

Pantheon Report

Generated at 2019-01-25 08:56:06 (UTC).
Data path: AWS Korea on `ens5` (*local*) → China on `eno1` (*remote*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

System info:

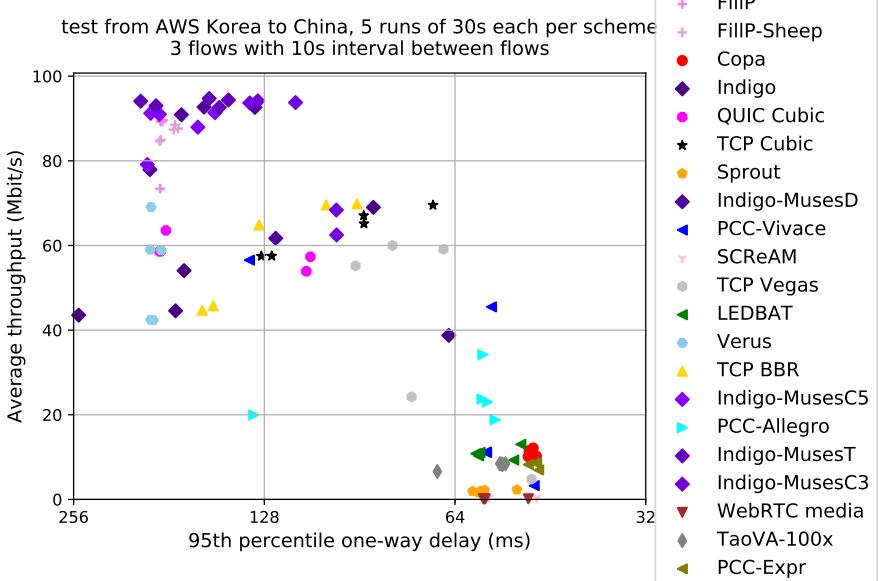
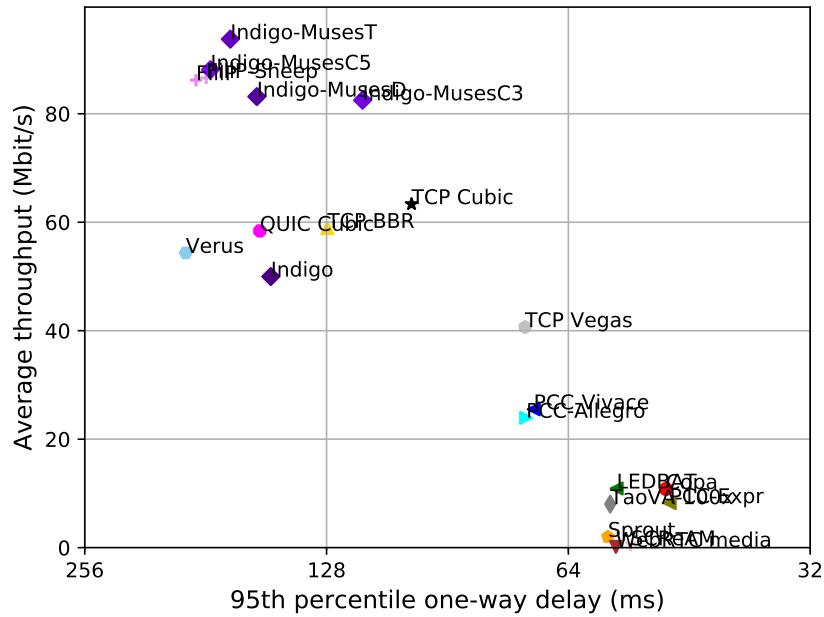
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from AWS Korea to China, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



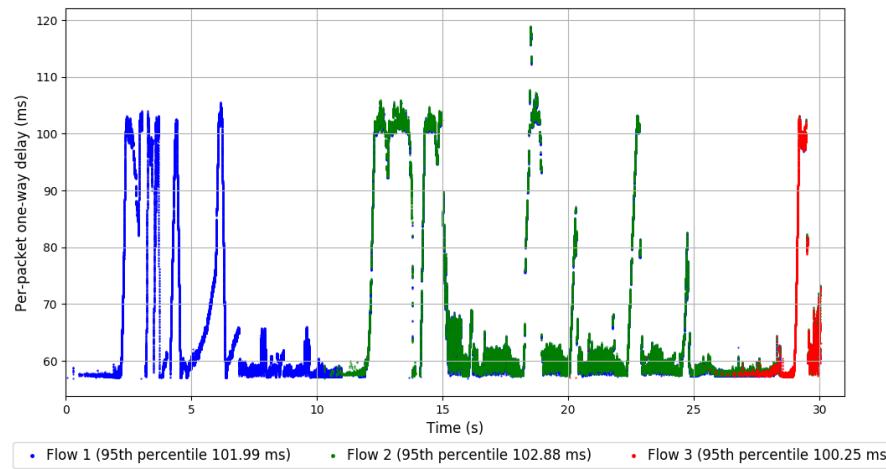
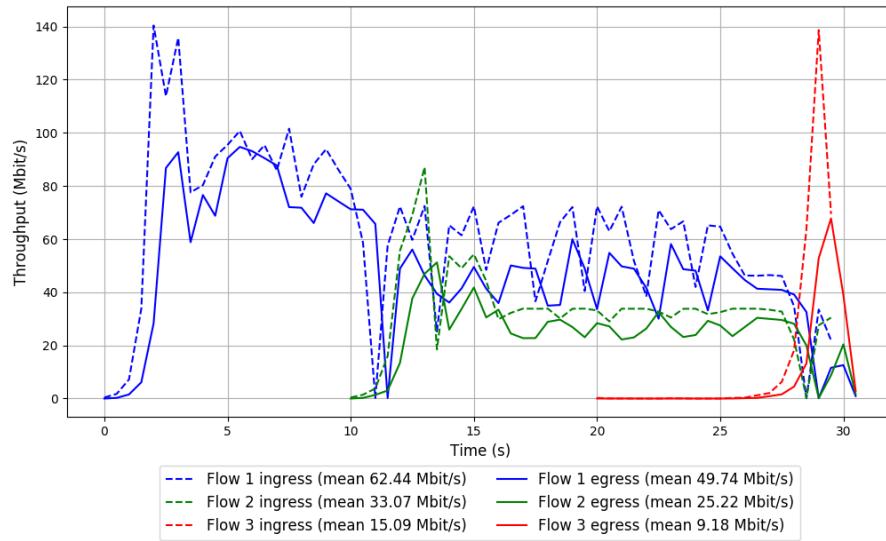
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	43.89	16.28	12.71	126.29	130.44	101.02	21.20	22.29	26.91
Copa	5	6.62	5.27	2.08	48.61	48.00	49.64	38.71	42.97	40.47
TCP Cubic	5	43.23	22.44	15.52	96.21	100.68	159.33	2.39	1.83	2.60
FillP	5	36.97	58.87	30.15	174.03	182.95	183.40	10.74	11.17	24.84
FillP-Sheep	5	29.25	65.91	40.60	163.45	181.67	181.58	5.53	4.67	11.01
Indigo	5	35.14	20.63	3.90	119.32	224.93	185.10	13.75	28.12	15.72
Indigo-MusesC3	5	37.67	49.72	40.89	96.60	109.65	129.85	4.52	0.00	0.00
Indigo-MusesC5	5	72.41	15.56	18.73	174.57	175.37	173.10	0.55	0.49	3.10
Indigo-MusesD	5	51.89	41.87	13.29	150.78	157.83	153.91	0.14	0.23	0.58
Indigo-MusesT	5	62.34	43.81	9.62	155.06	176.33	168.77	1.33	2.29	1.60
LEDBAT	5	7.37	4.16	2.38	56.01	52.75	55.49	0.00	0.08	0.00
PCC-Allegro	5	21.39	9.07	9.22	70.34	64.68	75.45	13.65	14.62	14.38
PCC-Expr	5	0.01	9.37	5.98	53.04	47.83	47.76	81.14	22.83	37.83
QUIC Cubic	5	34.29	27.14	18.92	150.83	169.90	148.80	0.22	0.30	0.85
SCReAM	5	0.22	0.22	0.22	49.74	51.71	51.79	0.00	0.00	0.00
Sprout	5	1.08	0.95	0.86	55.88	55.54	51.50	0.00	0.00	0.00
TaoVA-100x	5	0.01	8.87	6.43	49.31	59.03	50.54	92.16	19.07	23.85
TCP Vegas	5	18.43	21.70	23.33	72.73	65.44	71.38	1.80	1.14	1.92
Verus	5	31.63	32.52	3.88	182.43	190.96	170.64	10.84	11.44	6.41
PCC-Vivace	5	17.30	9.24	6.28	59.23	77.64	53.26	0.01	0.49	0.00
WebRTC media	5	0.05	0.05	0.05	52.80	50.77	50.92	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-25 03:03:54
End at: 2019-01-25 03:04:24
Local clock offset: -5.8 ms
Remote clock offset: 4.421 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.58 Mbit/s
95th percentile per-packet one-way delay: 102.209 ms
Loss rate: 22.21%
-- Flow 1:
Average throughput: 49.74 Mbit/s
95th percentile per-packet one-way delay: 101.988 ms
Loss rate: 20.32%
-- Flow 2:
Average throughput: 25.22 Mbit/s
95th percentile per-packet one-way delay: 102.879 ms
Loss rate: 23.72%
-- Flow 3:
Average throughput: 9.18 Mbit/s
95th percentile per-packet one-way delay: 100.252 ms
Loss rate: 39.12%
```

Run 1: Report of TCP BBR — Data Link

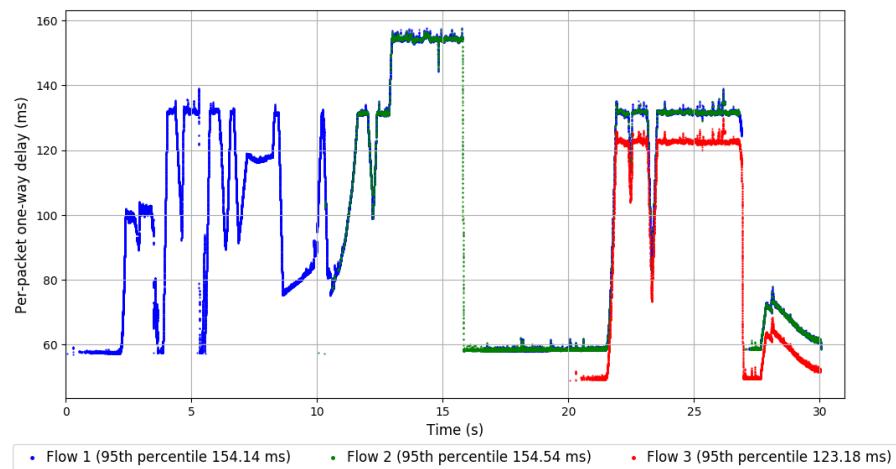
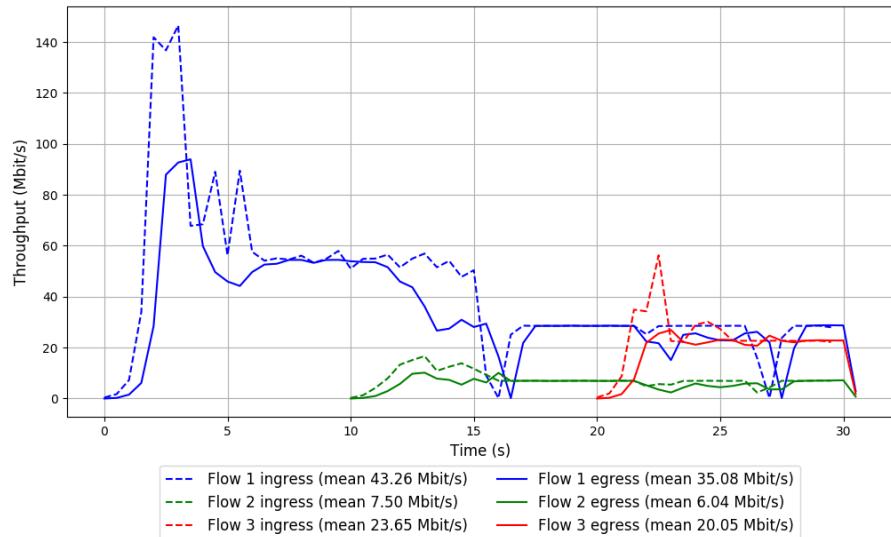


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-25 04:57:08
End at: 2019-01-25 04:57:38
Local clock offset: 3.163 ms
Remote clock offset: 54.336 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.77 Mbit/s
95th percentile per-packet one-way delay: 154.114 ms
Loss rate: 18.43%
-- Flow 1:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 154.137 ms
Loss rate: 18.91%
-- Flow 2:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 154.536 ms
Loss rate: 19.43%
-- Flow 3:
Average throughput: 20.05 Mbit/s
95th percentile per-packet one-way delay: 123.183 ms
Loss rate: 15.21%
```

Run 2: Report of TCP BBR — Data Link

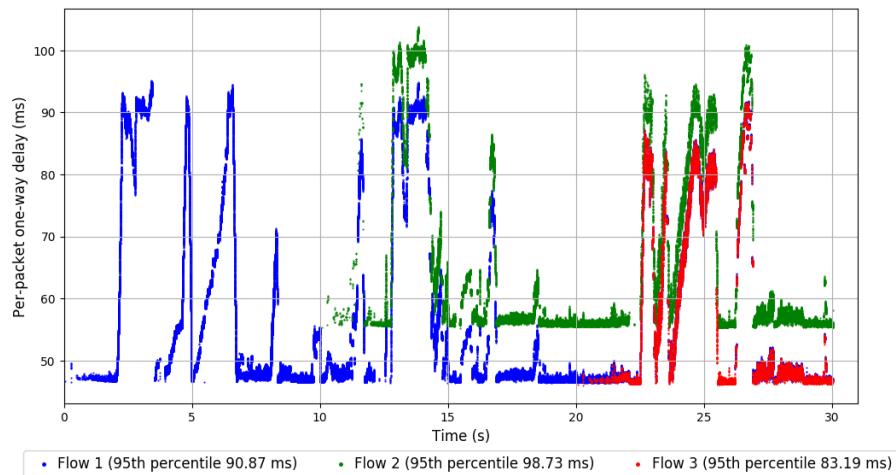
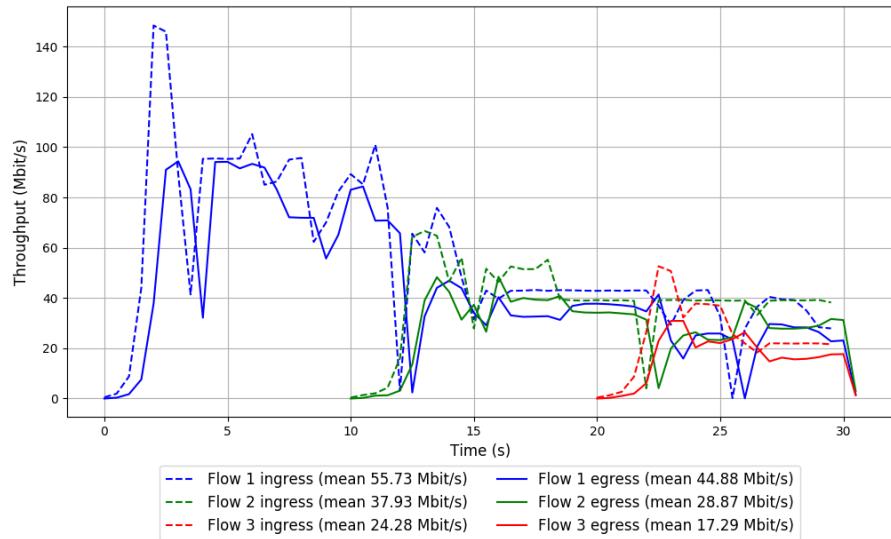


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-25 06:03:46
End at: 2019-01-25 06:04:16
Local clock offset: 15.24 ms
Remote clock offset: 42.729 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.84 Mbit/s
95th percentile per-packet one-way delay: 91.411 ms
Loss rate: 21.56%
-- Flow 1:
Average throughput: 44.88 Mbit/s
95th percentile per-packet one-way delay: 90.866 ms
Loss rate: 19.46%
-- Flow 2:
Average throughput: 28.87 Mbit/s
95th percentile per-packet one-way delay: 98.732 ms
Loss rate: 23.87%
-- Flow 3:
Average throughput: 17.29 Mbit/s
95th percentile per-packet one-way delay: 83.187 ms
Loss rate: 28.79%
```

Run 3: Report of TCP BBR — Data Link

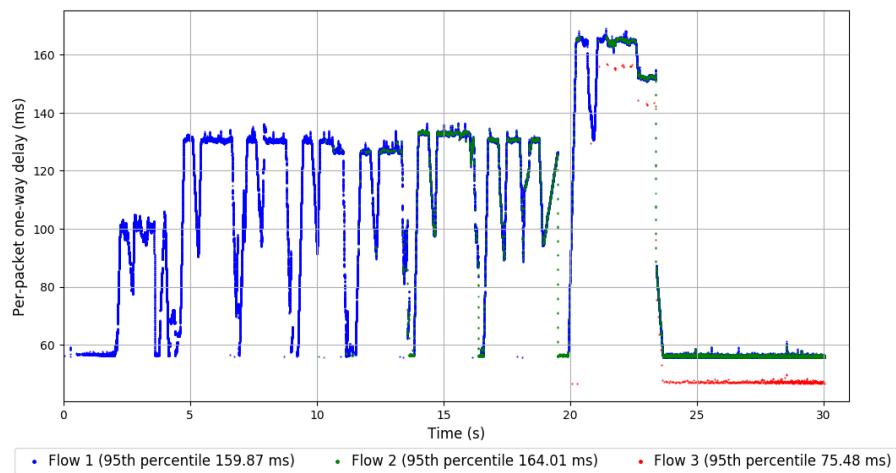
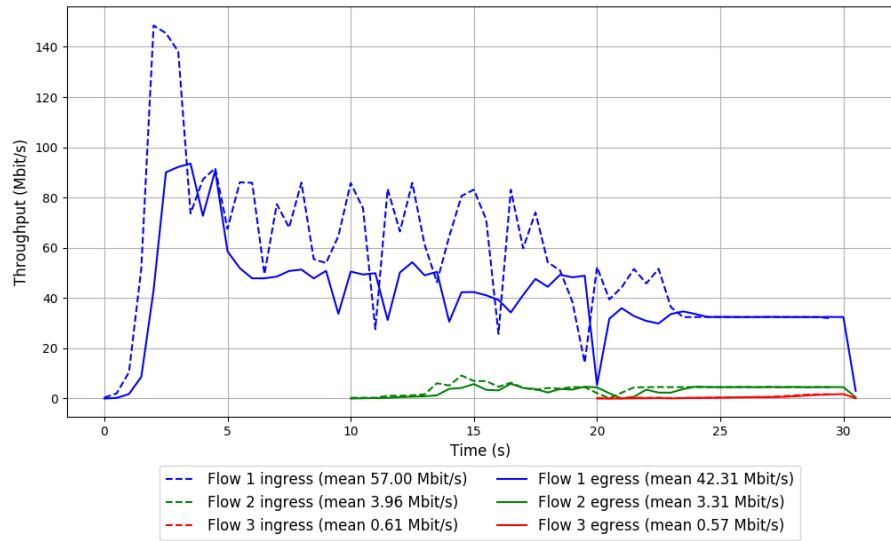


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-25 07:47:10
End at: 2019-01-25 07:47:40
Local clock offset: 6.894 ms
Remote clock offset: 48.33 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.70 Mbit/s
95th percentile per-packet one-way delay: 160.377 ms
Loss rate: 25.30%
-- Flow 1:
Average throughput: 42.31 Mbit/s
95th percentile per-packet one-way delay: 159.865 ms
Loss rate: 25.77%
-- Flow 2:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 164.010 ms
Loss rate: 16.50%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 75.485 ms
Loss rate: 7.48%
```

Run 4: Report of TCP BBR — Data Link

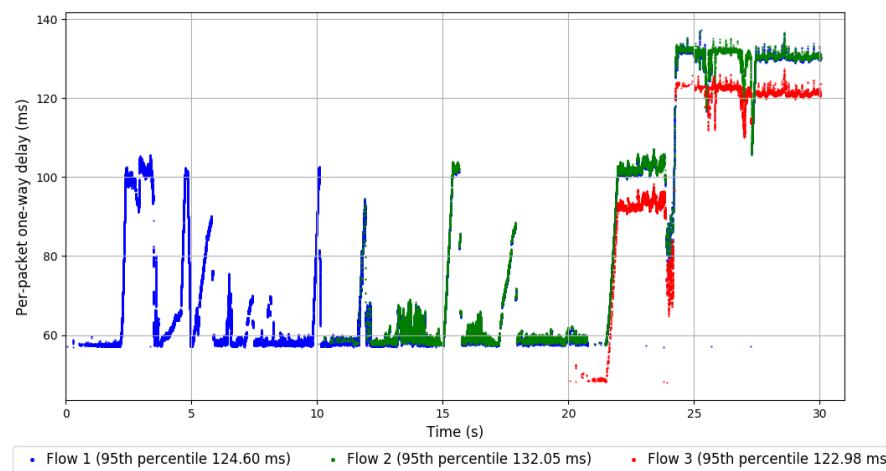
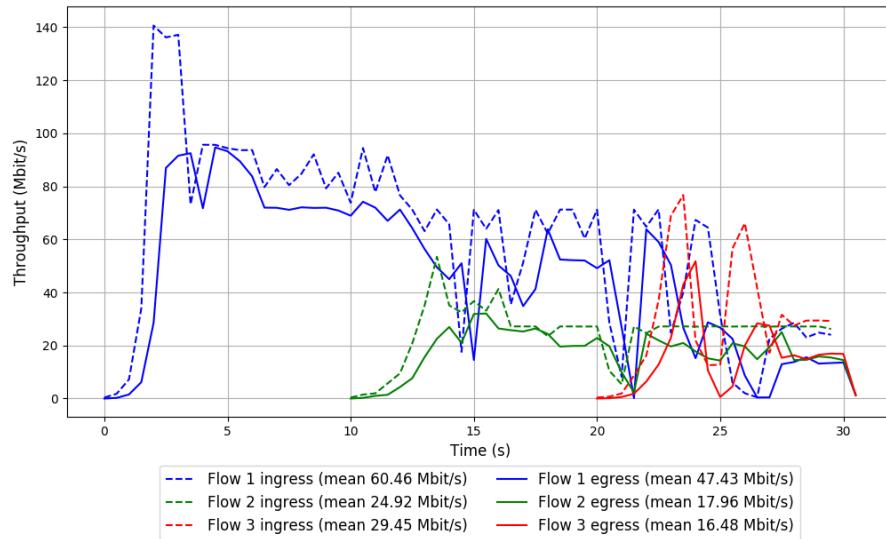


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-25 08:42:29
End at: 2019-01-25 08:42:59
Local clock offset: 3.215 ms
Remote clock offset: 44.06 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.87 Mbit/s
95th percentile per-packet one-way delay: 130.457 ms
Loss rate: 25.29%
-- Flow 1:
Average throughput: 47.43 Mbit/s
95th percentile per-packet one-way delay: 124.599 ms
Loss rate: 21.55%
-- Flow 2:
Average throughput: 17.96 Mbit/s
95th percentile per-packet one-way delay: 132.053 ms
Loss rate: 27.94%
-- Flow 3:
Average throughput: 16.48 Mbit/s
95th percentile per-packet one-way delay: 122.979 ms
Loss rate: 43.95%
```

Run 5: Report of TCP BBR — Data Link

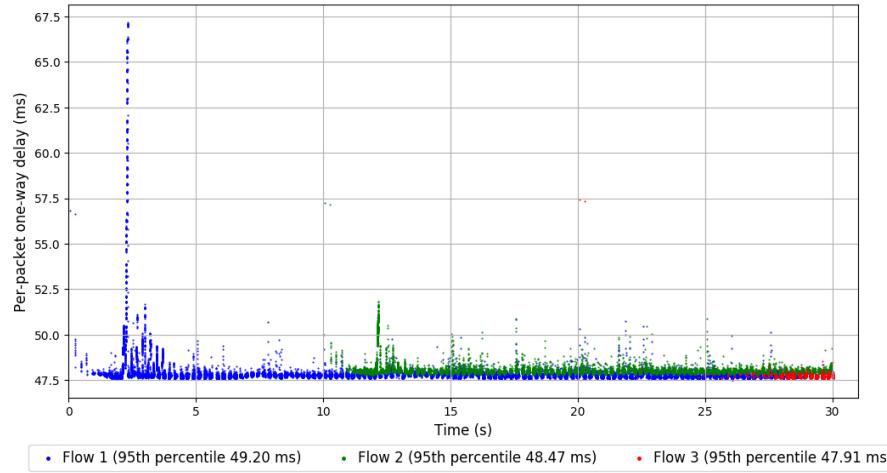
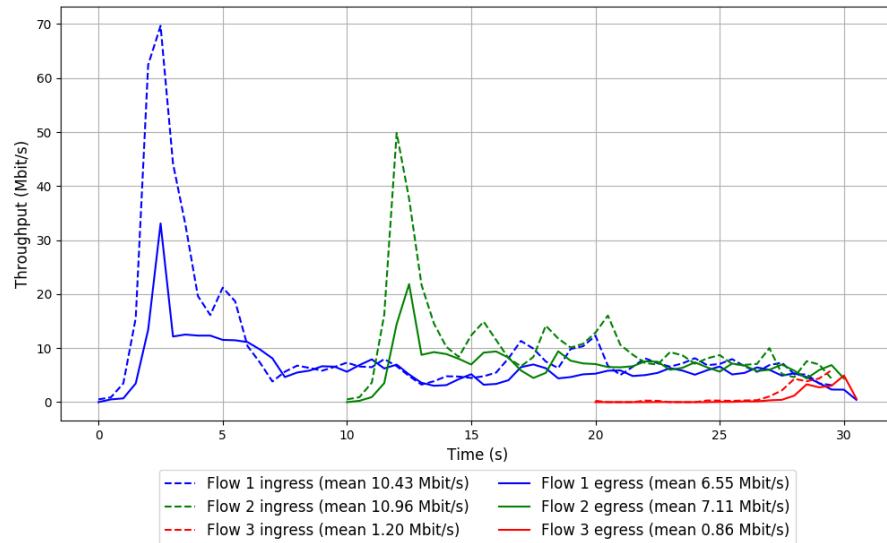


Run 1: Statistics of Copa

```
Start at: 2019-01-25 02:52:20
End at: 2019-01-25 02:52:50
Local clock offset: -8.182 ms
Remote clock offset: 5.099 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.56 Mbit/s
95th percentile per-packet one-way delay: 48.889 ms
Loss rate: 36.20%
-- Flow 1:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 49.204 ms
Loss rate: 37.24%
-- Flow 2:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 48.474 ms
Loss rate: 35.13%
-- Flow 3:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 47.910 ms
Loss rate: 28.81%
```

Run 1: Report of Copa — Data Link

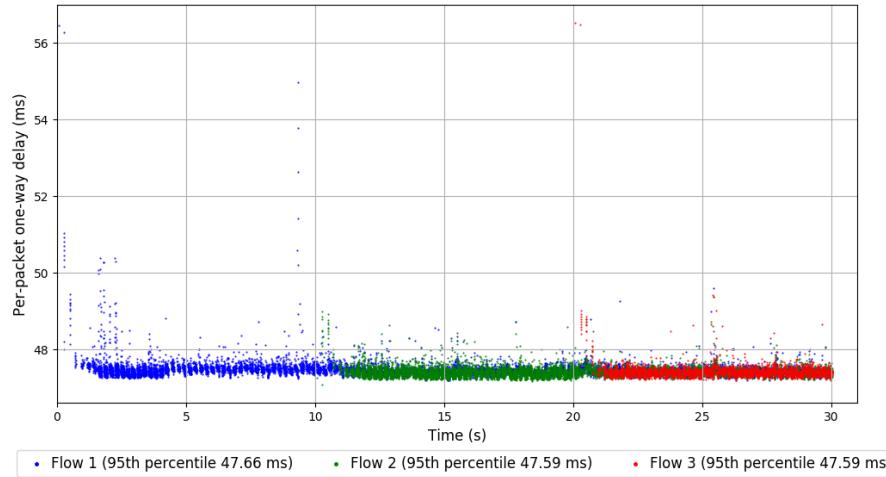
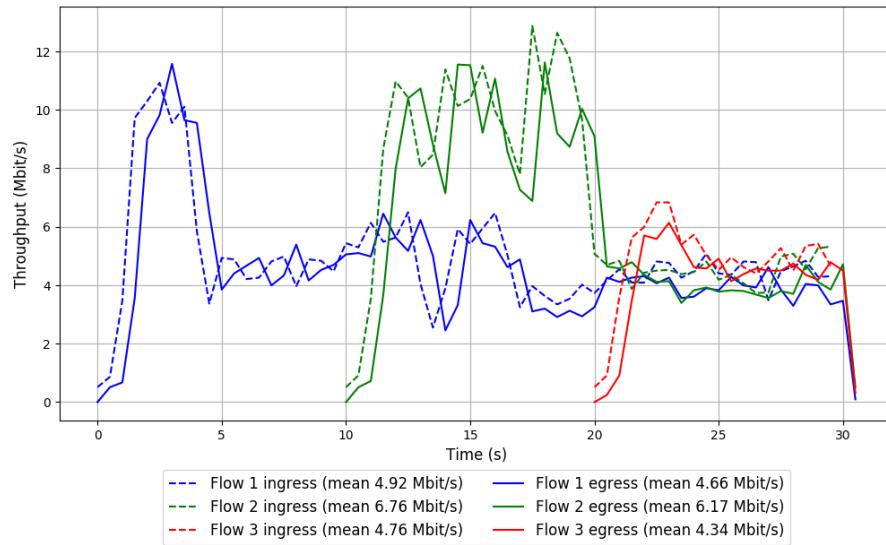


Run 2: Statistics of Copa

```
Start at: 2019-01-25 04:53:22
End at: 2019-01-25 04:53:52
Local clock offset: 3.156 ms
Remote clock offset: 54.827 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.21 Mbit/s
95th percentile per-packet one-way delay: 47.627 ms
Loss rate: 7.22%
-- Flow 1:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 47.664 ms
Loss rate: 5.28%
-- Flow 2:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 47.589 ms
Loss rate: 8.75%
-- Flow 3:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 47.589 ms
Loss rate: 8.92%
```

Run 2: Report of Copa — Data Link

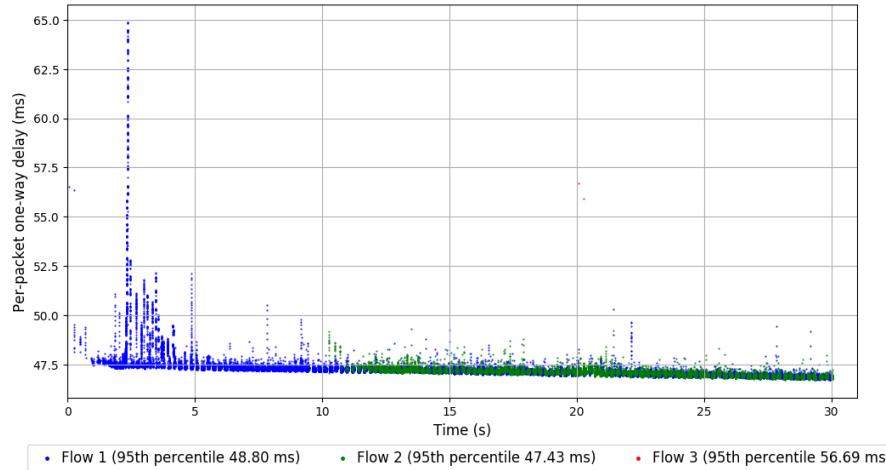
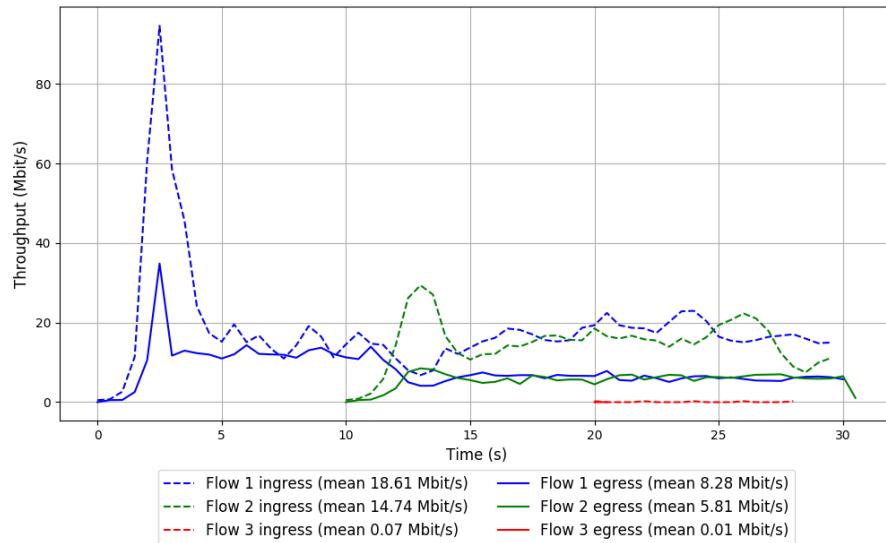


Run 3: Statistics of Copa

```
Start at: 2019-01-25 05:59:46
End at: 2019-01-25 06:00:16
Local clock offset: 19.344 ms
Remote clock offset: 43.273 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.13 Mbit/s
95th percentile per-packet one-way delay: 48.185 ms
Loss rate: 57.30%
-- Flow 1:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 48.804 ms
Loss rate: 55.50%
-- Flow 2:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 47.430 ms
Loss rate: 60.61%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.688 ms
Loss rate: 99.66%
```

Run 3: Report of Copa — Data Link

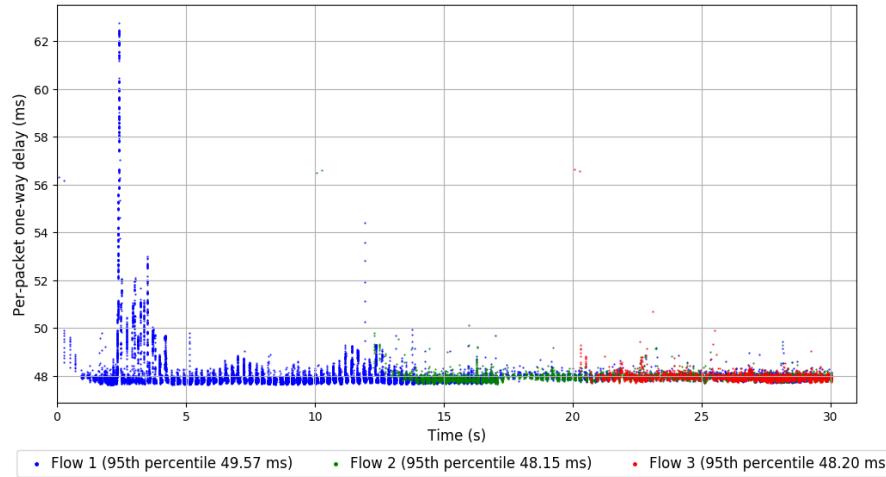
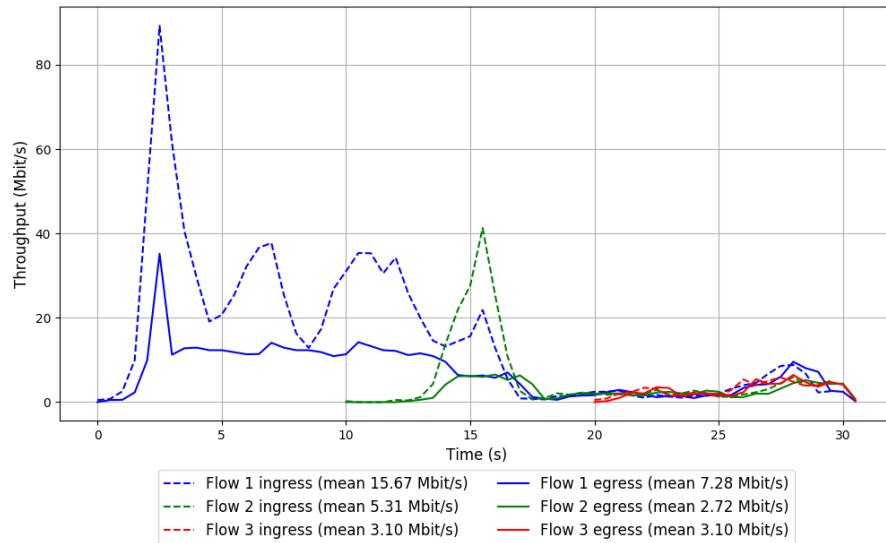


Run 4: Statistics of Copa

```
Start at: 2019-01-25 07:44:15
End at: 2019-01-25 07:44:45
Local clock offset: 6.256 ms
Remote clock offset: 48.515 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.12 Mbit/s
95th percentile per-packet one-way delay: 49.049 ms
Loss rate: 50.00%
-- Flow 1:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 49.573 ms
Loss rate: 53.57%
-- Flow 2:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 48.145 ms
Loss rate: 48.75%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 48.198 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link

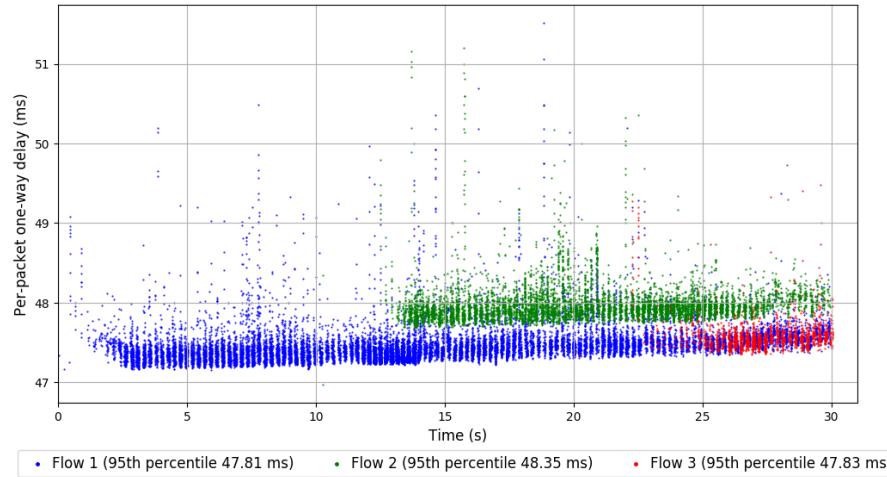
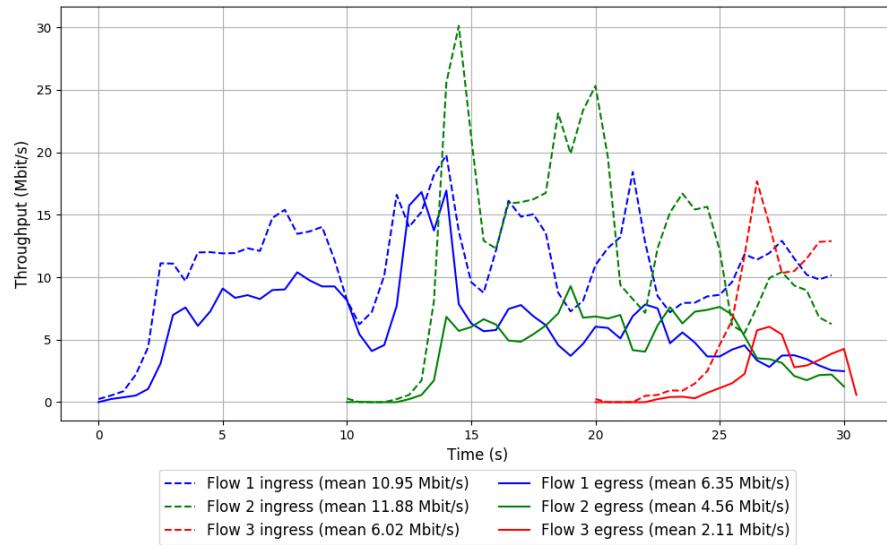


Run 5: Statistics of Copa

```
Start at: 2019-01-25 08:38:04
End at: 2019-01-25 08:38:34
Local clock offset: 4.059 ms
Remote clock offset: 46.201 ms

# Below is generated by plot.py at 2019-01-25 08:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.06 Mbit/s
95th percentile per-packet one-way delay: 48.140 ms
Loss rate: 51.63%
-- Flow 1:
Average throughput: 6.35 Mbit/s
95th percentile per-packet one-way delay: 47.807 ms
Loss rate: 41.98%
-- Flow 2:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 48.352 ms
Loss rate: 61.61%
-- Flow 3:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 47.833 ms
Loss rate: 64.94%
```

Run 5: Report of Copa — Data Link

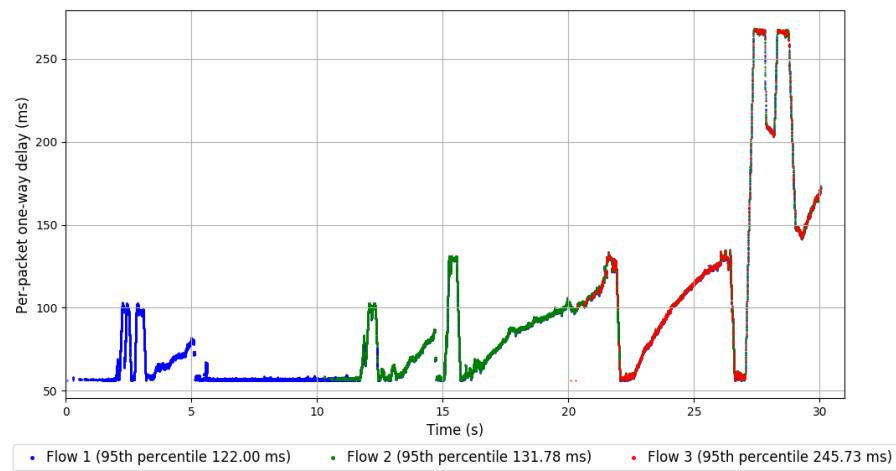
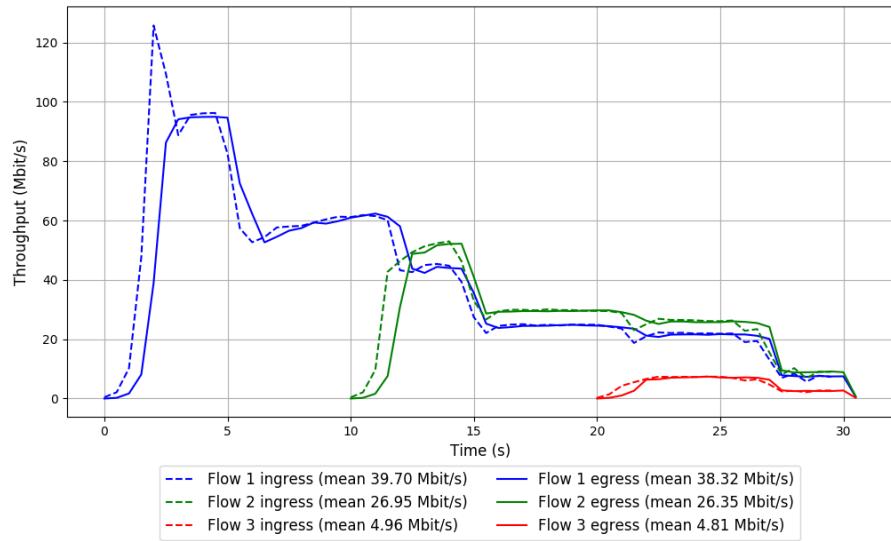


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-25 01:31:27
End at: 2019-01-25 01:31:57
Local clock offset: -1.071 ms
Remote clock offset: 12.921 ms

# Below is generated by plot.py at 2019-01-25 08:49:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.47 Mbit/s
95th percentile per-packet one-way delay: 129.380 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 38.32 Mbit/s
95th percentile per-packet one-way delay: 122.002 ms
Loss rate: 3.47%
-- Flow 2:
Average throughput: 26.35 Mbit/s
95th percentile per-packet one-way delay: 131.779 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 245.731 ms
Loss rate: 2.87%
```

Run 1: Report of TCP Cubic — Data Link

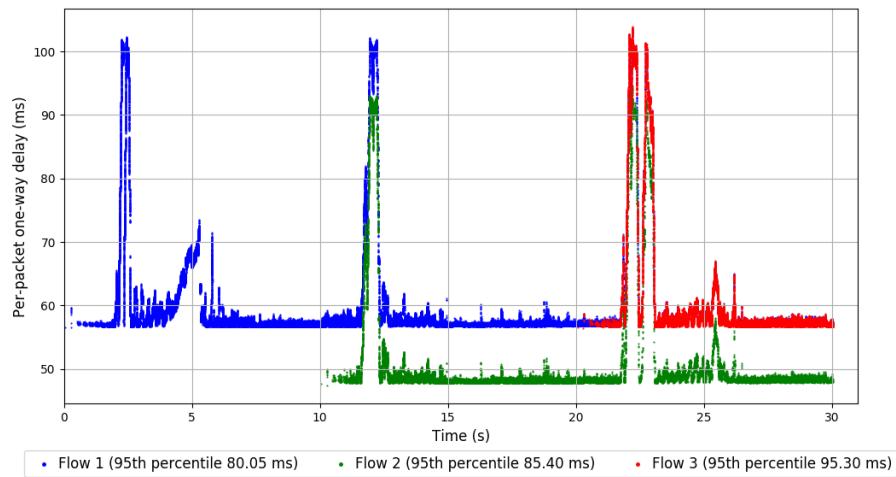
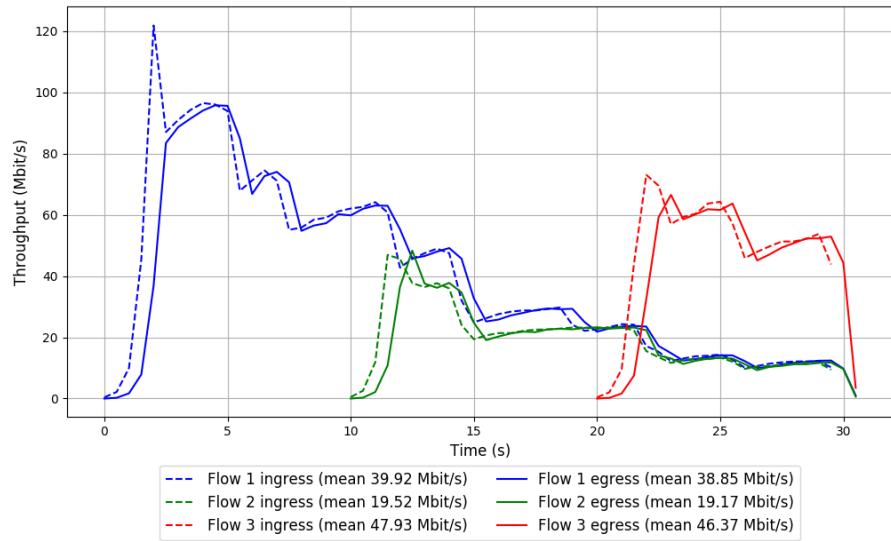


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-25 04:32:07
End at: 2019-01-25 04:32:37
Local clock offset: 2.738 ms
Remote clock offset: 54.106 ms

# Below is generated by plot.py at 2019-01-25 08:49:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.06 Mbit/s
95th percentile per-packet one-way delay: 89.189 ms
Loss rate: 2.64%
-- Flow 1:
Average throughput: 38.85 Mbit/s
95th percentile per-packet one-way delay: 80.051 ms
Loss rate: 2.68%
-- Flow 2:
Average throughput: 19.17 Mbit/s
95th percentile per-packet one-way delay: 85.401 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 46.37 Mbit/s
95th percentile per-packet one-way delay: 95.298 ms
Loss rate: 3.24%
```

Run 2: Report of TCP Cubic — Data Link

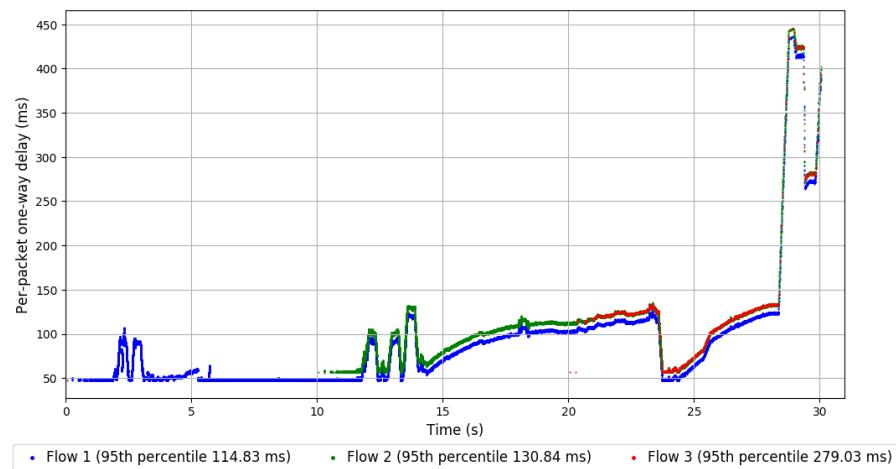
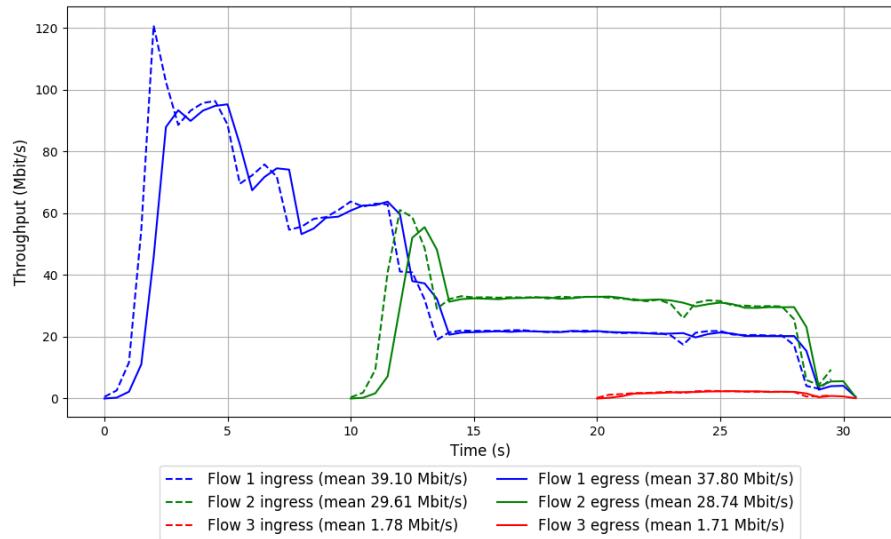


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-25 05:37:10
End at: 2019-01-25 05:37:40
Local clock offset: 11.365 ms
Remote clock offset: 32.611 ms

# Below is generated by plot.py at 2019-01-25 08:49:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.51 Mbit/s
95th percentile per-packet one-way delay: 124.610 ms
Loss rate: 3.18%
-- Flow 1:
Average throughput: 37.80 Mbit/s
95th percentile per-packet one-way delay: 114.831 ms
Loss rate: 3.30%
-- Flow 2:
Average throughput: 28.74 Mbit/s
95th percentile per-packet one-way delay: 130.835 ms
Loss rate: 2.90%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 279.032 ms
Loss rate: 4.06%
```

Run 3: Report of TCP Cubic — Data Link

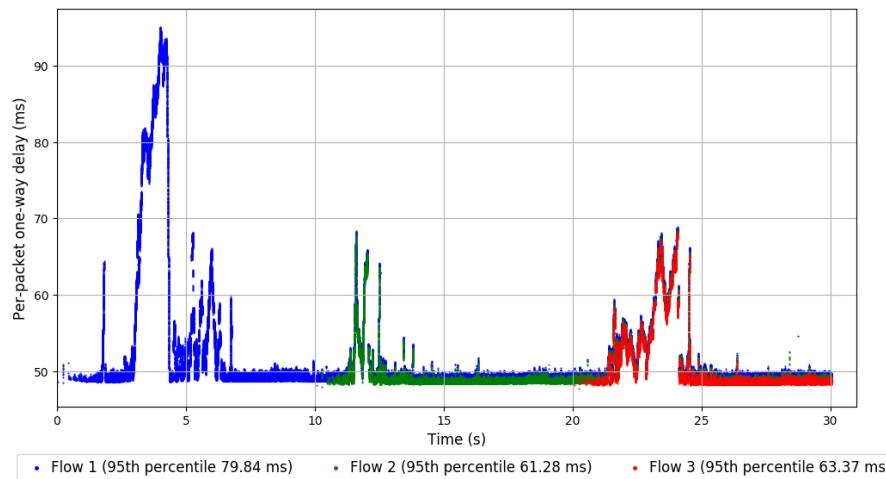
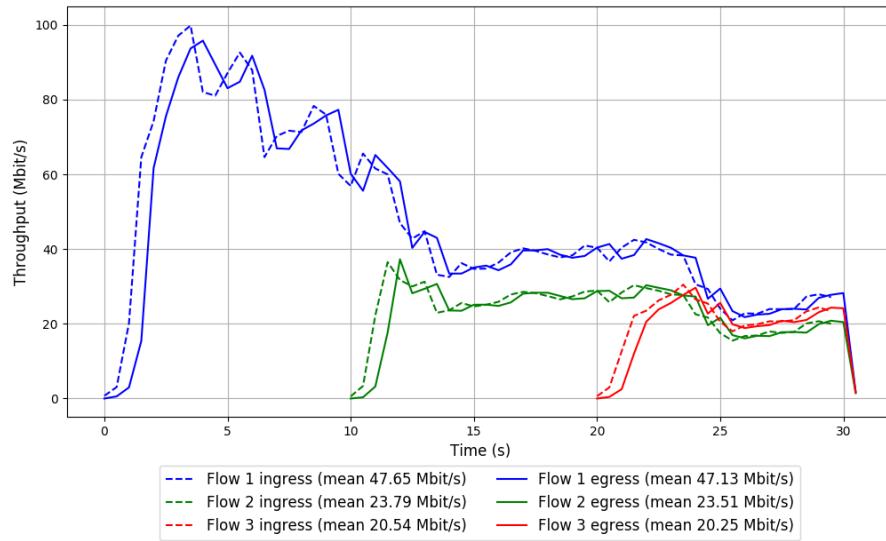


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-25 07:30:29
End at: 2019-01-25 07:30:59
Local clock offset: -0.715 ms
Remote clock offset: 48.334 ms

# Below is generated by plot.py at 2019-01-25 08:49:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.53 Mbit/s
95th percentile per-packet one-way delay: 69.337 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 79.841 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 23.51 Mbit/s
95th percentile per-packet one-way delay: 61.277 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 20.25 Mbit/s
95th percentile per-packet one-way delay: 63.370 ms
Loss rate: 1.43%
```

Run 4: Report of TCP Cubic — Data Link

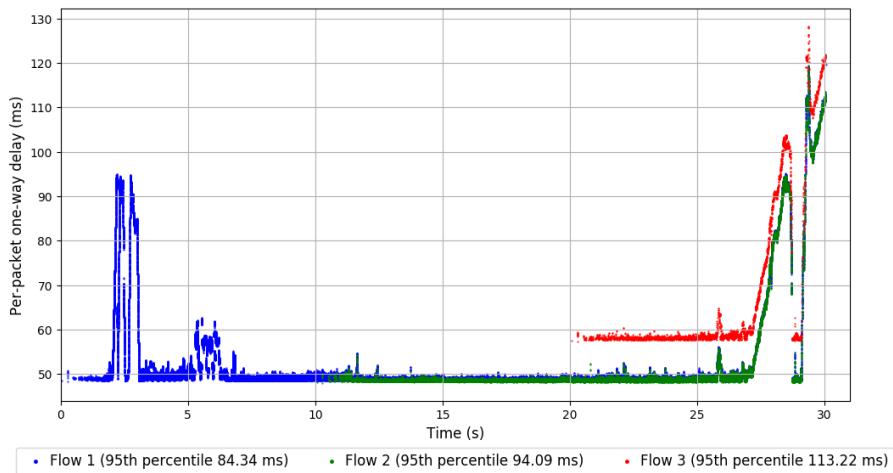
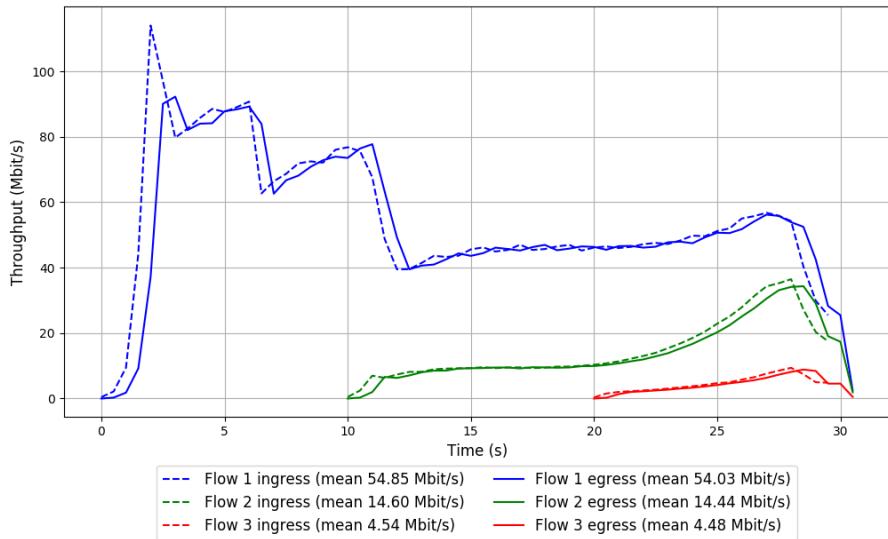


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-25 08:11:12
End at: 2019-01-25 08:11:42
Local clock offset: 6.558 ms
Remote clock offset: 67.264 ms

# Below is generated by plot.py at 2019-01-25 08:49:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.14 Mbit/s
95th percentile per-packet one-way delay: 89.113 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 54.03 Mbit/s
95th percentile per-packet one-way delay: 84.345 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 14.44 Mbit/s
95th percentile per-packet one-way delay: 94.095 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 113.219 ms
Loss rate: 1.38%
```

Run 5: Report of TCP Cubic — Data Link

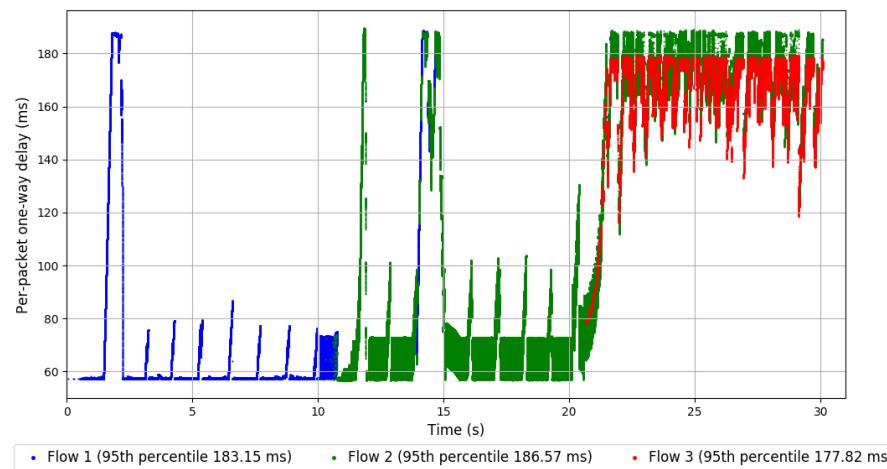
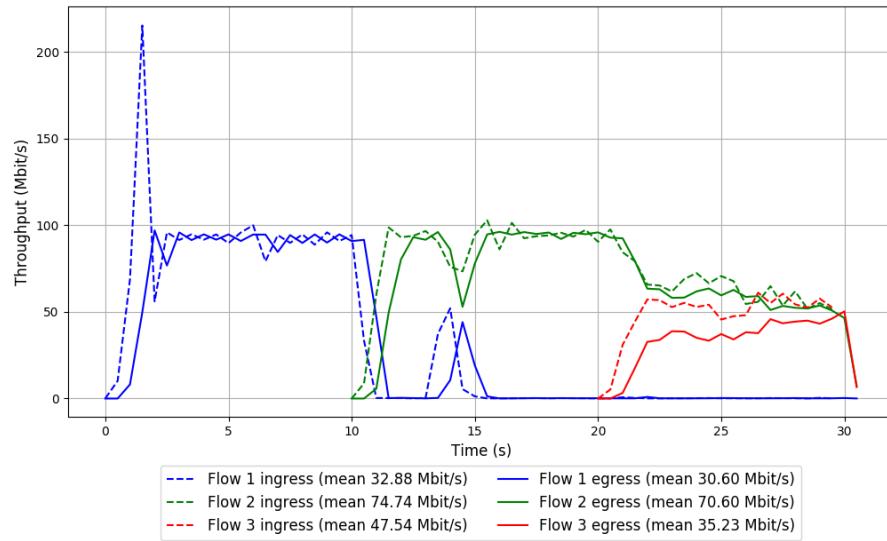


```
Run 1: Statistics of FillP

Start at: 2019-01-25 01:27:59
End at: 2019-01-25 01:28:29
Local clock offset: -0.805 ms
Remote clock offset: 12.888 ms

# Below is generated by plot.py at 2019-01-25 08:50:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.29 Mbit/s
95th percentile per-packet one-way delay: 186.173 ms
Loss rate: 8.93%
-- Flow 1:
Average throughput: 30.60 Mbit/s
95th percentile per-packet one-way delay: 183.151 ms
Loss rate: 6.54%
-- Flow 2:
Average throughput: 70.60 Mbit/s
95th percentile per-packet one-way delay: 186.568 ms
Loss rate: 5.33%
-- Flow 3:
Average throughput: 35.23 Mbit/s
95th percentile per-packet one-way delay: 177.816 ms
Loss rate: 25.31%
```

Run 1: Report of FillP — Data Link

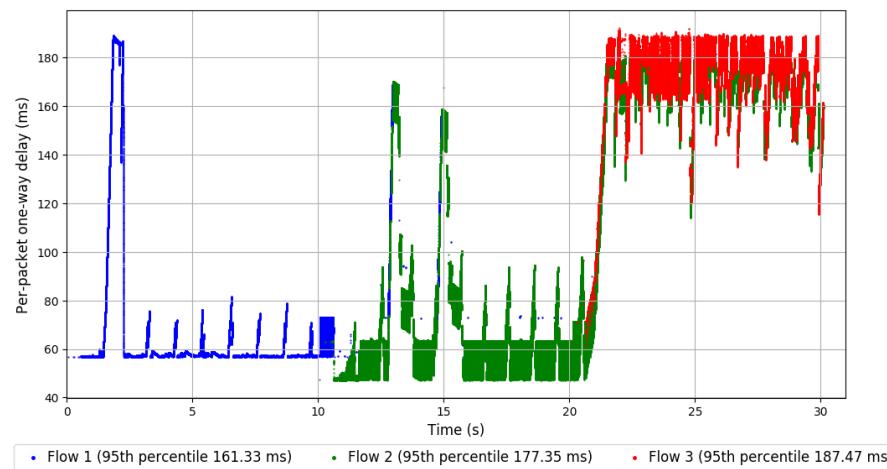
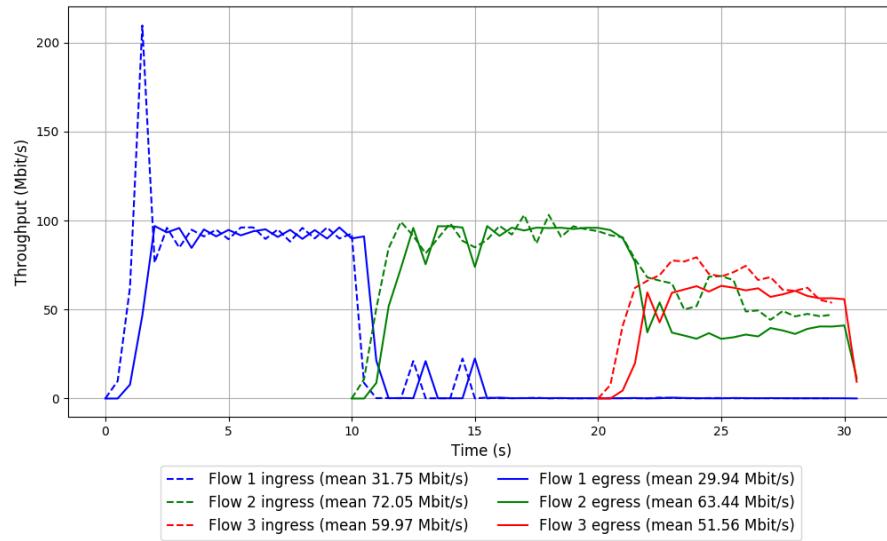


Run 2: Statistics of FillP

```
Start at: 2019-01-25 04:27:54
End at: 2019-01-25 04:28:24
Local clock offset: 2.684 ms
Remote clock offset: 55.816 ms

# Below is generated by plot.py at 2019-01-25 08:50:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.35 Mbit/s
95th percentile per-packet one-way delay: 185.747 ms
Loss rate: 9.95%
-- Flow 1:
Average throughput: 29.94 Mbit/s
95th percentile per-packet one-way delay: 161.326 ms
Loss rate: 5.41%
-- Flow 2:
Average throughput: 63.44 Mbit/s
95th percentile per-packet one-way delay: 177.355 ms
Loss rate: 11.46%
-- Flow 3:
Average throughput: 51.56 Mbit/s
95th percentile per-packet one-way delay: 187.469 ms
Loss rate: 13.54%
```

Run 2: Report of FillP — Data Link

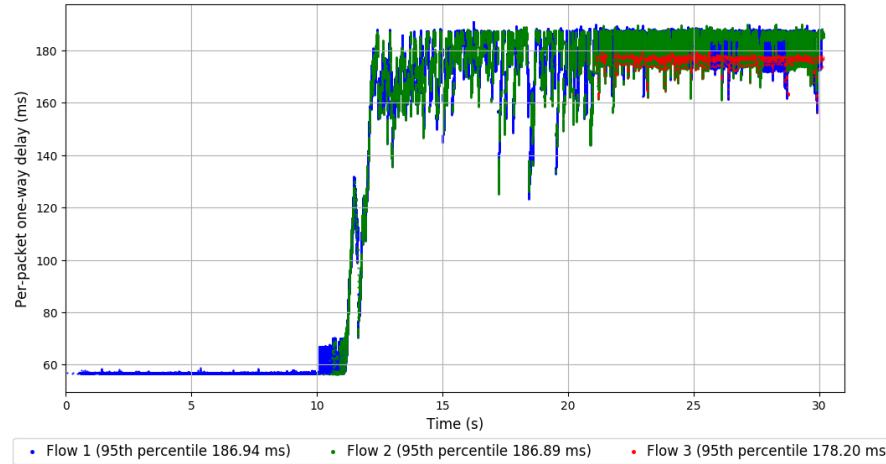
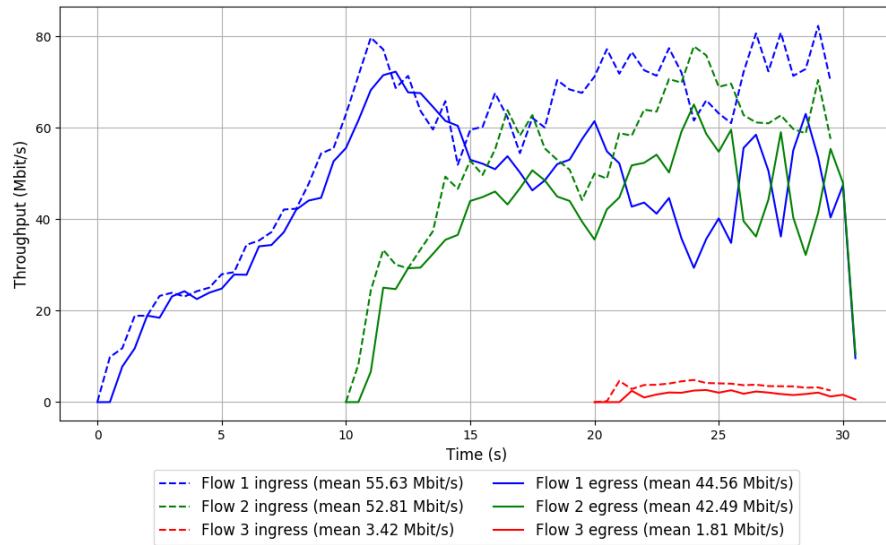


Run 3: Statistics of FillP

```
Start at: 2019-01-25 05:33:35
End at: 2019-01-25 05:34:05
Local clock offset: 8.469 ms
Remote clock offset: 27.373 ms

# Below is generated by plot.py at 2019-01-25 08:50:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.39 Mbit/s
95th percentile per-packet one-way delay: 186.917 ms
Loss rate: 19.81%
-- Flow 1:
Average throughput: 44.56 Mbit/s
95th percentile per-packet one-way delay: 186.940 ms
Loss rate: 19.75%
-- Flow 2:
Average throughput: 42.49 Mbit/s
95th percentile per-packet one-way delay: 186.888 ms
Loss rate: 19.04%
-- Flow 3:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 178.204 ms
Loss rate: 46.95%
```

Run 3: Report of FillP — Data Link

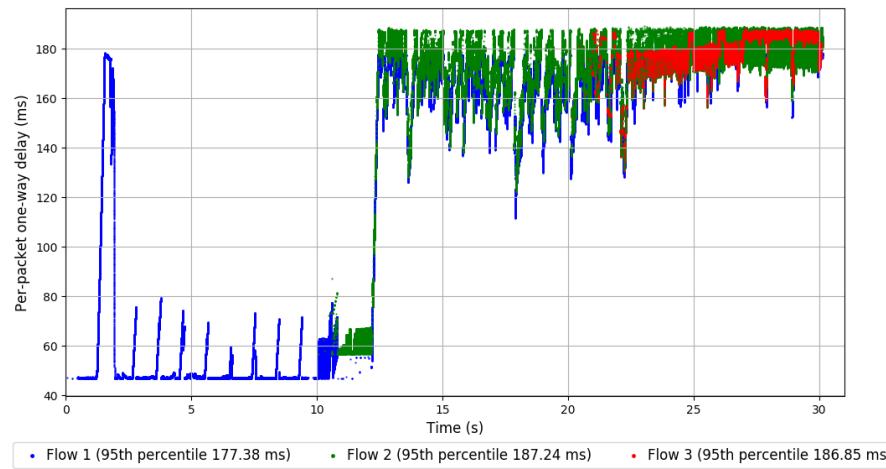
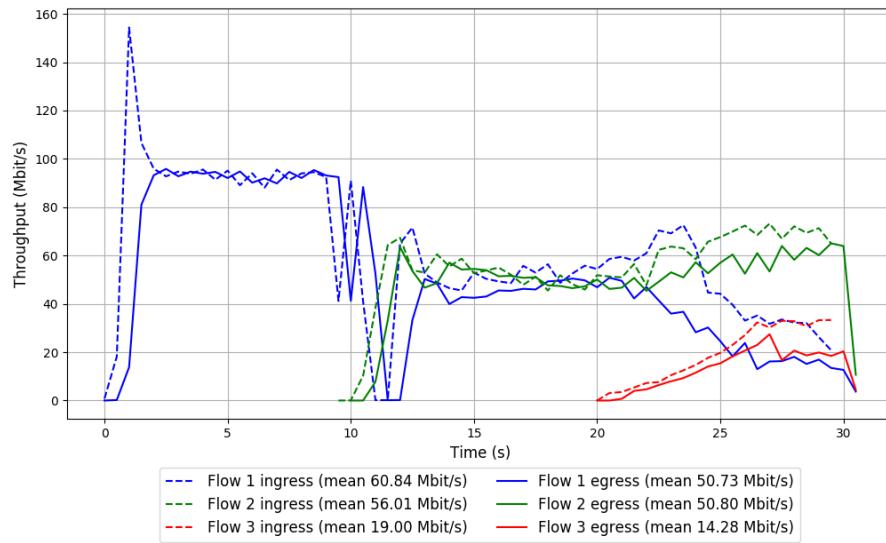


Run 4: Statistics of FillP

```
Start at: 2019-01-25 07:29:01
End at: 2019-01-25 07:29:31
Local clock offset: -1.26 ms
Remote clock offset: 48.166 ms

# Below is generated by plot.py at 2019-01-25 08:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.30 Mbit/s
95th percentile per-packet one-way delay: 186.648 ms
Loss rate: 14.12%
-- Flow 1:
Average throughput: 50.73 Mbit/s
95th percentile per-packet one-way delay: 177.383 ms
Loss rate: 16.26%
-- Flow 2:
Average throughput: 50.80 Mbit/s
95th percentile per-packet one-way delay: 187.240 ms
Loss rate: 8.76%
-- Flow 3:
Average throughput: 14.28 Mbit/s
95th percentile per-packet one-way delay: 186.848 ms
Loss rate: 25.22%
```

Run 4: Report of FillP — Data Link

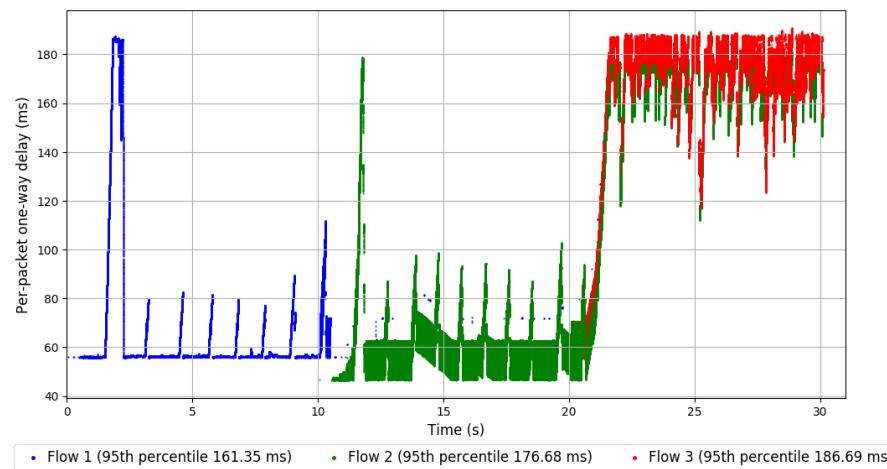
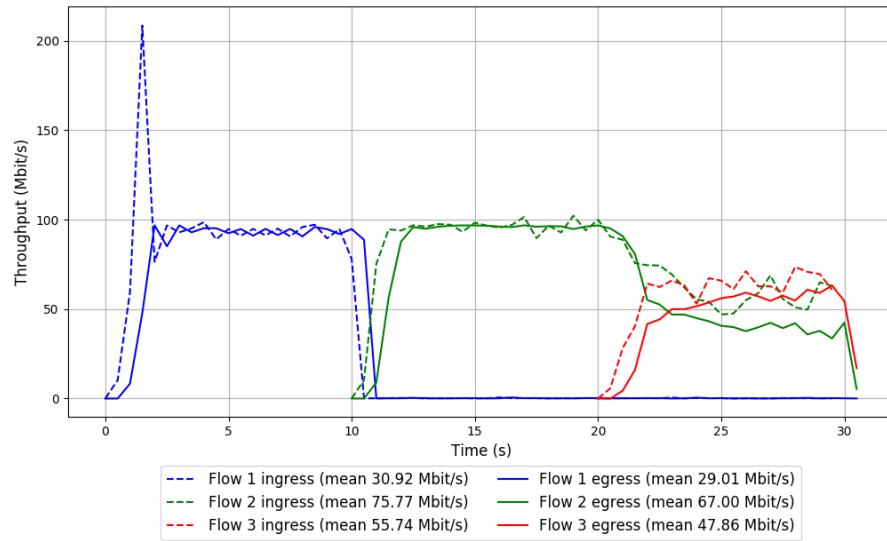


```
Run 5: Statistics of FillP
```

```
Start at: 2019-01-25 08:05:33
End at: 2019-01-25 08:06:03
Local clock offset: 6.963 ms
Remote clock offset: 64.134 ms

# Below is generated by plot.py at 2019-01-25 08:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.60 Mbit/s
95th percentile per-packet one-way delay: 184.996 ms
Loss rate: 9.91%
-- Flow 1:
Average throughput: 29.01 Mbit/s
95th percentile per-packet one-way delay: 161.350 ms
Loss rate: 5.75%
-- Flow 2:
Average throughput: 67.00 Mbit/s
95th percentile per-packet one-way delay: 176.675 ms
Loss rate: 11.26%
-- Flow 3:
Average throughput: 47.86 Mbit/s
95th percentile per-packet one-way delay: 186.685 ms
Loss rate: 13.18%
```

Run 5: Report of FillP — Data Link

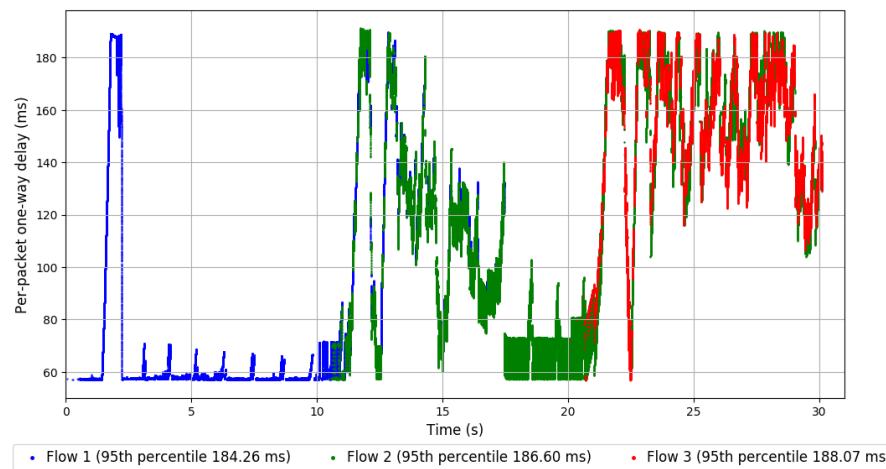
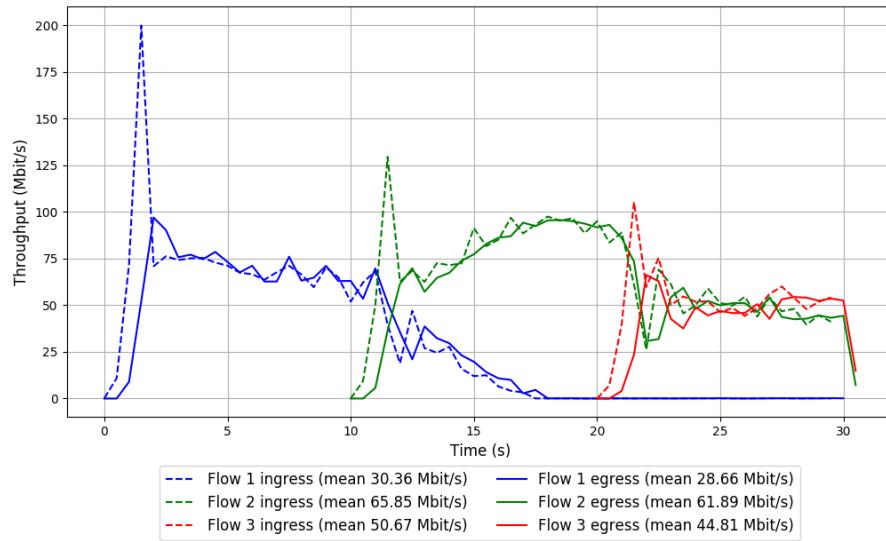


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-01-25 01:16:50
End at: 2019-01-25 01:17:20
Local clock offset: -1.033 ms
Remote clock offset: 10.855 ms

# Below is generated by plot.py at 2019-01-25 08:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.63 Mbit/s
95th percentile per-packet one-way delay: 187.215 ms
Loss rate: 6.73%
-- Flow 1:
Average throughput: 28.66 Mbit/s
95th percentile per-packet one-way delay: 184.264 ms
Loss rate: 5.93%
-- Flow 2:
Average throughput: 61.89 Mbit/s
95th percentile per-packet one-way delay: 186.601 ms
Loss rate: 5.67%
-- Flow 3:
Average throughput: 44.81 Mbit/s
95th percentile per-packet one-way delay: 188.072 ms
Loss rate: 10.95%
```

Run 1: Report of FillP-Sheep — Data Link

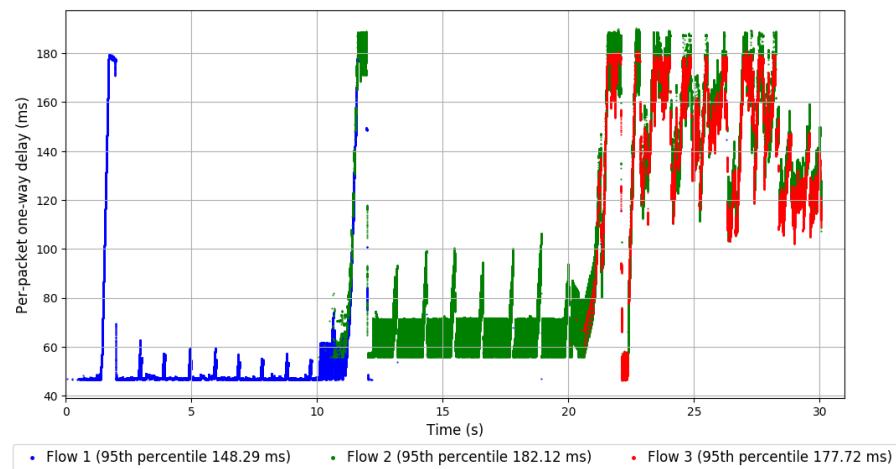
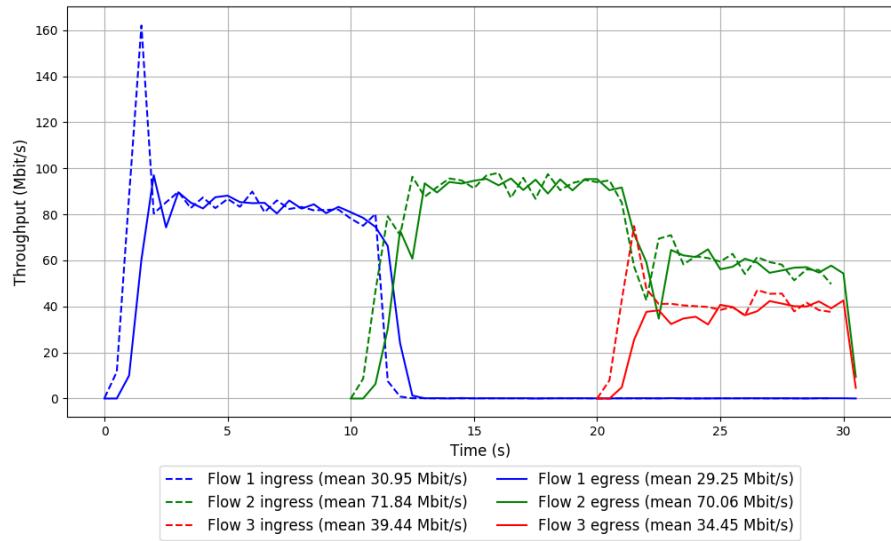


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-25 04:10:09
End at: 2019-01-25 04:10:39
Local clock offset: 3.011 ms
Remote clock offset: 55.947 ms

# Below is generated by plot.py at 2019-01-25 08:50:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.36 Mbit/s
95th percentile per-packet one-way delay: 177.968 ms
Loss rate: 4.68%
-- Flow 1:
Average throughput: 29.25 Mbit/s
95th percentile per-packet one-way delay: 148.289 ms
Loss rate: 5.27%
-- Flow 2:
Average throughput: 70.06 Mbit/s
95th percentile per-packet one-way delay: 182.119 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 34.45 Mbit/s
95th percentile per-packet one-way delay: 177.725 ms
Loss rate: 12.23%
```

Run 2: Report of FillP-Sheep — Data Link

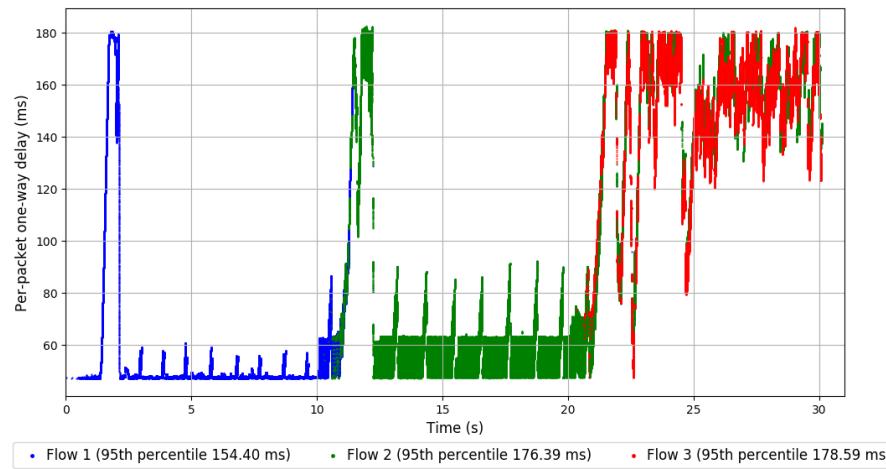
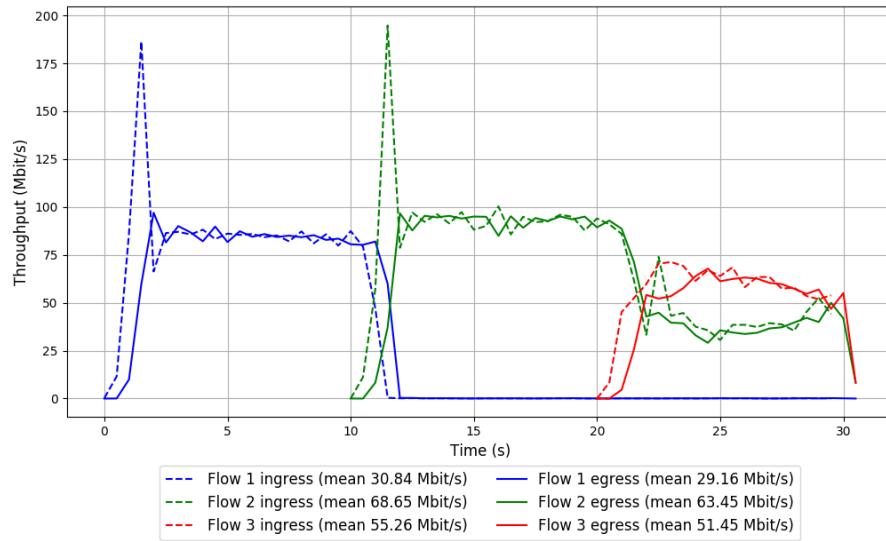


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-25 05:14:44
End at: 2019-01-25 05:15:14
Local clock offset: 3.655 ms
Remote clock offset: 28.699 ms

# Below is generated by plot.py at 2019-01-25 08:51:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.49 Mbit/s
95th percentile per-packet one-way delay: 177.165 ms
Loss rate: 6.32%
-- Flow 1:
Average throughput: 29.16 Mbit/s
95th percentile per-packet one-way delay: 154.403 ms
Loss rate: 5.08%
-- Flow 2:
Average throughput: 63.45 Mbit/s
95th percentile per-packet one-way delay: 176.389 ms
Loss rate: 7.16%
-- Flow 3:
Average throughput: 51.45 Mbit/s
95th percentile per-packet one-way delay: 178.588 ms
Loss rate: 6.32%
```

Run 3: Report of FillP-Sheep — Data Link

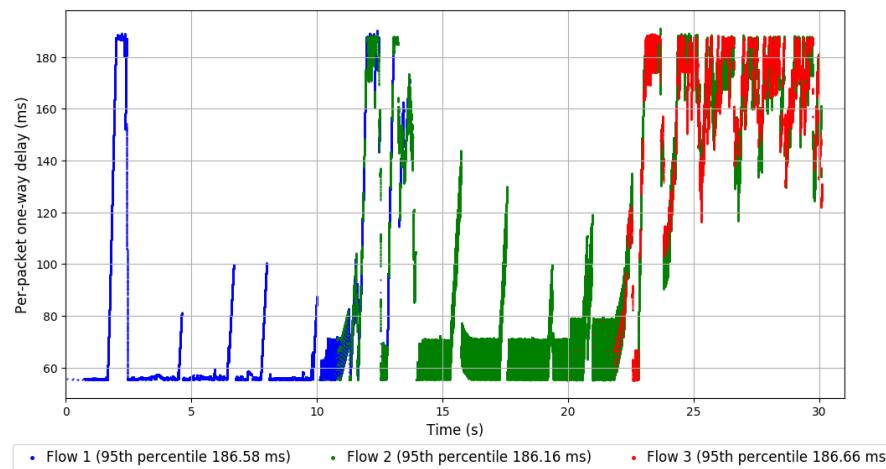
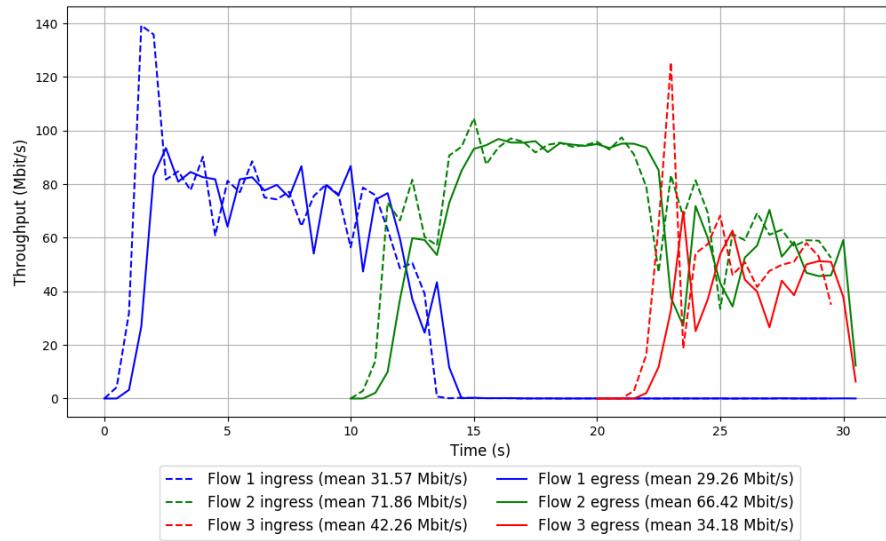


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-25 07:04:55
End at: 2019-01-25 07:05:25
Local clock offset: 9.341 ms
Remote clock offset: 48.632 ms

# Below is generated by plot.py at 2019-01-25 08:51:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.94 Mbit/s
95th percentile per-packet one-way delay: 186.412 ms
Loss rate: 8.90%
-- Flow 1:
Average throughput: 29.26 Mbit/s
95th percentile per-packet one-way delay: 186.584 ms
Loss rate: 7.08%
-- Flow 2:
Average throughput: 66.42 Mbit/s
95th percentile per-packet one-way delay: 186.164 ms
Loss rate: 7.27%
-- Flow 3:
Average throughput: 34.18 Mbit/s
95th percentile per-packet one-way delay: 186.664 ms
Loss rate: 18.57%
```

Run 4: Report of FillP-Sheep — Data Link

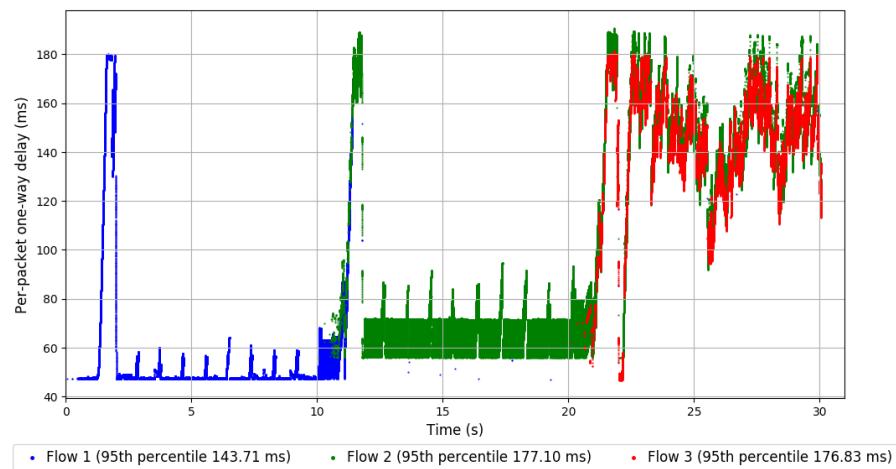
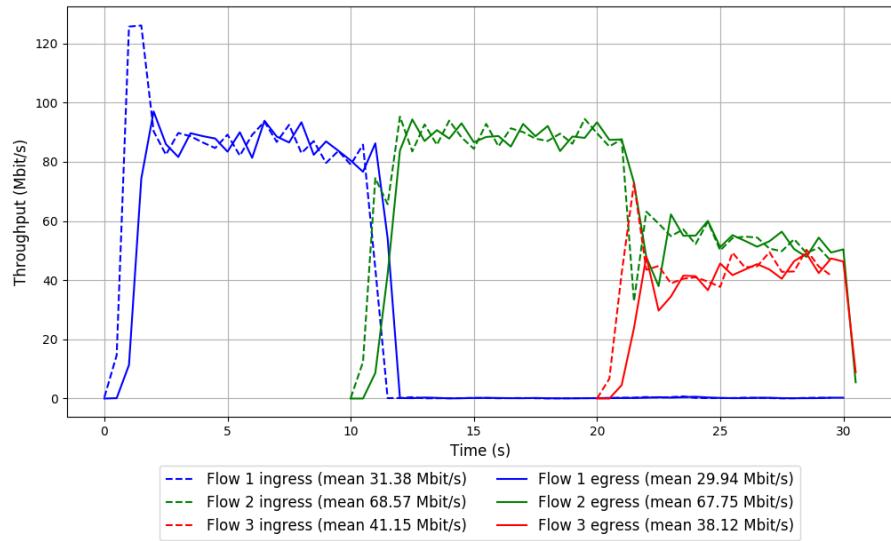


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-25 07:55:10
End at: 2019-01-25 07:55:40
Local clock offset: 7.505 ms
Remote clock offset: 58.3 ms

# Below is generated by plot.py at 2019-01-25 08:51:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.59 Mbit/s
95th percentile per-packet one-way delay: 175.031 ms
Loss rate: 3.05%
-- Flow 1:
Average throughput: 29.94 Mbit/s
95th percentile per-packet one-way delay: 143.711 ms
Loss rate: 4.28%
-- Flow 2:
Average throughput: 67.75 Mbit/s
95th percentile per-packet one-way delay: 177.100 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 38.12 Mbit/s
95th percentile per-packet one-way delay: 176.831 ms
Loss rate: 6.97%
```

Run 5: Report of FillP-Sheep — Data Link

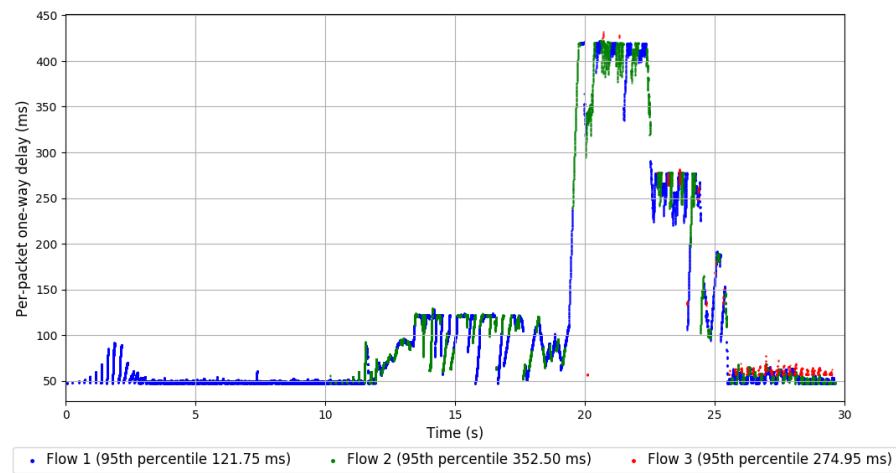
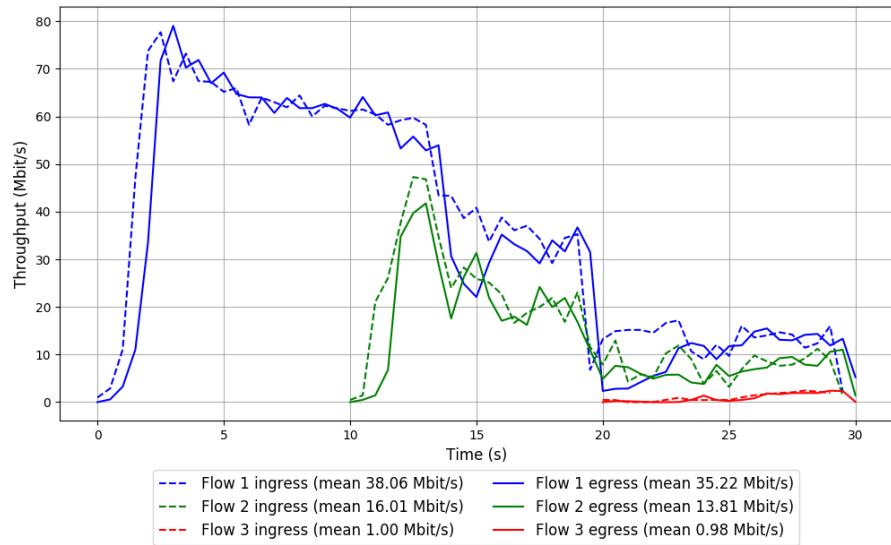


Run 1: Statistics of Indigo

```
Start at: 2019-01-25 01:23:49
End at: 2019-01-25 01:24:19
Local clock offset: -0.919 ms
Remote clock offset: 11.457 ms

# Below is generated by plot.py at 2019-01-25 08:51:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.57 Mbit/s
95th percentile per-packet one-way delay: 176.689 ms
Loss rate: 8.77%
-- Flow 1:
Average throughput: 35.22 Mbit/s
95th percentile per-packet one-way delay: 121.748 ms
Loss rate: 7.45%
-- Flow 2:
Average throughput: 13.81 Mbit/s
95th percentile per-packet one-way delay: 352.504 ms
Loss rate: 13.72%
-- Flow 3:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 274.946 ms
Loss rate: 2.04%
```

Run 1: Report of Indigo — Data Link

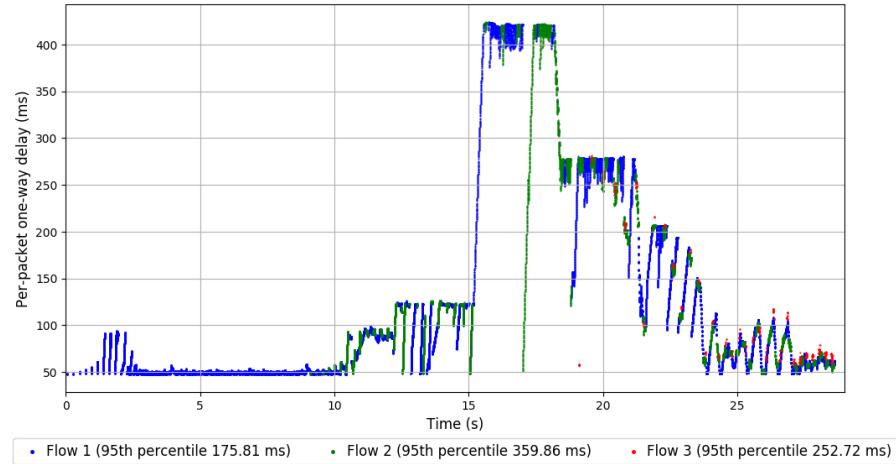
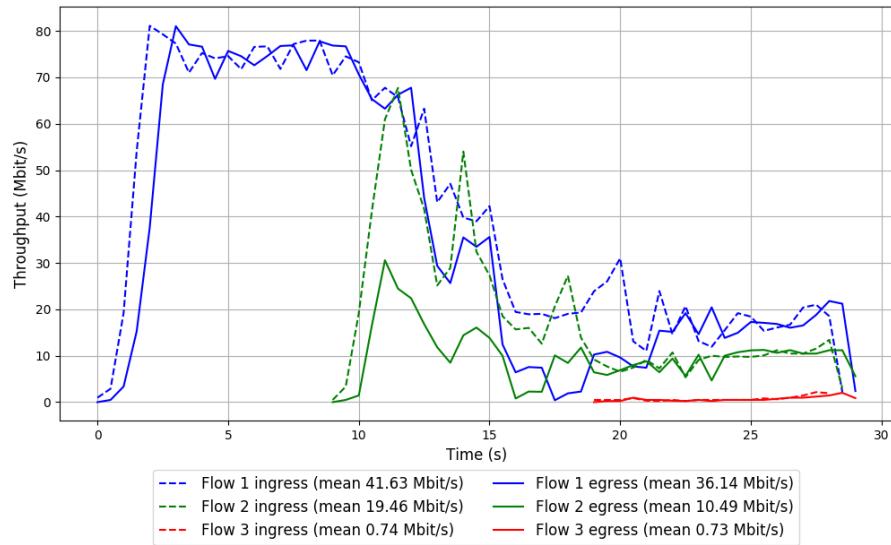


Run 2: Statistics of Indigo

```
Start at: 2019-01-25 04:22:22
End at: 2019-01-25 04:22:52
Local clock offset: 2.584 ms
Remote clock offset: 60.036 ms

# Below is generated by plot.py at 2019-01-25 08:51:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.54 Mbit/s
95th percentile per-packet one-way delay: 251.339 ms
Loss rate: 21.02%
-- Flow 1:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 175.807 ms
Loss rate: 13.14%
-- Flow 2:
Average throughput: 10.49 Mbit/s
95th percentile per-packet one-way delay: 359.862 ms
Loss rate: 46.08%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 252.719 ms
Loss rate: 1.21%
```

Run 2: Report of Indigo — Data Link

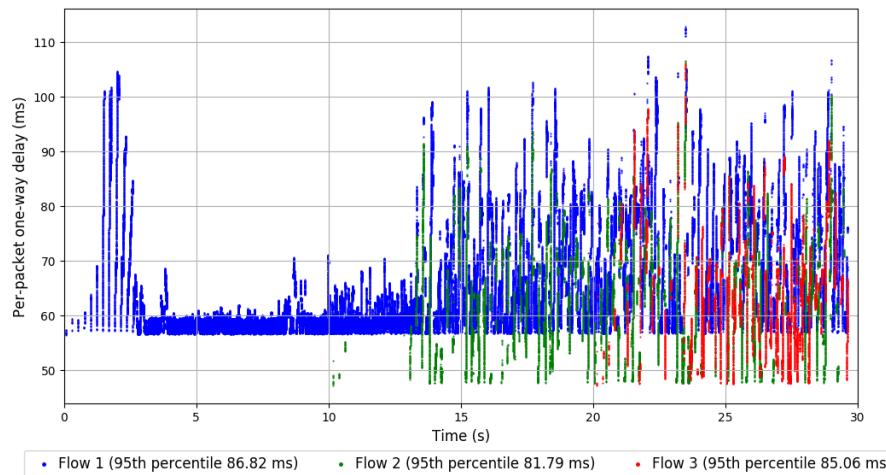
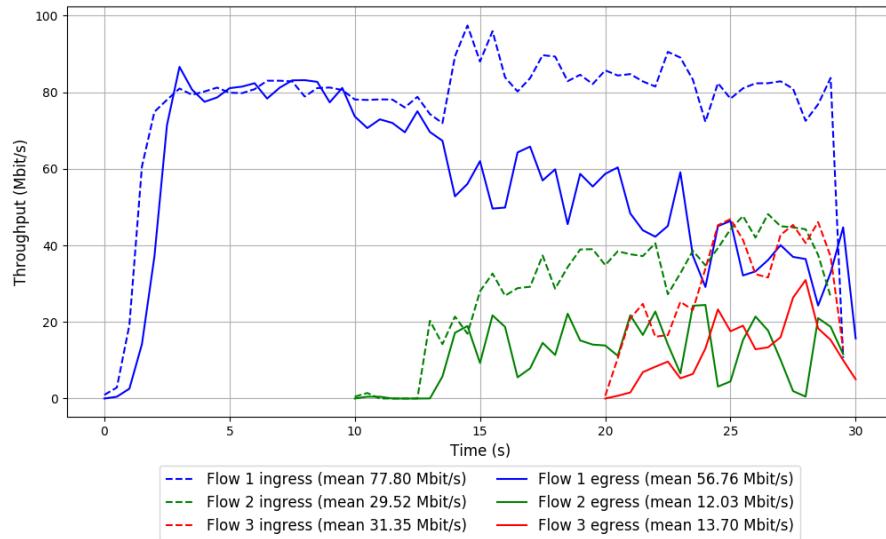


Run 3: Statistics of Indigo

```
Start at: 2019-01-25 05:27:13
End at: 2019-01-25 05:27:43
Local clock offset: 4.0 ms
Remote clock offset: 22.336 ms

# Below is generated by plot.py at 2019-01-25 08:51:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.00 Mbit/s
95th percentile per-packet one-way delay: 86.108 ms
Loss rate: 35.54%
-- Flow 1:
Average throughput: 56.76 Mbit/s
95th percentile per-packet one-way delay: 86.818 ms
Loss rate: 26.99%
-- Flow 2:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 81.789 ms
Loss rate: 59.24%
-- Flow 3:
Average throughput: 13.70 Mbit/s
95th percentile per-packet one-way delay: 85.063 ms
Loss rate: 56.26%
```

Run 3: Report of Indigo — Data Link

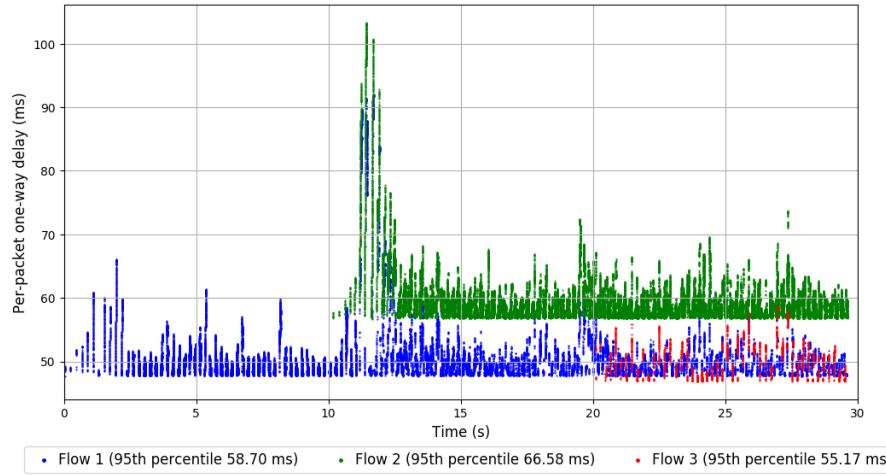
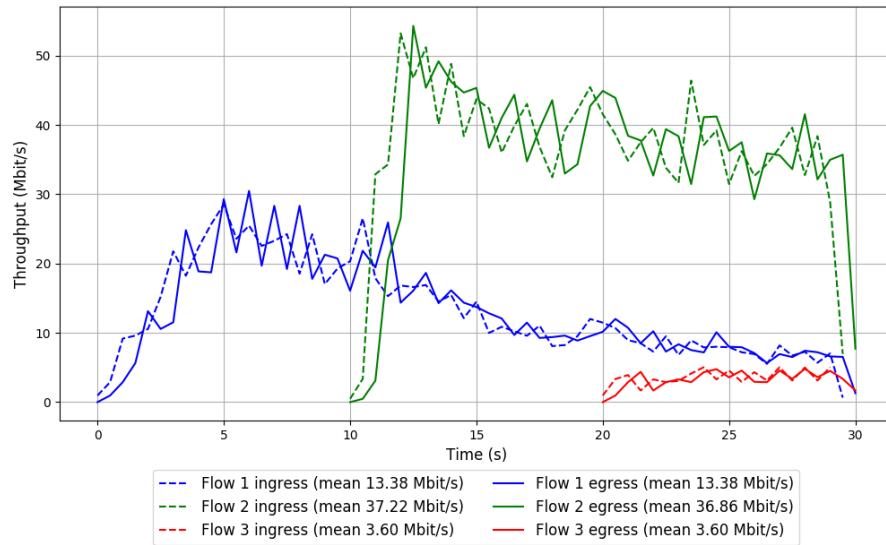


Run 4: Statistics of Indigo

```
Start at: 2019-01-25 07:26:17
End at: 2019-01-25 07:26:47
Local clock offset: -0.826 ms
Remote clock offset: 48.135 ms

# Below is generated by plot.py at 2019-01-25 08:51:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.76 Mbit/s
95th percentile per-packet one-way delay: 65.477 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 13.38 Mbit/s
95th percentile per-packet one-way delay: 58.705 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 36.86 Mbit/s
95th percentile per-packet one-way delay: 66.577 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 55.170 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

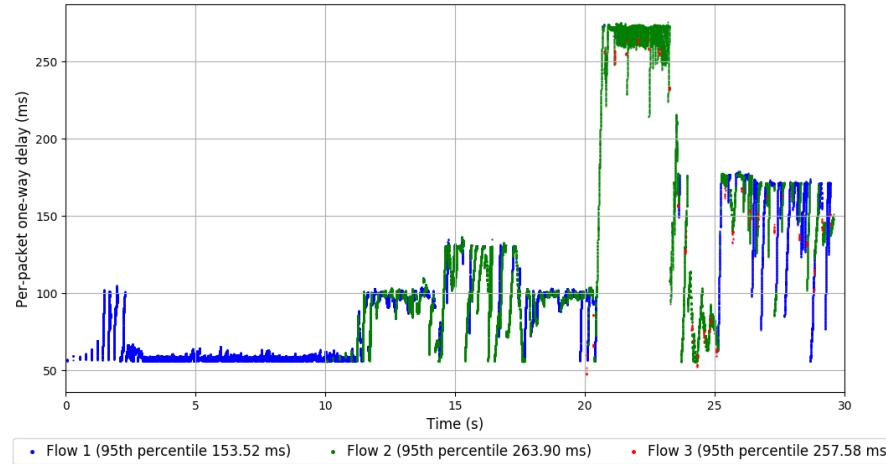
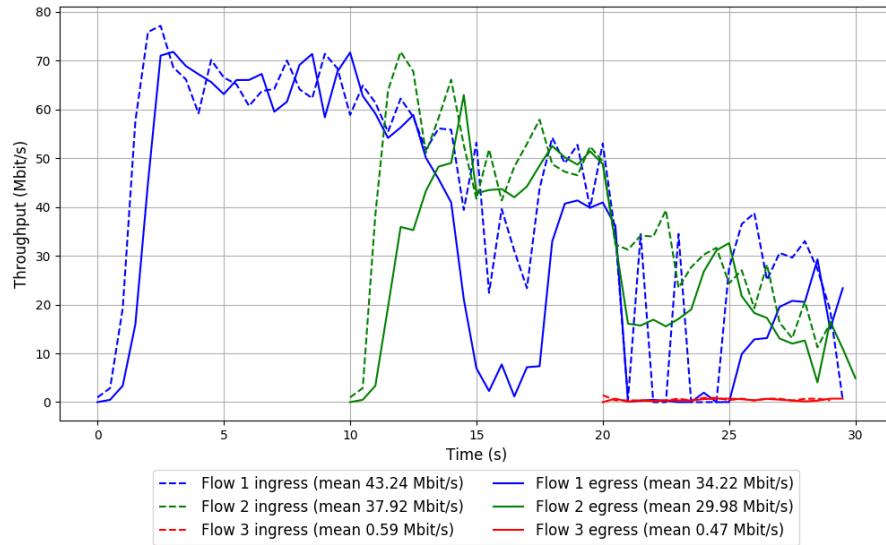


Run 5: Statistics of Indigo

```
Start at: 2019-01-25 08:00:41
End at: 2019-01-25 08:01:11
Local clock offset: 7.471 ms
Remote clock offset: 61.758 ms

# Below is generated by plot.py at 2019-01-25 08:51:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.05 Mbit/s
95th percentile per-packet one-way delay: 171.342 ms
Loss rate: 20.94%
-- Flow 1:
Average throughput: 34.22 Mbit/s
95th percentile per-packet one-way delay: 153.516 ms
Loss rate: 21.15%
-- Flow 2:
Average throughput: 29.98 Mbit/s
95th percentile per-packet one-way delay: 263.902 ms
Loss rate: 20.58%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 257.585 ms
Loss rate: 19.08%
```

Run 5: Report of Indigo — Data Link

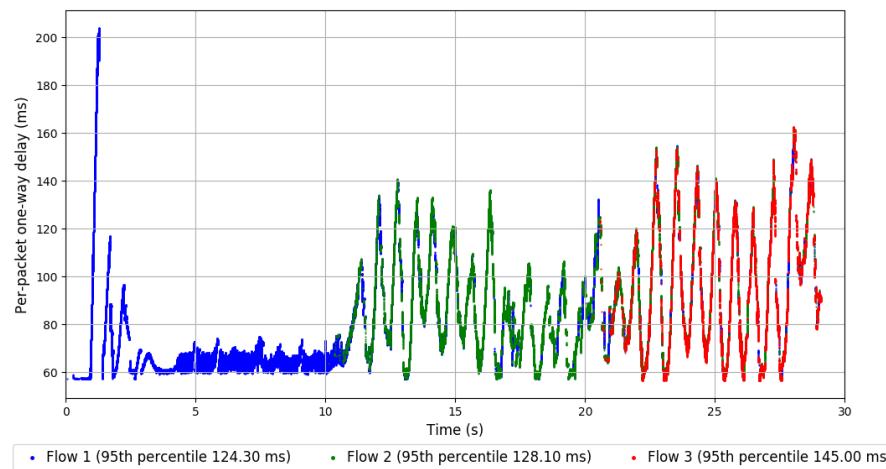
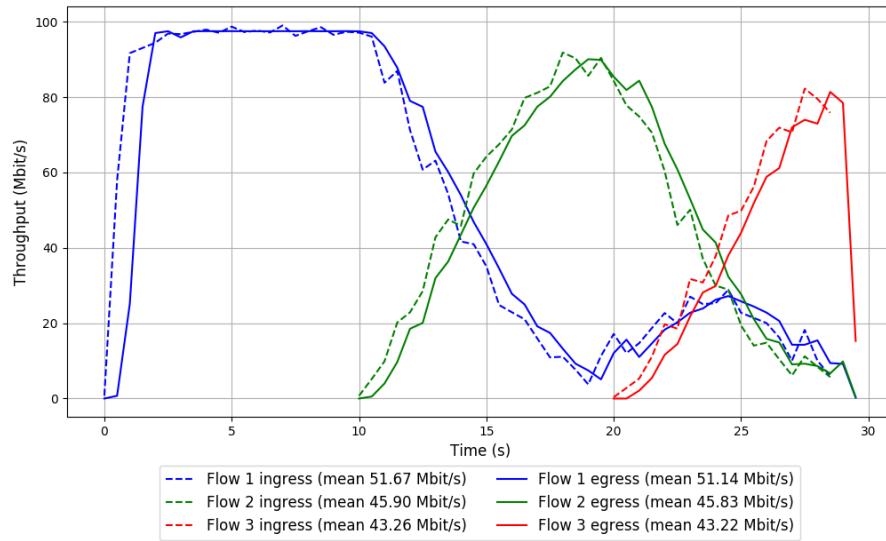


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-01-25 01:09:41
End at: 2019-01-25 01:10:11
Local clock offset: -1.152 ms
Remote clock offset: 8.737 ms

# Below is generated by plot.py at 2019-01-25 08:52:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 131.055 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 51.14 Mbit/s
95th percentile per-packet one-way delay: 124.295 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 45.83 Mbit/s
95th percentile per-packet one-way delay: 128.105 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.22 Mbit/s
95th percentile per-packet one-way delay: 144.998 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC3 — Data Link

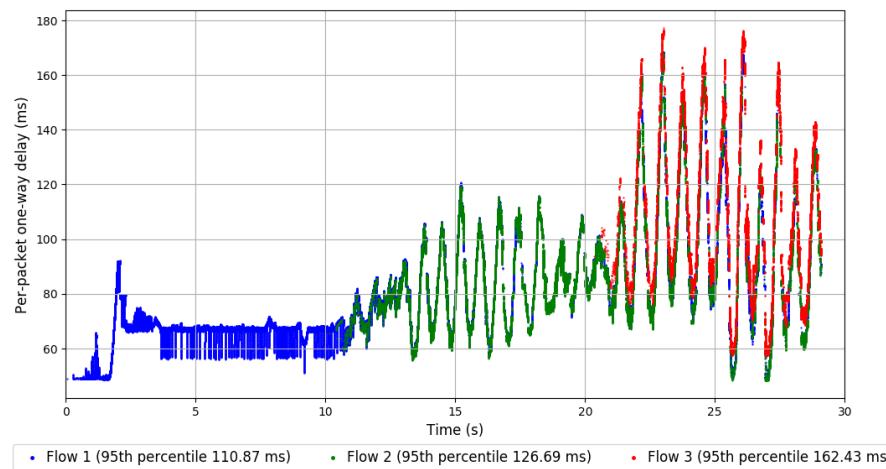
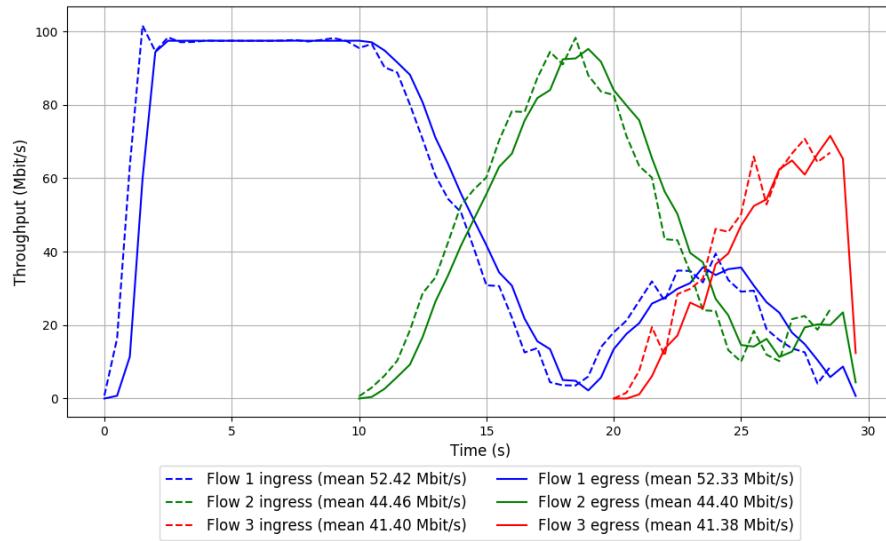


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 03:55:00
End at: 2019-01-25 03:55:30
Local clock offset: 4.544 ms
Remote clock offset: 56.394 ms

# Below is generated by plot.py at 2019-01-25 08:52:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.67 Mbit/s
95th percentile per-packet one-way delay: 134.938 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.33 Mbit/s
95th percentile per-packet one-way delay: 110.873 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 44.40 Mbit/s
95th percentile per-packet one-way delay: 126.691 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 41.38 Mbit/s
95th percentile per-packet one-way delay: 162.432 ms
Loss rate: 0.01%
```

Run 2: Report of Indigo-MusesC3 — Data Link

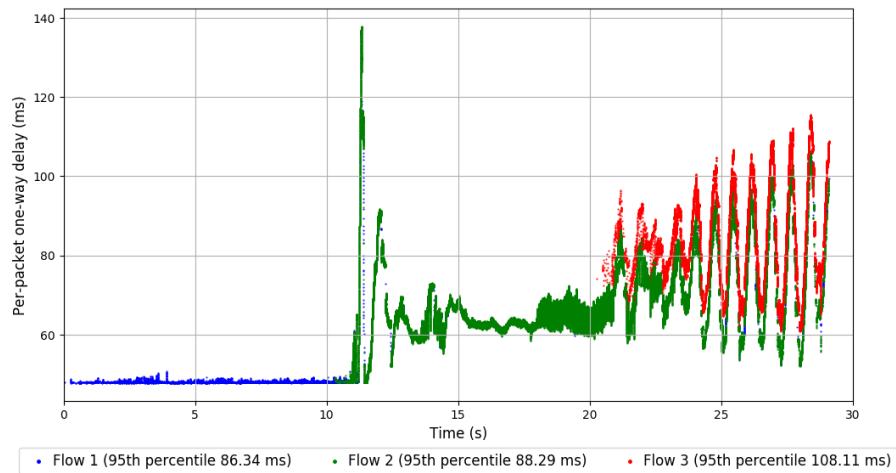
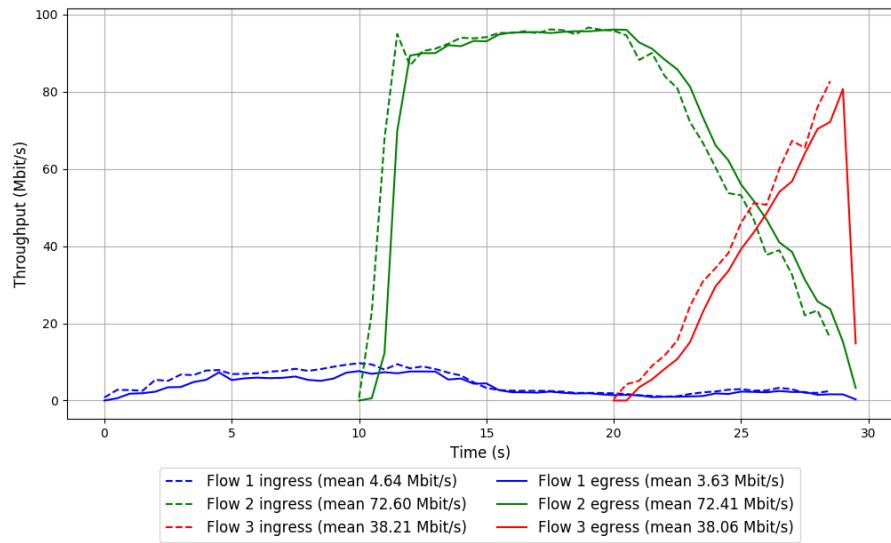


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 05:05:33
End at: 2019-01-25 05:06:03
Local clock offset: 3.437 ms
Remote clock offset: 37.395 ms

# Below is generated by plot.py at 2019-01-25 08:52:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.48 Mbit/s
95th percentile per-packet one-way delay: 98.432 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 86.341 ms
Loss rate: 21.64%
-- Flow 2:
Average throughput: 72.41 Mbit/s
95th percentile per-packet one-way delay: 88.286 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.06 Mbit/s
95th percentile per-packet one-way delay: 108.112 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

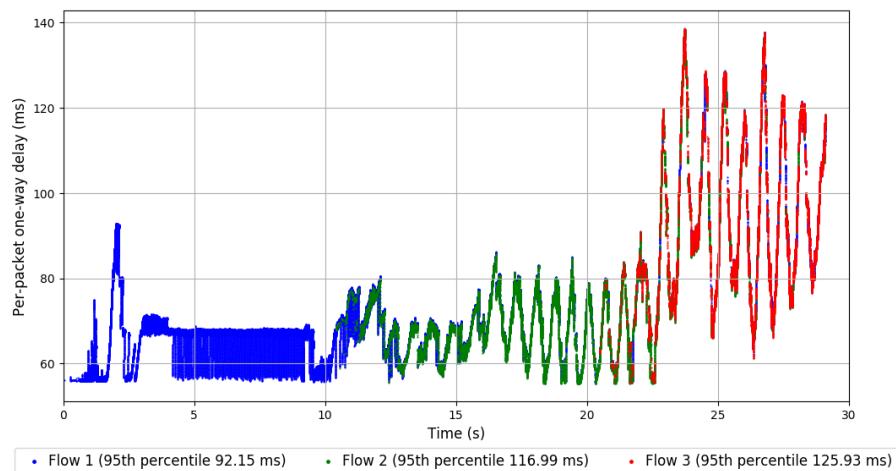
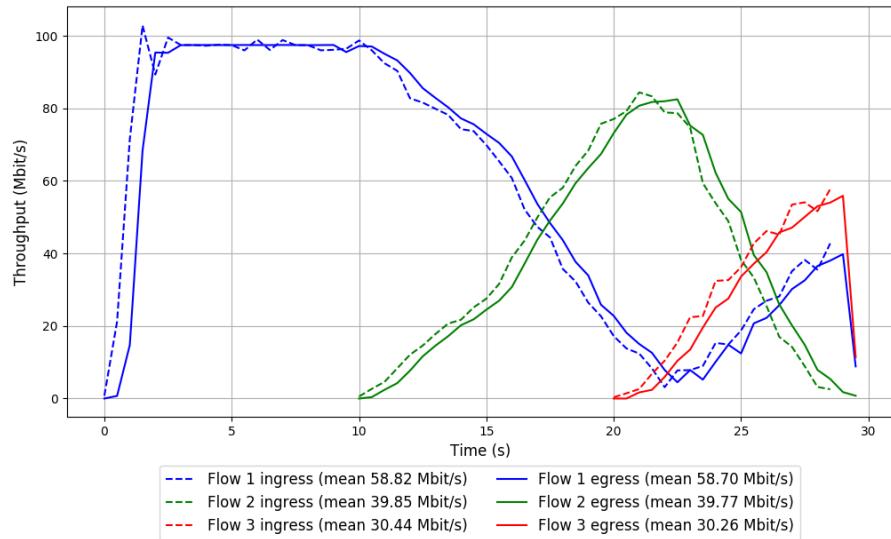


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 06:15:01
End at: 2019-01-25 06:15:31
Local clock offset: 9.753 ms
Remote clock offset: 47.282 ms

# Below is generated by plot.py at 2019-01-25 08:52:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.77 Mbit/s
95th percentile per-packet one-way delay: 114.278 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 92.146 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.77 Mbit/s
95th percentile per-packet one-way delay: 116.987 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 30.26 Mbit/s
95th percentile per-packet one-way delay: 125.927 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

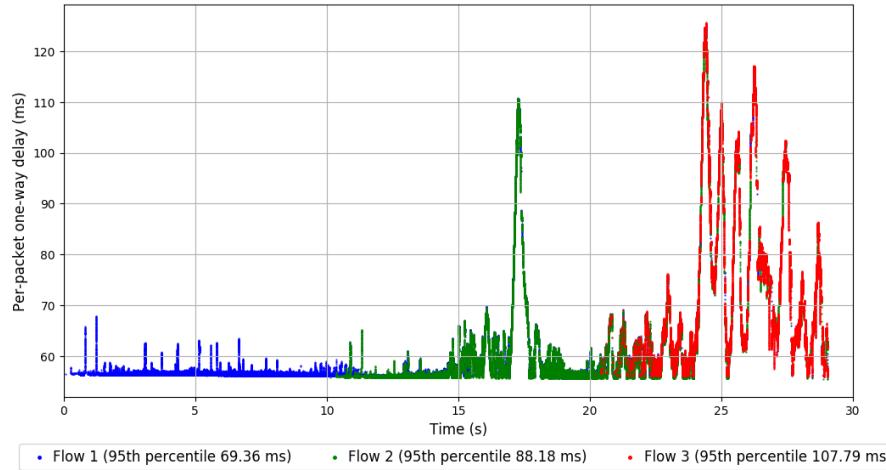
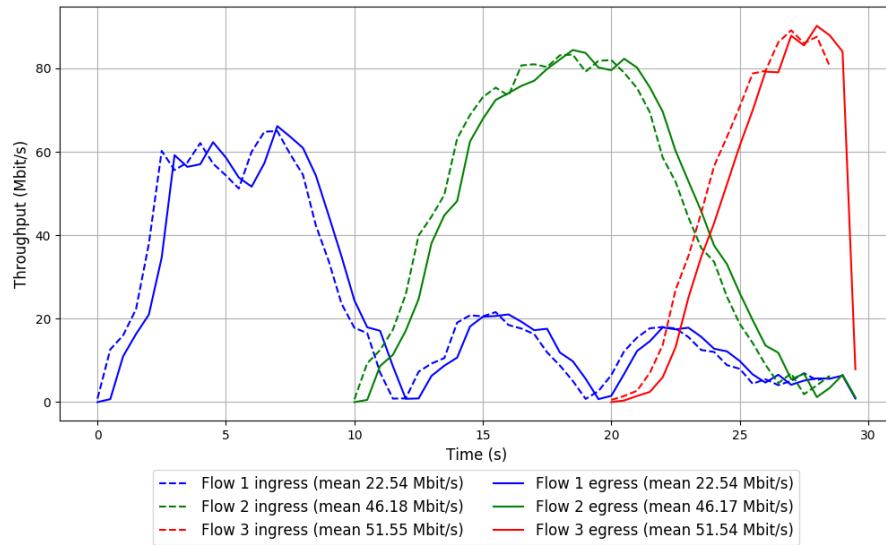


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 07:50:58
End at: 2019-01-25 07:51:28
Local clock offset: 7.319 ms
Remote clock offset: 53.926 ms

# Below is generated by plot.py at 2019-01-25 08:52:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.36 Mbit/s
95th percentile per-packet one-way delay: 98.512 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 22.54 Mbit/s
95th percentile per-packet one-way delay: 69.358 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.17 Mbit/s
95th percentile per-packet one-way delay: 88.182 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.54 Mbit/s
95th percentile per-packet one-way delay: 107.787 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link

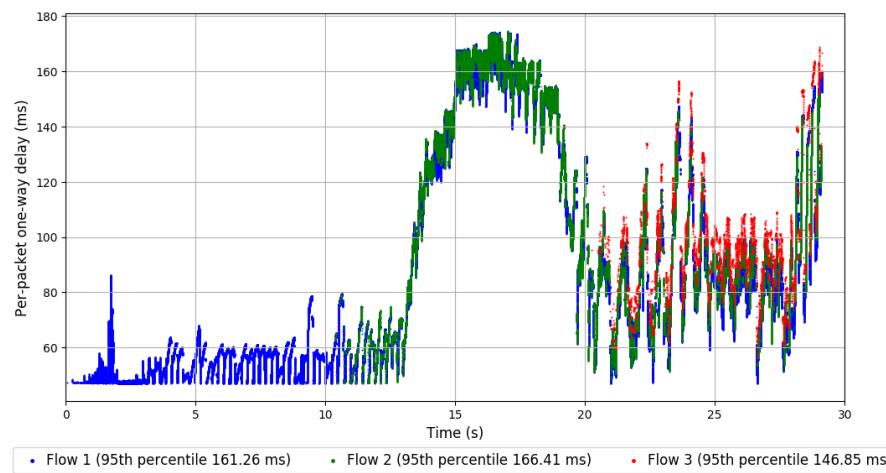
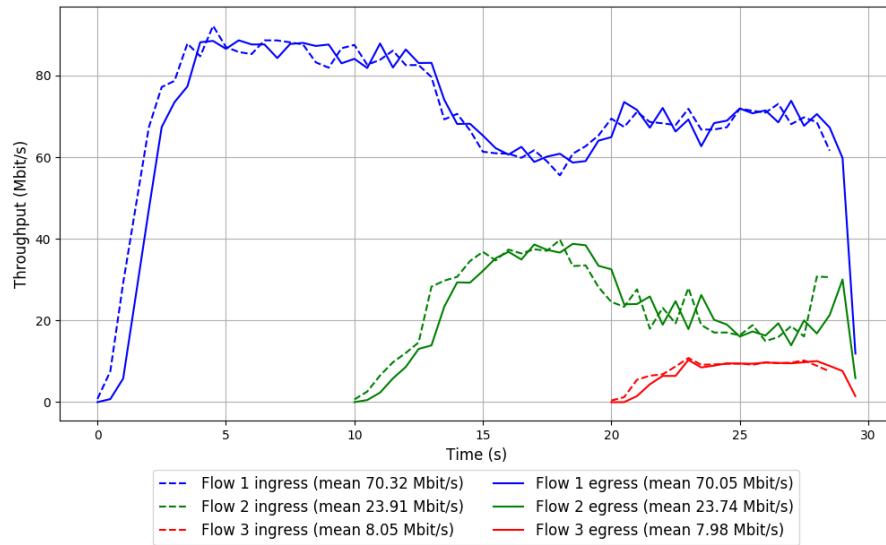


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-01-25 01:05:47
End at: 2019-01-25 01:06:17
Local clock offset: -1.548 ms
Remote clock offset: 5.834 ms

# Below is generated by plot.py at 2019-01-25 08:52:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.94 Mbit/s
95th percentile per-packet one-way delay: 162.953 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 70.05 Mbit/s
95th percentile per-packet one-way delay: 161.265 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 23.74 Mbit/s
95th percentile per-packet one-way delay: 166.412 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 146.853 ms
Loss rate: 0.36%
```

Run 1: Report of Indigo-MusesC5 — Data Link

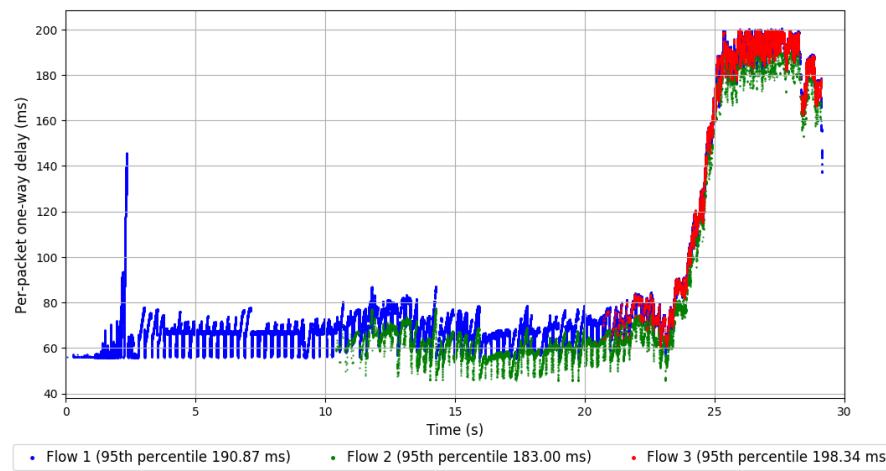
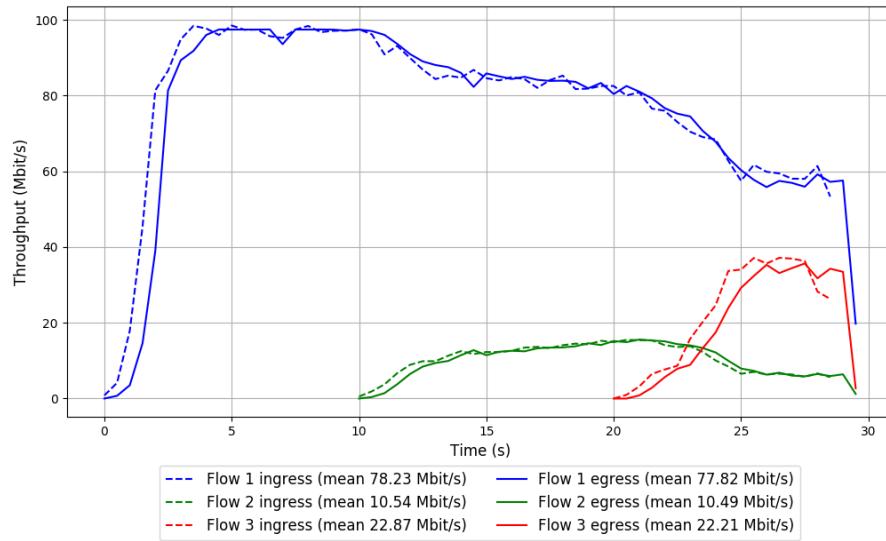


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 03:25:21
End at: 2019-01-25 03:25:51
Local clock offset: -0.122 ms
Remote clock offset: 36.058 ms

# Below is generated by plot.py at 2019-01-25 08:52:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.22 Mbit/s
95th percentile per-packet one-way delay: 193.444 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 77.82 Mbit/s
95th percentile per-packet one-way delay: 190.873 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 10.49 Mbit/s
95th percentile per-packet one-way delay: 182.997 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 22.21 Mbit/s
95th percentile per-packet one-way delay: 198.337 ms
Loss rate: 2.53%
```

Run 2: Report of Indigo-MusesC5 — Data Link

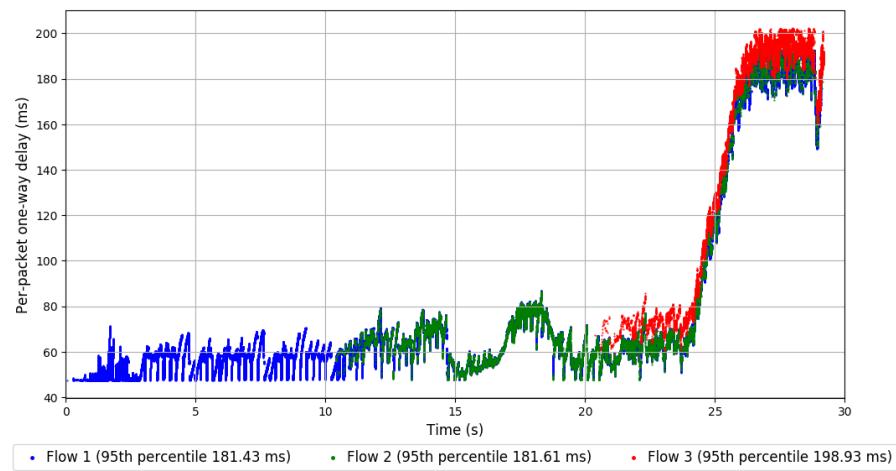
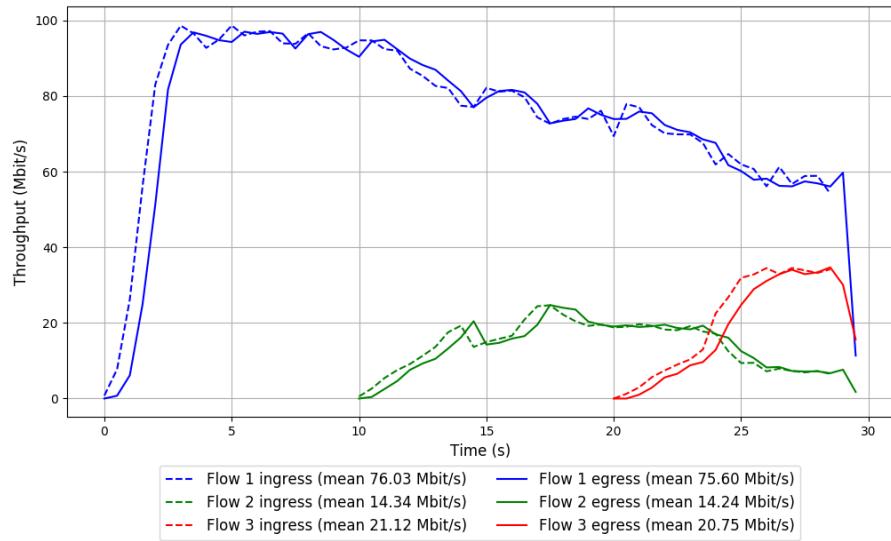


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 05:00:34
End at: 2019-01-25 05:01:04
Local clock offset: 3.375 ms
Remote clock offset: 45.216 ms

# Below is generated by plot.py at 2019-01-25 08:52:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.97 Mbit/s
95th percentile per-packet one-way delay: 187.391 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 75.60 Mbit/s
95th percentile per-packet one-way delay: 181.432 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 14.24 Mbit/s
95th percentile per-packet one-way delay: 181.611 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 20.75 Mbit/s
95th percentile per-packet one-way delay: 198.928 ms
Loss rate: 0.39%
```

Run 3: Report of Indigo-MusesC5 — Data Link

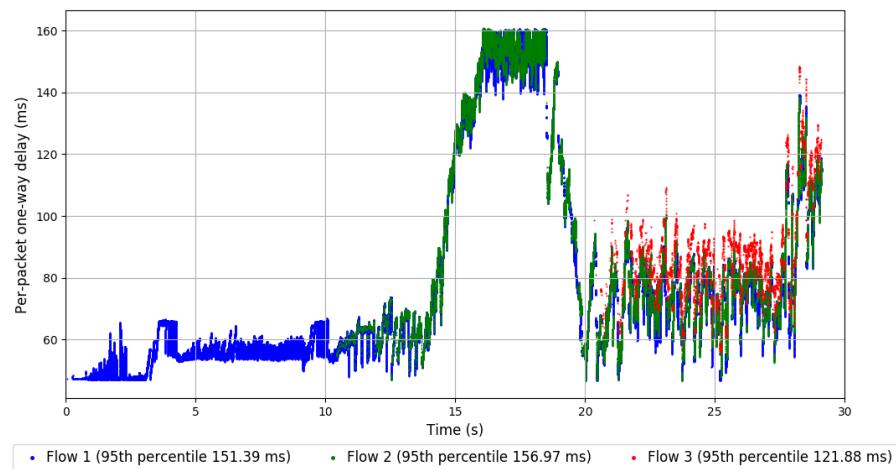
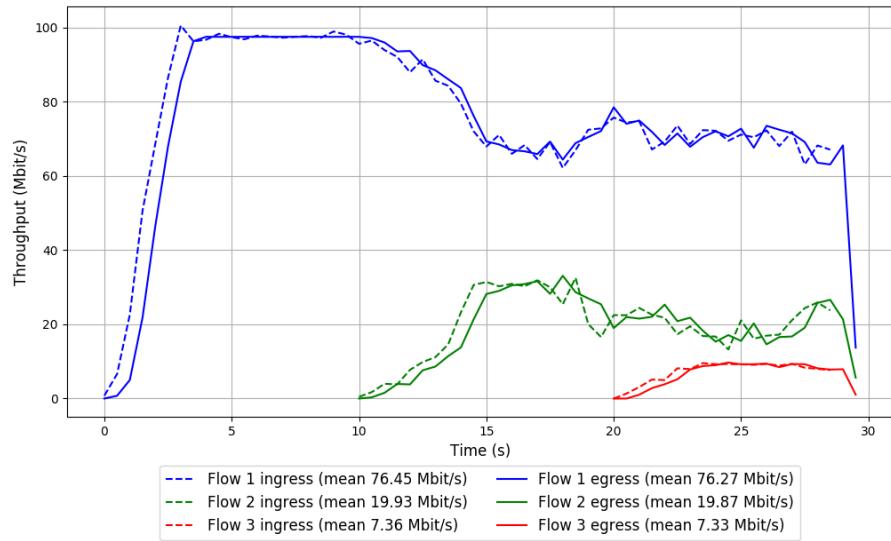


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 06:09:40
End at: 2019-01-25 06:10:10
Local clock offset: 11.176 ms
Remote clock offset: 45.646 ms

# Below is generated by plot.py at 2019-01-25 08:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 153.151 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 76.27 Mbit/s
95th percentile per-packet one-way delay: 151.389 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.87 Mbit/s
95th percentile per-packet one-way delay: 156.965 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.33 Mbit/s
95th percentile per-packet one-way delay: 121.880 ms
Loss rate: 0.47%
```

Run 4: Report of Indigo-MusesC5 — Data Link

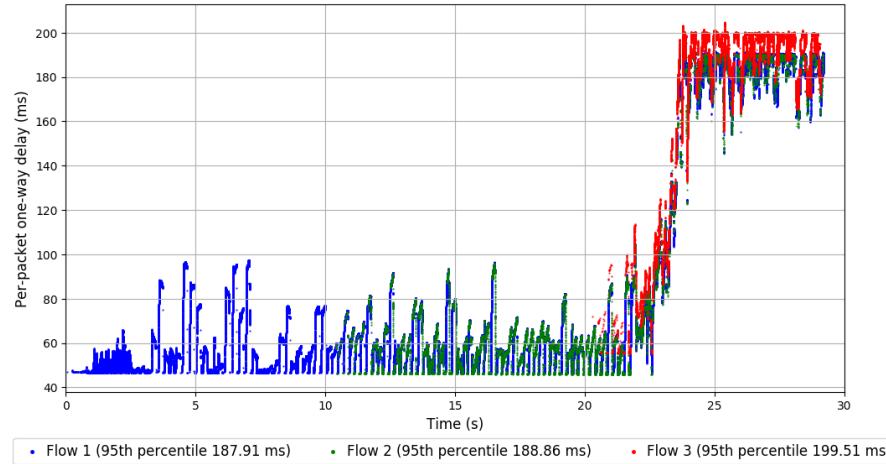
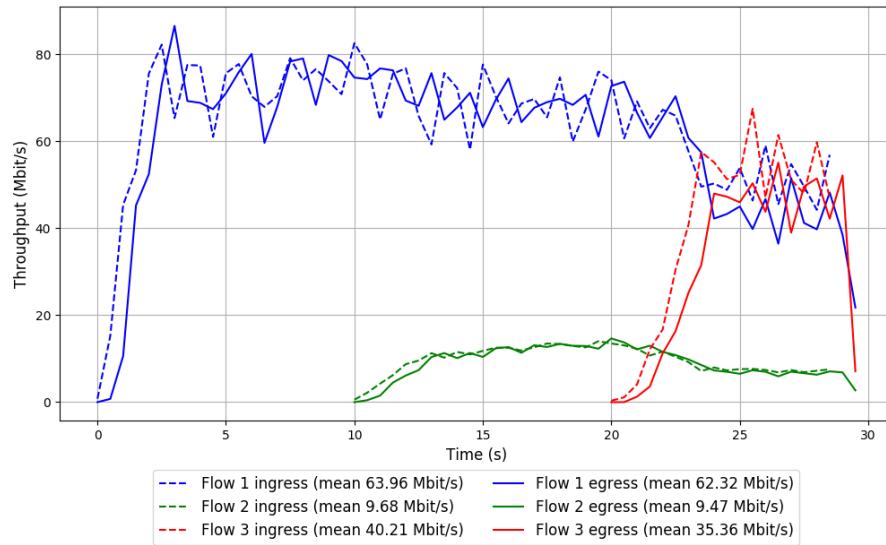


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 07:49:01
End at: 2019-01-25 07:49:31
Local clock offset: 6.997 ms
Remote clock offset: 50.987 ms

# Below is generated by plot.py at 2019-01-25 08:53:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.13 Mbit/s
95th percentile per-packet one-way delay: 195.841 ms
Loss rate: 3.47%
-- Flow 1:
Average throughput: 62.32 Mbit/s
95th percentile per-packet one-way delay: 187.913 ms
Loss rate: 2.09%
-- Flow 2:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 188.863 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 35.36 Mbit/s
95th percentile per-packet one-way delay: 199.509 ms
Loss rate: 11.76%
```

Run 5: Report of Indigo-MusesC5 — Data Link

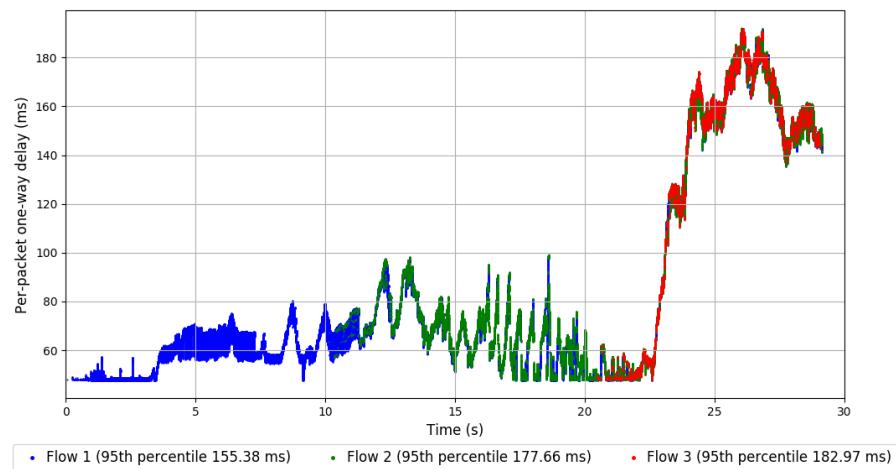
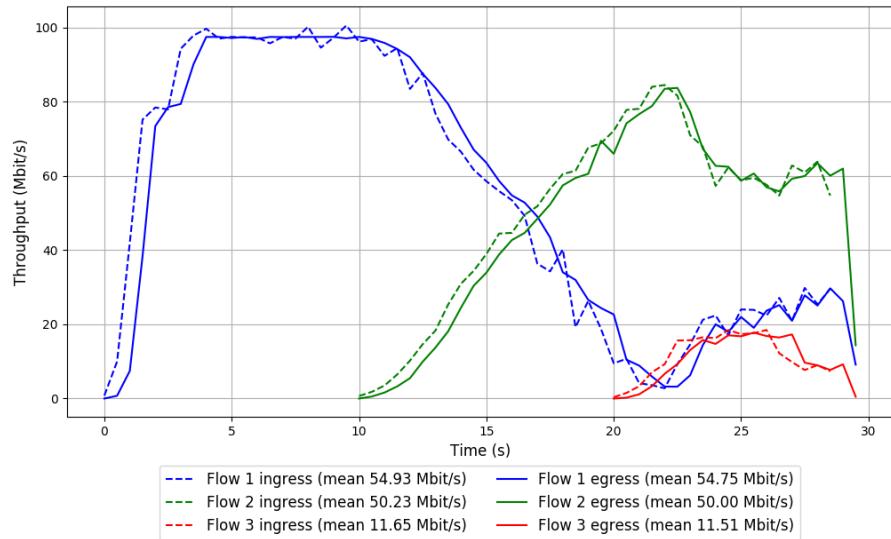


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 01:13:18
End at: 2019-01-25 01:13:48
Local clock offset: -0.852 ms
Remote clock offset: 9.79 ms

# Below is generated by plot.py at 2019-01-25 08:53:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 173.032 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 54.75 Mbit/s
95th percentile per-packet one-way delay: 155.383 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 50.00 Mbit/s
95th percentile per-packet one-way delay: 177.663 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 11.51 Mbit/s
95th percentile per-packet one-way delay: 182.971 ms
Loss rate: 0.61%
```

Run 1: Report of Indigo-MusesD — Data Link

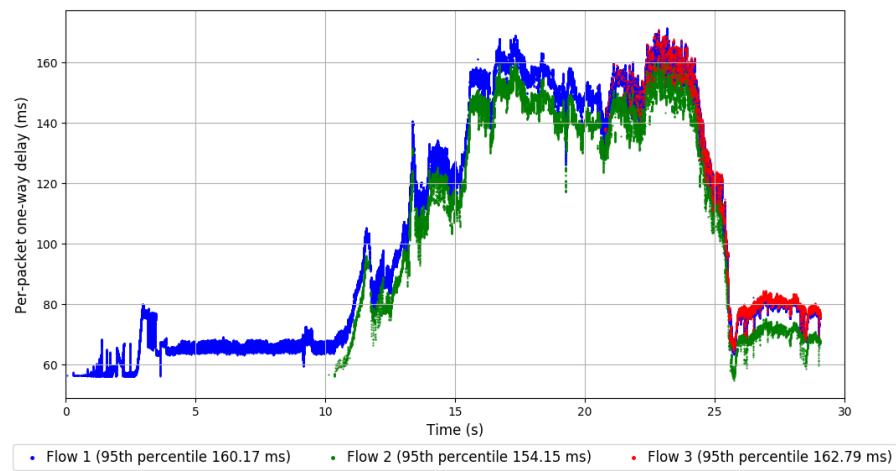
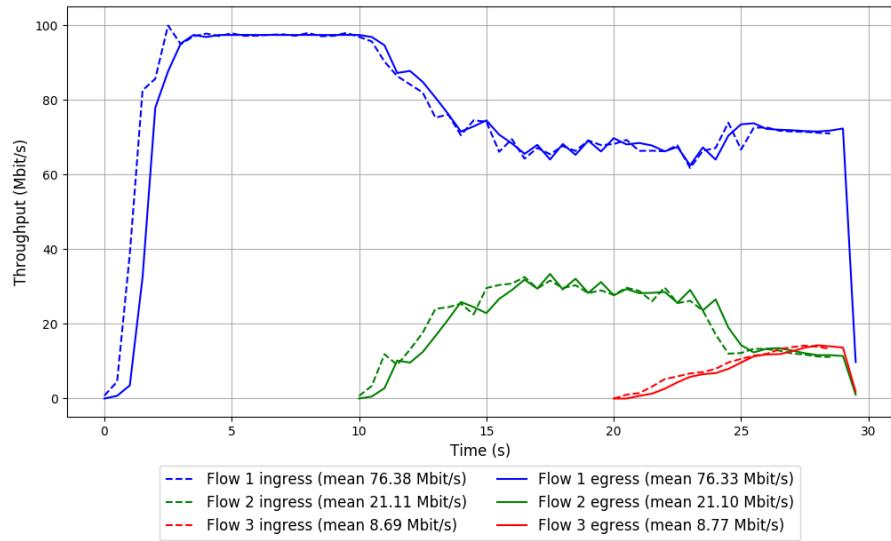


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 04:03:23
End at: 2019-01-25 04:03:53
Local clock offset: 4.079 ms
Remote clock offset: 55.221 ms

# Below is generated by plot.py at 2019-01-25 08:53:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.69 Mbit/s
95th percentile per-packet one-way delay: 159.324 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.33 Mbit/s
95th percentile per-packet one-way delay: 160.173 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.10 Mbit/s
95th percentile per-packet one-way delay: 154.152 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 162.790 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesD — Data Link

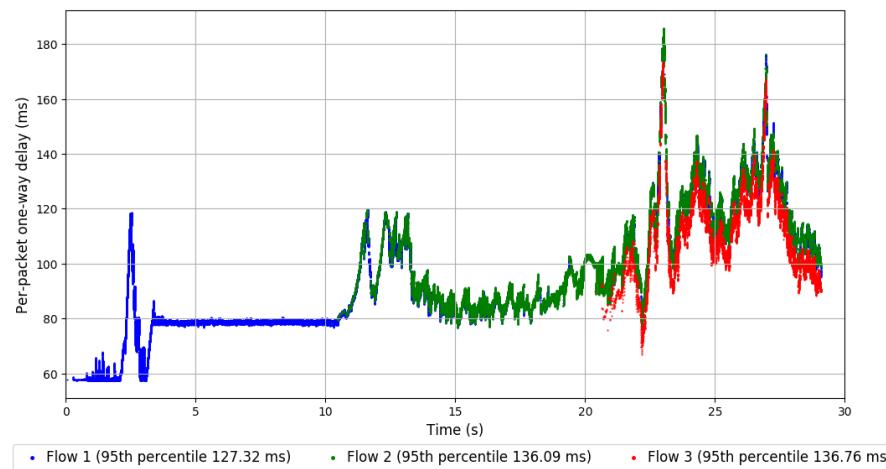
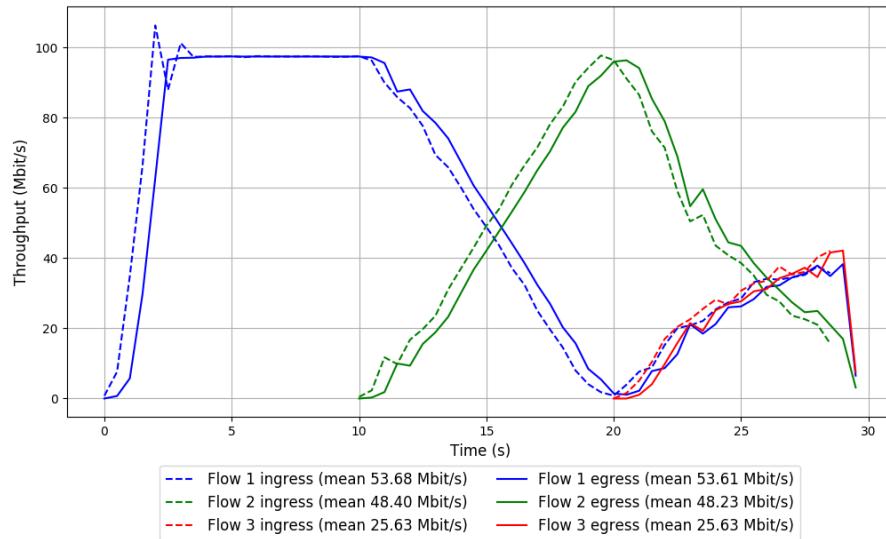


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 05:09:38
End at: 2019-01-25 05:10:08
Local clock offset: 3.705 ms
Remote clock offset: 33.759 ms

# Below is generated by plot.py at 2019-01-25 08:53:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.62 Mbit/s
95th percentile per-packet one-way delay: 132.440 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 53.61 Mbit/s
95th percentile per-packet one-way delay: 127.324 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.23 Mbit/s
95th percentile per-packet one-way delay: 136.090 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 25.63 Mbit/s
95th percentile per-packet one-way delay: 136.756 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

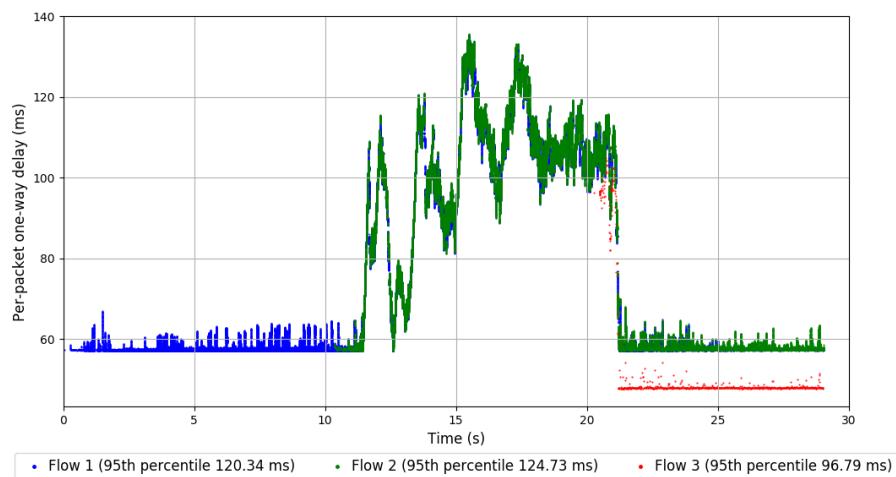
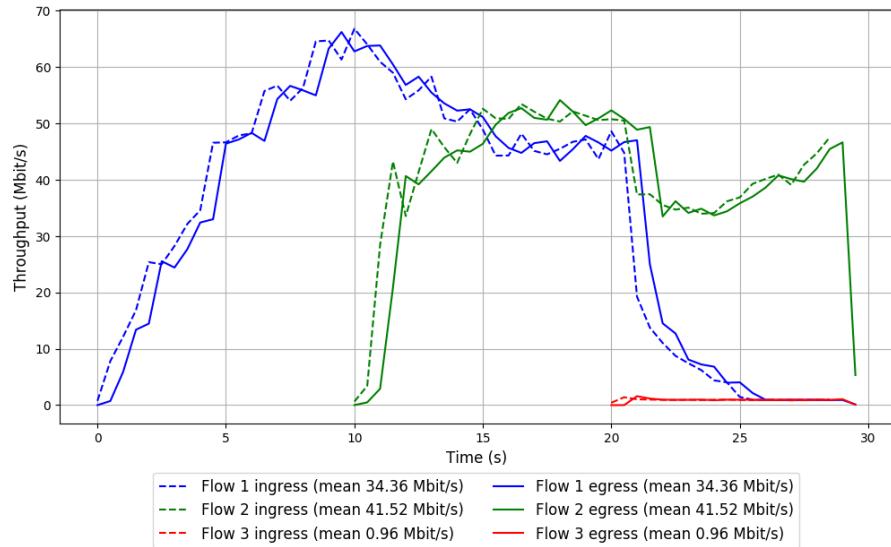


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 06:53:44
End at: 2019-01-25 06:54:14
Local clock offset: 15.75 ms
Remote clock offset: 49.236 ms

# Below is generated by plot.py at 2019-01-25 08:53:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.69 Mbit/s
95th percentile per-packet one-way delay: 122.798 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.36 Mbit/s
95th percentile per-packet one-way delay: 120.344 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.52 Mbit/s
95th percentile per-packet one-way delay: 124.735 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 96.787 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesD — Data Link

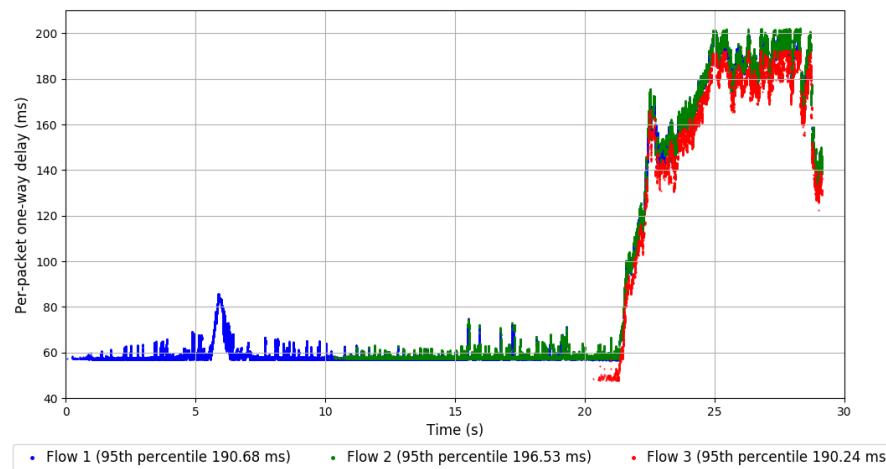
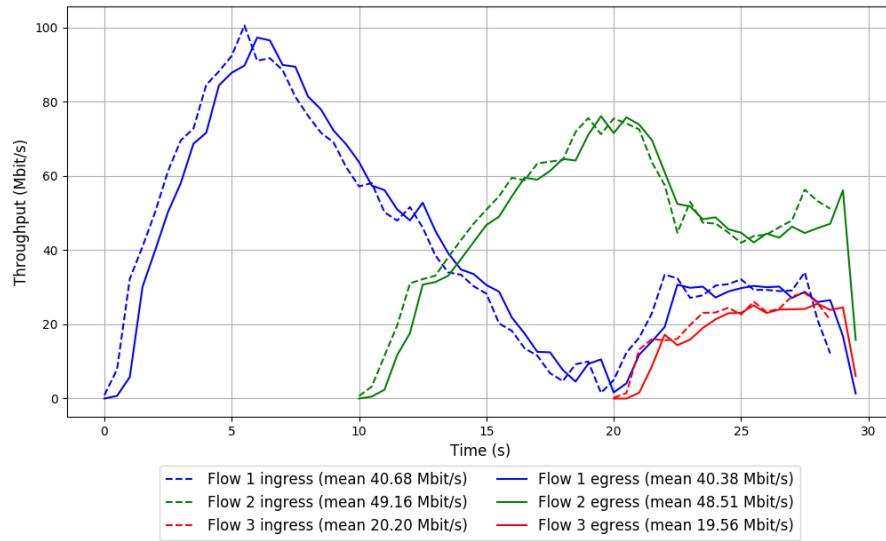


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 07:52:29
End at: 2019-01-25 07:52:59
Local clock offset: 7.214 ms
Remote clock offset: 56.368 ms

# Below is generated by plot.py at 2019-01-25 08:53:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.91 Mbit/s
95th percentile per-packet one-way delay: 194.004 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 40.38 Mbit/s
95th percentile per-packet one-way delay: 190.676 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 48.51 Mbit/s
95th percentile per-packet one-way delay: 196.528 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 19.56 Mbit/s
95th percentile per-packet one-way delay: 190.243 ms
Loss rate: 2.27%
```

Run 5: Report of Indigo-MusesD — Data Link

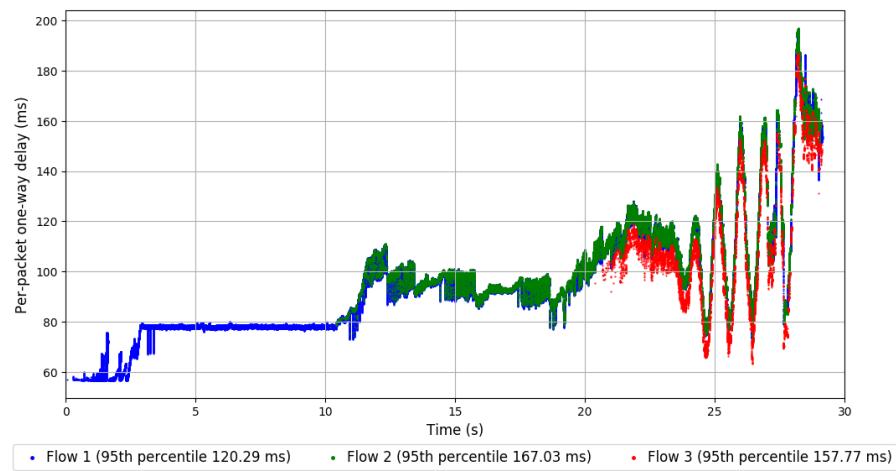
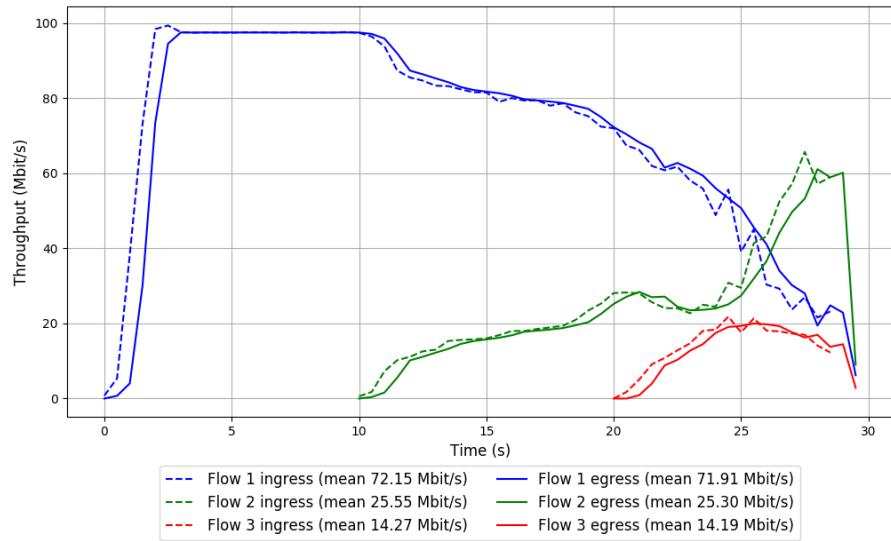


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 02:17:28
End at: 2019-01-25 02:17:58
Local clock offset: 0.88 ms
Remote clock offset: 5.594 ms

# Below is generated by plot.py at 2019-01-25 08:53:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.61 Mbit/s
95th percentile per-packet one-way delay: 150.751 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 71.91 Mbit/s
95th percentile per-packet one-way delay: 120.294 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 167.031 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 14.19 Mbit/s
95th percentile per-packet one-way delay: 157.771 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesT — Data Link

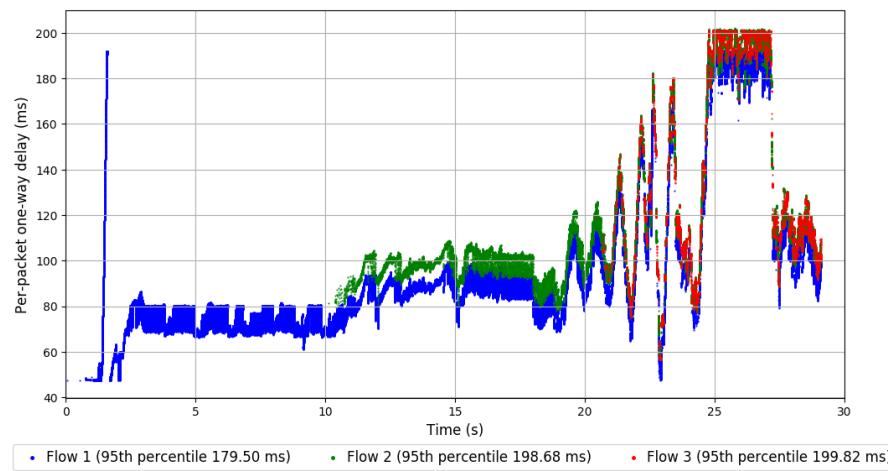
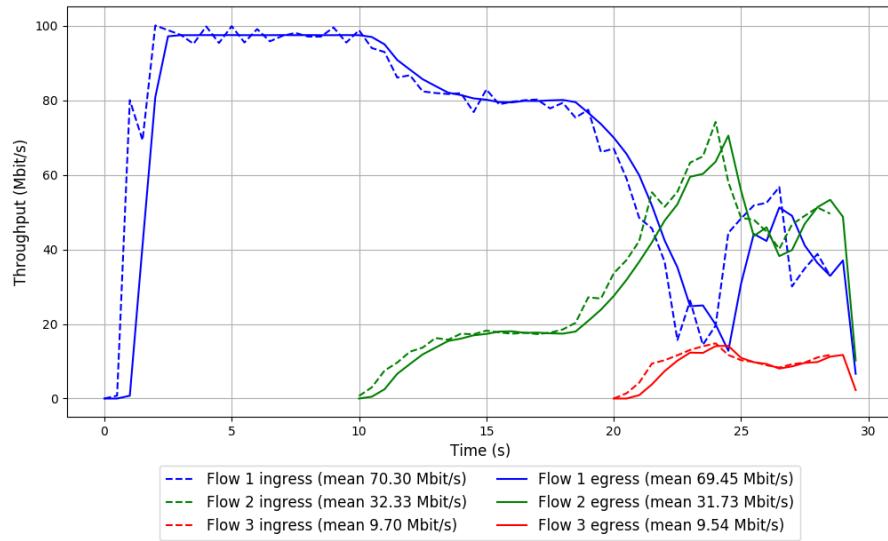


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 04:44:45
End at: 2019-01-25 04:45:15
Local clock offset: 2.889 ms
Remote clock offset: 53.949 ms

# Below is generated by plot.py at 2019-01-25 08:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.00 Mbit/s
95th percentile per-packet one-way delay: 189.711 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 69.45 Mbit/s
95th percentile per-packet one-way delay: 179.502 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 31.73 Mbit/s
95th percentile per-packet one-way delay: 198.682 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 199.821 ms
Loss rate: 1.94%
```

Run 2: Report of Indigo-MusesT — Data Link

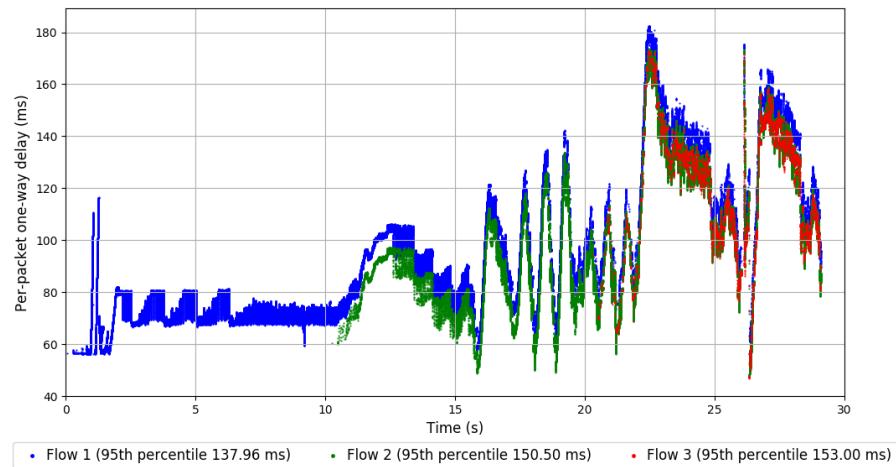
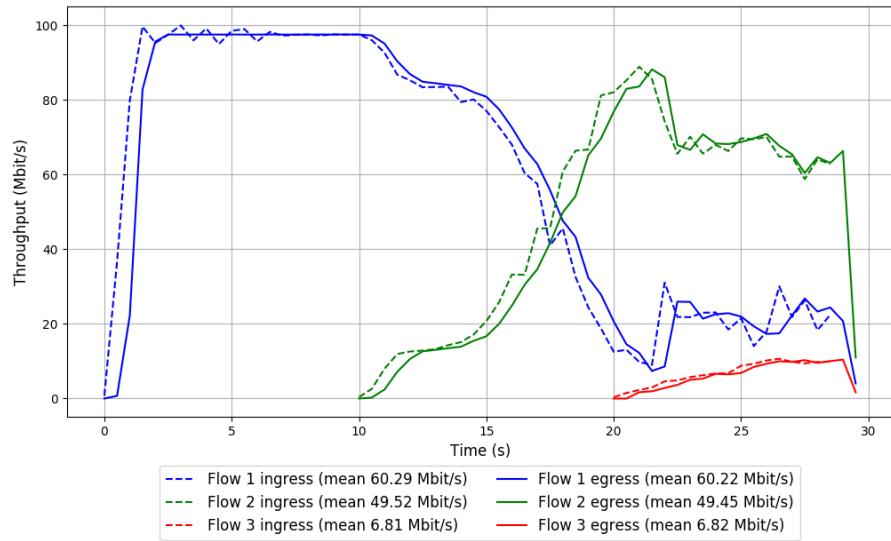


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 05:49:34
End at: 2019-01-25 05:50:04
Local clock offset: 16.793 ms
Remote clock offset: 40.35 ms

# Below is generated by plot.py at 2019-01-25 08:54:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.37 Mbit/s
95th percentile per-packet one-way delay: 145.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.22 Mbit/s
95th percentile per-packet one-way delay: 137.961 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.45 Mbit/s
95th percentile per-packet one-way delay: 150.499 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 153.003 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesT — Data Link

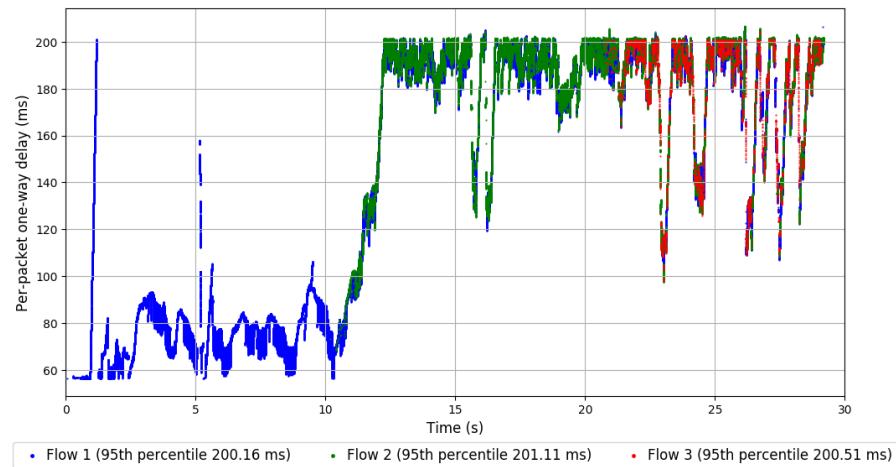
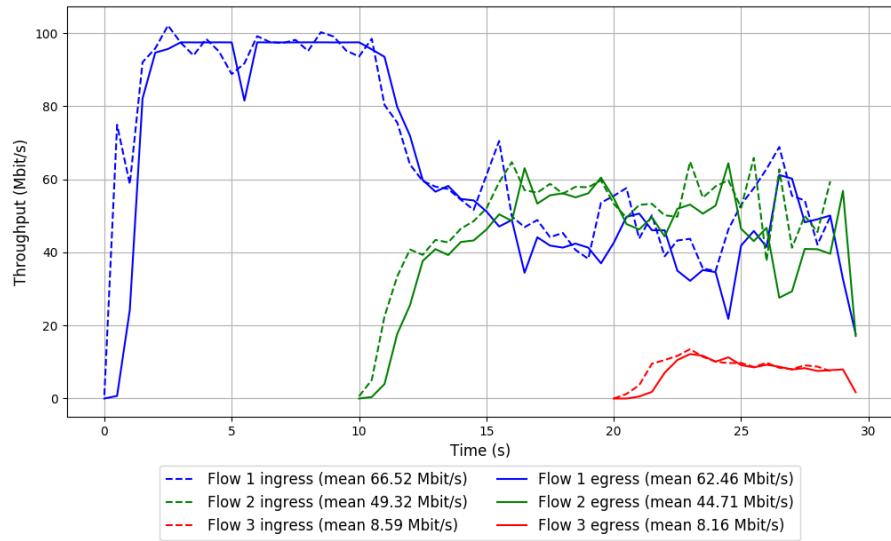


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 07:38:29
End at: 2019-01-25 07:38:59
Local clock offset: 4.595 ms
Remote clock offset: 48.185 ms

# Below is generated by plot.py at 2019-01-25 08:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.08 Mbit/s
95th percentile per-packet one-way delay: 200.607 ms
Loss rate: 6.63%
-- Flow 1:
Average throughput: 62.46 Mbit/s
95th percentile per-packet one-way delay: 200.164 ms
Loss rate: 5.64%
-- Flow 2:
Average throughput: 44.71 Mbit/s
95th percentile per-packet one-way delay: 201.110 ms
Loss rate: 8.74%
-- Flow 3:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 200.515 ms
Loss rate: 6.08%
```

Run 4: Report of Indigo-MusesT — Data Link

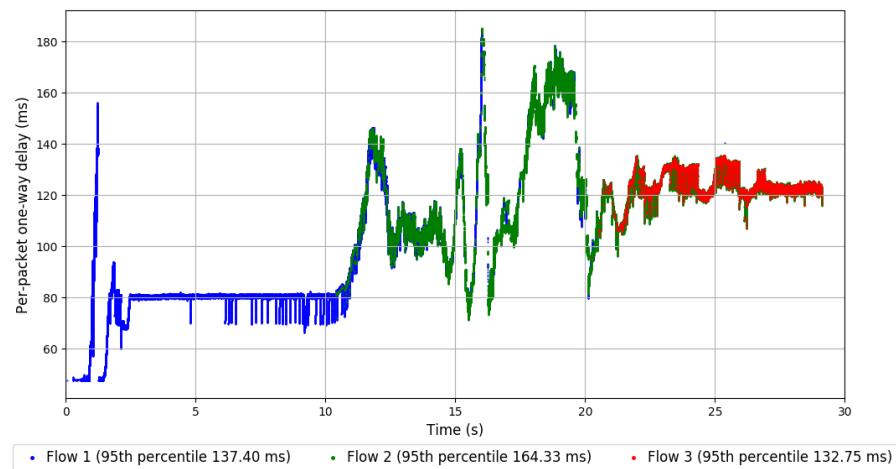
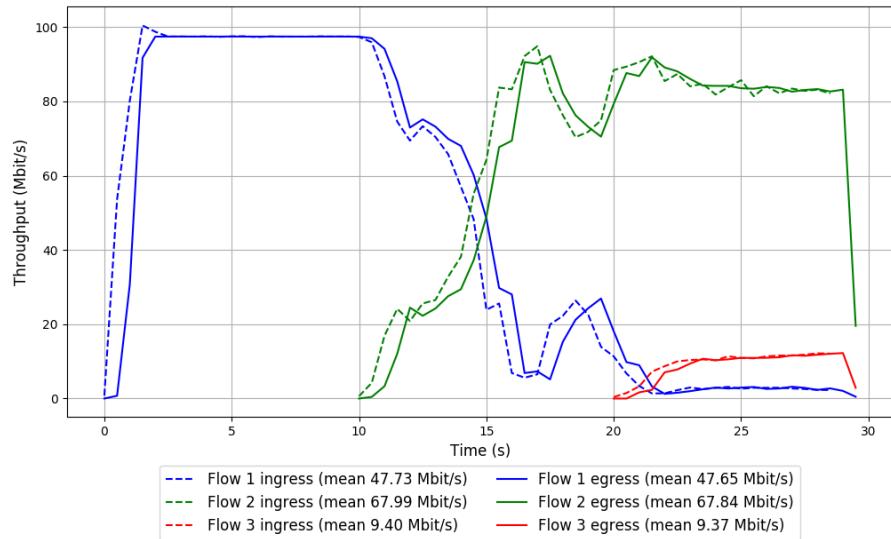


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 08:26:59
End at: 2019-01-25 08:27:29
Local clock offset: 5.896 ms
Remote clock offset: 57.137 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.71 Mbit/s
95th percentile per-packet one-way delay: 156.386 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.65 Mbit/s
95th percentile per-packet one-way delay: 137.397 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.84 Mbit/s
95th percentile per-packet one-way delay: 164.331 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 132.749 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesT — Data Link

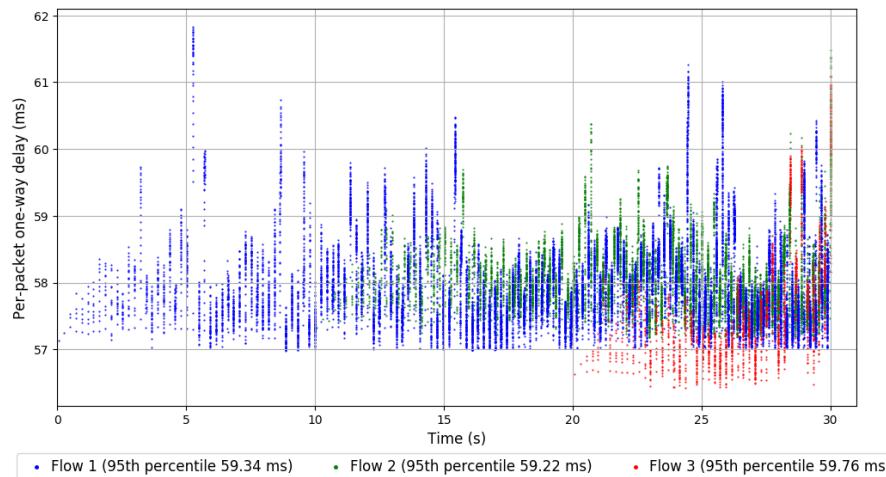
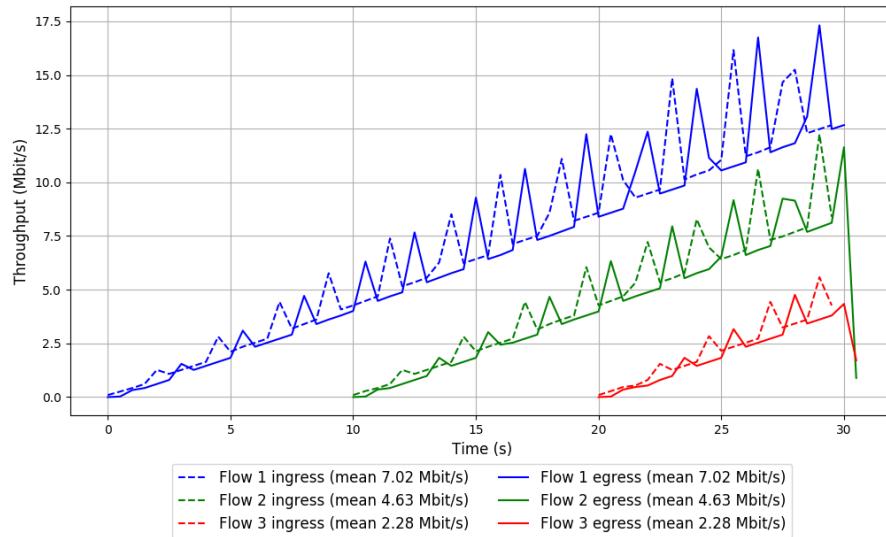


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 01:52:54
End at: 2019-01-25 01:53:24
Local clock offset: -2.762 ms
Remote clock offset: 6.563 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.82 Mbit/s
95th percentile per-packet one-way delay: 59.334 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 59.335 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 59.216 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 59.755 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

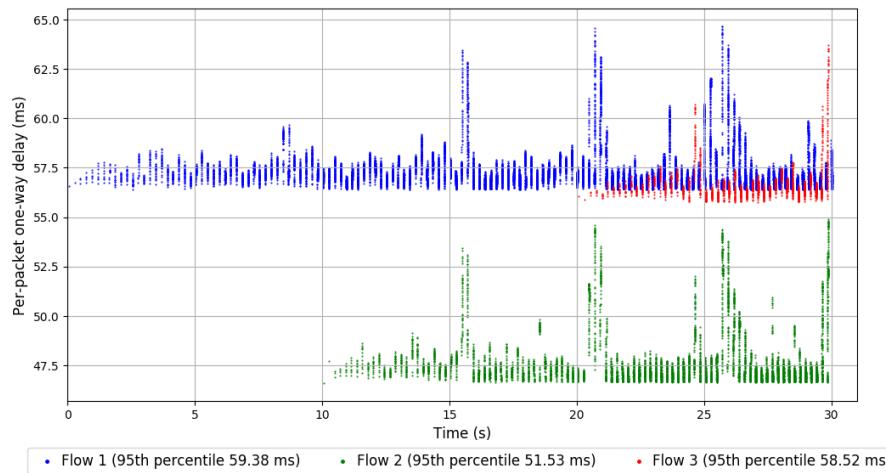
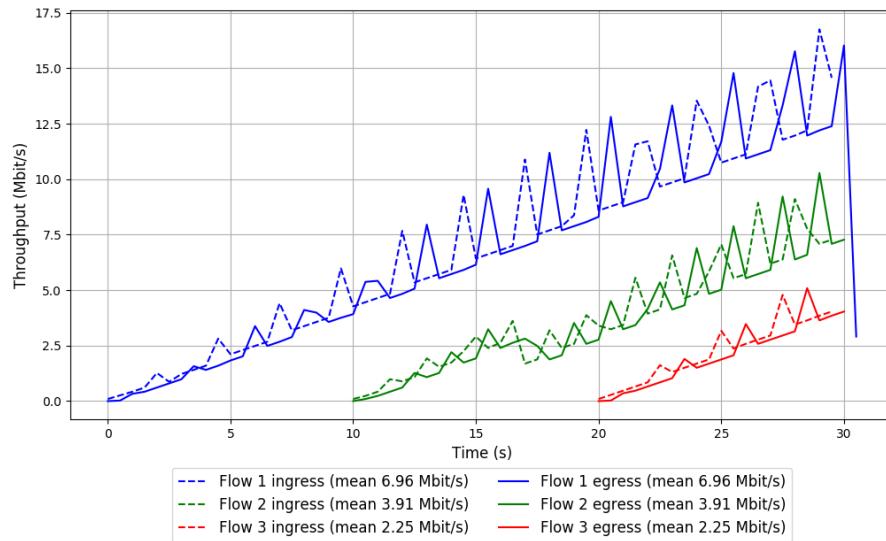


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-25 04:39:48
End at: 2019-01-25 04:40:18
Local clock offset: 2.904 ms
Remote clock offset: 53.062 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 58.757 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 59.379 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 51.533 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 58.524 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

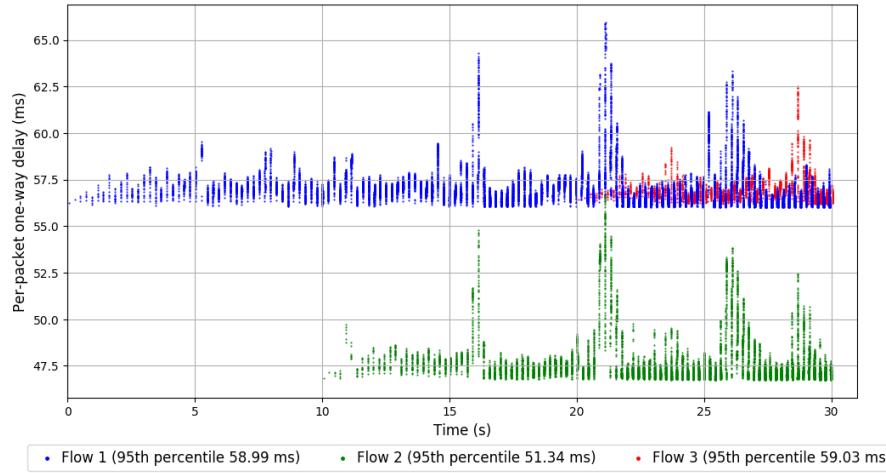
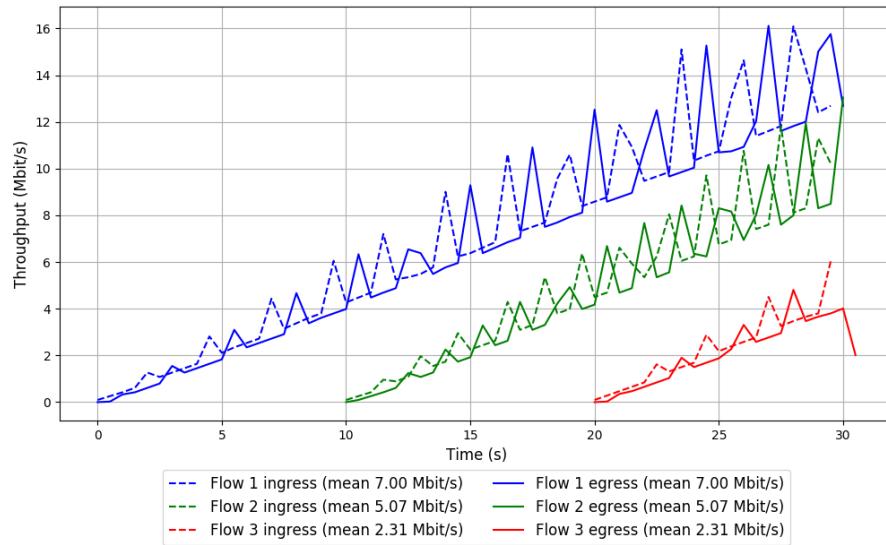


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-25 05:43:58
End at: 2019-01-25 05:44:28
Local clock offset: 14.933 ms
Remote clock offset: 38.194 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.11 Mbit/s
95th percentile per-packet one-way delay: 58.465 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 58.994 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.07 Mbit/s
95th percentile per-packet one-way delay: 51.342 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 59.026 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

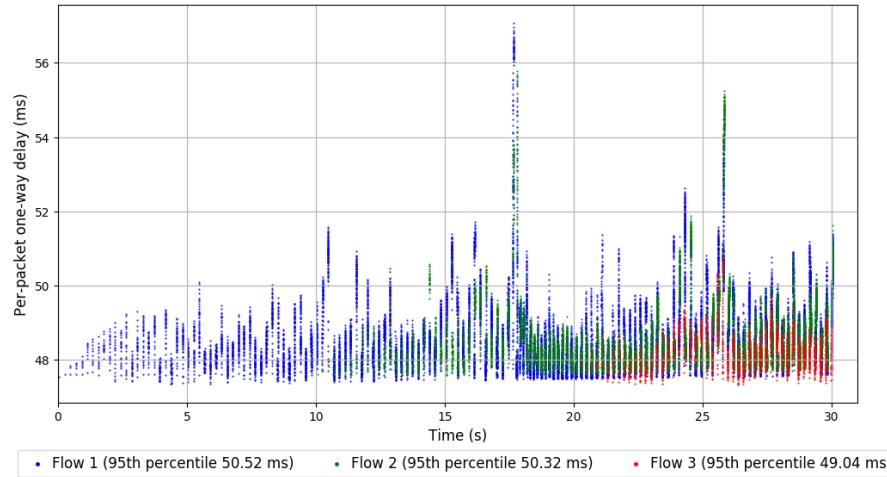
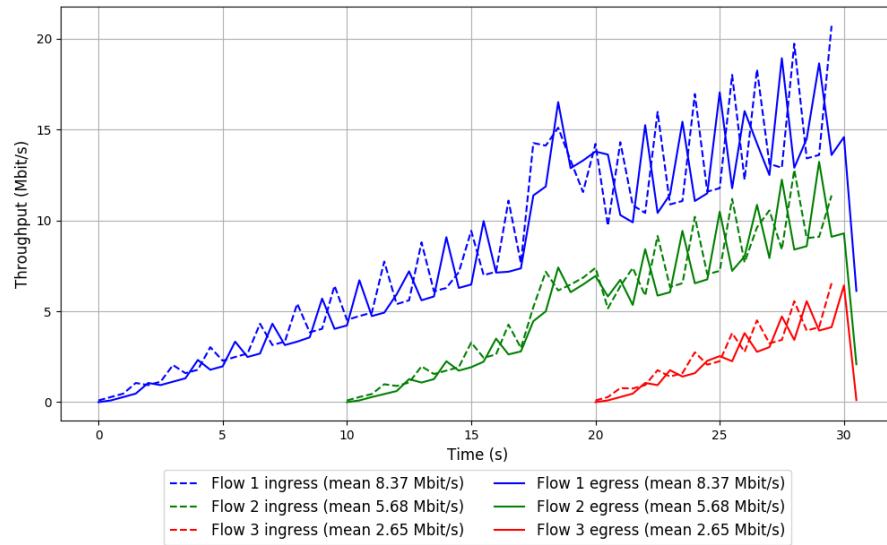


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-25 07:34:12
End at: 2019-01-25 07:34:42
Local clock offset: 2.376 ms
Remote clock offset: 48.122 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.03 Mbit/s
95th percentile per-packet one-way delay: 50.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 50.524 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 50.322 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 49.036 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

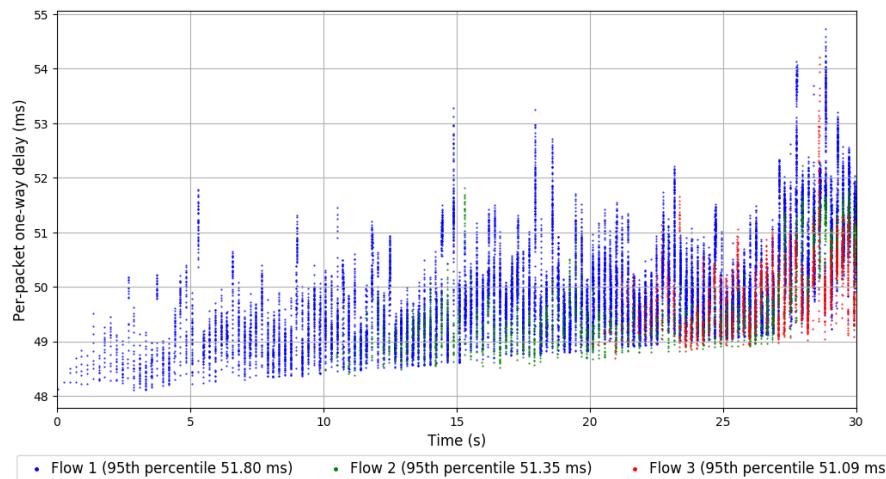
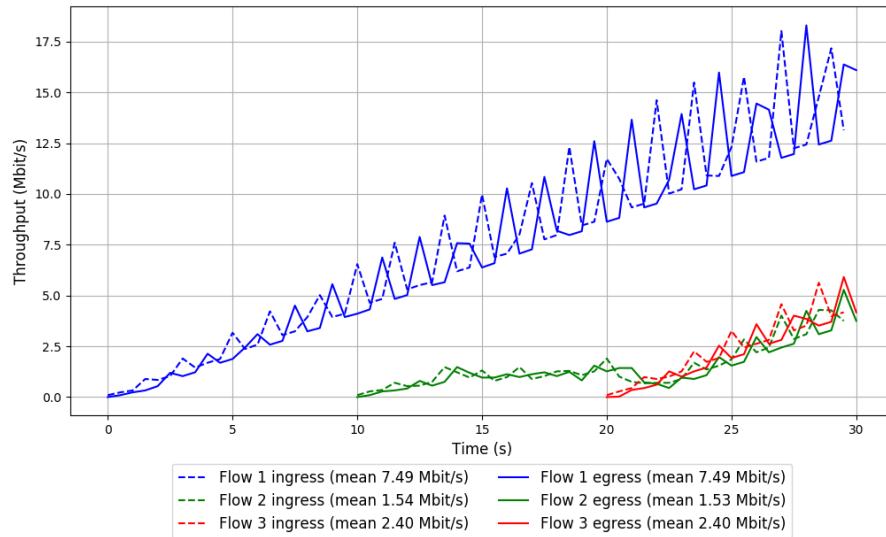


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-25 08:21:43
End at: 2019-01-25 08:22:13
Local clock offset: 6.133 ms
Remote clock offset: 68.583 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 51.708 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 51.805 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 51.354 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 51.093 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

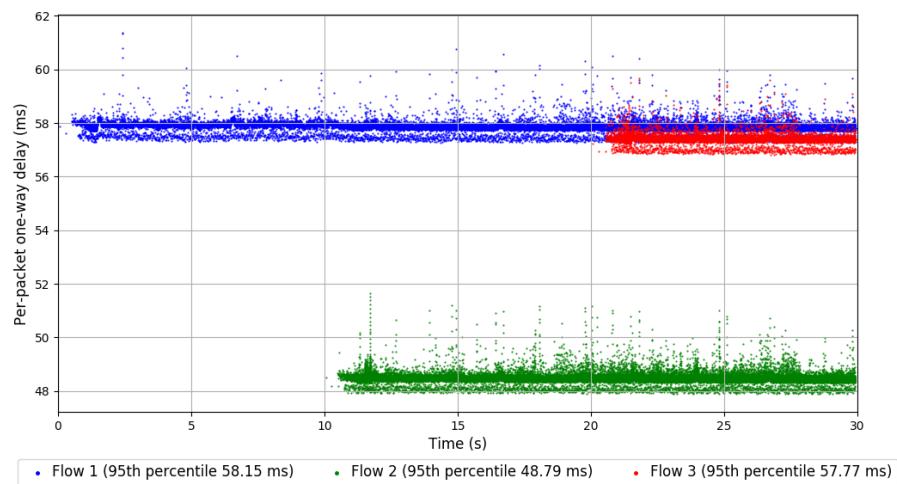
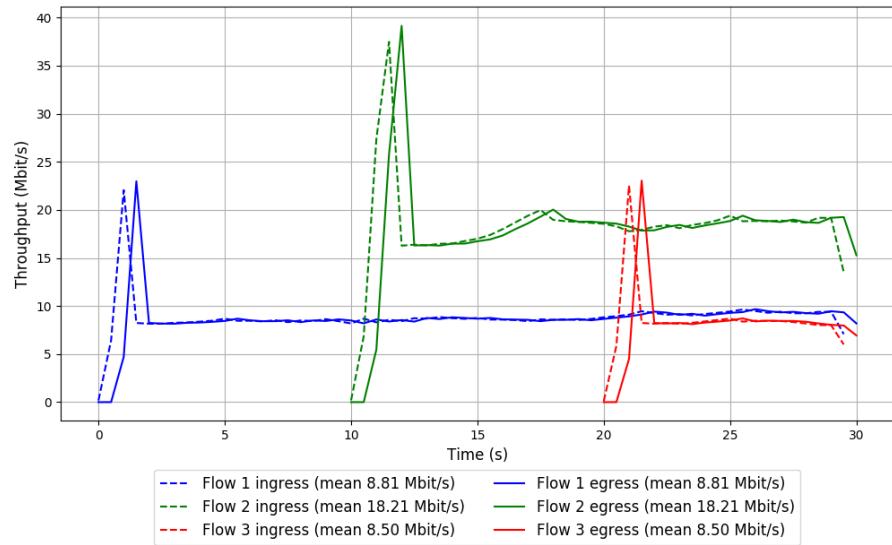


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-25 02:57:56
End at: 2019-01-25 02:58:26
Local clock offset: -9.041 ms
Remote clock offset: 5.359 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.72 Mbit/s
95th percentile per-packet one-way delay: 58.012 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.81 Mbit/s
95th percentile per-packet one-way delay: 58.148 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.21 Mbit/s
95th percentile per-packet one-way delay: 48.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 57.769 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Allegro — Data Link

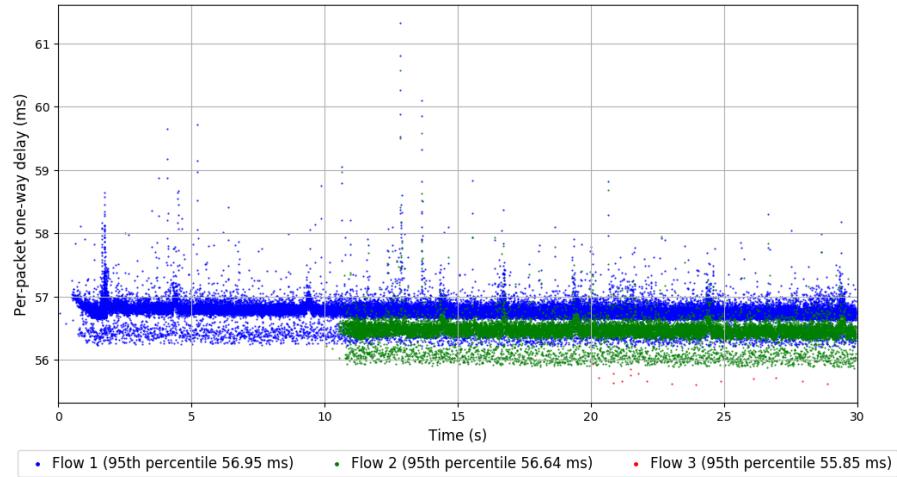
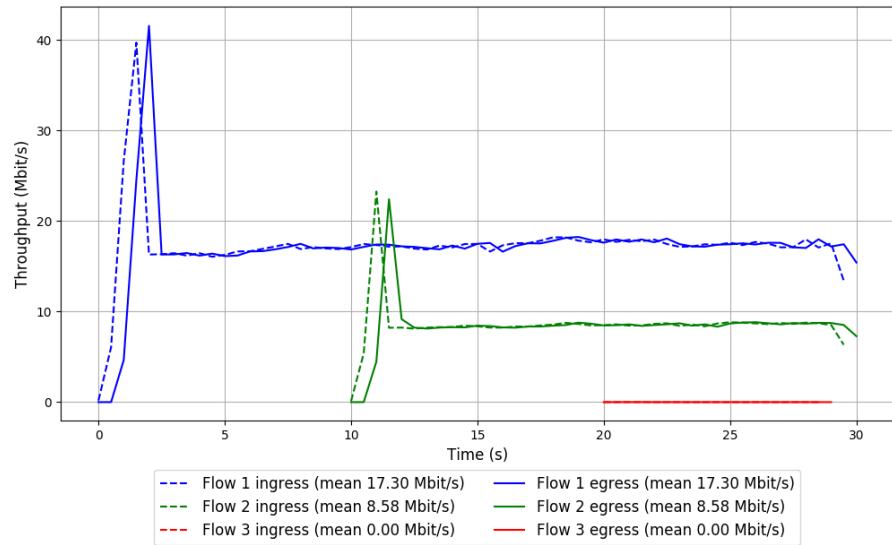


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-25 04:55:03
End at: 2019-01-25 04:55:33
Local clock offset: 3.188 ms
Remote clock offset: 54.88 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.01 Mbit/s
95th percentile per-packet one-way delay: 56.925 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 17.30 Mbit/s
95th percentile per-packet one-way delay: 56.951 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 56.641 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 55.852 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Allegro — Data Link

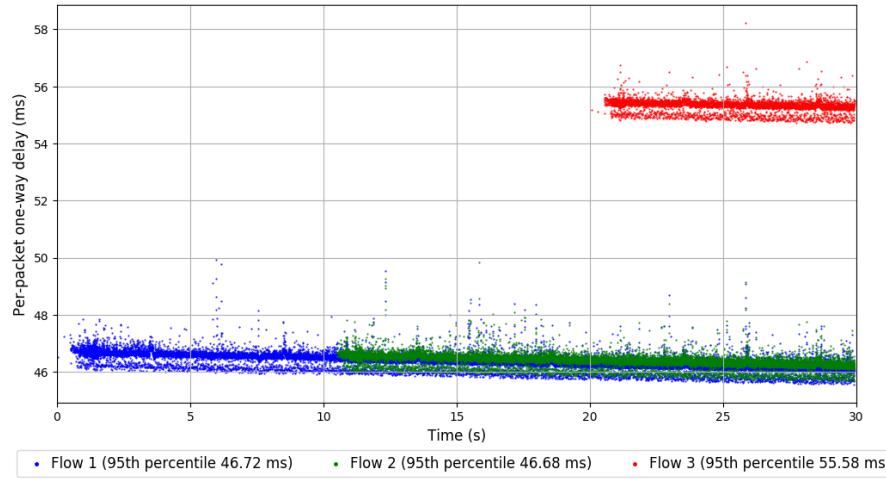
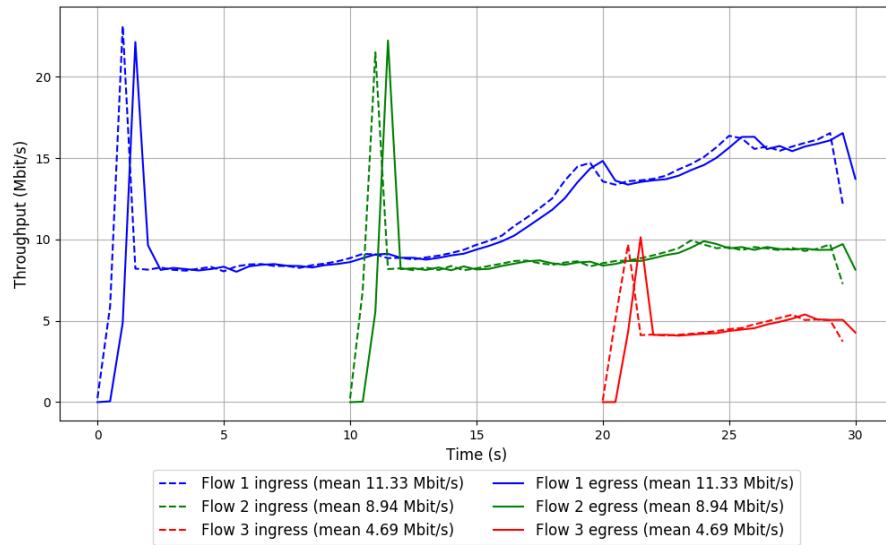


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-25 06:01:38
End at: 2019-01-25 06:02:08
Local clock offset: 17.001 ms
Remote clock offset: 42.35 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.82 Mbit/s
95th percentile per-packet one-way delay: 55.334 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.33 Mbit/s
95th percentile per-packet one-way delay: 46.718 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.94 Mbit/s
95th percentile per-packet one-way delay: 46.679 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.69 Mbit/s
95th percentile per-packet one-way delay: 55.583 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Allegro — Data Link

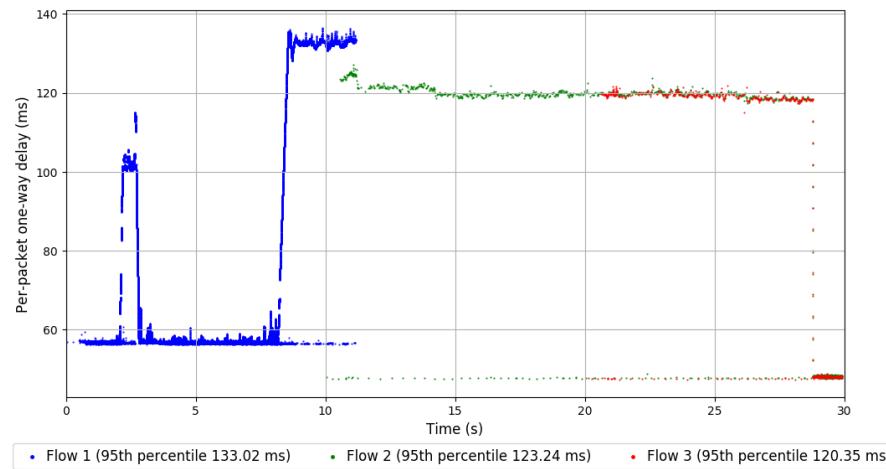
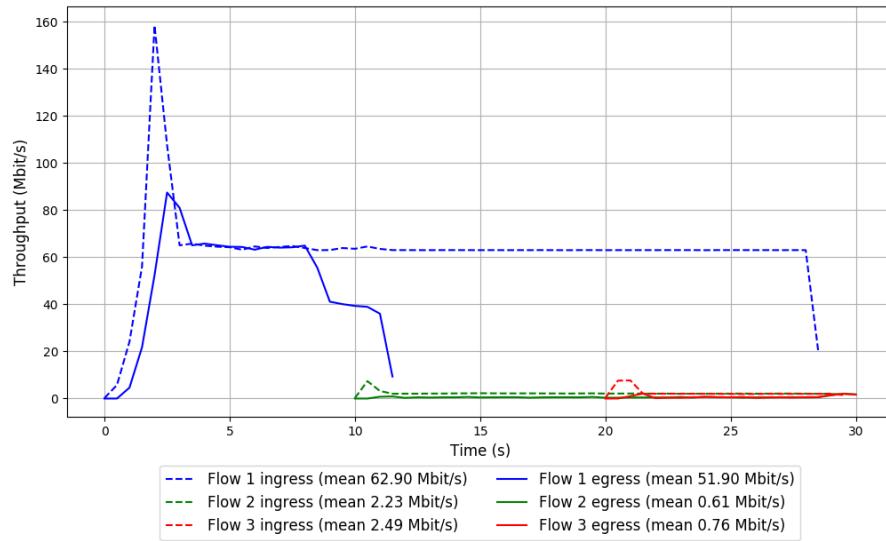


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-25 07:45:45
End at: 2019-01-25 07:46:15
Local clock offset: 6.656 ms
Remote clock offset: 48.982 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.96 Mbit/s
95th percentile per-packet one-way delay: 132.993 ms
Loss rate: 68.15%
-- Flow 1:
Average throughput: 51.90 Mbit/s
95th percentile per-packet one-way delay: 133.017 ms
Loss rate: 68.02%
-- Flow 2:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 123.236 ms
Loss rate: 72.79%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 120.349 ms
Loss rate: 69.36%
```

Run 4: Report of PCC-Allegro — Data Link

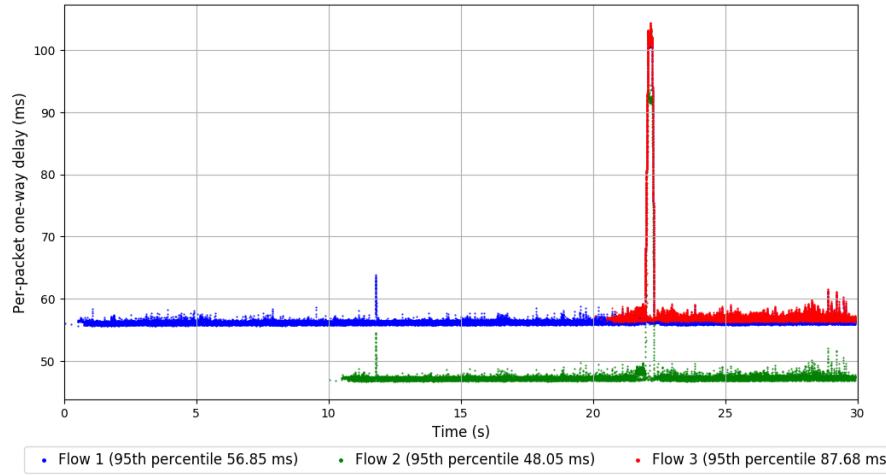
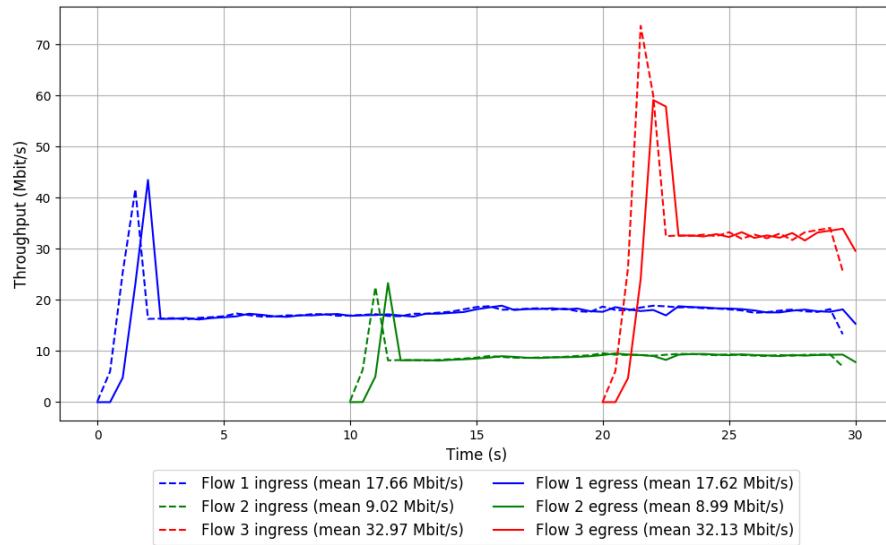


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-25 08:39:56
End at: 2019-01-25 08:40:26
Local clock offset: 3.738 ms
Remote clock offset: 44.942 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.20 Mbit/s
95th percentile per-packet one-way delay: 57.837 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 17.62 Mbit/s
95th percentile per-packet one-way delay: 56.853 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 8.99 Mbit/s
95th percentile per-packet one-way delay: 48.051 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 32.13 Mbit/s
95th percentile per-packet one-way delay: 87.678 ms
Loss rate: 2.56%
```

Run 5: Report of PCC-Allegro — Data Link

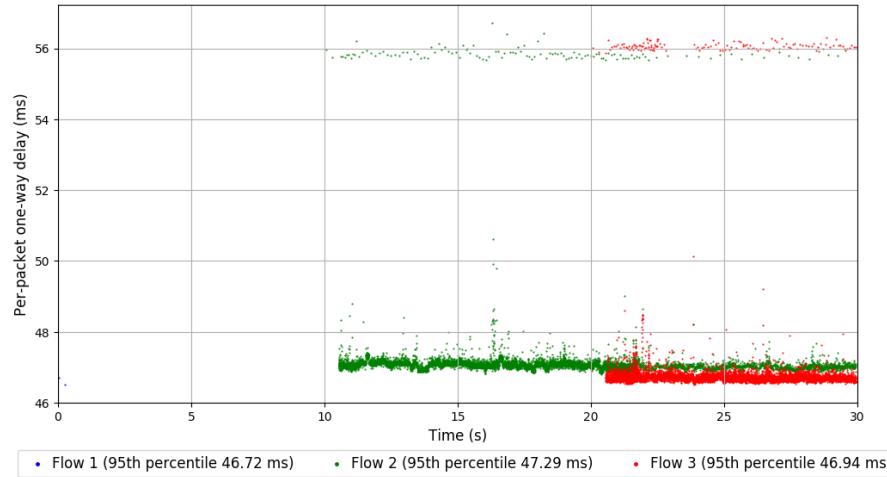
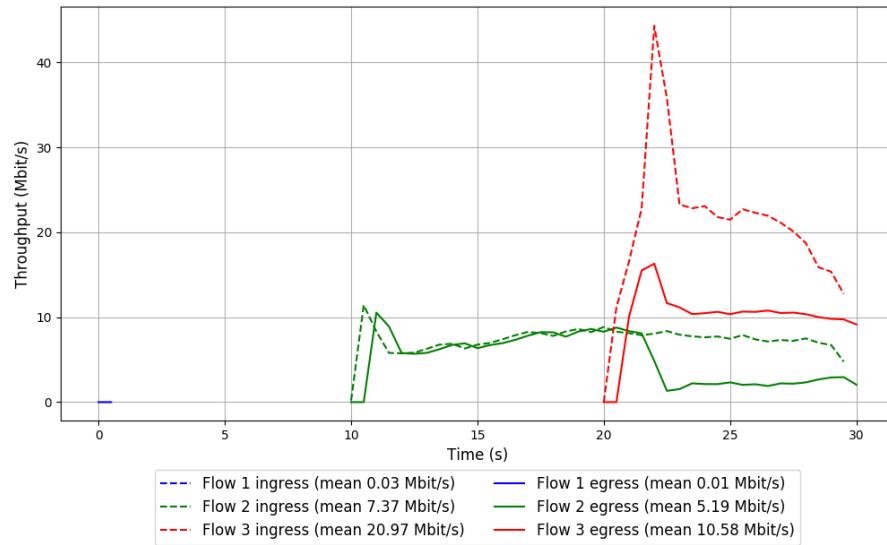


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-01-25 01:26:16
End at: 2019-01-25 01:26:46
Local clock offset: -0.74 ms
Remote clock offset: 11.576 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 47.234 ms
Loss rate: 41.30%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 46.716 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 5.19 Mbit/s
95th percentile per-packet one-way delay: 47.293 ms
Loss rate: 29.59%
-- Flow 3:
Average throughput: 10.58 Mbit/s
95th percentile per-packet one-way delay: 46.937 ms
Loss rate: 49.58%
```

Run 1: Report of PCC-Expr — Data Link

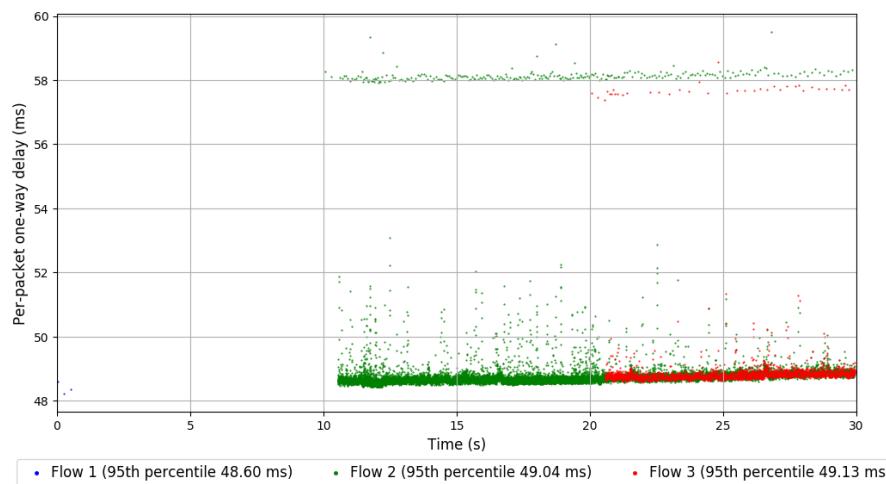
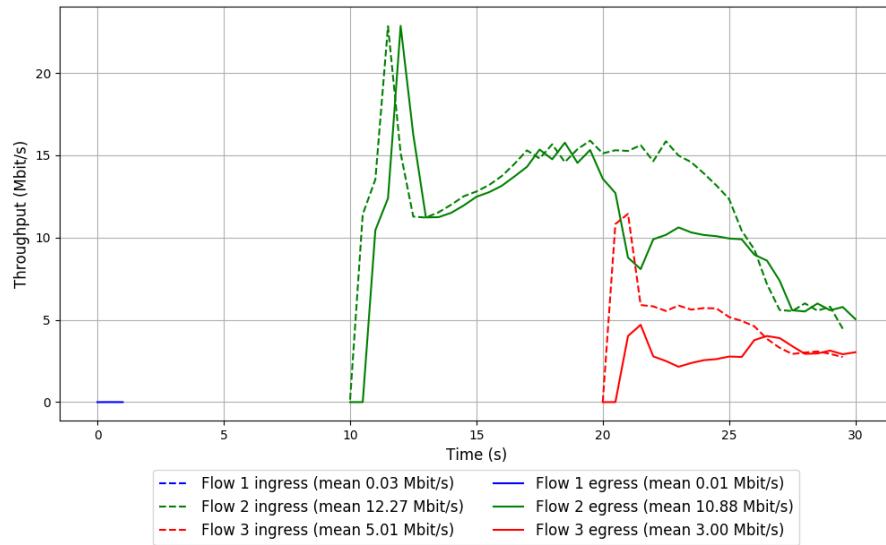


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-25 04:26:05
End at: 2019-01-25 04:26:35
Local clock offset: 2.733 ms
Remote clock offset: 57.758 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.23 Mbit/s
95th percentile per-packet one-way delay: 49.054 ms
Loss rate: 16.20%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 48.604 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 49.042 ms
Loss rate: 11.34%
-- Flow 3:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 49.127 ms
Loss rate: 40.13%
```

Run 2: Report of PCC-Expr — Data Link

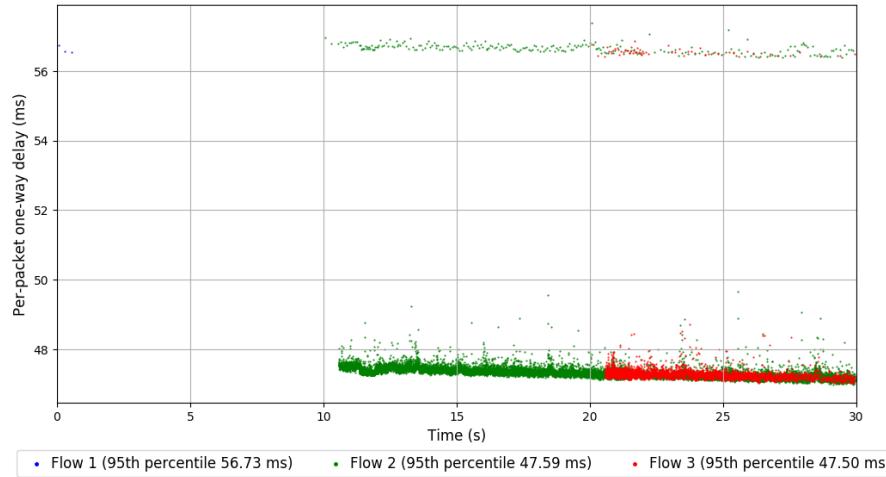
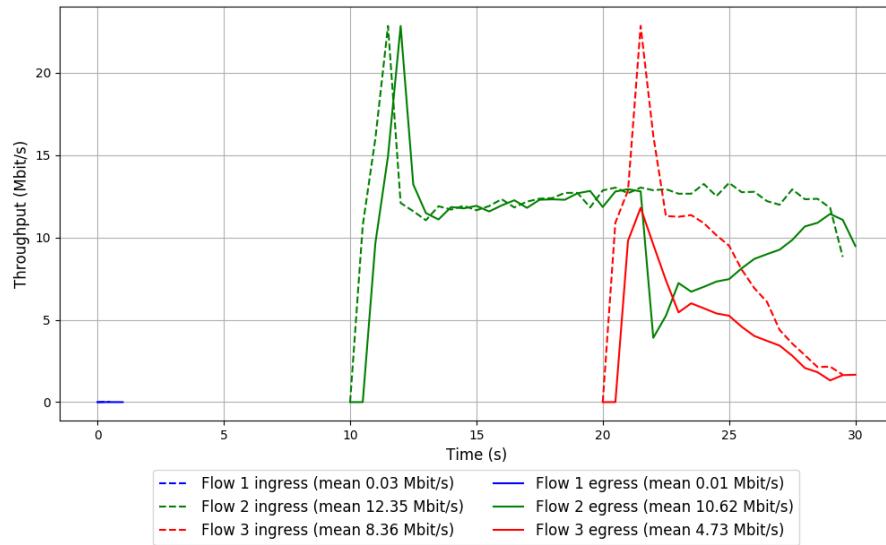


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-25 05:31:58
End at: 2019-01-25 05:32:28
Local clock offset: 6.861 ms
Remote clock offset: 23.915 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 47.588 ms
Loss rate: 21.41%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.734 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.62 Mbit/s
95th percentile per-packet one-way delay: 47.594 ms
Loss rate: 14.03%
-- Flow 3:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 47.501 ms
Loss rate: 43.37%
```

Run 3: Report of PCC-Expr — Data Link

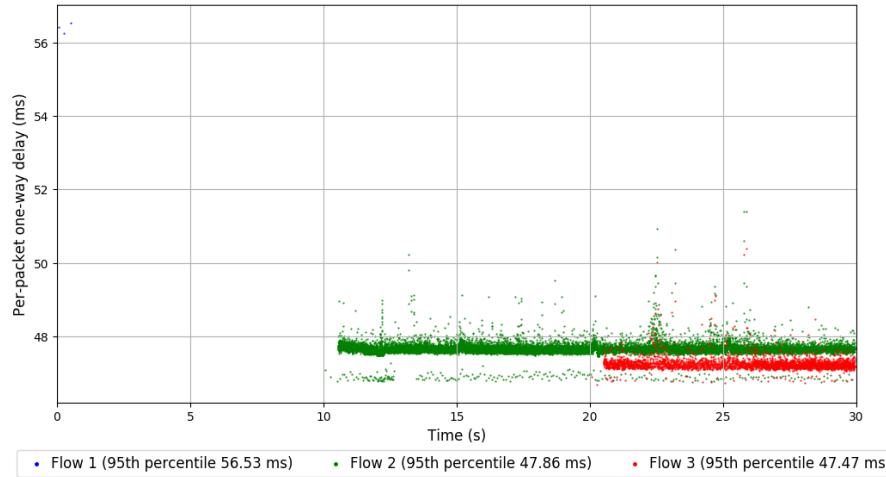
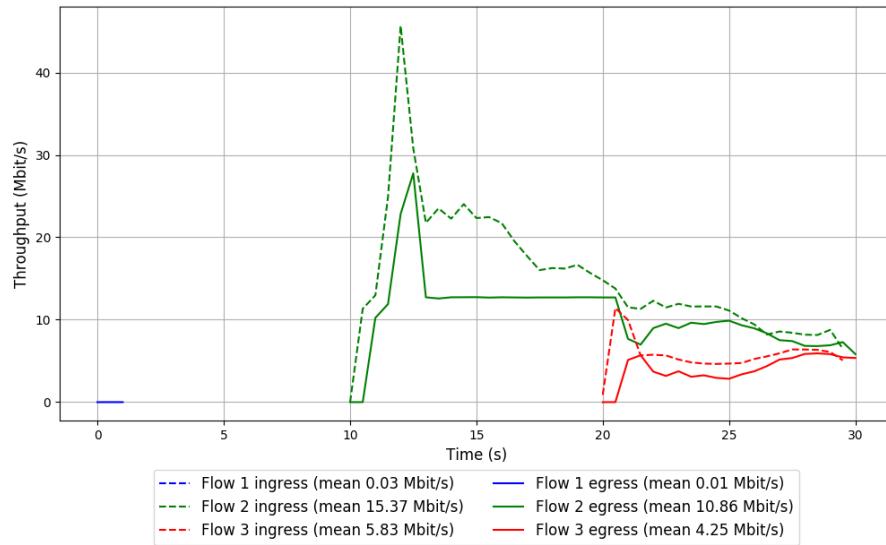


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-25 07:27:42
End at: 2019-01-25 07:28:12
Local clock offset: -1.217 ms
Remote clock offset: 47.987 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 47.842 ms
Loss rate: 28.97%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.532 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.86 Mbit/s
95th percentile per-packet one-way delay: 47.860 ms
Loss rate: 29.33%
-- Flow 3:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 47.467 ms
Loss rate: 27.05%
```

Run 4: Report of PCC-Expr — Data Link

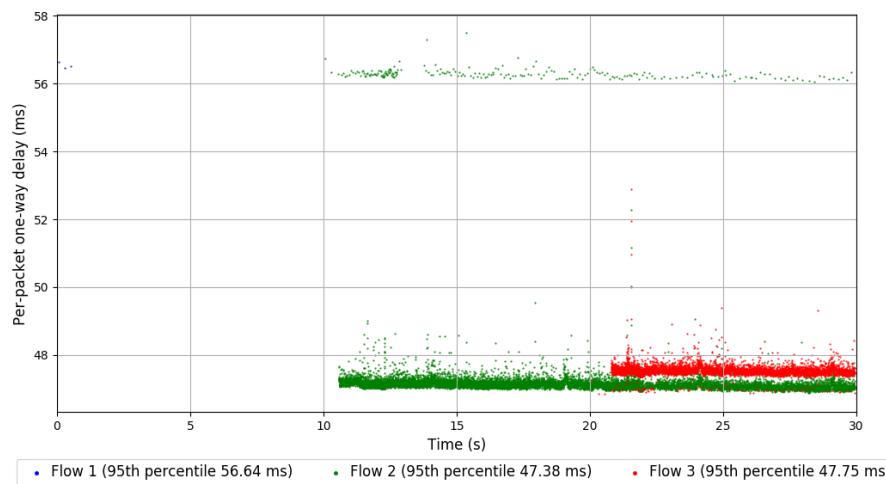
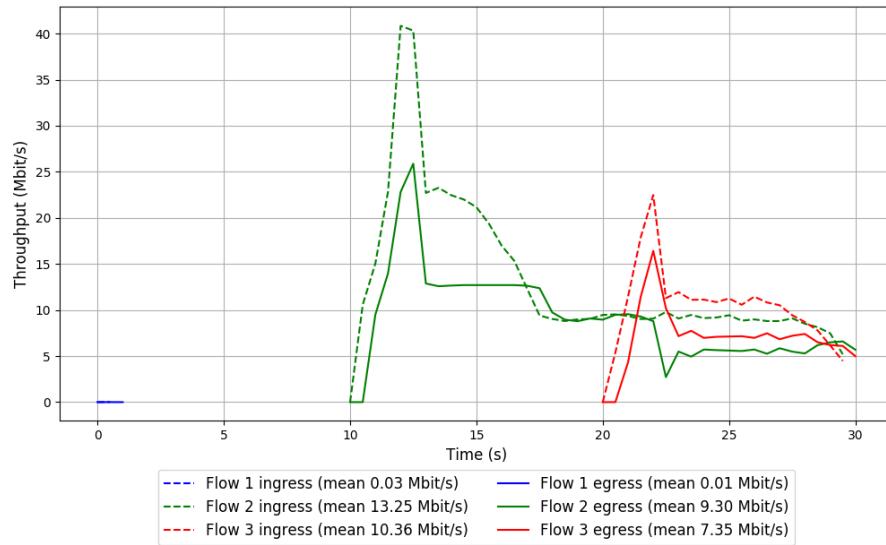


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-25 08:02:58
End at: 2019-01-25 08:03:28
Local clock offset: 7.246 ms
Remote clock offset: 63.14 ms

# Below is generated by plot.py at 2019-01-25 08:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 47.656 ms
Loss rate: 29.62%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.638 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 47.382 ms
Loss rate: 29.84%
-- Flow 3:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 47.749 ms
Loss rate: 29.04%
```

Run 5: Report of PCC-Expr — Data Link

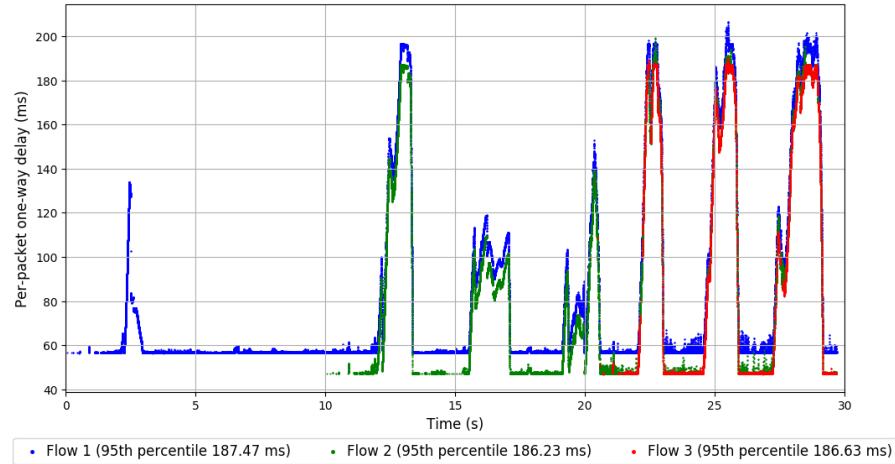
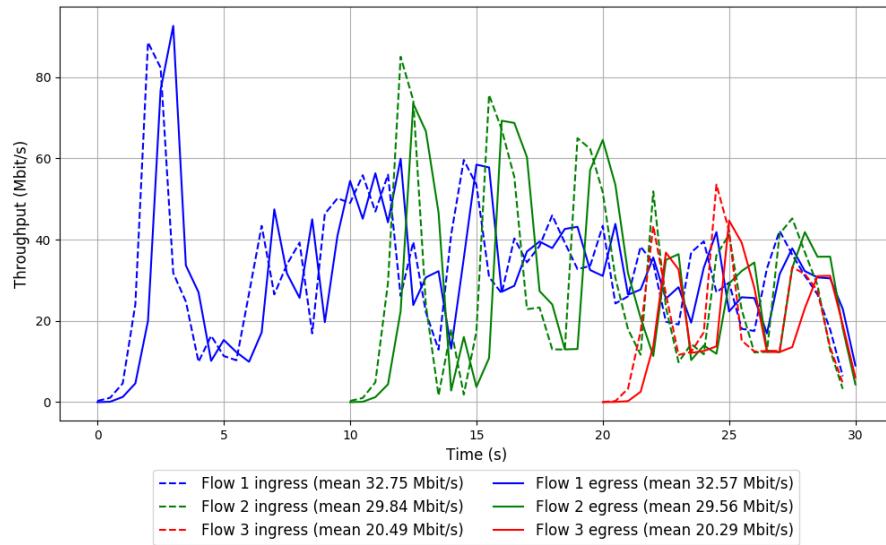


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-01-25 01:35:21
End at: 2019-01-25 01:35:51
Local clock offset: -1.569 ms
Remote clock offset: 10.614 ms

# Below is generated by plot.py at 2019-01-25 08:55:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.66 Mbit/s
95th percentile per-packet one-way delay: 186.443 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 187.474 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 186.233 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: 186.633 ms
Loss rate: 1.53%
```

Run 1: Report of QUIC Cubic — Data Link

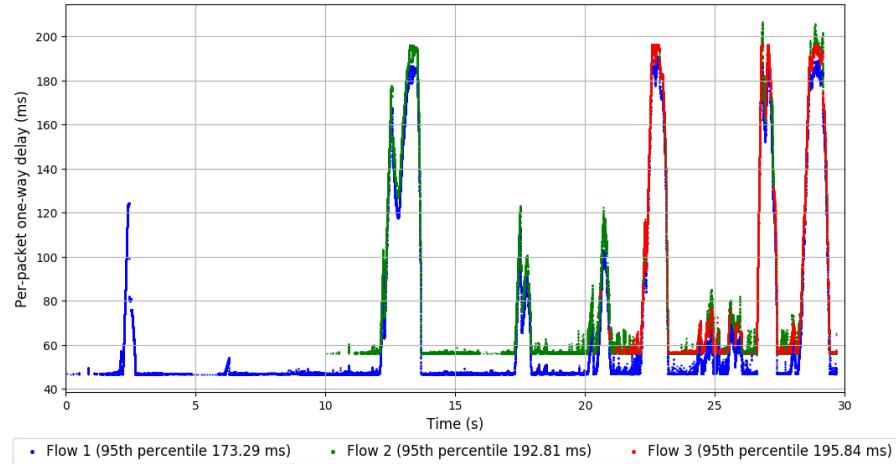
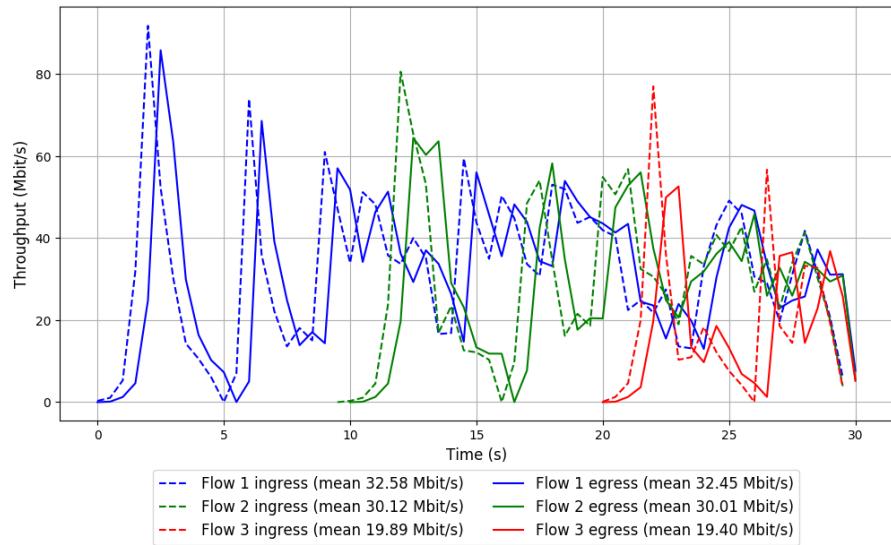


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-25 04:36:05
End at: 2019-01-25 04:36:35
Local clock offset: 2.806 ms
Remote clock offset: 53.185 ms

# Below is generated by plot.py at 2019-01-25 08:55:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.60 Mbit/s
95th percentile per-packet one-way delay: 187.360 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 32.45 Mbit/s
95th percentile per-packet one-way delay: 173.293 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 30.01 Mbit/s
95th percentile per-packet one-way delay: 192.810 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 19.40 Mbit/s
95th percentile per-packet one-way delay: 195.844 ms
Loss rate: 2.33%
```

Run 2: Report of QUIC Cubic — Data Link

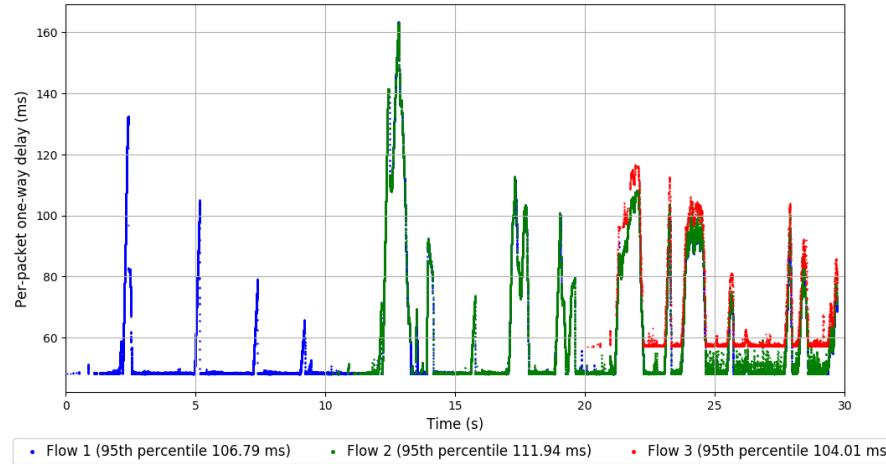
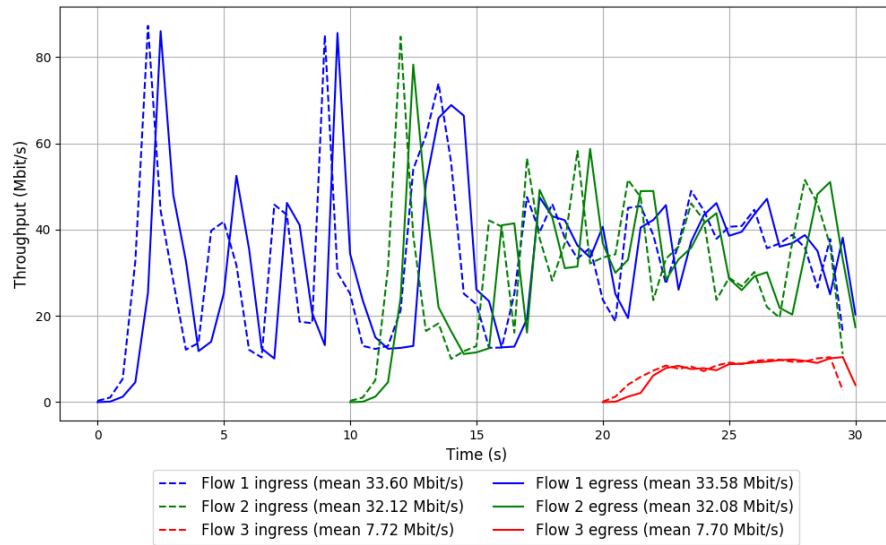


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-25 05:40:27
End at: 2019-01-25 05:40:57
Local clock offset: 13.458 ms
Remote clock offset: 36.931 ms

# Below is generated by plot.py at 2019-01-25 08:55:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.32 Mbit/s
95th percentile per-packet one-way delay: 108.251 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 106.793 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.08 Mbit/s
95th percentile per-packet one-way delay: 111.945 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 104.009 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

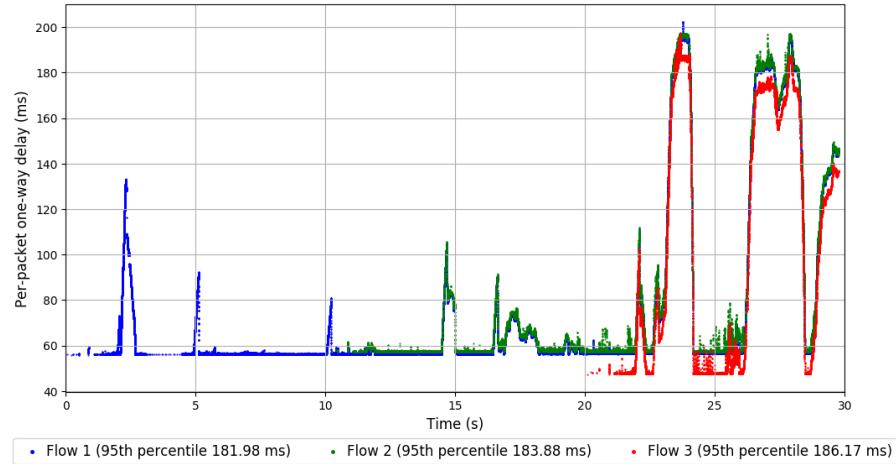
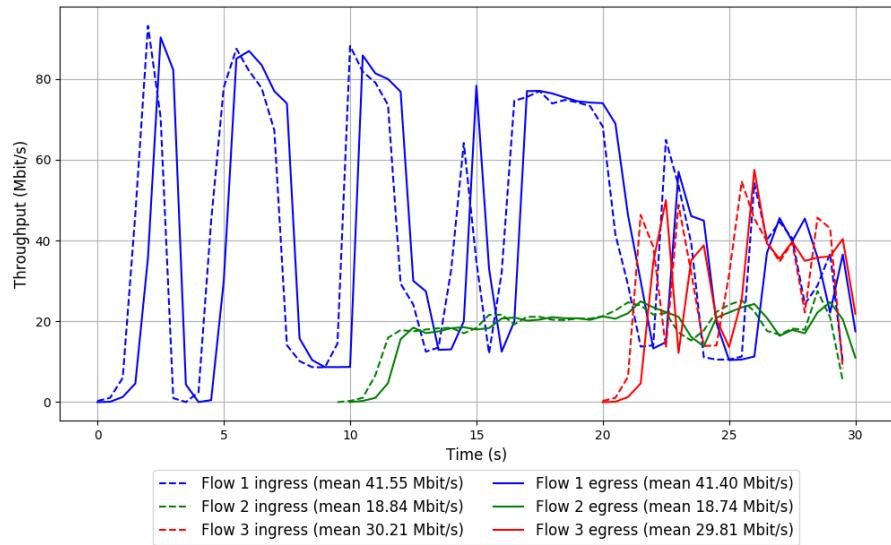


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-25 07:32:21
End at: 2019-01-25 07:32:51
Local clock offset: 0.907 ms
Remote clock offset: 47.752 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.54 Mbit/s
95th percentile per-packet one-way delay: 183.042 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 41.40 Mbit/s
95th percentile per-packet one-way delay: 181.984 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 18.74 Mbit/s
95th percentile per-packet one-way delay: 183.882 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 186.169 ms
Loss rate: 0.39%
```

Run 4: Report of QUIC Cubic — Data Link

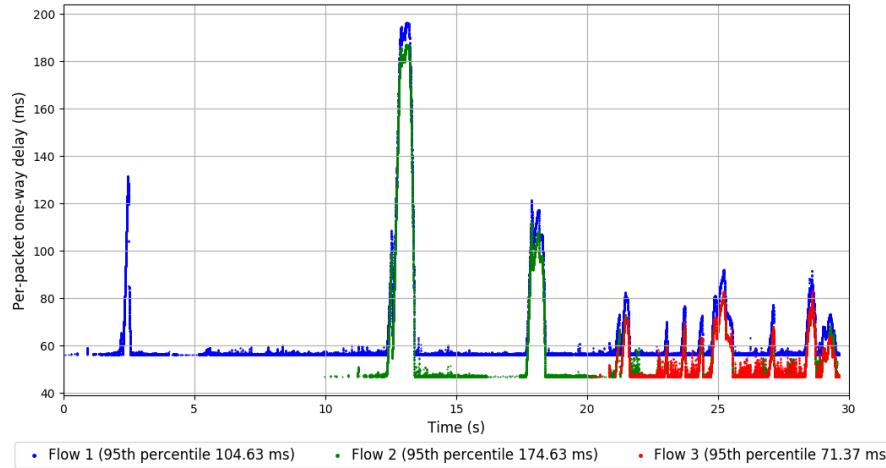
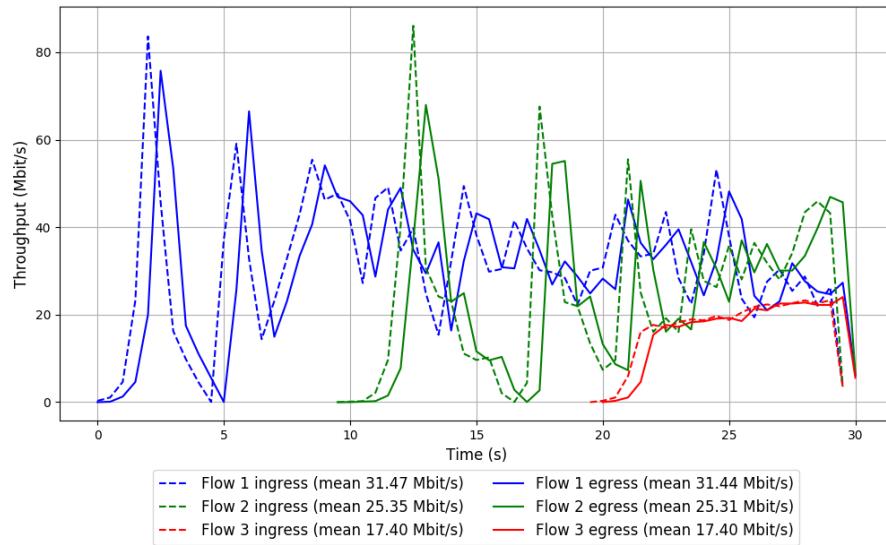


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-25 08:17:05
End at: 2019-01-25 08:17:35
Local clock offset: 6.304 ms
Remote clock offset: 67.908 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.89 Mbit/s
95th percentile per-packet one-way delay: 109.891 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 104.629 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 25.31 Mbit/s
95th percentile per-packet one-way delay: 174.626 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 17.40 Mbit/s
95th percentile per-packet one-way delay: 71.369 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

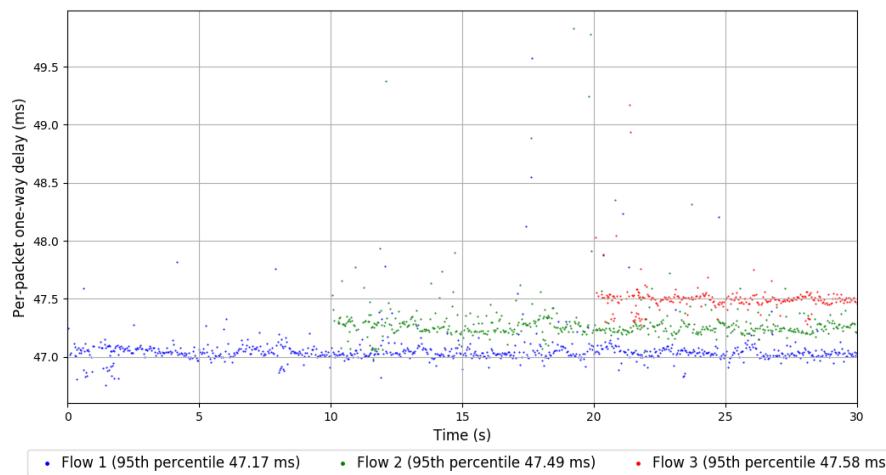
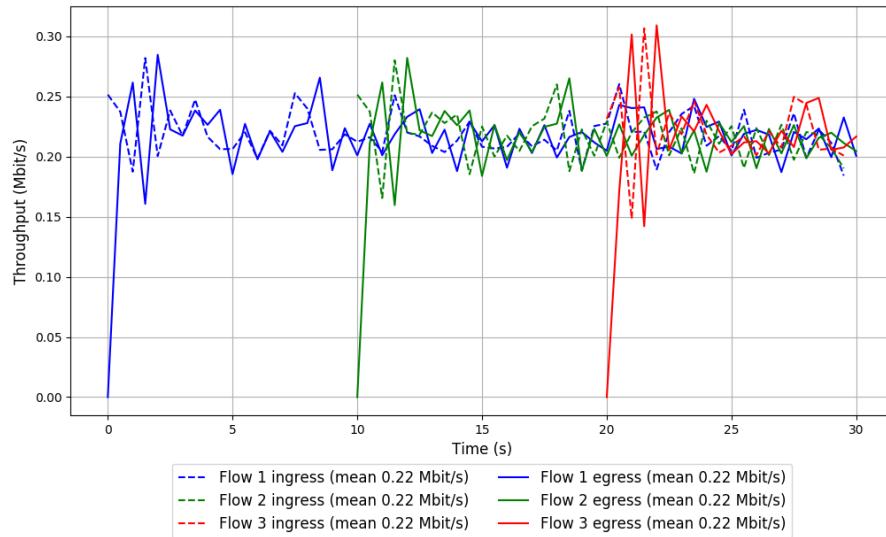


```
Run 1: Statistics of SCReAM

Start at: 2019-01-25 01:57:16
End at: 2019-01-25 01:57:46
Local clock offset: -2.842 ms
Remote clock offset: 6.199 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.488 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.579 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

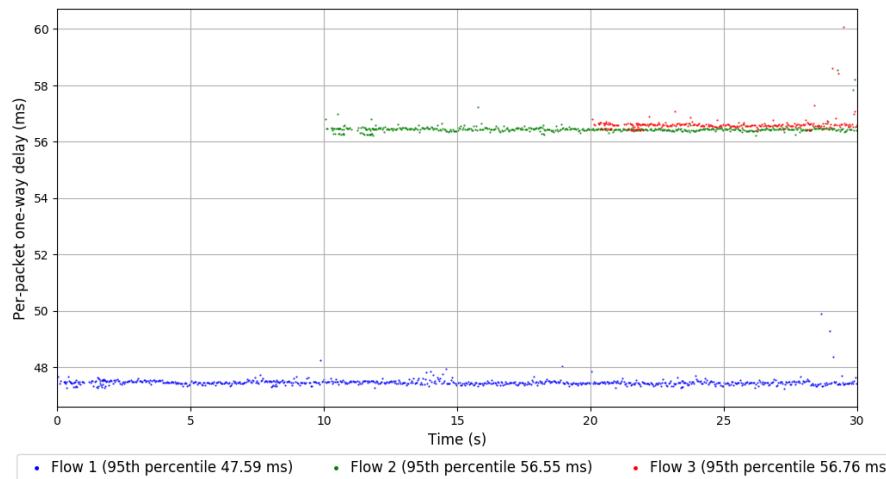
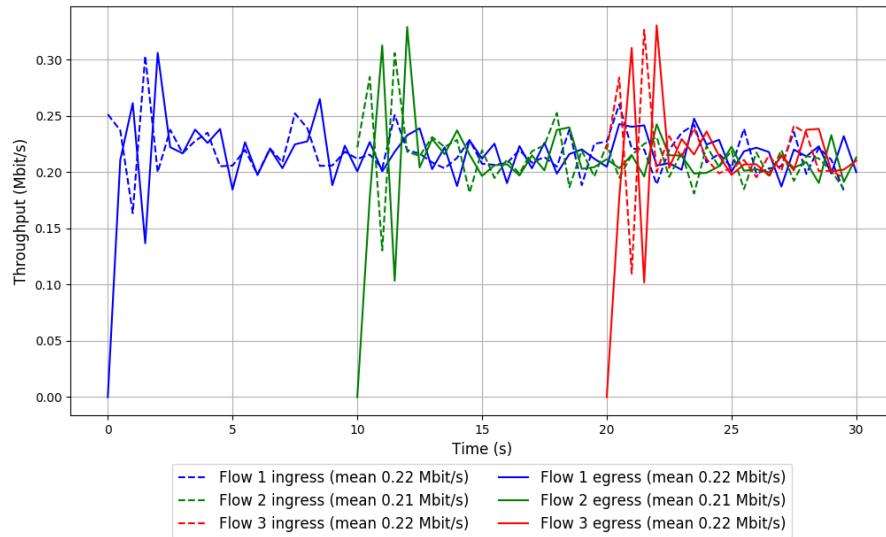


Run 2: Statistics of SCReAM

```
Start at: 2019-01-25 04:41:32
End at: 2019-01-25 04:42:02
Local clock offset: 2.841 ms
Remote clock offset: 53.498 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 56.621 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.585 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 56.547 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.758 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

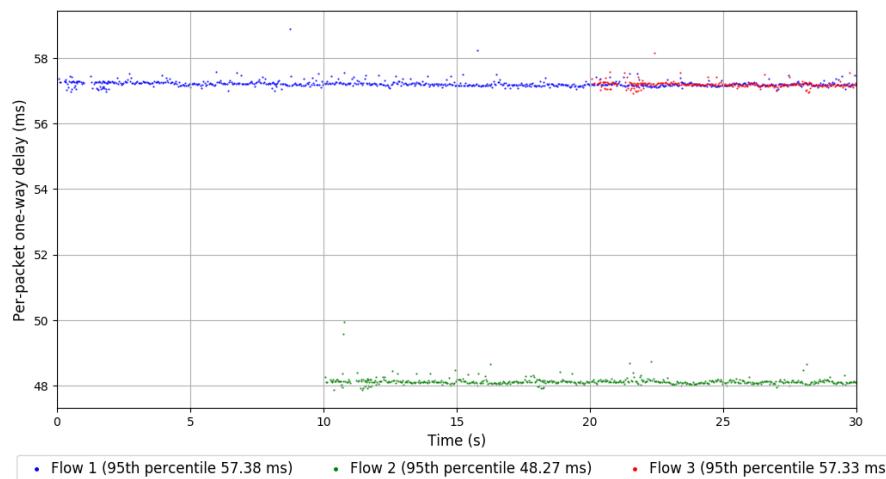
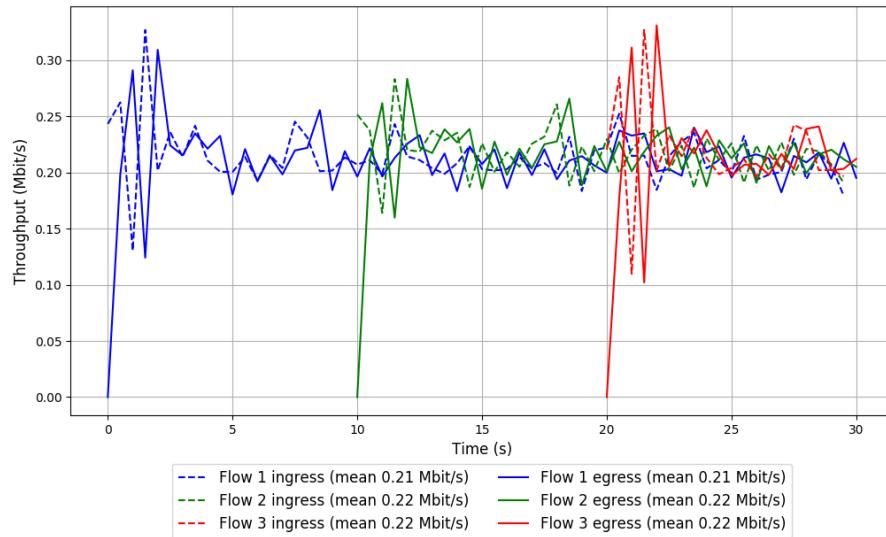


Run 3: Statistics of SCReAM

```
Start at: 2019-01-25 05:46:01
End at: 2019-01-25 05:46:31
Local clock offset: 15.844 ms
Remote clock offset: 40.288 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 57.309 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 57.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.273 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.328 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

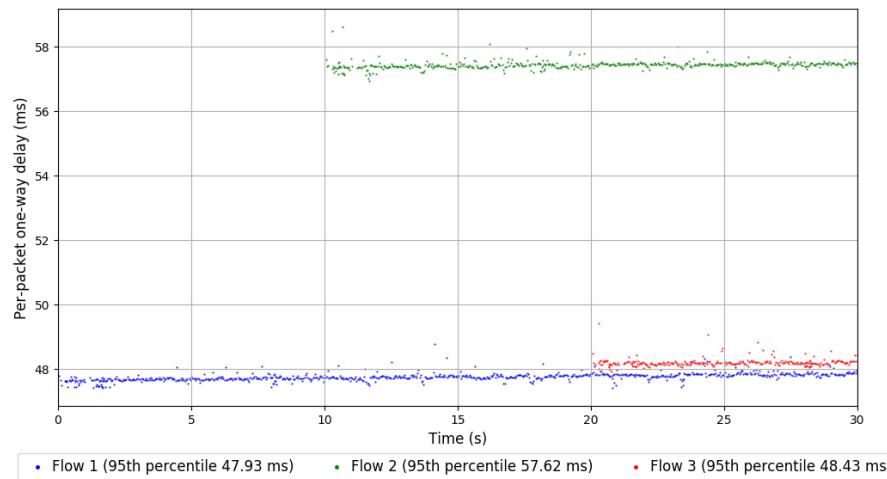
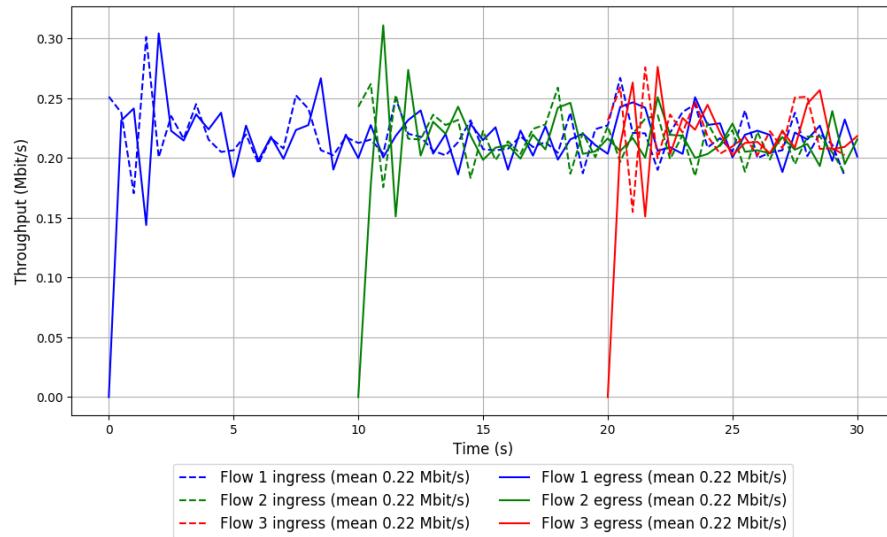


Run 4: Statistics of SCReAM

```
Start at: 2019-01-25 07:35:37
End at: 2019-01-25 07:36:07
Local clock offset: 3.081 ms
Remote clock offset: 48.389 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 57.503 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.932 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.620 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.430 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

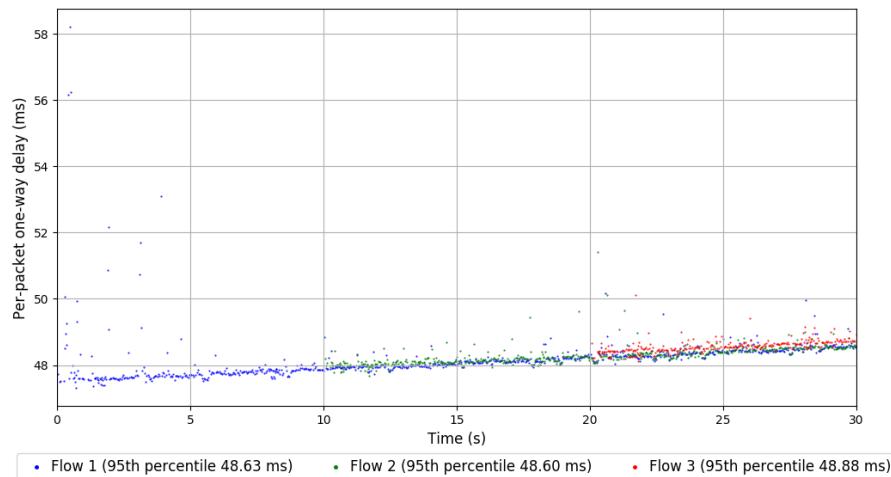
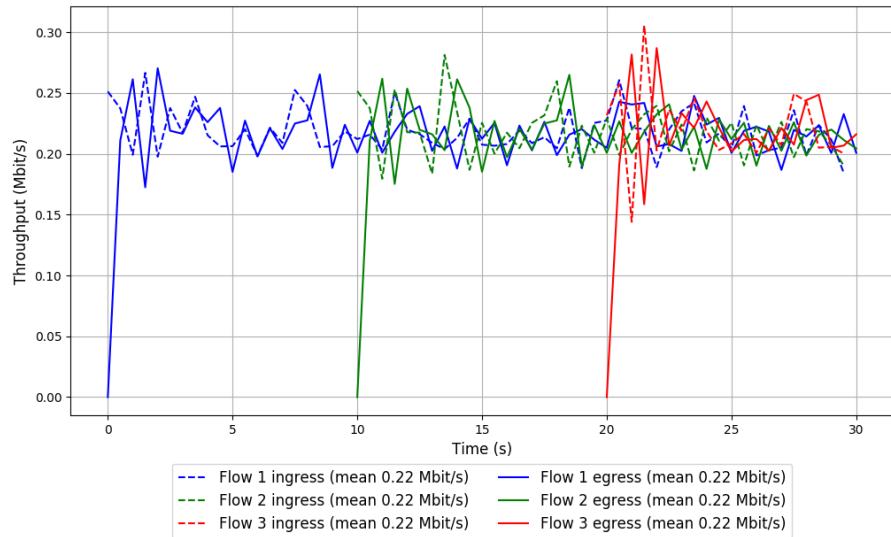


Run 5: Statistics of SCReAM

```
Start at: 2019-01-25 08:23:51
End at: 2019-01-25 08:24:21
Local clock offset: 6.058 ms
Remote clock offset: 63.346 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 48.732 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.633 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.599 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.879 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

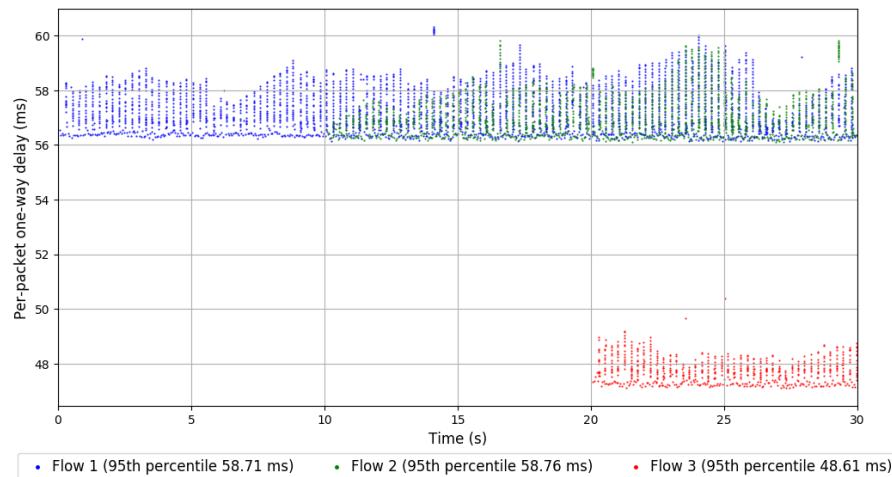
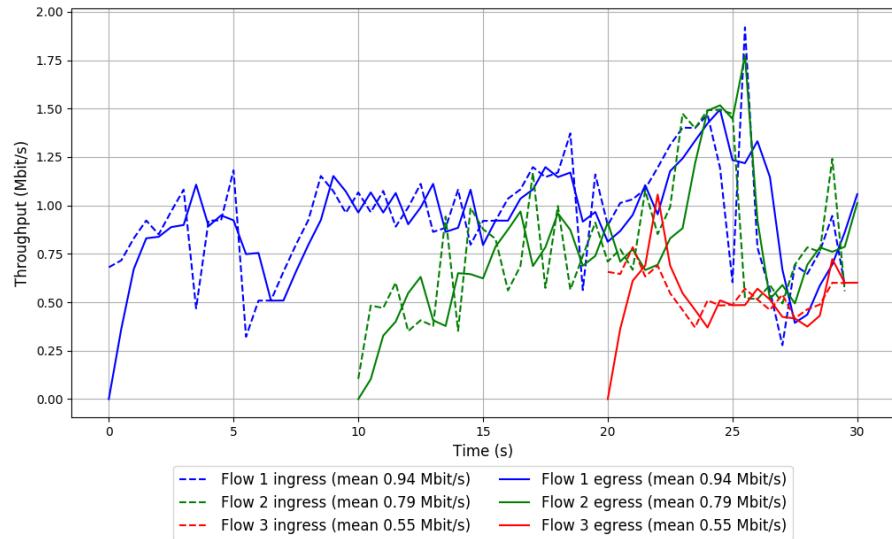


Run 1: Statistics of Sprout

```
Start at: 2019-01-25 02:50:30
End at: 2019-01-25 02:51:00
Local clock offset: -7.962 ms
Remote clock offset: 4.449 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 58.667 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 58.708 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 58.764 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 48.606 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

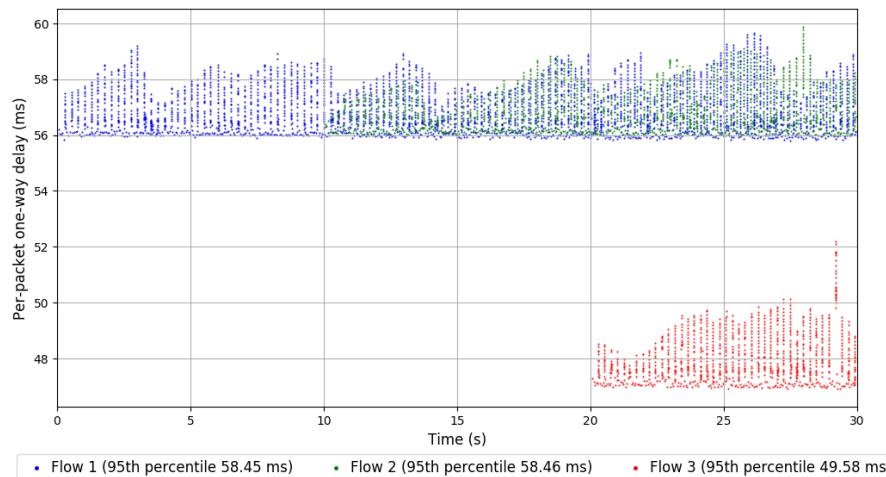
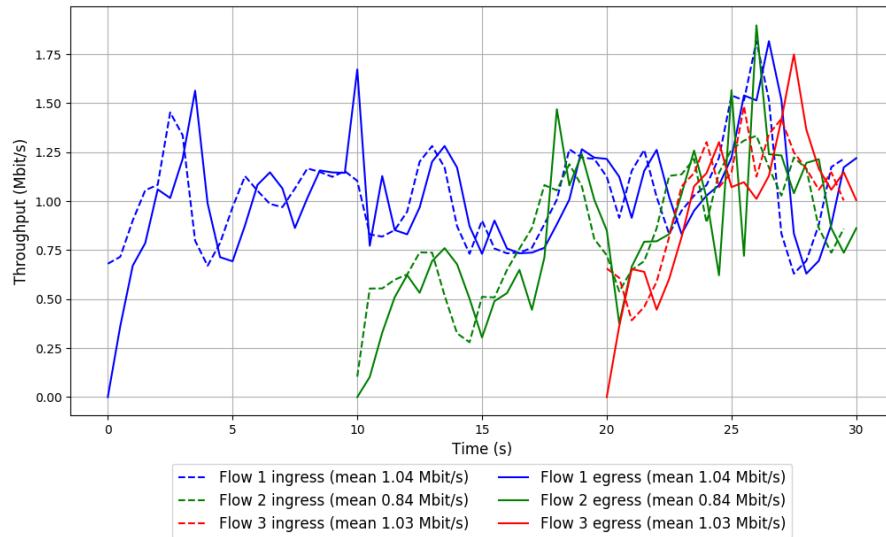


Run 2: Statistics of Sprout

```
Start at: 2019-01-25 04:51:59
End at: 2019-01-25 04:52:29
Local clock offset: 3.152 ms
Remote clock offset: 54.273 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 58.372 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 58.452 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 58.458 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 49.580 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

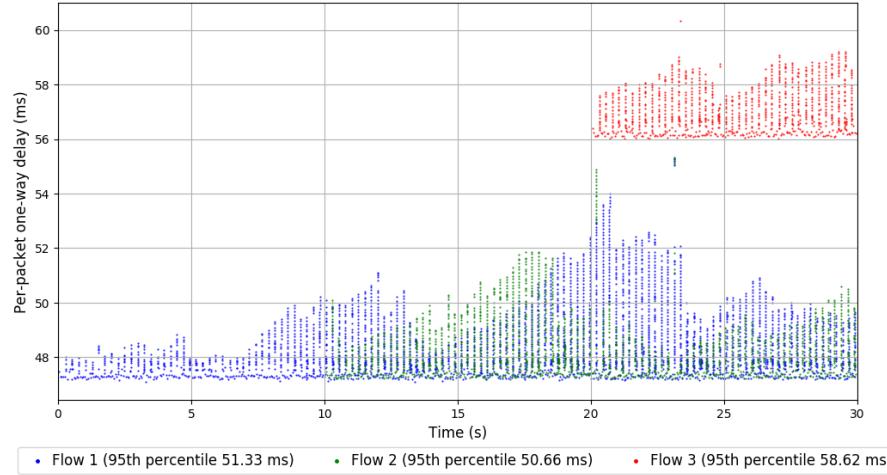
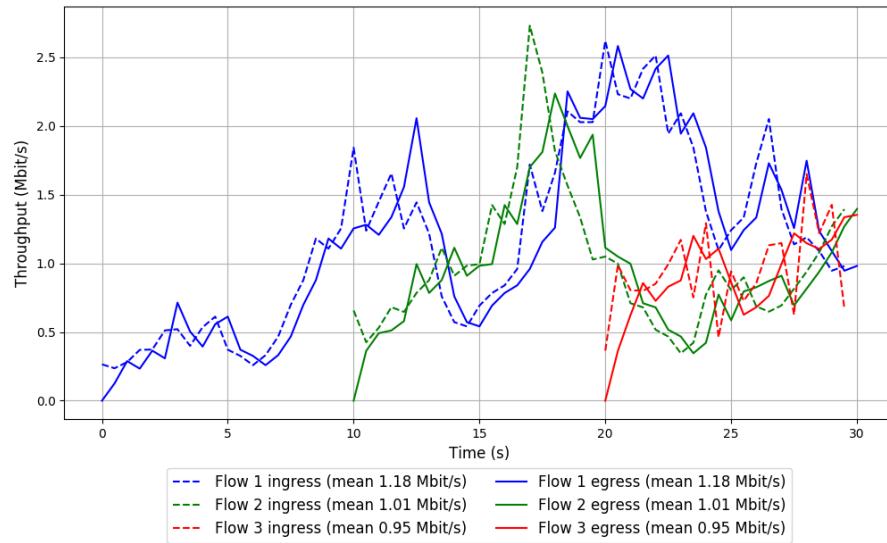


Run 3: Statistics of Sprout

```
Start at: 2019-01-25 05:58:21
End at: 2019-01-25 05:58:51
Local clock offset: 18.855 ms
Remote clock offset: 42.013 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 57.485 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 51.333 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 50.655 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 58.620 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

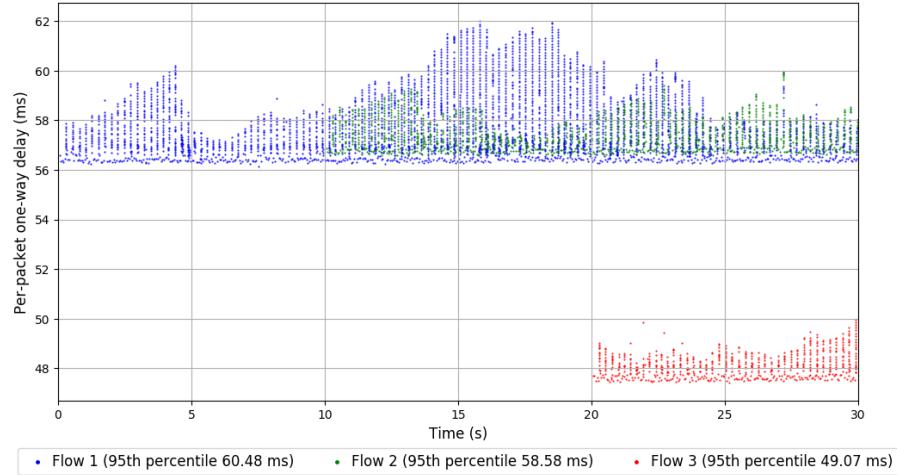
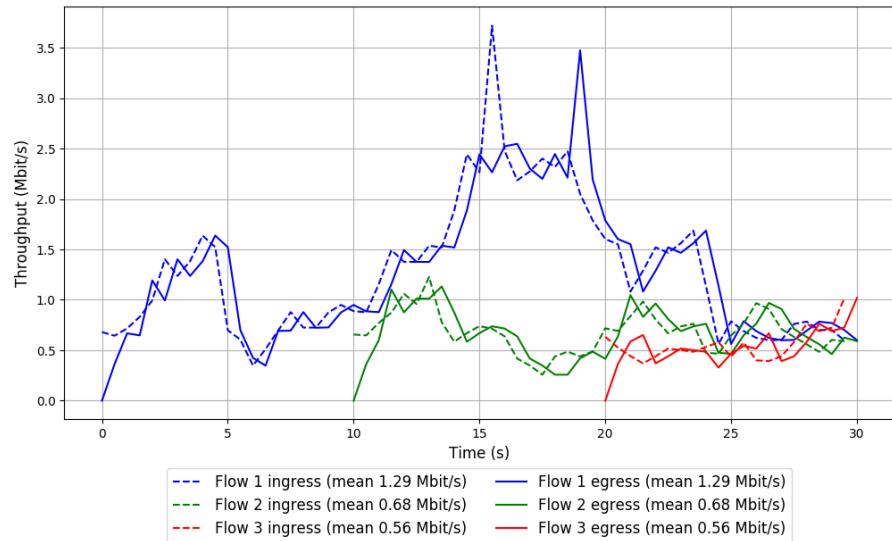


Run 4: Statistics of Sprout

```
Start at: 2019-01-25 07:42:52
End at: 2019-01-25 07:43:22
Local clock offset: 5.823 ms
Remote clock offset: 48.523 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 60.046 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 60.480 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 58.580 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 49.071 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

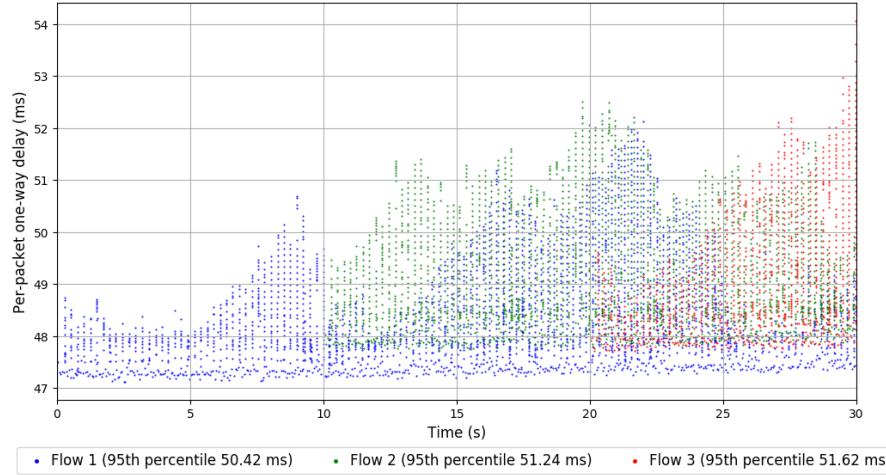
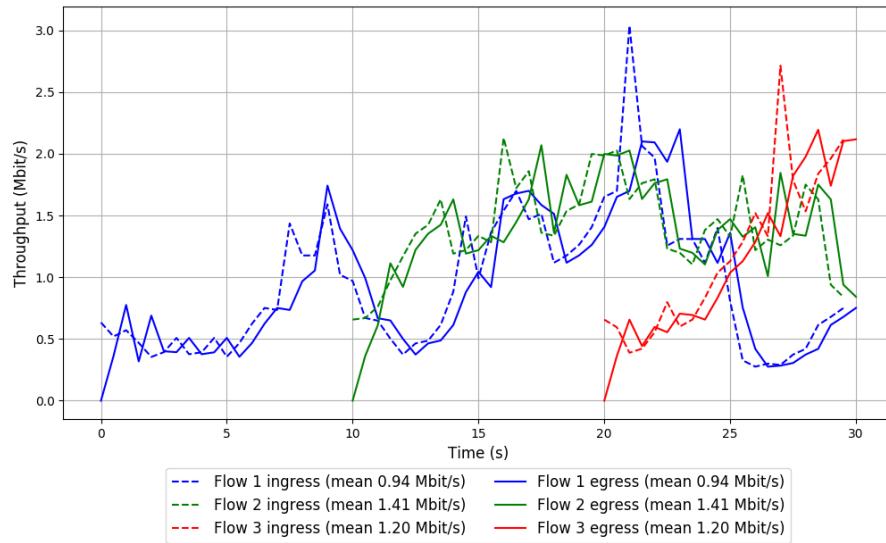


Run 5: Statistics of Sprout

```
Start at: 2019-01-25 08:36:39
End at: 2019-01-25 08:37:09
Local clock offset: 4.12 ms
Remote clock offset: 47.174 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 51.108 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 50.422 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 51.240 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 51.616 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

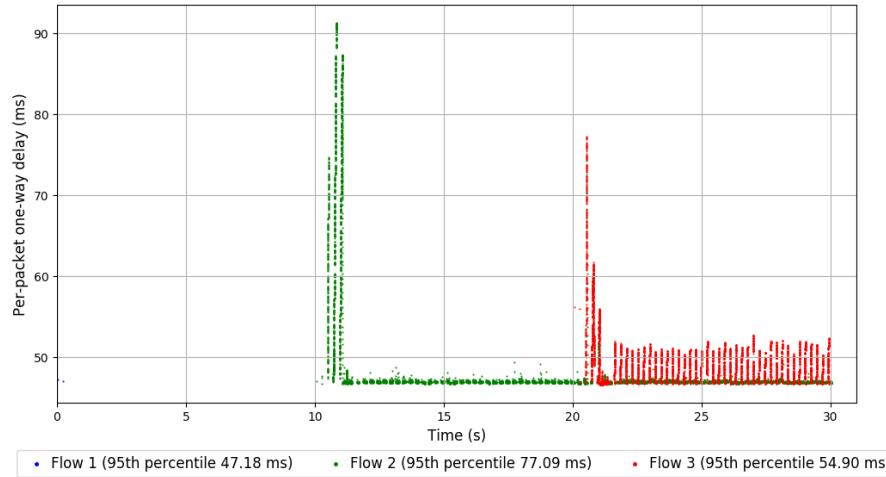
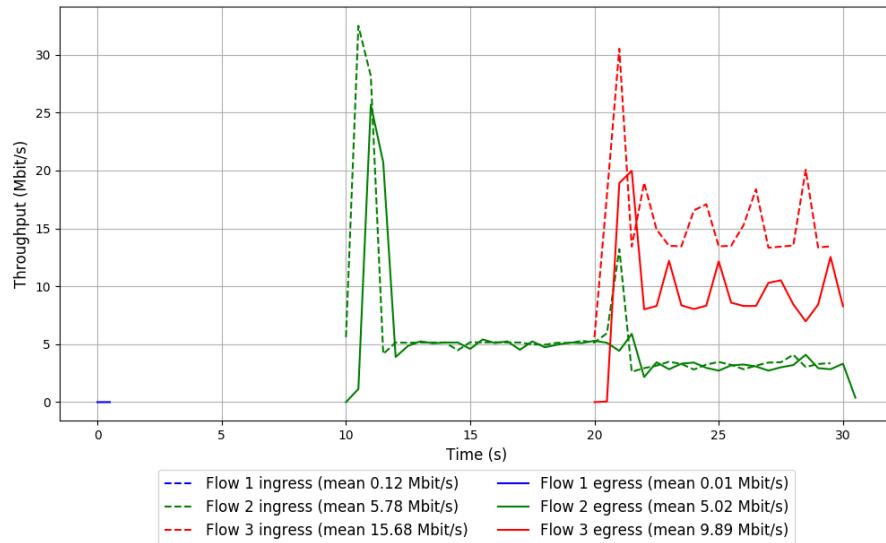


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-25 02:46:44
End at: 2019-01-25 02:47:14
Local clock offset: -7.249 ms
Remote clock offset: 4.233 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 68.244 ms
Loss rate: 26.84%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 47.181 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 77.086 ms
Loss rate: 13.19%
-- Flow 3:
Average throughput: 9.89 Mbit/s
95th percentile per-packet one-way delay: 54.900 ms
Loss rate: 37.01%
```

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

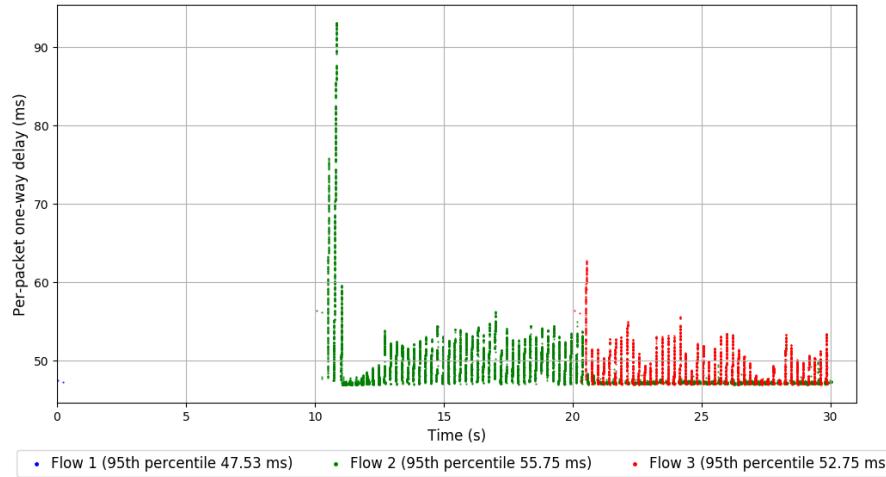
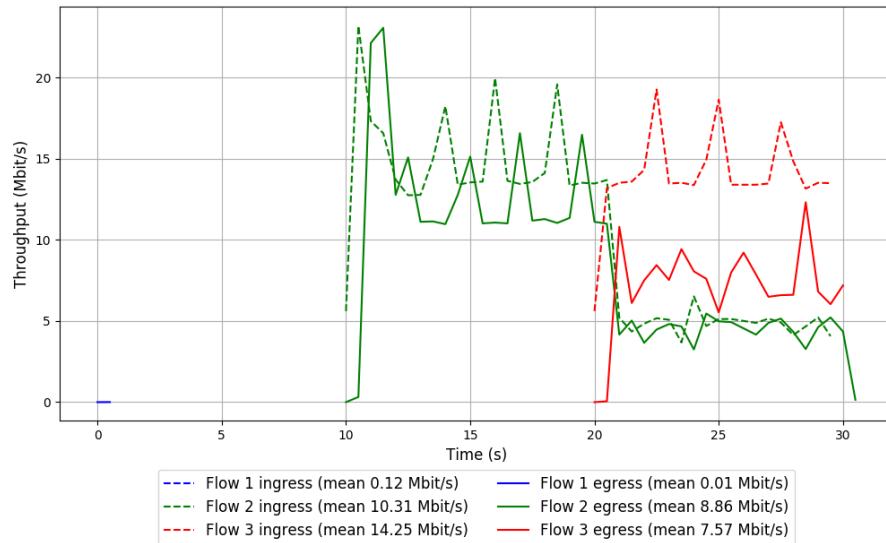


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-25 04:50:24
End at: 2019-01-25 04:50:54
Local clock offset: 3.122 ms
Remote clock offset: 54.204 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 54.100 ms
Loss rate: 27.39%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 47.528 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 55.748 ms
Loss rate: 14.11%
-- Flow 3:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 52.749 ms
Loss rate: 46.96%
```

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

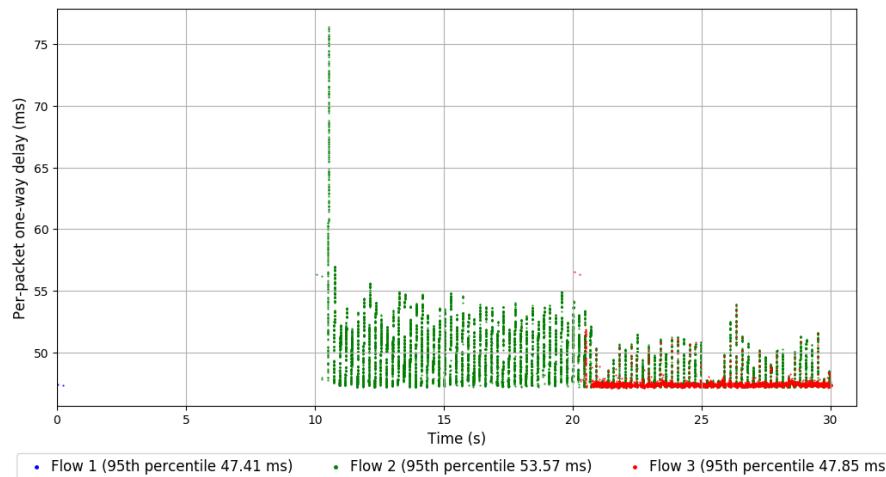
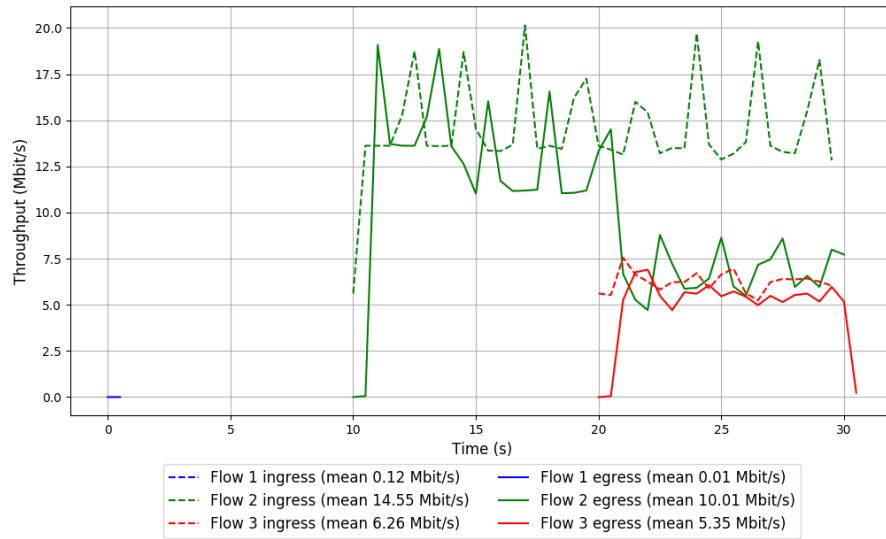


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-25 05:56:23
End at: 2019-01-25 05:56:54
Local clock offset: 18.789 ms
Remote clock offset: 42.061 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.43 Mbit/s
95th percentile per-packet one-way delay: 53.260 ms
Loss rate: 28.31%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 47.411 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 10.01 Mbit/s
95th percentile per-packet one-way delay: 53.571 ms
Loss rate: 31.24%
-- Flow 3:
Average throughput: 5.35 Mbit/s
95th percentile per-packet one-way delay: 47.851 ms
Loss rate: 14.61%
```

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

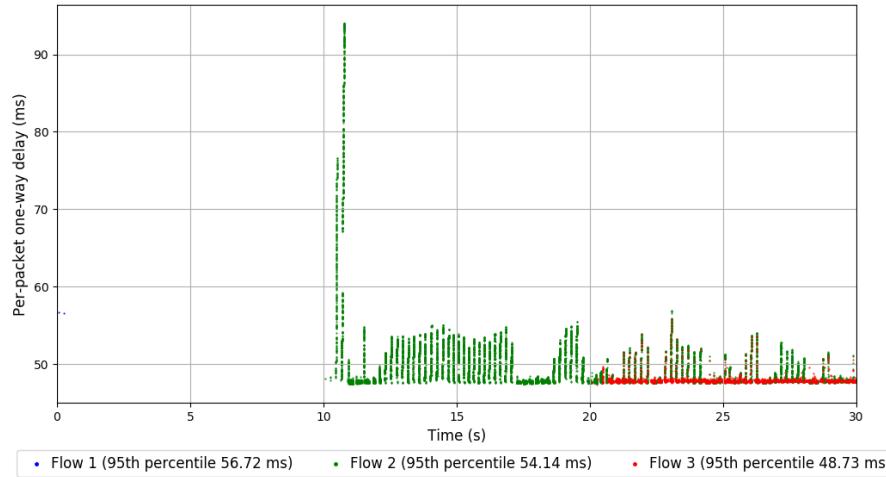
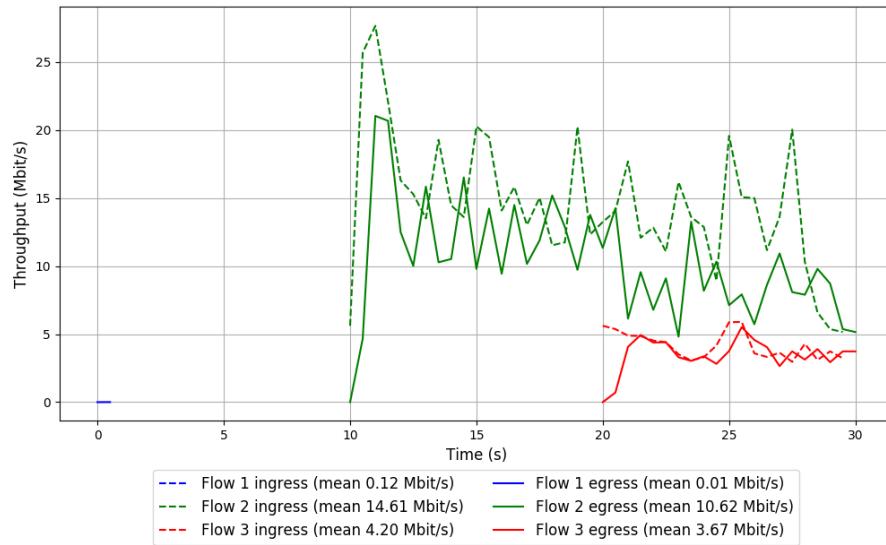


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-25 07:41:31
End at: 2019-01-25 07:42:01
Local clock offset: 5.502 ms
Remote clock offset: 48.594 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 53.822 ms
Loss rate: 25.48%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.721 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 10.62 Mbit/s
95th percentile per-packet one-way delay: 54.137 ms
Loss rate: 27.30%
-- Flow 3:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 48.734 ms
Loss rate: 12.74%
```

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

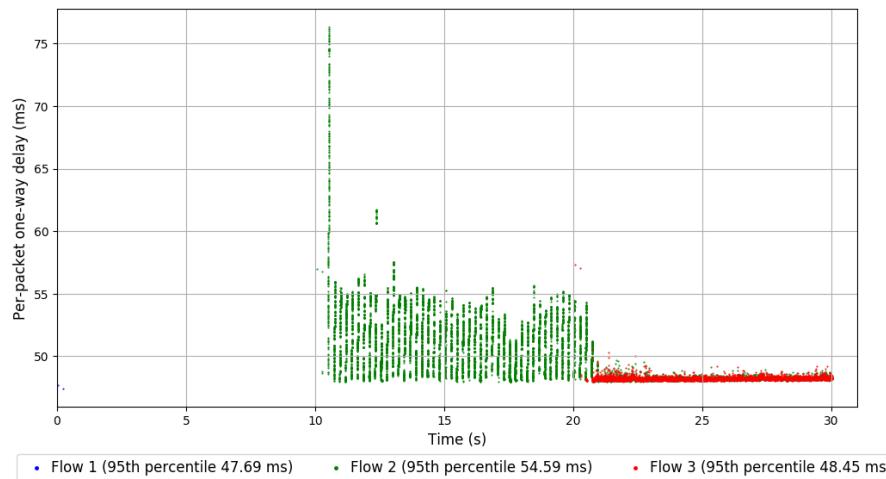
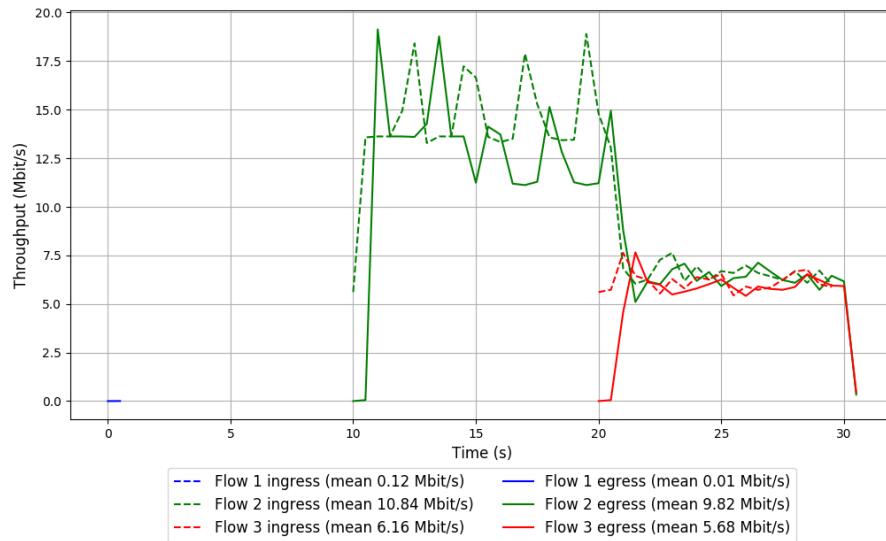


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-25 08:34:44
End at: 2019-01-25 08:35:14
Local clock offset: 4.49 ms
Remote clock offset: 48.569 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.43 Mbit/s
95th percentile per-packet one-way delay: 54.386 ms
Loss rate: 9.15%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 47.692 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 9.82 Mbit/s
95th percentile per-packet one-way delay: 54.592 ms
Loss rate: 9.49%
-- Flow 3:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 48.446 ms
Loss rate: 7.93%
```

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

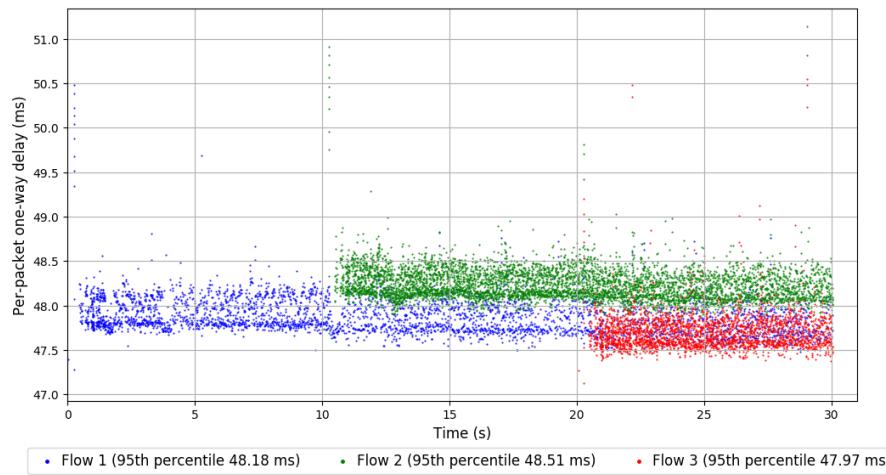
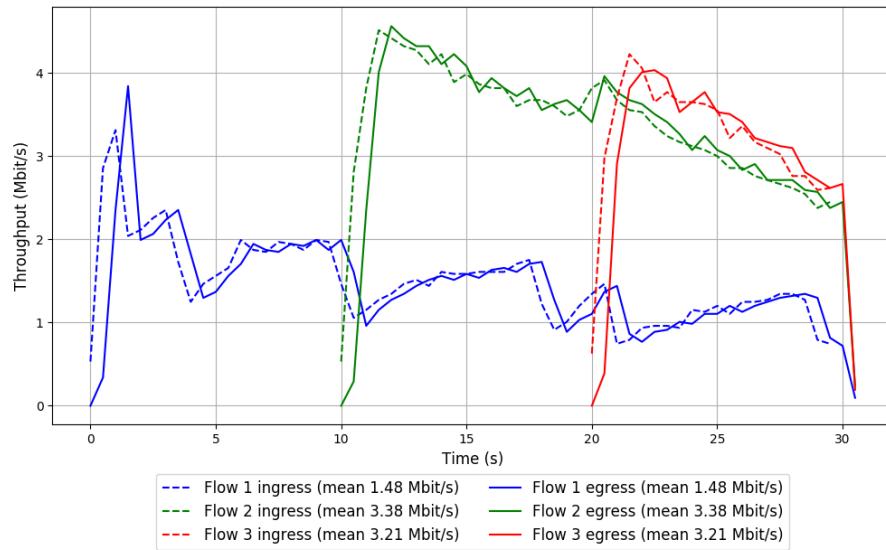


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-25 01:19:35
End at: 2019-01-25 01:20:05
Local clock offset: -0.907 ms
Remote clock offset: 10.563 ms

# Below is generated by plot.py at 2019-01-25 08:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 48.452 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 48.178 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 48.511 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 47.971 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

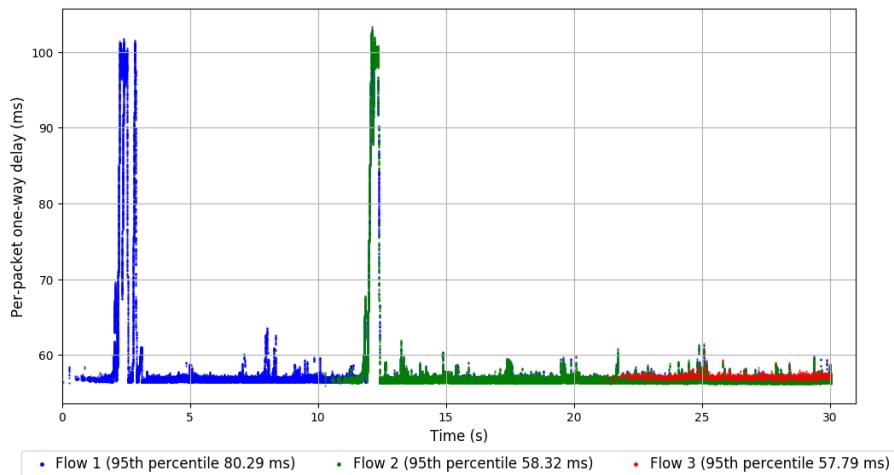
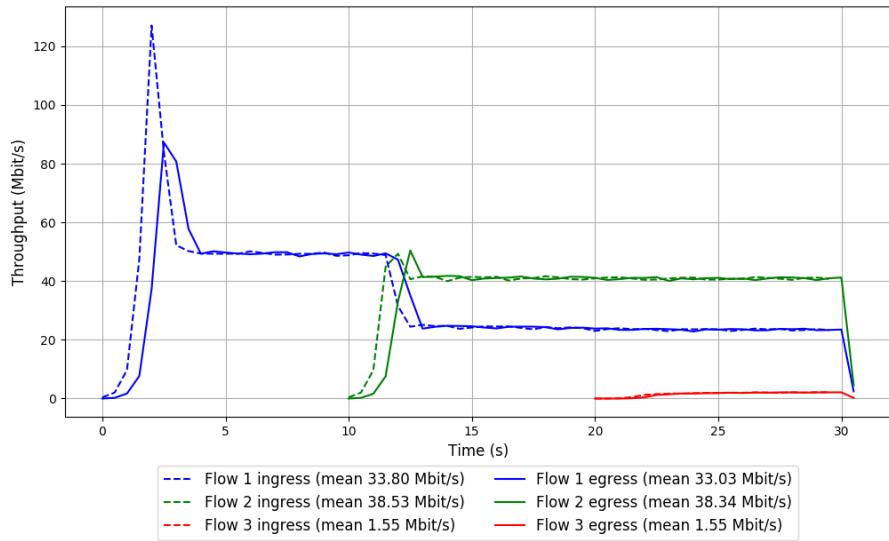


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-25 04:14:43
End at: 2019-01-25 04:15:13
Local clock offset: 2.727 ms
Remote clock offset: 57.531 ms

# Below is generated by plot.py at 2019-01-25 08:55:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.09 Mbit/s
95th percentile per-packet one-way delay: 66.746 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 80.287 ms
Loss rate: 2.28%
-- Flow 2:
Average throughput: 38.34 Mbit/s
95th percentile per-packet one-way delay: 58.324 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 57.791 ms
Loss rate: 0.00%
```

Run 2: Report of TCP Vegas — Data Link

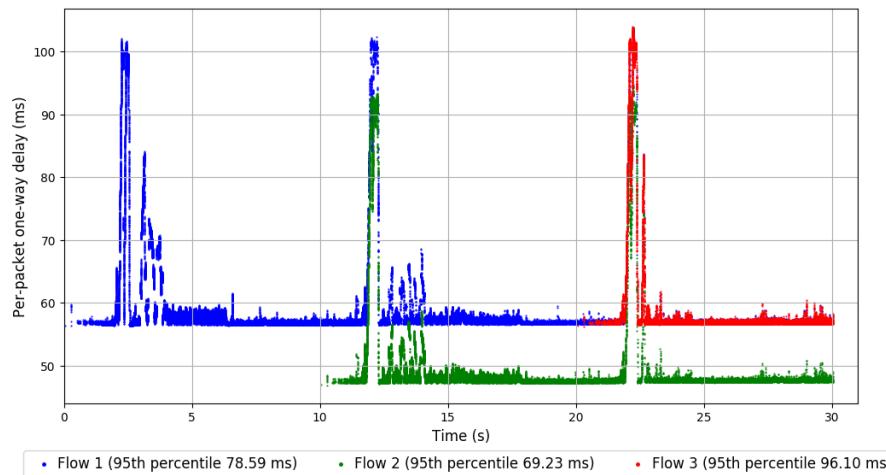
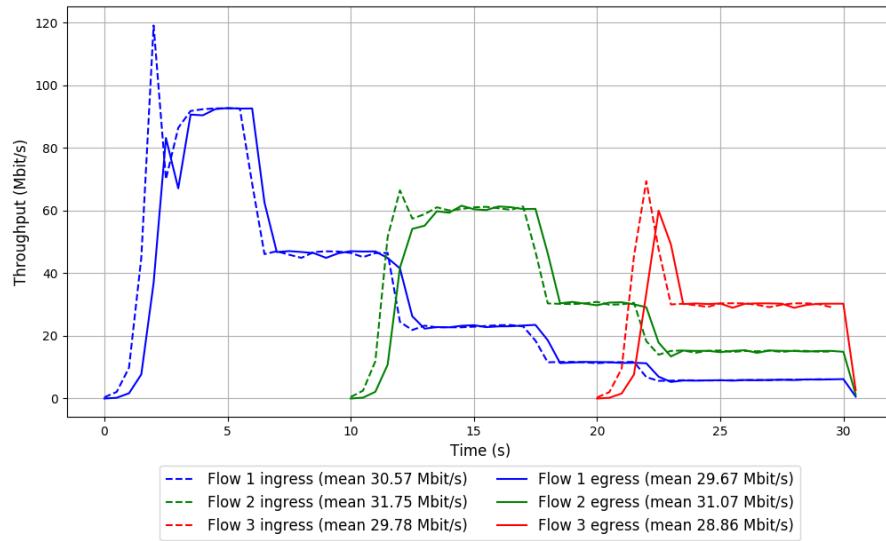


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-25 05:19:04
End at: 2019-01-25 05:19:34
Local clock offset: 4.058 ms
Remote clock offset: 26.078 ms

# Below is generated by plot.py at 2019-01-25 08:55:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.98 Mbit/s
95th percentile per-packet one-way delay: 80.315 ms
Loss rate: 2.68%
-- Flow 1:
Average throughput: 29.67 Mbit/s
95th percentile per-packet one-way delay: 78.587 ms
Loss rate: 2.94%
-- Flow 2:
Average throughput: 31.07 Mbit/s
95th percentile per-packet one-way delay: 69.233 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 28.86 Mbit/s
95th percentile per-packet one-way delay: 96.098 ms
Loss rate: 3.07%
```

Run 3: Report of TCP Vegas — Data Link

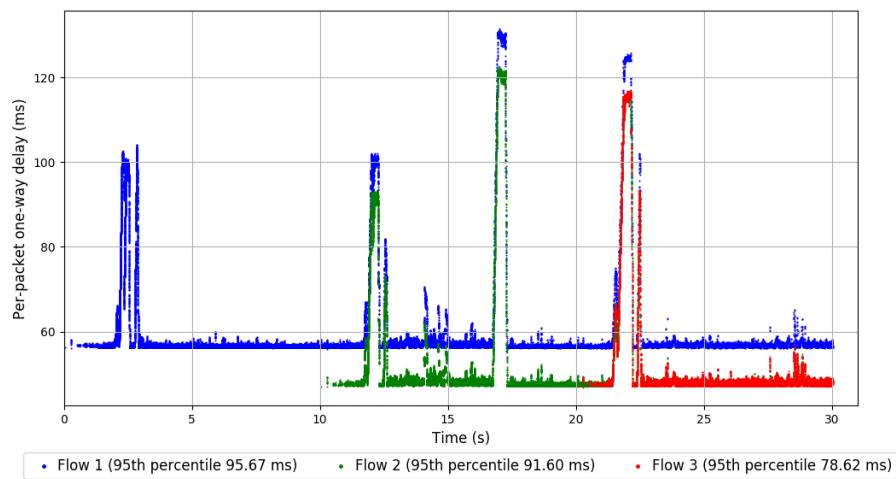
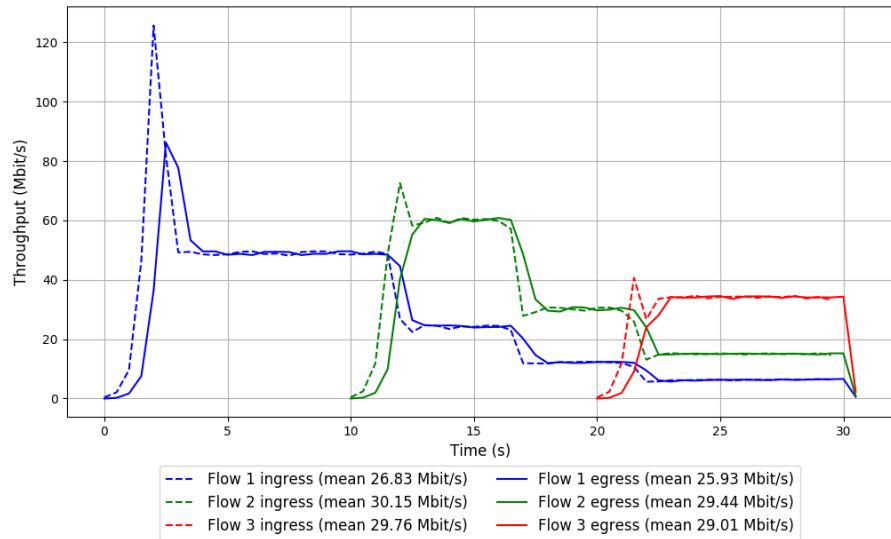


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-25 07:20:49
End at: 2019-01-25 07:21:19
Local clock offset: 0.614 ms
Remote clock offset: 48.188 ms

# Below is generated by plot.py at 2019-01-25 08:55:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.18 Mbit/s
95th percentile per-packet one-way delay: 91.854 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 25.93 Mbit/s
95th percentile per-packet one-way delay: 95.675 ms
Loss rate: 3.37%
-- Flow 2:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 91.599 ms
Loss rate: 2.34%
-- Flow 3:
Average throughput: 29.01 Mbit/s
95th percentile per-packet one-way delay: 78.623 ms
Loss rate: 2.53%
```

Run 4: Report of TCP Vegas — Data Link

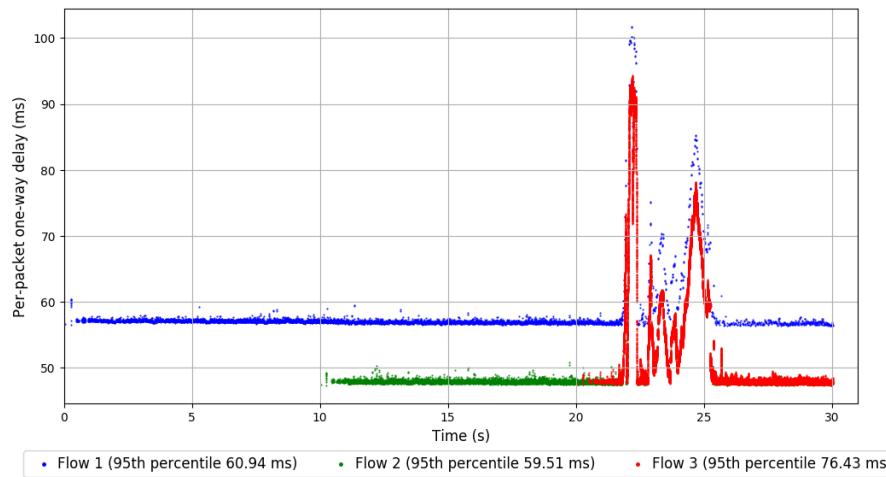
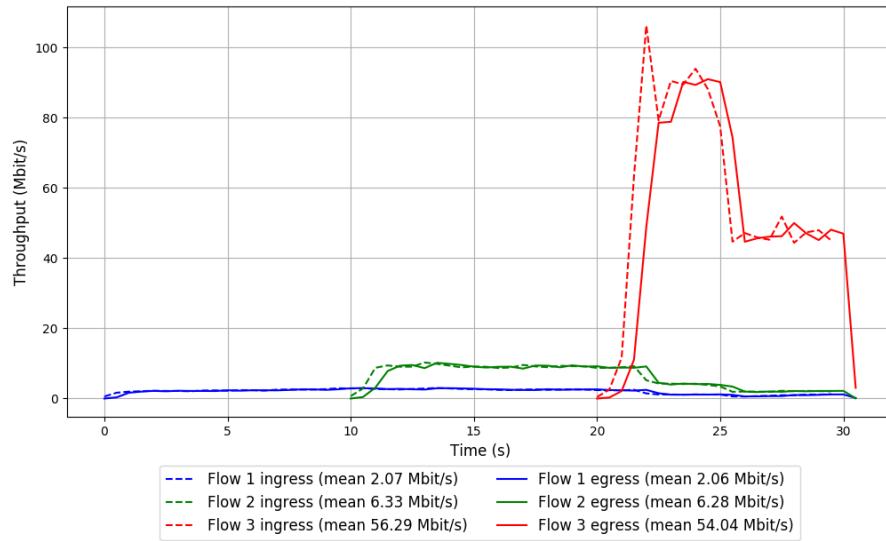


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-25 07:57:23
End at: 2019-01-25 07:57:53
Local clock offset: 7.417 ms
Remote clock offset: 59.81 ms

# Below is generated by plot.py at 2019-01-25 08:55:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.23 Mbit/s
95th percentile per-packet one-way delay: 74.947 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 60.943 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 6.28 Mbit/s
95th percentile per-packet one-way delay: 59.511 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 54.04 Mbit/s
95th percentile per-packet one-way delay: 76.433 ms
Loss rate: 3.98%
```

Run 5: Report of TCP Vegas — Data Link

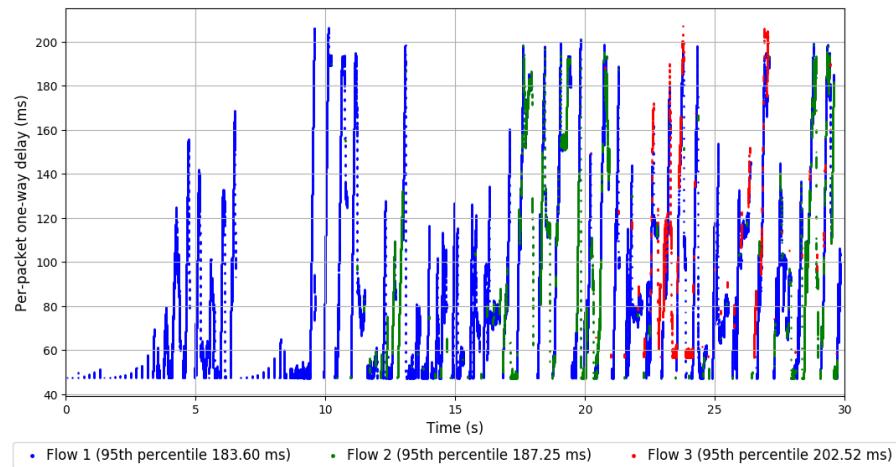
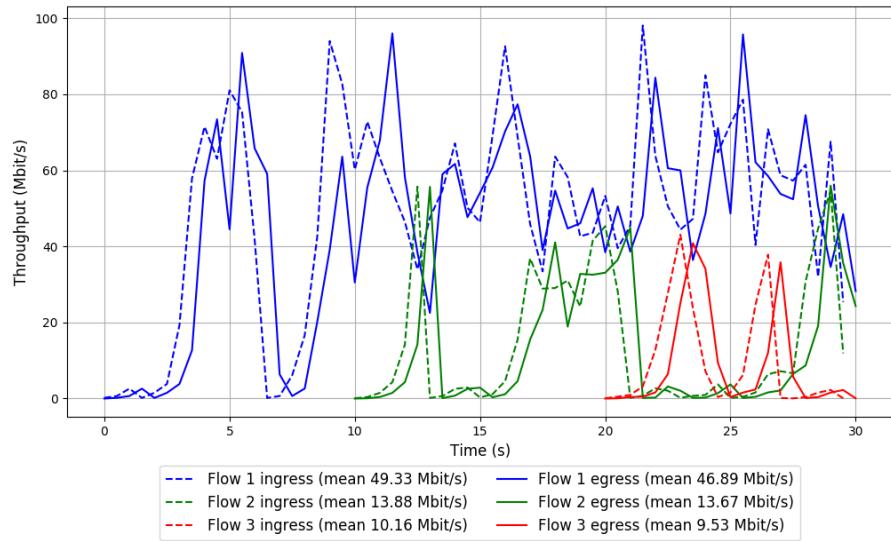


Run 1: Statistics of Verus

```
Start at: 2019-01-25 01:20:57
End at: 2019-01-25 01:21:27
Local clock offset: -0.803 ms
Remote clock offset: 10.995 ms

# Below is generated by plot.py at 2019-01-25 08:55:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.87 Mbit/s
95th percentile per-packet one-way delay: 186.193 ms
Loss rate: 4.53%
-- Flow 1:
Average throughput: 46.89 Mbit/s
95th percentile per-packet one-way delay: 183.597 ms
Loss rate: 4.80%
-- Flow 2:
Average throughput: 13.67 Mbit/s
95th percentile per-packet one-way delay: 187.255 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 202.516 ms
Loss rate: 7.03%
```

Run 1: Report of Verus — Data Link

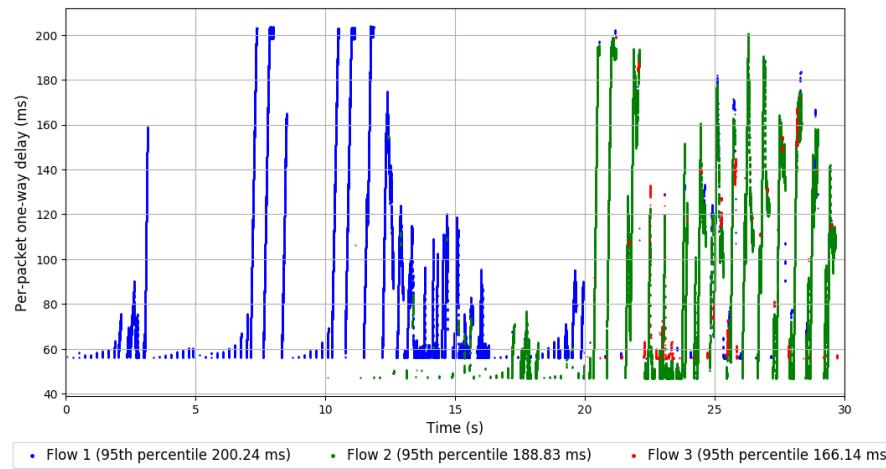
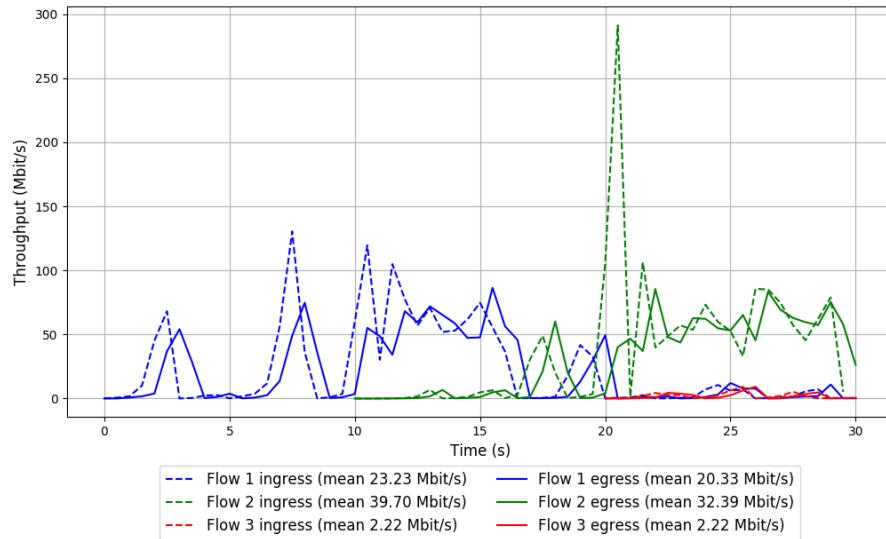


Run 2: Statistics of Verus

```
Start at: 2019-01-25 04:18:43
End at: 2019-01-25 04:19:13
Local clock offset: 2.632 ms
Remote clock offset: 58.53 ms

# Below is generated by plot.py at 2019-01-25 08:55:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.41 Mbit/s
95th percentile per-packet one-way delay: 193.397 ms
Loss rate: 15.25%
-- Flow 1:
Average throughput: 20.33 Mbit/s
95th percentile per-packet one-way delay: 200.240 ms
Loss rate: 12.46%
-- Flow 2:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 188.832 ms
Loss rate: 18.15%
-- Flow 3:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 166.142 ms
Loss rate: 0.00%
```

Run 2: Report of Verus — Data Link

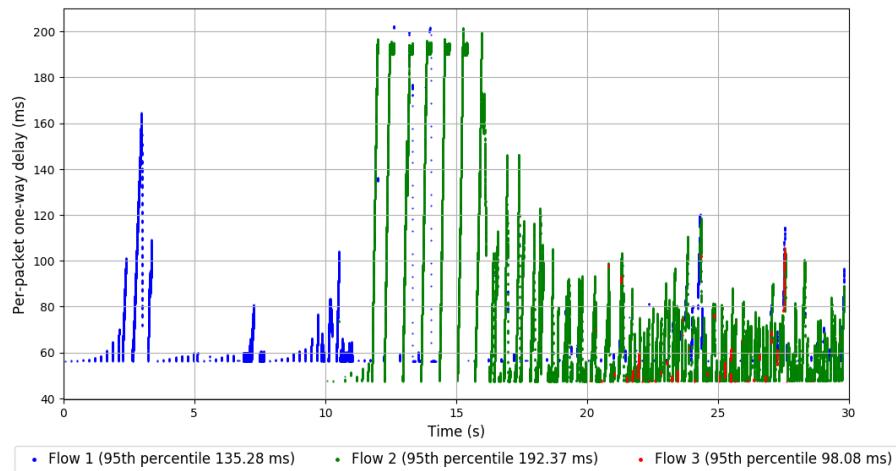
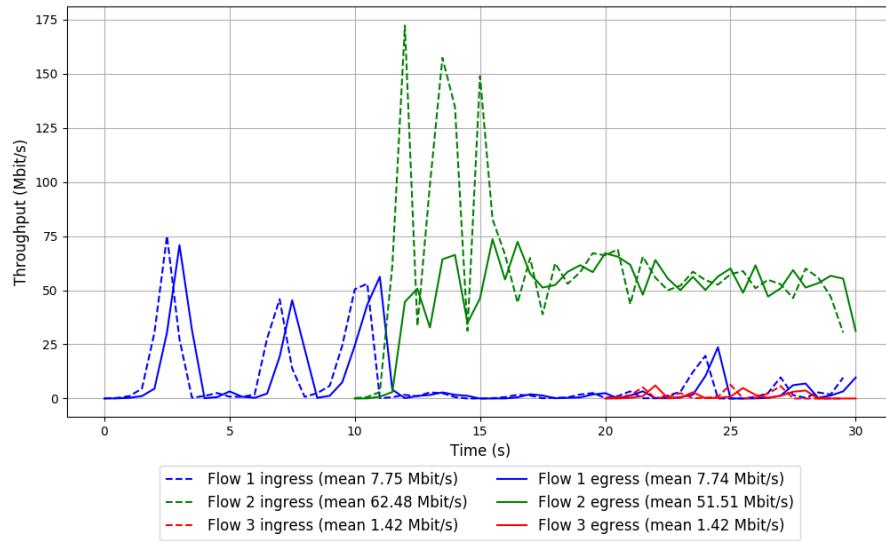


Run 3: Statistics of Verus

```
Start at: 2019-01-25 05:23:39
End at: 2019-01-25 05:24:09
Local clock offset: 4.175 ms
Remote clock offset: 23.903 ms

# Below is generated by plot.py at 2019-01-25 08:55:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.36 Mbit/s
95th percentile per-packet one-way delay: 191.666 ms
Loss rate: 14.53%
-- Flow 1:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 135.276 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 51.51 Mbit/s
95th percentile per-packet one-way delay: 192.366 ms
Loss rate: 17.39%
-- Flow 3:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 98.084 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

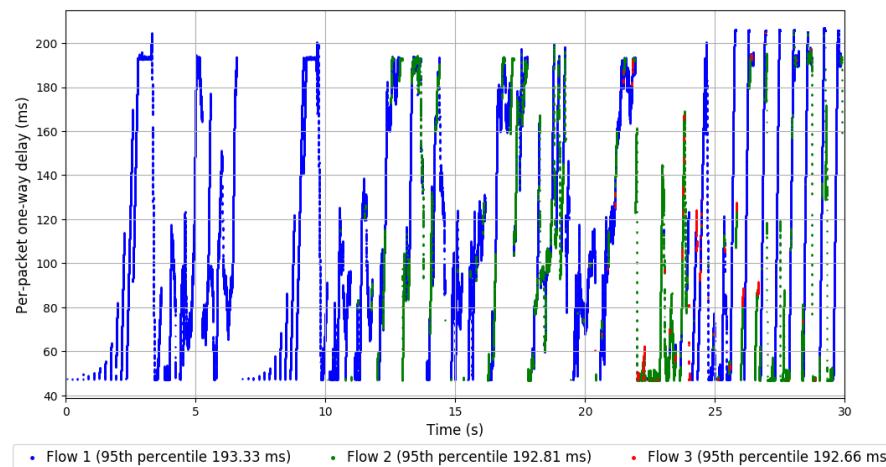
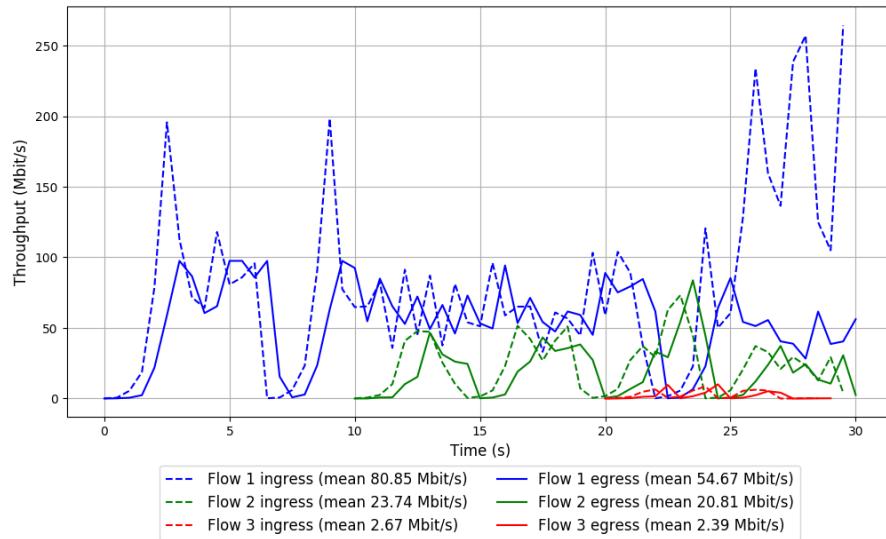


Run 4: Statistics of Verus

```
Start at: 2019-01-25 07:24:34
End at: 2019-01-25 07:25:04
Local clock offset: -0.428 ms
Remote clock offset: 48.202 ms

# Below is generated by plot.py at 2019-01-25 08:56:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.07 Mbit/s
95th percentile per-packet one-way delay: 193.217 ms
Loss rate: 28.74%
-- Flow 1:
Average throughput: 54.67 Mbit/s
95th percentile per-packet one-way delay: 193.326 ms
Loss rate: 32.20%
-- Flow 2:
Average throughput: 20.81 Mbit/s
95th percentile per-packet one-way delay: 192.814 ms
Loss rate: 11.85%
-- Flow 3:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 192.664 ms
Loss rate: 12.56%
```

Run 4: Report of Verus — Data Link

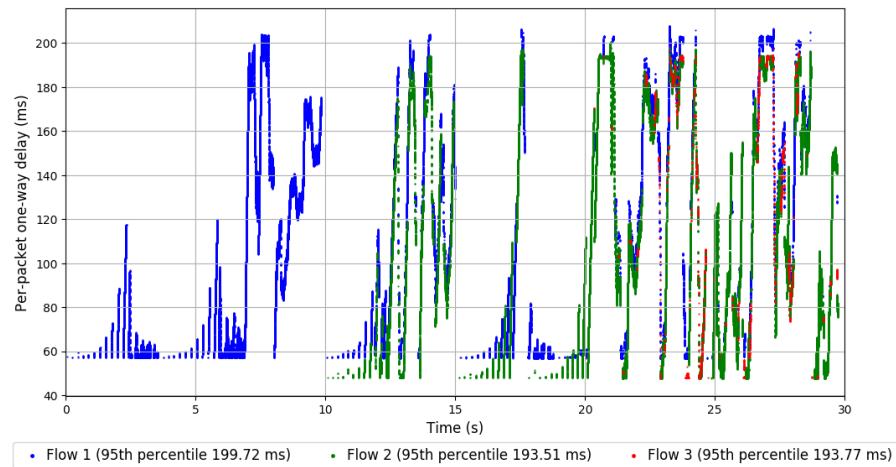
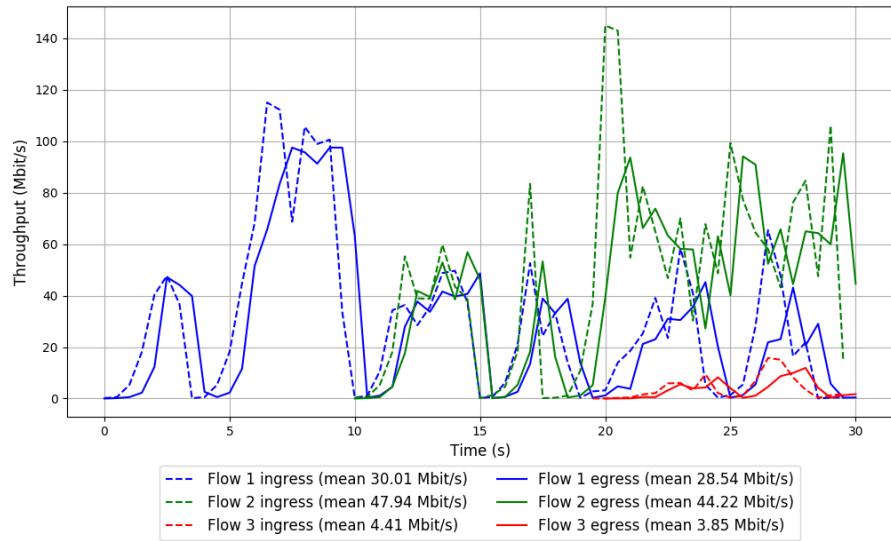


Run 5: Statistics of Verus

```
Start at: 2019-01-25 07:58:50
End at: 2019-01-25 07:59:20
Local clock offset: 7.703 ms
Remote clock offset: 61.747 ms

# Below is generated by plot.py at 2019-01-25 08:56:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.04 Mbit/s
95th percentile per-packet one-way delay: 193.800 ms
Loss rate: 6.31%
-- Flow 1:
Average throughput: 28.54 Mbit/s
95th percentile per-packet one-way delay: 199.715 ms
Loss rate: 4.64%
-- Flow 2:
Average throughput: 44.22 Mbit/s
95th percentile per-packet one-way delay: 193.511 ms
Loss rate: 7.61%
-- Flow 3:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 193.774 ms
Loss rate: 12.44%
```

Run 5: Report of Verus — Data Link

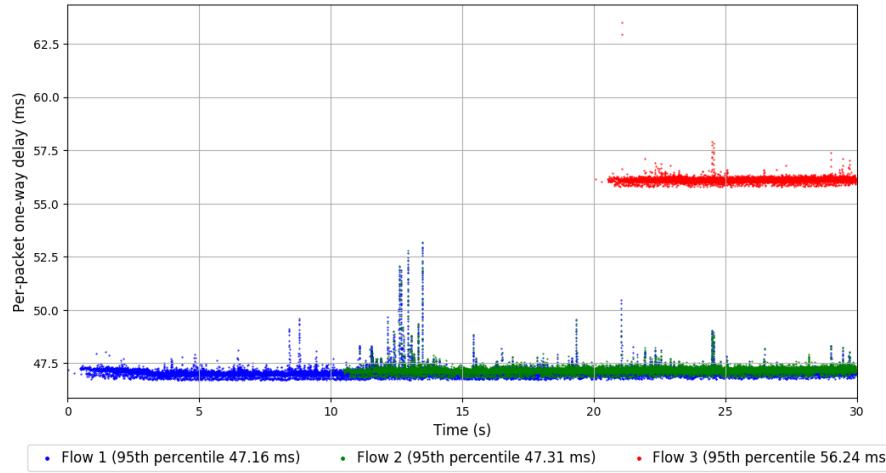
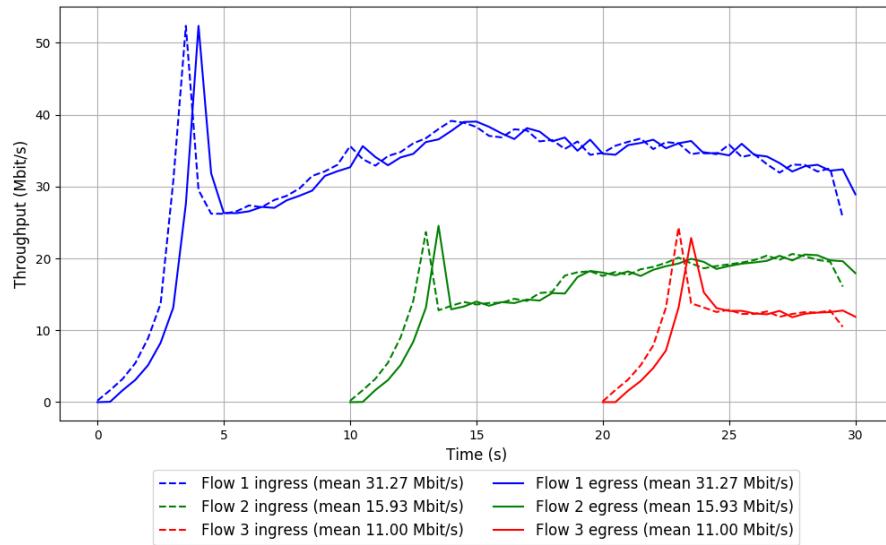


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-25 01:58:52
End at: 2019-01-25 01:59:22
Local clock offset: -2.786 ms
Remote clock offset: 5.841 ms

# Below is generated by plot.py at 2019-01-25 08:56:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.49 Mbit/s
95th percentile per-packet one-way delay: 56.073 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.27 Mbit/s
95th percentile per-packet one-way delay: 47.164 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.93 Mbit/s
95th percentile per-packet one-way delay: 47.306 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 11.00 Mbit/s
95th percentile per-packet one-way delay: 56.238 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

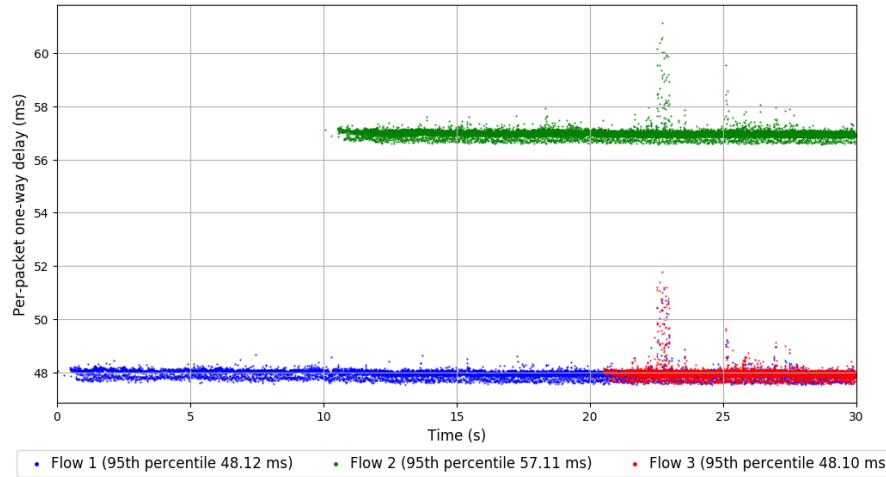
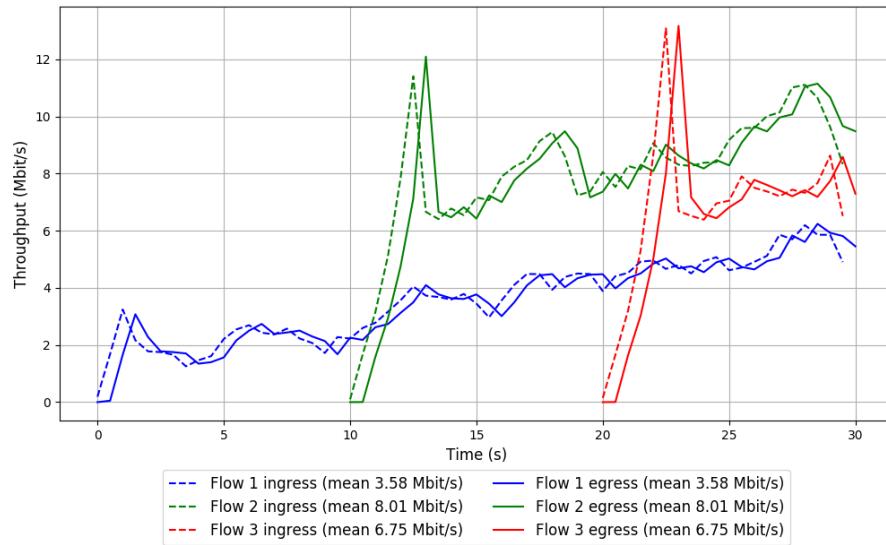


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-25 04:42:51
End at: 2019-01-25 04:43:21
Local clock offset: 2.824 ms
Remote clock offset: 54.289 ms

# Below is generated by plot.py at 2019-01-25 08:56:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 57.076 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 48.125 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 57.111 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 48.105 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

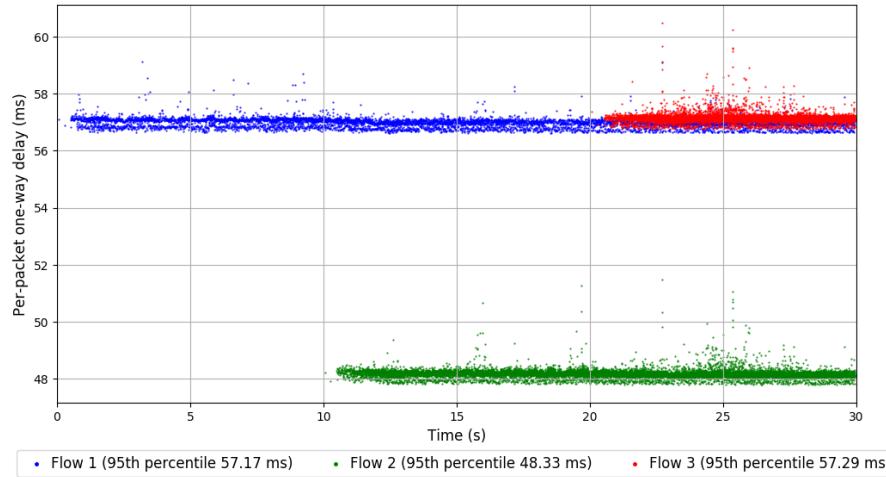
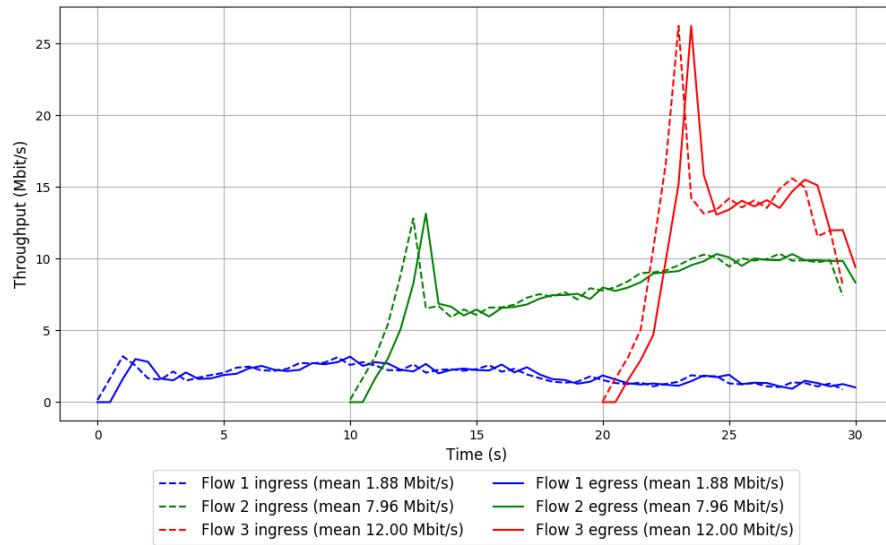


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-25 05:47:23
End at: 2019-01-25 05:47:53
Local clock offset: 16.259 ms
Remote clock offset: 40.788 ms

# Below is generated by plot.py at 2019-01-25 08:56:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.14 Mbit/s
95th percentile per-packet one-way delay: 57.206 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 57.171 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 48.328 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 57.292 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

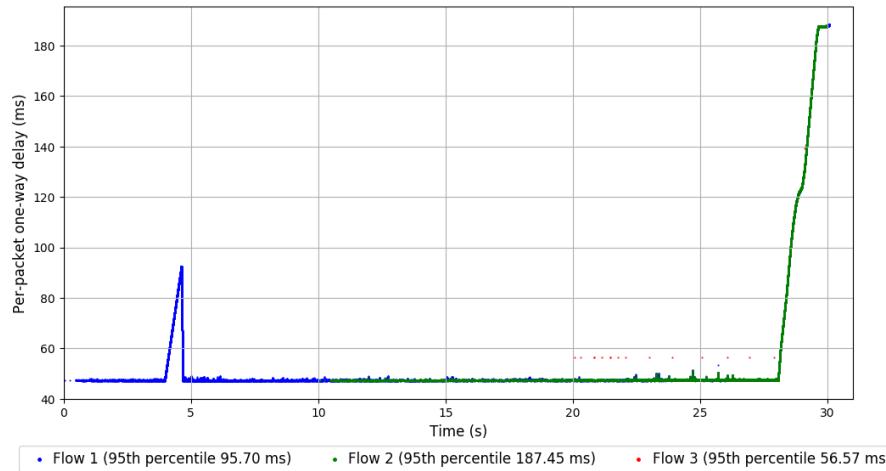
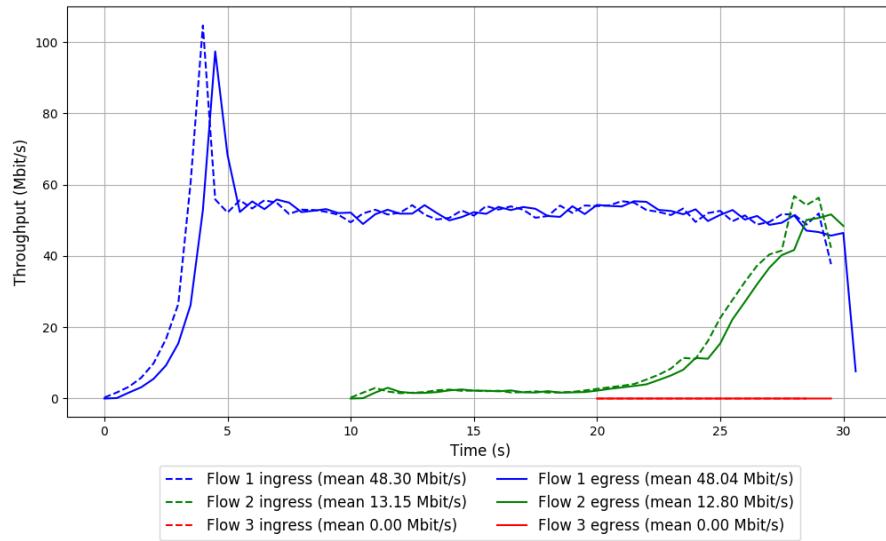


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-25 07:36:56
End at: 2019-01-25 07:37:26
Local clock offset: 3.983 ms
Remote clock offset: 48.097 ms

# Below is generated by plot.py at 2019-01-25 08:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.53 Mbit/s
95th percentile per-packet one-way delay: 135.145 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 48.04 Mbit/s
95th percentile per-packet one-way delay: 95.705 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 12.80 Mbit/s
95th percentile per-packet one-way delay: 187.448 ms
Loss rate: 2.45%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 56.571 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

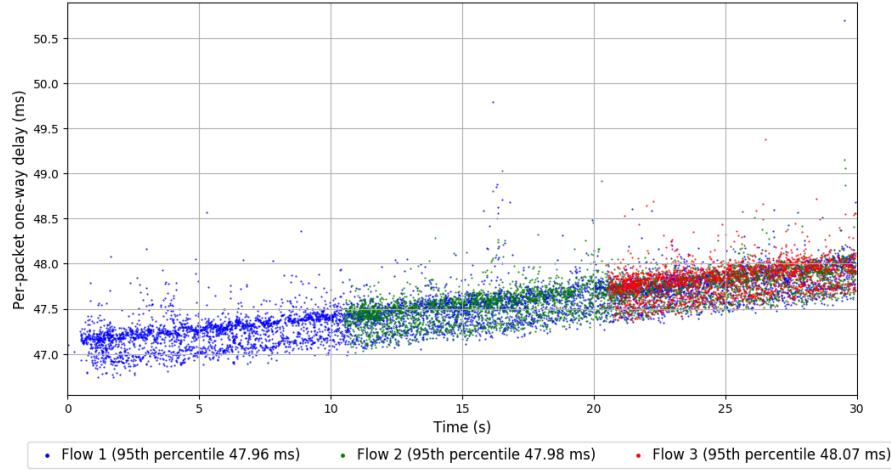
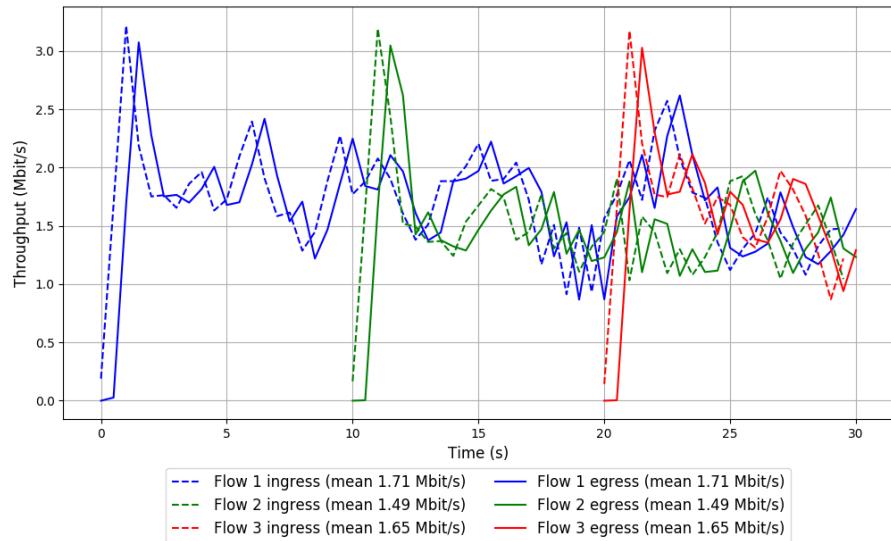


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-25 08:25:20
End at: 2019-01-25 08:25:50
Local clock offset: 6.154 ms
Remote clock offset: 59.864 ms

# Below is generated by plot.py at 2019-01-25 08:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.25 Mbit/s
95th percentile per-packet one-way delay: 48.003 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 47.960 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 47.985 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 48.074 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

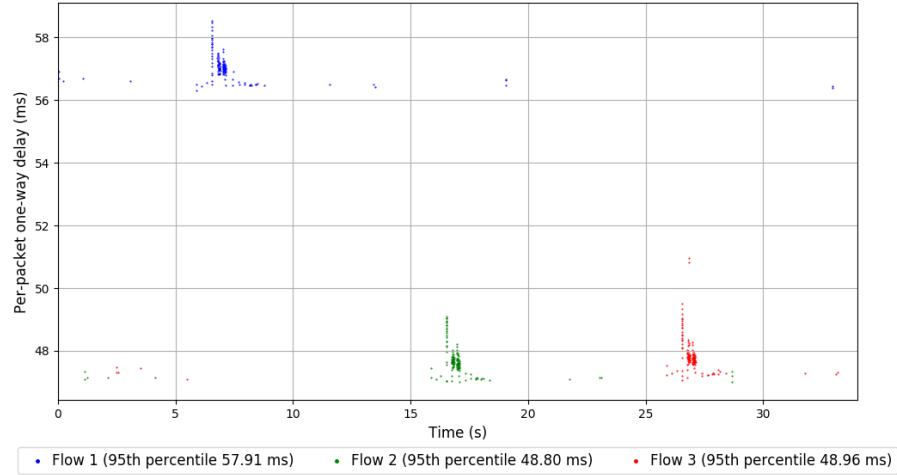
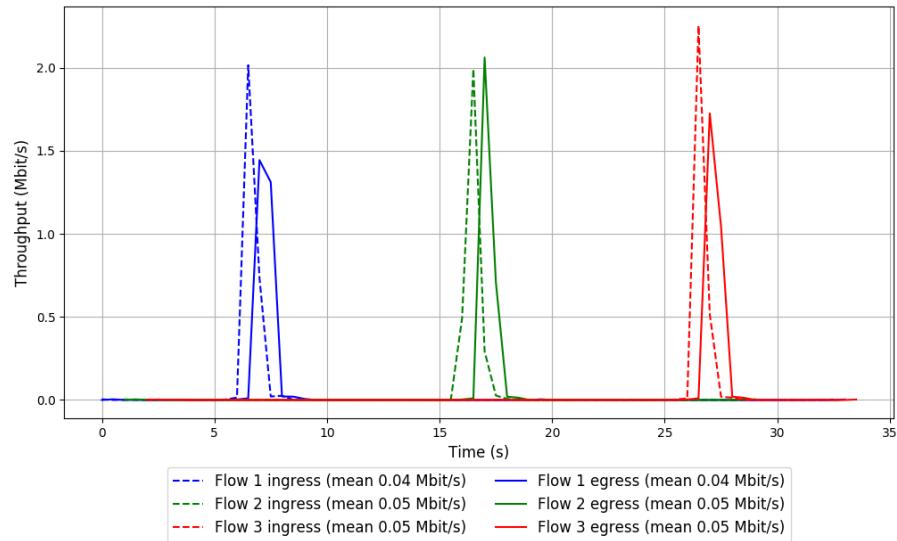


```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 02:45:21
End at: 2019-01-25 02:45:51
Local clock offset: -6.857 ms
Remote clock offset: 4.901 ms

# Below is generated by plot.py at 2019-01-25 08:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 57.351 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 57.915 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 48.801 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 48.958 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

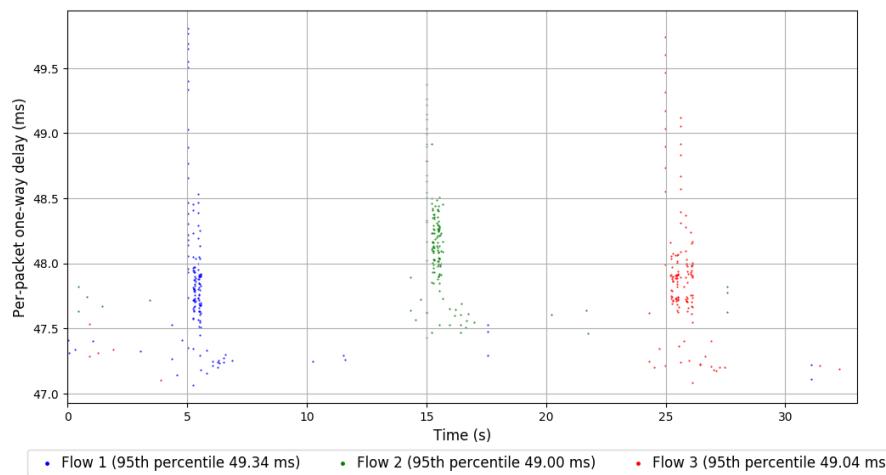
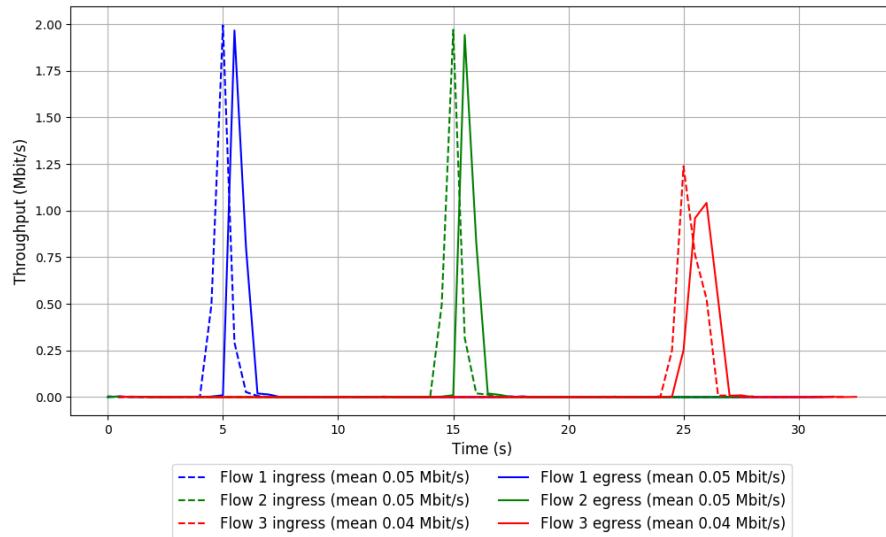


Run 2: Statistics of WebRTC media

```
Start at: 2019-01-25 04:49:06
End at: 2019-01-25 04:49:36
Local clock offset: 2.942 ms
Remote clock offset: 54.096 ms

# Below is generated by plot.py at 2019-01-25 08:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 49.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 49.337 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 48.998 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 49.037 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

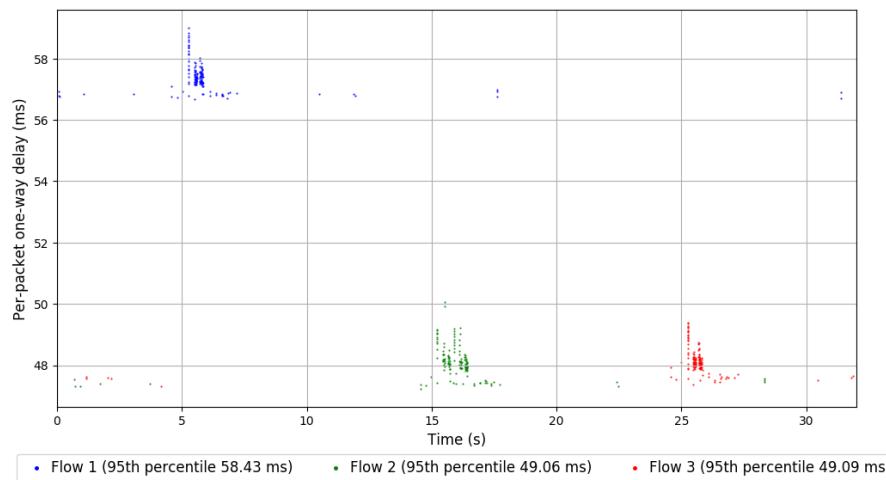
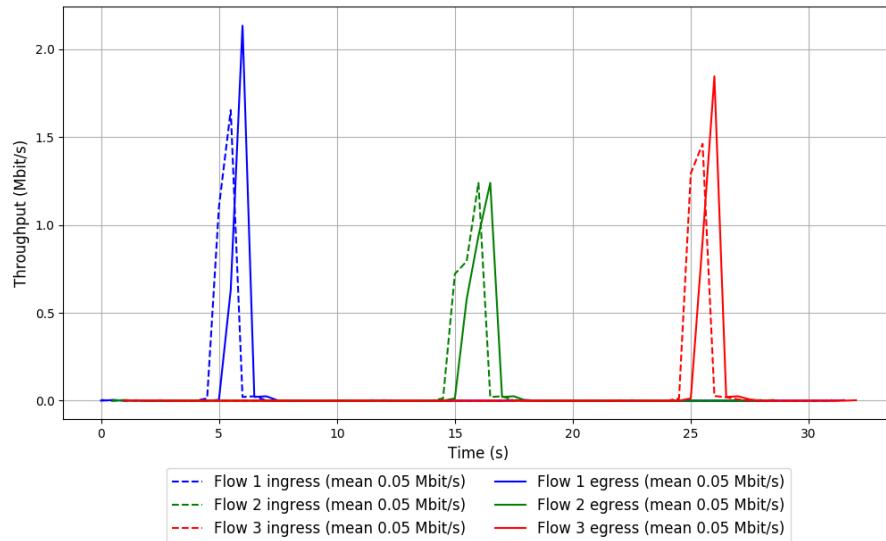


```
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 05:55:05
End at: 2019-01-25 05:55:35
Local clock offset: 18.22 ms
Remote clock offset: 41.911 ms

# Below is generated by plot.py at 2019-01-25 08:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 57.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 49.060 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 49.087 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

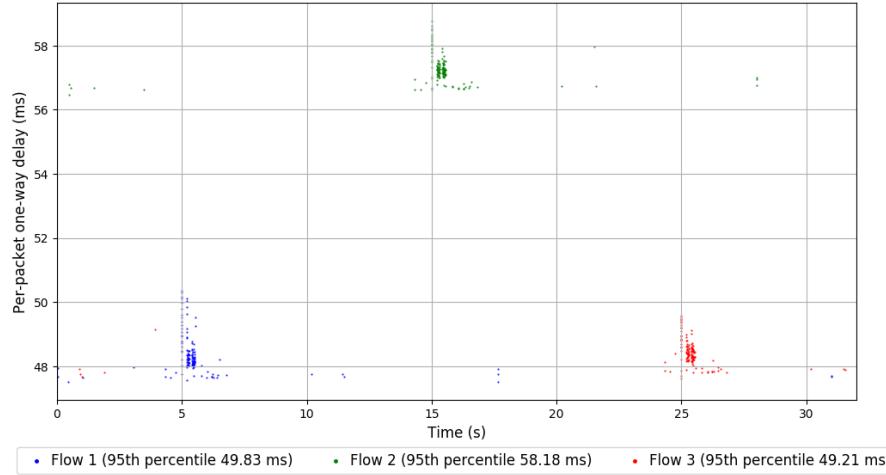
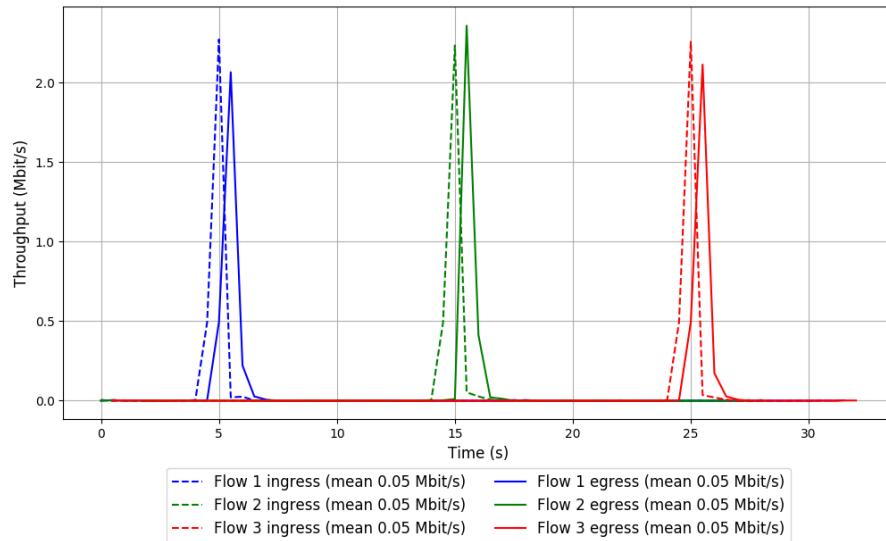


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-25 07:40:14
End at: 2019-01-25 07:40:44
Local clock offset: 5.196 ms
Remote clock offset: 48.603 ms

# Below is generated by plot.py at 2019-01-25 08:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 57.550 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 49.834 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.182 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 49.207 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-01-25 08:33:21
End at: 2019-01-25 08:33:51
Local clock offset: 5.042 ms
Remote clock offset: 49.889 ms

# Below is generated by plot.py at 2019-01-25 08:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 57.559 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 48.480 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 48.814 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 58.303 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

