

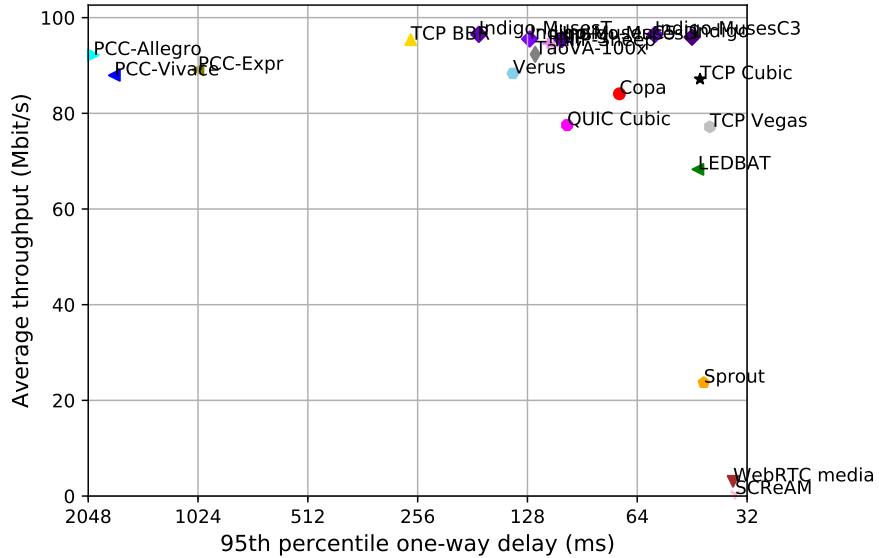
Pantheon Report

Generated at 2019-01-25 21:42:26 (UTC).
Data path: Mexico on `em1` (*remote*) → AWS California 2 on `ens5` (*local*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

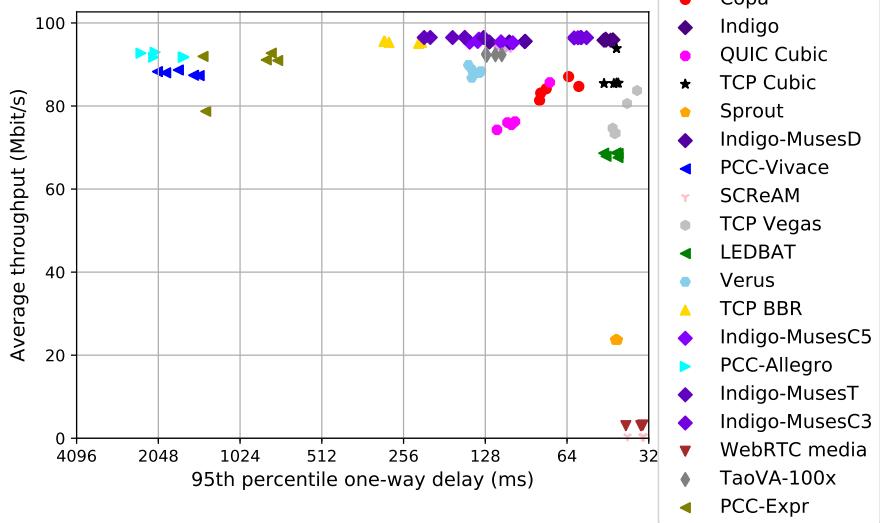
```
System info:  
Linux 4.15.0-1031-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
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 Mexico to AWS California 2, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Mexico to AWS California 2, 5 runs of 30s each per scheme
3 flows with 10s interval between flows



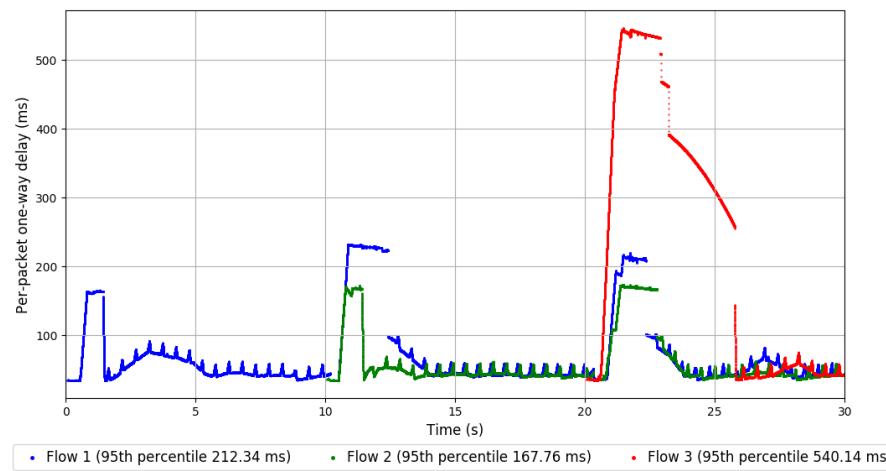
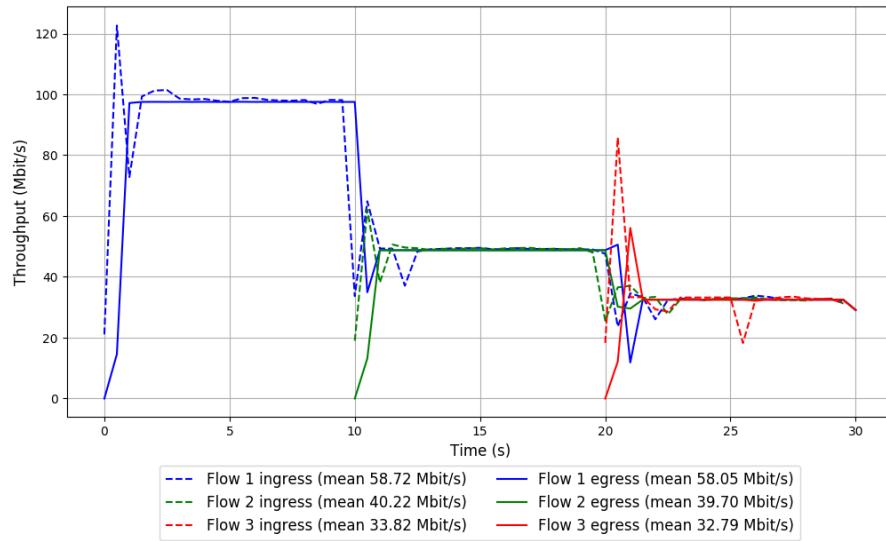
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	58.11	39.69	32.81	195.87	223.33	476.34	1.12	1.47	3.02
Copa	5	52.38	31.26	32.88	97.42	53.72	43.98	0.20	0.29	0.74
TCP Cubic	5	50.76	38.97	31.60	45.13	42.60	50.22	0.17	0.39	0.73
FillP	5	55.99	43.34	29.58	101.39	127.16	108.29	0.39	2.62	2.29
FillP-Sheep	5	58.77	38.62	29.06	93.97	125.84	112.37	0.26	0.53	1.20
Indigo	5	58.71	41.57	29.30	46.24	46.22	42.40	0.20	0.34	0.74
Indigo-MusesC3	5	63.47	38.77	26.63	50.21	69.20	51.94	0.22	0.46	0.93
Indigo-MusesC5	5	57.44	42.60	35.13	100.58	132.42	125.97	1.00	3.86	4.80
Indigo-MusesD	5	60.31	42.25	26.31	100.17	101.25	72.48	2.49	3.29	3.55
Indigo-MusesT	5	59.80	41.41	33.03	143.47	183.01	223.62	2.38	5.50	6.99
LEDBAT	5	40.27	31.52	21.29	43.58	44.27	43.49	0.16	0.39	0.87
PCC-Allegro	5	59.00	32.48	35.35	2009.96	1363.68	277.20	16.57	14.99	2.72
PCC-Expr	5	54.63	37.66	28.65	777.87	993.55	158.48	37.26	11.65	1.59
QUIC Cubic	5	45.74	34.20	27.55	82.07	122.55	132.17	0.22	0.41	1.34
SCReAM	5	0.21	0.21	0.22	34.51	34.51	34.51	0.21	0.40	0.71
Sprout	5	12.00	11.90	11.57	41.56	42.34	43.03	0.21	0.29	0.75
TaoVA-100x	5	54.87	39.96	32.82	118.20	125.69	133.99	0.65	1.45	3.08
TCP Vegas	5	40.76	35.68	38.27	47.27	36.77	43.45	0.17	0.29	0.69
Verus	5	55.02	37.45	25.48	135.11	135.46	212.28	0.48	0.84	1.36
PCC-Vivace	5	56.25	34.02	27.59	1780.68	364.38	91.81	7.00	2.67	1.19
WebRTC media	5	1.73	0.97	0.39	34.88	34.99	35.08	0.07	0.16	0.22

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-25 19:31:29
End at: 2019-01-25 19:31:59
Local clock offset: 0.337 ms
Remote clock offset: -2.244 ms

# Below is generated by plot.py at 2019-01-25 21:29:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.34 Mbit/s
95th percentile per-packet one-way delay: 289.502 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 212.340 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 39.70 Mbit/s
95th percentile per-packet one-way delay: 167.765 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 32.79 Mbit/s
95th percentile per-packet one-way delay: 540.138 ms
Loss rate: 3.70%
```

Run 1: Report of TCP BBR — Data Link

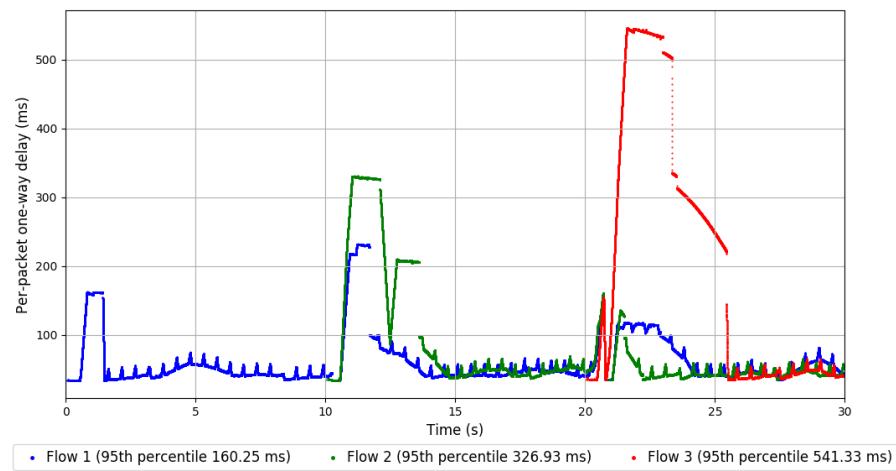
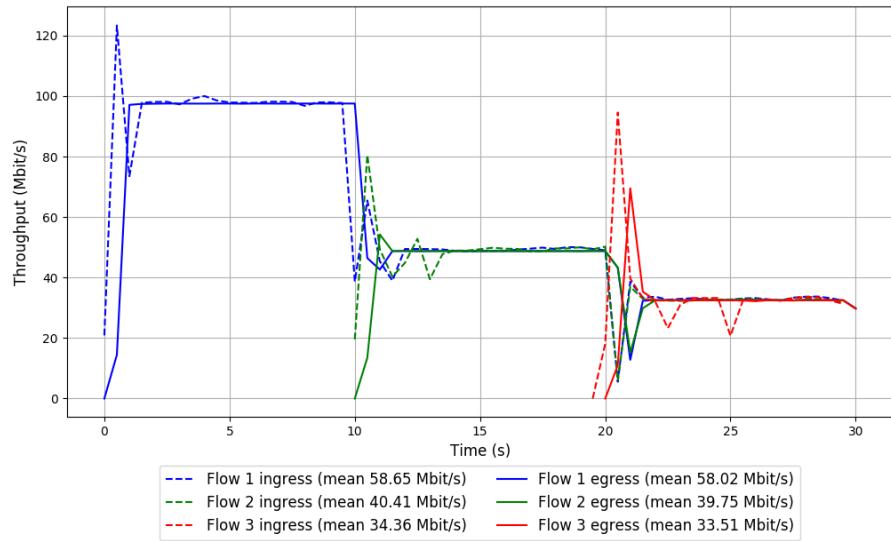


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-25 19:58:26
End at: 2019-01-25 19:58:56
Local clock offset: 0.149 ms
Remote clock offset: -0.941 ms

# Below is generated by plot.py at 2019-01-25 21:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 300.115 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 58.02 Mbit/s
95th percentile per-packet one-way delay: 160.249 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 39.75 Mbit/s
95th percentile per-packet one-way delay: 326.930 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 33.51 Mbit/s
95th percentile per-packet one-way delay: 541.334 ms
Loss rate: 3.11%
```

Run 2: Report of TCP BBR — Data Link

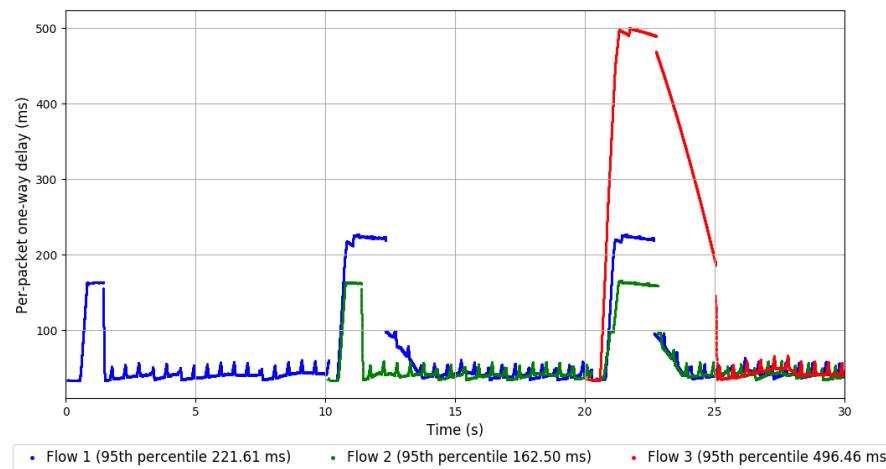
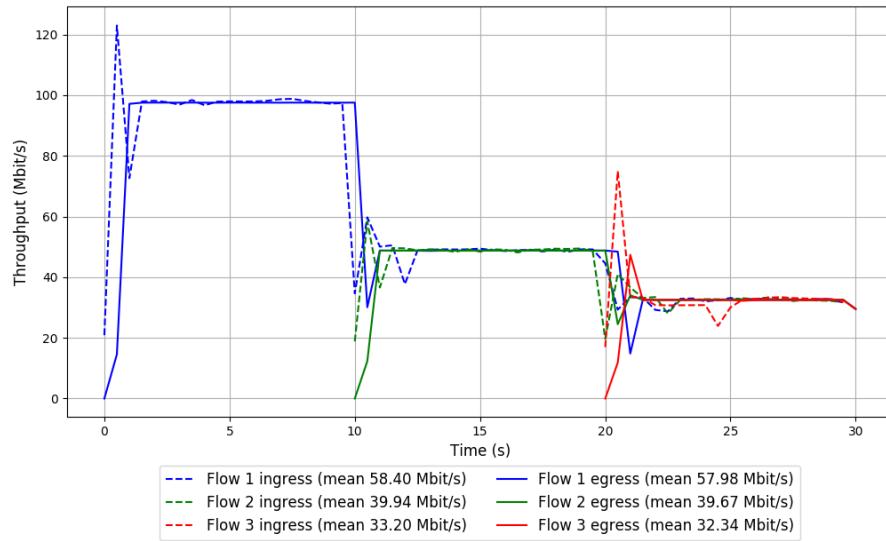


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-25 20:25:22
End at: 2019-01-25 20:25:52
Local clock offset: -3.571 ms
Remote clock offset: -0.248 ms

# Below is generated by plot.py at 2019-01-25 21:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.08 Mbit/s
95th percentile per-packet one-way delay: 225.328 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 57.98 Mbit/s
95th percentile per-packet one-way delay: 221.611 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 39.67 Mbit/s
95th percentile per-packet one-way delay: 162.500 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 496.464 ms
Loss rate: 3.22%
```

Run 3: Report of TCP BBR — Data Link

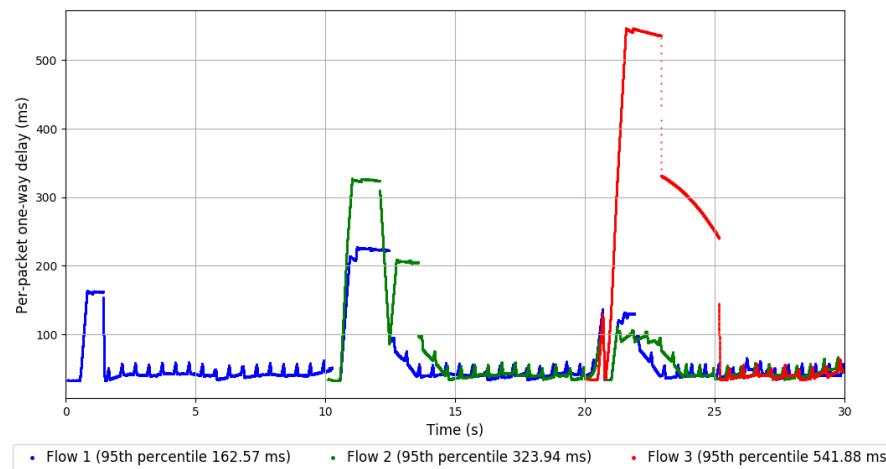
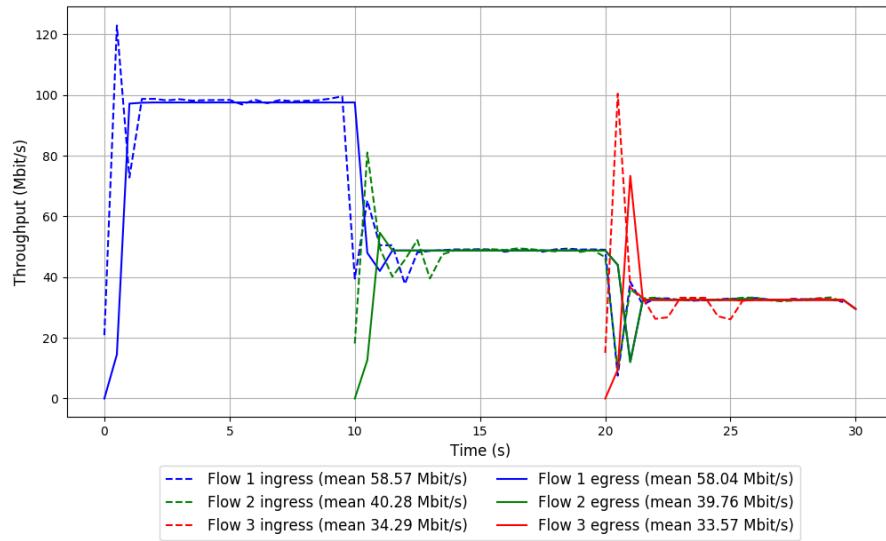


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-25 20:52:23
End at: 2019-01-25 20:52:54
Local clock offset: 0.579 ms
Remote clock offset: 0.191 ms

# Below is generated by plot.py at 2019-01-25 21:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 302.296 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 58.04 Mbit/s
95th percentile per-packet one-way delay: 162.575 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 39.76 Mbit/s
95th percentile per-packet one-way delay: 323.944 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 33.57 Mbit/s
95th percentile per-packet one-way delay: 541.883 ms
Loss rate: 2.75%
```

Run 4: Report of TCP BBR — Data Link

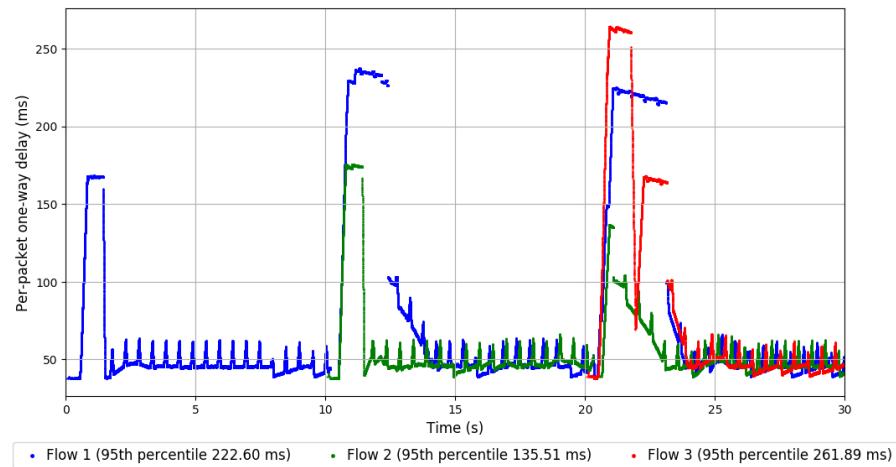
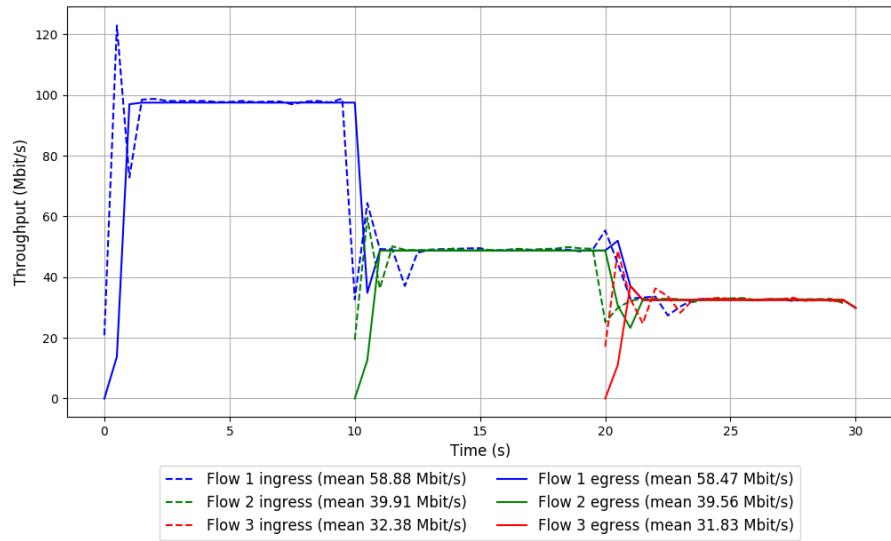


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-25 21:19:37
End at: 2019-01-25 21:20:07
Local clock offset: 0.833 ms
Remote clock offset: -4.281 ms

# Below is generated by plot.py at 2019-01-25 21:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.34 Mbit/s
95th percentile per-packet one-way delay: 219.598 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 58.47 Mbit/s
95th percentile per-packet one-way delay: 222.596 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 39.56 Mbit/s
95th percentile per-packet one-way delay: 135.510 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 261.887 ms
Loss rate: 2.34%
```

Run 5: Report of TCP BBR — Data Link

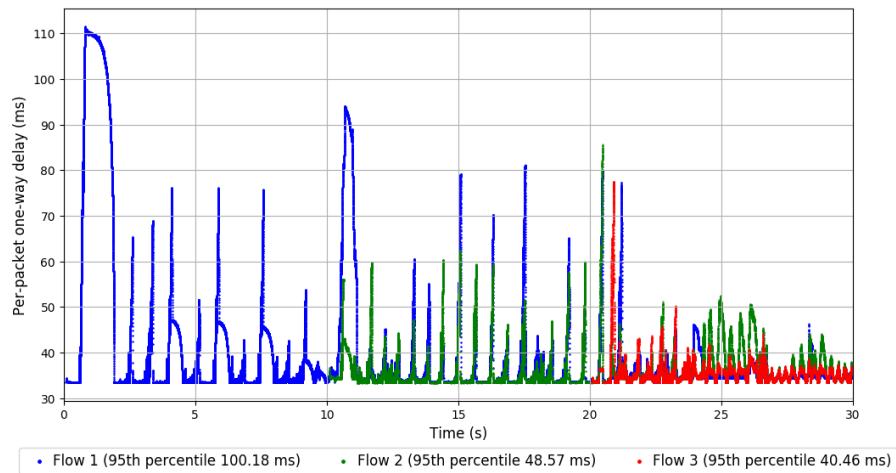
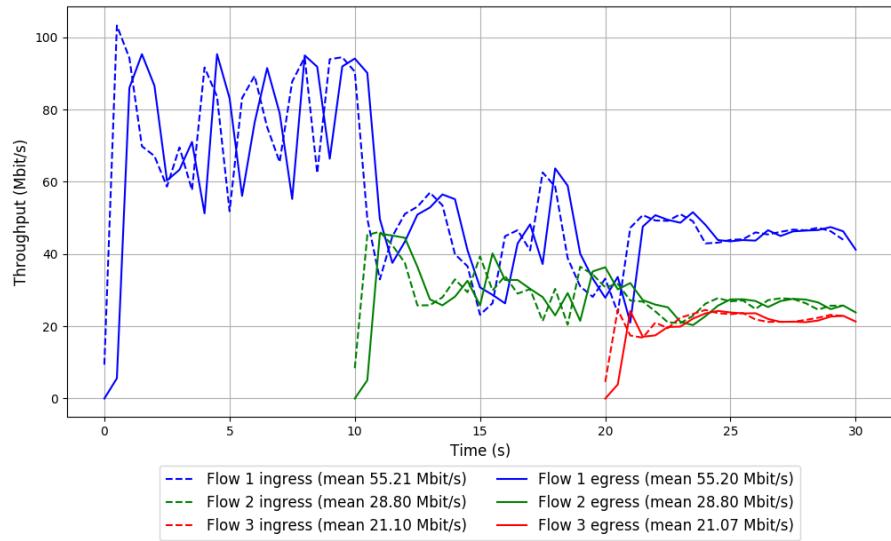


Run 1: Statistics of Copa

```
Start at: 2019-01-25 19:13:56
End at: 2019-01-25 19:14:26
Local clock offset: 0.308 ms
Remote clock offset: -2.89 ms

# Below is generated by plot.py at 2019-01-25 21:29:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 80.768 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 55.20 Mbit/s
95th percentile per-packet one-way delay: 100.183 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 28.80 Mbit/s
95th percentile per-packet one-way delay: 48.569 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 21.07 Mbit/s
95th percentile per-packet one-way delay: 40.457 ms
Loss rate: 0.76%
```

Run 1: Report of Copa — Data Link

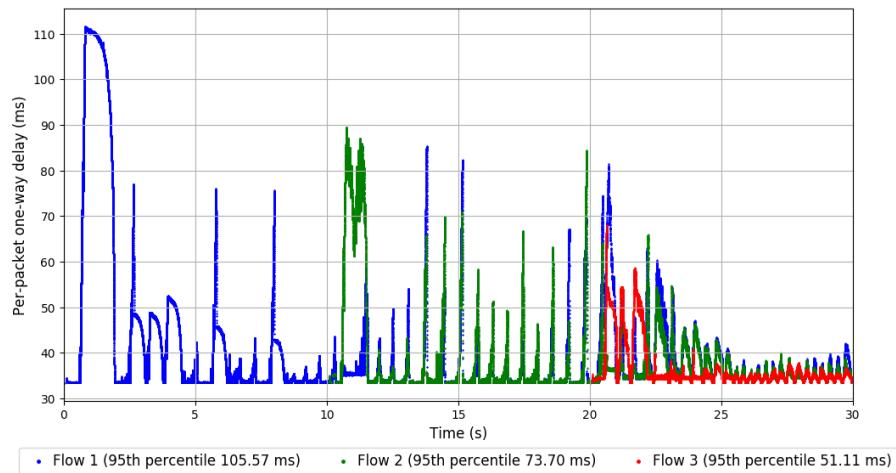
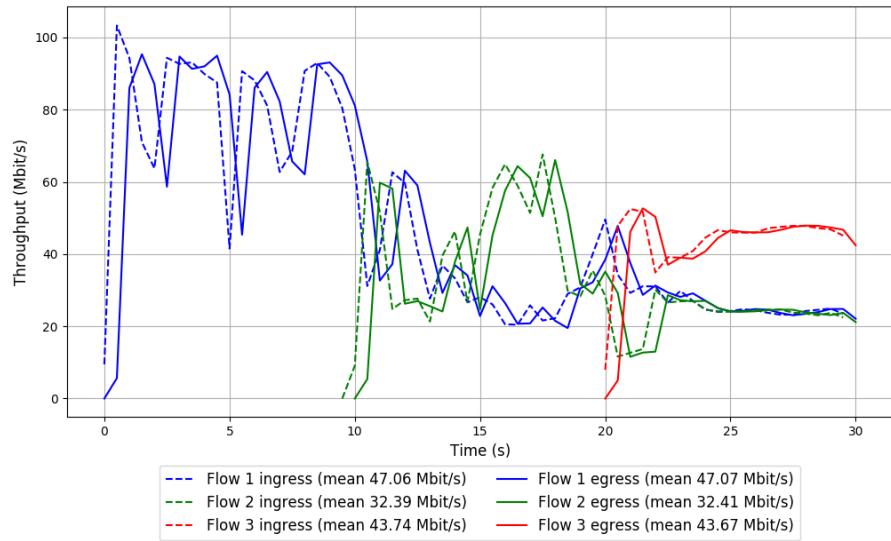


Run 2: Statistics of Copa

```
Start at: 2019-01-25 19:40:53
End at: 2019-01-25 19:41:23
Local clock offset: 0.207 ms
Remote clock offset: -1.544 ms

# Below is generated by plot.py at 2019-01-25 21:29:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.12 Mbit/s
95th percentile per-packet one-way delay: 80.008 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 47.07 Mbit/s
95th percentile per-packet one-way delay: 105.568 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 32.41 Mbit/s
95th percentile per-packet one-way delay: 73.703 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 43.67 Mbit/s
95th percentile per-packet one-way delay: 51.111 ms
Loss rate: 0.80%
```

Run 2: Report of Copa — Data Link

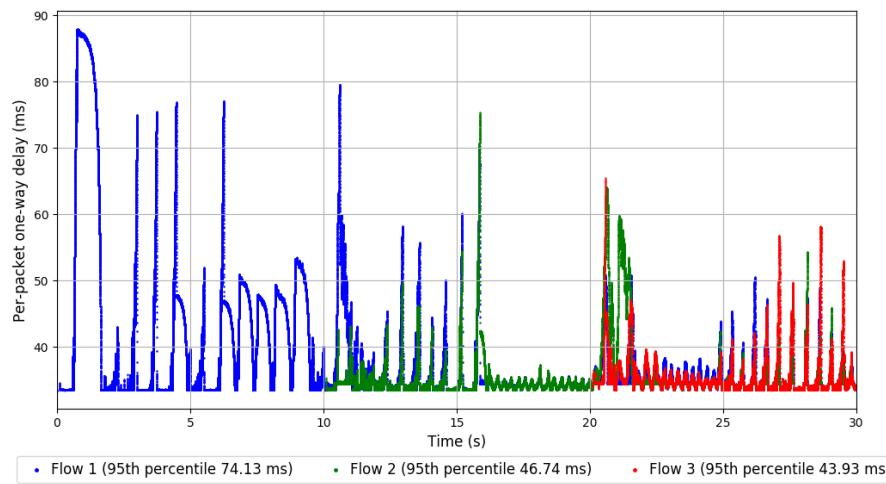
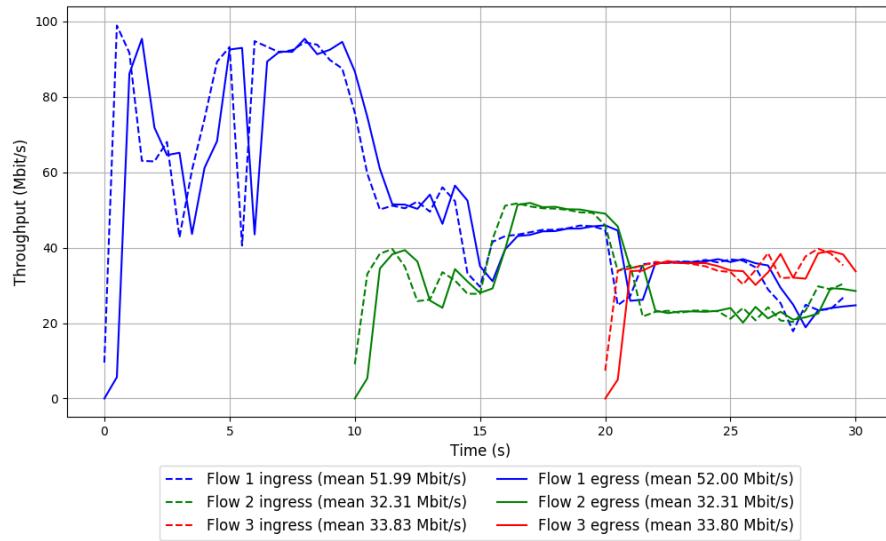


Run 3: Statistics of Copa

```
Start at: 2019-01-25 20:07:47
End at: 2019-01-25 20:08:17
Local clock offset: -1.96 ms
Remote clock offset: -0.591 ms

# Below is generated by plot.py at 2019-01-25 21:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.71 Mbit/s
95th percentile per-packet one-way delay: 57.906 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 52.00 Mbit/s
95th percentile per-packet one-way delay: 74.126 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 32.31 Mbit/s
95th percentile per-packet one-way delay: 46.742 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 33.80 Mbit/s
95th percentile per-packet one-way delay: 43.934 ms
Loss rate: 0.73%
```

Run 3: Report of Copa — Data Link

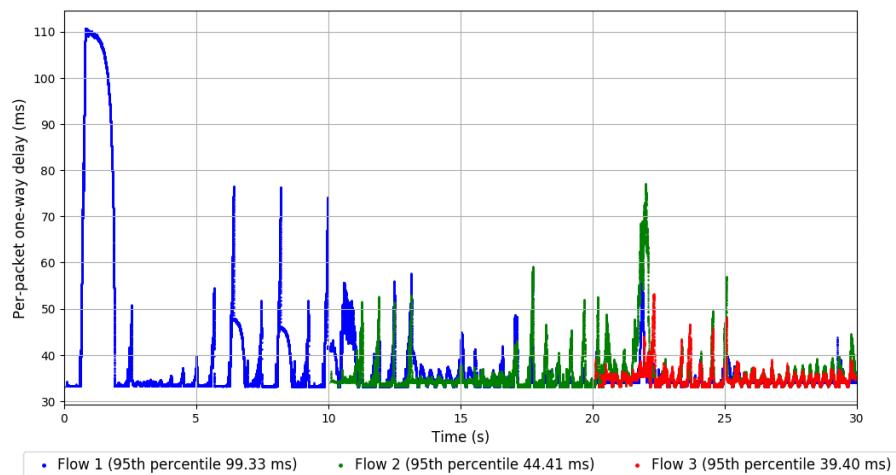
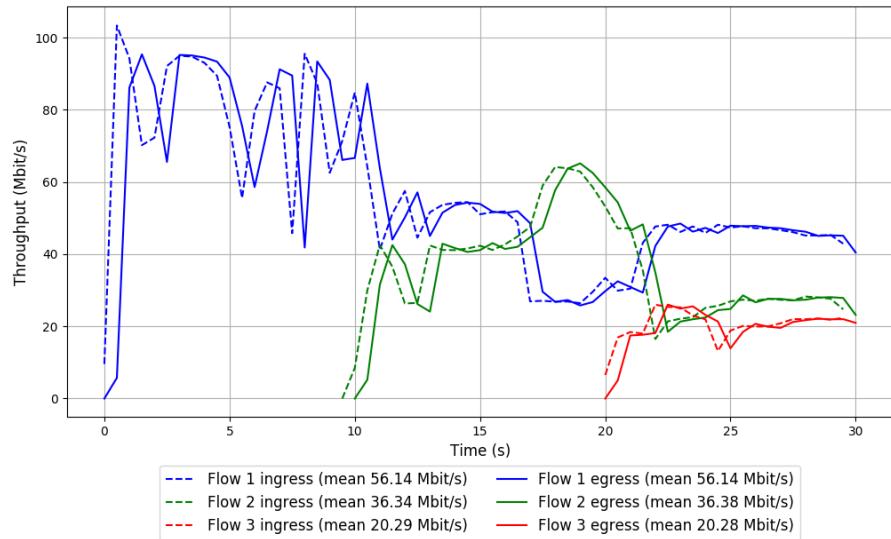


Run 4: Statistics of Copa

```
Start at: 2019-01-25 20:34:36
End at: 2019-01-25 20:35:06
Local clock offset: -1.795 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2019-01-25 21:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 63.133 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 56.14 Mbit/s
95th percentile per-packet one-way delay: 99.328 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 36.38 Mbit/s
95th percentile per-packet one-way delay: 44.410 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 20.28 Mbit/s
95th percentile per-packet one-way delay: 39.400 ms
Loss rate: 0.72%
```

Run 4: Report of Copa — Data Link

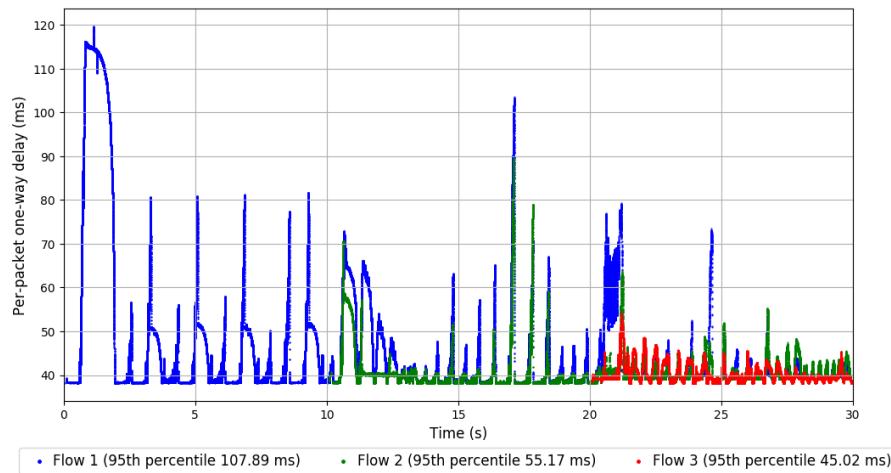
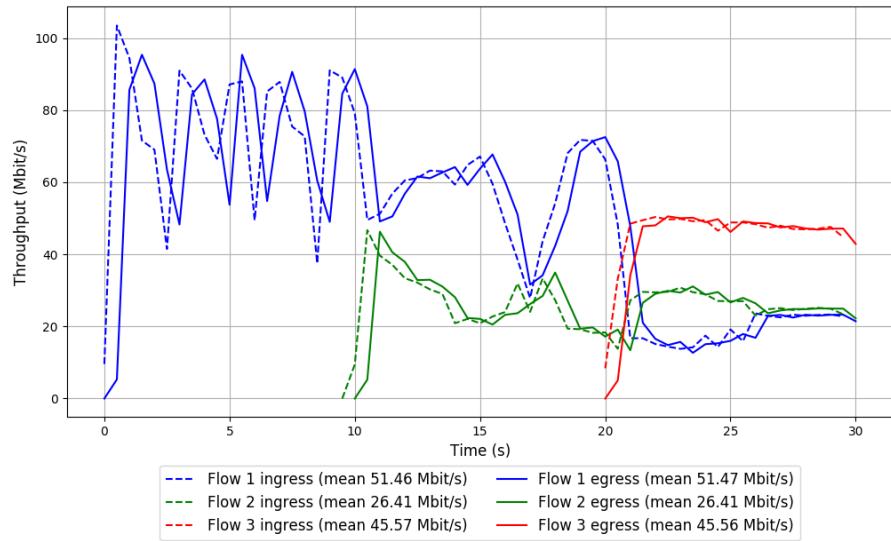


Run 5: Statistics of Copa

```
Start at: 2019-01-25 21:02:09
End at: 2019-01-25 21:02:39
Local clock offset: 0.83 ms
Remote clock offset: -4.737 ms

# Below is generated by plot.py at 2019-01-25 21:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.15 Mbit/s
95th percentile per-packet one-way delay: 76.335 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 51.47 Mbit/s
95th percentile per-packet one-way delay: 107.890 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 26.41 Mbit/s
95th percentile per-packet one-way delay: 55.174 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 45.56 Mbit/s
95th percentile per-packet one-way delay: 45.019 ms
Loss rate: 0.67%
```

Run 5: Report of Copa — Data Link

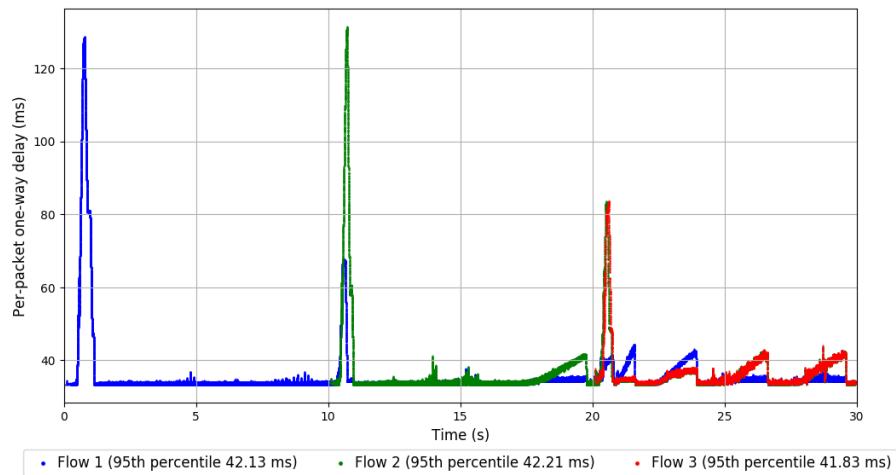
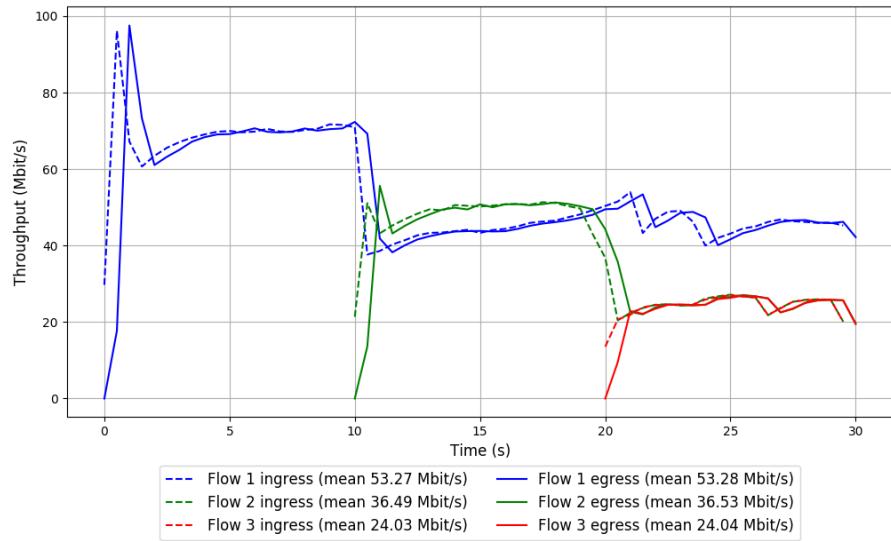


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-25 19:36:49
End at: 2019-01-25 19:37:19
Local clock offset: 0.237 ms
Remote clock offset: -1.692 ms

# Below is generated by plot.py at 2019-01-25 21:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.54 Mbit/s
95th percentile per-packet one-way delay: 42.070 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 53.28 Mbit/s
95th percentile per-packet one-way delay: 42.130 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 36.53 Mbit/s
95th percentile per-packet one-way delay: 42.208 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 41.831 ms
Loss rate: 0.62%
```

Run 1: Report of TCP Cubic — Data Link

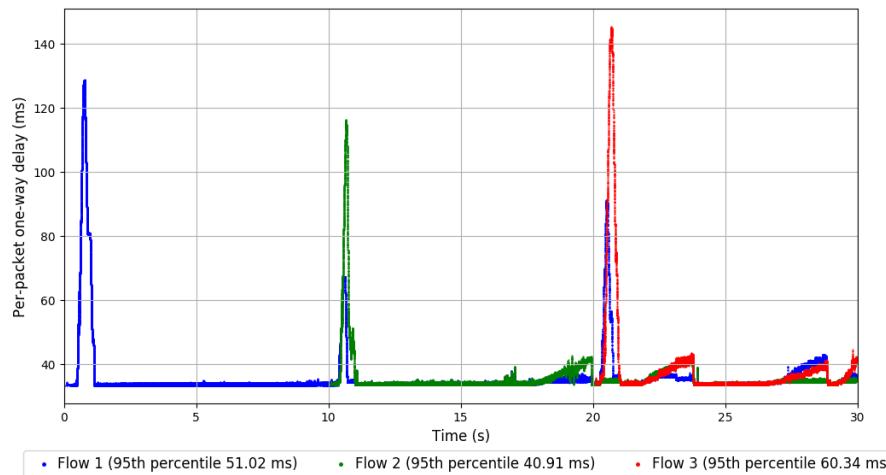
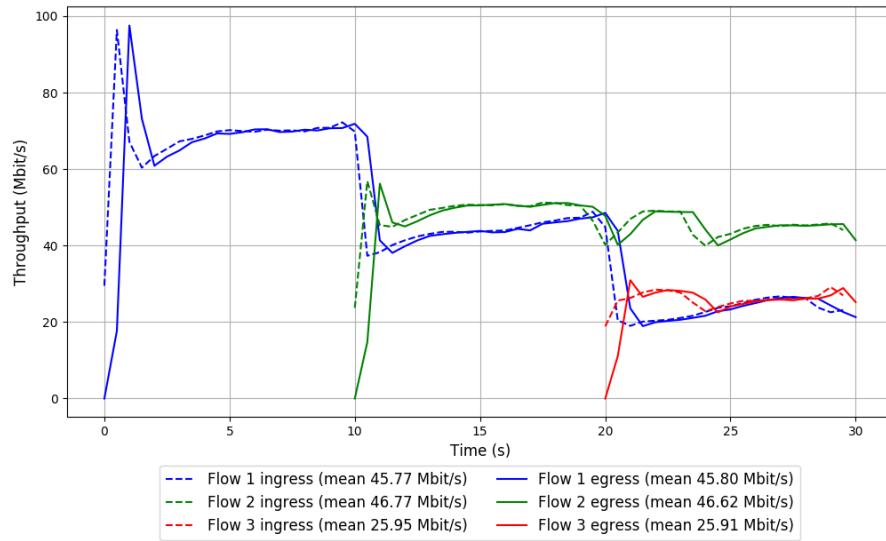


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-25 20:03:54
End at: 2019-01-25 20:04:24
Local clock offset: -1.164 ms
Remote clock offset: -0.637 ms

# Below is generated by plot.py at 2019-01-25 21:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.42 Mbit/s
95th percentile per-packet one-way delay: 43.025 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 45.80 Mbit/s
95th percentile per-packet one-way delay: 51.020 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 46.62 Mbit/s
95th percentile per-packet one-way delay: 40.908 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 60.336 ms
Loss rate: 0.80%
```

Run 2: Report of TCP Cubic — Data Link

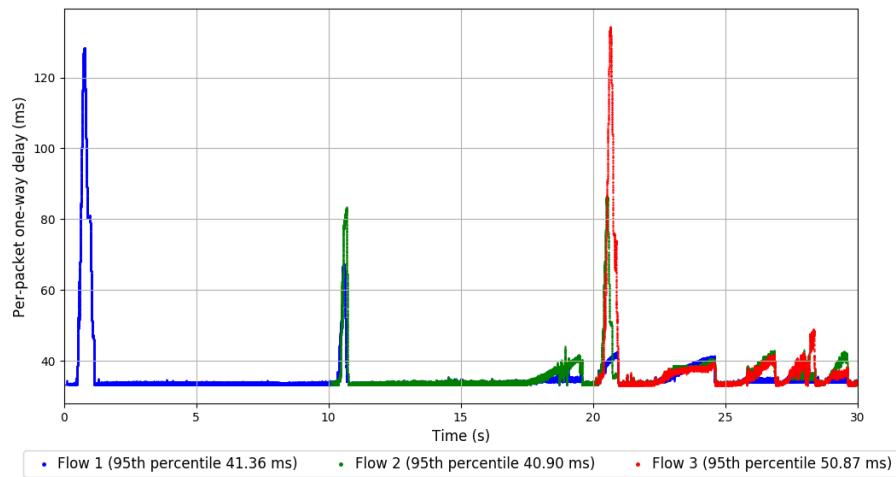
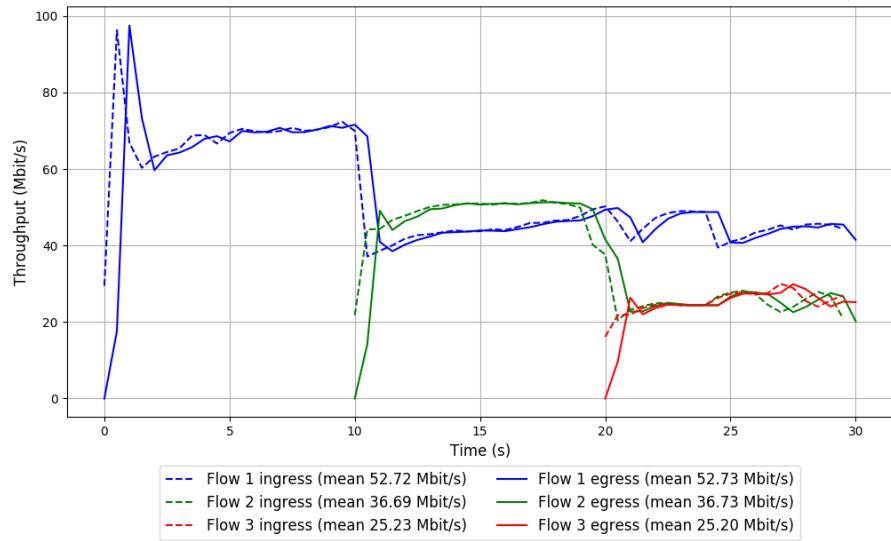


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-25 20:30:46
End at: 2019-01-25 20:31:16
Local clock offset: -3.151 ms
Remote clock offset: -0.189 ms

# Below is generated by plot.py at 2019-01-25 21:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 41.429 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 52.73 Mbit/s
95th percentile per-packet one-way delay: 41.360 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 36.73 Mbit/s
95th percentile per-packet one-way delay: 40.902 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 25.20 Mbit/s
95th percentile per-packet one-way delay: 50.866 ms
Loss rate: 0.78%
```

Run 3: Report of TCP Cubic — Data Link

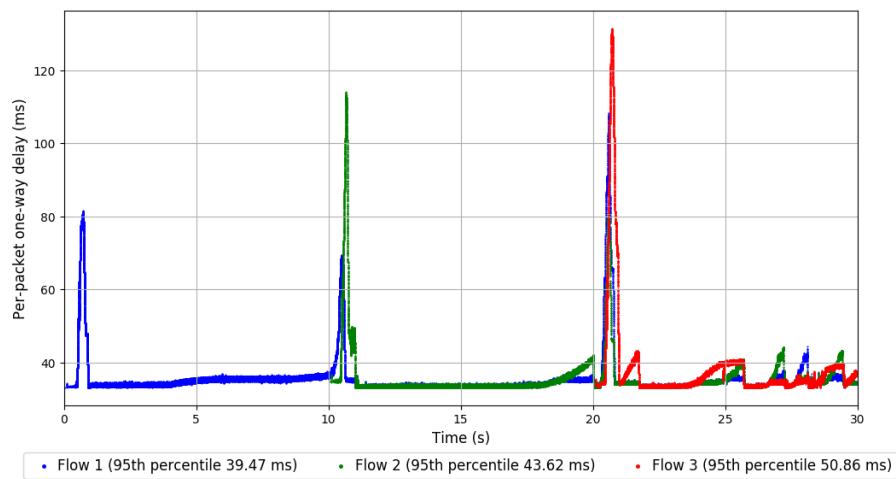
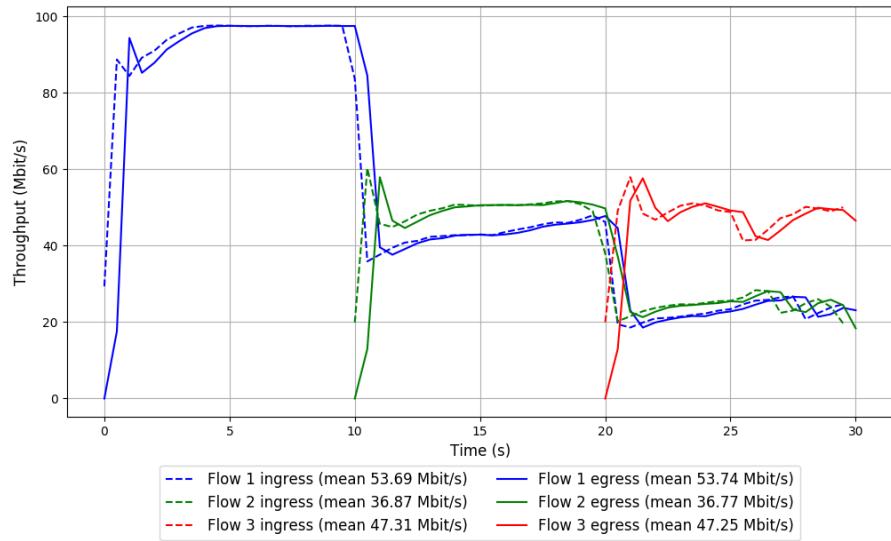


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-25 20:58:02
End at: 2019-01-25 20:58:32
Local clock offset: 0.856 ms
Remote clock offset: 0.167 ms

# Below is generated by plot.py at 2019-01-25 21:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 42.061 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 53.74 Mbit/s
95th percentile per-packet one-way delay: 39.469 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 36.77 Mbit/s
95th percentile per-packet one-way delay: 43.622 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 47.25 Mbit/s
95th percentile per-packet one-way delay: 50.858 ms
Loss rate: 0.77%
```

Run 4: Report of TCP Cubic — Data Link

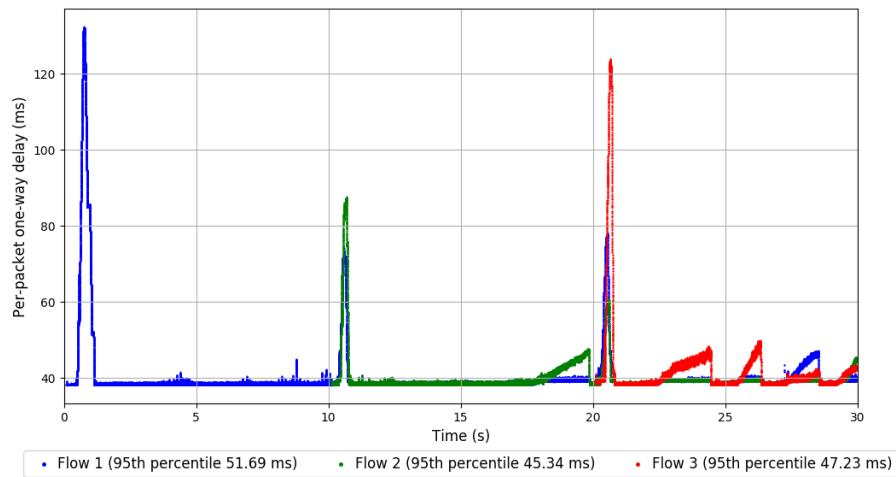
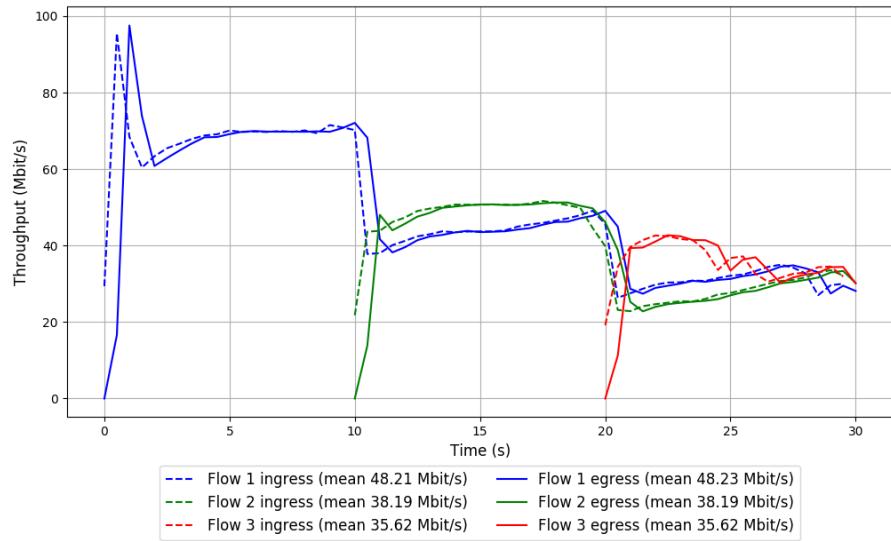


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-25 21:25:15
End at: 2019-01-25 21:25:45
Local clock offset: 0.9 ms
Remote clock offset: -4.387 ms

# Below is generated by plot.py at 2019-01-25 21:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.43 Mbit/s
95th percentile per-packet one-way delay: 46.740 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 48.23 Mbit/s
95th percentile per-packet one-way delay: 51.685 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 38.19 Mbit/s
95th percentile per-packet one-way delay: 45.337 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 35.62 Mbit/s
95th percentile per-packet one-way delay: 47.225 ms
Loss rate: 0.66%
```

Run 5: Report of TCP Cubic — Data Link

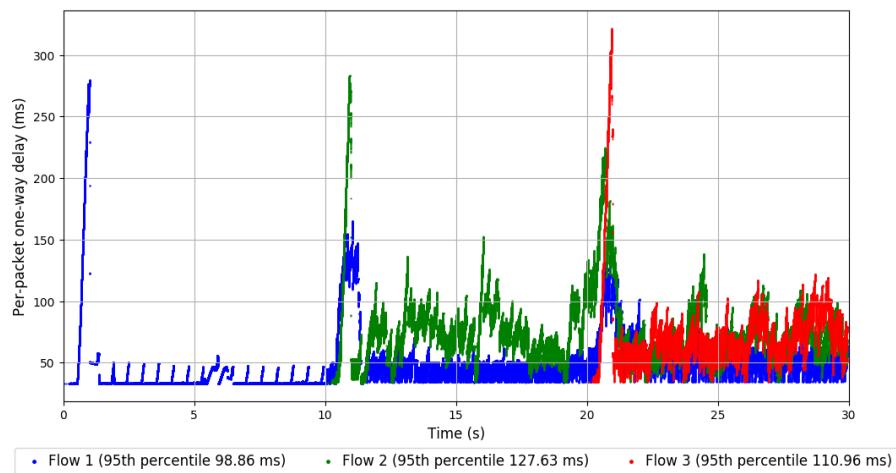
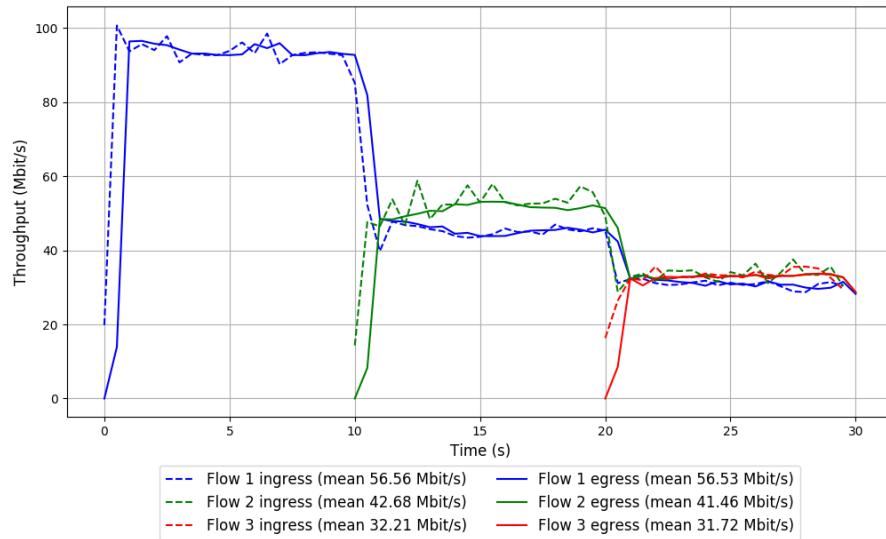


```
Run 1: Statistics of FillP

Start at: 2019-01-25 19:34:14
End at: 2019-01-25 19:34:44
Local clock offset: 0.27 ms
Remote clock offset: -1.87 ms

# Below is generated by plot.py at 2019-01-25 21:31:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.63 Mbit/s
95th percentile per-packet one-way delay: 115.230 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 56.53 Mbit/s
95th percentile per-packet one-way delay: 98.862 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 41.46 Mbit/s
95th percentile per-packet one-way delay: 127.626 ms
Loss rate: 3.07%
-- Flow 3:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 110.960 ms
Loss rate: 2.16%
```

Run 1: Report of FillP — Data Link

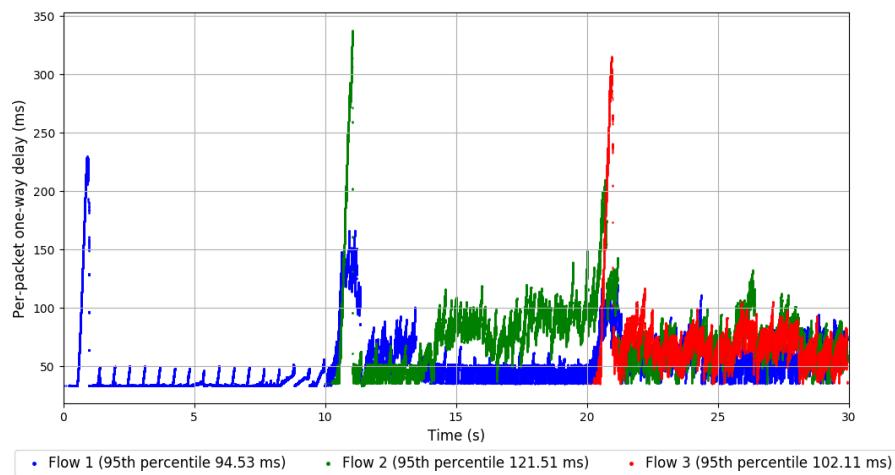
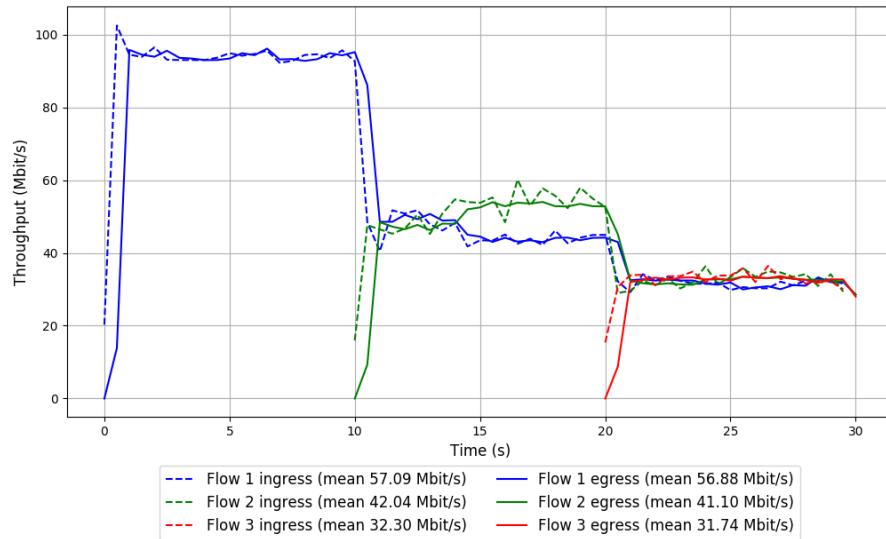


Run 2: Statistics of FillP

```
Start at: 2019-01-25 20:01:22
End at: 2019-01-25 20:01:52
Local clock offset: -0.448 ms
Remote clock offset: -0.754 ms

# Below is generated by plot.py at 2019-01-25 21:31:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 109.998 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 56.88 Mbit/s
95th percentile per-packet one-way delay: 94.532 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 41.10 Mbit/s
95th percentile per-packet one-way delay: 121.514 ms
Loss rate: 2.50%
-- Flow 3:
Average throughput: 31.74 Mbit/s
95th percentile per-packet one-way delay: 102.106 ms
Loss rate: 2.38%
```

Run 2: Report of FillP — Data Link

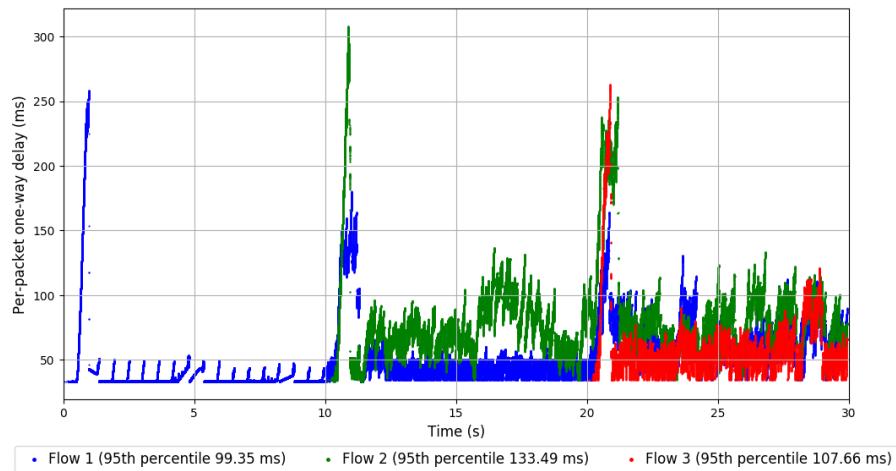
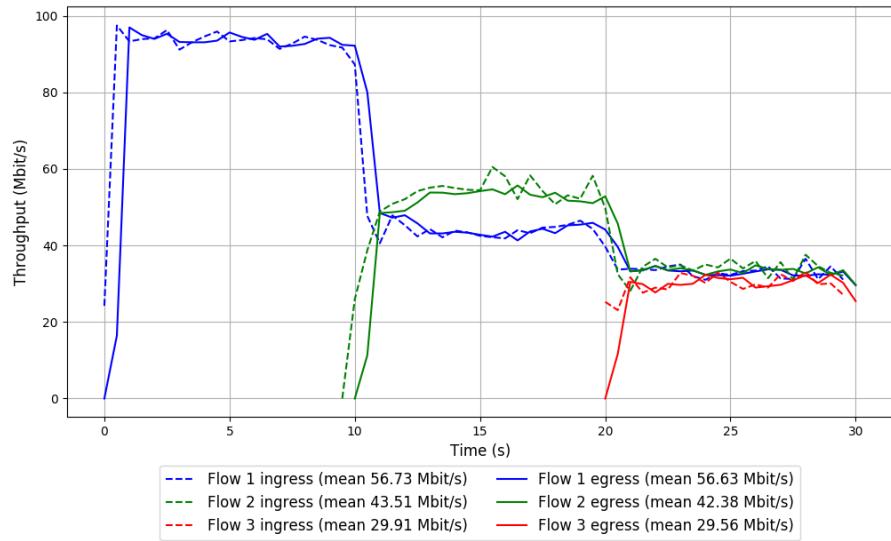


Run 3: Statistics of FillP

```
Start at: 2019-01-25 20:28:01
End at: 2019-01-25 20:28:31
Local clock offset: -3.721 ms
Remote clock offset: -0.166 ms

# Below is generated by plot.py at 2019-01-25 21:31:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: 113.571 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 56.63 Mbit/s
95th percentile per-packet one-way delay: 99.349 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 42.38 Mbit/s
95th percentile per-packet one-way delay: 133.487 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 107.655 ms
Loss rate: 1.53%
```

Run 3: Report of FillP — Data Link

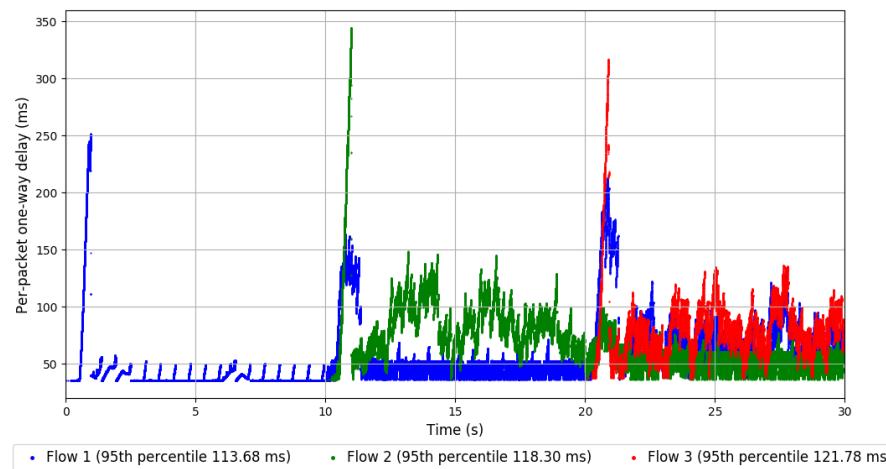
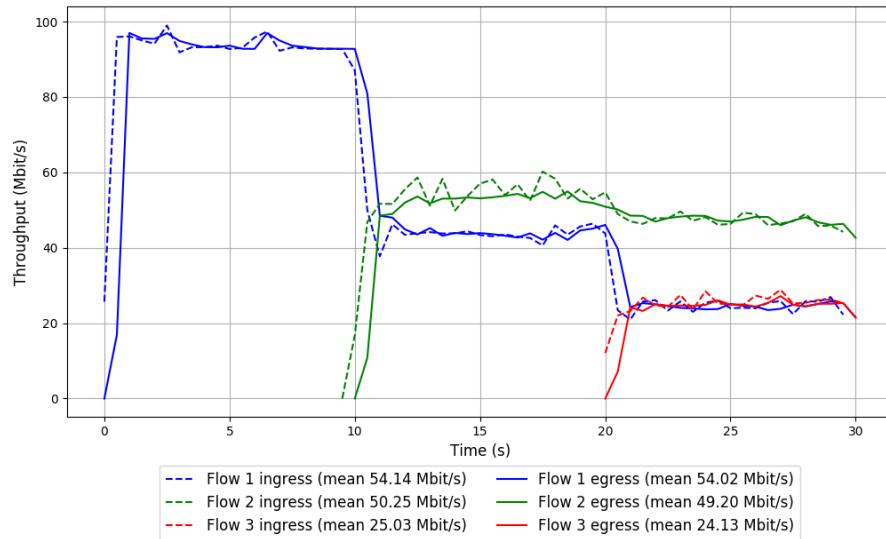


Run 4: Statistics of FillP

```
Start at: 2019-01-25 20:55:23
End at: 2019-01-25 20:55:53
Local clock offset: 0.73 ms
Remote clock offset: -2.292 ms

# Below is generated by plot.py at 2019-01-25 21:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.74 Mbit/s
95th percentile per-packet one-way delay: 118.094 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 54.02 Mbit/s
95th percentile per-packet one-way delay: 113.678 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 49.20 Mbit/s
95th percentile per-packet one-way delay: 118.302 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 24.13 Mbit/s
95th percentile per-packet one-way delay: 121.776 ms
Loss rate: 4.22%
```

Run 4: Report of FillP — Data Link

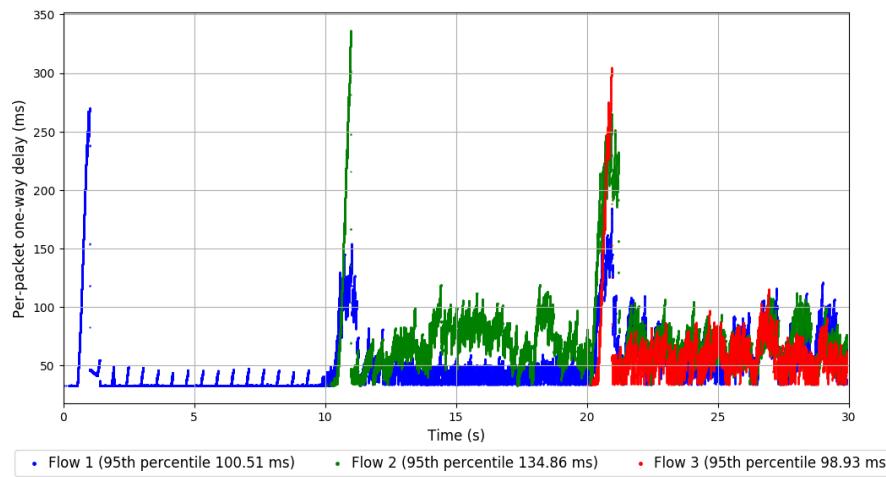
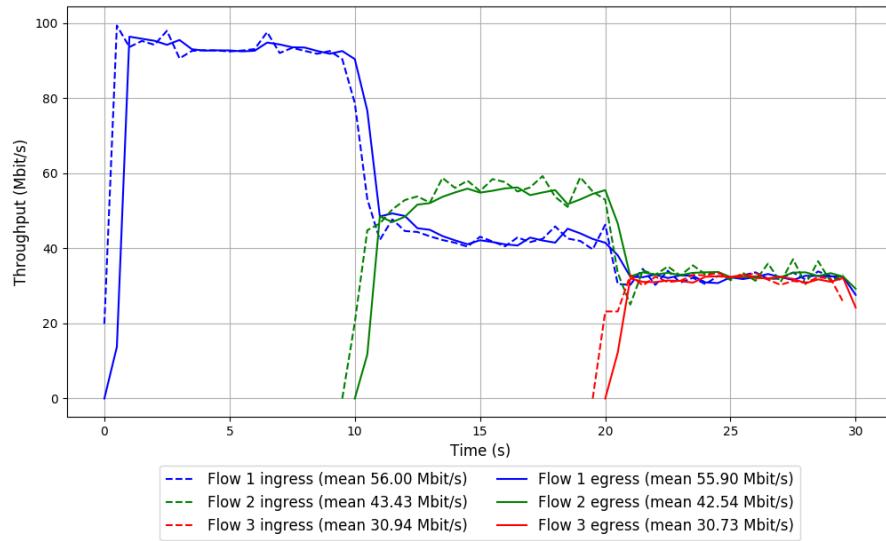


Run 5: Statistics of FillP

```
Start at: 2019-01-25 21:22:23
End at: 2019-01-25 21:22:53
Local clock offset: 0.866 ms
Remote clock offset: 0.679 ms

# Below is generated by plot.py at 2019-01-25 21:32:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 105.263 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 55.90 Mbit/s
95th percentile per-packet one-way delay: 100.509 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 42.54 Mbit/s
95th percentile per-packet one-way delay: 134.858 ms
Loss rate: 2.32%
-- Flow 3:
Average throughput: 30.73 Mbit/s
95th percentile per-packet one-way delay: 98.930 ms
Loss rate: 1.15%
```

Run 5: Report of FillP — Data Link

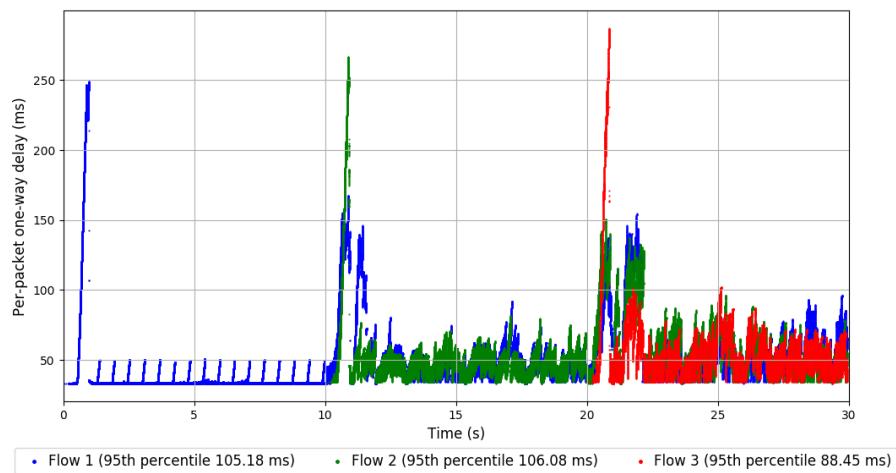
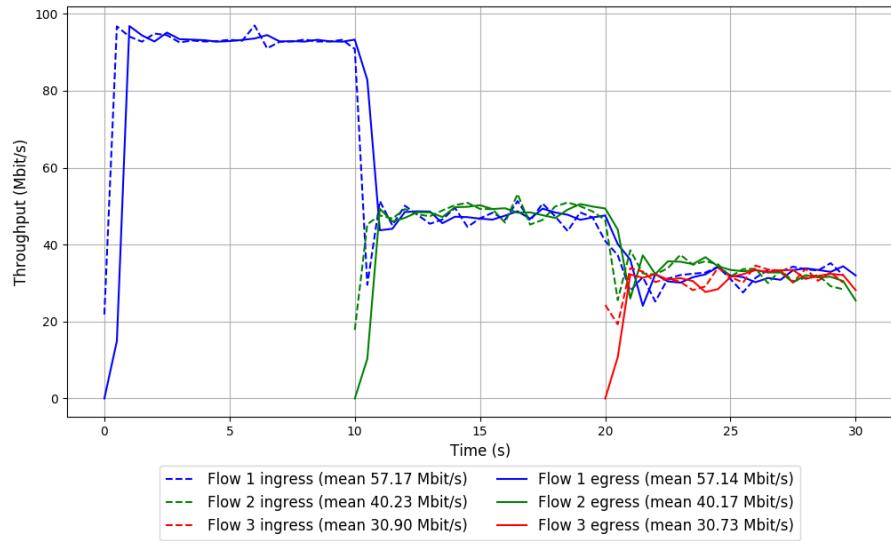


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-01-25 19:20:09
End at: 2019-01-25 19:20:39
Local clock offset: 0.322 ms
Remote clock offset: -2.689 ms

# Below is generated by plot.py at 2019-01-25 21:32:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.04 Mbit/s
95th percentile per-packet one-way delay: 103.375 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 57.14 Mbit/s
95th percentile per-packet one-way delay: 105.184 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 106.079 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 30.73 Mbit/s
95th percentile per-packet one-way delay: 88.455 ms
Loss rate: 0.96%
```

Run 1: Report of FillP-Sheep — Data Link

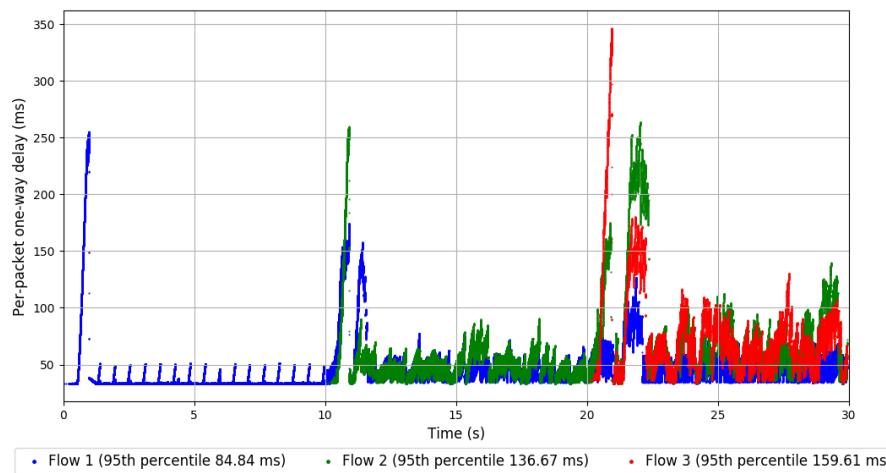
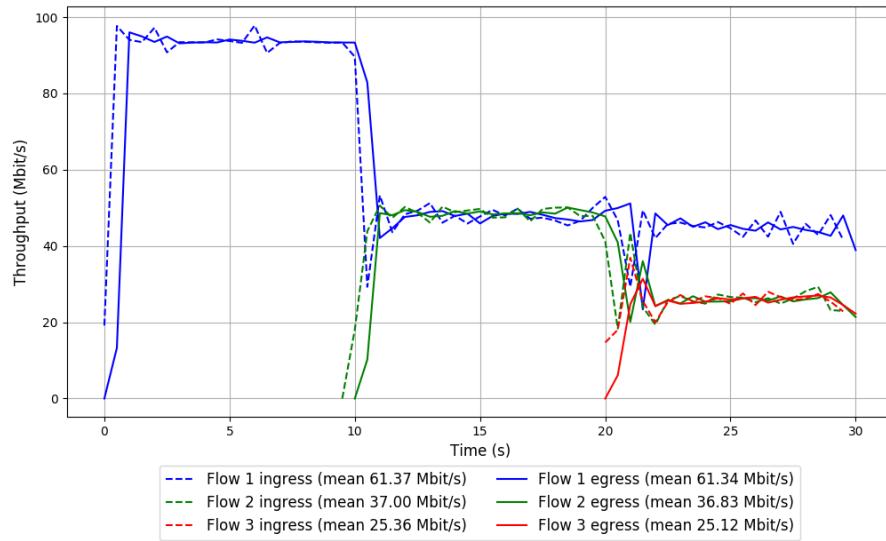


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-25 19:47:17
End at: 2019-01-25 19:47:47
Local clock offset: 0.17 ms
Remote clock offset: -1.18 ms

# Below is generated by plot.py at 2019-01-25 21:32:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 110.833 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 61.34 Mbit/s
95th percentile per-packet one-way delay: 84.844 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 36.83 Mbit/s
95th percentile per-packet one-way delay: 136.672 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 25.12 Mbit/s
95th percentile per-packet one-way delay: 159.609 ms
Loss rate: 1.61%
```

Run 2: Report of FillP-Sheep — Data Link

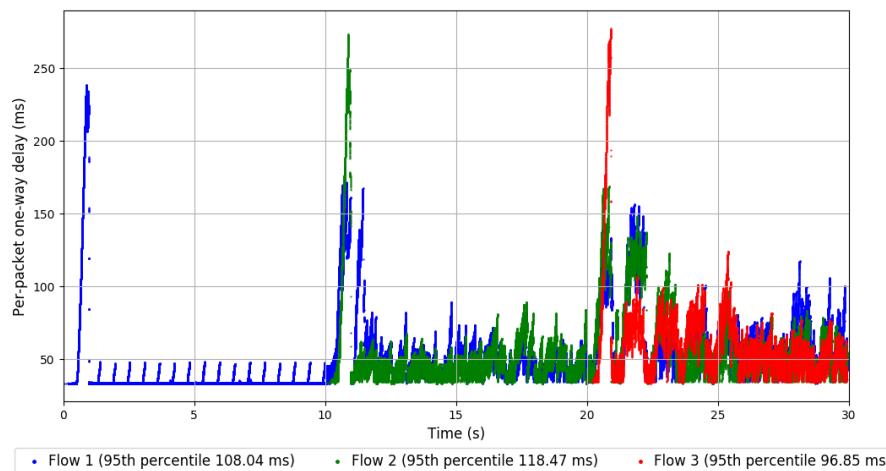
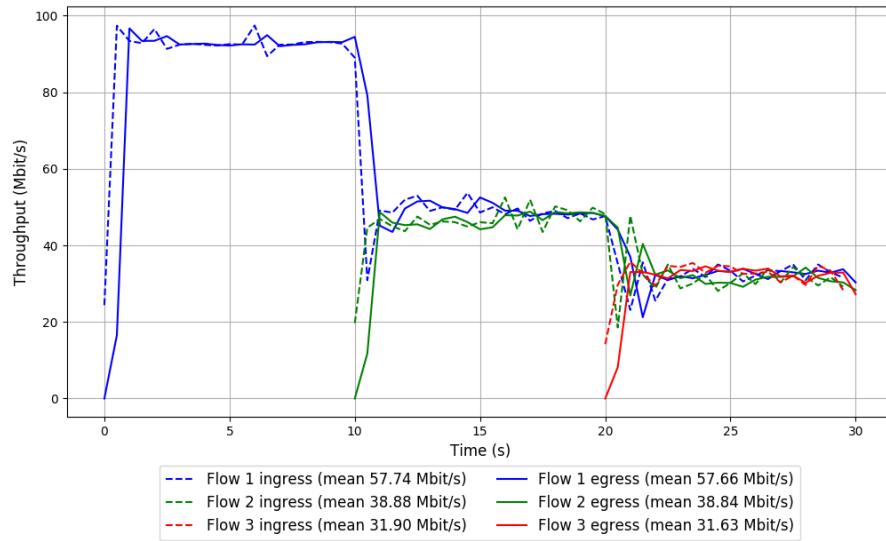


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-25 20:14:12
End at: 2019-01-25 20:14:43
Local clock offset: -2.75 ms
Remote clock offset: -0.653 ms

# Below is generated by plot.py at 2019-01-25 21:32:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 110.735 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 57.66 Mbit/s
95th percentile per-packet one-way delay: 108.043 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 38.84 Mbit/s
95th percentile per-packet one-way delay: 118.472 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 96.847 ms
Loss rate: 1.37%
```

Run 3: Report of FillP-Sheep — Data Link

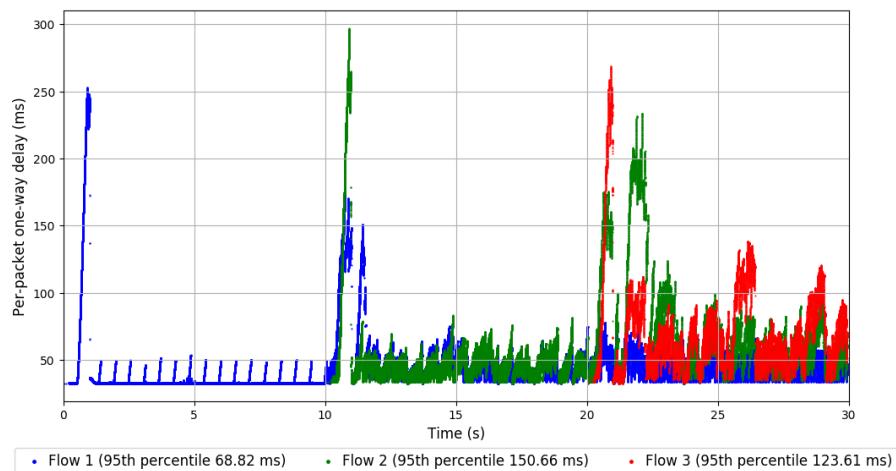
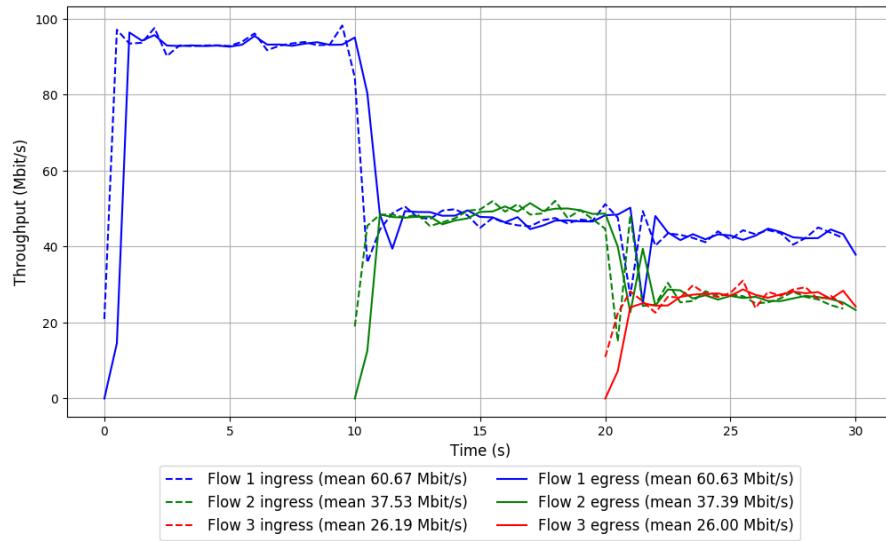


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-25 20:40:54
End at: 2019-01-25 20:41:24
Local clock offset: -0.446 ms
Remote clock offset: 0.594 ms

# Below is generated by plot.py at 2019-01-25 21:32:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.11 Mbit/s
95th percentile per-packet one-way delay: 107.885 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 60.63 Mbit/s
95th percentile per-packet one-way delay: 68.820 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 37.39 Mbit/s
95th percentile per-packet one-way delay: 150.658 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 26.00 Mbit/s
95th percentile per-packet one-way delay: 123.607 ms
Loss rate: 1.28%
```

Run 4: Report of FillP-Sheep — Data Link

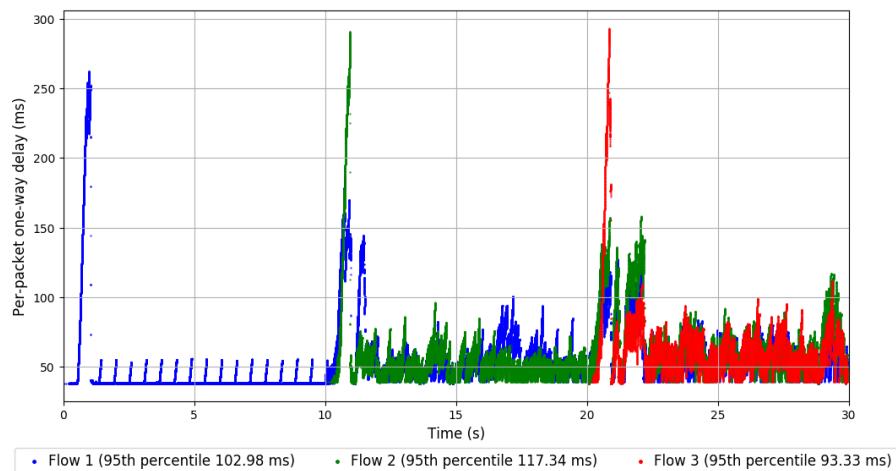
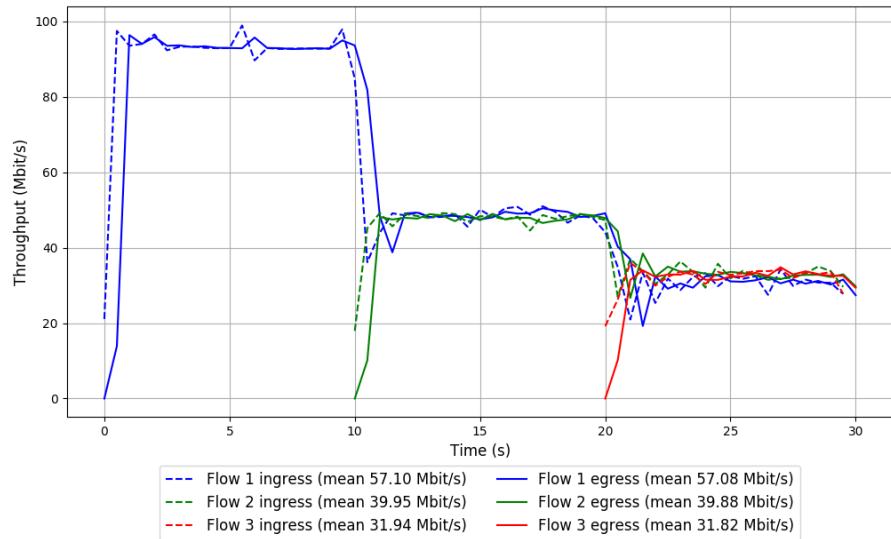


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-25 21:08:31
End at: 2019-01-25 21:09:01
Local clock offset: 0.765 ms
Remote clock offset: -4.959 ms

# Below is generated by plot.py at 2019-01-25 21:32:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 107.017 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 57.08 Mbit/s
95th percentile per-packet one-way delay: 102.977 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 117.343 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 93.331 ms
Loss rate: 0.79%
```

Run 5: Report of FillP-Sheep — Data Link

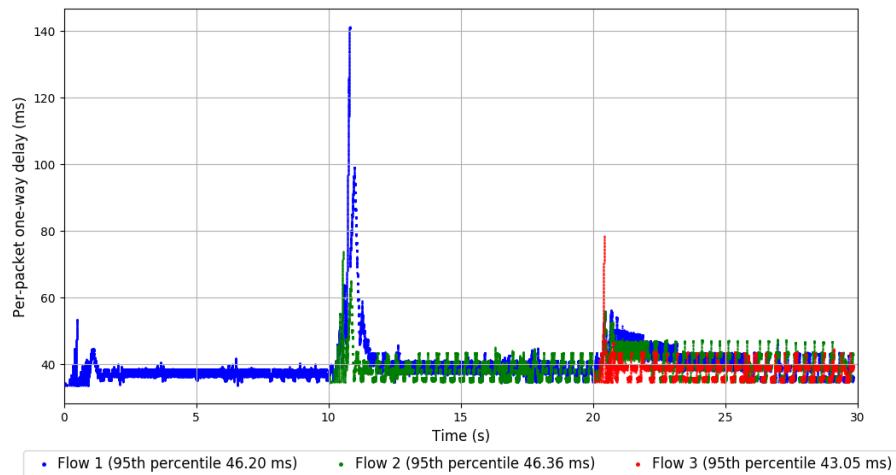
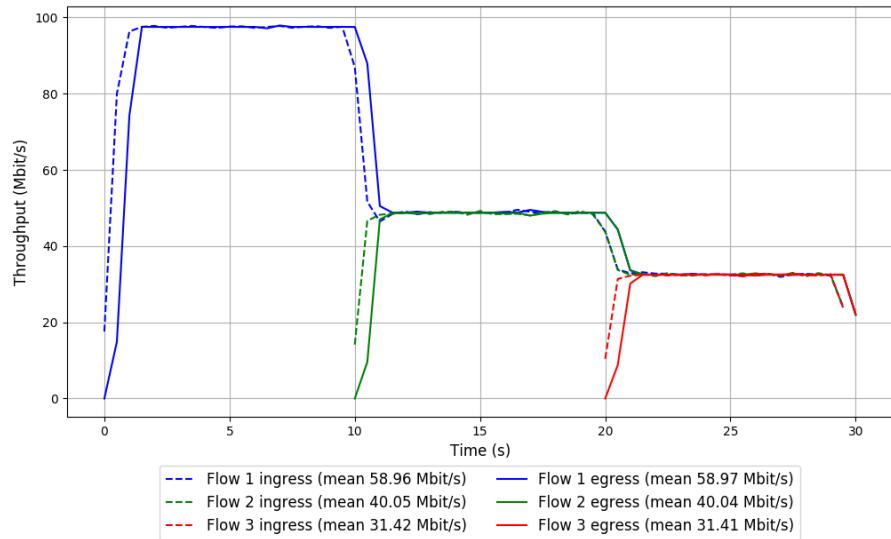


Run 1: Statistics of Indigo

```
Start at: 2019-01-25 19:22:31
End at: 2019-01-25 19:23:01
Local clock offset: 0.351 ms
Remote clock offset: -2.71 ms

# Below is generated by plot.py at 2019-01-25 21:32:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.85 Mbit/s
95th percentile per-packet one-way delay: 46.006 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 58.97 Mbit/s
95th percentile per-packet one-way delay: 46.204 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 40.04 Mbit/s
95th percentile per-packet one-way delay: 46.363 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 43.049 ms
Loss rate: 0.69%
```

Run 1: Report of Indigo — Data Link

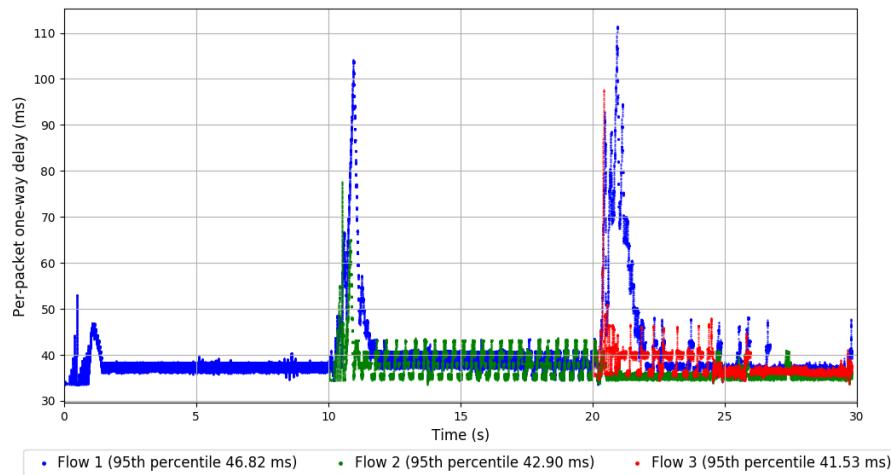
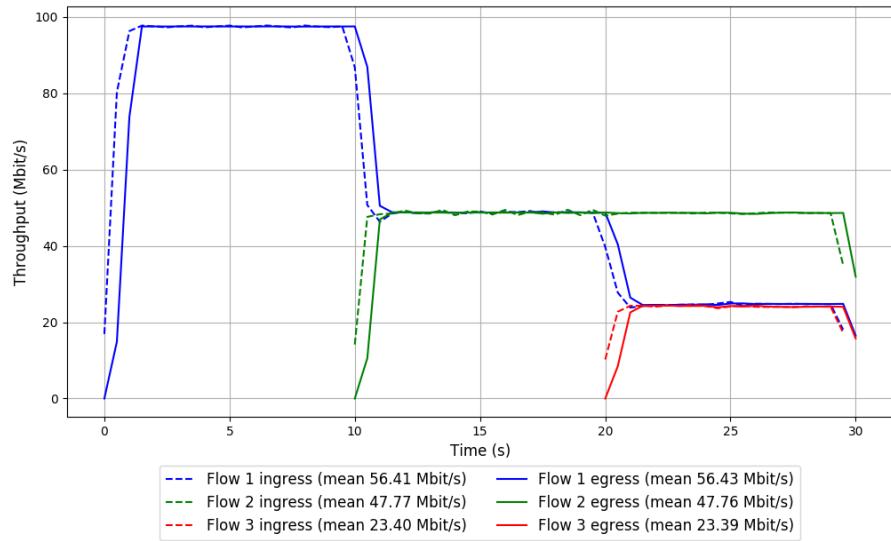


Run 2: Statistics of Indigo

```
Start at: 2019-01-25 19:49:41
End at: 2019-01-25 19:50:11
Local clock offset: 0.177 ms
Remote clock offset: -1.05 ms

# Below is generated by plot.py at 2019-01-25 21:32:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.84 Mbit/s
95th percentile per-packet one-way delay: 44.215 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 46.822 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 47.76 Mbit/s
95th percentile per-packet one-way delay: 42.896 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 41.526 ms
Loss rate: 0.70%
```

Run 2: Report of Indigo — Data Link

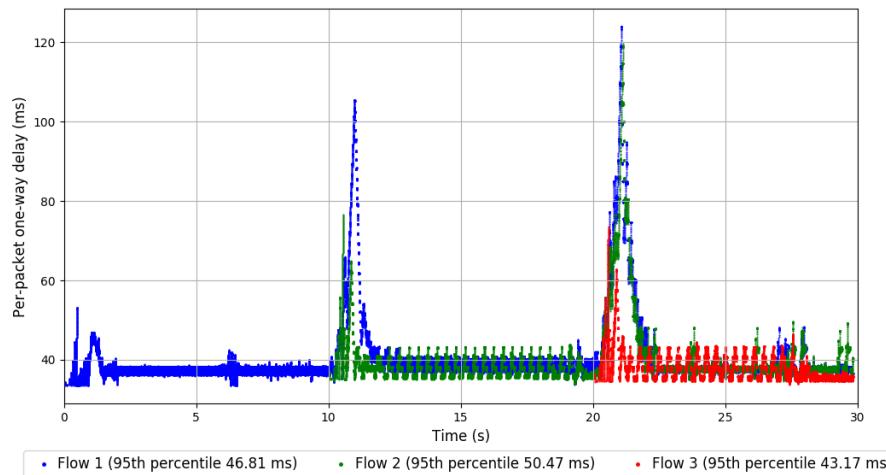
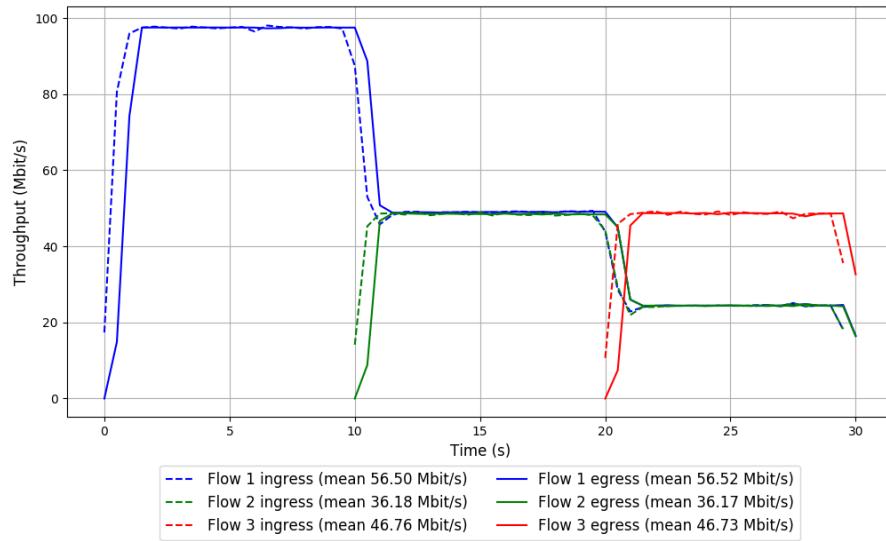


Run 3: Statistics of Indigo

```
Start at: 2019-01-25 20:16:35
End at: 2019-01-25 20:17:05
Local clock offset: -2.973 ms
Remote clock offset: -0.442 ms

# Below is generated by plot.py at 2019-01-25 21:33:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.84 Mbit/s
95th percentile per-packet one-way delay: 46.791 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 56.52 Mbit/s
95th percentile per-packet one-way delay: 46.814 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 36.17 Mbit/s
95th percentile per-packet one-way delay: 50.467 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 46.73 Mbit/s
95th percentile per-packet one-way delay: 43.169 ms
Loss rate: 0.71%
```

Run 3: Report of Indigo — Data Link

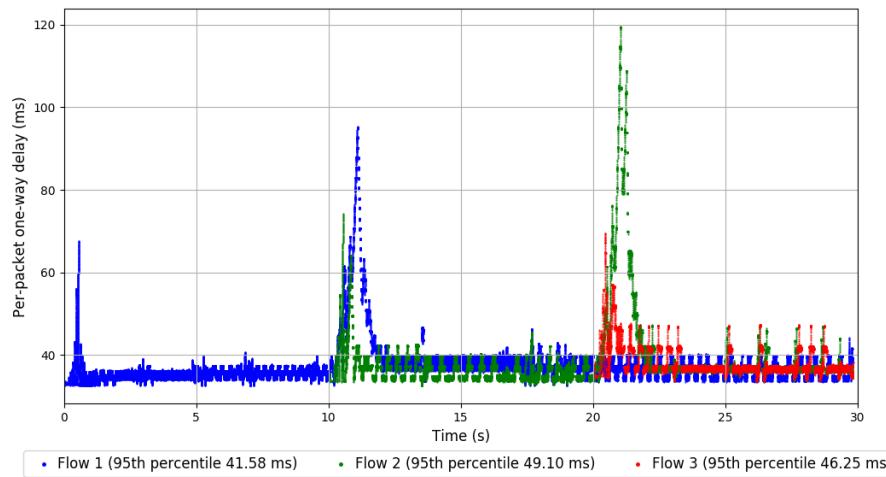
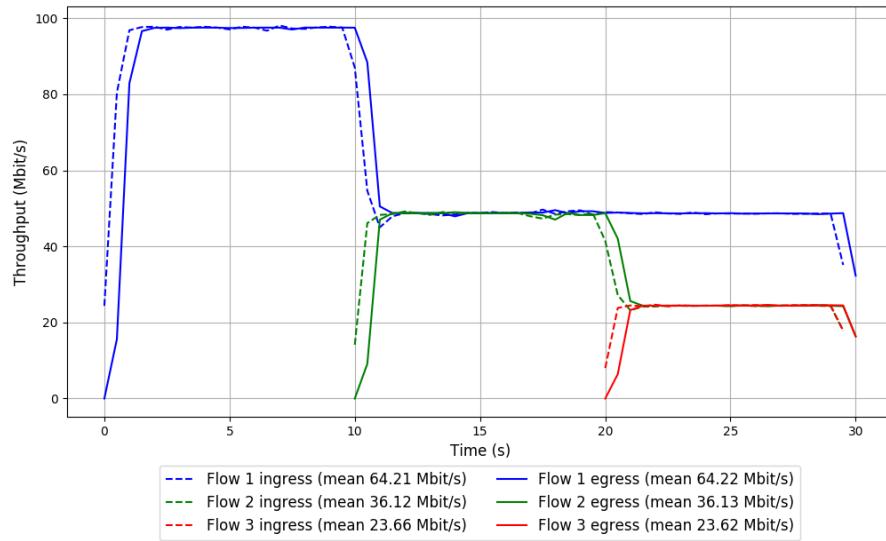


Run 4: Statistics of Indigo

```
Start at: 2019-01-25 20:43:18
End at: 2019-01-25 20:43:48
Local clock offset: -0.154 ms
Remote clock offset: 0.604 ms

# Below is generated by plot.py at 2019-01-25 21:33:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.95 Mbit/s
95th percentile per-packet one-way delay: 43.362 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 64.22 Mbit/s
95th percentile per-packet one-way delay: 41.579 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 36.13 Mbit/s
95th percentile per-packet one-way delay: 49.101 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 23.62 Mbit/s
95th percentile per-packet one-way delay: 46.247 ms
Loss rate: 0.82%
```

Run 4: Report of Indigo — Data Link

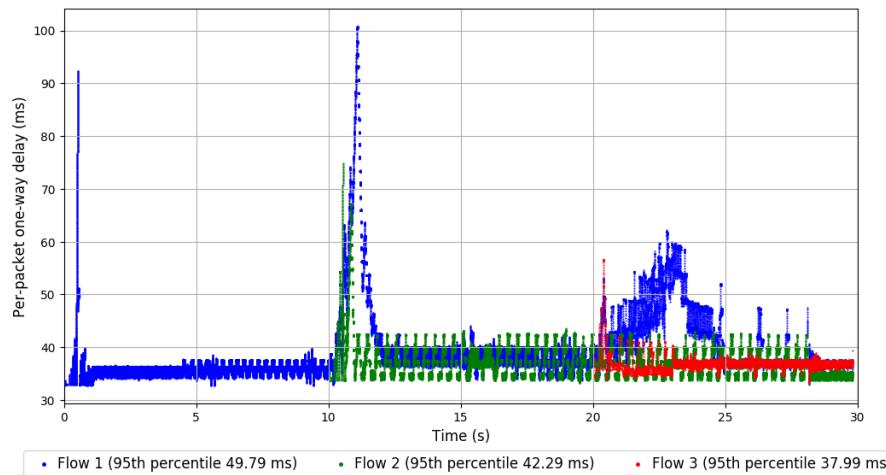
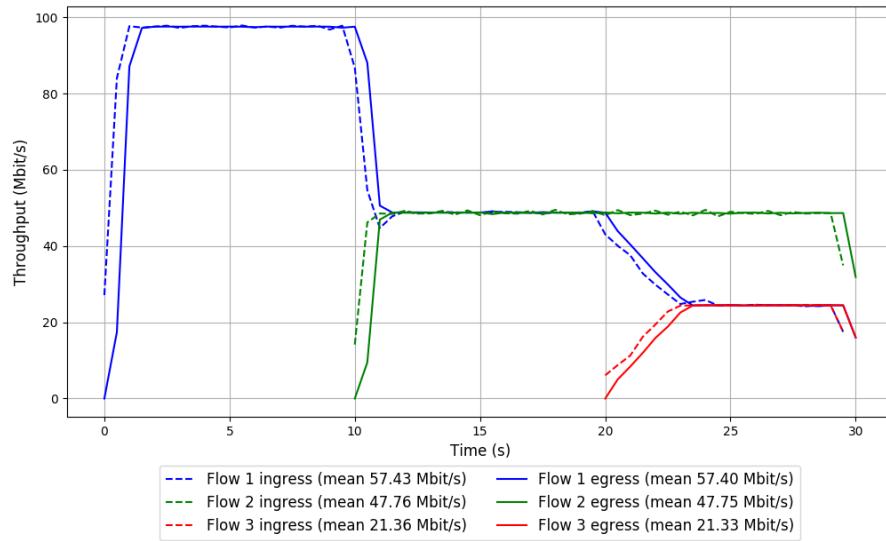


Run 5: Statistics of Indigo

```
Start at: 2019-01-25 21:10:53
End at: 2019-01-25 21:11:23
Local clock offset: 0.771 ms
Remote clock offset: 0.77 ms

# Below is generated by plot.py at 2019-01-25 21:33:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 46.119 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 57.40 Mbit/s
95th percentile per-packet one-way delay: 49.792 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 47.75 Mbit/s
95th percentile per-packet one-way delay: 42.287 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 21.33 Mbit/s
95th percentile per-packet one-way delay: 37.990 ms
Loss rate: 0.79%
```

Run 5: Report of Indigo — Data Link

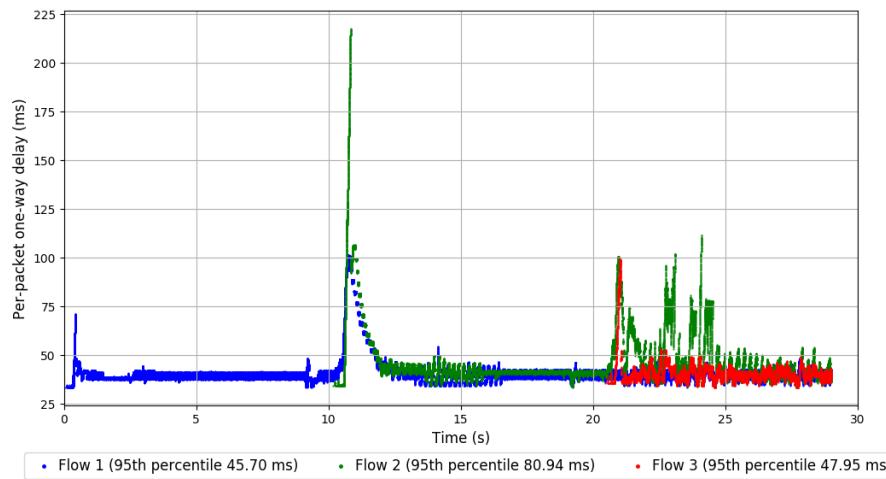
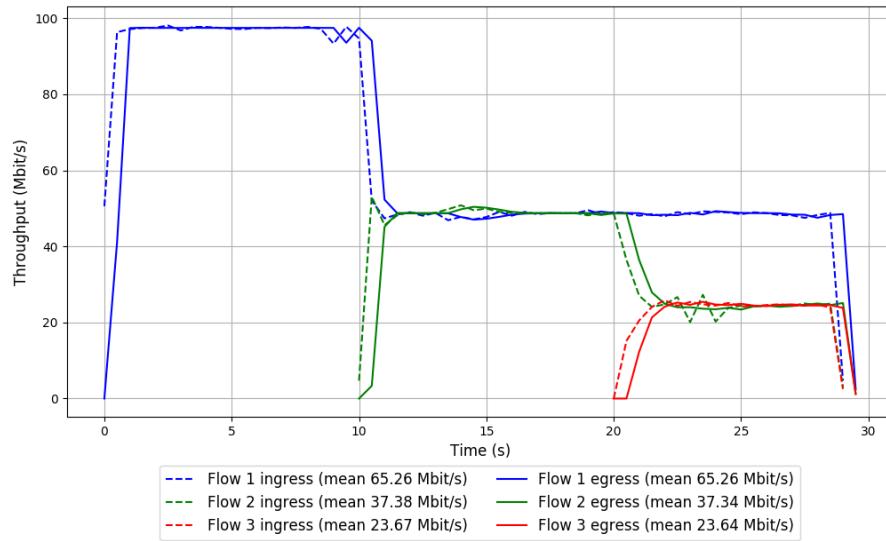


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-01-25 19:18:54
End at: 2019-01-25 19:19:24
Local clock offset: 0.343 ms
Remote clock offset: -2.766 ms

# Below is generated by plot.py at 2019-01-25 21:33:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 56.994 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 65.26 Mbit/s
95th percentile per-packet one-way delay: 45.695 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 37.34 Mbit/s
95th percentile per-packet one-way delay: 80.945 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 23.64 Mbit/s
95th percentile per-packet one-way delay: 47.955 ms
Loss rate: 0.87%
```

Run 1: Report of Indigo-MusesC3 — Data Link

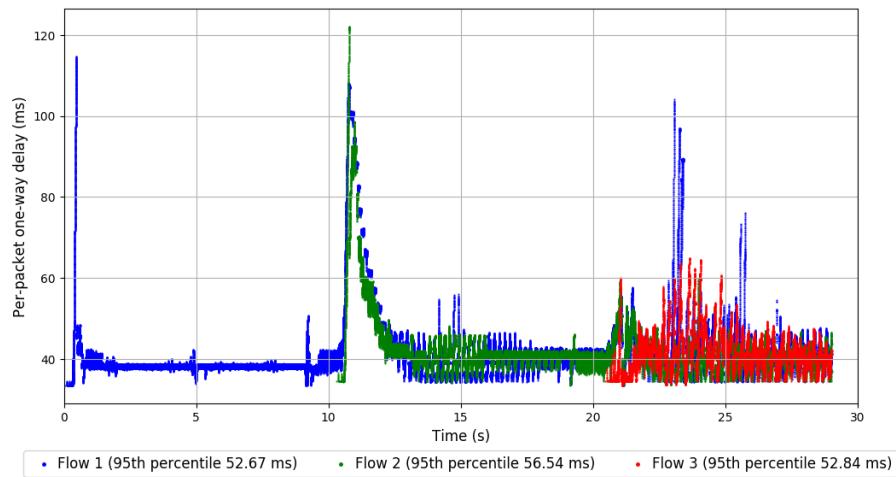
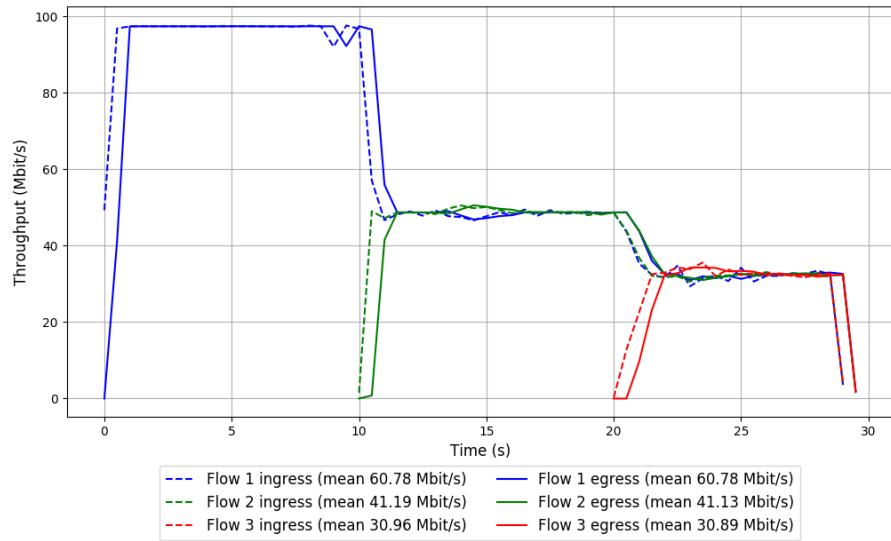


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 19:45:53
End at: 2019-01-25 19:46:23
Local clock offset: 0.199 ms
Remote clock offset: -1.282 ms

# Below is generated by plot.py at 2019-01-25 21:33:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.46 Mbit/s
95th percentile per-packet one-way delay: 54.241 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 60.78 Mbit/s
95th percentile per-packet one-way delay: 52.674 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 41.13 Mbit/s
95th percentile per-packet one-way delay: 56.539 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 30.89 Mbit/s
95th percentile per-packet one-way delay: 52.845 ms
Loss rate: 0.96%
```

Run 2: Report of Indigo-MusesC3 — Data Link

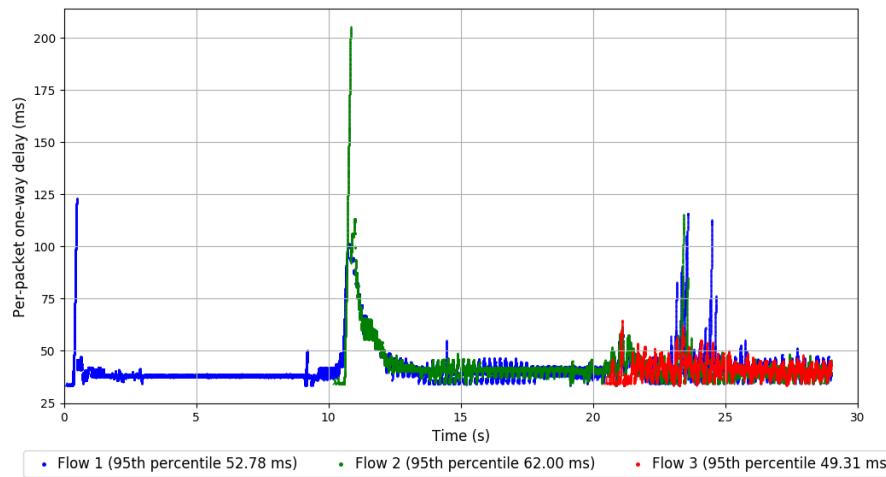
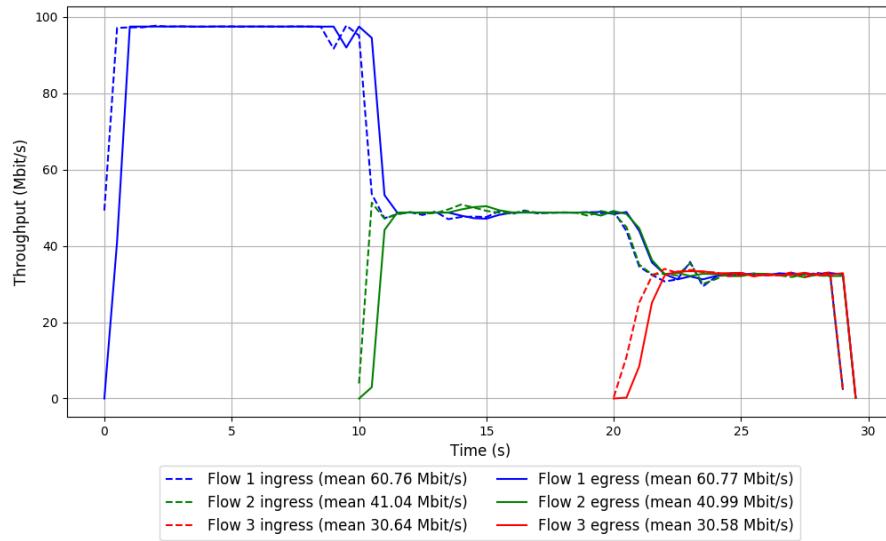


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 20:12:56
End at: 2019-01-25 20:13:26
Local clock offset: -2.621 ms
Remote clock offset: -0.381 ms

# Below is generated by plot.py at 2019-01-25 21:33:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.46 Mbit/s
95th percentile per-packet one-way delay: 56.672 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 60.77 Mbit/s
95th percentile per-packet one-way delay: 52.782 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 40.99 Mbit/s
95th percentile per-packet one-way delay: 62.001 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 30.58 Mbit/s
95th percentile per-packet one-way delay: 49.311 ms
Loss rate: 0.93%
```

Run 3: Report of Indigo-MusesC3 — Data Link

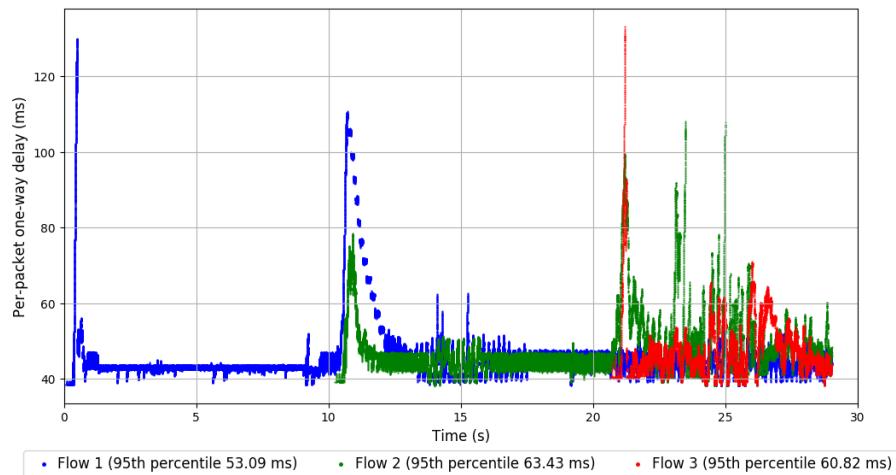
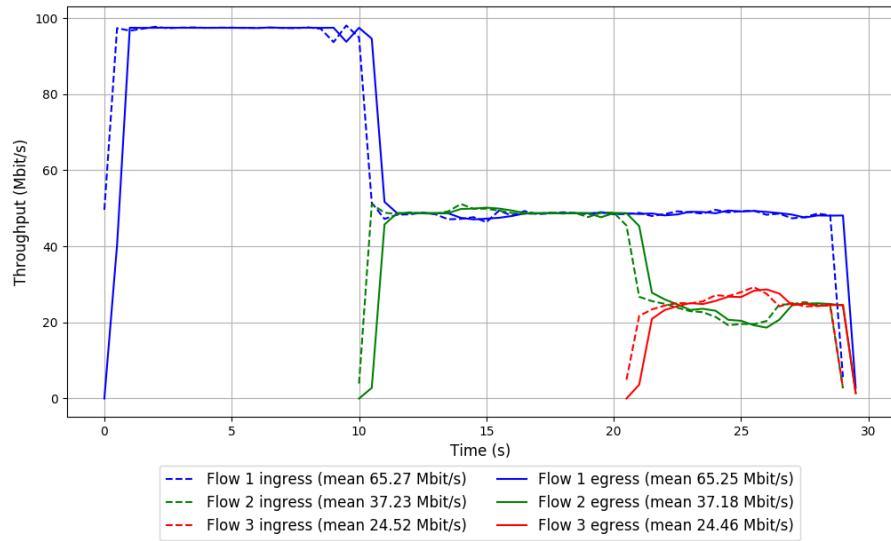


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 20:39:35
End at: 2019-01-25 20:40:05
Local clock offset: -0.648 ms
Remote clock offset: -5.159 ms

# Below is generated by plot.py at 2019-01-25 21:33:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.44 Mbit/s
95th percentile per-packet one-way delay: 58.338 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 65.25 Mbit/s
95th percentile per-packet one-way delay: 53.092 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 37.18 Mbit/s
95th percentile per-packet one-way delay: 63.428 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 60.820 ms
Loss rate: 1.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

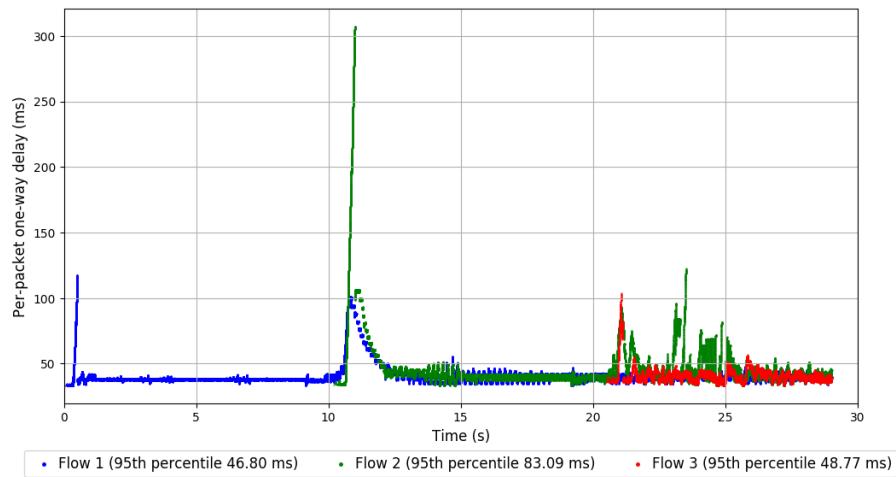
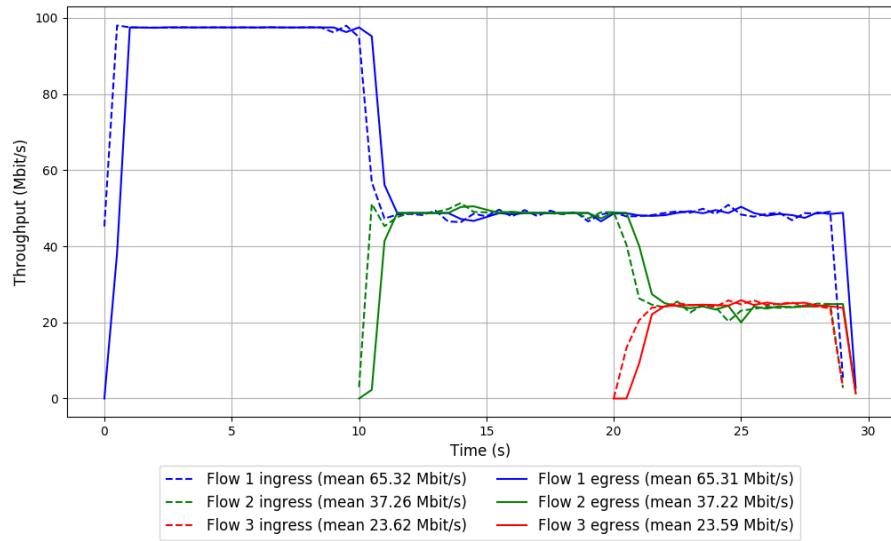


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 21:07:13
End at: 2019-01-25 21:07:43
Local clock offset: 0.776 ms
Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2019-01-25 21:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 60.259 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 65.31 Mbit/s
95th percentile per-packet one-way delay: 46.805 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 37.22 Mbit/s
95th percentile per-packet one-way delay: 83.095 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 23.59 Mbit/s
95th percentile per-packet one-way delay: 48.773 ms
Loss rate: 0.88%
```

Run 5: Report of Indigo-MusesC3 — Data Link

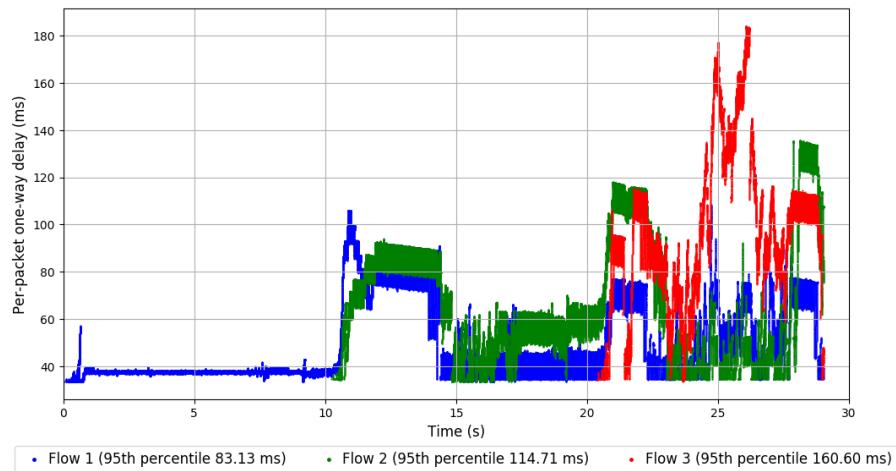
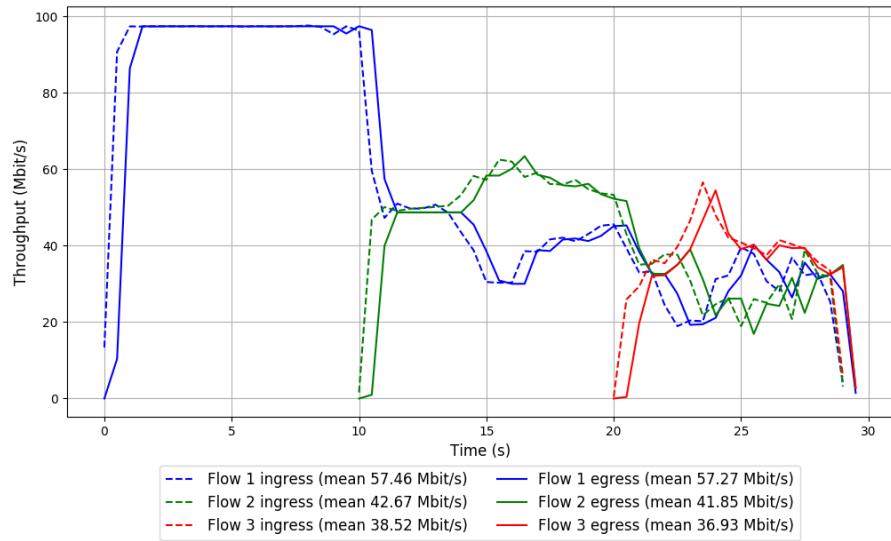


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 19:17:39
End at: 2019-01-25 19:18:09
Local clock offset: 0.336 ms
Remote clock offset: -2.783 ms

# Below is generated by plot.py at 2019-01-25 21:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.46 Mbit/s
95th percentile per-packet one-way delay: 111.971 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 57.27 Mbit/s
95th percentile per-packet one-way delay: 83.127 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 41.85 Mbit/s
95th percentile per-packet one-way delay: 114.707 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 36.93 Mbit/s
95th percentile per-packet one-way delay: 160.605 ms
Loss rate: 4.82%
```

Run 1: Report of Indigo-MusesC5 — Data Link

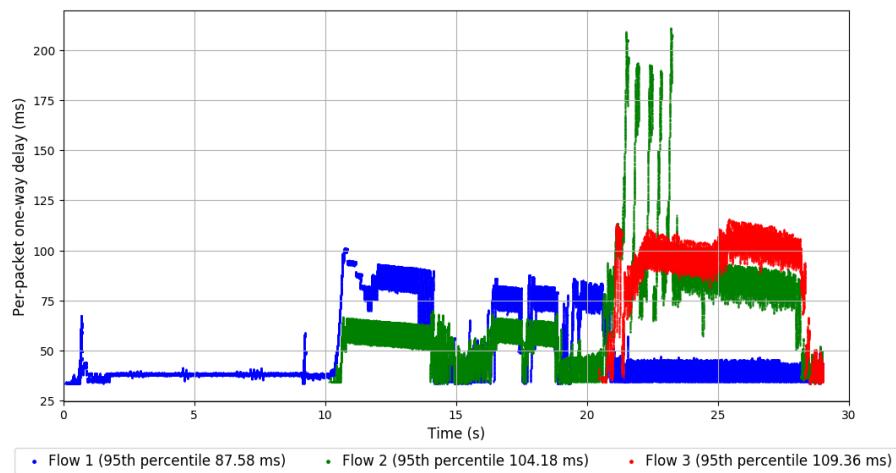
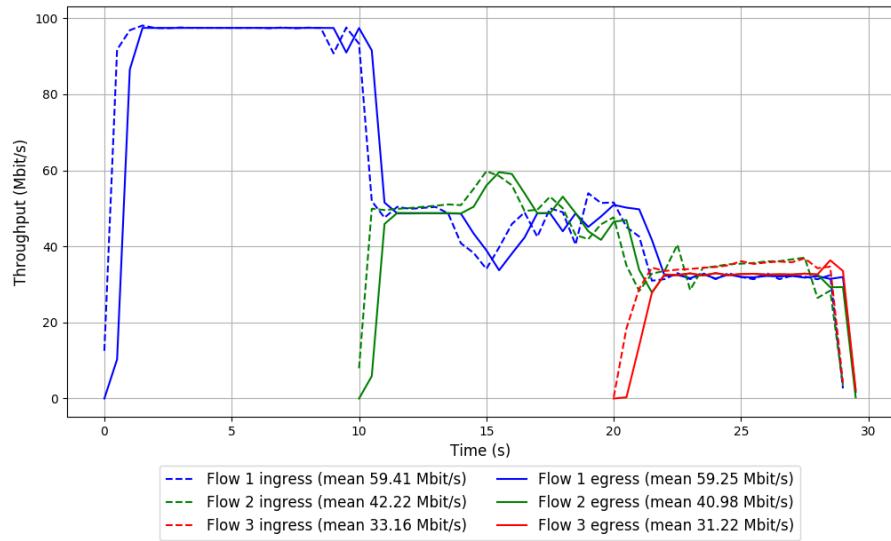


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 19:44:39
End at: 2019-01-25 19:45:09
Local clock offset: 0.178 ms
Remote clock offset: -1.484 ms

# Below is generated by plot.py at 2019-01-25 21:34:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 101.415 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 59.25 Mbit/s
95th percentile per-packet one-way delay: 87.580 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 40.98 Mbit/s
95th percentile per-packet one-way delay: 104.184 ms
Loss rate: 3.25%
-- Flow 3:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 109.364 ms
Loss rate: 6.58%
```

Run 2: Report of Indigo-MusesC5 — Data Link

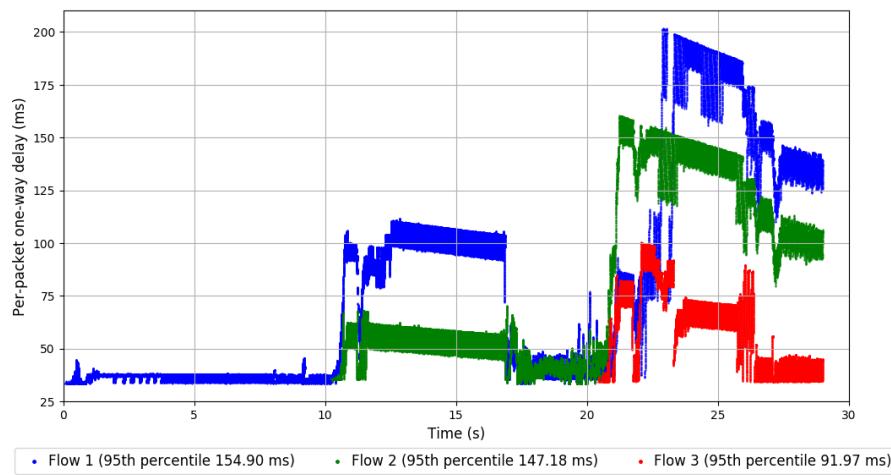
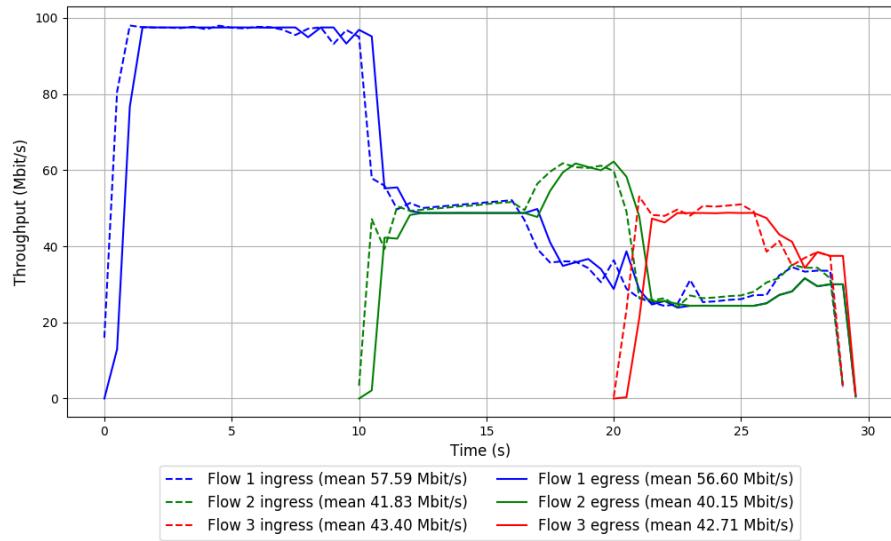


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 20:11:37
End at: 2019-01-25 20:12:07
Local clock offset: -2.499 ms
Remote clock offset: -0.445 ms

# Below is generated by plot.py at 2019-01-25 21:34:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.36 Mbit/s
95th percentile per-packet one-way delay: 146.145 ms
Loss rate: 2.64%
-- Flow 1:
Average throughput: 56.60 Mbit/s
95th percentile per-packet one-way delay: 154.900 ms
Loss rate: 1.92%
-- Flow 2:
Average throughput: 40.15 Mbit/s
95th percentile per-packet one-way delay: 147.182 ms
Loss rate: 4.34%
-- Flow 3:
Average throughput: 42.71 Mbit/s
95th percentile per-packet one-way delay: 91.967 ms
Loss rate: 2.25%
```

Run 3: Report of Indigo-MusesC5 — Data Link

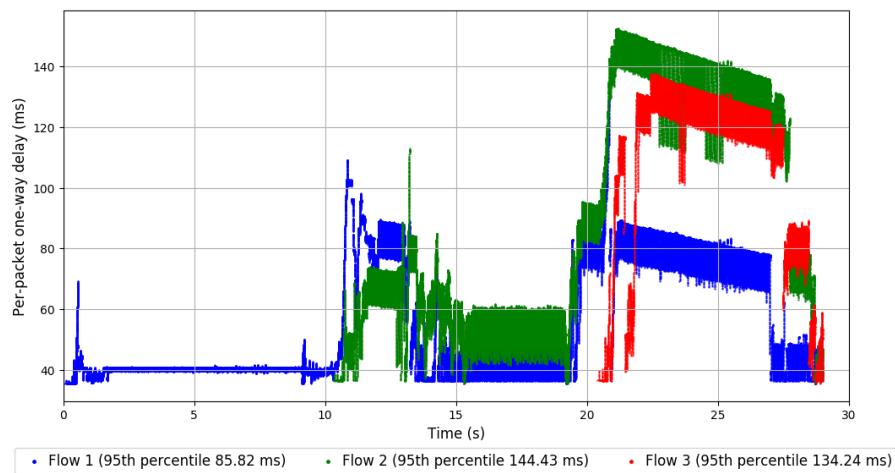
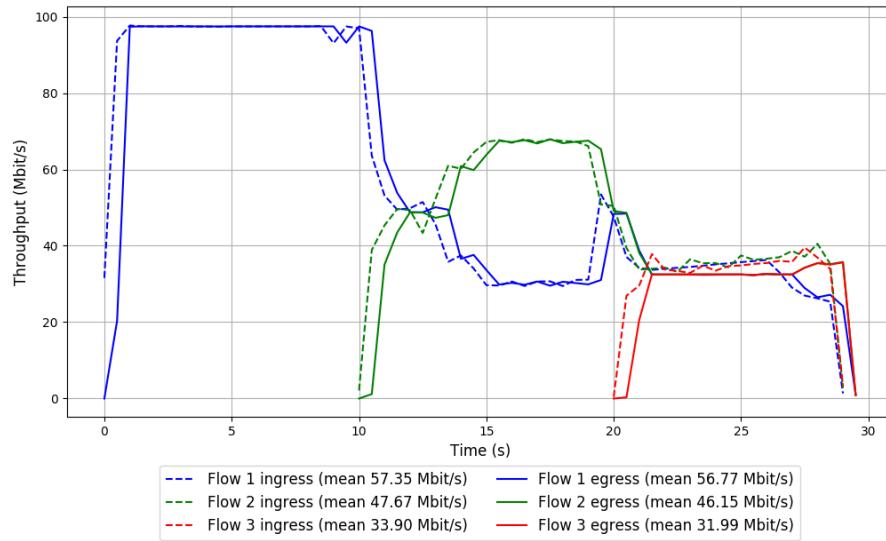


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 20:38:17
End at: 2019-01-25 20:38:47
Local clock offset: -0.926 ms
Remote clock offset: -2.348 ms

# Below is generated by plot.py at 2019-01-25 21:34:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 135.201 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 56.77 Mbit/s
95th percentile per-packet one-way delay: 85.822 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 46.15 Mbit/s
95th percentile per-packet one-way delay: 144.425 ms
Loss rate: 3.53%
-- Flow 3:
Average throughput: 31.99 Mbit/s
95th percentile per-packet one-way delay: 134.236 ms
Loss rate: 6.26%
```

Run 4: Report of Indigo-MusesC5 — Data Link

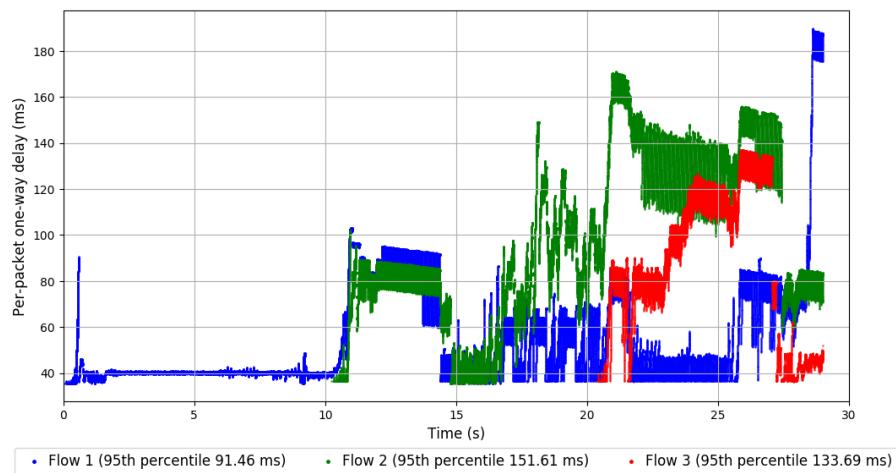
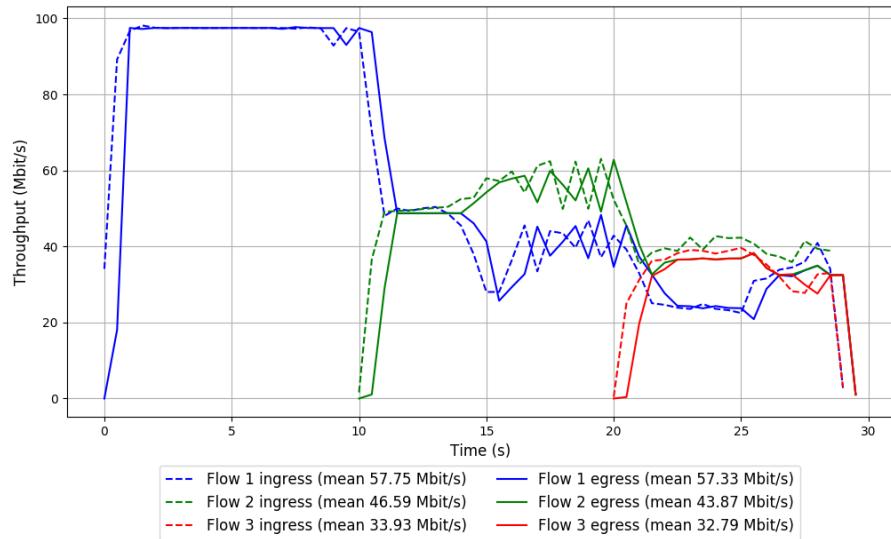


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 21:05:55
End at: 2019-01-25 21:06:25
Local clock offset: 0.778 ms
Remote clock offset: -2.014 ms

# Below is generated by plot.py at 2019-01-25 21:34:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 136.493 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 57.33 Mbit/s
95th percentile per-packet one-way delay: 91.457 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 43.87 Mbit/s
95th percentile per-packet one-way delay: 151.607 ms
Loss rate: 5.90%
-- Flow 3:
Average throughput: 32.79 Mbit/s
95th percentile per-packet one-way delay: 133.695 ms
Loss rate: 4.07%
```

Run 5: Report of Indigo-MusesC5 — Data Link

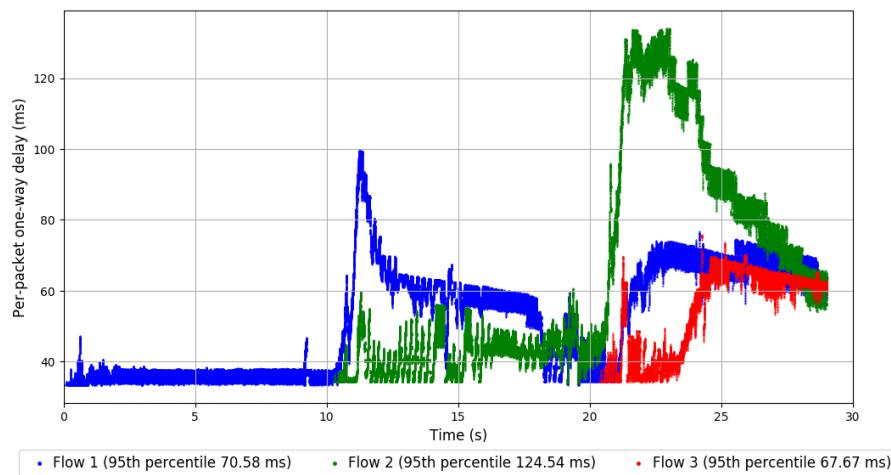
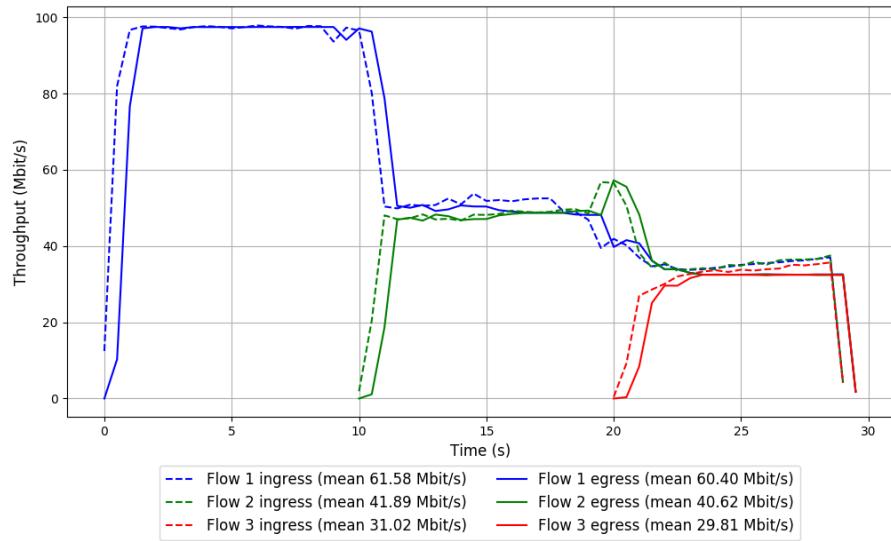


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 19:16:23
End at: 2019-01-25 19:16:53
Local clock offset: 0.341 ms
Remote clock offset: -2.792 ms

# Below is generated by plot.py at 2019-01-25 21:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 91.234 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 60.40 Mbit/s
95th percentile per-packet one-way delay: 70.578 ms
Loss rate: 2.13%
-- Flow 2:
Average throughput: 40.62 Mbit/s
95th percentile per-packet one-way delay: 124.539 ms
Loss rate: 3.37%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 67.669 ms
Loss rate: 4.58%
```

Run 1: Report of Indigo-MusesD — Data Link

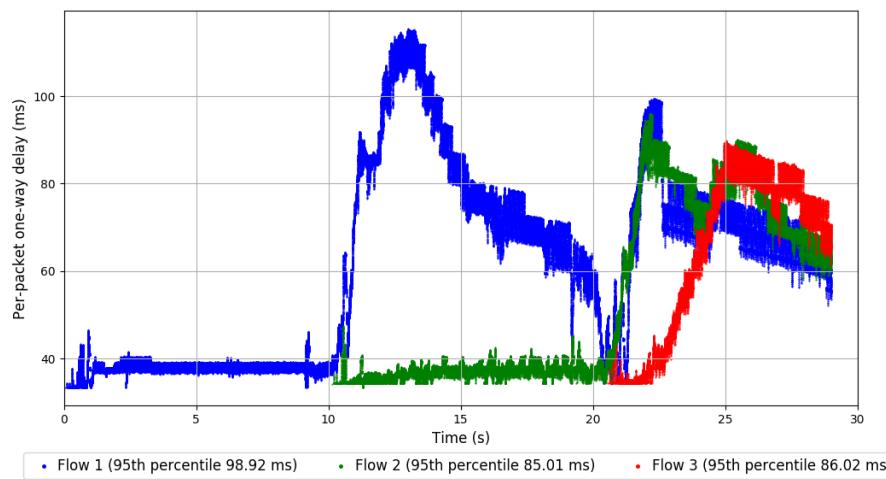
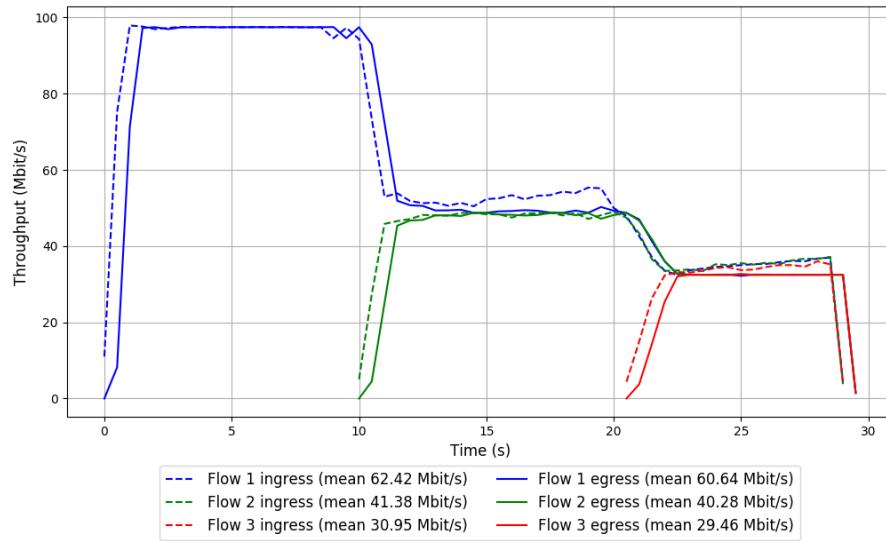


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 19:43:19
End at: 2019-01-25 19:43:49
Local clock offset: 0.19 ms
Remote clock offset: -1.396 ms

# Below is generated by plot.py at 2019-01-25 21:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.51 Mbit/s
95th percentile per-packet one-way delay: 91.605 ms
Loss rate: 3.27%
-- Flow 1:
Average throughput: 60.64 Mbit/s
95th percentile per-packet one-way delay: 98.925 ms
Loss rate: 3.06%
-- Flow 2:
Average throughput: 40.28 Mbit/s
95th percentile per-packet one-way delay: 85.007 ms
Loss rate: 3.00%
-- Flow 3:
Average throughput: 29.46 Mbit/s
95th percentile per-packet one-way delay: 86.017 ms
Loss rate: 5.52%
```

Run 2: Report of Indigo-MusesD — Data Link

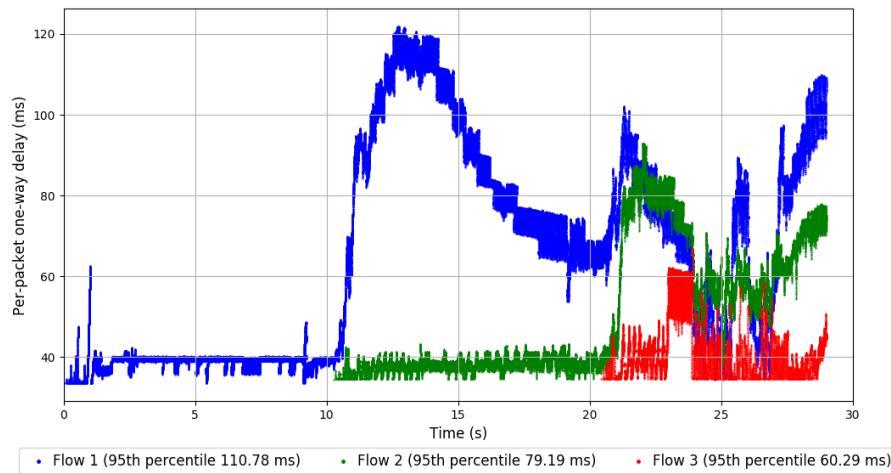
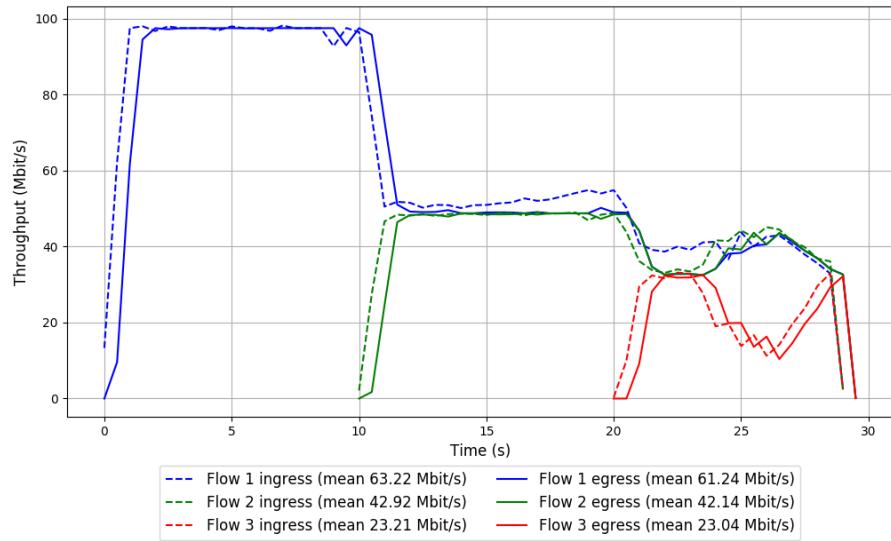


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 20:10:21
End at: 2019-01-25 20:10:51
Local clock offset: -2.318 ms
Remote clock offset: -0.487 ms

# Below is generated by plot.py at 2019-01-25 21:35:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.30 Mbit/s
95th percentile per-packet one-way delay: 104.081 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 61.24 Mbit/s
95th percentile per-packet one-way delay: 110.783 ms
Loss rate: 3.34%
-- Flow 2:
Average throughput: 42.14 Mbit/s
95th percentile per-packet one-way delay: 79.186 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 23.04 Mbit/s
95th percentile per-packet one-way delay: 60.286 ms
Loss rate: 1.50%
```

Run 3: Report of Indigo-MusesD — Data Link

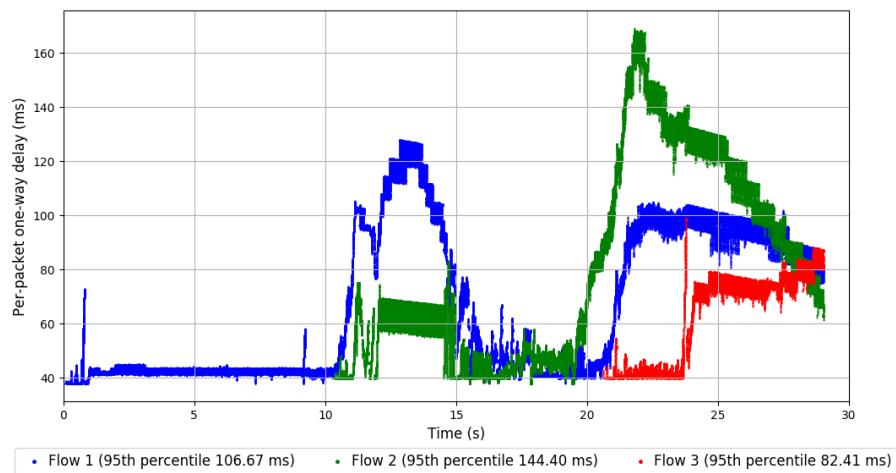
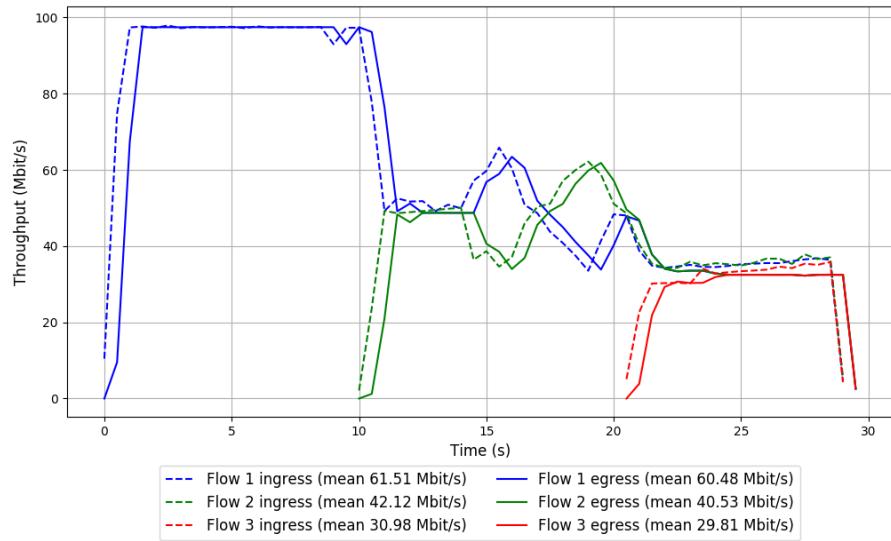


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 20:37:02
End at: 2019-01-25 20:37:32
Local clock offset: -1.137 ms
Remote clock offset: -4.732 ms

# Below is generated by plot.py at 2019-01-25 21:35:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.41 Mbit/s
95th percentile per-packet one-way delay: 123.547 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 60.48 Mbit/s
95th percentile per-packet one-way delay: 106.668 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 144.397 ms
Loss rate: 4.10%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 82.406 ms
Loss rate: 4.48%
```

Run 4: Report of Indigo-MusesD — Data Link

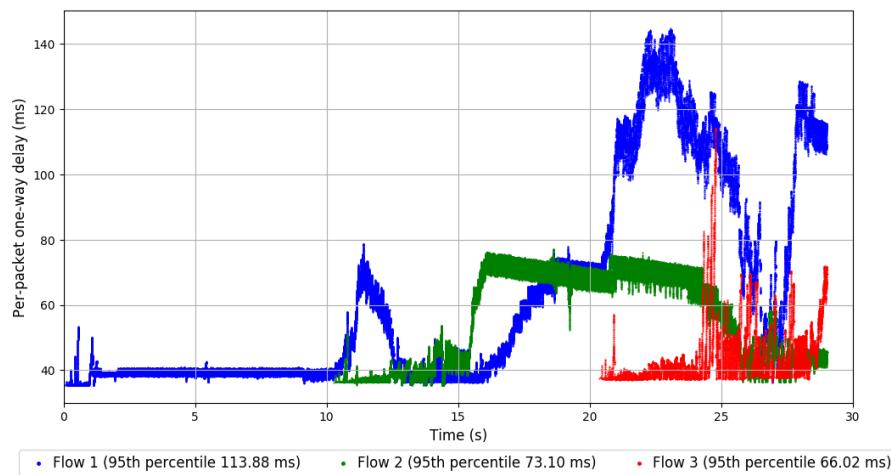
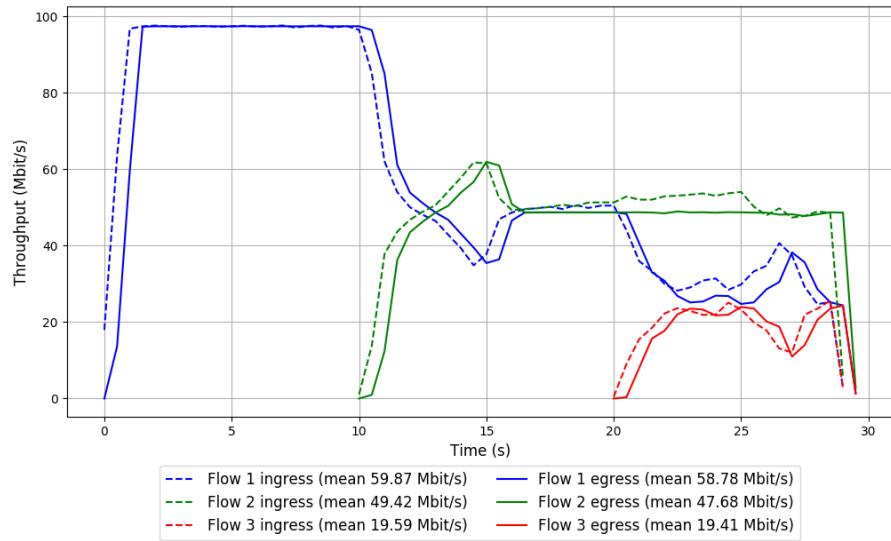


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 21:04:40
End at: 2019-01-25 21:05:10
Local clock offset: 0.802 ms
Remote clock offset: -2.019 ms

# Below is generated by plot.py at 2019-01-25 21:35:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.44 Mbit/s
95th percentile per-packet one-way delay: 104.488 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 58.78 Mbit/s
95th percentile per-packet one-way delay: 113.876 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 47.68 Mbit/s
95th percentile per-packet one-way delay: 73.098 ms
Loss rate: 3.85%
-- Flow 3:
Average throughput: 19.41 Mbit/s
95th percentile per-packet one-way delay: 66.017 ms
Loss rate: 1.65%
```

Run 5: Report of Indigo-MusesD — Data Link

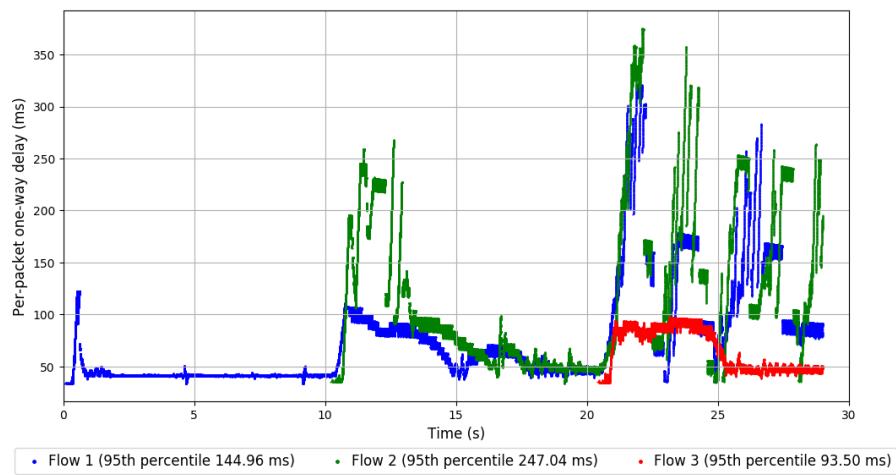
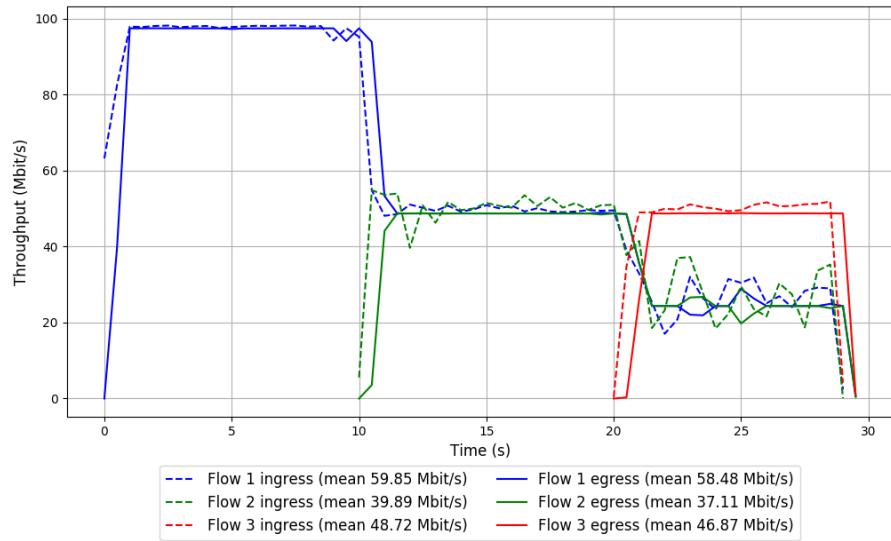


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 19:28:54
End at: 2019-01-25 19:29:24
Local clock offset: 0.384 ms
Remote clock offset: -2.272 ms

# Below is generated by plot.py at 2019-01-25 21:35:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 204.071 ms
Loss rate: 3.97%
-- Flow 1:
Average throughput: 58.48 Mbit/s
95th percentile per-packet one-way delay: 144.961 ms
Loss rate: 2.48%
-- Flow 2:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 247.039 ms
Loss rate: 7.09%
-- Flow 3:
Average throughput: 46.87 Mbit/s
95th percentile per-packet one-way delay: 93.495 ms
Loss rate: 4.52%
```

Run 1: Report of Indigo-MusesT — Data Link

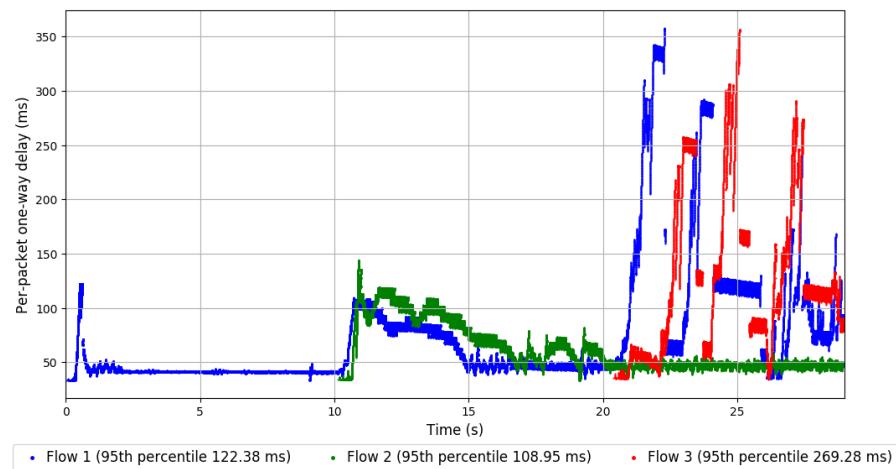
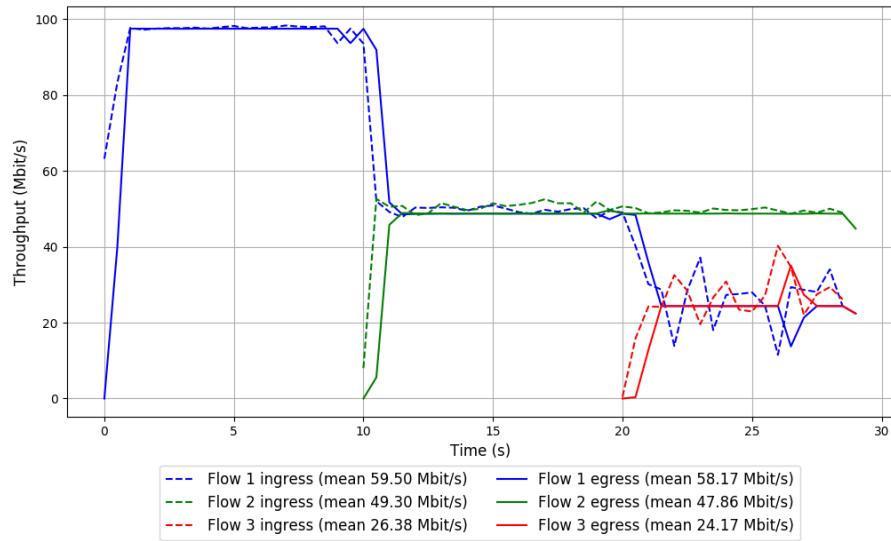


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 19:55:59
End at: 2019-01-25 19:56:29
Local clock offset: 0.152 ms
Remote clock offset: -0.875 ms

# Below is generated by plot.py at 2019-01-25 21:35:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 129.815 ms
Loss rate: 3.23%
-- Flow 1:
Average throughput: 58.17 Mbit/s
95th percentile per-packet one-way delay: 122.384 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 47.86 Mbit/s
95th percentile per-packet one-way delay: 108.954 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 269.282 ms
Loss rate: 9.08%
```

Run 2: Report of Indigo-MusesT — Data Link

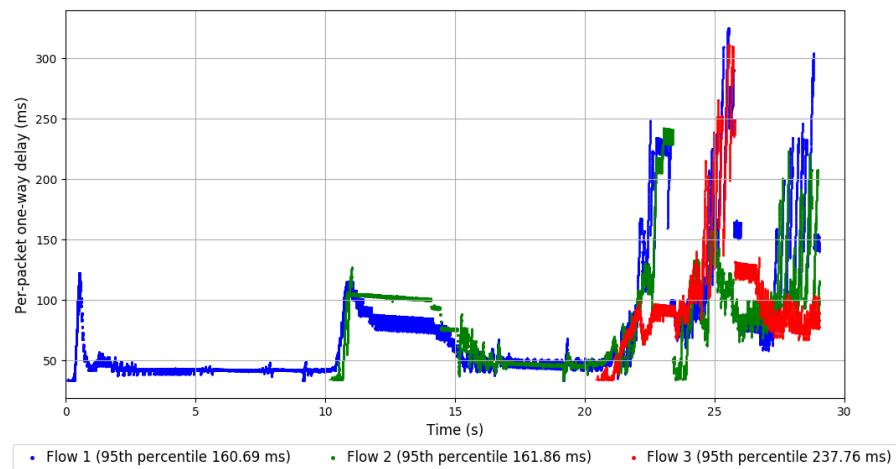
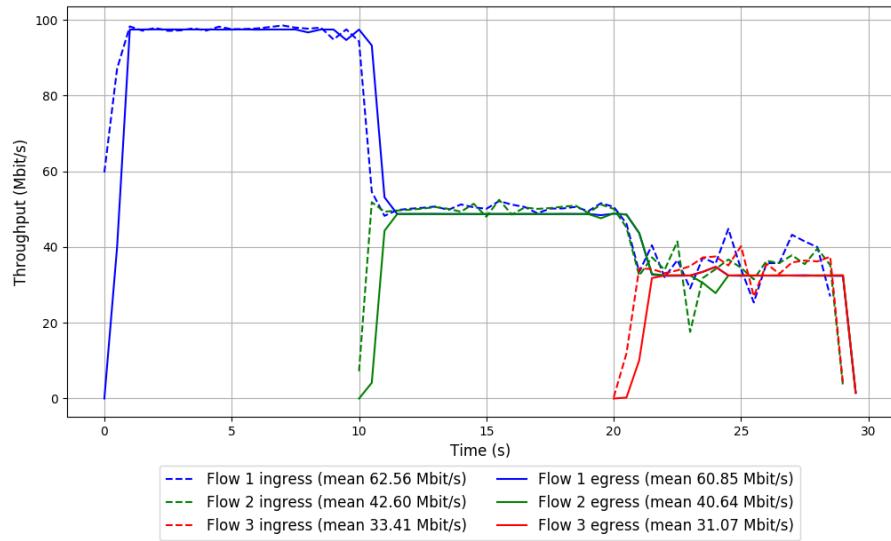


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 20:22:49
End at: 2019-01-25 20:23:19
Local clock offset: -3.401 ms
Remote clock offset: -0.298 ms

# Below is generated by plot.py at 2019-01-25 21:35:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 168.919 ms
Loss rate: 3.82%
-- Flow 1:
Average throughput: 60.85 Mbit/s
95th percentile per-packet one-way delay: 160.690 ms
Loss rate: 2.71%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 161.864 ms
Loss rate: 4.93%
-- Flow 3:
Average throughput: 31.07 Mbit/s
95th percentile per-packet one-way delay: 237.760 ms
Loss rate: 7.62%
```

Run 3: Report of Indigo-MusesT — Data Link

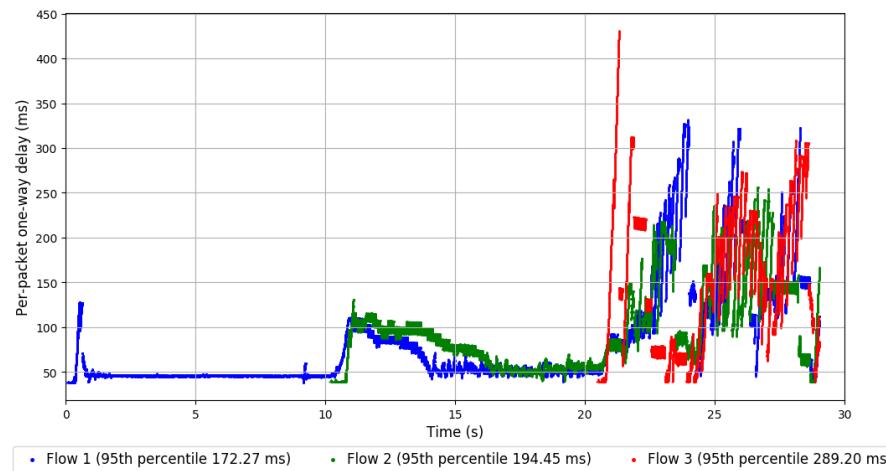
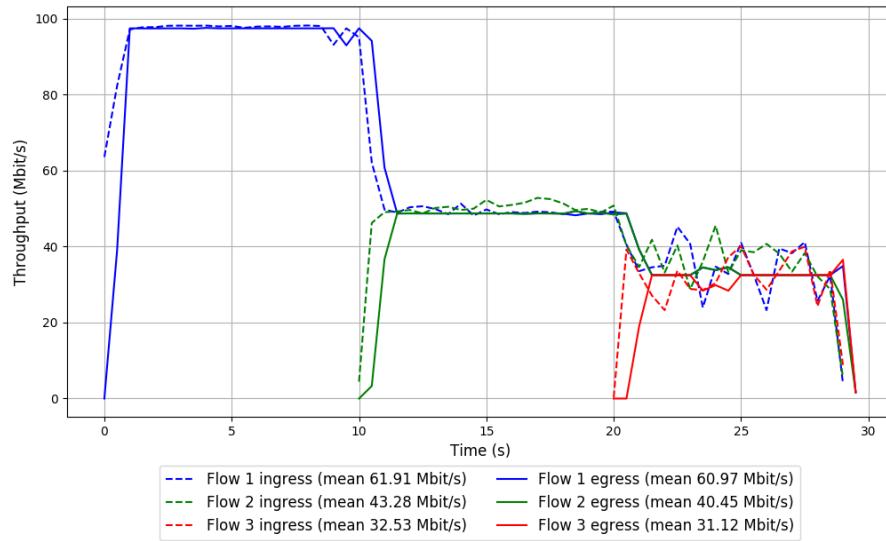


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 20:49:49
End at: 2019-01-25 20:50:19
Local clock offset: 0.439 ms
Remote clock offset: -4.59 ms

# Below is generated by plot.py at 2019-01-25 21:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 214.926 ms
Loss rate: 3.48%
-- Flow 1:
Average throughput: 60.97 Mbit/s
95th percentile per-packet one-way delay: 172.266 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 40.45 Mbit/s
95th percentile per-packet one-way delay: 194.449 ms
Loss rate: 6.82%
-- Flow 3:
Average throughput: 31.12 Mbit/s
95th percentile per-packet one-way delay: 289.203 ms
Loss rate: 5.05%
```

Run 4: Report of Indigo-MusesT — Data Link

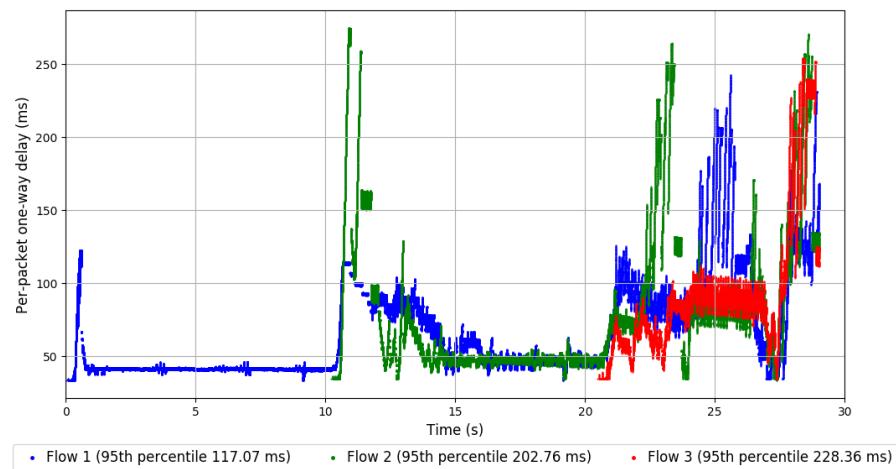
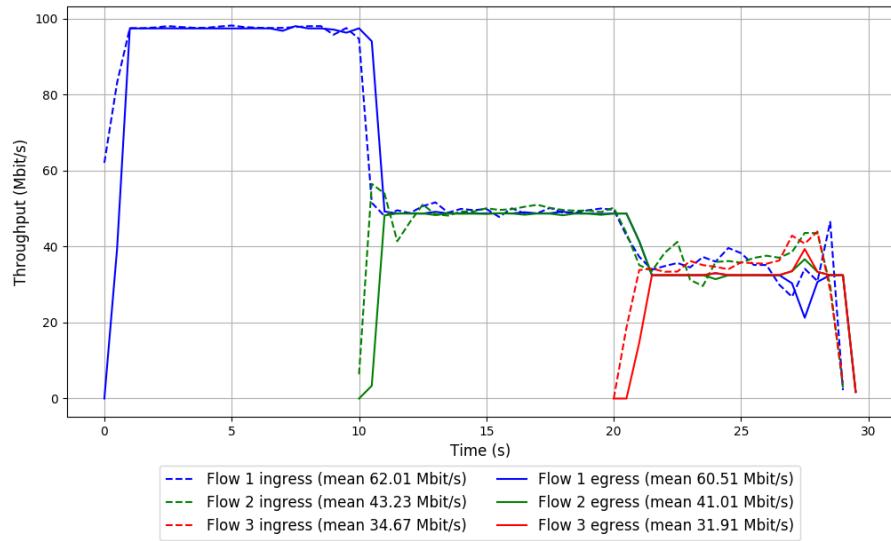


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 21:17:08
End at: 2019-01-25 21:17:38
Local clock offset: 0.799 ms
Remote clock offset: 0.242 ms

# Below is generated by plot.py at 2019-01-25 21:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 152.341 ms
Loss rate: 3.98%
-- Flow 1:
Average throughput: 60.51 Mbit/s
95th percentile per-packet one-way delay: 117.067 ms
Loss rate: 2.57%
-- Flow 2:
Average throughput: 41.01 Mbit/s
95th percentile per-packet one-way delay: 202.758 ms
Loss rate: 5.38%
-- Flow 3:
Average throughput: 31.91 Mbit/s
95th percentile per-packet one-way delay: 228.356 ms
Loss rate: 8.67%
```

Run 5: Report of Indigo-MusesT — Data Link

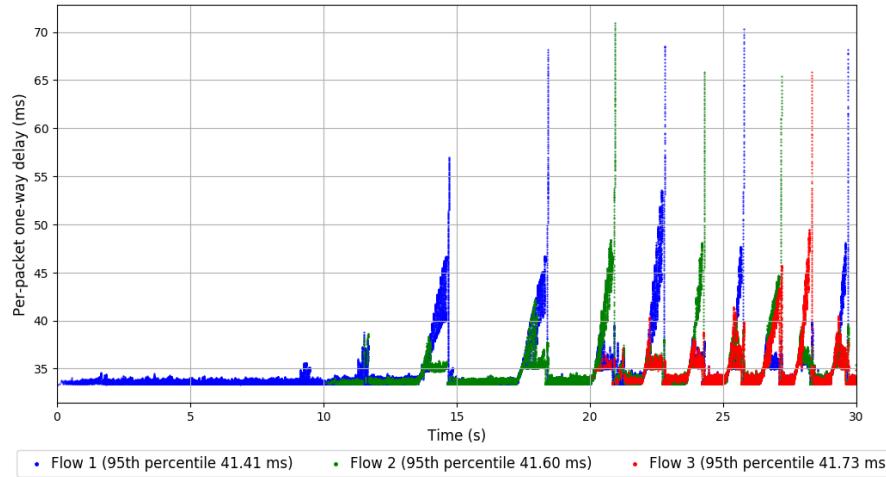
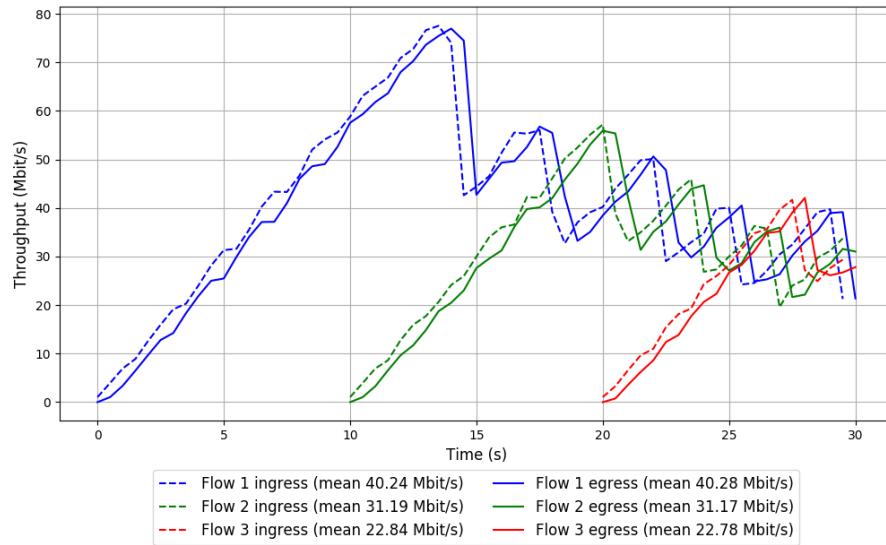


Run 1: Statistics of LEDBAT

```
Start at: 2019-01-25 19:27:39
End at: 2019-01-25 19:28:09
Local clock offset: 0.378 ms
Remote clock offset: -2.254 ms

# Below is generated by plot.py at 2019-01-25 21:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.56 Mbit/s
95th percentile per-packet one-way delay: 41.511 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 40.28 Mbit/s
95th percentile per-packet one-way delay: 41.407 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 31.17 Mbit/s
95th percentile per-packet one-way delay: 41.605 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 22.78 Mbit/s
95th percentile per-packet one-way delay: 41.733 ms
Loss rate: 0.91%
```

Run 1: Report of LEDBAT — Data Link

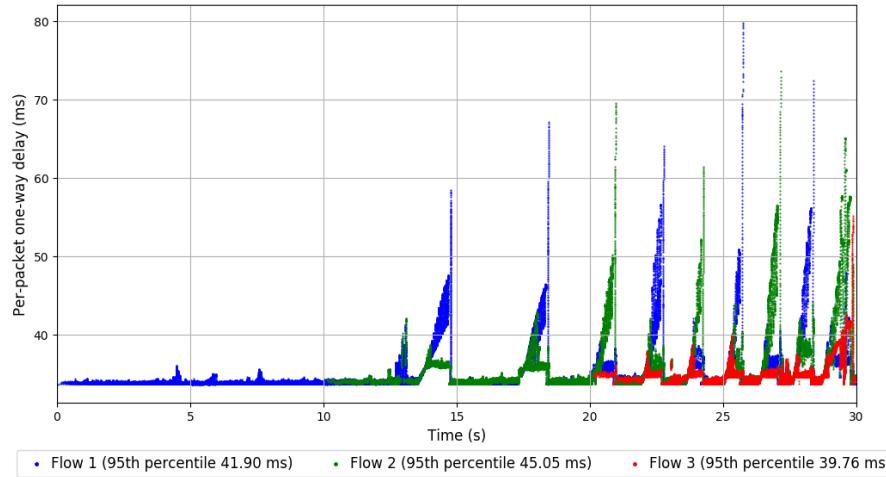
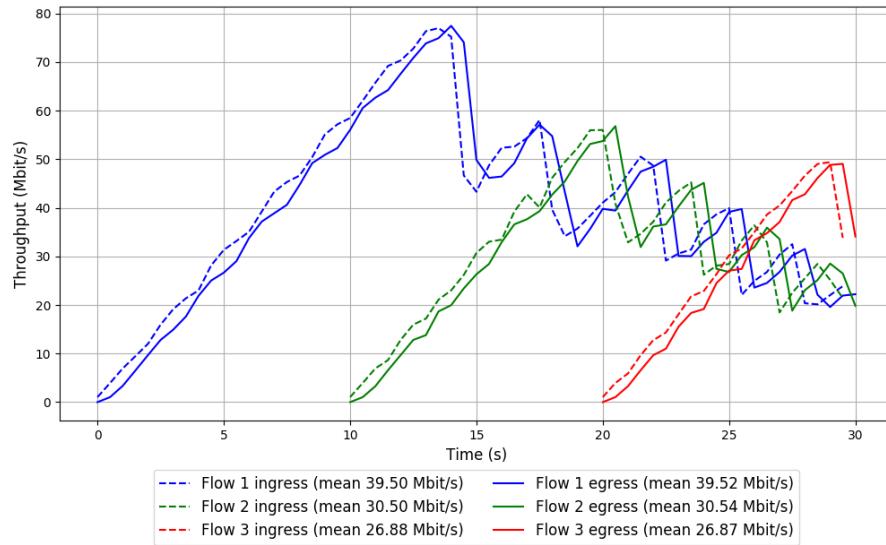


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-25 19:54:44
End at: 2019-01-25 19:55:14
Local clock offset: 0.158 ms
Remote clock offset: -1.135 ms

# Below is generated by plot.py at 2019-01-25 21:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.72 Mbit/s
95th percentile per-packet one-way delay: 42.285 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 39.52 Mbit/s
95th percentile per-packet one-way delay: 41.895 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 30.54 Mbit/s
95th percentile per-packet one-way delay: 45.048 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 26.87 Mbit/s
95th percentile per-packet one-way delay: 39.755 ms
Loss rate: 0.69%
```

Run 2: Report of LEDBAT — Data Link

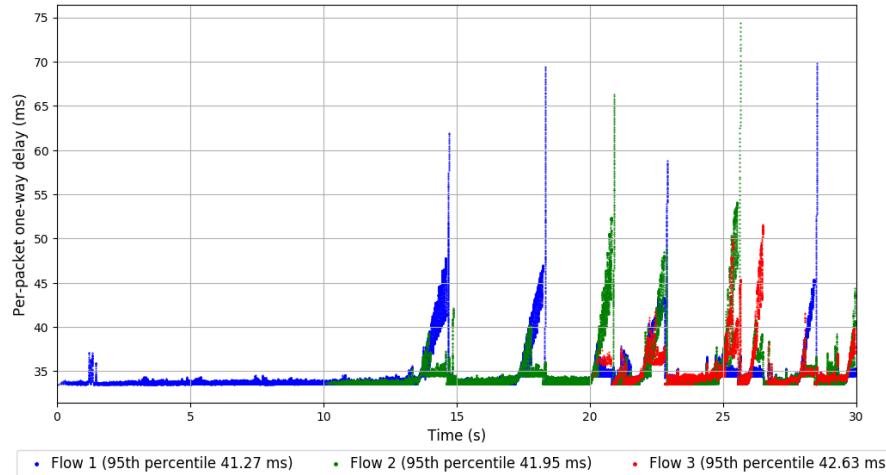
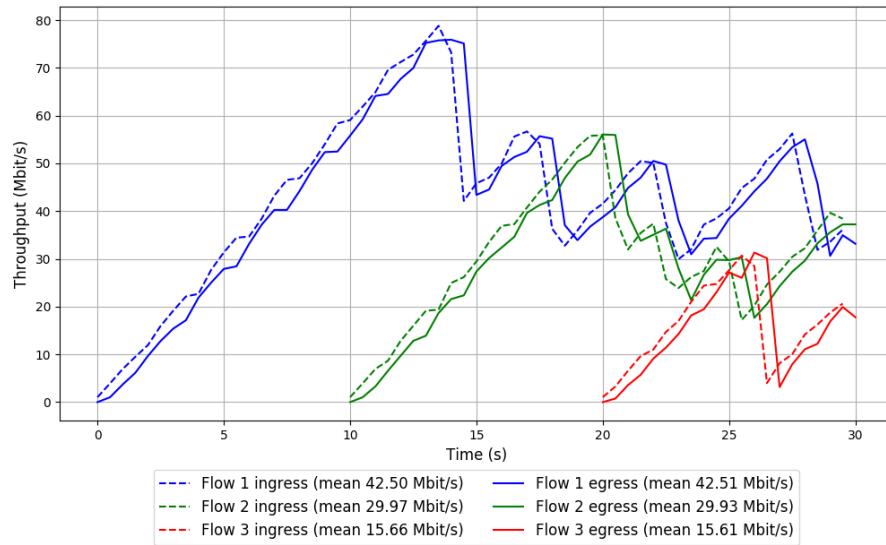


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-25 20:21:26
End at: 2019-01-25 20:21:56
Local clock offset: -3.328 ms
Remote clock offset: -0.389 ms

# Below is generated by plot.py at 2019-01-25 21:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.59 Mbit/s
95th percentile per-packet one-way delay: 41.563 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 42.51 Mbit/s
95th percentile per-packet one-way delay: 41.272 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 41.953 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 15.61 Mbit/s
95th percentile per-packet one-way delay: 42.626 ms
Loss rate: 1.00%
```

Run 3: Report of LEDBAT — Data Link

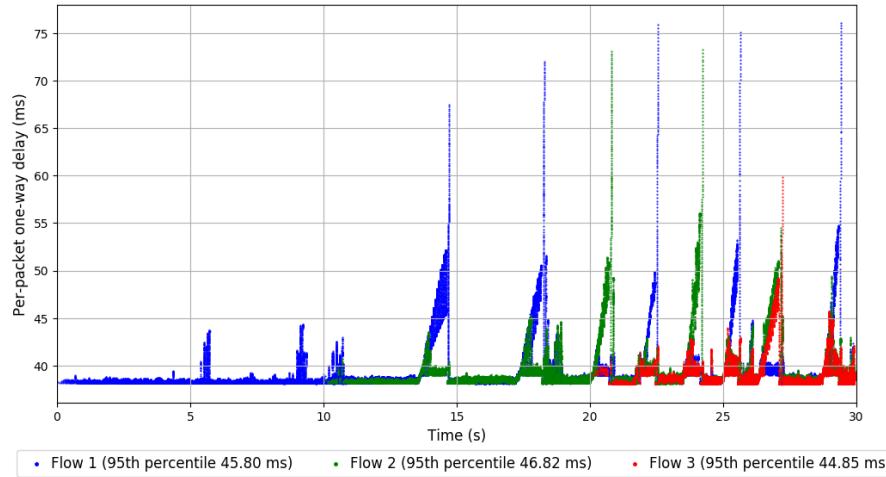
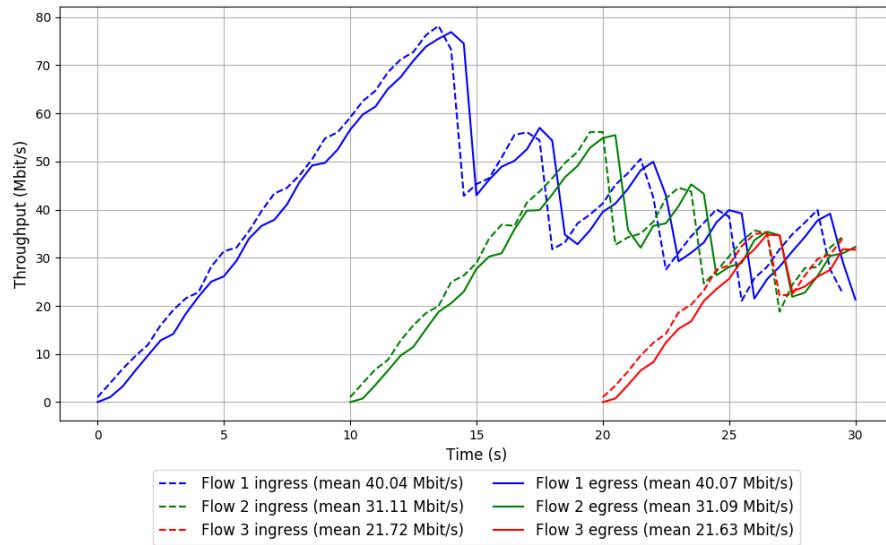


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-25 20:48:33
End at: 2019-01-25 20:49:03
Local clock offset: 0.329 ms
Remote clock offset: -4.808 ms

# Below is generated by plot.py at 2019-01-25 21:36:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.89 Mbit/s
95th percentile per-packet one-way delay: 45.987 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 40.07 Mbit/s
95th percentile per-packet one-way delay: 45.803 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 31.09 Mbit/s
95th percentile per-packet one-way delay: 46.823 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 21.63 Mbit/s
95th percentile per-packet one-way delay: 44.848 ms
Loss rate: 1.08%
```

Run 4: Report of LEDBAT — Data Link

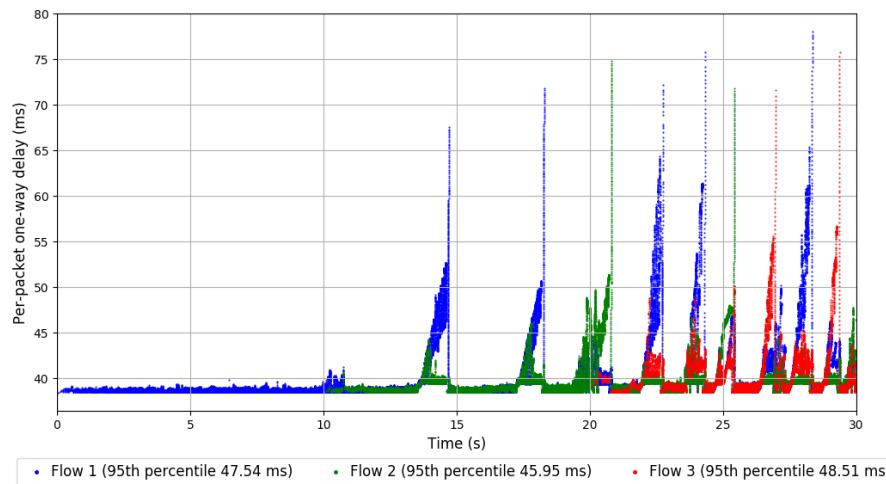
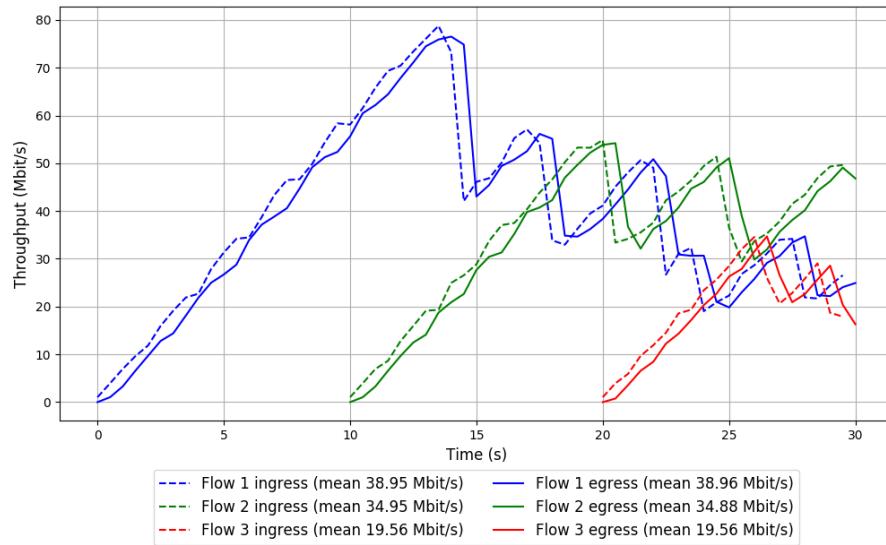


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-25 21:15:52
End at: 2019-01-25 21:16:22
Local clock offset: 0.795 ms
Remote clock offset: -4.849 ms

# Below is generated by plot.py at 2019-01-25 21:36:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.65 Mbit/s
95th percentile per-packet one-way delay: 46.903 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 38.96 Mbit/s
95th percentile per-packet one-way delay: 47.536 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 34.88 Mbit/s
95th percentile per-packet one-way delay: 45.945 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 19.56 Mbit/s
95th percentile per-packet one-way delay: 48.511 ms
Loss rate: 0.66%
```

Run 5: Report of LEDBAT — Data Link

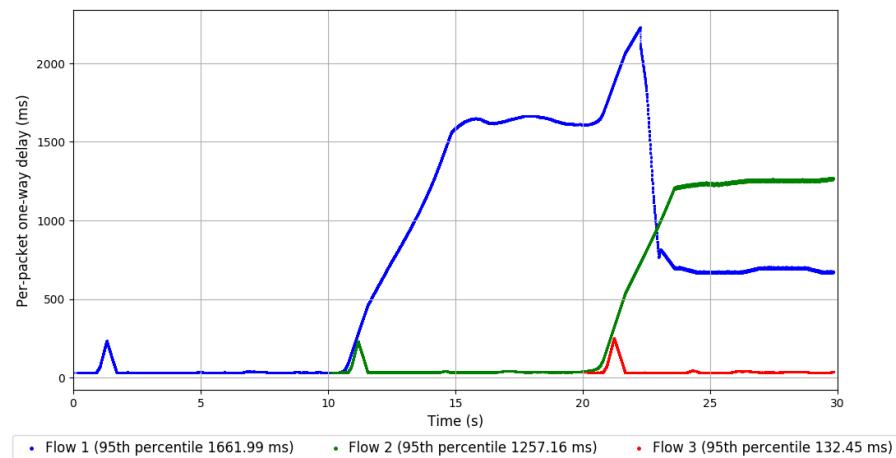
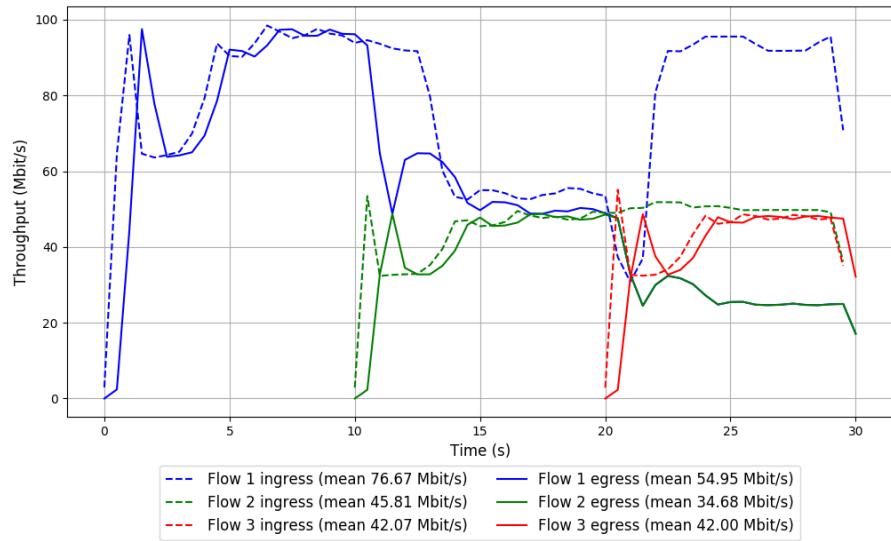


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-01-25 19:11:27
End at: 2019-01-25 19:11:57
Local clock offset: 0.321 ms
Remote clock offset: -2.896 ms

# Below is generated by plot.py at 2019-01-25 21:37:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.79 Mbit/s
95th percentile per-packet one-way delay: 1646.989 ms
Loss rate: 24.32%
-- Flow 1:
Average throughput: 54.95 Mbit/s
95th percentile per-packet one-way delay: 1661.992 ms
Loss rate: 28.48%
-- Flow 2:
Average throughput: 34.68 Mbit/s
95th percentile per-packet one-way delay: 1257.165 ms
Loss rate: 24.56%
-- Flow 3:
Average throughput: 42.00 Mbit/s
95th percentile per-packet one-way delay: 132.451 ms
Loss rate: 0.80%
```

Run 1: Report of PCC-Allegro — Data Link

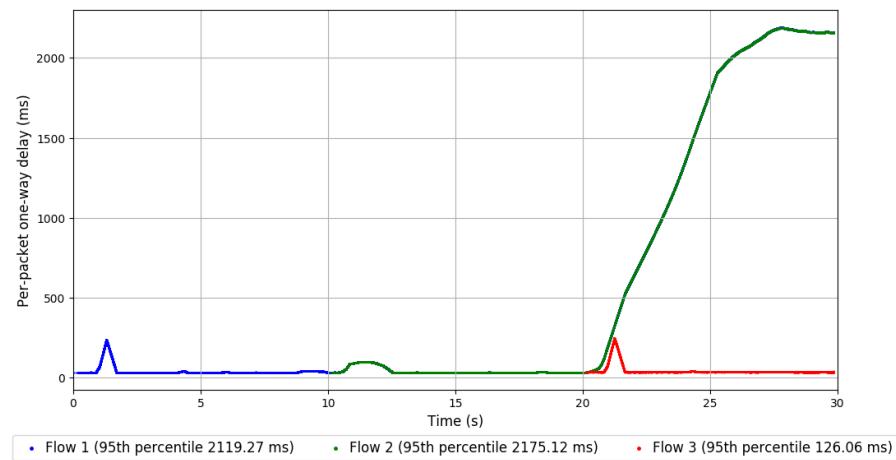
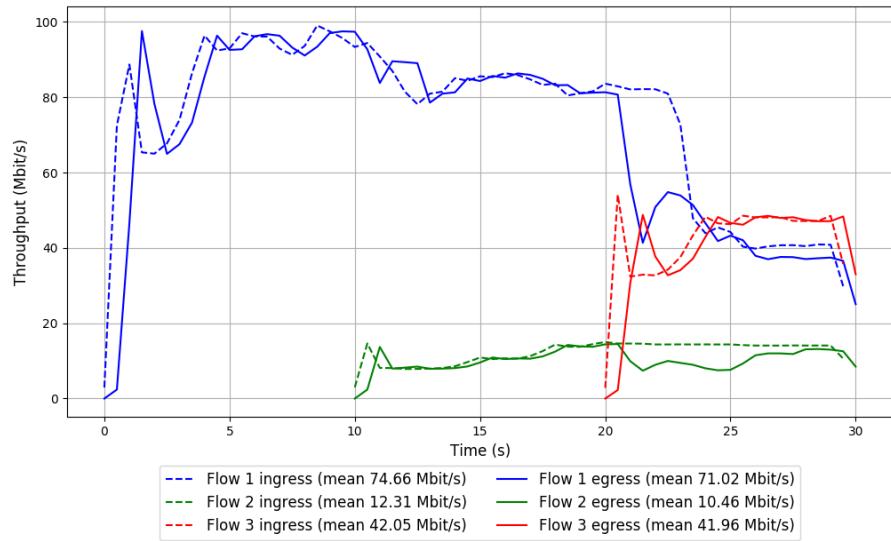


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-25 19:38:09
End at: 2019-01-25 19:38:39
Local clock offset: 0.206 ms
Remote clock offset: -1.738 ms

# Below is generated by plot.py at 2019-01-25 21:37:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.76 Mbit/s
95th percentile per-packet one-way delay: 2130.104 ms
Loss rate: 5.30%
-- Flow 1:
Average throughput: 71.02 Mbit/s
95th percentile per-packet one-way delay: 2119.270 ms
Loss rate: 5.04%
-- Flow 2:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 2175.120 ms
Loss rate: 15.32%
-- Flow 3:
Average throughput: 41.96 Mbit/s
95th percentile per-packet one-way delay: 126.065 ms
Loss rate: 0.81%
```

Run 2: Report of PCC-Allegro — Data Link

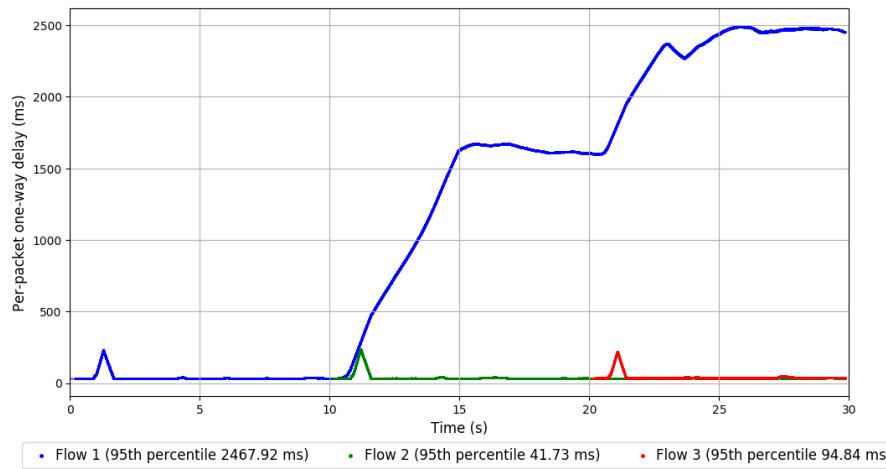
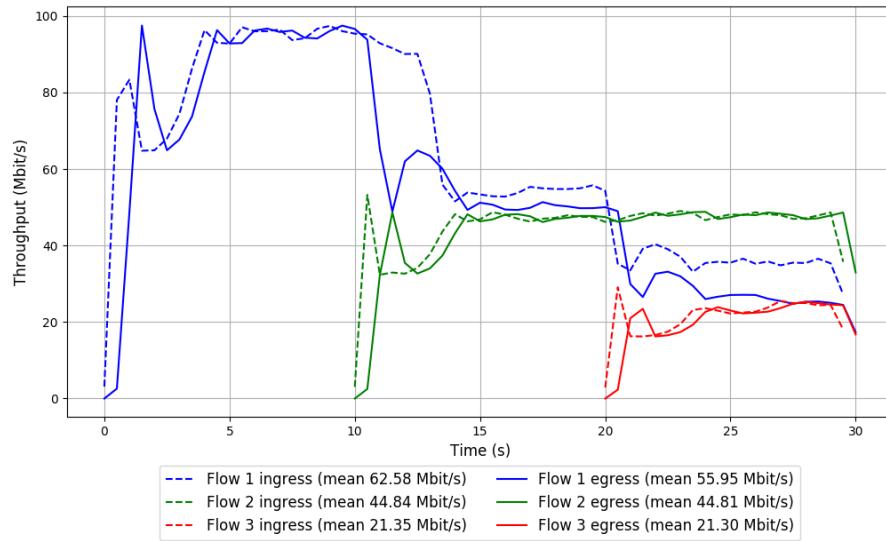


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-25 20:05:07
End at: 2019-01-25 20:05:37
Local clock offset: -1.474 ms
Remote clock offset: -0.622 ms

# Below is generated by plot.py at 2019-01-25 21:37:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.72 Mbit/s
95th percentile per-packet one-way delay: 2372.521 ms
Loss rate: 6.96%
-- Flow 1:
Average throughput: 55.95 Mbit/s
95th percentile per-packet one-way delay: 2467.919 ms
Loss rate: 10.78%
-- Flow 2:
Average throughput: 44.81 Mbit/s
95th percentile per-packet one-way delay: 41.734 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 21.30 Mbit/s
95th percentile per-packet one-way delay: 94.842 ms
Loss rate: 0.89%
```

Run 3: Report of PCC-Allegro — Data Link

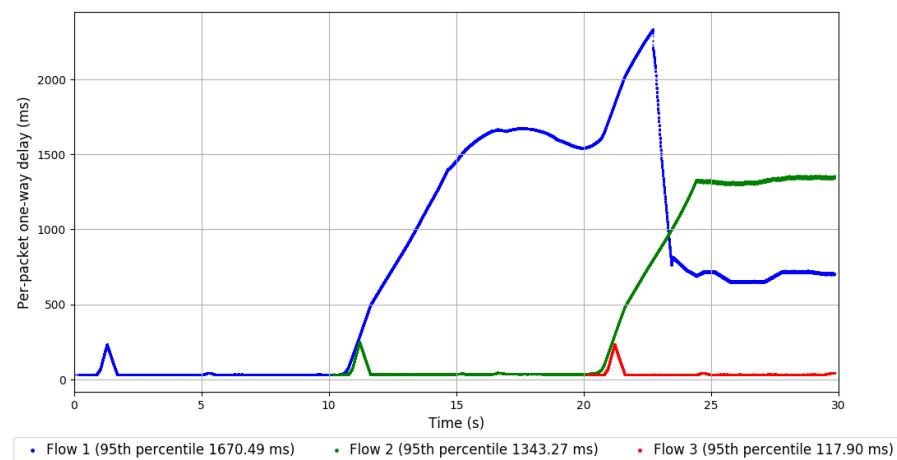
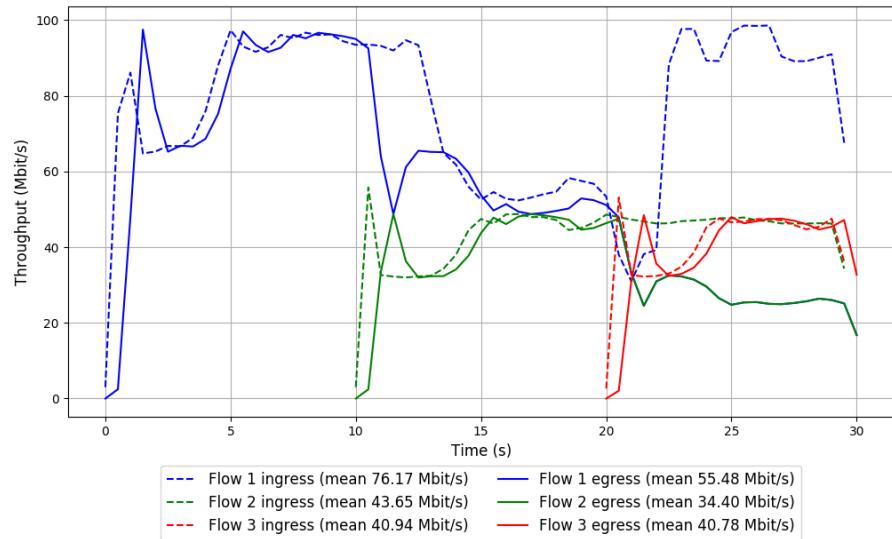


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-25 20:32:01
End at: 2019-01-25 20:32:31
Local clock offset: -2.598 ms
Remote clock offset: -0.233 ms

# Below is generated by plot.py at 2019-01-25 21:37:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.73 Mbit/s
95th percentile per-packet one-way delay: 1658.426 ms
Loss rate: 22.89%
-- Flow 1:
Average throughput: 55.48 Mbit/s
95th percentile per-packet one-way delay: 1670.493 ms
Loss rate: 27.32%
-- Flow 2:
Average throughput: 34.40 Mbit/s
95th percentile per-packet one-way delay: 1343.272 ms
Loss rate: 21.42%
-- Flow 3:
Average throughput: 40.78 Mbit/s
95th percentile per-packet one-way delay: 117.904 ms
Loss rate: 1.03%
```

Run 4: Report of PCC-Allegro — Data Link

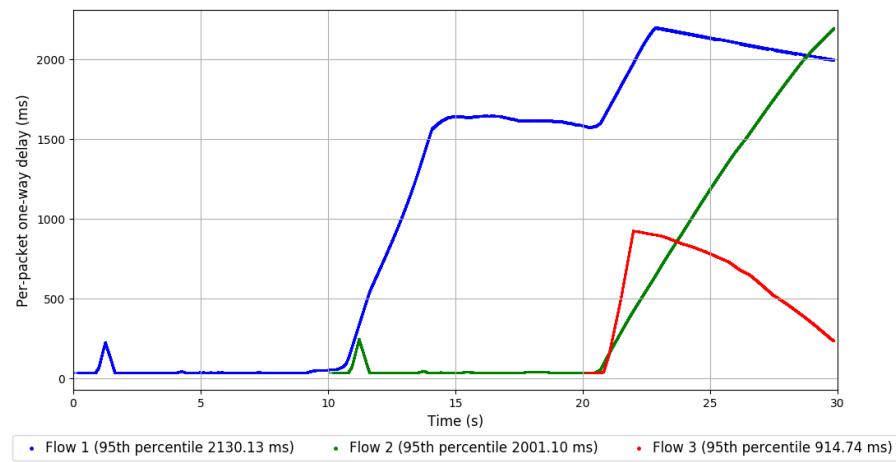
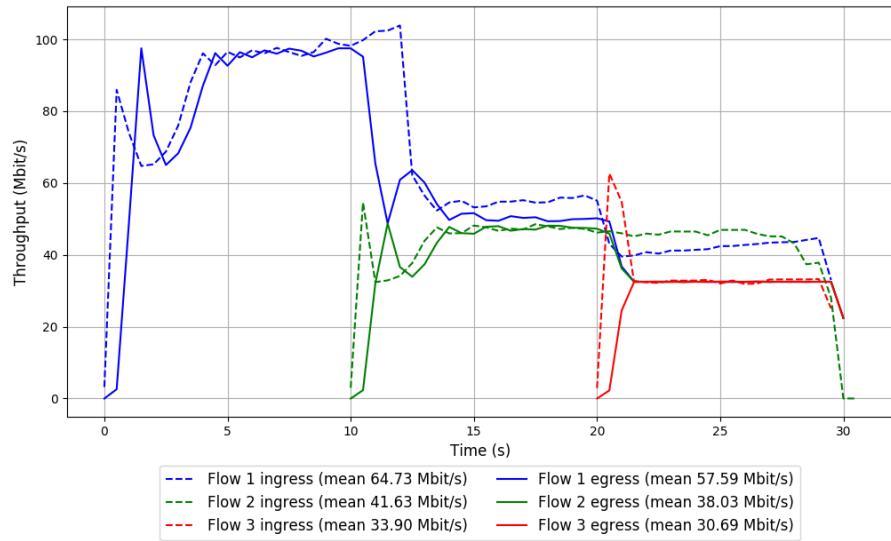


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-25 20:59:18
End at: 2019-01-25 20:59:48
Local clock offset: 0.909 ms
Remote clock offset: -4.649 ms

# Below is generated by plot.py at 2019-01-25 21:37:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 2104.105 ms
Loss rate: 11.66%
-- Flow 1:
Average throughput: 57.59 Mbit/s
95th percentile per-packet one-way delay: 2130.127 ms
Loss rate: 11.21%
-- Flow 2:
Average throughput: 38.03 Mbit/s
95th percentile per-packet one-way delay: 2001.099 ms
Loss rate: 13.29%
-- Flow 3:
Average throughput: 30.69 Mbit/s
95th percentile per-packet one-way delay: 914.735 ms
Loss rate: 10.06%
```

Run 5: Report of PCC-Allegro — Data Link

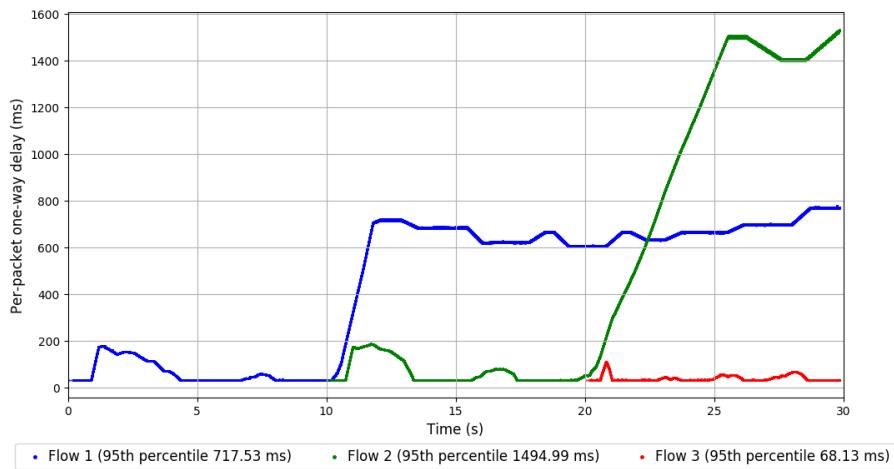
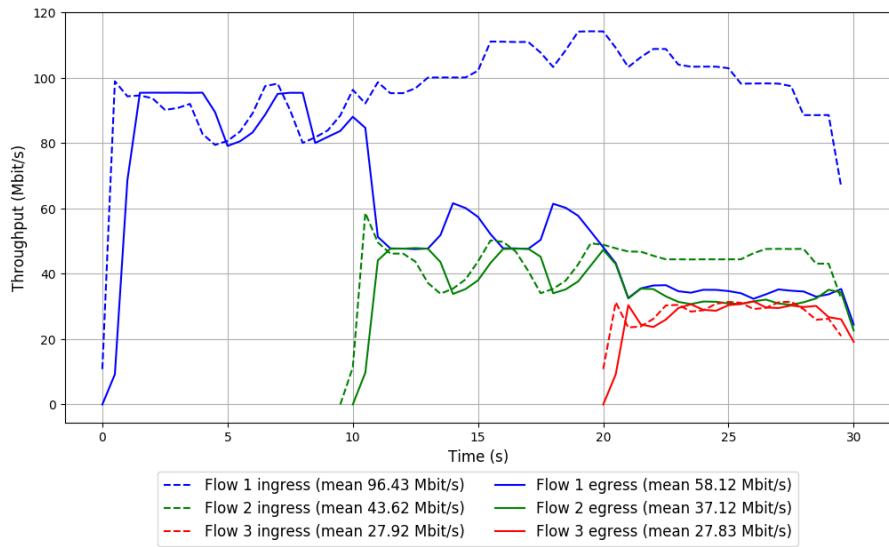


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-01-25 19:32:50
End at: 2019-01-25 19:33:20
Local clock offset: 0.281 ms
Remote clock offset: -2.162 ms

# Below is generated by plot.py at 2019-01-25 21:38:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.95 Mbit/s
95th percentile per-packet one-way delay: 1402.276 ms
Loss rate: 31.87%
-- Flow 1:
Average throughput: 58.12 Mbit/s
95th percentile per-packet one-way delay: 717.535 ms
Loss rate: 39.85%
-- Flow 2:
Average throughput: 37.12 Mbit/s
95th percentile per-packet one-way delay: 1494.987 ms
Loss rate: 15.18%
-- Flow 3:
Average throughput: 27.83 Mbit/s
95th percentile per-packet one-way delay: 68.132 ms
Loss rate: 0.96%
```

Run 1: Report of PCC-Expr — Data Link

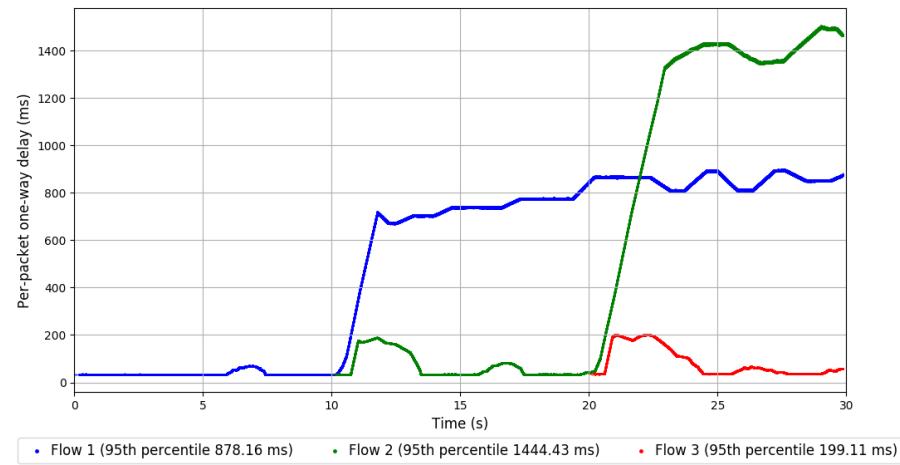
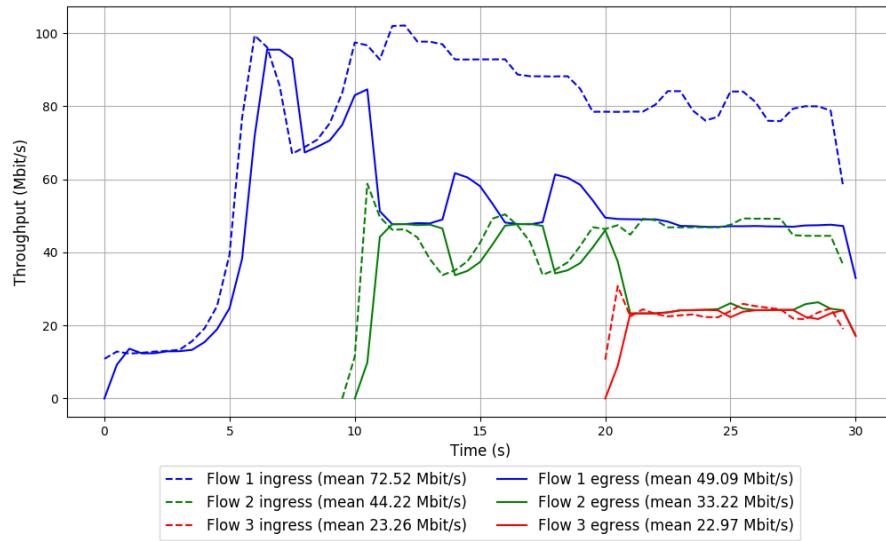


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-25 19:59:50
End at: 2019-01-25 20:00:20
Local clock offset: -0.001 ms
Remote clock offset: -0.735 ms

# Below is generated by plot.py at 2019-01-25 21:38:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.73 Mbit/s
95th percentile per-packet one-way delay: 1370.669 ms
Loss rate: 28.33%
-- Flow 1:
Average throughput: 49.09 Mbit/s
95th percentile per-packet one-way delay: 878.156 ms
Loss rate: 32.43%
-- Flow 2:
Average throughput: 33.22 Mbit/s
95th percentile per-packet one-way delay: 1444.433 ms
Loss rate: 25.12%
-- Flow 3:
Average throughput: 22.97 Mbit/s
95th percentile per-packet one-way delay: 199.110 ms
Loss rate: 1.93%
```

Run 2: Report of PCC-Expr — Data Link

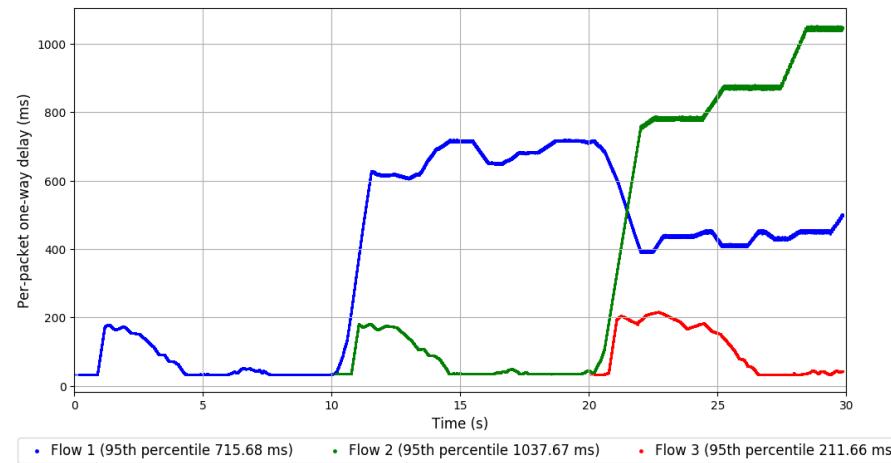
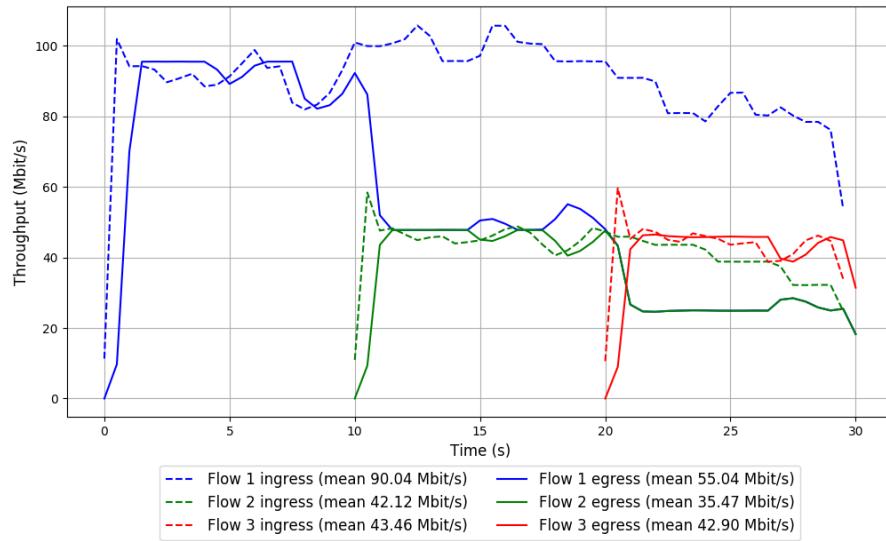


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-25 20:26:38
End at: 2019-01-25 20:27:08
Local clock offset: -3.632 ms
Remote clock offset: -0.241 ms

# Below is generated by plot.py at 2019-01-25 21:38:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: 786.265 ms
Loss rate: 30.13%
-- Flow 1:
Average throughput: 55.04 Mbit/s
95th percentile per-packet one-way delay: 715.682 ms
Loss rate: 39.00%
-- Flow 2:
Average throughput: 35.47 Mbit/s
95th percentile per-packet one-way delay: 1037.669 ms
Loss rate: 16.07%
-- Flow 3:
Average throughput: 42.90 Mbit/s
95th percentile per-packet one-way delay: 211.662 ms
Loss rate: 1.93%
```

Run 3: Report of PCC-Expr — Data Link

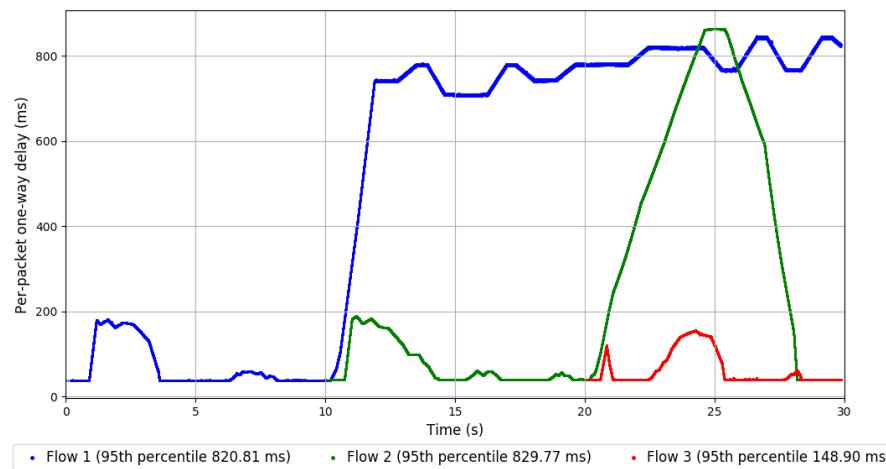
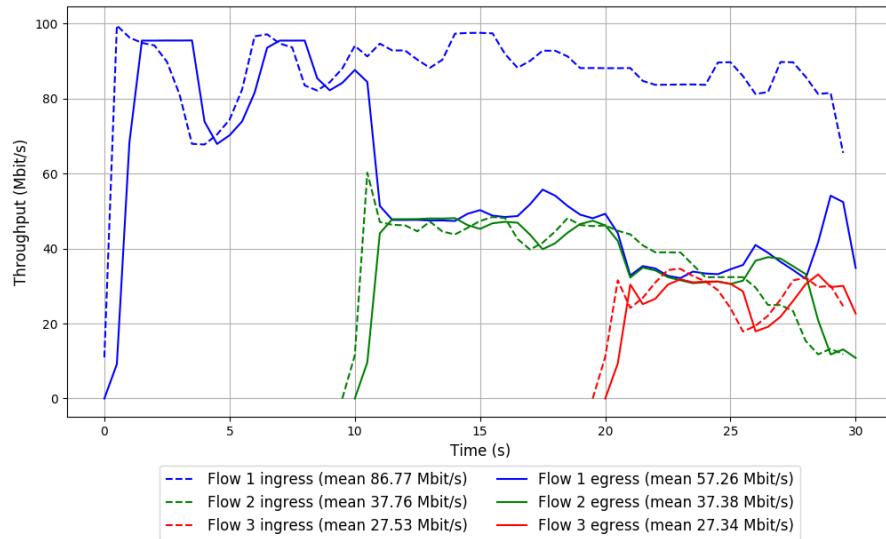


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-25 20:53:45
End at: 2019-01-25 20:54:15
Local clock offset: 0.641 ms
Remote clock offset: -4.681 ms

# Below is generated by plot.py at 2019-01-25 21:39:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.11 Mbit/s
95th percentile per-packet one-way delay: 820.138 ms
Loss rate: 24.87%
-- Flow 1:
Average throughput: 57.26 Mbit/s
95th percentile per-packet one-way delay: 820.808 ms
Loss rate: 34.15%
-- Flow 2:
Average throughput: 37.38 Mbit/s
95th percentile per-packet one-way delay: 829.773 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 27.34 Mbit/s
95th percentile per-packet one-way delay: 148.899 ms
Loss rate: 1.34%
```

Run 4: Report of PCC-Expr — Data Link

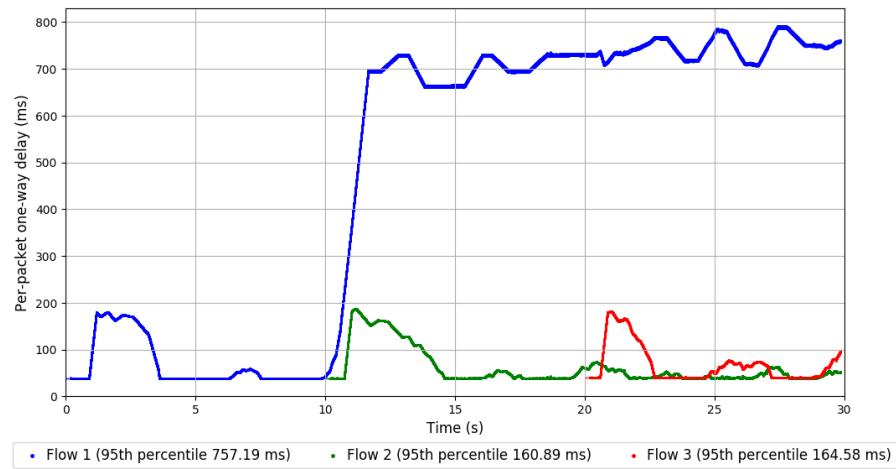
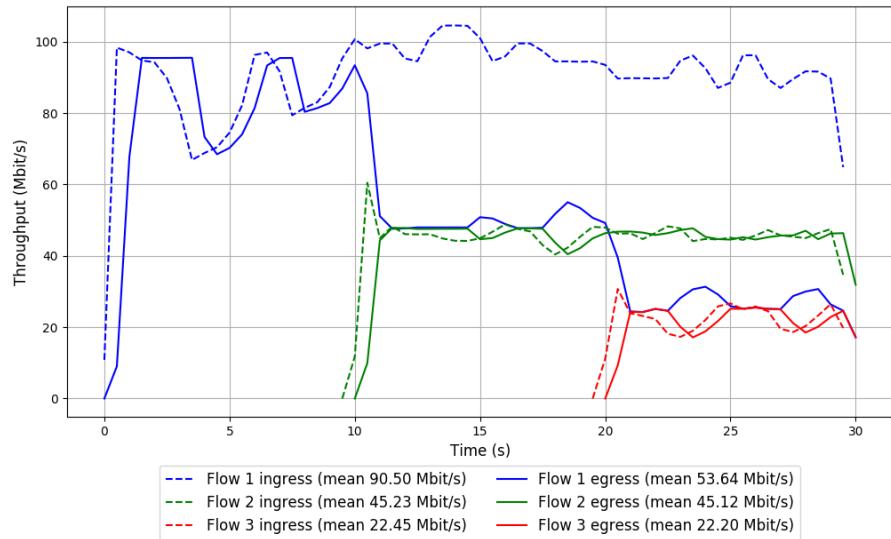


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-25 21:20:55
End at: 2019-01-25 21:21:25
Local clock offset: 0.852 ms
Remote clock offset: -4.344 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.96 Mbit/s
95th percentile per-packet one-way delay: 744.563 ms
Loss rate: 29.11%
-- Flow 1:
Average throughput: 53.64 Mbit/s
95th percentile per-packet one-way delay: 757.192 ms
Loss rate: 40.85%
-- Flow 2:
Average throughput: 45.12 Mbit/s
95th percentile per-packet one-way delay: 160.889 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 22.20 Mbit/s
95th percentile per-packet one-way delay: 164.580 ms
Loss rate: 1.78%
```

Run 5: Report of PCC-Expr — Data Link

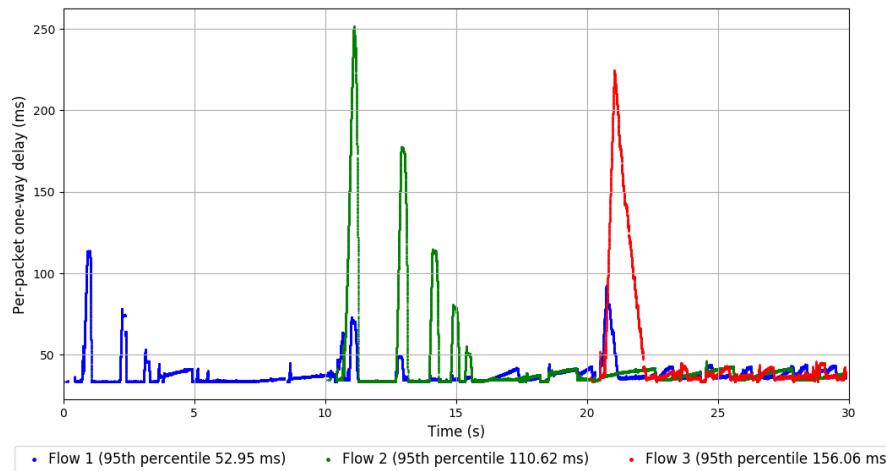
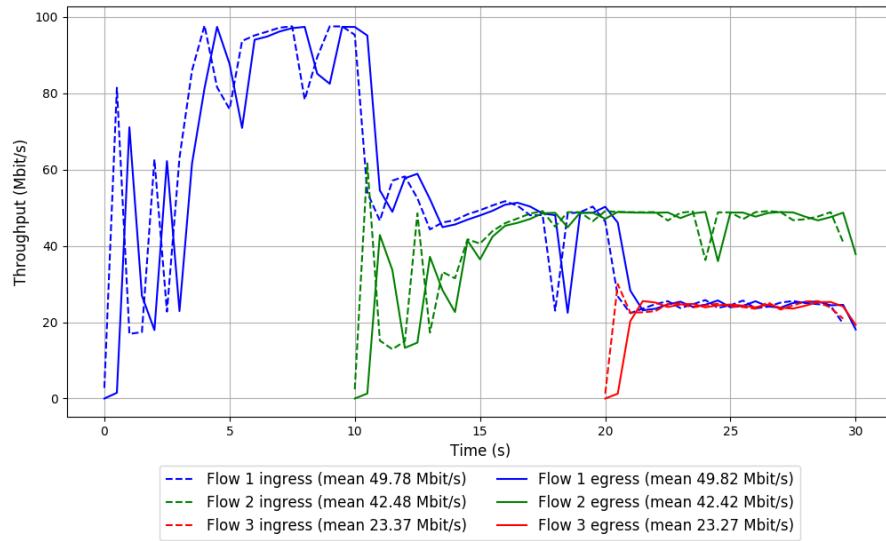


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-01-25 19:30:11
End at: 2019-01-25 19:30:41
Local clock offset: 0.352 ms
Remote clock offset: -2.192 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.68 Mbit/s
95th percentile per-packet one-way delay: 74.067 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 49.82 Mbit/s
95th percentile per-packet one-way delay: 52.950 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 42.42 Mbit/s
95th percentile per-packet one-way delay: 110.622 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 23.27 Mbit/s
95th percentile per-packet one-way delay: 156.059 ms
Loss rate: 1.10%
```

Run 1: Report of QUIC Cubic — Data Link

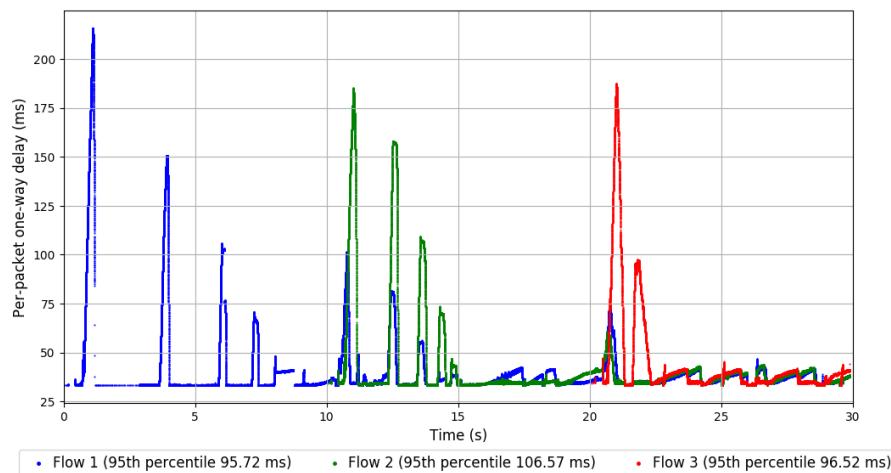
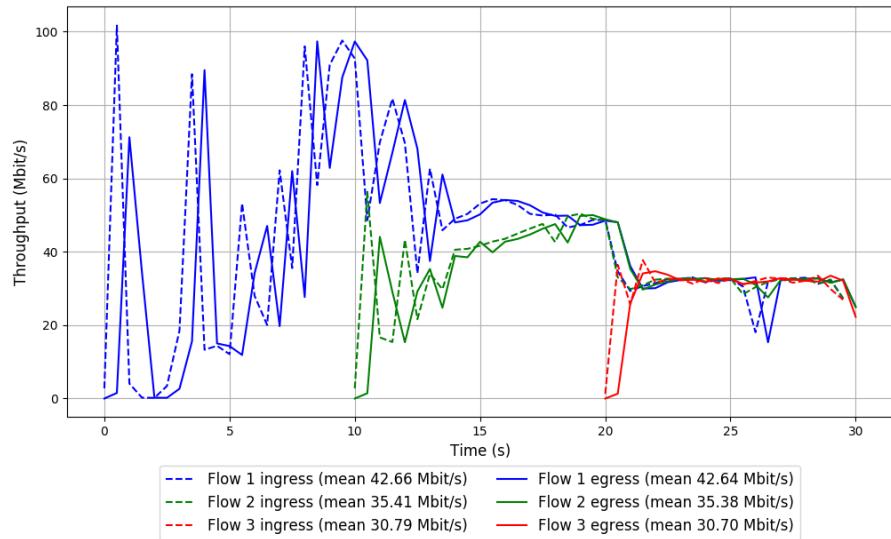


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-25 19:57:13
End at: 2019-01-25 19:57:43
Local clock offset: 0.17 ms
Remote clock offset: -0.778 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.26 Mbit/s
95th percentile per-packet one-way delay: 99.497 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 42.64 Mbit/s
95th percentile per-packet one-way delay: 95.725 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 106.574 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 30.70 Mbit/s
95th percentile per-packet one-way delay: 96.518 ms
Loss rate: 0.91%
```

Run 2: Report of QUIC Cubic — Data Link

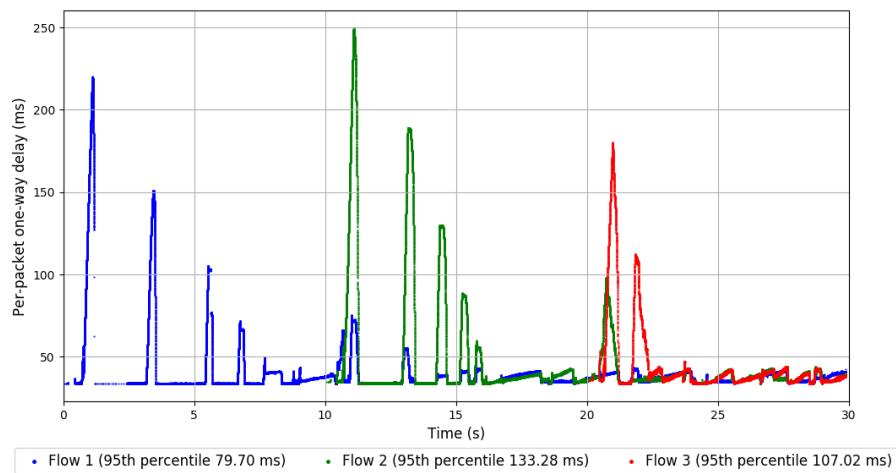
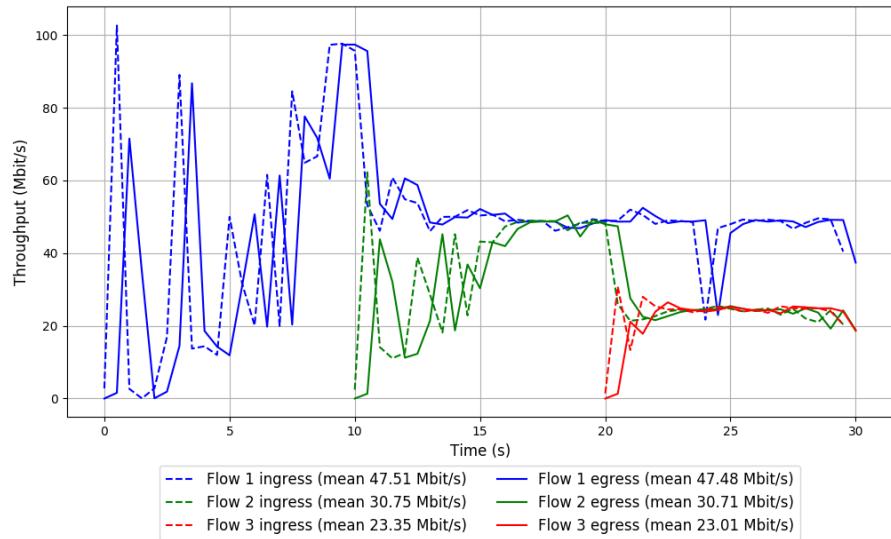


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-25 20:24:07
End at: 2019-01-25 20:24:37
Local clock offset: -3.488 ms
Remote clock offset: -0.261 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.48 Mbit/s
95th percentile per-packet one-way delay: 102.601 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 47.48 Mbit/s
95th percentile per-packet one-way delay: 79.698 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 133.282 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 23.01 Mbit/s
95th percentile per-packet one-way delay: 107.022 ms
Loss rate: 2.12%
```

Run 3: Report of QUIC Cubic — Data Link

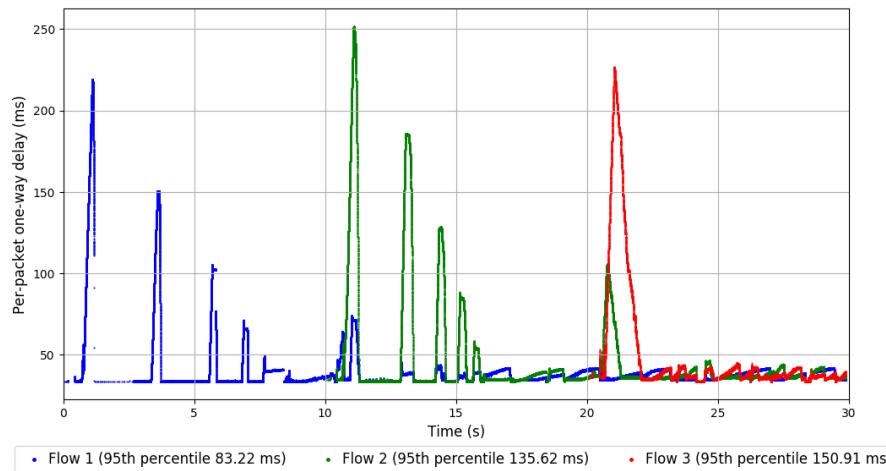
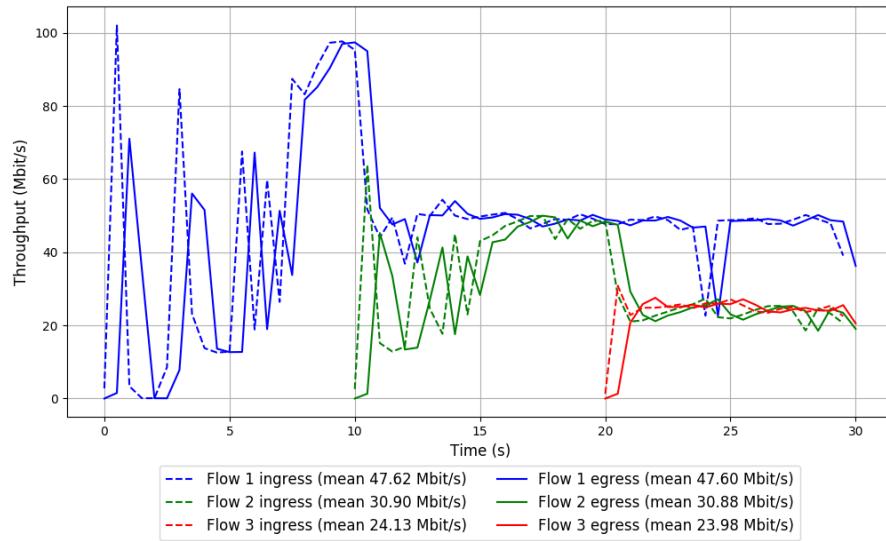


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-25 20:51:08
End at: 2019-01-25 20:51:38
Local clock offset: 0.5 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.02 Mbit/s
95th percentile per-packet one-way delay: 106.060 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 47.60 Mbit/s
95th percentile per-packet one-way delay: 83.224 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 30.88 Mbit/s
95th percentile per-packet one-way delay: 135.618 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 23.98 Mbit/s
95th percentile per-packet one-way delay: 150.908 ms
Loss rate: 1.27%
```

Run 4: Report of QUIC Cubic — Data Link

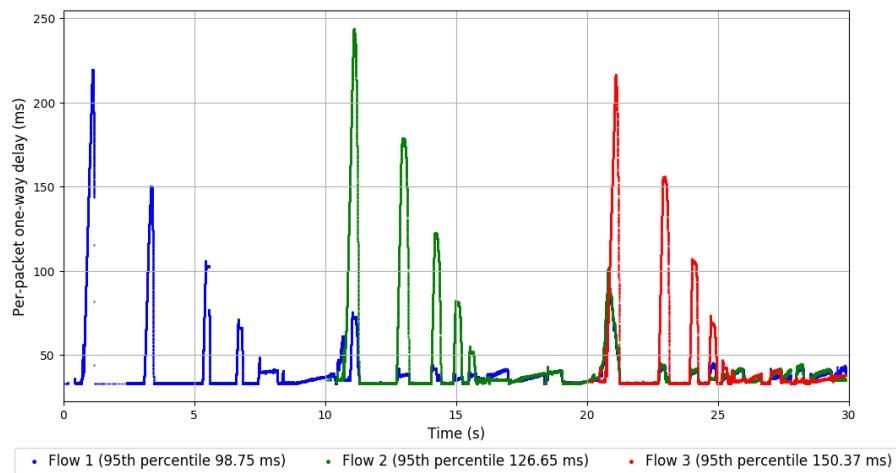
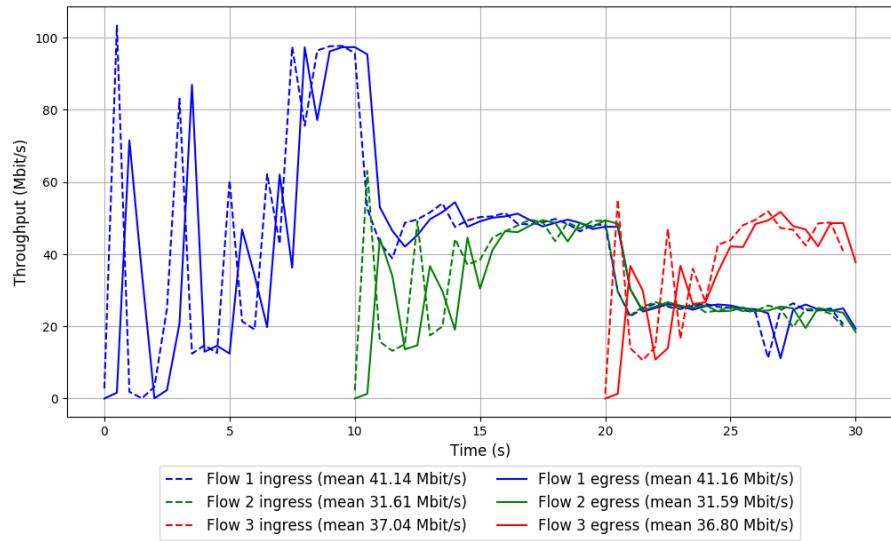


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-25 21:18:23
End at: 2019-01-25 21:18:53
Local clock offset: 0.816 ms
Remote clock offset: 0.482 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.26 Mbit/s
95th percentile per-packet one-way delay: 115.938 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 41.16 Mbit/s
95th percentile per-packet one-way delay: 98.750 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 31.59 Mbit/s
95th percentile per-packet one-way delay: 126.653 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 36.80 Mbit/s
95th percentile per-packet one-way delay: 150.366 ms
Loss rate: 1.29%
```

Run 5: Report of QUIC Cubic — Data Link

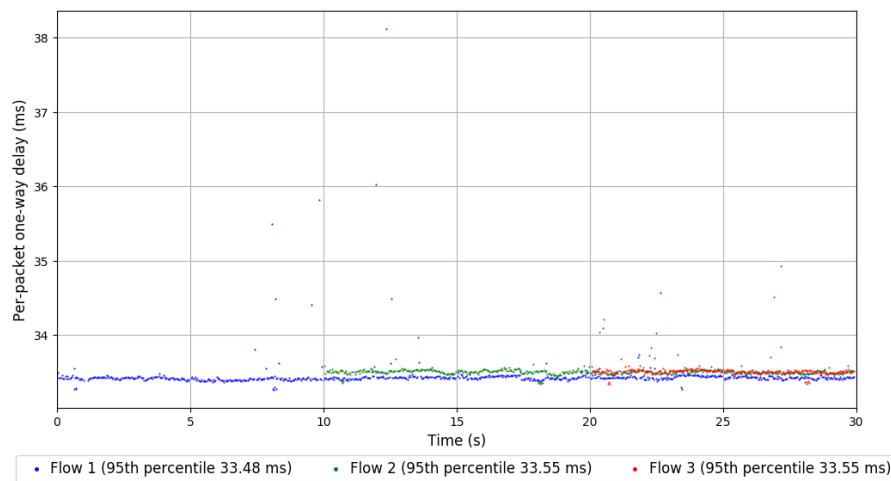
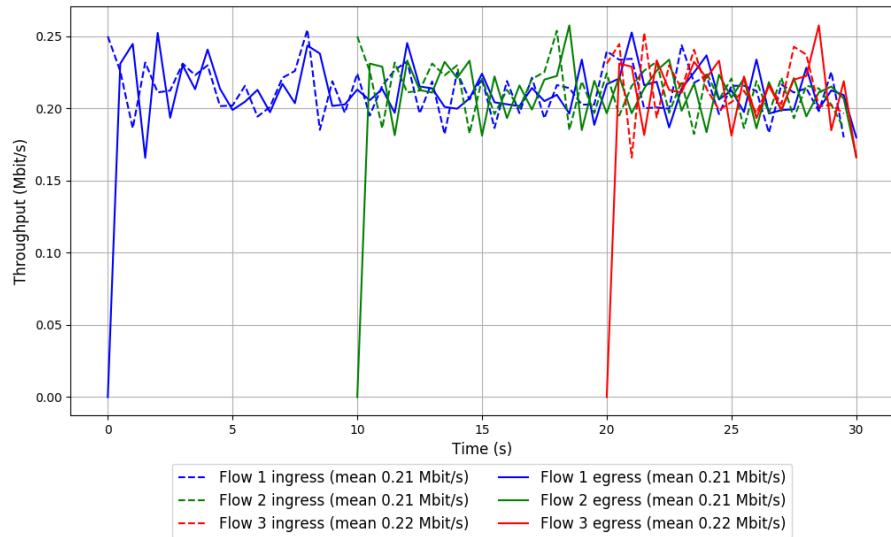


```
Run 1: Statistics of SCReAM
```

```
Start at: 2019-01-25 19:15:15
End at: 2019-01-25 19:15:45
Local clock offset: 0.322 ms
Remote clock offset: -2.816 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 33.543 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.478 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.550 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 33.547 ms
Loss rate: 0.71%
```

Run 1: Report of SCReAM — Data Link

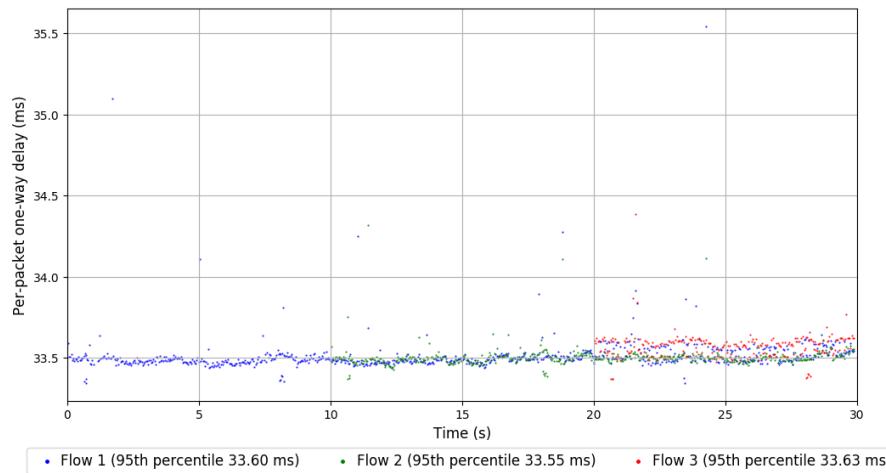
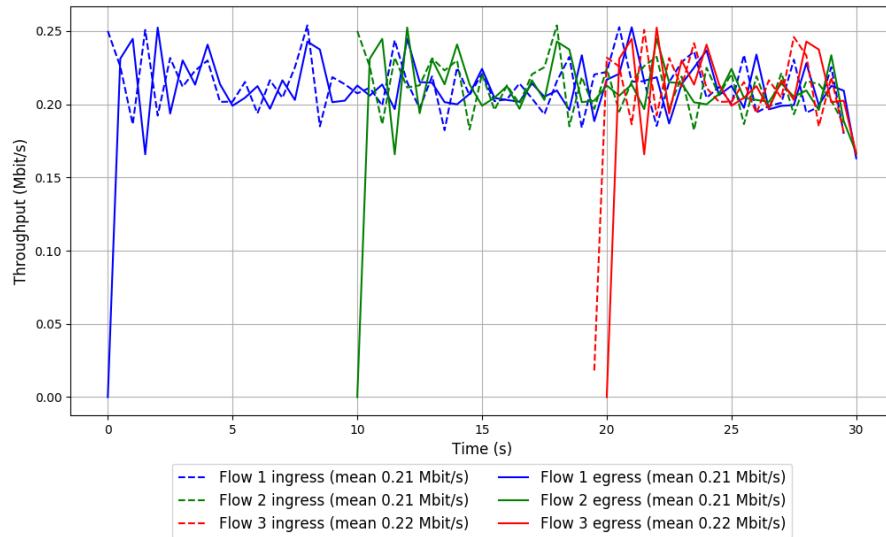


Run 2: Statistics of SCReAM

```
Start at: 2019-01-25 19:42:11
End at: 2019-01-25 19:42:41
Local clock offset: 0.201 ms
Remote clock offset: -1.501 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 33.613 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.597 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.549 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 33.631 ms
Loss rate: 0.71%
```

Run 2: Report of SCReAM — Data Link

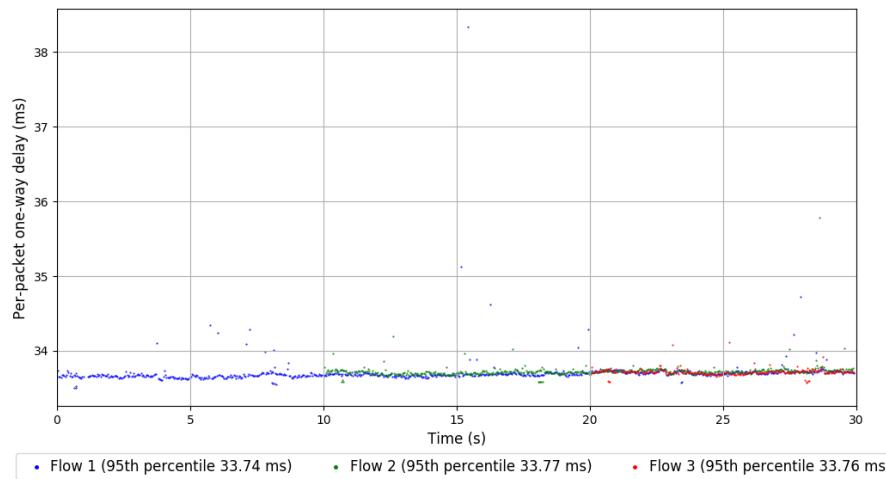
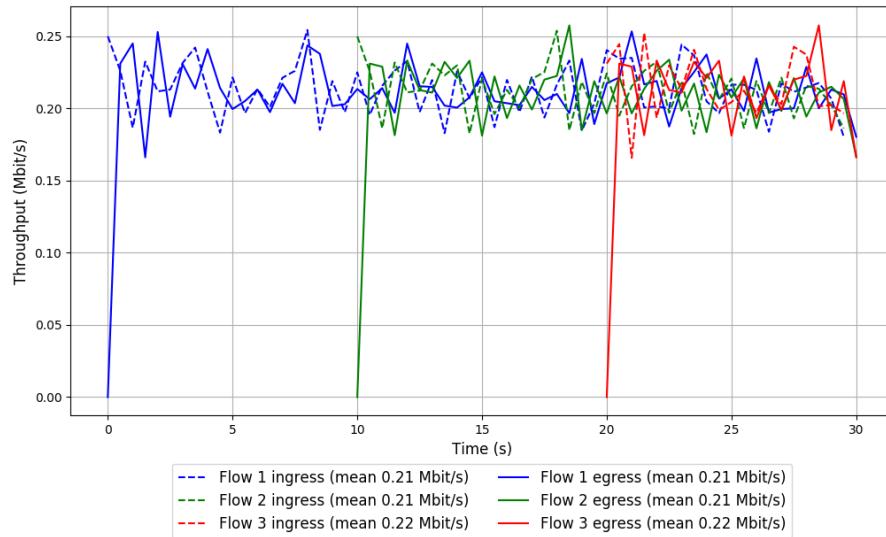


Run 3: Statistics of SCReAM

```
Start at: 2019-01-25 20:09:13
End at: 2019-01-25 20:09:43
Local clock offset: -2.162 ms
Remote clock offset: -0.693 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 33.756 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.740 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.766 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 33.756 ms
Loss rate: 0.71%
```

Run 3: Report of SCReAM — Data Link

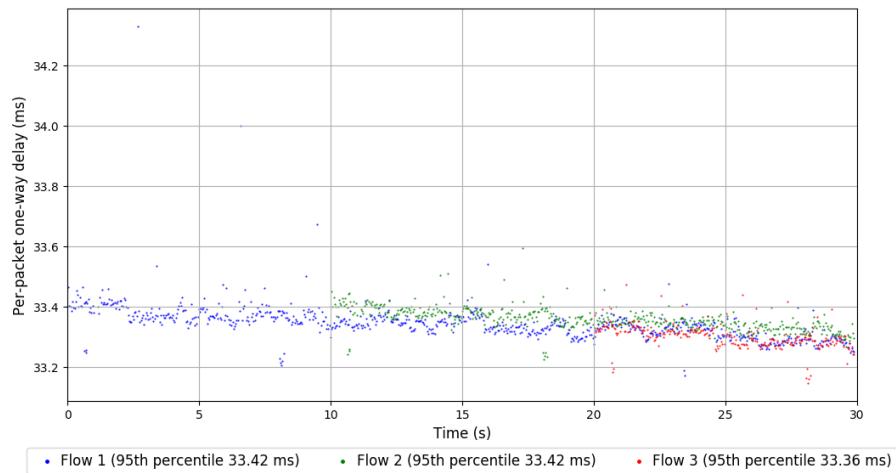
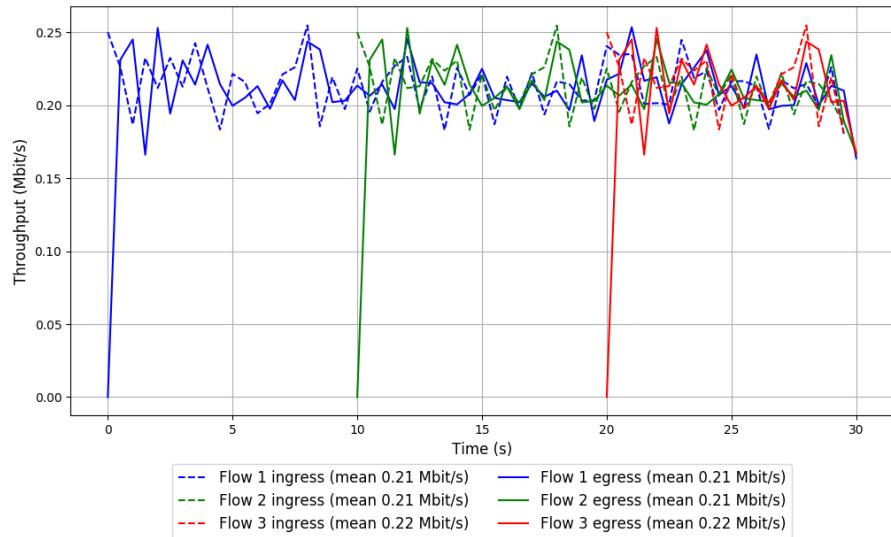


Run 4: Statistics of SCReAM

```
Start at: 2019-01-25 20:35:54
End at: 2019-01-25 20:36:24
Local clock offset: -1.399 ms
Remote clock offset: -0.184 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 33.413 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.416 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.417 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 33.356 ms
Loss rate: 0.71%
```

Run 4: Report of SCReAM — Data Link

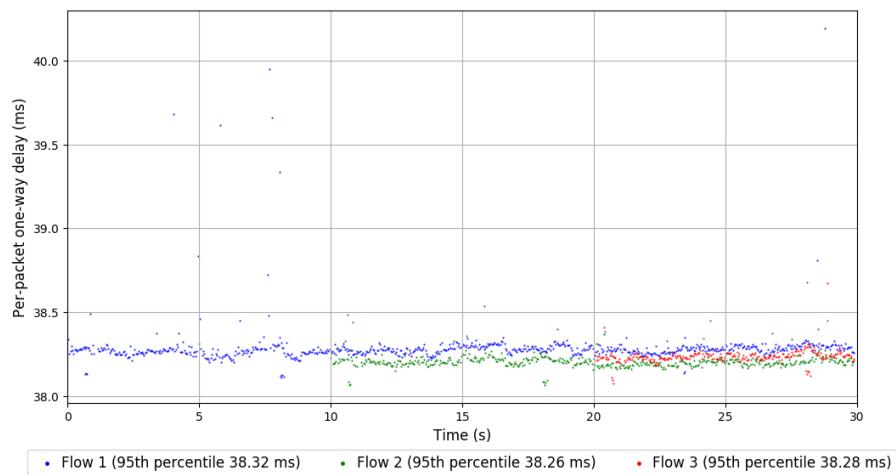
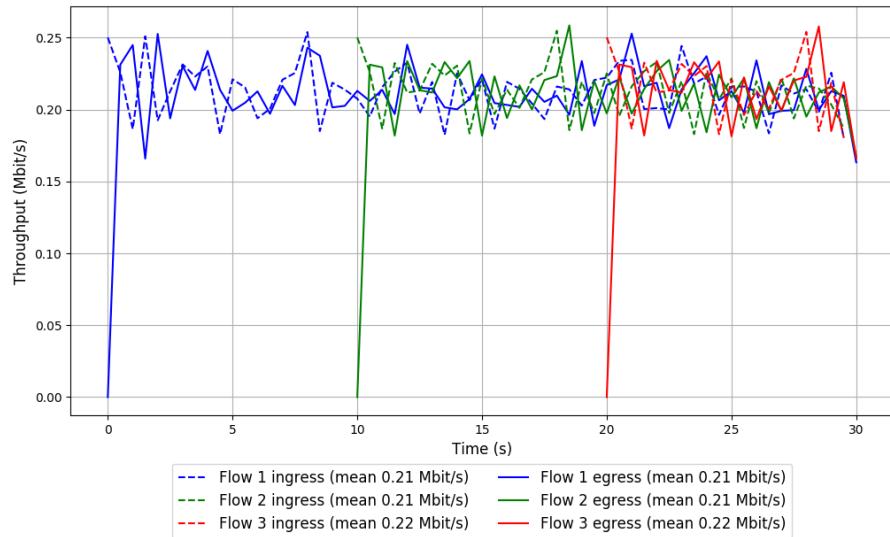


Run 5: Statistics of SCReAM

```
Start at: 2019-01-25 21:03:32
End at: 2019-01-25 21:04:02
Local clock offset: 0.813 ms
Remote clock offset: -4.739 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 38.313 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 38.320 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 38.261 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 38.276 ms
Loss rate: 0.71%
```

Run 5: Report of SCReAM — Data Link

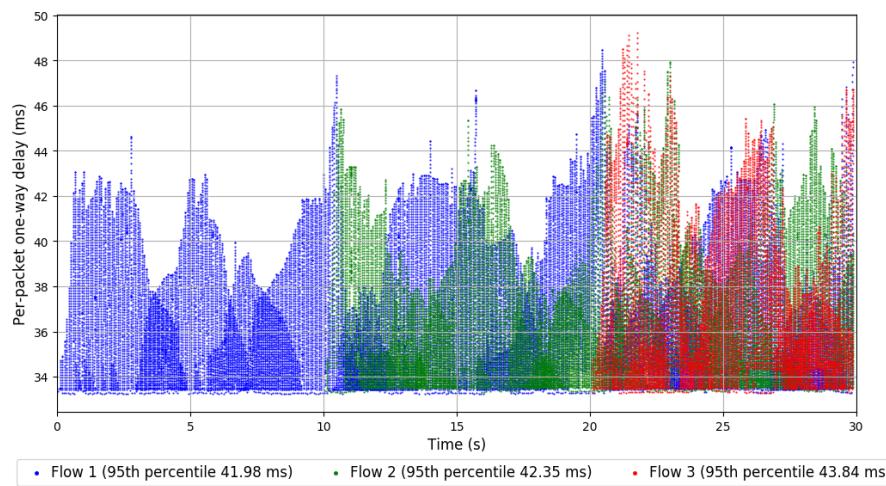
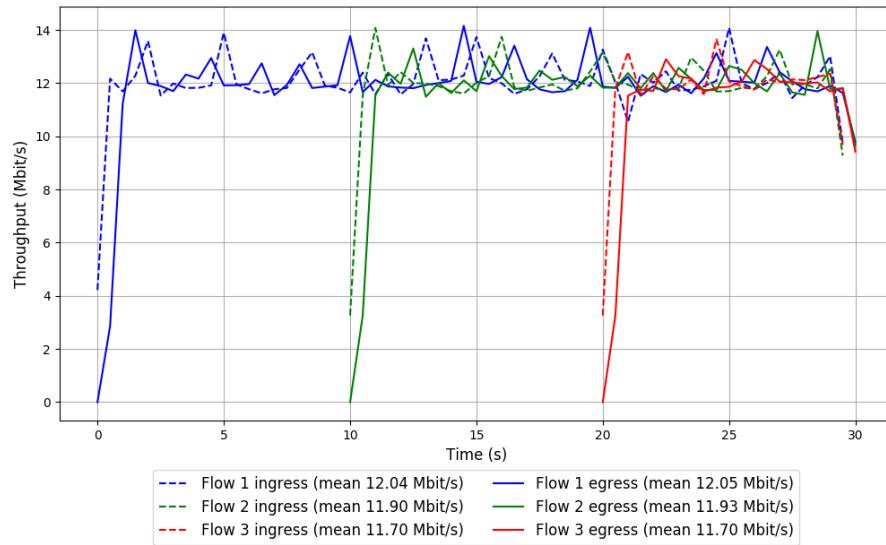


Run 1: Statistics of Sprout

```
Start at: 2019-01-25 19:21:21
End at: 2019-01-25 19:21:51
Local clock offset: 0.352 ms
Remote clock offset: -2.605 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.81 Mbit/s
95th percentile per-packet one-way delay: 42.371 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 41.975 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 42.353 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 11.70 Mbit/s
95th percentile per-packet one-way delay: 43.843 ms
Loss rate: 0.83%
```

Run 1: Report of Sprout — Data Link

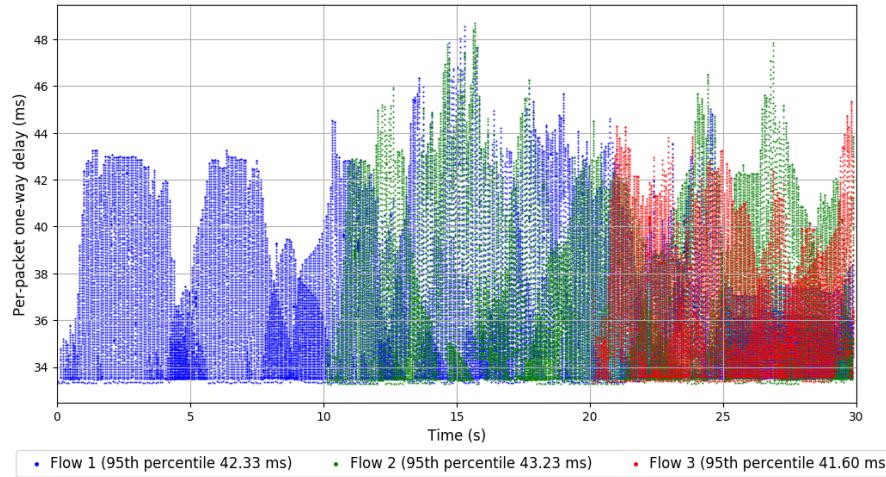
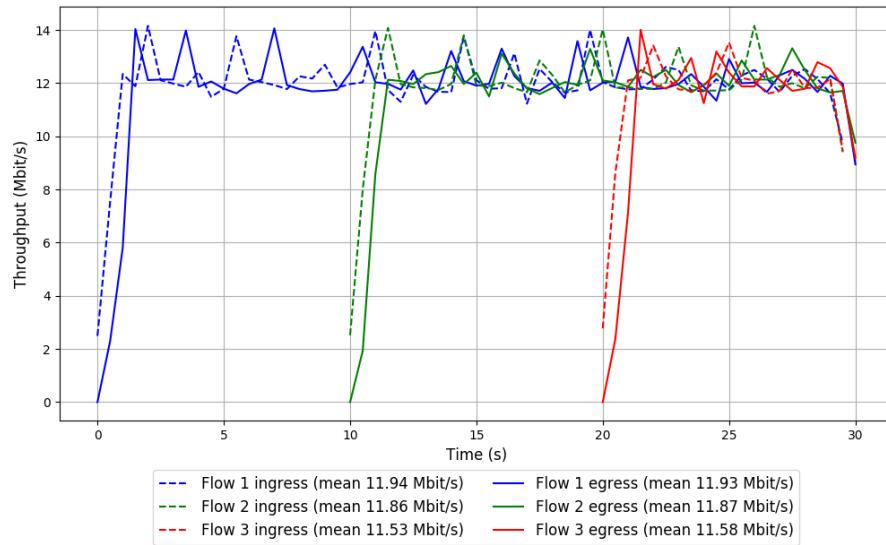


Run 2: Statistics of Sprout

```
Start at: 2019-01-25 19:48:32
End at: 2019-01-25 19:49:02
Local clock offset: 0.173 ms
Remote clock offset: -1.083 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.63 Mbit/s
95th percentile per-packet one-way delay: 42.517 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 42.329 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 11.87 Mbit/s
95th percentile per-packet one-way delay: 43.230 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 41.603 ms
Loss rate: 0.25%
```

Run 2: Report of Sprout — Data Link

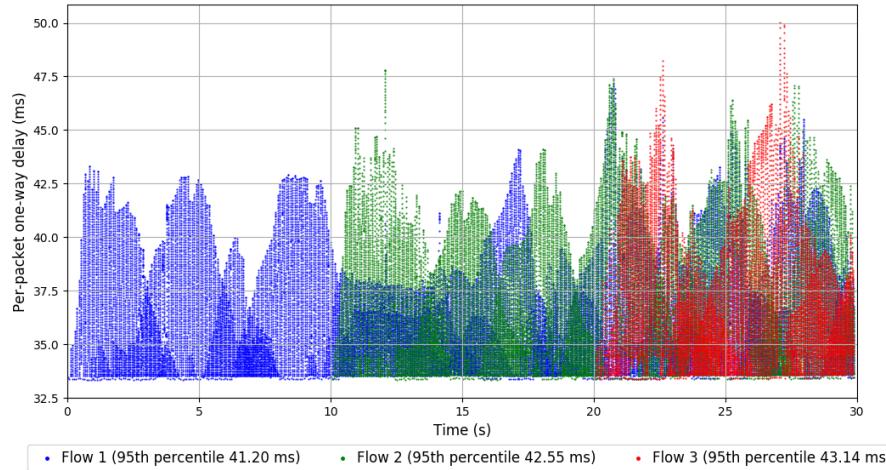
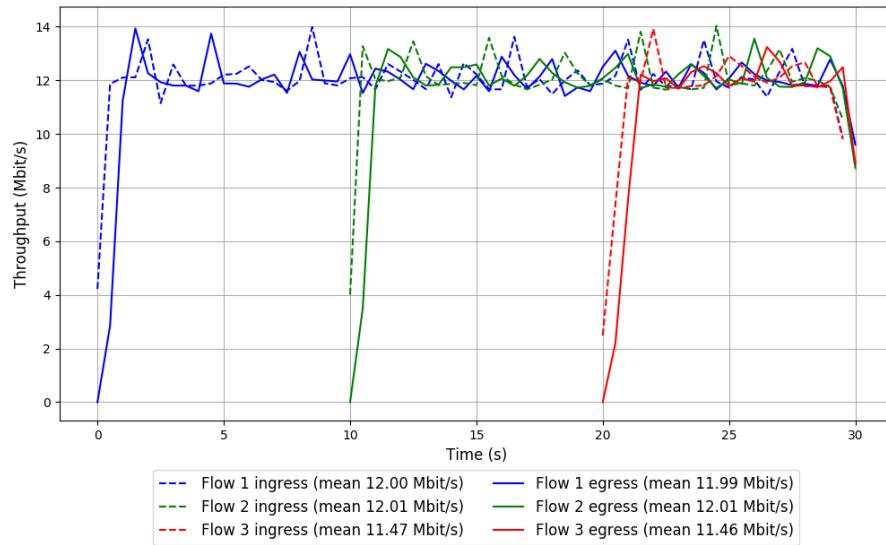


Run 3: Statistics of Sprout

```
Start at: 2019-01-25 20:15:26
End at: 2019-01-25 20:15:56
Local clock offset: -2.865 ms
Remote clock offset: -0.394 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.74 Mbit/s
95th percentile per-packet one-way delay: 41.995 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 41.205 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 12.01 Mbit/s
95th percentile per-packet one-way delay: 42.553 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 11.46 Mbit/s
95th percentile per-packet one-way delay: 43.144 ms
Loss rate: 0.85%
```

Run 3: Report of Sprout — Data Link

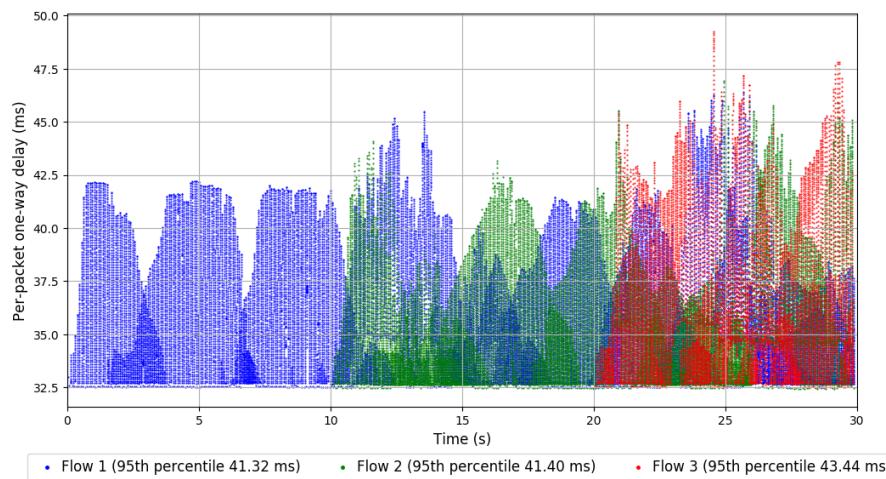
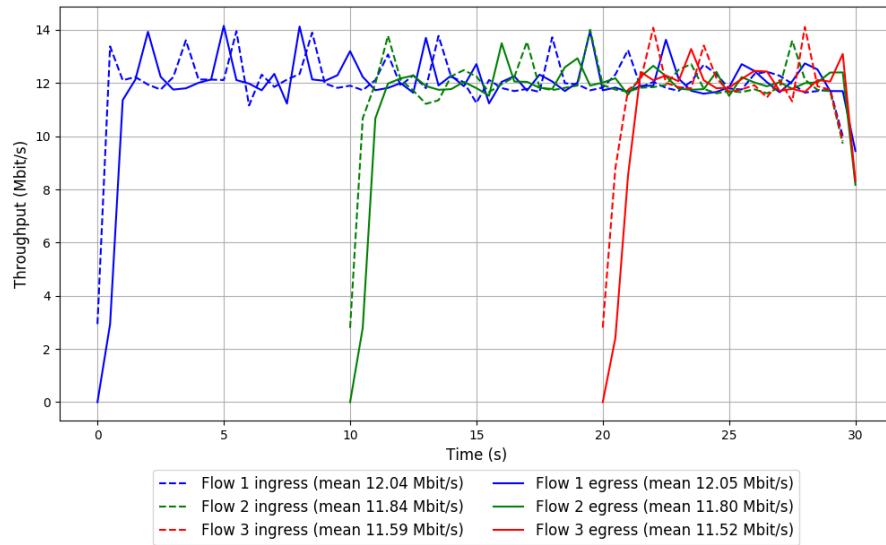


Run 4: Statistics of Sprout

```
Start at: 2019-01-25 20:42:08
End at: 2019-01-25 20:42:38
Local clock offset: -0.305 ms
Remote clock offset: 0.586 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.69 Mbit/s
95th percentile per-packet one-way delay: 41.780 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 41.323 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 41.395 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 11.52 Mbit/s
95th percentile per-packet one-way delay: 43.440 ms
Loss rate: 0.86%
```

Run 4: Report of Sprout — Data Link

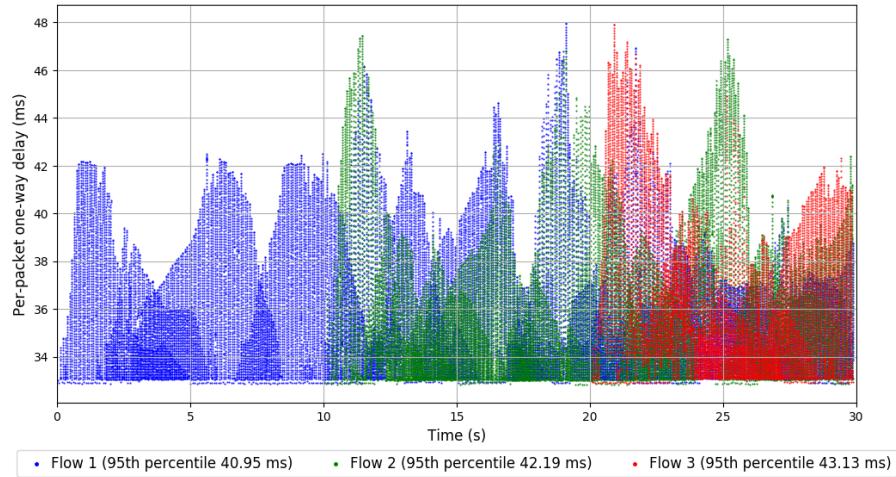
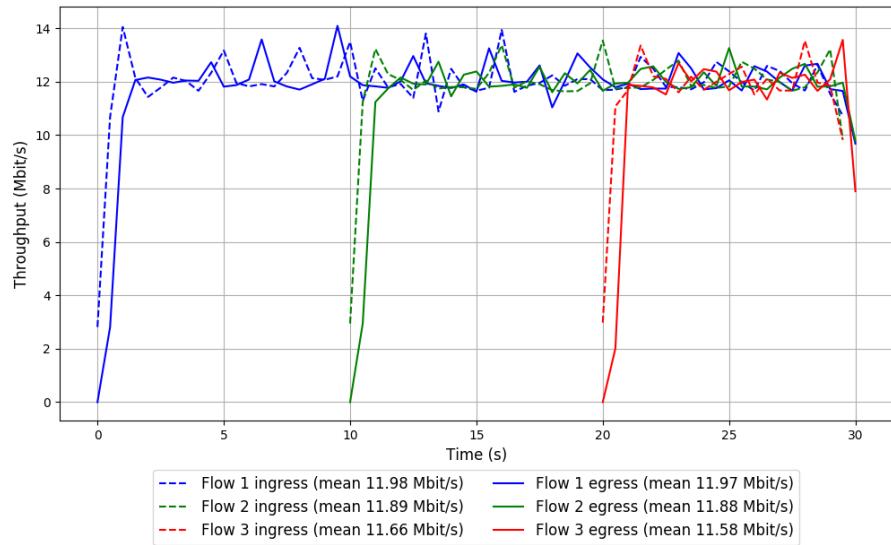


Run 5: Statistics of Sprout

```
Start at: 2019-01-25 21:09:44
End at: 2019-01-25 21:10:14
Local clock offset: 0.76 ms
Remote clock offset: 0.474 ms

# Below is generated by plot.py at 2019-01-25 21:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.67 Mbit/s
95th percentile per-packet one-way delay: 41.622 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 40.954 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 11.88 Mbit/s
95th percentile per-packet one-way delay: 42.187 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 43.133 ms
Loss rate: 0.98%
```

Run 5: Report of Sprout — Data Link

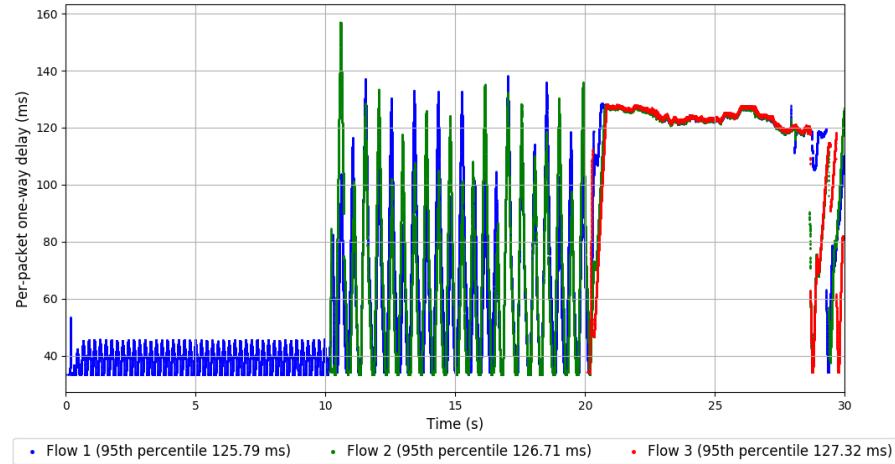
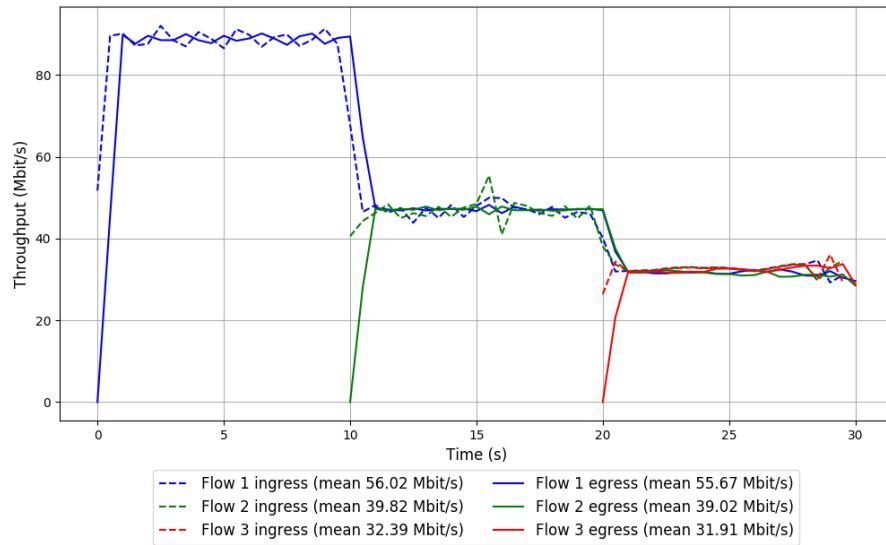


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-25 19:12:40
End at: 2019-01-25 19:13:10
Local clock offset: 0.313 ms
Remote clock offset: -2.867 ms

# Below is generated by plot.py at 2019-01-25 21:40:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.21 Mbit/s
95th percentile per-packet one-way delay: 126.732 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 55.67 Mbit/s
95th percentile per-packet one-way delay: 125.792 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 39.02 Mbit/s
95th percentile per-packet one-way delay: 126.711 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 31.91 Mbit/s
95th percentile per-packet one-way delay: 127.320 ms
Loss rate: 2.10%
```

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

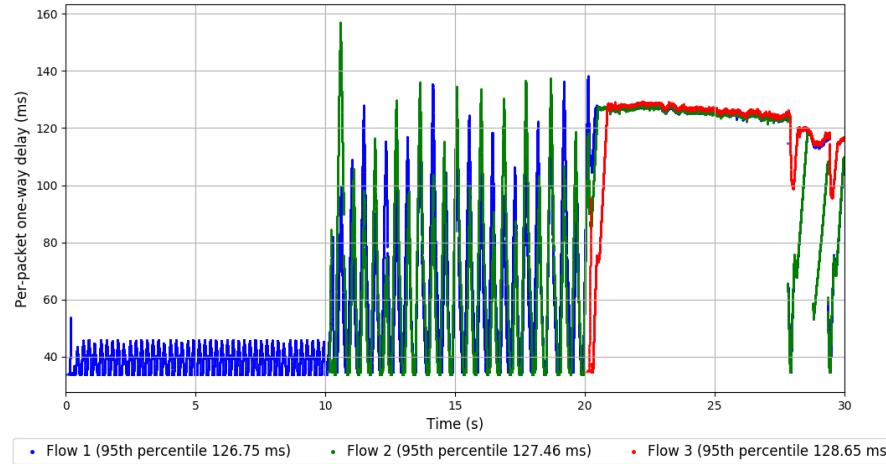
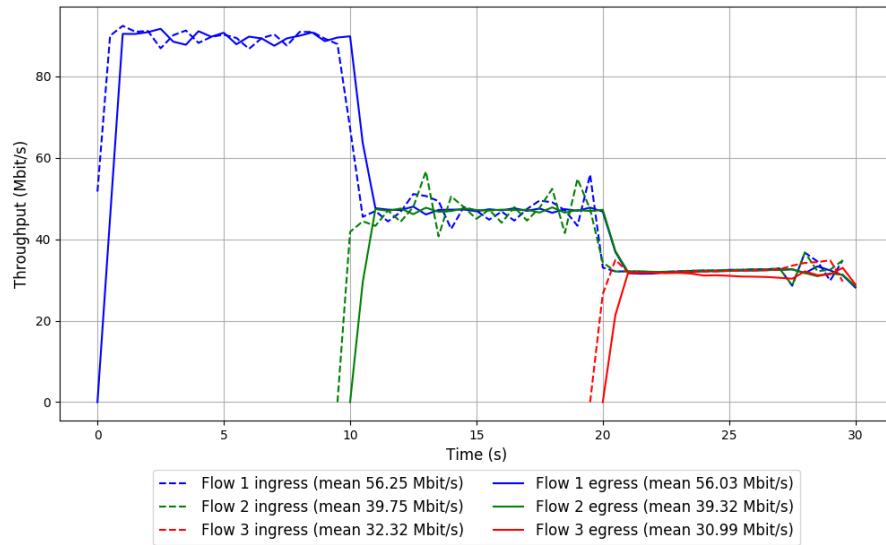


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-25 19:39:21
End at: 2019-01-25 19:39:51
Local clock offset: 0.214 ms
Remote clock offset: -1.852 ms

# Below is generated by plot.py at 2019-01-25 21:41:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 127.495 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 126.751 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 39.32 Mbit/s
95th percentile per-packet one-way delay: 127.456 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 30.99 Mbit/s
95th percentile per-packet one-way delay: 128.654 ms
Loss rate: 4.76%
```

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

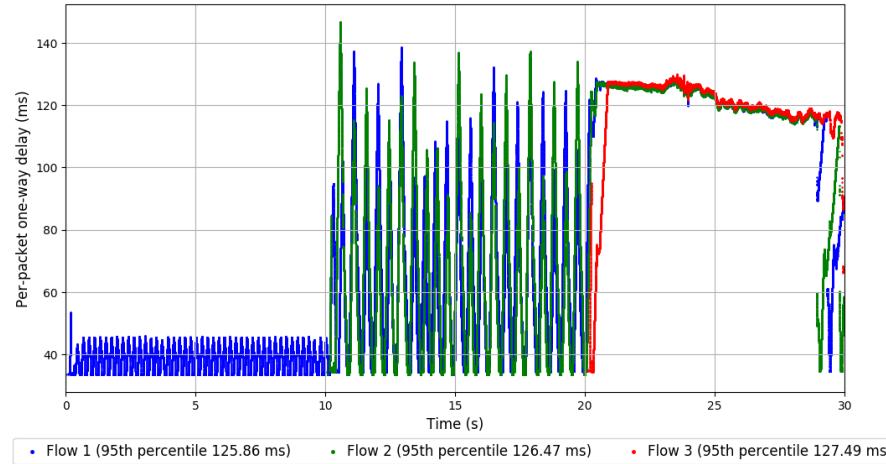
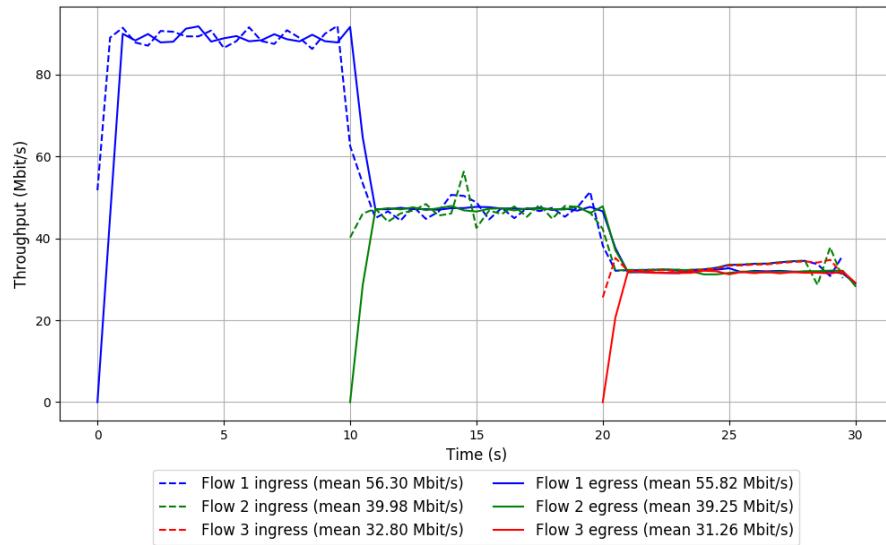


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-25 20:06:20
End at: 2019-01-25 20:06:50
Local clock offset: -1.68 ms
Remote clock offset: -0.587 ms

# Below is generated by plot.py at 2019-01-25 21:41:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.30 Mbit/s
95th percentile per-packet one-way delay: 126.636 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 55.82 Mbit/s
95th percentile per-packet one-way delay: 125.861 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 126.471 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 31.26 Mbit/s
95th percentile per-packet one-way delay: 127.492 ms
Loss rate: 5.33%
```

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

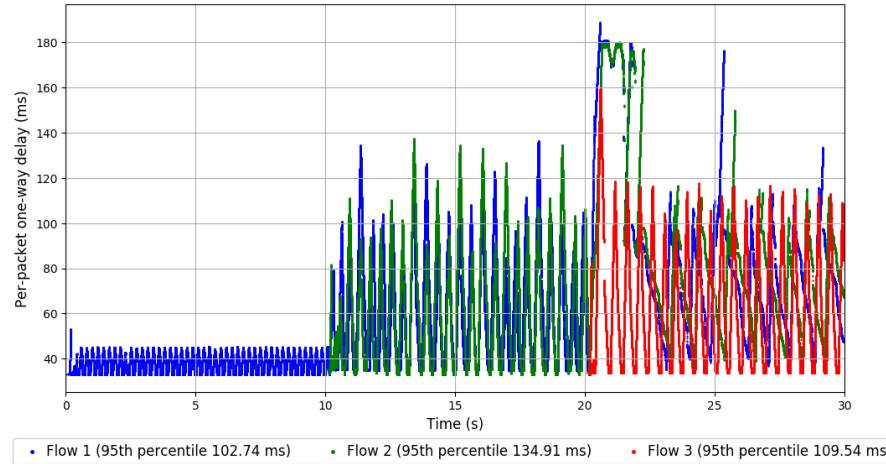
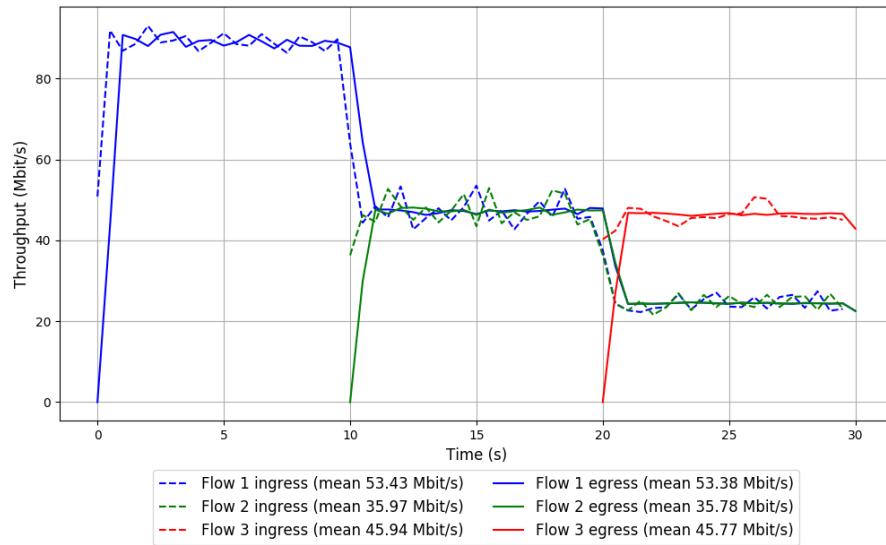


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-25 20:33:16
End at: 2019-01-25 20:33:46
Local clock offset: -2.237 ms
Remote clock offset: -0.174 ms

# Below is generated by plot.py at 2019-01-25 21:41:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.35 Mbit/s
95th percentile per-packet one-way delay: 111.283 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 53.38 Mbit/s
95th percentile per-packet one-way delay: 102.738 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 35.78 Mbit/s
95th percentile per-packet one-way delay: 134.909 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 45.77 Mbit/s
95th percentile per-packet one-way delay: 109.544 ms
Loss rate: 1.02%
```

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

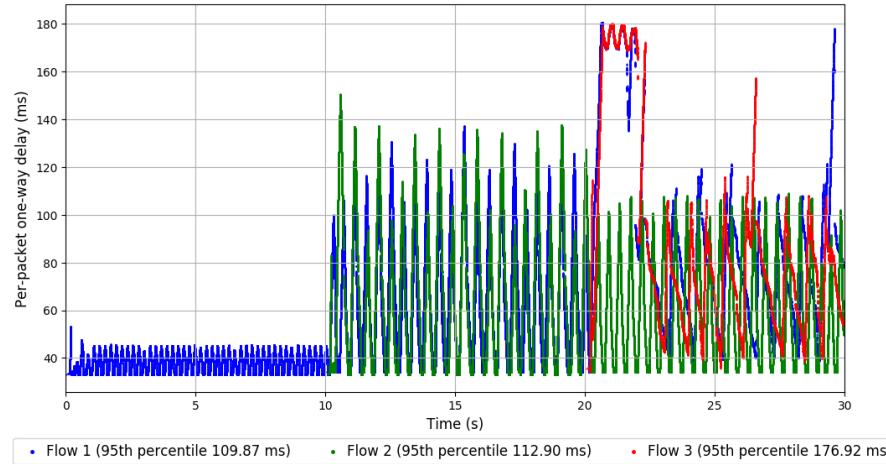
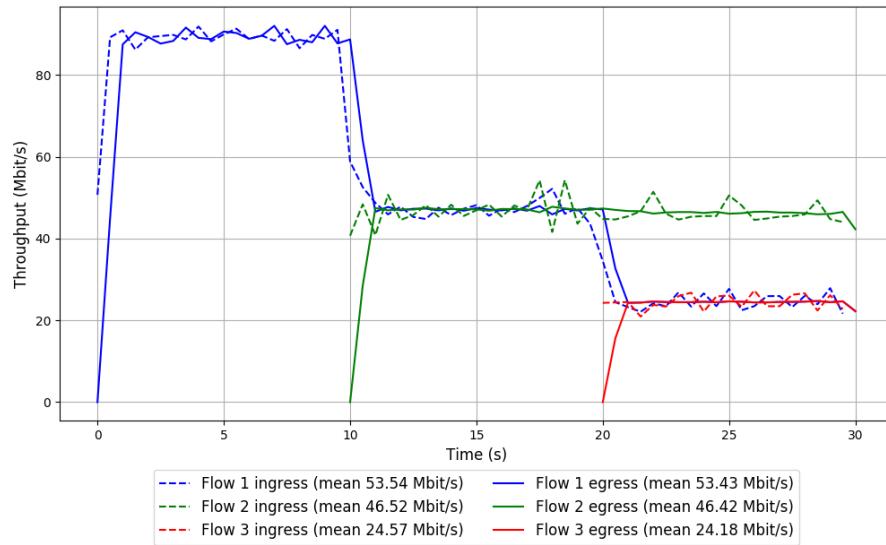


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-25 21:00:41
End at: 2019-01-25 21:01:11
Local clock offset: 0.876 ms
Remote clock offset: 0.269 ms

# Below is generated by plot.py at 2019-01-25 21:41:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 117.438 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 53.43 Mbit/s
95th percentile per-packet one-way delay: 109.869 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 46.42 Mbit/s
95th percentile per-packet one-way delay: 112.901 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 176.918 ms
Loss rate: 2.21%
```

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

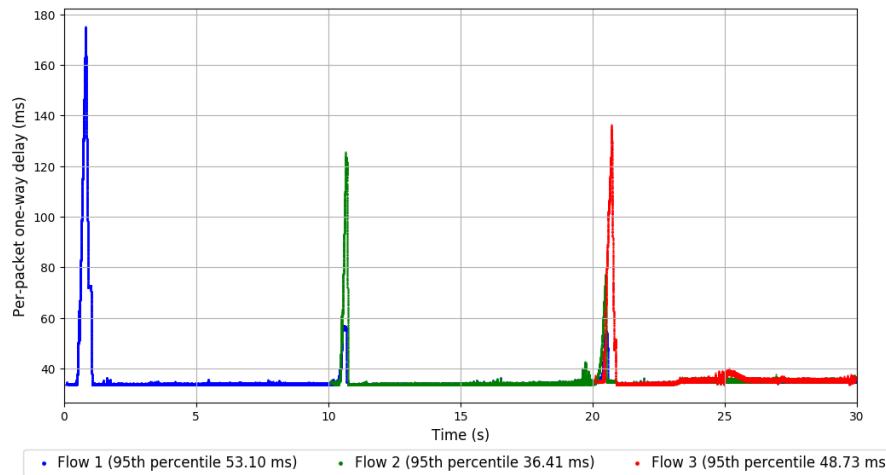
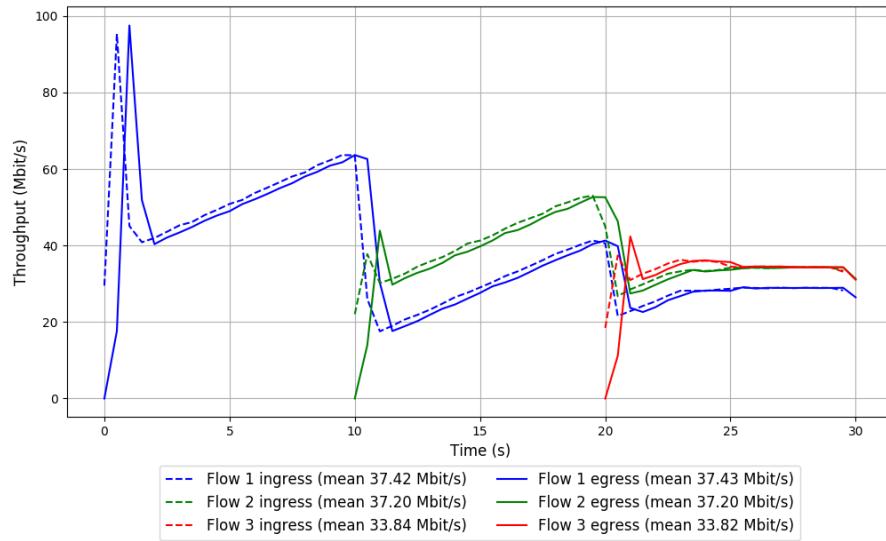


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-25 19:26:22
End at: 2019-01-25 19:26:52
Local clock offset: 0.363 ms
Remote clock offset: -2.555 ms

# Below is generated by plot.py at 2019-01-25 21:41:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.38 Mbit/s
95th percentile per-packet one-way delay: 42.749 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 37.43 Mbit/s
95th percentile per-packet one-way delay: 53.099 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 37.20 Mbit/s
95th percentile per-packet one-way delay: 36.409 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 33.82 Mbit/s
95th percentile per-packet one-way delay: 48.726 ms
Loss rate: 0.69%
```

Run 1: Report of TCP Vegas — Data Link

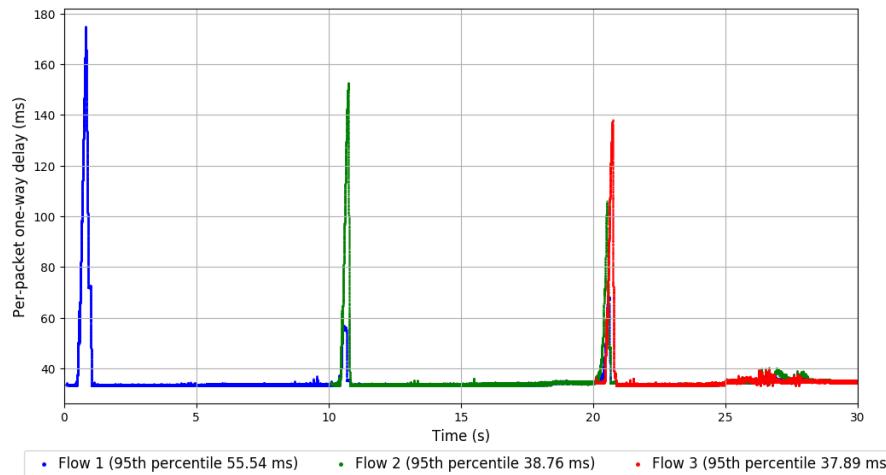
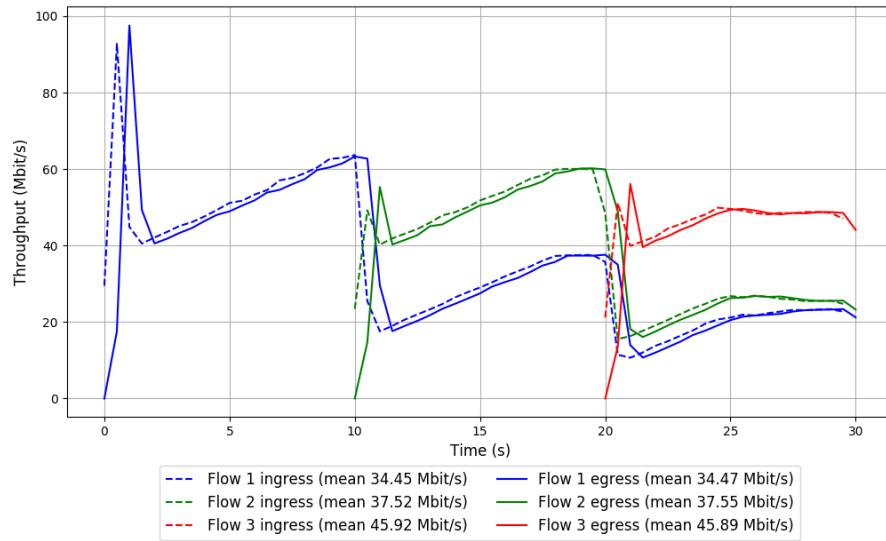


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-25 19:53:28
End at: 2019-01-25 19:53:58
Local clock offset: 0.156 ms
Remote clock offset: -0.898 ms

# Below is generated by plot.py at 2019-01-25 21:41:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.67 Mbit/s
95th percentile per-packet one-way delay: 43.466 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 34.47 Mbit/s
95th percentile per-packet one-way delay: 55.543 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 37.55 Mbit/s
95th percentile per-packet one-way delay: 38.757 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 45.89 Mbit/s
95th percentile per-packet one-way delay: 37.891 ms
Loss rate: 0.70%
```

Run 2: Report of TCP Vegas — Data Link

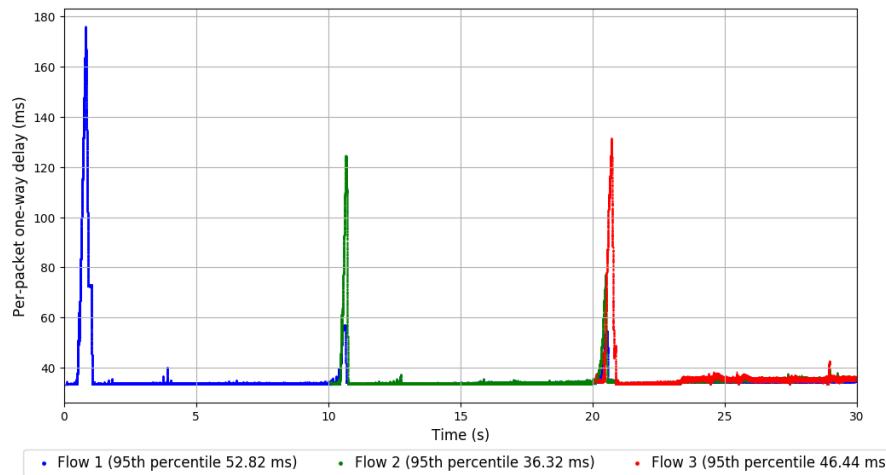
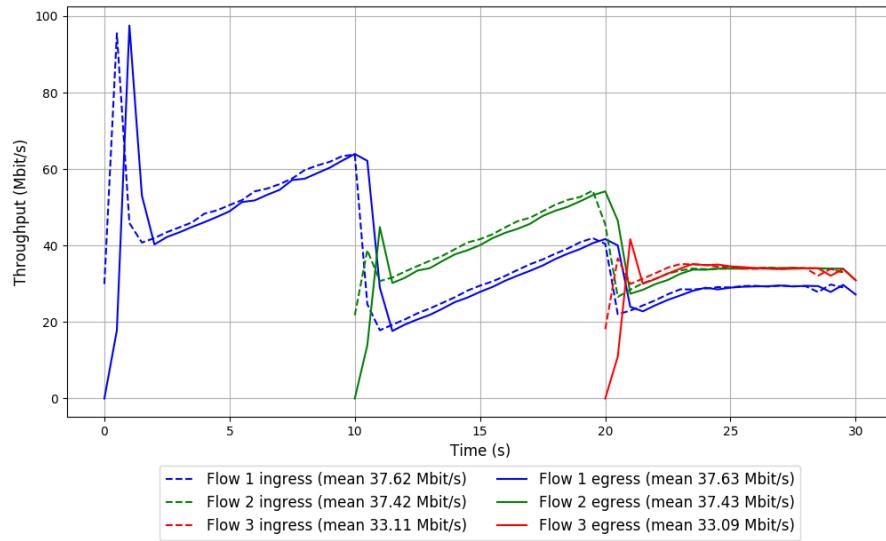


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-25 20:20:14
End at: 2019-01-25 20:20:44
Local clock offset: -3.252 ms
Remote clock offset: -0.378 ms

# Below is generated by plot.py at 2019-01-25 21:41:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.48 Mbit/s
95th percentile per-packet one-way delay: 42.392 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 52.818 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 37.43 Mbit/s
95th percentile per-packet one-way delay: 36.316 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 33.09 Mbit/s
95th percentile per-packet one-way delay: 46.438 ms
Loss rate: 0.69%
```

Run 3: Report of TCP Vegas — Data Link

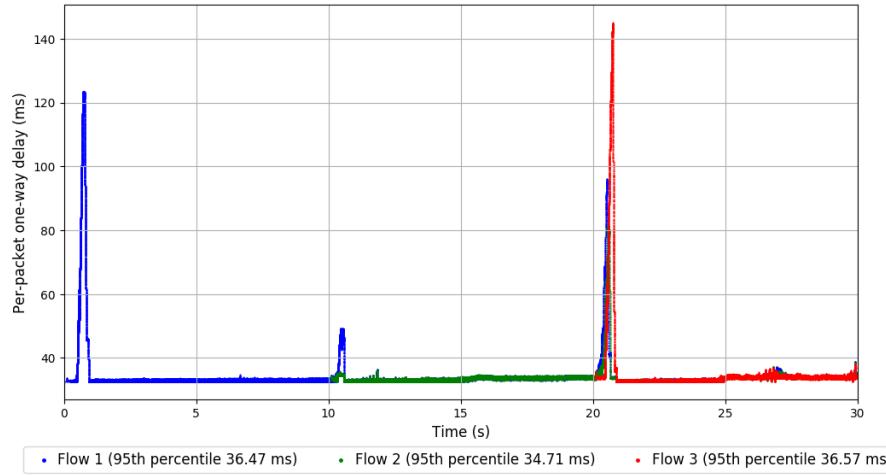
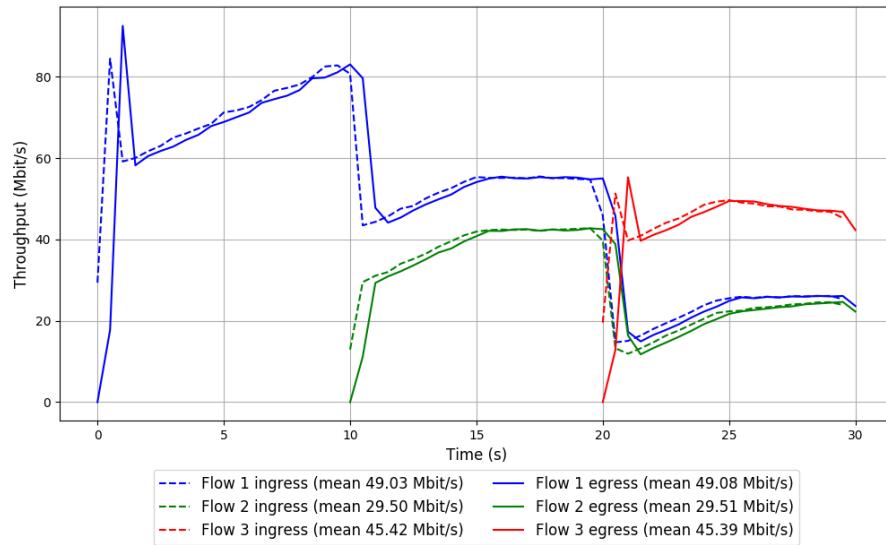


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-25 20:47:18
End at: 2019-01-25 20:47:48
Local clock offset: 0.245 ms
Remote clock offset: 0.582 ms

# Below is generated by plot.py at 2019-01-25 21:41:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.73 Mbit/s
95th percentile per-packet one-way delay: 35.332 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 49.08 Mbit/s
95th percentile per-packet one-way delay: 36.465 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 34.707 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 45.39 Mbit/s
95th percentile per-packet one-way delay: 36.571 ms
Loss rate: 0.69%
```

Run 4: Report of TCP Vegas — Data Link

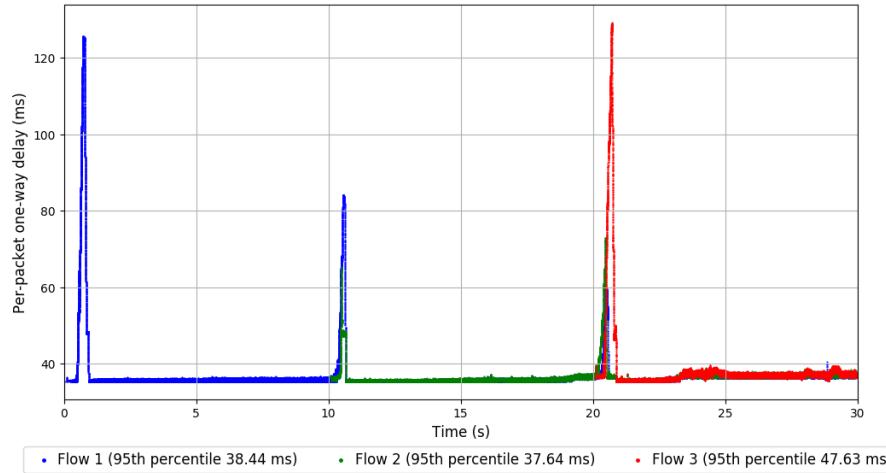
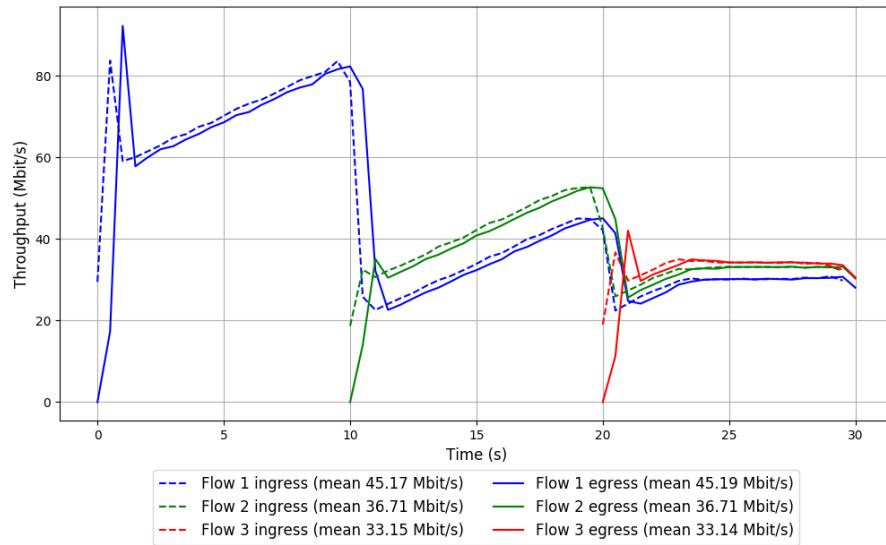


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-25 21:14:38
End at: 2019-01-25 21:15:08
Local clock offset: 0.775 ms
Remote clock offset: -1.823 ms

# Below is generated by plot.py at 2019-01-25 21:41:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.60 Mbit/s
95th percentile per-packet one-way delay: 38.448 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 45.19 Mbit/s
95th percentile per-packet one-way delay: 38.439 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 36.71 Mbit/s
95th percentile per-packet one-way delay: 37.644 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 33.14 Mbit/s
95th percentile per-packet one-way delay: 47.635 ms
Loss rate: 0.69%
```

Run 5: Report of TCP Vegas — Data Link

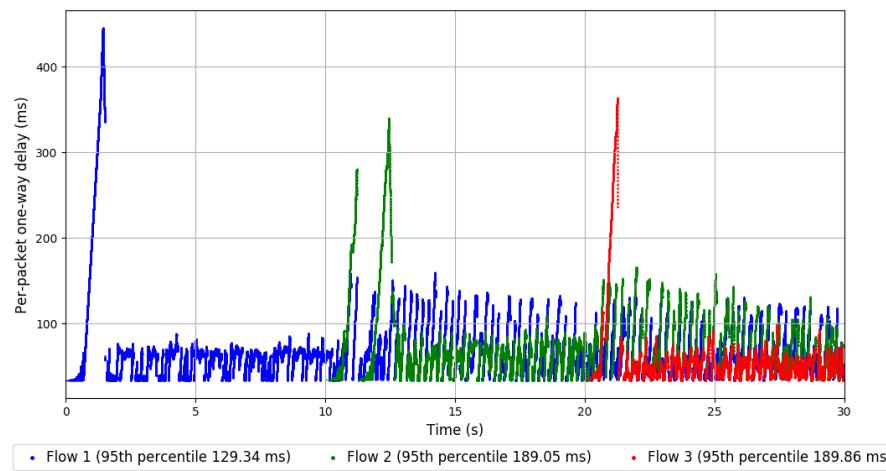
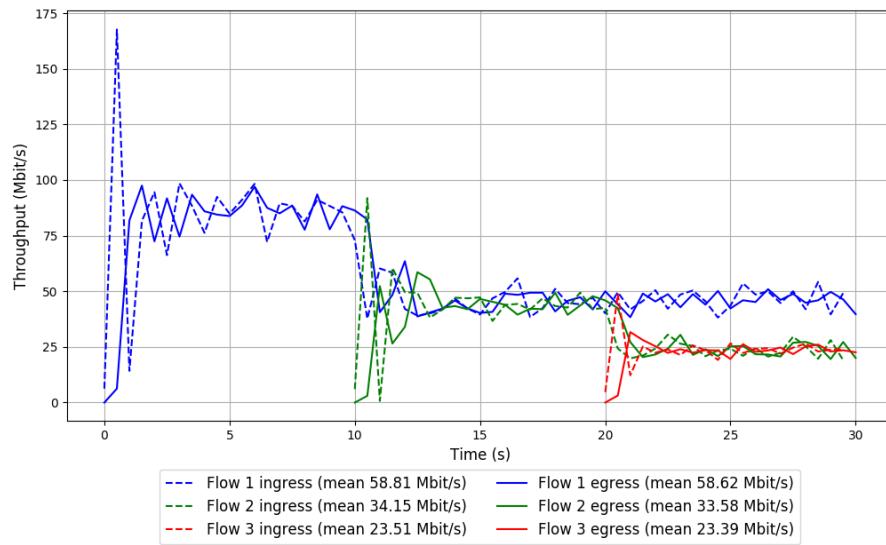


Run 1: Statistics of Verus

```
Start at: 2019-01-25 19:25:02
End at: 2019-01-25 19:25:32
Local clock offset: 0.356 ms
Remote clock offset: -2.331 ms

# Below is generated by plot.py at 2019-01-25 21:41:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.69 Mbit/s
95th percentile per-packet one-way delay: 143.198 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 58.62 Mbit/s
95th percentile per-packet one-way delay: 129.335 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 189.050 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 189.860 ms
Loss rate: 1.13%
```

Run 1: Report of Verus — Data Link

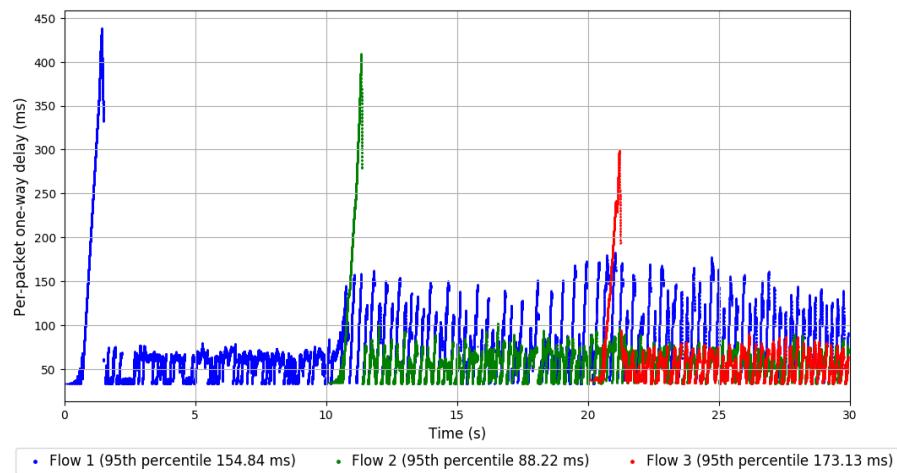
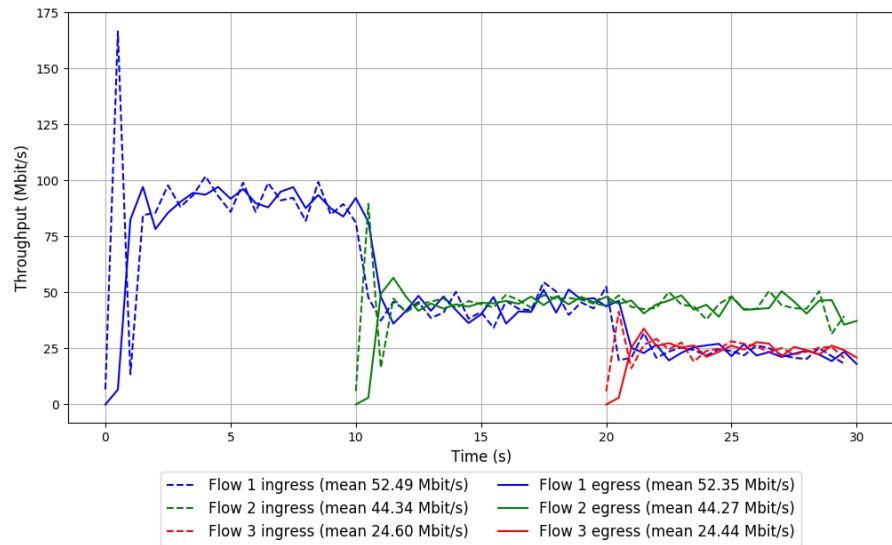


Run 2: Statistics of Verus

```
Start at: 2019-01-25 19:52:08
End at: 2019-01-25 19:52:38
Local clock offset: 0.167 ms
Remote clock offset: -0.932 ms

# Below is generated by plot.py at 2019-01-25 21:41:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.87 Mbit/s
95th percentile per-packet one-way delay: 147.634 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 52.35 Mbit/s
95th percentile per-packet one-way delay: 154.835 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 44.27 Mbit/s
95th percentile per-packet one-way delay: 88.225 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 24.44 Mbit/s
95th percentile per-packet one-way delay: 173.130 ms
Loss rate: 0.83%
```

Run 2: Report of Verus — Data Link

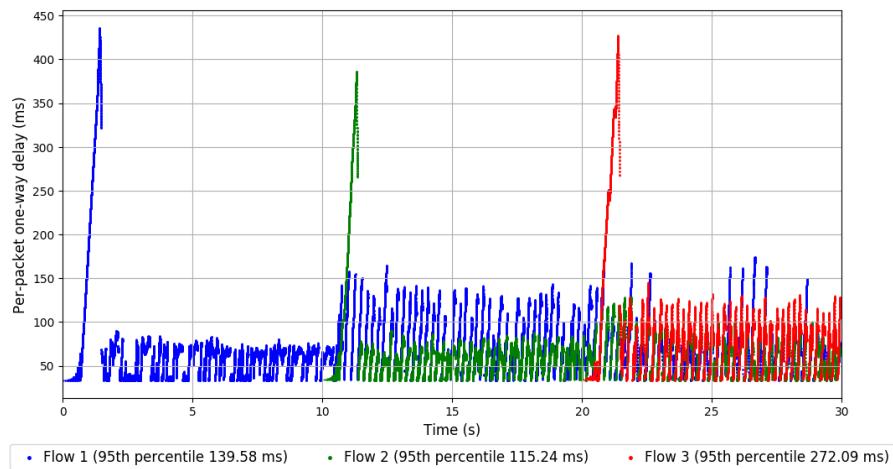
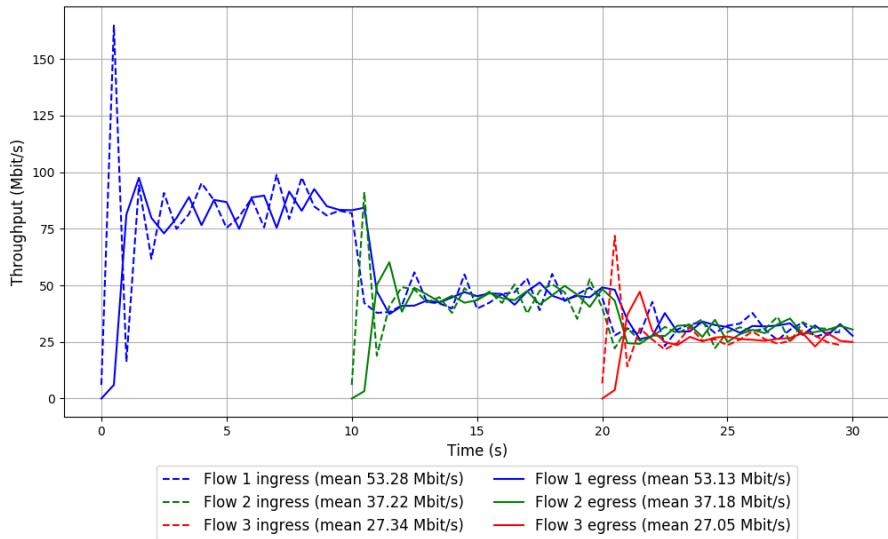


Run 3: Statistics of Verus

```
Start at: 2019-01-25 20:18:59
End at: 2019-01-25 20:19:29
Local clock offset: -3.152 ms
Remote clock offset: -0.392 ms

# Below is generated by plot.py at 2019-01-25 21:41:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.81 Mbit/s
95th percentile per-packet one-way delay: 143.489 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 53.13 Mbit/s
95th percentile per-packet one-way delay: 139.584 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 37.18 Mbit/s
95th percentile per-packet one-way delay: 115.244 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 27.05 Mbit/s
95th percentile per-packet one-way delay: 272.092 ms
Loss rate: 1.02%
```

Run 3: Report of Verus — Data Link

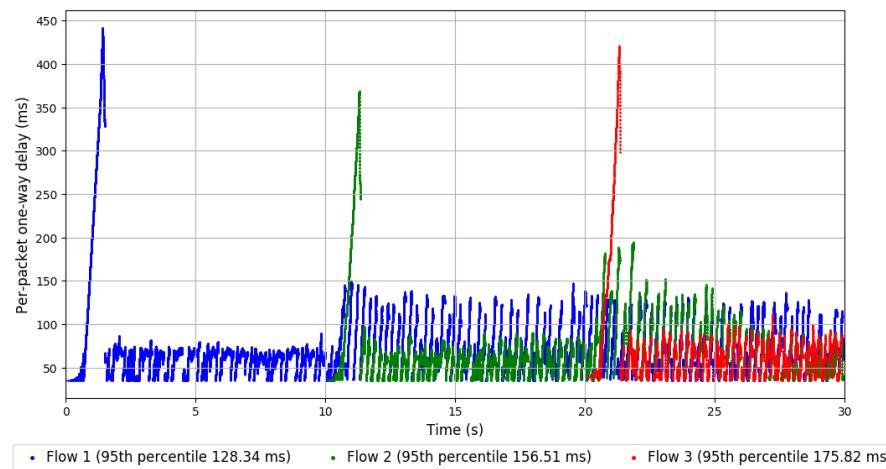
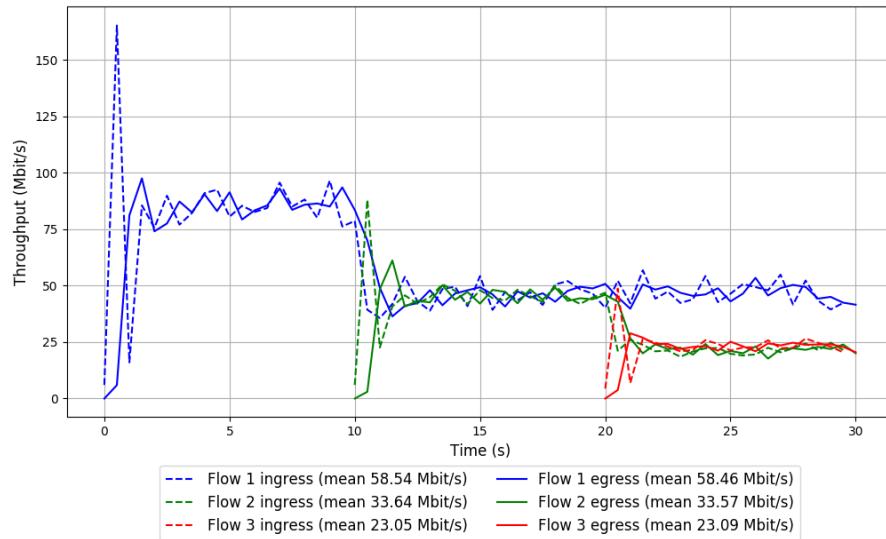


Run 4: Statistics of Verus

```
Start at: 2019-01-25 20:45:56
End at: 2019-01-25 20:46:26
Local clock offset: 0.134 ms
Remote clock offset: -2.159 ms

# Below is generated by plot.py at 2019-01-25 21:42:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.38 Mbit/s
95th percentile per-packet one-way delay: 132.827 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 58.46 Mbit/s
95th percentile per-packet one-way delay: 128.338 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 33.57 Mbit/s
95th percentile per-packet one-way delay: 156.508 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 23.09 Mbit/s
95th percentile per-packet one-way delay: 175.821 ms
Loss rate: 0.95%
```

Run 4: Report of Verus — Data Link

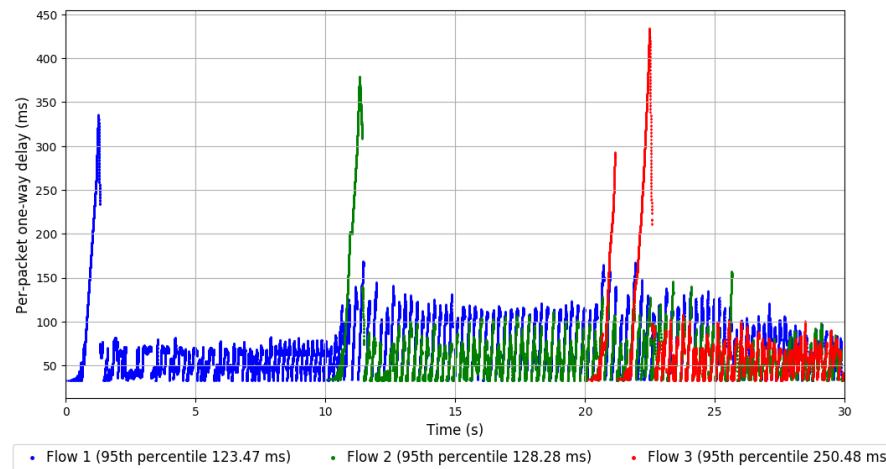
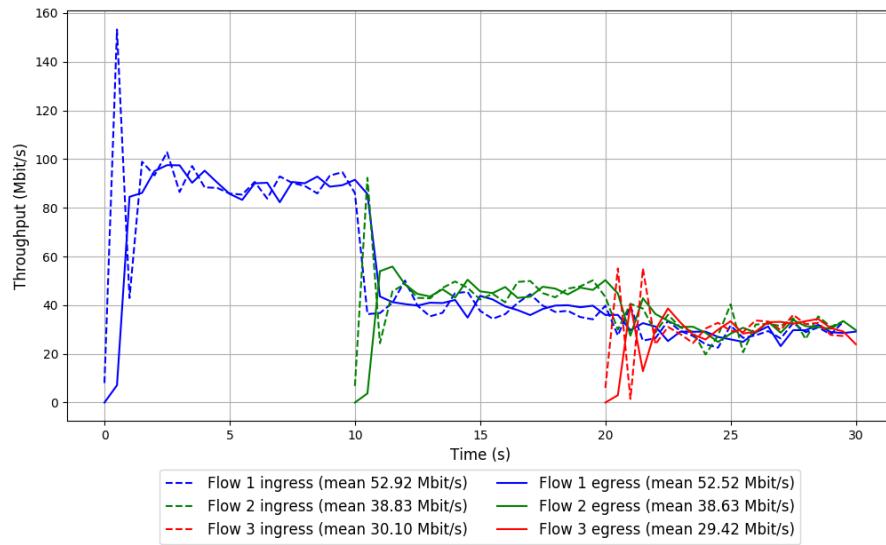


Run 5: Statistics of Verus

```
Start at: 2019-01-25 21:13:19
End at: 2019-01-25 21:13:49
Local clock offset: 0.765 ms
Remote clock offset: 0.432 ms

# Below is generated by plot.py at 2019-01-25 21:42:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.96 Mbit/s
95th percentile per-packet one-way delay: 134.747 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 52.52 Mbit/s
95th percentile per-packet one-way delay: 123.470 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 38.63 Mbit/s
95th percentile per-packet one-way delay: 128.284 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 29.42 Mbit/s
95th percentile per-packet one-way delay: 250.478 ms
Loss rate: 2.87%
```

Run 5: Report of Verus — Data Link

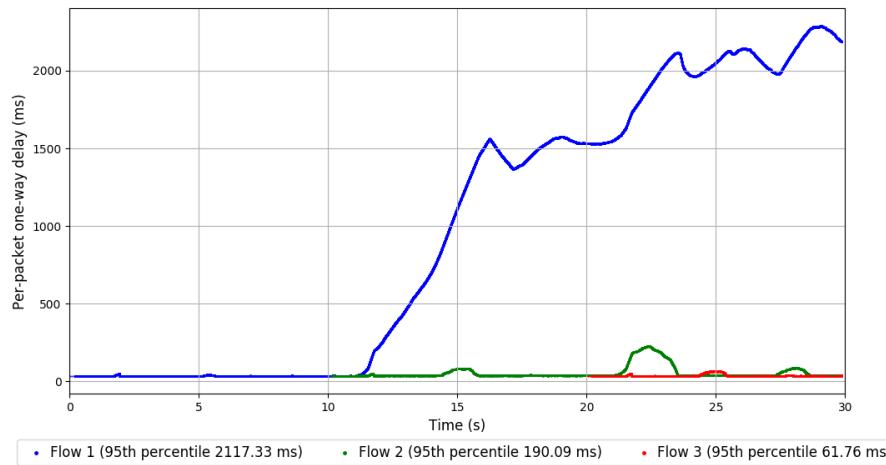
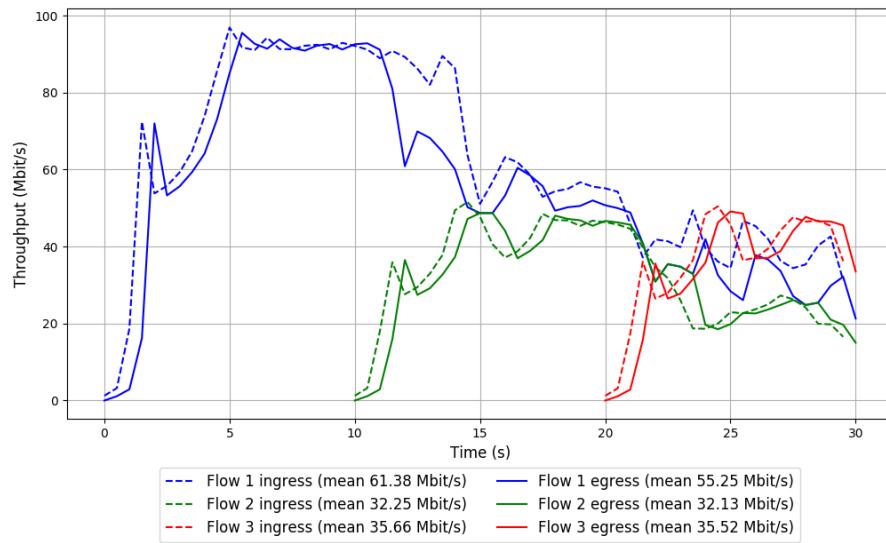


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-25 19:35:28
End at: 2019-01-25 19:35:58
Local clock offset: 0.248 ms
Remote clock offset: -2.053 ms

# Below is generated by plot.py at 2019-01-25 21:42:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.29 Mbit/s
95th percentile per-packet one-way delay: 2063.436 ms
Loss rate: 6.89%
-- Flow 1:
Average throughput: 55.25 Mbit/s
95th percentile per-packet one-way delay: 2117.327 ms
Loss rate: 10.18%
-- Flow 2:
Average throughput: 32.13 Mbit/s
95th percentile per-packet one-way delay: 190.090 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 61.761 ms
Loss rate: 1.05%
```

Run 1: Report of PCC-Vivace — Data Link

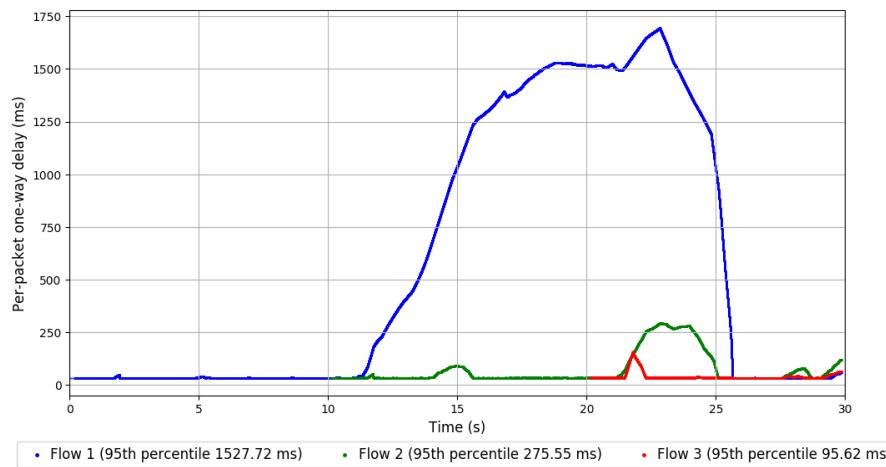
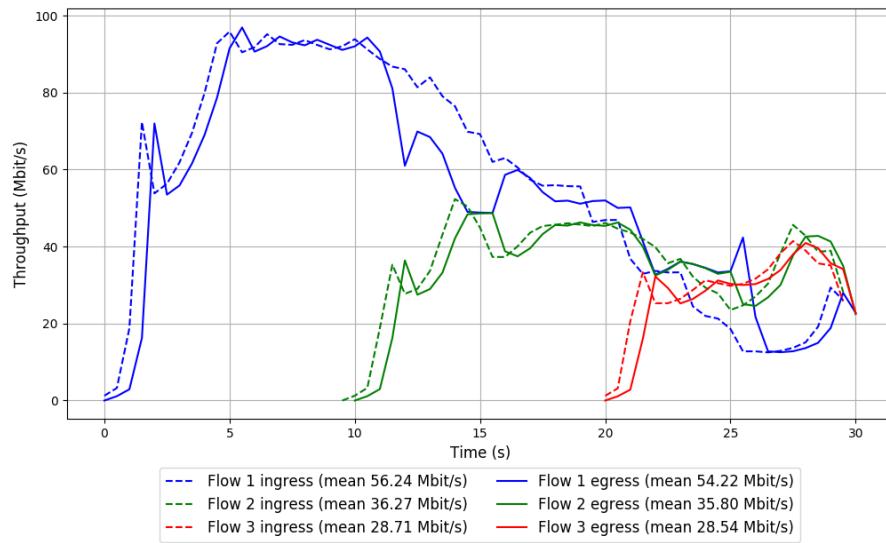


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-25 20:02:38
End at: 2019-01-25 20:03:08
Local clock offset: -0.835 ms
Remote clock offset: -0.887 ms

# Below is generated by plot.py at 2019-01-25 21:42:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.40 Mbit/s
95th percentile per-packet one-way delay: 1518.744 ms
Loss rate: 2.94%
-- Flow 1:
Average throughput: 54.22 Mbit/s
95th percentile per-packet one-way delay: 1527.725 ms
Loss rate: 3.80%
-- Flow 2:
Average throughput: 35.80 Mbit/s
95th percentile per-packet one-way delay: 275.554 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 28.54 Mbit/s
95th percentile per-packet one-way delay: 95.620 ms
Loss rate: 1.24%
```

Run 2: Report of PCC-Vivace — Data Link

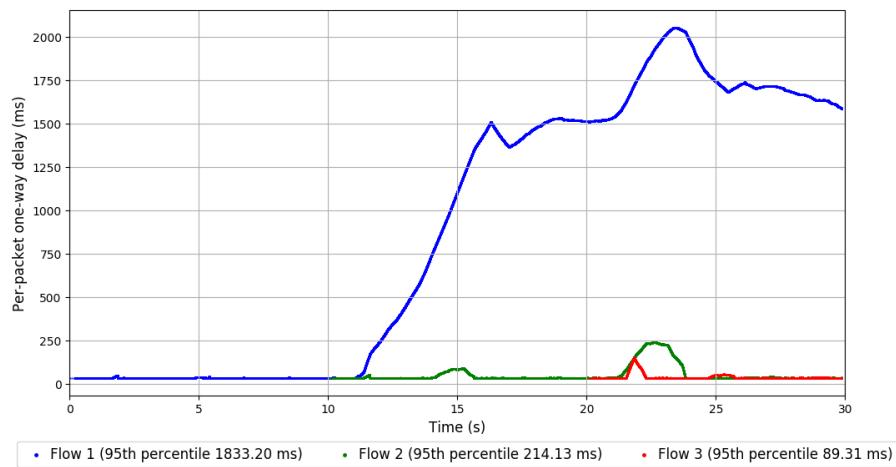
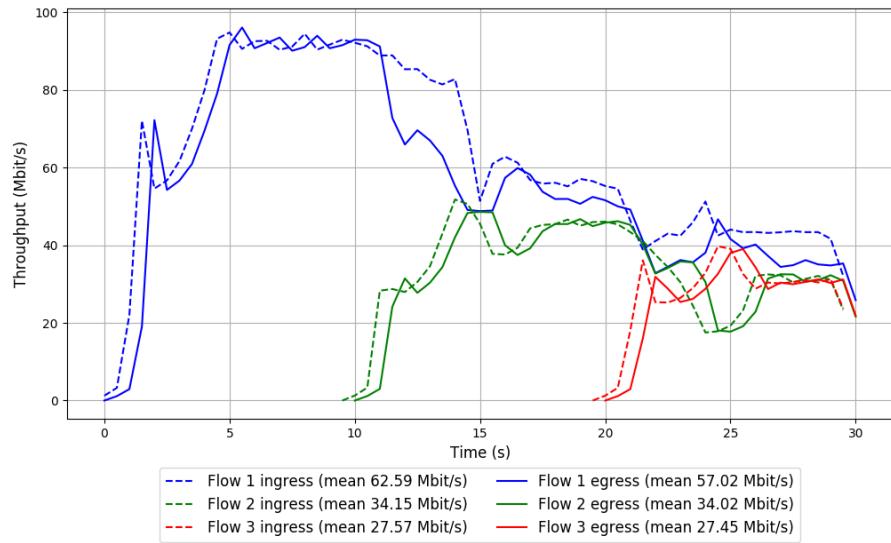


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-25 20:29:24
End at: 2019-01-25 20:29:54
Local clock offset: -3.78 ms
Remote clock offset: -0.22 ms

# Below is generated by plot.py at 2019-01-25 21:42:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.67 Mbit/s
95th percentile per-packet one-way delay: 1728.433 ms
Loss rate: 6.30%
-- Flow 1:
Average throughput: 57.02 Mbit/s
95th percentile per-packet one-way delay: 1833.203 ms
Loss rate: 9.10%
-- Flow 2:
Average throughput: 34.02 Mbit/s
95th percentile per-packet one-way delay: 214.133 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 27.45 Mbit/s
95th percentile per-packet one-way delay: 89.315 ms
Loss rate: 1.10%
```

Run 3: Report of PCC-Vivace — Data Link

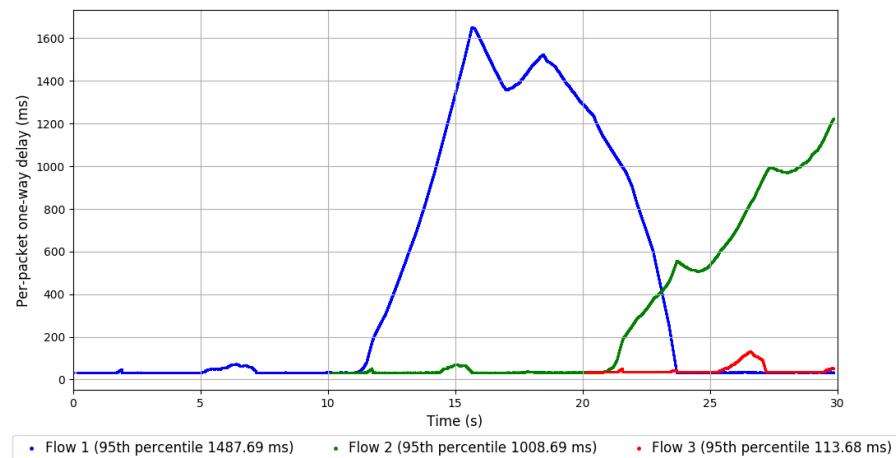
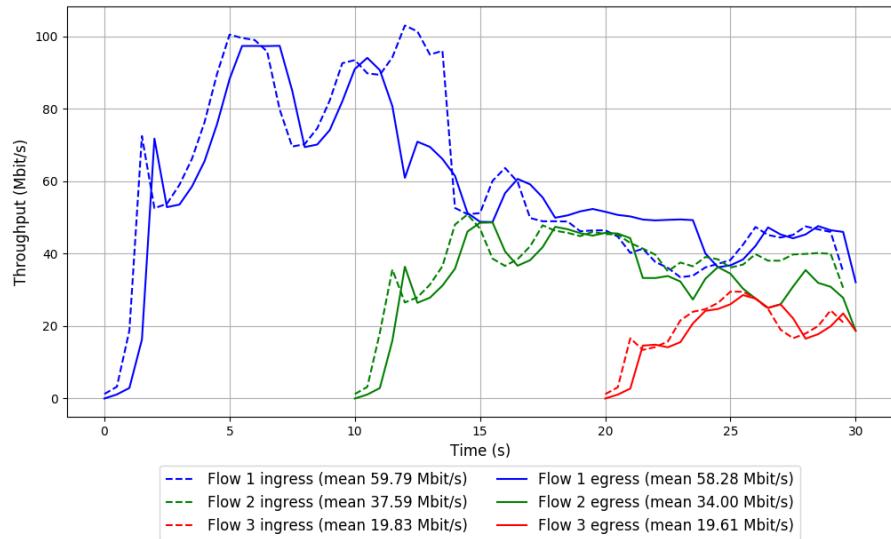


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-25 20:56:41
End at: 2019-01-25 20:57:11
Local clock offset: 0.804 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2019-01-25 21:42:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.32 Mbit/s
95th percentile per-packet one-way delay: 1448.948 ms
Loss rate: 4.61%
-- Flow 1:
Average throughput: 58.28 Mbit/s
95th percentile per-packet one-way delay: 1487.693 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 34.00 Mbit/s
95th percentile per-packet one-way delay: 1008.693 ms
Loss rate: 9.82%
-- Flow 3:
Average throughput: 19.61 Mbit/s
95th percentile per-packet one-way delay: 113.684 ms
Loss rate: 1.74%
```

Run 4: Report of PCC-Vivace — Data Link

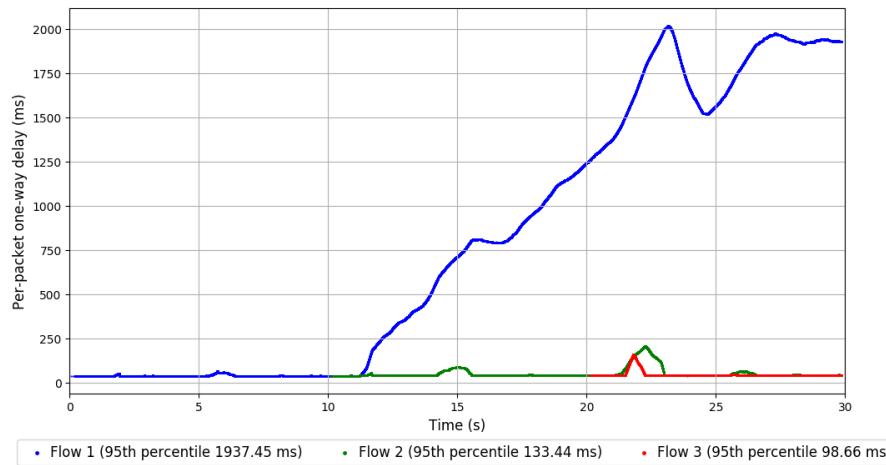
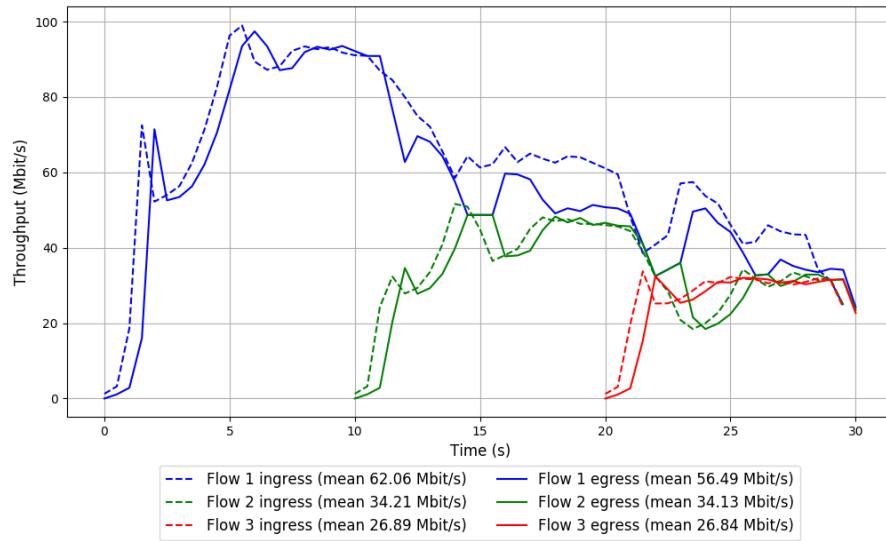


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-25 21:23:44
End at: 2019-01-25 21:24:14
Local clock offset: 0.875 ms
Remote clock offset: -4.323 ms

# Below is generated by plot.py at 2019-01-25 21:42:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.00 Mbit/s
95th percentile per-packet one-way delay: 1924.520 ms
Loss rate: 6.28%
-- Flow 1:
Average throughput: 56.49 Mbit/s
95th percentile per-packet one-way delay: 1937.455 ms
Loss rate: 9.16%
-- Flow 2:
Average throughput: 34.13 Mbit/s
95th percentile per-packet one-way delay: 133.435 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 26.84 Mbit/s
95th percentile per-packet one-way delay: 98.662 ms
Loss rate: 0.82%
```

Run 5: Report of PCC-Vivace — Data Link

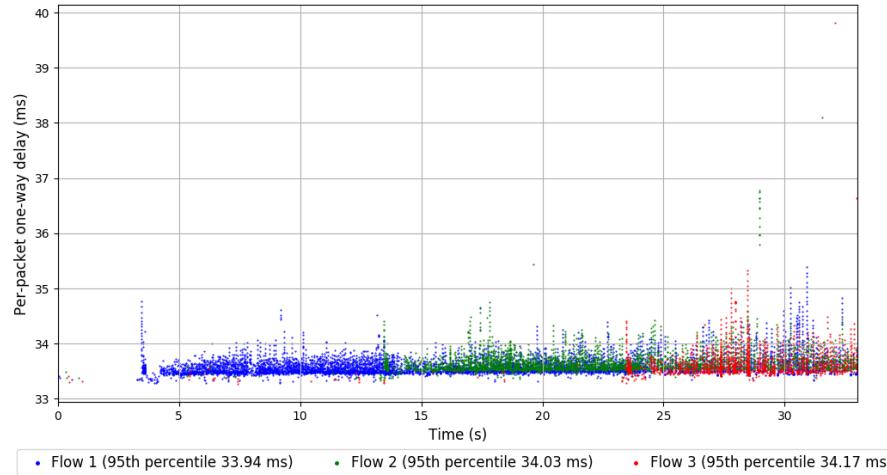
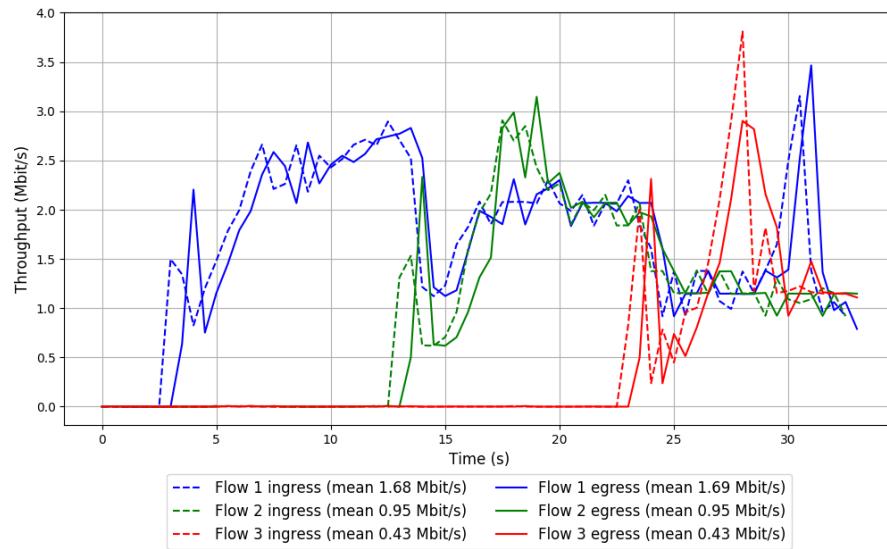


```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 19:23:53
End at: 2019-01-25 19:24:24
Local clock offset: 0.349 ms
Remote clock offset: -2.499 ms

# Below is generated by plot.py at 2019-01-25 21:42:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 34.009 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 33.937 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 34.029 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 34.169 ms
Loss rate: 0.14%
```

Run 1: Report of WebRTC media — Data Link

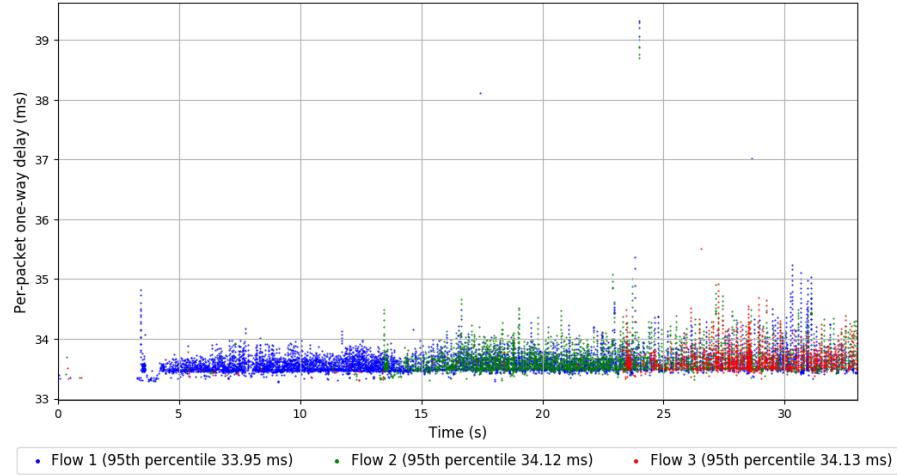
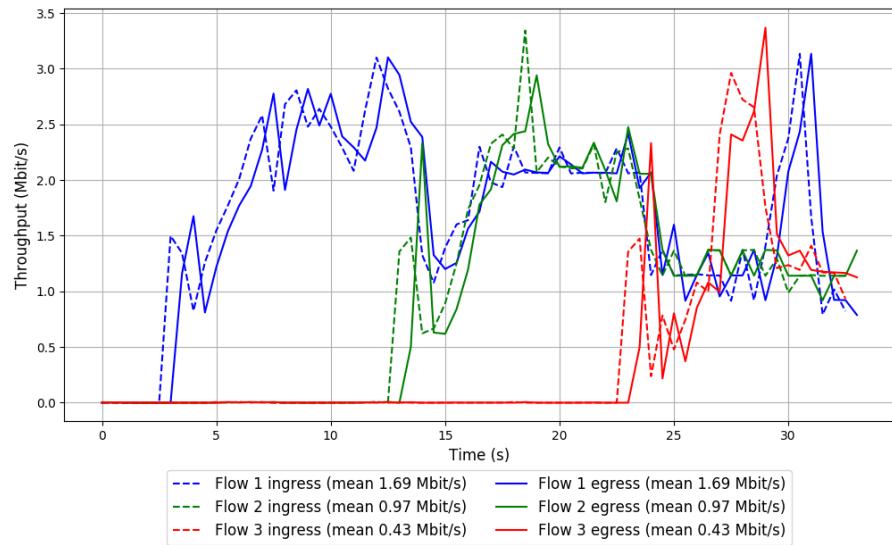


Run 2: Statistics of WebRTC media

```
Start at: 2019-01-25 19:50:59
End at: 2019-01-25 19:51:29
Local clock offset: 0.152 ms
Remote clock offset: -0.959 ms

# Below is generated by plot.py at 2019-01-25 21:42:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 34.054 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 33.954 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 34.115 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 34.134 ms
Loss rate: 0.14%
```

Run 2: Report of WebRTC media — Data Link

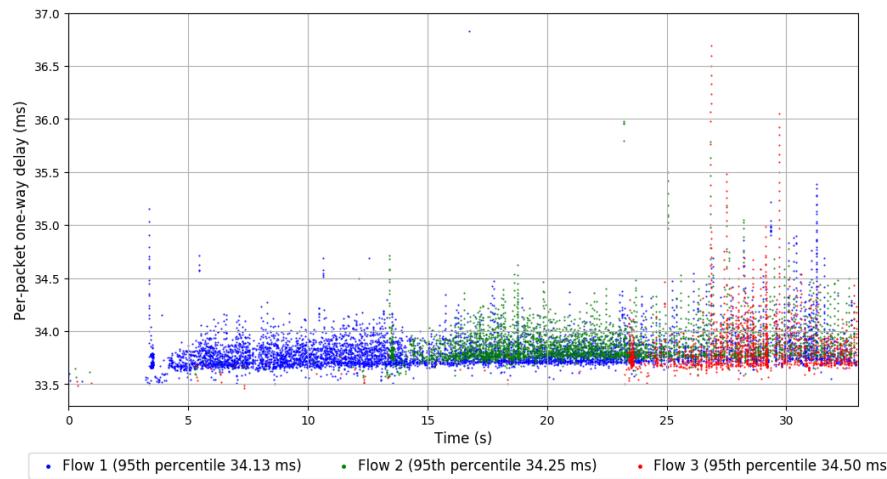
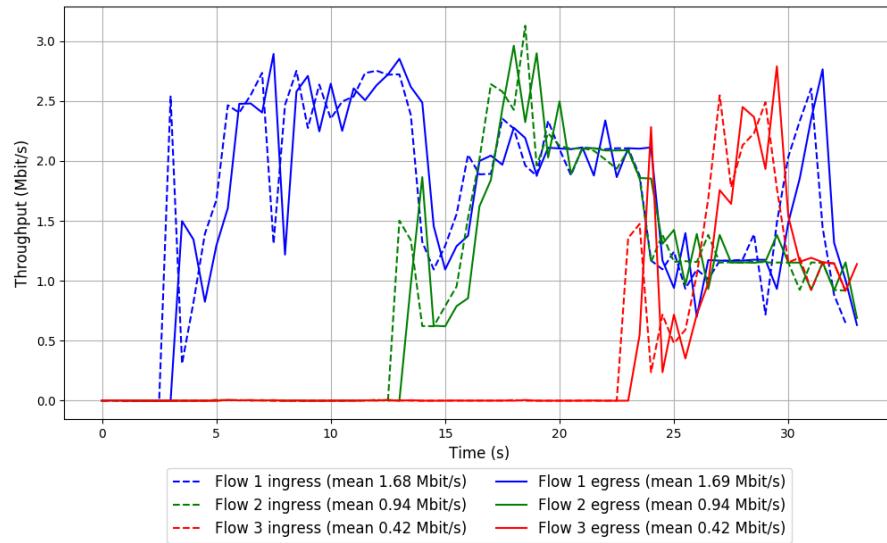


```
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 20:17:50
End at: 2019-01-25 20:18:20
Local clock offset: -3.067 ms
Remote clock offset: -0.577 ms

# Below is generated by plot.py at 2019-01-25 21:42:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 34.225 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 34.132 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 34.249 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 34.501 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

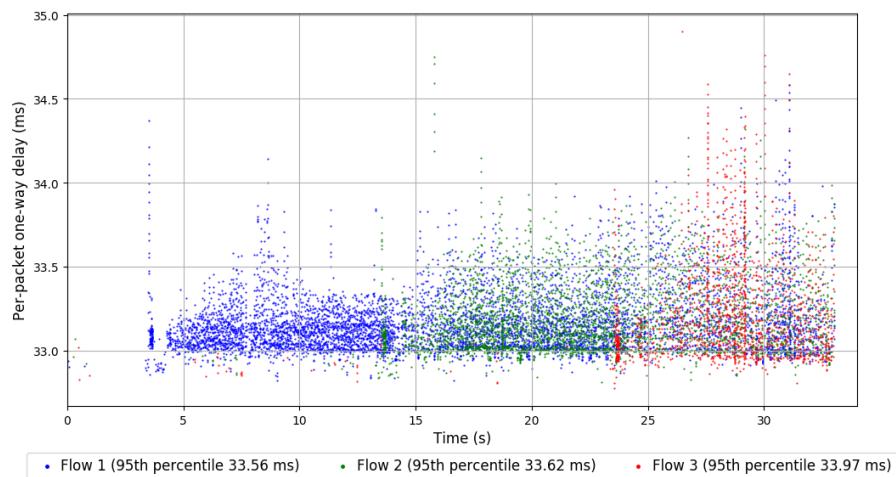
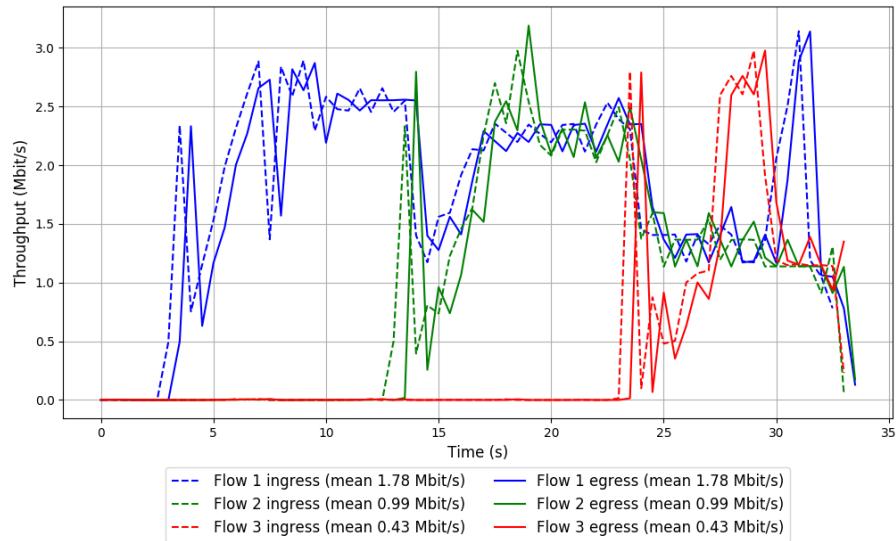


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-25 20:44:46
End at: 2019-01-25 20:45:16
Local clock offset: 0.043 ms
Remote clock offset: 0.326 ms

# Below is generated by plot.py at 2019-01-25 21:42:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 33.645 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 33.563 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 33.621 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 33.974 ms
Loss rate: 0.82%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-01-25 21:12:10
End at: 2019-01-25 21:12:40
Local clock offset: 0.777 ms
Remote clock offset: -4.681 ms

# Below is generated by plot.py at 2019-01-25 21:42:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 38.852 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 38.822 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 38.942 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 38.598 ms
Loss rate: 0.02%
```

Run 5: Report of WebRTC media — Data Link

