

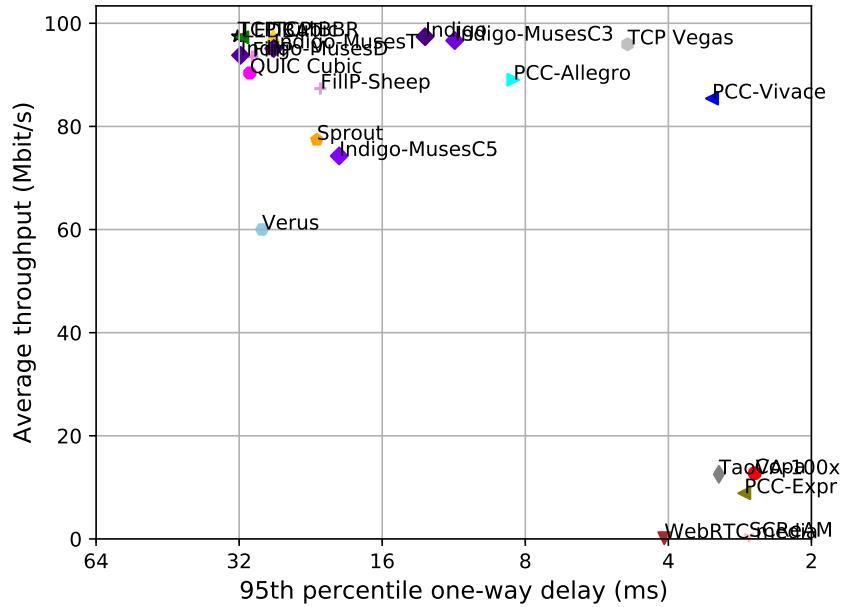
Pantheon Report

Generated at 2019-01-25 03:17:51 (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.

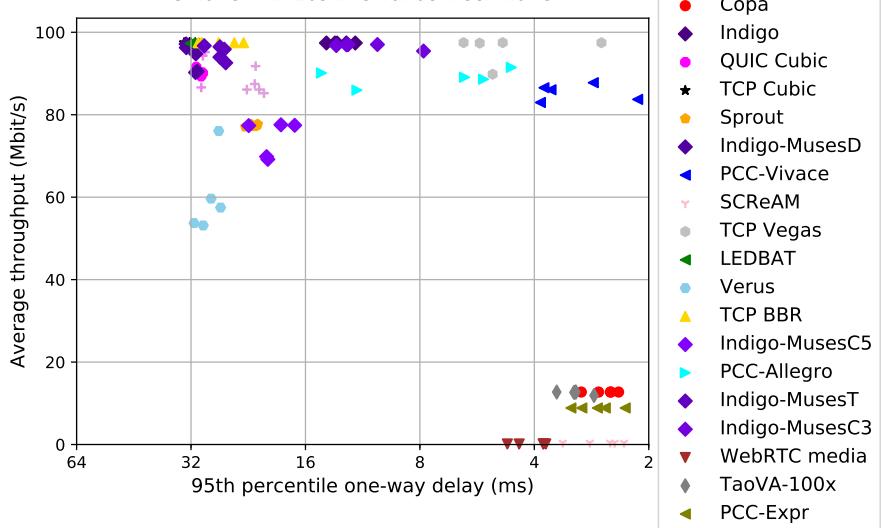
```
System info:  
Linux 4.15.0-1031-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
 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

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

test from AWS 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



4

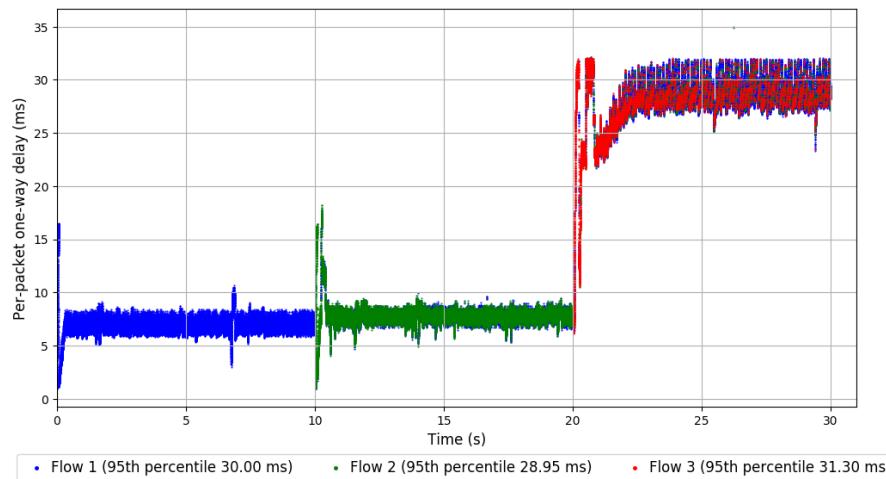
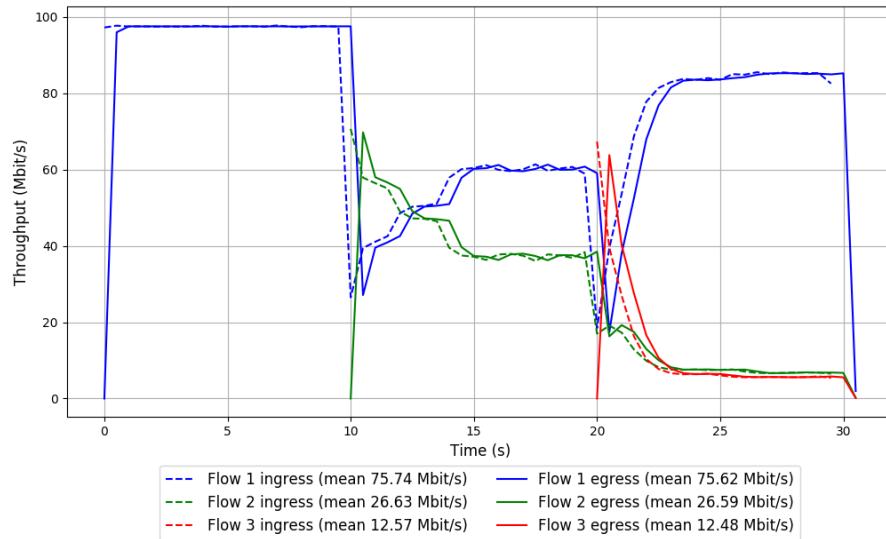
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	73.46	24.46	23.22	27.10	25.57	31.35	0.16	0.04	0.38
Copa	5	11.74	2.02	0.52	2.64	1.83	2.32	64.32	81.87	88.59
TCP Cubic	5	62.52	38.77	27.53	32.22	31.79	32.13	0.04	0.03	0.05
FillP	5	46.29	51.88	38.37	28.71	29.56	30.00	10.72	18.30	39.80
FillP-Sheep	5	48.02	36.81	44.68	16.94	22.76	25.09	1.06	1.56	1.85
Indigo	5	47.42	39.84	72.34	10.88	13.41	13.19	0.00	0.00	0.00
Indigo-MusesC3	5	51.45	51.93	37.90	10.72	12.05	8.76	0.00	0.00	0.00
Indigo-MusesC5	5	41.82	34.58	32.75	18.44	20.10	20.90	0.00	0.01	0.00
Indigo-MusesD	5	65.15	31.45	27.09	31.81	30.14	28.41	1.00	1.32	2.26
Indigo-MusesT	5	62.27	37.57	27.77	24.34	28.53	30.09	0.14	0.23	0.74
LEDBAT	5	59.33	41.69	30.84	31.13	31.81	31.82	0.03	0.05	0.09
PCC-Allegro	5	74.47	17.04	9.85	6.67	14.28	16.00	0.00	0.00	0.00
PCC-Expr	5	0.51	10.21	6.27	1.97	2.51	2.81	85.71	26.69	21.84
QUIC Cubic	5	57.28	35.20	29.46	29.97	30.48	31.06	0.14	0.19	0.27
SCReAM	5	0.22	0.22	0.22	1.92	1.90	2.44	0.00	0.00	0.00
Sprout	5	41.64	37.51	32.73	21.01	21.73	23.77	0.00	0.00	0.00
TaoVA-100x	5	5.91	9.78	1.49	3.14	2.83	2.80	85.52	89.63	97.87
TCP Vegas	5	46.47	45.39	57.77	9.32	3.93	3.86	0.00	0.00	0.00
Verus	5	34.56	25.67	25.24	24.04	29.18	31.56	6.50	6.70	11.42
PCC-Vivace	5	53.72	35.47	24.52	2.64	3.99	3.66	0.00	0.00	0.00
WebRTC media	5	0.05	0.05	0.05	4.43	4.02	4.23	0.00	0.01	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-25 01:26:08
End at: 2019-01-25 01:26:38
Local clock offset: -4.374 ms
Remote clock offset: 0.158 ms

# Below is generated by plot.py at 2019-01-25 03:07:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 30.019 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 75.62 Mbit/s
95th percentile per-packet one-way delay: 30.005 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 26.59 Mbit/s
95th percentile per-packet one-way delay: 28.945 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 31.300 ms
Loss rate: 0.49%
```

Run 1: Report of TCP BBR — Data Link

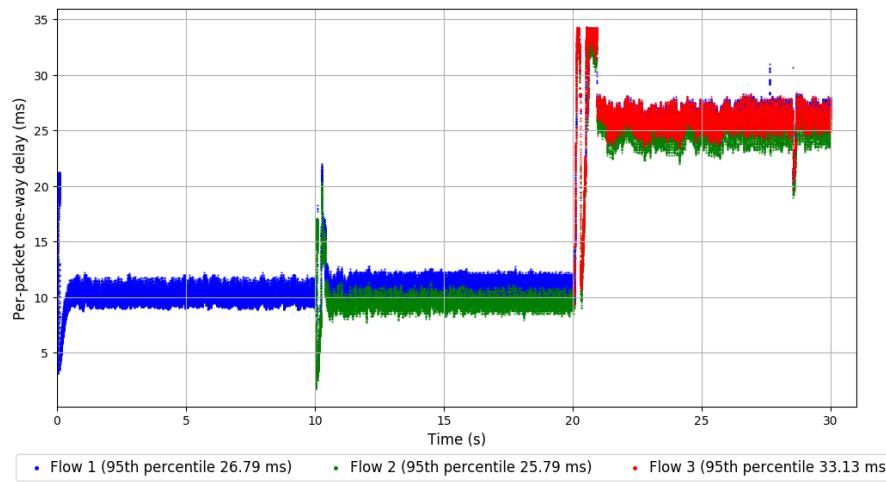
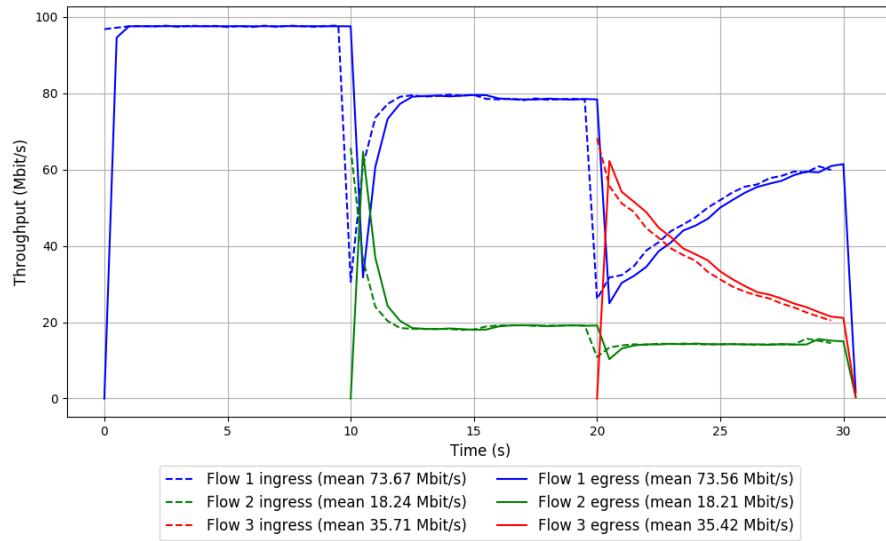


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-25 01:50:03
End at: 2019-01-25 01:50:33
Local clock offset: 0.546 ms
Remote clock offset: 0.427 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 27.057 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 73.56 Mbit/s
95th percentile per-packet one-way delay: 26.786 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 18.21 Mbit/s
95th percentile per-packet one-way delay: 25.787 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 35.42 Mbit/s
95th percentile per-packet one-way delay: 33.132 ms
Loss rate: 0.66%
```

Run 2: Report of TCP BBR — Data Link

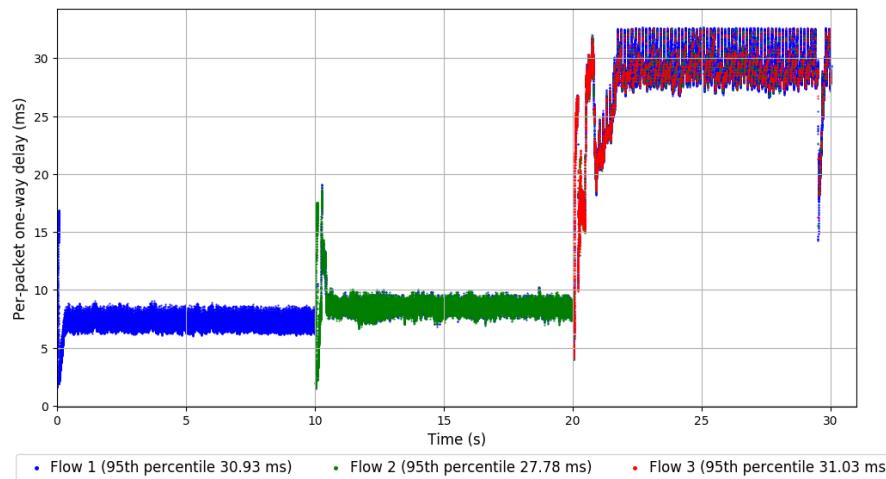
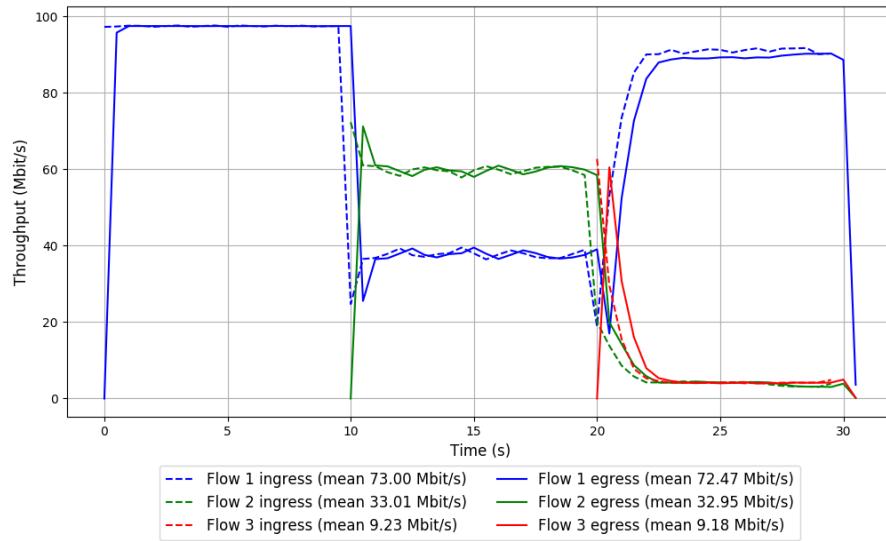


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-25 02:13:58
End at: 2019-01-25 02:14:28
Local clock offset: -4.434 ms
Remote clock offset: 0.577 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 30.632 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 72.47 Mbit/s
95th percentile per-packet one-way delay: 30.934 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 32.95 Mbit/s
95th percentile per-packet one-way delay: 27.782 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 9.18 Mbit/s
95th percentile per-packet one-way delay: 31.033 ms
Loss rate: 0.38%
```

Run 3: Report of TCP BBR — Data Link

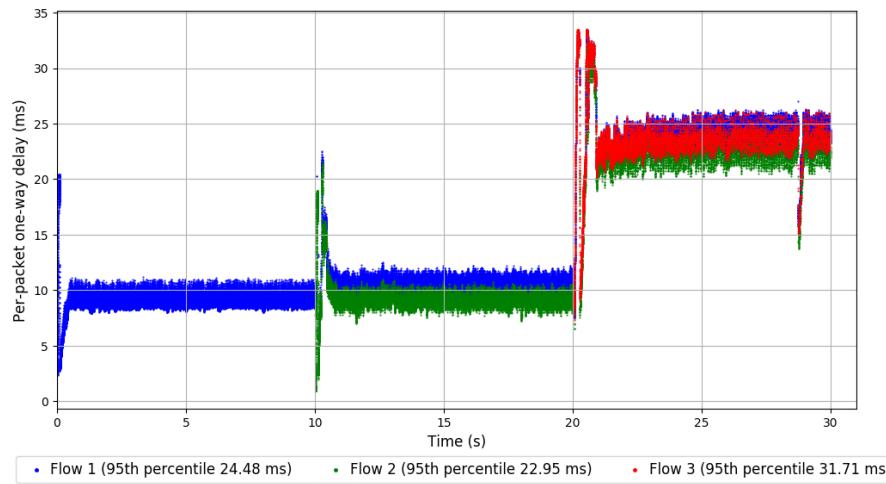
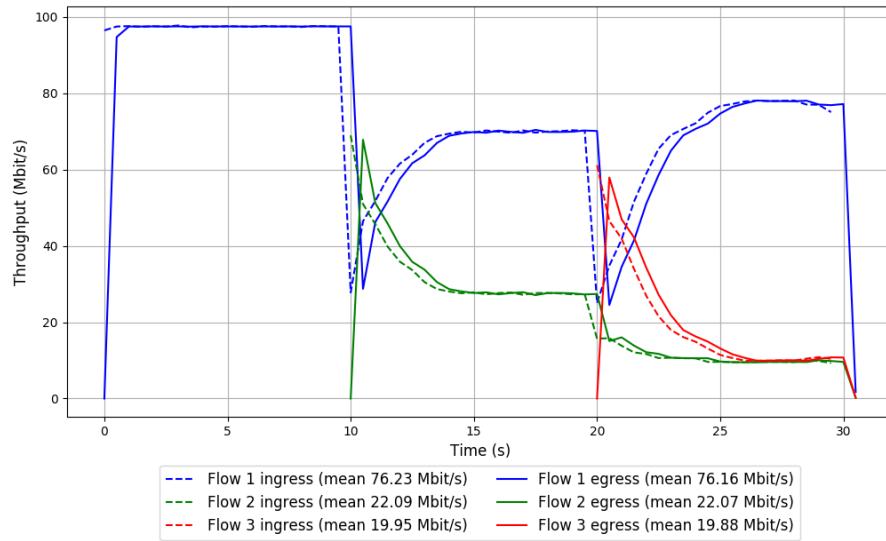


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-25 02:37:52
End at: 2019-01-25 02:38:22
Local clock offset: -4.565 ms
Remote clock offset: 0.791 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 24.607 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 76.16 Mbit/s
95th percentile per-packet one-way delay: 24.482 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 22.07 Mbit/s
95th percentile per-packet one-way delay: 22.950 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 19.88 Mbit/s
95th percentile per-packet one-way delay: 31.710 ms
Loss rate: 0.18%
```

Run 4: Report of TCP BBR — Data Link

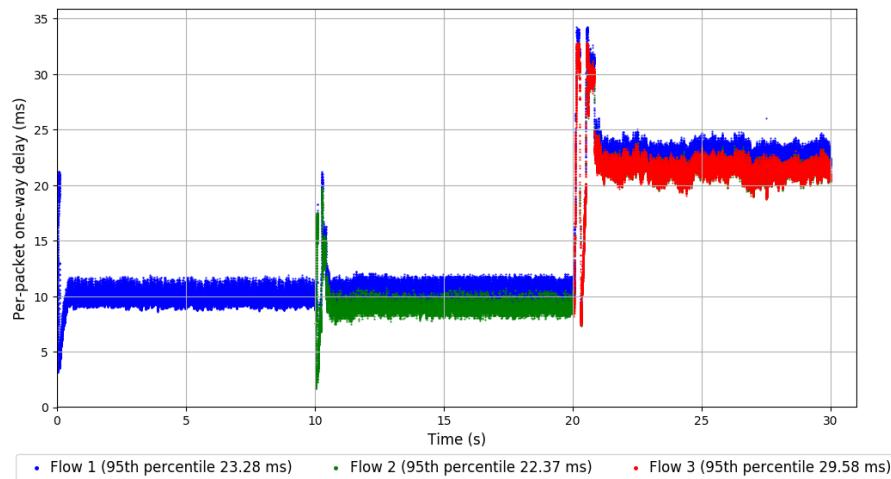
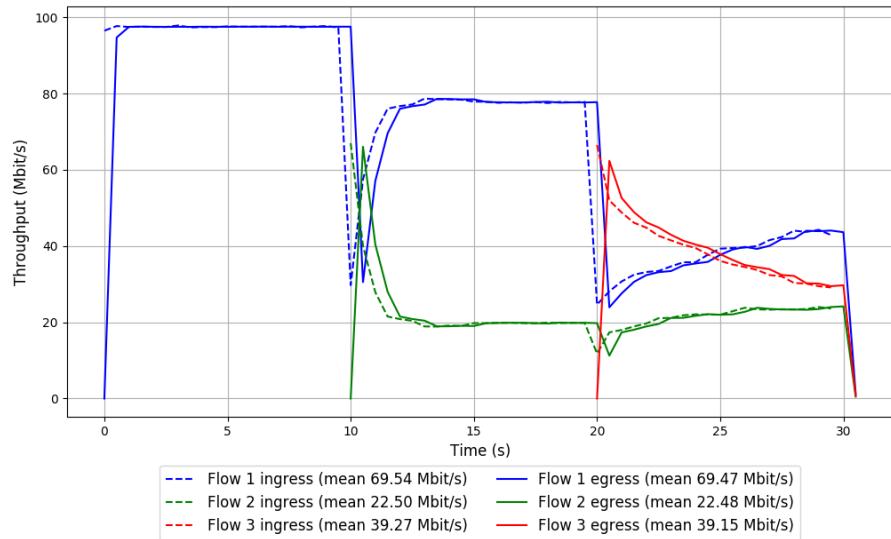


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-25 03:01:47
End at: 2019-01-25 03:02:17
Local clock offset: -5.135 ms
Remote clock offset: 0.785 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 23.276 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 69.47 Mbit/s
95th percentile per-packet one-way delay: 23.279 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 22.48 Mbit/s
95th percentile per-packet one-way delay: 22.368 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 39.15 Mbit/s
95th percentile per-packet one-way delay: 29.581 ms
Loss rate: 0.17%
```

Run 5: Report of TCP BBR — Data Link

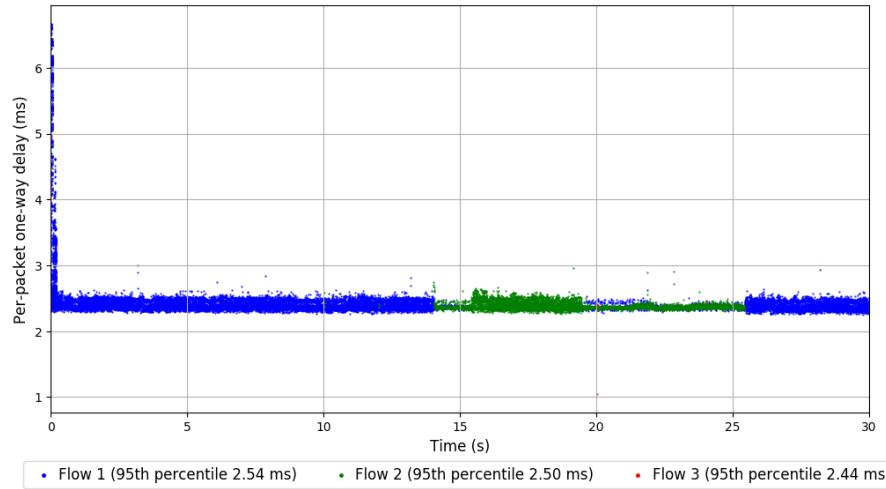
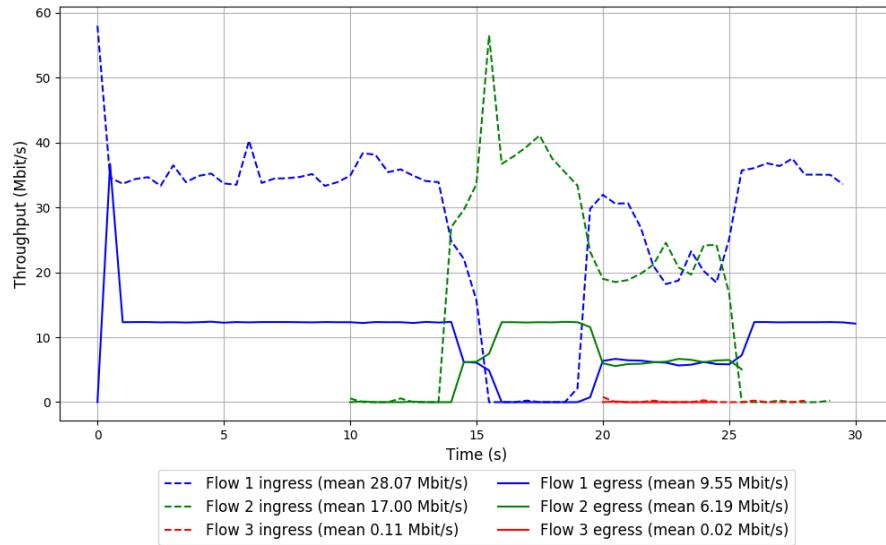


Run 1: Statistics of Copa

```
Start at: 2019-01-25 01:15:55
End at: 2019-01-25 01:16:25
Local clock offset: -3.997 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 2.524 ms
Loss rate: 67.45%
-- Flow 1:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 2.537 ms
Loss rate: 65.99%
-- Flow 2:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 2.504 ms
Loss rate: 71.11%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 2.444 ms
Loss rate: 93.23%
```

Run 1: Report of Copa — Data Link

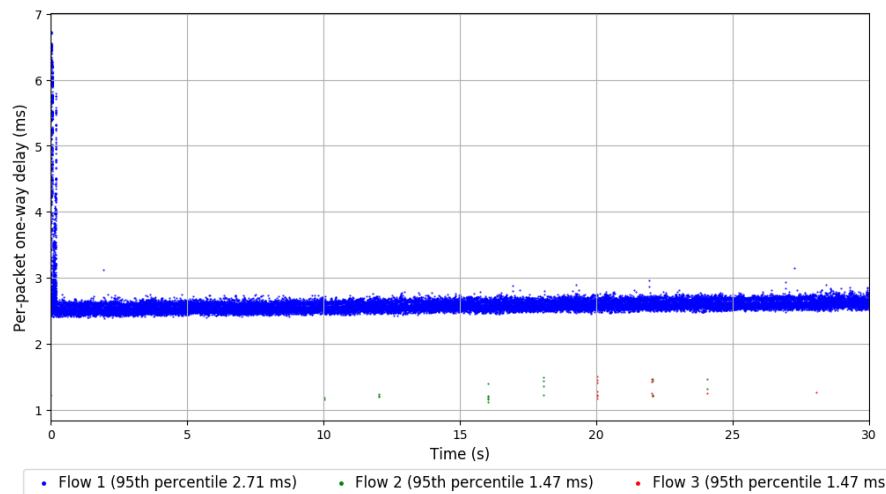
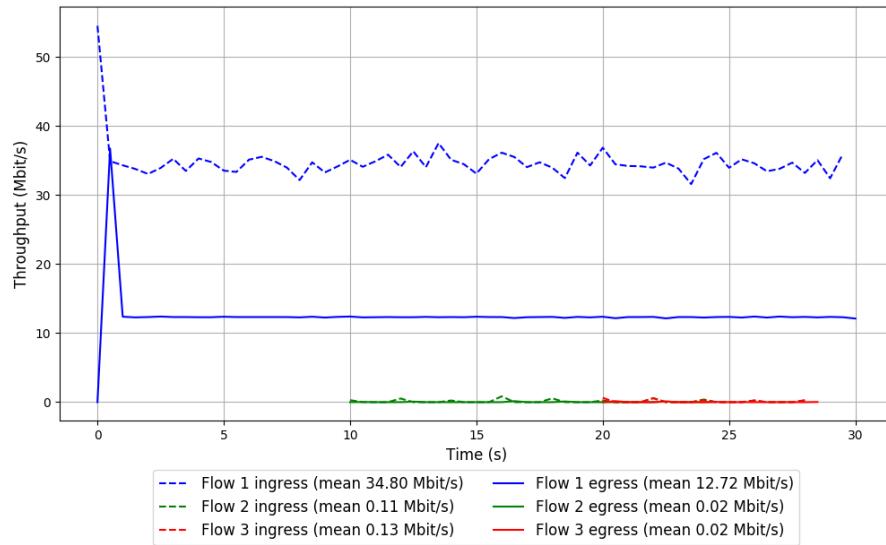


Run 2: Statistics of Copa

```
Start at: 2019-01-25 01:39:50
End at: 2019-01-25 01:40:20
Local clock offset: -0.338 ms
Remote clock offset: 0.325 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 2.710 ms
Loss rate: 63.53%
-- Flow 1:
Average throughput: 12.72 Mbit/s
95th percentile per-packet one-way delay: 2.710 ms
Loss rate: 63.46%
-- Flow 2:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 1.468 ms
Loss rate: 88.33%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 1.469 ms
Loss rate: 85.63%
```

Run 2: Report of Copa — Data Link

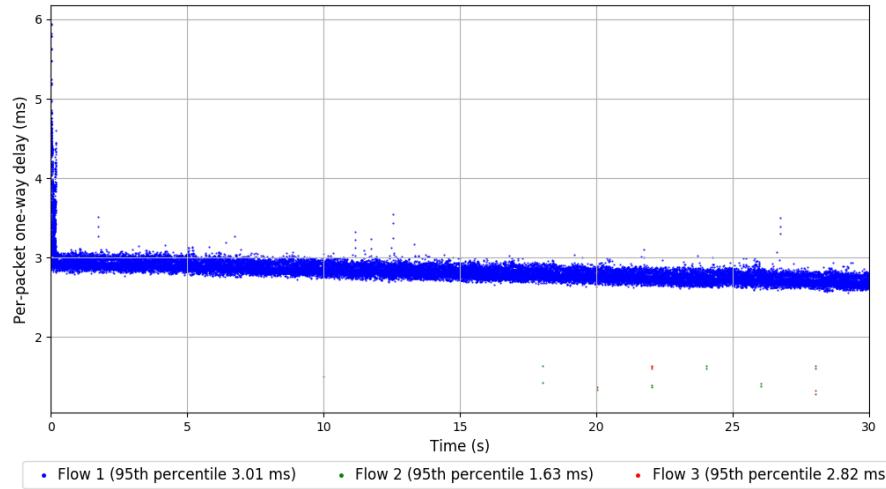
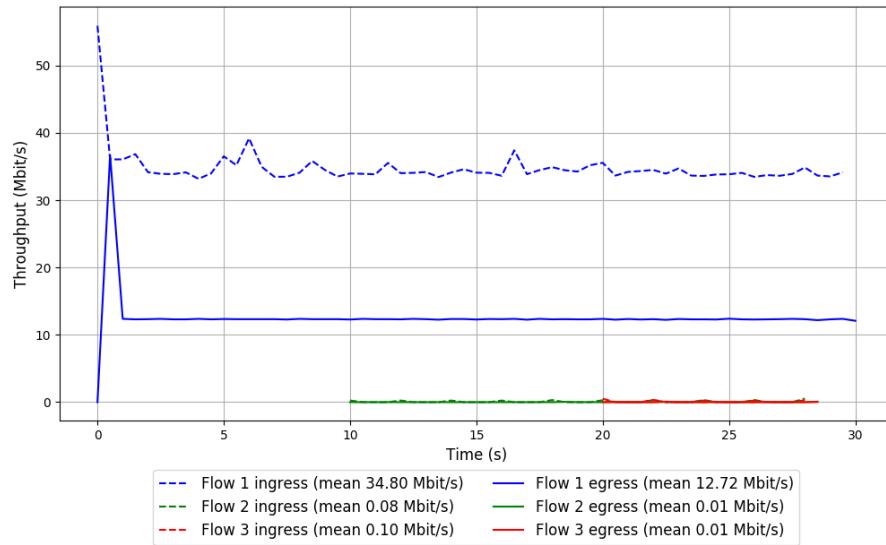


Run 3: Statistics of Copa

```
Start at: 2019-01-25 02:03:44
End at: 2019-01-25 02:04:14
Local clock offset: -1.143 ms
Remote clock offset: 0.55 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 3.009 ms
Loss rate: 63.50%
-- Flow 1:
Average throughput: 12.72 Mbit/s
95th percentile per-packet one-way delay: 3.009 ms
Loss rate: 63.44%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1.631 ms
Loss rate: 90.42%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2.819 ms
Loss rate: 92.42%
```

Run 3: Report of Copa — Data Link

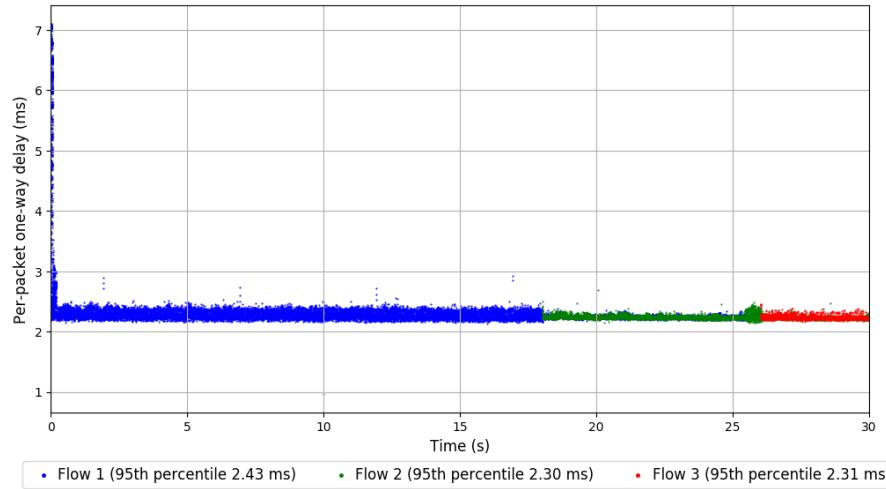
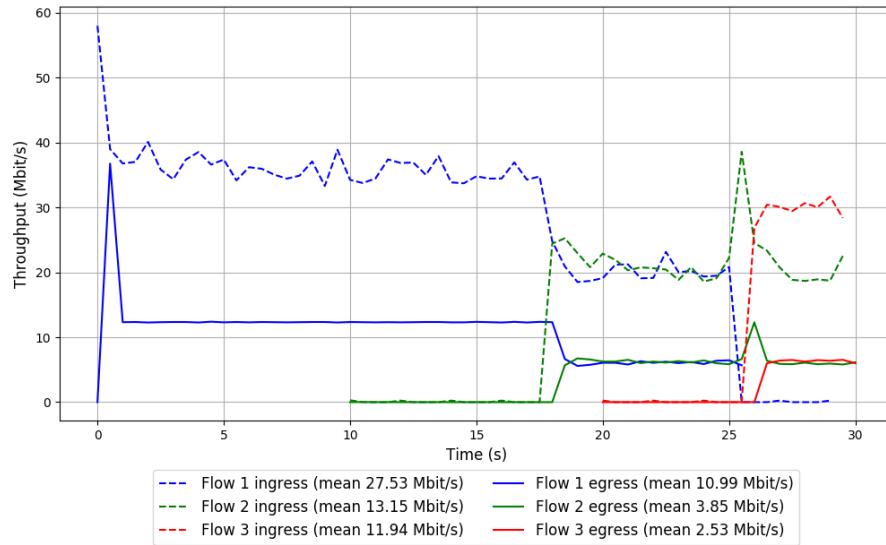


Run 4: Statistics of Copa

```
Start at: 2019-01-25 02:27:39
End at: 2019-01-25 02:28:09
Local clock offset: -5.237 ms
Remote clock offset: 0.631 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 2.401 ms
Loss rate: 67.98%
-- Flow 1:
Average throughput: 10.99 Mbit/s
95th percentile per-packet one-way delay: 2.430 ms
Loss rate: 65.50%
-- Flow 2:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 2.304 ms
Loss rate: 70.71%
-- Flow 3:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 2.308 ms
Loss rate: 78.81%
```

Run 4: Report of Copa — Data Link

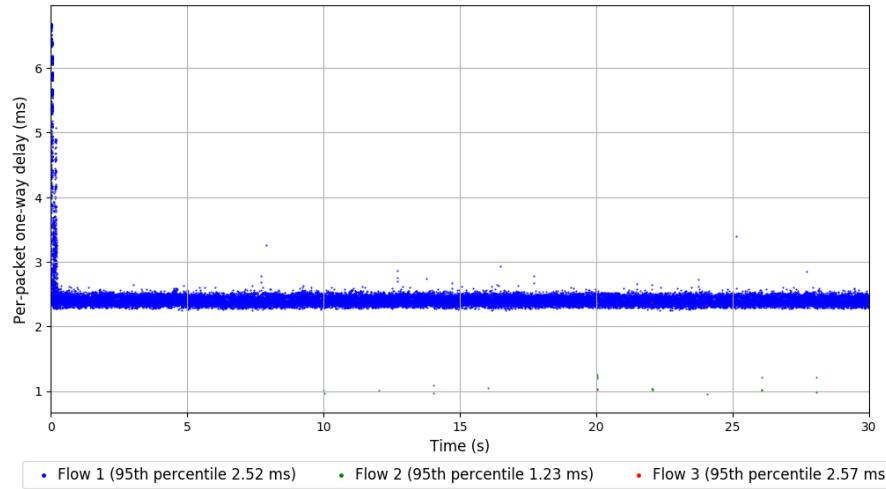
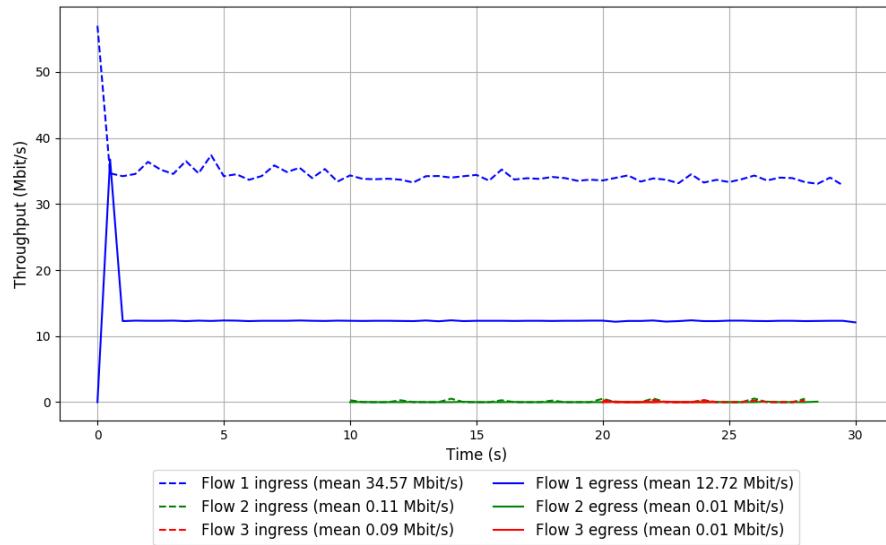


Run 5: Statistics of Copa

```
Start at: 2019-01-25 02:51:34
End at: 2019-01-25 02:52:04
Local clock offset: -4.357 ms
Remote clock offset: 0.825 ms

# Below is generated by plot.py at 2019-01-25 03:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 2.516 ms
Loss rate: 63.27%
-- Flow 1:
Average throughput: 12.72 Mbit/s
95th percentile per-packet one-way delay: 2.516 ms
Loss rate: 63.20%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1.228 ms
Loss rate: 88.78%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 2.571 ms
Loss rate: 92.84%
```

Run 5: Report of Copa — Data Link

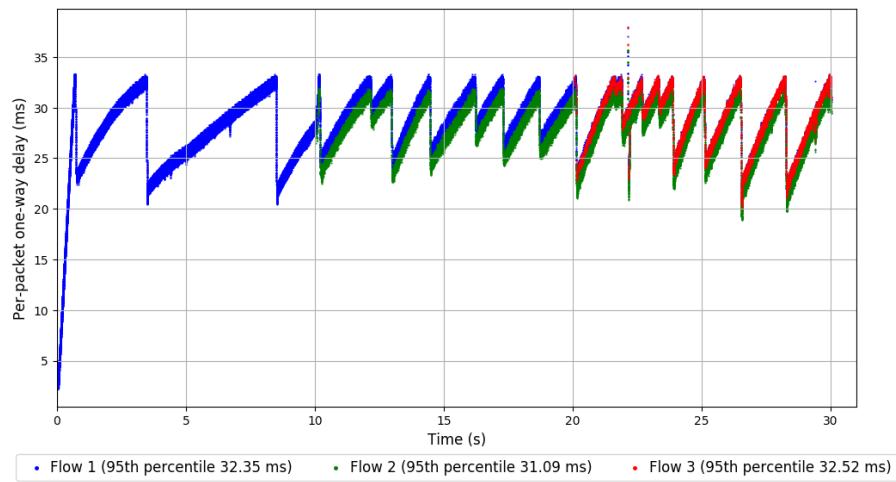
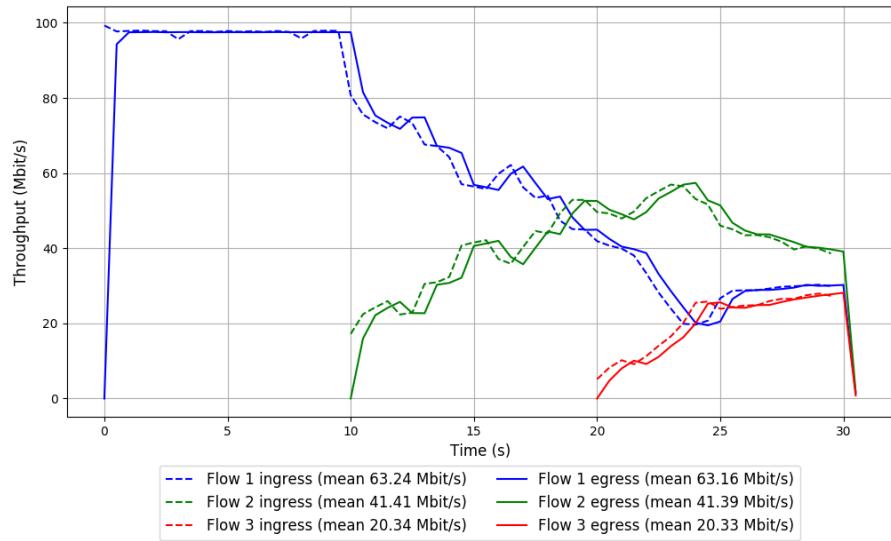


```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-25 01:23:49
End at: 2019-01-25 01:24:19
Local clock offset: -4.281 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2019-01-25 03:07:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.292 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.16 Mbit/s
95th percentile per-packet one-way delay: 32.351 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 41.39 Mbit/s
95th percentile per-packet one-way delay: 31.092 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 20.33 Mbit/s
95th percentile per-packet one-way delay: 32.525 ms
Loss rate: 0.05%
```

Run 1: Report of TCP Cubic — Data Link

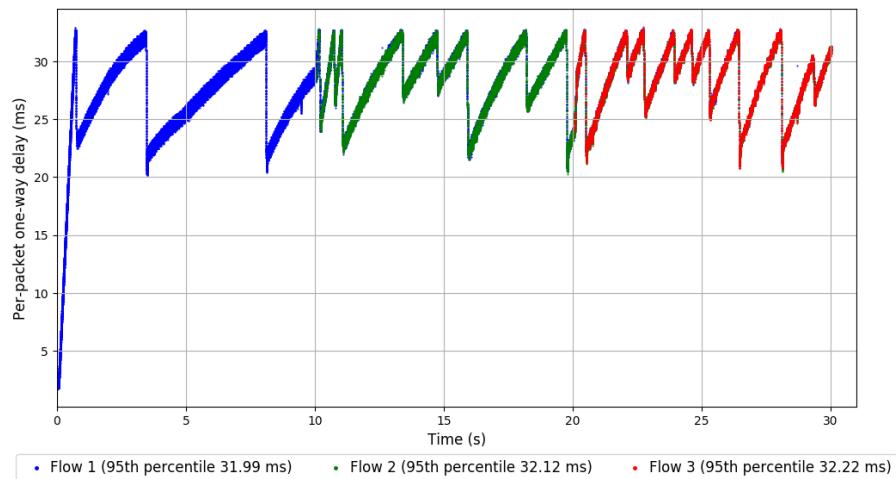
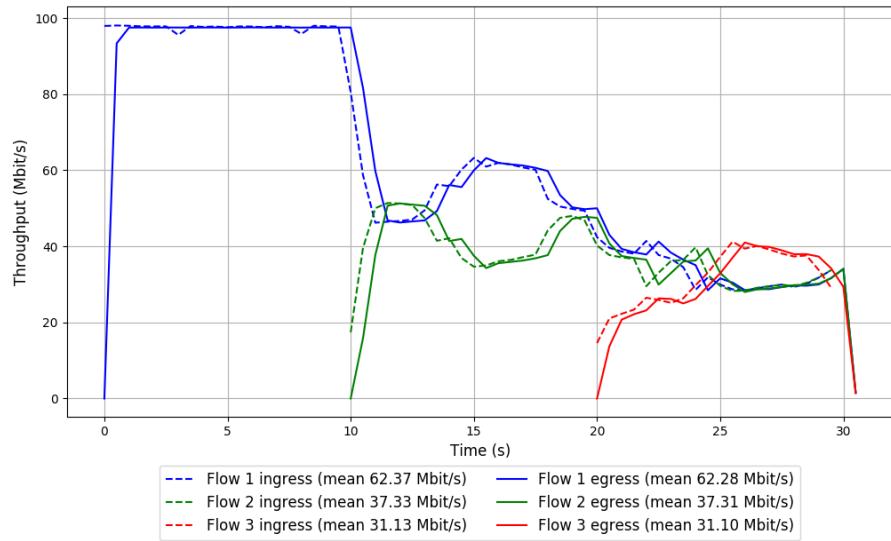


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-25 01:47:45
End at: 2019-01-25 01:48:15
Local clock offset: 0.27 ms
Remote clock offset: 0.337 ms

# Below is generated by plot.py at 2019-01-25 03:07:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 32.024 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 62.28 Mbit/s
95th percentile per-packet one-way delay: 31.988 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.31 Mbit/s
95th percentile per-packet one-way delay: 32.121 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 32.222 ms
Loss rate: 0.02%
```

Run 2: Report of TCP Cubic — Data Link

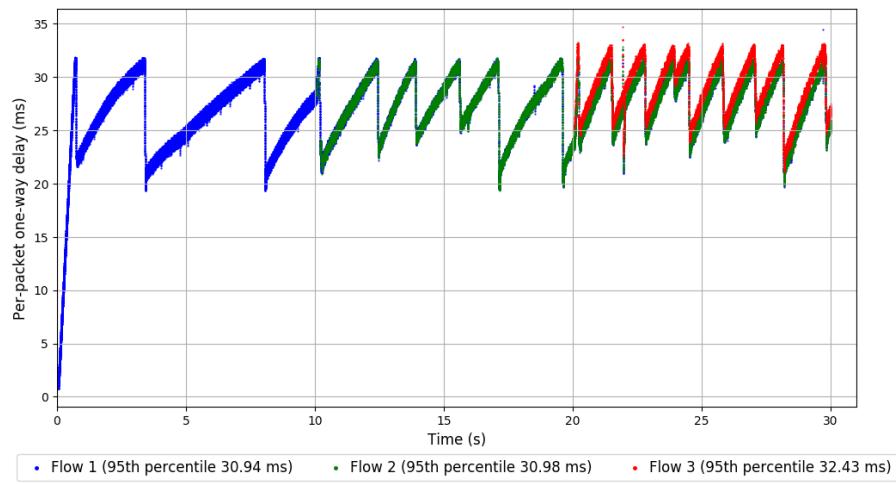
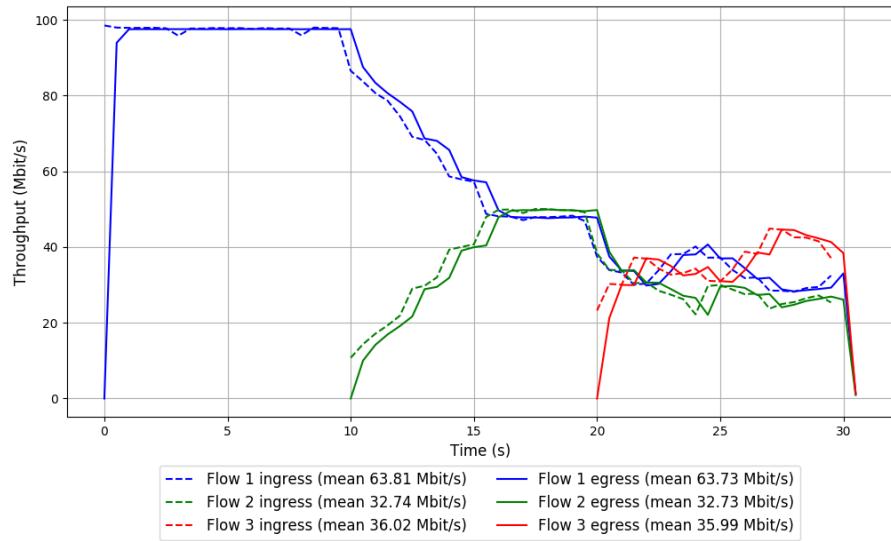


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-25 02:11:39
End at: 2019-01-25 02:12:09
Local clock offset: -3.17 ms
Remote clock offset: 0.553 ms

# Below is generated by plot.py at 2019-01-25 03:07:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 31.200 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 63.73 Mbit/s
95th percentile per-packet one-way delay: 30.941 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 32.73 Mbit/s
95th percentile per-packet one-way delay: 30.978 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 32.432 ms
Loss rate: 0.08%
```

Run 3: Report of TCP Cubic — Data Link

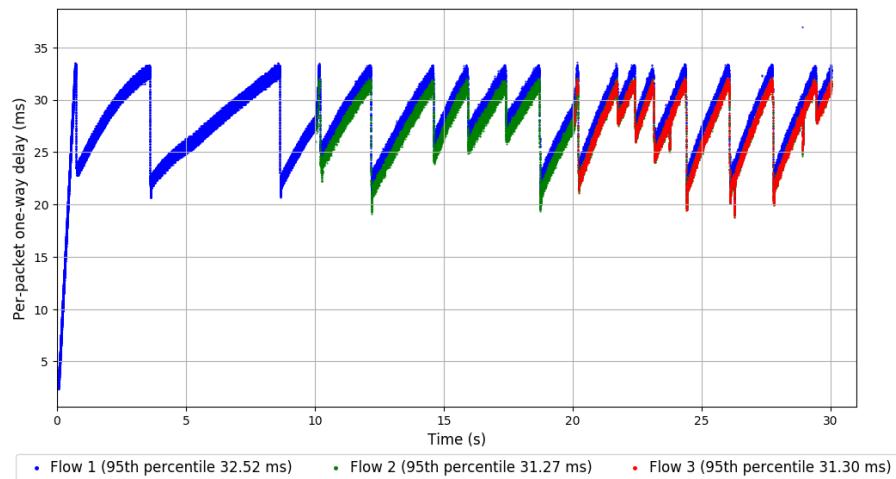
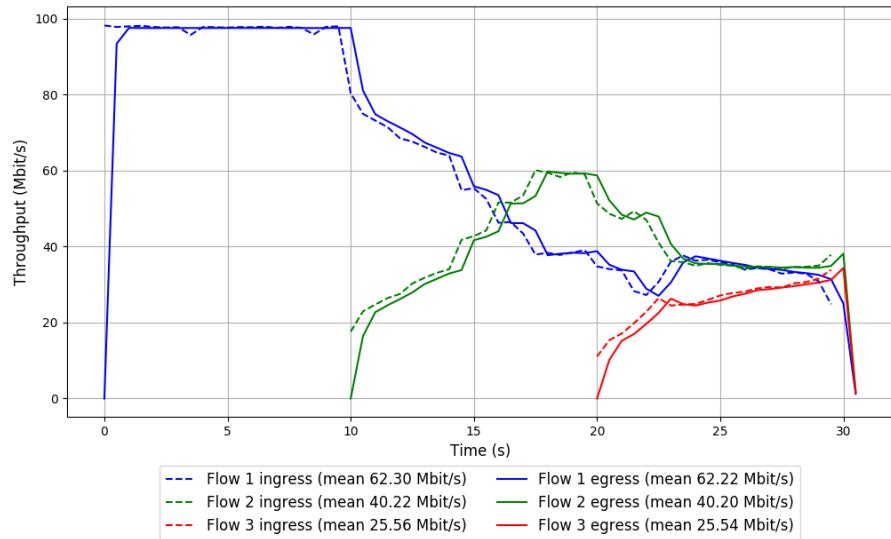


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-25 02:35:34
End at: 2019-01-25 02:36:04
Local clock offset: -4.802 ms
Remote clock offset: 0.707 ms

# Below is generated by plot.py at 2019-01-25 03:08:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.277 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 62.22 Mbit/s
95th percentile per-packet one-way delay: 32.521 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 40.20 Mbit/s
95th percentile per-packet one-way delay: 31.268 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 25.54 Mbit/s
95th percentile per-packet one-way delay: 31.295 ms
Loss rate: 0.04%
```

Run 4: Report of TCP Cubic — Data Link

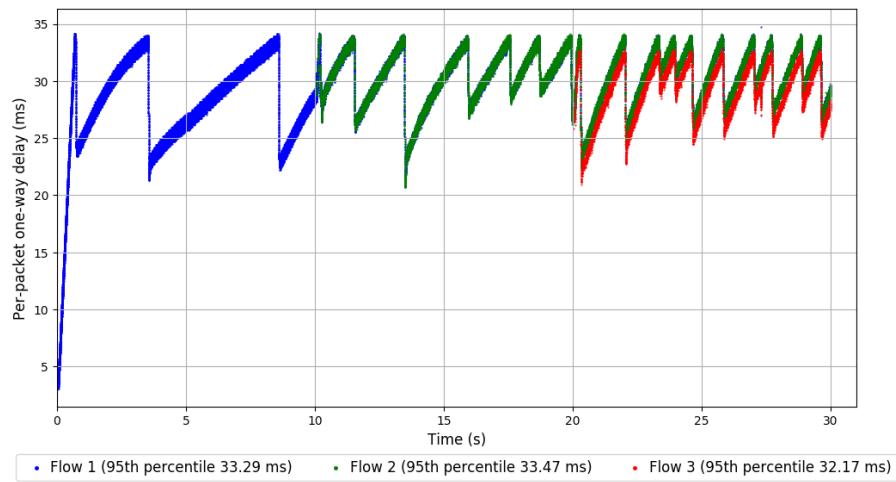
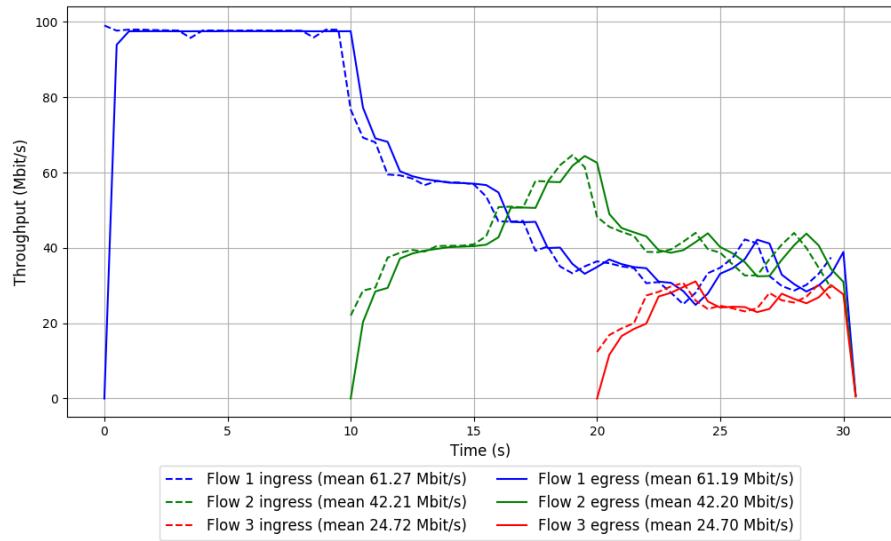


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-25 02:59:29
End at: 2019-01-25 02:59:59
Local clock offset: -5.202 ms
Remote clock offset: 0.774 ms

# Below is generated by plot.py at 2019-01-25 03:08:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 33.361 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.19 Mbit/s
95th percentile per-packet one-way delay: 33.288 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 42.20 Mbit/s
95th percentile per-packet one-way delay: 33.468 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 32.169 ms
Loss rate: 0.04%
```

Run 5: Report of TCP Cubic — Data Link

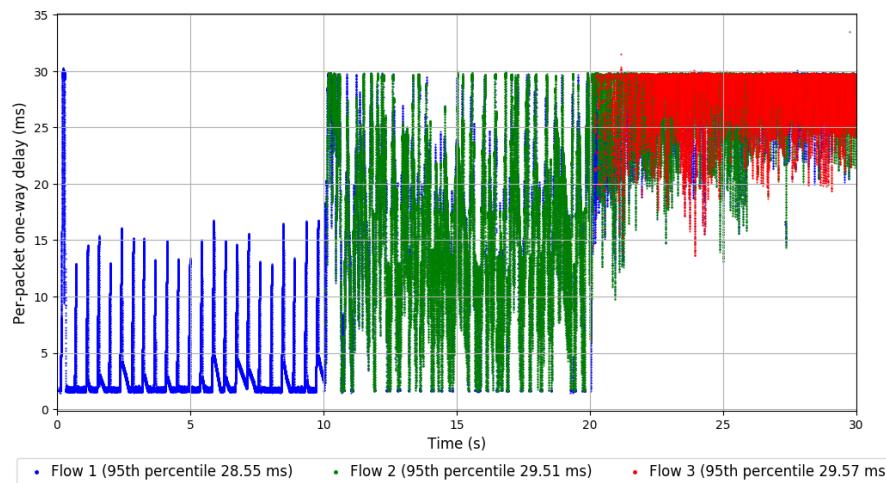
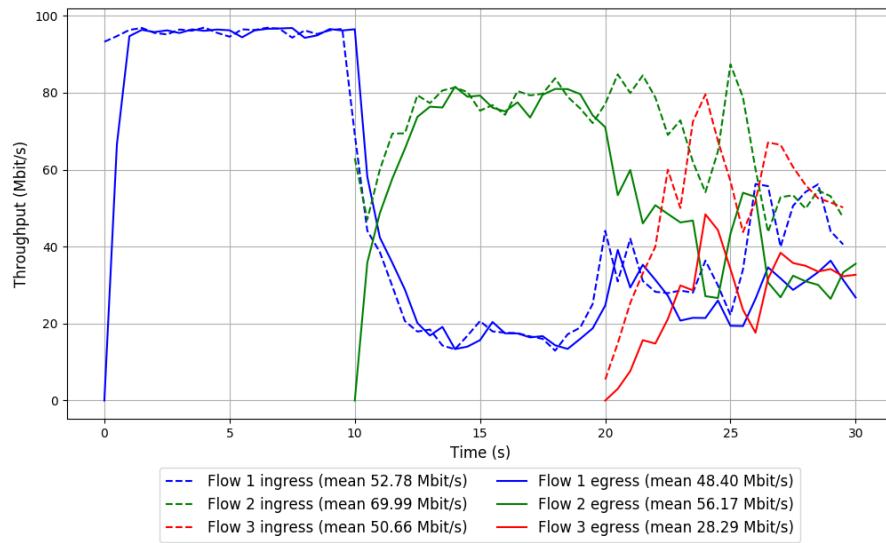


```
Run 1: Statistics of FillP

Start at: 2019-01-25 01:07:56
End at: 2019-01-25 01:08:26
Local clock offset: -4.166 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2019-01-25 03:08:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.18 Mbit/s
95th percentile per-packet one-way delay: 29.411 ms
Loss rate: 17.99%
-- Flow 1:
Average throughput: 48.40 Mbit/s
95th percentile per-packet one-way delay: 28.548 ms
Loss rate: 8.23%
-- Flow 2:
Average throughput: 56.17 Mbit/s
95th percentile per-packet one-way delay: 29.508 ms
Loss rate: 19.66%
-- Flow 3:
Average throughput: 28.29 Mbit/s
95th percentile per-packet one-way delay: 29.571 ms
Loss rate: 44.04%
```

Run 1: Report of FillP — Data Link

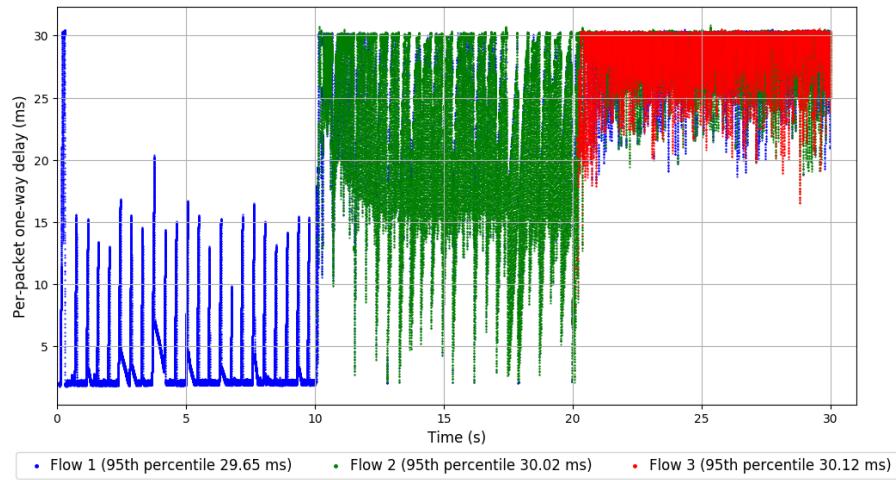
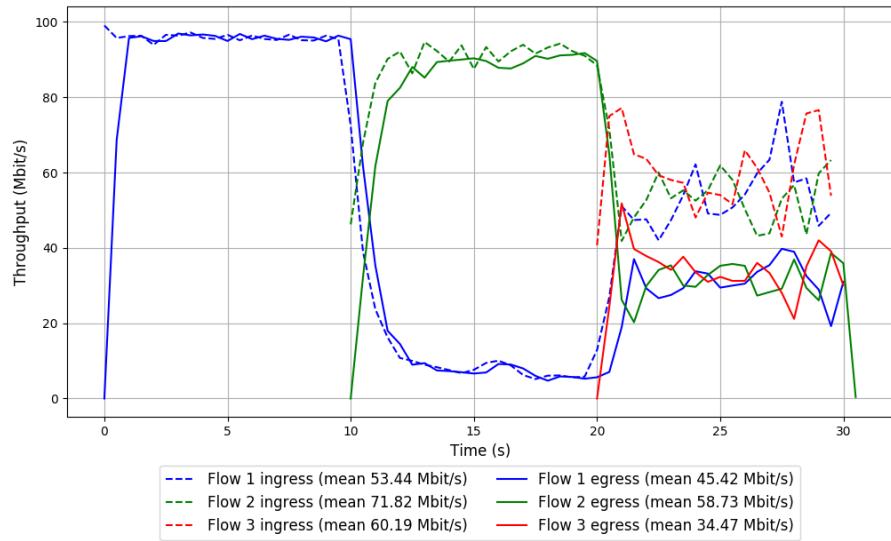


Run 2: Statistics of FillP

```
Start at: 2019-01-25 01:31:51
End at: 2019-01-25 01:32:21
Local clock offset: -4.044 ms
Remote clock offset: 0.195 ms

# Below is generated by plot.py at 2019-01-25 03:08:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.96 Mbit/s
95th percentile per-packet one-way delay: 29.979 ms
Loss rate: 20.76%
-- Flow 1:
Average throughput: 45.42 Mbit/s
95th percentile per-packet one-way delay: 29.650 ms
Loss rate: 14.92%
-- Flow 2:
Average throughput: 58.73 Mbit/s
95th percentile per-packet one-way delay: 30.019 ms
Loss rate: 18.12%
-- Flow 3:
Average throughput: 34.47 Mbit/s
95th percentile per-packet one-way delay: 30.121 ms
Loss rate: 42.70%
```

Run 2: Report of FillP — Data Link

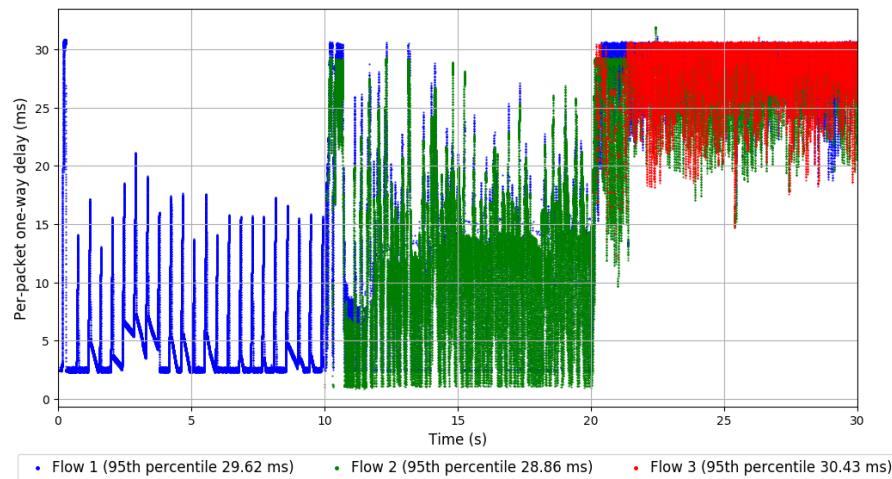
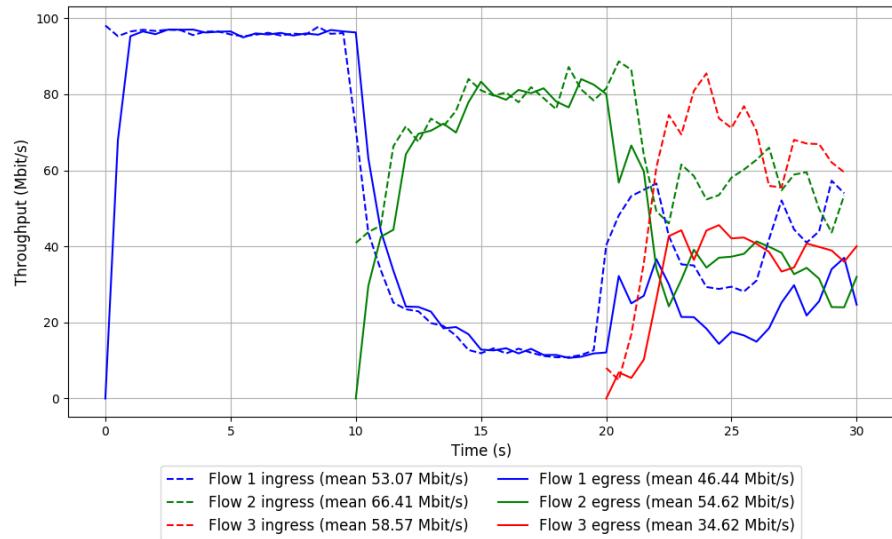


Run 3: Statistics of FillP

```
Start at: 2019-01-25 01:55:47
End at: 2019-01-25 01:56:17
Local clock offset: 1.807 ms
Remote clock offset: 0.508 ms

# Below is generated by plot.py at 2019-01-25 03:08:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.31 Mbit/s
95th percentile per-packet one-way delay: 29.796 ms
Loss rate: 19.11%
-- Flow 1:
Average throughput: 46.44 Mbit/s
95th percentile per-packet one-way delay: 29.623 ms
Loss rate: 12.40%
-- Flow 2:
Average throughput: 54.62 Mbit/s
95th percentile per-packet one-way delay: 28.855 ms
Loss rate: 17.66%
-- Flow 3:
Average throughput: 34.62 Mbit/s
95th percentile per-packet one-way delay: 30.430 ms
Loss rate: 40.79%
```

Run 3: Report of FillP — Data Link

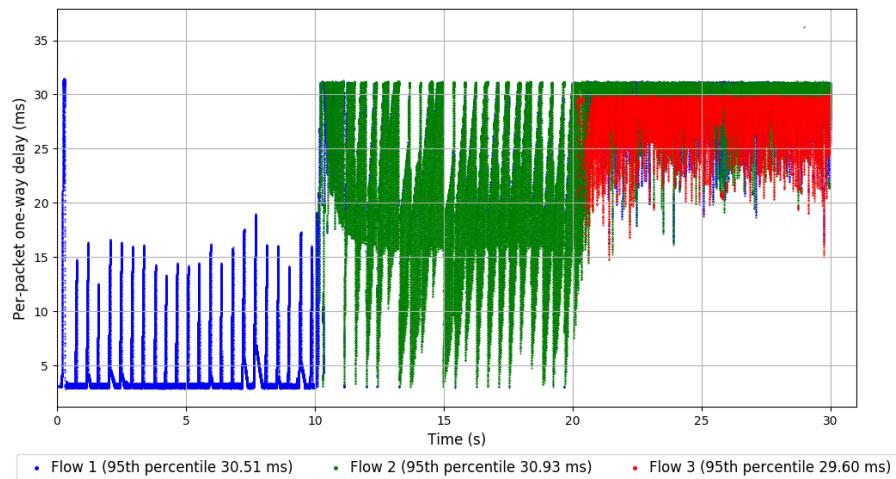
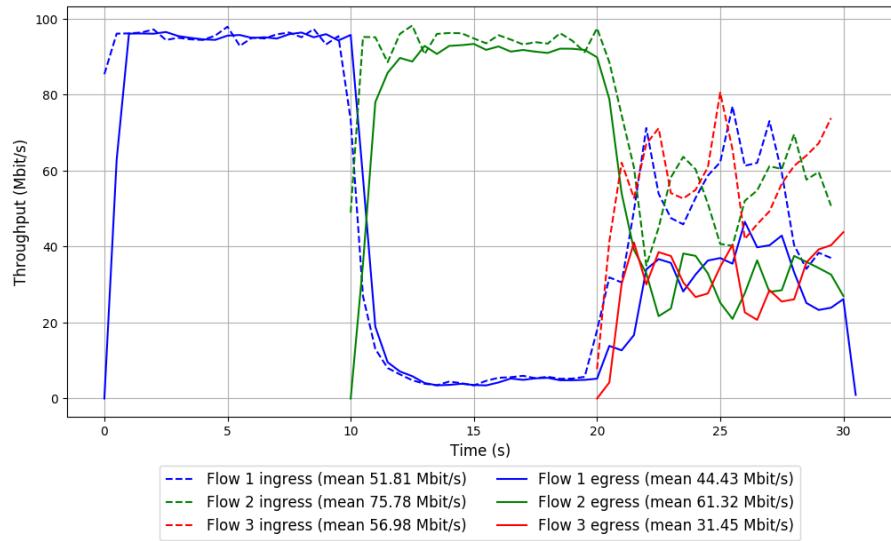


```
Run 4: Statistics of FillP
```

```
Start at: 2019-01-25 02:19:41
End at: 2019-01-25 02:20:11
Local clock offset: -5.243 ms
Remote clock offset: 0.691 ms

# Below is generated by plot.py at 2019-01-25 03:09:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 30.834 ms
Loss rate: 20.94%
-- Flow 1:
Average throughput: 44.43 Mbit/s
95th percentile per-packet one-way delay: 30.513 ms
Loss rate: 14.16%
-- Flow 2:
Average throughput: 61.32 Mbit/s
95th percentile per-packet one-way delay: 30.928 ms
Loss rate: 18.98%
-- Flow 3:
Average throughput: 31.45 Mbit/s
95th percentile per-packet one-way delay: 29.602 ms
Loss rate: 44.78%
```

Run 4: Report of FillP — Data Link

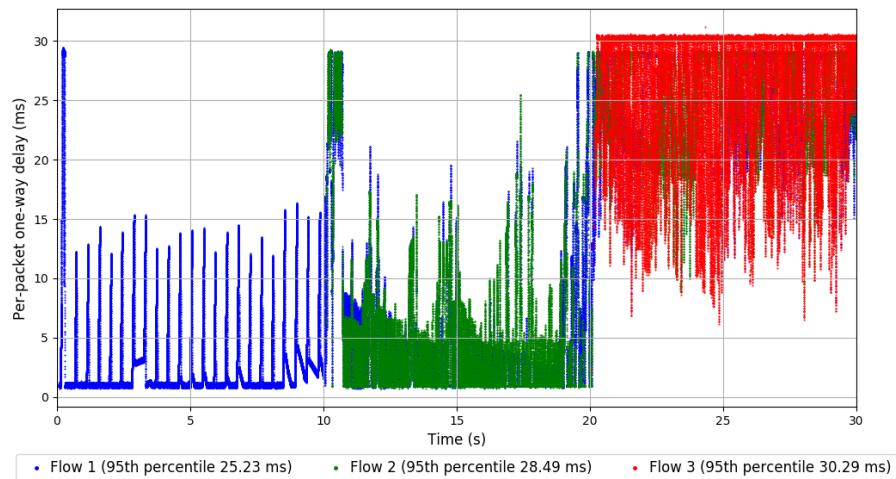
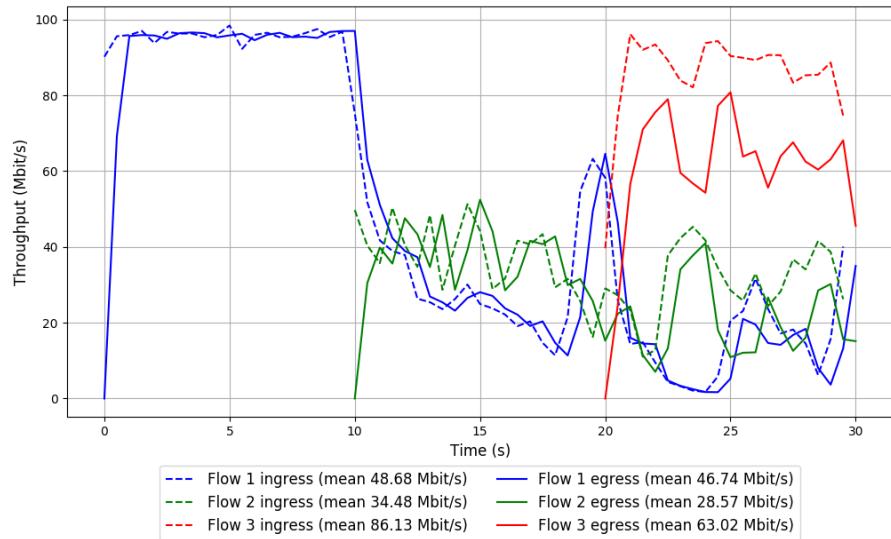


Run 5: Statistics of FillP

```
Start at: 2019-01-25 02:43:36
End at: 2019-01-25 02:44:06
Local clock offset: -4.405 ms
Remote clock offset: 0.756 ms

# Below is generated by plot.py at 2019-01-25 03:09:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.62 Mbit/s
95th percentile per-packet one-way delay: 30.079 ms
Loss rate: 13.40%
-- Flow 1:
Average throughput: 46.74 Mbit/s
95th percentile per-packet one-way delay: 25.230 ms
Loss rate: 3.89%
-- Flow 2:
Average throughput: 28.57 Mbit/s
95th percentile per-packet one-way delay: 28.488 ms
Loss rate: 17.06%
-- Flow 3:
Average throughput: 63.02 Mbit/s
95th percentile per-packet one-way delay: 30.285 ms
Loss rate: 26.70%
```

Run 5: Report of FillP — Data Link

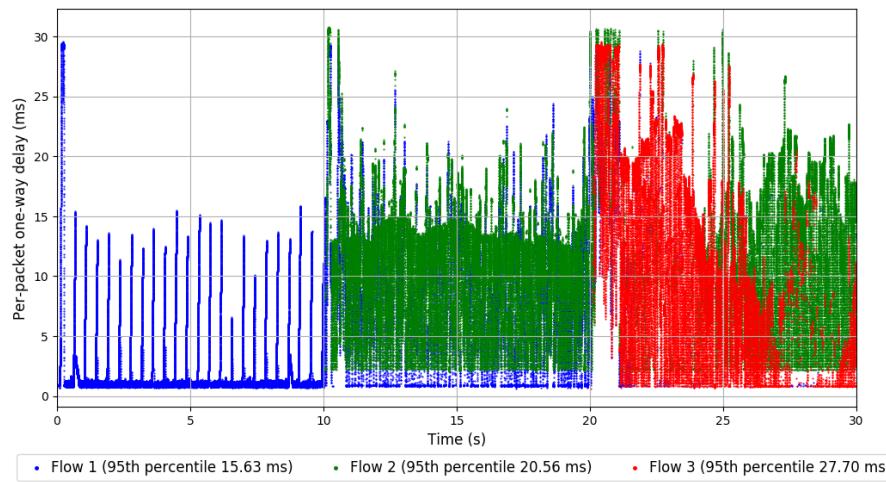
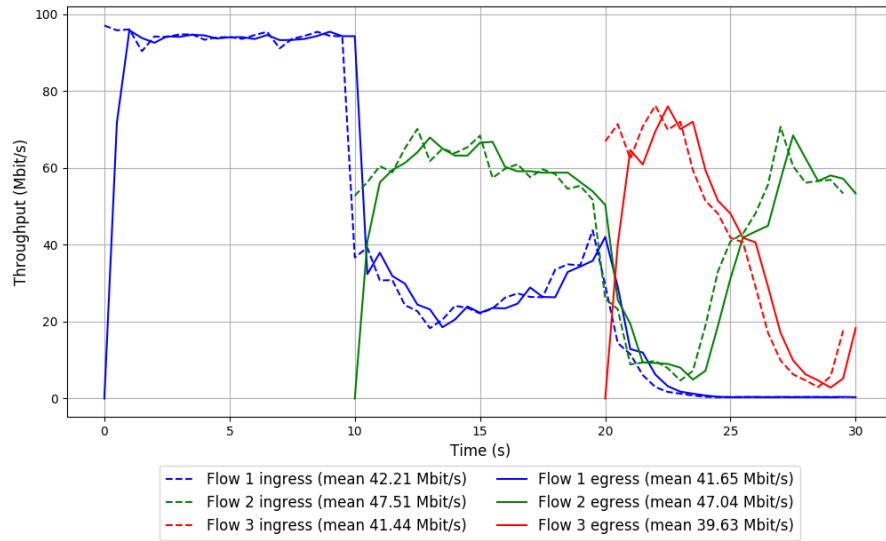


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-01-25 01:06:48
End at: 2019-01-25 01:07:18
Local clock offset: -3.318 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2019-01-25 03:09:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.10 Mbit/s
95th percentile per-packet one-way delay: 21.177 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 41.65 Mbit/s
95th percentile per-packet one-way delay: 15.632 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 47.04 Mbit/s
95th percentile per-packet one-way delay: 20.557 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 39.63 Mbit/s
95th percentile per-packet one-way delay: 27.700 ms
Loss rate: 4.40%
```

Run 1: Report of FillP-Sheep — Data Link

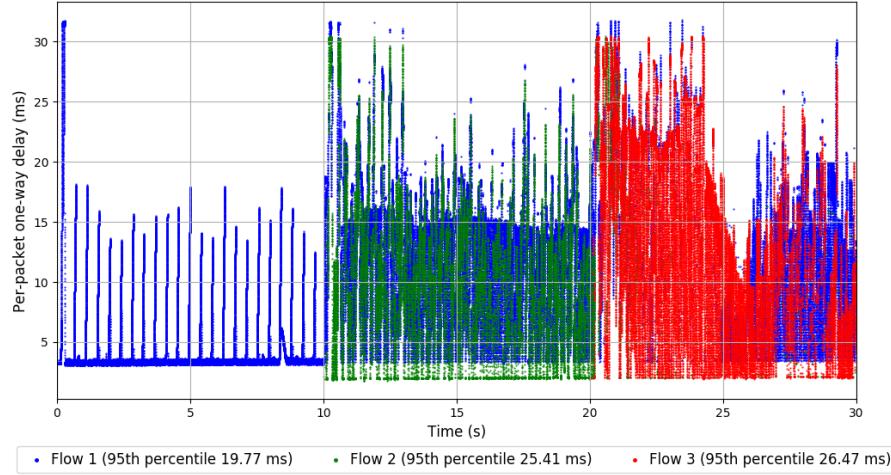
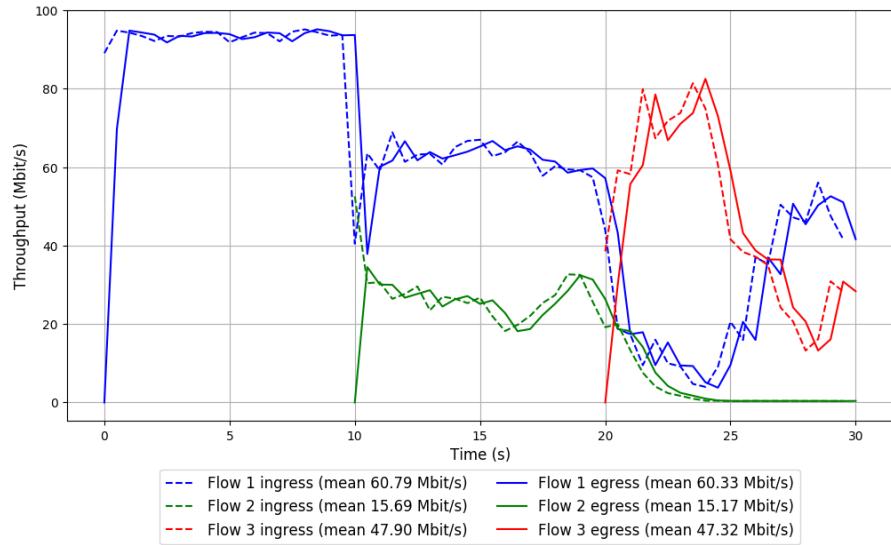


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-25 01:30:43
End at: 2019-01-25 01:31:13
Local clock offset: -4.619 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2019-01-25 03:09:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.10 Mbit/s
95th percentile per-packet one-way delay: 22.816 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 60.33 Mbit/s
95th percentile per-packet one-way delay: 19.770 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 15.17 Mbit/s
95th percentile per-packet one-way delay: 25.414 ms
Loss rate: 3.27%
-- Flow 3:
Average throughput: 47.32 Mbit/s
95th percentile per-packet one-way delay: 26.474 ms
Loss rate: 1.25%
```

Run 2: Report of FillP-Sheep — Data Link

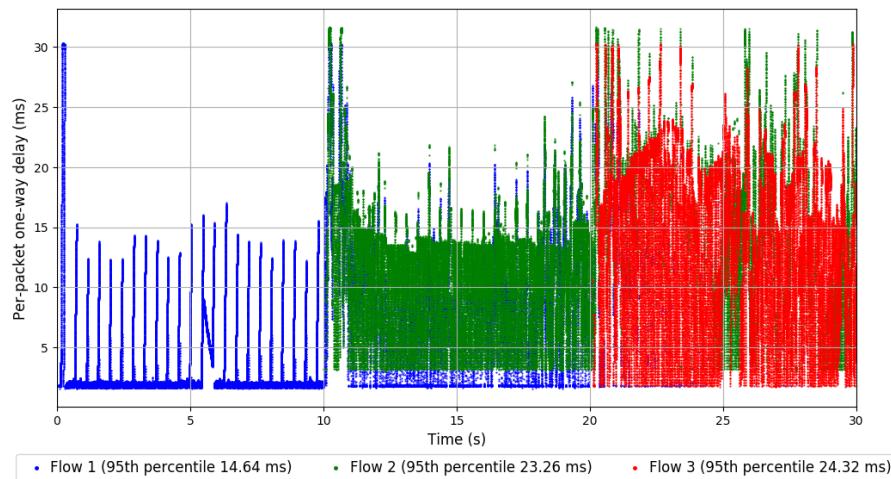
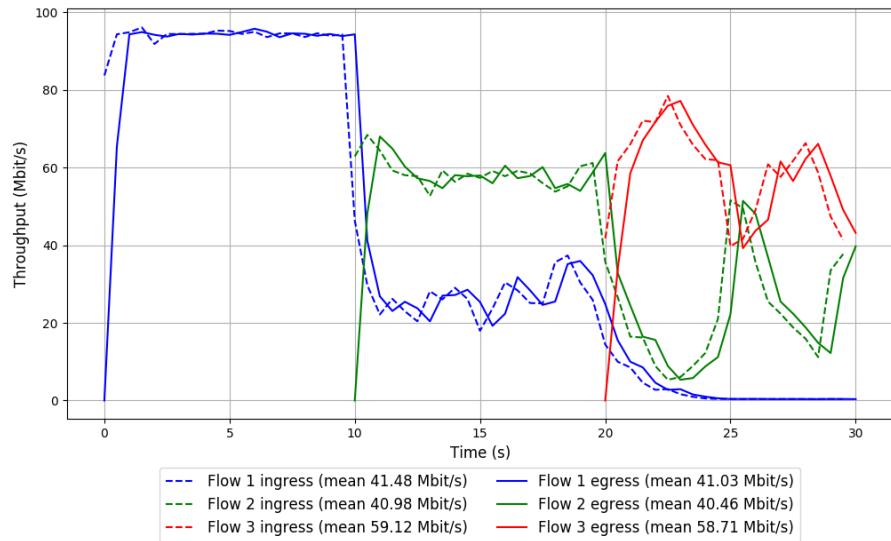


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-25 01:54:39
End at: 2019-01-25 01:55:09
Local clock offset: 0.986 ms
Remote clock offset: 0.485 ms

# Below is generated by plot.py at 2019-01-25 03:09:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.46 Mbit/s
95th percentile per-packet one-way delay: 21.757 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 41.03 Mbit/s
95th percentile per-packet one-way delay: 14.642 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 23.262 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 58.71 Mbit/s
95th percentile per-packet one-way delay: 24.319 ms
Loss rate: 0.66%
```

Run 3: Report of FillP-Sheep — Data Link

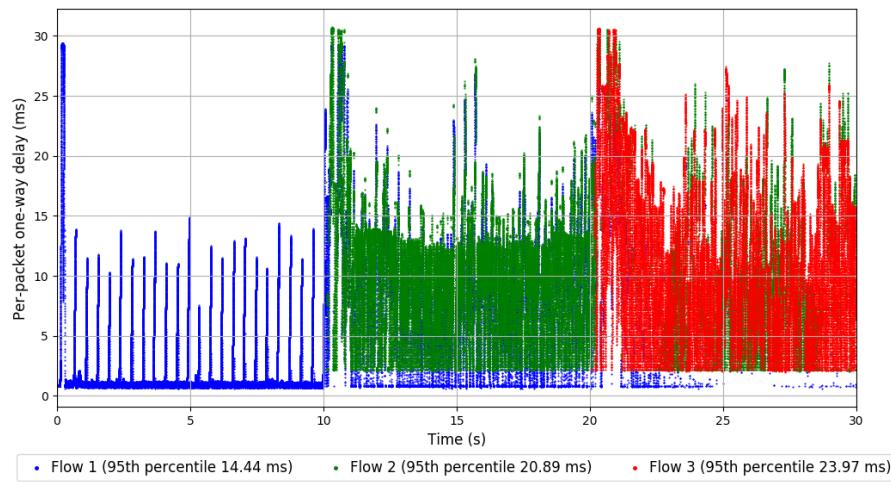
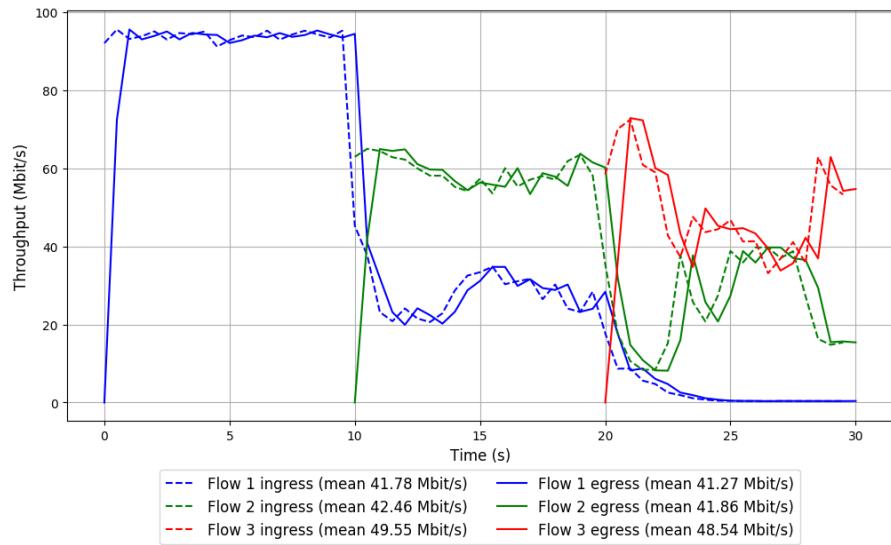


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-25 02:18:33
End at: 2019-01-25 02:19:03
Local clock offset: -4.367 ms
Remote clock offset: 0.568 ms

# Below is generated by plot.py at 2019-01-25 03:10:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.22 Mbit/s
95th percentile per-packet one-way delay: 20.570 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 41.27 Mbit/s
95th percentile per-packet one-way delay: 14.438 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 41.86 Mbit/s
95th percentile per-packet one-way delay: 20.890 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 48.54 Mbit/s
95th percentile per-packet one-way delay: 23.970 ms
Loss rate: 1.99%
```

Run 4: Report of FillP-Sheep — Data Link

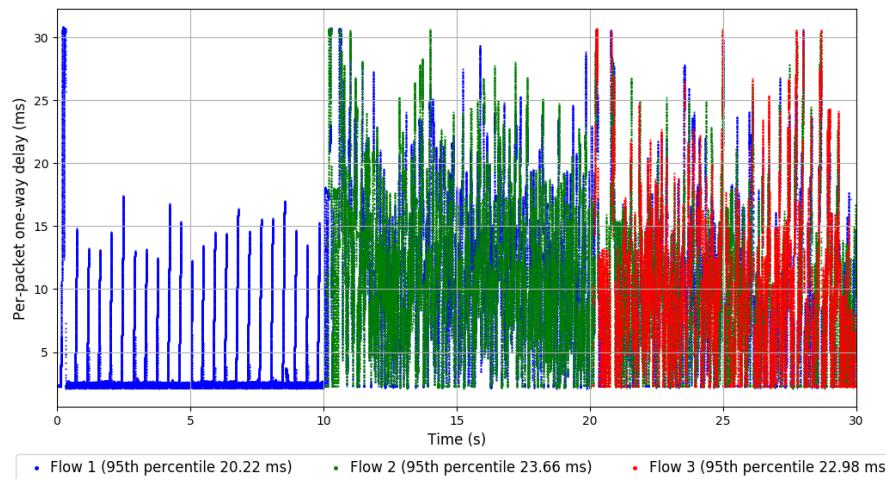
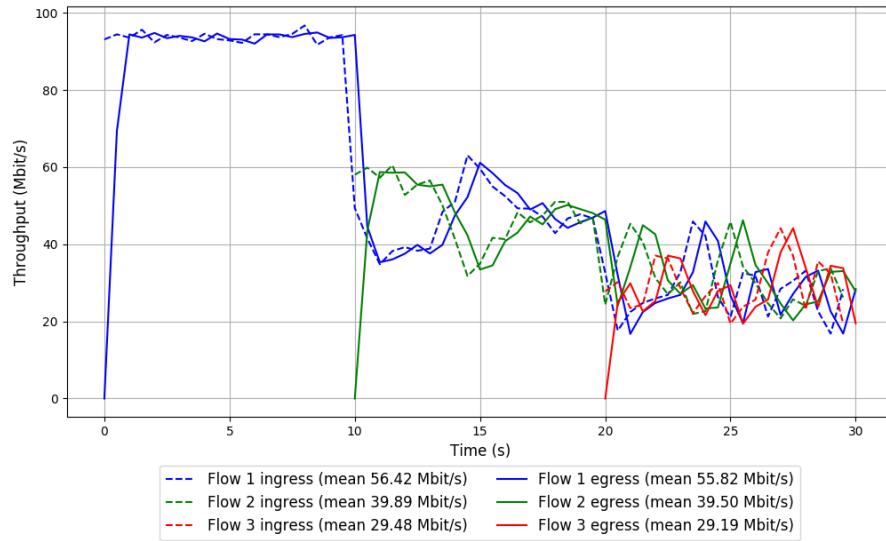


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-25 02:42:28
End at: 2019-01-25 02:42:58
Local clock offset: -4.409 ms
Remote clock offset: 0.75 ms

# Below is generated by plot.py at 2019-01-25 03:10:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.78 Mbit/s
95th percentile per-packet one-way delay: 21.636 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 55.82 Mbit/s
95th percentile per-packet one-way delay: 20.218 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 39.50 Mbit/s
95th percentile per-packet one-way delay: 23.657 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 29.19 Mbit/s
95th percentile per-packet one-way delay: 22.979 ms
Loss rate: 0.96%
```

Run 5: Report of FillP-Sheep — Data Link

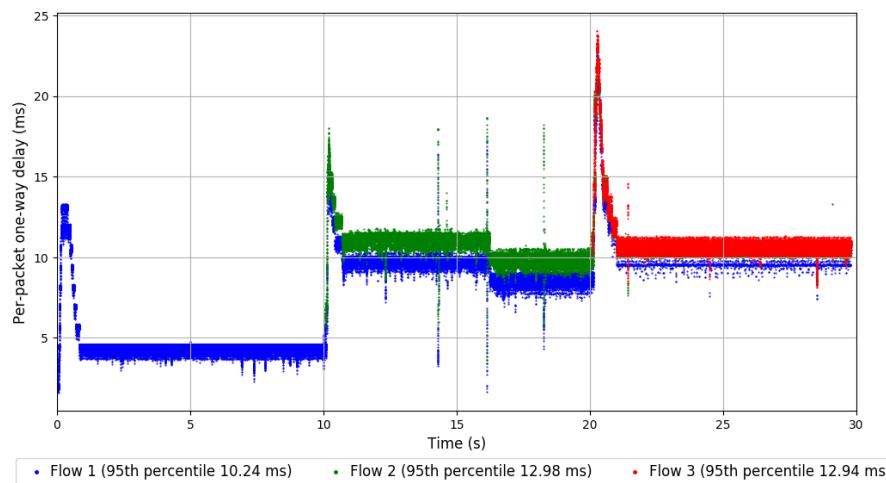
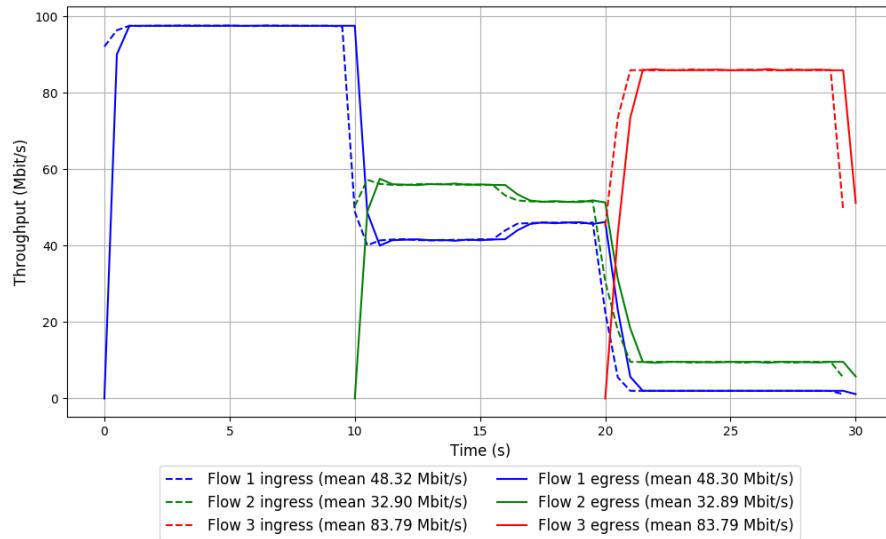


Run 1: Statistics of Indigo

```
Start at: 2019-01-25 01:20:24
End at: 2019-01-25 01:20:54
Local clock offset: -4.91 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2019-01-25 03:10:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 11.832 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 48.30 Mbit/s
95th percentile per-packet one-way delay: 10.236 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 32.89 Mbit/s
95th percentile per-packet one-way delay: 12.983 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.79 Mbit/s
95th percentile per-packet one-way delay: 12.944 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

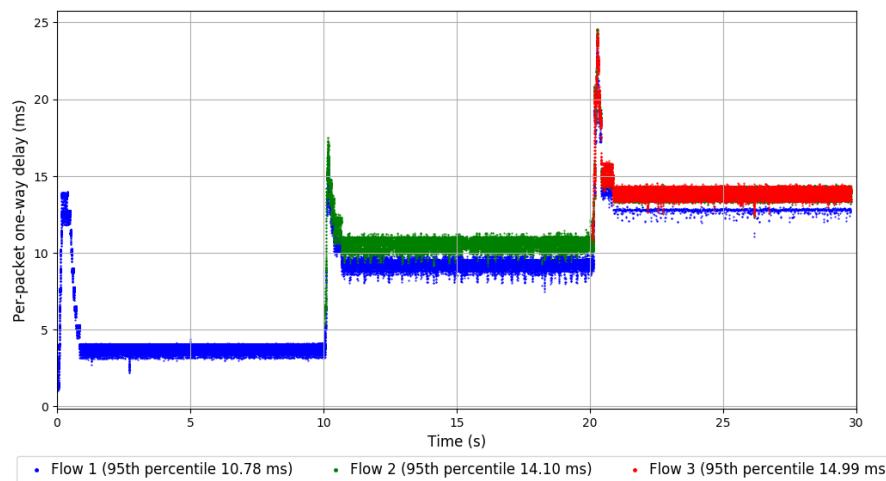
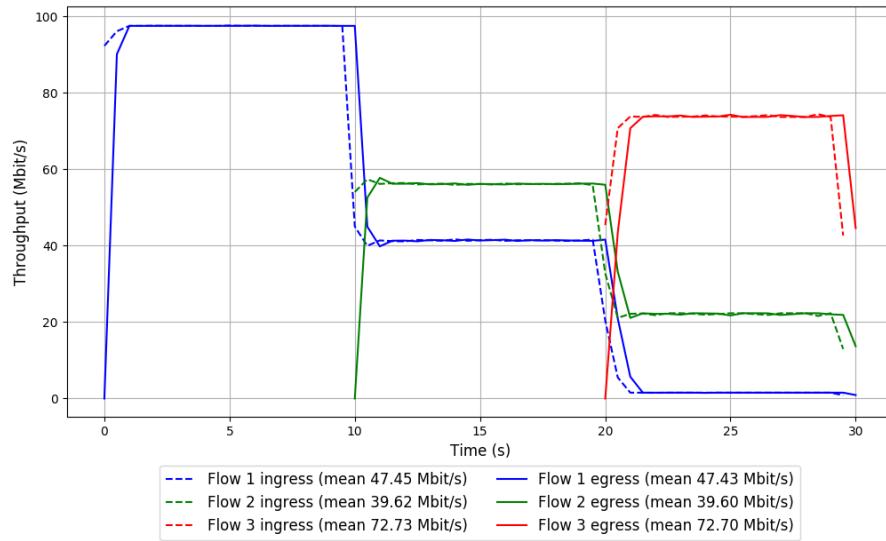


Run 2: Statistics of Indigo

```
Start at: 2019-01-25 01:44:20
End at: 2019-01-25 01:44:50
Local clock offset: 0.51 ms
Remote clock offset: 0.401 ms

# Below is generated by plot.py at 2019-01-25 03:10:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 14.093 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.43 Mbit/s
95th percentile per-packet one-way delay: 10.781 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.60 Mbit/s
95th percentile per-packet one-way delay: 14.096 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 72.70 Mbit/s
95th percentile per-packet one-way delay: 14.987 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

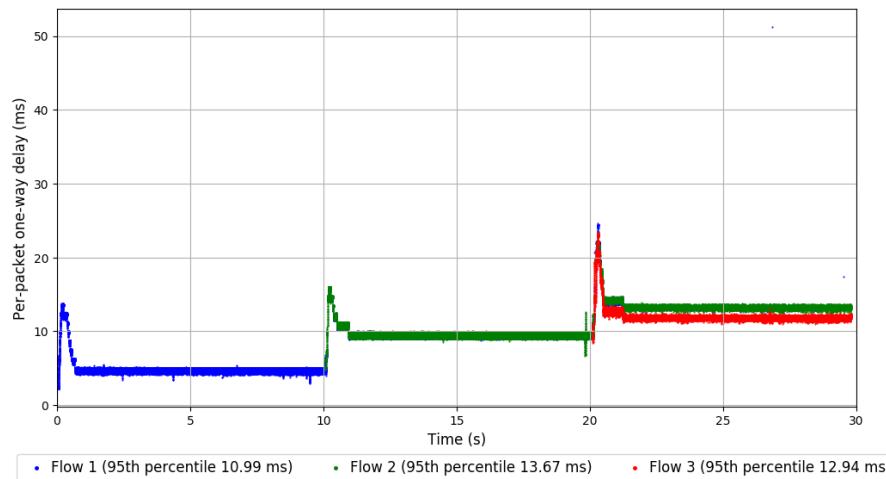
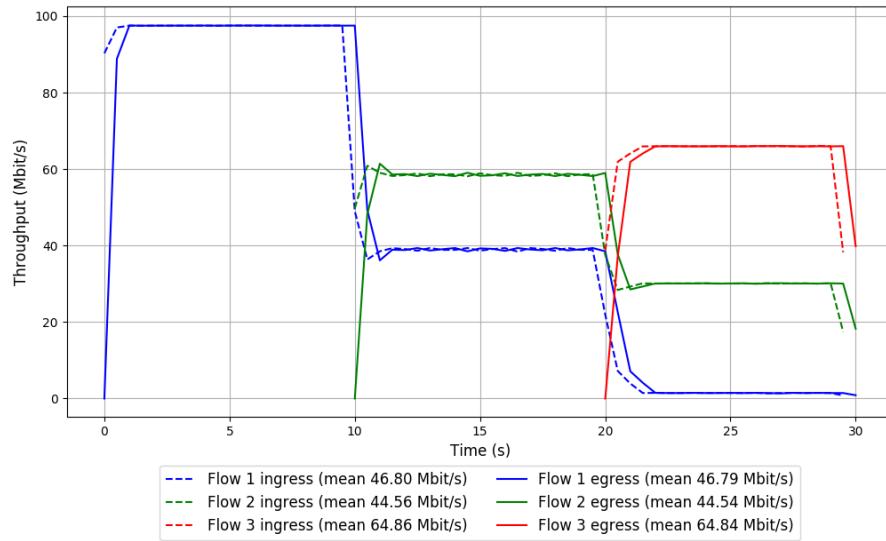


Run 3: Statistics of Indigo

```
Start at: 2019-01-25 02:08:14
End at: 2019-01-25 02:08:45
Local clock offset: -2.314 ms
Remote clock offset: 0.584 ms

# Below is generated by plot.py at 2019-01-25 03:10:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.39 Mbit/s
95th percentile per-packet one-way delay: 13.386 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.79 Mbit/s
95th percentile per-packet one-way delay: 10.994 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.54 Mbit/s
95th percentile per-packet one-way delay: 13.670 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.84 Mbit/s
95th percentile per-packet one-way delay: 12.940 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

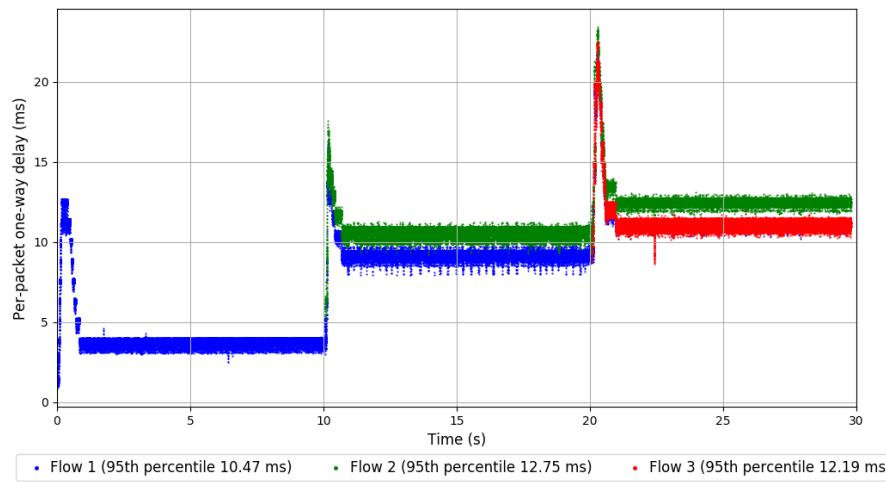
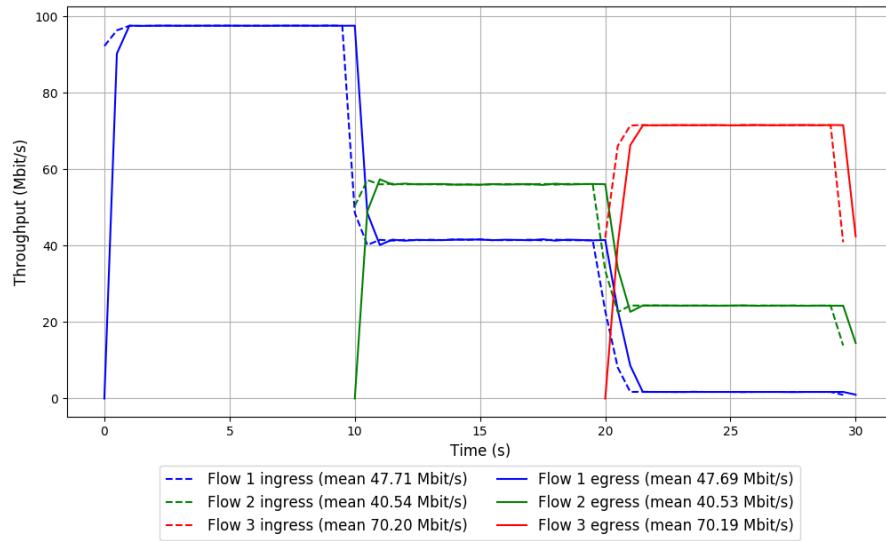


Run 4: Statistics of Indigo

```
Start at: 2019-01-25 02:32:09
End at: 2019-01-25 02:32:39
Local clock offset: -5.059 ms
Remote clock offset: 0.751 ms

# Below is generated by plot.py at 2019-01-25 03:10:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.41 Mbit/s
95th percentile per-packet one-way delay: 12.489 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.69 Mbit/s
95th percentile per-packet one-way delay: 10.466 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 12.747 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.19 Mbit/s
95th percentile per-packet one-way delay: 12.189 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

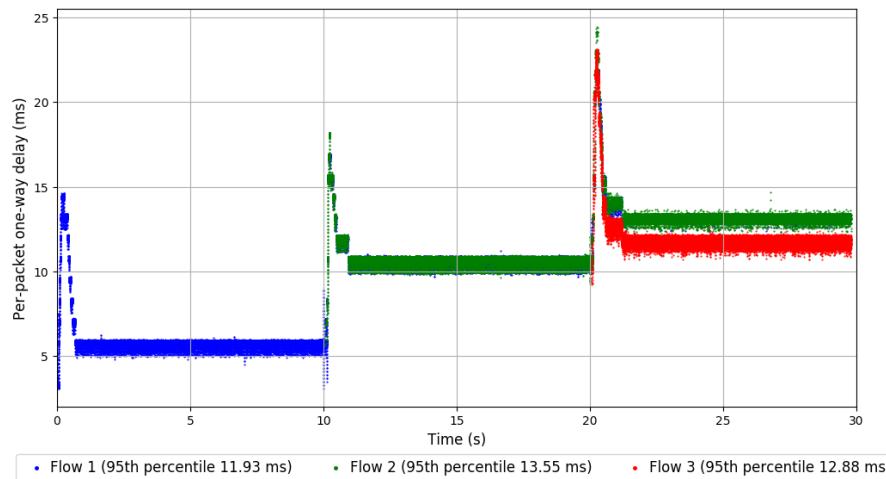
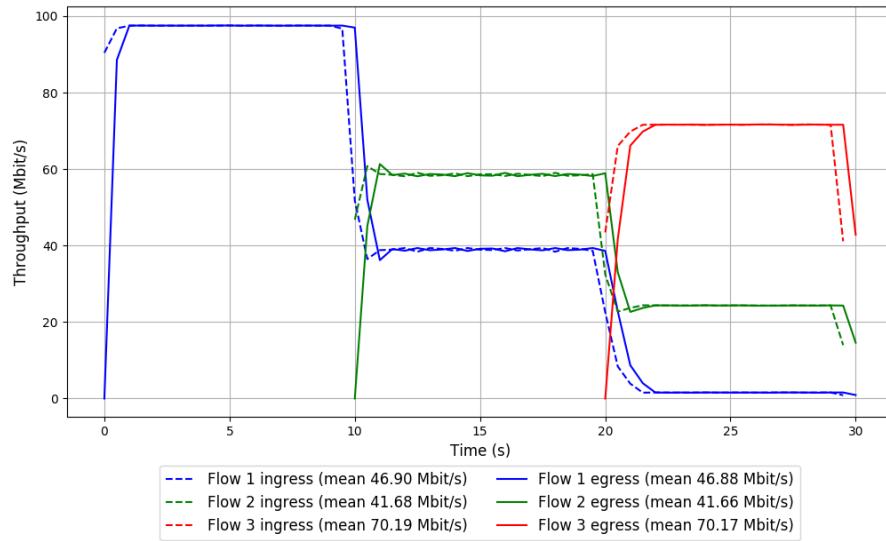


Run 5: Statistics of Indigo

```
Start at: 2019-01-25 02:56:04
End at: 2019-01-25 02:56:34
Local clock offset: -5.158 ms
Remote clock offset: 0.862 ms

# Below is generated by plot.py at 2019-01-25 03:10:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.37 Mbit/s
95th percentile per-packet one-way delay: 13.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.88 Mbit/s
95th percentile per-packet one-way delay: 11.932 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.66 Mbit/s
95th percentile per-packet one-way delay: 13.549 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.17 Mbit/s
95th percentile per-packet one-way delay: 12.885 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

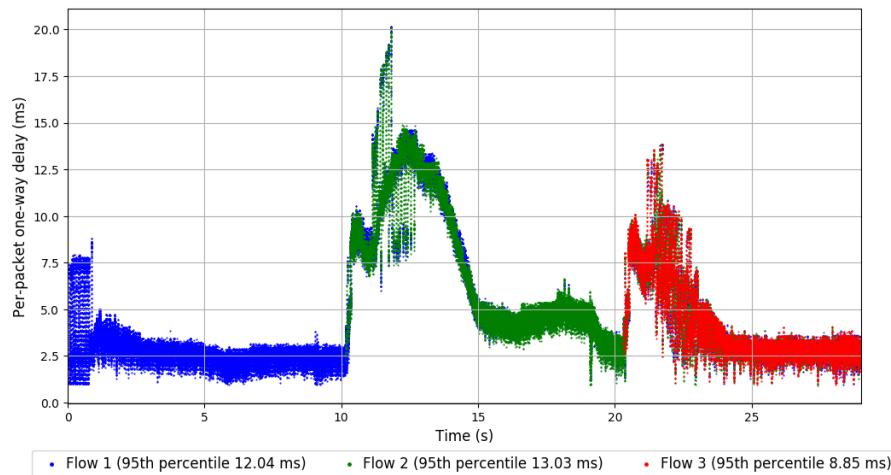
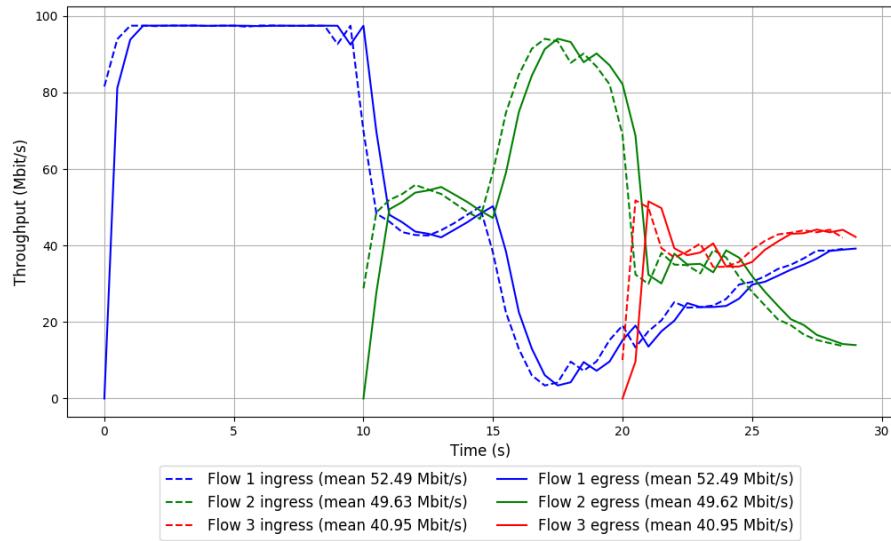


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-01-25 01:22:40
End at: 2019-01-25 01:23:10
Local clock offset: -4.258 ms
Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2019-01-25 03:10:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.00 Mbit/s
95th percentile per-packet one-way delay: 12.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.49 Mbit/s
95th percentile per-packet one-way delay: 12.043 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.62 Mbit/s
95th percentile per-packet one-way delay: 13.031 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 8.854 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC3 — Data Link

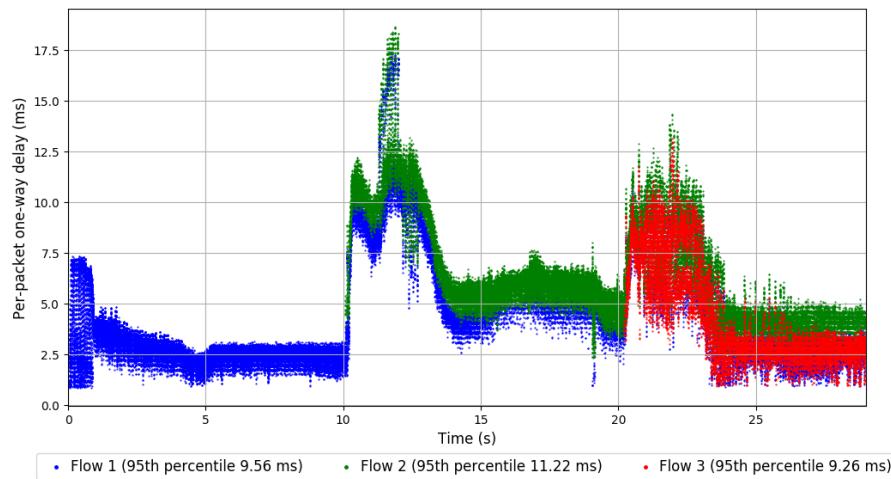
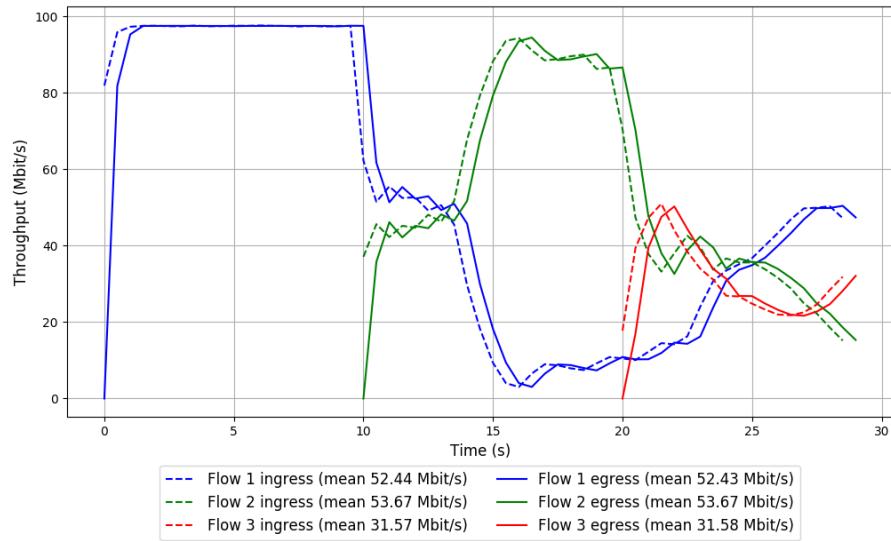


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 01:46:36
End at: 2019-01-25 01:47:06
Local clock offset: 0.888 ms
Remote clock offset: 0.292 ms

# Below is generated by plot.py at 2019-01-25 03:11:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 10.348 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.43 Mbit/s
95th percentile per-packet one-way delay: 9.556 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.67 Mbit/s
95th percentile per-packet one-way delay: 11.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.58 Mbit/s
95th percentile per-packet one-way delay: 9.258 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

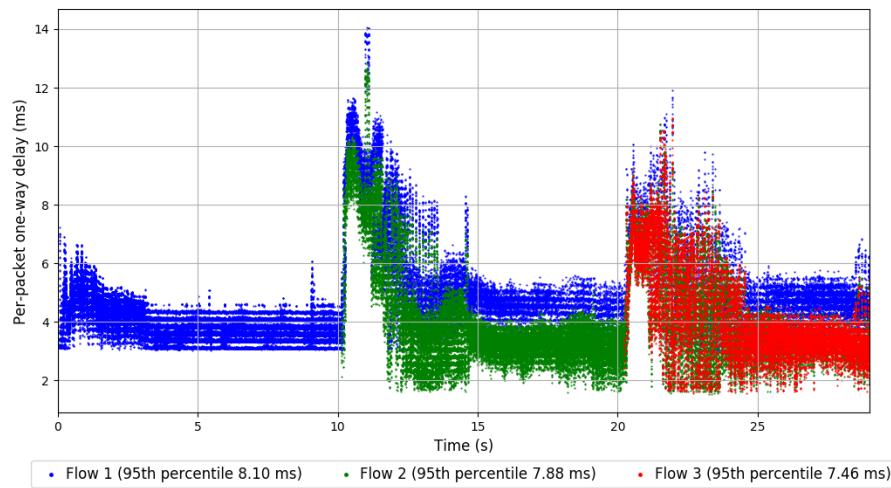
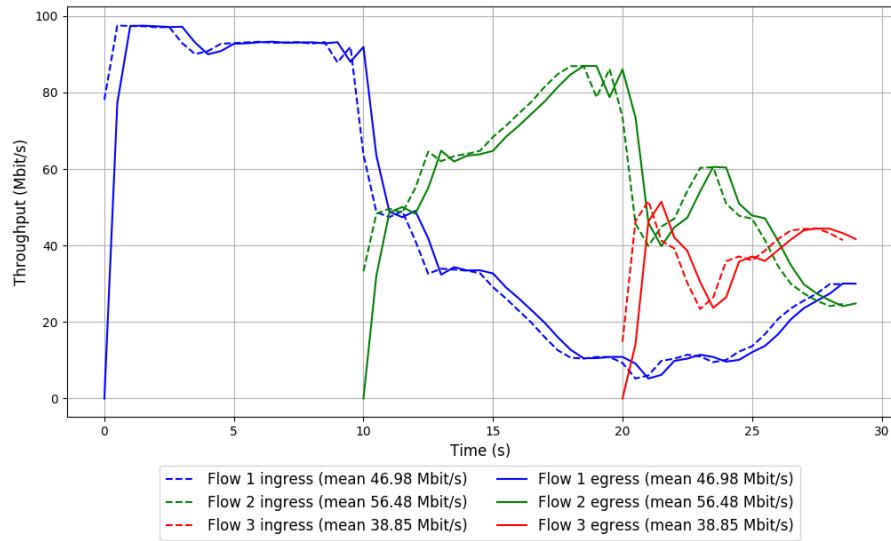


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 02:10:30
End at: 2019-01-25 02:11:00
Local clock offset: -3.769 ms
Remote clock offset: 0.614 ms

# Below is generated by plot.py at 2019-01-25 03:11:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.44 Mbit/s
95th percentile per-packet one-way delay: 7.826 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.98 Mbit/s
95th percentile per-packet one-way delay: 8.095 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.48 Mbit/s
95th percentile per-packet one-way delay: 7.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.85 Mbit/s
95th percentile per-packet one-way delay: 7.463 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

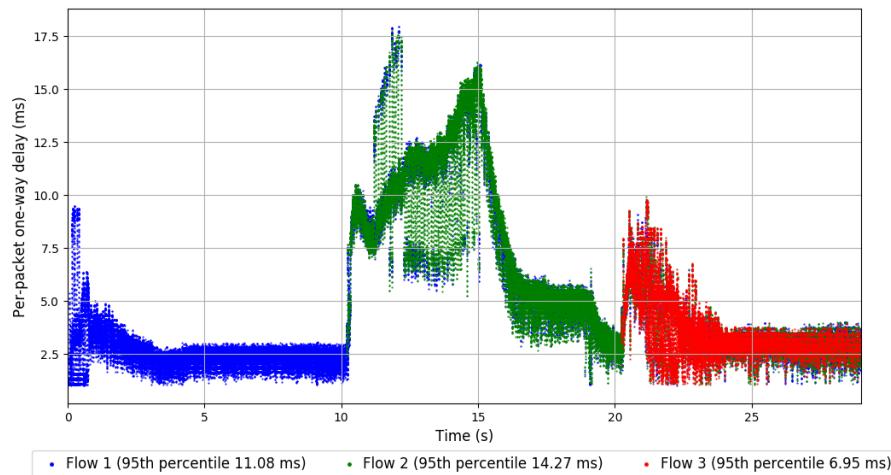
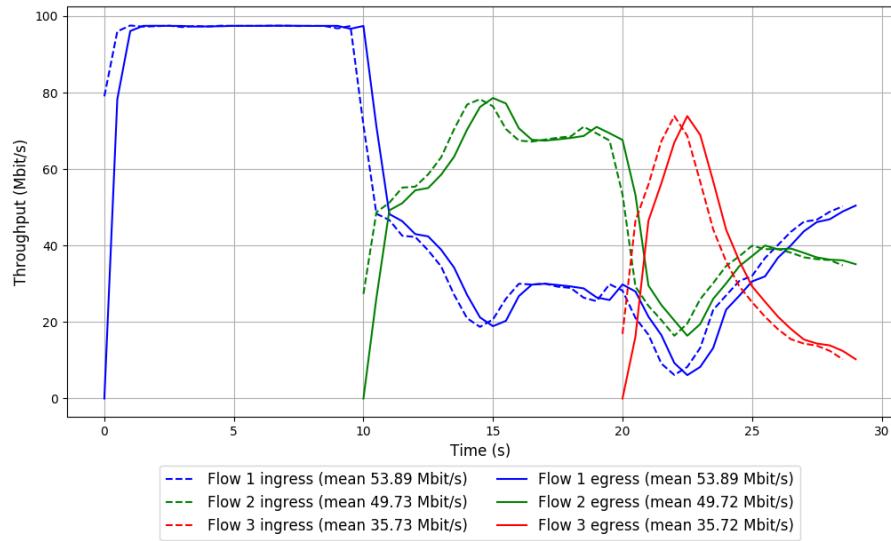


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 02:34:25
End at: 2019-01-25 02:34:55
Local clock offset: -4.871 ms
Remote clock offset: 0.783 ms

# Below is generated by plot.py at 2019-01-25 03:11:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.96 Mbit/s
95th percentile per-packet one-way delay: 12.485 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.89 Mbit/s
95th percentile per-packet one-way delay: 11.078 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.72 Mbit/s
95th percentile per-packet one-way delay: 14.273 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.72 Mbit/s
95th percentile per-packet one-way delay: 6.953 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

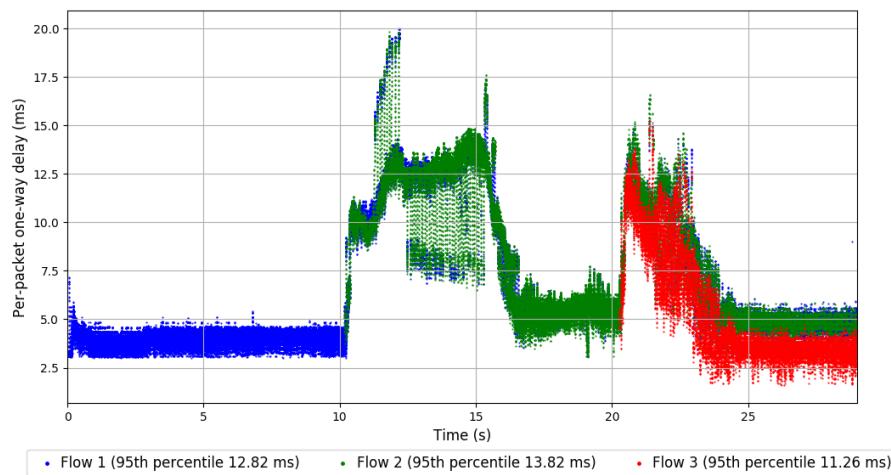
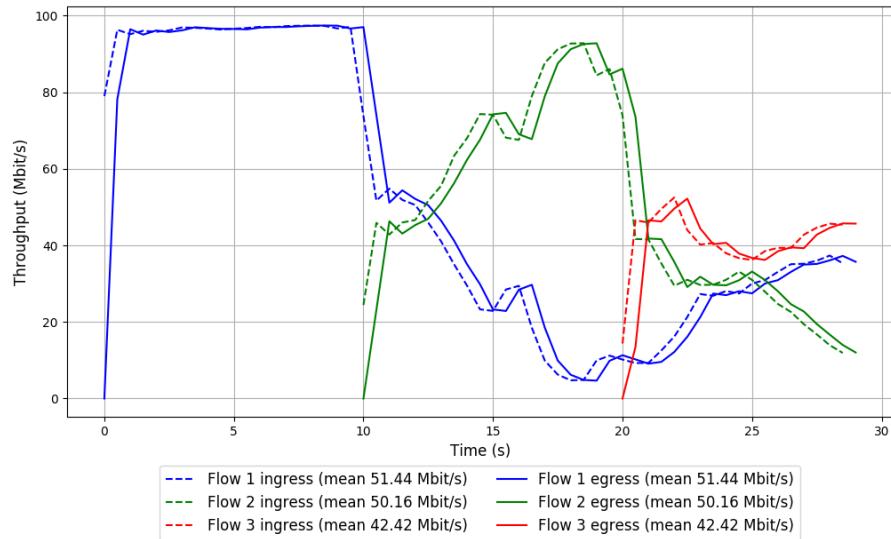


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 02:58:20
End at: 2019-01-25 02:58:50
Local clock offset: -5.179 ms
Remote clock offset: 0.791 ms

# Below is generated by plot.py at 2019-01-25 03:11:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.77 Mbit/s
95th percentile per-packet one-way delay: 13.275 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.44 Mbit/s
95th percentile per-packet one-way delay: 12.816 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 13.823 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.42 Mbit/s
95th percentile per-packet one-way delay: 11.257 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link

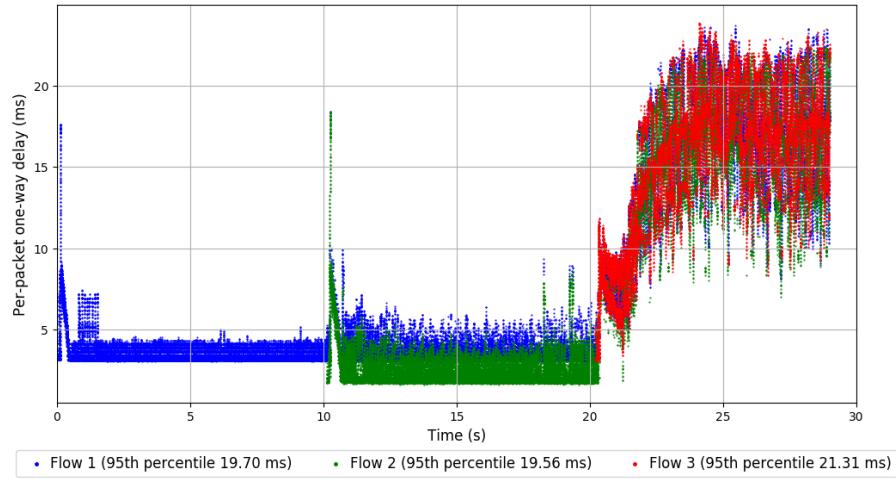
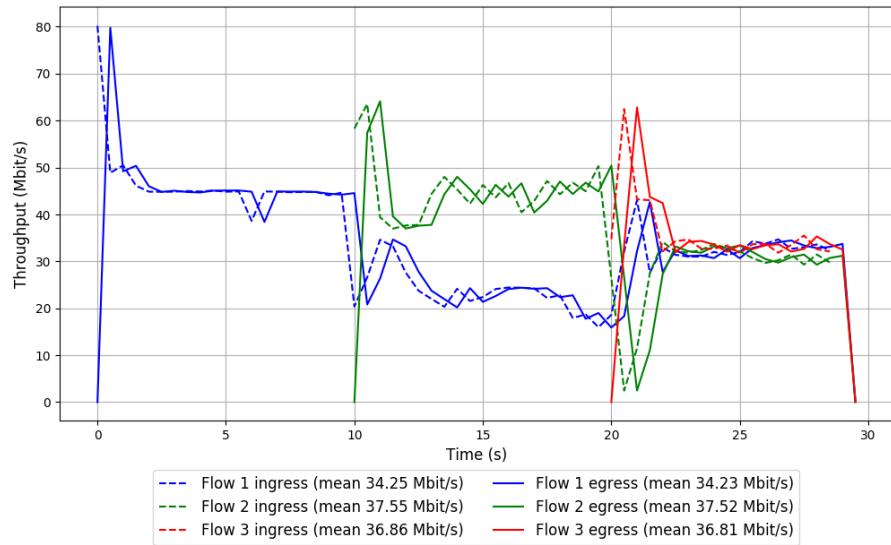


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-01-25 01:19:16
End at: 2019-01-25 01:19:46
Local clock offset: -4.878 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2019-01-25 03:11:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.83 Mbit/s
95th percentile per-packet one-way delay: 20.249 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: 19.699 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: 19.559 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.81 Mbit/s
95th percentile per-packet one-way delay: 21.306 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

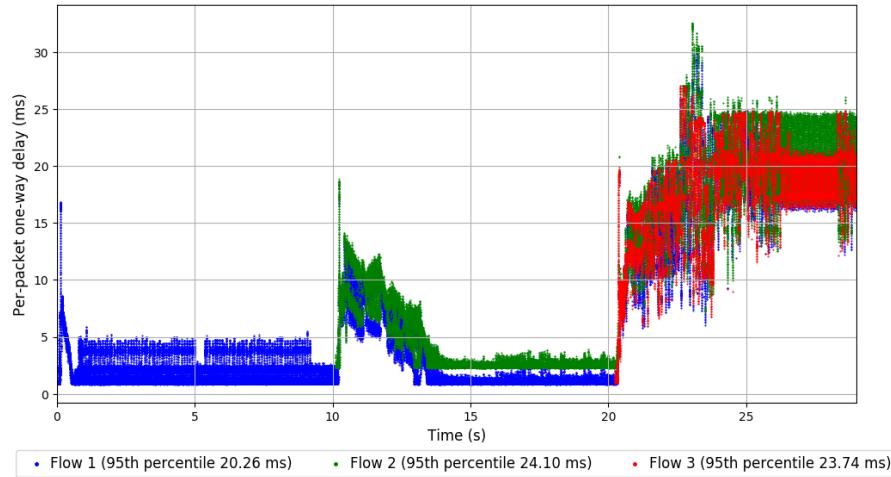
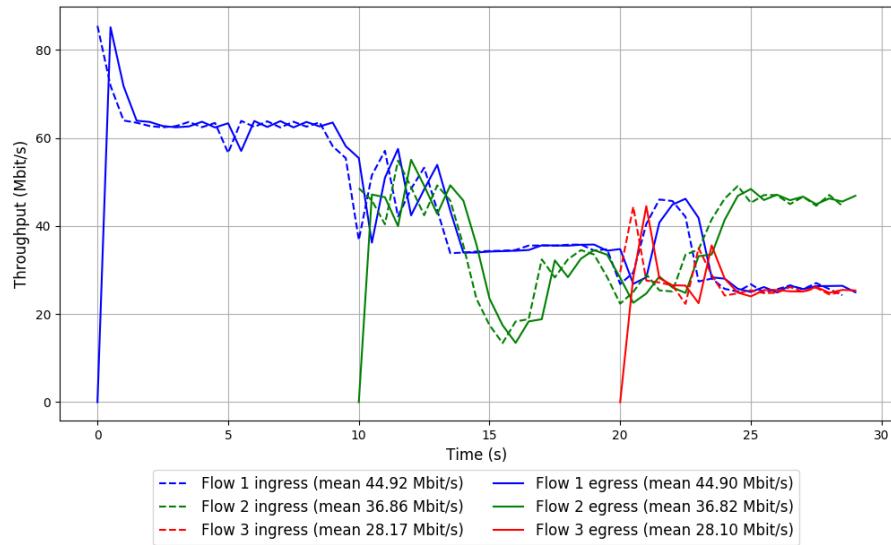


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 01:43:12
End at: 2019-01-25 01:43:42
Local clock offset: 0.338 ms
Remote clock offset: 0.196 ms

# Below is generated by plot.py at 2019-01-25 03:11:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.36 Mbit/s
95th percentile per-packet one-way delay: 22.558 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.90 Mbit/s
95th percentile per-packet one-way delay: 20.263 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.82 Mbit/s
95th percentile per-packet one-way delay: 24.096 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 28.10 Mbit/s
95th percentile per-packet one-way delay: 23.736 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC5 — Data Link

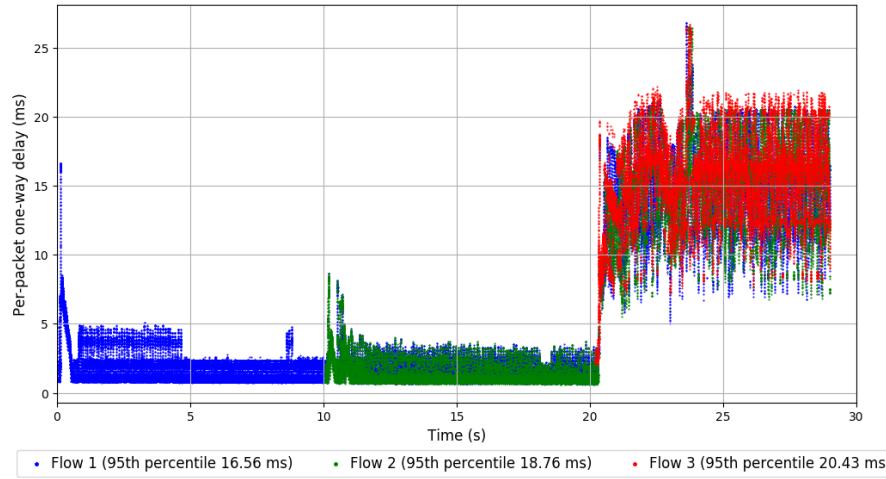
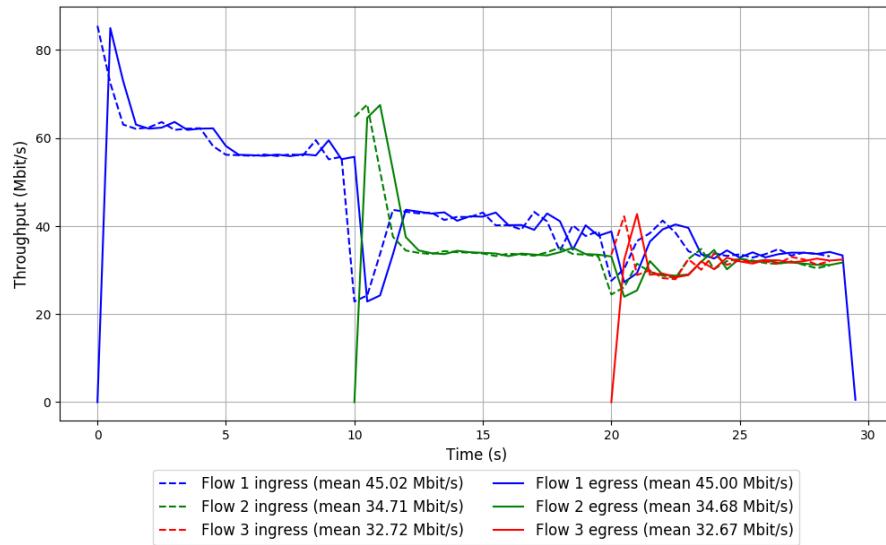


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 02:07:06
End at: 2019-01-25 02:07:36
Local clock offset: -1.891 ms
Remote clock offset: 0.586 ms

# Below is generated by plot.py at 2019-01-25 03:11:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.56 Mbit/s
95th percentile per-packet one-way delay: 18.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.00 Mbit/s
95th percentile per-packet one-way delay: 16.560 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.68 Mbit/s
95th percentile per-packet one-way delay: 18.760 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 32.67 Mbit/s
95th percentile per-packet one-way delay: 20.435 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

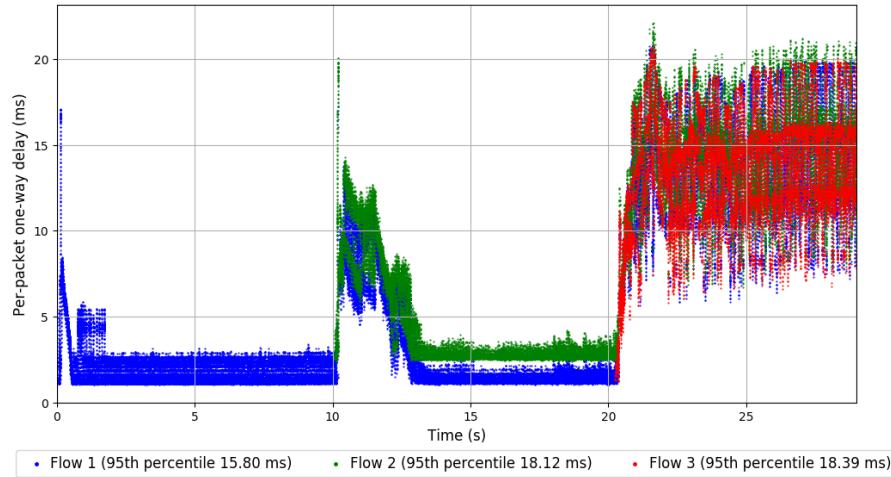
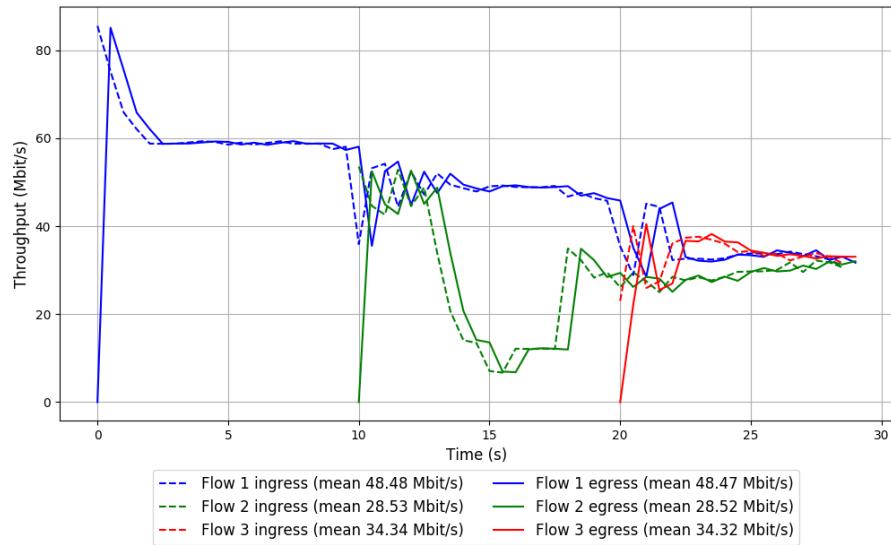


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 02:31:00
End at: 2019-01-25 02:31:30
Local clock offset: -5.273 ms
Remote clock offset: 0.767 ms

# Below is generated by plot.py at 2019-01-25 03:11:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.43 Mbit/s
95th percentile per-packet one-way delay: 17.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.47 Mbit/s
95th percentile per-packet one-way delay: 15.804 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.52 Mbit/s
95th percentile per-packet one-way delay: 18.124 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.32 Mbit/s
95th percentile per-packet one-way delay: 18.394 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

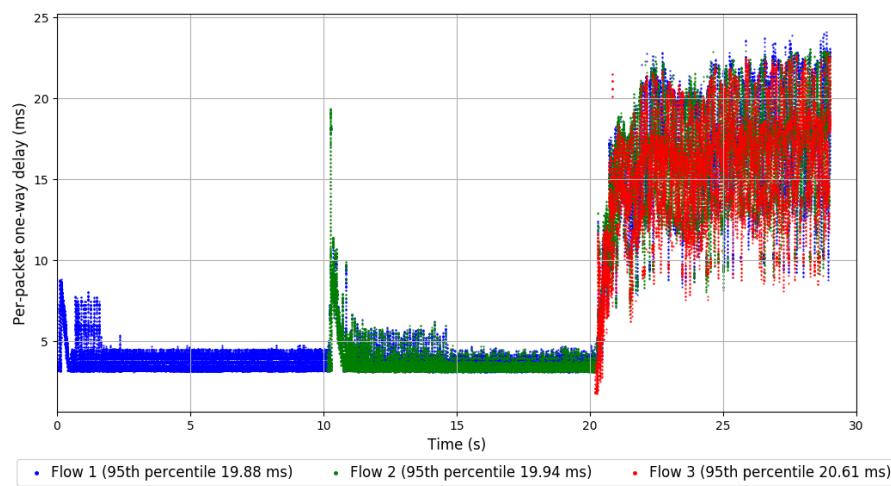
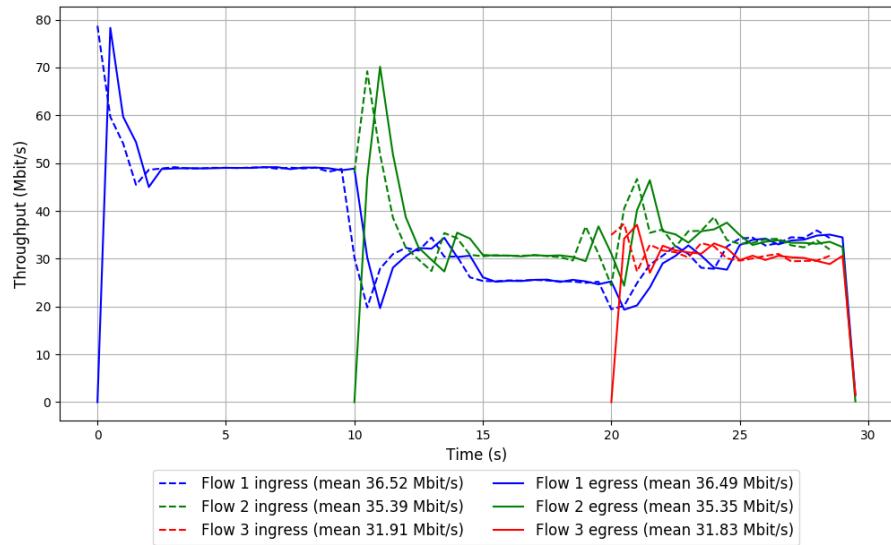


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 02:54:56
End at: 2019-01-25 02:55:26
Local clock offset: -5.192 ms
Remote clock offset: 0.839 ms

# Below is generated by plot.py at 2019-01-25 03:11:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.18 Mbit/s
95th percentile per-packet one-way delay: 20.096 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.49 Mbit/s
95th percentile per-packet one-way delay: 19.882 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.35 Mbit/s
95th percentile per-packet one-way delay: 19.938 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 20.605 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link

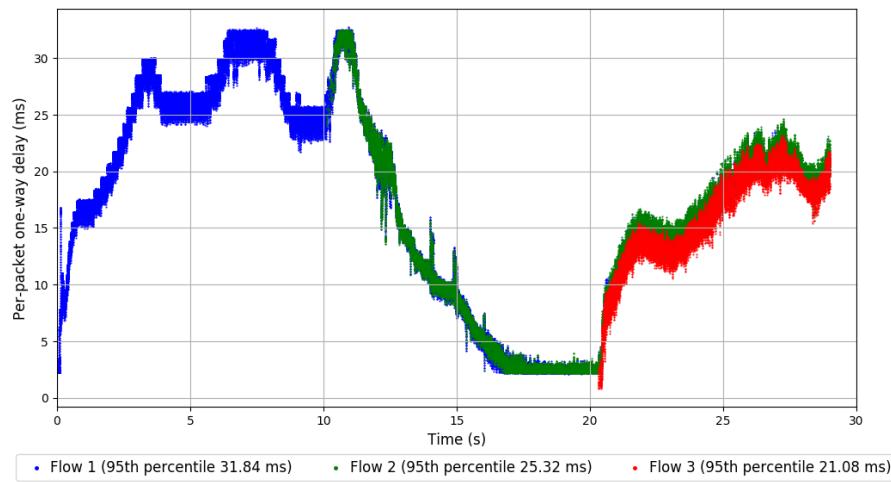
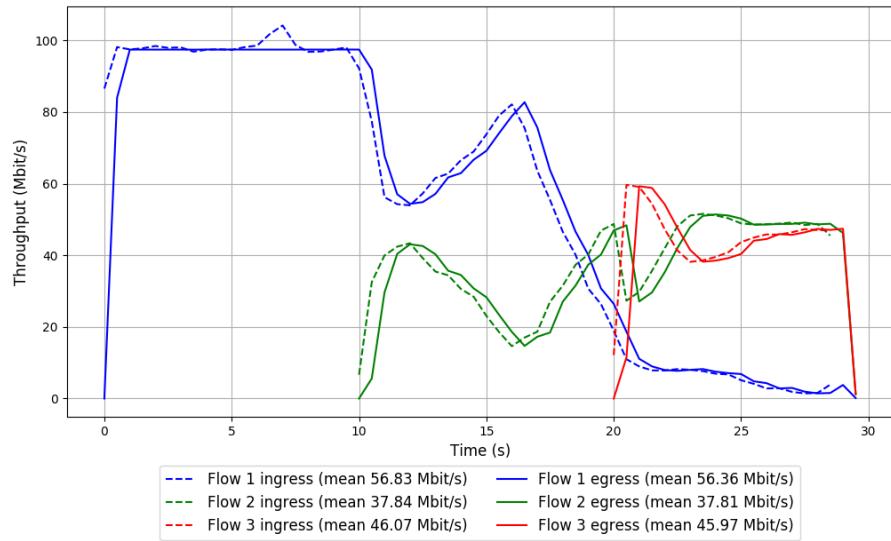


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 01:28:26
End at: 2019-01-25 01:28:56
Local clock offset: -4.442 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-01-25 03:12:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.77 Mbit/s
95th percentile per-packet one-way delay: 31.089 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 31.844 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 25.318 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 45.97 Mbit/s
95th percentile per-packet one-way delay: 21.081 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

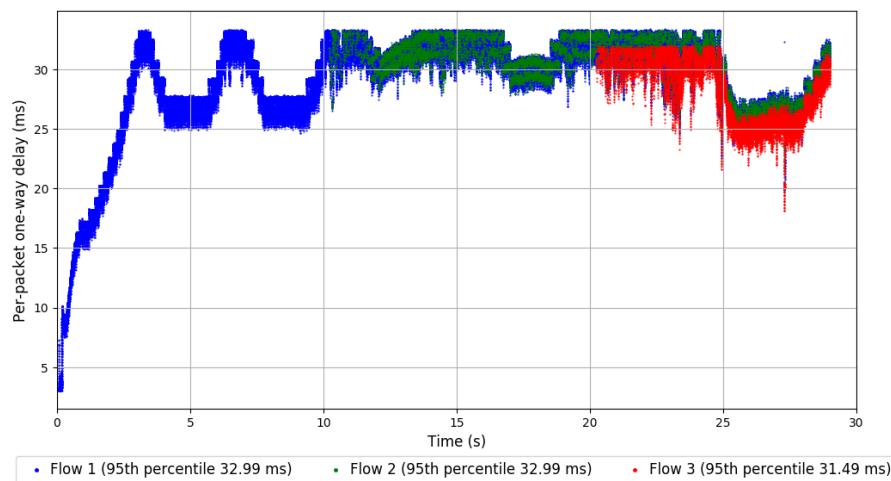
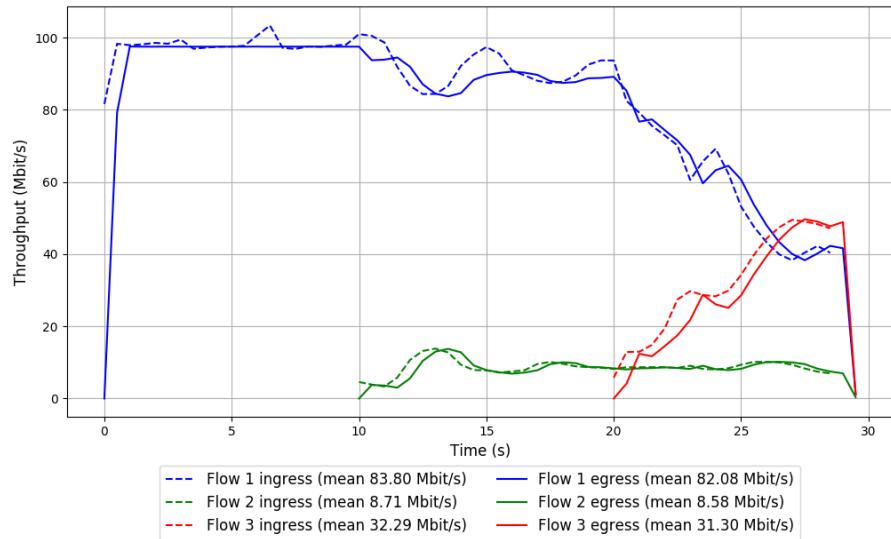


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 01:52:22
End at: 2019-01-25 01:52:52
Local clock offset: 0.774 ms
Remote clock offset: 0.305 ms

# Below is generated by plot.py at 2019-01-25 03:12:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 32.968 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 82.08 Mbit/s
95th percentile per-packet one-way delay: 32.987 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 32.995 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 31.30 Mbit/s
95th percentile per-packet one-way delay: 31.489 ms
Loss rate: 3.08%
```

Run 2: Report of Indigo-MusesD — Data Link

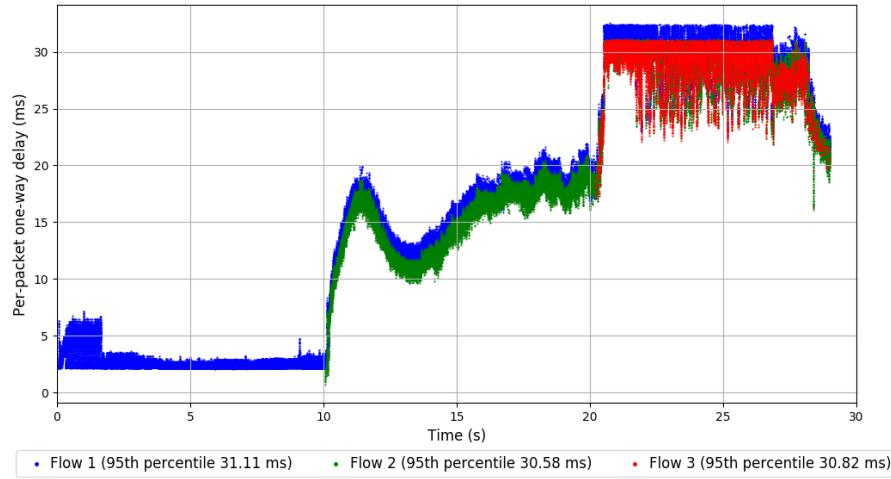
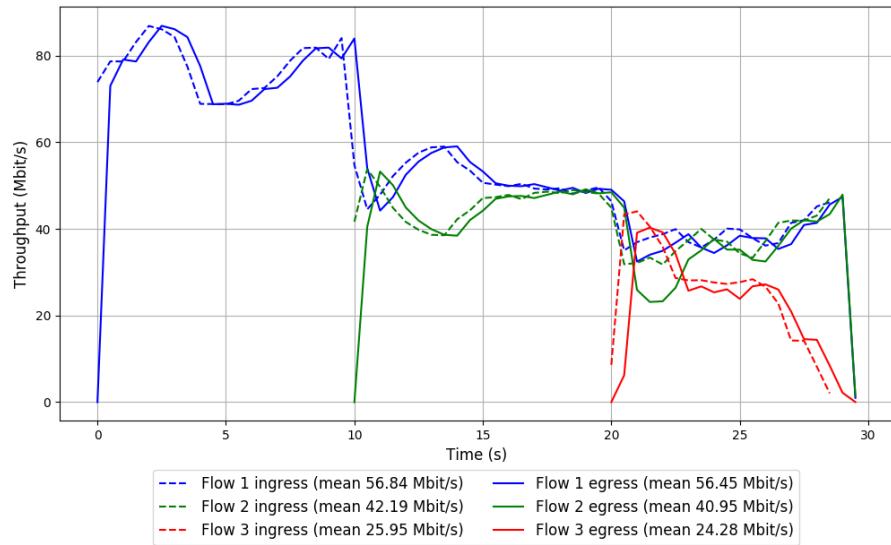


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 02:16:16
End at: 2019-01-25 02:16:46
Local clock offset: -4.106 ms
Remote clock offset: 0.496 ms

# Below is generated by plot.py at 2019-01-25 03:12:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.54 Mbit/s
95th percentile per-packet one-way delay: 30.807 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 56.45 Mbit/s
95th percentile per-packet one-way delay: 31.107 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 30.576 ms
Loss rate: 2.83%
-- Flow 3:
Average throughput: 24.28 Mbit/s
95th percentile per-packet one-way delay: 30.822 ms
Loss rate: 6.40%
```

Run 3: Report of Indigo-MusesD — Data Link

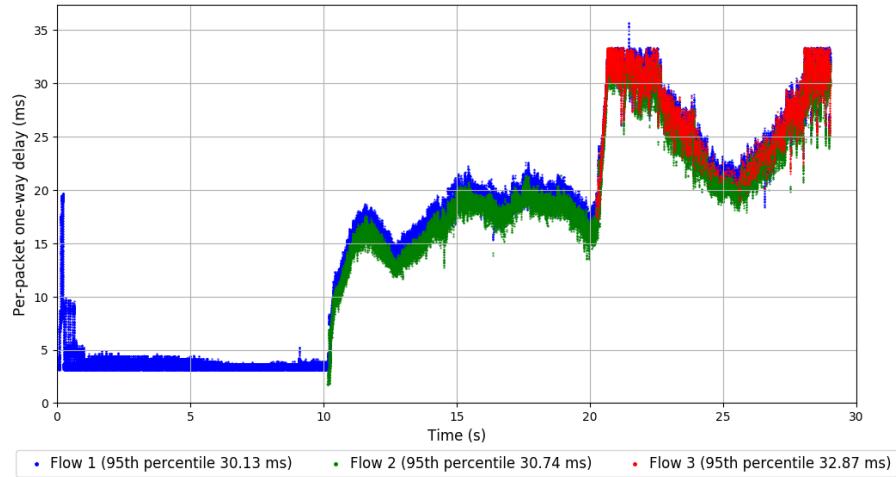
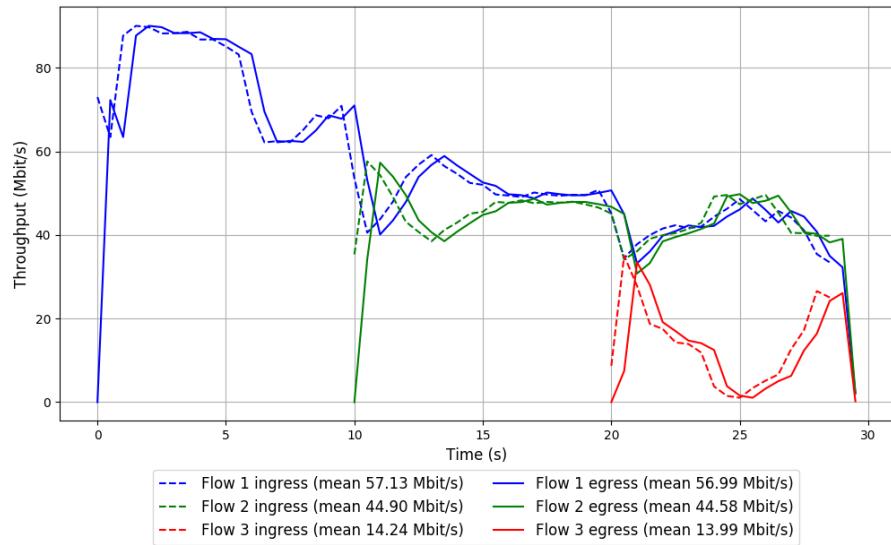


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 02:40:11
End at: 2019-01-25 02:40:41
Local clock offset: -5.304 ms
Remote clock offset: 0.735 ms

# Below is generated by plot.py at 2019-01-25 03:12:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.24 Mbit/s
95th percentile per-packet one-way delay: 31.140 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 56.99 Mbit/s
95th percentile per-packet one-way delay: 30.127 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 44.58 Mbit/s
95th percentile per-packet one-way delay: 30.739 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 32.867 ms
Loss rate: 1.66%
```

Run 4: Report of Indigo-MusesD — Data Link

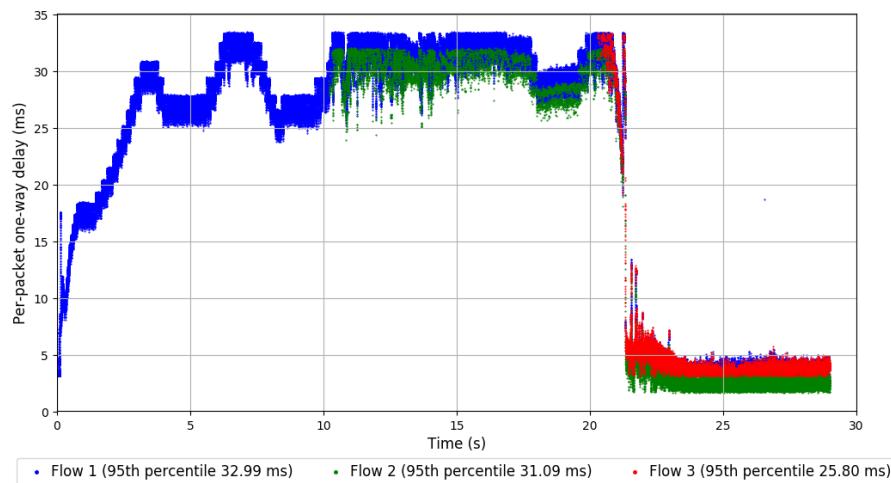
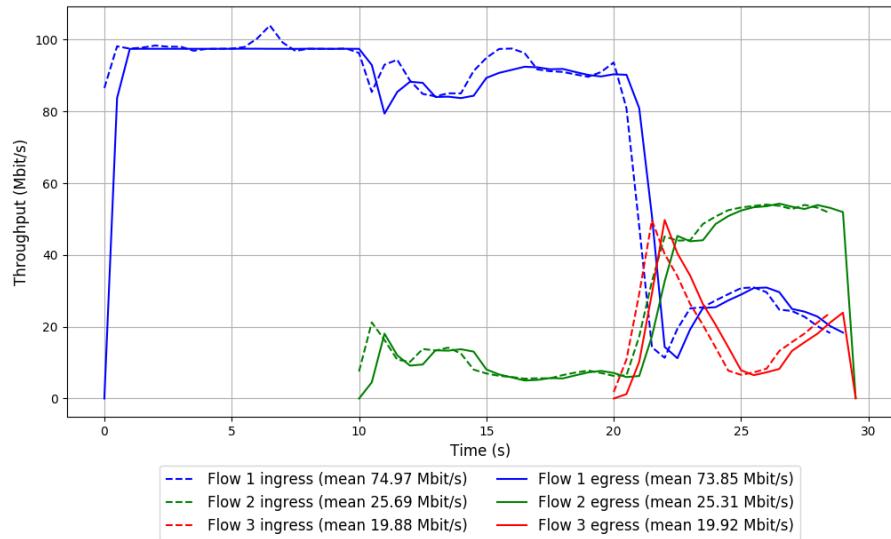


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 03:04:06
End at: 2019-01-25 03:04:36
Local clock offset: -5.08 ms
Remote clock offset: 0.769 ms

# Below is generated by plot.py at 2019-01-25 03:12:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.27 Mbit/s
95th percentile per-packet one-way delay: 32.926 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 73.85 Mbit/s
95th percentile per-packet one-way delay: 32.994 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 25.31 Mbit/s
95th percentile per-packet one-way delay: 31.088 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 19.92 Mbit/s
95th percentile per-packet one-way delay: 25.800 ms
Loss rate: 0.14%
```

Run 5: Report of Indigo-MusesD — Data Link

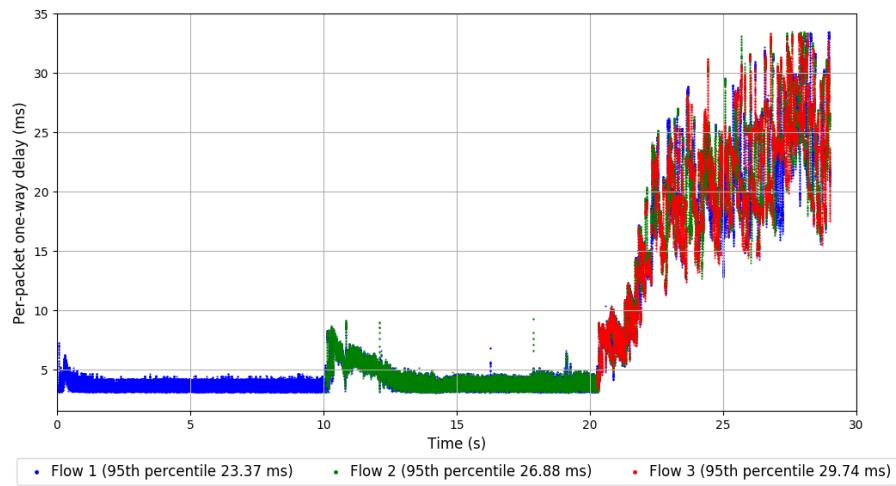
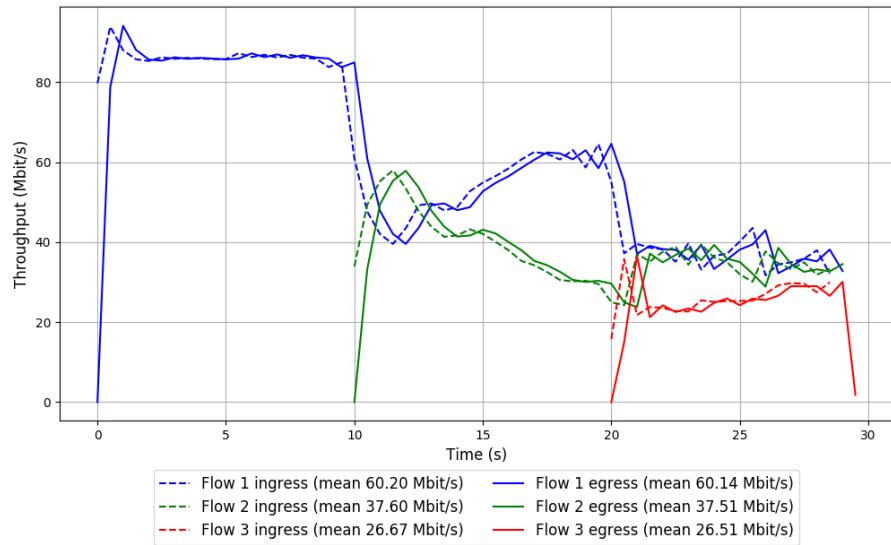


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 01:24:59
End at: 2019-01-25 01:25:29
Local clock offset: -5.152 ms
Remote clock offset: 0.12 ms

# Below is generated by plot.py at 2019-01-25 03:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.59 Mbit/s
95th percentile per-packet one-way delay: 25.934 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 60.14 Mbit/s
95th percentile per-packet one-way delay: 23.368 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 37.51 Mbit/s
95th percentile per-packet one-way delay: 26.882 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 26.51 Mbit/s
95th percentile per-packet one-way delay: 29.737 ms
Loss rate: 0.38%
```

Run 1: Report of Indigo-MusesT — Data Link

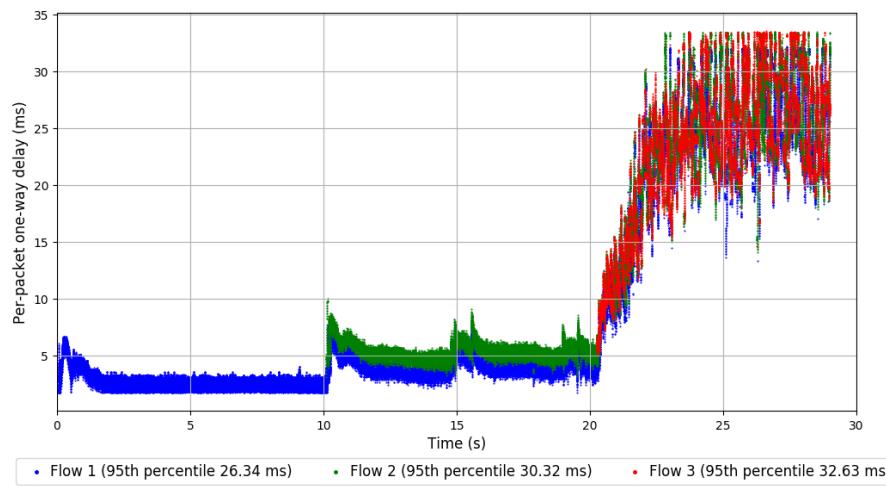
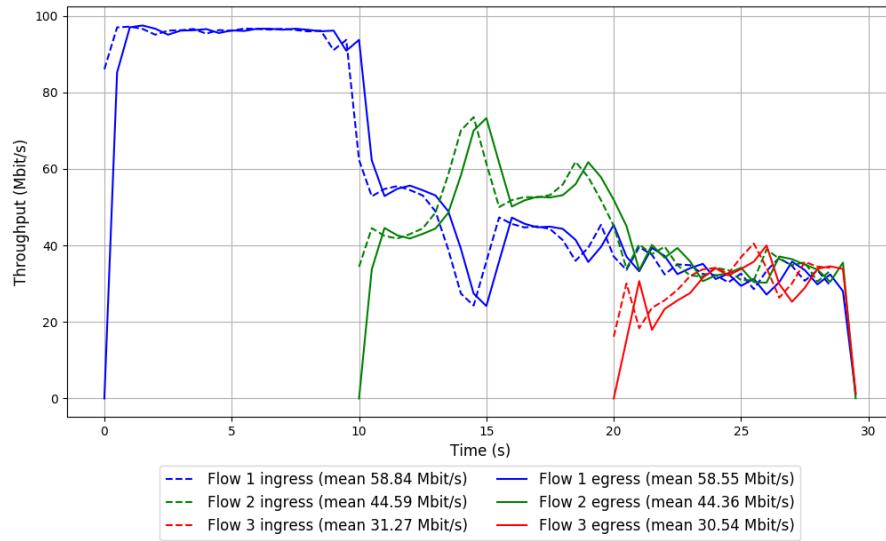


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 01:48:54
End at: 2019-01-25 01:49:24
Local clock offset: 0.426 ms
Remote clock offset: 0.439 ms

# Below is generated by plot.py at 2019-01-25 03:12:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.72 Mbit/s
95th percentile per-packet one-way delay: 29.535 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 58.55 Mbit/s
95th percentile per-packet one-way delay: 26.342 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 44.36 Mbit/s
95th percentile per-packet one-way delay: 30.318 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 30.54 Mbit/s
95th percentile per-packet one-way delay: 32.633 ms
Loss rate: 2.09%
```

Run 2: Report of Indigo-MusesT — Data Link

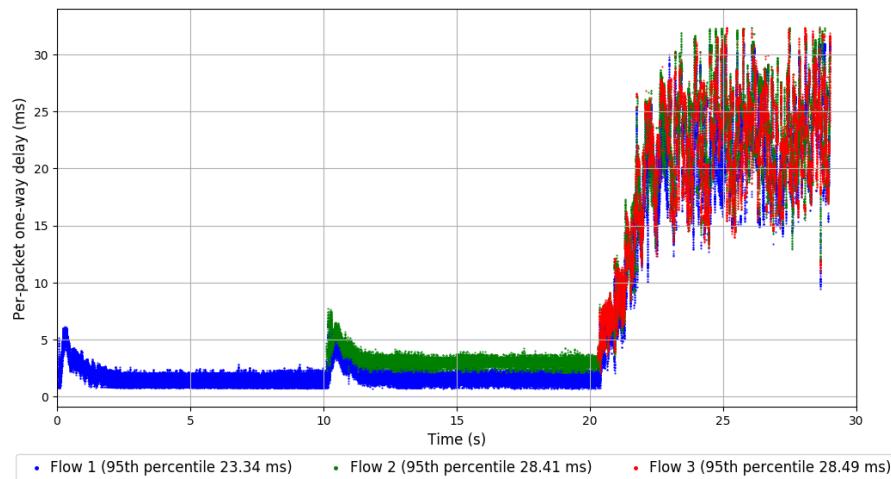
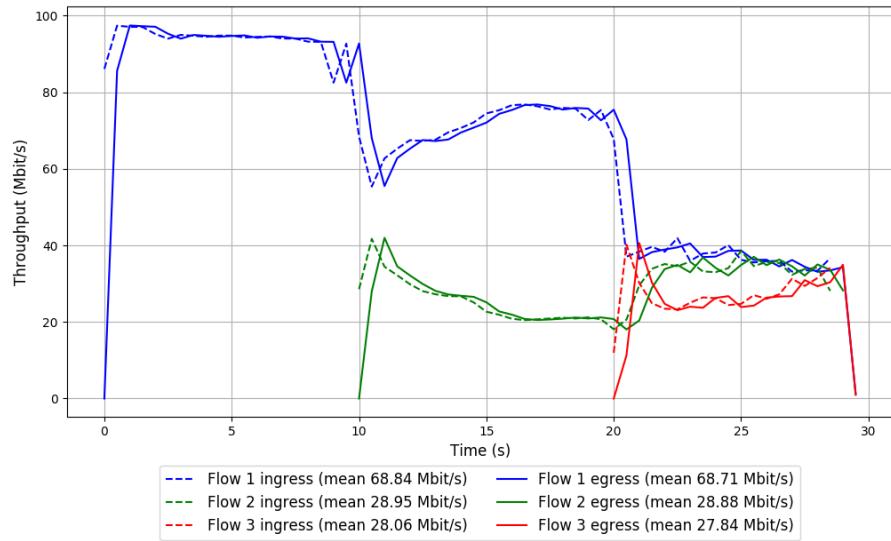


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 02:12:49
End at: 2019-01-25 02:13:19
Local clock offset: -3.474 ms
Remote clock offset: 0.526 ms

# Below is generated by plot.py at 2019-01-25 03:12:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 26.158 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 68.71 Mbit/s
95th percentile per-packet one-way delay: 23.341 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 28.406 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 27.84 Mbit/s
95th percentile per-packet one-way delay: 28.490 ms
Loss rate: 0.45%
```

Run 3: Report of Indigo-MusesT — Data Link

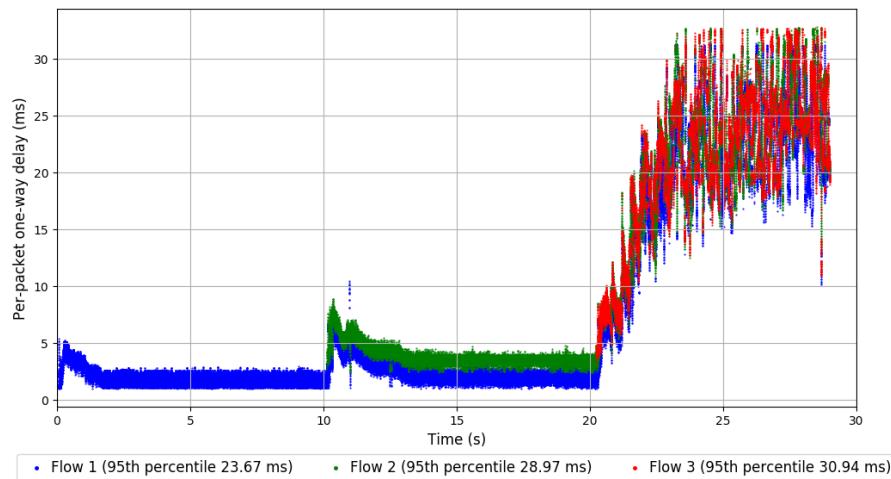
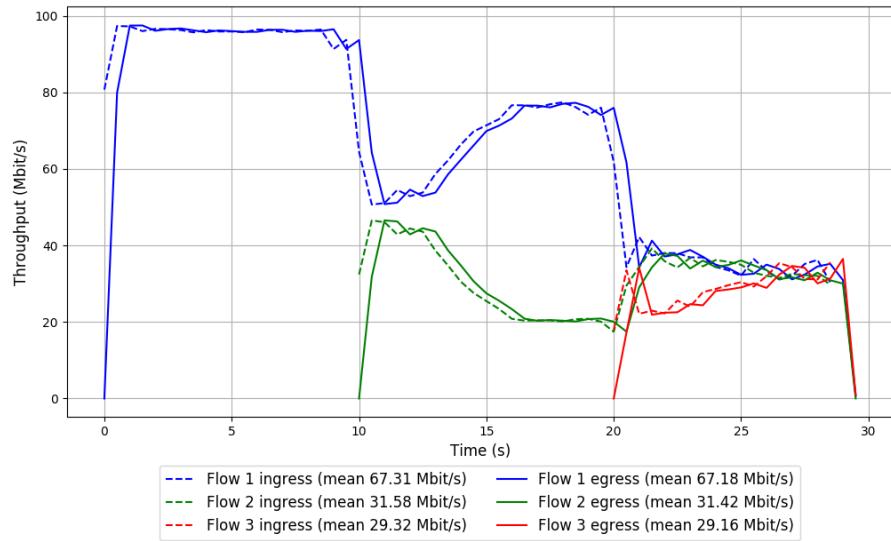


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 02:36:43
End at: 2019-01-25 02:37:13
Local clock offset: -4.688 ms
Remote clock offset: 0.784 ms

# Below is generated by plot.py at 2019-01-25 03:13:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.46 Mbit/s
95th percentile per-packet one-way delay: 26.853 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 67.18 Mbit/s
95th percentile per-packet one-way delay: 23.667 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: 28.971 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 29.16 Mbit/s
95th percentile per-packet one-way delay: 30.936 ms
Loss rate: 0.36%
```

Run 4: Report of Indigo-MusesT — Data Link

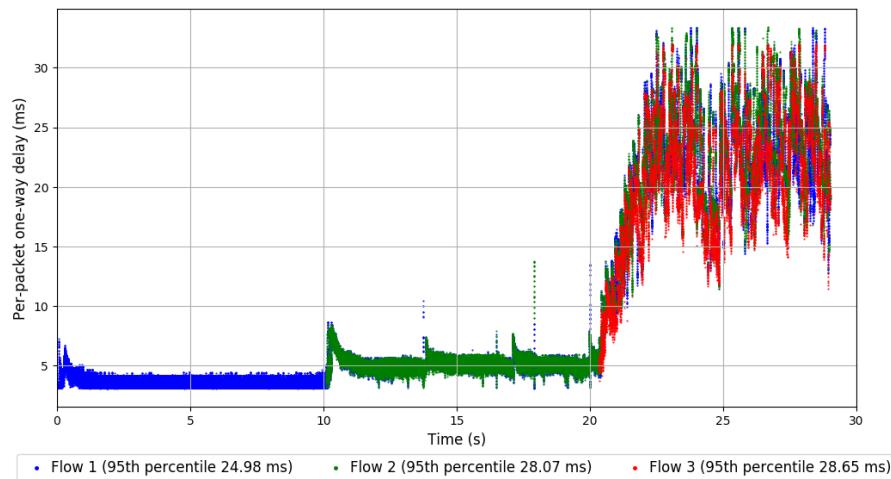
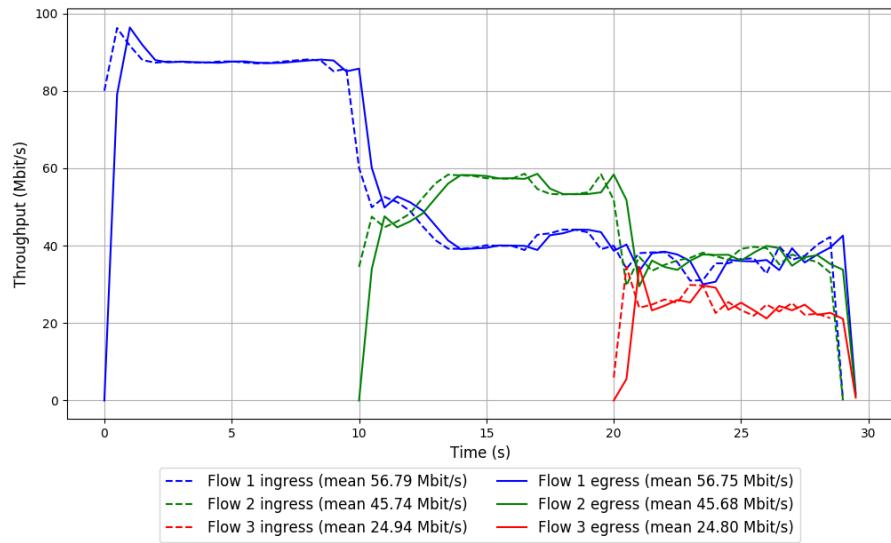


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 03:00:38
End at: 2019-01-25 03:01:08
Local clock offset: -5.163 ms
Remote clock offset: 0.806 ms

# Below is generated by plot.py at 2019-01-25 03:13:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 26.858 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 56.75 Mbit/s
95th percentile per-packet one-way delay: 24.978 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 45.68 Mbit/s
95th percentile per-packet one-way delay: 28.071 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 28.646 ms
Loss rate: 0.42%
```

Run 5: Report of Indigo-MusesT — Data Link

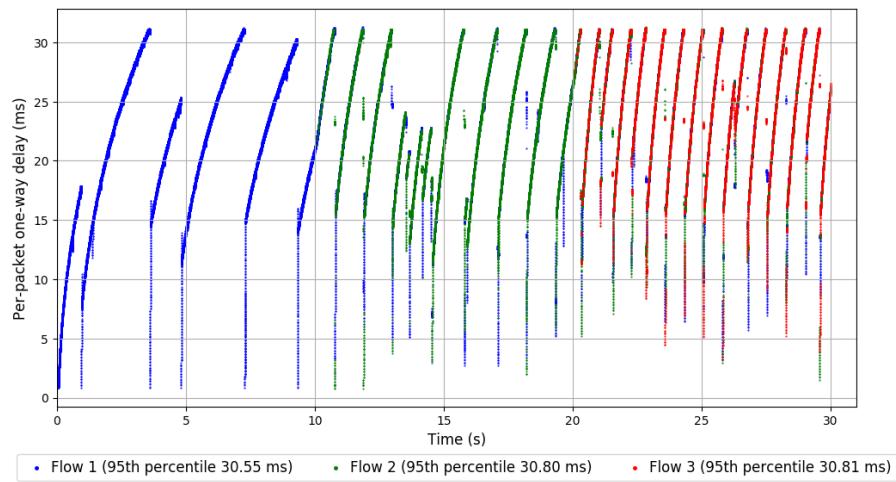
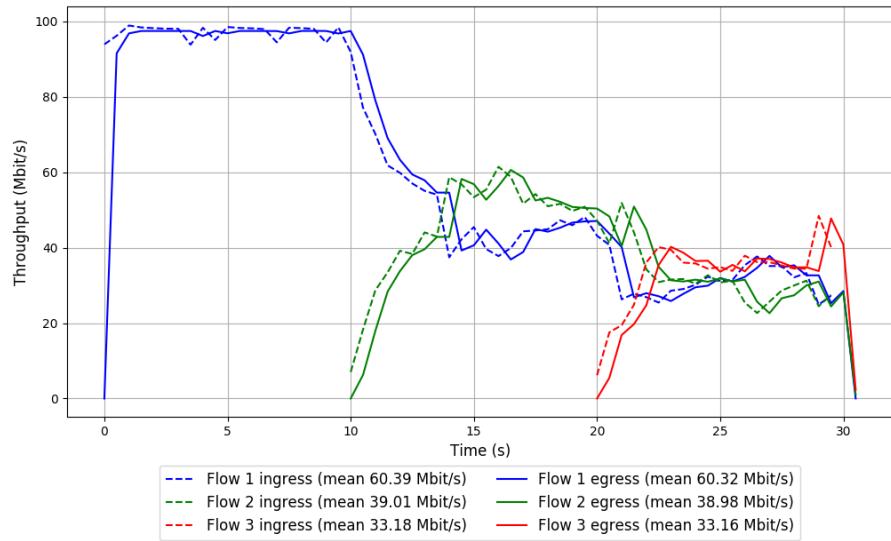


Run 1: Statistics of LEDBAT

```
Start at: 2019-01-25 01:11:20
End at: 2019-01-25 01:11:50
Local clock offset: -3.679 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2019-01-25 03:13:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 30.711 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 60.32 Mbit/s
95th percentile per-packet one-way delay: 30.547 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 38.98 Mbit/s
95th percentile per-packet one-way delay: 30.805 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 33.16 Mbit/s
95th percentile per-packet one-way delay: 30.814 ms
Loss rate: 0.06%
```

Run 1: Report of LEDBAT — Data Link

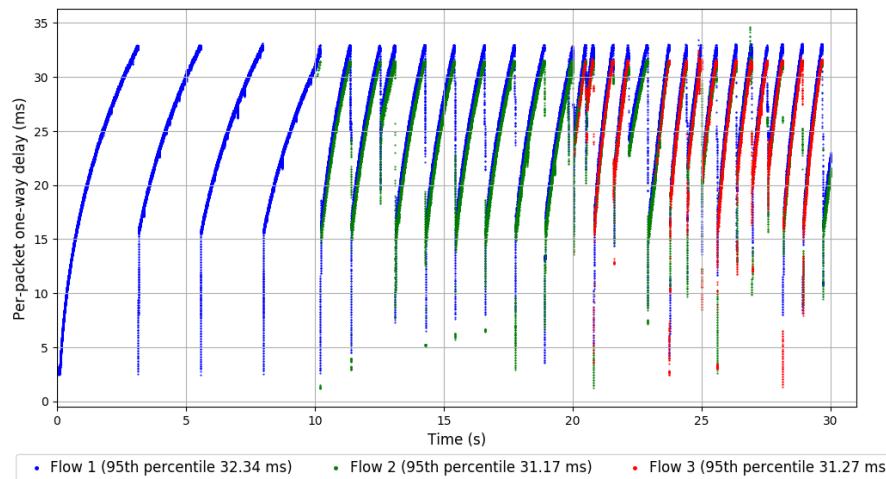
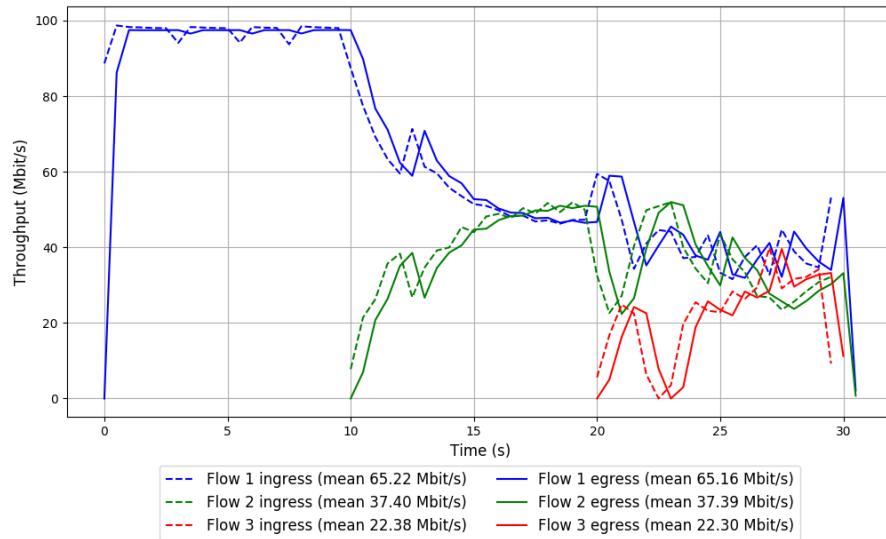


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-25 01:35:15
End at: 2019-01-25 01:35:45
Local clock offset: -1.787 ms
Remote clock offset: 0.199 ms

# Below is generated by plot.py at 2019-01-25 03:13:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 31.984 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 65.16 Mbit/s
95th percentile per-packet one-way delay: 32.336 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.39 Mbit/s
95th percentile per-packet one-way delay: 31.173 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 22.30 Mbit/s
95th percentile per-packet one-way delay: 31.269 ms
Loss rate: 0.17%
```

Run 2: Report of LEDBAT — Data Link

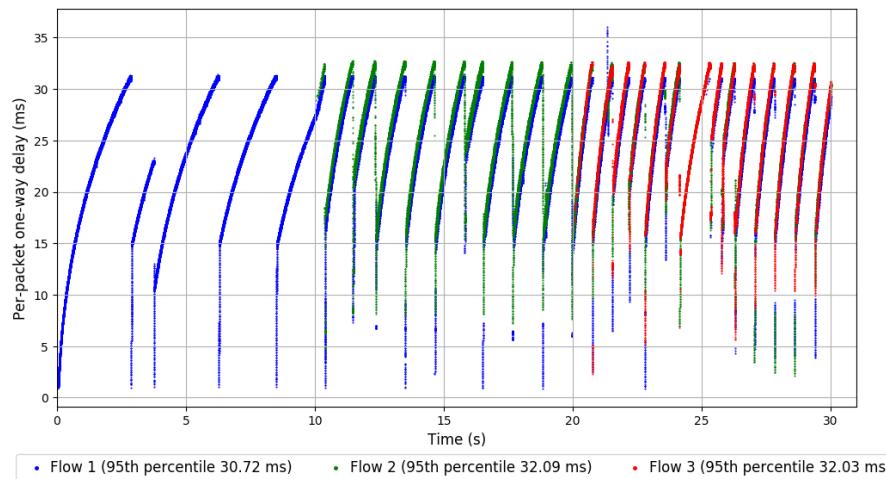
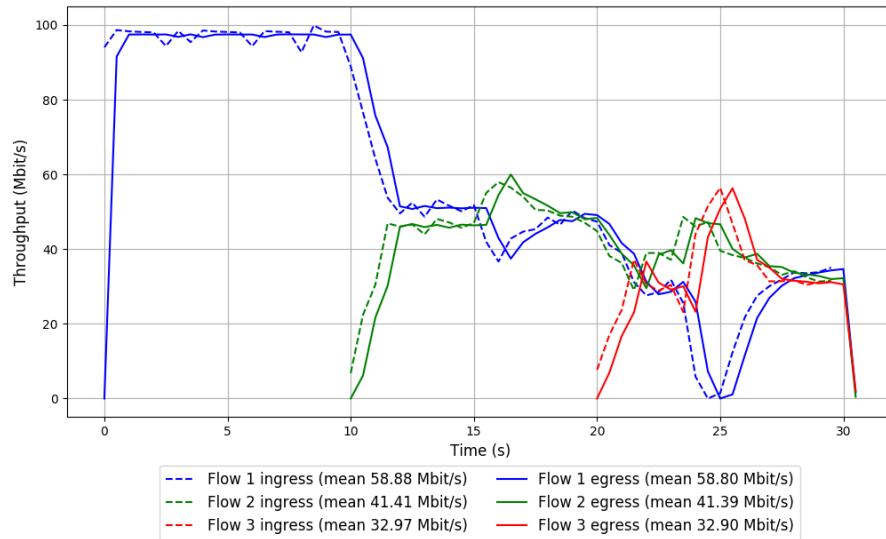


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-25 01:59:11
End at: 2019-01-25 01:59:41
Local clock offset: 2.075 ms
Remote clock offset: 0.491 ms

# Below is generated by plot.py at 2019-01-25 03:13:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 31.310 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 58.80 Mbit/s
95th percentile per-packet one-way delay: 30.717 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 41.39 Mbit/s
95th percentile per-packet one-way delay: 32.087 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 32.90 Mbit/s
95th percentile per-packet one-way delay: 32.035 ms
Loss rate: 0.08%
```

Run 3: Report of LEDBAT — Data Link

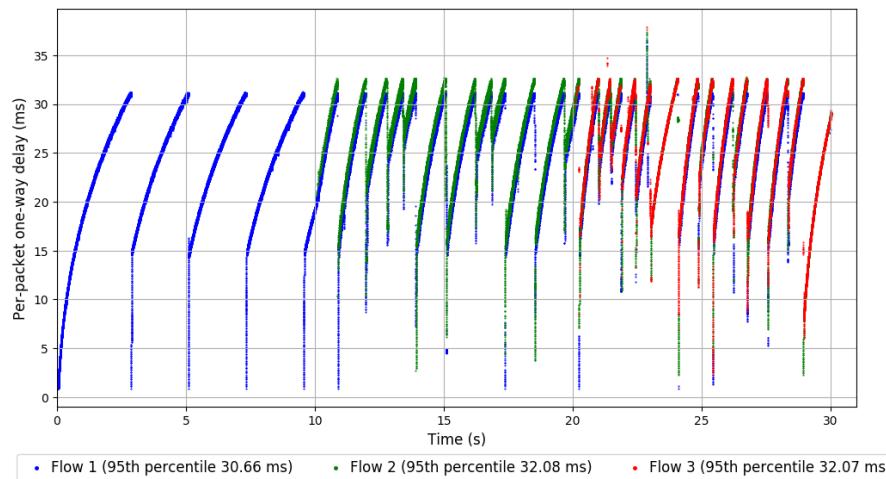
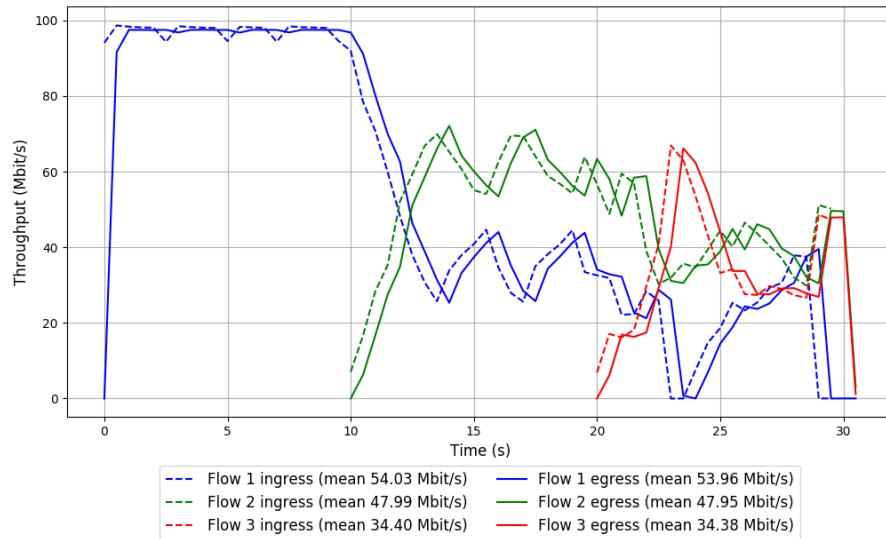


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-25 02:23:05
End at: 2019-01-25 02:23:35
Local clock offset: -4.854 ms
Remote clock offset: 0.692 ms

# Below is generated by plot.py at 2019-01-25 03:13:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.28 Mbit/s
95th percentile per-packet one-way delay: 31.394 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 53.96 Mbit/s
95th percentile per-packet one-way delay: 30.662 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 47.95 Mbit/s
95th percentile per-packet one-way delay: 32.080 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 34.38 Mbit/s
95th percentile per-packet one-way delay: 32.072 ms
Loss rate: 0.07%
```

Run 4: Report of LEDBAT — Data Link

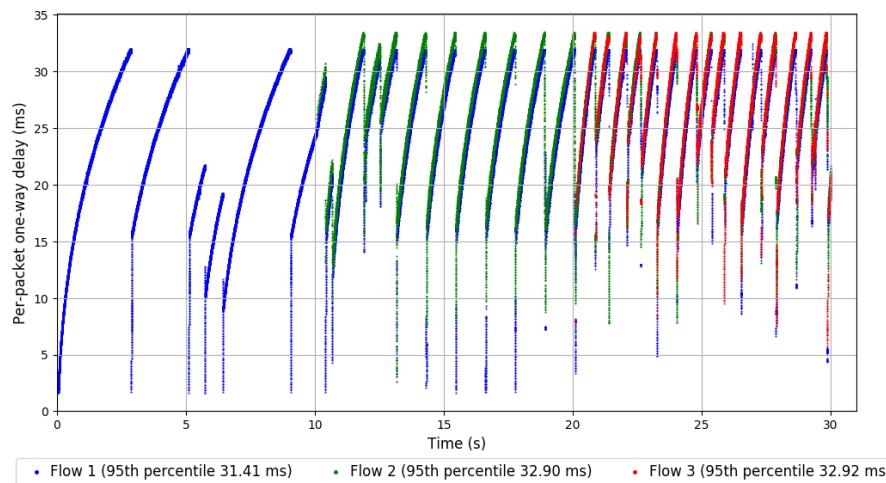
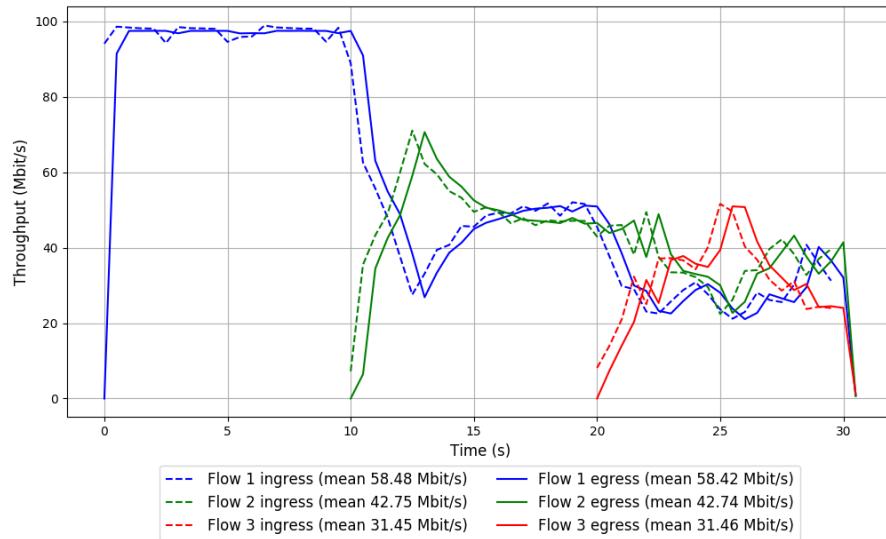


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-25 02:46:59
End at: 2019-01-25 02:47:29
Local clock offset: -5.119 ms
Remote clock offset: 0.778 ms

# Below is generated by plot.py at 2019-01-25 03:14:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: 32.159 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 58.42 Mbit/s
95th percentile per-packet one-way delay: 31.408 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 42.74 Mbit/s
95th percentile per-packet one-way delay: 32.900 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 32.918 ms
Loss rate: 0.09%
```

Run 5: Report of LEDBAT — Data Link

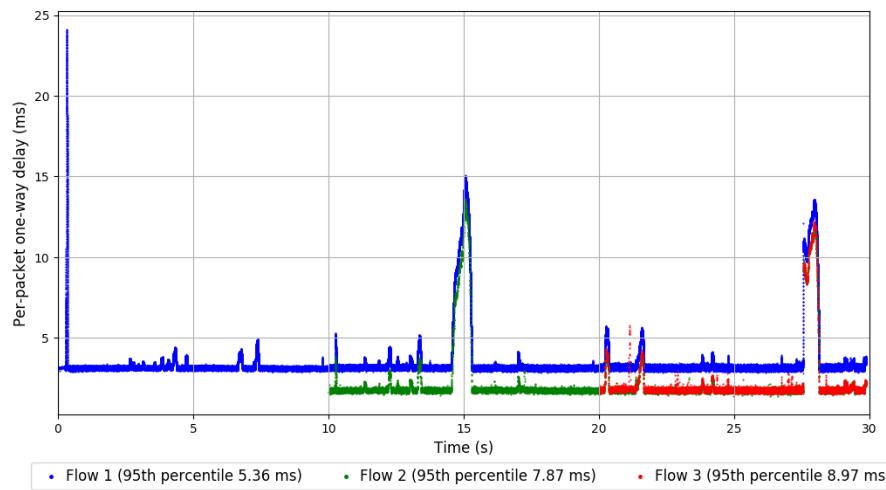
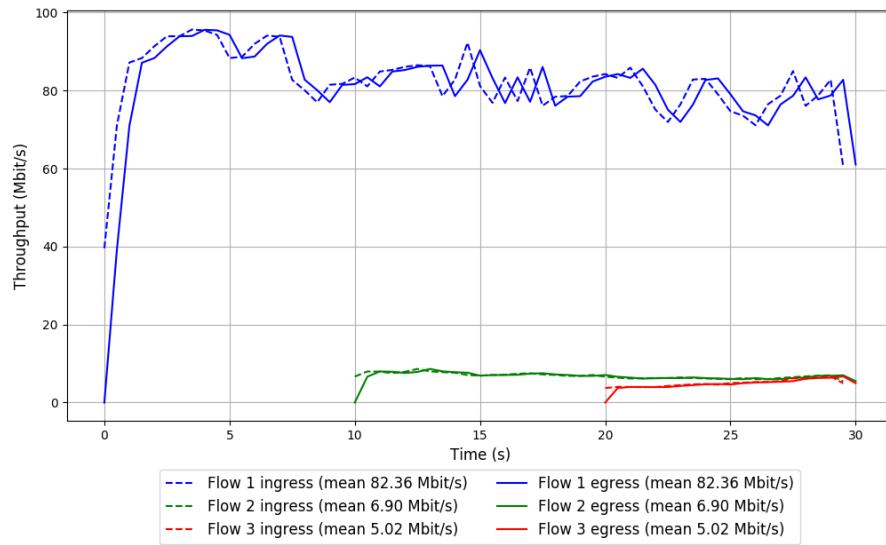


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-25 01:05:40
End at: 2019-01-25 01:06:10
Local clock offset: -3.95 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2019-01-25 03:14:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.61 Mbit/s
95th percentile per-packet one-way delay: 5.441 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.36 Mbit/s
95th percentile per-packet one-way delay: 5.361 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 7.865 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 8.974 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Allegro — Data Link

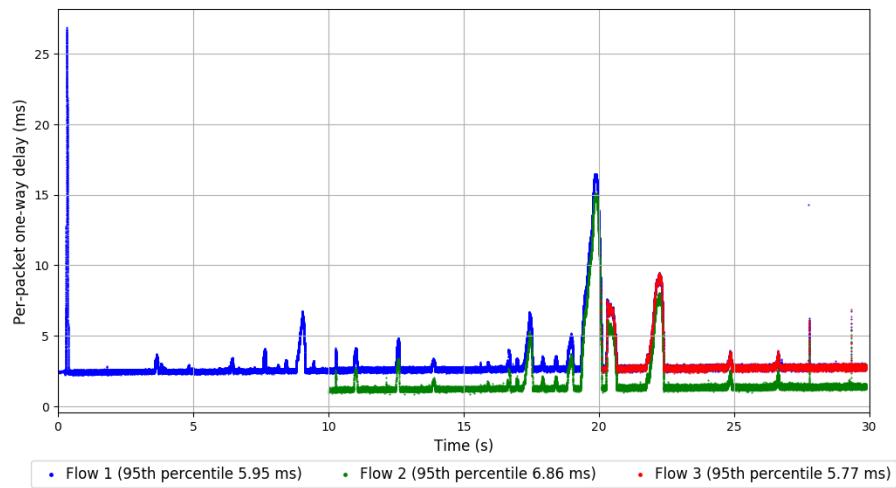
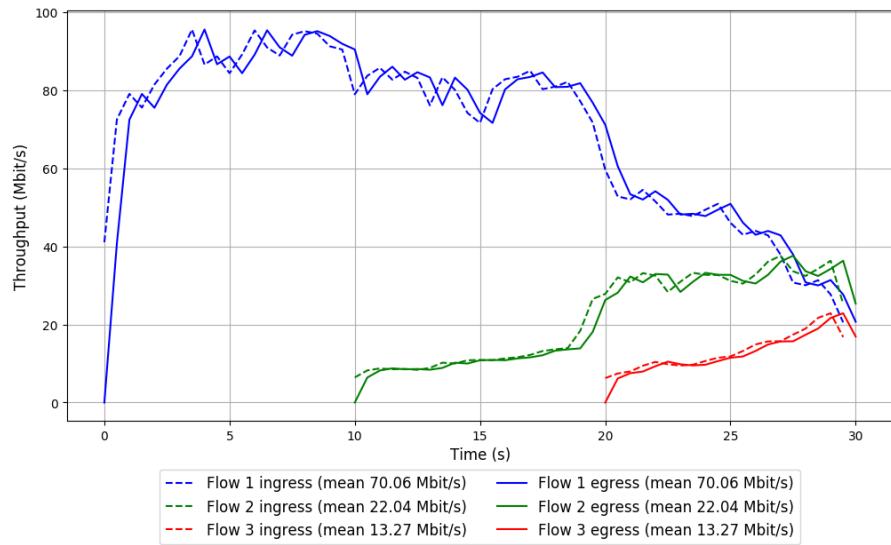


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-25 01:29:35
End at: 2019-01-25 01:30:05
Local clock offset: -4.467 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2019-01-25 03:14:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.08 Mbit/s
95th percentile per-packet one-way delay: 6.103 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.06 Mbit/s
95th percentile per-packet one-way delay: 5.951 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.04 Mbit/s
95th percentile per-packet one-way delay: 6.856 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.27 Mbit/s
95th percentile per-packet one-way delay: 5.772 ms
Loss rate: 0.01%
```

Run 2: Report of PCC-Allegro — Data Link

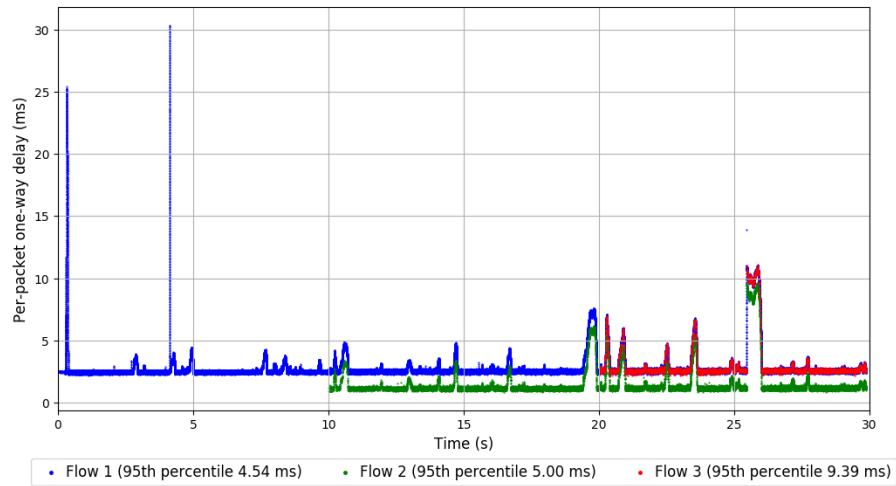
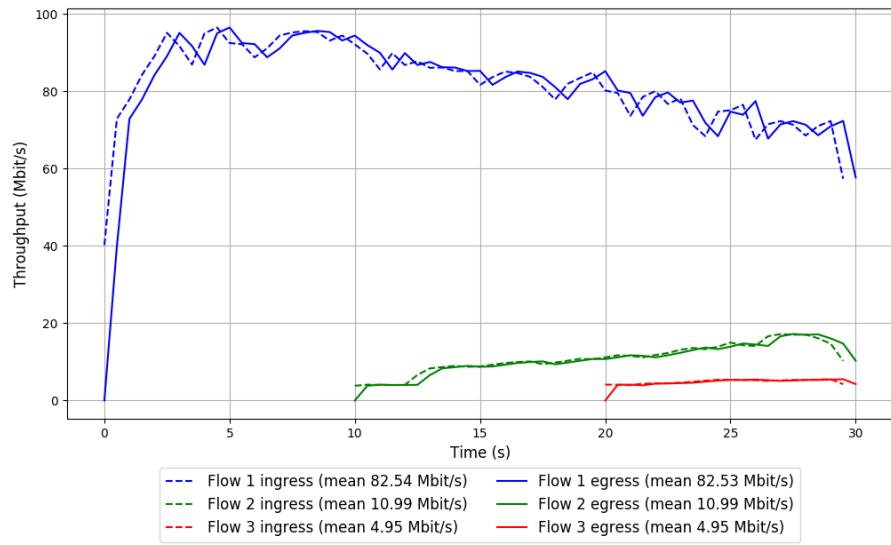


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-25 01:53:31
End at: 2019-01-25 01:54:01
Local clock offset: 1.648 ms
Remote clock offset: 0.445 ms

# Below is generated by plot.py at 2019-01-25 03:14:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 4.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.53 Mbit/s
95th percentile per-packet one-way delay: 4.544 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.99 Mbit/s
95th percentile per-packet one-way delay: 4.997 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 9.393 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Allegro — Data Link

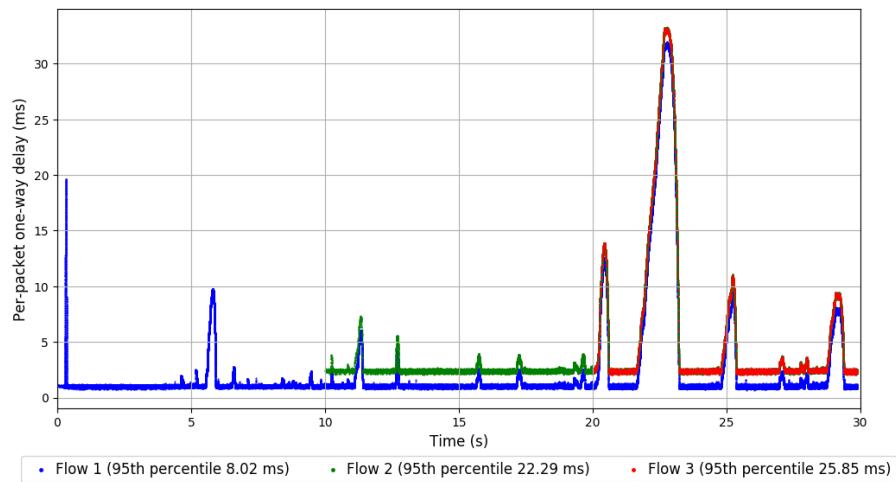
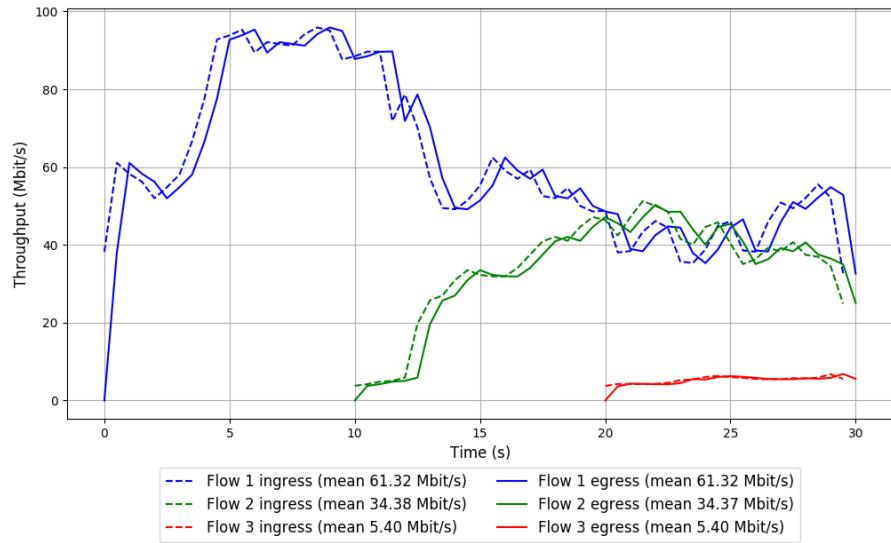


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-25 02:17:25
End at: 2019-01-25 02:17:55
Local clock offset: -4.211 ms
Remote clock offset: 0.68 ms

# Below is generated by plot.py at 2019-01-25 03:14:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 11.715 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.32 Mbit/s
95th percentile per-packet one-way delay: 8.016 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.37 Mbit/s
95th percentile per-packet one-way delay: 22.290 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 5.40 Mbit/s
95th percentile per-packet one-way delay: 25.846 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Allegro — Data Link

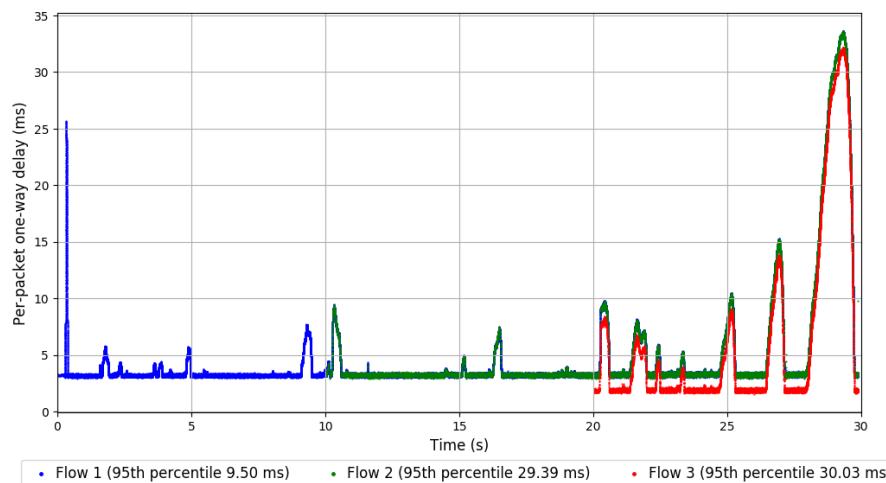
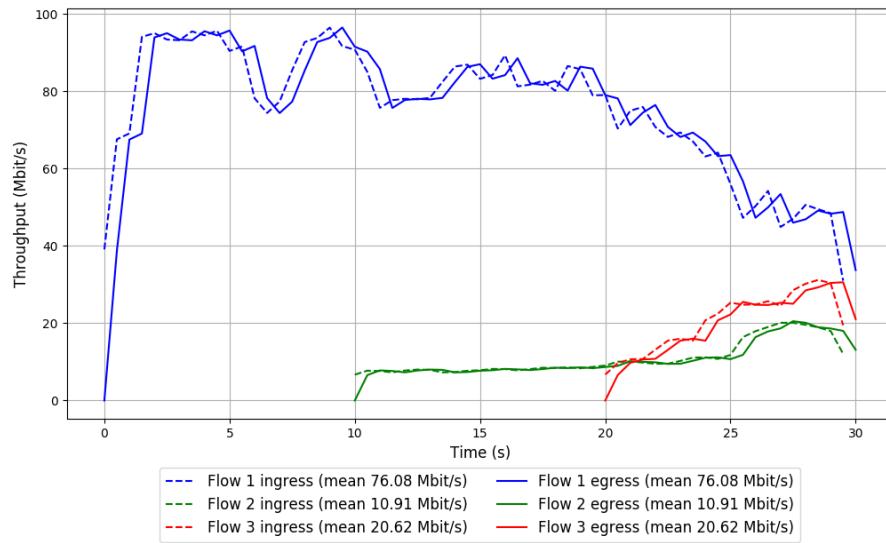


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-25 02:41:19
End at: 2019-01-25 02:41:49
Local clock offset: -5.277 ms
Remote clock offset: 0.722 ms

# Below is generated by plot.py at 2019-01-25 03:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 14.519 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.08 Mbit/s
95th percentile per-packet one-way delay: 9.498 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.91 Mbit/s
95th percentile per-packet one-way delay: 29.386 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.62 Mbit/s
95th percentile per-packet one-way delay: 30.032 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Allegro — Data Link

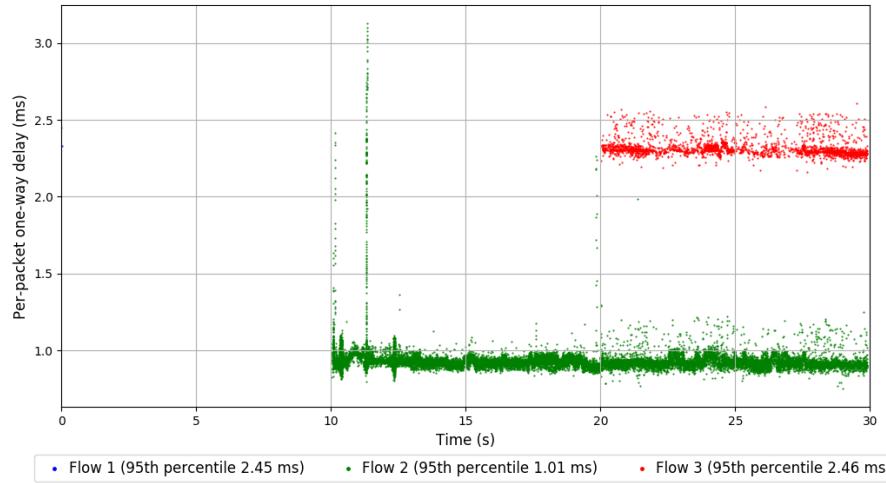
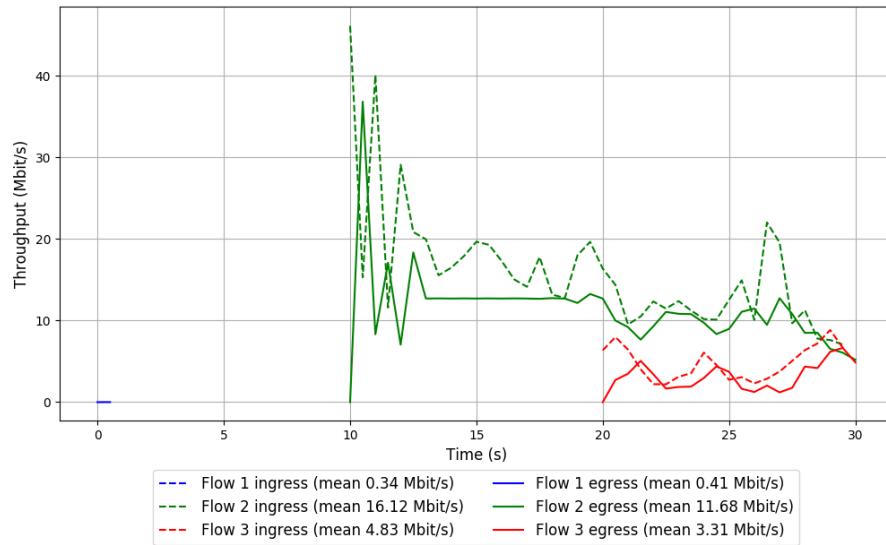


Run 1: Statistics of PCC-Expr

```
Start at: 2019-01-25 01:09:05
End at: 2019-01-25 01:09:35
Local clock offset: -3.501 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2019-01-25 03:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 2.307 ms
Loss rate: 28.05%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 2.451 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 1.006 ms
Loss rate: 27.52%
-- Flow 3:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 2.462 ms
Loss rate: 31.56%
```

Run 1: Report of PCC-Expr — Data Link

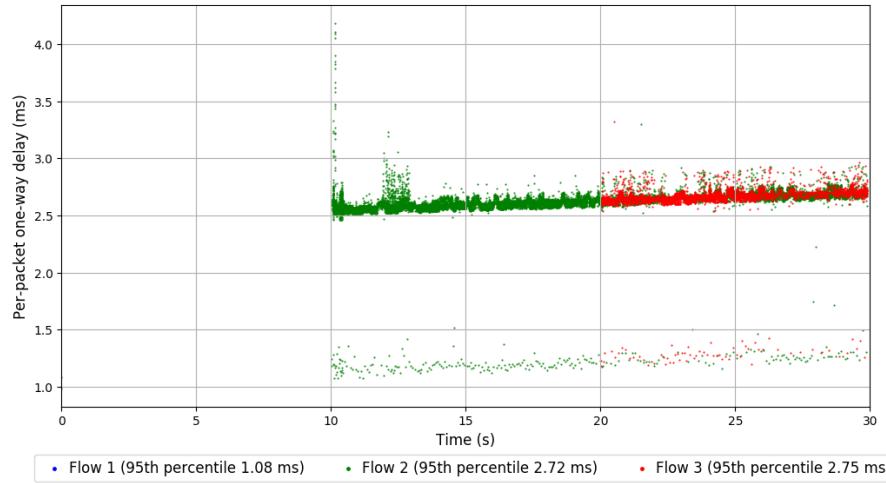
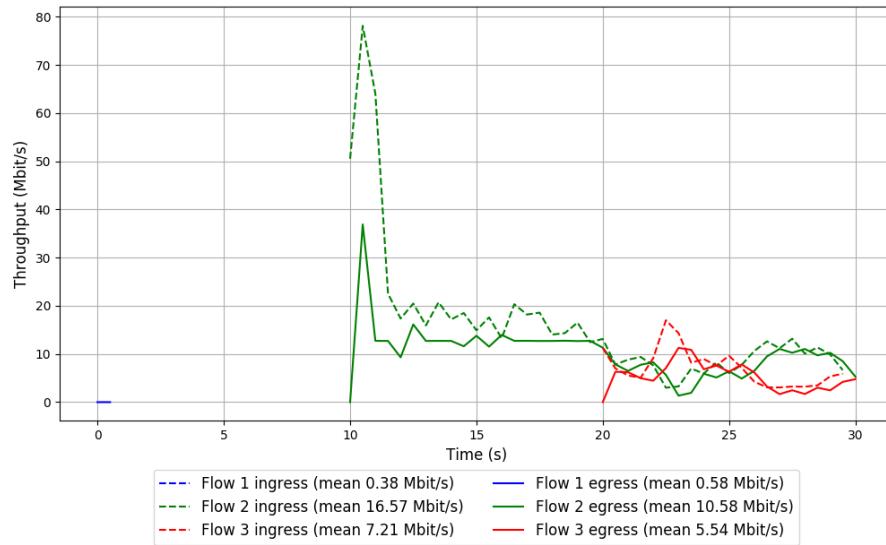


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-25 01:33:00
End at: 2019-01-25 01:33:30
Local clock offset: -2.662 ms
Remote clock offset: 0.115 ms

# Below is generated by plot.py at 2019-01-25 03:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 2.731 ms
Loss rate: 33.85%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1.080 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.58 Mbit/s
95th percentile per-packet one-way delay: 2.723 ms
Loss rate: 36.15%
-- Flow 3:
Average throughput: 5.54 Mbit/s
95th percentile per-packet one-way delay: 2.755 ms
Loss rate: 23.19%
```

Run 2: Report of PCC-Expr — Data Link

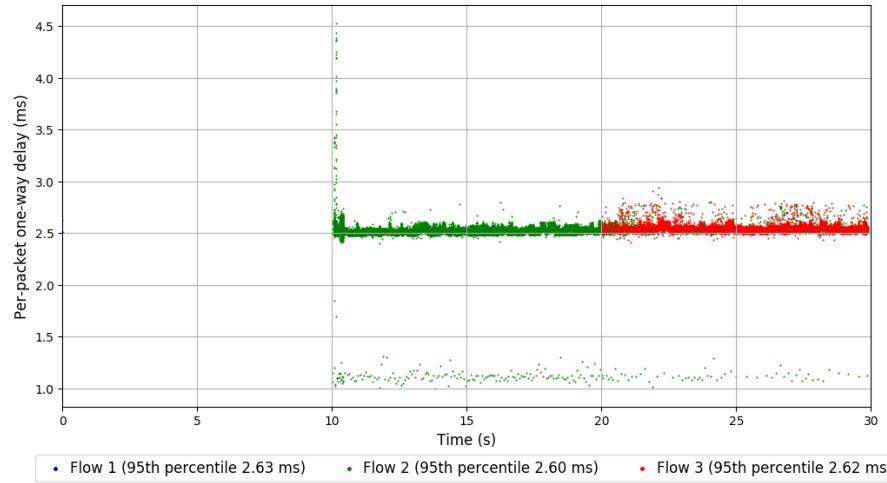
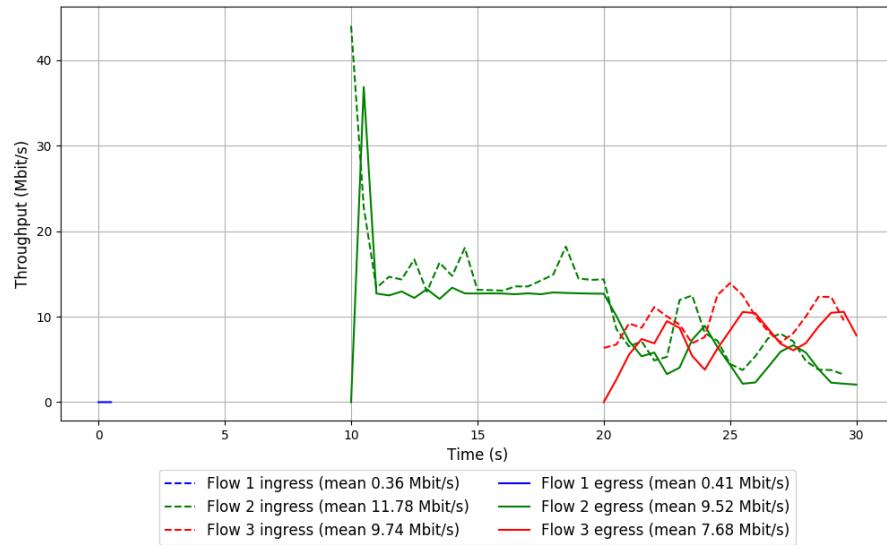


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-25 01:56:56
End at: 2019-01-25 01:57:26
Local clock offset: 1.855 ms
Remote clock offset: 0.482 ms

# Below is generated by plot.py at 2019-01-25 03:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 2.603 ms
Loss rate: 19.80%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 2.629 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 2.598 ms
Loss rate: 19.23%
-- Flow 3:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 2.615 ms
Loss rate: 21.19%
```

Run 3: Report of PCC-Expr — Data Link

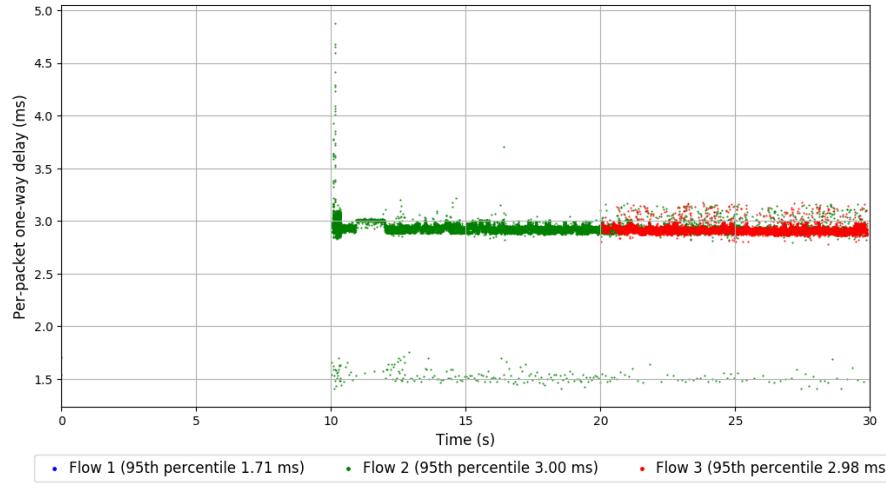
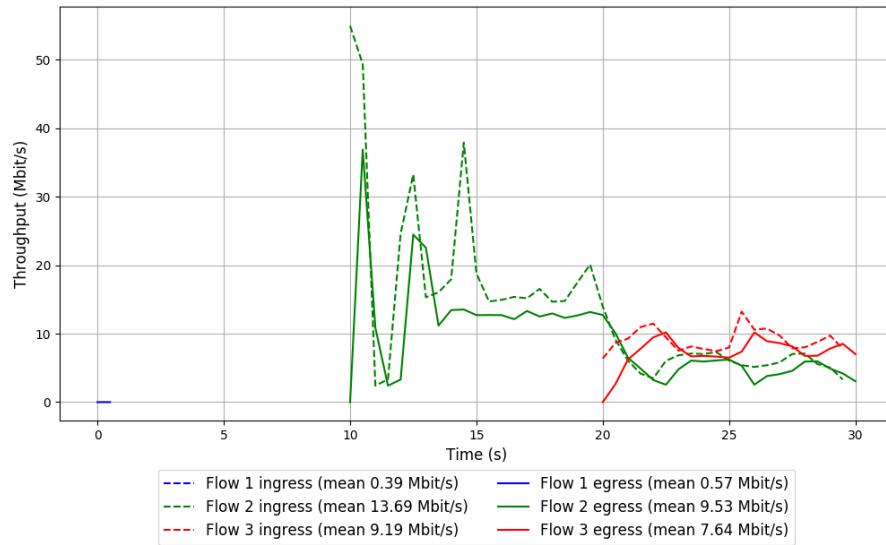


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-25 02:20:50
End at: 2019-01-25 02:21:20
Local clock offset: -5.4 ms
Remote clock offset: 0.517 ms

# Below is generated by plot.py at 2019-01-25 03:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.87 Mbit/s
95th percentile per-packet one-way delay: 3.000 ms
Loss rate: 26.98%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 1.708 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 3.004 ms
Loss rate: 30.37%
-- Flow 3:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 2.978 ms
Loss rate: 16.81%
```

Run 4: Report of PCC-Expr — Data Link

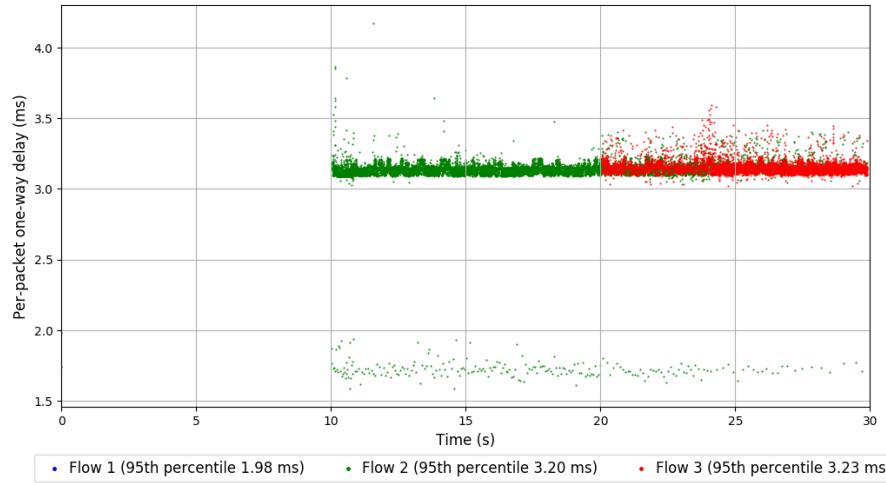
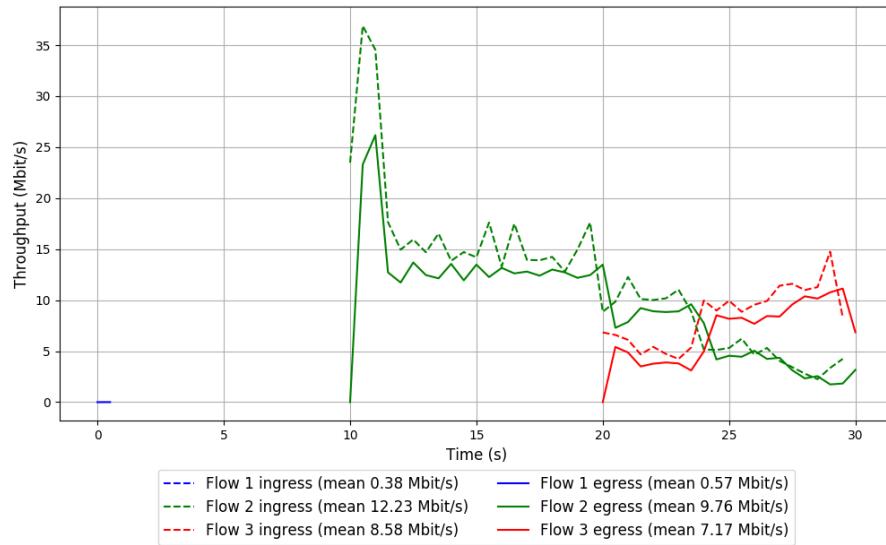


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-25 02:44:44
End at: 2019-01-25 02:45:14
Local clock offset: -5.13 ms
Remote clock offset: 0.786 ms

# Below is generated by plot.py at 2019-01-25 03:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 3.205 ms
Loss rate: 19.23%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 1.981 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 3.199 ms
Loss rate: 20.19%
-- Flow 3:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 3.231 ms
Loss rate: 16.44%
```

Run 5: Report of PCC-Expr — Data Link

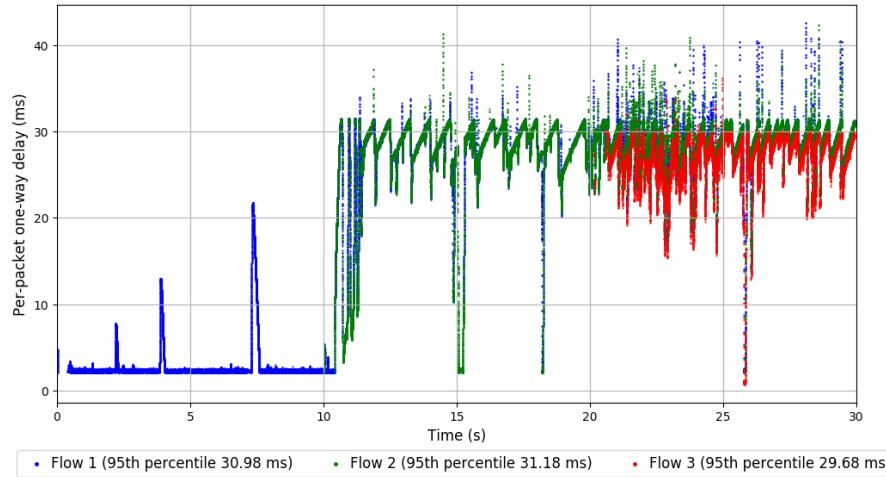
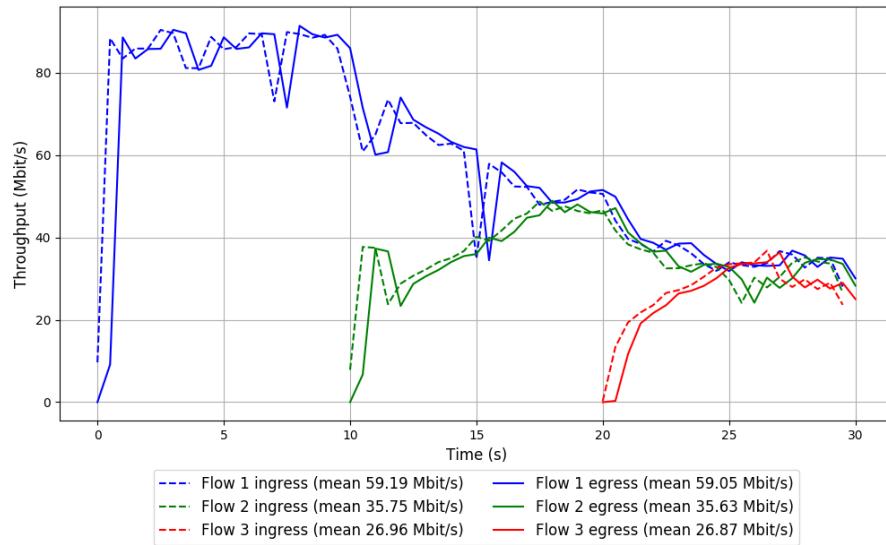


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-25 01:10:11
End at: 2019-01-25 01:10:41
Local clock offset: -3.597 ms
Remote clock offset: -0.21 ms

# Below is generated by plot.py at 2019-01-25 03:15:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.58 Mbit/s
95th percentile per-packet one-way delay: 31.019 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 59.05 Mbit/s
95th percentile per-packet one-way delay: 30.978 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 35.63 Mbit/s
95th percentile per-packet one-way delay: 31.179 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 26.87 Mbit/s
95th percentile per-packet one-way delay: 29.682 ms
Loss rate: 0.28%
```

Run 1: Report of QUIC Cubic — Data Link

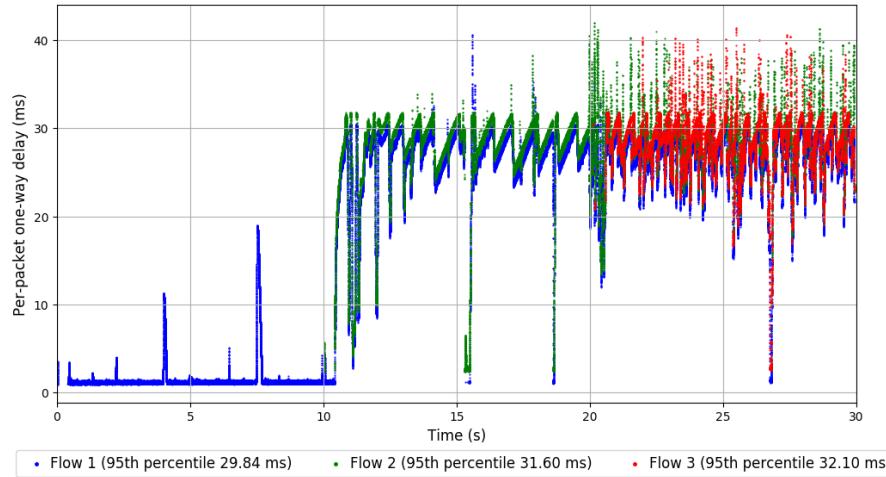
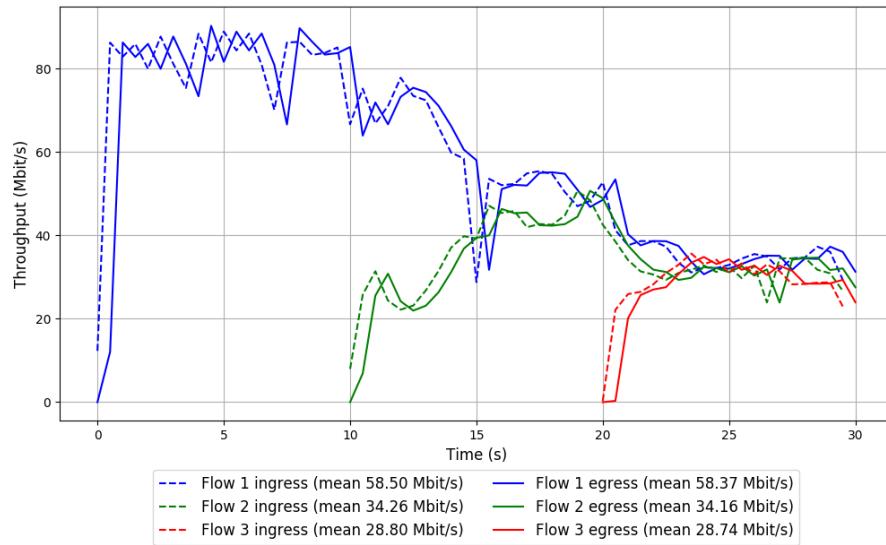


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-25 01:34:06
End at: 2019-01-25 01:34:36
Local clock offset: -2.157 ms
Remote clock offset: 0.136 ms

# Below is generated by plot.py at 2019-01-25 03:15:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.53 Mbit/s
95th percentile per-packet one-way delay: 31.112 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.37 Mbit/s
95th percentile per-packet one-way delay: 29.838 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 34.16 Mbit/s
95th percentile per-packet one-way delay: 31.601 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 28.74 Mbit/s
95th percentile per-packet one-way delay: 32.102 ms
Loss rate: 0.26%
```

Run 2: Report of QUIC Cubic — Data Link

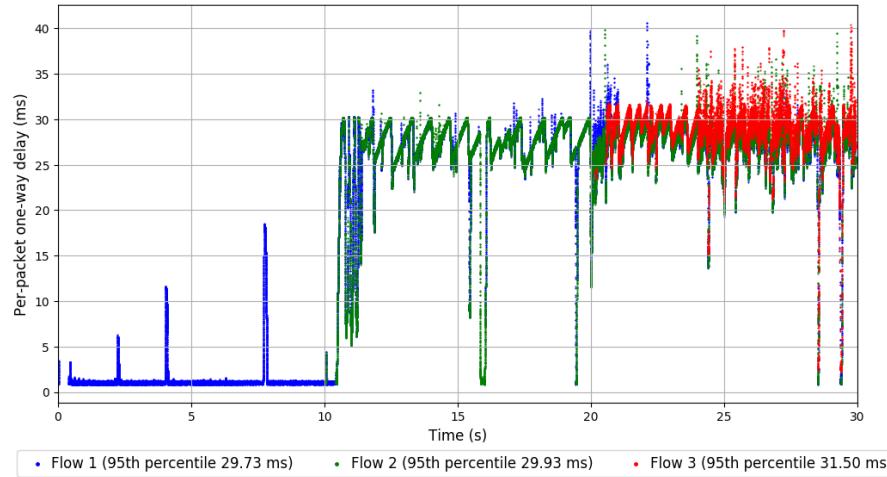
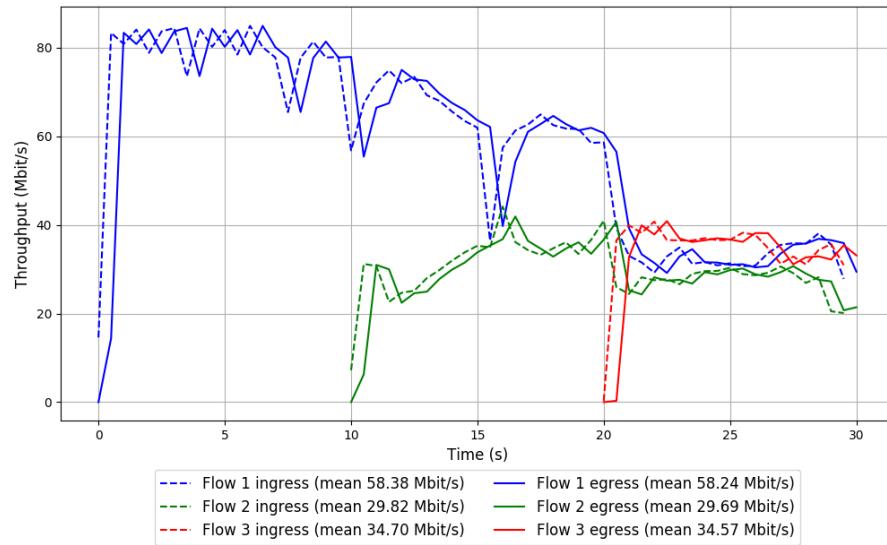


```
Run 3: Statistics of QUIC Cubic
```

```
Start at: 2019-01-25 01:58:02
End at: 2019-01-25 01:58:32
Local clock offset: 2.01 ms
Remote clock offset: 0.428 ms

# Below is generated by plot.py at 2019-01-25 03:15:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.33 Mbit/s
95th percentile per-packet one-way delay: 30.100 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 58.24 Mbit/s
95th percentile per-packet one-way delay: 29.728 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 29.69 Mbit/s
95th percentile per-packet one-way delay: 29.926 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 34.57 Mbit/s
95th percentile per-packet one-way delay: 31.504 ms
Loss rate: 0.37%
```

Run 3: Report of QUIC Cubic — Data Link

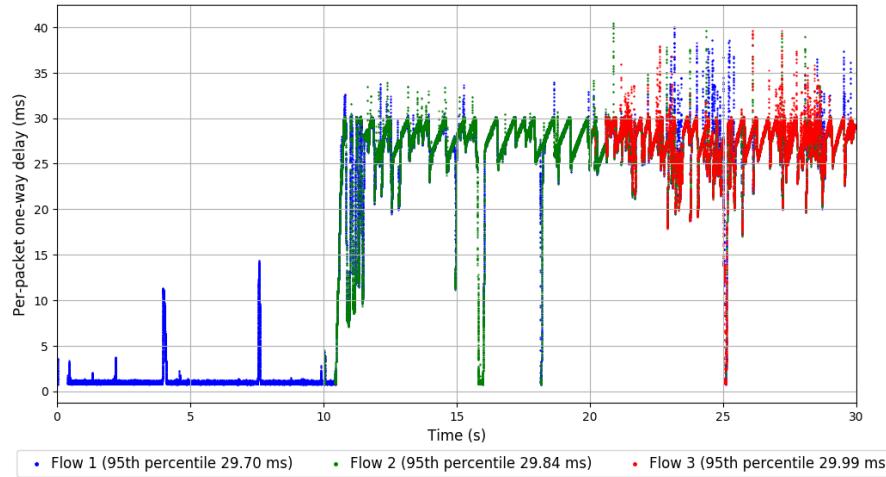
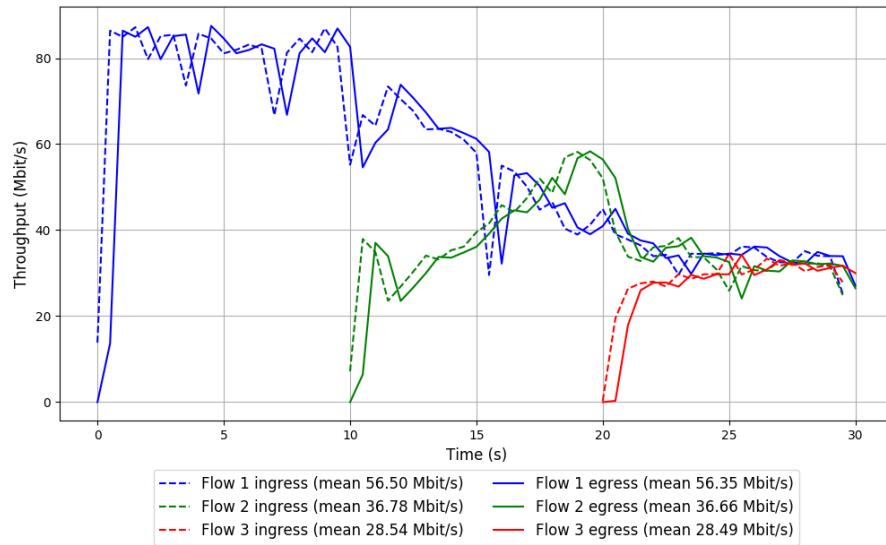


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-25 02:21:56
End at: 2019-01-25 02:22:26
Local clock offset: -4.767 ms
Remote clock offset: 0.639 ms

# Below is generated by plot.py at 2019-01-25 03:15:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.09 Mbit/s
95th percentile per-packet one-way delay: 29.796 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 56.35 Mbit/s
95th percentile per-packet one-way delay: 29.700 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 36.66 Mbit/s
95th percentile per-packet one-way delay: 29.839 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 28.49 Mbit/s
95th percentile per-packet one-way delay: 29.994 ms
Loss rate: 0.19%
```

Run 4: Report of QUIC Cubic — Data Link

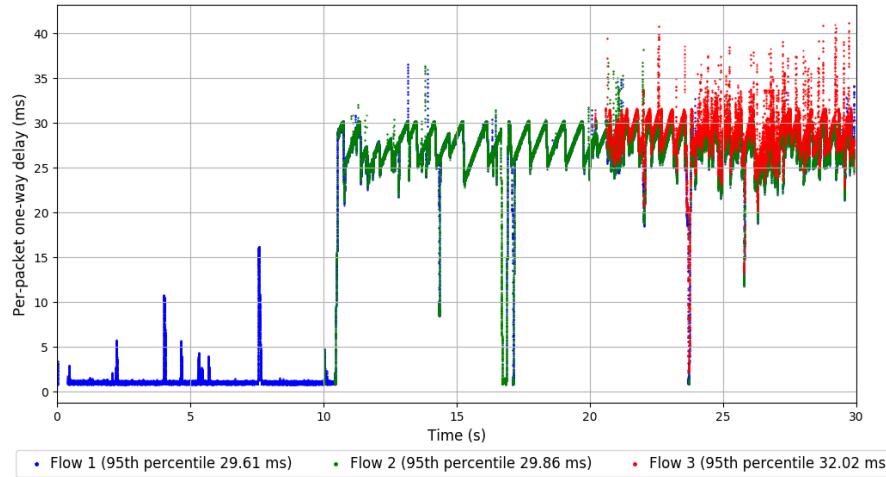
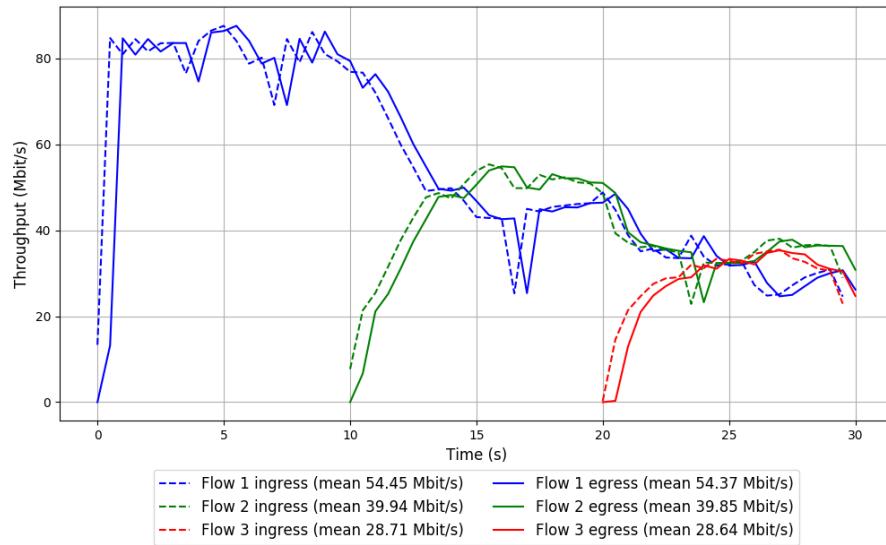


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-25 02:45:50
End at: 2019-01-25 02:46:20
Local clock offset: -4.44 ms
Remote clock offset: 0.706 ms

# Below is generated by plot.py at 2019-01-25 03:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.25 Mbit/s
95th percentile per-packet one-way delay: 29.933 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 54.37 Mbit/s
95th percentile per-packet one-way delay: 29.608 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 29.858 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 28.64 Mbit/s
95th percentile per-packet one-way delay: 32.024 ms
Loss rate: 0.26%
```

Run 5: Report of QUIC Cubic — Data Link

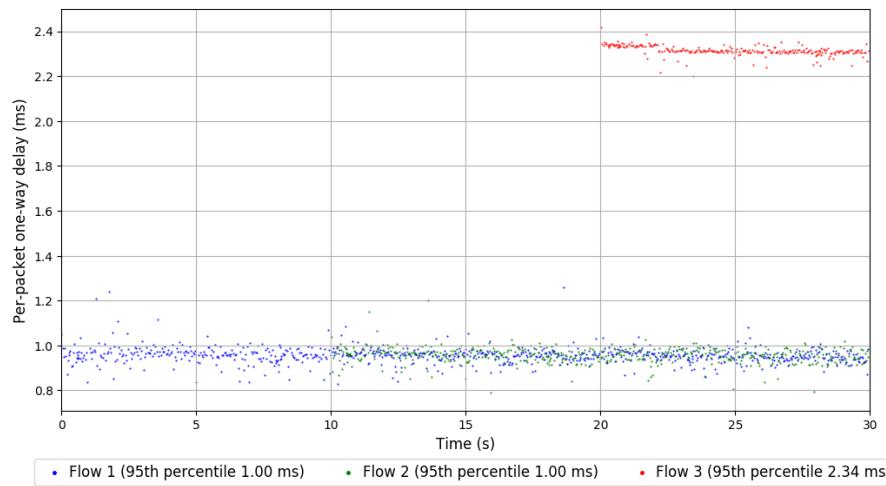
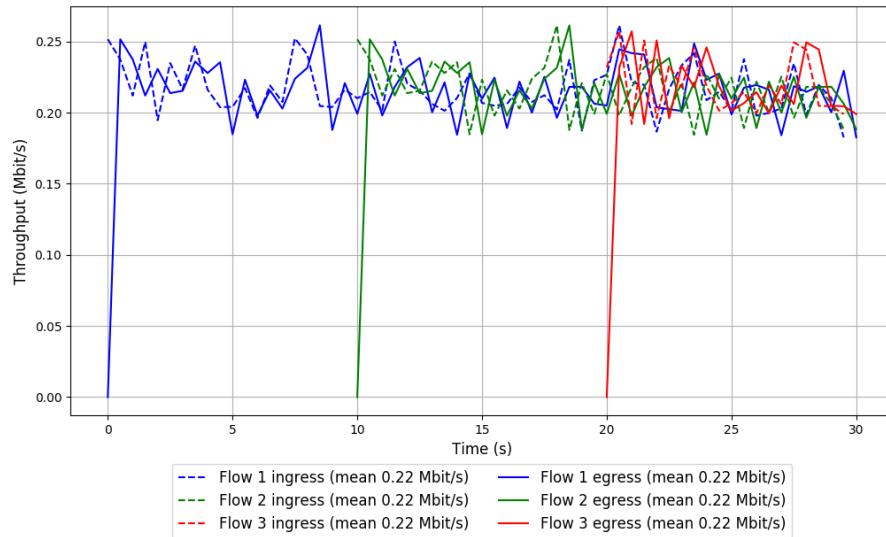


```
Run 1: Statistics of SCReAM

Start at: 2019-01-25 01:21:35
End at: 2019-01-25 01:22:05
Local clock offset: -4.191 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2019-01-25 03:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.323 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.005 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.001 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.344 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

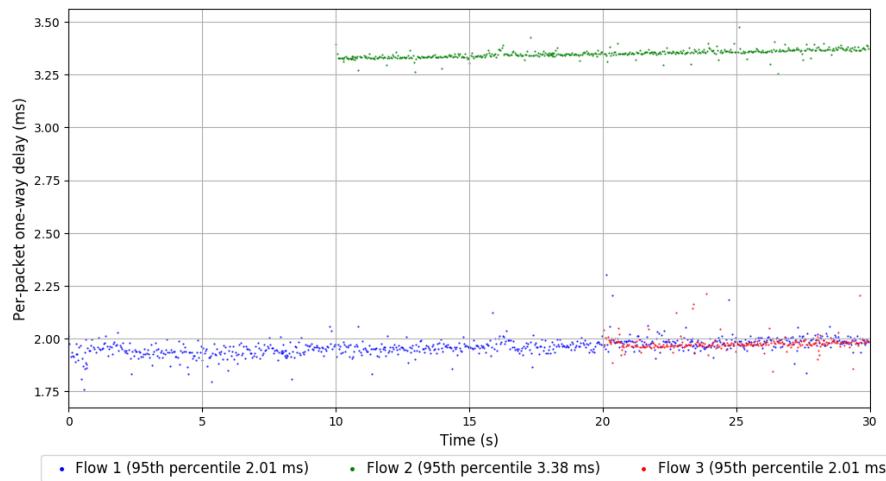
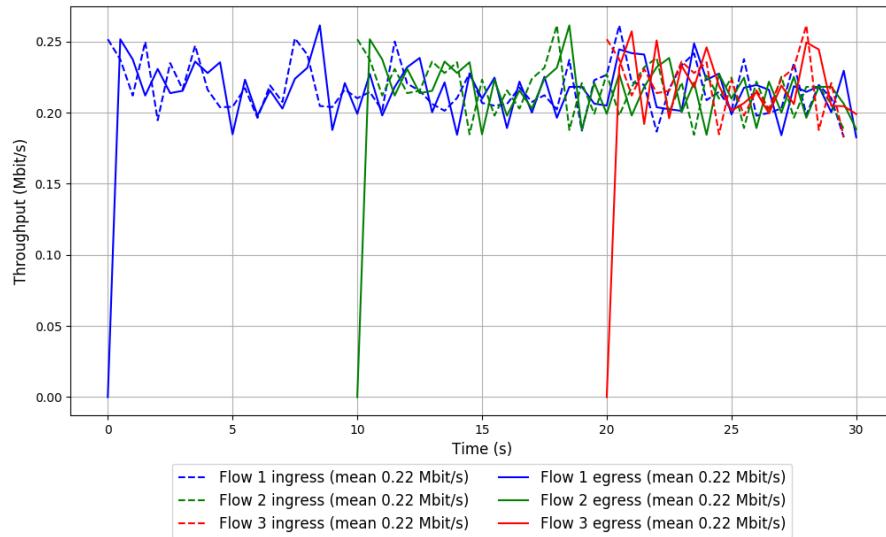


Run 2: Statistics of SCReAM

```
Start at: 2019-01-25 01:45:30
End at: 2019-01-25 01:46:00
Local clock offset: -0.098 ms
Remote clock offset: 0.387 ms

# Below is generated by plot.py at 2019-01-25 03:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.012 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.378 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.013 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

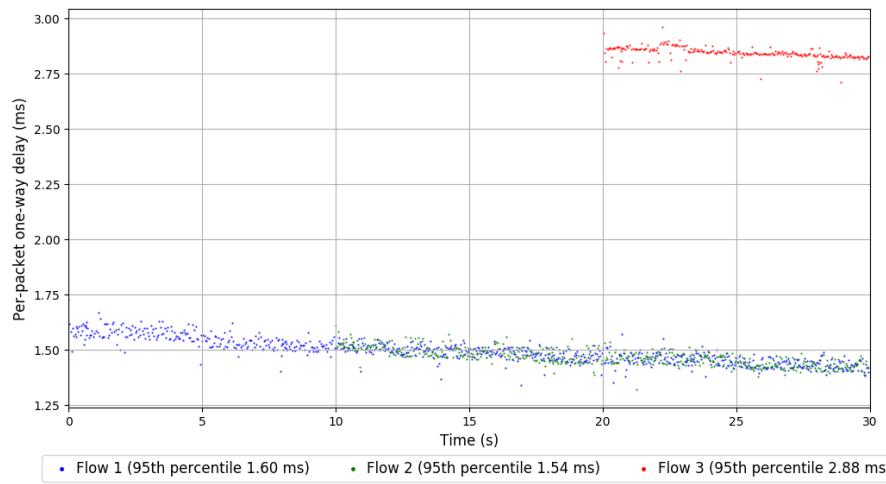
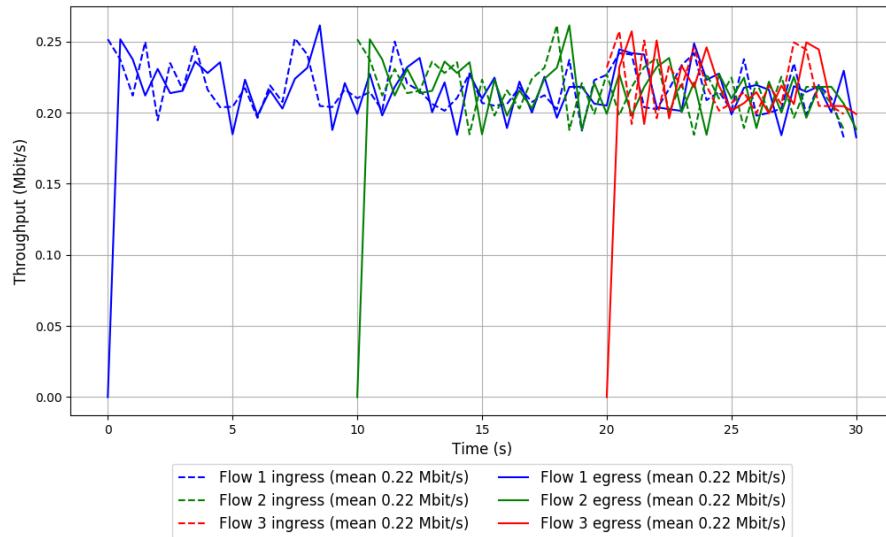


Run 3: Statistics of SCReAM

```
Start at: 2019-01-25 02:09:25
End at: 2019-01-25 02:09:55
Local clock offset: -3.395 ms
Remote clock offset: 0.467 ms

# Below is generated by plot.py at 2019-01-25 03:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.858 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.598 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.536 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.881 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

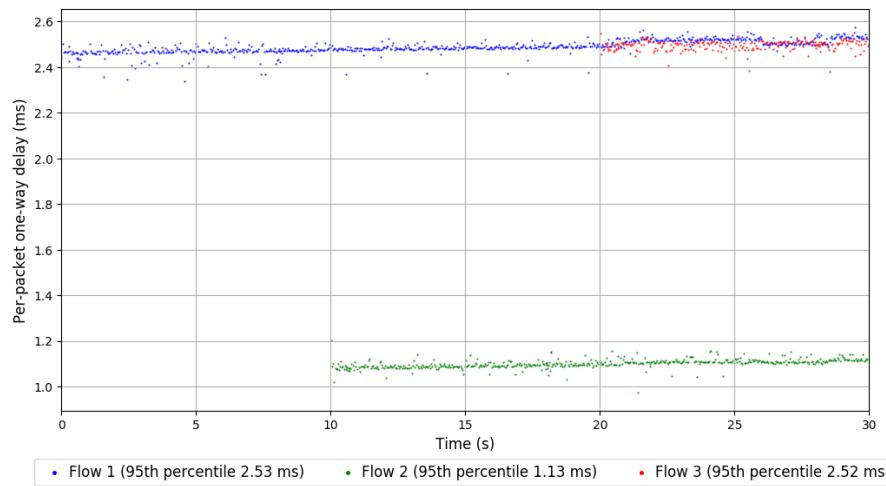
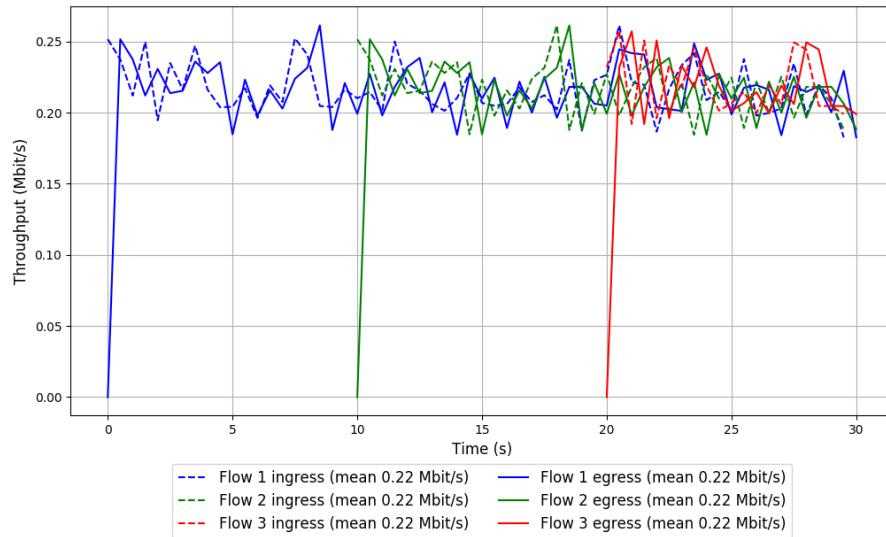


Run 4: Statistics of SCReAM

```
Start at: 2019-01-25 02:33:19
End at: 2019-01-25 02:38:49
Local clock offset: -4.923 ms
Remote clock offset: 0.753 ms

# Below is generated by plot.py at 2019-01-25 03:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.527 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.534 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.524 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

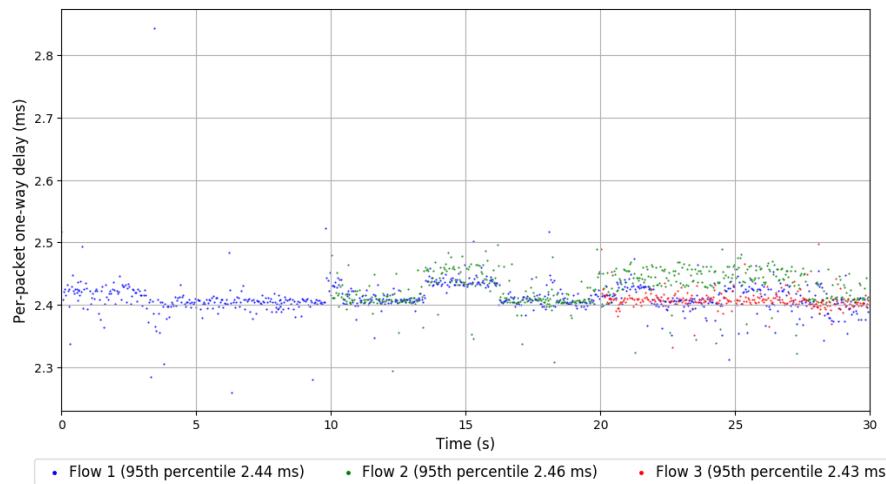
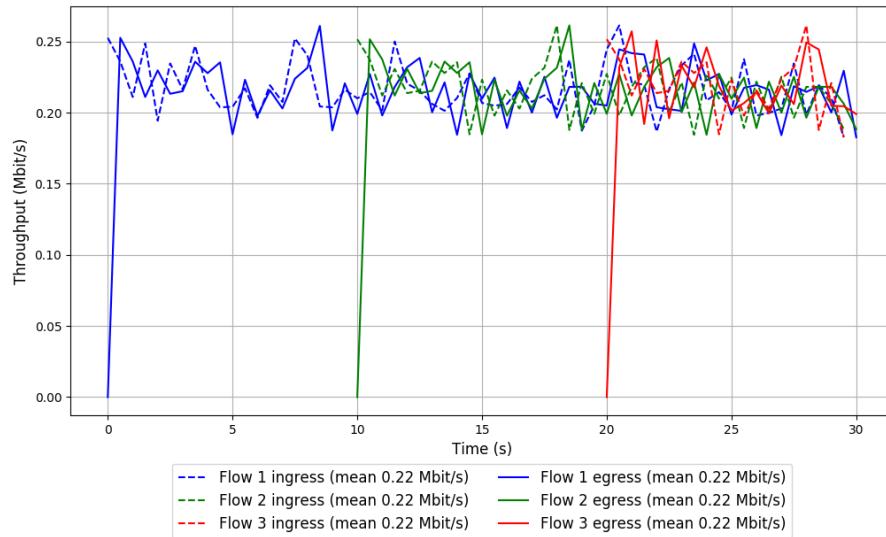


Run 5: Statistics of SCReAM

```
Start at: 2019-01-25 02:57:15
End at: 2019-01-25 02:57:45
Local clock offset: -4.396 ms
Remote clock offset: 0.829 ms

# Below is generated by plot.py at 2019-01-25 03:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.459 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.442 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.465 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.428 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

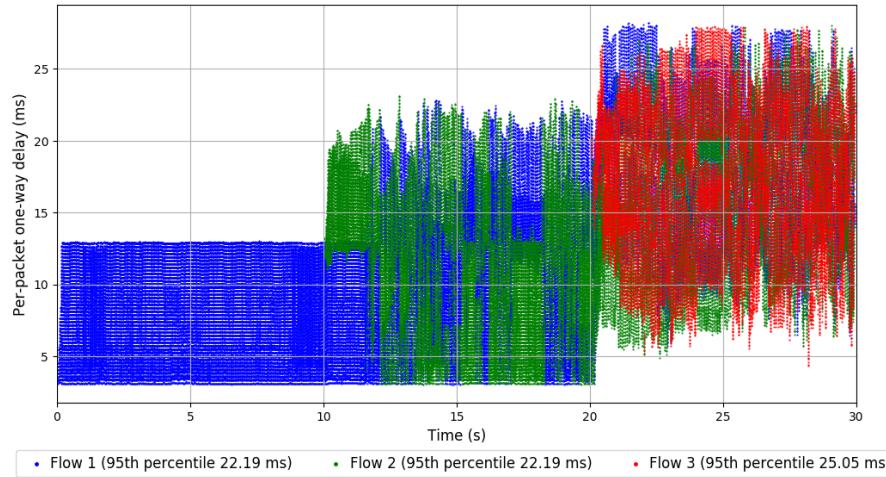
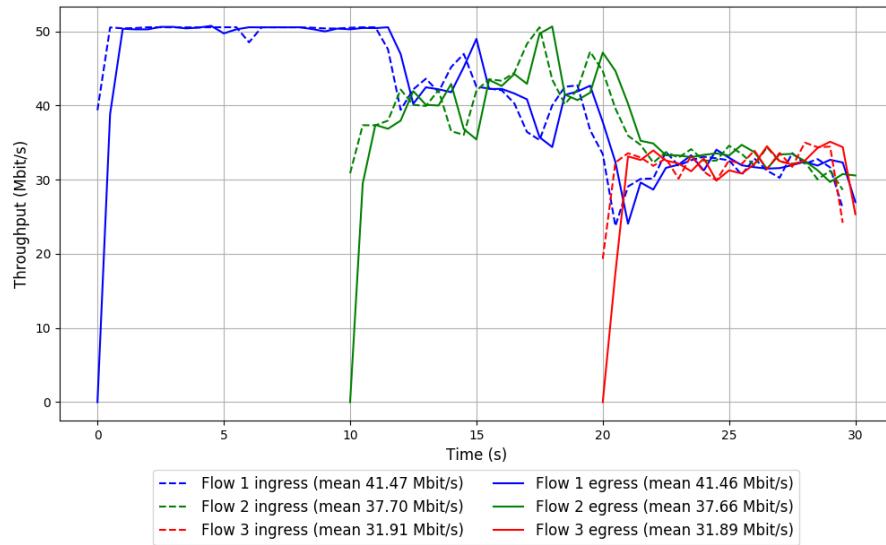


Run 1: Statistics of Sprout

```
Start at: 2019-01-25 01:14:47
End at: 2019-01-25 01:15:17
Local clock offset: -4.661 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2019-01-25 03:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.06 Mbit/s
95th percentile per-packet one-way delay: 23.013 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.46 Mbit/s
95th percentile per-packet one-way delay: 22.193 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.66 Mbit/s
95th percentile per-packet one-way delay: 22.190 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.89 Mbit/s
95th percentile per-packet one-way delay: 25.052 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

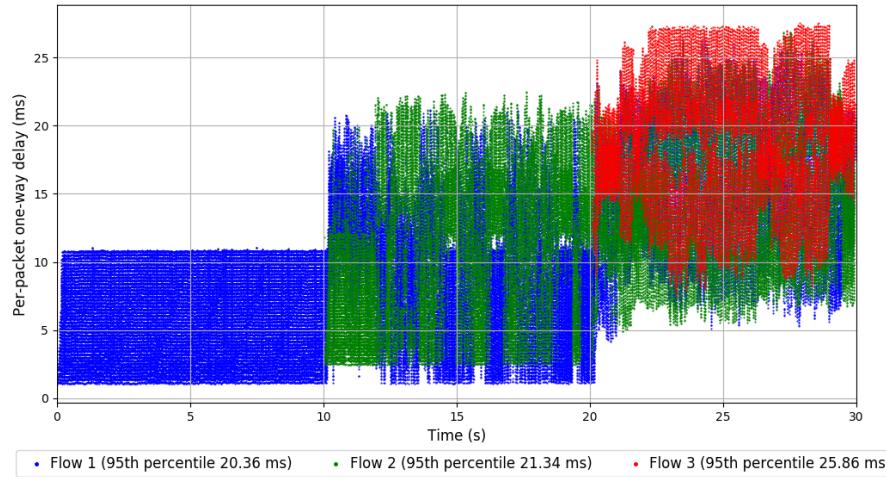
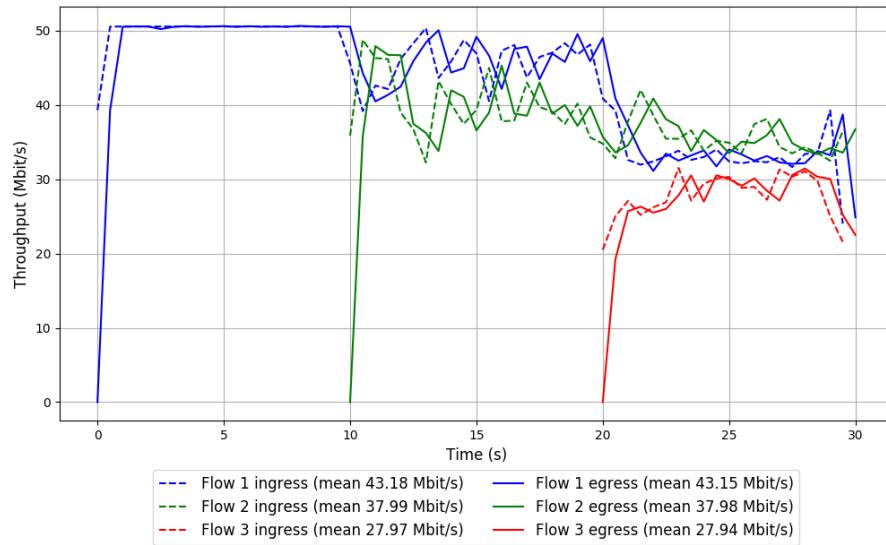


Run 2: Statistics of Sprout

```
Start at: 2019-01-25 01:38:42
End at: 2019-01-25 01:39:12
Local clock offset: -0.614 ms
Remote clock offset: 0.271 ms

# Below is generated by plot.py at 2019-01-25 03:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.64 Mbit/s
95th percentile per-packet one-way delay: 22.200 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.15 Mbit/s
95th percentile per-packet one-way delay: 20.364 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.98 Mbit/s
95th percentile per-packet one-way delay: 21.345 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.94 Mbit/s
95th percentile per-packet one-way delay: 25.864 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

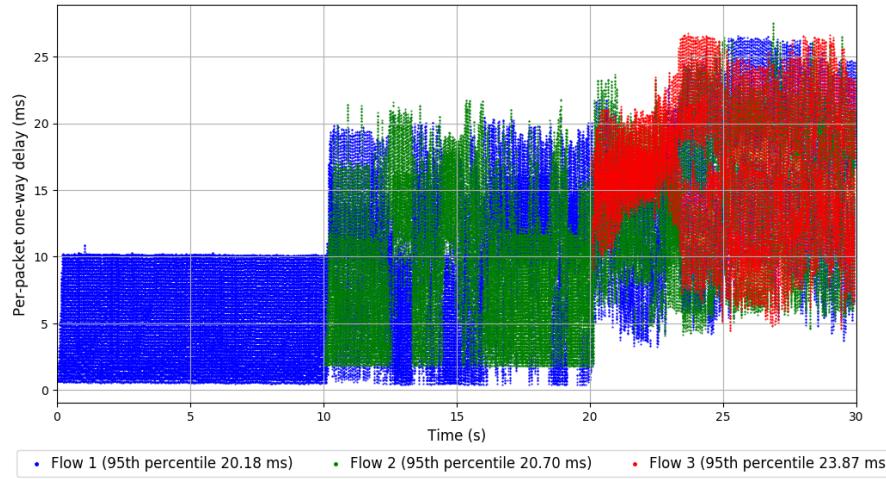
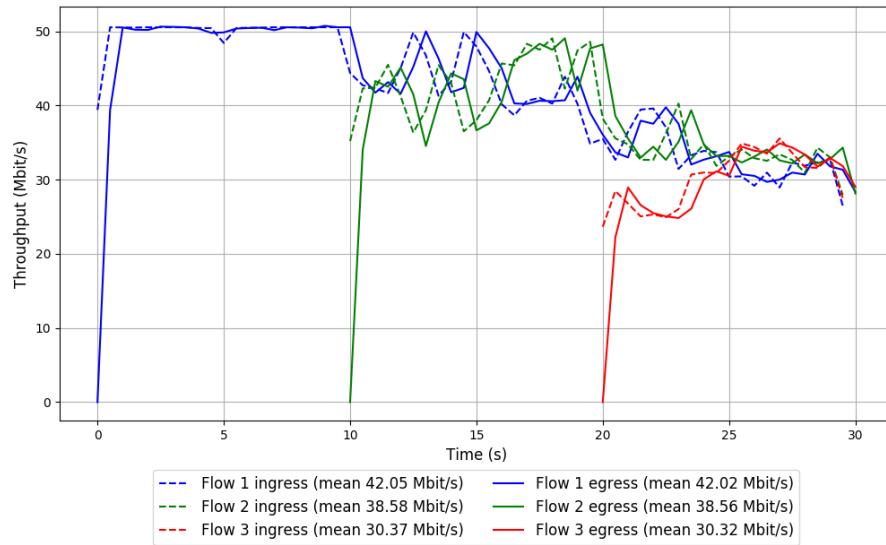


Run 3: Statistics of Sprout

```
Start at: 2019-01-25 02:02:37
End at: 2019-01-25 02:03:07
Local clock offset: 0.239 ms
Remote clock offset: 0.426 ms

# Below is generated by plot.py at 2019-01-25 03:15:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.68 Mbit/s
95th percentile per-packet one-way delay: 21.370 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.02 Mbit/s
95th percentile per-packet one-way delay: 20.177 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.56 Mbit/s
95th percentile per-packet one-way delay: 20.701 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.32 Mbit/s
95th percentile per-packet one-way delay: 23.872 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

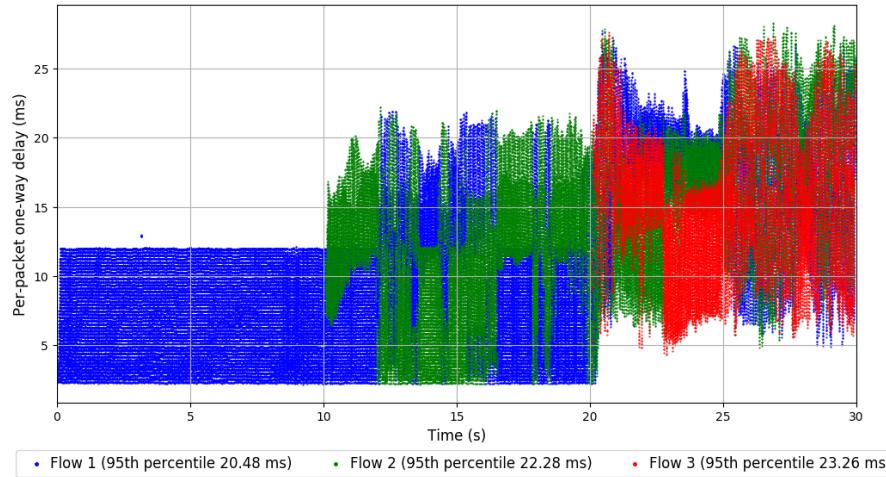
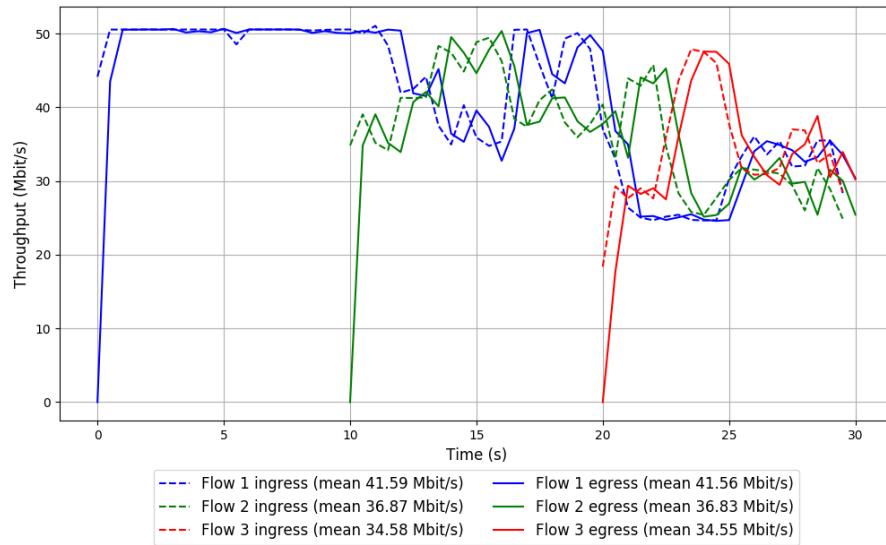


Run 4: Statistics of Sprout

```
Start at: 2019-01-25 02:26:31
End at: 2019-01-25 02:27:01
Local clock offset: -5.17 ms
Remote clock offset: 0.642 ms

# Below is generated by plot.py at 2019-01-25 03:16:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.48 Mbit/s
95th percentile per-packet one-way delay: 21.473 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.56 Mbit/s
95th percentile per-packet one-way delay: 20.478 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.83 Mbit/s
95th percentile per-packet one-way delay: 22.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.55 Mbit/s
95th percentile per-packet one-way delay: 23.261 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

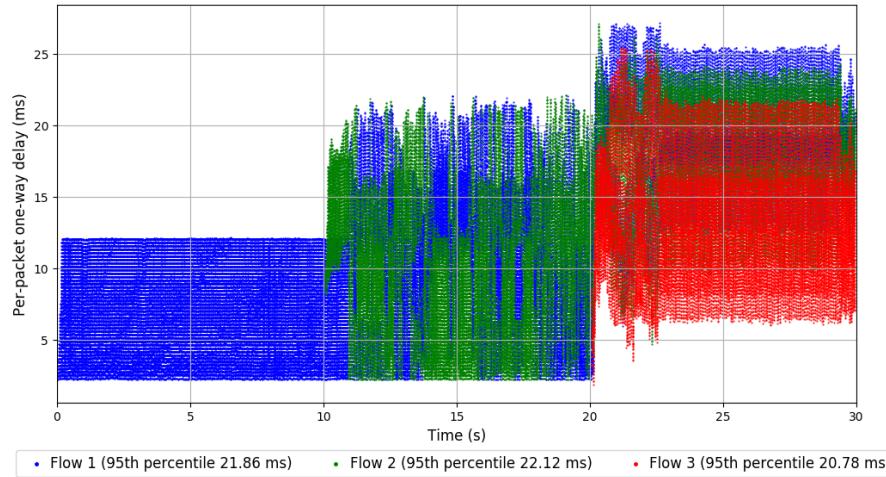
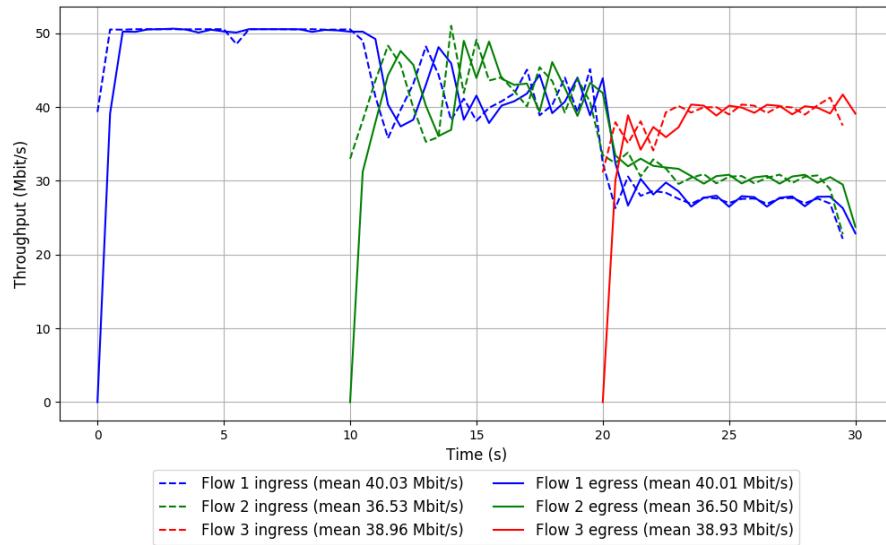


Run 5: Statistics of Sprout

```
Start at: 2019-01-25 02:50:27
End at: 2019-01-25 02:50:57
Local clock offset: -4.364 ms
Remote clock offset: 0.75 ms

# Below is generated by plot.py at 2019-01-25 03:16:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.17 Mbit/s
95th percentile per-packet one-way delay: 21.759 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.01 Mbit/s
95th percentile per-packet one-way delay: 21.856 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.50 Mbit/s
95th percentile per-packet one-way delay: 22.120 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.93 Mbit/s
95th percentile per-packet one-way delay: 20.778 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

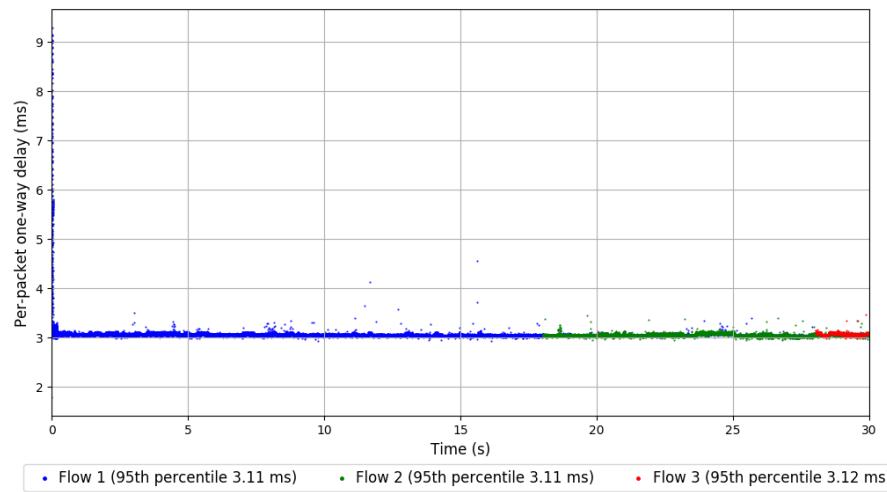
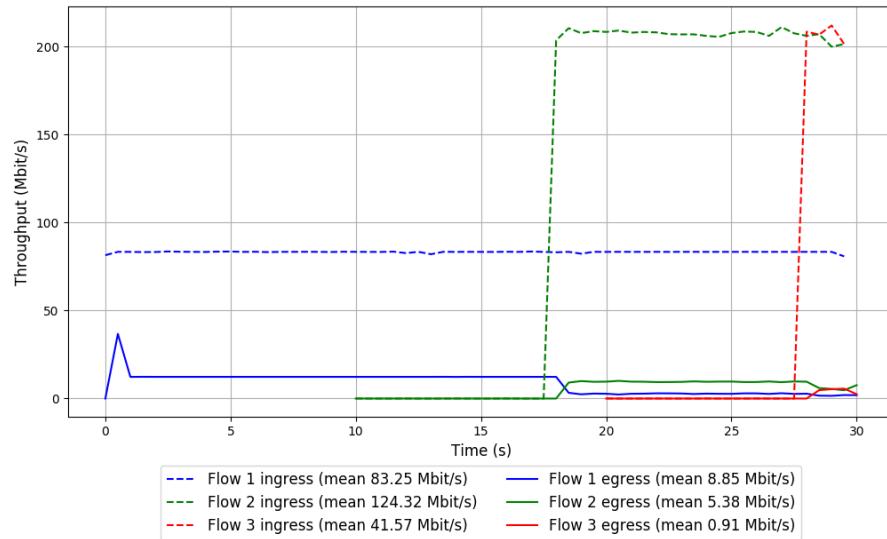


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-25 01:12:31
End at: 2019-01-25 01:13:01
Local clock offset: -4.526 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2019-01-25 03:16:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 3.110 ms
Loss rate: 92.92%
-- Flow 1:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 3.111 ms
Loss rate: 89.38%
-- Flow 2:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 3.107 ms
Loss rate: 95.68%
-- Flow 3:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 3.115 ms
Loss rate: 97.81%
```

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

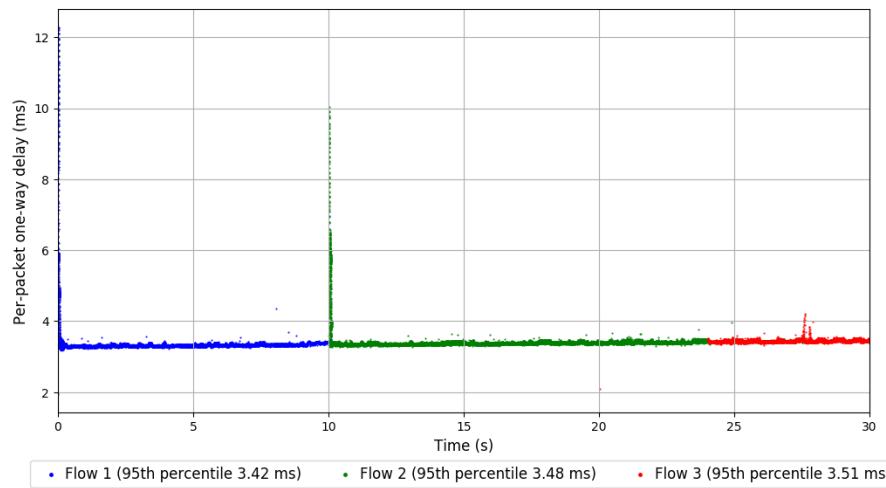
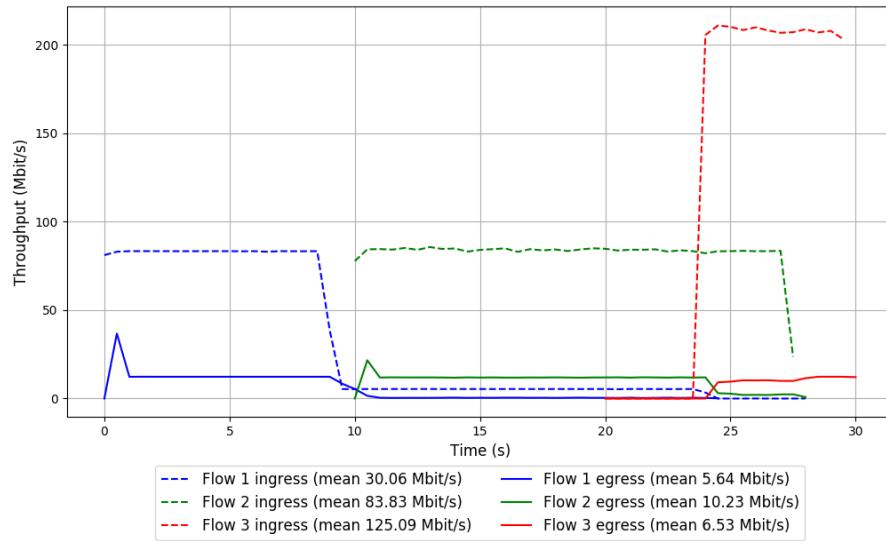


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-25 01:36:26
End at: 2019-01-25 01:36:56
Local clock offset: -2.14 ms
Remote clock offset: 0.197 ms

# Below is generated by plot.py at 2019-01-25 03:16:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 3.493 ms
Loss rate: 89.32%
-- Flow 1:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 3.421 ms
Loss rate: 83.91%
-- Flow 2:
Average throughput: 10.23 Mbit/s
95th percentile per-packet one-way delay: 3.480 ms
Loss rate: 87.80%
-- Flow 3:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 3.513 ms
Loss rate: 94.78%
```

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

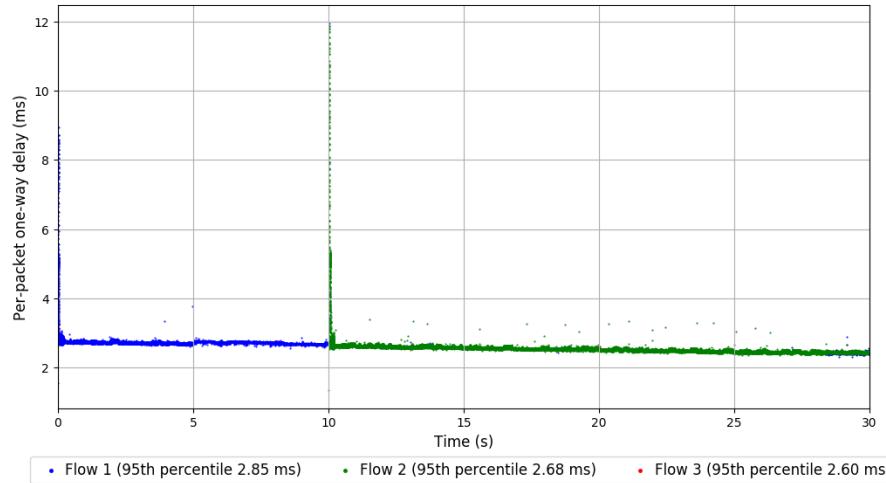
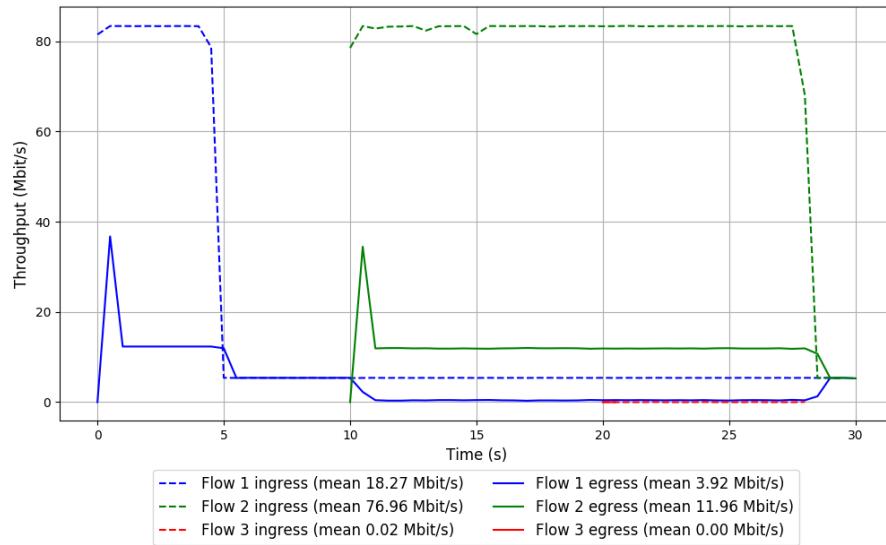


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-25 02:00:22
End at: 2019-01-25 02:00:52
Local clock offset: 0.962 ms
Remote clock offset: 0.444 ms

# Below is generated by plot.py at 2019-01-25 03:16:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.89 Mbit/s
95th percentile per-packet one-way delay: 2.786 ms
Loss rate: 82.90%
-- Flow 1:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 2.847 ms
Loss rate: 78.53%
-- Flow 2:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 2.680 ms
Loss rate: 84.46%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 2.601 ms
Loss rate: 99.16%
```

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

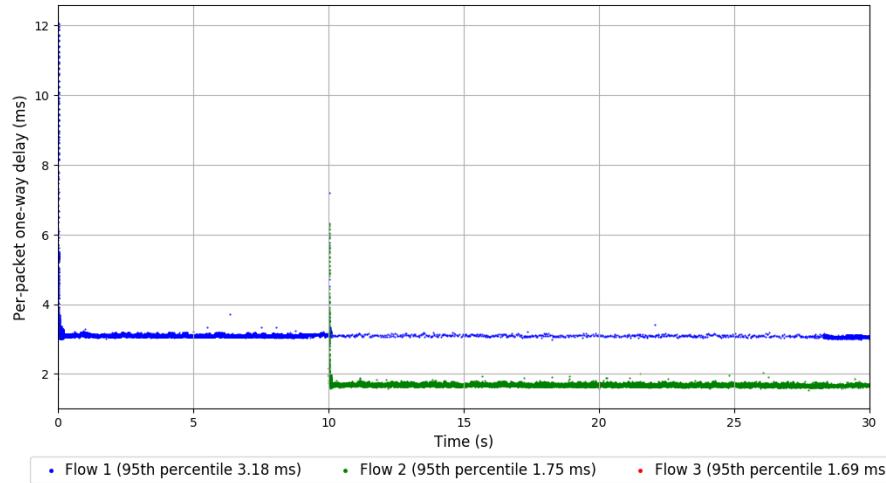
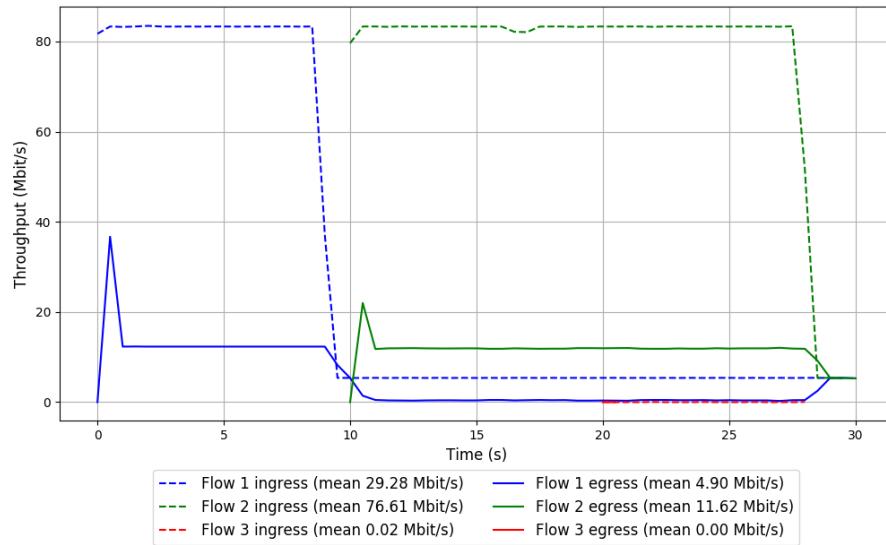


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-25 02:24:16
End at: 2019-01-25 02:24:46
Local clock offset: -5.799 ms
Remote clock offset: 0.62 ms

# Below is generated by plot.py at 2019-01-25 03:16:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 3.146 ms
Loss rate: 84.26%
-- Flow 1:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 3.183 ms
Loss rate: 83.26%
-- Flow 2:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 1.750 ms
Loss rate: 84.84%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.690 ms
Loss rate: 99.16%
```

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

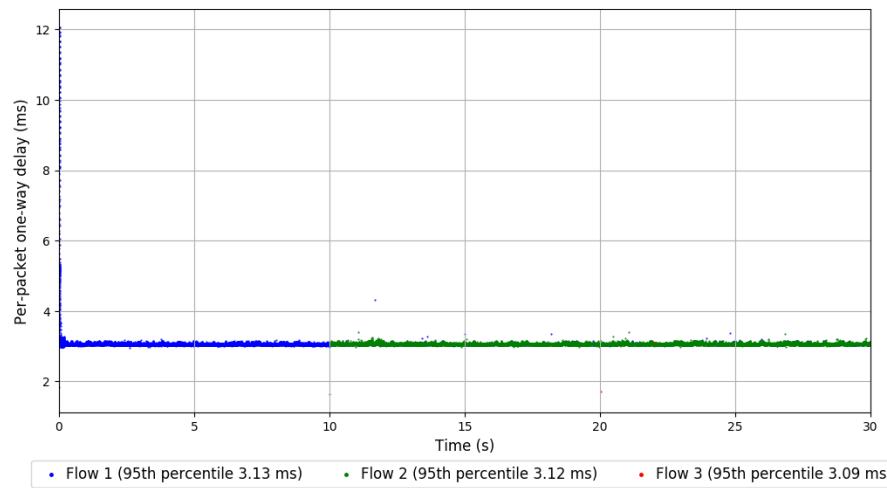
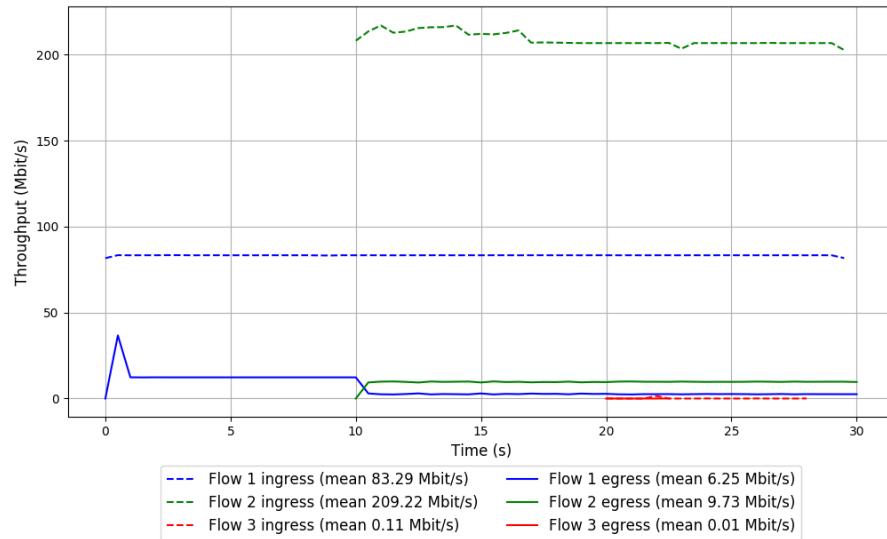


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-25 02:48:10
End at: 2019-01-25 02:48:40
Local clock offset: -5.103 ms
Remote clock offset: 0.736 ms

# Below is generated by plot.py at 2019-01-25 03:16:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 3.124 ms
Loss rate: 94.28%
-- Flow 1:
Average throughput: 6.25 Mbit/s
95th percentile per-packet one-way delay: 3.128 ms
Loss rate: 92.50%
-- Flow 2:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 3.117 ms
Loss rate: 95.35%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 3.087 ms
Loss rate: 98.45%
```

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

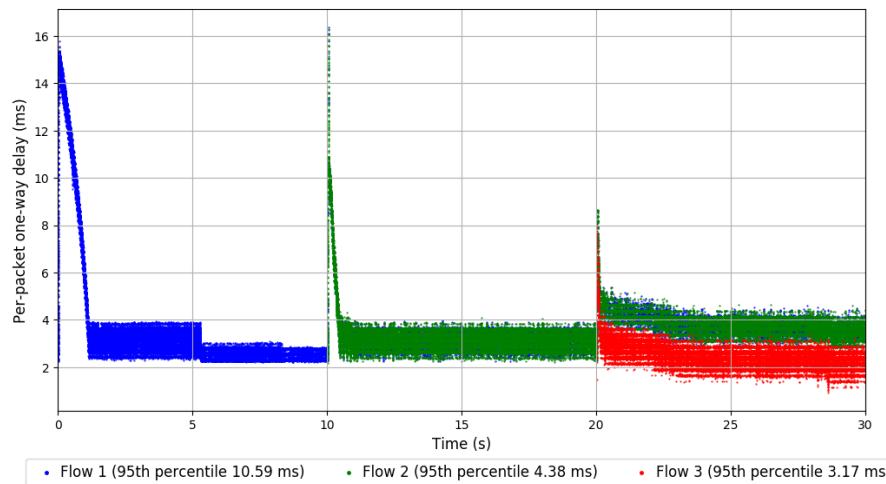
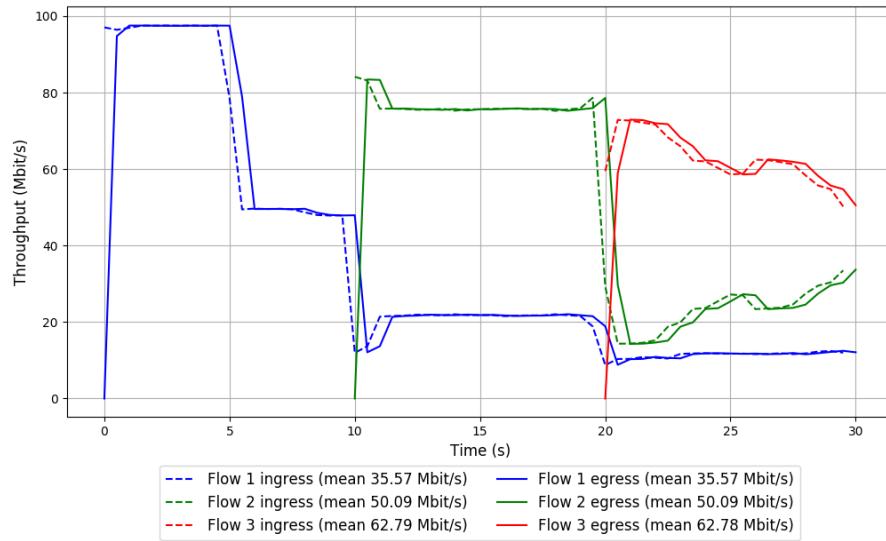


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-25 01:27:17
End at: 2019-01-25 01:27:47
Local clock offset: -4.399 ms
Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2019-01-25 03:16:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.82 Mbit/s
95th percentile per-packet one-way delay: 5.150 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.57 Mbit/s
95th percentile per-packet one-way delay: 10.588 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.09 Mbit/s
95th percentile per-packet one-way delay: 4.376 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.78 Mbit/s
95th percentile per-packet one-way delay: 3.165 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

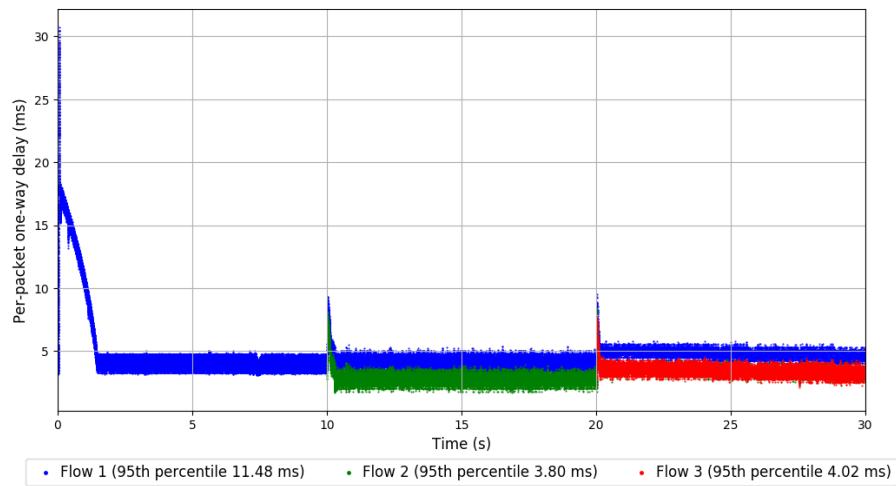
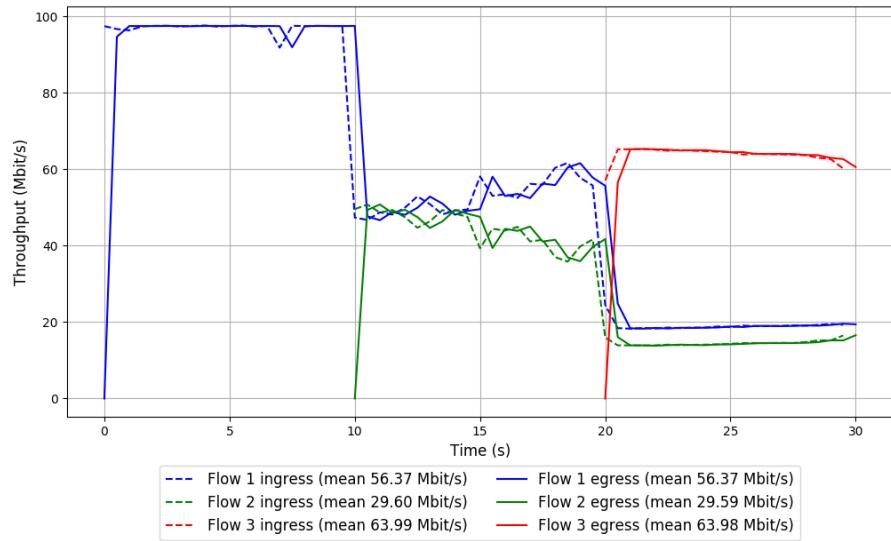


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-25 01:51:13
End at: 2019-01-25 01:51:43
Local clock offset: 0.657 ms
Remote clock offset: 0.401 ms

# Below is generated by plot.py at 2019-01-25 03:16:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.36 Mbit/s
95th percentile per-packet one-way delay: 5.569 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.37 Mbit/s
95th percentile per-packet one-way delay: 11.478 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 3.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.98 Mbit/s
95th percentile per-packet one-way delay: 4.017 ms
Loss rate: 0.00%
```

Run 2: Report of TCP Vegas — Data Link

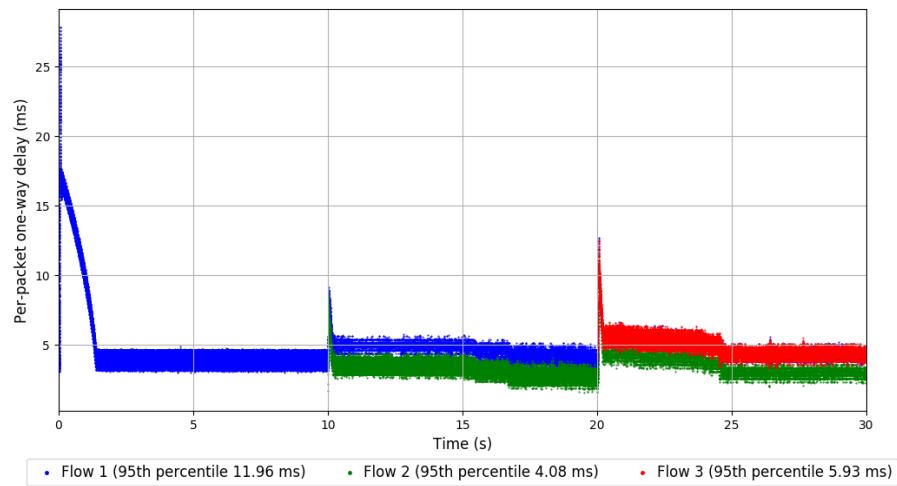
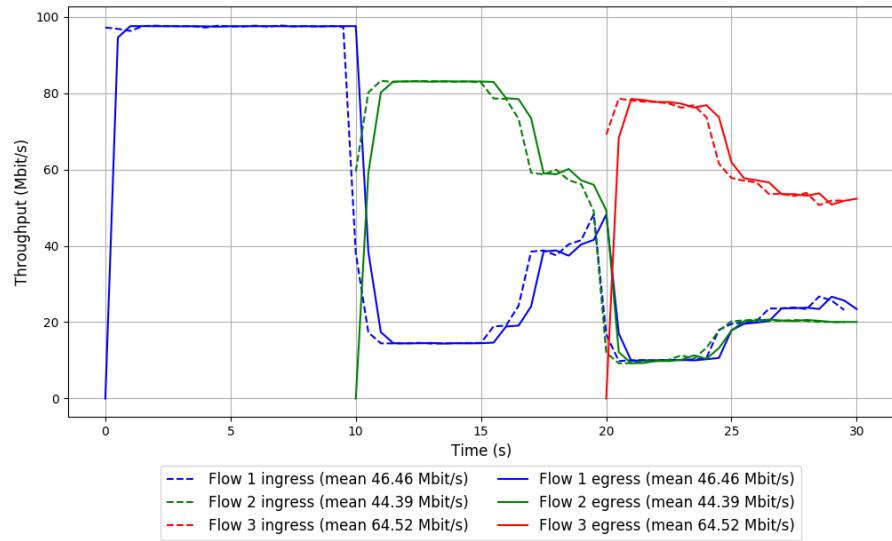


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-25 02:15:07
End at: 2019-01-25 02:15:37
Local clock offset: -4.616 ms
Remote clock offset: 0.644 ms

# Below is generated by plot.py at 2019-01-25 03:16:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 6.140 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.46 Mbit/s
95th percentile per-packet one-way delay: 11.962 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.39 Mbit/s
95th percentile per-packet one-way delay: 4.078 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.52 Mbit/s
95th percentile per-packet one-way delay: 5.932 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

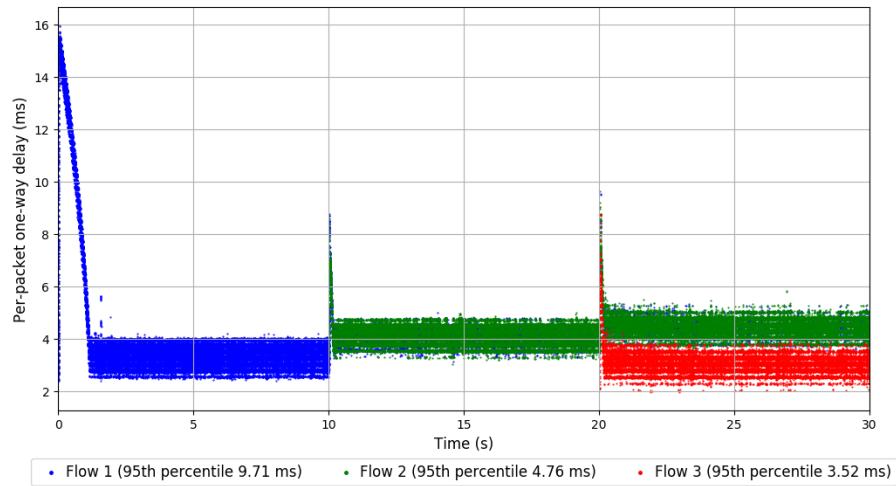
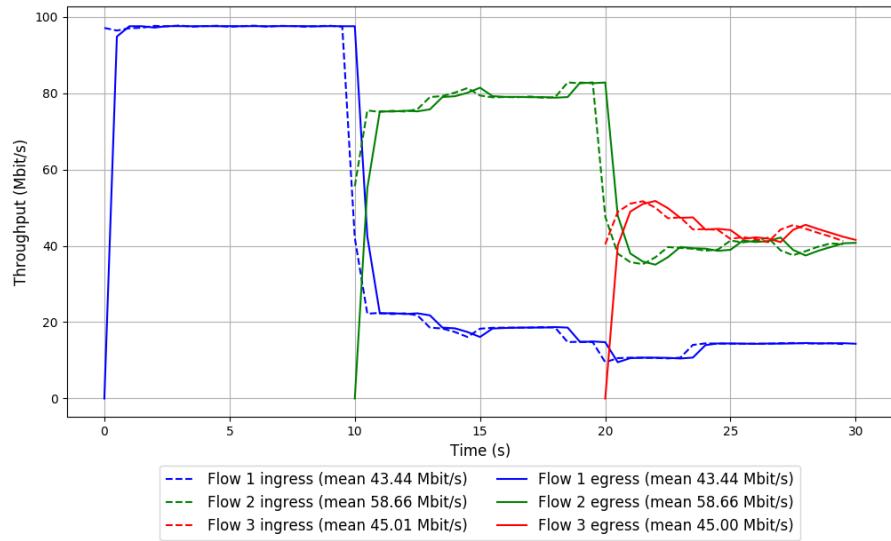


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-25 02:39:01
End at: 2019-01-25 02:39:31
Local clock offset: -4.533 ms
Remote clock offset: 0.788 ms

# Below is generated by plot.py at 2019-01-25 03:16:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 4.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.44 Mbit/s
95th percentile per-packet one-way delay: 9.715 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.66 Mbit/s
95th percentile per-packet one-way delay: 4.765 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.00 Mbit/s
95th percentile per-packet one-way delay: 3.518 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Vegas — Data Link

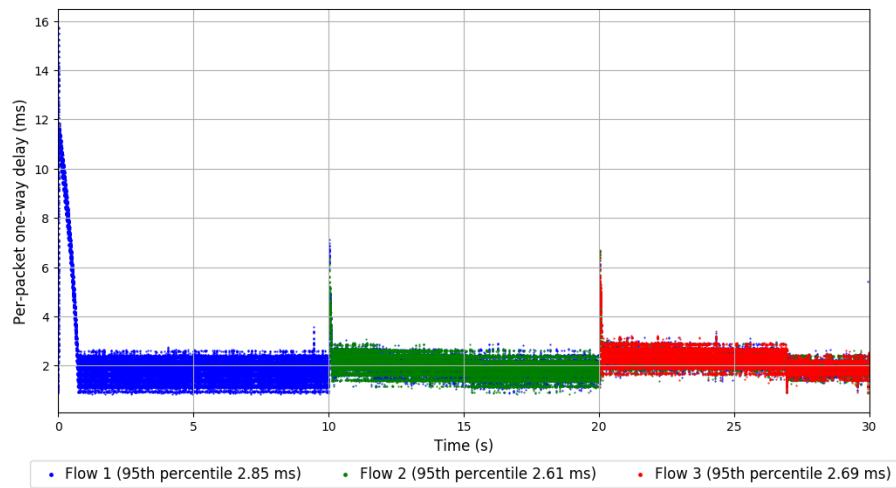
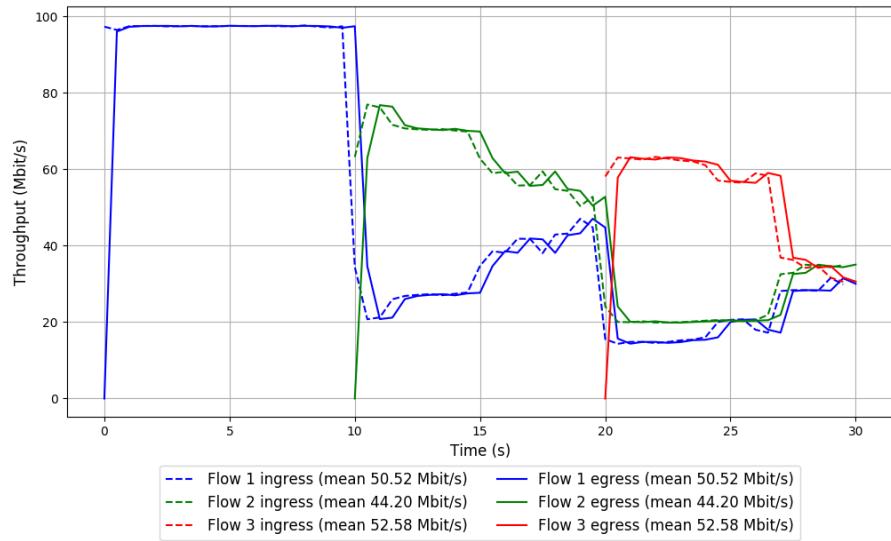


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-25 03:02:56
End at: 2019-01-25 03:03:26
Local clock offset: -4.352 ms
Remote clock offset: 0.67 ms

# Below is generated by plot.py at 2019-01-25 03:17:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 2.664 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.52 Mbit/s
95th percentile per-packet one-way delay: 2.855 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.20 Mbit/s
95th percentile per-packet one-way delay: 2.614 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.58 Mbit/s
95th percentile per-packet one-way delay: 2.692 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

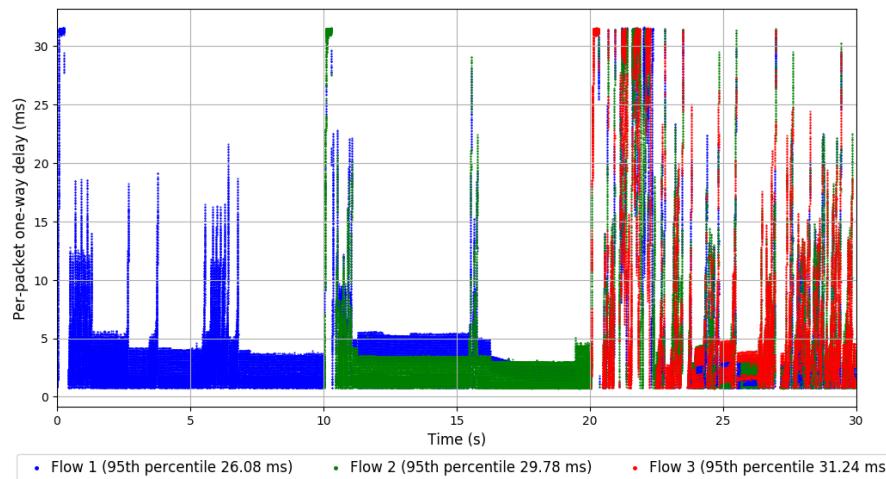
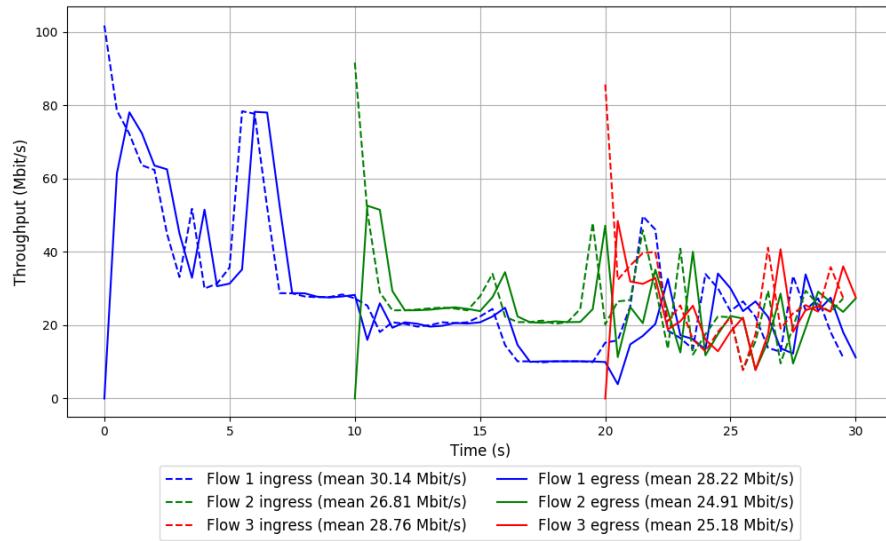


Run 1: Statistics of Verus

```
Start at: 2019-01-25 01:13:39
End at: 2019-01-25 01:14:09
Local clock offset: -3.829 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2019-01-25 03:17:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.14 Mbit/s
95th percentile per-packet one-way delay: 29.719 ms
Loss rate: 7.61%
-- Flow 1:
Average throughput: 28.22 Mbit/s
95th percentile per-packet one-way delay: 26.080 ms
Loss rate: 6.37%
-- Flow 2:
Average throughput: 24.91 Mbit/s
95th percentile per-packet one-way delay: 29.776 ms
Loss rate: 7.12%
-- Flow 3:
Average throughput: 25.18 Mbit/s
95th percentile per-packet one-way delay: 31.237 ms
Loss rate: 12.46%
```

Run 1: Report of Verus — Data Link

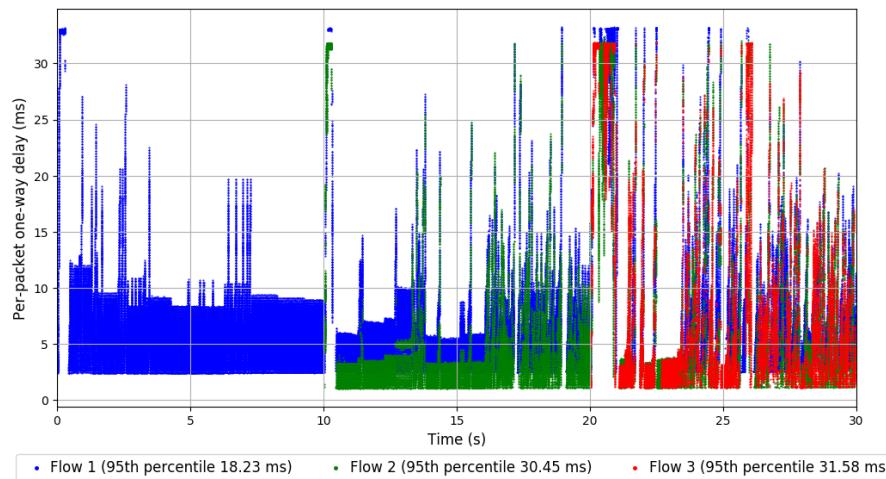
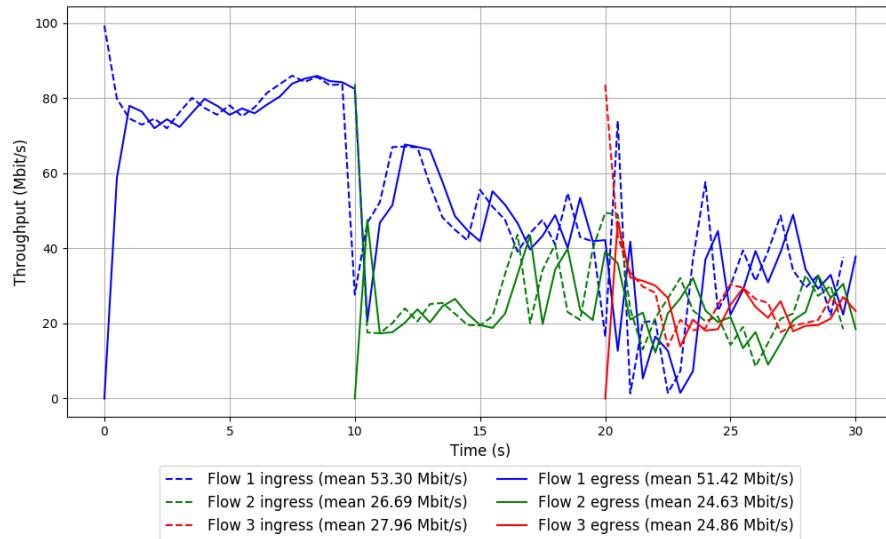


Run 2: Statistics of Verus

```
Start at: 2019-01-25 01:37:33
End at: 2019-01-25 01:38:03
Local clock offset: -1.002 ms
Remote clock offset: 0.214 ms

# Below is generated by plot.py at 2019-01-25 03:17:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.06 Mbit/s
95th percentile per-packet one-way delay: 27.056 ms
Loss rate: 5.30%
-- Flow 1:
Average throughput: 51.42 Mbit/s
95th percentile per-packet one-way delay: 18.228 ms
Loss rate: 3.49%
-- Flow 2:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 30.450 ms
Loss rate: 7.72%
-- Flow 3:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 31.582 ms
Loss rate: 11.05%
```

Run 2: Report of Verus — Data Link

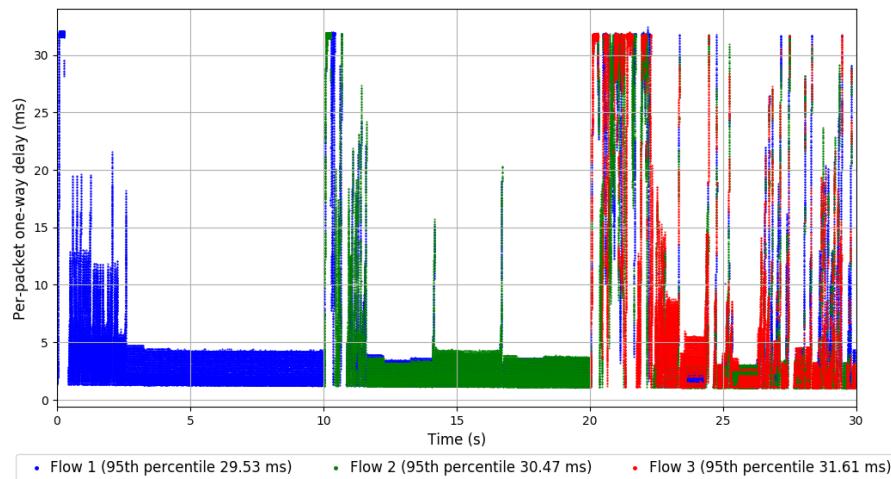
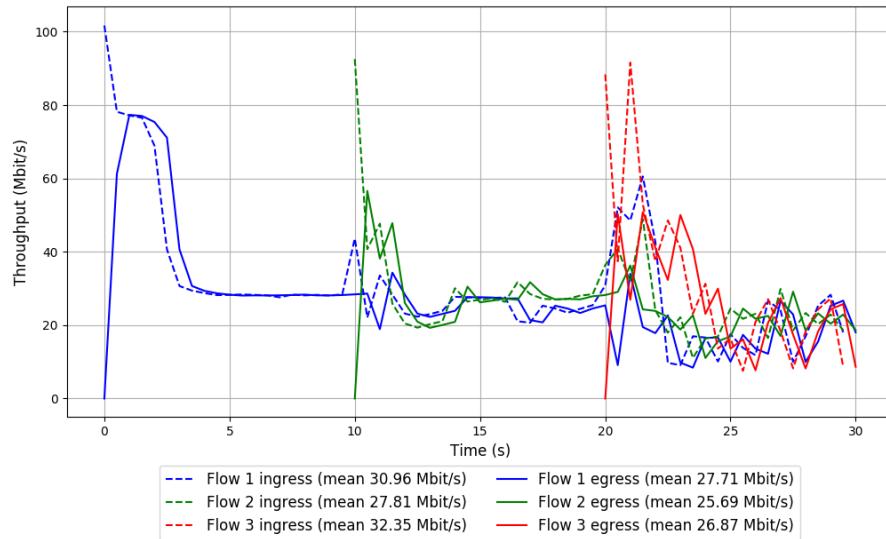


Run 3: Statistics of Verus

```
Start at: 2019-01-25 02:01:28
End at: 2019-01-25 02:01:58
Local clock offset: 0.099 ms
Remote clock offset: 0.392 ms

# Below is generated by plot.py at 2019-01-25 03:17:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 31.425 ms
Loss rate: 10.77%
-- Flow 1:
Average throughput: 27.71 Mbit/s
95th percentile per-packet one-way delay: 29.534 ms
Loss rate: 10.51%
-- Flow 2:
Average throughput: 25.69 Mbit/s
95th percentile per-packet one-way delay: 30.470 ms
Loss rate: 7.63%
-- Flow 3:
Average throughput: 26.87 Mbit/s
95th percentile per-packet one-way delay: 31.615 ms
Loss rate: 16.94%
```

Run 3: Report of Verus — Data Link

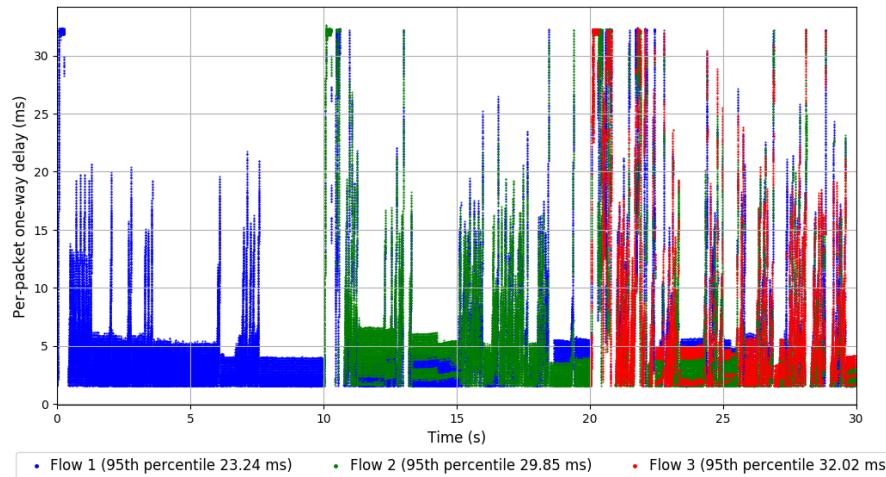
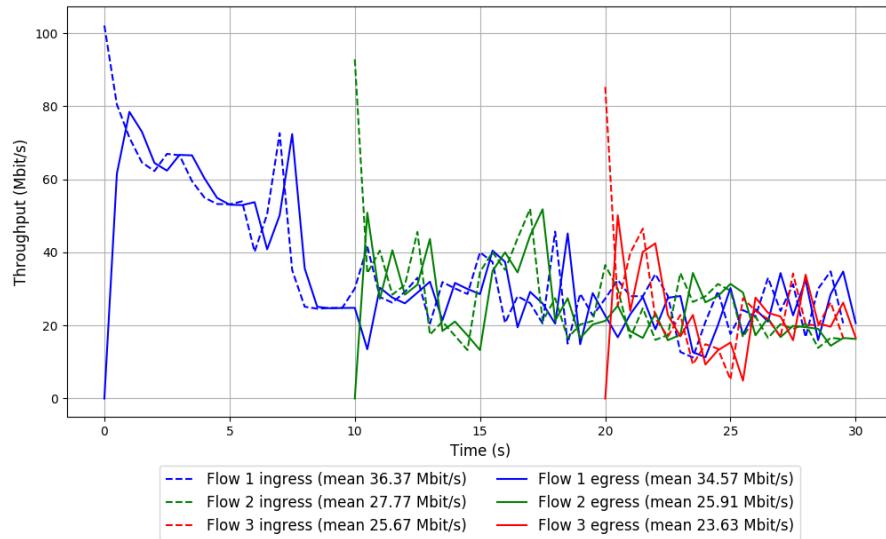


Run 4: Statistics of Verus

```
Start at: 2019-01-25 02:25:23
End at: 2019-01-25 02:25:53
Local clock offset: -5.814 ms
Remote clock offset: 0.664 ms

# Below is generated by plot.py at 2019-01-25 03:17:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.65 Mbit/s
95th percentile per-packet one-way delay: 28.336 ms
Loss rate: 5.87%
-- Flow 1:
Average throughput: 34.57 Mbit/s
95th percentile per-packet one-way delay: 23.237 ms
Loss rate: 4.96%
-- Flow 2:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 29.852 ms
Loss rate: 6.70%
-- Flow 3:
Average throughput: 23.63 Mbit/s
95th percentile per-packet one-way delay: 32.021 ms
Loss rate: 8.00%
```

Run 4: Report of Verus — Data Link

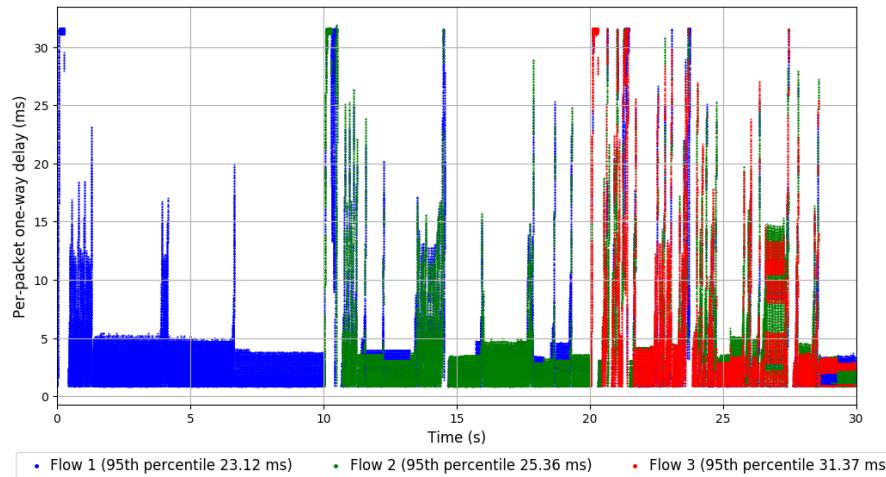
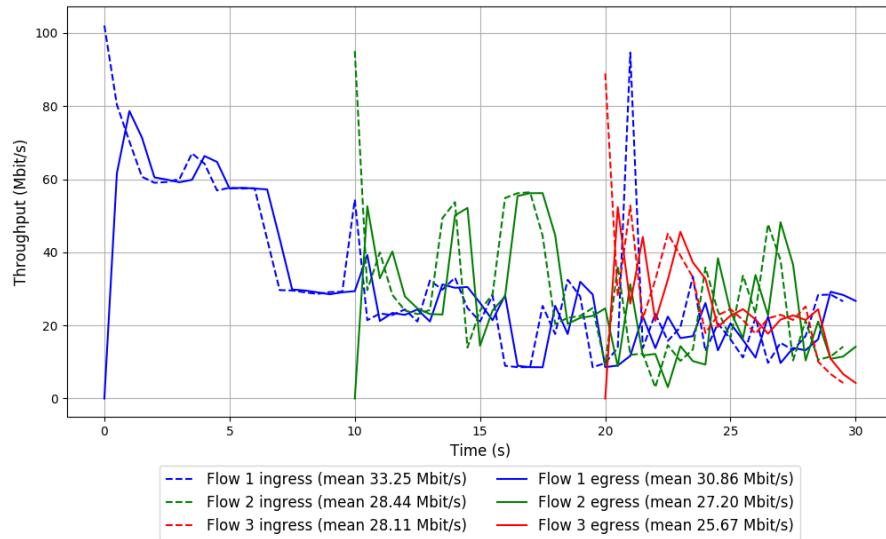


Run 5: Statistics of Verus

```
Start at: 2019-01-25 02:49:18
End at: 2019-01-25 02:49:48
Local clock offset: -4.366 ms
Remote clock offset: 0.8 ms

# Below is generated by plot.py at 2019-01-25 03:17:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.48 Mbit/s
95th percentile per-packet one-way delay: 26.751 ms
Loss rate: 6.53%
-- Flow 1:
Average throughput: 30.86 Mbit/s
95th percentile per-packet one-way delay: 23.124 ms
Loss rate: 7.17%
-- Flow 2:
Average throughput: 27.20 Mbit/s
95th percentile per-packet one-way delay: 25.360 ms
Loss rate: 4.35%
-- Flow 3:
Average throughput: 25.67 Mbit/s
95th percentile per-packet one-way delay: 31.369 ms
Loss rate: 8.67%
```

Run 5: Report of Verus — Data Link

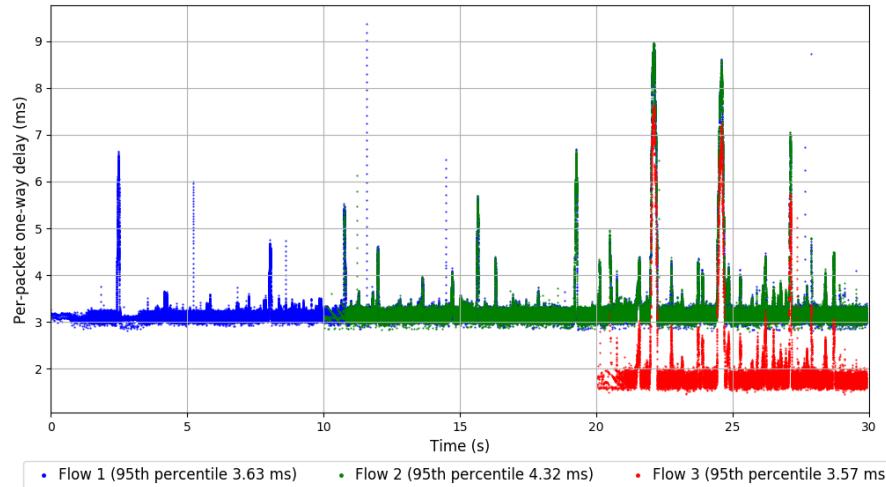
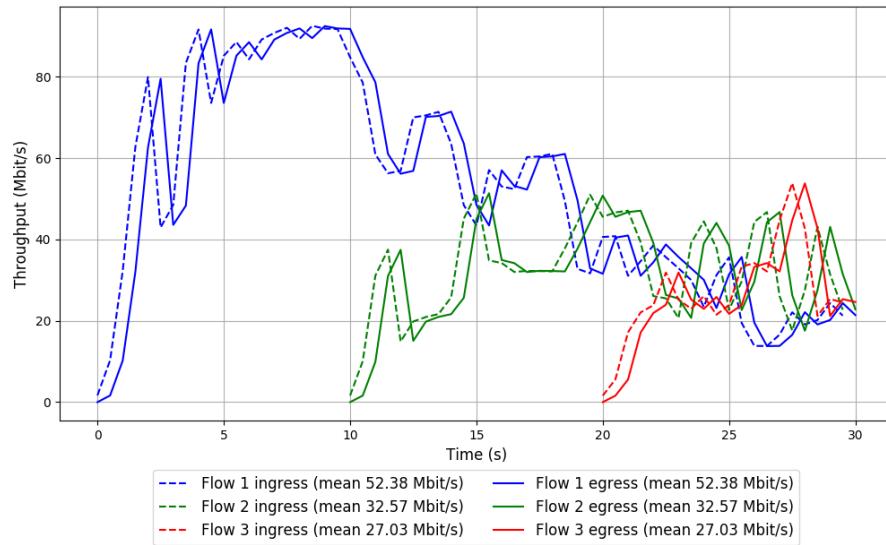


```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-25 01:17:01
End at: 2019-01-25 01:17:31
Local clock offset: -4.75 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2019-01-25 03:17:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.97 Mbit/s
95th percentile per-packet one-way delay: 3.856 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.38 Mbit/s
95th percentile per-packet one-way delay: 3.626 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 4.321 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.03 Mbit/s
95th percentile per-packet one-way delay: 3.571 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

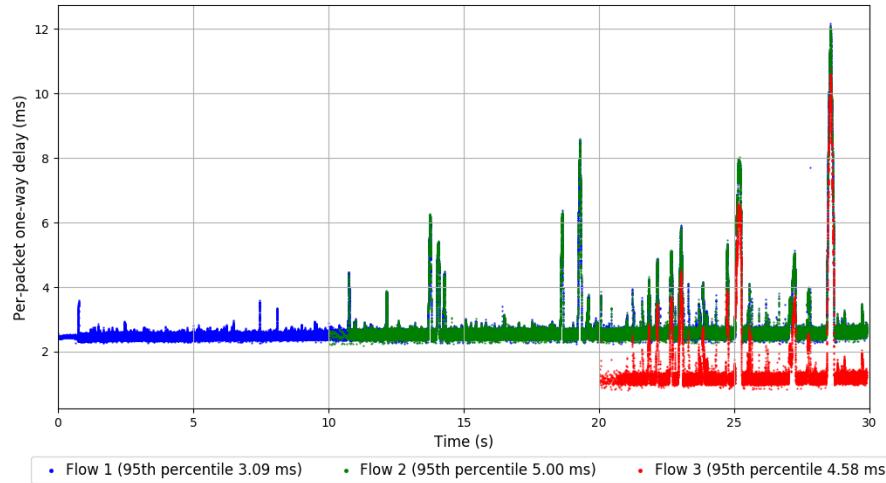
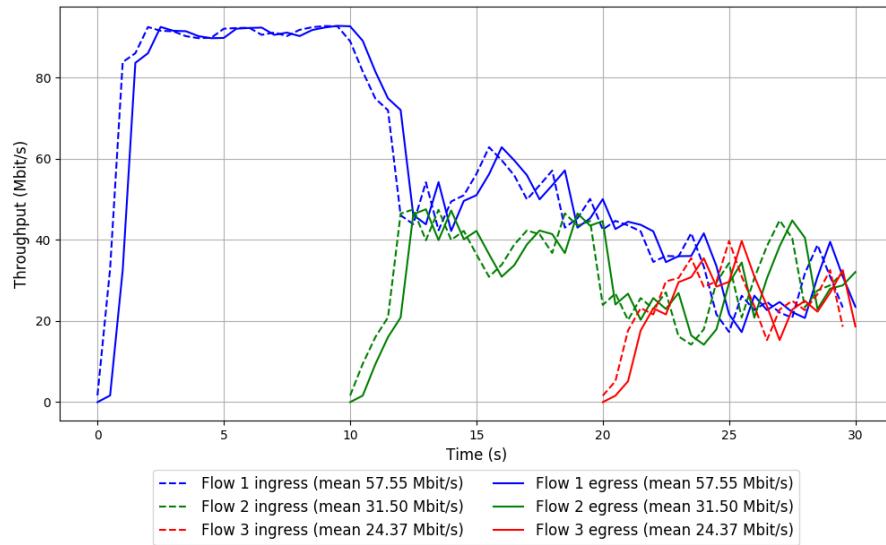


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-25 01:40:56
End at: 2019-01-25 01:41:26
Local clock offset: -0.09 ms
Remote clock offset: 0.274 ms

# Below is generated by plot.py at 2019-01-25 03:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.55 Mbit/s
95th percentile per-packet one-way delay: 3.774 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.55 Mbit/s
95th percentile per-packet one-way delay: 3.088 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 4.996 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.37 Mbit/s
95th percentile per-packet one-way delay: 4.582 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

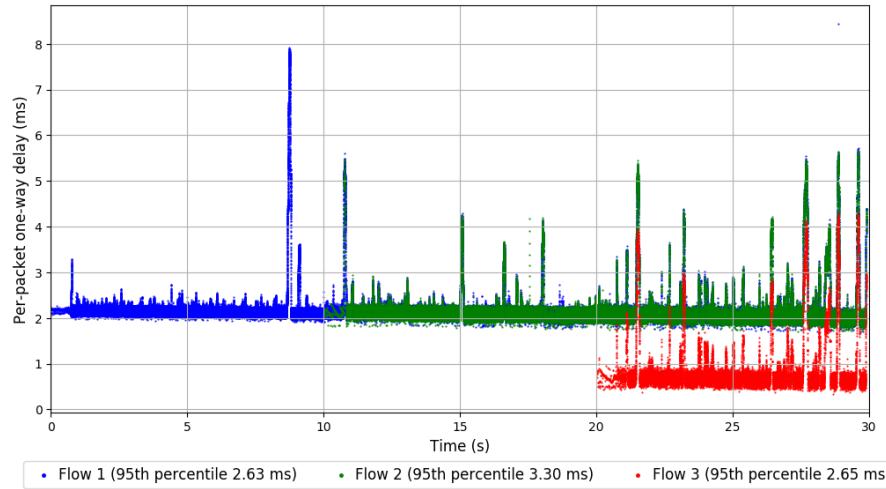
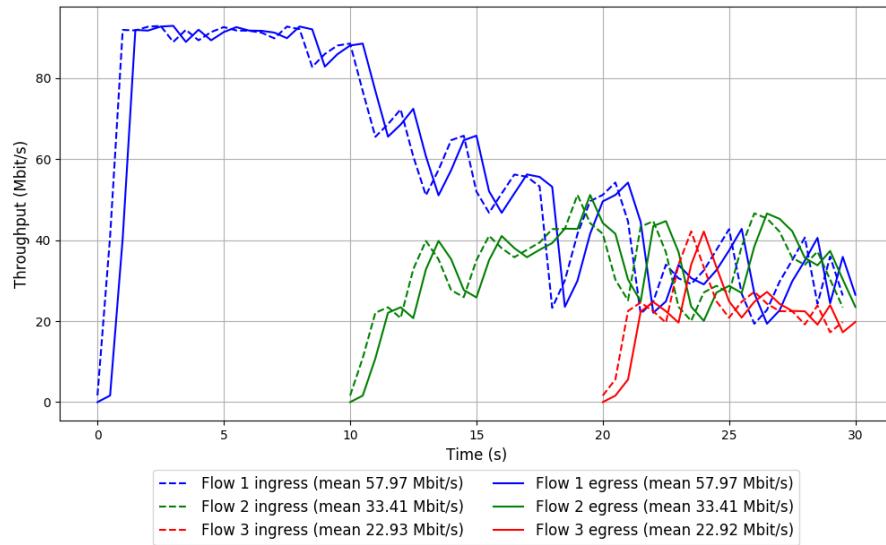


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-25 02:04:50
End at: 2019-01-25 02:05:20
Local clock offset: -0.892 ms
Remote clock offset: 0.562 ms

# Below is generated by plot.py at 2019-01-25 03:17:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.77 Mbit/s
95th percentile per-packet one-way delay: 2.799 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.97 Mbit/s
95th percentile per-packet one-way delay: 2.627 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.41 Mbit/s
95th percentile per-packet one-way delay: 3.298 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.92 Mbit/s
95th percentile per-packet one-way delay: 2.645 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

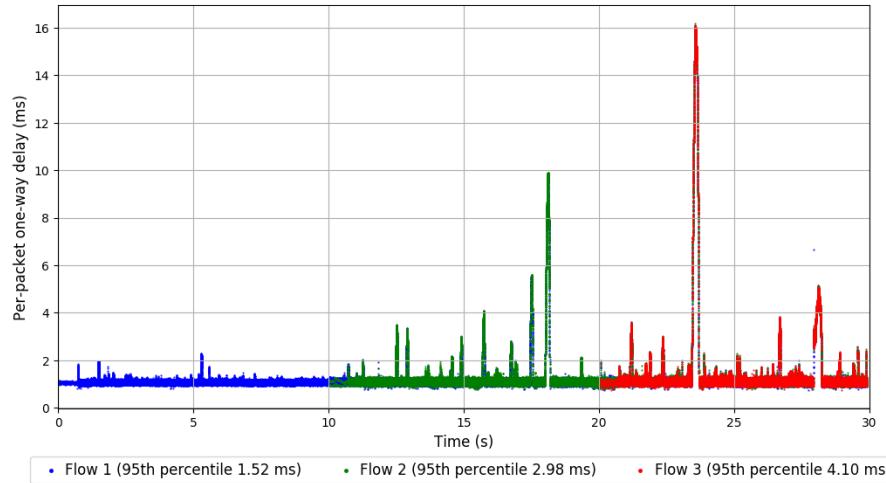
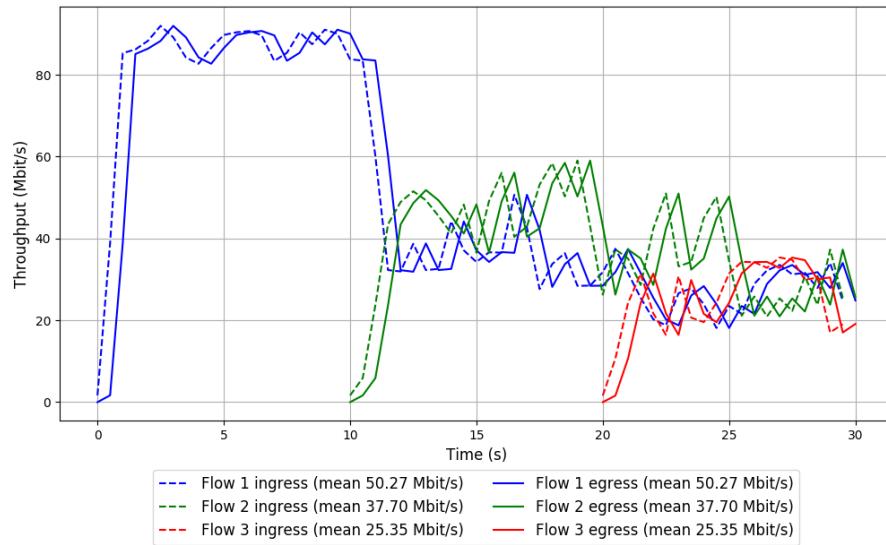


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-25 02:28:45
End at: 2019-01-25 02:29:15
Local clock offset: -5.365 ms
Remote clock offset: 0.755 ms

# Below is generated by plot.py at 2019-01-25 03:17:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.72 Mbit/s
95th percentile per-packet one-way delay: 2.139 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.27 Mbit/s
95th percentile per-packet one-way delay: 1.520 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.70 Mbit/s
95th percentile per-packet one-way delay: 2.977 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.35 Mbit/s
95th percentile per-packet one-way delay: 4.104 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

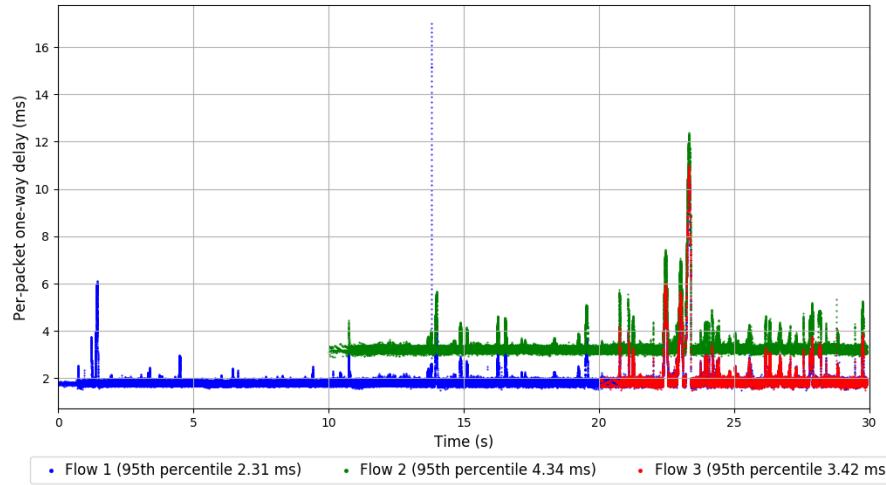
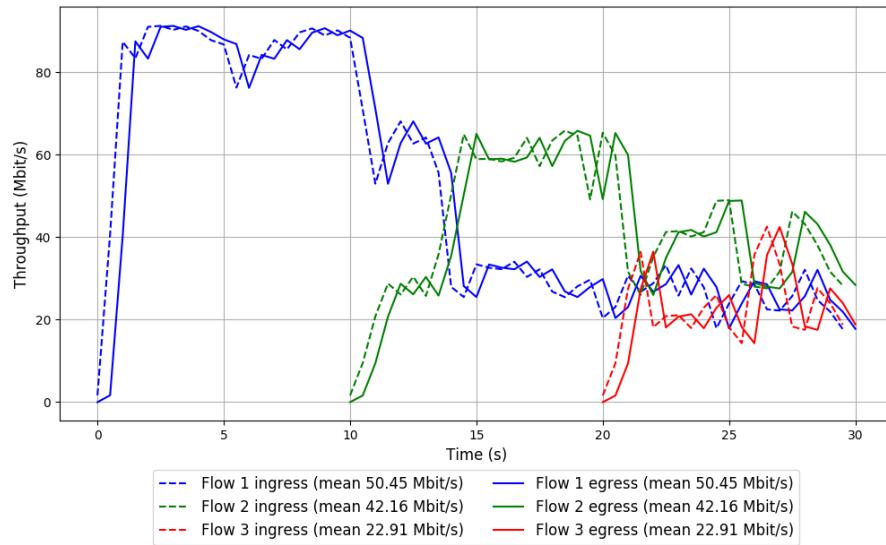


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-25 02:52:40
End at: 2019-01-25 02:53:10
Local clock offset: -5.147 ms
Remote clock offset: 0.818 ms

# Below is generated by plot.py at 2019-01-25 03:17:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.05 Mbit/s
95th percentile per-packet one-way delay: 3.616 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.45 Mbit/s
95th percentile per-packet one-way delay: 2.314 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.16 Mbit/s
95th percentile per-packet one-way delay: 4.336 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.91 Mbit/s
95th percentile per-packet one-way delay: 3.415 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

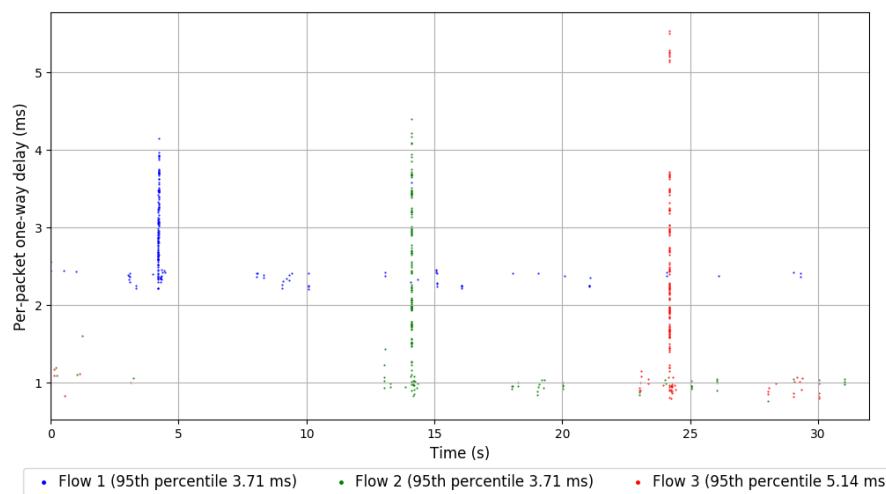
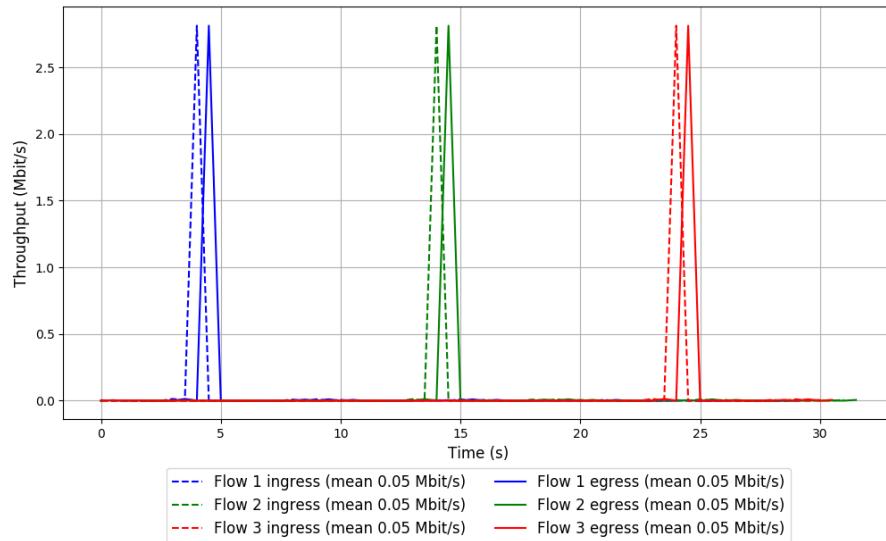


```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 01:18:11
End at: 2019-01-25 01:18:41
Local clock offset: -4.058 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-01-25 03:17:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 3.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.712 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.714 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.139 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

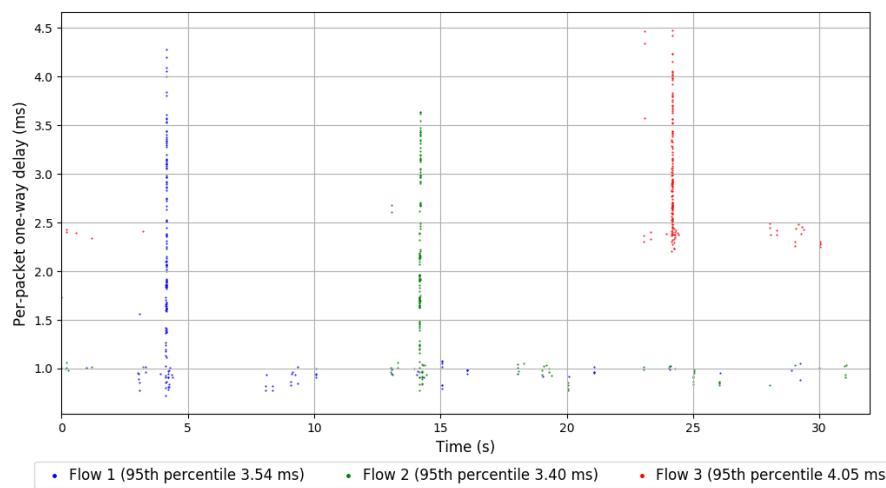
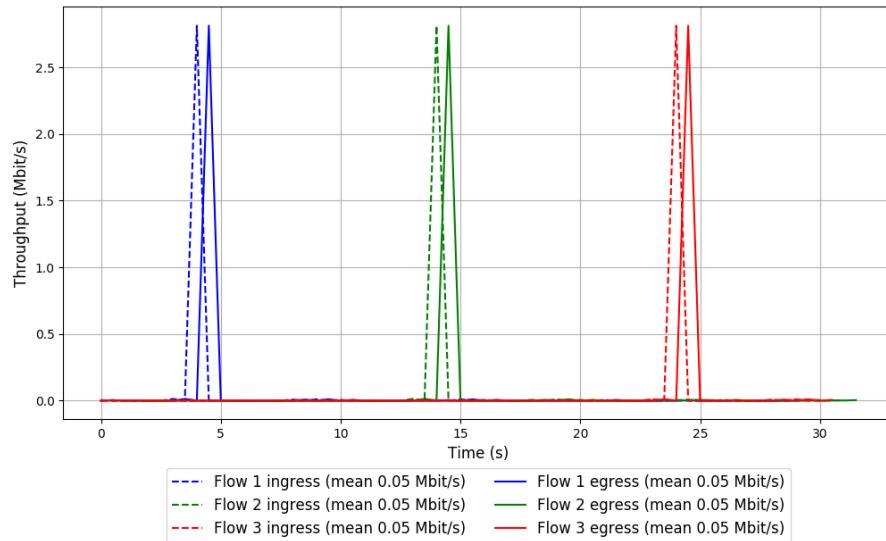


```
Run 2: Statistics of WebRTC media

Start at: 2019-01-25 01:42:06
End at: 2019-01-25 01:42:36
Local clock offset: 0.155 ms
Remote clock offset: 0.186 ms

# Below is generated by plot.py at 2019-01-25 03:17:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 3.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.538 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.396 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.048 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

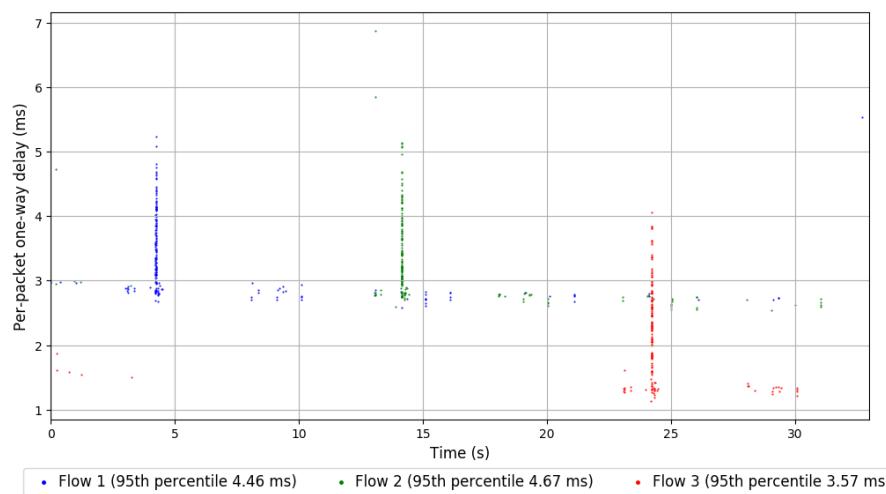
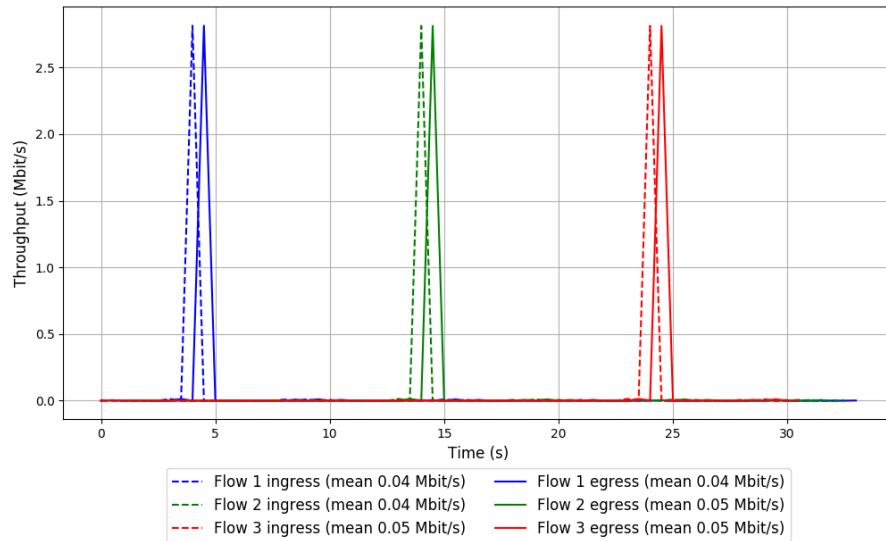


```
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 02:06:01
End at: 2019-01-25 02:06:31
Local clock offset: -2.234 ms
Remote clock offset: 0.448 ms

# Below is generated by plot.py at 2019-01-25 03:17:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 4.384 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 4.457 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.671 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.567 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

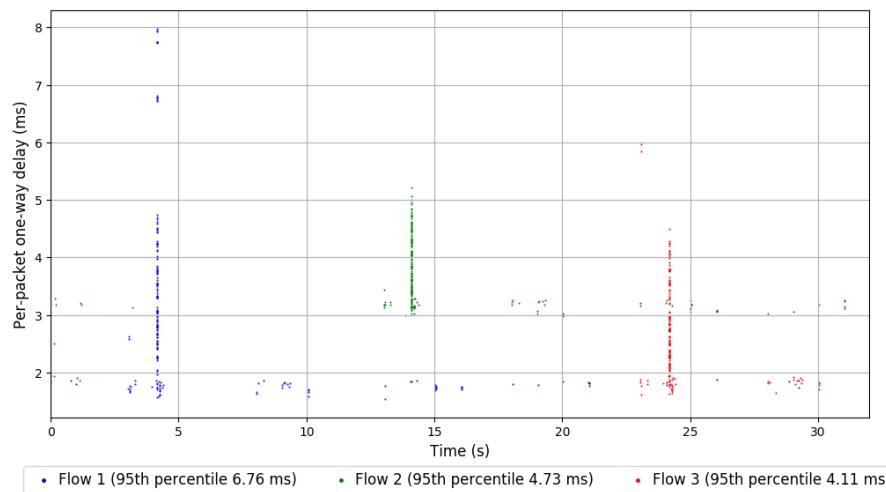
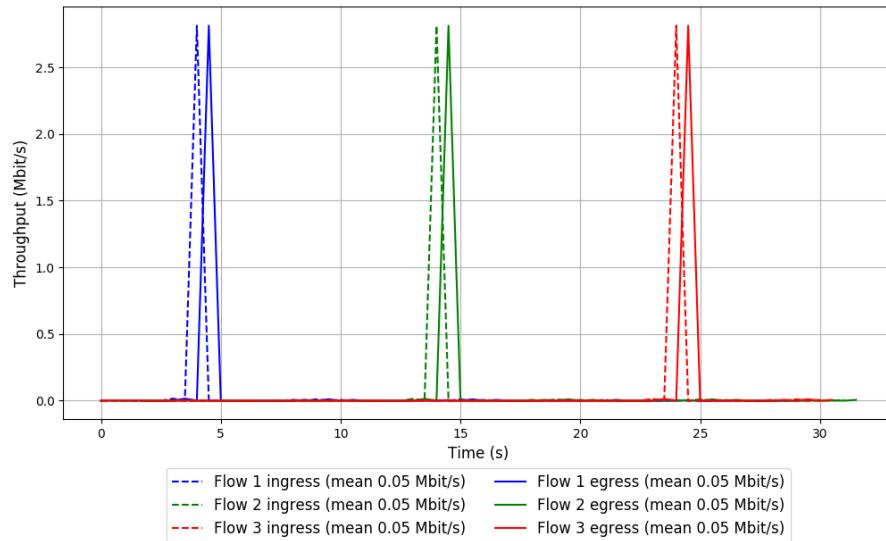


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-25 02:29:55
End at: 2019-01-25 02:30:25
Local clock offset: -6.134 ms
Remote clock offset: 0.669 ms

# Below is generated by plot.py at 2019-01-25 03:17:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.710 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.729 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.107 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-01-25 02:53:51
End at: 2019-01-25 02:54:21
Local clock offset: -4.377 ms
Remote clock offset: 0.715 ms

# Below is generated by plot.py at 2019-01-25 03:17:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 3.781 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.684 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.603 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.303 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

