25 04:34:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.23 Mbit/s
95th percentile per-packet one-way delay: 56.960 ms
Loss rate: 12.02%
-- Flow 1:
Average throughput: 324.05 Mbit/s
95th percentile per-packet one-way delay: 56.953 ms
Loss rate: 12.12%
-- Flow 2:
Average throughput: 10.12 Mbit/s
95th percentile per-packet one-way delay: 56.677 ms
Loss rate: 9.16%
-- Flow 3:
Average throughput: 15.23 Mbit/s
95th percentile per-packet one-way delay: 57.183 ms
Loss rate: 8.89%
```

Run 1: Report of Indigo-MusesT — Data Link

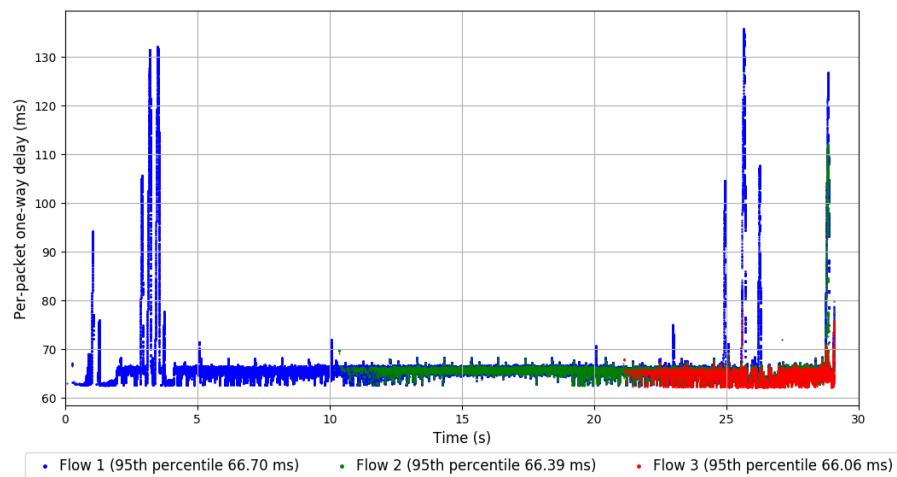
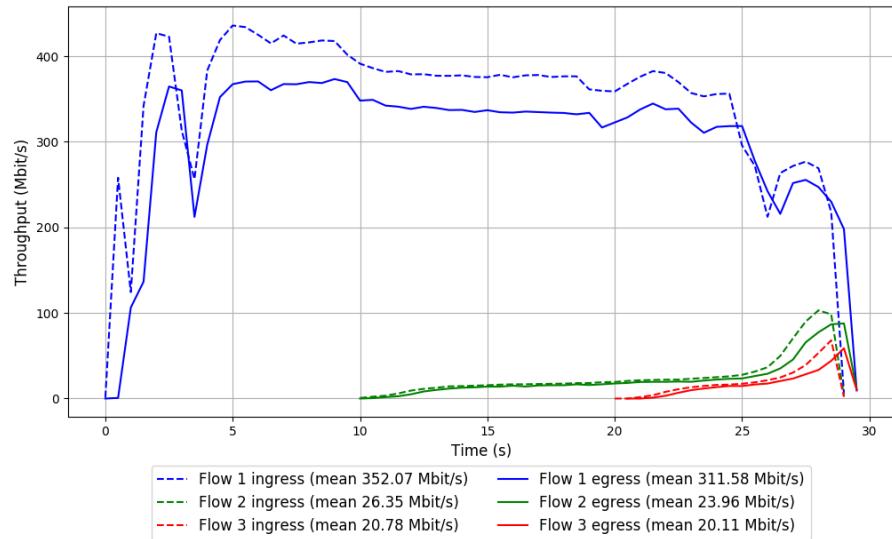


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 01:43:48
End at: 2019-01-25 01:44:18
Local clock offset: 0.859 ms
Remote clock offset: -33.57 ms

# Below is generated by plot.py at 2019-01-25 04:35:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.83 Mbit/s
95th percentile per-packet one-way delay: 66.666 ms
Loss rate: 11.34%
-- Flow 1:
Average throughput: 311.58 Mbit/s
95th percentile per-packet one-way delay: 66.696 ms
Loss rate: 11.49%
-- Flow 2:
Average throughput: 23.96 Mbit/s
95th percentile per-packet one-way delay: 66.393 ms
Loss rate: 9.07%
-- Flow 3:
Average throughput: 20.11 Mbit/s
95th percentile per-packet one-way delay: 66.064 ms
Loss rate: 8.82%
```

Run 2: Report of Indigo-MusesT — Data Link

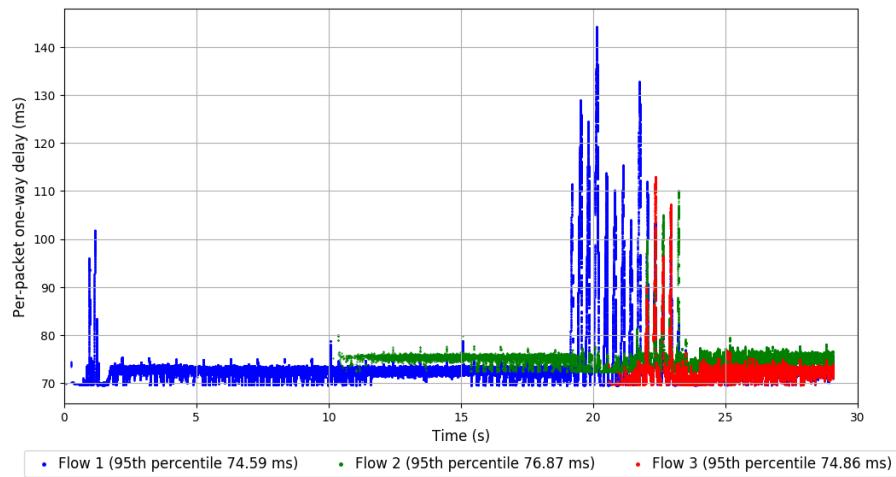
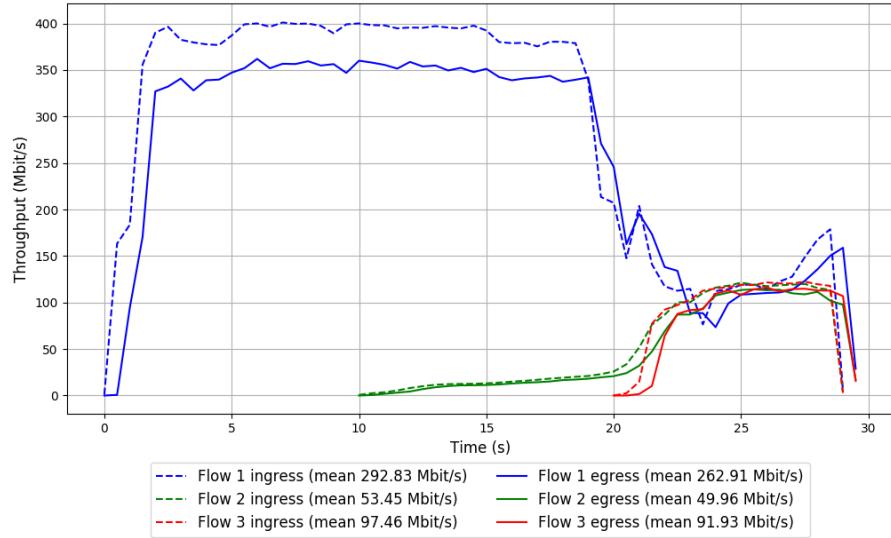


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 02:20:09
End at: 2019-01-25 02:20:39
Local clock offset: -6.904 ms
Remote clock offset: -35.029 ms

# Below is generated by plot.py at 2019-01-25 04:35:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.04 Mbit/s
95th percentile per-packet one-way delay: 76.141 ms
Loss rate: 9.49%
-- Flow 1:
Average throughput: 262.91 Mbit/s
95th percentile per-packet one-way delay: 74.594 ms
Loss rate: 10.22%
-- Flow 2:
Average throughput: 49.96 Mbit/s
95th percentile per-packet one-way delay: 76.872 ms
Loss rate: 6.57%
-- Flow 3:
Average throughput: 91.93 Mbit/s
95th percentile per-packet one-way delay: 74.858 ms
Loss rate: 5.65%
```

Run 3: Report of Indigo-MusesT — Data Link

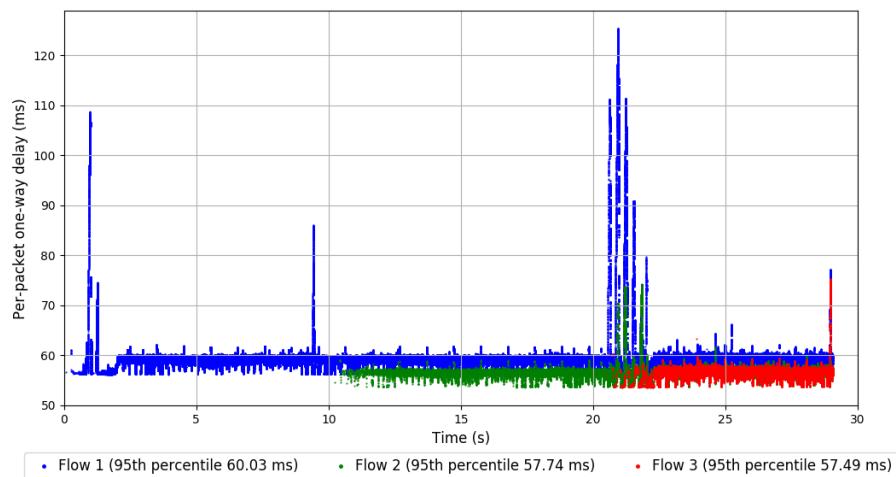
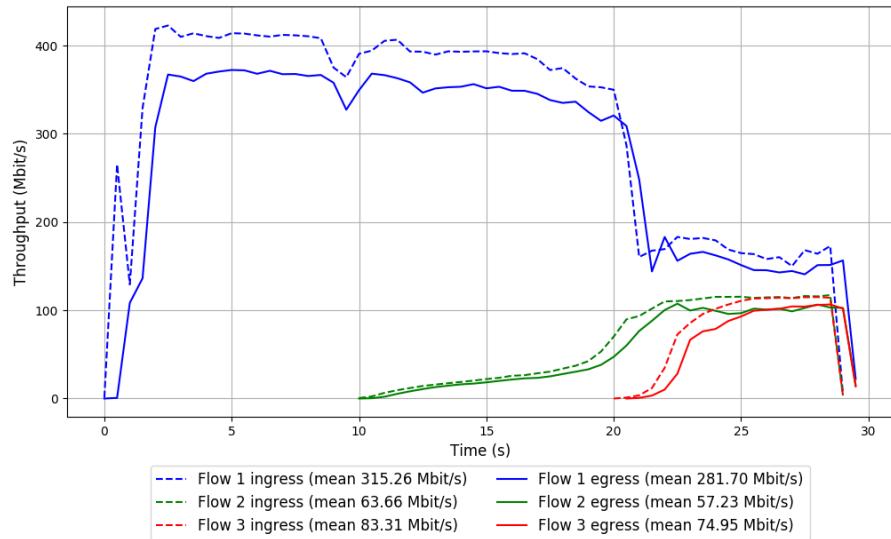


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 02:55:52
End at: 2019-01-25 02:56:22
Local clock offset: 0.158 ms
Remote clock offset: -43.852 ms

# Below is generated by plot.py at 2019-01-25 04:35:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.97 Mbit/s
95th percentile per-packet one-way delay: 59.943 ms
Loss rate: 10.56%
-- Flow 1:
Average throughput: 281.70 Mbit/s
95th percentile per-packet one-way delay: 60.027 ms
Loss rate: 10.66%
-- Flow 2:
Average throughput: 57.23 Mbit/s
95th percentile per-packet one-way delay: 57.745 ms
Loss rate: 10.09%
-- Flow 3:
Average throughput: 74.95 Mbit/s
95th percentile per-packet one-way delay: 57.489 ms
Loss rate: 10.03%
```

Run 4: Report of Indigo-MusesT — Data Link

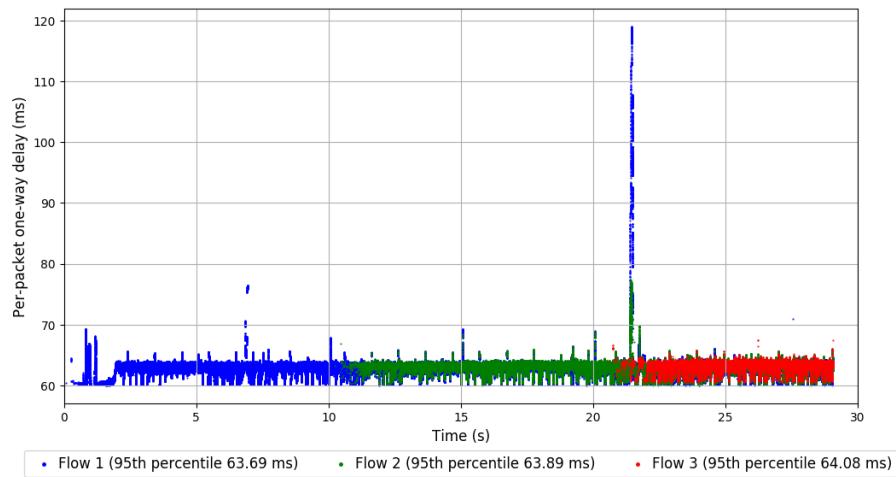
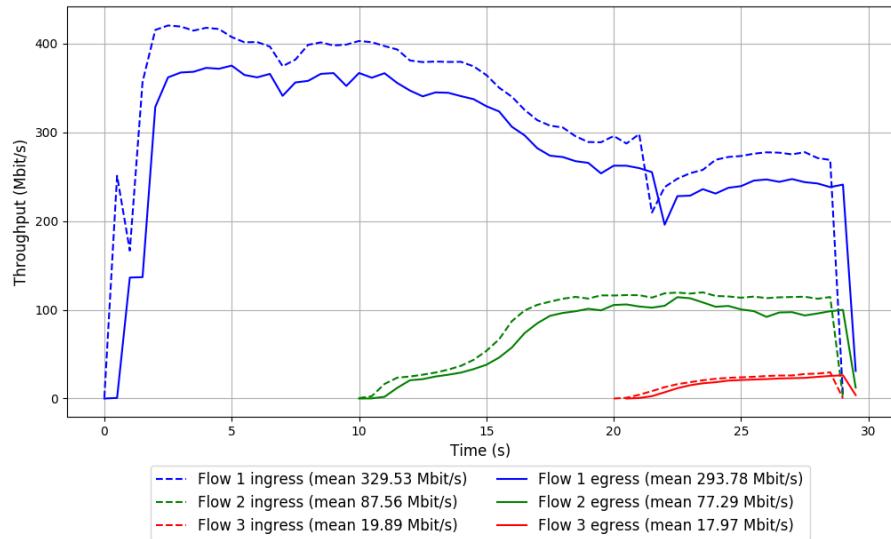


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 03:26:49
End at: 2019-01-25 03:27:19
Local clock offset: -0.977 ms
Remote clock offset: -39.127 ms

# Below is generated by plot.py at 2019-01-25 04:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.16 Mbit/s
95th percentile per-packet one-way delay: 63.752 ms
Loss rate: 10.95%
-- Flow 1:
Average throughput: 293.78 Mbit/s
95th percentile per-packet one-way delay: 63.689 ms
Loss rate: 10.84%
-- Flow 2:
Average throughput: 77.29 Mbit/s
95th percentile per-packet one-way delay: 63.894 ms
Loss rate: 11.73%
-- Flow 3:
Average throughput: 17.97 Mbit/s
95th percentile per-packet one-way delay: 64.077 ms
Loss rate: 9.63%
```

Run 5: Report of Indigo-MusesT — Data Link

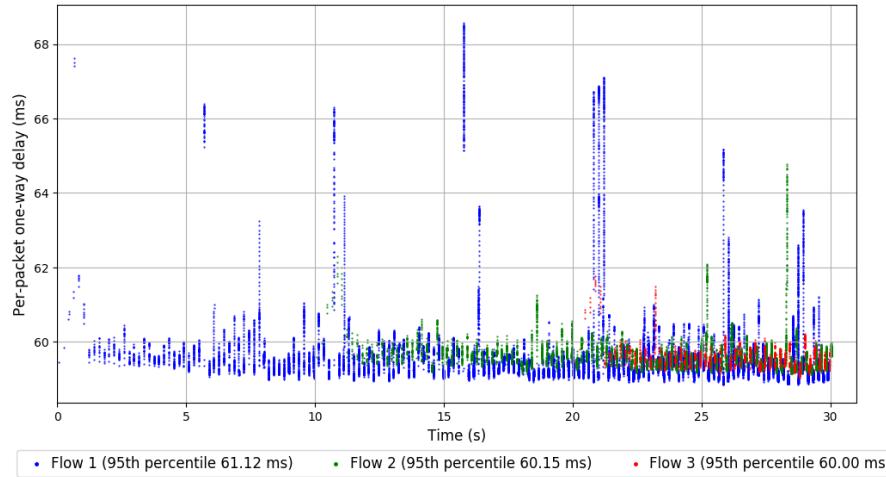
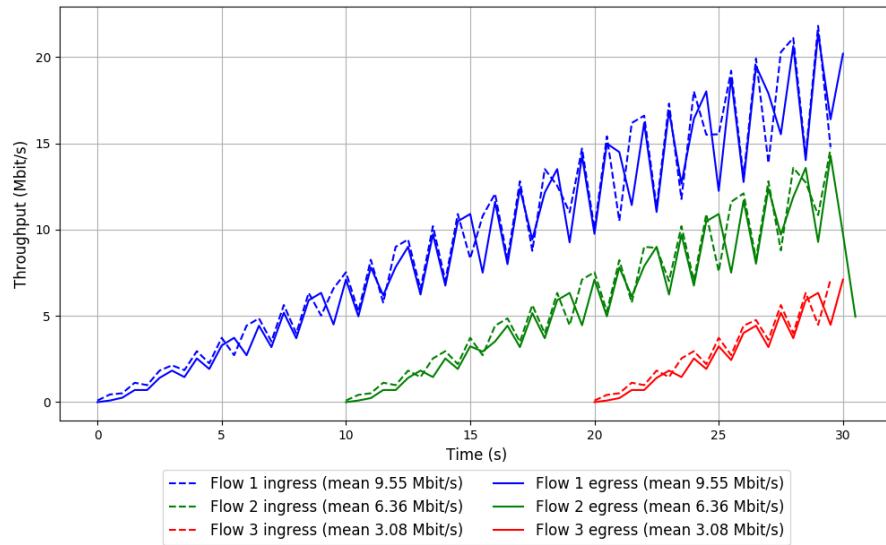


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 01:10:31
End at: 2019-01-25 01:11:01
Local clock offset: 3.227 ms
Remote clock offset: -39.031 ms

# Below is generated by plot.py at 2019-01-25 04:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.76 Mbit/s
95th percentile per-packet one-way delay: 60.622 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 61.121 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.36 Mbit/s
95th percentile per-packet one-way delay: 60.154 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 59.996 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

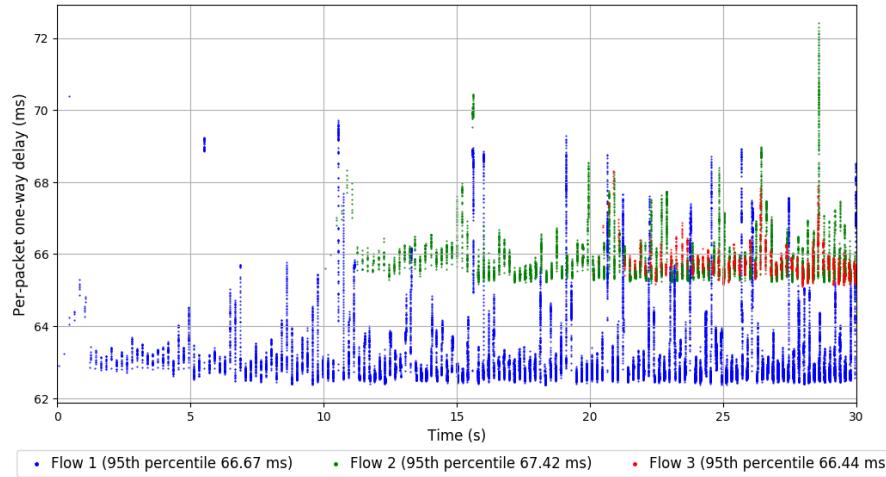
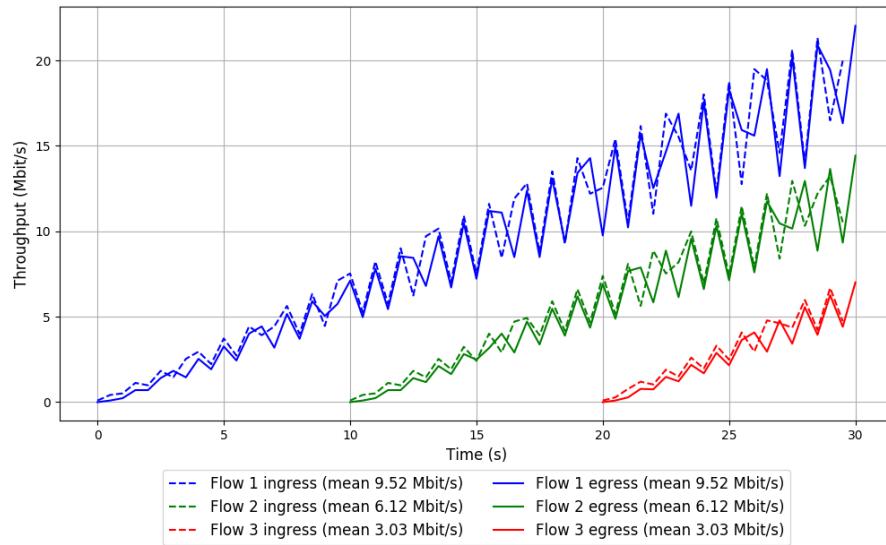


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-25 01:40:57
End at: 2019-01-25 01:41:27
Local clock offset: -2.726 ms
Remote clock offset: -37.215 ms

# Below is generated by plot.py at 2019-01-25 04:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.59 Mbit/s
95th percentile per-packet one-way delay: 66.989 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 66.675 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 67.425 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 66.439 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

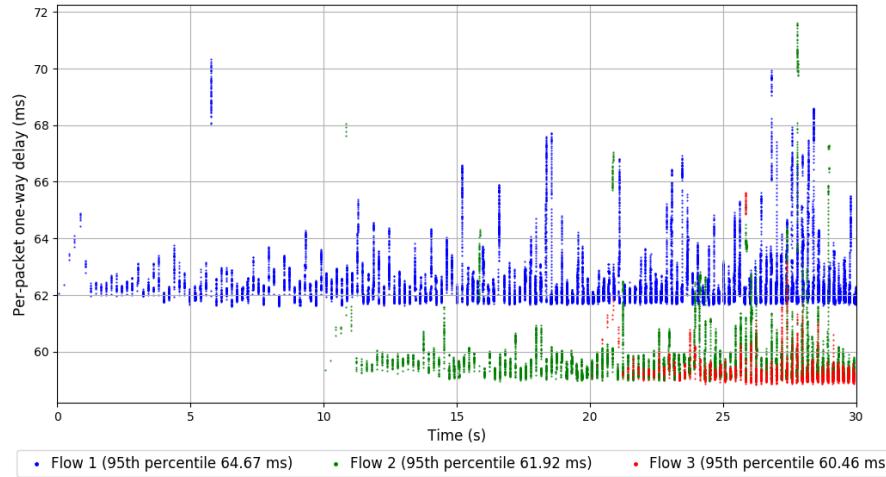
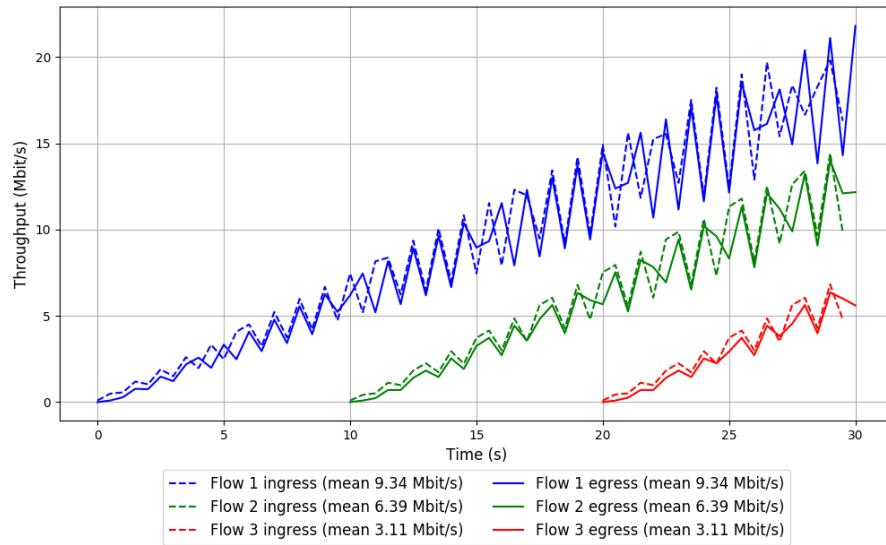


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-25 02:17:16
End at: 2019-01-25 02:17:46
Local clock offset: 0.199 ms
Remote clock offset: -38.445 ms

# Below is generated by plot.py at 2019-01-25 04:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.60 Mbit/s
95th percentile per-packet one-way delay: 64.177 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.34 Mbit/s
95th percentile per-packet one-way delay: 64.671 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 61.924 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 60.458 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

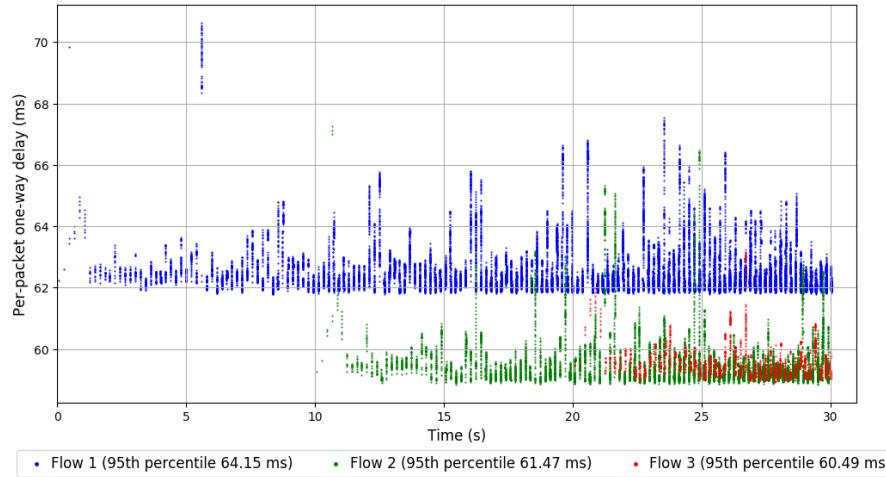
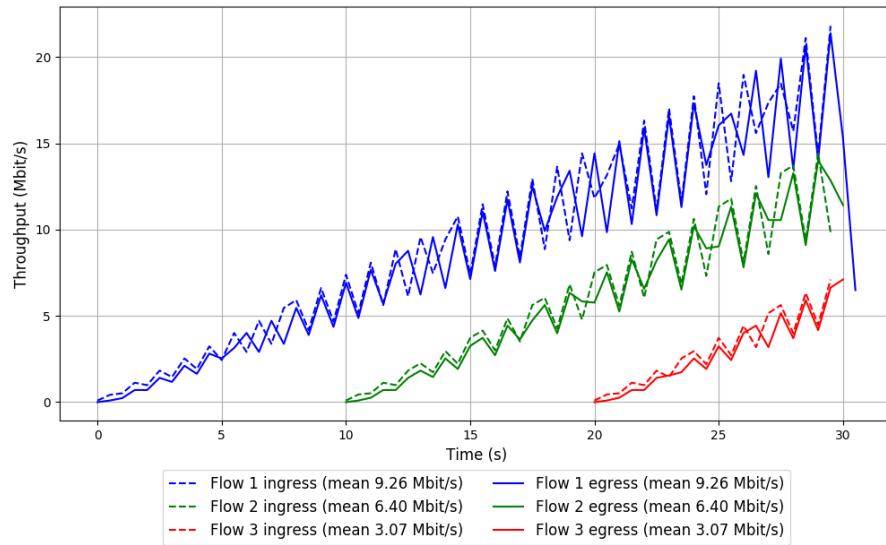


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-25 02:52:59
End at: 2019-01-25 02:53:29
Local clock offset: -0.071 ms
Remote clock offset: -38.521 ms

# Below is generated by plot.py at 2019-01-25 04:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.51 Mbit/s
95th percentile per-packet one-way delay: 63.849 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.26 Mbit/s
95th percentile per-packet one-way delay: 64.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 61.474 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 60.490 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

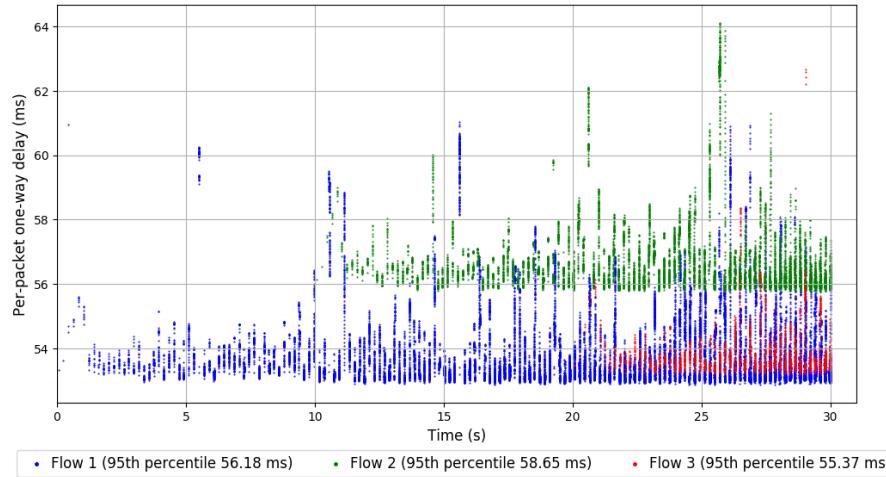
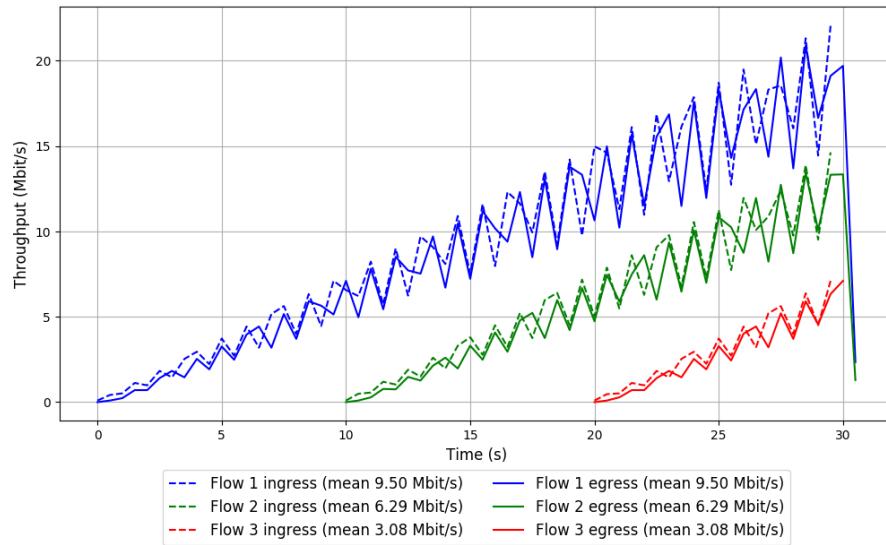


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-25 03:23:57
End at: 2019-01-25 03:24:27
Local clock offset: -1.611 ms
Remote clock offset: -47.223 ms

# Below is generated by plot.py at 2019-01-25 04:36:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.71 Mbit/s
95th percentile per-packet one-way delay: 57.547 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.50 Mbit/s
95th percentile per-packet one-way delay: 56.182 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 58.652 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 55.369 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

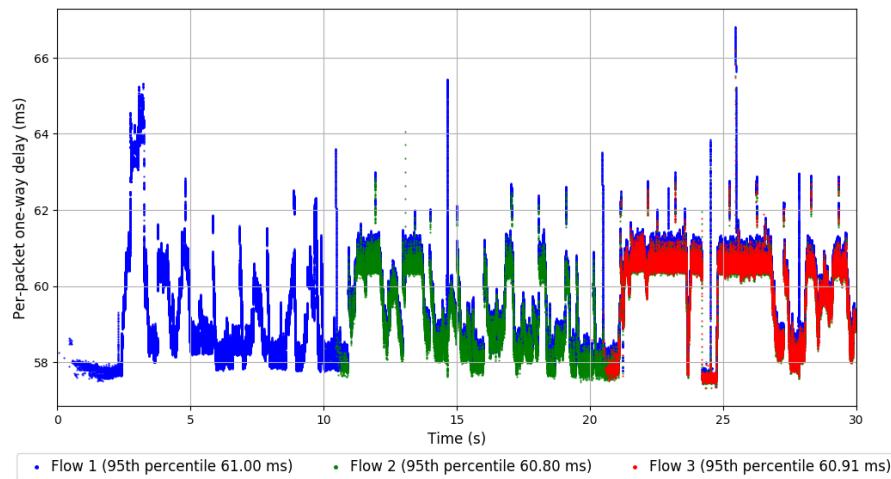
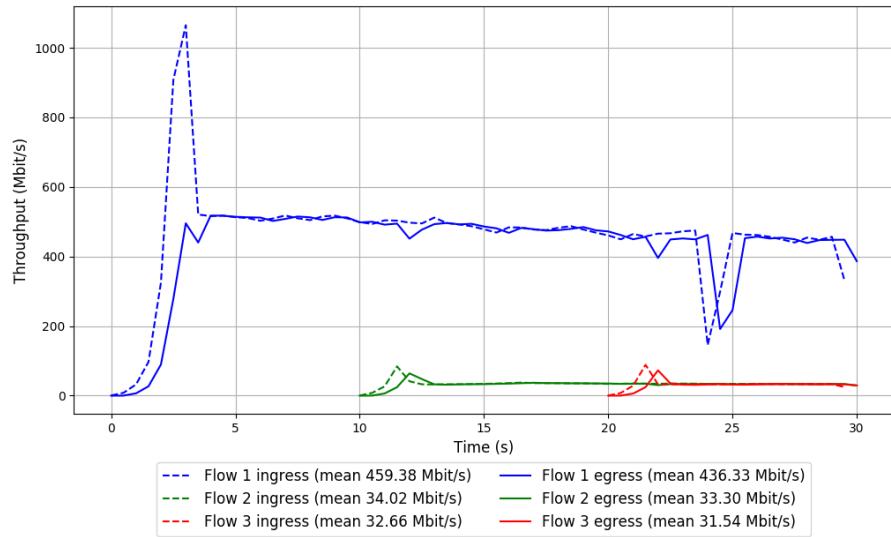


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-25 01:16:28
End at: 2019-01-25 01:16:58
Local clock offset: 1.924 ms
Remote clock offset: -40.021 ms

# Below is generated by plot.py at 2019-01-25 04:38:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.88 Mbit/s
95th percentile per-packet one-way delay: 60.986 ms
Loss rate: 4.85%
-- Flow 1:
Average throughput: 436.33 Mbit/s
95th percentile per-packet one-way delay: 60.996 ms
Loss rate: 5.01%
-- Flow 2:
Average throughput: 33.30 Mbit/s
95th percentile per-packet one-way delay: 60.804 ms
Loss rate: 2.12%
-- Flow 3:
Average throughput: 31.54 Mbit/s
95th percentile per-packet one-way delay: 60.905 ms
Loss rate: 3.43%
```

Run 1: Report of PCC-Allegro — Data Link

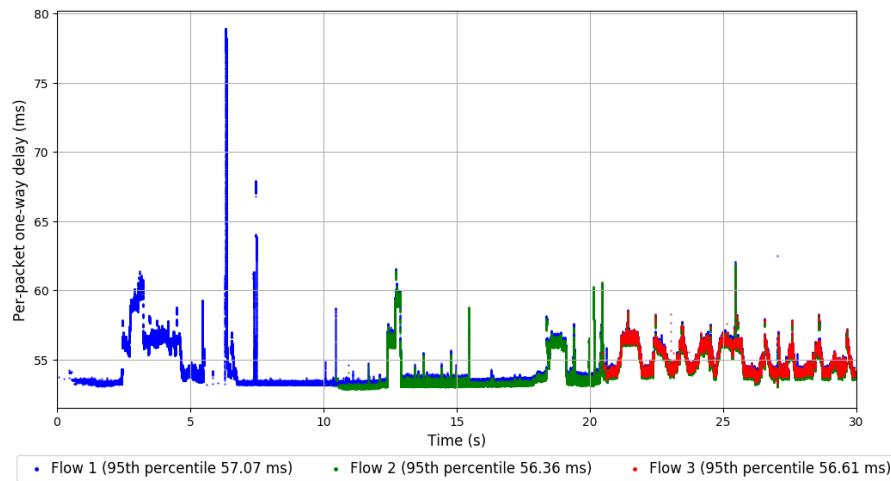
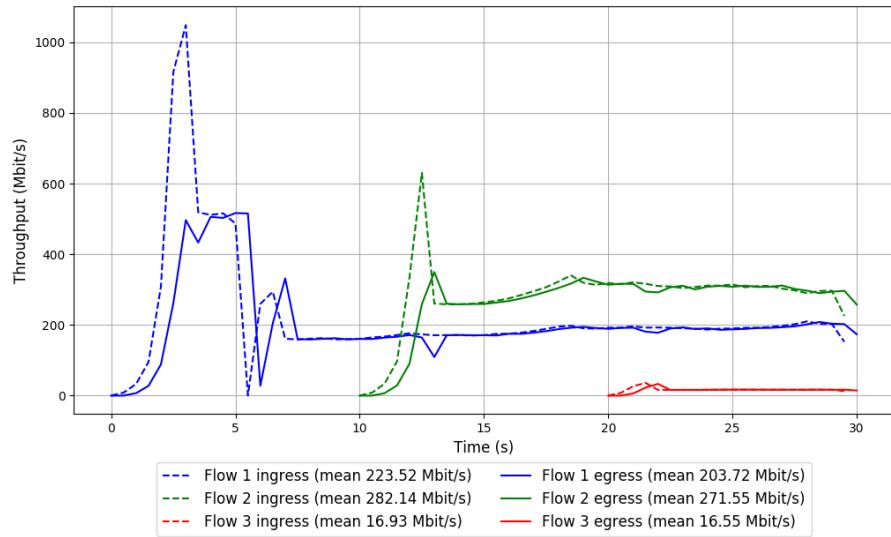


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-25 01:46:53
End at: 2019-01-25 01:47:23
Local clock offset: -1.413 ms
Remote clock offset: -44.99 ms

# Below is generated by plot.py at 2019-01-25 04:38:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.76 Mbit/s
95th percentile per-packet one-way delay: 56.627 ms
Loss rate: 6.47%
-- Flow 1:
Average throughput: 203.72 Mbit/s
95th percentile per-packet one-way delay: 57.073 ms
Loss rate: 8.86%
-- Flow 2:
Average throughput: 271.55 Mbit/s
95th percentile per-packet one-way delay: 56.362 ms
Loss rate: 3.75%
-- Flow 3:
Average throughput: 16.55 Mbit/s
95th percentile per-packet one-way delay: 56.606 ms
Loss rate: 2.24%
```

Run 2: Report of PCC-Allegro — Data Link

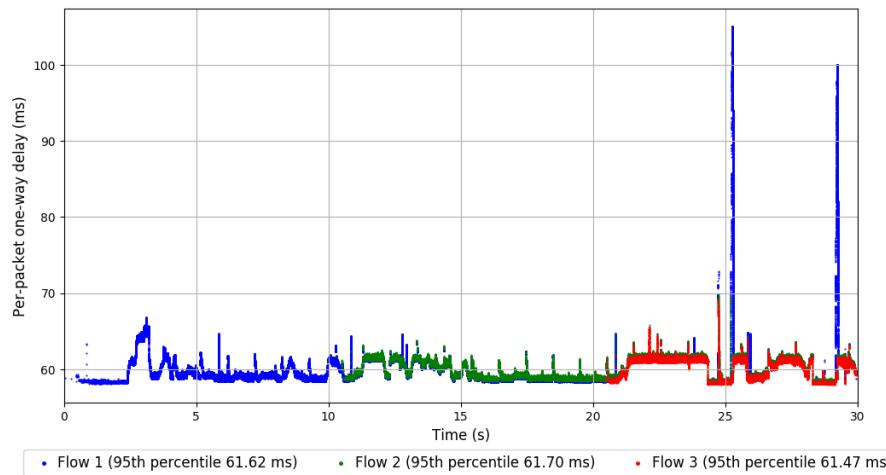
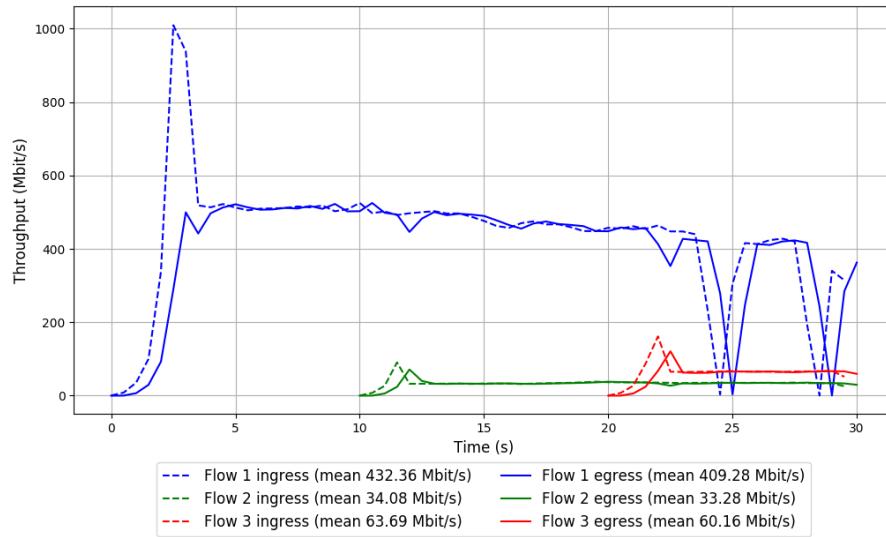


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-25 02:23:14
End at: 2019-01-25 02:23:44
Local clock offset: -0.848 ms
Remote clock offset: -40.089 ms

# Below is generated by plot.py at 2019-01-25 04:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.25 Mbit/s
95th percentile per-packet one-way delay: 61.629 ms
Loss rate: 5.21%
-- Flow 1:
Average throughput: 409.28 Mbit/s
95th percentile per-packet one-way delay: 61.623 ms
Loss rate: 5.34%
-- Flow 2:
Average throughput: 33.28 Mbit/s
95th percentile per-packet one-way delay: 61.702 ms
Loss rate: 2.37%
-- Flow 3:
Average throughput: 60.16 Mbit/s
95th percentile per-packet one-way delay: 61.467 ms
Loss rate: 5.55%
```

Run 3: Report of PCC-Allegro — Data Link

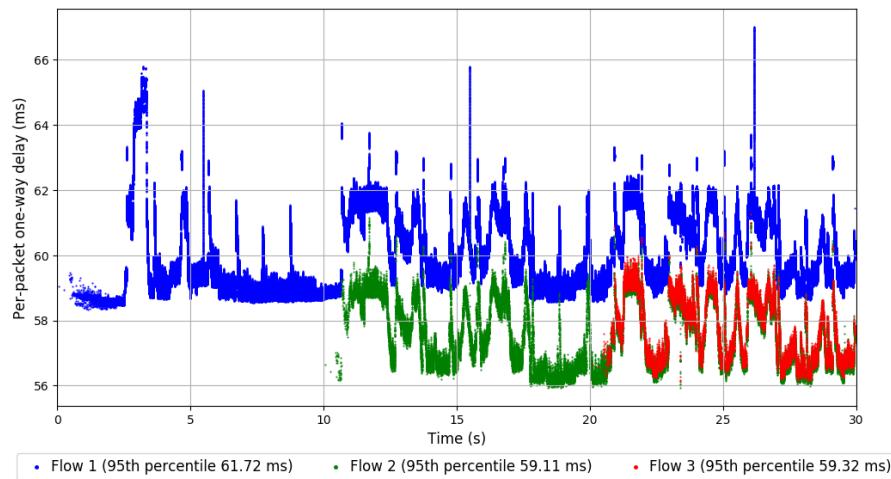
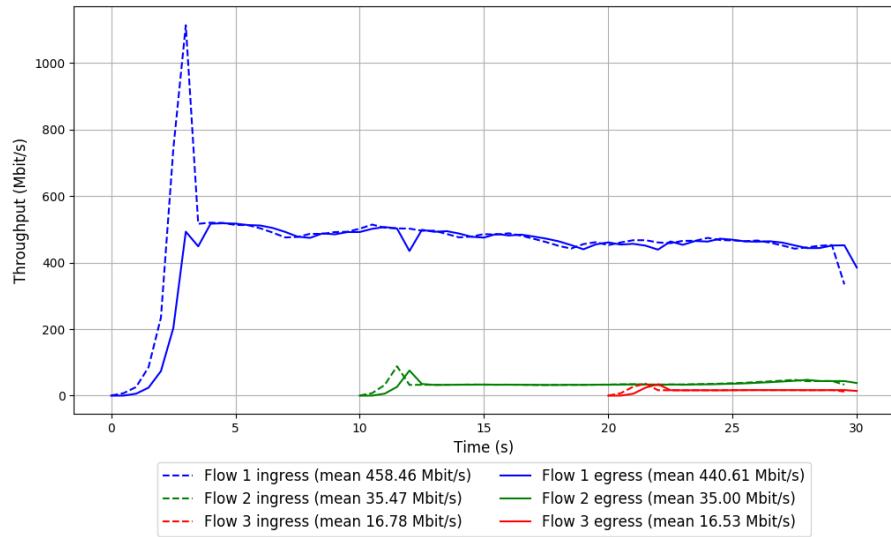


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-25 02:58:58
End at: 2019-01-25 02:59:29
Local clock offset: -2.229 ms
Remote clock offset: -43.805 ms

# Below is generated by plot.py at 2019-01-25 04:40:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 469.33 Mbit/s
95th percentile per-packet one-way delay: 61.709 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 440.61 Mbit/s
95th percentile per-packet one-way delay: 61.724 ms
Loss rate: 3.89%
-- Flow 2:
Average throughput: 35.00 Mbit/s
95th percentile per-packet one-way delay: 59.106 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 16.53 Mbit/s
95th percentile per-packet one-way delay: 59.321 ms
Loss rate: 1.48%
```

Run 4: Report of PCC-Allegro — Data Link

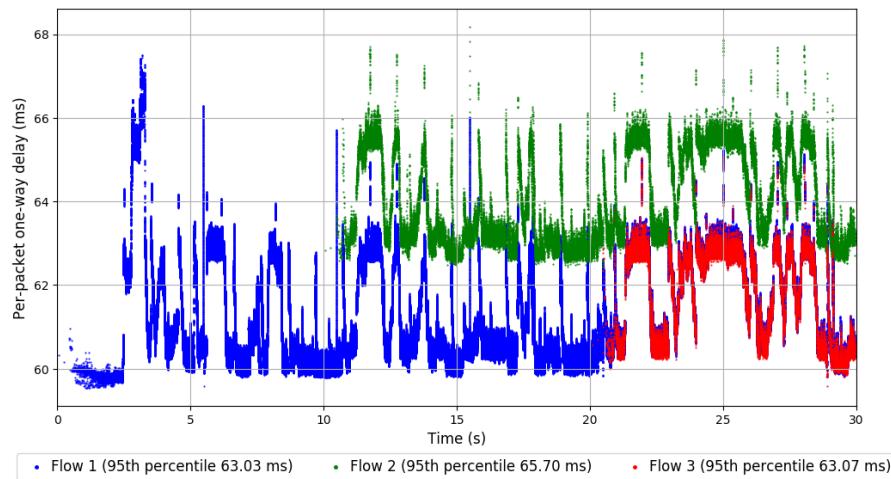
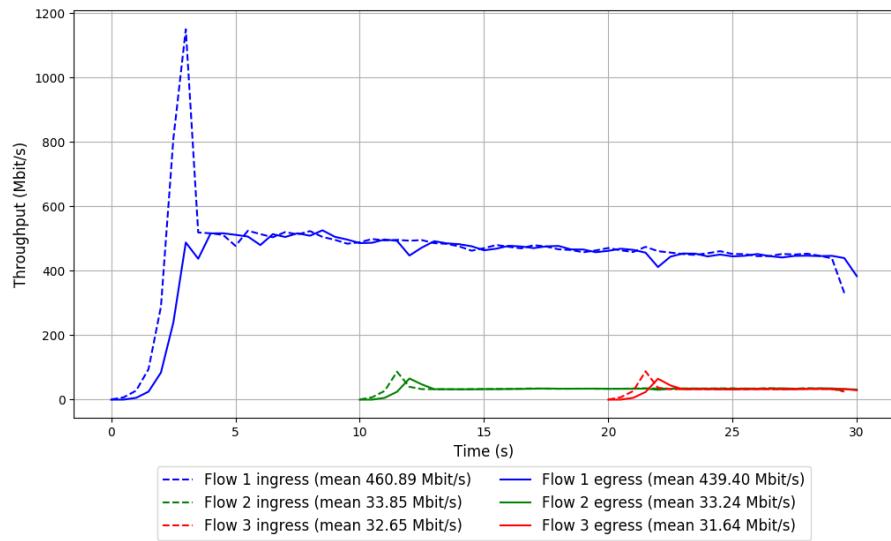


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-25 03:29:55
End at: 2019-01-25 03:30:25
Local clock offset: 1.042 ms
Remote clock offset: -37.599 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.92 Mbit/s
95th percentile per-packet one-way delay: 63.363 ms
Loss rate: 4.50%
-- Flow 1:
Average throughput: 439.40 Mbit/s
95th percentile per-packet one-way delay: 63.029 ms
Loss rate: 4.66%
-- Flow 2:
Average throughput: 33.24 Mbit/s
95th percentile per-packet one-way delay: 65.699 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 63.067 ms
Loss rate: 3.09%
```

Run 5: Report of PCC-Allegro — Data Link

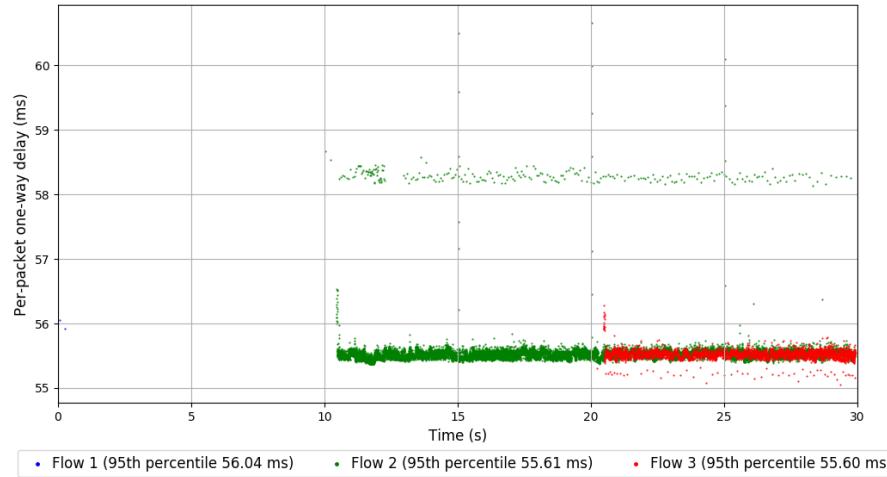
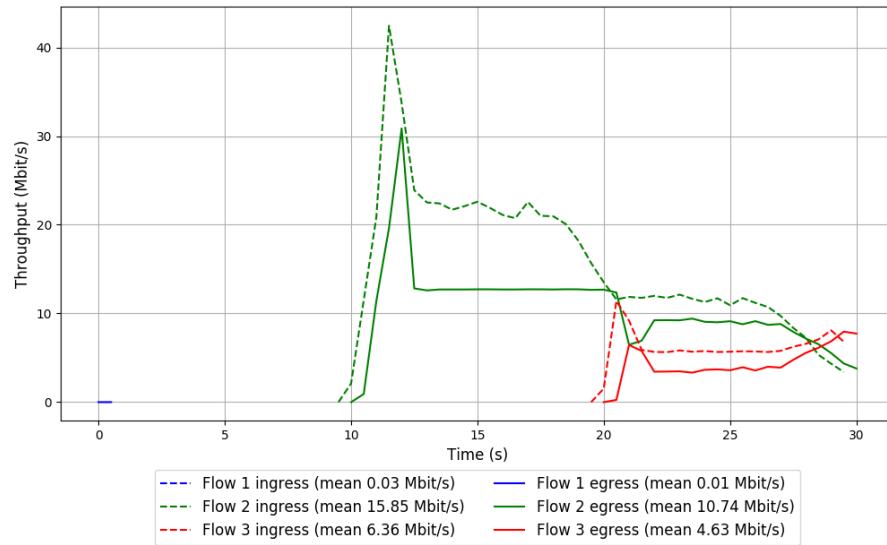


Run 1: Statistics of PCC-Expr

```
Start at: 2019-01-25 01:21:13
End at: 2019-01-25 01:21:43
Local clock offset: 2.48 ms
Remote clock offset: -40.72 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 55.611 ms
Loss rate: 31.42%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.044 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.74 Mbit/s
95th percentile per-packet one-way delay: 55.612 ms
Loss rate: 32.26%
-- Flow 3:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 55.601 ms
Loss rate: 27.17%
```

Run 1: Report of PCC-Expr — Data Link

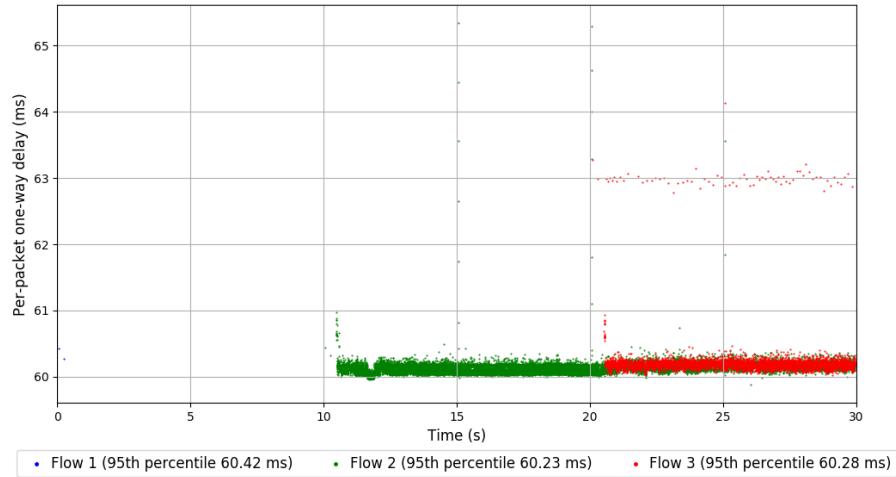
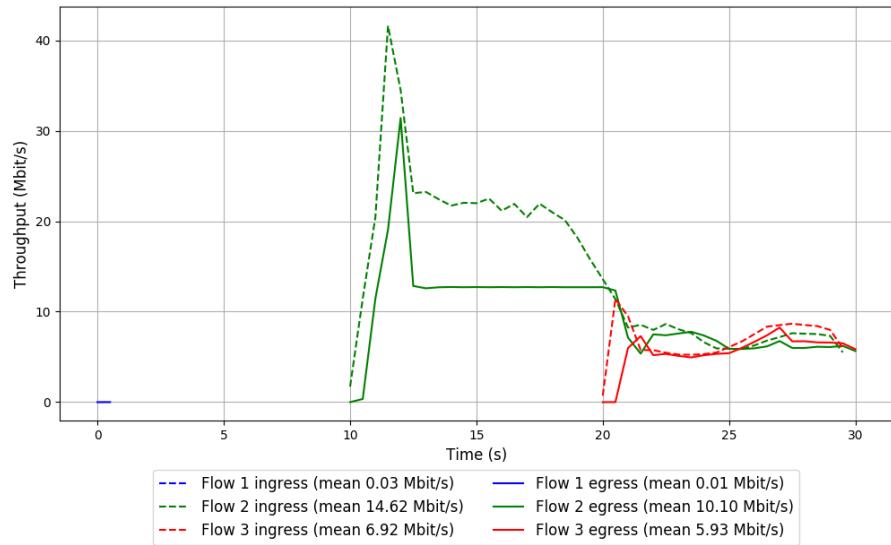


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-25 01:51:37
End at: 2019-01-25 01:52:07
Local clock offset: -2.101 ms
Remote clock offset: -38.642 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 60.245 ms
Loss rate: 27.77%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 60.419 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.10 Mbit/s
95th percentile per-packet one-way delay: 60.229 ms
Loss rate: 30.94%
-- Flow 3:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 60.284 ms
Loss rate: 14.28%
```

Run 2: Report of PCC-Expr — Data Link

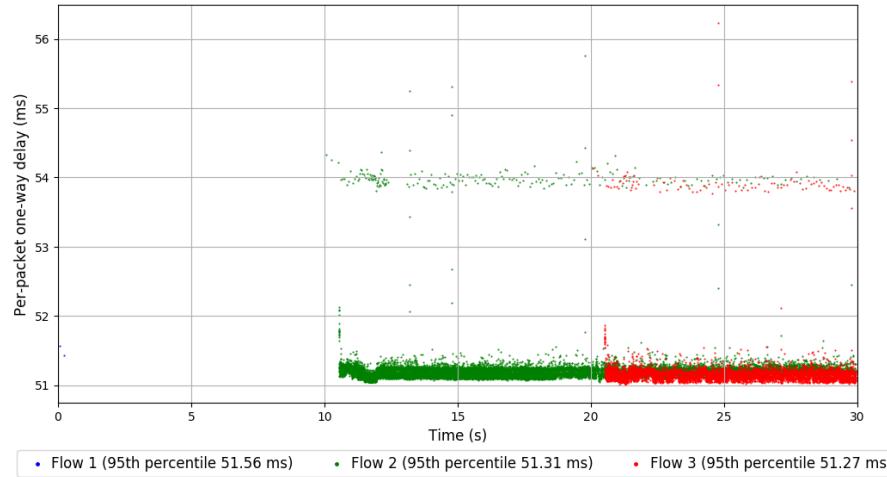
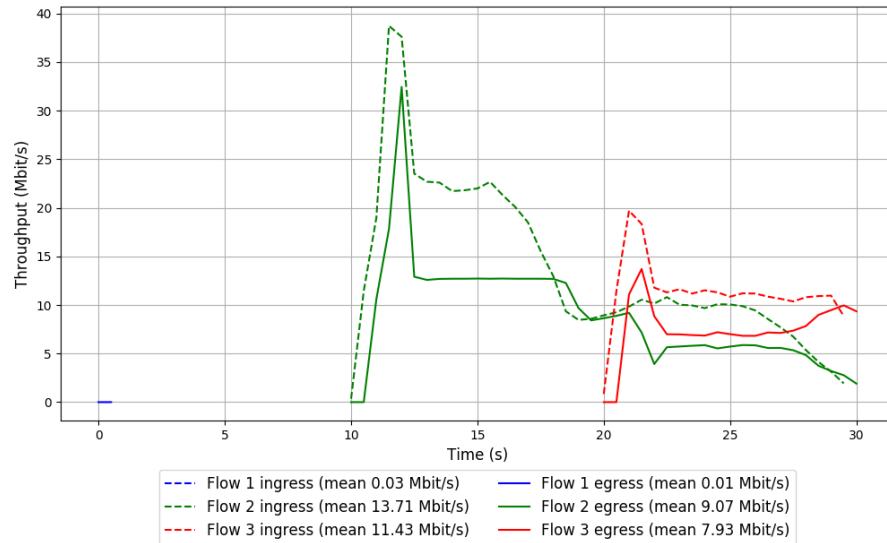


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-25 02:28:00
End at: 2019-01-25 02:28:30
Local clock offset: 1.09 ms
Remote clock offset: -45.324 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 51.303 ms
Loss rate: 32.92%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 51.561 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 51.309 ms
Loss rate: 33.85%
-- Flow 3:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 51.272 ms
Loss rate: 30.65%
```

Run 3: Report of PCC-Expr — Data Link

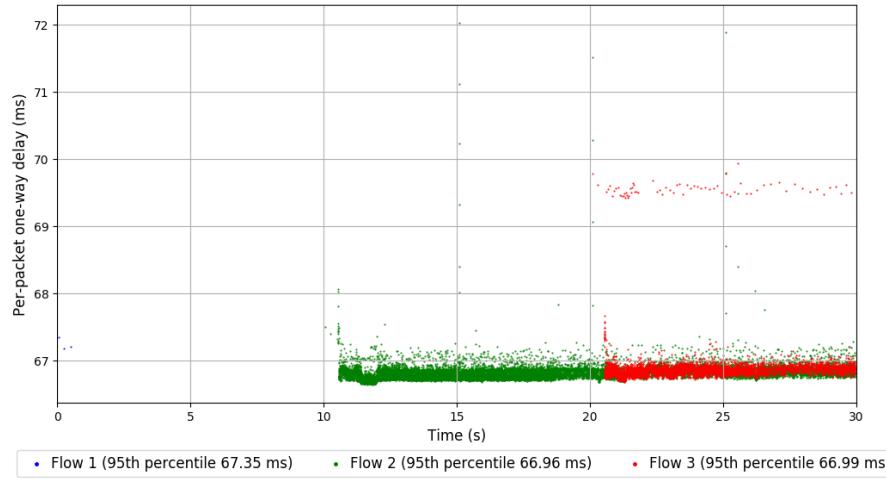
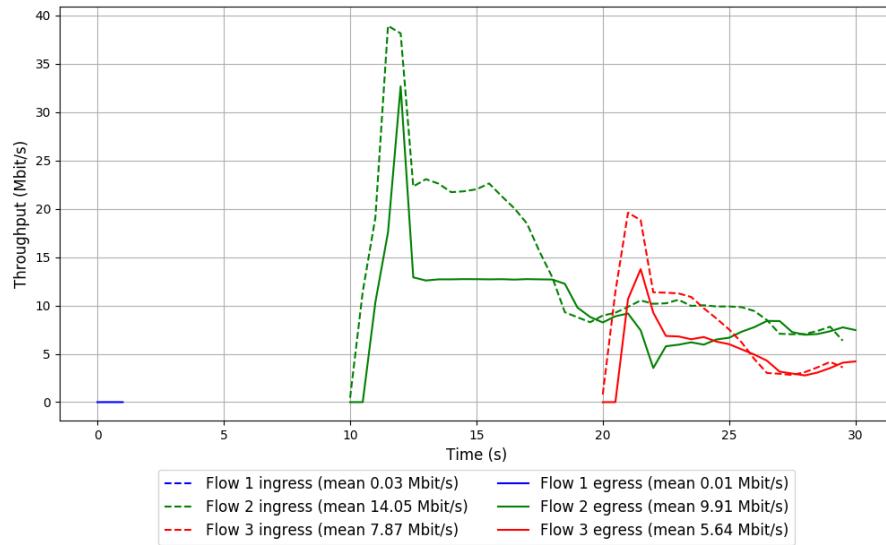


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-25 03:03:43
End at: 2019-01-25 03:04:13
Local clock offset: -1.254 ms
Remote clock offset: -32.452 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 66.968 ms
Loss rate: 29.24%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 67.351 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 9.91 Mbit/s
95th percentile per-packet one-way delay: 66.956 ms
Loss rate: 29.49%
-- Flow 3:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 66.991 ms
Loss rate: 28.31%
```

Run 4: Report of PCC-Expr — Data Link

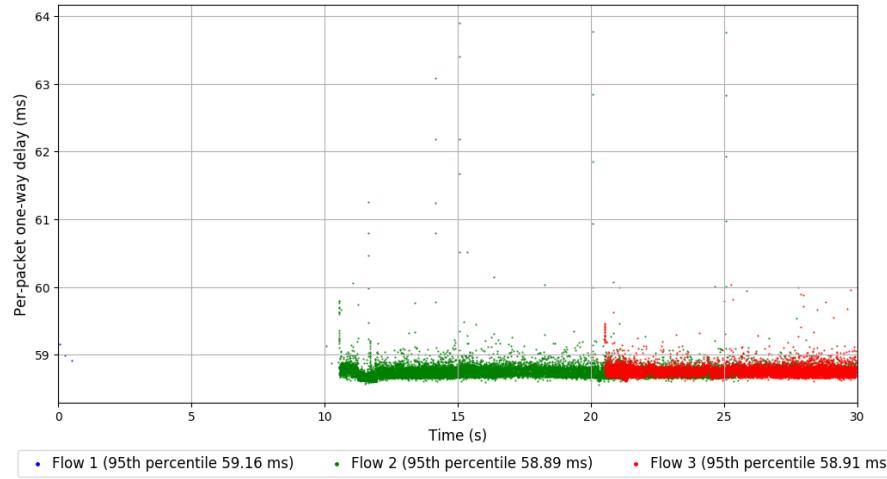
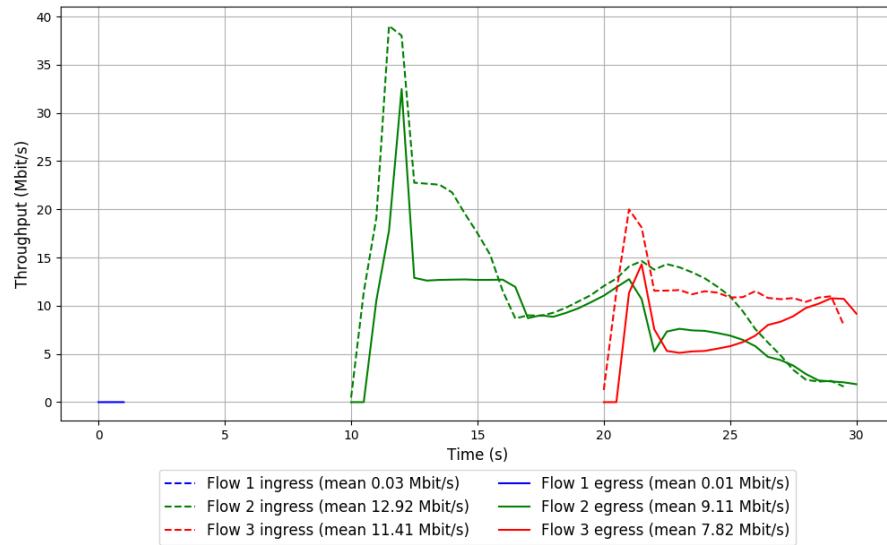


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-25 03:40:12
End at: 2019-01-25 03:40:42
Local clock offset: 1.134 ms
Remote clock offset: -38.677 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.64 Mbit/s
95th percentile per-packet one-way delay: 58.895 ms
Loss rate: 30.06%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 59.159 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 58.888 ms
Loss rate: 29.46%
-- Flow 3:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 58.910 ms
Loss rate: 31.41%
```

Run 5: Report of PCC-Expr — Data Link

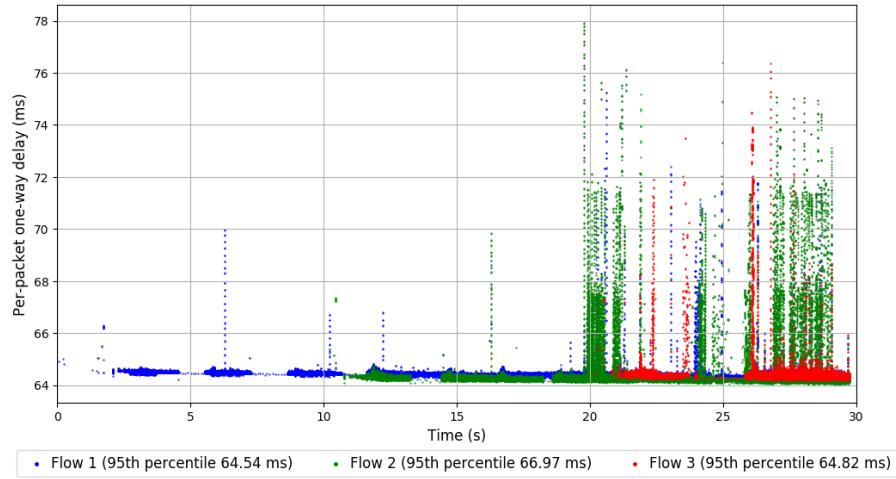
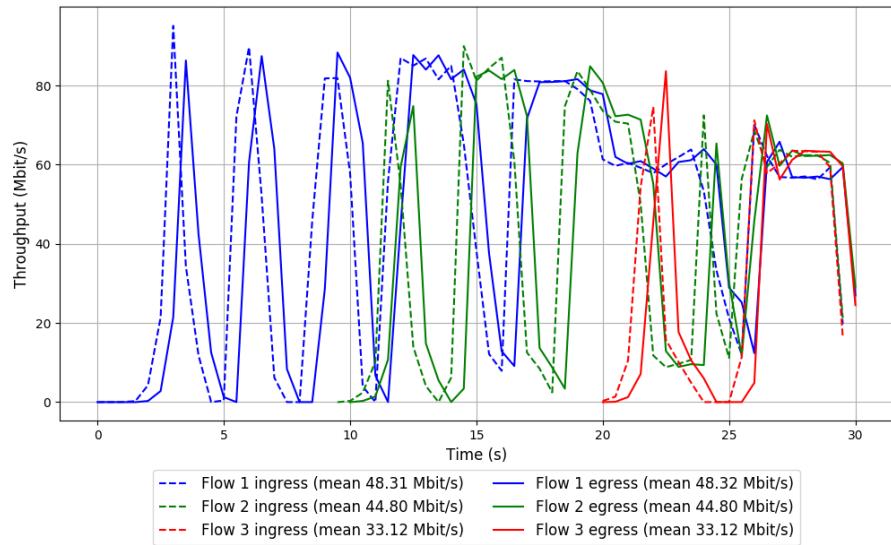


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-01-25 01:07:29
End at: 2019-01-25 01:07:59
Local clock offset: 4.466 ms
Remote clock offset: -33.918 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.84 Mbit/s
95th percentile per-packet one-way delay: 64.812 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.32 Mbit/s
95th percentile per-packet one-way delay: 64.542 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 66.969 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.12 Mbit/s
95th percentile per-packet one-way delay: 64.824 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

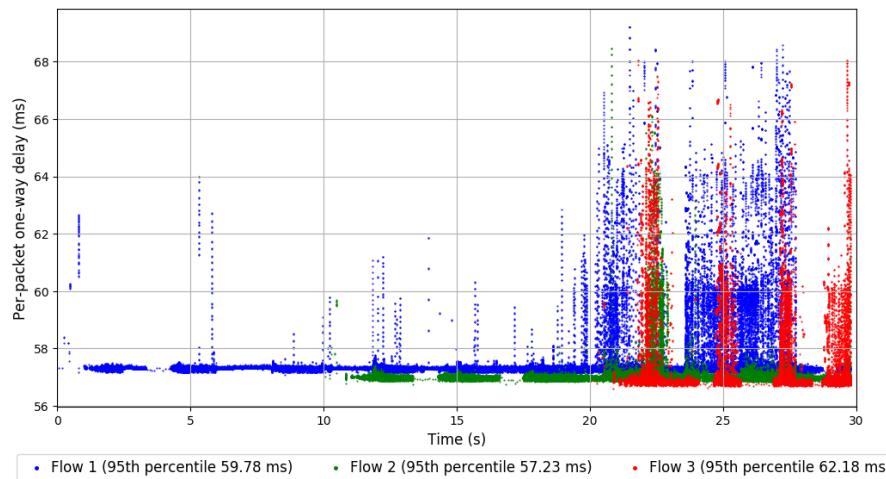
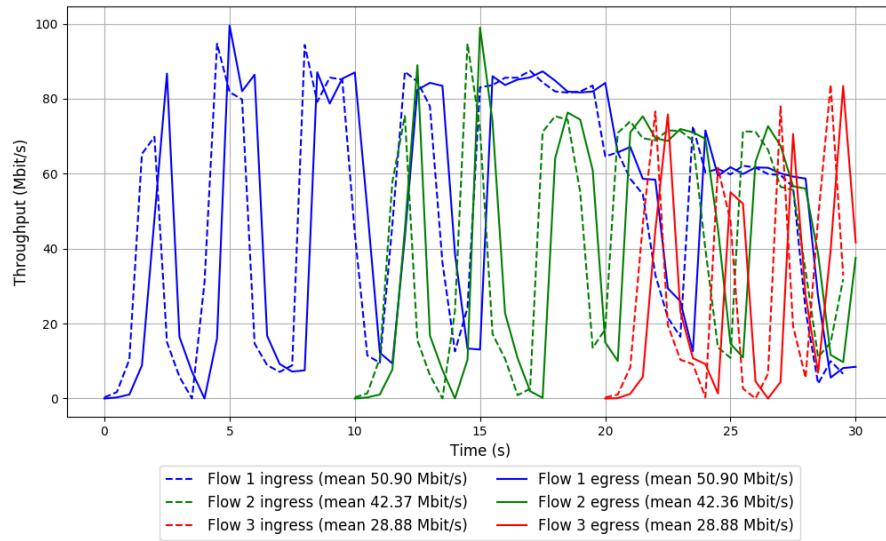


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-25 01:38:01
End at: 2019-01-25 01:38:31
Local clock offset: -0.035 ms
Remote clock offset: -40.1 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.36 Mbit/s
95th percentile per-packet one-way delay: 59.602 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 50.90 Mbit/s
95th percentile per-packet one-way delay: 59.780 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.36 Mbit/s
95th percentile per-packet one-way delay: 57.226 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 62.178 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

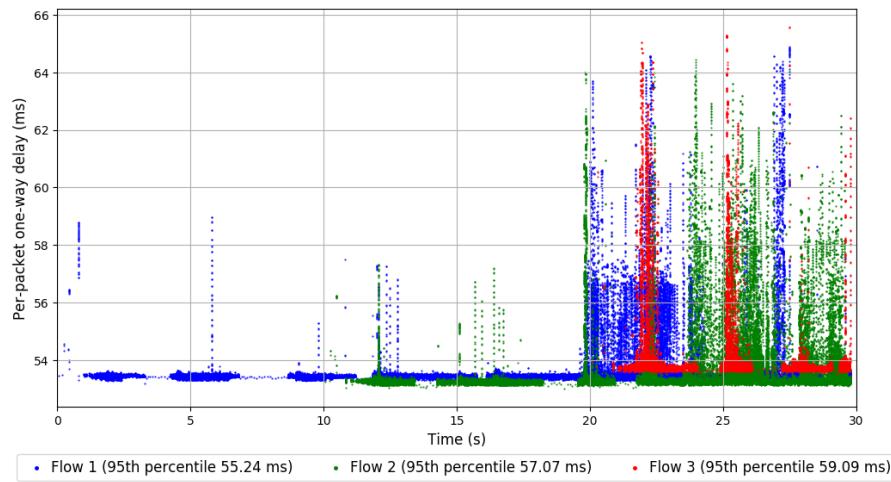
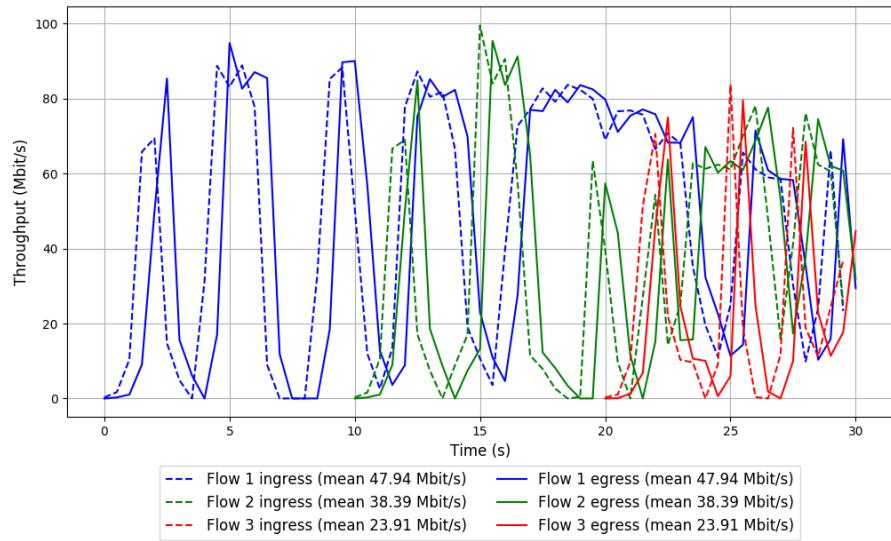


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-25 02:14:21
End at: 2019-01-25 02:14:51
Local clock offset: -0.913 ms
Remote clock offset: -45.096 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.16 Mbit/s
95th percentile per-packet one-way delay: 56.317 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.94 Mbit/s
95th percentile per-packet one-way delay: 55.244 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.39 Mbit/s
95th percentile per-packet one-way delay: 57.066 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.91 Mbit/s
95th percentile per-packet one-way delay: 59.095 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

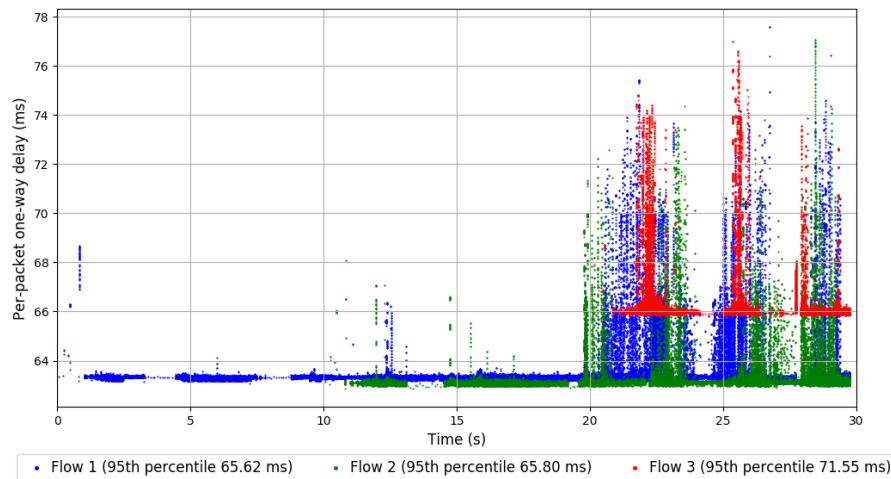
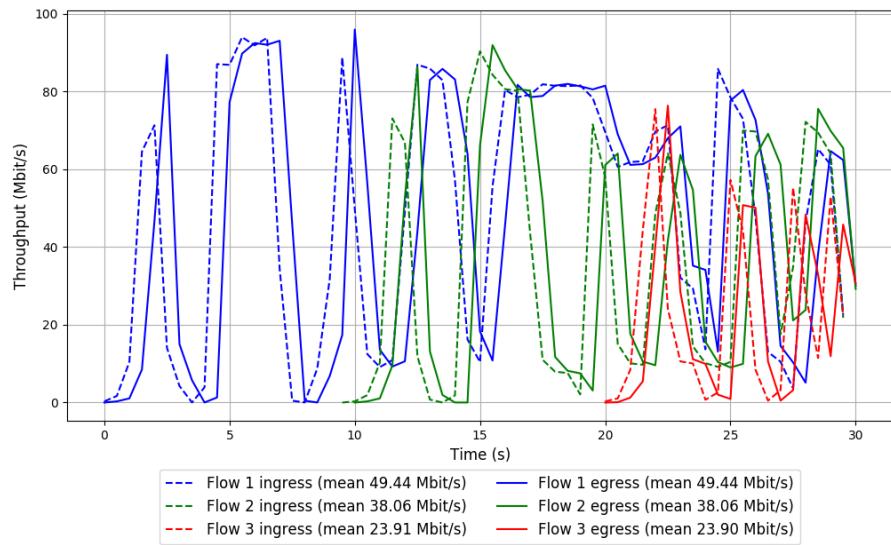


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-25 02:50:02
End at: 2019-01-25 02:50:32
Local clock offset: -2.966 ms
Remote clock offset: -37.209 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.44 Mbit/s
95th percentile per-packet one-way delay: 66.600 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 49.44 Mbit/s
95th percentile per-packet one-way delay: 65.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.06 Mbit/s
95th percentile per-packet one-way delay: 65.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.90 Mbit/s
95th percentile per-packet one-way delay: 71.547 ms
Loss rate: 0.06%
```

Run 4: Report of QUIC Cubic — Data Link

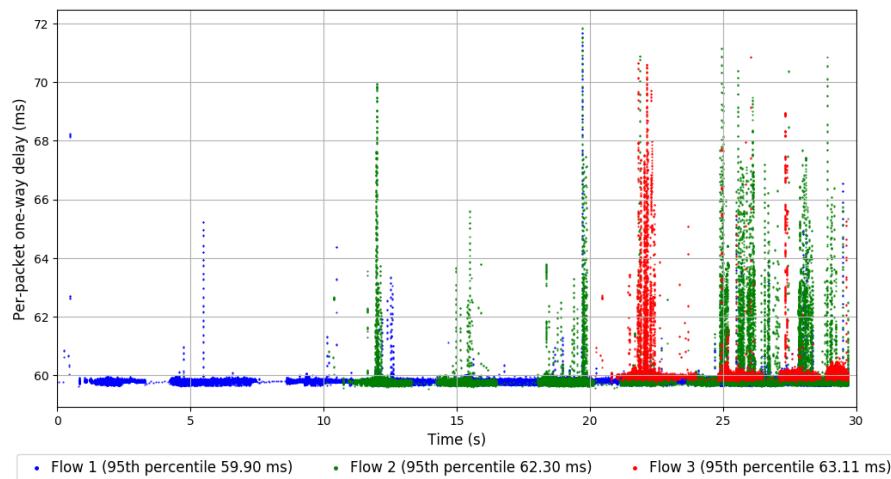
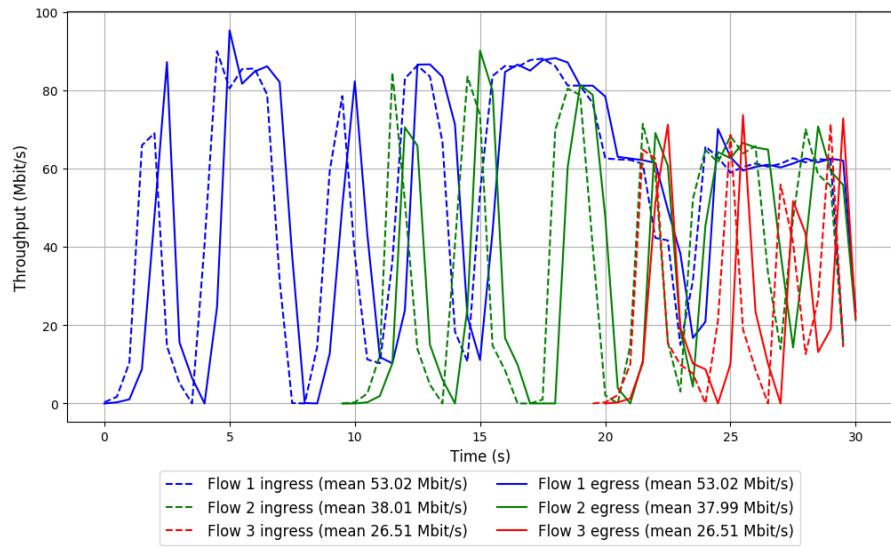


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-25 03:21:02
End at: 2019-01-25 03:21:32
Local clock offset: -0.389 ms
Remote clock offset: -39.179 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.91 Mbit/s
95th percentile per-packet one-way delay: 60.266 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.02 Mbit/s
95th percentile per-packet one-way delay: 59.902 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.99 Mbit/s
95th percentile per-packet one-way delay: 62.304 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 26.51 Mbit/s
95th percentile per-packet one-way delay: 63.113 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

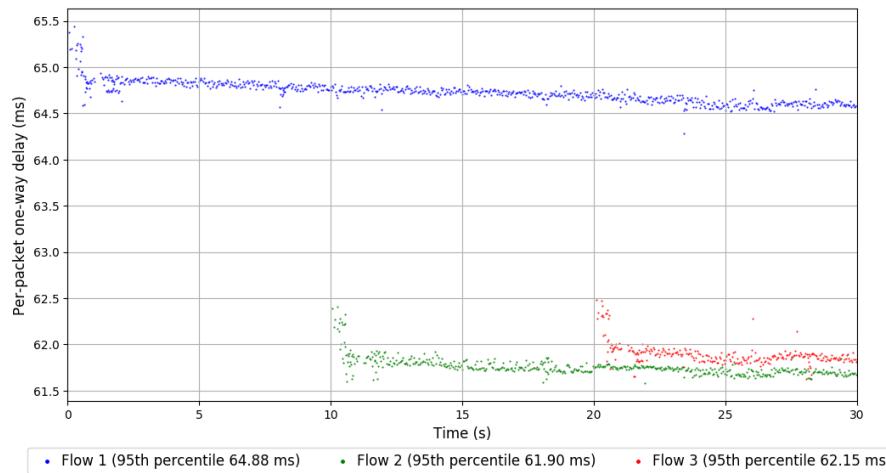
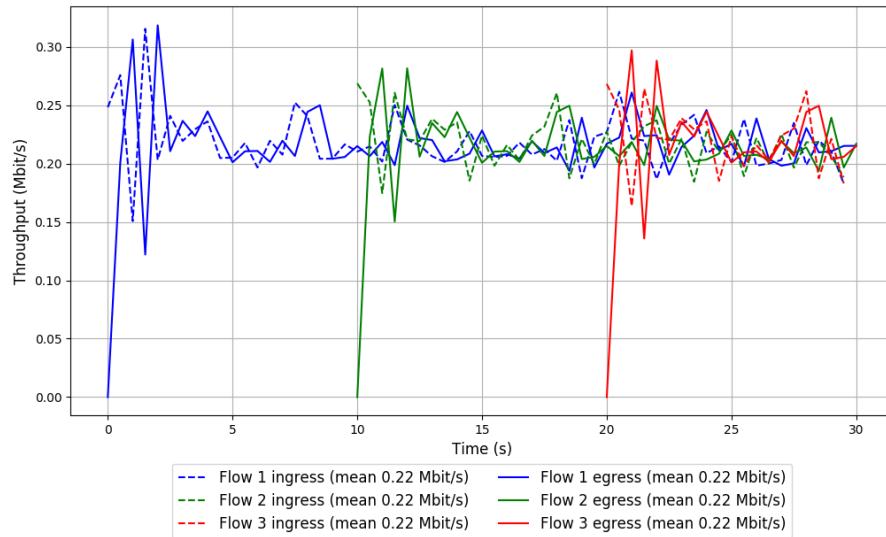


```
Run 1: Statistics of SCReAM

Start at: 2019-01-25 01:06:13
End at: 2019-01-25 01:06:43
Local clock offset: 0.288 ms
Remote clock offset: -41.393 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 64.854 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.882 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.903 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.145 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

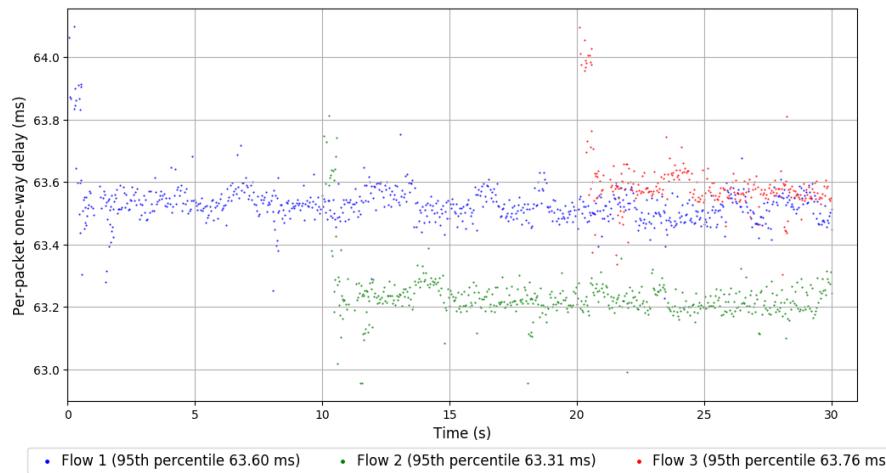
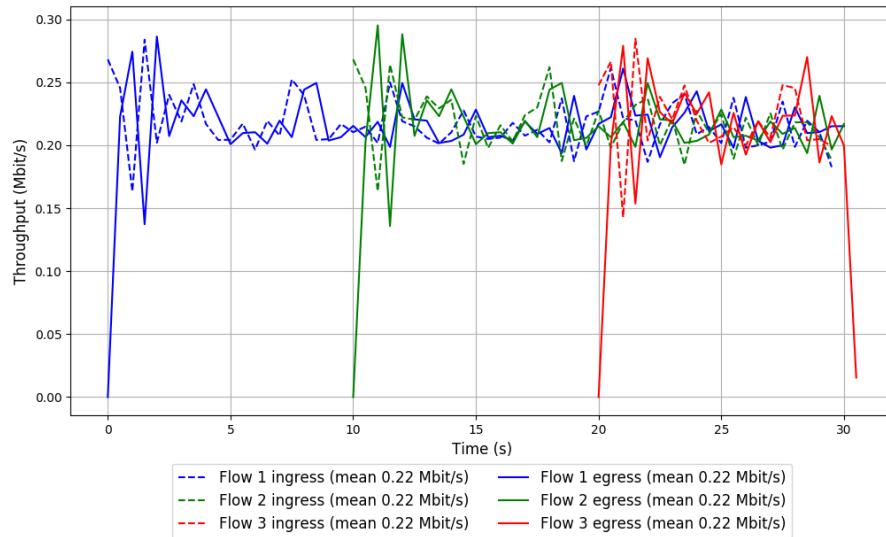


Run 2: Statistics of SCReAM

```
Start at: 2019-01-25 01:36:45
End at: 2019-01-25 01:37:15
Local clock offset: 0.135 ms
Remote clock offset: -33.596 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.600 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.310 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.764 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

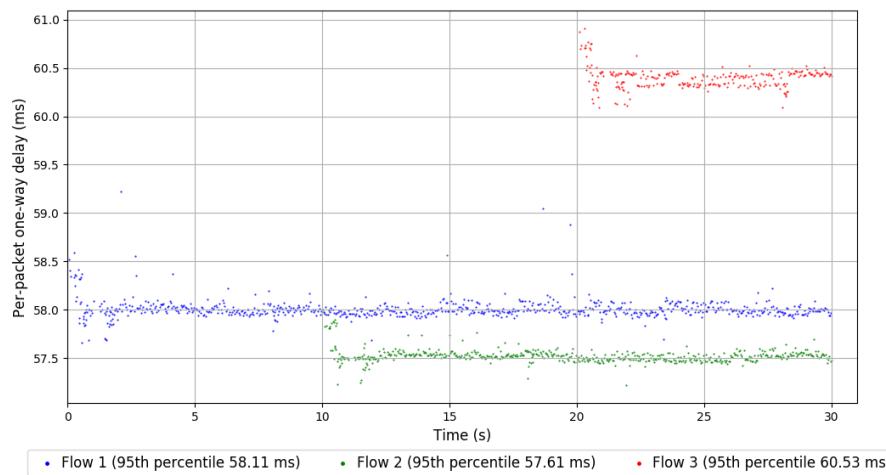
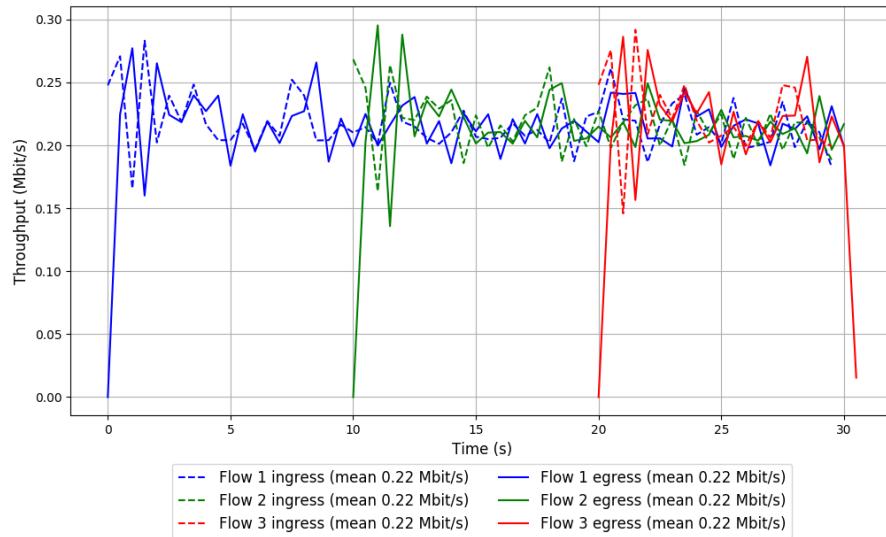


Run 3: Statistics of SCReAM

```
Start at: 2019-01-25 02:13:05
End at: 2019-01-25 02:13:35
Local clock offset: -0.687 ms
Remote clock offset: -40.936 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 60.440 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.108 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.613 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.534 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

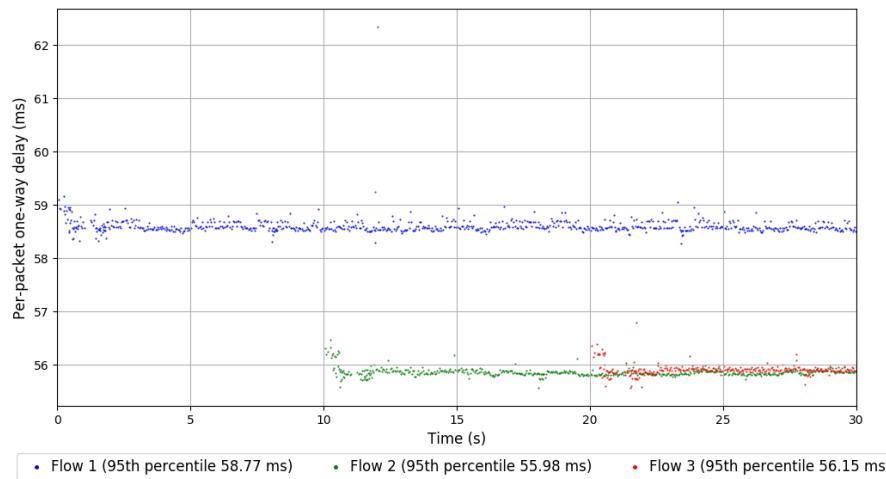
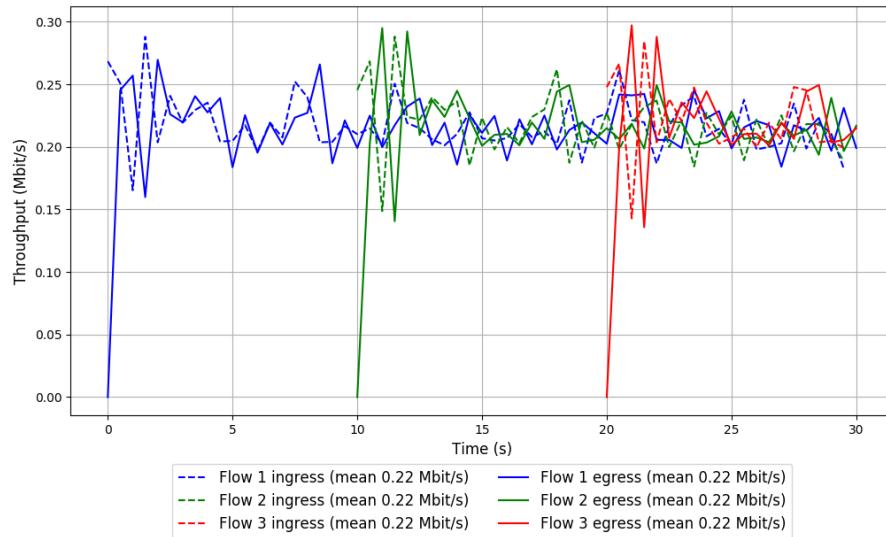


Run 4: Statistics of SCReAM

```
Start at: 2019-01-25 02:48:46
End at: 2019-01-25 02:49:16
Local clock offset: -2.566 ms
Remote clock offset: -44.395 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 58.710 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.767 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 55.975 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.146 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

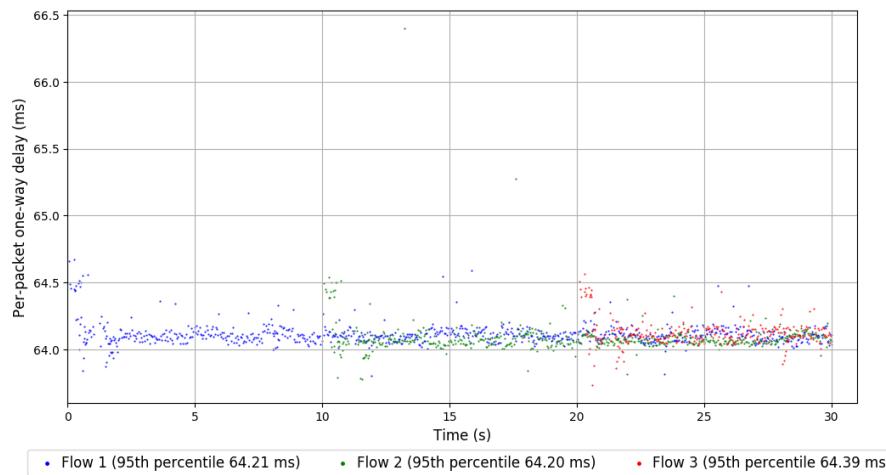
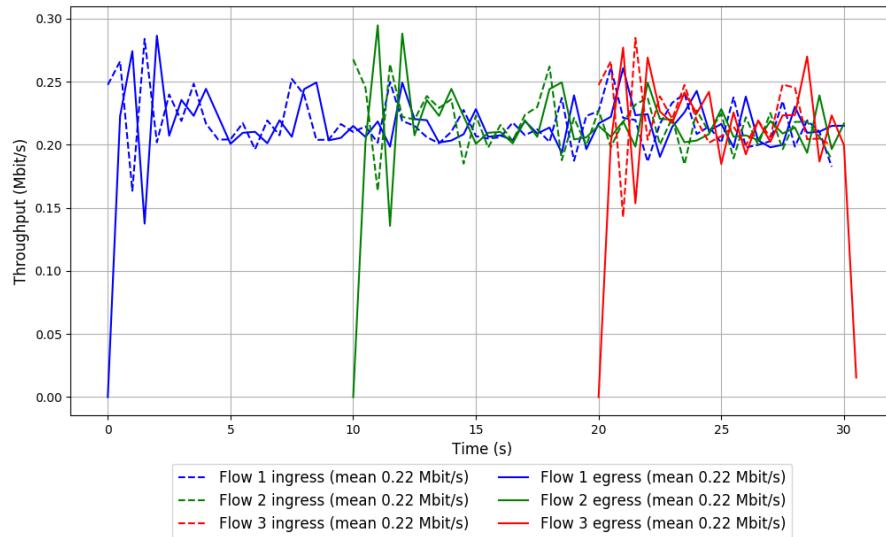


Run 5: Statistics of SCReAM

```
Start at: 2019-01-25 03:19:46
End at: 2019-01-25 03:20:16
Local clock offset: 0.693 ms
Remote clock offset: -34.089 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 64.249 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.214 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.200 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.390 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

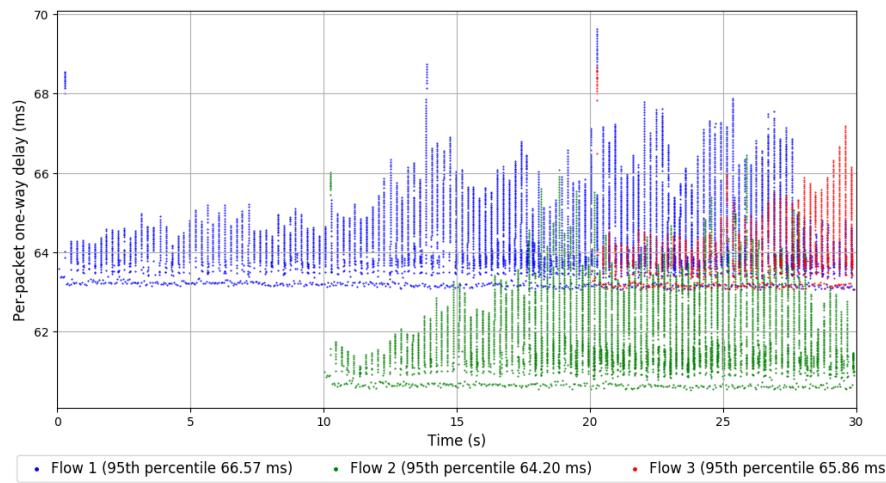
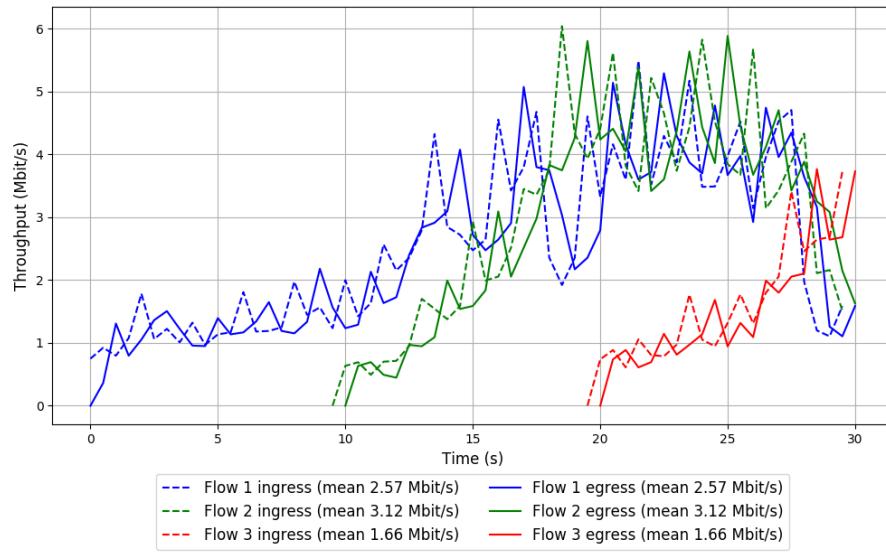


Run 1: Statistics of Sprout

```
Start at: 2019-01-25 01:26:48
End at: 2019-01-25 01:27:18
Local clock offset: -1.999 ms
Remote clock offset: -39.254 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.20 Mbit/s
95th percentile per-packet one-way delay: 66.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 66.570 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 64.201 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 65.857 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

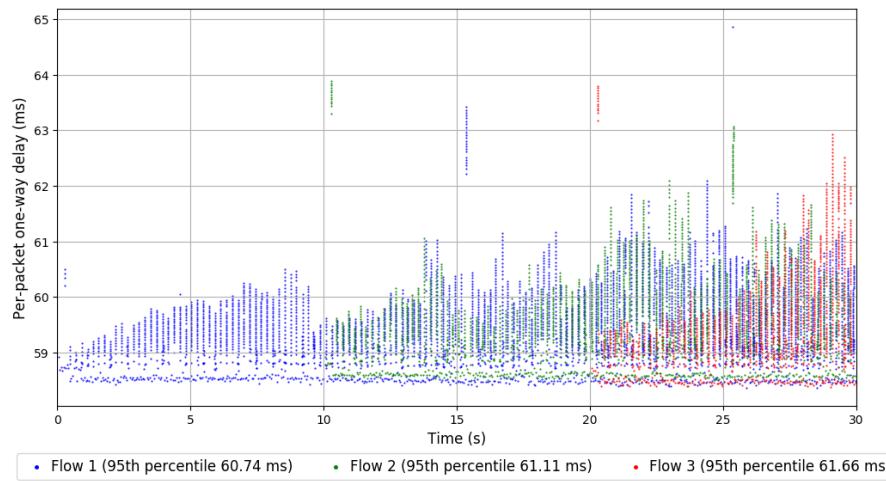
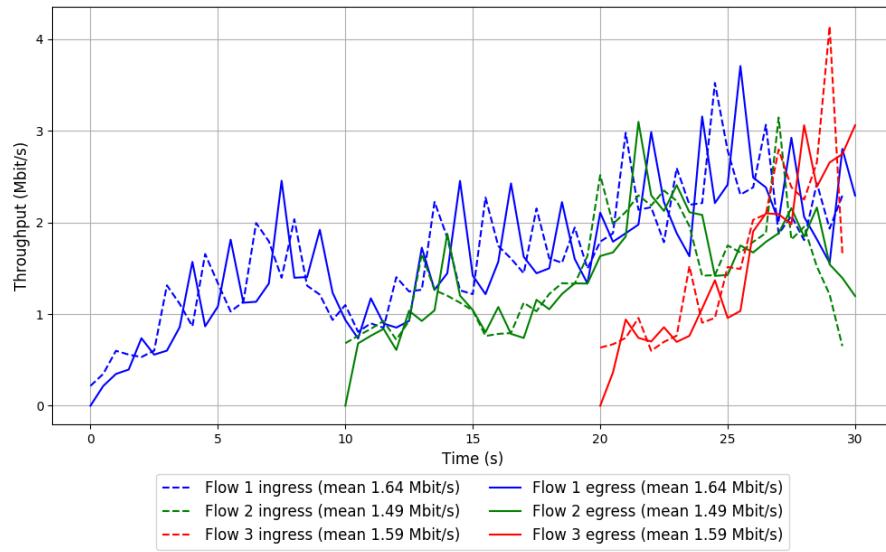


Run 2: Statistics of Sprout

```
Start at: 2019-01-25 01:57:18
End at: 2019-01-25 01:57:48
Local clock offset: -2.501 ms
Remote clock offset: -40.314 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 61.007 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 60.743 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 61.111 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 61.658 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

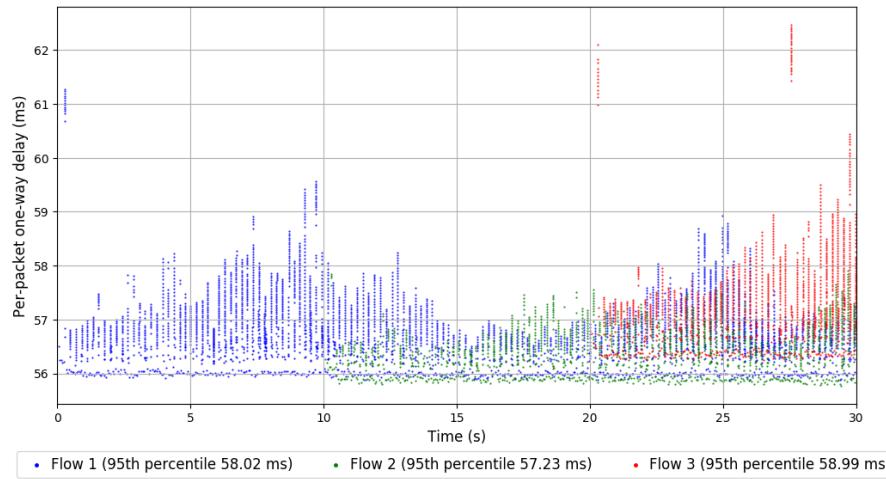
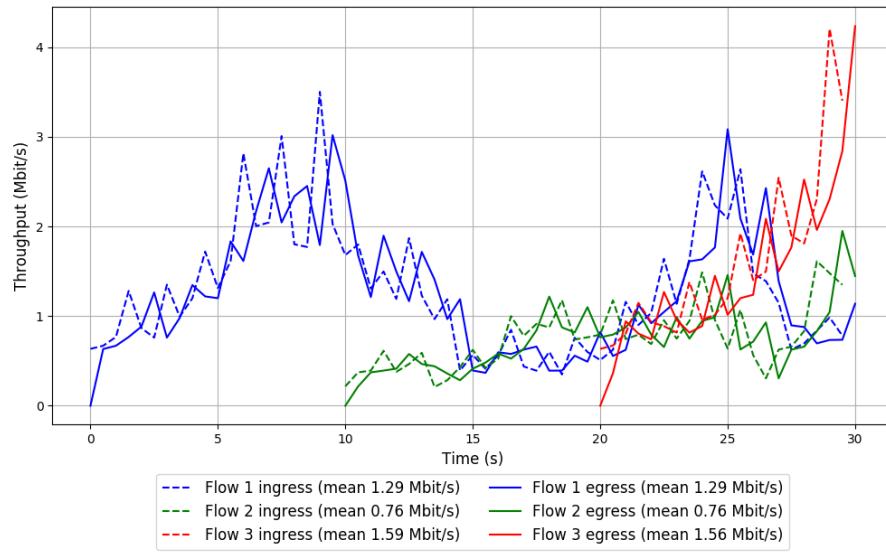


Run 3: Statistics of Sprout

```
Start at: 2019-01-25 02:33:33
End at: 2019-01-25 02:34:03
Local clock offset: -2.099 ms
Remote clock offset: -43.445 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 58.203 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 58.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 57.226 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 58.990 ms
Loss rate: 1.70%
```

Run 3: Report of Sprout — Data Link

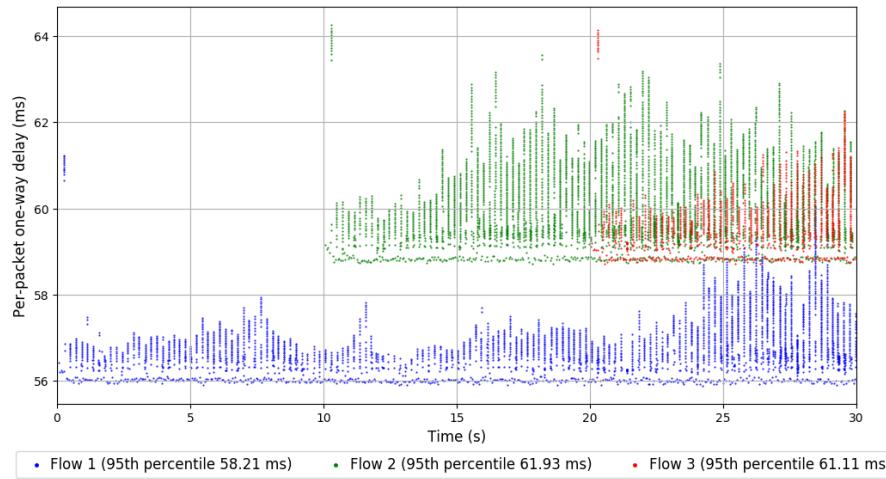
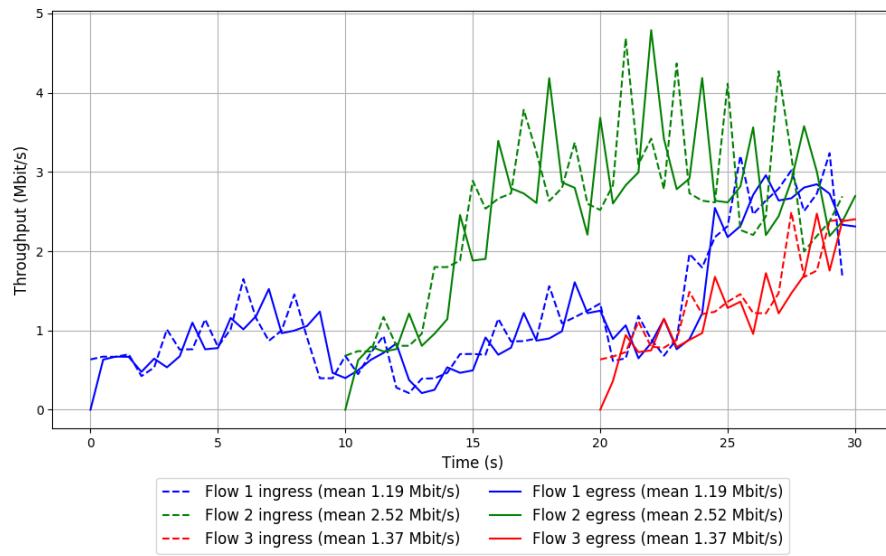


Run 4: Statistics of Sprout

```
Start at: 2019-01-25 03:09:38
End at: 2019-01-25 03:10:08
Local clock offset: -0.751 ms
Remote clock offset: -42.869 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 61.566 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 58.206 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 61.927 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 61.107 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

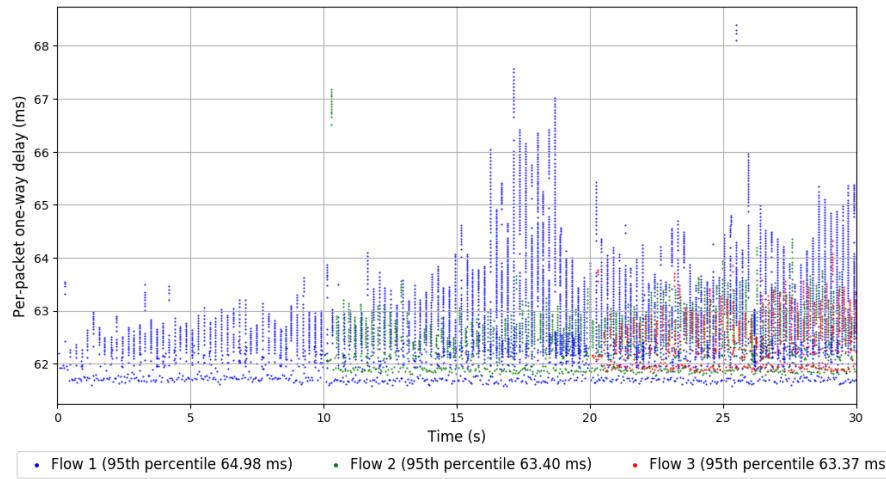
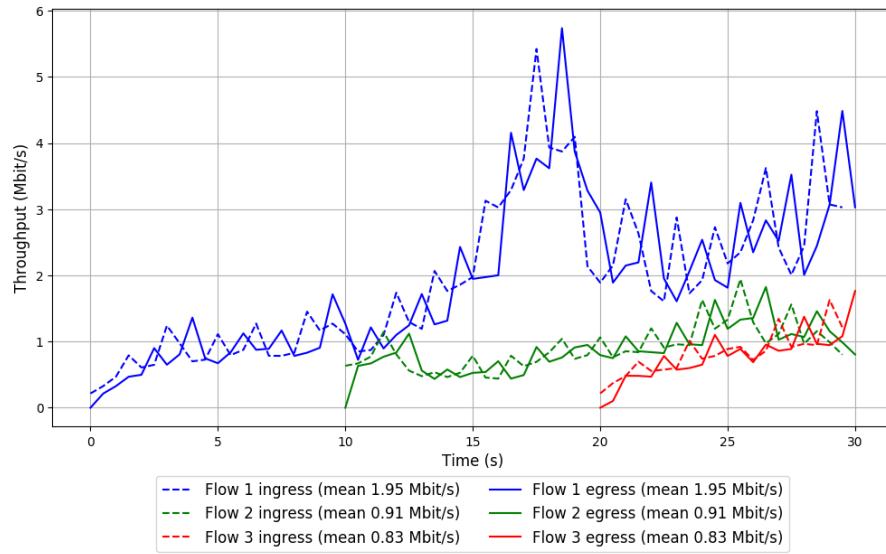


Run 5: Statistics of Sprout

```
Start at: 2019-01-25 03:51:27
End at: 2019-01-25 03:51:57
Local clock offset: -1.163 ms
Remote clock offset: -37.98 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 64.617 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 64.985 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 63.399 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 63.368 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

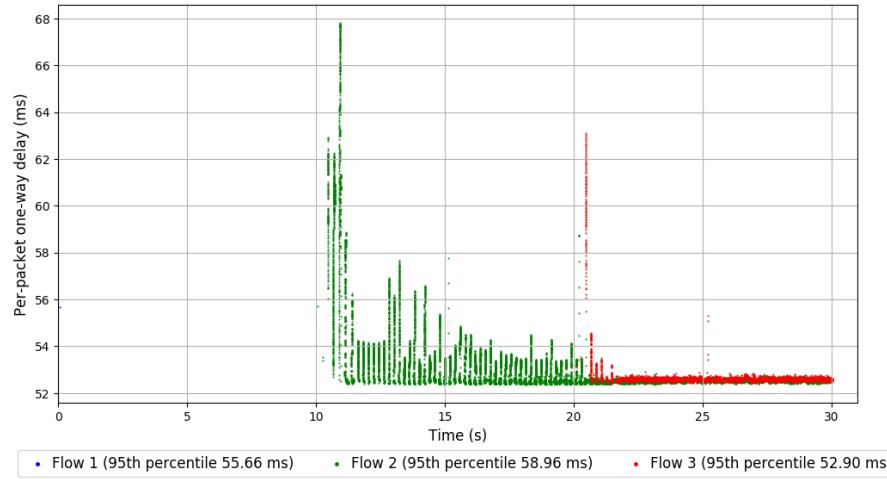
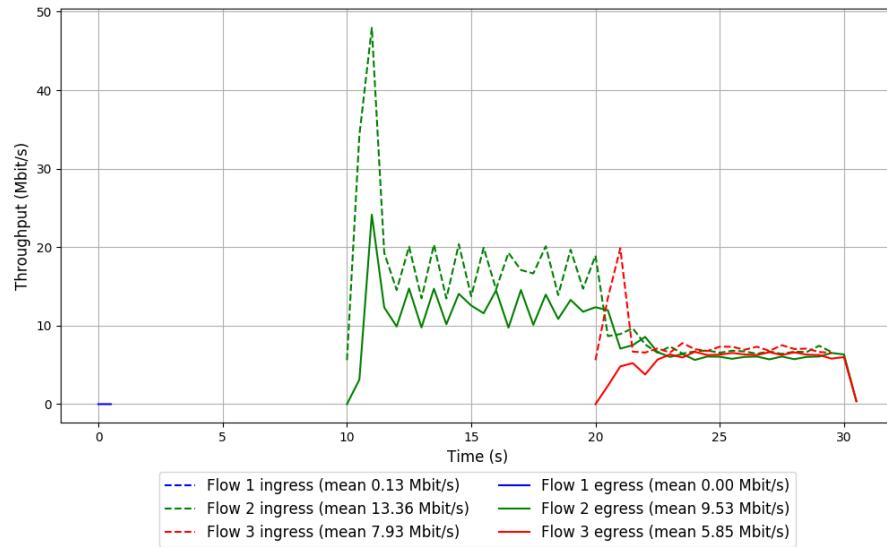


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-25 01:35:25
End at: 2019-01-25 01:35:55
Local clock offset: 0.581 ms
Remote clock offset: -44.17 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 57.736 ms
Loss rate: 28.10%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 55.655 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 58.956 ms
Loss rate: 28.68%
-- Flow 3:
Average throughput: 5.85 Mbit/s
95th percentile per-packet one-way delay: 52.899 ms
Loss rate: 26.15%
```

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

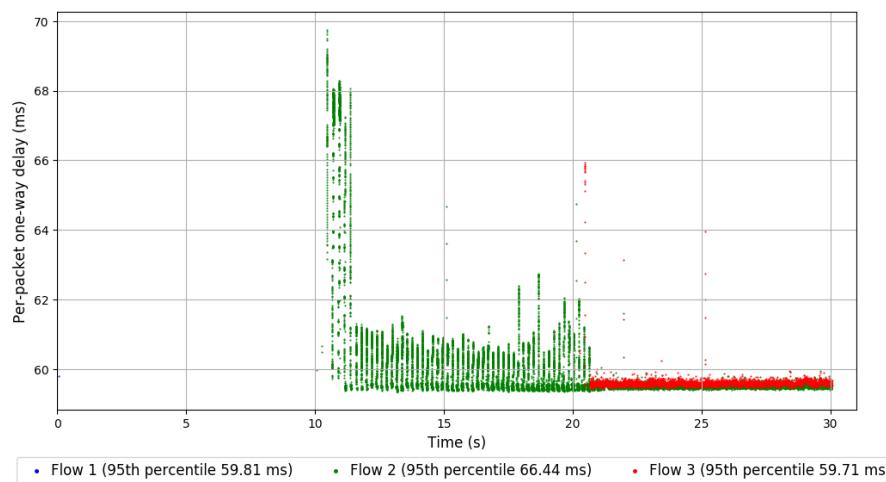
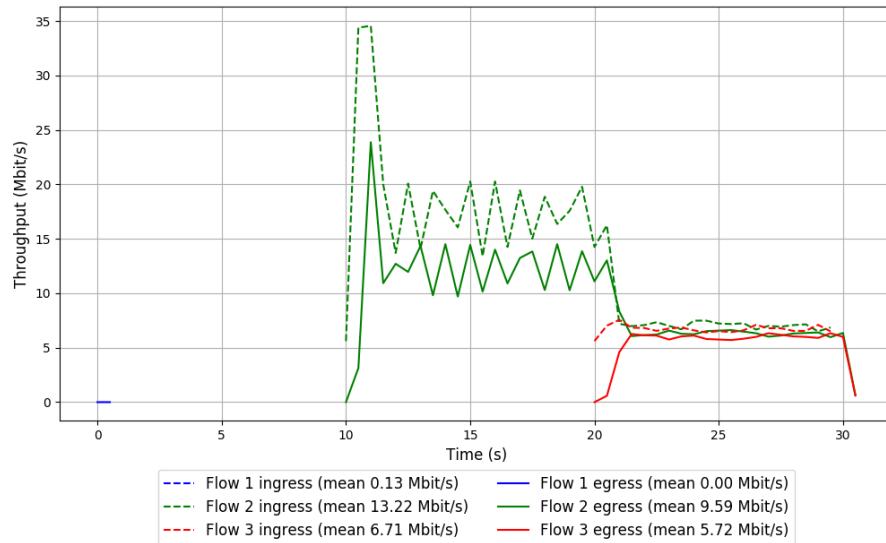


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-25 02:11:46
End at: 2019-01-25 02:12:16
Local clock offset: 0.177 ms
Remote clock offset: -38.054 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 64.442 ms
Loss rate: 24.93%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 59.812 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.59 Mbit/s
95th percentile per-packet one-way delay: 66.435 ms
Loss rate: 27.48%
-- Flow 3:
Average throughput: 5.72 Mbit/s
95th percentile per-packet one-way delay: 59.707 ms
Loss rate: 14.85%
```

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

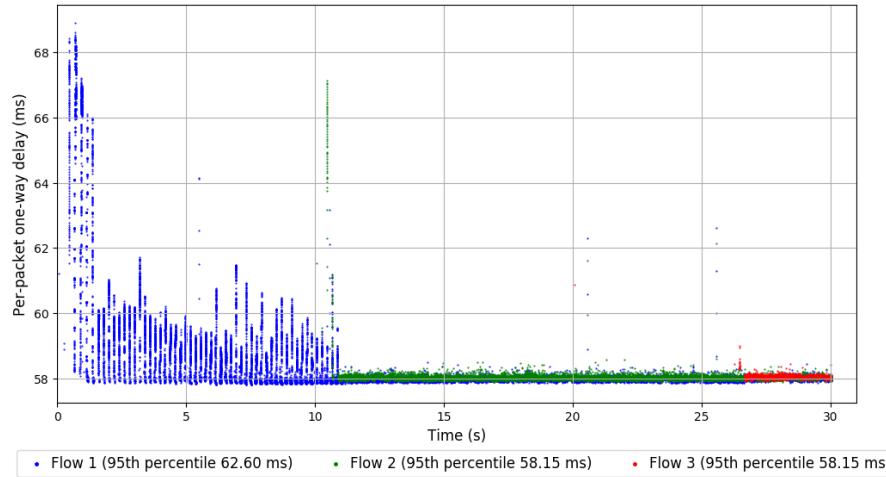
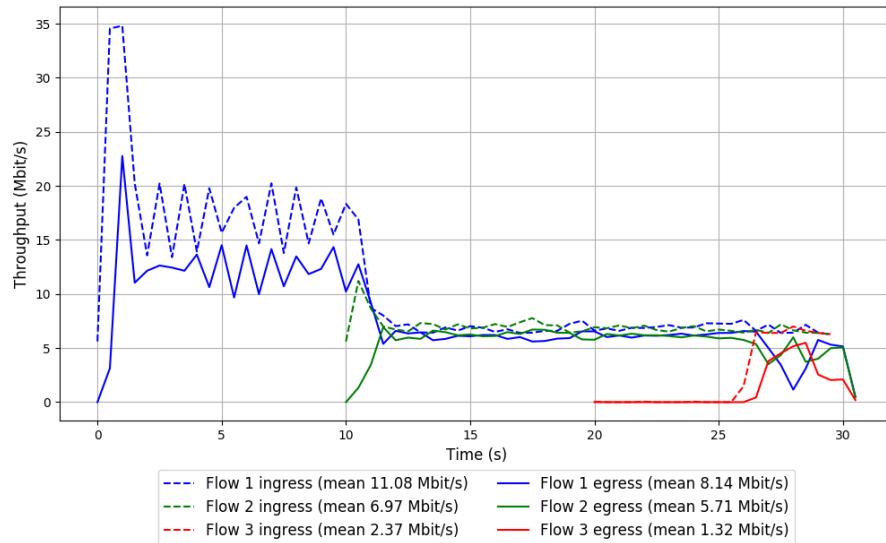


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-25 02:47:27
End at: 2019-01-25 02:47:57
Local clock offset: 0.482 ms
Remote clock offset: -39.049 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.38 Mbit/s
95th percentile per-packet one-way delay: 60.592 ms
Loss rate: 25.02%
-- Flow 1:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 62.604 ms
Loss rate: 26.55%
-- Flow 2:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 58.151 ms
Loss rate: 18.11%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 58.151 ms
Loss rate: 44.23%
```

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

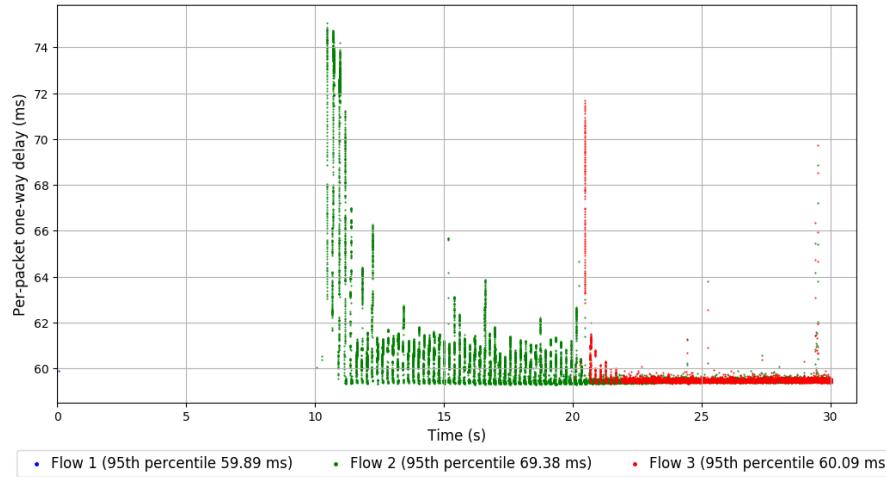
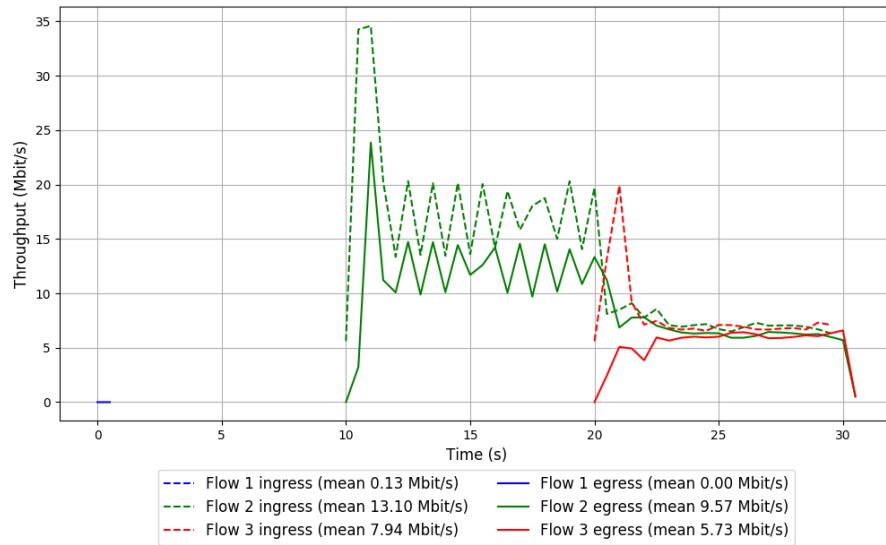


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-25 03:18:27
End at: 2019-01-25 03:18:57
Local clock offset: 0.135 ms
Remote clock offset: -39.1 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 66.458 ms
Loss rate: 27.12%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 59.889 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.57 Mbit/s
95th percentile per-packet one-way delay: 69.377 ms
Loss rate: 26.89%
-- Flow 3:
Average throughput: 5.73 Mbit/s
95th percentile per-packet one-way delay: 60.088 ms
Loss rate: 27.84%
```

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

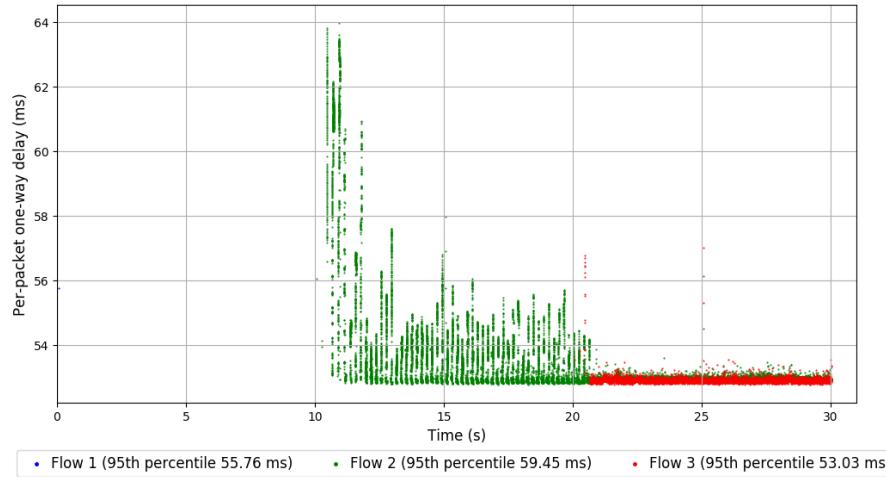
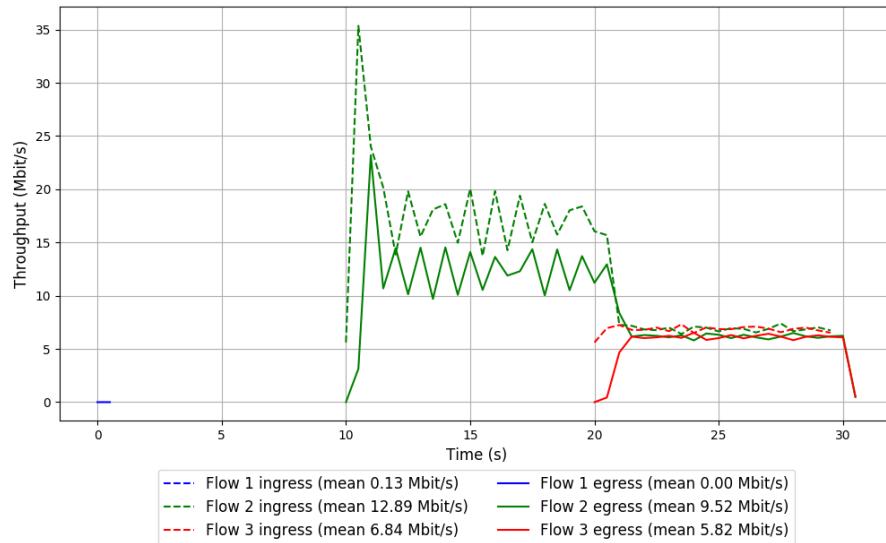


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-25 04:11:26
End at: 2019-01-25 04:11:56
Local clock offset: 0.694 ms
Remote clock offset: -45.483 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 57.548 ms
Loss rate: 23.80%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 55.761 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 59.449 ms
Loss rate: 26.17%
-- Flow 3:
Average throughput: 5.82 Mbit/s
95th percentile per-packet one-way delay: 53.029 ms
Loss rate: 14.84%
```

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

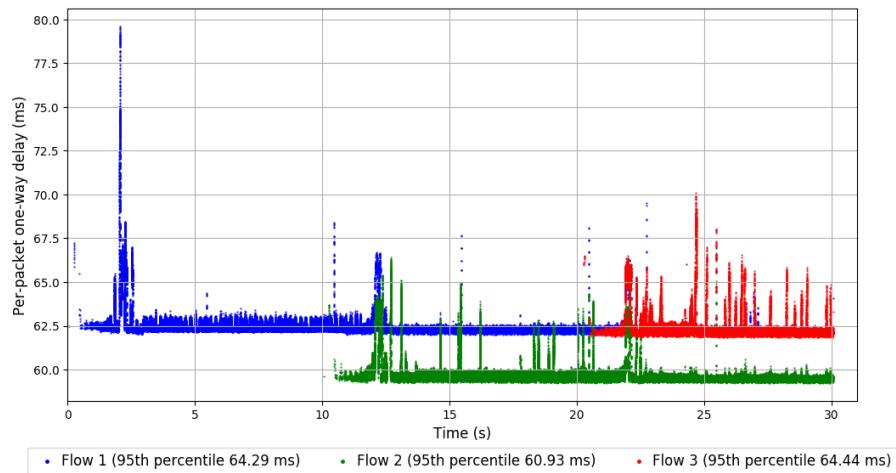
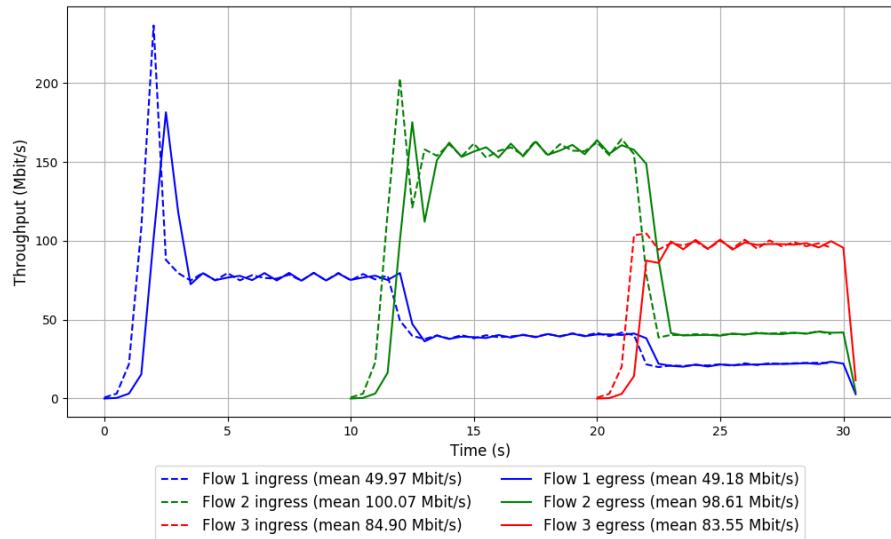


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-25 01:23:49
End at: 2019-01-25 01:24:19
Local clock offset: 0.495 ms
Remote clock offset: -38.386 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.66 Mbit/s
95th percentile per-packet one-way delay: 63.090 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 49.18 Mbit/s
95th percentile per-packet one-way delay: 64.286 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 98.61 Mbit/s
95th percentile per-packet one-way delay: 60.933 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 83.55 Mbit/s
95th percentile per-packet one-way delay: 64.436 ms
Loss rate: 1.59%
```

Run 1: Report of TCP Vegas — Data Link

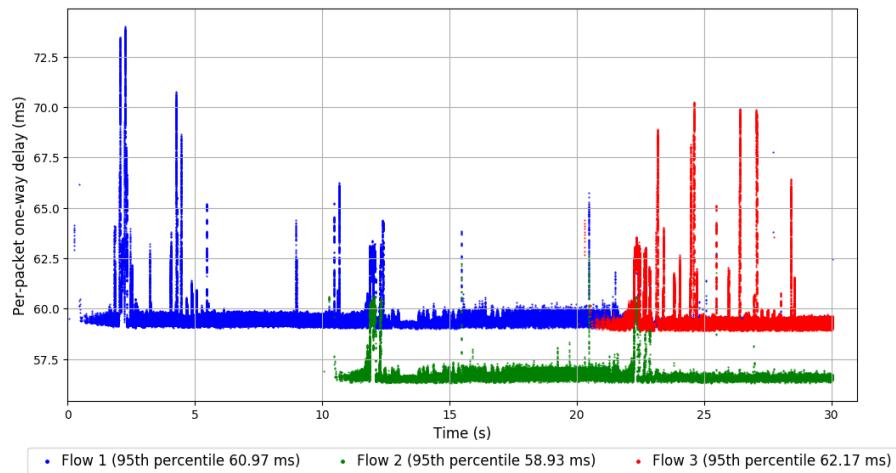
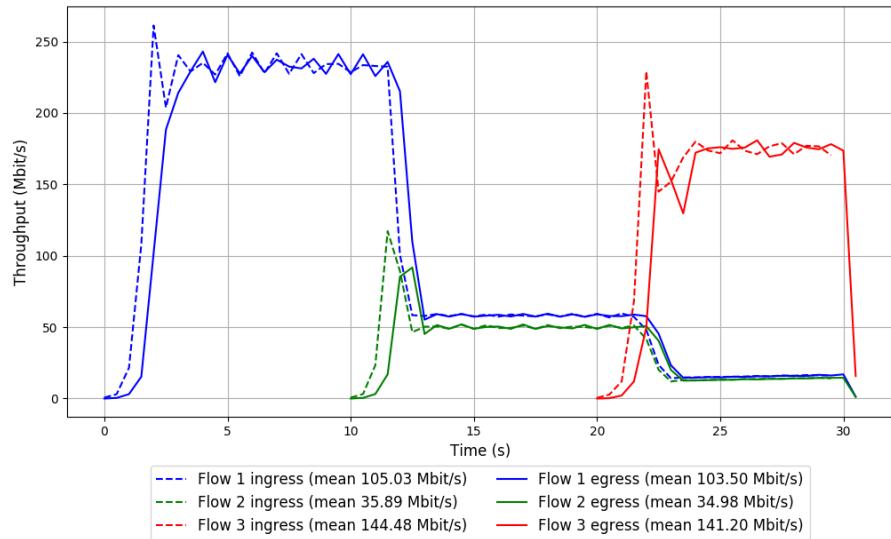


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-25 01:54:13
End at: 2019-01-25 01:54:43
Local clock offset: -1.387 ms
Remote clock offset: -41.456 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.72 Mbit/s
95th percentile per-packet one-way delay: 60.981 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 103.50 Mbit/s
95th percentile per-packet one-way delay: 60.965 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 34.98 Mbit/s
95th percentile per-packet one-way delay: 58.934 ms
Loss rate: 2.54%
-- Flow 3:
Average throughput: 141.20 Mbit/s
95th percentile per-packet one-way delay: 62.174 ms
Loss rate: 2.29%
```

Run 2: Report of TCP Vegas — Data Link

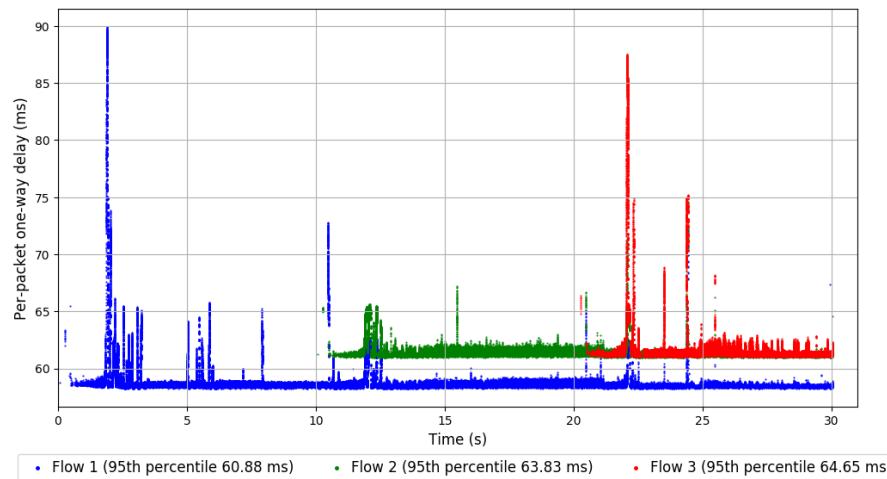
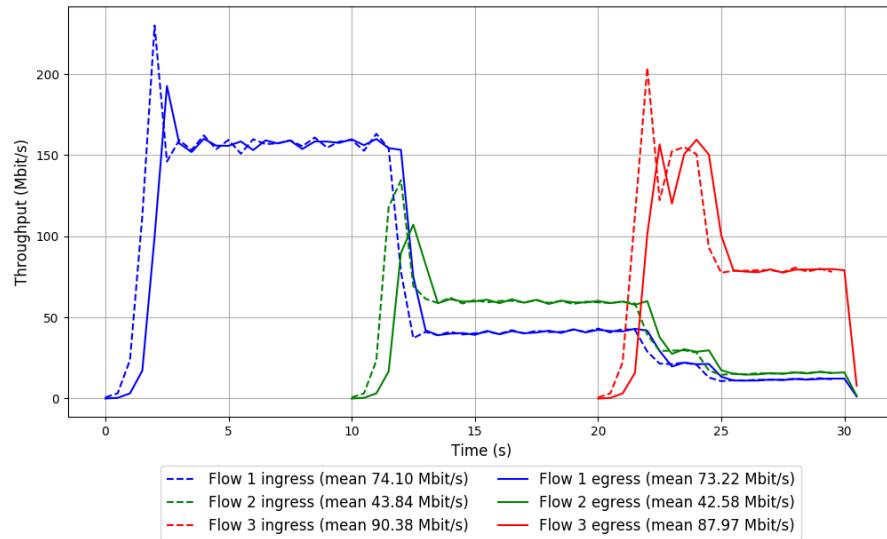


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-25 02:30:34
End at: 2019-01-25 02:31:04
Local clock offset: 0.279 ms
Remote clock offset: -38.808 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.85 Mbit/s
95th percentile per-packet one-way delay: 62.146 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 73.22 Mbit/s
95th percentile per-packet one-way delay: 60.880 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 42.58 Mbit/s
95th percentile per-packet one-way delay: 63.826 ms
Loss rate: 2.87%
-- Flow 3:
Average throughput: 87.97 Mbit/s
95th percentile per-packet one-way delay: 64.652 ms
Loss rate: 2.69%
```

Run 3: Report of TCP Vegas — Data Link

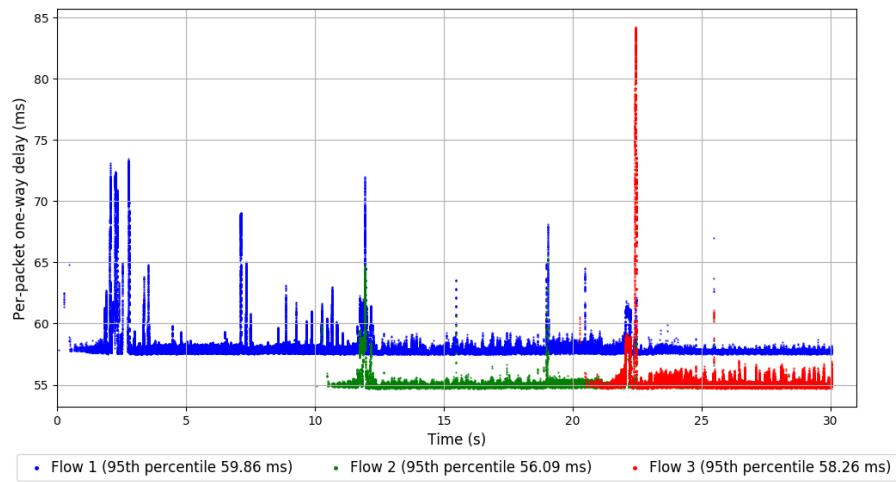
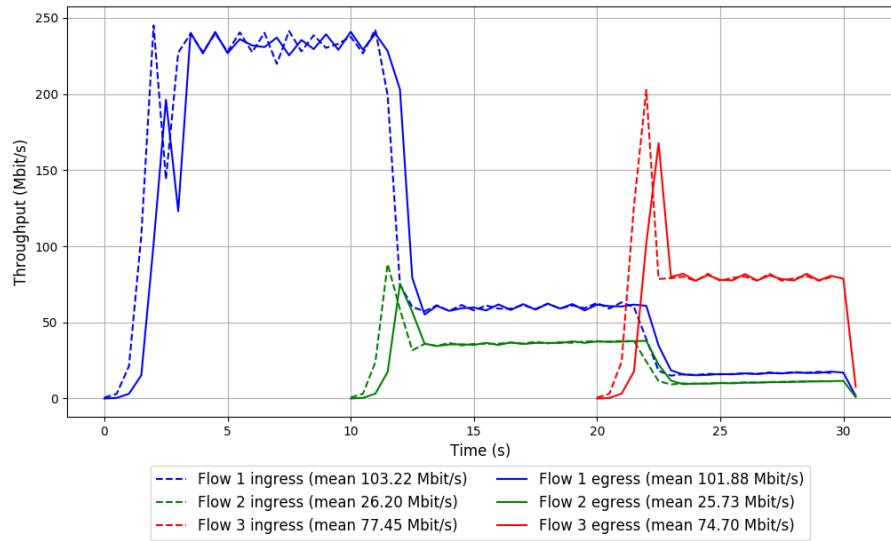


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-25 03:06:38
End at: 2019-01-25 03:07:08
Local clock offset: 1.329 ms
Remote clock offset: -42.056 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 143.86 Mbit/s
95th percentile per-packet one-way delay: 58.982 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 101.88 Mbit/s
95th percentile per-packet one-way delay: 59.860 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 25.73 Mbit/s
95th percentile per-packet one-way delay: 56.087 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 74.70 Mbit/s
95th percentile per-packet one-way delay: 58.257 ms
Loss rate: 3.56%
```

Run 4: Report of TCP Vegas — Data Link

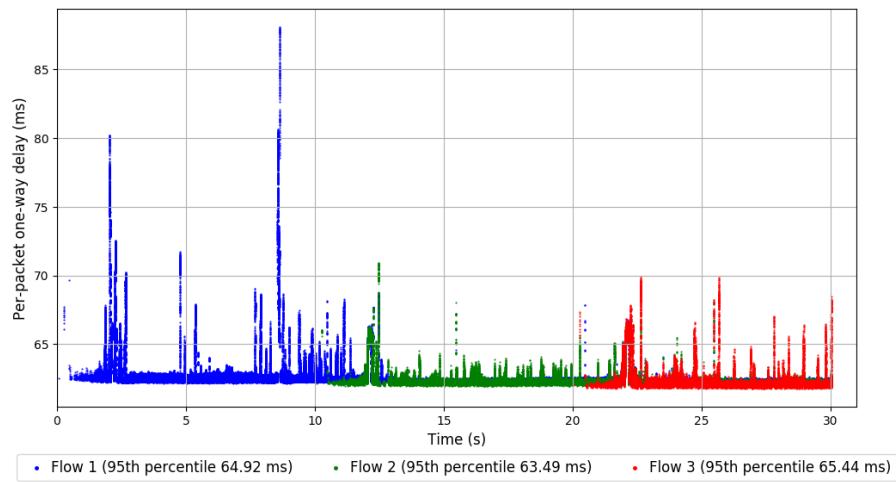
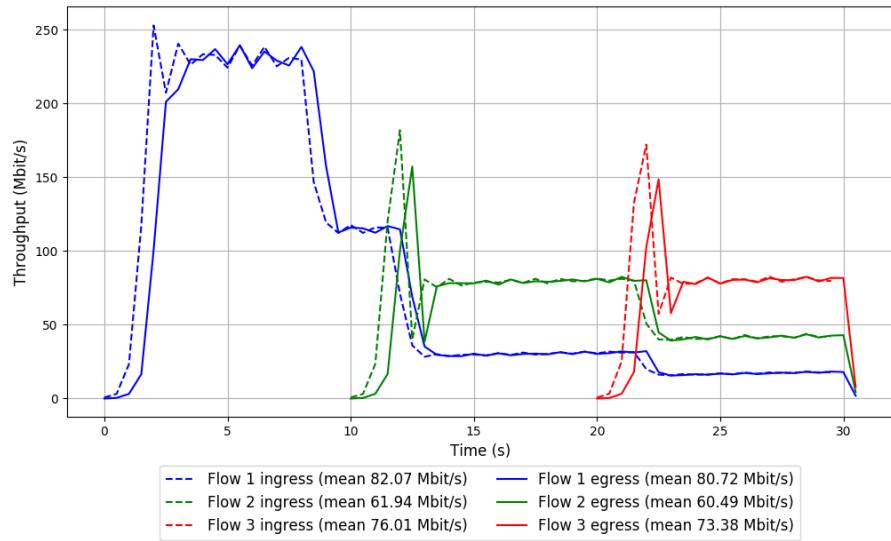


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-25 03:42:47
End at: 2019-01-25 03:43:17
Local clock offset: -1.389 ms
Remote clock offset: -37.797 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.42 Mbit/s
95th percentile per-packet one-way delay: 64.747 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 80.72 Mbit/s
95th percentile per-packet one-way delay: 64.919 ms
Loss rate: 1.64%
-- Flow 2:
Average throughput: 60.49 Mbit/s
95th percentile per-packet one-way delay: 63.491 ms
Loss rate: 2.34%
-- Flow 3:
Average throughput: 73.38 Mbit/s
95th percentile per-packet one-way delay: 65.435 ms
Loss rate: 3.46%
```

Run 5: Report of TCP Vegas — Data Link

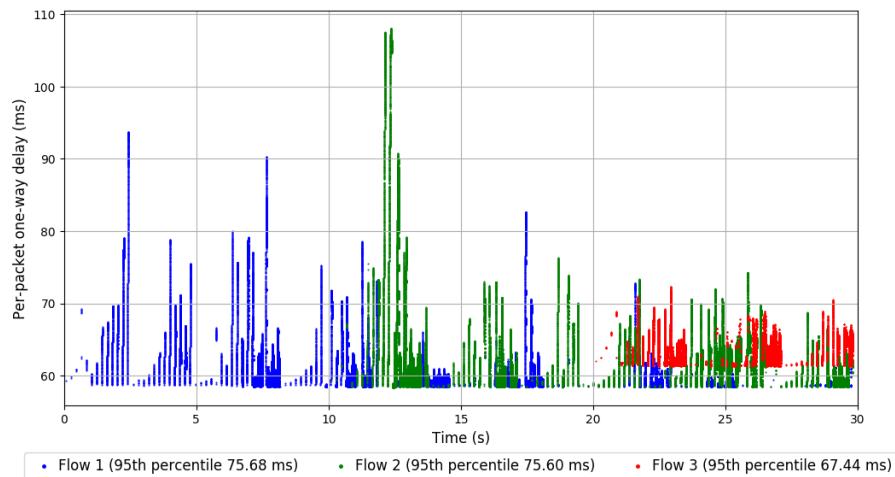
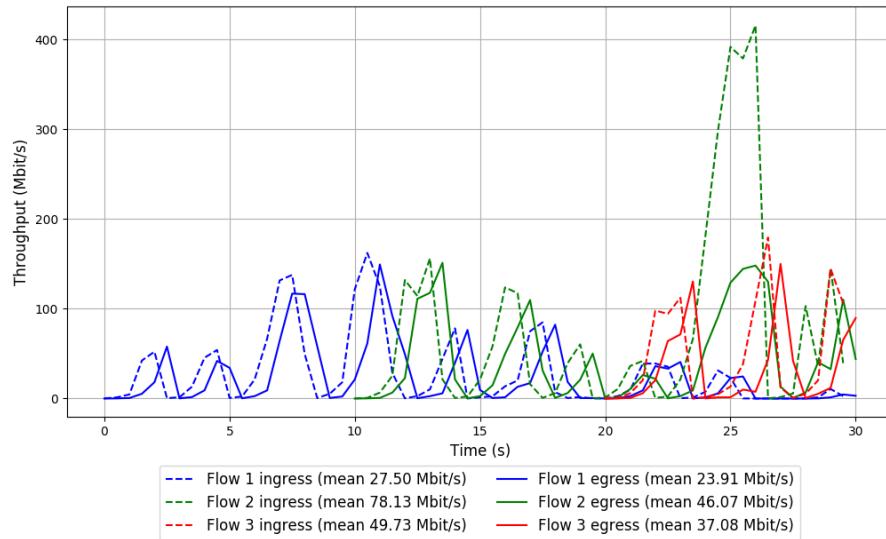


Run 1: Statistics of Verus

```
Start at: 2019-01-25 01:30:52
End at: 2019-01-25 01:31:22
Local clock offset: -1.26 ms
Remote clock offset: -40.142 ms

# Below is generated by plot.py at 2019-01-25 04:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.51 Mbit/s
95th percentile per-packet one-way delay: 73.400 ms
Loss rate: 30.32%
-- Flow 1:
Average throughput: 23.91 Mbit/s
95th percentile per-packet one-way delay: 75.684 ms
Loss rate: 13.05%
-- Flow 2:
Average throughput: 46.07 Mbit/s
95th percentile per-packet one-way delay: 75.596 ms
Loss rate: 41.03%
-- Flow 3:
Average throughput: 37.08 Mbit/s
95th percentile per-packet one-way delay: 67.436 ms
Loss rate: 25.41%
```

Run 1: Report of Verus — Data Link

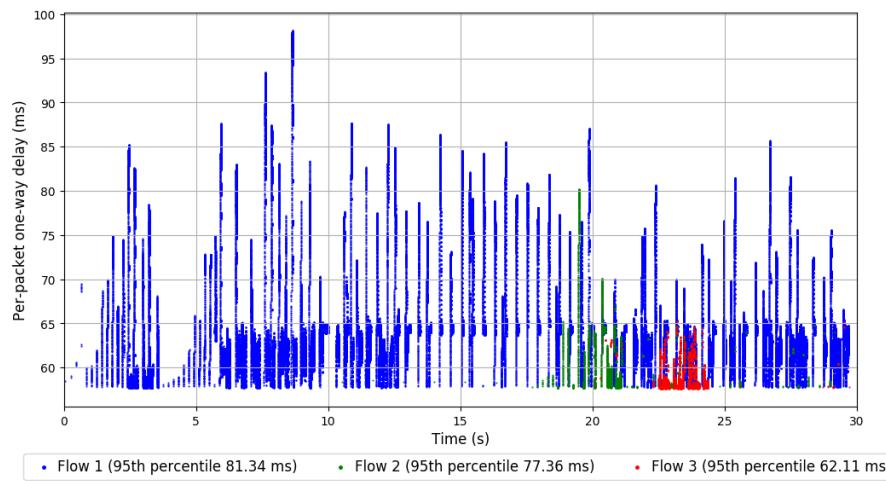
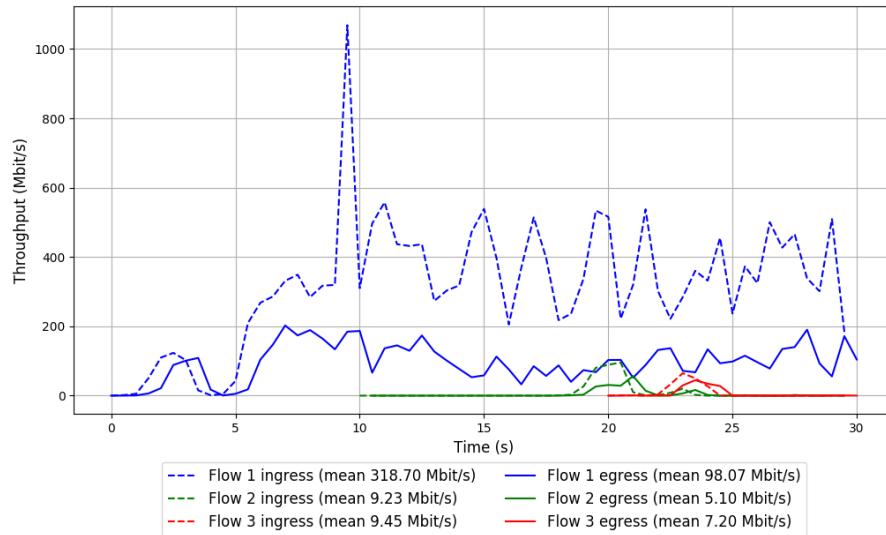


Run 2: Statistics of Verus

```
Start at: 2019-01-25 02:01:27
End at: 2019-01-25 02:01:57
Local clock offset: -2.249 ms
Remote clock offset: -41.318 ms

# Below is generated by plot.py at 2019-01-25 04:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.53 Mbit/s
95th percentile per-packet one-way delay: 81.089 ms
Loss rate: 68.36%
-- Flow 1:
Average throughput: 98.07 Mbit/s
95th percentile per-packet one-way delay: 81.343 ms
Loss rate: 69.22%
-- Flow 2:
Average throughput: 5.10 Mbit/s
95th percentile per-packet one-way delay: 77.357 ms
Loss rate: 44.70%
-- Flow 3:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 62.111 ms
Loss rate: 23.76%
```

Run 2: Report of Verus — Data Link

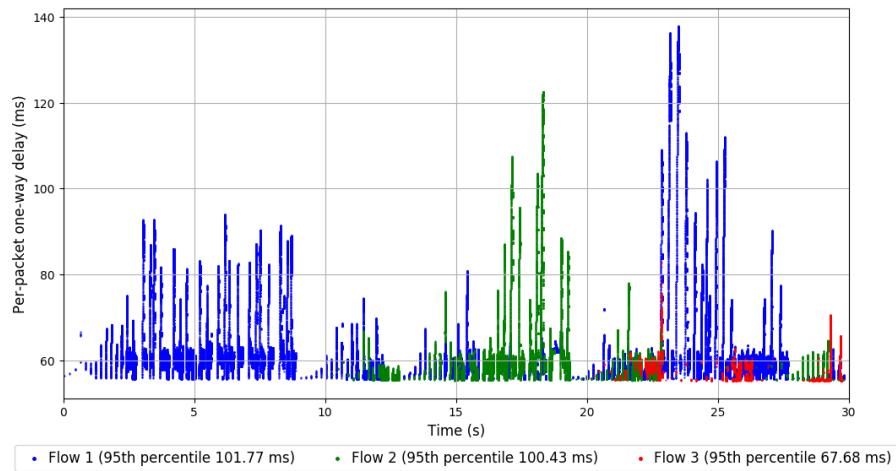
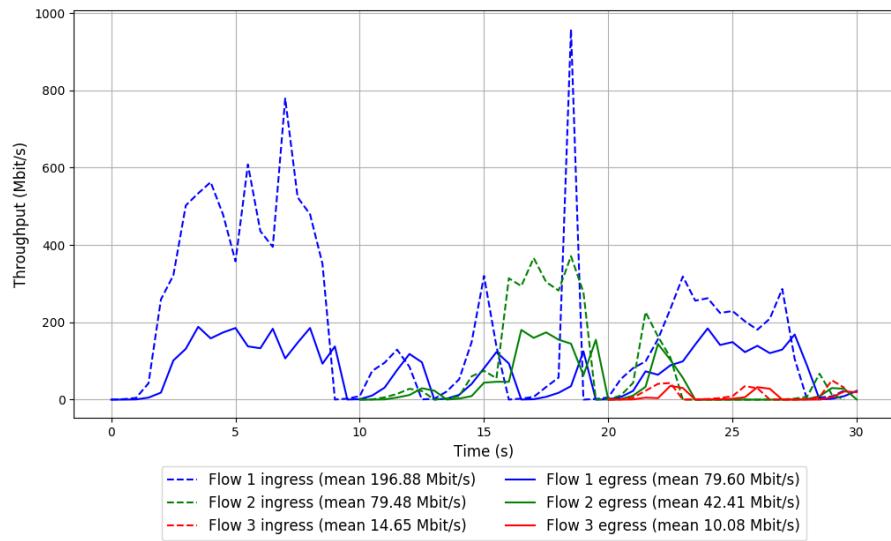


Run 3: Statistics of Verus

```
Start at: 2019-01-25 02:42:50
End at: 2019-01-25 02:43:20
Local clock offset: -2.882 ms
Remote clock offset: -44.836 ms

# Below is generated by plot.py at 2019-01-25 04:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.93 Mbit/s
95th percentile per-packet one-way delay: 100.575 ms
Loss rate: 56.36%
-- Flow 1:
Average throughput: 79.60 Mbit/s
95th percentile per-packet one-way delay: 101.771 ms
Loss rate: 59.57%
-- Flow 2:
Average throughput: 42.41 Mbit/s
95th percentile per-packet one-way delay: 100.432 ms
Loss rate: 46.64%
-- Flow 3:
Average throughput: 10.08 Mbit/s
95th percentile per-packet one-way delay: 67.682 ms
Loss rate: 31.18%
```

Run 3: Report of Verus — Data Link

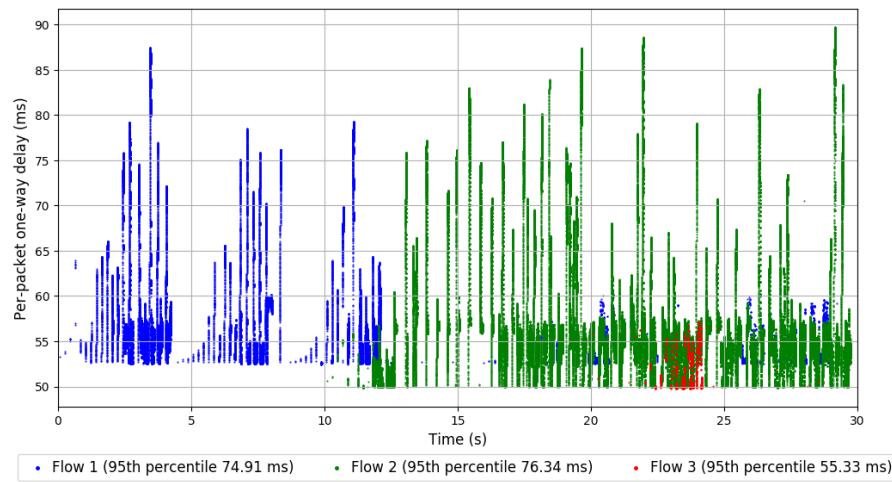
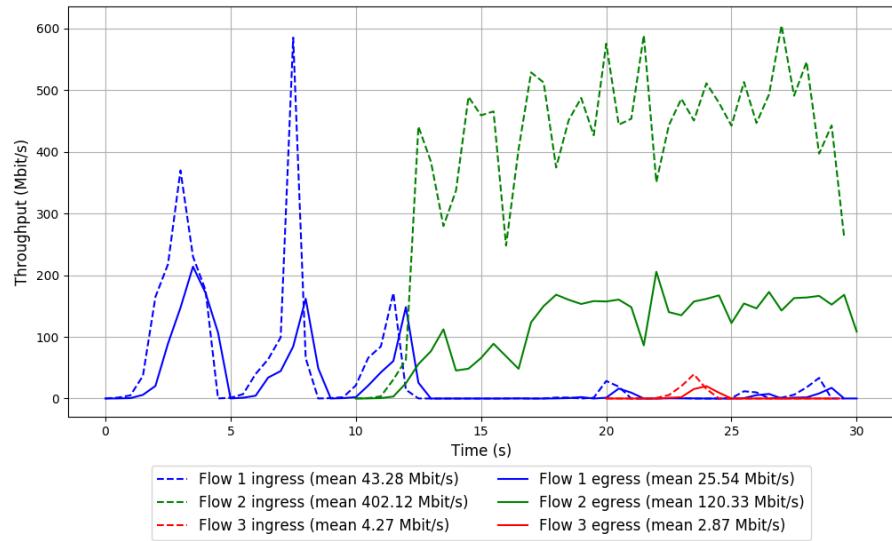


Run 4: Statistics of Verus

```
Start at: 2019-01-25 03:13:43
End at: 2019-01-25 03:14:13
Local clock offset: 1.141 ms
Remote clock offset: -47.557 ms

# Below is generated by plot.py at 2019-01-25 04:41:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.93 Mbit/s
95th percentile per-packet one-way delay: 75.673 ms
Loss rate: 65.90%
-- Flow 1:
Average throughput: 25.54 Mbit/s
95th percentile per-packet one-way delay: 74.912 ms
Loss rate: 40.99%
-- Flow 2:
Average throughput: 120.33 Mbit/s
95th percentile per-packet one-way delay: 76.338 ms
Loss rate: 70.07%
-- Flow 3:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 55.326 ms
Loss rate: 40.92%
```

Run 4: Report of Verus — Data Link

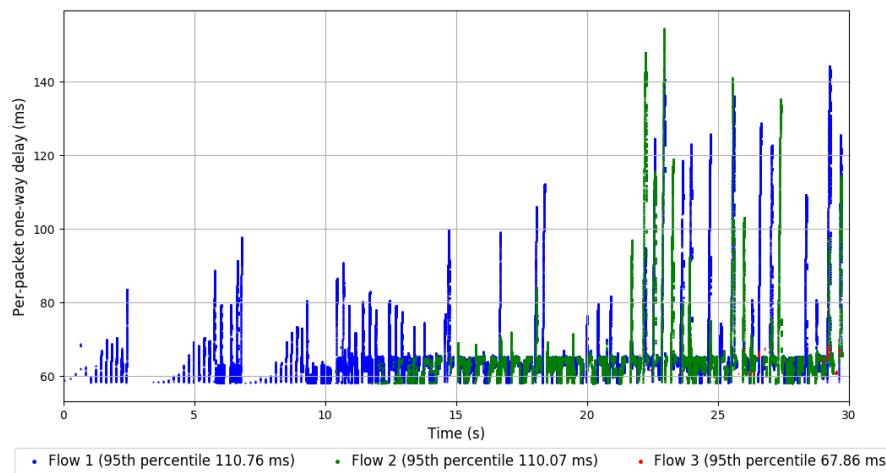
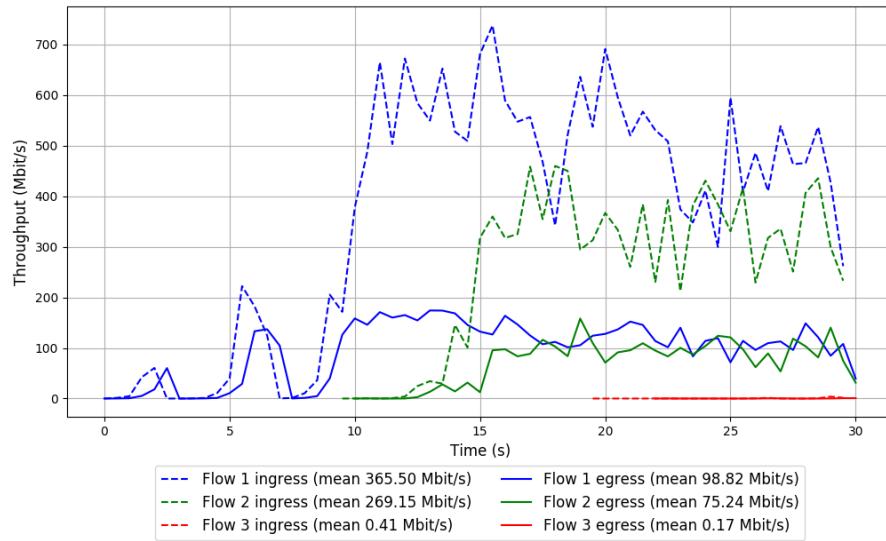


Run 5: Statistics of Verus

```
Start at: 2019-01-25 04:01:07
End at: 2019-01-25 04:01:37
Local clock offset: 0.413 ms
Remote clock offset: -40.297 ms

# Below is generated by plot.py at 2019-01-25 04:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.89 Mbit/s
95th percentile per-packet one-way delay: 110.571 ms
Loss rate: 72.65%
-- Flow 1:
Average throughput: 98.82 Mbit/s
95th percentile per-packet one-way delay: 110.759 ms
Loss rate: 72.96%
-- Flow 2:
Average throughput: 75.24 Mbit/s
95th percentile per-packet one-way delay: 110.068 ms
Loss rate: 72.03%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 67.859 ms
Loss rate: 68.62%
```

Run 5: Report of Verus — Data Link

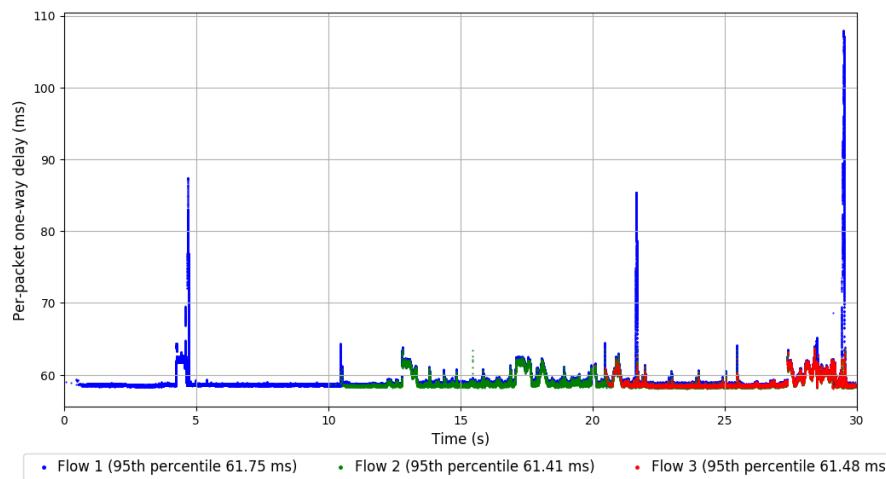
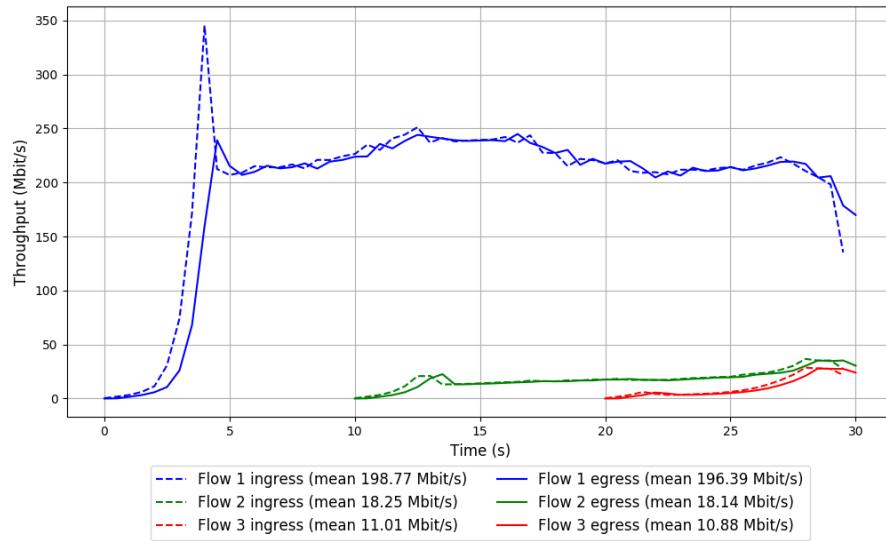


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-25 01:08:58
End at: 2019-01-25 01:09:28
Local clock offset: 4.932 ms
Remote clock offset: -38.809 ms

# Below is generated by plot.py at 2019-01-25 04:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 212.05 Mbit/s
95th percentile per-packet one-way delay: 61.716 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 196.39 Mbit/s
95th percentile per-packet one-way delay: 61.746 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 18.14 Mbit/s
95th percentile per-packet one-way delay: 61.412 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 61.477 ms
Loss rate: 1.17%
```

Run 1: Report of PCC-Vivace — Data Link

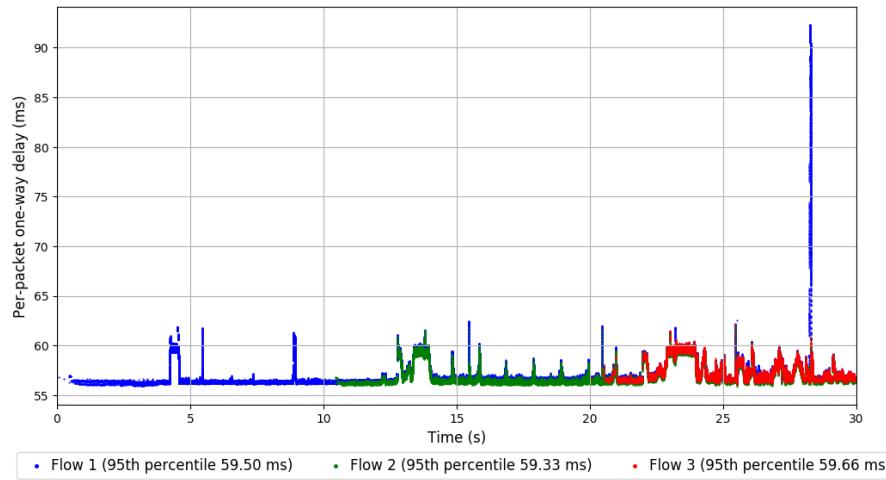
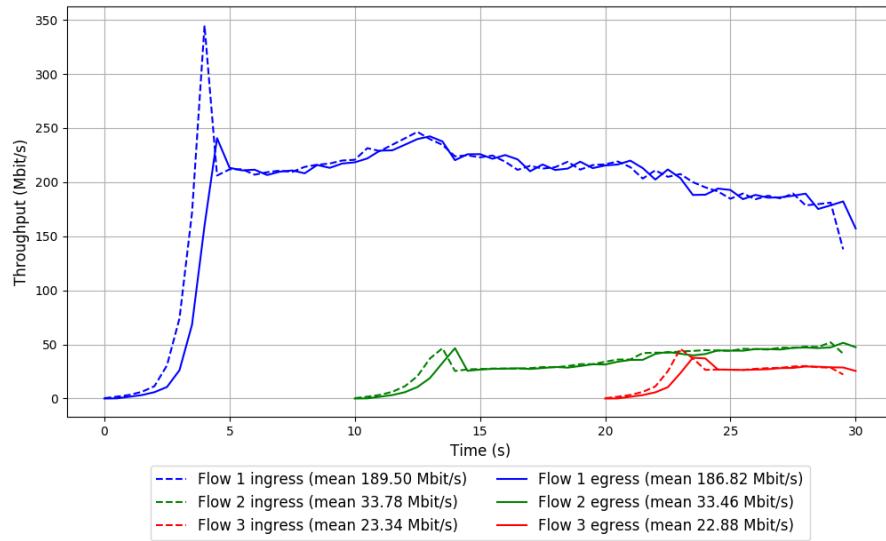


```
Run 2: Statistics of PCC-Vivace
```

```
Start at: 2019-01-25 01:39:24
End at: 2019-01-25 01:39:54
Local clock offset: -0.72 ms
Remote clock offset: -41.465 ms

# Below is generated by plot.py at 2019-01-25 04:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.64 Mbit/s
95th percentile per-packet one-way delay: 59.491 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 186.82 Mbit/s
95th percentile per-packet one-way delay: 59.497 ms
Loss rate: 1.41%
-- Flow 2:
Average throughput: 33.46 Mbit/s
95th percentile per-packet one-way delay: 59.332 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 22.88 Mbit/s
95th percentile per-packet one-way delay: 59.660 ms
Loss rate: 1.99%
```

Run 2: Report of PCC-Vivace — Data Link

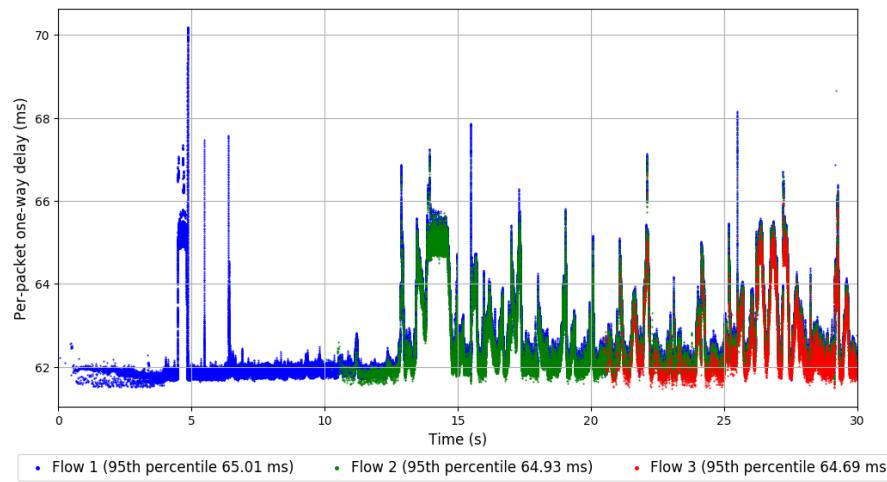
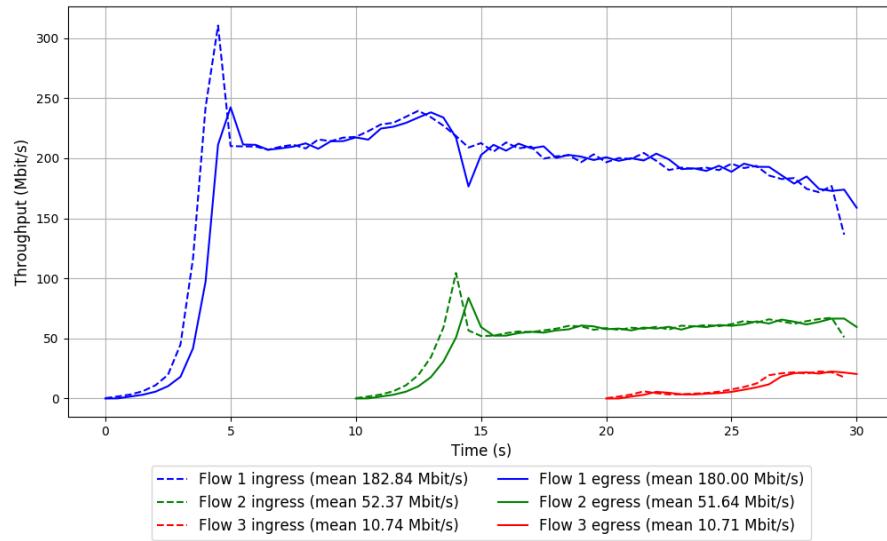


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-25 02:15:43
End at: 2019-01-25 02:16:13
Local clock offset: 0.319 ms
Remote clock offset: -38.467 ms

# Below is generated by plot.py at 2019-01-25 04:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 217.88 Mbit/s
95th percentile per-packet one-way delay: 64.990 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 180.00 Mbit/s
95th percentile per-packet one-way delay: 65.007 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 51.64 Mbit/s
95th percentile per-packet one-way delay: 64.930 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 64.687 ms
Loss rate: 0.31%
```

Run 3: Report of PCC-Vivace — Data Link

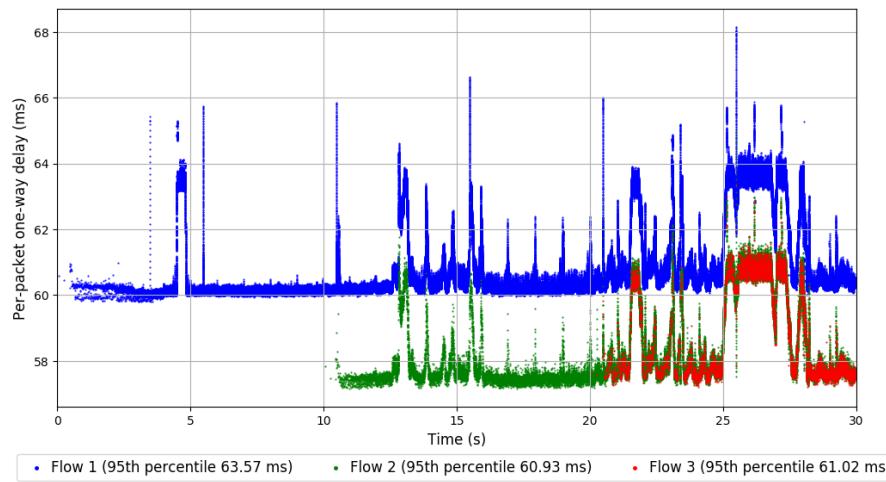
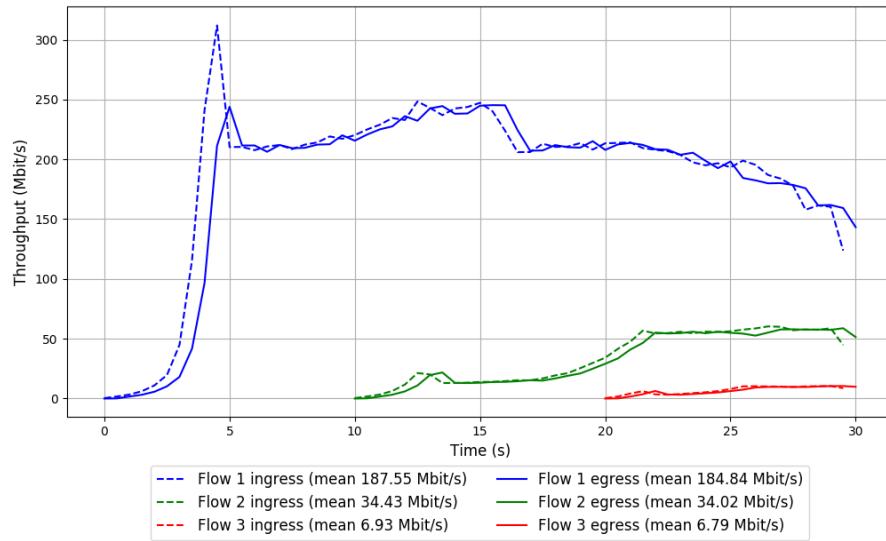


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-25 02:51:25
End at: 2019-01-25 02:51:55
Local clock offset: -1.894 ms
Remote clock offset: -42.052 ms

# Below is generated by plot.py at 2019-01-25 04:42:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.72 Mbit/s
95th percentile per-packet one-way delay: 63.520 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 184.84 Mbit/s
95th percentile per-packet one-way delay: 63.566 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 34.02 Mbit/s
95th percentile per-packet one-way delay: 60.927 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 61.018 ms
Loss rate: 1.93%
```

Run 4: Report of PCC-Vivace — Data Link

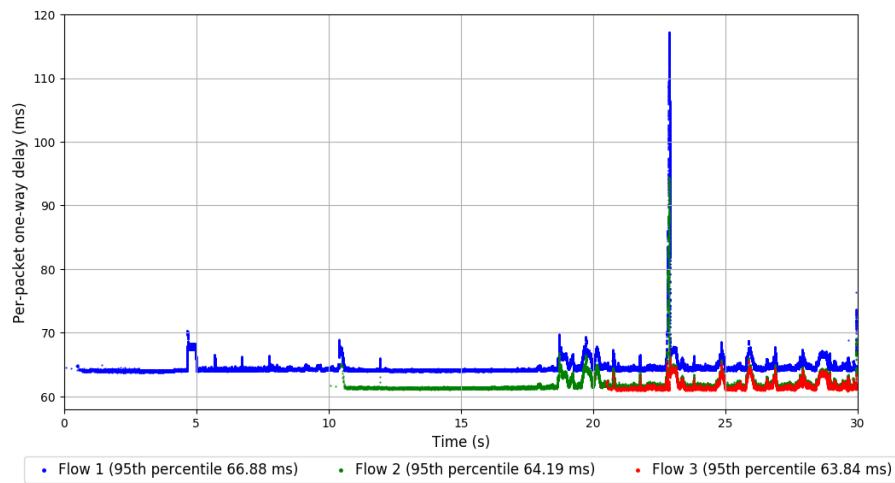
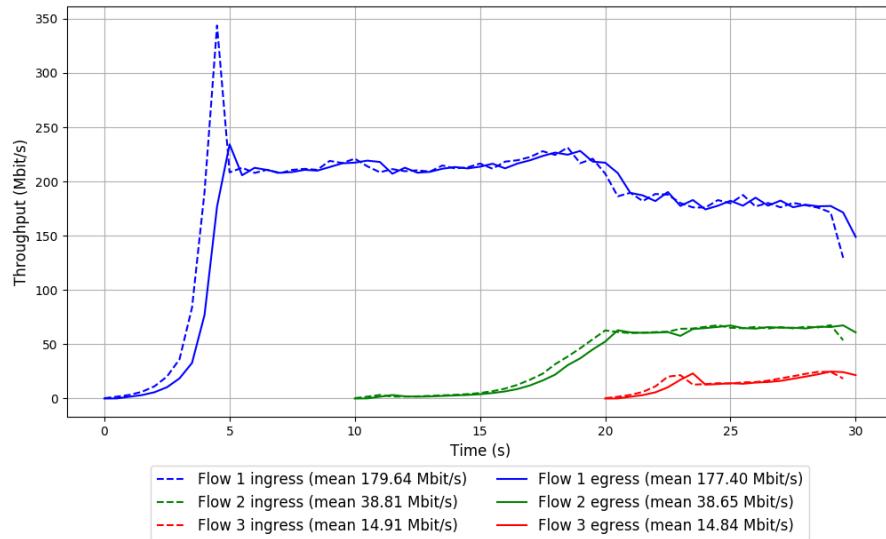


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-25 03:22:24
End at: 2019-01-25 03:22:54
Local clock offset: -1.516 ms
Remote clock offset: -39.084 ms

# Below is generated by plot.py at 2019-01-25 04:42:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.02 Mbit/s
95th percentile per-packet one-way delay: 66.659 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 177.40 Mbit/s
95th percentile per-packet one-way delay: 66.879 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 38.65 Mbit/s
95th percentile per-packet one-way delay: 64.186 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 14.84 Mbit/s
95th percentile per-packet one-way delay: 63.835 ms
Loss rate: 0.48%
```

Run 5: Report of PCC-Vivace — Data Link

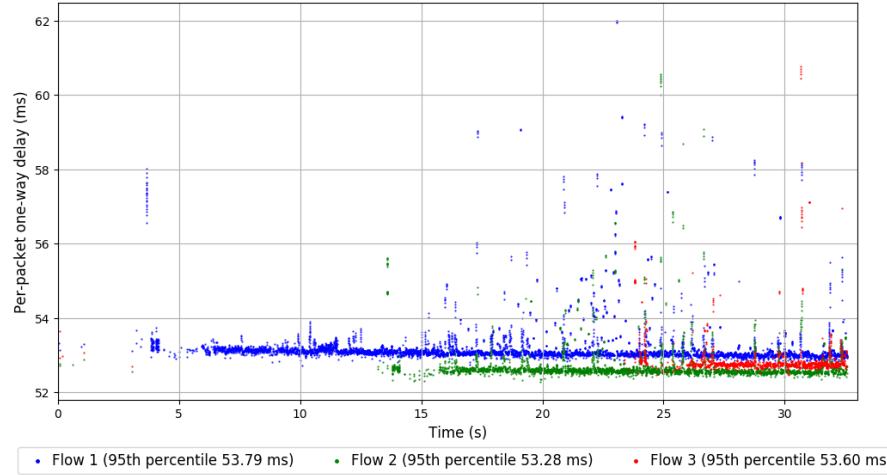
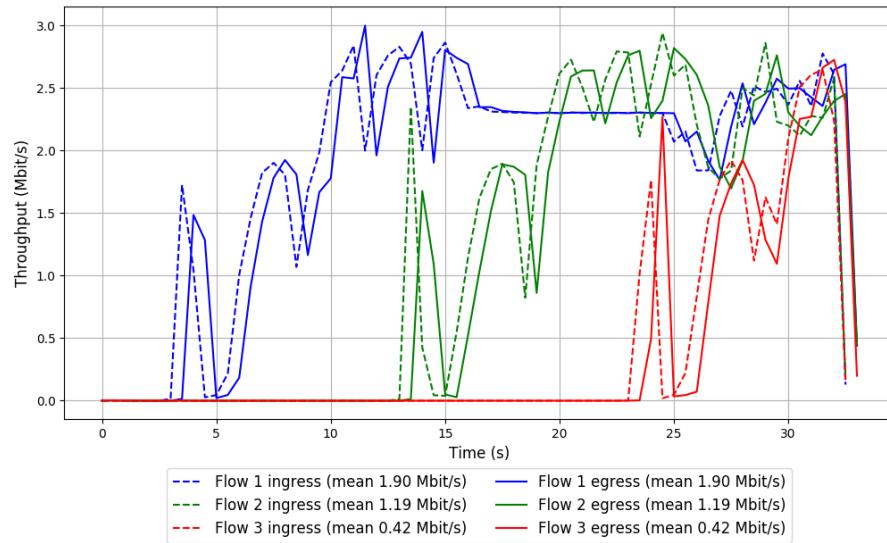


```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 01:22:31
End at: 2019-01-25 01:23:01
Local clock offset: 0.691 ms
Remote clock offset: -45.146 ms

# Below is generated by plot.py at 2019-01-25 04:42:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 53.632 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 53.791 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 53.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 53.604 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

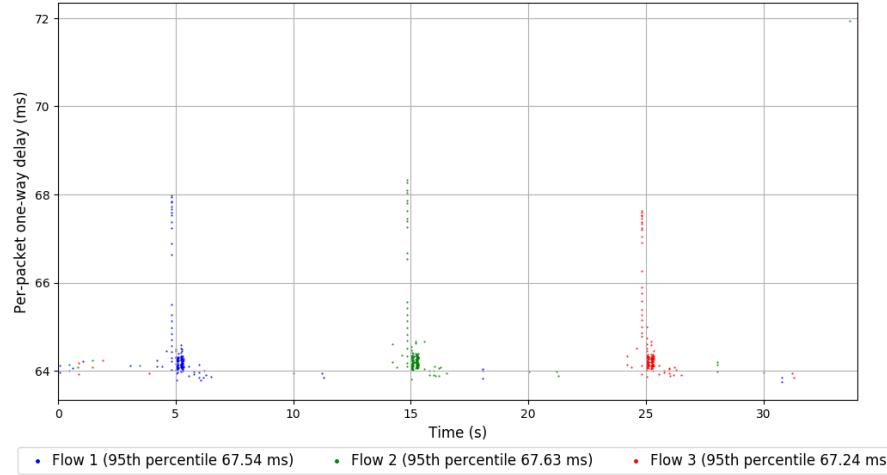
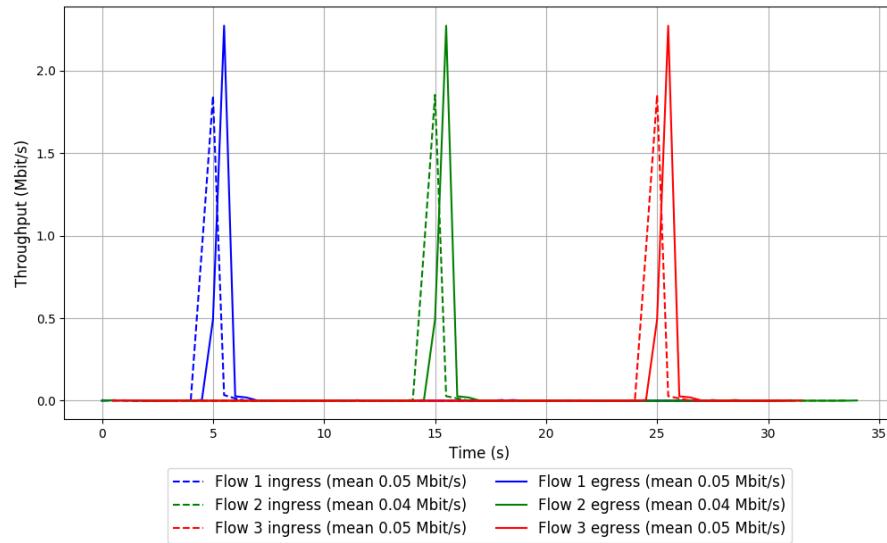


```
Run 2: Statistics of WebRTC media

Start at: 2019-01-25 01:52:57
End at: 2019-01-25 01:53:27
Local clock offset: -0.851 ms
Remote clock offset: -33.586 ms

# Below is generated by plot.py at 2019-01-25 04:42:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 67.394 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.538 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 67.626 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.240 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

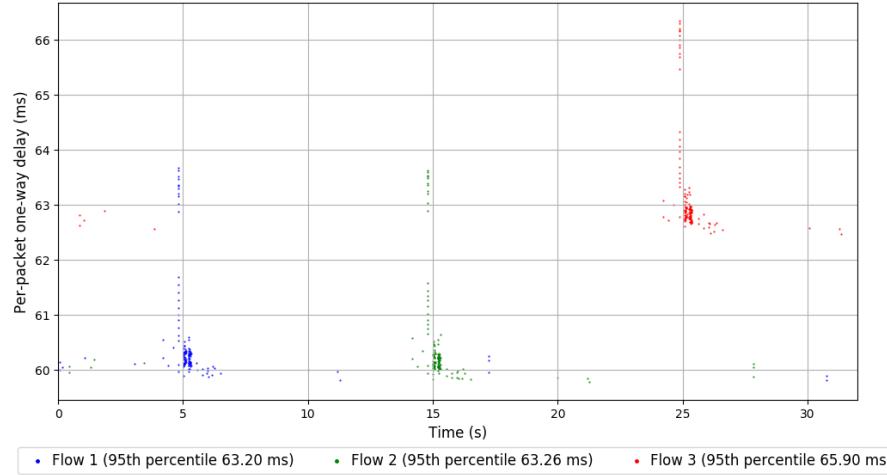
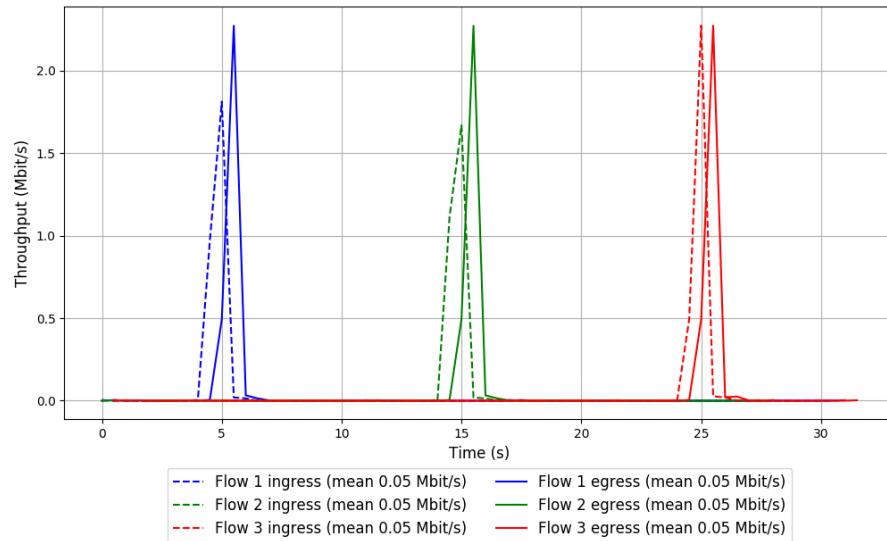


Run 3: Statistics of WebRTC media

```
Start at: 2019-01-25 02:29:19
End at: 2019-01-25 02:29:49
Local clock offset: -2.004 ms
Remote clock offset: -39.705 ms

# Below is generated by plot.py at 2019-01-25 04:42:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.578 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.202 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.257 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.904 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

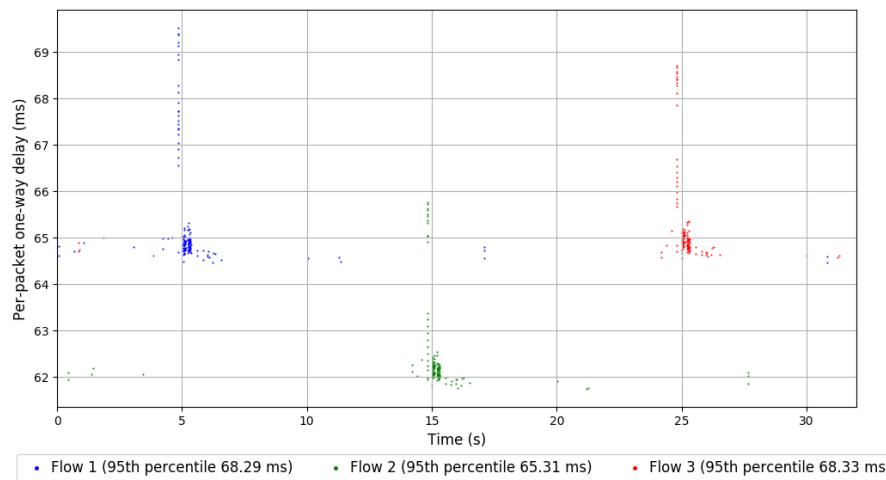
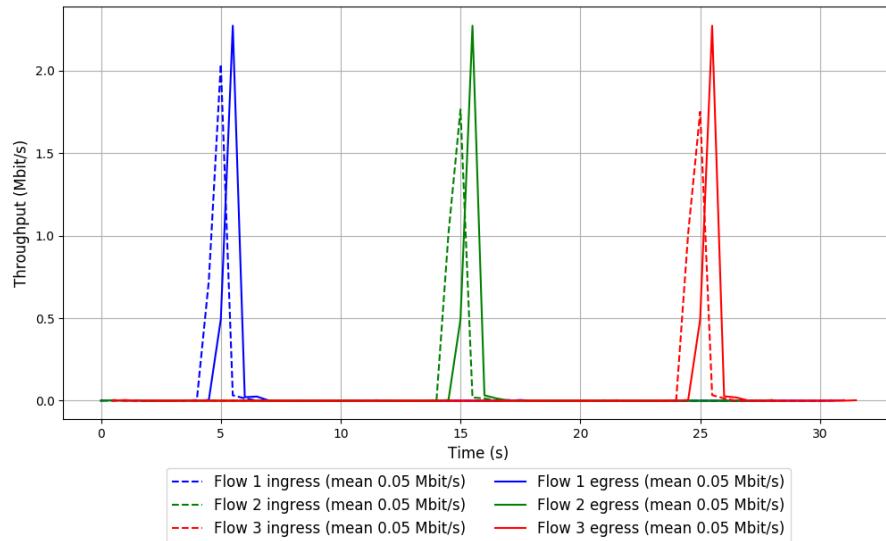


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-25 03:05:02
End at: 2019-01-25 03:05:32
Local clock offset: -1.28 ms
Remote clock offset: -37.431 ms

# Below is generated by plot.py at 2019-01-25 04:42:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 67.718 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.286 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.311 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.331 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-01-25 03:41:31
End at: 2019-01-25 03:42:01
Local clock offset: -1.544 ms
Remote clock offset: -40.722 ms

# Below is generated by plot.py at 2019-01-25 04:42:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 64.428 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.462 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.989 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

