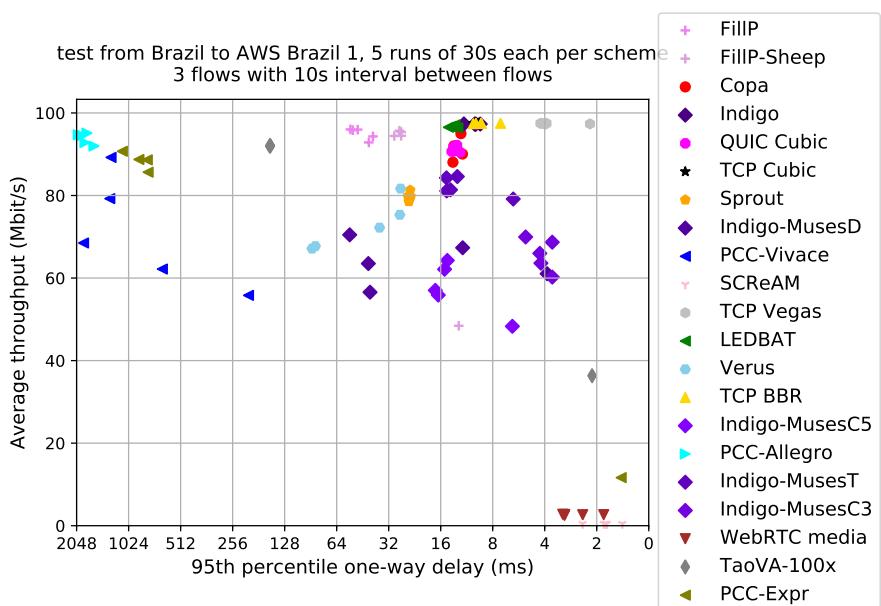
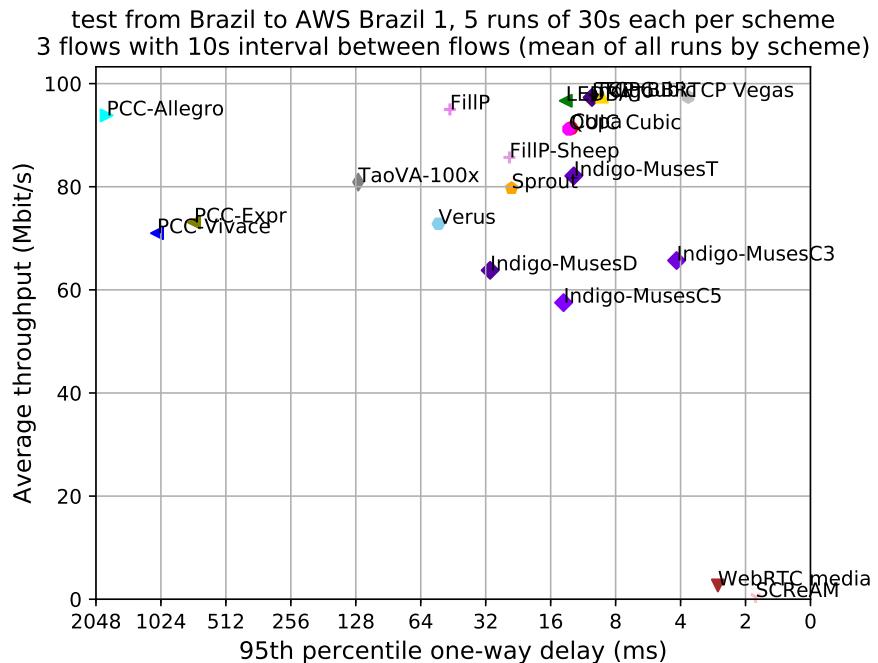


Pantheon Report

Generated at 2019-02-05 20:28:32 (UTC).
Data path: Brazil on p4p1 (*remote*) → AWS Brazil 1 on `ens5` (*local*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
System info:  
Linux 4.15.0-1031-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee  
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/pantheon-tunnel @ 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



4

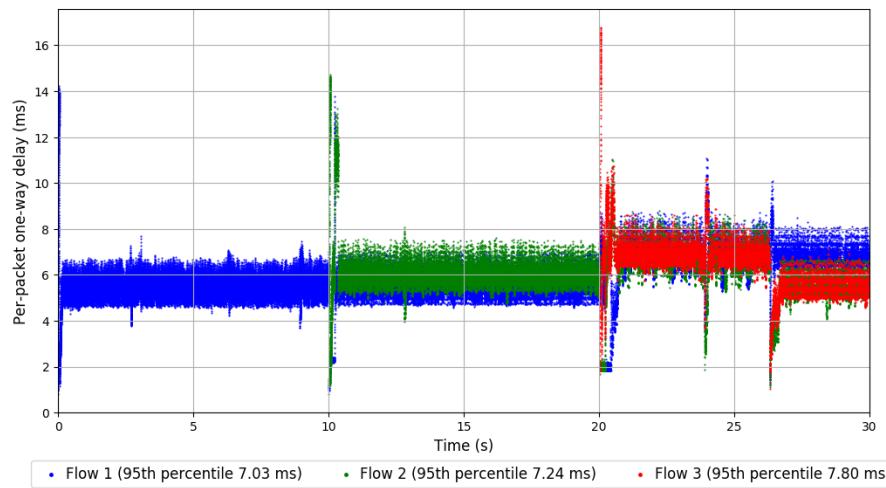
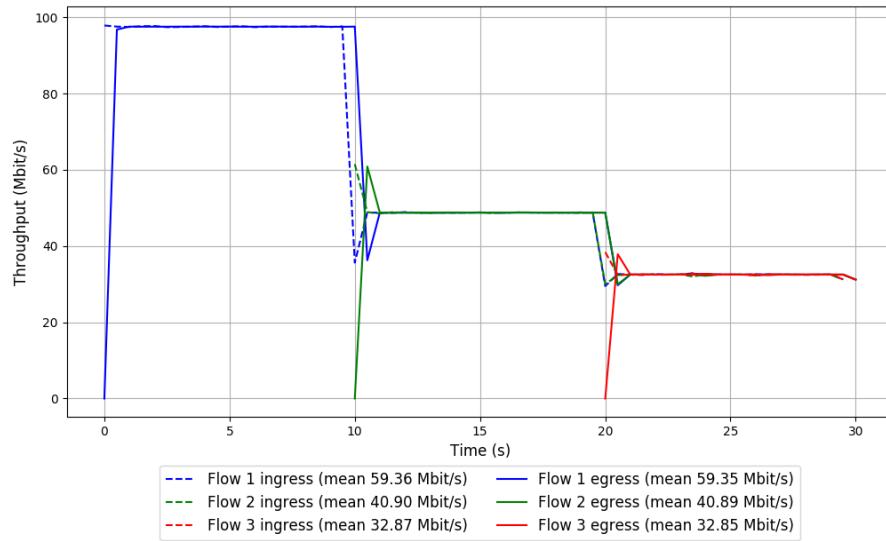
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	59.30	40.88	32.96	8.54	9.67	9.80	0.08	0.34	0.53
Copa	5	54.68	39.49	31.26	11.97	13.43	14.51	0.04	0.09	0.11
TCP Cubic	5	59.61	40.65	32.49	9.88	9.90	10.07	0.08	0.15	0.23
FillP	5	55.02	45.86	28.47	29.36	50.41	51.74	0.15	2.46	2.81
FillP-Sheep	5	54.32	33.35	27.69	21.88	26.50	46.63	0.03	0.05	0.15
Indigo	5	59.67	40.63	32.34	9.60	10.59	8.94	0.02	0.41	0.12
Indigo-MusesC3	5	44.88	26.37	15.76	4.01	4.17	4.09	0.01	0.01	0.04
Indigo-MusesC5	5	31.58	27.92	31.13	12.95	12.98	15.98	0.05	0.05	0.18
Indigo-MusesD	5	38.84	24.50	35.40	10.25	12.65	37.34	0.05	0.09	2.30
Indigo-MusesT	5	52.63	37.29	22.97	11.21	14.47	11.59	0.03	0.04	0.12
LEDBAT	5	59.04	40.61	31.88	13.20	13.75	13.81	0.13	0.22	0.41
PCC-Allegro	5	64.84	32.69	22.06	1848.38	122.84	6.70	8.77	1.57	0.10
PCC-Expr	5	43.75	32.02	24.32	595.80	545.62	364.08	7.58	5.52	5.85
QUIC Cubic	5	54.15	40.19	31.08	12.97	13.07	13.67	0.17	0.32	0.50
SCReAM	5	0.22	0.22	0.22	1.69	1.68	1.68	0.00	0.00	0.21
Sprout	5	42.82	39.48	32.20	22.69	24.63	25.56	0.18	0.36	0.28
TaoVA-100x	5	46.36	32.92	37.94	124.10	125.04	125.12	0.39	0.85	2.25
TCP Vegas	5	52.03	48.37	39.65	2.86	3.54	4.11	0.01	0.01	0.04
Verus	5	39.52	34.79	30.50	29.07	32.40	191.38	0.04	0.03	0.07
PCC-Vivace	5	37.45	36.88	27.30	504.65	776.80	82.29	1.97	4.64	0.34
WebRTC media	5	1.52	0.79	0.38	2.68	2.59	2.80	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-02-05 18:12:28
End at: 2019-02-05 18:12:58
Local clock offset: -5.955 ms
Remote clock offset: 0.433 ms

# Below is generated by plot.py at 2019-02-05 20:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 7.209 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 59.35 Mbit/s
95th percentile per-packet one-way delay: 7.026 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 7.243 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 32.85 Mbit/s
95th percentile per-packet one-way delay: 7.797 ms
Loss rate: 0.06%
```

Run 1: Report of TCP BBR — Data Link

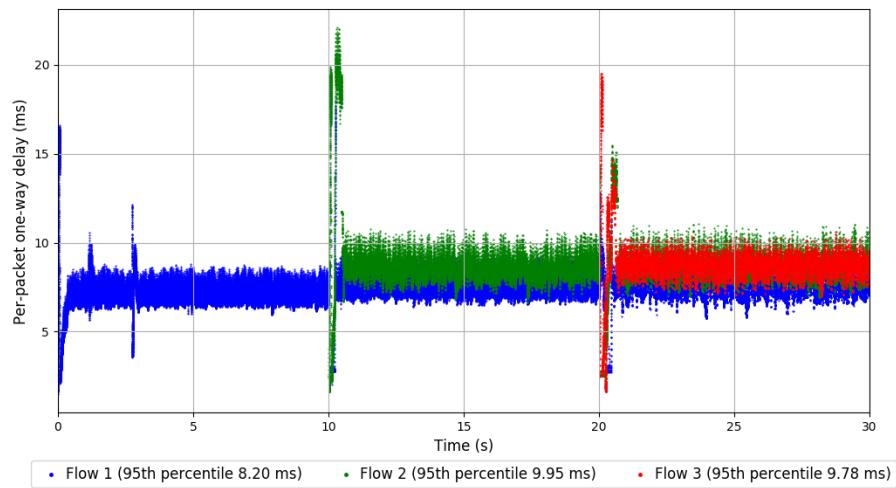
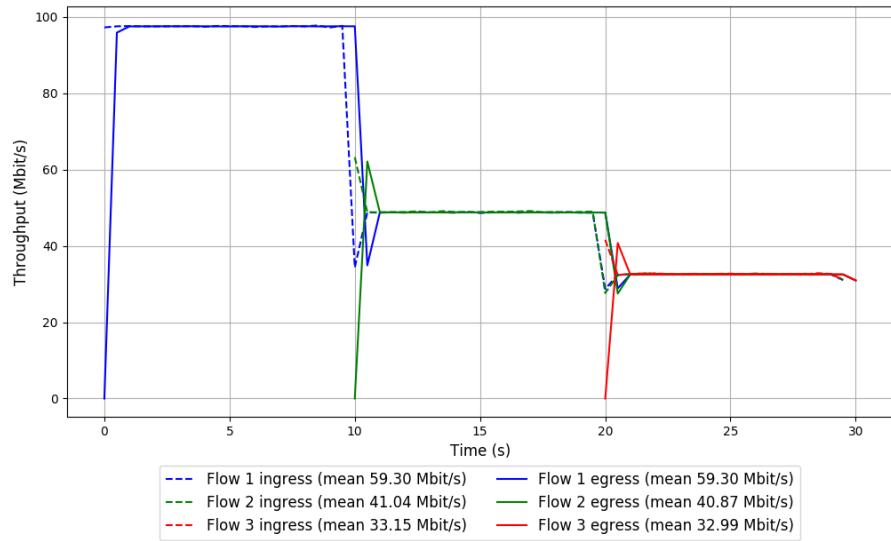


Run 2: Statistics of TCP BBR

```
Start at: 2019-02-05 18:36:24
End at: 2019-02-05 18:36:54
Local clock offset: -5.807 ms
Remote clock offset: 1.174 ms

# Below is generated by plot.py at 2019-02-05 20:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 9.307 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 8.199 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.87 Mbit/s
95th percentile per-packet one-way delay: 9.954 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 9.776 ms
Loss rate: 0.55%
```

Run 2: Report of TCP BBR — Data Link

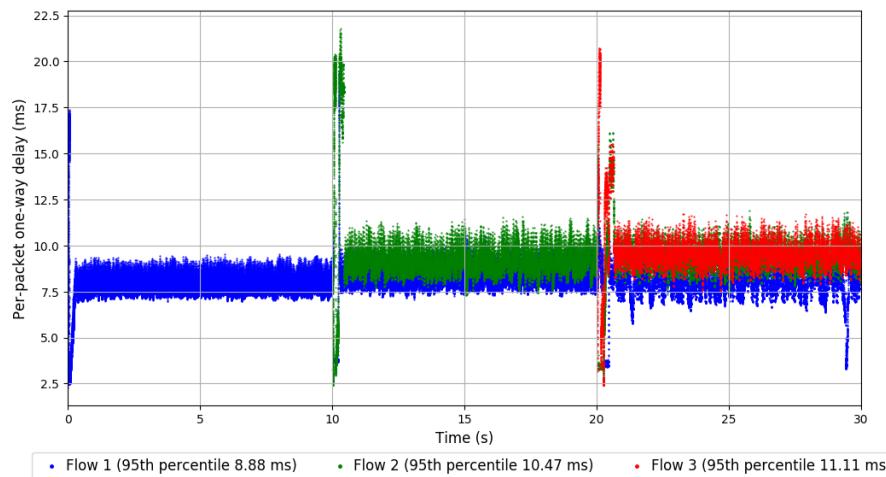
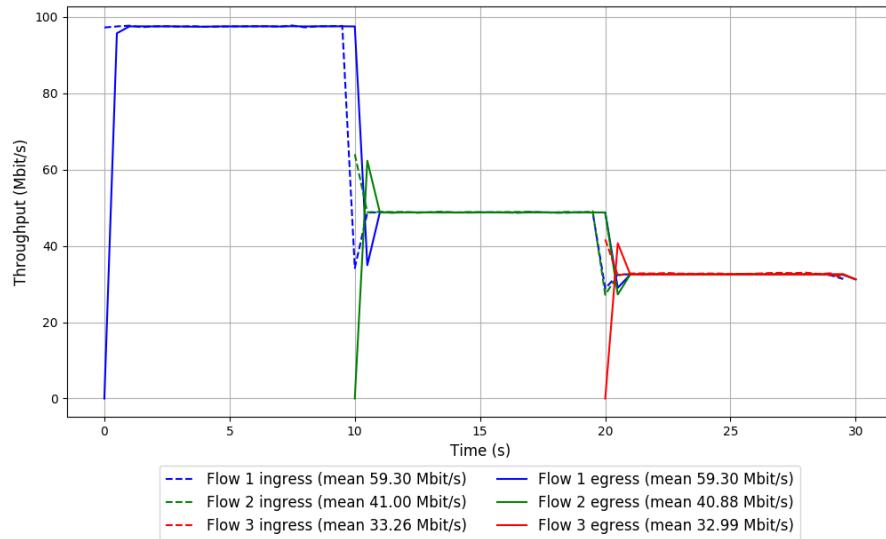


Run 3: Statistics of TCP BBR

```
Start at: 2019-02-05 19:00:35
End at: 2019-02-05 19:01:05
Local clock offset: -3.881 ms
Remote clock offset: 1.661 ms

# Below is generated by plot.py at 2019-02-05 20:15:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 10.009 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 8.880 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 10.473 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 11.109 ms
Loss rate: 0.85%
```

Run 3: Report of TCP BBR — Data Link

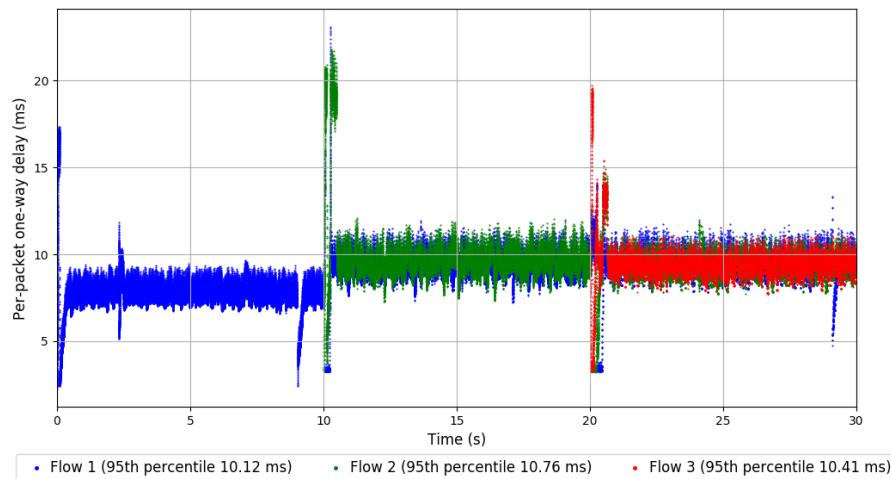
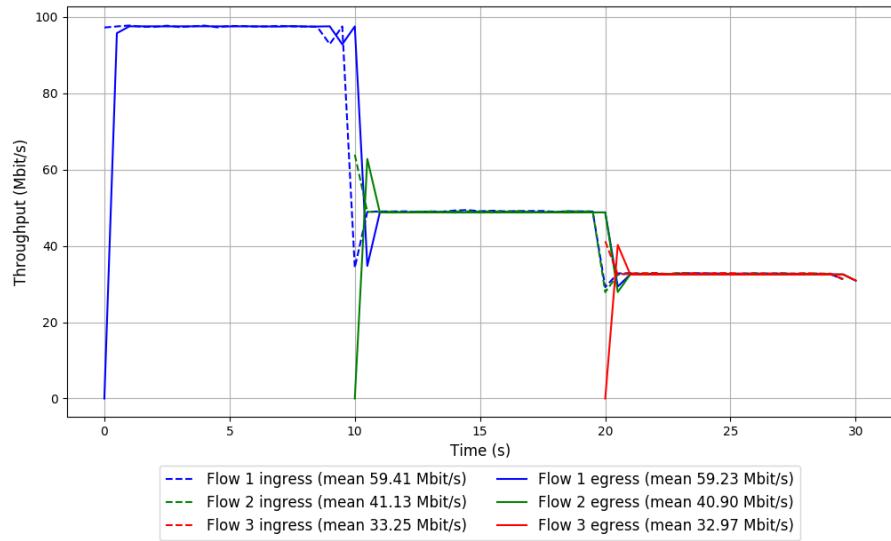


Run 4: Statistics of TCP BBR

```
Start at: 2019-02-05 19:24:45
End at: 2019-02-05 19:25:15
Local clock offset: -3.32 ms
Remote clock offset: 1.968 ms

# Below is generated by plot.py at 2019-02-05 20:15:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.42 Mbit/s
95th percentile per-packet one-way delay: 10.365 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 59.23 Mbit/s
95th percentile per-packet one-way delay: 10.117 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 40.90 Mbit/s
95th percentile per-packet one-way delay: 10.755 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 10.410 ms
Loss rate: 0.88%
```

Run 4: Report of TCP BBR — Data Link

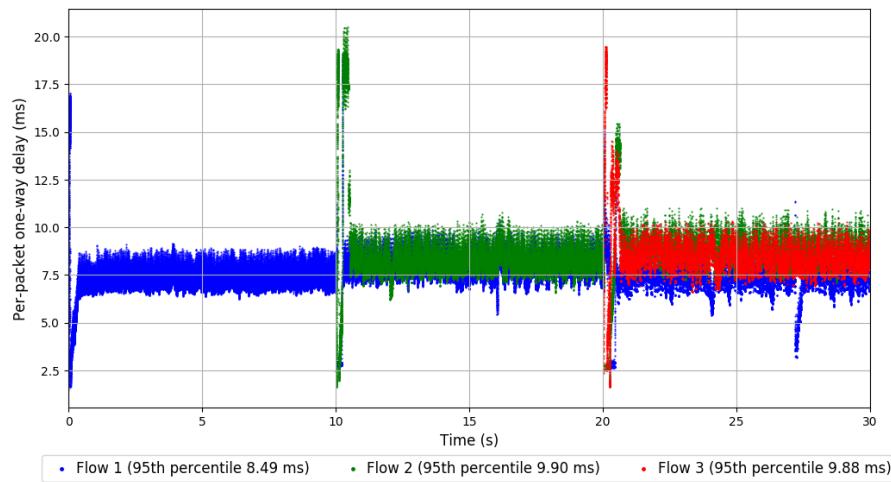
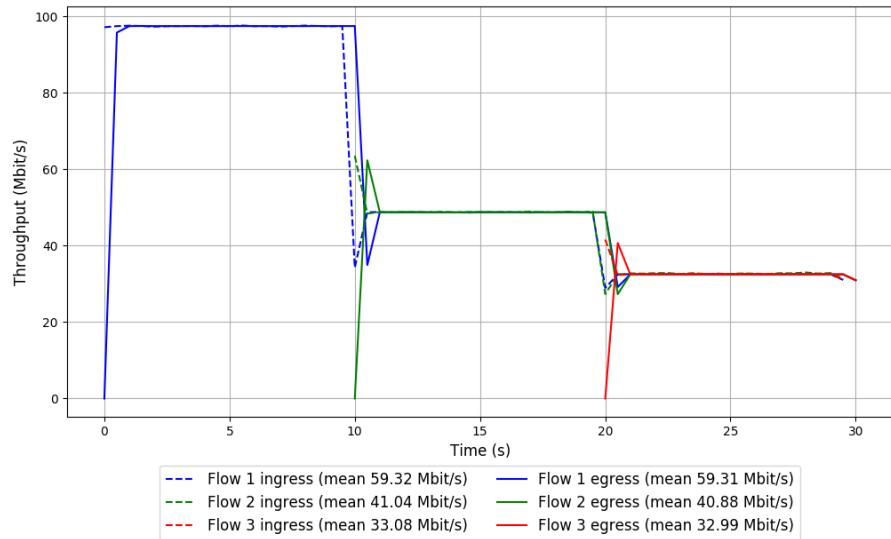


Run 5: Statistics of TCP BBR

```
Start at: 2019-02-05 19:48:56
End at: 2019-02-05 19:49:26
Local clock offset: -3.841 ms
Remote clock offset: 1.803 ms

# Below is generated by plot.py at 2019-02-05 20:15:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 9.351 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 8.489 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 9.904 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 9.884 ms
Loss rate: 0.31%
```

Run 5: Report of TCP BBR — Data Link

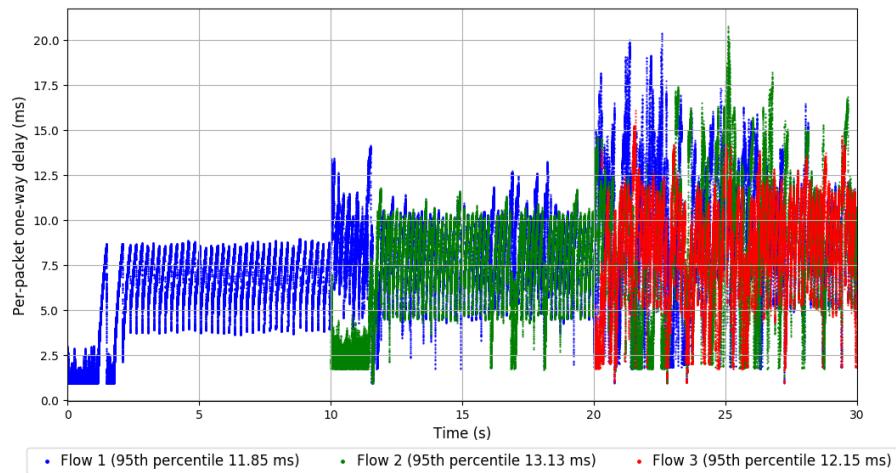
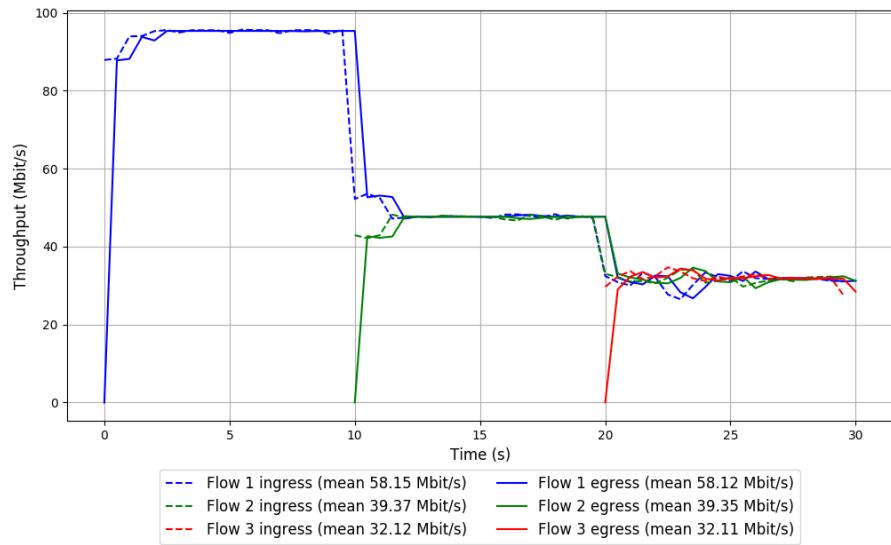


Run 1: Statistics of Copa

```
Start at: 2019-02-05 18:34:01
End at: 2019-02-05 18:34:31
Local clock offset: -5.124 ms
Remote clock offset: 1.049 ms

# Below is generated by plot.py at 2019-02-05 20:16:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 12.219 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 58.12 Mbit/s
95th percentile per-packet one-way delay: 11.851 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 39.35 Mbit/s
95th percentile per-packet one-way delay: 13.135 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 32.11 Mbit/s
95th percentile per-packet one-way delay: 12.150 ms
Loss rate: 0.08%
```

Run 1: Report of Copa — Data Link

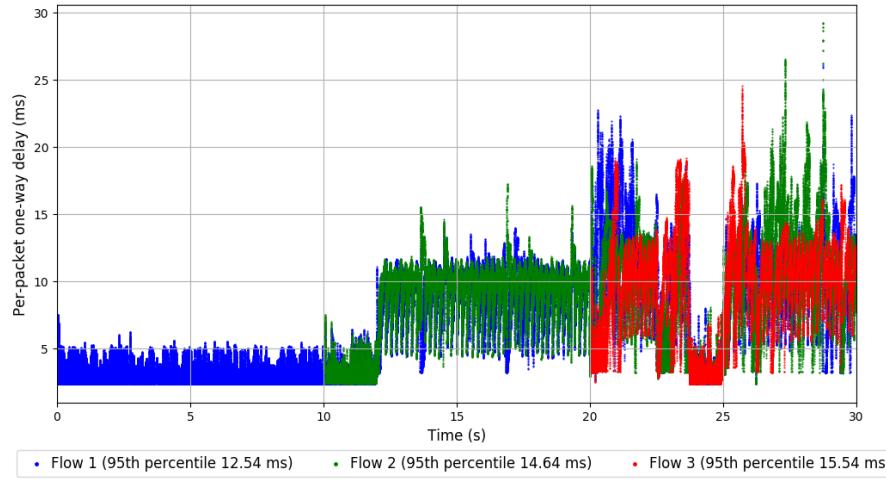
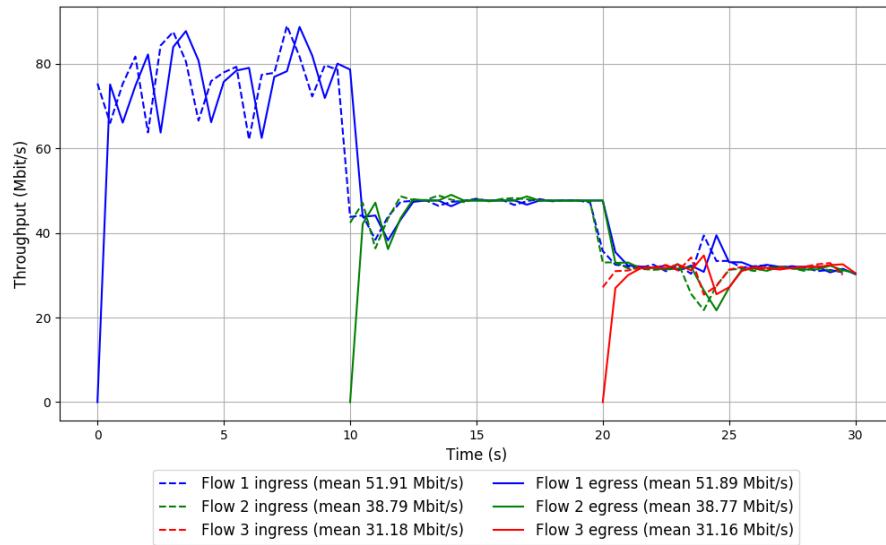


Run 2: Statistics of Copa

```
Start at: 2019-02-05 18:58:13
End at: 2019-02-05 18:58:43
Local clock offset: -3.983 ms
Remote clock offset: 1.588 ms

# Below is generated by plot.py at 2019-02-05 20:16:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.06 Mbit/s
95th percentile per-packet one-way delay: 13.599 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 51.89 Mbit/s
95th percentile per-packet one-way delay: 12.538 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 14.639 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 31.16 Mbit/s
95th percentile per-packet one-way delay: 15.539 ms
Loss rate: 0.11%
```

Run 2: Report of Copa — Data Link

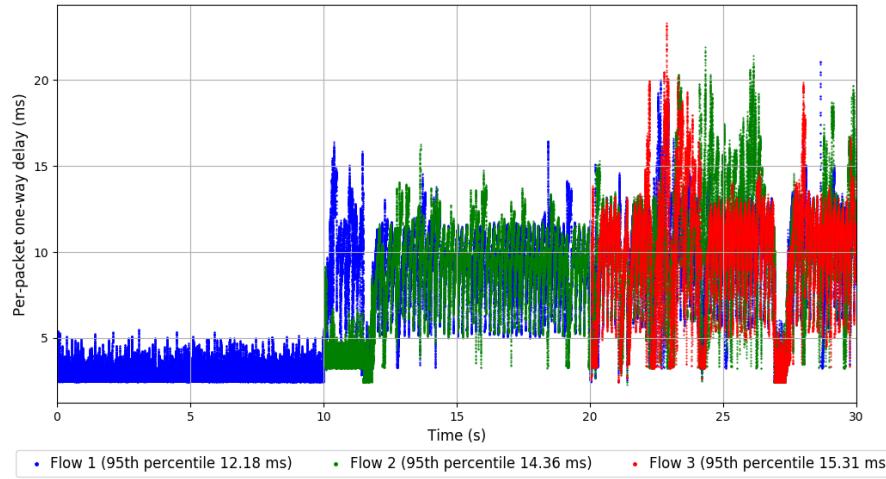
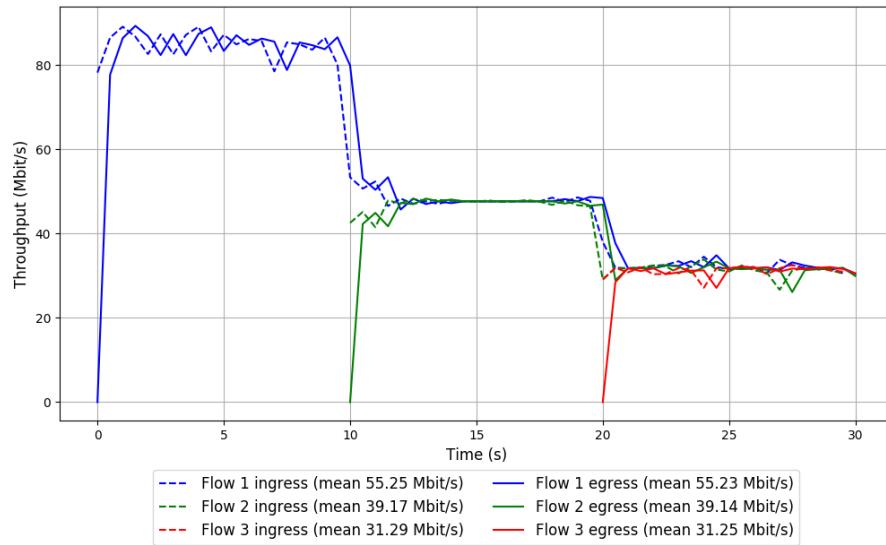


Run 3: Statistics of Copa

```
Start at: 2019-02-05 19:22:22
End at: 2019-02-05 19:22:52
Local clock offset: -3.351 ms
Remote clock offset: 1.909 ms

# Below is generated by plot.py at 2019-02-05 20:16:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.68 Mbit/s
95th percentile per-packet one-way delay: 13.017 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 55.23 Mbit/s
95th percentile per-packet one-way delay: 12.175 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 14.363 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 31.25 Mbit/s
95th percentile per-packet one-way delay: 15.313 ms
Loss rate: 0.15%
```

Run 3: Report of Copa — Data Link

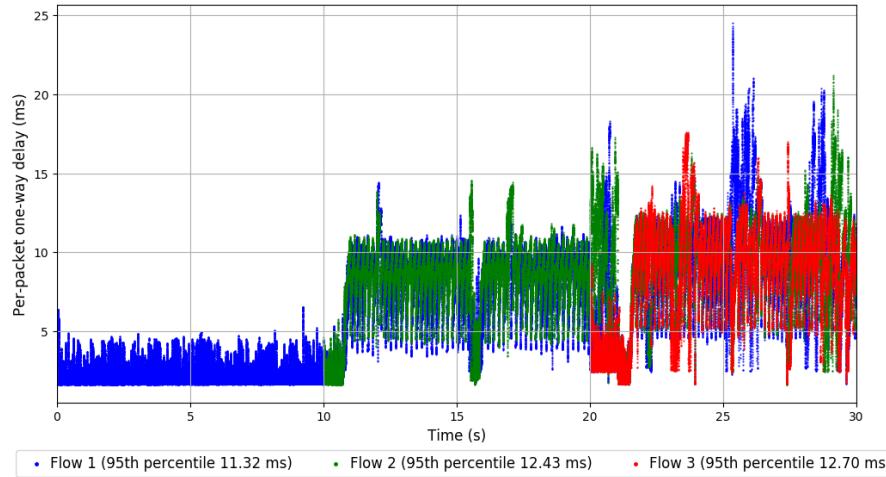
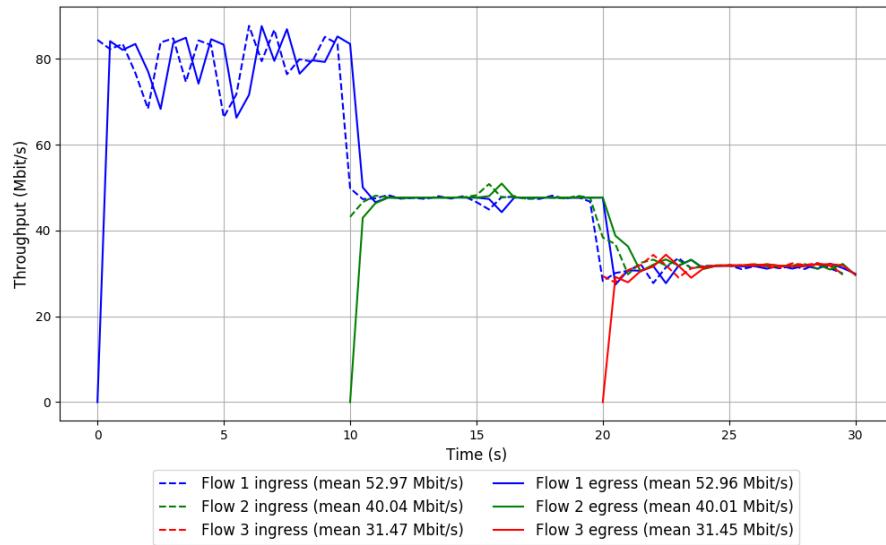


Run 4: Statistics of Copa

```
Start at: 2019-02-05 19:46:34
End at: 2019-02-05 19:47:04
Local clock offset: -3.801 ms
Remote clock offset: 1.742 ms

# Below is generated by plot.py at 2019-02-05 20:17:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.05 Mbit/s
95th percentile per-packet one-way delay: 11.972 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 52.96 Mbit/s
95th percentile per-packet one-way delay: 11.316 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.01 Mbit/s
95th percentile per-packet one-way delay: 12.434 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 31.45 Mbit/s
95th percentile per-packet one-way delay: 12.696 ms
Loss rate: 0.16%
```

Run 4: Report of Copa — Data Link

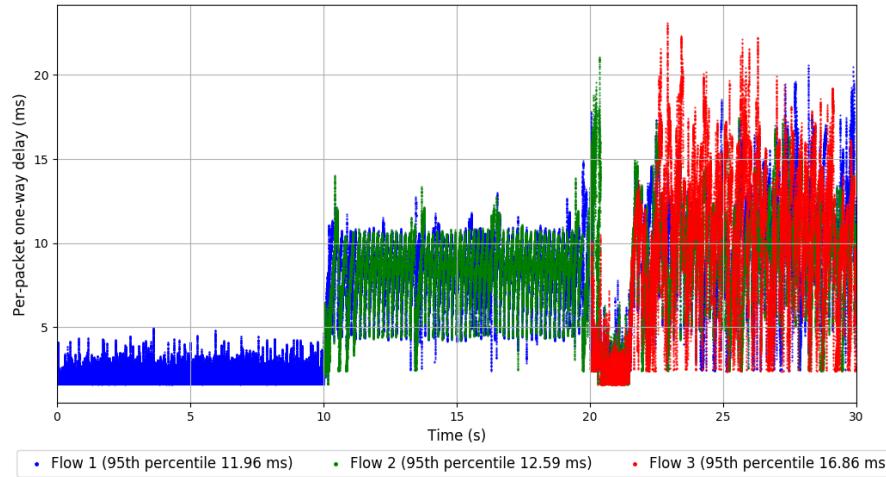
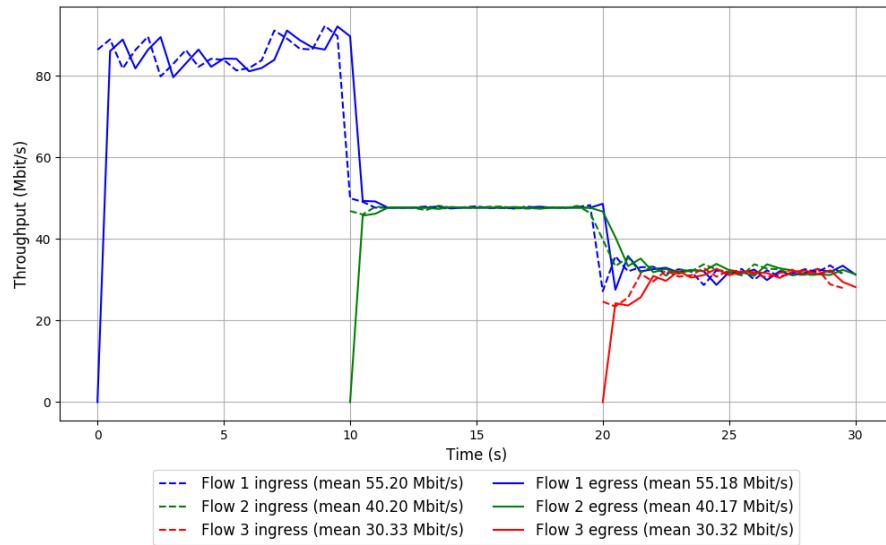


Run 5: Statistics of Copa

```
Start at: 2019-02-05 20:10:44
End at: 2019-02-05 20:11:14
Local clock offset: -4.081 ms
Remote clock offset: 1.562 ms

# Below is generated by plot.py at 2019-02-05 20:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.01 Mbit/s
95th percentile per-packet one-way delay: 13.425 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 55.18 Mbit/s
95th percentile per-packet one-way delay: 11.965 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 12.588 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 30.32 Mbit/s
95th percentile per-packet one-way delay: 16.862 ms
Loss rate: 0.05%
```

Run 5: Report of Copa — Data Link

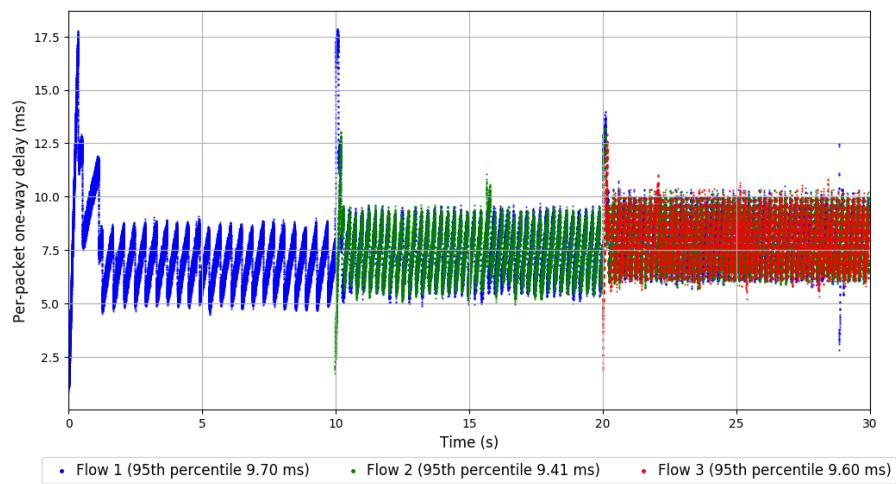
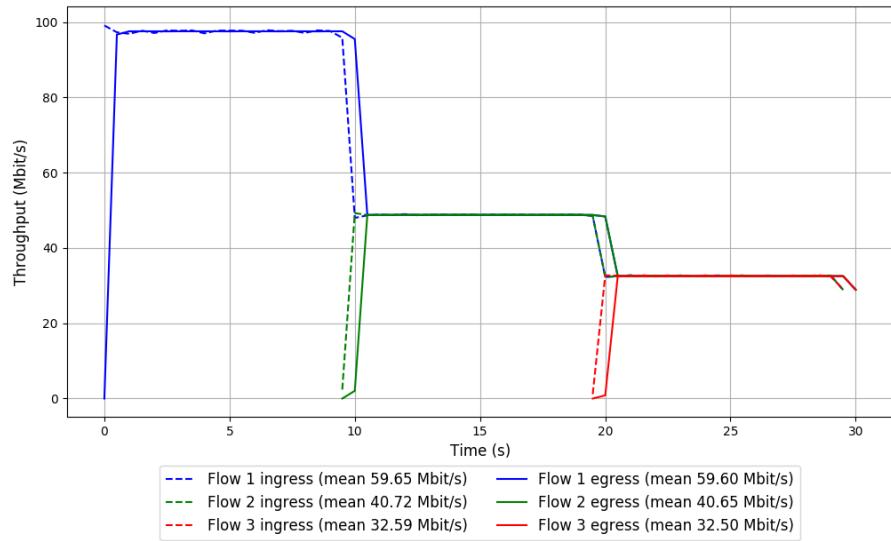


```
Run 1: Statistics of TCP Cubic

Start at: 2019-02-05 18:17:01
End at: 2019-02-05 18:17:31
Local clock offset: -5.881 ms
Remote clock offset: 0.453 ms

# Below is generated by plot.py at 2019-02-05 20:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 9.558 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 59.60 Mbit/s
95th percentile per-packet one-way delay: 9.695 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 9.406 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 9.601 ms
Loss rate: 0.28%
```

Run 1: Report of TCP Cubic — Data Link

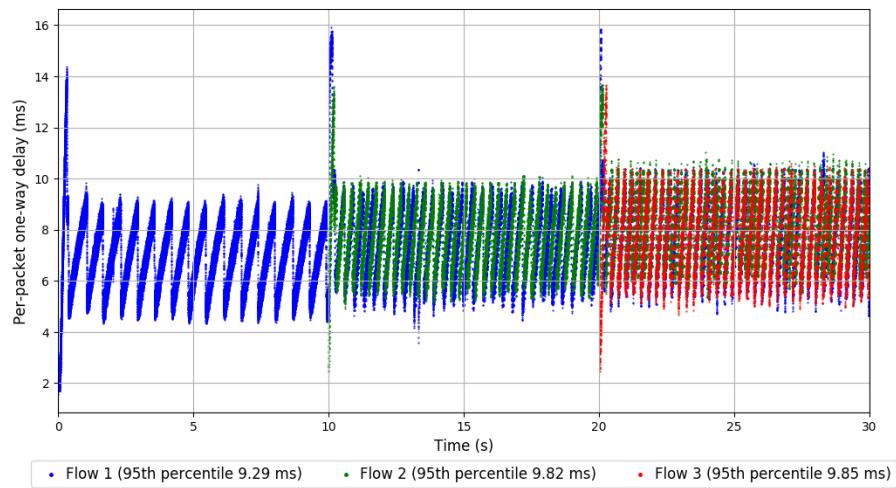
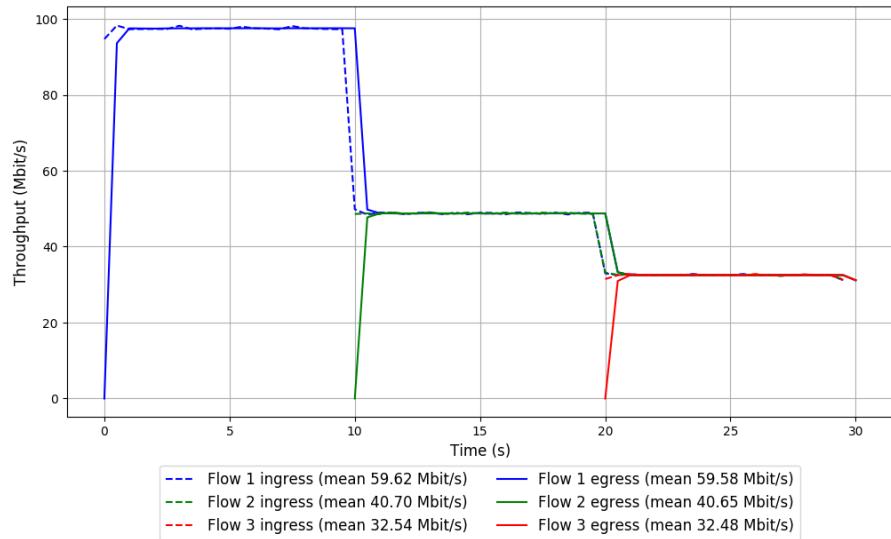


```
Run 2: Statistics of TCP Cubic
```

```
Start at: 2019-02-05 18:40:57
End at: 2019-02-05 18:41:27
Local clock offset: -5.745 ms
Remote clock offset: 1.275 ms

# Below is generated by plot.py at 2019-02-05 20:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 9.590 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.58 Mbit/s
95th percentile per-packet one-way delay: 9.286 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 9.821 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 9.849 ms
Loss rate: 0.21%
```

Run 2: Report of TCP Cubic — Data Link

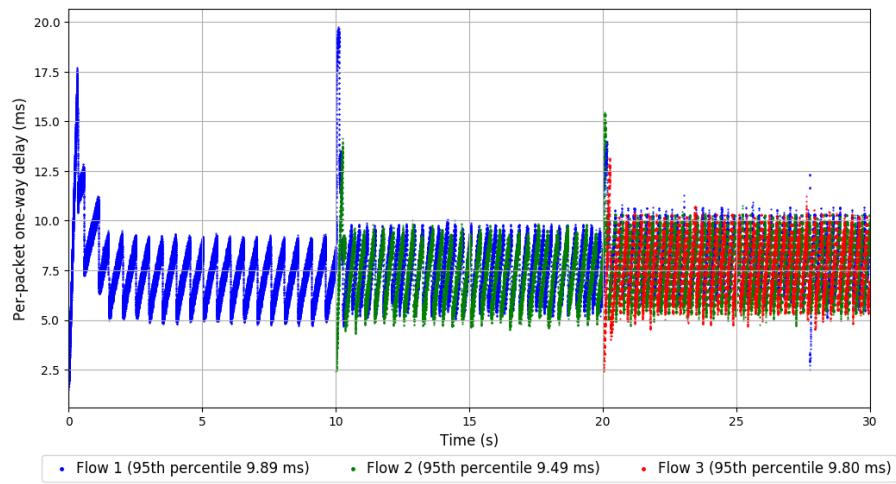
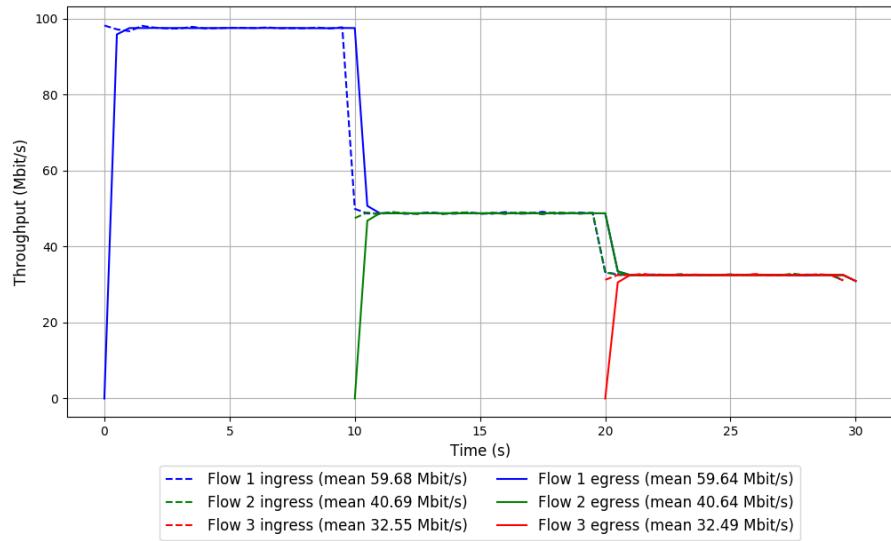


Run 3: Statistics of TCP Cubic

```
Start at: 2019-02-05 19:05:08
End at: 2019-02-05 19:05:38
Local clock offset: -4.507 ms
Remote clock offset: 1.756 ms

# Below is generated by plot.py at 2019-02-05 20:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 9.752 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 59.64 Mbit/s
95th percentile per-packet one-way delay: 9.895 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 9.487 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 9.801 ms
Loss rate: 0.24%
```

Run 3: Report of TCP Cubic — Data Link

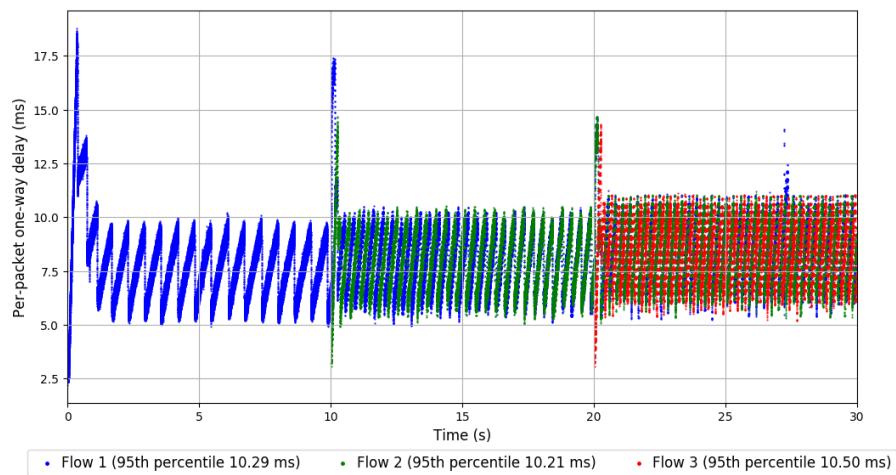
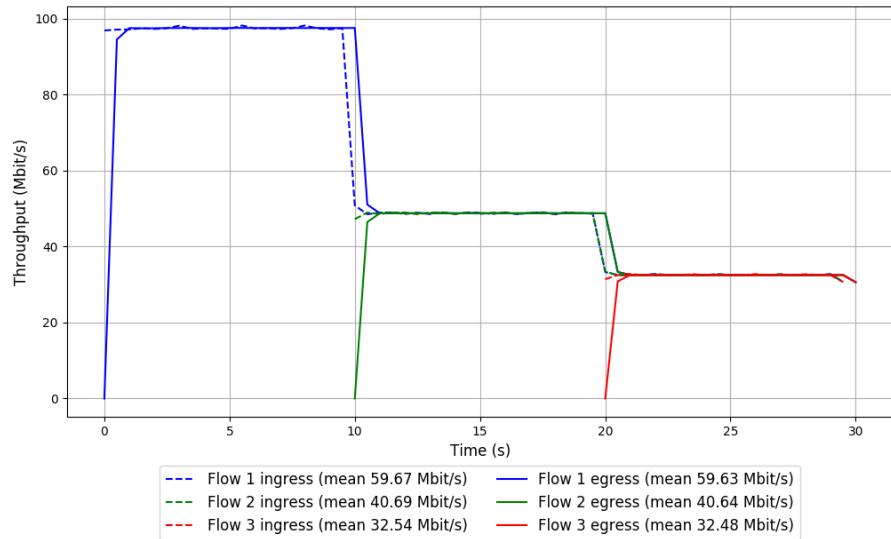


Run 4: Statistics of TCP Cubic

```
Start at: 2019-02-05 19:29:18
End at: 2019-02-05 19:29:48
Local clock offset: -3.246 ms
Remote clock offset: 1.991 ms

# Below is generated by plot.py at 2019-02-05 20:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 10.273 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.63 Mbit/s
95th percentile per-packet one-way delay: 10.290 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 10.207 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 10.498 ms
Loss rate: 0.22%
```

Run 4: Report of TCP Cubic — Data Link

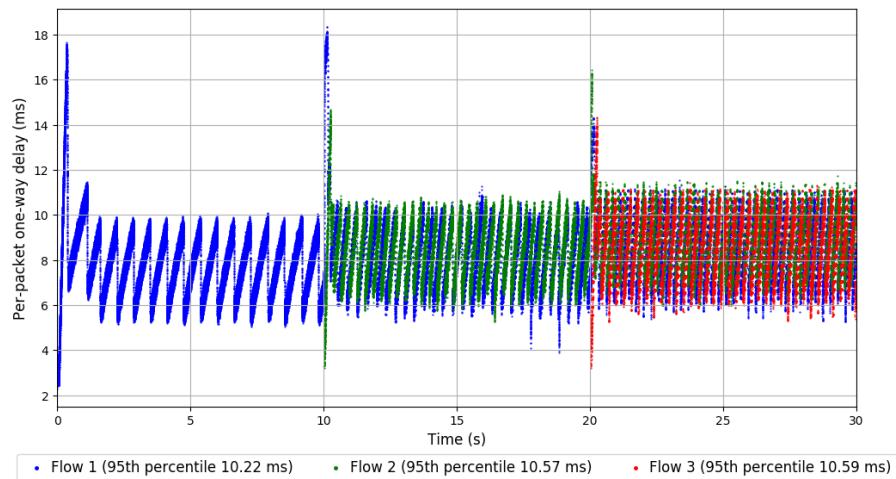
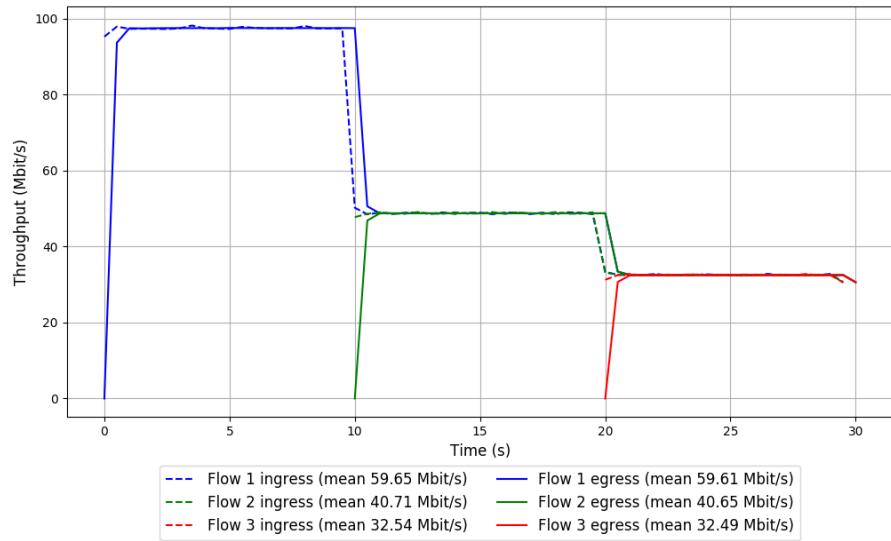


```
Run 5: Statistics of TCP Cubic
```

```
Start at: 2019-02-05 19:53:29
End at: 2019-02-05 19:53:59
Local clock offset: -3.208 ms
Remote clock offset: 1.705 ms

# Below is generated by plot.py at 2019-02-05 20:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 10.370 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 10.218 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 10.574 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 10.588 ms
Loss rate: 0.20%
```

Run 5: Report of TCP Cubic — Data Link

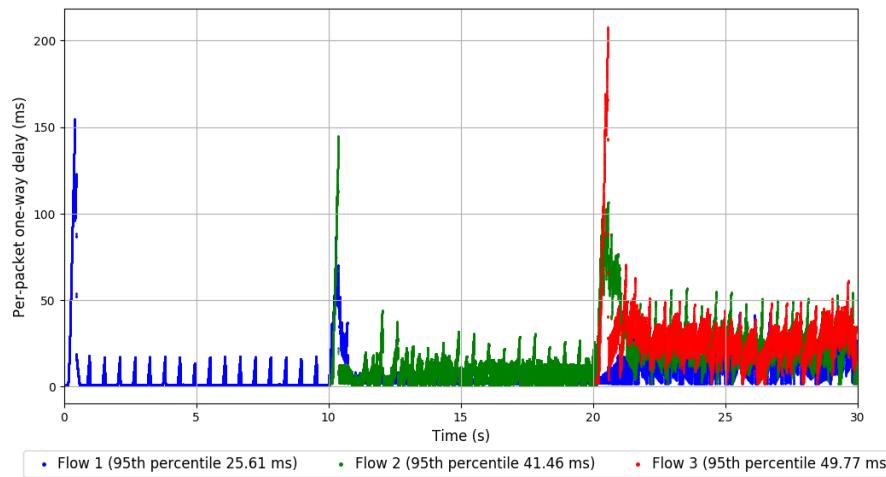
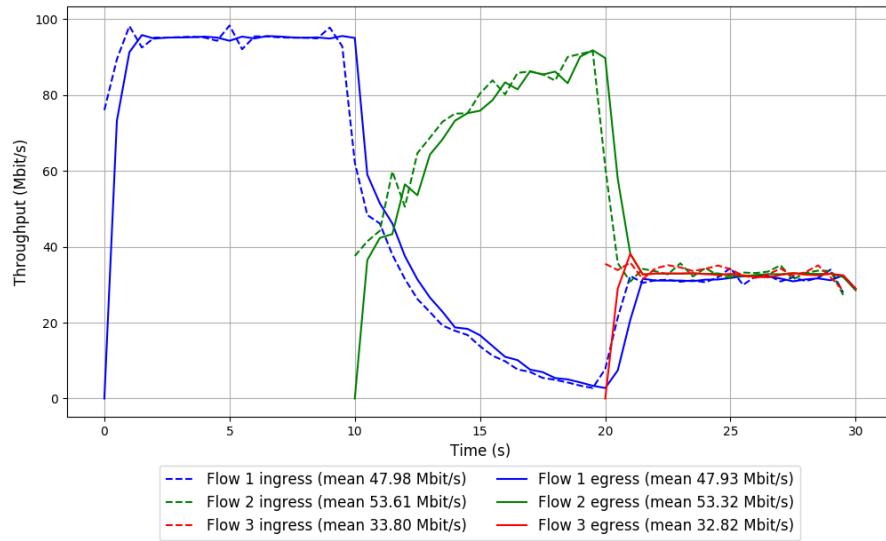


```
Run 1: Statistics of FillP

Start at: 2019-02-05 18:20:29
End at: 2019-02-05 18:20:59
Local clock offset: -5.606 ms
Remote clock offset: 0.625 ms

# Below is generated by plot.py at 2019-02-05 20:18:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.32 Mbit/s
95th percentile per-packet one-way delay: 39.448 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 47.93 Mbit/s
95th percentile per-packet one-way delay: 25.605 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 53.32 Mbit/s
95th percentile per-packet one-way delay: 41.458 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 32.82 Mbit/s
95th percentile per-packet one-way delay: 49.765 ms
Loss rate: 2.76%
```

Run 1: Report of FillP — Data Link

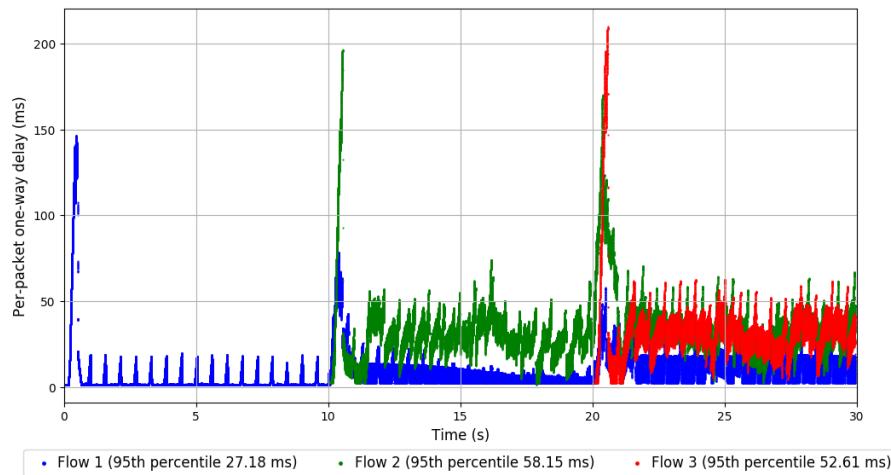
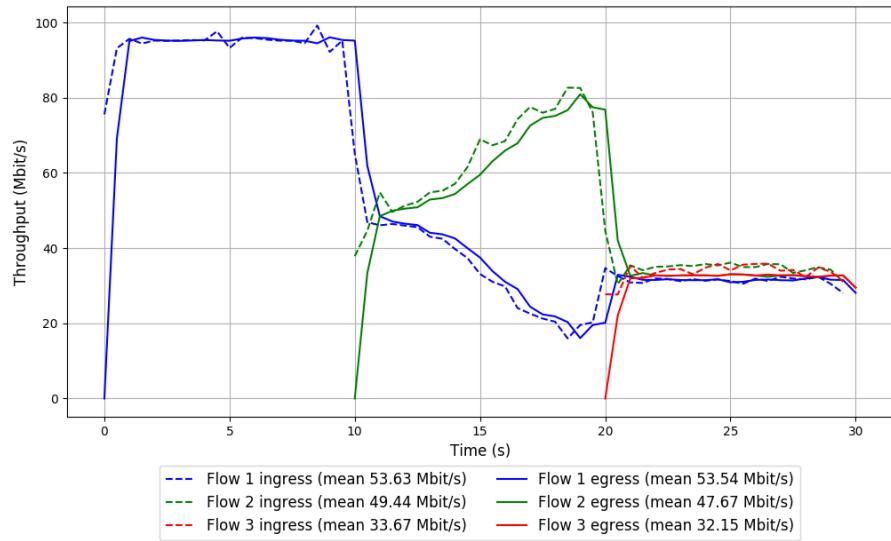


Run 2: Statistics of FillP

```
Start at: 2019-02-05 18:44:24
End at: 2019-02-05 18:44:54
Local clock offset: -5.709 ms
Remote clock offset: 1.438 ms

# Below is generated by plot.py at 2019-02-05 20:18:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.96 Mbit/s
95th percentile per-packet one-way delay: 48.368 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 53.54 Mbit/s
95th percentile per-packet one-way delay: 27.178 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 47.67 Mbit/s
95th percentile per-packet one-way delay: 58.151 ms
Loss rate: 3.54%
-- Flow 3:
Average throughput: 32.15 Mbit/s
95th percentile per-packet one-way delay: 52.608 ms
Loss rate: 4.54%
```

Run 2: Report of FillP — Data Link

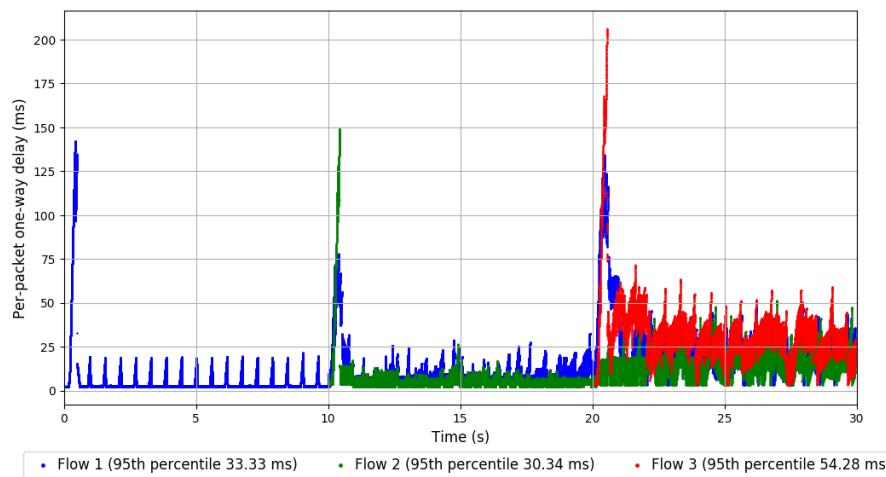
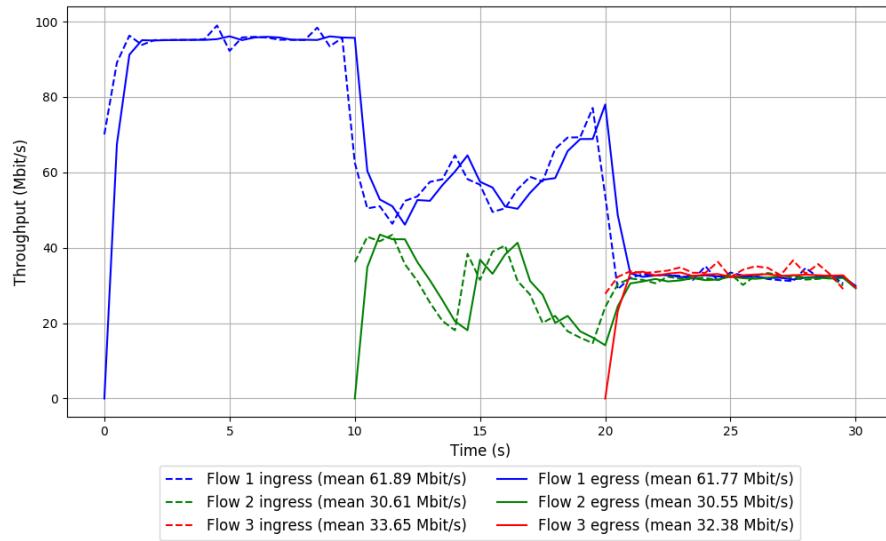


Run 3: Statistics of FillP

```
Start at: 2019-02-05 19:08:36
End at: 2019-02-05 19:09:06
Local clock offset: -3.703 ms
Remote clock offset: 1.773 ms

# Below is generated by plot.py at 2019-02-05 20:18:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.86 Mbit/s
95th percentile per-packet one-way delay: 41.711 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 61.77 Mbit/s
95th percentile per-packet one-way delay: 33.326 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 30.339 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 32.38 Mbit/s
95th percentile per-packet one-way delay: 54.280 ms
Loss rate: 3.68%
```

Run 3: Report of FillP — Data Link

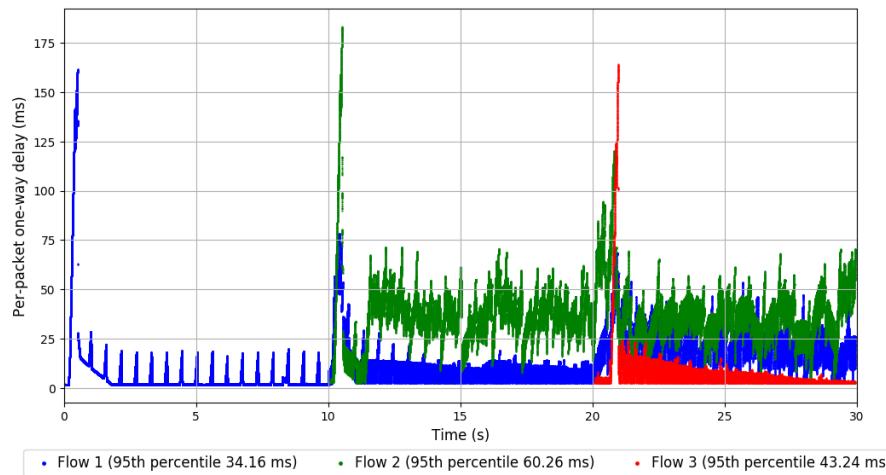
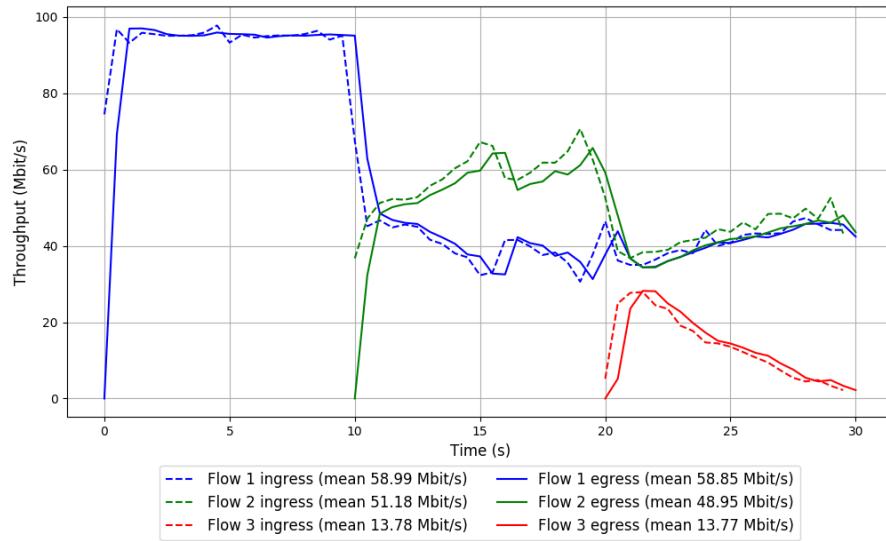


Run 4: Statistics of FillP

```
Start at: 2019-02-05 19:32:46
End at: 2019-02-05 19:33:16
Local clock offset: -3.937 ms
Remote clock offset: 1.823 ms

# Below is generated by plot.py at 2019-02-05 20:18:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.02 Mbit/s
95th percentile per-packet one-way delay: 53.327 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 58.85 Mbit/s
95th percentile per-packet one-way delay: 34.163 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 48.95 Mbit/s
95th percentile per-packet one-way delay: 60.261 ms
Loss rate: 4.31%
-- Flow 3:
Average throughput: 13.77 Mbit/s
95th percentile per-packet one-way delay: 43.236 ms
Loss rate: 0.06%
```

Run 4: Report of FillP — Data Link

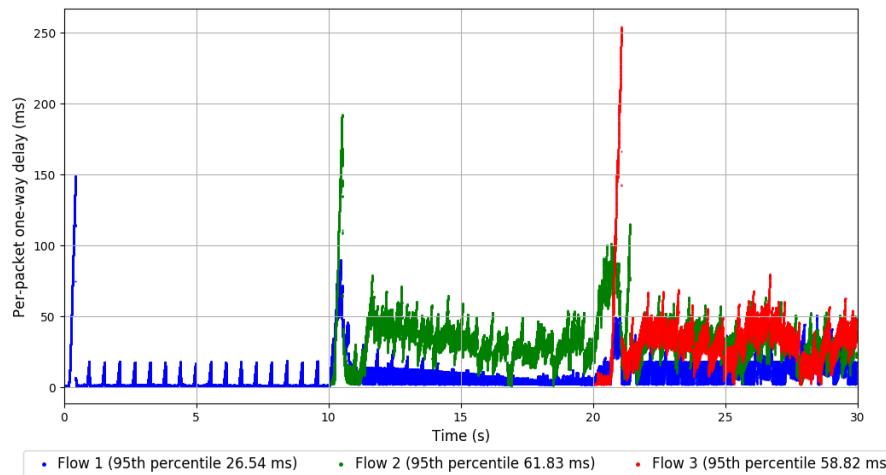
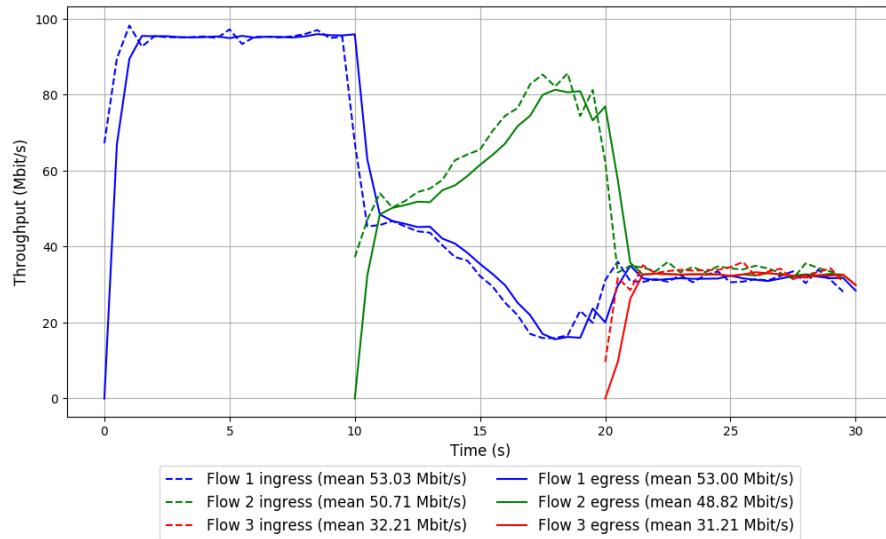


```
Run 5: Statistics of FillP

Start at: 2019-02-05 19:56:57
End at: 2019-02-05 19:57:27
Local clock offset: -4.007 ms
Remote clock offset: 1.733 ms

# Below is generated by plot.py at 2019-02-05 20:19:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 51.622 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 53.00 Mbit/s
95th percentile per-packet one-way delay: 26.543 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 48.82 Mbit/s
95th percentile per-packet one-way delay: 61.826 ms
Loss rate: 3.74%
-- Flow 3:
Average throughput: 31.21 Mbit/s
95th percentile per-packet one-way delay: 58.823 ms
Loss rate: 3.01%
```

Run 5: Report of FillP — Data Link

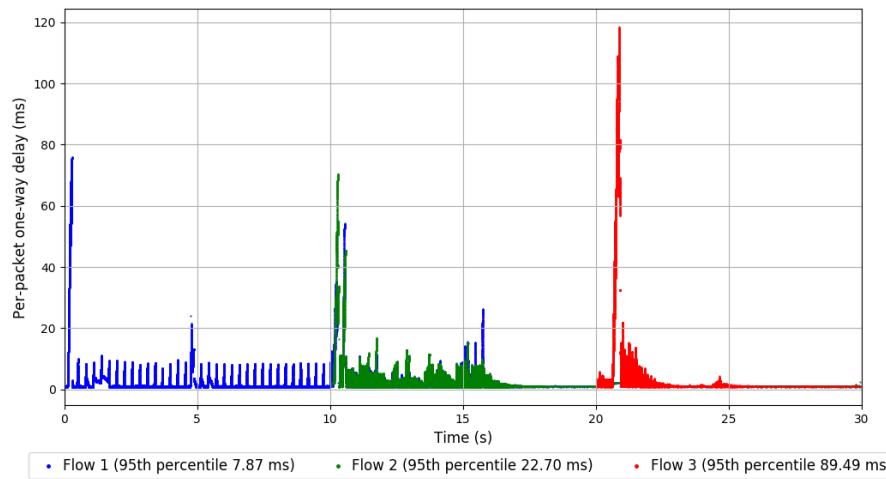
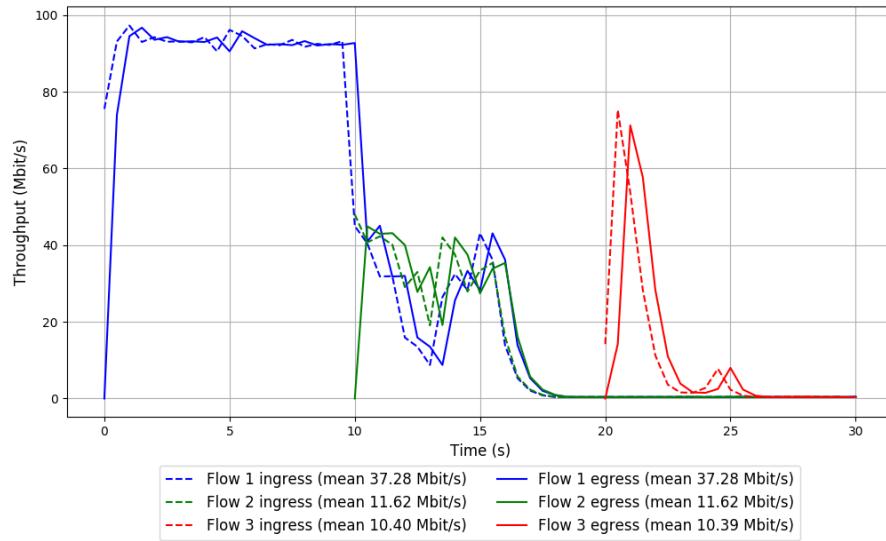


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-02-05 18:30:40
End at: 2019-02-05 18:31:10
Local clock offset: -5.246 ms
Remote clock offset: 0.954 ms

# Below is generated by plot.py at 2019-02-05 20:19:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.44 Mbit/s
95th percentile per-packet one-way delay: 12.580 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 37.28 Mbit/s
95th percentile per-packet one-way delay: 7.870 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 22.699 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 10.39 Mbit/s
95th percentile per-packet one-way delay: 89.488 ms
Loss rate: 0.03%
```

Run 1: Report of FillP-Sheep — Data Link

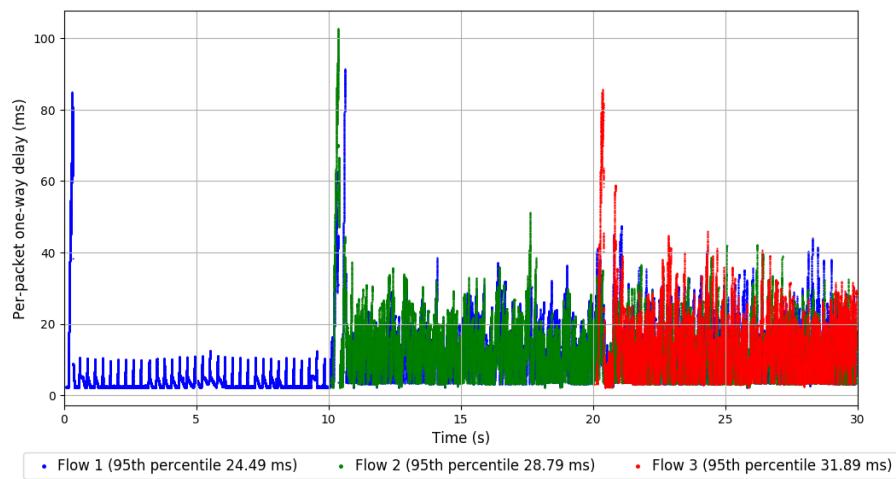
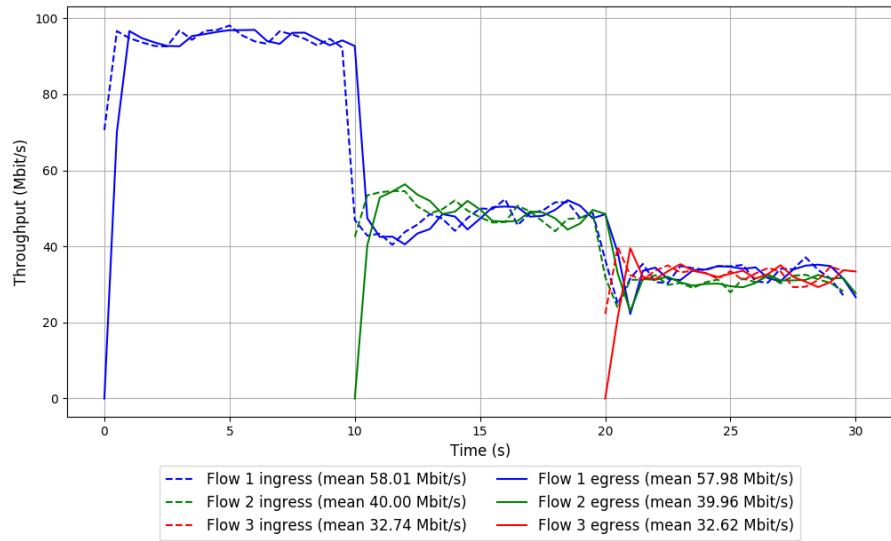


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-02-05 18:54:50
End at: 2019-02-05 18:55:20
Local clock offset: -4.224 ms
Remote clock offset: 1.512 ms

# Below is generated by plot.py at 2019-02-05 20:19:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 27.087 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 57.98 Mbit/s
95th percentile per-packet one-way delay: 24.488 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 39.96 Mbit/s
95th percentile per-packet one-way delay: 28.786 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 32.62 Mbit/s
95th percentile per-packet one-way delay: 31.890 ms
Loss rate: 0.28%
```

Run 2: Report of FillP-Sheep — Data Link

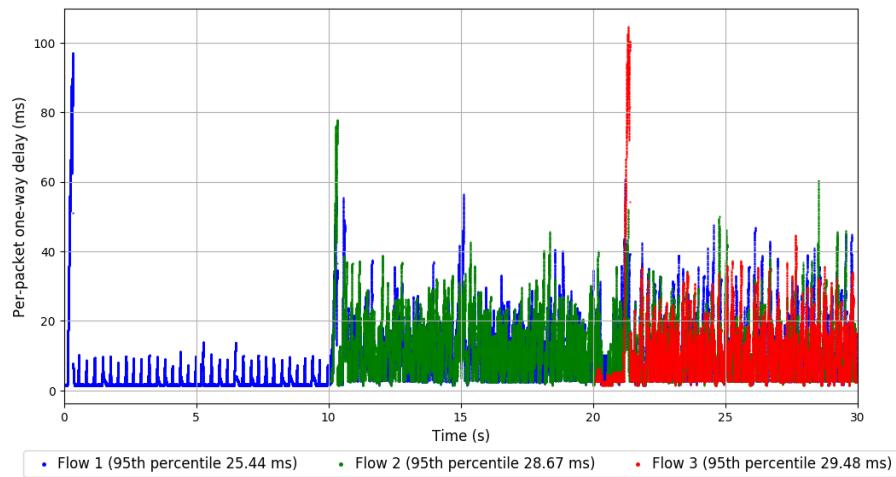
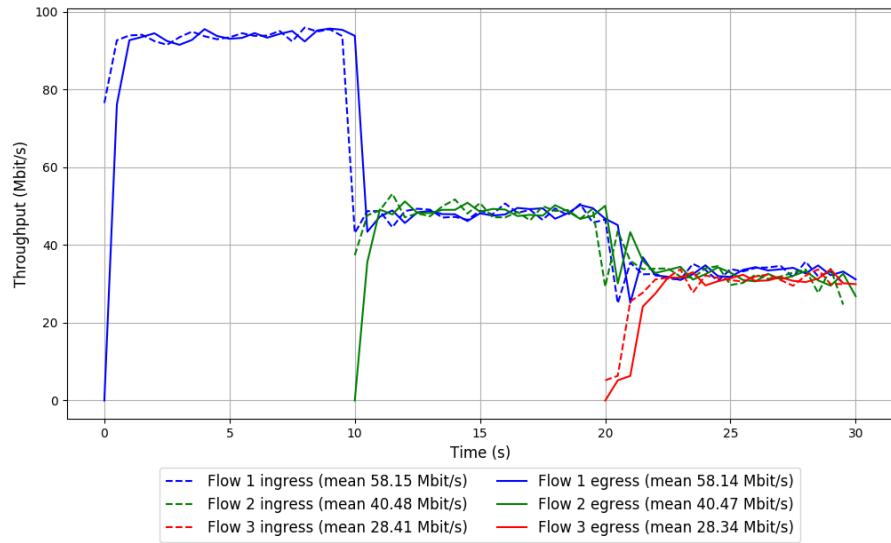


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-02-05 19:18:59
End at: 2019-02-05 19:19:29
Local clock offset: -4.241 ms
Remote clock offset: 1.98 ms

# Below is generated by plot.py at 2019-02-05 20:19:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 27.099 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 58.14 Mbit/s
95th percentile per-packet one-way delay: 25.442 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.47 Mbit/s
95th percentile per-packet one-way delay: 28.668 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 28.34 Mbit/s
95th percentile per-packet one-way delay: 29.482 ms
Loss rate: 0.28%
```

Run 3: Report of FillP-Sheep — Data Link

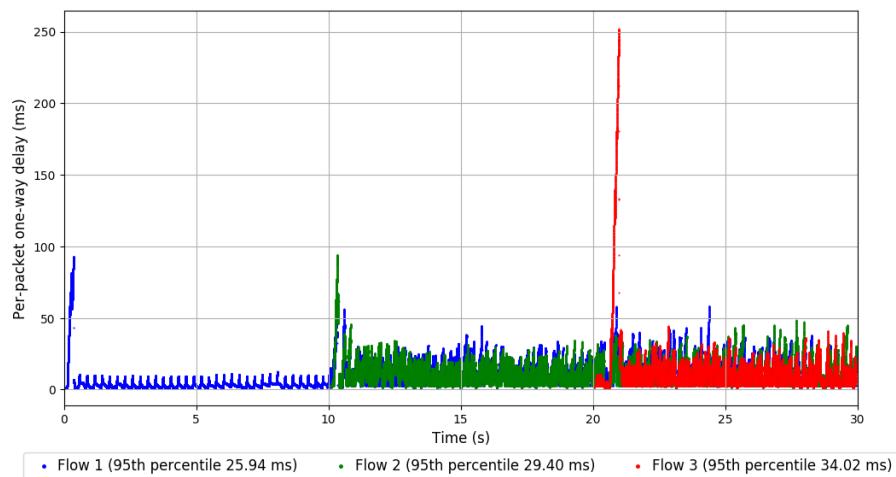
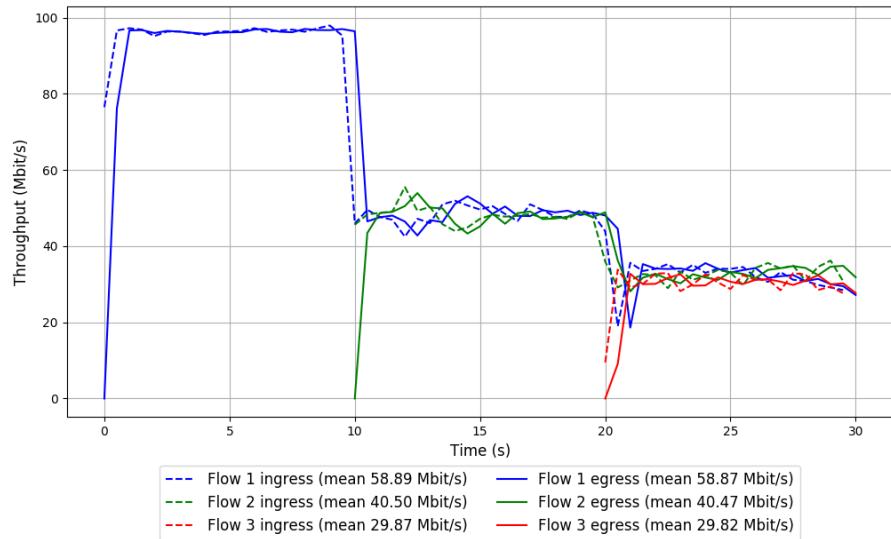


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-02-05 19:43:11
End at: 2019-02-05 19:43:41
Local clock offset: -3.757 ms
Remote clock offset: 1.863 ms

# Below is generated by plot.py at 2019-02-05 20:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.70 Mbit/s
95th percentile per-packet one-way delay: 27.746 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 58.87 Mbit/s
95th percentile per-packet one-way delay: 25.938 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 40.47 Mbit/s
95th percentile per-packet one-way delay: 29.398 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 29.82 Mbit/s
95th percentile per-packet one-way delay: 34.022 ms
Loss rate: 0.03%
```

Run 4: Report of FillP-Sheep — Data Link

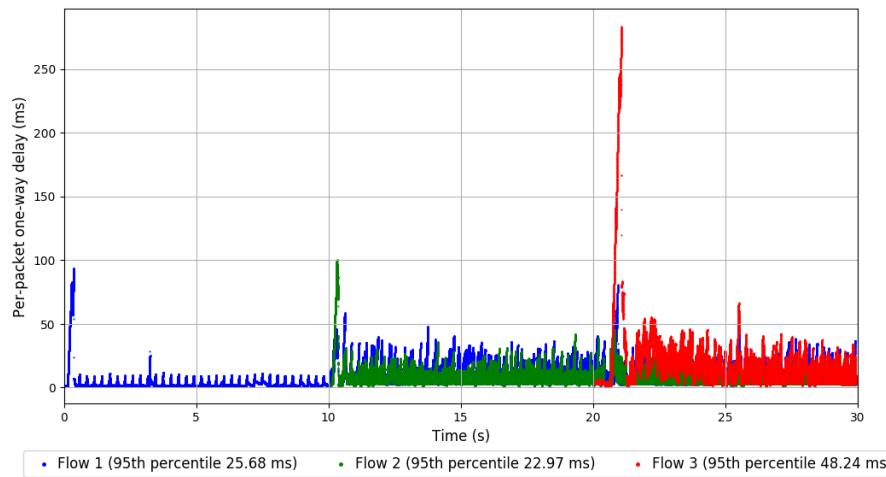
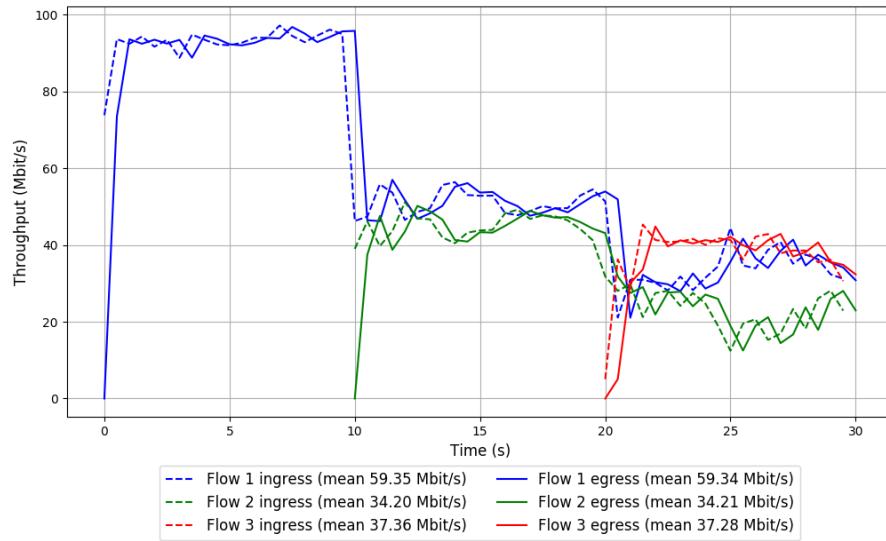


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-02-05 20:07:21
End at: 2019-02-05 20:07:51
Local clock offset: -4.015 ms
Remote clock offset: 1.627 ms

# Below is generated by plot.py at 2019-02-05 20:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.43 Mbit/s
95th percentile per-packet one-way delay: 29.691 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 59.34 Mbit/s
95th percentile per-packet one-way delay: 25.678 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 34.21 Mbit/s
95th percentile per-packet one-way delay: 22.973 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 37.28 Mbit/s
95th percentile per-packet one-way delay: 48.245 ms
Loss rate: 0.14%
```

Run 5: Report of FillP-Sheep — Data Link

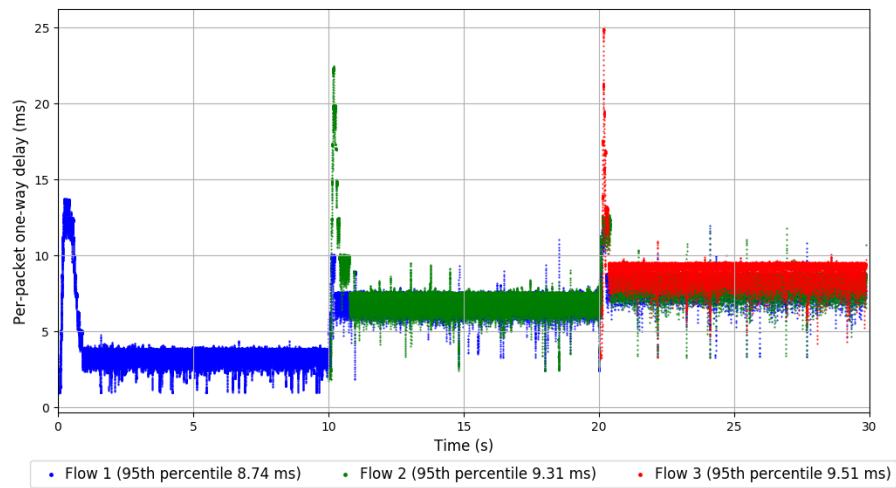
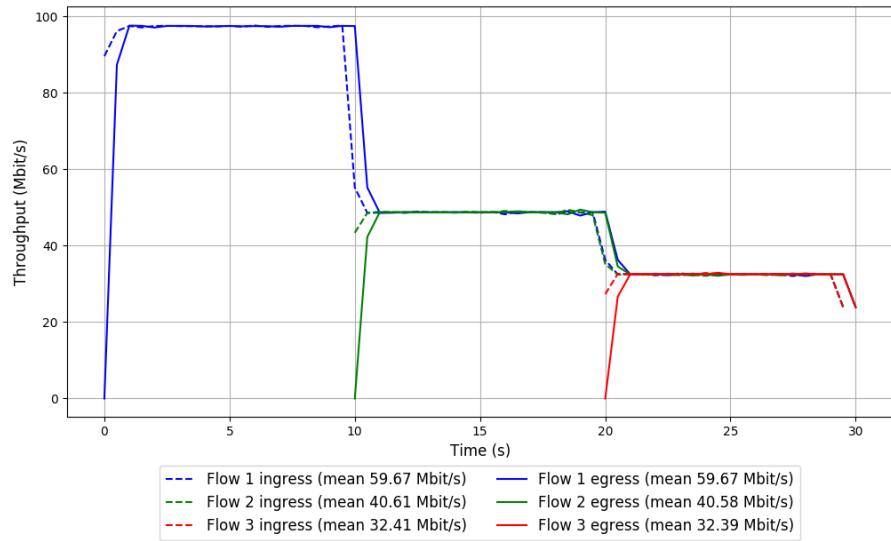


Run 1: Statistics of Indigo

```
Start at: 2019-02-05 18:35:13
End at: 2019-02-05 18:35:43
Local clock offset: -5.104 ms
Remote clock offset: 1.079 ms

# Below is generated by plot.py at 2019-02-05 20:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.31 Mbit/s
95th percentile per-packet one-way delay: 9.445 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 59.67 Mbit/s
95th percentile per-packet one-way delay: 8.737 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.58 Mbit/s
95th percentile per-packet one-way delay: 9.312 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 9.506 ms
Loss rate: 0.11%
```

Run 1: Report of Indigo — Data Link

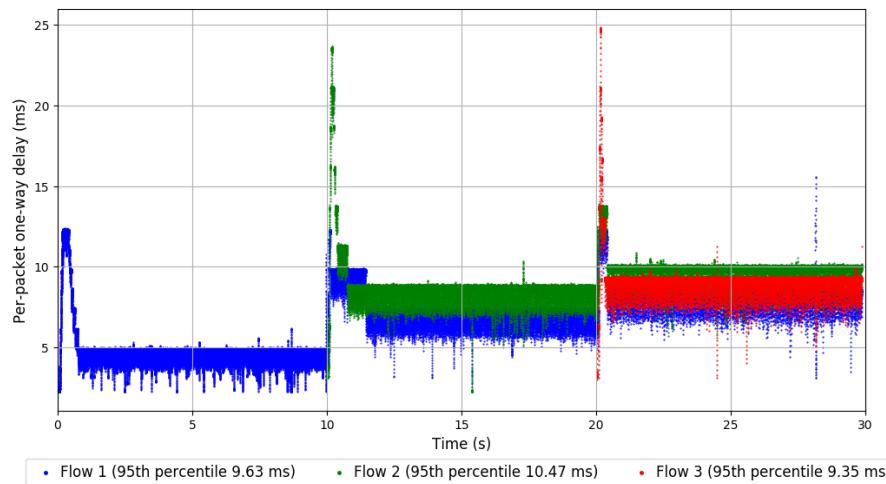
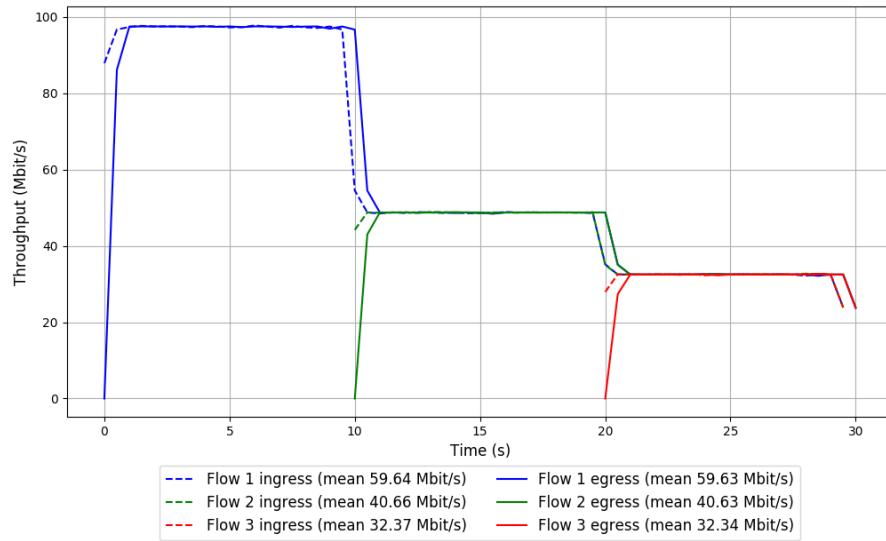


Run 2: Statistics of Indigo

```
Start at: 2019-02-05 18:59:25
End at: 2019-02-05 18:59:55
Local clock offset: -4.01 ms
Remote clock offset: 1.711 ms

# Below is generated by plot.py at 2019-02-05 20:19:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 10.017 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 59.63 Mbit/s
95th percentile per-packet one-way delay: 9.633 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 10.467 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 9.348 ms
Loss rate: 0.11%
```

Run 2: Report of Indigo — Data Link

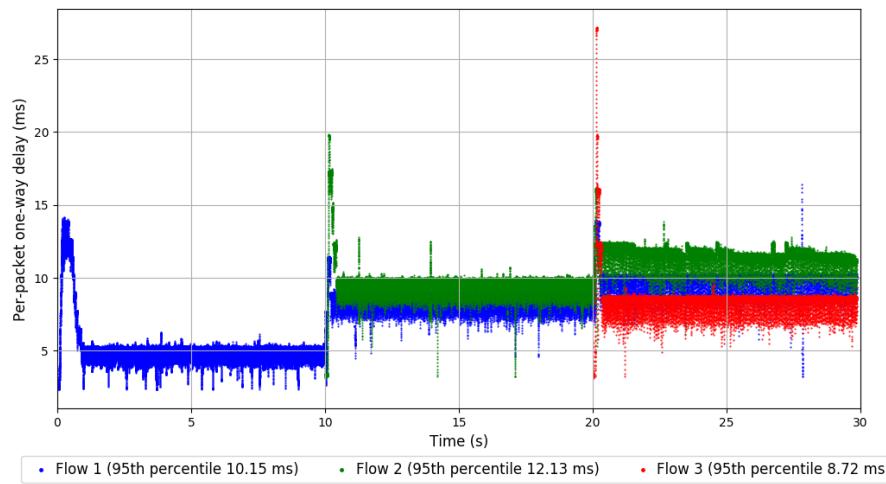
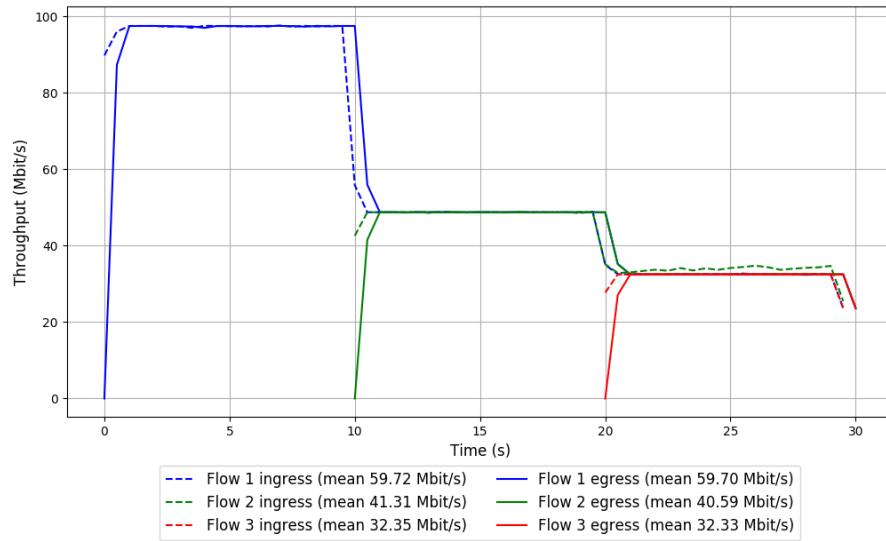


Run 3: Statistics of Indigo

```
Start at: 2019-02-05 19:23:34
End at: 2019-02-05 19:24:04
Local clock offset: -3.326 ms
Remote clock offset: 2.0 ms

# Below is generated by plot.py at 2019-02-05 20:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.34 Mbit/s
95th percentile per-packet one-way delay: 11.747 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 59.70 Mbit/s
95th percentile per-packet one-way delay: 10.147 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.59 Mbit/s
95th percentile per-packet one-way delay: 12.128 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 8.720 ms
Loss rate: 0.10%
```

Run 3: Report of Indigo — Data Link

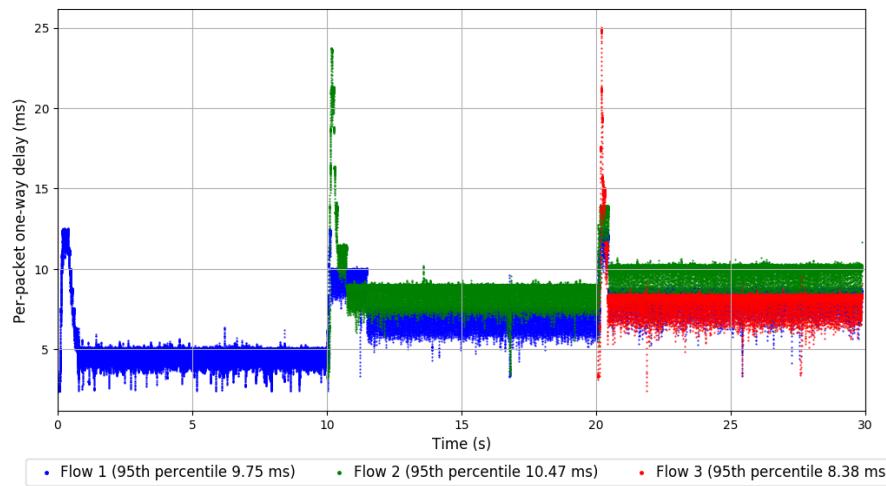
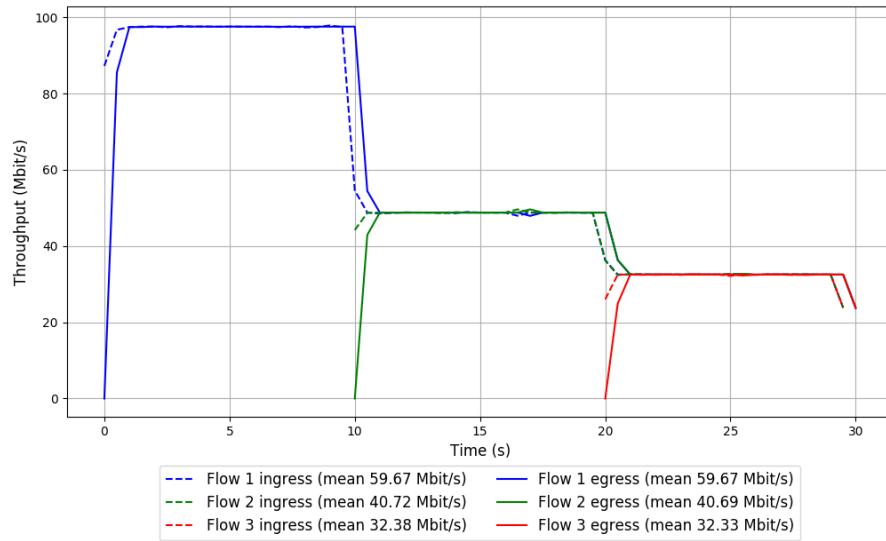


Run 4: Statistics of Indigo

```
Start at: 2019-02-05 19:47:46
End at: 2019-02-05 19:48:16
Local clock offset: -3.024 ms
Remote clock offset: 1.822 ms

# Below is generated by plot.py at 2019-02-05 20:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.32 Mbit/s
95th percentile per-packet one-way delay: 10.153 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 59.67 Mbit/s
95th percentile per-packet one-way delay: 9.751 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.69 Mbit/s
95th percentile per-packet one-way delay: 10.469 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 8.385 ms
Loss rate: 0.18%
```

Run 4: Report of Indigo — Data Link

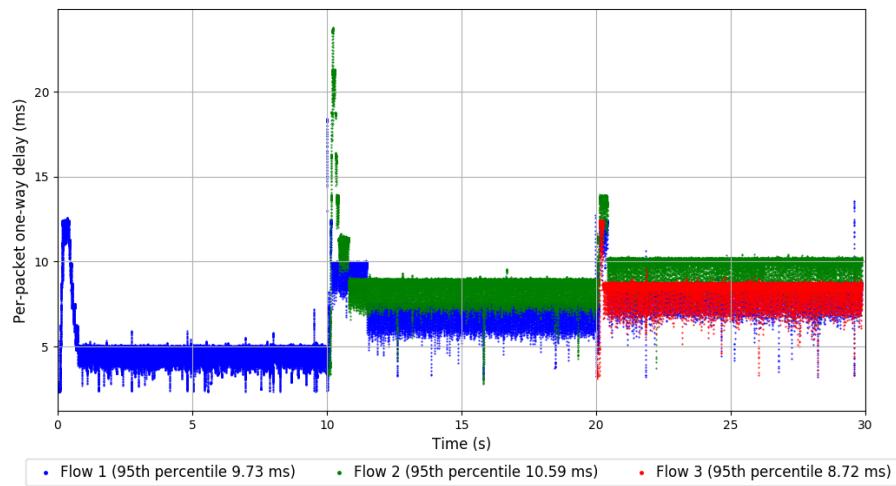
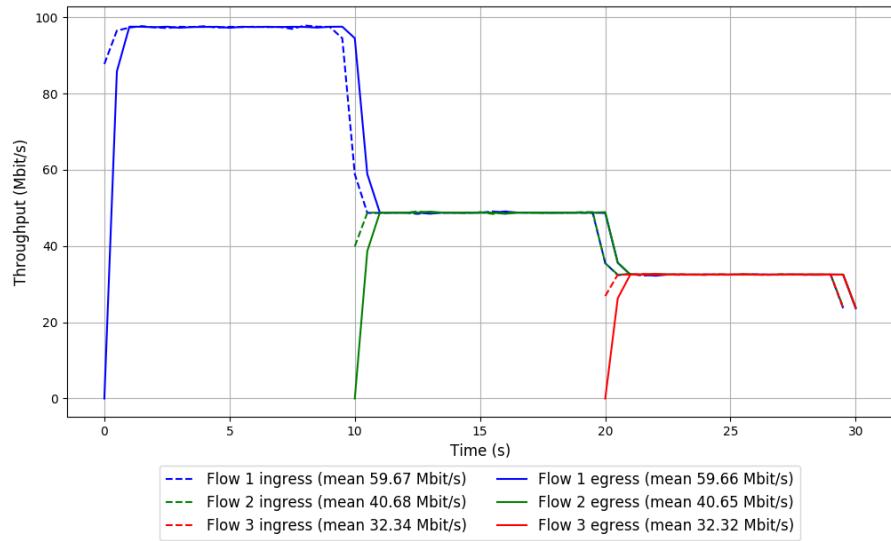


Run 5: Statistics of Indigo

```
Start at: 2019-02-05 20:11:56
End at: 2019-02-05 20:12:26
Local clock offset: -3.244 ms
Remote clock offset: 1.63 ms

# Below is generated by plot.py at 2019-02-05 20:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.26 Mbit/s
95th percentile per-packet one-way delay: 10.122 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 59.66 Mbit/s
95th percentile per-packet one-way delay: 9.734 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 10.593 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 8.720 ms
Loss rate: 0.08%
```

Run 5: Report of Indigo — Data Link

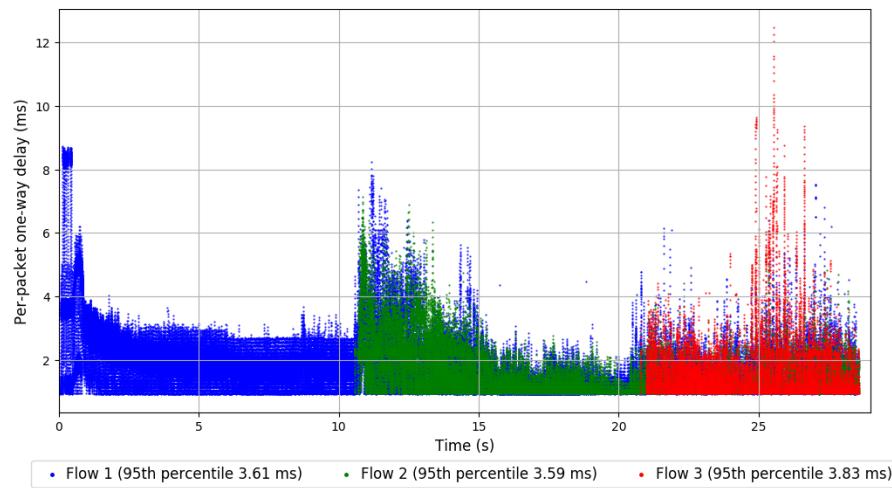
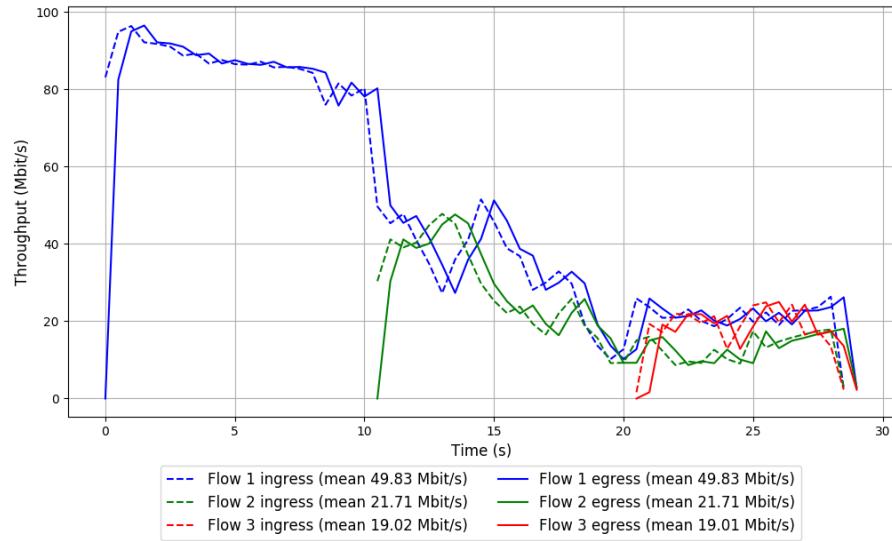


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-02-05 18:26:08
End at: 2019-02-05 18:26:38
Local clock offset: -5.316 ms
Remote clock offset: 0.786 ms

# Below is generated by plot.py at 2019-02-05 20:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.69 Mbit/s
95th percentile per-packet one-way delay: 3.619 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.83 Mbit/s
95th percentile per-packet one-way delay: 3.613 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.71 Mbit/s
95th percentile per-packet one-way delay: 3.593 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.01 Mbit/s
95th percentile per-packet one-way delay: 3.828 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo-MusesC3 — Data Link

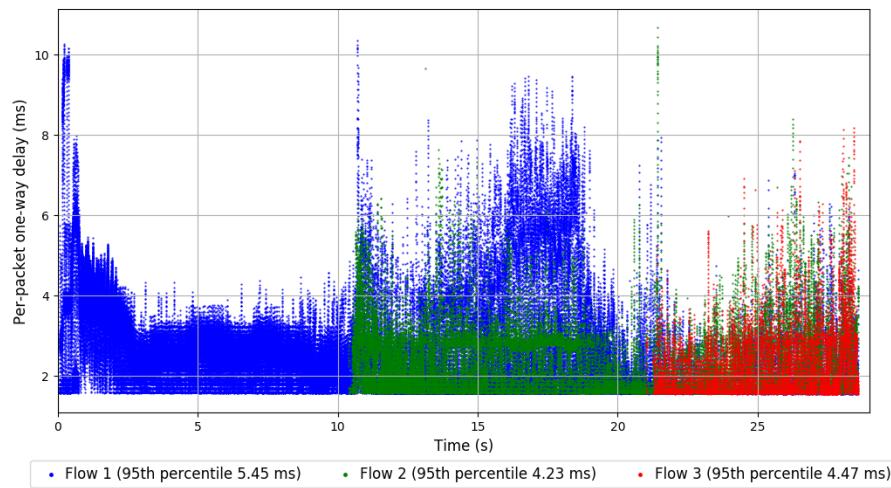
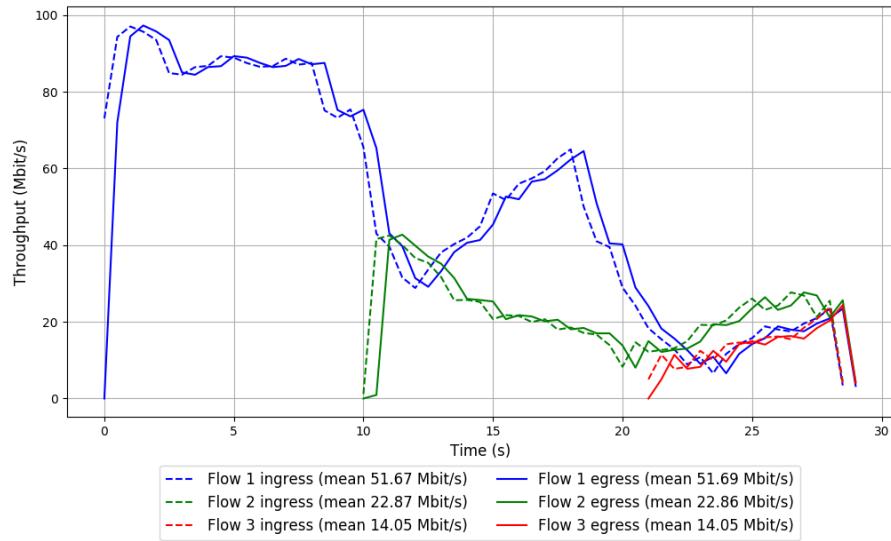


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 18:50:12
End at: 2019-02-05 18:50:42
Local clock offset: -5.259 ms
Remote clock offset: 1.501 ms

# Below is generated by plot.py at 2019-02-05 20:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.95 Mbit/s
95th percentile per-packet one-way delay: 5.159 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.69 Mbit/s
95th percentile per-packet one-way delay: 5.448 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 22.86 Mbit/s
95th percentile per-packet one-way delay: 4.232 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.05 Mbit/s
95th percentile per-packet one-way delay: 4.469 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

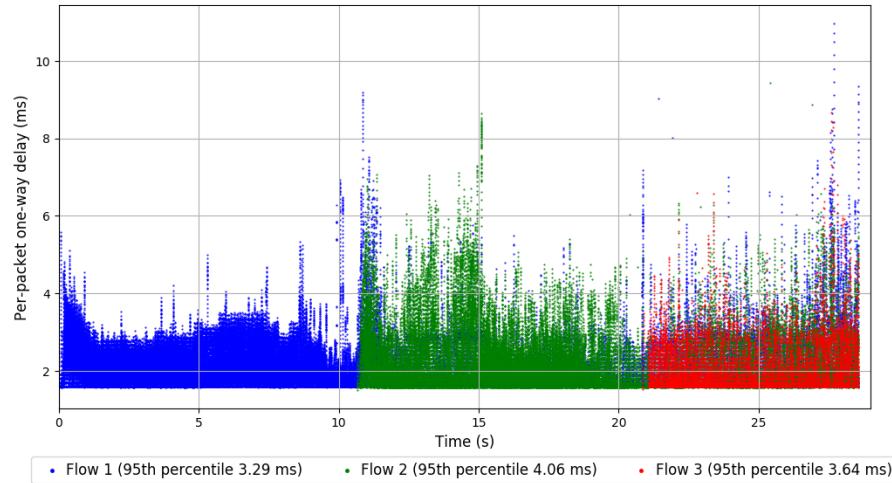
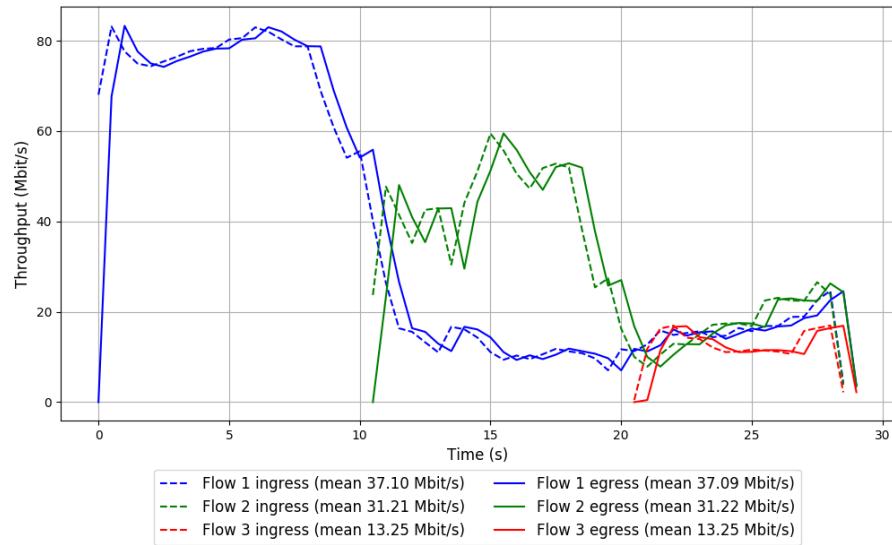


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 19:14:22
End at: 2019-02-05 19:14:52
Local clock offset: -4.353 ms
Remote clock offset: 1.905 ms

# Below is generated by plot.py at 2019-02-05 20:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.23 Mbit/s
95th percentile per-packet one-way delay: 3.616 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 37.09 Mbit/s
95th percentile per-packet one-way delay: 3.287 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 4.056 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 13.25 Mbit/s
95th percentile per-packet one-way delay: 3.644 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

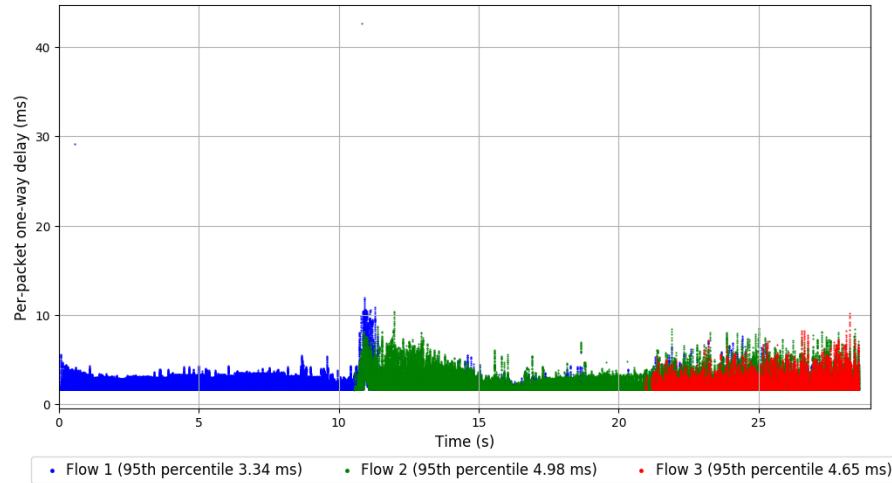
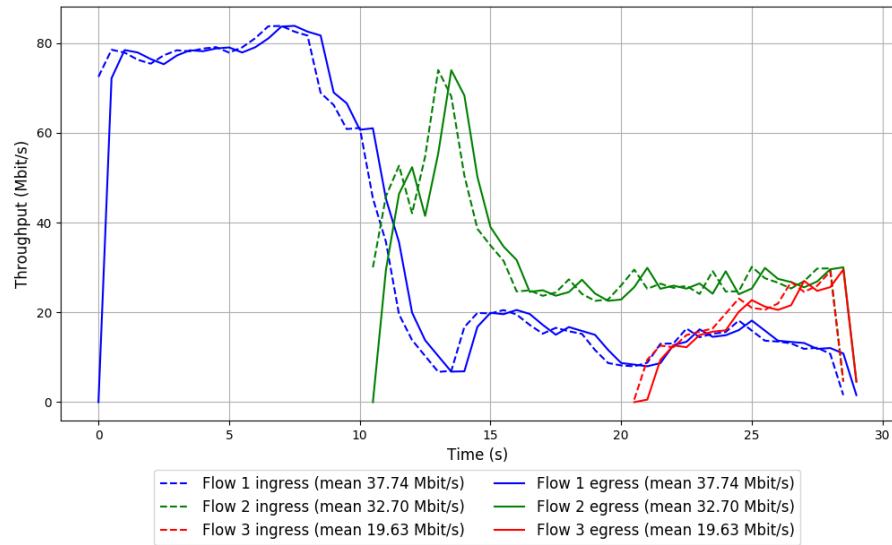


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 19:38:34
End at: 2019-02-05 19:39:04
Local clock offset: -3.851 ms
Remote clock offset: 1.79 ms

# Below is generated by plot.py at 2019-02-05 20:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.60 Mbit/s
95th percentile per-packet one-way delay: 4.209 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 37.74 Mbit/s
95th percentile per-packet one-way delay: 3.338 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.70 Mbit/s
95th percentile per-packet one-way delay: 4.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.63 Mbit/s
95th percentile per-packet one-way delay: 4.648 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

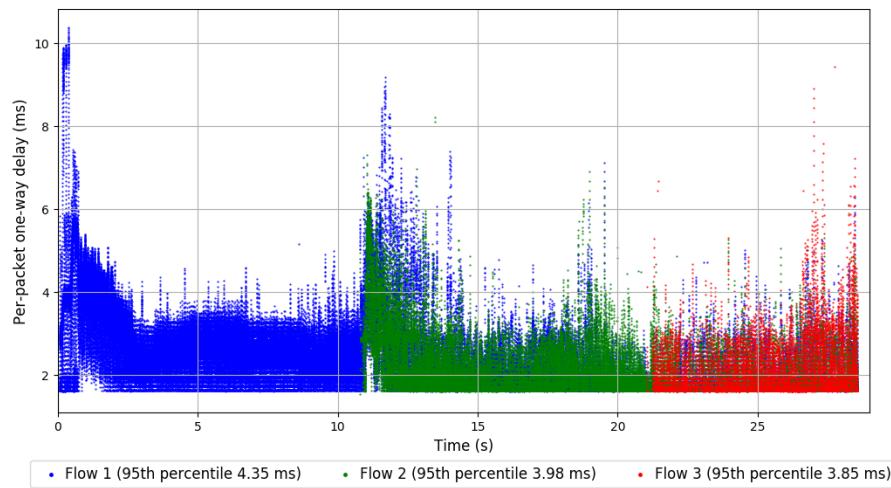
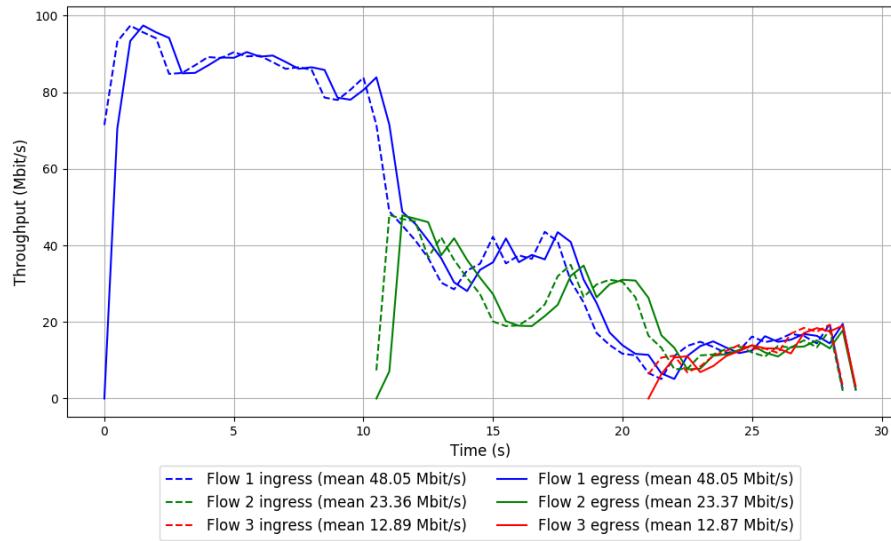


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-02-05 20:02:44
End at: 2019-02-05 20:03:14
Local clock offset: -4.105 ms
Remote clock offset: 1.583 ms

# Below is generated by plot.py at 2019-02-05 20:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.98 Mbit/s
95th percentile per-packet one-way delay: 4.271 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 48.05 Mbit/s
95th percentile per-packet one-way delay: 4.347 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.37 Mbit/s
95th percentile per-packet one-way delay: 3.980 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 12.87 Mbit/s
95th percentile per-packet one-way delay: 3.855 ms
Loss rate: 0.18%
```

Run 5: Report of Indigo-MusesC3 — Data Link

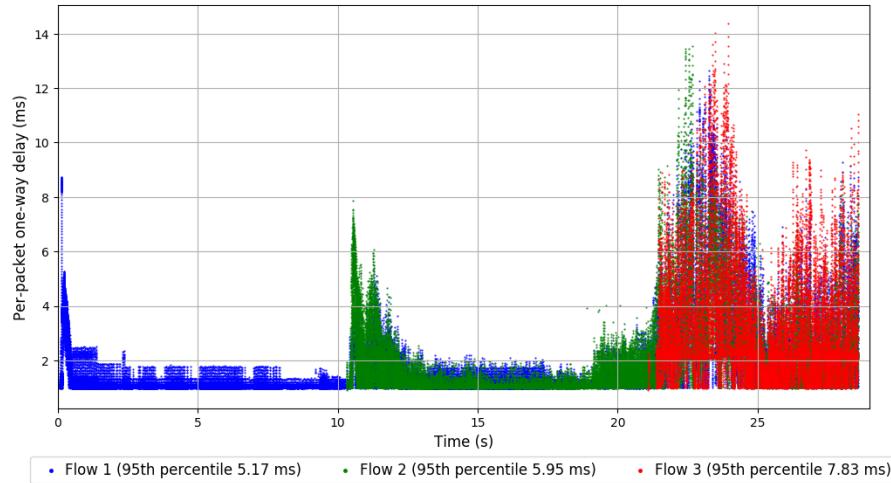
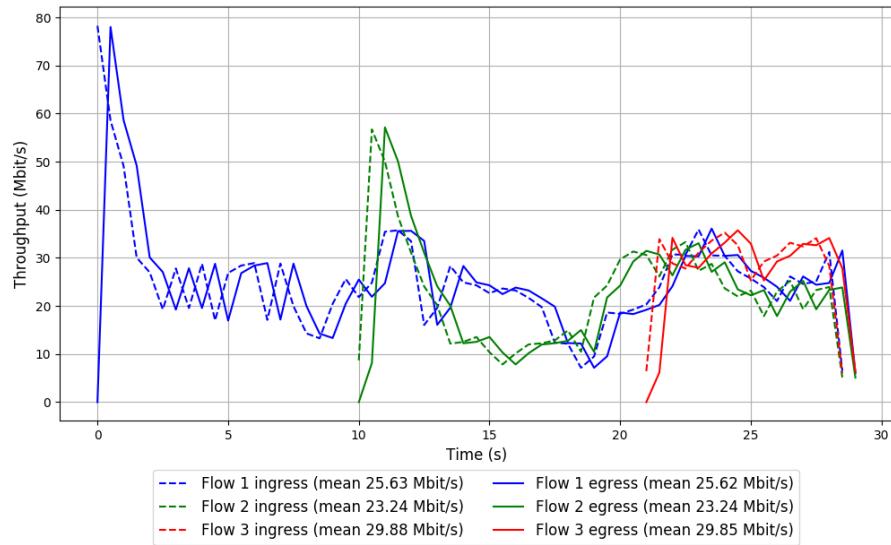


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 18:23:55
End at: 2019-02-05 18:24:25
Local clock offset: -5.443 ms
Remote clock offset: 0.627 ms

# Below is generated by plot.py at 2019-02-05 20:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.31 Mbit/s
95th percentile per-packet one-way delay: 6.157 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 25.62 Mbit/s
95th percentile per-packet one-way delay: 5.167 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 23.24 Mbit/s
95th percentile per-packet one-way delay: 5.954 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 29.85 Mbit/s
95th percentile per-packet one-way delay: 7.832 ms
Loss rate: 0.05%
```

Run 1: Report of Indigo-MusesC5 — Data Link

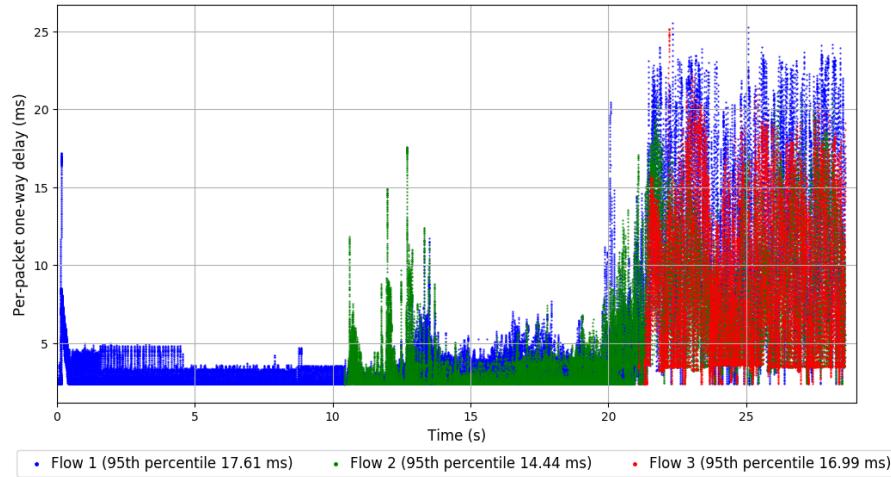
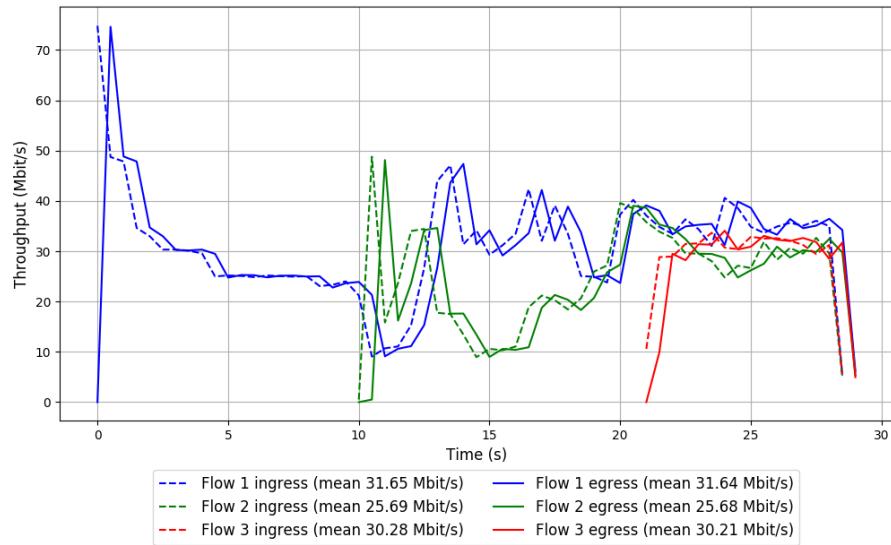


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 18:47:52
End at: 2019-02-05 18:48:22
Local clock offset: -4.711 ms
Remote clock offset: 1.398 ms

# Below is generated by plot.py at 2019-02-05 20:20:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.88 Mbit/s
95th percentile per-packet one-way delay: 16.522 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 17.608 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 25.68 Mbit/s
95th percentile per-packet one-way delay: 14.441 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 16.987 ms
Loss rate: 0.24%
```

Run 2: Report of Indigo-MusesC5 — Data Link

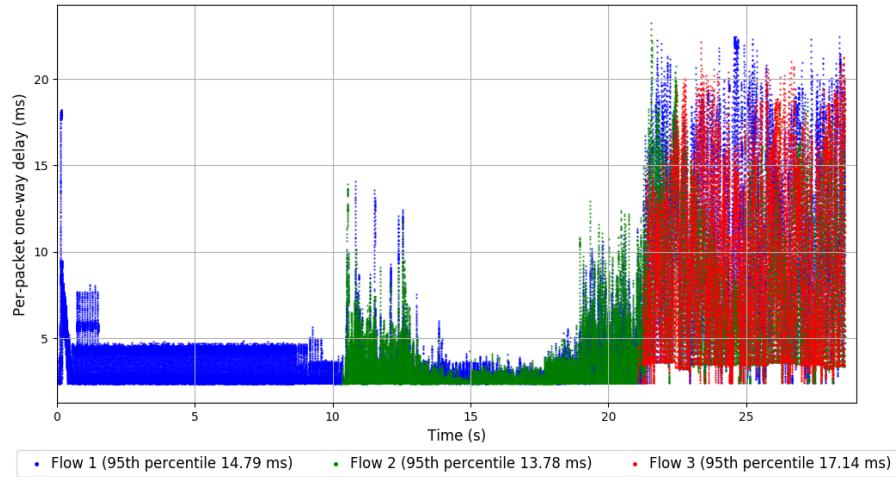
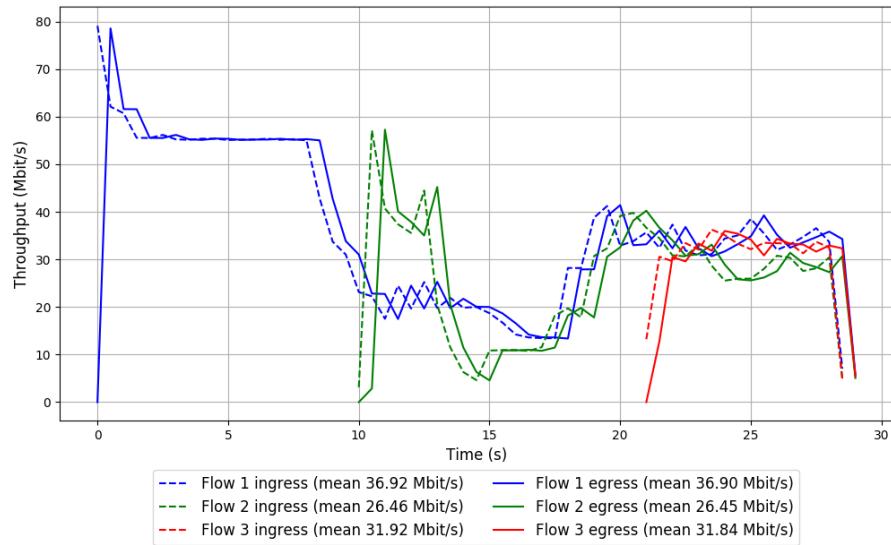


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 19:12:01
End at: 2019-02-05 19:12:31
Local clock offset: -3.555 ms
Remote clock offset: 1.921 ms

# Below is generated by plot.py at 2019-02-05 20:20:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.13 Mbit/s
95th percentile per-packet one-way delay: 15.194 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 36.90 Mbit/s
95th percentile per-packet one-way delay: 14.792 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 26.45 Mbit/s
95th percentile per-packet one-way delay: 13.780 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 17.145 ms
Loss rate: 0.18%
```

Run 3: Report of Indigo-MusesC5 — Data Link

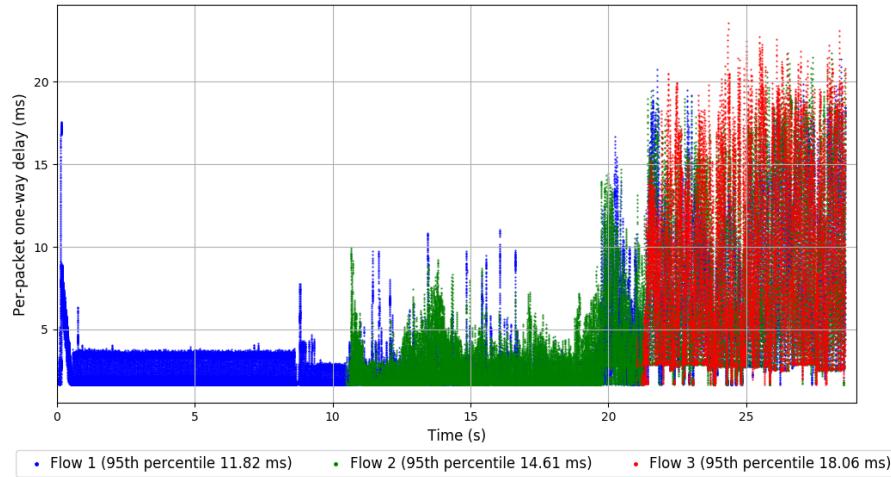
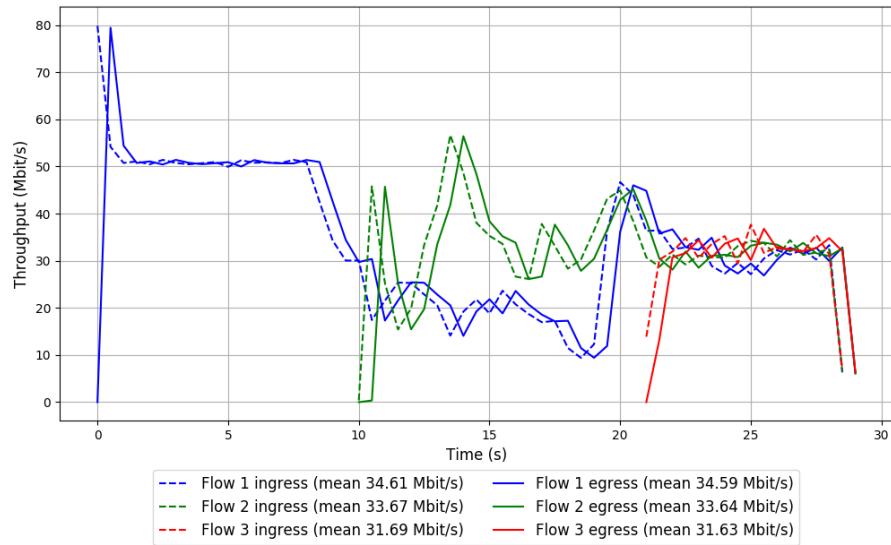


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 19:36:14
End at: 2019-02-05 19:36:44
Local clock offset: -3.876 ms
Remote clock offset: 1.871 ms

# Below is generated by plot.py at 2019-02-05 20:20:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.27 Mbit/s
95th percentile per-packet one-way delay: 14.648 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 34.59 Mbit/s
95th percentile per-packet one-way delay: 11.818 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 33.64 Mbit/s
95th percentile per-packet one-way delay: 14.606 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 18.058 ms
Loss rate: 0.21%
```

Run 4: Report of Indigo-MusesC5 — Data Link

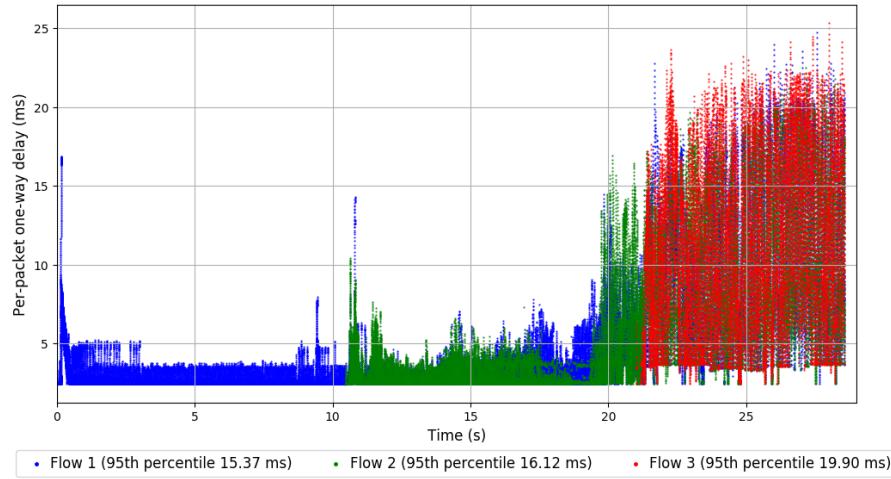
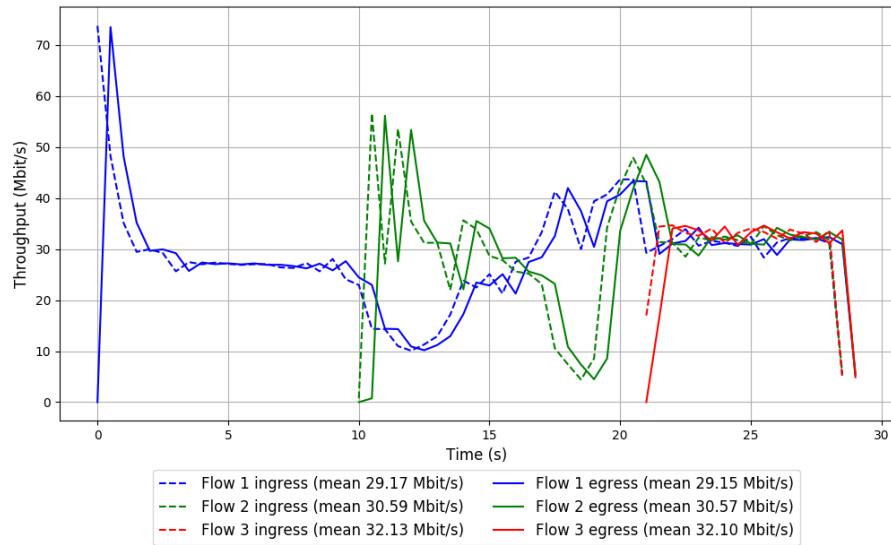


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-02-05 20:00:23
End at: 2019-02-05 20:00:53
Local clock offset: -3.273 ms
Remote clock offset: 1.613 ms

# Below is generated by plot.py at 2019-02-05 20:20:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.02 Mbit/s
95th percentile per-packet one-way delay: 17.197 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 29.15 Mbit/s
95th percentile per-packet one-way delay: 15.373 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 30.57 Mbit/s
95th percentile per-packet one-way delay: 16.120 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 32.10 Mbit/s
95th percentile per-packet one-way delay: 19.901 ms
Loss rate: 0.21%
```

Run 5: Report of Indigo-MusesC5 — Data Link

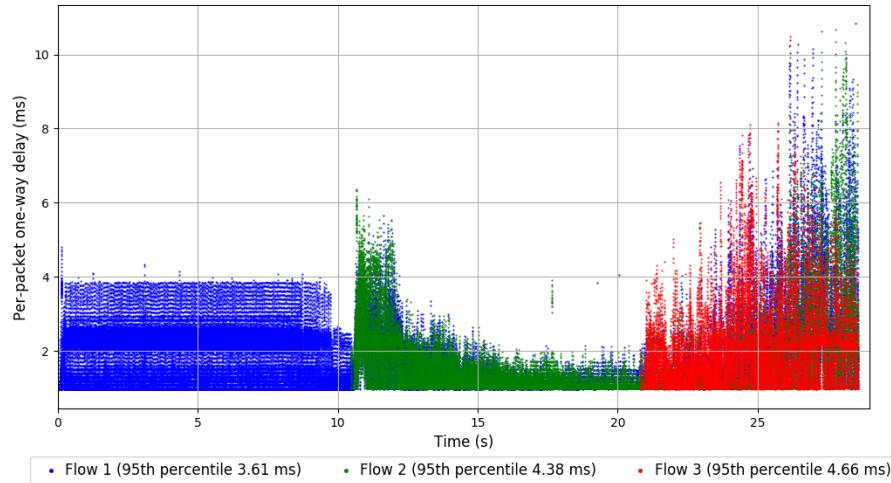
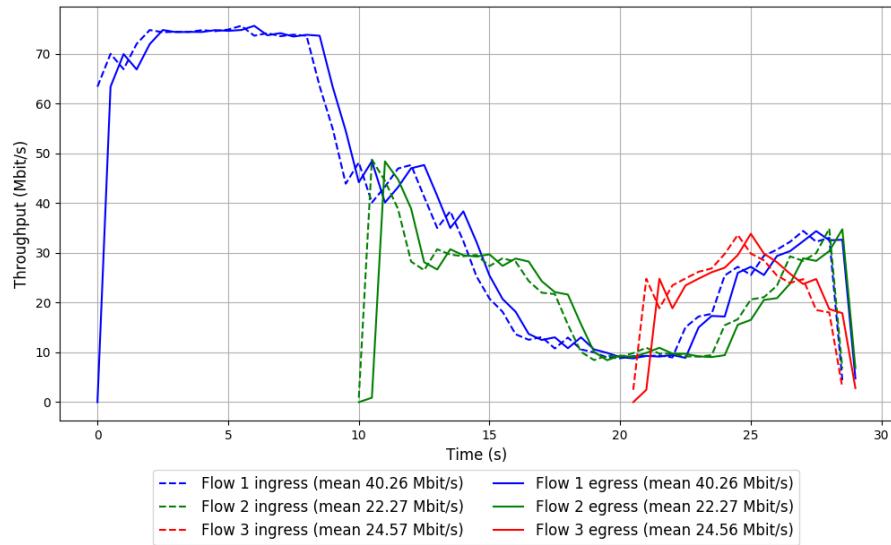


```
Run 1: Statistics of Indigo-MusesD
```

```
Start at: 2019-02-05 18:29:32
End at: 2019-02-05 18:30:02
Local clock offset: -5.225 ms
Remote clock offset: 0.877 ms

# Below is generated by plot.py at 2019-02-05 20:21:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.06 Mbit/s
95th percentile per-packet one-way delay: 3.874 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 40.26 Mbit/s
95th percentile per-packet one-way delay: 3.607 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 22.27 Mbit/s
95th percentile per-packet one-way delay: 4.376 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 4.656 ms
Loss rate: 0.07%
```

Run 1: Report of Indigo-MusesD — Data Link

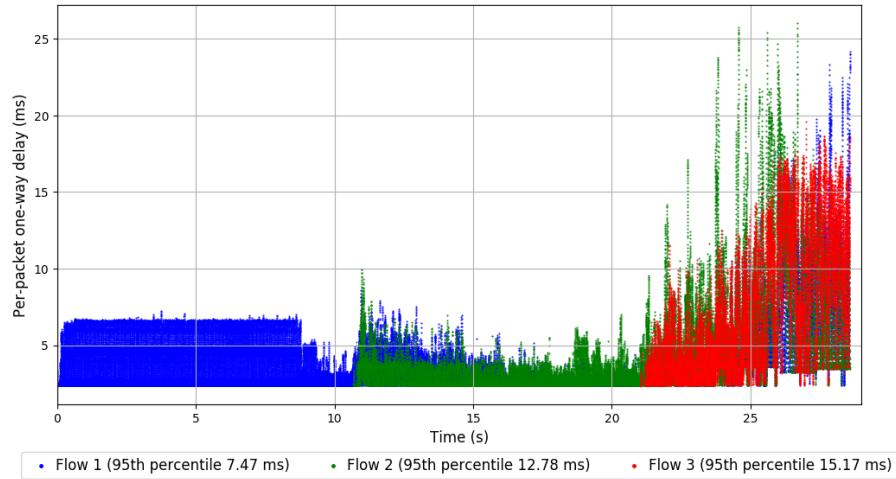
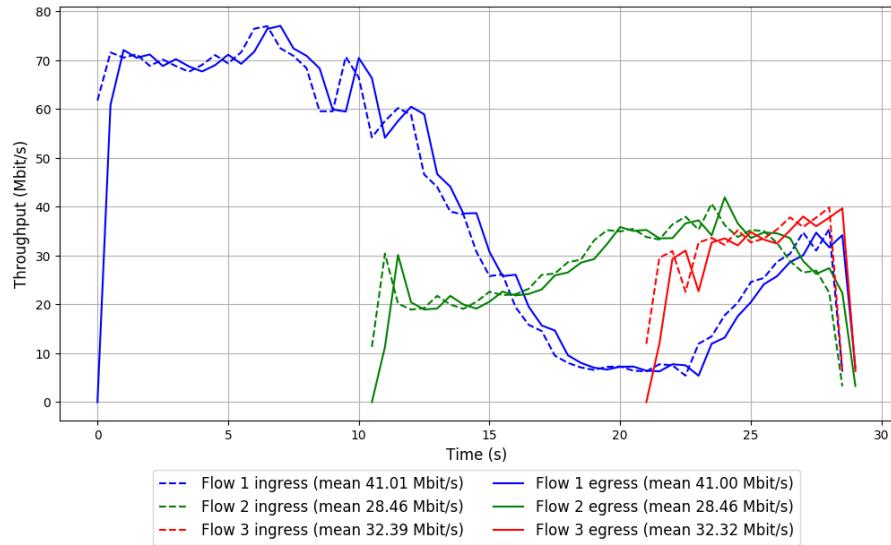


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 18:53:42
End at: 2019-02-05 18:54:12
Local clock offset: -4.303 ms
Remote clock offset: 1.454 ms

# Below is generated by plot.py at 2019-02-05 20:21:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.34 Mbit/s
95th percentile per-packet one-way delay: 11.940 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 41.00 Mbit/s
95th percentile per-packet one-way delay: 7.473 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 12.781 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 15.167 ms
Loss rate: 0.22%
```

Run 2: Report of Indigo-MusesD — Data Link

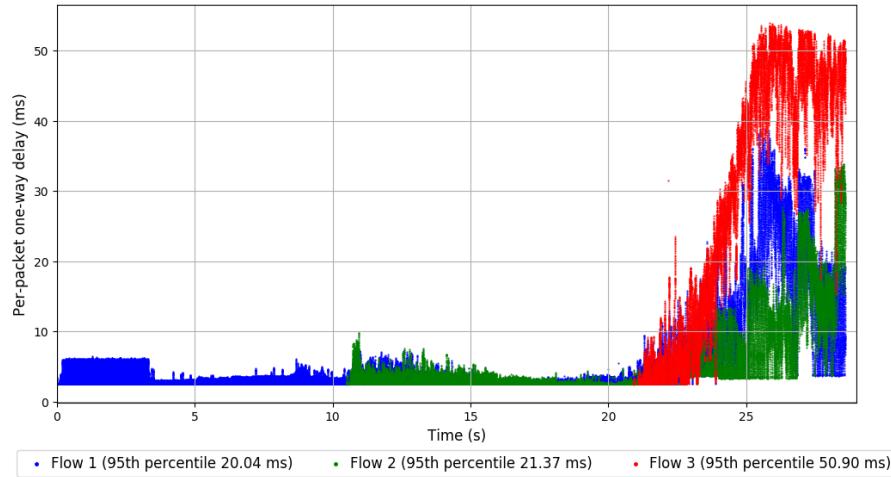
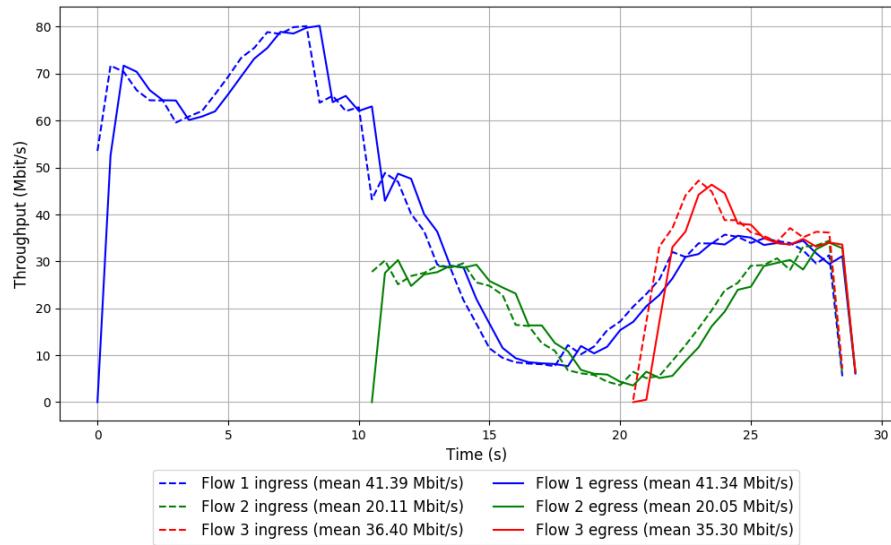


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 19:17:51
End at: 2019-02-05 19:18:21
Local clock offset: -3.445 ms
Remote clock offset: 1.867 ms

# Below is generated by plot.py at 2019-02-05 20:21:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.51 Mbit/s
95th percentile per-packet one-way delay: 41.961 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 41.34 Mbit/s
95th percentile per-packet one-way delay: 20.043 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 20.05 Mbit/s
95th percentile per-packet one-way delay: 21.366 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 35.30 Mbit/s
95th percentile per-packet one-way delay: 50.895 ms
Loss rate: 3.04%
```

Run 3: Report of Indigo-MusesD — Data Link

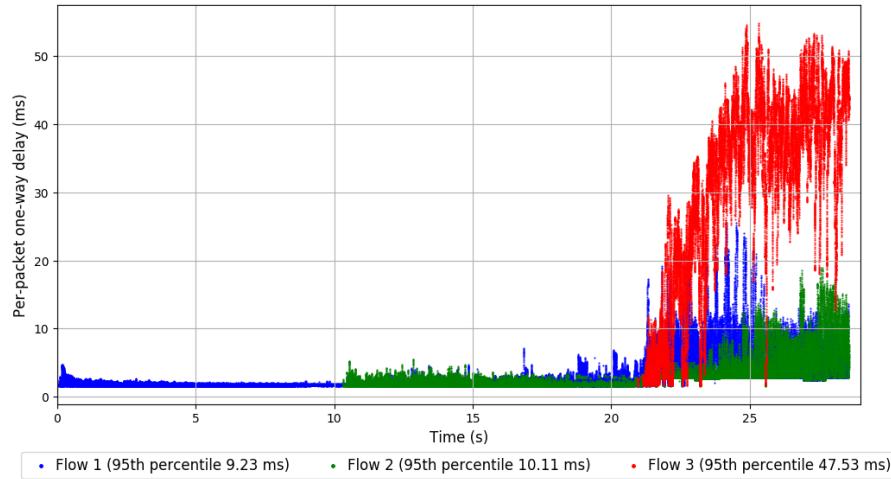
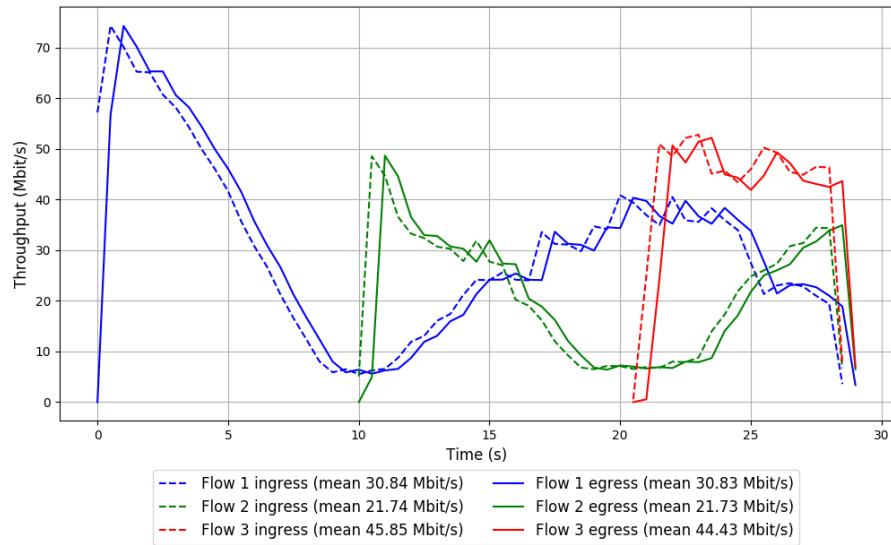


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 19:42:03
End at: 2019-02-05 19:42:33
Local clock offset: -3.766 ms
Remote clock offset: 1.858 ms

# Below is generated by plot.py at 2019-02-05 20:21:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 41.029 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 9.231 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 21.73 Mbit/s
95th percentile per-packet one-way delay: 10.111 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 44.43 Mbit/s
95th percentile per-packet one-way delay: 47.531 ms
Loss rate: 3.12%
```

Run 4: Report of Indigo-MusesD — Data Link

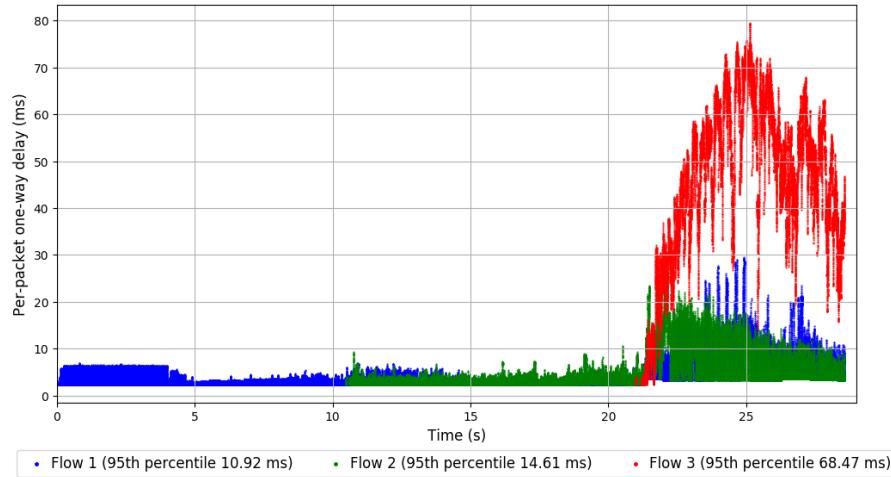
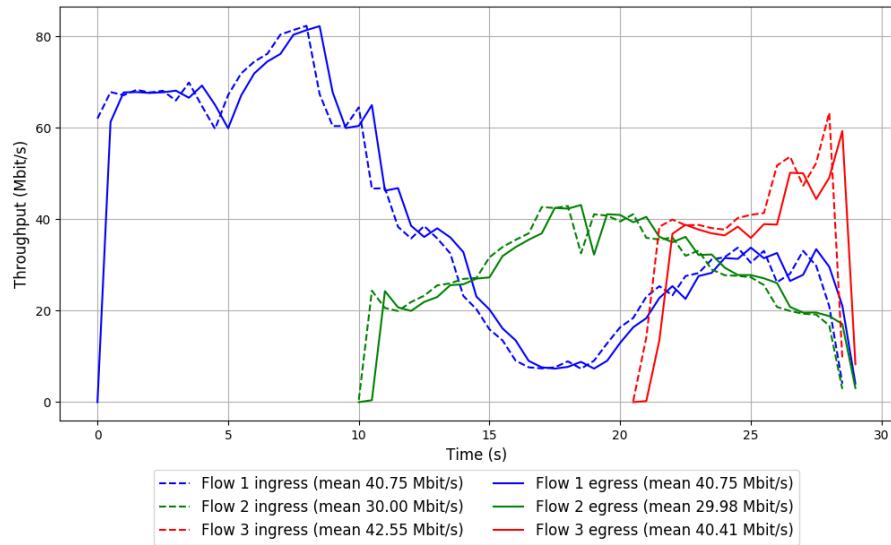


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-02-05 20:06:13
End at: 2019-02-05 20:06:43
Local clock offset: -3.272 ms
Remote clock offset: 1.602 ms

# Below is generated by plot.py at 2019-02-05 20:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.47 Mbit/s
95th percentile per-packet one-way delay: 53.808 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 40.75 Mbit/s
95th percentile per-packet one-way delay: 10.920 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 29.98 Mbit/s
95th percentile per-packet one-way delay: 14.605 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 40.41 Mbit/s
95th percentile per-packet one-way delay: 68.465 ms
Loss rate: 5.05%
```

Run 5: Report of Indigo-MusesD — Data Link

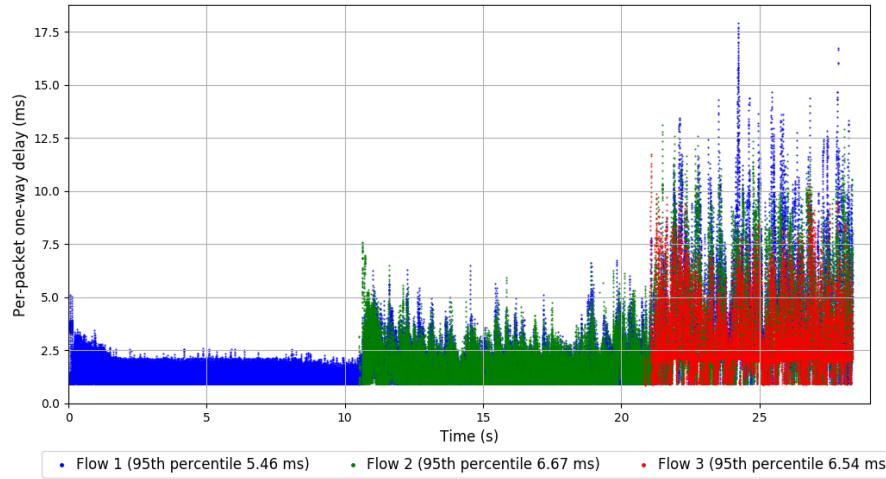
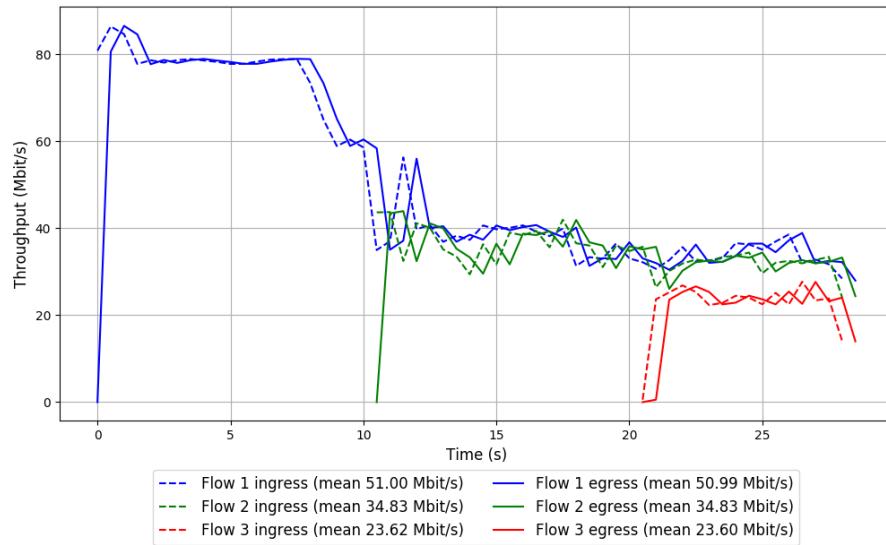


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 18:21:37
End at: 2019-02-05 18:22:07
Local clock offset: -5.543 ms
Remote clock offset: 0.659 ms

# Below is generated by plot.py at 2019-02-05 20:21:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.15 Mbit/s
95th percentile per-packet one-way delay: 6.086 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 5.464 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 34.83 Mbit/s
95th percentile per-packet one-way delay: 6.665 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 23.60 Mbit/s
95th percentile per-packet one-way delay: 6.544 ms
Loss rate: 0.05%
```

Run 1: Report of Indigo-MusesT — Data Link

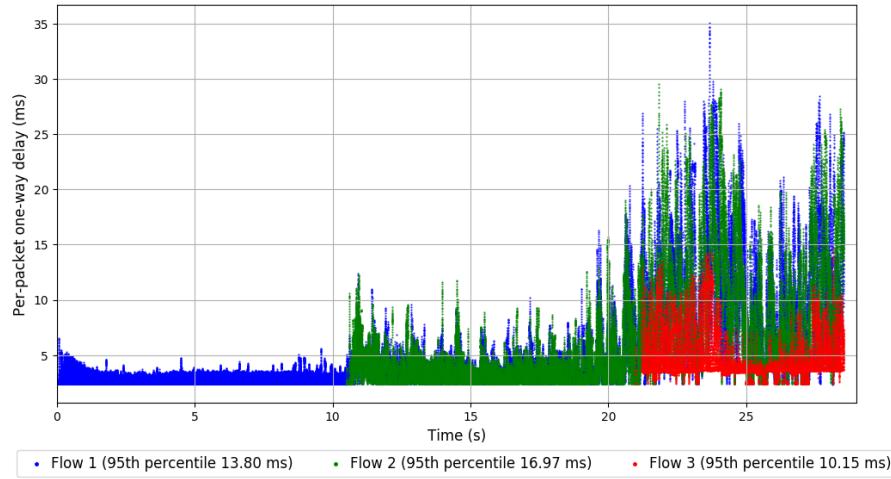
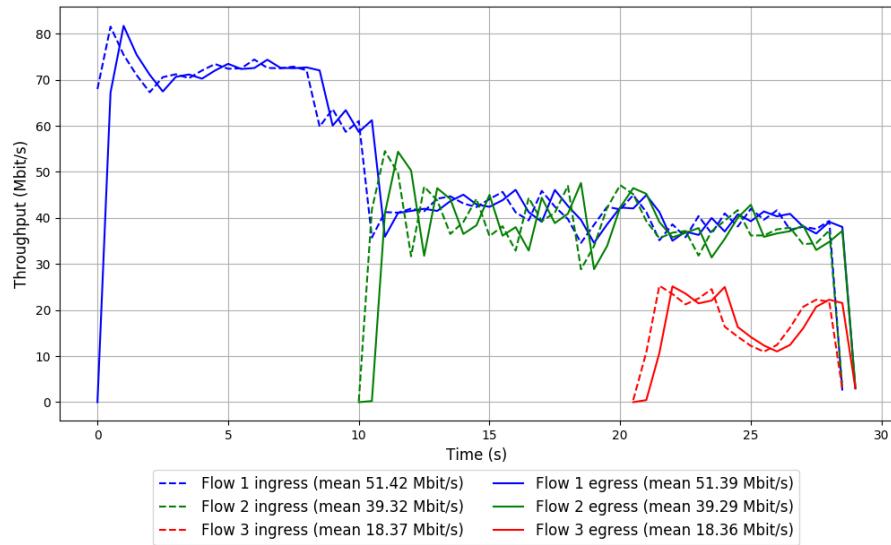


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 18:45:33
End at: 2019-02-05 18:46:03
Local clock offset: -4.95 ms
Remote clock offset: 1.389 ms

# Below is generated by plot.py at 2019-02-05 20:21:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.11 Mbit/s
95th percentile per-packet one-way delay: 14.778 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 51.39 Mbit/s
95th percentile per-packet one-way delay: 13.797 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 39.29 Mbit/s
95th percentile per-packet one-way delay: 16.968 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 18.36 Mbit/s
95th percentile per-packet one-way delay: 10.146 ms
Loss rate: 0.12%
```

Run 2: Report of Indigo-MusesT — Data Link

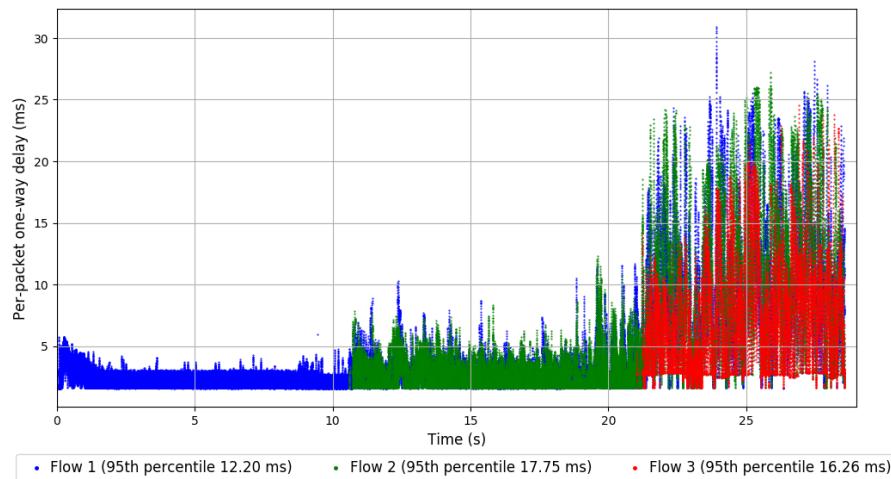
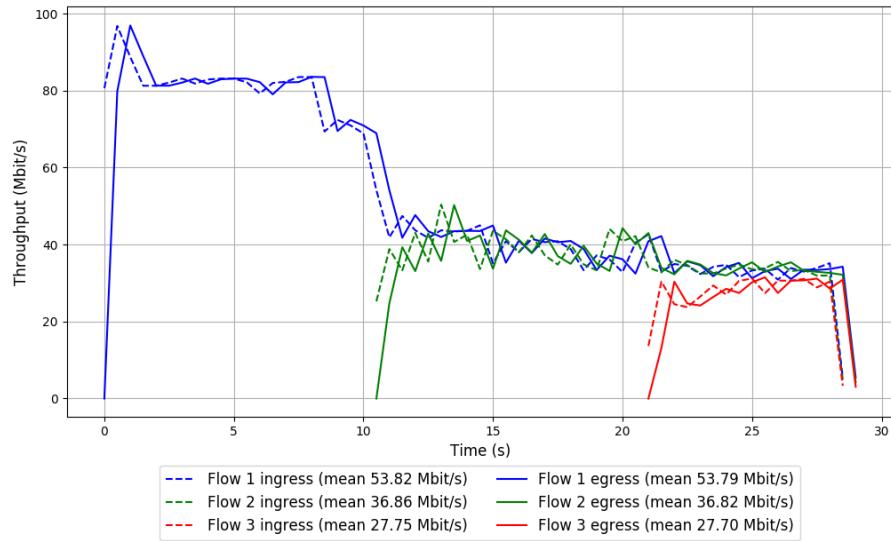


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 19:09:44
End at: 2019-02-05 19:10:14
Local clock offset: -4.392 ms
Remote clock offset: 1.885 ms

# Below is generated by plot.py at 2019-02-05 20:21:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.28 Mbit/s
95th percentile per-packet one-way delay: 14.819 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 53.79 Mbit/s
95th percentile per-packet one-way delay: 12.197 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 36.82 Mbit/s
95th percentile per-packet one-way delay: 17.752 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 27.70 Mbit/s
95th percentile per-packet one-way delay: 16.257 ms
Loss rate: 0.11%
```

Run 3: Report of Indigo-MusesT — Data Link

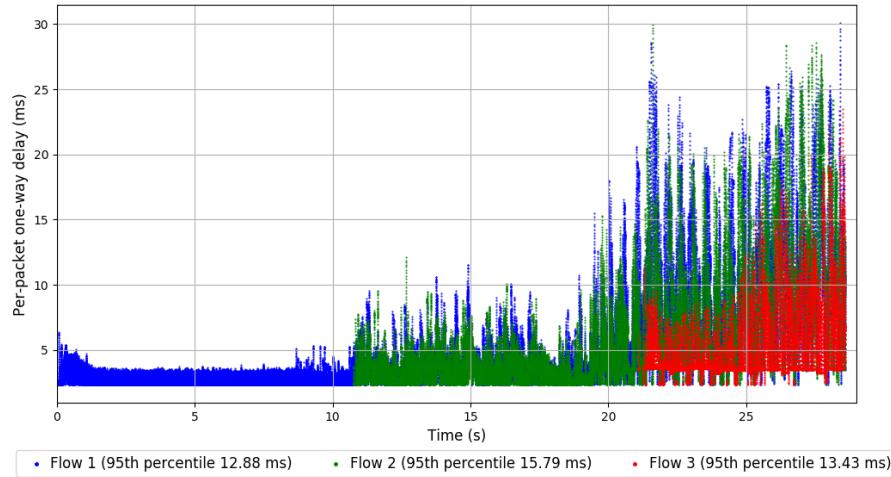
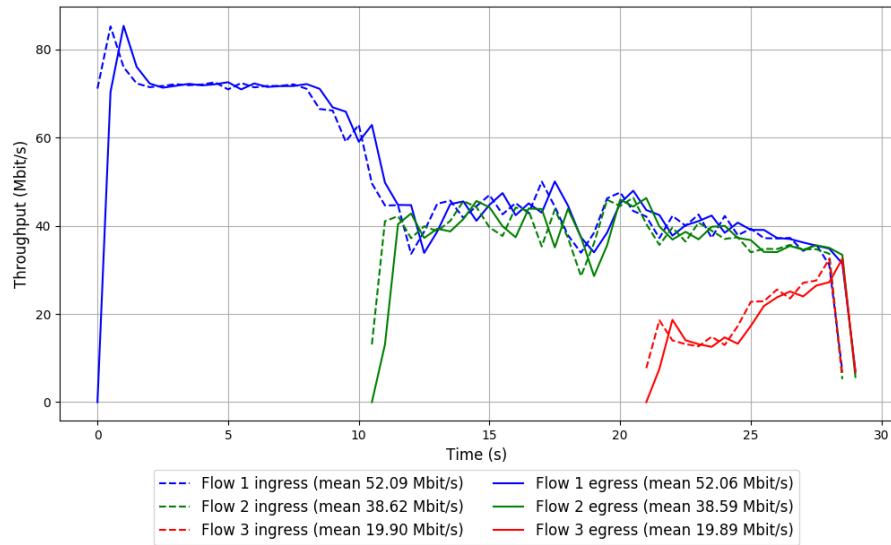


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 19:33:54
End at: 2019-02-05 19:34:24
Local clock offset: -3.17 ms
Remote clock offset: 1.965 ms

# Below is generated by plot.py at 2019-02-05 20:21:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.38 Mbit/s
95th percentile per-packet one-way delay: 14.036 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 52.06 Mbit/s
95th percentile per-packet one-way delay: 12.881 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.59 Mbit/s
95th percentile per-packet one-way delay: 15.785 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 13.429 ms
Loss rate: 0.19%
```

Run 4: Report of Indigo-MusesT — Data Link

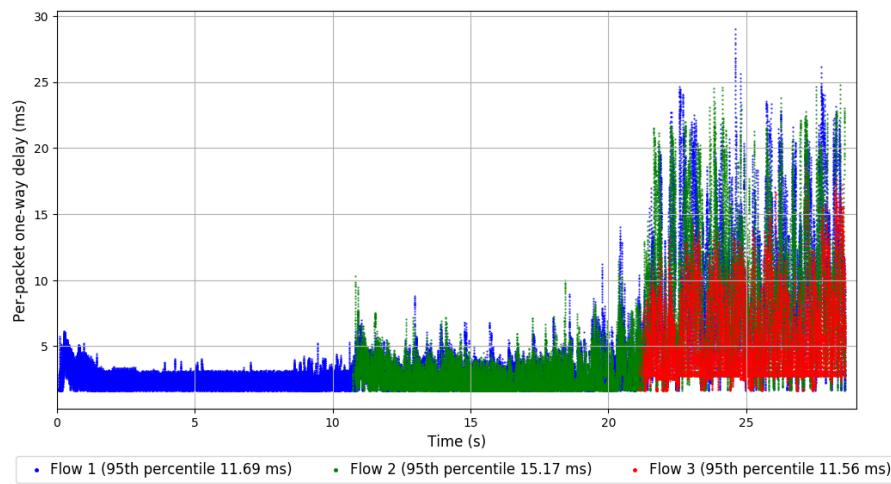
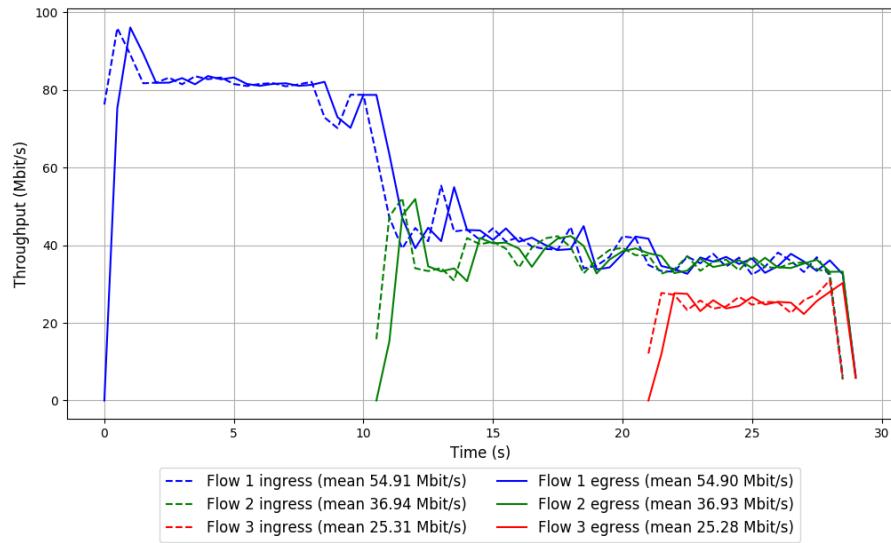


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-02-05 19:58:05
End at: 2019-02-05 19:58:35
Local clock offset: -4.015 ms
Remote clock offset: 1.664 ms

# Below is generated by plot.py at 2019-02-05 20:21:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.60 Mbit/s
95th percentile per-packet one-way delay: 12.818 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 54.90 Mbit/s
95th percentile per-packet one-way delay: 11.688 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 36.93 Mbit/s
95th percentile per-packet one-way delay: 15.171 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.28 Mbit/s
95th percentile per-packet one-way delay: 11.565 ms
Loss rate: 0.11%
```

Run 5: Report of Indigo-MusesT — Data Link

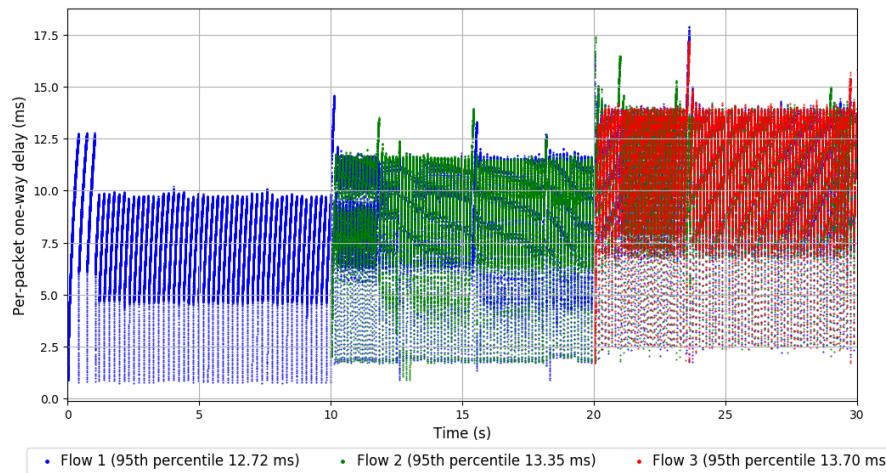
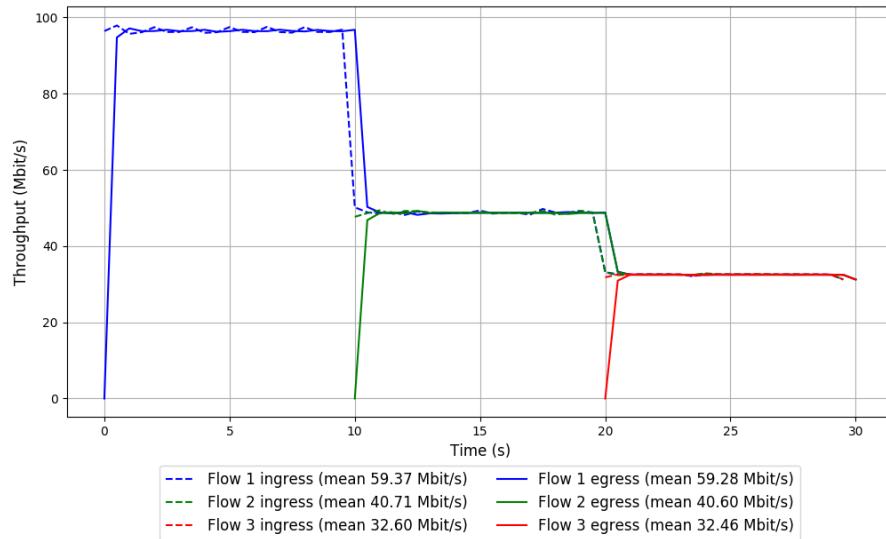


Run 1: Statistics of LEDBAT

```
Start at: 2019-02-05 18:19:18
End at: 2019-02-05 18:19:48
Local clock offset: -5.687 ms
Remote clock offset: 0.602 ms

# Below is generated by plot.py at 2019-02-05 20:22:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.12 Mbit/s
95th percentile per-packet one-way delay: 13.218 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 59.28 Mbit/s
95th percentile per-packet one-way delay: 12.722 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.60 Mbit/s
95th percentile per-packet one-way delay: 13.347 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 32.46 Mbit/s
95th percentile per-packet one-way delay: 13.696 ms
Loss rate: 0.38%
```

Run 1: Report of LEDBAT — Data Link

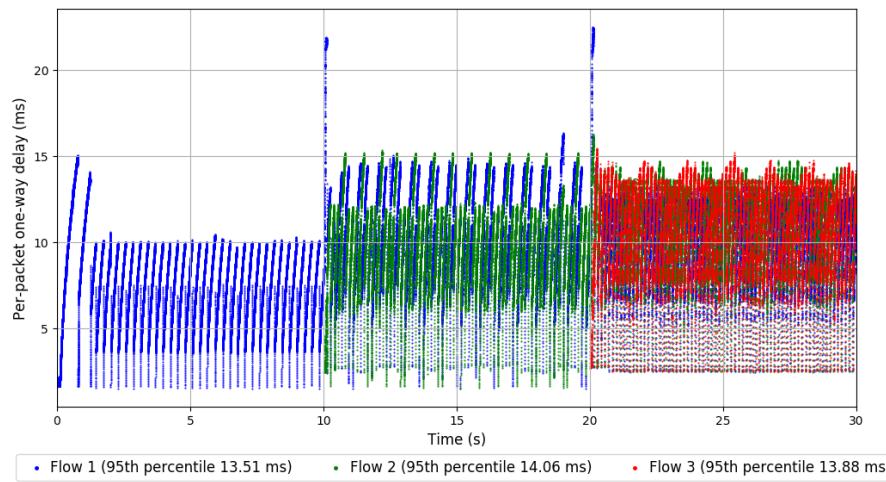
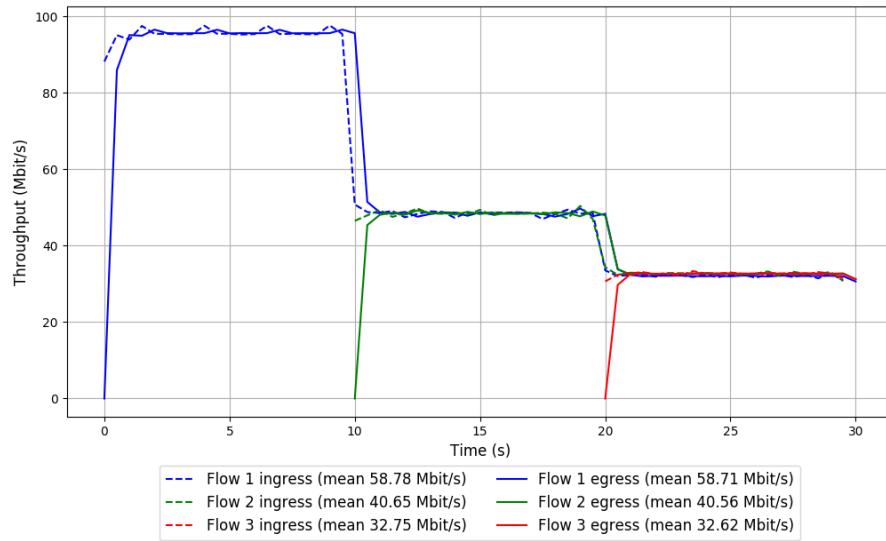


Run 2: Statistics of LEDBAT

```
Start at: 2019-02-05 18:43:14
End at: 2019-02-05 18:43:44
Local clock offset: -5.723 ms
Remote clock offset: 1.373 ms

# Below is generated by plot.py at 2019-02-05 20:22:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 13.808 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 58.71 Mbit/s
95th percentile per-packet one-way delay: 13.506 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 40.56 Mbit/s
95th percentile per-packet one-way delay: 14.063 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 32.62 Mbit/s
95th percentile per-packet one-way delay: 13.881 ms
Loss rate: 0.42%
```

Run 2: Report of LEDBAT — Data Link

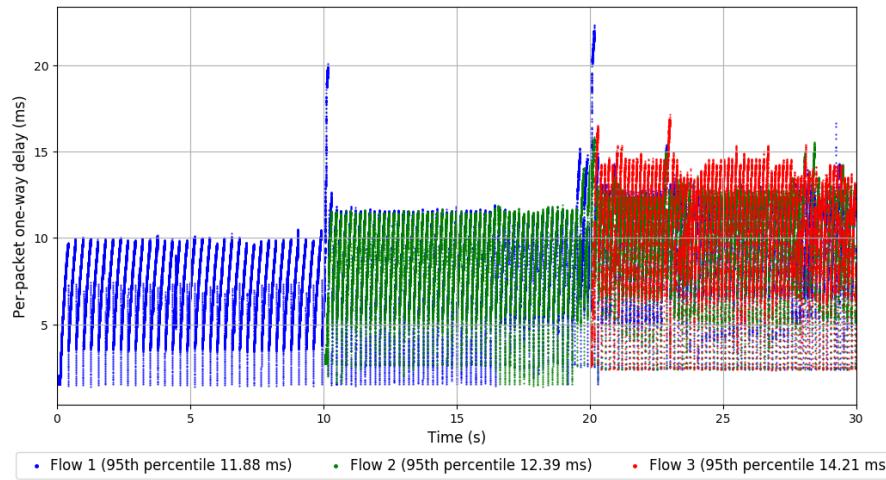
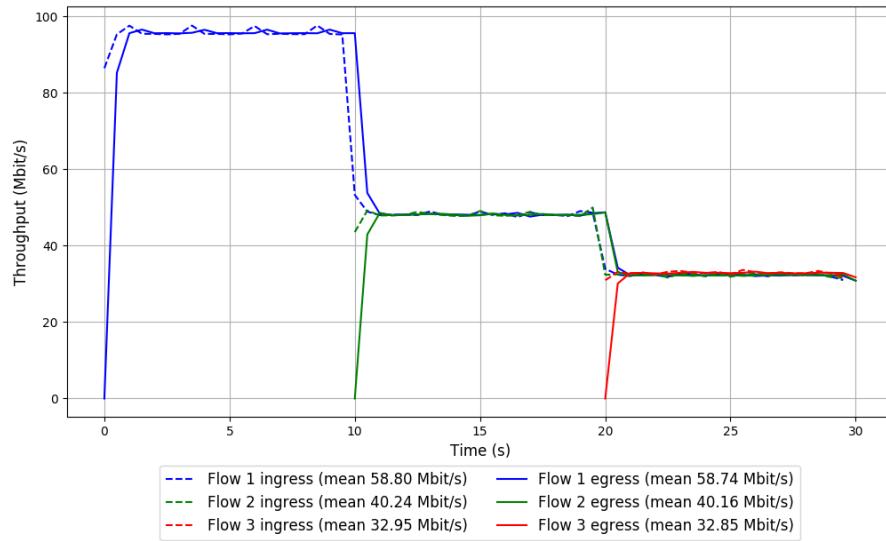


Run 3: Statistics of LEDBAT

```
Start at: 2019-02-05 19:07:25
End at: 2019-02-05 19:07:55
Local clock offset: -4.497 ms
Remote clock offset: 1.857 ms

# Below is generated by plot.py at 2019-02-05 20:22:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.39 Mbit/s
95th percentile per-packet one-way delay: 12.744 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 11.880 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 40.16 Mbit/s
95th percentile per-packet one-way delay: 12.387 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 32.85 Mbit/s
95th percentile per-packet one-way delay: 14.207 ms
Loss rate: 0.35%
```

Run 3: Report of LEDBAT — Data Link

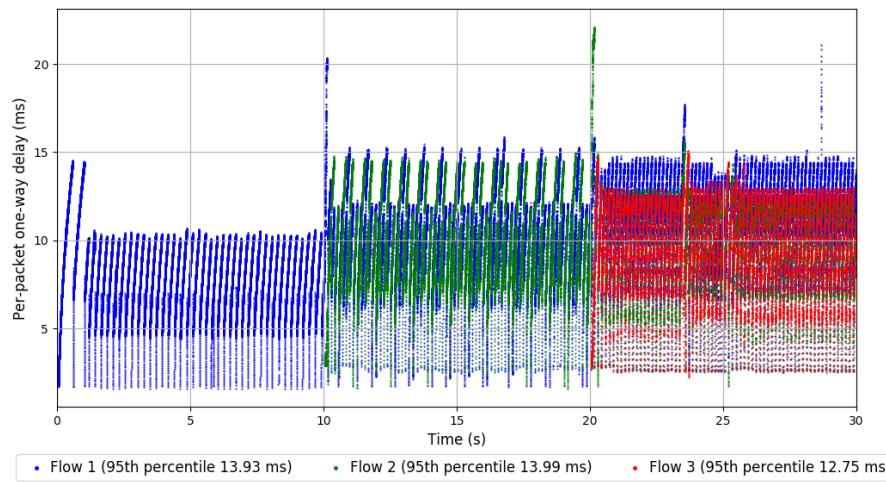
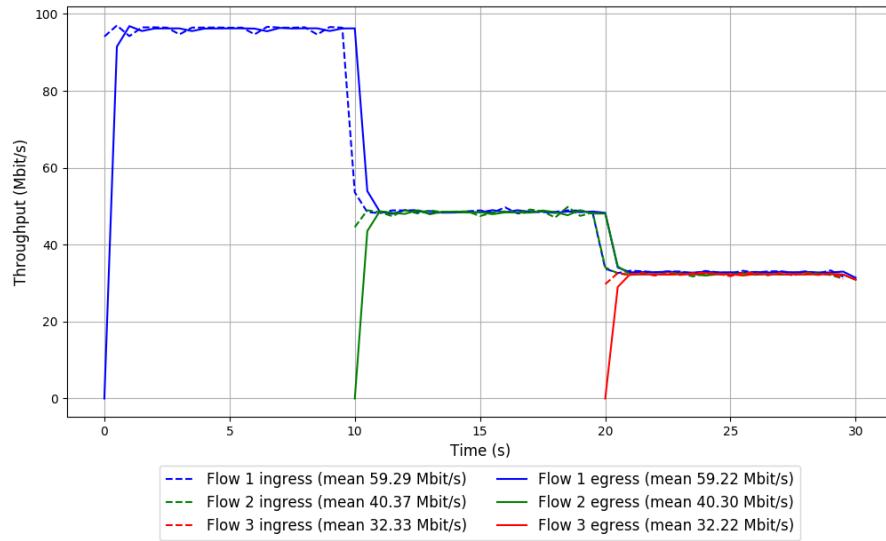


Run 4: Statistics of LEDBAT

```
Start at: 2019-02-05 19:31:35
End at: 2019-02-05 19:32:05
Local clock offset: -3.946 ms
Remote clock offset: 1.901 ms

# Below is generated by plot.py at 2019-02-05 20:22:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.76 Mbit/s
95th percentile per-packet one-way delay: 13.890 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 59.22 Mbit/s
95th percentile per-packet one-way delay: 13.931 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 40.30 Mbit/s
95th percentile per-packet one-way delay: 13.993 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 32.22 Mbit/s
95th percentile per-packet one-way delay: 12.754 ms
Loss rate: 0.38%
```

Run 4: Report of LEDBAT — Data Link

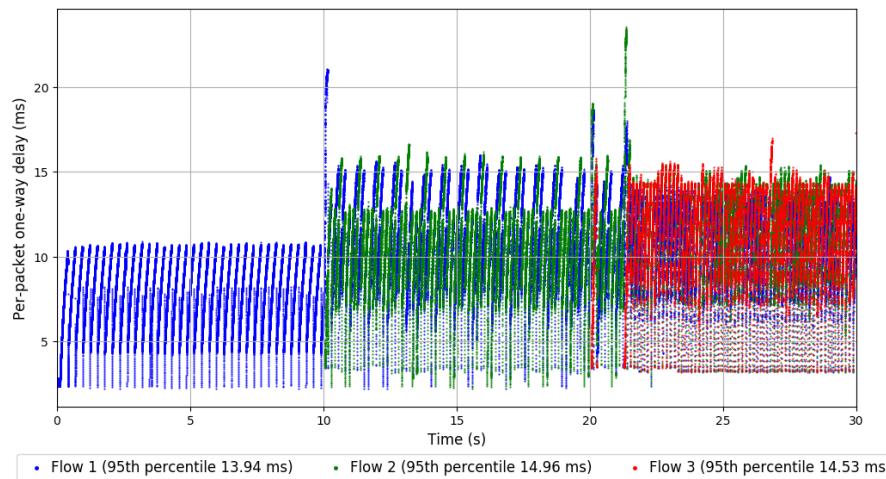
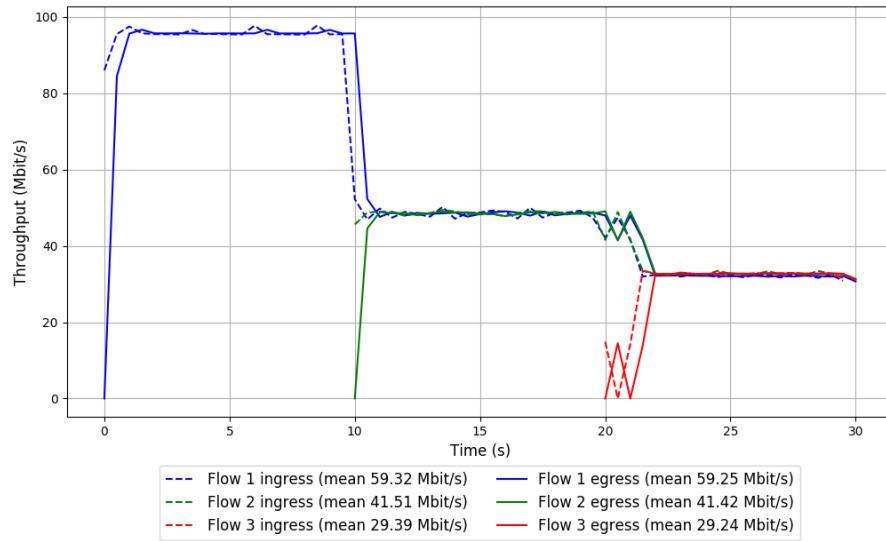


Run 5: Statistics of LEDBAT

```
Start at: 2019-02-05 19:55:46
End at: 2019-02-05 19:56:16
Local clock offset: -3.303 ms
Remote clock offset: 1.698 ms

# Below is generated by plot.py at 2019-02-05 20:22:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 14.438 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 59.25 Mbit/s
95th percentile per-packet one-way delay: 13.943 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 41.42 Mbit/s
95th percentile per-packet one-way delay: 14.955 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 29.24 Mbit/s
95th percentile per-packet one-way delay: 14.531 ms
Loss rate: 0.51%
```

Run 5: Report of LEDBAT — Data Link

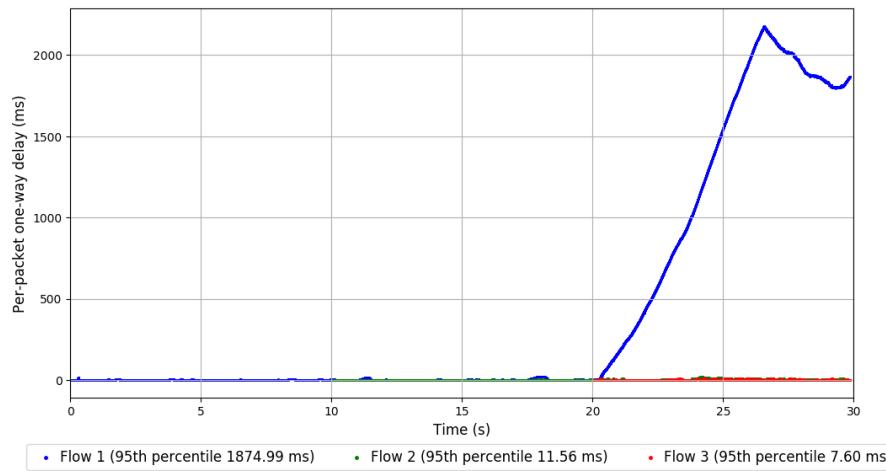
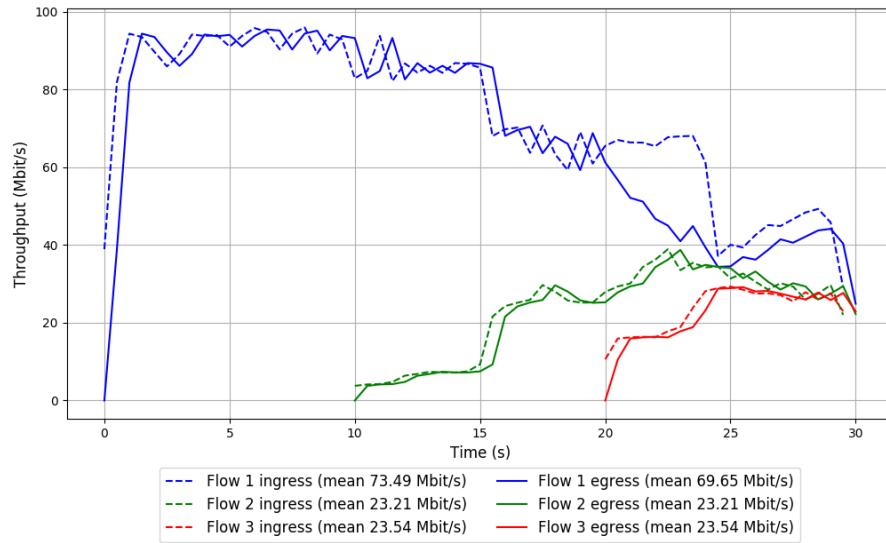


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-02-05 18:27:16
End at: 2019-02-05 18:27:46
Local clock offset: -5.279 ms
Remote clock offset: 0.806 ms

# Below is generated by plot.py at 2019-02-05 20:23:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 1832.885 ms
Loss rate: 3.98%
-- Flow 1:
Average throughput: 69.65 Mbit/s
95th percentile per-packet one-way delay: 1874.993 ms
Loss rate: 5.22%
-- Flow 2:
Average throughput: 23.21 Mbit/s
95th percentile per-packet one-way delay: 11.559 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 23.54 Mbit/s
95th percentile per-packet one-way delay: 7.602 ms
Loss rate: 0.03%
```

Run 1: Report of PCC-Allegro — Data Link

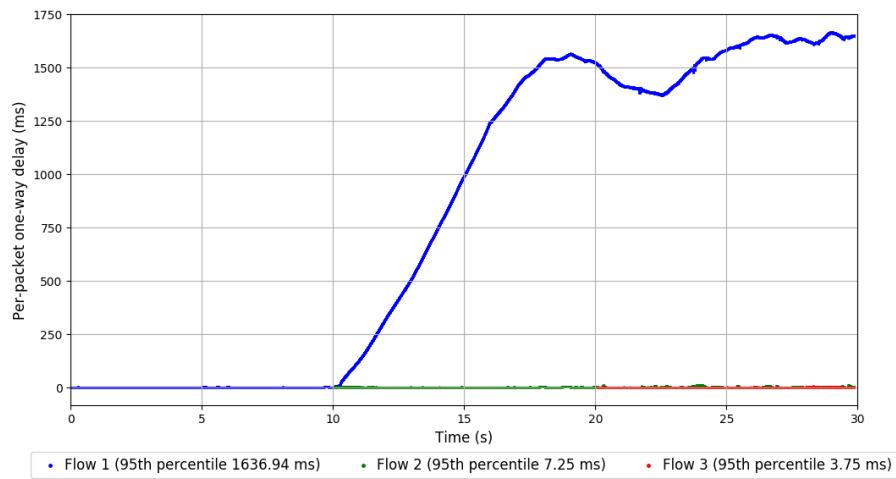
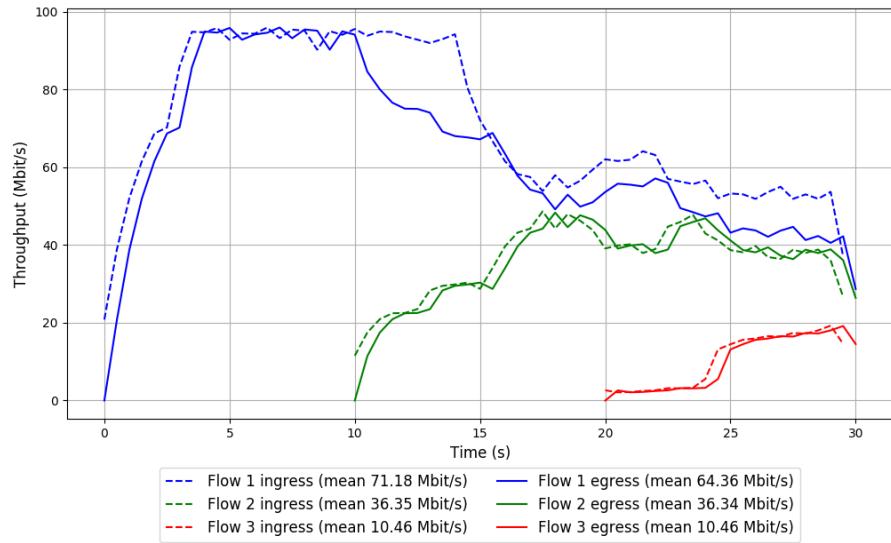


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-02-05 18:51:21
End at: 2019-02-05 18:51:51
Local clock offset: -5.148 ms
Remote clock offset: 1.458 ms

# Below is generated by plot.py at 2019-02-05 20:23:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.97 Mbit/s
95th percentile per-packet one-way delay: 1623.491 ms
Loss rate: 6.91%
-- Flow 1:
Average throughput: 64.36 Mbit/s
95th percentile per-packet one-way delay: 1636.945 ms
Loss rate: 9.58%
-- Flow 2:
Average throughput: 36.34 Mbit/s
95th percentile per-packet one-way delay: 7.248 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 3.755 ms
Loss rate: 0.07%
```

Run 2: Report of PCC-Allegro — Data Link

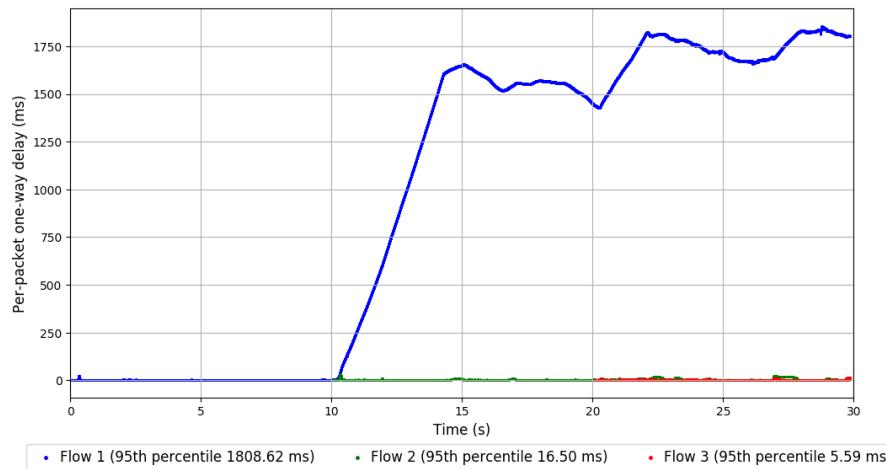
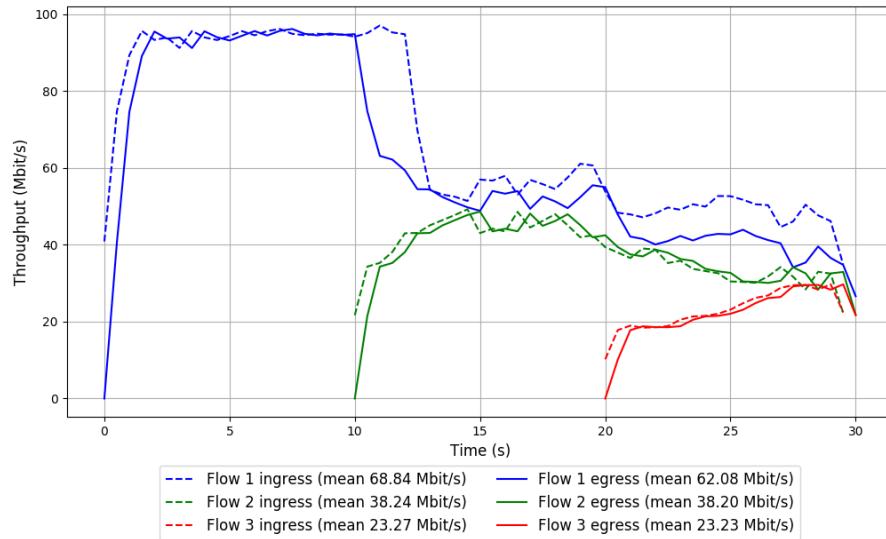


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-02-05 19:15:29
End at: 2019-02-05 19:15:59
Local clock offset: -3.49 ms
Remote clock offset: 1.938 ms

# Below is generated by plot.py at 2019-02-05 20:23:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.11 Mbit/s
95th percentile per-packet one-way delay: 1782.998 ms
Loss rate: 6.70%
-- Flow 1:
Average throughput: 62.08 Mbit/s
95th percentile per-packet one-way delay: 1808.616 ms
Loss rate: 9.86%
-- Flow 2:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 16.498 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 23.23 Mbit/s
95th percentile per-packet one-way delay: 5.591 ms
Loss rate: 0.21%
```

Run 3: Report of PCC-Allegro — Data Link

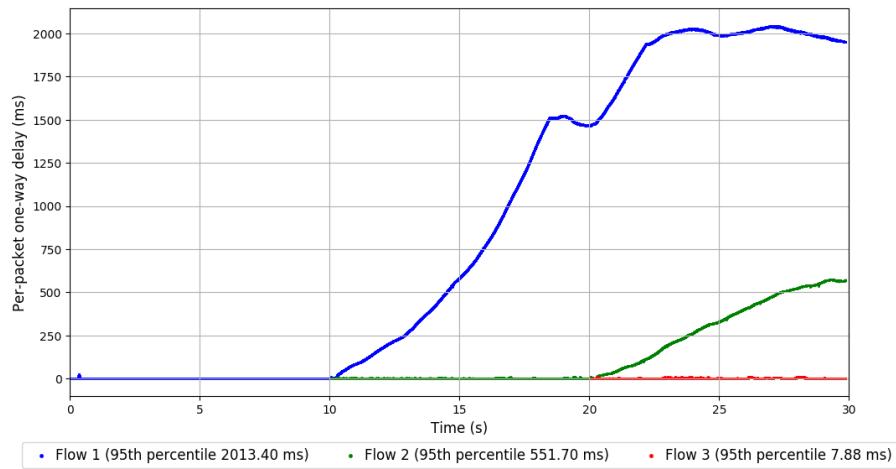
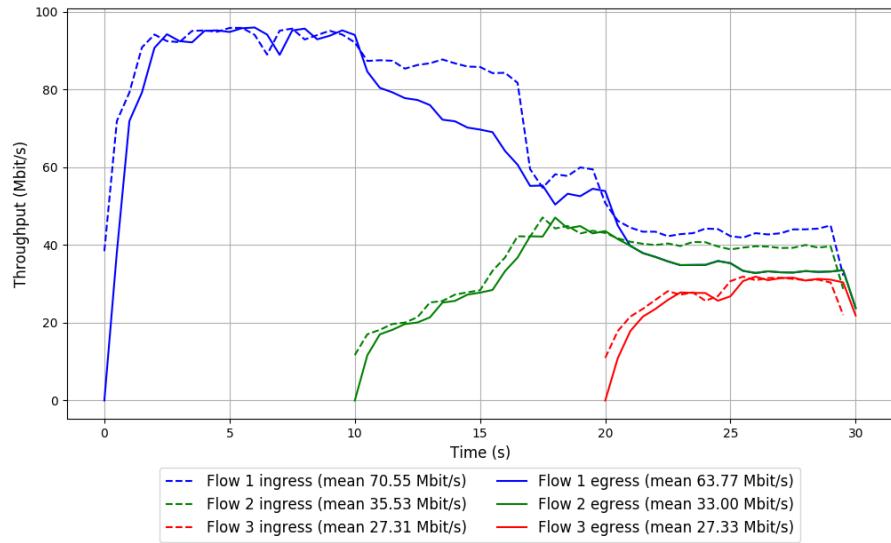


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-02-05 19:39:42
End at: 2019-02-05 19:40:12
Local clock offset: -3.866 ms
Remote clock offset: 1.799 ms

# Below is generated by plot.py at 2019-02-05 20:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.70 Mbit/s
95th percentile per-packet one-way delay: 2001.486 ms
Loss rate: 8.22%
-- Flow 1:
Average throughput: 63.77 Mbit/s
95th percentile per-packet one-way delay: 2013.402 ms
Loss rate: 9.61%
-- Flow 2:
Average throughput: 33.00 Mbit/s
95th percentile per-packet one-way delay: 551.702 ms
Loss rate: 7.18%
-- Flow 3:
Average throughput: 27.33 Mbit/s
95th percentile per-packet one-way delay: 7.877 ms
Loss rate: 0.07%
```

Run 4: Report of PCC-Allegro — Data Link

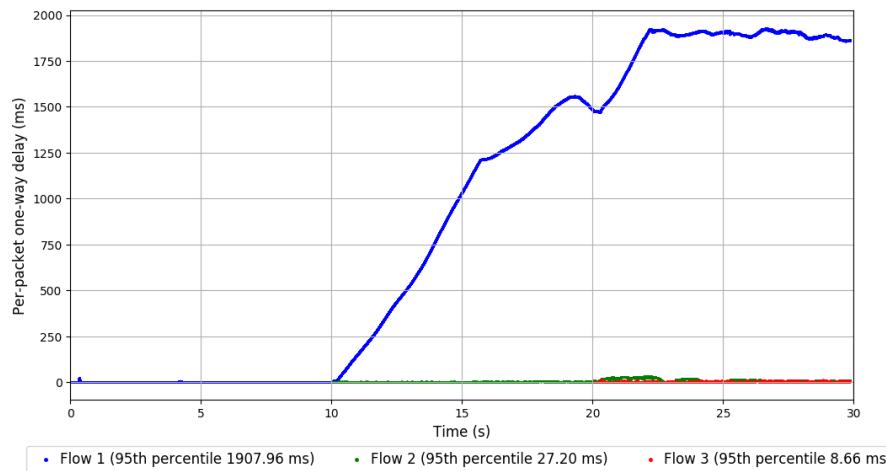
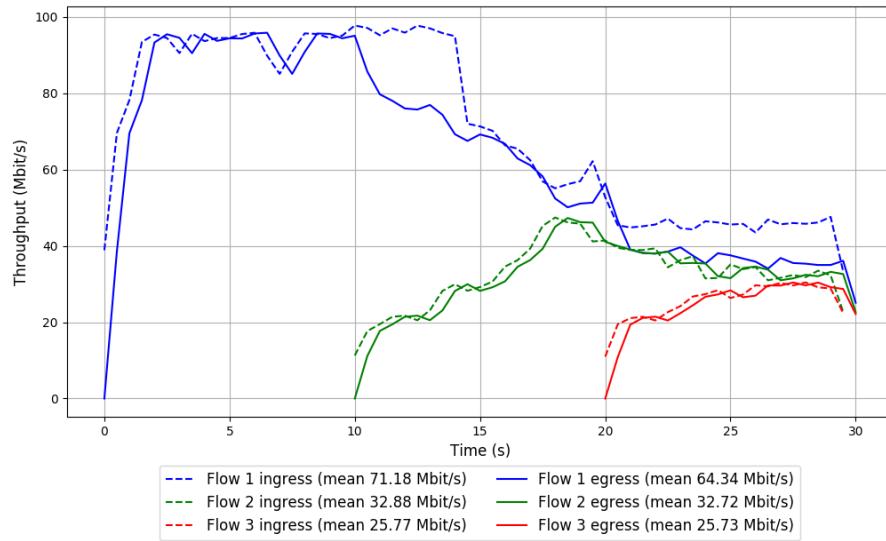


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-02-05 20:03:52
End at: 2019-02-05 20:04:22
Local clock offset: -3.269 ms
Remote clock offset: 1.592 ms

# Below is generated by plot.py at 2019-02-05 20:23:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.55 Mbit/s
95th percentile per-packet one-way delay: 1901.402 ms
Loss rate: 6.85%
-- Flow 1:
Average throughput: 64.34 Mbit/s
95th percentile per-packet one-way delay: 1907.959 ms
Loss rate: 9.60%
-- Flow 2:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 27.198 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 25.73 Mbit/s
95th percentile per-packet one-way delay: 8.662 ms
Loss rate: 0.11%
```

Run 5: Report of PCC-Allegro — Data Link

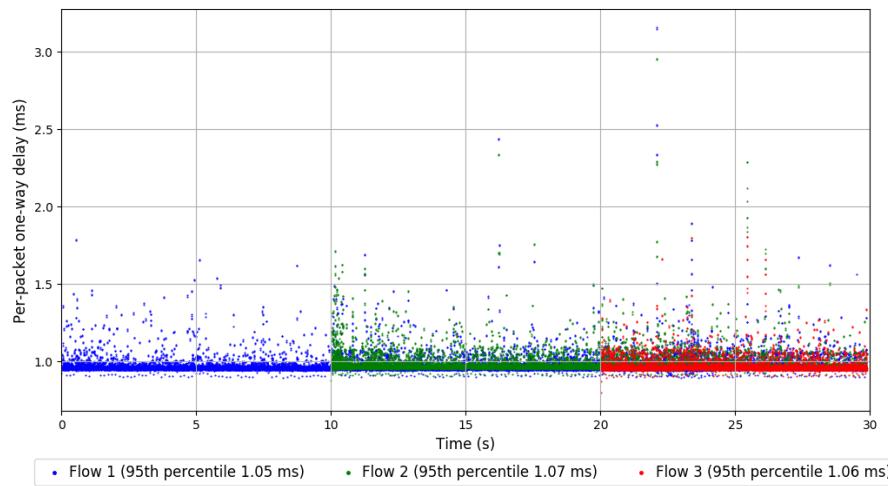
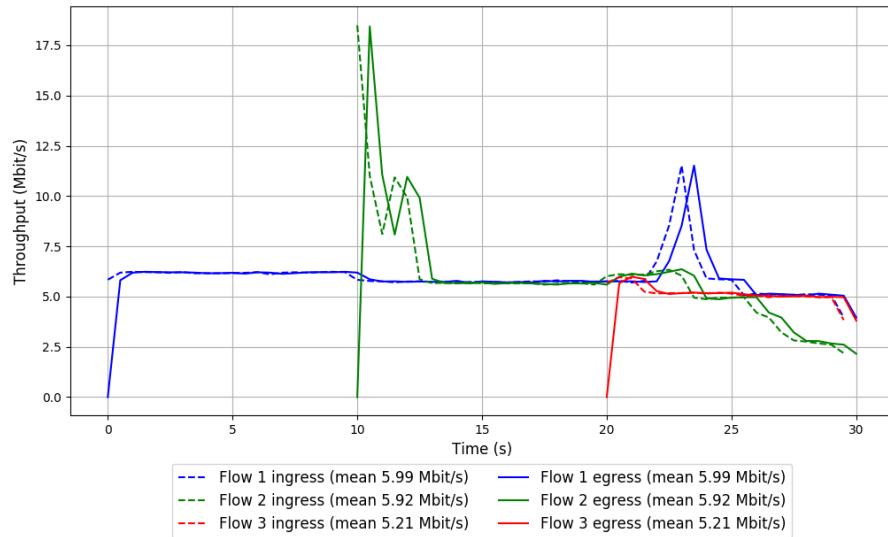


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-02-05 18:25:02
End at: 2019-02-05 18:25:32
Local clock offset: -5.359 ms
Remote clock offset: 0.743 ms

# Below is generated by plot.py at 2019-02-05 20:23:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.65 Mbit/s
95th percentile per-packet one-way delay: 1.062 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 1.054 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 1.074 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 5.21 Mbit/s
95th percentile per-packet one-way delay: 1.061 ms
Loss rate: 0.02%
```

Run 1: Report of PCC-Expr — Data Link

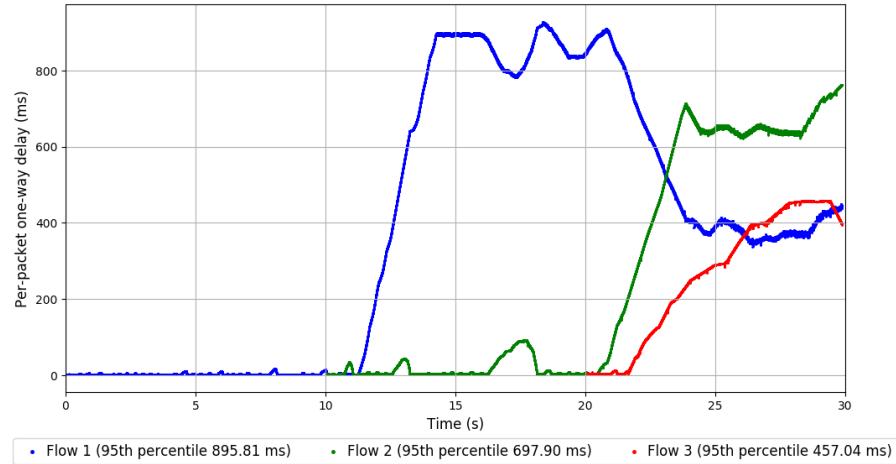
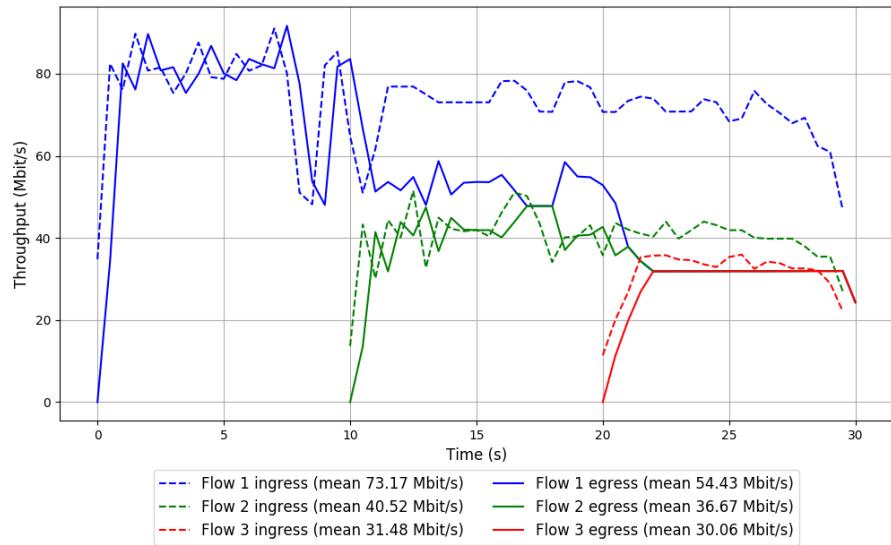


Run 2: Statistics of PCC-Expr

```
Start at: 2019-02-05 18:48:59
End at: 2019-02-05 18:49:29
Local clock offset: -4.603 ms
Remote clock offset: 1.492 ms

# Below is generated by plot.py at 2019-02-05 20:24:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.73 Mbit/s
95th percentile per-packet one-way delay: 893.168 ms
Loss rate: 19.71%
-- Flow 1:
Average throughput: 54.43 Mbit/s
95th percentile per-packet one-way delay: 895.810 ms
Loss rate: 25.61%
-- Flow 2:
Average throughput: 36.67 Mbit/s
95th percentile per-packet one-way delay: 697.903 ms
Loss rate: 9.53%
-- Flow 3:
Average throughput: 30.06 Mbit/s
95th percentile per-packet one-way delay: 457.042 ms
Loss rate: 4.59%
```

Run 2: Report of PCC-Expr — Data Link

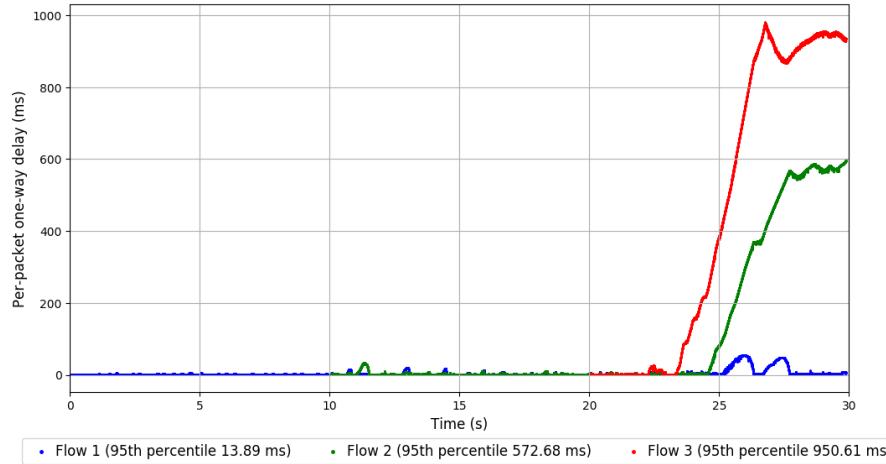
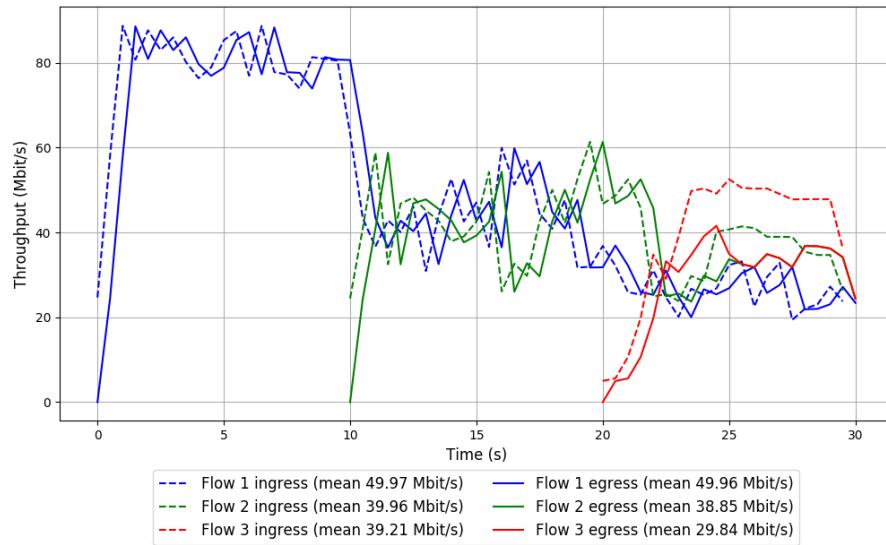


Run 3: Statistics of PCC-Expr

```
Start at: 2019-02-05 19:13:09
End at: 2019-02-05 19:13:39
Local clock offset: -4.3 ms
Remote clock offset: 1.822 ms

# Below is generated by plot.py at 2019-02-05 20:24:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.64 Mbit/s
95th percentile per-packet one-way delay: 789.762 ms
Loss rate: 4.31%
-- Flow 1:
Average throughput: 49.96 Mbit/s
95th percentile per-packet one-way delay: 13.893 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.85 Mbit/s
95th percentile per-packet one-way delay: 572.681 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 950.605 ms
Loss rate: 23.93%
```

Run 3: Report of PCC-Expr — Data Link

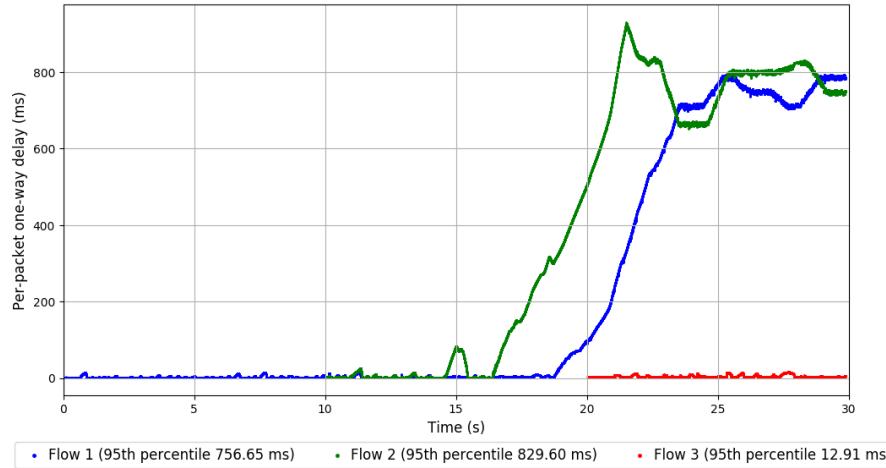
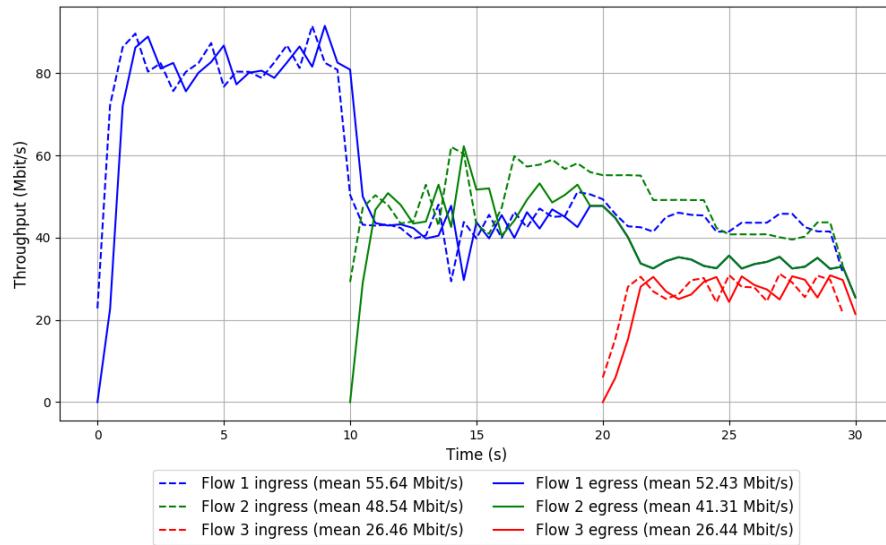


Run 4: Statistics of PCC-Expr

```
Start at: 2019-02-05 19:37:21
End at: 2019-02-05 19:37:51
Local clock offset: -3.938 ms
Remote clock offset: 1.869 ms

# Below is generated by plot.py at 2019-02-05 20:24:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.64 Mbit/s
95th percentile per-packet one-way delay: 798.826 ms
Loss rate: 8.32%
-- Flow 1:
Average throughput: 52.43 Mbit/s
95th percentile per-packet one-way delay: 756.654 ms
Loss rate: 5.79%
-- Flow 2:
Average throughput: 41.31 Mbit/s
95th percentile per-packet one-way delay: 829.597 ms
Loss rate: 14.90%
-- Flow 3:
Average throughput: 26.44 Mbit/s
95th percentile per-packet one-way delay: 12.909 ms
Loss rate: 0.09%
```

Run 4: Report of PCC-Expr — Data Link

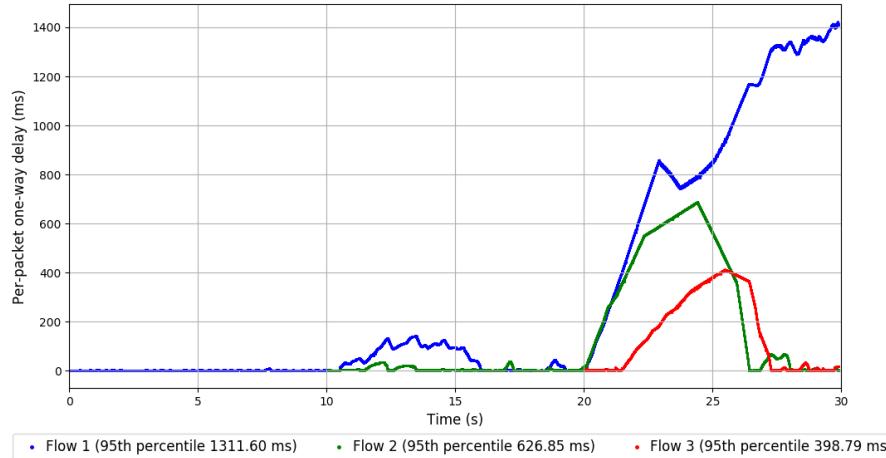
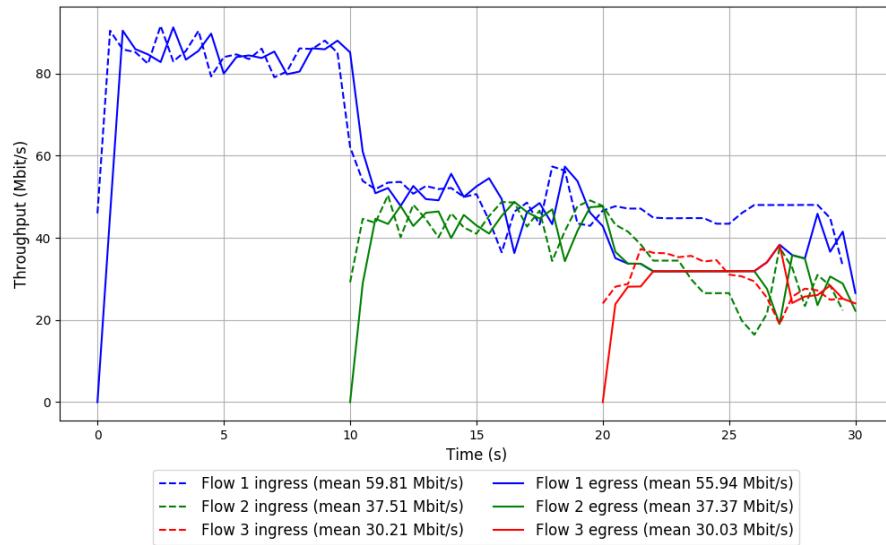


Run 5: Statistics of PCC-Expr

```
Start at: 2019-02-05 20:01:31
End at: 2019-02-05 20:02:01
Local clock offset: -4.103 ms
Remote clock offset: 1.563 ms

# Below is generated by plot.py at 2019-02-05 20:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.72 Mbit/s
95th percentile per-packet one-way delay: 1113.562 ms
Loss rate: 4.25%
-- Flow 1:
Average throughput: 55.94 Mbit/s
95th percentile per-packet one-way delay: 1311.602 ms
Loss rate: 6.47%
-- Flow 2:
Average throughput: 37.37 Mbit/s
95th percentile per-packet one-way delay: 626.852 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 398.785 ms
Loss rate: 0.63%
```

Run 5: Report of PCC-Expr — Data Link

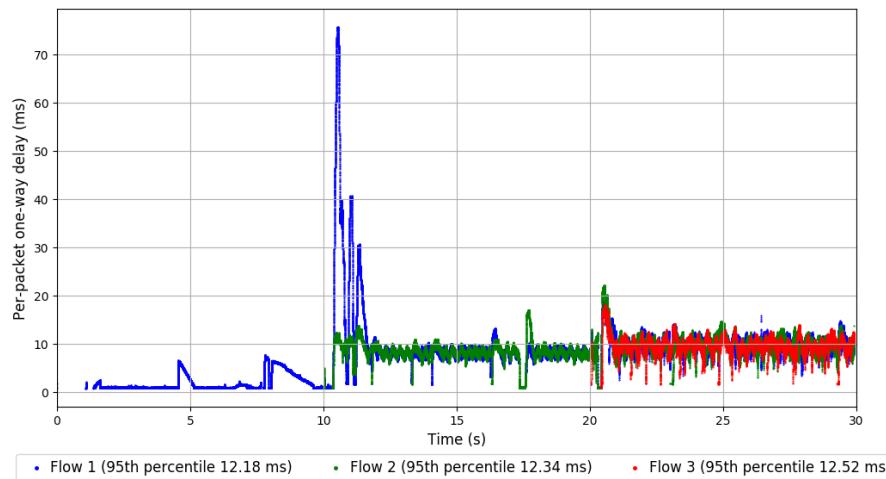
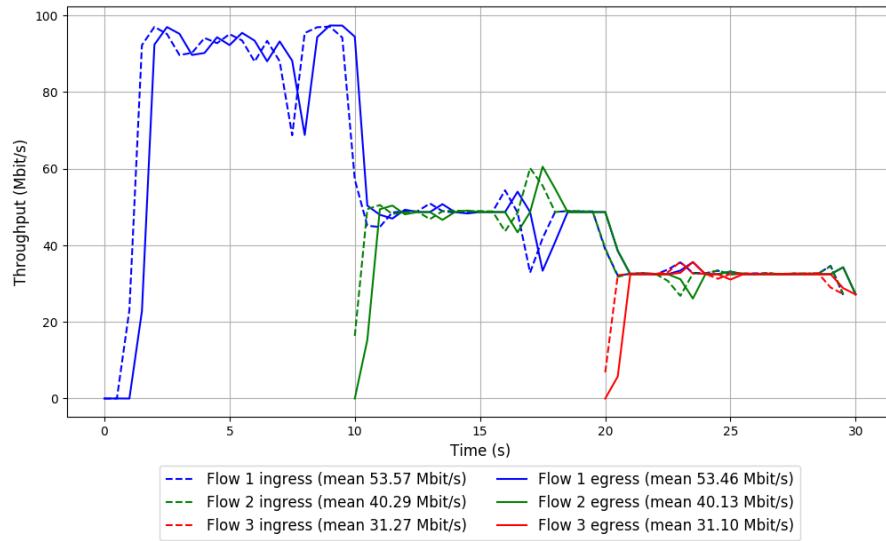


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-02-05 18:15:52
End at: 2019-02-05 18:16:22
Local clock offset: -6.003 ms
Remote clock offset: 0.56 ms

# Below is generated by plot.py at 2019-02-05 20:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.46 Mbit/s
95th percentile per-packet one-way delay: 12.330 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 53.46 Mbit/s
95th percentile per-packet one-way delay: 12.181 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 40.13 Mbit/s
95th percentile per-packet one-way delay: 12.342 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 12.519 ms
Loss rate: 0.57%
```

Run 1: Report of QUIC Cubic — Data Link

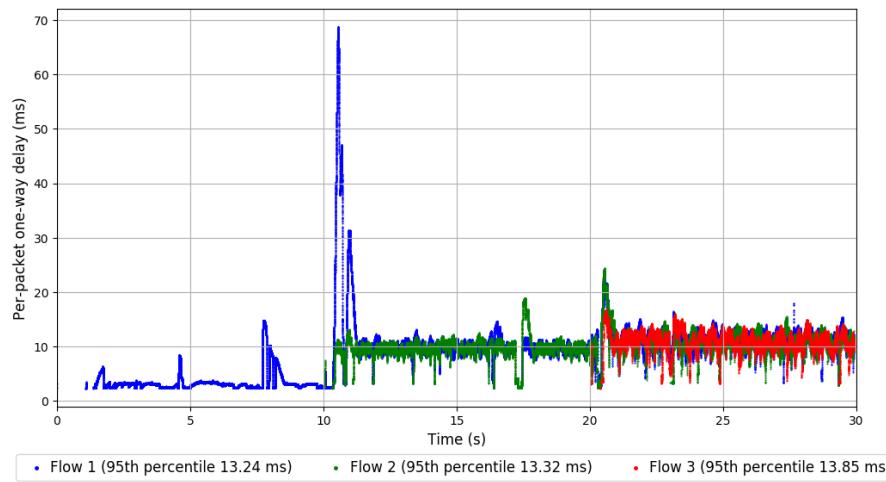
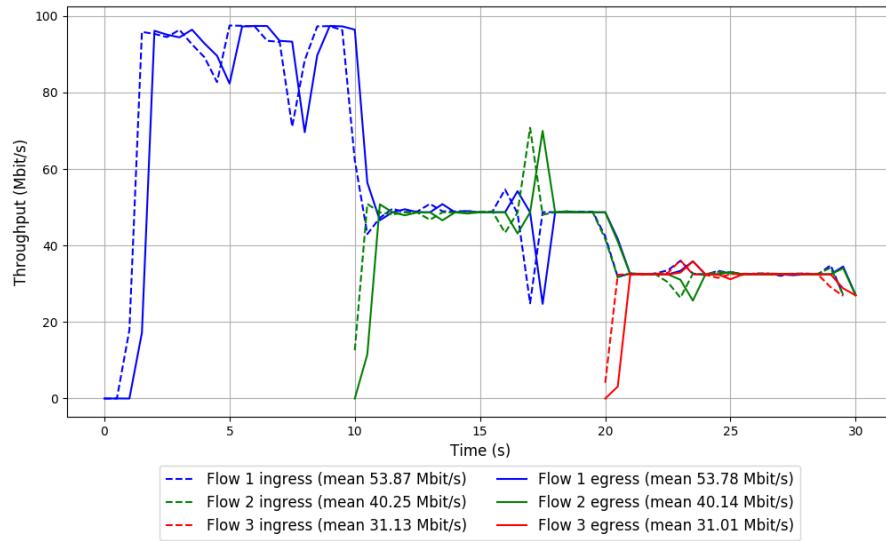


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-02-05 18:39:48
End at: 2019-02-05 18:40:18
Local clock offset: -4.998 ms
Remote clock offset: 1.249 ms

# Below is generated by plot.py at 2019-02-05 20:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.73 Mbit/s
95th percentile per-packet one-way delay: 13.421 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 53.78 Mbit/s
95th percentile per-packet one-way delay: 13.243 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 13.324 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 13.846 ms
Loss rate: 0.42%
```

Run 2: Report of QUIC Cubic — Data Link

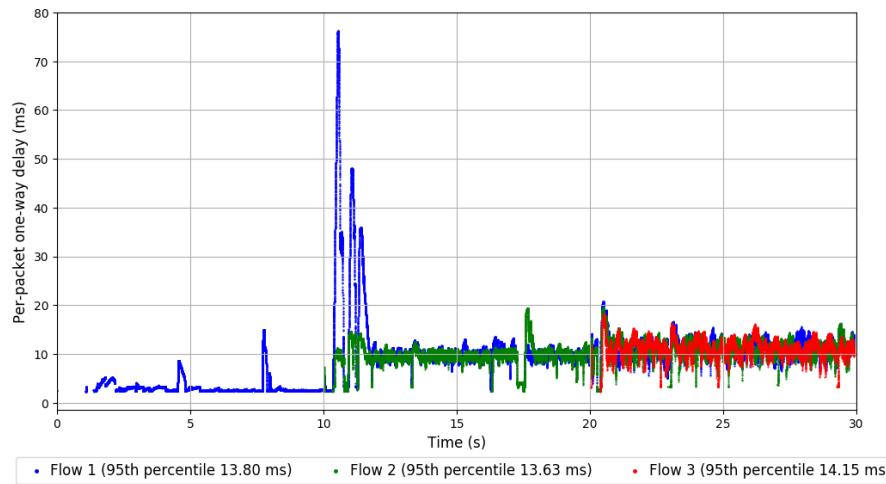
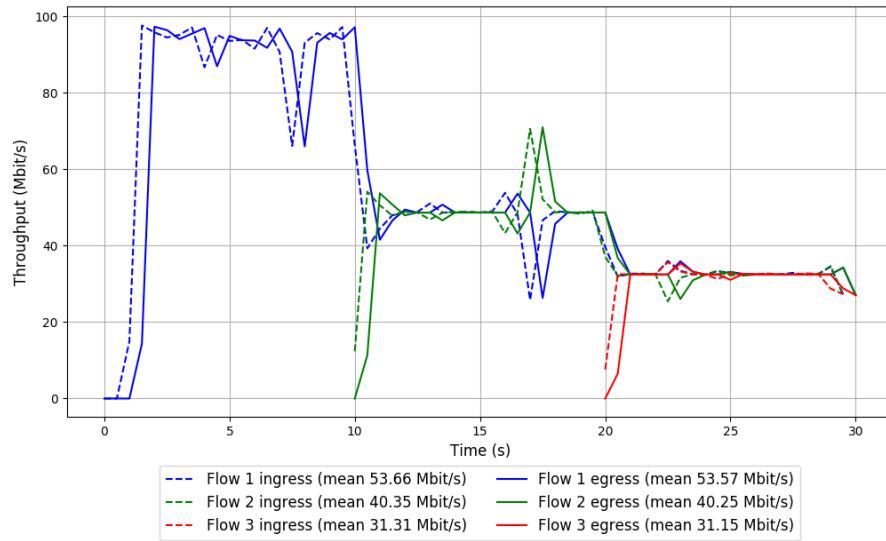


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-02-05 19:03:59
End at: 2019-02-05 19:04:29
Local clock offset: -3.78 ms
Remote clock offset: 1.735 ms

# Below is generated by plot.py at 2019-02-05 20:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 13.824 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 13.800 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 40.25 Mbit/s
95th percentile per-packet one-way delay: 13.630 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 14.151 ms
Loss rate: 0.55%
```

Run 3: Report of QUIC Cubic — Data Link

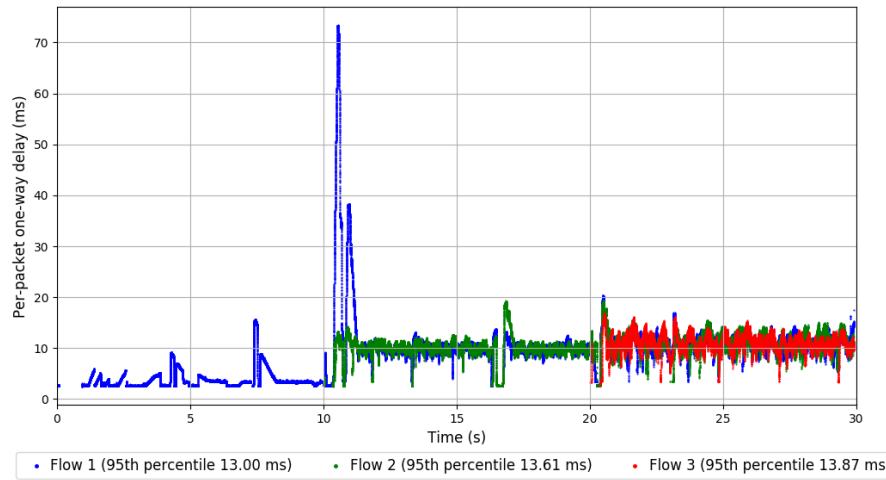
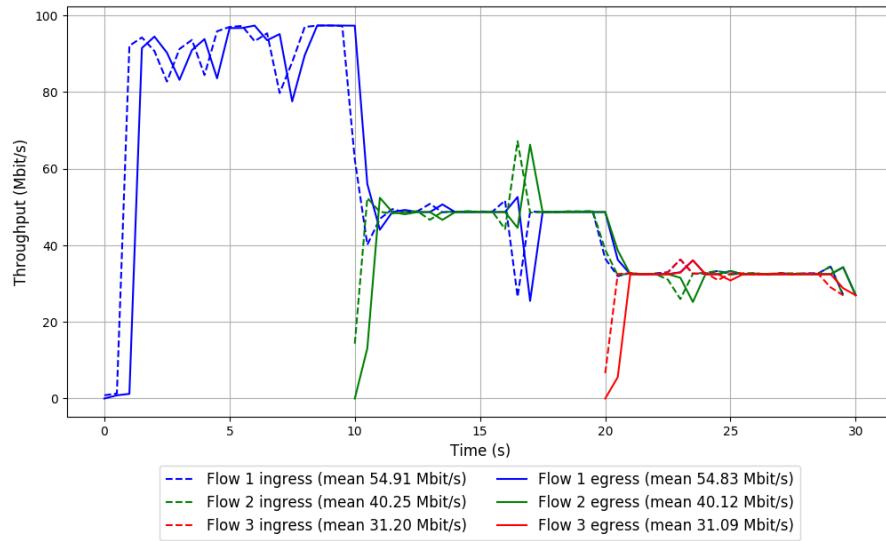


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-02-05 19:28:09
End at: 2019-02-05 19:28:39
Local clock offset: -3.269 ms
Remote clock offset: 1.849 ms

# Below is generated by plot.py at 2019-02-05 20:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.81 Mbit/s
95th percentile per-packet one-way delay: 13.446 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 54.83 Mbit/s
95th percentile per-packet one-way delay: 13.003 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.12 Mbit/s
95th percentile per-packet one-way delay: 13.614 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 31.09 Mbit/s
95th percentile per-packet one-way delay: 13.873 ms
Loss rate: 0.49%
```

Run 4: Report of QUIC Cubic — Data Link

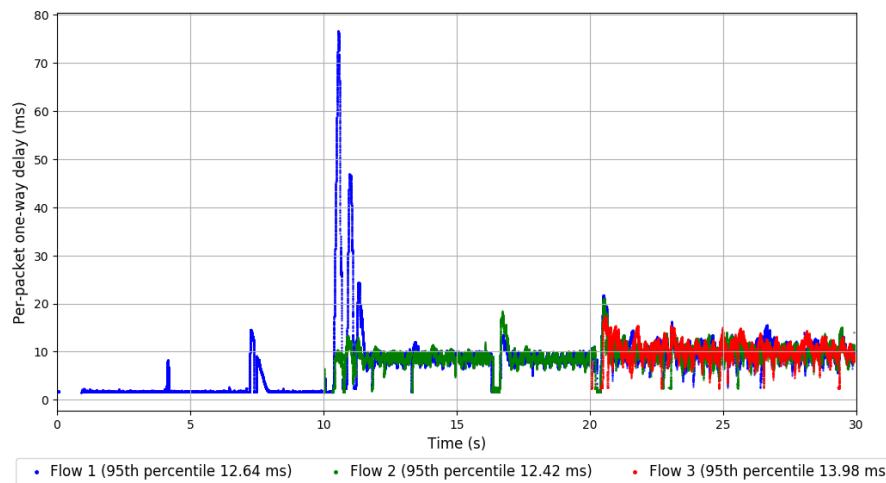
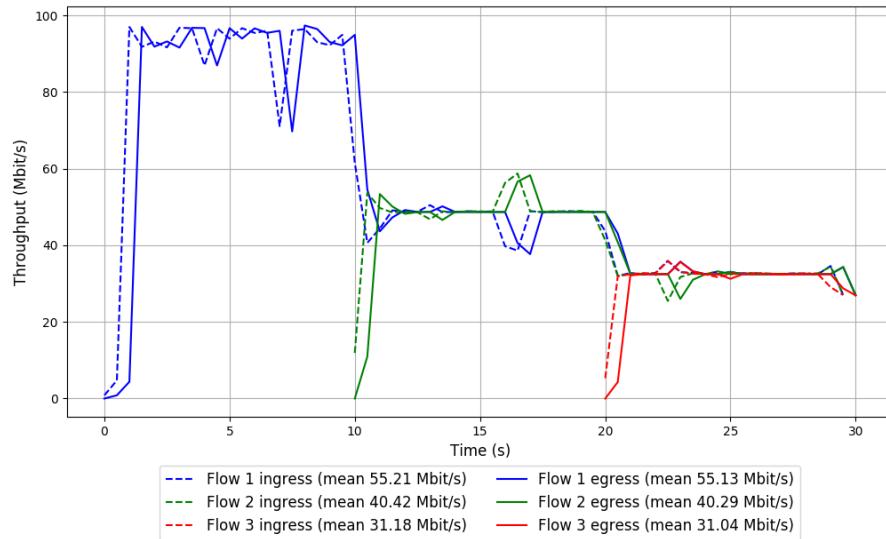


```
Run 5: Statistics of QUIC Cubic
```

```
Start at: 2019-02-05 19:52:20
End at: 2019-02-05 19:52:50
Local clock offset: -3.95 ms
Remote clock offset: 1.766 ms

# Below is generated by plot.py at 2019-02-05 20:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.20 Mbit/s
95th percentile per-packet one-way delay: 12.881 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 55.13 Mbit/s
95th percentile per-packet one-way delay: 12.639 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 12.417 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 13.981 ms
Loss rate: 0.49%
```

Run 5: Report of QUIC Cubic — Data Link

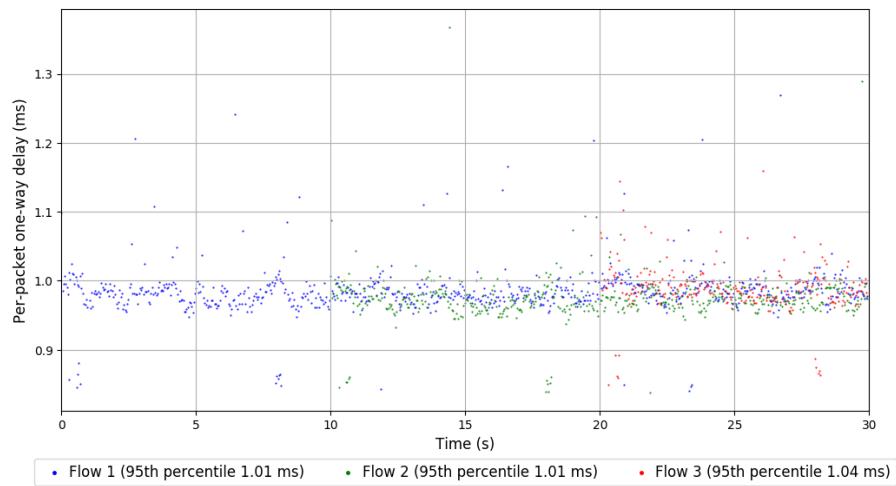
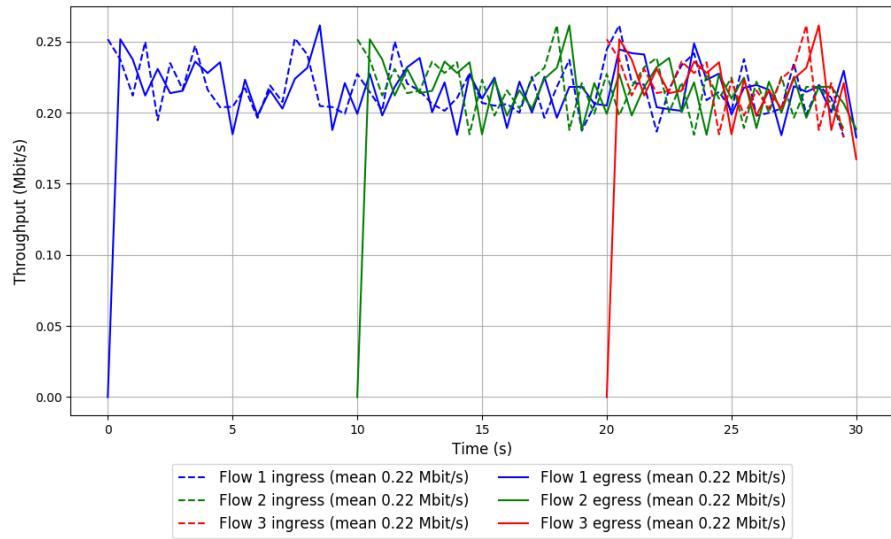


```
Run 1: Statistics of SCReAM

Start at: 2019-02-05 18:31:47
End at: 2019-02-05 18:32:17
Local clock offset: -5.171 ms
Remote clock offset: 0.96 ms

# Below is generated by plot.py at 2019-02-05 20:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.018 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.015 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.008 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.043 ms
Loss rate: 0.35%
```

Run 1: Report of SCReAM — Data Link

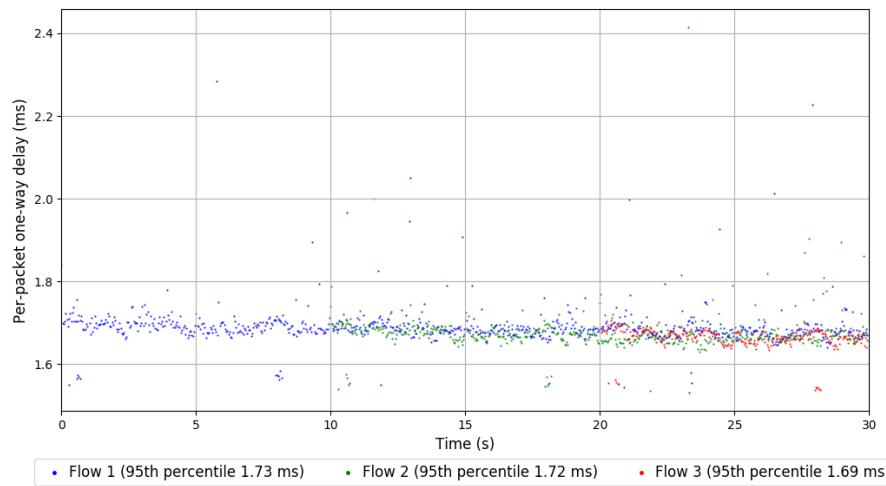
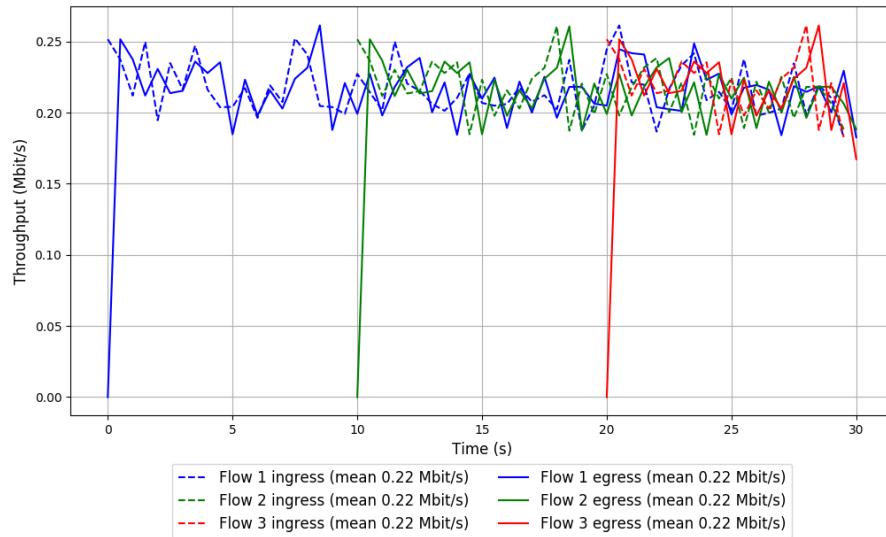


Run 2: Statistics of SCReAM

```
Start at: 2019-02-05 18:55:58
End at: 2019-02-05 18:56:28
Local clock offset: -4.859 ms
Remote clock offset: 1.532 ms

# Below is generated by plot.py at 2019-02-05 20:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.725 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.734 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.719 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.693 ms
Loss rate: 0.35%
```

Run 2: Report of SCReAM — Data Link

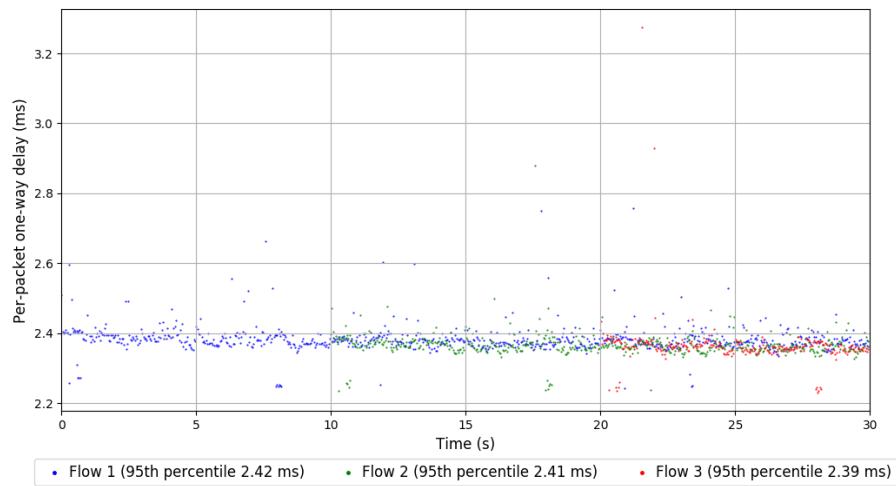
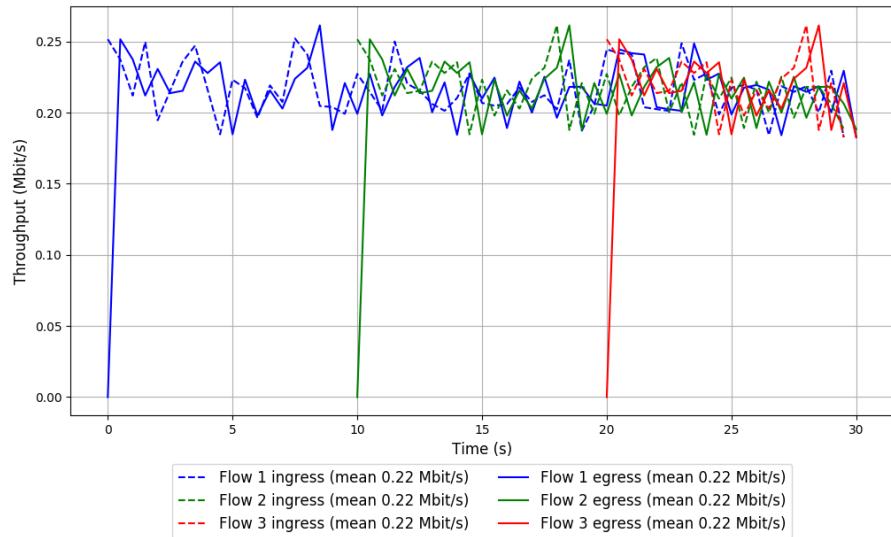


Run 3: Statistics of SCReAM

```
Start at: 2019-02-05 19:20:07
End at: 2019-02-05 19:20:37
Local clock offset: -3.401 ms
Remote clock offset: 1.991 ms

# Below is generated by plot.py at 2019-02-05 20:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.415 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.407 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.387 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

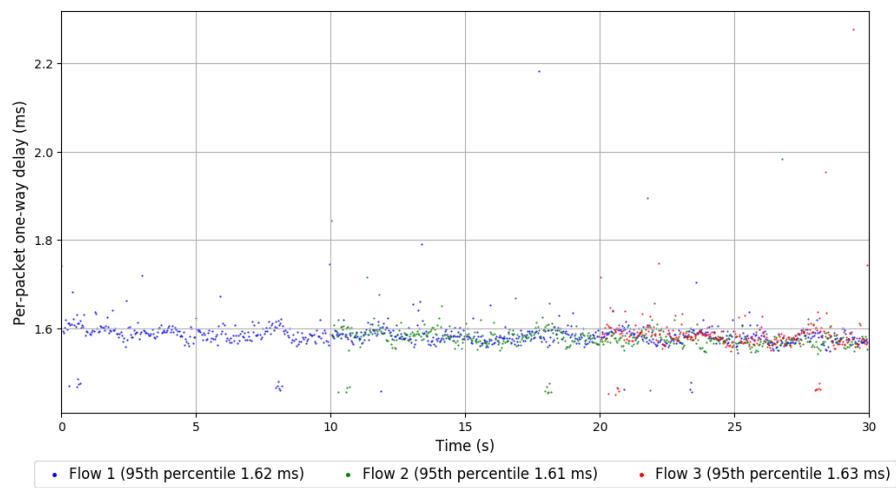
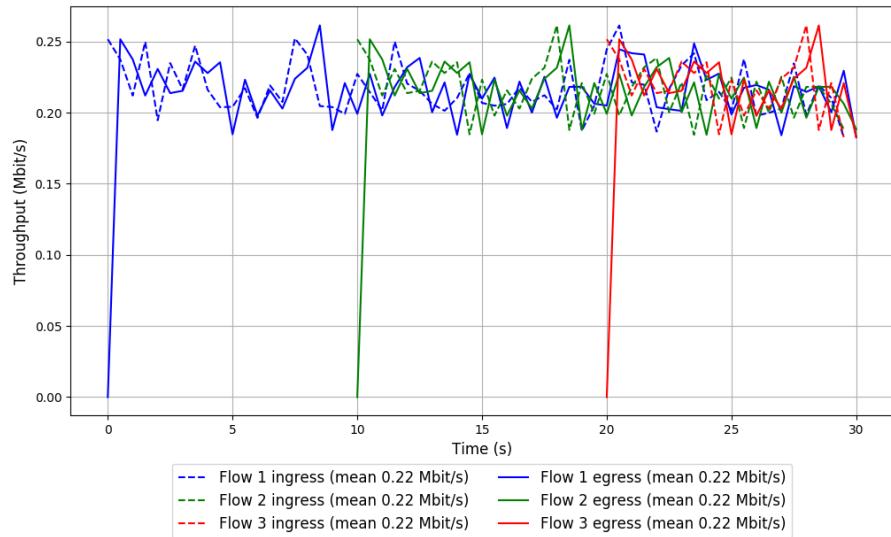


Run 4: Statistics of SCReAM

```
Start at: 2019-02-05 19:44:19
End at: 2019-02-05 19:44:49
Local clock offset: -3.794 ms
Remote clock offset: 1.789 ms

# Below is generated by plot.py at 2019-02-05 20:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.614 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.616 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.610 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.629 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

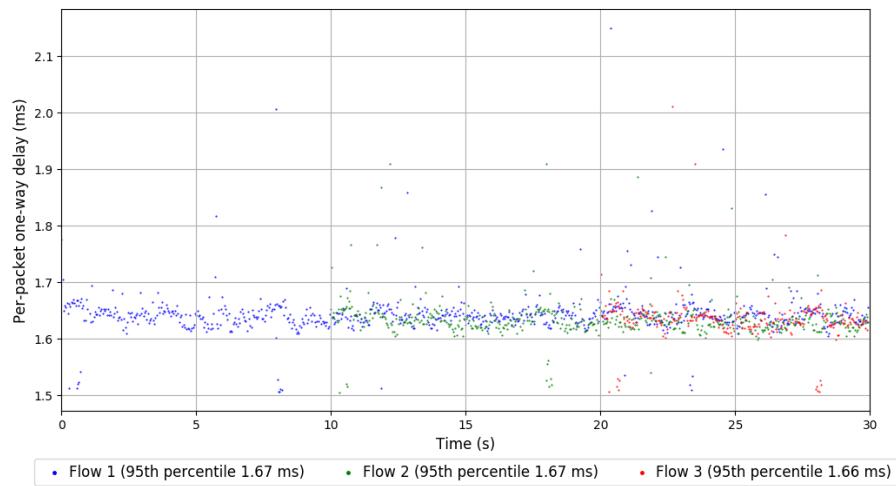
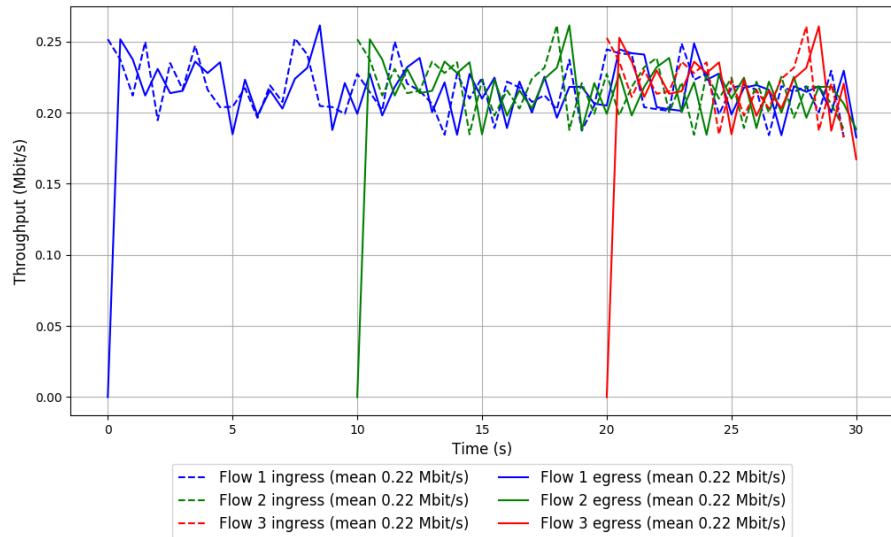


Run 5: Statistics of SCReAM

```
Start at: 2019-02-05 20:08:29
End at: 2019-02-05 20:08:59
Local clock offset: -4.026 ms
Remote clock offset: 1.603 ms

# Below is generated by plot.py at 2019-02-05 20:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.671 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.671 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.672 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.663 ms
Loss rate: 0.35%
```

Run 5: Report of SCReAM — Data Link

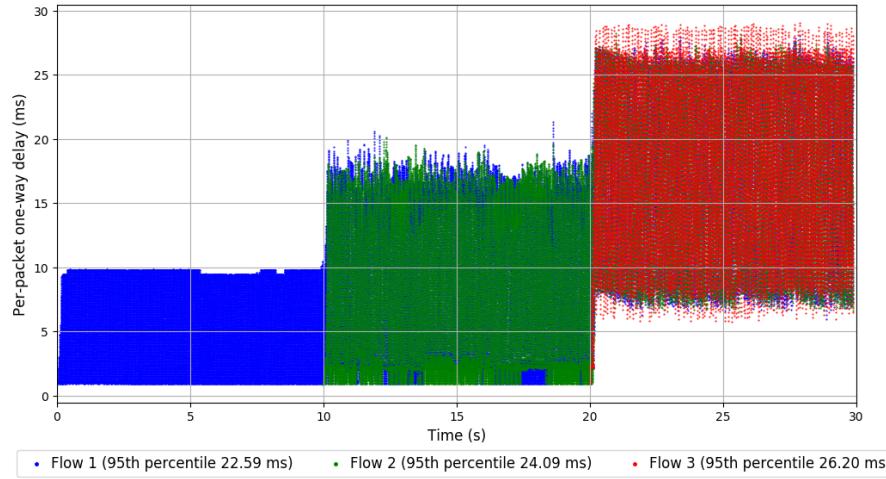
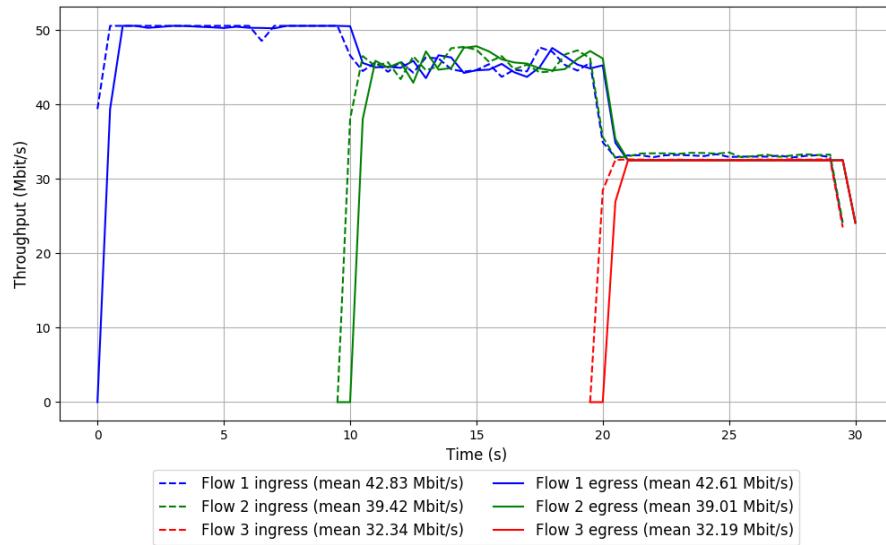


Run 1: Statistics of Sprout

```
Start at: 2019-02-05 18:18:11
End at: 2019-02-05 18:18:41
Local clock offset: -5.854 ms
Remote clock offset: 0.49 ms

# Below is generated by plot.py at 2019-02-05 20:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.23 Mbit/s
95th percentile per-packet one-way delay: 24.261 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 42.61 Mbit/s
95th percentile per-packet one-way delay: 22.587 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 24.091 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 26.198 ms
Loss rate: 0.35%
```

Run 1: Report of Sprout — Data Link

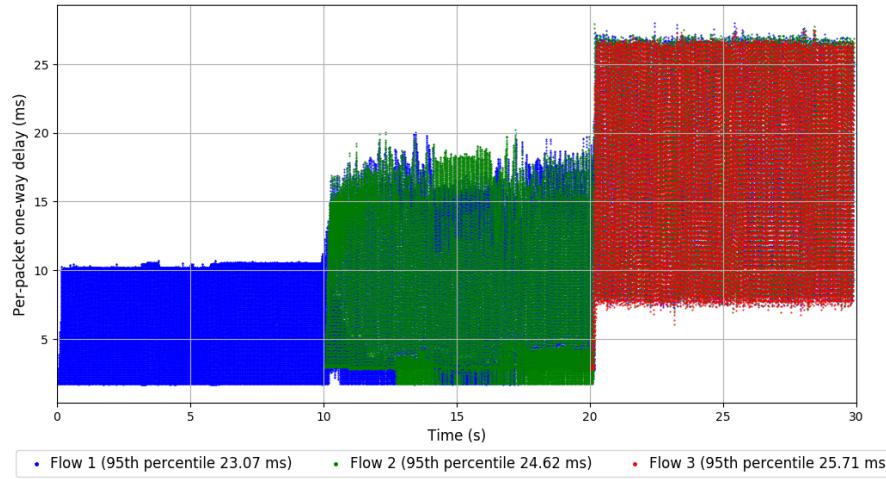
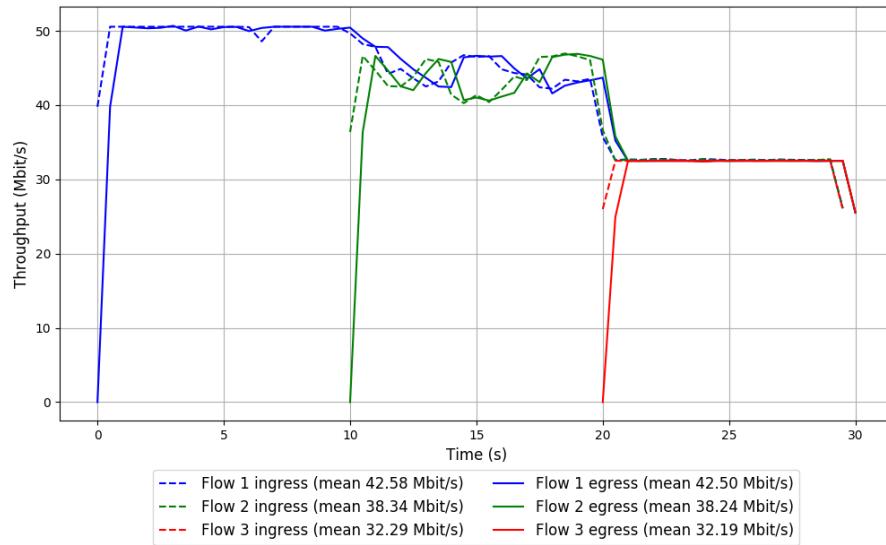


Run 2: Statistics of Sprout

```
Start at: 2019-02-05 18:42:06
End at: 2019-02-05 18:42:36
Local clock offset: -5.744 ms
Remote clock offset: 1.317 ms

# Below is generated by plot.py at 2019-02-05 20:25:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.55 Mbit/s
95th percentile per-packet one-way delay: 24.455 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 42.50 Mbit/s
95th percentile per-packet one-way delay: 23.067 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 38.24 Mbit/s
95th percentile per-packet one-way delay: 24.616 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 25.707 ms
Loss rate: 0.32%
```

Run 2: Report of Sprout — Data Link

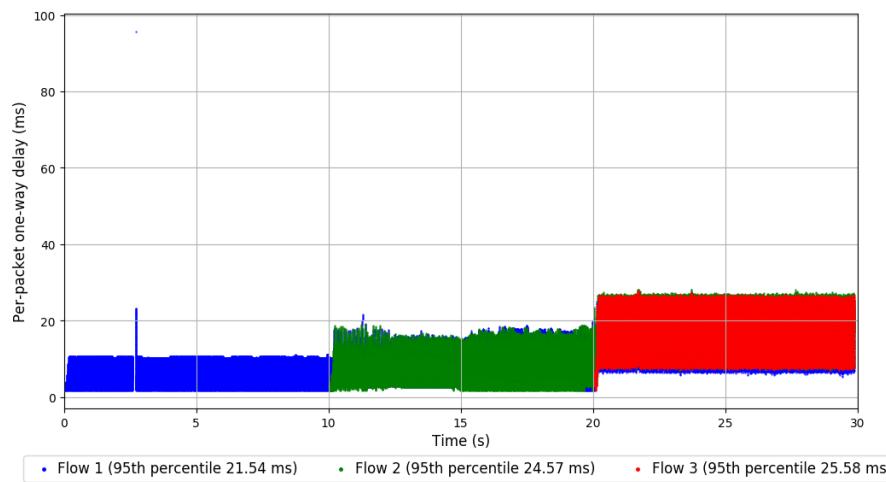
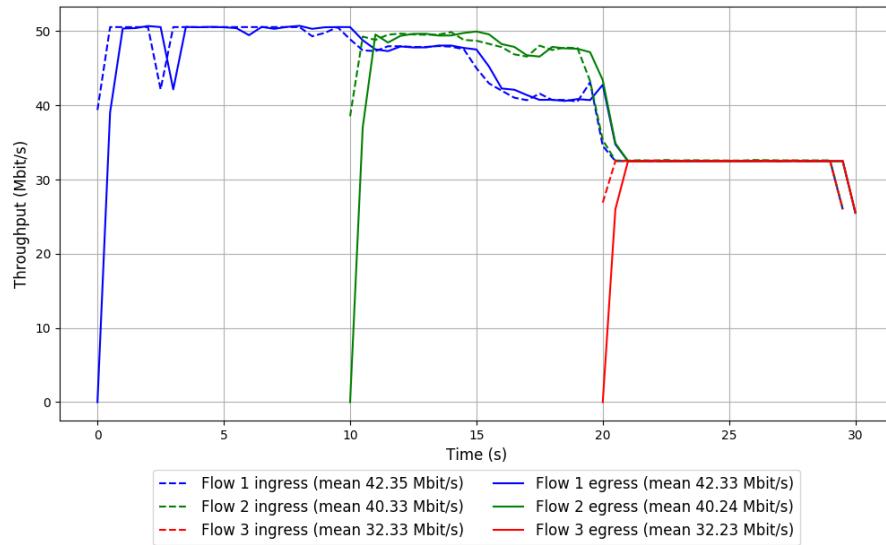


Run 3: Statistics of Sprout

```
Start at: 2019-02-05 19:06:18
End at: 2019-02-05 19:06:48
Local clock offset: -4.454 ms
Remote clock offset: 1.7 ms

# Below is generated by plot.py at 2019-02-05 20:25:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.74 Mbit/s
95th percentile per-packet one-way delay: 23.886 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 42.33 Mbit/s
95th percentile per-packet one-way delay: 21.541 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: 24.570 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 25.577 ms
Loss rate: 0.26%
```

Run 3: Report of Sprout — Data Link

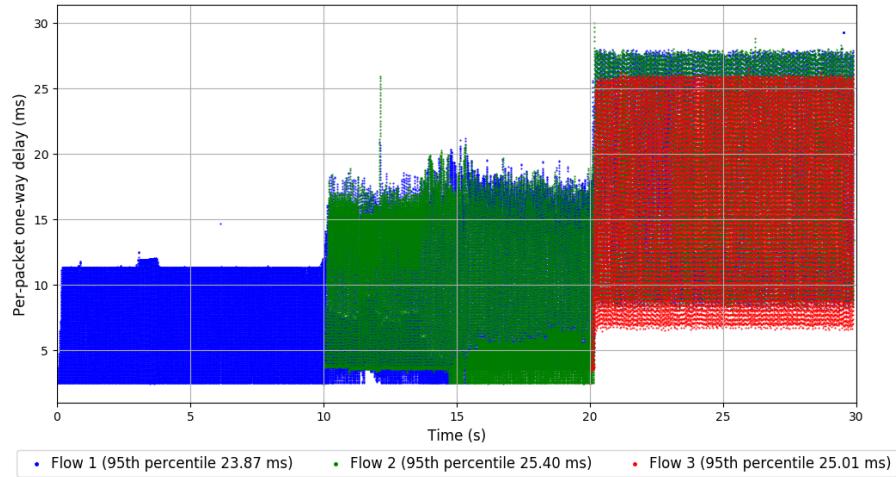
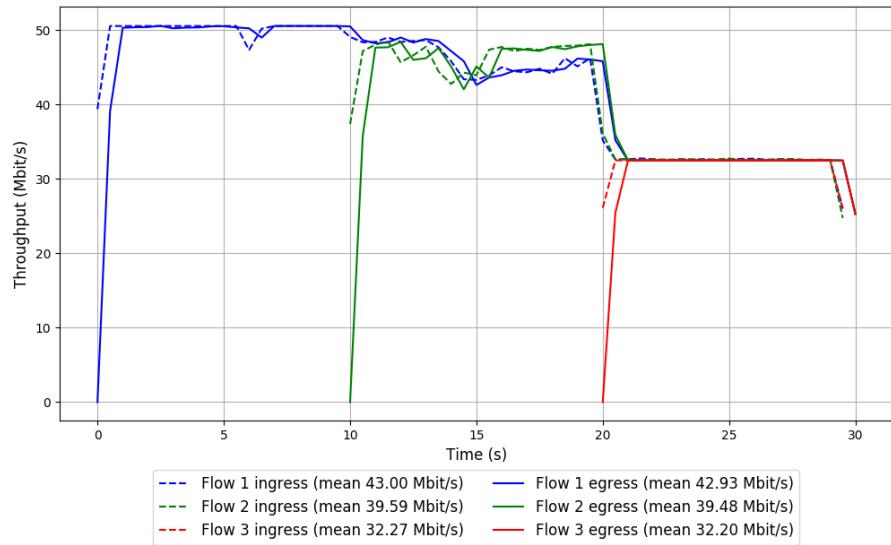


Run 4: Statistics of Sprout

```
Start at: 2019-02-05 19:30:27
End at: 2019-02-05 19:30:57
Local clock offset: -3.213 ms
Remote clock offset: 1.9 ms

# Below is generated by plot.py at 2019-02-05 20:25:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.82 Mbit/s
95th percentile per-packet one-way delay: 24.747 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 42.93 Mbit/s
95th percentile per-packet one-way delay: 23.871 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 25.398 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 32.20 Mbit/s
95th percentile per-packet one-way delay: 25.013 ms
Loss rate: 0.21%
```

Run 4: Report of Sprout — Data Link

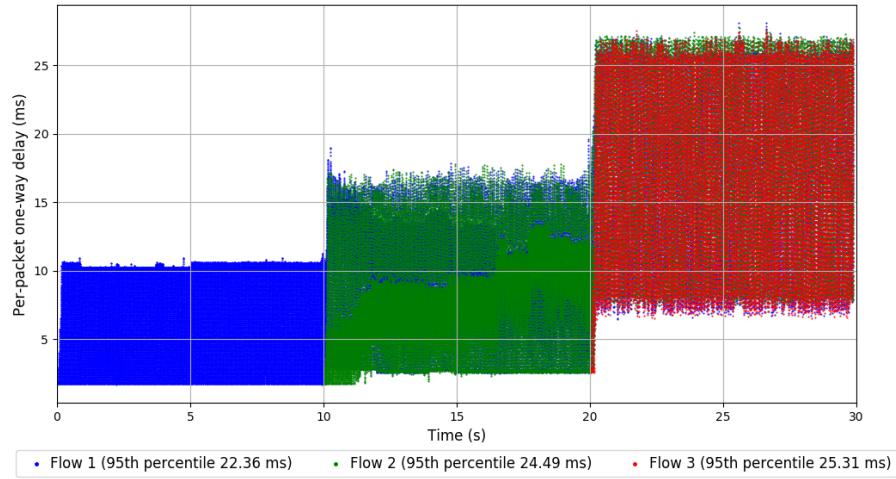
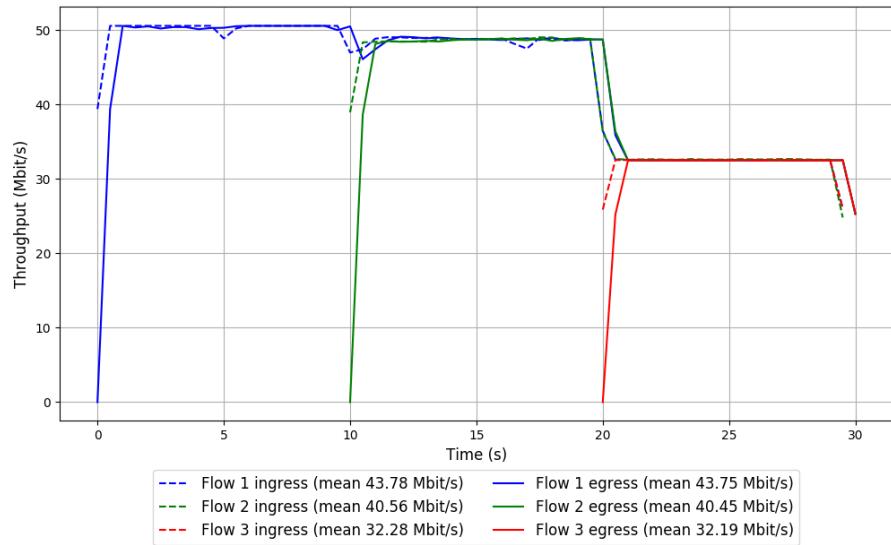


Run 5: Statistics of Sprout

```
Start at: 2019-02-05 19:54:39
End at: 2019-02-05 19:55:09
Local clock offset: -3.972 ms
Remote clock offset: 1.684 ms

# Below is generated by plot.py at 2019-02-05 20:25:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.29 Mbit/s
95th percentile per-packet one-way delay: 24.052 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 43.75 Mbit/s
95th percentile per-packet one-way delay: 22.365 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.45 Mbit/s
95th percentile per-packet one-way delay: 24.491 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 25.310 ms
Loss rate: 0.26%
```

Run 5: Report of Sprout — Data Link

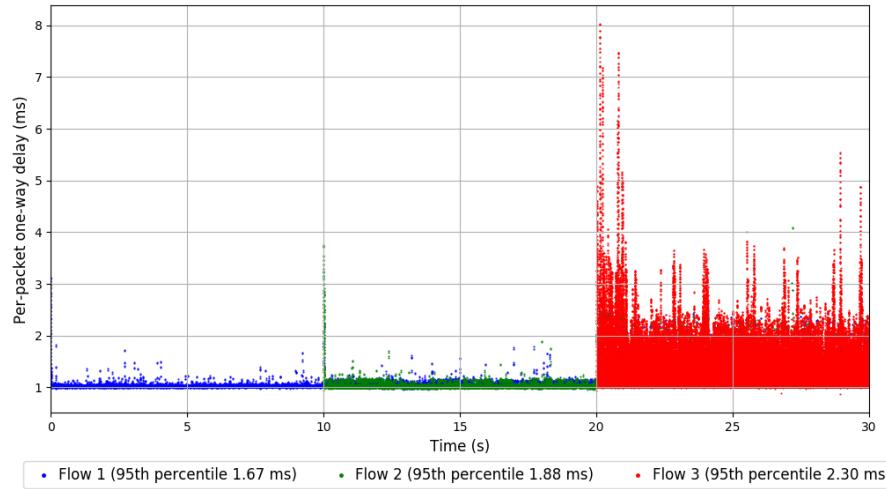
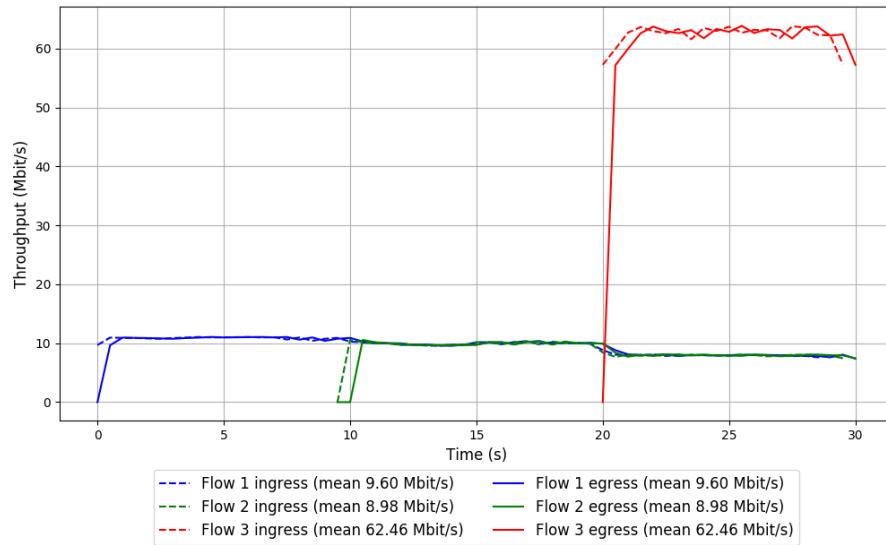


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-02-05 18:28:24
End at: 2019-02-05 18:28:54
Local clock offset: -5.248 ms
Remote clock offset: 0.813 ms

# Below is generated by plot.py at 2019-02-05 20:25:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.35 Mbit/s
95th percentile per-packet one-way delay: 2.128 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 1.668 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 8.98 Mbit/s
95th percentile per-packet one-way delay: 1.881 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 62.46 Mbit/s
95th percentile per-packet one-way delay: 2.296 ms
Loss rate: 0.02%
```

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

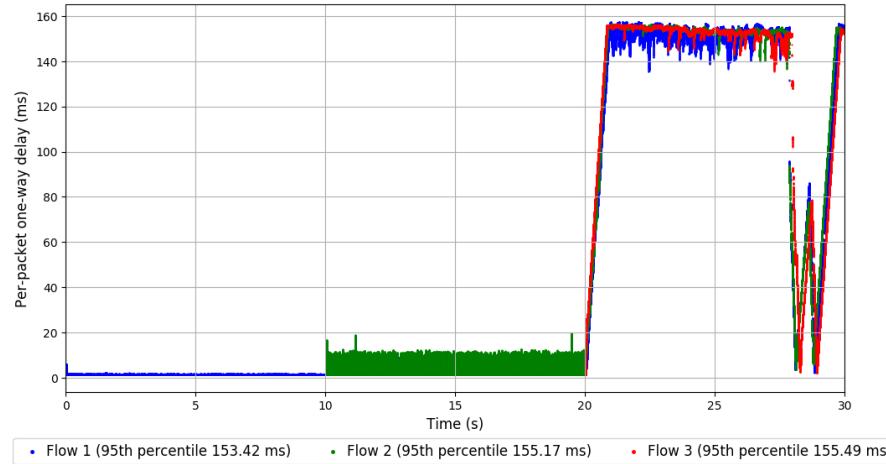
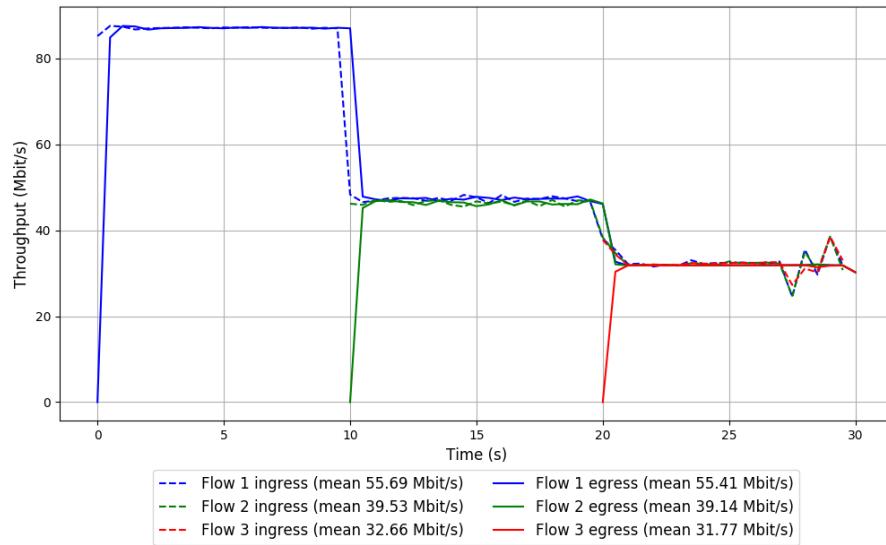


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-02-05 18:52:29
End at: 2019-02-05 18:52:59
Local clock offset: -5.076 ms
Remote clock offset: 1.434 ms

# Below is generated by plot.py at 2019-02-05 20:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.03 Mbit/s
95th percentile per-packet one-way delay: 155.014 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 55.41 Mbit/s
95th percentile per-packet one-way delay: 153.419 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 155.168 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 155.488 ms
Loss rate: 2.76%
```

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

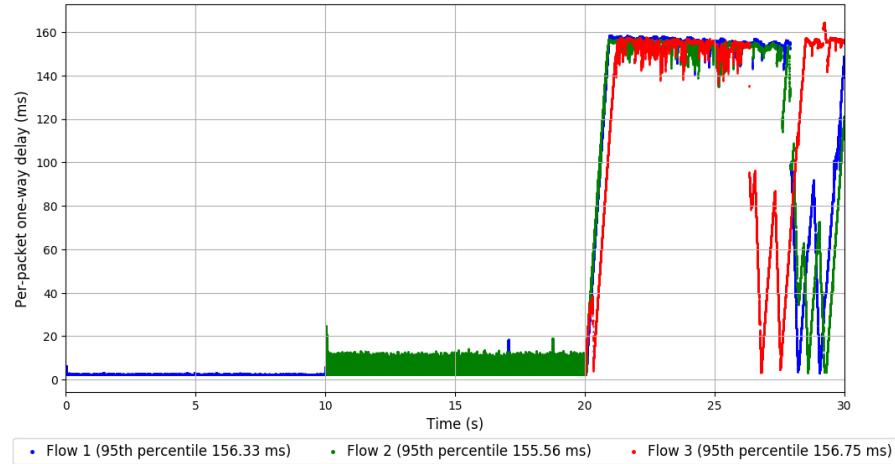
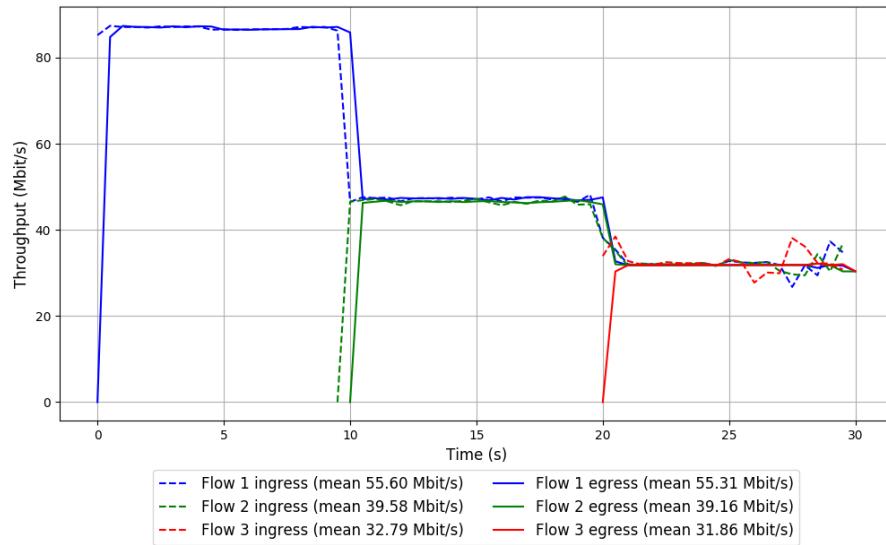


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-02-05 19:16:38
End at: 2019-02-05 19:17:08
Local clock offset: -3.464 ms
Remote clock offset: 1.887 ms

# Below is generated by plot.py at 2019-02-05 20:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.98 Mbit/s
95th percentile per-packet one-way delay: 156.197 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 156.330 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 39.16 Mbit/s
95th percentile per-packet one-way delay: 155.560 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 31.86 Mbit/s
95th percentile per-packet one-way delay: 156.748 ms
Loss rate: 2.88%
```

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

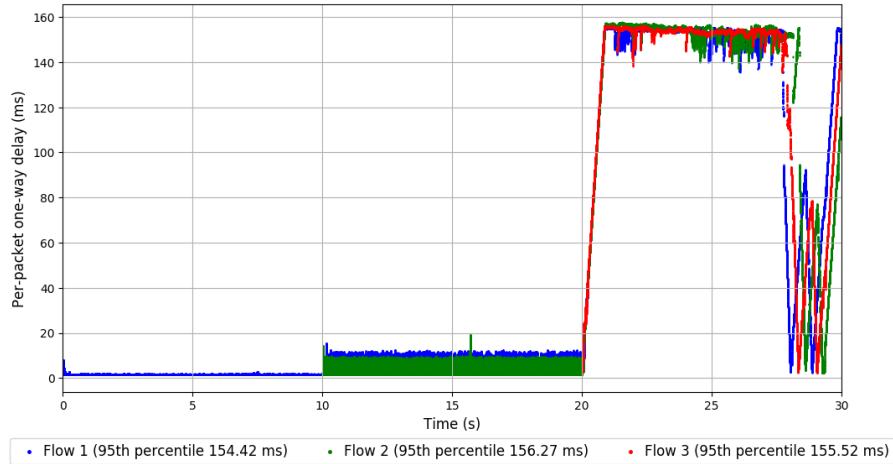
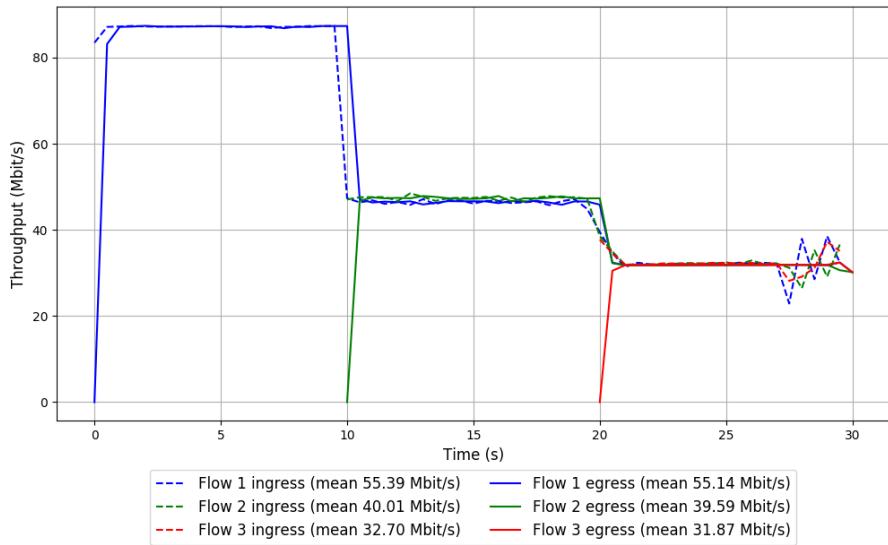


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-02-05 19:40:51
End at: 2019-02-05 19:41:21
Local clock offset: -3.802 ms
Remote clock offset: 1.775 ms

# Below is generated by plot.py at 2019-02-05 20:27:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.09 Mbit/s
95th percentile per-packet one-way delay: 155.269 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 55.14 Mbit/s
95th percentile per-packet one-way delay: 154.424 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 156.270 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 31.87 Mbit/s
95th percentile per-packet one-way delay: 155.517 ms
Loss rate: 2.58%
```

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

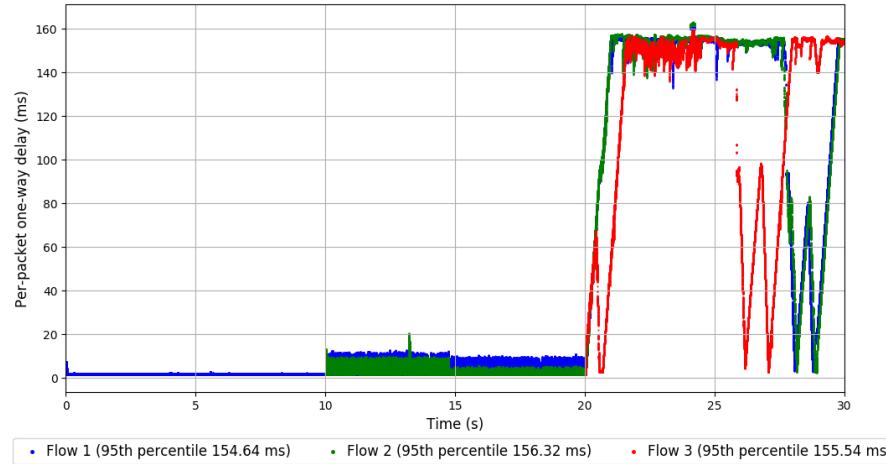
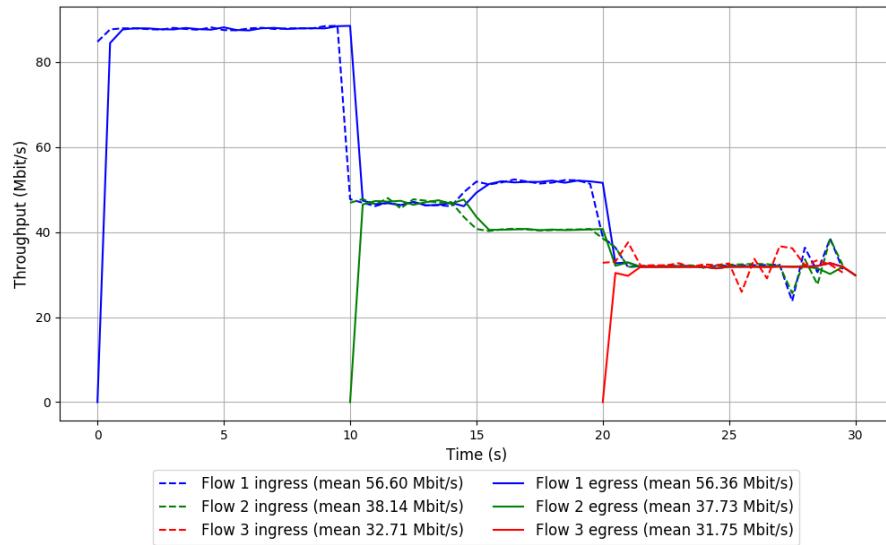


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-02-05 20:05:00
End at: 2019-02-05 20:05:30
Local clock offset: -4.035 ms
Remote clock offset: 1.567 ms

# Below is generated by plot.py at 2019-02-05 20:27:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.03 Mbit/s
95th percentile per-packet one-way delay: 155.322 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 154.639 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 37.73 Mbit/s
95th percentile per-packet one-way delay: 156.322 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 31.75 Mbit/s
95th percentile per-packet one-way delay: 155.543 ms
Loss rate: 3.02%
```

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

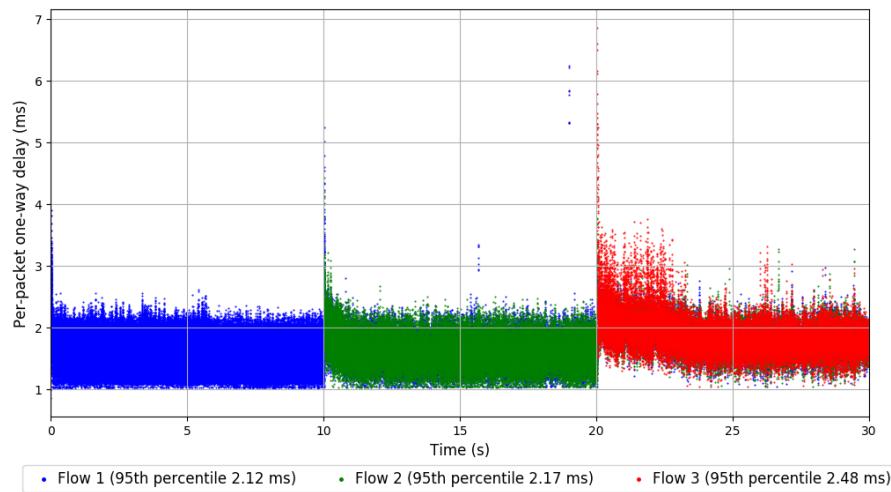
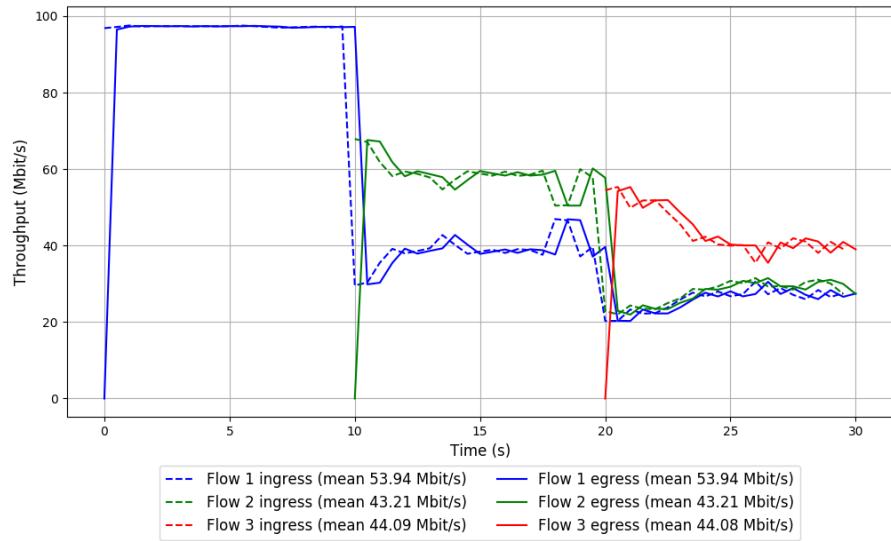


Run 1: Statistics of TCP Vegas

```
Start at: 2019-02-05 18:14:43
End at: 2019-02-05 18:15:13
Local clock offset: -5.964 ms
Remote clock offset: 0.439 ms

# Below is generated by plot.py at 2019-02-05 20:27:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.35 Mbit/s
95th percentile per-packet one-way delay: 2.188 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.94 Mbit/s
95th percentile per-packet one-way delay: 2.118 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.21 Mbit/s
95th percentile per-packet one-way delay: 2.171 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 44.08 Mbit/s
95th percentile per-packet one-way delay: 2.482 ms
Loss rate: 0.02%
```

Run 1: Report of TCP Vegas — Data Link

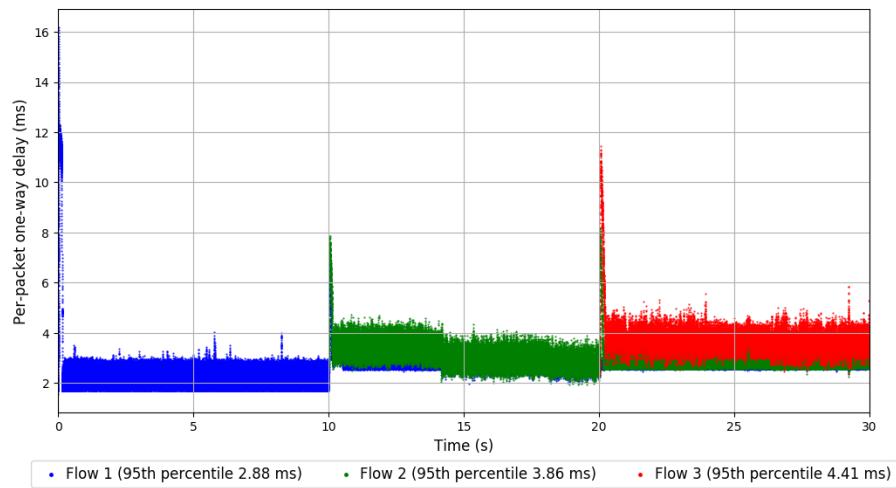
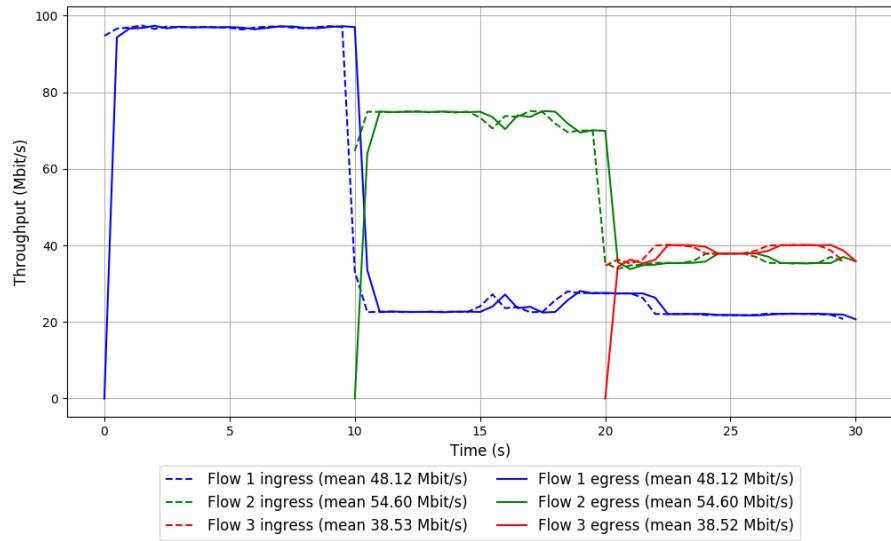


Run 2: Statistics of TCP Vegas

```
Start at: 2019-02-05 18:38:39
End at: 2019-02-05 18:39:09
Local clock offset: -5.791 ms
Remote clock offset: 1.183 ms

# Below is generated by plot.py at 2019-02-05 20:27:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.28 Mbit/s
95th percentile per-packet one-way delay: 3.979 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 48.12 Mbit/s
95th percentile per-packet one-way delay: 2.884 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 54.60 Mbit/s
95th percentile per-packet one-way delay: 3.857 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 38.52 Mbit/s
95th percentile per-packet one-way delay: 4.407 ms
Loss rate: 0.04%
```

Run 2: Report of TCP Vegas — Data Link

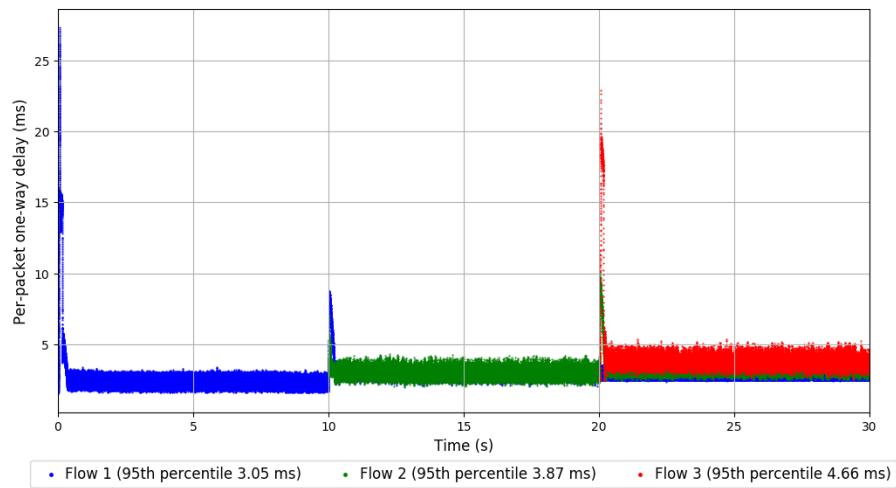
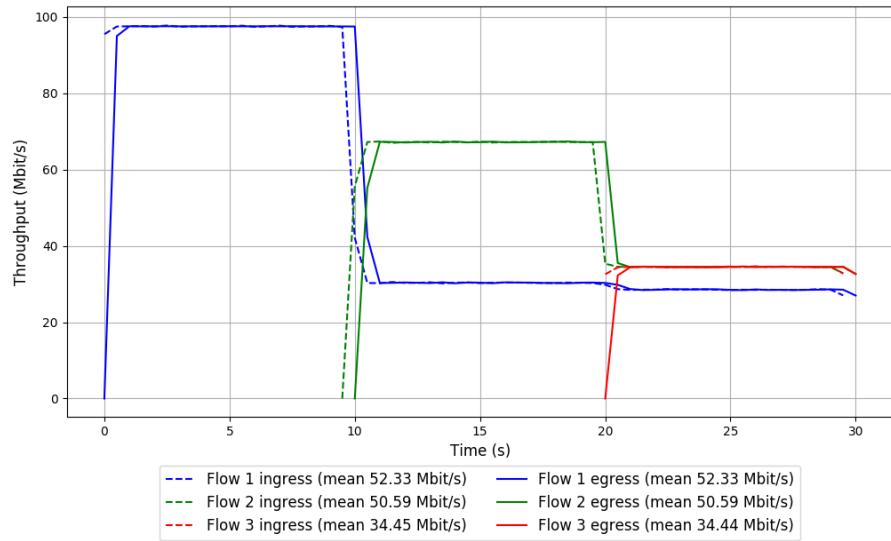


Run 3: Statistics of TCP Vegas

```
Start at: 2019-02-05 19:02:50
End at: 2019-02-05 19:03:20
Local clock offset: -4.579 ms
Remote clock offset: 1.733 ms

# Below is generated by plot.py at 2019-02-05 20:27:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 4.131 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.33 Mbit/s
95th percentile per-packet one-way delay: 3.053 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 50.59 Mbit/s
95th percentile per-packet one-way delay: 3.868 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 4.655 ms
Loss rate: 0.06%
```

Run 3: Report of TCP Vegas — Data Link

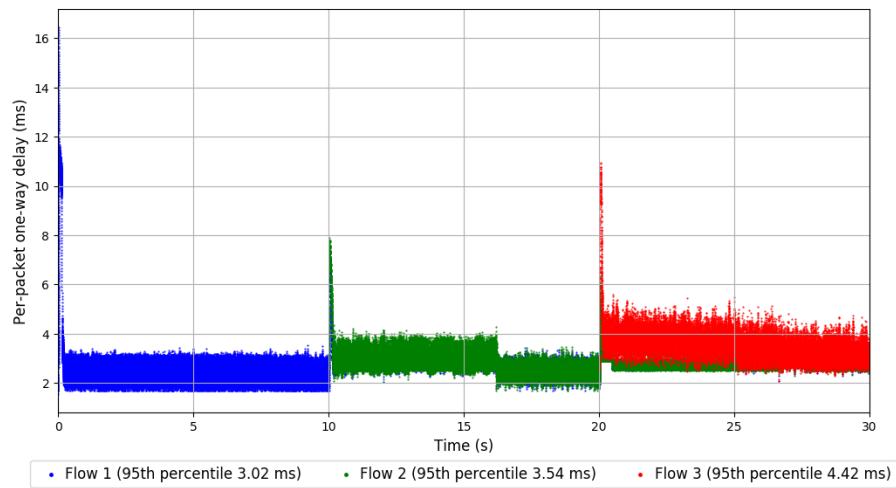
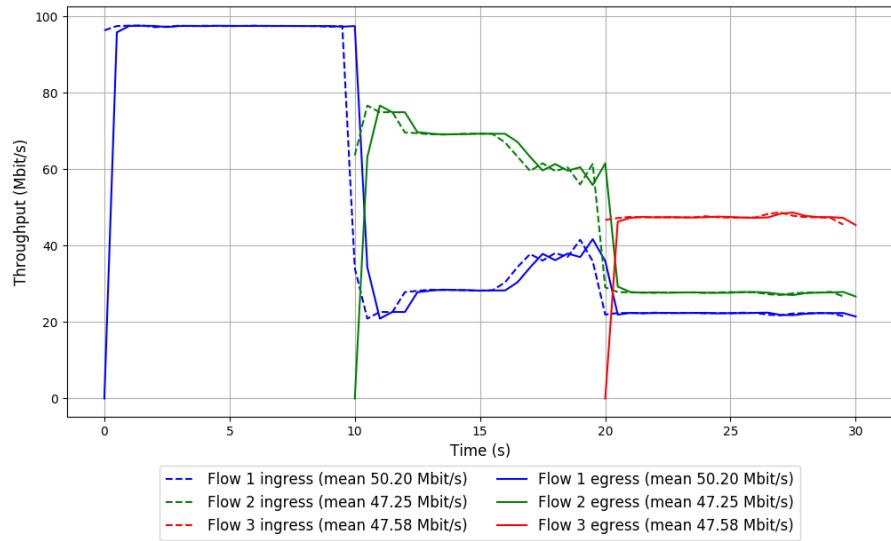


Run 4: Statistics of TCP Vegas

```
Start at: 2019-02-05 19:27:00
End at: 2019-02-05 19:27:30
Local clock offset: -4.039 ms
Remote clock offset: 1.911 ms

# Below is generated by plot.py at 2019-02-05 20:27:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 3.904 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 3.019 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 47.25 Mbit/s
95th percentile per-packet one-way delay: 3.540 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 47.58 Mbit/s
95th percentile per-packet one-way delay: 4.421 ms
Loss rate: 0.04%
```

Run 4: Report of TCP Vegas — Data Link

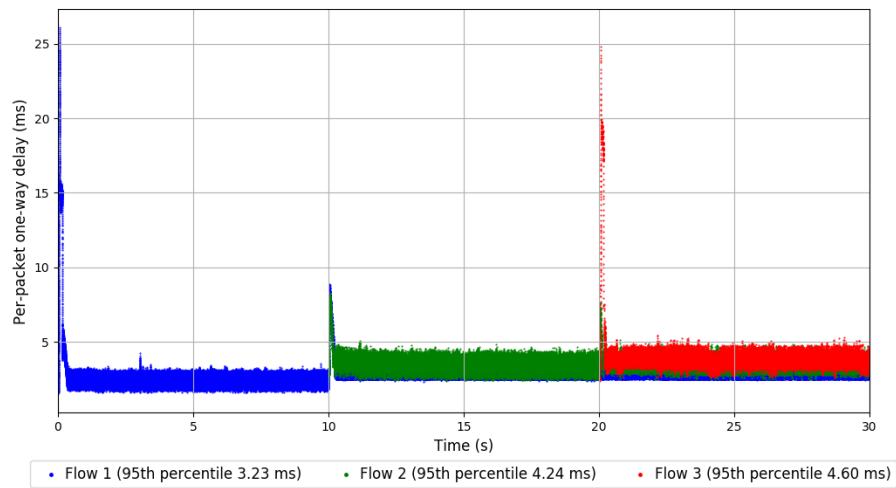
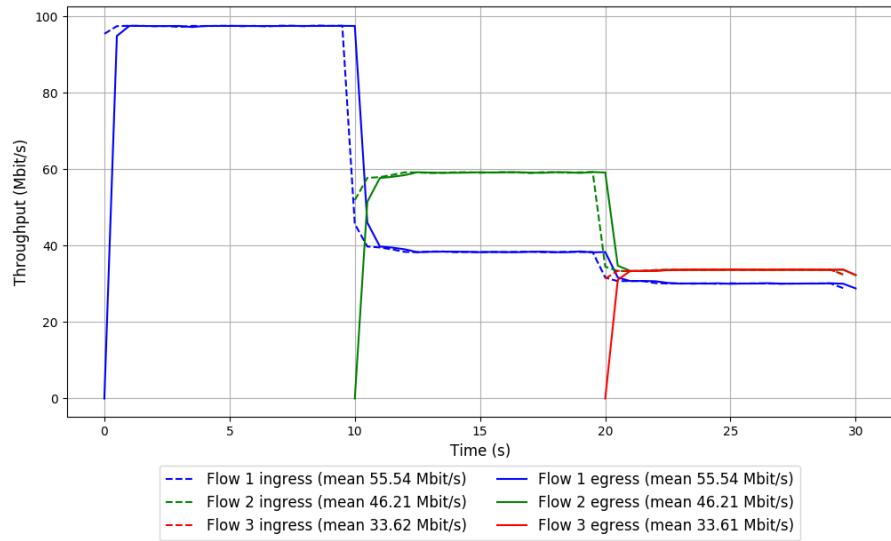


Run 5: Statistics of TCP Vegas

```
Start at: 2019-02-05 19:51:11
End at: 2019-02-05 19:51:41
Local clock offset: -3.977 ms
Remote clock offset: 1.739 ms

# Below is generated by plot.py at 2019-02-05 20:27:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 4.239 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 55.54 Mbit/s
95th percentile per-packet one-way delay: 3.229 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 46.21 Mbit/s
95th percentile per-packet one-way delay: 4.239 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 4.601 ms
Loss rate: 0.06%
```

Run 5: Report of TCP Vegas — Data Link

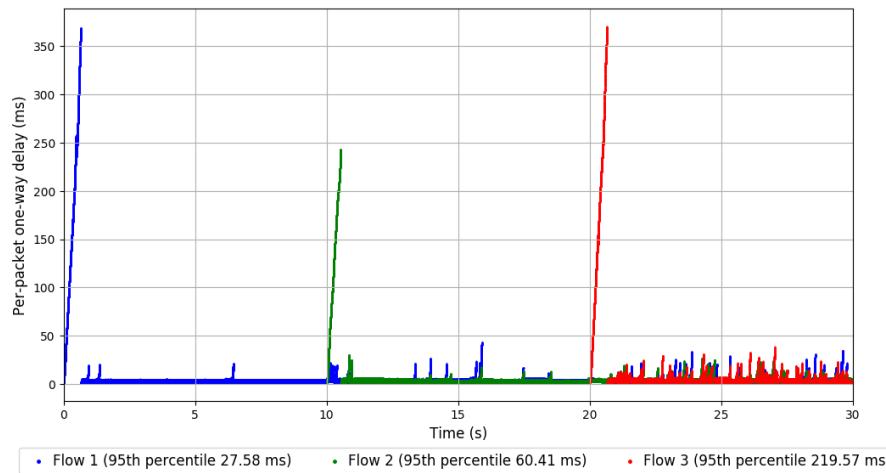
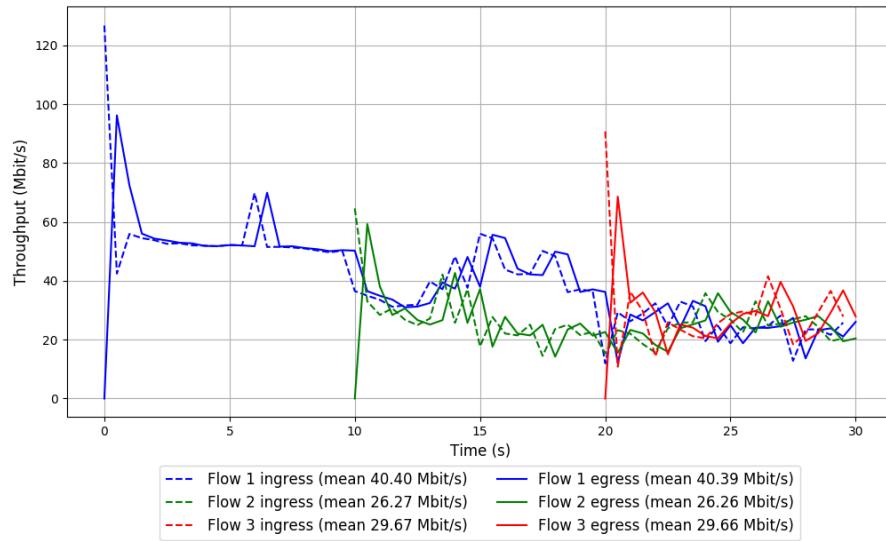


Run 1: Statistics of Verus

```
Start at: 2019-02-05 18:32:52
End at: 2019-02-05 18:33:22
Local clock offset: -5.154 ms
Remote clock offset: 0.995 ms

# Below is generated by plot.py at 2019-02-05 20:27:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.73 Mbit/s
95th percentile per-packet one-way delay: 84.967 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 40.39 Mbit/s
95th percentile per-packet one-way delay: 27.576 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 26.26 Mbit/s
95th percentile per-packet one-way delay: 60.414 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 29.66 Mbit/s
95th percentile per-packet one-way delay: 219.573 ms
Loss rate: 0.05%
```

Run 1: Report of Verus — Data Link

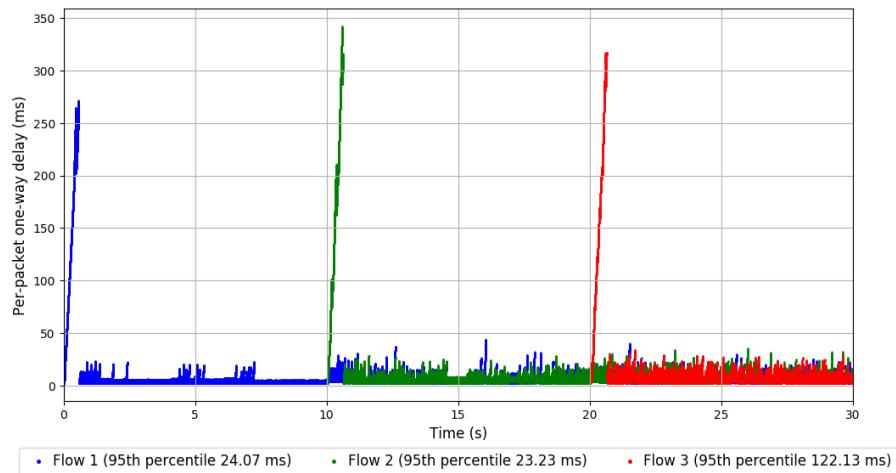
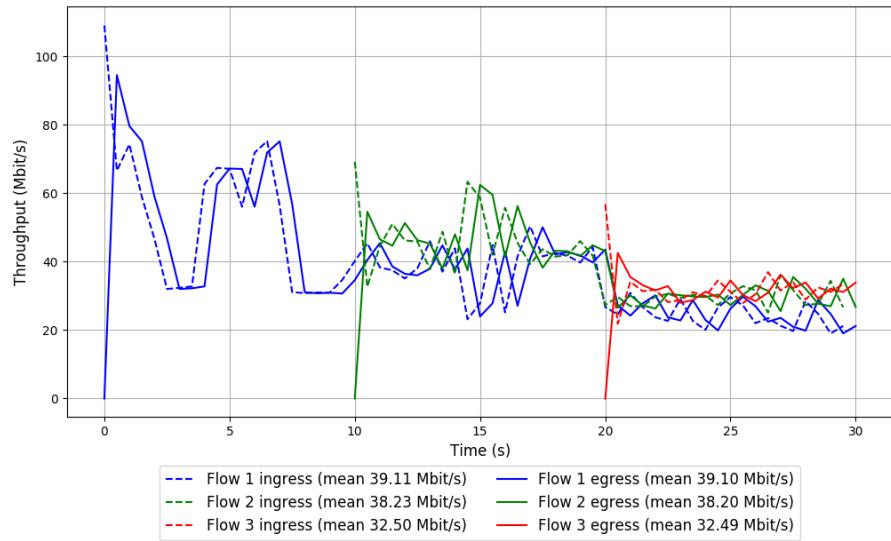


Run 2: Statistics of Verus

```
Start at: 2019-02-05 18:57:03
End at: 2019-02-05 18:57:33
Local clock offset: -4.04 ms
Remote clock offset: 1.592 ms

# Below is generated by plot.py at 2019-02-05 20:27:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.33 Mbit/s
95th percentile per-packet one-way delay: 27.576 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 39.10 Mbit/s
95th percentile per-packet one-way delay: 24.072 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 23.233 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 122.130 ms
Loss rate: 0.04%
```

Run 2: Report of Verus — Data Link

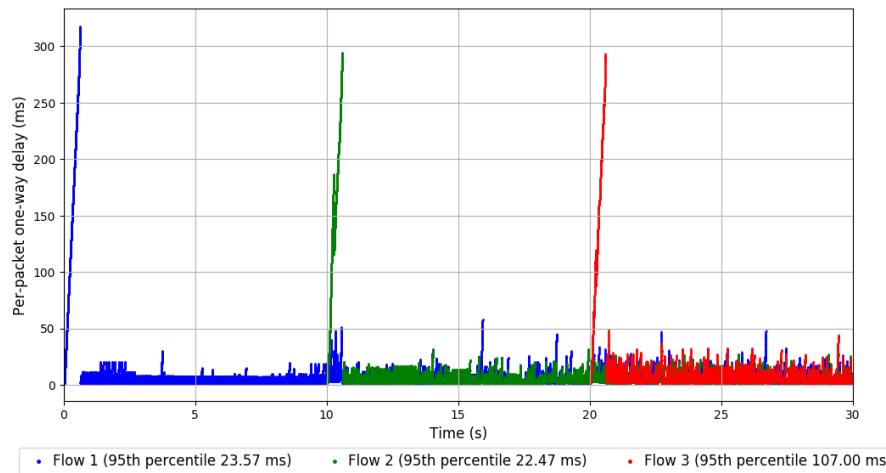
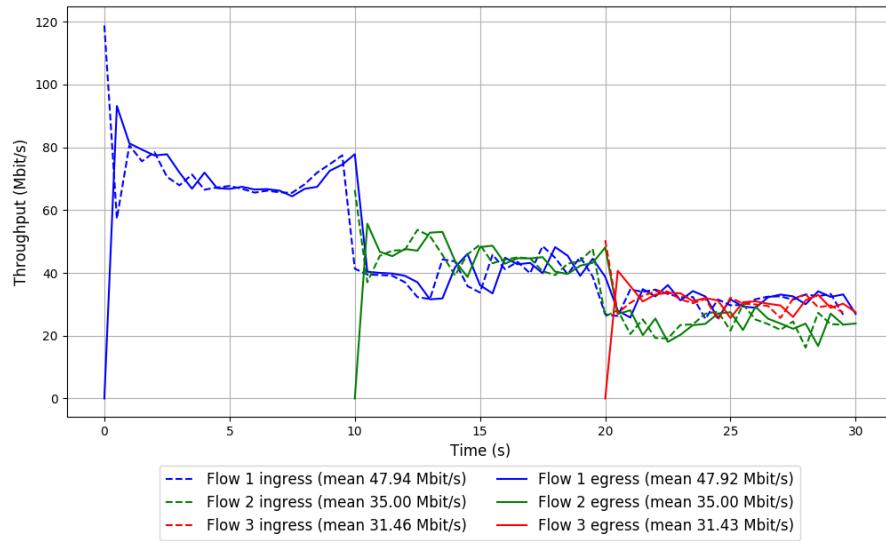


Run 3: Statistics of Verus

```
Start at: 2019-02-05 19:21:12
End at: 2019-02-05 19:21:42
Local clock offset: -4.132 ms
Remote clock offset: 1.921 ms

# Below is generated by plot.py at 2019-02-05 20:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.67 Mbit/s
95th percentile per-packet one-way delay: 27.295 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 47.92 Mbit/s
95th percentile per-packet one-way delay: 23.575 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 35.00 Mbit/s
95th percentile per-packet one-way delay: 22.473 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 106.998 ms
Loss rate: 0.07%
```

Run 3: Report of Verus — Data Link

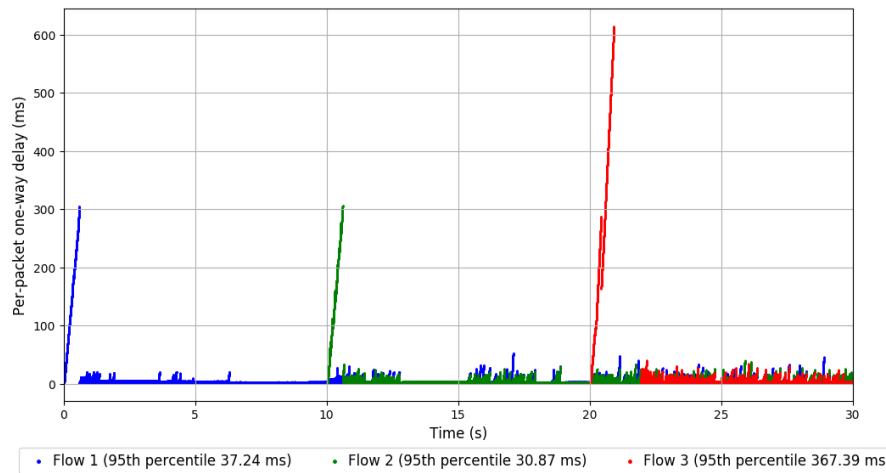
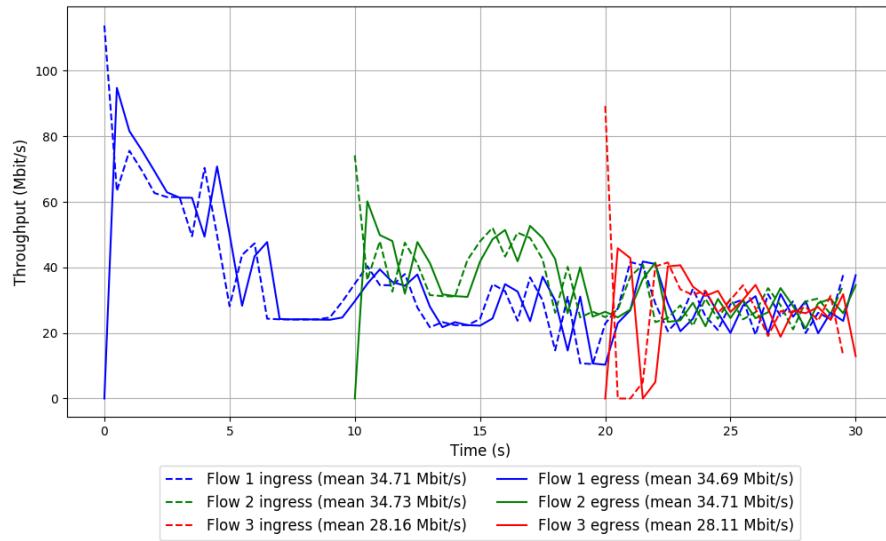


Run 4: Statistics of Verus

```
Start at: 2019-02-05 19:45:25
End at: 2019-02-05 19:45:55
Local clock offset: -3.772 ms
Remote clock offset: 1.833 ms

# Below is generated by plot.py at 2019-02-05 20:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.14 Mbit/s
95th percentile per-packet one-way delay: 88.929 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 34.69 Mbit/s
95th percentile per-packet one-way delay: 37.245 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 34.71 Mbit/s
95th percentile per-packet one-way delay: 30.872 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 28.11 Mbit/s
95th percentile per-packet one-way delay: 367.391 ms
Loss rate: 0.13%
```

Run 4: Report of Verus — Data Link

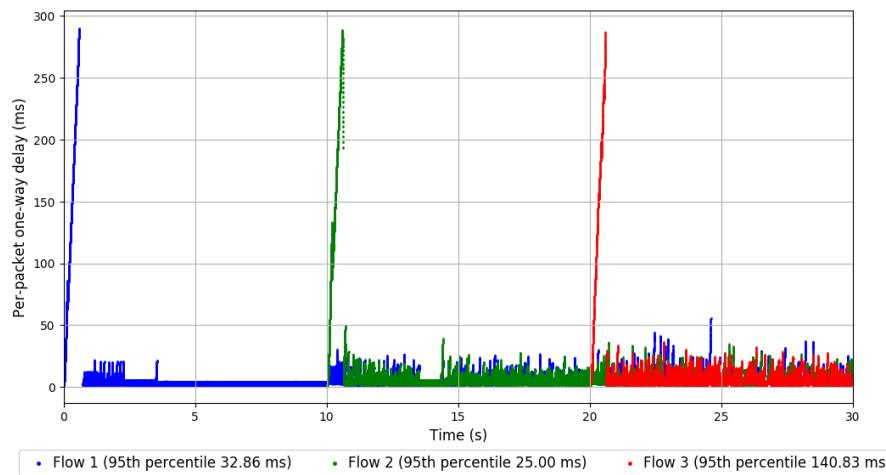
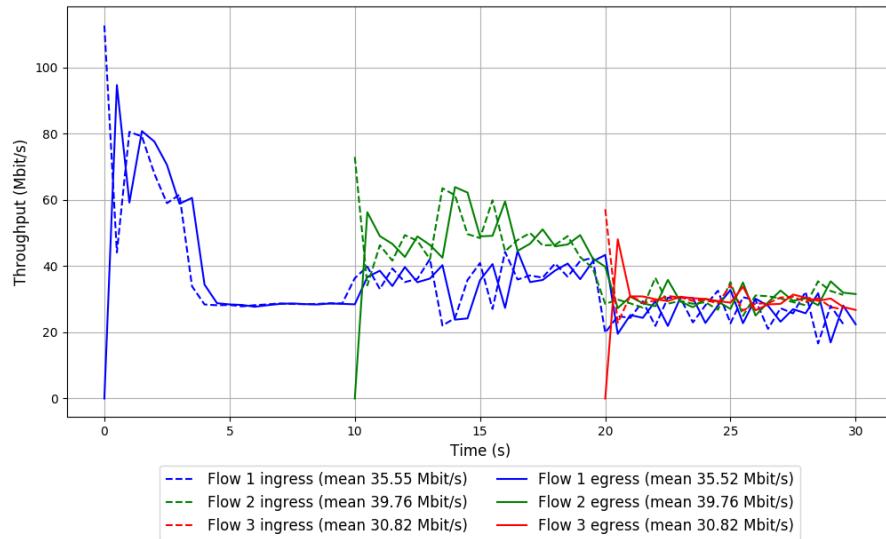


Run 5: Statistics of Verus

```
Start at: 2019-02-05 20:09:35
End at: 2019-02-05 20:10:05
Local clock offset: -4.017 ms
Remote clock offset: 1.566 ms

# Below is generated by plot.py at 2019-02-05 20:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.21 Mbit/s
95th percentile per-packet one-way delay: 36.131 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 32.862 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 39.76 Mbit/s
95th percentile per-packet one-way delay: 25.002 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 30.82 Mbit/s
95th percentile per-packet one-way delay: 140.830 ms
Loss rate: 0.07%
```

Run 5: Report of Verus — Data Link

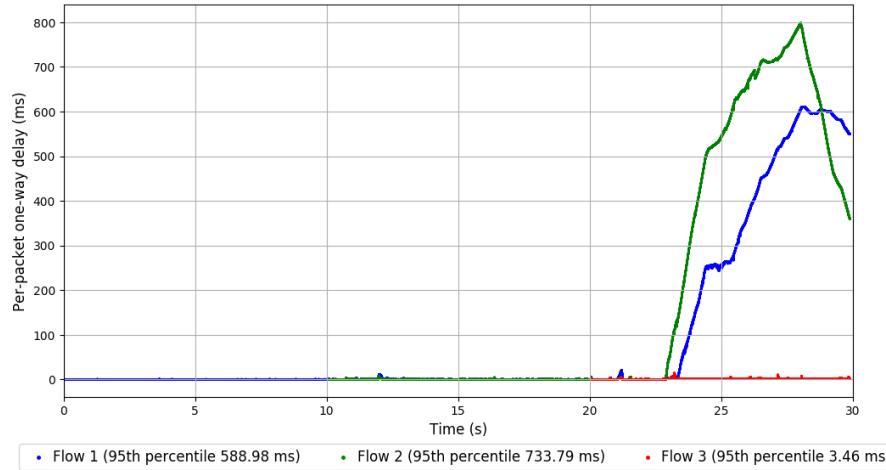
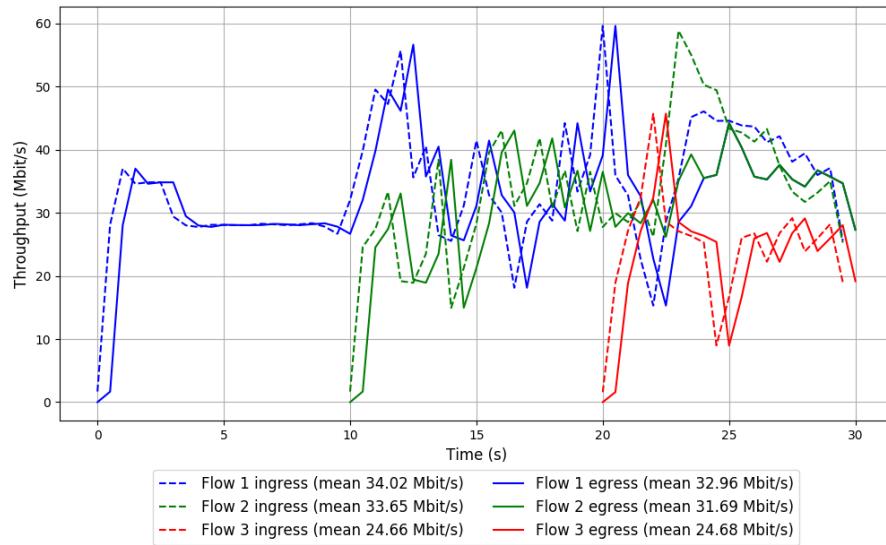


```
Run 1: Statistics of PCC-Vivace

Start at: 2019-02-05 18:22:46
End at: 2019-02-05 18:23:16
Local clock offset: -5.452 ms
Remote clock offset: 0.654 ms

# Below is generated by plot.py at 2019-02-05 20:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.18 Mbit/s
95th percentile per-packet one-way delay: 653.381 ms
Loss rate: 3.67%
-- Flow 1:
Average throughput: 32.96 Mbit/s
95th percentile per-packet one-way delay: 588.975 ms
Loss rate: 3.12%
-- Flow 2:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 733.789 ms
Loss rate: 5.84%
-- Flow 3:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 3.463 ms
Loss rate: 0.02%
```

Run 1: Report of PCC-Vivace — Data Link

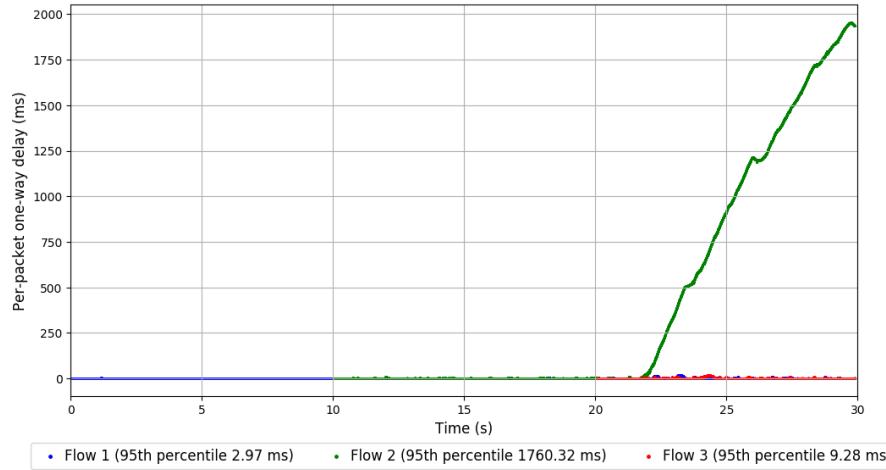
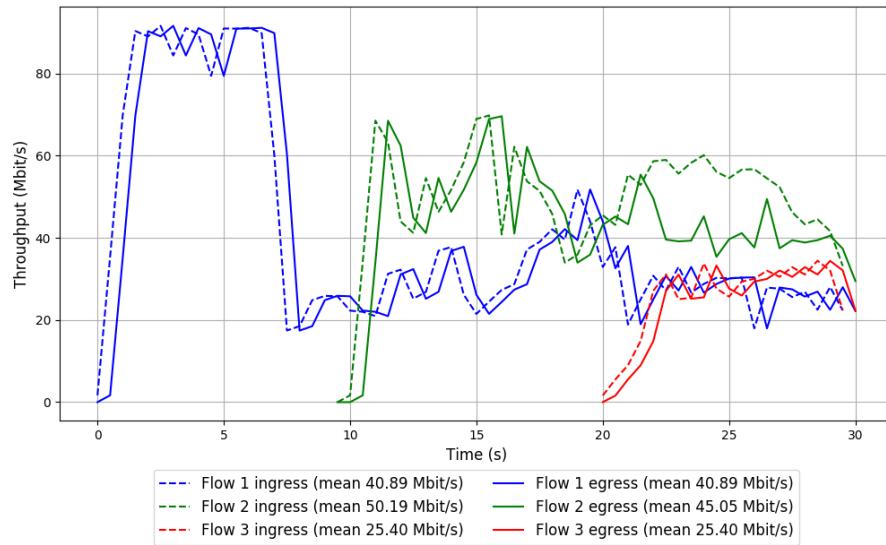


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-02-05 18:46:41
End at: 2019-02-05 18:47:11
Local clock offset: -5.618 ms
Remote clock offset: 1.459 ms

# Below is generated by plot.py at 2019-02-05 20:28:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 1316.115 ms
Loss rate: 4.17%
-- Flow 1:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 2.972 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 45.05 Mbit/s
95th percentile per-packet one-way delay: 1760.323 ms
Loss rate: 10.28%
-- Flow 3:
Average throughput: 25.40 Mbit/s
95th percentile per-packet one-way delay: 9.280 ms
Loss rate: 0.06%
```

Run 2: Report of PCC-Vivace — Data Link

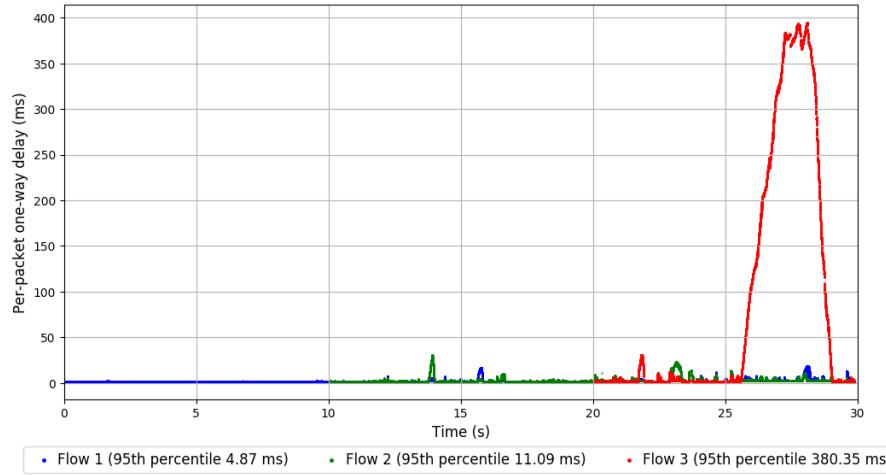
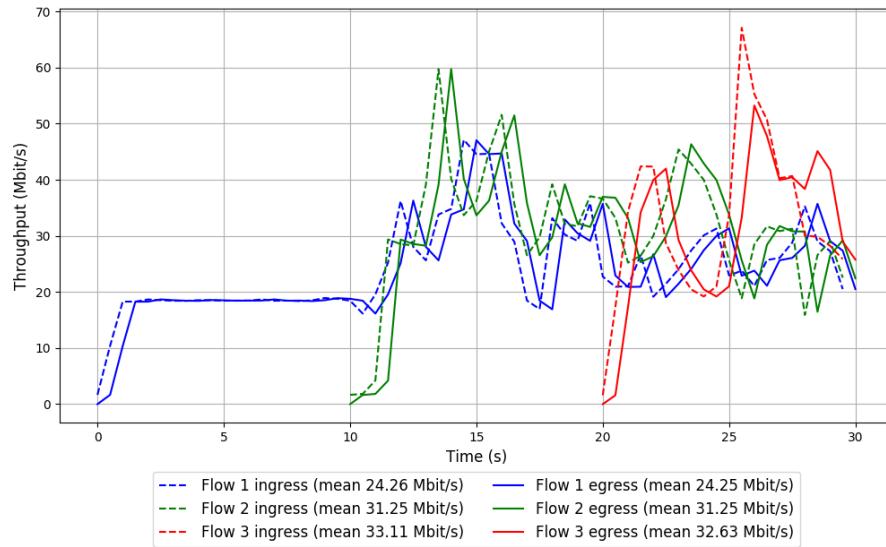


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-02-05 19:10:53
End at: 2019-02-05 19:11:23
Local clock offset: -4.346 ms
Remote clock offset: 1.825 ms

# Below is generated by plot.py at 2019-02-05 20:28:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.81 Mbit/s
95th percentile per-packet one-way delay: 207.282 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 4.865 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 31.25 Mbit/s
95th percentile per-packet one-way delay: 11.090 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 32.63 Mbit/s
95th percentile per-packet one-way delay: 380.353 ms
Loss rate: 1.46%
```

Run 3: Report of PCC-Vivace — Data Link

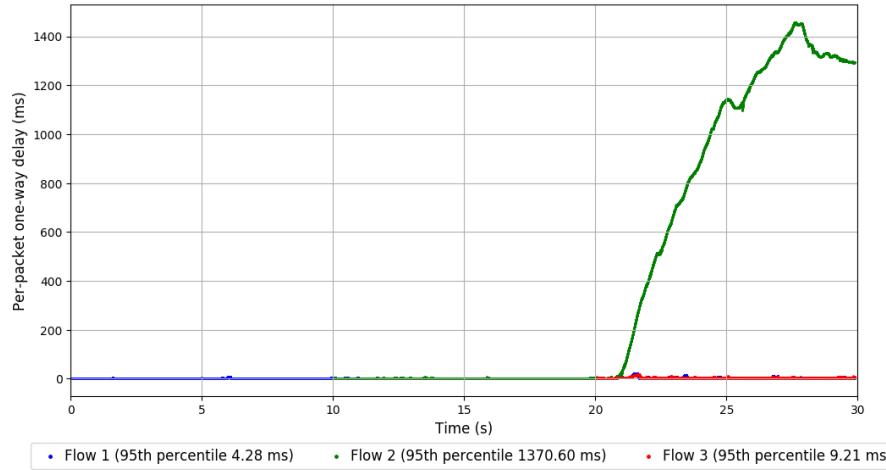
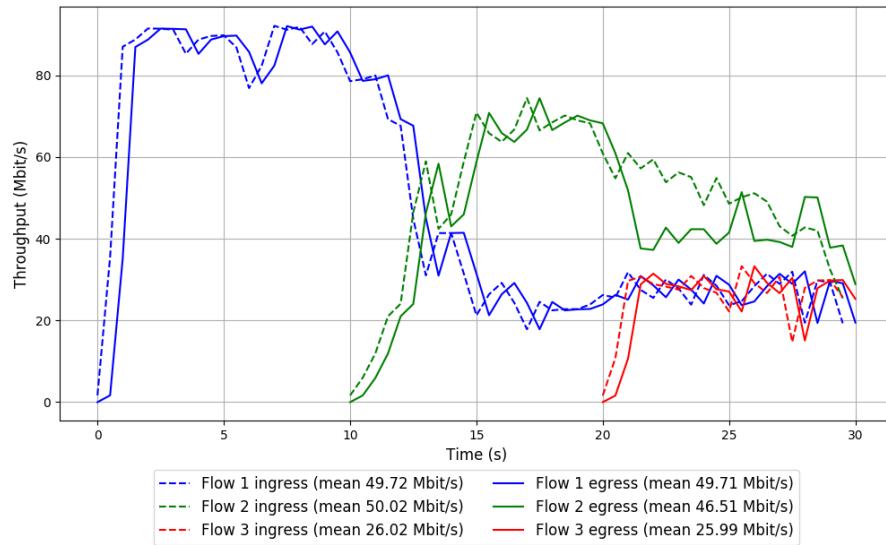


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-02-05 19:35:03
End at: 2019-02-05 19:35:33
Local clock offset: -3.137 ms
Remote clock offset: 1.883 ms

# Below is generated by plot.py at 2019-02-05 20:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.23 Mbit/s
95th percentile per-packet one-way delay: 1294.463 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 49.71 Mbit/s
95th percentile per-packet one-way delay: 4.280 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 46.51 Mbit/s
95th percentile per-packet one-way delay: 1370.599 ms
Loss rate: 7.02%
-- Flow 3:
Average throughput: 25.99 Mbit/s
95th percentile per-packet one-way delay: 9.206 ms
Loss rate: 0.13%
```

Run 4: Report of PCC-Vivace — Data Link

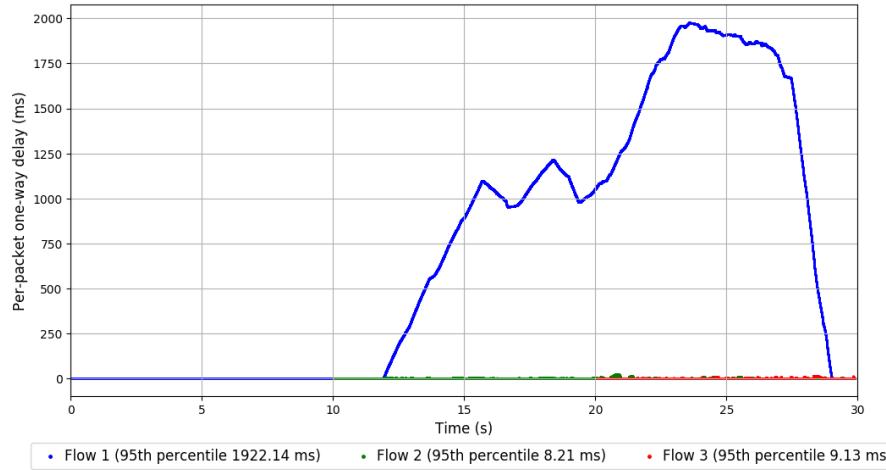
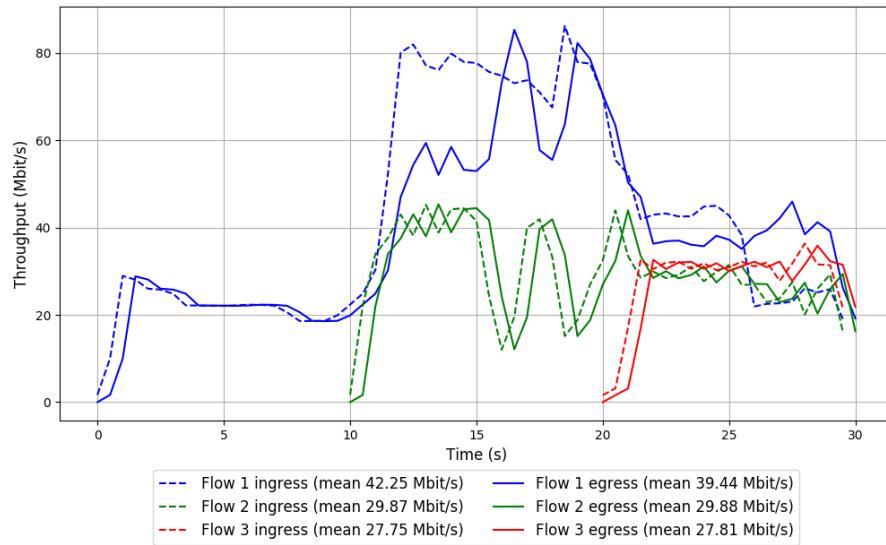


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-02-05 19:59:14
End at: 2019-02-05 19:59:44
Local clock offset: -3.26 ms
Remote clock offset: 1.624 ms

# Below is generated by plot.py at 2019-02-05 20:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.50 Mbit/s
95th percentile per-packet one-way delay: 1867.398 ms
Loss rate: 3.96%
-- Flow 1:
Average throughput: 39.44 Mbit/s
95th percentile per-packet one-way delay: 1922.137 ms
Loss rate: 6.67%
-- Flow 2:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 8.205 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 27.81 Mbit/s
95th percentile per-packet one-way delay: 9.129 ms
Loss rate: 0.01%
```

Run 5: Report of PCC-Vivace — Data Link

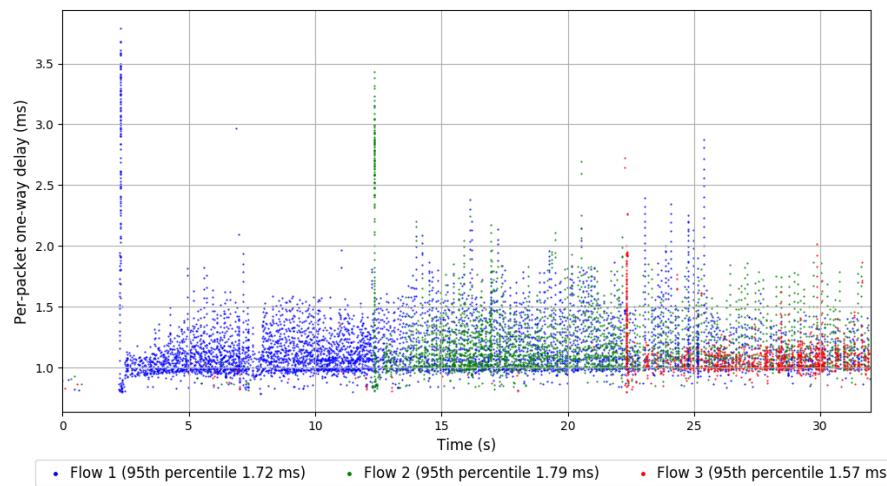
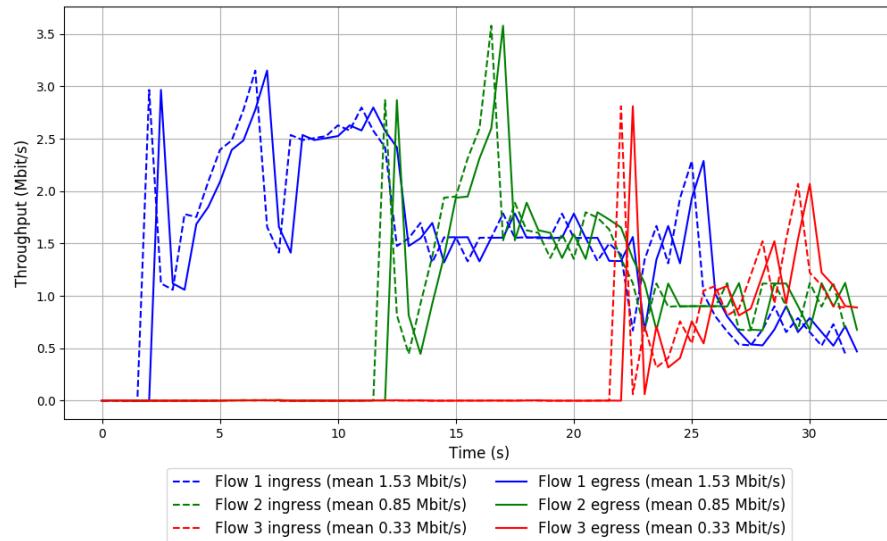


Run 1: Statistics of WebRTC media

```
Start at: 2019-02-05 18:13:37
End at: 2019-02-05 18:14:07
Local clock offset: -5.97 ms
Remote clock offset: 0.47 ms

# Below is generated by plot.py at 2019-02-05 20:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 1.733 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 1.719 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 1.790 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 1.567 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

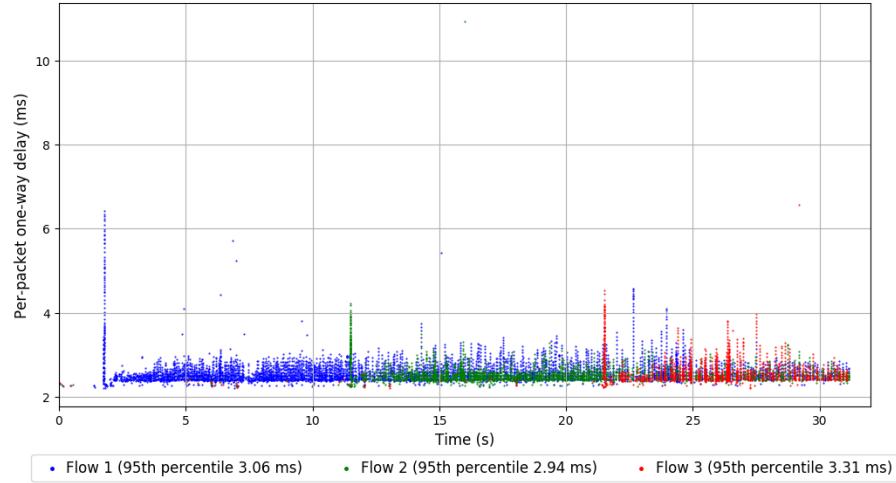
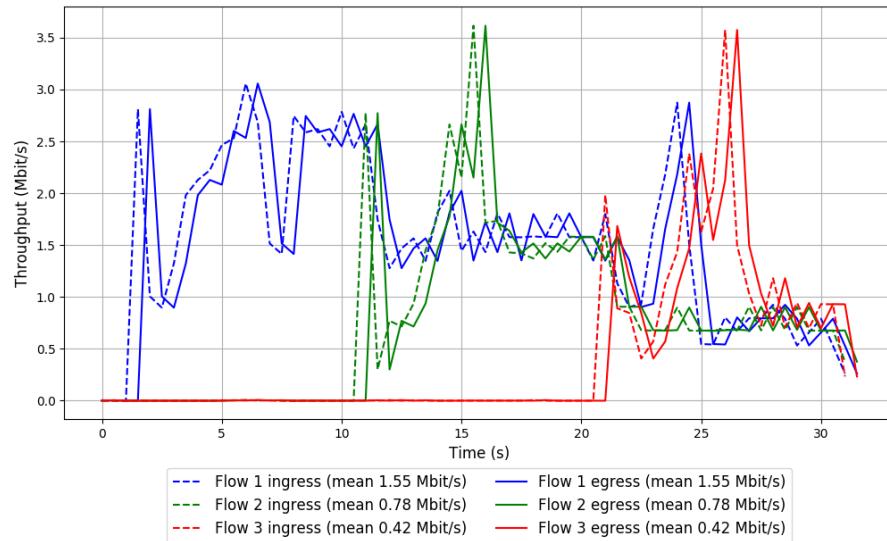


Run 2: Statistics of WebRTC media

```
Start at: 2019-02-05 18:37:33
End at: 2019-02-05 18:38:03
Local clock offset: -5.017 ms
Remote clock offset: 1.249 ms

# Below is generated by plot.py at 2019-02-05 20:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 3.067 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 3.055 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 2.938 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 3.310 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

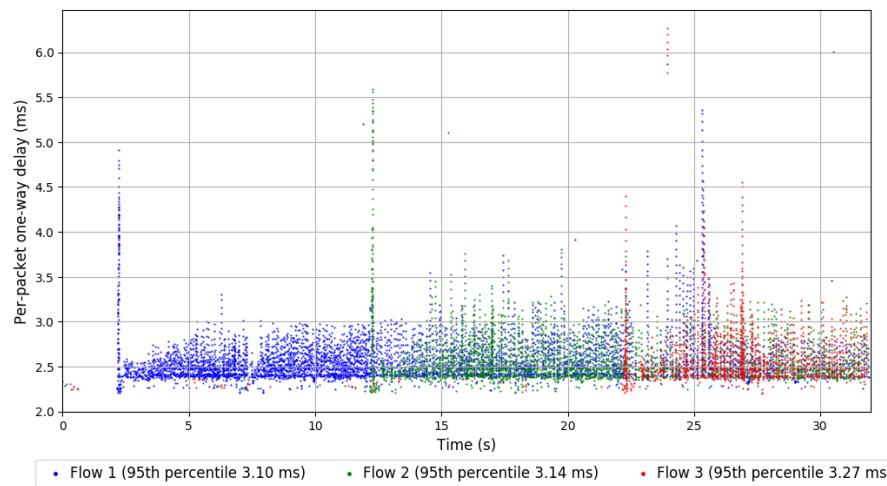
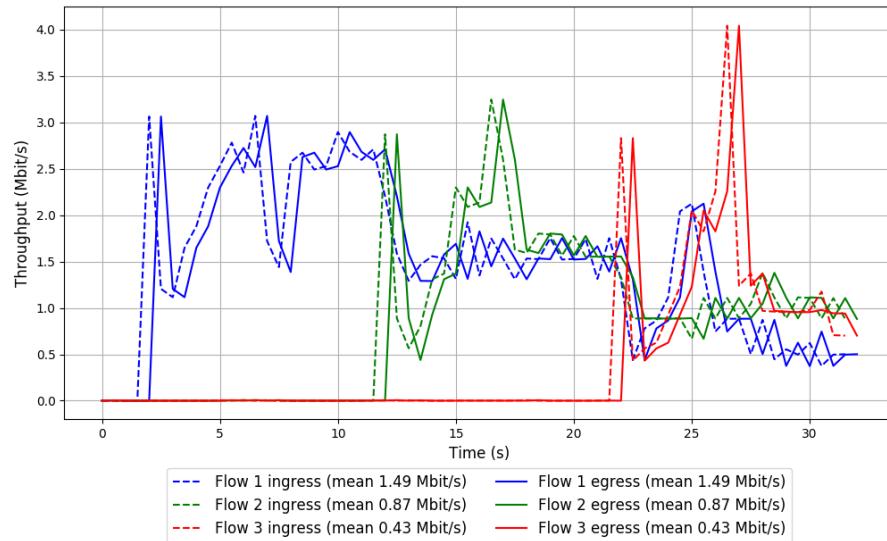


```
Run 3: Statistics of WebRTC media

Start at: 2019-02-05 19:01:45
End at: 2019-02-05 19:02:15
Local clock offset: -3.841 ms
Remote clock offset: 1.747 ms

# Below is generated by plot.py at 2019-02-05 20:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.77 Mbit/s
95th percentile per-packet one-way delay: 3.147 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 3.104 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 3.140 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 3.266 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

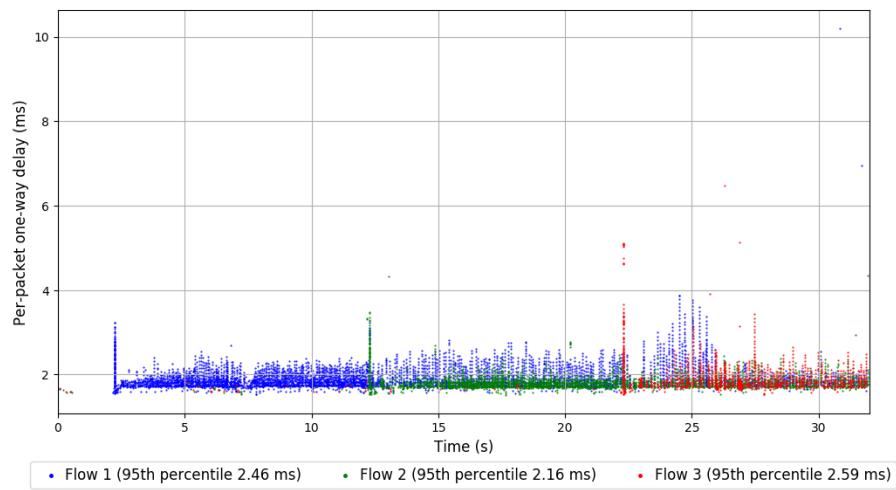
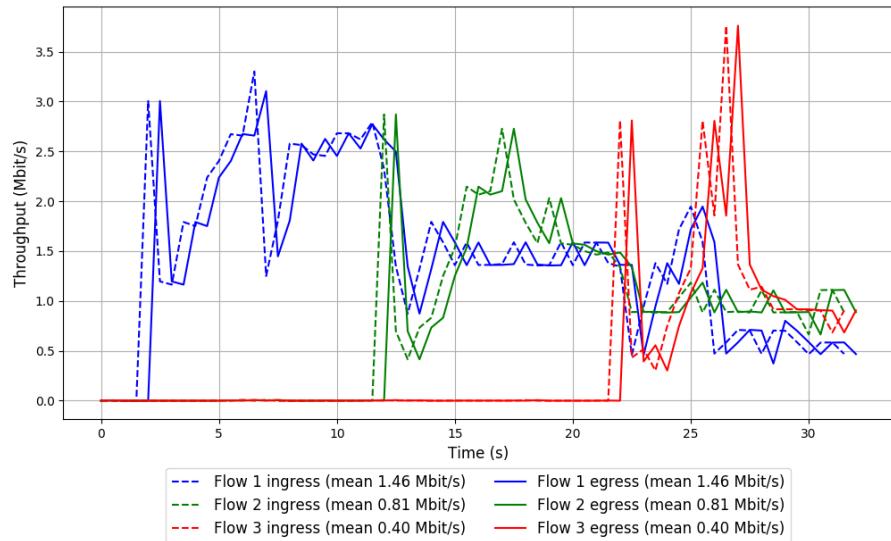


Run 4: Statistics of WebRTC media

```
Start at: 2019-02-05 19:25:54
End at: 2019-02-05 19:26:24
Local clock offset: -4.058 ms
Remote clock offset: 1.9 ms

# Below is generated by plot.py at 2019-02-05 20:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 2.412 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 2.455 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 2.158 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 2.594 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-02-05 19:50:06
End at: 2019-02-05 19:50:36
Local clock offset: -3.129 ms
Remote clock offset: 1.752 ms

# Below is generated by plot.py at 2019-02-05 20:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 3.074 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 3.086 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 2.944 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 3.267 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

