

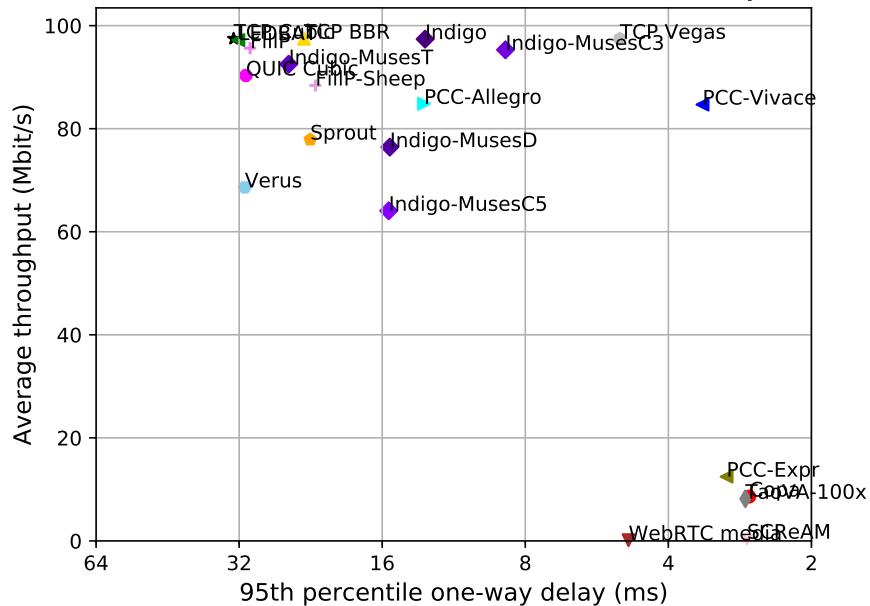
Pantheon Report

Generated at 2019-02-11 19:29:46 (UTC).
Data path: AWS Brazil 1 on `ens5` (*local*) → Brazil on `p4p1` (*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 `gps.ntp.br` and have been applied to correct the timestamps in logs.

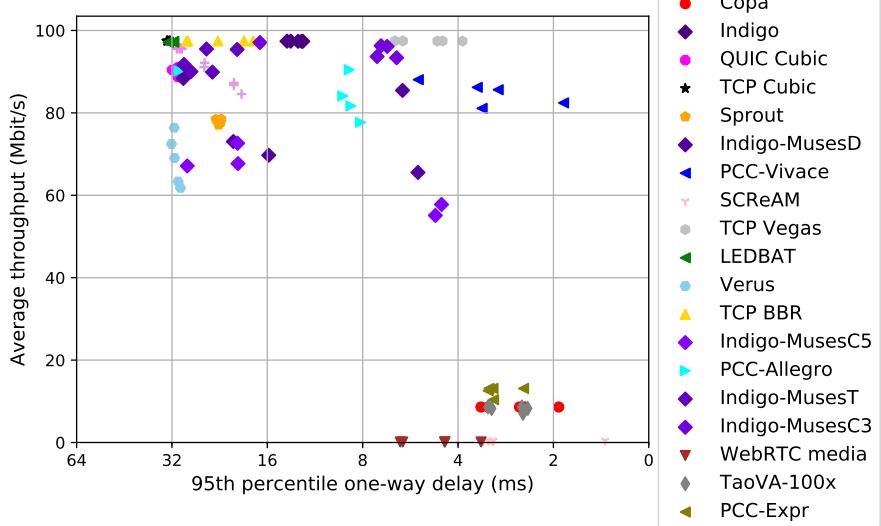
```
System info:  
Linux 4.15.0-1031-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee  
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd  
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab  
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
M src/ScreamClient  
M src/ScreamServer  
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26  
M src/examples/cellsim.cc  
M src/examples/sproutbt2.cc  
M src/network/sproutconn.cc  
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494  
M src/verus.hpp  
M tools/plot.py
```

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

test from AWS Brazil 1 to Brazil, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS Brazil 1 to Brazil, 5 runs of 30s each per scheme
3 flows with 10s interval between flows



↳

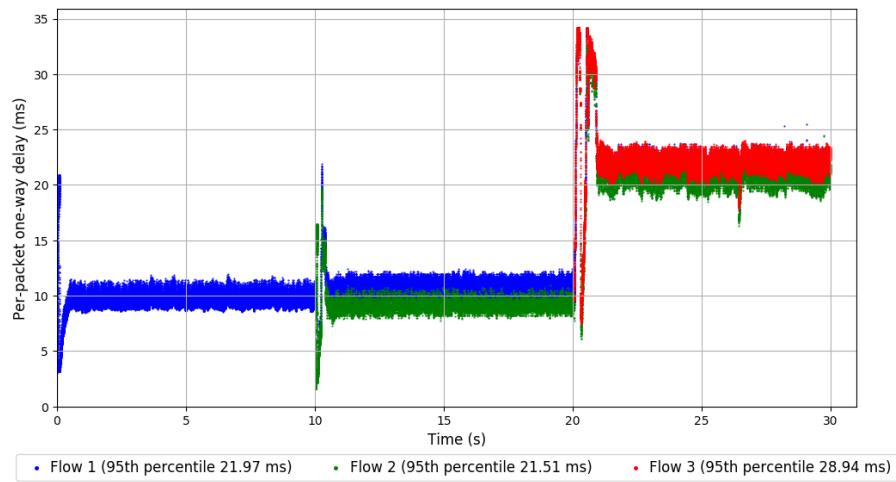
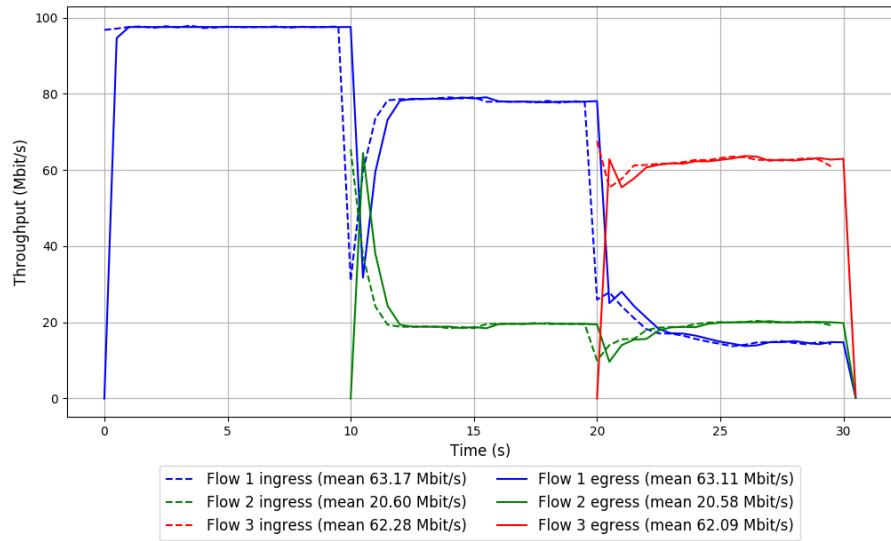
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	67.15	33.89	23.27	23.02	22.72	26.38	0.01	0.01	0.09
Copa		0.00	12.55	2.78	2.33	2.72	2.72	98.27	64.56	84.02
TCP Cubic		63.05	37.12	29.21	32.75	32.89	32.04	0.04	0.04	0.04
FillP		44.40	59.86	34.36	28.89	30.37	30.16	12.82	18.17	43.49
FillP-Sheep		56.16	30.69	35.63	19.88	22.42	25.10	0.78	1.00	3.55
Indigo		46.68	44.19	65.64	11.29	13.25	13.04	0.00	0.00	0.00
Indigo-MusesC3		64.37	32.35	32.75	8.39	9.22	9.84	0.00	0.00	0.00
Indigo-MusesC5		34.43	30.33	32.65	14.54	16.06	15.76	0.00	0.00	0.00
Indigo-MusesD		46.00	35.25	25.03	13.76	15.86	17.29	0.05	0.05	0.48
Indigo-MusesT		58.08	40.33	27.12	23.29	25.59	28.31	0.12	0.28	0.64
LEDBAT		60.69	39.75	30.31	32.22	31.78	31.58	0.03	0.06	0.12
PCC-Allegro		66.39	22.92	9.69	9.39	15.45	20.43	0.03	0.06	0.30
PCC-Expr		7.21	5.53	4.80	3.12	2.72	2.45	32.28	24.00	25.31
QUIC Cubic		57.93	34.80	28.16	30.45	31.20	30.94	0.16	0.23	0.29
SCReAM		0.22	0.22	0.22	1.57	2.15	2.45	0.00	0.00	0.00
Sprout		41.87	39.54	29.41	20.98	21.95	25.43	0.00	0.00	0.00
TaoVA-100x		0.00	9.20	6.16	2.15	2.75	2.58	95.92	81.38	92.33
TCP Vegas		53.34	40.65	51.19	6.90	3.83	4.31	0.00	0.00	0.00
Verus		36.96	33.81	27.63	29.29	31.65	32.16	9.21	15.10	20.80
PCC-Vivace		53.27	33.18	28.29	2.33	4.77	7.34	0.00	0.02	0.02
WebRTC media		0.05	0.05	0.05	4.61	5.50	4.43	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-02-11 17:26:33
End at: 2019-02-11 17:27:03
Local clock offset: -1.005 ms
Remote clock offset: -0.381 ms

# Below is generated by plot.py at 2019-02-11 19:19:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 22.914 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 63.11 Mbit/s
95th percentile per-packet one-way delay: 21.966 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 20.58 Mbit/s
95th percentile per-packet one-way delay: 21.513 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 62.09 Mbit/s
95th percentile per-packet one-way delay: 28.937 ms
Loss rate: 0.18%
```

Run 1: Report of TCP BBR — Data Link

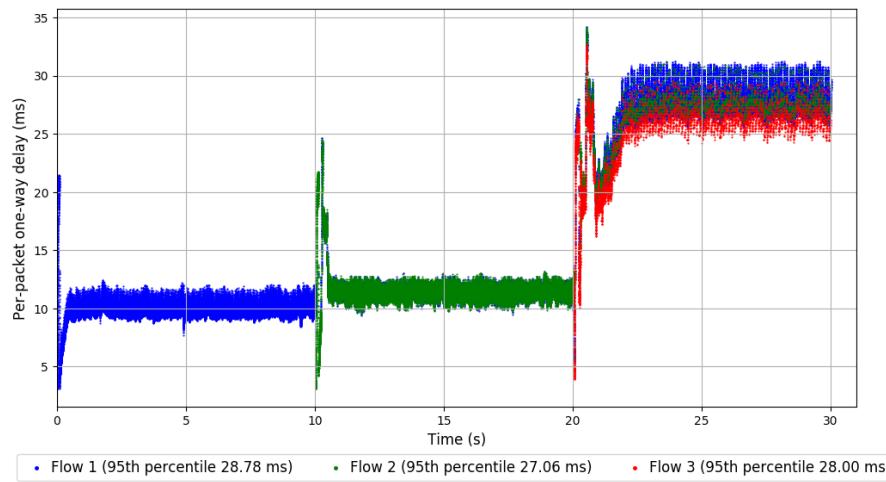
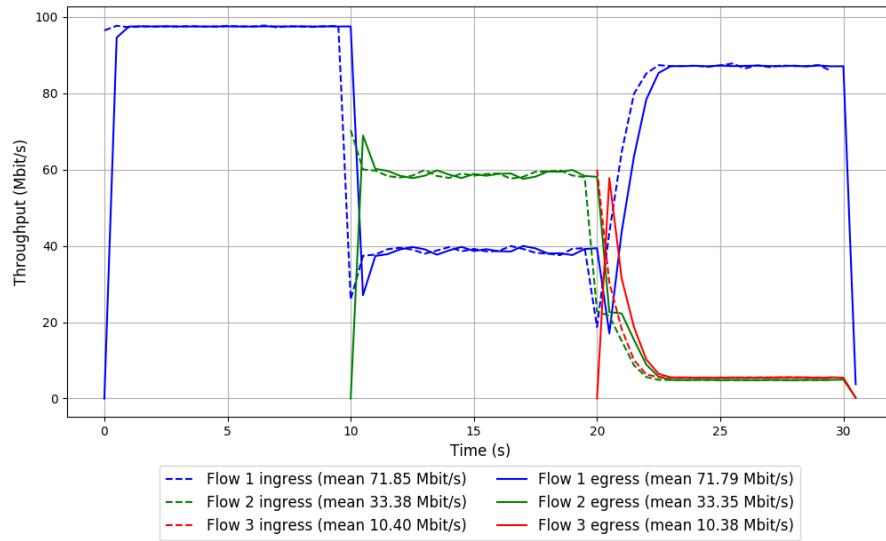


Run 2: Statistics of TCP BBR

```
Start at: 2019-02-11 17:50:29
End at: 2019-02-11 17:50:59
Local clock offset: -1.699 ms
Remote clock offset: -0.221 ms

# Below is generated by plot.py at 2019-02-11 19:19:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 28.555 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.79 Mbit/s
95th percentile per-packet one-way delay: 28.777 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 27.064 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 27.996 ms
Loss rate: 0.03%
```

Run 2: Report of TCP BBR — Data Link

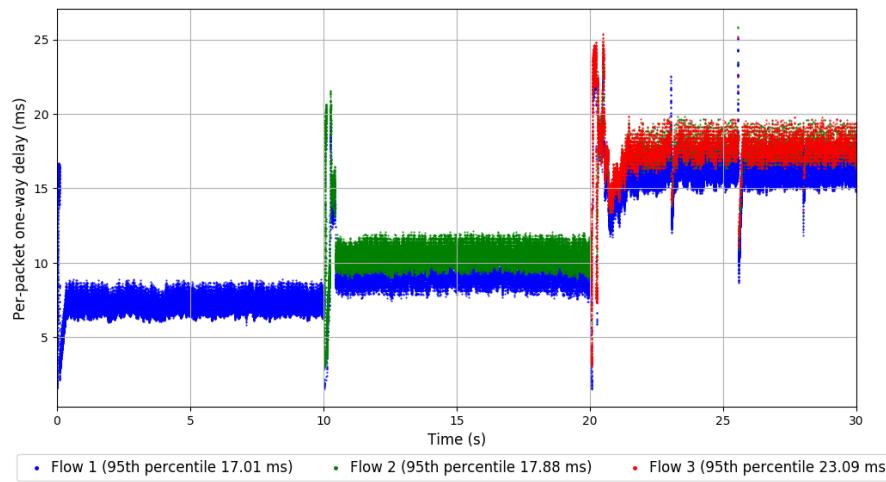
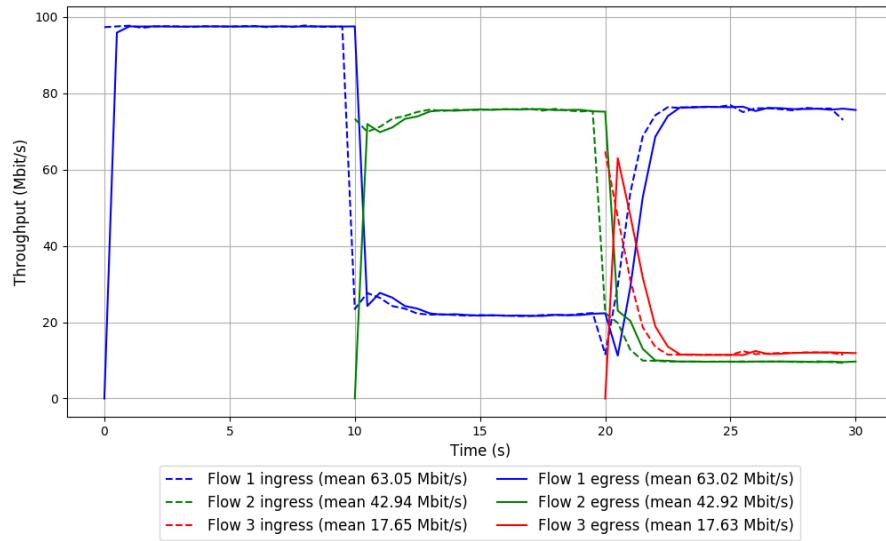


Run 3: Statistics of TCP BBR

```
Start at: 2019-02-11 18:14:25
End at: 2019-02-11 18:14:55
Local clock offset: -3.084 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-02-11 19:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 17.708 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.02 Mbit/s
95th percentile per-packet one-way delay: 17.014 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.92 Mbit/s
95th percentile per-packet one-way delay: 17.875 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.63 Mbit/s
95th percentile per-packet one-way delay: 23.089 ms
Loss rate: 0.00%
```

Run 3: Report of TCP BBR — Data Link

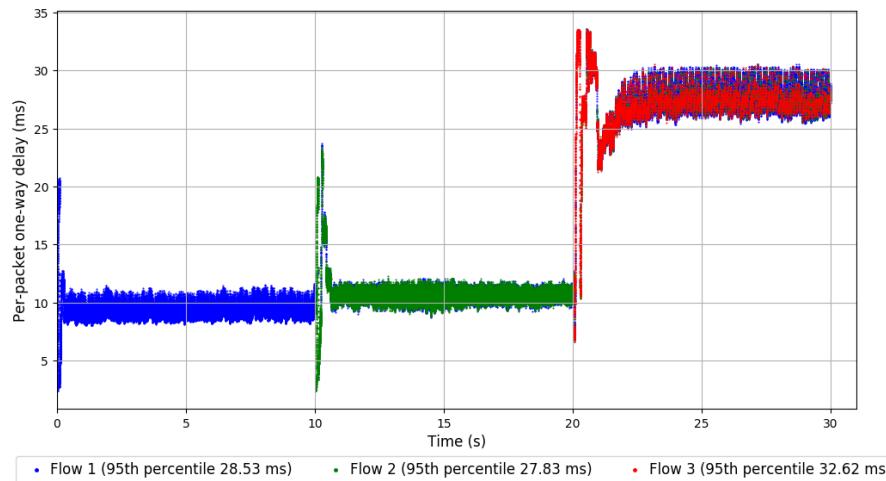
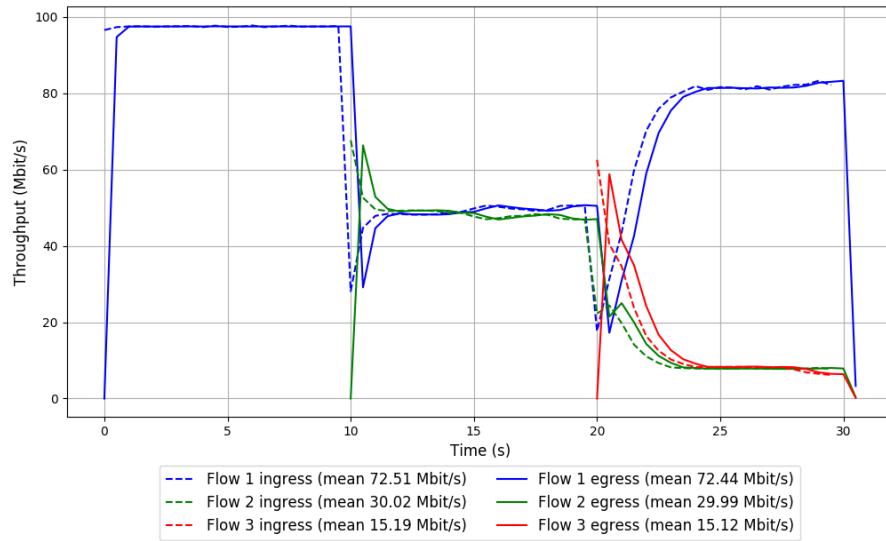


Run 4: Statistics of TCP BBR

```
Start at: 2019-02-11 18:38:20
End at: 2019-02-11 18:38:50
Local clock offset: -2.44 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2019-02-11 19:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 28.727 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 72.44 Mbit/s
95th percentile per-packet one-way delay: 28.530 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 29.99 Mbit/s
95th percentile per-packet one-way delay: 27.829 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 15.12 Mbit/s
95th percentile per-packet one-way delay: 32.621 ms
Loss rate: 0.25%
```

Run 4: Report of TCP BBR — Data Link

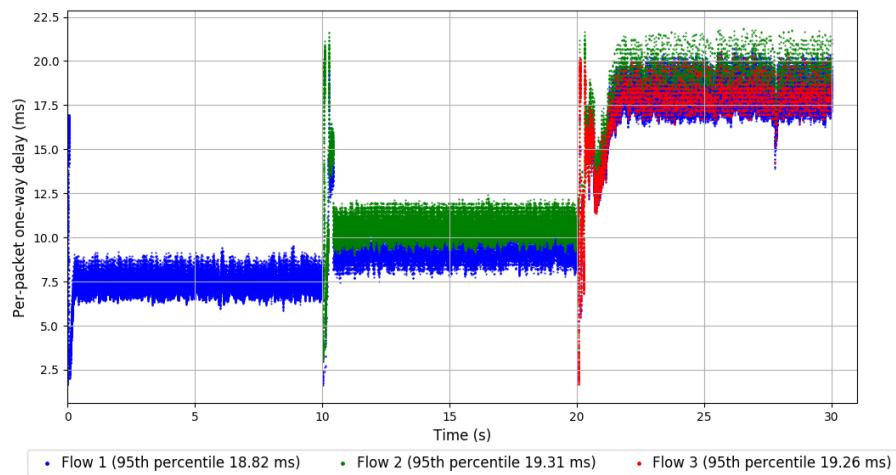
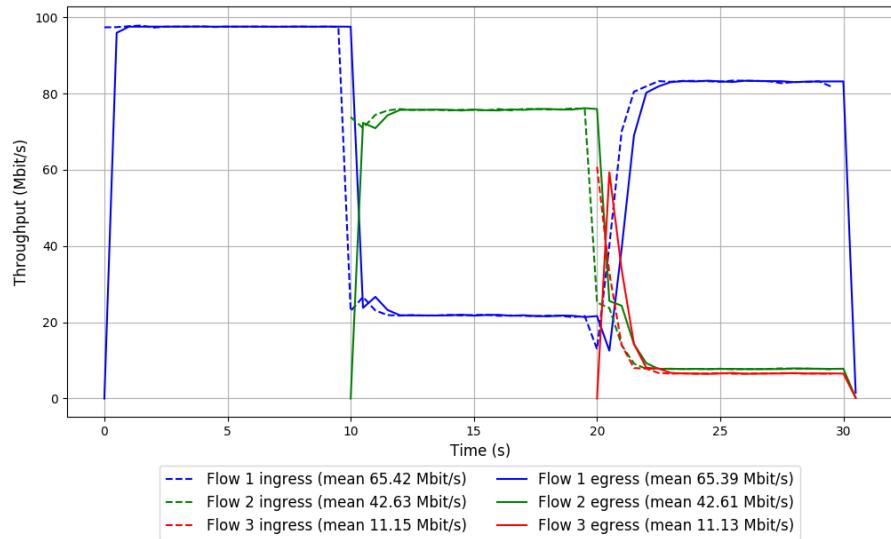


Run 5: Statistics of TCP BBR

```
Start at: 2019-02-11 19:02:16
End at: 2019-02-11 19:02:46
Local clock offset: -1.684 ms
Remote clock offset: 0.176 ms

# Below is generated by plot.py at 2019-02-11 19:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 18.946 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.39 Mbit/s
95th percentile per-packet one-way delay: 18.815 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.61 Mbit/s
95th percentile per-packet one-way delay: 19.313 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 19.260 ms
Loss rate: 0.00%
```

Run 5: Report of TCP BBR — Data Link

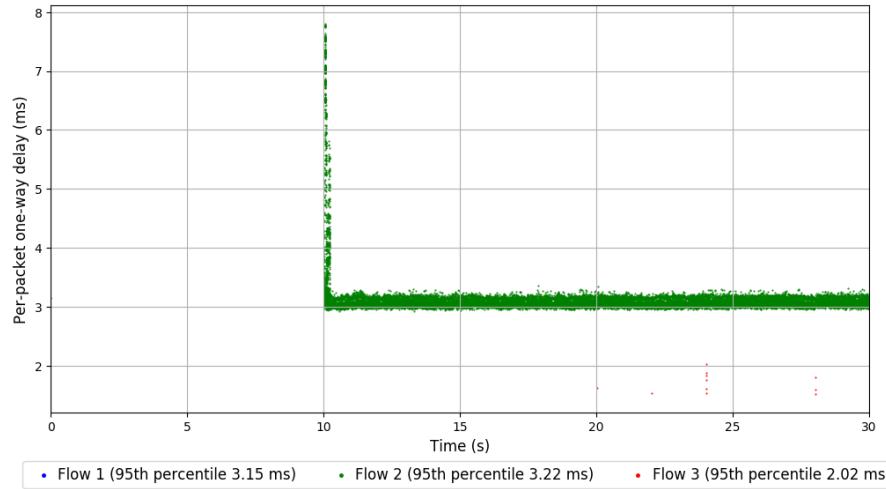
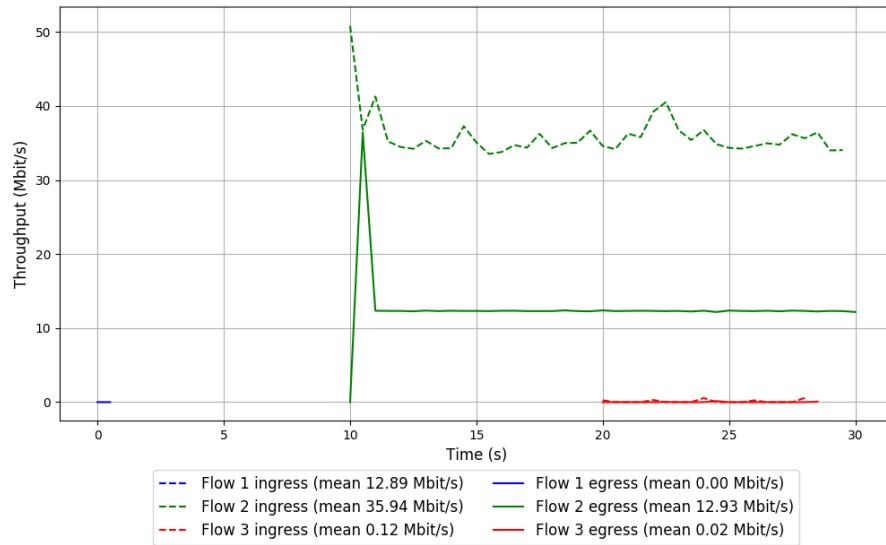


Run 1: Statistics of Copa

```
Start at: 2019-02-11 17:20:55
End at: 2019-02-11 17:21:25
Local clock offset: -1.214 ms
Remote clock offset: -0.515 ms

# Below is generated by plot.py at 2019-02-11 19:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 3.216 ms
Loss rate: 64.06%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3.153 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 3.216 ms
Loss rate: 64.03%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 2.019 ms
Loss rate: 87.25%
```

Run 1: Report of Copa — Data Link

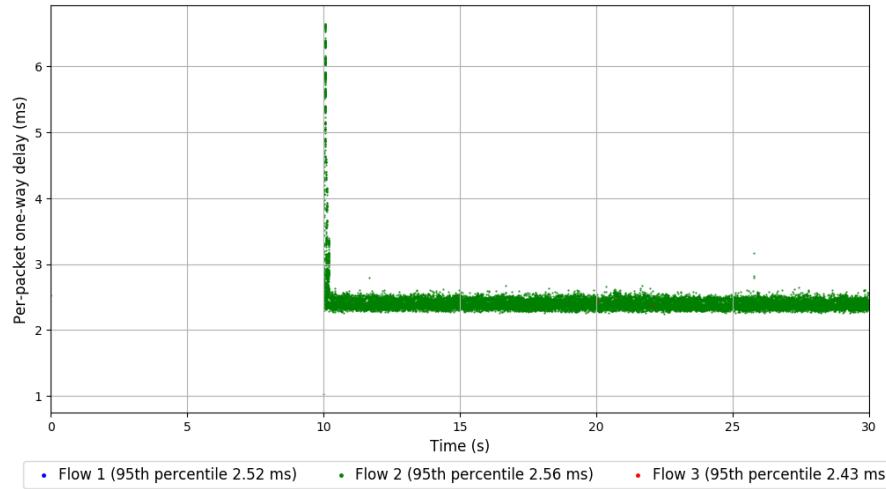
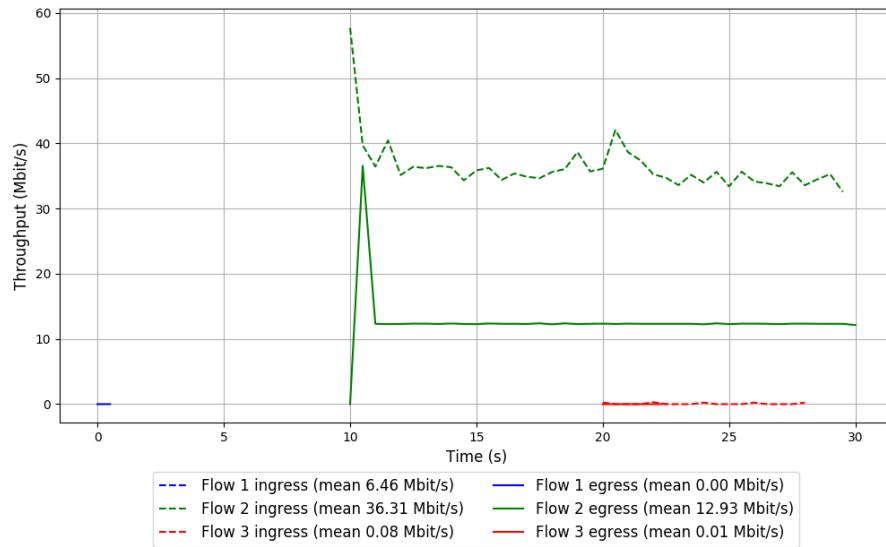


Run 2: Statistics of Copa

```
Start at: 2019-02-11 17:44:51
End at: 2019-02-11 17:45:21
Local clock offset: -0.799 ms
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2019-02-11 19:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 2.559 ms
Loss rate: 64.41%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.523 ms
Loss rate: 97.24%
-- Flow 2:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 2.559 ms
Loss rate: 64.38%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2.432 ms
Loss rate: 97.92%
```

Run 2: Report of Copa — Data Link

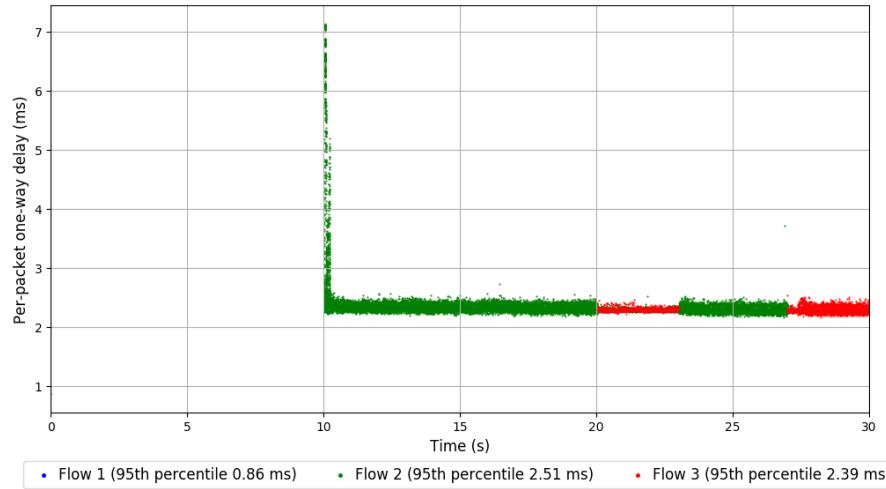
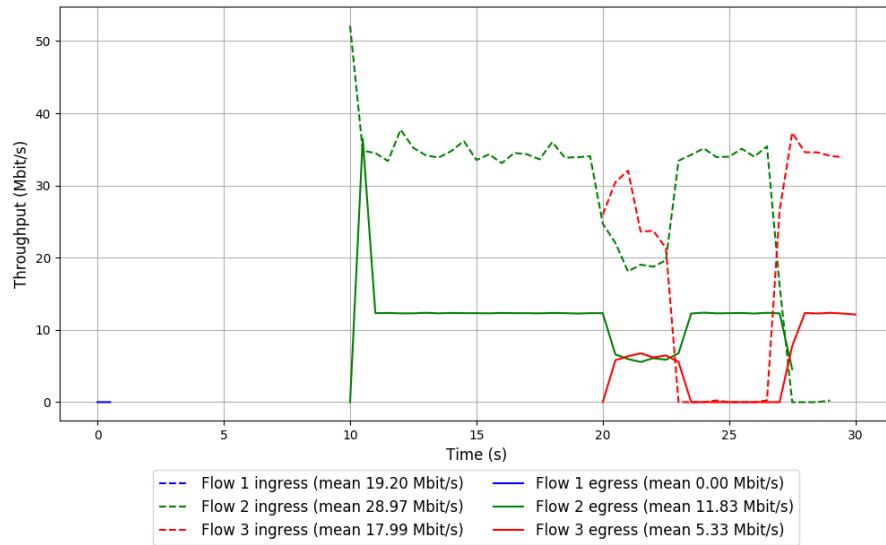


Run 3: Statistics of Copa

```
Start at: 2019-02-11 18:08:46
End at: 2019-02-11 18:09:16
Local clock offset: -1.702 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-02-11 19:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 2.463 ms
Loss rate: 65.09%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.862 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 2.511 ms
Loss rate: 63.40%
-- Flow 3:
Average throughput: 5.33 Mbit/s
95th percentile per-packet one-way delay: 2.387 ms
Loss rate: 70.36%
```

Run 3: Report of Copa — Data Link

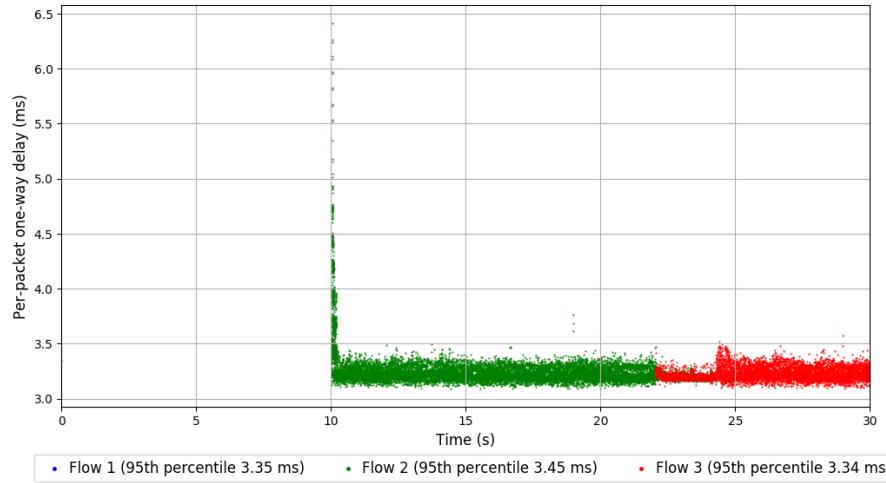
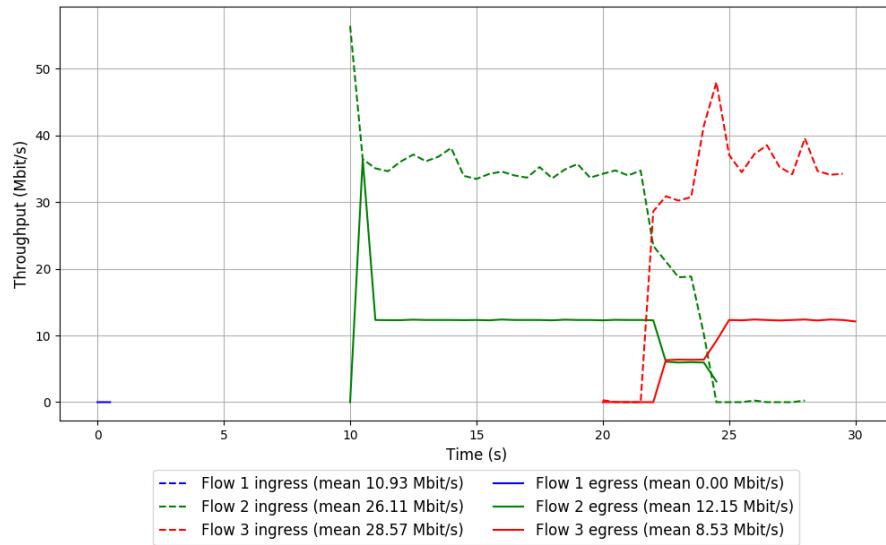


Run 4: Statistics of Copa

```
Start at: 2019-02-11 18:32:42
End at: 2019-02-11 18:33:12
Local clock offset: -3.931 ms
Remote clock offset: 0.132 ms

# Below is generated by plot.py at 2019-02-11 19:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 3.387 ms
Loss rate: 66.08%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3.349 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 12.15 Mbit/s
95th percentile per-packet one-way delay: 3.450 ms
Loss rate: 63.65%
-- Flow 3:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 3.340 ms
Loss rate: 70.15%
```

Run 4: Report of Copa — Data Link

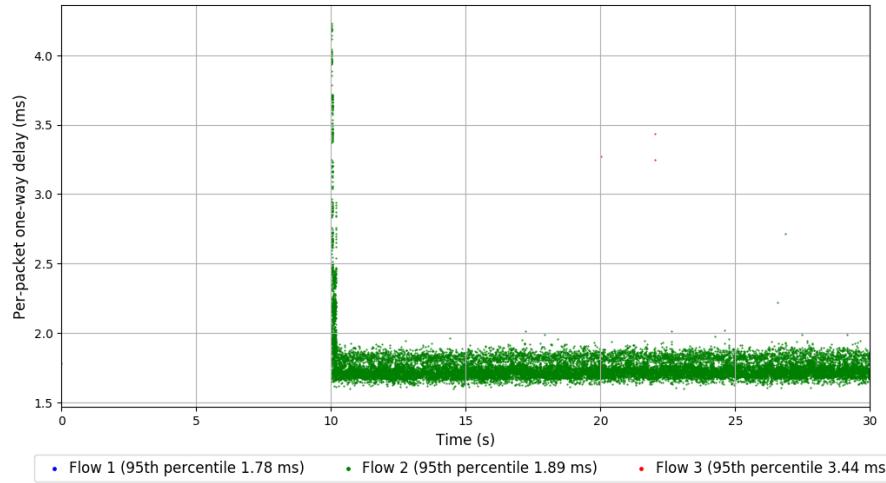
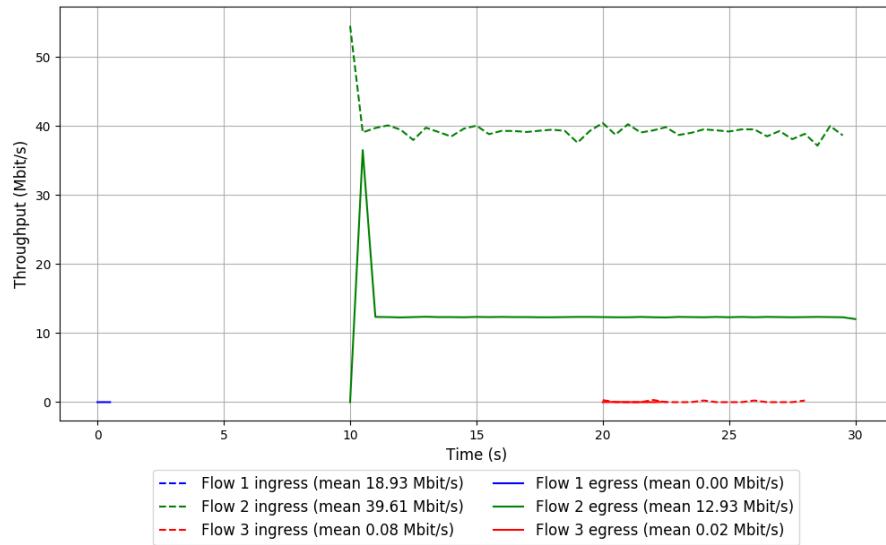


Run 5: Statistics of Copa

```
Start at: 2019-02-11 18:56:37
End at: 2019-02-11 18:57:07
Local clock offset: -1.939 ms
Remote clock offset: 0.132 ms

# Below is generated by plot.py at 2019-02-11 19:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 1.888 ms
Loss rate: 67.37%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.781 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 1.888 ms
Loss rate: 67.35%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 3.437 ms
Loss rate: 94.40%
```

Run 5: Report of Copa — Data Link

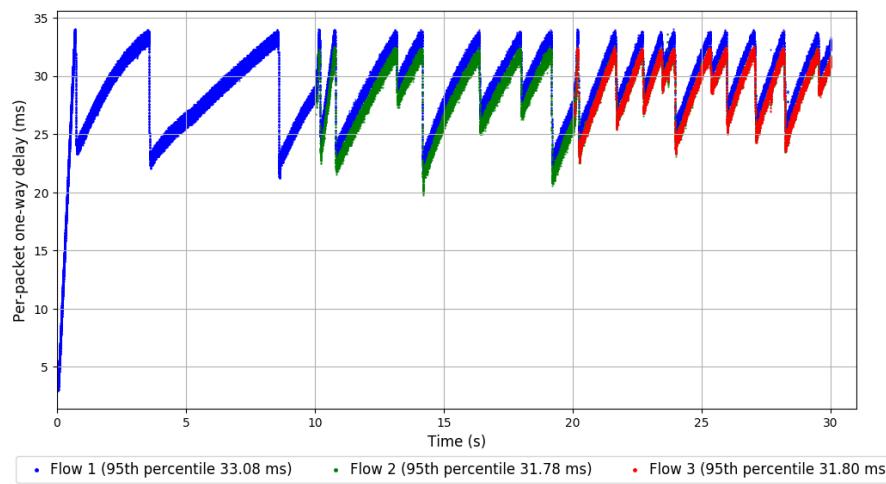
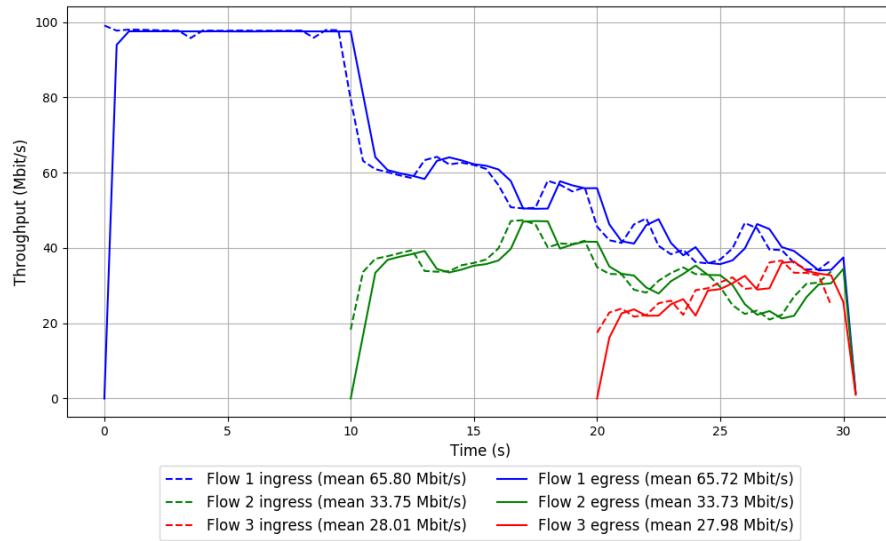


```
Run 1: Statistics of TCP Cubic

Start at: 2019-02-11 17:40:18
End at: 2019-02-11 17:40:48
Local clock offset: -1.347 ms
Remote clock offset: -0.404 ms

# Below is generated by plot.py at 2019-02-11 19:19:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.978 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 65.72 Mbit/s
95th percentile per-packet one-way delay: 33.080 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 33.73 Mbit/s
95th percentile per-packet one-way delay: 31.776 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 27.98 Mbit/s
95th percentile per-packet one-way delay: 31.801 ms
Loss rate: 0.07%
```

Run 1: Report of TCP Cubic — Data Link

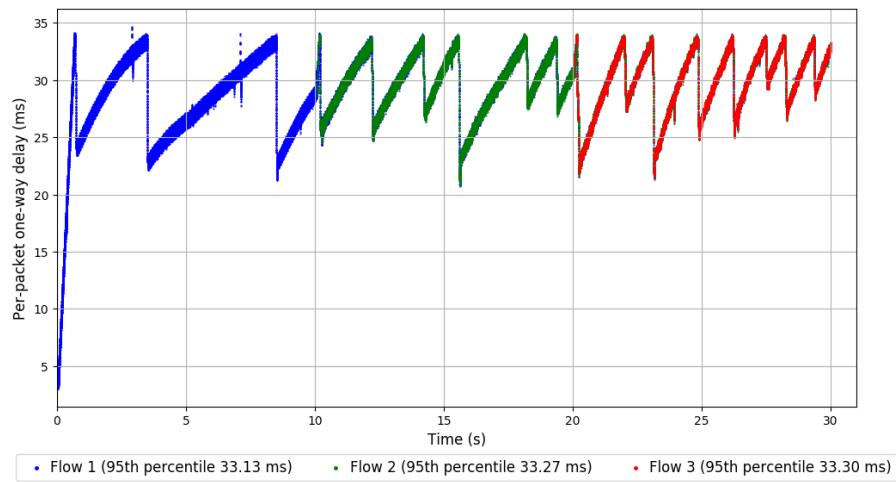
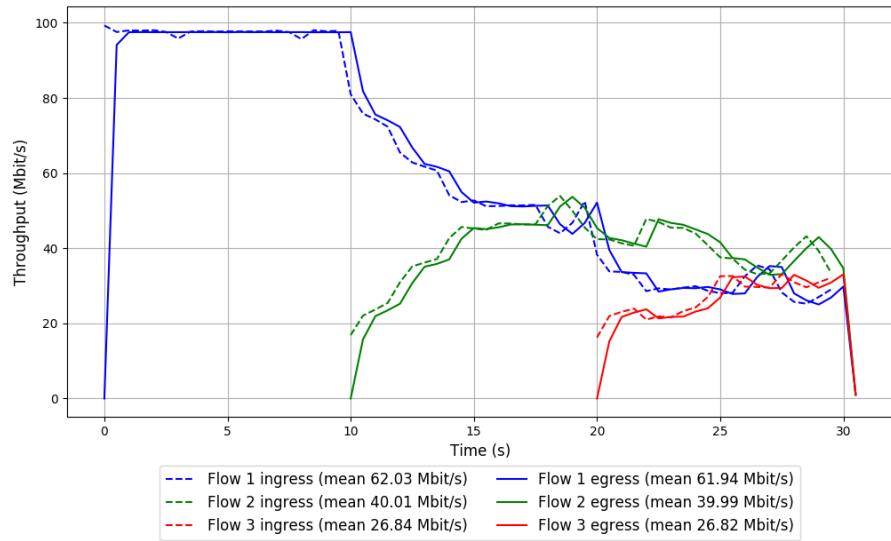


Run 2: Statistics of TCP Cubic

```
Start at: 2019-02-11 18:04:14
End at: 2019-02-11 18:04:44
Local clock offset: -1.532 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2019-02-11 19:19:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 33.230 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.94 Mbit/s
95th percentile per-packet one-way delay: 33.127 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 39.99 Mbit/s
95th percentile per-packet one-way delay: 33.267 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 26.82 Mbit/s
95th percentile per-packet one-way delay: 33.295 ms
Loss rate: 0.02%
```

Run 2: Report of TCP Cubic — Data Link

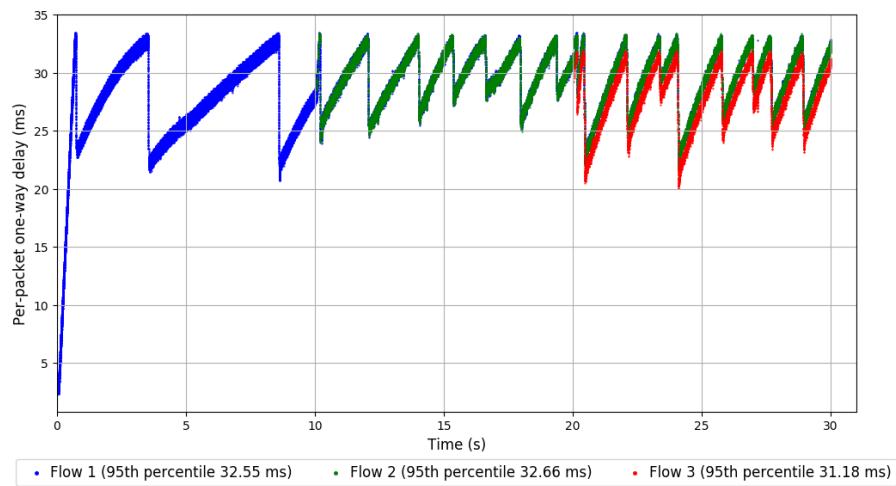
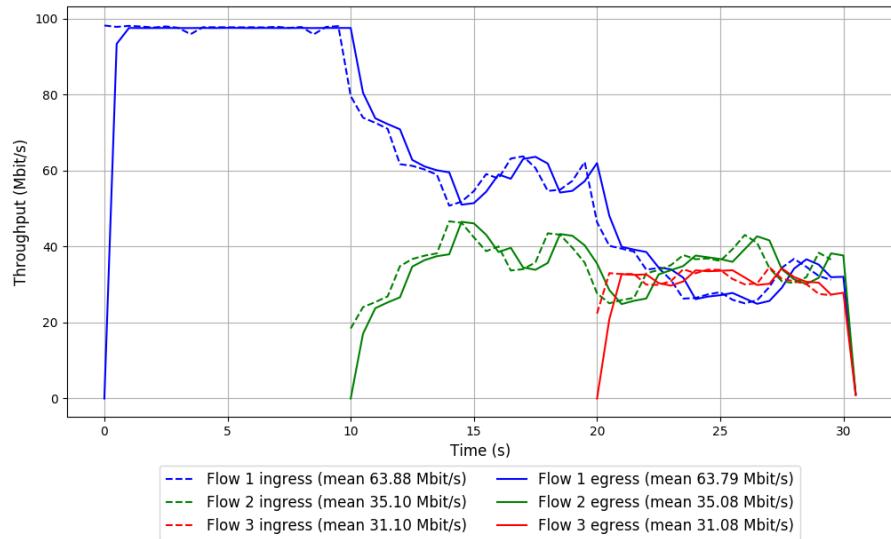


Run 3: Statistics of TCP Cubic

```
Start at: 2019-02-11 18:28:10
End at: 2019-02-11 18:28:40
Local clock offset: -2.996 ms
Remote clock offset: 0.128 ms

# Below is generated by plot.py at 2019-02-11 19:19:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.492 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.79 Mbit/s
95th percentile per-packet one-way delay: 32.551 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 32.655 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 31.08 Mbit/s
95th percentile per-packet one-way delay: 31.180 ms
Loss rate: 0.03%
```

Run 3: Report of TCP Cubic — Data Link

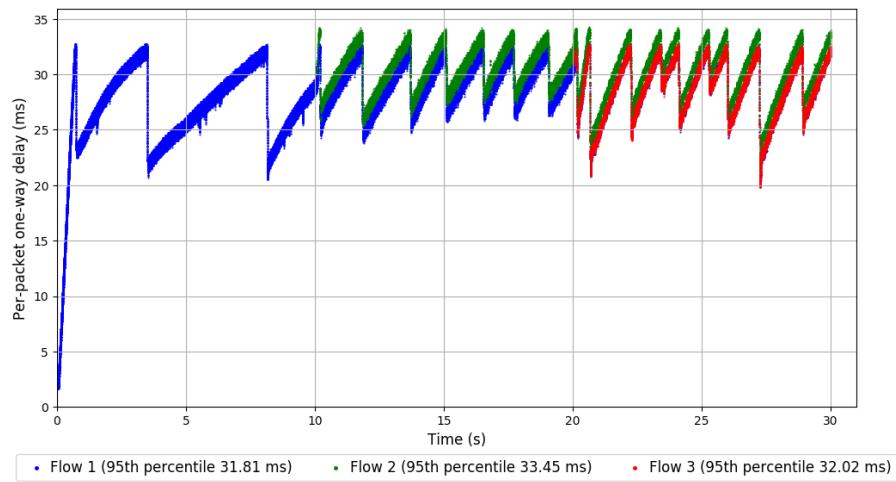
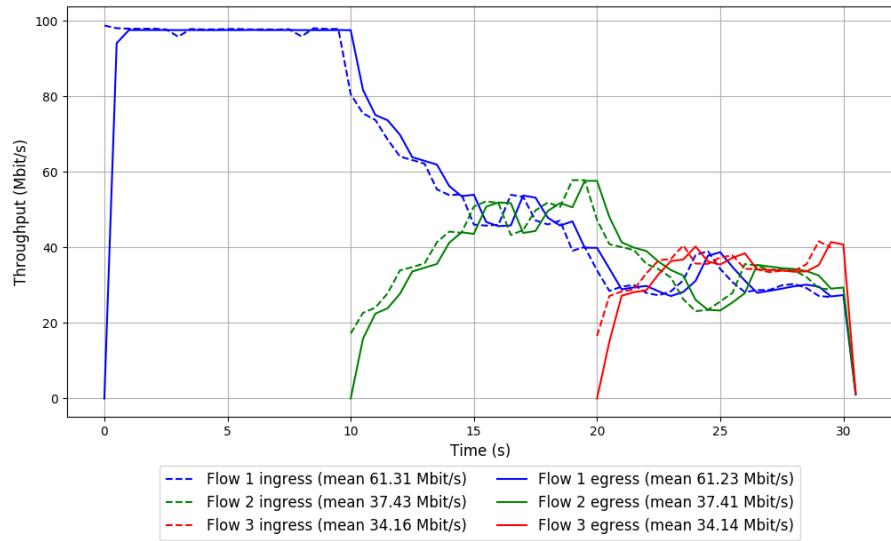


Run 4: Statistics of TCP Cubic

```
Start at: 2019-02-11 18:52:04
End at: 2019-02-11 18:52:34
Local clock offset: -2.03 ms
Remote clock offset: 0.206 ms

# Below is generated by plot.py at 2019-02-11 19:20:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.510 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 31.812 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.41 Mbit/s
95th percentile per-packet one-way delay: 33.453 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 34.14 Mbit/s
95th percentile per-packet one-way delay: 32.022 ms
Loss rate: 0.03%
```

Run 4: Report of TCP Cubic — Data Link

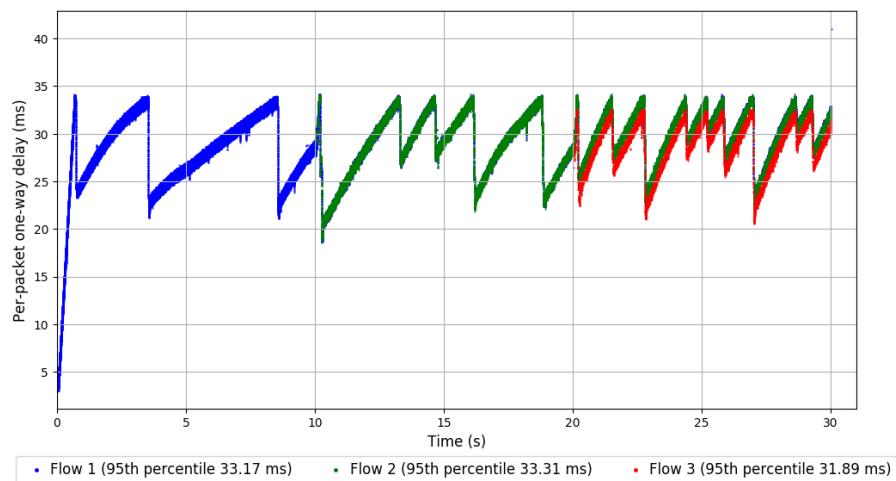
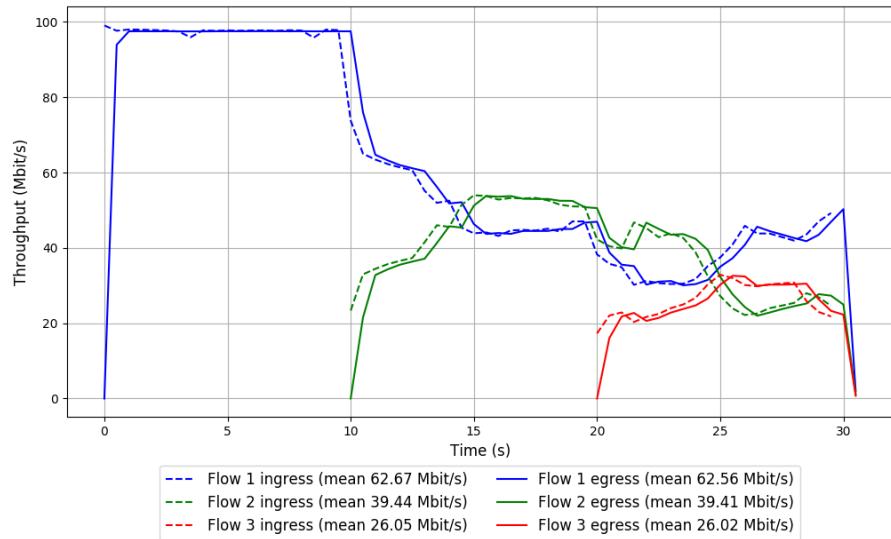


Run 5: Statistics of TCP Cubic

```
Start at: 2019-02-11 19:16:02
End at: 2019-02-11 19:16:32
Local clock offset: -2.021 ms
Remote clock offset: 0.134 ms

# Below is generated by plot.py at 2019-02-11 19:20:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.44 Mbit/s
95th percentile per-packet one-way delay: 33.155 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.56 Mbit/s
95th percentile per-packet one-way delay: 33.167 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 39.41 Mbit/s
95th percentile per-packet one-way delay: 33.311 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 26.02 Mbit/s
95th percentile per-packet one-way delay: 31.895 ms
Loss rate: 0.06%
```

Run 5: Report of TCP Cubic — Data Link

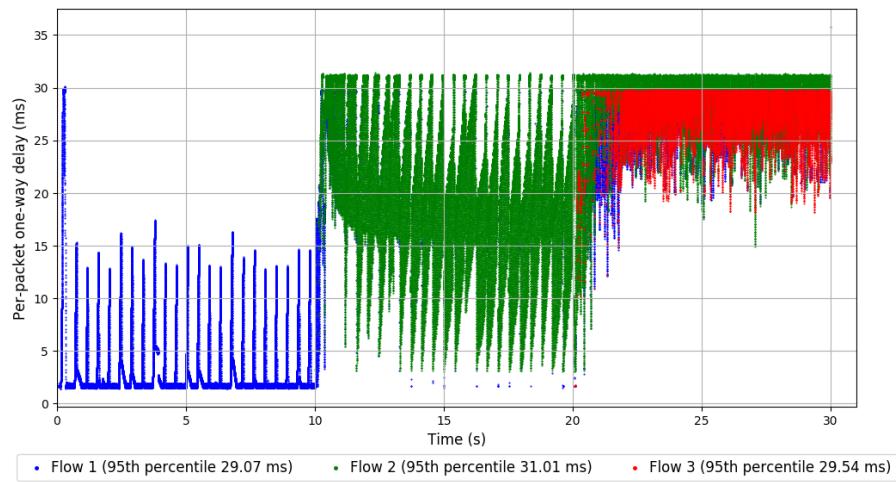
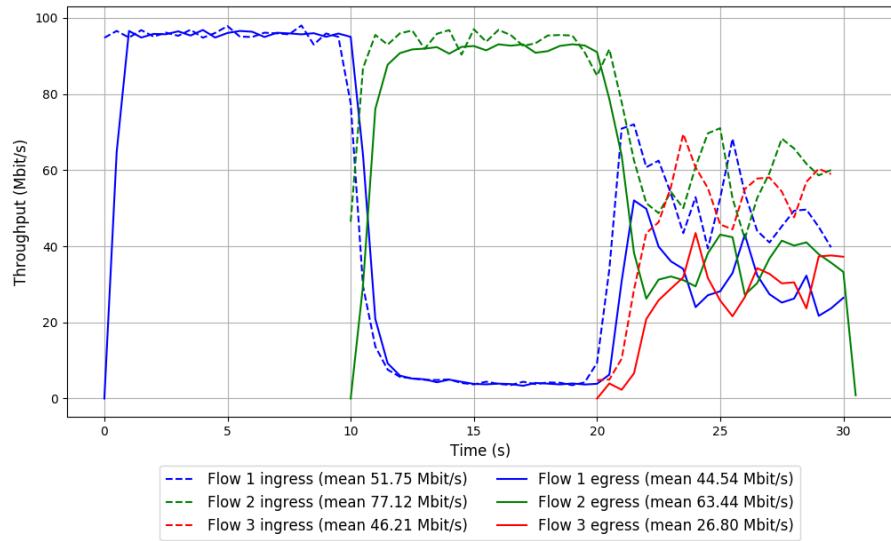


```
Run 1: Statistics of FillP

Start at: 2019-02-11 17:30:01
End at: 2019-02-11 17:30:31
Local clock offset: -0.886 ms
Remote clock offset: -0.387 ms

# Below is generated by plot.py at 2019-02-11 19:20:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 30.807 ms
Loss rate: 19.13%
-- Flow 1:
Average throughput: 44.54 Mbit/s
95th percentile per-packet one-way delay: 29.066 ms
Loss rate: 13.88%
-- Flow 2:
Average throughput: 63.44 Mbit/s
95th percentile per-packet one-way delay: 31.006 ms
Loss rate: 17.61%
-- Flow 3:
Average throughput: 26.80 Mbit/s
95th percentile per-packet one-way delay: 29.540 ms
Loss rate: 41.99%
```

Run 1: Report of FillP — Data Link

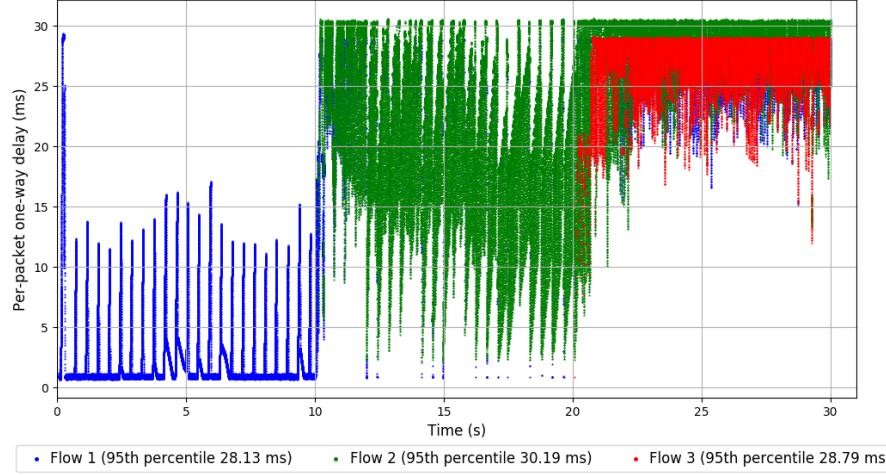
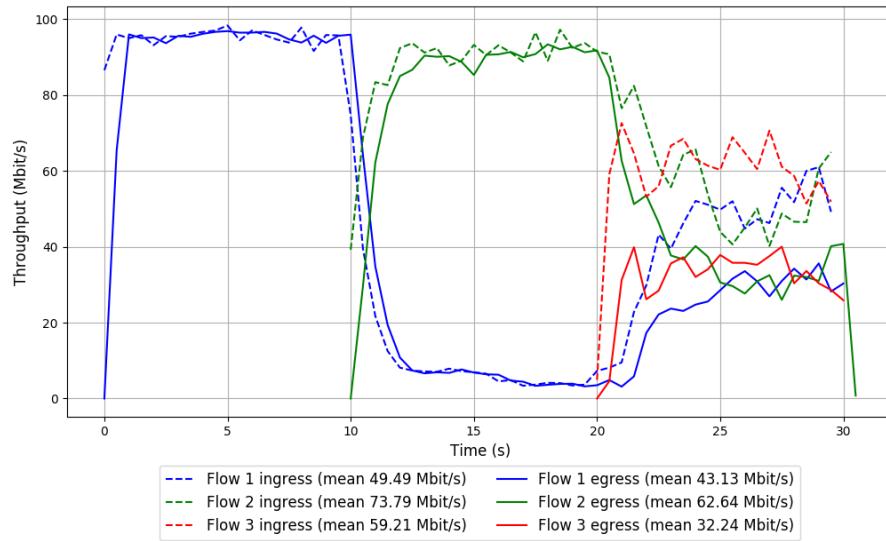


Run 2: Statistics of FillP

```
Start at: 2019-02-11 17:53:57
End at: 2019-02-11 17:54:27
Local clock offset: -0.873 ms
Remote clock offset: -0.196 ms

# Below is generated by plot.py at 2019-02-11 19:20:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 29.782 ms
Loss rate: 19.13%
-- Flow 1:
Average throughput: 43.13 Mbit/s
95th percentile per-packet one-way delay: 28.134 ms
Loss rate: 12.78%
-- Flow 2:
Average throughput: 62.64 Mbit/s
95th percentile per-packet one-way delay: 30.194 ms
Loss rate: 14.99%
-- Flow 3:
Average throughput: 32.24 Mbit/s
95th percentile per-packet one-way delay: 28.792 ms
Loss rate: 45.52%
```

Run 2: Report of FillP — Data Link

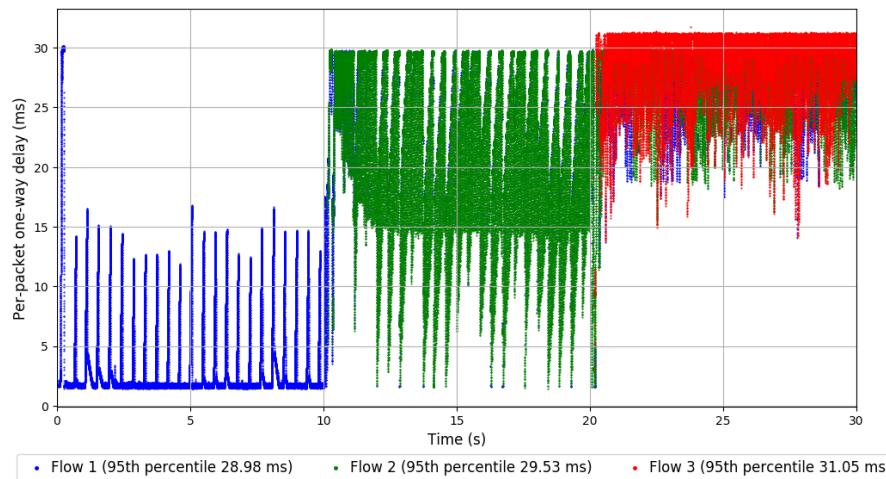
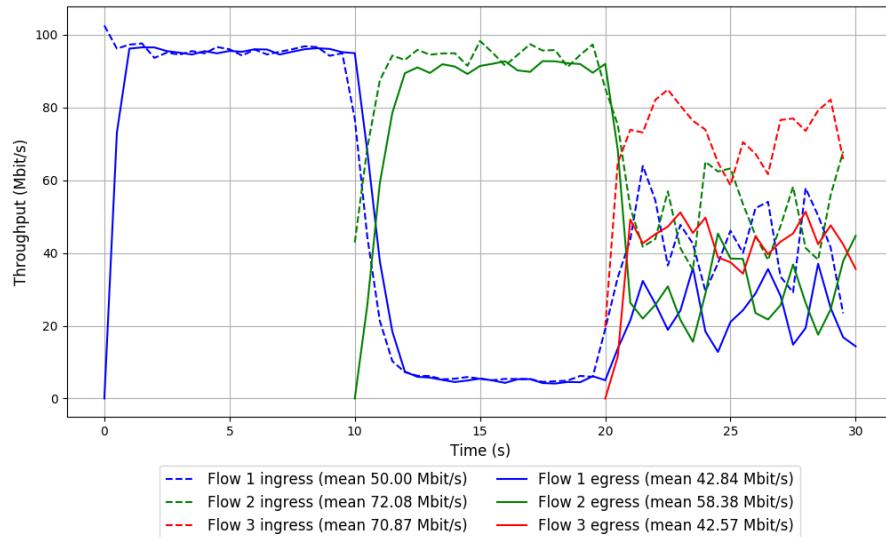


Run 3: Statistics of FillP

```
Start at: 2019-02-11 18:17:52
End at: 2019-02-11 18:18:22
Local clock offset: -3.41 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2019-02-11 19:20:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 30.134 ms
Loss rate: 21.05%
-- Flow 1:
Average throughput: 42.84 Mbit/s
95th percentile per-packet one-way delay: 28.982 ms
Loss rate: 14.26%
-- Flow 2:
Average throughput: 58.38 Mbit/s
95th percentile per-packet one-way delay: 29.529 ms
Loss rate: 18.91%
-- Flow 3:
Average throughput: 42.57 Mbit/s
95th percentile per-packet one-way delay: 31.047 ms
Loss rate: 39.92%
```

Run 3: Report of FillP — Data Link

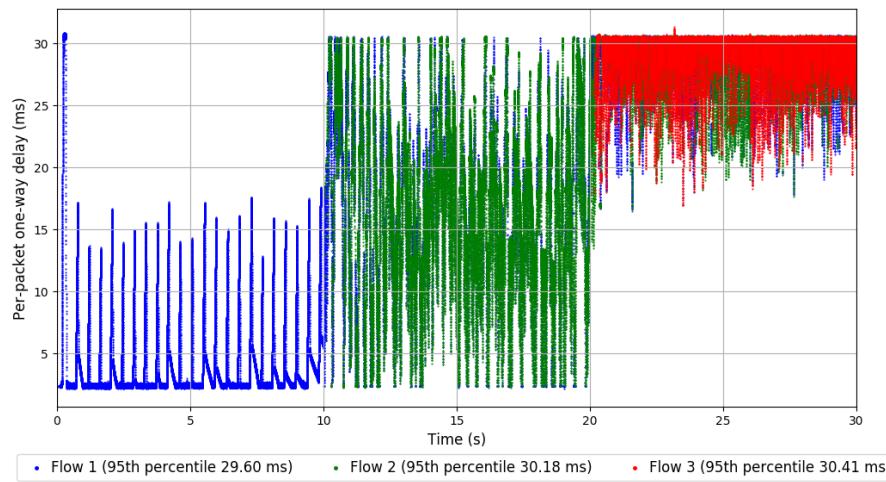
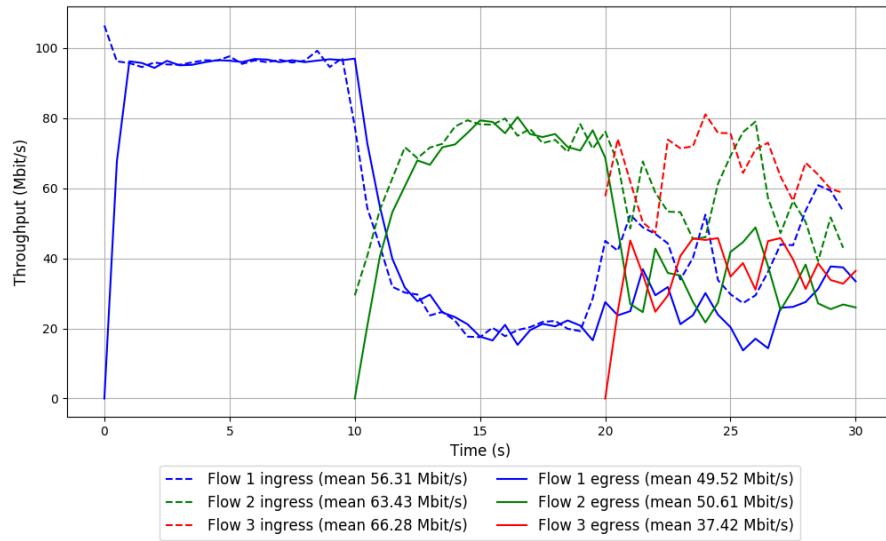


Run 4: Statistics of FillP

```
Start at: 2019-02-11 18:41:48
End at: 2019-02-11 18:42:18
Local clock offset: -1.947 ms
Remote clock offset: 0.152 ms

# Below is generated by plot.py at 2019-02-11 19:21:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 30.158 ms
Loss rate: 20.60%
-- Flow 1:
Average throughput: 49.52 Mbit/s
95th percentile per-packet one-way delay: 29.597 ms
Loss rate: 11.98%
-- Flow 2:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: 30.179 ms
Loss rate: 20.13%
-- Flow 3:
Average throughput: 37.42 Mbit/s
95th percentile per-packet one-way delay: 30.406 ms
Loss rate: 43.53%
```

Run 4: Report of FillP — Data Link

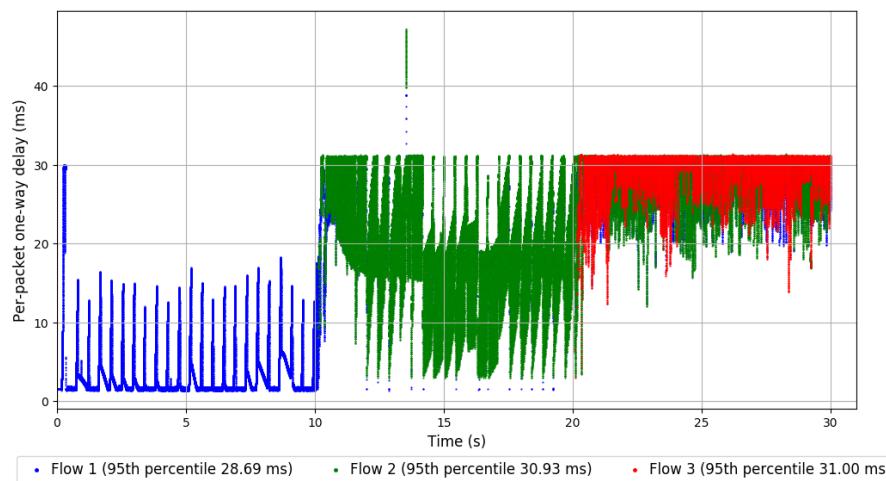
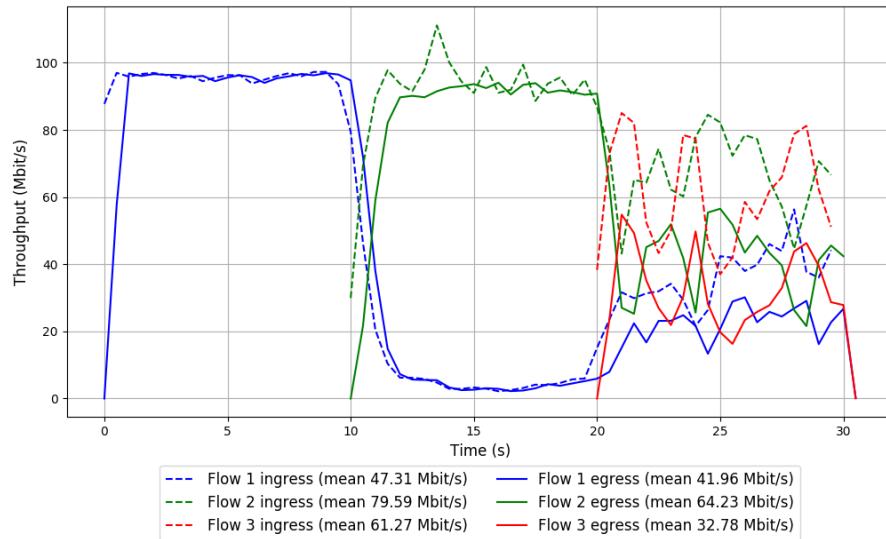


```
Run 5: Statistics of FillP

Start at: 2019-02-11 19:05:44
End at: 2019-02-11 19:06:14
Local clock offset: -1.729 ms
Remote clock offset: 0.161 ms

# Below is generated by plot.py at 2019-02-11 19:21:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 30.846 ms
Loss rate: 20.66%
-- Flow 1:
Average throughput: 41.96 Mbit/s
95th percentile per-packet one-way delay: 28.687 ms
Loss rate: 11.22%
-- Flow 2:
Average throughput: 64.23 Mbit/s
95th percentile per-packet one-way delay: 30.933 ms
Loss rate: 19.19%
-- Flow 3:
Average throughput: 32.78 Mbit/s
95th percentile per-packet one-way delay: 31.001 ms
Loss rate: 46.50%
```

Run 5: Report of FillP — Data Link

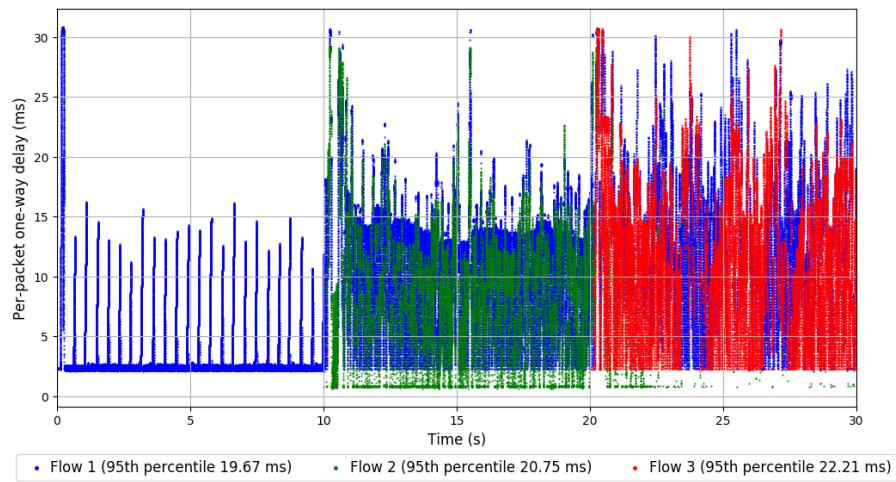
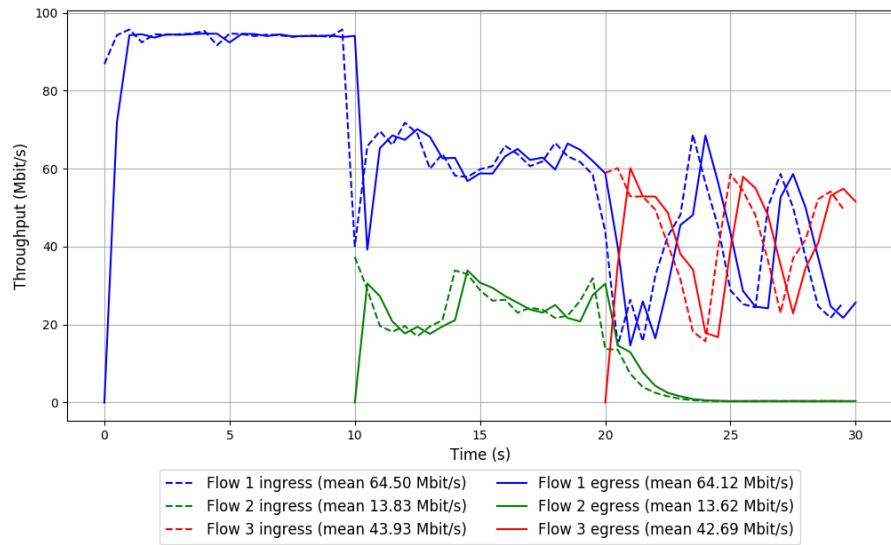


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-02-11 17:17:32
End at: 2019-02-11 17:18:02
Local clock offset: -0.562 ms
Remote clock offset: -0.474 ms

# Below is generated by plot.py at 2019-02-11 19:21:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.31 Mbit/s
95th percentile per-packet one-way delay: 20.383 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 64.12 Mbit/s
95th percentile per-packet one-way delay: 19.667 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 13.62 Mbit/s
95th percentile per-packet one-way delay: 20.751 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 42.69 Mbit/s
95th percentile per-packet one-way delay: 22.208 ms
Loss rate: 2.81%
```

Run 1: Report of FillP-Sheep — Data Link

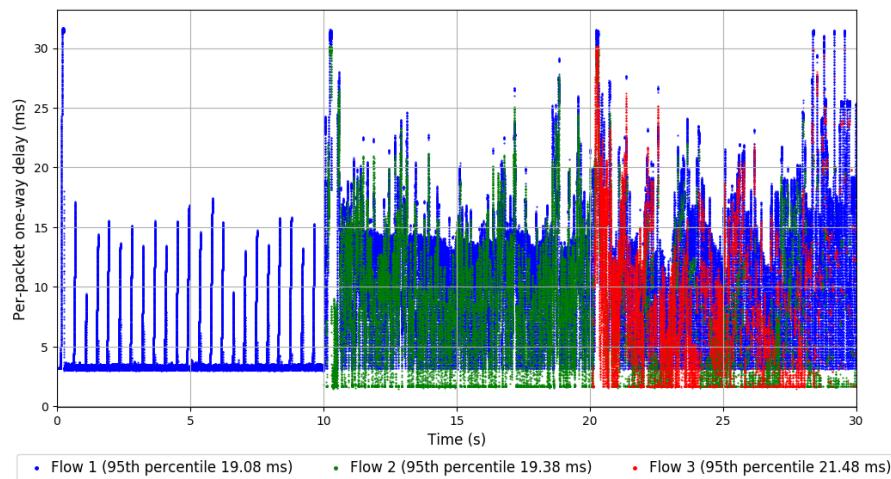
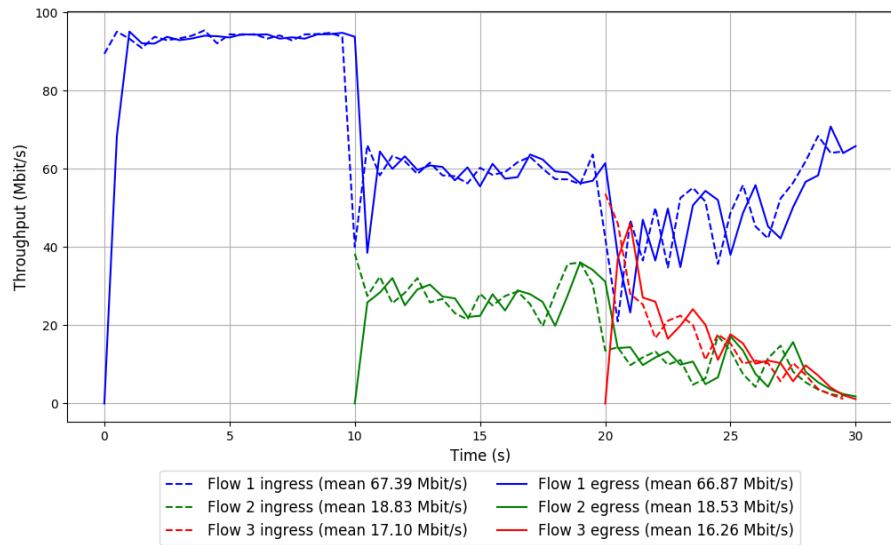


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-02-11 17:41:28
End at: 2019-02-11 17:41:58
Local clock offset: -1.479 ms
Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2019-02-11 19:21:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.58 Mbit/s
95th percentile per-packet one-way delay: 19.296 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 66.87 Mbit/s
95th percentile per-packet one-way delay: 19.084 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 18.53 Mbit/s
95th percentile per-packet one-way delay: 19.377 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 16.26 Mbit/s
95th percentile per-packet one-way delay: 21.484 ms
Loss rate: 5.05%
```

Run 2: Report of FillP-Sheep — Data Link

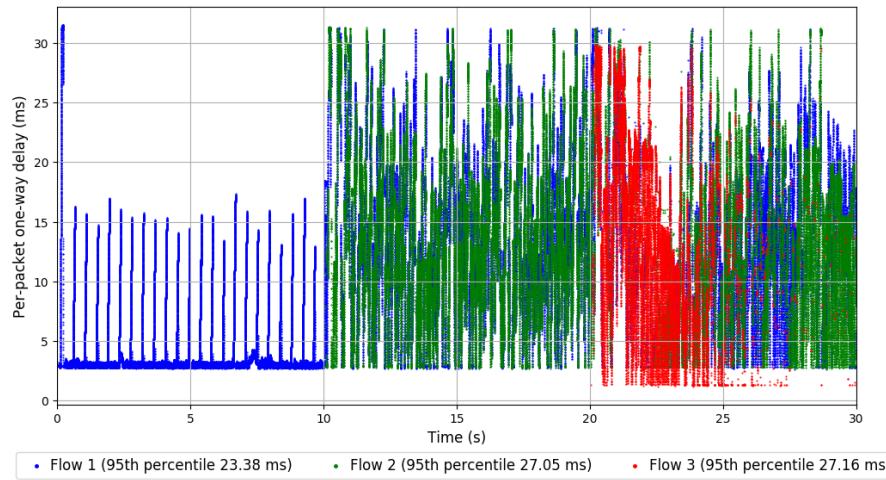
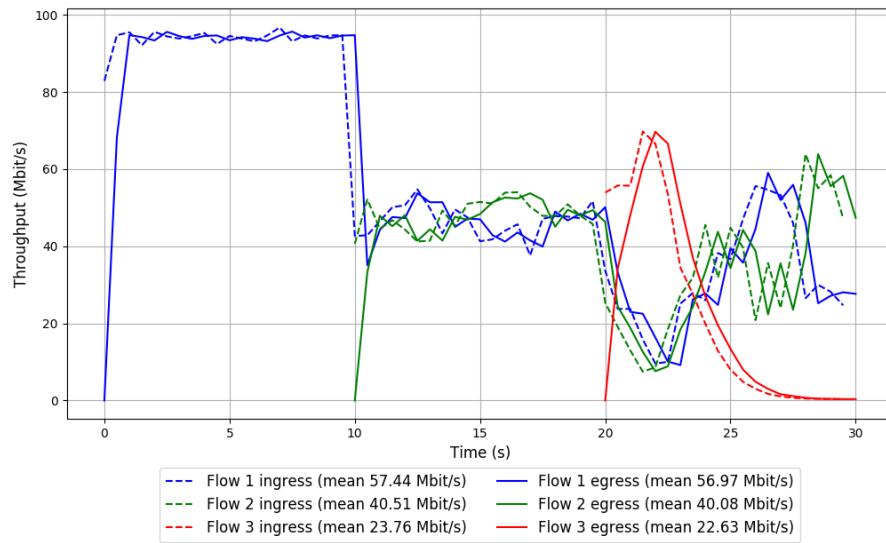


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-02-11 18:05:23
End at: 2019-02-11 18:05:53
Local clock offset: -1.731 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2019-02-11 19:21:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.13 Mbit/s
95th percentile per-packet one-way delay: 25.296 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 56.97 Mbit/s
95th percentile per-packet one-way delay: 23.381 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 27.051 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 22.63 Mbit/s
95th percentile per-packet one-way delay: 27.161 ms
Loss rate: 4.82%
```

Run 3: Report of FillP-Sheep — Data Link

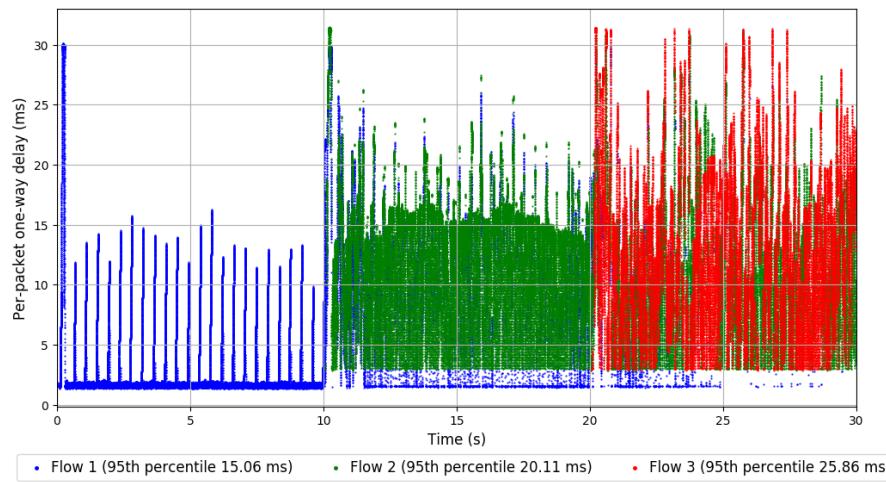
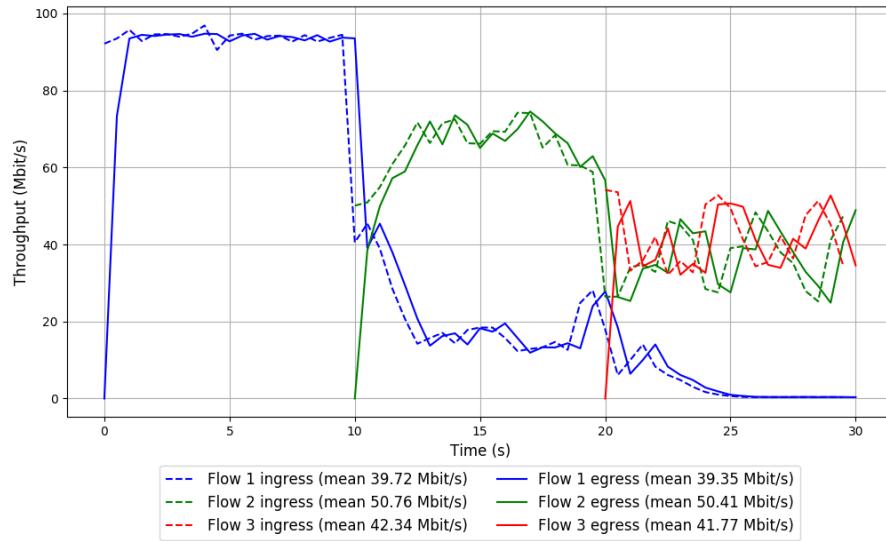


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-02-11 18:29:19
End at: 2019-02-11 18:29:49
Local clock offset: -3.782 ms
Remote clock offset: 0.065 ms

# Below is generated by plot.py at 2019-02-11 19:22:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 20.407 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 39.35 Mbit/s
95th percentile per-packet one-way delay: 15.059 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 50.41 Mbit/s
95th percentile per-packet one-way delay: 20.112 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 41.77 Mbit/s
95th percentile per-packet one-way delay: 25.857 ms
Loss rate: 1.22%
```

Run 4: Report of FillP-Sheep — Data Link

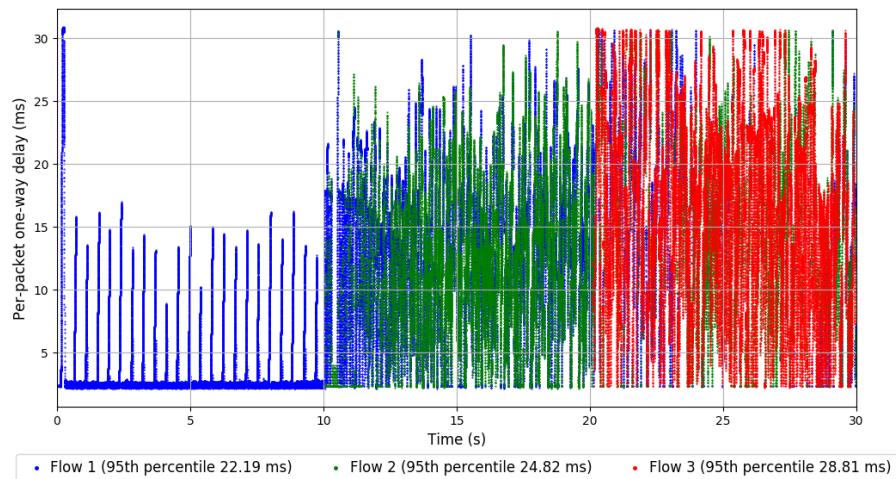
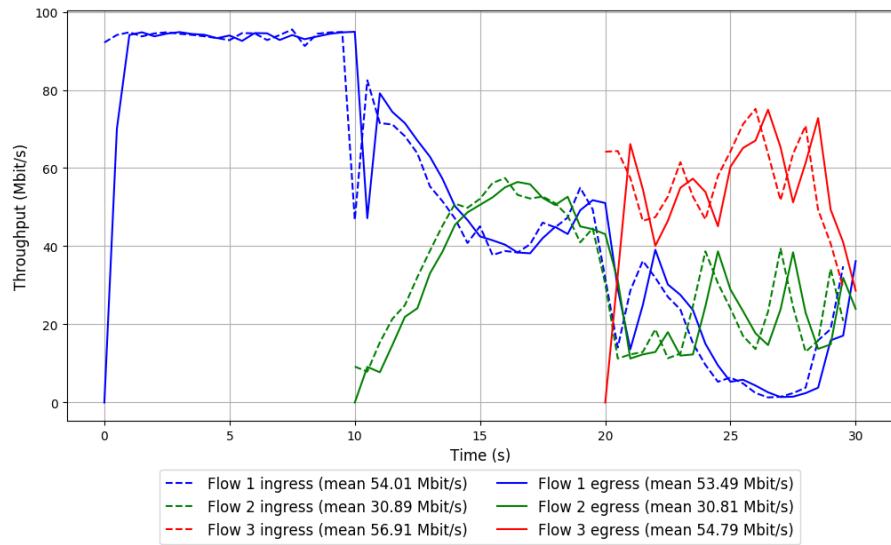


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-02-11 18:53:14
End at: 2019-02-11 18:53:44
Local clock offset: -1.218 ms
Remote clock offset: 0.136 ms

# Below is generated by plot.py at 2019-02-11 19:22:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.16 Mbit/s
95th percentile per-packet one-way delay: 25.234 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 53.49 Mbit/s
95th percentile per-packet one-way delay: 22.193 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 30.81 Mbit/s
95th percentile per-packet one-way delay: 24.825 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 54.79 Mbit/s
95th percentile per-packet one-way delay: 28.813 ms
Loss rate: 3.84%
```

Run 5: Report of FillP-Sheep — Data Link

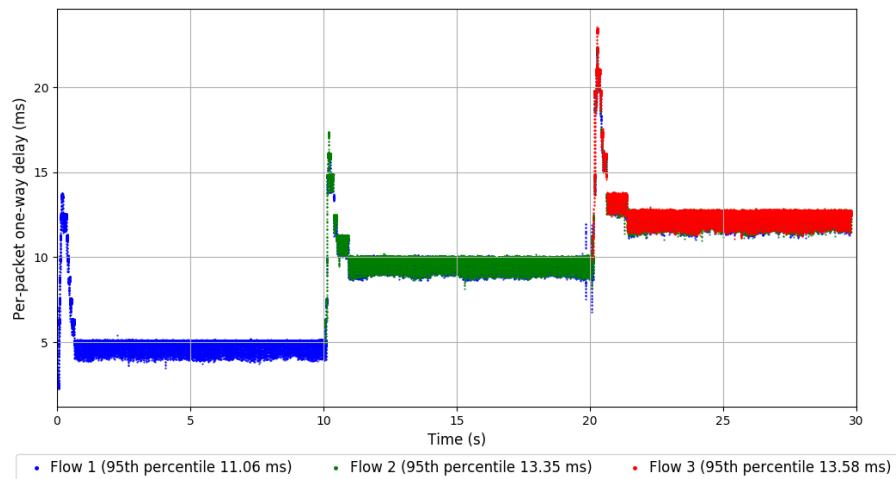
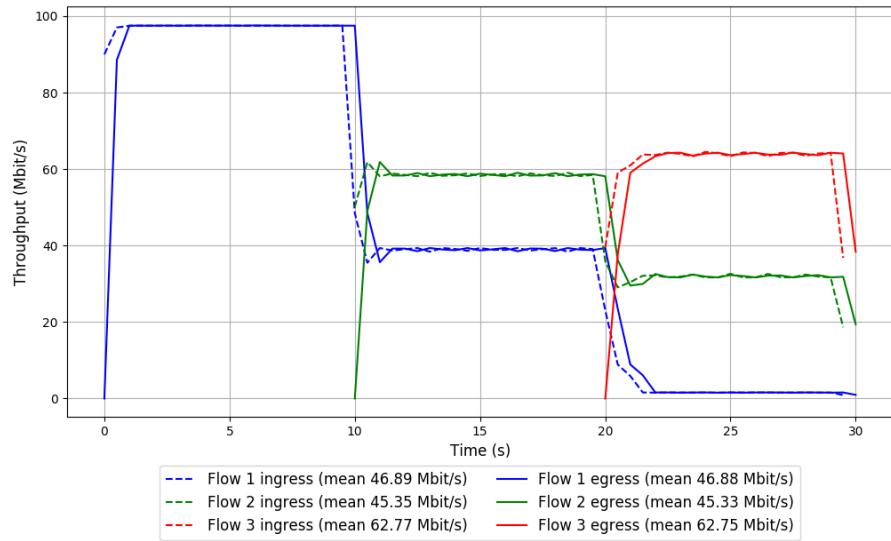


Run 1: Statistics of Indigo

```
Start at: 2019-02-11 17:37:57
End at: 2019-02-11 17:38:27
Local clock offset: -0.405 ms
Remote clock offset: -0.328 ms

# Below is generated by plot.py at 2019-02-11 19:22:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.37 Mbit/s
95th percentile per-packet one-way delay: 12.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.88 Mbit/s
95th percentile per-packet one-way delay: 11.060 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.33 Mbit/s
95th percentile per-packet one-way delay: 13.346 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.75 Mbit/s
95th percentile per-packet one-way delay: 13.580 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

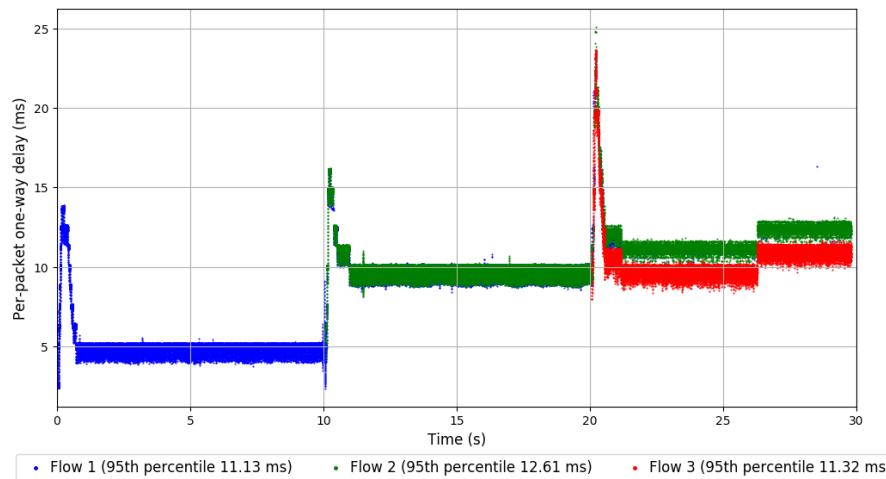
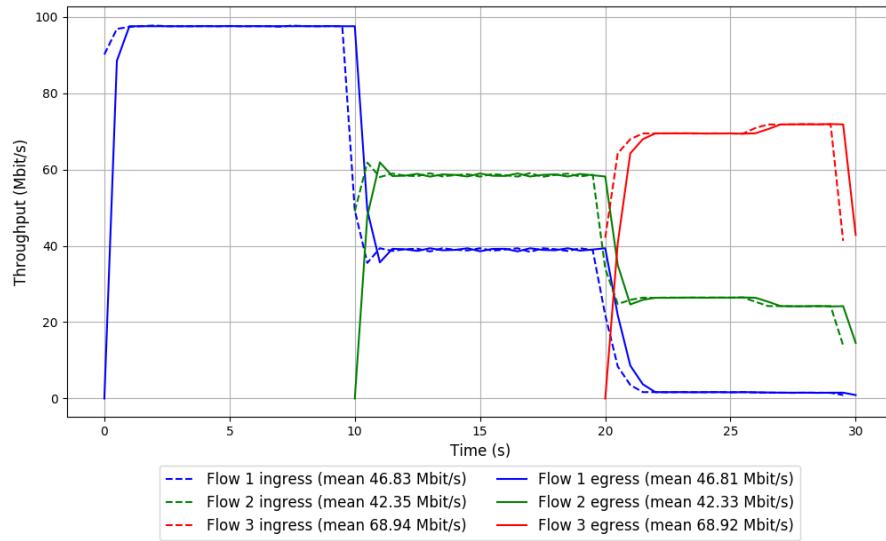


Run 2: Statistics of Indigo

```
Start at: 2019-02-11 18:01:53
End at: 2019-02-11 18:02:23
Local clock offset: -0.754 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-02-11 19:22:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.37 Mbit/s
95th percentile per-packet one-way delay: 12.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.81 Mbit/s
95th percentile per-packet one-way delay: 11.129 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.33 Mbit/s
95th percentile per-packet one-way delay: 12.611 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.92 Mbit/s
95th percentile per-packet one-way delay: 11.321 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

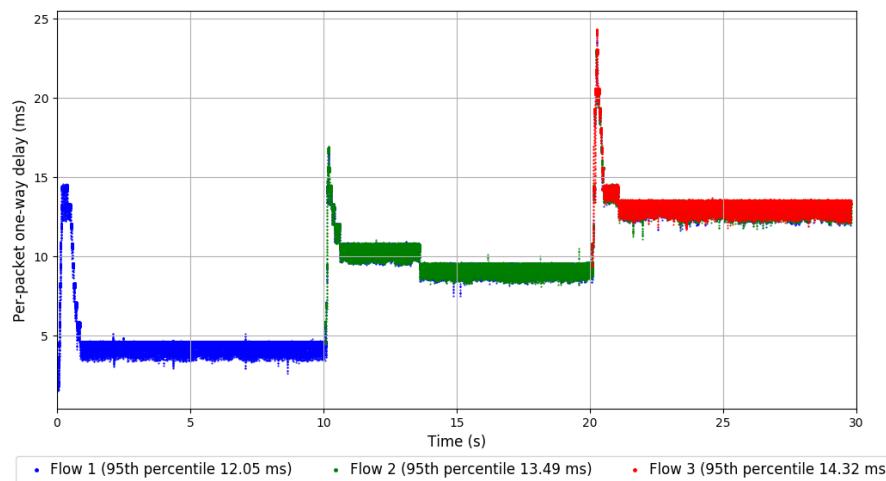
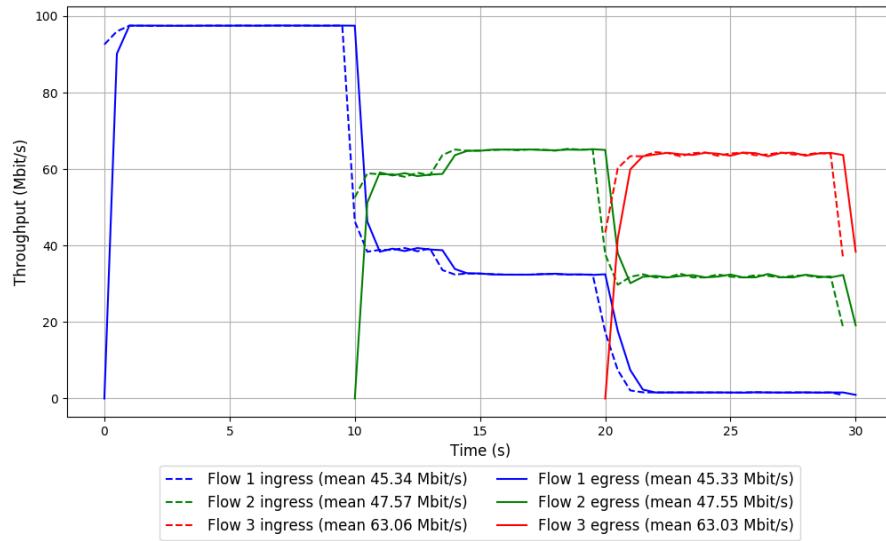


Run 3: Statistics of Indigo

```
Start at: 2019-02-11 18:25:48
End at: 2019-02-11 18:26:18
Local clock offset: -3.695 ms
Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2019-02-11 19:22:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 13.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.33 Mbit/s
95th percentile per-packet one-way delay: 12.049 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.55 Mbit/s
95th percentile per-packet one-way delay: 13.493 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.03 Mbit/s
95th percentile per-packet one-way delay: 14.325 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

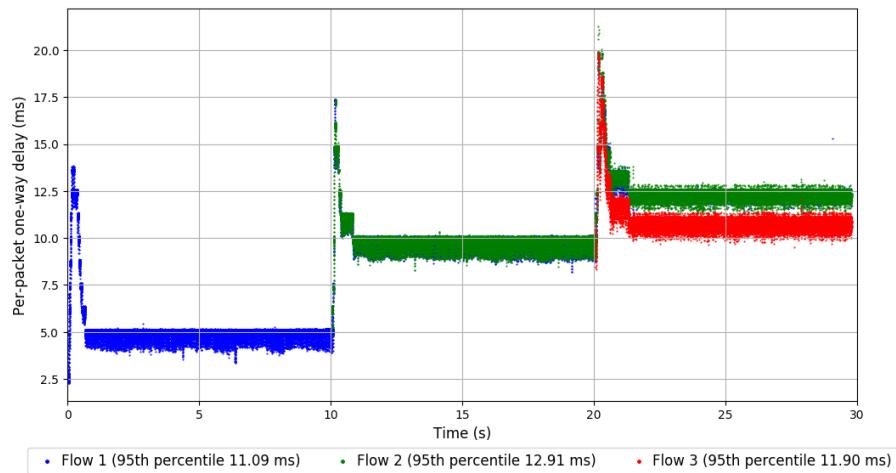
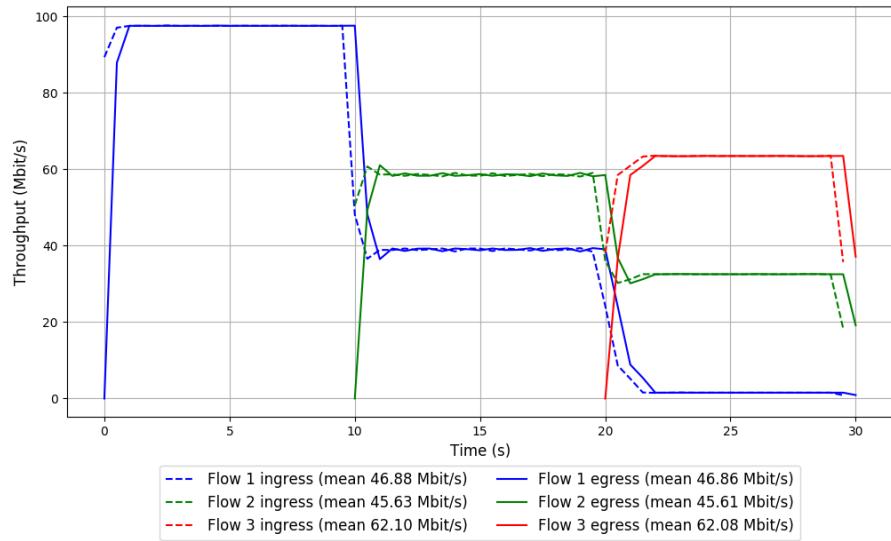


Run 4: Statistics of Indigo

```
Start at: 2019-02-11 18:49:43
End at: 2019-02-11 18:50:13
Local clock offset: -1.382 ms
Remote clock offset: 0.142 ms

# Below is generated by plot.py at 2019-02-11 19:22:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.37 Mbit/s
95th percentile per-packet one-way delay: 12.469 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.86 Mbit/s
95th percentile per-packet one-way delay: 11.086 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.61 Mbit/s
95th percentile per-packet one-way delay: 12.913 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.08 Mbit/s
95th percentile per-packet one-way delay: 11.903 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

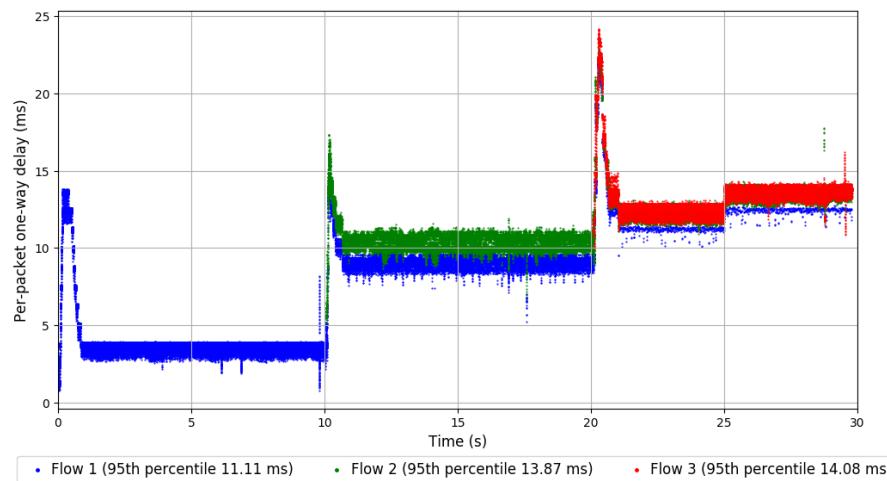
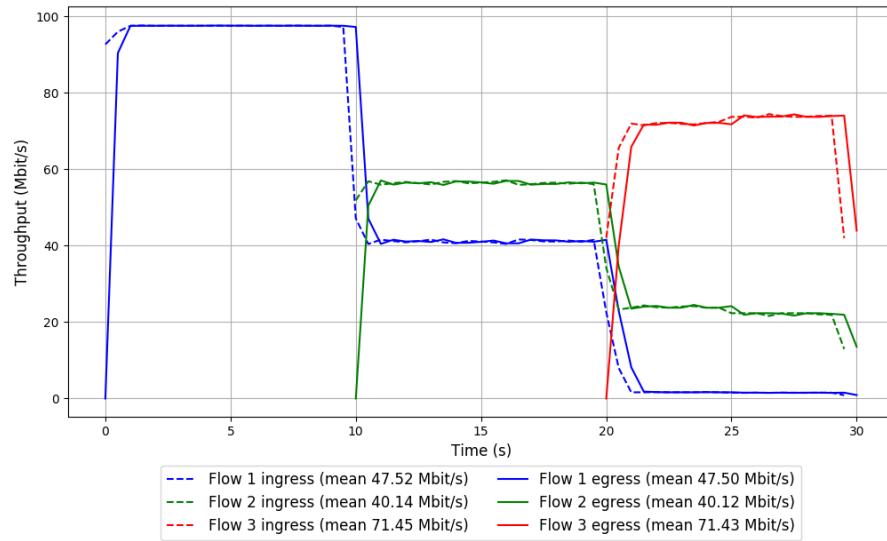


Run 5: Statistics of Indigo

```
Start at: 2019-02-11 19:13:41
End at: 2019-02-11 19:14:11
Local clock offset: -1.231 ms
Remote clock offset: 0.198 ms

# Below is generated by plot.py at 2019-02-11 19:22:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 13.869 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.50 Mbit/s
95th percentile per-packet one-way delay: 11.105 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.12 Mbit/s
95th percentile per-packet one-way delay: 13.867 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 71.43 Mbit/s
95th percentile per-packet one-way delay: 14.076 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

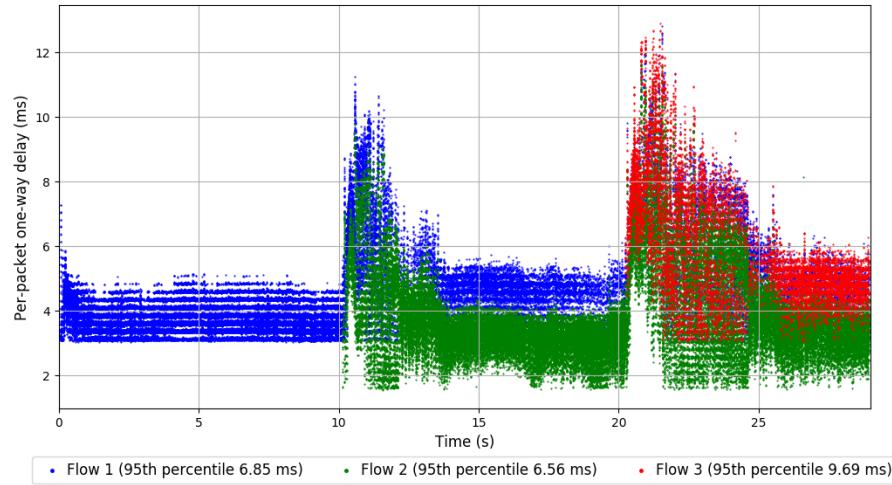
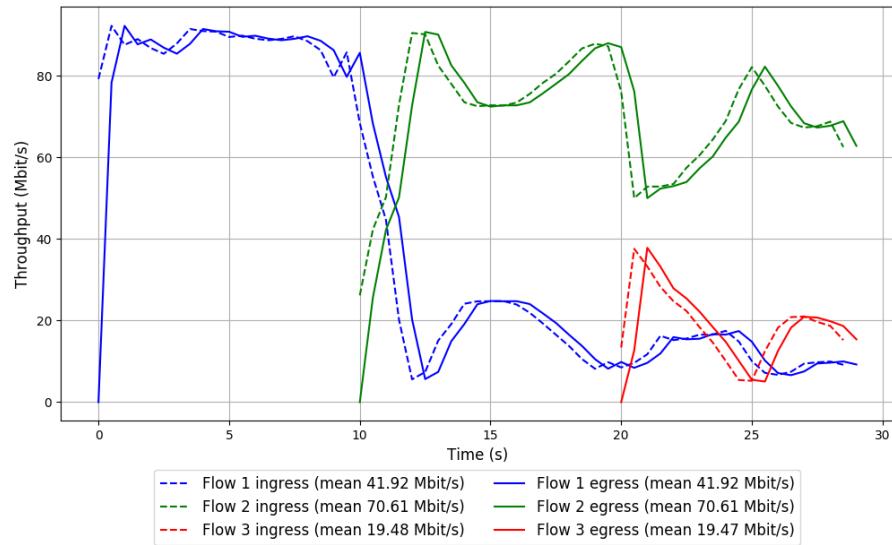


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 17:28:51
End at: 2019-02-11 17:29:21
Local clock offset: -0.937 ms
Remote clock offset: -0.4 ms

# Below is generated by plot.py at 2019-02-11 19:22:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.66 Mbit/s
95th percentile per-packet one-way delay: 7.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.92 Mbit/s
95th percentile per-packet one-way delay: 6.851 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.61 Mbit/s
95th percentile per-packet one-way delay: 6.564 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.47 Mbit/s
95th percentile per-packet one-way delay: 9.689 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC3 — Data Link

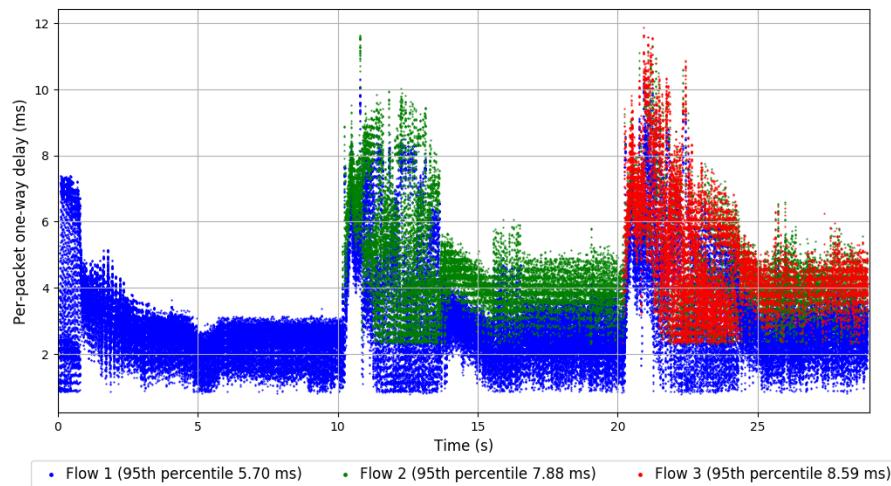
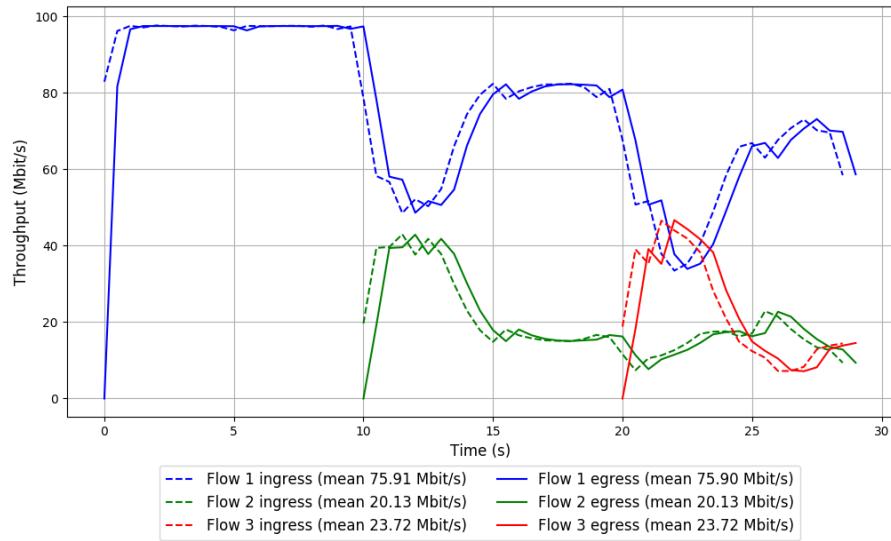


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 17:52:47
End at: 2019-02-11 17:53:17
Local clock offset: -0.889 ms
Remote clock offset: -0.176 ms

# Below is generated by plot.py at 2019-02-11 19:23:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 6.696 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.90 Mbit/s
95th percentile per-packet one-way delay: 5.700 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.13 Mbit/s
95th percentile per-packet one-way delay: 7.885 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.72 Mbit/s
95th percentile per-packet one-way delay: 8.592 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

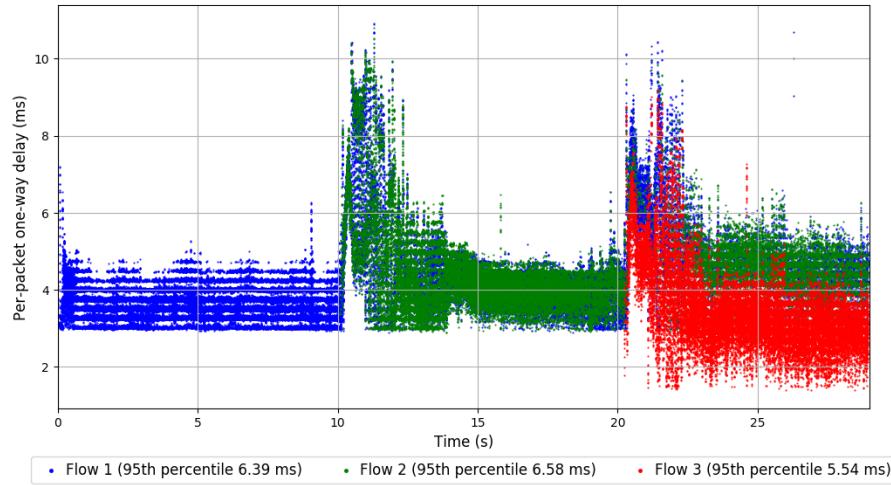
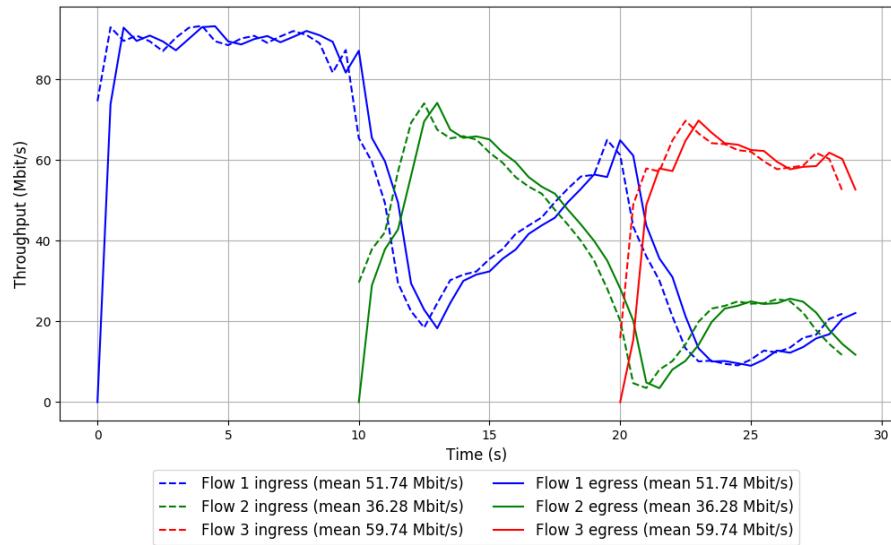


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 18:16:43
End at: 2019-02-11 18:17:13
Local clock offset: -3.264 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2019-02-11 19:23:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.38 Mbit/s
95th percentile per-packet one-way delay: 6.252 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 6.388 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.28 Mbit/s
95th percentile per-packet one-way delay: 6.584 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.74 Mbit/s
95th percentile per-packet one-way delay: 5.540 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

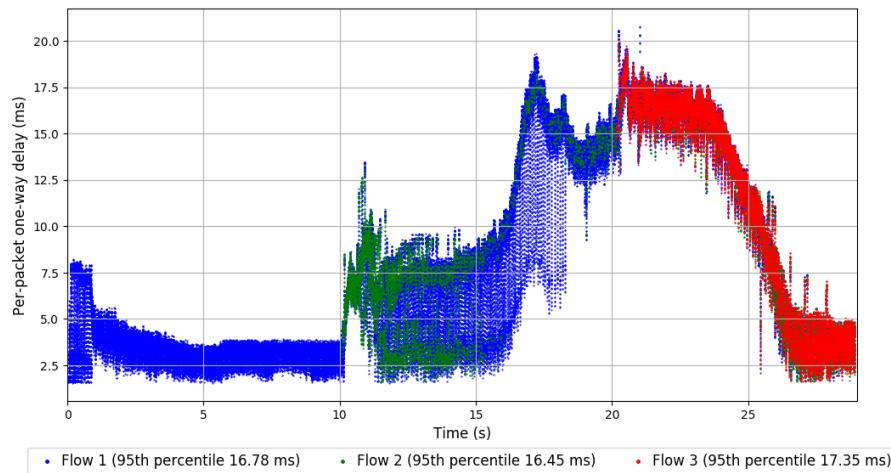
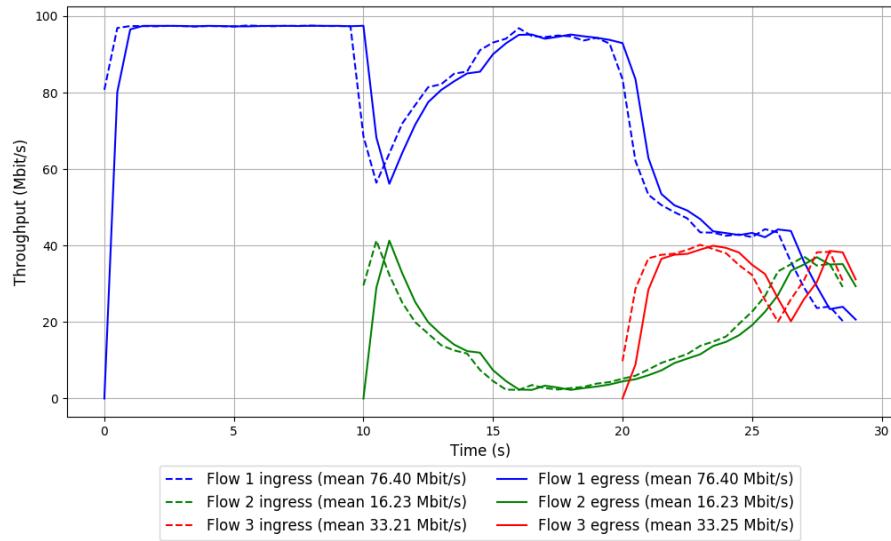


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 18:40:39
End at: 2019-02-11 18:41:09
Local clock offset: -2.833 ms
Remote clock offset: 0.079 ms

# Below is generated by plot.py at 2019-02-11 19:23:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.07 Mbit/s
95th percentile per-packet one-way delay: 16.884 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.40 Mbit/s
95th percentile per-packet one-way delay: 16.779 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.23 Mbit/s
95th percentile per-packet one-way delay: 16.452 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.25 Mbit/s
95th percentile per-packet one-way delay: 17.346 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

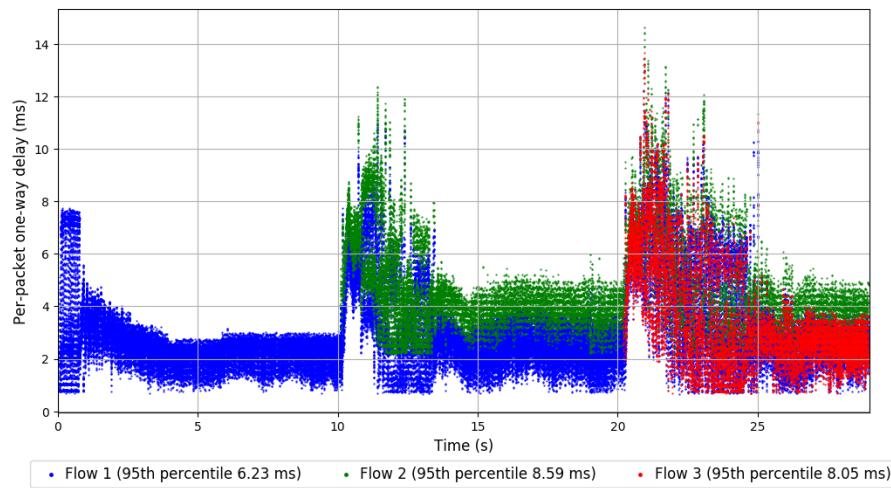
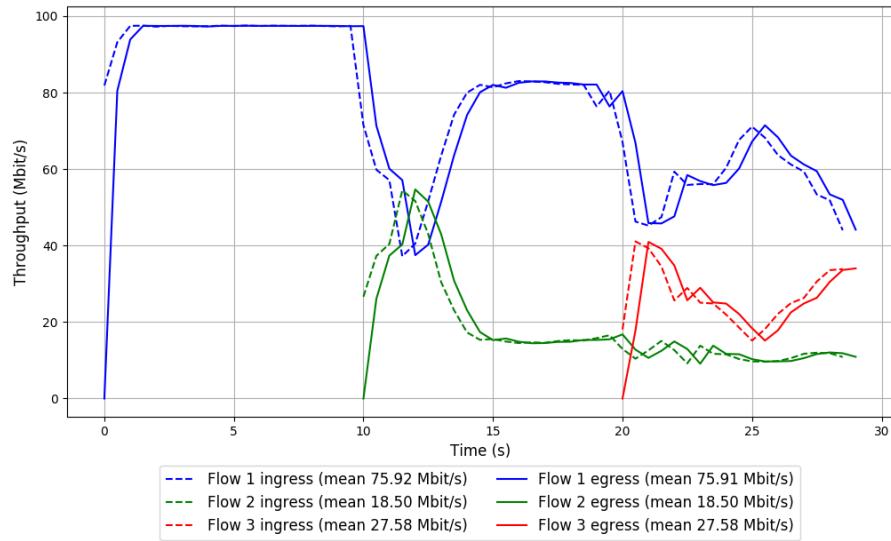


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 19:04:34
End at: 2019-02-11 19:05:04
Local clock offset: -0.895 ms
Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2019-02-11 19:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 6.998 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.91 Mbit/s
95th percentile per-packet one-way delay: 6.231 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.50 Mbit/s
95th percentile per-packet one-way delay: 8.592 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.58 Mbit/s
95th percentile per-packet one-way delay: 8.048 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link

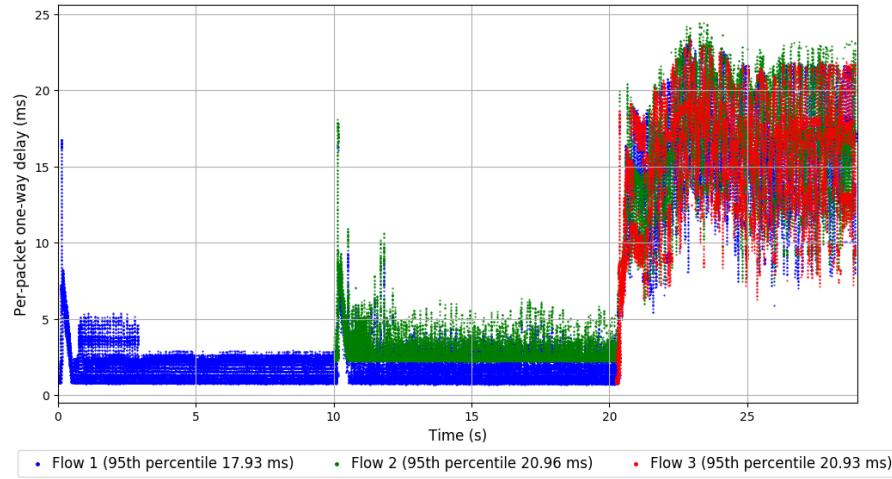
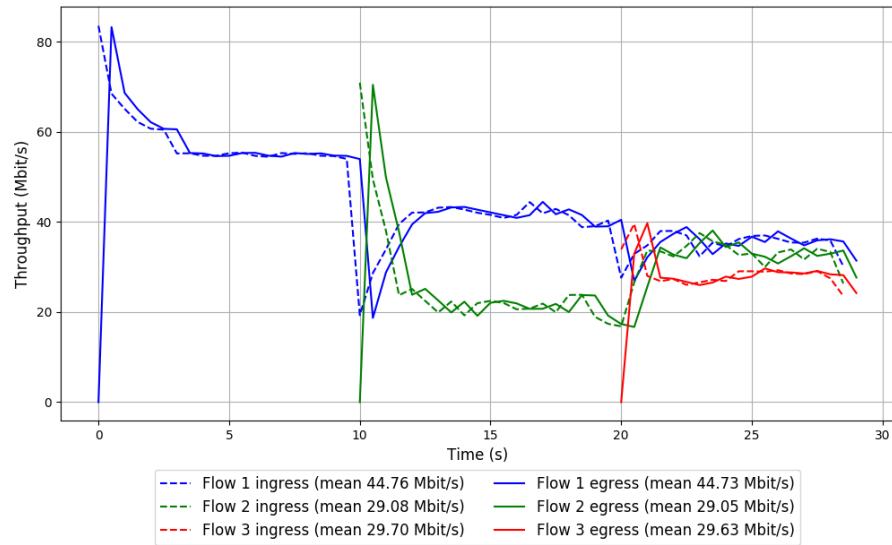


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 17:34:33
End at: 2019-02-11 17:35:03
Local clock offset: 0.002 ms
Remote clock offset: -0.331 ms

# Below is generated by plot.py at 2019-02-11 19:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.62 Mbit/s
95th percentile per-packet one-way delay: 19.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.73 Mbit/s
95th percentile per-packet one-way delay: 17.930 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.05 Mbit/s
95th percentile per-packet one-way delay: 20.957 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.63 Mbit/s
95th percentile per-packet one-way delay: 20.932 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

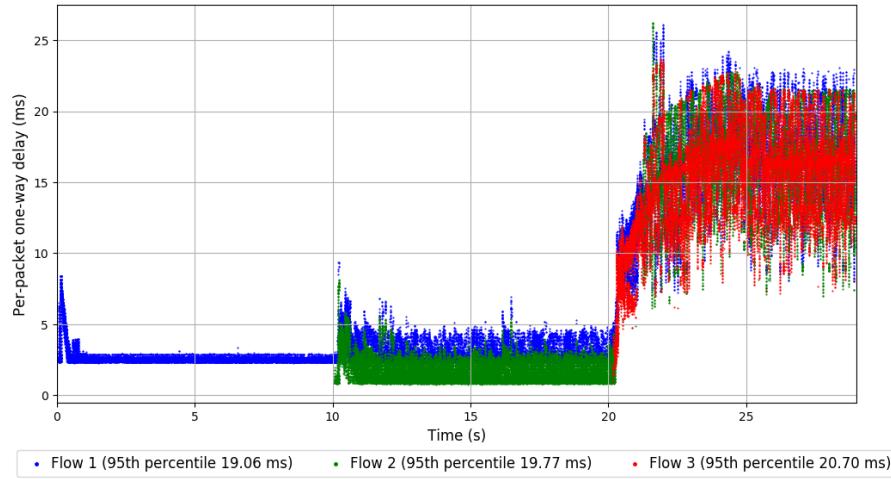
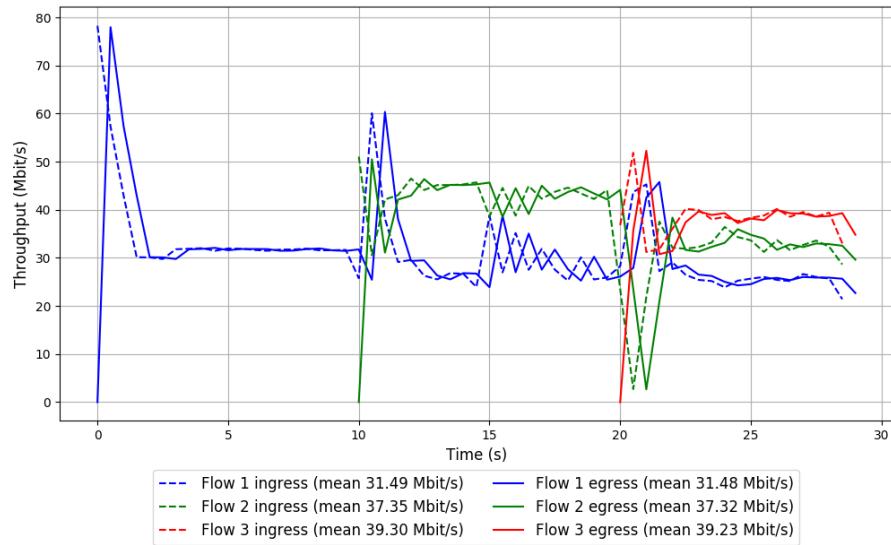


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 17:58:29
End at: 2019-02-11 17:58:59
Local clock offset: -0.826 ms
Remote clock offset: -0.161 ms

# Below is generated by plot.py at 2019-02-11 19:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.69 Mbit/s
95th percentile per-packet one-way delay: 19.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.48 Mbit/s
95th percentile per-packet one-way delay: 19.061 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.32 Mbit/s
95th percentile per-packet one-way delay: 19.768 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.23 Mbit/s
95th percentile per-packet one-way delay: 20.696 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC5 — Data Link

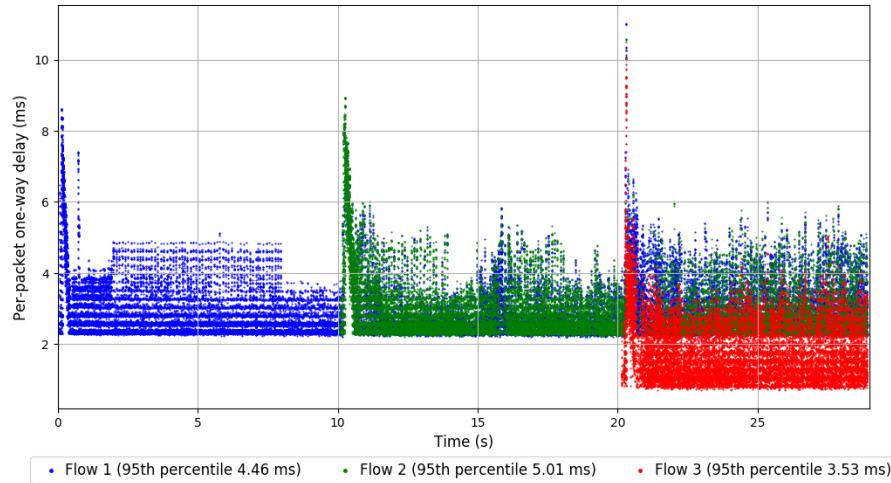
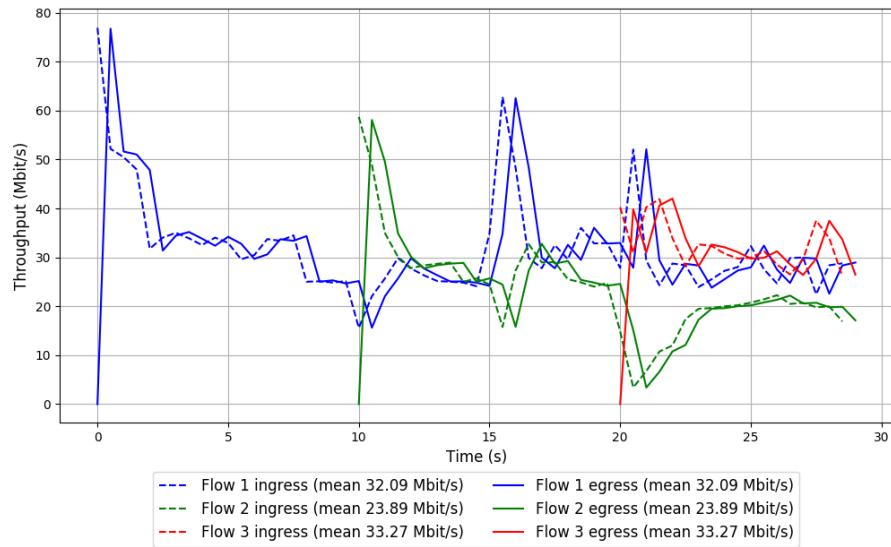


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 18:22:25
End at: 2019-02-11 18:22:55
Local clock offset: -2.816 ms
Remote clock offset: 0.065 ms

# Below is generated by plot.py at 2019-02-11 19:23:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.78 Mbit/s
95th percentile per-packet one-way delay: 4.510 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.09 Mbit/s
95th percentile per-packet one-way delay: 4.462 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.89 Mbit/s
95th percentile per-packet one-way delay: 5.008 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.27 Mbit/s
95th percentile per-packet one-way delay: 3.528 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

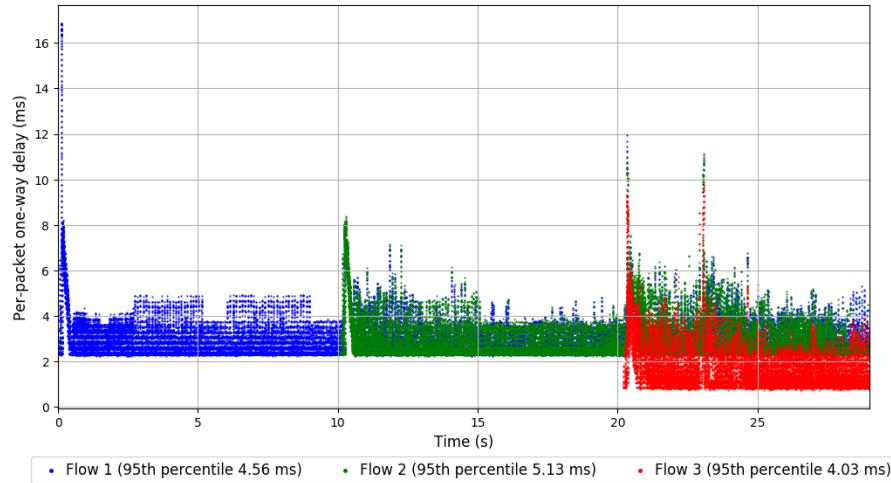
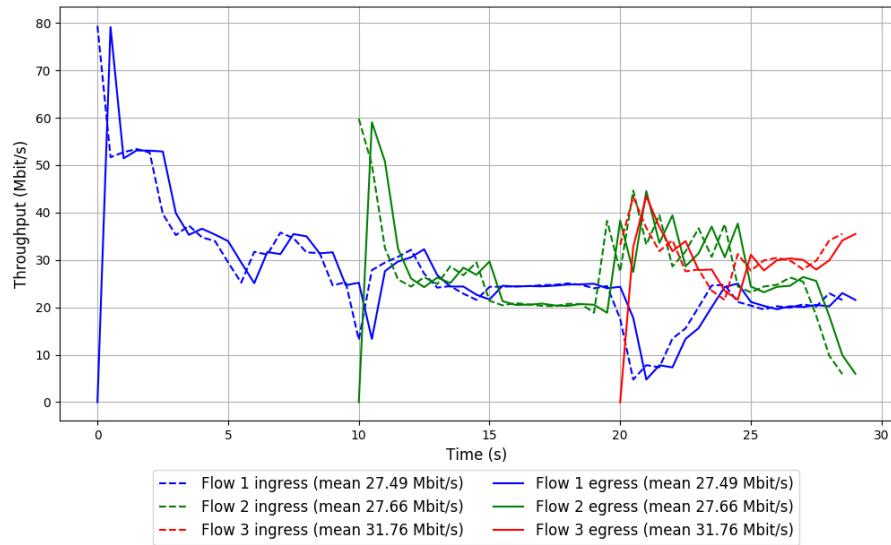


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 18:46:20
End at: 2019-02-11 18:46:50
Local clock offset: -1.585 ms
Remote clock offset: 0.102 ms

# Below is generated by plot.py at 2019-02-11 19:23:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.11 Mbit/s
95th percentile per-packet one-way delay: 4.717 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 27.49 Mbit/s
95th percentile per-packet one-way delay: 4.563 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.66 Mbit/s
95th percentile per-packet one-way delay: 5.128 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 4.031 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

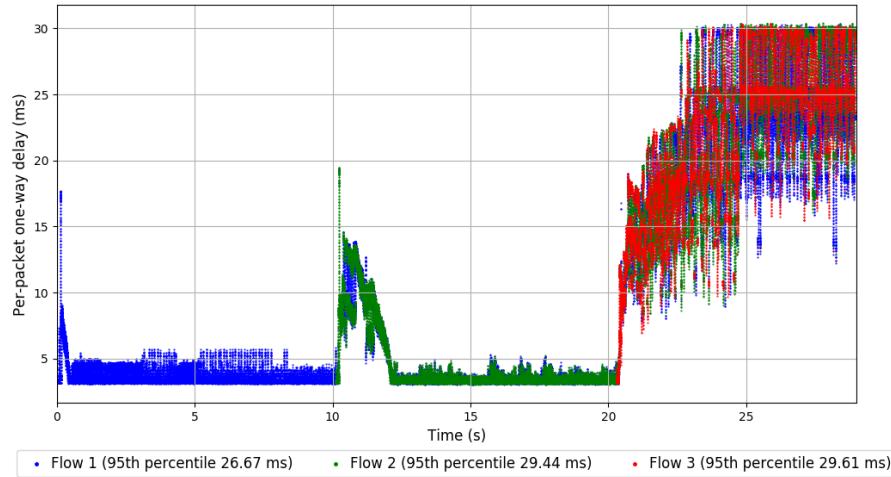
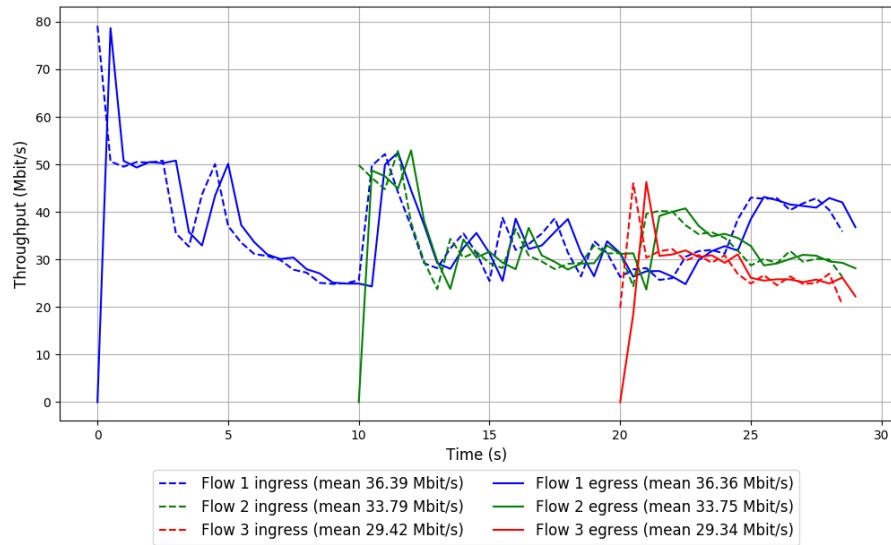


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 19:10:17
End at: 2019-02-11 19:10:47
Local clock offset: -1.972 ms
Remote clock offset: 0.179 ms

# Below is generated by plot.py at 2019-02-11 19:23:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.12 Mbit/s
95th percentile per-packet one-way delay: 28.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.36 Mbit/s
95th percentile per-packet one-way delay: 26.666 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.75 Mbit/s
95th percentile per-packet one-way delay: 29.437 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.34 Mbit/s
95th percentile per-packet one-way delay: 29.609 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link

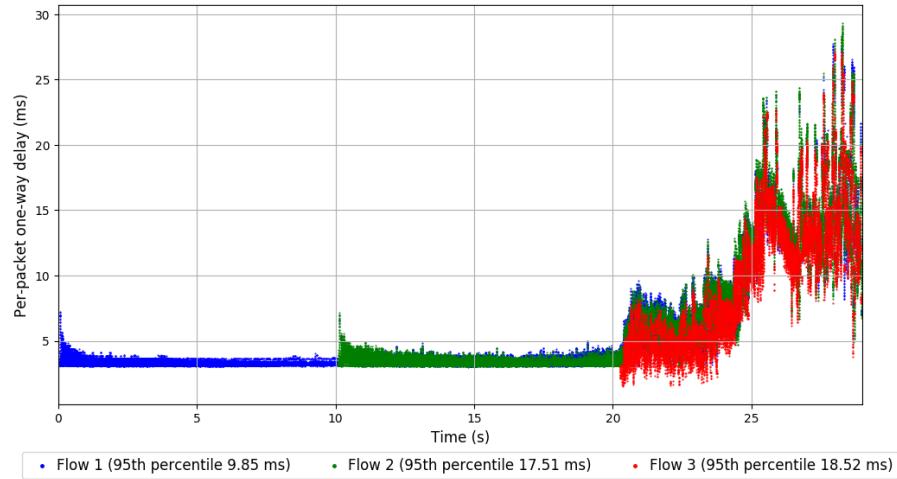
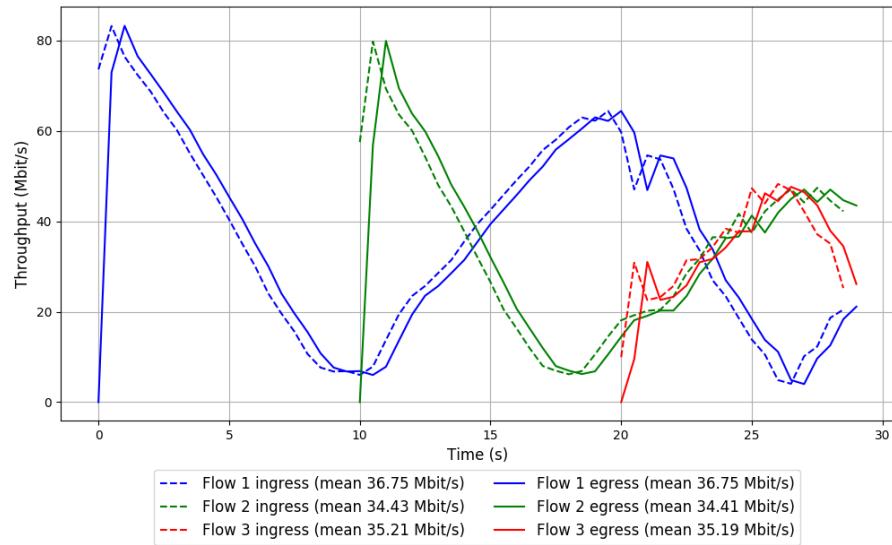


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 17:22:01
End at: 2019-02-11 17:22:31
Local clock offset: -1.172 ms
Remote clock offset: -0.392 ms

# Below is generated by plot.py at 2019-02-11 19:24:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.72 Mbit/s
95th percentile per-packet one-way delay: 15.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.75 Mbit/s
95th percentile per-packet one-way delay: 9.850 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.41 Mbit/s
95th percentile per-packet one-way delay: 17.512 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.19 Mbit/s
95th percentile per-packet one-way delay: 18.521 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

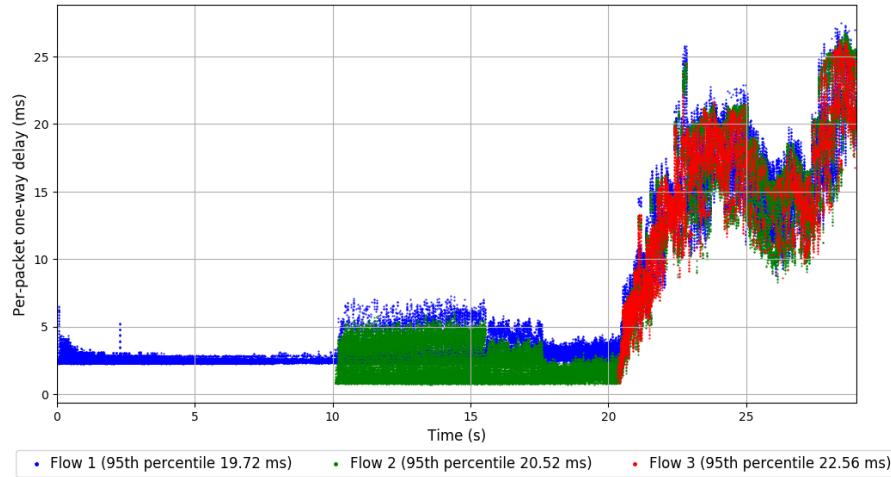
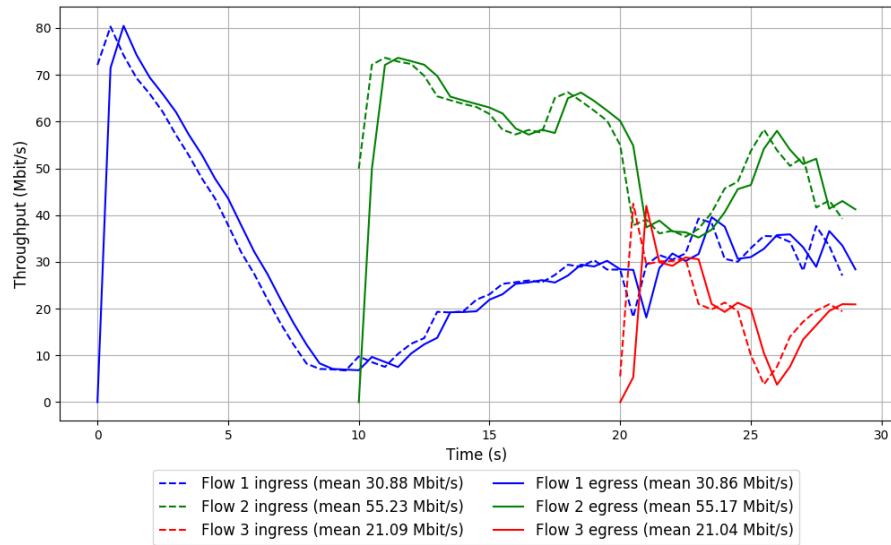


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 17:45:57
End at: 2019-02-11 17:46:27
Local clock offset: -0.831 ms
Remote clock offset: -0.281 ms

# Below is generated by plot.py at 2019-02-11 19:24:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.05 Mbit/s
95th percentile per-packet one-way delay: 20.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 30.86 Mbit/s
95th percentile per-packet one-way delay: 19.720 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.17 Mbit/s
95th percentile per-packet one-way delay: 20.522 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 22.556 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesD — Data Link

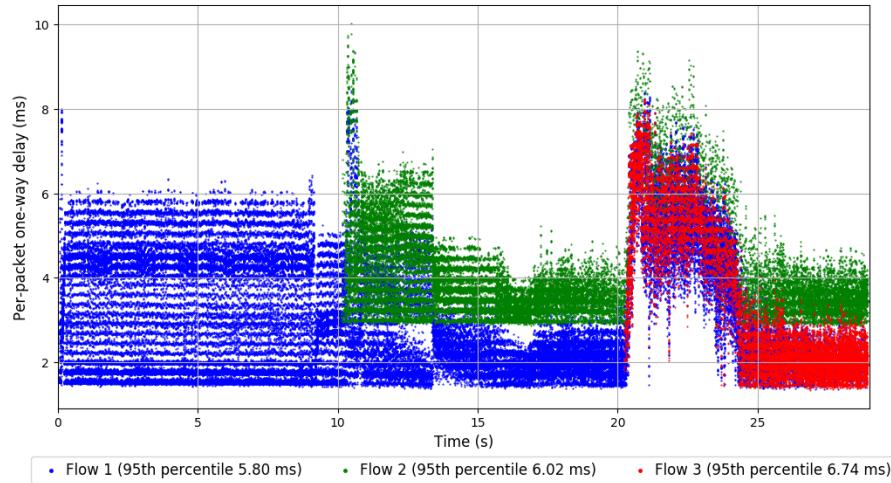
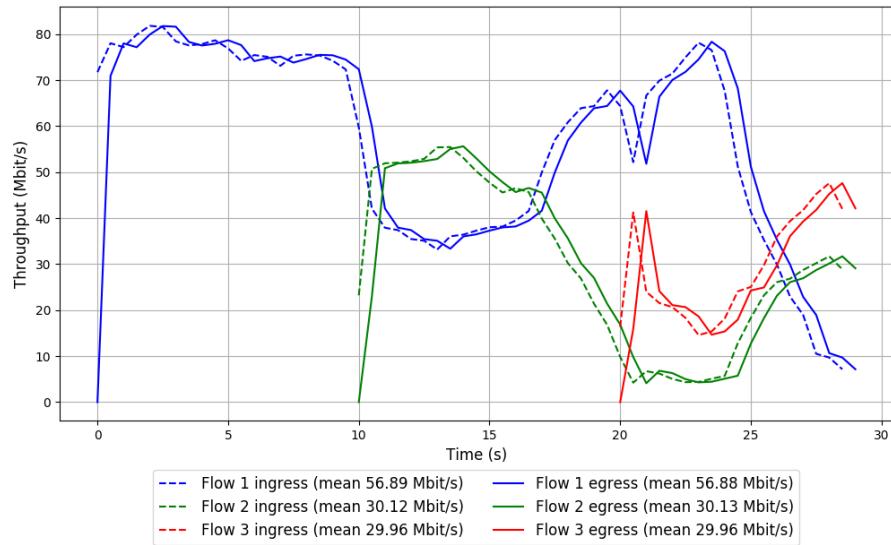


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 18:09:52
End at: 2019-02-11 18:10:22
Local clock offset: -2.565 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2019-02-11 19:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 5.988 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.88 Mbit/s
95th percentile per-packet one-way delay: 5.805 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.13 Mbit/s
95th percentile per-packet one-way delay: 6.020 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 6.736 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

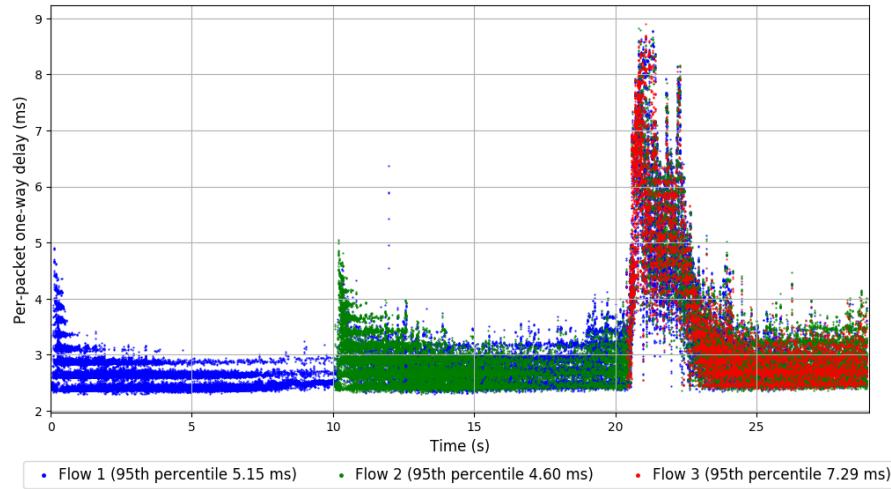
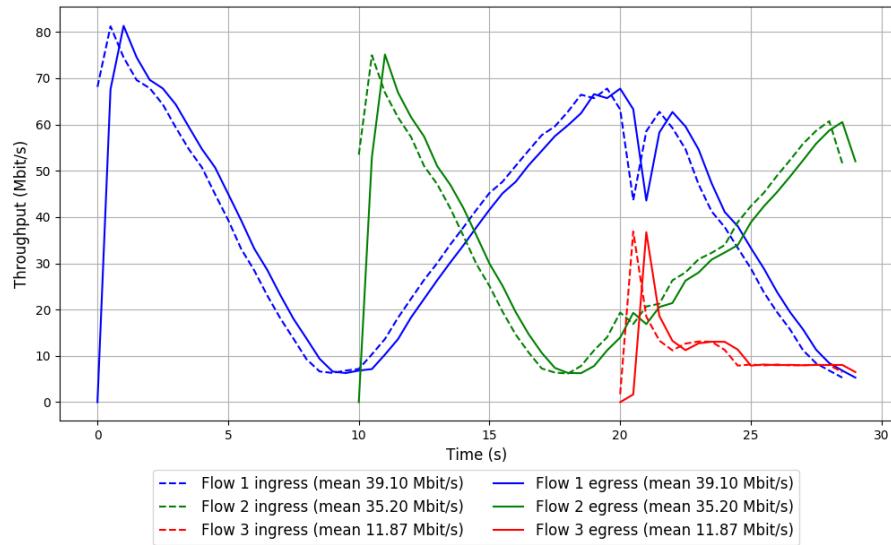


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 18:33:48
End at: 2019-02-11 18:34:18
Local clock offset: -3.194 ms
Remote clock offset: 0.087 ms

# Below is generated by plot.py at 2019-02-11 19:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.55 Mbit/s
95th percentile per-packet one-way delay: 5.353 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.10 Mbit/s
95th percentile per-packet one-way delay: 5.151 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.20 Mbit/s
95th percentile per-packet one-way delay: 4.602 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.87 Mbit/s
95th percentile per-packet one-way delay: 7.290 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesD — Data Link

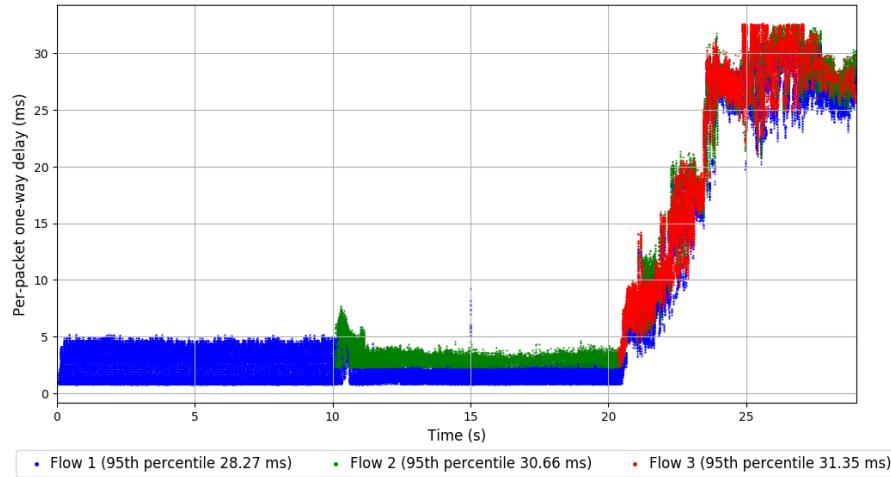
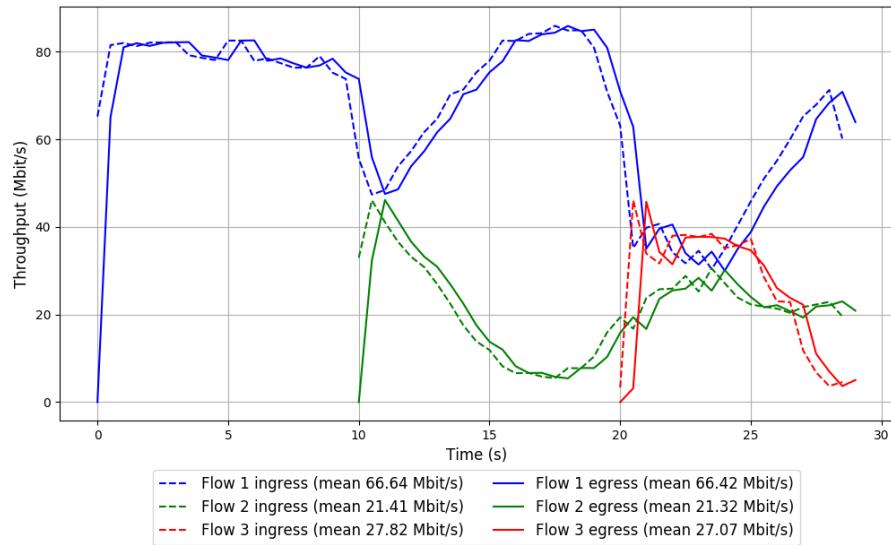


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 18:57:43
End at: 2019-02-11 18:58:13
Local clock offset: -1.068 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2019-02-11 19:24:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.35 Mbit/s
95th percentile per-packet one-way delay: 29.462 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 66.42 Mbit/s
95th percentile per-packet one-way delay: 28.274 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 21.32 Mbit/s
95th percentile per-packet one-way delay: 30.658 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 27.07 Mbit/s
95th percentile per-packet one-way delay: 31.346 ms
Loss rate: 2.40%
```

Run 5: Report of Indigo-MusesD — Data Link

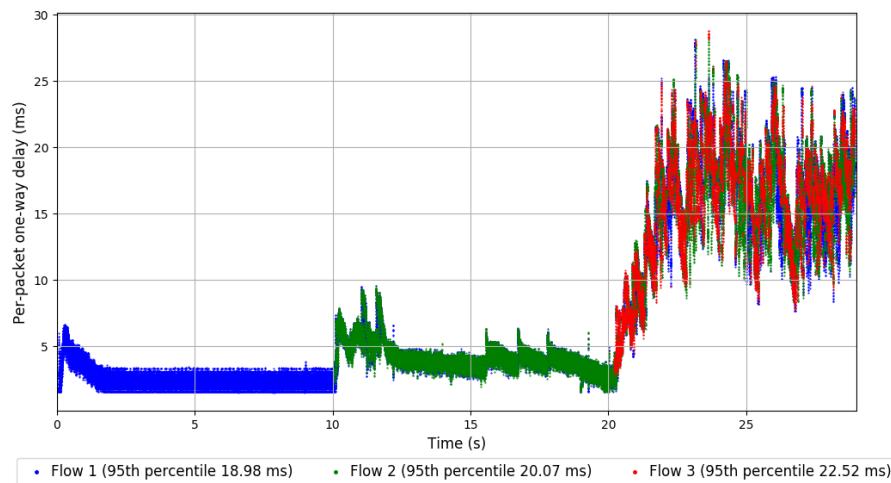
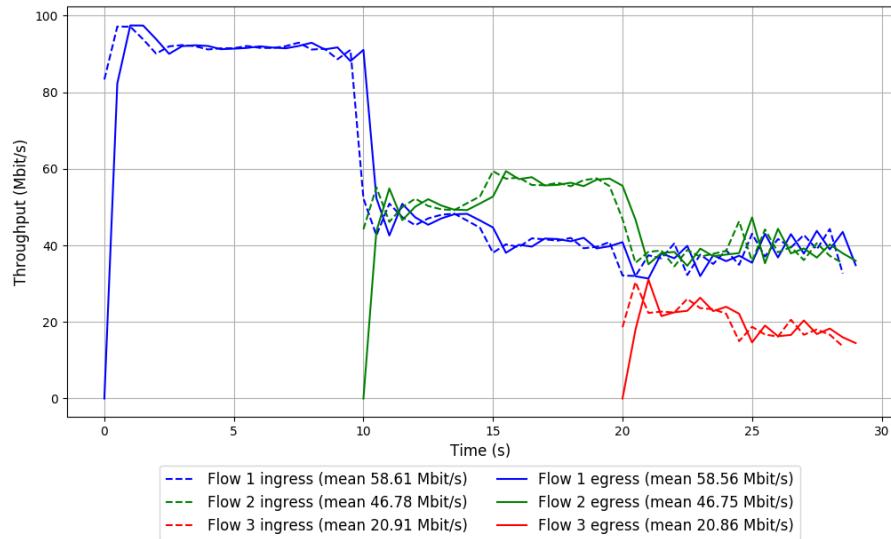


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 17:31:10
End at: 2019-02-11 17:31:40
Local clock offset: -0.811 ms
Remote clock offset: -0.395 ms

# Below is generated by plot.py at 2019-02-11 19:24:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.39 Mbit/s
95th percentile per-packet one-way delay: 19.928 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.56 Mbit/s
95th percentile per-packet one-way delay: 18.978 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.75 Mbit/s
95th percentile per-packet one-way delay: 20.065 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.86 Mbit/s
95th percentile per-packet one-way delay: 22.518 ms
Loss rate: 0.01%
```

Run 1: Report of Indigo-MusesT — Data Link

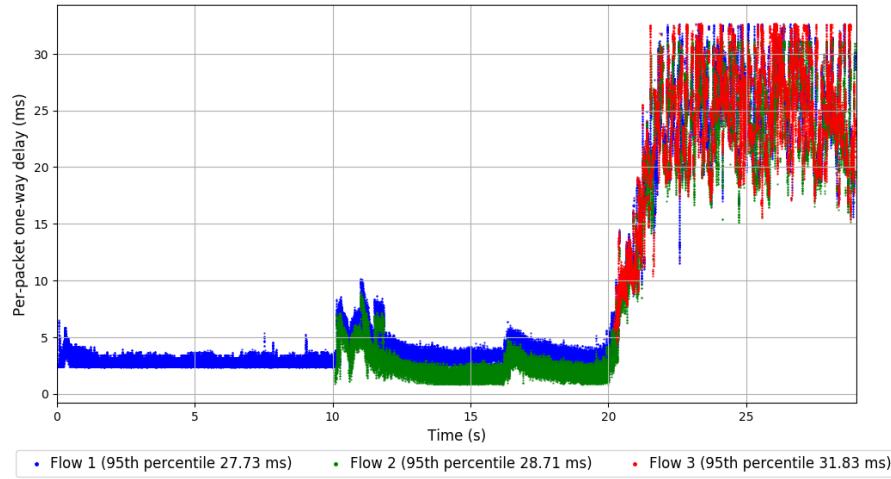
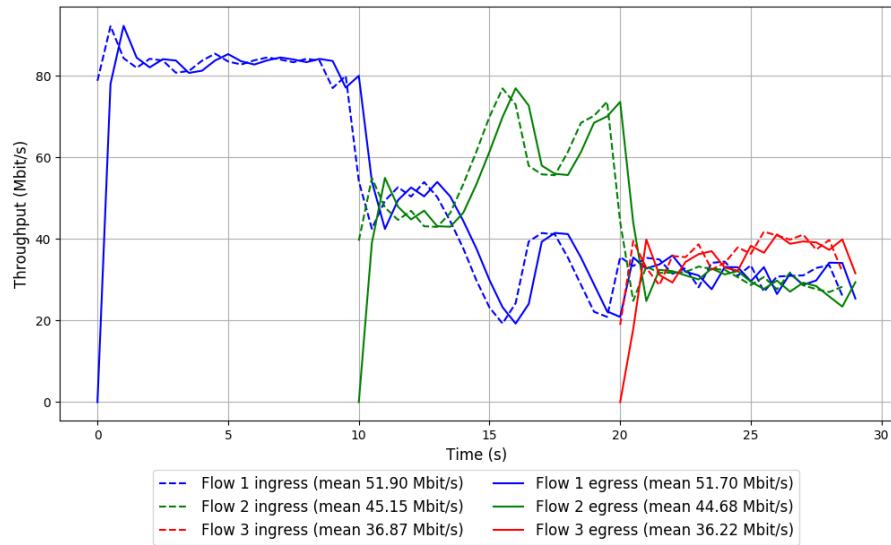


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 17:55:06
End at: 2019-02-11 17:55:36
Local clock offset: -0.872 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2019-02-11 19:24:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.77 Mbit/s
95th percentile per-packet one-way delay: 29.323 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 51.70 Mbit/s
95th percentile per-packet one-way delay: 27.729 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 44.68 Mbit/s
95th percentile per-packet one-way delay: 28.713 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 36.22 Mbit/s
95th percentile per-packet one-way delay: 31.833 ms
Loss rate: 1.60%
```

Run 2: Report of Indigo-MusesT — Data Link

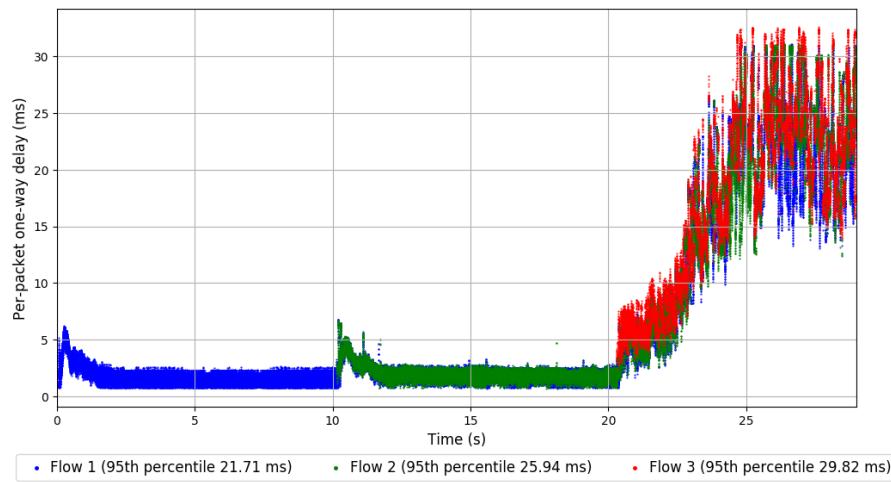
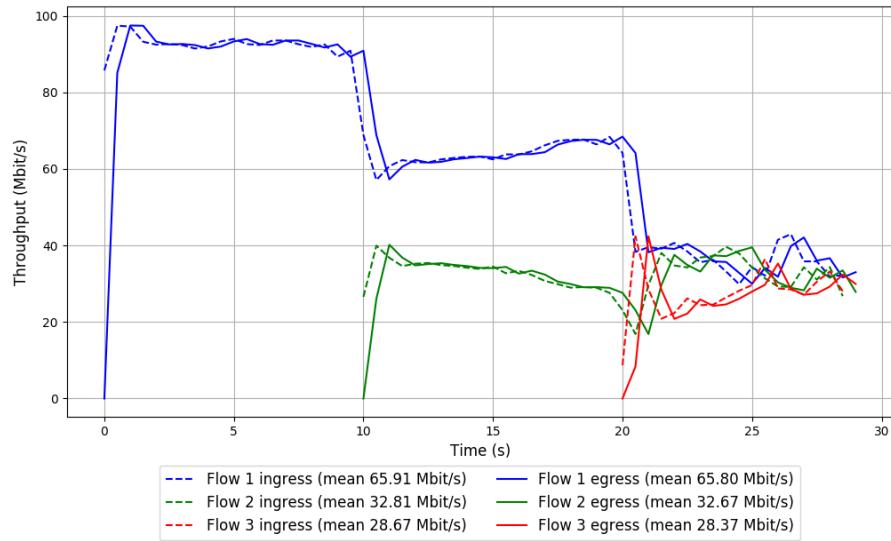


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 18:19:02
End at: 2019-02-11 18:19:32
Local clock offset: -2.642 ms
Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2019-02-11 19:25:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 24.898 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 65.80 Mbit/s
95th percentile per-packet one-way delay: 21.706 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 32.67 Mbit/s
95th percentile per-packet one-way delay: 25.943 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 29.824 ms
Loss rate: 0.79%
```

Run 3: Report of Indigo-MusesT — Data Link

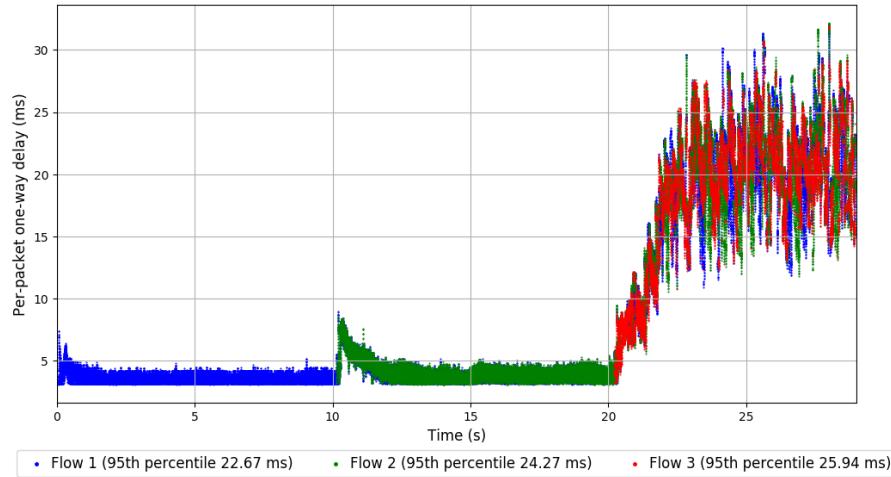
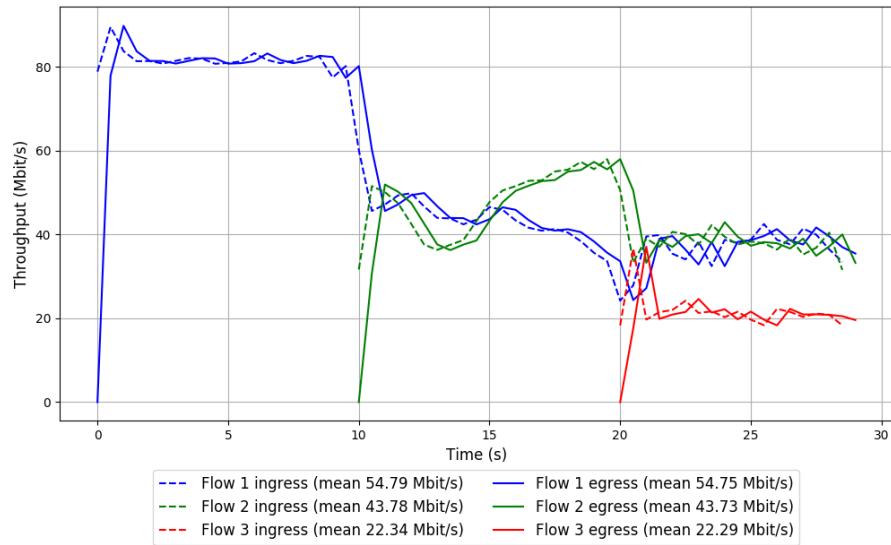


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 18:42:57
End at: 2019-02-11 18:43:27
Local clock offset: -2.609 ms
Remote clock offset: 0.164 ms

# Below is generated by plot.py at 2019-02-11 19:25:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 23.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.75 Mbit/s
95th percentile per-packet one-way delay: 22.667 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.73 Mbit/s
95th percentile per-packet one-way delay: 24.268 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.29 Mbit/s
95th percentile per-packet one-way delay: 25.937 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesT — Data Link

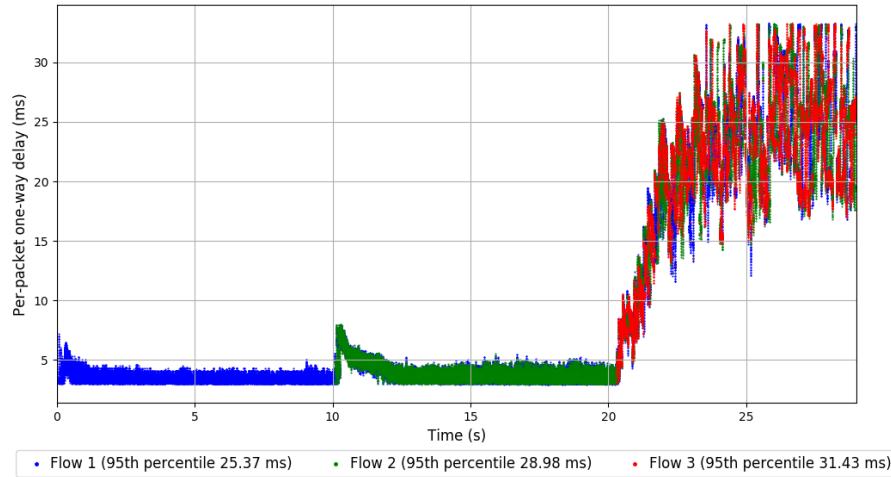
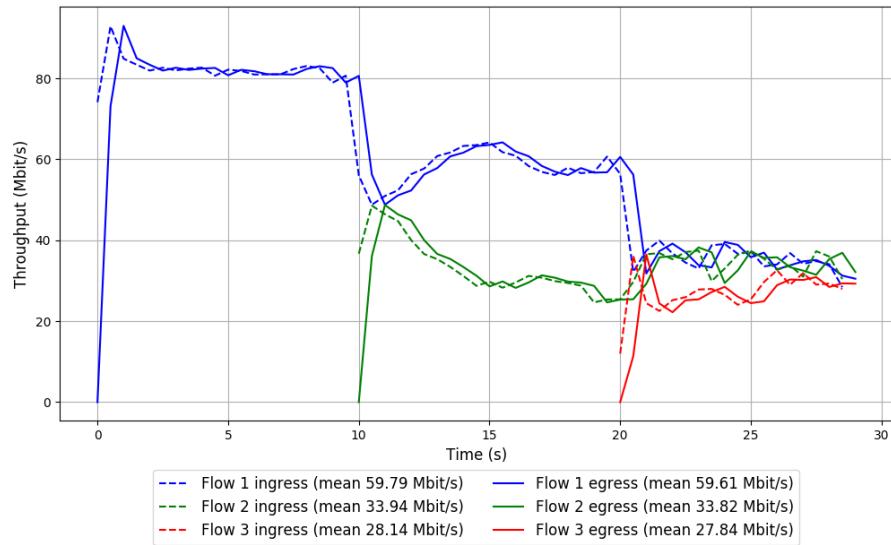


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 19:06:53
End at: 2019-02-11 19:07:23
Local clock offset: -1.779 ms
Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2019-02-11 19:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.02 Mbit/s
95th percentile per-packet one-way delay: 27.859 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 25.372 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 33.82 Mbit/s
95th percentile per-packet one-way delay: 28.976 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 27.84 Mbit/s
95th percentile per-packet one-way delay: 31.435 ms
Loss rate: 0.82%
```

Run 5: Report of Indigo-MusesT — Data Link

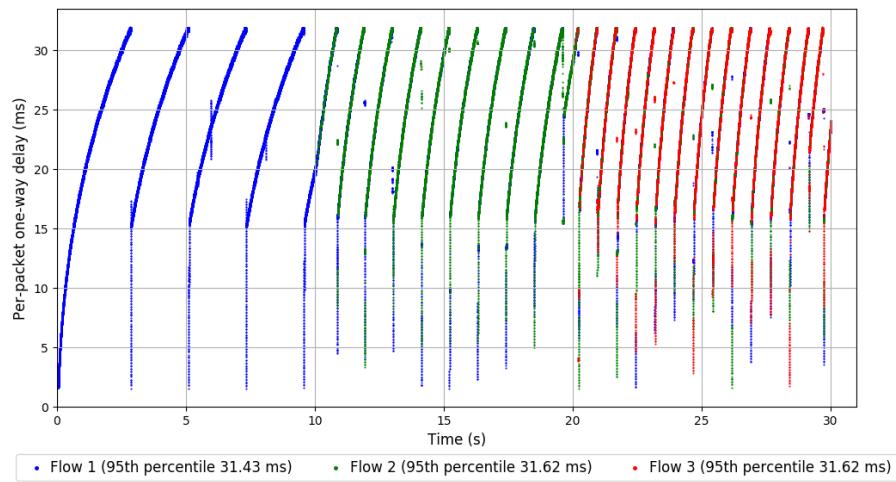
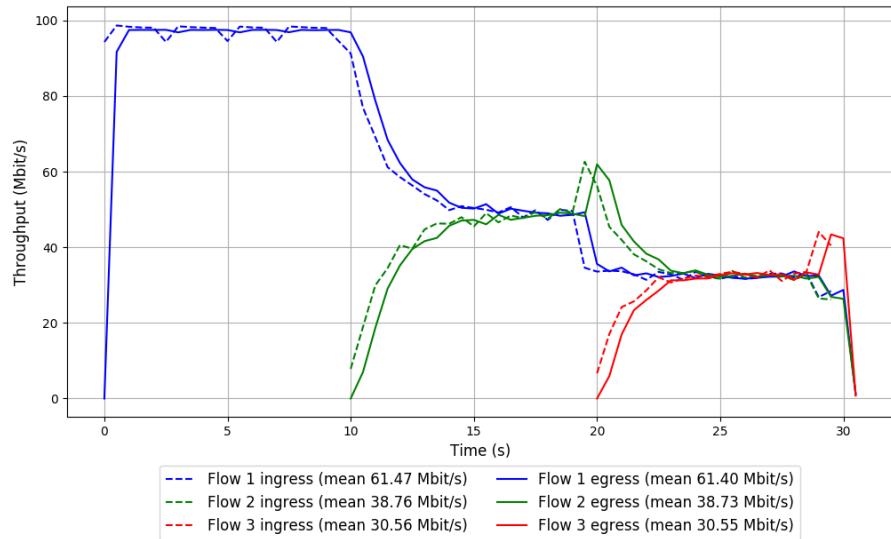


Run 1: Statistics of LEDBAT

```
Start at: 2019-02-11 17:39:08
End at: 2019-02-11 17:39:38
Local clock offset: -1.255 ms
Remote clock offset: -0.299 ms

# Below is generated by plot.py at 2019-02-11 19:25:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.32 Mbit/s
95th percentile per-packet one-way delay: 31.590 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 61.40 Mbit/s
95th percentile per-packet one-way delay: 31.427 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 31.620 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 31.617 ms
Loss rate: 0.09%
```

Run 1: Report of LEDBAT — Data Link

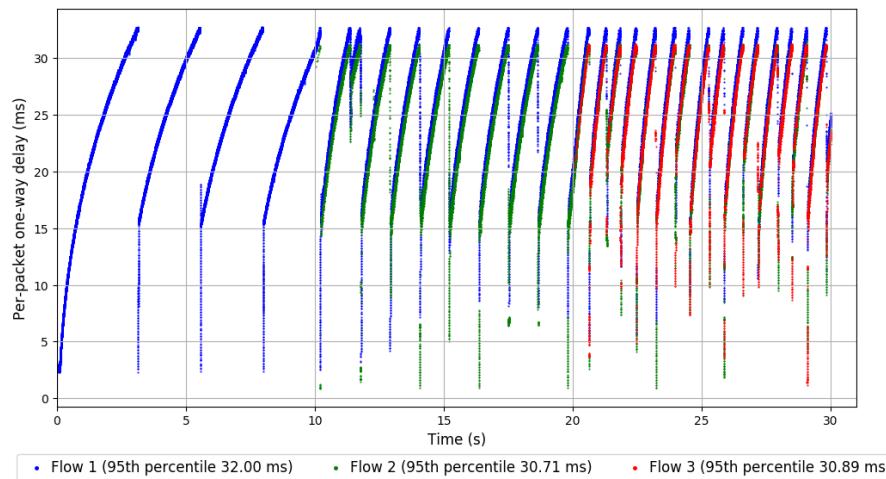
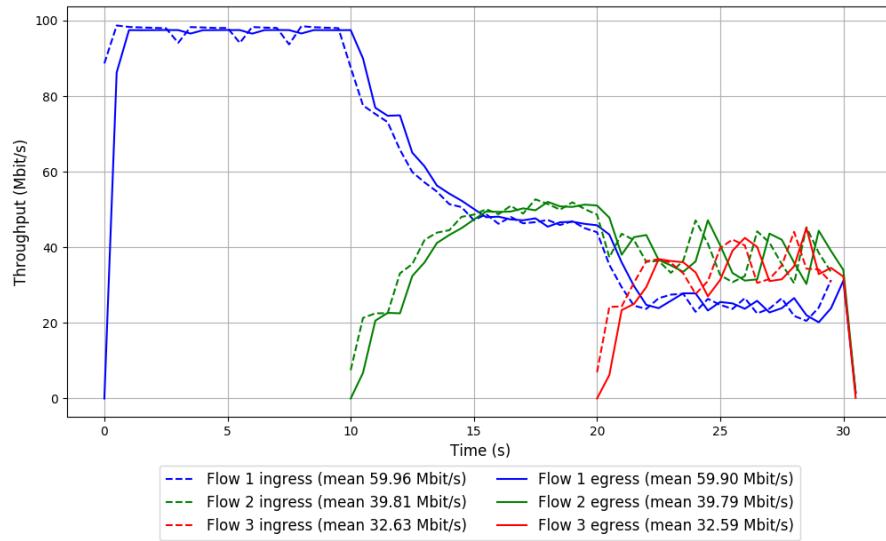


Run 2: Statistics of LEDBAT

```
Start at: 2019-02-11 18:03:03
End at: 2019-02-11 18:03:33
Local clock offset: -0.8 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2019-02-11 19:25:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 31.700 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 59.90 Mbit/s
95th percentile per-packet one-way delay: 31.996 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 39.79 Mbit/s
95th percentile per-packet one-way delay: 30.715 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 32.59 Mbit/s
95th percentile per-packet one-way delay: 30.891 ms
Loss rate: 0.10%
```

Run 2: Report of LEDBAT — Data Link

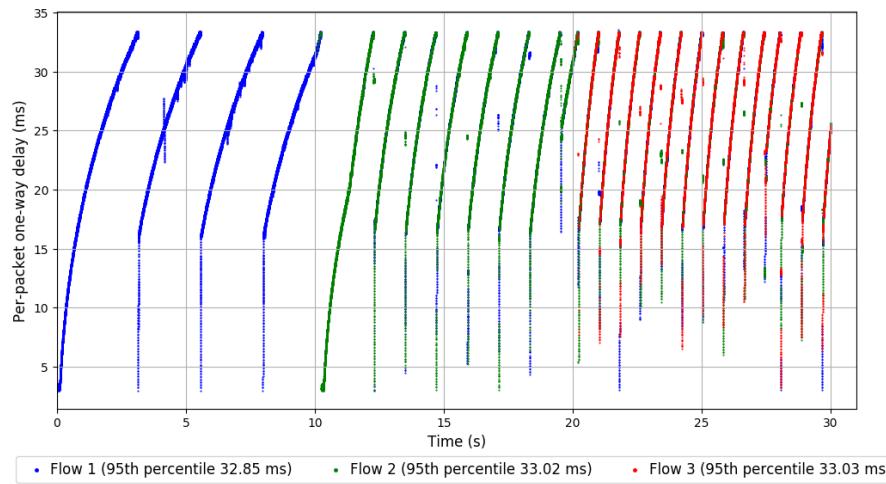
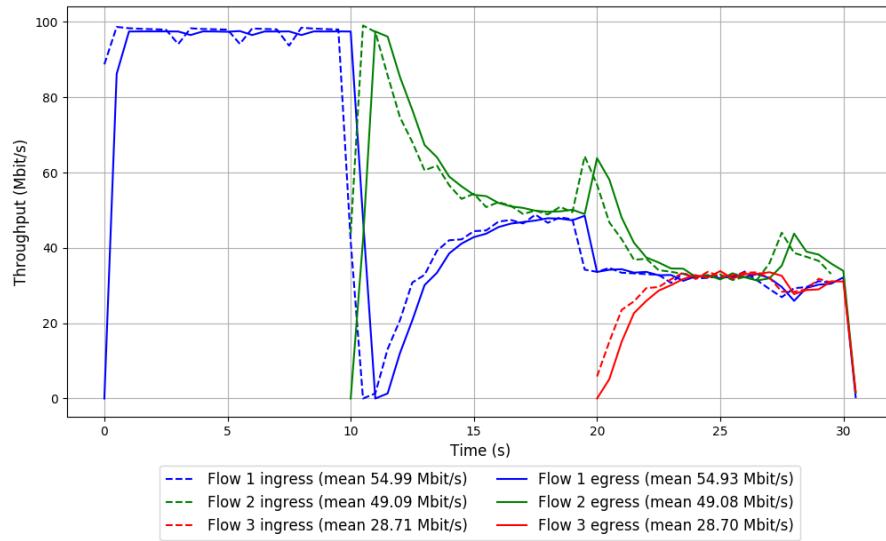


Run 3: Statistics of LEDBAT

```
Start at: 2019-02-11 18:26:59
End at: 2019-02-11 18:27:29
Local clock offset: -3.734 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2019-02-11 19:25:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.09 Mbit/s
95th percentile per-packet one-way delay: 32.877 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 54.93 Mbit/s
95th percentile per-packet one-way delay: 32.849 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 49.08 Mbit/s
95th percentile per-packet one-way delay: 33.023 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 28.70 Mbit/s
95th percentile per-packet one-way delay: 33.035 ms
Loss rate: 0.09%
```

Run 3: Report of LEDBAT — Data Link

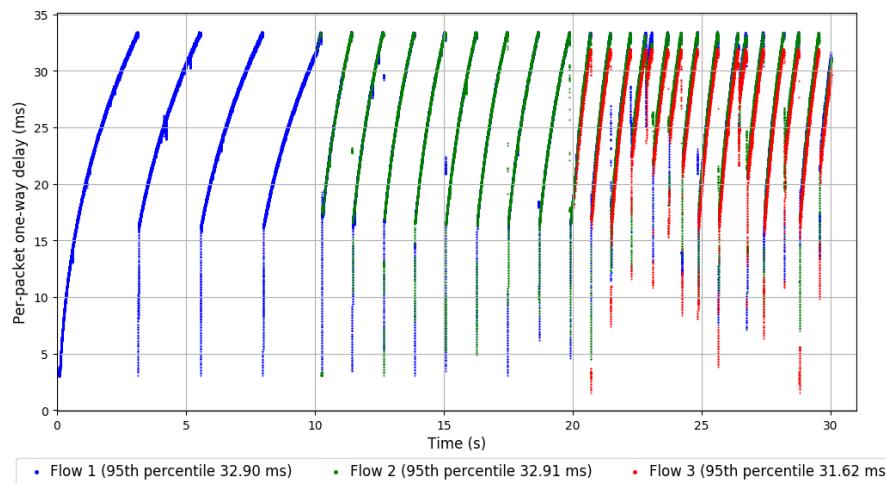
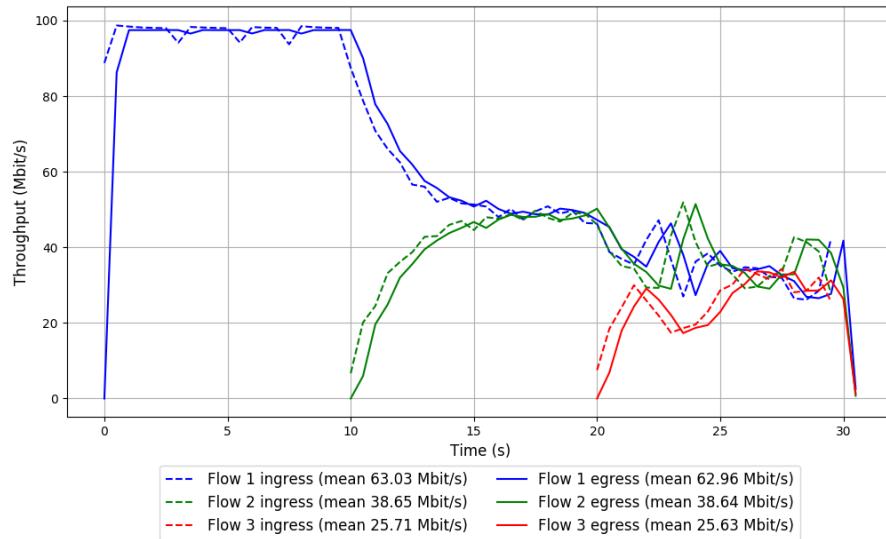


Run 4: Statistics of LEDBAT

```
Start at: 2019-02-11 18:50:54
End at: 2019-02-11 18:51:24
Local clock offset: -2.067 ms
Remote clock offset: 0.151 ms

# Below is generated by plot.py at 2019-02-11 19:25:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 32.871 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.96 Mbit/s
95th percentile per-packet one-way delay: 32.895 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 38.64 Mbit/s
95th percentile per-packet one-way delay: 32.910 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 25.63 Mbit/s
95th percentile per-packet one-way delay: 31.622 ms
Loss rate: 0.21%
```

Run 4: Report of LEDBAT — Data Link

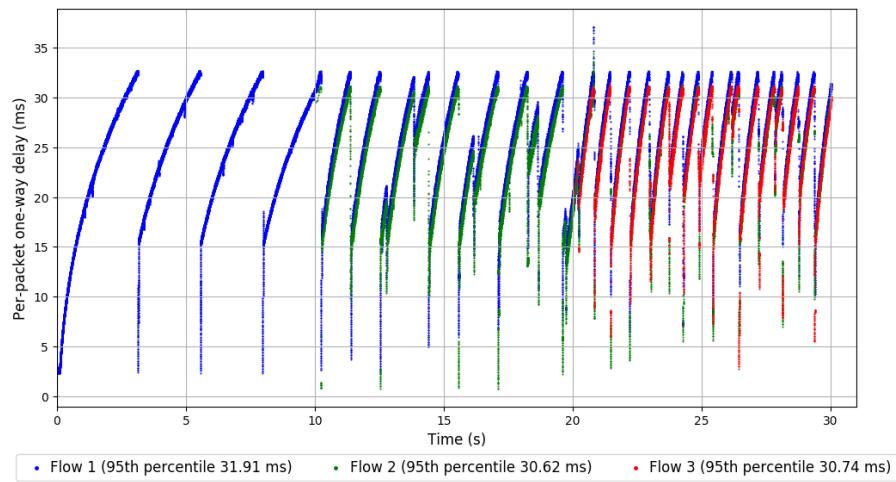
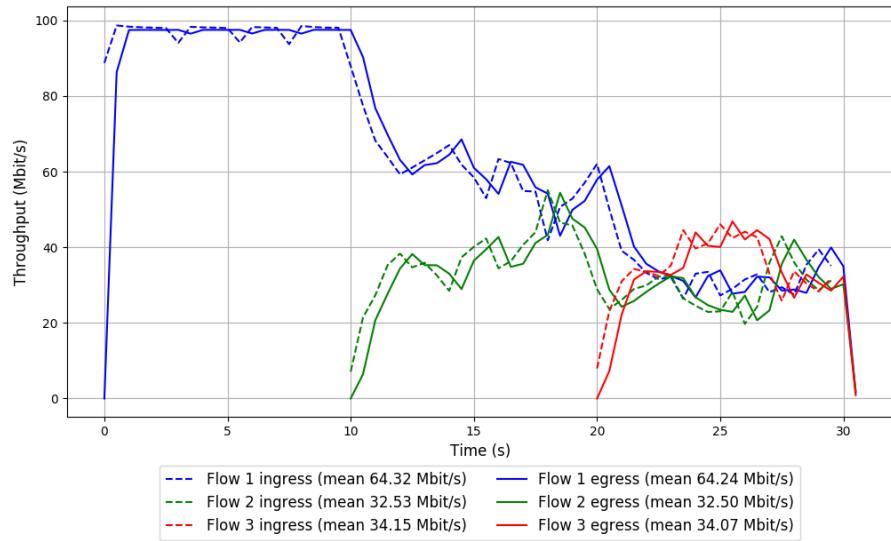


Run 5: Statistics of LEDBAT

```
Start at: 2019-02-11 19:14:51
End at: 2019-02-11 19:15:21
Local clock offset: -1.243 ms
Remote clock offset: 0.175 ms

# Below is generated by plot.py at 2019-02-11 19:25:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 31.636 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 64.24 Mbit/s
95th percentile per-packet one-way delay: 31.909 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 30.620 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 34.07 Mbit/s
95th percentile per-packet one-way delay: 30.743 ms
Loss rate: 0.11%
```

Run 5: Report of LEDBAT — Data Link

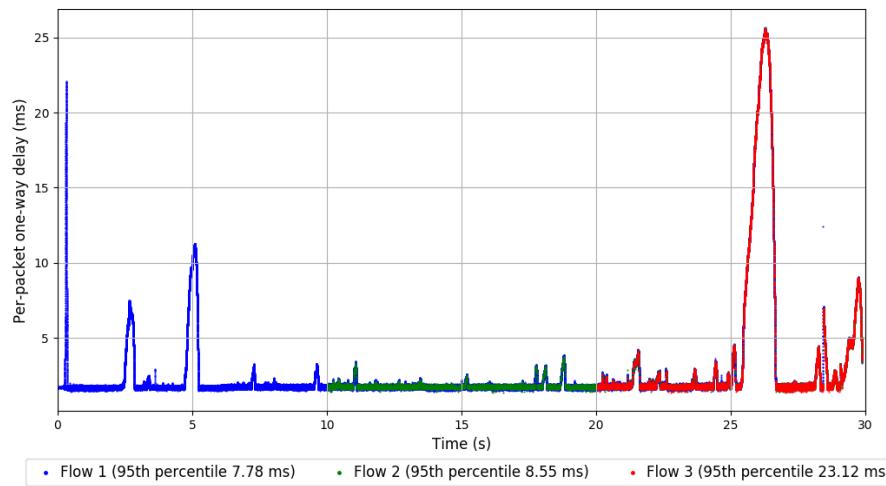
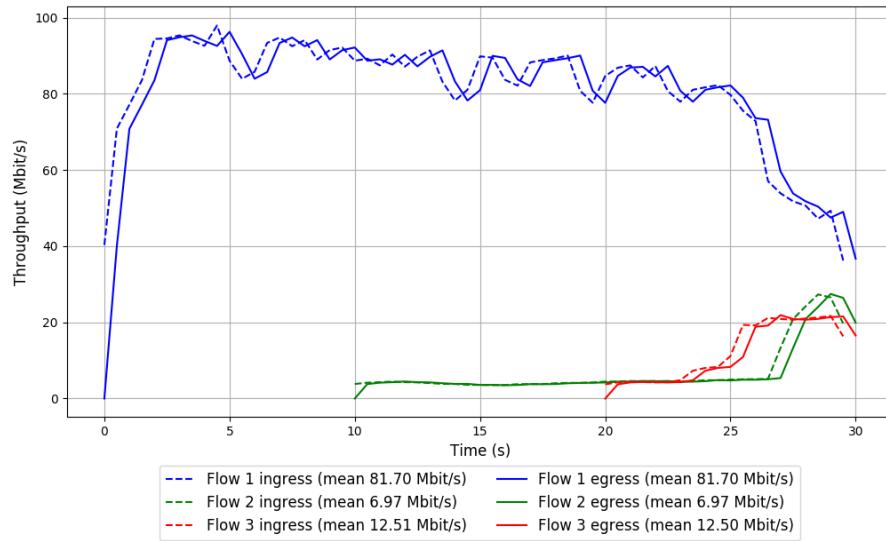


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-02-11 17:33:25
End at: 2019-02-11 17:33:55
Local clock offset: -0.738 ms
Remote clock offset: -0.387 ms

# Below is generated by plot.py at 2019-02-11 19:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.46 Mbit/s
95th percentile per-packet one-way delay: 8.820 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.70 Mbit/s
95th percentile per-packet one-way delay: 7.775 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 8.554 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.50 Mbit/s
95th percentile per-packet one-way delay: 23.117 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Allegro — Data Link

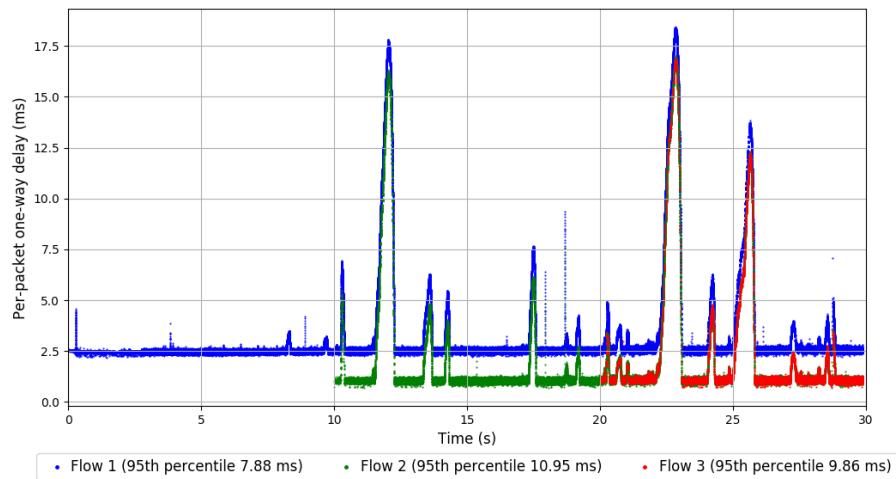
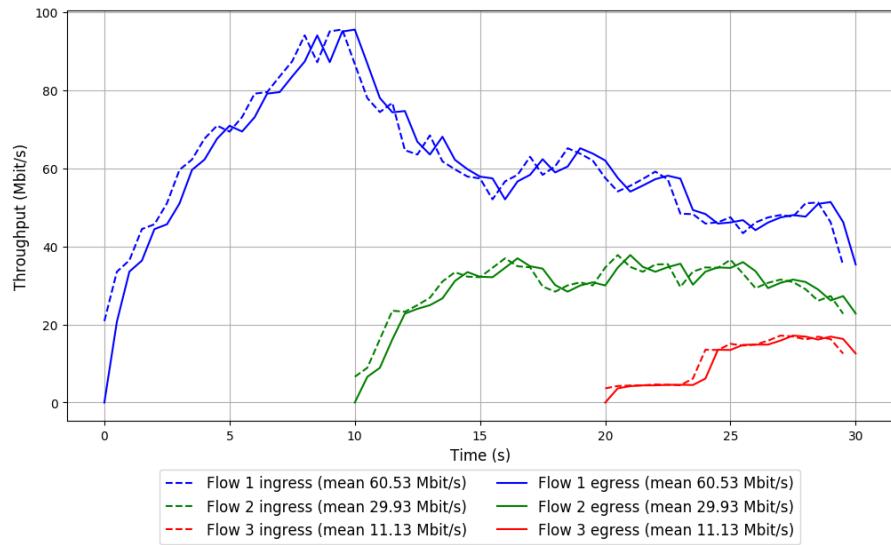


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-02-11 17:57:21
End at: 2019-02-11 17:57:51
Local clock offset: -0.902 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2019-02-11 19:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.10 Mbit/s
95th percentile per-packet one-way delay: 9.244 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.53 Mbit/s
95th percentile per-packet one-way delay: 7.877 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 10.948 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 9.855 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Allegro — Data Link

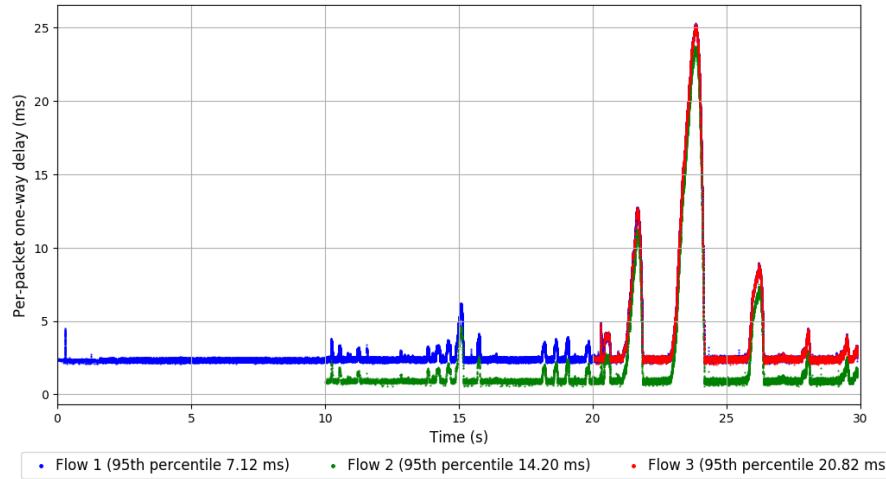
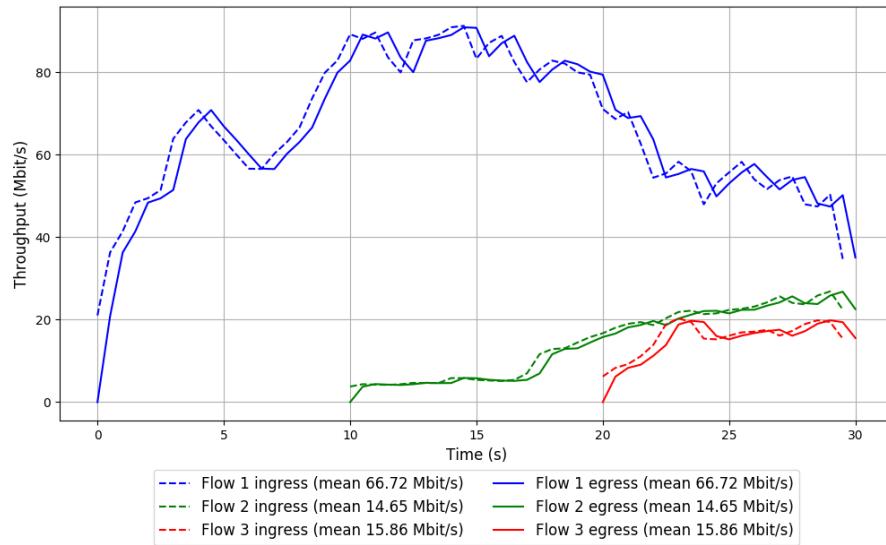


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-02-11 18:21:17
End at: 2019-02-11 18:21:47
Local clock offset: -2.772 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2019-02-11 19:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.69 Mbit/s
95th percentile per-packet one-way delay: 8.715 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.72 Mbit/s
95th percentile per-packet one-way delay: 7.124 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 14.65 Mbit/s
95th percentile per-packet one-way delay: 14.196 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.86 Mbit/s
95th percentile per-packet one-way delay: 20.824 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Allegro — Data Link

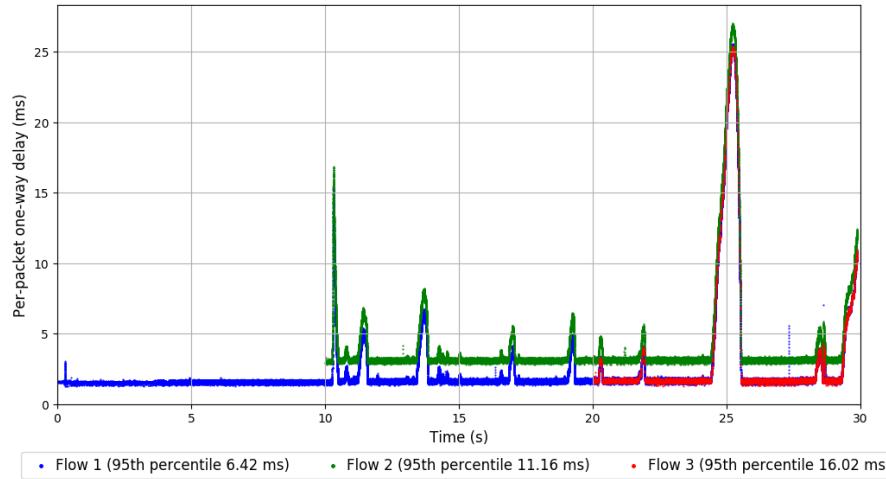
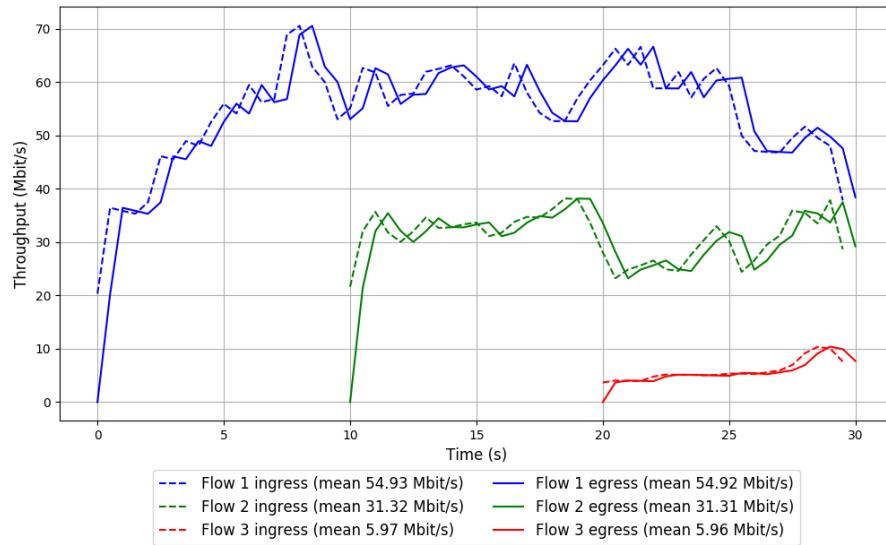


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-02-11 18:45:12
End at: 2019-02-11 18:45:42
Local clock offset: -2.409 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-02-11 19:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.70 Mbit/s
95th percentile per-packet one-way delay: 8.128 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.92 Mbit/s
95th percentile per-packet one-way delay: 6.420 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.31 Mbit/s
95th percentile per-packet one-way delay: 11.162 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.96 Mbit/s
95th percentile per-packet one-way delay: 16.022 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Allegro — Data Link

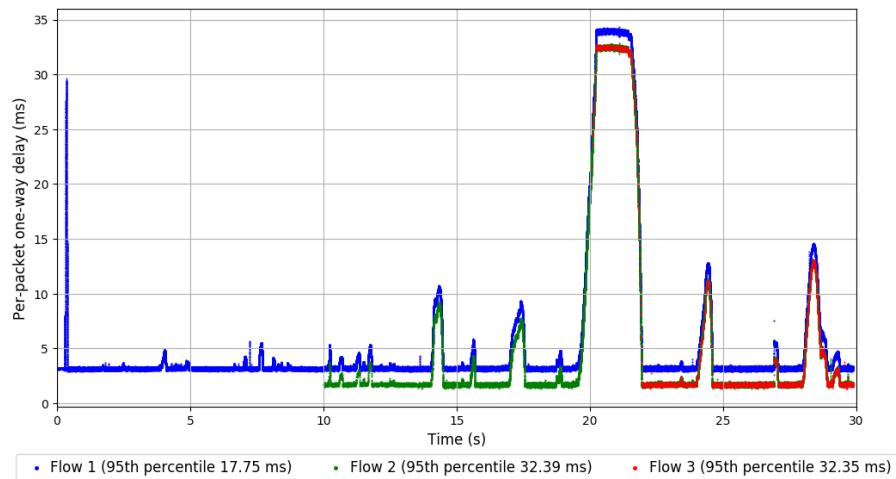
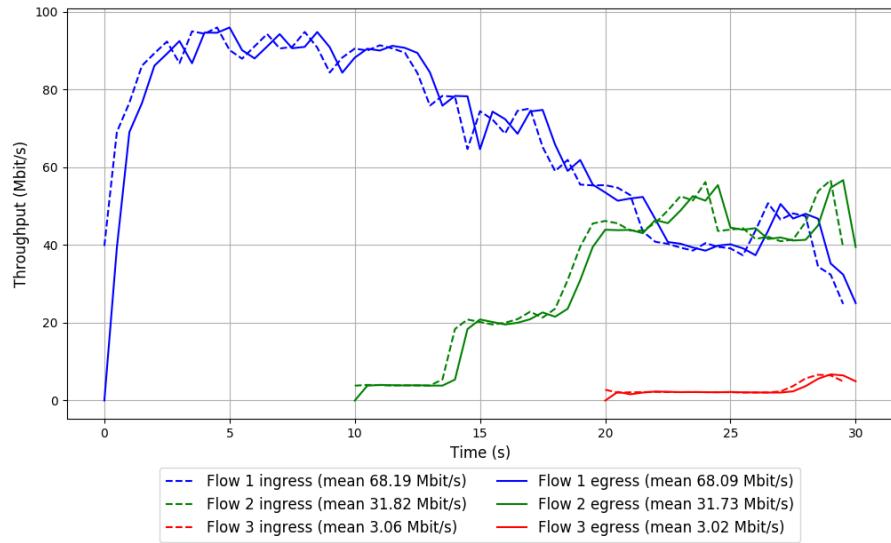


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-02-11 19:09:09
End at: 2019-02-11 19:09:39
Local clock offset: -1.884 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2019-02-11 19:26:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.18 Mbit/s
95th percentile per-packet one-way delay: 30.423 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 68.09 Mbit/s
95th percentile per-packet one-way delay: 17.749 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 31.73 Mbit/s
95th percentile per-packet one-way delay: 32.388 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 32.355 ms
Loss rate: 1.50%
```

Run 5: Report of PCC-Allegro — Data Link

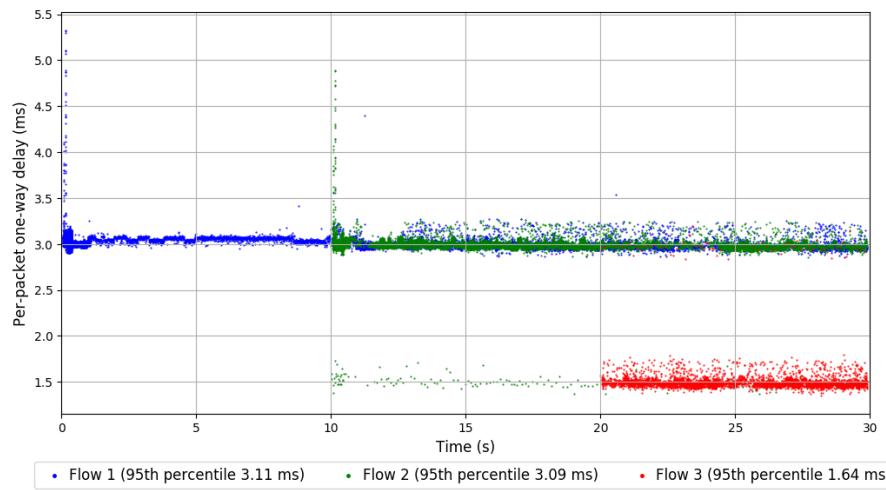
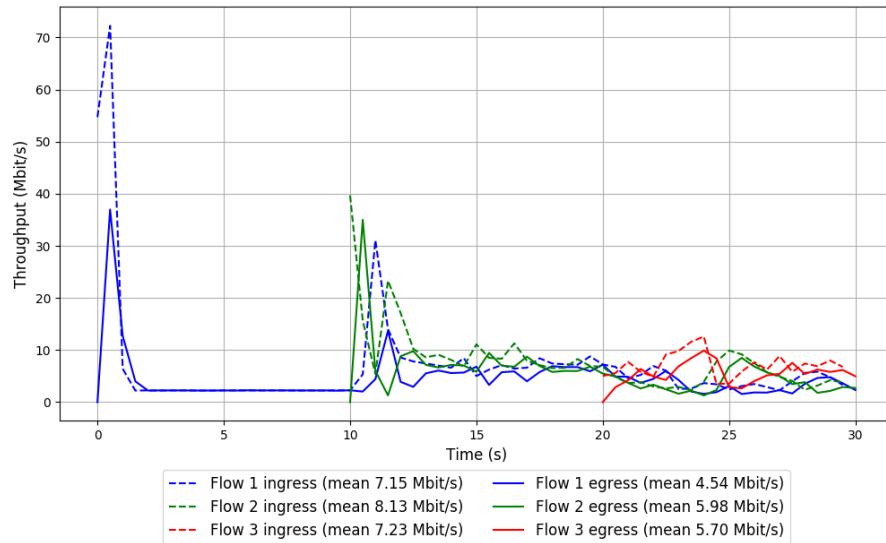


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-02-11 17:36:51
End at: 2019-02-11 17:37:21
Local clock offset: -1.018 ms
Remote clock offset: -0.399 ms

# Below is generated by plot.py at 2019-02-11 19:26:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 3.090 ms
Loss rate: 30.36%
-- Flow 1:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 3.113 ms
Loss rate: 36.42%
-- Flow 2:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 3.091 ms
Loss rate: 26.40%
-- Flow 3:
Average throughput: 5.70 Mbit/s
95th percentile per-packet one-way delay: 1.642 ms
Loss rate: 21.22%
```

Run 1: Report of PCC-Expr — Data Link

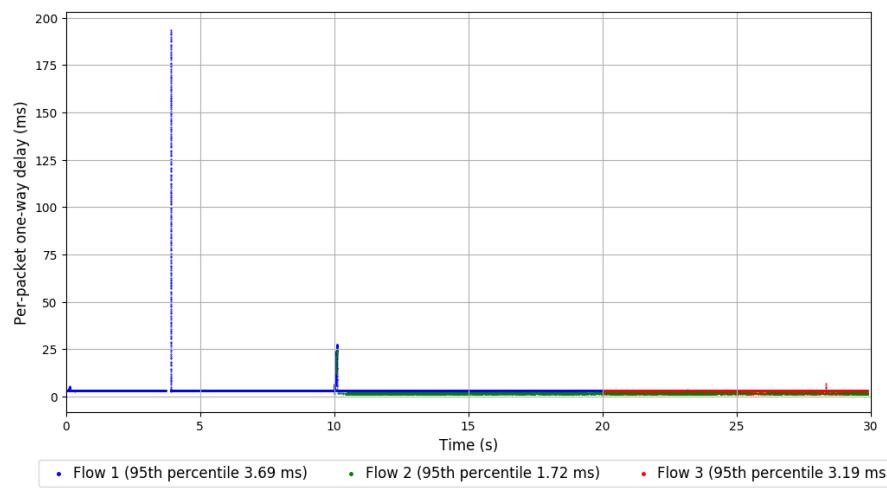
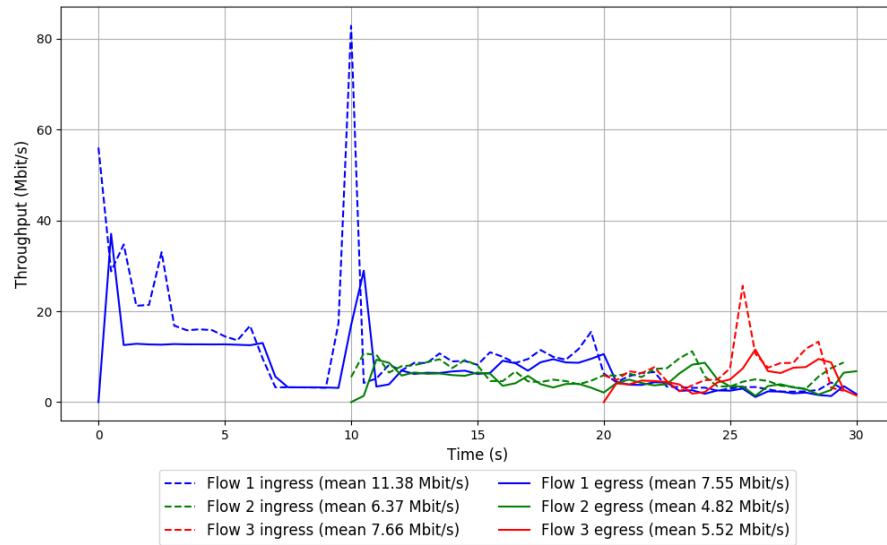


Run 2: Statistics of PCC-Expr

```
Start at: 2019-02-11 18:00:47
End at: 2019-02-11 18:01:17
Local clock offset: -1.539 ms
Remote clock offset: -0.182 ms

# Below is generated by plot.py at 2019-02-11 19:26:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.57 Mbit/s
95th percentile per-packet one-way delay: 3.214 ms
Loss rate: 30.71%
-- Flow 1:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 3.695 ms
Loss rate: 33.70%
-- Flow 2:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 1.720 ms
Loss rate: 24.30%
-- Flow 3:
Average throughput: 5.52 Mbit/s
95th percentile per-packet one-way delay: 3.187 ms
Loss rate: 27.96%
```

Run 2: Report of PCC-Expr — Data Link

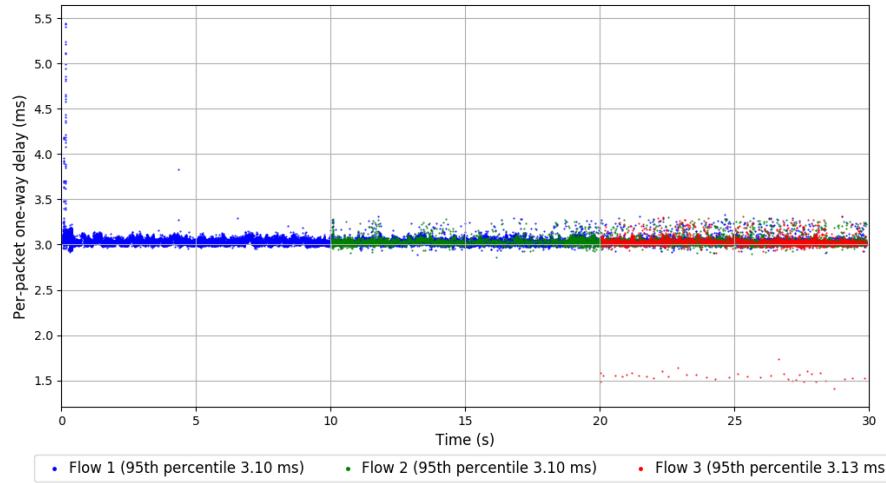
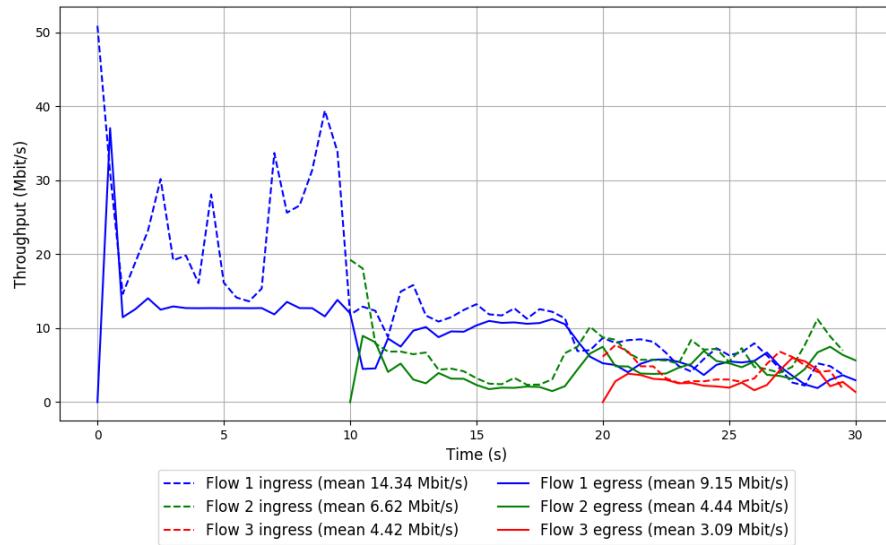


Run 3: Statistics of PCC-Expr

```
Start at: 2019-02-11 18:24:42
End at: 2019-02-11 18:25:12
Local clock offset: -3.654 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-02-11 19:26:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 3.103 ms
Loss rate: 35.04%
-- Flow 1:
Average throughput: 9.15 Mbit/s
95th percentile per-packet one-way delay: 3.102 ms
Loss rate: 36.22%
-- Flow 2:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 3.104 ms
Loss rate: 32.87%
-- Flow 3:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 3.131 ms
Loss rate: 29.99%
```

Run 3: Report of PCC-Expr — Data Link

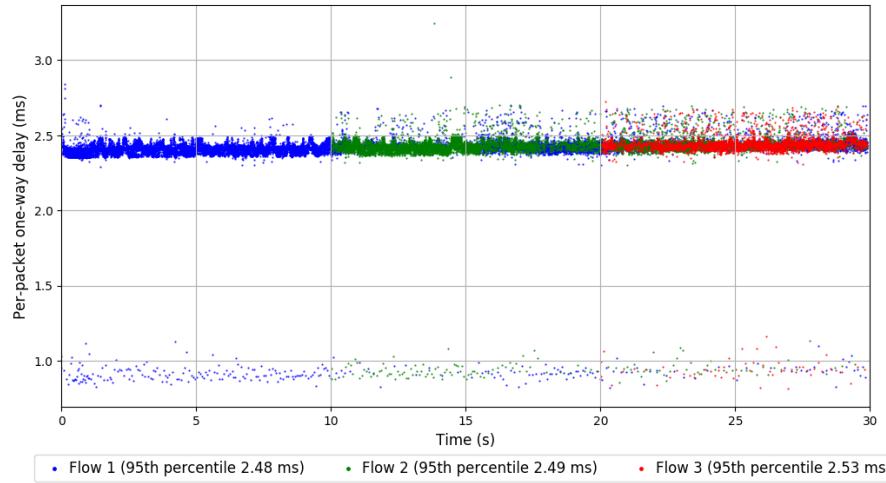
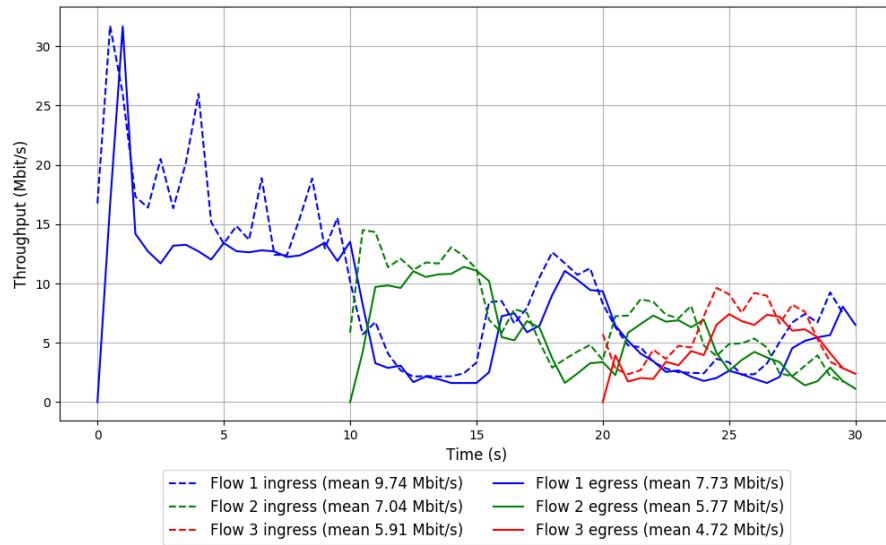


Run 4: Statistics of PCC-Expr

```
Start at: 2019-02-11 18:48:37
End at: 2019-02-11 18:49:07
Local clock offset: -1.464 ms
Remote clock offset: 0.144 ms

# Below is generated by plot.py at 2019-02-11 19:26:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 2.485 ms
Loss rate: 19.85%
-- Flow 1:
Average throughput: 7.73 Mbit/s
95th percentile per-packet one-way delay: 2.476 ms
Loss rate: 20.66%
-- Flow 2:
Average throughput: 5.77 Mbit/s
95th percentile per-packet one-way delay: 2.494 ms
Loss rate: 18.09%
-- Flow 3:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 2.534 ms
Loss rate: 20.05%
```

Run 4: Report of PCC-Expr — Data Link

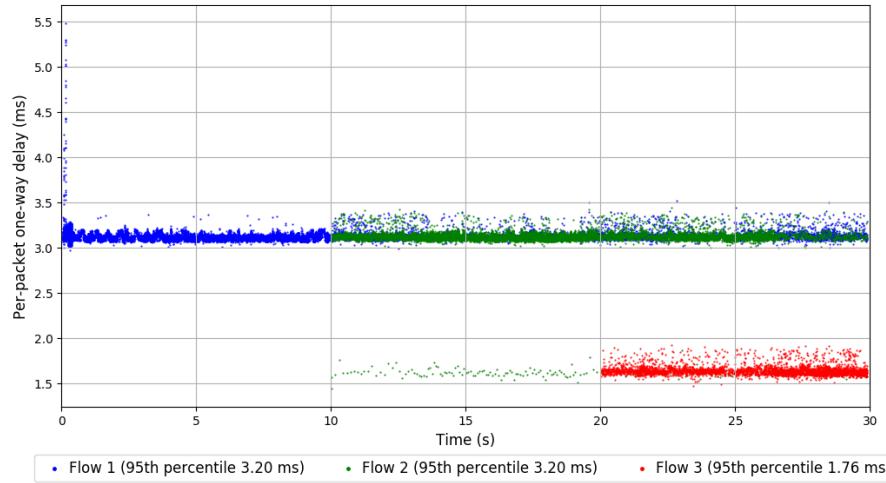
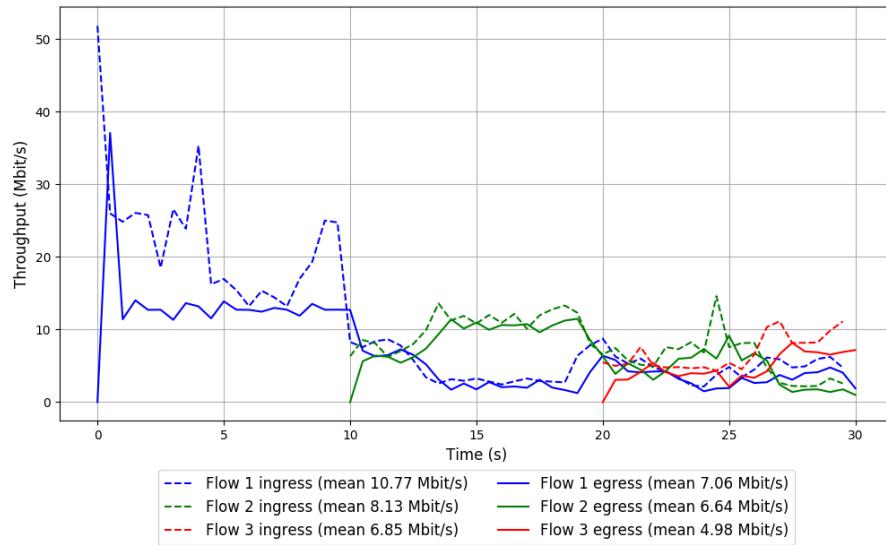


Run 5: Statistics of PCC-Expr

```
Start at: 2019-02-11 19:12:35
End at: 2019-02-11 19:13:05
Local clock offset: -1.968 ms
Remote clock offset: 0.177 ms

# Below is generated by plot.py at 2019-02-11 19:26:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 3.195 ms
Loss rate: 28.82%
-- Flow 1:
Average throughput: 7.06 Mbit/s
95th percentile per-packet one-way delay: 3.203 ms
Loss rate: 34.40%
-- Flow 2:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 3.196 ms
Loss rate: 18.33%
-- Flow 3:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 1.762 ms
Loss rate: 27.33%
```

Run 5: Report of PCC-Expr — Data Link

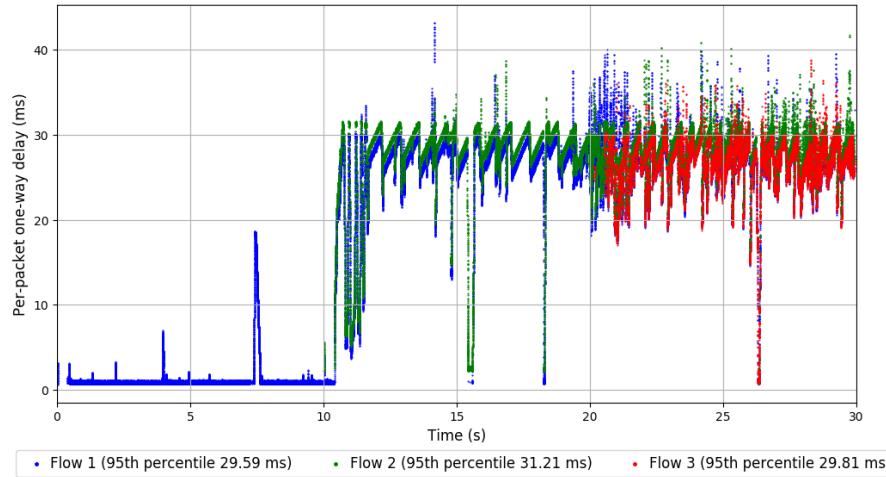
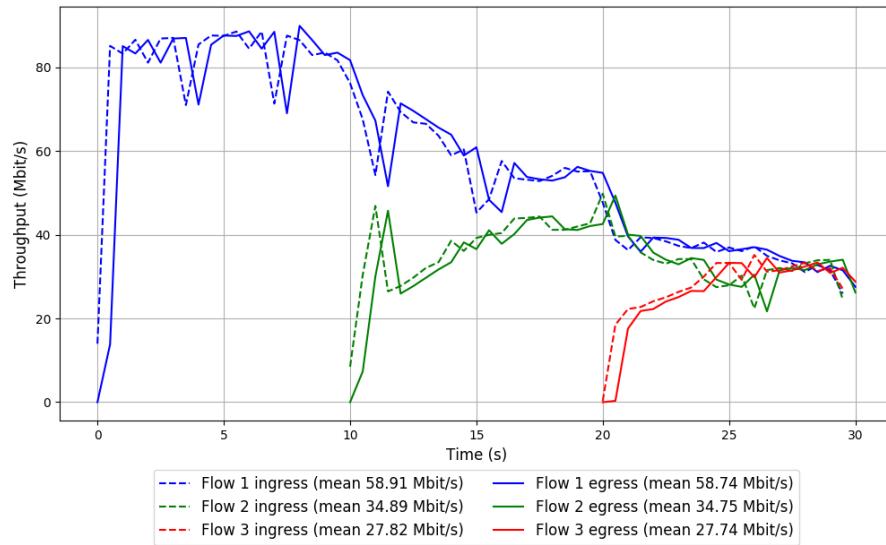


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-02-11 17:27:42
End at: 2019-02-11 17:28:12
Local clock offset: -0.199 ms
Remote clock offset: -0.441 ms

# Below is generated by plot.py at 2019-02-11 19:27:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.97 Mbit/s
95th percentile per-packet one-way delay: 30.585 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 29.592 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 34.75 Mbit/s
95th percentile per-packet one-way delay: 31.208 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 27.74 Mbit/s
95th percentile per-packet one-way delay: 29.814 ms
Loss rate: 0.29%
```

Run 1: Report of QUIC Cubic — Data Link

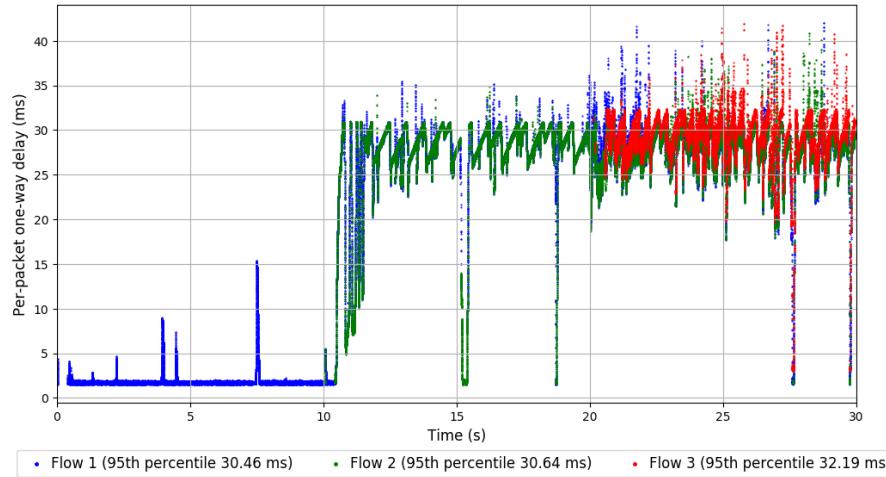
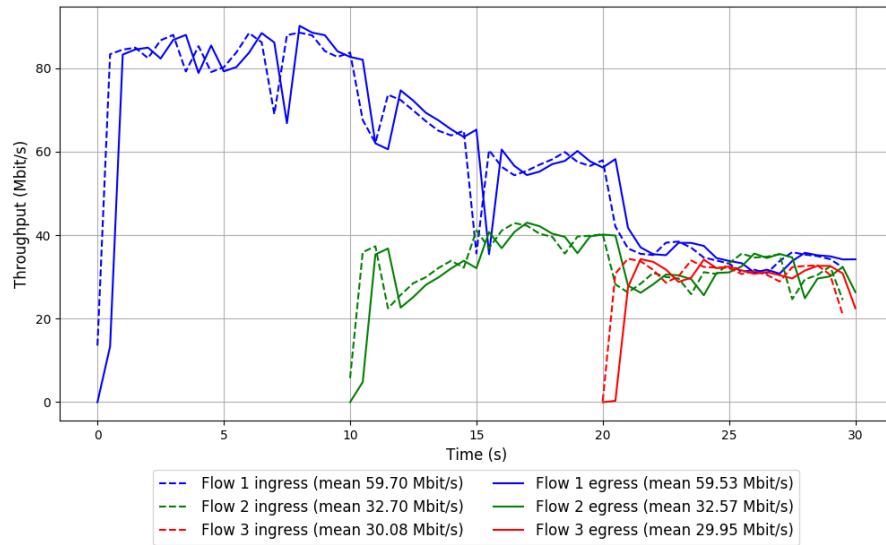


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-02-11 17:51:38
End at: 2019-02-11 17:52:08
Local clock offset: -1.632 ms
Remote clock offset: -0.206 ms

# Below is generated by plot.py at 2019-02-11 19:27:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 30.717 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 59.53 Mbit/s
95th percentile per-packet one-way delay: 30.462 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 30.636 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 29.95 Mbit/s
95th percentile per-packet one-way delay: 32.194 ms
Loss rate: 0.42%
```

Run 2: Report of QUIC Cubic — Data Link

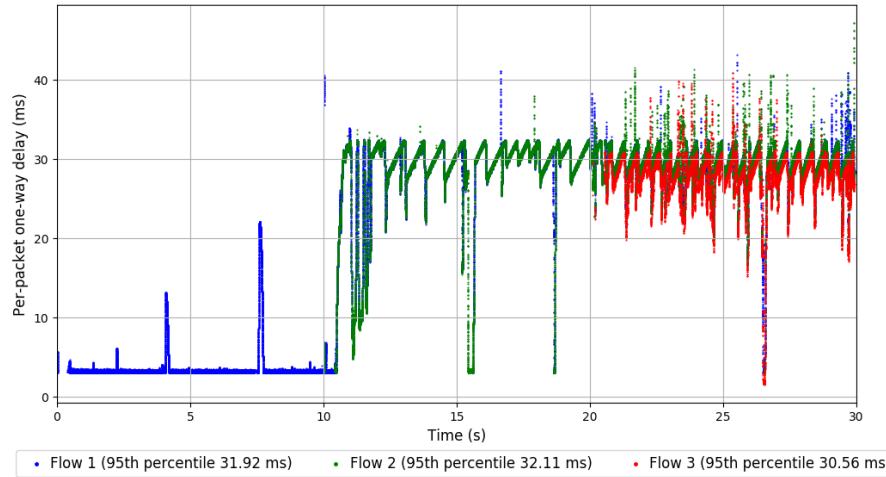
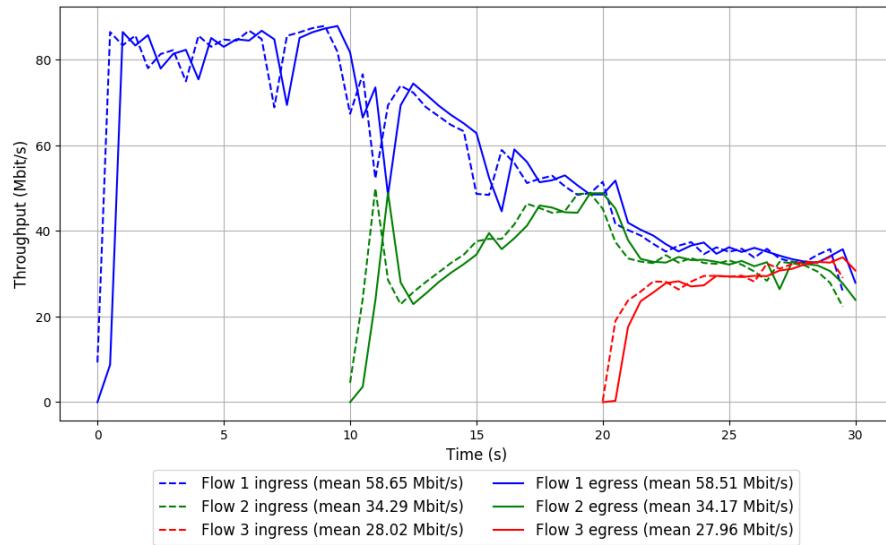


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-02-11 18:15:34
End at: 2019-02-11 18:16:04
Local clock offset: -3.254 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-02-11 19:27:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.42 Mbit/s
95th percentile per-packet one-way delay: 31.966 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 58.51 Mbit/s
95th percentile per-packet one-way delay: 31.922 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 34.17 Mbit/s
95th percentile per-packet one-way delay: 32.112 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 27.96 Mbit/s
95th percentile per-packet one-way delay: 30.564 ms
Loss rate: 0.21%
```

Run 3: Report of QUIC Cubic — Data Link

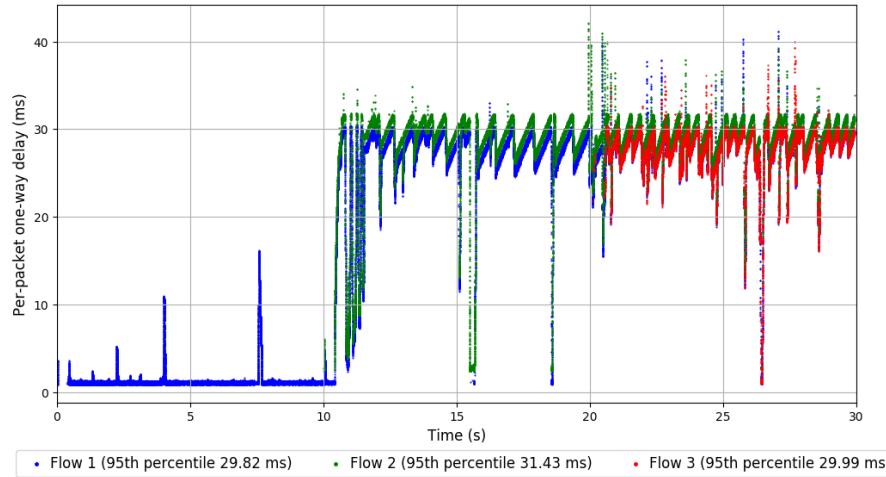
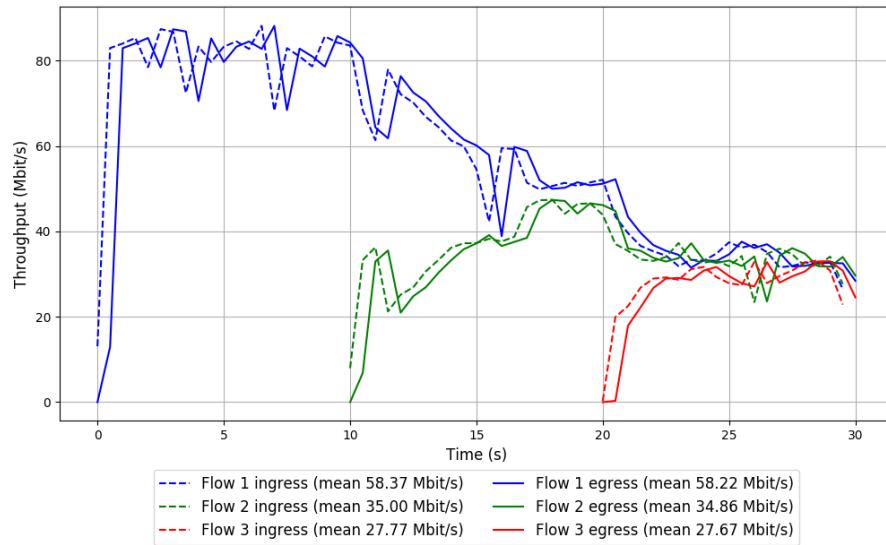


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-02-11 18:39:29
End at: 2019-02-11 18:39:59
Local clock offset: -2.293 ms
Remote clock offset: 0.119 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.48 Mbit/s
95th percentile per-packet one-way delay: 30.883 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 58.22 Mbit/s
95th percentile per-packet one-way delay: 29.815 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 34.86 Mbit/s
95th percentile per-packet one-way delay: 31.430 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 27.67 Mbit/s
95th percentile per-packet one-way delay: 29.988 ms
Loss rate: 0.28%
```

Run 4: Report of QUIC Cubic — Data Link

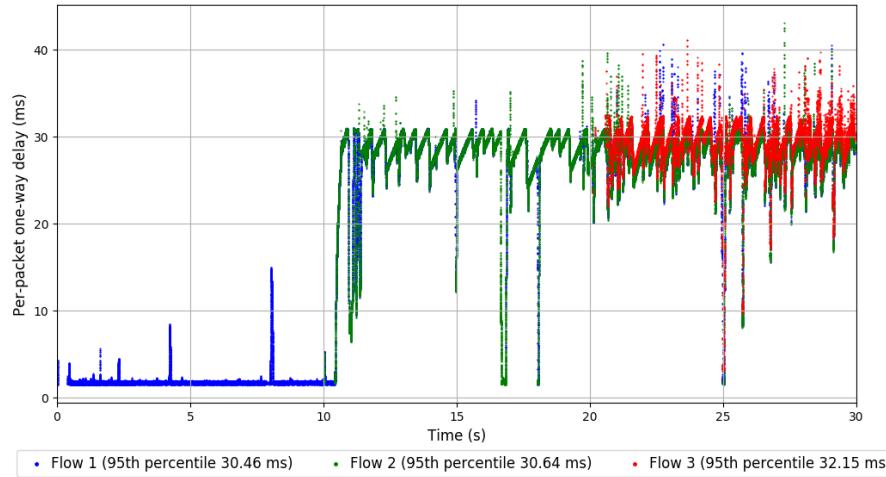
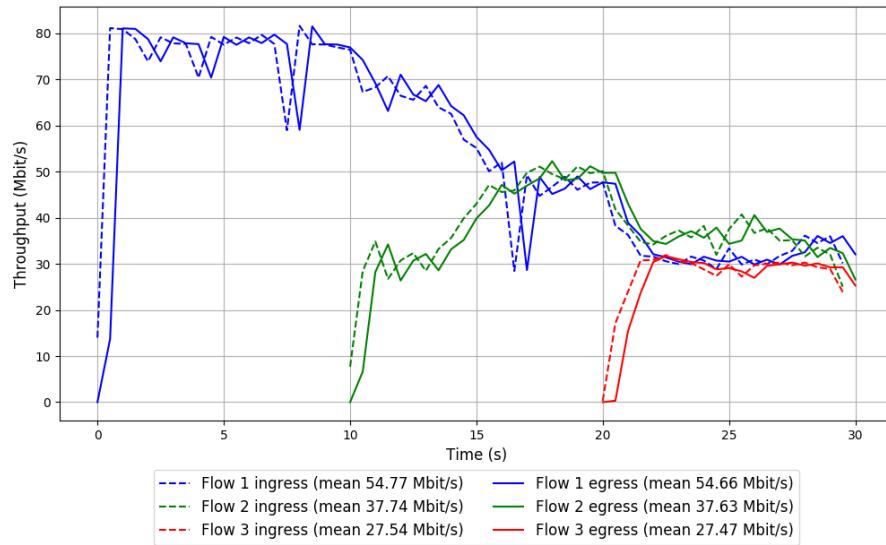


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-02-11 19:03:25
End at: 2019-02-11 19:03:55
Local clock offset: -1.665 ms
Remote clock offset: 0.191 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.73 Mbit/s
95th percentile per-packet one-way delay: 30.697 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 54.66 Mbit/s
95th percentile per-packet one-way delay: 30.463 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 30.636 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 27.47 Mbit/s
95th percentile per-packet one-way delay: 32.152 ms
Loss rate: 0.24%
```

Run 5: Report of QUIC Cubic — Data Link

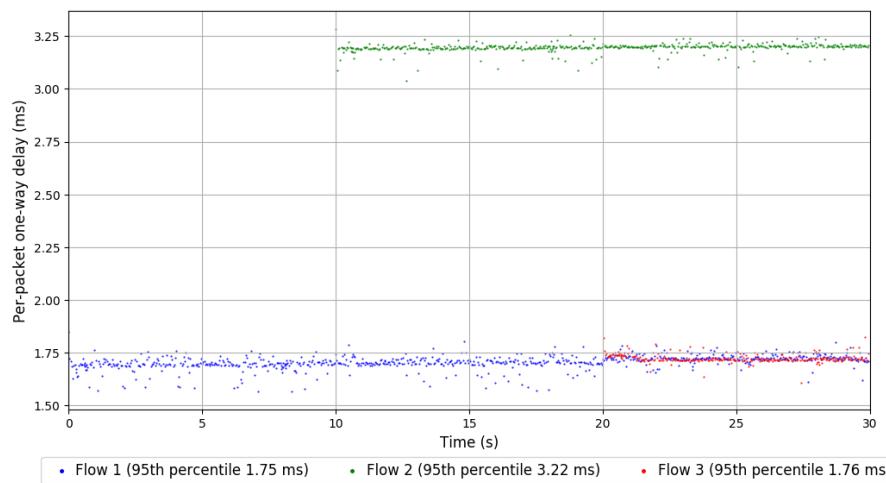
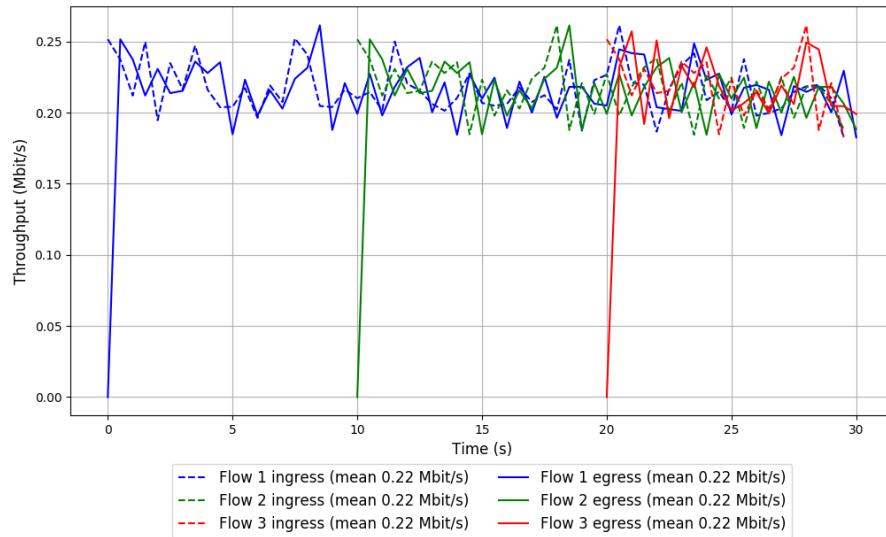


```
Run 1: Statistics of SCReAM

Start at: 2019-02-11 17:23:09
End at: 2019-02-11 17:23:39
Local clock offset: -1.141 ms
Remote clock offset: -0.395 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.749 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.762 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

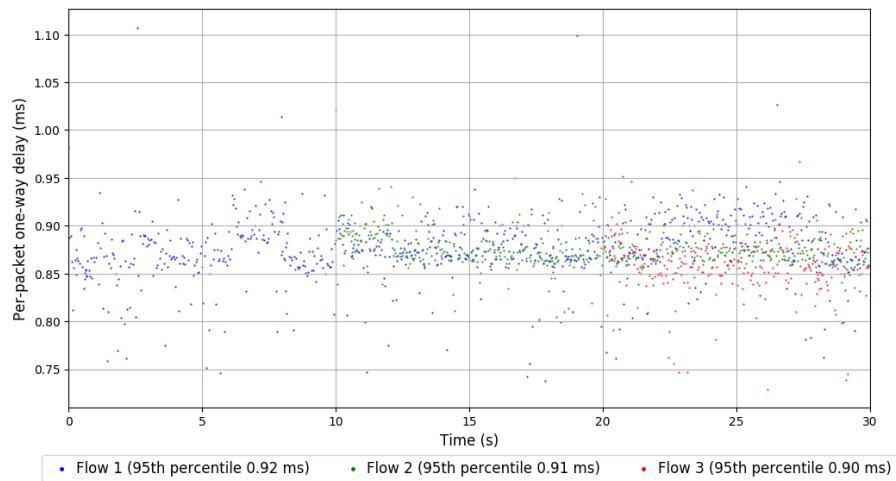
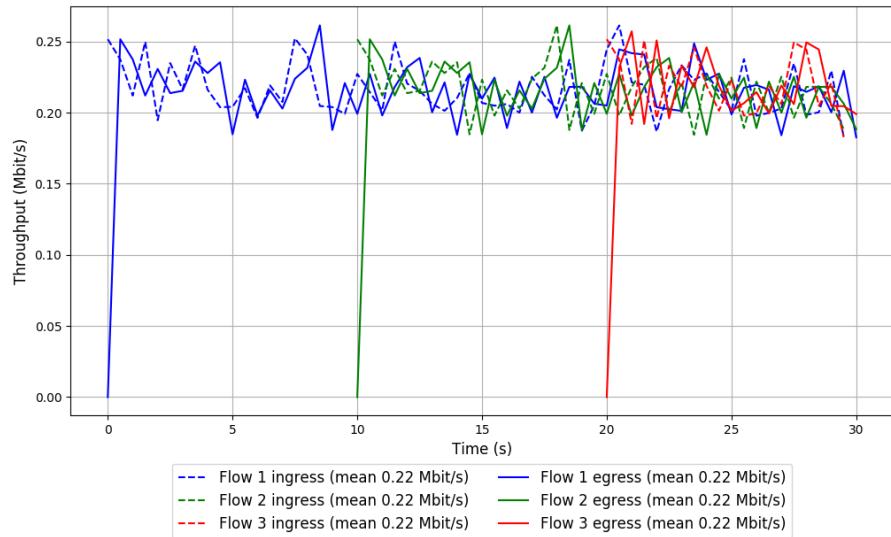


Run 2: Statistics of SCReAM

```
Start at: 2019-02-11 17:47:05
End at: 2019-02-11 17:47:35
Local clock offset: -0.843 ms
Remote clock offset: -0.295 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 0.917 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.922 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.908 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.896 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

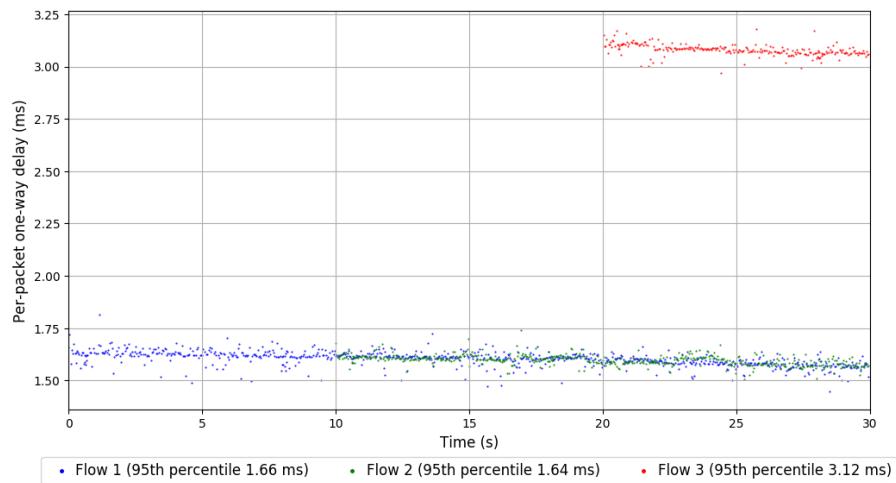
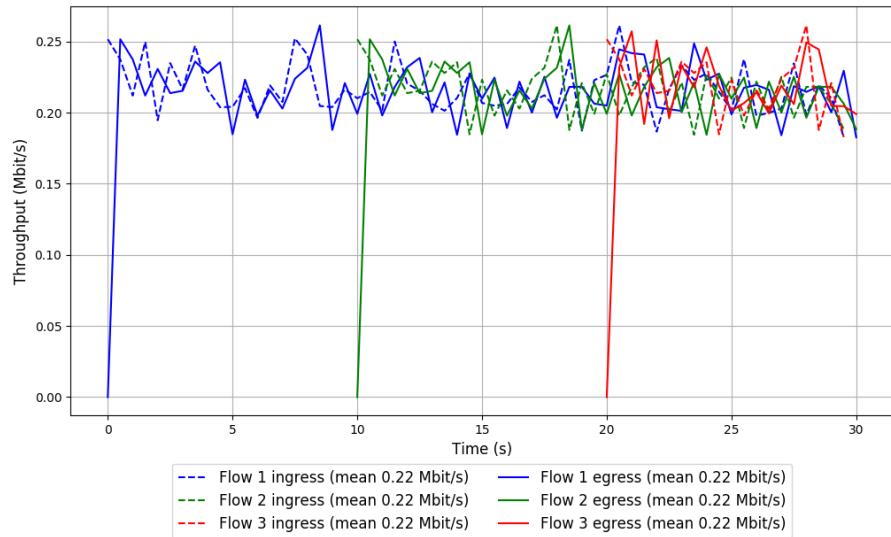


Run 3: Statistics of SCReAM

```
Start at: 2019-02-11 18:11:01
End at: 2019-02-11 18:11:31
Local clock offset: -2.748 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.090 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.655 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.638 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.120 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

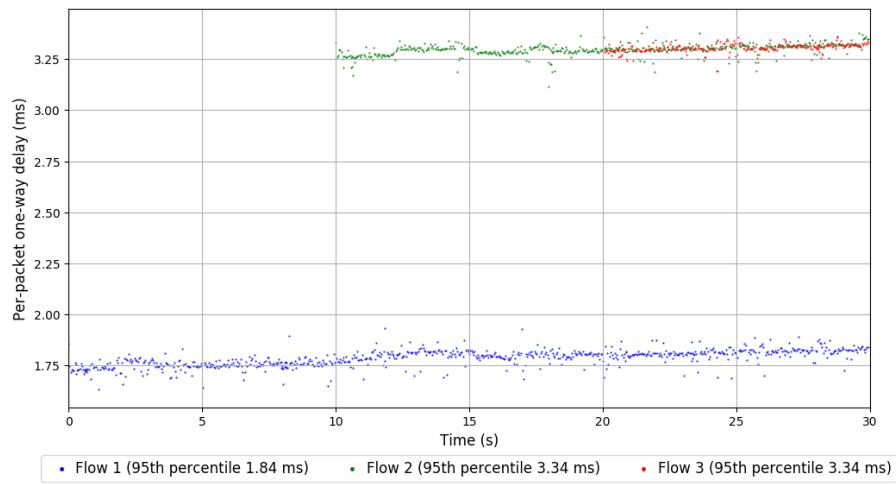
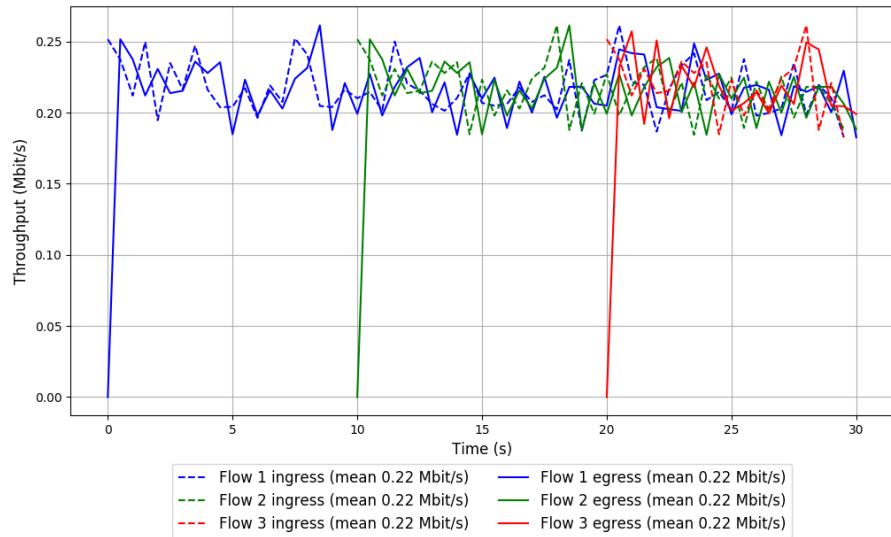


Run 4: Statistics of SCReAM

```
Start at: 2019-02-11 18:34:56
End at: 2019-02-11 18:35:27
Local clock offset: -3.767 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.841 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.340 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.338 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

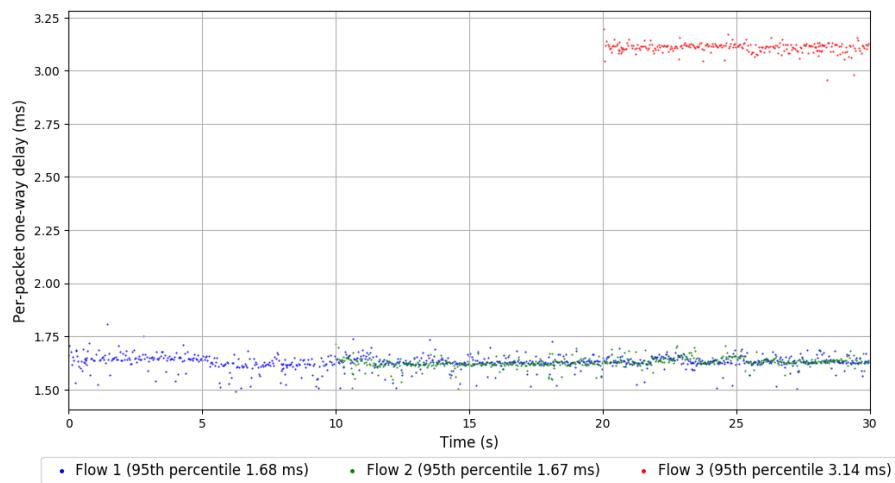
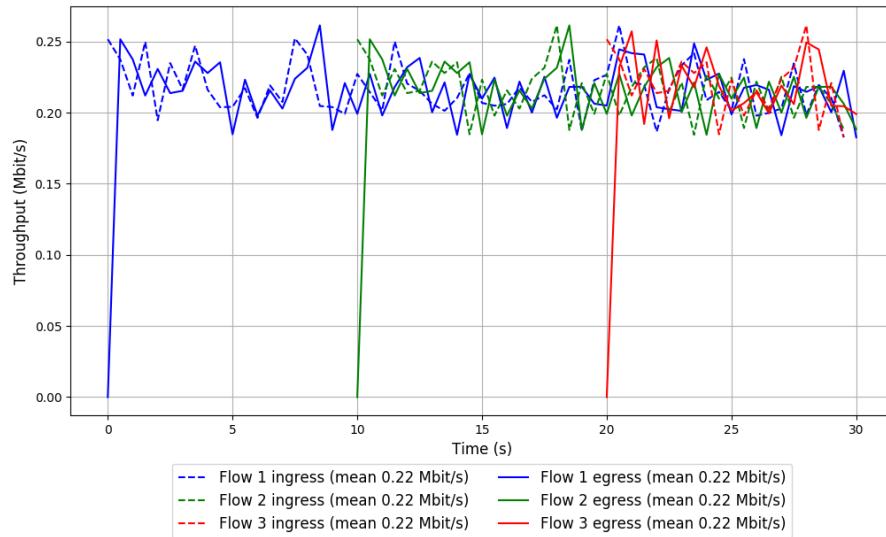


Run 5: Statistics of SCReAM

```
Start at: 2019-02-11 18:58:52
End at: 2019-02-11 18:59:22
Local clock offset: -1.793 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.119 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.677 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.668 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.137 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

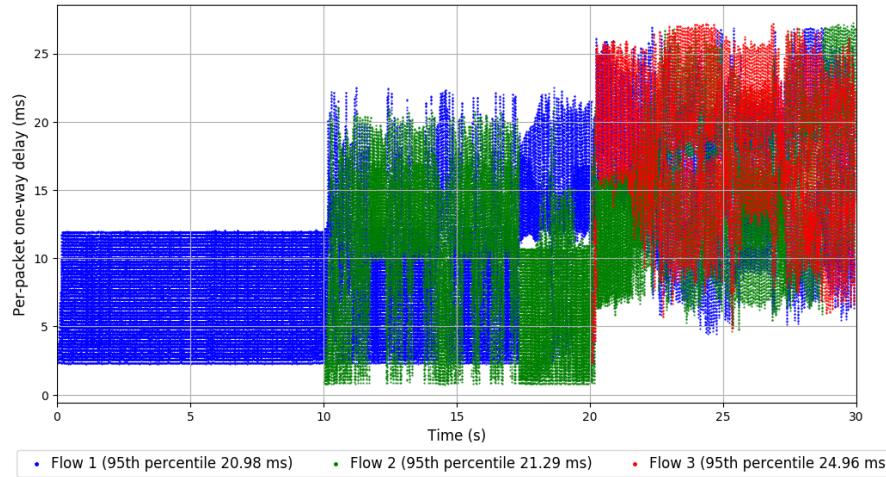
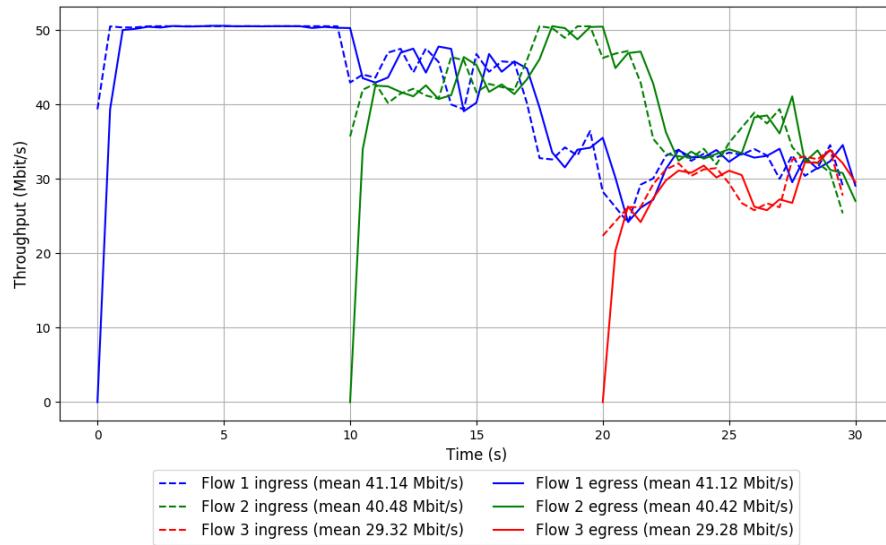


Run 1: Statistics of Sprout

```
Start at: 2019-02-11 17:25:25
End at: 2019-02-11 17:25:55
Local clock offset: -0.261 ms
Remote clock offset: -0.394 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.69 Mbit/s
95th percentile per-packet one-way delay: 22.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.12 Mbit/s
95th percentile per-packet one-way delay: 20.977 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.42 Mbit/s
95th percentile per-packet one-way delay: 21.294 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.28 Mbit/s
95th percentile per-packet one-way delay: 24.957 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

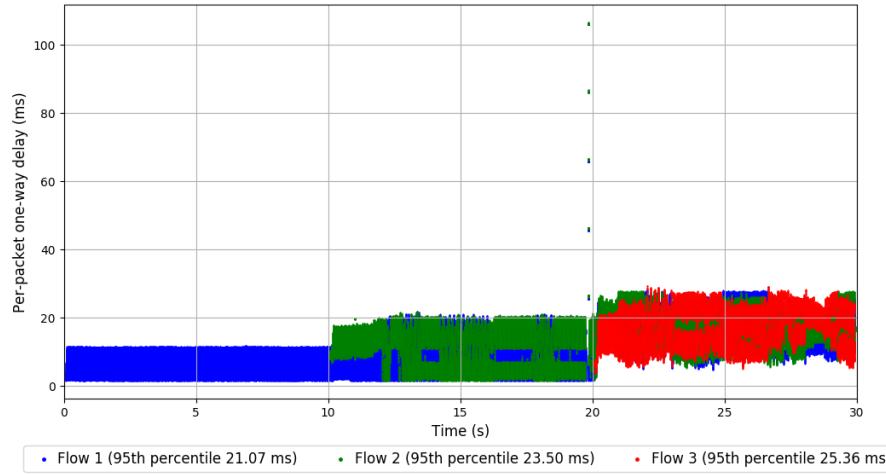
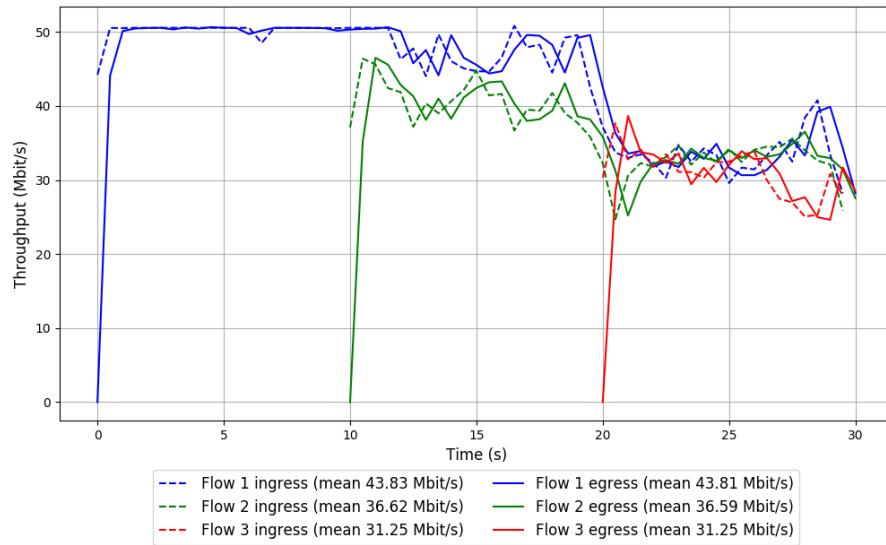


Run 2: Statistics of Sprout

```
Start at: 2019-02-11 17:49:21
End at: 2019-02-11 17:49:51
Local clock offset: -1.711 ms
Remote clock offset: -0.324 ms

# Below is generated by plot.py at 2019-02-11 19:27:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.47 Mbit/s
95th percentile per-packet one-way delay: 23.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.81 Mbit/s
95th percentile per-packet one-way delay: 21.065 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.59 Mbit/s
95th percentile per-packet one-way delay: 23.501 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.25 Mbit/s
95th percentile per-packet one-way delay: 25.363 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

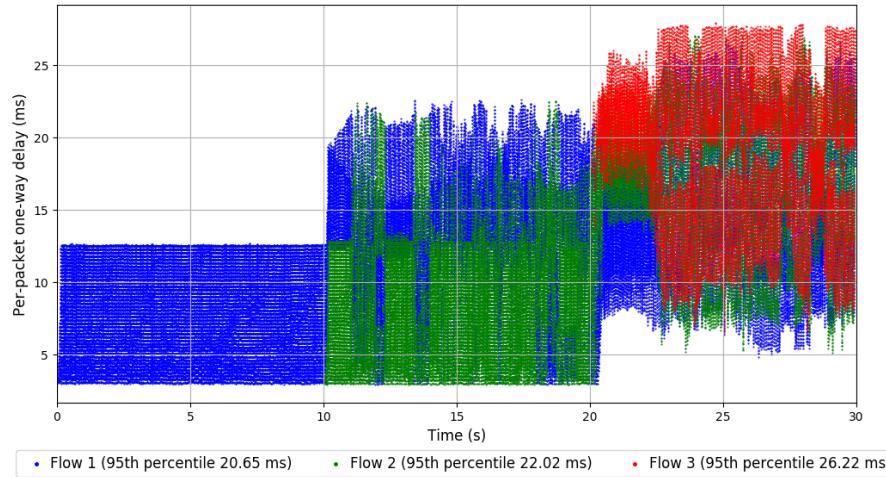
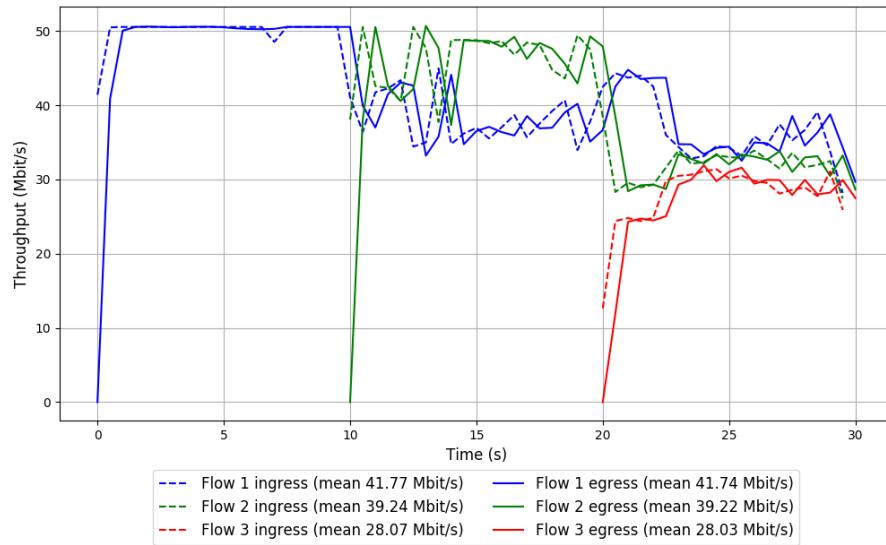


Run 3: Statistics of Sprout

```
Start at: 2019-02-11 18:13:17
End at: 2019-02-11 18:13:47
Local clock offset: -2.976 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-02-11 19:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.08 Mbit/s
95th percentile per-packet one-way delay: 22.791 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.74 Mbit/s
95th percentile per-packet one-way delay: 20.654 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.22 Mbit/s
95th percentile per-packet one-way delay: 22.018 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.03 Mbit/s
95th percentile per-packet one-way delay: 26.224 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

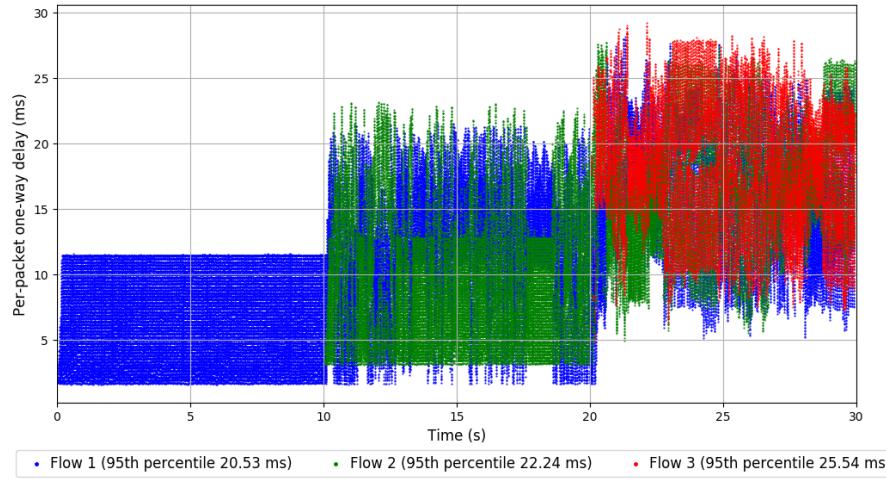
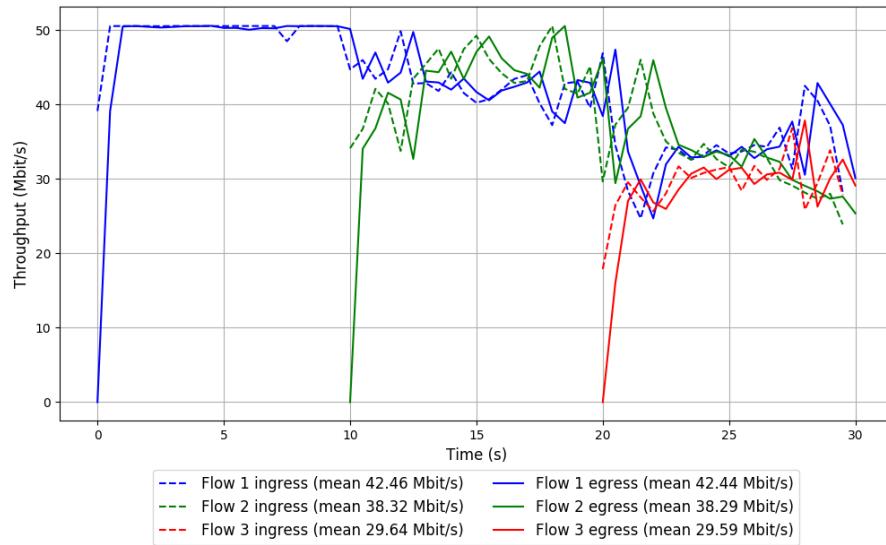


Run 4: Statistics of Sprout

```
Start at: 2019-02-11 18:37:12
End at: 2019-02-11 18:37:42
Local clock offset: -3.319 ms
Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2019-02-11 19:28:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.67 Mbit/s
95th percentile per-packet one-way delay: 22.530 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.44 Mbit/s
95th percentile per-packet one-way delay: 20.527 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.29 Mbit/s
95th percentile per-packet one-way delay: 22.241 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 25.540 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

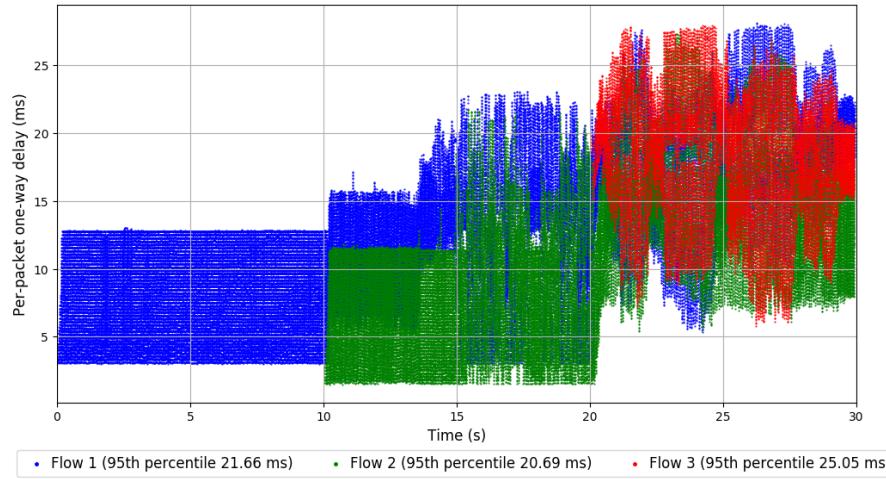
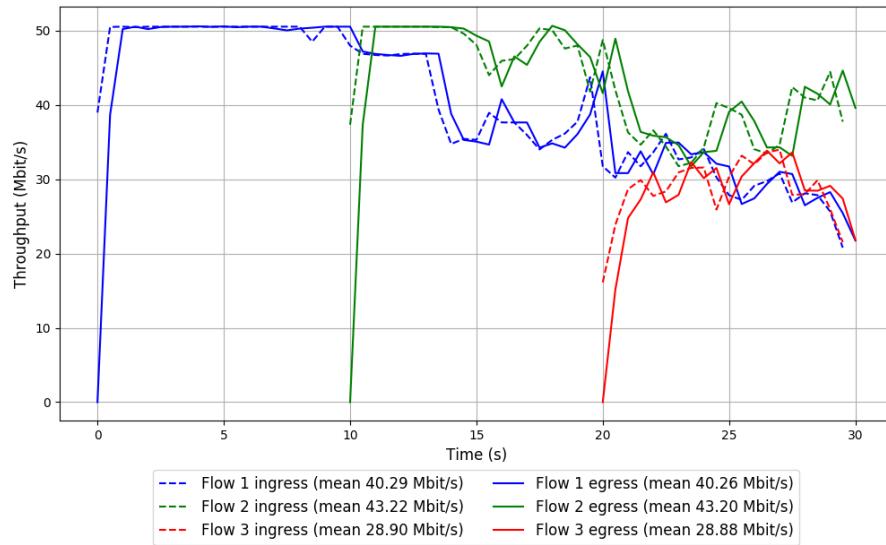


Run 5: Statistics of Sprout

```
Start at: 2019-02-11 19:01:08
End at: 2019-02-11 19:01:38
Local clock offset: -1.705 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2019-02-11 19:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.53 Mbit/s
95th percentile per-packet one-way delay: 22.372 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.26 Mbit/s
95th percentile per-packet one-way delay: 21.660 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.20 Mbit/s
95th percentile per-packet one-way delay: 20.692 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 25.055 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

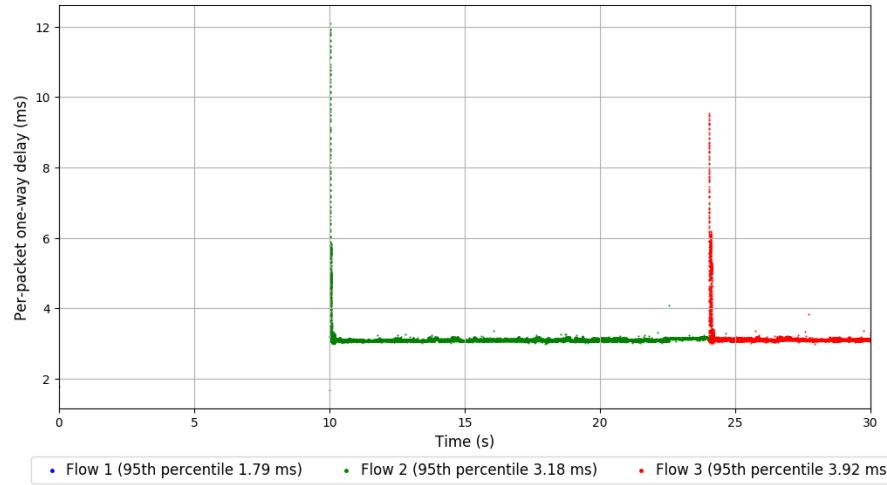
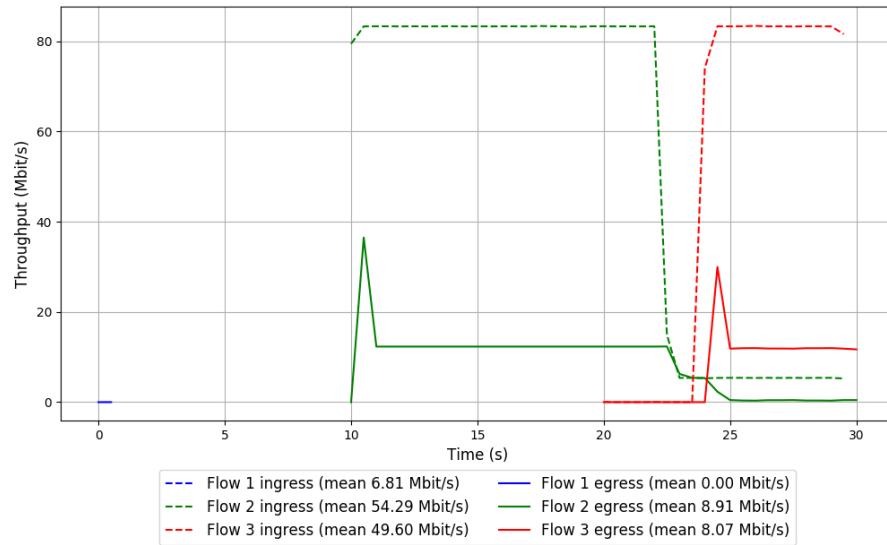


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-02-11 17:32:19
End at: 2019-02-11 17:32:49
Local clock offset: -0.776 ms
Remote clock offset: -0.406 ms

# Below is generated by plot.py at 2019-02-11 19:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 3.218 ms
Loss rate: 83.64%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.791 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 8.91 Mbit/s
95th percentile per-packet one-way delay: 3.181 ms
Loss rate: 83.59%
-- Flow 3:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 3.917 ms
Loss rate: 83.74%
```

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

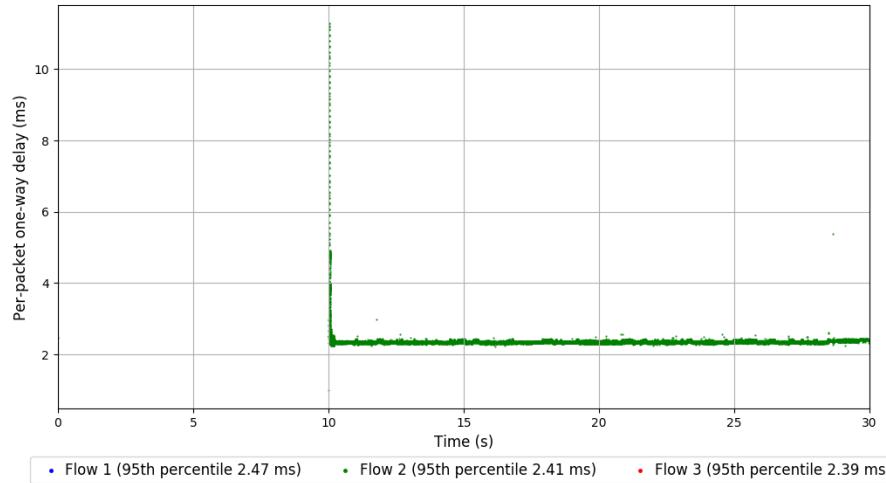
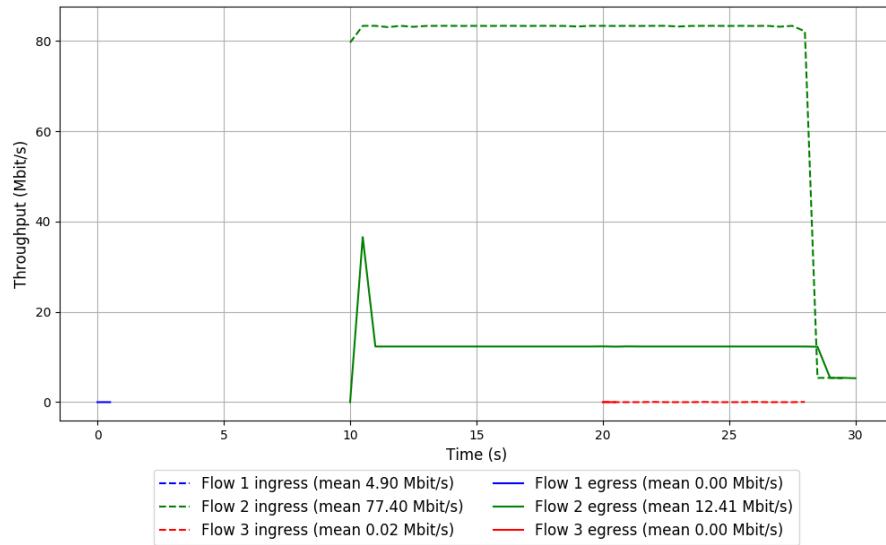


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-02-11 17:56:15
End at: 2019-02-11 17:56:45
Local clock offset: -0.843 ms
Remote clock offset: -0.199 ms

# Below is generated by plot.py at 2019-02-11 19:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 2.412 ms
Loss rate: 83.96%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.467 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 2.412 ms
Loss rate: 83.96%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.388 ms
Loss rate: 99.16%
```

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

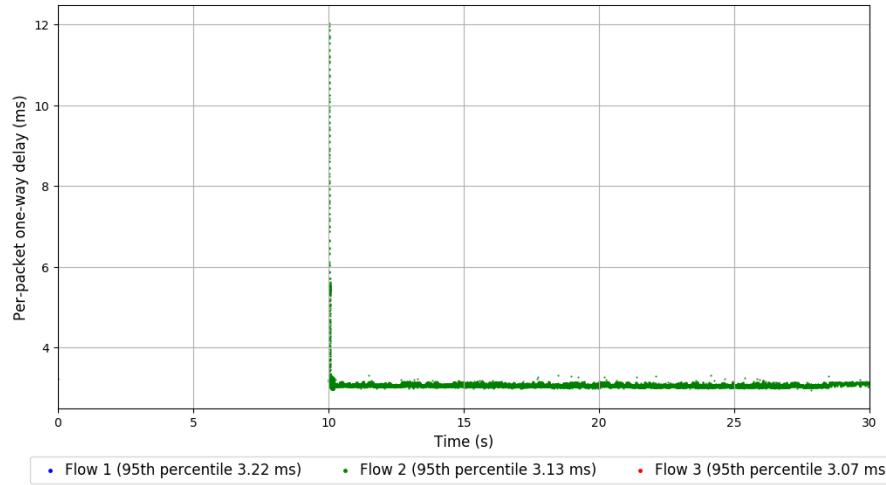
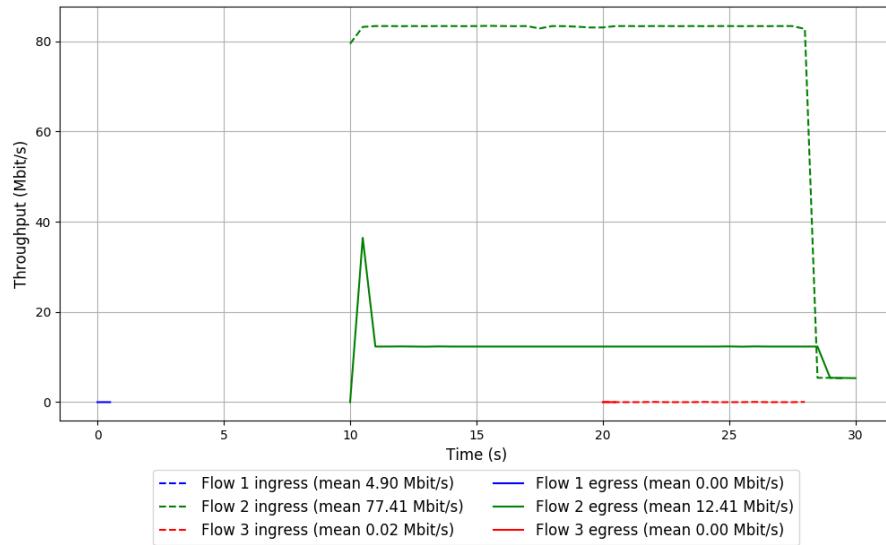


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-02-11 18:20:11
End at: 2019-02-11 18:20:41
Local clock offset: -3.479 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2019-02-11 19:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 3.134 ms
Loss rate: 83.96%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3.217 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 3.134 ms
Loss rate: 83.96%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 3.070 ms
Loss rate: 99.16%
```

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

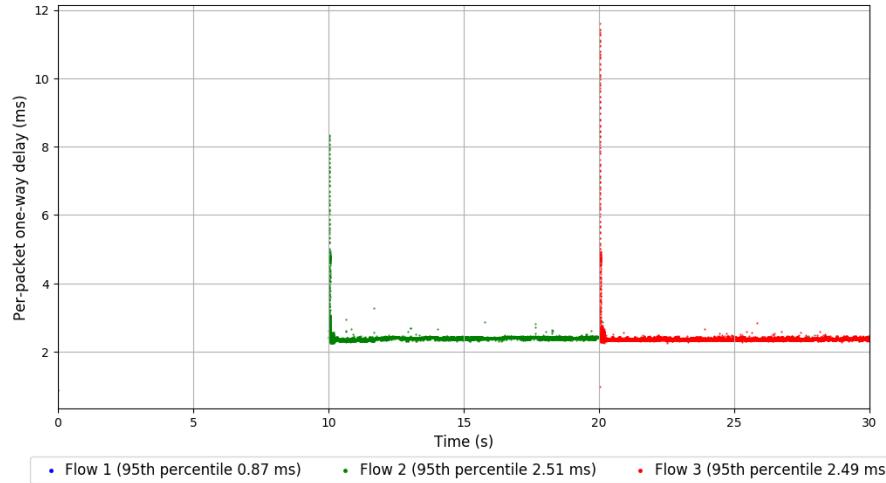
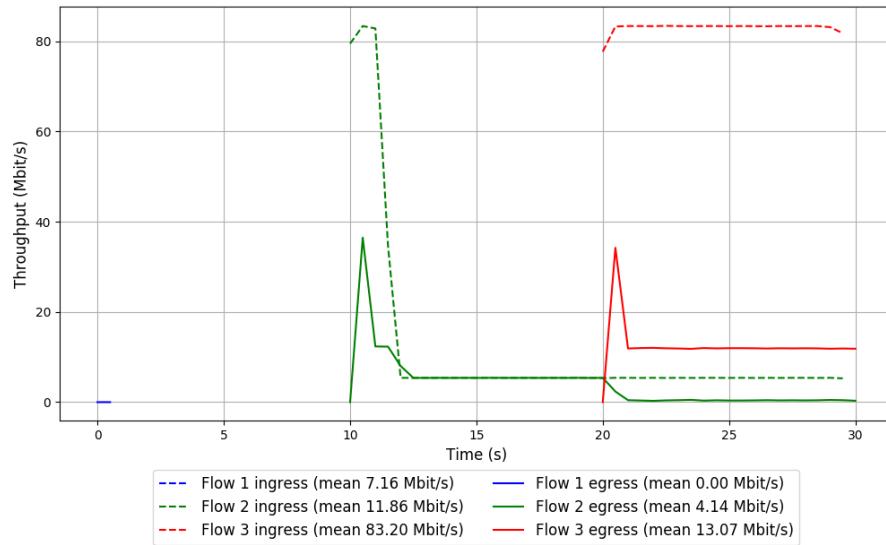


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-02-11 18:44:06
End at: 2019-02-11 18:44:36
Local clock offset: -1.743 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2019-02-11 19:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 2.495 ms
Loss rate: 80.04%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.874 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 2.507 ms
Loss rate: 65.16%
-- Flow 3:
Average throughput: 13.07 Mbit/s
95th percentile per-packet one-way delay: 2.489 ms
Loss rate: 84.29%
```

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

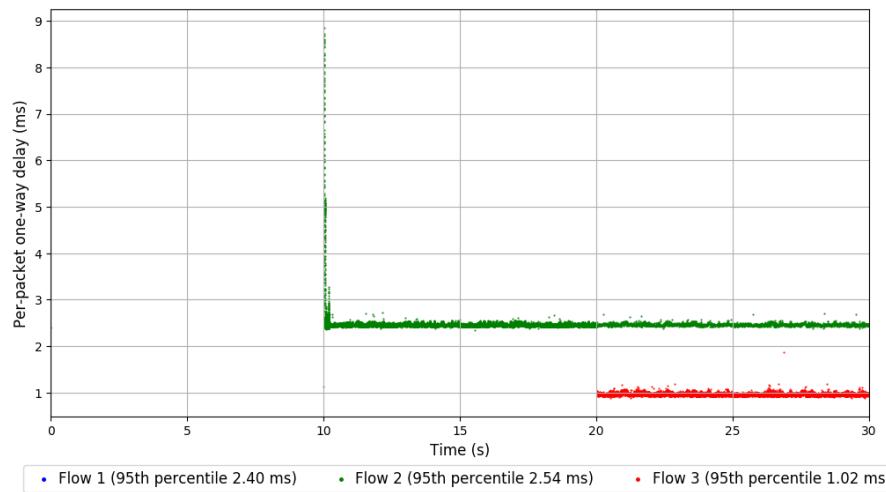
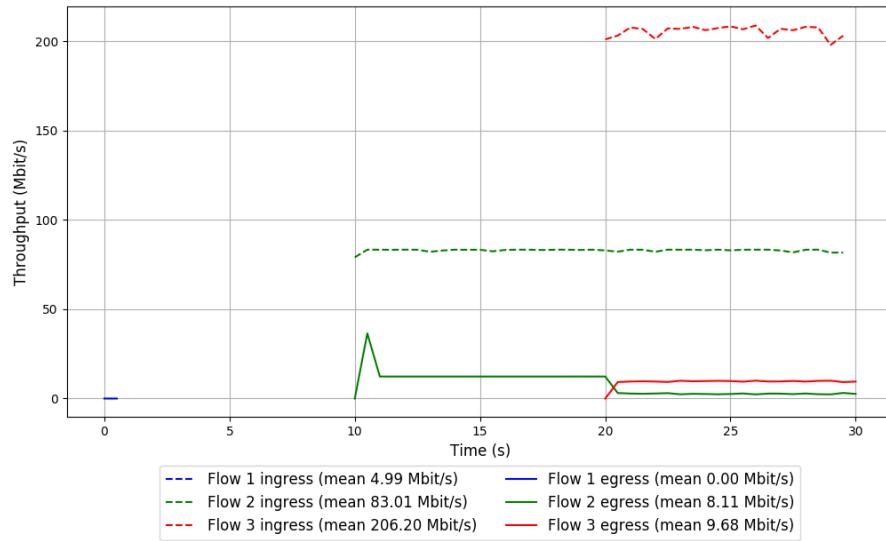


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-02-11 19:08:02
End at: 2019-02-11 19:08:32
Local clock offset: -1.152 ms
Remote clock offset: 0.234 ms

# Below is generated by plot.py at 2019-02-11 19:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 2.516 ms
Loss rate: 93.04%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.395 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 8.11 Mbit/s
95th percentile per-packet one-way delay: 2.535 ms
Loss rate: 90.23%
-- Flow 3:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: 1.024 ms
Loss rate: 95.31%
```

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

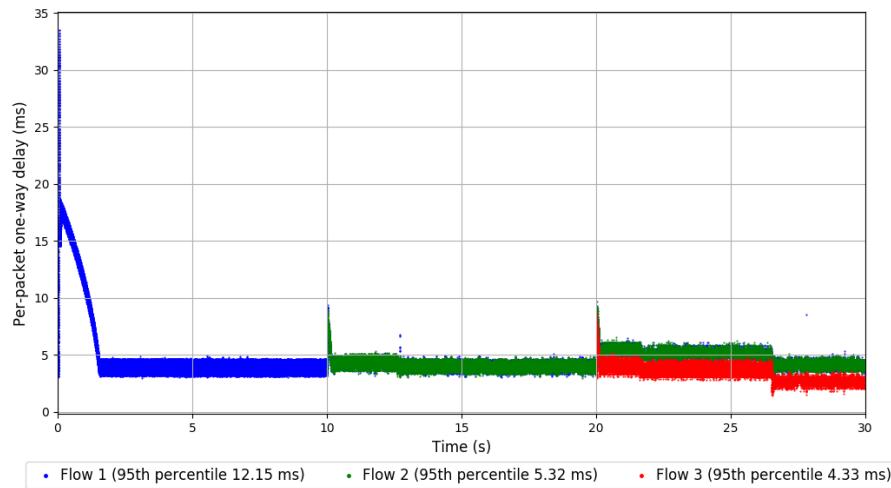
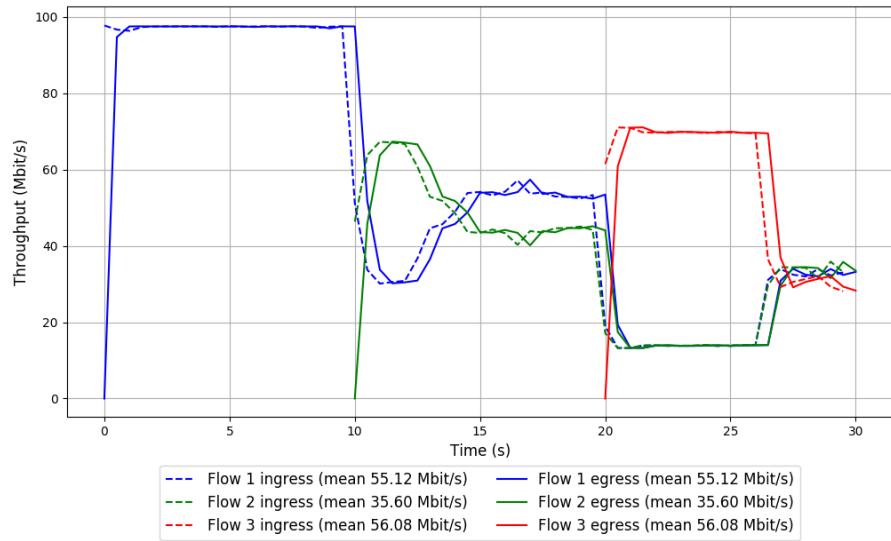


Run 1: Statistics of TCP Vegas

```
Start at: 2019-02-11 17:35:42
End at: 2019-02-11 17:36:12
Local clock offset: -0.898 ms
Remote clock offset: -0.363 ms

# Below is generated by plot.py at 2019-02-11 19:28:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 6.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.12 Mbit/s
95th percentile per-packet one-way delay: 12.150 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.60 Mbit/s
95th percentile per-packet one-way delay: 5.323 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.08 Mbit/s
95th percentile per-packet one-way delay: 4.331 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

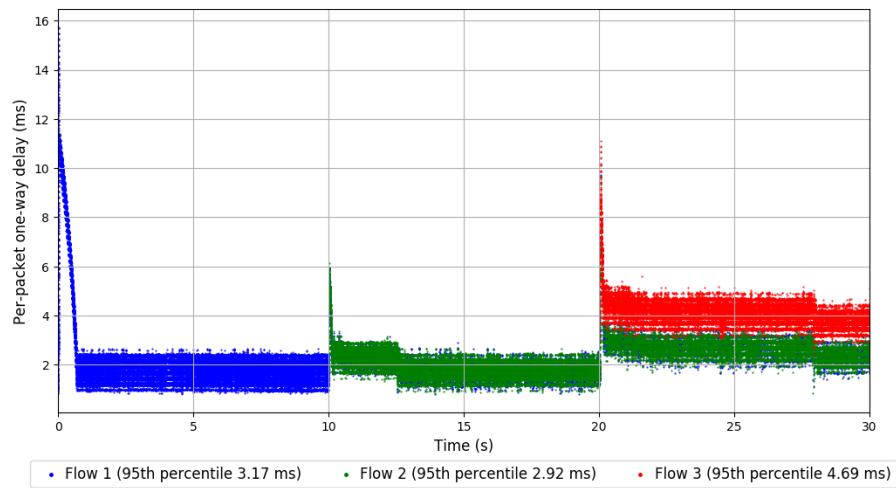
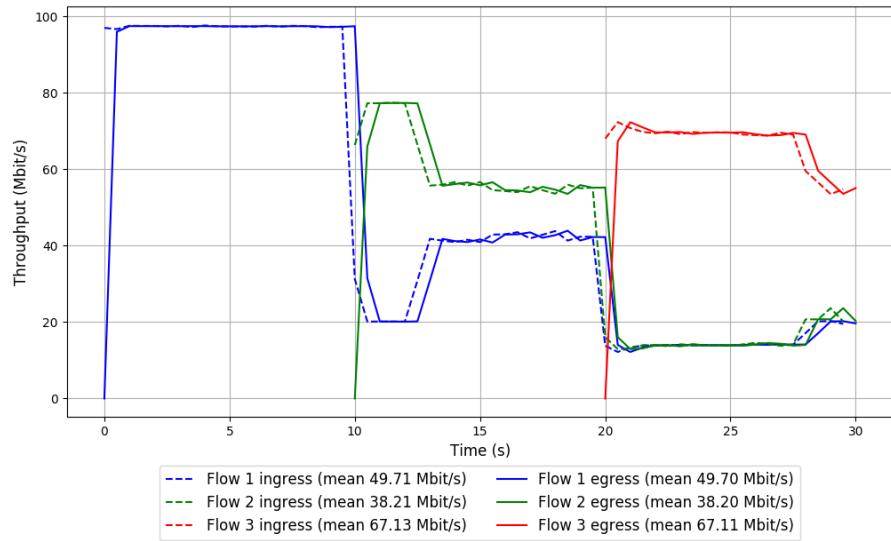


Run 2: Statistics of TCP Vegas

```
Start at: 2019-02-11 17:59:37
End at: 2019-02-11 18:00:07
Local clock offset: -0.789 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2019-02-11 19:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 4.477 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 3.169 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 2.920 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 67.11 Mbit/s
95th percentile per-packet one-way delay: 4.689 ms
Loss rate: 0.01%
```

Run 2: Report of TCP Vegas — Data Link

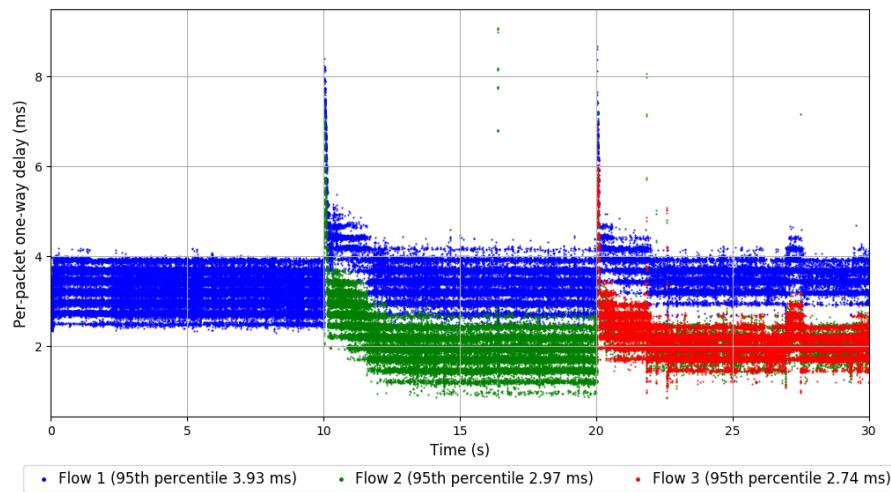
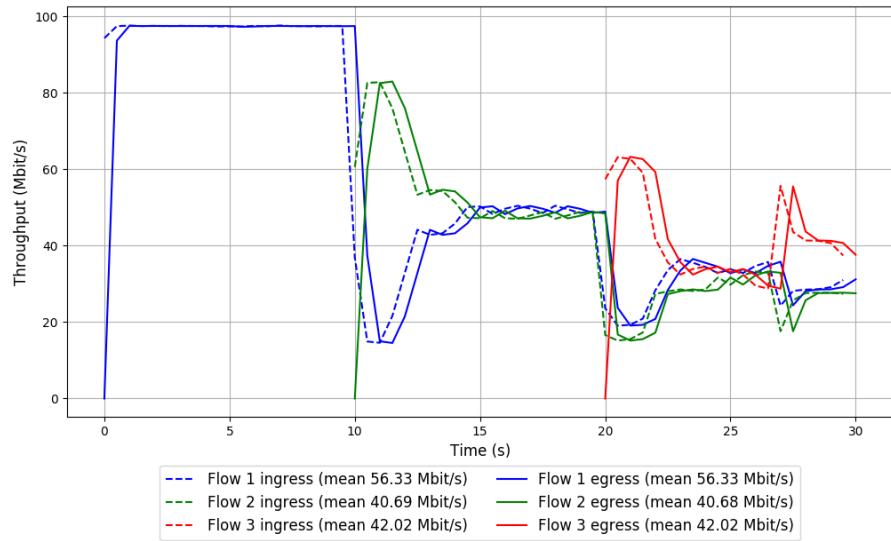


Run 3: Statistics of TCP Vegas

```
Start at: 2019-02-11 18:23:33
End at: 2019-02-11 18:24:03
Local clock offset: -2.868 ms
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2019-02-11 19:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 3.876 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.33 Mbit/s
95th percentile per-packet one-way delay: 3.926 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.68 Mbit/s
95th percentile per-packet one-way delay: 2.966 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.02 Mbit/s
95th percentile per-packet one-way delay: 2.736 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

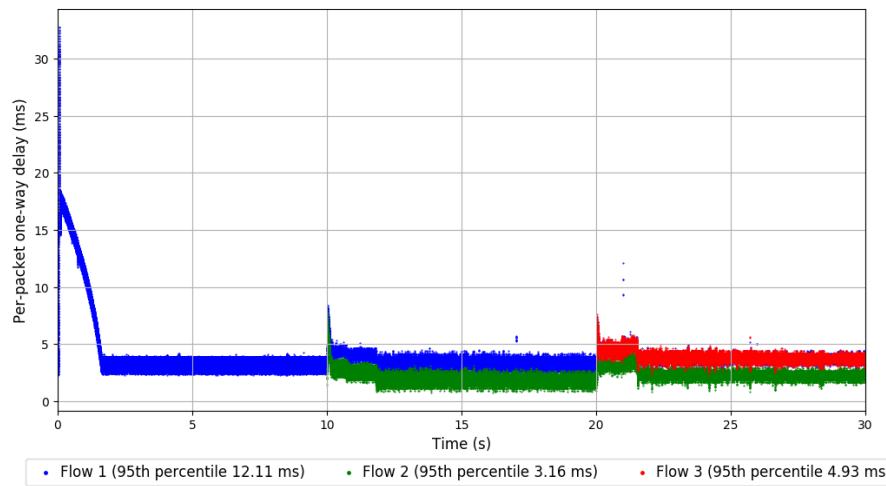
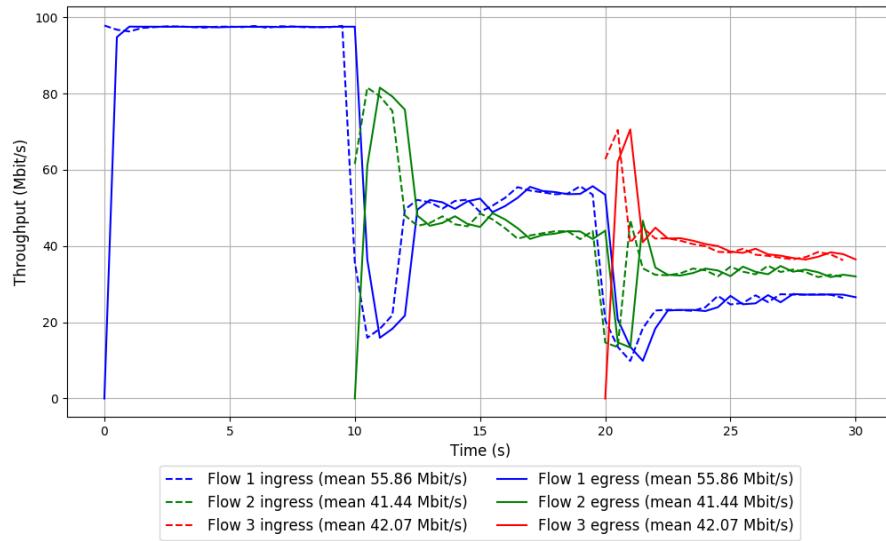


Run 4: Statistics of TCP Vegas

```
Start at: 2019-02-11 18:47:28
End at: 2019-02-11 18:47:58
Local clock offset: -1.563 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2019-02-11 19:28:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 5.973 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.86 Mbit/s
95th percentile per-packet one-way delay: 12.110 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.44 Mbit/s
95th percentile per-packet one-way delay: 3.164 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.07 Mbit/s
95th percentile per-packet one-way delay: 4.926 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Vegas — Data Link

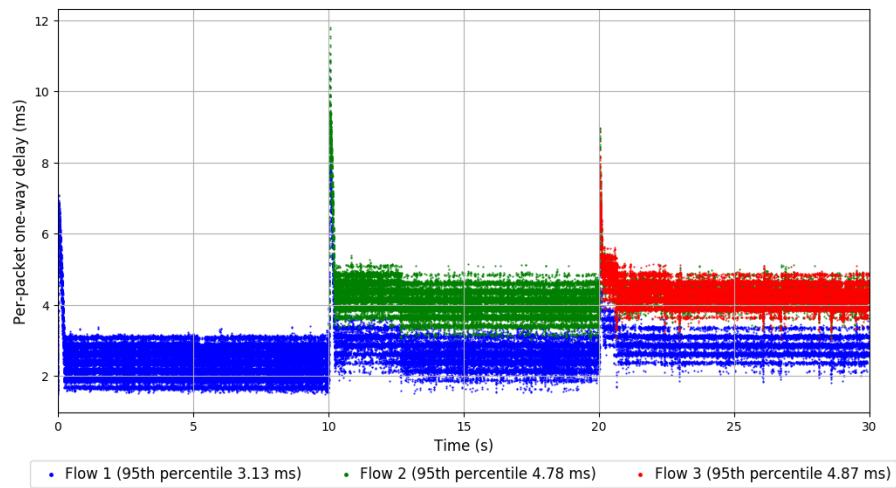
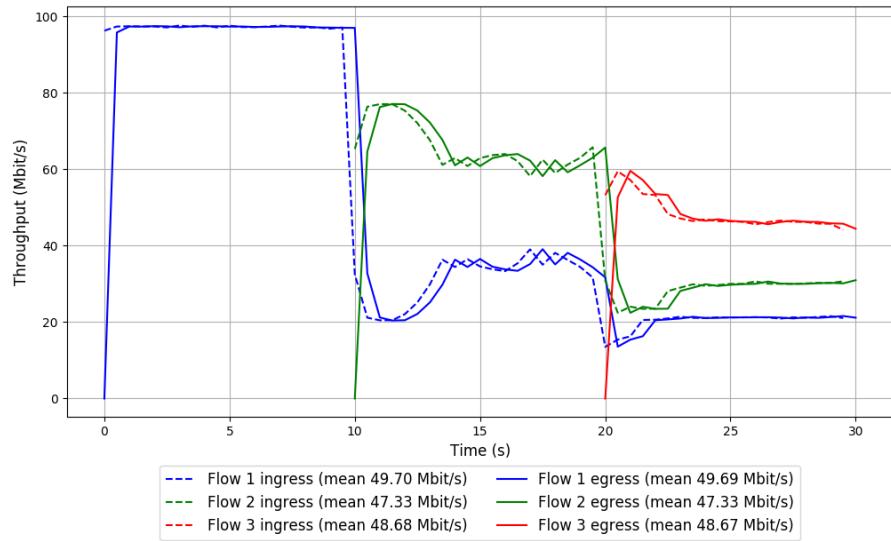


Run 5: Statistics of TCP Vegas

```
Start at: 2019-02-11 19:11:25
End at: 2019-02-11 19:11:55
Local clock offset: -1.947 ms
Remote clock offset: 0.131 ms

# Below is generated by plot.py at 2019-02-11 19:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 4.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.69 Mbit/s
95th percentile per-packet one-way delay: 3.127 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.33 Mbit/s
95th percentile per-packet one-way delay: 4.780 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.67 Mbit/s
95th percentile per-packet one-way delay: 4.869 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

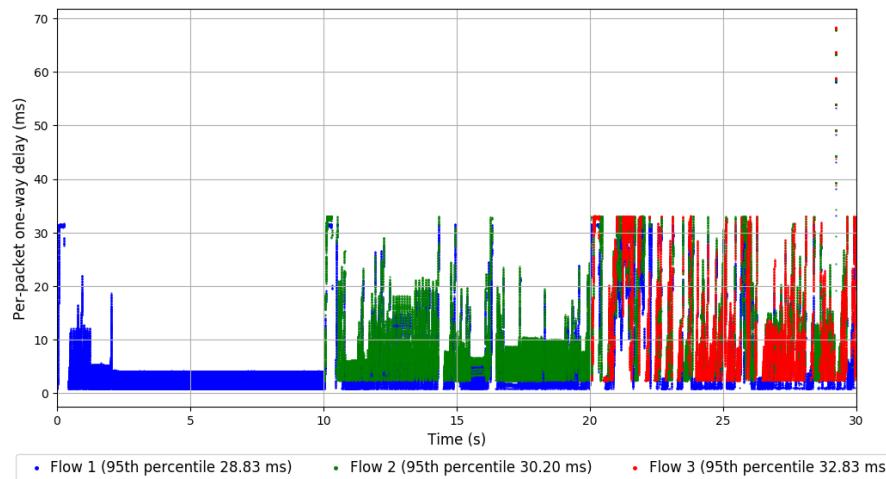
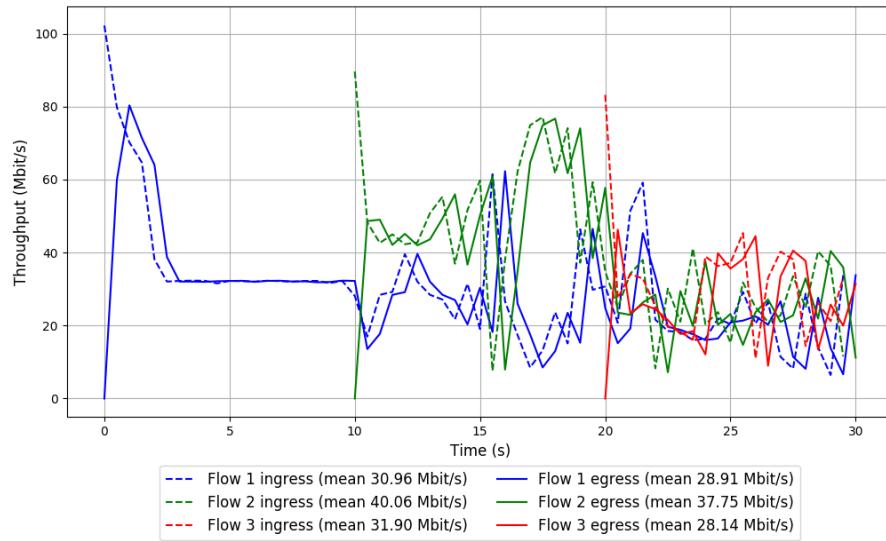


Run 1: Statistics of Verus

```
Start at: 2019-02-11 17:18:41
End at: 2019-02-11 17:19:11
Local clock offset: -0.587 ms
Remote clock offset: -0.422 ms

# Below is generated by plot.py at 2019-02-11 19:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.33 Mbit/s
95th percentile per-packet one-way delay: 30.593 ms
Loss rate: 7.01%
-- Flow 1:
Average throughput: 28.91 Mbit/s
95th percentile per-packet one-way delay: 28.828 ms
Loss rate: 6.55%
-- Flow 2:
Average throughput: 37.75 Mbit/s
95th percentile per-packet one-way delay: 30.201 ms
Loss rate: 5.73%
-- Flow 3:
Average throughput: 28.14 Mbit/s
95th percentile per-packet one-way delay: 32.832 ms
Loss rate: 11.59%
```

Run 1: Report of Verus — Data Link

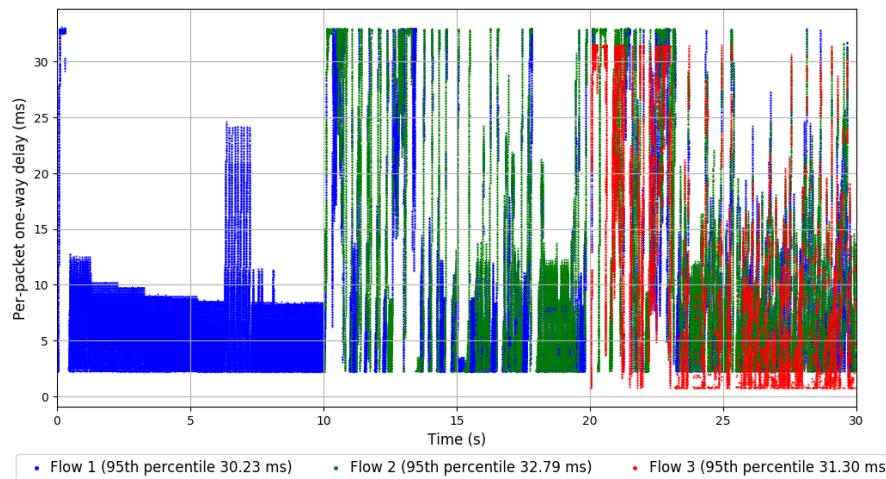
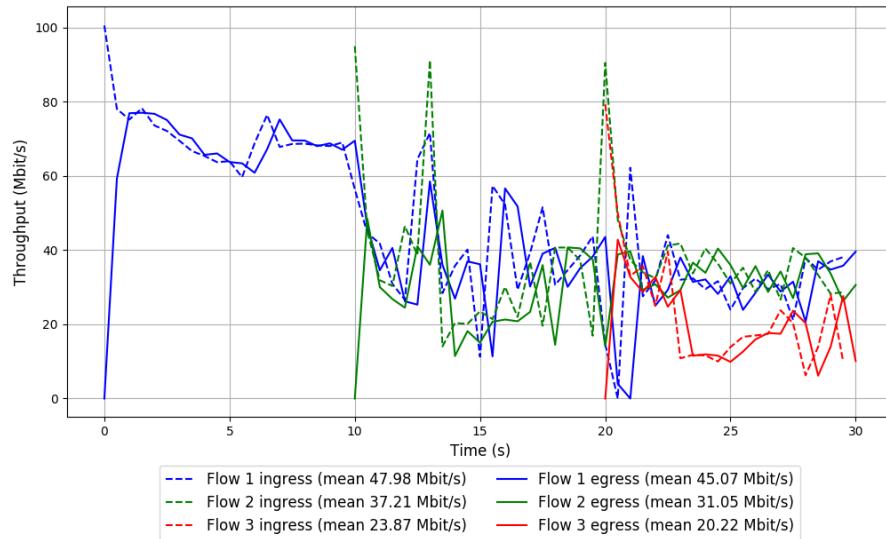


Run 2: Statistics of Verus

```
Start at: 2019-02-11 17:42:36
End at: 2019-02-11 17:43:06
Local clock offset: -0.719 ms
Remote clock offset: -0.299 ms

# Below is generated by plot.py at 2019-02-11 19:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.45 Mbit/s
95th percentile per-packet one-way delay: 32.114 ms
Loss rate: 10.19%
-- Flow 1:
Average throughput: 45.07 Mbit/s
95th percentile per-packet one-way delay: 30.234 ms
Loss rate: 6.06%
-- Flow 2:
Average throughput: 31.05 Mbit/s
95th percentile per-packet one-way delay: 32.794 ms
Loss rate: 16.55%
-- Flow 3:
Average throughput: 20.22 Mbit/s
95th percentile per-packet one-way delay: 31.298 ms
Loss rate: 15.29%
```

Run 2: Report of Verus — Data Link

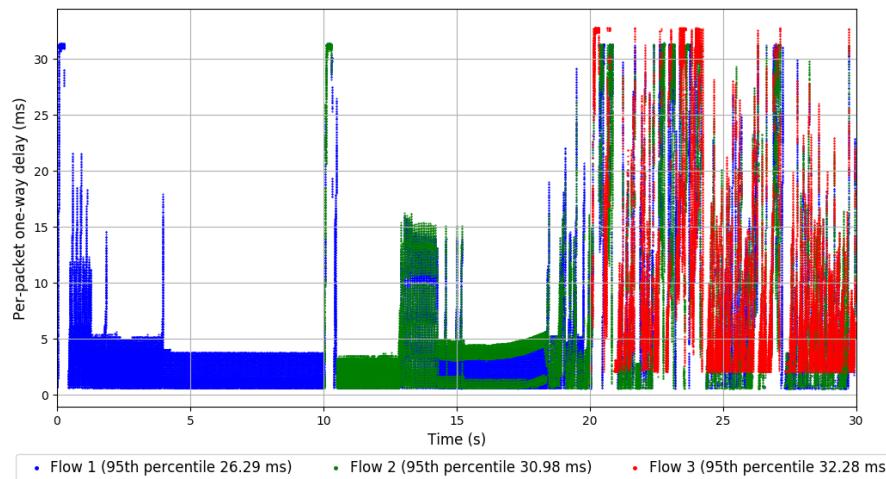
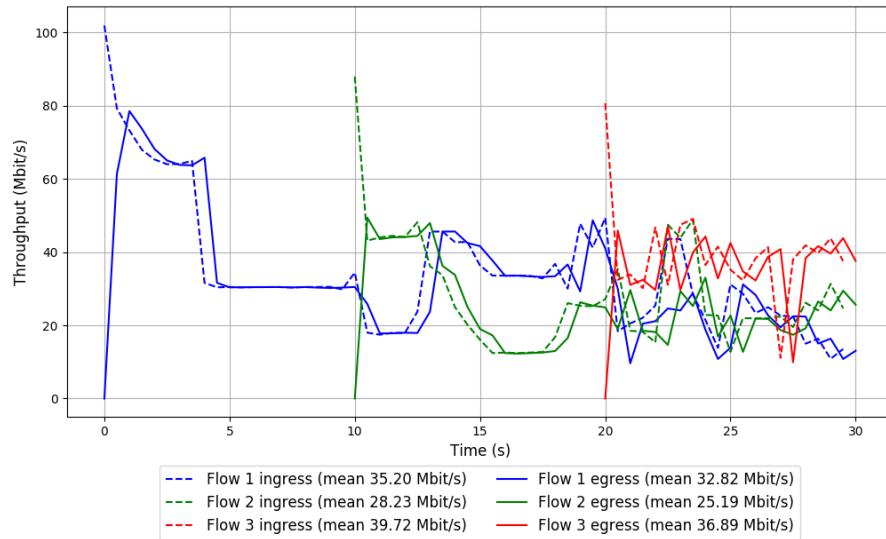


Run 3: Statistics of Verus

```
Start at: 2019-02-11 18:06:32
End at: 2019-02-11 18:07:02
Local clock offset: -1.256 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2019-02-11 19:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.81 Mbit/s
95th percentile per-packet one-way delay: 30.081 ms
Loss rate: 7.90%
-- Flow 1:
Average throughput: 32.82 Mbit/s
95th percentile per-packet one-way delay: 26.288 ms
Loss rate: 6.68%
-- Flow 2:
Average throughput: 25.19 Mbit/s
95th percentile per-packet one-way delay: 30.985 ms
Loss rate: 10.74%
-- Flow 3:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 32.285 ms
Loss rate: 7.11%
```

Run 3: Report of Verus — Data Link

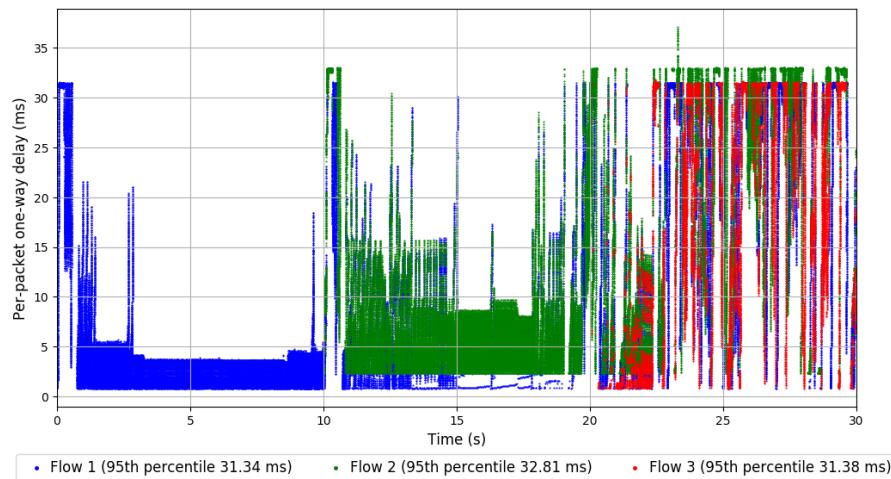
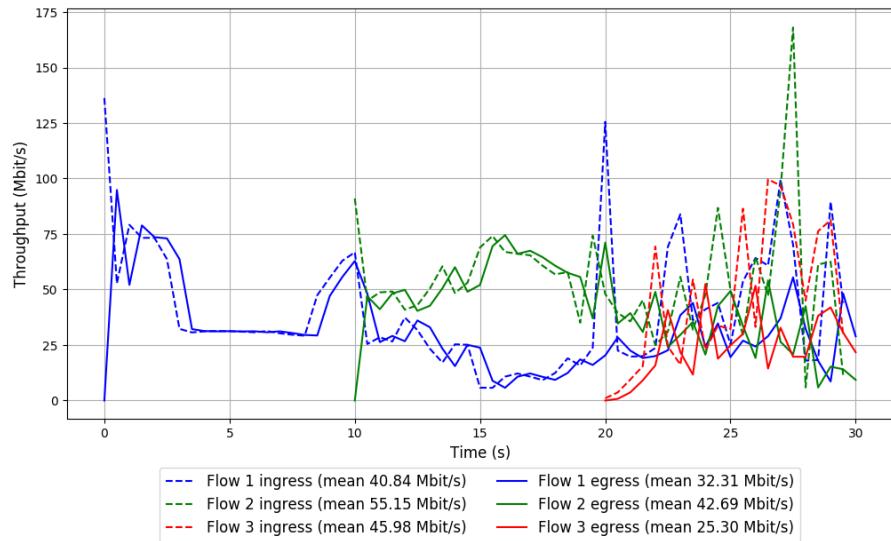


Run 4: Statistics of Verus

```
Start at: 2019-02-11 18:30:28
End at: 2019-02-11 18:30:58
Local clock offset: -3.053 ms
Remote clock offset: 0.139 ms

# Below is generated by plot.py at 2019-02-11 19:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.06 Mbit/s
95th percentile per-packet one-way delay: 31.400 ms
Loss rate: 25.48%
-- Flow 1:
Average throughput: 32.31 Mbit/s
95th percentile per-packet one-way delay: 31.344 ms
Loss rate: 20.83%
-- Flow 2:
Average throughput: 42.69 Mbit/s
95th percentile per-packet one-way delay: 32.811 ms
Loss rate: 22.56%
-- Flow 3:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 31.382 ms
Loss rate: 45.02%
```

Run 4: Report of Verus — Data Link

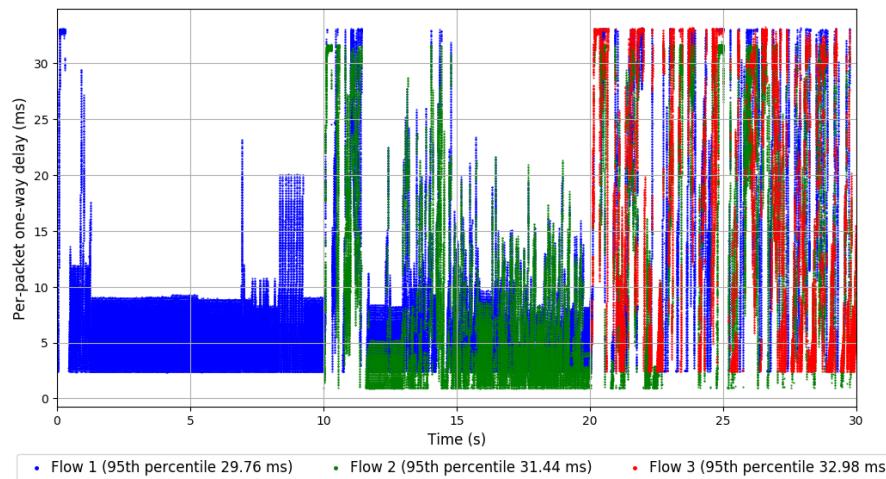
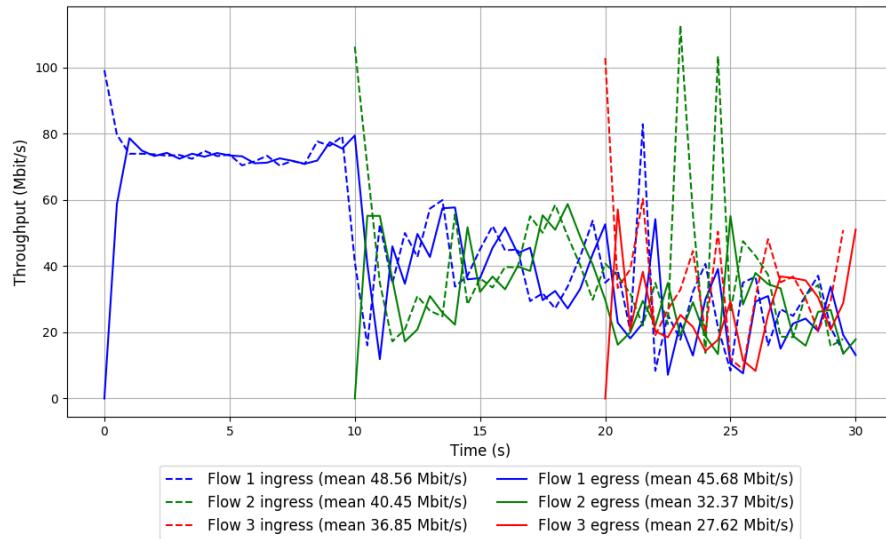


Run 5: Statistics of Verus

```
Start at: 2019-02-11 18:54:22
End at: 2019-02-11 18:54:52
Local clock offset: -1.238 ms
Remote clock offset: 0.21 ms

# Below is generated by plot.py at 2019-02-11 19:29:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.39 Mbit/s
95th percentile per-packet one-way delay: 31.490 ms
Loss rate: 12.87%
-- Flow 1:
Average throughput: 45.68 Mbit/s
95th percentile per-packet one-way delay: 29.756 ms
Loss rate: 5.92%
-- Flow 2:
Average throughput: 32.37 Mbit/s
95th percentile per-packet one-way delay: 31.442 ms
Loss rate: 19.92%
-- Flow 3:
Average throughput: 27.62 Mbit/s
95th percentile per-packet one-way delay: 32.979 ms
Loss rate: 24.99%
```

Run 5: Report of Verus — Data Link

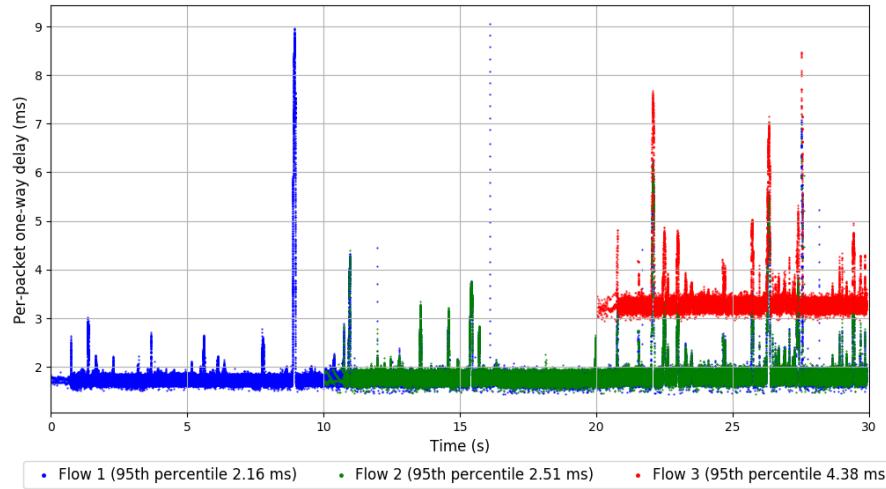
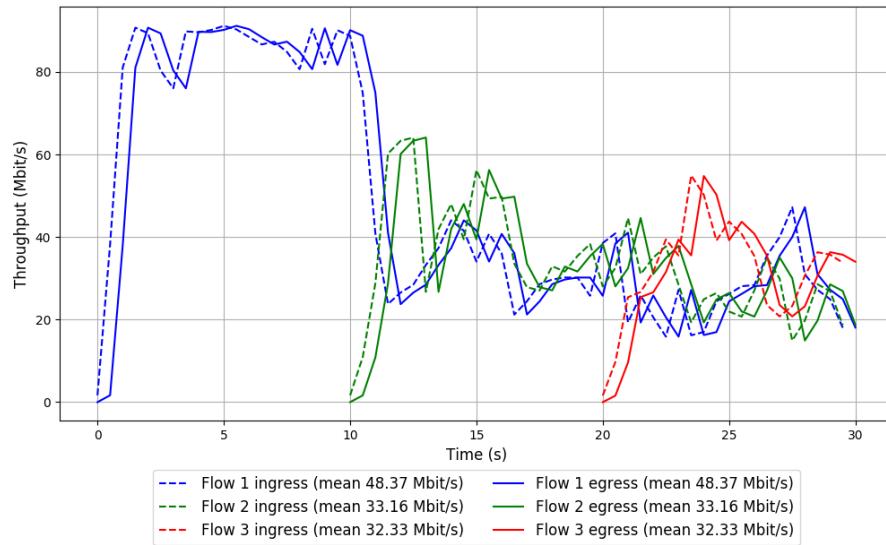


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-02-11 17:24:15
End at: 2019-02-11 17:24:45
Local clock offset: -1.147 ms
Remote clock offset: -0.409 ms

# Below is generated by plot.py at 2019-02-11 19:29:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.10 Mbit/s
95th percentile per-packet one-way delay: 3.358 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.37 Mbit/s
95th percentile per-packet one-way delay: 2.156 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.16 Mbit/s
95th percentile per-packet one-way delay: 2.508 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 4.376 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

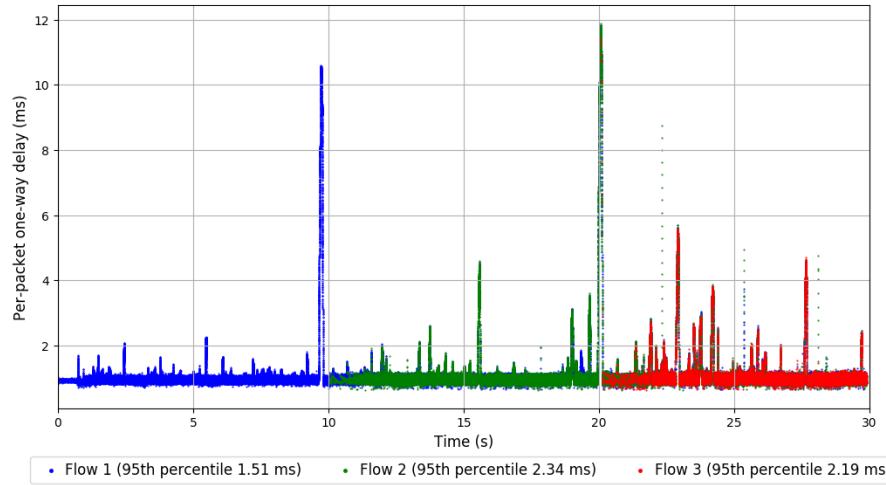
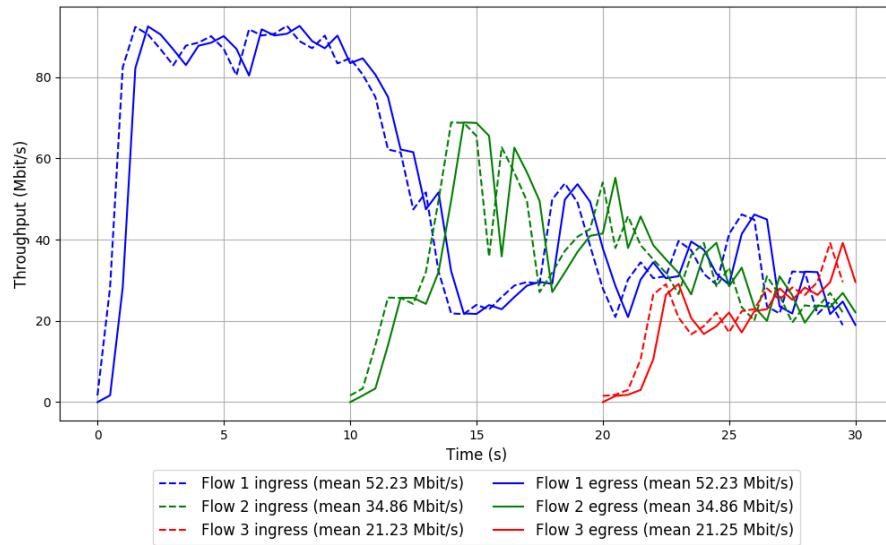


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-02-11 17:48:11
End at: 2019-02-11 17:48:41
Local clock offset: -0.855 ms
Remote clock offset: -0.196 ms

# Below is generated by plot.py at 2019-02-11 19:29:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.42 Mbit/s
95th percentile per-packet one-way delay: 1.787 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.23 Mbit/s
95th percentile per-packet one-way delay: 1.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.86 Mbit/s
95th percentile per-packet one-way delay: 2.344 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.25 Mbit/s
95th percentile per-packet one-way delay: 2.190 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

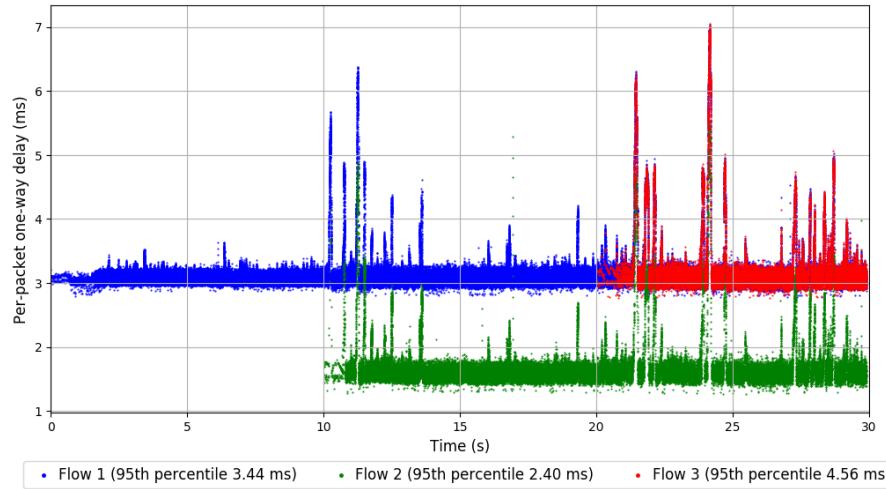
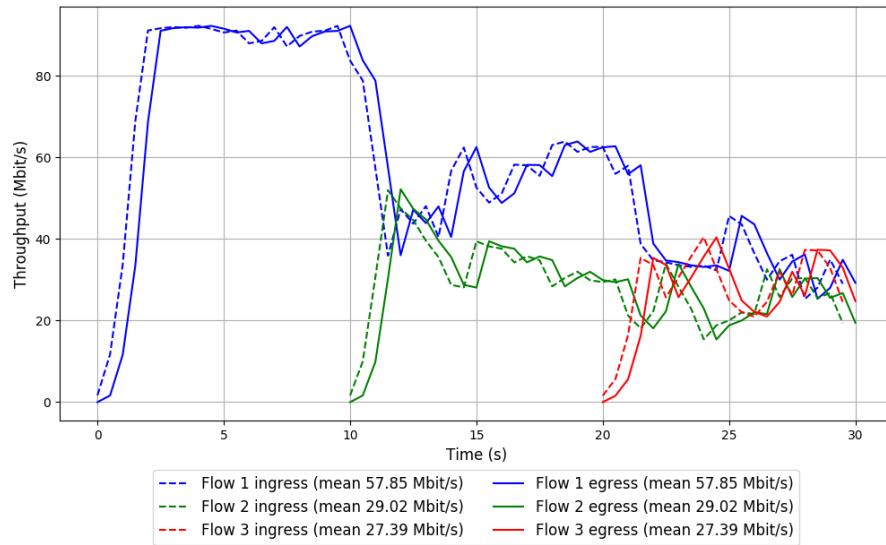


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-02-11 18:12:07
End at: 2019-02-11 18:12:37
Local clock offset: -2.856 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2019-02-11 19:29:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.20 Mbit/s
95th percentile per-packet one-way delay: 3.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.85 Mbit/s
95th percentile per-packet one-way delay: 3.444 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.02 Mbit/s
95th percentile per-packet one-way delay: 2.397 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.39 Mbit/s
95th percentile per-packet one-way delay: 4.563 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

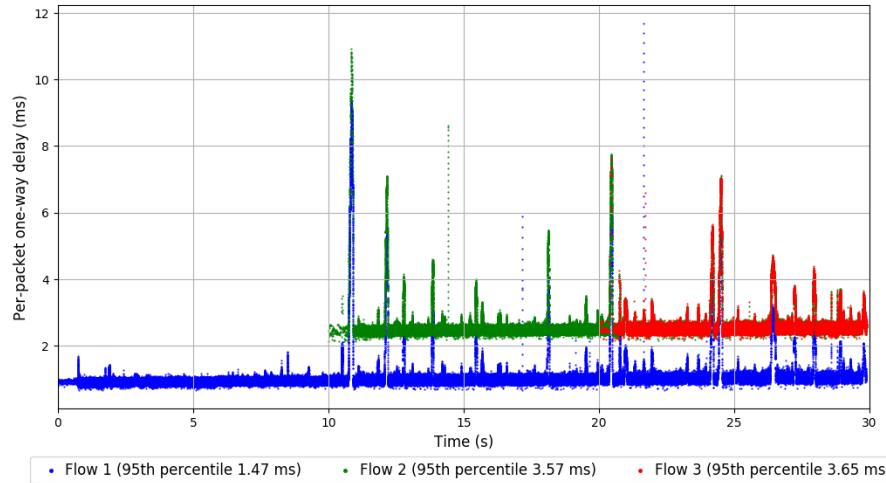
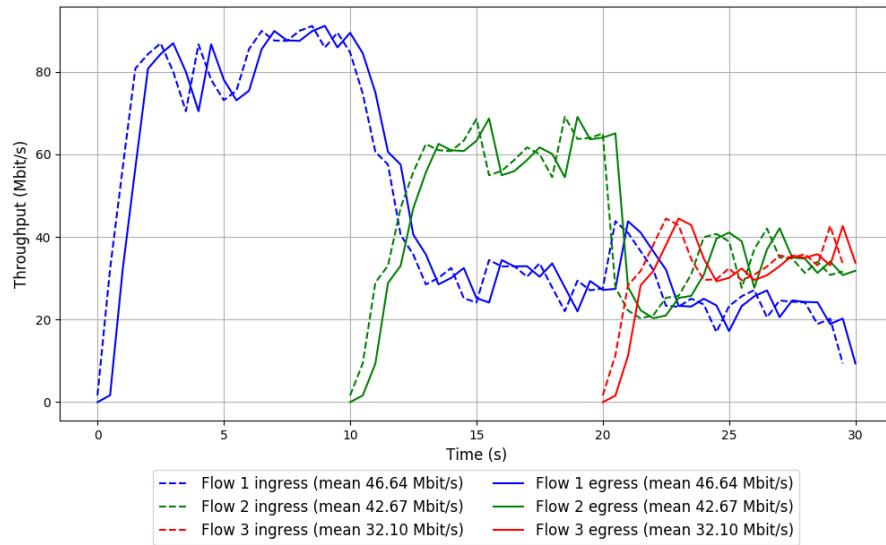


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-02-11 18:36:02
End at: 2019-02-11 18:36:32
Local clock offset: -2.771 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-02-11 19:29:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.61 Mbit/s
95th percentile per-packet one-way delay: 2.988 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.64 Mbit/s
95th percentile per-packet one-way delay: 1.467 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.67 Mbit/s
95th percentile per-packet one-way delay: 3.568 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.10 Mbit/s
95th percentile per-packet one-way delay: 3.647 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

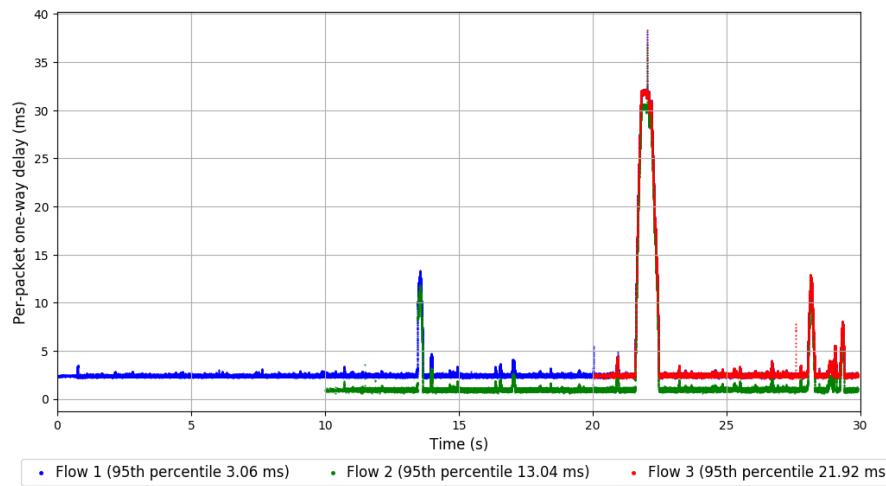
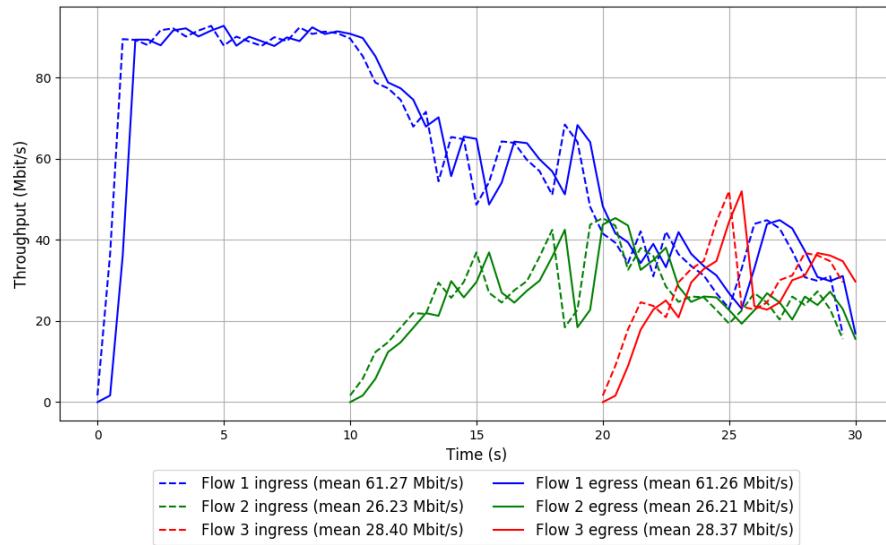


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-02-11 18:59:58
End at: 2019-02-11 19:00:28
Local clock offset: -0.998 ms
Remote clock offset: 0.146 ms

# Below is generated by plot.py at 2019-02-11 19:29:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.06 Mbit/s
95th percentile per-packet one-way delay: 5.340 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.26 Mbit/s
95th percentile per-packet one-way delay: 3.055 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 26.21 Mbit/s
95th percentile per-packet one-way delay: 13.044 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 21.919 ms
Loss rate: 0.09%
```

Run 5: Report of PCC-Vivace — Data Link

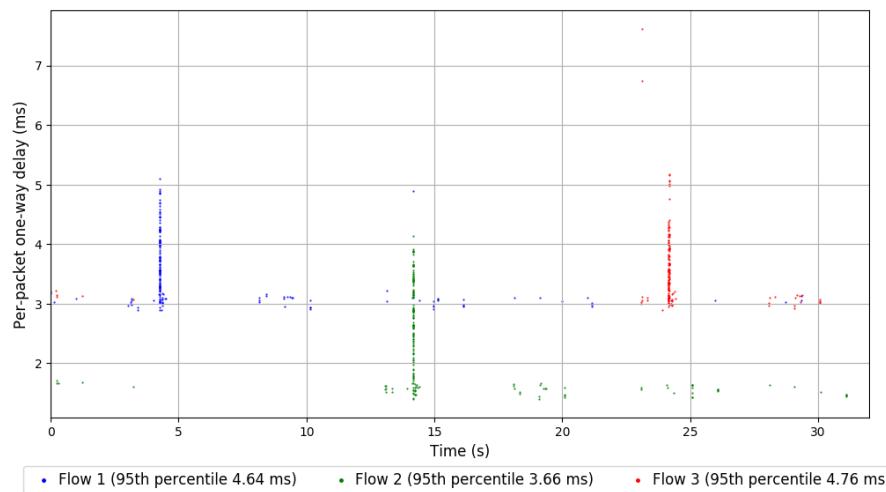
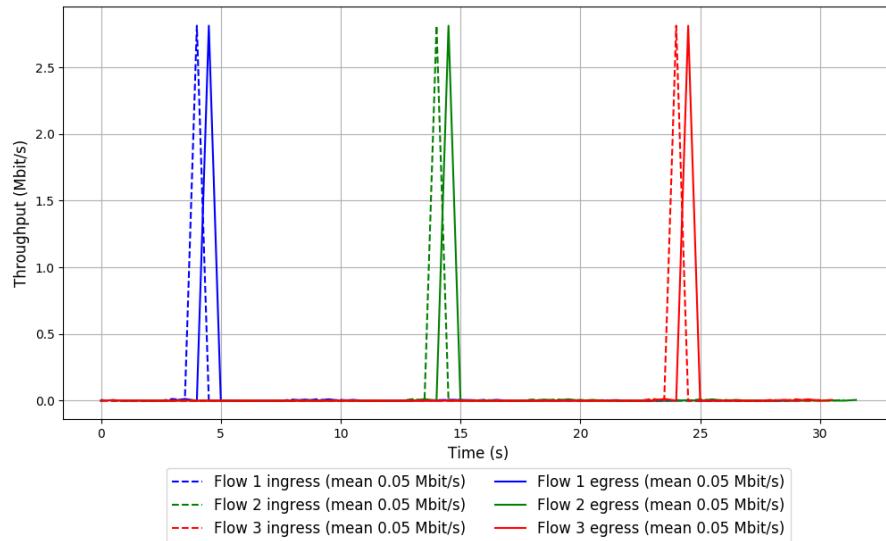


```
Run 1: Statistics of WebRTC media

Start at: 2019-02-11 17:19:50
End at: 2019-02-11 17:20:20
Local clock offset: -1.241 ms
Remote clock offset: -0.471 ms

# Below is generated by plot.py at 2019-02-11 19:29:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.409 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.638 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.660 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.756 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

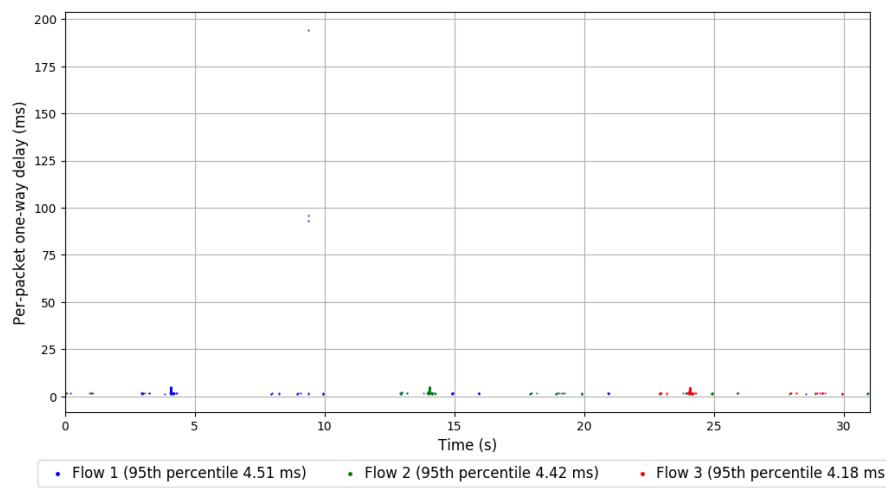
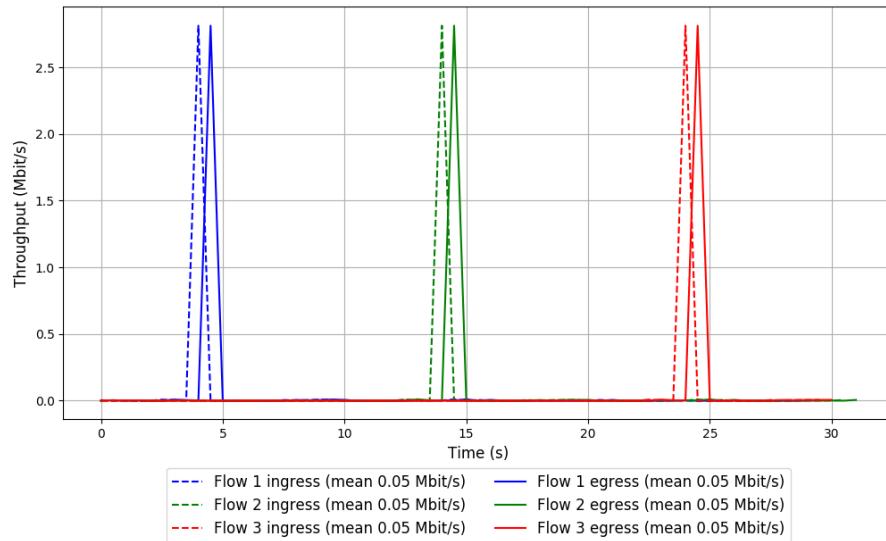


Run 2: Statistics of WebRTC media

```
Start at: 2019-02-11 17:43:46
End at: 2019-02-11 17:44:16
Local clock offset: -1.523 ms
Remote clock offset: -0.309 ms

# Below is generated by plot.py at 2019-02-11 19:29:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.515 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.425 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.182 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

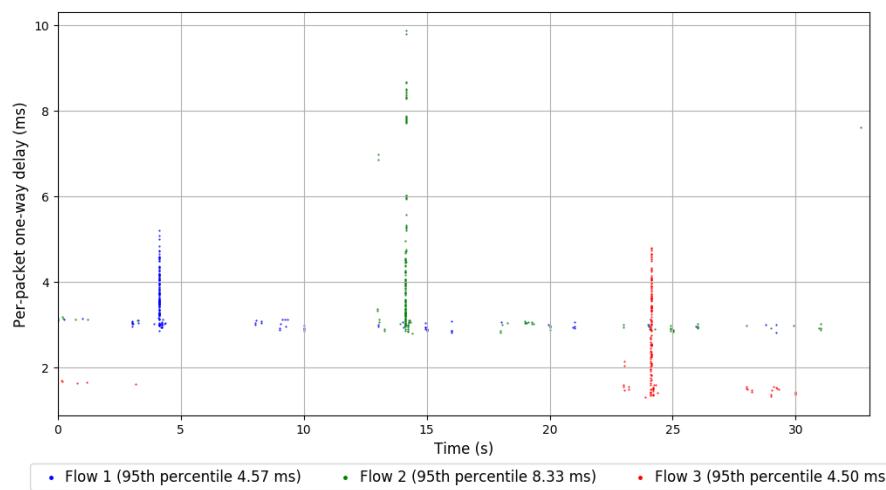
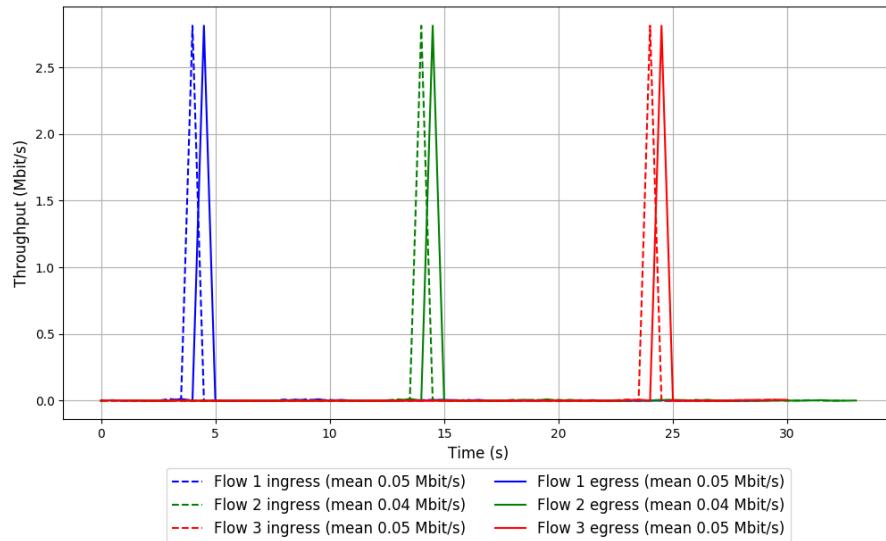


Run 3: Statistics of WebRTC media

```
Start at: 2019-02-11 18:07:41
End at: 2019-02-11 18:08:11
Local clock offset: -2.236 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2019-02-11 19:29:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 5.979 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.569 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 8.334 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.500 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

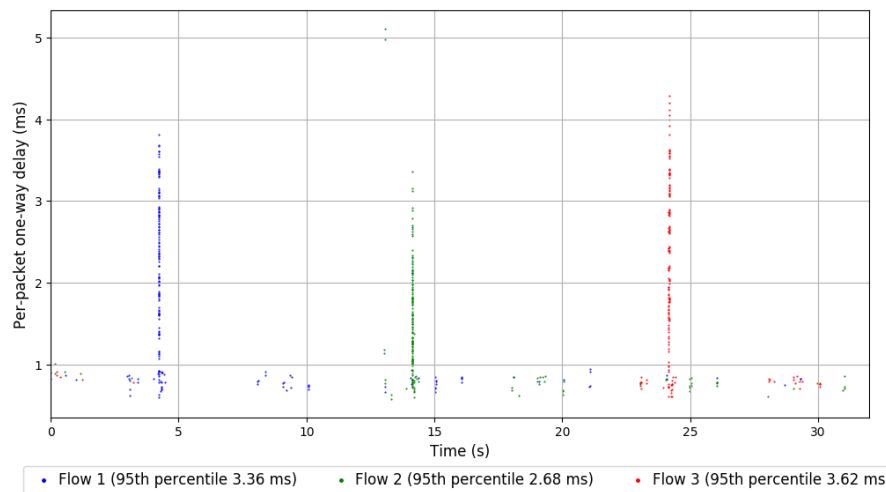
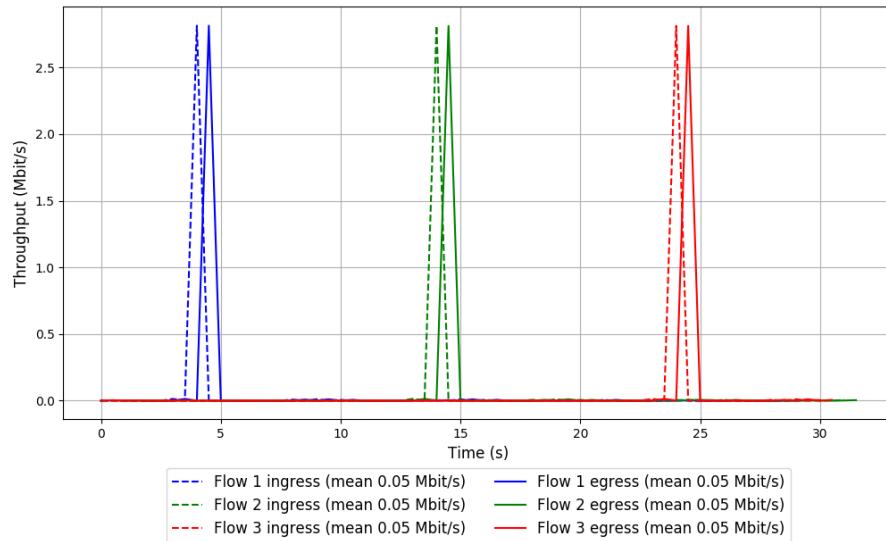


Run 4: Statistics of WebRTC media

```
Start at: 2019-02-11 18:31:37
End at: 2019-02-11 18:32:07
Local clock offset: -3.063 ms
Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2019-02-11 19:29:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 3.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.362 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2.677 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.624 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-02-11 18:55:32
End at: 2019-02-11 18:56:02
Local clock offset: -1.898 ms
Remote clock offset: 0.149 ms

# Below is generated by plot.py at 2019-02-11 19:29:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 6.089 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.979 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.410 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.101 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

