

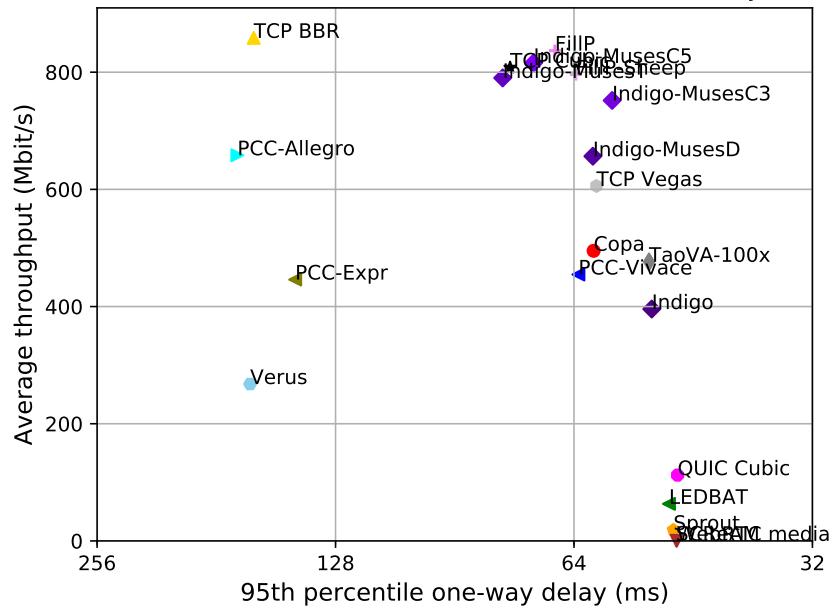
Pantheon Report

Generated at 2019-03-28 02:38:24 (UTC).
Data path: GCE Iowa on `ens4` (*remote*) → GCE London on `ens4` (*local*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

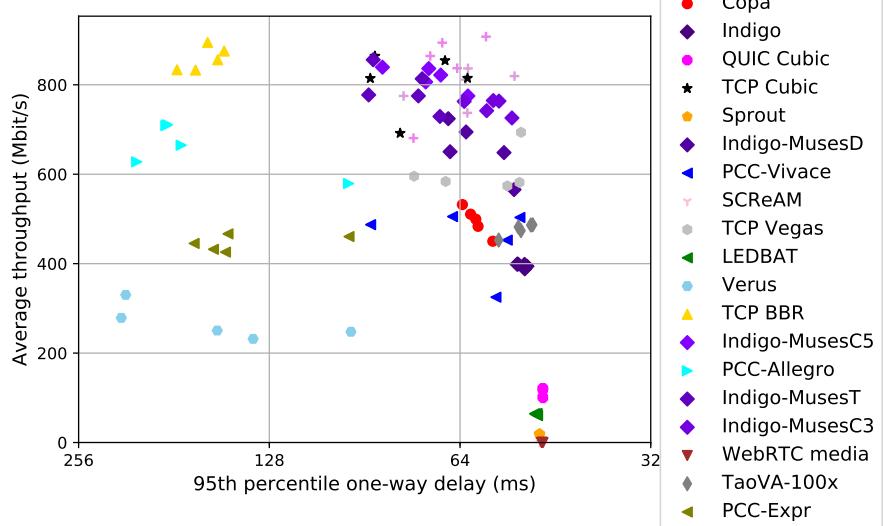
```
System info:  
Linux 4.15.0-1028-gcp  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee  
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/pantheon-tunnel @ 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 GCE Iowa to GCE London, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



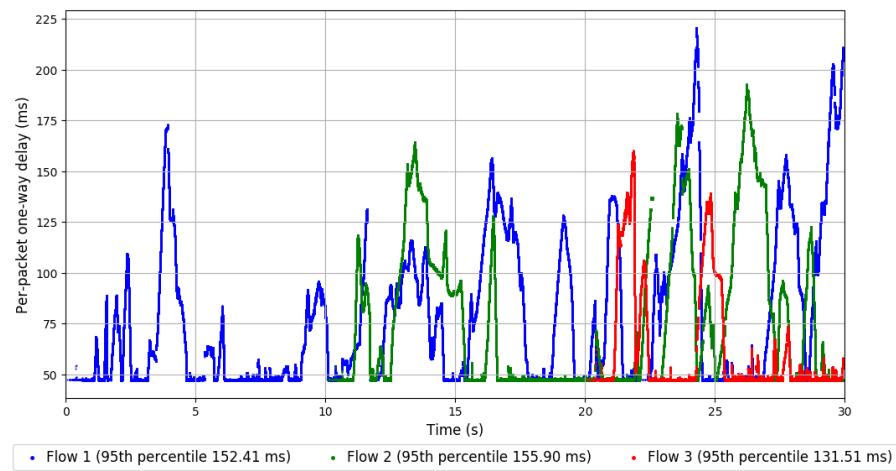
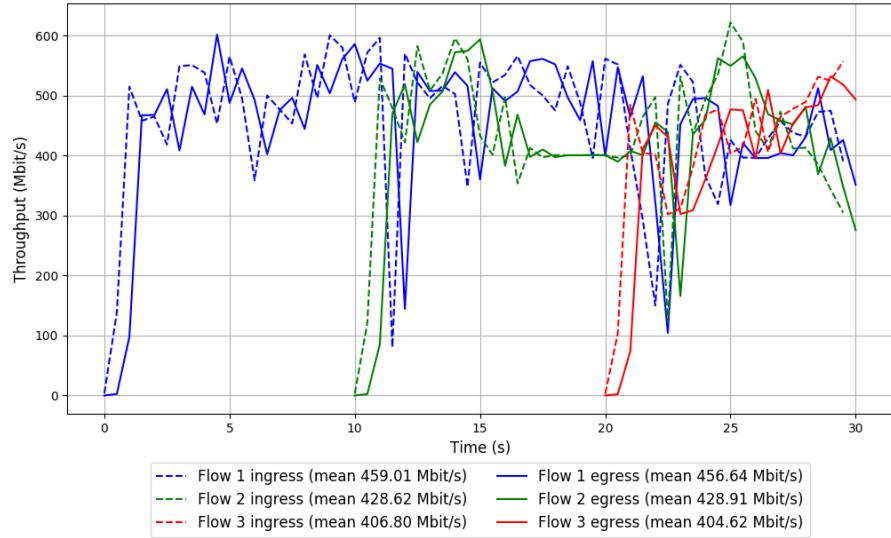
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	440.40	434.37	391.29	153.20	173.52	146.34	0.73	1.34	1.67
Copa	5	260.21	247.57	212.94	59.35	61.63	62.71	0.27	0.53	1.09
TCP Cubic	5	424.82	393.43	367.34	79.67	67.48	75.73	0.32	0.43	1.01
FillP	5	522.25	342.15	264.87	74.64	52.04	50.22	0.19	0.40	1.04
FillP-Sheep	5	495.22	331.06	245.39	69.62	52.60	51.47	0.25	0.41	1.09
Indigo	5	209.65	194.13	174.97	50.87	51.48	50.49	0.31	0.51	1.14
Indigo-MusesC3	5	435.88	378.18	267.76	58.76	56.89	51.26	0.24	0.43	1.69
Indigo-MusesC5	5	486.57	406.22	252.47	71.94	70.36	56.63	0.27	0.36	1.34
Indigo-MusesD	5	410.87	262.67	283.92	65.24	58.59	51.57	0.24	0.26	1.63
Indigo-MusesT	5	479.55	410.23	171.74	82.61	73.19	50.13	0.29	0.50	1.41
LEDBAT	5	40.59	27.37	13.71	48.47	48.61	48.20	0.50	0.95	1.91
PCC-Allegro	5	349.95	339.83	253.03	150.77	180.87	123.43	4.07	4.55	1.40
PCC-Expr	5	238.92	231.95	162.20	130.38	108.86	97.55	1.29	1.21	2.24
QUIC Cubic	5	61.28	59.61	33.04	47.35	47.36	47.05	0.39	0.56	1.52
SCReAM	5	0.22	0.22	0.22	47.31	47.26	47.62	0.26	0.61	1.09
Sprout	5	9.50	9.44	9.13	47.84	47.91	47.92	0.35	0.52	0.88
TaoVA-100x	5	242.02	237.71	230.98	49.69	52.00	53.41	0.34	0.45	0.96
TCP Vegas	5	311.85	290.83	304.24	50.18	59.35	73.19	0.27	0.42	0.97
Verus	5	153.39	137.23	70.73	129.51	188.81	73.78	1.11	2.32	1.16
PCC-Vivace	5	248.36	219.72	184.49	59.79	81.98	79.04	0.37	0.54	1.17
WebRTC media	5	0.05	0.05	0.05	47.32	47.52	47.45	0.00	0.00	0.02

Run 1: Statistics of TCP BBR

```
Start at: 2019-03-27 20:49:17
End at: 2019-03-27 20:49:47
Local clock offset: -0.136 ms
Remote clock offset: -0.249 ms

# Below is generated by plot.py at 2019-03-28 00:13:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 875.49 Mbit/s
95th percentile per-packet one-way delay: 150.838 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 456.64 Mbit/s
95th percentile per-packet one-way delay: 152.405 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 428.91 Mbit/s
95th percentile per-packet one-way delay: 155.897 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 404.62 Mbit/s
95th percentile per-packet one-way delay: 131.508 ms
Loss rate: 1.49%
```

Run 1: Report of TCP BBR — Data Link

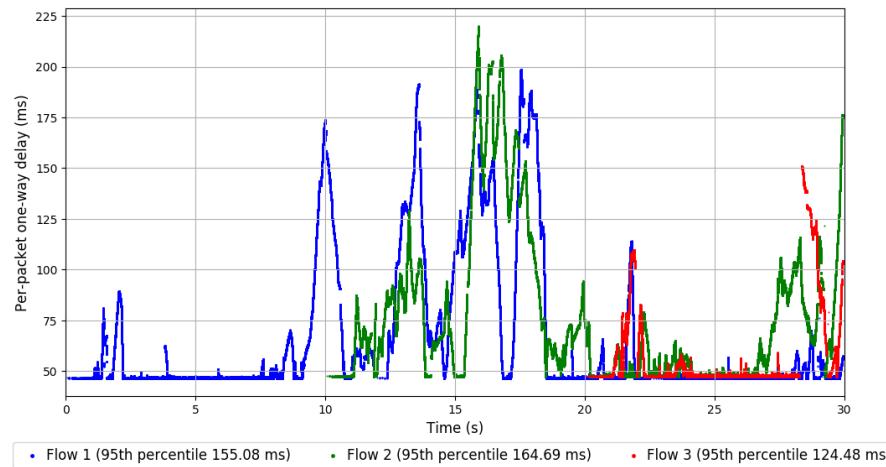
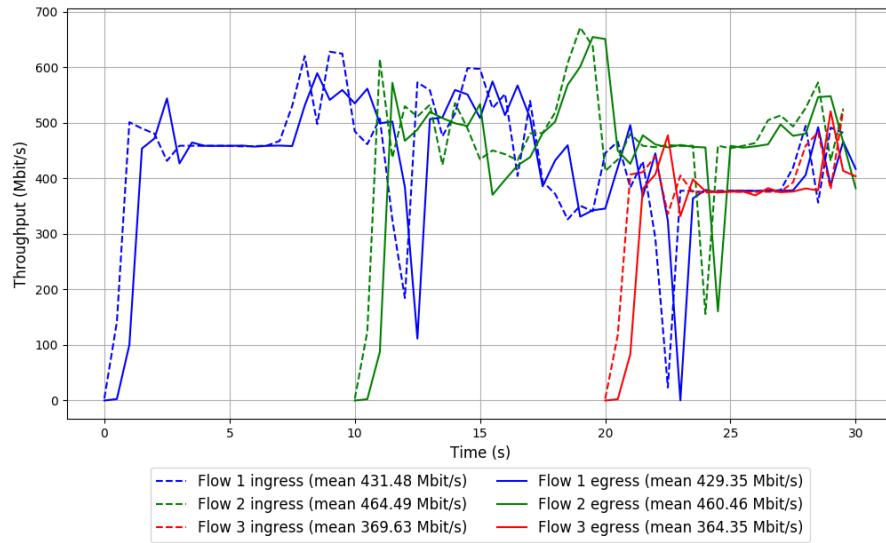


Run 2: Statistics of TCP BBR

```
Start at: 2019-03-27 21:24:44
End at: 2019-03-27 21:25:14
Local clock offset: -0.178 ms
Remote clock offset: -0.29 ms

# Below is generated by plot.py at 2019-03-28 00:13:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 855.88 Mbit/s
95th percentile per-packet one-way delay: 154.404 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 429.35 Mbit/s
95th percentile per-packet one-way delay: 155.080 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 460.46 Mbit/s
95th percentile per-packet one-way delay: 164.688 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 364.35 Mbit/s
95th percentile per-packet one-way delay: 124.477 ms
Loss rate: 2.37%
```

Run 2: Report of TCP BBR — Data Link

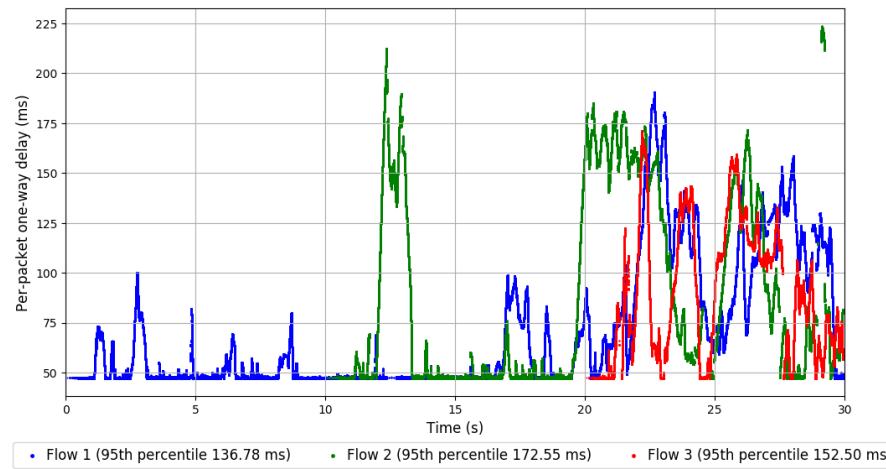
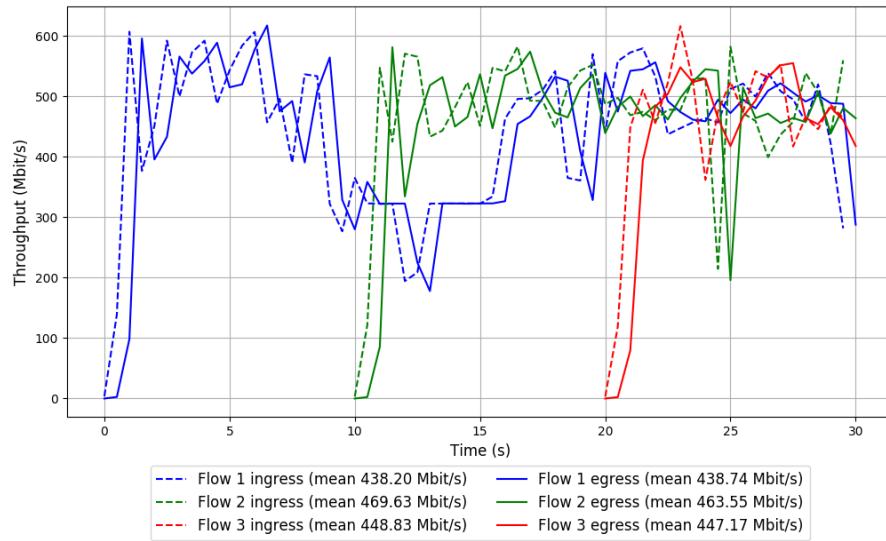


Run 3: Statistics of TCP BBR

```
Start at: 2019-03-27 22:00:22
End at: 2019-03-27 22:00:52
Local clock offset: -0.05 ms
Remote clock offset: -0.362 ms

# Below is generated by plot.py at 2019-03-28 00:13:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 894.72 Mbit/s
95th percentile per-packet one-way delay: 160.165 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 438.74 Mbit/s
95th percentile per-packet one-way delay: 136.776 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 463.55 Mbit/s
95th percentile per-packet one-way delay: 172.551 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 447.17 Mbit/s
95th percentile per-packet one-way delay: 152.504 ms
Loss rate: 1.32%
```

Run 3: Report of TCP BBR — Data Link

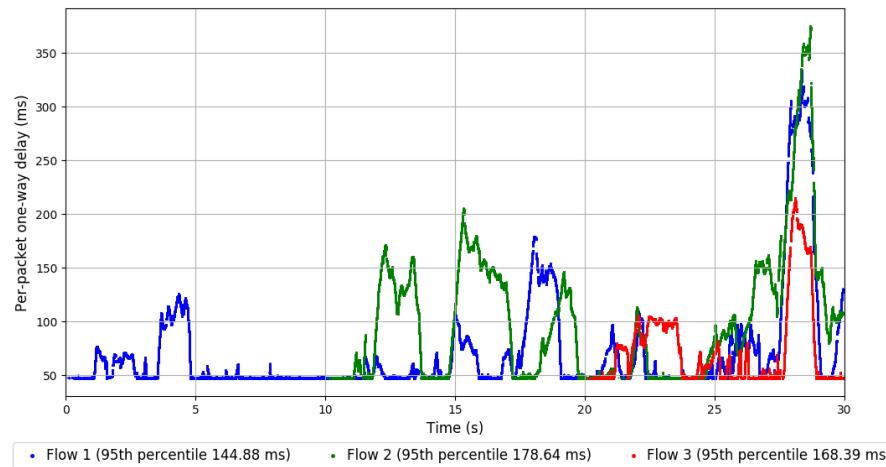
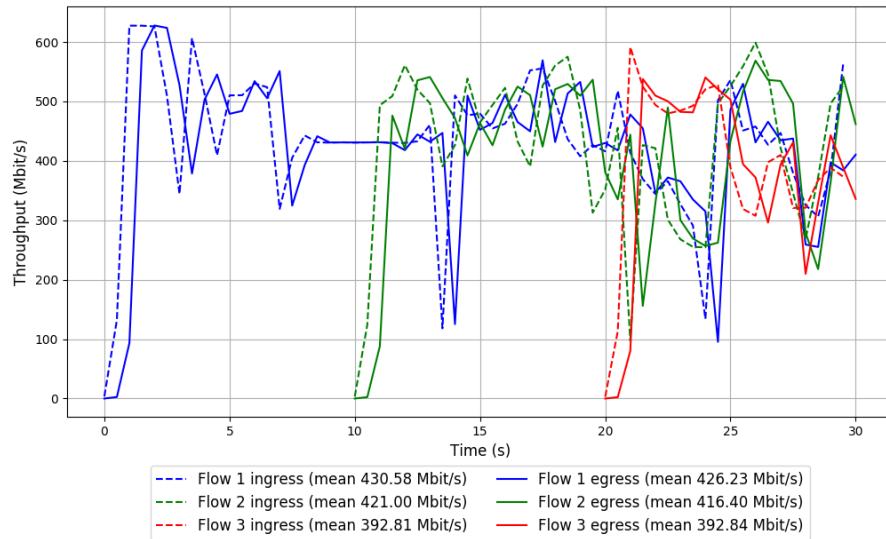


Run 4: Statistics of TCP BBR

```
Start at: 2019-03-27 22:35:56
End at: 2019-03-27 22:36:26
Local clock offset: -0.098 ms
Remote clock offset: -0.395 ms

# Below is generated by plot.py at 2019-03-28 00:13:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 832.88 Mbit/s
95th percentile per-packet one-way delay: 167.367 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 426.23 Mbit/s
95th percentile per-packet one-way delay: 144.878 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 416.40 Mbit/s
95th percentile per-packet one-way delay: 178.636 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 392.84 Mbit/s
95th percentile per-packet one-way delay: 168.391 ms
Loss rate: 0.95%
```

Run 4: Report of TCP BBR — Data Link

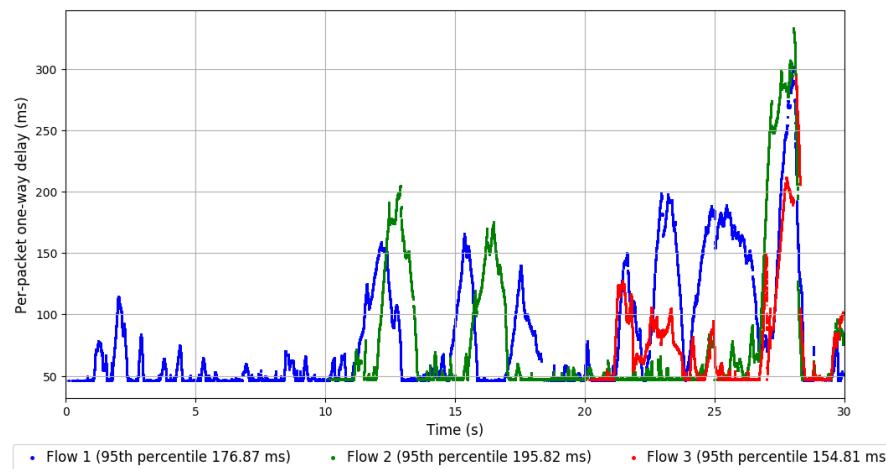
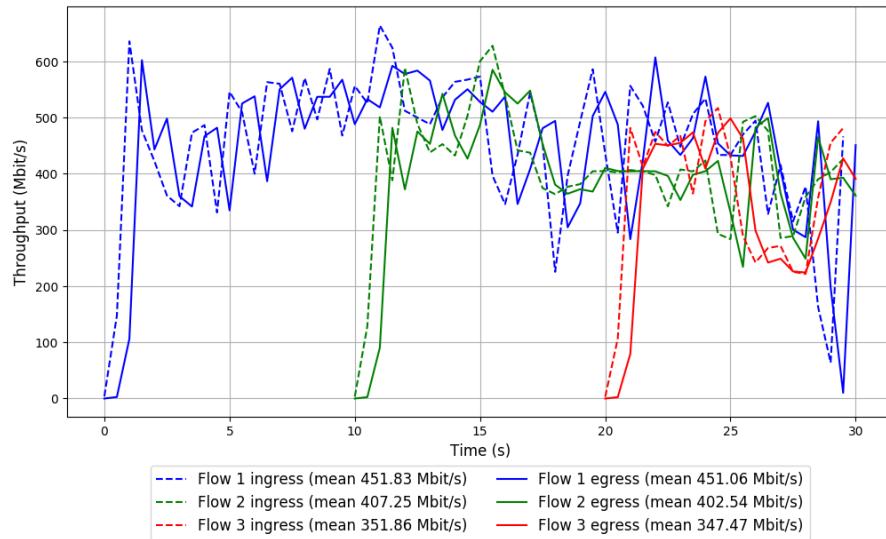


Run 5: Statistics of TCP BBR

```
Start at: 2019-03-27 23:12:09
End at: 2019-03-27 23:12:39
Local clock offset: -0.107 ms
Remote clock offset: -0.447 ms

# Below is generated by plot.py at 2019-03-28 00:13:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 833.64 Mbit/s
95th percentile per-packet one-way delay: 179.010 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 451.06 Mbit/s
95th percentile per-packet one-way delay: 176.868 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 402.54 Mbit/s
95th percentile per-packet one-way delay: 195.821 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 347.47 Mbit/s
95th percentile per-packet one-way delay: 154.807 ms
Loss rate: 2.20%
```

Run 5: Report of TCP BBR — Data Link

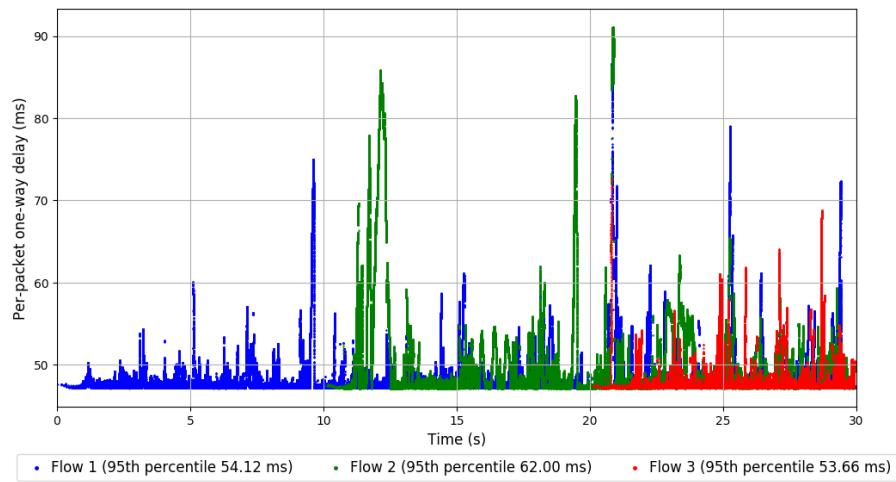
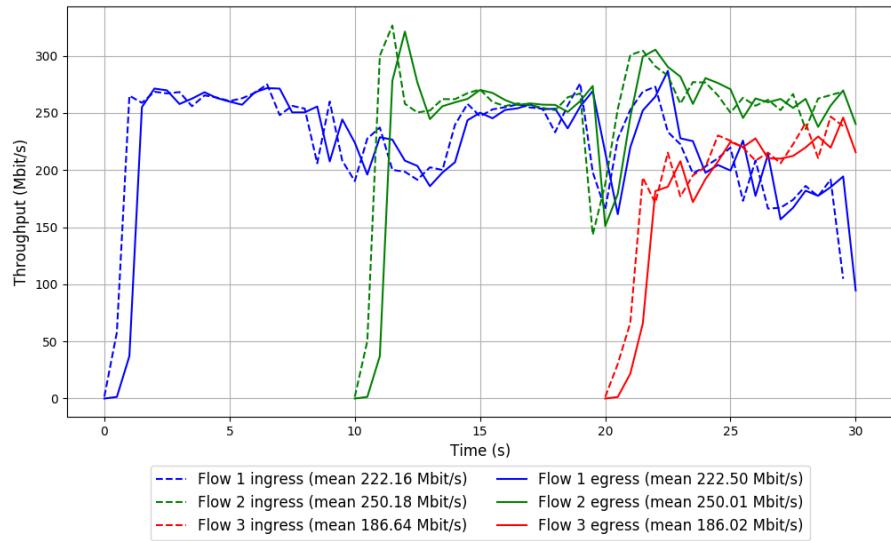


Run 1: Statistics of Copa

```
Start at: 2019-03-27 20:42:20
End at: 2019-03-27 20:42:50
Local clock offset: -0.059 ms
Remote clock offset: -0.222 ms

# Below is generated by plot.py at 2019-03-28 00:13:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 450.16 Mbit/s
95th percentile per-packet one-way delay: 56.816 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 222.50 Mbit/s
95th percentile per-packet one-way delay: 54.124 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 250.01 Mbit/s
95th percentile per-packet one-way delay: 62.000 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 186.02 Mbit/s
95th percentile per-packet one-way delay: 53.661 ms
Loss rate: 1.27%
```

Run 1: Report of Copa — Data Link

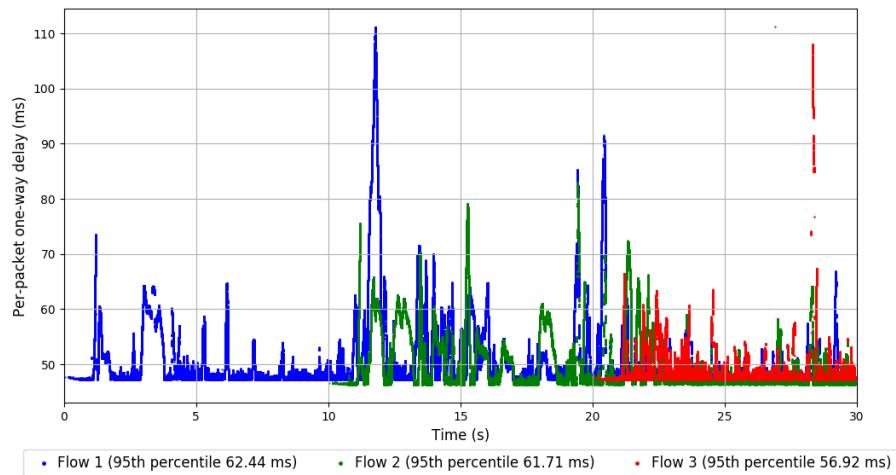
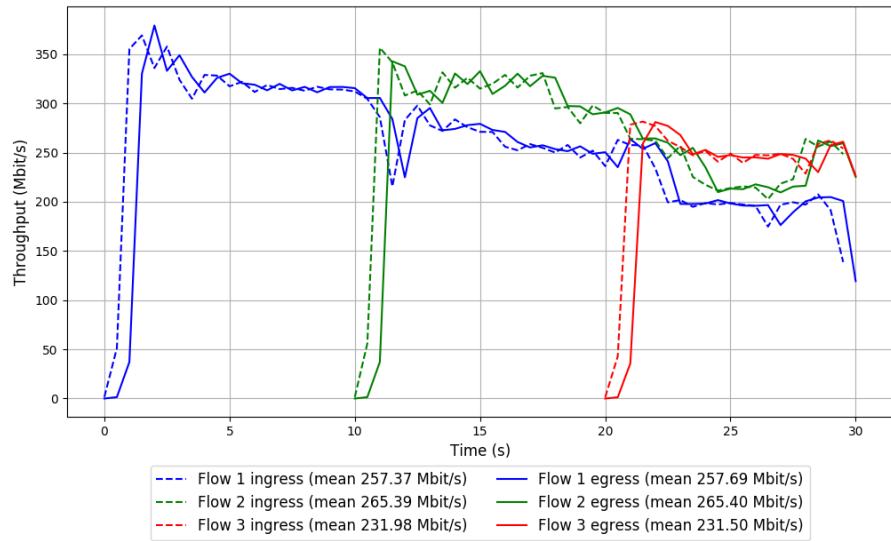


Run 2: Statistics of Copa

```
Start at: 2019-03-27 21:17:43
End at: 2019-03-27 21:18:13
Local clock offset: -0.141 ms
Remote clock offset: -0.292 ms

# Below is generated by plot.py at 2019-03-28 00:14:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 510.61 Mbit/s
95th percentile per-packet one-way delay: 61.591 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 257.69 Mbit/s
95th percentile per-packet one-way delay: 62.443 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 265.40 Mbit/s
95th percentile per-packet one-way delay: 61.710 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 231.50 Mbit/s
95th percentile per-packet one-way delay: 56.925 ms
Loss rate: 1.16%
```

Run 2: Report of Copa — Data Link

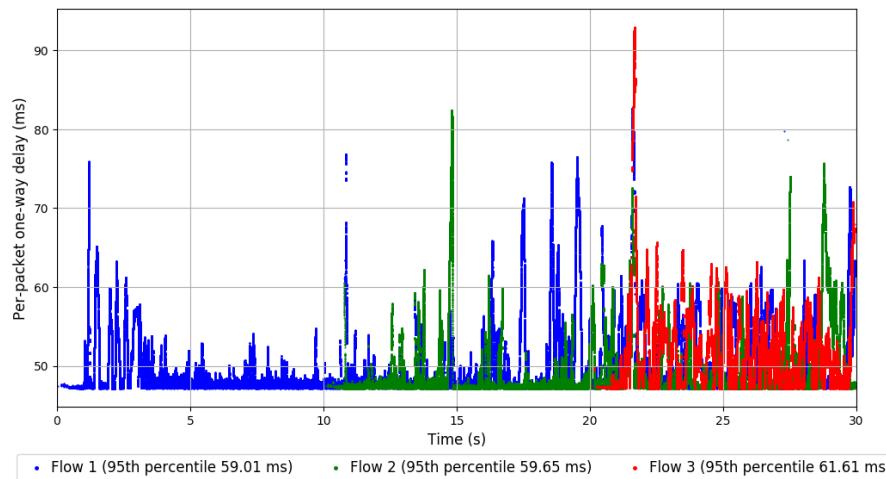
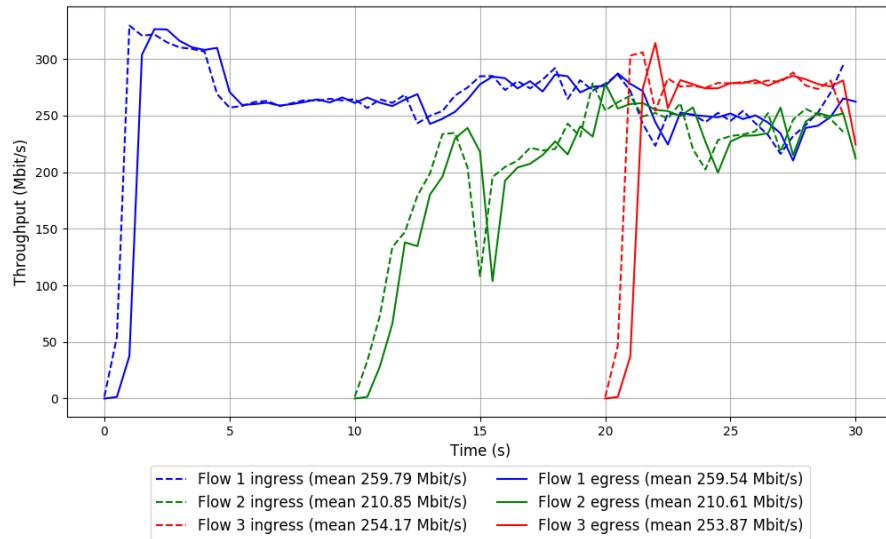


Run 3: Statistics of Copa

```
Start at: 2019-03-27 21:53:20
End at: 2019-03-27 21:53:50
Local clock offset: -0.066 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2019-03-28 00:14:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 483.46 Mbit/s
95th percentile per-packet one-way delay: 59.942 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 259.54 Mbit/s
95th percentile per-packet one-way delay: 59.010 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 210.61 Mbit/s
95th percentile per-packet one-way delay: 59.647 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 253.87 Mbit/s
95th percentile per-packet one-way delay: 61.614 ms
Loss rate: 1.06%
```

Run 3: Report of Copa — Data Link

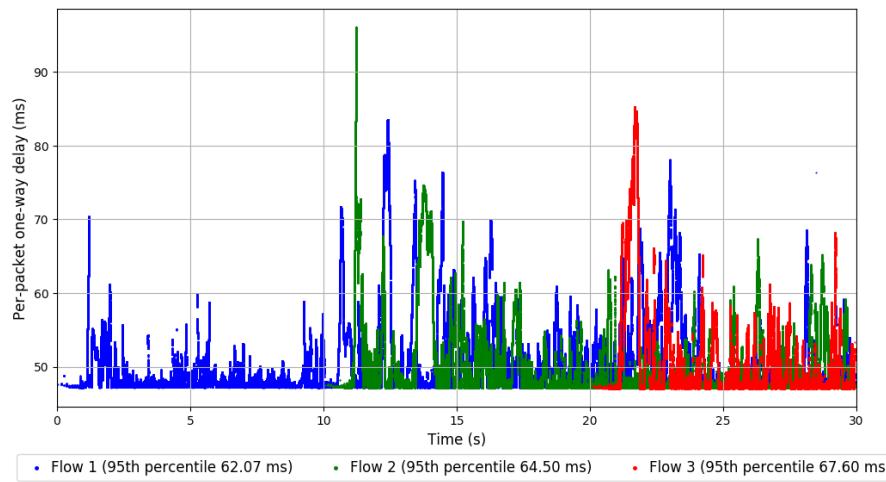
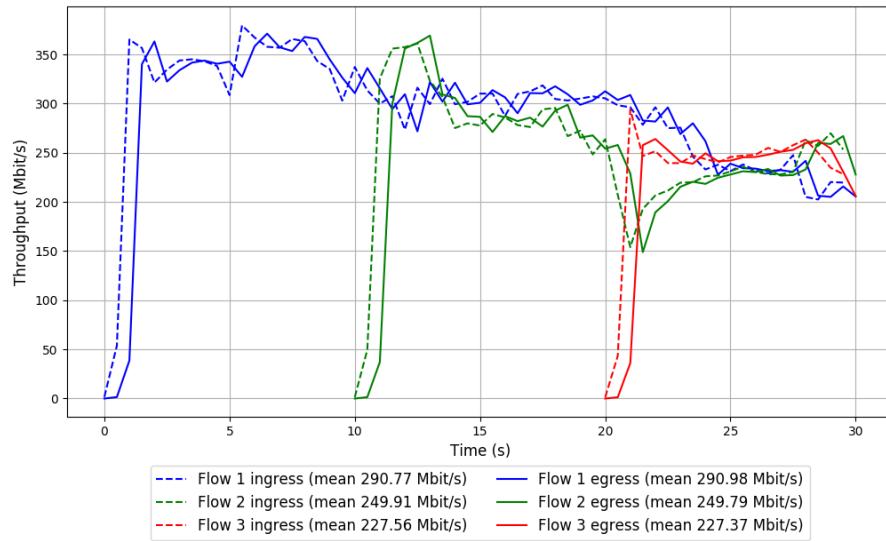


Run 4: Statistics of Copa

```
Start at: 2019-03-27 22:28:38
End at: 2019-03-27 22:29:08
Local clock offset: -0.049 ms
Remote clock offset: -0.386 ms

# Below is generated by plot.py at 2019-03-28 00:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 532.08 Mbit/s
95th percentile per-packet one-way delay: 63.455 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 290.98 Mbit/s
95th percentile per-packet one-way delay: 62.074 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 249.79 Mbit/s
95th percentile per-packet one-way delay: 64.500 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 227.37 Mbit/s
95th percentile per-packet one-way delay: 67.598 ms
Loss rate: 1.03%
```

Run 4: Report of Copa — Data Link

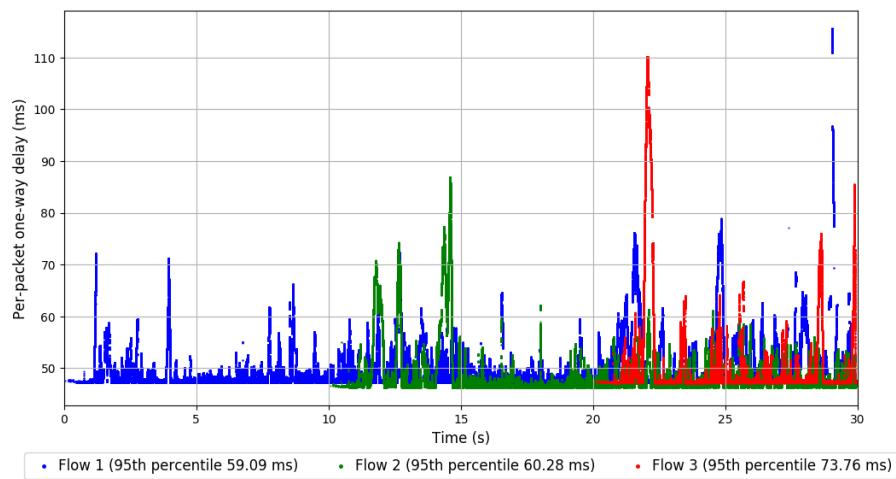
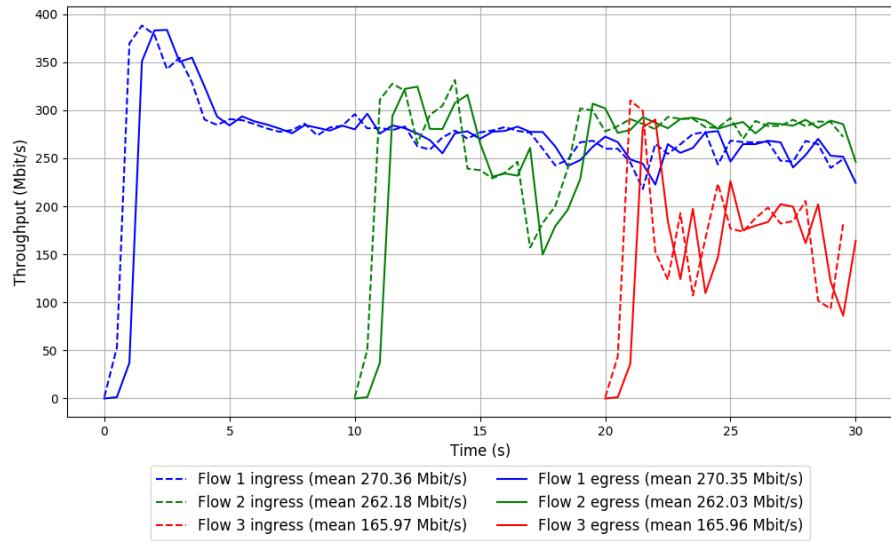


Run 5: Statistics of Copa

```
Start at: 2019-03-27 23:04:57
End at: 2019-03-27 23:05:27
Local clock offset: -0.118 ms
Remote clock offset: -0.458 ms

# Below is generated by plot.py at 2019-03-28 00:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.40 Mbit/s
95th percentile per-packet one-way delay: 60.437 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 270.35 Mbit/s
95th percentile per-packet one-way delay: 59.086 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 262.03 Mbit/s
95th percentile per-packet one-way delay: 60.281 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 165.96 Mbit/s
95th percentile per-packet one-way delay: 73.761 ms
Loss rate: 0.95%
```

Run 5: Report of Copa — Data Link

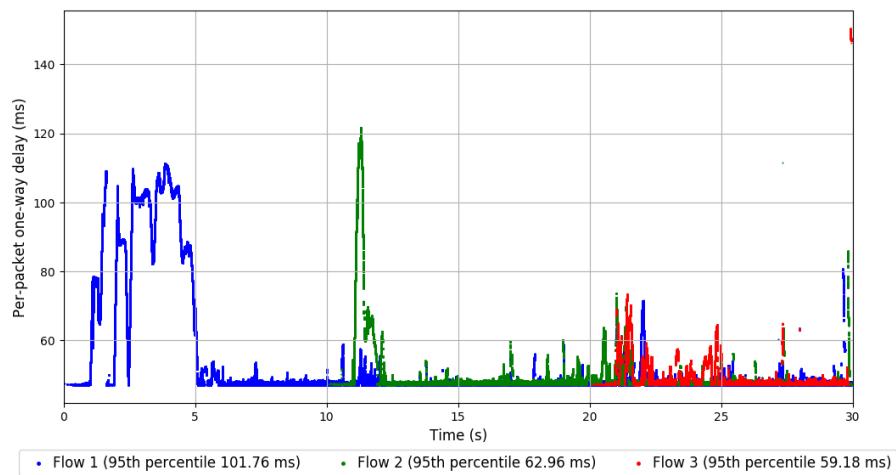
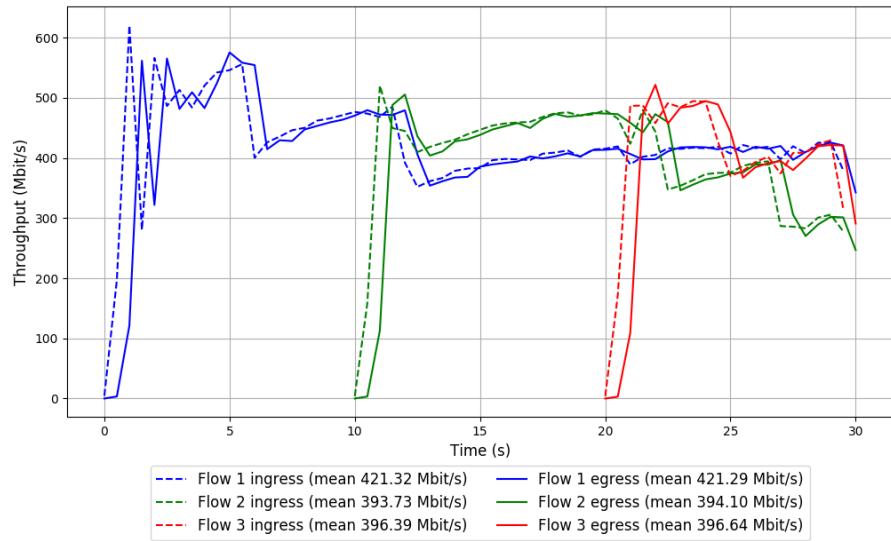


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-03-27 20:53:06
End at: 2019-03-27 20:53:36
Local clock offset: -0.127 ms
Remote clock offset: -0.245 ms

# Below is generated by plot.py at 2019-03-28 00:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 814.47 Mbit/s
95th percentile per-packet one-way delay: 88.675 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 421.29 Mbit/s
95th percentile per-packet one-way delay: 101.757 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 394.10 Mbit/s
95th percentile per-packet one-way delay: 62.961 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 396.64 Mbit/s
95th percentile per-packet one-way delay: 59.178 ms
Loss rate: 0.89%
```

Run 1: Report of TCP Cubic — Data Link

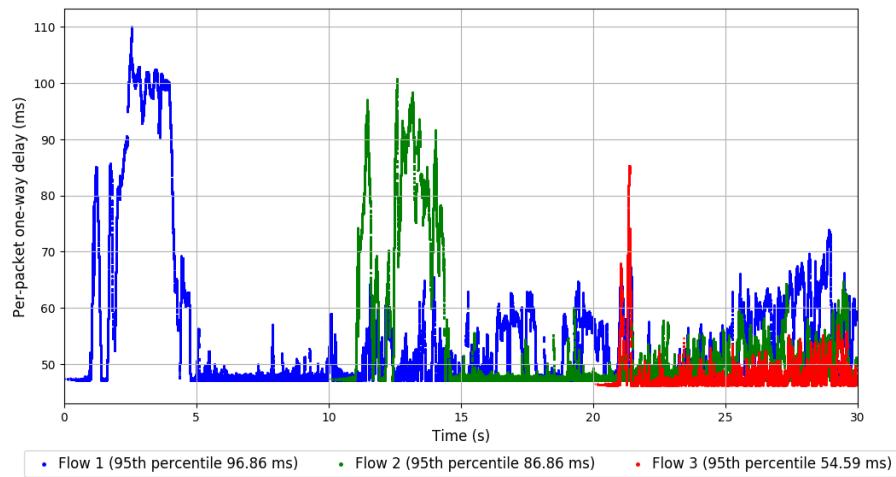
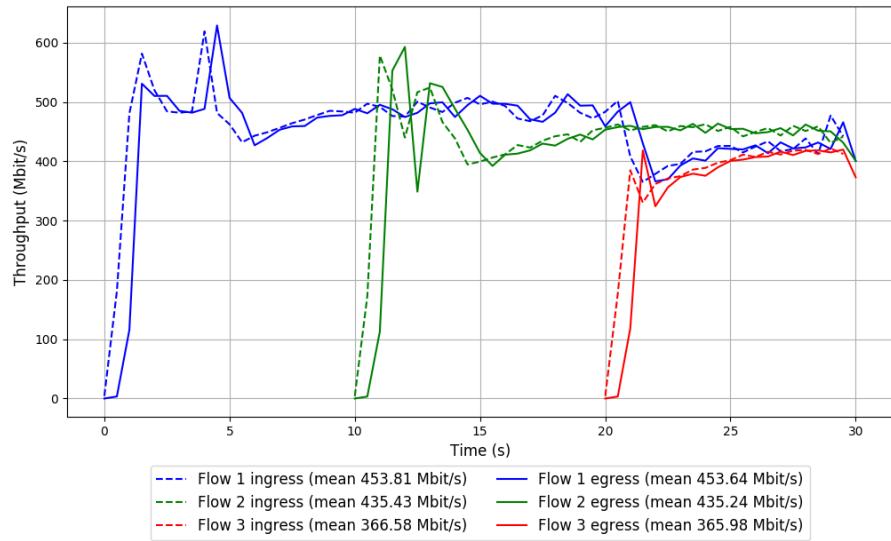


Run 2: Statistics of TCP Cubic

```
Start at: 2019-03-27 21:28:29
End at: 2019-03-27 21:28:59
Local clock offset: -0.183 ms
Remote clock offset: -0.281 ms

# Below is generated by plot.py at 2019-03-28 00:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 864.12 Mbit/s
95th percentile per-packet one-way delay: 87.209 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 453.64 Mbit/s
95th percentile per-packet one-way delay: 96.861 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 435.24 Mbit/s
95th percentile per-packet one-way delay: 86.856 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 365.98 Mbit/s
95th percentile per-packet one-way delay: 54.593 ms
Loss rate: 1.10%
```

Run 2: Report of TCP Cubic — Data Link

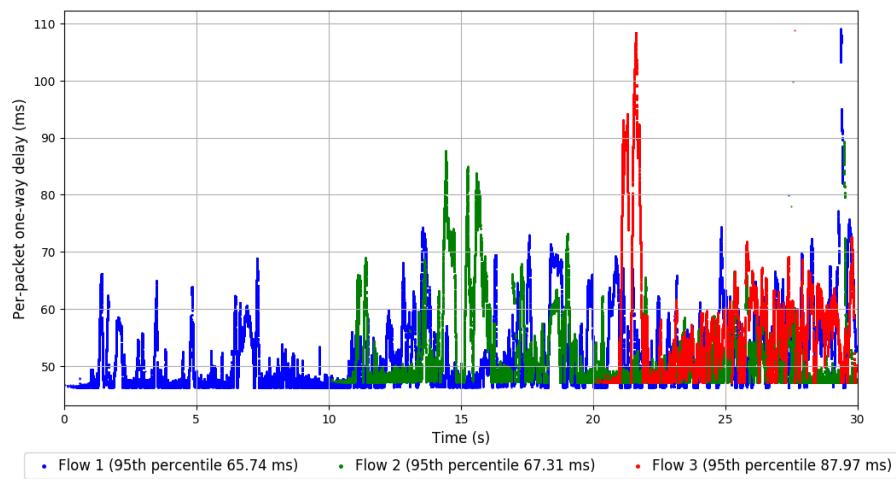
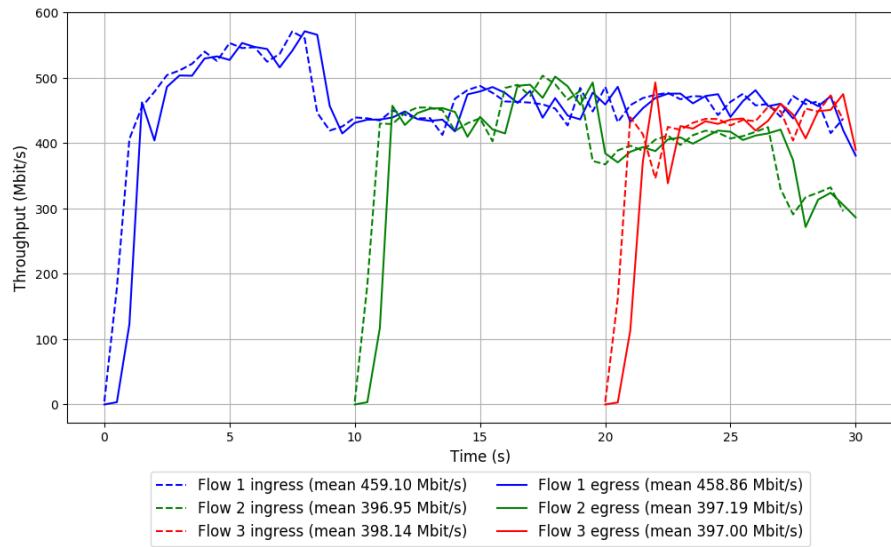


Run 3: Statistics of TCP Cubic

```
Start at: 2019-03-27 22:04:10
End at: 2019-03-27 22:04:40
Local clock offset: -0.035 ms
Remote clock offset: -0.354 ms

# Below is generated by plot.py at 2019-03-28 00:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 854.15 Mbit/s
95th percentile per-packet one-way delay: 67.587 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 458.86 Mbit/s
95th percentile per-packet one-way delay: 65.741 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 397.19 Mbit/s
95th percentile per-packet one-way delay: 67.315 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 397.00 Mbit/s
95th percentile per-packet one-way delay: 87.974 ms
Loss rate: 1.23%
```

Run 3: Report of TCP Cubic — Data Link

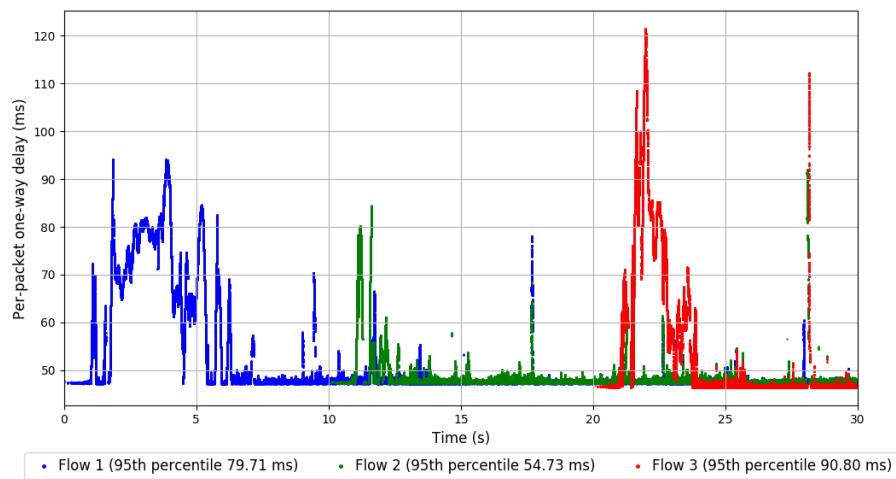
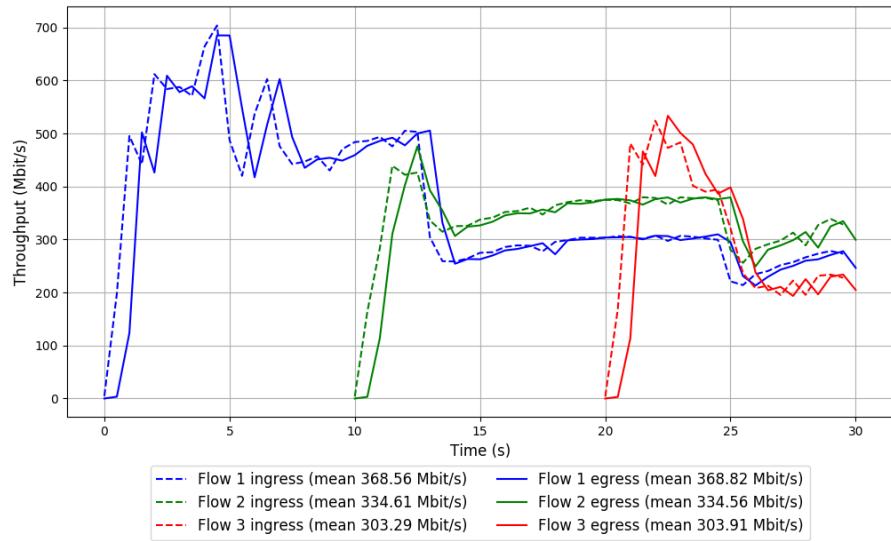


Run 4: Statistics of TCP Cubic

```
Start at: 2019-03-27 22:39:38
End at: 2019-03-27 22:40:08
Local clock offset: -0.06 ms
Remote clock offset: -0.463 ms

# Below is generated by plot.py at 2019-03-28 00:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 691.71 Mbit/s
95th percentile per-packet one-way delay: 79.556 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 368.82 Mbit/s
95th percentile per-packet one-way delay: 79.707 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 334.56 Mbit/s
95th percentile per-packet one-way delay: 54.726 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 303.91 Mbit/s
95th percentile per-packet one-way delay: 90.795 ms
Loss rate: 0.74%
```

Run 4: Report of TCP Cubic — Data Link

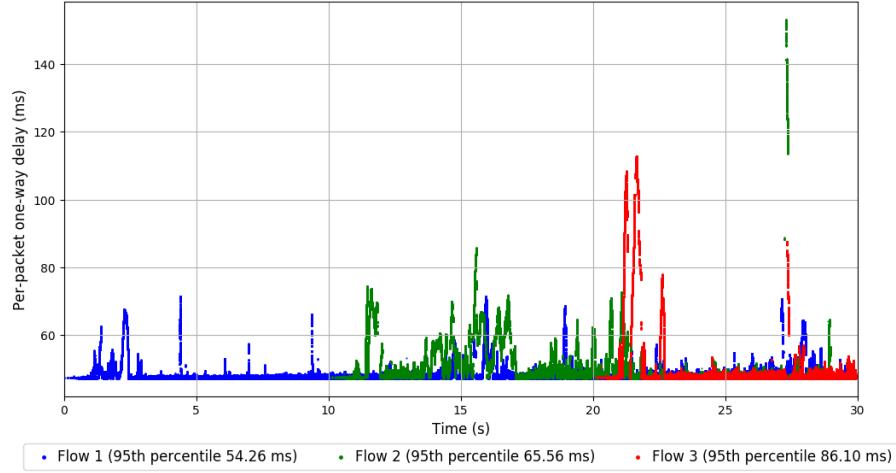
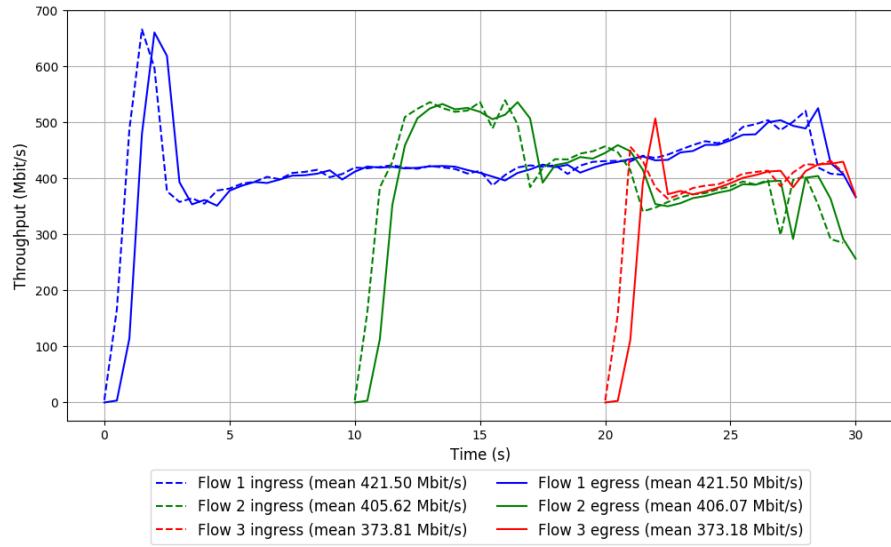


Run 5: Statistics of TCP Cubic

```
Start at: 2019-03-27 23:15:53
End at: 2019-03-27 23:16:23
Local clock offset: -0.116 ms
Remote clock offset: -0.464 ms

# Below is generated by plot.py at 2019-03-28 00:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 814.75 Mbit/s
95th percentile per-packet one-way delay: 62.281 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 421.50 Mbit/s
95th percentile per-packet one-way delay: 54.261 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 406.07 Mbit/s
95th percentile per-packet one-way delay: 65.555 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 373.18 Mbit/s
95th percentile per-packet one-way delay: 86.096 ms
Loss rate: 1.11%
```

Run 5: Report of TCP Cubic — Data Link

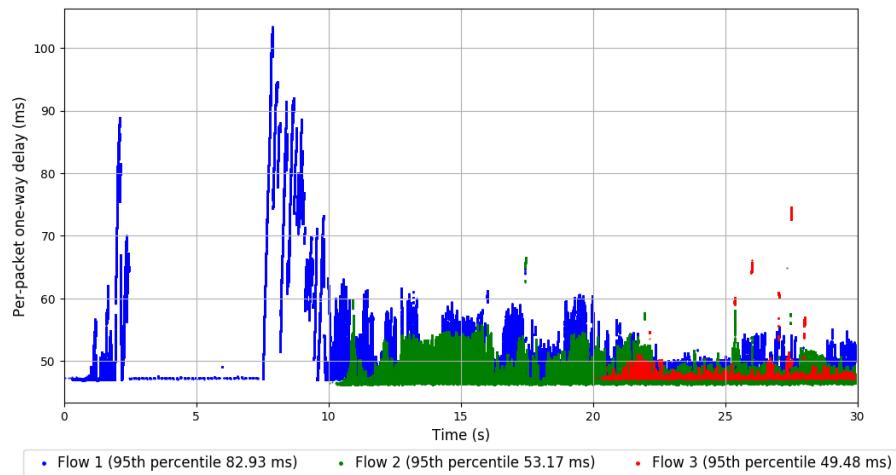
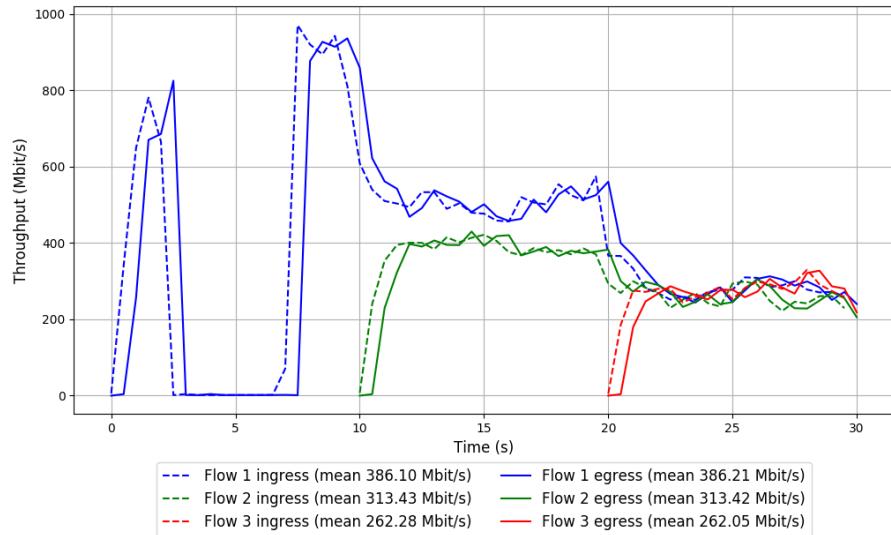


```
Run 1: Statistics of FillP

Start at: 2019-03-27 20:59:48
End at: 2019-03-27 21:00:18
Local clock offset: -0.132 ms
Remote clock offset: -0.233 ms

# Below is generated by plot.py at 2019-03-28 00:31:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 680.75 Mbit/s
95th percentile per-packet one-way delay: 75.805 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 386.21 Mbit/s
95th percentile per-packet one-way delay: 82.933 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 313.42 Mbit/s
95th percentile per-packet one-way delay: 53.168 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 262.05 Mbit/s
95th percentile per-packet one-way delay: 49.483 ms
Loss rate: 1.17%
```

Run 1: Report of FillP — Data Link

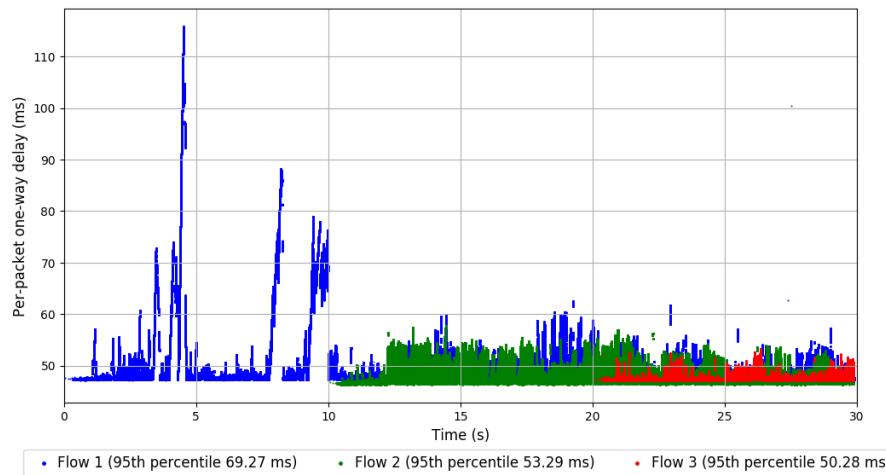
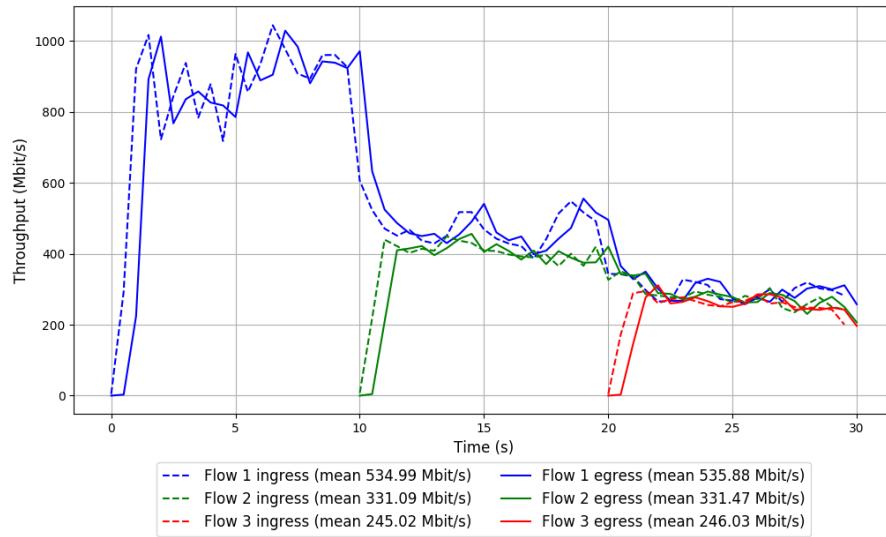


Run 2: Statistics of FillP

```
Start at: 2019-03-27 21:35:14
End at: 2019-03-27 21:35:44
Local clock offset: -0.182 ms
Remote clock offset: -0.317 ms

# Below is generated by plot.py at 2019-03-28 00:45:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 836.97 Mbit/s
95th percentile per-packet one-way delay: 64.671 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 535.88 Mbit/s
95th percentile per-packet one-way delay: 69.274 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 331.47 Mbit/s
95th percentile per-packet one-way delay: 53.287 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 246.03 Mbit/s
95th percentile per-packet one-way delay: 50.285 ms
Loss rate: 0.80%
```

Run 2: Report of FillP — Data Link

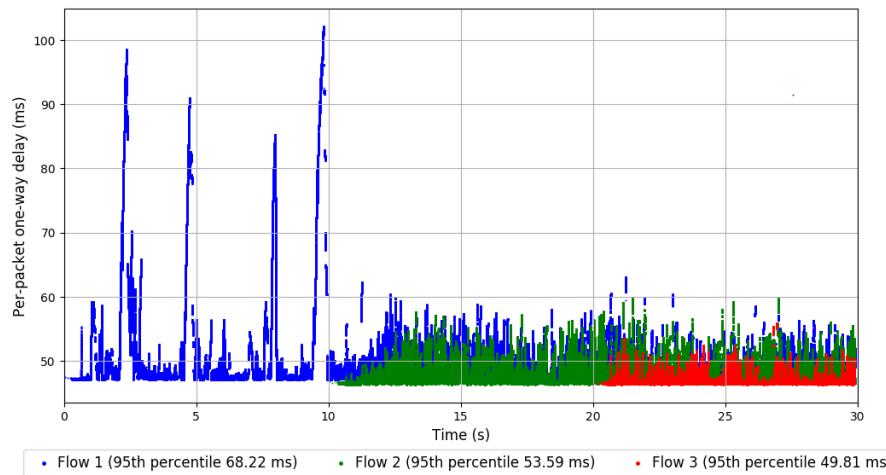
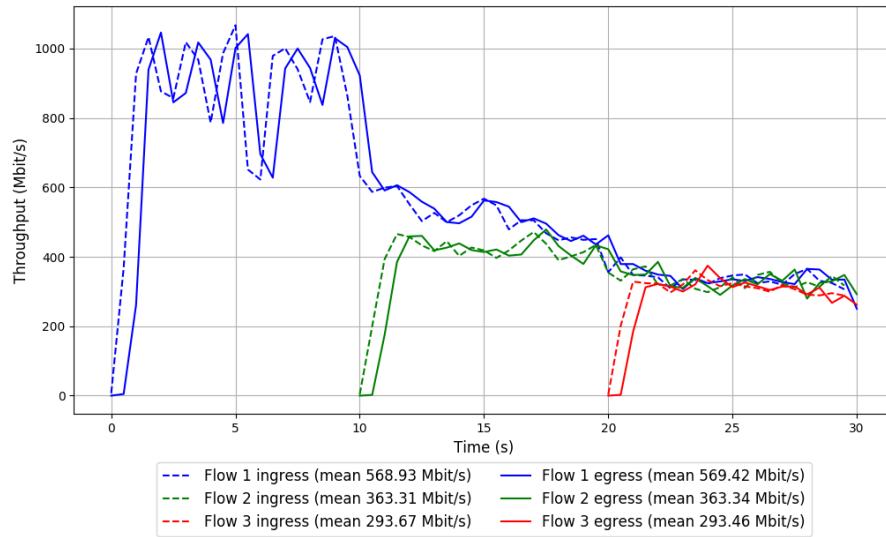


Run 3: Statistics of FillP

```
Start at: 2019-03-27 22:10:47
End at: 2019-03-27 22:11:17
Local clock offset: -0.032 ms
Remote clock offset: -0.378 ms

# Below is generated by plot.py at 2019-03-28 00:49:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 907.65 Mbit/s
95th percentile per-packet one-way delay: 58.235 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 569.42 Mbit/s
95th percentile per-packet one-way delay: 68.221 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 363.34 Mbit/s
95th percentile per-packet one-way delay: 53.587 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 293.46 Mbit/s
95th percentile per-packet one-way delay: 49.813 ms
Loss rate: 1.16%
```

Run 3: Report of FillP — Data Link

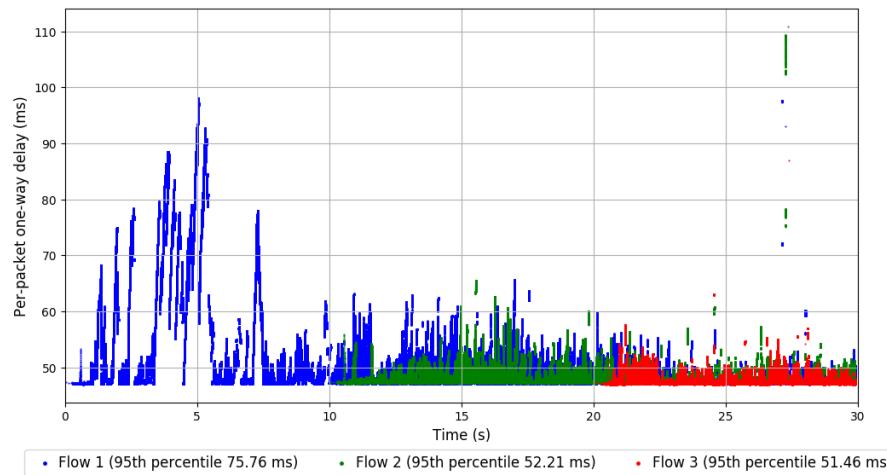
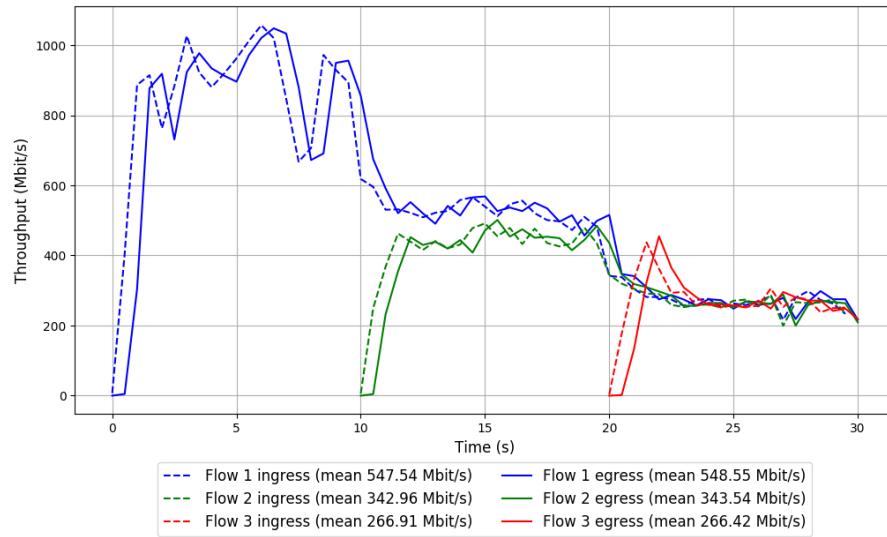


Run 4: Statistics of FillP

```
Start at: 2019-03-27 22:46:33
End at: 2019-03-27 22:47:03
Local clock offset: -0.139 ms
Remote clock offset: -0.437 ms

# Below is generated by plot.py at 2019-03-28 00:49:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 864.35 Mbit/s
95th percentile per-packet one-way delay: 71.320 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 548.55 Mbit/s
95th percentile per-packet one-way delay: 75.757 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 343.54 Mbit/s
95th percentile per-packet one-way delay: 52.206 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 266.42 Mbit/s
95th percentile per-packet one-way delay: 51.462 ms
Loss rate: 1.00%
```

Run 4: Report of FillP — Data Link

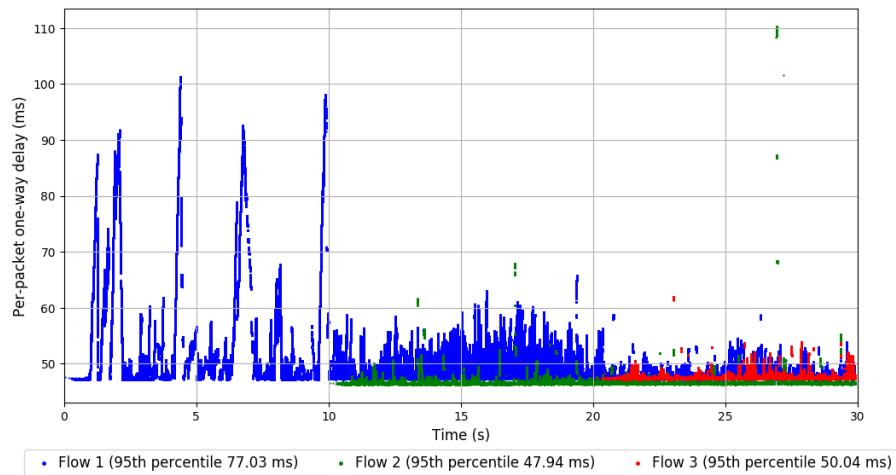
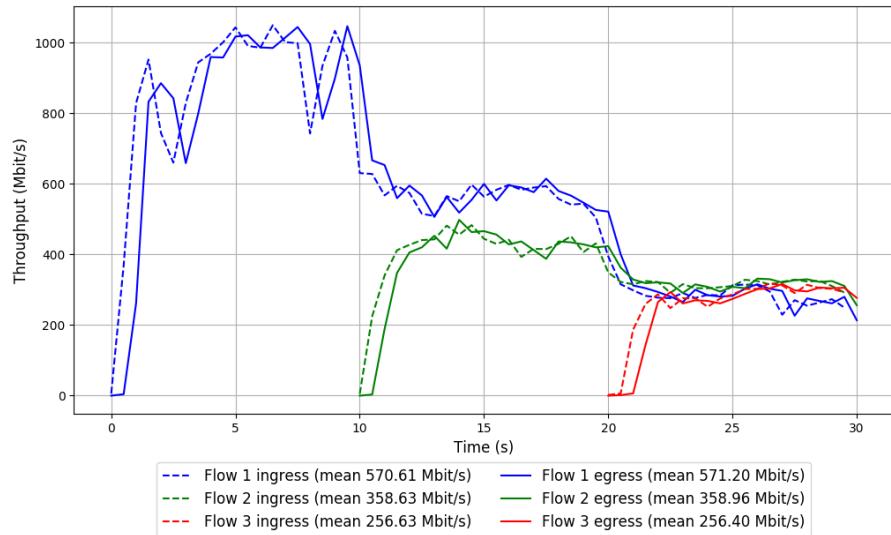


Run 5: Statistics of FillP

```
Start at: 2019-03-27 23:22:44
End at: 2019-03-27 23:23:14
Local clock offset: -0.101 ms
Remote clock offset: -0.462 ms

# Below is generated by plot.py at 2019-03-28 00:49:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 894.06 Mbit/s
95th percentile per-packet one-way delay: 68.270 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 571.20 Mbit/s
95th percentile per-packet one-way delay: 77.027 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 358.96 Mbit/s
95th percentile per-packet one-way delay: 47.938 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 256.40 Mbit/s
95th percentile per-packet one-way delay: 50.042 ms
Loss rate: 1.05%
```

Run 5: Report of FillP — Data Link

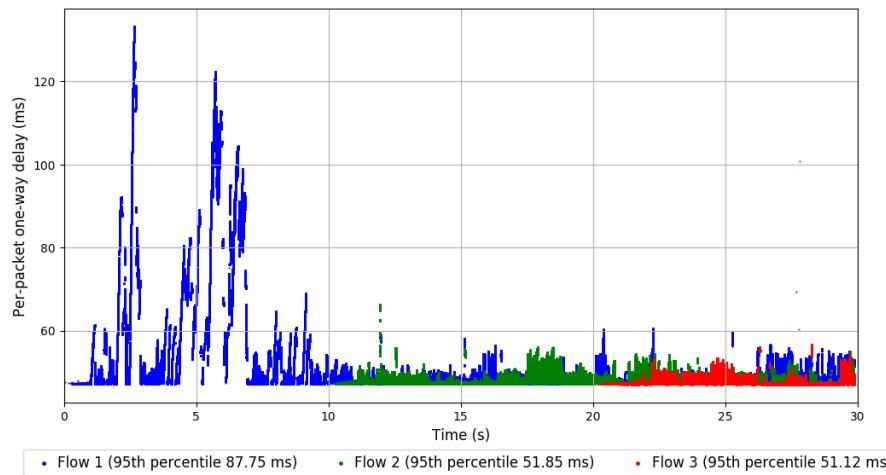
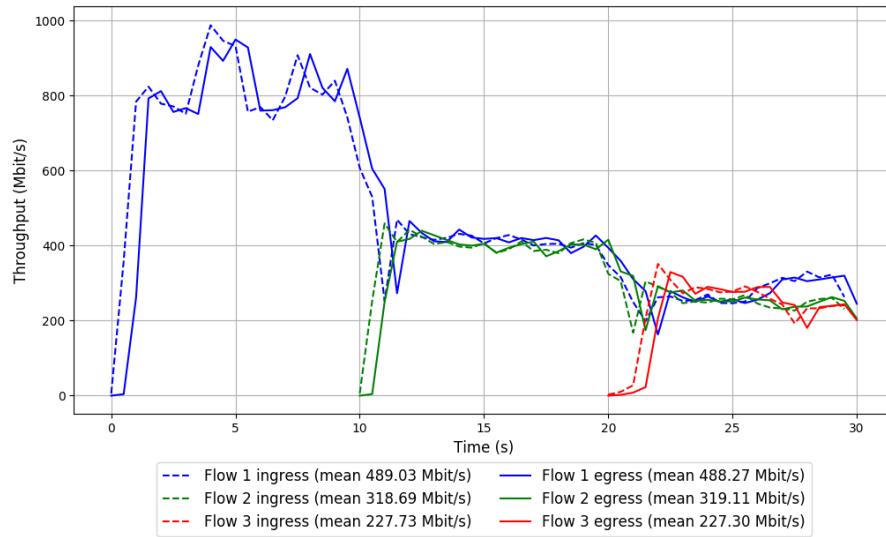


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-03-27 20:51:21
End at: 2019-03-27 20:51:51
Local clock offset: -0.091 ms
Remote clock offset: -0.225 ms

# Below is generated by plot.py at 2019-03-28 00:49:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 775.00 Mbit/s
95th percentile per-packet one-way delay: 78.571 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 488.27 Mbit/s
95th percentile per-packet one-way delay: 87.748 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 319.11 Mbit/s
95th percentile per-packet one-way delay: 51.849 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 227.30 Mbit/s
95th percentile per-packet one-way delay: 51.121 ms
Loss rate: 1.28%
```

Run 1: Report of FillP-Sheep — Data Link

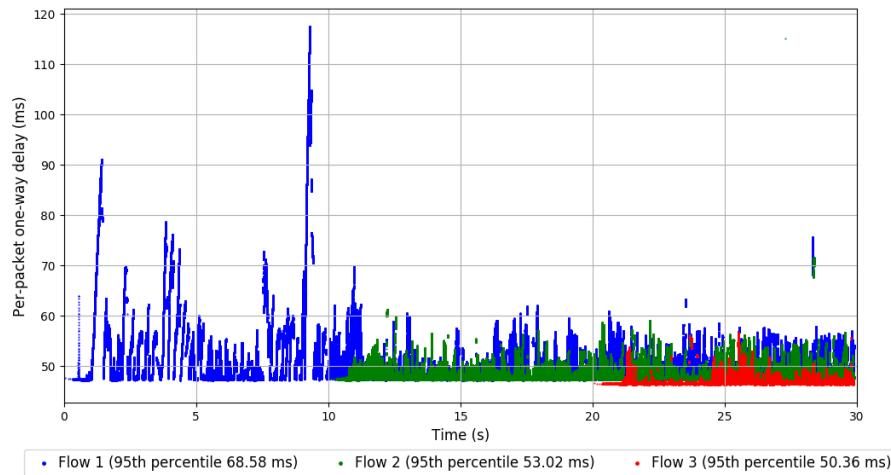
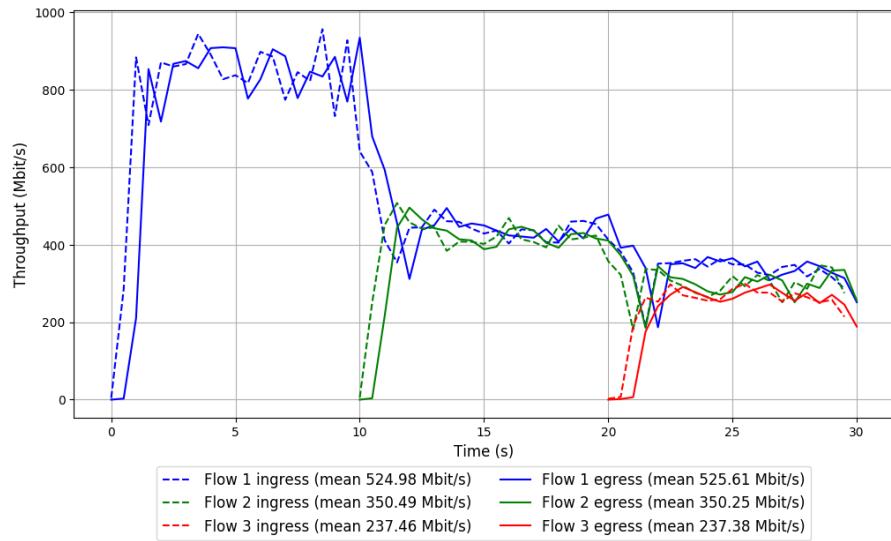


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-03-27 21:26:43
End at: 2019-03-27 21:27:13
Local clock offset: -0.167 ms
Remote clock offset: -0.311 ms

# Below is generated by plot.py at 2019-03-28 00:49:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 836.56 Mbit/s
95th percentile per-packet one-way delay: 62.179 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 525.61 Mbit/s
95th percentile per-packet one-way delay: 68.580 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 350.25 Mbit/s
95th percentile per-packet one-way delay: 53.016 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 237.38 Mbit/s
95th percentile per-packet one-way delay: 50.364 ms
Loss rate: 1.12%
```

Run 2: Report of FillP-Sheep — Data Link

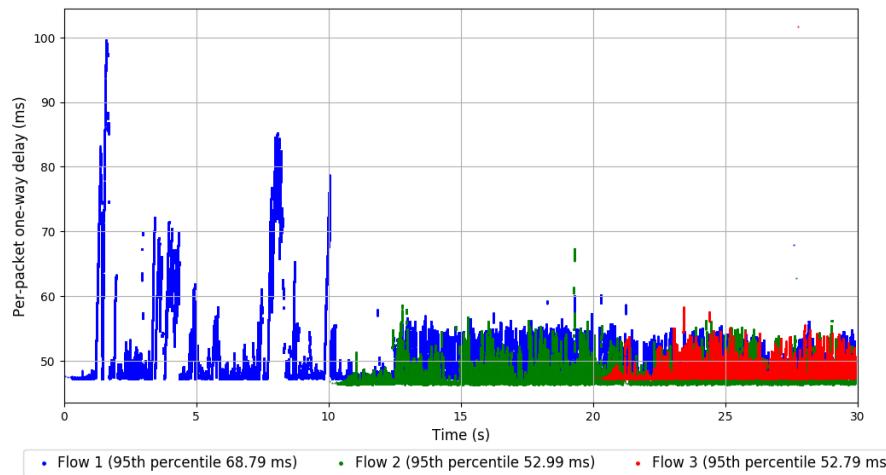
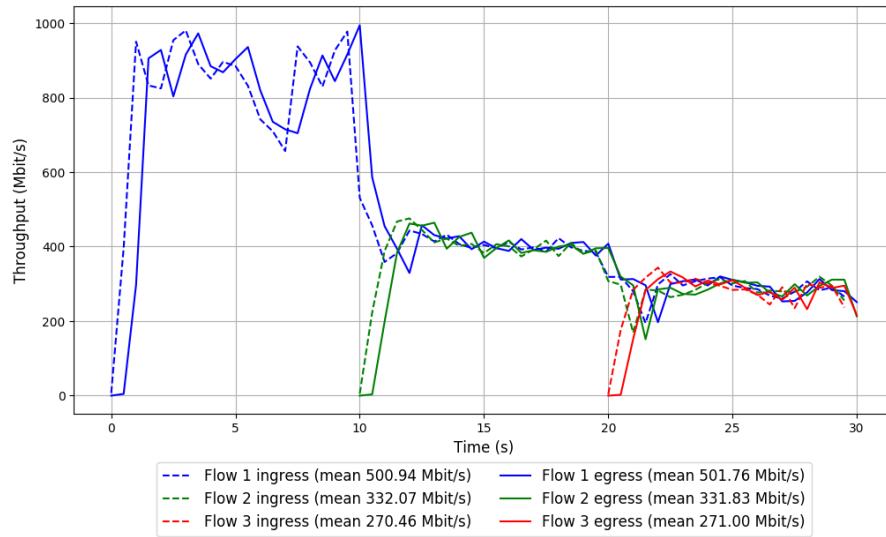


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-03-27 22:02:24
End at: 2019-03-27 22:02:54
Local clock offset: -0.043 ms
Remote clock offset: -0.382 ms

# Below is generated by plot.py at 2019-03-28 00:49:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 811.55 Mbit/s
95th percentile per-packet one-way delay: 62.727 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 501.76 Mbit/s
95th percentile per-packet one-way delay: 68.792 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 331.83 Mbit/s
95th percentile per-packet one-way delay: 52.990 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 271.00 Mbit/s
95th percentile per-packet one-way delay: 52.788 ms
Loss rate: 0.78%
```

Run 3: Report of FillP-Sheep — Data Link

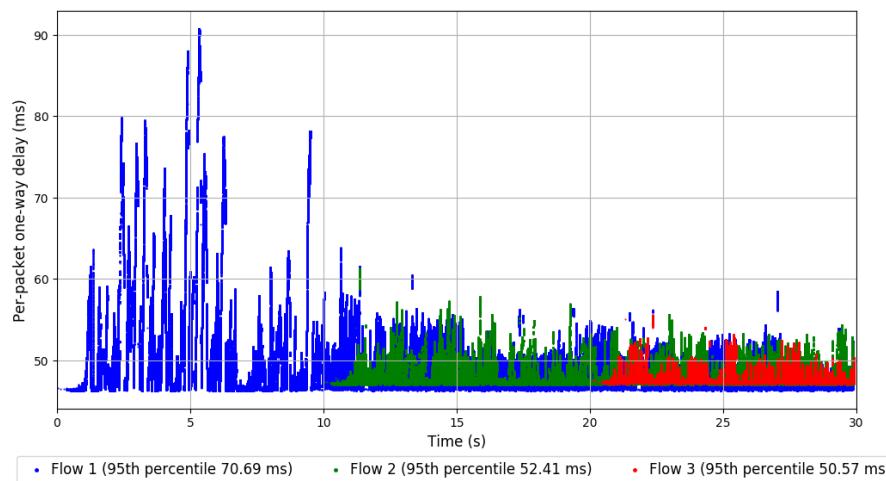
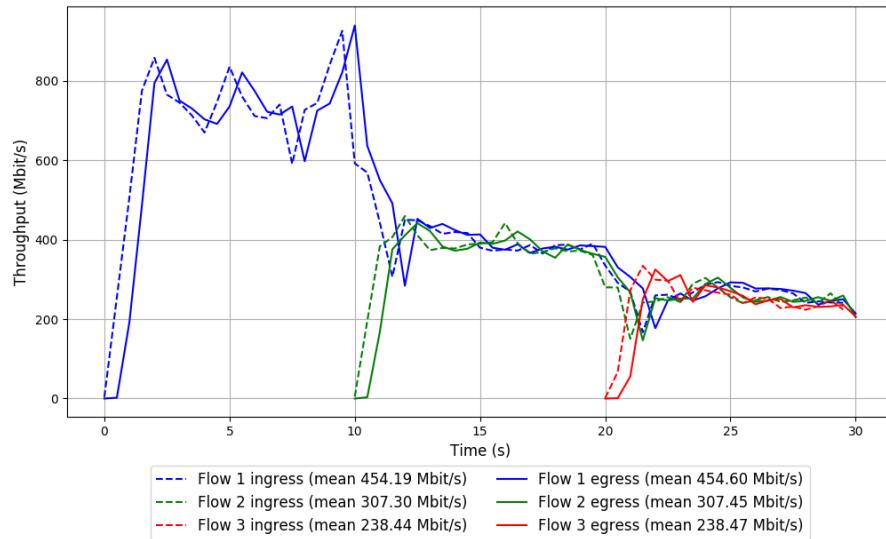


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-03-27 22:37:56
End at: 2019-03-27 22:38:26
Local clock offset: -0.109 ms
Remote clock offset: -0.42 ms

# Below is generated by plot.py at 2019-03-28 00:49:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 737.12 Mbit/s
95th percentile per-packet one-way delay: 62.330 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 454.60 Mbit/s
95th percentile per-packet one-way delay: 70.687 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 307.45 Mbit/s
95th percentile per-packet one-way delay: 52.406 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 238.47 Mbit/s
95th percentile per-packet one-way delay: 50.571 ms
Loss rate: 1.00%
```

Run 4: Report of FillP-Sheep — Data Link

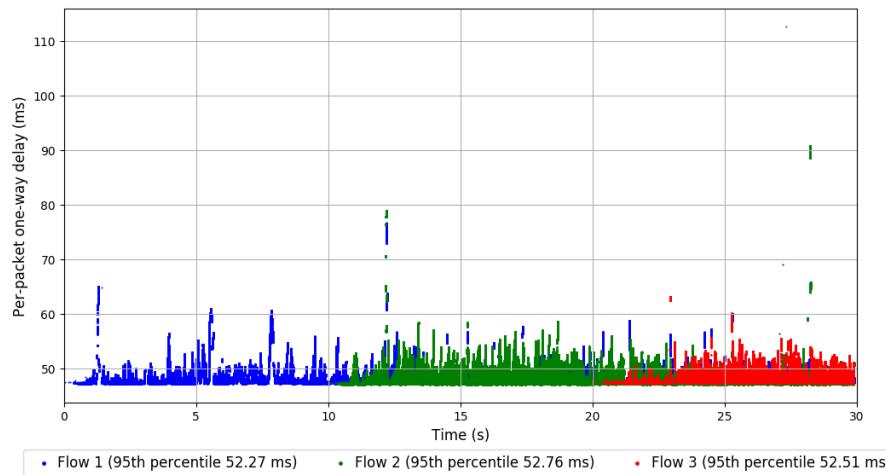
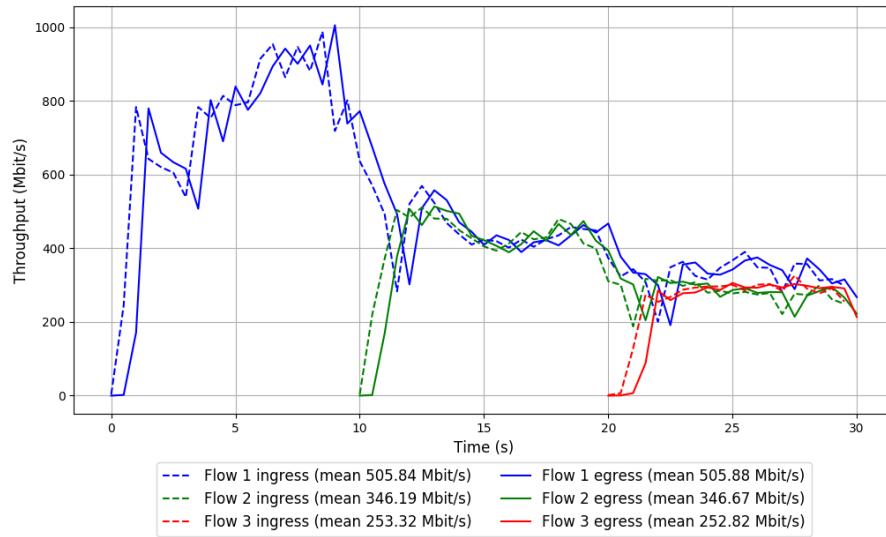


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-03-27 23:14:08
End at: 2019-03-27 23:14:38
Local clock offset: -0.098 ms
Remote clock offset: -0.476 ms

# Below is generated by plot.py at 2019-03-28 01:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 819.40 Mbit/s
95th percentile per-packet one-way delay: 52.505 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 505.88 Mbit/s
95th percentile per-packet one-way delay: 52.269 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 346.67 Mbit/s
95th percentile per-packet one-way delay: 52.755 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 252.82 Mbit/s
95th percentile per-packet one-way delay: 52.507 ms
Loss rate: 1.27%
```

Run 5: Report of FillP-Sheep — Data Link

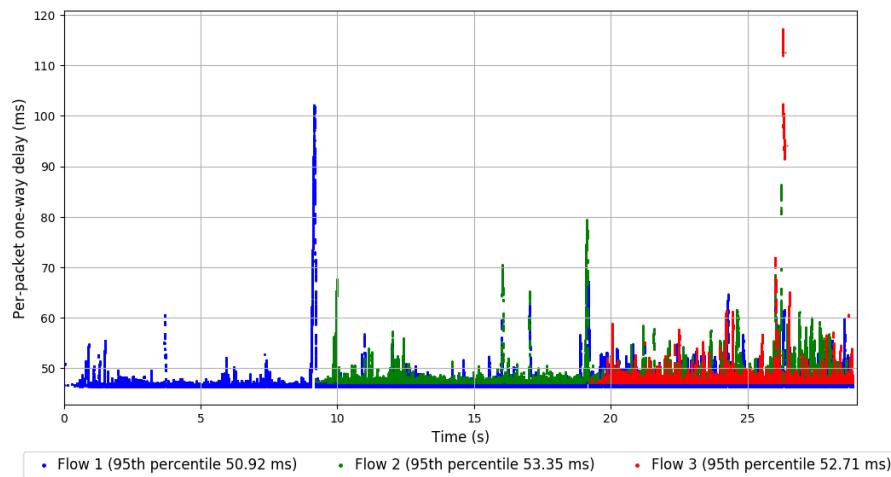
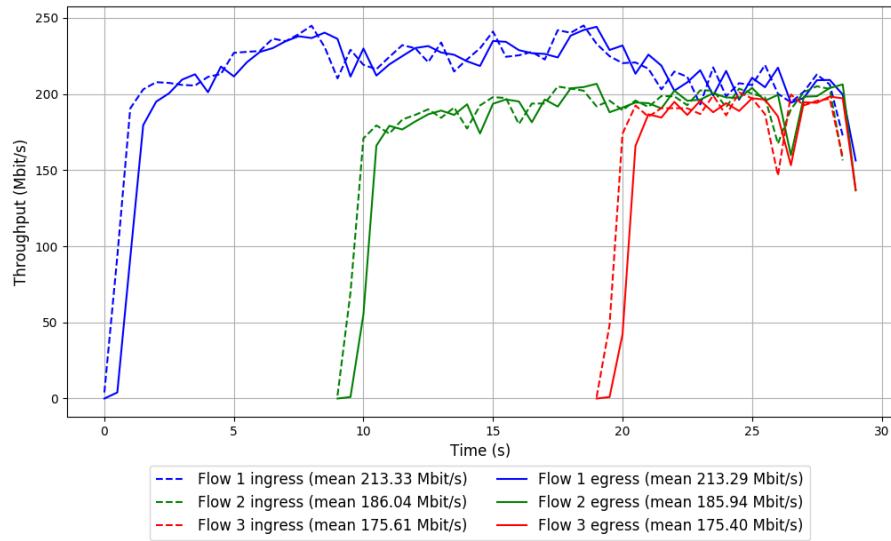


Run 1: Statistics of Indigo

```
Start at: 2019-03-27 21:06:10
End at: 2019-03-27 21:06:40
Local clock offset: -0.144 ms
Remote clock offset: -0.251 ms

# Below is generated by plot.py at 2019-03-28 01:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.76 Mbit/s
95th percentile per-packet one-way delay: 52.003 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 213.29 Mbit/s
95th percentile per-packet one-way delay: 50.917 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 185.94 Mbit/s
95th percentile per-packet one-way delay: 53.349 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 175.40 Mbit/s
95th percentile per-packet one-way delay: 52.708 ms
Loss rate: 1.11%
```

Run 1: Report of Indigo — Data Link

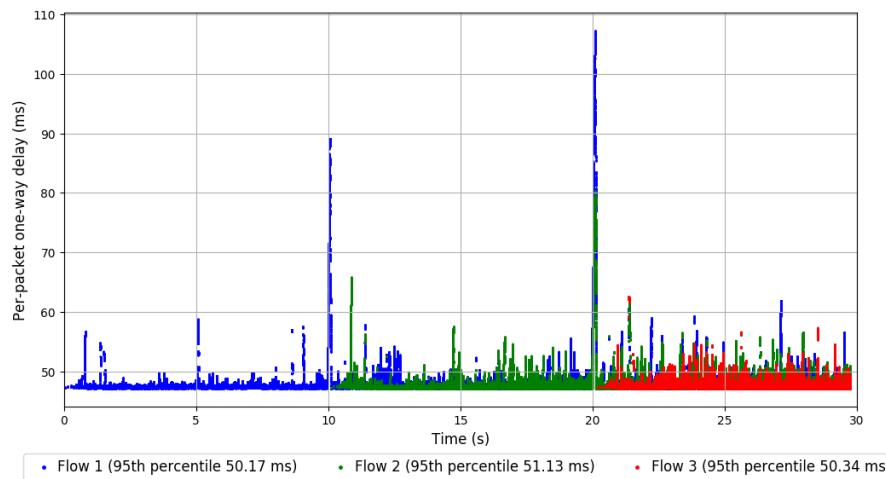
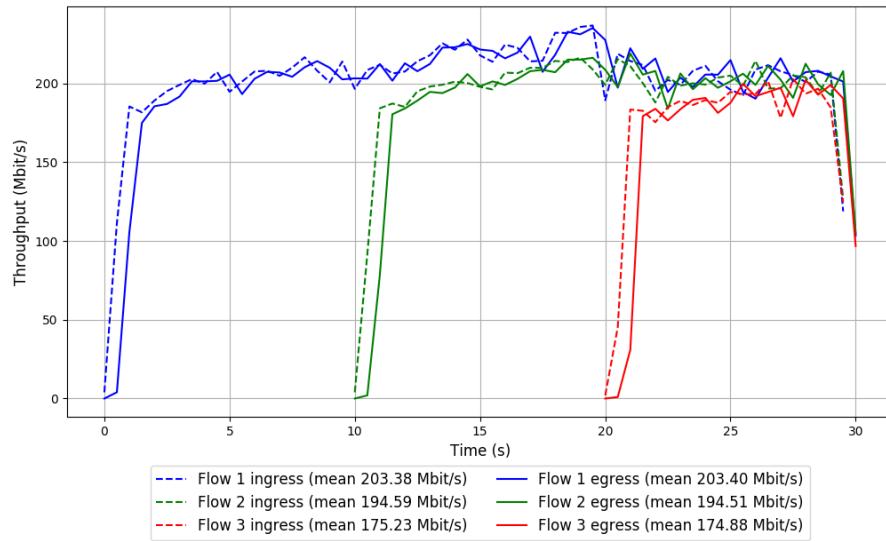


Run 2: Statistics of Indigo

```
Start at: 2019-03-27 21:41:42
End at: 2019-03-27 21:42:12
Local clock offset: -0.11 ms
Remote clock offset: -0.307 ms

# Below is generated by plot.py at 2019-03-28 01:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 388.45 Mbit/s
95th percentile per-packet one-way delay: 50.586 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 203.40 Mbit/s
95th percentile per-packet one-way delay: 50.169 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 194.51 Mbit/s
95th percentile per-packet one-way delay: 51.130 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 174.88 Mbit/s
95th percentile per-packet one-way delay: 50.338 ms
Loss rate: 1.19%
```

Run 2: Report of Indigo — Data Link

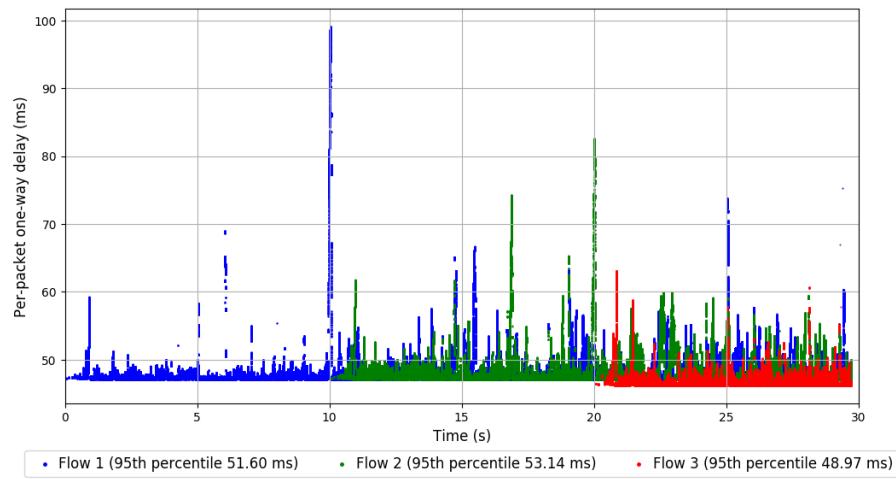
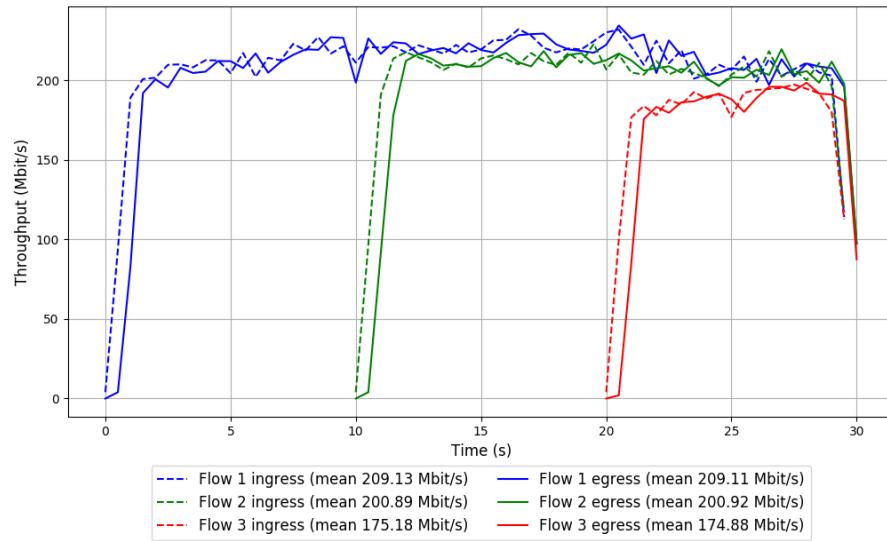


Run 3: Statistics of Indigo

```
Start at: 2019-03-27 22:17:18
End at: 2019-03-27 22:17:48
Local clock offset: -0.066 ms
Remote clock offset: -0.334 ms

# Below is generated by plot.py at 2019-03-28 01:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.05 Mbit/s
95th percentile per-packet one-way delay: 51.862 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 209.11 Mbit/s
95th percentile per-packet one-way delay: 51.599 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 200.92 Mbit/s
95th percentile per-packet one-way delay: 53.139 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 174.88 Mbit/s
95th percentile per-packet one-way delay: 48.973 ms
Loss rate: 1.15%
```

Run 3: Report of Indigo — Data Link

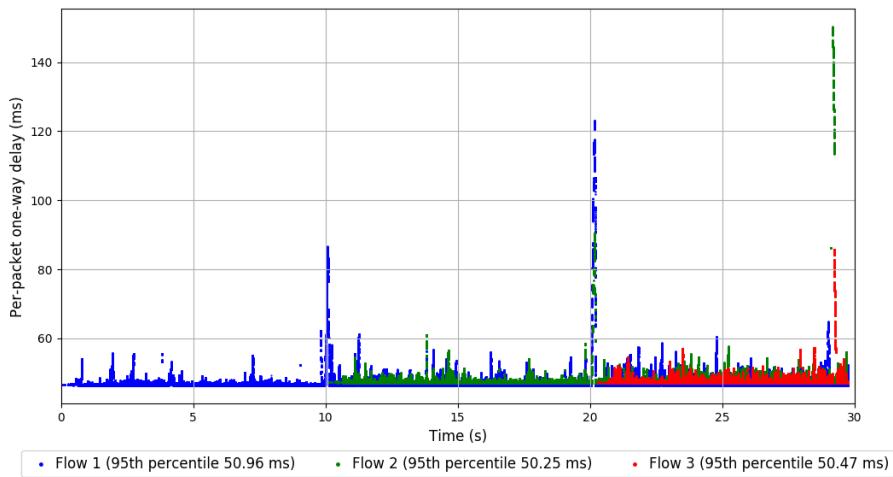
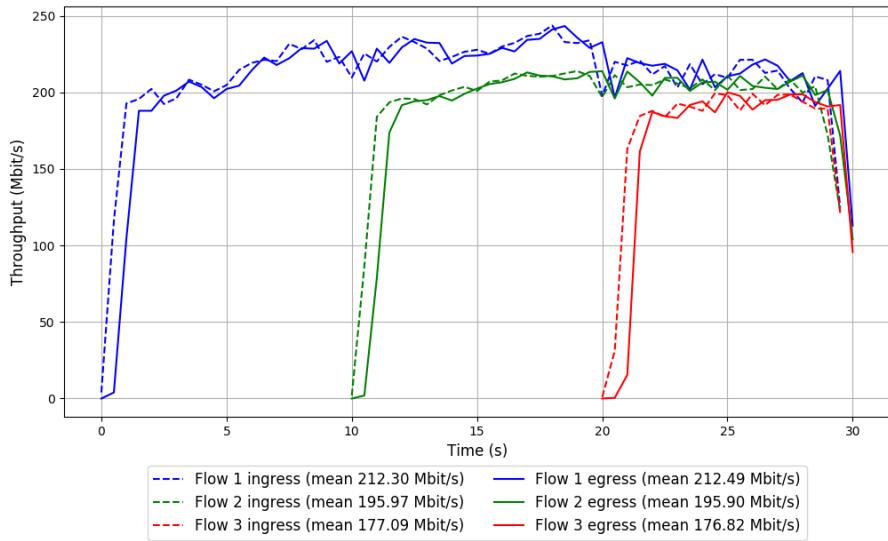


Run 4: Statistics of Indigo

```
Start at: 2019-03-27 22:53:14
End at: 2019-03-27 22:53:44
Local clock offset: -0.115 ms
Remote clock offset: -0.441 ms

# Below is generated by plot.py at 2019-03-28 01:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.28 Mbit/s
95th percentile per-packet one-way delay: 50.624 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 212.49 Mbit/s
95th percentile per-packet one-way delay: 50.958 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 195.90 Mbit/s
95th percentile per-packet one-way delay: 50.251 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 176.82 Mbit/s
95th percentile per-packet one-way delay: 50.469 ms
Loss rate: 1.16%
```

Run 4: Report of Indigo — Data Link

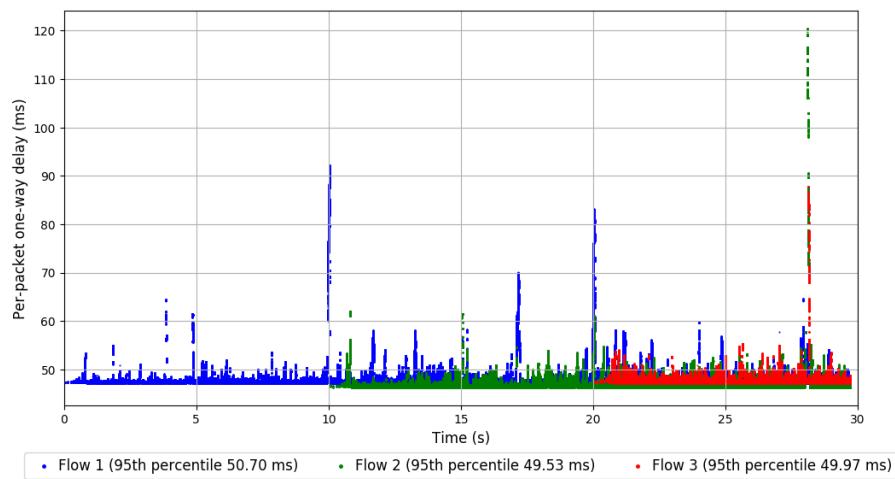
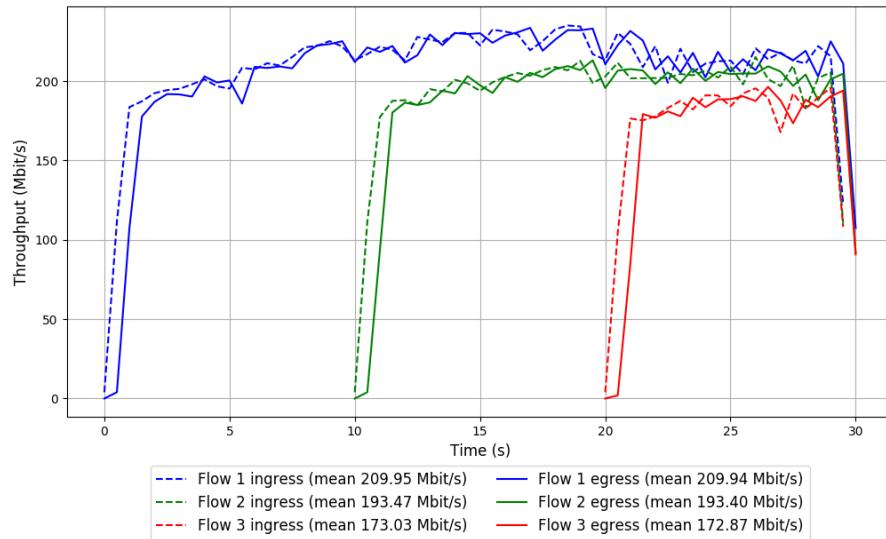


Run 5: Statistics of Indigo

```
Start at: 2019-03-27 23:29:15
End at: 2019-03-27 23:29:45
Local clock offset: -0.151 ms
Remote clock offset: -0.502 ms

# Below is generated by plot.py at 2019-03-28 01:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 394.26 Mbit/s
95th percentile per-packet one-way delay: 50.187 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 209.94 Mbit/s
95th percentile per-packet one-way delay: 50.700 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 193.40 Mbit/s
95th percentile per-packet one-way delay: 49.533 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 172.87 Mbit/s
95th percentile per-packet one-way delay: 49.974 ms
Loss rate: 1.08%
```

Run 5: Report of Indigo — Data Link

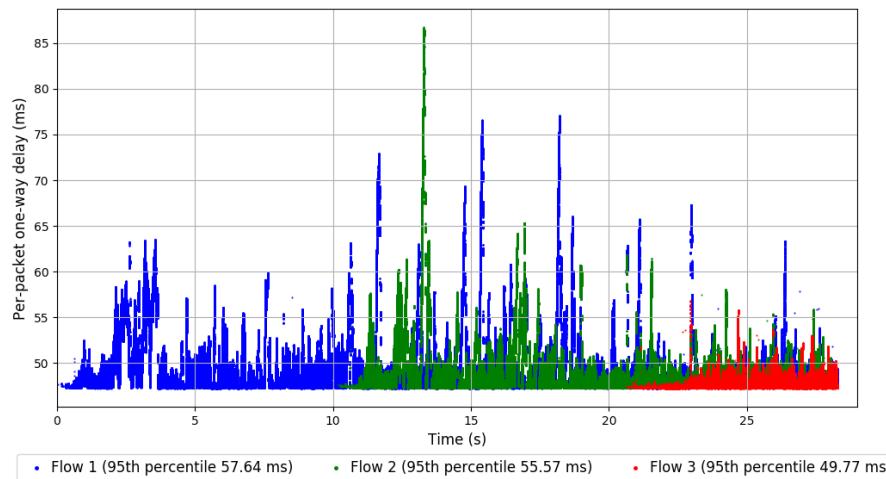
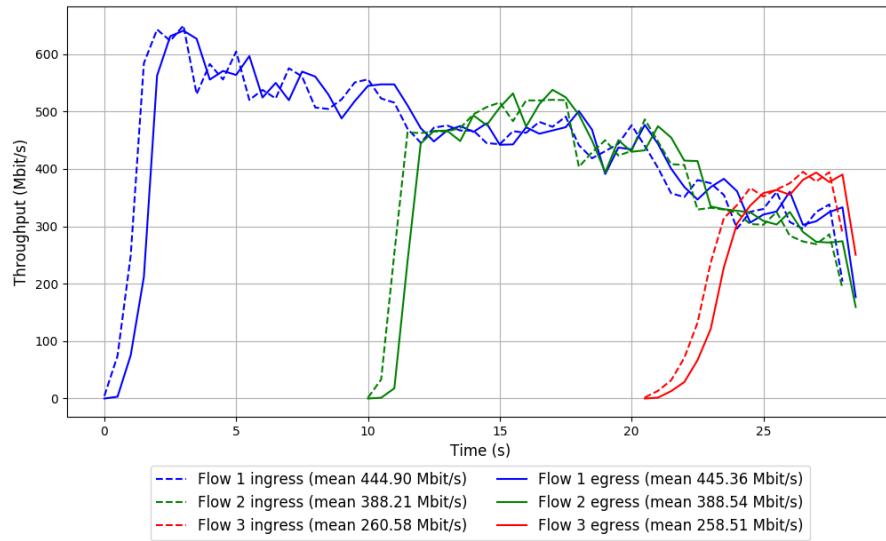


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 21:04:23
End at: 2019-03-27 21:04:53
Local clock offset: -0.136 ms
Remote clock offset: -0.263 ms

# Below is generated by plot.py at 2019-03-28 01:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 764.79 Mbit/s
95th percentile per-packet one-way delay: 56.719 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 445.36 Mbit/s
95th percentile per-packet one-way delay: 57.638 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 388.54 Mbit/s
95th percentile per-packet one-way delay: 55.567 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 258.51 Mbit/s
95th percentile per-packet one-way delay: 49.770 ms
Loss rate: 2.02%
```

Run 1: Report of Indigo-MusesC3 — Data Link

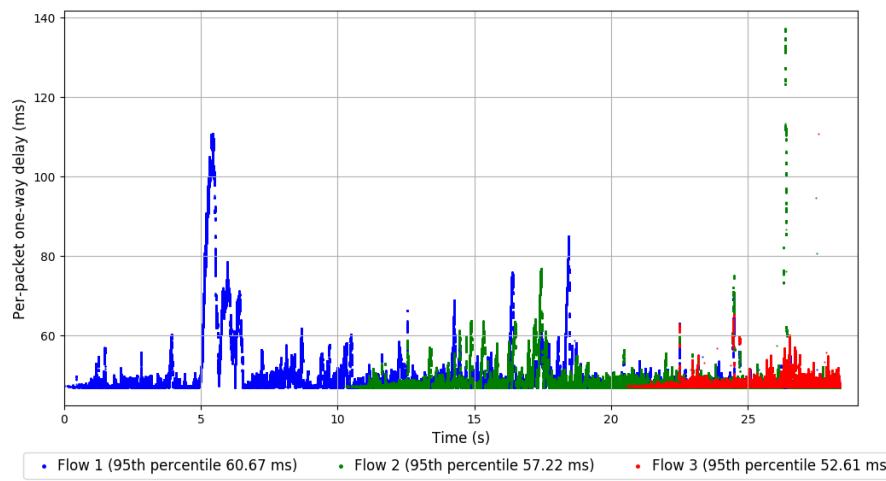
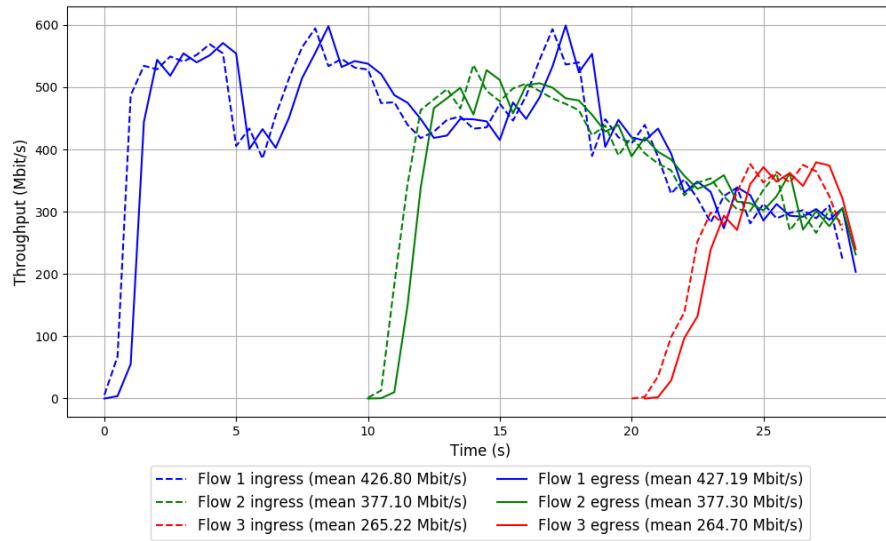


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 21:39:52
End at: 2019-03-27 21:40:22
Local clock offset: -0.19 ms
Remote clock offset: -0.295 ms

# Below is generated by plot.py at 2019-03-28 01:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 741.99 Mbit/s
95th percentile per-packet one-way delay: 58.098 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 427.19 Mbit/s
95th percentile per-packet one-way delay: 60.670 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 377.30 Mbit/s
95th percentile per-packet one-way delay: 57.216 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 264.70 Mbit/s
95th percentile per-packet one-way delay: 52.614 ms
Loss rate: 1.40%
```

Run 2: Report of Indigo-MusesC3 — Data Link

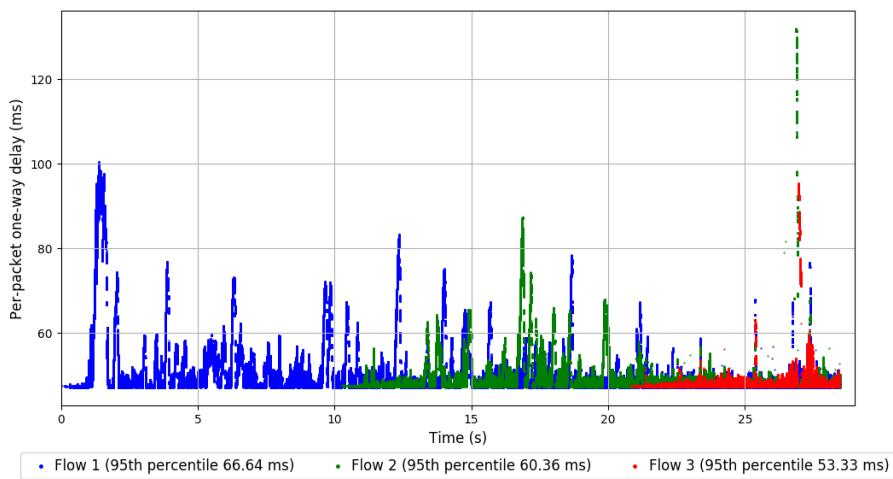
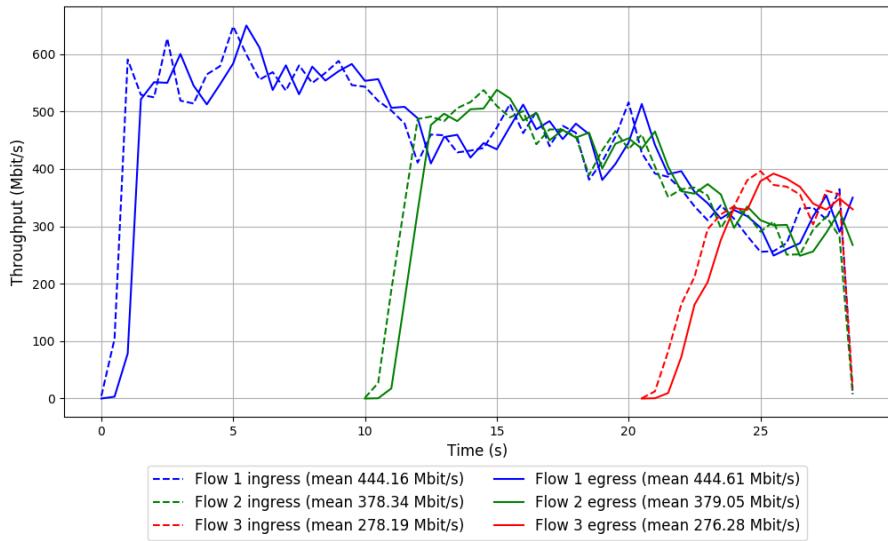


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 22:15:29
End at: 2019-03-27 22:15:59
Local clock offset: -0.052 ms
Remote clock offset: -0.34 ms

# Below is generated by plot.py at 2019-03-28 01:16:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 762.80 Mbit/s
95th percentile per-packet one-way delay: 63.038 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 444.61 Mbit/s
95th percentile per-packet one-way delay: 66.645 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 379.05 Mbit/s
95th percentile per-packet one-way delay: 60.361 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 276.28 Mbit/s
95th percentile per-packet one-way delay: 53.328 ms
Loss rate: 1.82%
```

Run 3: Report of Indigo-MusesC3 — Data Link

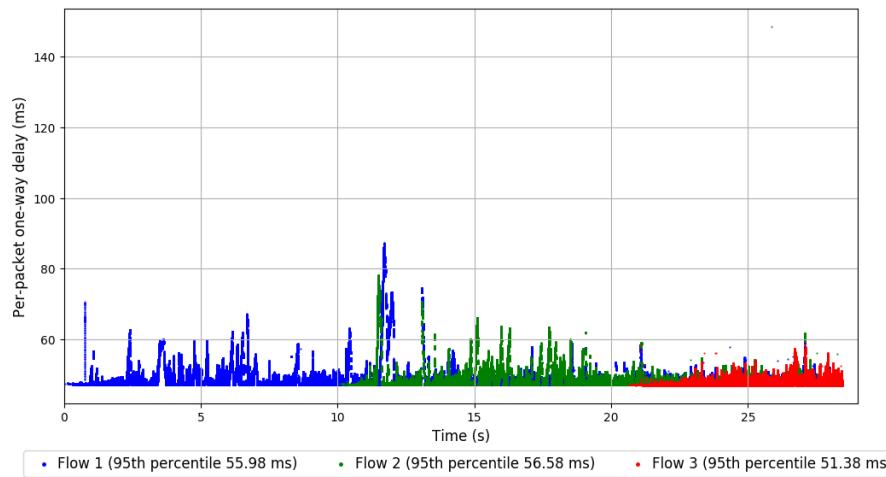
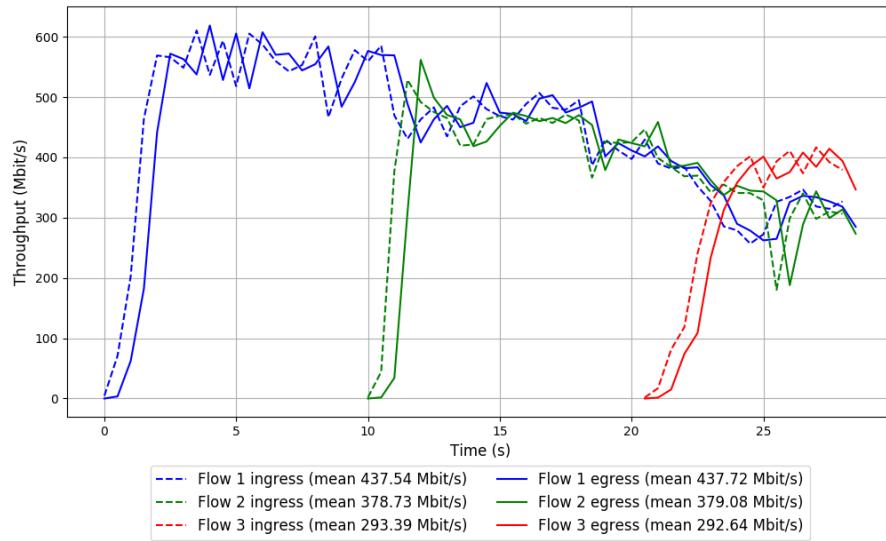


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 22:51:23
End at: 2019-03-27 22:51:53
Local clock offset: -0.102 ms
Remote clock offset: -0.426 ms

# Below is generated by plot.py at 2019-03-28 01:17:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 763.49 Mbit/s
95th percentile per-packet one-way delay: 55.553 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 437.72 Mbit/s
95th percentile per-packet one-way delay: 55.982 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 379.08 Mbit/s
95th percentile per-packet one-way delay: 56.583 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 292.64 Mbit/s
95th percentile per-packet one-way delay: 51.380 ms
Loss rate: 1.46%
```

Run 4: Report of Indigo-MusesC3 — Data Link

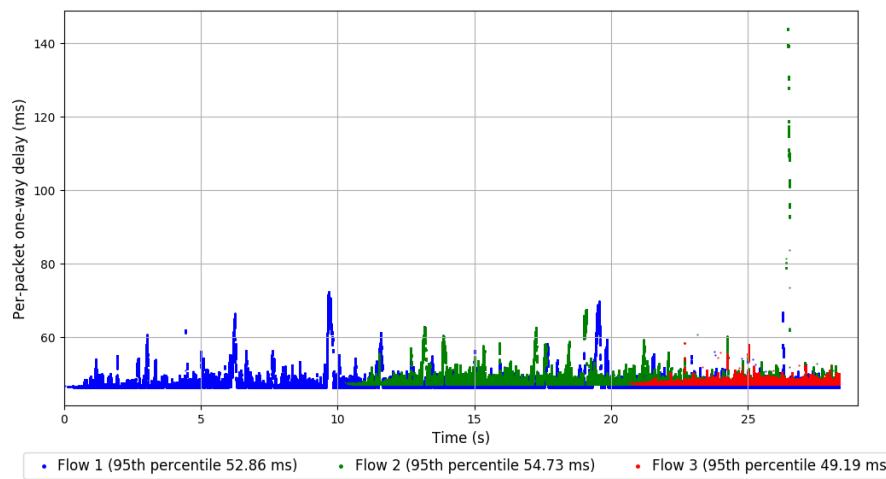
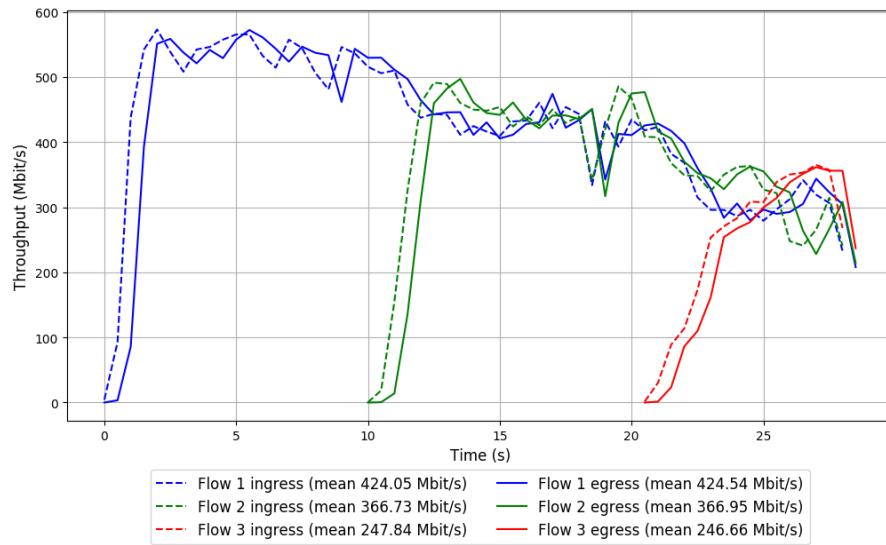


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 23:27:27
End at: 2019-03-27 23:27:57
Local clock offset: -0.106 ms
Remote clock offset: -0.472 ms

# Below is generated by plot.py at 2019-03-28 01:17:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 725.81 Mbit/s
95th percentile per-packet one-way delay: 52.996 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 424.54 Mbit/s
95th percentile per-packet one-way delay: 52.860 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 366.95 Mbit/s
95th percentile per-packet one-way delay: 54.731 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 246.66 Mbit/s
95th percentile per-packet one-way delay: 49.188 ms
Loss rate: 1.76%
```

Run 5: Report of Indigo-MusesC3 — Data Link

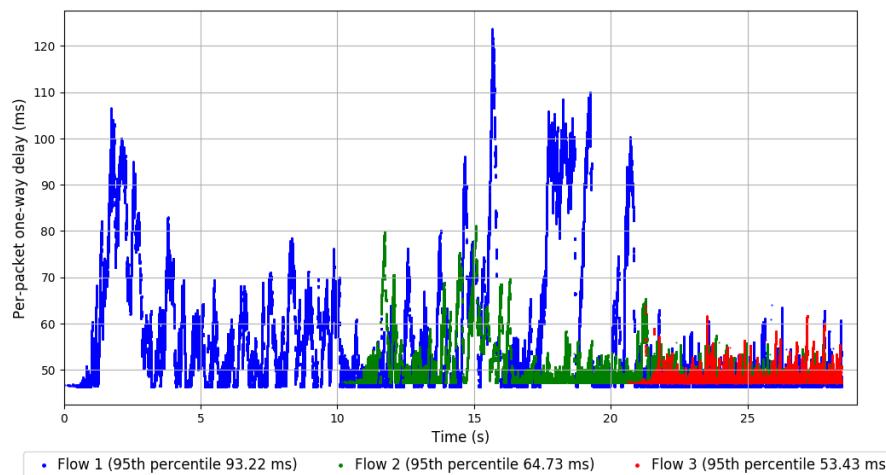
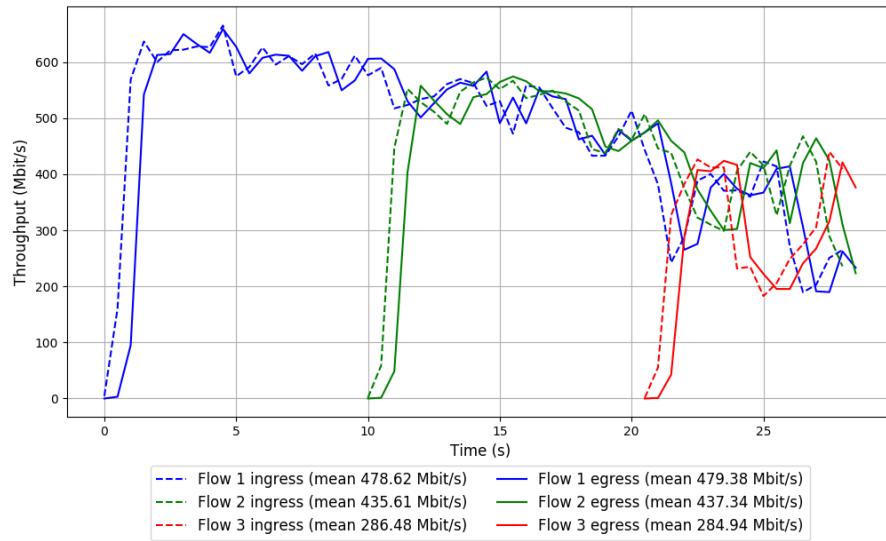


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 21:09:44
End at: 2019-03-27 21:10:14
Local clock offset: -0.143 ms
Remote clock offset: -0.292 ms

# Below is generated by plot.py at 2019-03-28 01:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 839.28 Mbit/s
95th percentile per-packet one-way delay: 84.842 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 479.38 Mbit/s
95th percentile per-packet one-way delay: 93.223 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 437.34 Mbit/s
95th percentile per-packet one-way delay: 64.727 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 284.94 Mbit/s
95th percentile per-packet one-way delay: 53.427 ms
Loss rate: 1.74%
```

Run 1: Report of Indigo-MusesC5 — Data Link

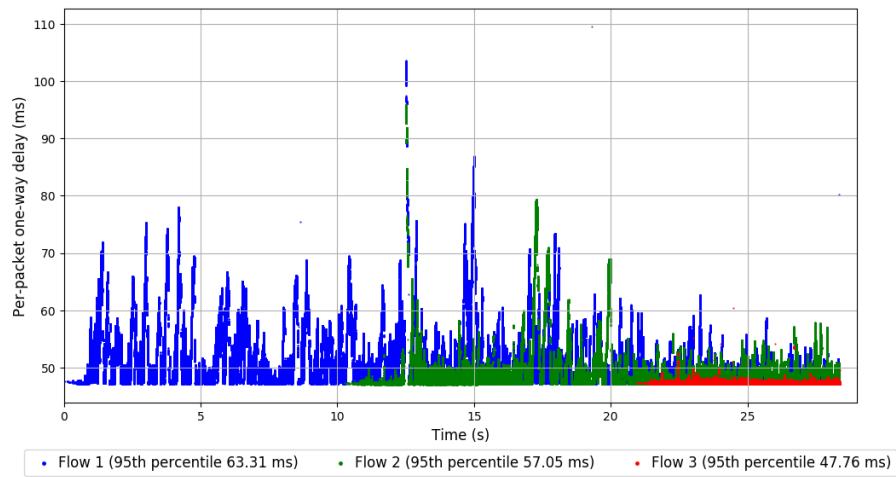
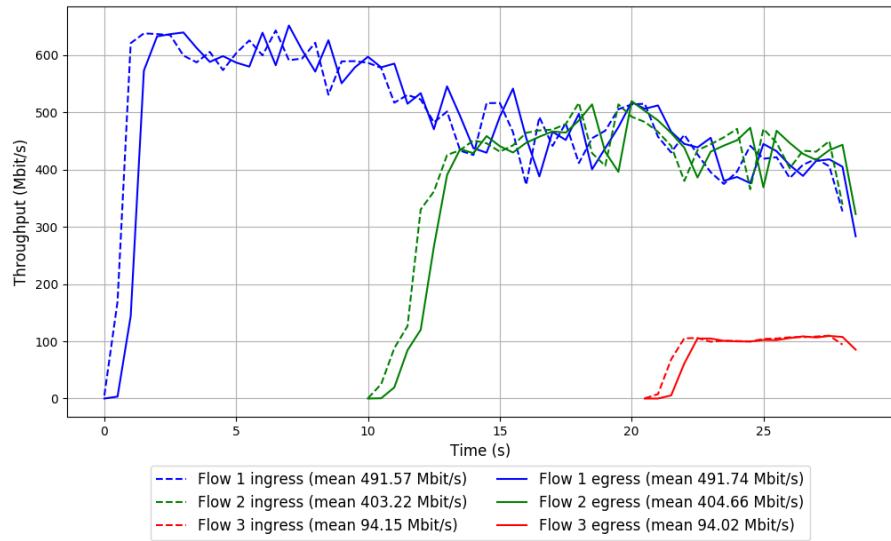


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 21:45:20
End at: 2019-03-27 21:45:50
Local clock offset: -0.105 ms
Remote clock offset: -0.318 ms

# Below is generated by plot.py at 2019-03-28 01:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 775.01 Mbit/s
95th percentile per-packet one-way delay: 62.197 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 491.74 Mbit/s
95th percentile per-packet one-way delay: 63.309 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 404.66 Mbit/s
95th percentile per-packet one-way delay: 57.050 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 94.02 Mbit/s
95th percentile per-packet one-way delay: 47.757 ms
Loss rate: 1.34%
```

Run 2: Report of Indigo-MusesC5 — Data Link

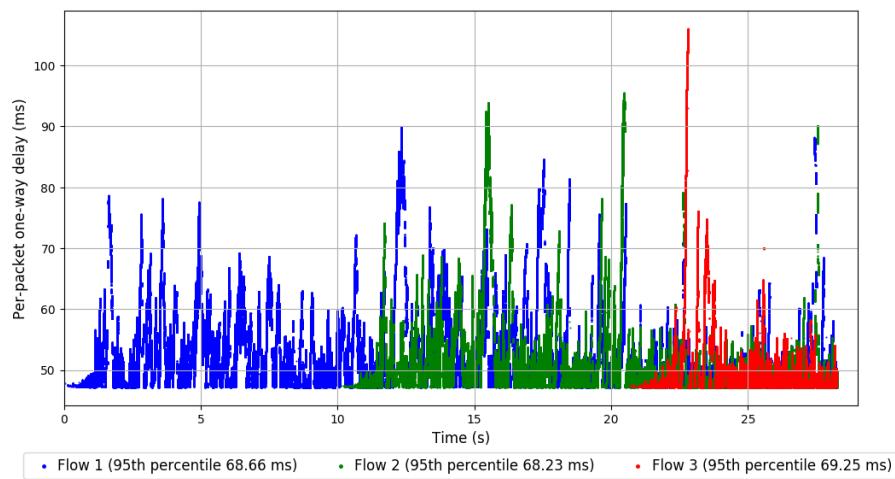
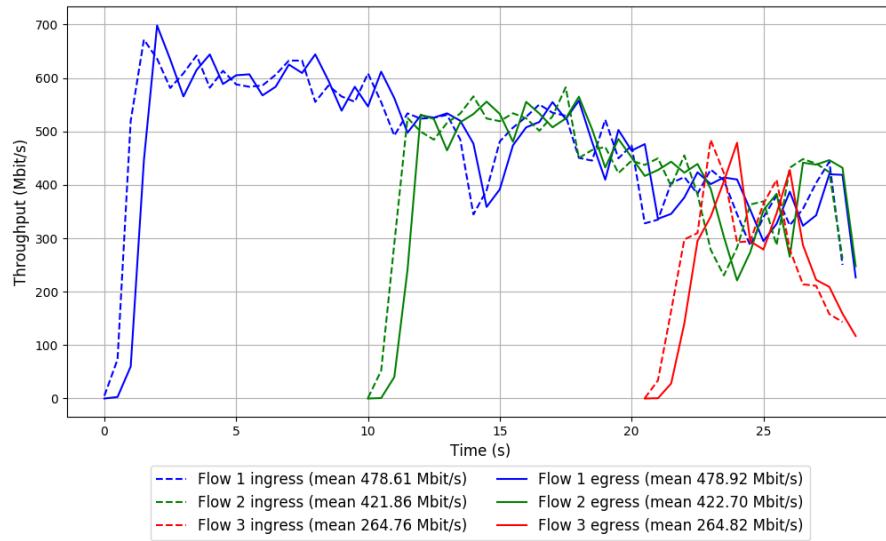


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 22:20:44
End at: 2019-03-27 22:21:14
Local clock offset: -0.069 ms
Remote clock offset: -0.405 ms

# Below is generated by plot.py at 2019-03-28 01:20:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 821.77 Mbit/s
95th percentile per-packet one-way delay: 68.654 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 478.92 Mbit/s
95th percentile per-packet one-way delay: 68.656 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 422.70 Mbit/s
95th percentile per-packet one-way delay: 68.227 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 264.82 Mbit/s
95th percentile per-packet one-way delay: 69.251 ms
Loss rate: 1.15%
```

Run 3: Report of Indigo-MusesC5 — Data Link

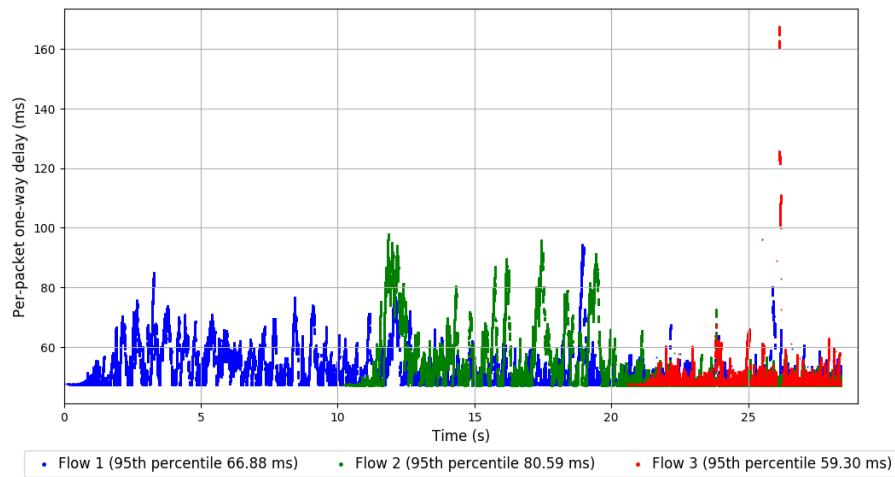
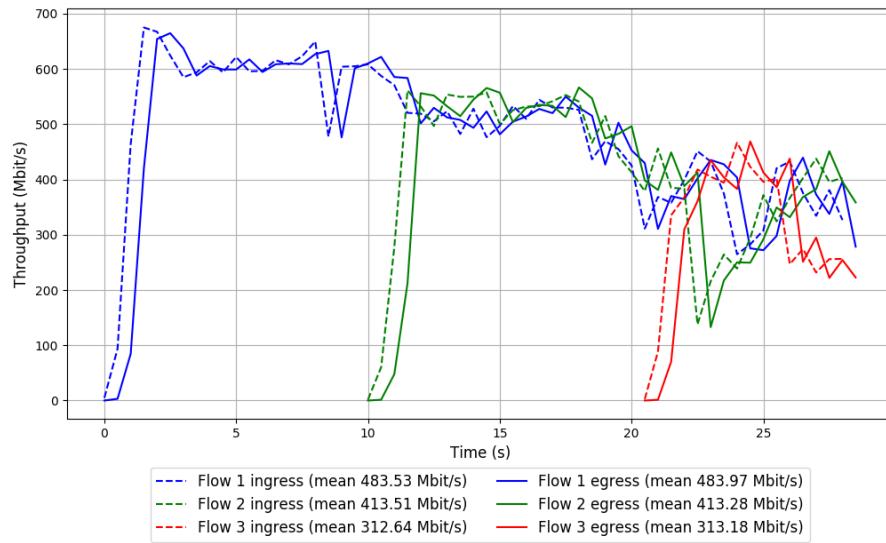


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 22:57:03
End at: 2019-03-27 22:57:33
Local clock offset: -0.097 ms
Remote clock offset: -0.45 ms

# Below is generated by plot.py at 2019-03-28 01:20:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 836.27 Mbit/s
95th percentile per-packet one-way delay: 71.708 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 483.97 Mbit/s
95th percentile per-packet one-way delay: 66.877 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 413.28 Mbit/s
95th percentile per-packet one-way delay: 80.592 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 313.18 Mbit/s
95th percentile per-packet one-way delay: 59.295 ms
Loss rate: 1.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

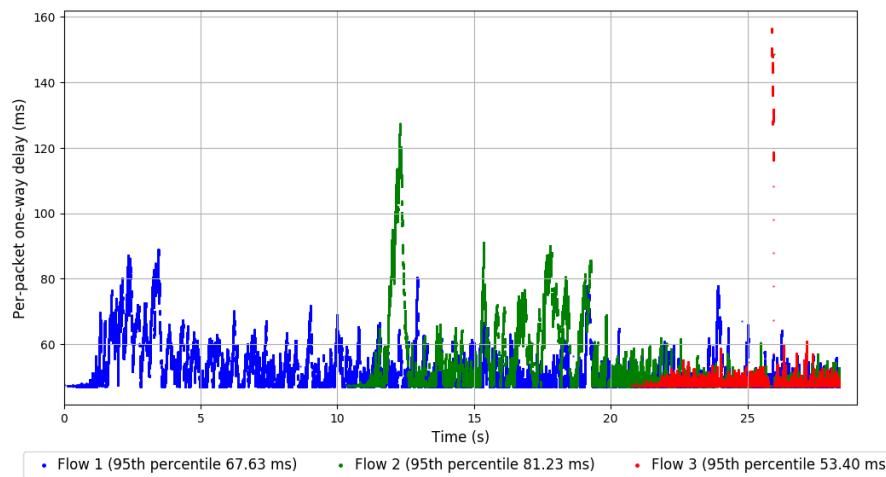
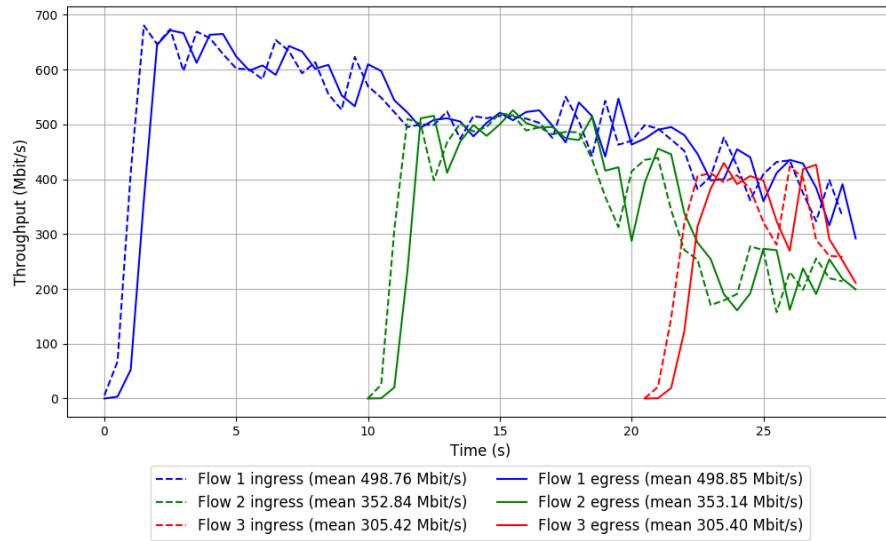


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 23:32:54
End at: 2019-03-27 23:33:24
Local clock offset: -0.163 ms
Remote clock offset: -0.489 ms

# Below is generated by plot.py at 2019-03-28 01:22:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 806.39 Mbit/s
95th percentile per-packet one-way delay: 72.512 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 498.85 Mbit/s
95th percentile per-packet one-way delay: 67.634 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 353.14 Mbit/s
95th percentile per-packet one-way delay: 81.229 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 305.40 Mbit/s
95th percentile per-packet one-way delay: 53.397 ms
Loss rate: 1.48%
```

Run 5: Report of Indigo-MusesC5 — Data Link

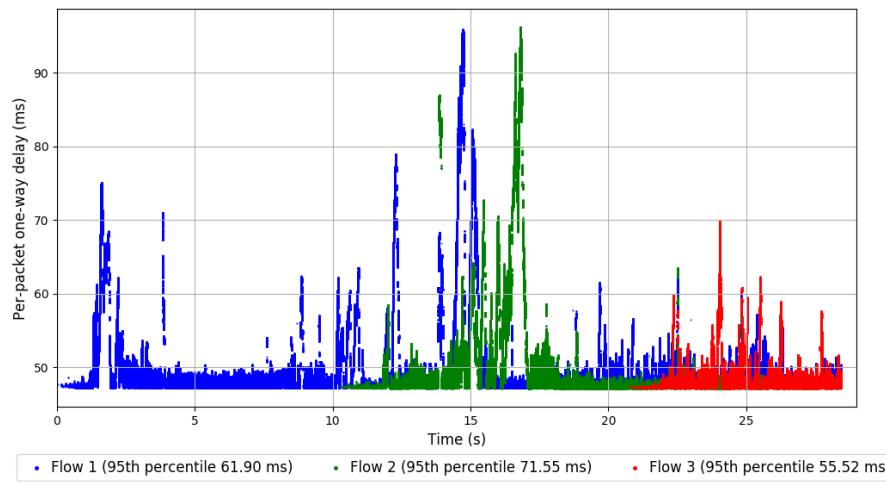
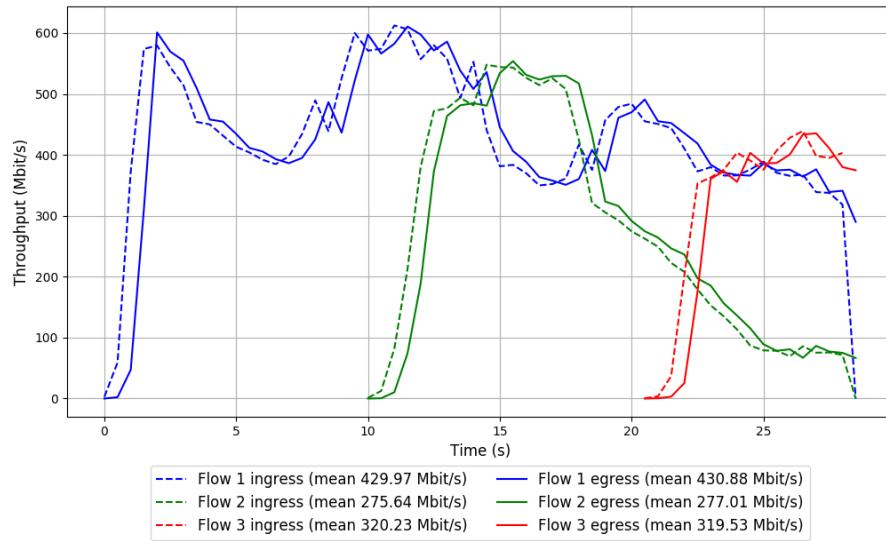


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 21:01:27
End at: 2019-03-27 21:01:57
Local clock offset: -0.125 ms
Remote clock offset: -0.249 ms

# Below is generated by plot.py at 2019-03-28 01:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 694.49 Mbit/s
95th percentile per-packet one-way delay: 62.611 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 430.88 Mbit/s
95th percentile per-packet one-way delay: 61.896 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 277.01 Mbit/s
95th percentile per-packet one-way delay: 71.554 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 319.53 Mbit/s
95th percentile per-packet one-way delay: 55.525 ms
Loss rate: 1.42%
```

Run 1: Report of Indigo-MusesD — Data Link

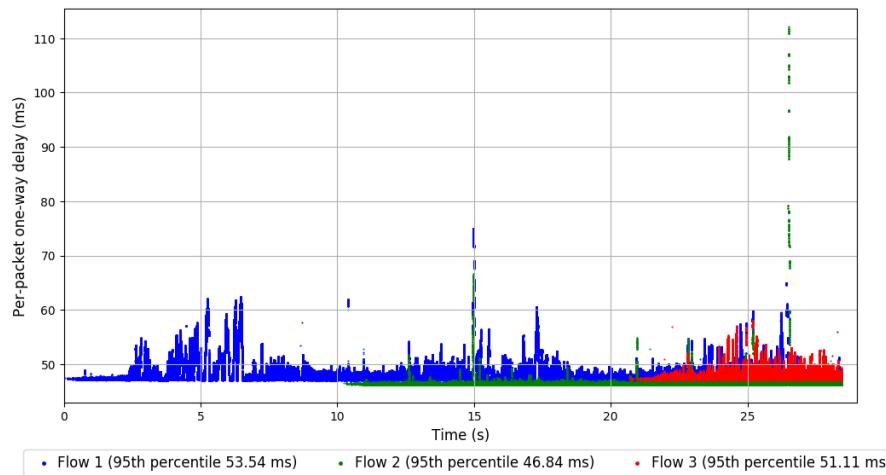
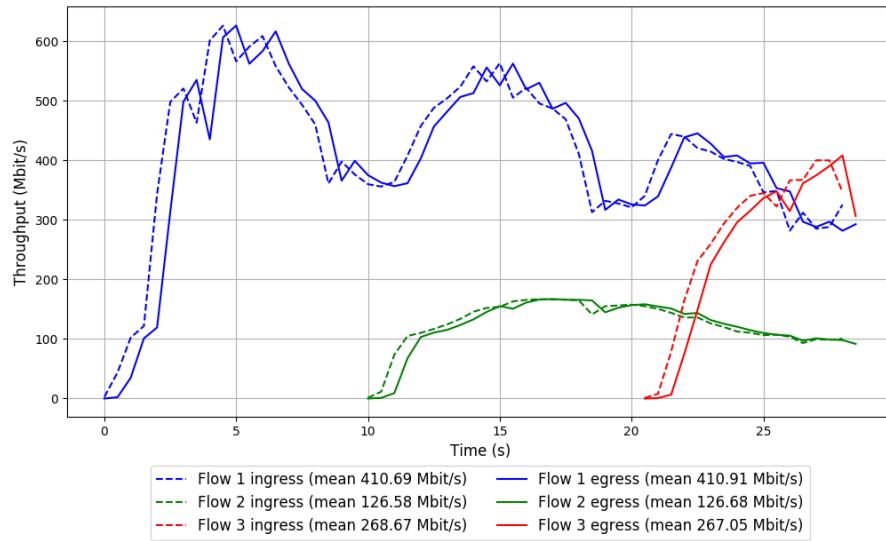


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 21:37:01
End at: 2019-03-27 21:37:31
Local clock offset: -0.197 ms
Remote clock offset: -0.284 ms

# Below is generated by plot.py at 2019-03-28 01:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 565.57 Mbit/s
95th percentile per-packet one-way delay: 52.595 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 410.91 Mbit/s
95th percentile per-packet one-way delay: 53.539 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 126.68 Mbit/s
95th percentile per-packet one-way delay: 46.842 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 267.05 Mbit/s
95th percentile per-packet one-way delay: 51.109 ms
Loss rate: 1.79%
```

Run 2: Report of Indigo-MusesD — Data Link

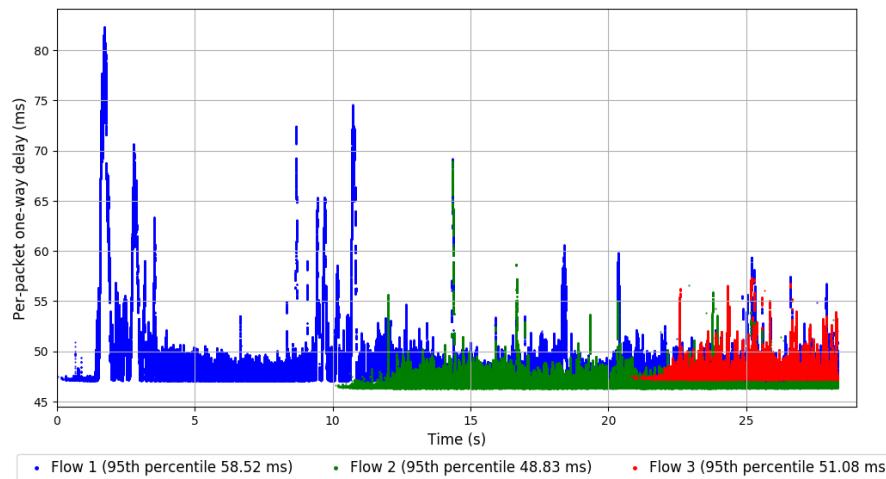
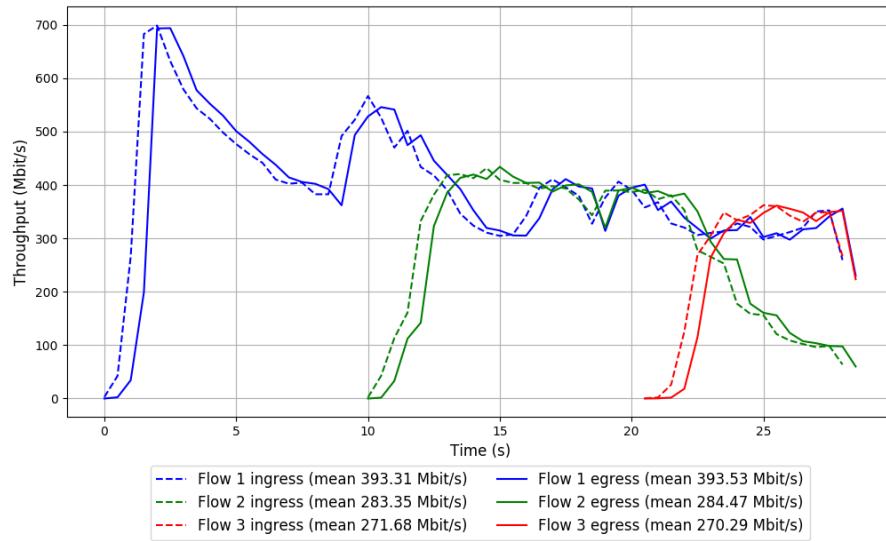


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 22:12:35
End at: 2019-03-27 22:13:05
Local clock offset: -0.029 ms
Remote clock offset: -0.372 ms

# Below is generated by plot.py at 2019-03-28 01:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 648.33 Mbit/s
95th percentile per-packet one-way delay: 54.547 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 393.53 Mbit/s
95th percentile per-packet one-way delay: 58.517 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 284.47 Mbit/s
95th percentile per-packet one-way delay: 48.828 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 270.29 Mbit/s
95th percentile per-packet one-way delay: 51.079 ms
Loss rate: 1.76%
```

Run 3: Report of Indigo-MusesD — Data Link

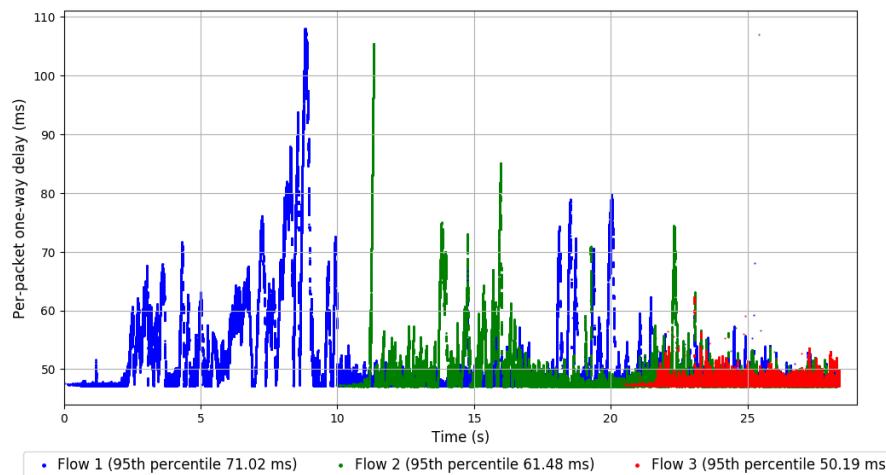
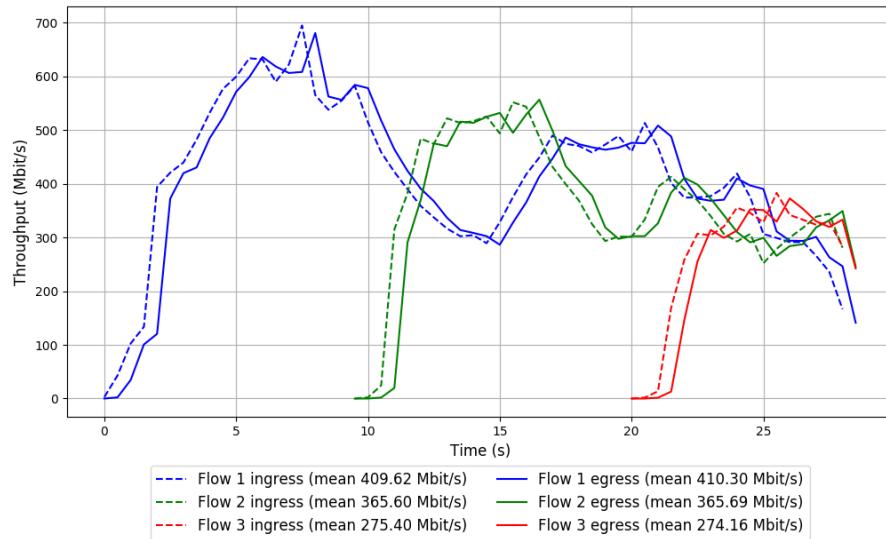


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 22:48:23
End at: 2019-03-27 22:48:53
Local clock offset: -0.108 ms
Remote clock offset: -0.432 ms

# Below is generated by plot.py at 2019-03-28 01:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 724.20 Mbit/s
95th percentile per-packet one-way delay: 66.801 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 410.30 Mbit/s
95th percentile per-packet one-way delay: 71.022 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 365.69 Mbit/s
95th percentile per-packet one-way delay: 61.476 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 274.16 Mbit/s
95th percentile per-packet one-way delay: 50.192 ms
Loss rate: 1.62%
```

Run 4: Report of Indigo-MusesD — Data Link

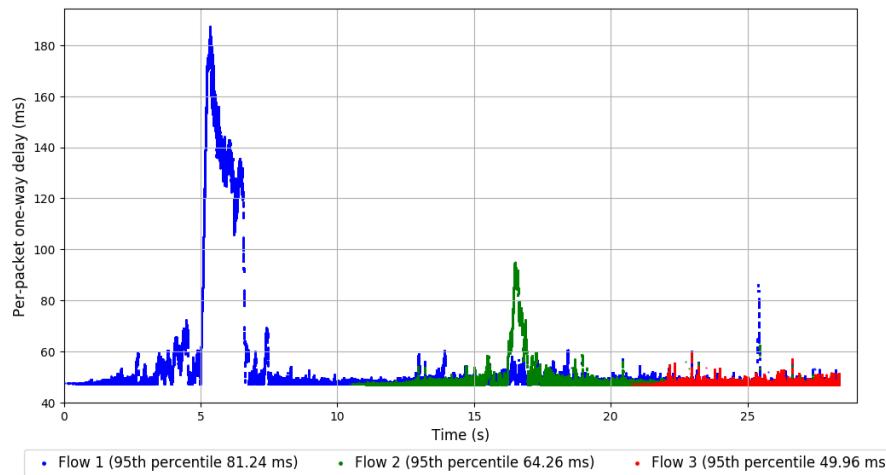
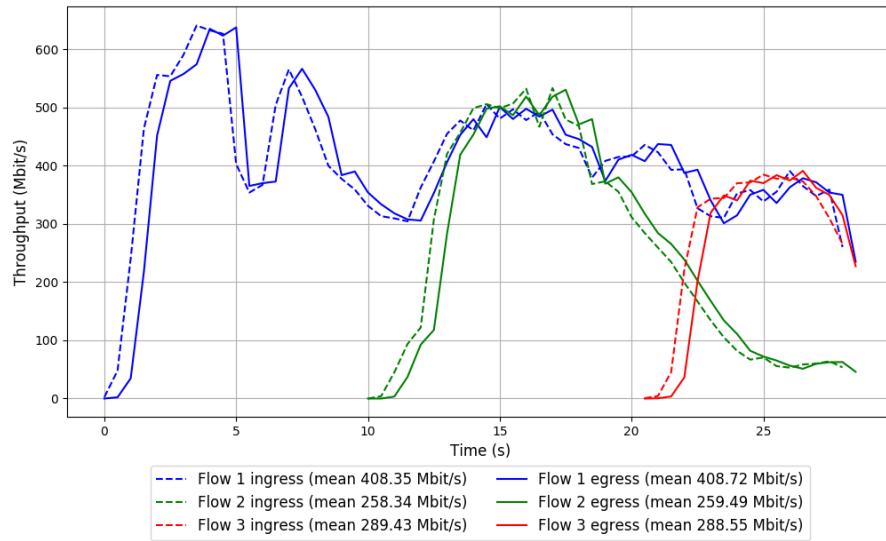


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 23:24:33
End at: 2019-03-27 23:25:03
Local clock offset: -0.107 ms
Remote clock offset: -0.431 ms

# Below is generated by plot.py at 2019-03-28 01:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 650.33 Mbit/s
95th percentile per-packet one-way delay: 66.357 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 408.72 Mbit/s
95th percentile per-packet one-way delay: 81.240 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 259.49 Mbit/s
95th percentile per-packet one-way delay: 64.264 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 288.55 Mbit/s
95th percentile per-packet one-way delay: 49.963 ms
Loss rate: 1.55%
```

Run 5: Report of Indigo-MusesD — Data Link

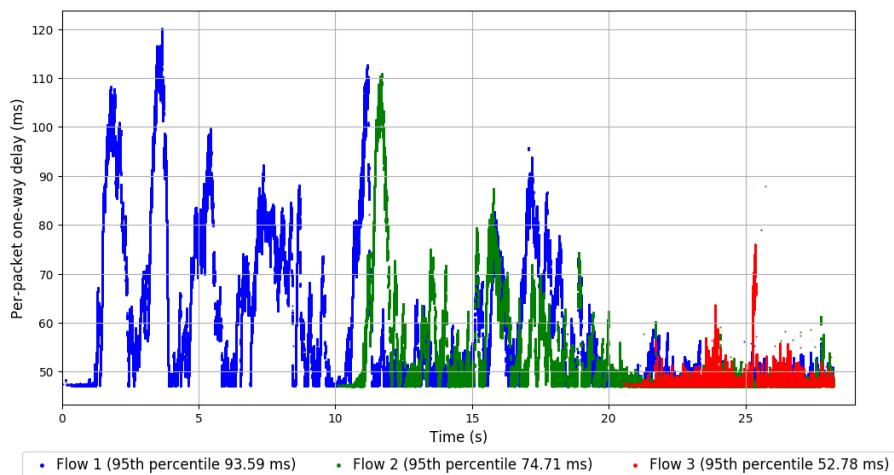
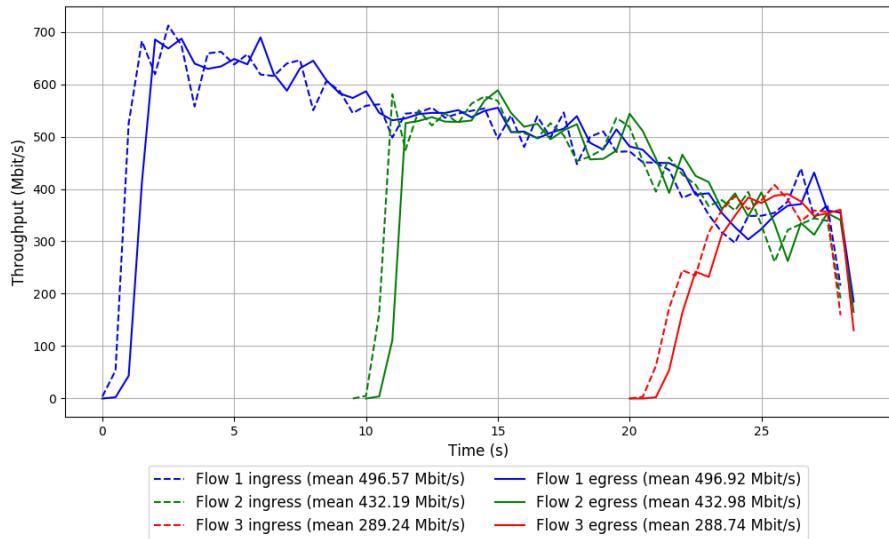


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 20:45:32
End at: 2019-03-27 20:46:02
Local clock offset: -0.138 ms
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2019-03-28 01:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 855.85 Mbit/s
95th percentile per-packet one-way delay: 87.743 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 496.92 Mbit/s
95th percentile per-packet one-way delay: 93.589 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 432.98 Mbit/s
95th percentile per-packet one-way delay: 74.707 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 288.74 Mbit/s
95th percentile per-packet one-way delay: 52.781 ms
Loss rate: 1.36%
```

Run 1: Report of Indigo-MusesT — Data Link

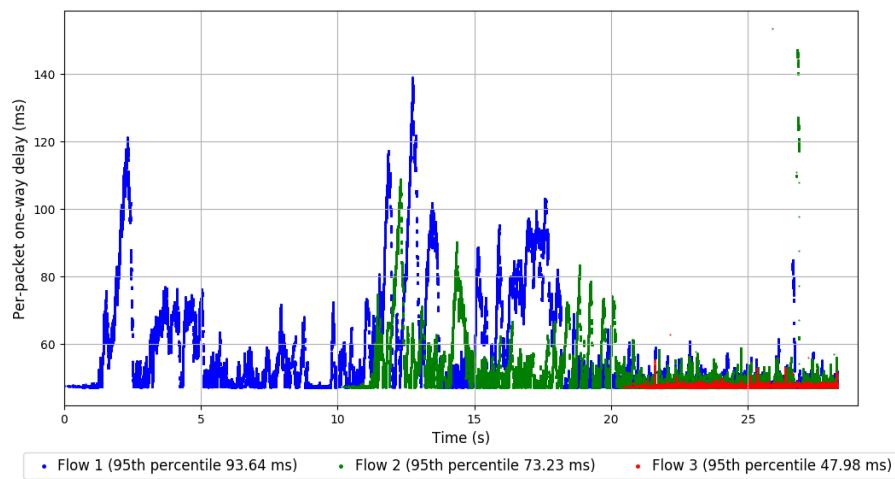
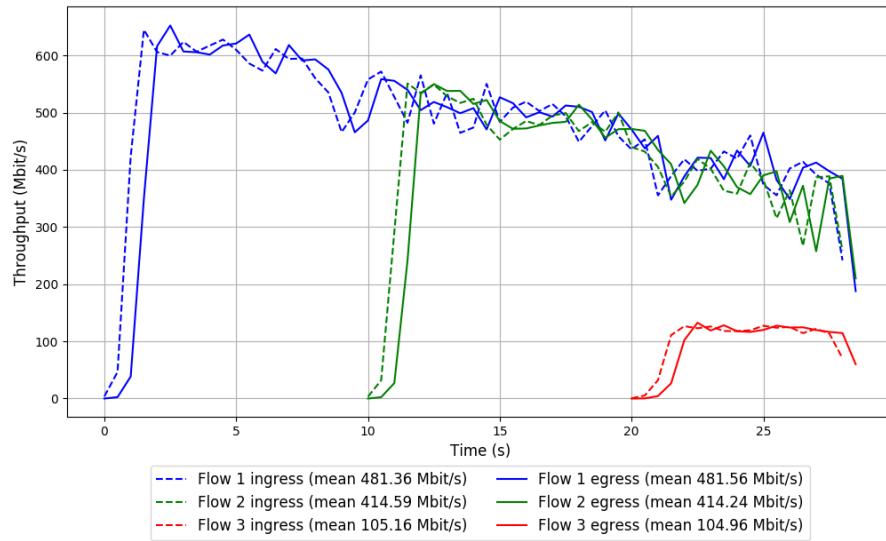


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 21:21:00
End at: 2019-03-27 21:21:30
Local clock offset: -0.194 ms
Remote clock offset: -0.215 ms

# Below is generated by plot.py at 2019-03-28 01:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 777.33 Mbit/s
95th percentile per-packet one-way delay: 89.205 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 481.56 Mbit/s
95th percentile per-packet one-way delay: 93.635 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 414.24 Mbit/s
95th percentile per-packet one-way delay: 73.229 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 104.96 Mbit/s
95th percentile per-packet one-way delay: 47.978 ms
Loss rate: 1.32%
```

Run 2: Report of Indigo-MusesT — Data Link

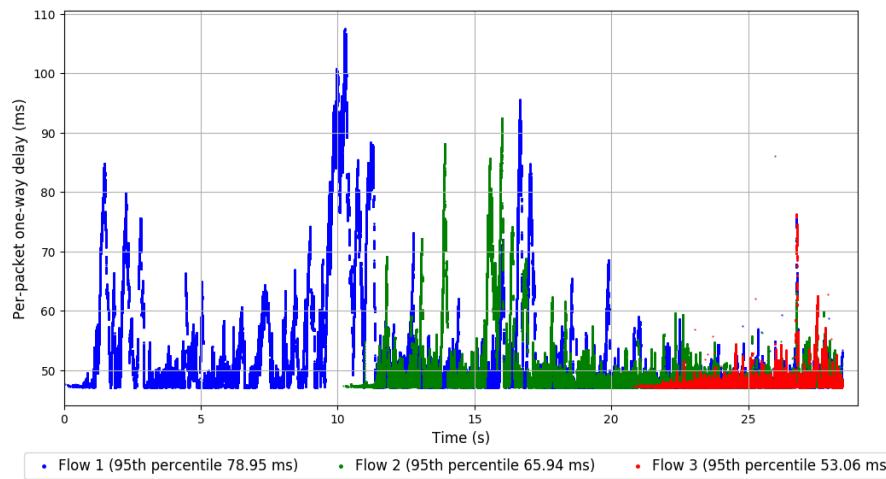
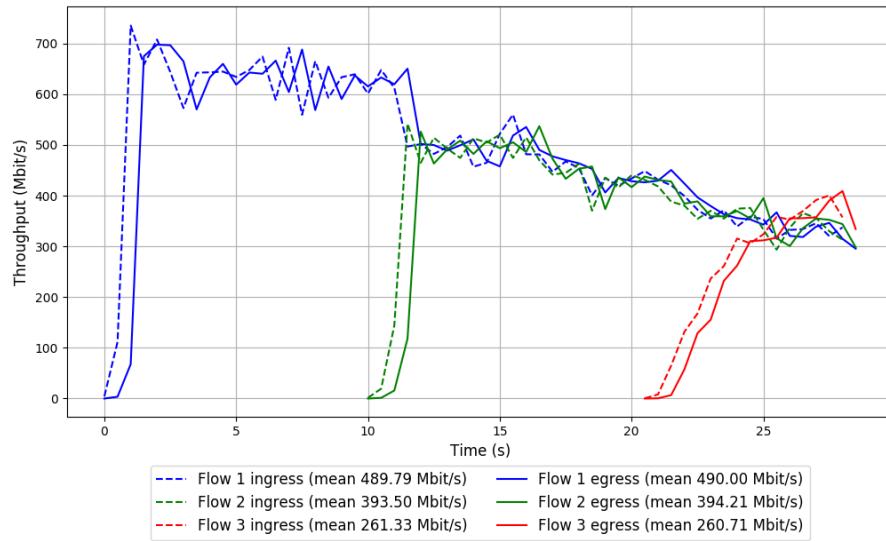


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 21:56:35
End at: 2019-03-27 21:57:05
Local clock offset: -0.047 ms
Remote clock offset: -0.331 ms

# Below is generated by plot.py at 2019-03-28 01:39:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 813.44 Mbit/s
95th percentile per-packet one-way delay: 73.443 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 490.00 Mbit/s
95th percentile per-packet one-way delay: 78.946 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 394.21 Mbit/s
95th percentile per-packet one-way delay: 65.939 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 260.71 Mbit/s
95th percentile per-packet one-way delay: 53.062 ms
Loss rate: 1.51%
```

Run 3: Report of Indigo-MusesT — Data Link

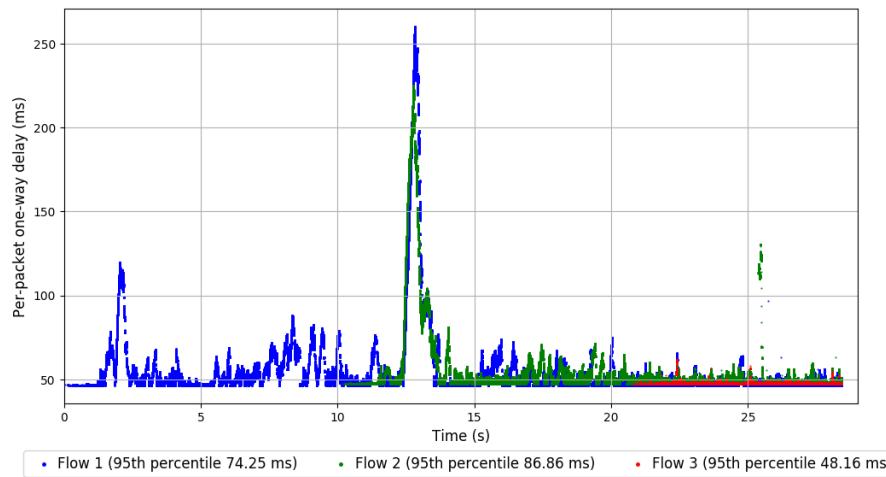
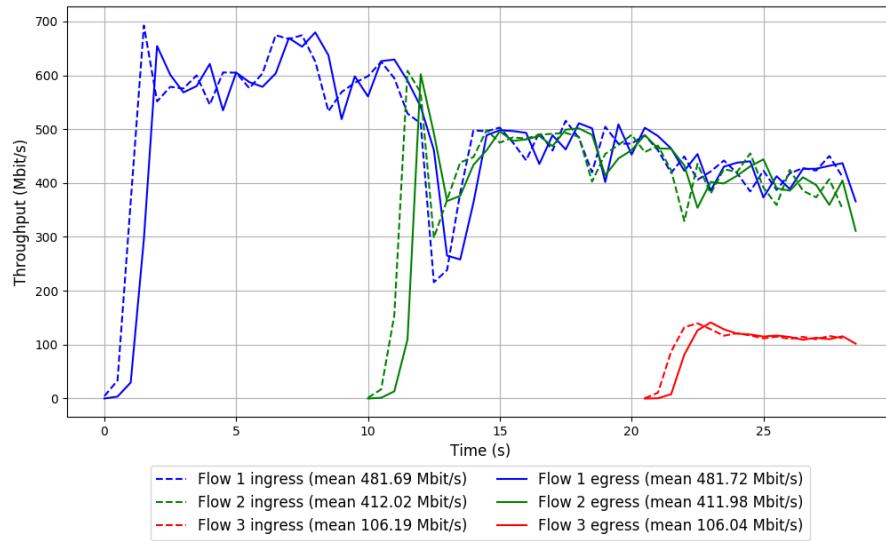


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 22:32:08
End at: 2019-03-27 22:32:38
Local clock offset: -0.09 ms
Remote clock offset: -0.415 ms

# Below is generated by plot.py at 2019-03-28 01:43:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 775.11 Mbit/s
95th percentile per-packet one-way delay: 74.463 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 481.72 Mbit/s
95th percentile per-packet one-way delay: 74.246 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 411.98 Mbit/s
95th percentile per-packet one-way delay: 86.860 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 106.04 Mbit/s
95th percentile per-packet one-way delay: 48.165 ms
Loss rate: 1.36%
```

Run 4: Report of Indigo-MusesT — Data Link

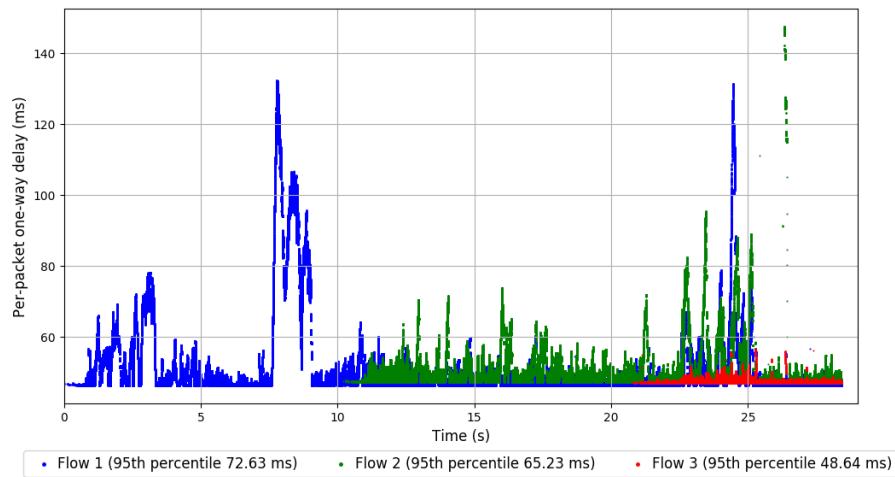
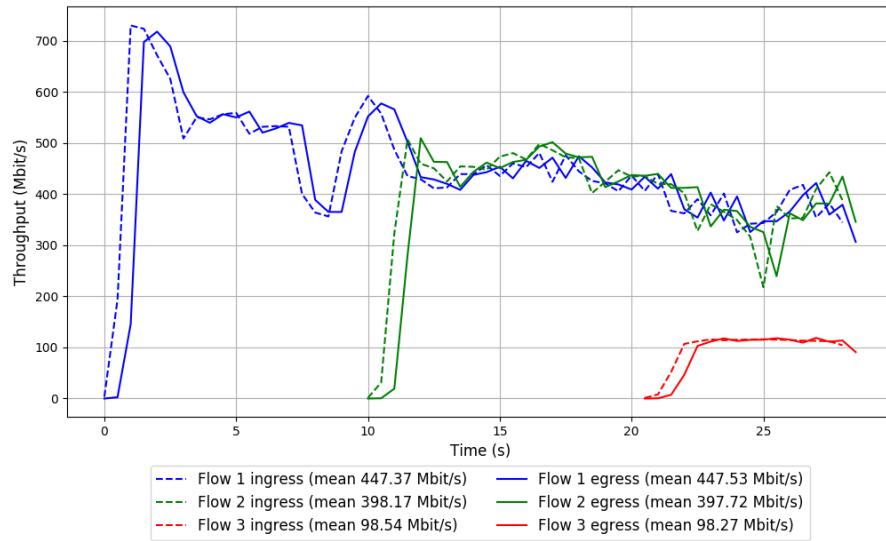


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 23:08:25
End at: 2019-03-27 23:08:55
Local clock offset: -0.086 ms
Remote clock offset: -0.464 ms

# Below is generated by plot.py at 2019-03-28 01:43:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 729.15 Mbit/s
95th percentile per-packet one-way delay: 68.849 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 447.53 Mbit/s
95th percentile per-packet one-way delay: 72.632 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 397.72 Mbit/s
95th percentile per-packet one-way delay: 65.230 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 98.27 Mbit/s
95th percentile per-packet one-way delay: 48.640 ms
Loss rate: 1.51%
```

Run 5: Report of Indigo-MusesT — Data Link

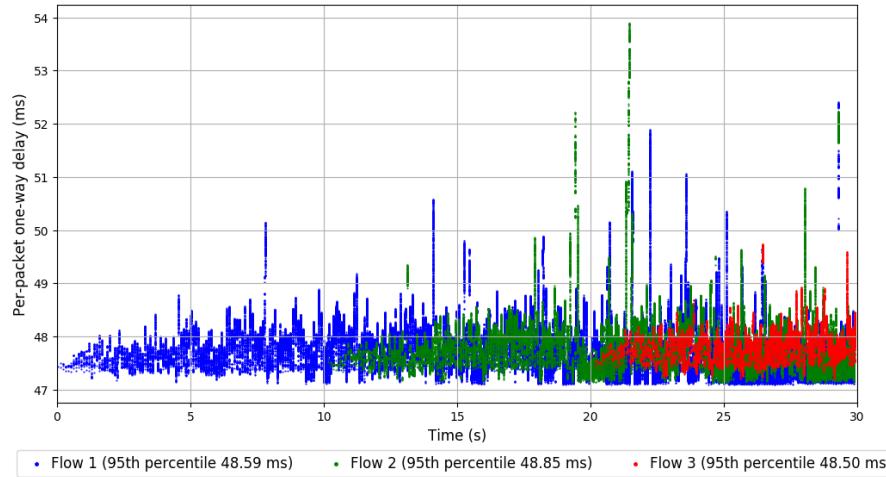
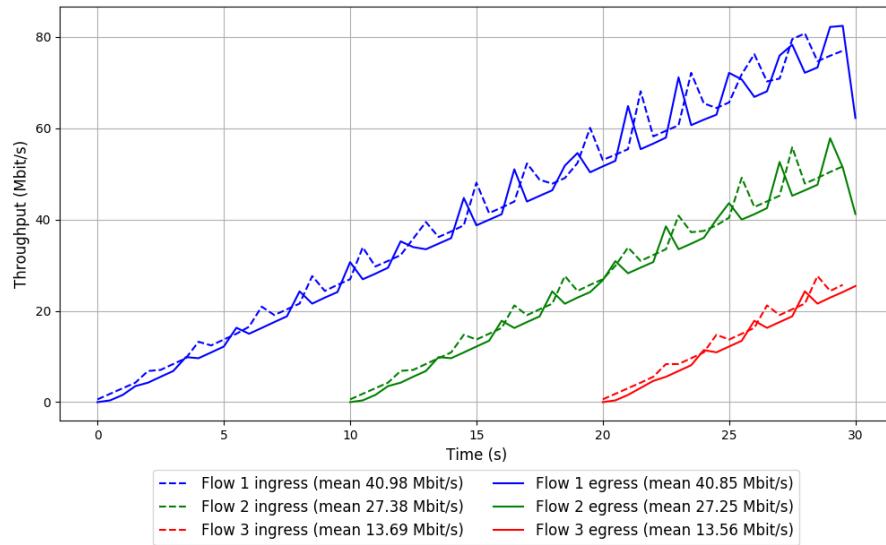


```
Run 1: Statistics of LEDBAT

Start at: 2019-03-27 21:14:42
End at: 2019-03-27 21:15:12
Local clock offset: -0.173 ms
Remote clock offset: -0.276 ms

# Below is generated by plot.py at 2019-03-28 01:43:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.35 Mbit/s
95th percentile per-packet one-way delay: 48.650 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 48.588 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 48.846 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 13.56 Mbit/s
95th percentile per-packet one-way delay: 48.497 ms
Loss rate: 1.92%
```

Run 1: Report of LEDBAT — Data Link

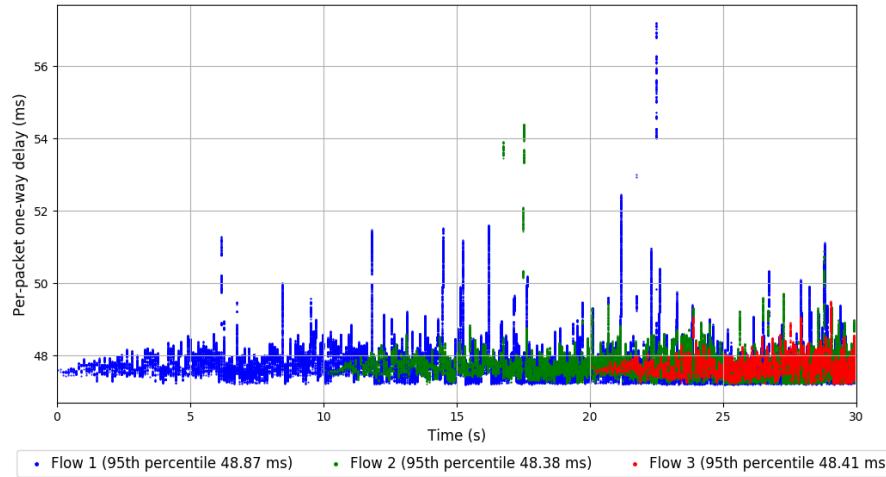
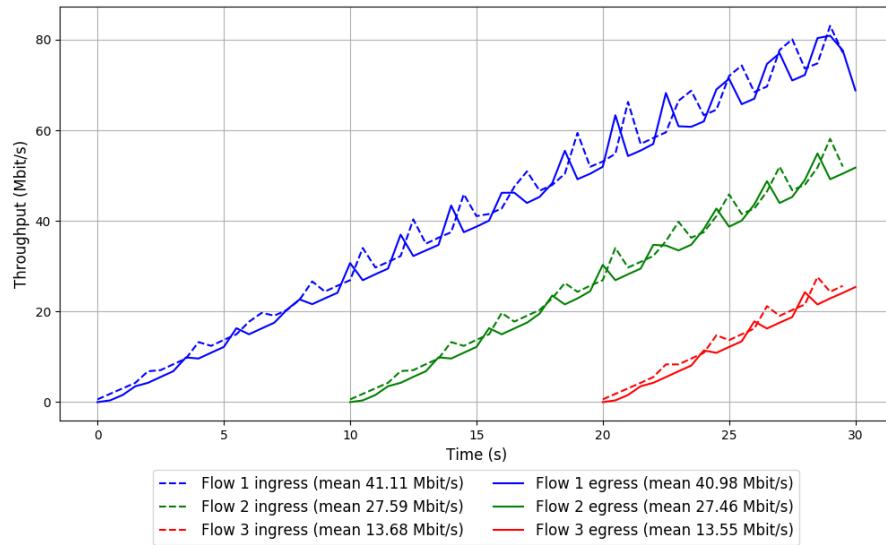


Run 2: Statistics of LEDBAT

```
Start at: 2019-03-27 21:50:21
End at: 2019-03-27 21:50:51
Local clock offset: -0.062 ms
Remote clock offset: -0.389 ms

# Below is generated by plot.py at 2019-03-28 01:43:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.70 Mbit/s
95th percentile per-packet one-way delay: 48.689 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 40.98 Mbit/s
95th percentile per-packet one-way delay: 48.871 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 48.385 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 13.55 Mbit/s
95th percentile per-packet one-way delay: 48.415 ms
Loss rate: 1.93%
```

Run 2: Report of LEDBAT — Data Link

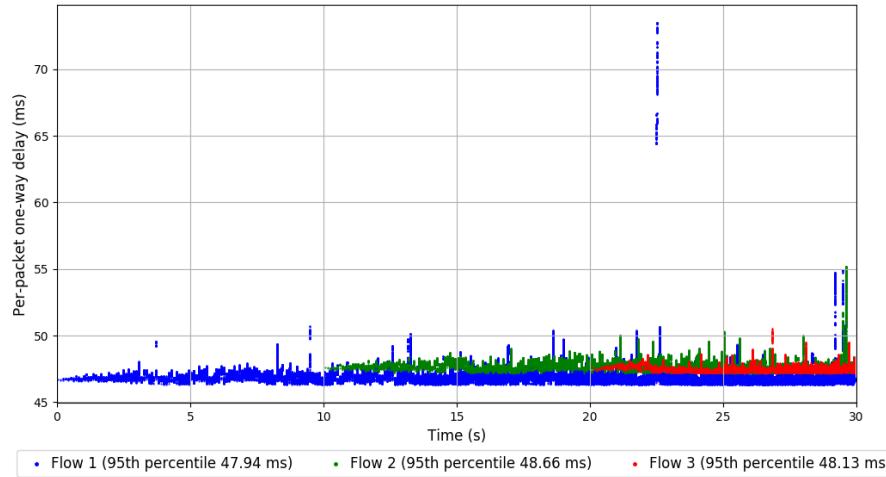
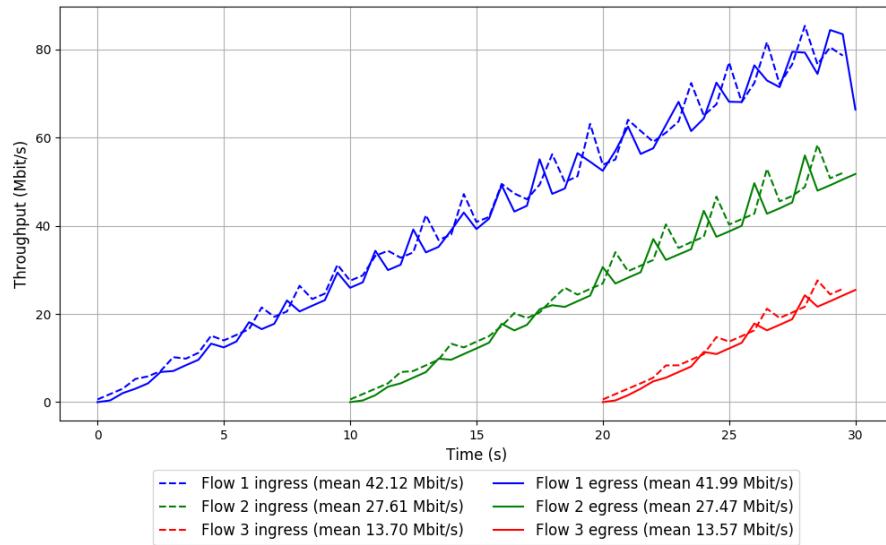


Run 3: Statistics of LEDBAT

```
Start at: 2019-03-27 22:25:44
End at: 2019-03-27 22:26:14
Local clock offset: -0.066 ms
Remote clock offset: -0.388 ms

# Below is generated by plot.py at 2019-03-28 01:43:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.71 Mbit/s
95th percentile per-packet one-way delay: 48.368 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 41.99 Mbit/s
95th percentile per-packet one-way delay: 47.941 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 27.47 Mbit/s
95th percentile per-packet one-way delay: 48.658 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 13.57 Mbit/s
95th percentile per-packet one-way delay: 48.133 ms
Loss rate: 1.92%
```

Run 3: Report of LEDBAT — Data Link

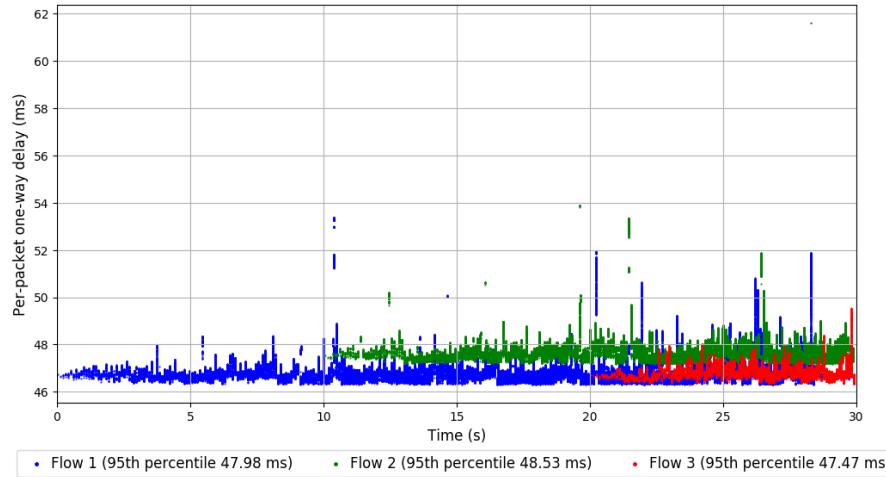
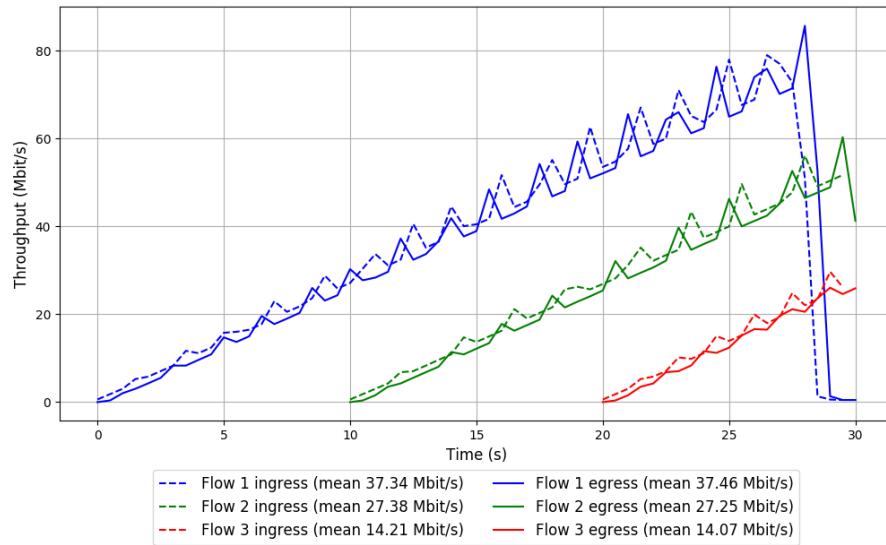


Run 4: Statistics of LEDBAT

```
Start at: 2019-03-27 23:02:03
End at: 2019-03-27 23:02:33
Local clock offset: -0.089 ms
Remote clock offset: -0.476 ms

# Below is generated by plot.py at 2019-03-28 01:43:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.17 Mbit/s
95th percentile per-packet one-way delay: 48.287 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 37.46 Mbit/s
95th percentile per-packet one-way delay: 47.978 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 48.531 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 14.07 Mbit/s
95th percentile per-packet one-way delay: 47.469 ms
Loss rate: 1.89%
```

Run 4: Report of LEDBAT — Data Link

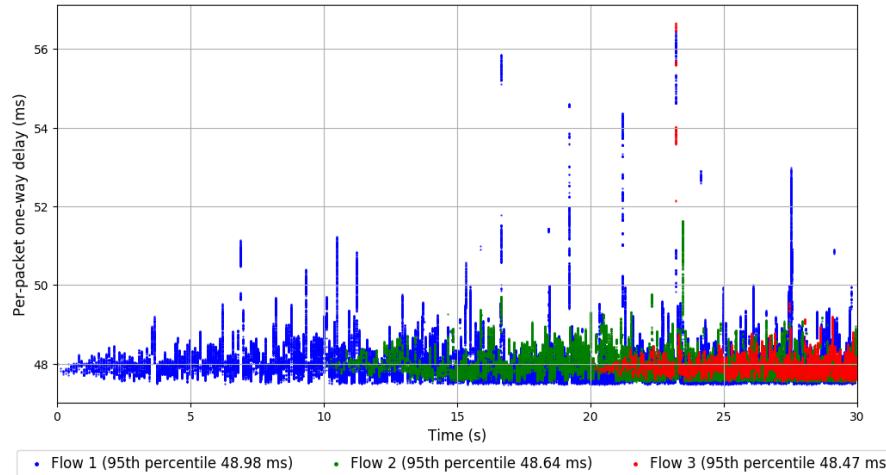
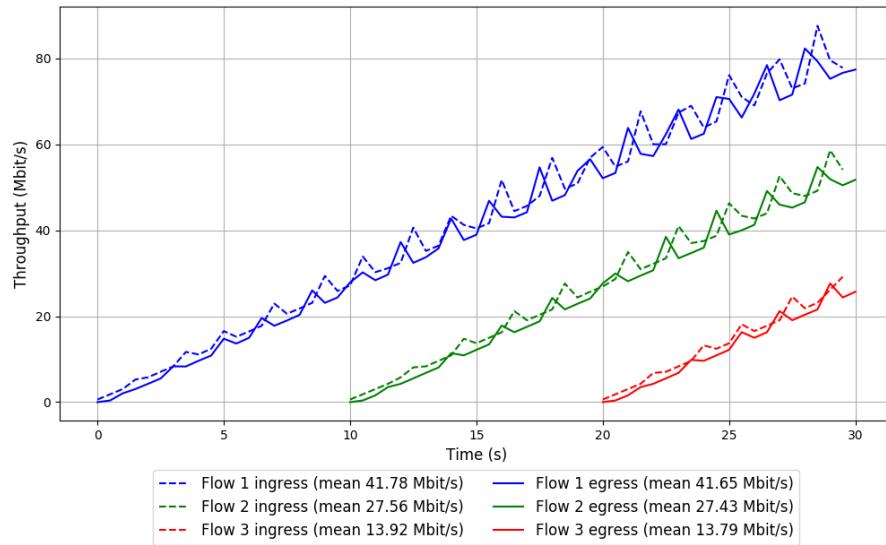


Run 5: Statistics of LEDBAT

```
Start at: 2019-03-27 23:37:54
End at: 2019-03-27 23:38:24
Local clock offset: 0.217 ms
Remote clock offset: -0.475 ms

# Below is generated by plot.py at 2019-03-28 01:43:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.40 Mbit/s
95th percentile per-packet one-way delay: 48.832 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 41.65 Mbit/s
95th percentile per-packet one-way delay: 48.985 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 48.643 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 13.79 Mbit/s
95th percentile per-packet one-way delay: 48.466 ms
Loss rate: 1.91%
```

Run 5: Report of LEDBAT — Data Link

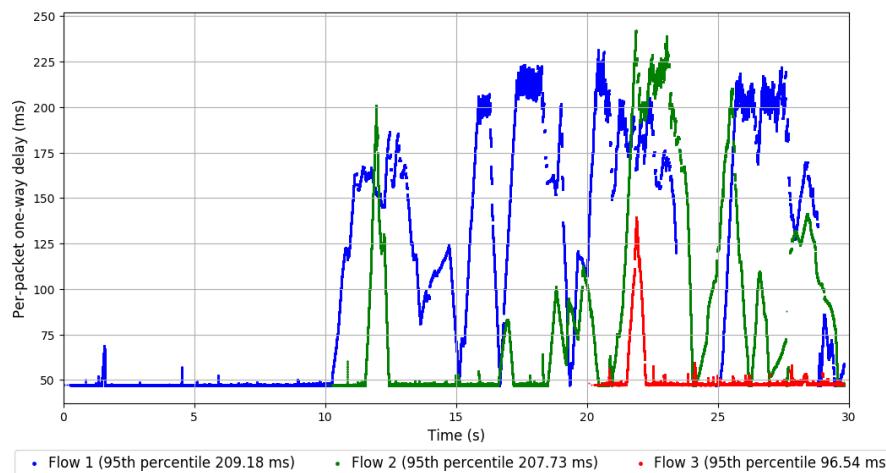
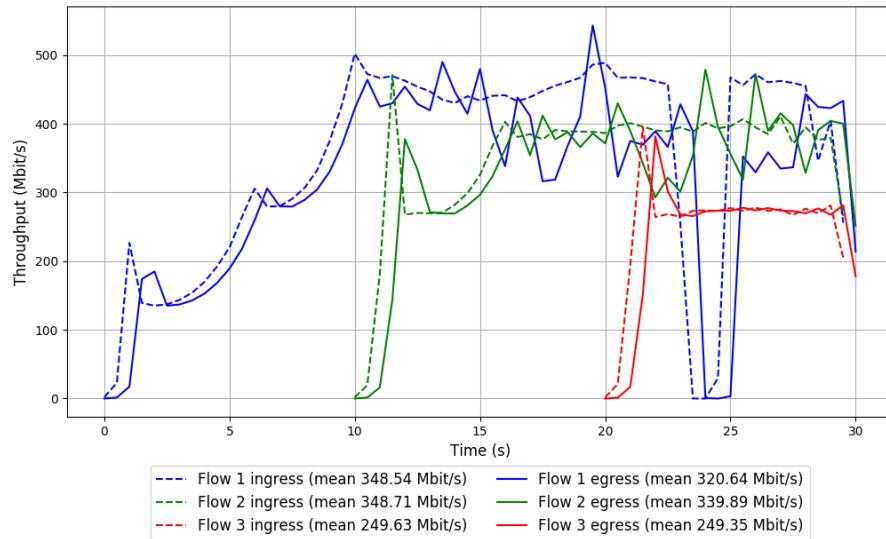


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-03-27 20:57:53
End at: 2019-03-27 20:58:23
Local clock offset: -0.118 ms
Remote clock offset: -0.235 ms

# Below is generated by plot.py at 2019-03-28 01:59:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 627.70 Mbit/s
95th percentile per-packet one-way delay: 207.283 ms
Loss rate: 5.55%
-- Flow 1:
Average throughput: 320.64 Mbit/s
95th percentile per-packet one-way delay: 209.175 ms
Loss rate: 8.30%
-- Flow 2:
Average throughput: 339.89 Mbit/s
95th percentile per-packet one-way delay: 207.726 ms
Loss rate: 2.99%
-- Flow 3:
Average throughput: 249.35 Mbit/s
95th percentile per-packet one-way delay: 96.543 ms
Loss rate: 1.10%
```

Run 1: Report of PCC-Allegro — Data Link

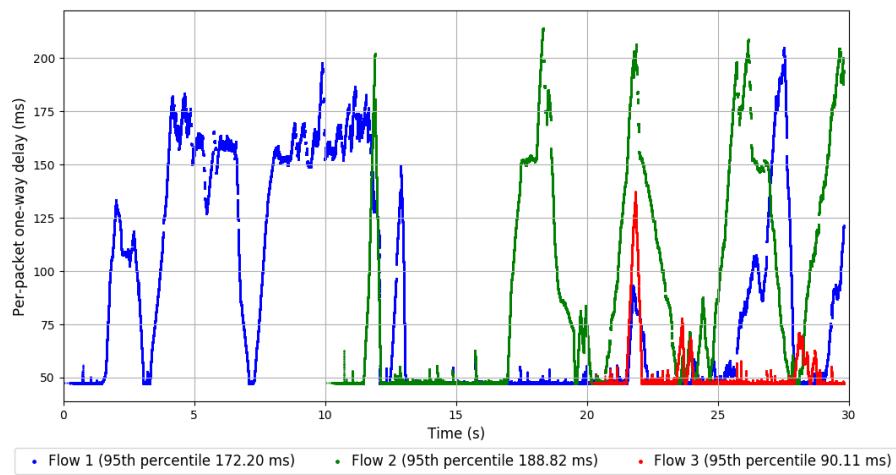
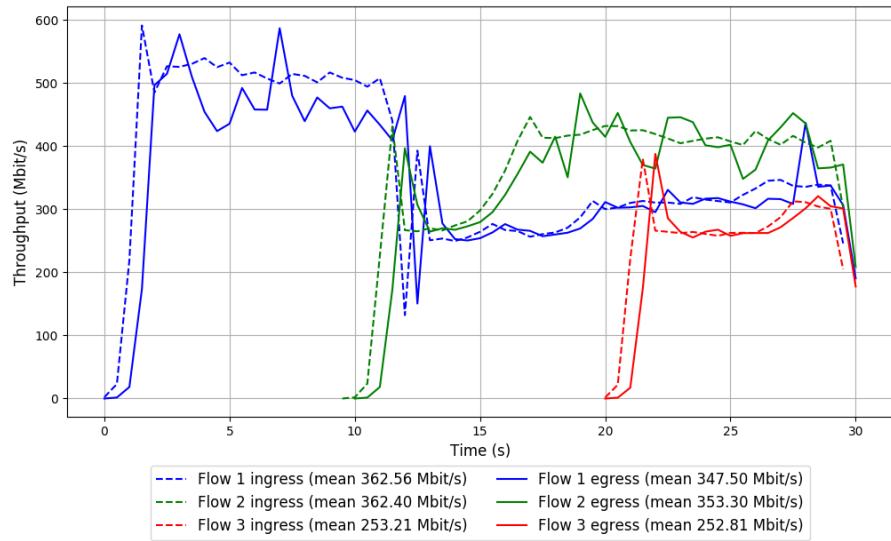


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-03-27 21:33:18
End at: 2019-03-27 21:33:48
Local clock offset: -0.193 ms
Remote clock offset: -0.273 ms

# Below is generated by plot.py at 2019-03-28 02:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 664.84 Mbit/s
95th percentile per-packet one-way delay: 176.364 ms
Loss rate: 3.54%
-- Flow 1:
Average throughput: 347.50 Mbit/s
95th percentile per-packet one-way delay: 172.201 ms
Loss rate: 4.46%
-- Flow 2:
Average throughput: 353.30 Mbit/s
95th percentile per-packet one-way delay: 188.818 ms
Loss rate: 2.98%
-- Flow 3:
Average throughput: 252.81 Mbit/s
95th percentile per-packet one-way delay: 90.115 ms
Loss rate: 1.13%
```

Run 2: Report of PCC-Allegro — Data Link

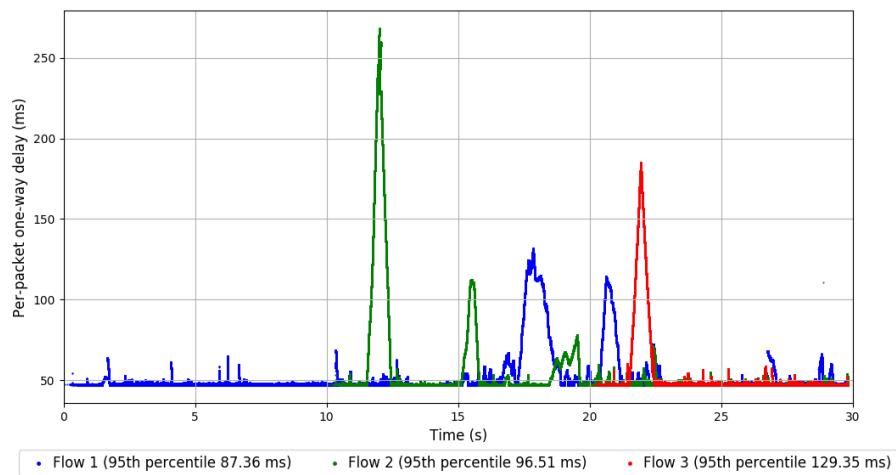
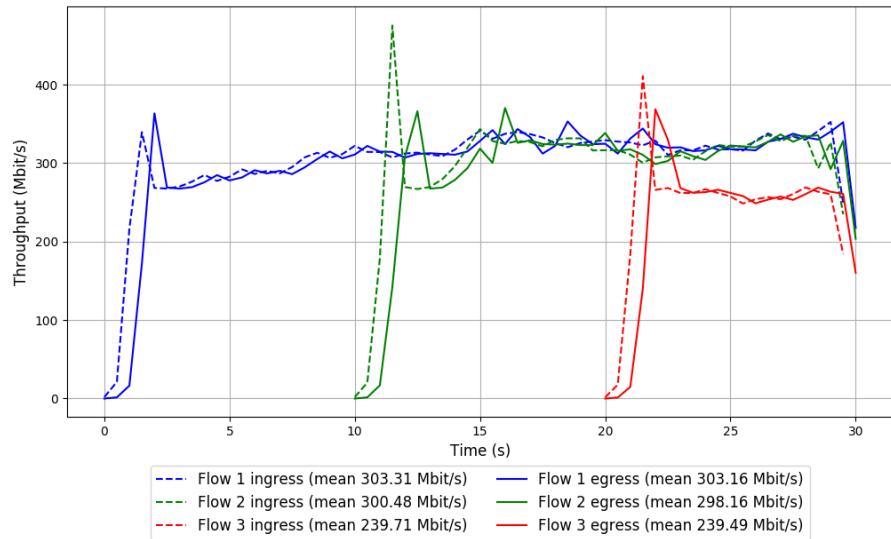


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-03-27 22:08:57
End at: 2019-03-27 22:09:27
Local clock offset: -0.018 ms
Remote clock offset: -0.395 ms

# Below is generated by plot.py at 2019-03-28 02:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 579.25 Mbit/s
95th percentile per-packet one-way delay: 95.956 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 303.16 Mbit/s
95th percentile per-packet one-way delay: 87.359 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 298.16 Mbit/s
95th percentile per-packet one-way delay: 96.510 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 239.49 Mbit/s
95th percentile per-packet one-way delay: 129.348 ms
Loss rate: 1.03%
```

Run 3: Report of PCC-Allegro — Data Link

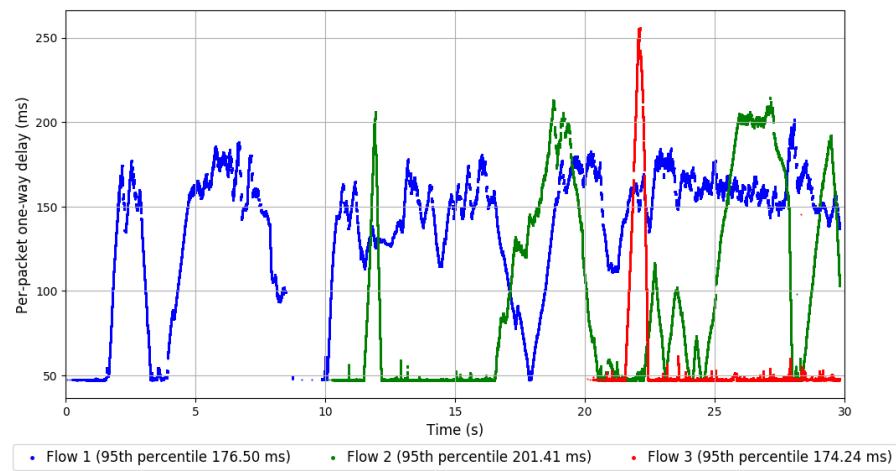
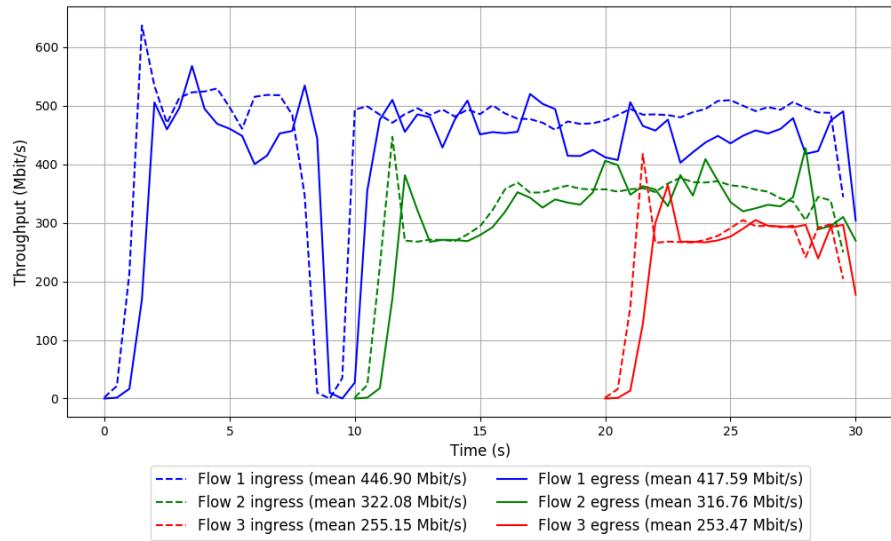


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-03-27 22:44:30
End at: 2019-03-27 22:45:00
Local clock offset: -0.096 ms
Remote clock offset: -0.408 ms

# Below is generated by plot.py at 2019-03-28 02:04:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.67 Mbit/s
95th percentile per-packet one-way delay: 185.305 ms
Loss rate: 4.90%
-- Flow 1:
Average throughput: 417.59 Mbit/s
95th percentile per-packet one-way delay: 176.499 ms
Loss rate: 6.86%
-- Flow 2:
Average throughput: 316.76 Mbit/s
95th percentile per-packet one-way delay: 201.410 ms
Loss rate: 2.12%
-- Flow 3:
Average throughput: 253.47 Mbit/s
95th percentile per-packet one-way delay: 174.235 ms
Loss rate: 1.62%
```

Run 4: Report of PCC-Allegro — Data Link

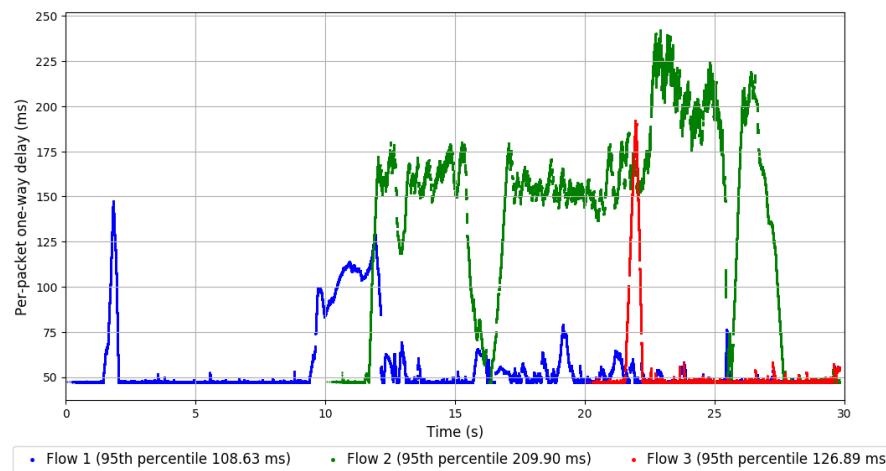
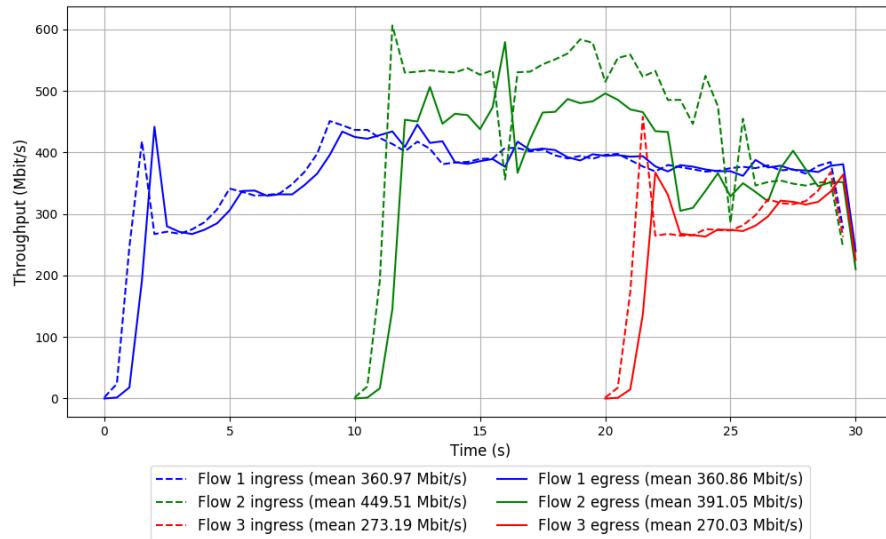


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-03-27 23:20:44
End at: 2019-03-27 23:21:14
Local clock offset: -0.129 ms
Remote clock offset: -0.464 ms

# Below is generated by plot.py at 2019-03-28 02:05:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 708.64 Mbit/s
95th percentile per-packet one-way delay: 186.453 ms
Loss rate: 5.77%
-- Flow 1:
Average throughput: 360.86 Mbit/s
95th percentile per-packet one-way delay: 108.632 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 391.05 Mbit/s
95th percentile per-packet one-way delay: 209.904 ms
Loss rate: 13.42%
-- Flow 3:
Average throughput: 270.03 Mbit/s
95th percentile per-packet one-way delay: 126.885 ms
Loss rate: 2.12%
```

Run 5: Report of PCC-Allegro — Data Link

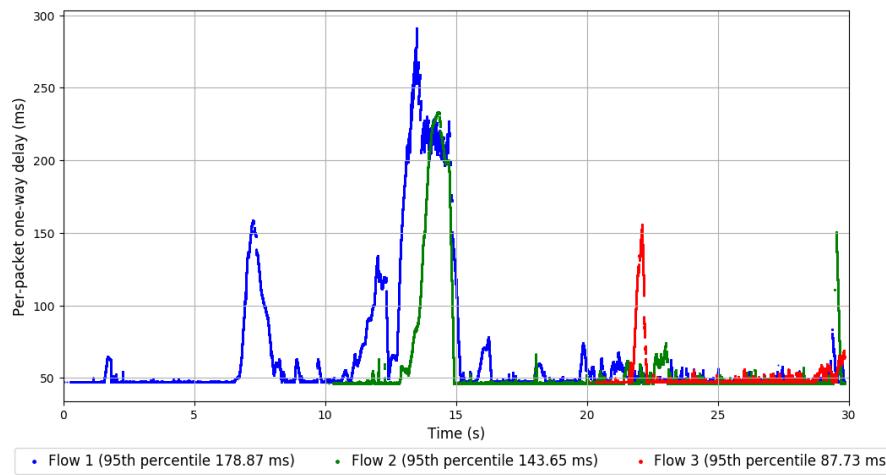
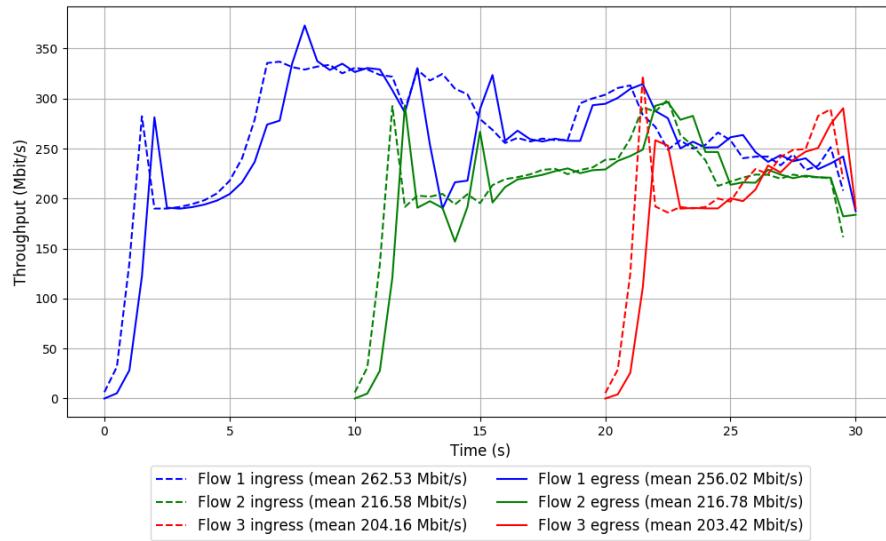


Run 1: Statistics of PCC-Expr

```
Start at: 2019-03-27 21:11:35
End at: 2019-03-27 21:12:05
Local clock offset: -0.147 ms
Remote clock offset: -0.251 ms

# Below is generated by plot.py at 2019-03-28 02:05:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.60 Mbit/s
95th percentile per-packet one-way delay: 148.754 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 256.02 Mbit/s
95th percentile per-packet one-way delay: 178.865 ms
Loss rate: 2.85%
-- Flow 2:
Average throughput: 216.78 Mbit/s
95th percentile per-packet one-way delay: 143.652 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 203.42 Mbit/s
95th percentile per-packet one-way delay: 87.727 ms
Loss rate: 1.51%
```

Run 1: Report of PCC-Expr — Data Link

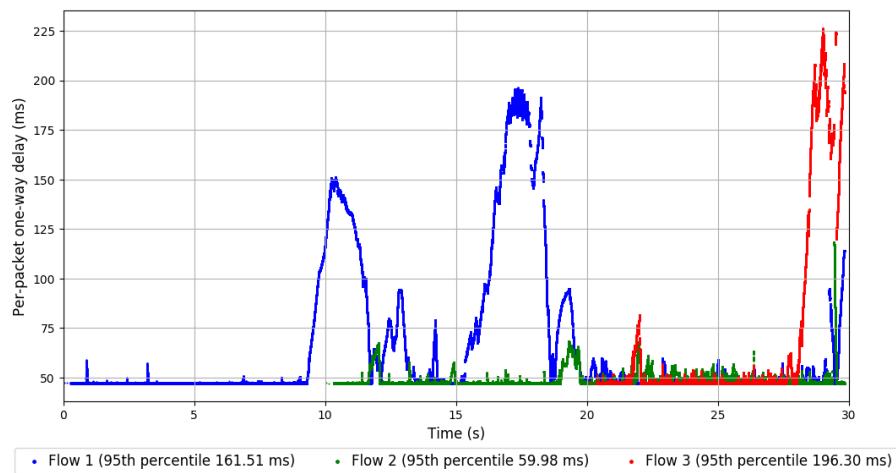
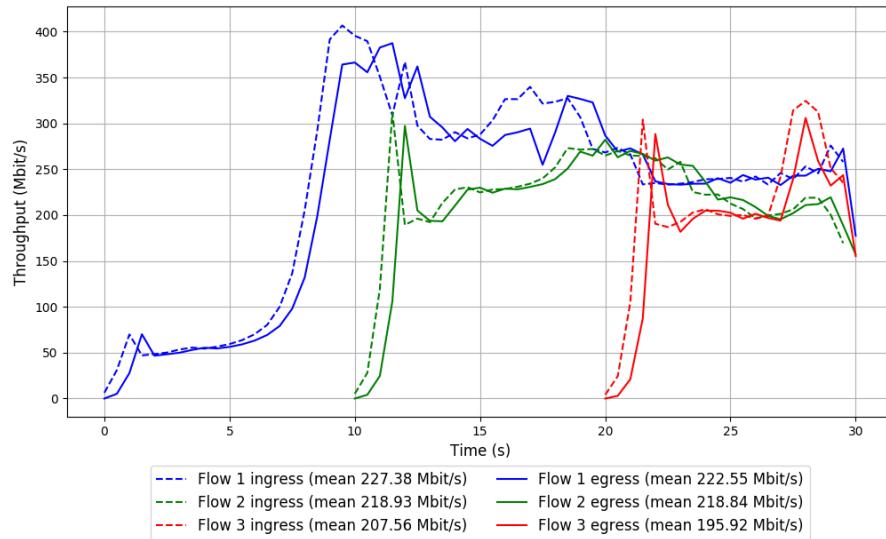


Run 2: Statistics of PCC-Expr

```
Start at: 2019-03-27 21:47:10
End at: 2019-03-27 21:47:40
Local clock offset: -0.076 ms
Remote clock offset: -0.289 ms

# Below is generated by plot.py at 2019-03-28 02:05:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.04 Mbit/s
95th percentile per-packet one-way delay: 156.823 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 222.55 Mbit/s
95th percentile per-packet one-way delay: 161.515 ms
Loss rate: 2.43%
-- Flow 2:
Average throughput: 218.84 Mbit/s
95th percentile per-packet one-way delay: 59.985 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 195.92 Mbit/s
95th percentile per-packet one-way delay: 196.296 ms
Loss rate: 6.53%
```

Run 2: Report of PCC-Expr — Data Link

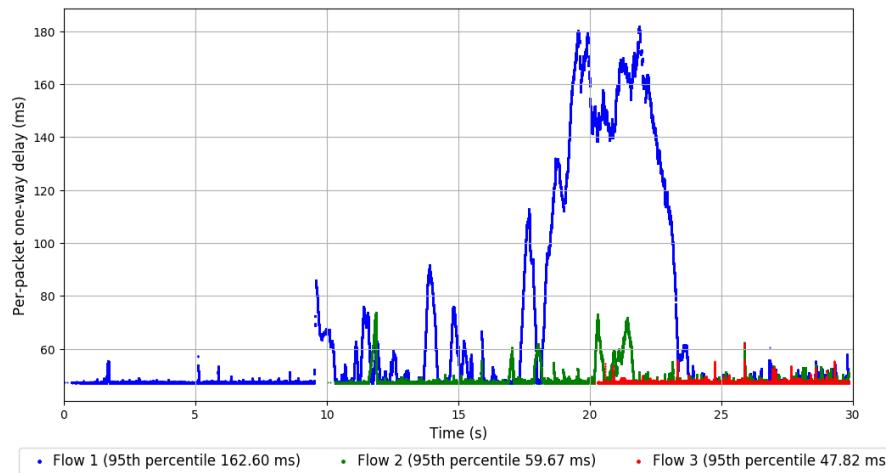
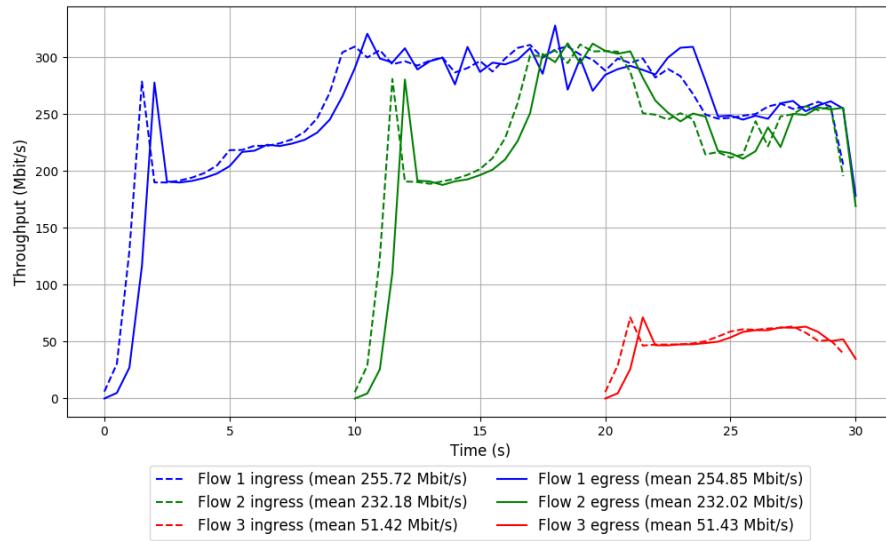


Run 3: Statistics of PCC-Expr

```
Start at: 2019-03-27 22:22:38
End at: 2019-03-27 22:23:08
Local clock offset: -0.08 ms
Remote clock offset: -0.402 ms

# Below is generated by plot.py at 2019-03-28 02:05:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.81 Mbit/s
95th percentile per-packet one-way delay: 150.125 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 254.85 Mbit/s
95th percentile per-packet one-way delay: 162.605 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 232.02 Mbit/s
95th percentile per-packet one-way delay: 59.667 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 51.43 Mbit/s
95th percentile per-packet one-way delay: 47.820 ms
Loss rate: 0.96%
```

Run 3: Report of PCC-Expr — Data Link

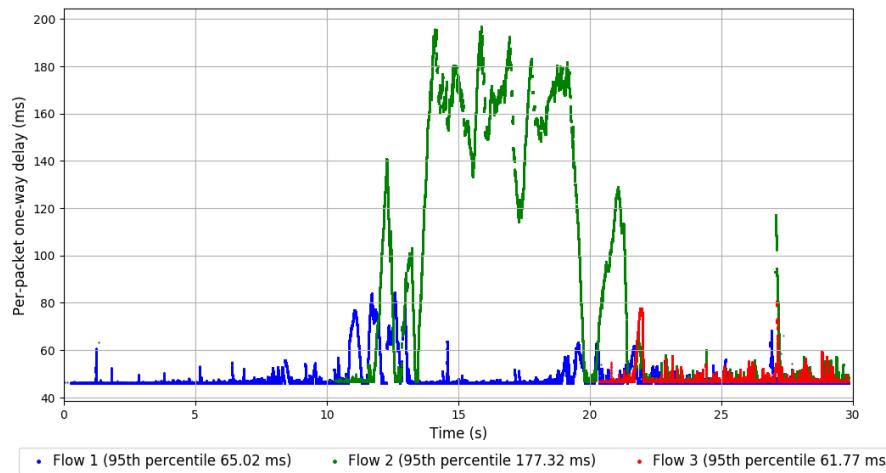
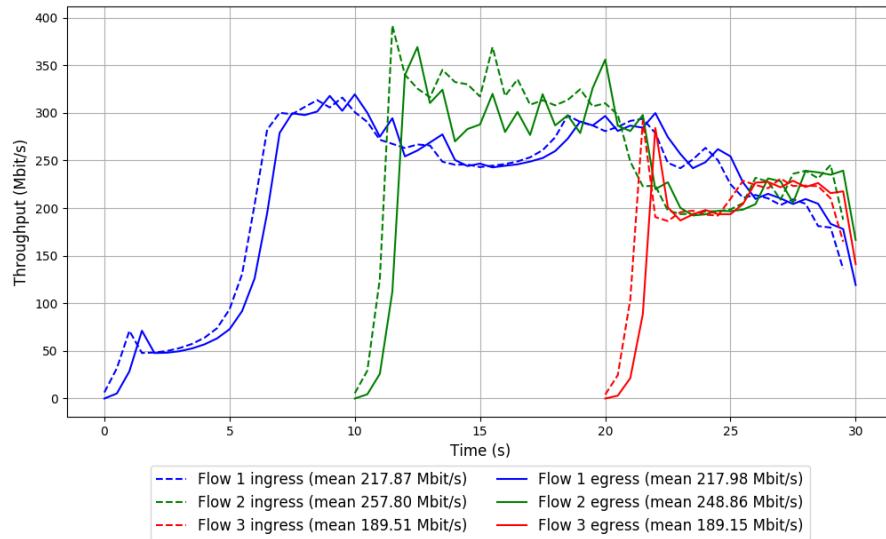


Run 4: Statistics of PCC-Expr

```
Start at: 2019-03-27 22:58:58
End at: 2019-03-27 22:59:28
Local clock offset: -0.494 ms
Remote clock offset: -0.458 ms

# Below is generated by plot.py at 2019-03-28 02:12:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.23 Mbit/s
95th percentile per-packet one-way delay: 168.232 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 217.98 Mbit/s
95th percentile per-packet one-way delay: 65.020 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 248.86 Mbit/s
95th percentile per-packet one-way delay: 177.317 ms
Loss rate: 3.93%
-- Flow 3:
Average throughput: 189.15 Mbit/s
95th percentile per-packet one-way delay: 61.773 ms
Loss rate: 1.15%
```

Run 4: Report of PCC-Expr — Data Link

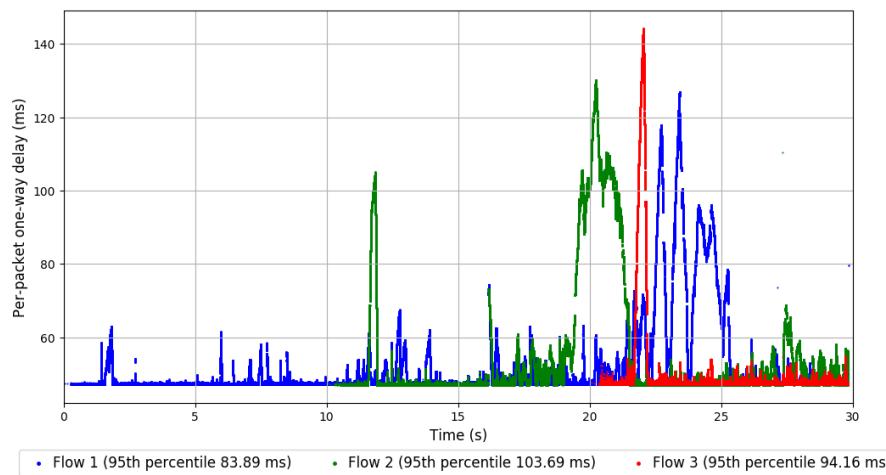
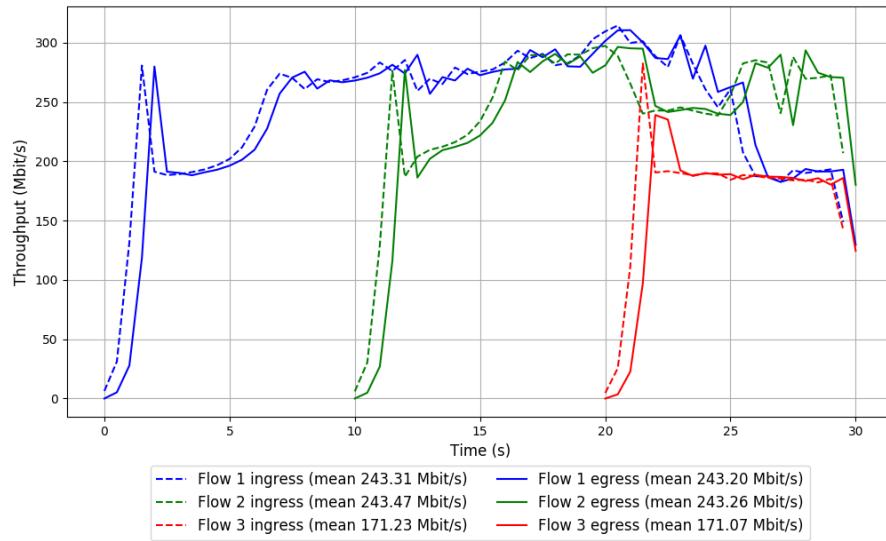


Run 5: Statistics of PCC-Expr

```
Start at: 2019-03-27 23:34:45
End at: 2019-03-27 23:35:15
Local clock offset: -0.18 ms
Remote clock offset: -0.505 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.54 Mbit/s
95th percentile per-packet one-way delay: 95.819 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 243.20 Mbit/s
95th percentile per-packet one-way delay: 83.890 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 243.26 Mbit/s
95th percentile per-packet one-way delay: 103.686 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 171.07 Mbit/s
95th percentile per-packet one-way delay: 94.155 ms
Loss rate: 1.06%
```

Run 5: Report of PCC-Expr — Data Link

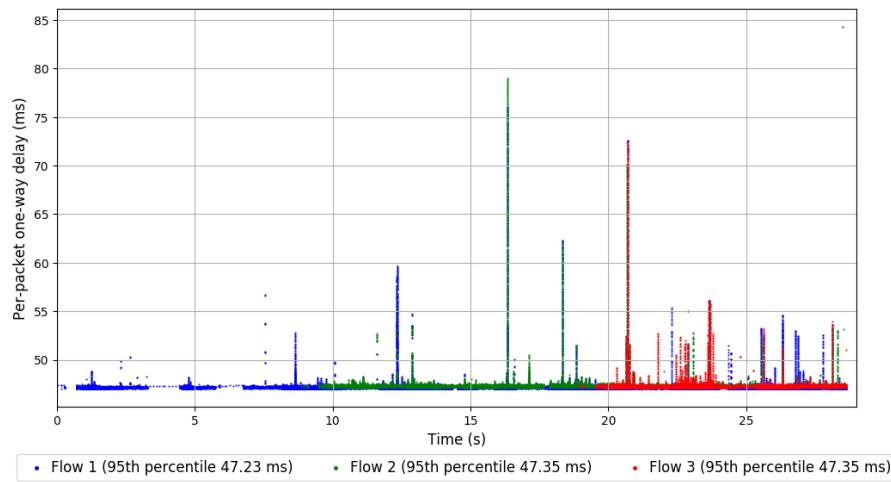
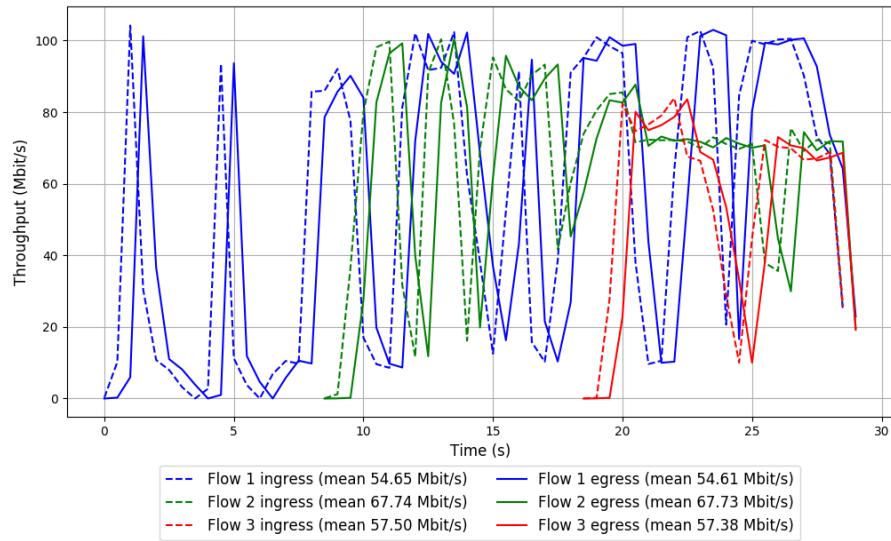


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-03-27 20:44:14
End at: 2019-03-27 20:44:44
Local clock offset: -0.107 ms
Remote clock offset: -0.276 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 121.07 Mbit/s
95th percentile per-packet one-way delay: 47.333 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 54.61 Mbit/s
95th percentile per-packet one-way delay: 47.233 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 67.73 Mbit/s
95th percentile per-packet one-way delay: 47.355 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 57.38 Mbit/s
95th percentile per-packet one-way delay: 47.353 ms
Loss rate: 1.14%
```

Run 1: Report of QUIC Cubic — Data Link

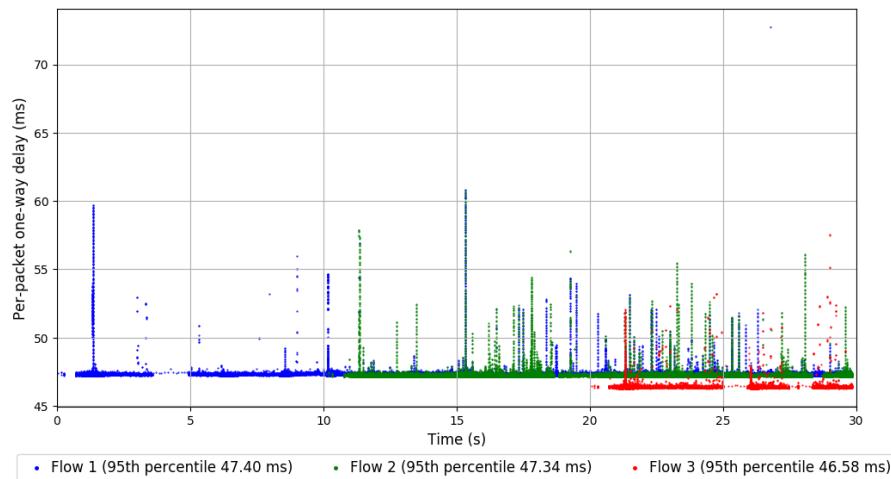
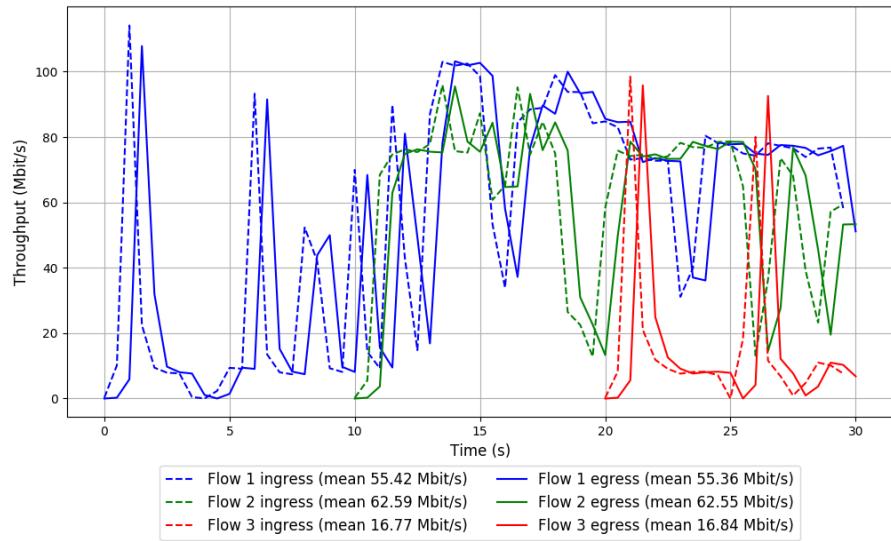


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-03-27 21:19:42
End at: 2019-03-27 21:20:12
Local clock offset: -0.18 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.34 Mbit/s
95th percentile per-packet one-way delay: 47.379 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 55.36 Mbit/s
95th percentile per-packet one-way delay: 47.396 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 62.55 Mbit/s
95th percentile per-packet one-way delay: 47.340 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 16.84 Mbit/s
95th percentile per-packet one-way delay: 46.578 ms
Loss rate: 0.54%
```

Run 2: Report of QUIC Cubic — Data Link

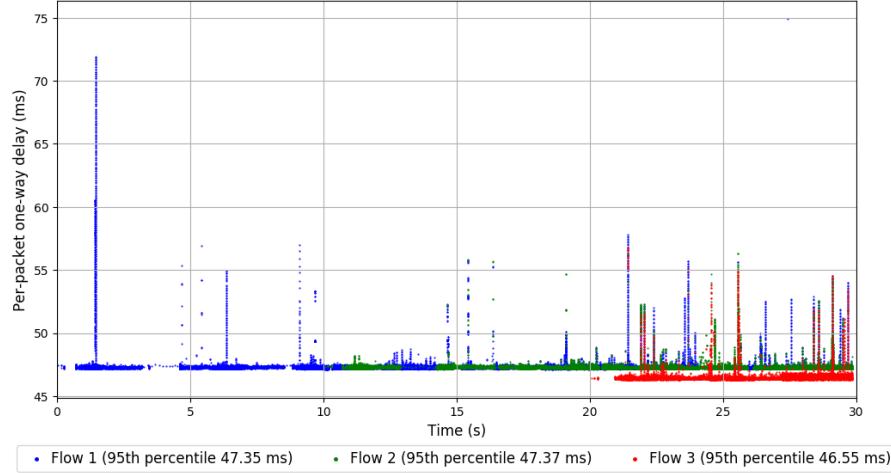
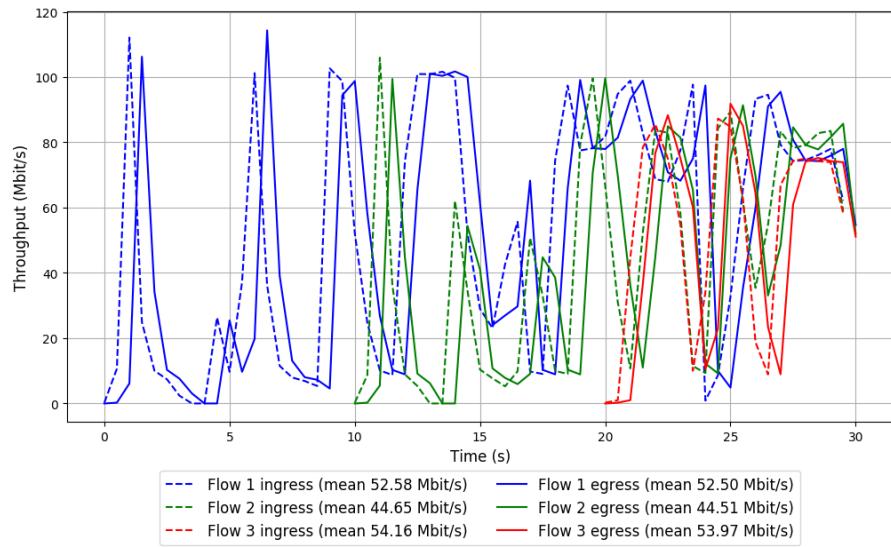


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-03-27 21:55:18
End at: 2019-03-27 21:55:48
Local clock offset: -0.033 ms
Remote clock offset: -0.347 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.75 Mbit/s
95th percentile per-packet one-way delay: 47.349 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 52.50 Mbit/s
95th percentile per-packet one-way delay: 47.355 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 44.51 Mbit/s
95th percentile per-packet one-way delay: 47.367 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 53.97 Mbit/s
95th percentile per-packet one-way delay: 46.555 ms
Loss rate: 1.31%
```

Run 3: Report of QUIC Cubic — Data Link

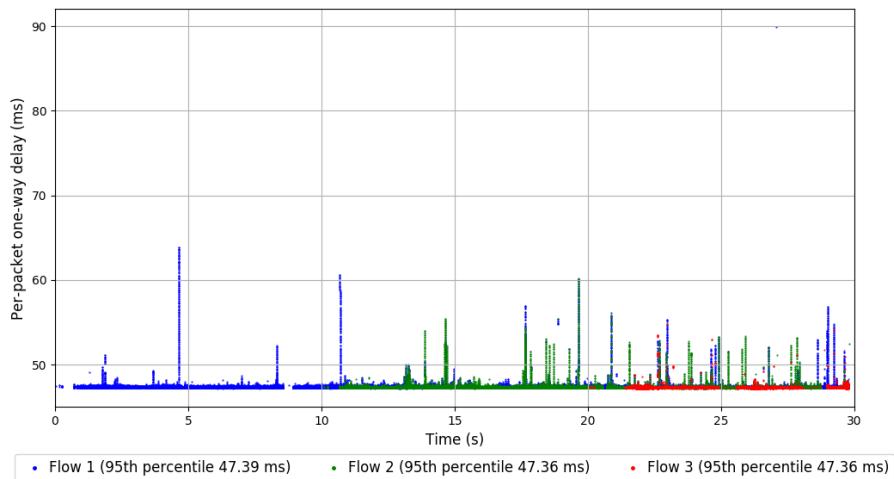
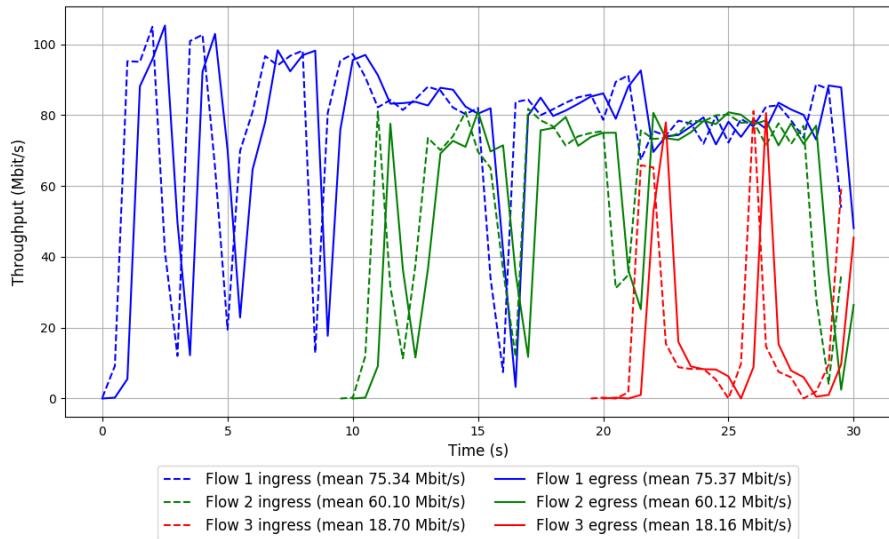


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-03-27 22:30:49
End at: 2019-03-27 22:31:19
Local clock offset: -0.089 ms
Remote clock offset: -0.412 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 121.31 Mbit/s
95th percentile per-packet one-way delay: 47.380 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 75.37 Mbit/s
95th percentile per-packet one-way delay: 47.389 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 60.12 Mbit/s
95th percentile per-packet one-way delay: 47.358 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 18.16 Mbit/s
95th percentile per-packet one-way delay: 47.357 ms
Loss rate: 3.94%
```

Run 4: Report of QUIC Cubic — Data Link

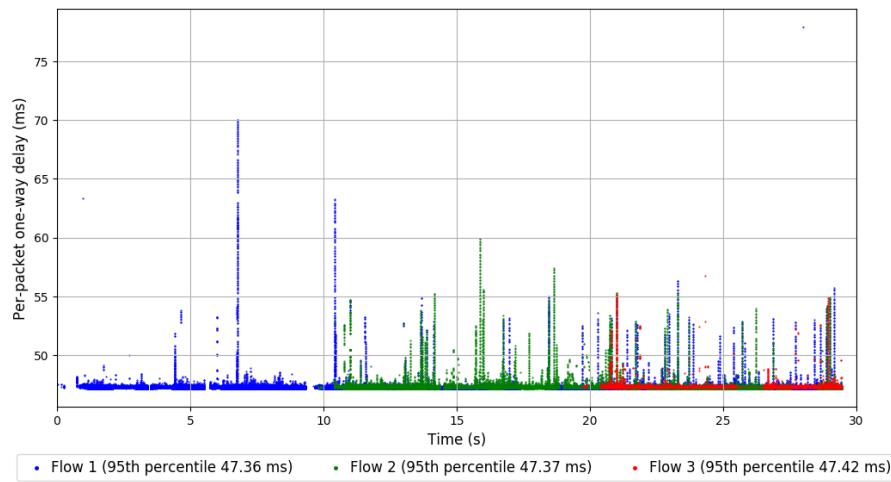
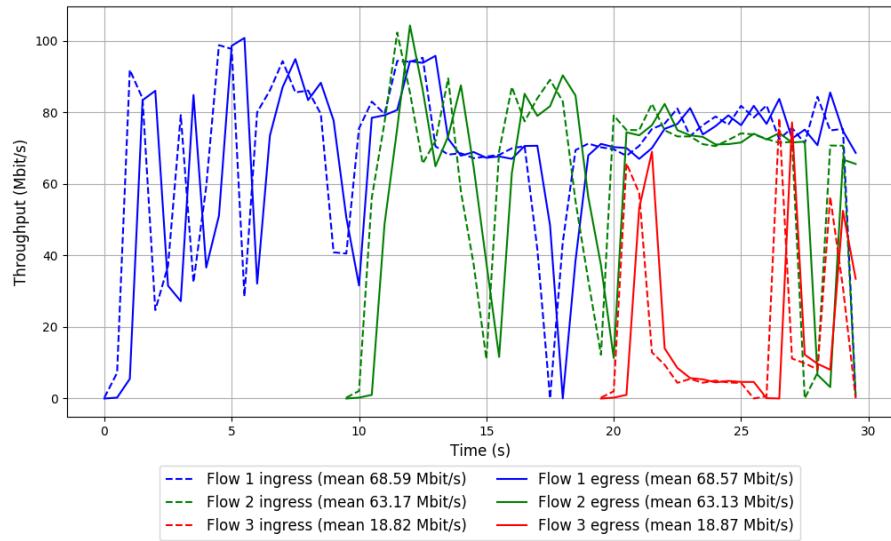


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-03-27 23:07:06
End at: 2019-03-27 23:07:36
Local clock offset: -0.085 ms
Remote clock offset: -0.462 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.25 Mbit/s
95th percentile per-packet one-way delay: 47.366 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 68.57 Mbit/s
95th percentile per-packet one-way delay: 47.357 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 63.13 Mbit/s
95th percentile per-packet one-way delay: 47.369 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 18.87 Mbit/s
95th percentile per-packet one-way delay: 47.424 ms
Loss rate: 0.68%
```

Run 5: Report of QUIC Cubic — Data Link

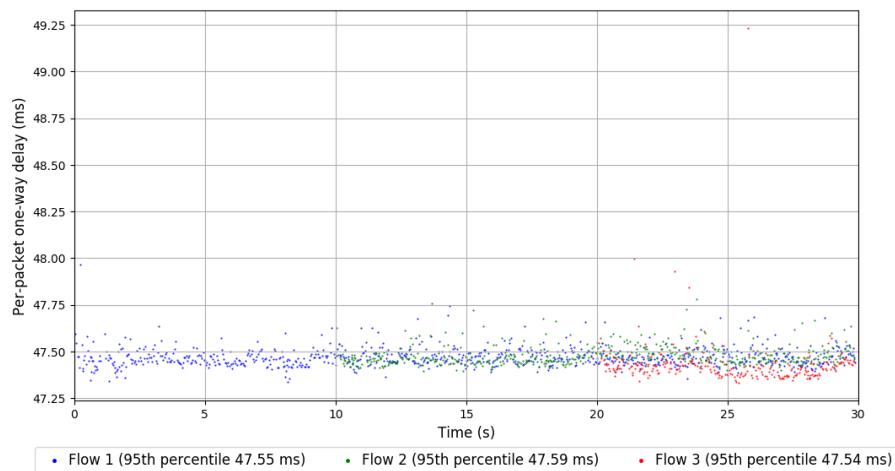
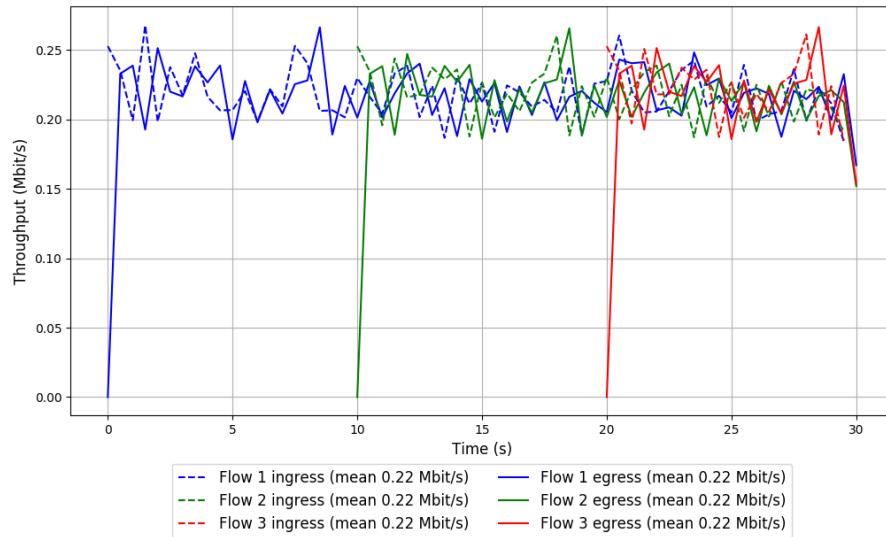


```
Run 1: Statistics of SCReAM

Start at: 2019-03-27 21:03:12
End at: 2019-03-27 21:03:42
Local clock offset: -0.086 ms
Remote clock offset: -0.281 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.569 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.554 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.587 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.540 ms
Loss rate: 1.09%
```

Run 1: Report of SCReAM — Data Link

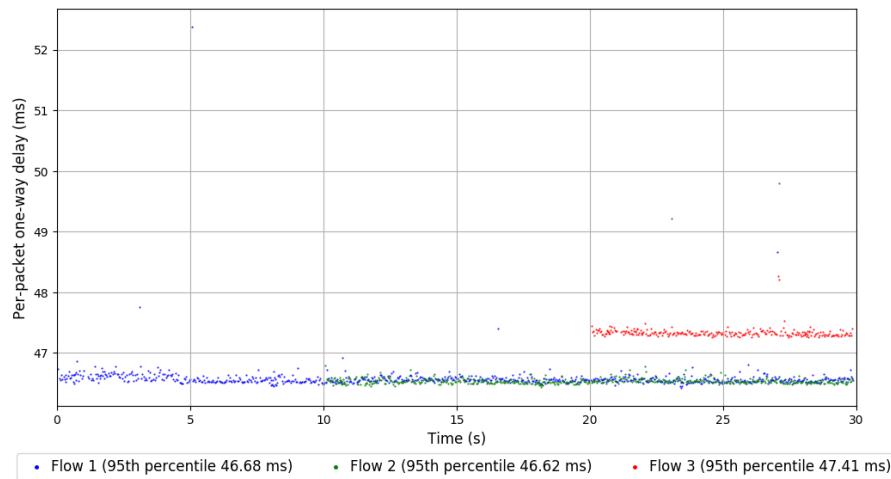
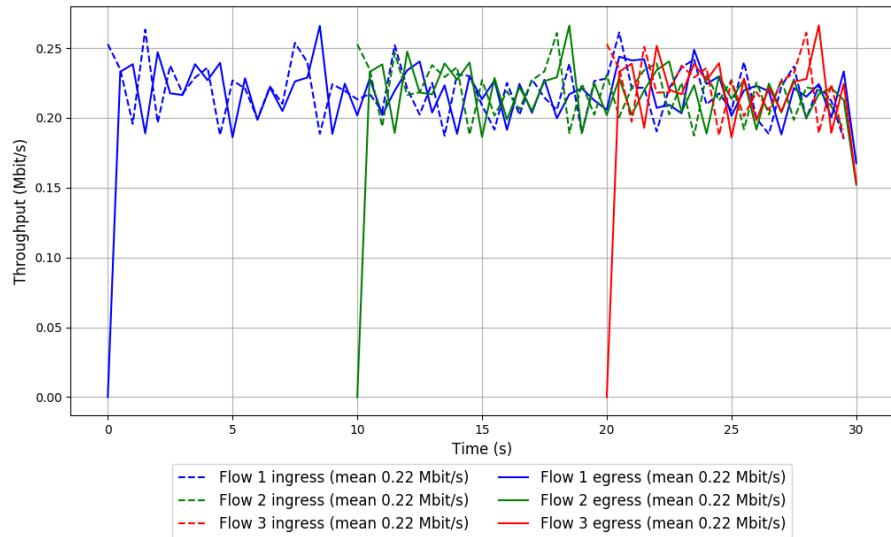


Run 2: Statistics of SCReAM

```
Start at: 2019-03-27 21:38:40
End at: 2019-03-27 21:39:10
Local clock offset: -0.189 ms
Remote clock offset: -0.33 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.350 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.684 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.621 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.413 ms
Loss rate: 1.09%
```

Run 2: Report of SCReAM — Data Link

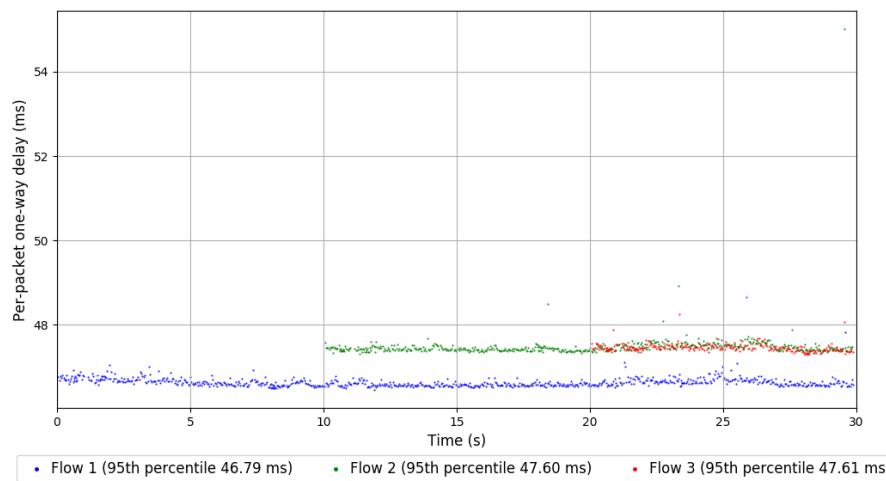
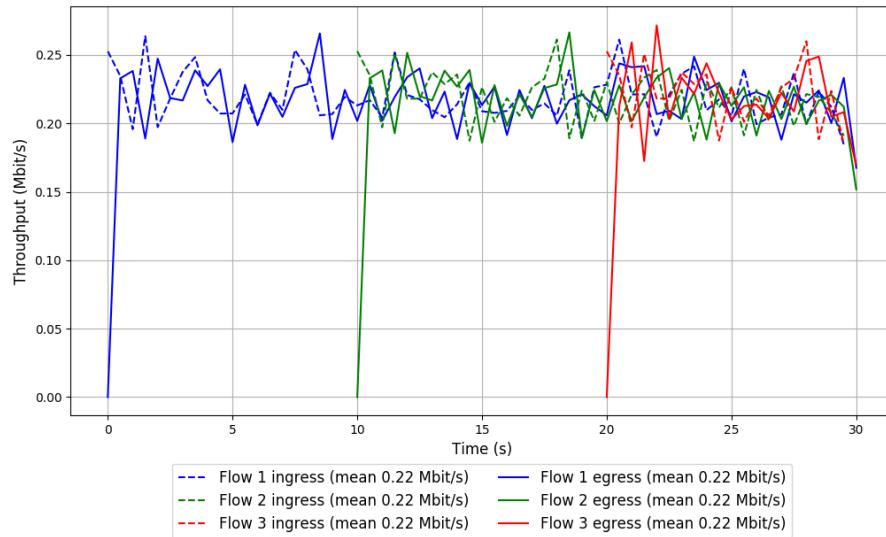


Run 3: Statistics of SCReAM

```
Start at: 2019-03-27 22:14:18
End at: 2019-03-27 22:14:48
Local clock offset: -0.063 ms
Remote clock offset: -0.388 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.561 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.789 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.605 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.610 ms
Loss rate: 1.09%
```

Run 3: Report of SCReAM — Data Link

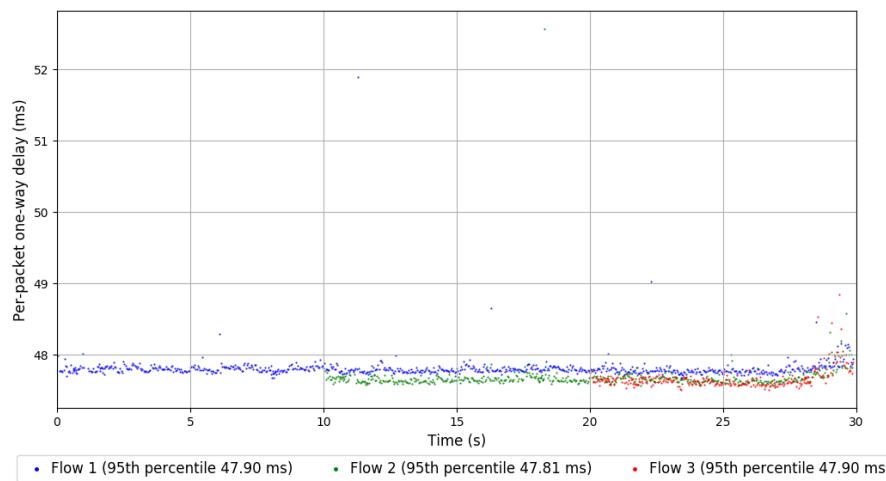
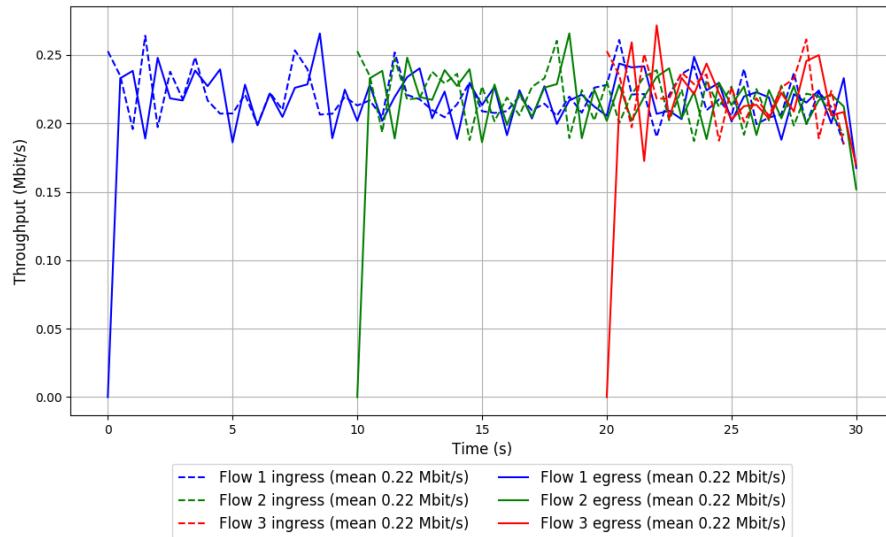


Run 4: Statistics of SCReAM

```
Start at: 2019-03-27 22:50:11
End at: 2019-03-27 22:50:41
Local clock offset: 0.264 ms
Remote clock offset: -0.418 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.889 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.901 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.811 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.895 ms
Loss rate: 1.09%
```

Run 4: Report of SCReAM — Data Link

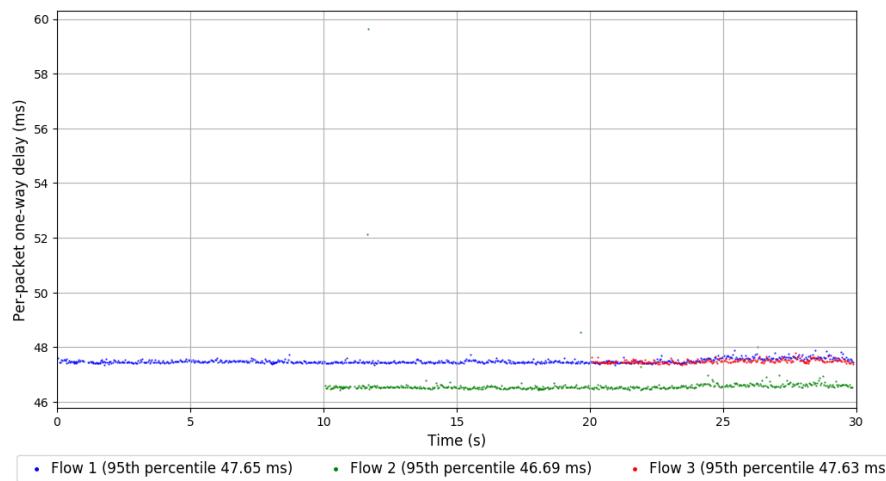
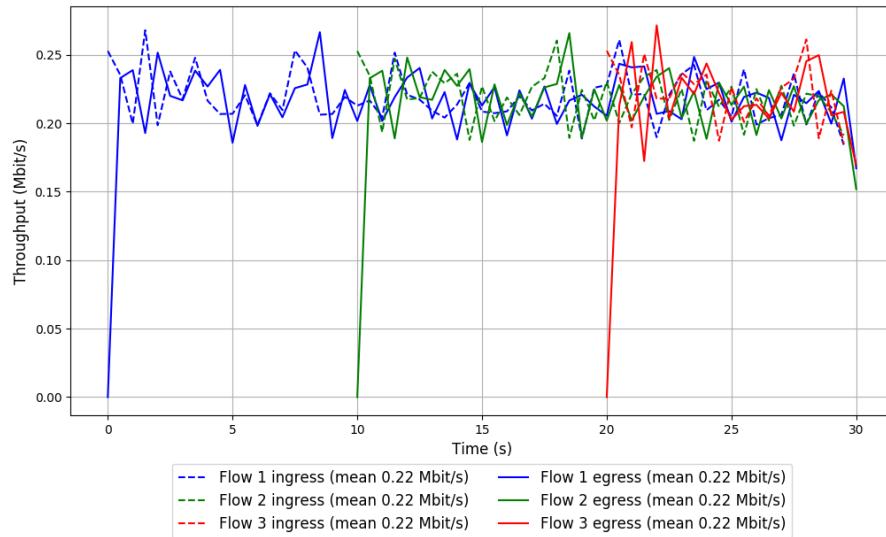


Run 5: Statistics of SCReAM

```
Start at: 2019-03-27 23:26:16
End at: 2019-03-27 23:26:46
Local clock offset: -0.146 ms
Remote clock offset: -0.486 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.620 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.646 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.694 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.628 ms
Loss rate: 1.09%
```

Run 5: Report of SCReAM — Data Link

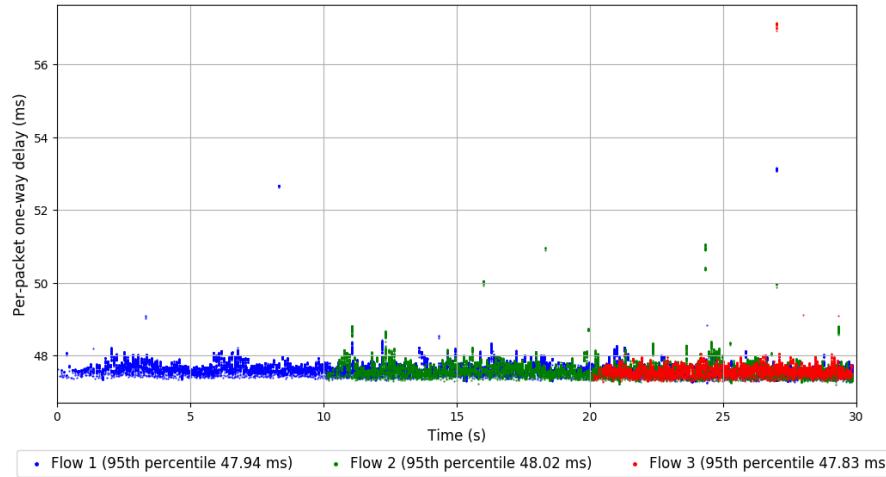
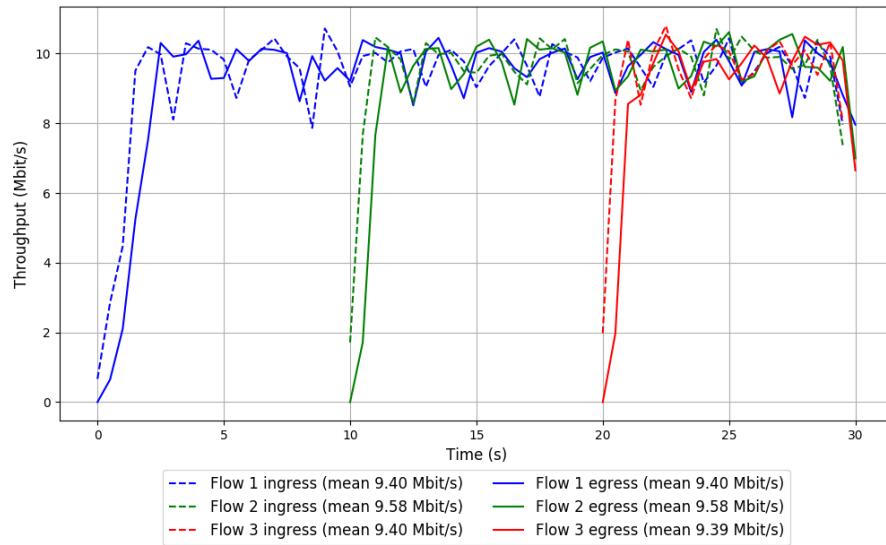


Run 1: Statistics of Sprout

```
Start at: 2019-03-27 21:13:29
End at: 2019-03-27 21:13:59
Local clock offset: -0.156 ms
Remote clock offset: -0.277 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 47.938 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 47.938 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 48.024 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 9.39 Mbit/s
95th percentile per-packet one-way delay: 47.829 ms
Loss rate: 1.09%
```

Run 1: Report of Sprout — Data Link

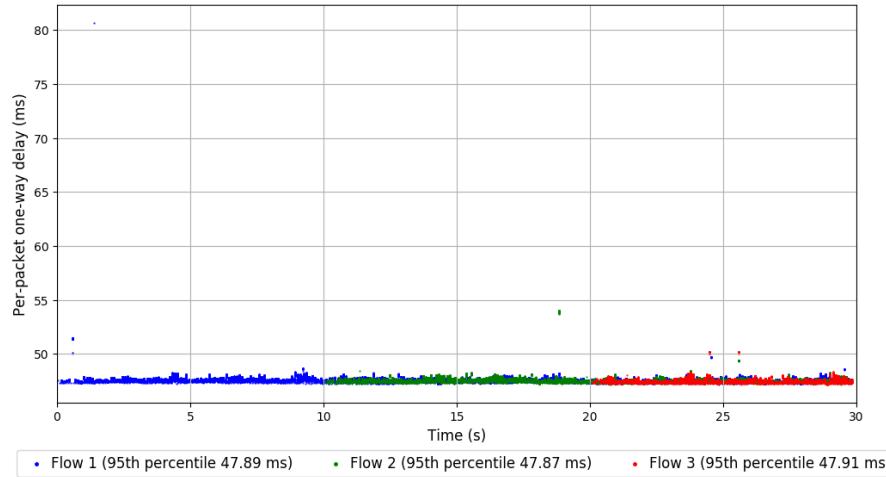
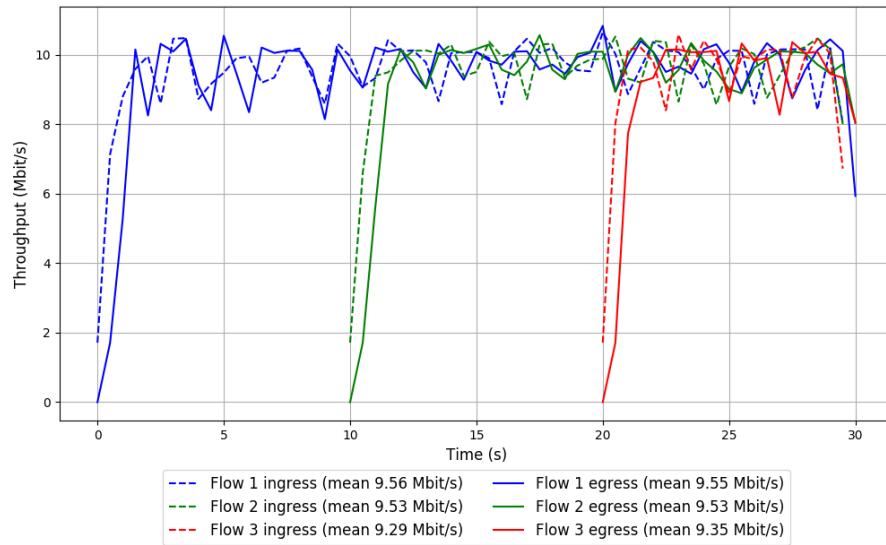


Run 2: Statistics of Sprout

```
Start at: 2019-03-27 21:49:08
End at: 2019-03-27 21:49:38
Local clock offset: -0.071 ms
Remote clock offset: -0.321 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.95 Mbit/s
95th percentile per-packet one-way delay: 47.884 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 47.886 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 47.872 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 47.909 ms
Loss rate: 0.40%
```

Run 2: Report of Sprout — Data Link

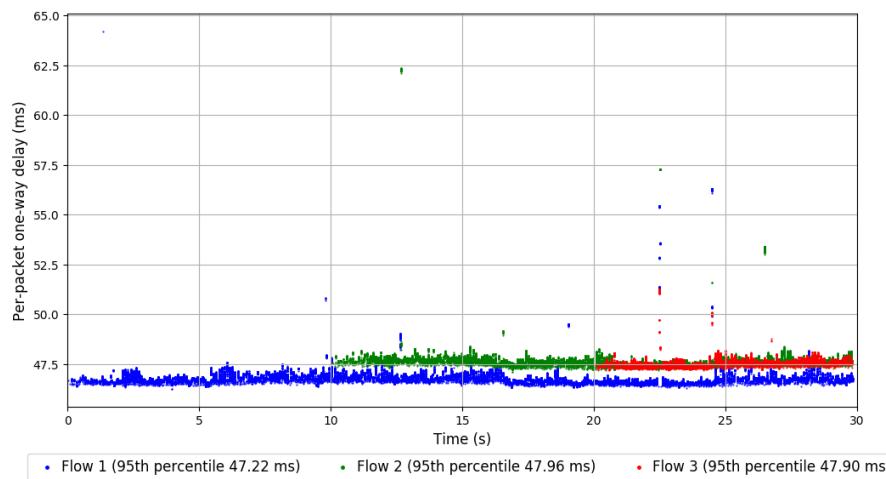
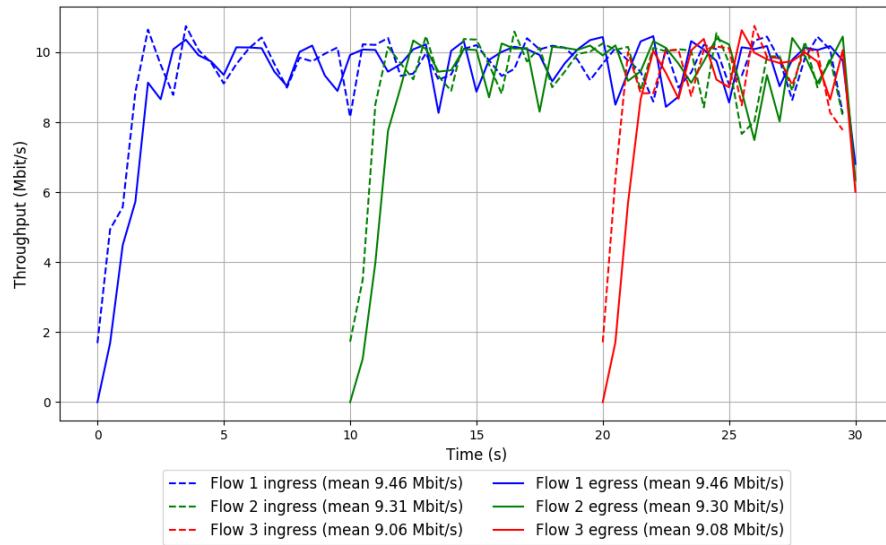


Run 3: Statistics of Sprout

```
Start at: 2019-03-27 22:24:31
End at: 2019-03-27 22:25:01
Local clock offset: -0.109 ms
Remote clock offset: -0.368 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.60 Mbit/s
95th percentile per-packet one-way delay: 47.861 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 9.46 Mbit/s
95th percentile per-packet one-way delay: 47.219 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 47.958 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 47.900 ms
Loss rate: 1.12%
```

Run 3: Report of Sprout — Data Link

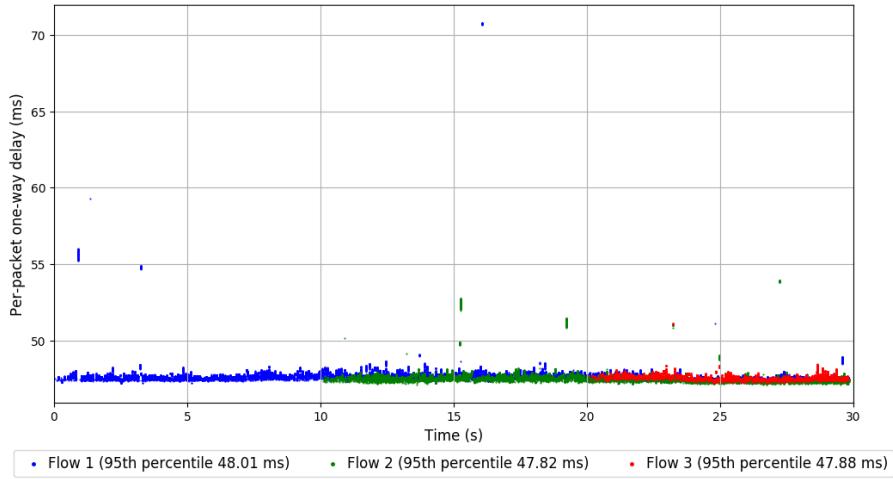
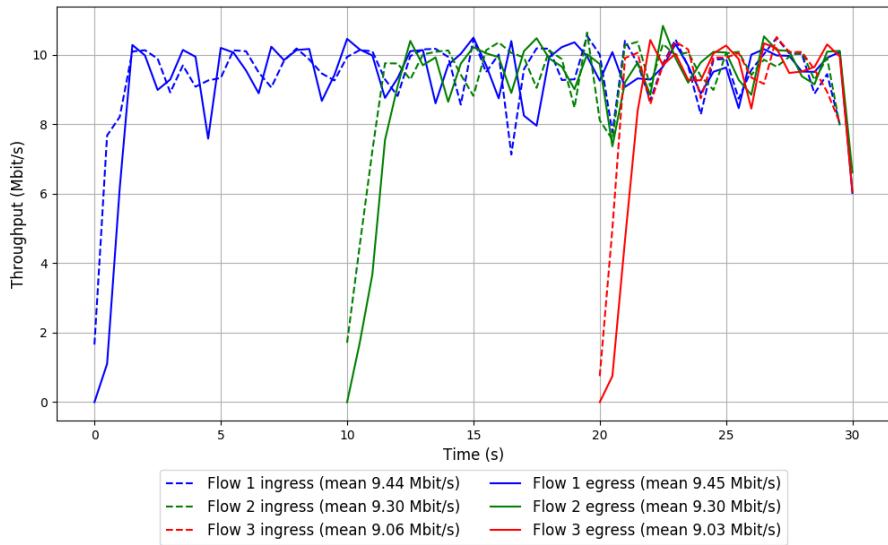


Run 4: Statistics of Sprout

```
Start at: 2019-03-27 23:00:50
End at: 2019-03-27 23:01:20
Local clock offset: -0.102 ms
Remote clock offset: -0.422 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.57 Mbit/s
95th percentile per-packet one-way delay: 47.946 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 9.45 Mbit/s
95th percentile per-packet one-way delay: 48.009 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 47.822 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 9.03 Mbit/s
95th percentile per-packet one-way delay: 47.883 ms
Loss rate: 1.27%
```

Run 4: Report of Sprout — Data Link

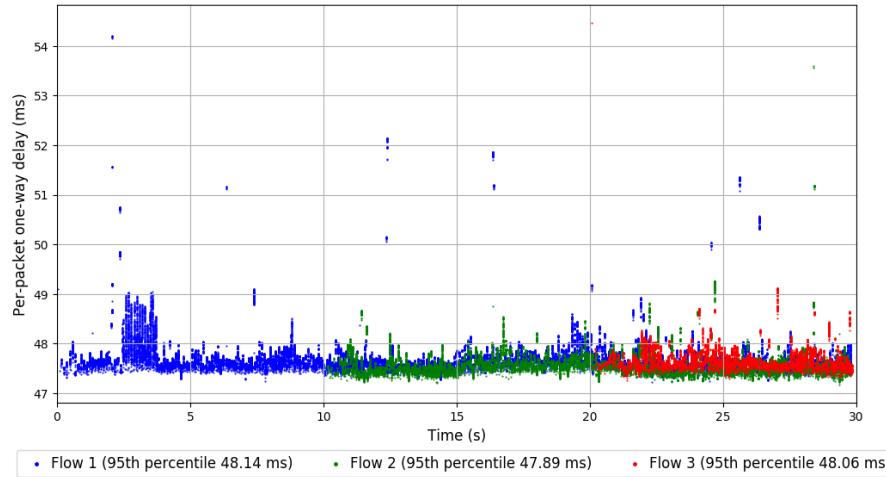
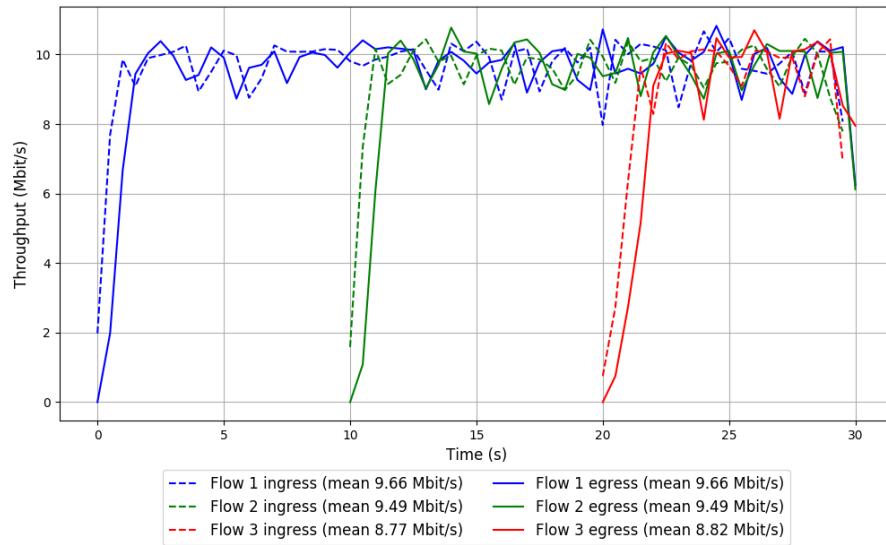


Run 5: Statistics of Sprout

```
Start at: 2019-03-27 23:36:41
End at: 2019-03-27 23:37:11
Local clock offset: -0.163 ms
Remote clock offset: -0.493 ms

# Below is generated by plot.py at 2019-03-28 02:13:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 48.043 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 48.142 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.49 Mbit/s
95th percentile per-packet one-way delay: 47.887 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 8.82 Mbit/s
95th percentile per-packet one-way delay: 48.065 ms
Loss rate: 0.51%
```

Run 5: Report of Sprout — Data Link

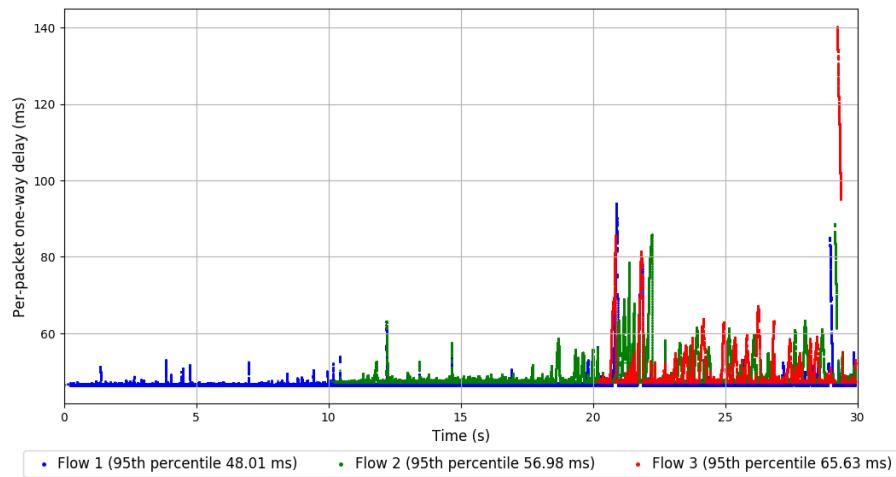
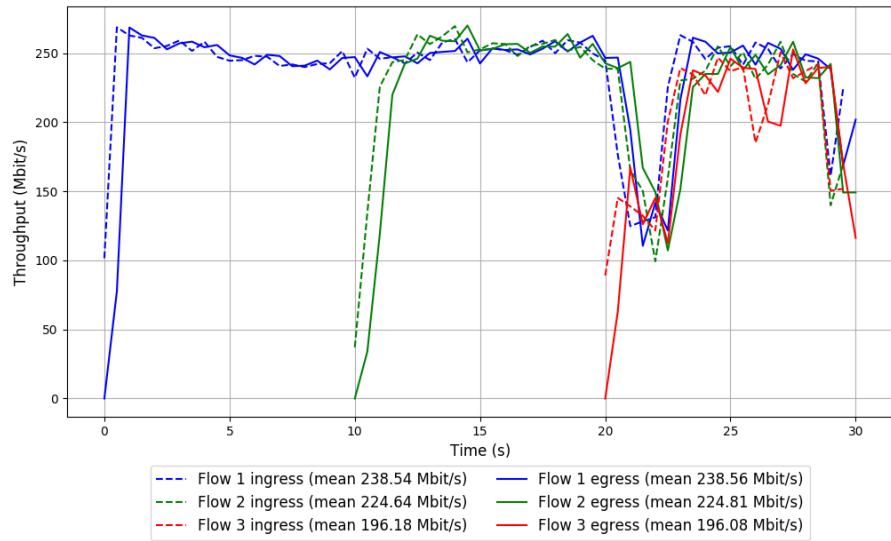


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-03-27 20:47:23
End at: 2019-03-27 20:47:53
Local clock offset: -0.081 ms
Remote clock offset: -0.244 ms

# Below is generated by plot.py at 2019-03-28 02:20:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.77 Mbit/s
95th percentile per-packet one-way delay: 55.609 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 238.56 Mbit/s
95th percentile per-packet one-way delay: 48.006 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 224.81 Mbit/s
95th percentile per-packet one-way delay: 56.982 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 196.08 Mbit/s
95th percentile per-packet one-way delay: 65.631 ms
Loss rate: 1.02%
```

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

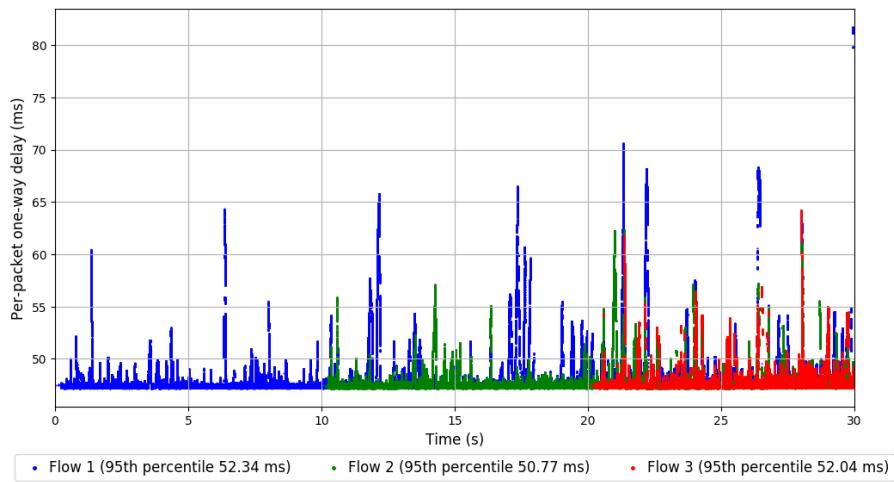
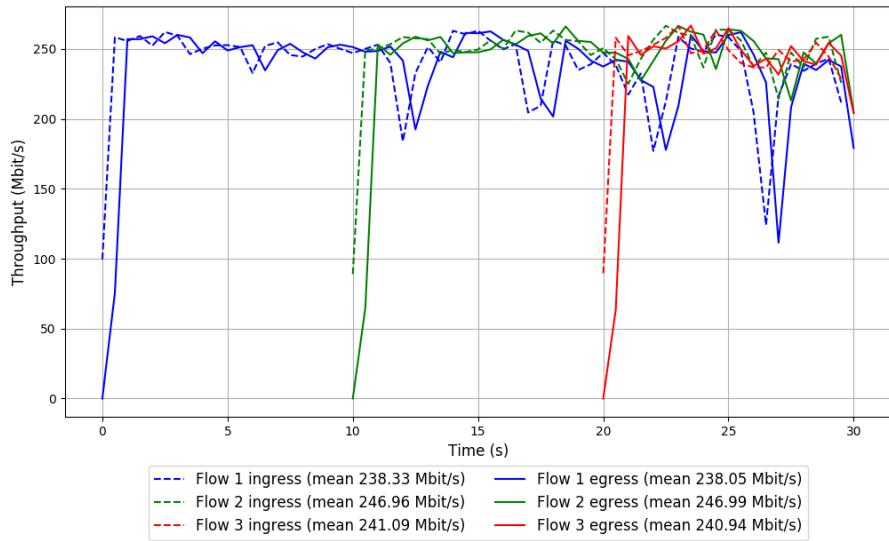


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-03-27 21:22:47
End at: 2019-03-27 21:23:17
Local clock offset: -0.184 ms
Remote clock offset: -0.33 ms

# Below is generated by plot.py at 2019-03-28 02:22:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 481.86 Mbit/s
95th percentile per-packet one-way delay: 51.765 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 238.05 Mbit/s
95th percentile per-packet one-way delay: 52.342 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 246.99 Mbit/s
95th percentile per-packet one-way delay: 50.770 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 240.94 Mbit/s
95th percentile per-packet one-way delay: 52.038 ms
Loss rate: 1.02%
```

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

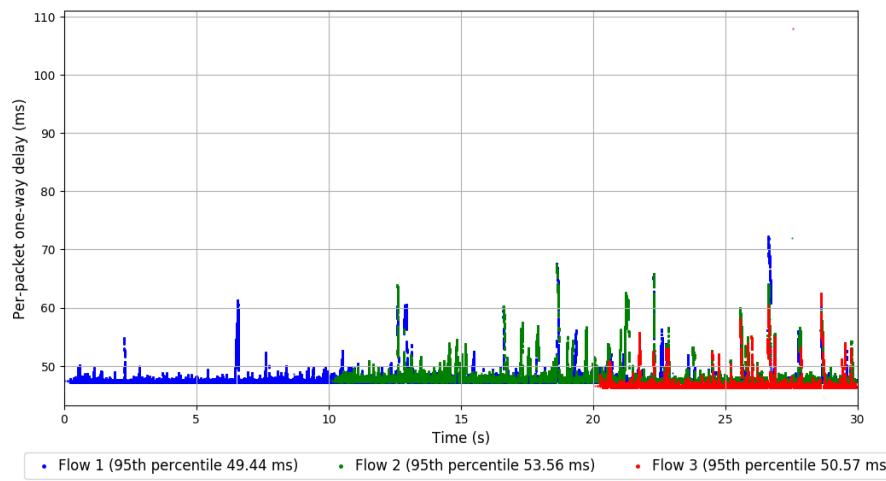
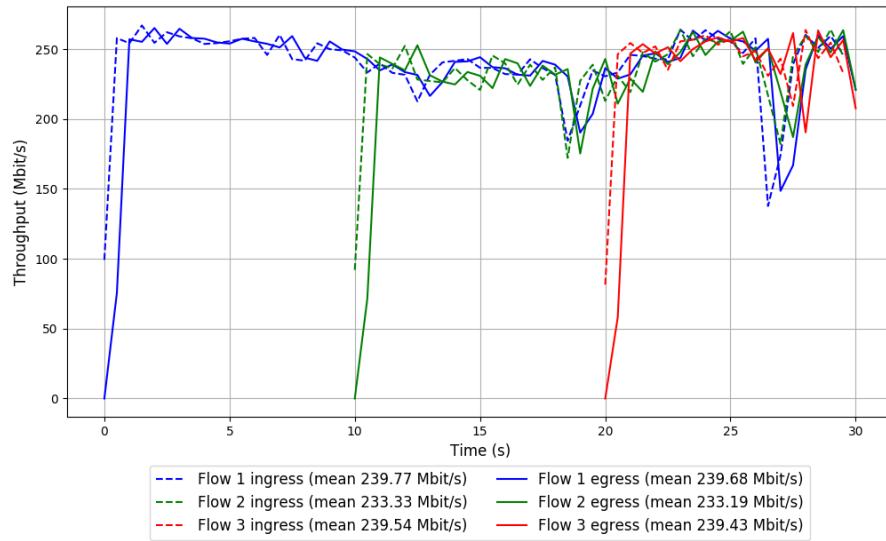


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-03-27 21:58:25
End at: 2019-03-27 21:58:55
Local clock offset: -0.034 ms
Remote clock offset: -0.367 ms

# Below is generated by plot.py at 2019-03-28 02:22:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.84 Mbit/s
95th percentile per-packet one-way delay: 51.292 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 239.68 Mbit/s
95th percentile per-packet one-way delay: 49.441 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 233.19 Mbit/s
95th percentile per-packet one-way delay: 53.558 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 239.43 Mbit/s
95th percentile per-packet one-way delay: 50.572 ms
Loss rate: 1.00%
```

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

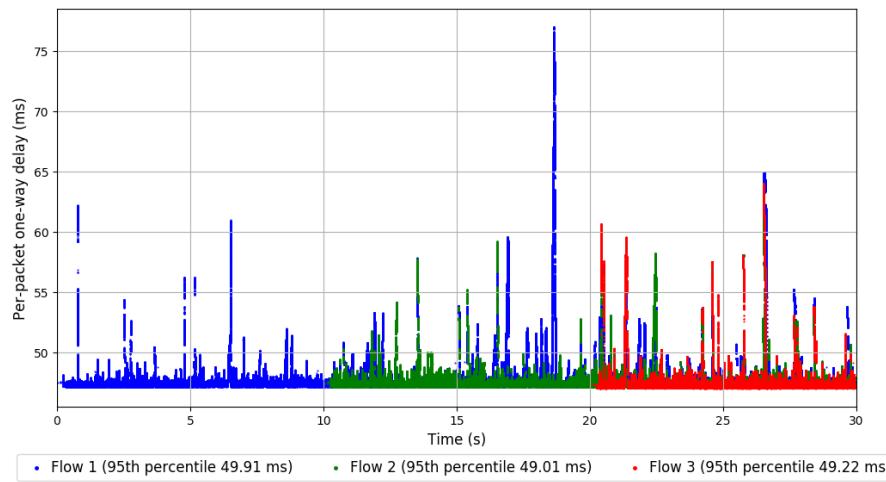
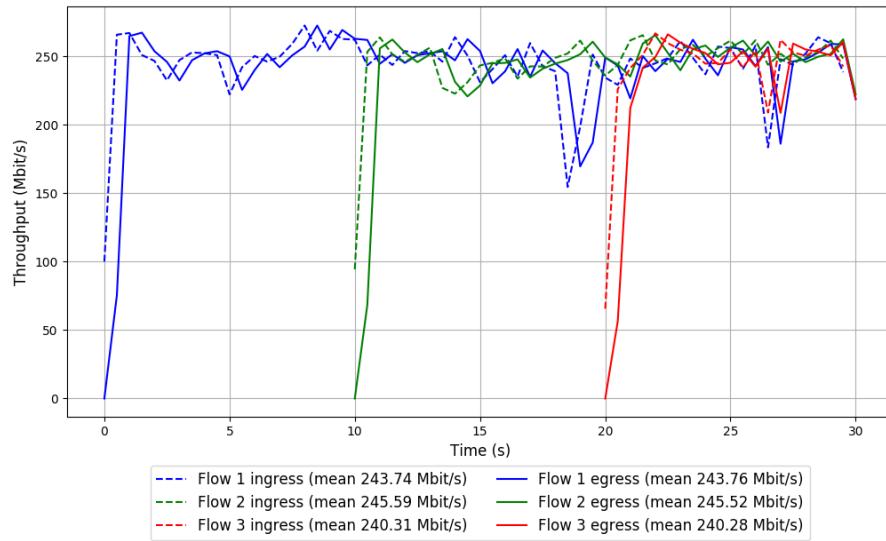


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-03-27 22:33:57
End at: 2019-03-27 22:34:27
Local clock offset: -0.088 ms
Remote clock offset: -0.396 ms

# Below is generated by plot.py at 2019-03-28 02:22:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 486.35 Mbit/s
95th percentile per-packet one-way delay: 49.483 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 243.76 Mbit/s
95th percentile per-packet one-way delay: 49.913 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 245.52 Mbit/s
95th percentile per-packet one-way delay: 49.005 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 240.28 Mbit/s
95th percentile per-packet one-way delay: 49.222 ms
Loss rate: 0.97%
```

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

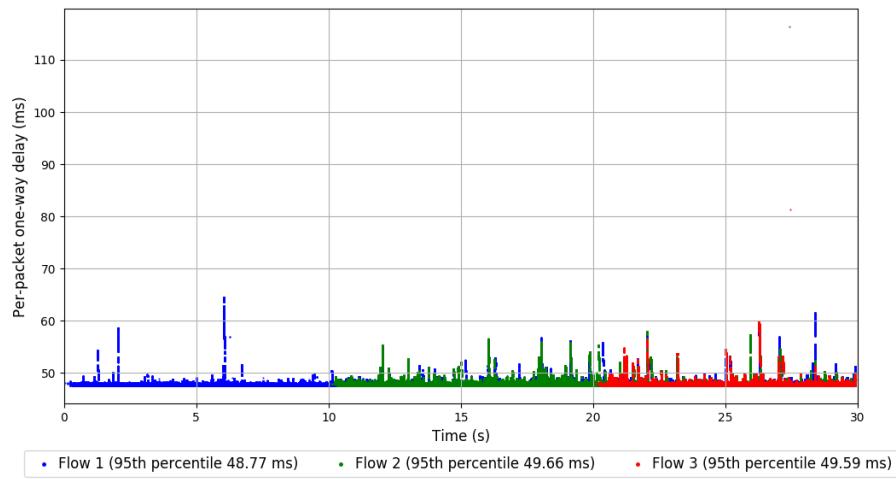
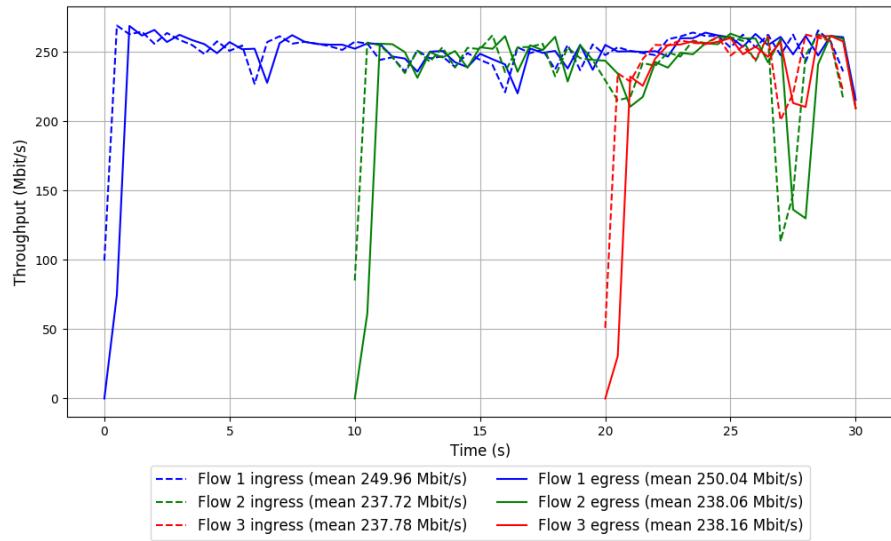


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-03-27 23:10:11
End at: 2019-03-27 23:10:42
Local clock offset: 0.286 ms
Remote clock offset: -0.483 ms

# Below is generated by plot.py at 2019-03-28 02:22:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 486.94 Mbit/s
95th percentile per-packet one-way delay: 49.153 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 250.04 Mbit/s
95th percentile per-packet one-way delay: 48.769 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 238.06 Mbit/s
95th percentile per-packet one-way delay: 49.665 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 238.16 Mbit/s
95th percentile per-packet one-way delay: 49.589 ms
Loss rate: 0.79%
```

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

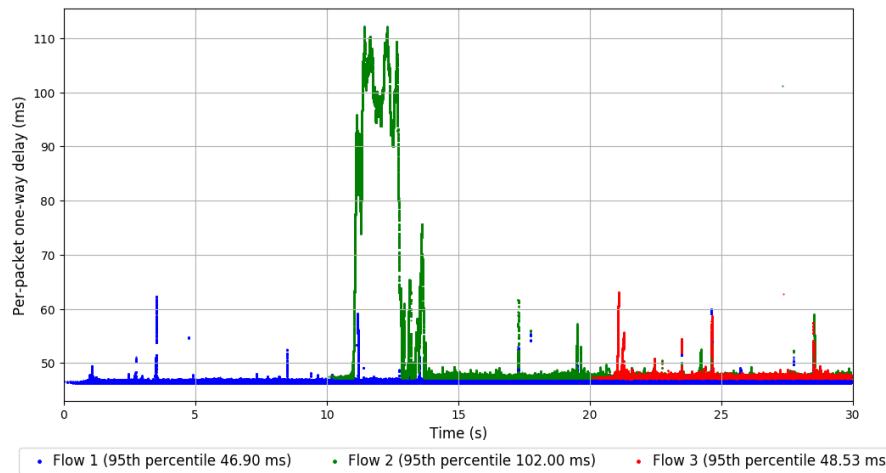
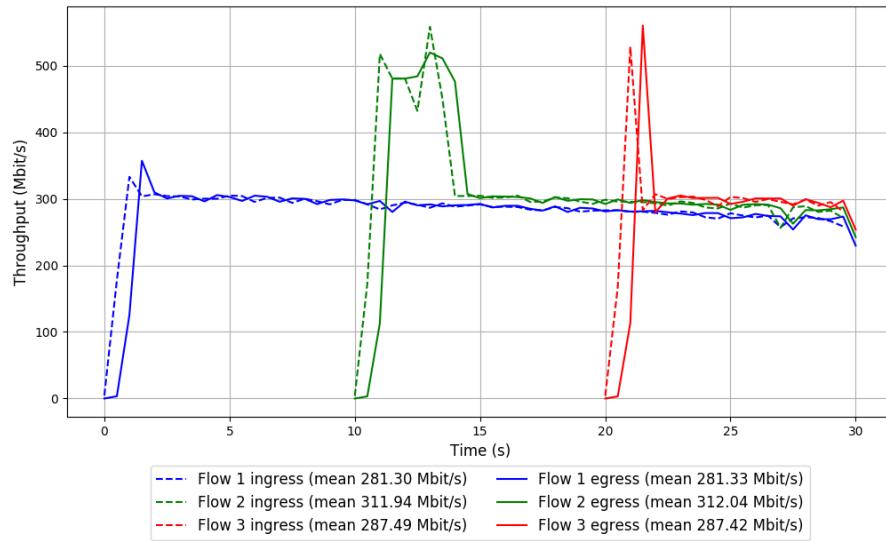


Run 1: Statistics of TCP Vegas

```
Start at: 2019-03-27 20:55:00
End at: 2019-03-27 20:55:30
Local clock offset: -0.107 ms
Remote clock offset: -0.245 ms

# Below is generated by plot.py at 2019-03-28 02:22:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 583.81 Mbit/s
95th percentile per-packet one-way delay: 67.434 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 281.33 Mbit/s
95th percentile per-packet one-way delay: 46.900 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 312.04 Mbit/s
95th percentile per-packet one-way delay: 101.996 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 287.42 Mbit/s
95th percentile per-packet one-way delay: 48.532 ms
Loss rate: 0.98%
```

Run 1: Report of TCP Vegas — Data Link

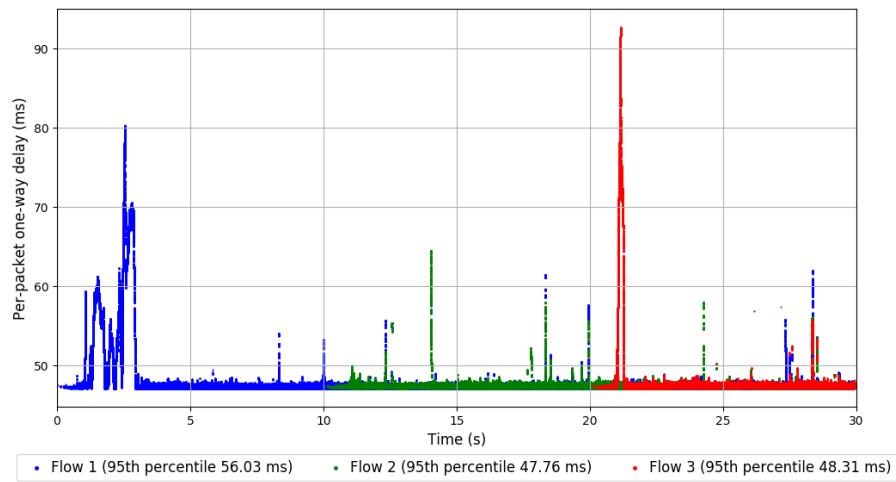
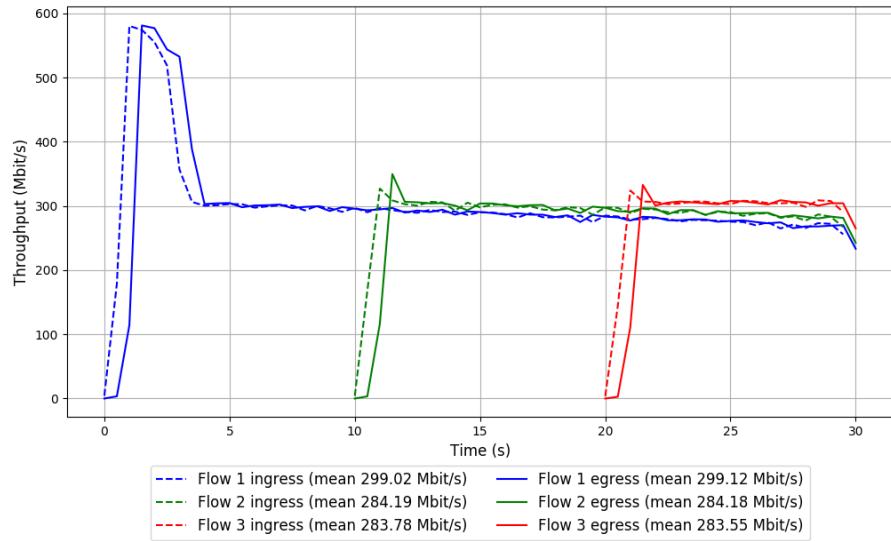


Run 2: Statistics of TCP Vegas

```
Start at: 2019-03-27 21:30:25
End at: 2019-03-27 21:30:55
Local clock offset: -0.203 ms
Remote clock offset: -0.306 ms

# Below is generated by plot.py at 2019-03-28 02:25:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 581.64 Mbit/s
95th percentile per-packet one-way delay: 51.566 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 299.12 Mbit/s
95th percentile per-packet one-way delay: 56.033 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 284.18 Mbit/s
95th percentile per-packet one-way delay: 47.761 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 283.55 Mbit/s
95th percentile per-packet one-way delay: 48.308 ms
Loss rate: 1.03%
```

Run 2: Report of TCP Vegas — Data Link

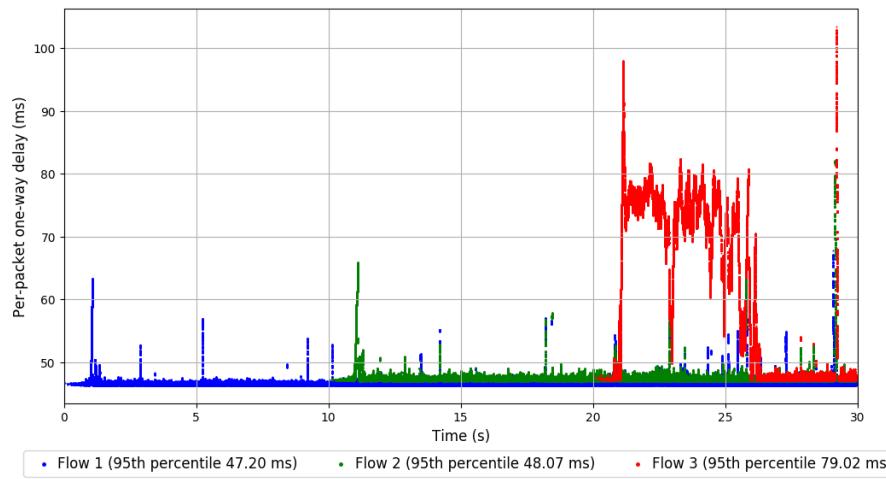
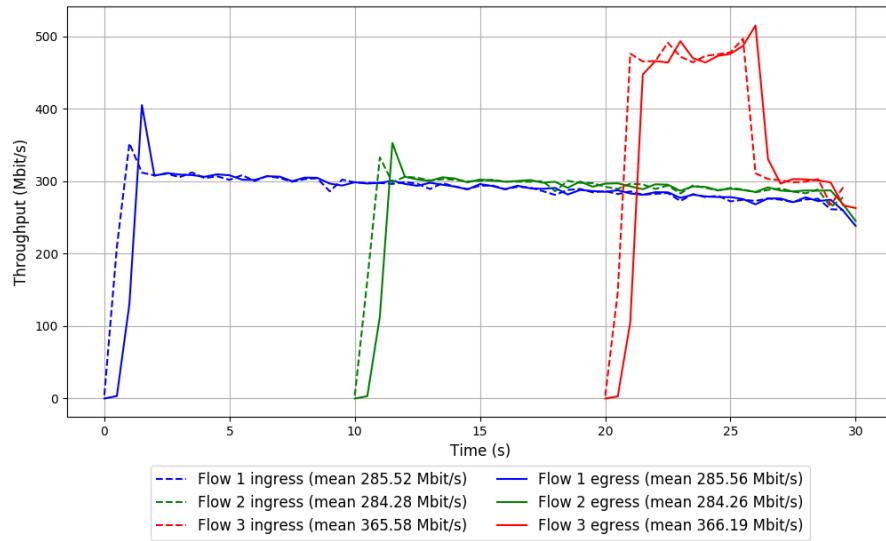


Run 3: Statistics of TCP Vegas

```
Start at: 2019-03-27 22:06:04
End at: 2019-03-27 22:06:34
Local clock offset: -0.032 ms
Remote clock offset: -0.383 ms

# Below is generated by plot.py at 2019-03-28 02:26:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 595.55 Mbit/s
95th percentile per-packet one-way delay: 75.629 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 285.56 Mbit/s
95th percentile per-packet one-way delay: 47.199 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 284.26 Mbit/s
95th percentile per-packet one-way delay: 48.074 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 366.19 Mbit/s
95th percentile per-packet one-way delay: 79.022 ms
Loss rate: 0.79%
```

Run 3: Report of TCP Vegas — Data Link

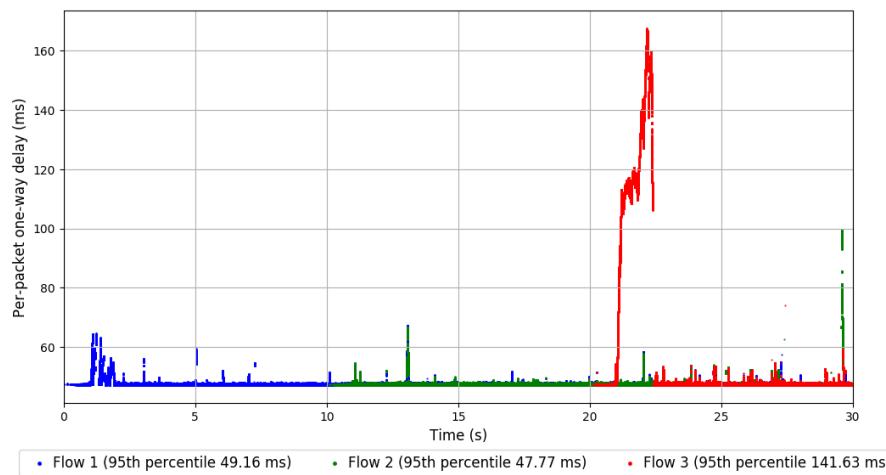
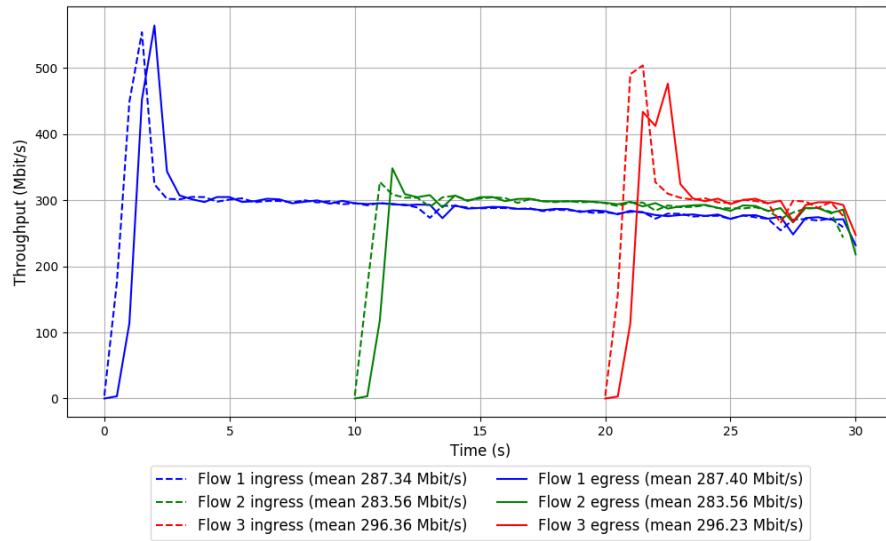


Run 4: Statistics of TCP Vegas

```
Start at: 2019-03-27 22:41:30
End at: 2019-03-27 22:42:01
Local clock offset: -0.1 ms
Remote clock offset: -0.413 ms

# Below is generated by plot.py at 2019-03-28 02:28:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.86 Mbit/s
95th percentile per-packet one-way delay: 53.887 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 287.40 Mbit/s
95th percentile per-packet one-way delay: 49.157 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 283.56 Mbit/s
95th percentile per-packet one-way delay: 47.773 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 296.23 Mbit/s
95th percentile per-packet one-way delay: 141.627 ms
Loss rate: 1.00%
```

Run 4: Report of TCP Vegas — Data Link

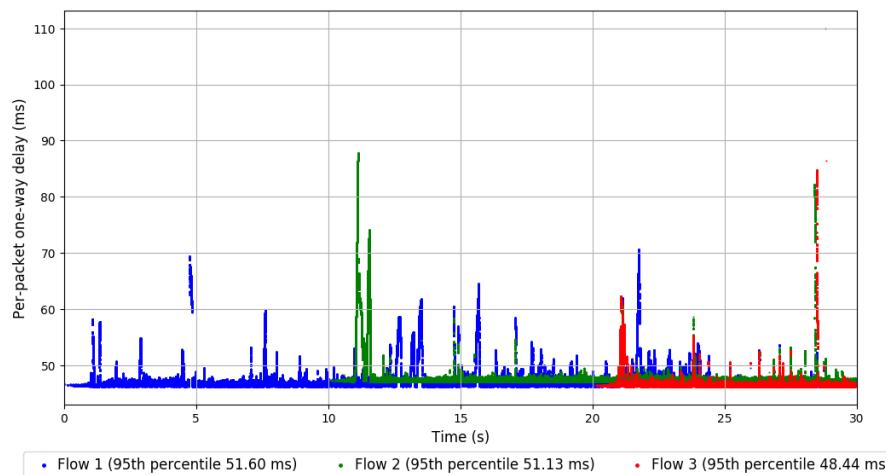
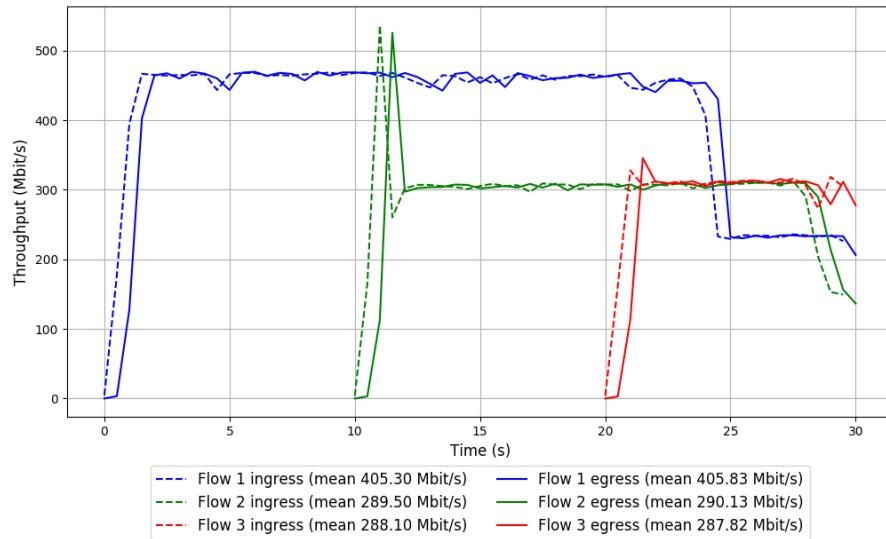


Run 5: Statistics of TCP Vegas

```
Start at: 2019-03-27 23:17:46
End at: 2019-03-27 23:18:16
Local clock offset: -0.098 ms
Remote clock offset: -0.444 ms

# Below is generated by plot.py at 2019-03-28 02:34:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 693.69 Mbit/s
95th percentile per-packet one-way delay: 51.269 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 405.83 Mbit/s
95th percentile per-packet one-way delay: 51.605 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 290.13 Mbit/s
95th percentile per-packet one-way delay: 51.126 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 287.82 Mbit/s
95th percentile per-packet one-way delay: 48.436 ms
Loss rate: 1.03%
```

Run 5: Report of TCP Vegas — Data Link

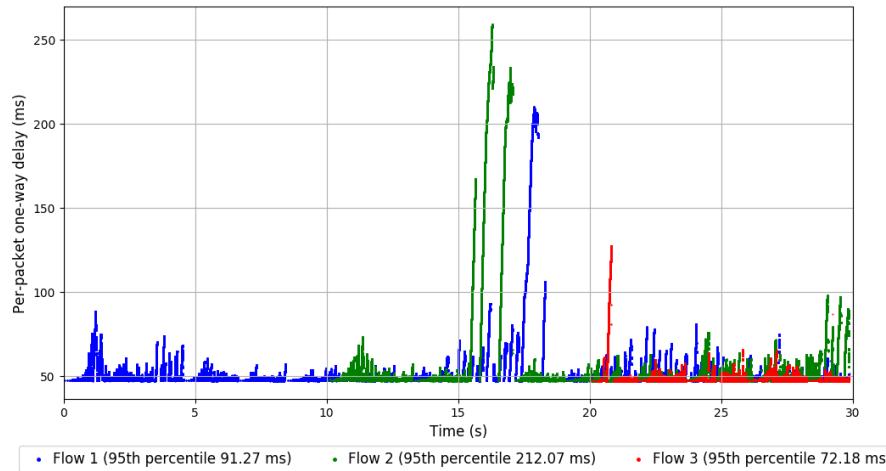
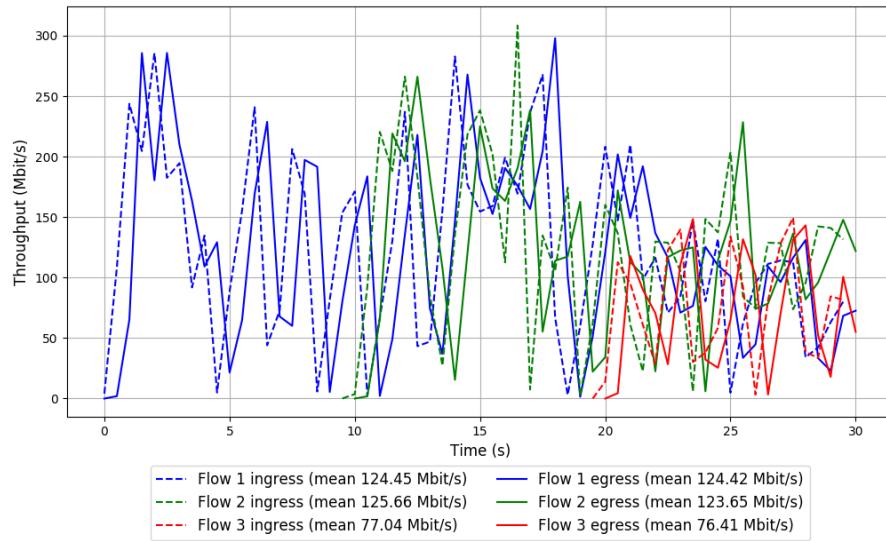


Run 1: Statistics of Verus

```
Start at: 2019-03-27 20:40:47
End at: 2019-03-27 20:41:17
Local clock offset: -0.079 ms
Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2019-03-28 02:34:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.82 Mbit/s
95th percentile per-packet one-way delay: 135.746 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 124.42 Mbit/s
95th percentile per-packet one-way delay: 91.270 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 123.65 Mbit/s
95th percentile per-packet one-way delay: 212.072 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 76.41 Mbit/s
95th percentile per-packet one-way delay: 72.180 ms
Loss rate: 1.73%
```

Run 1: Report of Verus — Data Link

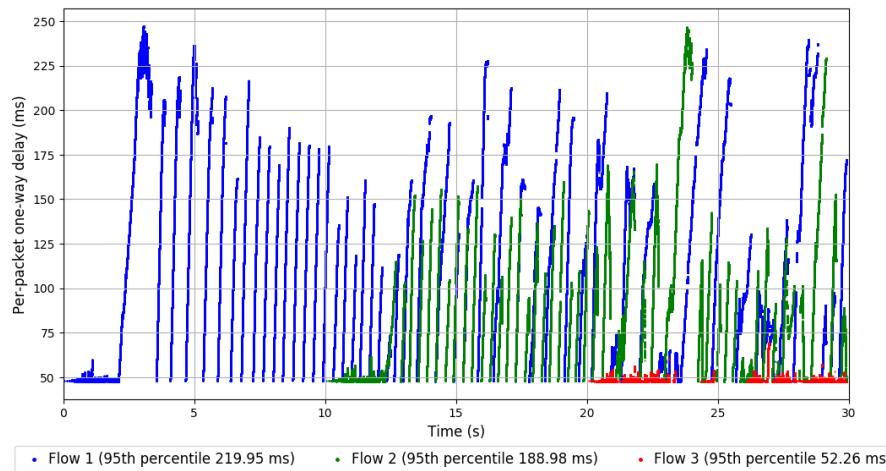
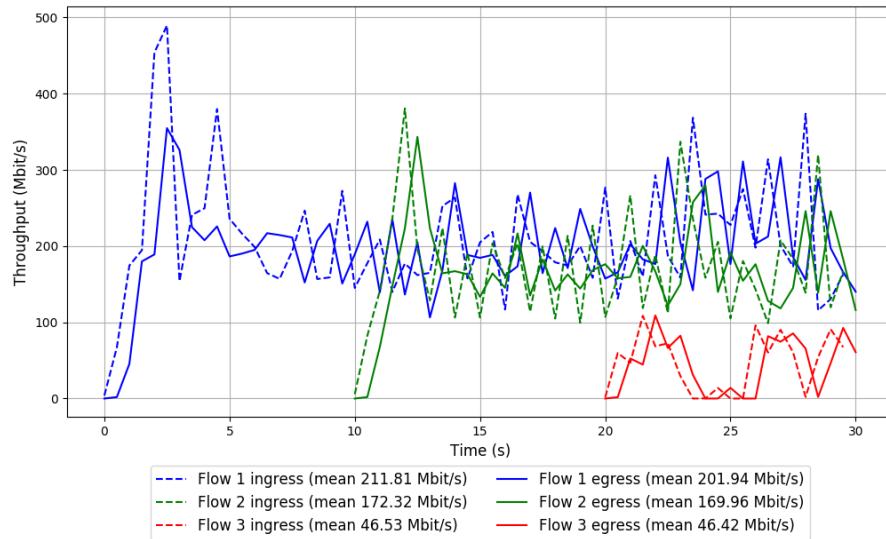


Run 2: Statistics of Verus

```
Start at: 2019-03-27 21:16:00
End at: 2019-03-27 21:16:30
Local clock offset: 0.223 ms
Remote clock offset: -0.276 ms

# Below is generated by plot.py at 2019-03-28 02:35:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.16 Mbit/s
95th percentile per-packet one-way delay: 215.700 ms
Loss rate: 3.38%
-- Flow 1:
Average throughput: 201.94 Mbit/s
95th percentile per-packet one-way delay: 219.946 ms
Loss rate: 4.36%
-- Flow 2:
Average throughput: 169.96 Mbit/s
95th percentile per-packet one-way delay: 188.978 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 46.42 Mbit/s
95th percentile per-packet one-way delay: 52.257 ms
Loss rate: 1.38%
```

Run 2: Report of Verus — Data Link

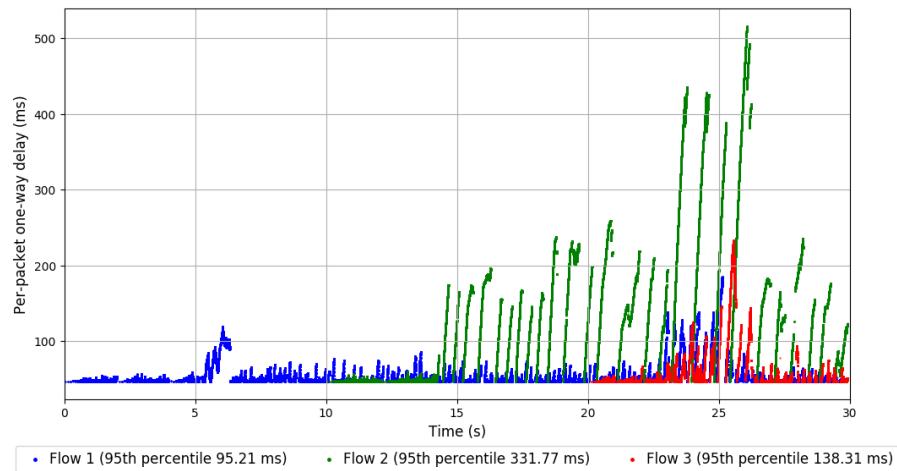
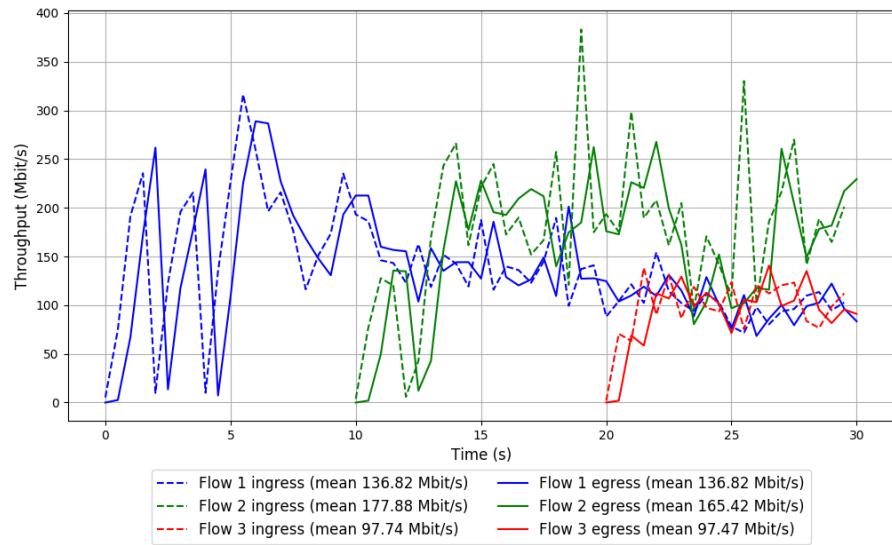


Run 3: Statistics of Verus

```
Start at: 2019-03-27 21:51:39
End at: 2019-03-27 21:52:09
Local clock offset: -0.054 ms
Remote clock offset: -0.357 ms

# Below is generated by plot.py at 2019-03-28 02:35:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.77 Mbit/s
95th percentile per-packet one-way delay: 219.206 ms
Loss rate: 3.11%
-- Flow 1:
Average throughput: 136.82 Mbit/s
95th percentile per-packet one-way delay: 95.208 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 165.42 Mbit/s
95th percentile per-packet one-way delay: 331.767 ms
Loss rate: 6.81%
-- Flow 3:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 138.308 ms
Loss rate: 1.24%
```

Run 3: Report of Verus — Data Link

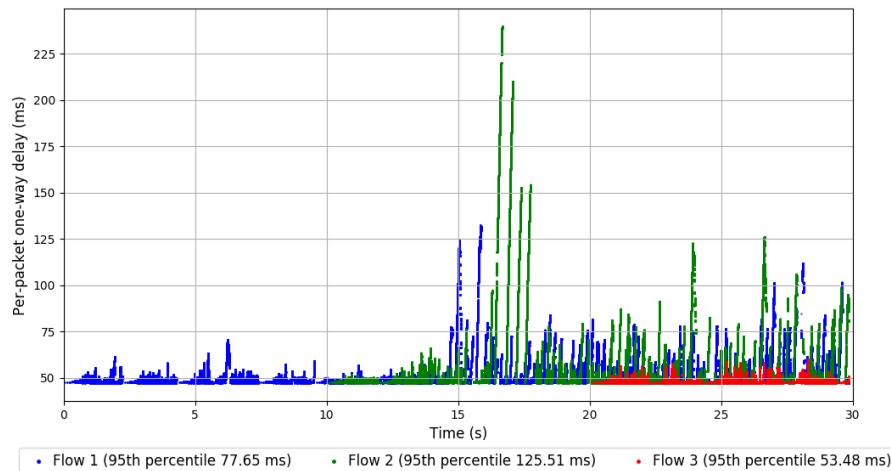
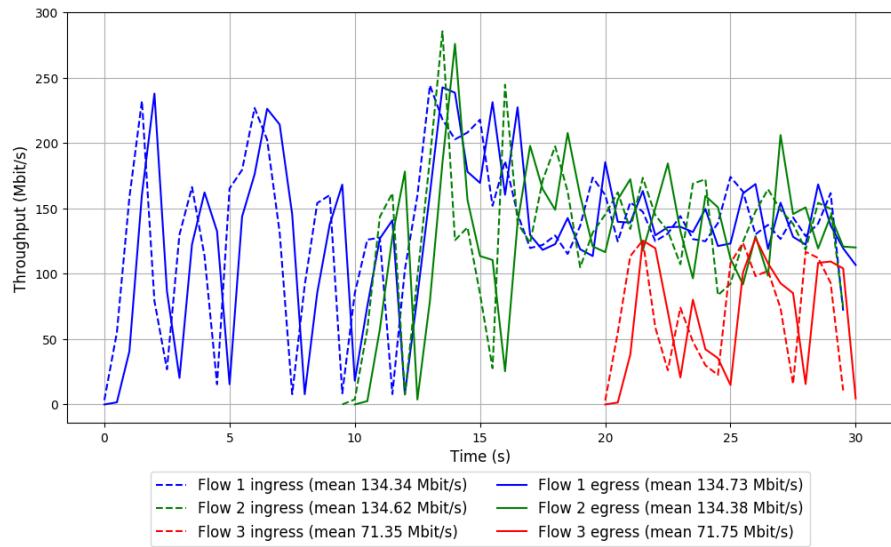


Run 4: Statistics of Verus

```
Start at: 2019-03-27 22:27:02
End at: 2019-03-27 22:27:32
Local clock offset: -0.067 ms
Remote clock offset: -0.405 ms

# Below is generated by plot.py at 2019-03-28 02:35:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.68 Mbit/s
95th percentile per-packet one-way delay: 95.131 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 134.73 Mbit/s
95th percentile per-packet one-way delay: 77.646 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 134.38 Mbit/s
95th percentile per-packet one-way delay: 125.514 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 71.75 Mbit/s
95th percentile per-packet one-way delay: 53.475 ms
Loss rate: 0.44%
```

Run 4: Report of Verus — Data Link

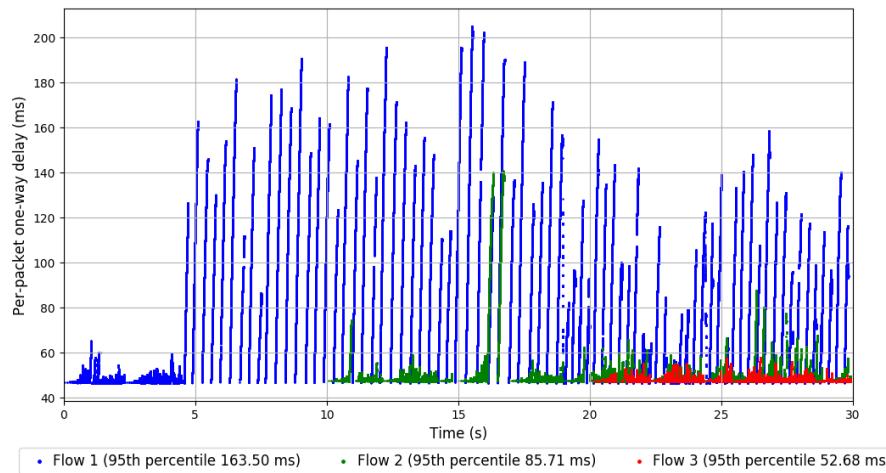
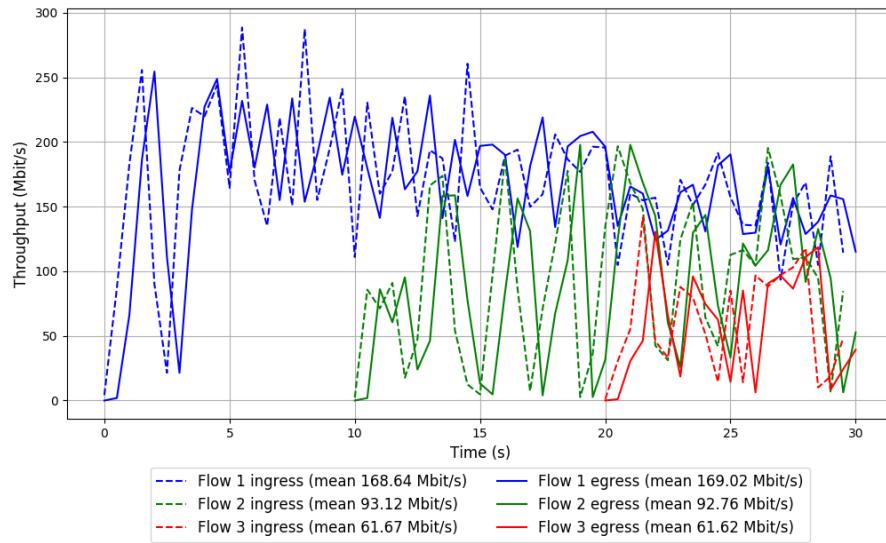


Run 5: Statistics of Verus

```
Start at: 2019-03-27 23:03:21
End at: 2019-03-27 23:03:51
Local clock offset: -0.094 ms
Remote clock offset: -0.446 ms

# Below is generated by plot.py at 2019-03-28 02:35:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.42 Mbit/s
95th percentile per-packet one-way delay: 154.670 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 169.02 Mbit/s
95th percentile per-packet one-way delay: 163.501 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 92.76 Mbit/s
95th percentile per-packet one-way delay: 85.710 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 61.62 Mbit/s
95th percentile per-packet one-way delay: 52.680 ms
Loss rate: 1.00%
```

Run 5: Report of Verus — Data Link

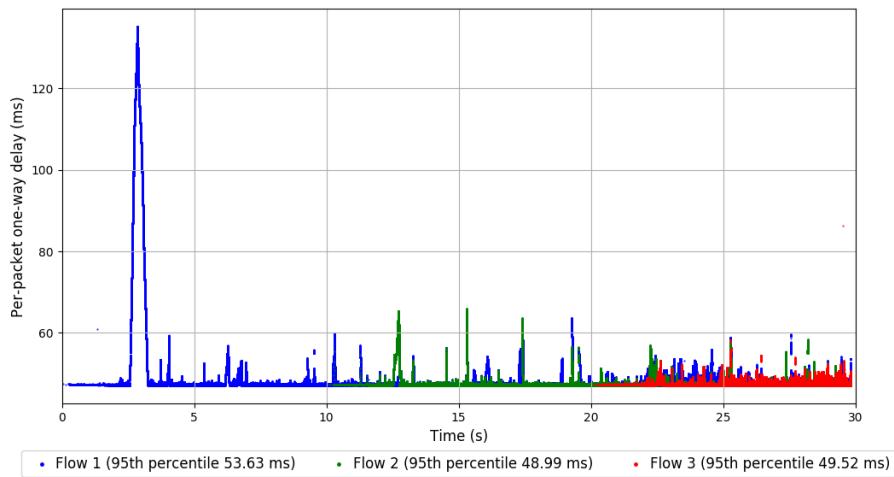
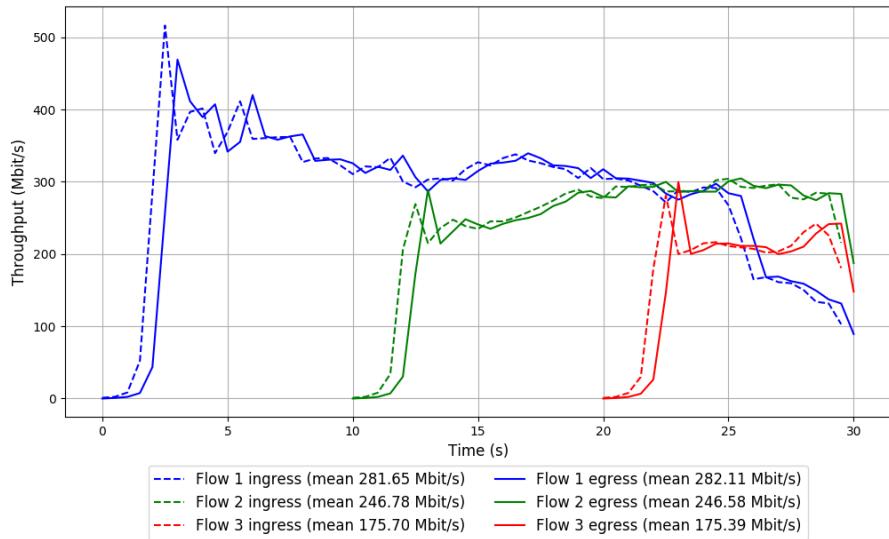


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-03-27 21:07:58
End at: 2019-03-27 21:08:28
Local clock offset: -0.139 ms
Remote clock offset: -0.272 ms

# Below is generated by plot.py at 2019-03-28 02:36:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 503.31 Mbit/s
95th percentile per-packet one-way delay: 51.491 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 282.11 Mbit/s
95th percentile per-packet one-way delay: 53.634 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 246.58 Mbit/s
95th percentile per-packet one-way delay: 48.992 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 175.39 Mbit/s
95th percentile per-packet one-way delay: 49.518 ms
Loss rate: 1.14%
```

Run 1: Report of PCC-Vivace — Data Link

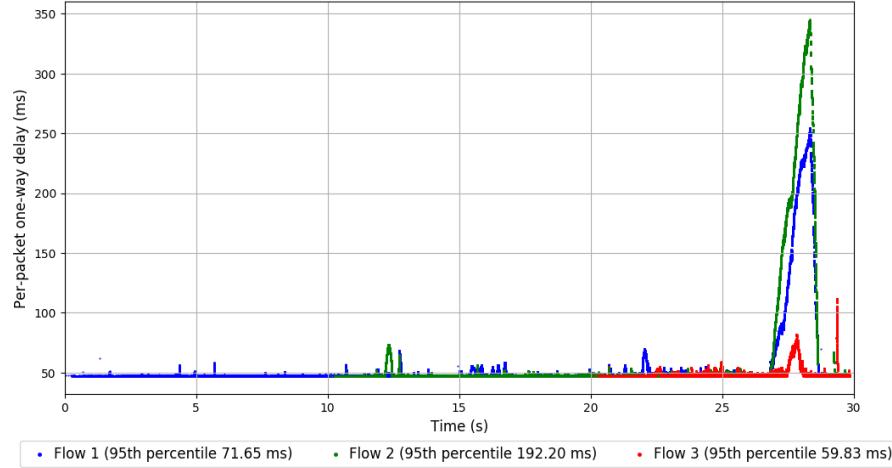
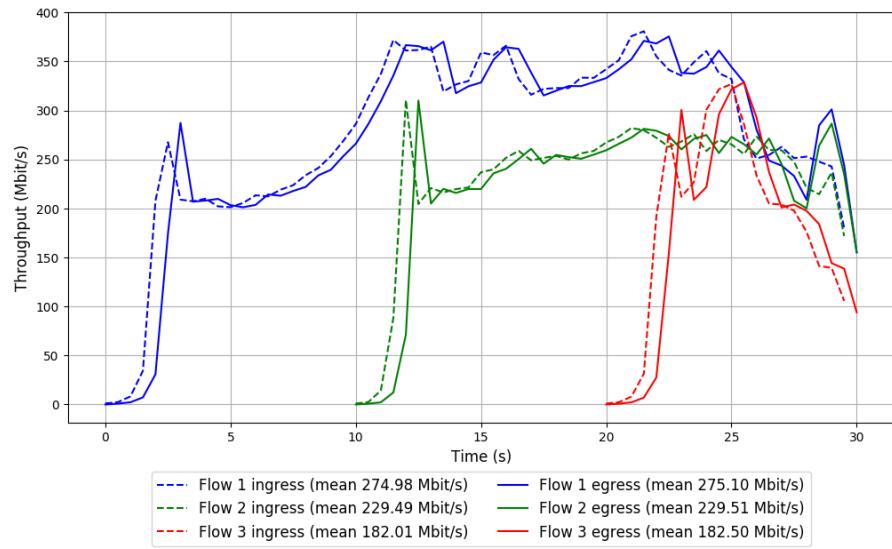


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-03-27 21:43:33
End at: 2019-03-27 21:44:03
Local clock offset: -0.121 ms
Remote clock offset: -0.297 ms

# Below is generated by plot.py at 2019-03-28 02:37:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 487.26 Mbit/s
95th percentile per-packet one-way delay: 88.580 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 275.10 Mbit/s
95th percentile per-packet one-way delay: 71.654 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 229.51 Mbit/s
95th percentile per-packet one-way delay: 192.197 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 182.50 Mbit/s
95th percentile per-packet one-way delay: 59.834 ms
Loss rate: 0.70%
```

Run 2: Report of PCC-Vivace — Data Link

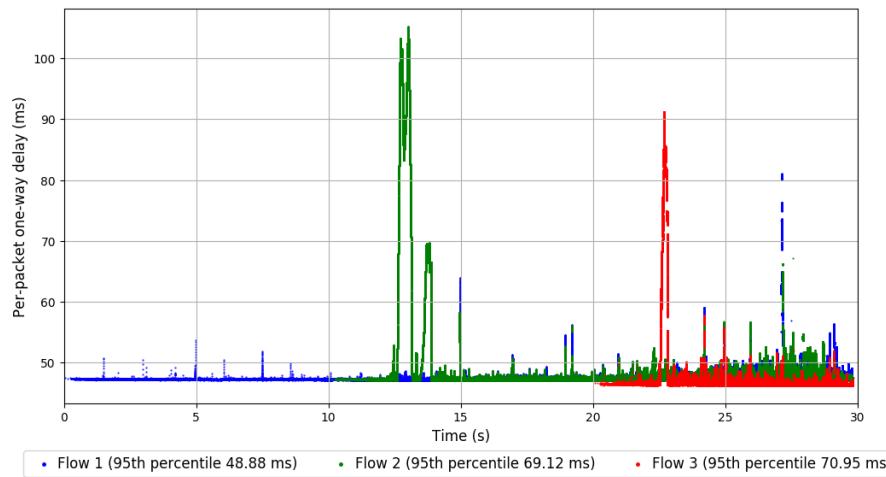
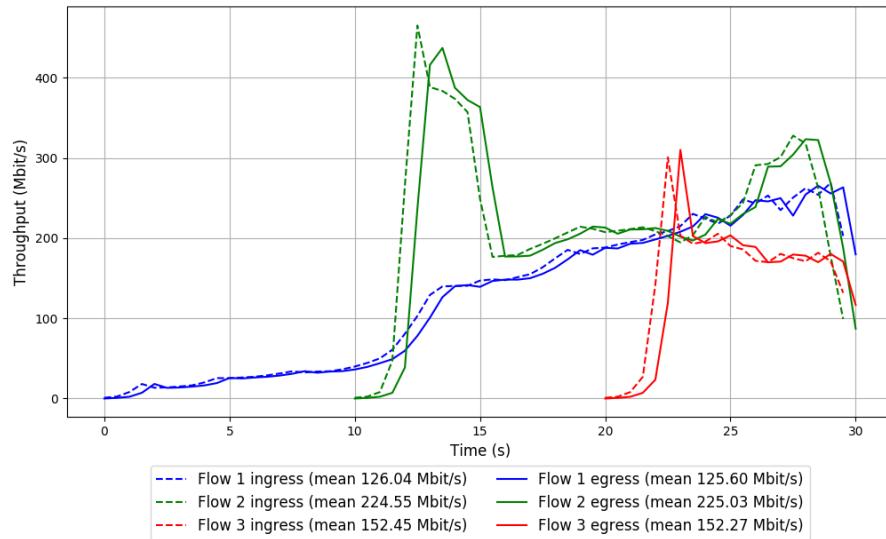


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-03-27 22:19:08
End at: 2019-03-27 22:19:38
Local clock offset: -0.046 ms
Remote clock offset: -0.377 ms

# Below is generated by plot.py at 2019-03-28 02:37:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.96 Mbit/s
95th percentile per-packet one-way delay: 56.178 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 125.60 Mbit/s
95th percentile per-packet one-way delay: 48.882 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 225.03 Mbit/s
95th percentile per-packet one-way delay: 69.125 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 152.27 Mbit/s
95th percentile per-packet one-way delay: 70.953 ms
Loss rate: 1.07%
```

Run 3: Report of PCC-Vivace — Data Link

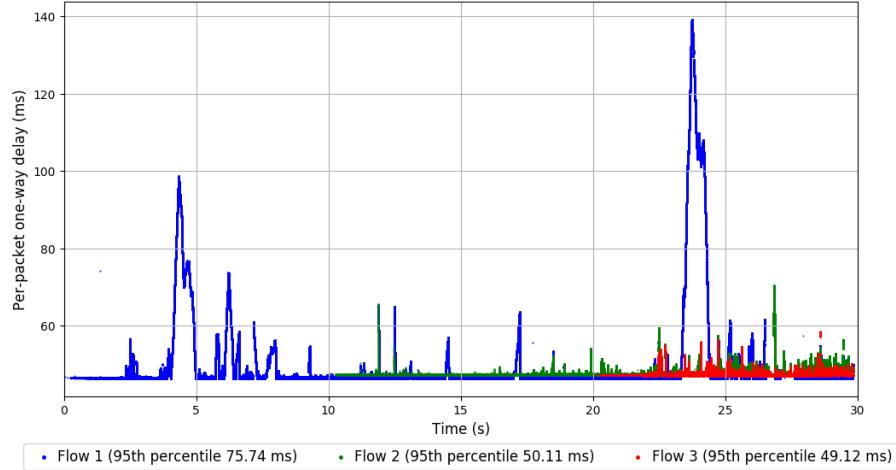
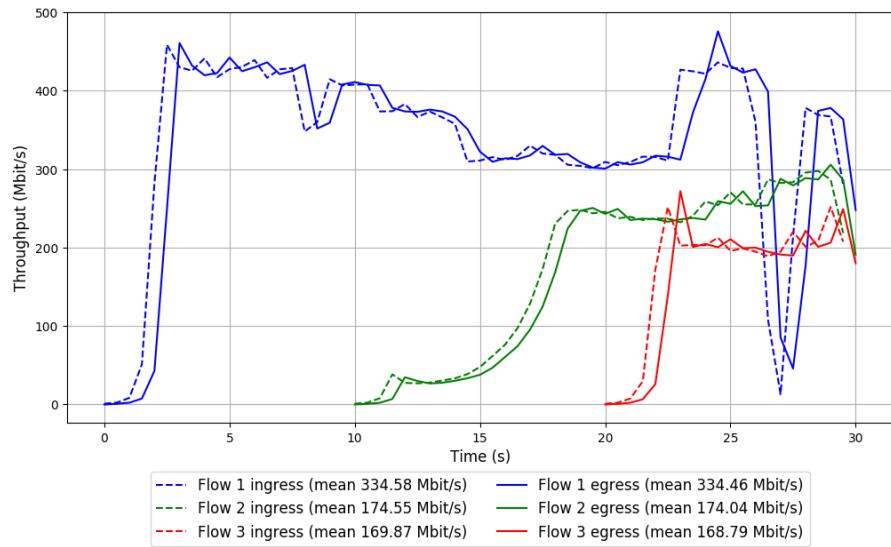


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-03-27 22:55:05
End at: 2019-03-27 22:55:35
Local clock offset: -0.076 ms
Remote clock offset: -0.461 ms

# Below is generated by plot.py at 2019-03-28 02:38:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 505.33 Mbit/s
95th percentile per-packet one-way delay: 65.775 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 334.46 Mbit/s
95th percentile per-packet one-way delay: 75.740 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 174.04 Mbit/s
95th percentile per-packet one-way delay: 50.112 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 168.79 Mbit/s
95th percentile per-packet one-way delay: 49.125 ms
Loss rate: 1.57%
```

Run 4: Report of PCC-Vivace — Data Link

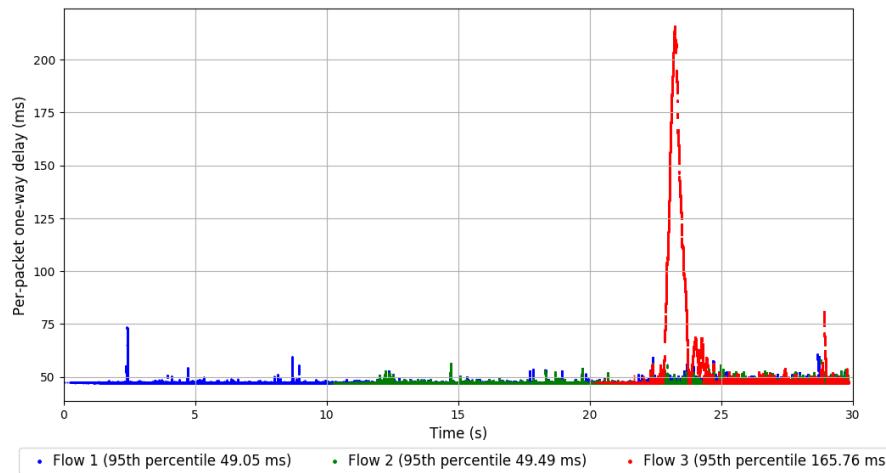
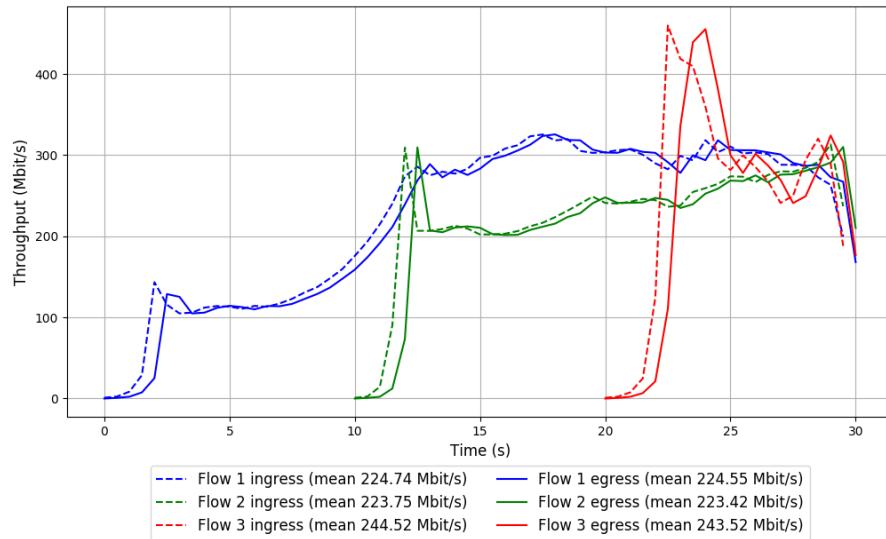


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-03-27 23:31:09
End at: 2019-03-27 23:31:39
Local clock offset: -0.143 ms
Remote clock offset: -0.47 ms

# Below is generated by plot.py at 2019-03-28 02:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.62 Mbit/s
95th percentile per-packet one-way delay: 53.911 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 224.55 Mbit/s
95th percentile per-packet one-way delay: 49.051 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 223.42 Mbit/s
95th percentile per-packet one-way delay: 49.487 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 243.52 Mbit/s
95th percentile per-packet one-way delay: 165.756 ms
Loss rate: 1.36%
```

Run 5: Report of PCC-Vivace — Data Link

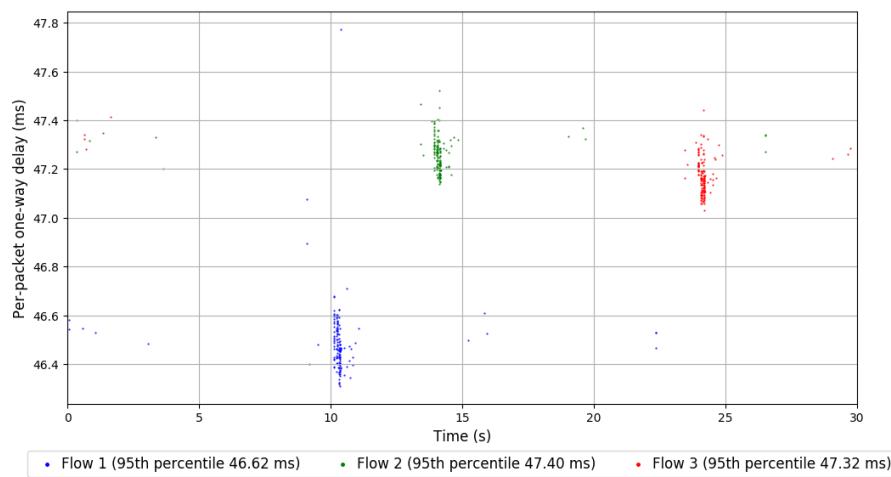
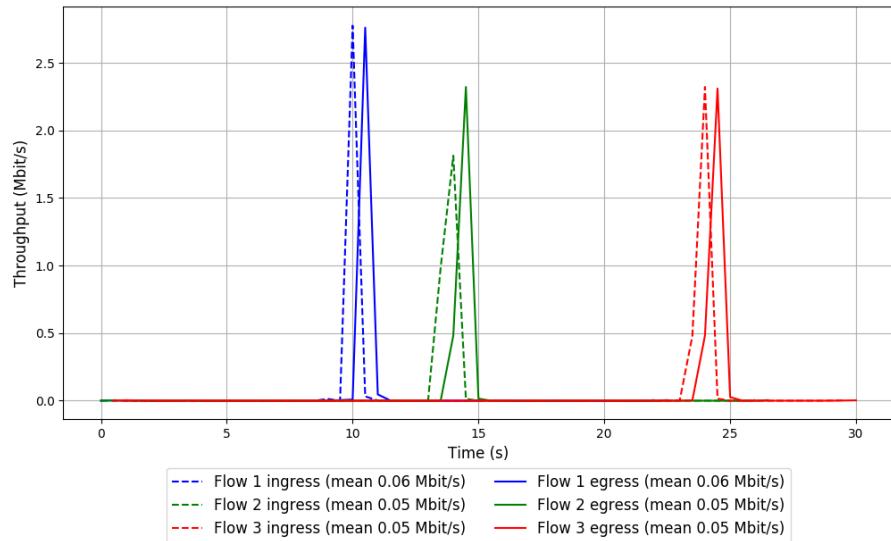


Run 1: Statistics of WebRTC media

```
Start at: 2019-03-27 20:56:41
End at: 2019-03-27 20:57:11
Local clock offset: -0.129 ms
Remote clock offset: -0.226 ms

# Below is generated by plot.py at 2019-03-28 02:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.341 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 46.622 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.396 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.322 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

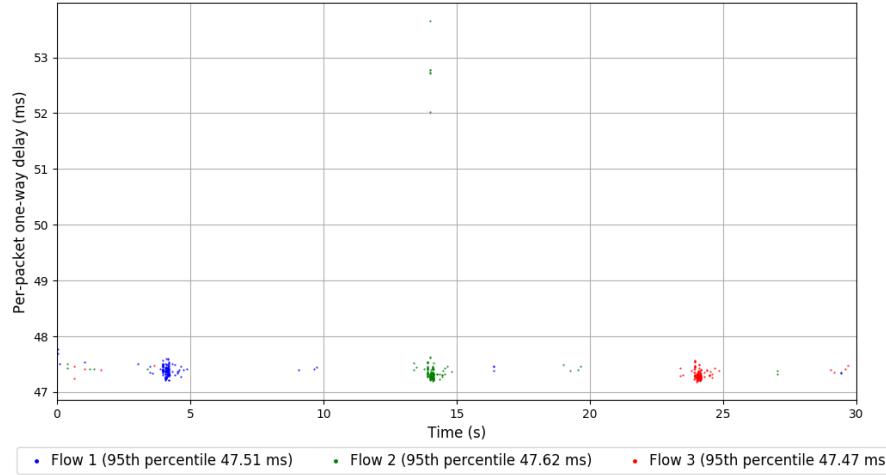
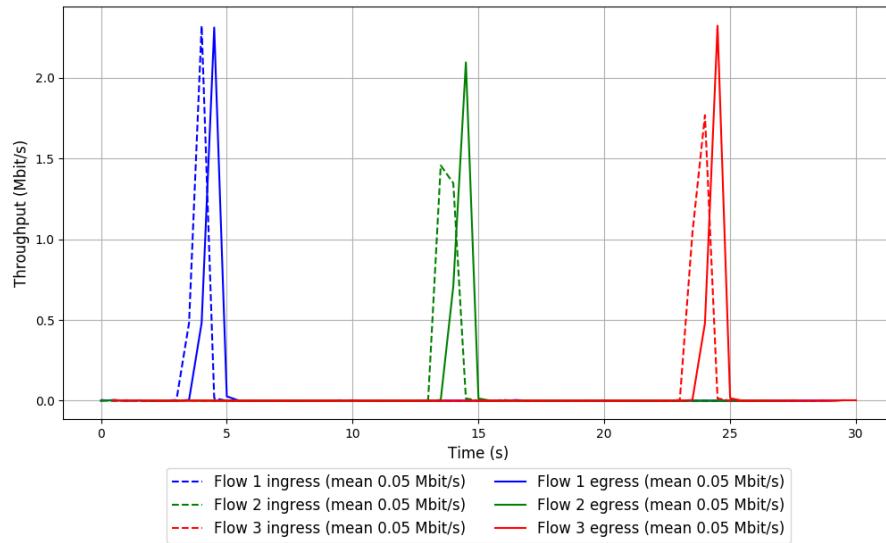


Run 2: Statistics of WebRTC media

```
Start at: 2019-03-27 21:32:07
End at: 2019-03-27 21:32:37
Local clock offset: -0.199 ms
Remote clock offset: -0.284 ms

# Below is generated by plot.py at 2019-03-28 02:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.512 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.625 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.465 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

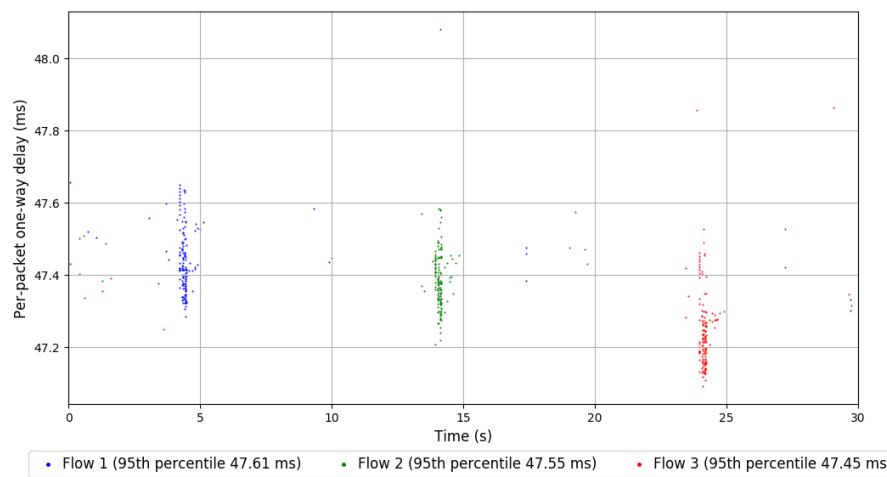
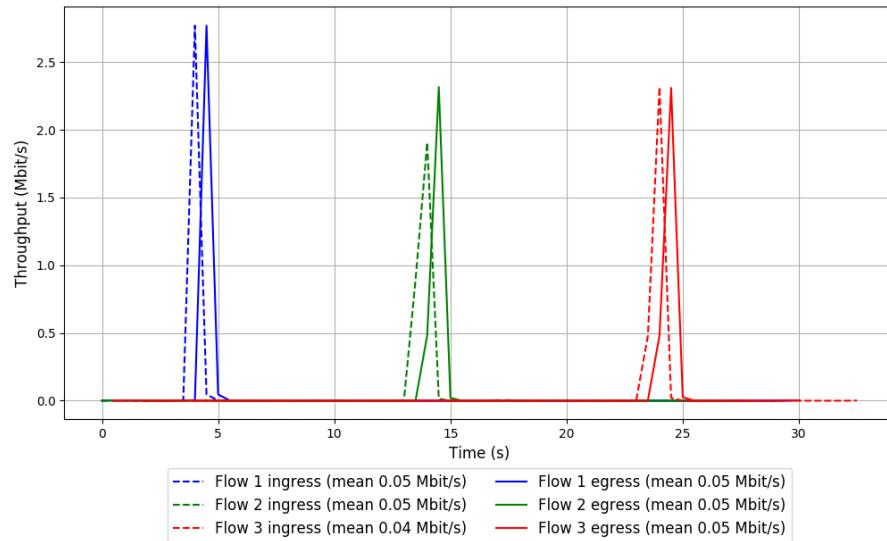


Run 3: Statistics of WebRTC media

```
Start at: 2019-03-27 22:07:46
End at: 2019-03-27 22:08:16
Local clock offset: -0.012 ms
Remote clock offset: -0.36 ms

# Below is generated by plot.py at 2019-03-28 02:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.579 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.611 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.545 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.455 ms
Loss rate: 0.05%
```

Run 3: Report of WebRTC media — Data Link

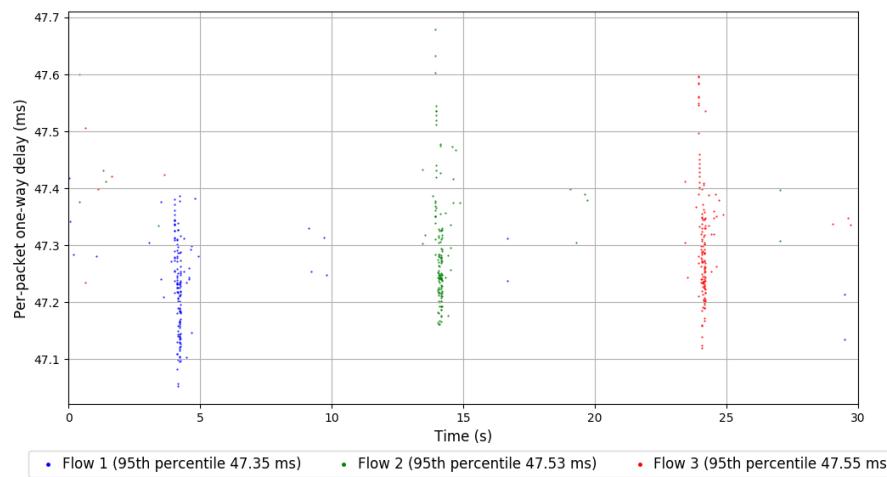
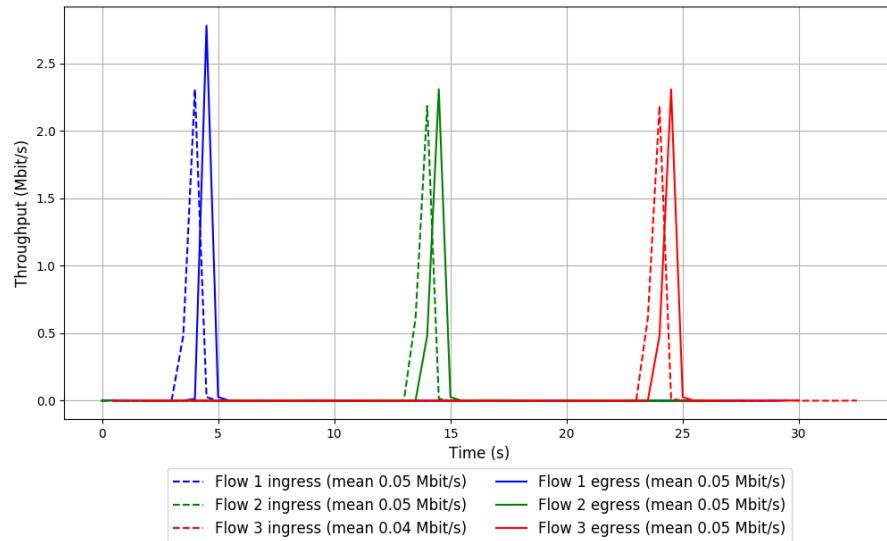


Run 4: Statistics of WebRTC media

```
Start at: 2019-03-27 22:43:19
End at: 2019-03-27 22:43:49
Local clock offset: -0.118 ms
Remote clock offset: -0.41 ms

# Below is generated by plot.py at 2019-03-28 02:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.475 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.353 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.528 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.546 ms
Loss rate: 0.05%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-03-27 23:19:33
End at: 2019-03-27 23:20:03
Local clock offset: -0.157 ms
Remote clock offset: -0.476 ms

# Below is generated by plot.py at 2019-03-28 02:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.502 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.477 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.523 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.473 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

