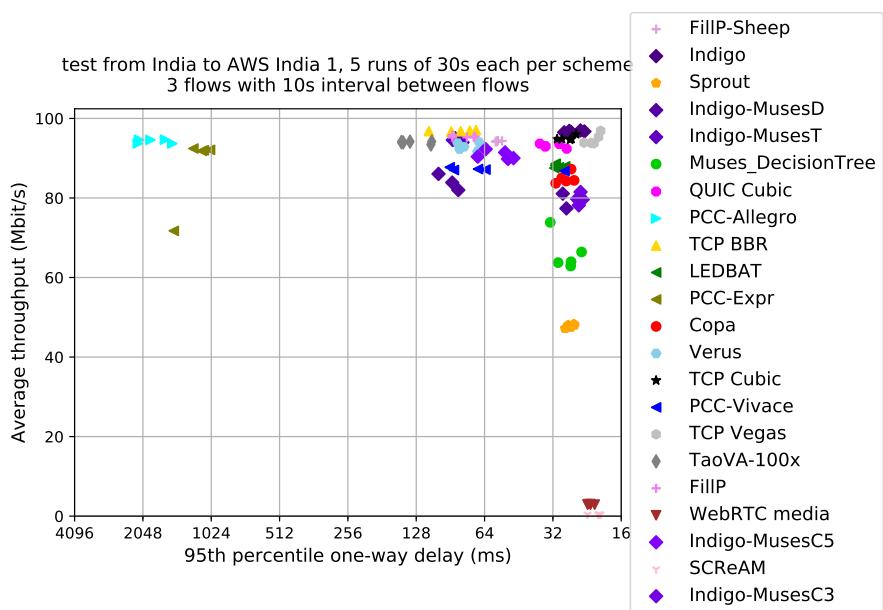
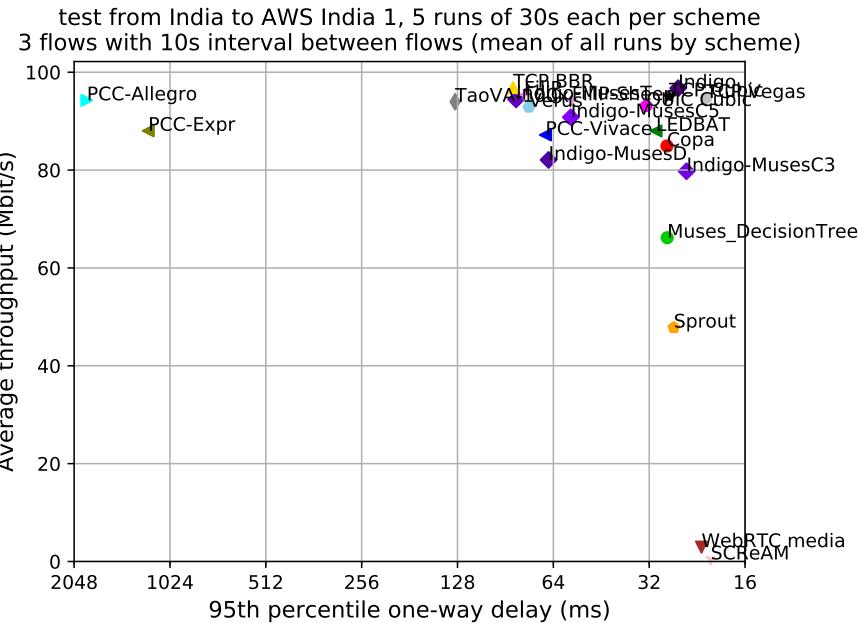


Pantheon Report

Generated at 2019-06-28 14:02:31 (UTC).
Data path: India on `em1` (*remote*) → AWS India 1 on `ens5` (*local*).
Repeated the test of 22 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

```
System info:  
Linux 4.15.0-1039-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 @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef  
third_party/fillp @ d6da1459332fce56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/muses_dtree @ 11c9498ecb1596b02cc896791a02d03172af7ed  
M helpers/__init__.pyc  
M helpers/context.pyc  
M helpers/utils.pyc  
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd  
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
```



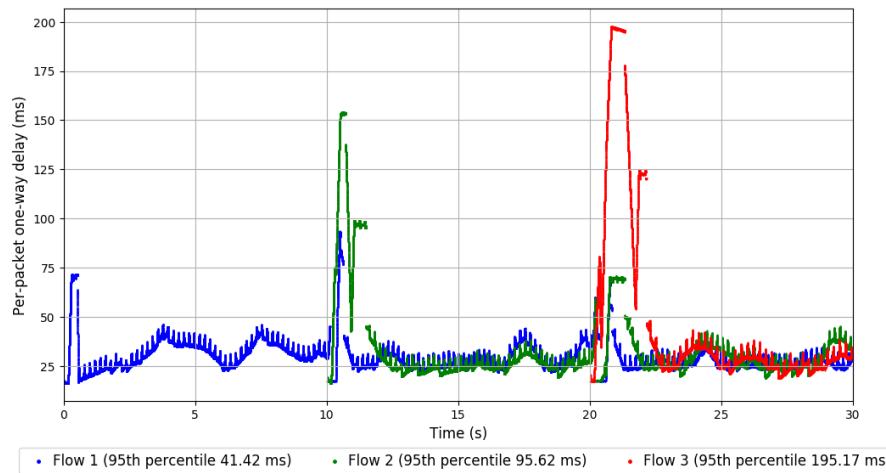
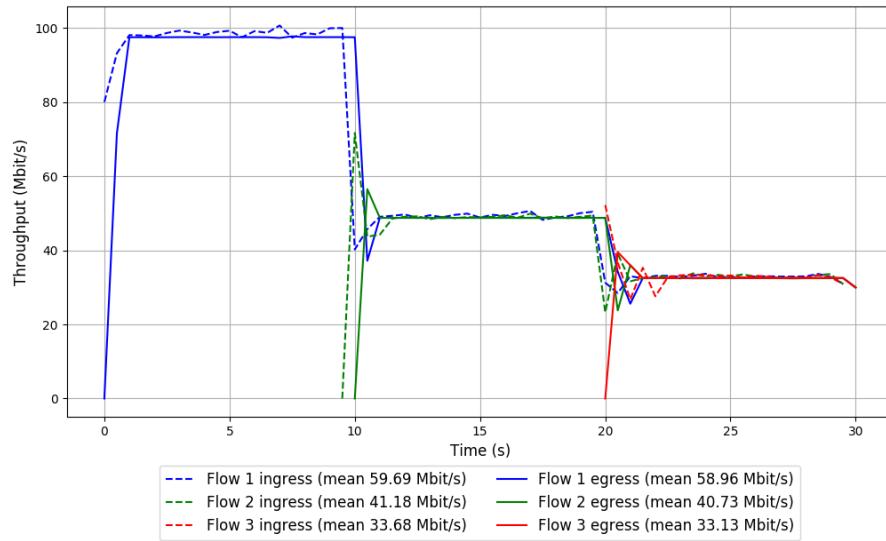
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	57.33	42.88	33.07	43.66	105.77	192.24	1.20	1.51	1.72
Copa	5	51.11	35.70	30.23	28.11	28.23	27.08	0.06	0.10	0.33
TCP Cubic	5	56.99	40.69	33.02	26.98	28.16	27.45	0.06	0.14	0.32
FillP	5	56.57	37.56	41.66	60.50	93.11	60.51	0.36	3.28	1.10
FillP-Sheep	5	56.44	40.35	33.05	47.35	60.86	74.66	0.12	0.33	0.59
Indigo	5	58.37	41.15	33.67	24.26	25.94	24.49	0.06	0.15	0.32
Indigo-MusesC3	5	53.78	33.34	18.02	24.34	24.16	24.18	0.03	0.13	0.45
Indigo-MusesC5	5	52.23	45.77	35.85	45.57	54.17	75.12	0.39	0.77	2.51
Indigo-MusesD	5	45.96	45.40	27.70	29.90	77.29	49.00	0.07	1.08	1.19
Indigo-MusesT	5	62.01	40.31	26.09	59.53	89.99	107.15	0.49	0.90	3.30
LEDBAT	5	51.62	39.62	30.10	30.32	29.77	31.25	0.06	0.17	0.35
Muses_DecisionTree	5	46.76	25.83	7.19	29.11	24.10	20.99	0.03	0.03	0.20
PCC-Allegro	5	59.97	37.18	29.12	1877.68	1878.37	159.45	12.88	13.50	2.03
PCC-Expr	5	56.19	36.67	22.59	1011.07	799.21	222.32	20.96	9.44	2.45
QUIC Cubic	5	56.65	39.62	30.64	31.00	33.30	58.05	0.10	0.20	0.48
SCReAM	5	0.21	0.21	0.21	18.97	19.89	19.59	0.08	0.19	0.21
Sprout	5	24.04	24.11	23.45	25.66	27.02	26.56	0.12	0.14	0.29
TaoVA-100x	5	57.17	37.44	35.72	114.34	168.28	121.93	0.36	1.02	2.94
TCP Vegas	5	57.70	37.53	36.31	20.97	20.96	22.71	0.05	0.12	0.27
Verus	5	54.45	40.85	34.04	75.98	68.48	123.18	0.17	0.48	0.96
PCC-Vivace	5	54.27	38.83	21.53	55.00	133.86	32.10	0.13	0.39	0.40
WebRTC media	5	1.59	0.94	0.42	21.50	18.76	19.17	0.05	0.07	0.70

Run 1: Statistics of TCP BBR

```
Start at: 2019-06-28 11:49:45
End at: 2019-06-28 11:50:15
Local clock offset: -1.054 ms
Remote clock offset: -0.871 ms

# Below is generated by plot.py at 2019-06-28 13:47:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 69.780 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 58.96 Mbit/s
95th percentile per-packet one-way delay: 41.425 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 40.73 Mbit/s
95th percentile per-packet one-way delay: 95.616 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 33.13 Mbit/s
95th percentile per-packet one-way delay: 195.167 ms
Loss rate: 1.89%
```

Run 1: Report of TCP BBR — Data Link

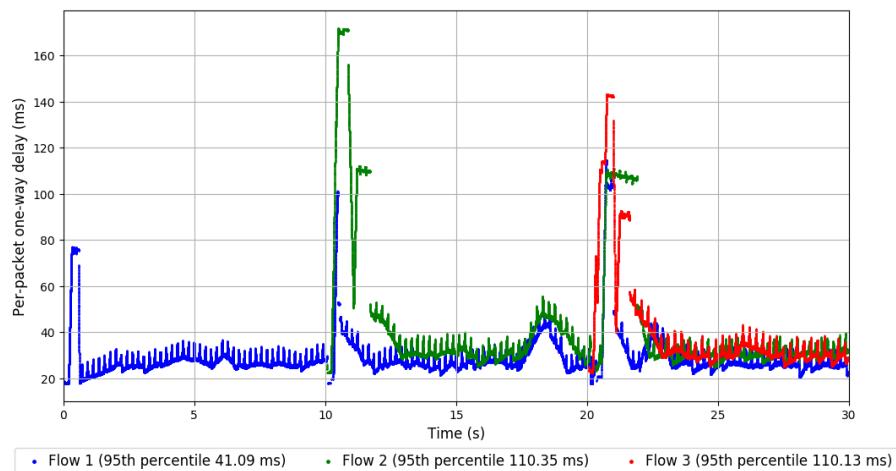
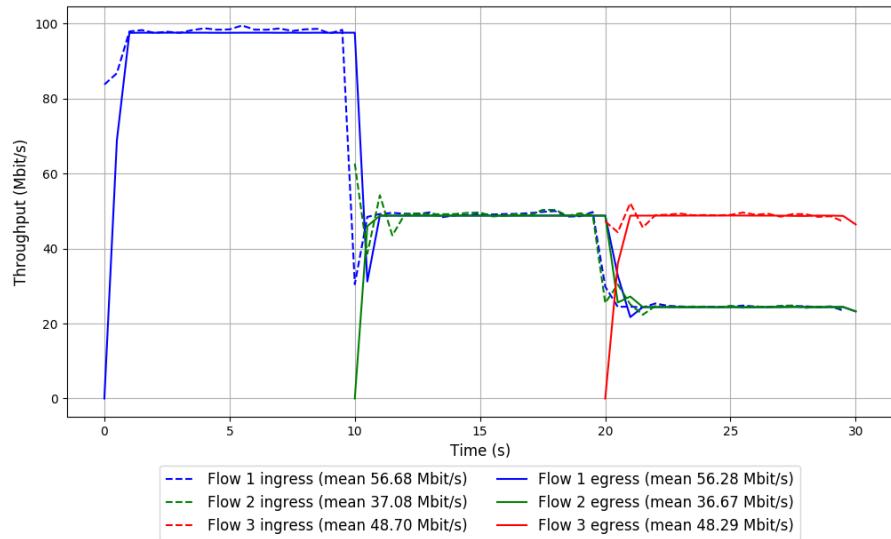


Run 2: Statistics of TCP BBR

```
Start at: 2019-06-28 12:16:53
End at: 2019-06-28 12:17:23
Local clock offset: -1.353 ms
Remote clock offset: -4.15 ms

# Below is generated by plot.py at 2019-06-28 13:47:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.72 Mbit/s
95th percentile per-packet one-way delay: 89.742 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 56.28 Mbit/s
95th percentile per-packet one-way delay: 41.090 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 36.67 Mbit/s
95th percentile per-packet one-way delay: 110.348 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 110.134 ms
Loss rate: 1.13%
```

Run 2: Report of TCP BBR — Data Link

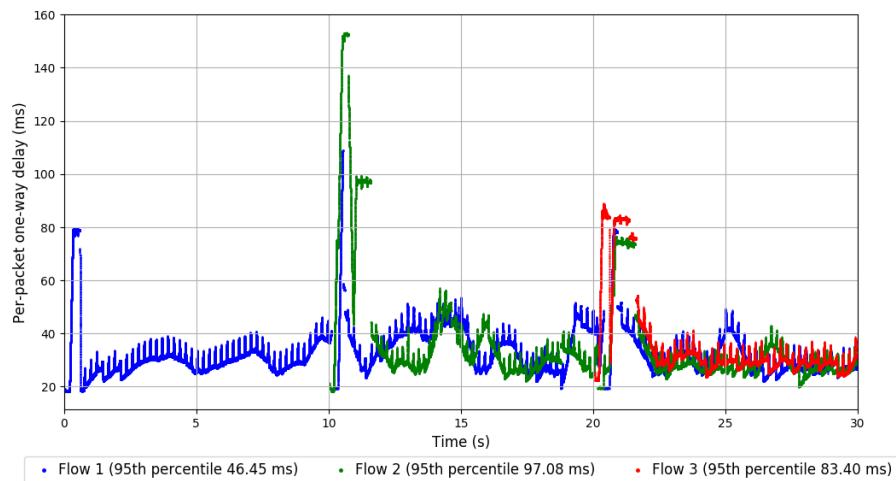
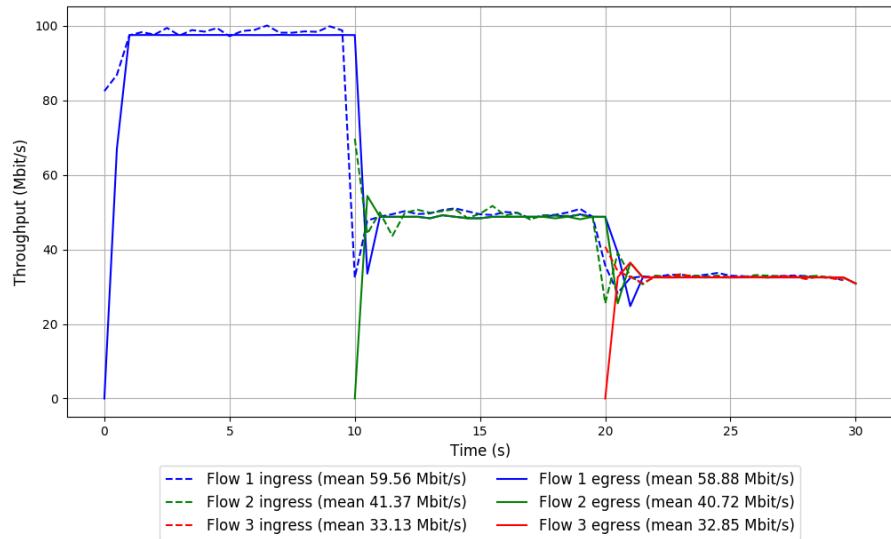


Run 3: Statistics of TCP BBR

```
Start at: 2019-06-28 12:43:27
End at: 2019-06-28 12:43:57
Local clock offset: -1.918 ms
Remote clock offset: -5.078 ms

# Below is generated by plot.py at 2019-06-28 13:47:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.89 Mbit/s
95th percentile per-packet one-way delay: 74.341 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 58.88 Mbit/s
95th percentile per-packet one-way delay: 46.455 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 40.72 Mbit/s
95th percentile per-packet one-way delay: 97.078 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 32.85 Mbit/s
95th percentile per-packet one-way delay: 83.398 ms
Loss rate: 1.11%
```

Run 3: Report of TCP BBR — Data Link

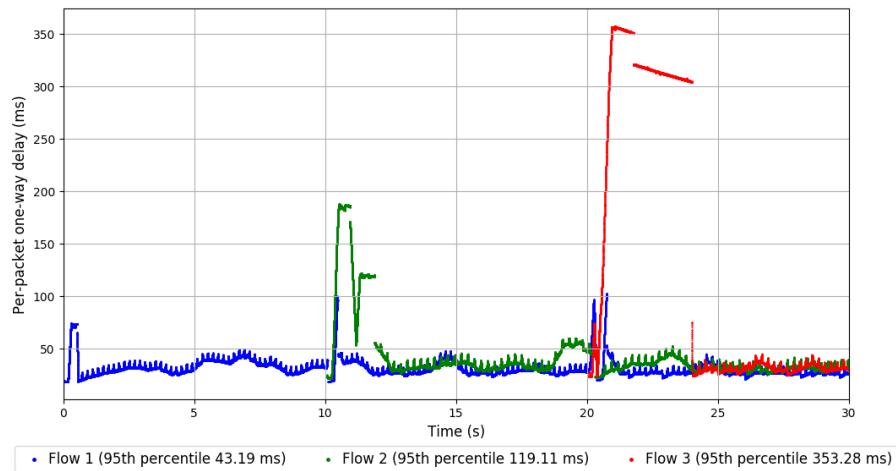
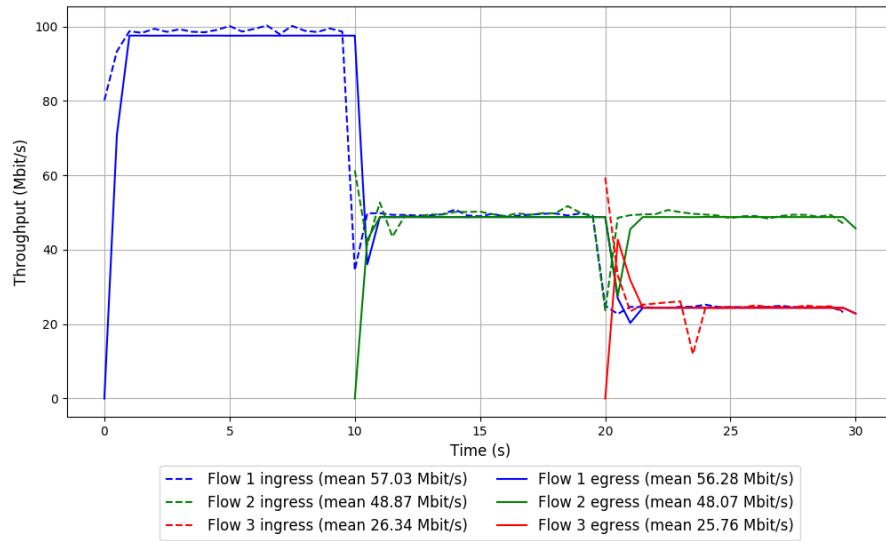


Run 4: Statistics of TCP BBR

```
Start at: 2019-06-28 13:10:06
End at: 2019-06-28 13:10:36
Local clock offset: -1.806 ms
Remote clock offset: -5.686 ms

# Below is generated by plot.py at 2019-06-28 13:47:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 112.649 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 56.28 Mbit/s
95th percentile per-packet one-way delay: 43.194 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 48.07 Mbit/s
95th percentile per-packet one-way delay: 119.110 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 25.76 Mbit/s
95th percentile per-packet one-way delay: 353.283 ms
Loss rate: 2.55%
```

Run 4: Report of TCP BBR — Data Link

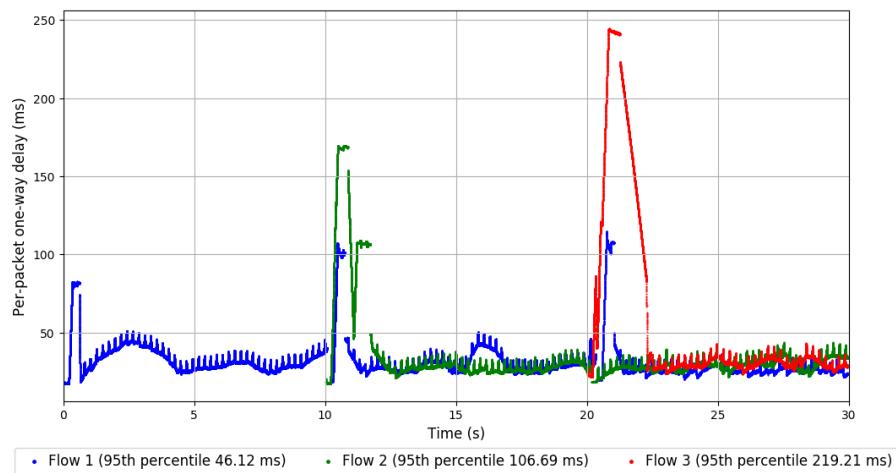
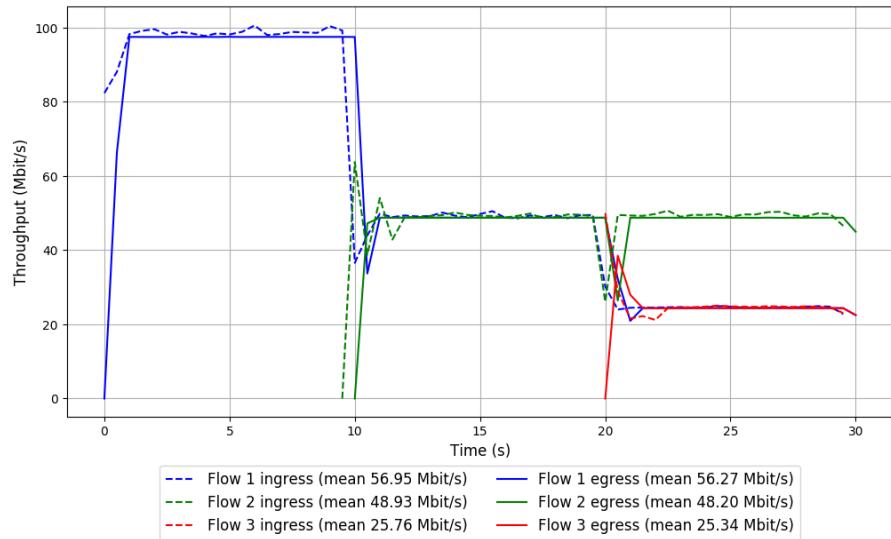


Run 5: Statistics of TCP BBR

```
Start at: 2019-06-28 13:37:08
End at: 2019-06-28 13:37:38
Local clock offset: -1.088 ms
Remote clock offset: -4.735 ms

# Below is generated by plot.py at 2019-06-28 13:47:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.79 Mbit/s
95th percentile per-packet one-way delay: 81.542 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 56.27 Mbit/s
95th percentile per-packet one-way delay: 46.123 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 48.20 Mbit/s
95th percentile per-packet one-way delay: 106.692 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 25.34 Mbit/s
95th percentile per-packet one-way delay: 219.207 ms
Loss rate: 1.93%
```

Run 5: Report of TCP BBR — Data Link

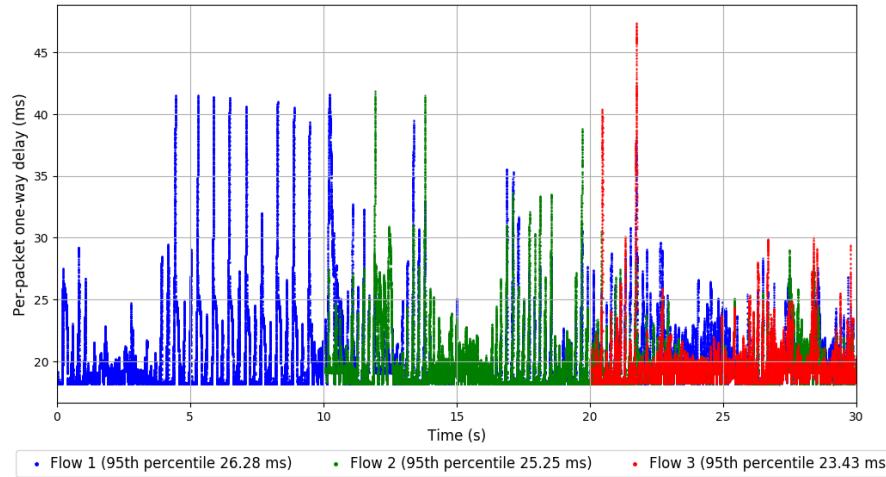
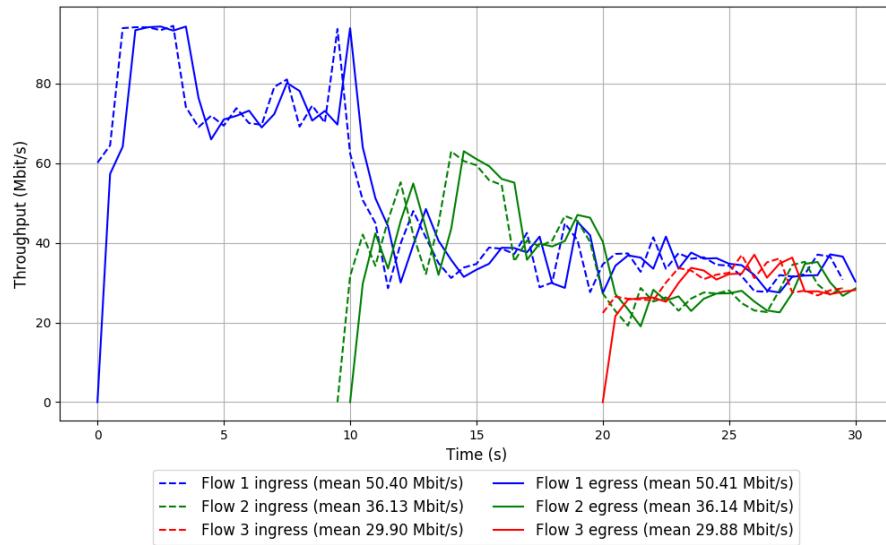


Run 1: Statistics of Copa

```
Start at: 2019-06-28 11:56:04
End at: 2019-06-28 11:56:34
Local clock offset: -1.215 ms
Remote clock offset: -2.69 ms

# Below is generated by plot.py at 2019-06-28 13:48:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.42 Mbit/s
95th percentile per-packet one-way delay: 25.790 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 50.41 Mbit/s
95th percentile per-packet one-way delay: 26.280 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 25.250 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 23.432 ms
Loss rate: 0.28%
```

Run 1: Report of Copa — Data Link

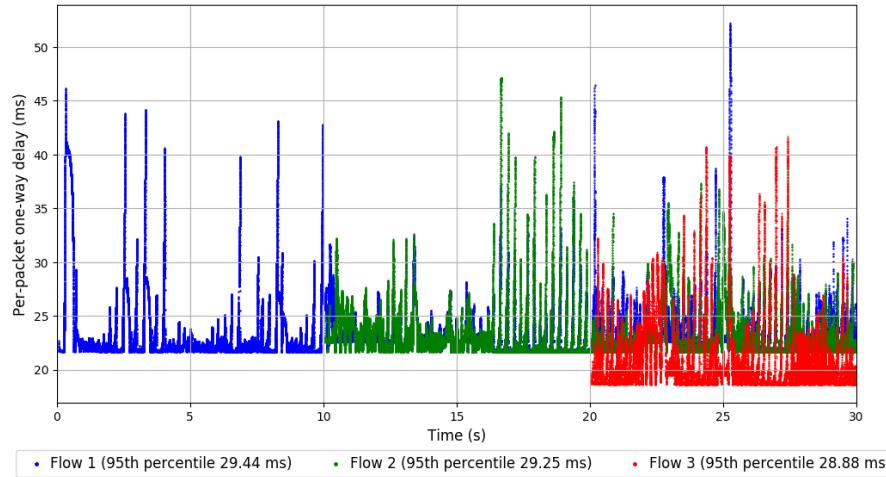
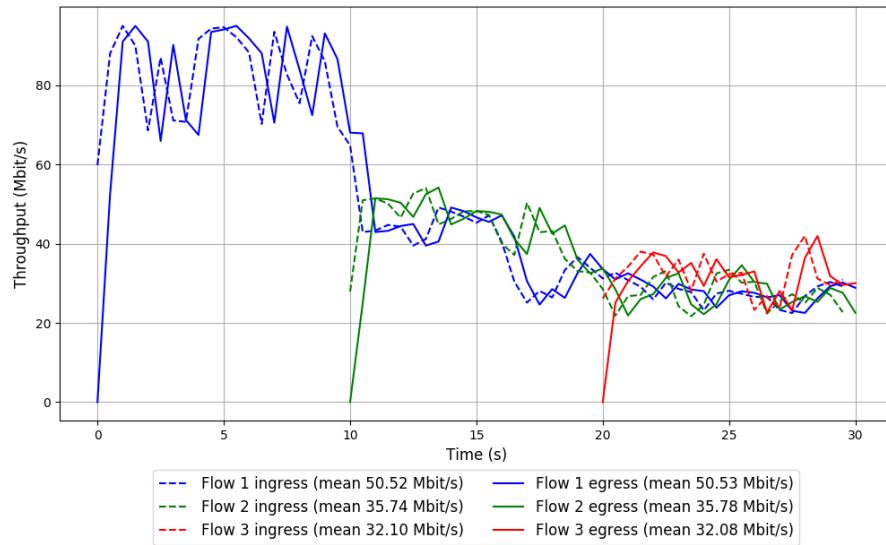


Run 2: Statistics of Copa

```
Start at: 2019-06-28 12:22:50
End at: 2019-06-28 12:23:20
Local clock offset: -1.0 ms
Remote clock offset: -3.48 ms

# Below is generated by plot.py at 2019-06-28 13:48:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.01 Mbit/s
95th percentile per-packet one-way delay: 29.277 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 50.53 Mbit/s
95th percentile per-packet one-way delay: 29.442 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 35.78 Mbit/s
95th percentile per-packet one-way delay: 29.248 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 32.08 Mbit/s
95th percentile per-packet one-way delay: 28.876 ms
Loss rate: 0.32%
```

Run 2: Report of Copa — Data Link

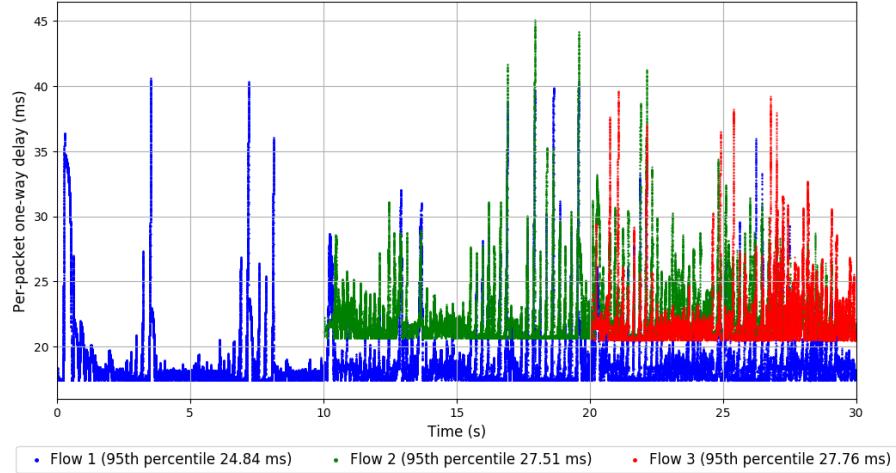
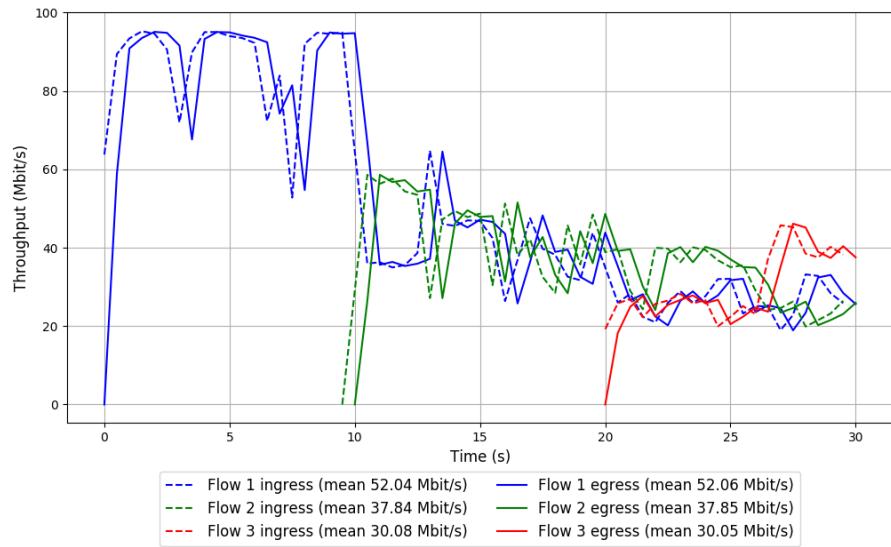


Run 3: Statistics of Copa

```
Start at: 2019-06-28 12:49:31
End at: 2019-06-28 12:50:01
Local clock offset: -2.207 ms
Remote clock offset: -4.508 ms

# Below is generated by plot.py at 2019-06-28 13:48:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.25 Mbit/s
95th percentile per-packet one-way delay: 26.601 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 52.06 Mbit/s
95th percentile per-packet one-way delay: 24.842 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 37.85 Mbit/s
95th percentile per-packet one-way delay: 27.508 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 30.05 Mbit/s
95th percentile per-packet one-way delay: 27.758 ms
Loss rate: 0.40%
```

Run 3: Report of Copa — Data Link

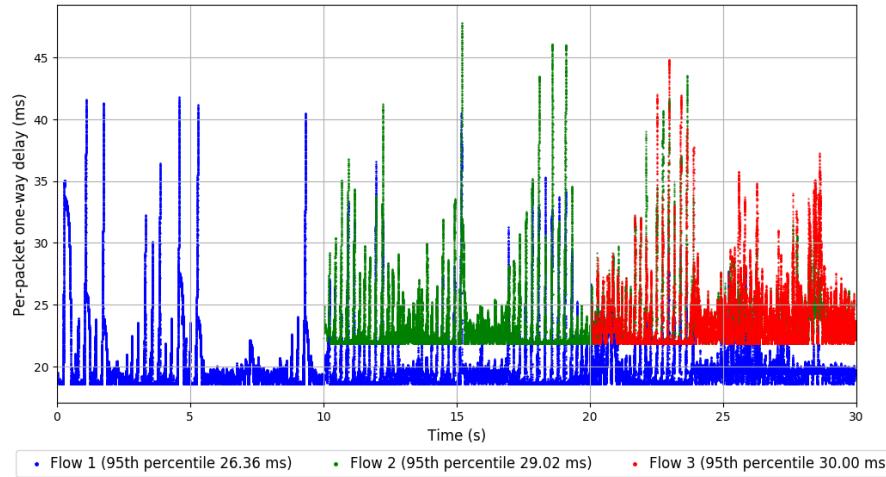
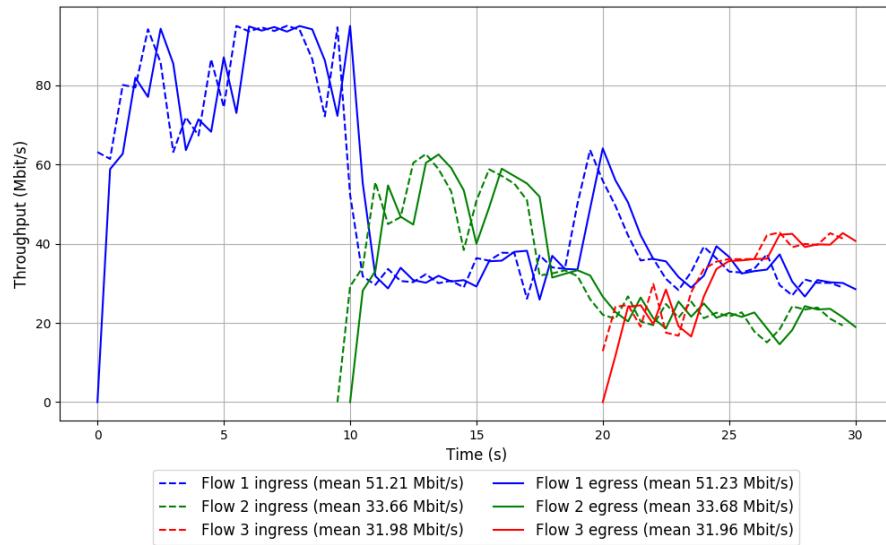


Run 4: Statistics of Copa

```
Start at: 2019-06-28 13:16:10
End at: 2019-06-28 13:16:40
Local clock offset: -1.9 ms
Remote clock offset: -5.761 ms

# Below is generated by plot.py at 2019-06-28 13:49:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.25 Mbit/s
95th percentile per-packet one-way delay: 27.958 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 51.23 Mbit/s
95th percentile per-packet one-way delay: 26.355 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 33.68 Mbit/s
95th percentile per-packet one-way delay: 29.024 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 31.96 Mbit/s
95th percentile per-packet one-way delay: 29.995 ms
Loss rate: 0.41%
```

Run 4: Report of Copa — Data Link

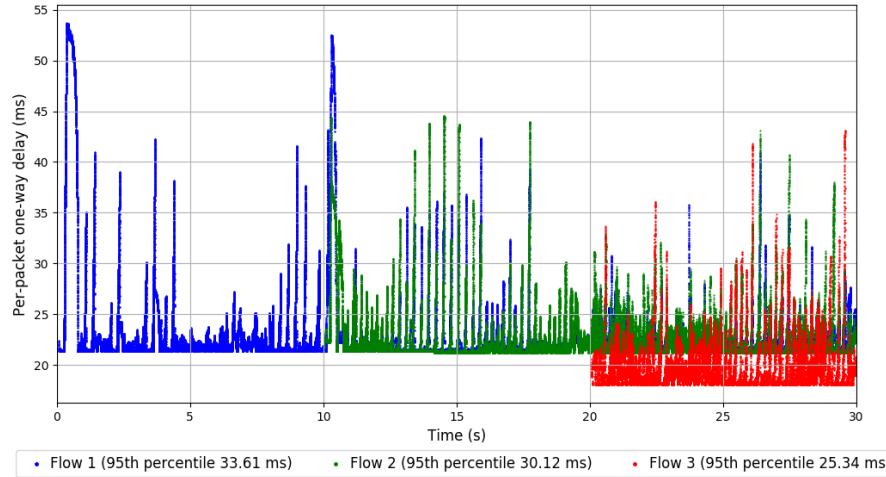
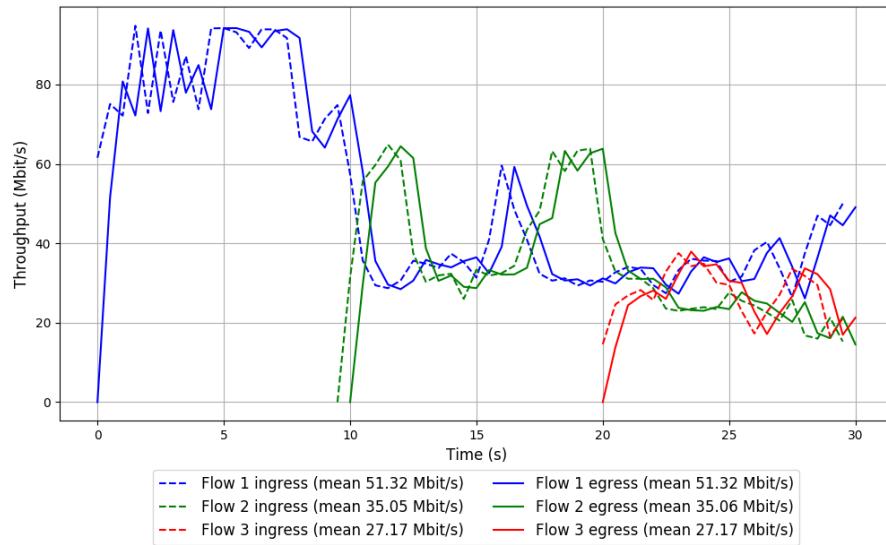


Run 5: Statistics of Copa

```
Start at: 2019-06-28 13:43:20
End at: 2019-06-28 13:43:50
Local clock offset: -0.719 ms
Remote clock offset: -5.497 ms

# Below is generated by plot.py at 2019-06-28 13:49:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.69 Mbit/s
95th percentile per-packet one-way delay: 31.089 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 51.32 Mbit/s
95th percentile per-packet one-way delay: 33.611 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 35.06 Mbit/s
95th percentile per-packet one-way delay: 30.120 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 27.17 Mbit/s
95th percentile per-packet one-way delay: 25.344 ms
Loss rate: 0.23%
```

Run 5: Report of Copa — Data Link

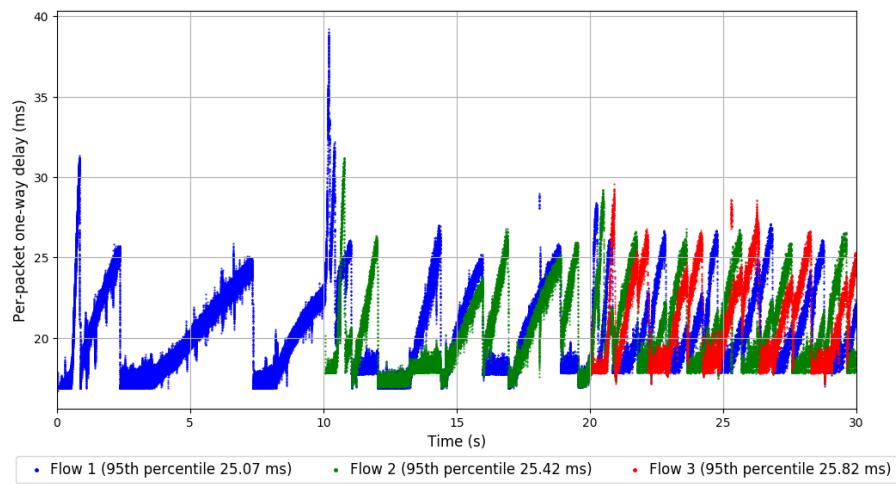
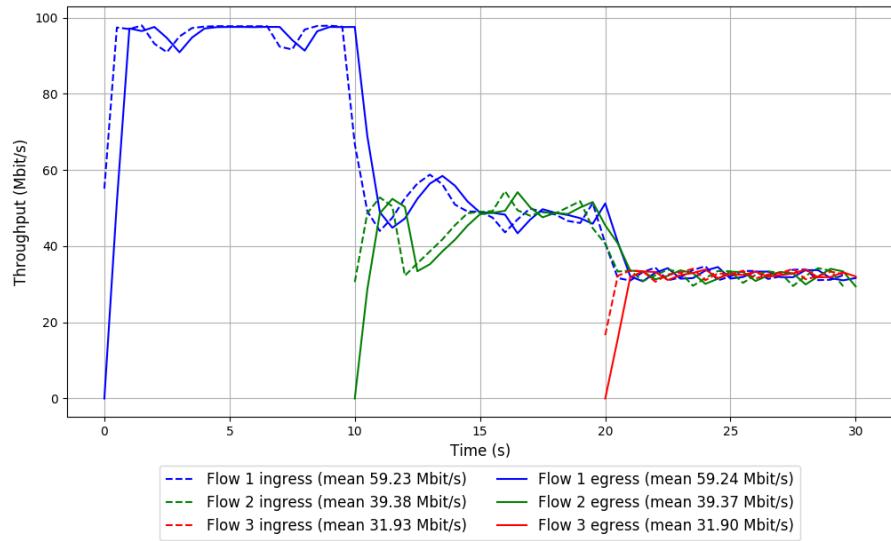


```
Run 1: Statistics of TCP Cubic

Start at: 2019-06-28 11:37:23
End at: 2019-06-28 11:37:53
Local clock offset: -0.799 ms
Remote clock offset: -1.064 ms

# Below is generated by plot.py at 2019-06-28 13:49:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.04 Mbit/s
95th percentile per-packet one-way delay: 25.295 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.24 Mbit/s
95th percentile per-packet one-way delay: 25.066 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 39.37 Mbit/s
95th percentile per-packet one-way delay: 25.419 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 31.90 Mbit/s
95th percentile per-packet one-way delay: 25.817 ms
Loss rate: 0.35%
```

Run 1: Report of TCP Cubic — Data Link

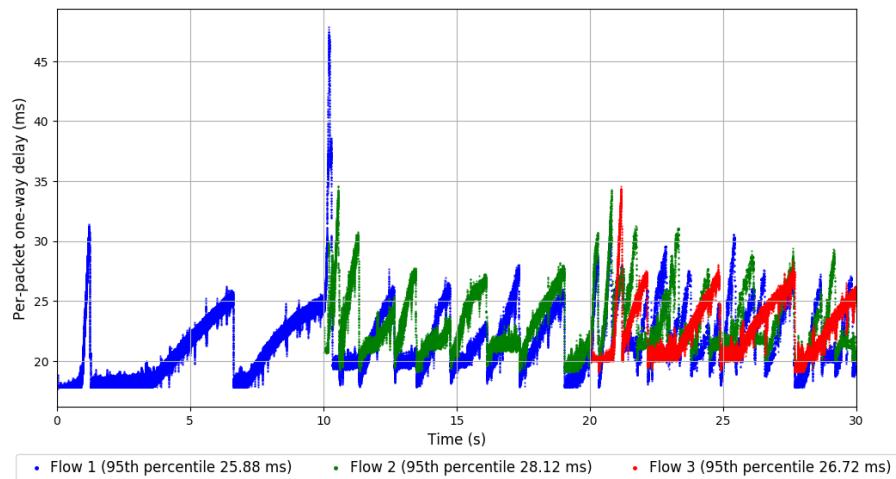
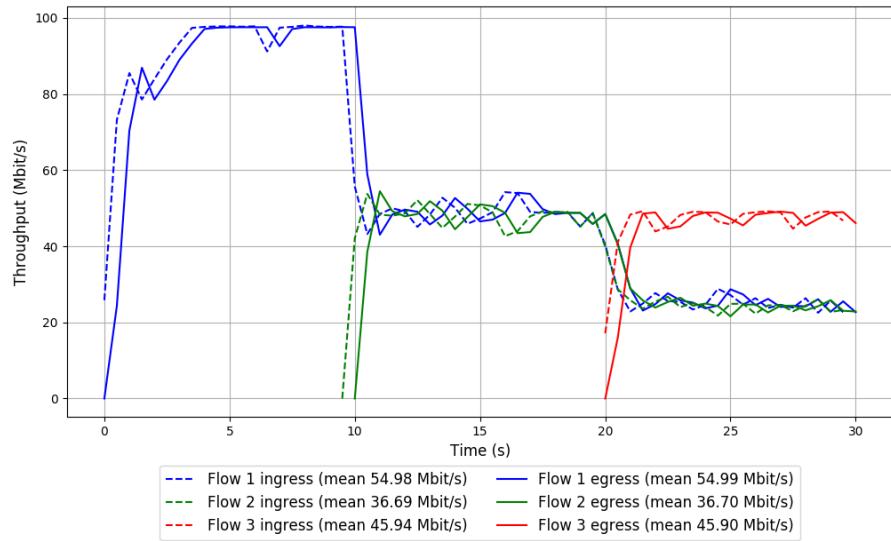


Run 2: Statistics of TCP Cubic

```
Start at: 2019-06-28 12:04:40
End at: 2019-06-28 12:05:10
Local clock offset: -1.507 ms
Remote clock offset: -3.982 ms

# Below is generated by plot.py at 2019-06-28 13:49:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.67 Mbit/s
95th percentile per-packet one-way delay: 26.890 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 54.99 Mbit/s
95th percentile per-packet one-way delay: 25.878 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 36.70 Mbit/s
95th percentile per-packet one-way delay: 28.121 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 45.90 Mbit/s
95th percentile per-packet one-way delay: 26.721 ms
Loss rate: 0.34%
```

Run 2: Report of TCP Cubic — Data Link

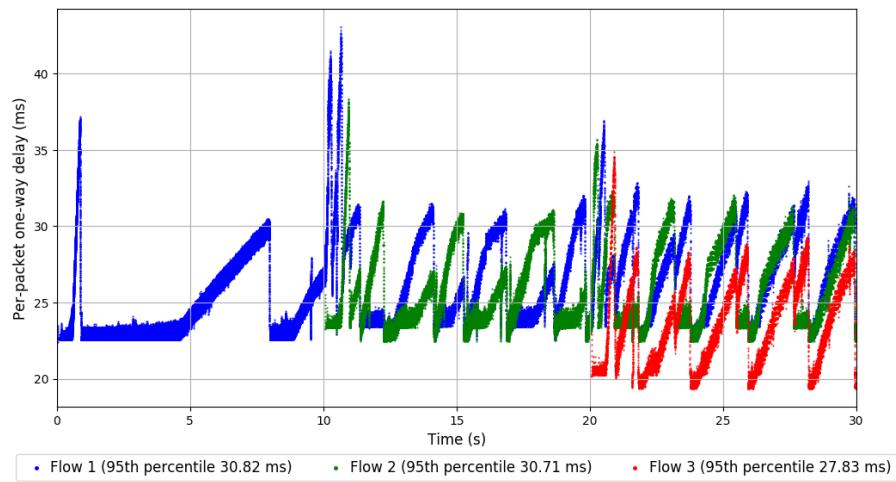
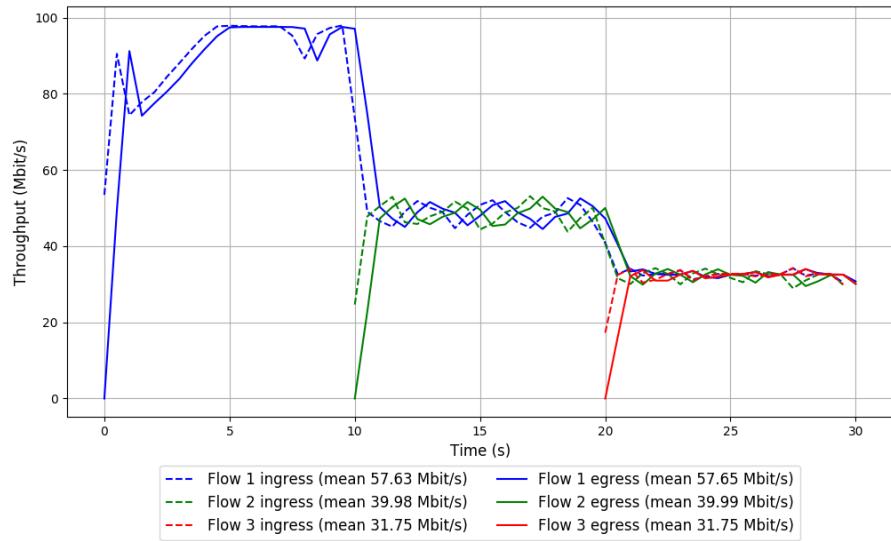


Run 3: Statistics of TCP Cubic

```
Start at: 2019-06-28 12:31:16
End at: 2019-06-28 12:31:46
Local clock offset: -1.547 ms
Remote clock offset: -5.248 ms

# Below is generated by plot.py at 2019-06-28 13:49:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 30.670 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 57.65 Mbit/s
95th percentile per-packet one-way delay: 30.816 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 39.99 Mbit/s
95th percentile per-packet one-way delay: 30.706 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 31.75 Mbit/s
95th percentile per-packet one-way delay: 27.829 ms
Loss rate: 0.26%
```

Run 3: Report of TCP Cubic — Data Link

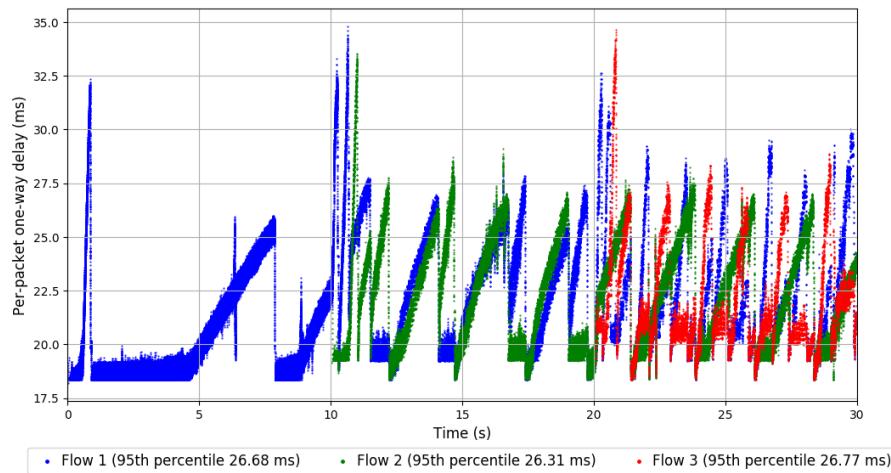
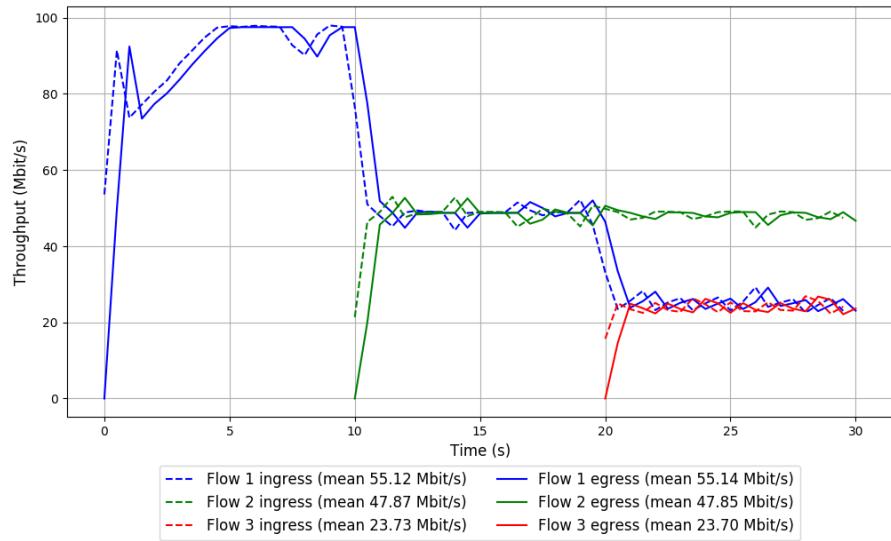


Run 4: Statistics of TCP Cubic

```
Start at: 2019-06-28 12:57:49
End at: 2019-06-28 12:58:19
Local clock offset: -0.762 ms
Remote clock offset: -4.169 ms

# Below is generated by plot.py at 2019-06-28 13:49:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.86 Mbit/s
95th percentile per-packet one-way delay: 26.506 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 55.14 Mbit/s
95th percentile per-packet one-way delay: 26.677 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 47.85 Mbit/s
95th percentile per-packet one-way delay: 26.312 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 23.70 Mbit/s
95th percentile per-packet one-way delay: 26.771 ms
Loss rate: 0.35%
```

Run 4: Report of TCP Cubic — Data Link

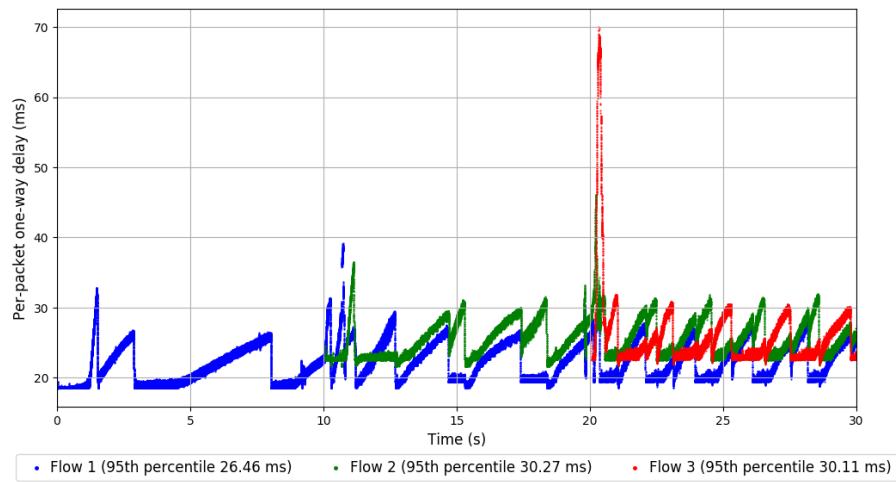
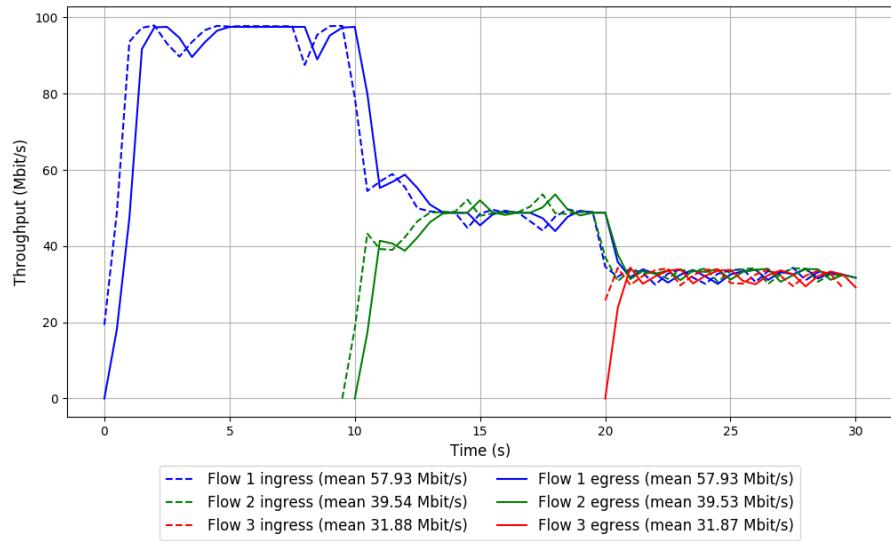


Run 5: Statistics of TCP Cubic

```
Start at: 2019-06-28 13:24:43
End at: 2019-06-28 13:25:13
Local clock offset: -0.924 ms
Remote clock offset: -5.16 ms

# Below is generated by plot.py at 2019-06-28 13:49:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.83 Mbit/s
95th percentile per-packet one-way delay: 29.183 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 57.93 Mbit/s
95th percentile per-packet one-way delay: 26.464 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 39.53 Mbit/s
95th percentile per-packet one-way delay: 30.267 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 31.87 Mbit/s
95th percentile per-packet one-way delay: 30.106 ms
Loss rate: 0.29%
```

Run 5: Report of TCP Cubic — Data Link

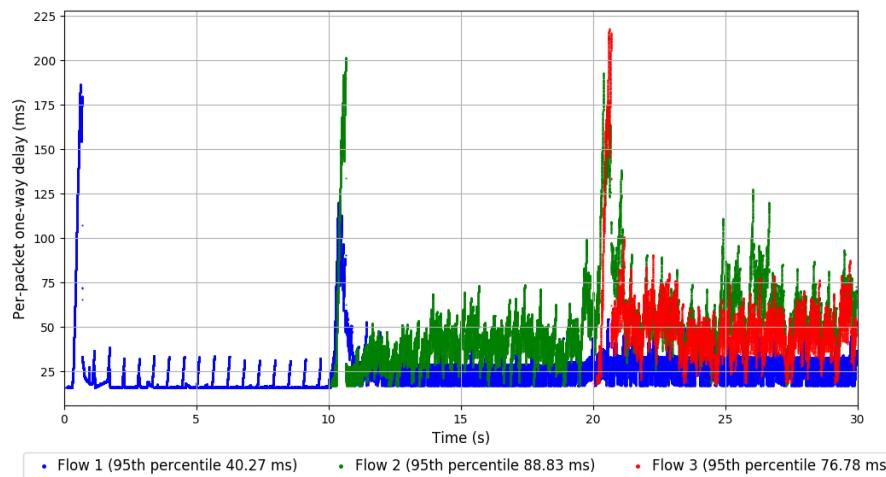
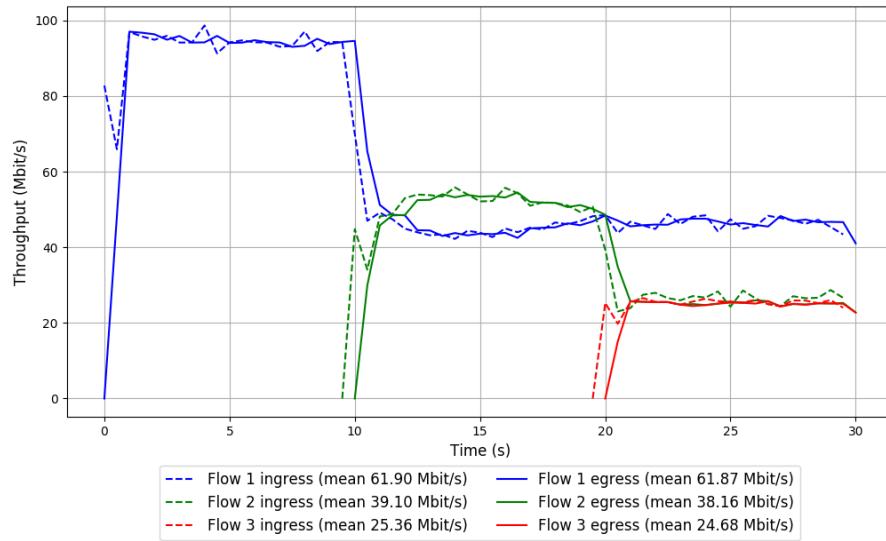


```
Run 1: Statistics of FillP

Start at: 2019-06-28 11:42:28
End at: 2019-06-28 11:42:58
Local clock offset: -1.318 ms
Remote clock offset: -0.658 ms

# Below is generated by plot.py at 2019-06-28 13:49:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.47 Mbit/s
95th percentile per-packet one-way delay: 70.434 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 61.87 Mbit/s
95th percentile per-packet one-way delay: 40.271 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 38.16 Mbit/s
95th percentile per-packet one-way delay: 88.832 ms
Loss rate: 2.50%
-- Flow 3:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 76.784 ms
Loss rate: 2.79%
```

Run 1: Report of FillP — Data Link

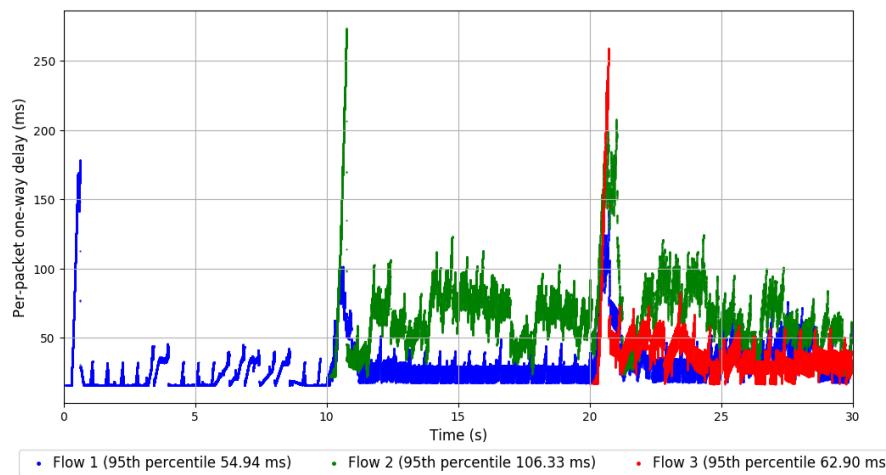
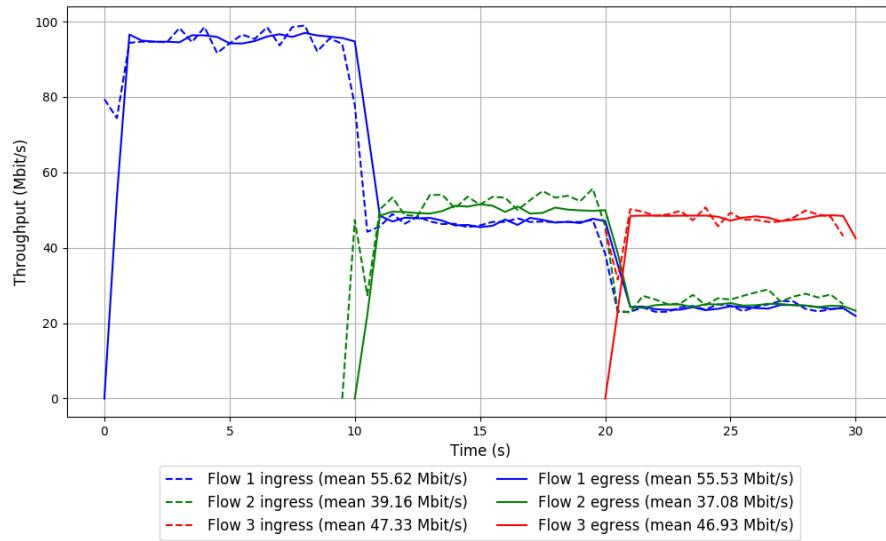


Run 2: Statistics of FillP

```
Start at: 2019-06-28 12:09:39
End at: 2019-06-28 12:10:09
Local clock offset: -1.579 ms
Remote clock offset: -2.239 ms

# Below is generated by plot.py at 2019-06-28 13:50:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.79 Mbit/s
95th percentile per-packet one-way delay: 88.637 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 55.53 Mbit/s
95th percentile per-packet one-way delay: 54.939 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 37.08 Mbit/s
95th percentile per-packet one-way delay: 106.331 ms
Loss rate: 5.43%
-- Flow 3:
Average throughput: 46.93 Mbit/s
95th percentile per-packet one-way delay: 62.900 ms
Loss rate: 1.09%
```

Run 2: Report of FillP — Data Link

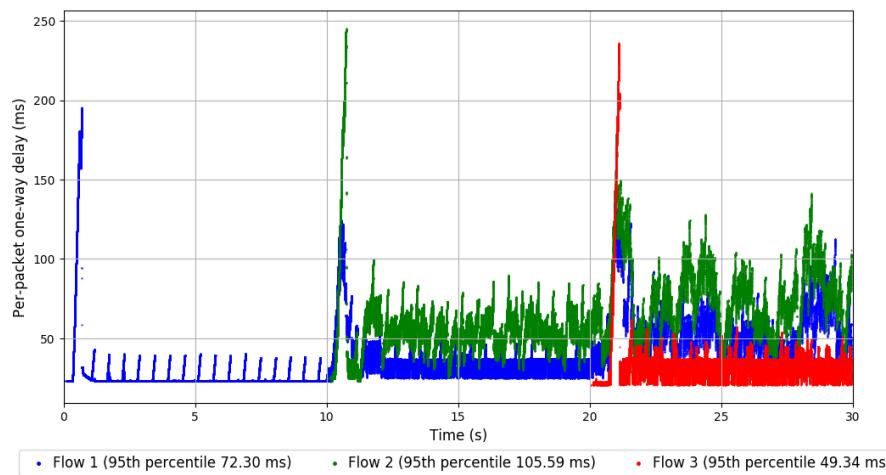
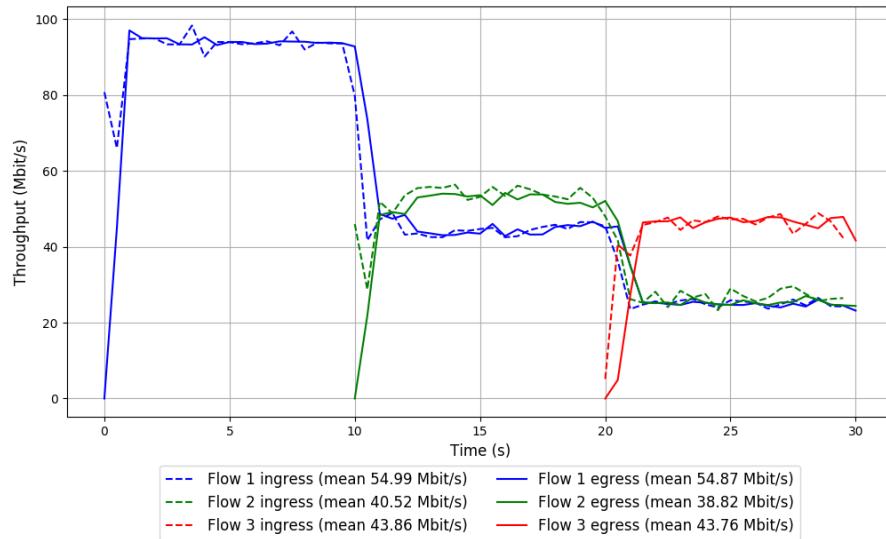


Run 3: Statistics of FillP

```
Start at: 2019-06-28 12:36:15
End at: 2019-06-28 12:36:45
Local clock offset: -0.722 ms
Remote clock offset: -5.156 ms

# Below is generated by plot.py at 2019-06-28 13:50:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 88.678 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 54.87 Mbit/s
95th percentile per-packet one-way delay: 72.297 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 38.82 Mbit/s
95th percentile per-packet one-way delay: 105.589 ms
Loss rate: 4.30%
-- Flow 3:
Average throughput: 43.76 Mbit/s
95th percentile per-packet one-way delay: 49.339 ms
Loss rate: 0.45%
```

Run 3: Report of FillP — Data Link

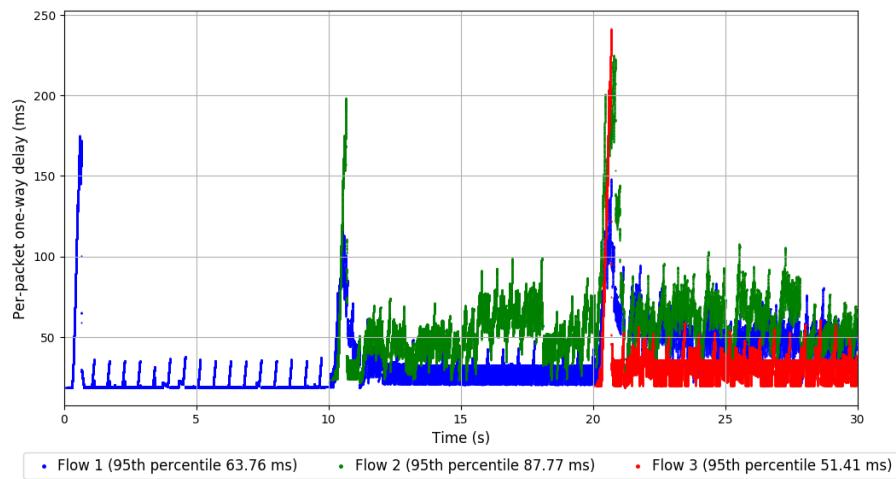
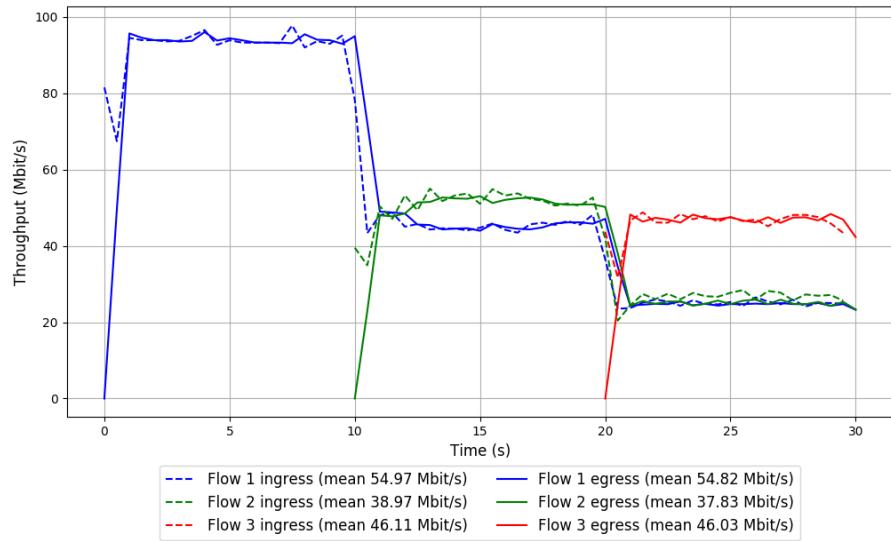


Run 4: Statistics of FillP

```
Start at: 2019-06-28 13:02:45
End at: 2019-06-28 13:03:15
Local clock offset: -2.045 ms
Remote clock offset: -5.792 ms

# Below is generated by plot.py at 2019-06-28 13:50:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 76.574 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 54.82 Mbit/s
95th percentile per-packet one-way delay: 63.764 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 87.765 ms
Loss rate: 3.04%
-- Flow 3:
Average throughput: 46.03 Mbit/s
95th percentile per-packet one-way delay: 51.408 ms
Loss rate: 0.42%
```

Run 4: Report of FillP — Data Link

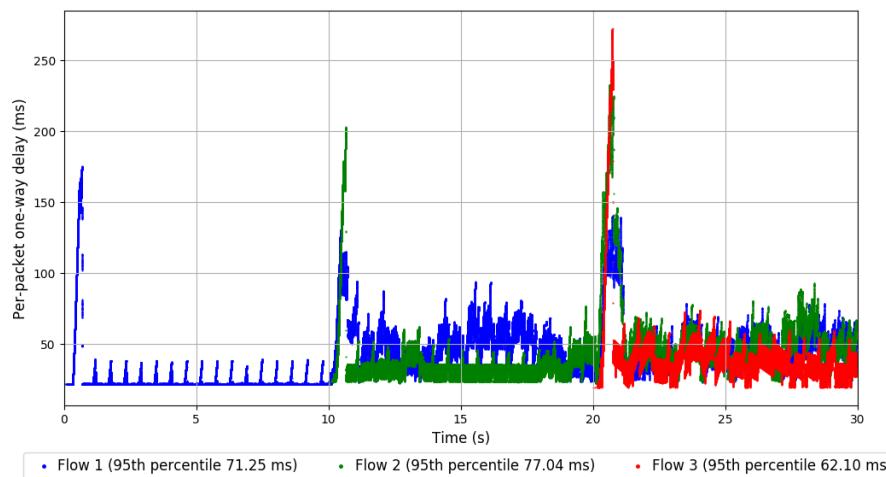
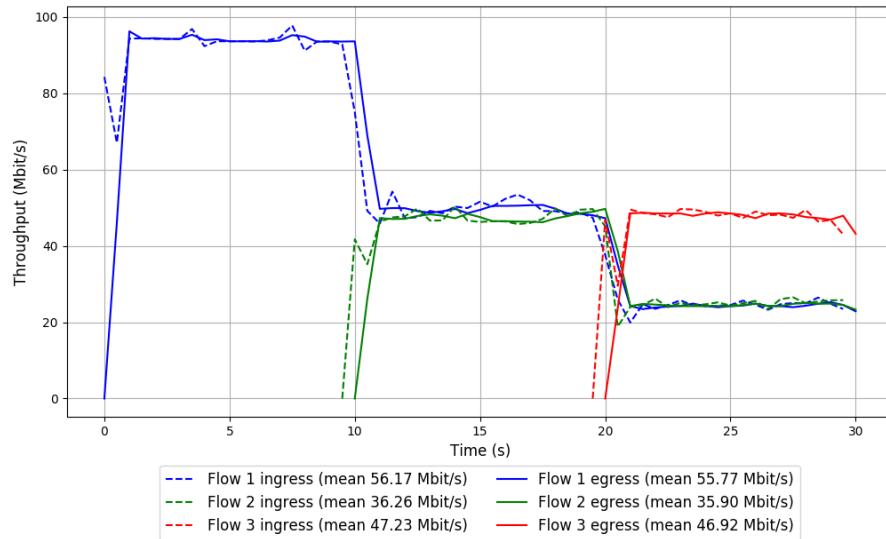


Run 5: Statistics of FillP

```
Start at: 2019-06-28 13:29:41
End at: 2019-06-28 13:30:11
Local clock offset: -0.478 ms
Remote clock offset: -4.908 ms

# Below is generated by plot.py at 2019-06-28 13:50:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 71.409 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 71.246 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 35.90 Mbit/s
95th percentile per-packet one-way delay: 77.036 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 46.92 Mbit/s
95th percentile per-packet one-way delay: 62.103 ms
Loss rate: 0.74%
```

Run 5: Report of FillP — Data Link

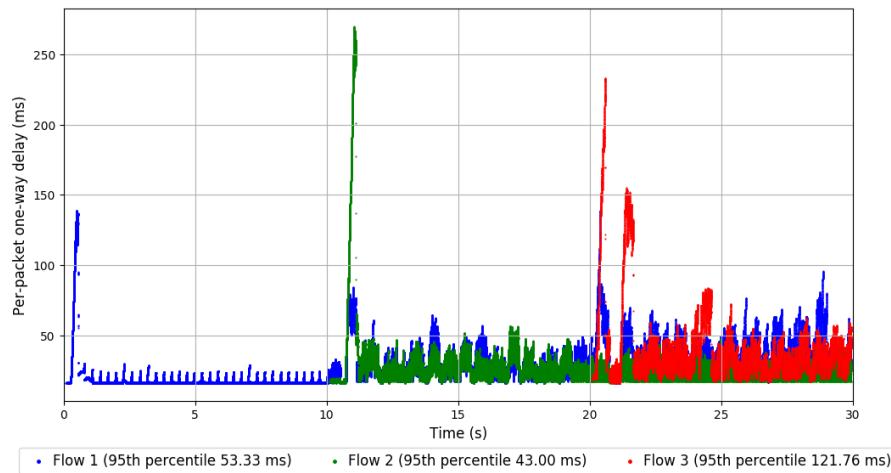
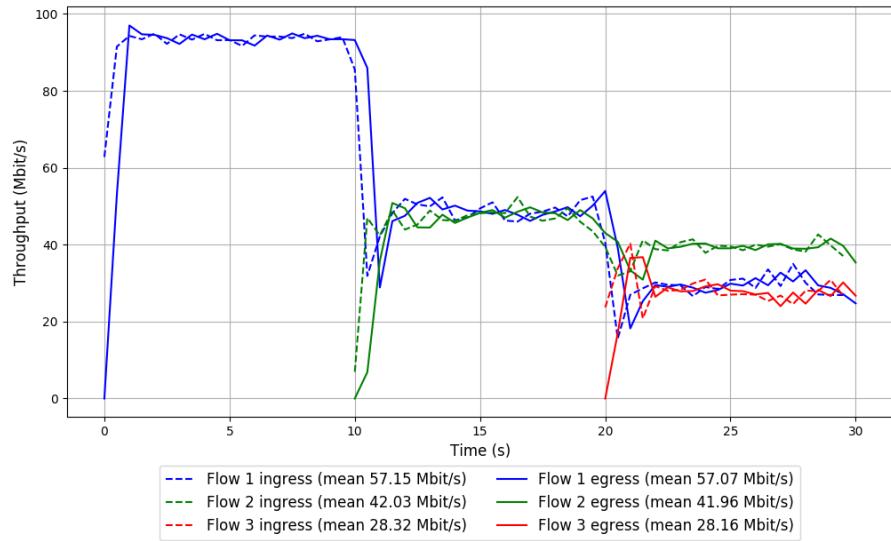


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-06-28 11:31:28
End at: 2019-06-28 11:31:58
Local clock offset: -1.233 ms
Remote clock offset: -0.684 ms

# Below is generated by plot.py at 2019-06-28 13:50:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.34 Mbit/s
95th percentile per-packet one-way delay: 53.617 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 57.07 Mbit/s
95th percentile per-packet one-way delay: 53.327 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 41.96 Mbit/s
95th percentile per-packet one-way delay: 42.998 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 28.16 Mbit/s
95th percentile per-packet one-way delay: 121.757 ms
Loss rate: 0.75%
```

Run 1: Report of FillP-Sheep — Data Link

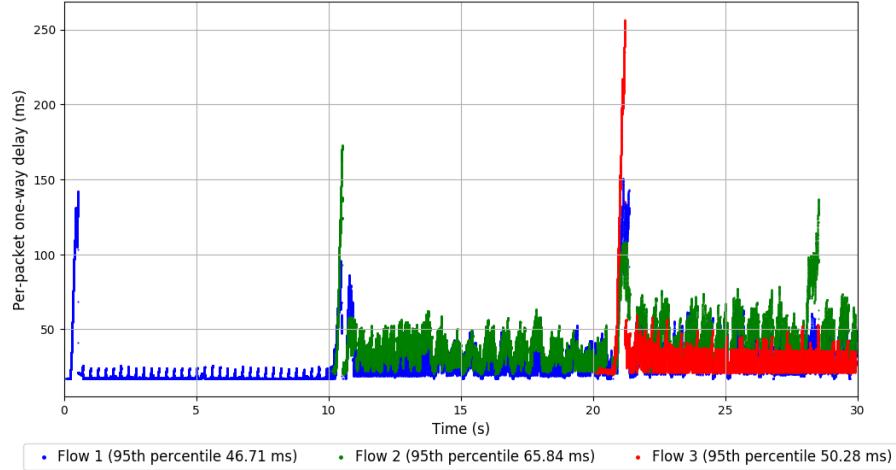
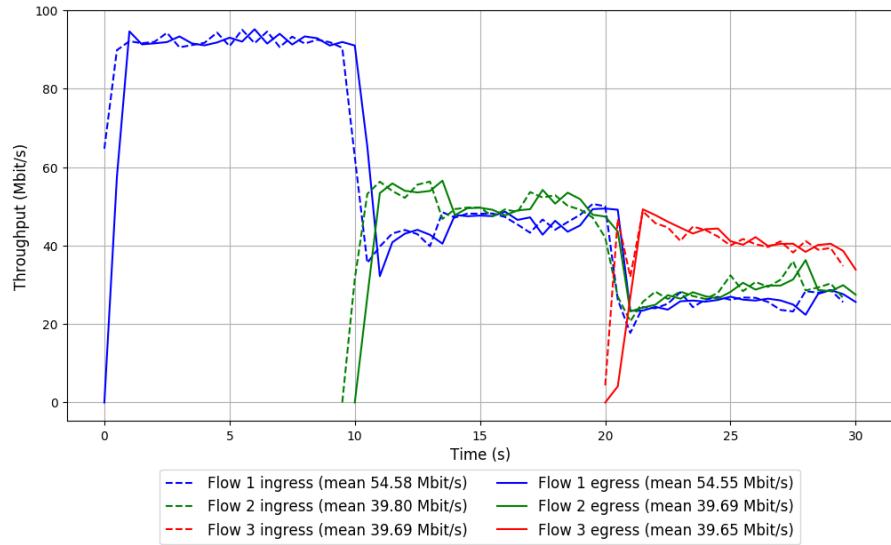


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-06-28 11:58:34
End at: 2019-06-28 11:59:04
Local clock offset: -1.568 ms
Remote clock offset: -2.076 ms

# Below is generated by plot.py at 2019-06-28 13:50:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.11 Mbit/s
95th percentile per-packet one-way delay: 57.169 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 54.55 Mbit/s
95th percentile per-packet one-way delay: 46.712 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 39.69 Mbit/s
95th percentile per-packet one-way delay: 65.836 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 39.65 Mbit/s
95th percentile per-packet one-way delay: 50.280 ms
Loss rate: 0.48%
```

Run 2: Report of FillP-Sheep — Data Link

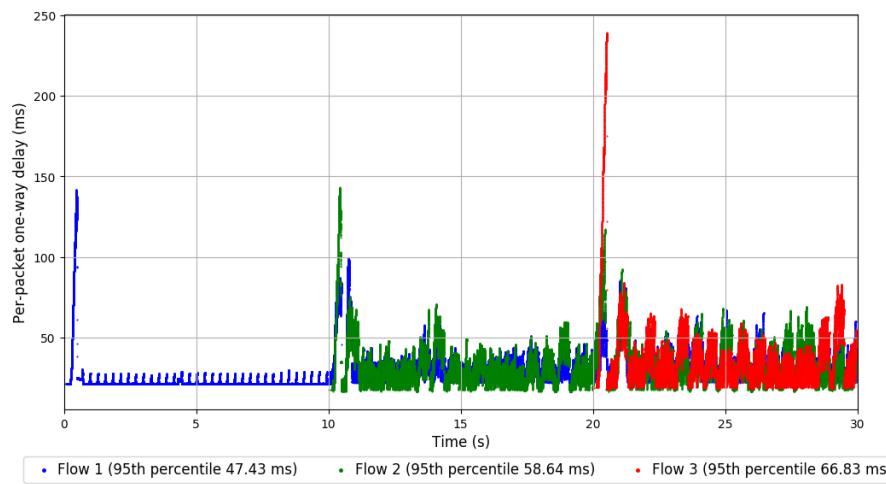
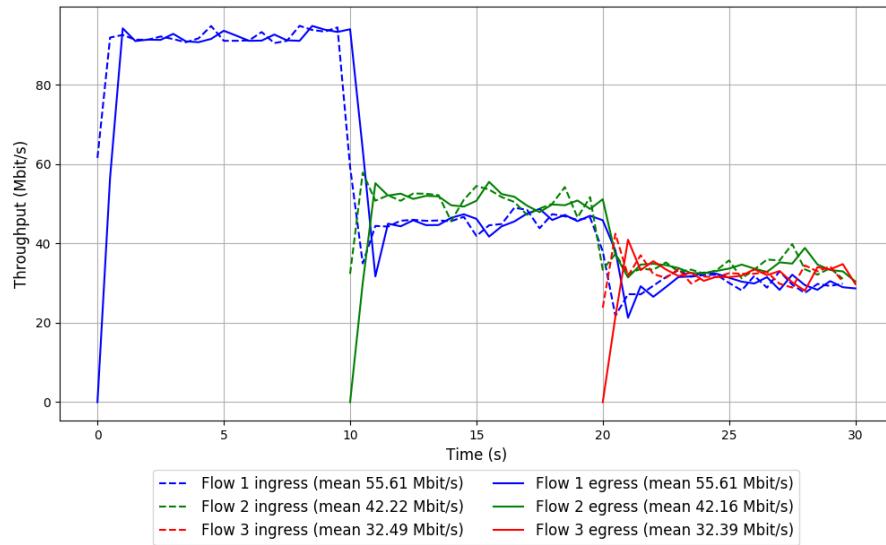


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-06-28 12:25:18
End at: 2019-06-28 12:25:48
Local clock offset: -1.585 ms
Remote clock offset: -3.634 ms

# Below is generated by plot.py at 2019-06-28 13:50:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.42 Mbit/s
95th percentile per-packet one-way delay: 55.908 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 55.61 Mbit/s
95th percentile per-packet one-way delay: 47.428 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 42.16 Mbit/s
95th percentile per-packet one-way delay: 58.638 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 66.826 ms
Loss rate: 0.40%
```

Run 3: Report of FillP-Sheep — Data Link

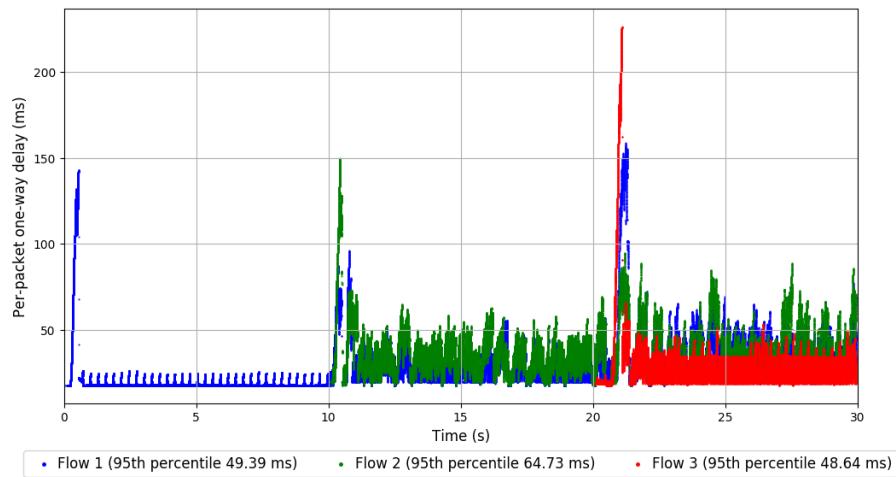
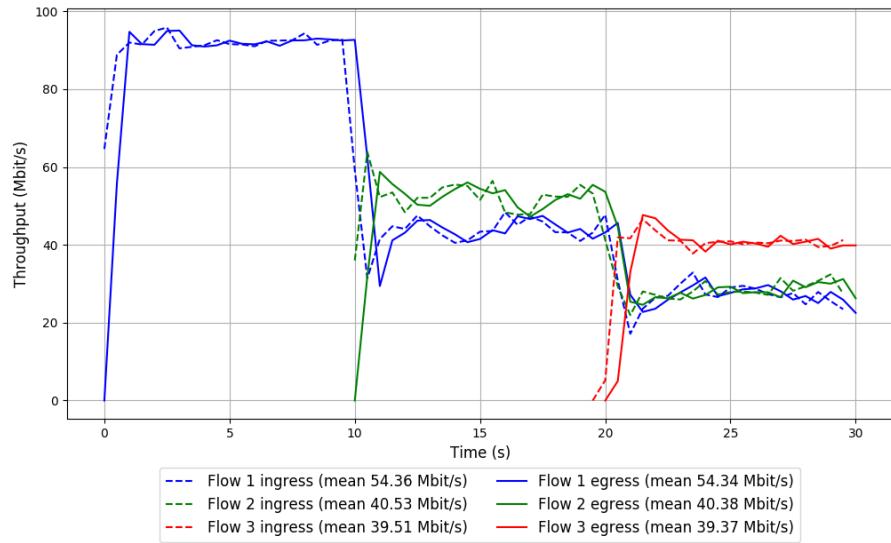


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-06-28 12:51:58
End at: 2019-06-28 12:52:28
Local clock offset: -2.249 ms
Remote clock offset: -5.252 ms

# Below is generated by plot.py at 2019-06-28 13:51:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.30 Mbit/s
95th percentile per-packet one-way delay: 56.830 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 54.34 Mbit/s
95th percentile per-packet one-way delay: 49.393 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.38 Mbit/s
95th percentile per-packet one-way delay: 64.727 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 39.37 Mbit/s
95th percentile per-packet one-way delay: 48.637 ms
Loss rate: 0.48%
```

Run 4: Report of FillP-Sheep — Data Link

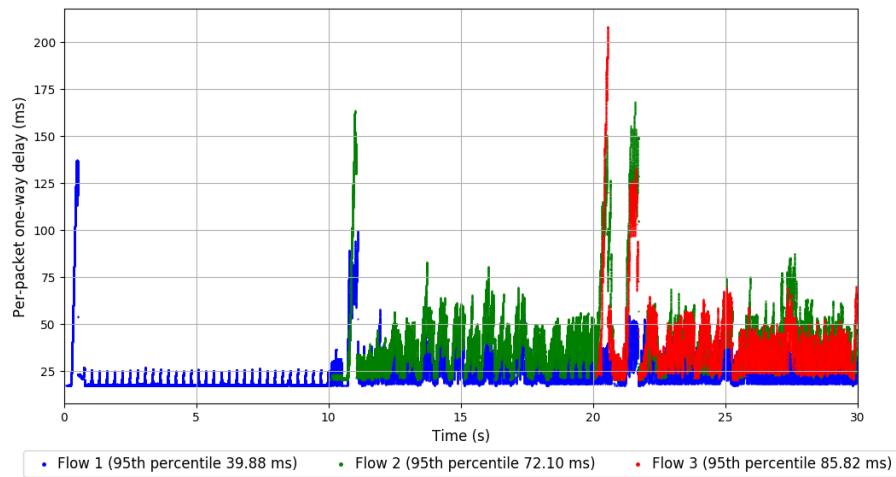
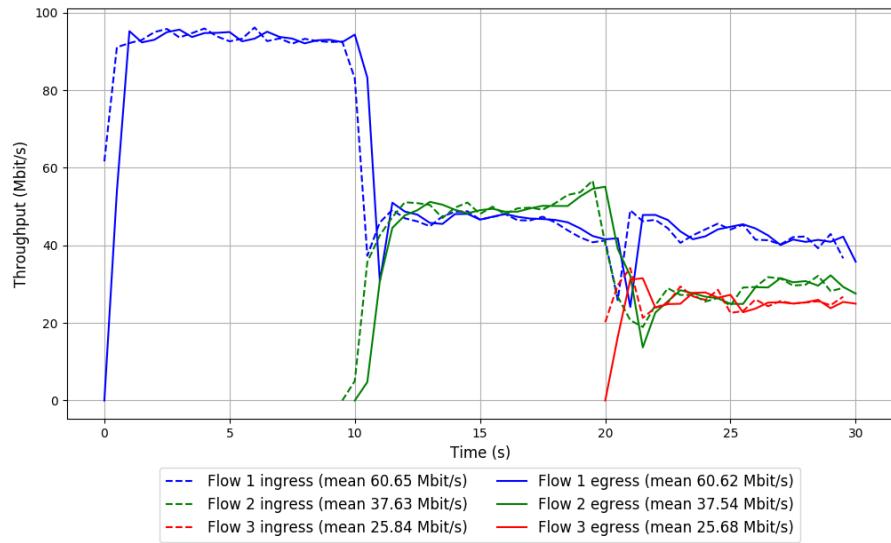


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-06-28 13:18:42
End at: 2019-06-28 13:19:12
Local clock offset: -1.876 ms
Remote clock offset: -4.655 ms

# Below is generated by plot.py at 2019-06-28 13:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.13 Mbit/s
95th percentile per-packet one-way delay: 56.513 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 60.62 Mbit/s
95th percentile per-packet one-way delay: 39.880 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 37.54 Mbit/s
95th percentile per-packet one-way delay: 72.103 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 25.68 Mbit/s
95th percentile per-packet one-way delay: 85.822 ms
Loss rate: 0.86%
```

Run 5: Report of FillP-Sheep — Data Link

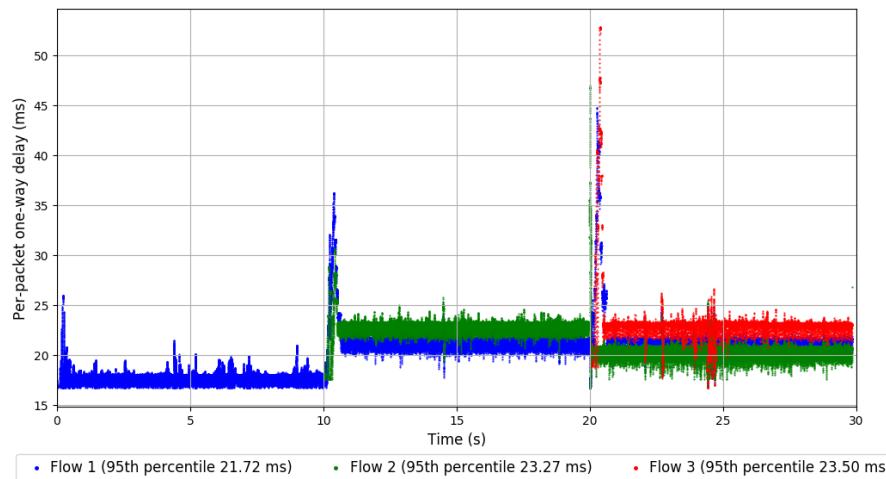
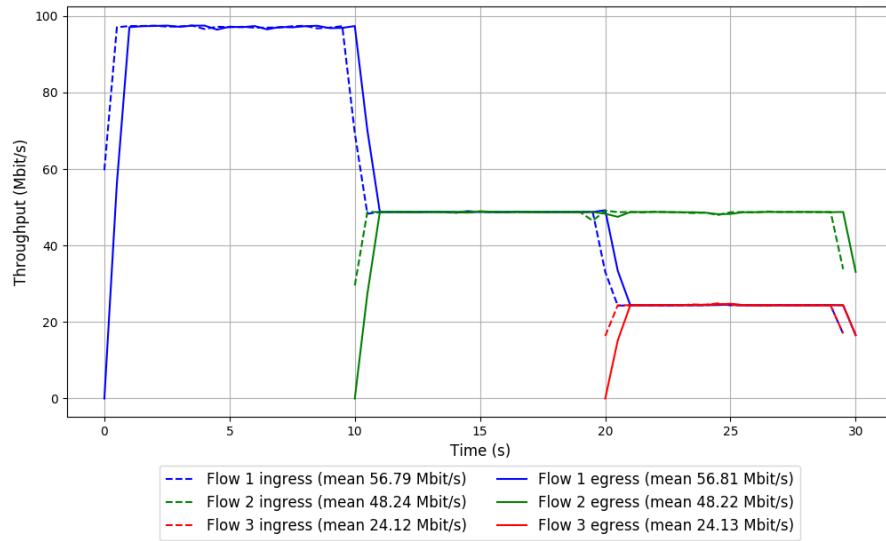


```
Run 1: Statistics of Indigo
```

```
Start at: 2019-06-28 11:41:08
End at: 2019-06-28 11:41:38
Local clock offset: -0.656 ms
Remote clock offset: -0.746 ms

# Below is generated by plot.py at 2019-06-28 13:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.73 Mbit/s
95th percentile per-packet one-way delay: 23.242 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 56.81 Mbit/s
95th percentile per-packet one-way delay: 21.721 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 48.22 Mbit/s
95th percentile per-packet one-way delay: 23.268 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 24.13 Mbit/s
95th percentile per-packet one-way delay: 23.504 ms
Loss rate: 0.32%
```

Run 1: Report of Indigo — Data Link

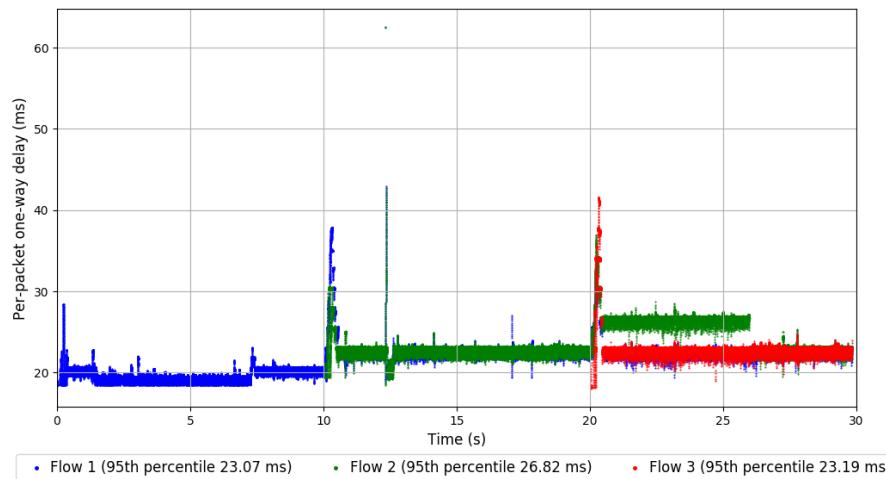
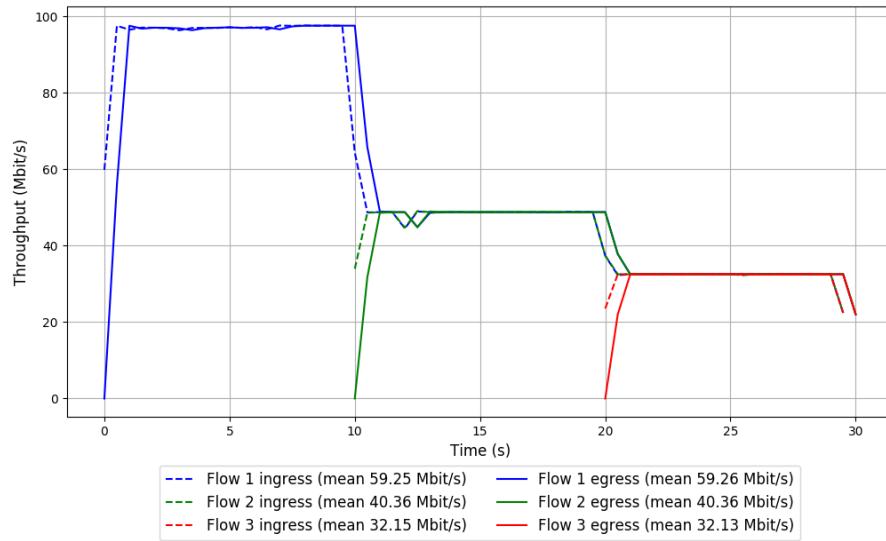


Run 2: Statistics of Indigo

```
Start at: 2019-06-28 12:08:24
End at: 2019-06-28 12:08:54
Local clock offset: -0.667 ms
Remote clock offset: -2.447 ms

# Below is generated by plot.py at 2019-06-28 13:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 26.653 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 59.26 Mbit/s
95th percentile per-packet one-way delay: 23.066 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 40.36 Mbit/s
95th percentile per-packet one-way delay: 26.817 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 32.13 Mbit/s
95th percentile per-packet one-way delay: 23.189 ms
Loss rate: 0.30%
```

Run 2: Report of Indigo — Data Link

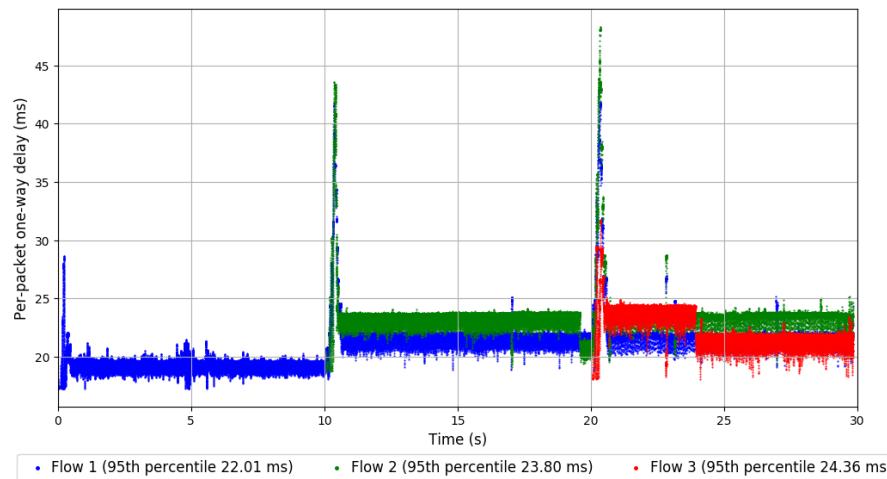
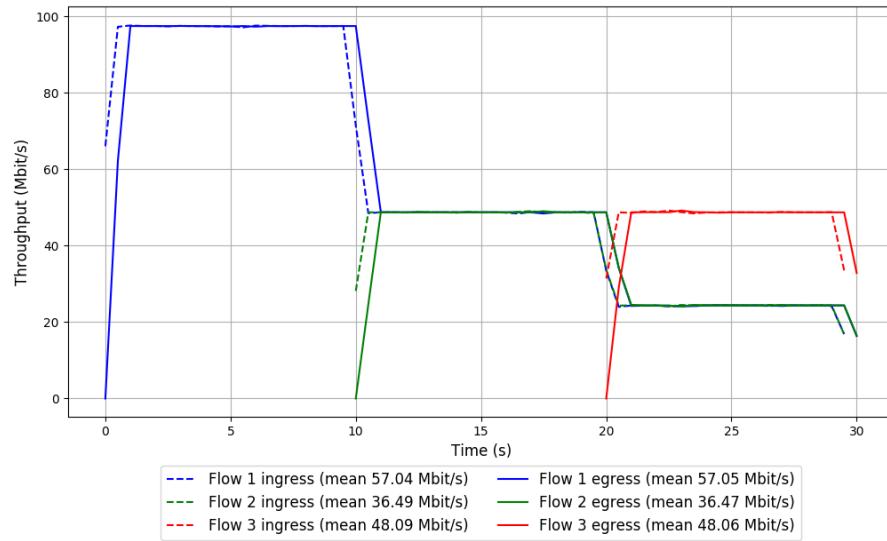


Run 3: Statistics of Indigo

```
Start at: 2019-06-28 12:35:01
End at: 2019-06-28 12:35:31
Local clock offset: -2.086 ms
Remote clock offset: -3.907 ms

# Below is generated by plot.py at 2019-06-28 13:52:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.98 Mbit/s
95th percentile per-packet one-way delay: 24.198 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 57.05 Mbit/s
95th percentile per-packet one-way delay: 22.013 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 36.47 Mbit/s
95th percentile per-packet one-way delay: 23.804 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 48.06 Mbit/s
95th percentile per-packet one-way delay: 24.356 ms
Loss rate: 0.30%
```

Run 3: Report of Indigo — Data Link

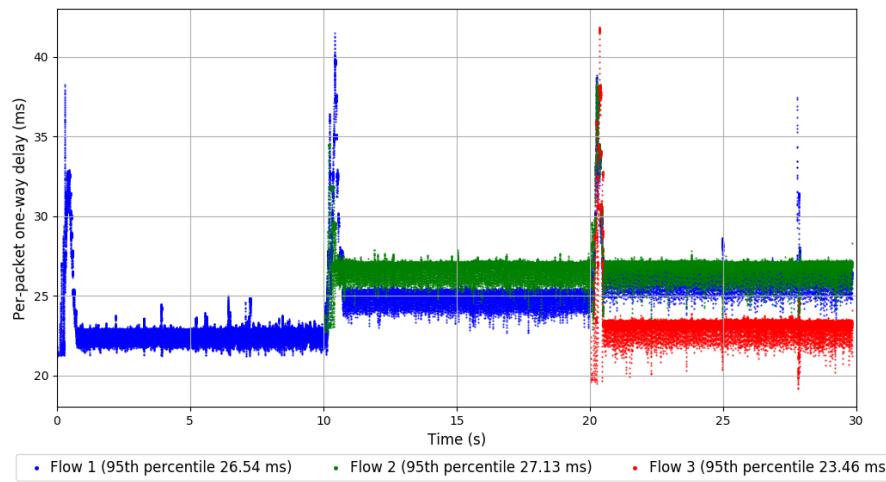
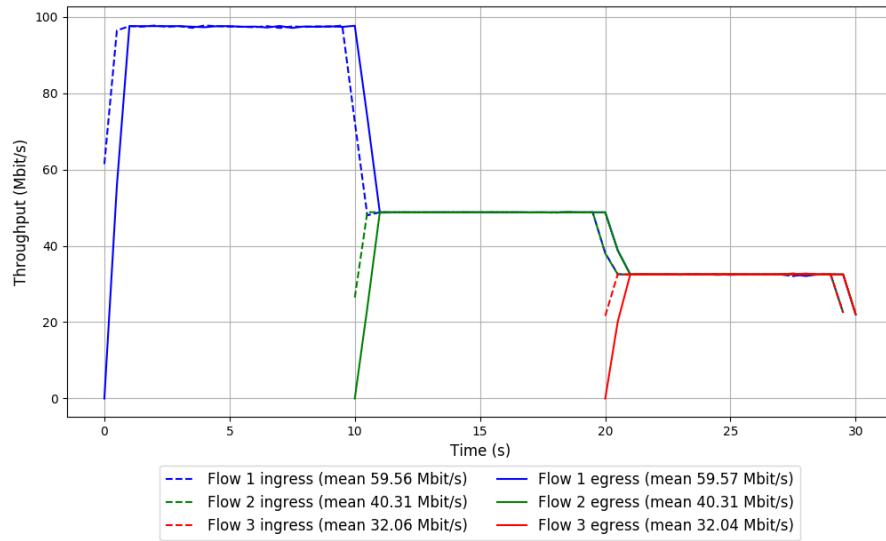


Run 4: Statistics of Indigo

```
Start at: 2019-06-28 13:01:30
End at: 2019-06-28 13:02:00
Local clock offset: -2.284 ms
Remote clock offset: -5.567 ms

# Below is generated by plot.py at 2019-06-28 13:52:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.86 Mbit/s
95th percentile per-packet one-way delay: 27.098 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 59.57 Mbit/s
95th percentile per-packet one-way delay: 26.540 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.31 Mbit/s
95th percentile per-packet one-way delay: 27.133 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.04 Mbit/s
95th percentile per-packet one-way delay: 23.456 ms
Loss rate: 0.31%
```

Run 4: Report of Indigo — Data Link

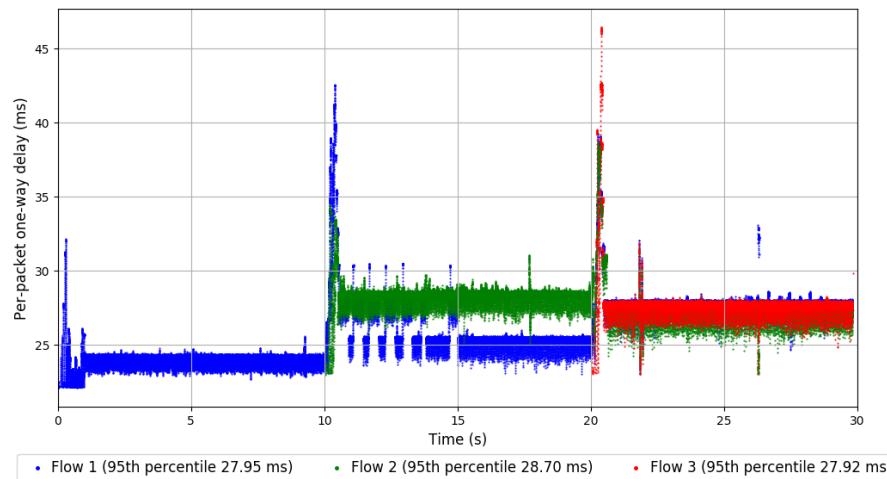
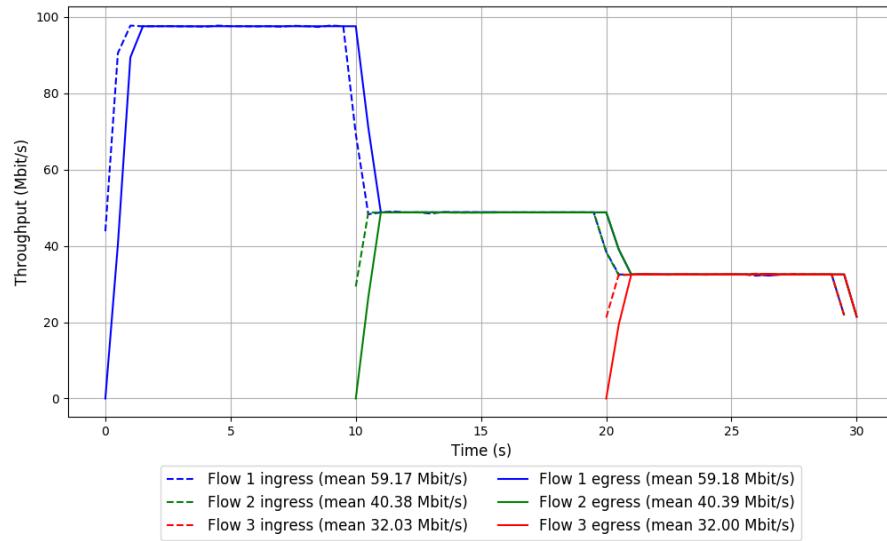


Run 5: Statistics of Indigo

```
Start at: 2019-06-28 13:28:27
End at: 2019-06-28 13:28:57
Local clock offset: -0.899 ms
Remote clock offset: -5.867 ms

# Below is generated by plot.py at 2019-06-28 13:52:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 28.539 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 59.18 Mbit/s
95th percentile per-packet one-way delay: 27.950 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 40.39 Mbit/s
95th percentile per-packet one-way delay: 28.695 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.00 Mbit/s
95th percentile per-packet one-way delay: 27.921 ms
Loss rate: 0.35%
```

Run 5: Report of Indigo — Data Link

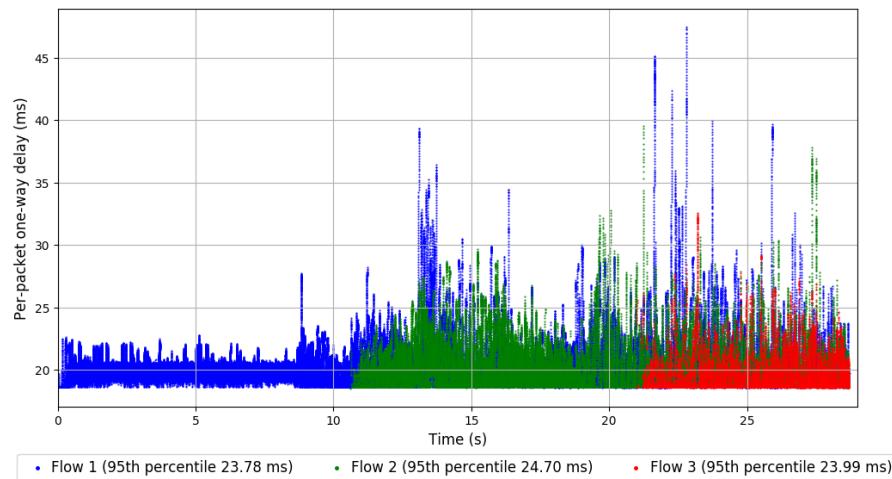
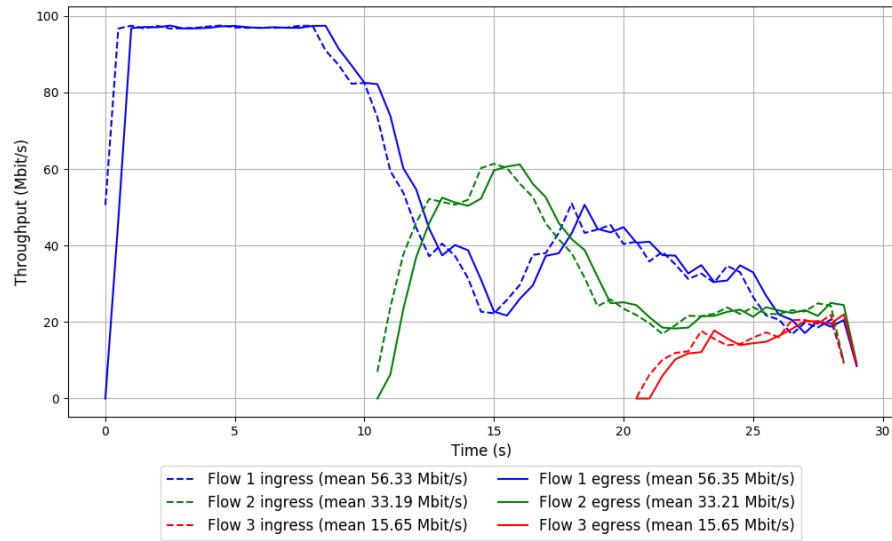


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-06-28 11:36:10
End at: 2019-06-28 11:36:40
Local clock offset: -1.375 ms
Remote clock offset: -3.277 ms

# Below is generated by plot.py at 2019-06-28 13:52:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.51 Mbit/s
95th percentile per-packet one-way delay: 24.171 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 56.35 Mbit/s
95th percentile per-packet one-way delay: 23.781 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 33.21 Mbit/s
95th percentile per-packet one-way delay: 24.704 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 23.993 ms
Loss rate: 0.38%
```

Run 1: Report of Indigo-MusesC3 — Data Link

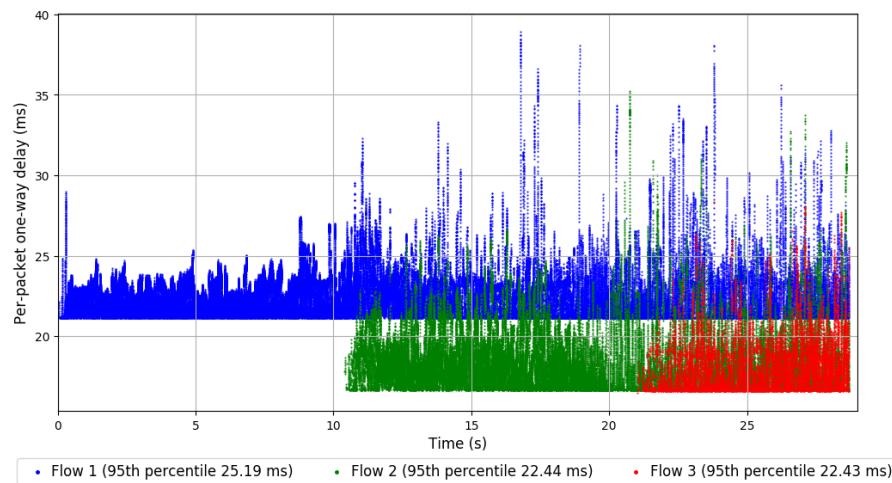
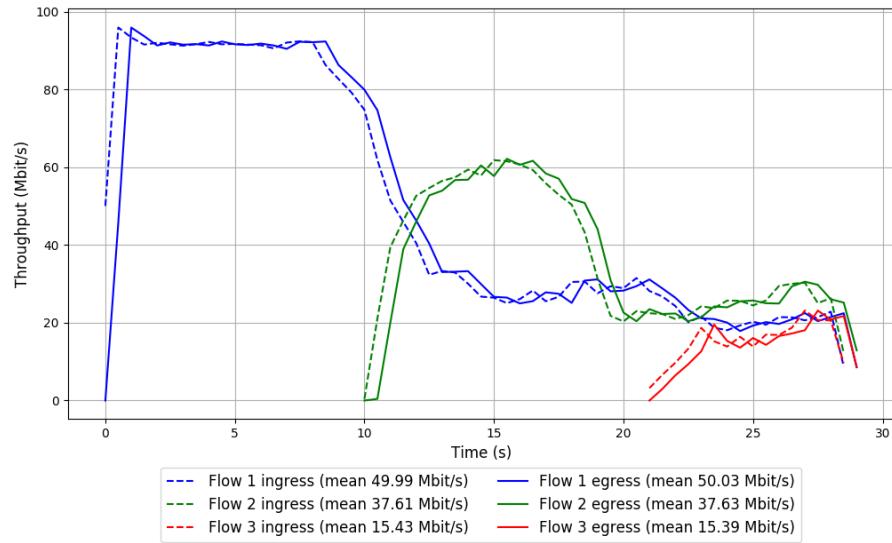


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 12:03:25
End at: 2019-06-28 12:03:55
Local clock offset: -1.659 ms
Remote clock offset: -2.933 ms

# Below is generated by plot.py at 2019-06-28 13:52:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.16 Mbit/s
95th percentile per-packet one-way delay: 24.604 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 50.03 Mbit/s
95th percentile per-packet one-way delay: 25.190 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 22.441 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 22.431 ms
Loss rate: 0.43%
```

Run 2: Report of Indigo-MusesC3 — Data Link

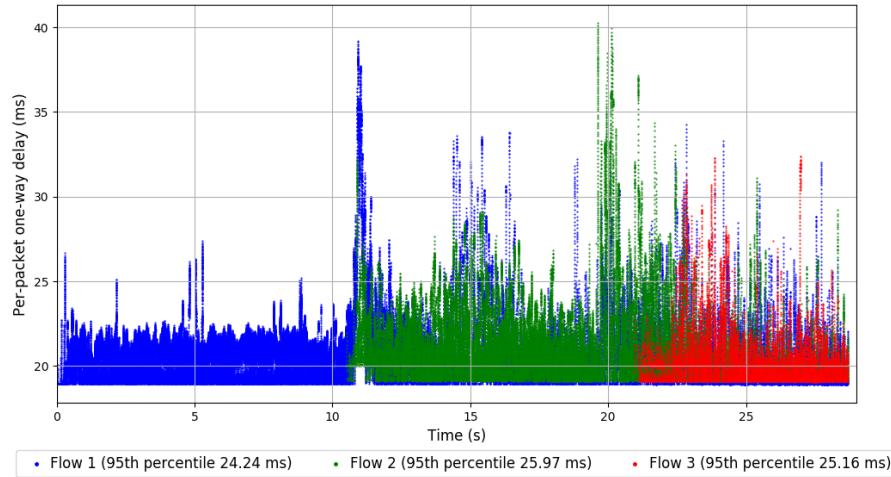
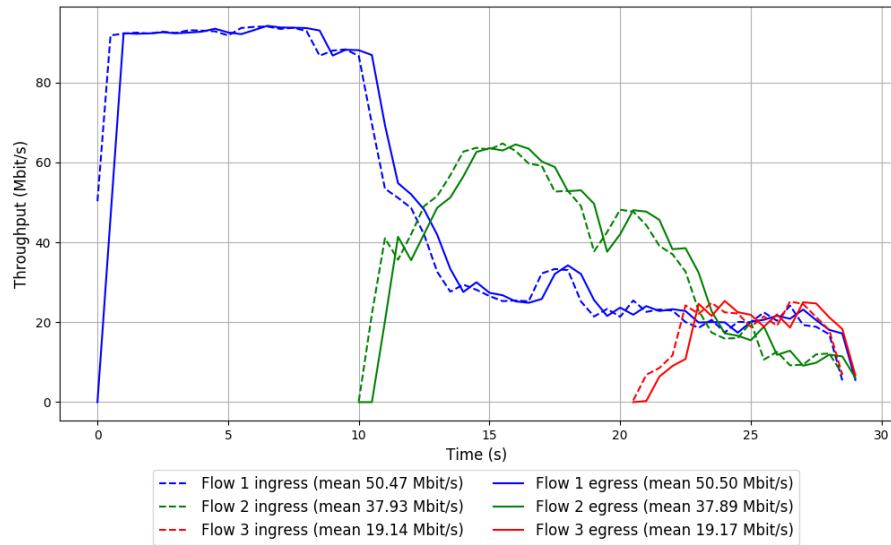


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 12:30:03
End at: 2019-06-28 12:30:33
Local clock offset: -0.87 ms
Remote clock offset: -4.222 ms

# Below is generated by plot.py at 2019-06-28 13:52:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.76 Mbit/s
95th percentile per-packet one-way delay: 25.026 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 50.50 Mbit/s
95th percentile per-packet one-way delay: 24.236 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.89 Mbit/s
95th percentile per-packet one-way delay: 25.970 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 19.17 Mbit/s
95th percentile per-packet one-way delay: 25.158 ms
Loss rate: 0.27%
```

Run 3: Report of Indigo-MusesC3 — Data Link

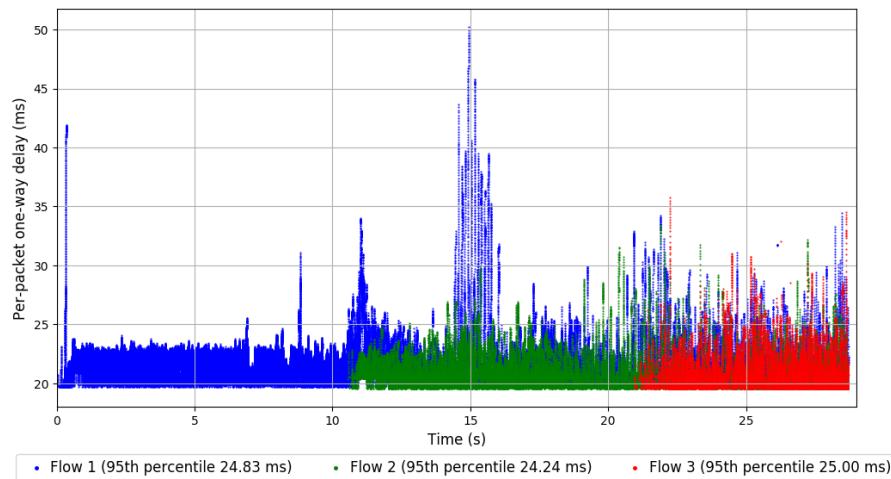
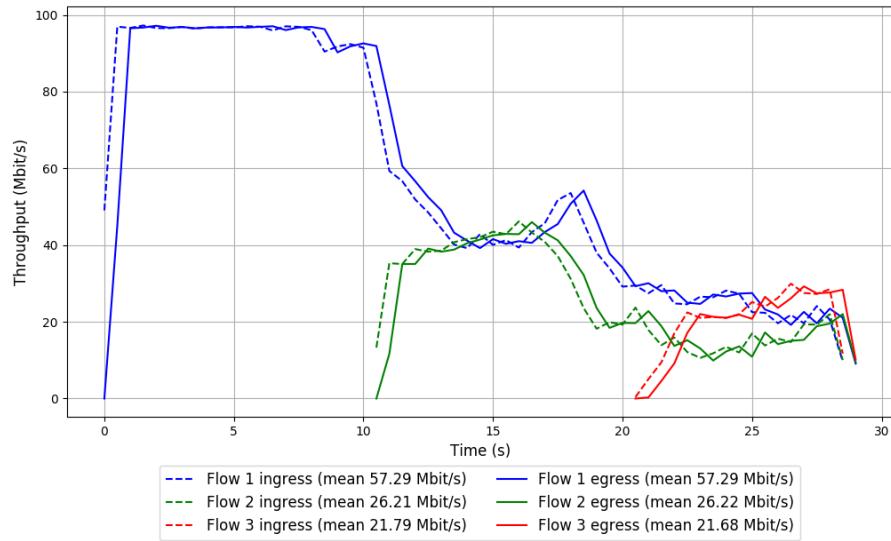


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 12:56:38
End at: 2019-06-28 12:57:08
Local clock offset: -0.79 ms
Remote clock offset: -5.572 ms

# Below is generated by plot.py at 2019-06-28 13:52:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.75 Mbit/s
95th percentile per-packet one-way delay: 24.711 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 57.29 Mbit/s
95th percentile per-packet one-way delay: 24.834 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 26.22 Mbit/s
95th percentile per-packet one-way delay: 24.236 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 21.68 Mbit/s
95th percentile per-packet one-way delay: 24.999 ms
Loss rate: 0.76%
```

Run 4: Report of Indigo-MusesC3 — Data Link

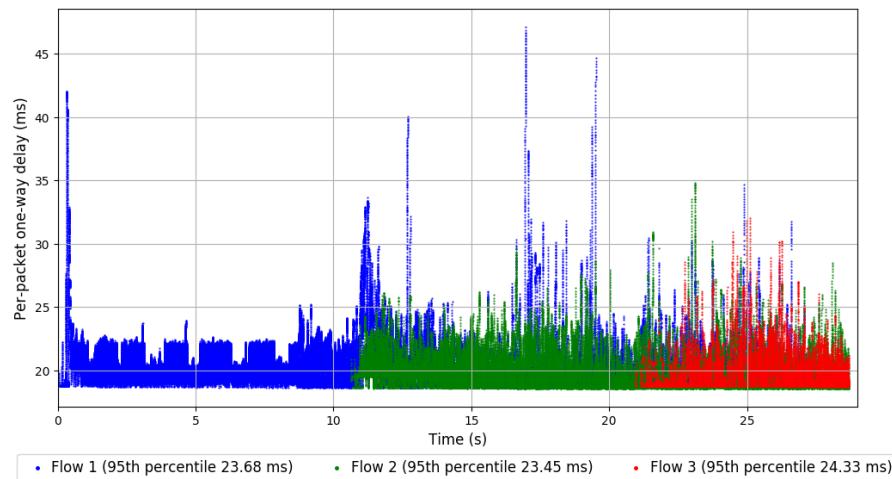
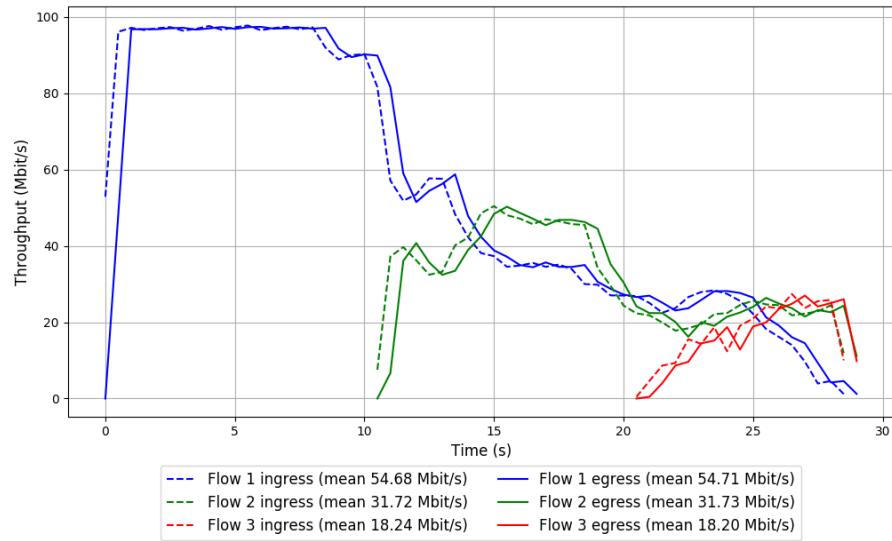


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 13:23:30
End at: 2019-06-28 13:24:00
Local clock offset: -0.909 ms
Remote clock offset: -5.362 ms

# Below is generated by plot.py at 2019-06-28 13:52:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.63 Mbit/s
95th percentile per-packet one-way delay: 23.642 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 54.71 Mbit/s
95th percentile per-packet one-way delay: 23.678 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.73 Mbit/s
95th percentile per-packet one-way delay: 23.454 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 18.20 Mbit/s
95th percentile per-packet one-way delay: 24.327 ms
Loss rate: 0.42%
```

Run 5: Report of Indigo-MusesC3 — Data Link

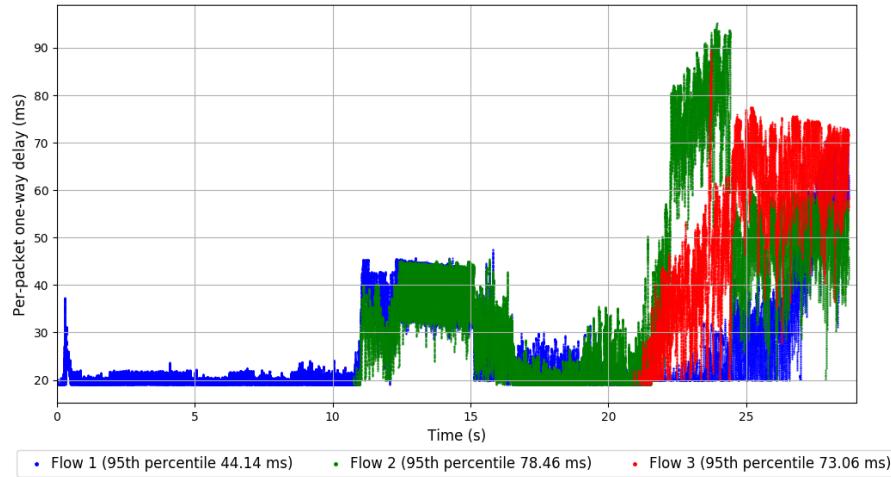
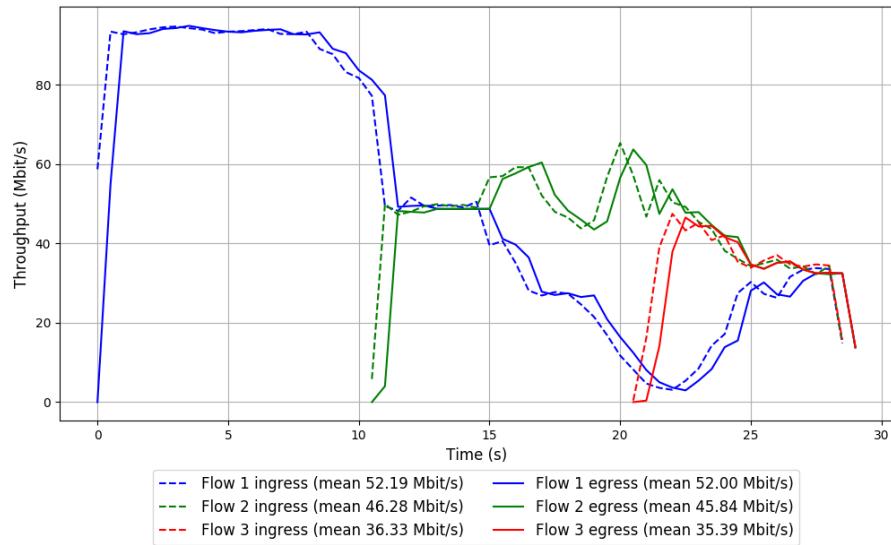


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-06-28 11:33:52
End at: 2019-06-28 11:34:22
Local clock offset: -0.603 ms
Remote clock offset: -2.879 ms

# Below is generated by plot.py at 2019-06-28 13:53:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.39 Mbit/s
95th percentile per-packet one-way delay: 68.575 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 52.00 Mbit/s
95th percentile per-packet one-way delay: 44.136 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 45.84 Mbit/s
95th percentile per-packet one-way delay: 78.460 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 35.39 Mbit/s
95th percentile per-packet one-way delay: 73.059 ms
Loss rate: 3.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

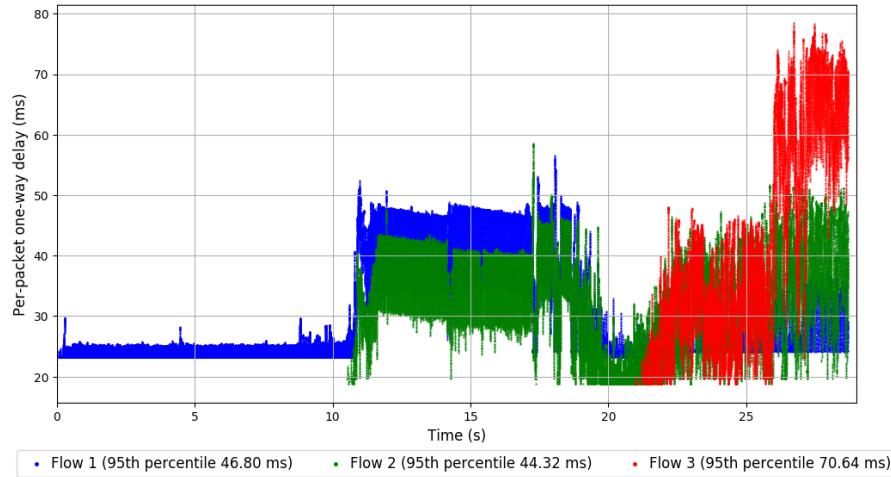
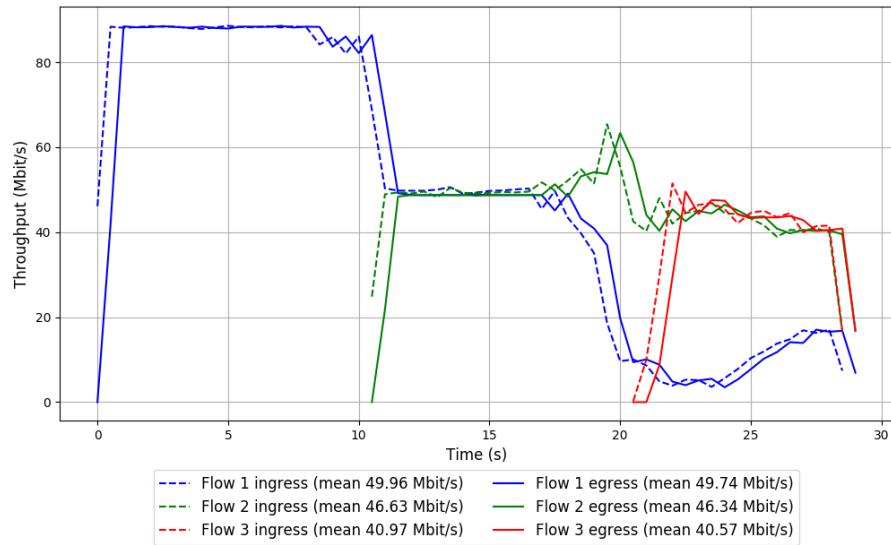


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 12:01:04
End at: 2019-06-28 12:01:34
Local clock offset: -0.551 ms
Remote clock offset: -3.925 ms

# Below is generated by plot.py at 2019-06-28 13:53:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.02 Mbit/s
95th percentile per-packet one-way delay: 47.746 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 49.74 Mbit/s
95th percentile per-packet one-way delay: 46.803 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 46.34 Mbit/s
95th percentile per-packet one-way delay: 44.318 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 40.57 Mbit/s
95th percentile per-packet one-way delay: 70.638 ms
Loss rate: 1.17%
```

Run 2: Report of Indigo-MusesC5 — Data Link

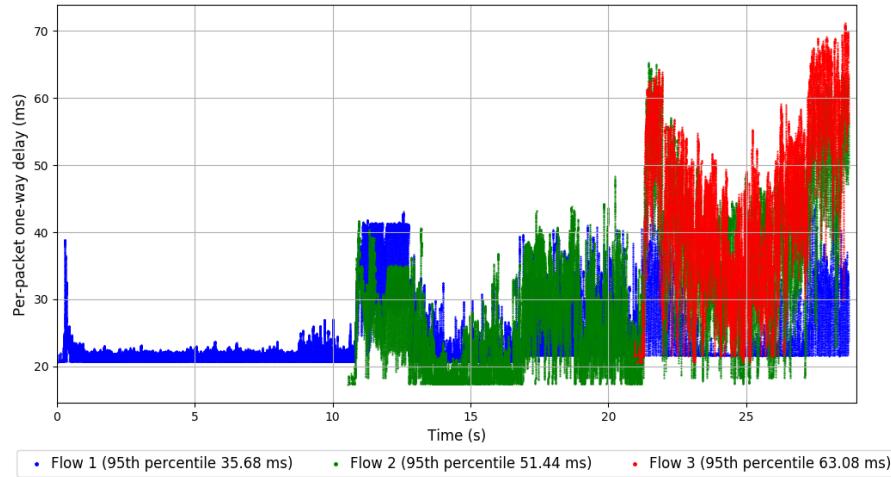
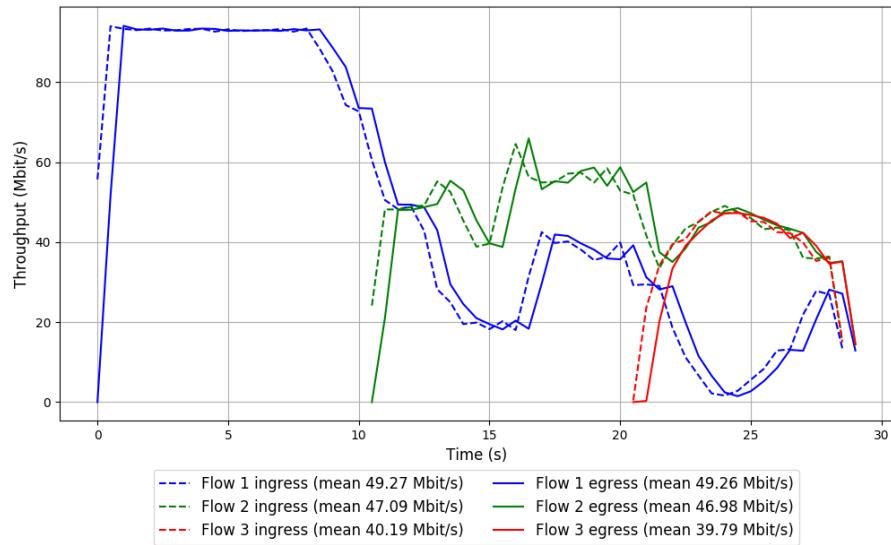


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 12:27:45
End at: 2019-06-28 12:28:15
Local clock offset: -1.998 ms
Remote clock offset: -3.636 ms

# Below is generated by plot.py at 2019-06-28 13:53:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.81 Mbit/s
95th percentile per-packet one-way delay: 50.468 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: 35.682 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 46.98 Mbit/s
95th percentile per-packet one-way delay: 51.438 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 39.79 Mbit/s
95th percentile per-packet one-way delay: 63.080 ms
Loss rate: 1.28%
```

Run 3: Report of Indigo-MusesC5 — Data Link

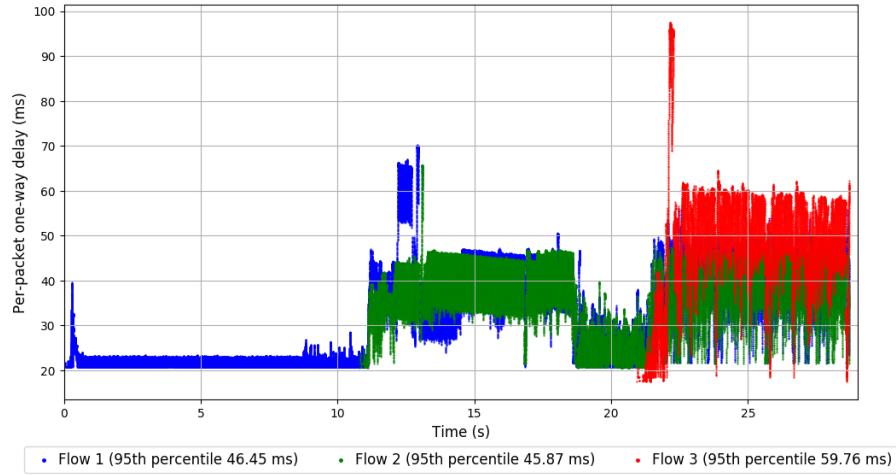
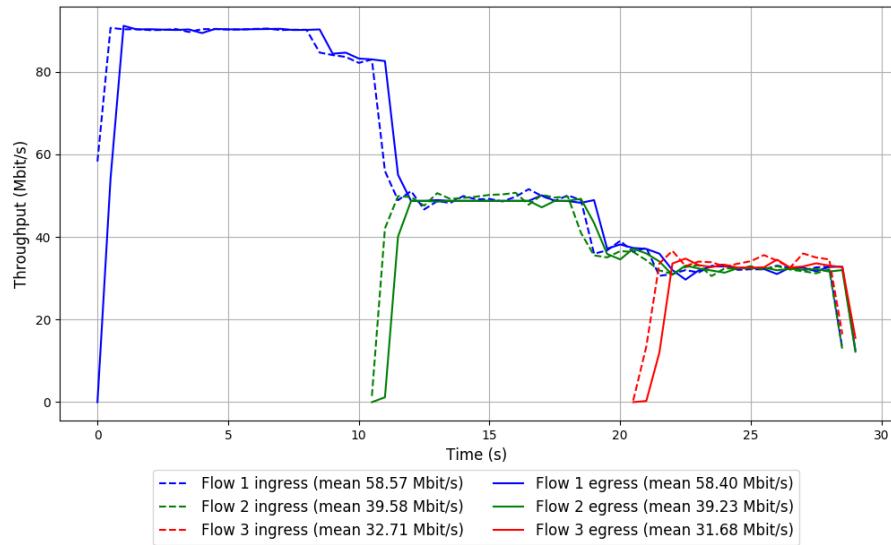


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 12:54:20
End at: 2019-06-28 12:54:50
Local clock offset: -1.786 ms
Remote clock offset: -4.357 ms

# Below is generated by plot.py at 2019-06-28 13:53:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.45 Mbit/s
95th percentile per-packet one-way delay: 51.975 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 58.40 Mbit/s
95th percentile per-packet one-way delay: 46.447 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 39.23 Mbit/s
95th percentile per-packet one-way delay: 45.871 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 31.68 Mbit/s
95th percentile per-packet one-way delay: 59.759 ms
Loss rate: 3.44%
```

Run 4: Report of Indigo-MusesC5 — Data Link

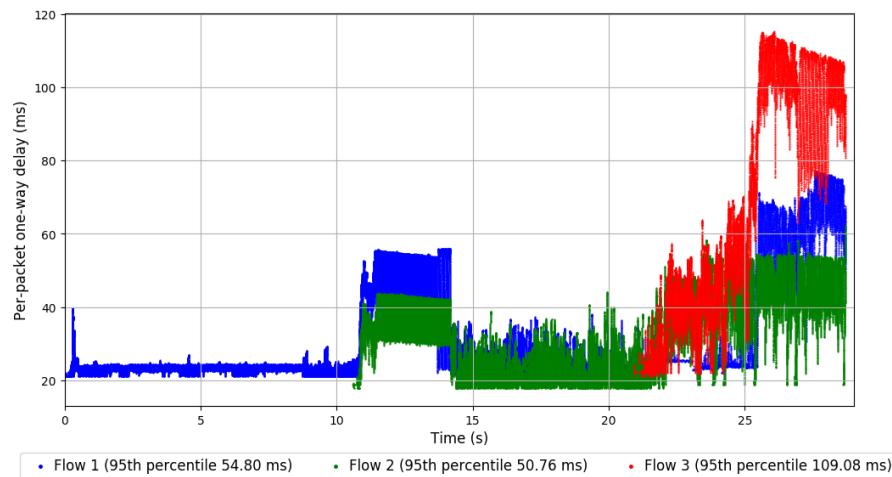
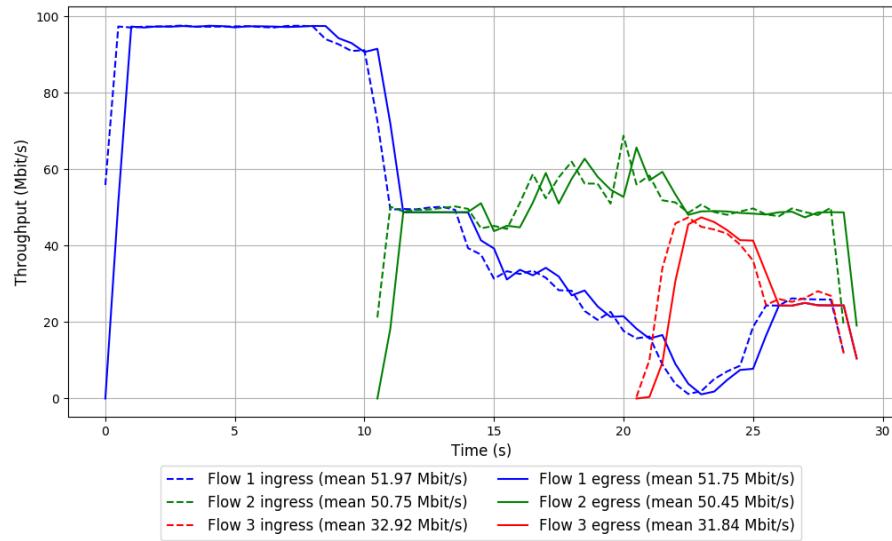


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 13:21:09
End at: 2019-06-28 13:21:39
Local clock offset: -1.93 ms
Remote clock offset: -5.239 ms

# Below is generated by plot.py at 2019-06-28 13:53:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 63.288 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 51.75 Mbit/s
95th percentile per-packet one-way delay: 54.799 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 50.45 Mbit/s
95th percentile per-packet one-way delay: 50.759 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 109.080 ms
Loss rate: 3.64%
```

Run 5: Report of Indigo-MusesC5 — Data Link

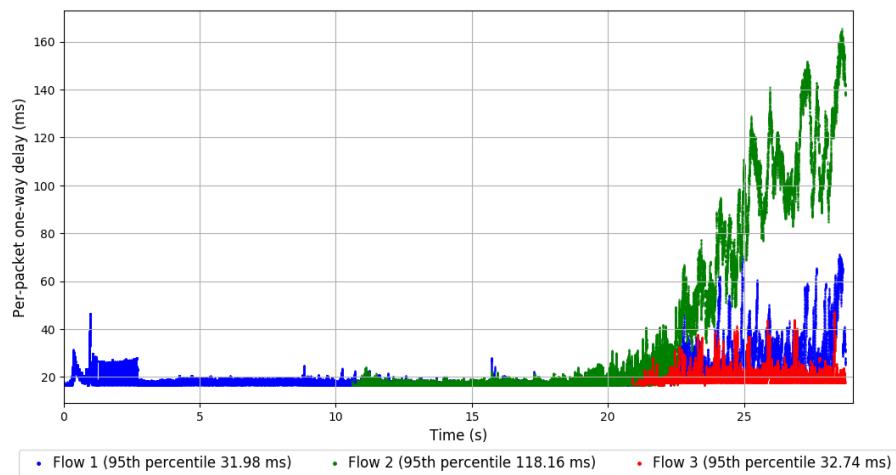
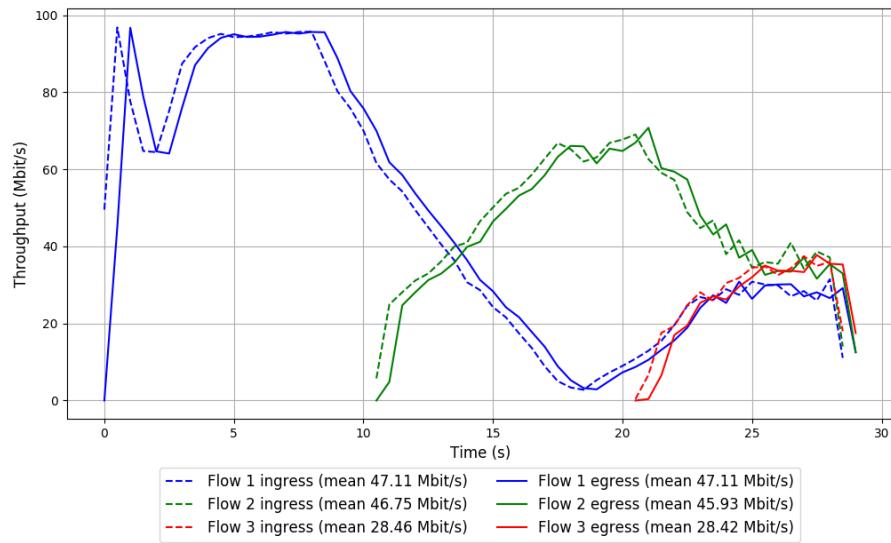


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 11:44:55
End at: 2019-06-28 11:45:25
Local clock offset: -0.807 ms
Remote clock offset: -0.851 ms

# Below is generated by plot.py at 2019-06-28 13:53:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.88 Mbit/s
95th percentile per-packet one-way delay: 88.845 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 47.11 Mbit/s
95th percentile per-packet one-way delay: 31.984 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 45.93 Mbit/s
95th percentile per-packet one-way delay: 118.155 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 28.42 Mbit/s
95th percentile per-packet one-way delay: 32.741 ms
Loss rate: 0.49%
```

Run 1: Report of Indigo-MusesD — Data Link

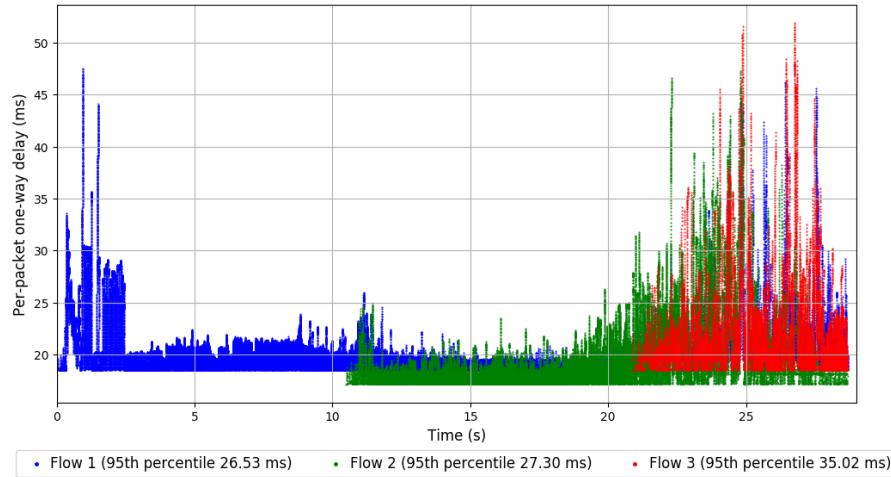
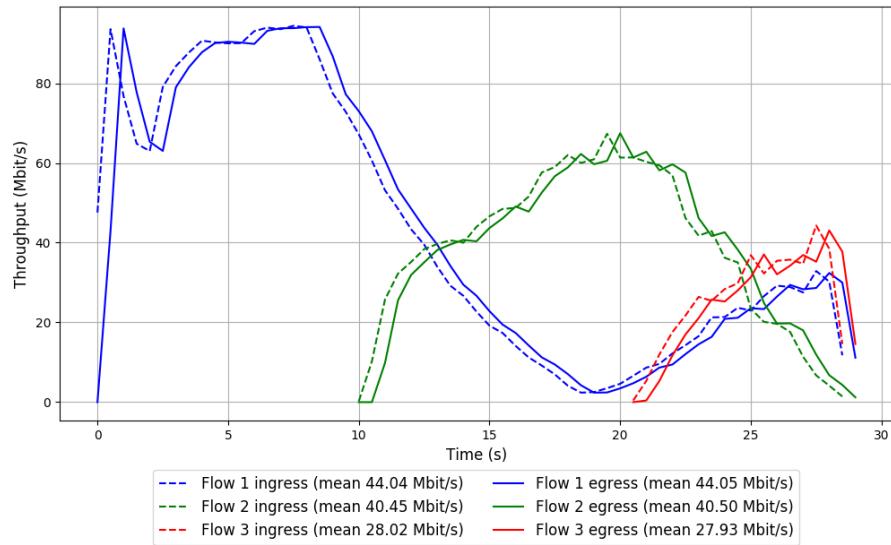


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 12:12:04
End at: 2019-06-28 12:12:34
Local clock offset: -1.453 ms
Remote clock offset: -3.435 ms

# Below is generated by plot.py at 2019-06-28 13:53:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.38 Mbit/s
95th percentile per-packet one-way delay: 27.893 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 44.05 Mbit/s
95th percentile per-packet one-way delay: 26.529 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 40.50 Mbit/s
95th percentile per-packet one-way delay: 27.300 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 27.93 Mbit/s
95th percentile per-packet one-way delay: 35.016 ms
Loss rate: 0.63%
```

Run 2: Report of Indigo-MusesD — Data Link

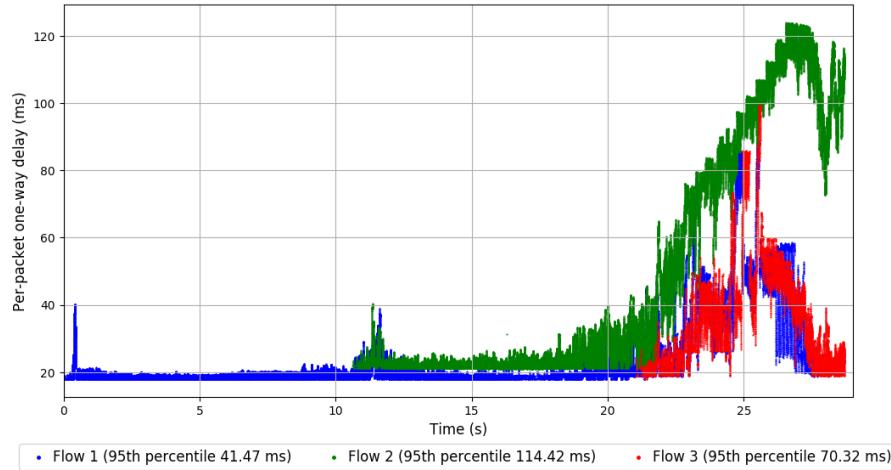
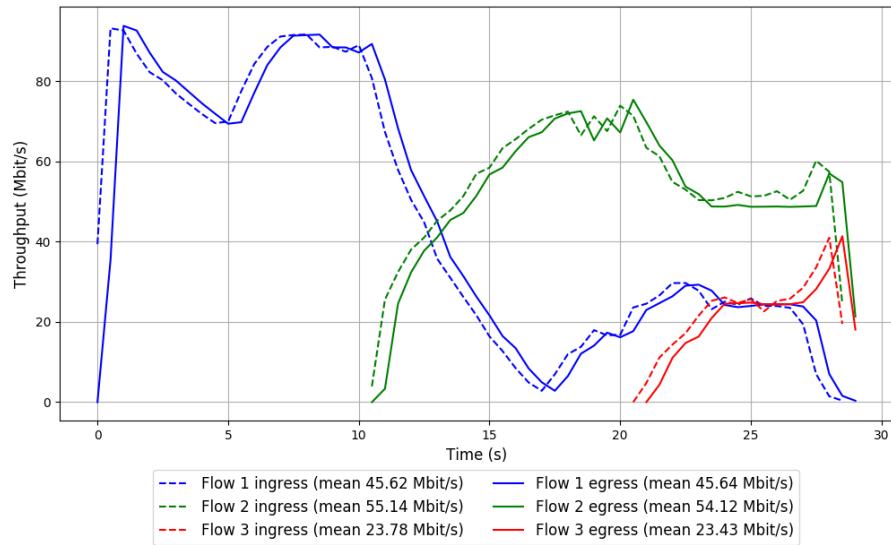


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 12:38:39
End at: 2019-06-28 12:39:09
Local clock offset: -2.023 ms
Remote clock offset: -4.69 ms

# Below is generated by plot.py at 2019-06-28 13:53:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.05 Mbit/s
95th percentile per-packet one-way delay: 102.115 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 45.64 Mbit/s
95th percentile per-packet one-way delay: 41.473 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 54.12 Mbit/s
95th percentile per-packet one-way delay: 114.420 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 70.321 ms
Loss rate: 1.81%
```

Run 3: Report of Indigo-MusesD — Data Link

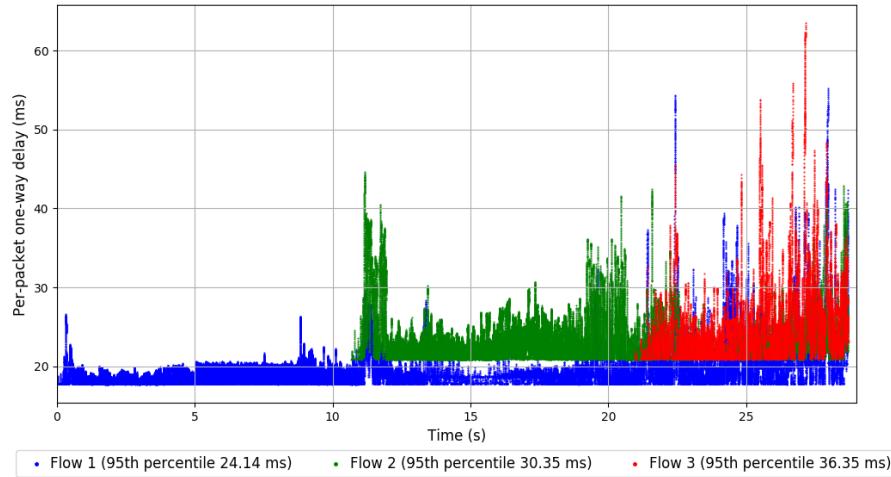
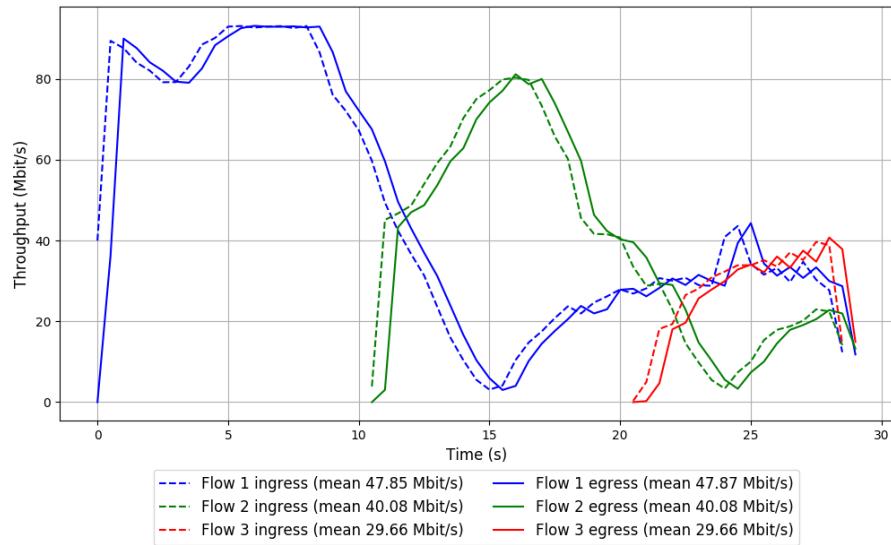


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 13:05:11
End at: 2019-06-28 13:05:41
Local clock offset: -2.207 ms
Remote clock offset: -5.119 ms

# Below is generated by plot.py at 2019-06-28 13:54:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.09 Mbit/s
95th percentile per-packet one-way delay: 28.947 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 47.87 Mbit/s
95th percentile per-packet one-way delay: 24.139 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 30.351 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 29.66 Mbit/s
95th percentile per-packet one-way delay: 36.350 ms
Loss rate: 0.39%
```

Run 4: Report of Indigo-MusesD — Data Link

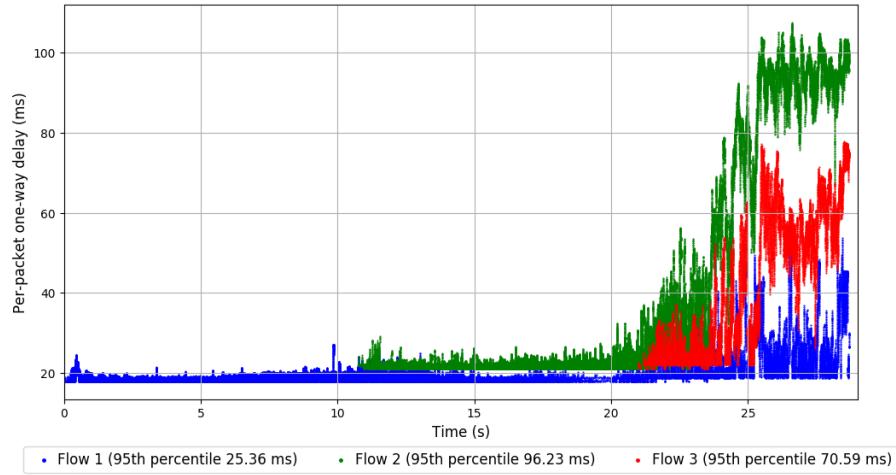
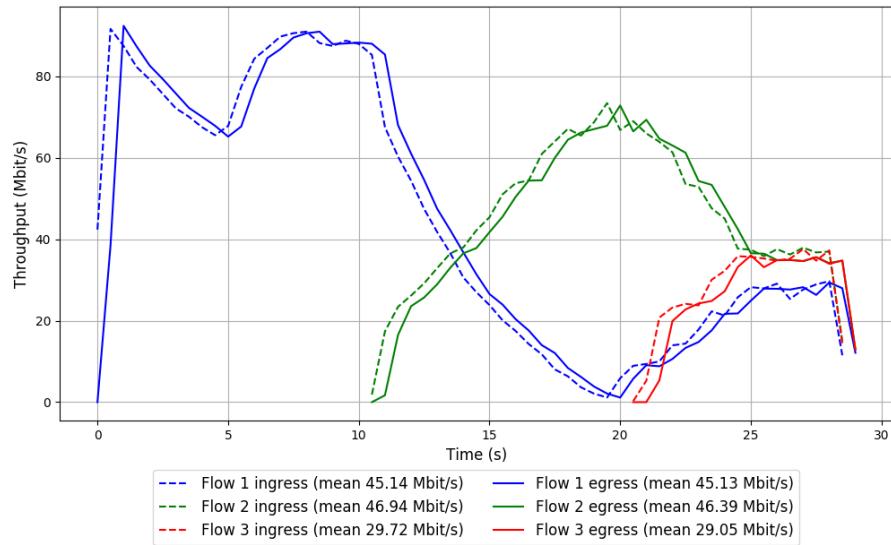


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 13:32:08
End at: 2019-06-28 13:32:38
Local clock offset: -0.235 ms
Remote clock offset: -4.322 ms

# Below is generated by plot.py at 2019-06-28 13:54:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.98 Mbit/s
95th percentile per-packet one-way delay: 83.535 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 45.13 Mbit/s
95th percentile per-packet one-way delay: 25.355 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 46.39 Mbit/s
95th percentile per-packet one-way delay: 96.234 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 29.05 Mbit/s
95th percentile per-packet one-way delay: 70.595 ms
Loss rate: 2.62%
```

Run 5: Report of Indigo-MusesD — Data Link

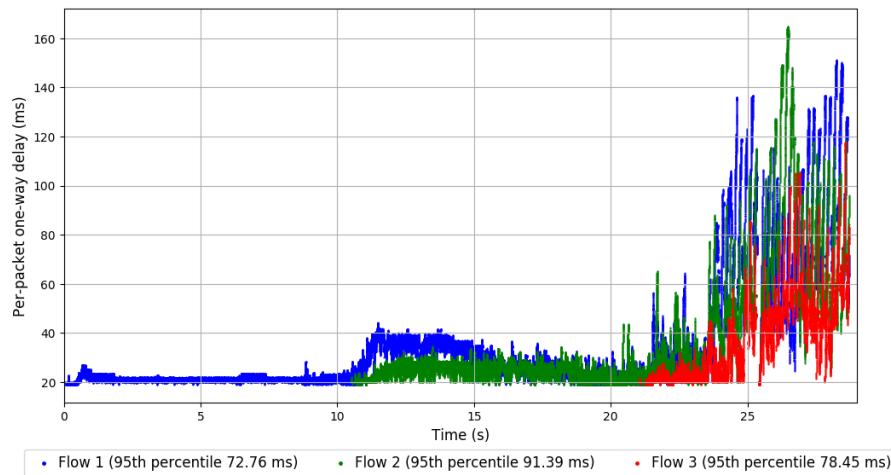
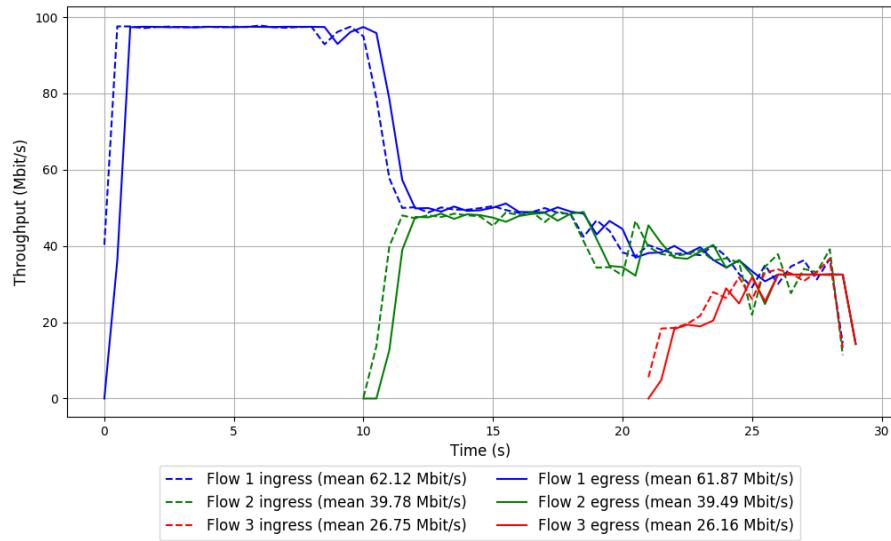


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 11:32:40
End at: 2019-06-28 11:33:10
Local clock offset: -0.708 ms
Remote clock offset: -2.907 ms

# Below is generated by plot.py at 2019-06-28 13:54:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 80.036 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 61.87 Mbit/s
95th percentile per-packet one-way delay: 72.764 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 39.49 Mbit/s
95th percentile per-packet one-way delay: 91.392 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 26.16 Mbit/s
95th percentile per-packet one-way delay: 78.451 ms
Loss rate: 1.73%
```

Run 1: Report of Indigo-MusesT — Data Link

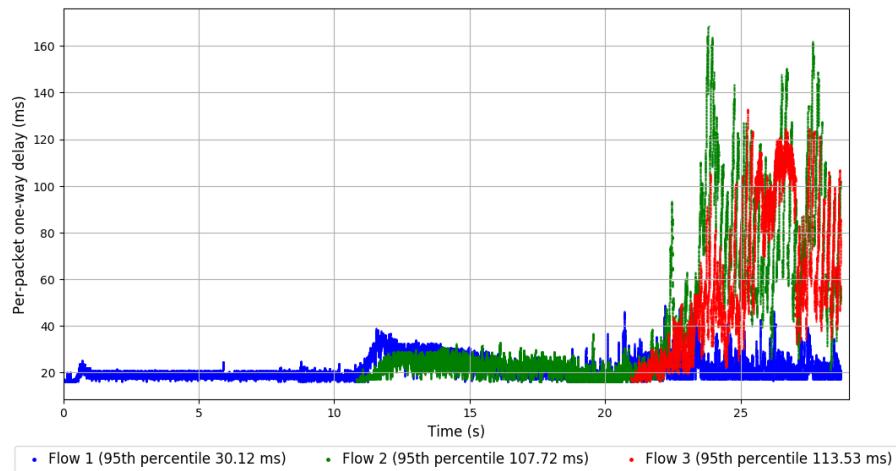
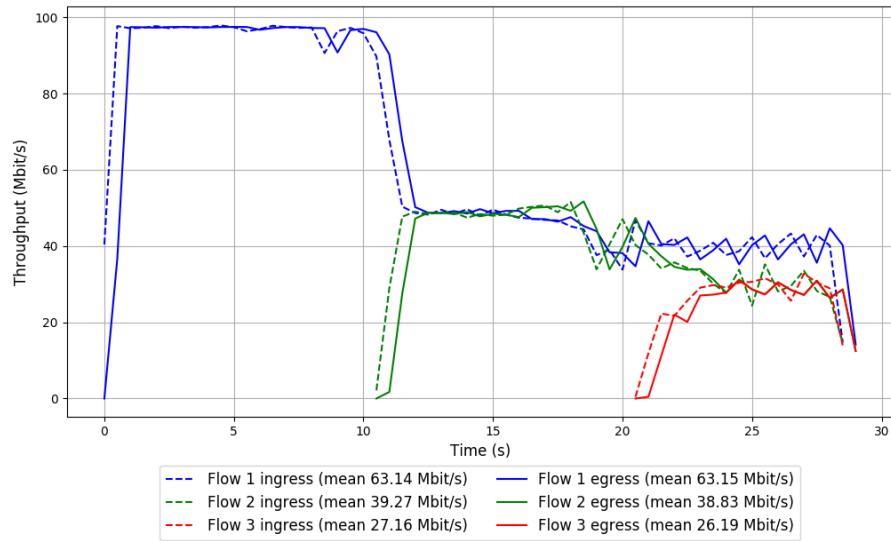


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 11:59:48
End at: 2019-06-28 12:00:18
Local clock offset: -1.389 ms
Remote clock offset: -2.221 ms

# Below is generated by plot.py at 2019-06-28 13:54:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 81.632 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 63.15 Mbit/s
95th percentile per-packet one-way delay: 30.122 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 38.83 Mbit/s
95th percentile per-packet one-way delay: 107.715 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 26.19 Mbit/s
95th percentile per-packet one-way delay: 113.533 ms
Loss rate: 3.93%
```

Run 2: Report of Indigo-MusesT — Data Link

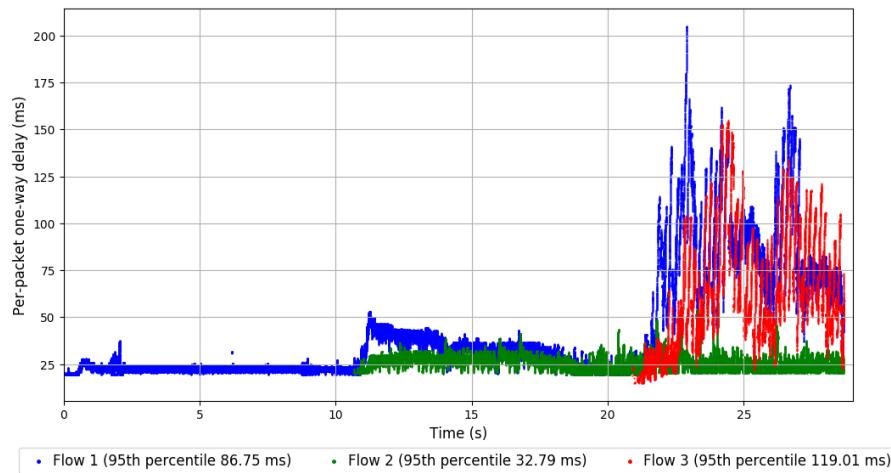
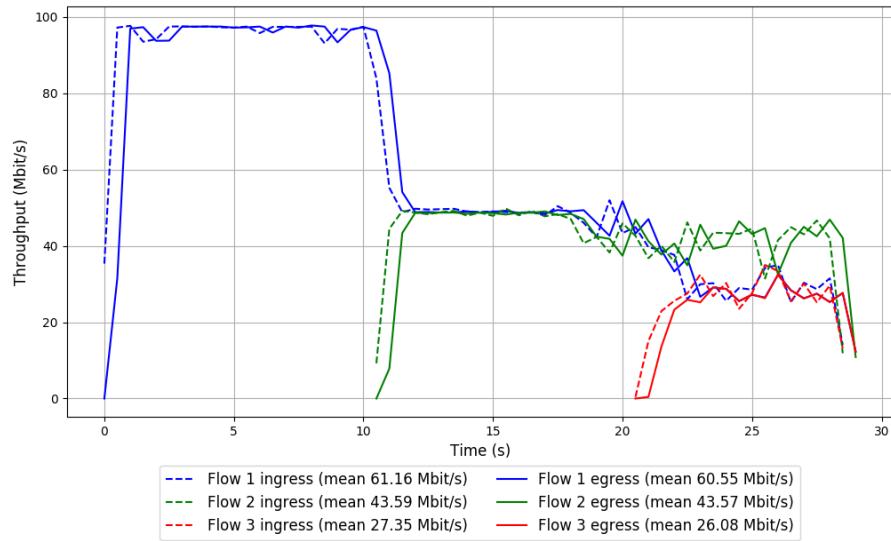


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 12:26:29
End at: 2019-06-28 12:26:59
Local clock offset: -1.567 ms
Remote clock offset: -1.963 ms

# Below is generated by plot.py at 2019-06-28 13:54:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.04 Mbit/s
95th percentile per-packet one-way delay: 86.312 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 60.55 Mbit/s
95th percentile per-packet one-way delay: 86.754 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 43.57 Mbit/s
95th percentile per-packet one-way delay: 32.792 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 26.08 Mbit/s
95th percentile per-packet one-way delay: 119.011 ms
Loss rate: 4.52%
```

Run 3: Report of Indigo-MusesT — Data Link

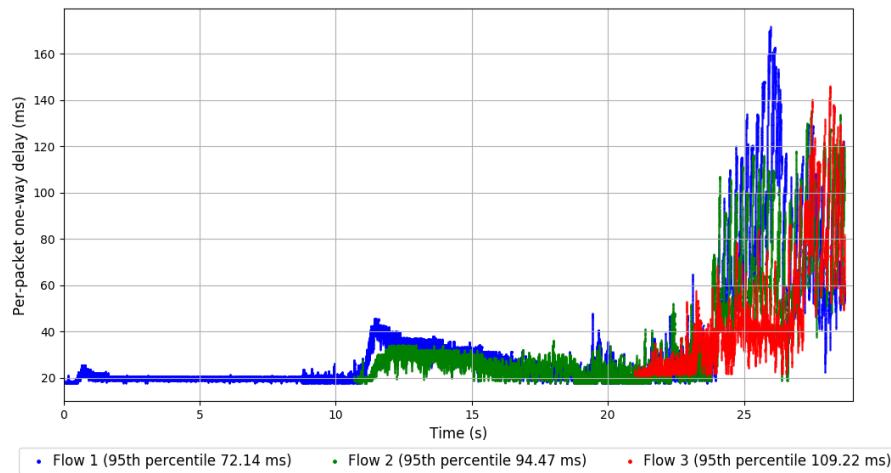
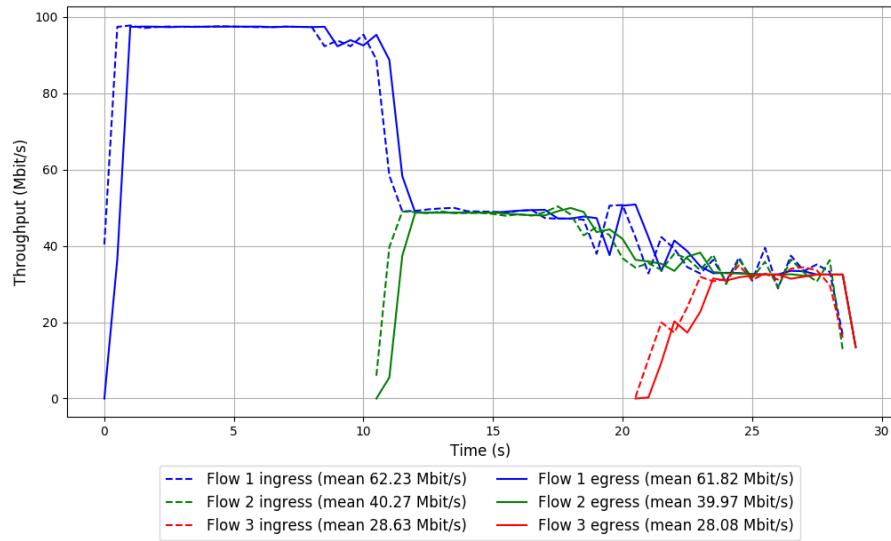


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 12:53:09
End at: 2019-06-28 12:53:39
Local clock offset: -1.746 ms
Remote clock offset: -4.422 ms

# Below is generated by plot.py at 2019-06-28 13:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.56 Mbit/s
95th percentile per-packet one-way delay: 88.263 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 61.82 Mbit/s
95th percentile per-packet one-way delay: 72.135 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 39.97 Mbit/s
95th percentile per-packet one-way delay: 94.467 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 28.08 Mbit/s
95th percentile per-packet one-way delay: 109.217 ms
Loss rate: 1.73%
```

Run 4: Report of Indigo-MusesT — Data Link

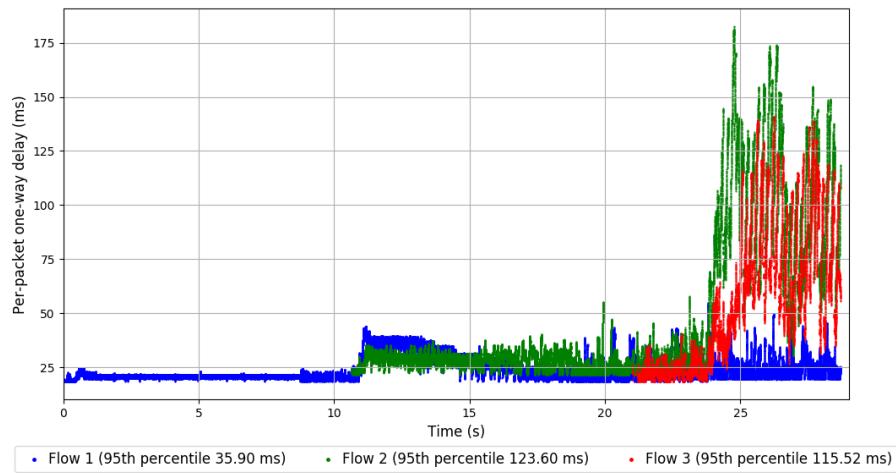
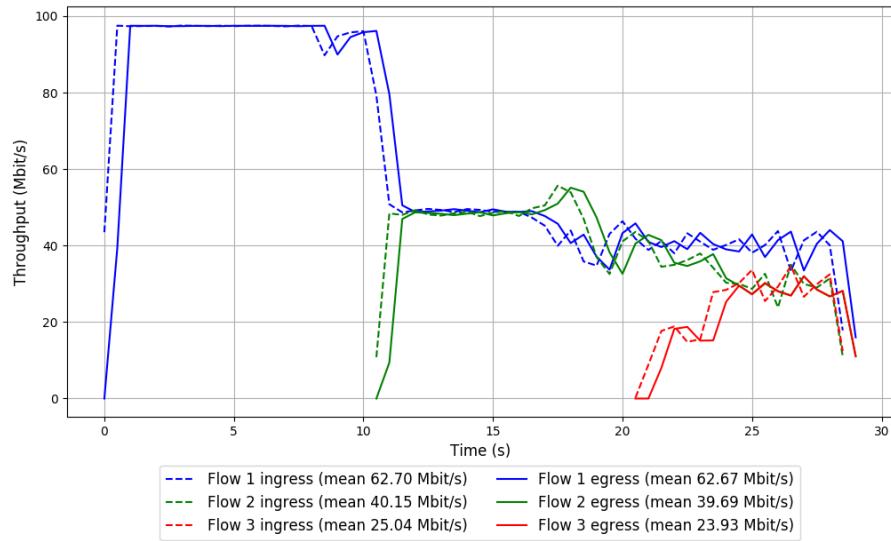


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 13:19:55
End at: 2019-06-28 13:20:25
Local clock offset: -1.769 ms
Remote clock offset: -5.565 ms

# Below is generated by plot.py at 2019-06-28 13:54:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 82.724 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 62.67 Mbit/s
95th percentile per-packet one-way delay: 35.897 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 39.69 Mbit/s
95th percentile per-packet one-way delay: 123.597 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 23.93 Mbit/s
95th percentile per-packet one-way delay: 115.520 ms
Loss rate: 4.61%
```

Run 5: Report of Indigo-MusesT — Data Link

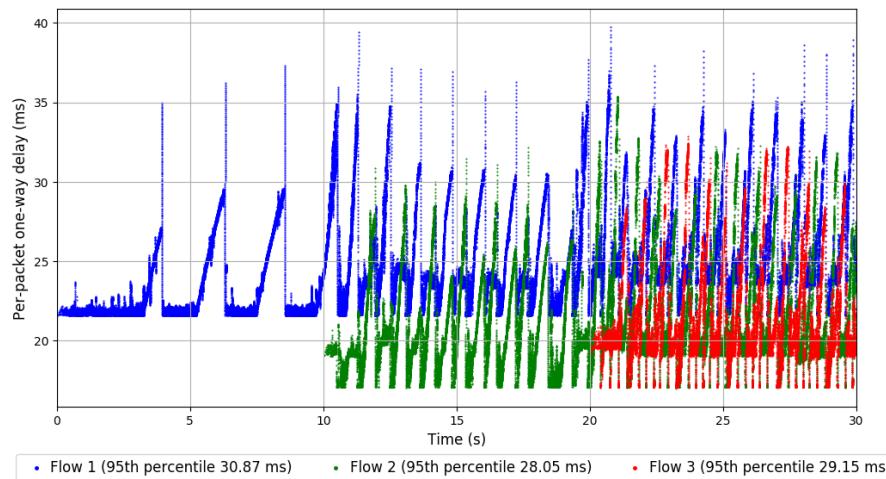
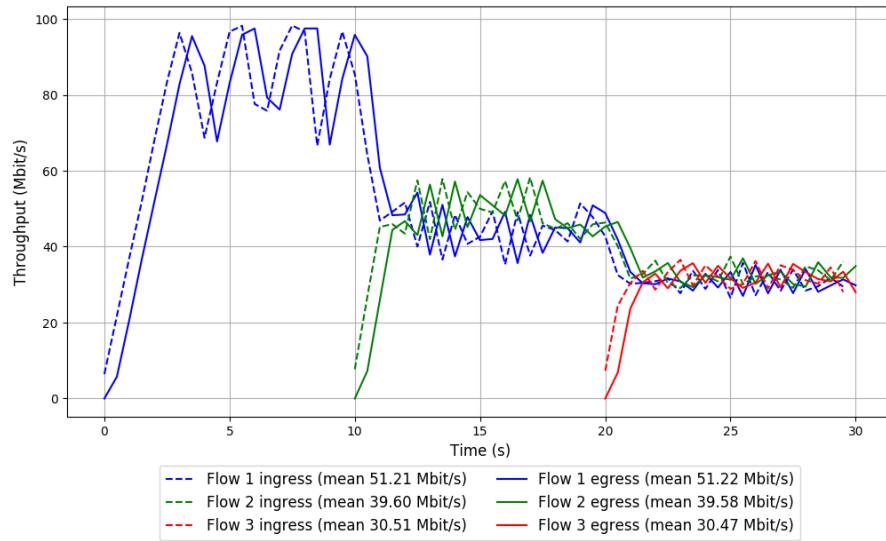


Run 1: Statistics of LEDBAT

```
Start at: 2019-06-28 11:54:47
End at: 2019-06-28 11:55:17
Local clock offset: -1.587 ms
Remote clock offset: -3.241 ms

# Below is generated by plot.py at 2019-06-28 13:54:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.70 Mbit/s
95th percentile per-packet one-way delay: 30.113 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 51.22 Mbit/s
95th percentile per-packet one-way delay: 30.869 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 39.58 Mbit/s
95th percentile per-packet one-way delay: 28.052 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 30.47 Mbit/s
95th percentile per-packet one-way delay: 29.149 ms
Loss rate: 0.37%
```

Run 1: Report of LEDBAT — Data Link

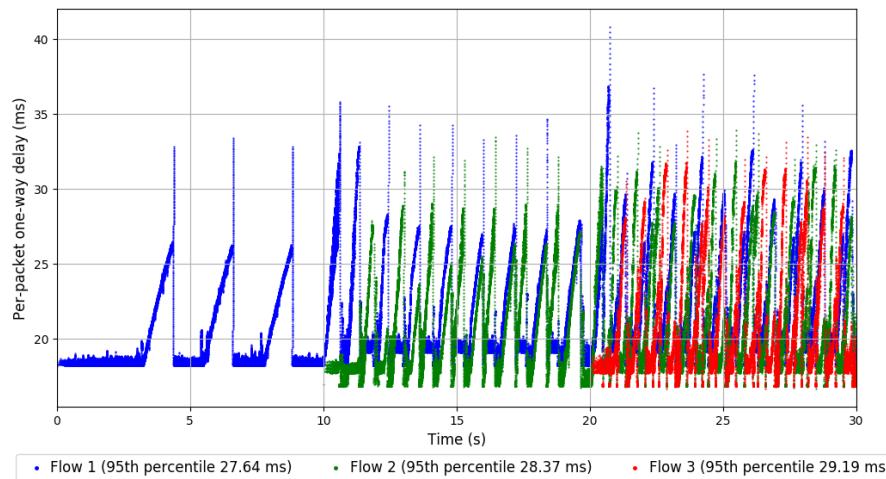
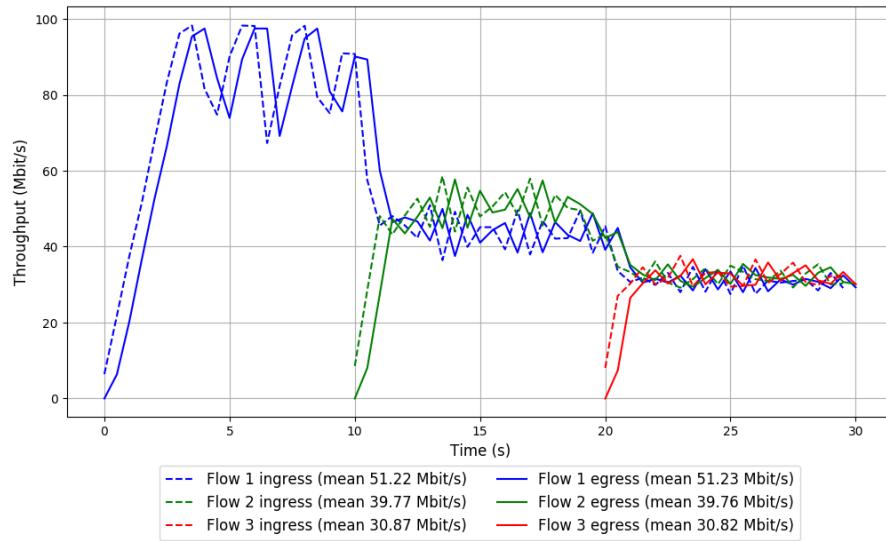


Run 2: Statistics of LEDBAT

```
Start at: 2019-06-28 12:21:36
End at: 2019-06-28 12:22:06
Local clock offset: -1.358 ms
Remote clock offset: -3.412 ms

# Below is generated by plot.py at 2019-06-28 13:55:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 28.241 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 51.23 Mbit/s
95th percentile per-packet one-way delay: 27.635 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 39.76 Mbit/s
95th percentile per-packet one-way delay: 28.369 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 30.82 Mbit/s
95th percentile per-packet one-way delay: 29.191 ms
Loss rate: 0.38%
```

Run 2: Report of LEDBAT — Data Link

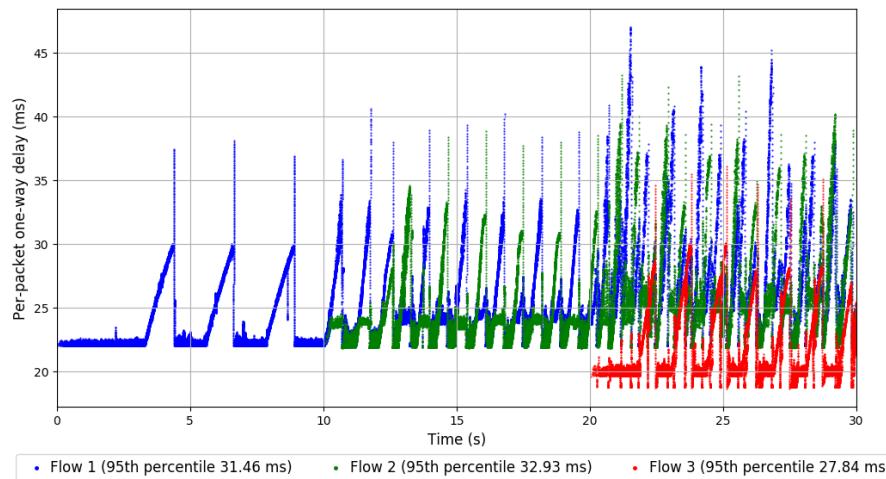
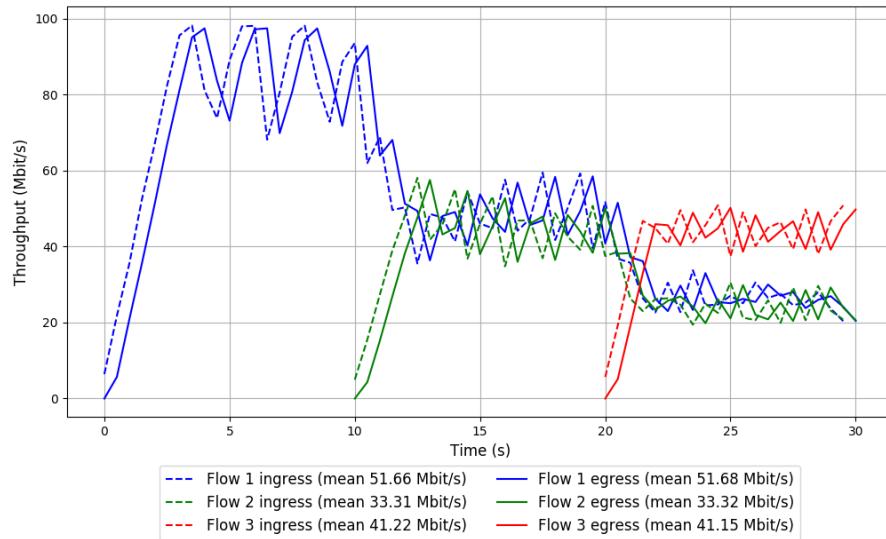


Run 3: Statistics of LEDBAT

```
Start at: 2019-06-28 12:48:14
End at: 2019-06-28 12:48:44
Local clock offset: -1.11 ms
Remote clock offset: -4.637 ms

# Below is generated by plot.py at 2019-06-28 13:55:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.51 Mbit/s
95th percentile per-packet one-way delay: 31.562 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 51.68 Mbit/s
95th percentile per-packet one-way delay: 31.460 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 33.32 Mbit/s
95th percentile per-packet one-way delay: 32.926 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 41.15 Mbit/s
95th percentile per-packet one-way delay: 27.835 ms
Loss rate: 0.42%
```

Run 3: Report of LEDBAT — Data Link

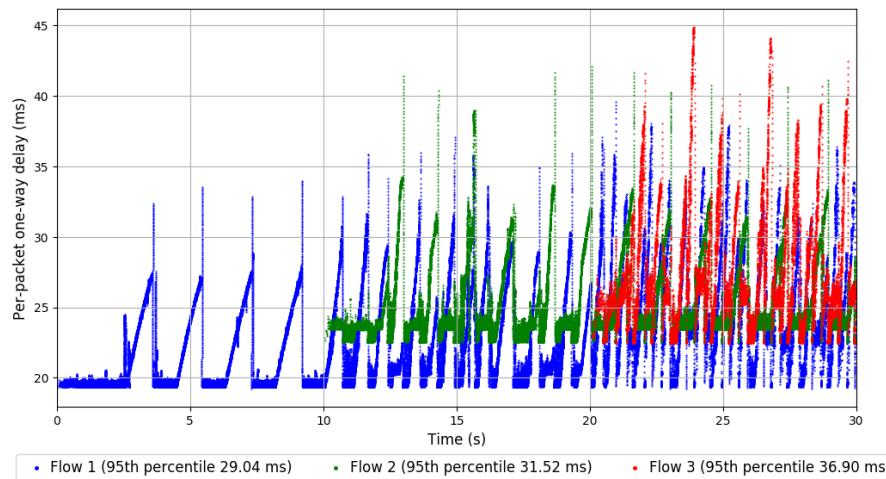
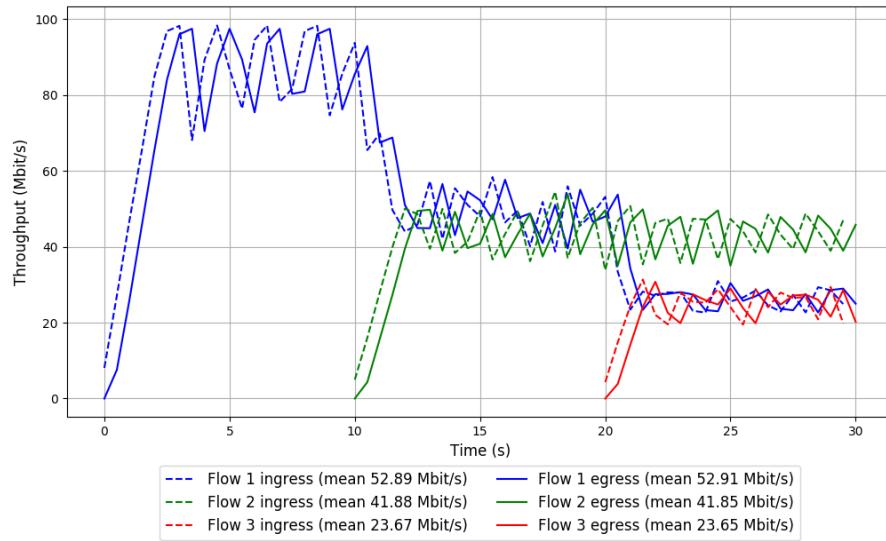


Run 4: Statistics of LEDBAT

```
Start at: 2019-06-28 13:14:54
End at: 2019-06-28 13:15:24
Local clock offset: -0.885 ms
Remote clock offset: -5.328 ms

# Below is generated by plot.py at 2019-06-28 13:55:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.62 Mbit/s
95th percentile per-packet one-way delay: 31.138 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 52.91 Mbit/s
95th percentile per-packet one-way delay: 29.042 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 41.85 Mbit/s
95th percentile per-packet one-way delay: 31.519 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 23.65 Mbit/s
95th percentile per-packet one-way delay: 36.896 ms
Loss rate: 0.37%
```

Run 4: Report of LEDBAT — Data Link

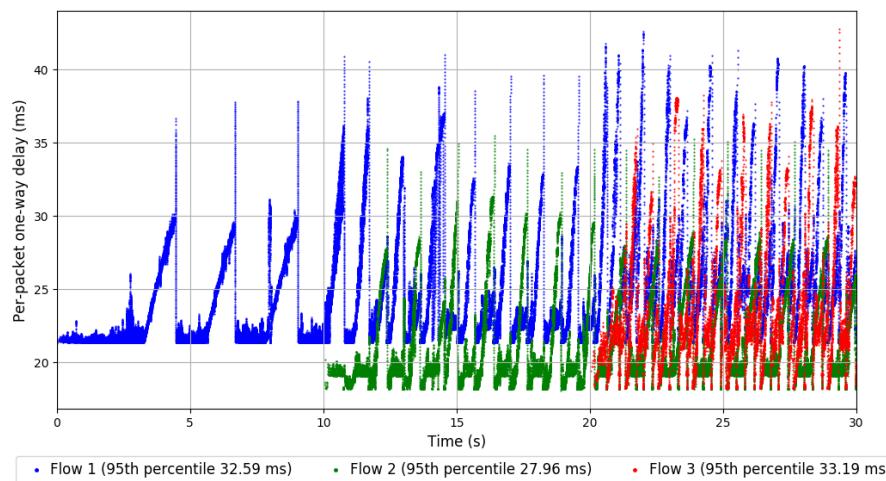
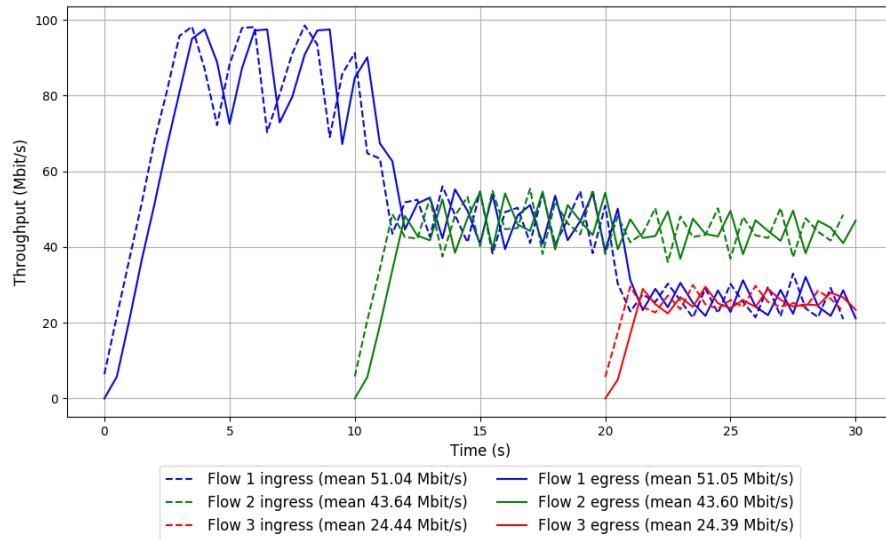


Run 5: Statistics of LEDBAT

```
Start at: 2019-06-28 13:42:02
End at: 2019-06-28 13:42:32
Local clock offset: -0.077 ms
Remote clock offset: -4.898 ms

# Below is generated by plot.py at 2019-06-28 13:55:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.18 Mbit/s
95th percentile per-packet one-way delay: 31.286 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 51.05 Mbit/s
95th percentile per-packet one-way delay: 32.591 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 43.60 Mbit/s
95th percentile per-packet one-way delay: 27.960 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 24.39 Mbit/s
95th percentile per-packet one-way delay: 33.191 ms
Loss rate: 0.19%
```

Run 5: Report of LEDBAT — Data Link

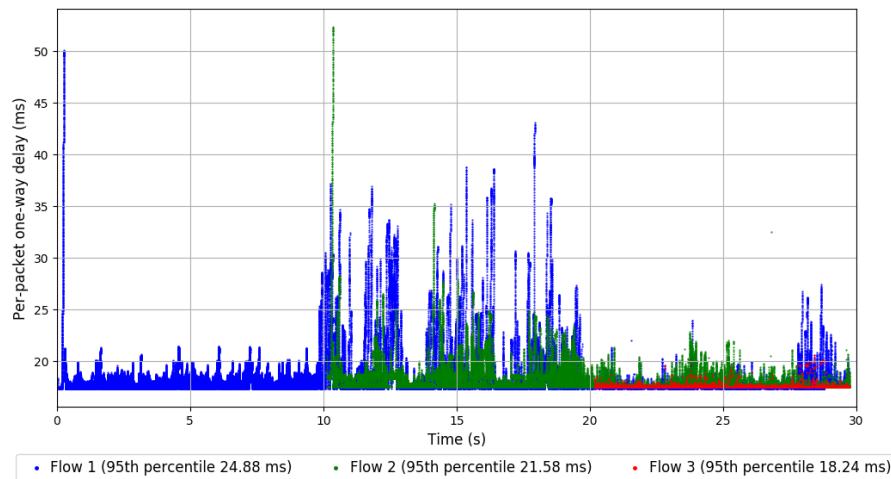
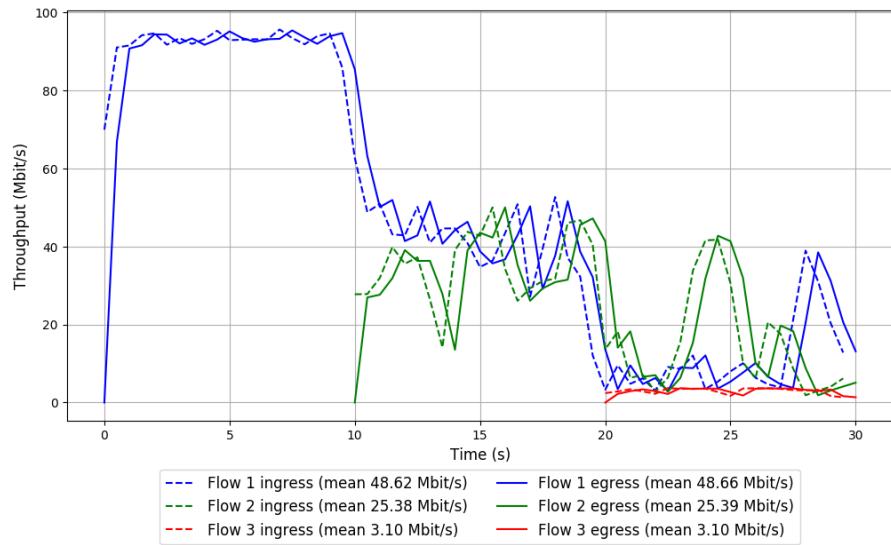


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 11:50:59
End at: 2019-06-28 11:51:29
Local clock offset: -0.118 ms
Remote clock offset: -1.044 ms

# Below is generated by plot.py at 2019-06-28 13:55:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.42 Mbit/s
95th percentile per-packet one-way delay: 23.918 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 48.66 Mbit/s
95th percentile per-packet one-way delay: 24.875 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 25.39 Mbit/s
95th percentile per-packet one-way delay: 21.582 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 18.244 ms
Loss rate: 0.16%
```

Run 1: Report of Muses_DecisionTree — Data Link

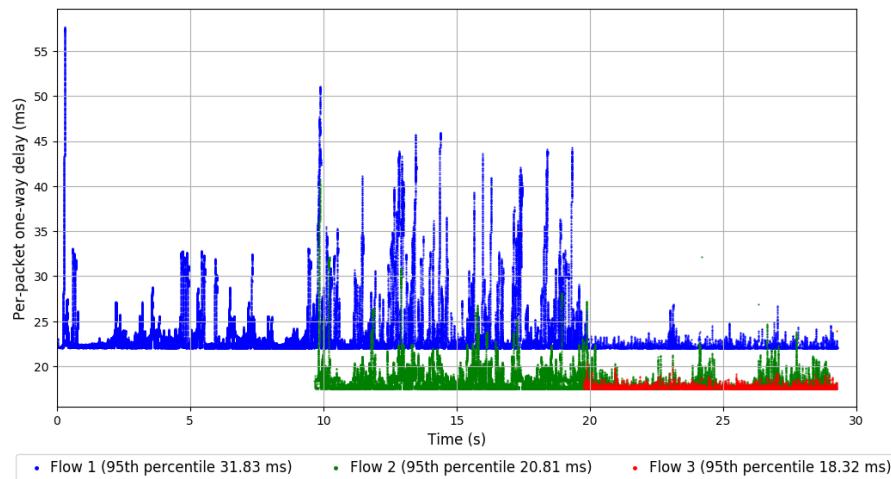
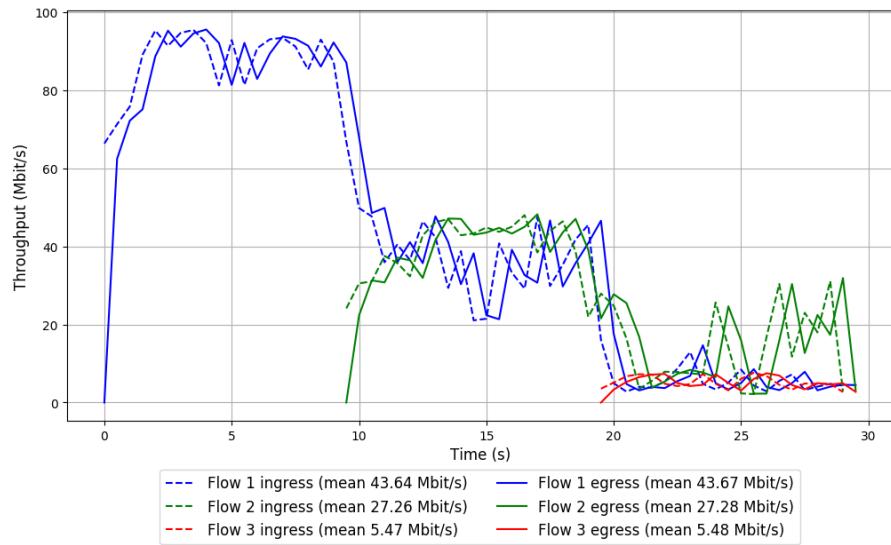


```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 12:18:06
End at: 2019-06-28 12:18:36
Local clock offset: -1.926 ms
Remote clock offset: -4.465 ms

# Below is generated by plot.py at 2019-06-28 13:55:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.75 Mbit/s
95th percentile per-packet one-way delay: 30.347 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 43.67 Mbit/s
95th percentile per-packet one-way delay: 31.833 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 27.28 Mbit/s
95th percentile per-packet one-way delay: 20.813 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 18.317 ms
Loss rate: 0.04%
```

Run 2: Report of Muses_DecisionTree — Data Link

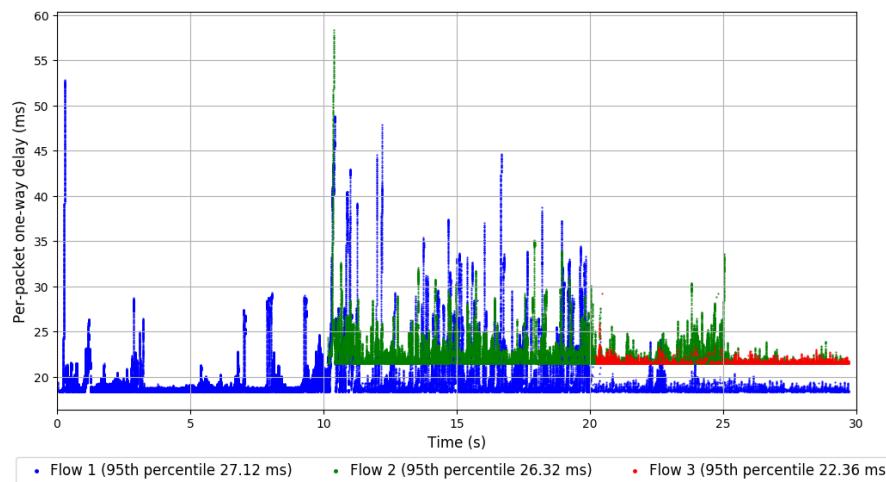
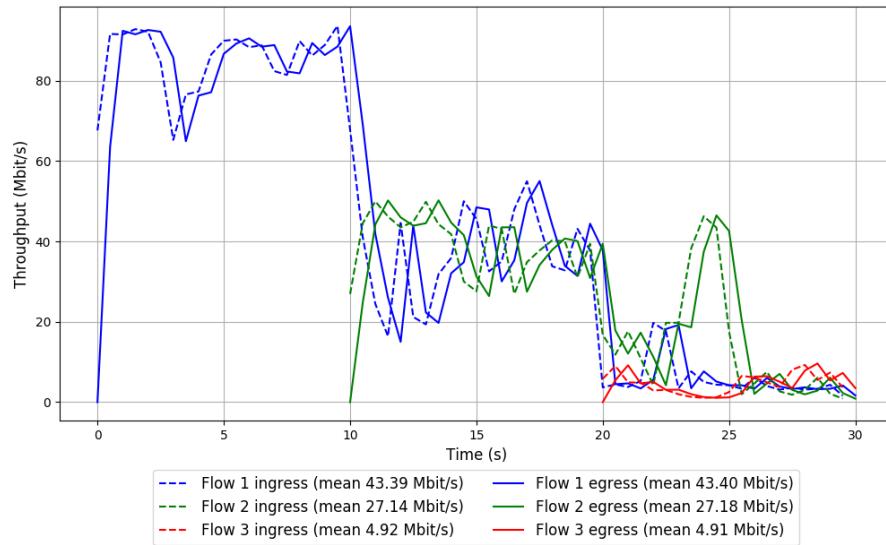


```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 12:44:42
End at: 2019-06-28 12:45:12
Local clock offset: -0.702 ms
Remote clock offset: -3.937 ms

# Below is generated by plot.py at 2019-06-28 13:55:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.88 Mbit/s
95th percentile per-packet one-way delay: 26.721 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 43.40 Mbit/s
95th percentile per-packet one-way delay: 27.122 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 27.18 Mbit/s
95th percentile per-packet one-way delay: 26.315 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 22.359 ms
Loss rate: 0.52%
```

Run 3: Report of Muses_DecisionTree — Data Link

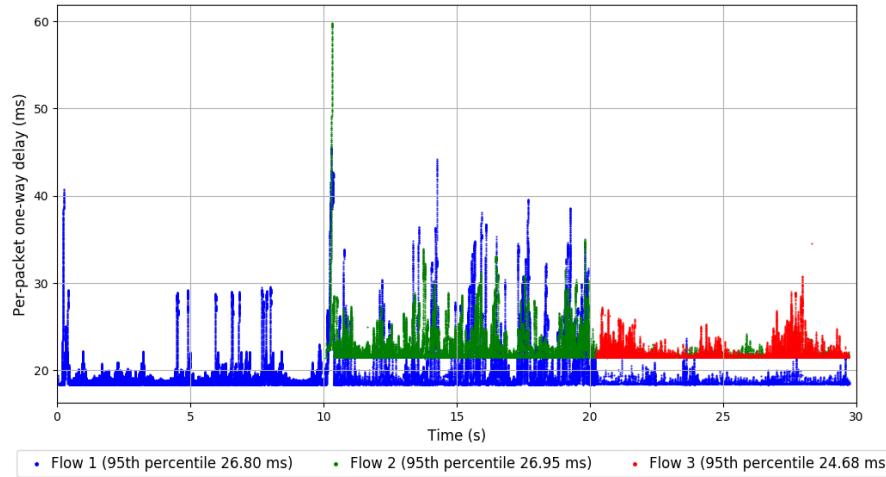
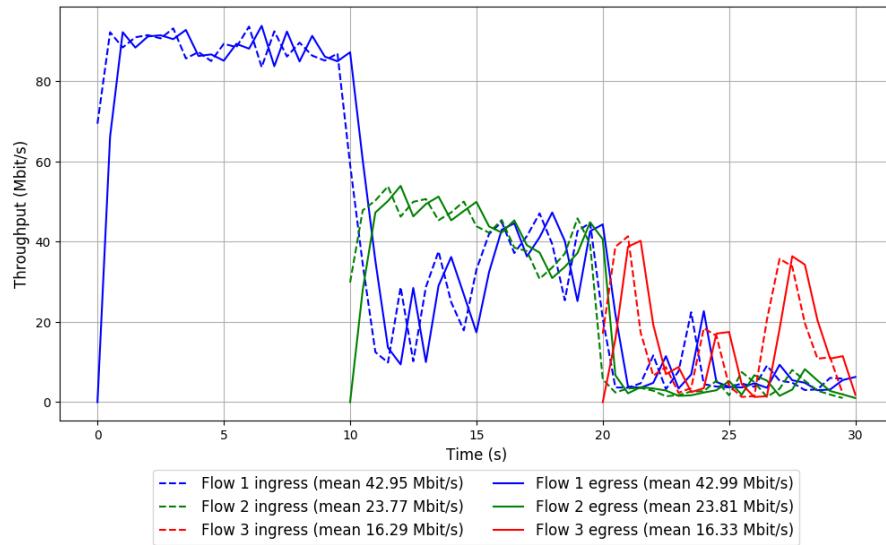


```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 13:11:18
End at: 2019-06-28 13:11:48
Local clock offset: -1.604 ms
Remote clock offset: -5.235 ms

# Below is generated by plot.py at 2019-06-28 13:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.97 Mbit/s
95th percentile per-packet one-way delay: 26.614 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 42.99 Mbit/s
95th percentile per-packet one-way delay: 26.795 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 23.81 Mbit/s
95th percentile per-packet one-way delay: 26.948 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 16.33 Mbit/s
95th percentile per-packet one-way delay: 24.684 ms
Loss rate: 0.16%
```

Run 4: Report of Muses_DecisionTree — Data Link

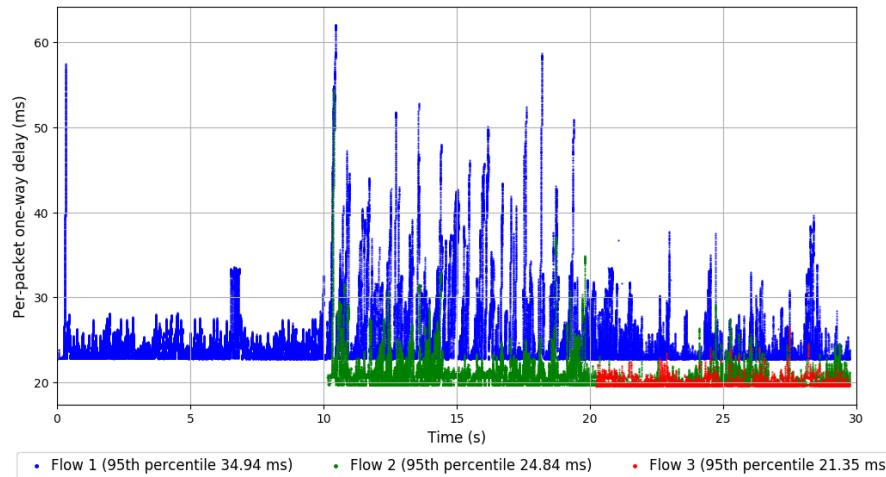
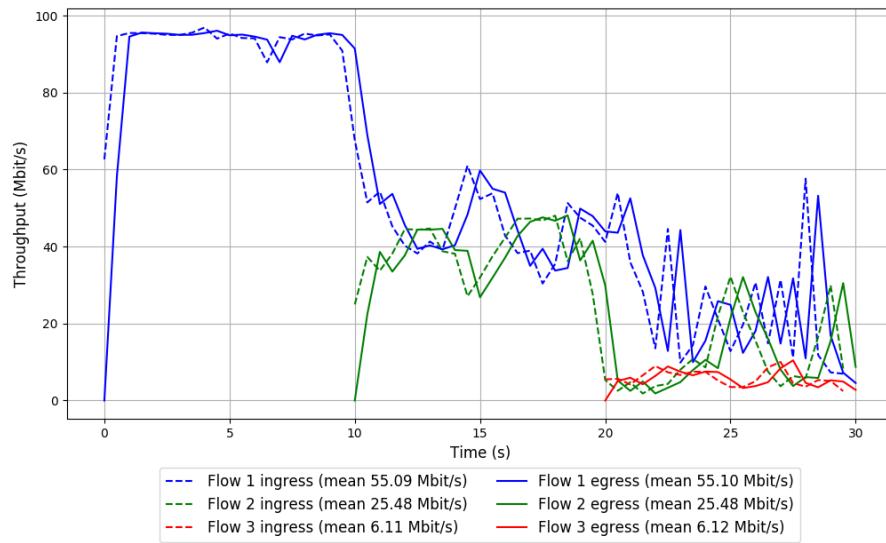


```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 13:38:23
End at: 2019-06-28 13:38:53
Local clock offset: -0.155 ms
Remote clock offset: -6.017 ms

# Below is generated by plot.py at 2019-06-28 13:56:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.86 Mbit/s
95th percentile per-packet one-way delay: 32.869 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 55.10 Mbit/s
95th percentile per-packet one-way delay: 34.942 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 25.48 Mbit/s
95th percentile per-packet one-way delay: 24.843 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 21.348 ms
Loss rate: 0.10%
```

Run 5: Report of Muses_DecisionTree — Data Link

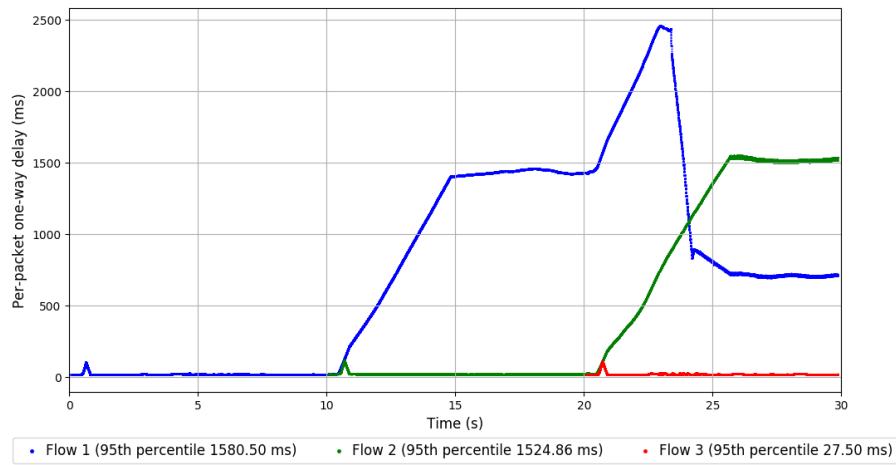
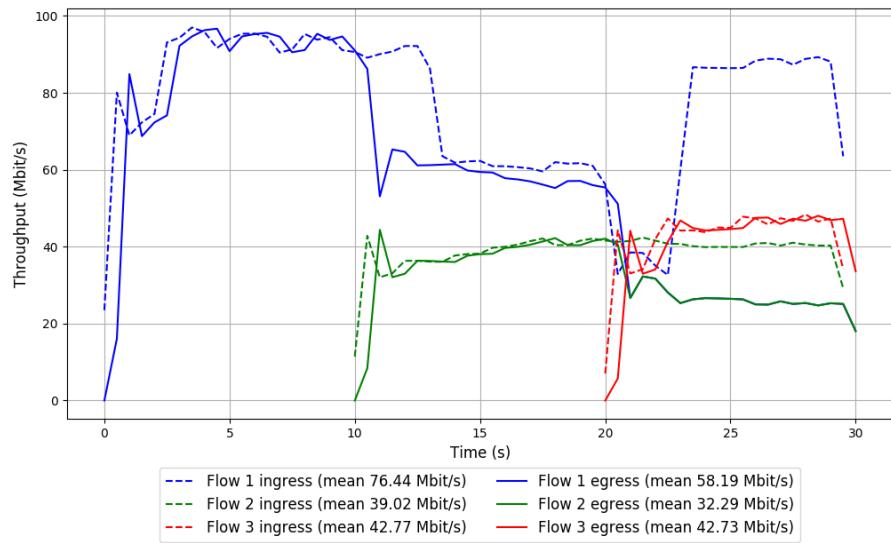


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-06-28 11:38:35
End at: 2019-06-28 11:39:05
Local clock offset: -0.358 ms
Remote clock offset: -2.817 ms

# Below is generated by plot.py at 2019-06-28 13:56:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.68 Mbit/s
95th percentile per-packet one-way delay: 1518.776 ms
Loss rate: 19.62%
-- Flow 1:
Average throughput: 58.19 Mbit/s
95th percentile per-packet one-way delay: 1580.497 ms
Loss rate: 23.95%
-- Flow 2:
Average throughput: 32.29 Mbit/s
95th percentile per-packet one-way delay: 1524.862 ms
Loss rate: 17.34%
-- Flow 3:
Average throughput: 42.73 Mbit/s
95th percentile per-packet one-way delay: 27.499 ms
Loss rate: 0.31%
```

Run 1: Report of PCC-Allegro — Data Link

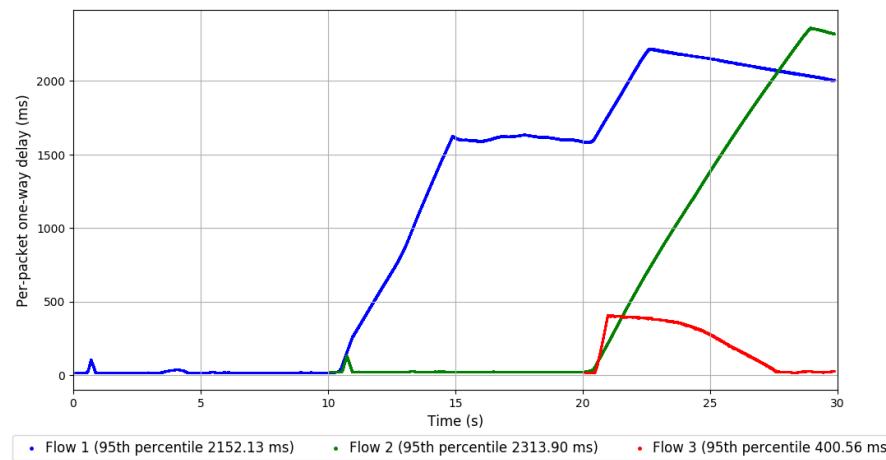
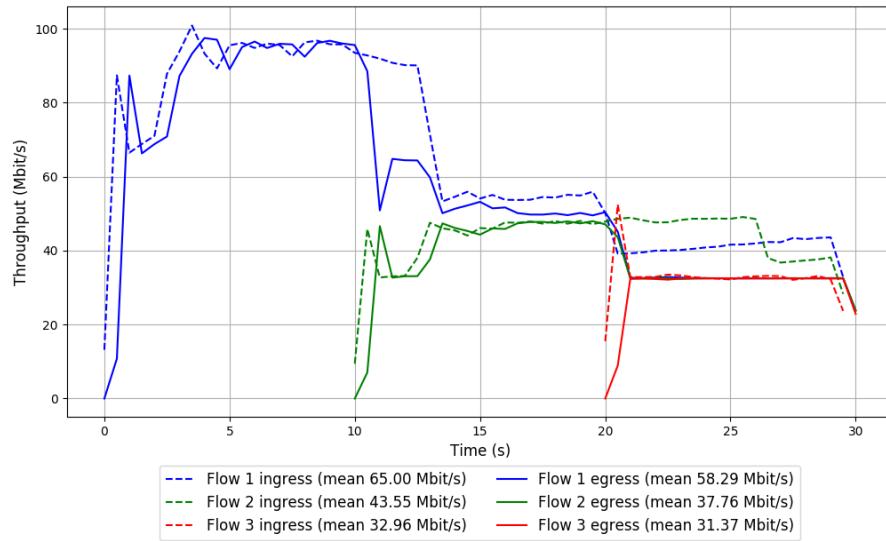


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-06-28 12:05:55
End at: 2019-06-28 12:06:25
Local clock offset: -1.92 ms
Remote clock offset: -3.569 ms

# Below is generated by plot.py at 2019-06-28 13:56:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.70 Mbit/s
95th percentile per-packet one-way delay: 2157.050 ms
Loss rate: 10.68%
-- Flow 1:
Average throughput: 58.29 Mbit/s
95th percentile per-packet one-way delay: 2152.134 ms
Loss rate: 10.38%
-- Flow 2:
Average throughput: 37.76 Mbit/s
95th percentile per-packet one-way delay: 2313.903 ms
Loss rate: 13.43%
-- Flow 3:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 400.561 ms
Loss rate: 5.11%
```

Run 2: Report of PCC-Allegro — Data Link

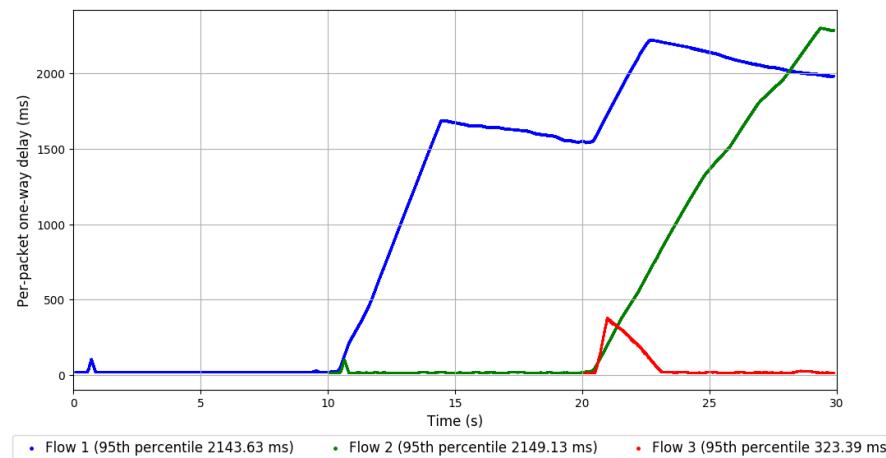
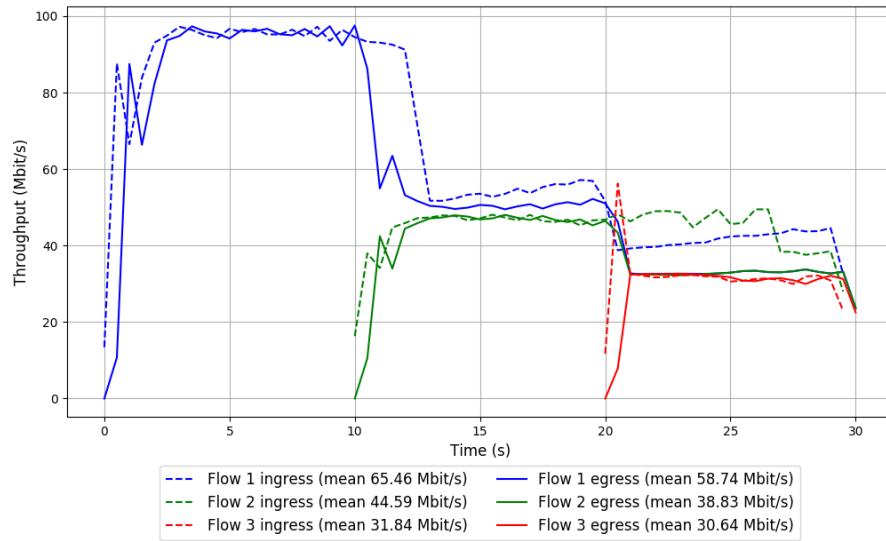


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-06-28 12:32:28
End at: 2019-06-28 12:32:58
Local clock offset: -1.37 ms
Remote clock offset: -3.34 ms

# Below is generated by plot.py at 2019-06-28 13:56:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.63 Mbit/s
95th percentile per-packet one-way delay: 2130.216 ms
Loss rate: 10.47%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 2143.627 ms
Loss rate: 10.34%
-- Flow 2:
Average throughput: 38.83 Mbit/s
95th percentile per-packet one-way delay: 2149.133 ms
Loss rate: 13.01%
-- Flow 3:
Average throughput: 30.64 Mbit/s
95th percentile per-packet one-way delay: 323.391 ms
Loss rate: 4.13%
```

Run 3: Report of PCC-Allegro — Data Link

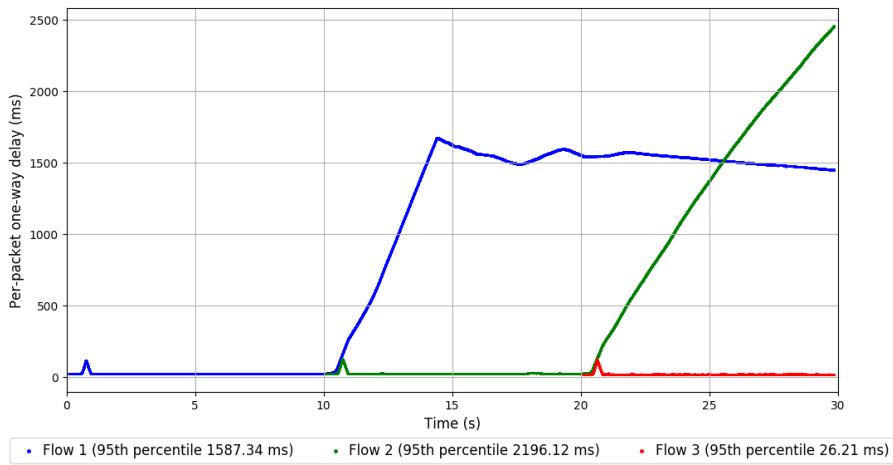
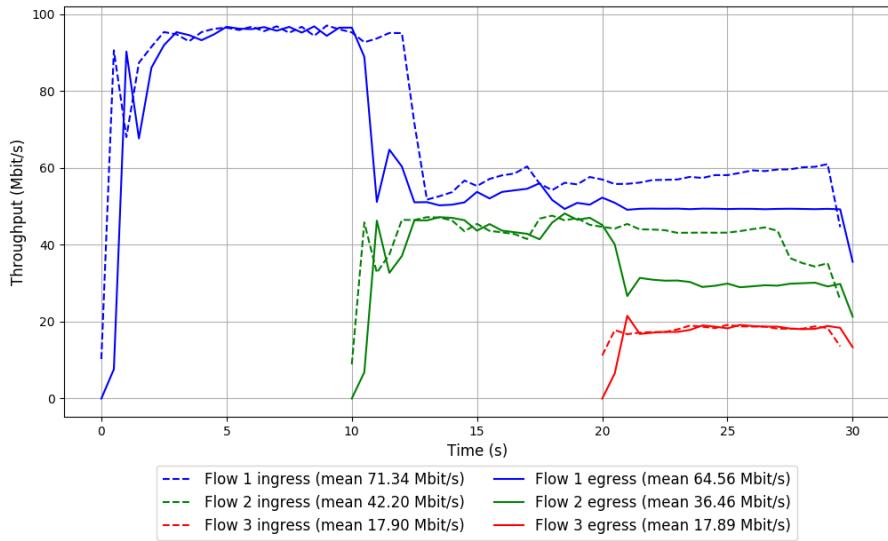


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-06-28 12:59:01
End at: 2019-06-28 12:59:31
Local clock offset: -1.677 ms
Remote clock offset: -5.403 ms

# Below is generated by plot.py at 2019-06-28 13:56:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.68 Mbit/s
95th percentile per-packet one-way delay: 1636.180 ms
Loss rate: 10.18%
-- Flow 1:
Average throughput: 64.56 Mbit/s
95th percentile per-packet one-way delay: 1587.343 ms
Loss rate: 9.59%
-- Flow 2:
Average throughput: 36.46 Mbit/s
95th percentile per-packet one-way delay: 2196.121 ms
Loss rate: 13.76%
-- Flow 3:
Average throughput: 17.89 Mbit/s
95th percentile per-packet one-way delay: 26.213 ms
Loss rate: 0.32%
```

Run 4: Report of PCC-Allegro — Data Link

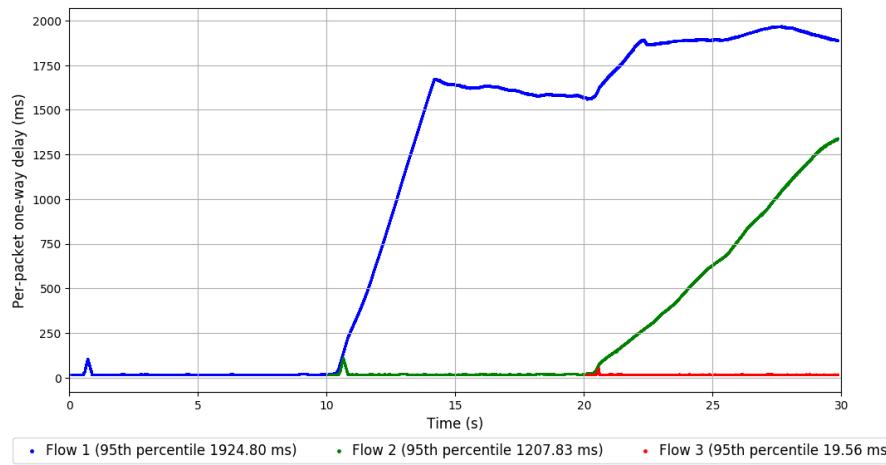
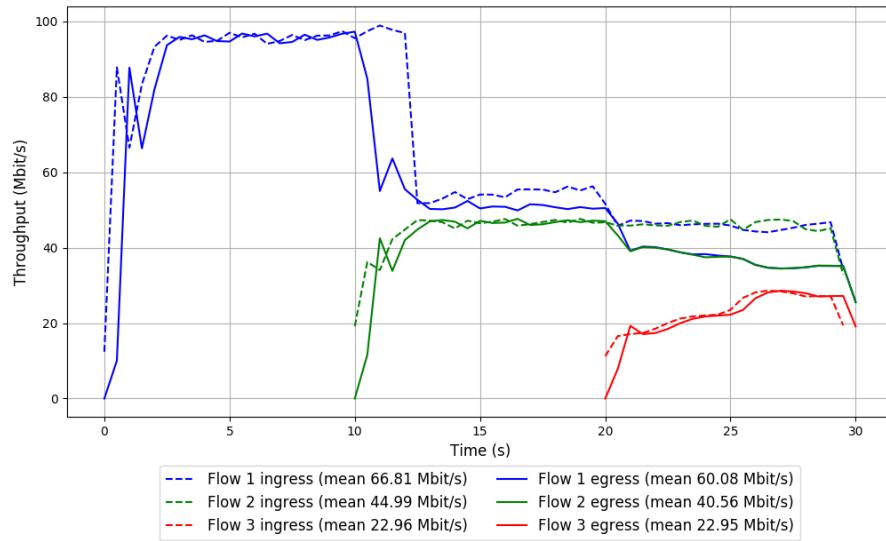


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-06-28 13:25:57
End at: 2019-06-28 13:26:27
Local clock offset: -0.84 ms
Remote clock offset: -4.635 ms

# Below is generated by plot.py at 2019-06-28 13:56:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 1896.389 ms
Loss rate: 9.38%
-- Flow 1:
Average throughput: 60.08 Mbit/s
95th percentile per-packet one-way delay: 1924.801 ms
Loss rate: 10.15%
-- Flow 2:
Average throughput: 40.56 Mbit/s
95th percentile per-packet one-way delay: 1207.833 ms
Loss rate: 9.96%
-- Flow 3:
Average throughput: 22.95 Mbit/s
95th percentile per-packet one-way delay: 19.562 ms
Loss rate: 0.28%
```

Run 5: Report of PCC-Allegro — Data Link

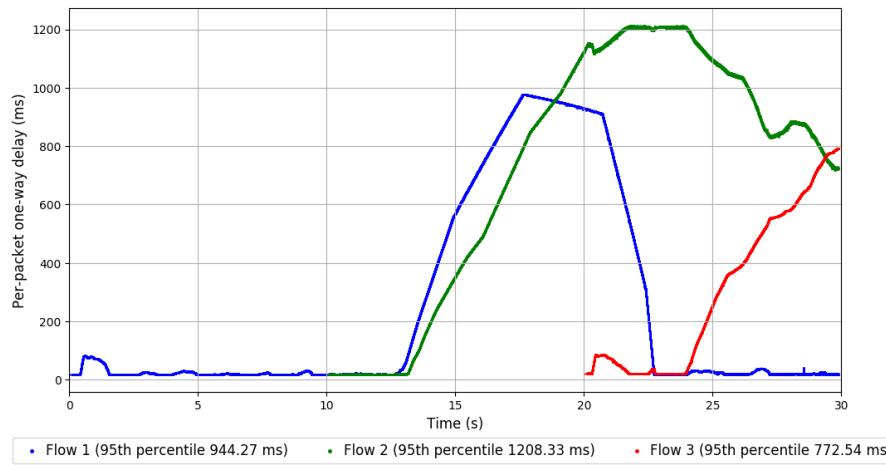
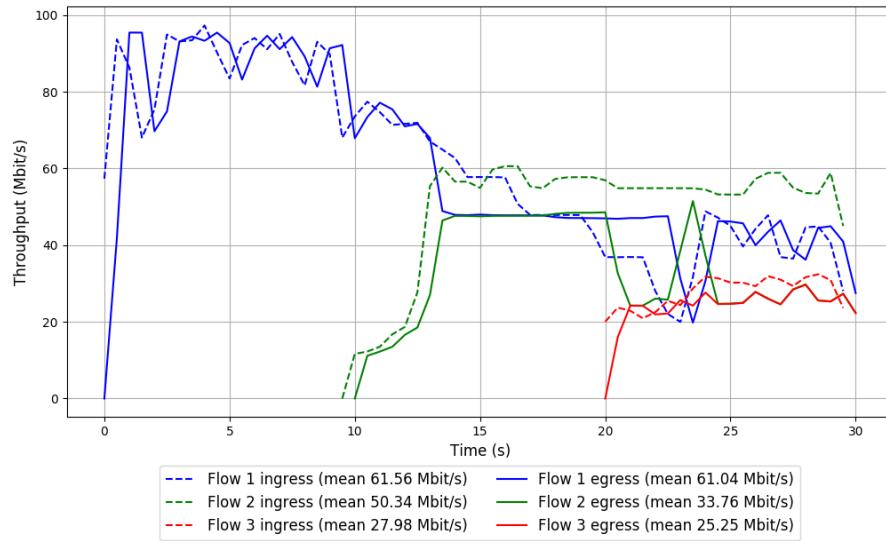


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-06-28 11:47:20
End at: 2019-06-28 11:47:50
Local clock offset: -0.579 ms
Remote clock offset: -2.818 ms

# Below is generated by plot.py at 2019-06-28 13:57:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.83 Mbit/s
95th percentile per-packet one-way delay: 1125.333 ms
Loss rate: 12.04%
-- Flow 1:
Average throughput: 61.04 Mbit/s
95th percentile per-packet one-way delay: 944.271 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 33.76 Mbit/s
95th percentile per-packet one-way delay: 1208.326 ms
Loss rate: 33.02%
-- Flow 3:
Average throughput: 25.25 Mbit/s
95th percentile per-packet one-way delay: 772.540 ms
Loss rate: 9.97%
```

Run 1: Report of PCC-Expr — Data Link

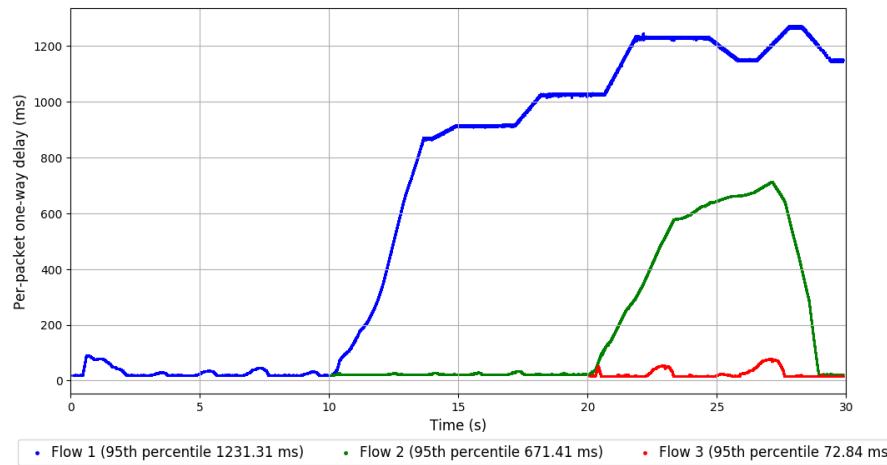
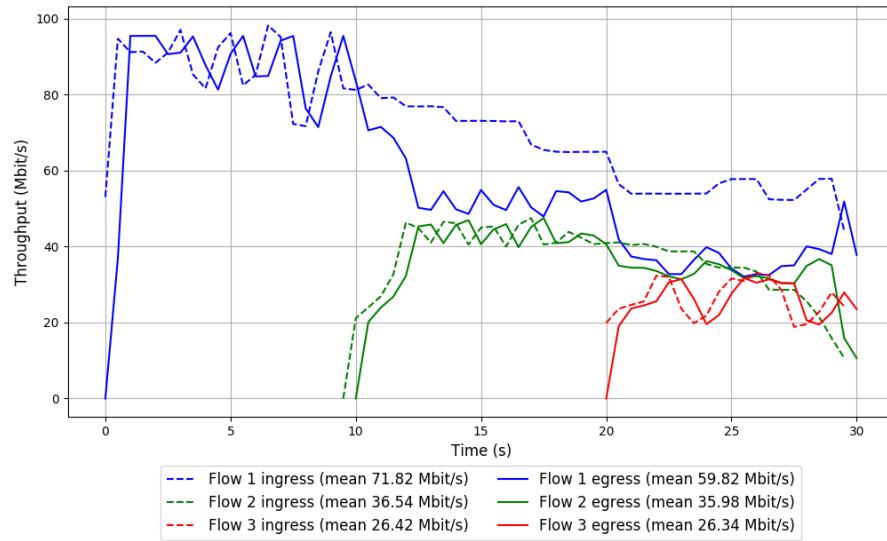


Run 2: Statistics of PCC-Expr

```
Start at: 2019-06-28 12:14:28
End at: 2019-06-28 12:14:58
Local clock offset: -1.707 ms
Remote clock offset: -2.245 ms

# Below is generated by plot.py at 2019-06-28 13:57:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.44 Mbit/s
95th percentile per-packet one-way delay: 1227.627 ms
Loss rate: 11.93%
-- Flow 1:
Average throughput: 59.82 Mbit/s
95th percentile per-packet one-way delay: 1231.313 ms
Loss rate: 16.78%
-- Flow 2:
Average throughput: 35.98 Mbit/s
95th percentile per-packet one-way delay: 671.407 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 26.34 Mbit/s
95th percentile per-packet one-way delay: 72.843 ms
Loss rate: 0.55%
```

Run 2: Report of PCC-Expr — Data Link

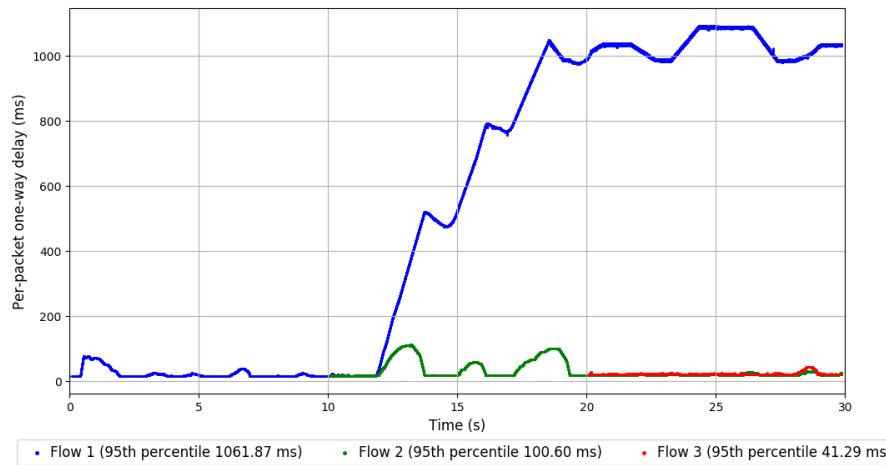
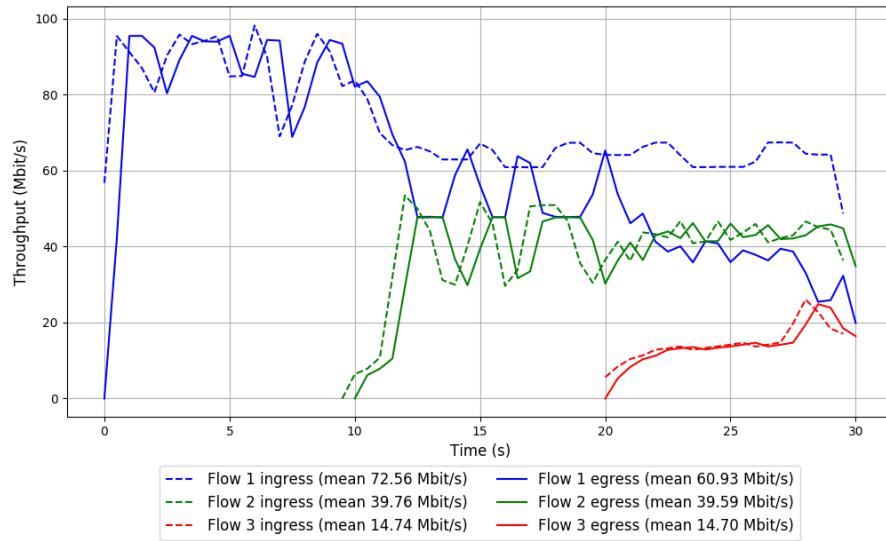


Run 3: Statistics of PCC-Expr

```
Start at: 2019-06-28 12:41:02
End at: 2019-06-28 12:41:32
Local clock offset: -1.267 ms
Remote clock offset: -3.047 ms

# Below is generated by plot.py at 2019-06-28 13:58:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.10 Mbit/s
95th percentile per-packet one-way delay: 1036.776 ms
Loss rate: 11.42%
-- Flow 1:
Average throughput: 60.93 Mbit/s
95th percentile per-packet one-way delay: 1061.872 ms
Loss rate: 16.09%
-- Flow 2:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 100.598 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 14.70 Mbit/s
95th percentile per-packet one-way delay: 41.286 ms
Loss rate: 0.56%
```

Run 3: Report of PCC-Expr — Data Link

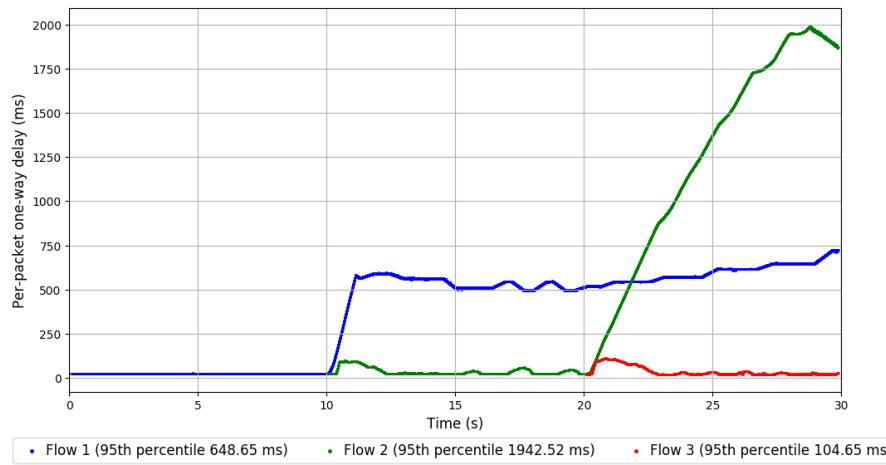
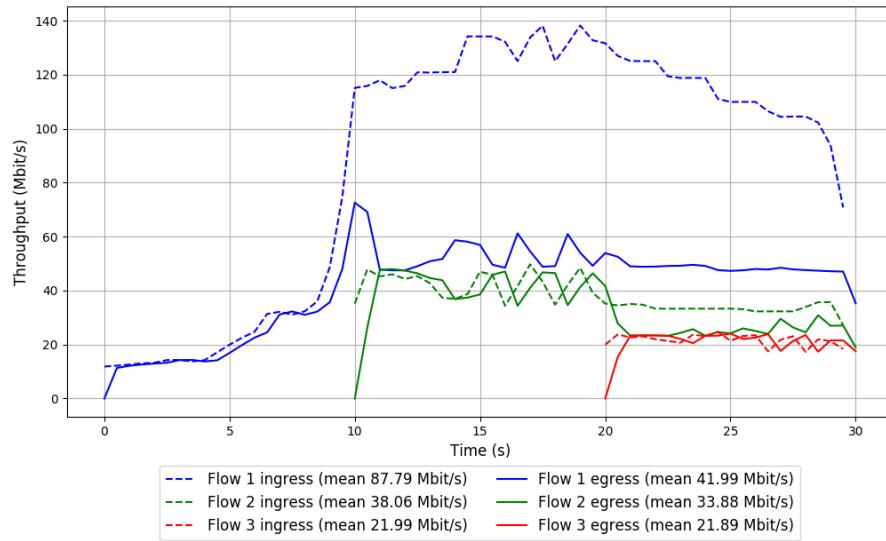


Run 4: Statistics of PCC-Expr

```
Start at: 2019-06-28 13:07:36
End at: 2019-06-28 13:08:06
Local clock offset: -1.092 ms
Remote clock offset: -5.452 ms

# Below is generated by plot.py at 2019-06-28 13:58:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.73 Mbit/s
95th percentile per-packet one-way delay: 1497.566 ms
Loss rate: 40.48%
-- Flow 1:
Average throughput: 41.99 Mbit/s
95th percentile per-packet one-way delay: 648.646 ms
Loss rate: 52.23%
-- Flow 2:
Average throughput: 33.88 Mbit/s
95th percentile per-packet one-way delay: 1942.522 ms
Loss rate: 11.12%
-- Flow 3:
Average throughput: 21.89 Mbit/s
95th percentile per-packet one-way delay: 104.646 ms
Loss rate: 0.72%
```

Run 4: Report of PCC-Expr — Data Link

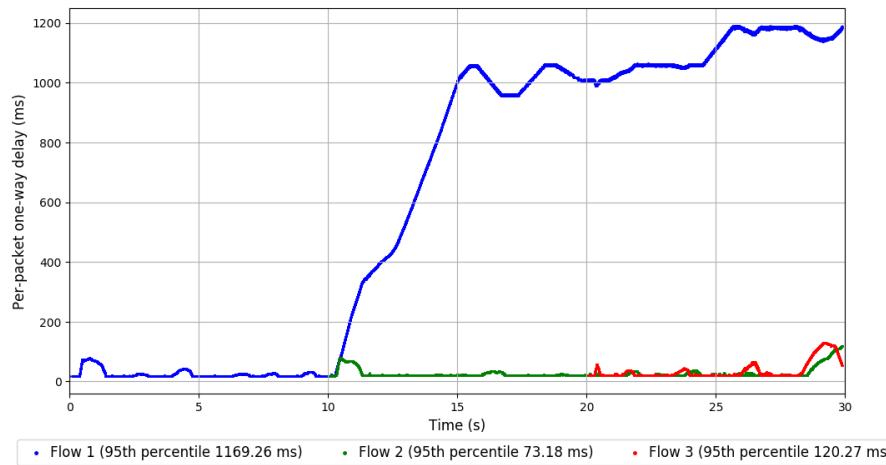
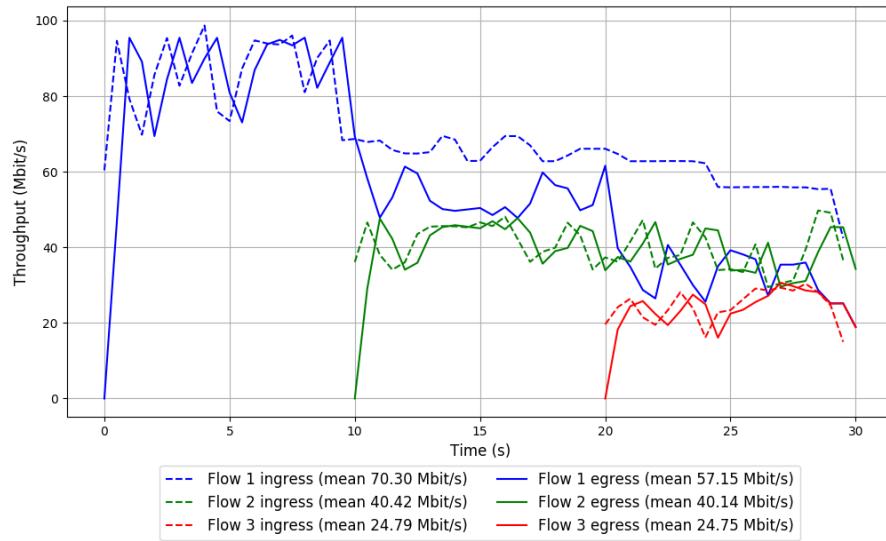


Run 5: Statistics of PCC-Expr

```
Start at: 2019-06-28 13:34:38
End at: 2019-06-28 13:35:08
Local clock offset: -1.063 ms
Remote clock offset: -6.096 ms

# Below is generated by plot.py at 2019-06-28 13:58:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 1103.937 ms
Loss rate: 12.77%
-- Flow 1:
Average throughput: 57.15 Mbit/s
95th percentile per-packet one-way delay: 1169.259 ms
Loss rate: 18.77%
-- Flow 2:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 73.184 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 120.270 ms
Loss rate: 0.44%
```

Run 5: Report of PCC-Expr — Data Link

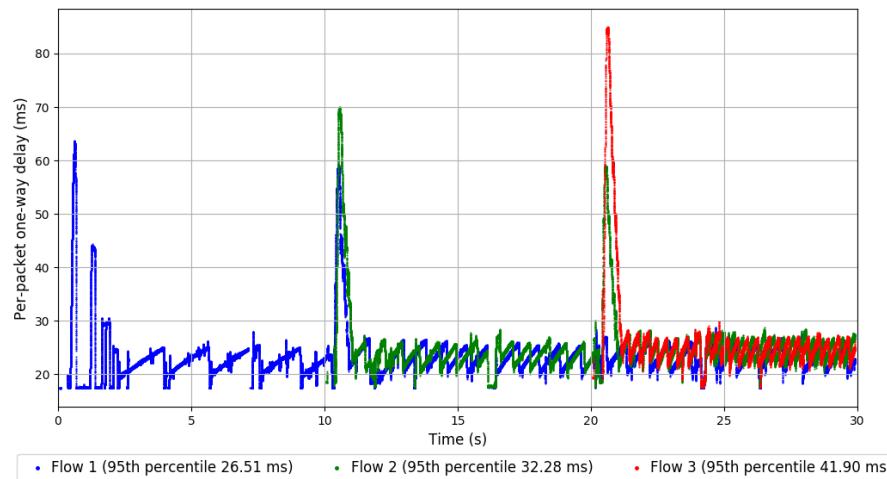
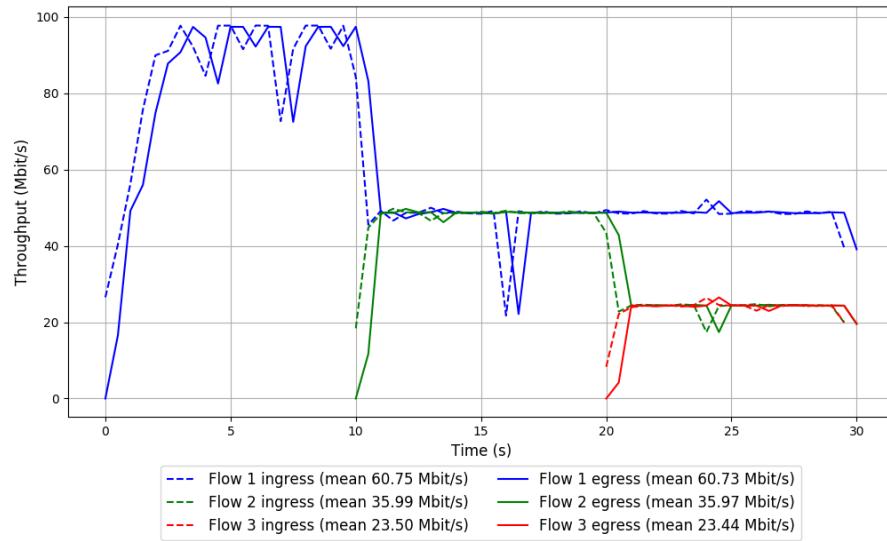


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-06-28 11:46:06
End at: 2019-06-28 11:46:36
Local clock offset: -1.211 ms
Remote clock offset: -2.321 ms

# Below is generated by plot.py at 2019-06-28 13:58:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 27.822 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 60.73 Mbit/s
95th percentile per-packet one-way delay: 26.510 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 32.285 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 23.44 Mbit/s
95th percentile per-packet one-way delay: 41.895 ms
Loss rate: 0.52%
```

Run 1: Report of QUIC Cubic — Data Link

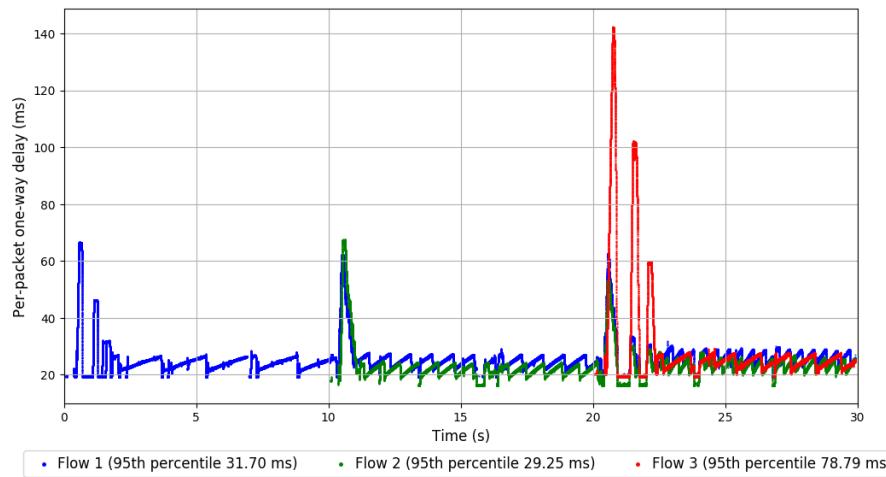
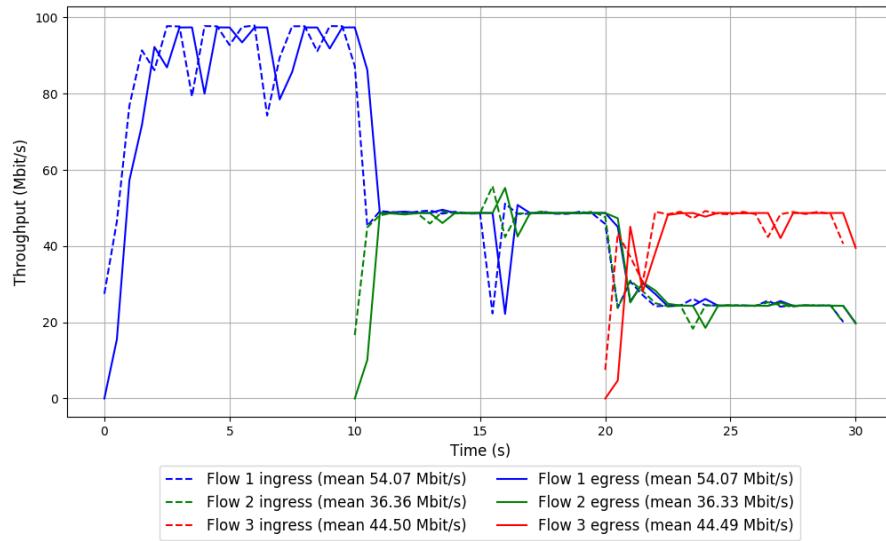


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-06-28 12:13:16
End at: 2019-06-28 12:13:46
Local clock offset: -2.149 ms
Remote clock offset: -1.844 ms

# Below is generated by plot.py at 2019-06-28 13:58:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.91 Mbit/s
95th percentile per-packet one-way delay: 34.577 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 54.07 Mbit/s
95th percentile per-packet one-way delay: 31.697 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 36.33 Mbit/s
95th percentile per-packet one-way delay: 29.249 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 44.49 Mbit/s
95th percentile per-packet one-way delay: 78.788 ms
Loss rate: 0.44%
```

Run 2: Report of QUIC Cubic — Data Link

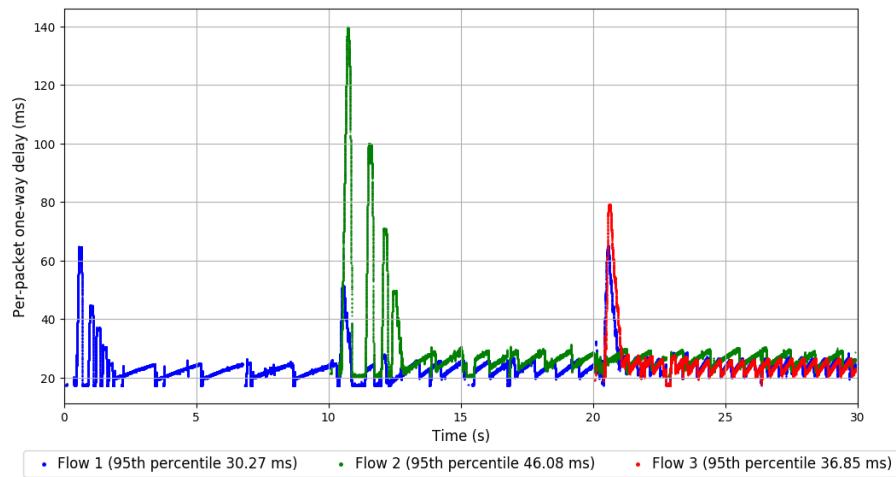
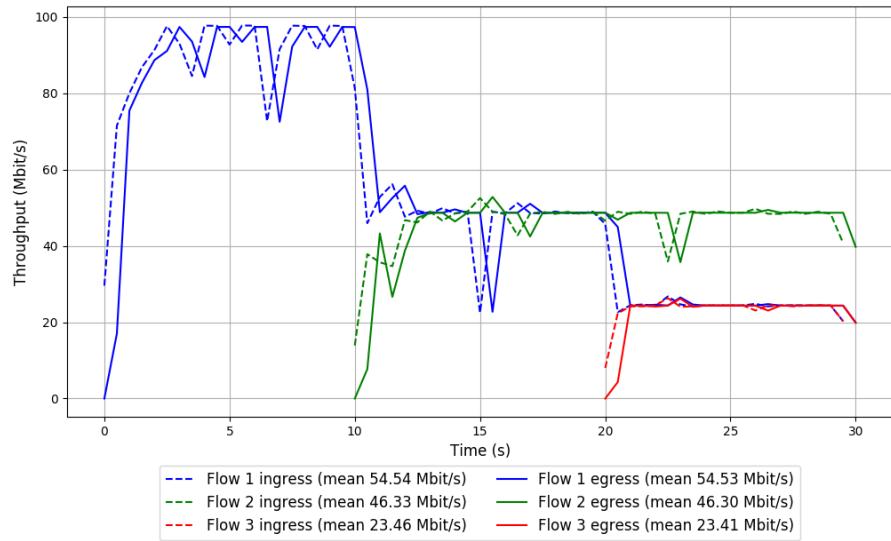


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-06-28 12:39:50
End at: 2019-06-28 12:40:20
Local clock offset: -1.543 ms
Remote clock offset: -3.69 ms

# Below is generated by plot.py at 2019-06-28 13:58:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.05 Mbit/s
95th percentile per-packet one-way delay: 34.457 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 54.53 Mbit/s
95th percentile per-packet one-way delay: 30.267 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 46.30 Mbit/s
95th percentile per-packet one-way delay: 46.079 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 23.41 Mbit/s
95th percentile per-packet one-way delay: 36.847 ms
Loss rate: 0.47%
```

Run 3: Report of QUIC Cubic — Data Link

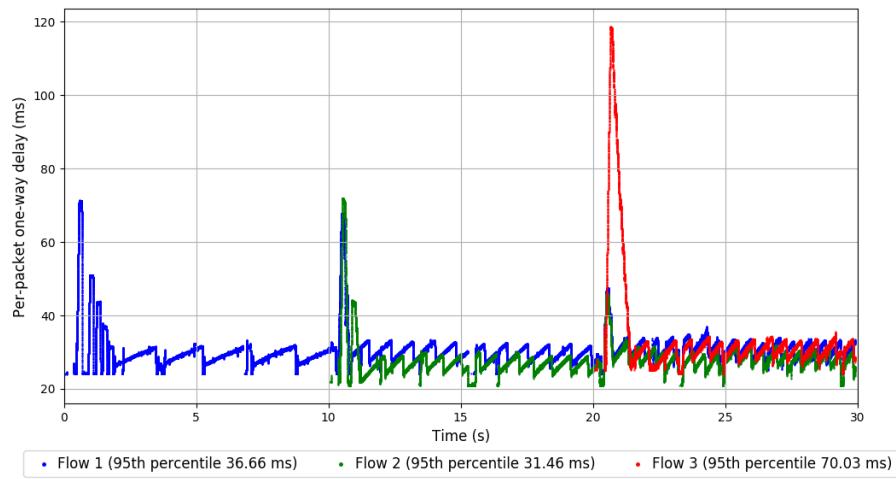
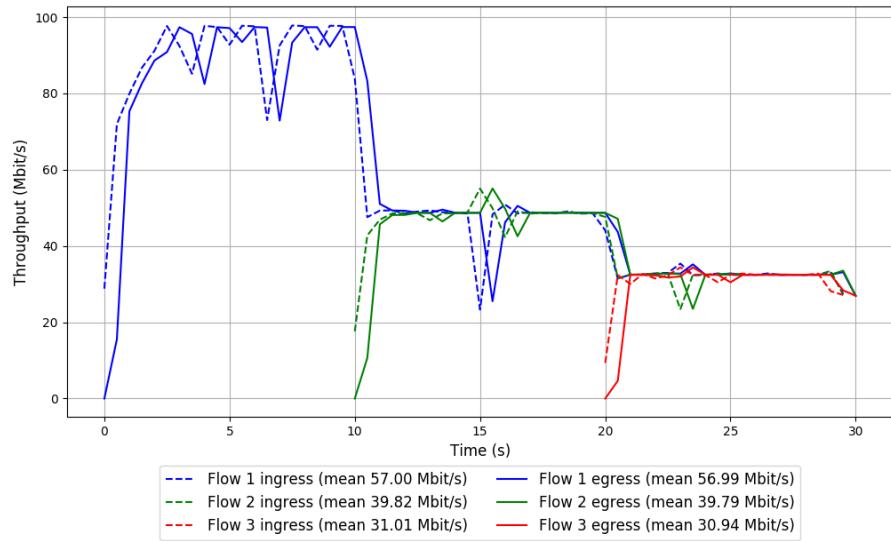


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-06-28 13:06:22
End at: 2019-06-28 13:06:52
Local clock offset: -3.464 ms
Remote clock offset: -9.556 ms

# Below is generated by plot.py at 2019-06-28 13:58:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.66 Mbit/s
95th percentile per-packet one-way delay: 36.539 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 56.99 Mbit/s
95th percentile per-packet one-way delay: 36.660 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 39.79 Mbit/s
95th percentile per-packet one-way delay: 31.460 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 30.94 Mbit/s
95th percentile per-packet one-way delay: 70.034 ms
Loss rate: 0.49%
```

Run 4: Report of QUIC Cubic — Data Link

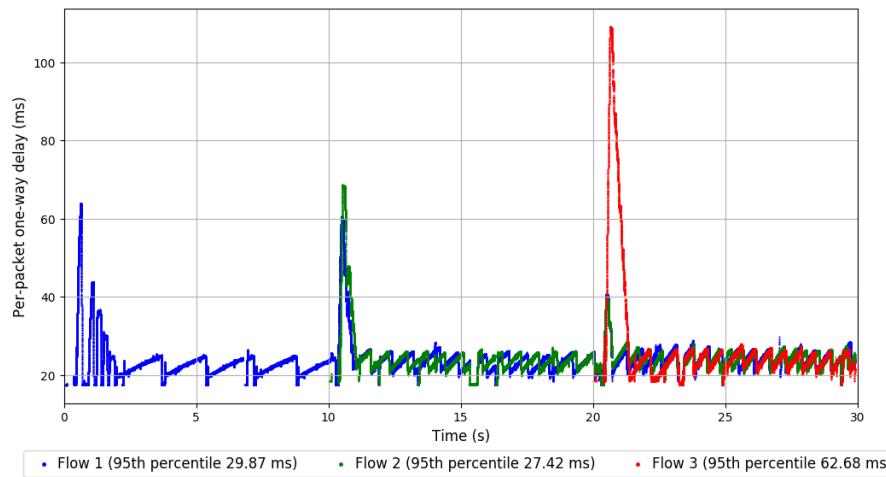
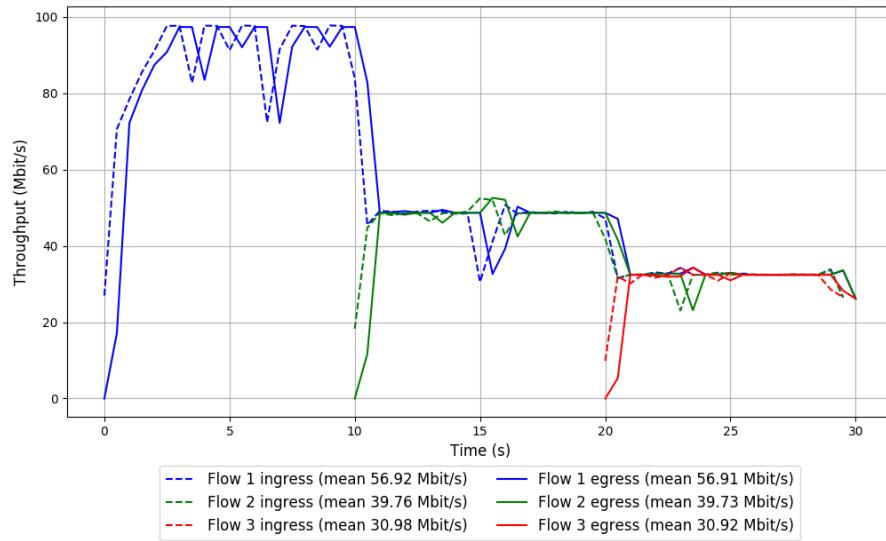


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-06-28 13:33:23
End at: 2019-06-28 13:33:53
Local clock offset: -0.692 ms
Remote clock offset: -4.59 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.56 Mbit/s
95th percentile per-packet one-way delay: 29.980 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 56.91 Mbit/s
95th percentile per-packet one-way delay: 29.872 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 27.417 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 62.676 ms
Loss rate: 0.46%
```

Run 5: Report of QUIC Cubic — Data Link

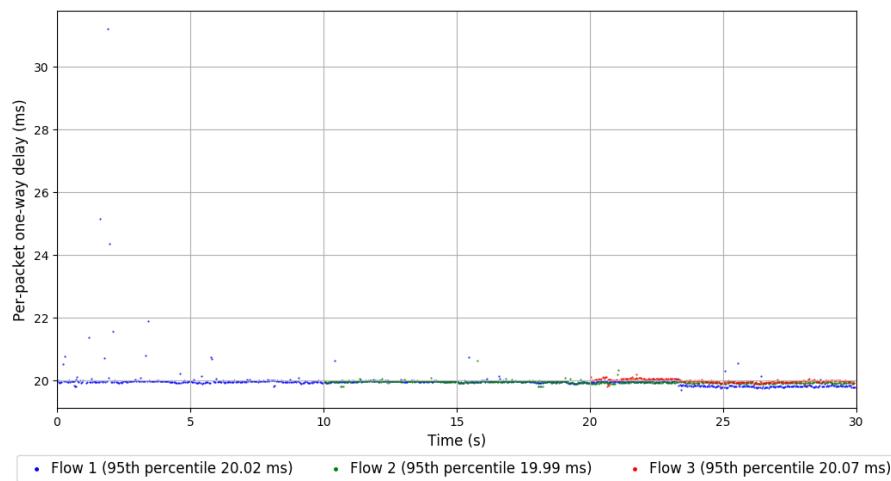
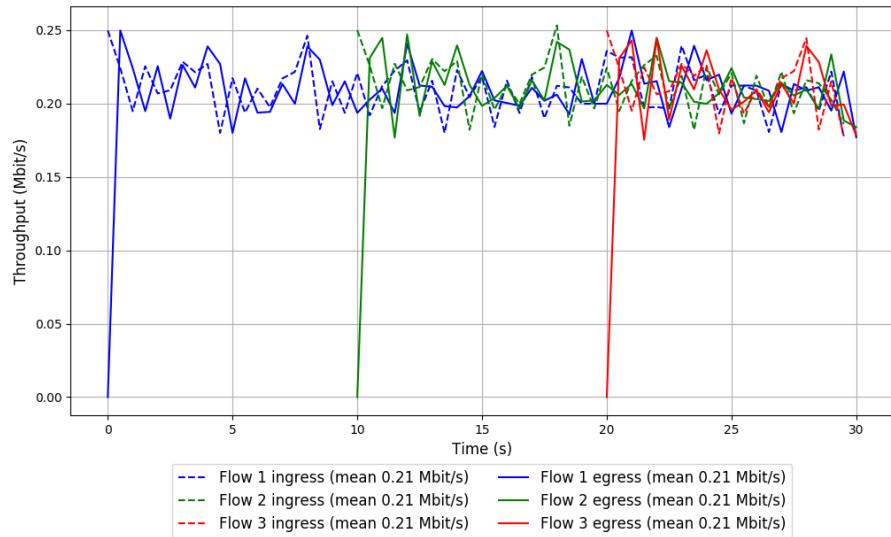


Run 1: Statistics of SCReAM

```
Start at: 2019-06-28 11:35:04
End at: 2019-06-28 11:35:34
Local clock offset: -0.002 ms
Remote clock offset: -3.202 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 20.048 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 20.020 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 19.989 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 20.067 ms
Loss rate: 0.36%
```

Run 1: Report of SCReAM — Data Link

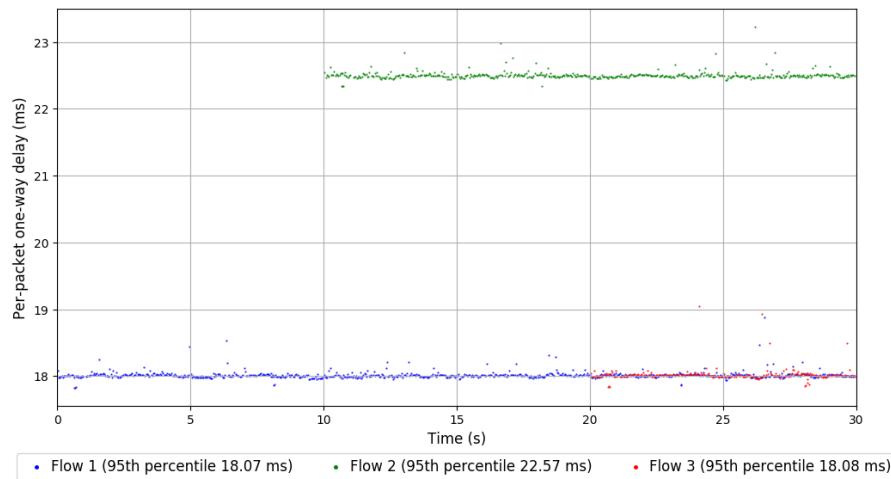
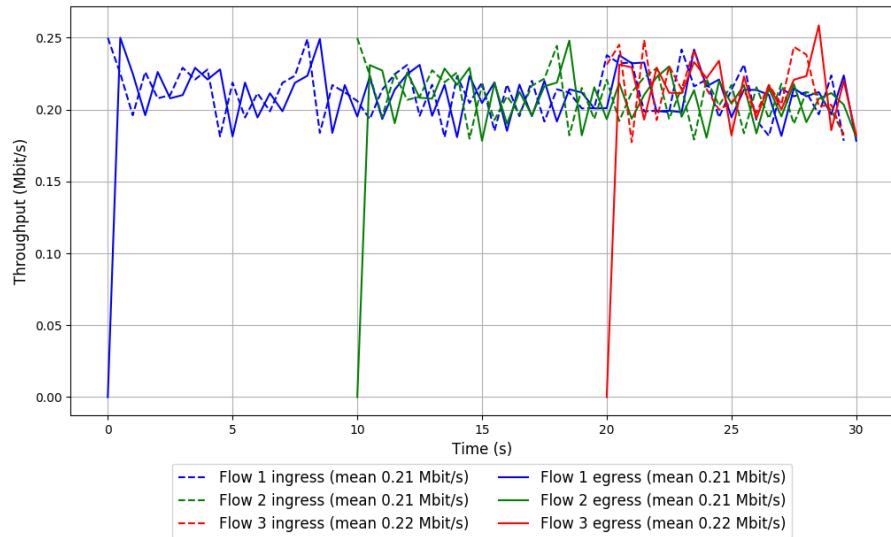


Run 2: Statistics of SCReAM

```
Start at: 2019-06-28 12:02:18
End at: 2019-06-28 12:02:48
Local clock offset: -1.54 ms
Remote clock offset: -4.133 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 22.518 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 18.069 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 22.571 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.079 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

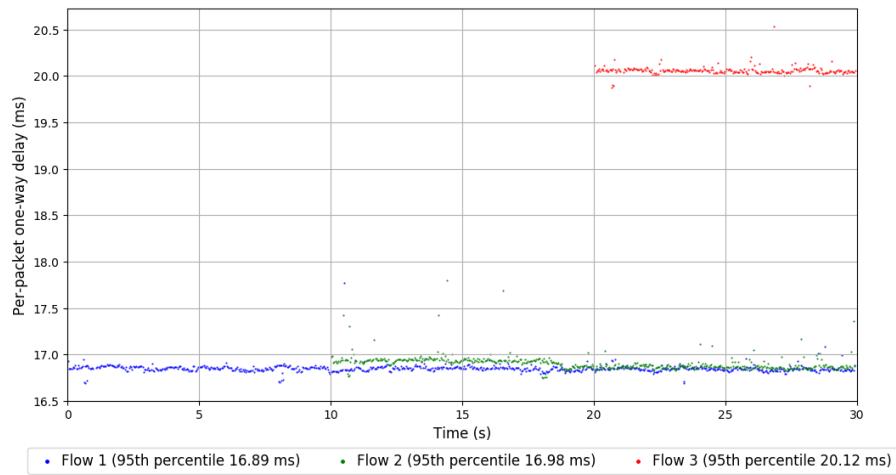
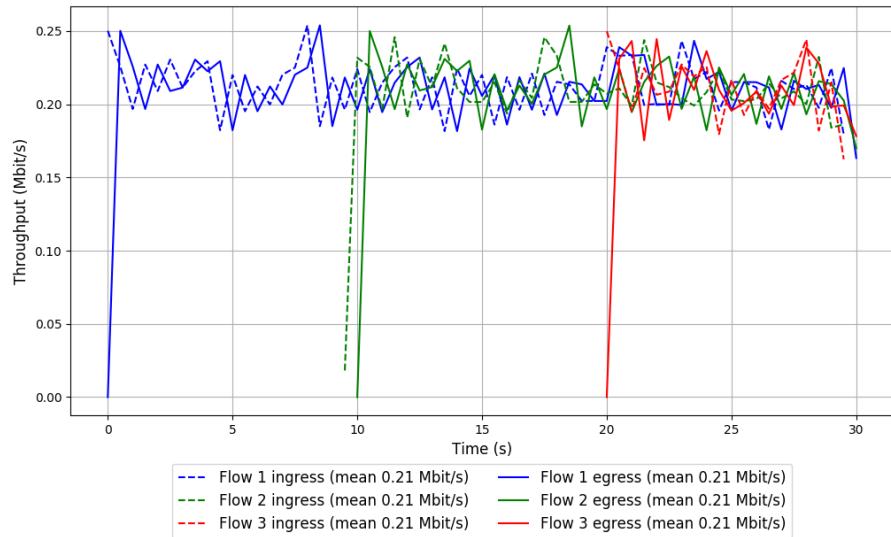


Run 3: Statistics of SCReAM

```
Start at: 2019-06-28 12:28:56
End at: 2019-06-28 12:29:26
Local clock offset: -1.447 ms
Remote clock offset: -2.443 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 20.068 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 16.889 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 16.983 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 20.120 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

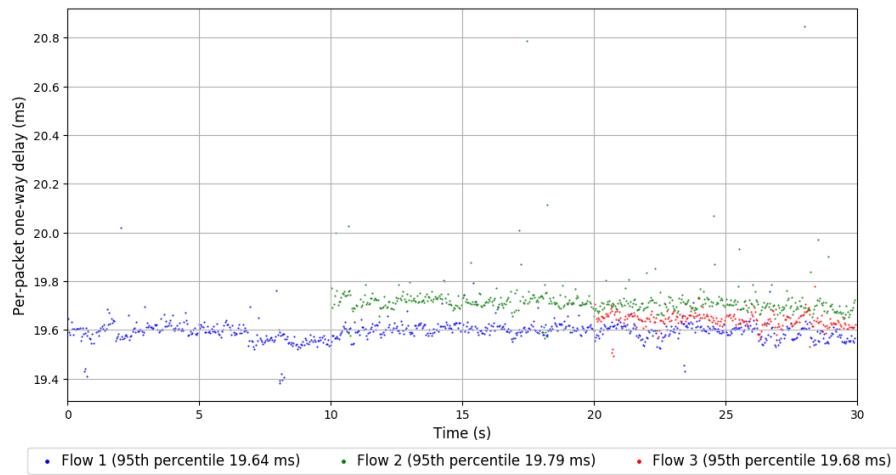
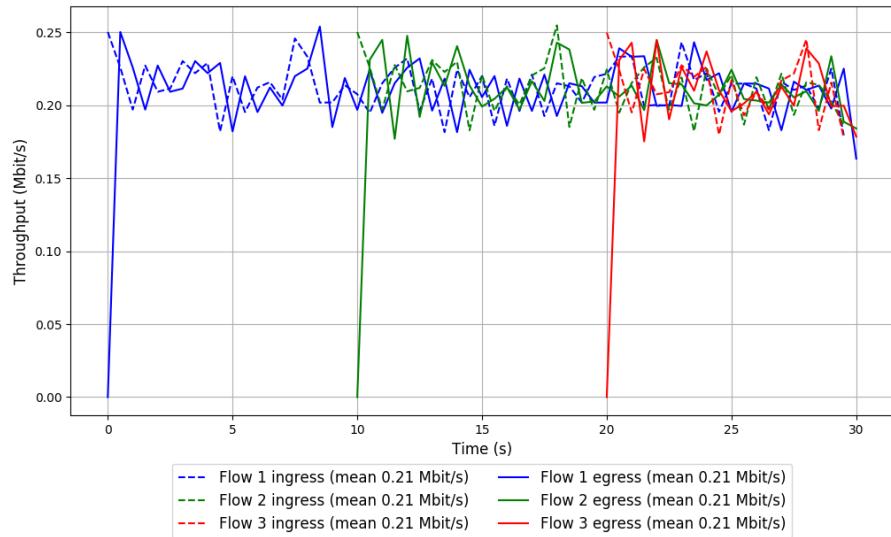


Run 4: Statistics of SCReAM

```
Start at: 2019-06-28 12:55:32
End at: 2019-06-28 12:56:02
Local clock offset: -0.952 ms
Remote clock offset: -5.565 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.741 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 19.638 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 19.786 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 19.682 ms
Loss rate: 0.35%
```

Run 4: Report of SCReAM — Data Link

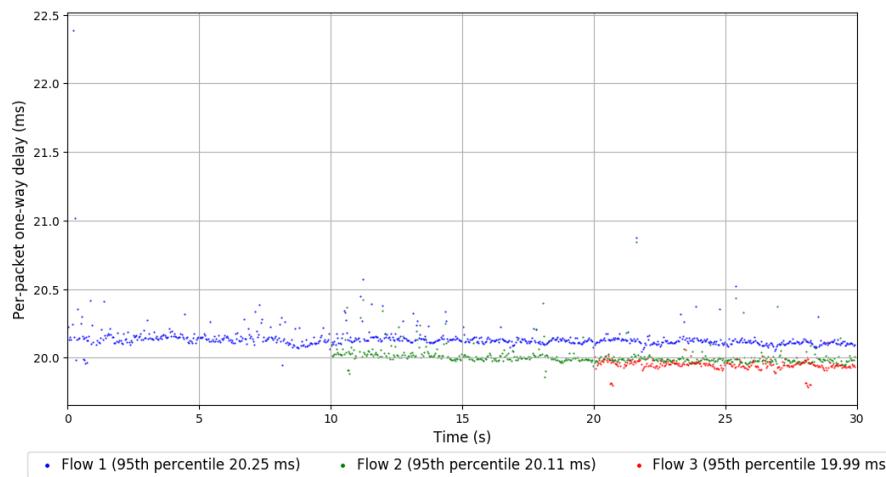
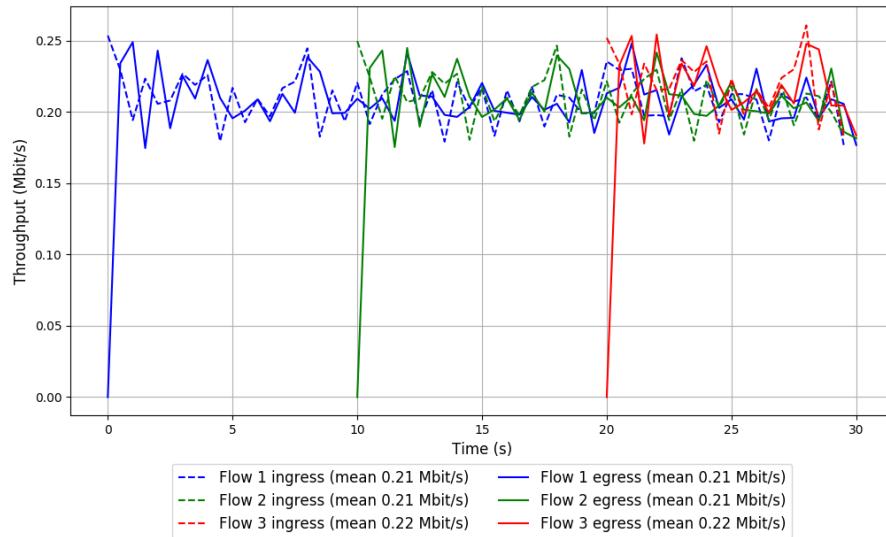


Run 5: Statistics of SCReAM

```
Start at: 2019-06-28 13:22:23
End at: 2019-06-28 13:22:53
Local clock offset: -1.331 ms
Remote clock offset: -3.707 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 20.186 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 20.247 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 20.109 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.993 ms
Loss rate: 0.35%
```

Run 5: Report of SCReAM — Data Link

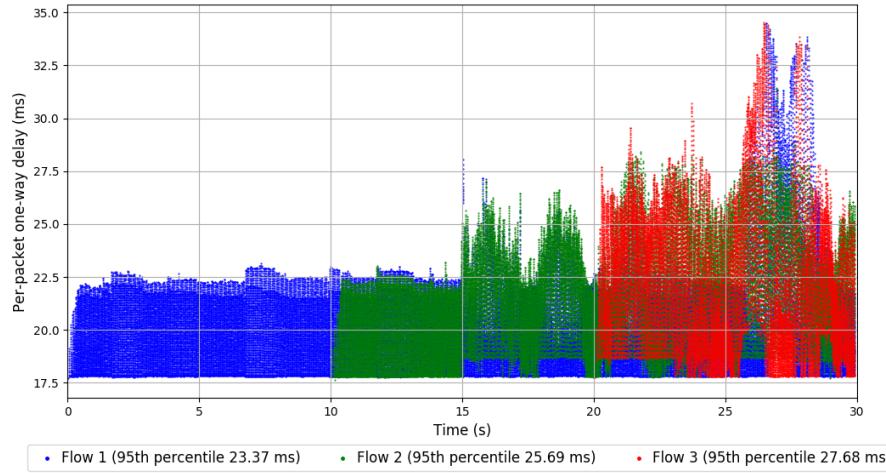
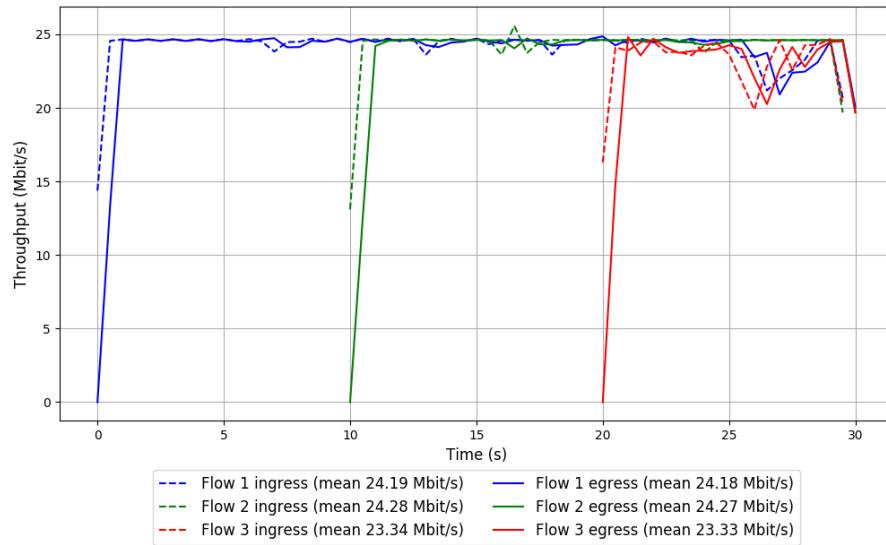


Run 1: Statistics of Sprout

```
Start at: 2019-06-28 11:48:37
End at: 2019-06-28 11:49:07
Local clock offset: -0.667 ms
Remote clock offset: -1.897 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.02 Mbit/s
95th percentile per-packet one-way delay: 25.684 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 23.372 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 24.27 Mbit/s
95th percentile per-packet one-way delay: 25.688 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 23.33 Mbit/s
95th percentile per-packet one-way delay: 27.685 ms
Loss rate: 0.35%
```

Run 1: Report of Sprout — Data Link

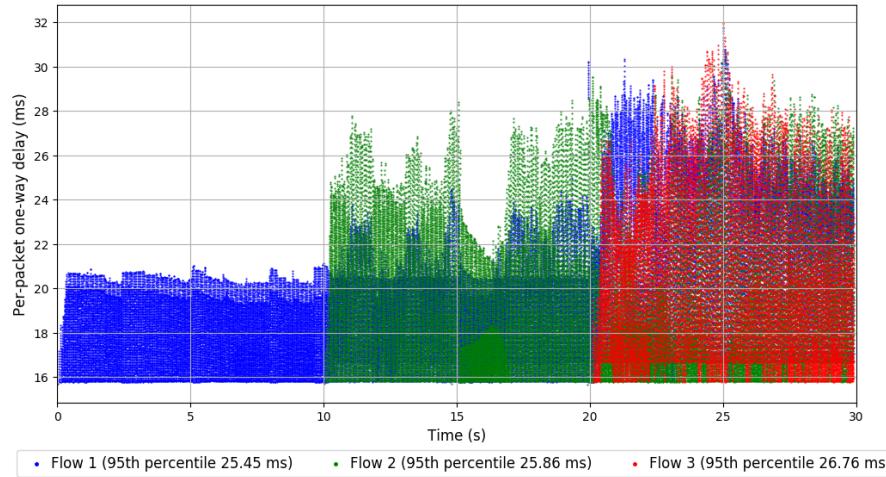
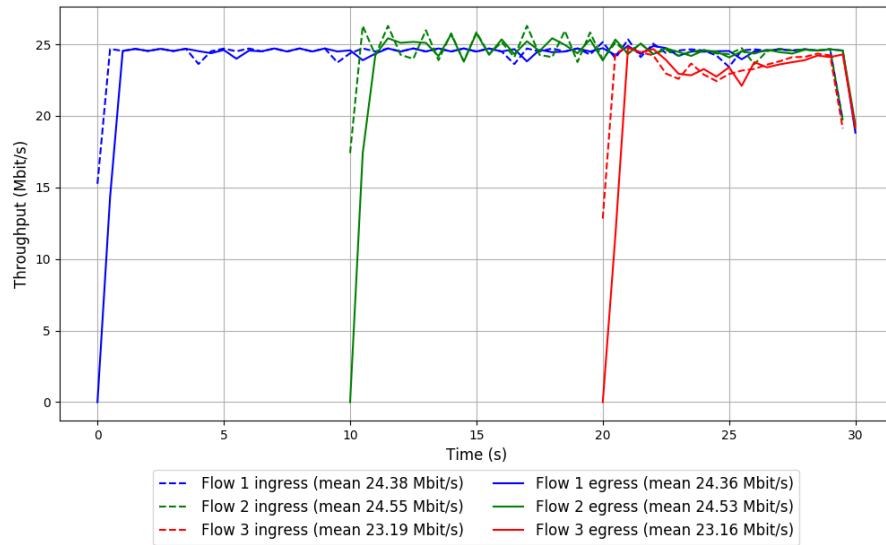


Run 2: Statistics of Sprout

```
Start at: 2019-06-28 12:15:45
End at: 2019-06-28 12:16:15
Local clock offset: -1.476 ms
Remote clock offset: -2.137 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.32 Mbit/s
95th percentile per-packet one-way delay: 25.875 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 25.448 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 24.53 Mbit/s
95th percentile per-packet one-way delay: 25.865 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 23.16 Mbit/s
95th percentile per-packet one-way delay: 26.757 ms
Loss rate: 0.22%
```

Run 2: Report of Sprout — Data Link

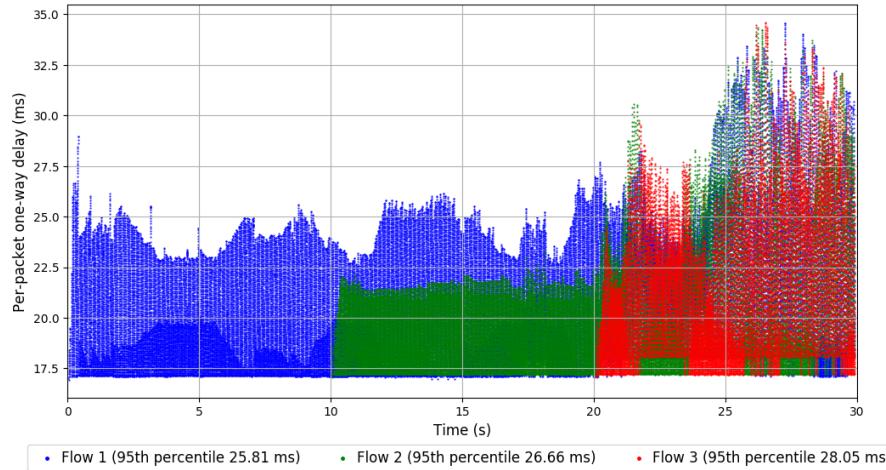
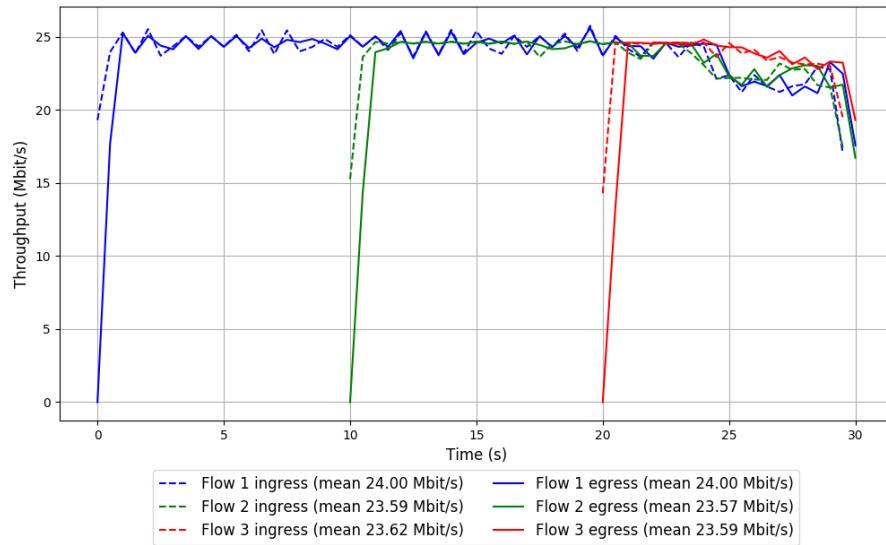


Run 3: Statistics of Sprout

```
Start at: 2019-06-28 12:42:17
End at: 2019-06-28 12:42:47
Local clock offset: -1.815 ms
Remote clock offset: -3.716 ms

# Below is generated by plot.py at 2019-06-28 13:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.46 Mbit/s
95th percentile per-packet one-way delay: 26.685 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 24.00 Mbit/s
95th percentile per-packet one-way delay: 25.806 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 23.57 Mbit/s
95th percentile per-packet one-way delay: 26.655 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 23.59 Mbit/s
95th percentile per-packet one-way delay: 28.047 ms
Loss rate: 0.21%
```

Run 3: Report of Sprout — Data Link

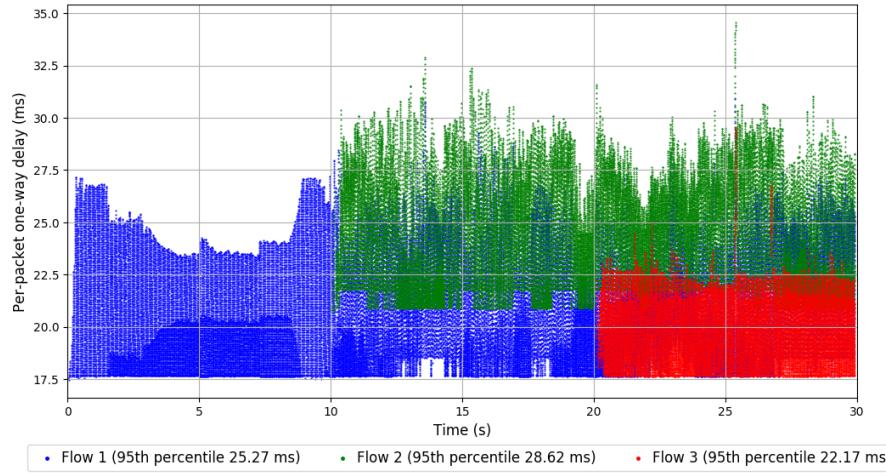
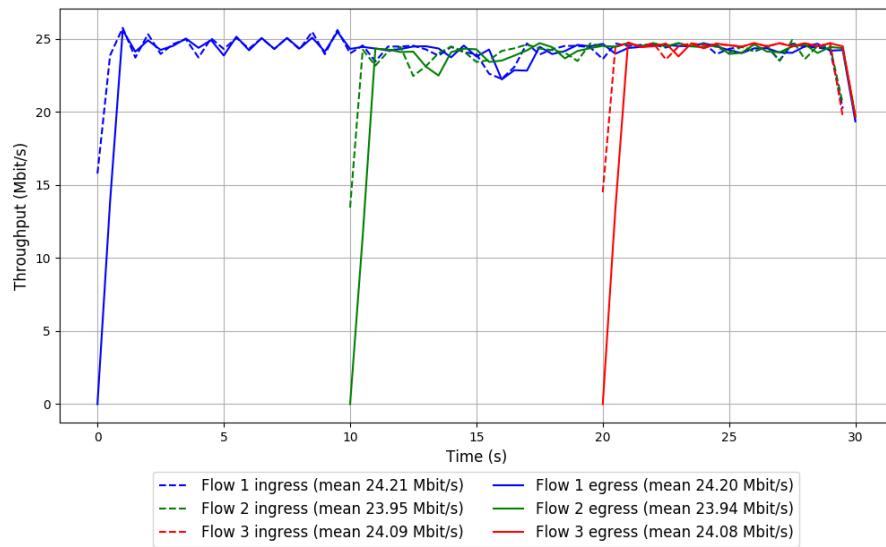


Run 4: Statistics of Sprout

```
Start at: 2019-06-28 13:08:57
End at: 2019-06-28 13:09:27
Local clock offset: -1.389 ms
Remote clock offset: -4.159 ms

# Below is generated by plot.py at 2019-06-28 13:59:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.06 Mbit/s
95th percentile per-packet one-way delay: 27.419 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 24.20 Mbit/s
95th percentile per-packet one-way delay: 25.271 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 23.94 Mbit/s
95th percentile per-packet one-way delay: 28.623 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 24.08 Mbit/s
95th percentile per-packet one-way delay: 22.174 ms
Loss rate: 0.23%
```

Run 4: Report of Sprout — Data Link

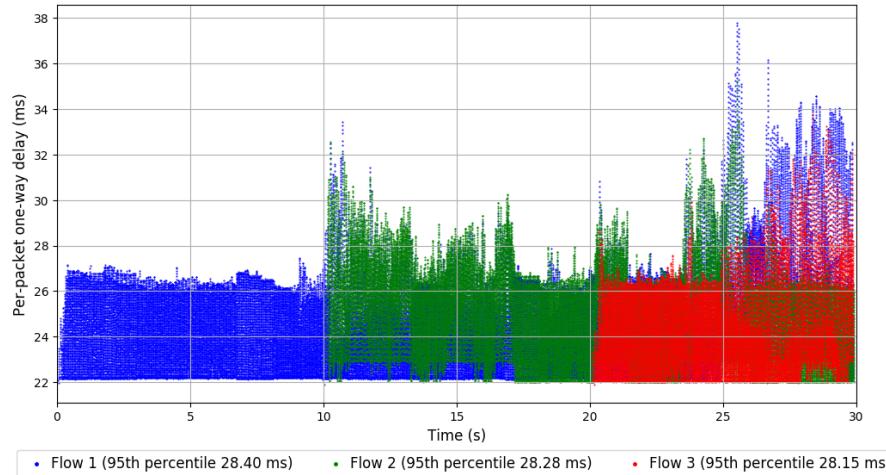
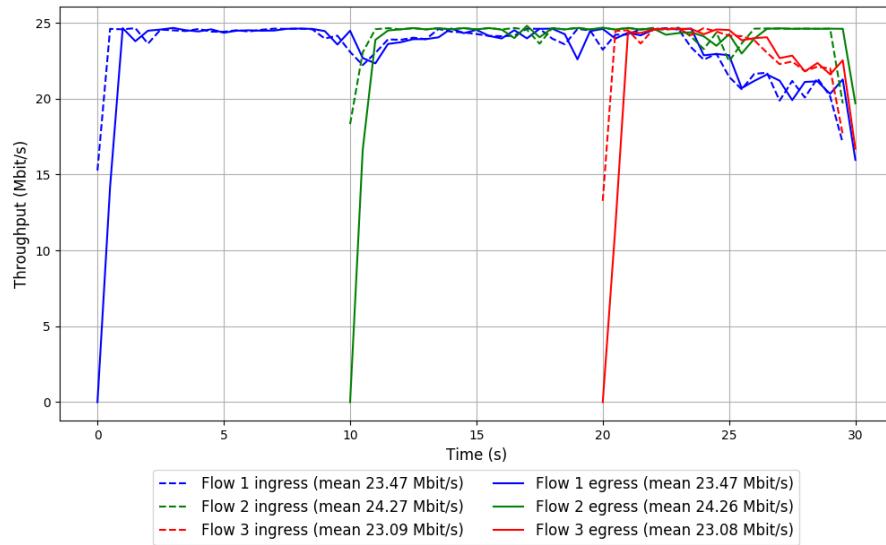


Run 5: Statistics of Sprout

```
Start at: 2019-06-28 13:35:59
End at: 2019-06-28 13:36:29
Local clock offset: -0.326 ms
Remote clock offset: -5.319 ms

# Below is generated by plot.py at 2019-06-28 13:59:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.19 Mbit/s
95th percentile per-packet one-way delay: 28.297 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 23.47 Mbit/s
95th percentile per-packet one-way delay: 28.403 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 24.26 Mbit/s
95th percentile per-packet one-way delay: 28.279 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 23.08 Mbit/s
95th percentile per-packet one-way delay: 28.150 ms
Loss rate: 0.43%
```

Run 5: Report of Sprout — Data Link

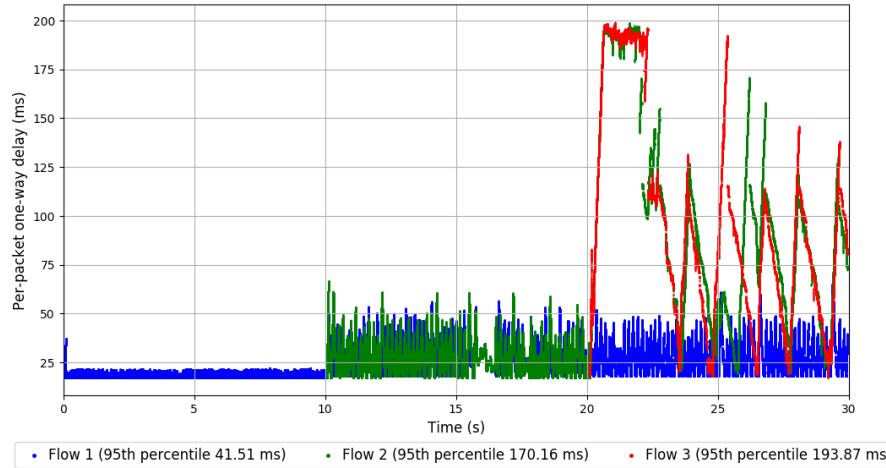
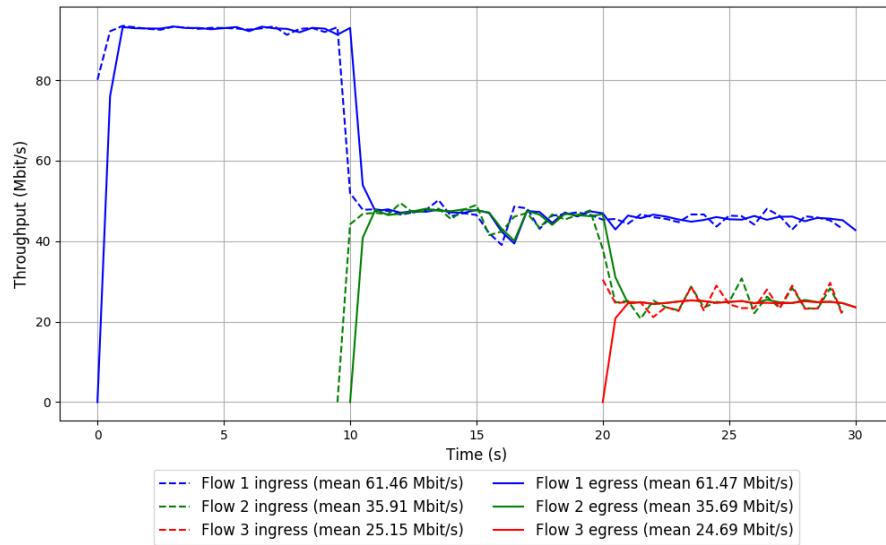


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-06-28 11:39:47
End at: 2019-06-28 11:40:17
Local clock offset: -0.468 ms
Remote clock offset: -1.146 ms

# Below is generated by plot.py at 2019-06-28 14:00:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.44 Mbit/s
95th percentile per-packet one-way delay: 110.327 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 61.47 Mbit/s
95th percentile per-packet one-way delay: 41.508 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 35.69 Mbit/s
95th percentile per-packet one-way delay: 170.164 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 193.866 ms
Loss rate: 2.08%
```

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

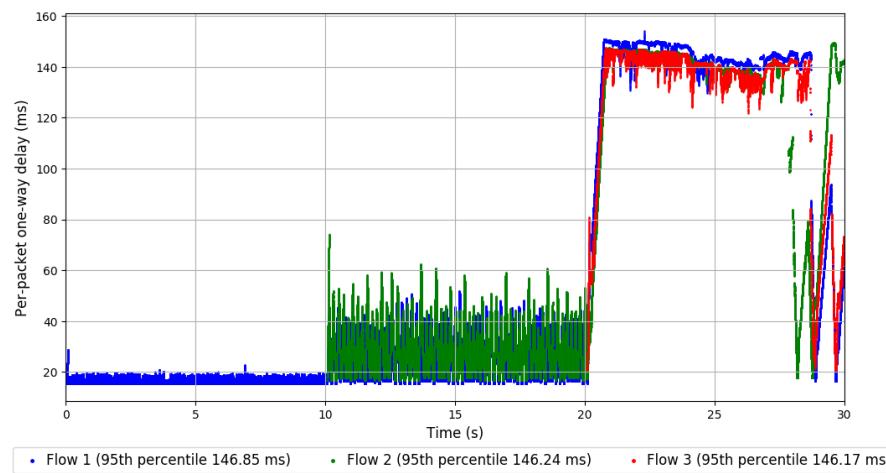
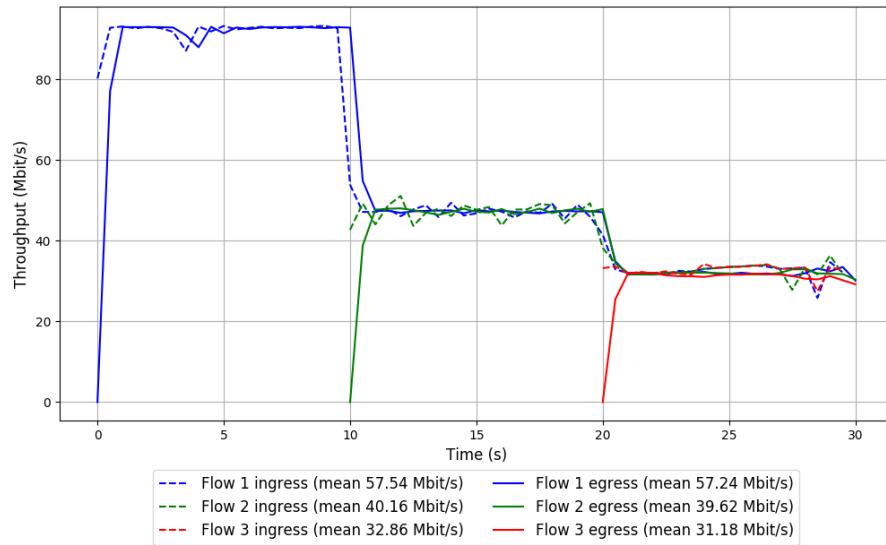


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-06-28 12:07:08
End at: 2019-06-28 12:07:38
Local clock offset: -1.603 ms
Remote clock offset: -1.778 ms

# Below is generated by plot.py at 2019-06-28 14:00:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.96 Mbit/s
95th percentile per-packet one-way delay: 146.260 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 57.24 Mbit/s
95th percentile per-packet one-way delay: 146.852 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 39.62 Mbit/s
95th percentile per-packet one-way delay: 146.238 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 31.18 Mbit/s
95th percentile per-packet one-way delay: 146.173 ms
Loss rate: 5.40%
```

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

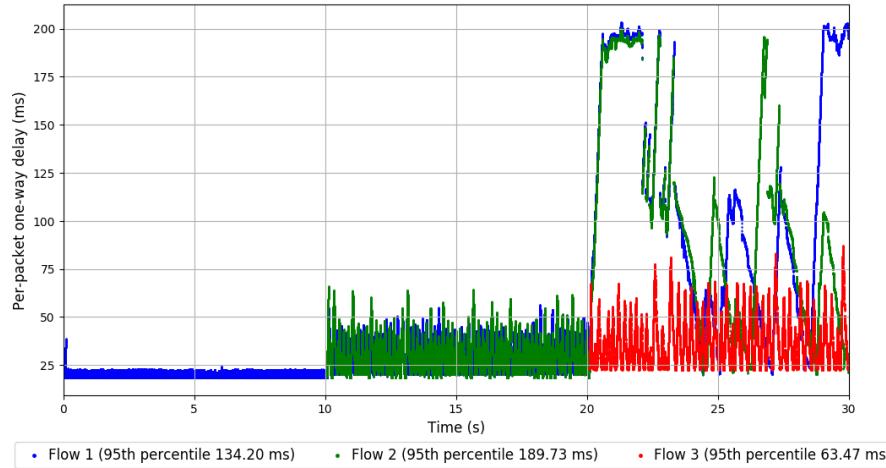
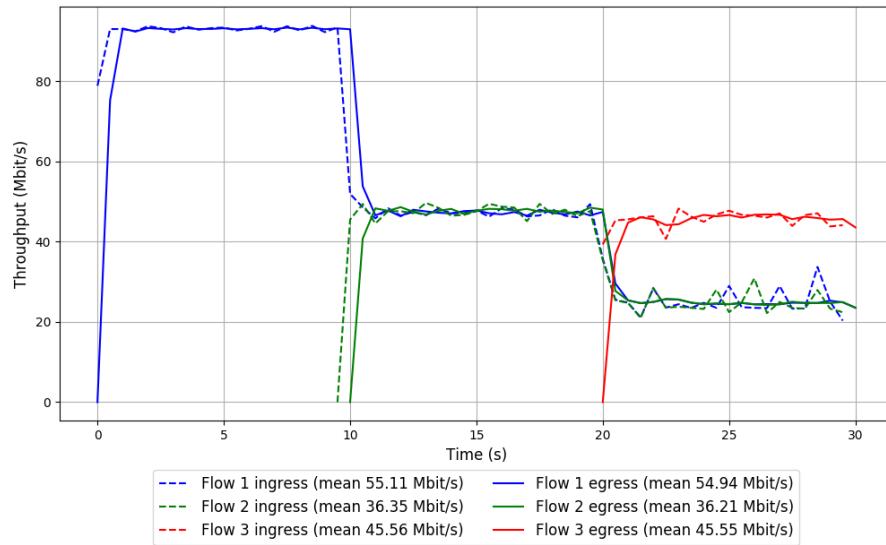


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-06-28 12:33:41
End at: 2019-06-28 12:34:11
Local clock offset: -1.128 ms
Remote clock offset: -4.292 ms

# Below is generated by plot.py at 2019-06-28 14:00:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 136.364 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 54.94 Mbit/s
95th percentile per-packet one-way delay: 134.199 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 189.726 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 45.55 Mbit/s
95th percentile per-packet one-way delay: 63.466 ms
Loss rate: 0.35%
```

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

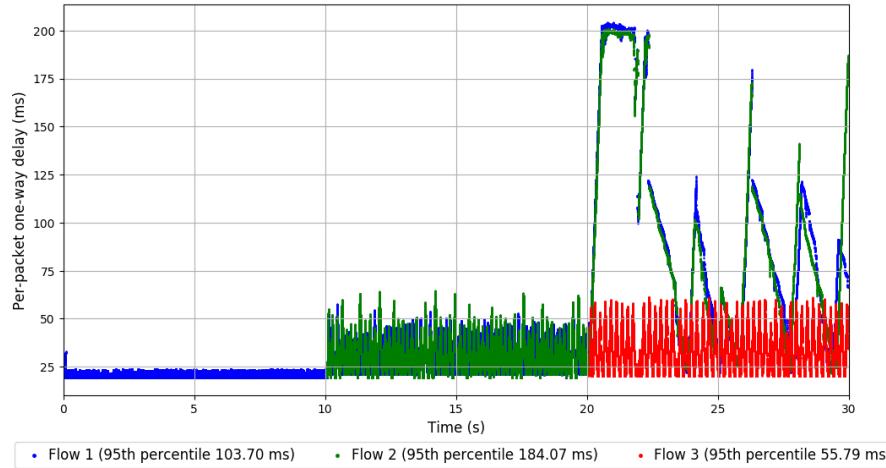
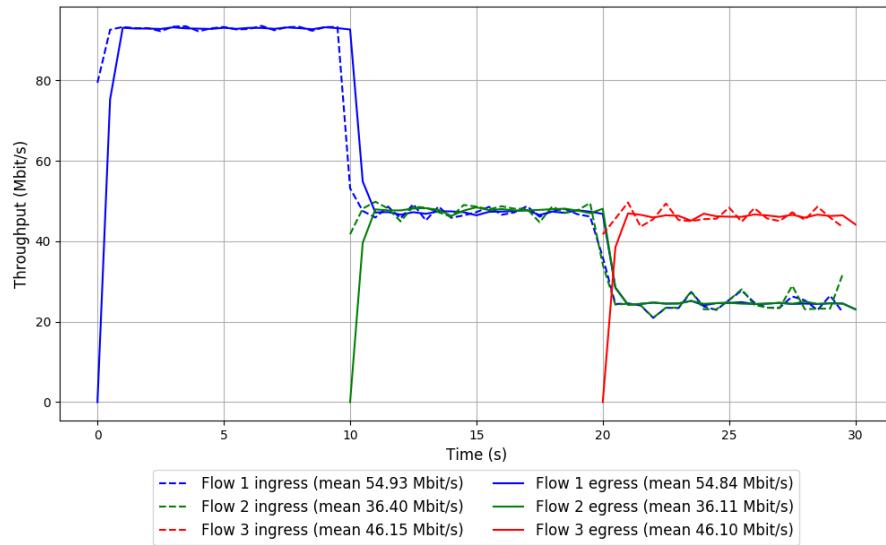


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-06-28 13:00:13
End at: 2019-06-28 13:00:43
Local clock offset: -1.098 ms
Remote clock offset: -5.69 ms

# Below is generated by plot.py at 2019-06-28 14:00:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 109.390 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 54.84 Mbit/s
95th percentile per-packet one-way delay: 103.703 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 184.071 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 46.10 Mbit/s
95th percentile per-packet one-way delay: 55.787 ms
Loss rate: 0.38%
```

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

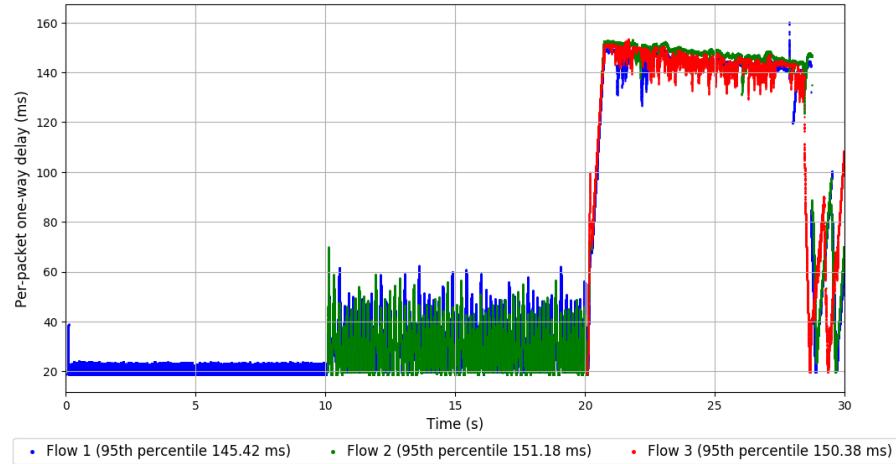
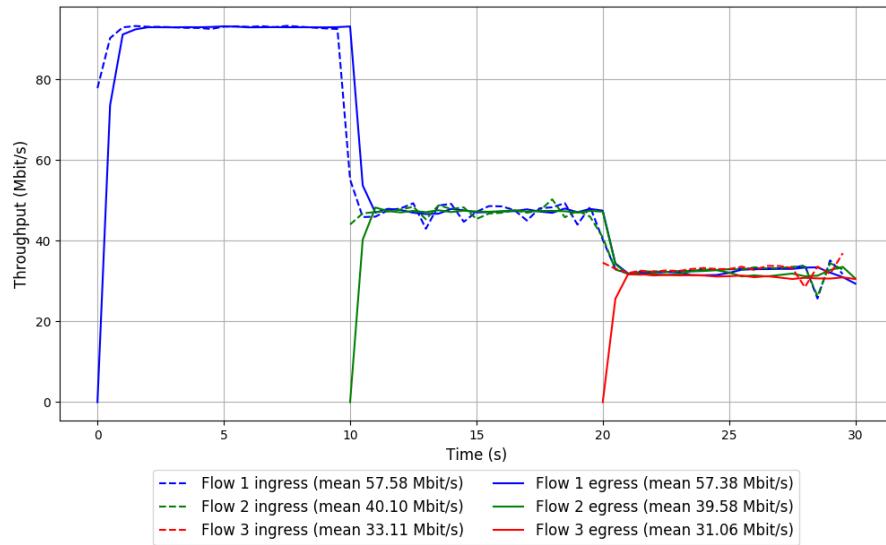


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-06-28 13:27:08
End at: 2019-06-28 13:27:38
Local clock offset: -0.653 ms
Remote clock offset: -5.457 ms

# Below is generated by plot.py at 2019-06-28 14:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.06 Mbit/s
95th percentile per-packet one-way delay: 148.821 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 57.38 Mbit/s
95th percentile per-packet one-way delay: 145.417 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 39.58 Mbit/s
95th percentile per-packet one-way delay: 151.182 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 150.383 ms
Loss rate: 6.47%
```

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

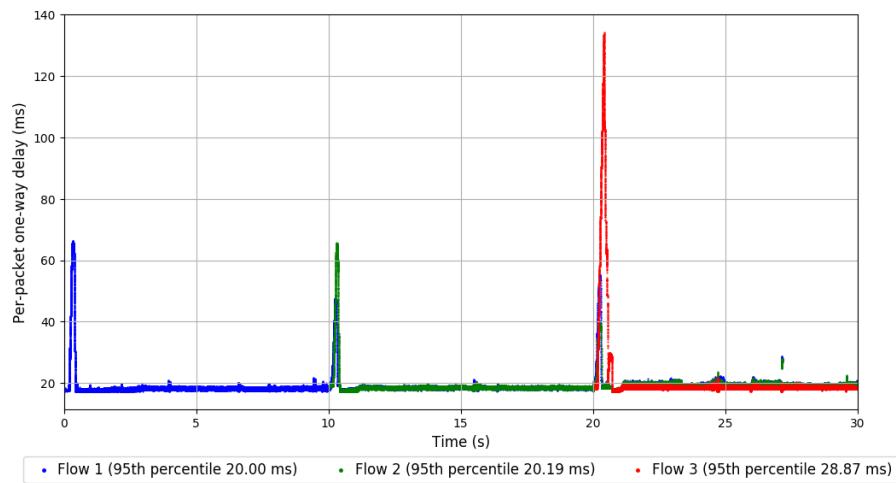
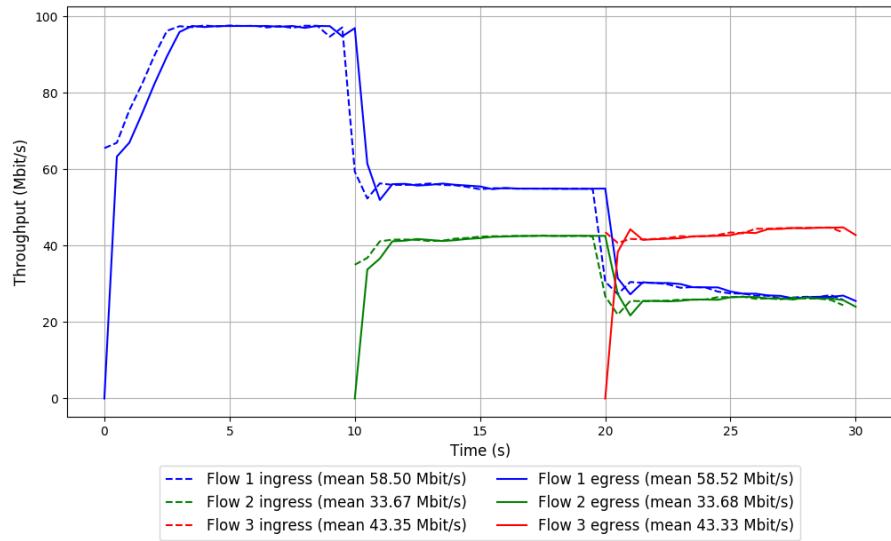


Run 1: Statistics of TCP Vegas

```
Start at: 2019-06-28 11:30:15
End at: 2019-06-28 11:30:45
Local clock offset: -1.396 ms
Remote clock offset: -1.984 ms

# Below is generated by plot.py at 2019-06-28 14:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.33 Mbit/s
95th percentile per-packet one-way delay: 20.142 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 58.52 Mbit/s
95th percentile per-packet one-way delay: 20.004 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 33.68 Mbit/s
95th percentile per-packet one-way delay: 20.193 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 43.33 Mbit/s
95th percentile per-packet one-way delay: 28.867 ms
Loss rate: 0.28%
```

Run 1: Report of TCP Vegas — Data Link

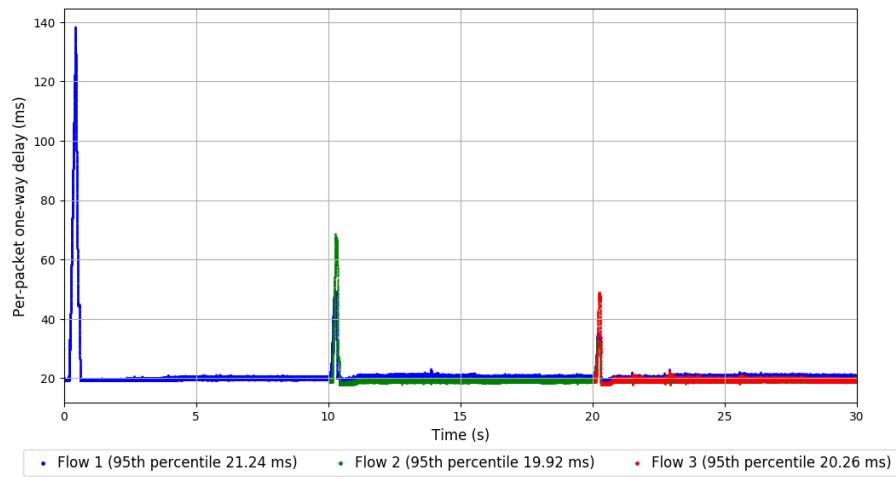
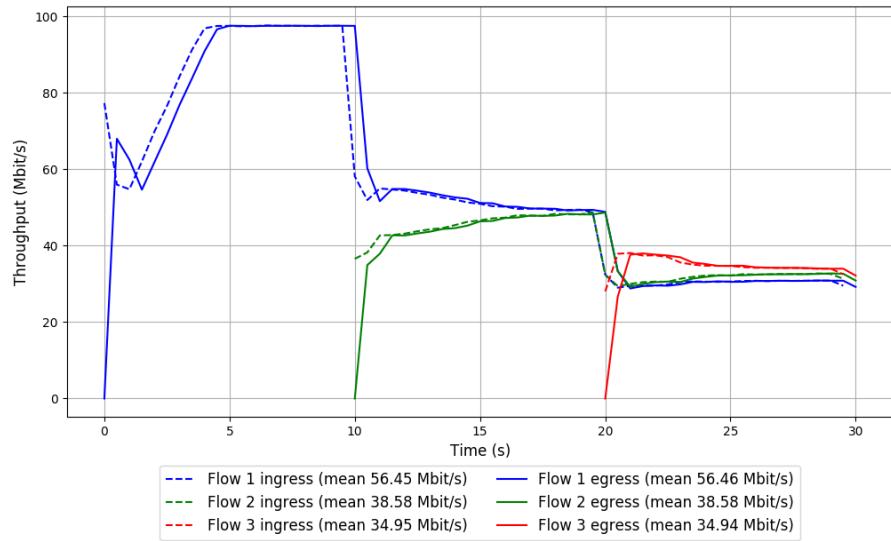


Run 2: Statistics of TCP Vegas

```
Start at: 2019-06-28 11:57:21
End at: 2019-06-28 11:57:51
Local clock offset: -0.92 ms
Remote clock offset: -3.366 ms

# Below is generated by plot.py at 2019-06-28 14:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.74 Mbit/s
95th percentile per-packet one-way delay: 21.093 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 56.46 Mbit/s
95th percentile per-packet one-way delay: 21.244 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 38.58 Mbit/s
95th percentile per-packet one-way delay: 19.924 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 34.94 Mbit/s
95th percentile per-packet one-way delay: 20.256 ms
Loss rate: 0.26%
```

Run 2: Report of TCP Vegas — Data Link

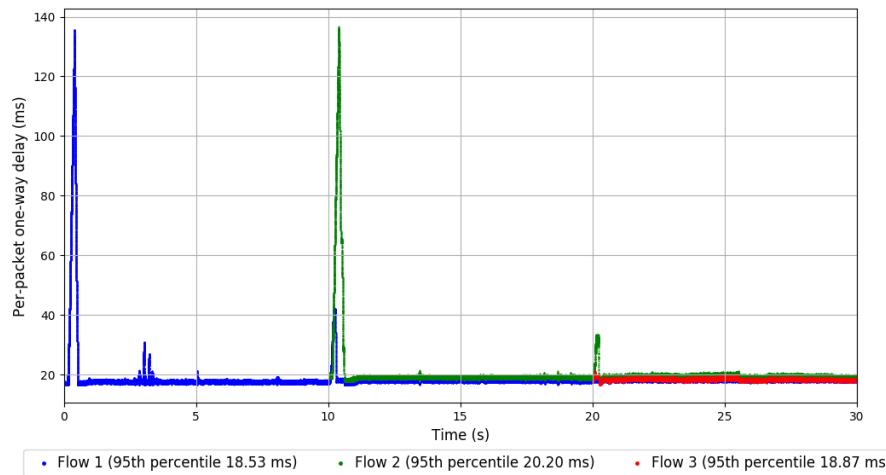
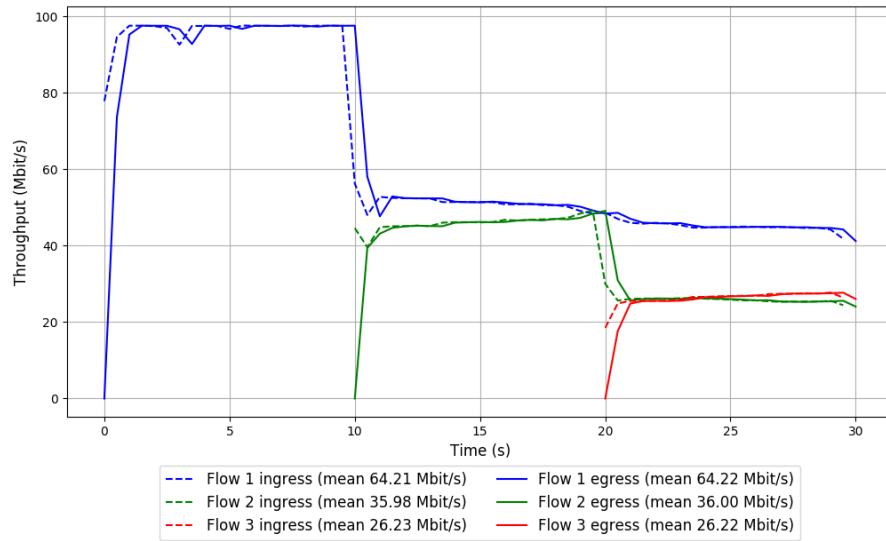


Run 3: Statistics of TCP Vegas

```
Start at: 2019-06-28 12:24:06
End at: 2019-06-28 12:24:36
Local clock offset: -1.454 ms
Remote clock offset: -3.349 ms

# Below is generated by plot.py at 2019-06-28 14:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.90 Mbit/s
95th percentile per-packet one-way delay: 19.715 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 64.22 Mbit/s
95th percentile per-packet one-way delay: 18.534 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 36.00 Mbit/s
95th percentile per-packet one-way delay: 20.197 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 26.22 Mbit/s
95th percentile per-packet one-way delay: 18.868 ms
Loss rate: 0.26%
```

Run 3: Report of TCP Vegas — Data Link

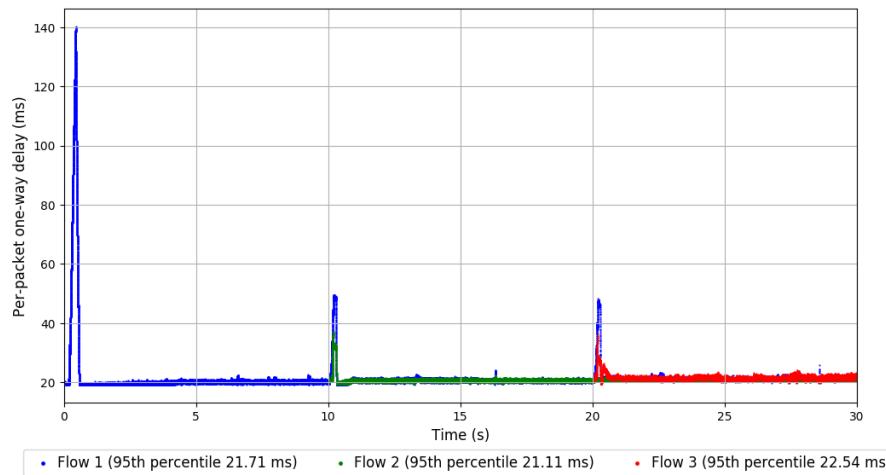
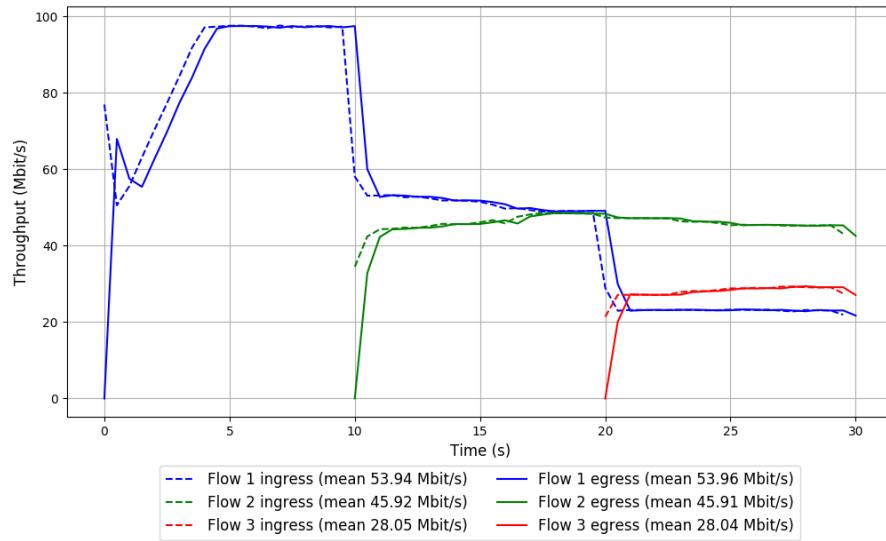


Run 4: Statistics of TCP Vegas

```
Start at: 2019-06-28 12:50:47
End at: 2019-06-28 12:51:17
Local clock offset: -1.75 ms
Remote clock offset: -5.936 ms

# Below is generated by plot.py at 2019-06-28 14:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.83 Mbit/s
95th percentile per-packet one-way delay: 21.754 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 53.96 Mbit/s
95th percentile per-packet one-way delay: 21.707 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 45.91 Mbit/s
95th percentile per-packet one-way delay: 21.109 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 28.04 Mbit/s
95th percentile per-packet one-way delay: 22.539 ms
Loss rate: 0.28%
```

Run 4: Report of TCP Vegas — Data Link

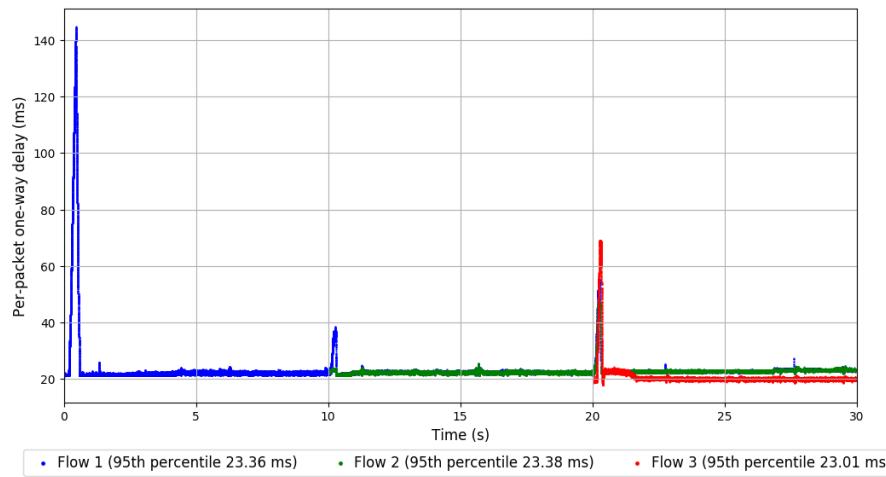
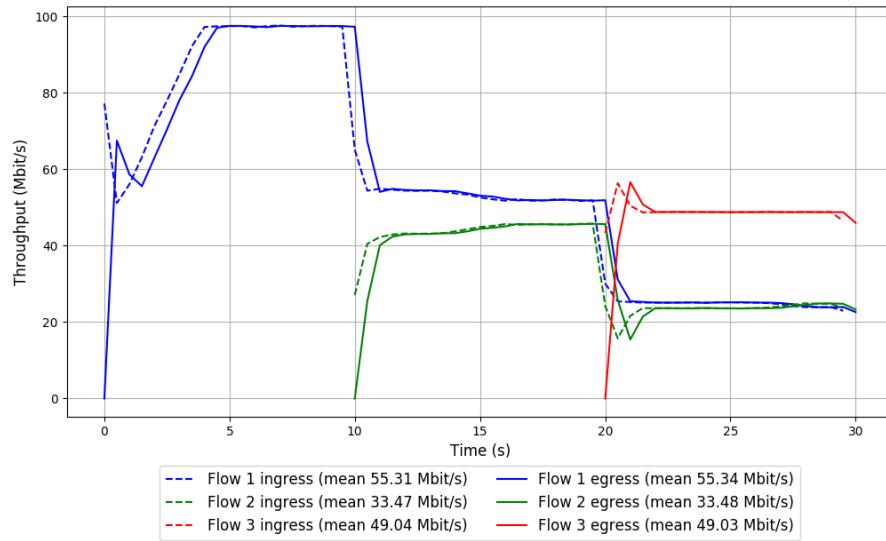


Run 5: Statistics of TCP Vegas

```
Start at: 2019-06-28 13:17:30
End at: 2019-06-28 13:18:00
Local clock offset: -1.587 ms
Remote clock offset: -4.735 ms

# Below is generated by plot.py at 2019-06-28 14:01:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 23.334 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 55.34 Mbit/s
95th percentile per-packet one-way delay: 23.358 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 33.48 Mbit/s
95th percentile per-packet one-way delay: 23.381 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 49.03 Mbit/s
95th percentile per-packet one-way delay: 23.008 ms
Loss rate: 0.27%
```

Run 5: Report of TCP Vegas — Data Link

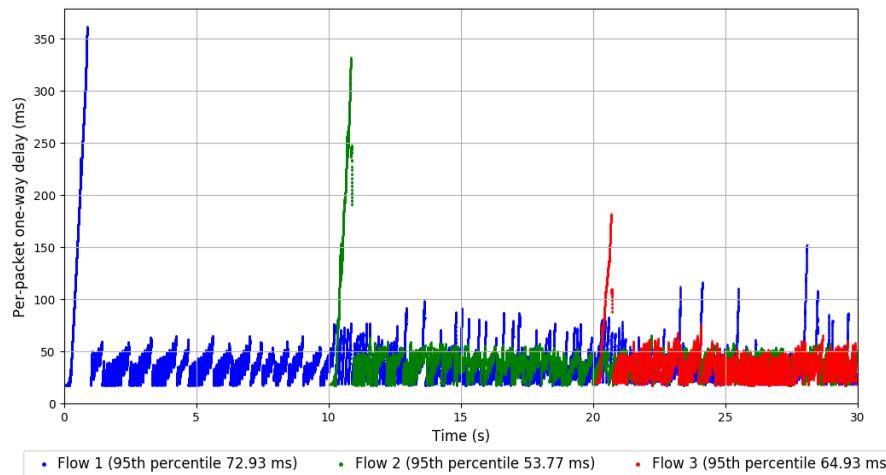
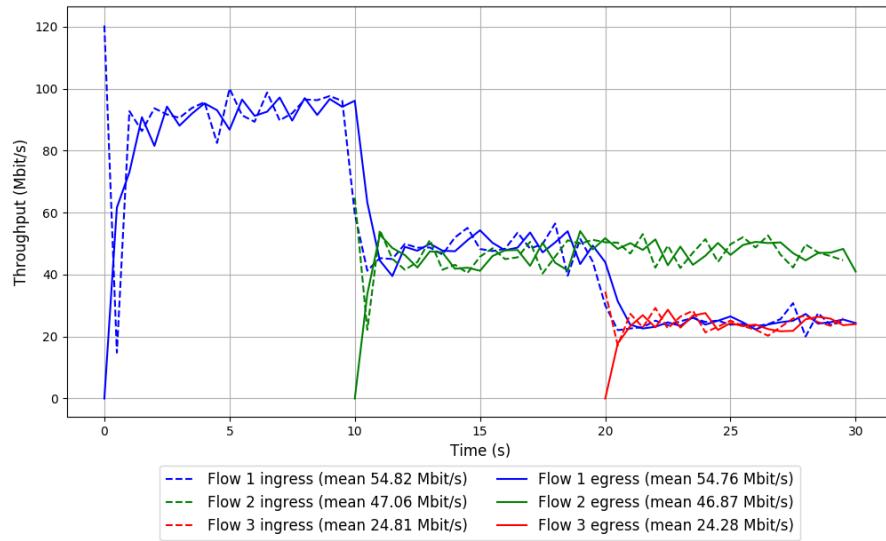


Run 1: Statistics of Verus

```
Start at: 2019-06-28 11:43:41
End at: 2019-06-28 11:44:11
Local clock offset: -1.373 ms
Remote clock offset: -2.086 ms

# Below is generated by plot.py at 2019-06-28 14:01:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.02 Mbit/s
95th percentile per-packet one-way delay: 67.621 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 54.76 Mbit/s
95th percentile per-packet one-way delay: 72.931 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 46.87 Mbit/s
95th percentile per-packet one-way delay: 53.767 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 24.28 Mbit/s
95th percentile per-packet one-way delay: 64.927 ms
Loss rate: 2.39%
```

Run 1: Report of Verus — Data Link

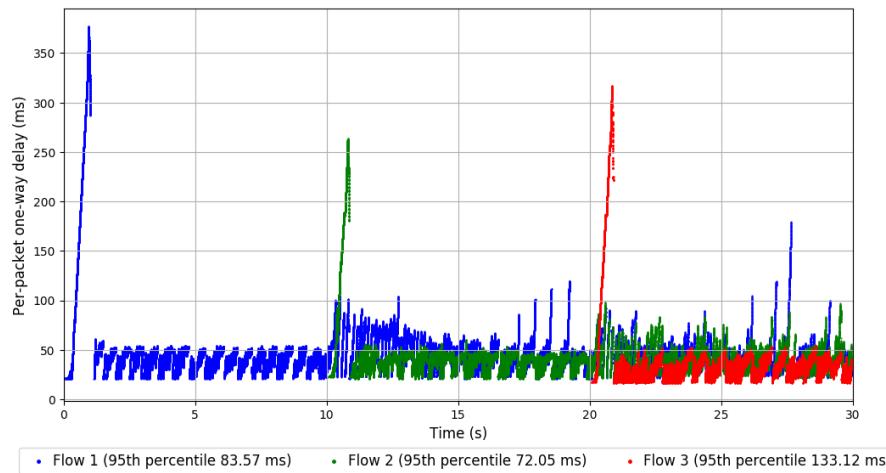
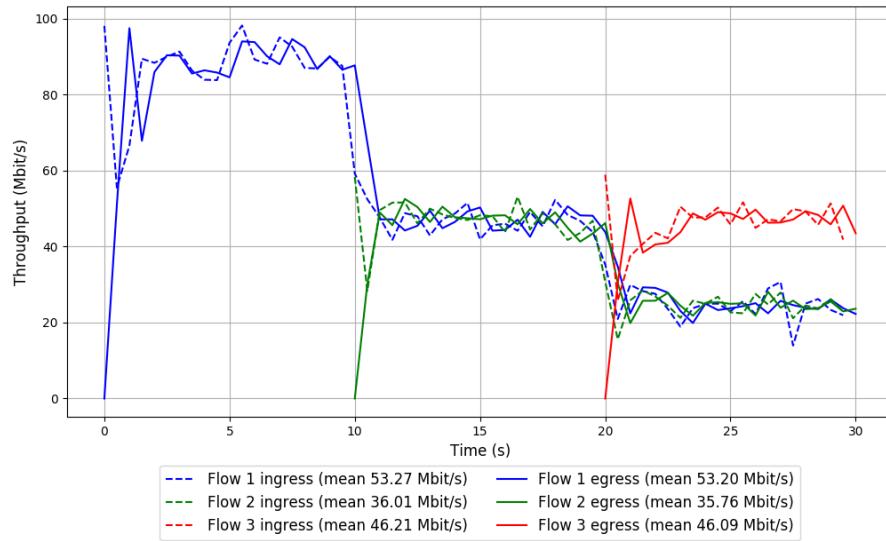


Run 2: Statistics of Verus

```
Start at: 2019-06-28 12:10:50
End at: 2019-06-28 12:11:20
Local clock offset: -1.173 ms
Remote clock offset: -2.356 ms

# Below is generated by plot.py at 2019-06-28 14:01:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 82.456 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 53.20 Mbit/s
95th percentile per-packet one-way delay: 83.573 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 35.76 Mbit/s
95th percentile per-packet one-way delay: 72.049 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 46.09 Mbit/s
95th percentile per-packet one-way delay: 133.119 ms
Loss rate: 0.45%
```

Run 2: Report of Verus — Data Link

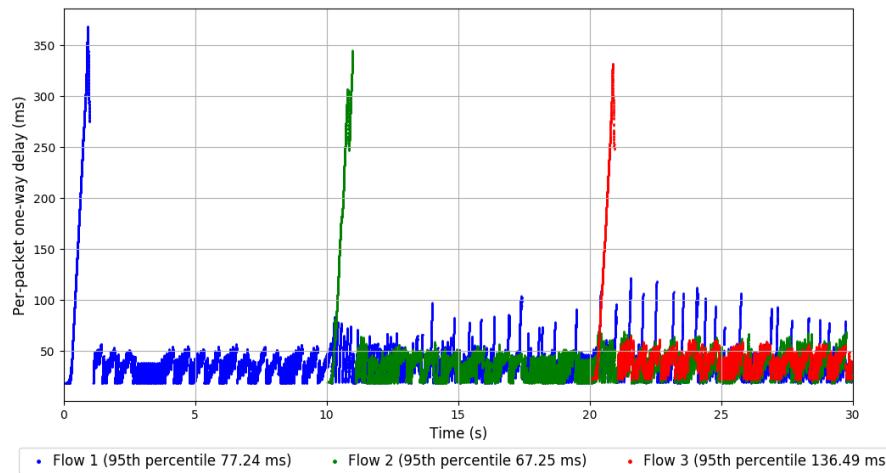
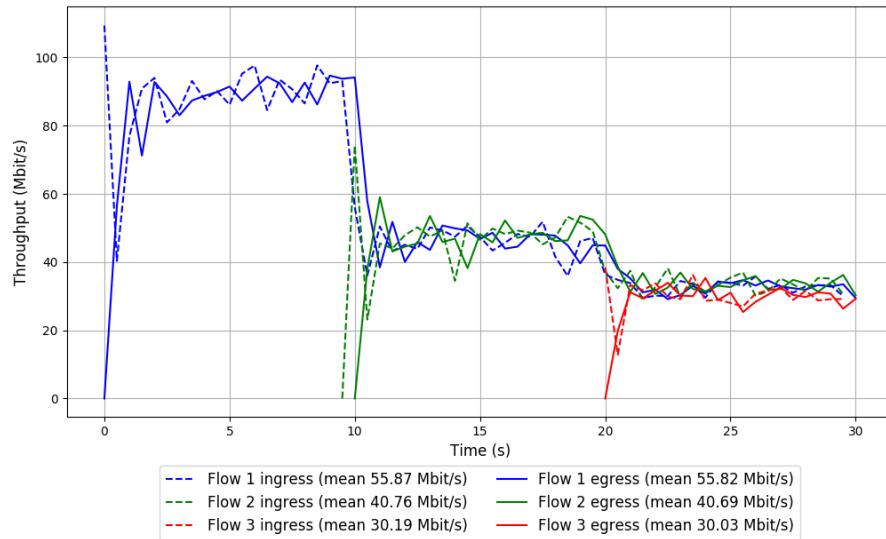


Run 3: Statistics of Verus

```
Start at: 2019-06-28 12:37:26
End at: 2019-06-28 12:37:56
Local clock offset: -1.033 ms
Remote clock offset: -4.412 ms

# Below is generated by plot.py at 2019-06-28 14:01:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.86 Mbit/s
95th percentile per-packet one-way delay: 78.740 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 55.82 Mbit/s
95th percentile per-packet one-way delay: 77.237 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 40.69 Mbit/s
95th percentile per-packet one-way delay: 67.252 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 136.490 ms
Loss rate: 0.80%
```

Run 3: Report of Verus — Data Link

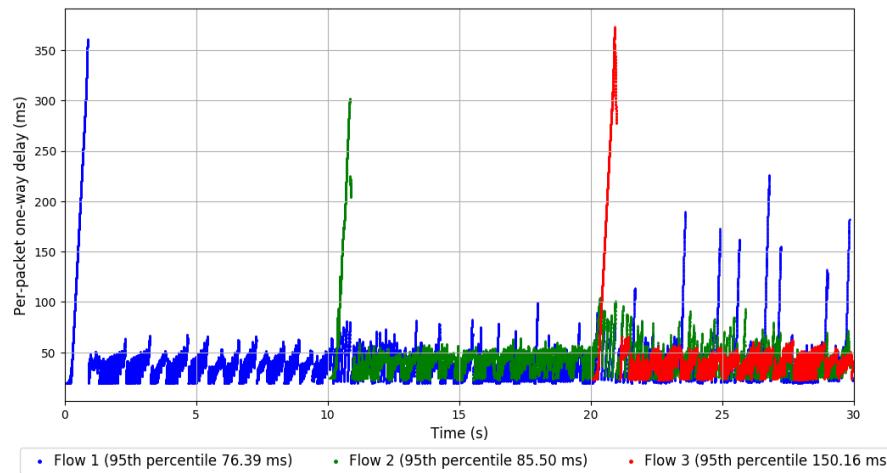
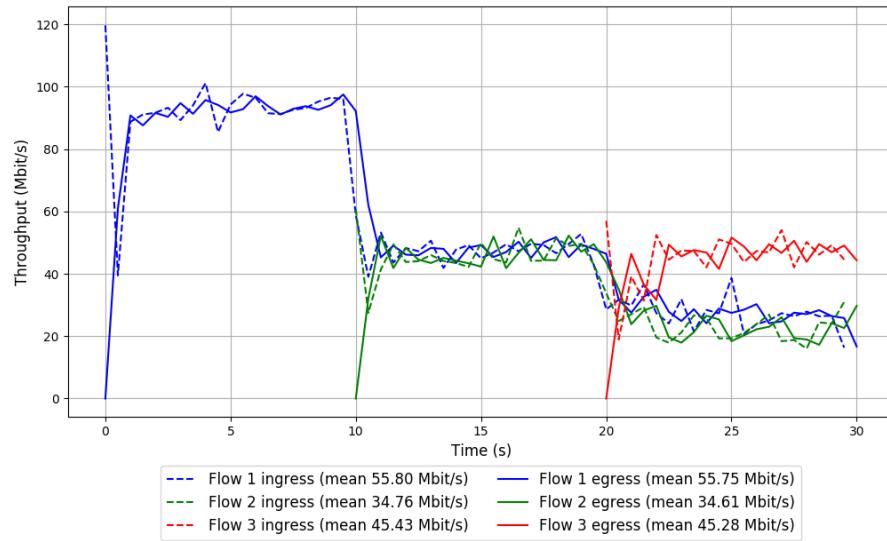


Run 4: Statistics of Verus

```
Start at: 2019-06-28 13:03:56
End at: 2019-06-28 13:04:26
Local clock offset: -0.71 ms
Remote clock offset: -5.175 ms

# Below is generated by plot.py at 2019-06-28 14:01:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 84.094 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 55.75 Mbit/s
95th percentile per-packet one-way delay: 76.393 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 34.61 Mbit/s
95th percentile per-packet one-way delay: 85.504 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 45.28 Mbit/s
95th percentile per-packet one-way delay: 150.162 ms
Loss rate: 0.60%
```

Run 4: Report of Verus — Data Link

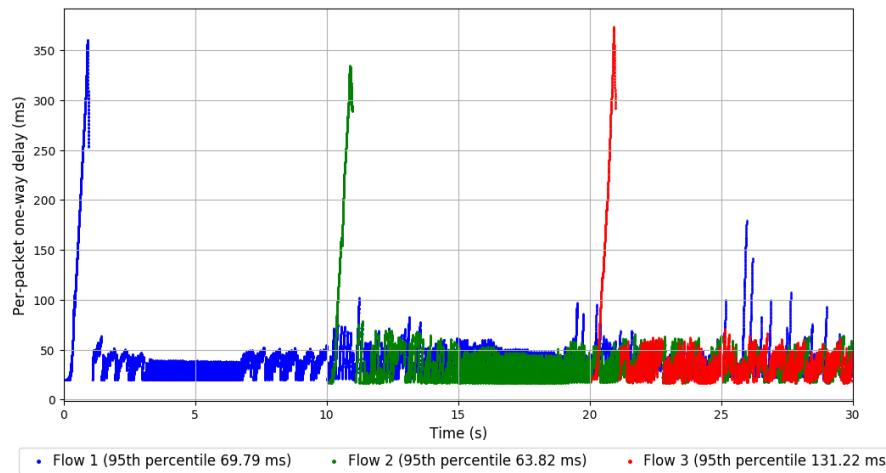
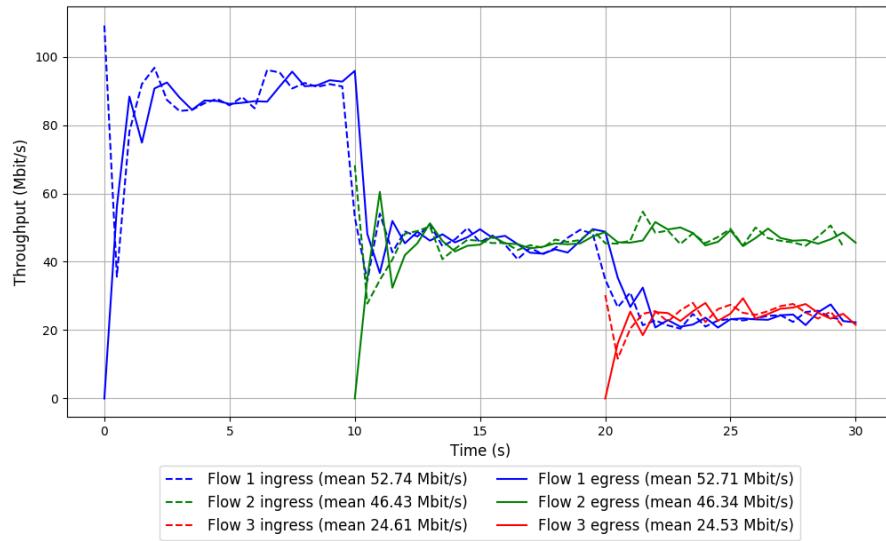


Run 5: Statistics of Verus

```
Start at: 2019-06-28 13:30:53
End at: 2019-06-28 13:31:23
Local clock offset: -0.645 ms
Remote clock offset: -3.686 ms

# Below is generated by plot.py at 2019-06-28 14:02:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.68 Mbit/s
95th percentile per-packet one-way delay: 68.861 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 52.71 Mbit/s
95th percentile per-packet one-way delay: 69.788 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 46.34 Mbit/s
95th percentile per-packet one-way delay: 63.816 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 24.53 Mbit/s
95th percentile per-packet one-way delay: 131.220 ms
Loss rate: 0.57%
```

Run 5: Report of Verus — Data Link

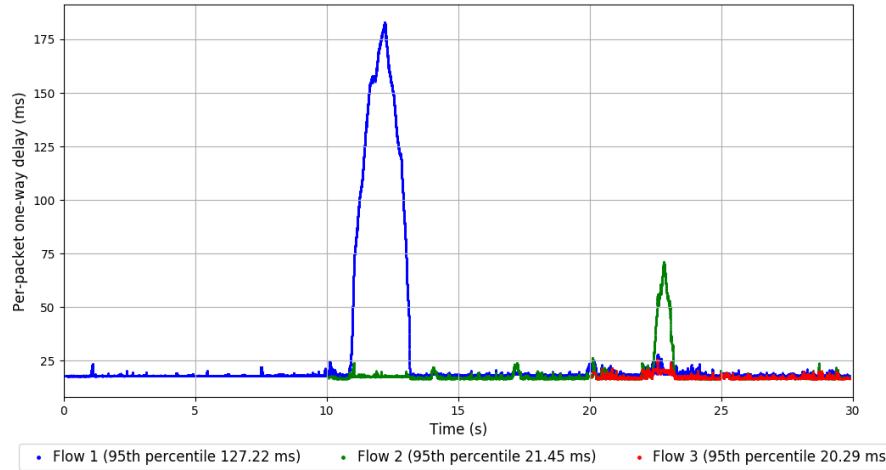
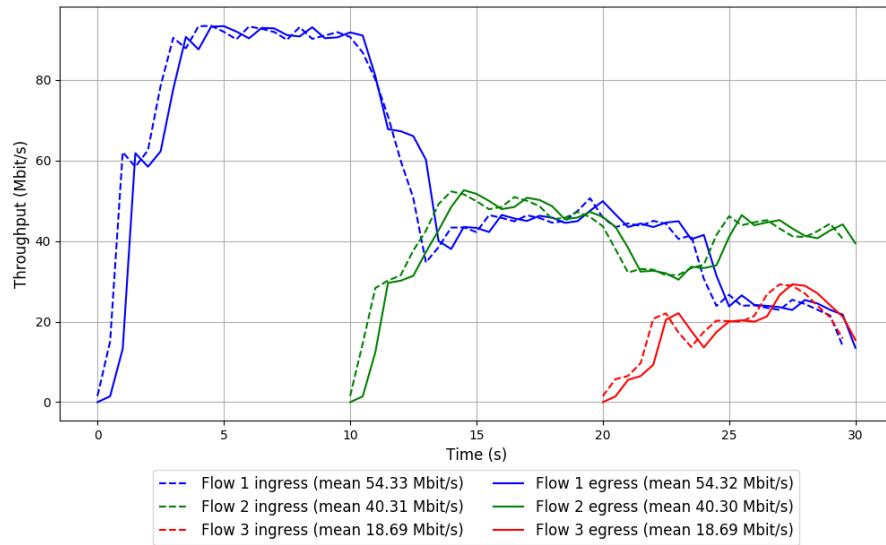


```
Run 1: Statistics of PCC-Vivace

Start at: 2019-06-28 11:53:30
End at: 2019-06-28 11:54:00
Local clock offset: -1.318 ms
Remote clock offset: -2.48 ms

# Below is generated by plot.py at 2019-06-28 14:02:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.27 Mbit/s
95th percentile per-packet one-way delay: 68.406 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 54.32 Mbit/s
95th percentile per-packet one-way delay: 127.219 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 40.30 Mbit/s
95th percentile per-packet one-way delay: 21.455 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 18.69 Mbit/s
95th percentile per-packet one-way delay: 20.289 ms
Loss rate: 0.27%
```

Run 1: Report of PCC-Vivace — Data Link

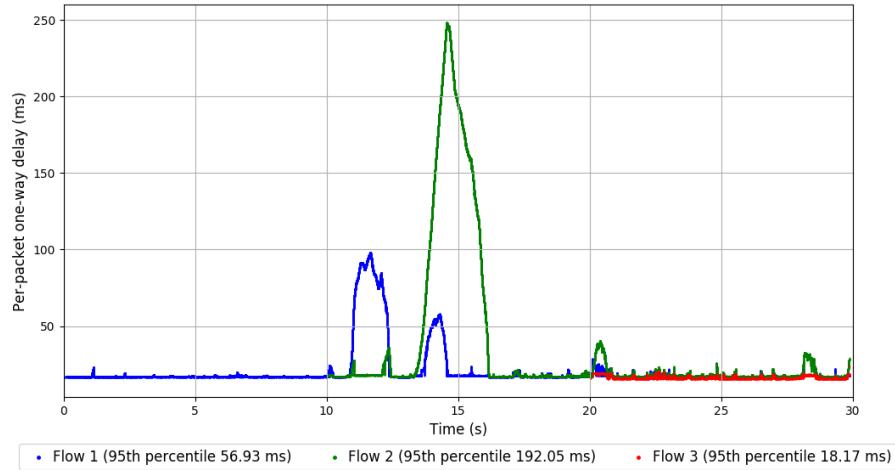
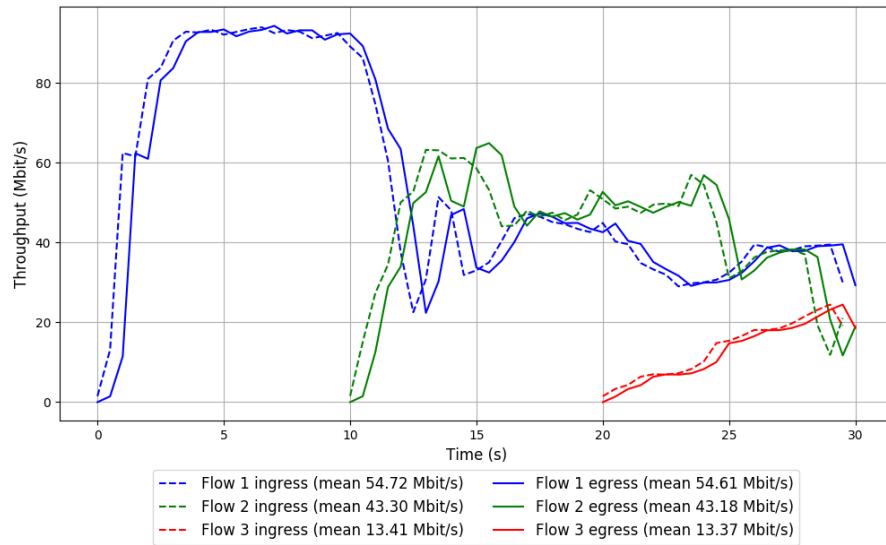


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-06-28 12:20:23
End at: 2019-06-28 12:20:53
Local clock offset: -1.376 ms
Remote clock offset: -2.126 ms

# Below is generated by plot.py at 2019-06-28 14:02:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.72 Mbit/s
95th percentile per-packet one-way delay: 91.135 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 54.61 Mbit/s
95th percentile per-packet one-way delay: 56.931 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 43.18 Mbit/s
95th percentile per-packet one-way delay: 192.047 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 13.37 Mbit/s
95th percentile per-packet one-way delay: 18.167 ms
Loss rate: 0.49%
```

Run 2: Report of PCC-Vivace — Data Link

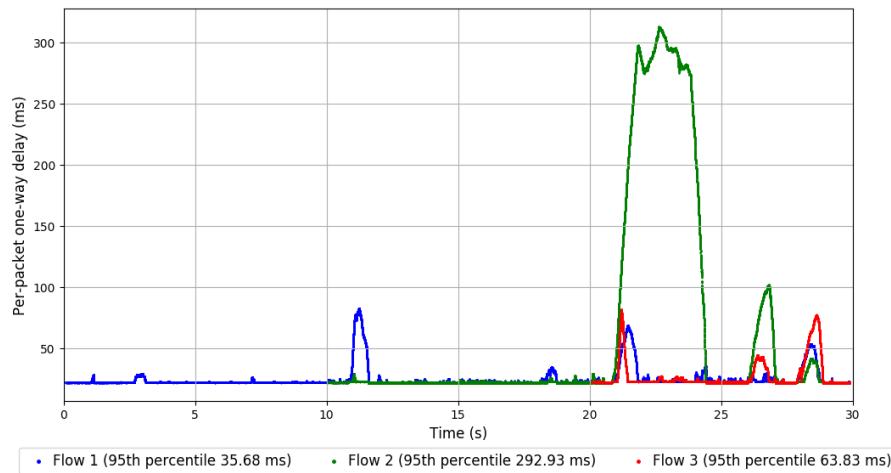
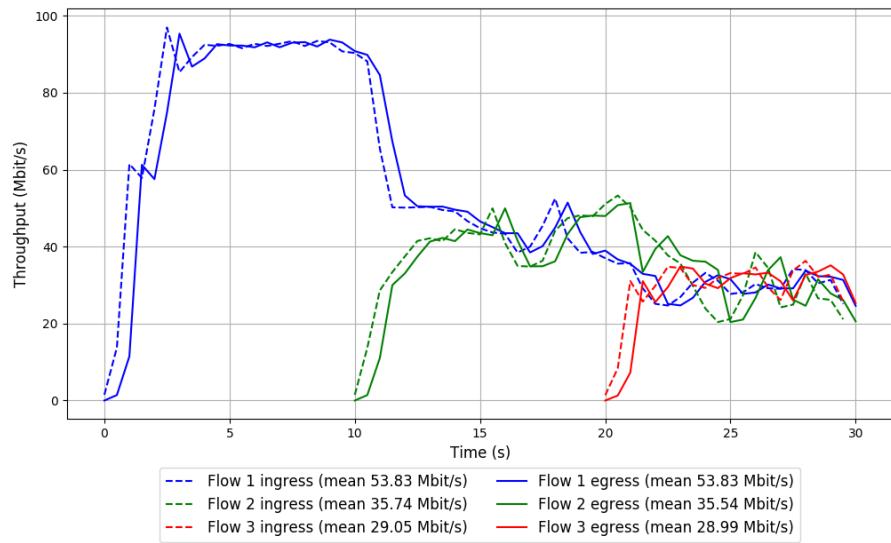


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-06-28 12:46:59
End at: 2019-06-28 12:47:29
Local clock offset: -1.164 ms
Remote clock offset: -4.814 ms

# Below is generated by plot.py at 2019-06-28 14:02:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 87.346 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 53.83 Mbit/s
95th percentile per-packet one-way delay: 35.678 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 35.54 Mbit/s
95th percentile per-packet one-way delay: 292.931 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 28.99 Mbit/s
95th percentile per-packet one-way delay: 63.828 ms
Loss rate: 0.52%
```

Run 3: Report of PCC-Vivace — Data Link

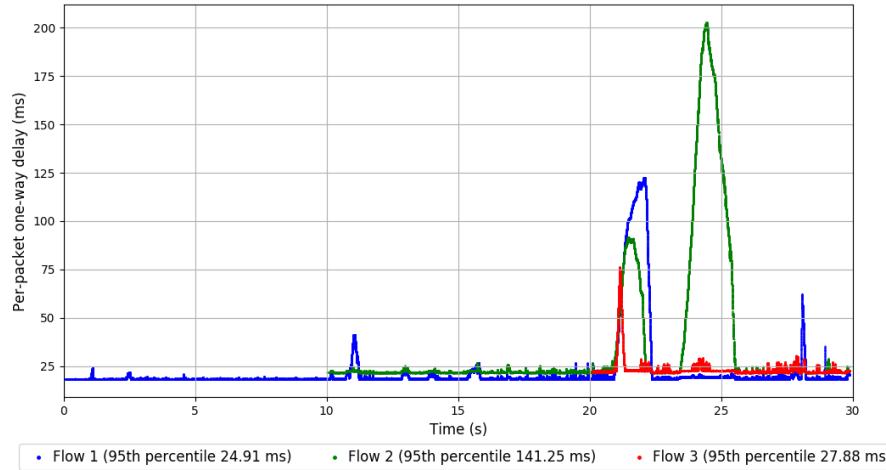
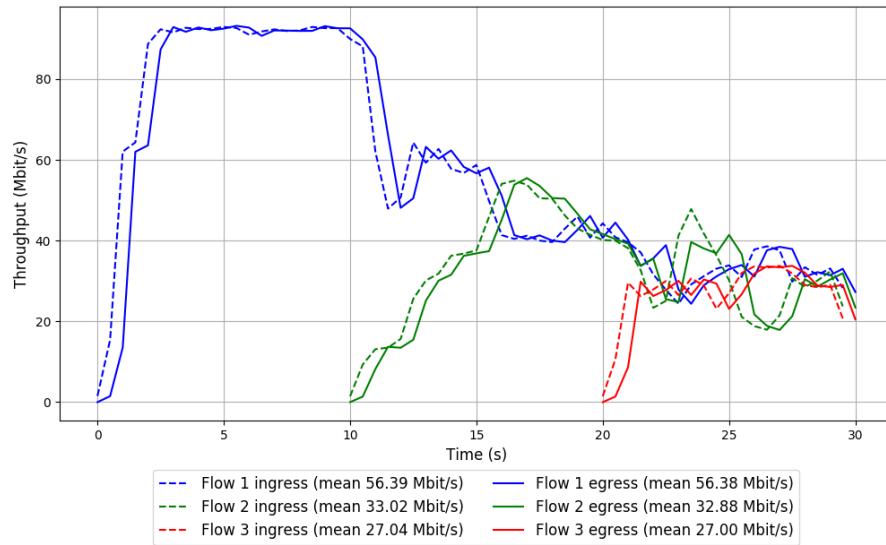


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-06-28 13:13:38
End at: 2019-06-28 13:14:08
Local clock offset: -1.037 ms
Remote clock offset: -4.645 ms

# Below is generated by plot.py at 2019-06-28 14:02:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 63.438 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 56.38 Mbit/s
95th percentile per-packet one-way delay: 24.914 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 32.88 Mbit/s
95th percentile per-packet one-way delay: 141.246 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 27.00 Mbit/s
95th percentile per-packet one-way delay: 27.884 ms
Loss rate: 0.41%
```

Run 4: Report of PCC-Vivace — Data Link

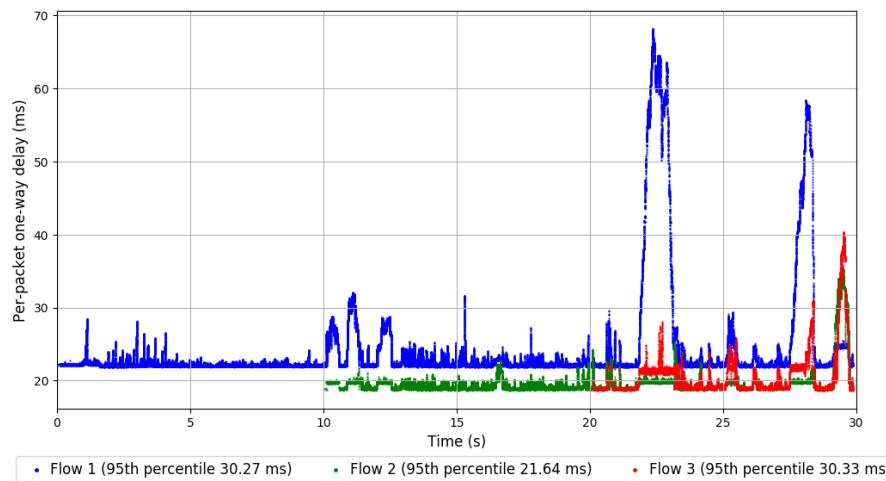
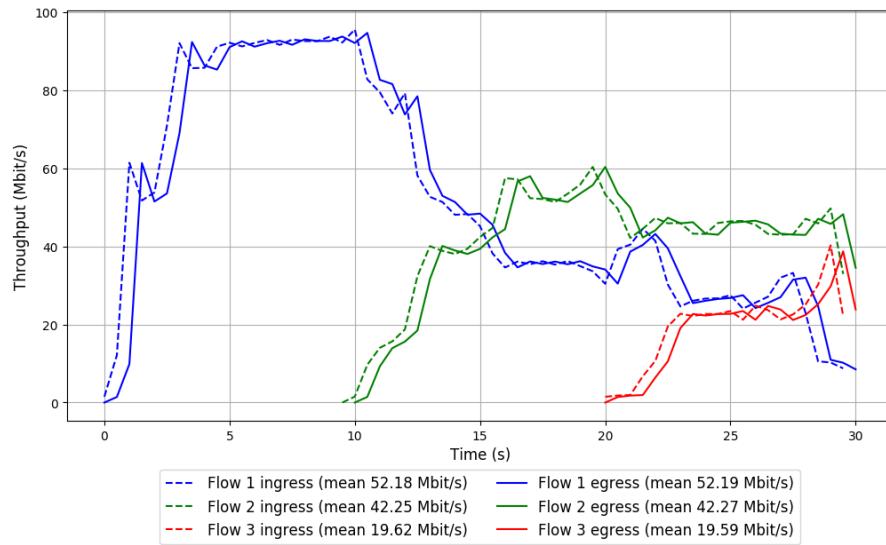


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-06-28 13:40:42
End at: 2019-06-28 13:41:12
Local clock offset: -0.182 ms
Remote clock offset: -5.605 ms

# Below is generated by plot.py at 2019-06-28 14:02:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.75 Mbit/s
95th percentile per-packet one-way delay: 28.462 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 52.19 Mbit/s
95th percentile per-packet one-way delay: 30.273 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 42.27 Mbit/s
95th percentile per-packet one-way delay: 21.644 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 19.59 Mbit/s
95th percentile per-packet one-way delay: 30.327 ms
Loss rate: 0.33%
```

Run 5: Report of PCC-Vivace — Data Link

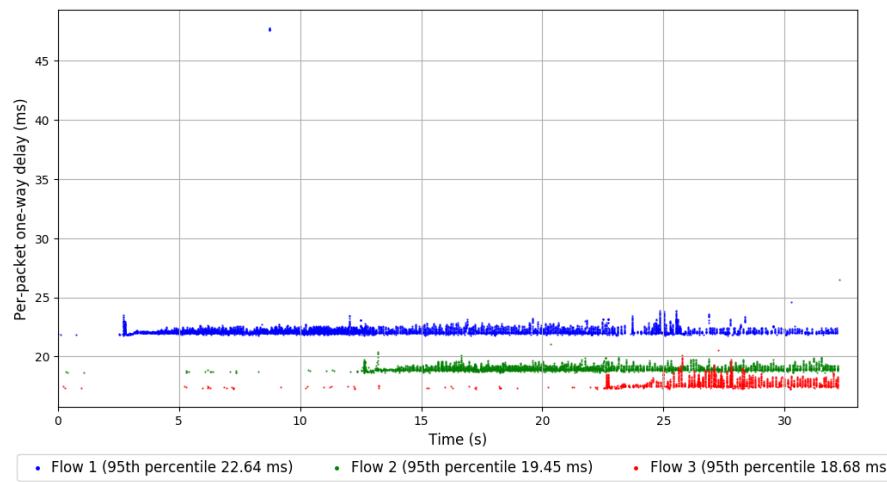
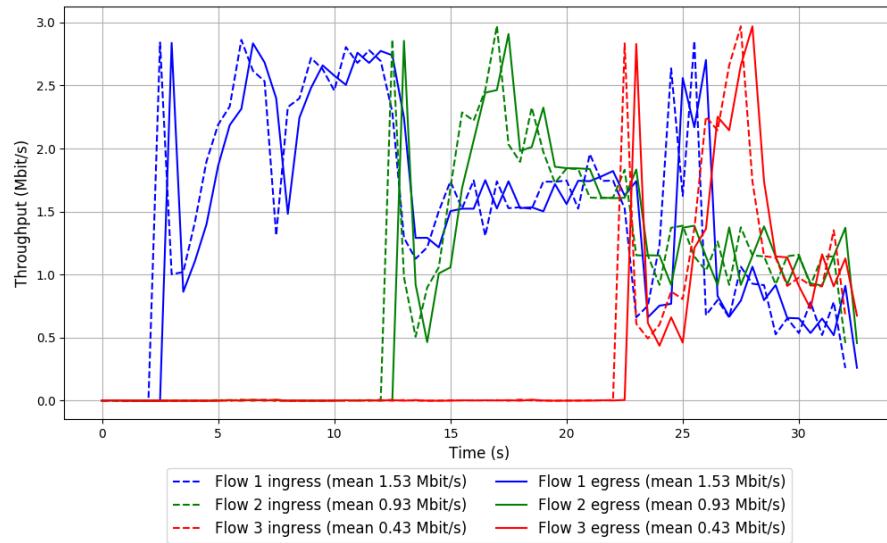


```
Run 1: Statistics of WebRTC media

Start at: 2019-06-28 11:52:22
End at: 2019-06-28 11:52:52
Local clock offset: -3.059 ms
Remote clock offset: -5.131 ms

# Below is generated by plot.py at 2019-06-28 14:02:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 22.481 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 22.639 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 19.451 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 18.685 ms
Loss rate: 0.82%
```

Run 1: Report of WebRTC media — Data Link

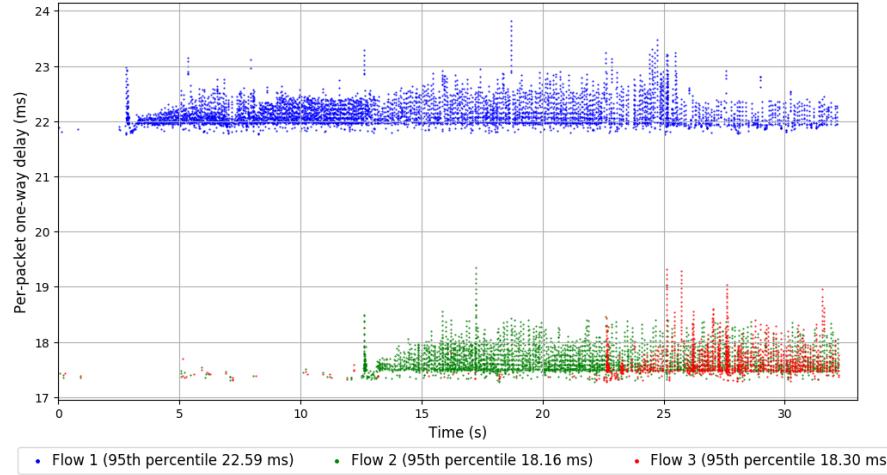
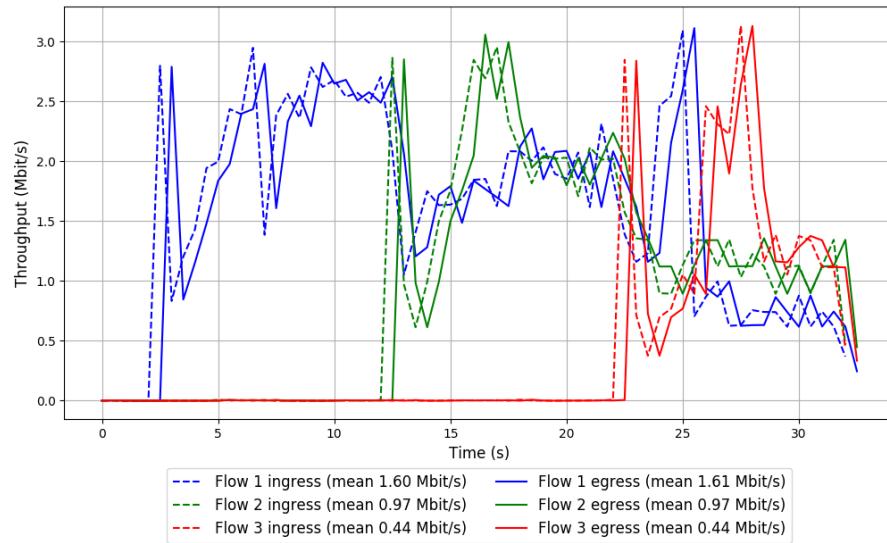


Run 2: Statistics of WebRTC media

```
Start at: 2019-06-28 12:19:16
End at: 2019-06-28 12:19:46
Local clock offset: -1.751 ms
Remote clock offset: -4.267 ms

# Below is generated by plot.py at 2019-06-28 14:02:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 22.477 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 22.595 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 18.157 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 18.303 ms
Loss rate: 0.39%
```

Run 2: Report of WebRTC media — Data Link

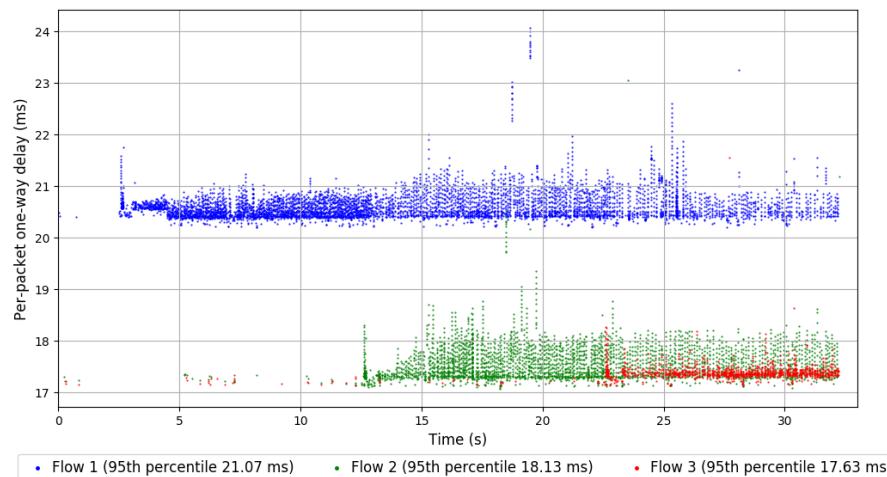
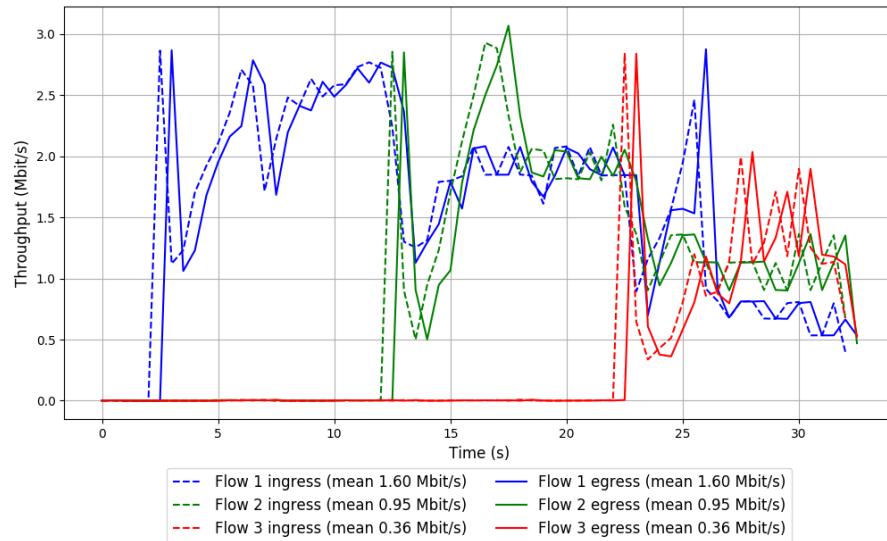


Run 3: Statistics of WebRTC media

```
Start at: 2019-06-28 12:45:52
End at: 2019-06-28 12:46:22
Local clock offset: -1.133 ms
Remote clock offset: -3.222 ms

# Below is generated by plot.py at 2019-06-28 14:02:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 20.944 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 21.073 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 18.129 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 17.631 ms
Loss rate: 0.74%
```

Run 3: Report of WebRTC media — Data Link

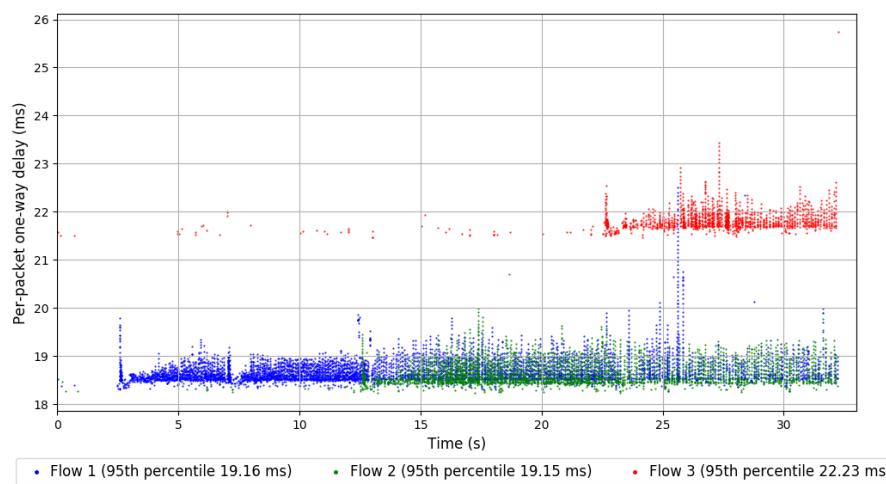
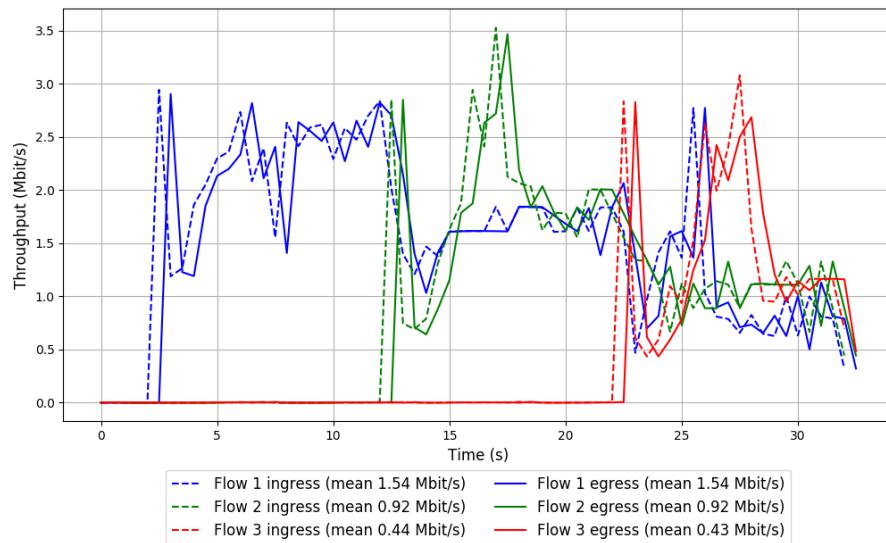


Run 4: Statistics of WebRTC media

```
Start at: 2019-06-28 13:12:31
End at: 2019-06-28 13:13:01
Local clock offset: -1.952 ms
Remote clock offset: -5.644 ms

# Below is generated by plot.py at 2019-06-28 14:02:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 21.858 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 19.159 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 19.148 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 22.230 ms
Loss rate: 0.75%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-06-28 13:39:35
End at: 2019-06-28 13:40:05
Local clock offset: -0.397 ms
Remote clock offset: -4.833 ms

# Below is generated by plot.py at 2019-06-28 14:02:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 21.876 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 22.045 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 18.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 18.979 ms
Loss rate: 0.78%
```

Run 5: Report of WebRTC media — Data Link

