

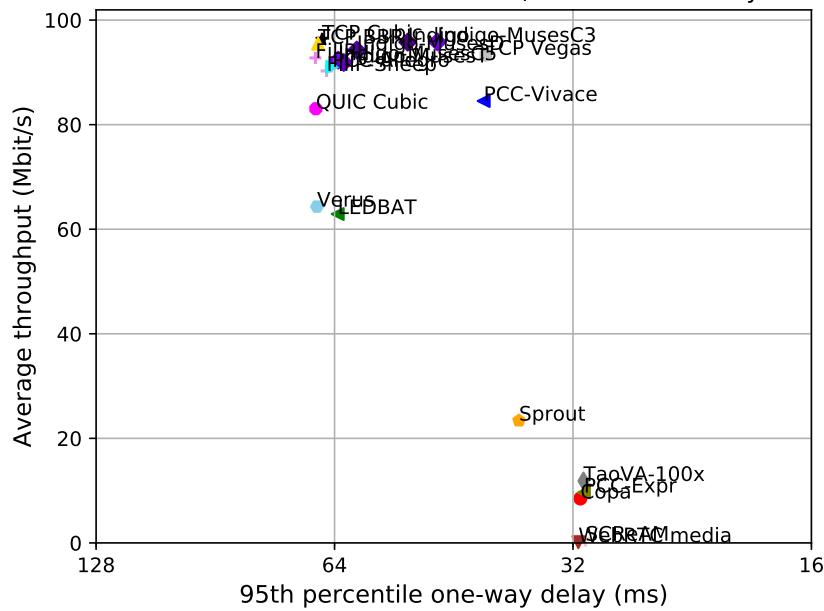
Pantheon Report

Generated at 2019-01-25 03:28:52 (UTC).
Data path: AWS California 2 on `ens5` (*local*) → Mexico on `em1` (*remote*).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

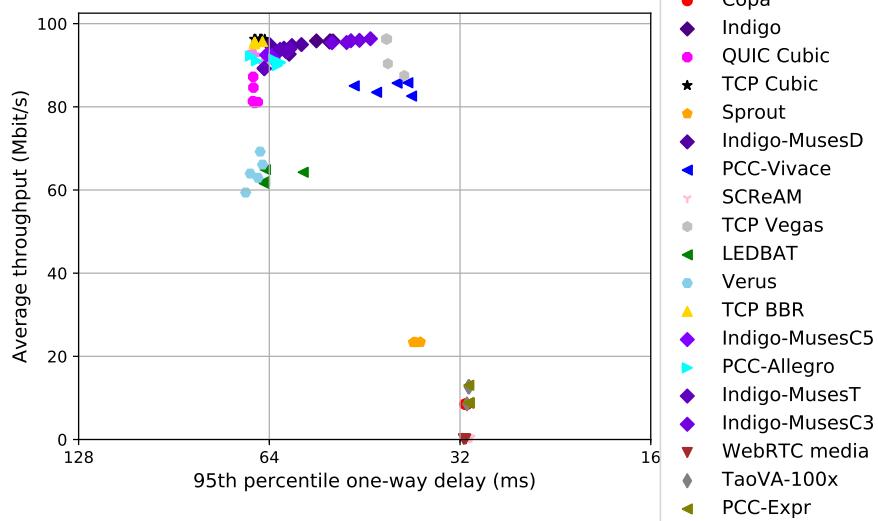
```
System info:  
Linux 4.15.0-1031-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f  
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d  
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd  
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab  
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
M src/ScreamClient  
M src/ScreamServer  
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26  
M src/examples/cellsim.cc  
M src/examples/sproutbt2.cc  
M src/network/sproutconn.cc  
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494  
M src/verus.hpp  
M tools/plot.py
```

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

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



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



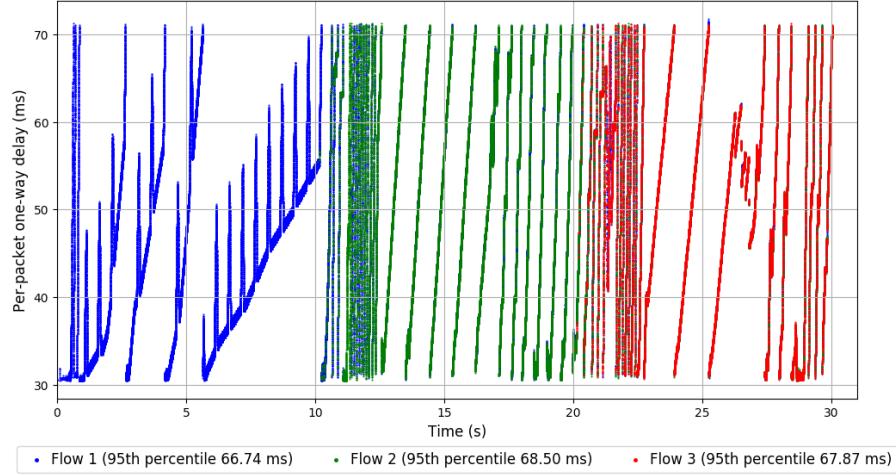
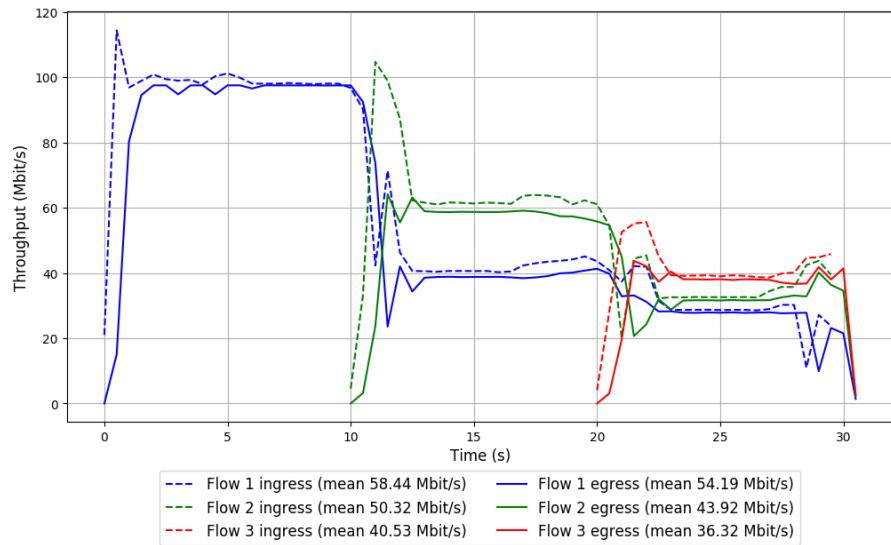
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	60.27	36.66	32.52	65.99	68.05	68.19	6.62	11.05	11.31
Copa	5	0.00	9.99	5.57	30.87	31.88	30.95	98.04	71.59	78.53
TCP Cubic	5	75.80	19.14	23.23	66.18	66.94	66.44	0.89	0.57	0.66
FillP	5	58.63	41.36	20.18	66.31	68.88	68.33	29.28	47.23	52.76
FillP-Sheep	5	54.91	42.06	22.37	63.56	66.99	66.38	9.13	16.84	16.28
Indigo	5	61.24	36.23	32.27	47.94	53.78	57.29	0.01	0.03	0.00
Indigo-MusesC3	5	52.20	51.12	34.61	44.72	48.17	54.96	0.25	0.45	1.89
Indigo-MusesC5	5	56.20	50.28	11.39	60.60	65.00	65.88	10.22	18.11	28.29
Indigo-MusesD	5	62.79	40.37	17.59	55.81	58.37	66.77	2.88	4.99	16.53
Indigo-MusesT	5	57.23	48.40	10.60	58.84	64.65	65.74	13.40	25.05	30.76
LEDBAT	5	38.96	25.84	20.36	62.34	64.66	55.62	0.07	0.44	0.09
PCC-Allegro	5	79.80	13.30	7.30	64.28	65.55	63.60	4.01	5.11	3.53
PCC-Expr	5	1.91	8.93	5.50	30.90	31.00	31.06	79.02	43.84	36.70
QUIC Cubic	5	58.71	30.34	12.72	67.37	67.82	68.00	2.57	1.29	1.10
SCReAM	5	0.21	0.21	0.22	30.87	30.86	30.86	0.00	0.00	0.00
Sprout	5	11.80	11.70	11.54	37.29	37.60	37.65	0.00	0.04	0.00
TaoVA-100x	5	6.29	5.73	5.48	31.27	31.13	30.95	84.29	43.73	45.82
TCP Vegas	5	74.88	18.57	18.35	41.51	39.55	38.26	0.44	0.01	0.03
Verus	5	36.20	35.89	21.14	66.06	68.26	73.84	24.48	50.63	50.24
PCC-Vivace	5	62.66	25.60	14.63	42.36	41.66	43.07	0.05	0.02	0.00
WebRTC media	5	0.05	0.05	0.05	31.46	31.50	31.58	0.01	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-25 01:08:22
End at: 2019-01-25 01:08:52
Local clock offset: 0.476 ms
Remote clock offset: -4.56 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 67.535 ms
Loss rate: 9.38%
-- Flow 1:
Average throughput: 54.19 Mbit/s
95th percentile per-packet one-way delay: 66.740 ms
Loss rate: 7.23%
-- Flow 2:
Average throughput: 43.92 Mbit/s
95th percentile per-packet one-way delay: 68.503 ms
Loss rate: 12.75%
-- Flow 3:
Average throughput: 36.32 Mbit/s
95th percentile per-packet one-way delay: 67.866 ms
Loss rate: 10.30%
```

Run 1: Report of TCP BBR — Data Link

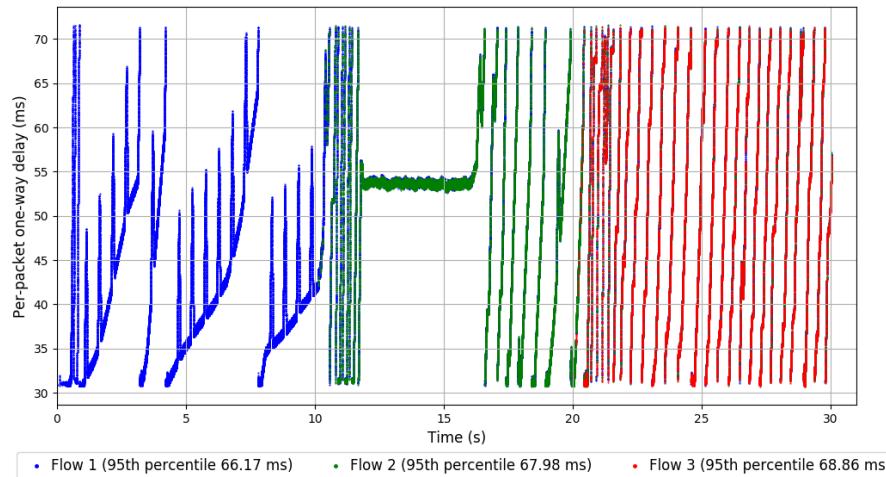
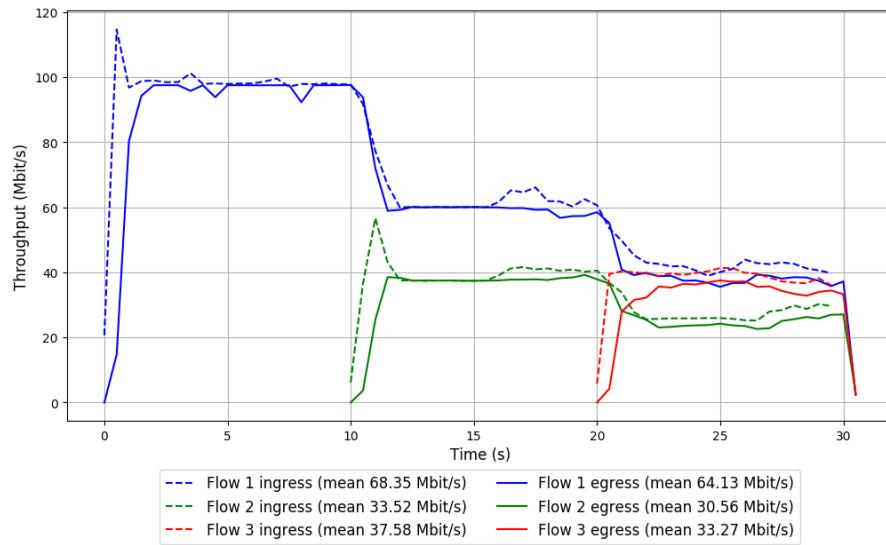


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-25 01:35:23
End at: 2019-01-25 01:35:53
Local clock offset: 0.552 ms
Remote clock offset: -4.513 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.56 Mbit/s
95th percentile per-packet one-way delay: 67.430 ms
Loss rate: 7.30%
-- Flow 1:
Average throughput: 64.13 Mbit/s
95th percentile per-packet one-way delay: 66.171 ms
Loss rate: 6.10%
-- Flow 2:
Average throughput: 30.56 Mbit/s
95th percentile per-packet one-way delay: 67.981 ms
Loss rate: 8.75%
-- Flow 3:
Average throughput: 33.27 Mbit/s
95th percentile per-packet one-way delay: 68.859 ms
Loss rate: 11.24%
```

Run 2: Report of TCP BBR — Data Link

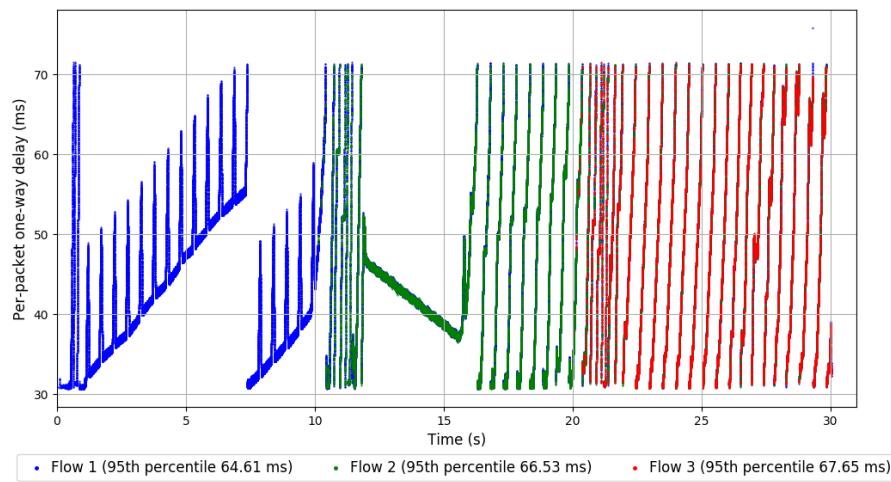
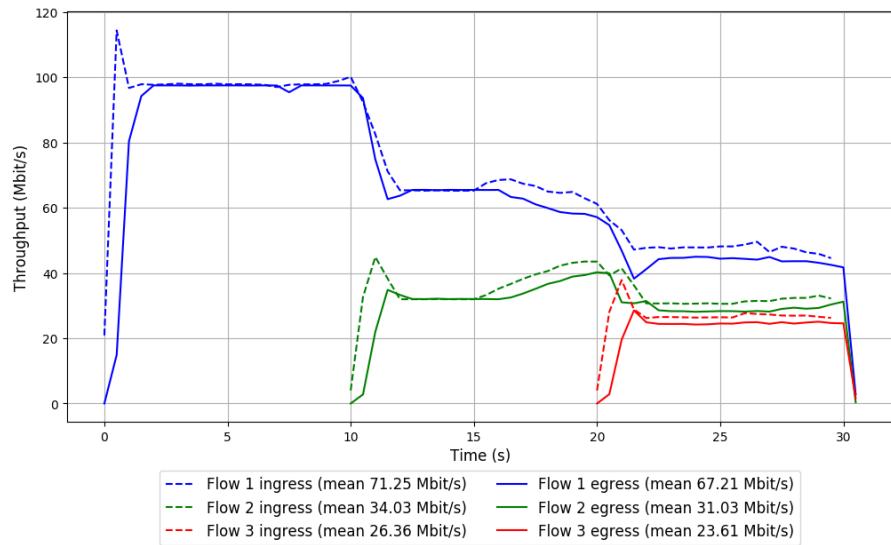


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-25 02:01:37
End at: 2019-01-25 02:02:07
Local clock offset: 0.509 ms
Remote clock offset: -3.838 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.70 Mbit/s
95th percentile per-packet one-way delay: 65.606 ms
Loss rate: 6.78%
-- Flow 1:
Average throughput: 67.21 Mbit/s
95th percentile per-packet one-way delay: 64.611 ms
Loss rate: 5.67%
-- Flow 2:
Average throughput: 31.03 Mbit/s
95th percentile per-packet one-way delay: 66.535 ms
Loss rate: 8.83%
-- Flow 3:
Average throughput: 23.61 Mbit/s
95th percentile per-packet one-way delay: 67.653 ms
Loss rate: 10.48%
```

Run 3: Report of TCP BBR — Data Link

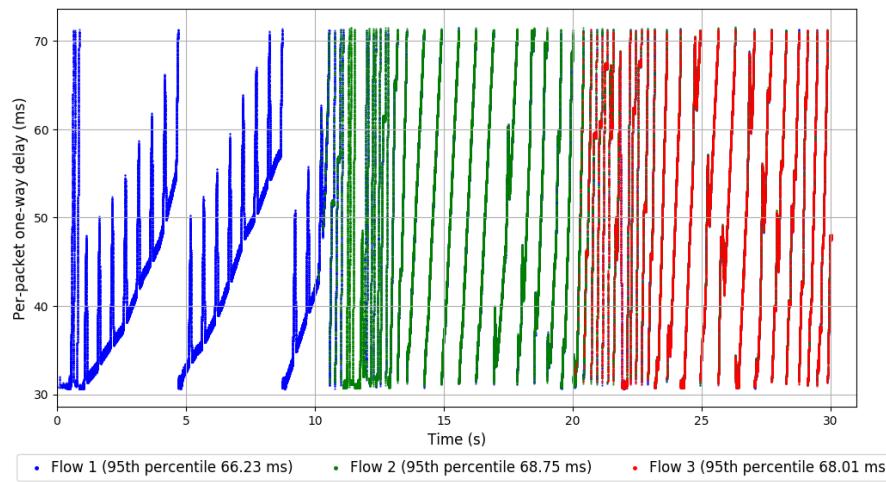
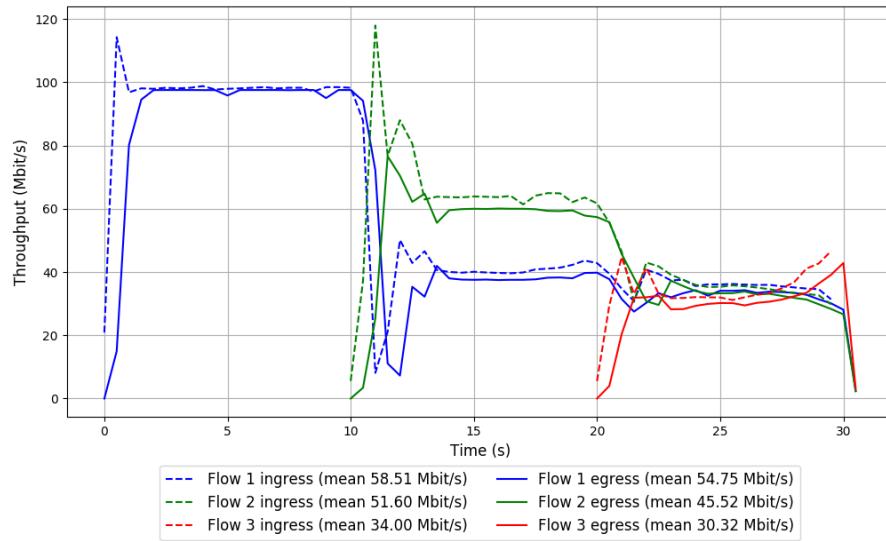


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-25 02:27:21
End at: 2019-01-25 02:27:51
Local clock offset: 0.558 ms
Remote clock offset: -3.203 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 67.588 ms
Loss rate: 8.62%
-- Flow 1:
Average throughput: 54.75 Mbit/s
95th percentile per-packet one-way delay: 66.228 ms
Loss rate: 6.37%
-- Flow 2:
Average throughput: 45.52 Mbit/s
95th percentile per-packet one-way delay: 68.755 ms
Loss rate: 11.76%
-- Flow 3:
Average throughput: 30.32 Mbit/s
95th percentile per-packet one-way delay: 68.008 ms
Loss rate: 10.69%
```

Run 4: Report of TCP BBR — Data Link

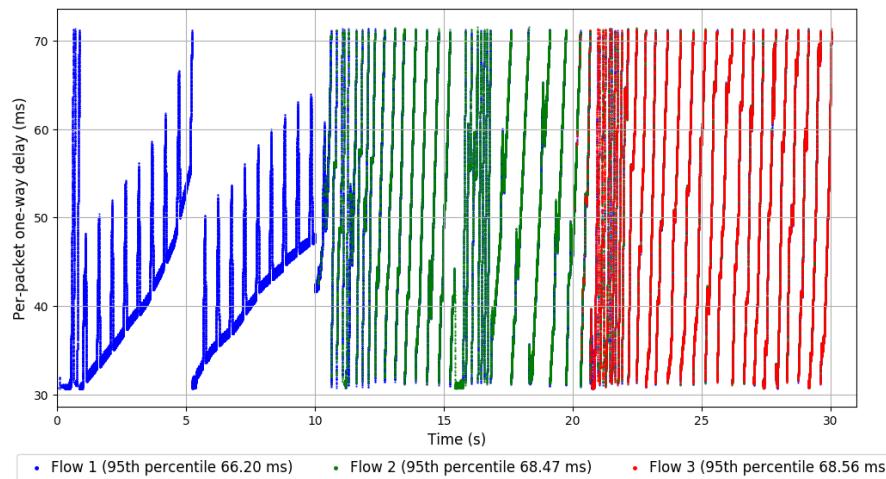
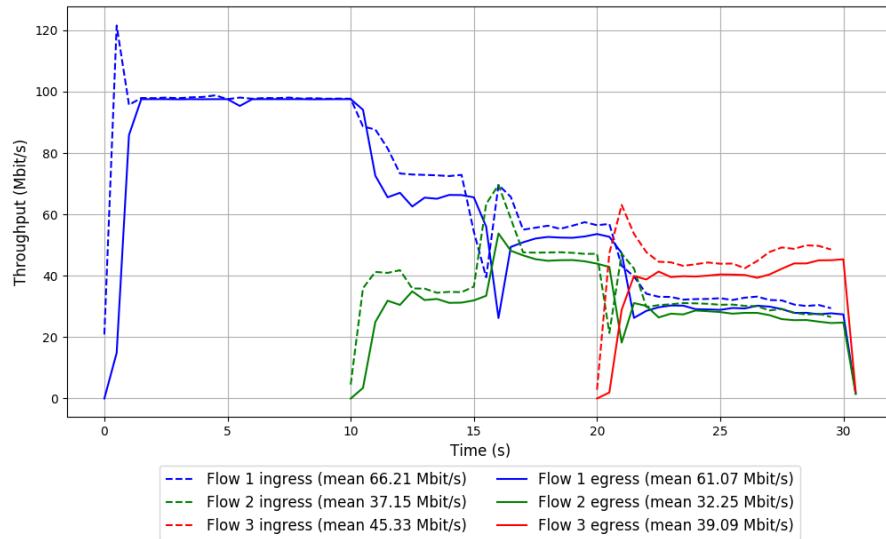


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-25 02:52:55
End at: 2019-01-25 02:53:25
Local clock offset: 0.79 ms
Remote clock offset: -2.769 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 67.560 ms
Loss rate: 9.87%
-- Flow 1:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 66.205 ms
Loss rate: 7.73%
-- Flow 2:
Average throughput: 32.25 Mbit/s
95th percentile per-packet one-way delay: 68.473 ms
Loss rate: 13.18%
-- Flow 3:
Average throughput: 39.09 Mbit/s
95th percentile per-packet one-way delay: 68.555 ms
Loss rate: 13.82%
```

Run 5: Report of TCP BBR — Data Link

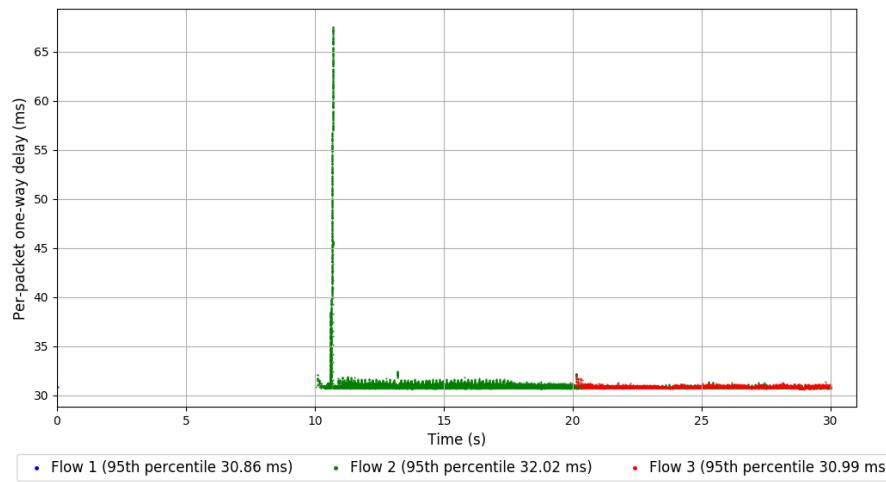
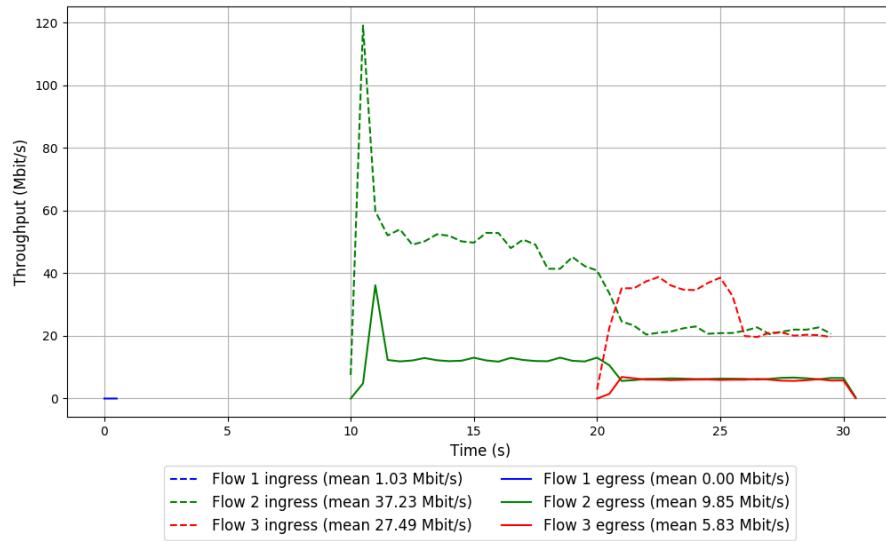


Run 1: Statistics of Copa

```
Start at: 2019-01-25 01:26:40
End at: 2019-01-25 01:27:10
Local clock offset: 0.602 ms
Remote clock offset: -4.67 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 31.448 ms
Loss rate: 74.96%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.857 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.85 Mbit/s
95th percentile per-packet one-way delay: 32.015 ms
Loss rate: 73.54%
-- Flow 3:
Average throughput: 5.83 Mbit/s
95th percentile per-packet one-way delay: 30.992 ms
Loss rate: 78.80%
```

Run 1: Report of Copa — Data Link

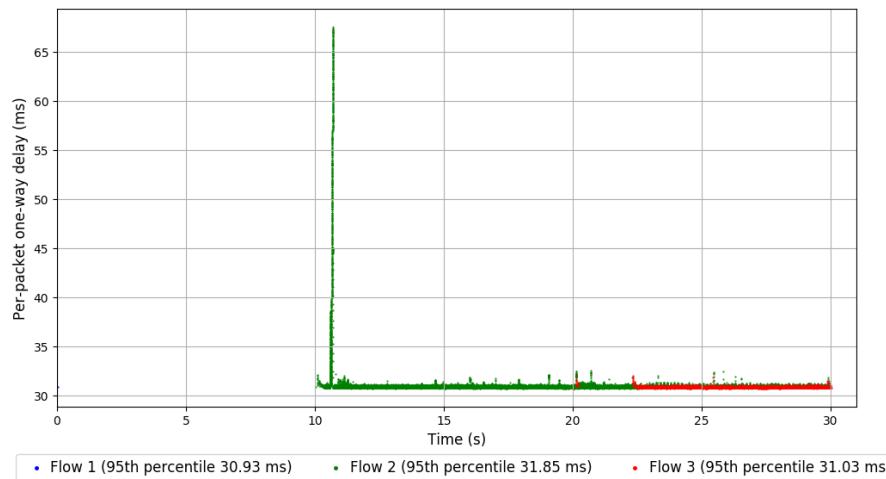
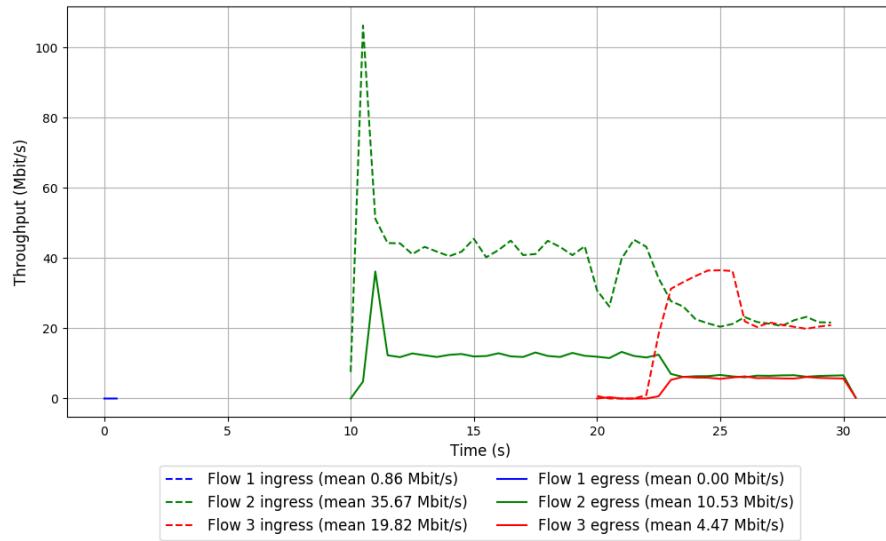


Run 2: Statistics of Copa

```
Start at: 2019-01-25 01:52:59
End at: 2019-01-25 01:53:29
Local clock offset: 0.489 ms
Remote clock offset: -4.034 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 31.390 ms
Loss rate: 71.99%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.928 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: 31.848 ms
Loss rate: 70.47%
-- Flow 3:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 31.030 ms
Loss rate: 77.43%
```

Run 2: Report of Copa — Data Link

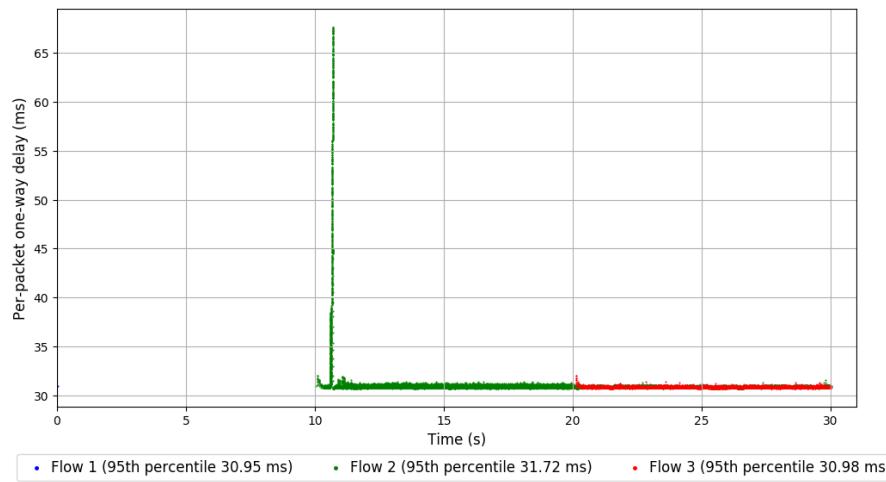
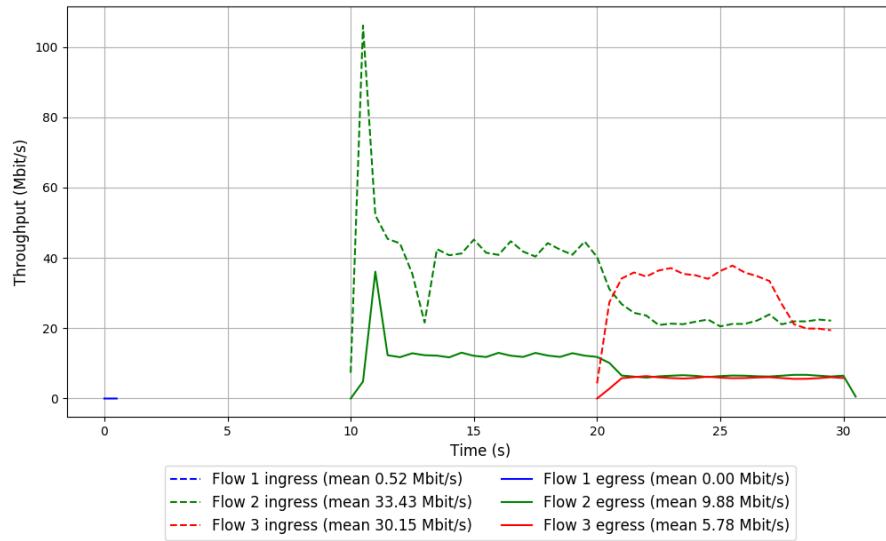


Run 3: Statistics of Copa

```
Start at: 2019-01-25 02:18:57
End at: 2019-01-25 02:19:27
Local clock offset: 0.538 ms
Remote clock offset: -3.406 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 31.195 ms
Loss rate: 73.67%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.947 ms
Loss rate: 97.24%
-- Flow 2:
Average throughput: 9.88 Mbit/s
95th percentile per-packet one-way delay: 31.723 ms
Loss rate: 70.45%
-- Flow 3:
Average throughput: 5.78 Mbit/s
95th percentile per-packet one-way delay: 30.979 ms
Loss rate: 80.84%
```

Run 3: Report of Copa — Data Link

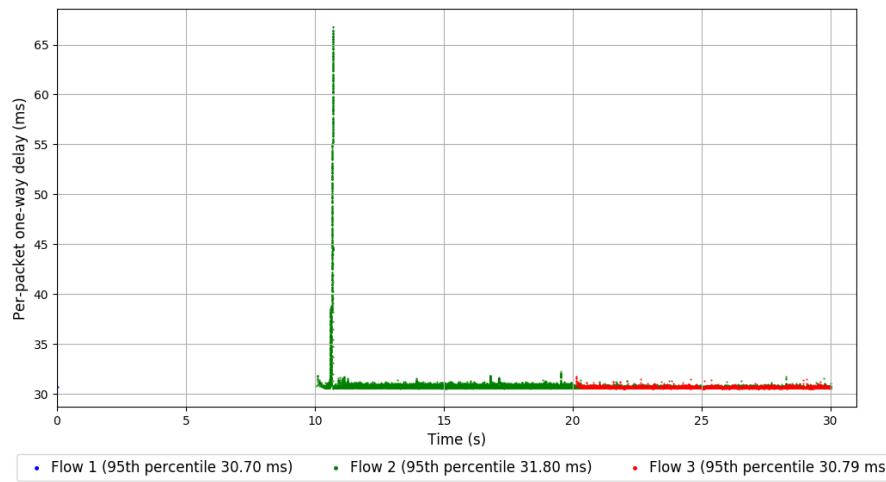
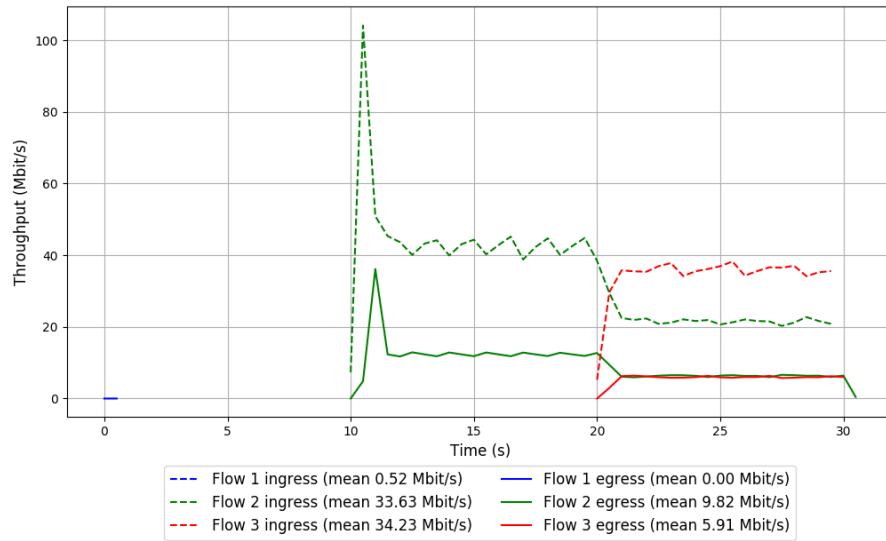


Run 4: Statistics of Copa

```
Start at: 2019-01-25 02:44:29
End at: 2019-01-25 02:44:59
Local clock offset: 0.712 ms
Remote clock offset: -3.031 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 31.193 ms
Loss rate: 74.84%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.697 ms
Loss rate: 97.24%
-- Flow 2:
Average throughput: 9.82 Mbit/s
95th percentile per-packet one-way delay: 31.803 ms
Loss rate: 70.81%
-- Flow 3:
Average throughput: 5.91 Mbit/s
95th percentile per-packet one-way delay: 30.793 ms
Loss rate: 82.80%
```

Run 4: Report of Copa — Data Link

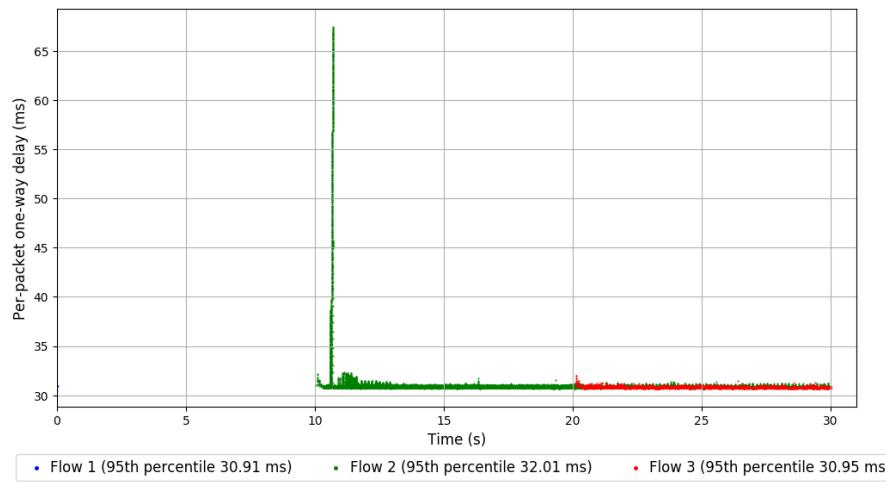
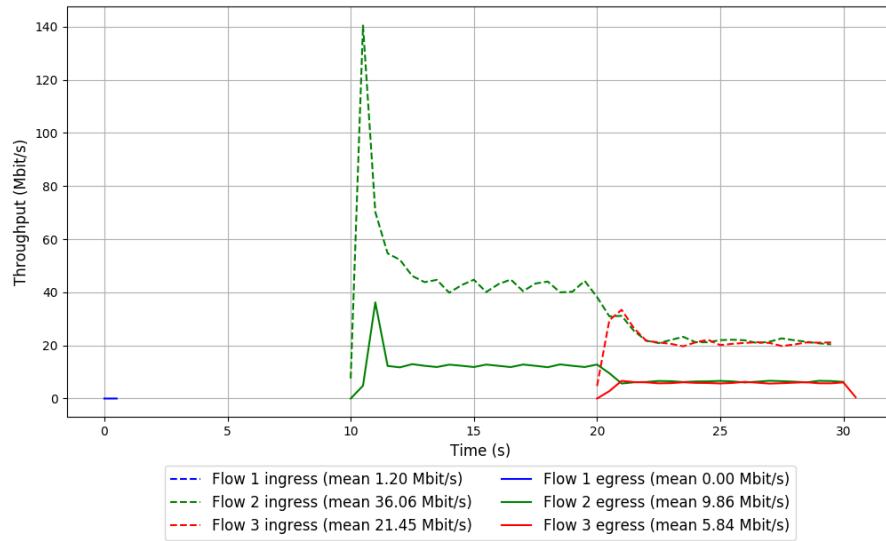


Run 5: Statistics of Copa

```
Start at: 2019-01-25 03:10:29
End at: 2019-01-25 03:10:59
Local clock offset: 0.73 ms
Remote clock offset: -2.477 ms

# Below is generated by plot.py at 2019-01-25 03:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 31.384 ms
Loss rate: 72.69%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.914 ms
Loss rate: 98.80%
-- Flow 2:
Average throughput: 9.86 Mbit/s
95th percentile per-packet one-way delay: 32.005 ms
Loss rate: 72.66%
-- Flow 3:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 30.951 ms
Loss rate: 72.77%
```

Run 5: Report of Copa — Data Link

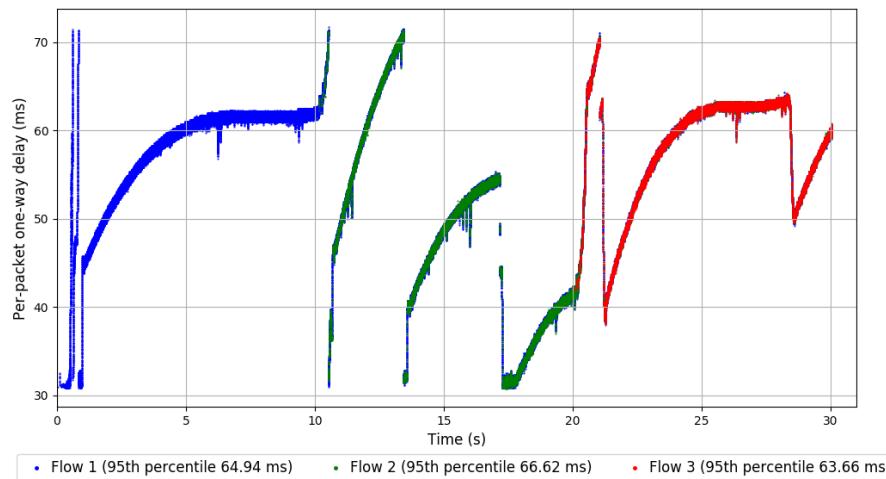
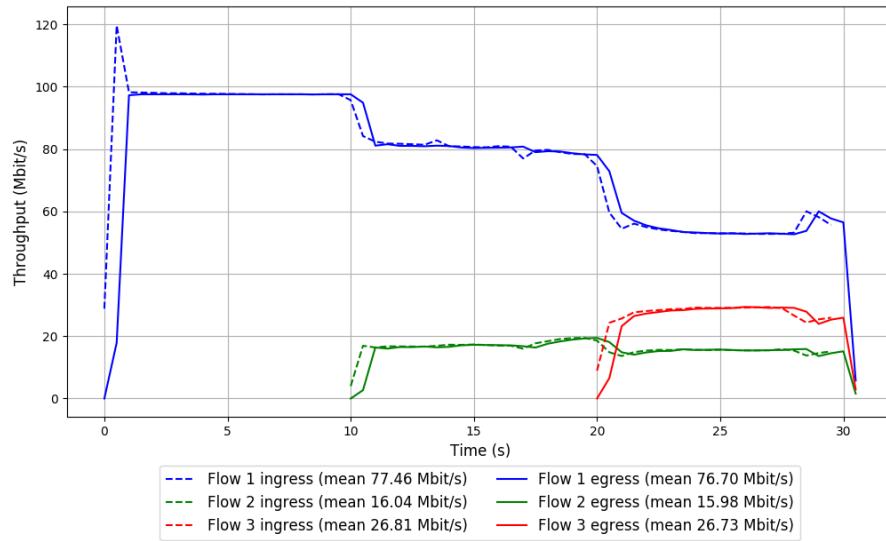


```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-25 01:22:37
End at: 2019-01-25 01:23:07
Local clock offset: 0.575 ms
Remote clock offset: -4.545 ms

# Below is generated by plot.py at 2019-01-25 03:18:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 65.080 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 76.70 Mbit/s
95th percentile per-packet one-way delay: 64.935 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 15.98 Mbit/s
95th percentile per-packet one-way delay: 66.623 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 26.73 Mbit/s
95th percentile per-packet one-way delay: 63.659 ms
Loss rate: 0.11%
```

Run 1: Report of TCP Cubic — Data Link

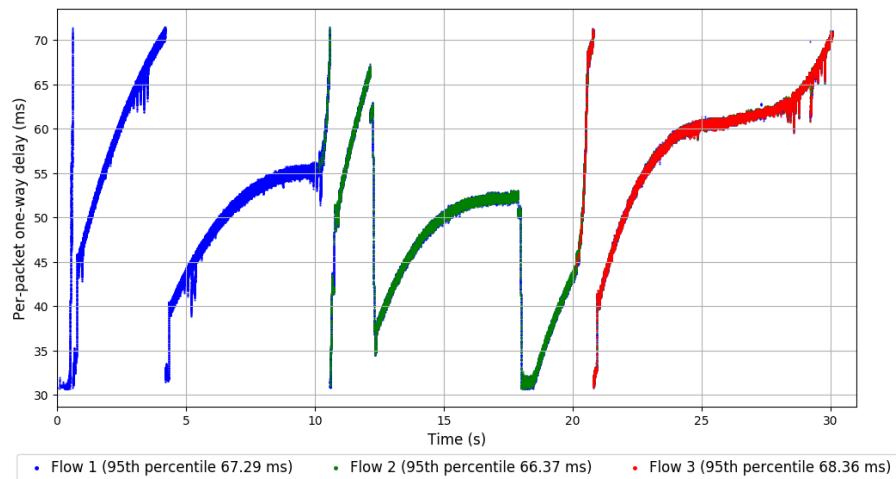
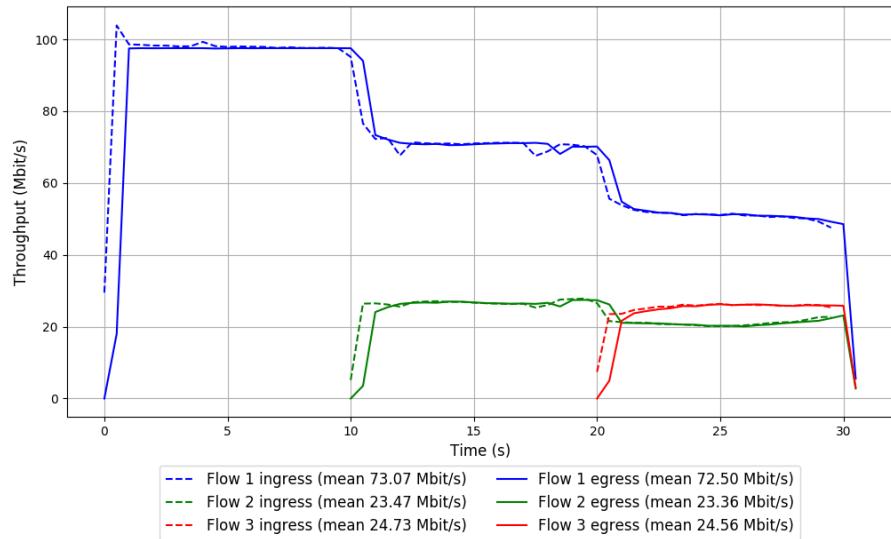


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-25 01:49:17
End at: 2019-01-25 01:49:47
Local clock offset: 0.489 ms
Remote clock offset: -4.141 ms

# Below is generated by plot.py at 2019-01-25 03:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 67.290 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 72.50 Mbit/s
95th percentile per-packet one-way delay: 67.292 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 23.36 Mbit/s
95th percentile per-packet one-way delay: 66.373 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 68.358 ms
Loss rate: 0.42%
```

Run 2: Report of TCP Cubic — Data Link

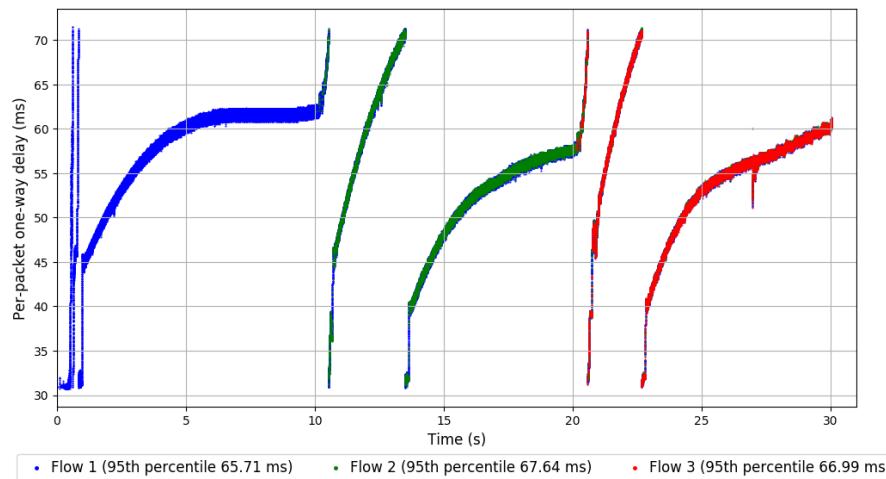
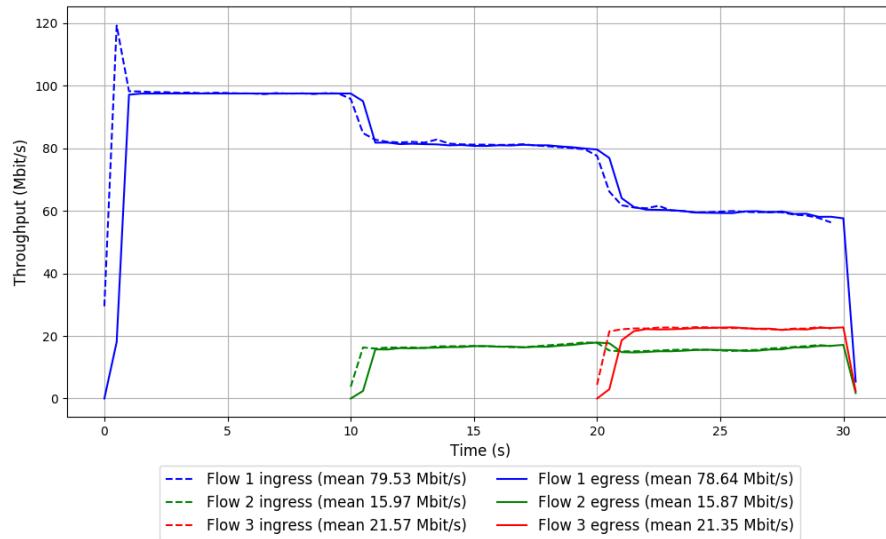


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-25 02:15:14
End at: 2019-01-25 02:15:44
Local clock offset: 0.527 ms
Remote clock offset: -3.468 ms

# Below is generated by plot.py at 2019-01-25 03:19:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 66.158 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 78.64 Mbit/s
95th percentile per-packet one-way delay: 65.707 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 15.87 Mbit/s
95th percentile per-packet one-way delay: 67.638 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 21.35 Mbit/s
95th percentile per-packet one-way delay: 66.994 ms
Loss rate: 0.98%
```

Run 3: Report of TCP Cubic — Data Link

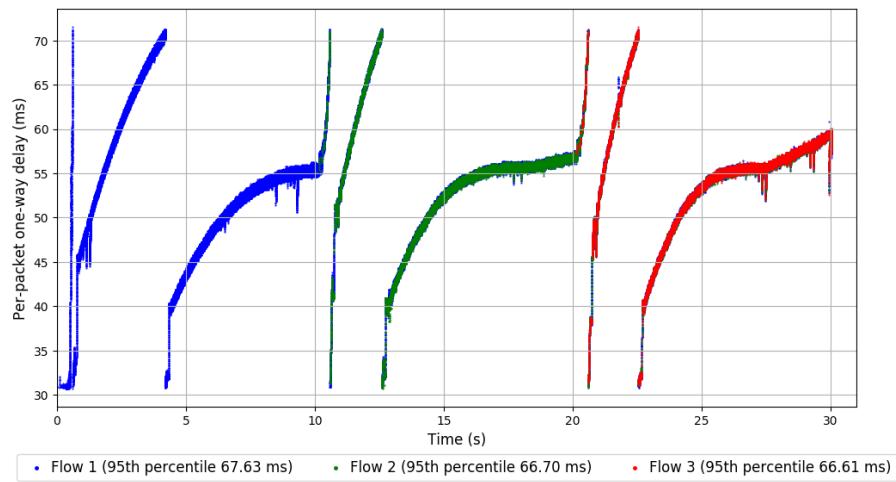
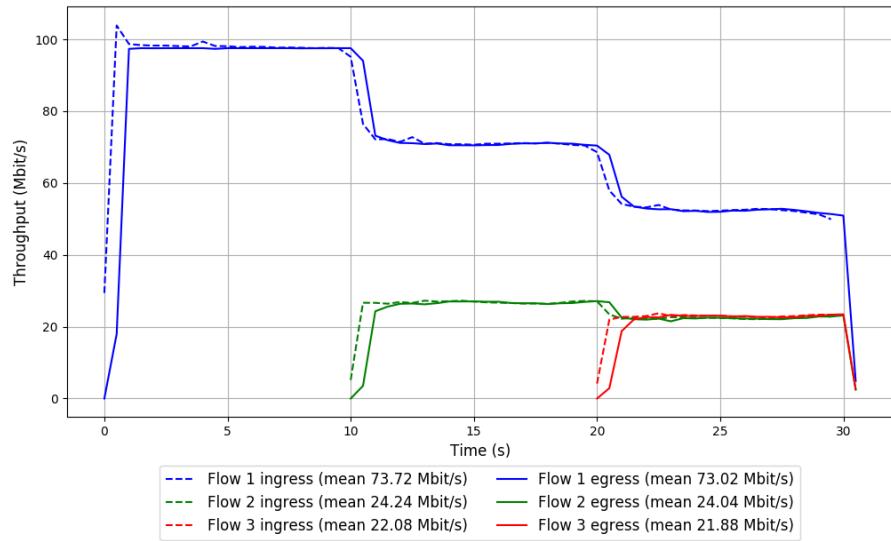


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-25 02:40:48
End at: 2019-01-25 02:41:18
Local clock offset: 0.685 ms
Remote clock offset: -2.908 ms

# Below is generated by plot.py at 2019-01-25 03:19:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 67.555 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 73.02 Mbit/s
95th percentile per-packet one-way delay: 67.630 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 66.698 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 21.88 Mbit/s
95th percentile per-packet one-way delay: 66.606 ms
Loss rate: 0.89%
```

Run 4: Report of TCP Cubic — Data Link

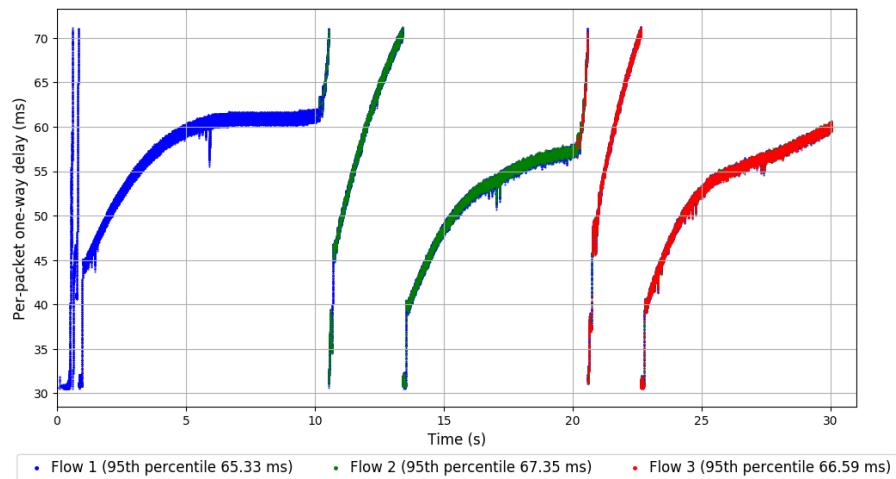
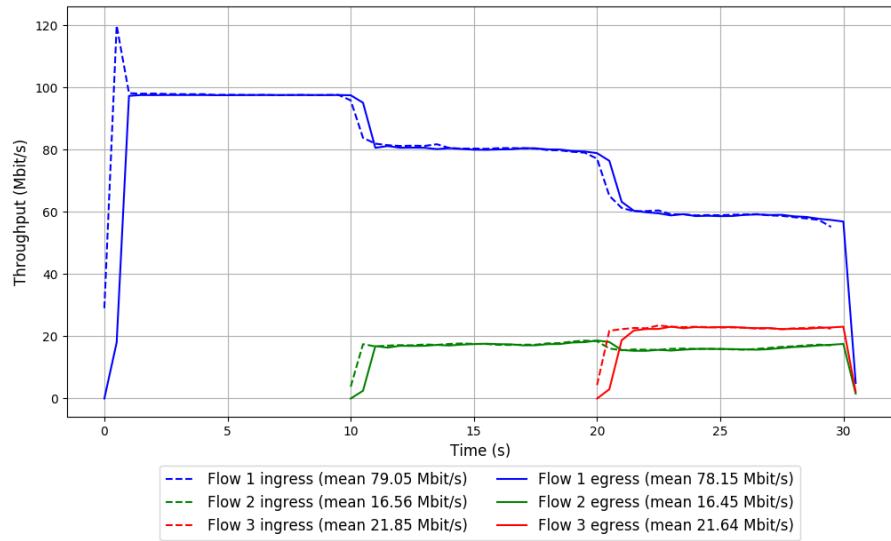


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-25 03:06:46
End at: 2019-01-25 03:07:16
Local clock offset: 0.75 ms
Remote clock offset: -2.743 ms

# Below is generated by plot.py at 2019-01-25 03:19:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 65.791 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 78.15 Mbit/s
95th percentile per-packet one-way delay: 65.332 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 16.45 Mbit/s
95th percentile per-packet one-way delay: 67.349 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 21.64 Mbit/s
95th percentile per-packet one-way delay: 66.588 ms
Loss rate: 0.91%
```

Run 5: Report of TCP Cubic — Data Link

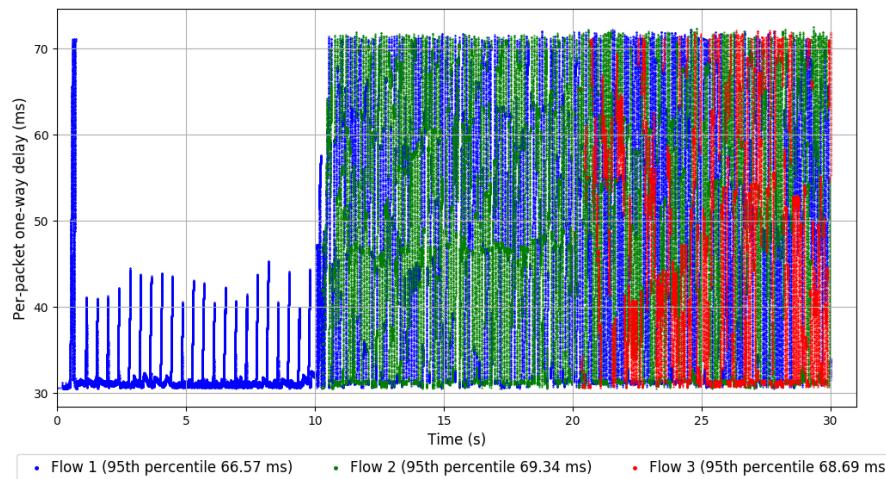
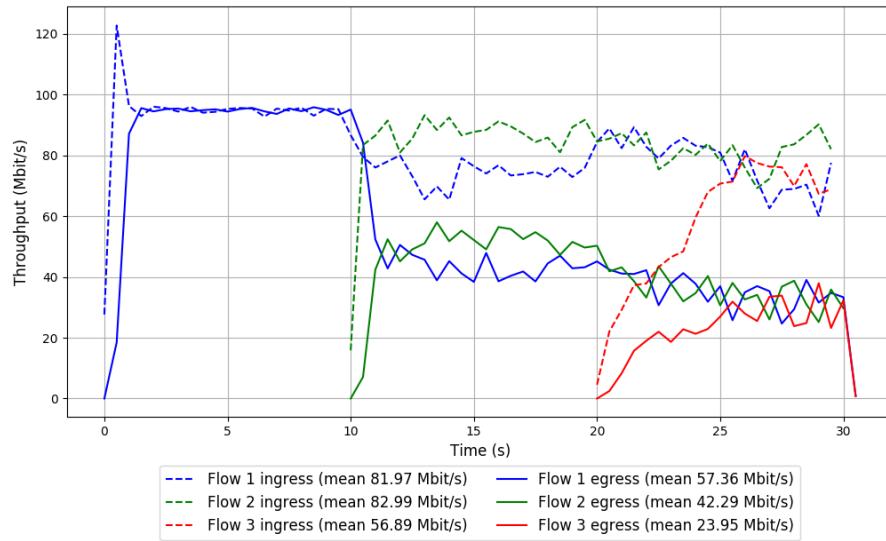


```
Run 1: Statistics of FillP

Start at: 2019-01-25 01:09:45
End at: 2019-01-25 01:10:15
Local clock offset: 0.49 ms
Remote clock offset: -4.38 ms

# Below is generated by plot.py at 2019-01-25 03:20:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.43 Mbit/s
95th percentile per-packet one-way delay: 68.161 ms
Loss rate: 40.14%
-- Flow 1:
Average throughput: 57.36 Mbit/s
95th percentile per-packet one-way delay: 66.566 ms
Loss rate: 30.02%
-- Flow 2:
Average throughput: 42.29 Mbit/s
95th percentile per-packet one-way delay: 69.338 ms
Loss rate: 49.08%
-- Flow 3:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 68.693 ms
Loss rate: 57.96%
```

Run 1: Report of FillP — Data Link

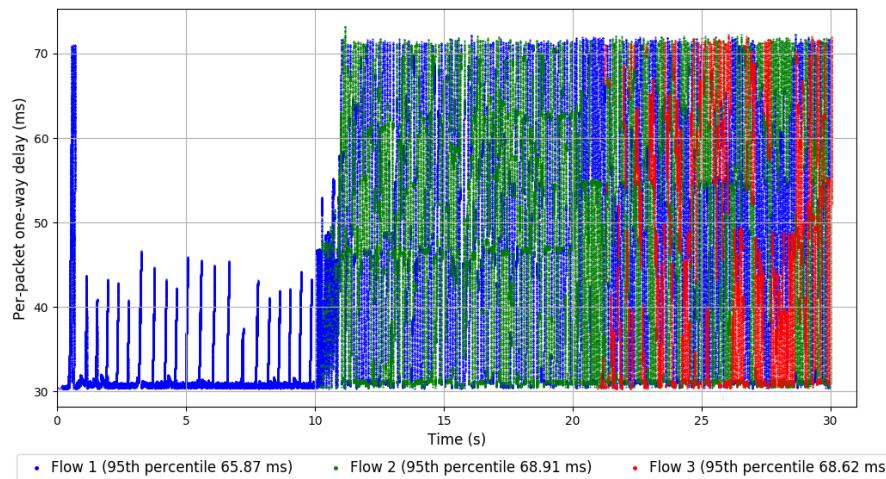
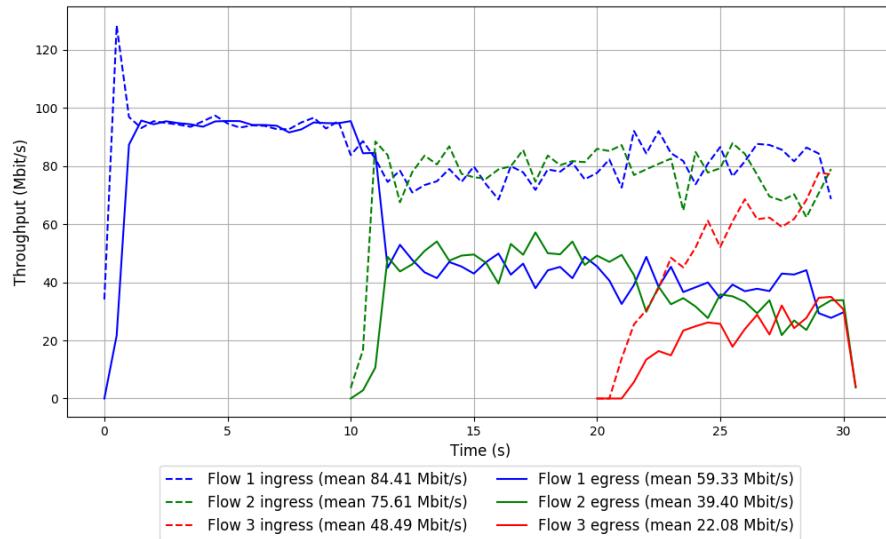


Run 2: Statistics of FillP

```
Start at: 2019-01-25 01:36:42
End at: 2019-01-25 01:37:12
Local clock offset: 0.539 ms
Remote clock offset: -4.651 ms

# Below is generated by plot.py at 2019-01-25 03:20:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.64 Mbit/s
95th percentile per-packet one-way delay: 67.496 ms
Loss rate: 38.48%
-- Flow 1:
Average throughput: 59.33 Mbit/s
95th percentile per-packet one-way delay: 65.871 ms
Loss rate: 29.70%
-- Flow 2:
Average throughput: 39.40 Mbit/s
95th percentile per-packet one-way delay: 68.909 ms
Loss rate: 47.83%
-- Flow 3:
Average throughput: 22.08 Mbit/s
95th percentile per-packet one-way delay: 68.619 ms
Loss rate: 55.24%
```

Run 2: Report of FillP — Data Link

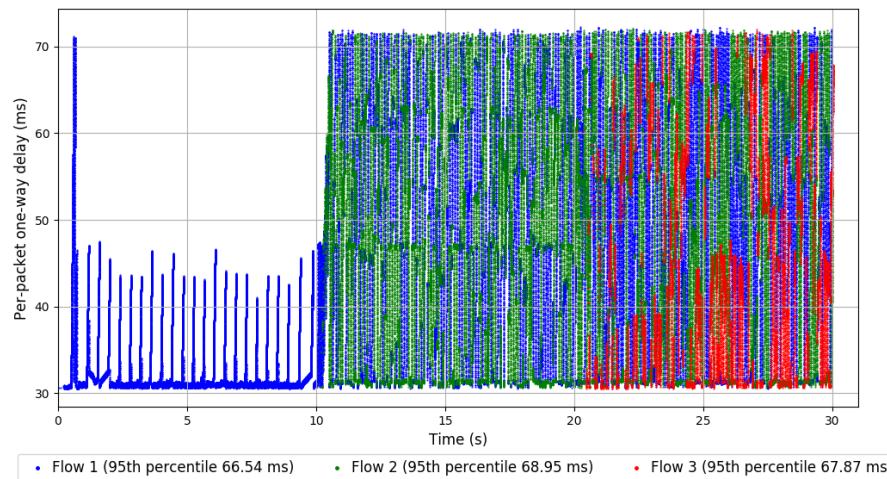
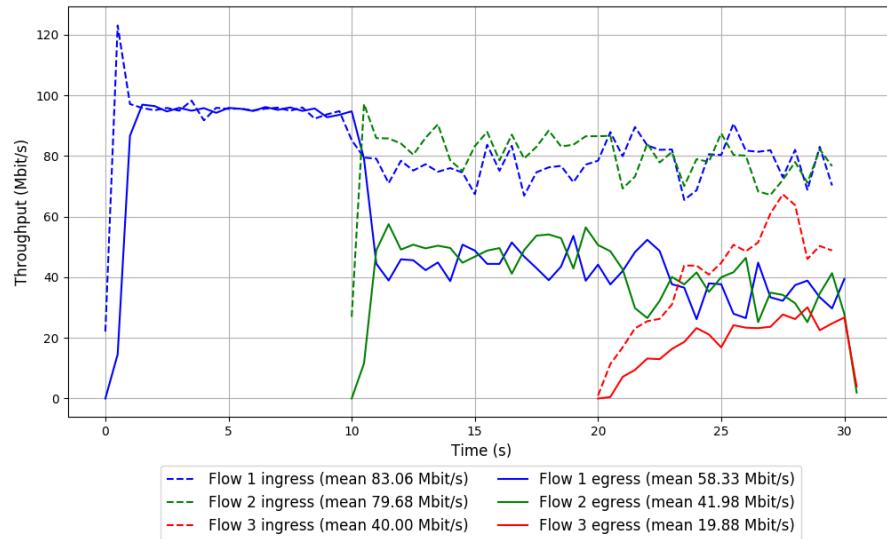


Run 3: Statistics of FillP

```
Start at: 2019-01-25 02:02:51
End at: 2019-01-25 02:03:21
Local clock offset: 0.503 ms
Remote clock offset: -3.787 ms

# Below is generated by plot.py at 2019-01-25 03:20:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.76 Mbit/s
95th percentile per-packet one-way delay: 67.741 ms
Loss rate: 37.82%
-- Flow 1:
Average throughput: 58.33 Mbit/s
95th percentile per-packet one-way delay: 66.541 ms
Loss rate: 29.78%
-- Flow 2:
Average throughput: 41.98 Mbit/s
95th percentile per-packet one-way delay: 68.952 ms
Loss rate: 47.26%
-- Flow 3:
Average throughput: 19.88 Mbit/s
95th percentile per-packet one-way delay: 67.868 ms
Loss rate: 50.29%
```

Run 3: Report of FillP — Data Link

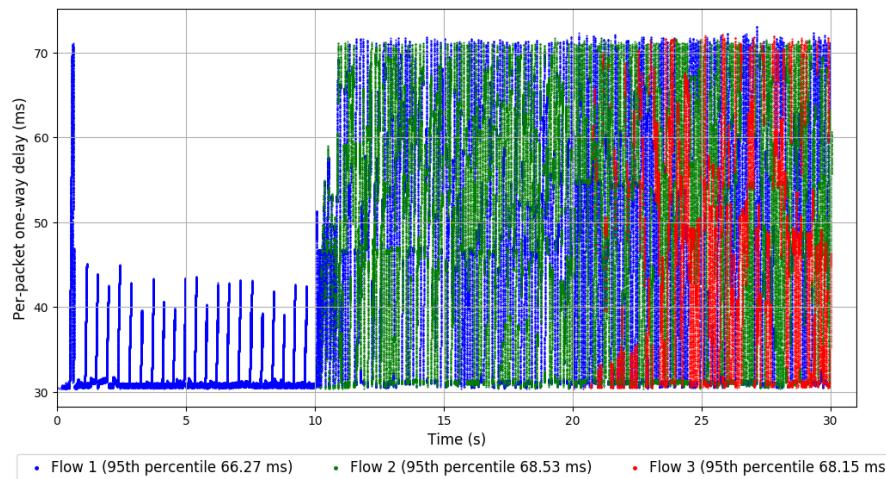
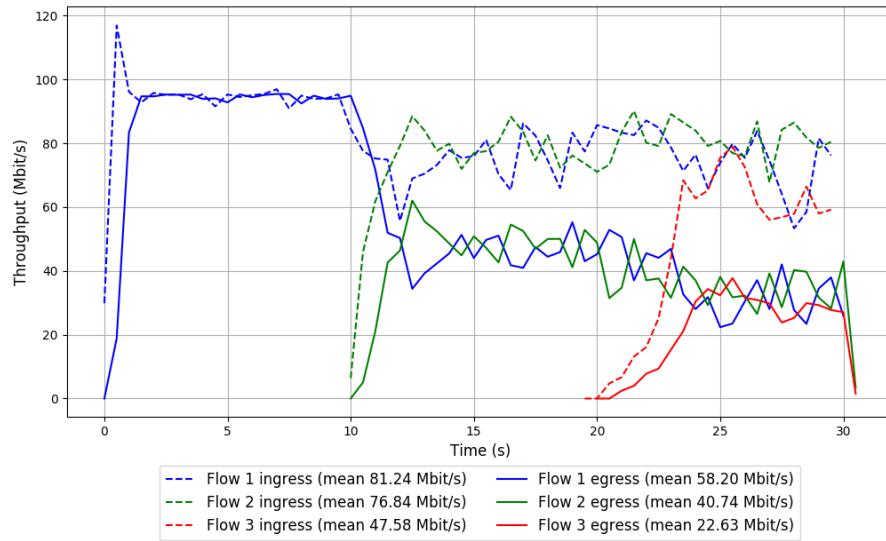


Run 4: Statistics of FillP

```
Start at: 2019-01-25 02:28:38
End at: 2019-01-25 02:29:08
Local clock offset: 0.55 ms
Remote clock offset: -3.307 ms

# Below is generated by plot.py at 2019-01-25 03:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 67.518 ms
Loss rate: 37.33%
-- Flow 1:
Average throughput: 58.20 Mbit/s
95th percentile per-packet one-way delay: 66.270 ms
Loss rate: 28.36%
-- Flow 2:
Average throughput: 40.74 Mbit/s
95th percentile per-packet one-way delay: 68.533 ms
Loss rate: 46.91%
-- Flow 3:
Average throughput: 22.63 Mbit/s
95th percentile per-packet one-way delay: 68.153 ms
Loss rate: 52.37%
```

Run 4: Report of FillP — Data Link

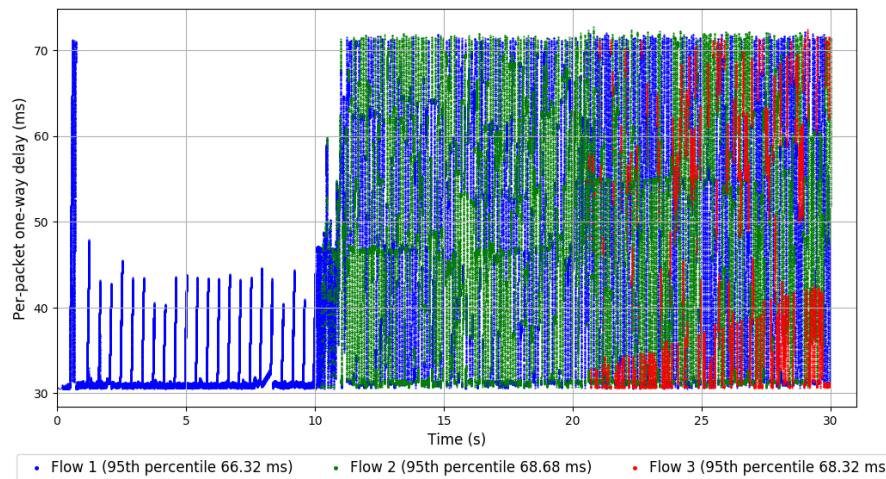
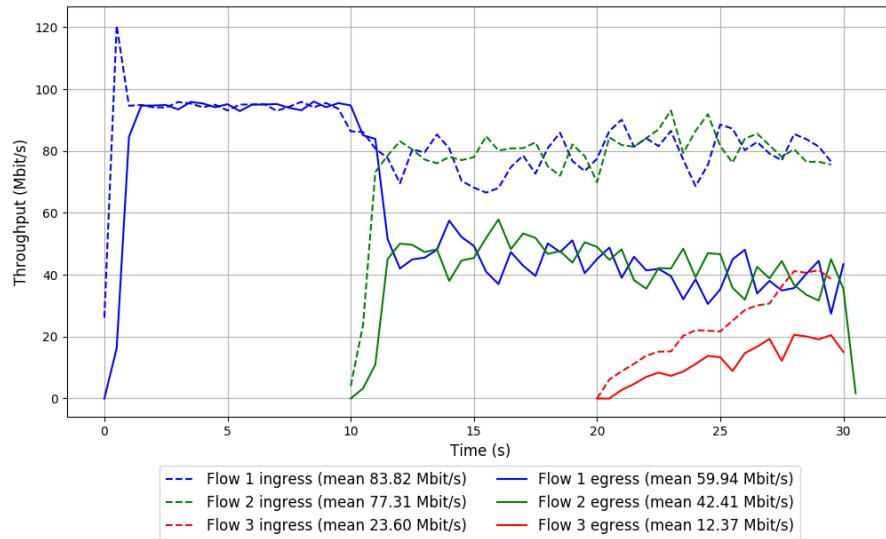


```
Run 5: Statistics of FillP
```

```
Start at: 2019-01-25 02:54:10
End at: 2019-01-25 02:54:40
Local clock offset: 0.781 ms
Remote clock offset: -2.74 ms

# Below is generated by plot.py at 2019-01-25 03:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.21 Mbit/s
95th percentile per-packet one-way delay: 67.377 ms
Loss rate: 35.53%
-- Flow 1:
Average throughput: 59.94 Mbit/s
95th percentile per-packet one-way delay: 66.316 ms
Loss rate: 28.52%
-- Flow 2:
Average throughput: 42.41 Mbit/s
95th percentile per-packet one-way delay: 68.681 ms
Loss rate: 45.06%
-- Flow 3:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 68.324 ms
Loss rate: 47.93%
```

Run 5: Report of FillP — Data Link

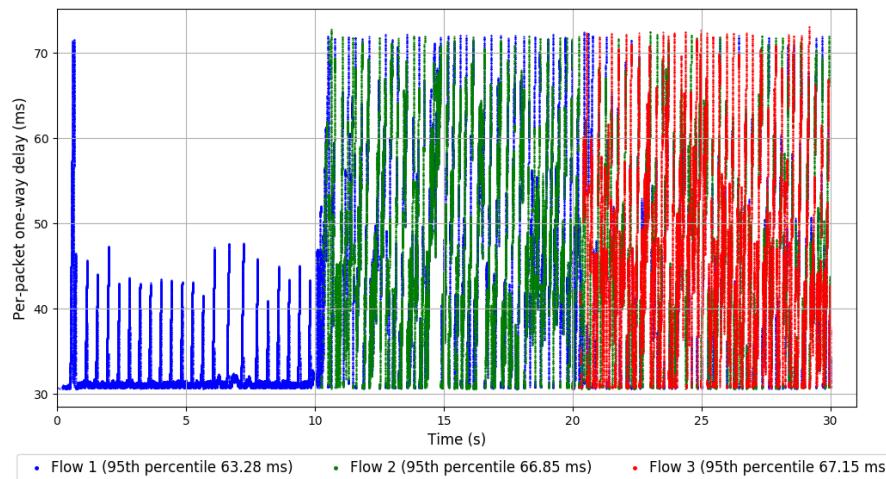
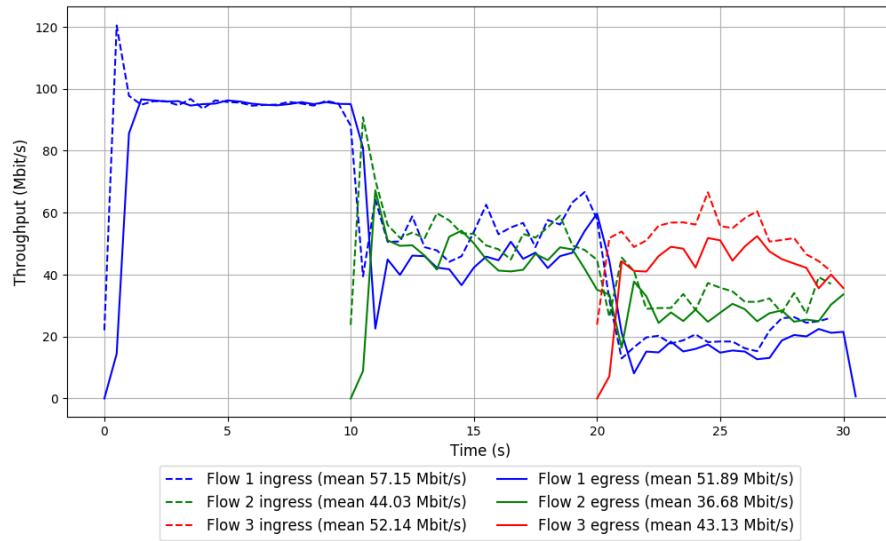


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-01-25 01:14:38
End at: 2019-01-25 01:15:08
Local clock offset: 0.514 ms
Remote clock offset: -4.513 ms

# Below is generated by plot.py at 2019-01-25 03:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.61 Mbit/s
95th percentile per-packet one-way delay: 65.521 ms
Loss rate: 12.66%
-- Flow 1:
Average throughput: 51.89 Mbit/s
95th percentile per-packet one-way delay: 63.280 ms
Loss rate: 9.20%
-- Flow 2:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 66.852 ms
Loss rate: 16.70%
-- Flow 3:
Average throughput: 43.13 Mbit/s
95th percentile per-packet one-way delay: 67.147 ms
Loss rate: 17.27%
```

Run 1: Report of FillP-Sheep — Data Link

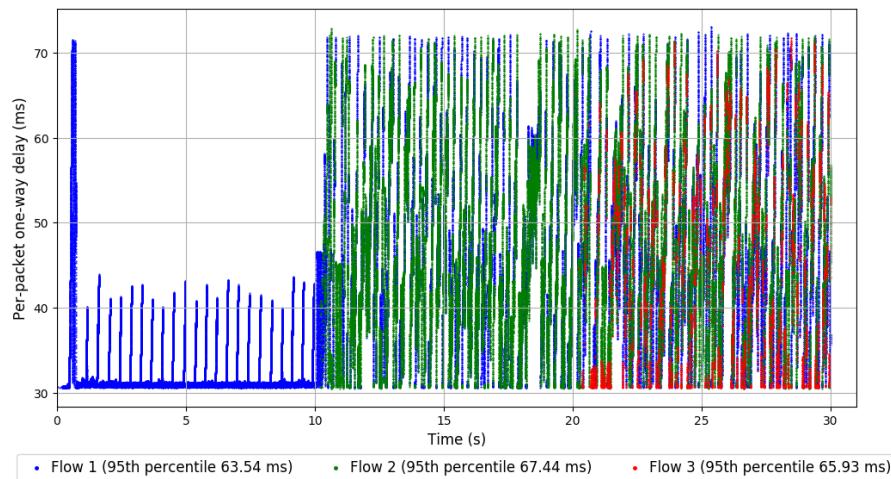
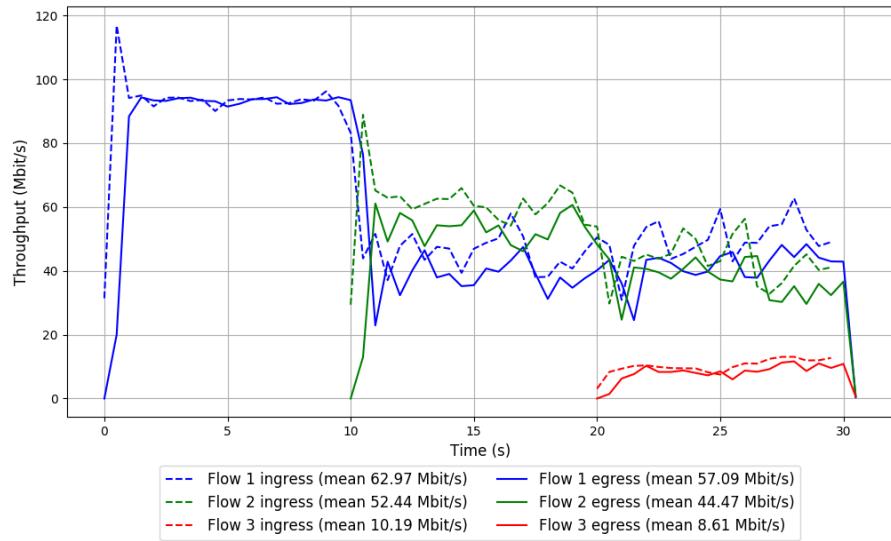


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-25 01:41:38
End at: 2019-01-25 01:42:08
Local clock offset: 0.511 ms
Remote clock offset: -4.393 ms

# Below is generated by plot.py at 2019-01-25 03:20:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.54 Mbit/s
95th percentile per-packet one-way delay: 65.681 ms
Loss rate: 11.54%
-- Flow 1:
Average throughput: 57.09 Mbit/s
95th percentile per-packet one-way delay: 63.536 ms
Loss rate: 9.33%
-- Flow 2:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 67.437 ms
Loss rate: 15.12%
-- Flow 3:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 65.927 ms
Loss rate: 15.65%
```

Run 2: Report of FillP-Sheep — Data Link

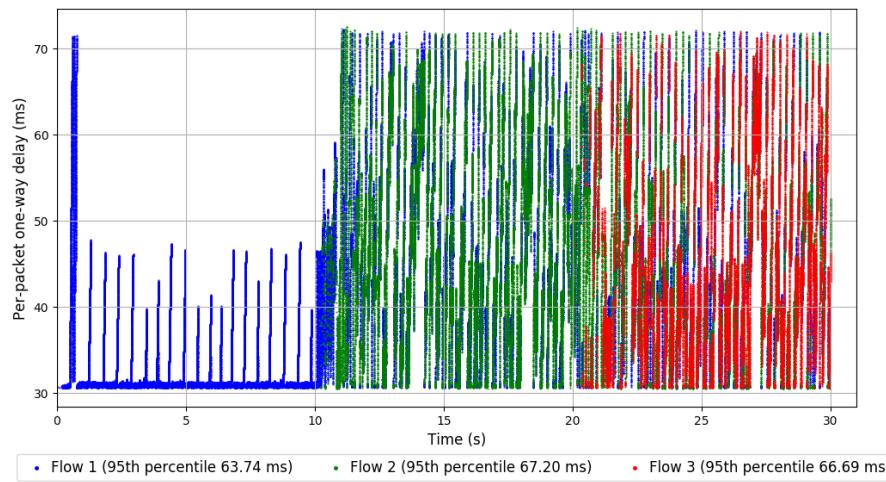
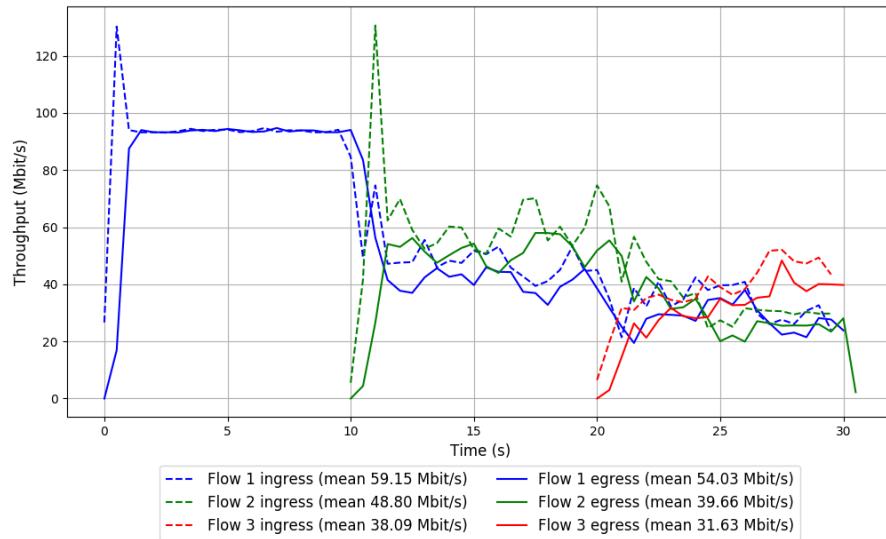


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-25 02:07:34
End at: 2019-01-25 02:08:04
Local clock offset: 0.509 ms
Remote clock offset: -3.659 ms

# Below is generated by plot.py at 2019-01-25 03:21:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.78 Mbit/s
95th percentile per-packet one-way delay: 65.590 ms
Loss rate: 12.79%
-- Flow 1:
Average throughput: 54.03 Mbit/s
95th percentile per-packet one-way delay: 63.743 ms
Loss rate: 8.65%
-- Flow 2:
Average throughput: 39.66 Mbit/s
95th percentile per-packet one-way delay: 67.199 ms
Loss rate: 18.66%
-- Flow 3:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 66.691 ms
Loss rate: 17.01%
```

Run 3: Report of FillP-Sheep — Data Link

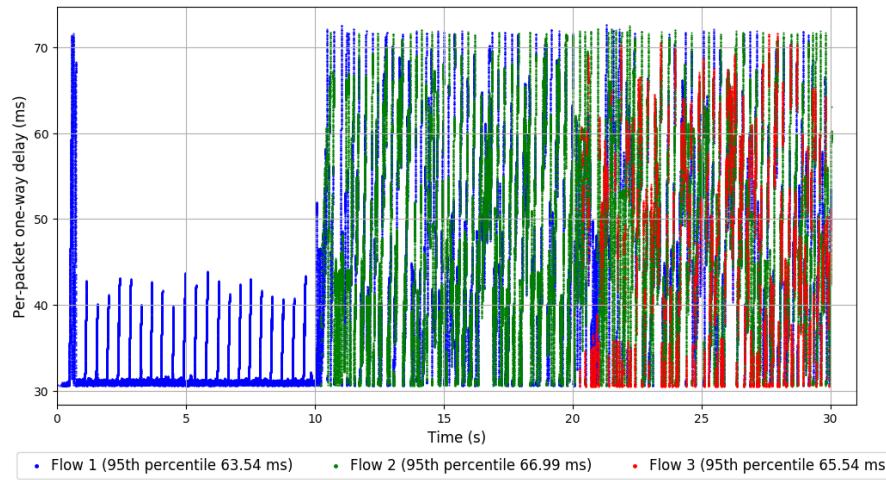
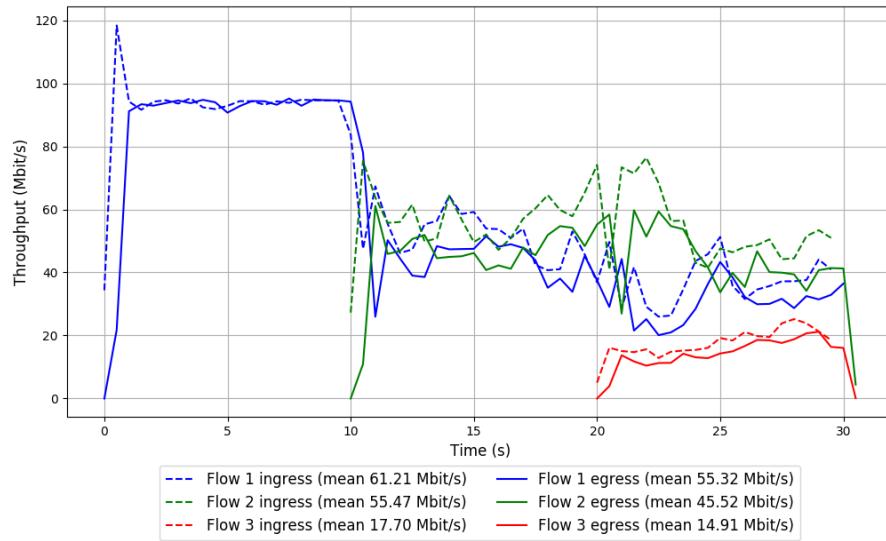


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-25 02:33:27
End at: 2019-01-25 02:33:57
Local clock offset: 0.598 ms
Remote clock offset: -3.048 ms

# Below is generated by plot.py at 2019-01-25 03:21:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.52 Mbit/s
95th percentile per-packet one-way delay: 65.459 ms
Loss rate: 12.85%
-- Flow 1:
Average throughput: 55.32 Mbit/s
95th percentile per-packet one-way delay: 63.540 ms
Loss rate: 9.58%
-- Flow 2:
Average throughput: 45.52 Mbit/s
95th percentile per-packet one-way delay: 66.990 ms
Loss rate: 17.82%
-- Flow 3:
Average throughput: 14.91 Mbit/s
95th percentile per-packet one-way delay: 65.536 ms
Loss rate: 15.73%
```

Run 4: Report of FillP-Sheep — Data Link

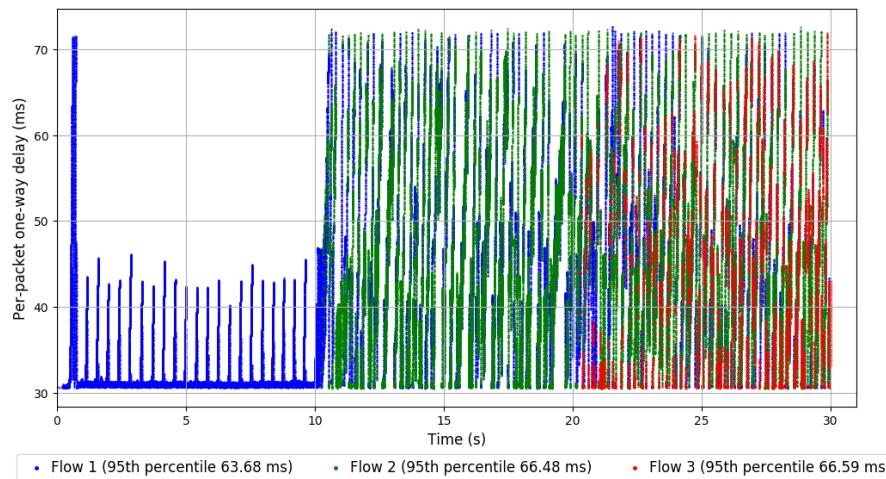
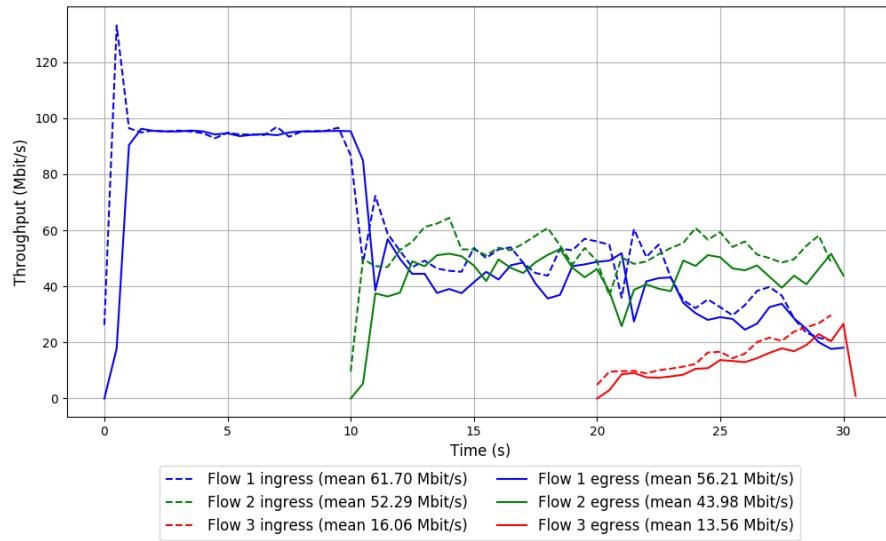


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-25 02:59:10
End at: 2019-01-25 02:59:40
Local clock offset: 0.827 ms
Remote clock offset: -2.655 ms

# Below is generated by plot.py at 2019-01-25 03:21:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.90 Mbit/s
95th percentile per-packet one-way delay: 65.210 ms
Loss rate: 11.66%
-- Flow 1:
Average throughput: 56.21 Mbit/s
95th percentile per-packet one-way delay: 63.681 ms
Loss rate: 8.90%
-- Flow 2:
Average throughput: 43.98 Mbit/s
95th percentile per-packet one-way delay: 66.478 ms
Loss rate: 15.91%
-- Flow 3:
Average throughput: 13.56 Mbit/s
95th percentile per-packet one-way delay: 66.595 ms
Loss rate: 15.72%
```

Run 5: Report of FillP-Sheep — Data Link

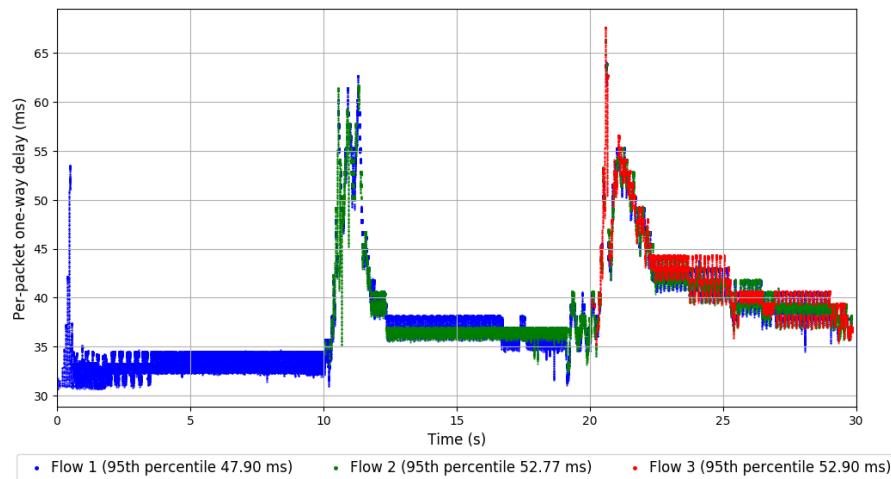
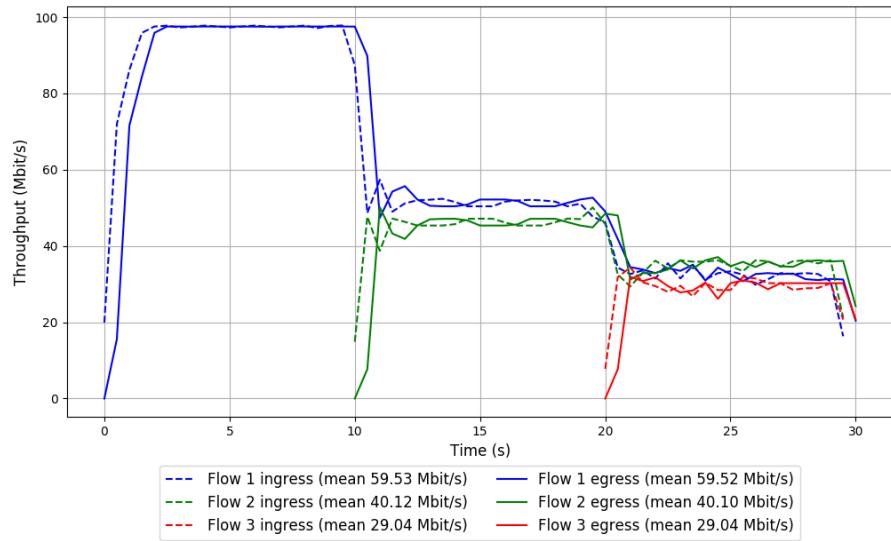


Run 1: Statistics of Indigo

```
Start at: 2019-01-25 01:29:07
End at: 2019-01-25 01:29:37
Local clock offset: 0.606 ms
Remote clock offset: -4.618 ms

# Below is generated by plot.py at 2019-01-25 03:21:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 51.413 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 59.52 Mbit/s
95th percentile per-packet one-way delay: 47.903 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.10 Mbit/s
95th percentile per-packet one-way delay: 52.773 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 29.04 Mbit/s
95th percentile per-packet one-way delay: 52.897 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

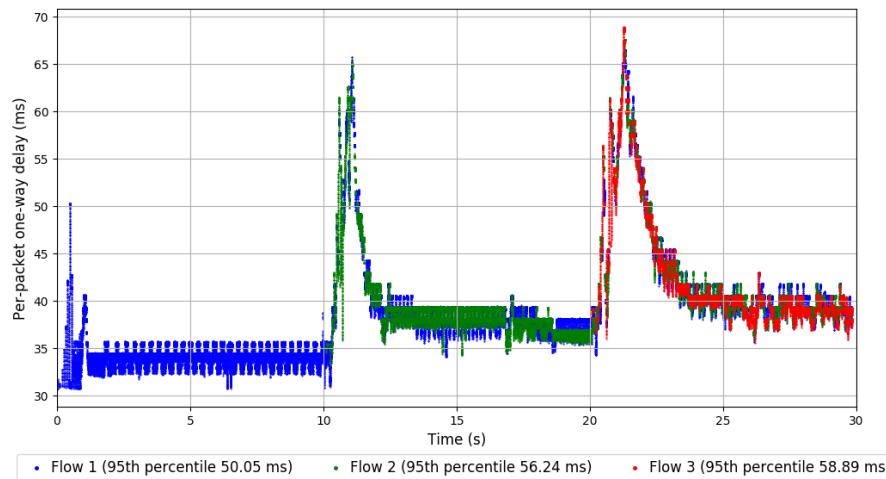
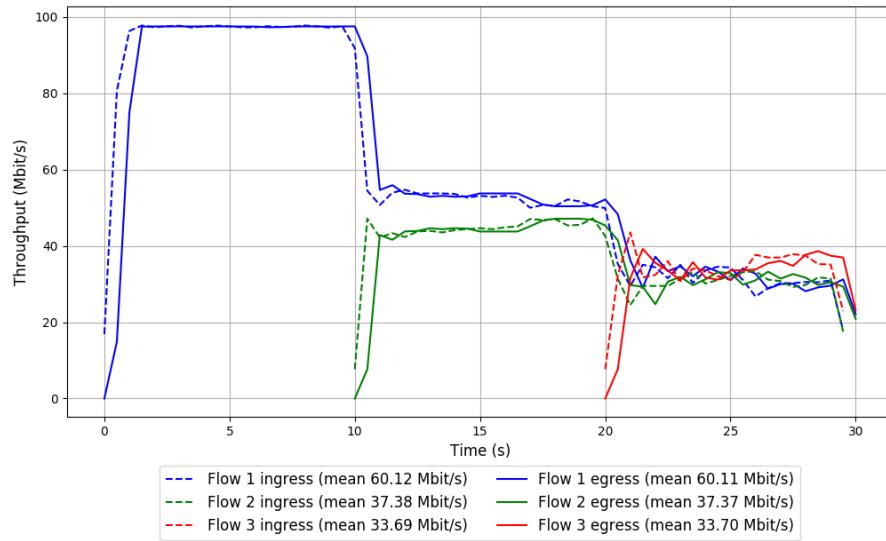


Run 2: Statistics of Indigo

```
Start at: 2019-01-25 01:55:21
End at: 2019-01-25 01:55:51
Local clock offset: 0.508 ms
Remote clock offset: -4.008 ms

# Below is generated by plot.py at 2019-01-25 03:21:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 53.930 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.11 Mbit/s
95th percentile per-packet one-way delay: 50.048 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.37 Mbit/s
95th percentile per-packet one-way delay: 56.240 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.70 Mbit/s
95th percentile per-packet one-way delay: 58.890 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

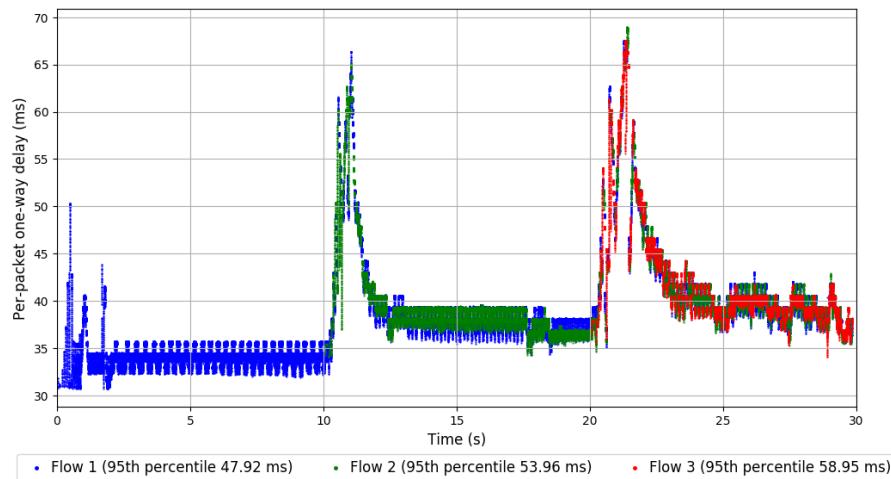
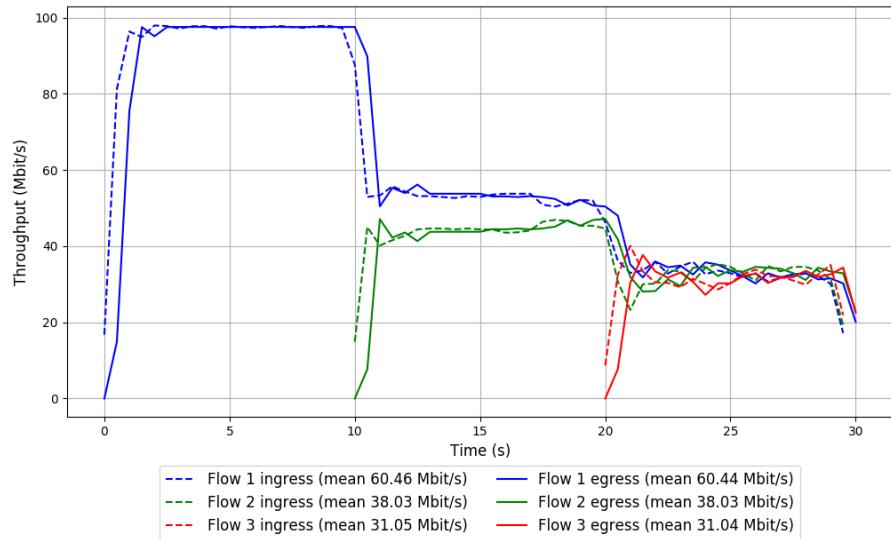


Run 3: Statistics of Indigo

```
Start at: 2019-01-25 02:21:21
End at: 2019-01-25 02:21:51
Local clock offset: 0.562 ms
Remote clock offset: -3.324 ms

# Below is generated by plot.py at 2019-01-25 03:21:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 51.355 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 47.922 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.03 Mbit/s
95th percentile per-packet one-way delay: 53.964 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 58.945 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

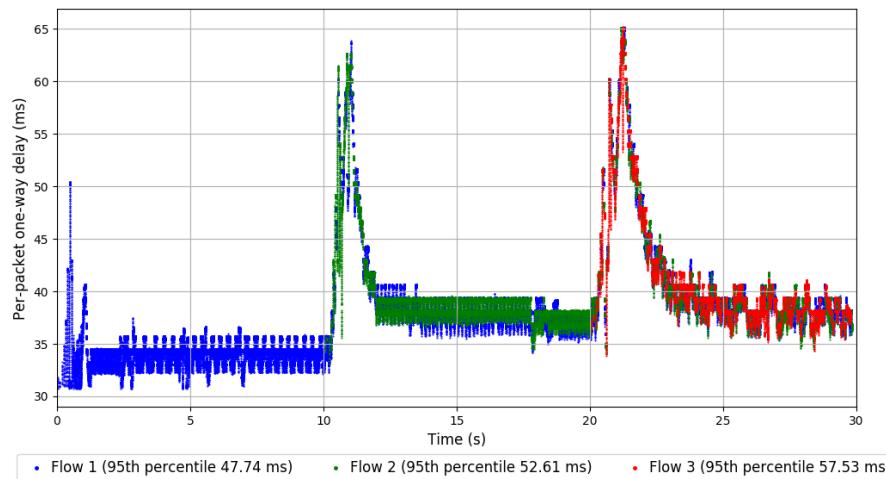
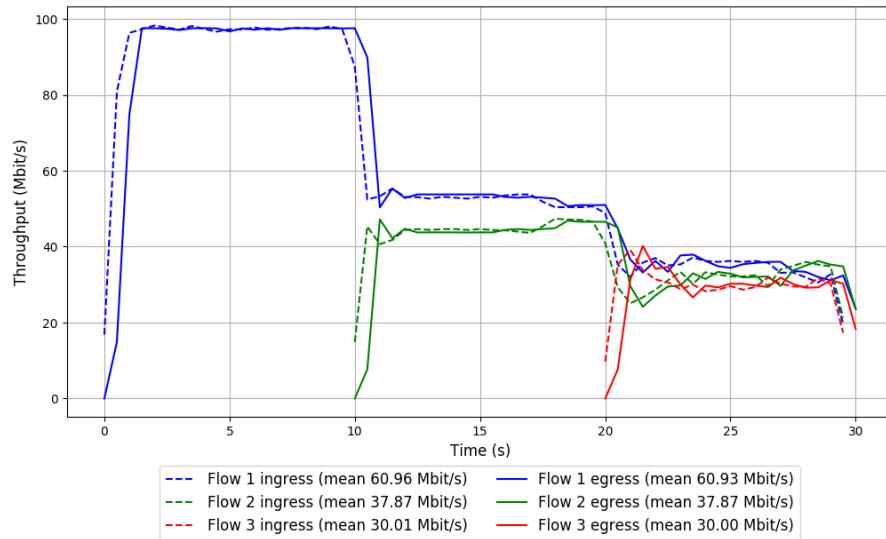


Run 4: Statistics of Indigo

```
Start at: 2019-01-25 02:46:52
End at: 2019-01-25 02:47:22
Local clock offset: 0.709 ms
Remote clock offset: -2.847 ms

# Below is generated by plot.py at 2019-01-25 03:21:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 51.239 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 60.93 Mbit/s
95th percentile per-packet one-way delay: 47.741 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 37.87 Mbit/s
95th percentile per-packet one-way delay: 52.606 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.00 Mbit/s
95th percentile per-packet one-way delay: 57.529 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

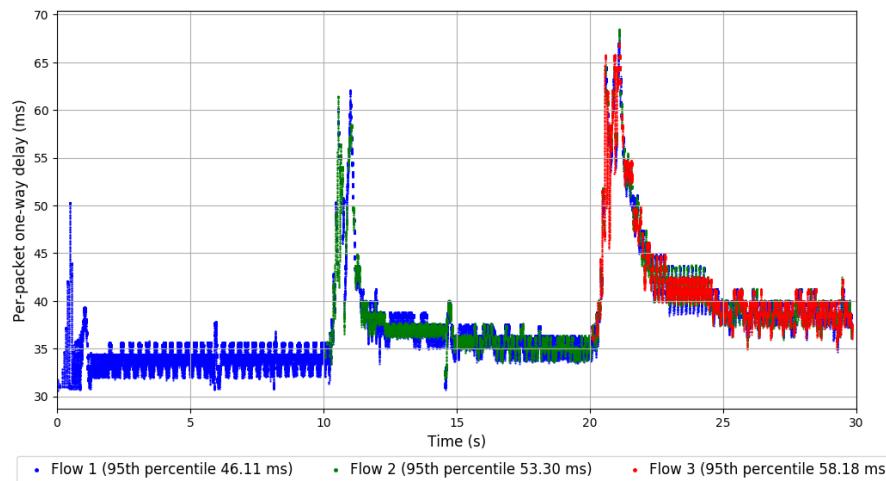
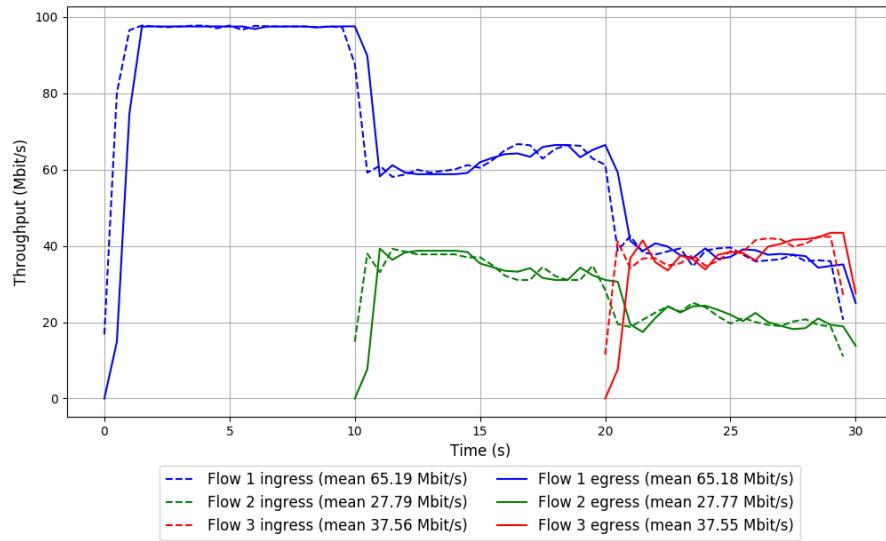


Run 5: Statistics of Indigo

```
Start at: 2019-01-25 03:12:51
End at: 2019-01-25 03:13:21
Local clock offset: 0.747 ms
Remote clock offset: -2.414 ms

# Below is generated by plot.py at 2019-01-25 03:22:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.84 Mbit/s
95th percentile per-packet one-way delay: 50.773 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 65.18 Mbit/s
95th percentile per-packet one-way delay: 46.111 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.77 Mbit/s
95th percentile per-packet one-way delay: 53.304 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 37.55 Mbit/s
95th percentile per-packet one-way delay: 58.179 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

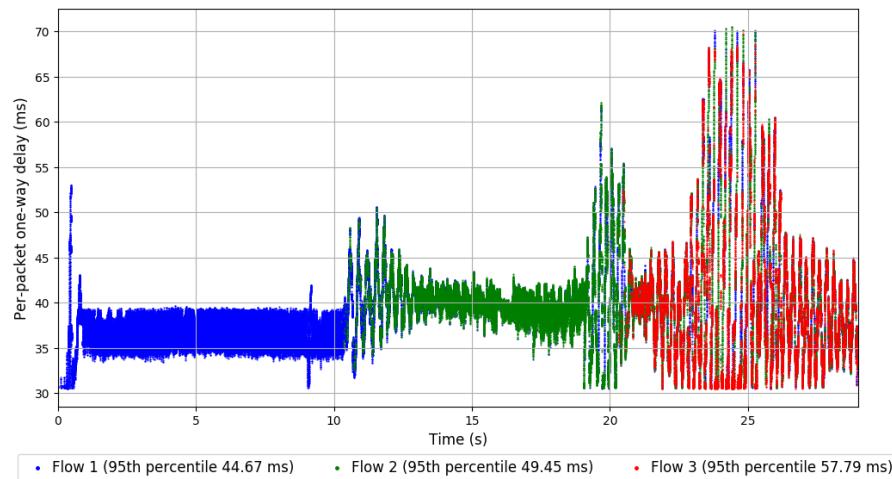
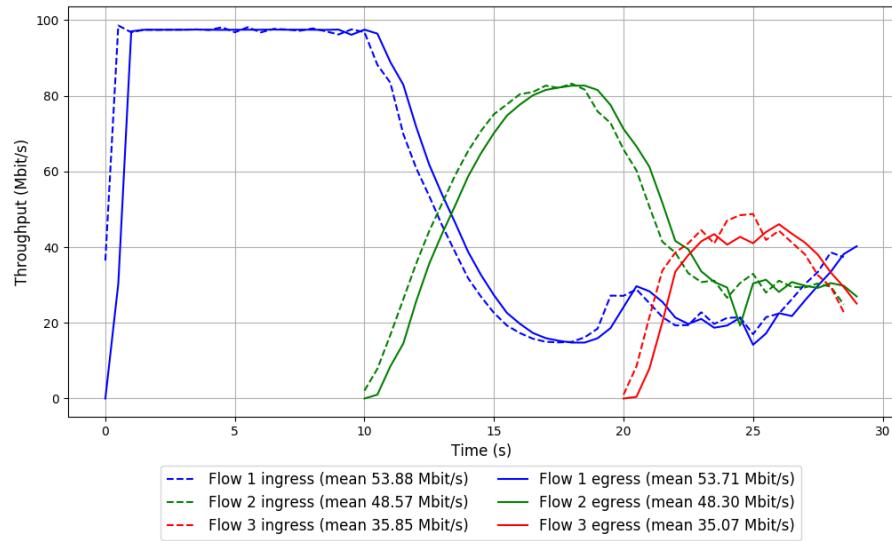


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 01:17:10
End at: 2019-01-25 01:17:40
Local clock offset: 0.541 ms
Remote clock offset: -4.7 ms

# Below is generated by plot.py at 2019-01-25 03:22:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.46 Mbit/s
95th percentile per-packet one-way delay: 48.321 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 44.669 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 48.30 Mbit/s
95th percentile per-packet one-way delay: 49.446 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 35.07 Mbit/s
95th percentile per-packet one-way delay: 57.788 ms
Loss rate: 2.33%
```

Run 1: Report of Indigo-MusesC3 — Data Link

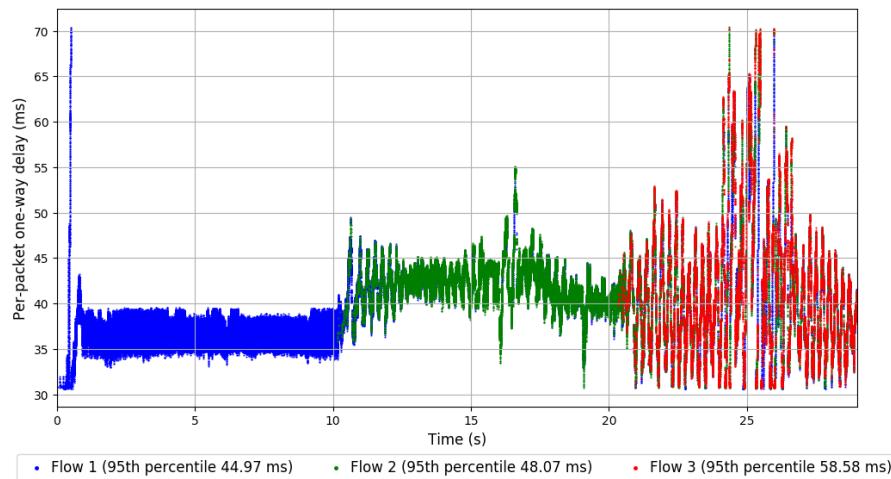
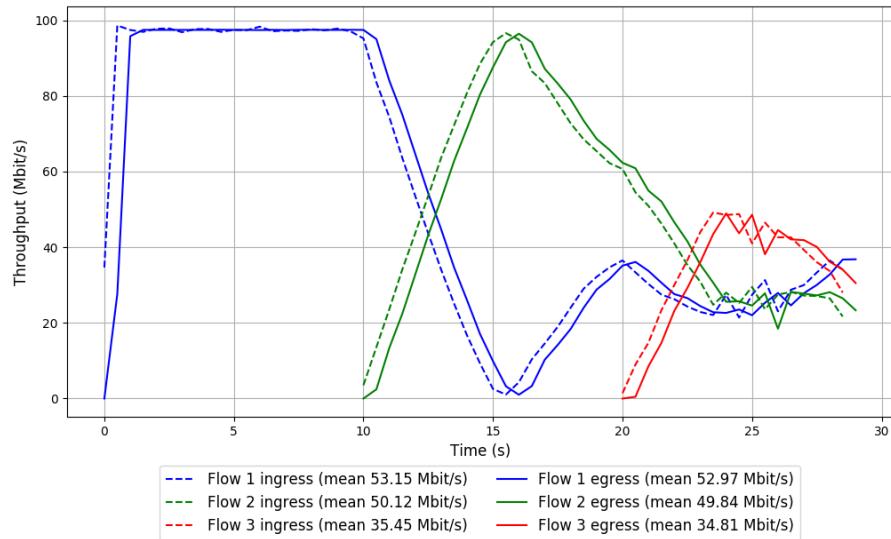


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 01:44:06
End at: 2019-01-25 01:44:36
Local clock offset: 0.489 ms
Remote clock offset: -4.321 ms

# Below is generated by plot.py at 2019-01-25 03:22:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.89 Mbit/s
95th percentile per-packet one-way delay: 47.571 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 52.97 Mbit/s
95th percentile per-packet one-way delay: 44.968 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 49.84 Mbit/s
95th percentile per-packet one-way delay: 48.068 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 34.81 Mbit/s
95th percentile per-packet one-way delay: 58.584 ms
Loss rate: 1.78%
```

Run 2: Report of Indigo-MusesC3 — Data Link

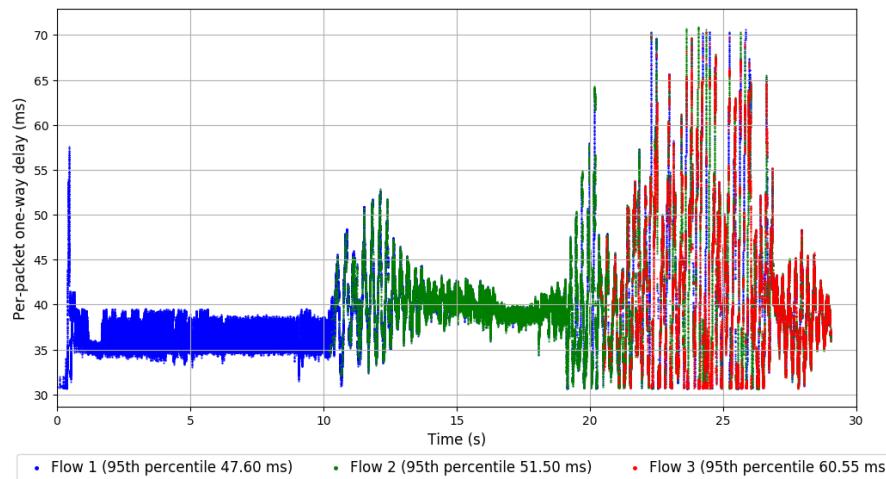
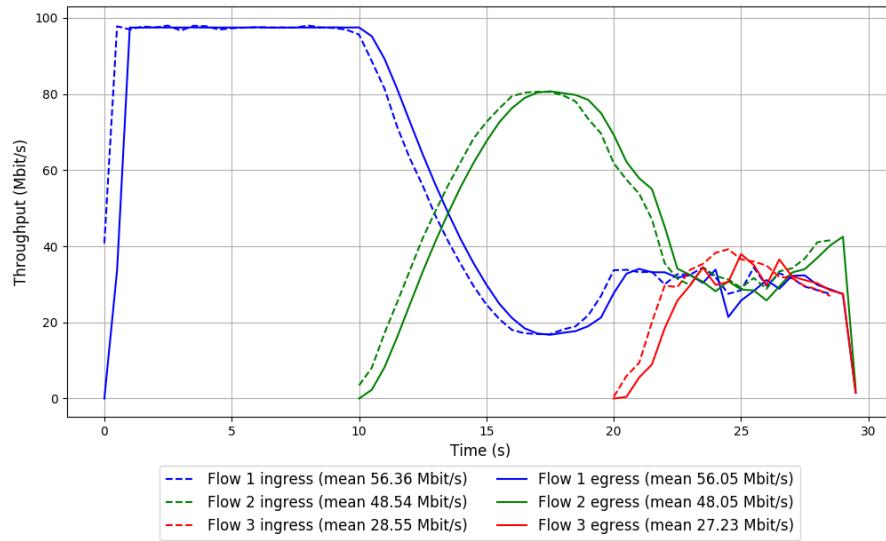


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 02:10:06
End at: 2019-01-25 02:10:36
Local clock offset: 0.519 ms
Remote clock offset: -3.616 ms

# Below is generated by plot.py at 2019-01-25 03:22:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.43 Mbit/s
95th percentile per-packet one-way delay: 50.944 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 56.05 Mbit/s
95th percentile per-packet one-way delay: 47.597 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 48.05 Mbit/s
95th percentile per-packet one-way delay: 51.500 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 27.23 Mbit/s
95th percentile per-packet one-way delay: 60.552 ms
Loss rate: 4.75%
```

Run 3: Report of Indigo-MusesC3 — Data Link

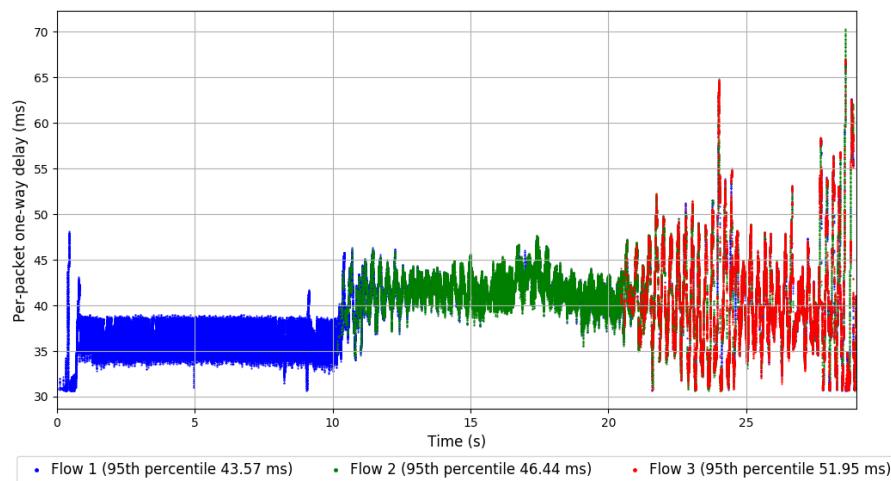
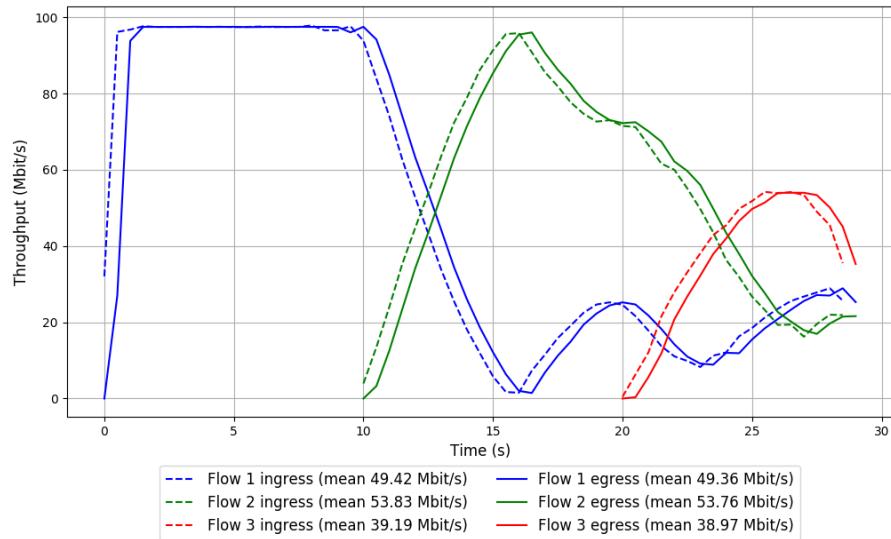


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 02:35:54
End at: 2019-01-25 02:36:24
Local clock offset: 0.633 ms
Remote clock offset: -2.99 ms

# Below is generated by plot.py at 2019-01-25 03:22:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.99 Mbit/s
95th percentile per-packet one-way delay: 46.121 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 49.36 Mbit/s
95th percentile per-packet one-way delay: 43.572 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 53.76 Mbit/s
95th percentile per-packet one-way delay: 46.440 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 38.97 Mbit/s
95th percentile per-packet one-way delay: 51.953 ms
Loss rate: 0.60%
```

Run 4: Report of Indigo-MusesC3 — Data Link

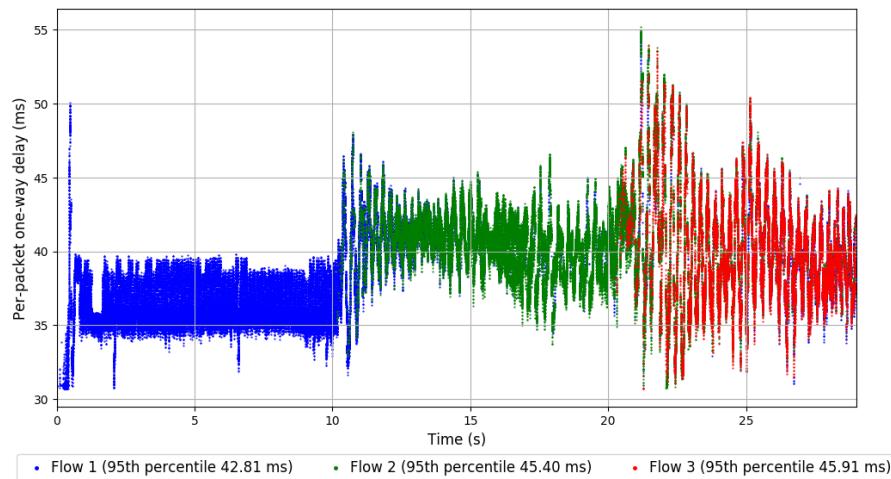
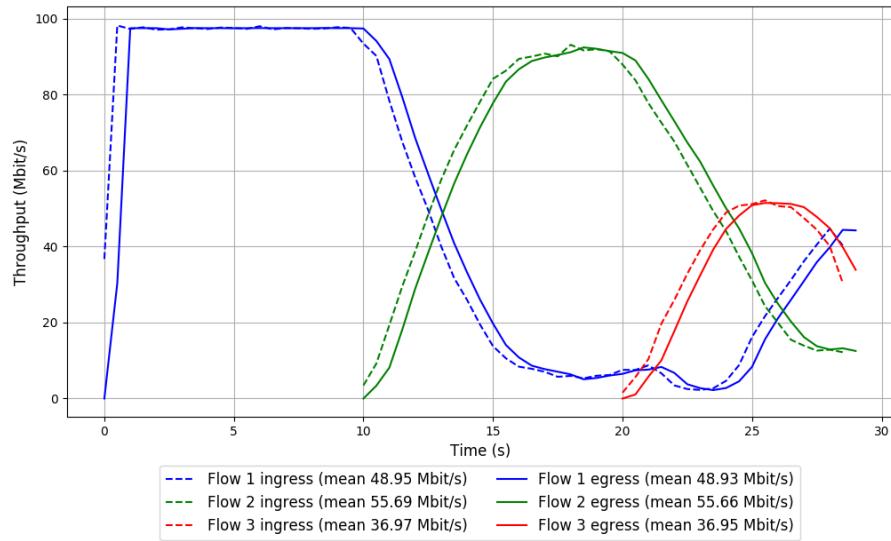


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 03:01:42
End at: 2019-01-25 03:02:12
Local clock offset: 0.805 ms
Remote clock offset: -2.586 ms

# Below is generated by plot.py at 2019-01-25 03:22:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.37 Mbit/s
95th percentile per-packet one-way delay: 44.317 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 48.93 Mbit/s
95th percentile per-packet one-way delay: 42.809 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 55.66 Mbit/s
95th percentile per-packet one-way delay: 45.404 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 36.95 Mbit/s
95th percentile per-packet one-way delay: 45.908 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link

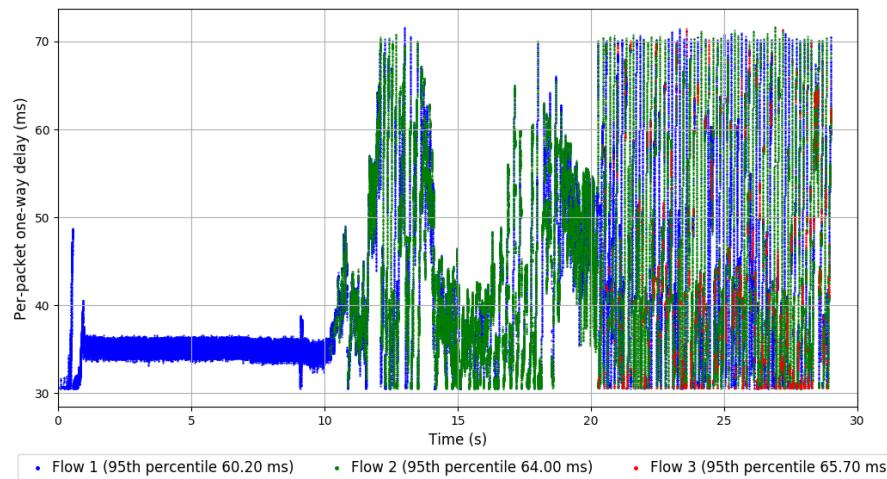
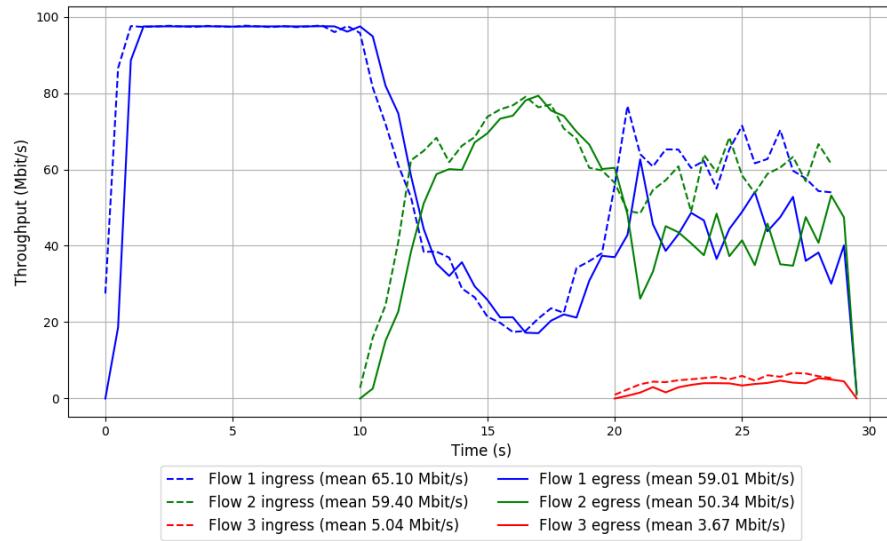


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-01-25 01:19:53
End at: 2019-01-25 01:20:23
Local clock offset: 0.537 ms
Remote clock offset: -4.758 ms

# Below is generated by plot.py at 2019-01-25 03:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.88 Mbit/s
95th percentile per-packet one-way delay: 62.245 ms
Loss rate: 11.77%
-- Flow 1:
Average throughput: 59.01 Mbit/s
95th percentile per-packet one-way delay: 60.196 ms
Loss rate: 9.33%
-- Flow 2:
Average throughput: 50.34 Mbit/s
95th percentile per-packet one-way delay: 64.005 ms
Loss rate: 15.27%
-- Flow 3:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 65.698 ms
Loss rate: 27.31%
```

Run 1: Report of Indigo-MusesC5 — Data Link

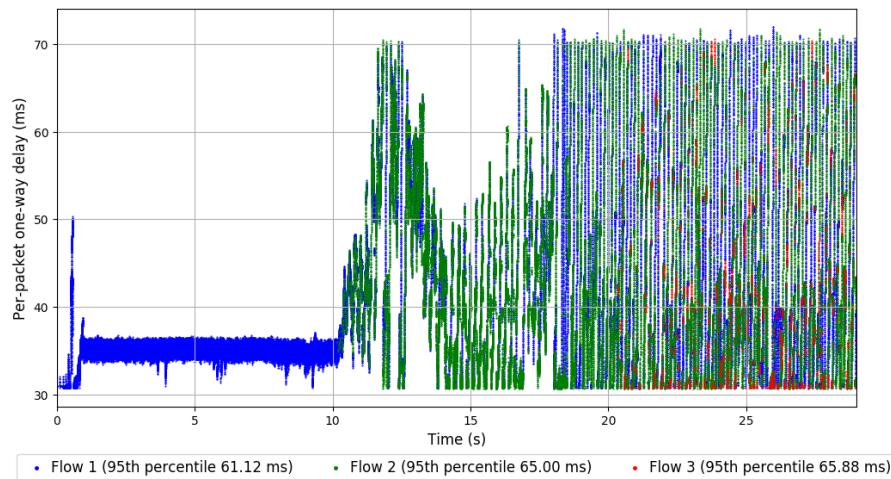
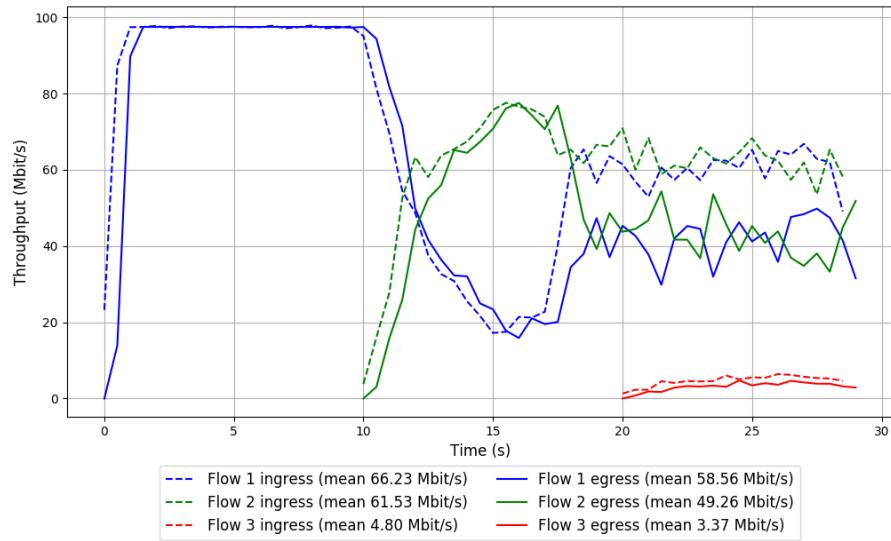


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 01:46:40
End at: 2019-01-25 01:47:10
Local clock offset: 0.474 ms
Remote clock offset: -4.231 ms

# Below is generated by plot.py at 2019-01-25 03:22:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.61 Mbit/s
95th percentile per-packet one-way delay: 63.169 ms
Loss rate: 14.91%
-- Flow 1:
Average throughput: 58.56 Mbit/s
95th percentile per-packet one-way delay: 61.122 ms
Loss rate: 11.55%
-- Flow 2:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: 64.996 ms
Loss rate: 19.93%
-- Flow 3:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 65.882 ms
Loss rate: 30.05%
```

Run 2: Report of Indigo-MusesC5 — Data Link

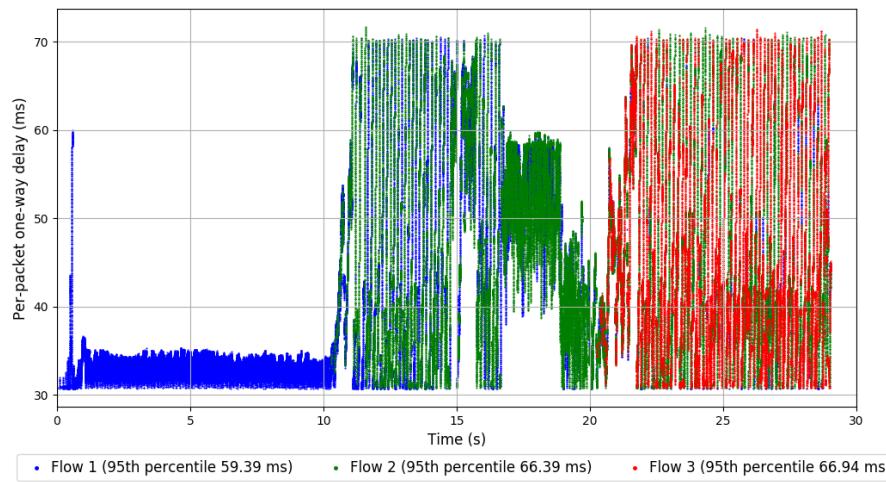
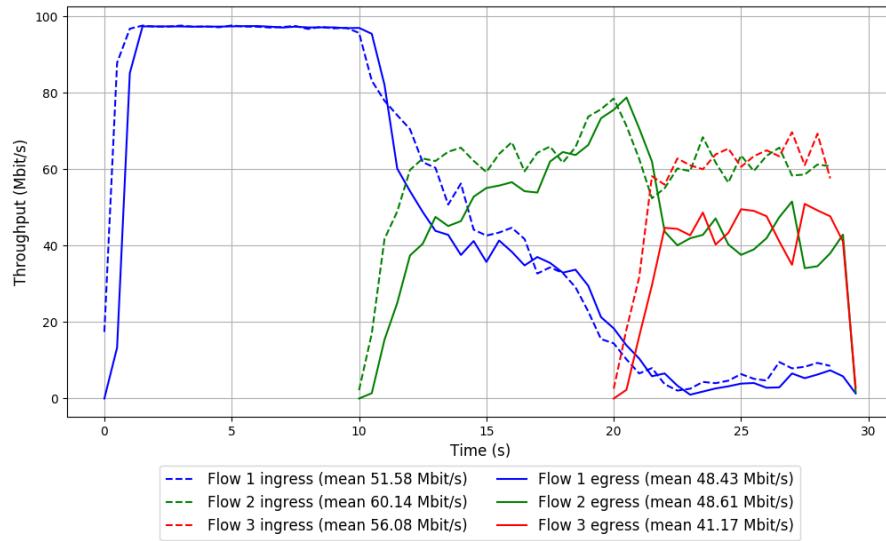


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 02:12:38
End at: 2019-01-25 02:13:08
Local clock offset: 0.534 ms
Remote clock offset: -3.497 ms

# Below is generated by plot.py at 2019-01-25 03:23:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 64.636 ms
Loss rate: 14.05%
-- Flow 1:
Average throughput: 48.43 Mbit/s
95th percentile per-packet one-way delay: 59.393 ms
Loss rate: 6.06%
-- Flow 2:
Average throughput: 48.61 Mbit/s
95th percentile per-packet one-way delay: 66.392 ms
Loss rate: 19.13%
-- Flow 3:
Average throughput: 41.17 Mbit/s
95th percentile per-packet one-way delay: 66.938 ms
Loss rate: 26.59%
```

Run 3: Report of Indigo-MusesC5 — Data Link

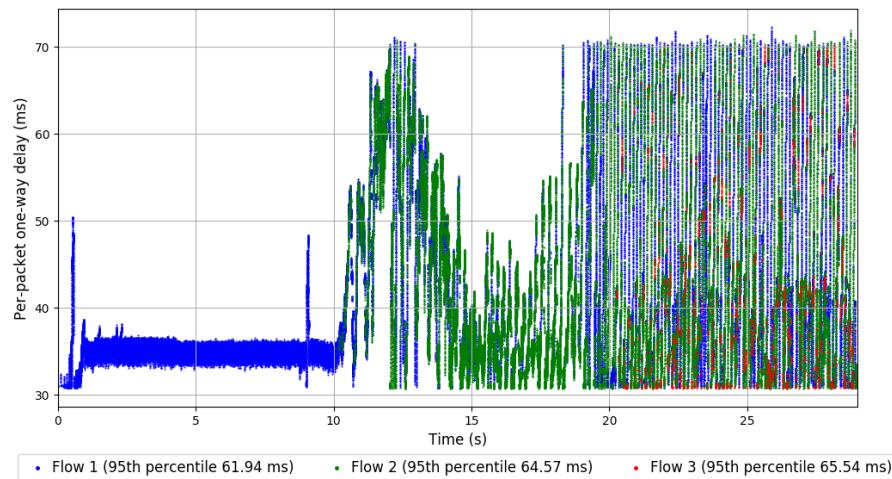
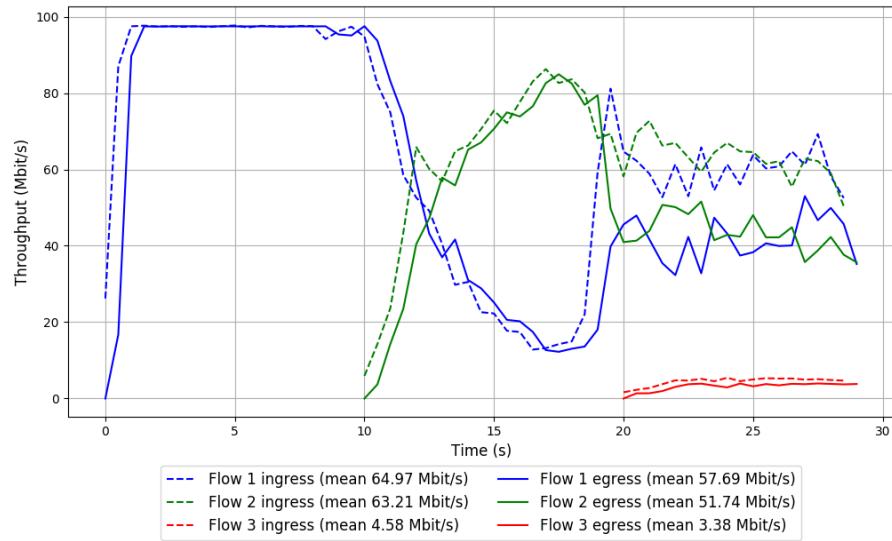


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 02:38:22
End at: 2019-01-25 02:38:52
Local clock offset: 0.637 ms
Remote clock offset: -2.924 ms

# Below is generated by plot.py at 2019-01-25 03:23:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.37 Mbit/s
95th percentile per-packet one-way delay: 63.353 ms
Loss rate: 14.06%
-- Flow 1:
Average throughput: 57.69 Mbit/s
95th percentile per-packet one-way delay: 61.939 ms
Loss rate: 11.20%
-- Flow 2:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 64.567 ms
Loss rate: 18.16%
-- Flow 3:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 65.539 ms
Loss rate: 26.28%
```

Run 4: Report of Indigo-MusesC5 — Data Link

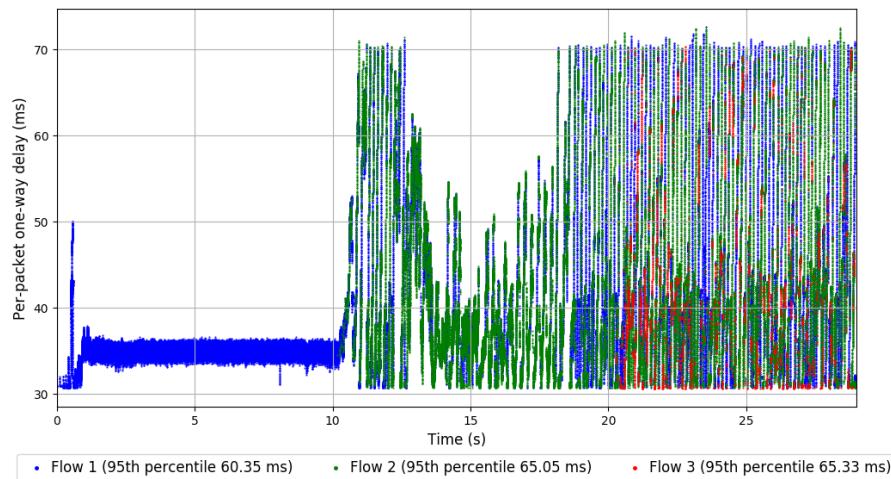
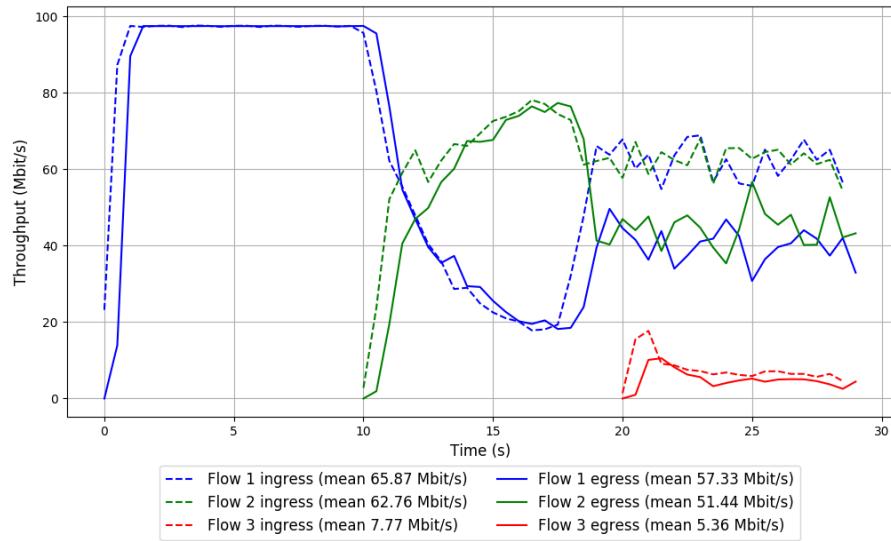


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 03:04:17
End at: 2019-01-25 03:04:47
Local clock offset: 0.776 ms
Remote clock offset: -2.547 ms

# Below is generated by plot.py at 2019-01-25 03:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 63.237 ms
Loss rate: 15.26%
-- Flow 1:
Average throughput: 57.33 Mbit/s
95th percentile per-packet one-way delay: 60.354 ms
Loss rate: 12.97%
-- Flow 2:
Average throughput: 51.44 Mbit/s
95th percentile per-packet one-way delay: 65.054 ms
Loss rate: 18.04%
-- Flow 3:
Average throughput: 5.36 Mbit/s
95th percentile per-packet one-way delay: 65.333 ms
Loss rate: 31.24%
```

Run 5: Report of Indigo-MusesC5 — Data Link

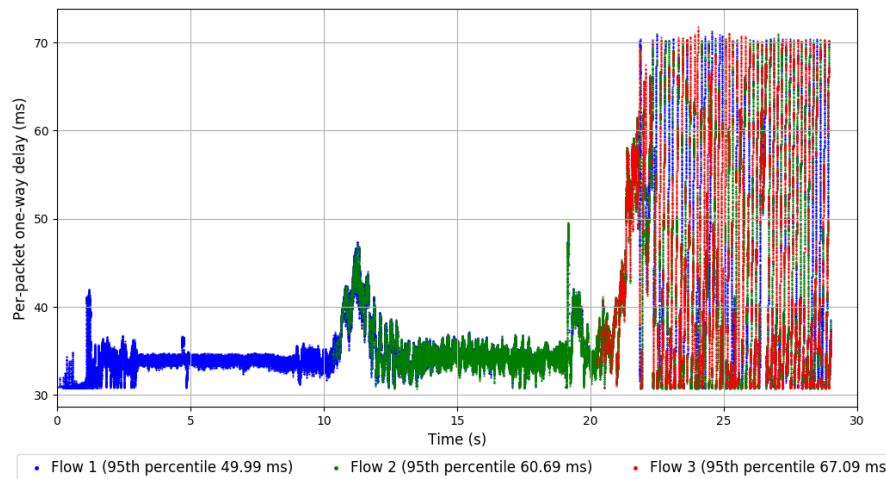
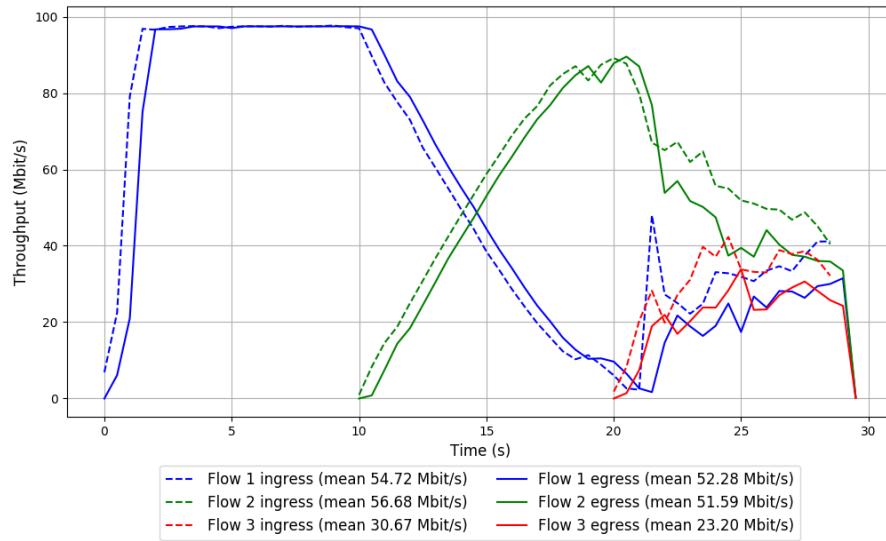


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 01:18:29
End at: 2019-01-25 01:18:59
Local clock offset: 0.53 ms
Remote clock offset: -4.531 ms

# Below is generated by plot.py at 2019-01-25 03:23:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.66 Mbit/s
95th percentile per-packet one-way delay: 59.541 ms
Loss rate: 7.92%
-- Flow 1:
Average throughput: 52.28 Mbit/s
95th percentile per-packet one-way delay: 49.991 ms
Loss rate: 4.43%
-- Flow 2:
Average throughput: 51.59 Mbit/s
95th percentile per-packet one-way delay: 60.692 ms
Loss rate: 8.97%
-- Flow 3:
Average throughput: 23.20 Mbit/s
95th percentile per-packet one-way delay: 67.090 ms
Loss rate: 24.33%
```

Run 1: Report of Indigo-MusesD — Data Link

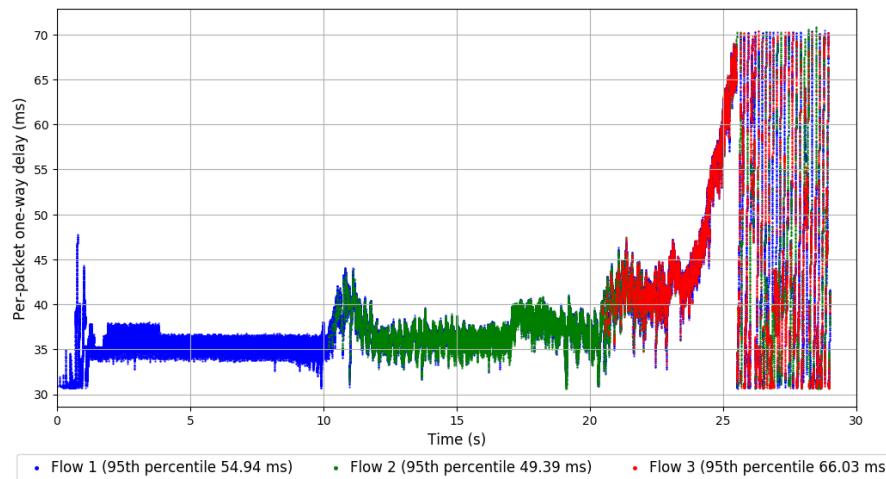
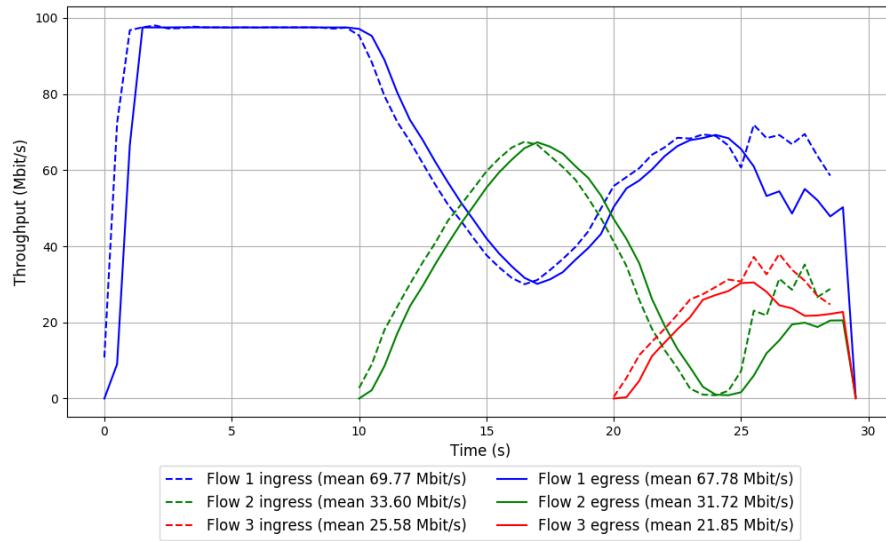


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 01:45:25
End at: 2019-01-25 01:45:55
Local clock offset: 0.49 ms
Remote clock offset: -4.296 ms

# Below is generated by plot.py at 2019-01-25 03:23:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.97 Mbit/s
95th percentile per-packet one-way delay: 56.945 ms
Loss rate: 4.32%
-- Flow 1:
Average throughput: 67.78 Mbit/s
95th percentile per-packet one-way delay: 54.939 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 49.391 ms
Loss rate: 5.56%
-- Flow 3:
Average throughput: 21.85 Mbit/s
95th percentile per-packet one-way delay: 66.034 ms
Loss rate: 14.53%
```

Run 2: Report of Indigo-MusesD — Data Link

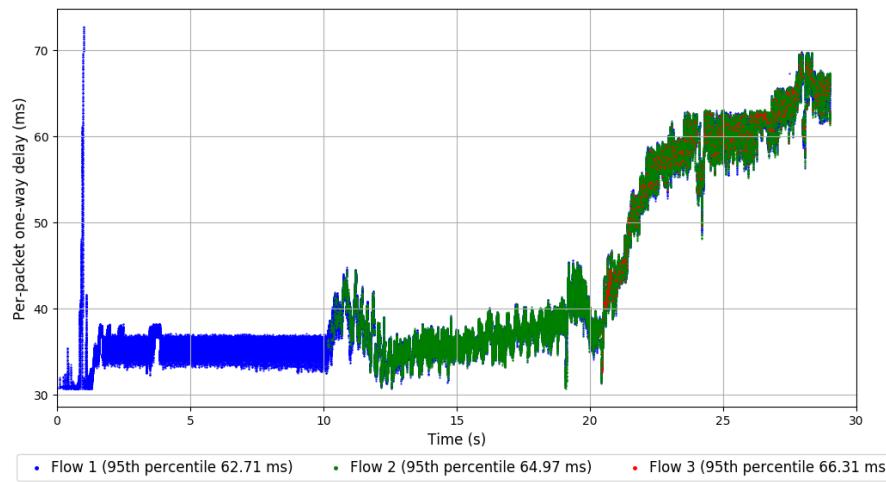
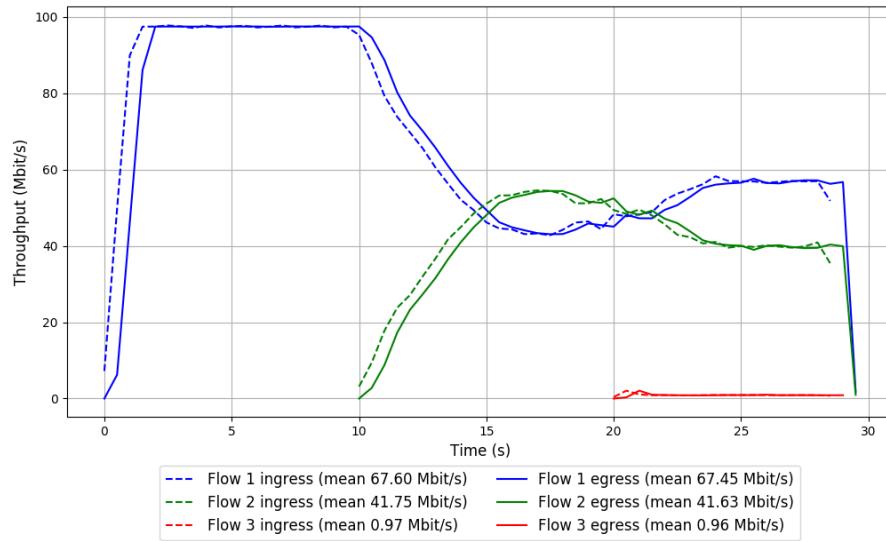


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 02:11:22
End at: 2019-01-25 02:11:52
Local clock offset: 0.518 ms
Remote clock offset: -3.556 ms

# Below is generated by plot.py at 2019-01-25 03:23:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 63.858 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 67.45 Mbit/s
95th percentile per-packet one-way delay: 62.713 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 41.63 Mbit/s
95th percentile per-packet one-way delay: 64.965 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 66.309 ms
Loss rate: 0.28%
```

Run 3: Report of Indigo-MusesD — Data Link

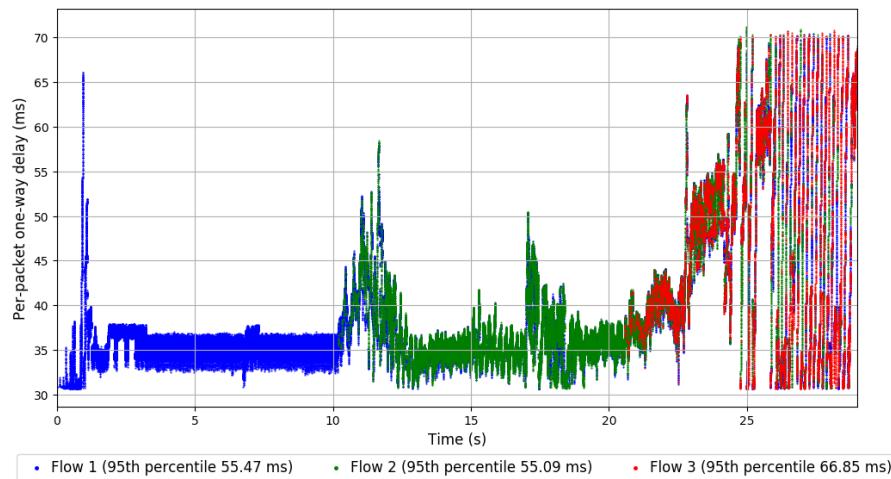
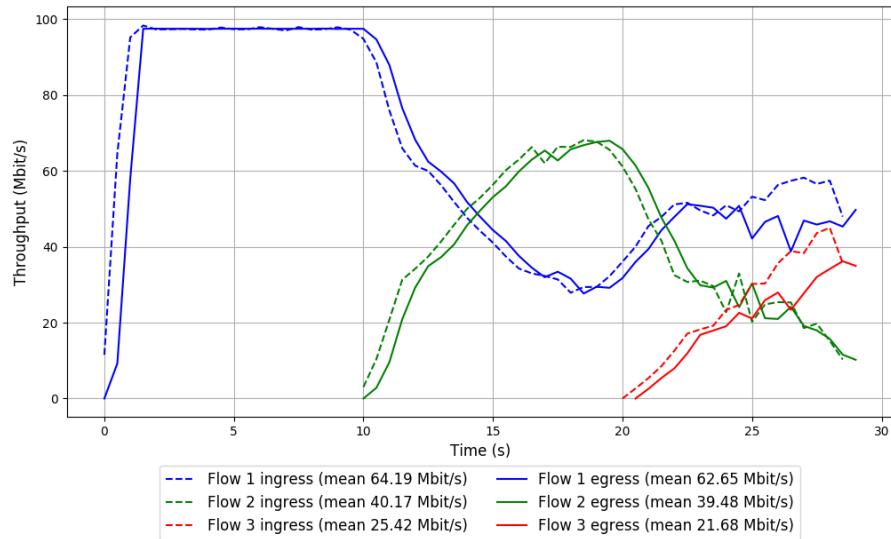


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 02:37:08
End at: 2019-01-25 02:37:38
Local clock offset: 0.634 ms
Remote clock offset: -2.947 ms

# Below is generated by plot.py at 2019-01-25 03:23:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 58.954 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 62.65 Mbit/s
95th percentile per-packet one-way delay: 55.466 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 55.088 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 21.68 Mbit/s
95th percentile per-packet one-way delay: 66.849 ms
Loss rate: 14.38%
```

Run 4: Report of Indigo-MusesD — Data Link

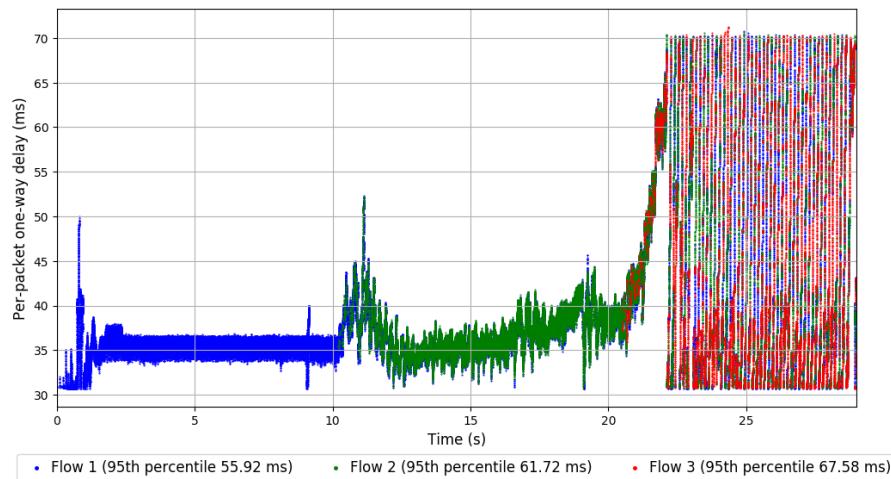
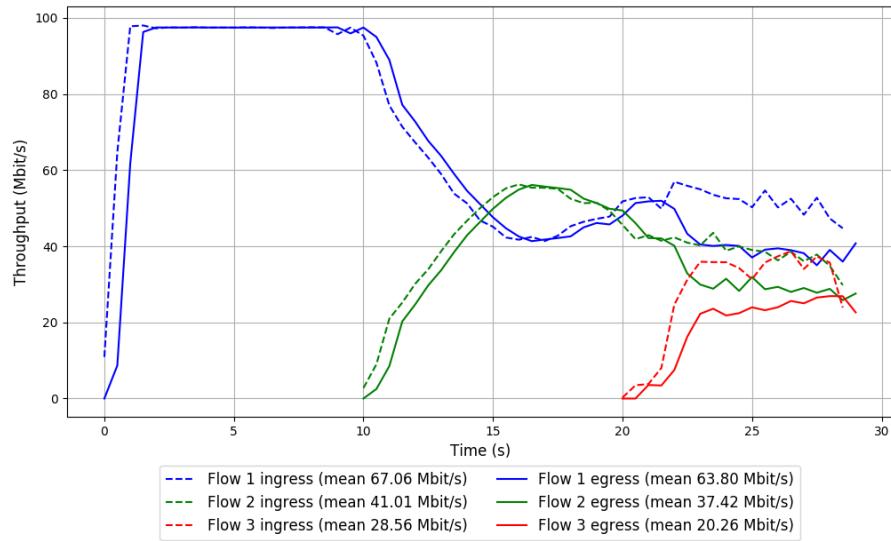


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 03:02:59
End at: 2019-01-25 03:03:29
Local clock offset: 0.732 ms
Remote clock offset: -2.624 ms

# Below is generated by plot.py at 2019-01-25 03:23:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 60.690 ms
Loss rate: 7.85%
-- Flow 1:
Average throughput: 63.80 Mbit/s
95th percentile per-packet one-way delay: 55.917 ms
Loss rate: 4.81%
-- Flow 2:
Average throughput: 37.42 Mbit/s
95th percentile per-packet one-way delay: 61.722 ms
Loss rate: 8.77%
-- Flow 3:
Average throughput: 20.26 Mbit/s
95th percentile per-packet one-way delay: 67.581 ms
Loss rate: 29.11%
```

Run 5: Report of Indigo-MusesD — Data Link

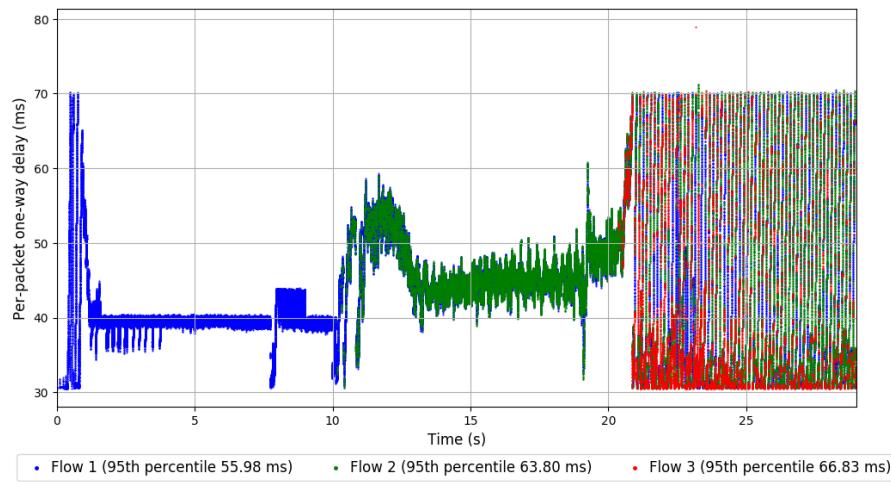
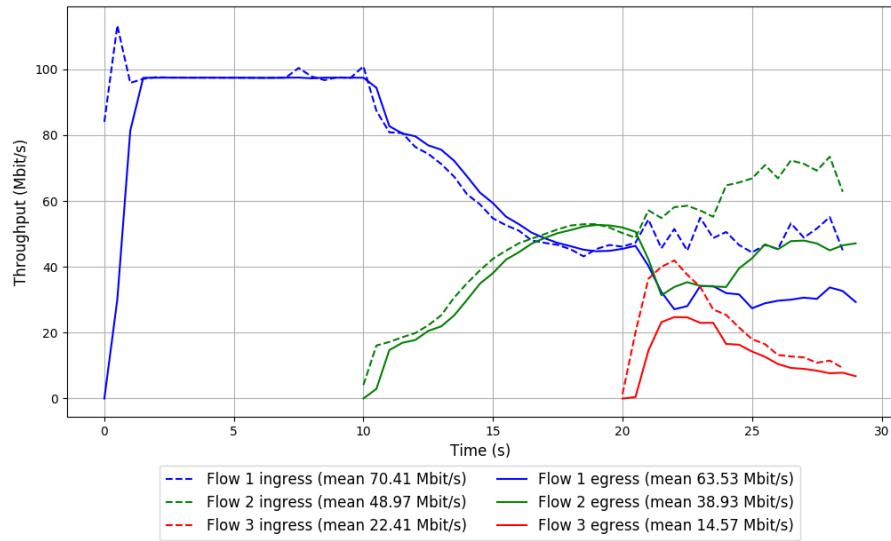


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 01:13:17
End at: 2019-01-25 01:13:47
Local clock offset: 0.507 ms
Remote clock offset: -4.66 ms

# Below is generated by plot.py at 2019-01-25 03:24:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 60.244 ms
Loss rate: 14.48%
-- Flow 1:
Average throughput: 63.53 Mbit/s
95th percentile per-packet one-way delay: 55.978 ms
Loss rate: 9.77%
-- Flow 2:
Average throughput: 38.93 Mbit/s
95th percentile per-packet one-way delay: 63.800 ms
Loss rate: 20.52%
-- Flow 3:
Average throughput: 14.57 Mbit/s
95th percentile per-packet one-way delay: 66.835 ms
Loss rate: 35.11%
```

Run 1: Report of Indigo-MusesT — Data Link

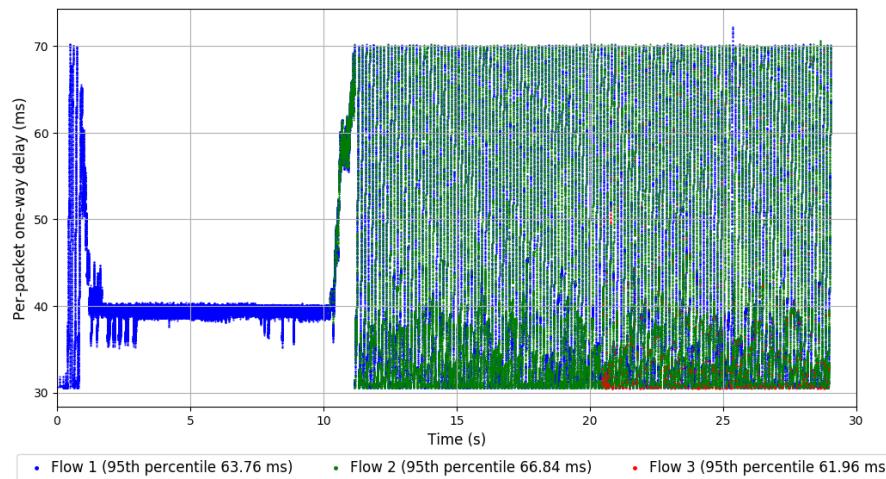
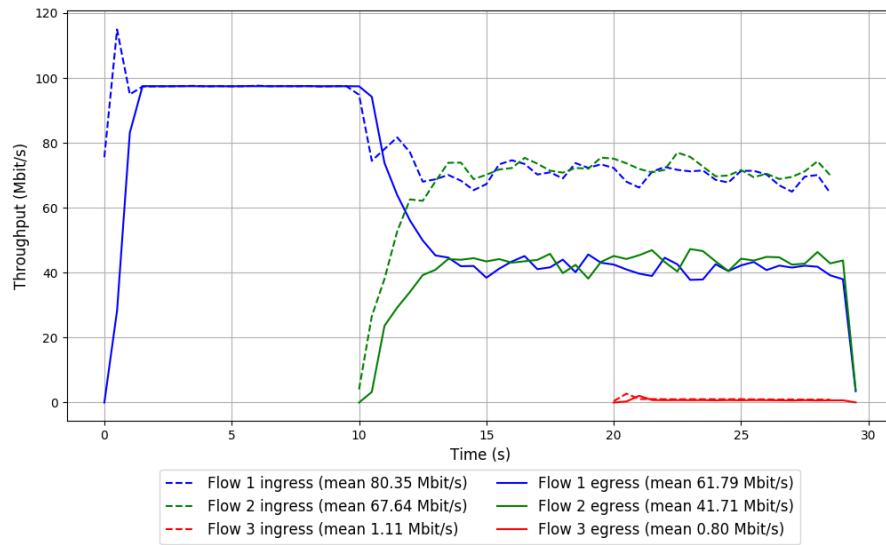


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 01:40:21
End at: 2019-01-25 01:40:51
Local clock offset: 0.506 ms
Remote clock offset: -4.638 ms

# Below is generated by plot.py at 2019-01-25 03:24:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.16 Mbit/s
95th percentile per-packet one-way delay: 65.163 ms
Loss rate: 28.43%
-- Flow 1:
Average throughput: 61.79 Mbit/s
95th percentile per-packet one-way delay: 63.760 ms
Loss rate: 23.04%
-- Flow 2:
Average throughput: 41.71 Mbit/s
95th percentile per-packet one-way delay: 66.836 ms
Loss rate: 38.27%
-- Flow 3:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 61.956 ms
Loss rate: 27.87%
```

Run 2: Report of Indigo-MusesT — Data Link

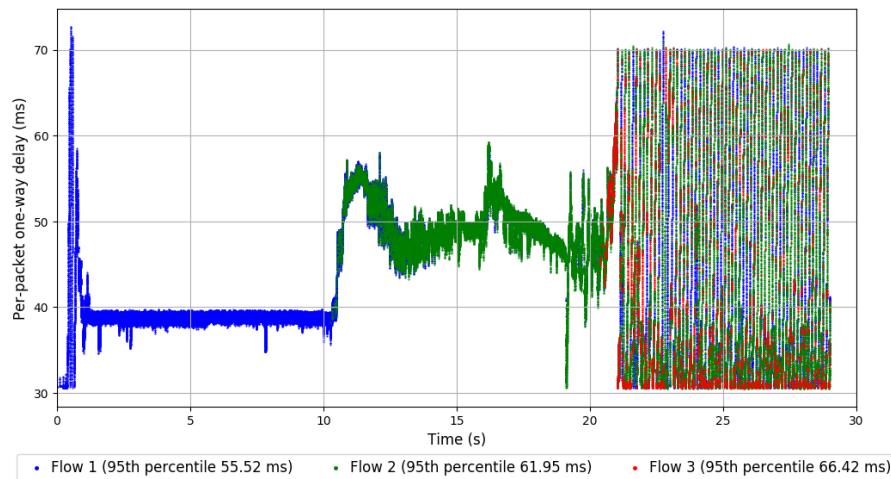
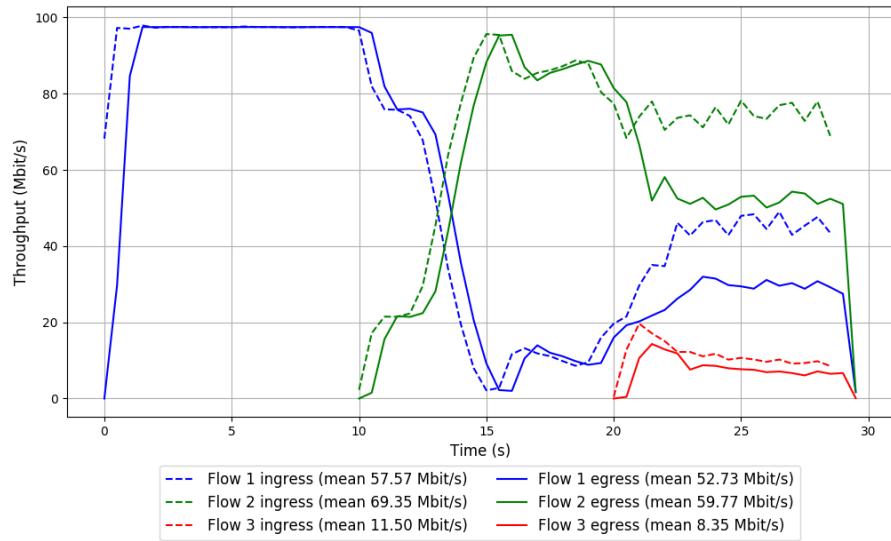


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 02:06:21
End at: 2019-01-25 02:06:51
Local clock offset: 0.518 ms
Remote clock offset: -3.892 ms

# Below is generated by plot.py at 2019-01-25 03:24:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.93 Mbit/s
95th percentile per-packet one-way delay: 59.395 ms
Loss rate: 11.30%
-- Flow 1:
Average throughput: 52.73 Mbit/s
95th percentile per-packet one-way delay: 55.516 ms
Loss rate: 8.38%
-- Flow 2:
Average throughput: 59.77 Mbit/s
95th percentile per-packet one-way delay: 61.954 ms
Loss rate: 13.81%
-- Flow 3:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 66.422 ms
Loss rate: 27.38%
```

Run 3: Report of Indigo-MusesT — Data Link

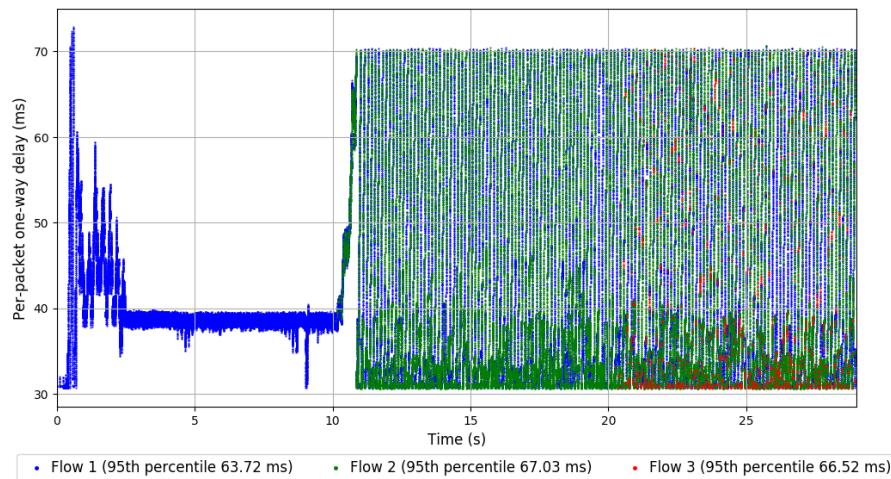
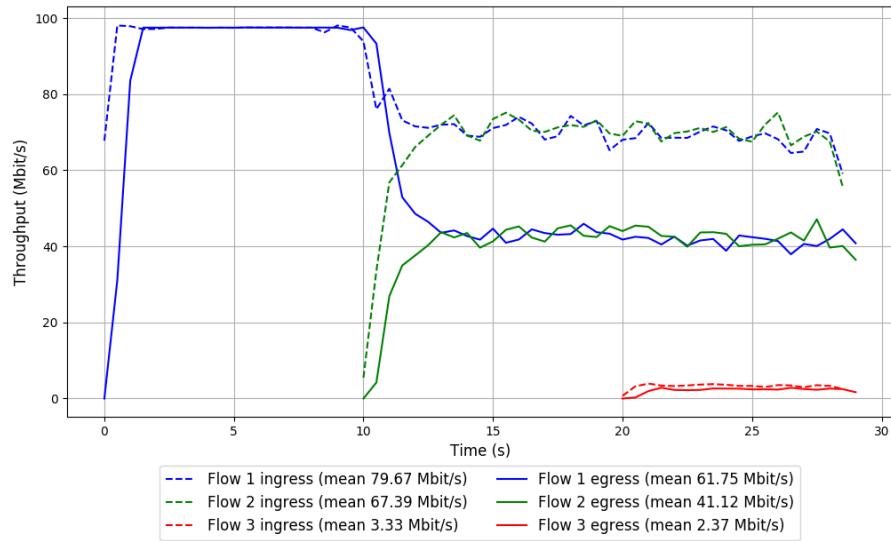


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 02:32:12
End at: 2019-01-25 02:32:42
Local clock offset: 0.582 ms
Remote clock offset: -3.121 ms

# Below is generated by plot.py at 2019-01-25 03:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.26 Mbit/s
95th percentile per-packet one-way delay: 65.232 ms
Loss rate: 28.35%
-- Flow 1:
Average throughput: 61.75 Mbit/s
95th percentile per-packet one-way delay: 63.722 ms
Loss rate: 22.48%
-- Flow 2:
Average throughput: 41.12 Mbit/s
95th percentile per-packet one-way delay: 67.028 ms
Loss rate: 38.99%
-- Flow 3:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 66.518 ms
Loss rate: 28.85%
```

Run 4: Report of Indigo-MusesT — Data Link

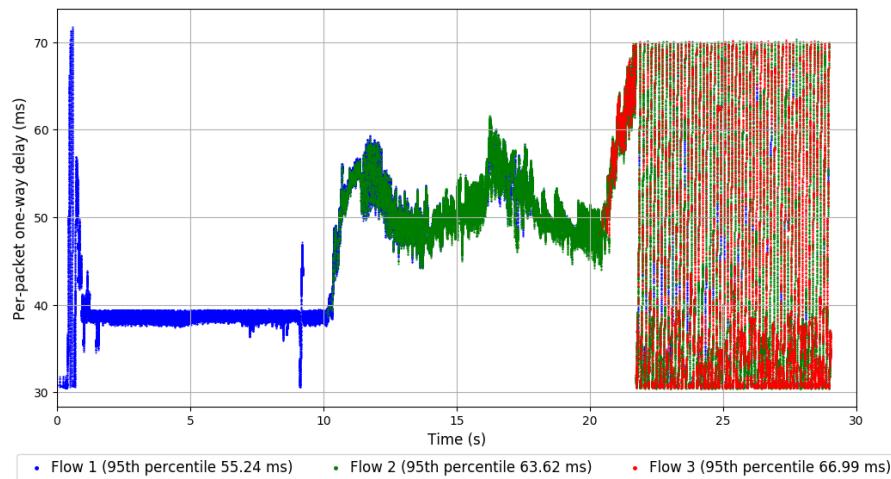
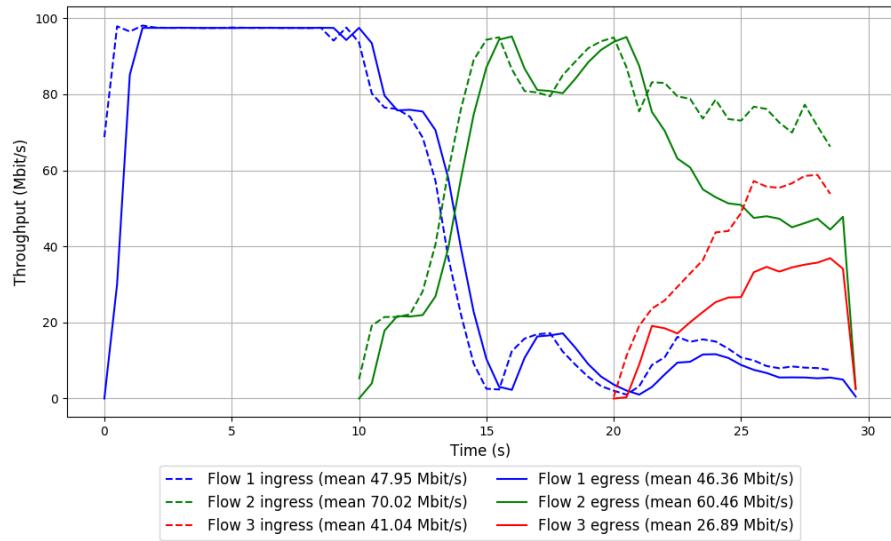


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 02:57:45
End at: 2019-01-25 02:58:15
Local clock offset: 0.818 ms
Remote clock offset: -2.912 ms

# Below is generated by plot.py at 2019-01-25 03:24:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.82 Mbit/s
95th percentile per-packet one-way delay: 61.546 ms
Loss rate: 11.41%
-- Flow 1:
Average throughput: 46.36 Mbit/s
95th percentile per-packet one-way delay: 55.238 ms
Loss rate: 3.32%
-- Flow 2:
Average throughput: 60.46 Mbit/s
95th percentile per-packet one-way delay: 63.619 ms
Loss rate: 13.67%
-- Flow 3:
Average throughput: 26.89 Mbit/s
95th percentile per-packet one-way delay: 66.989 ms
Loss rate: 34.58%
```

Run 5: Report of Indigo-MusesT — Data Link

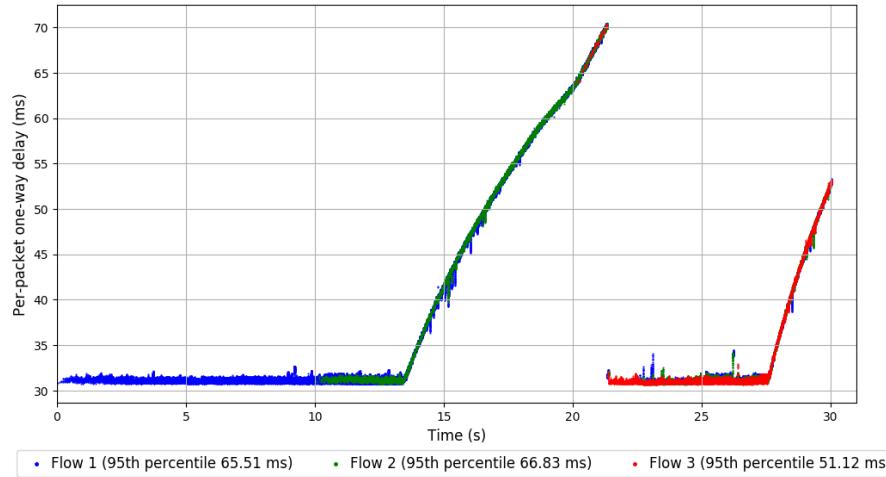
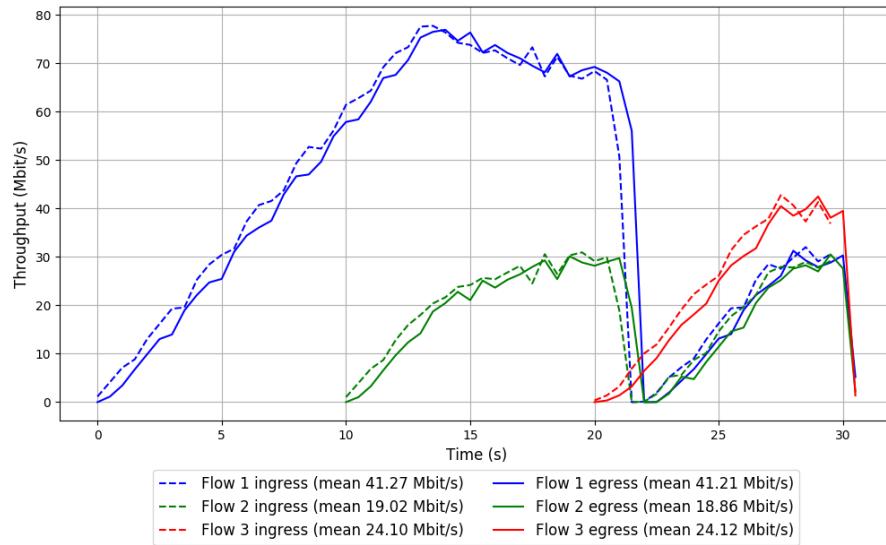


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 01:21:18
End at: 2019-01-25 01:21:48
Local clock offset: 0.562 ms
Remote clock offset: -4.608 ms

# Below is generated by plot.py at 2019-01-25 03:24:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 65.294 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 41.21 Mbit/s
95th percentile per-packet one-way delay: 65.509 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 18.86 Mbit/s
95th percentile per-packet one-way delay: 66.832 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 24.12 Mbit/s
95th percentile per-packet one-way delay: 51.124 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

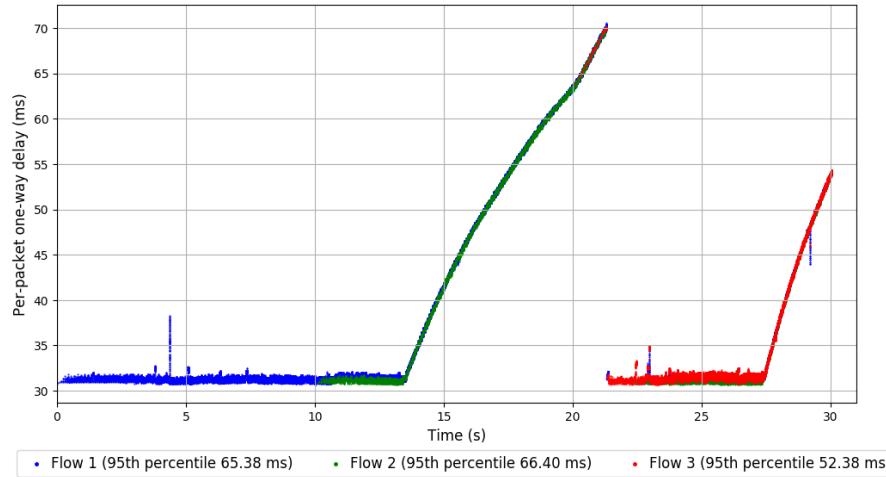
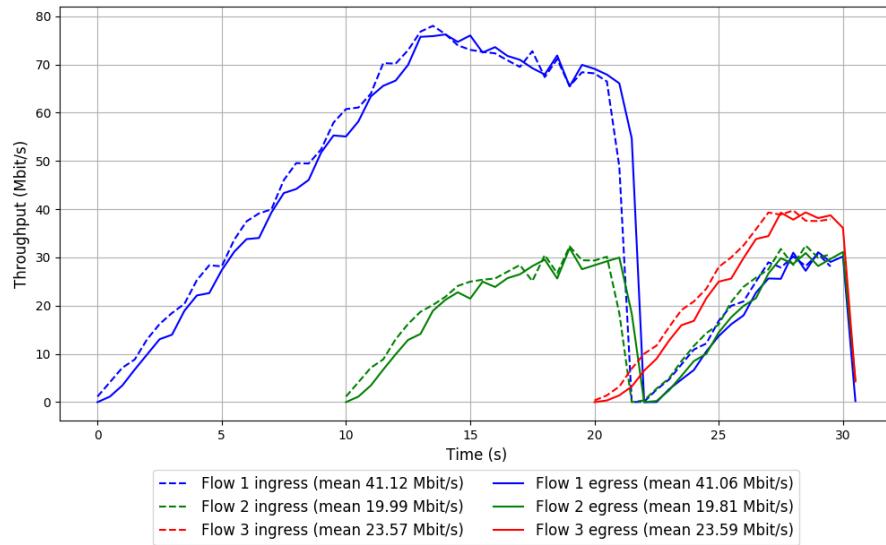


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-25 01:47:55
End at: 2019-01-25 01:48:25
Local clock offset: 0.487 ms
Remote clock offset: -4.189 ms

# Below is generated by plot.py at 2019-01-25 03:24:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.04 Mbit/s
95th percentile per-packet one-way delay: 65.115 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 41.06 Mbit/s
95th percentile per-packet one-way delay: 65.382 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 19.81 Mbit/s
95th percentile per-packet one-way delay: 66.397 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 23.59 Mbit/s
95th percentile per-packet one-way delay: 52.378 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

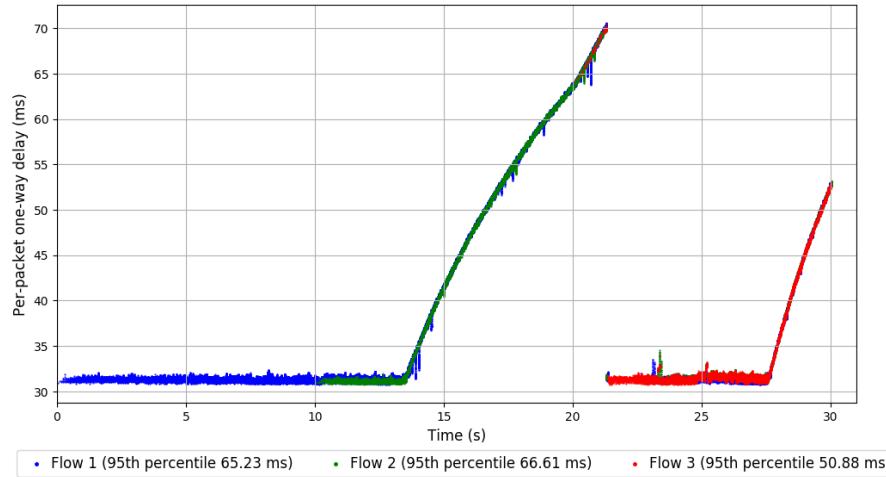
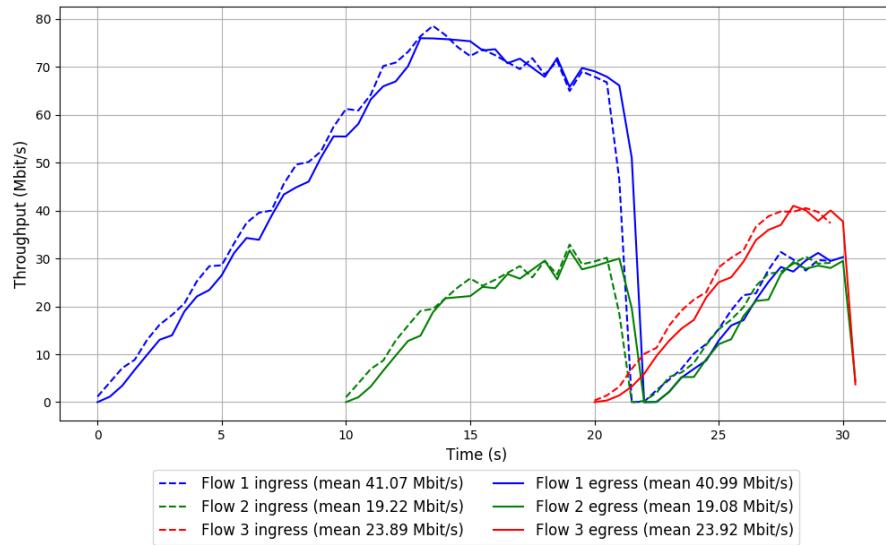


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-25 02:13:55
End at: 2019-01-25 02:14:25
Local clock offset: 0.544 ms
Remote clock offset: -3.463 ms

# Below is generated by plot.py at 2019-01-25 03:24:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.56 Mbit/s
95th percentile per-packet one-way delay: 65.162 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 40.99 Mbit/s
95th percentile per-packet one-way delay: 65.231 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 19.08 Mbit/s
95th percentile per-packet one-way delay: 66.608 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 23.92 Mbit/s
95th percentile per-packet one-way delay: 50.876 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

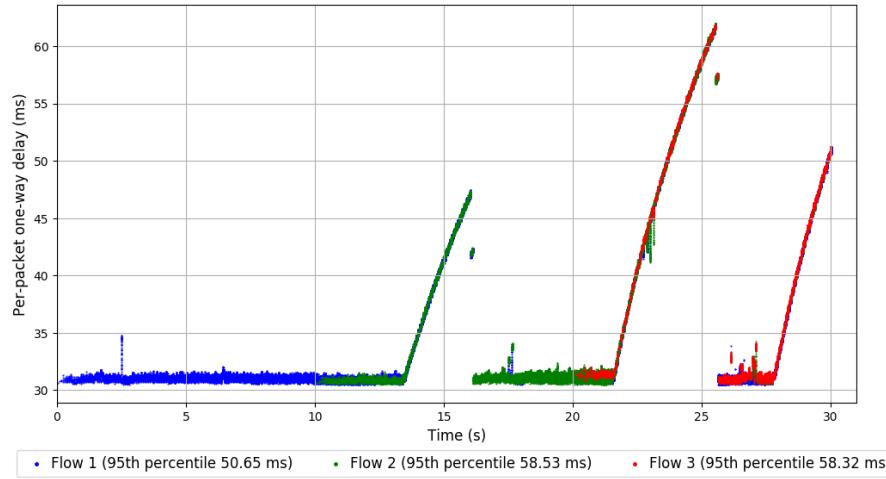
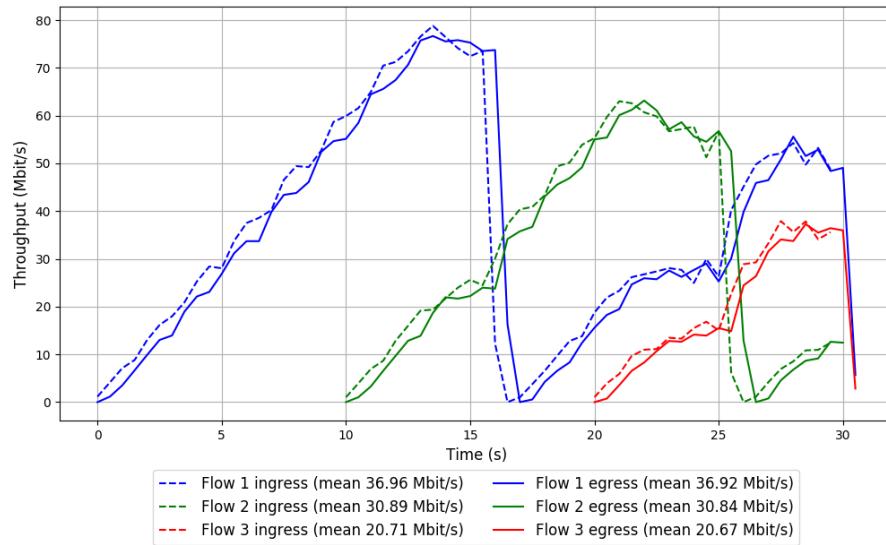


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-25 02:39:36
End at: 2019-01-25 02:40:06
Local clock offset: 0.675 ms
Remote clock offset: -3.127 ms

# Below is generated by plot.py at 2019-01-25 03:25:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.27 Mbit/s
95th percentile per-packet one-way delay: 56.585 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 36.92 Mbit/s
95th percentile per-packet one-way delay: 50.650 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 30.84 Mbit/s
95th percentile per-packet one-way delay: 58.535 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 20.67 Mbit/s
95th percentile per-packet one-way delay: 58.316 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

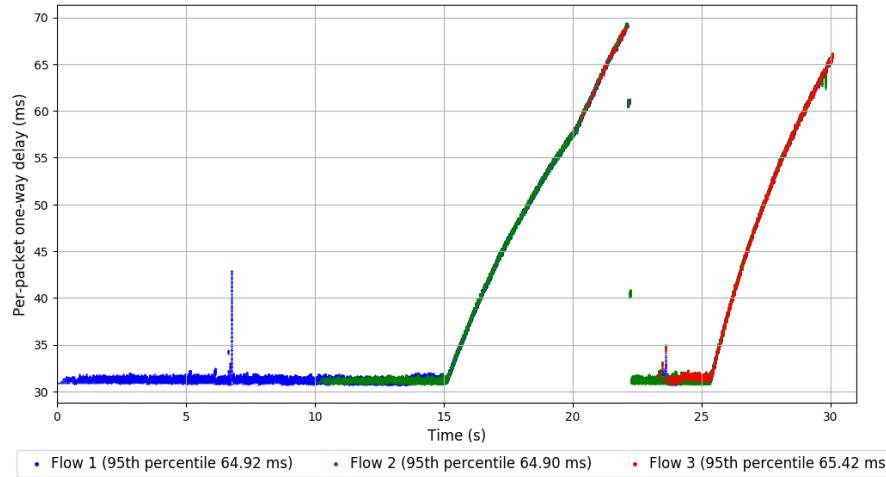
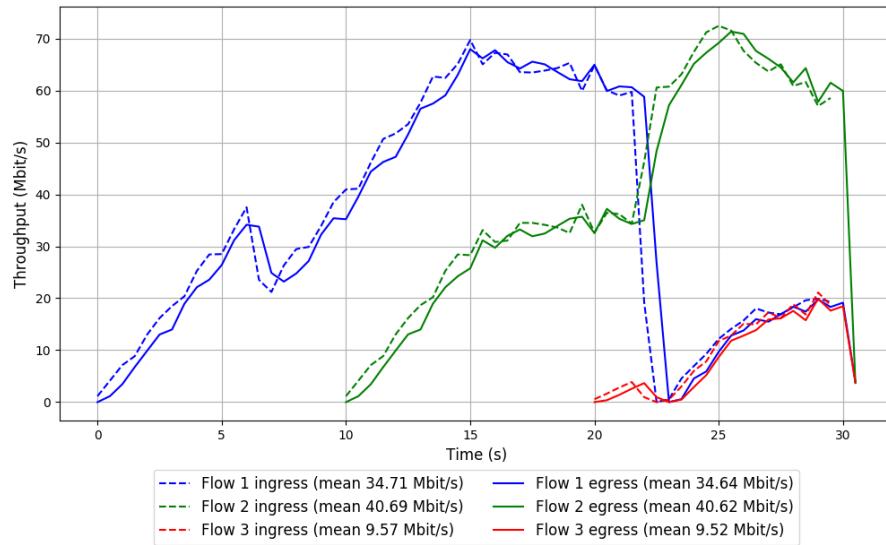


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-25 03:05:32
End at: 2019-01-25 03:06:02
Local clock offset: 0.763 ms
Remote clock offset: -2.516 ms

# Below is generated by plot.py at 2019-01-25 03:25:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.88 Mbit/s
95th percentile per-packet one-way delay: 64.933 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 34.64 Mbit/s
95th percentile per-packet one-way delay: 64.918 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.62 Mbit/s
95th percentile per-packet one-way delay: 64.903 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 65.418 ms
Loss rate: 0.45%
```

Run 5: Report of LEDBAT — Data Link

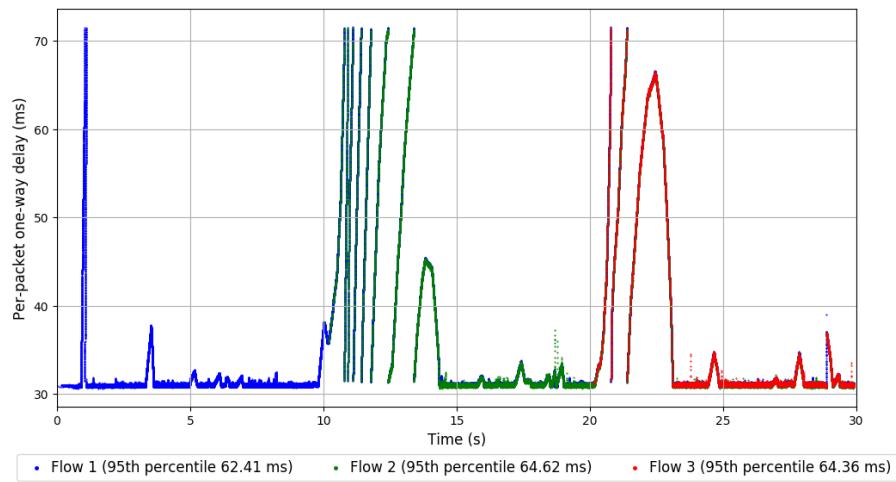
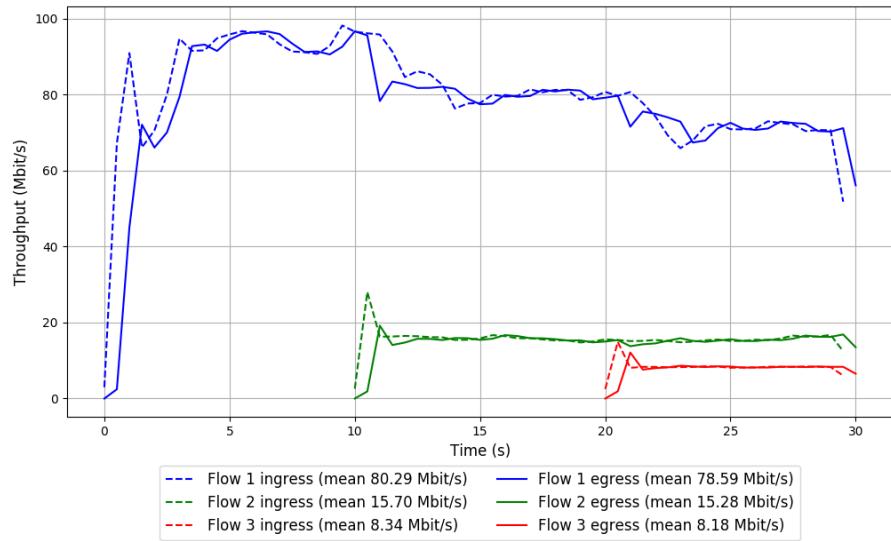


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-25 01:15:54
End at: 2019-01-25 01:16:24
Local clock offset: 0.505 ms
Remote clock offset: -4.5 ms

# Below is generated by plot.py at 2019-01-25 03:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.44 Mbit/s
95th percentile per-packet one-way delay: 62.966 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 62.408 ms
Loss rate: 2.12%
-- Flow 2:
Average throughput: 15.28 Mbit/s
95th percentile per-packet one-way delay: 64.618 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 64.362 ms
Loss rate: 1.96%
```

Run 1: Report of PCC-Allegro — Data Link

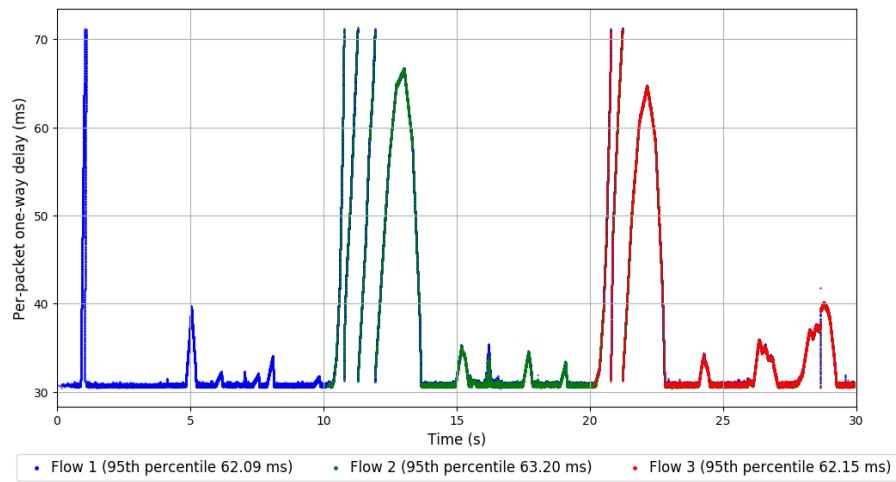
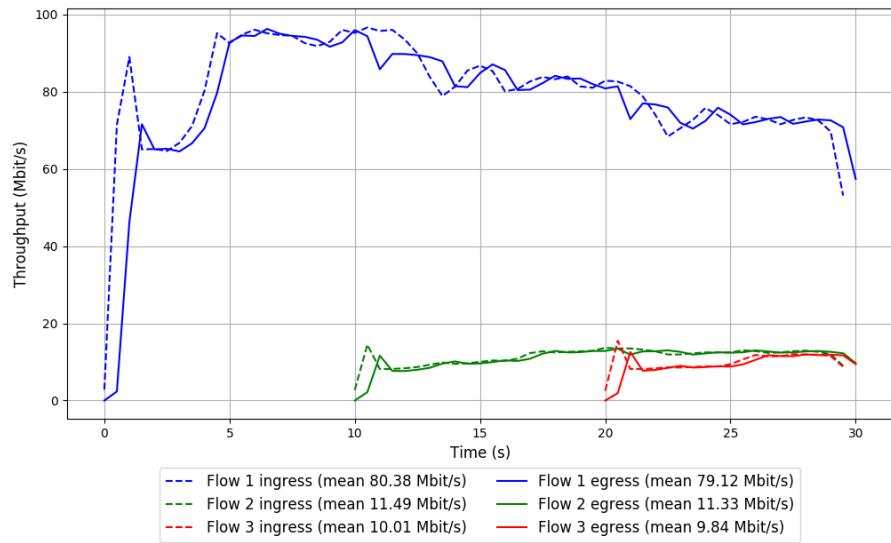


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-25 01:42:53
End at: 2019-01-25 01:43:23
Local clock offset: 0.493 ms
Remote clock offset: -4.517 ms

# Below is generated by plot.py at 2019-01-25 03:25:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.90 Mbit/s
95th percentile per-packet one-way delay: 62.218 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 79.12 Mbit/s
95th percentile per-packet one-way delay: 62.092 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 11.33 Mbit/s
95th percentile per-packet one-way delay: 63.199 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 9.84 Mbit/s
95th percentile per-packet one-way delay: 62.152 ms
Loss rate: 1.64%
```

Run 2: Report of PCC-Allegro — Data Link

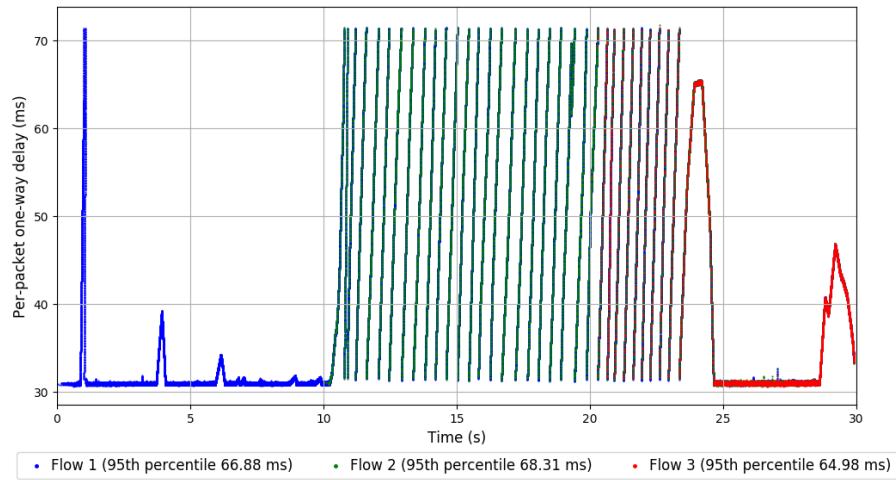
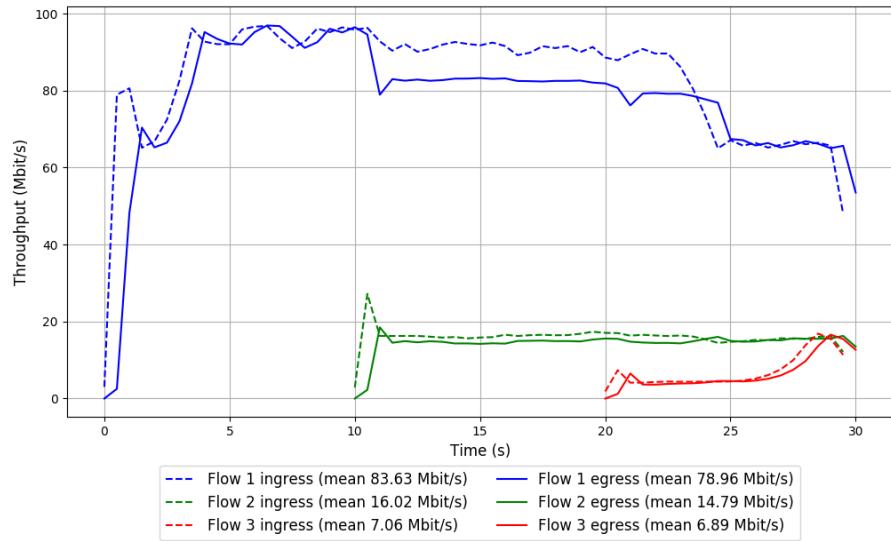


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-25 02:08:51
End at: 2019-01-25 02:09:21
Local clock offset: 0.515 ms
Remote clock offset: -3.599 ms

# Below is generated by plot.py at 2019-01-25 03:25:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.07 Mbit/s
95th percentile per-packet one-way delay: 67.043 ms
Loss rate: 5.74%
-- Flow 1:
Average throughput: 78.96 Mbit/s
95th percentile per-packet one-way delay: 66.883 ms
Loss rate: 5.58%
-- Flow 2:
Average throughput: 14.79 Mbit/s
95th percentile per-packet one-way delay: 68.311 ms
Loss rate: 7.62%
-- Flow 3:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 64.981 ms
Loss rate: 2.53%
```

Run 3: Report of PCC-Allegro — Data Link

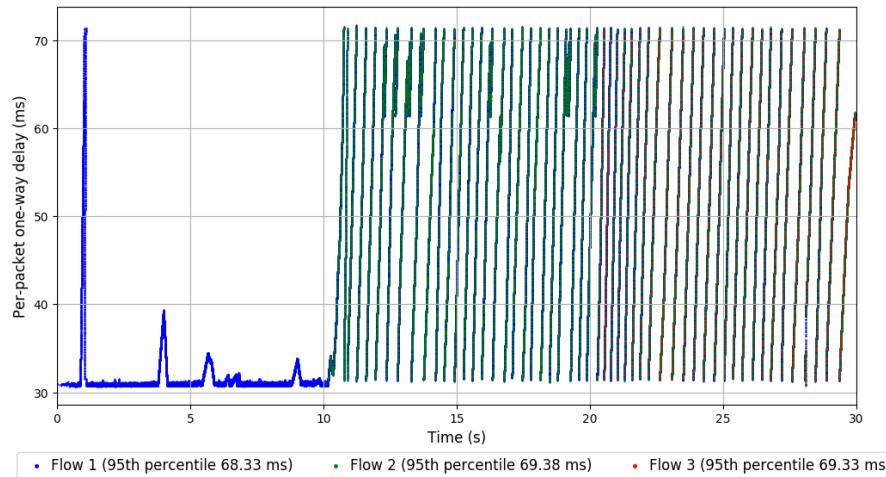
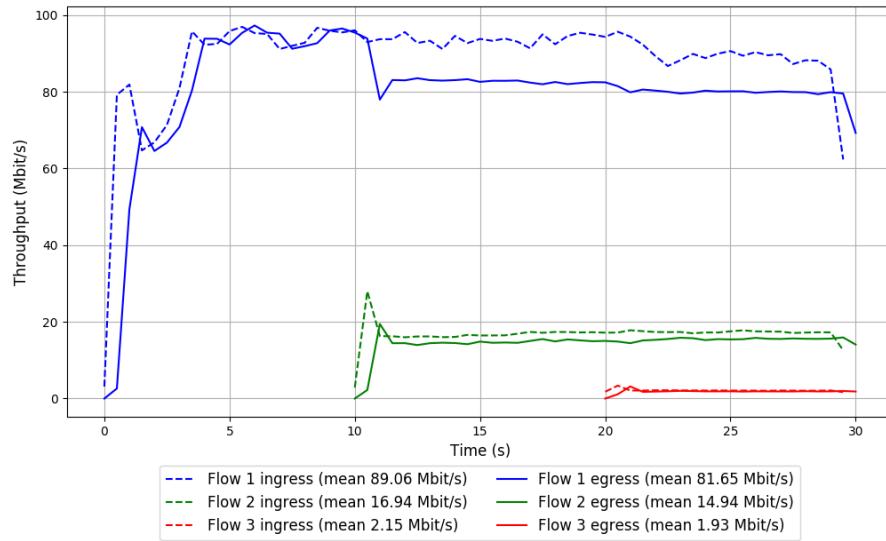


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-25 02:34:40
End at: 2019-01-25 02:35:10
Local clock offset: 0.613 ms
Remote clock offset: -2.959 ms

# Below is generated by plot.py at 2019-01-25 03:25:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.23 Mbit/s
95th percentile per-packet one-way delay: 68.512 ms
Loss rate: 8.62%
-- Flow 1:
Average throughput: 81.65 Mbit/s
95th percentile per-packet one-way delay: 68.326 ms
Loss rate: 8.22%
-- Flow 2:
Average throughput: 14.94 Mbit/s
95th percentile per-packet one-way delay: 69.383 ms
Loss rate: 11.65%
-- Flow 3:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 69.325 ms
Loss rate: 10.46%
```

Run 4: Report of PCC-Allegro — Data Link

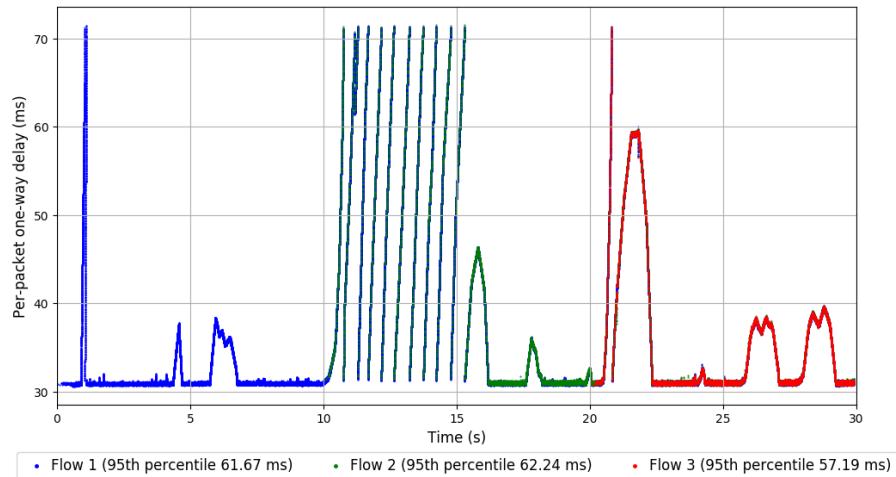
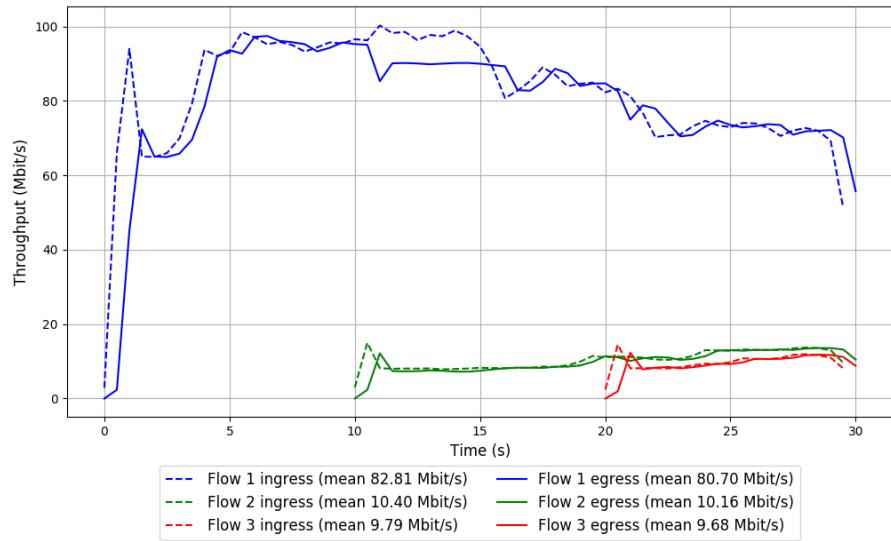


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-25 03:00:27
End at: 2019-01-25 03:00:57
Local clock offset: 0.817 ms
Remote clock offset: -2.612 ms

# Below is generated by plot.py at 2019-01-25 03:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.65 Mbit/s
95th percentile per-packet one-way delay: 61.418 ms
Loss rate: 2.48%
-- Flow 1:
Average throughput: 80.70 Mbit/s
95th percentile per-packet one-way delay: 61.675 ms
Loss rate: 2.55%
-- Flow 2:
Average throughput: 10.16 Mbit/s
95th percentile per-packet one-way delay: 62.241 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: 57.185 ms
Loss rate: 1.05%
```

Run 5: Report of PCC-Allegro — Data Link

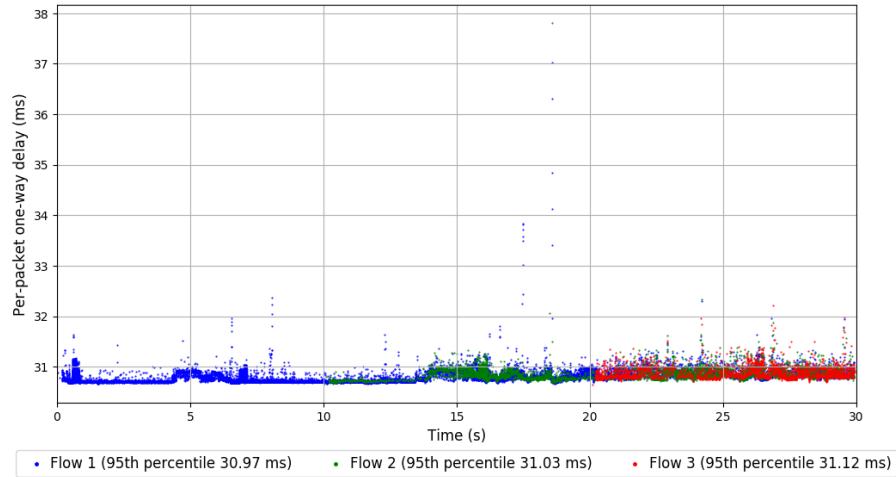
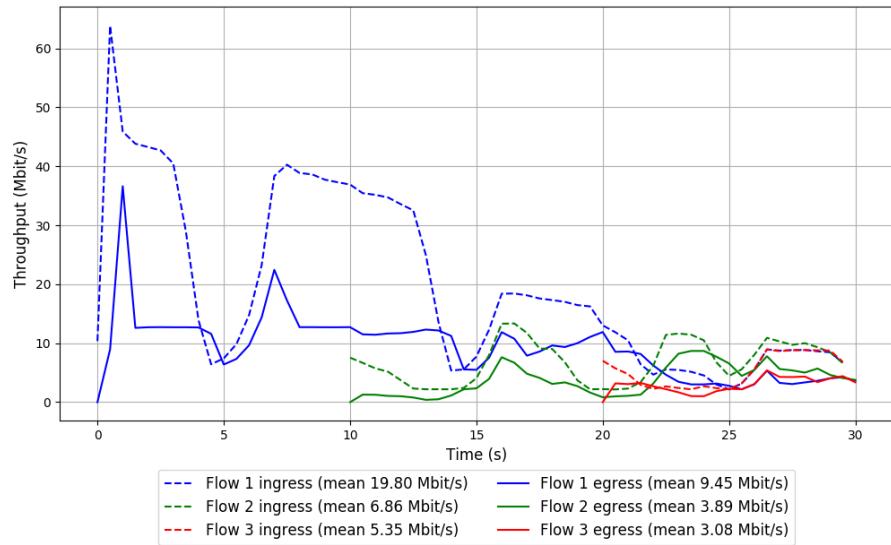


Run 1: Statistics of PCC-Expr

```
Start at: 2019-01-25 01:10:59
End at: 2019-01-25 01:11:29
Local clock offset: 0.513 ms
Remote clock offset: -4.411 ms

# Below is generated by plot.py at 2019-01-25 03:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 31.001 ms
Loss rate: 50.01%
-- Flow 1:
Average throughput: 9.45 Mbit/s
95th percentile per-packet one-way delay: 30.973 ms
Loss rate: 52.25%
-- Flow 2:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 31.032 ms
Loss rate: 43.23%
-- Flow 3:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 31.120 ms
Loss rate: 42.30%
```

Run 1: Report of PCC-Expr — Data Link

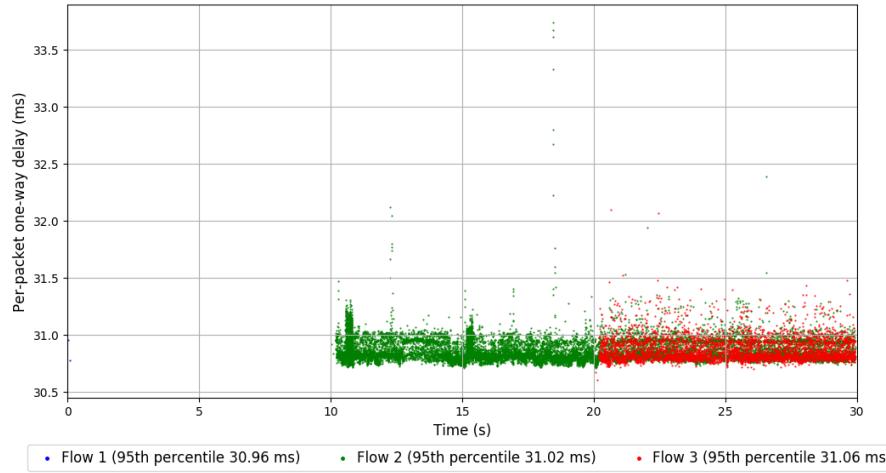
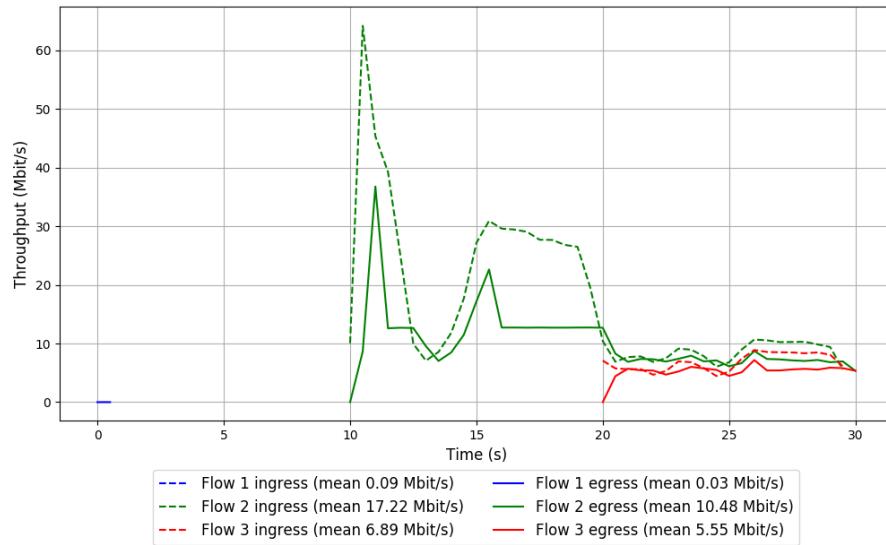


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-25 01:38:02
End at: 2019-01-25 01:38:32
Local clock offset: 0.523 ms
Remote clock offset: -4.457 ms

# Below is generated by plot.py at 2019-01-25 03:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 31.027 ms
Loss rate: 35.88%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.958 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.48 Mbit/s
95th percentile per-packet one-way delay: 31.019 ms
Loss rate: 39.13%
-- Flow 3:
Average throughput: 5.55 Mbit/s
95th percentile per-packet one-way delay: 31.062 ms
Loss rate: 19.53%
```

Run 2: Report of PCC-Expr — Data Link

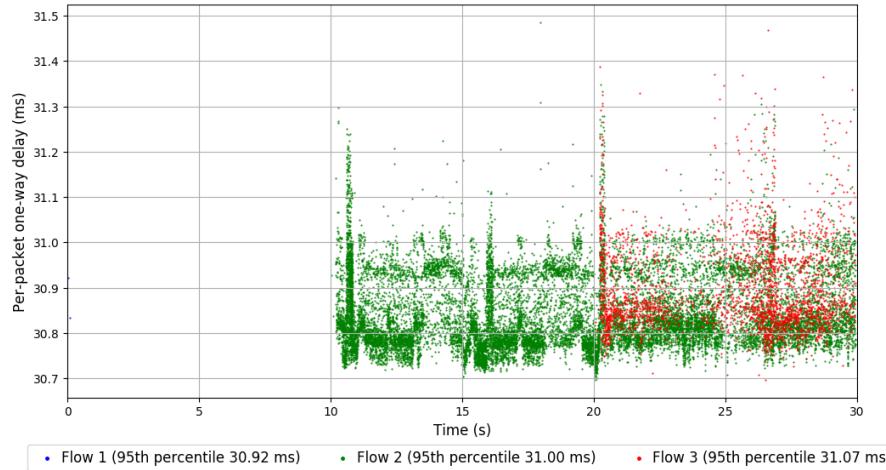
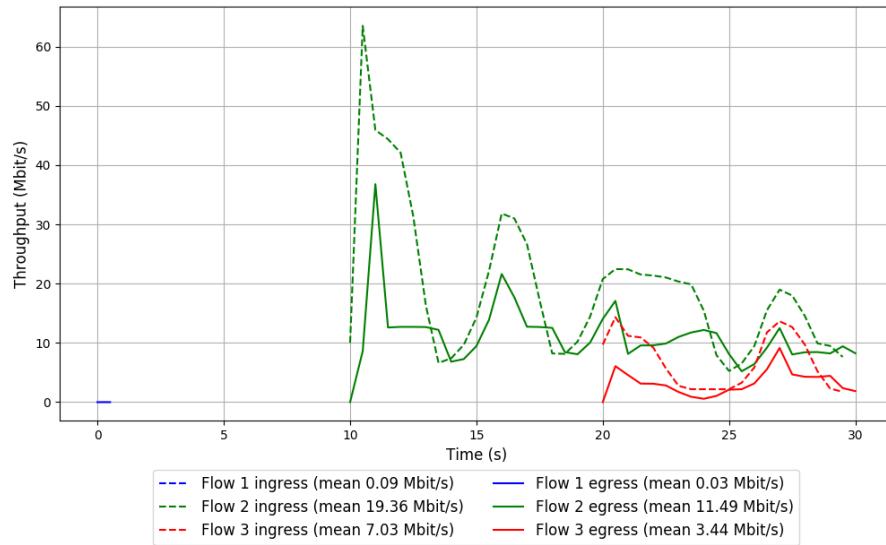


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-25 02:04:04
End at: 2019-01-25 02:04:34
Local clock offset: 0.51 ms
Remote clock offset: -3.747 ms

# Below is generated by plot.py at 2019-01-25 03:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.78 Mbit/s
95th percentile per-packet one-way delay: 31.005 ms
Loss rate: 42.25%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.922 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.49 Mbit/s
95th percentile per-packet one-way delay: 30.998 ms
Loss rate: 40.68%
-- Flow 3:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 31.072 ms
Loss rate: 50.99%
```

Run 3: Report of PCC-Expr — Data Link

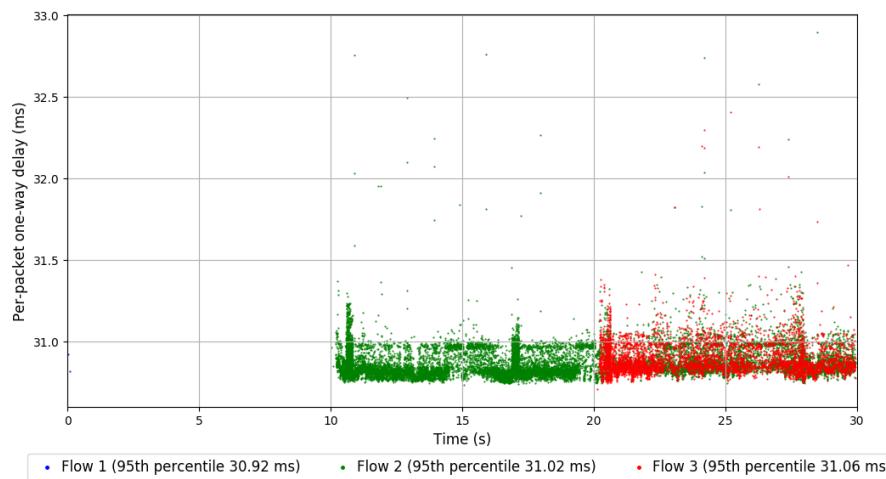
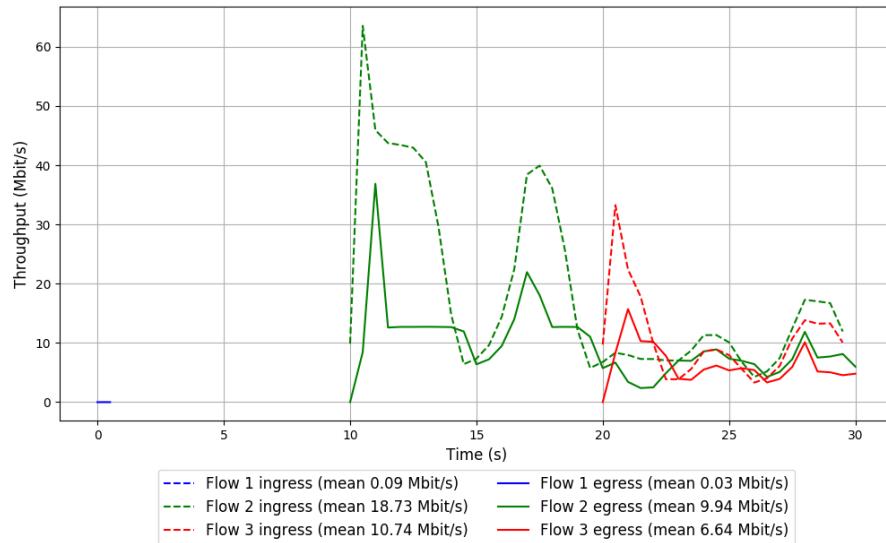


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-25 02:29:55
End at: 2019-01-25 02:30:25
Local clock offset: 0.554 ms
Remote clock offset: -3.109 ms

# Below is generated by plot.py at 2019-01-25 03:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 31.032 ms
Loss rate: 45.01%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.922 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.94 Mbit/s
95th percentile per-packet one-way delay: 31.015 ms
Loss rate: 46.95%
-- Flow 3:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 31.063 ms
Loss rate: 38.19%
```

Run 4: Report of PCC-Expr — Data Link

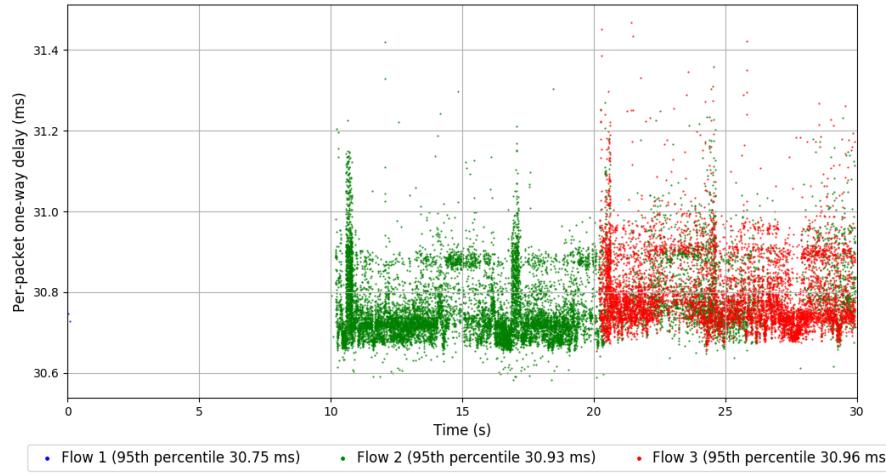
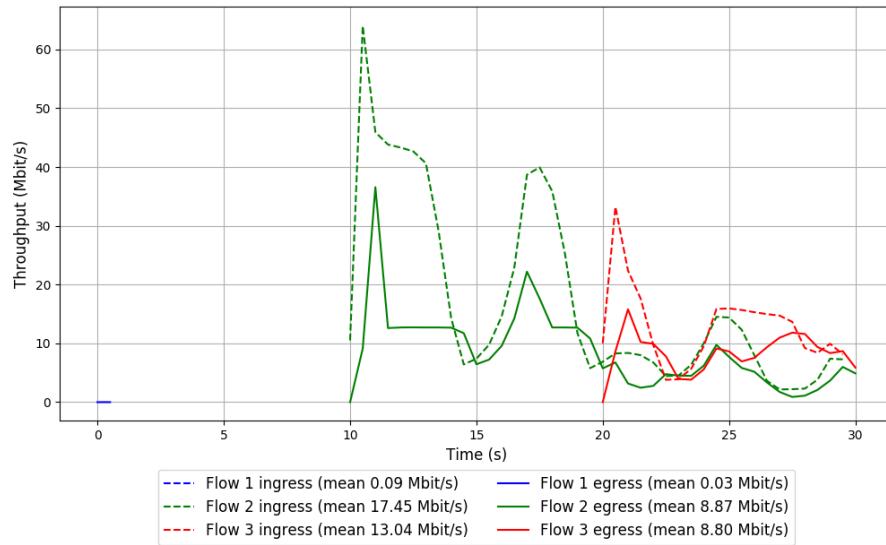


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-25 02:55:25
End at: 2019-01-25 02:55:55
Local clock offset: 0.806 ms
Remote clock offset: -2.758 ms

# Below is generated by plot.py at 2019-01-25 03:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.81 Mbit/s
95th percentile per-packet one-way delay: 30.941 ms
Loss rate: 44.68%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.747 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 8.87 Mbit/s
95th percentile per-packet one-way delay: 30.926 ms
Loss rate: 49.19%
-- Flow 3:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 30.959 ms
Loss rate: 32.50%
```

Run 5: Report of PCC-Expr — Data Link

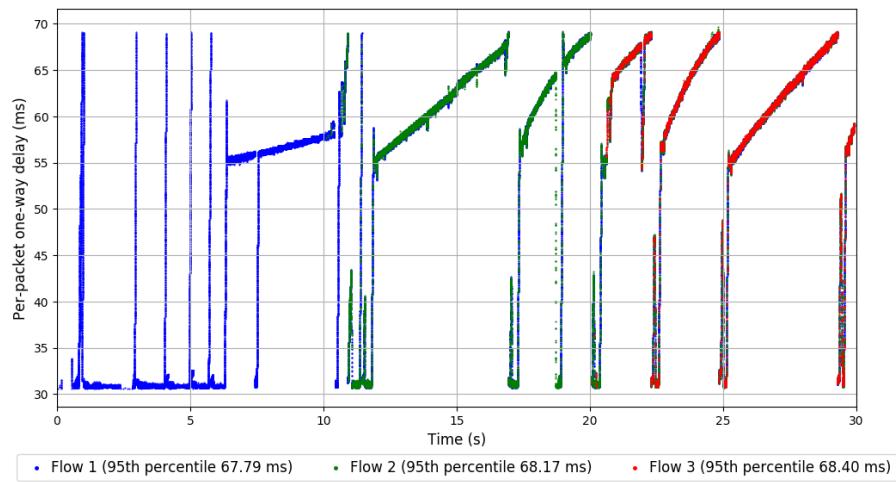
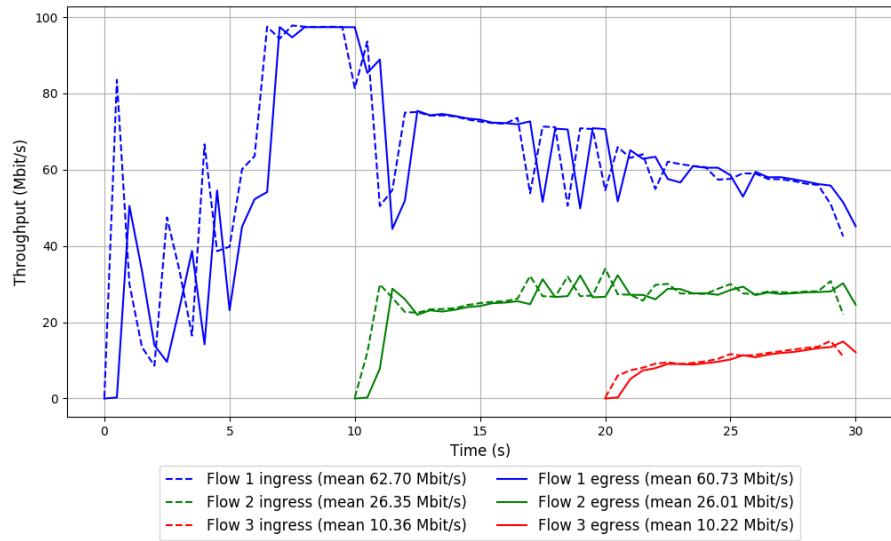


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-01-25 01:25:21
End at: 2019-01-25 01:25:51
Local clock offset: 0.584 ms
Remote clock offset: -4.634 ms

# Below is generated by plot.py at 2019-01-25 03:26:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.36 Mbit/s
95th percentile per-packet one-way delay: 67.922 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 60.73 Mbit/s
95th percentile per-packet one-way delay: 67.792 ms
Loss rate: 3.05%
-- Flow 2:
Average throughput: 26.01 Mbit/s
95th percentile per-packet one-way delay: 68.168 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 68.396 ms
Loss rate: 1.11%
```

Run 1: Report of QUIC Cubic — Data Link

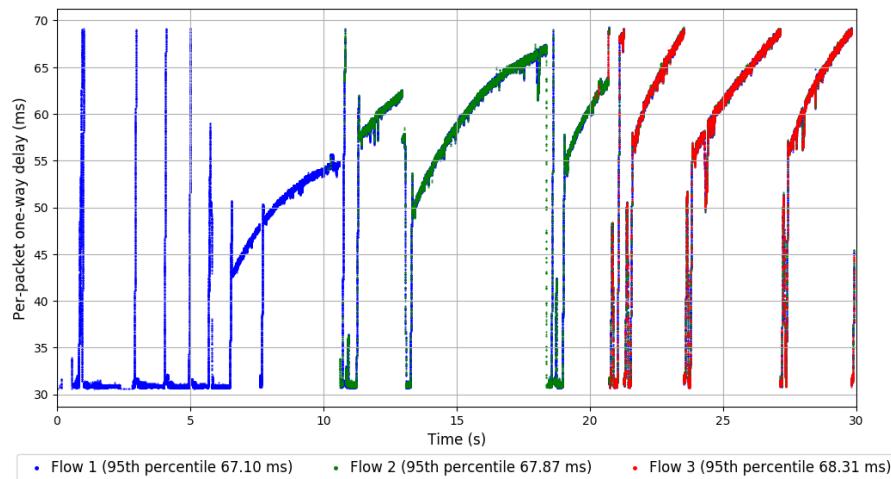
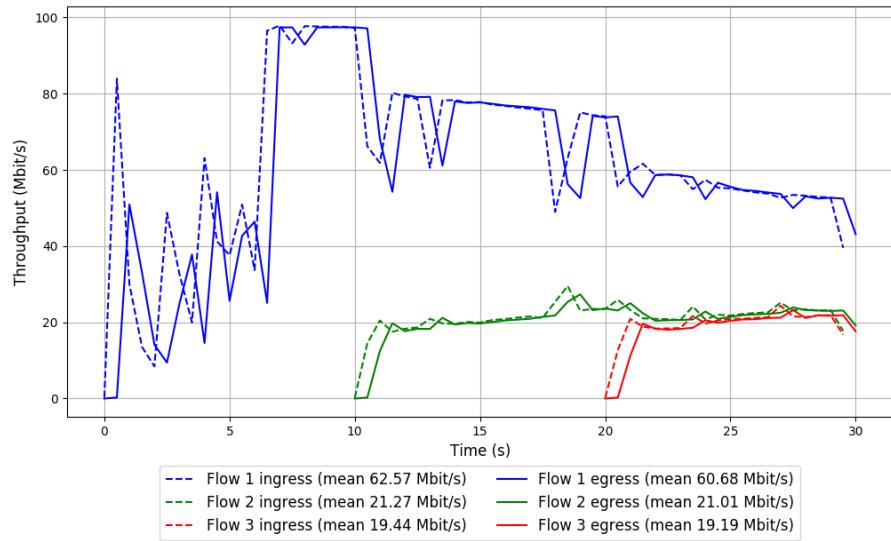


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-25 01:51:46
End at: 2019-01-25 01:52:16
Local clock offset: 0.487 ms
Remote clock offset: -4.115 ms

# Below is generated by plot.py at 2019-01-25 03:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.93 Mbit/s
95th percentile per-packet one-way delay: 67.521 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 60.68 Mbit/s
95th percentile per-packet one-way delay: 67.101 ms
Loss rate: 2.98%
-- Flow 2:
Average throughput: 21.01 Mbit/s
95th percentile per-packet one-way delay: 67.866 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 19.19 Mbit/s
95th percentile per-packet one-way delay: 68.306 ms
Loss rate: 1.43%
```

Run 2: Report of QUIC Cubic — Data Link

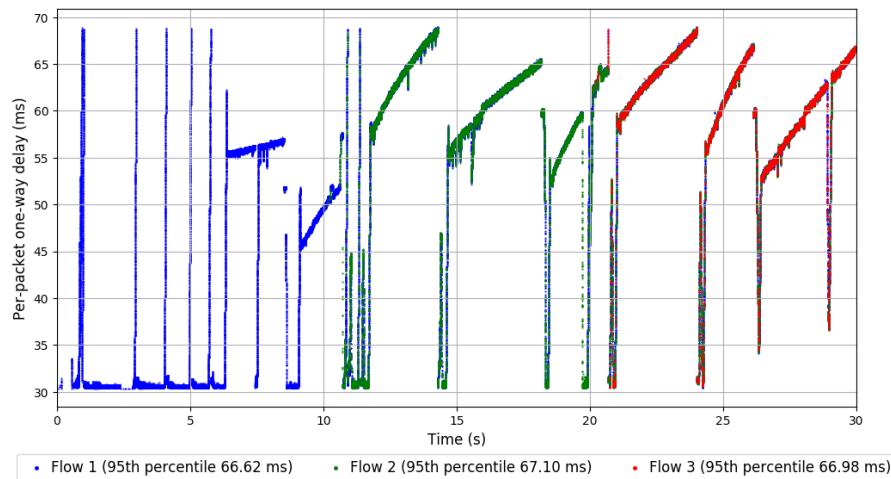
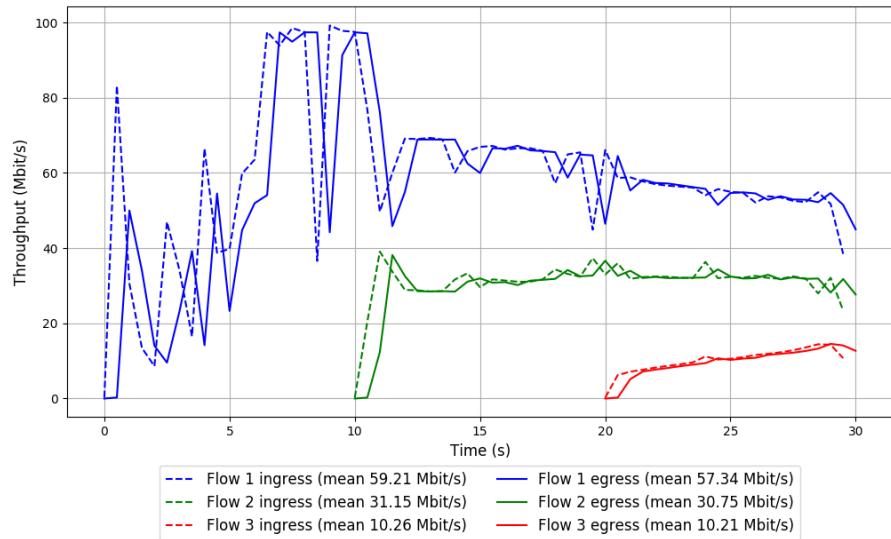


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-25 02:17:44
End at: 2019-01-25 02:18:14
Local clock offset: 0.563 ms
Remote clock offset: -3.626 ms

# Below is generated by plot.py at 2019-01-25 03:26:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.12 Mbit/s
95th percentile per-packet one-way delay: 66.733 ms
Loss rate: 2.48%
-- Flow 1:
Average throughput: 57.34 Mbit/s
95th percentile per-packet one-way delay: 66.621 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 30.75 Mbit/s
95th percentile per-packet one-way delay: 67.101 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 10.21 Mbit/s
95th percentile per-packet one-way delay: 66.979 ms
Loss rate: 0.47%
```

Run 3: Report of QUIC Cubic — Data Link

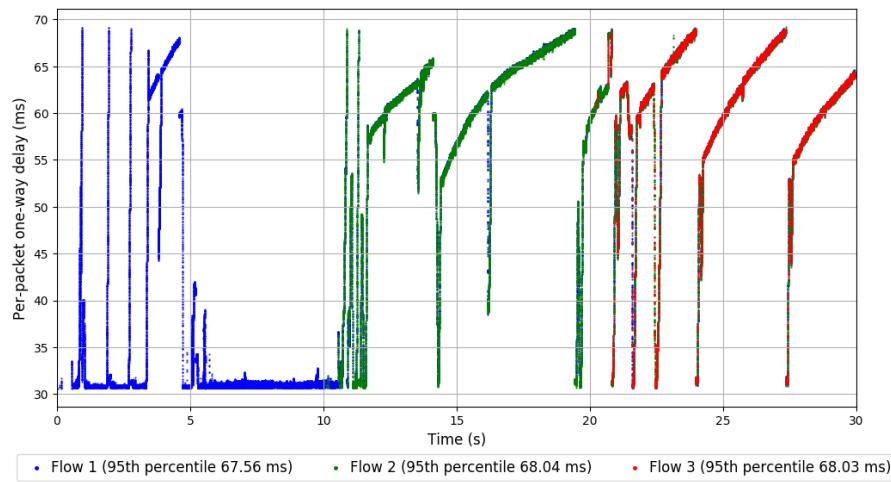
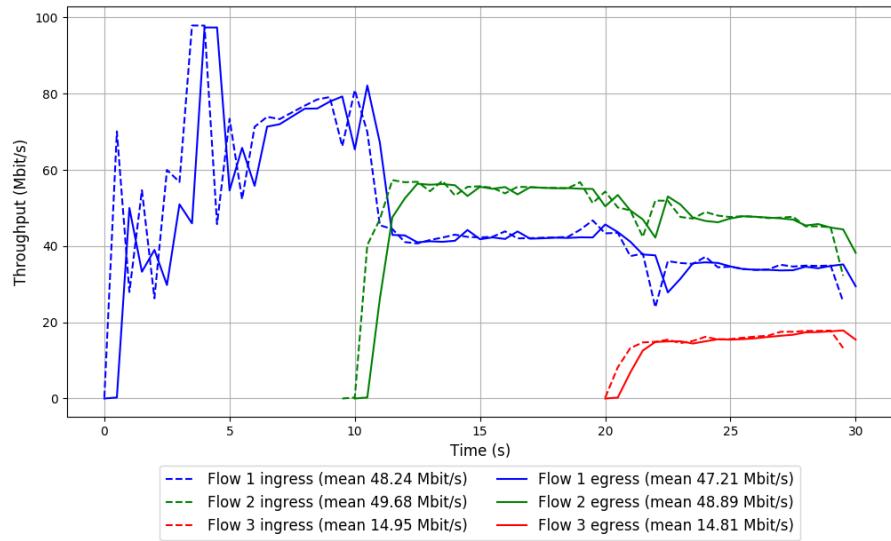


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-25 02:43:15
End at: 2019-01-25 02:43:45
Local clock offset: 0.692 ms
Remote clock offset: -2.926 ms

# Below is generated by plot.py at 2019-01-25 03:26:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.62 Mbit/s
95th percentile per-packet one-way delay: 67.809 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 47.21 Mbit/s
95th percentile per-packet one-way delay: 67.560 ms
Loss rate: 2.01%
-- Flow 2:
Average throughput: 48.89 Mbit/s
95th percentile per-packet one-way delay: 68.041 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 14.81 Mbit/s
95th percentile per-packet one-way delay: 68.025 ms
Loss rate: 0.84%
```

Run 4: Report of QUIC Cubic — Data Link

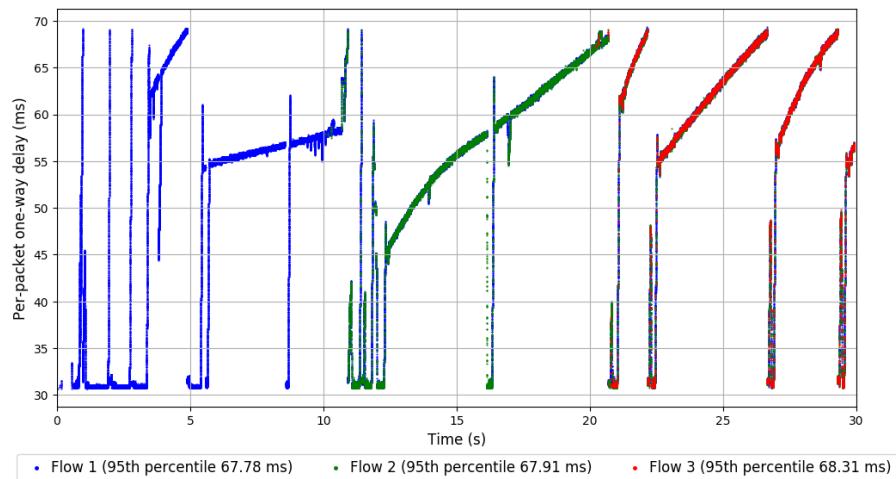
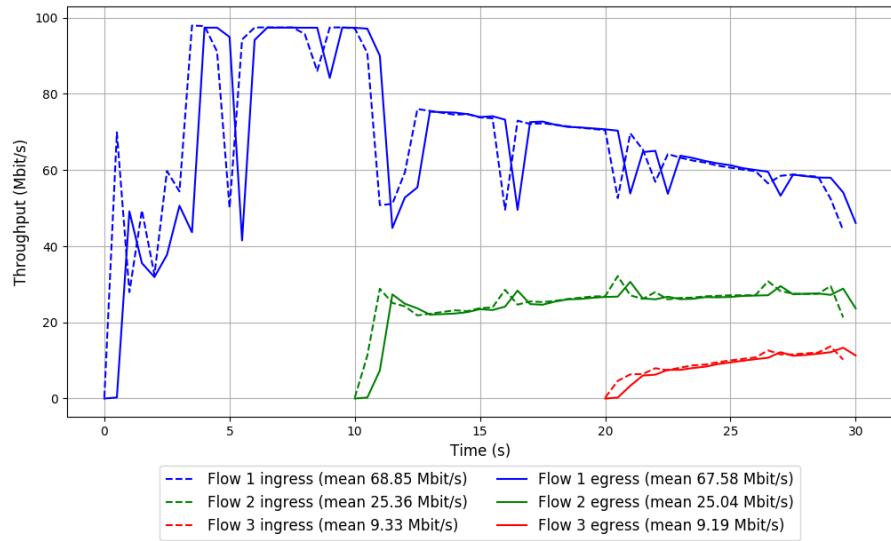


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-25 03:09:16
End at: 2019-01-25 03:09:46
Local clock offset: 0.725 ms
Remote clock offset: -2.49 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.22 Mbit/s
95th percentile per-packet one-way delay: 67.865 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 67.58 Mbit/s
95th percentile per-packet one-way delay: 67.778 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 25.04 Mbit/s
95th percentile per-packet one-way delay: 67.913 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 9.19 Mbit/s
95th percentile per-packet one-way delay: 68.308 ms
Loss rate: 1.64%
```

Run 5: Report of QUIC Cubic — Data Link

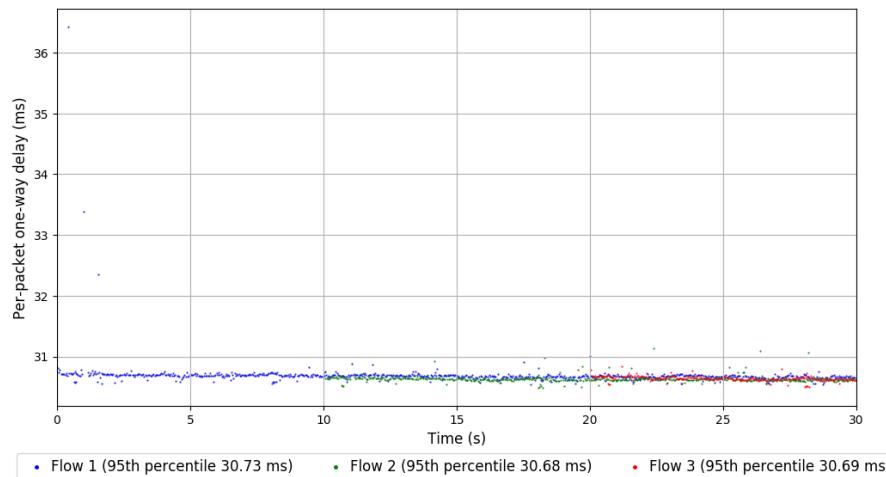
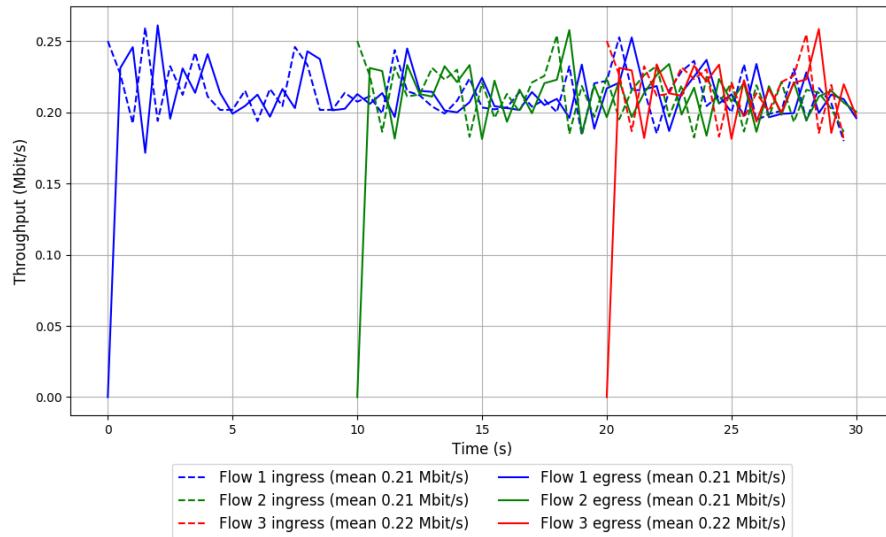


```
Run 1: Statistics of SCReAM

Start at: 2019-01-25 01:30:28
End at: 2019-01-25 01:30:58
Local clock offset: 0.623 ms
Remote clock offset: -4.804 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.723 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.731 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.678 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.687 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

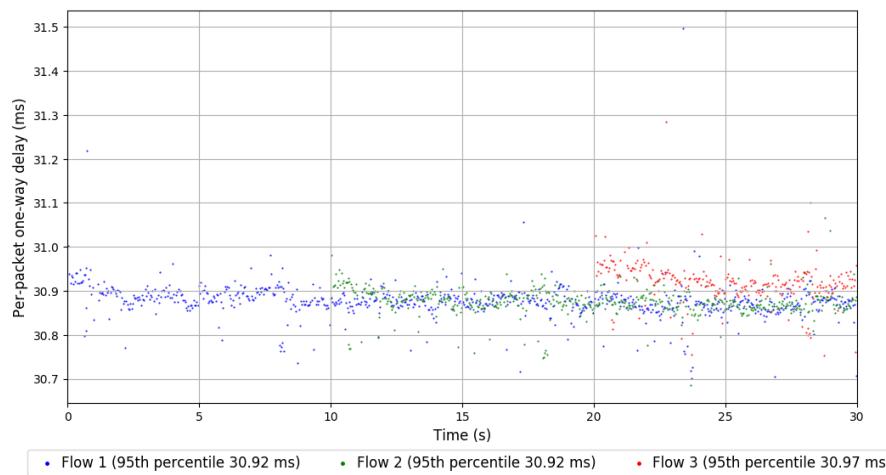
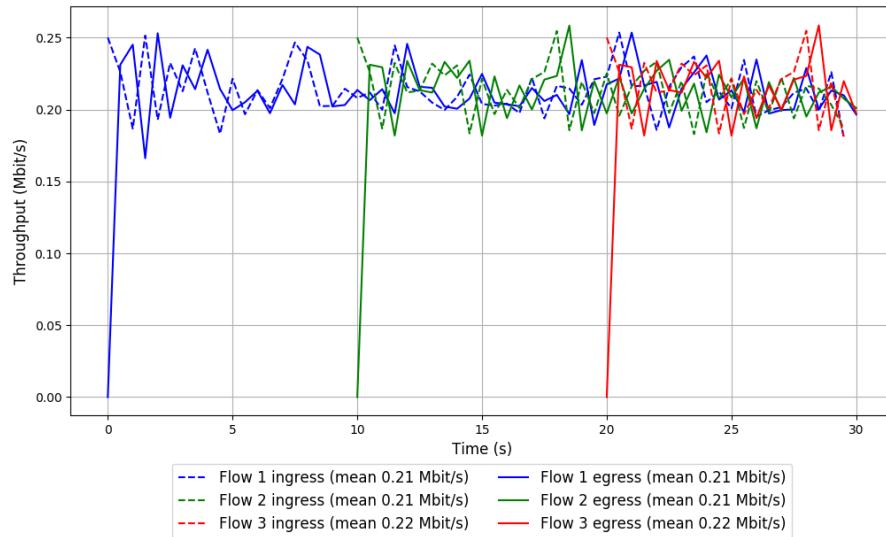


Run 2: Statistics of SCReAM

```
Start at: 2019-01-25 01:56:45
End at: 2019-01-25 01:57:15
Local clock offset: 0.503 ms
Remote clock offset: -3.896 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.922 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.919 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.971 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

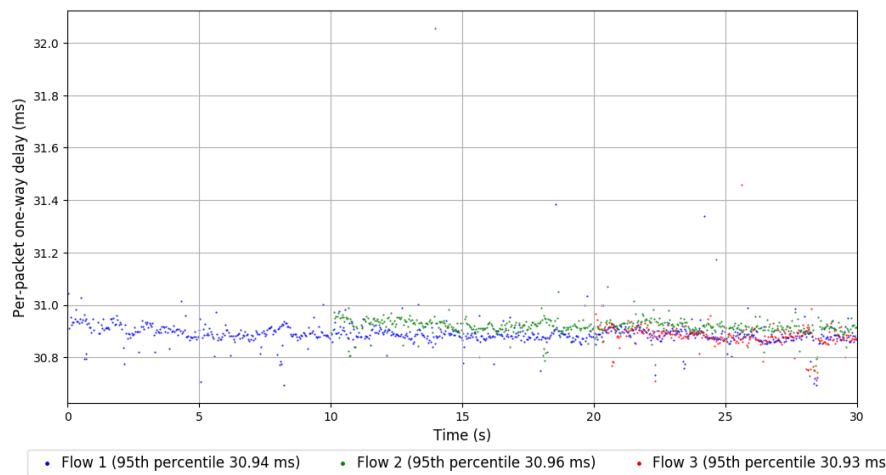
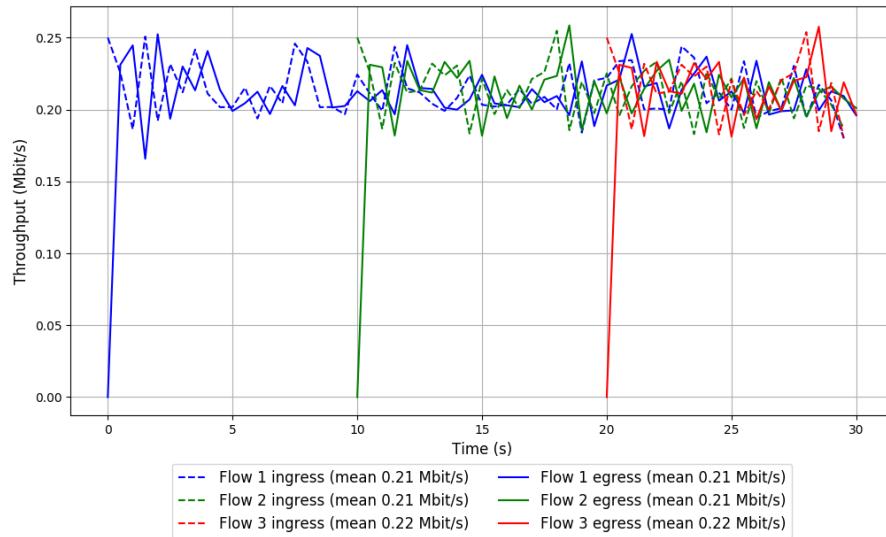


Run 3: Statistics of SCReAM

```
Start at: 2019-01-25 02:22:37
End at: 2019-01-25 02:23:07
Local clock offset: 0.535 ms
Remote clock offset: -3.273 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.949 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.943 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.956 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.929 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

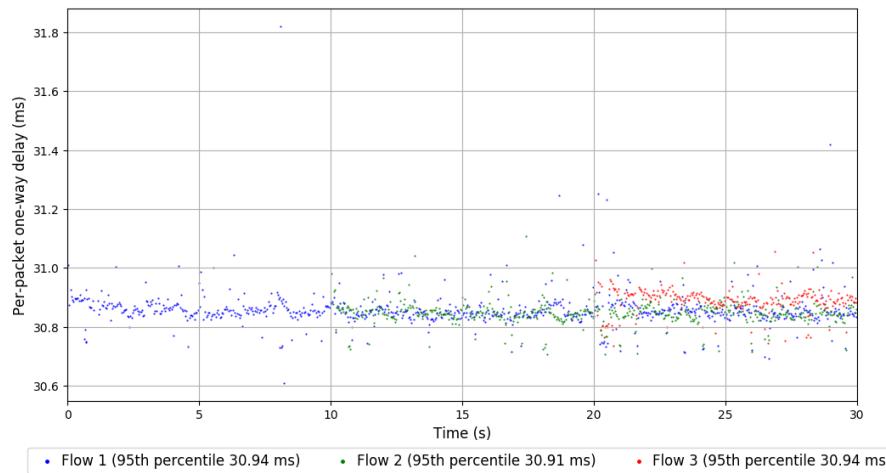
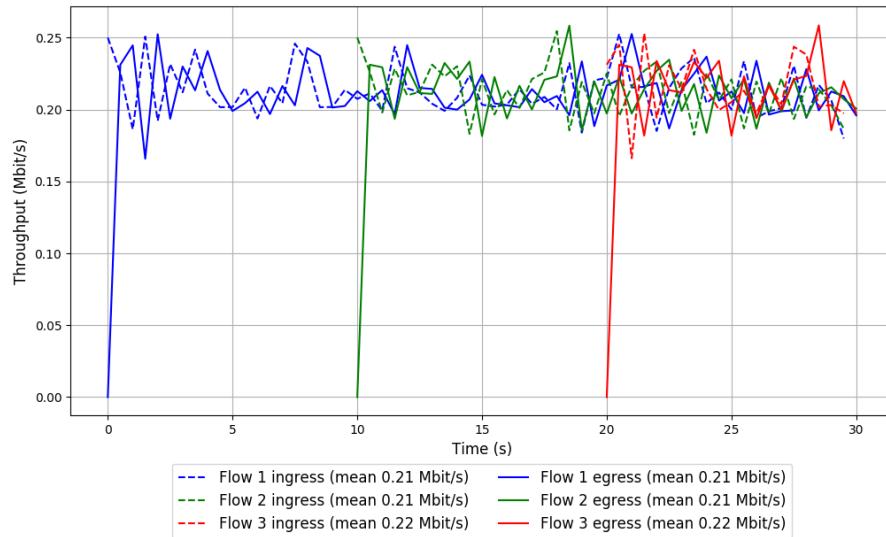


Run 4: Statistics of SCReAM

```
Start at: 2019-01-25 02:48:06
End at: 2019-01-25 02:48:36
Local clock offset: 0.741 ms
Remote clock offset: -2.775 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.929 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.939 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.911 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.938 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

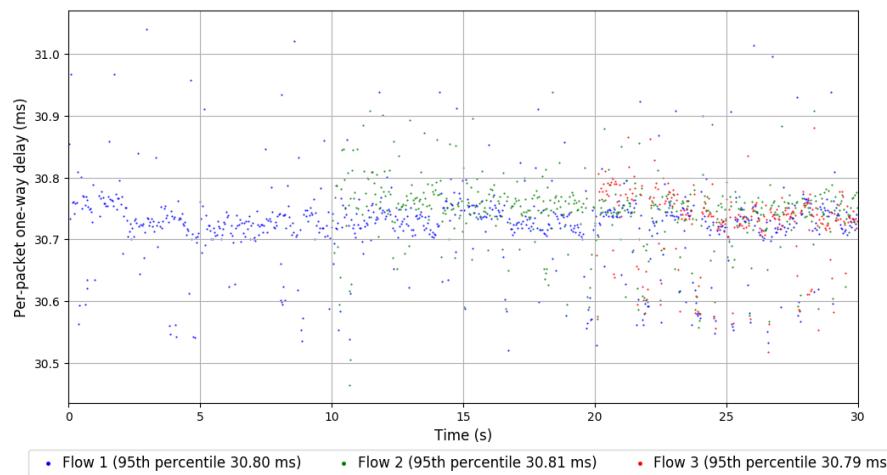
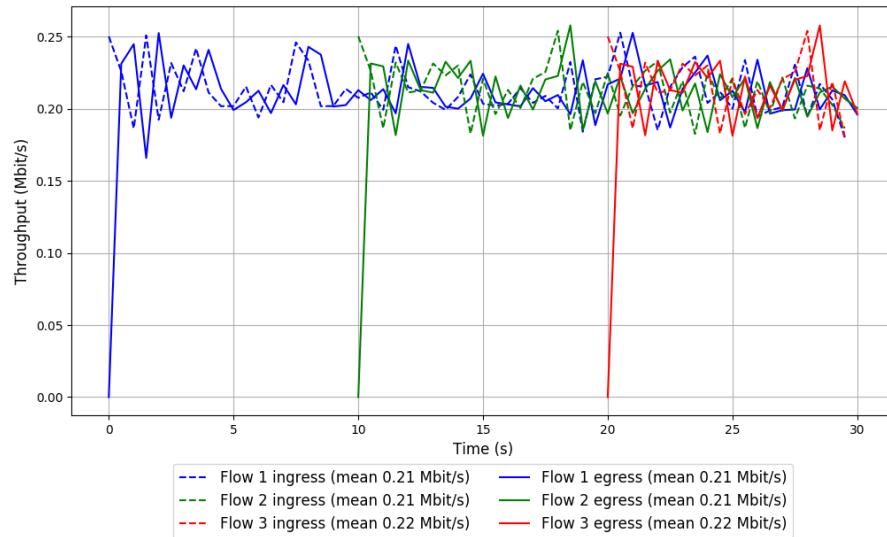


Run 5: Statistics of SCReAM

```
Start at: 2019-01-25 03:14:05
End at: 2019-01-25 03:14:35
Local clock offset: 0.742 ms
Remote clock offset: -2.554 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.809 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.813 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.793 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

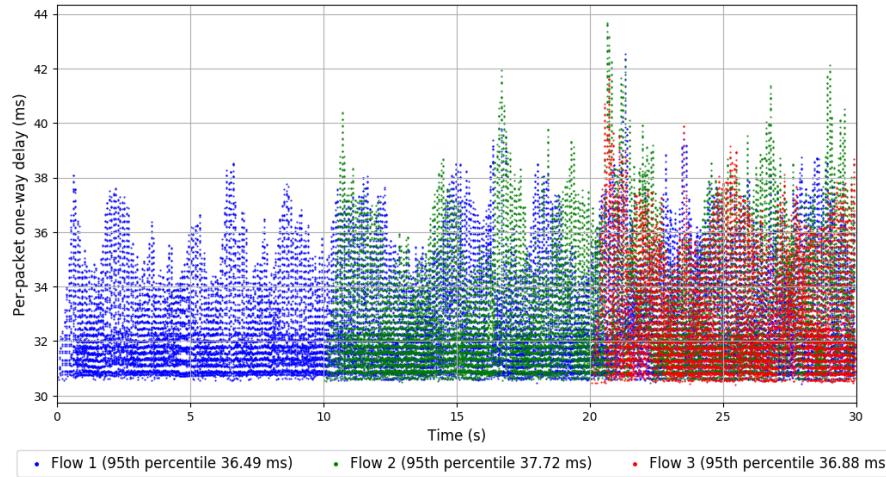
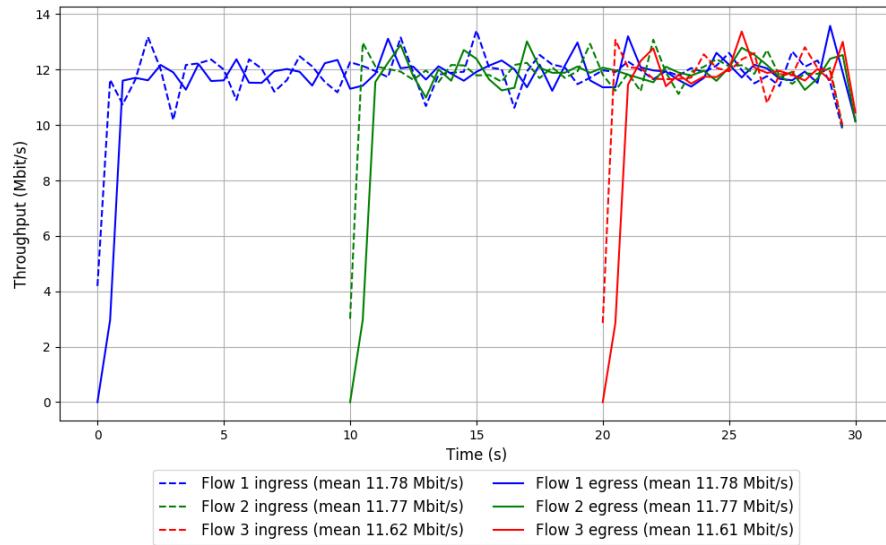


Run 1: Statistics of Sprout

```
Start at: 2019-01-25 01:31:36
End at: 2019-01-25 01:32:06
Local clock offset: 0.587 ms
Remote clock offset: -4.754 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.44 Mbit/s
95th percentile per-packet one-way delay: 36.990 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 36.490 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.77 Mbit/s
95th percentile per-packet one-way delay: 37.721 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.61 Mbit/s
95th percentile per-packet one-way delay: 36.882 ms
Loss rate: 0.02%
```

Run 1: Report of Sprout — Data Link

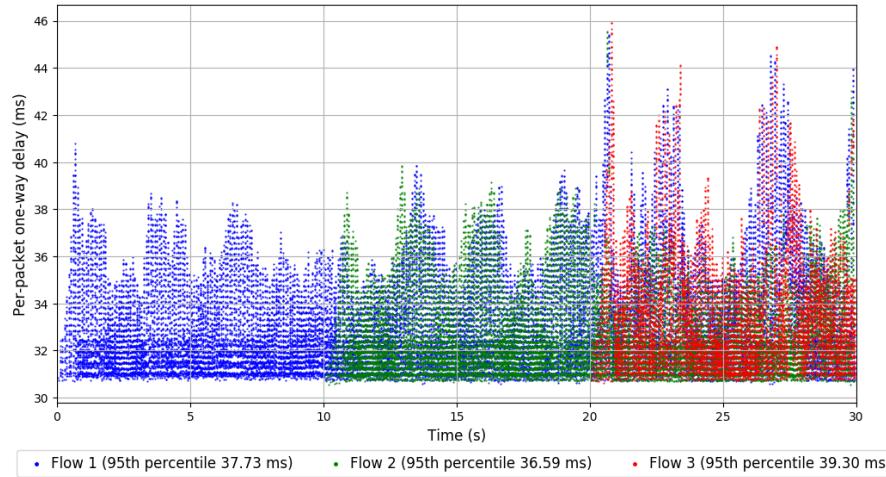
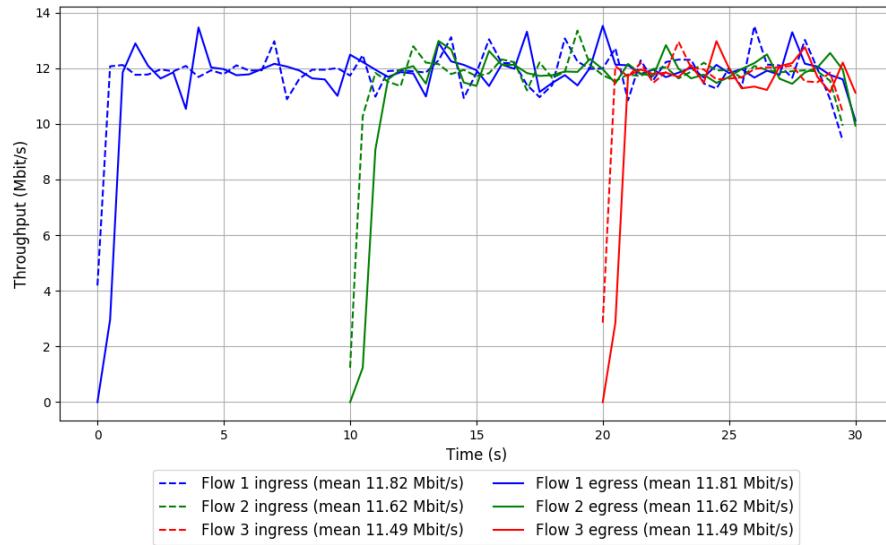


Run 2: Statistics of Sprout

```
Start at: 2019-01-25 01:57:54
End at: 2019-01-25 01:58:24
Local clock offset: 0.518 ms
Remote clock offset: -3.871 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.34 Mbit/s
95th percentile per-packet one-way delay: 37.517 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.81 Mbit/s
95th percentile per-packet one-way delay: 37.727 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 36.585 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.49 Mbit/s
95th percentile per-packet one-way delay: 39.303 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

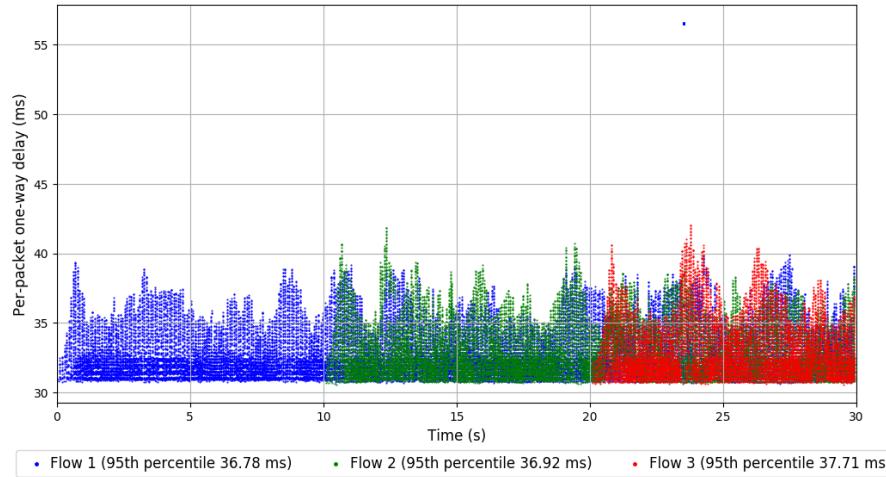
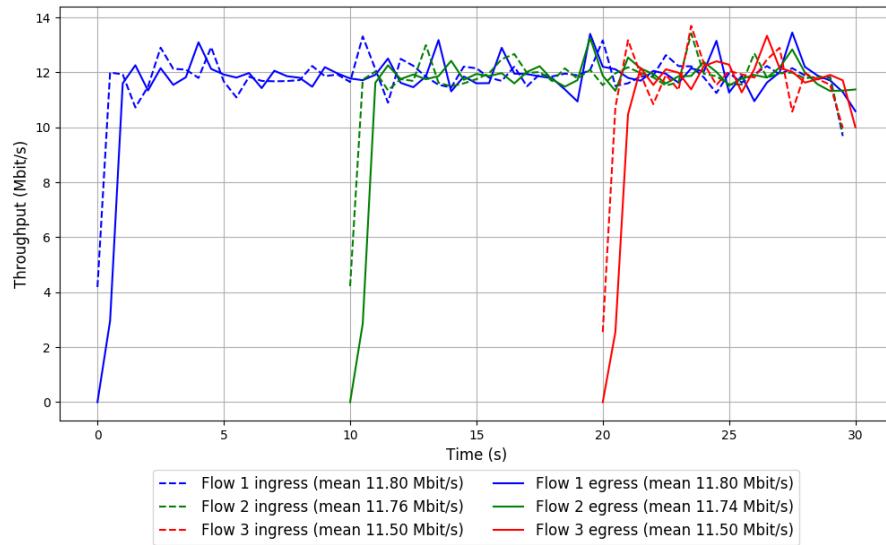


Run 3: Statistics of Sprout

```
Start at: 2019-01-25 02:23:45
End at: 2019-01-25 02:24:15
Local clock offset: 0.538 ms
Remote clock offset: -3.243 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.41 Mbit/s
95th percentile per-packet one-way delay: 36.952 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 36.777 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 36.917 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 11.50 Mbit/s
95th percentile per-packet one-way delay: 37.714 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

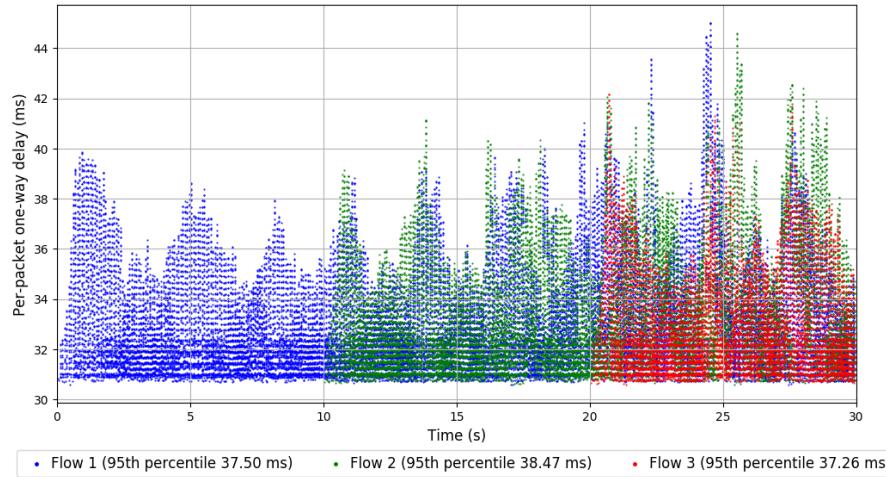
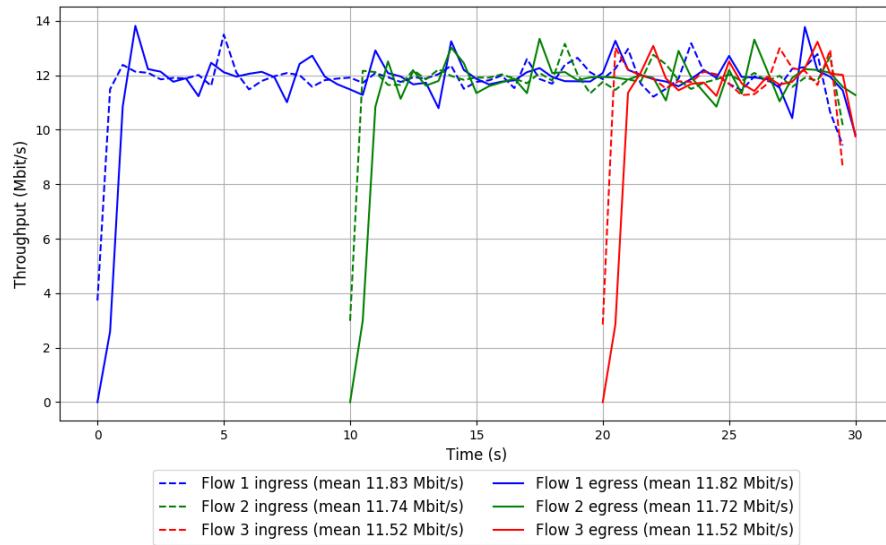


Run 4: Statistics of Sprout

```
Start at: 2019-01-25 02:49:15
End at: 2019-01-25 02:49:45
Local clock offset: 0.739 ms
Remote clock offset: -2.784 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 37.792 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 11.82 Mbit/s
95th percentile per-packet one-way delay: 37.499 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 11.72 Mbit/s
95th percentile per-packet one-way delay: 38.469 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 11.52 Mbit/s
95th percentile per-packet one-way delay: 37.259 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

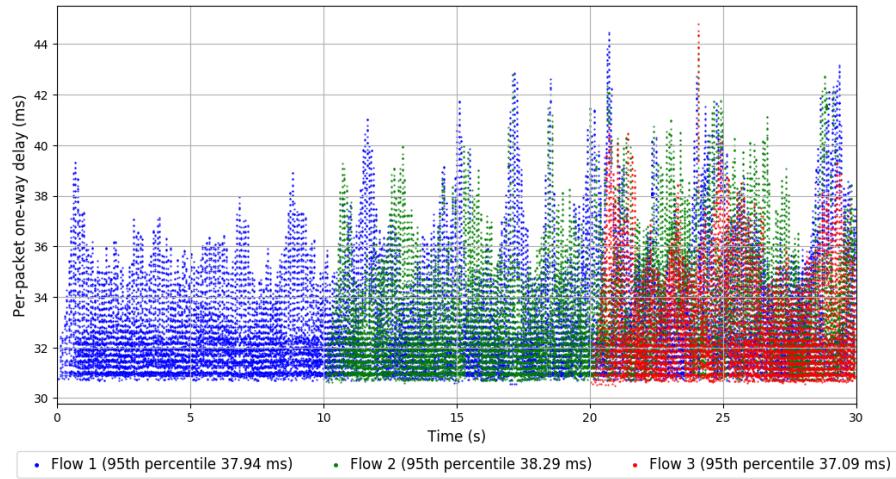
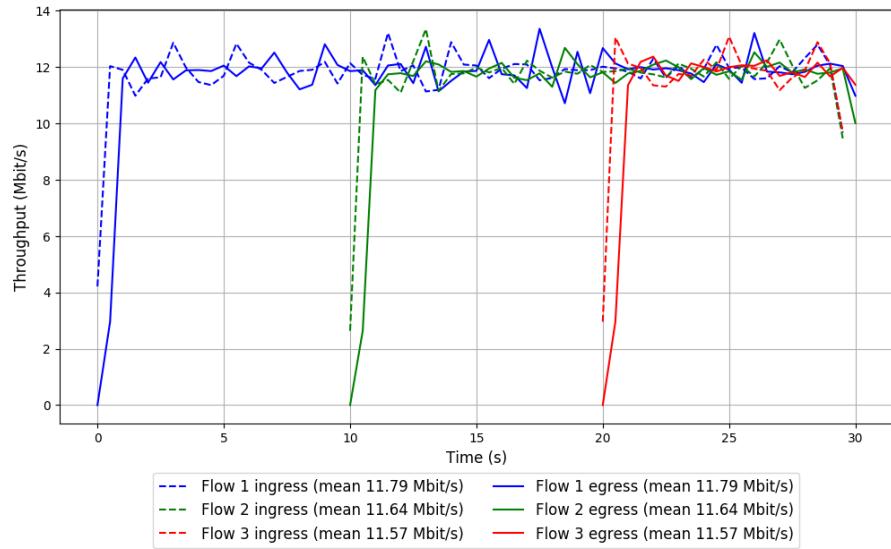


Run 5: Statistics of Sprout

```
Start at: 2019-01-25 03:15:14
End at: 2019-01-25 03:15:44
Local clock offset: 0.766 ms
Remote clock offset: -2.404 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.35 Mbit/s
95th percentile per-packet one-way delay: 37.938 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 37.939 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.64 Mbit/s
95th percentile per-packet one-way delay: 38.290 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 37.094 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

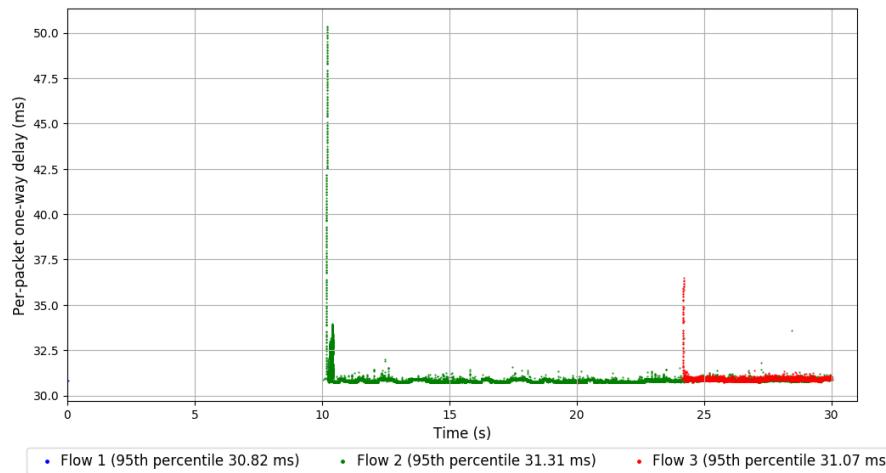
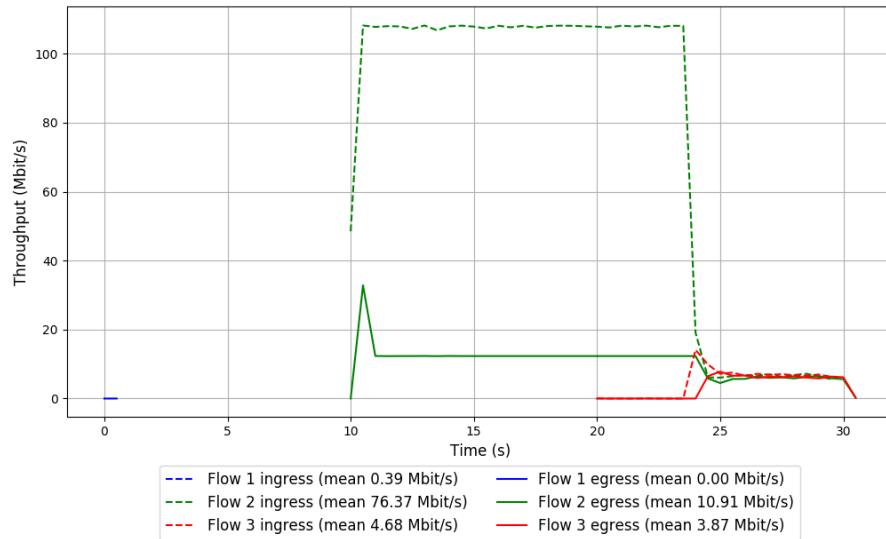


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-25 01:05:45
End at: 2019-01-25 01:06:15
Local clock offset: 0.457 ms
Remote clock offset: -4.323 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 31.205 ms
Loss rate: 83.68%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.821 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.91 Mbit/s
95th percentile per-packet one-way delay: 31.312 ms
Loss rate: 85.71%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 31.074 ms
Loss rate: 17.19%
```

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

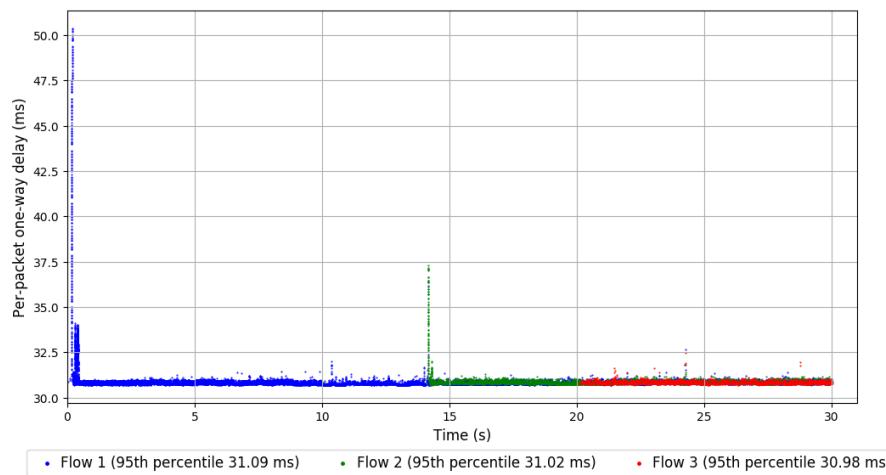
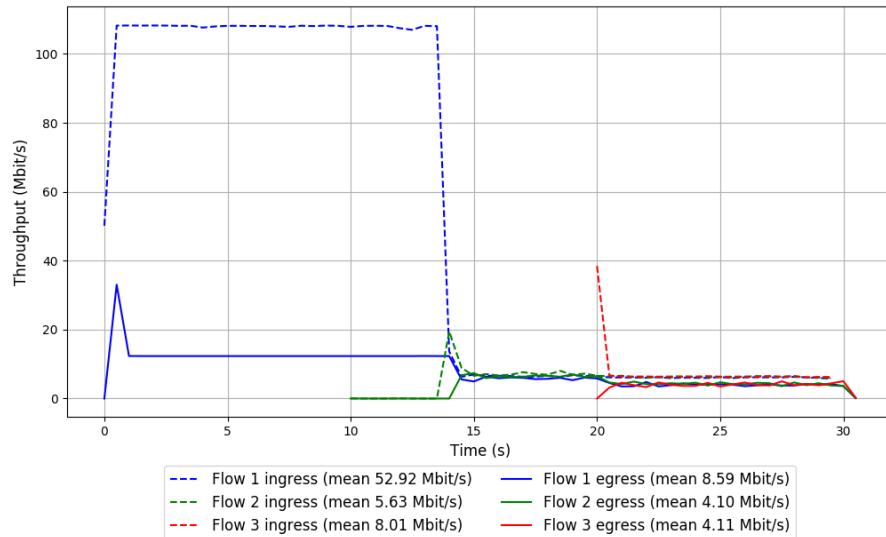


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-25 01:32:46
End at: 2019-01-25 01:33:16
Local clock offset: 0.571 ms
Remote clock offset: -4.546 ms

# Below is generated by plot.py at 2019-01-25 03:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 31.030 ms
Loss rate: 78.63%
-- Flow 1:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 31.086 ms
Loss rate: 83.78%
-- Flow 2:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 31.022 ms
Loss rate: 27.27%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 30.984 ms
Loss rate: 48.71%
```

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

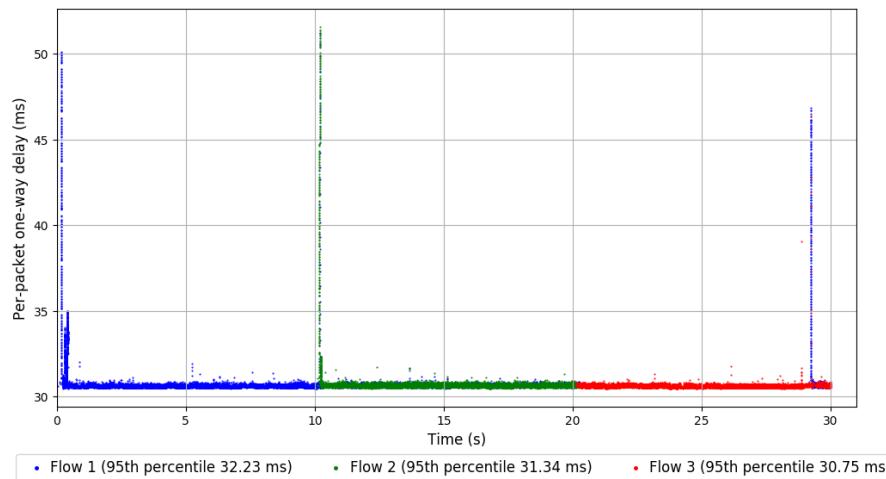
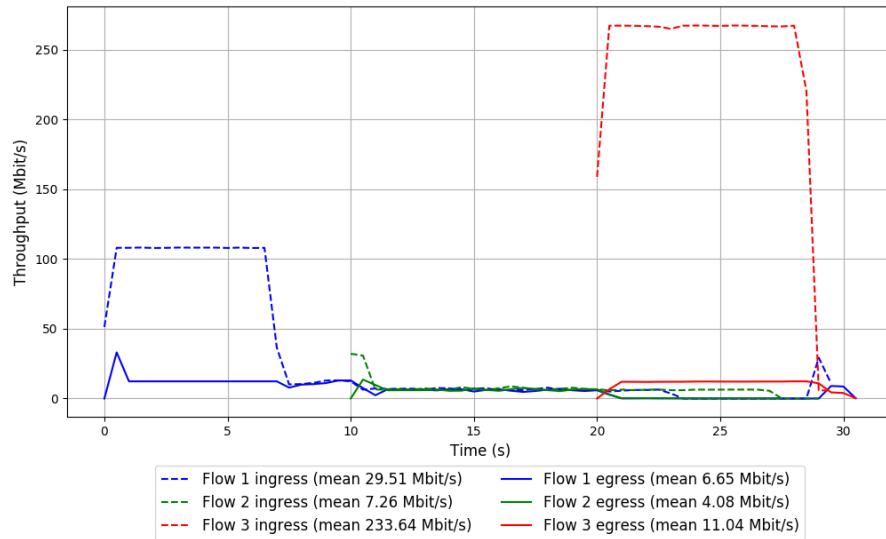


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-25 01:59:04
End at: 2019-01-25 01:59:34
Local clock offset: 0.518 ms
Remote clock offset: -4.069 ms

# Below is generated by plot.py at 2019-01-25 03:27:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 30.935 ms
Loss rate: 88.67%
-- Flow 1:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 32.227 ms
Loss rate: 77.45%
-- Flow 2:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 31.335 ms
Loss rate: 49.80%
-- Flow 3:
Average throughput: 11.04 Mbit/s
95th percentile per-packet one-way delay: 30.753 ms
Loss rate: 95.28%
```

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

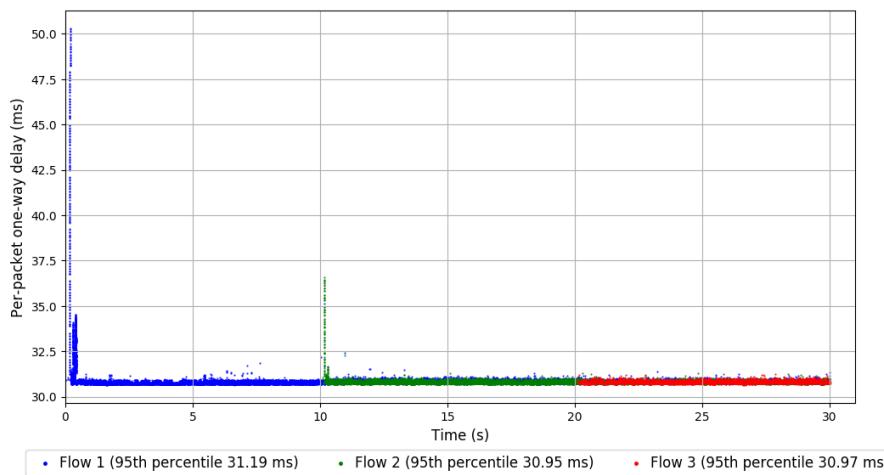
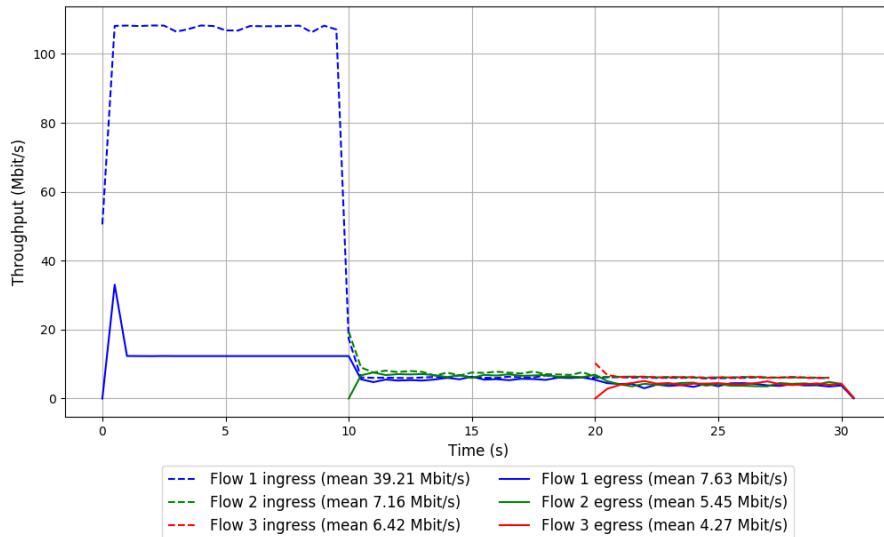


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-25 02:24:55
End at: 2019-01-25 02:25:25
Local clock offset: 0.55 ms
Remote clock offset: -3.243 ms

# Below is generated by plot.py at 2019-01-25 03:27:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 31.008 ms
Loss rate: 72.50%
-- Flow 1:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 31.186 ms
Loss rate: 80.54%
-- Flow 2:
Average throughput: 5.45 Mbit/s
95th percentile per-packet one-way delay: 30.955 ms
Loss rate: 23.82%
-- Flow 3:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 30.967 ms
Loss rate: 33.50%
```

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

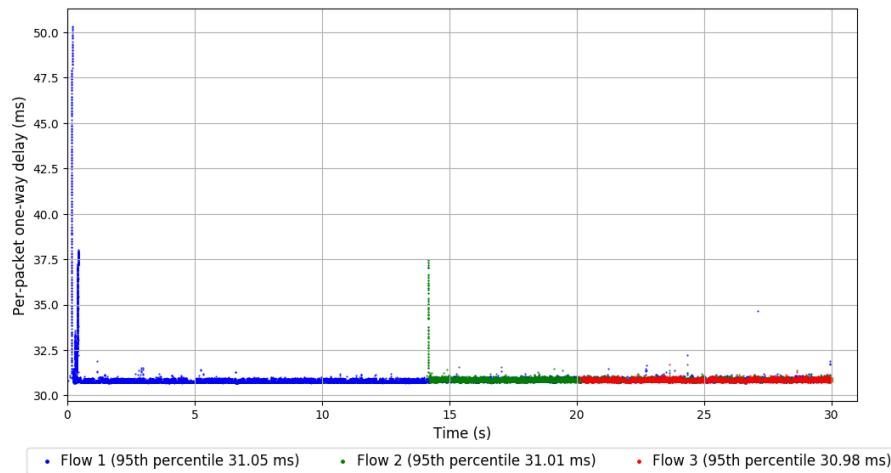
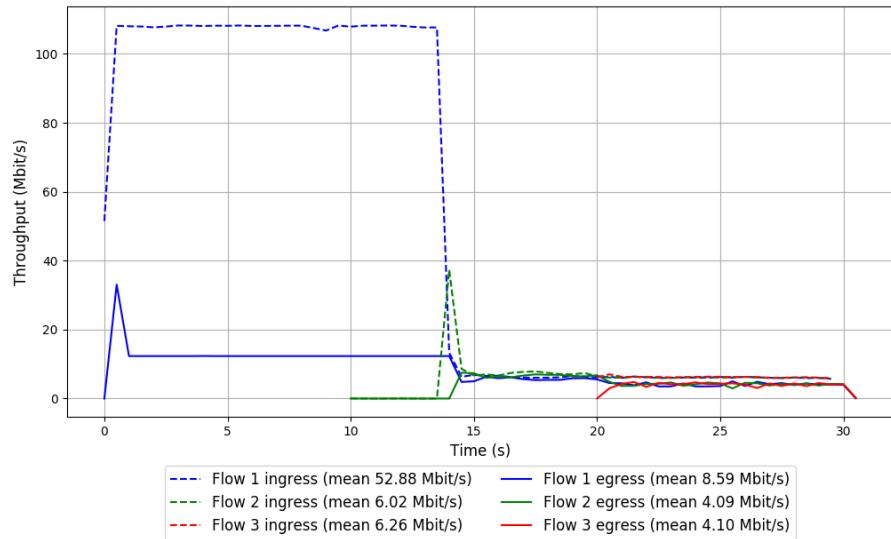


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-25 02:50:27
End at: 2019-01-25 02:50:57
Local clock offset: 0.76 ms
Remote clock offset: -2.748 ms

# Below is generated by plot.py at 2019-01-25 03:27:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 31.022 ms
Loss rate: 78.50%
-- Flow 1:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 31.053 ms
Loss rate: 83.75%
-- Flow 2:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 31.013 ms
Loss rate: 32.05%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 30.985 ms
Loss rate: 34.43%
```

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

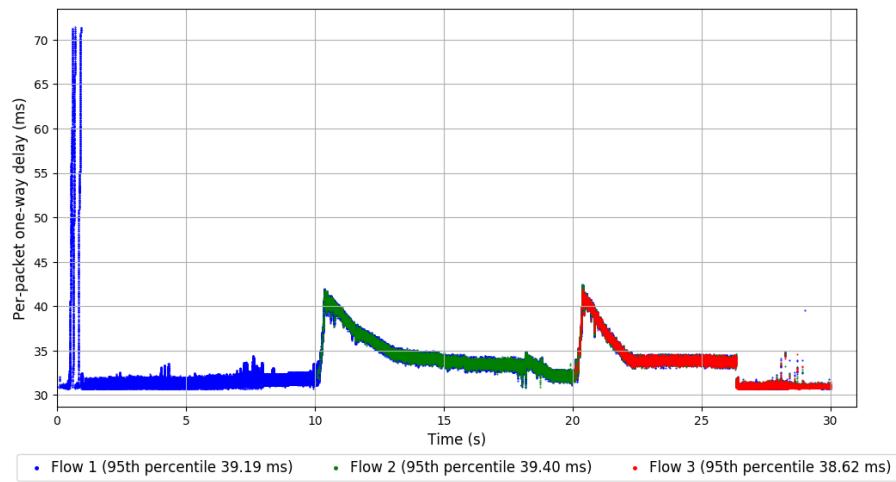
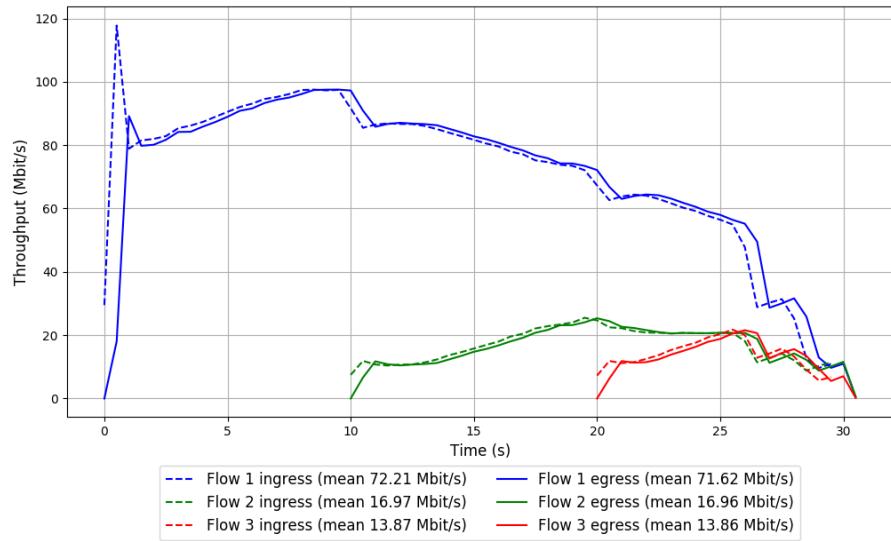


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-25 01:27:50
End at: 2019-01-25 01:28:20
Local clock offset: 0.606 ms
Remote clock offset: -4.663 ms

# Below is generated by plot.py at 2019-01-25 03:27:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.53 Mbit/s
95th percentile per-packet one-way delay: 39.194 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 71.62 Mbit/s
95th percentile per-packet one-way delay: 39.192 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 16.96 Mbit/s
95th percentile per-packet one-way delay: 39.402 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 38.617 ms
Loss rate: 0.14%
```

Run 1: Report of TCP Vegas — Data Link

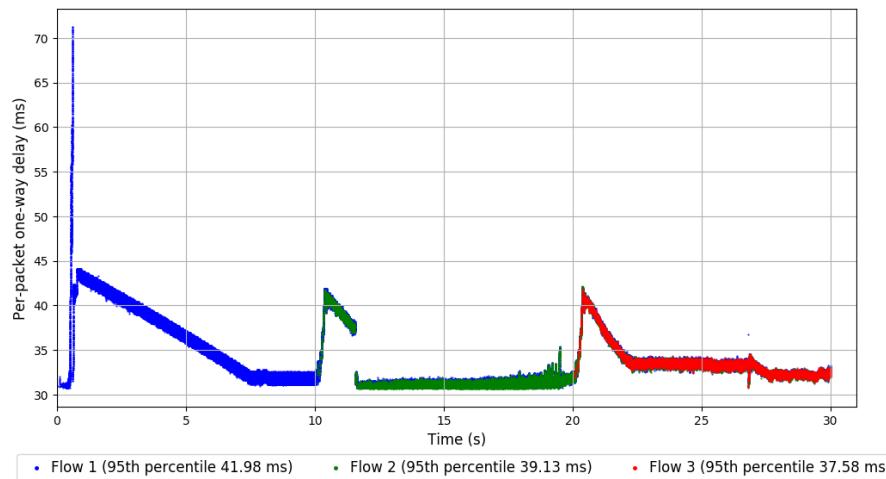
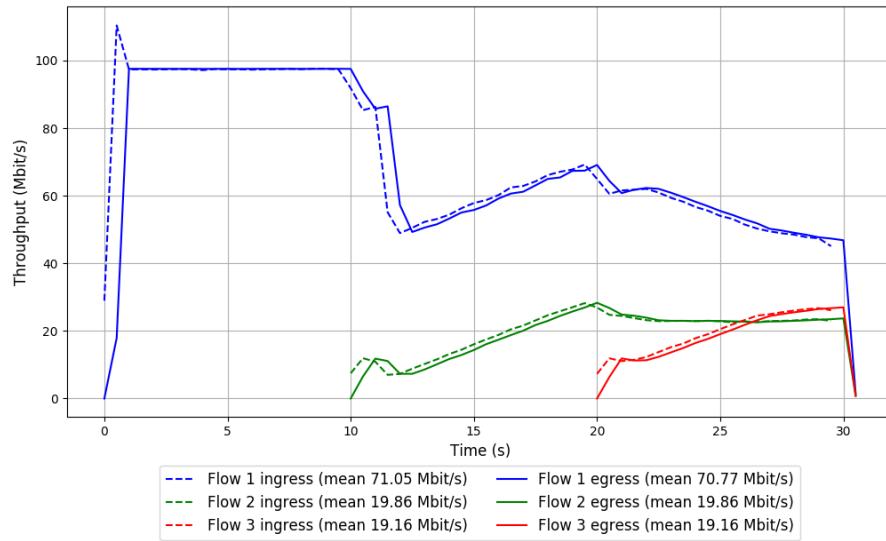


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-25 01:54:08
End at: 2019-01-25 01:54:38
Local clock offset: 0.504 ms
Remote clock offset: -4.042 ms

# Below is generated by plot.py at 2019-01-25 03:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.37 Mbit/s
95th percentile per-packet one-way delay: 41.601 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 70.77 Mbit/s
95th percentile per-packet one-way delay: 41.977 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 19.86 Mbit/s
95th percentile per-packet one-way delay: 39.126 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 19.16 Mbit/s
95th percentile per-packet one-way delay: 37.584 ms
Loss rate: 0.00%
```

Run 2: Report of TCP Vegas — Data Link

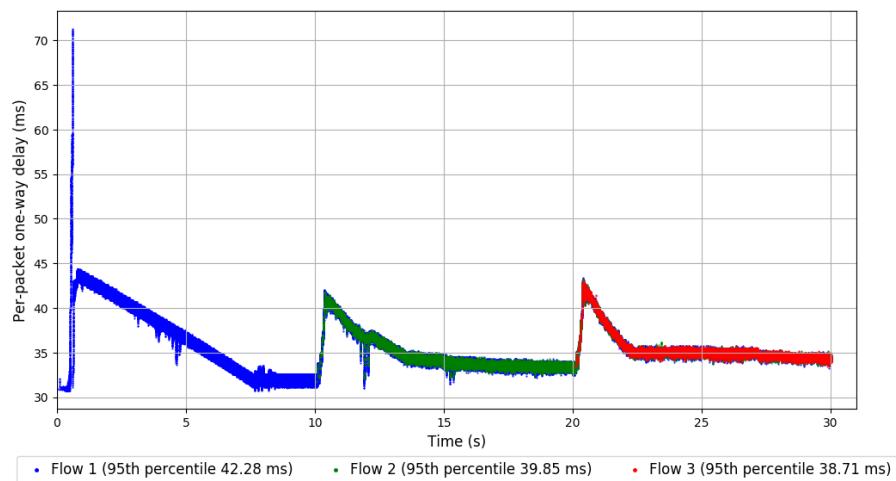
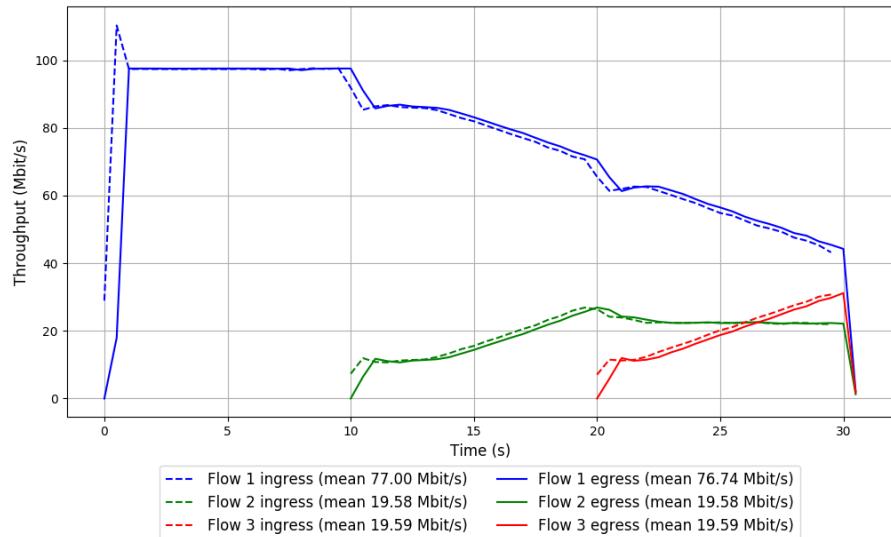


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-25 02:20:07
End at: 2019-01-25 02:20:37
Local clock offset: 0.559 ms
Remote clock offset: -3.337 ms

# Below is generated by plot.py at 2019-01-25 03:27:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 41.871 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 76.74 Mbit/s
95th percentile per-packet one-way delay: 42.278 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 19.58 Mbit/s
95th percentile per-packet one-way delay: 39.849 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.59 Mbit/s
95th percentile per-packet one-way delay: 38.713 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

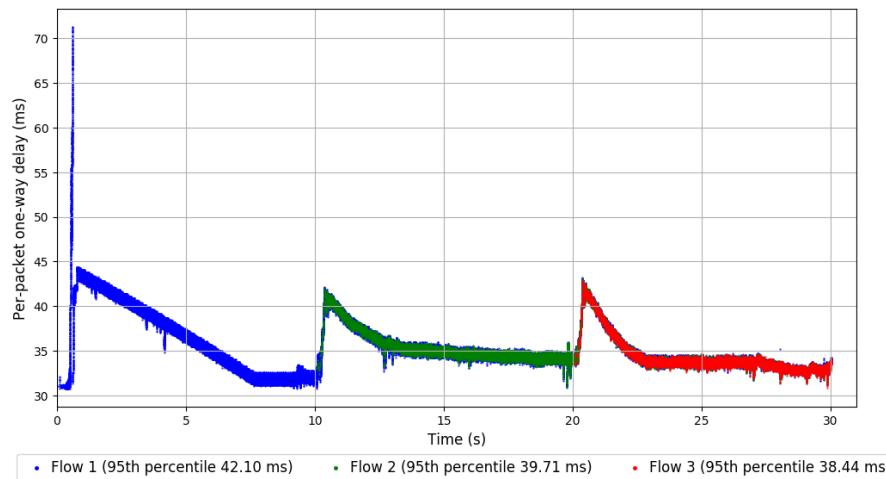
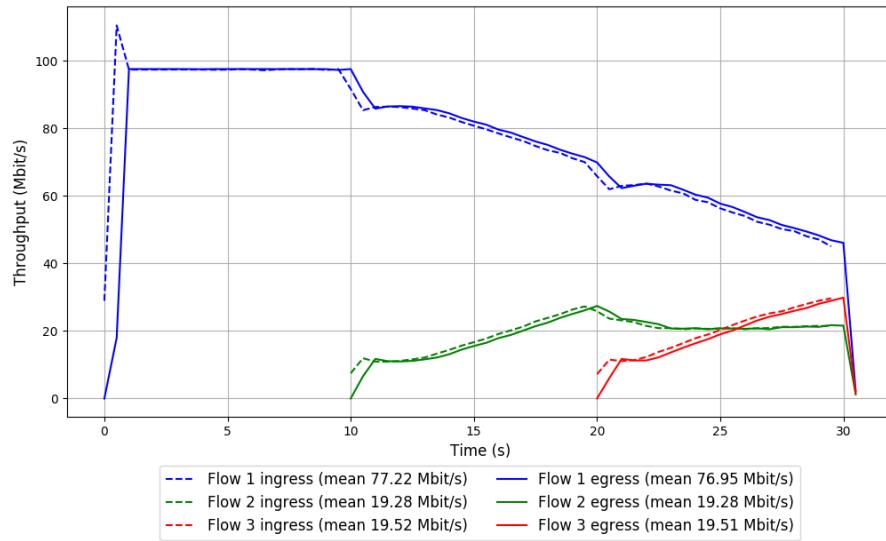


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-25 02:45:39
End at: 2019-01-25 02:46:09
Local clock offset: 0.717 ms
Remote clock offset: -2.834 ms

# Below is generated by plot.py at 2019-01-25 03:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 41.825 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 76.95 Mbit/s
95th percentile per-packet one-way delay: 42.099 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 19.28 Mbit/s
95th percentile per-packet one-way delay: 39.710 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.51 Mbit/s
95th percentile per-packet one-way delay: 38.442 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Vegas — Data Link

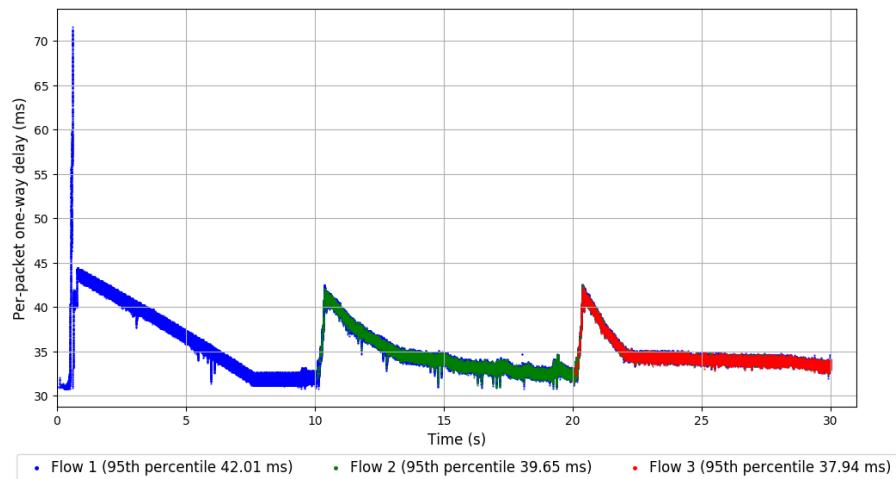
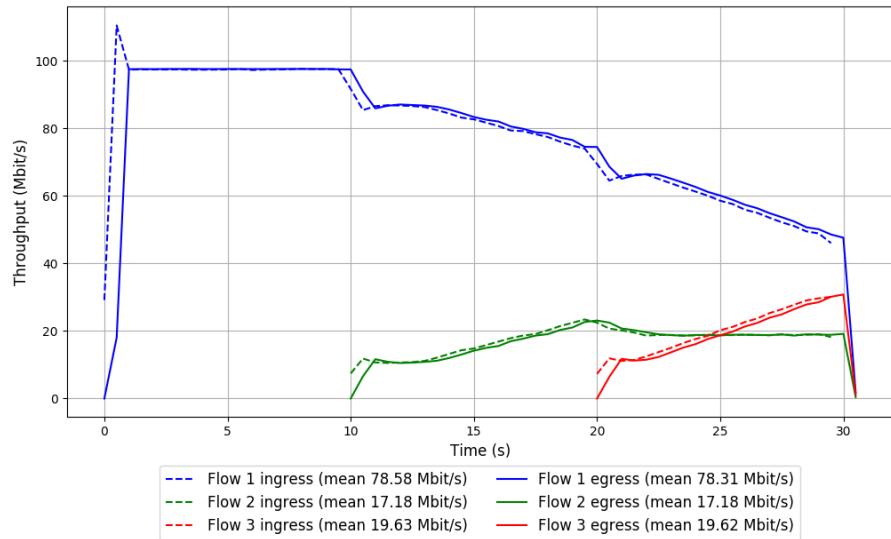


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-25 03:11:38
End at: 2019-01-25 03:12:08
Local clock offset: 0.733 ms
Remote clock offset: -2.366 ms

# Below is generated by plot.py at 2019-01-25 03:27:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.28 Mbit/s
95th percentile per-packet one-way delay: 41.708 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 78.31 Mbit/s
95th percentile per-packet one-way delay: 42.010 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 17.18 Mbit/s
95th percentile per-packet one-way delay: 39.652 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.62 Mbit/s
95th percentile per-packet one-way delay: 37.942 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

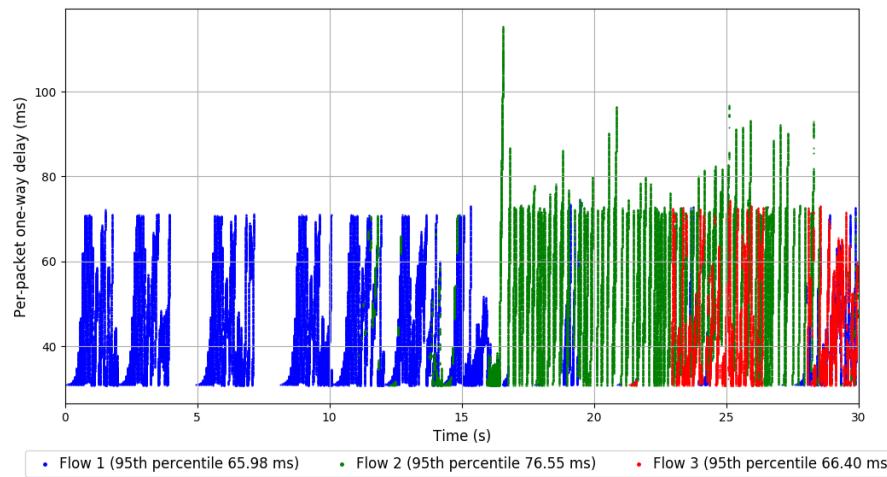
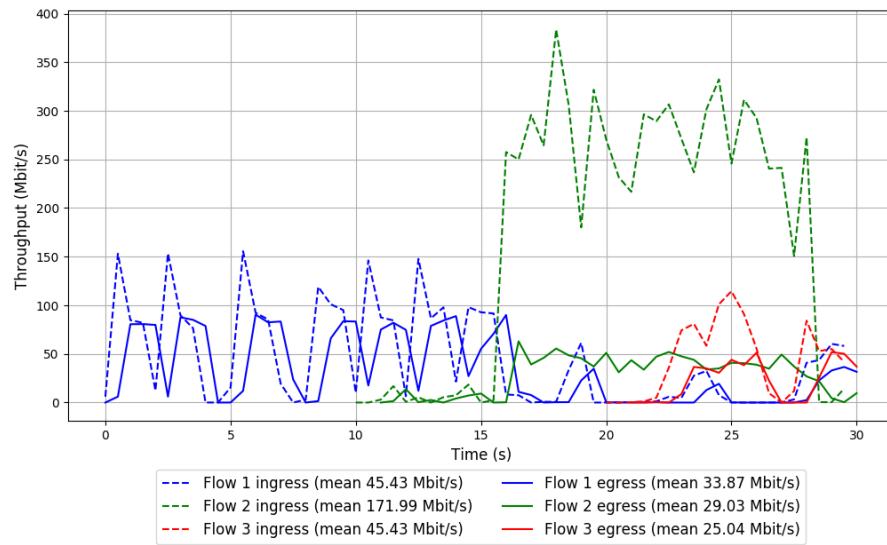


Run 1: Statistics of Verus

```
Start at: 2019-01-25 01:24:00
End at: 2019-01-25 01:24:30
Local clock offset: 0.574 ms
Remote clock offset: -4.634 ms

# Below is generated by plot.py at 2019-01-25 03:28:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.40 Mbit/s
95th percentile per-packet one-way delay: 69.741 ms
Loss rate: 65.92%
-- Flow 1:
Average throughput: 33.87 Mbit/s
95th percentile per-packet one-way delay: 65.979 ms
Loss rate: 25.42%
-- Flow 2:
Average throughput: 29.03 Mbit/s
95th percentile per-packet one-way delay: 76.553 ms
Loss rate: 83.96%
-- Flow 3:
Average throughput: 25.04 Mbit/s
95th percentile per-packet one-way delay: 66.398 ms
Loss rate: 50.52%
```

Run 1: Report of Verus — Data Link

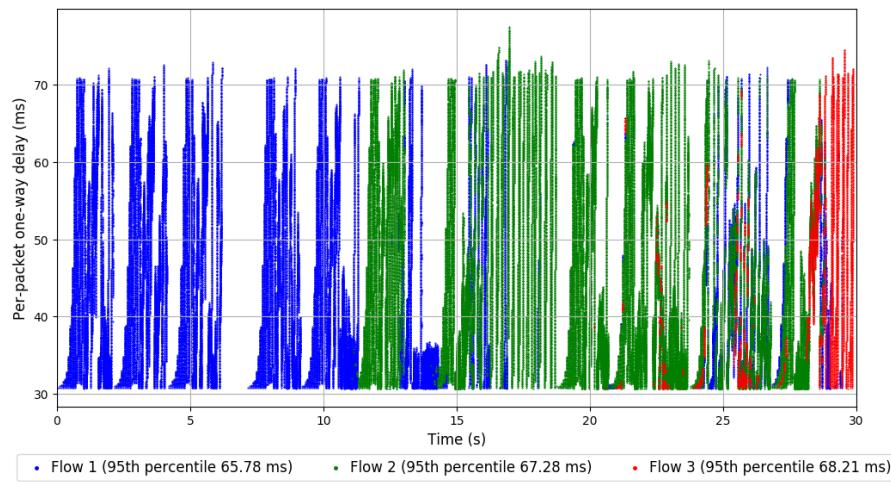
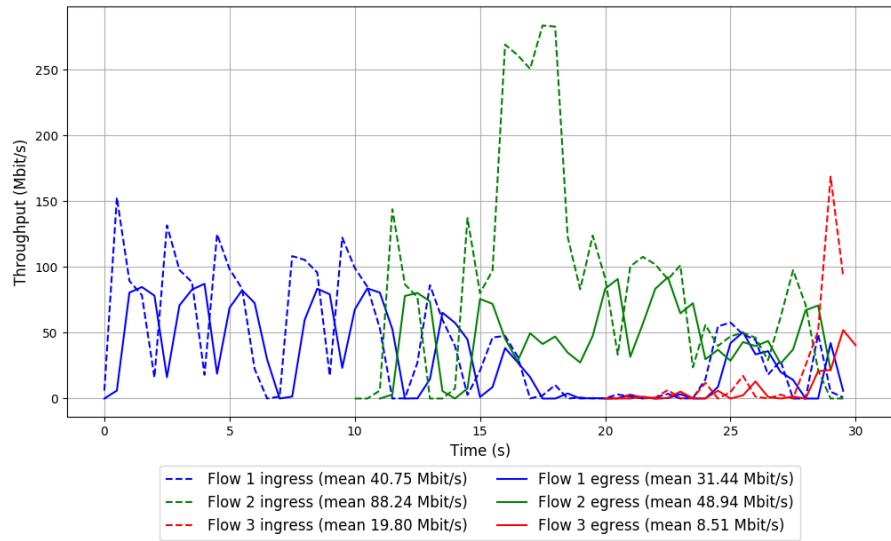


Run 2: Statistics of Verus

```
Start at: 2019-01-25 01:50:33
End at: 2019-01-25 01:51:03
Local clock offset: 0.49 ms
Remote clock offset: -4.154 ms

# Below is generated by plot.py at 2019-01-25 03:28:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.94 Mbit/s
95th percentile per-packet one-way delay: 66.678 ms
Loss rate: 40.14%
-- Flow 1:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 65.780 ms
Loss rate: 23.03%
-- Flow 2:
Average throughput: 48.94 Mbit/s
95th percentile per-packet one-way delay: 67.276 ms
Loss rate: 50.06%
-- Flow 3:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 68.212 ms
Loss rate: 57.03%
```

Run 2: Report of Verus — Data Link

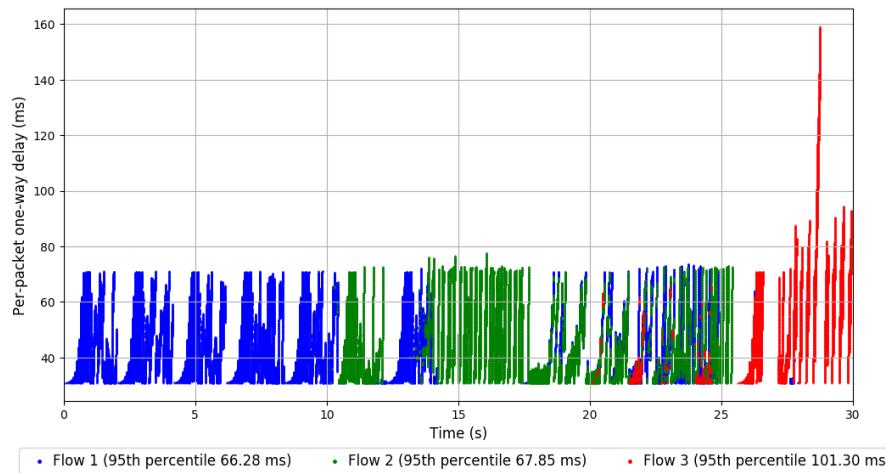
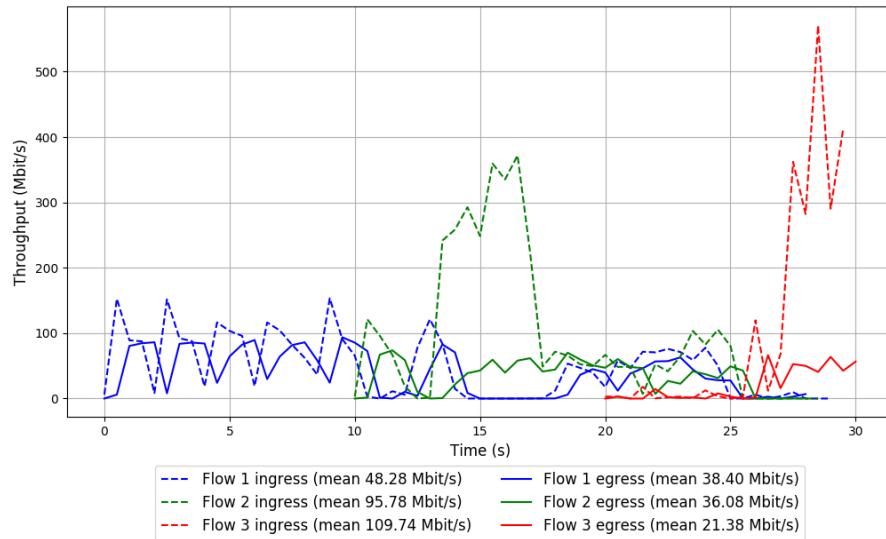


Run 3: Statistics of Verus

```
Start at: 2019-01-25 02:16:29
End at: 2019-01-25 02:16:59
Local clock offset: 0.535 ms
Remote clock offset: -3.457 ms

# Below is generated by plot.py at 2019-01-25 03:28:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.95 Mbit/s
95th percentile per-packet one-way delay: 68.600 ms
Loss rate: 55.61%
-- Flow 1:
Average throughput: 38.40 Mbit/s
95th percentile per-packet one-way delay: 66.284 ms
Loss rate: 24.24%
-- Flow 2:
Average throughput: 36.08 Mbit/s
95th percentile per-packet one-way delay: 67.848 ms
Loss rate: 65.23%
-- Flow 3:
Average throughput: 21.38 Mbit/s
95th percentile per-packet one-way delay: 101.296 ms
Loss rate: 80.46%
```

Run 3: Report of Verus — Data Link

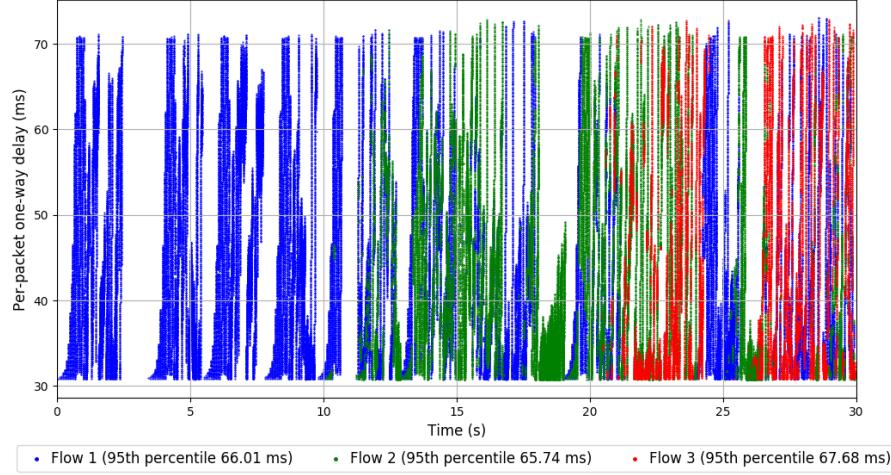
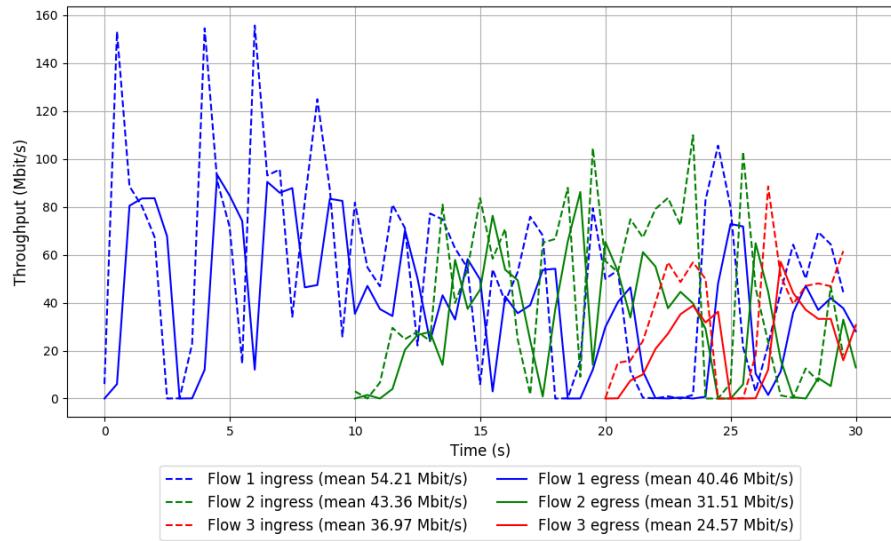


Run 4: Statistics of Verus

```
Start at: 2019-01-25 02:42:01
End at: 2019-01-25 02:42:31
Local clock offset: 0.675 ms
Remote clock offset: -2.918 ms

# Below is generated by plot.py at 2019-01-25 03:28:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.23 Mbit/s
95th percentile per-packet one-way delay: 66.160 ms
Loss rate: 26.98%
-- Flow 1:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 66.008 ms
Loss rate: 25.36%
-- Flow 2:
Average throughput: 31.51 Mbit/s
95th percentile per-packet one-way delay: 65.741 ms
Loss rate: 27.33%
-- Flow 3:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 67.680 ms
Loss rate: 33.52%
```

Run 4: Report of Verus — Data Link

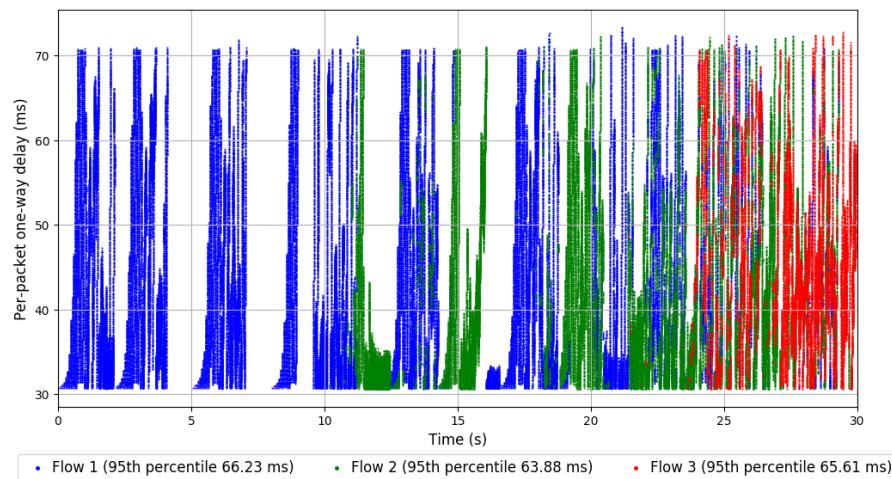
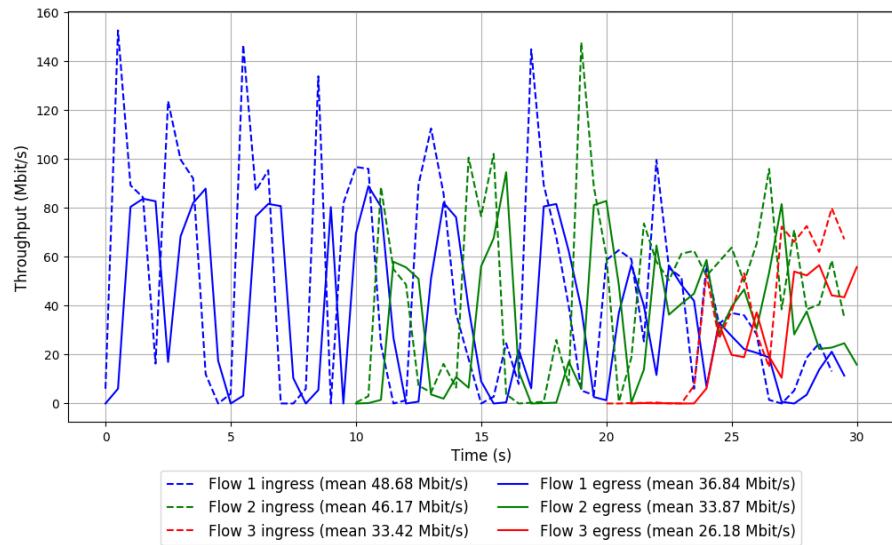


Run 5: Statistics of Verus

```
Start at: 2019-01-25 03:08:01
End at: 2019-01-25 03:08:31
Local clock offset: 0.744 ms
Remote clock offset: -2.546 ms

# Below is generated by plot.py at 2019-01-25 03:28:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.11 Mbit/s
95th percentile per-packet one-way delay: 65.594 ms
Loss rate: 25.76%
-- Flow 1:
Average throughput: 36.84 Mbit/s
95th percentile per-packet one-way delay: 66.233 ms
Loss rate: 24.33%
-- Flow 2:
Average throughput: 33.87 Mbit/s
95th percentile per-packet one-way delay: 63.876 ms
Loss rate: 26.59%
-- Flow 3:
Average throughput: 26.18 Mbit/s
95th percentile per-packet one-way delay: 65.606 ms
Loss rate: 29.69%
```

Run 5: Report of Verus — Data Link

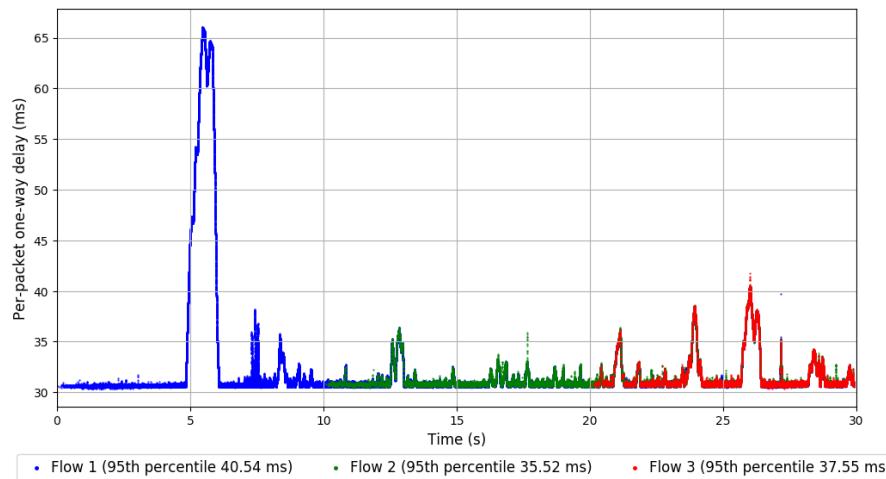
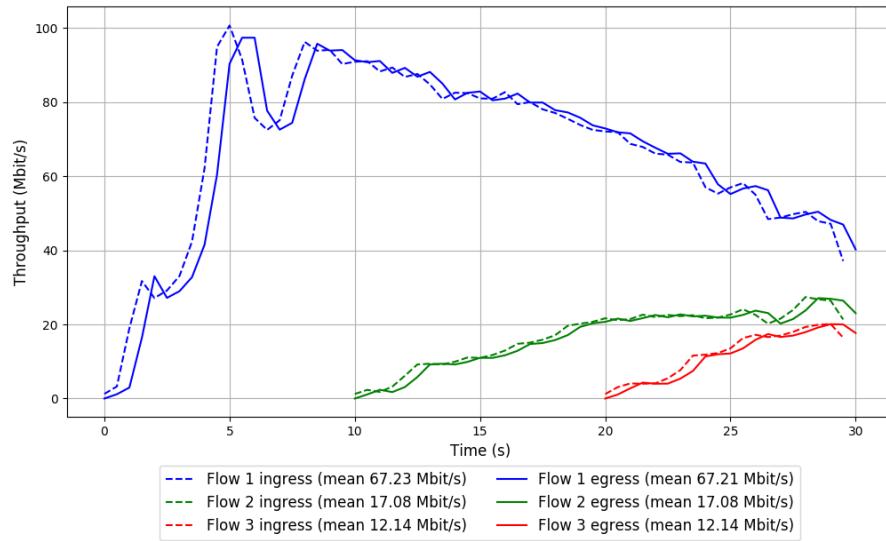


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-25 01:06:58
End at: 2019-01-25 01:07:28
Local clock offset: 0.473 ms
Remote clock offset: -4.543 ms

# Below is generated by plot.py at 2019-01-25 03:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.59 Mbit/s
95th percentile per-packet one-way delay: 38.168 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 67.21 Mbit/s
95th percentile per-packet one-way delay: 40.537 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 17.08 Mbit/s
95th percentile per-packet one-way delay: 35.516 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.14 Mbit/s
95th percentile per-packet one-way delay: 37.548 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

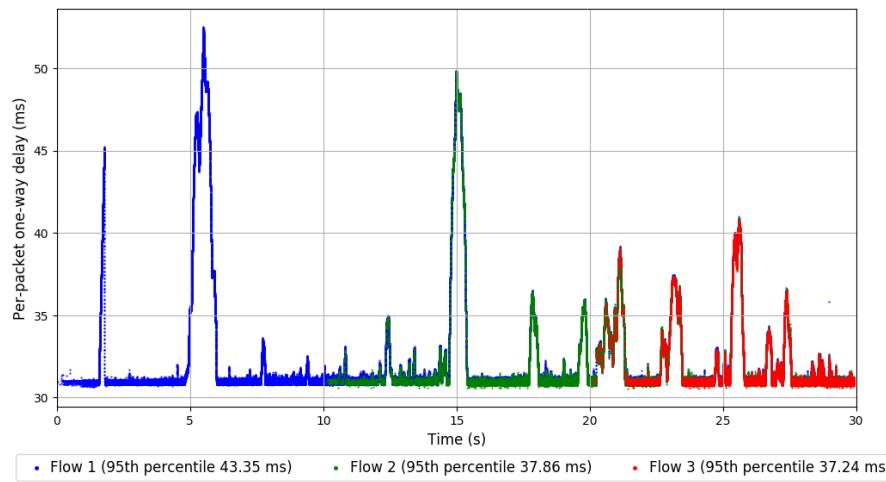
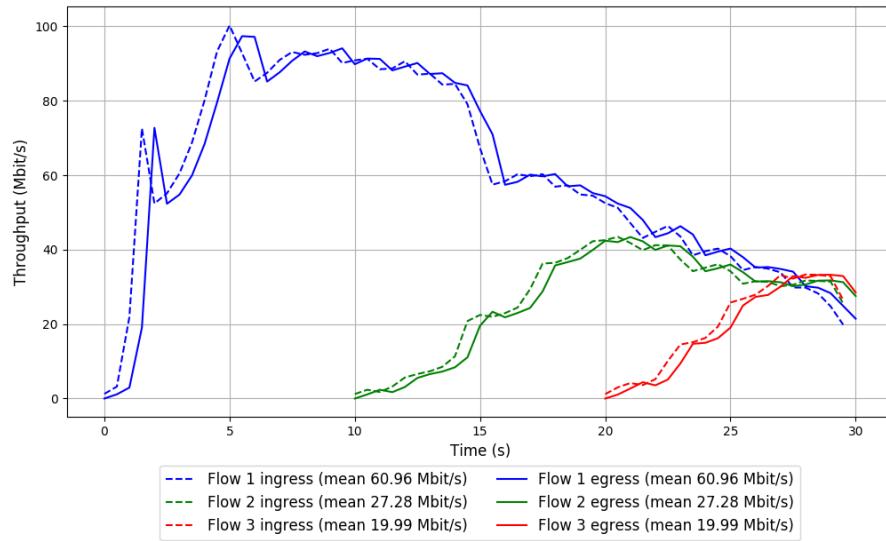


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-25 01:33:59
End at: 2019-01-25 01:34:29
Local clock offset: 0.564 ms
Remote clock offset: -4.496 ms

# Below is generated by plot.py at 2019-01-25 03:28:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.70 Mbit/s
95th percentile per-packet one-way delay: 40.227 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.96 Mbit/s
95th percentile per-packet one-way delay: 43.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.28 Mbit/s
95th percentile per-packet one-way delay: 37.856 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.99 Mbit/s
95th percentile per-packet one-way delay: 37.242 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

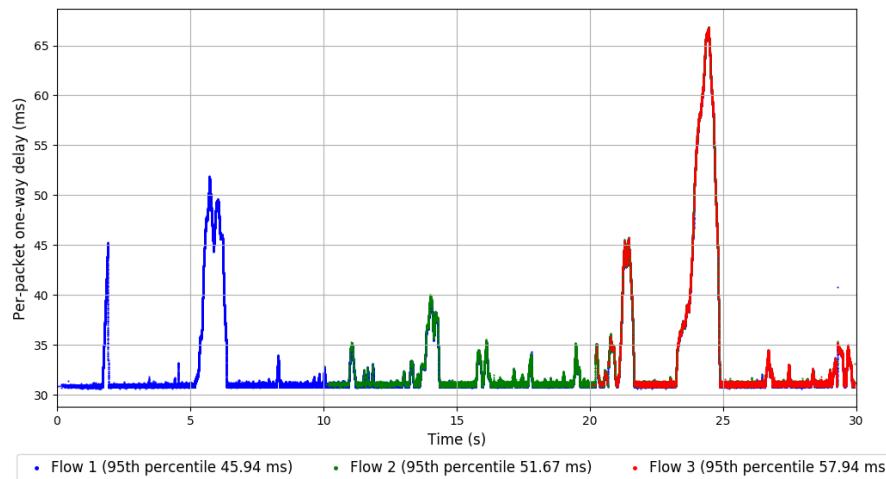
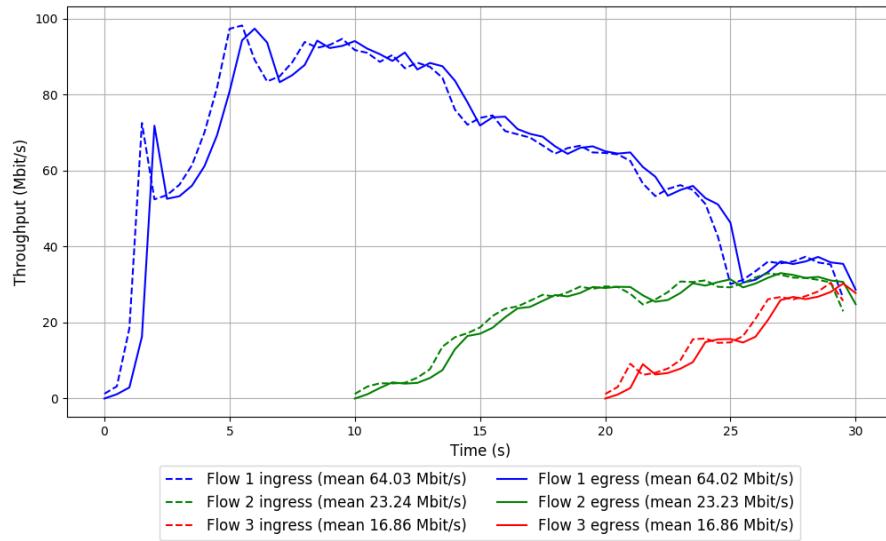


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-25 02:00:15
End at: 2019-01-25 02:00:45
Local clock offset: 0.498 ms
Remote clock offset: -3.797 ms

# Below is generated by plot.py at 2019-01-25 03:28:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.04 Mbit/s
95th percentile per-packet one-way delay: 47.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.02 Mbit/s
95th percentile per-packet one-way delay: 45.944 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.23 Mbit/s
95th percentile per-packet one-way delay: 51.669 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.86 Mbit/s
95th percentile per-packet one-way delay: 57.937 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

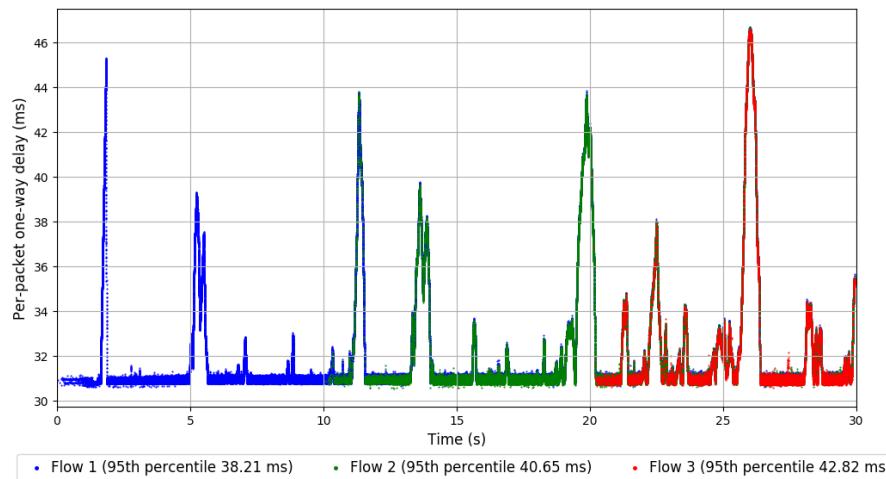
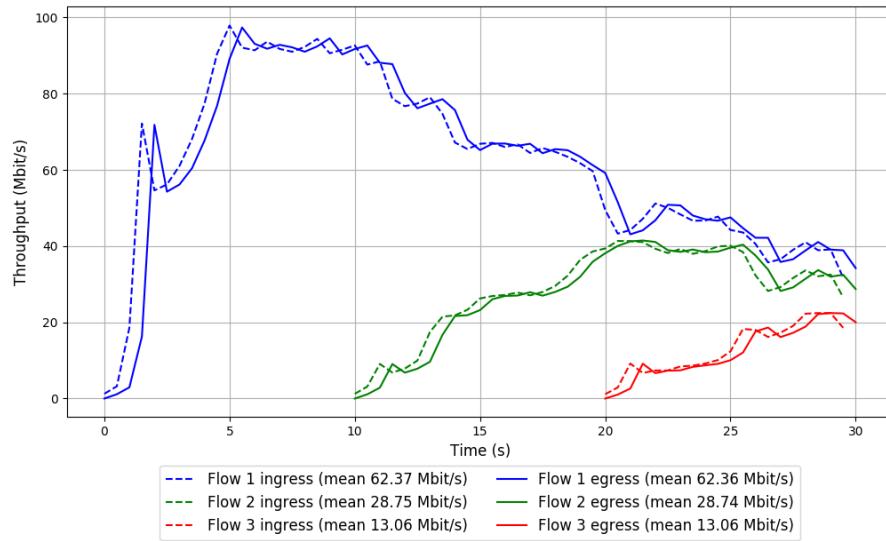


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-25 02:26:05
End at: 2019-01-25 02:26:35
Local clock offset: 0.554 ms
Remote clock offset: -3.166 ms

# Below is generated by plot.py at 2019-01-25 03:28:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.79 Mbit/s
95th percentile per-packet one-way delay: 38.685 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.36 Mbit/s
95th percentile per-packet one-way delay: 38.209 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.74 Mbit/s
95th percentile per-packet one-way delay: 40.646 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 42.819 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

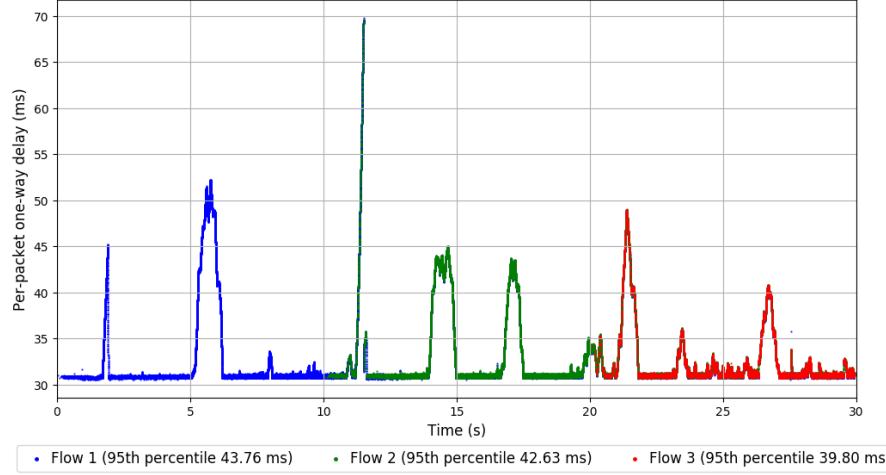
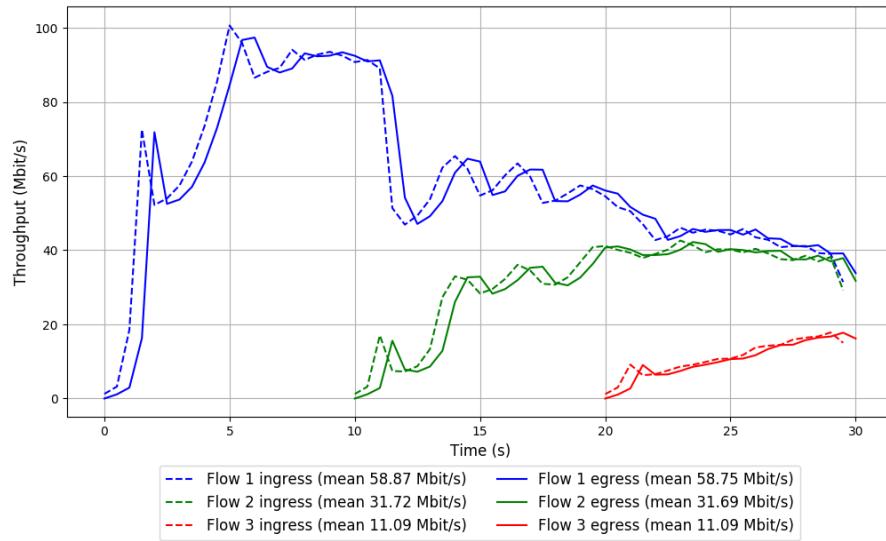


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-25 02:51:38
End at: 2019-01-25 02:52:08
Local clock offset: 0.757 ms
Remote clock offset: -2.75 ms

# Below is generated by plot.py at 2019-01-25 03:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.49 Mbit/s
95th percentile per-packet one-way delay: 43.343 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.75 Mbit/s
95th percentile per-packet one-way delay: 43.759 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 42.626 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 11.09 Mbit/s
95th percentile per-packet one-way delay: 39.796 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

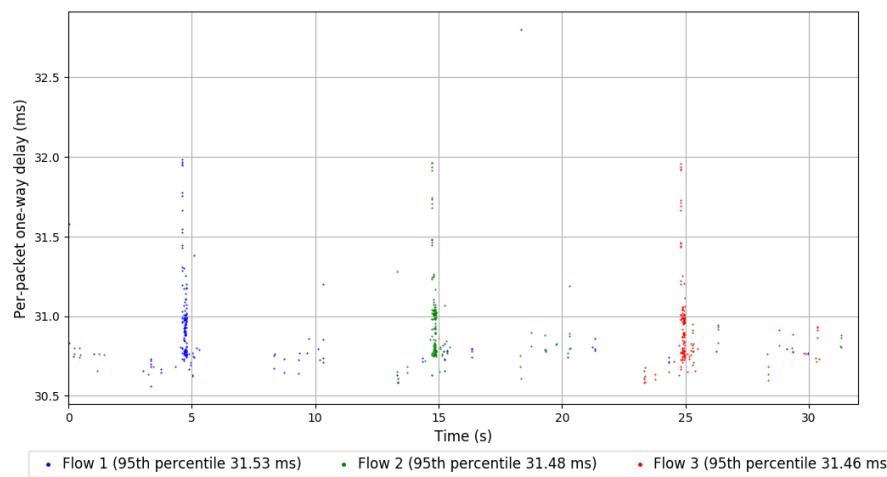
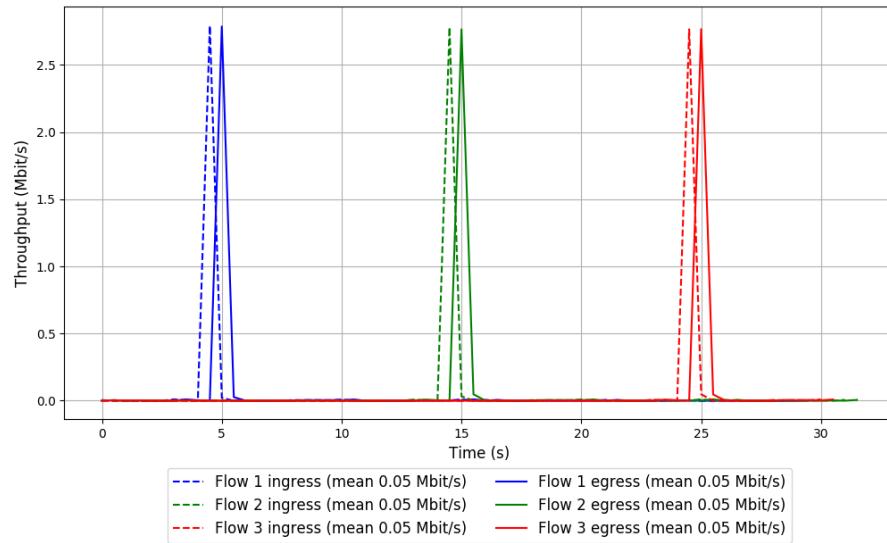


```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 01:12:08
End at: 2019-01-25 01:12:38
Local clock offset: 0.482 ms
Remote clock offset: -4.446 ms

# Below is generated by plot.py at 2019-01-25 03:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.485 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.526 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.475 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.459 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

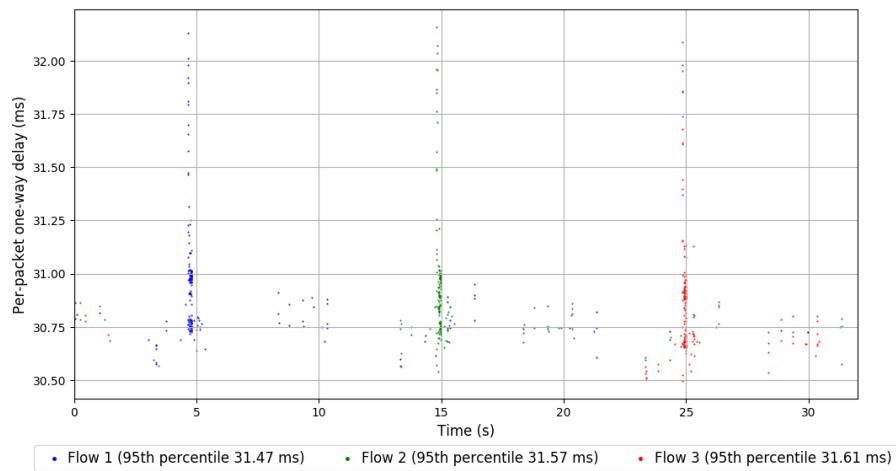
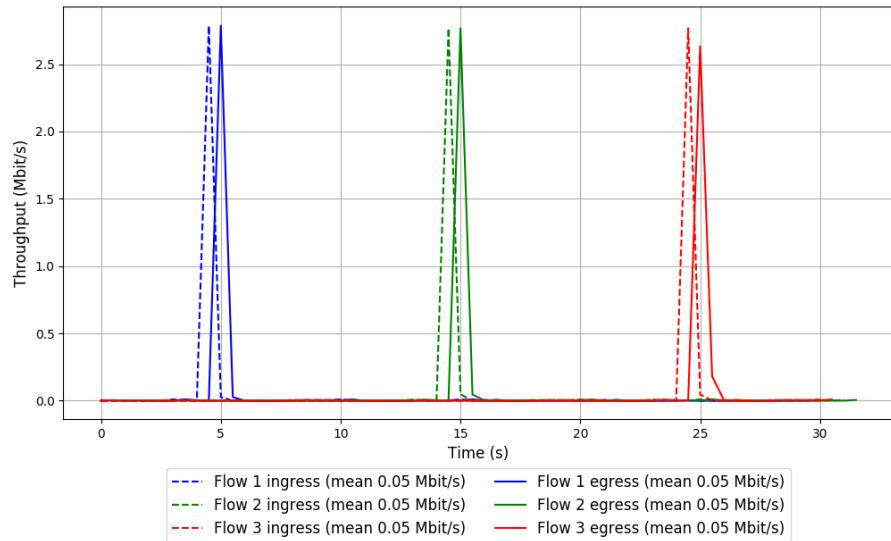


Run 2: Statistics of WebRTC media

```
Start at: 2019-01-25 01:39:12
End at: 2019-01-25 01:39:42
Local clock offset: 0.512 ms
Remote clock offset: -4.478 ms

# Below is generated by plot.py at 2019-01-25 03:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.575 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.473 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.572 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.607 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

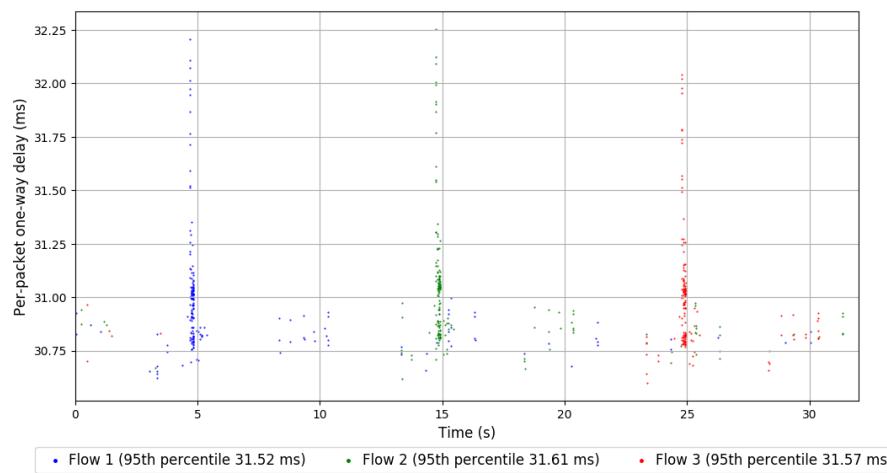
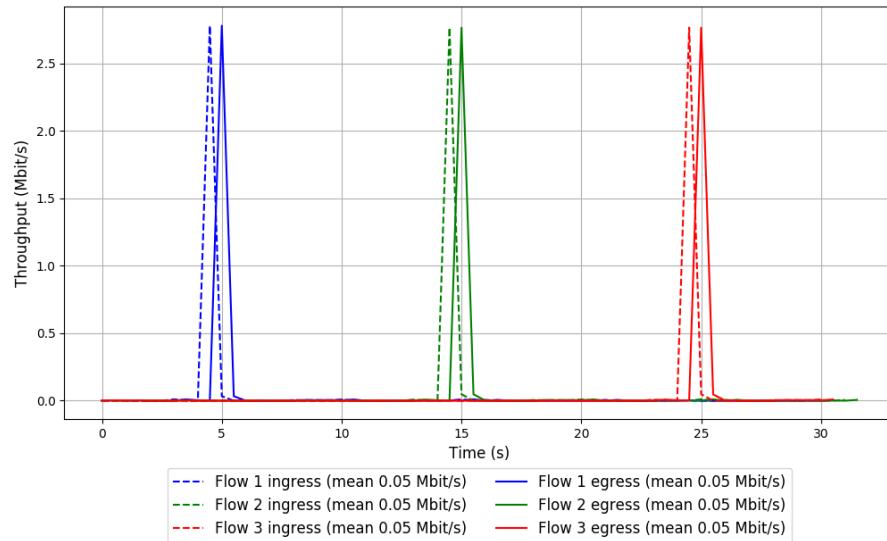


```
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 02:05:13
End at: 2019-01-25 02:05:43
Local clock offset: 0.519 ms
Remote clock offset: -3.727 ms

# Below is generated by plot.py at 2019-01-25 03:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.593 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.521 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.611 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.566 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

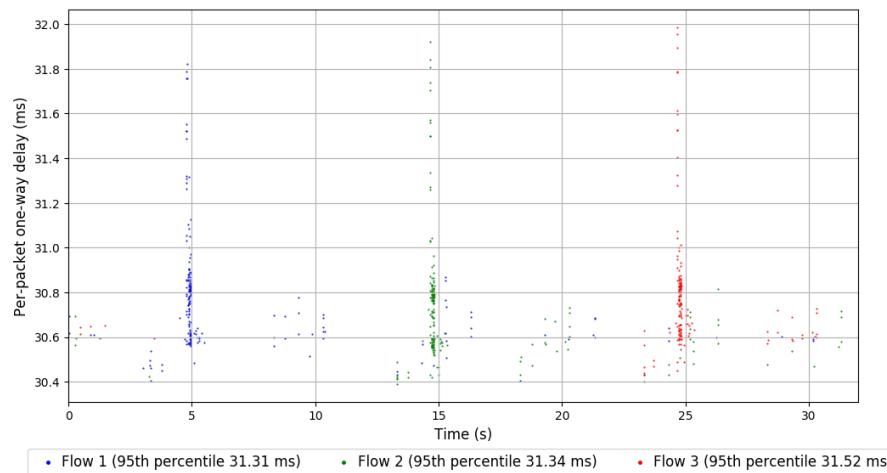
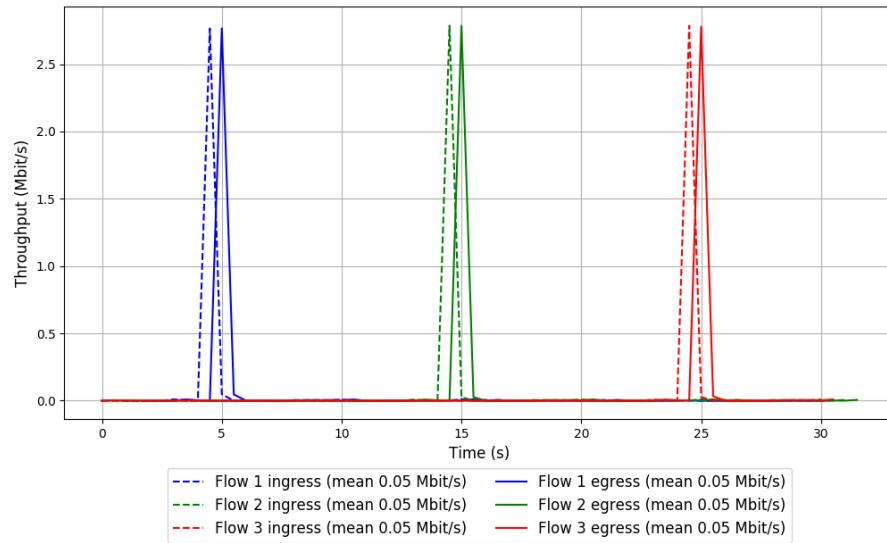


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-25 02:31:04
End at: 2019-01-25 02:31:34
Local clock offset: 0.564 ms
Remote clock offset: -3.304 ms

# Below is generated by plot.py at 2019-01-25 03:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.309 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.336 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.524 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-01-25 02:56:36
End at: 2019-01-25 02:57:06
Local clock offset: 0.808 ms
Remote clock offset: -2.699 ms

# Below is generated by plot.py at 2019-01-25 03:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.538 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.454 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.515 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.729 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

