

Pantheon Report

Generated at 2019-01-18 15:28:19 (UTC).

Data path: GCE Sydney on `ens4 (local)` → GCE Tokyo on `ens4 (remote)`.

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

System info:

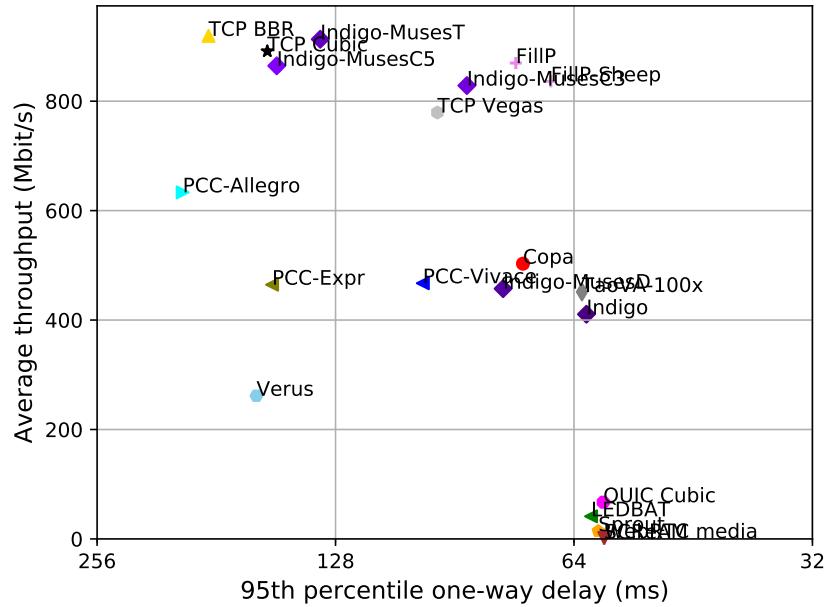
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

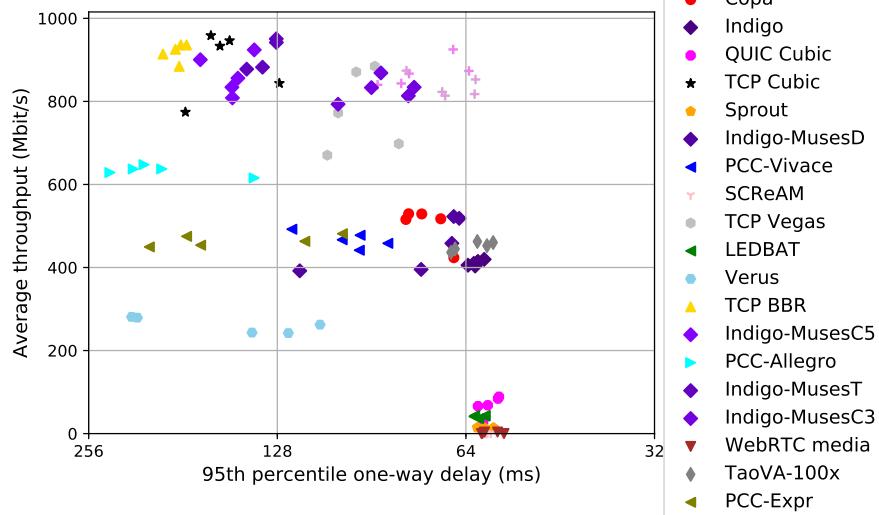
```
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
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 GCE Sydney to GCE Tokyo, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney to GCE Tokyo, 5 runs of 30s each per scheme
3 flows with 10s interval between flows



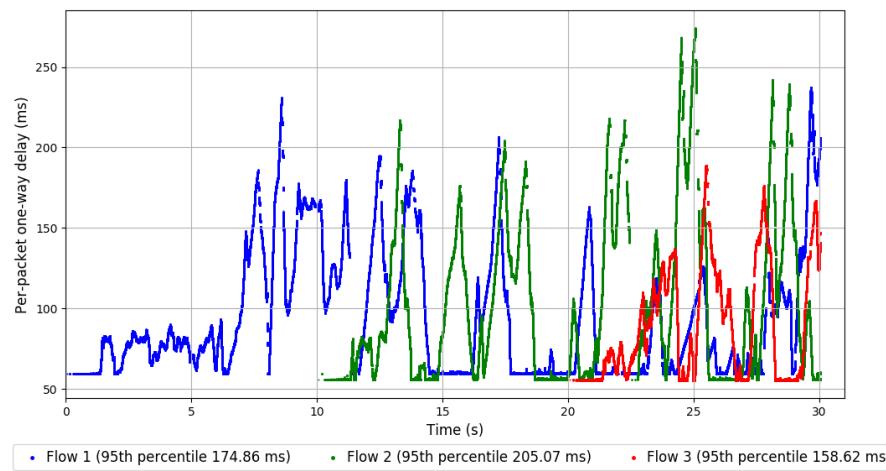
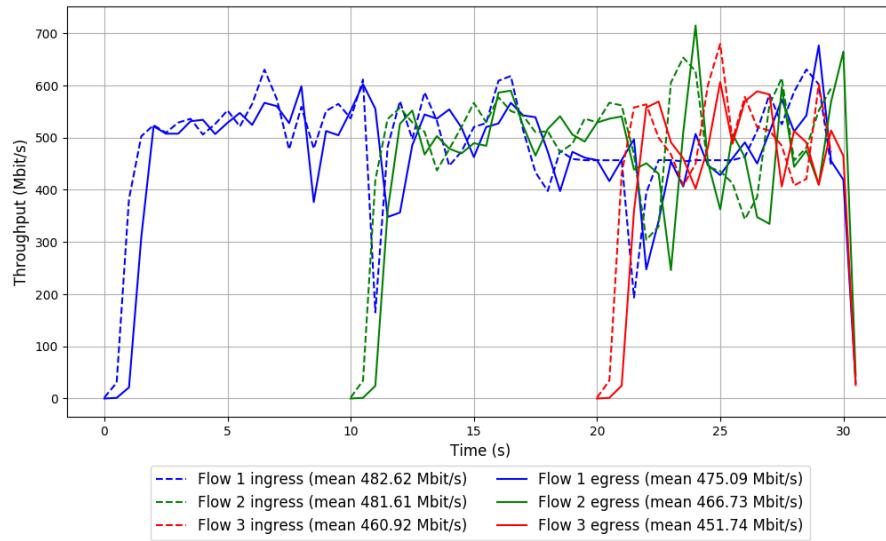
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	479.71	450.91	419.24	177.27	195.79	164.63	1.46	1.52	1.35
Copa	5	263.57	243.62	232.47	71.63	74.44	79.01	0.01	0.03	0.06
TCP Cubic	5	476.99	426.51	391.42	151.73	135.98	122.16	0.14	0.16	0.40
FillP	5	565.35	332.11	251.79	80.20	61.62	62.24	0.09	0.01	0.01
FillP-Sheep	5	546.46	316.08	240.18	71.25	63.55	60.58	0.00	0.02	0.01
Indigo	5	213.52	207.39	184.55	61.78	60.90	61.00	0.01	0.00	0.00
Indigo-MusesC3	5	496.10	418.55	223.10	84.49	93.44	64.96	0.00	0.04	0.10
Indigo-MusesC5	5	530.68	458.65	137.88	157.05	137.46	65.03	0.32	0.20	0.04
Indigo-MusesD	5	322.36	195.31	32.64	80.98	62.64	58.13	0.00	0.01	0.03
Indigo-MusesT	4	550.49	460.88	232.21	137.82	114.34	67.22	0.10	0.03	0.03
LEDBAT	5	26.31	18.14	8.86	60.07	59.35	59.79	0.05	0.03	0.20
PCC-Allegro	5	355.29	294.00	250.87	202.19	188.90	152.67	5.26	2.12	0.83
PCC-Expr	5	264.12	238.02	127.35	142.93	143.17	80.04	1.60	0.76	0.01
QUIC Cubic	5	34.92	36.49	24.26	57.41	58.73	58.11	0.00	0.00	0.01
SCReAM	5	0.22	0.22	0.22	57.23	58.66	57.91	0.00	0.00	0.00
Sprout	5	7.32	6.97	7.20	58.41	59.58	57.53	0.04	0.00	0.00
TaoVA-100x	5	233.45	219.93	214.04	60.51	63.94	63.76	0.00	0.03	0.01
TCP Vegas	5	430.33	352.72	342.97	88.48	94.97	100.67	0.02	0.05	0.04
Verus	5	152.32	125.83	79.42	145.78	138.59	138.82	0.69	0.83	2.45
PCC-Vivace	5	278.54	239.20	90.05	119.46	80.83	61.26	0.06	0.35	0.00
WebRTC media	5	0.83	0.53	0.22	57.92	57.95	56.56	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-18 09:25:04
End at: 2019-01-18 09:25:34
Local clock offset: 0.04 ms
Remote clock offset: -1.176 ms

# Below is generated by plot.py at 2019-01-18 13:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 936.26 Mbit/s
95th percentile per-packet one-way delay: 182.494 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 475.09 Mbit/s
95th percentile per-packet one-way delay: 174.856 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 466.73 Mbit/s
95th percentile per-packet one-way delay: 205.067 ms
Loss rate: 3.08%
-- Flow 3:
Average throughput: 451.74 Mbit/s
95th percentile per-packet one-way delay: 158.617 ms
Loss rate: 1.99%
```

Run 1: Report of TCP BBR — Data Link

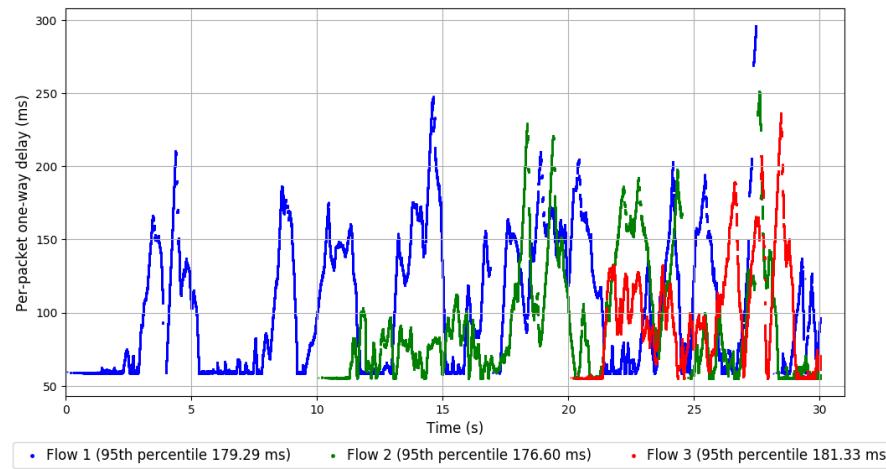
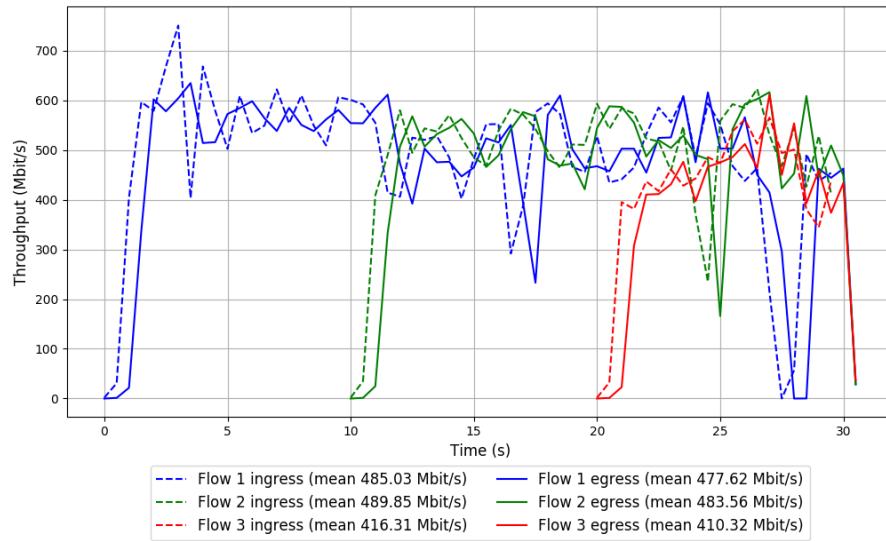


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-18 10:02:39
End at: 2019-01-18 10:03:09
Local clock offset: 0.353 ms
Remote clock offset: -1.372 ms

# Below is generated by plot.py at 2019-01-18 13:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 936.04 Mbit/s
95th percentile per-packet one-way delay: 178.684 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 477.62 Mbit/s
95th percentile per-packet one-way delay: 179.289 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 483.56 Mbit/s
95th percentile per-packet one-way delay: 176.604 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 410.32 Mbit/s
95th percentile per-packet one-way delay: 181.330 ms
Loss rate: 1.43%
```

Run 2: Report of TCP BBR — Data Link

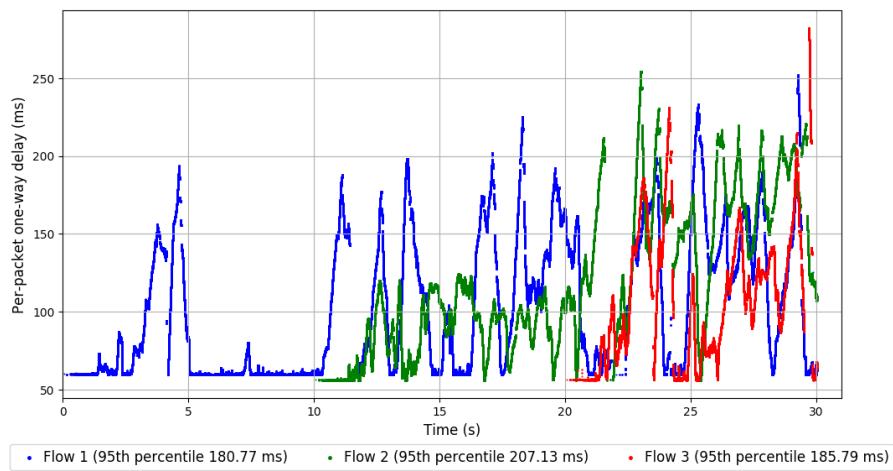
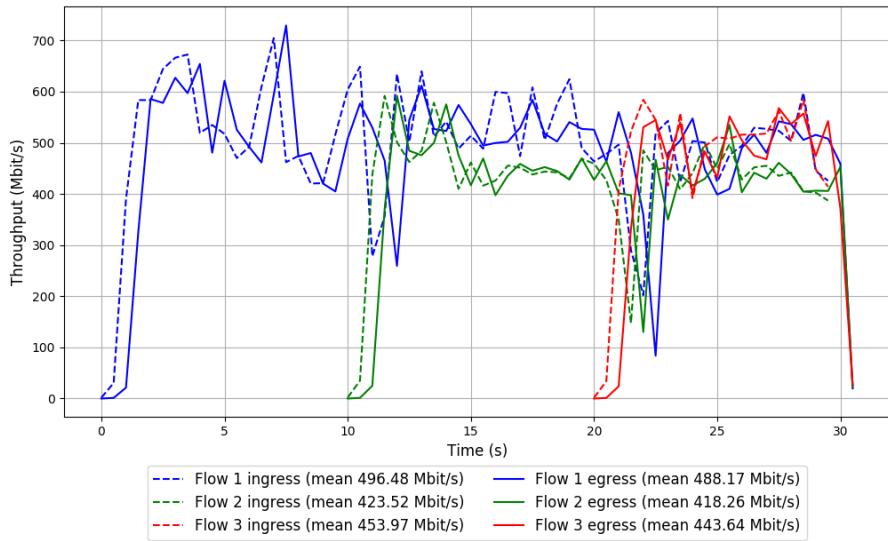


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-18 10:39:06
End at: 2019-01-18 10:39:36
Local clock offset: -0.47 ms
Remote clock offset: -1.221 ms

# Below is generated by plot.py at 2019-01-18 13:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 914.11 Mbit/s
95th percentile per-packet one-way delay: 194.830 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 488.17 Mbit/s
95th percentile per-packet one-way delay: 180.773 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 418.26 Mbit/s
95th percentile per-packet one-way delay: 207.129 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 443.64 Mbit/s
95th percentile per-packet one-way delay: 185.793 ms
Loss rate: 2.27%
```

Run 3: Report of TCP BBR — Data Link

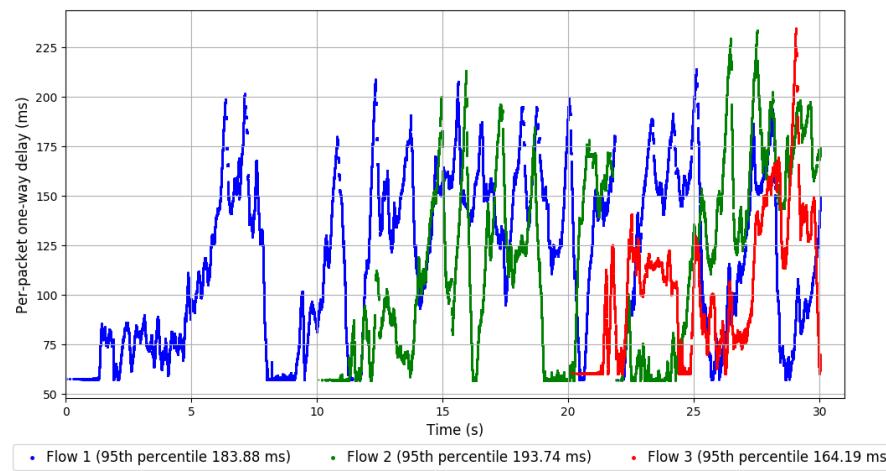
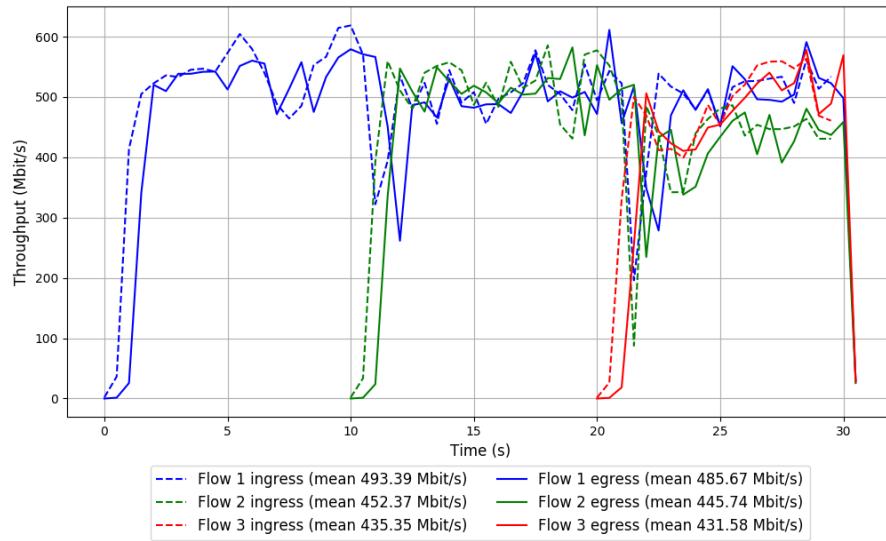


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-18 11:16:09
End at: 2019-01-18 11:16:39
Local clock offset: 0.087 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2019-01-18 13:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 925.63 Mbit/s
95th percentile per-packet one-way delay: 186.146 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 485.67 Mbit/s
95th percentile per-packet one-way delay: 183.882 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 445.74 Mbit/s
95th percentile per-packet one-way delay: 193.739 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 431.58 Mbit/s
95th percentile per-packet one-way delay: 164.192 ms
Loss rate: 0.89%
```

Run 4: Report of TCP BBR — Data Link

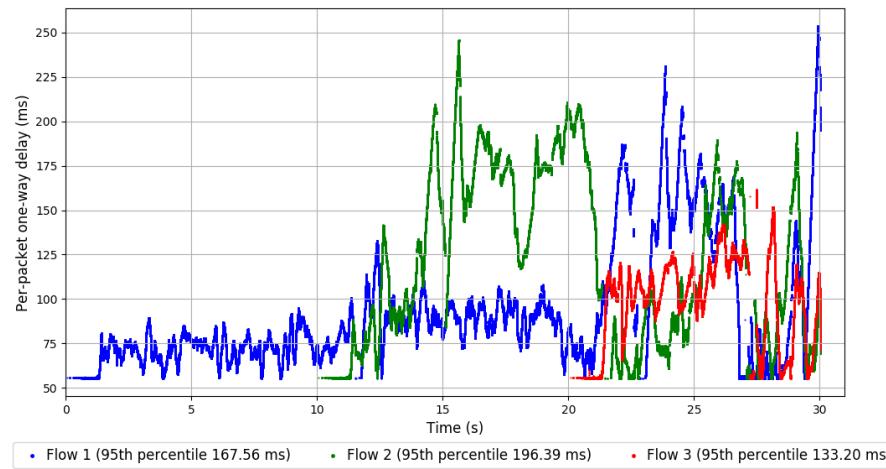
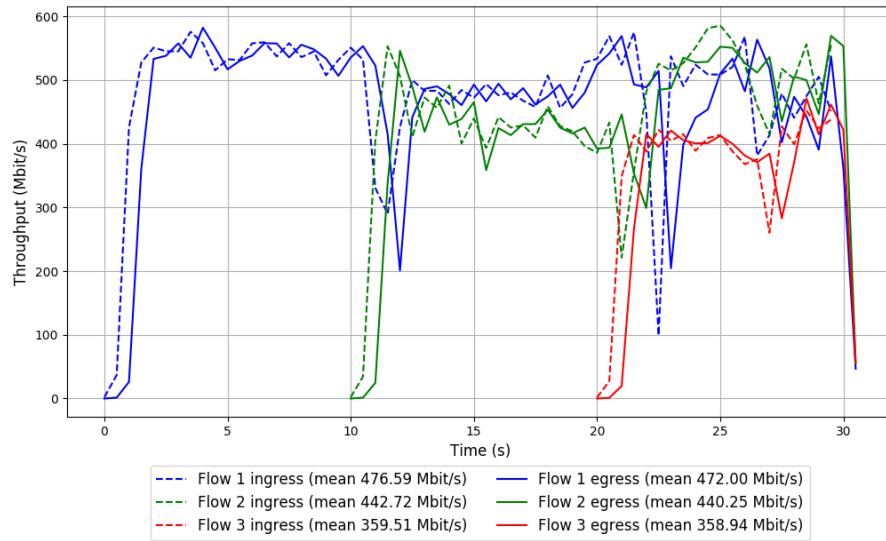


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-18 11:52:43
End at: 2019-01-18 11:53:13
Local clock offset: 0.026 ms
Remote clock offset: -1.342 ms

# Below is generated by plot.py at 2019-01-18 13:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 884.55 Mbit/s
95th percentile per-packet one-way delay: 183.573 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 472.00 Mbit/s
95th percentile per-packet one-way delay: 167.565 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 440.25 Mbit/s
95th percentile per-packet one-way delay: 196.386 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 358.94 Mbit/s
95th percentile per-packet one-way delay: 133.204 ms
Loss rate: 0.15%
```

Run 5: Report of TCP BBR — Data Link

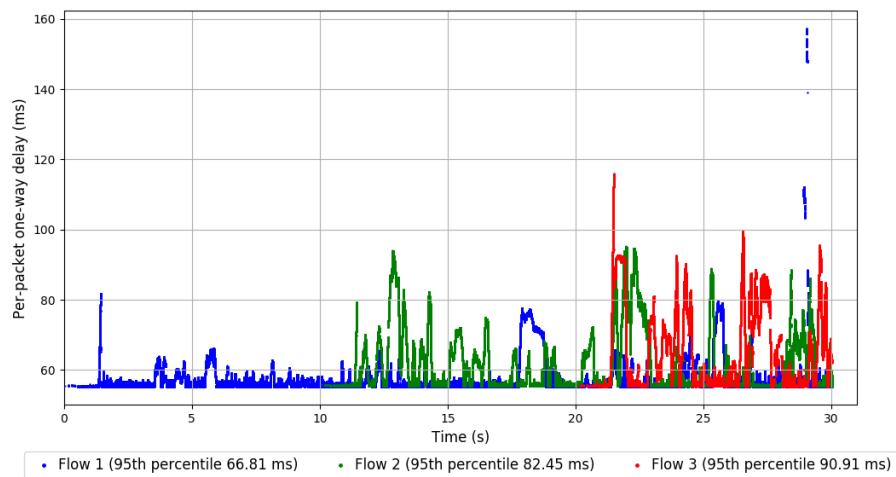
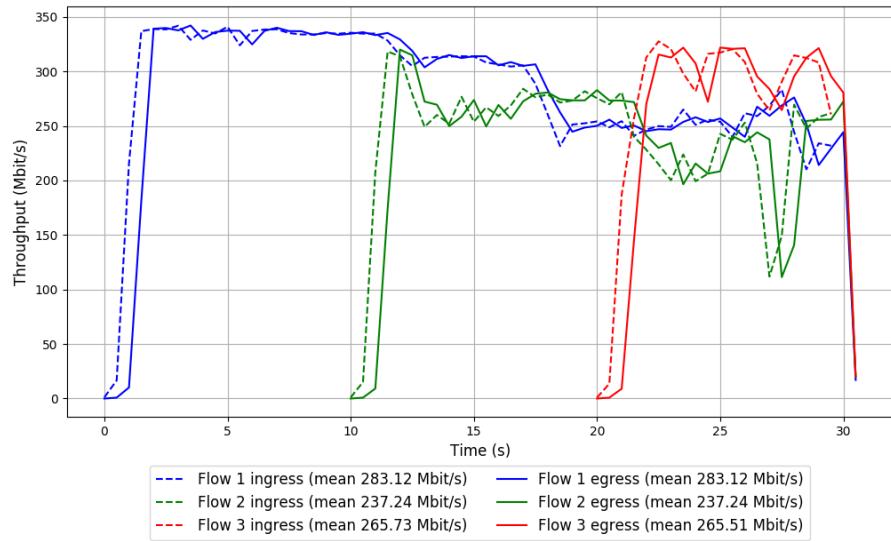


Run 1: Statistics of Copa

```
Start at: 2019-01-18 09:34:12
End at: 2019-01-18 09:34:42
Local clock offset: 0.32 ms
Remote clock offset: -1.266 ms

# Below is generated by plot.py at 2019-01-18 13:00:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 529.32 Mbit/s
95th percentile per-packet one-way delay: 78.995 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 283.12 Mbit/s
95th percentile per-packet one-way delay: 66.809 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 237.24 Mbit/s
95th percentile per-packet one-way delay: 82.450 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 265.51 Mbit/s
95th percentile per-packet one-way delay: 90.907 ms
Loss rate: 0.07%
```

Run 1: Report of Copa — Data Link

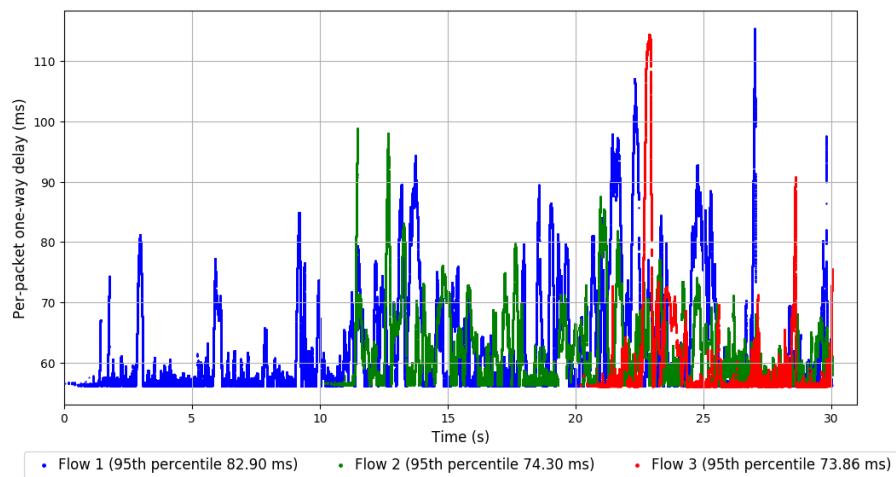
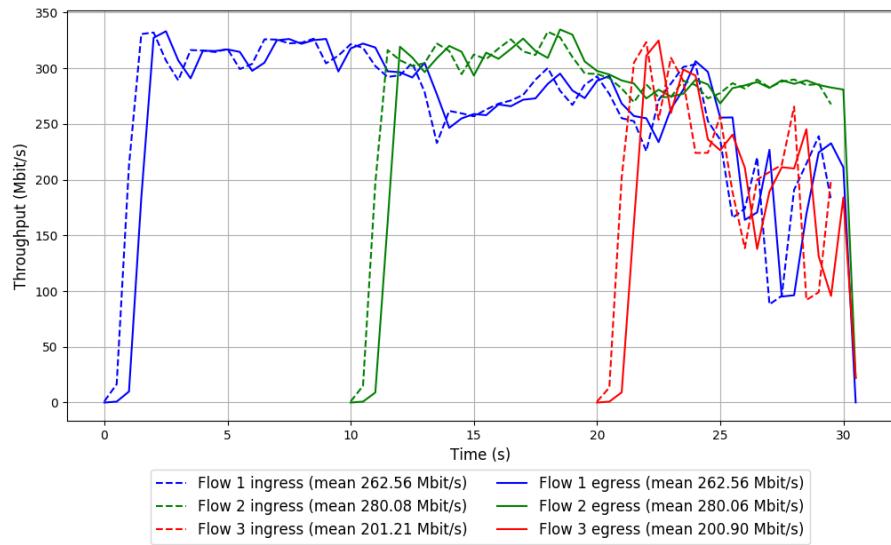


Run 2: Statistics of Copa

```
Start at: 2019-01-18 10:11:20
End at: 2019-01-18 10:11:50
Local clock offset: 0.404 ms
Remote clock offset: -0.427 ms

# Below is generated by plot.py at 2019-01-18 13:00:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 515.78 Mbit/s
95th percentile per-packet one-way delay: 79.793 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 262.56 Mbit/s
95th percentile per-packet one-way delay: 82.898 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 280.06 Mbit/s
95th percentile per-packet one-way delay: 74.300 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 200.90 Mbit/s
95th percentile per-packet one-way delay: 73.857 ms
Loss rate: 0.15%
```

Run 2: Report of Copa — Data Link

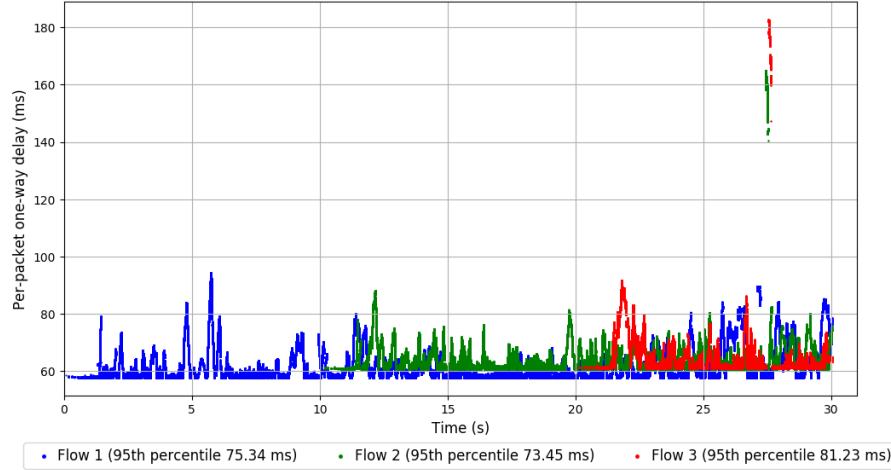
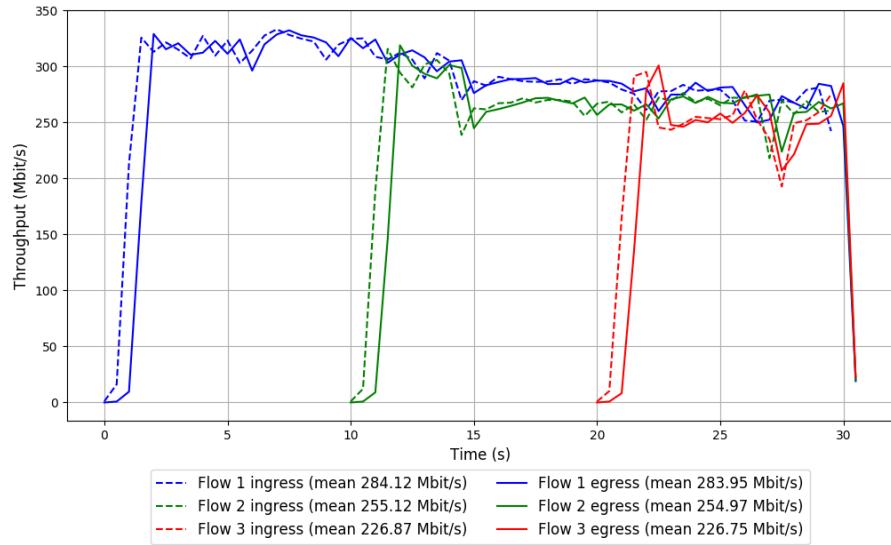


Run 3: Statistics of Copa

```
Start at: 2019-01-18 10:48:25
End at: 2019-01-18 10:48:55
Local clock offset: -0.049 ms
Remote clock offset: 0.806 ms

# Below is generated by plot.py at 2019-01-18 13:00:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 529.01 Mbit/s
95th percentile per-packet one-way delay: 75.282 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 283.95 Mbit/s
95th percentile per-packet one-way delay: 75.341 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 254.97 Mbit/s
95th percentile per-packet one-way delay: 73.452 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 226.75 Mbit/s
95th percentile per-packet one-way delay: 81.226 ms
Loss rate: 0.08%
```

Run 3: Report of Copa — Data Link

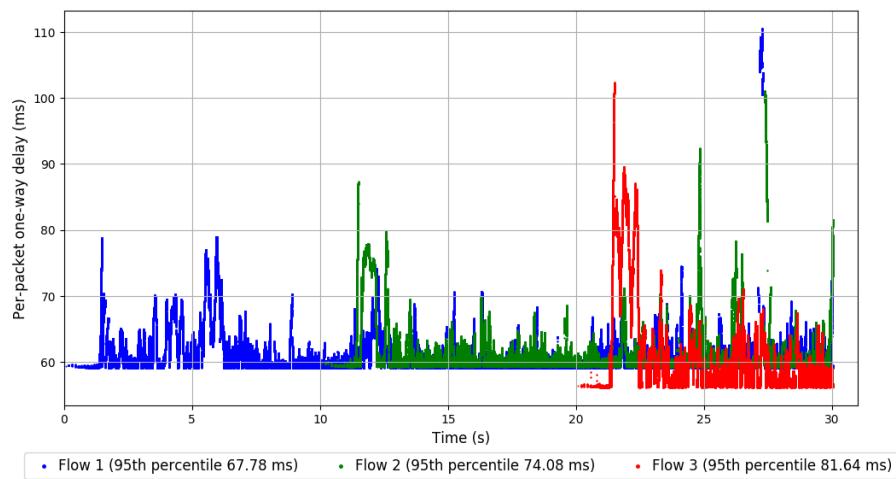
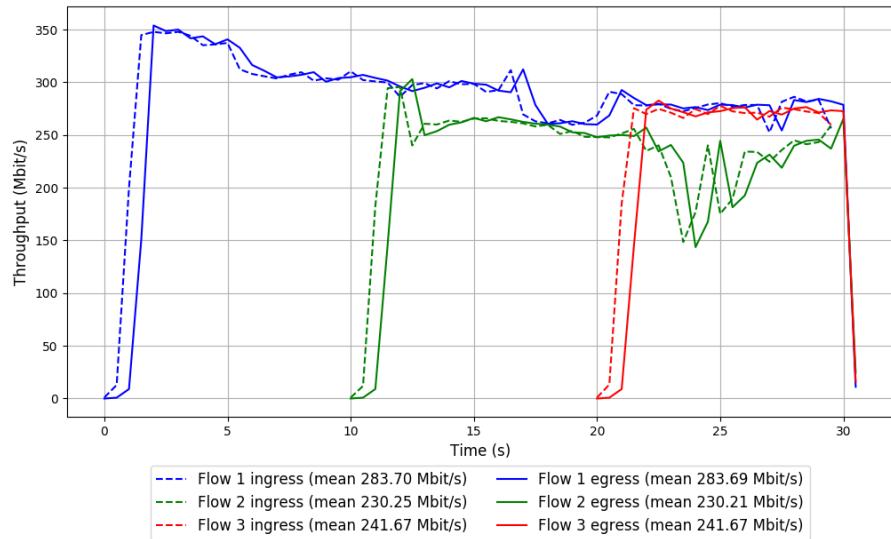


Run 4: Statistics of Copa

```
Start at: 2019-01-18 11:24:43
End at: 2019-01-18 11:25:13
Local clock offset: 0.196 ms
Remote clock offset: -0.773 ms

# Below is generated by plot.py at 2019-01-18 13:17:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 517.32 Mbit/s
95th percentile per-packet one-way delay: 70.202 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 283.69 Mbit/s
95th percentile per-packet one-way delay: 67.784 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 230.21 Mbit/s
95th percentile per-packet one-way delay: 74.085 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 241.67 Mbit/s
95th percentile per-packet one-way delay: 81.640 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link

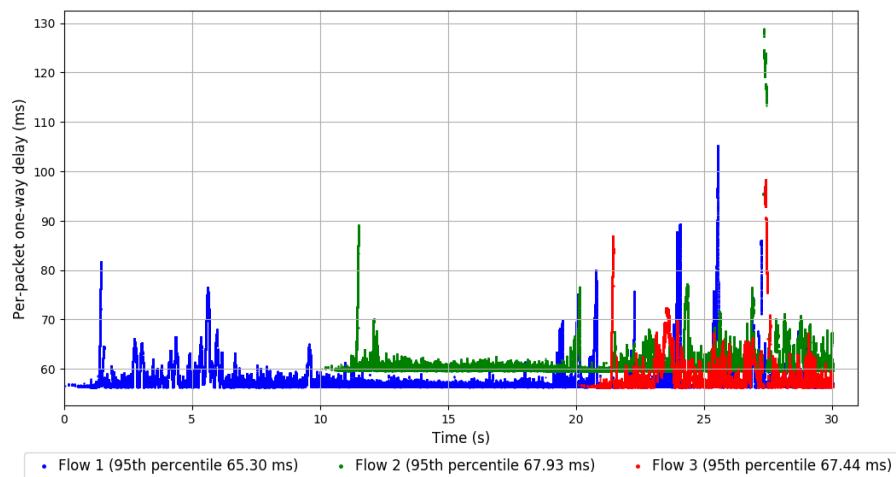
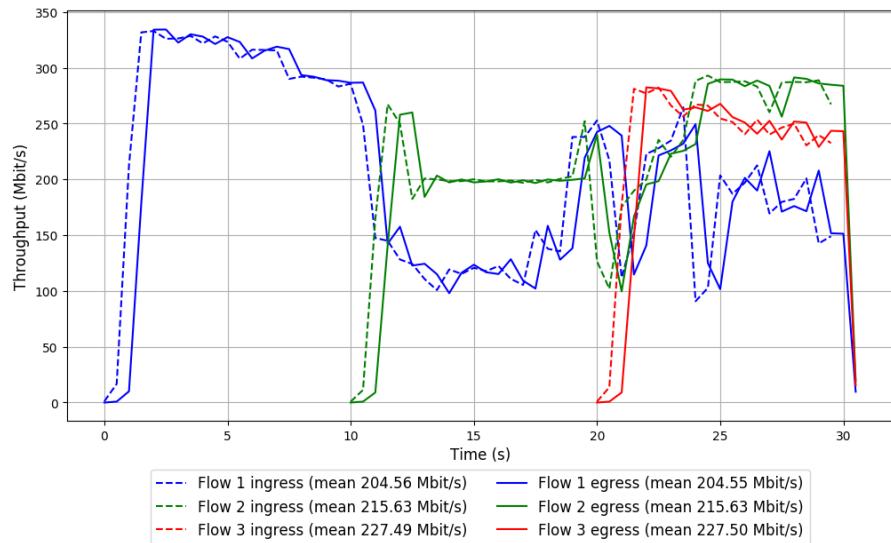


Run 5: Statistics of Copa

```
Start at: 2019-01-18 12:01:48
End at: 2019-01-18 12:02:18
Local clock offset: -0.075 ms
Remote clock offset: -0.565 ms

# Below is generated by plot.py at 2019-01-18 13:17:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 423.67 Mbit/s
95th percentile per-packet one-way delay: 66.898 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 204.55 Mbit/s
95th percentile per-packet one-way delay: 65.302 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 215.63 Mbit/s
95th percentile per-packet one-way delay: 67.933 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 227.50 Mbit/s
95th percentile per-packet one-way delay: 67.437 ms
Loss rate: 0.00%
```

Run 5: Report of Copa — Data Link

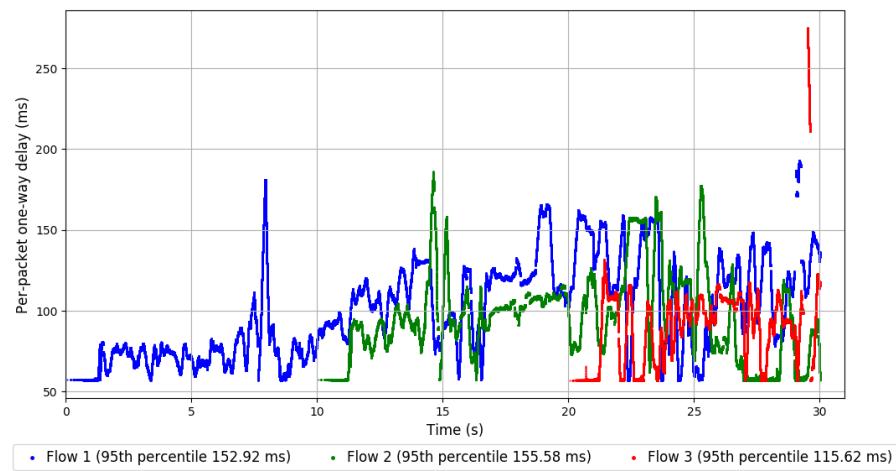
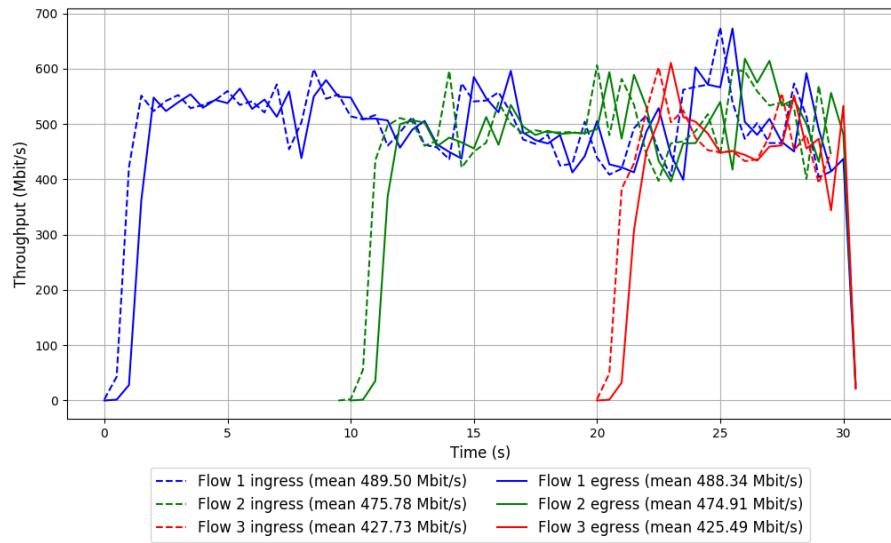


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-18 09:22:48
End at: 2019-01-18 09:23:18
Local clock offset: 0.023 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2019-01-18 13:17:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 946.36 Mbit/s
95th percentile per-packet one-way delay: 152.529 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 488.34 Mbit/s
95th percentile per-packet one-way delay: 152.916 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 474.91 Mbit/s
95th percentile per-packet one-way delay: 155.583 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 425.49 Mbit/s
95th percentile per-packet one-way delay: 115.622 ms
Loss rate: 0.43%
```

Run 1: Report of TCP Cubic — Data Link

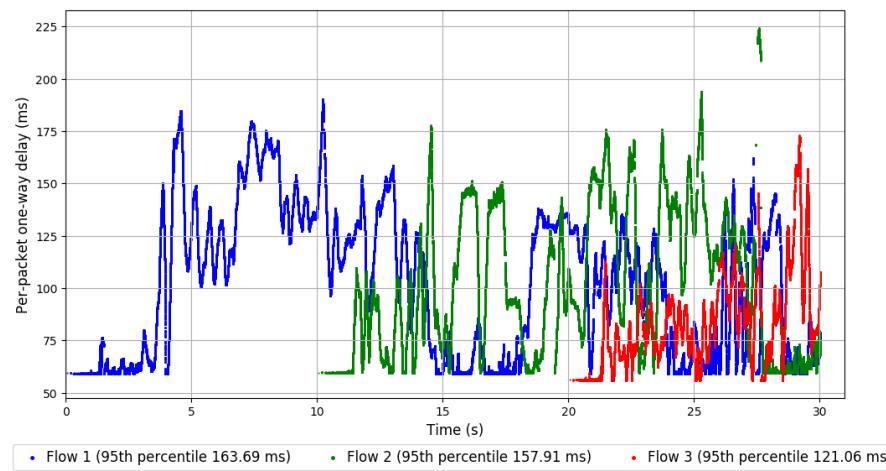
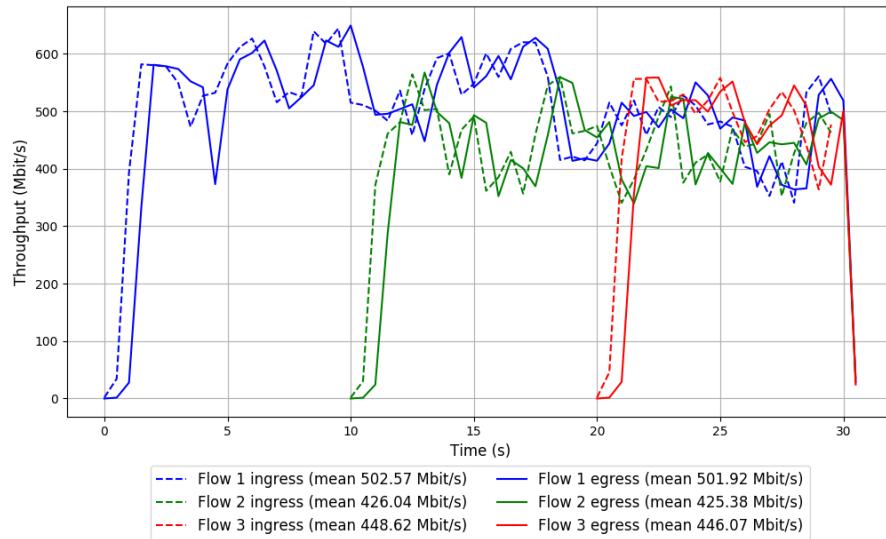


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-18 10:00:35
End at: 2019-01-18 10:01:05
Local clock offset: -0.146 ms
Remote clock offset: -1.333 ms

# Below is generated by plot.py at 2019-01-18 13:17:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 933.36 Mbit/s
95th percentile per-packet one-way delay: 158.031 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 501.92 Mbit/s
95th percentile per-packet one-way delay: 163.690 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 425.38 Mbit/s
95th percentile per-packet one-way delay: 157.905 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 446.07 Mbit/s
95th percentile per-packet one-way delay: 121.061 ms
Loss rate: 0.57%
```

Run 2: Report of TCP Cubic — Data Link

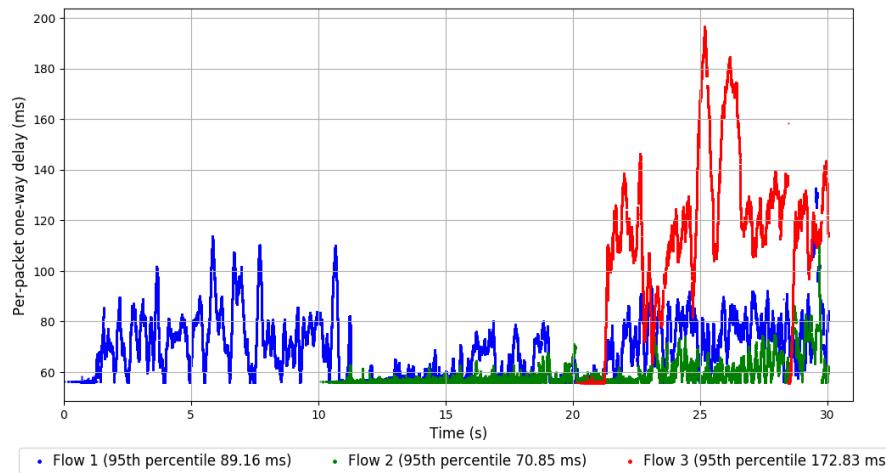
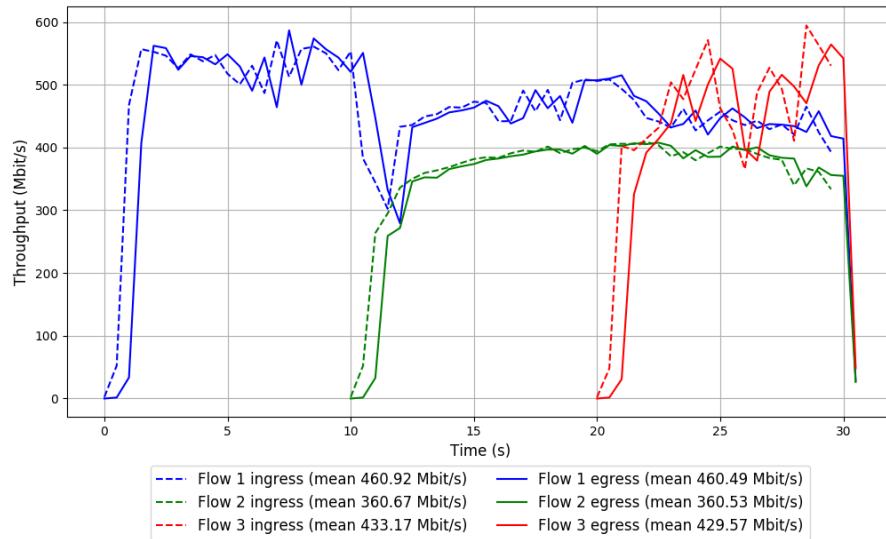


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-18 10:37:08
End at: 2019-01-18 10:37:38
Local clock offset: -0.207 ms
Remote clock offset: -1.231 ms

# Below is generated by plot.py at 2019-01-18 13:17:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 843.52 Mbit/s
95th percentile per-packet one-way delay: 127.020 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 460.49 Mbit/s
95th percentile per-packet one-way delay: 89.161 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 360.53 Mbit/s
95th percentile per-packet one-way delay: 70.854 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 429.57 Mbit/s
95th percentile per-packet one-way delay: 172.831 ms
Loss rate: 0.83%
```

Run 3: Report of TCP Cubic — Data Link

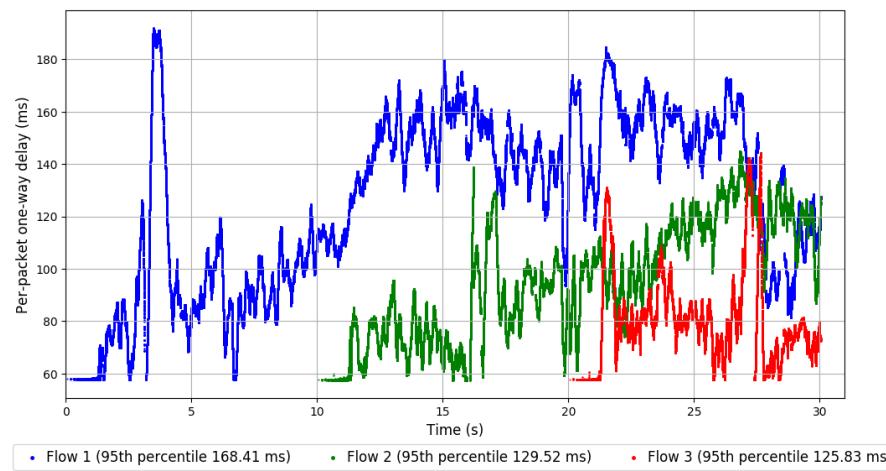
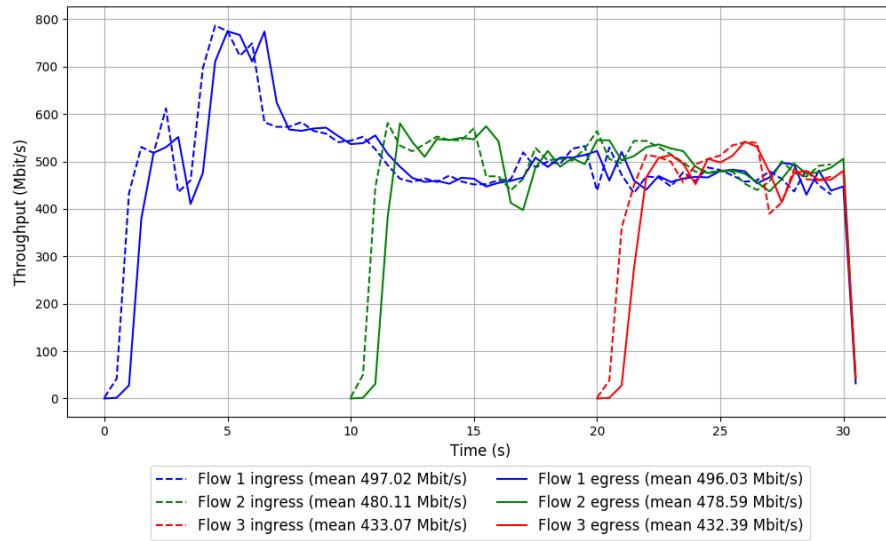


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-18 11:14:07
End at: 2019-01-18 11:14:37
Local clock offset: 0.222 ms
Remote clock offset: 0.694 ms

# Below is generated by plot.py at 2019-01-18 13:18:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 958.62 Mbit/s
95th percentile per-packet one-way delay: 163.385 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 496.03 Mbit/s
95th percentile per-packet one-way delay: 168.411 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 478.59 Mbit/s
95th percentile per-packet one-way delay: 129.523 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 432.39 Mbit/s
95th percentile per-packet one-way delay: 125.835 ms
Loss rate: 0.15%
```

Run 4: Report of TCP Cubic — Data Link

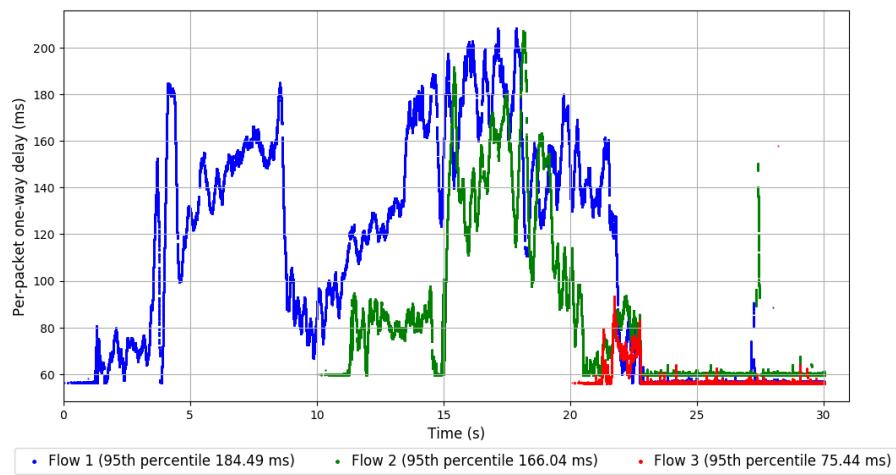
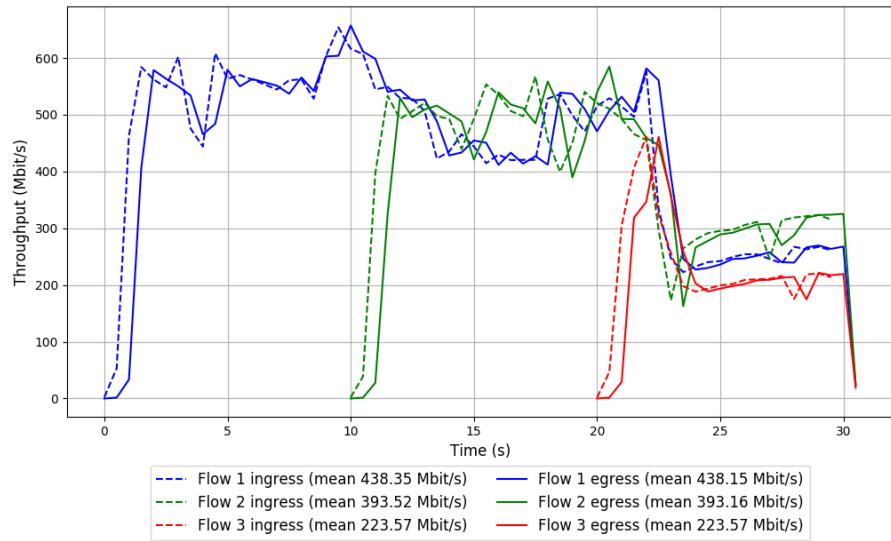


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-18 11:50:42
End at: 2019-01-18 11:51:12
Local clock offset: -0.435 ms
Remote clock offset: -1.263 ms

# Below is generated by plot.py at 2019-01-18 13:18:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 774.26 Mbit/s
95th percentile per-packet one-way delay: 179.411 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 438.15 Mbit/s
95th percentile per-packet one-way delay: 184.486 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 393.16 Mbit/s
95th percentile per-packet one-way delay: 166.039 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 223.57 Mbit/s
95th percentile per-packet one-way delay: 75.437 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Cubic — Data Link

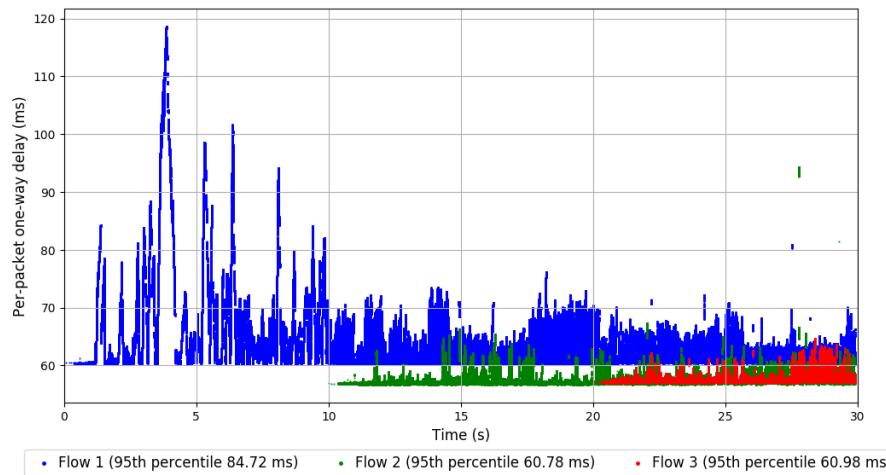
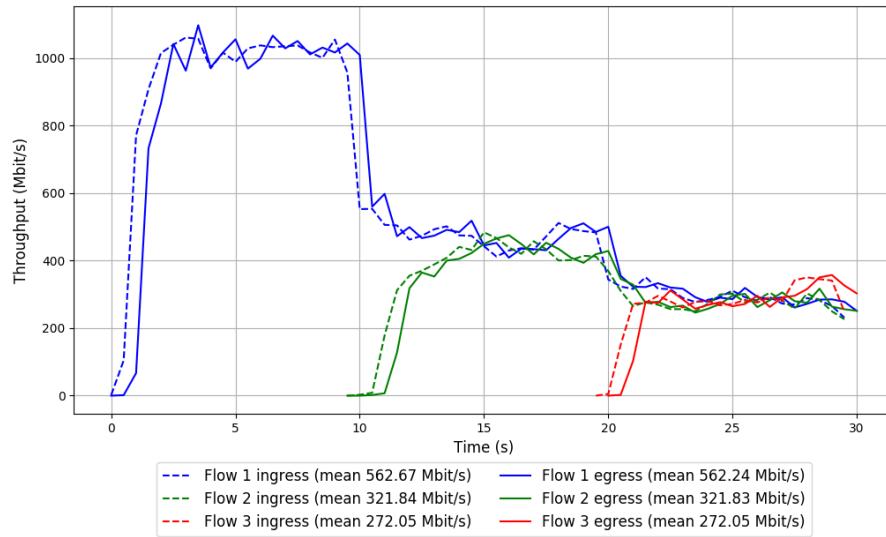


```
Run 1: Statistics of FillP

Start at: 2019-01-18 09:41:37
End at: 2019-01-18 09:42:07
Local clock offset: -0.517 ms
Remote clock offset: -0.397 ms

# Below is generated by plot.py at 2019-01-18 13:20:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 867.03 Mbit/s
95th percentile per-packet one-way delay: 78.879 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 562.24 Mbit/s
95th percentile per-packet one-way delay: 84.715 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 321.83 Mbit/s
95th percentile per-packet one-way delay: 60.776 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 272.05 Mbit/s
95th percentile per-packet one-way delay: 60.981 ms
Loss rate: 0.00%
```

Run 1: Report of FillP — Data Link

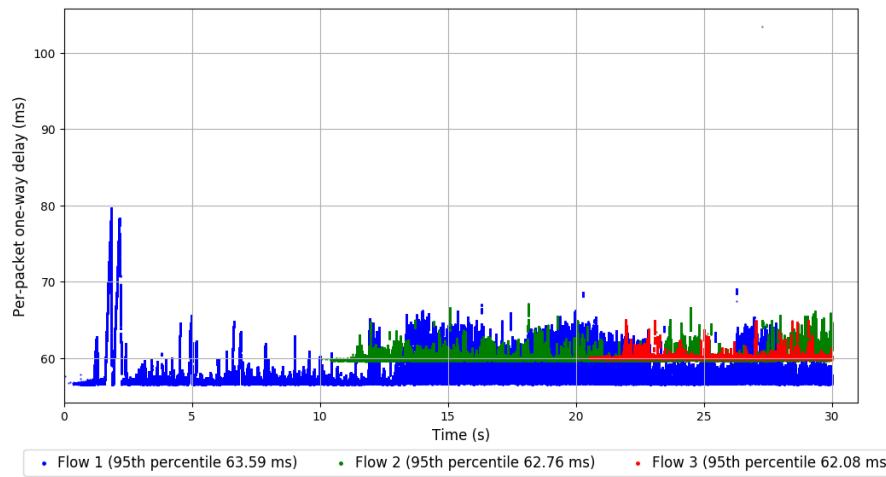
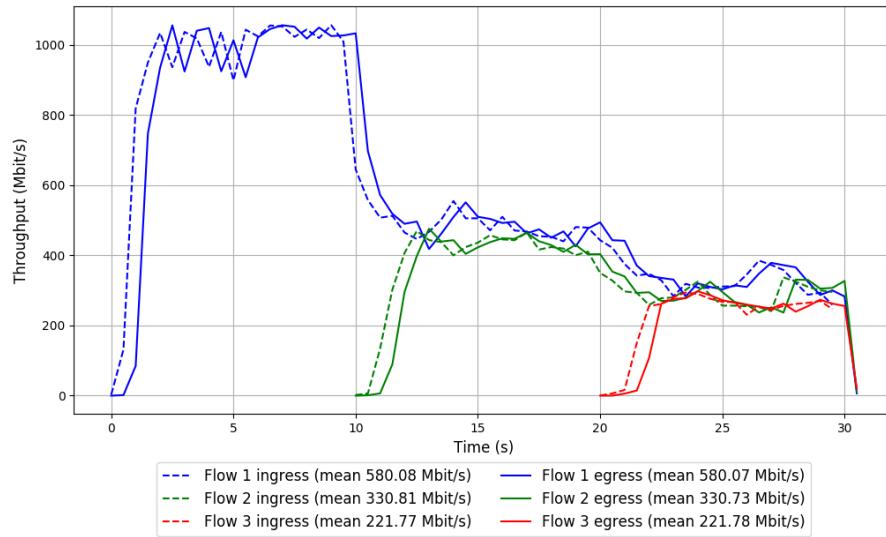


Run 2: Statistics of FillP

```
Start at: 2019-01-18 10:18:26
End at: 2019-01-18 10:18:56
Local clock offset: -0.102 ms
Remote clock offset: -0.692 ms

# Below is generated by plot.py at 2019-01-18 13:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 873.32 Mbit/s
95th percentile per-packet one-way delay: 63.294 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 580.07 Mbit/s
95th percentile per-packet one-way delay: 63.591 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 330.73 Mbit/s
95th percentile per-packet one-way delay: 62.761 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 221.78 Mbit/s
95th percentile per-packet one-way delay: 62.081 ms
Loss rate: 0.00%
```

Run 2: Report of FillP — Data Link

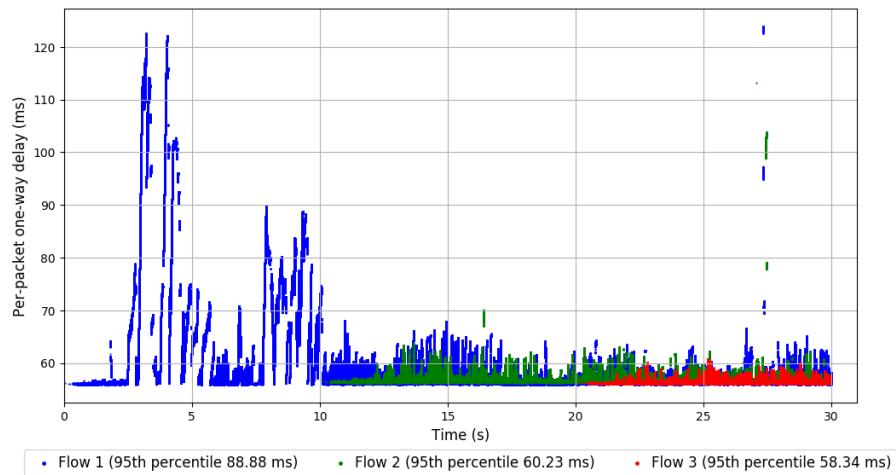
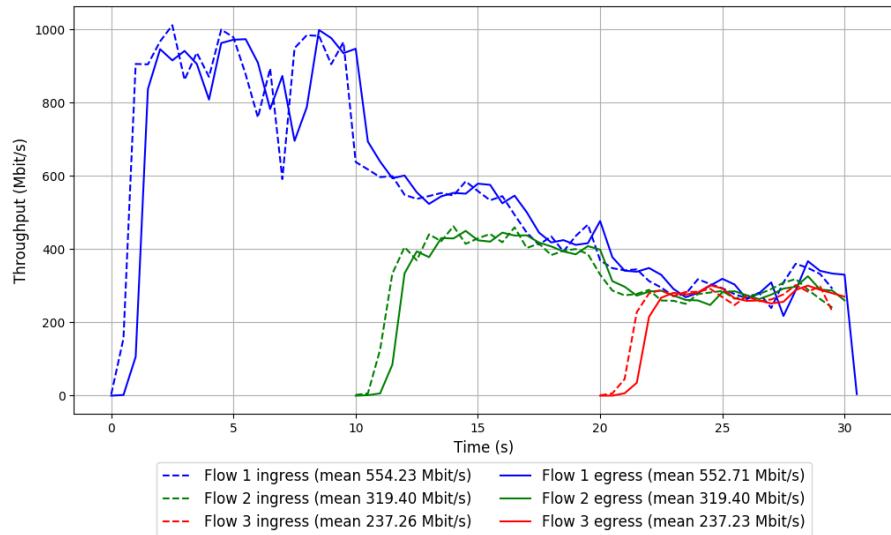


```
Run 3: Statistics of FillP
```

```
Start at: 2019-01-18 10:55:35
End at: 2019-01-18 10:56:05
Local clock offset: -0.285 ms
Remote clock offset: -1.293 ms

# Below is generated by plot.py at 2019-01-18 13:35:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 843.27 Mbit/s
95th percentile per-packet one-way delay: 81.174 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 552.71 Mbit/s
95th percentile per-packet one-way delay: 88.883 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 319.40 Mbit/s
95th percentile per-packet one-way delay: 60.233 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 237.23 Mbit/s
95th percentile per-packet one-way delay: 58.339 ms
Loss rate: 0.00%
```

Run 3: Report of FillP — Data Link

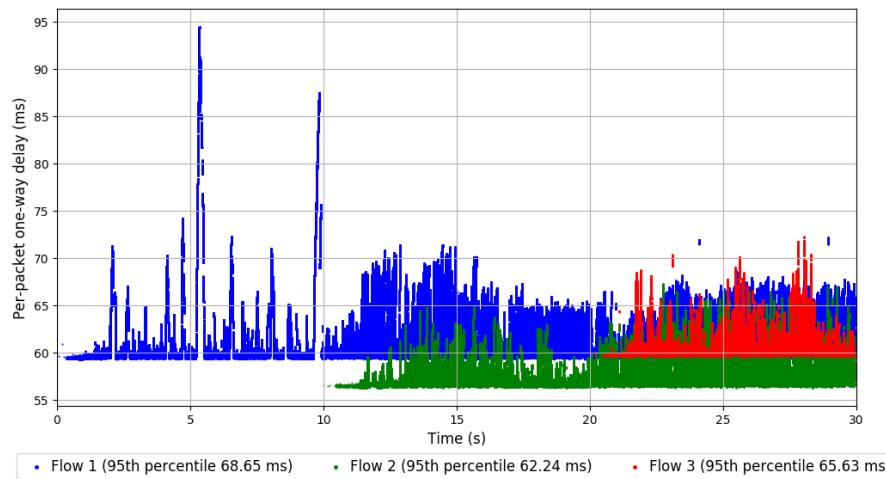
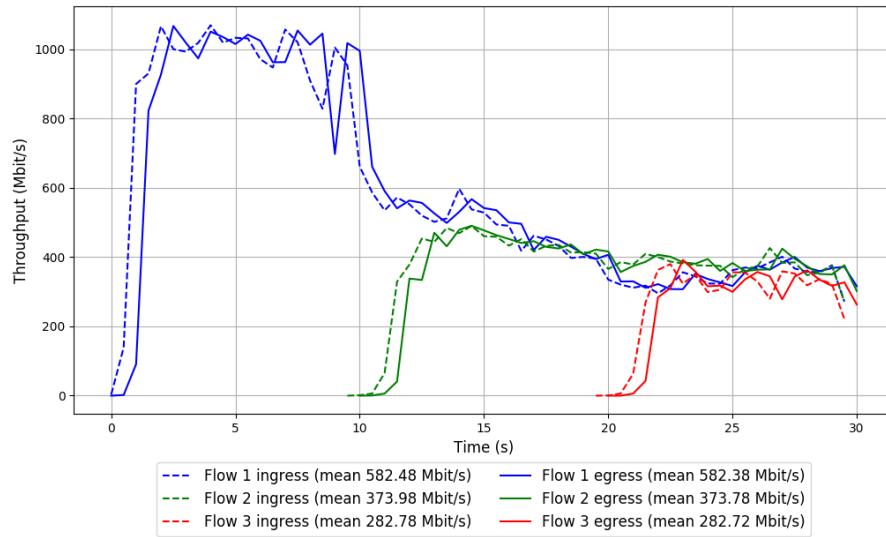


Run 4: Statistics of FillP

```
Start at: 2019-01-18 11:31:42
End at: 2019-01-18 11:32:12
Local clock offset: 0.037 ms
Remote clock offset: -0.715 ms

# Below is generated by plot.py at 2019-01-18 13:38:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 925.14 Mbit/s
95th percentile per-packet one-way delay: 67.070 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 582.38 Mbit/s
95th percentile per-packet one-way delay: 68.649 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 373.78 Mbit/s
95th percentile per-packet one-way delay: 62.236 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 282.72 Mbit/s
95th percentile per-packet one-way delay: 65.627 ms
Loss rate: 0.02%
```

Run 4: Report of FillP — Data Link

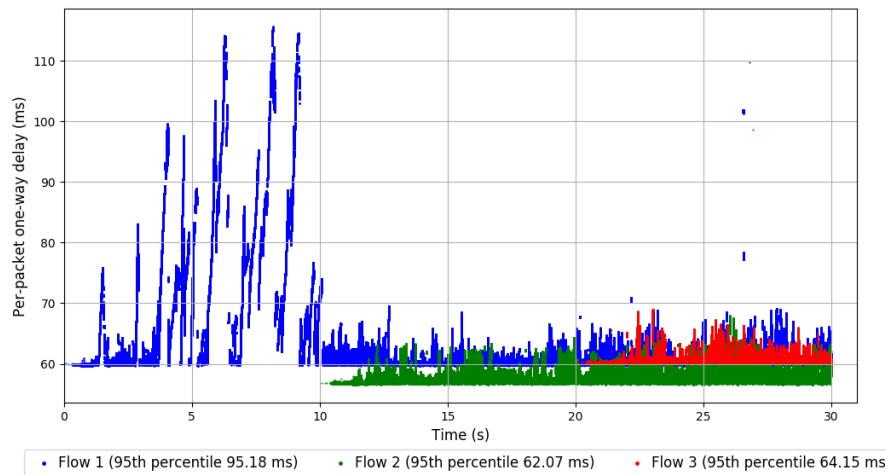
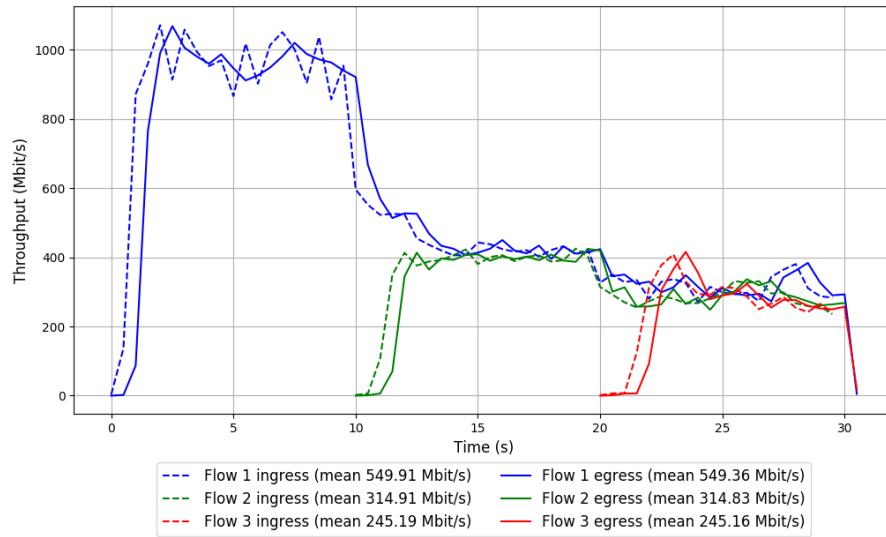


Run 5: Statistics of FillP

```
Start at: 2019-01-18 12:08:58
End at: 2019-01-18 12:09:28
Local clock offset: 0.358 ms
Remote clock offset: 0.179 ms

# Below is generated by plot.py at 2019-01-18 13:38:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 840.02 Mbit/s
95th percentile per-packet one-way delay: 88.545 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 549.36 Mbit/s
95th percentile per-packet one-way delay: 95.182 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 314.83 Mbit/s
95th percentile per-packet one-way delay: 62.071 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 245.16 Mbit/s
95th percentile per-packet one-way delay: 64.150 ms
Loss rate: 0.01%
```

Run 5: Report of FillP — Data Link

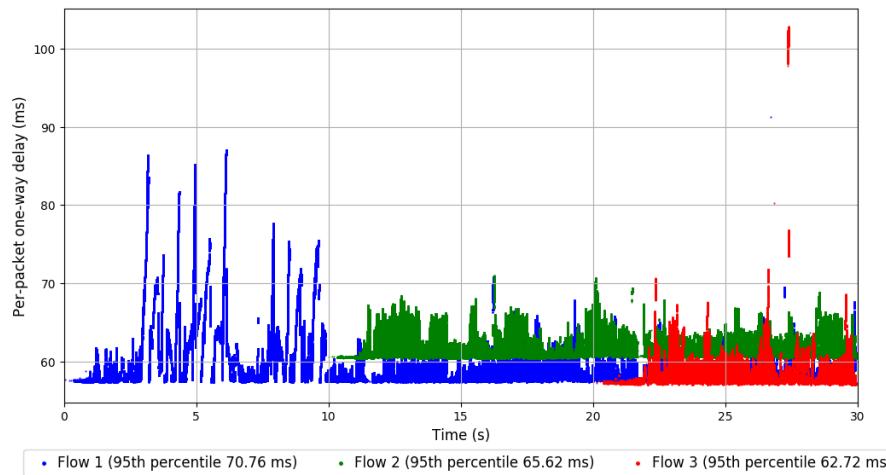
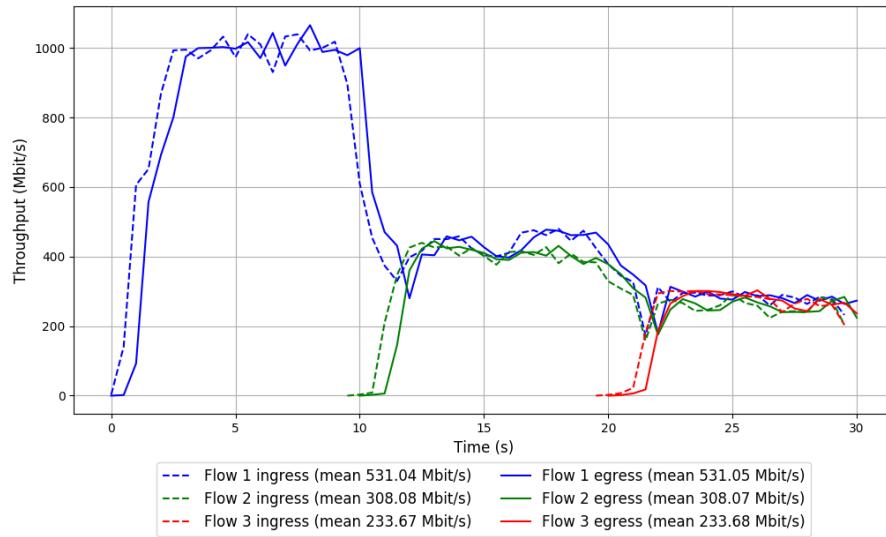


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-01-18 09:36:29
End at: 2019-01-18 09:36:59
Local clock offset: 0.063 ms
Remote clock offset: 0.325 ms

# Below is generated by plot.py at 2019-01-18 13:38:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 813.73 Mbit/s
95th percentile per-packet one-way delay: 69.083 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 531.05 Mbit/s
95th percentile per-packet one-way delay: 70.756 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 308.07 Mbit/s
95th percentile per-packet one-way delay: 65.617 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 233.68 Mbit/s
95th percentile per-packet one-way delay: 62.724 ms
Loss rate: 0.00%
```

Run 1: Report of FillP-Sheep — Data Link

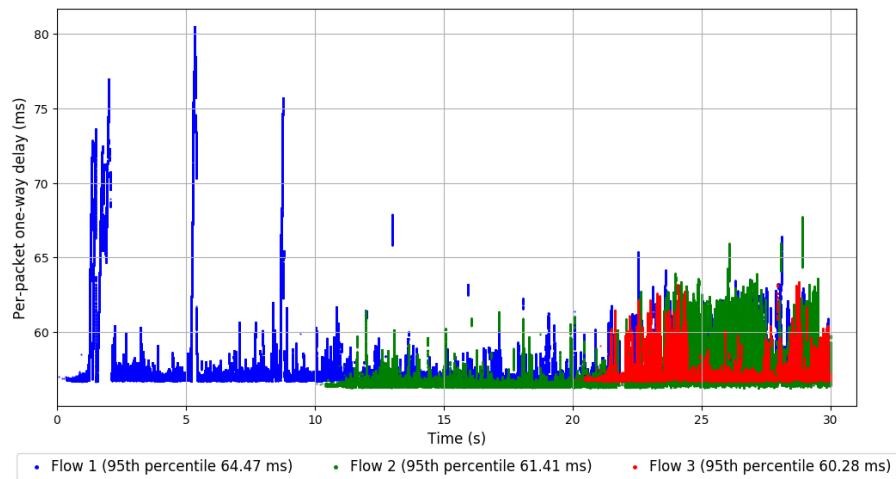
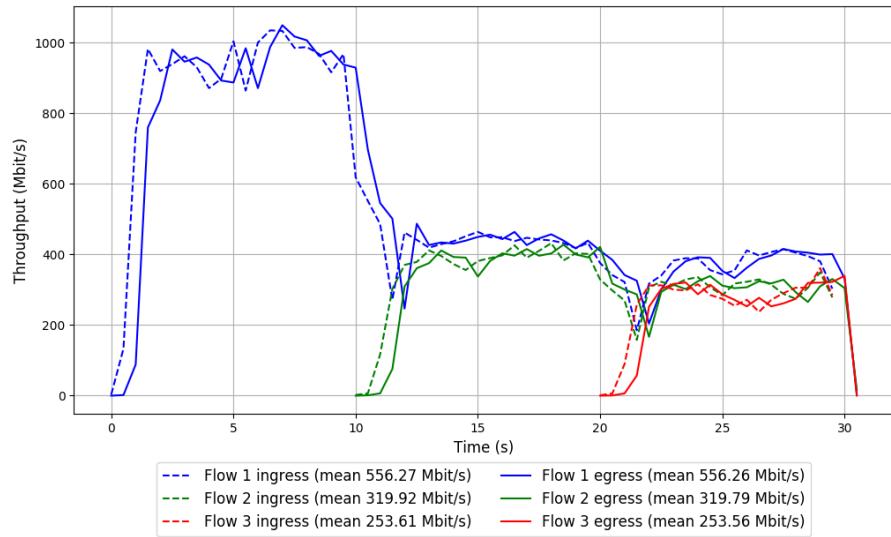


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-18 10:13:22
End at: 2019-01-18 10:13:53
Local clock offset: -0.101 ms
Remote clock offset: -0.715 ms

# Below is generated by plot.py at 2019-01-18 13:38:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 852.82 Mbit/s
95th percentile per-packet one-way delay: 61.773 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 556.26 Mbit/s
95th percentile per-packet one-way delay: 64.475 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 319.79 Mbit/s
95th percentile per-packet one-way delay: 61.412 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 253.56 Mbit/s
95th percentile per-packet one-way delay: 60.280 ms
Loss rate: 0.02%
```

Run 2: Report of FillP-Sheep — Data Link

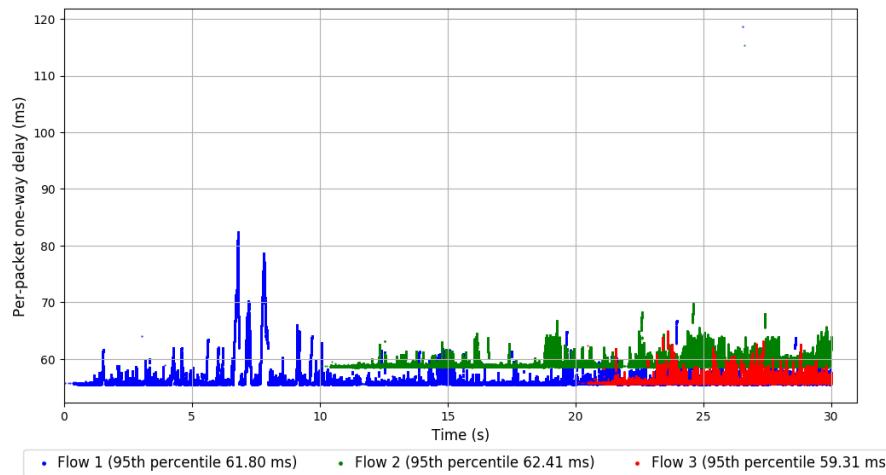
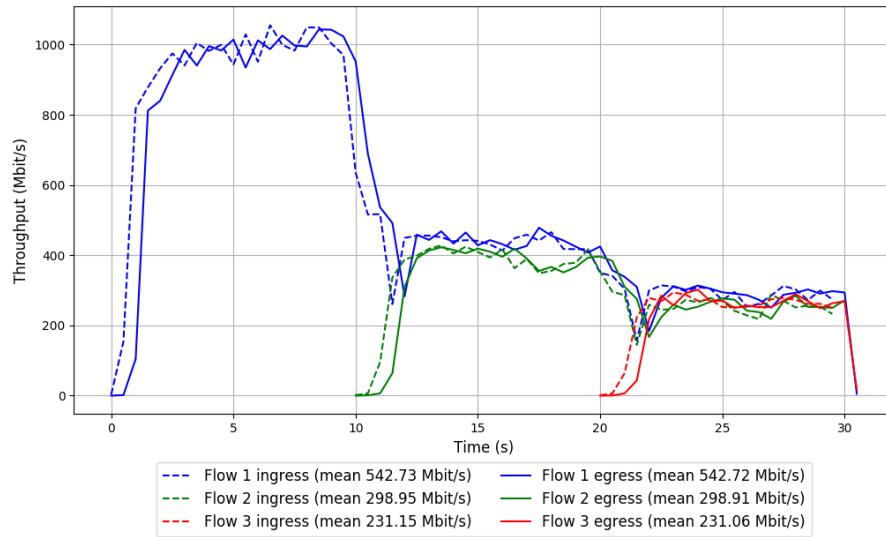


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-18 10:50:39
End at: 2019-01-18 10:51:09
Local clock offset: 0.111 ms
Remote clock offset: -1.256 ms

# Below is generated by plot.py at 2019-01-18 13:38:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 817.63 Mbit/s
95th percentile per-packet one-way delay: 61.985 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 542.72 Mbit/s
95th percentile per-packet one-way delay: 61.800 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 298.91 Mbit/s
95th percentile per-packet one-way delay: 62.411 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 231.06 Mbit/s
95th percentile per-packet one-way delay: 59.314 ms
Loss rate: 0.03%
```

Run 3: Report of FillP-Sheep — Data Link

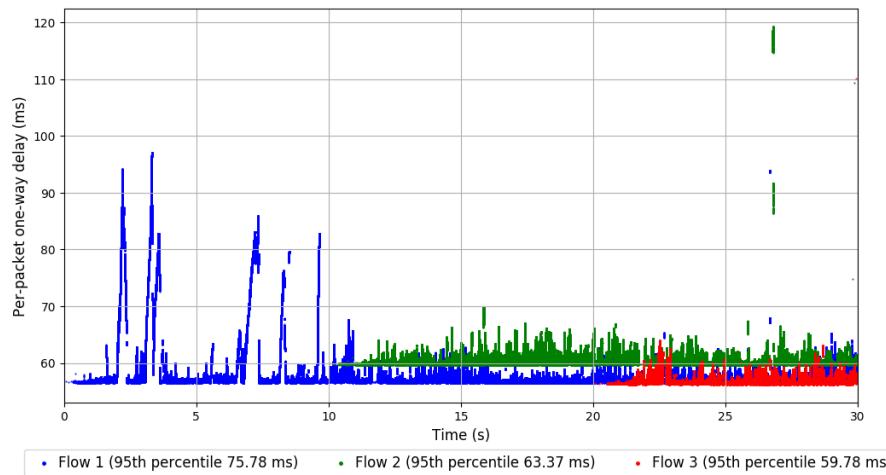
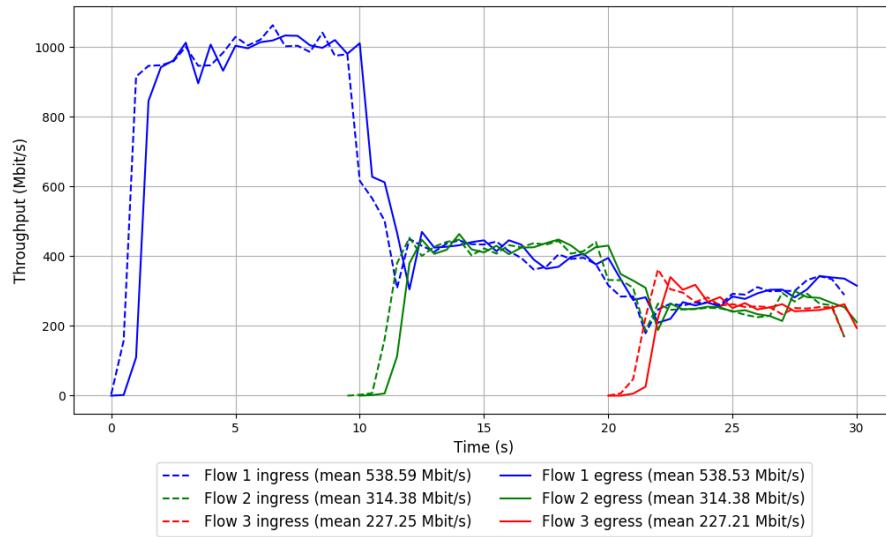


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-18 11:26:49
End at: 2019-01-18 11:27:19
Local clock offset: 0.134 ms
Remote clock offset: -0.665 ms

# Below is generated by plot.py at 2019-01-18 13:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 822.99 Mbit/s
95th percentile per-packet one-way delay: 69.826 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 538.53 Mbit/s
95th percentile per-packet one-way delay: 75.784 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 314.38 Mbit/s
95th percentile per-packet one-way delay: 63.373 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 227.21 Mbit/s
95th percentile per-packet one-way delay: 59.776 ms
Loss rate: 0.00%
```

Run 4: Report of FillP-Sheep — Data Link

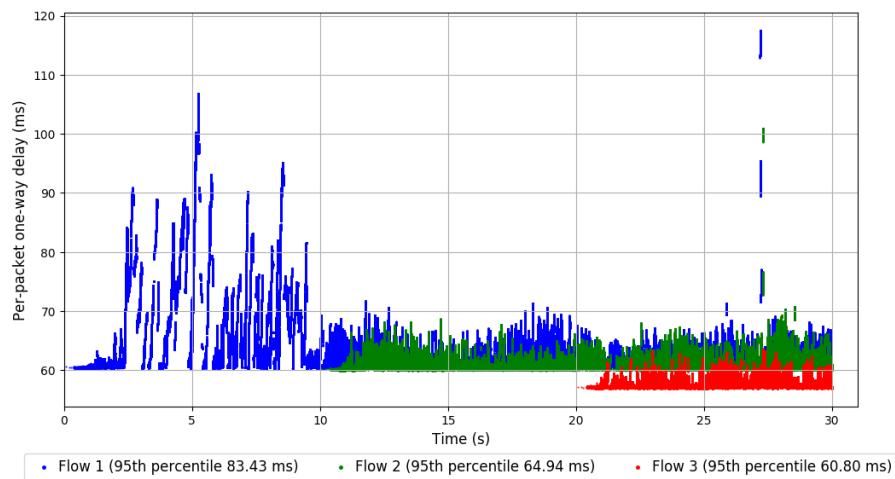
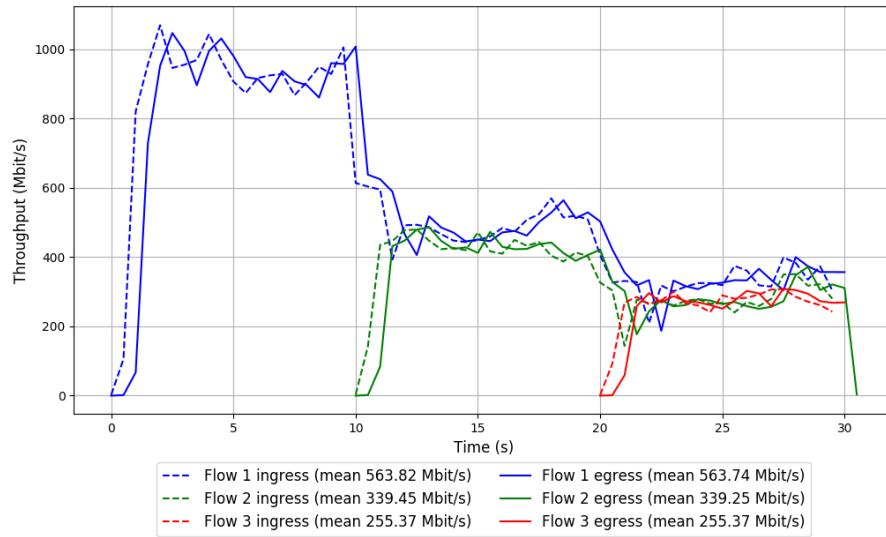


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-18 12:03:48
End at: 2019-01-18 12:04:18
Local clock offset: 0.041 ms
Remote clock offset: 0.159 ms

# Below is generated by plot.py at 2019-01-18 13:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 874.06 Mbit/s
95th percentile per-packet one-way delay: 79.631 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 563.74 Mbit/s
95th percentile per-packet one-way delay: 83.427 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 339.25 Mbit/s
95th percentile per-packet one-way delay: 64.938 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 255.37 Mbit/s
95th percentile per-packet one-way delay: 60.802 ms
Loss rate: 0.00%
```

Run 5: Report of FillP-Sheep — Data Link

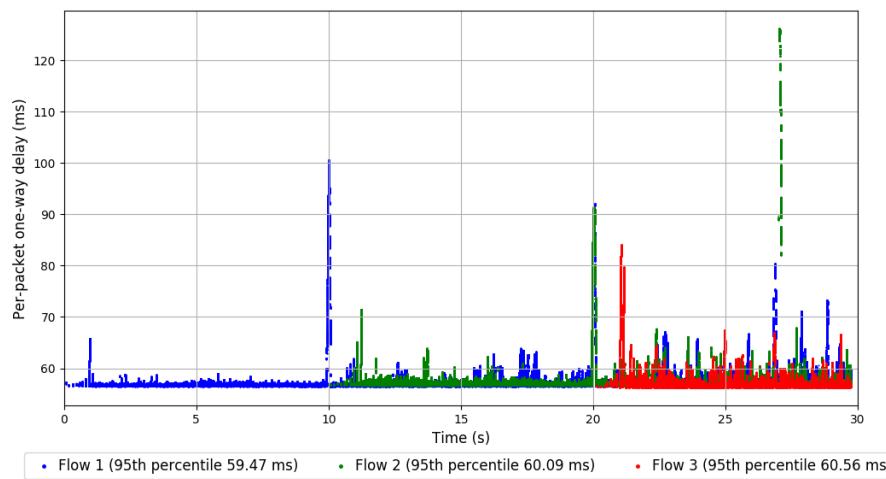
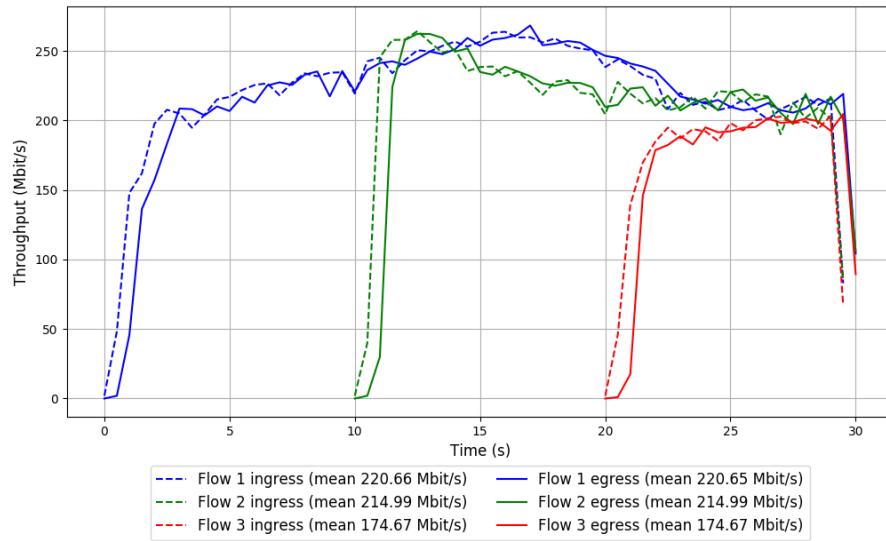


Run 1: Statistics of Indigo

```
Start at: 2019-01-18 09:53:28
End at: 2019-01-18 09:53:58
Local clock offset: -0.101 ms
Remote clock offset: -0.512 ms

# Below is generated by plot.py at 2019-01-18 13:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.56 Mbit/s
95th percentile per-packet one-way delay: 59.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.65 Mbit/s
95th percentile per-packet one-way delay: 59.472 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 214.99 Mbit/s
95th percentile per-packet one-way delay: 60.090 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.67 Mbit/s
95th percentile per-packet one-way delay: 60.558 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

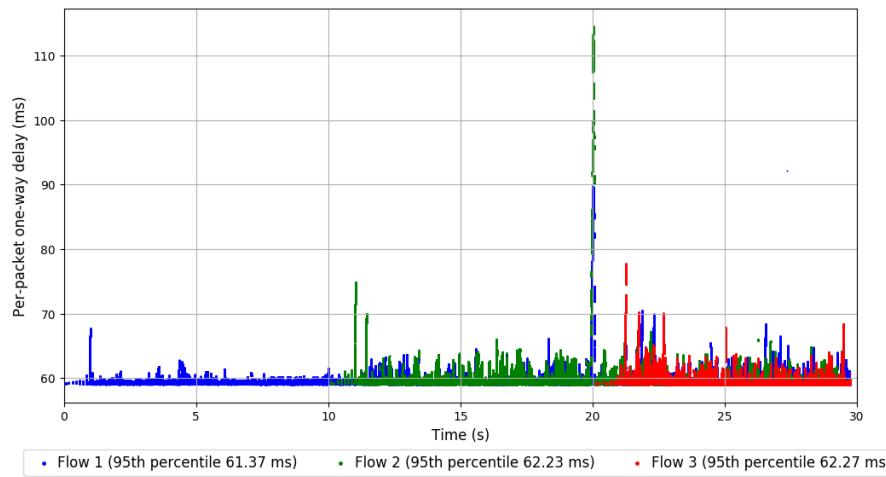
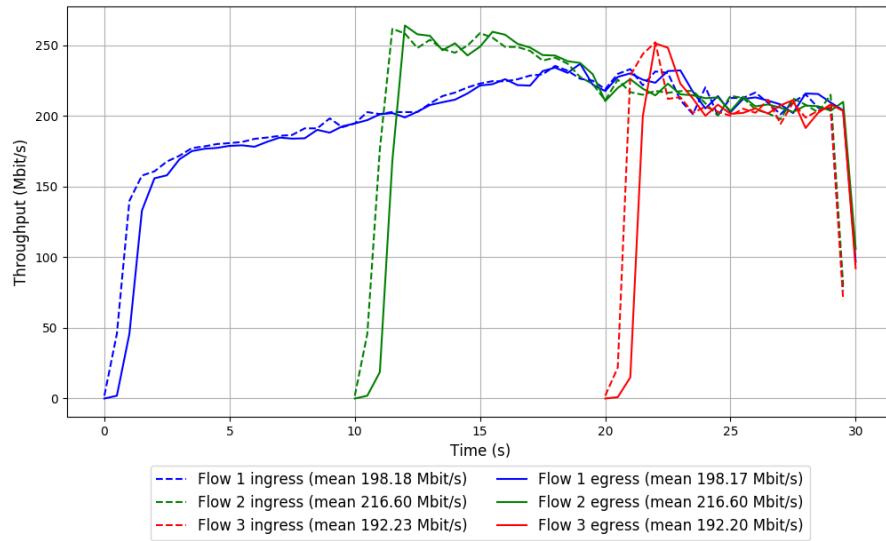


Run 2: Statistics of Indigo

```
Start at: 2019-01-18 10:30:11
End at: 2019-01-18 10:30:41
Local clock offset: -0.085 ms
Remote clock offset: -1.196 ms

# Below is generated by plot.py at 2019-01-18 13:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.64 Mbit/s
95th percentile per-packet one-way delay: 61.861 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 198.17 Mbit/s
95th percentile per-packet one-way delay: 61.365 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 216.60 Mbit/s
95th percentile per-packet one-way delay: 62.227 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 192.20 Mbit/s
95th percentile per-packet one-way delay: 62.265 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo — Data Link

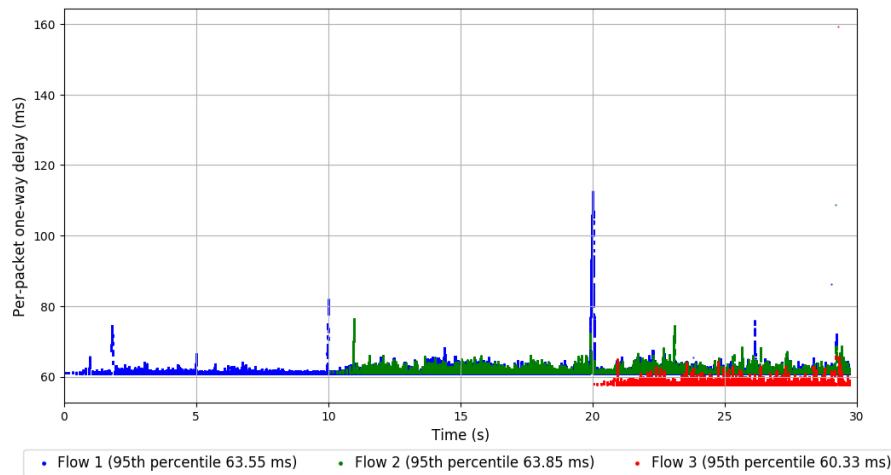
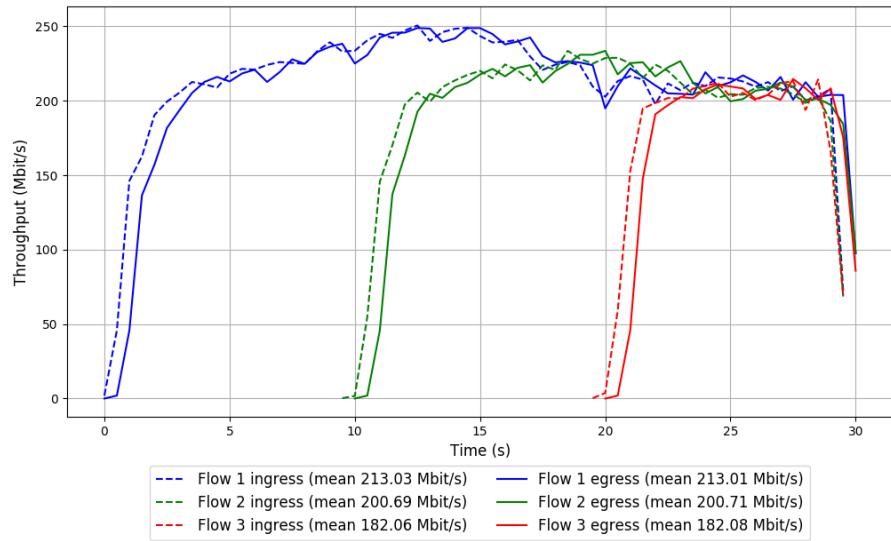


Run 3: Statistics of Indigo

```
Start at: 2019-01-18 11:07:08
End at: 2019-01-18 11:07:38
Local clock offset: -0.207 ms
Remote clock offset: 0.225 ms

# Below is generated by plot.py at 2019-01-18 13:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.56 Mbit/s
95th percentile per-packet one-way delay: 63.516 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 213.01 Mbit/s
95th percentile per-packet one-way delay: 63.546 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 200.71 Mbit/s
95th percentile per-packet one-way delay: 63.847 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 182.08 Mbit/s
95th percentile per-packet one-way delay: 60.334 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

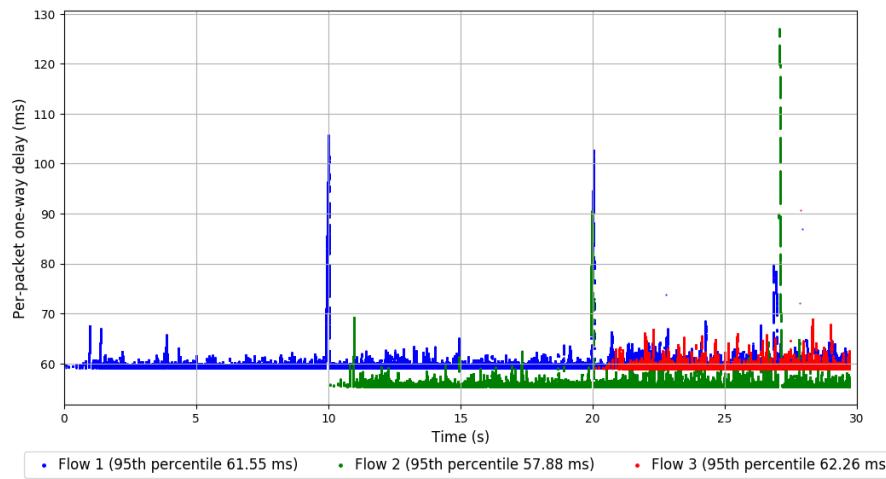
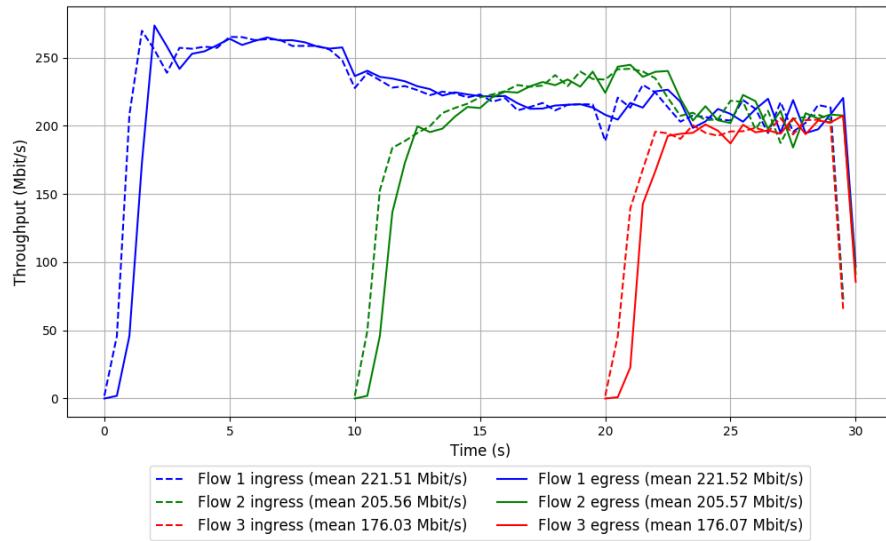


Run 4: Statistics of Indigo

```
Start at: 2019-01-18 11:43:21
End at: 2019-01-18 11:43:51
Local clock offset: -0.135 ms
Remote clock offset: -1.343 ms

# Below is generated by plot.py at 2019-01-18 13:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.68 Mbit/s
95th percentile per-packet one-way delay: 61.244 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.52 Mbit/s
95th percentile per-packet one-way delay: 61.546 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 205.57 Mbit/s
95th percentile per-packet one-way delay: 57.876 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 176.07 Mbit/s
95th percentile per-packet one-way delay: 62.258 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

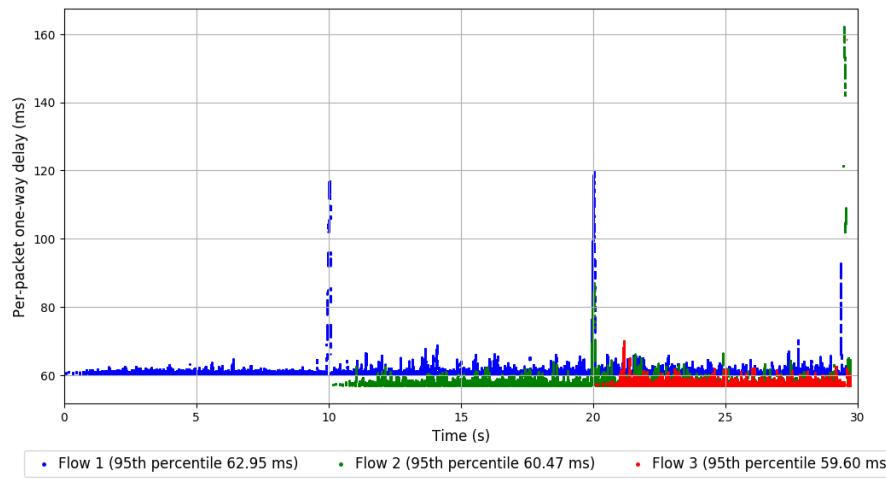
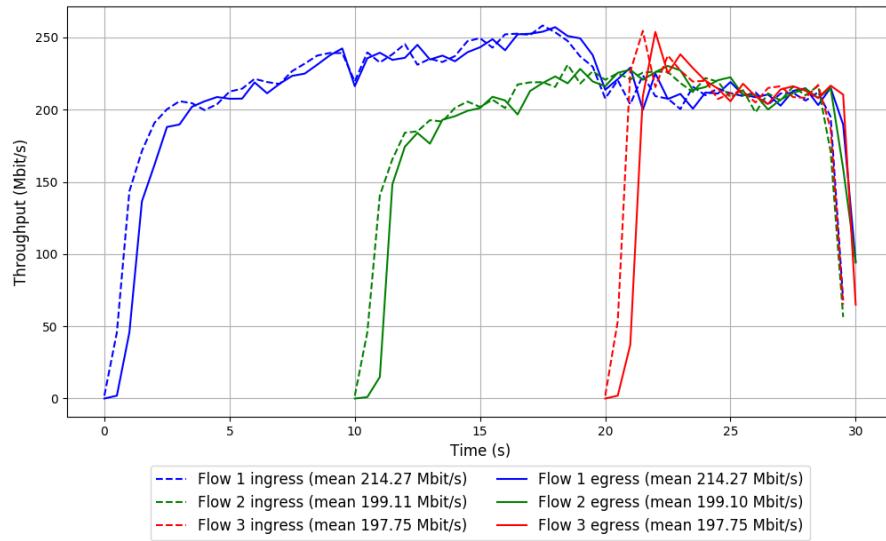


Run 5: Statistics of Indigo

```
Start at: 2019-01-18 12:21:06
End at: 2019-01-18 12:21:36
Local clock offset: 0.025 ms
Remote clock offset: 0.233 ms

# Below is generated by plot.py at 2019-01-18 13:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 409.83 Mbit/s
95th percentile per-packet one-way delay: 62.179 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.27 Mbit/s
95th percentile per-packet one-way delay: 62.955 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 199.10 Mbit/s
95th percentile per-packet one-way delay: 60.467 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 197.75 Mbit/s
95th percentile per-packet one-way delay: 59.605 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

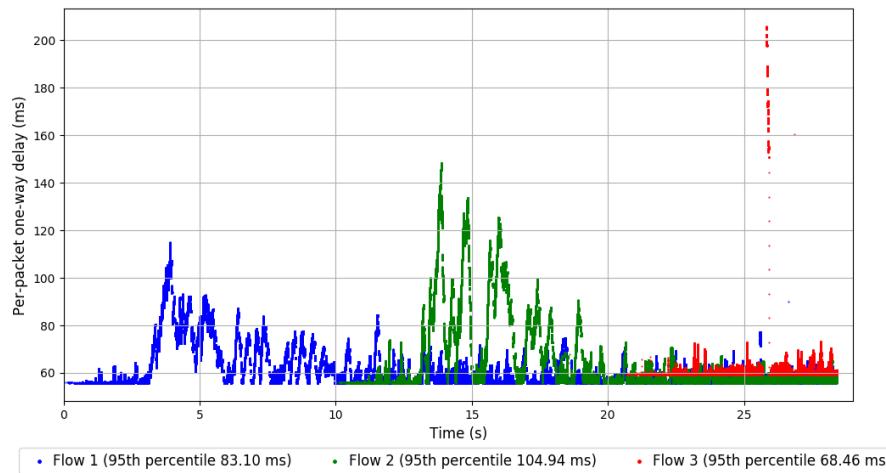
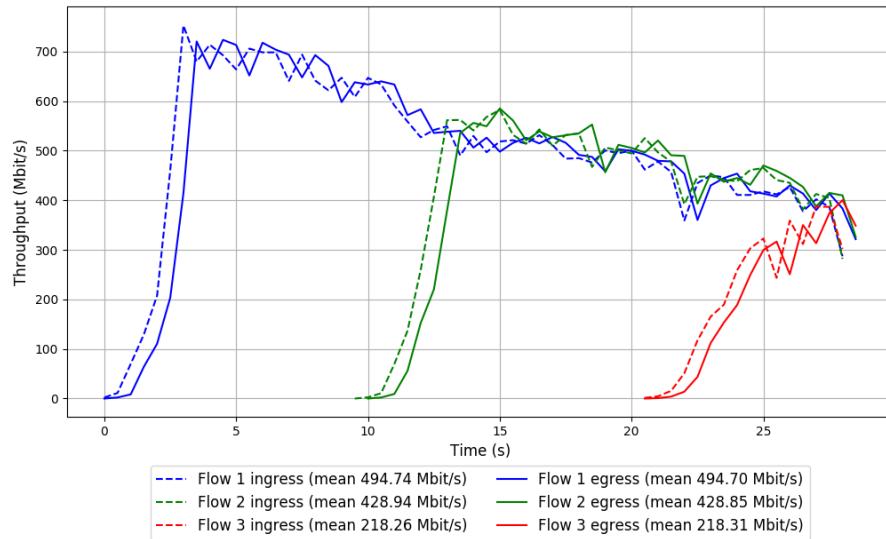


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-01-18 09:44:40
End at: 2019-01-18 09:45:10
Local clock offset: -0.088 ms
Remote clock offset: -1.18 ms

# Below is generated by plot.py at 2019-01-18 13:56:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 833.19 Mbit/s
95th percentile per-packet one-way delay: 90.577 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 494.70 Mbit/s
95th percentile per-packet one-way delay: 83.096 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 428.85 Mbit/s
95th percentile per-packet one-way delay: 104.940 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 218.31 Mbit/s
95th percentile per-packet one-way delay: 68.459 ms
Loss rate: 0.01%
```

Run 1: Report of Indigo-MusesC3 — Data Link

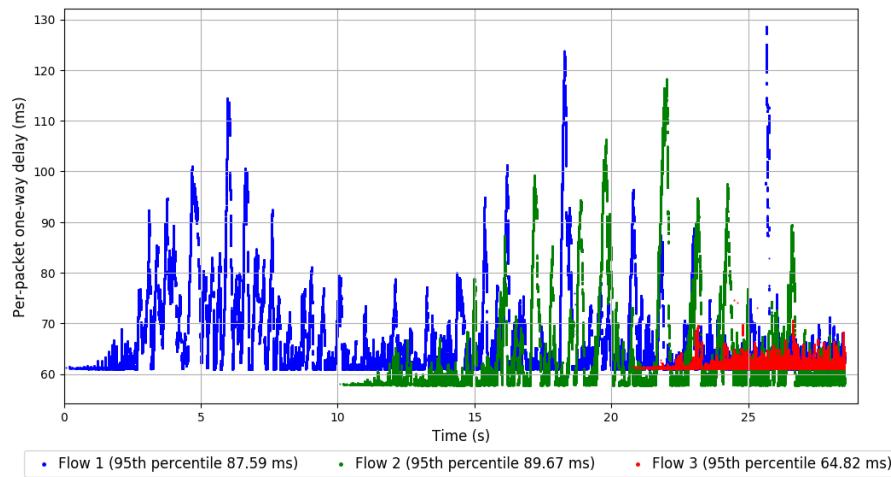
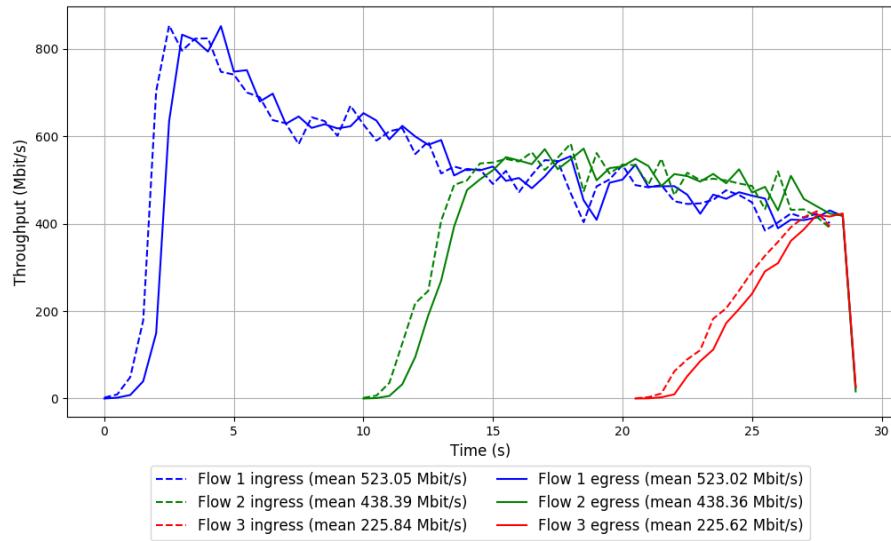


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-18 10:21:37
End at: 2019-01-18 10:22:07
Local clock offset: -0.016 ms
Remote clock offset: 0.731 ms

# Below is generated by plot.py at 2019-01-18 13:56:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 868.62 Mbit/s
95th percentile per-packet one-way delay: 87.462 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 523.02 Mbit/s
95th percentile per-packet one-way delay: 87.588 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 438.36 Mbit/s
95th percentile per-packet one-way delay: 89.666 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 225.62 Mbit/s
95th percentile per-packet one-way delay: 64.823 ms
Loss rate: 0.12%
```

Run 2: Report of Indigo-MusesC3 — Data Link

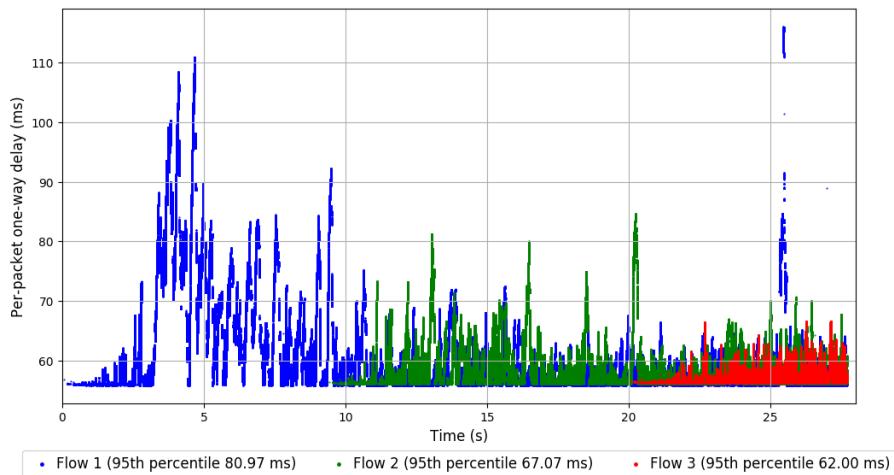
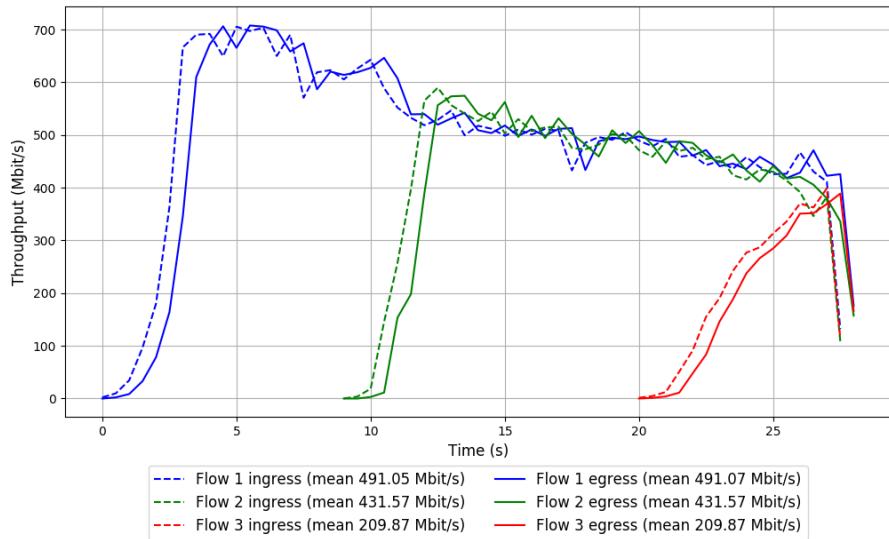


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-18 10:58:39
End at: 2019-01-18 10:59:09
Local clock offset: 0.196 ms
Remote clock offset: -0.712 ms

# Below is generated by plot.py at 2019-01-18 14:07:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 834.17 Mbit/s
95th percentile per-packet one-way delay: 77.411 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 491.07 Mbit/s
95th percentile per-packet one-way delay: 80.966 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 431.57 Mbit/s
95th percentile per-packet one-way delay: 67.067 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 209.87 Mbit/s
95th percentile per-packet one-way delay: 62.000 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

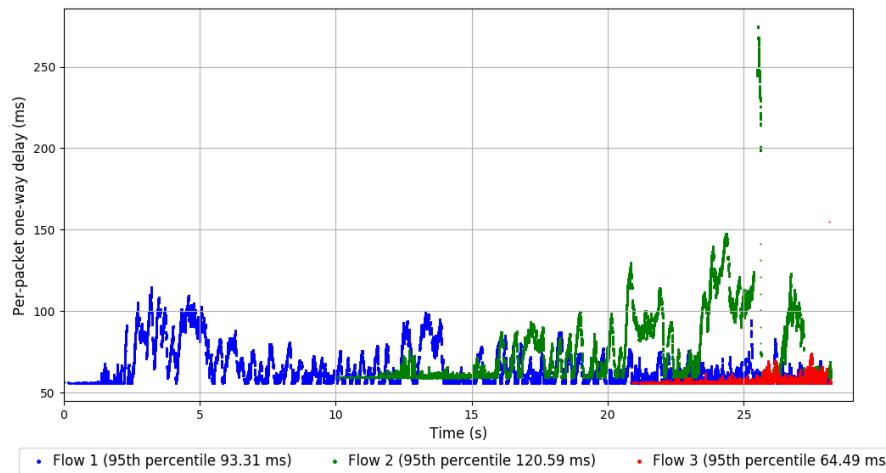
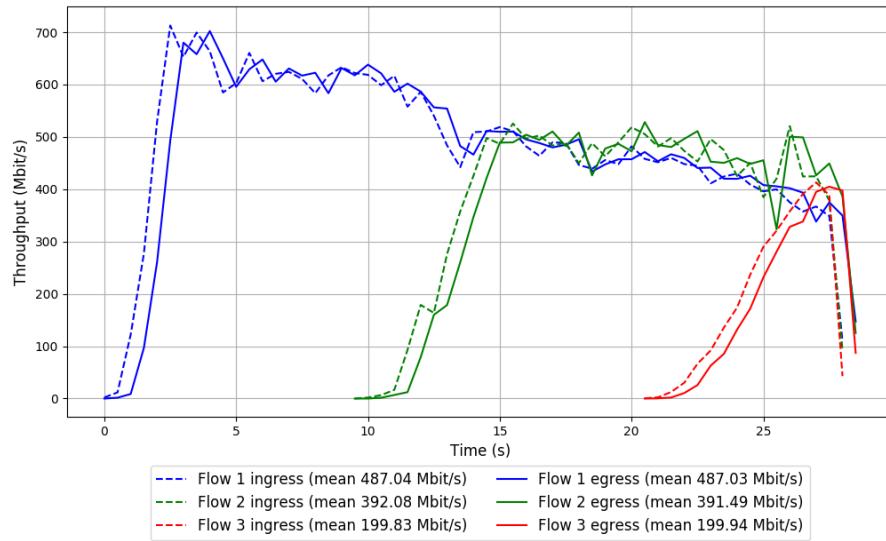


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-18 11:34:51
End at: 2019-01-18 11:35:21
Local clock offset: -0.119 ms
Remote clock offset: -1.322 ms

# Below is generated by plot.py at 2019-01-18 14:07:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 793.25 Mbit/s
95th percentile per-packet one-way delay: 102.382 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 487.03 Mbit/s
95th percentile per-packet one-way delay: 93.313 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 391.49 Mbit/s
95th percentile per-packet one-way delay: 120.588 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 199.94 Mbit/s
95th percentile per-packet one-way delay: 64.492 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

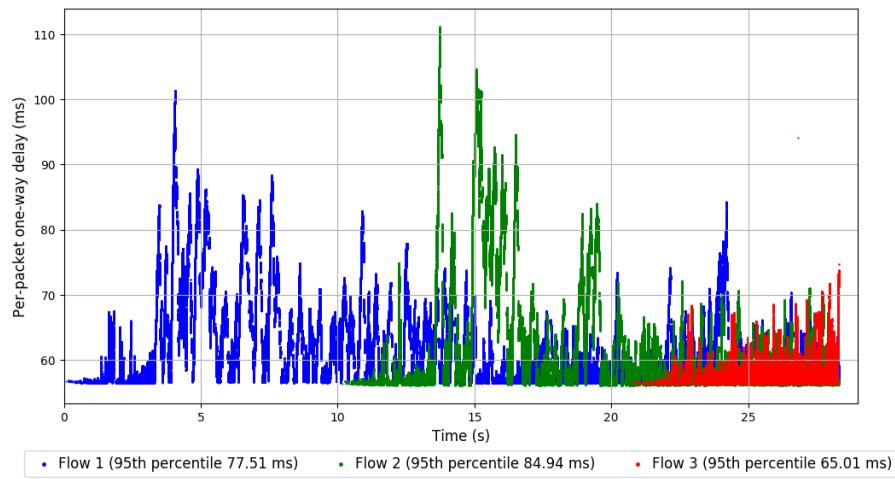
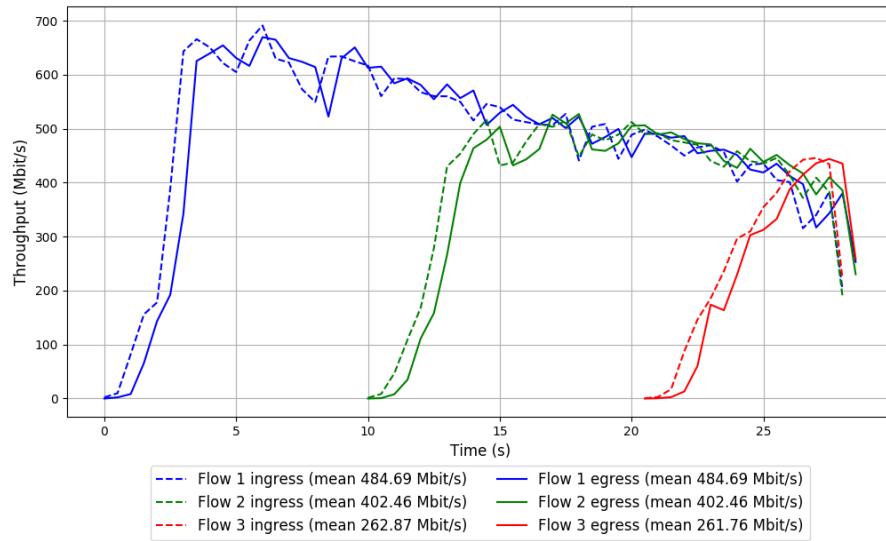


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-18 12:12:13
End at: 2019-01-18 12:12:43
Local clock offset: 0.014 ms
Remote clock offset: -0.467 ms

# Below is generated by plot.py at 2019-01-18 14:07:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 813.41 Mbit/s
95th percentile per-packet one-way delay: 79.075 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 484.69 Mbit/s
95th percentile per-packet one-way delay: 77.508 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 402.46 Mbit/s
95th percentile per-packet one-way delay: 84.938 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 261.76 Mbit/s
95th percentile per-packet one-way delay: 65.008 ms
Loss rate: 0.39%
```

Run 5: Report of Indigo-MusesC3 — Data Link

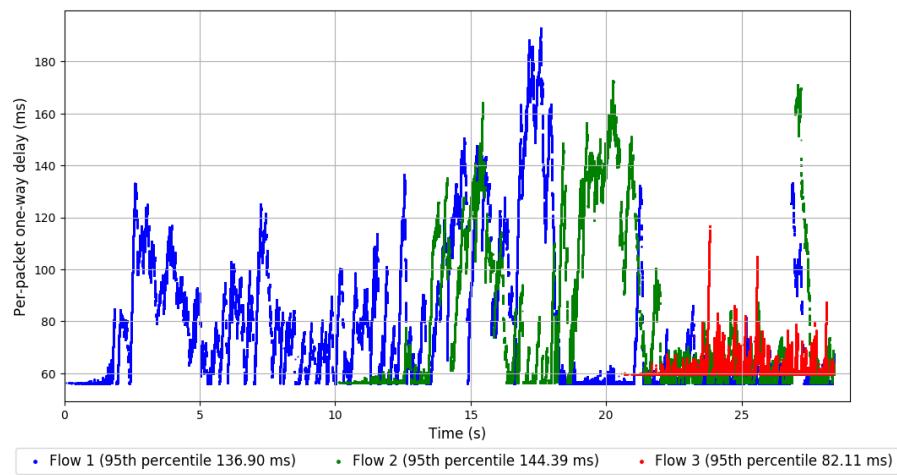
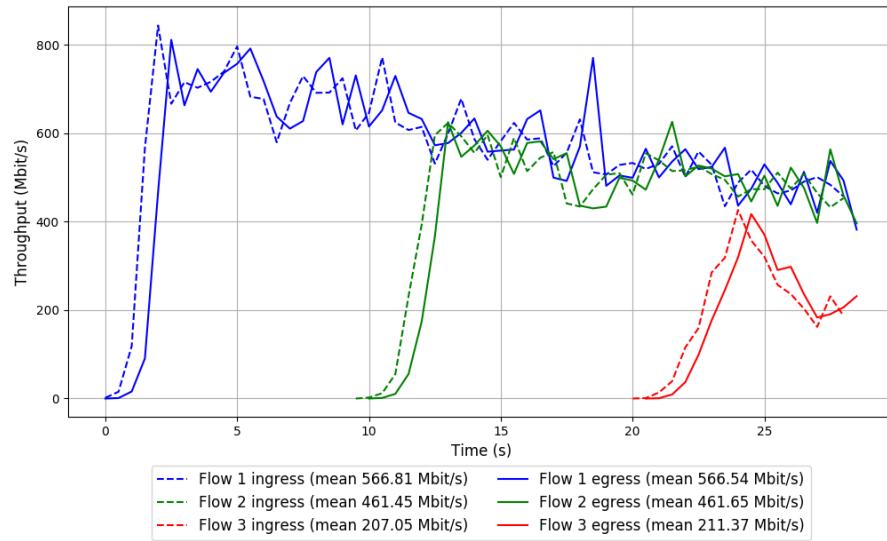


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-01-18 09:51:22
End at: 2019-01-18 09:51:52
Local clock offset: -0.182 ms
Remote clock offset: -1.189 ms

# Below is generated by plot.py at 2019-01-18 14:11:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 924.11 Mbit/s
95th percentile per-packet one-way delay: 139.309 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 566.54 Mbit/s
95th percentile per-packet one-way delay: 136.902 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 461.65 Mbit/s
95th percentile per-packet one-way delay: 144.386 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 211.37 Mbit/s
95th percentile per-packet one-way delay: 82.109 ms
Loss rate: 0.06%
```

Run 1: Report of Indigo-MusesC5 — Data Link

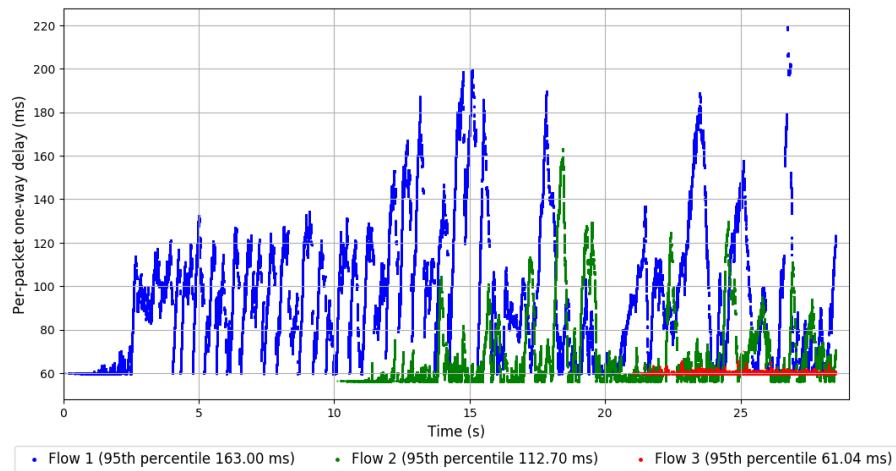
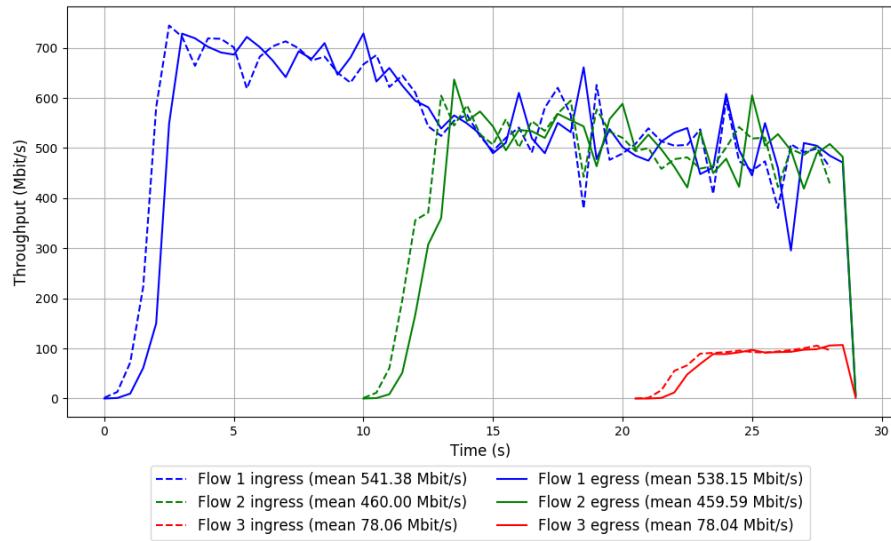


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-18 10:28:16
End at: 2019-01-18 10:28:46
Local clock offset: 0.184 ms
Remote clock offset: -0.644 ms

# Below is generated by plot.py at 2019-01-18 14:11:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 855.97 Mbit/s
95th percentile per-packet one-way delay: 147.937 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 538.15 Mbit/s
95th percentile per-packet one-way delay: 162.998 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 459.59 Mbit/s
95th percentile per-packet one-way delay: 112.697 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 78.04 Mbit/s
95th percentile per-packet one-way delay: 61.044 ms
Loss rate: 0.06%
```

Run 2: Report of Indigo-MusesC5 — Data Link

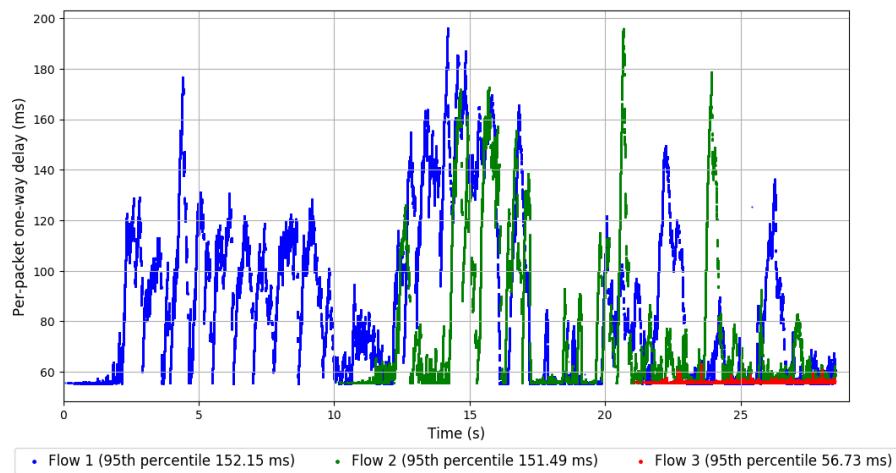
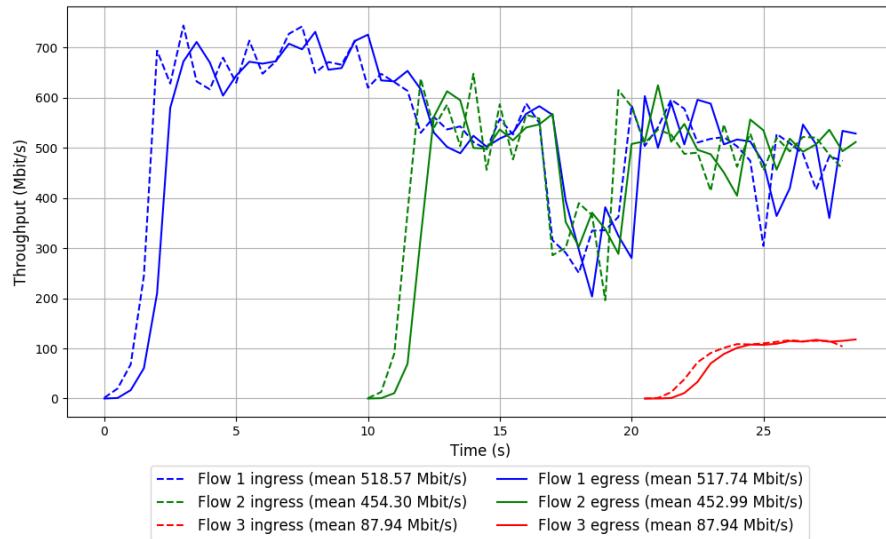


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-18 11:05:15
End at: 2019-01-18 11:05:45
Local clock offset: -0.033 ms
Remote clock offset: -1.439 ms

# Below is generated by plot.py at 2019-01-18 14:11:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 834.15 Mbit/s
95th percentile per-packet one-way delay: 151.227 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 517.74 Mbit/s
95th percentile per-packet one-way delay: 152.147 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 452.99 Mbit/s
95th percentile per-packet one-way delay: 151.494 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 87.94 Mbit/s
95th percentile per-packet one-way delay: 56.726 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

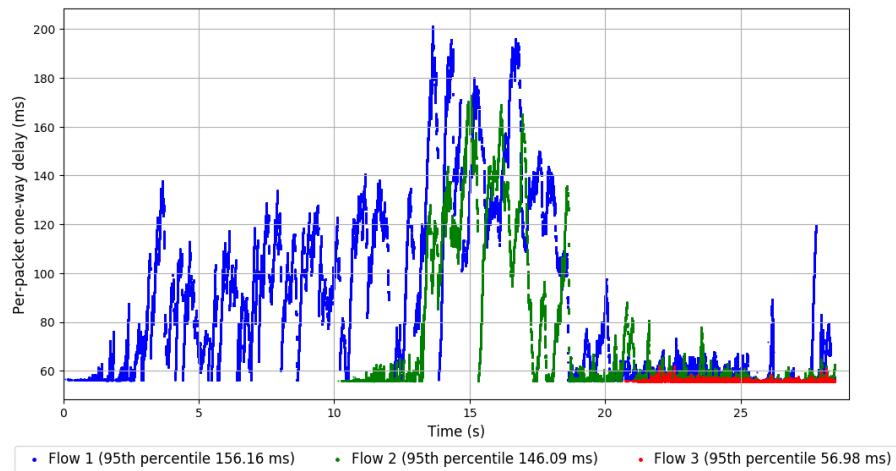
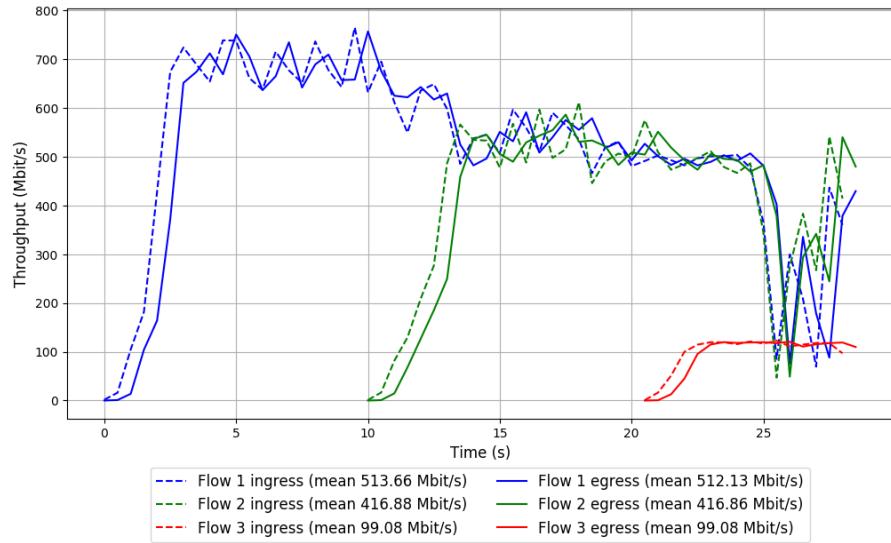


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-18 11:41:24
End at: 2019-01-18 11:41:54
Local clock offset: -0.119 ms
Remote clock offset: -1.195 ms

# Below is generated by plot.py at 2019-01-18 14:12:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 808.47 Mbit/s
95th percentile per-packet one-way delay: 150.951 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 512.13 Mbit/s
95th percentile per-packet one-way delay: 156.165 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 416.86 Mbit/s
95th percentile per-packet one-way delay: 146.087 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 99.08 Mbit/s
95th percentile per-packet one-way delay: 56.976 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

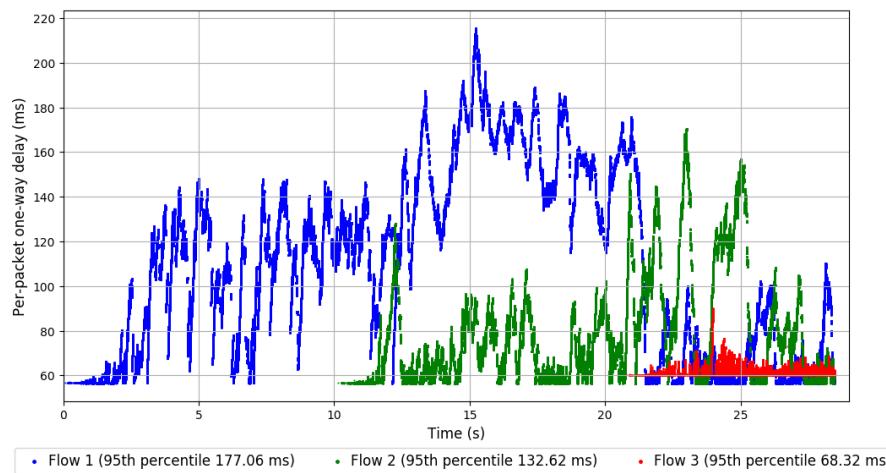
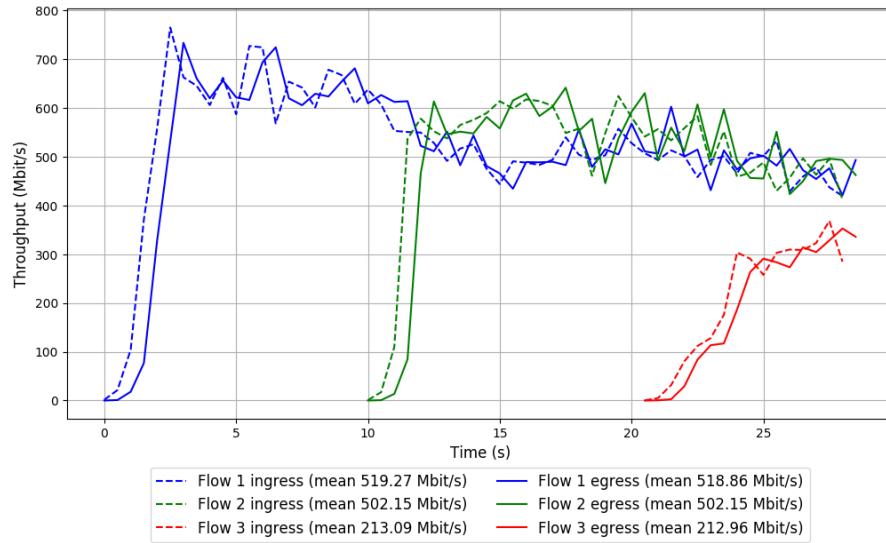


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-18 12:19:02
End at: 2019-01-18 12:19:32
Local clock offset: 0.447 ms
Remote clock offset: 0.18 ms

# Below is generated by plot.py at 2019-01-18 14:14:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 900.42 Mbit/s
95th percentile per-packet one-way delay: 169.843 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 518.86 Mbit/s
95th percentile per-packet one-way delay: 177.062 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 502.15 Mbit/s
95th percentile per-packet one-way delay: 132.618 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 212.96 Mbit/s
95th percentile per-packet one-way delay: 68.318 ms
Loss rate: 0.09%
```

Run 5: Report of Indigo-MusesC5 — Data Link

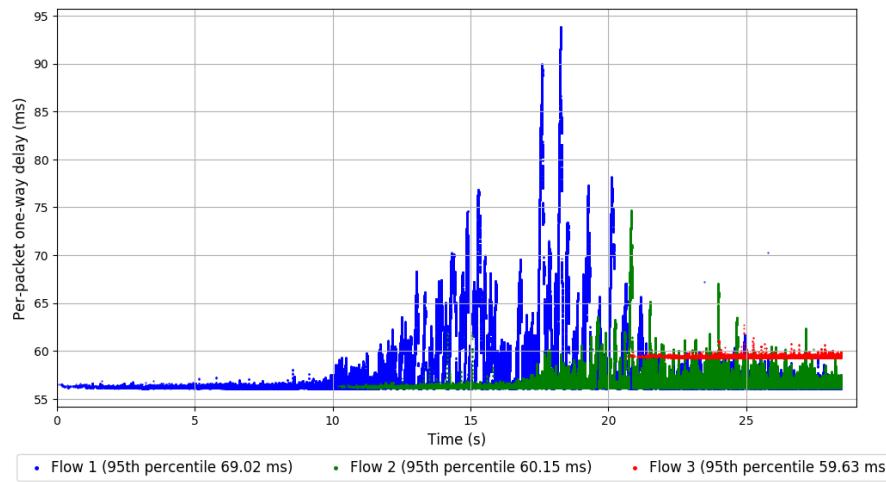
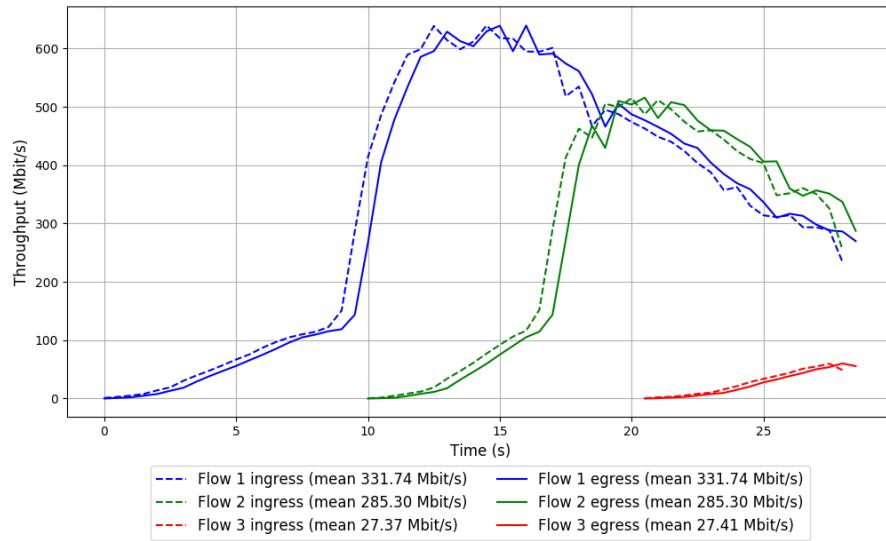


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-18 09:46:35
End at: 2019-01-18 09:47:05
Local clock offset: 0.293 ms
Remote clock offset: -0.638 ms

# Below is generated by plot.py at 2019-01-18 14:17:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 522.77 Mbit/s
95th percentile per-packet one-way delay: 66.927 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 331.74 Mbit/s
95th percentile per-packet one-way delay: 69.024 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 285.30 Mbit/s
95th percentile per-packet one-way delay: 60.153 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.41 Mbit/s
95th percentile per-packet one-way delay: 59.629 ms
Loss rate: 0.01%
```

Run 1: Report of Indigo-MusesD — Data Link

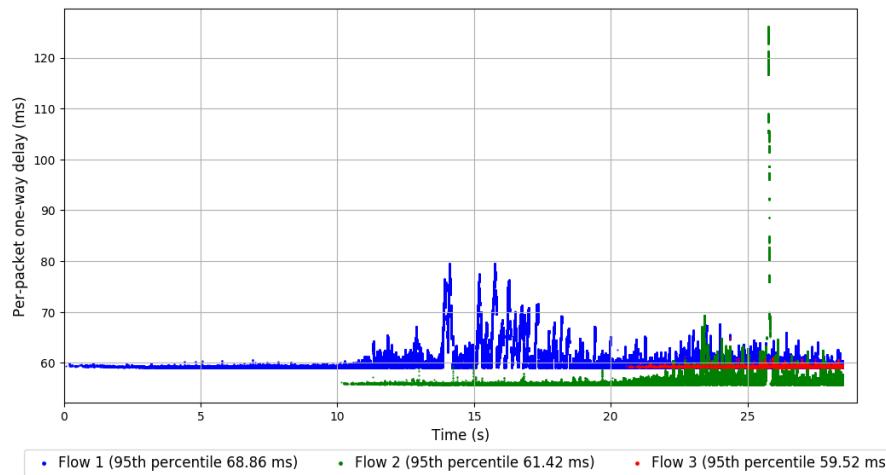
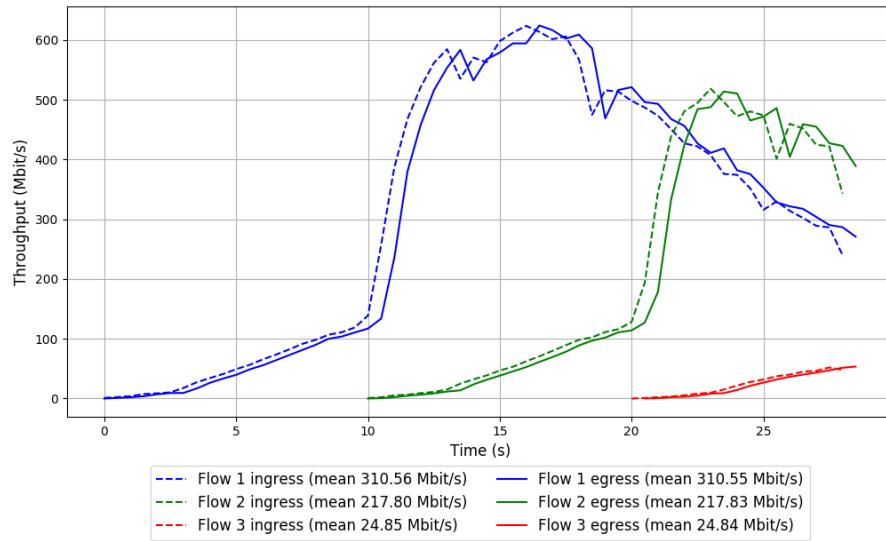


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-18 10:23:34
End at: 2019-01-18 10:24:04
Local clock offset: -0.156 ms
Remote clock offset: -1.461 ms

# Below is generated by plot.py at 2019-01-18 14:17:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 458.17 Mbit/s
95th percentile per-packet one-way delay: 67.385 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 310.55 Mbit/s
95th percentile per-packet one-way delay: 68.857 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 217.83 Mbit/s
95th percentile per-packet one-way delay: 61.424 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.84 Mbit/s
95th percentile per-packet one-way delay: 59.515 ms
Loss rate: 0.10%
```

Run 2: Report of Indigo-MusesD — Data Link

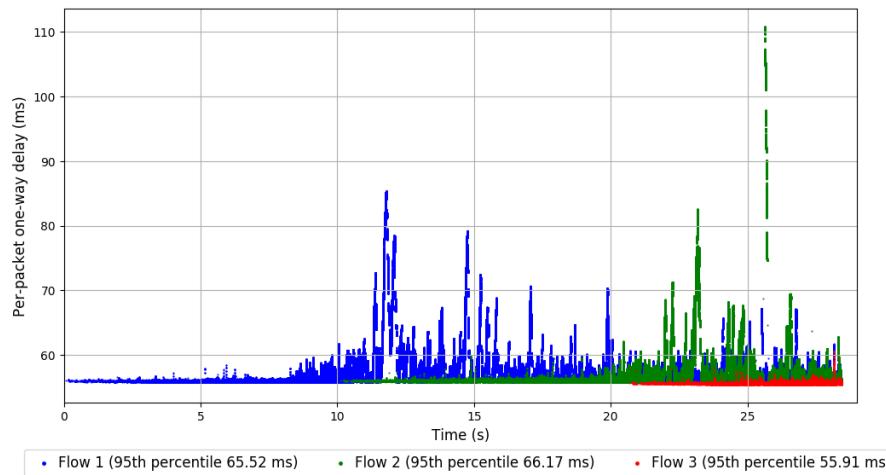
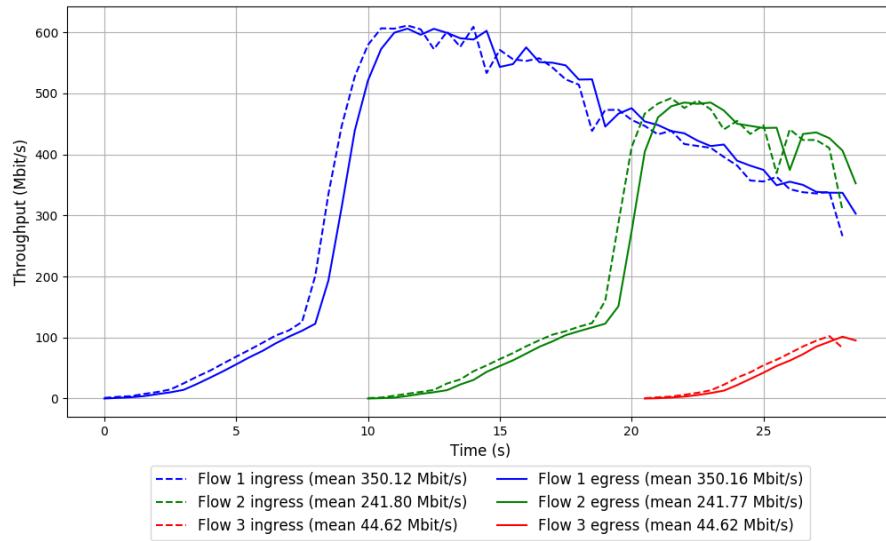


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-18 11:00:31
End at: 2019-01-18 11:01:01
Local clock offset: -0.046 ms
Remote clock offset: -1.335 ms

# Below is generated by plot.py at 2019-01-18 14:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 518.41 Mbit/s
95th percentile per-packet one-way delay: 65.601 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 350.16 Mbit/s
95th percentile per-packet one-way delay: 65.520 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 241.77 Mbit/s
95th percentile per-packet one-way delay: 66.172 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 44.62 Mbit/s
95th percentile per-packet one-way delay: 55.911 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

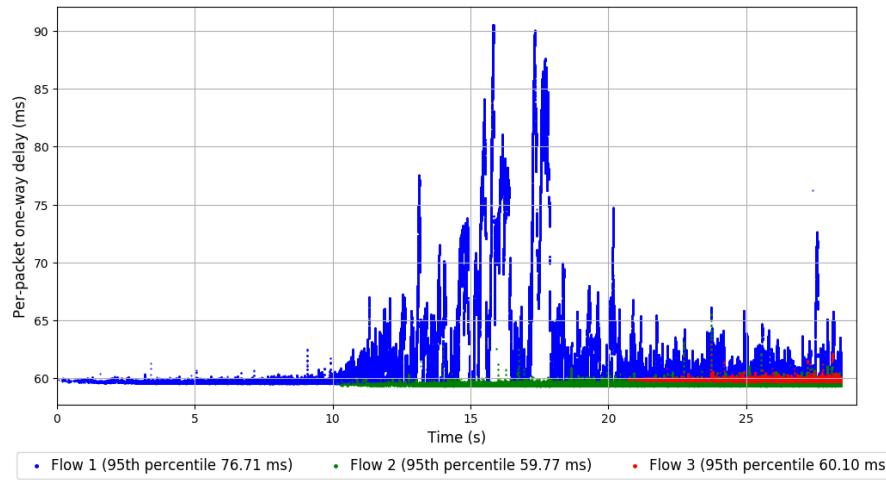
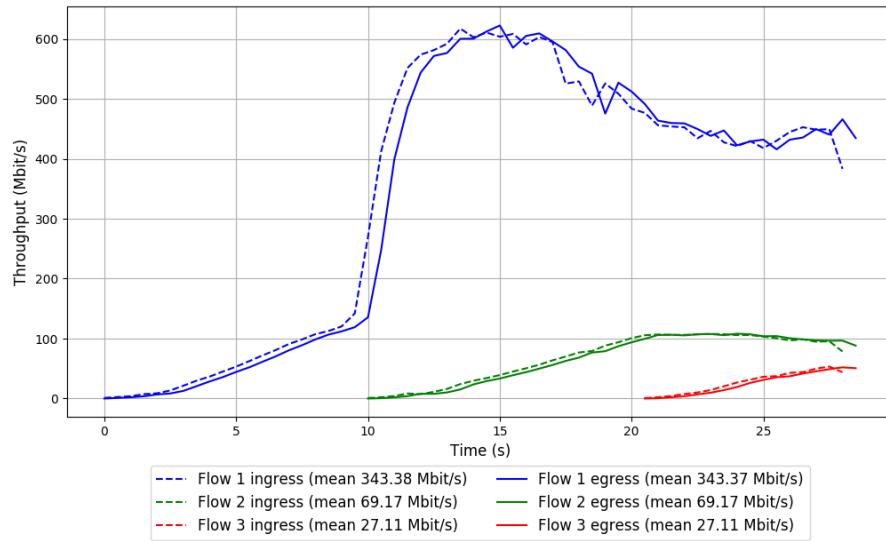


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-18 11:36:41
End at: 2019-01-18 11:37:11
Local clock offset: -0.062 ms
Remote clock offset: -0.668 ms

# Below is generated by plot.py at 2019-01-18 14:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 395.39 Mbit/s
95th percentile per-packet one-way delay: 75.452 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 343.37 Mbit/s
95th percentile per-packet one-way delay: 76.709 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.17 Mbit/s
95th percentile per-packet one-way delay: 59.772 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 27.11 Mbit/s
95th percentile per-packet one-way delay: 60.098 ms
Loss rate: 0.04%
```

Run 4: Report of Indigo-MusesD — Data Link

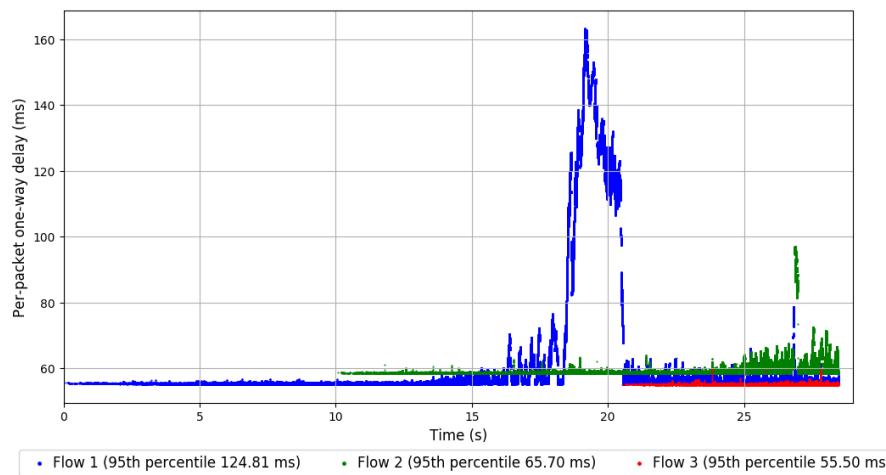
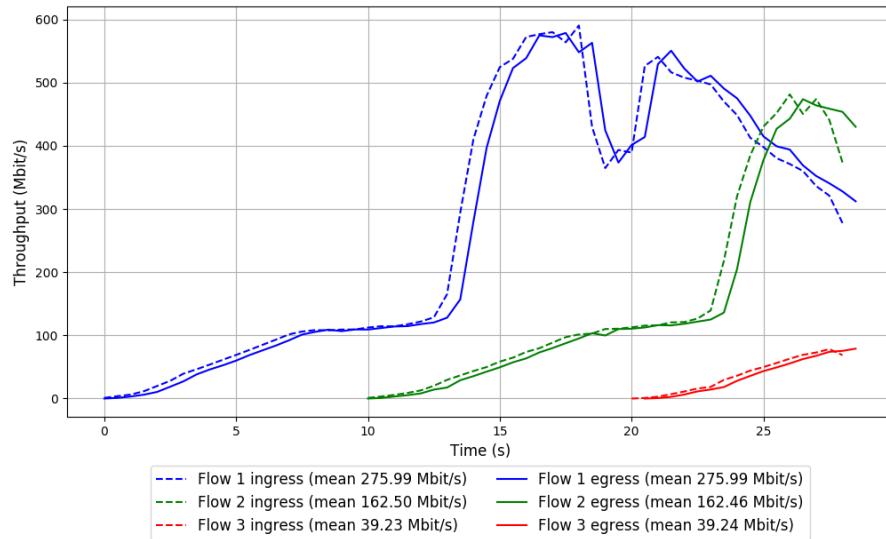


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-18 12:14:10
End at: 2019-01-18 12:14:40
Local clock offset: 0.346 ms
Remote clock offset: -1.224 ms

# Below is generated by plot.py at 2019-01-18 14:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.03 Mbit/s
95th percentile per-packet one-way delay: 117.871 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 275.99 Mbit/s
95th percentile per-packet one-way delay: 124.809 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 162.46 Mbit/s
95th percentile per-packet one-way delay: 65.700 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 39.24 Mbit/s
95th percentile per-packet one-way delay: 55.498 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

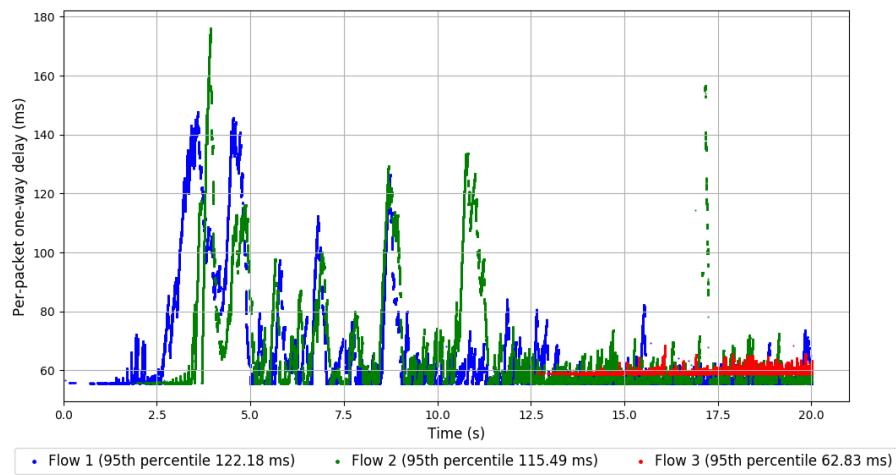
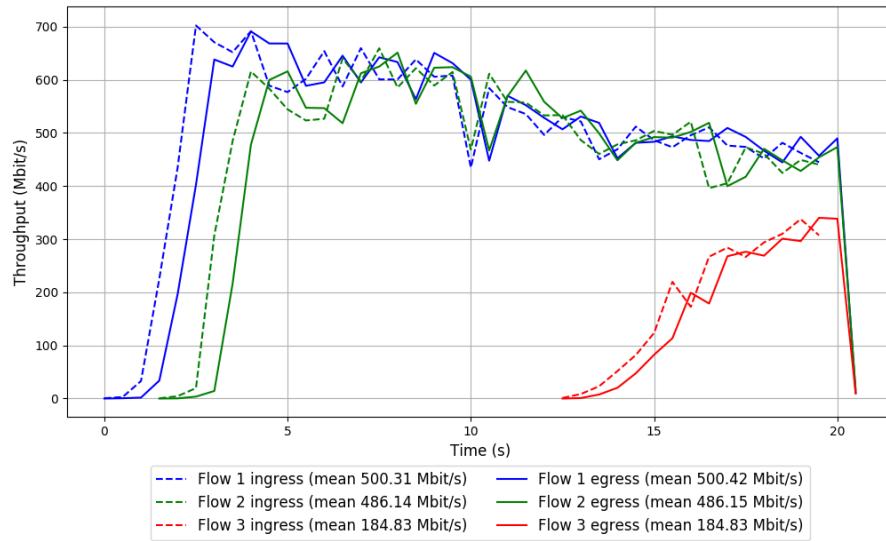
Start at: 2019-01-18 09:18:51

End at: 2019-01-18 09:19:21

Local clock offset: 0.283 ms

Remote clock offset: -1.13 ms

Run 1: Report of Indigo-MusesT — Data Link

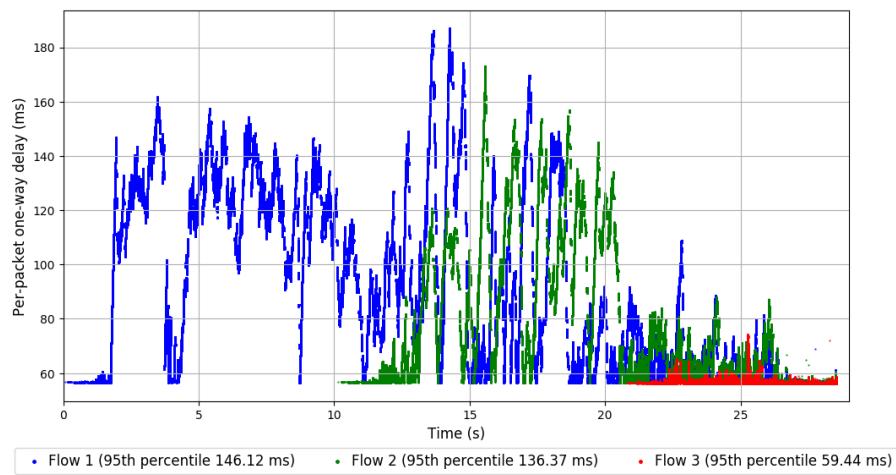
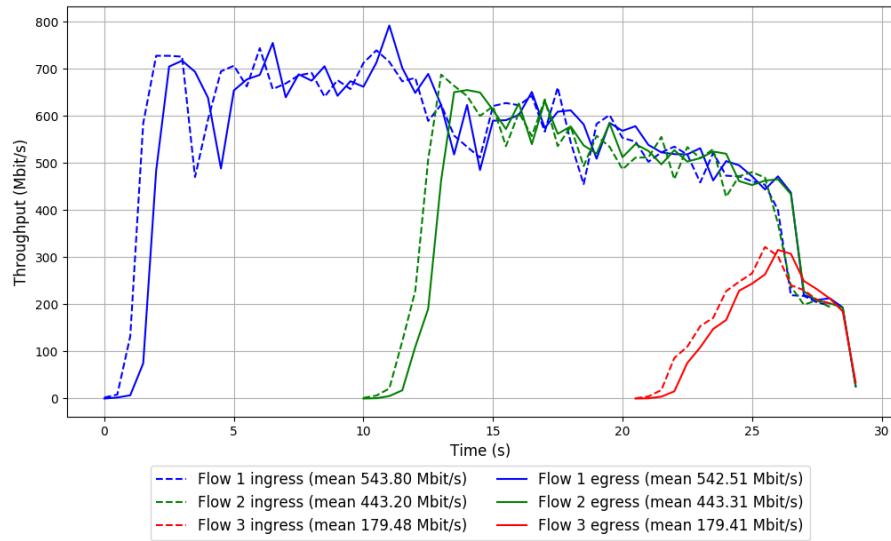


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-18 09:56:37
End at: 2019-01-18 09:57:07
Local clock offset: -0.05 ms
Remote clock offset: -0.674 ms

# Below is generated by plot.py at 2019-01-18 14:27:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 877.66 Mbit/s
95th percentile per-packet one-way delay: 143.241 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 542.51 Mbit/s
95th percentile per-packet one-way delay: 146.115 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 443.31 Mbit/s
95th percentile per-packet one-way delay: 136.366 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 179.41 Mbit/s
95th percentile per-packet one-way delay: 59.444 ms
Loss rate: 0.07%
```

Run 2: Report of Indigo-MusesT — Data Link

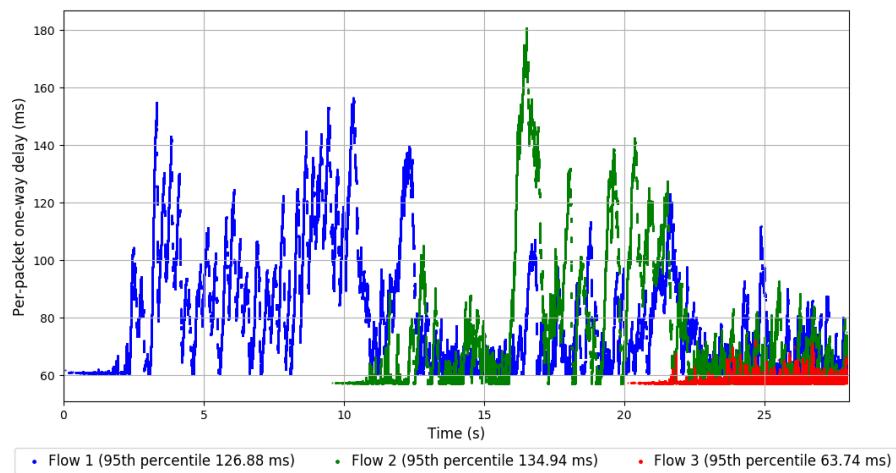
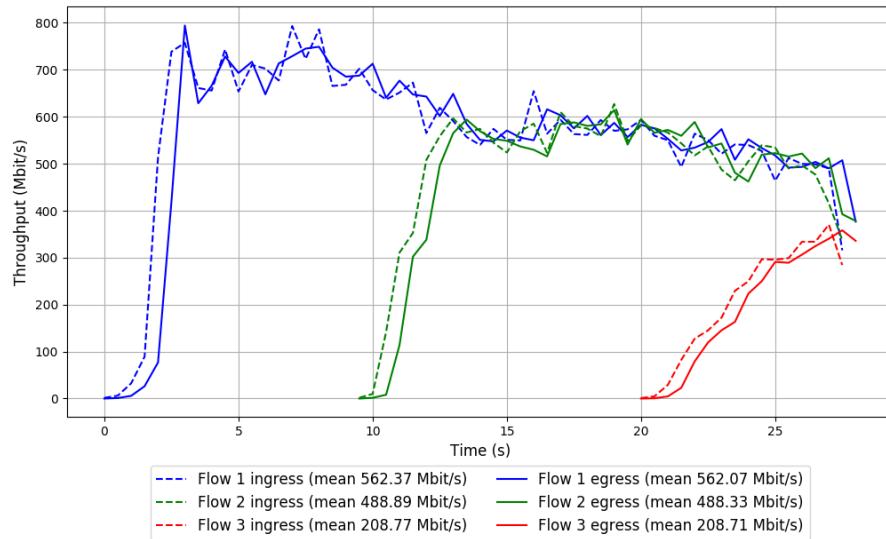


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-18 10:33:15
End at: 2019-01-18 10:38:45
Local clock offset: -0.059 ms
Remote clock offset: 0.198 ms

# Below is generated by plot.py at 2019-01-18 14:31:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 942.00 Mbit/s
95th percentile per-packet one-way delay: 128.435 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 562.07 Mbit/s
95th percentile per-packet one-way delay: 126.884 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 488.33 Mbit/s
95th percentile per-packet one-way delay: 134.937 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 208.71 Mbit/s
95th percentile per-packet one-way delay: 63.743 ms
Loss rate: 0.01%
```

Run 3: Report of Indigo-MusesT — Data Link

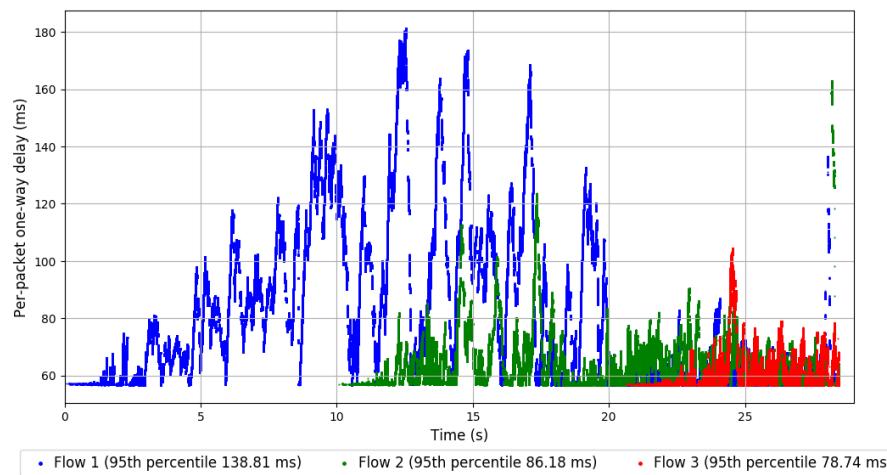
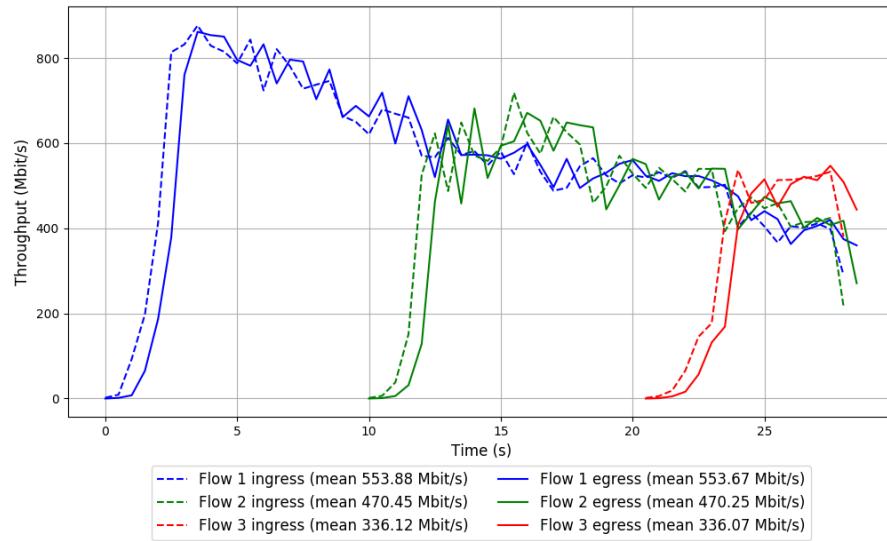


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-18 11:10:12
End at: 2019-01-18 11:10:42
Local clock offset: 0.355 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-01-18 14:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 950.59 Mbit/s
95th percentile per-packet one-way delay: 128.480 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 553.67 Mbit/s
95th percentile per-packet one-way delay: 138.815 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 470.25 Mbit/s
95th percentile per-packet one-way delay: 86.184 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 336.07 Mbit/s
95th percentile per-packet one-way delay: 78.738 ms
Loss rate: 0.03%
```

Run 4: Report of Indigo-MusesT — Data Link

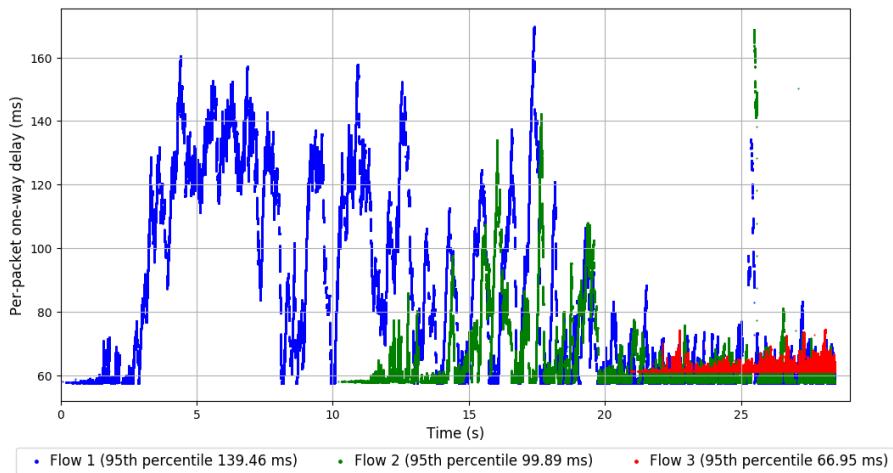
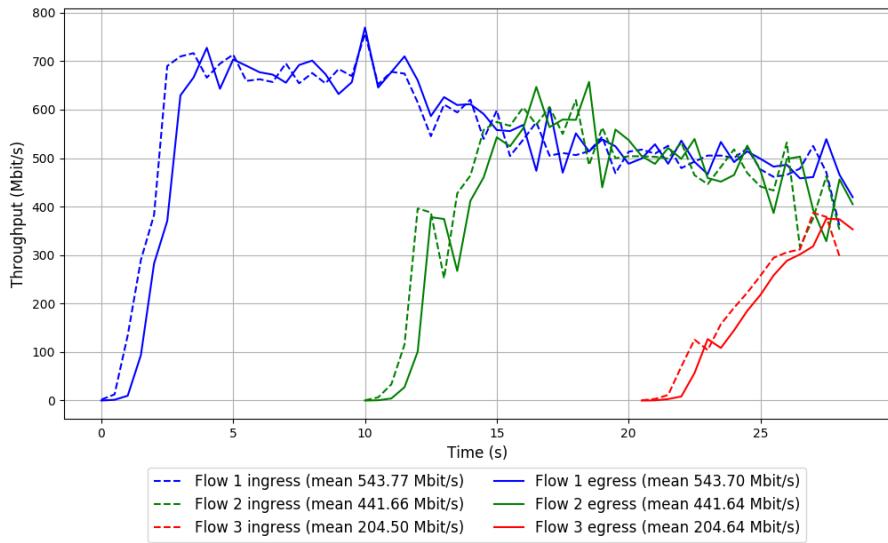


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-18 11:46:37
End at: 2019-01-18 11:47:07
Local clock offset: -0.183 ms
Remote clock offset: 0.721 ms

# Below is generated by plot.py at 2019-01-18 14:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 882.38 Mbit/s
95th percentile per-packet one-way delay: 135.146 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 543.70 Mbit/s
95th percentile per-packet one-way delay: 139.464 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 441.64 Mbit/s
95th percentile per-packet one-way delay: 99.892 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 204.64 Mbit/s
95th percentile per-packet one-way delay: 66.953 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesT — Data Link

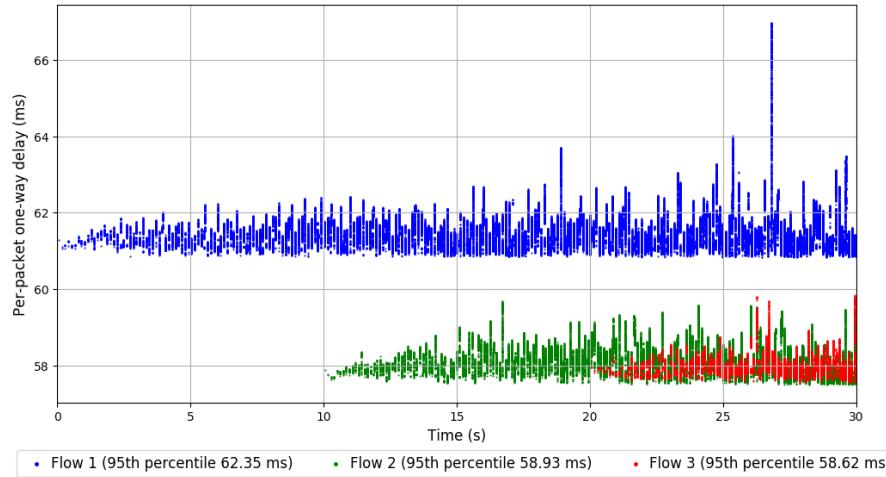
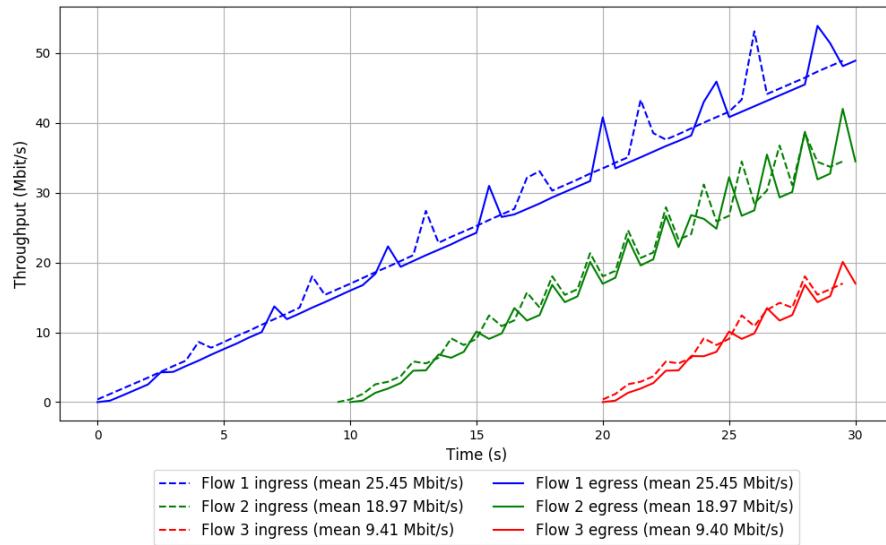


Run 1: Statistics of LEDBAT

```
Start at: 2019-01-18 09:40:20
End at: 2019-01-18 09:40:50
Local clock offset: 0.069 ms
Remote clock offset: 0.83 ms

# Below is generated by plot.py at 2019-01-18 14:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.17 Mbit/s
95th percentile per-packet one-way delay: 62.129 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.45 Mbit/s
95th percentile per-packet one-way delay: 62.346 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.97 Mbit/s
95th percentile per-packet one-way delay: 58.931 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 58.621 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

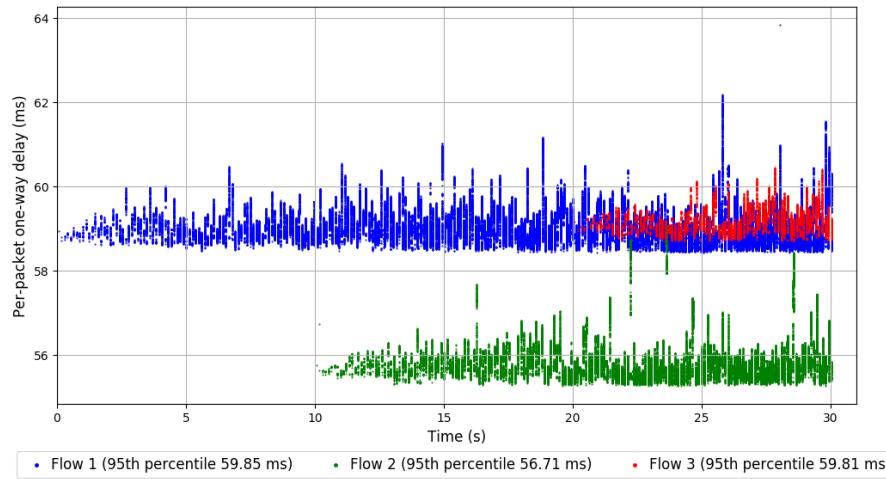
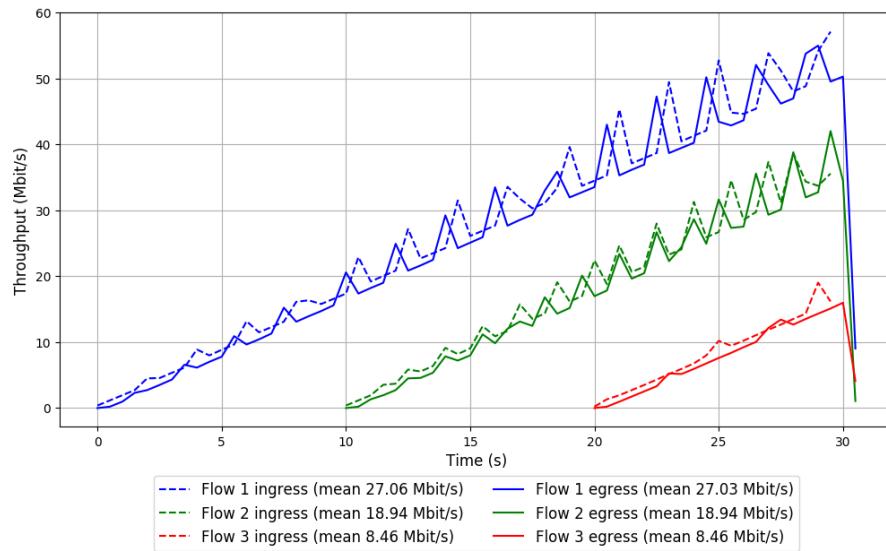


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-18 10:17:08
End at: 2019-01-18 10:17:38
Local clock offset: 0.378 ms
Remote clock offset: -1.199 ms

# Below is generated by plot.py at 2019-01-18 14:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.45 Mbit/s
95th percentile per-packet one-way delay: 59.732 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 27.03 Mbit/s
95th percentile per-packet one-way delay: 59.849 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 18.94 Mbit/s
95th percentile per-packet one-way delay: 56.708 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 59.808 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

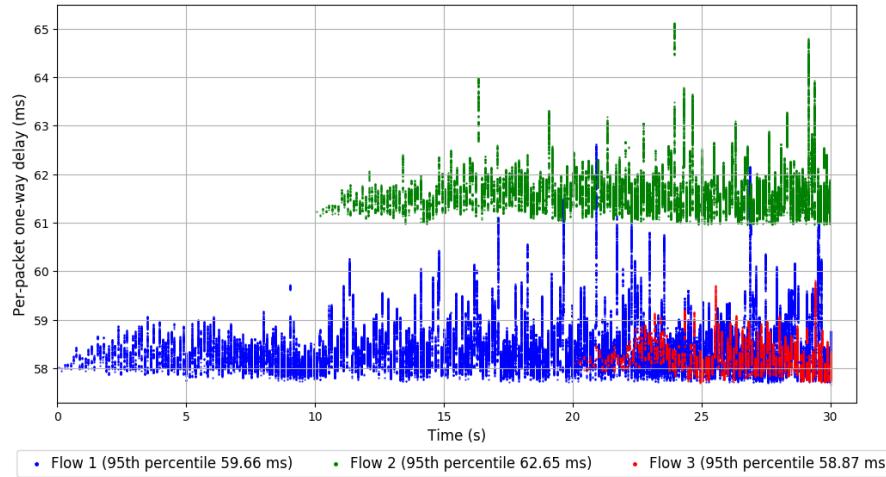
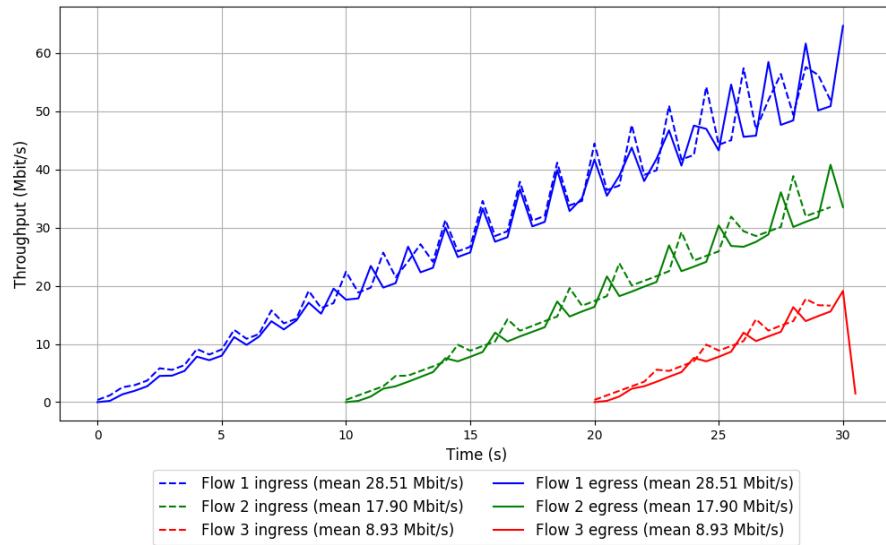


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-18 10:54:18
End at: 2019-01-18 10:54:48
Local clock offset: -0.072 ms
Remote clock offset: 0.608 ms

# Below is generated by plot.py at 2019-01-18 14:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.35 Mbit/s
95th percentile per-packet one-way delay: 61.981 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.51 Mbit/s
95th percentile per-packet one-way delay: 59.664 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.90 Mbit/s
95th percentile per-packet one-way delay: 62.646 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.93 Mbit/s
95th percentile per-packet one-way delay: 58.870 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

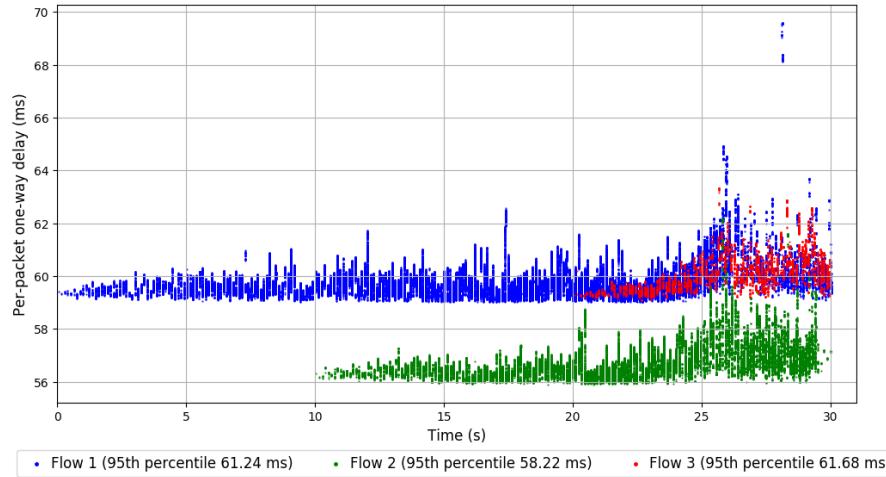
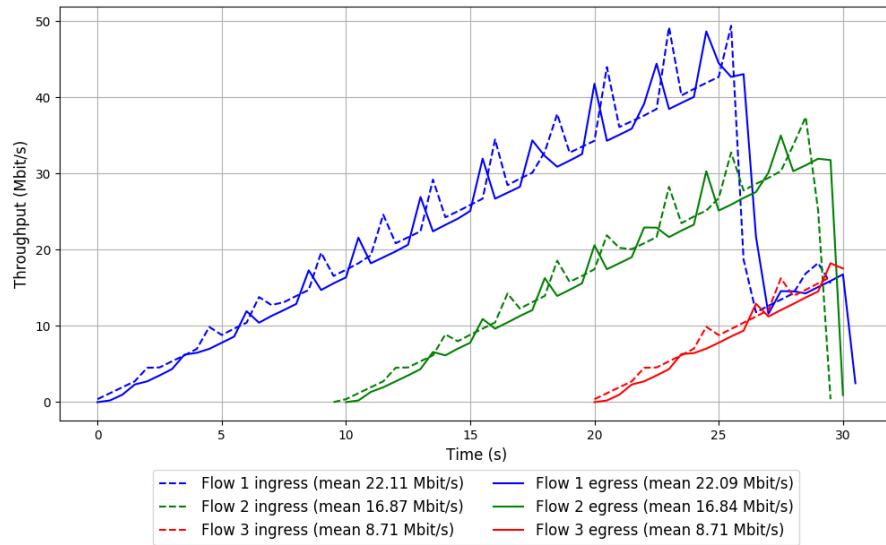


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-18 11:30:26
End at: 2019-01-18 11:30:56
Local clock offset: -0.075 ms
Remote clock offset: -1.38 ms

# Below is generated by plot.py at 2019-01-18 14:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.18 Mbit/s
95th percentile per-packet one-way delay: 61.054 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 22.09 Mbit/s
95th percentile per-packet one-way delay: 61.245 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 16.84 Mbit/s
95th percentile per-packet one-way delay: 58.220 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 61.677 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

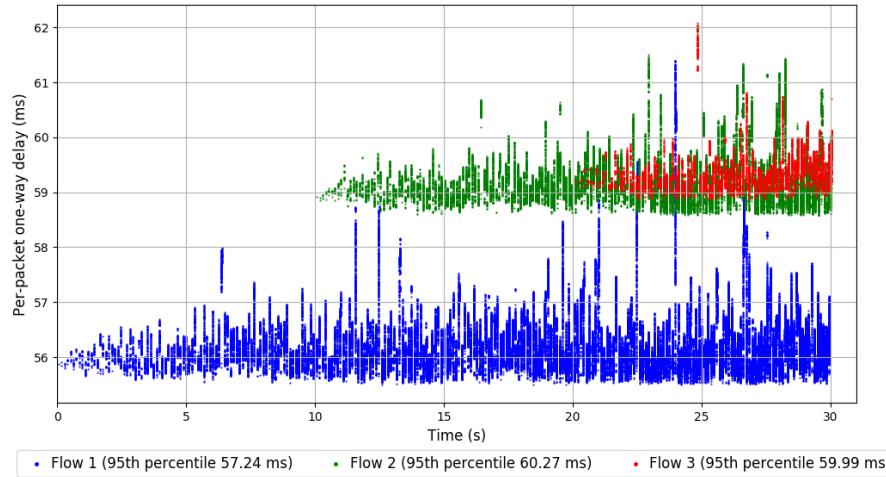
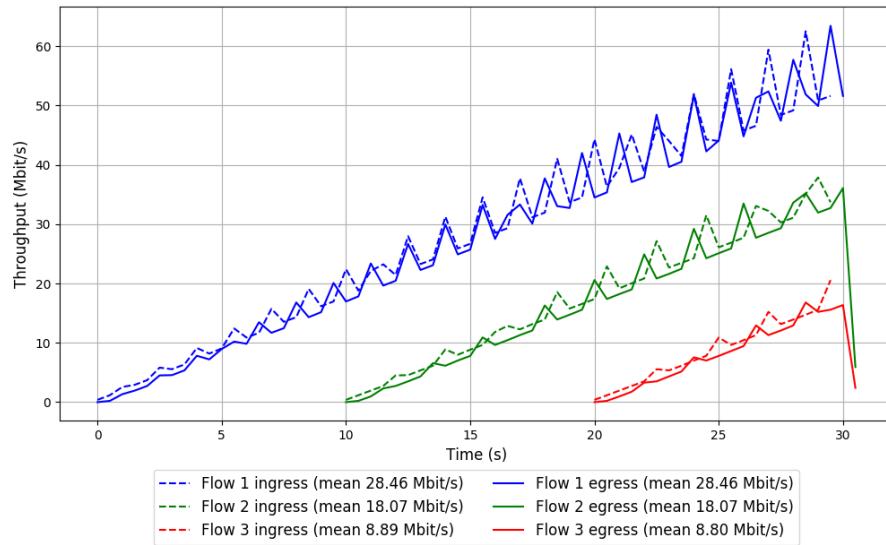


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-18 12:07:41
End at: 2019-01-18 12:08:11
Local clock offset: 0.031 ms
Remote clock offset: -1.223 ms

# Below is generated by plot.py at 2019-01-18 14:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.32 Mbit/s
95th percentile per-packet one-way delay: 59.621 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 57.242 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.07 Mbit/s
95th percentile per-packet one-way delay: 60.267 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 59.994 ms
Loss rate: 1.02%
```

Run 5: Report of LEDBAT — Data Link

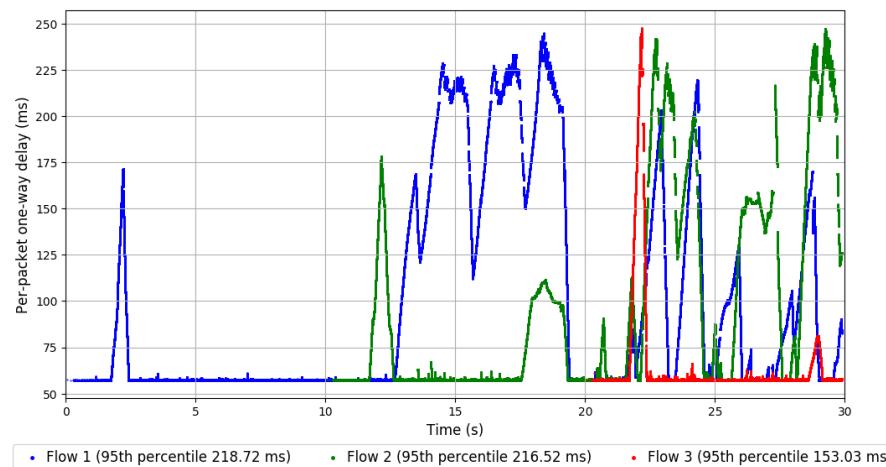
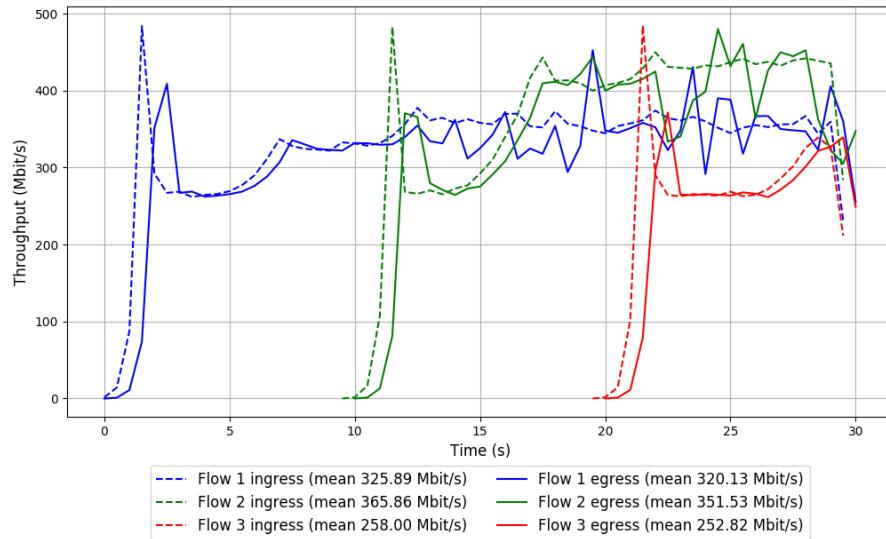


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-18 09:20:43
End at: 2019-01-18 09:21:13
Local clock offset: 0.419 ms
Remote clock offset: 0.666 ms

# Below is generated by plot.py at 2019-01-18 14:43:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 637.30 Mbit/s
95th percentile per-packet one-way delay: 217.330 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 320.13 Mbit/s
95th percentile per-packet one-way delay: 218.717 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 351.53 Mbit/s
95th percentile per-packet one-way delay: 216.516 ms
Loss rate: 3.91%
-- Flow 3:
Average throughput: 252.82 Mbit/s
95th percentile per-packet one-way delay: 153.027 ms
Loss rate: 2.02%
```

Run 1: Report of PCC-Allegro — Data Link

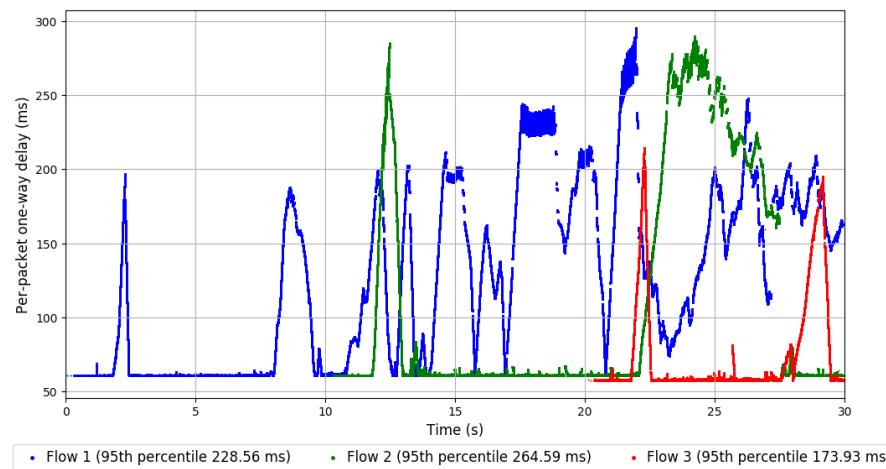
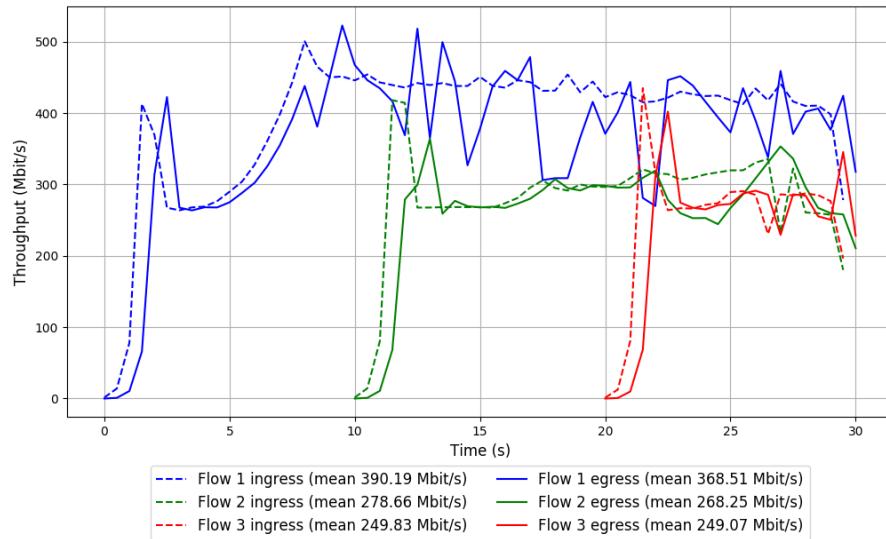


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-18 09:58:36
End at: 2019-01-18 09:59:06
Local clock offset: -0.472 ms
Remote clock offset: 0.14 ms

# Below is generated by plot.py at 2019-01-18 14:44:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 628.65 Mbit/s
95th percentile per-packet one-way delay: 236.803 ms
Loss rate: 4.39%
-- Flow 1:
Average throughput: 368.51 Mbit/s
95th percentile per-packet one-way delay: 228.557 ms
Loss rate: 5.56%
-- Flow 2:
Average throughput: 268.25 Mbit/s
95th percentile per-packet one-way delay: 264.590 ms
Loss rate: 3.74%
-- Flow 3:
Average throughput: 249.07 Mbit/s
95th percentile per-packet one-way delay: 173.929 ms
Loss rate: 0.30%
```

Run 2: Report of PCC-Allegro — Data Link

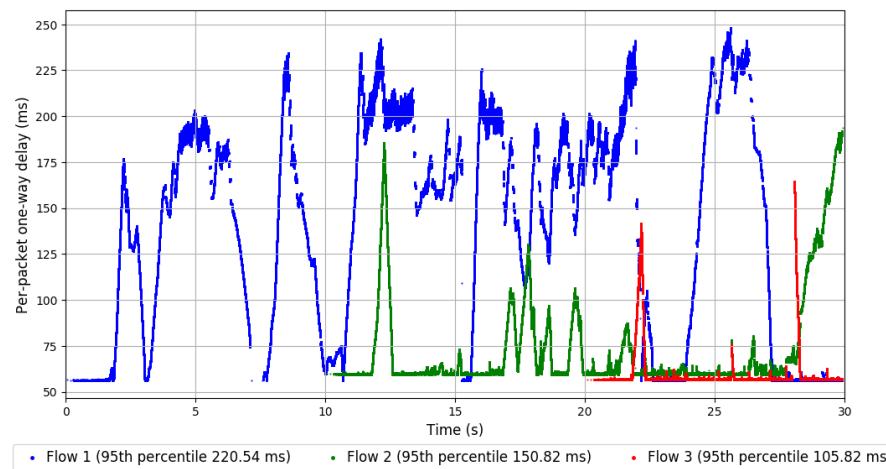
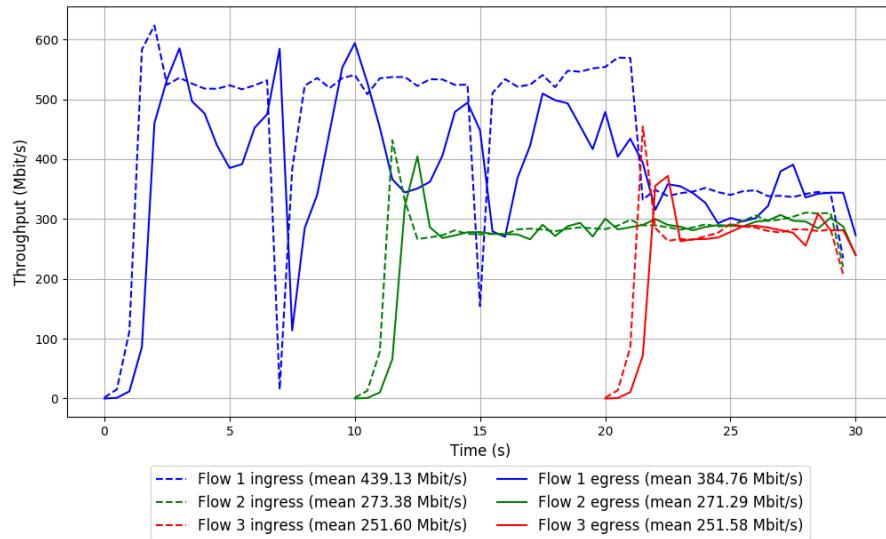


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-18 10:35:11
End at: 2019-01-18 10:35:41
Local clock offset: -0.408 ms
Remote clock offset: -1.076 ms

# Below is generated by plot.py at 2019-01-18 14:46:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 647.74 Mbit/s
95th percentile per-packet one-way delay: 208.856 ms
Loss rate: 7.93%
-- Flow 1:
Average throughput: 384.76 Mbit/s
95th percentile per-packet one-way delay: 220.536 ms
Loss rate: 12.38%
-- Flow 2:
Average throughput: 271.29 Mbit/s
95th percentile per-packet one-way delay: 150.823 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 251.58 Mbit/s
95th percentile per-packet one-way delay: 105.823 ms
Loss rate: 0.01%
```

Run 3: Report of PCC-Allegro — Data Link

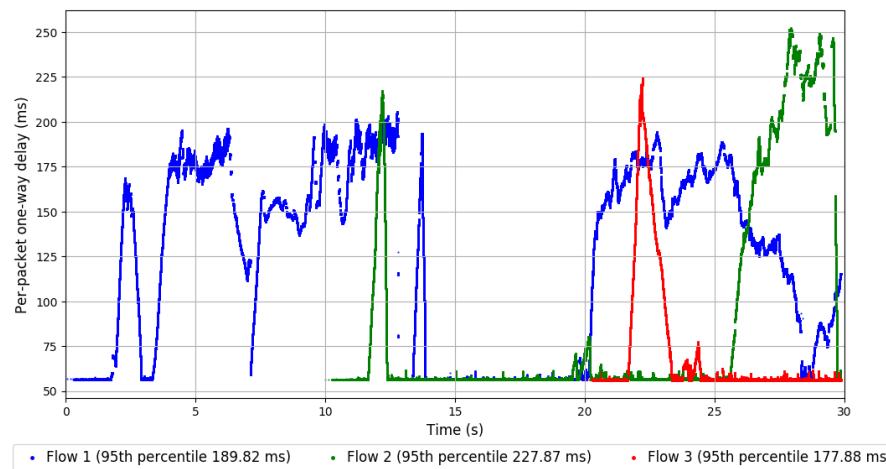
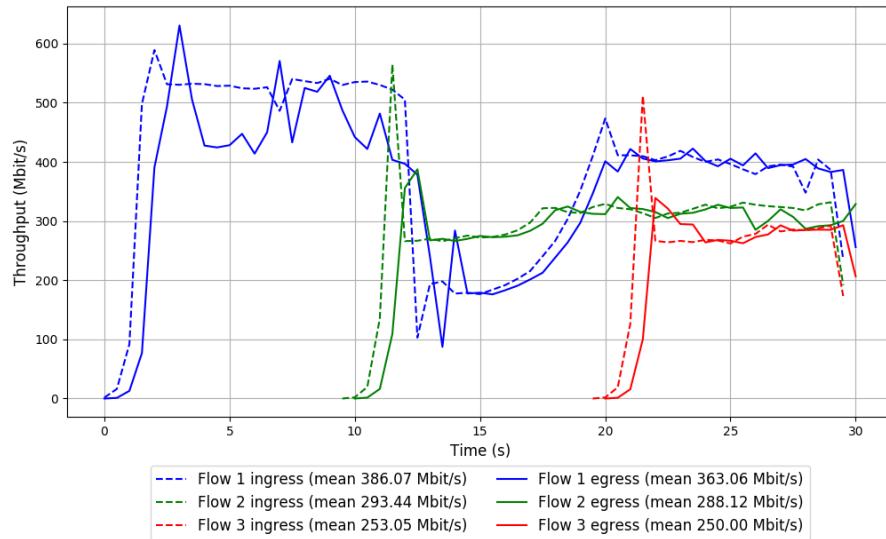


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-18 11:12:11
End at: 2019-01-18 11:12:41
Local clock offset: -0.453 ms
Remote clock offset: -1.208 ms

# Below is generated by plot.py at 2019-01-18 14:49:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 637.37 Mbit/s
95th percentile per-packet one-way delay: 195.716 ms
Loss rate: 4.14%
-- Flow 1:
Average throughput: 363.06 Mbit/s
95th percentile per-packet one-way delay: 189.824 ms
Loss rate: 5.96%
-- Flow 2:
Average throughput: 288.12 Mbit/s
95th percentile per-packet one-way delay: 227.871 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 250.00 Mbit/s
95th percentile per-packet one-way delay: 177.879 ms
Loss rate: 1.20%
```

Run 4: Report of PCC-Allegro — Data Link

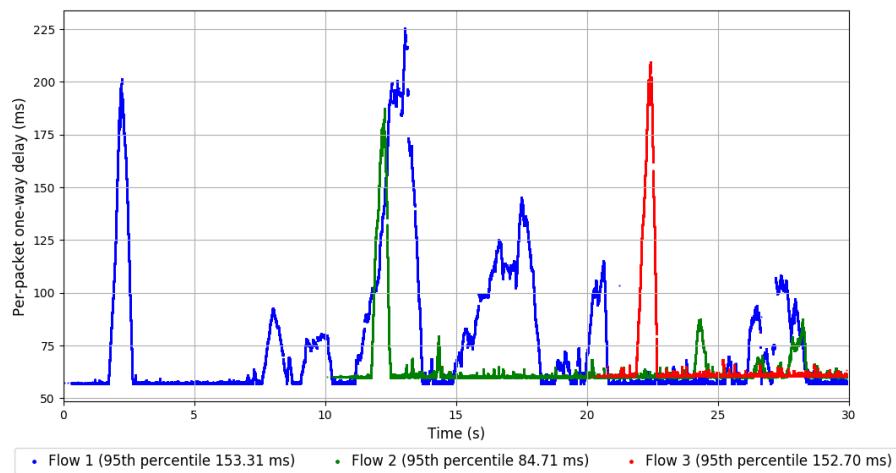
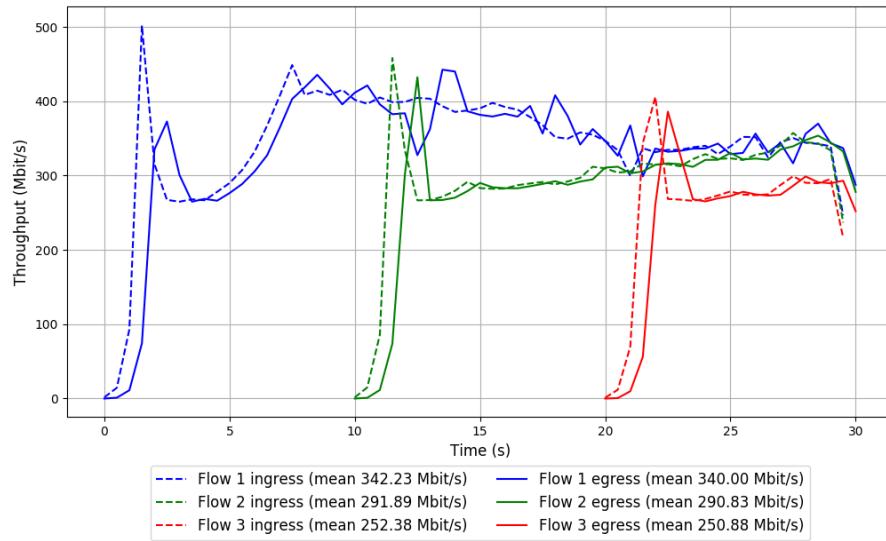


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-18 11:48:44
End at: 2019-01-18 11:49:14
Local clock offset: -0.539 ms
Remote clock offset: -0.553 ms

# Below is generated by plot.py at 2019-01-18 14:53:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 615.73 Mbit/s
95th percentile per-packet one-way delay: 139.361 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 340.00 Mbit/s
95th percentile per-packet one-way delay: 153.310 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 290.83 Mbit/s
95th percentile per-packet one-way delay: 84.712 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 250.88 Mbit/s
95th percentile per-packet one-way delay: 152.702 ms
Loss rate: 0.60%
```

Run 5: Report of PCC-Allegro — Data Link

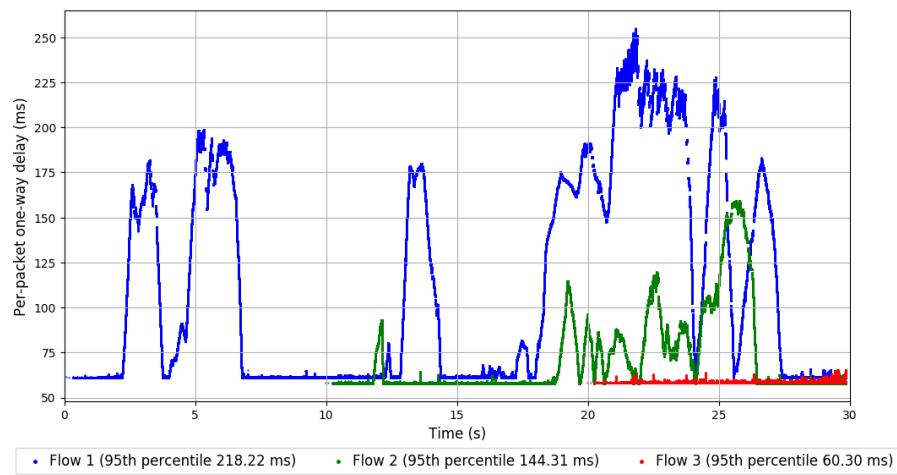
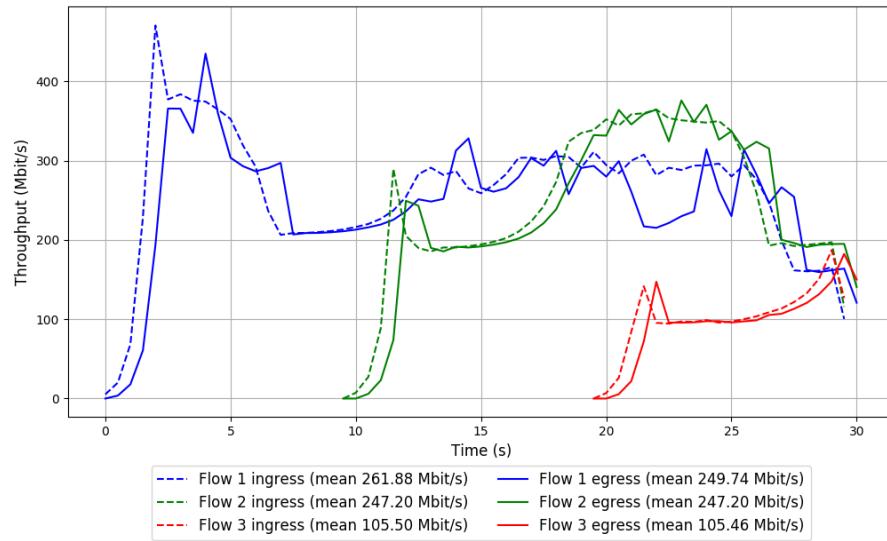


Run 1: Statistics of PCC-Expr

```
Start at: 2019-01-18 09:49:27
End at: 2019-01-18 09:49:57
Local clock offset: -0.322 ms
Remote clock offset: 0.722 ms

# Below is generated by plot.py at 2019-01-18 14:53:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 449.56 Mbit/s
95th percentile per-packet one-way delay: 204.871 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 249.74 Mbit/s
95th percentile per-packet one-way delay: 218.215 ms
Loss rate: 4.64%
-- Flow 2:
Average throughput: 247.20 Mbit/s
95th percentile per-packet one-way delay: 144.307 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 105.46 Mbit/s
95th percentile per-packet one-way delay: 60.301 ms
Loss rate: 0.02%
```

Run 1: Report of PCC-Expr — Data Link

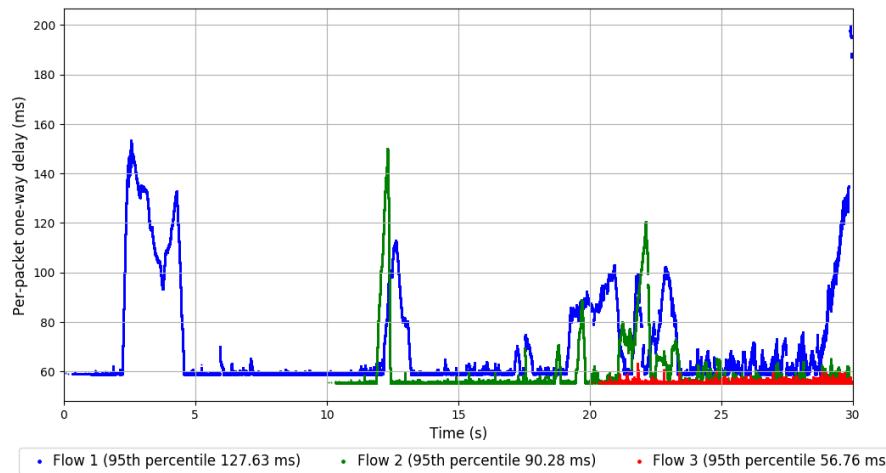
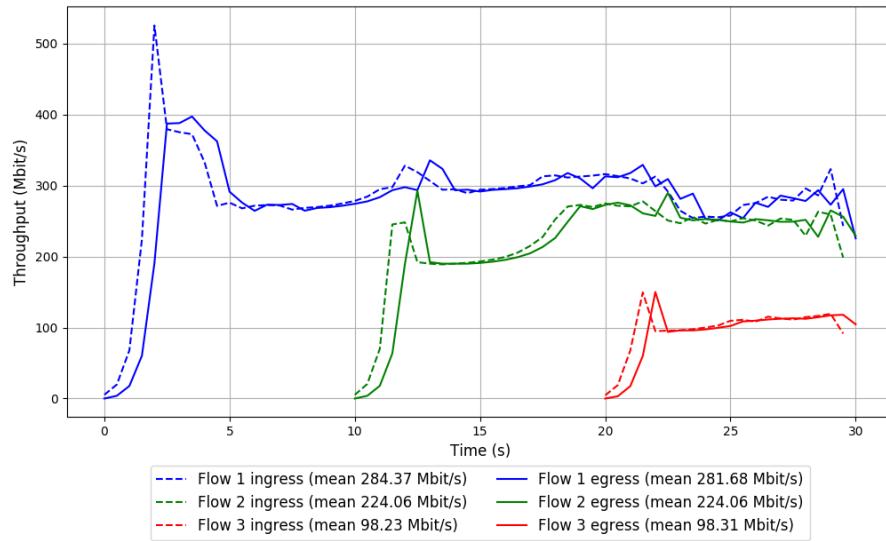


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-18 10:26:21
End at: 2019-01-18 10:26:51
Local clock offset: 0.293 ms
Remote clock offset: -1.333 ms

# Below is generated by plot.py at 2019-01-18 14:53:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 463.11 Mbit/s
95th percentile per-packet one-way delay: 115.699 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 281.68 Mbit/s
95th percentile per-packet one-way delay: 127.627 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 224.06 Mbit/s
95th percentile per-packet one-way delay: 90.284 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.31 Mbit/s
95th percentile per-packet one-way delay: 56.759 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Expr — Data Link

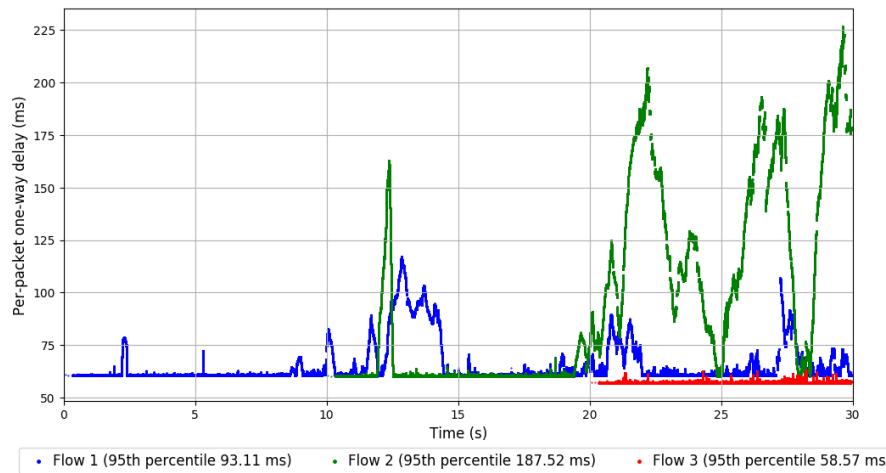
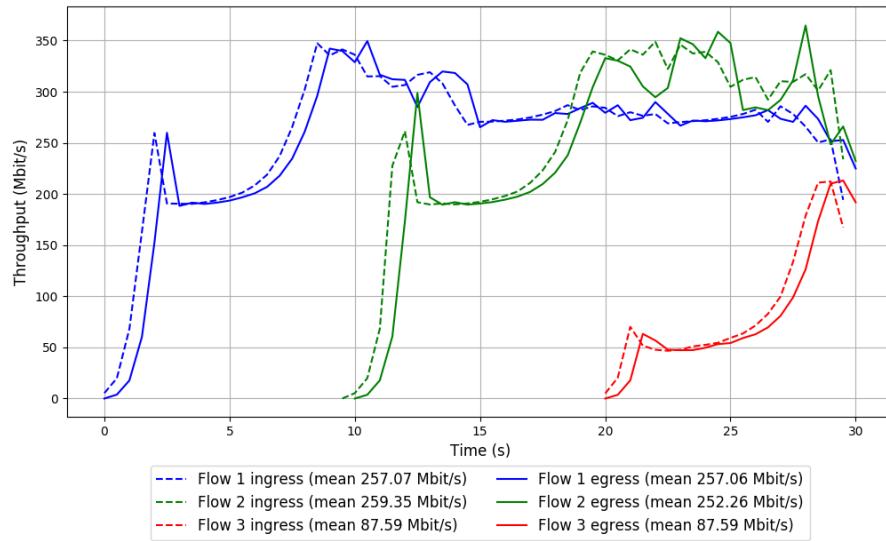


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-18 11:03:21
End at: 2019-01-18 11:03:51
Local clock offset: 0.382 ms
Remote clock offset: 0.596 ms

# Below is generated by plot.py at 2019-01-18 14:53:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 453.79 Mbit/s
95th percentile per-packet one-way delay: 169.684 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 257.06 Mbit/s
95th percentile per-packet one-way delay: 93.107 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 252.26 Mbit/s
95th percentile per-packet one-way delay: 187.517 ms
Loss rate: 2.74%
-- Flow 3:
Average throughput: 87.59 Mbit/s
95th percentile per-packet one-way delay: 58.570 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Expr — Data Link

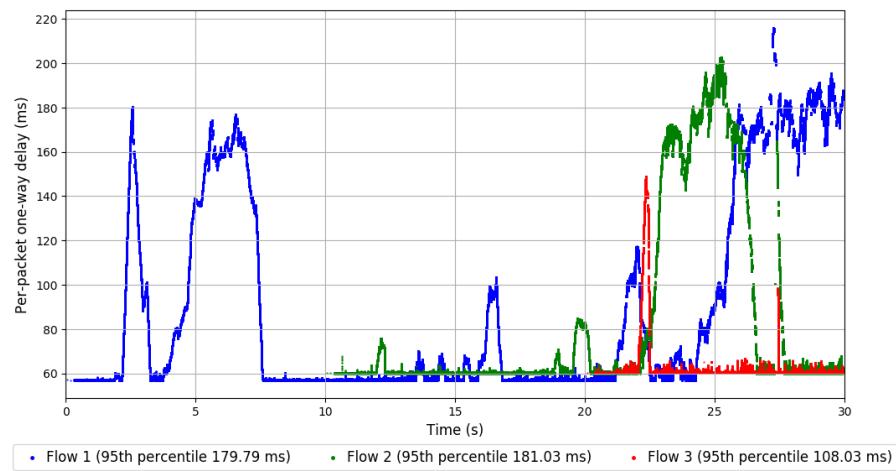
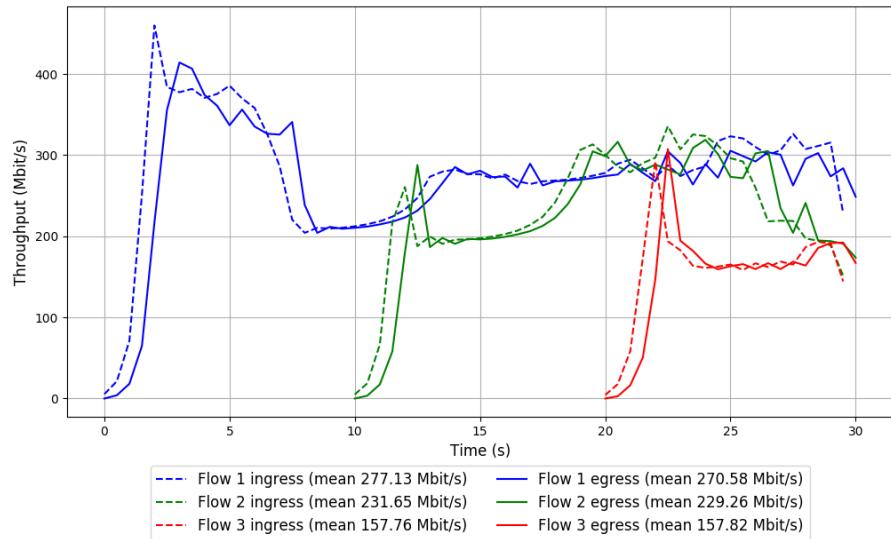


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-18 11:39:25
End at: 2019-01-18 11:39:55
Local clock offset: -0.248 ms
Remote clock offset: -0.46 ms

# Below is generated by plot.py at 2019-01-18 15:00:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 475.00 Mbit/s
95th percentile per-packet one-way delay: 178.659 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 270.58 Mbit/s
95th percentile per-packet one-way delay: 179.792 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 229.26 Mbit/s
95th percentile per-packet one-way delay: 181.027 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 157.82 Mbit/s
95th percentile per-packet one-way delay: 108.030 ms
Loss rate: 0.04%
```

Run 4: Report of PCC-Expr — Data Link

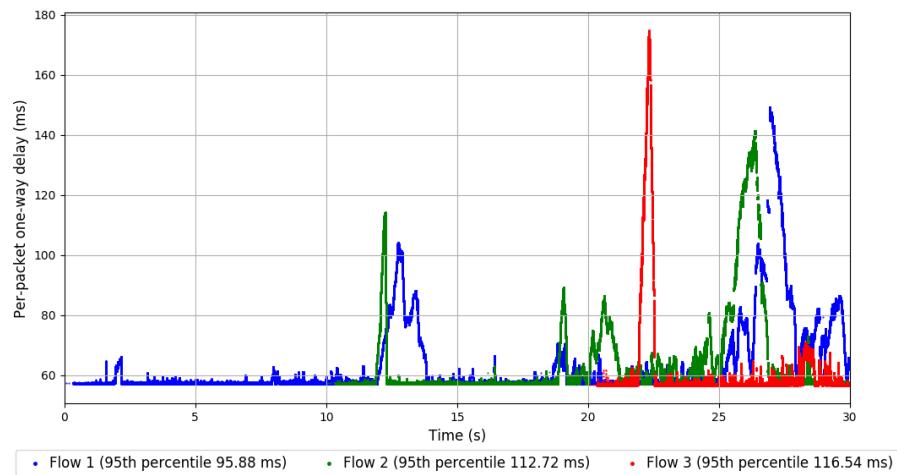
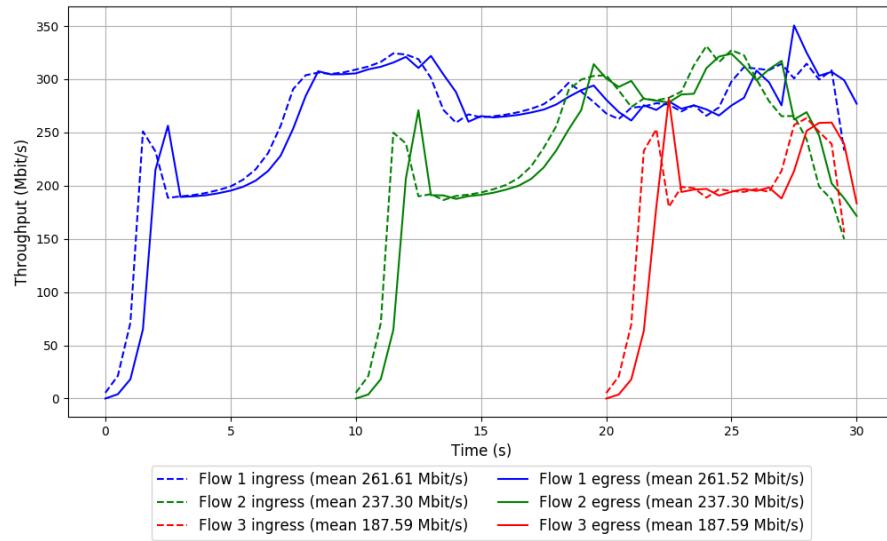


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-18 12:16:57
End at: 2019-01-18 12:17:27
Local clock offset: 0.104 ms
Remote clock offset: 0.11 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 481.34 Mbit/s
95th percentile per-packet one-way delay: 100.779 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 261.52 Mbit/s
95th percentile per-packet one-way delay: 95.884 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 237.30 Mbit/s
95th percentile per-packet one-way delay: 112.715 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 187.59 Mbit/s
95th percentile per-packet one-way delay: 116.539 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Expr — Data Link

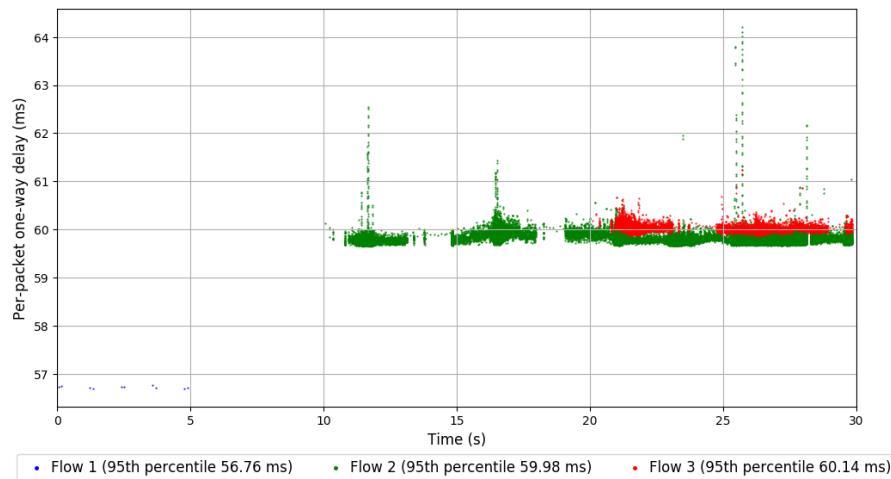
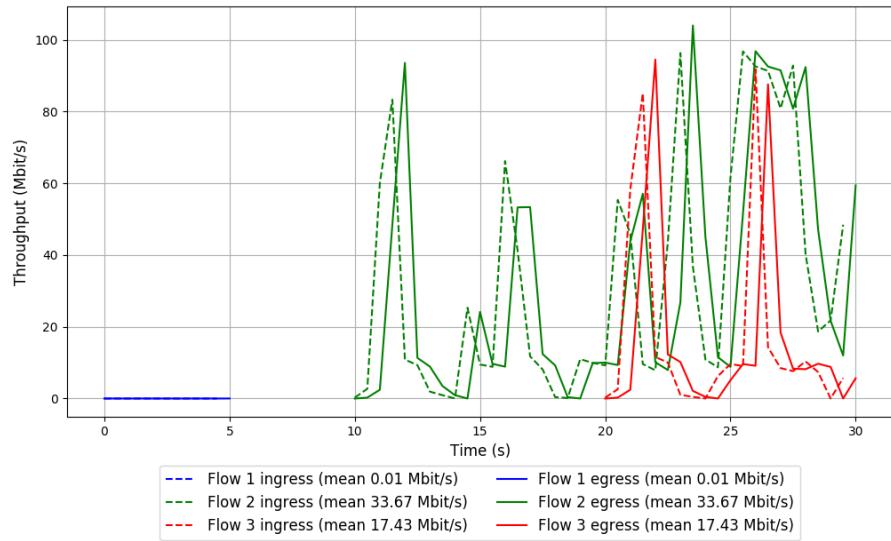


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-01-18 09:43:26
End at: 2019-01-18 09:43:56
Local clock offset: 0.307 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.06 Mbit/s
95th percentile per-packet one-way delay: 60.064 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 56.758 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 59.978 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 17.43 Mbit/s
95th percentile per-packet one-way delay: 60.144 ms
Loss rate: 0.02%
```

Run 1: Report of QUIC Cubic — Data Link

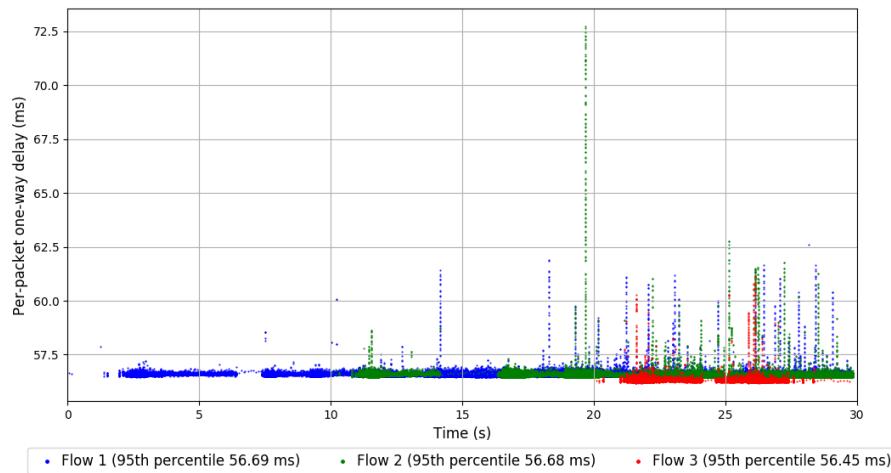
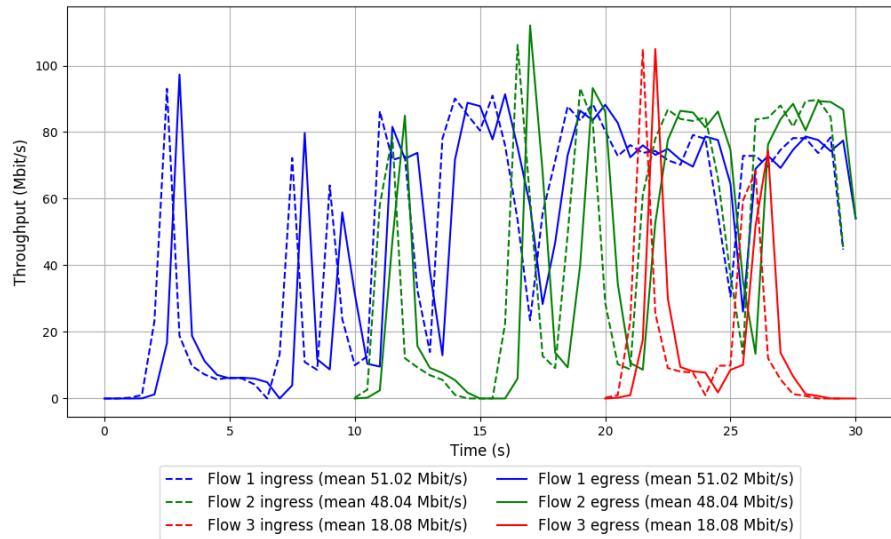


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-18 10:20:19
End at: 2019-01-18 10:20:49
Local clock offset: 0.098 ms
Remote clock offset: -0.532 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.78 Mbit/s
95th percentile per-packet one-way delay: 56.683 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.02 Mbit/s
95th percentile per-packet one-way delay: 56.690 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.04 Mbit/s
95th percentile per-packet one-way delay: 56.676 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.08 Mbit/s
95th percentile per-packet one-way delay: 56.446 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

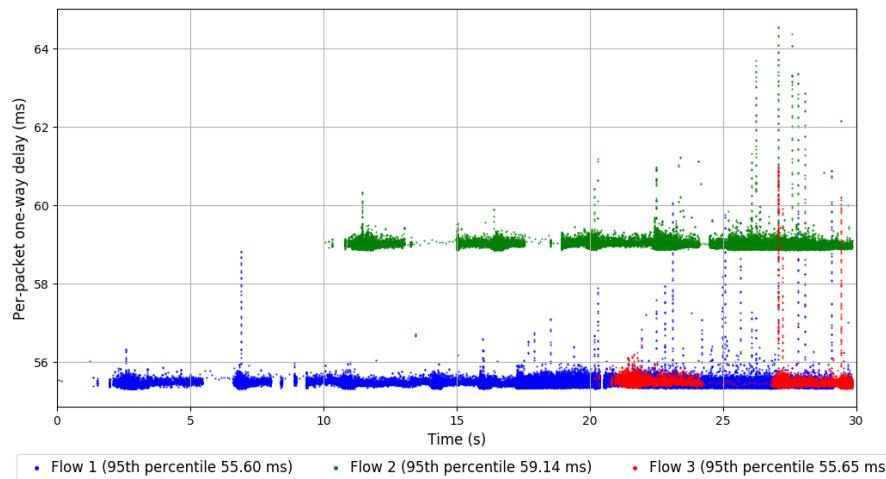
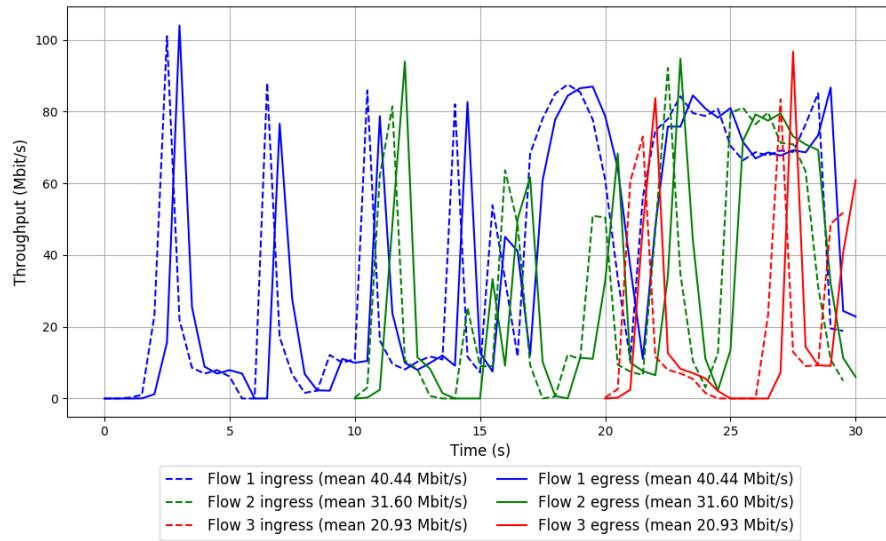


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-18 10:57:22
End at: 2019-01-18 10:57:52
Local clock offset: 0.363 ms
Remote clock offset: -1.317 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.27 Mbit/s
95th percentile per-packet one-way delay: 59.061 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.44 Mbit/s
95th percentile per-packet one-way delay: 55.601 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.60 Mbit/s
95th percentile per-packet one-way delay: 59.144 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.93 Mbit/s
95th percentile per-packet one-way delay: 55.645 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

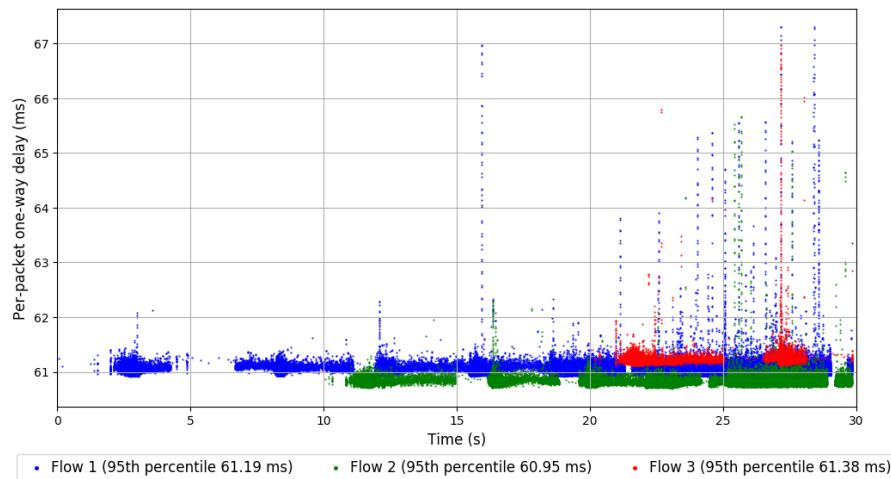
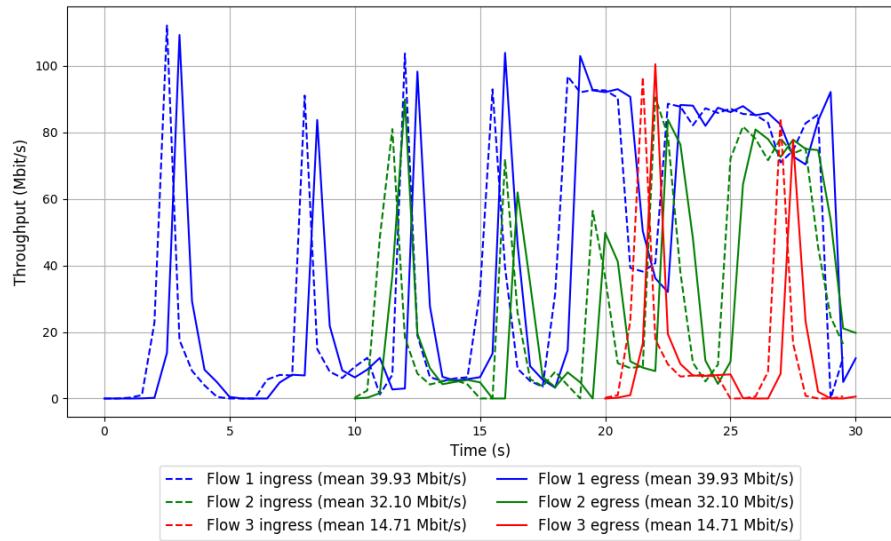


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-18 11:33:34
End at: 2019-01-18 11:34:04
Local clock offset: -0.075 ms
Remote clock offset: 0.715 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.06 Mbit/s
95th percentile per-packet one-way delay: 61.229 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 61.188 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 32.10 Mbit/s
95th percentile per-packet one-way delay: 60.951 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.71 Mbit/s
95th percentile per-packet one-way delay: 61.379 ms
Loss rate: 0.02%
```

Run 4: Report of QUIC Cubic — Data Link

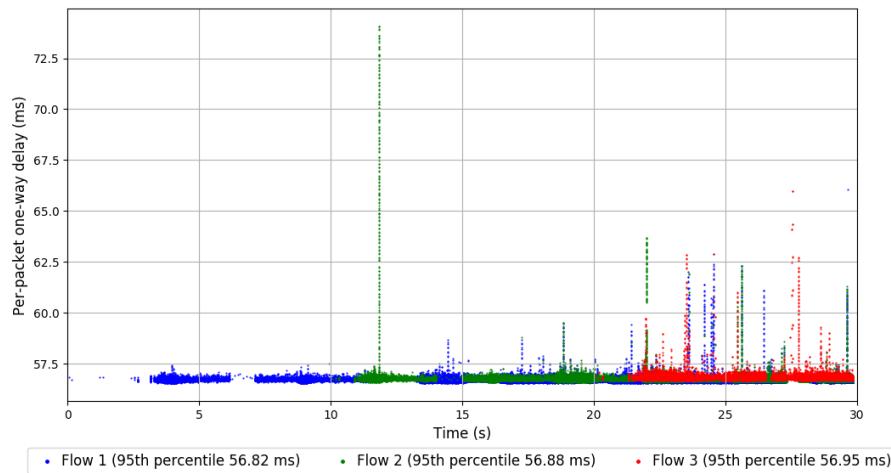
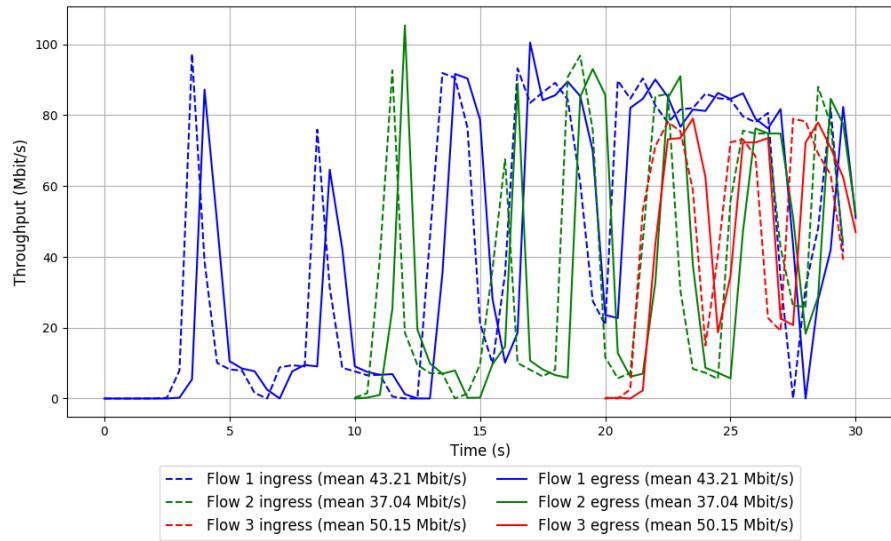


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-18 12:10:55
End at: 2019-01-18 12:11:25
Local clock offset: -0.423 ms
Remote clock offset: -0.655 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.25 Mbit/s
95th percentile per-packet one-way delay: 56.876 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.21 Mbit/s
95th percentile per-packet one-way delay: 56.822 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.04 Mbit/s
95th percentile per-packet one-way delay: 56.877 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.15 Mbit/s
95th percentile per-packet one-way delay: 56.945 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

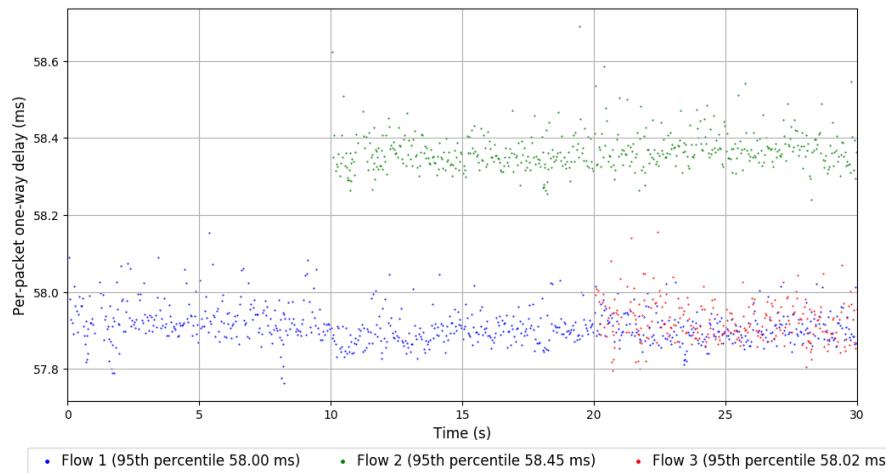
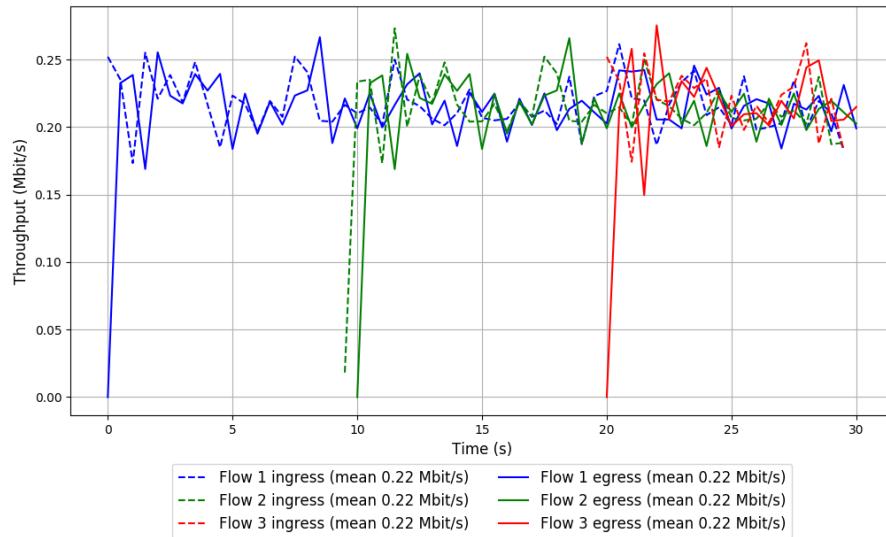


Run 1: Statistics of SCReAM

```
Start at: 2019-01-18 09:48:15
End at: 2019-01-18 09:48:45
Local clock offset: -0.174 ms
Remote clock offset: 0.707 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 58.407 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.001 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.449 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 58.015 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

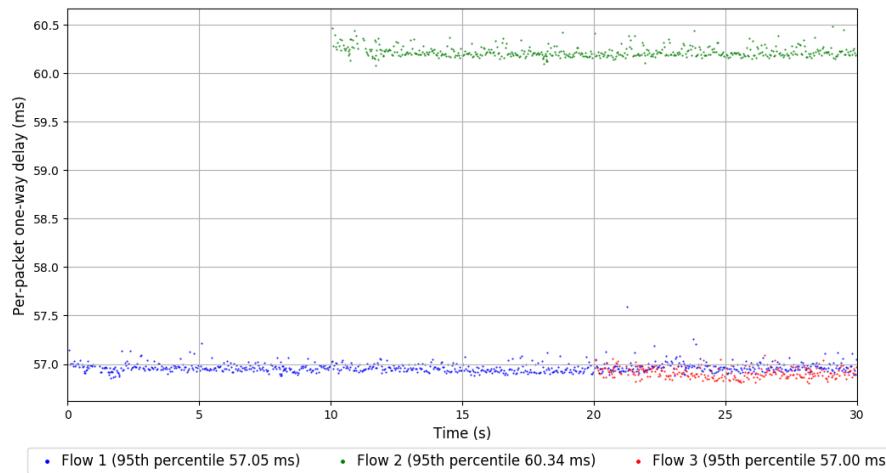
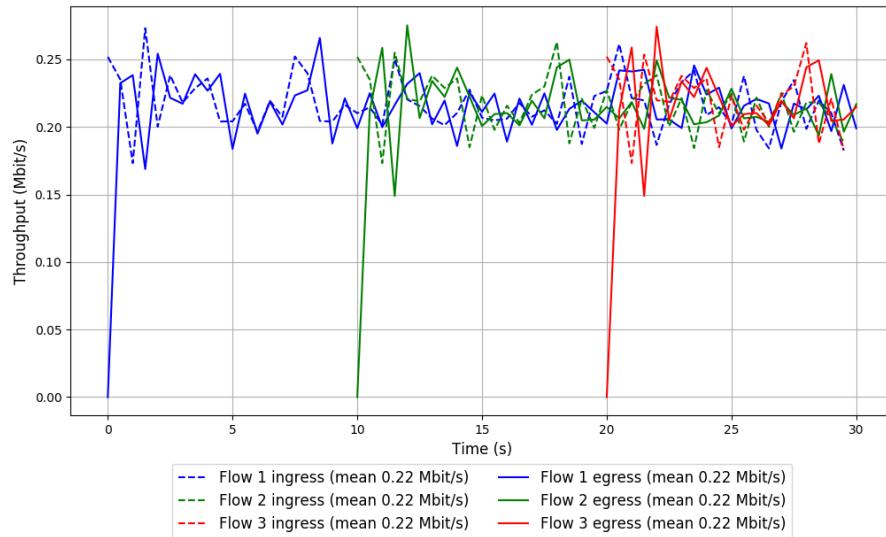


Run 2: Statistics of SCReAM

```
Start at: 2019-01-18 10:25:09
End at: 2019-01-18 10:25:39
Local clock offset: -0.285 ms
Remote clock offset: -0.658 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 60.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.342 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.999 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

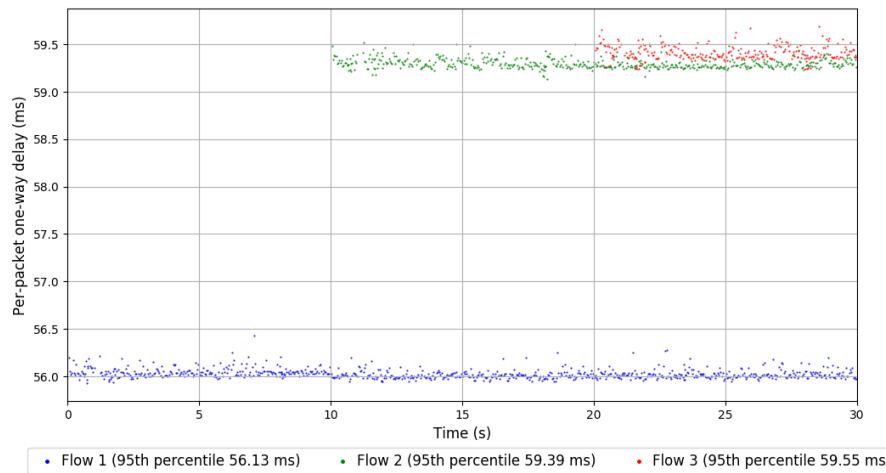
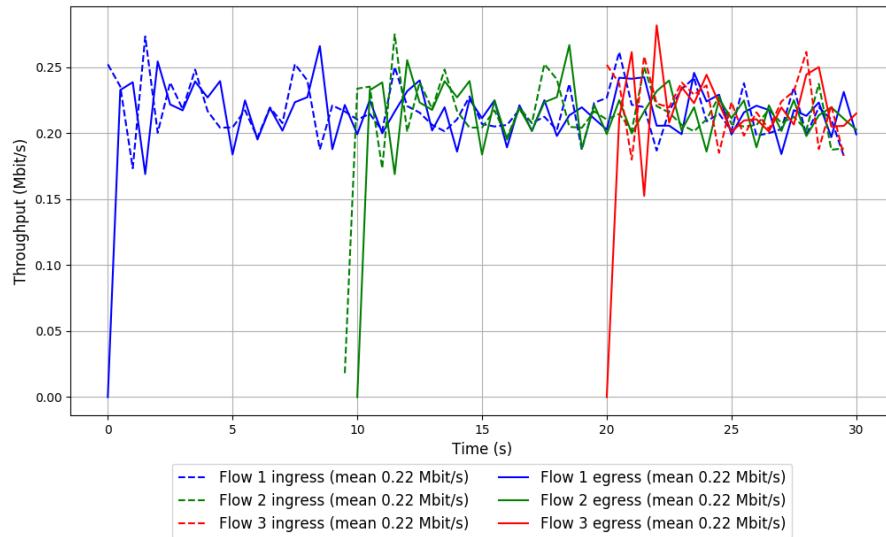


Run 3: Statistics of SCReAM

```
Start at: 2019-01-18 11:02:09
End at: 2019-01-18 11:02:39
Local clock offset: 0.117 ms
Remote clock offset: -1.171 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 59.458 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.130 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.394 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.549 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

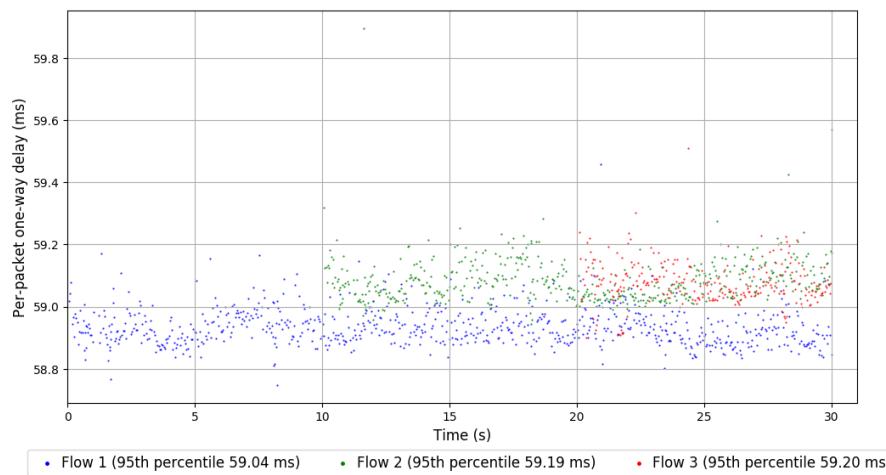
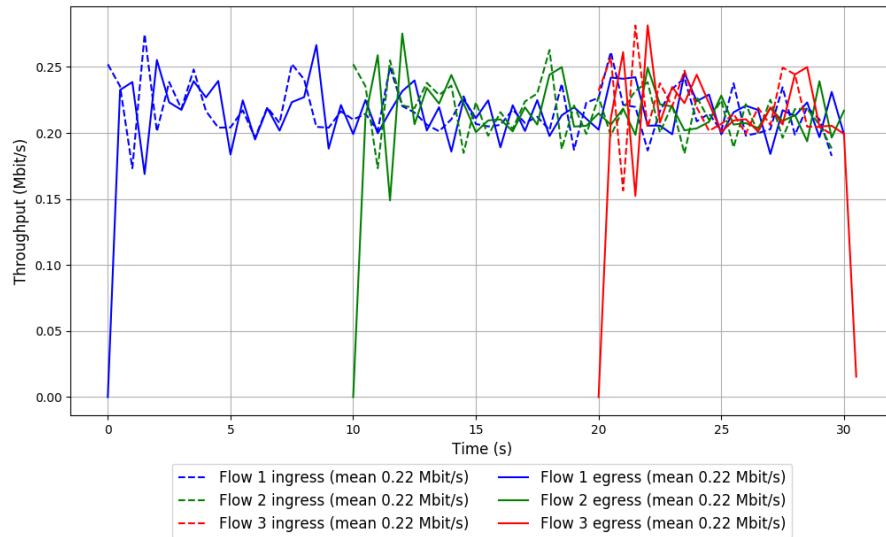


Run 4: Statistics of SCReAM

```
Start at: 2019-01-18 11:38:13
End at: 2019-01-18 11:38:43
Local clock offset: 0.077 ms
Remote clock offset: -1.336 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 59.163 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.036 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.193 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.201 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

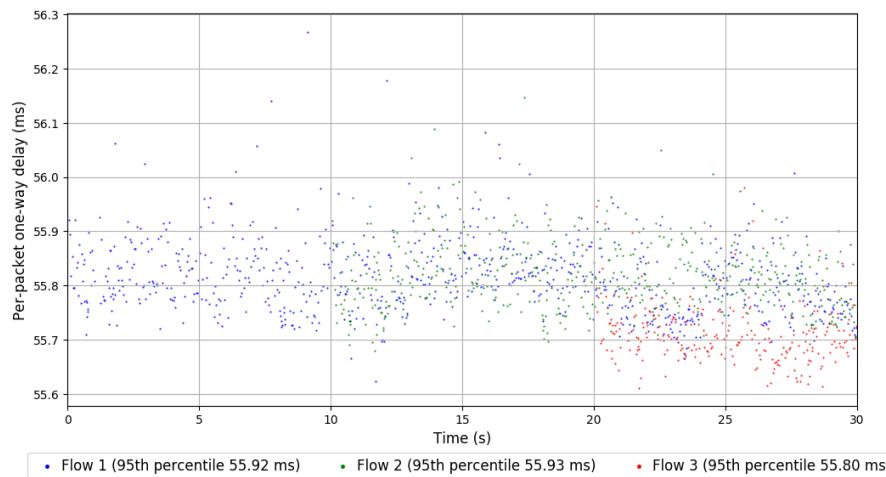
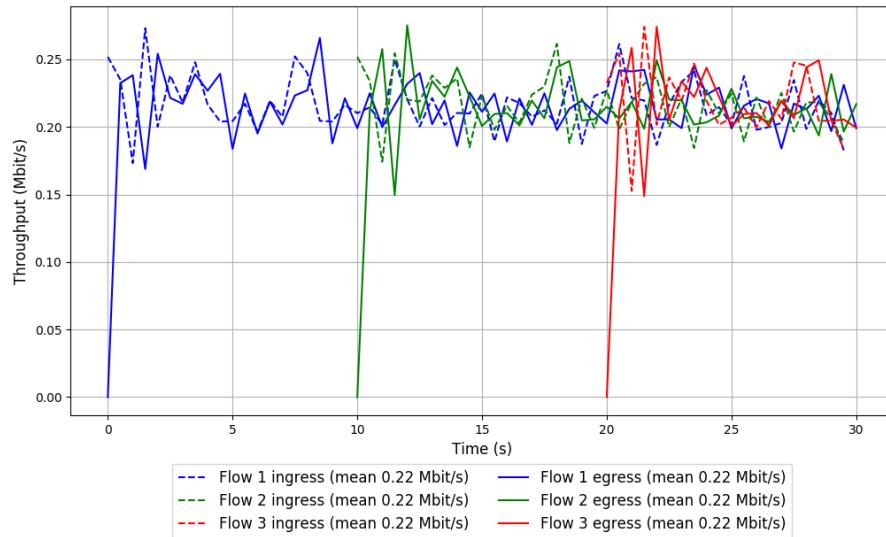


Run 5: Statistics of SCReAM

```
Start at: 2019-01-18 12:15:45
End at: 2019-01-18 12:16:15
Local clock offset: 0.226 ms
Remote clock offset: -1.005 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 55.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 55.921 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 55.931 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 55.805 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

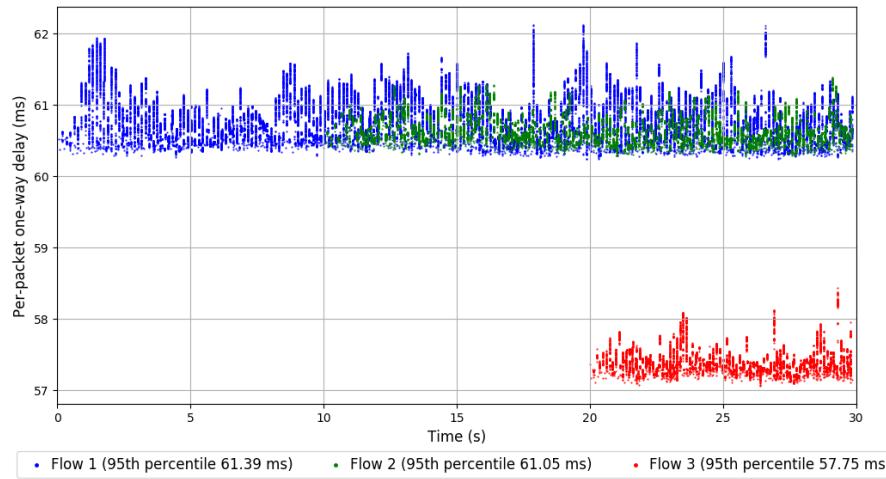
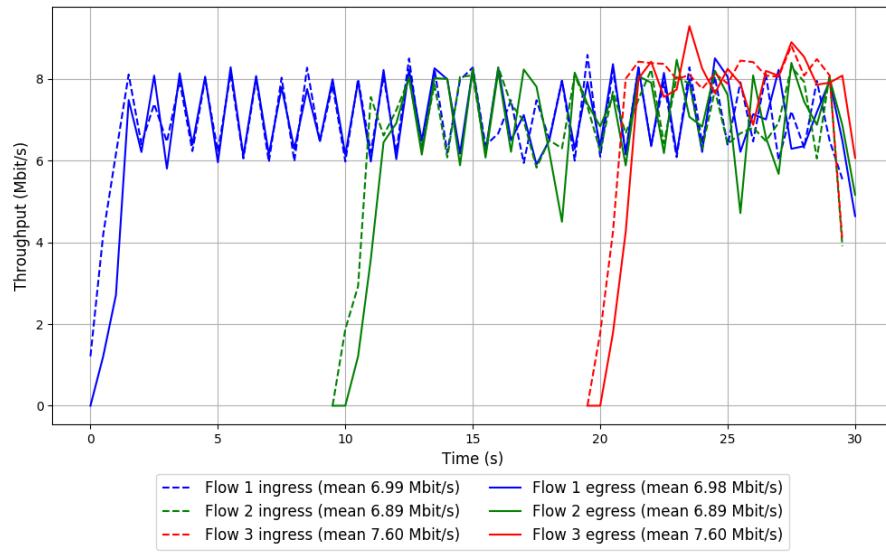


Run 1: Statistics of Sprout

```
Start at: 2019-01-18 09:55:24
End at: 2019-01-18 09:55:54
Local clock offset: 0.142 ms
Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.08 Mbit/s
95th percentile per-packet one-way delay: 61.245 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 61.394 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 61.046 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 57.751 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

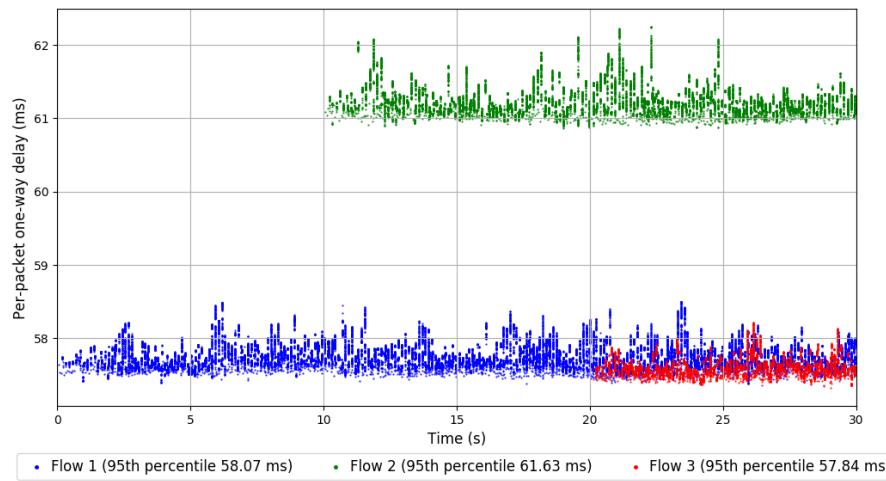
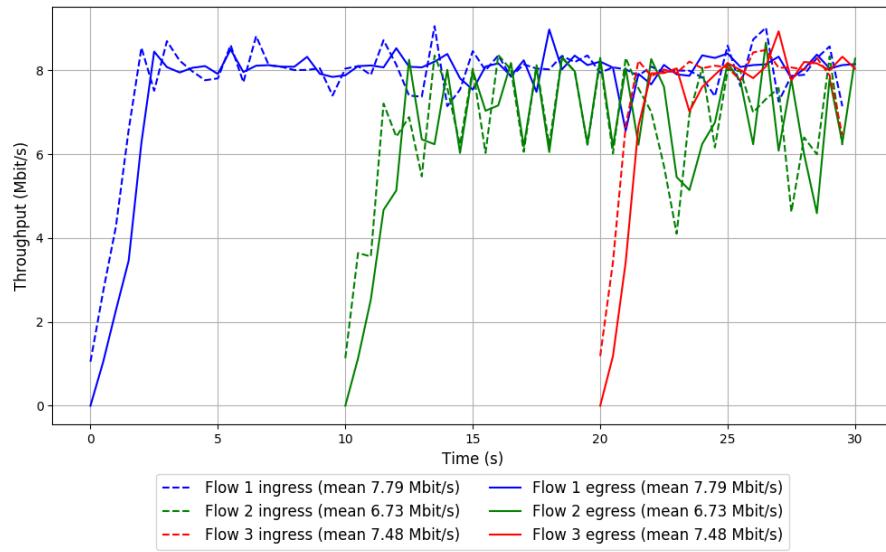


Run 2: Statistics of Sprout

```
Start at: 2019-01-18 10:32:01
End at: 2019-01-18 10:32:31
Local clock offset: -0.434 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.72 Mbit/s
95th percentile per-packet one-way delay: 61.409 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 58.069 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 61.632 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 57.838 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

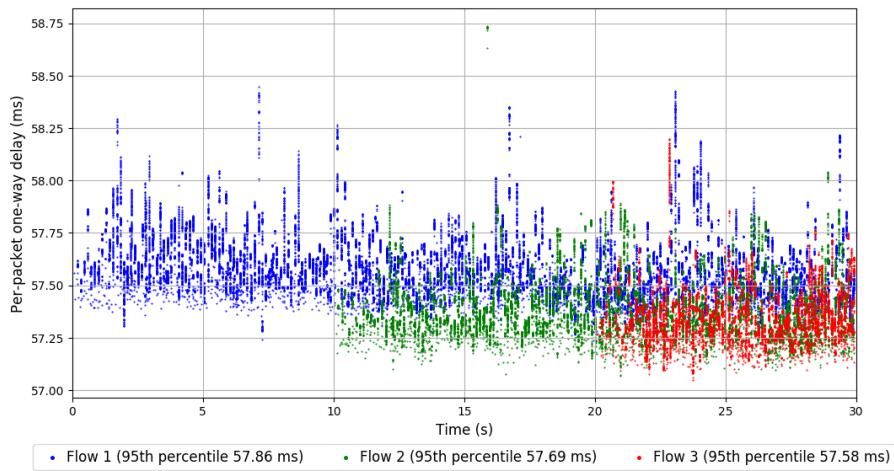
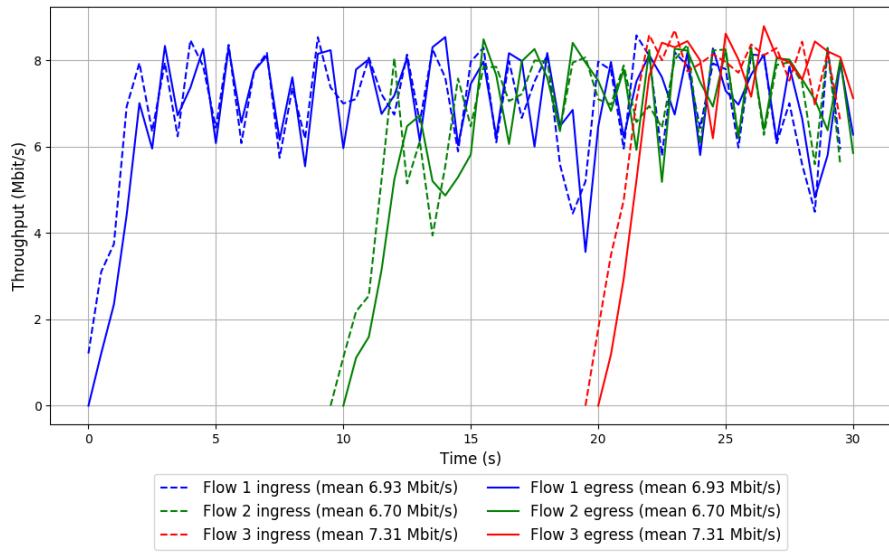


Run 3: Statistics of Sprout

```
Start at: 2019-01-18 11:08:59
End at: 2019-01-18 11:09:29
Local clock offset: -0.07 ms
Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.81 Mbit/s
95th percentile per-packet one-way delay: 57.795 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 57.857 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 57.688 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 57.580 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

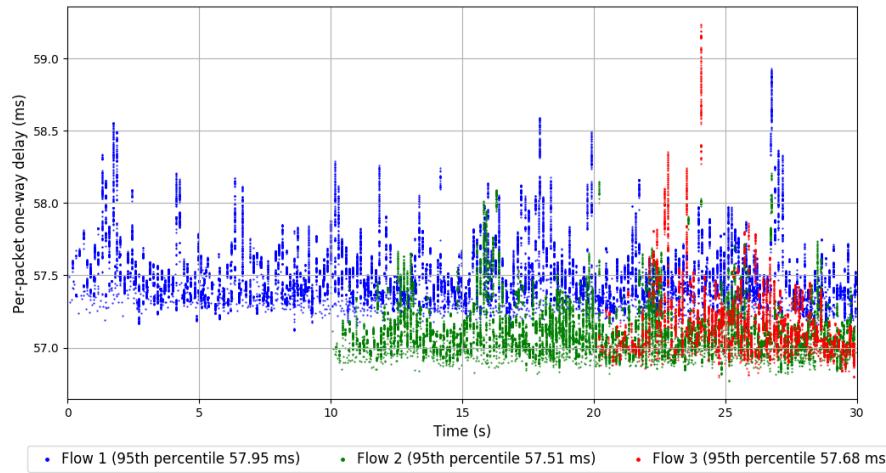
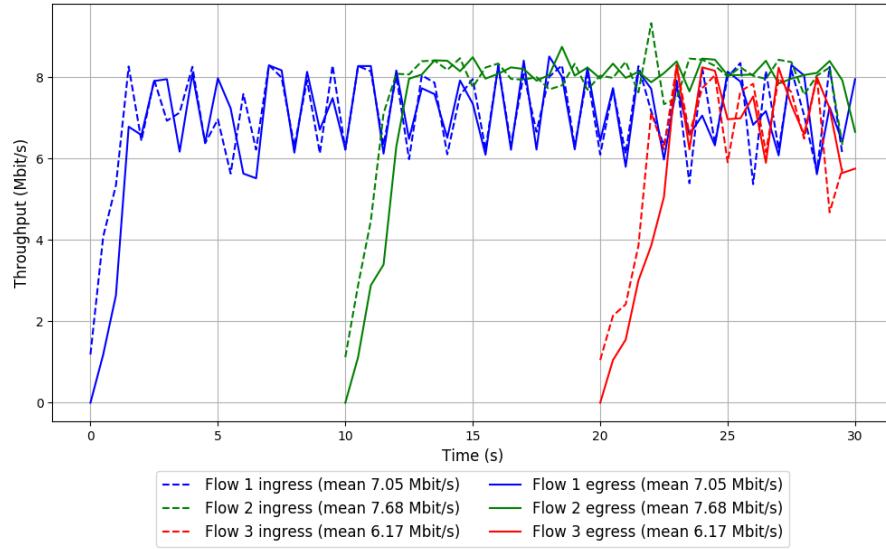


Run 4: Statistics of Sprout

```
Start at: 2019-01-18 11:45:23
End at: 2019-01-18 11:45:53
Local clock offset: -0.445 ms
Remote clock offset: -0.571 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.19 Mbit/s
95th percentile per-packet one-way delay: 57.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.05 Mbit/s
95th percentile per-packet one-way delay: 57.949 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 57.509 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 57.682 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

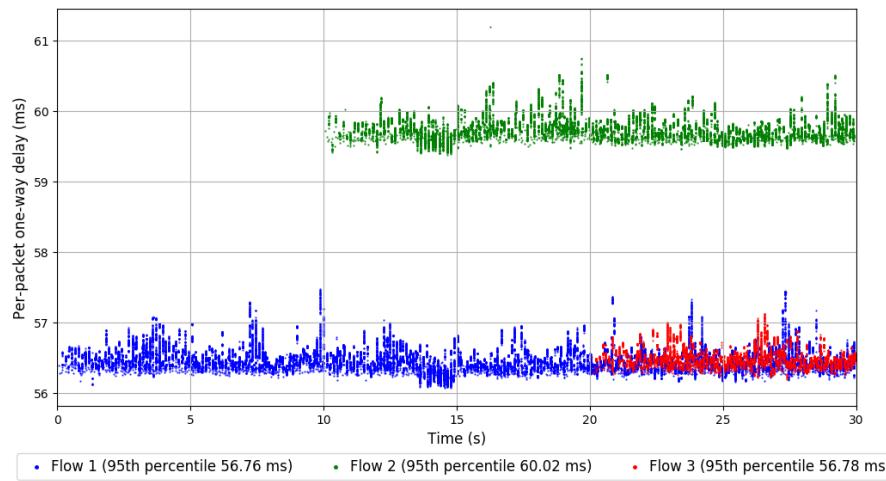
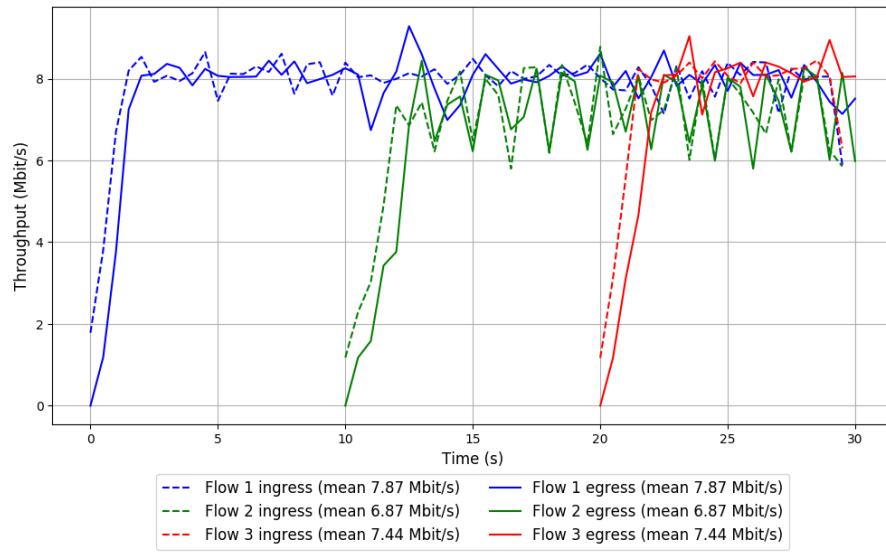


Run 5: Statistics of Sprout

```
Start at: 2019-01-18 12:23:06
End at: 2019-01-18 12:23:36
Local clock offset: 0.234 ms
Remote clock offset: -0.447 ms

# Below is generated by plot.py at 2019-01-18 15:01:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.88 Mbit/s
95th percentile per-packet one-way delay: 59.872 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 56.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.87 Mbit/s
95th percentile per-packet one-way delay: 60.023 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 56.777 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

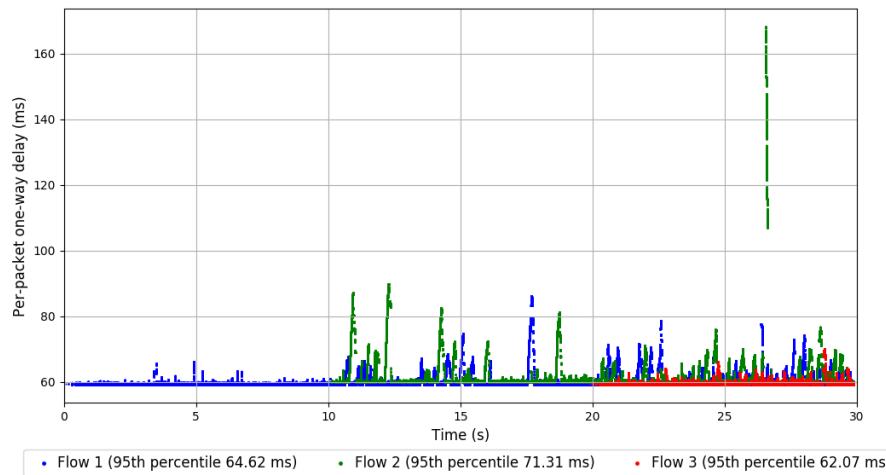
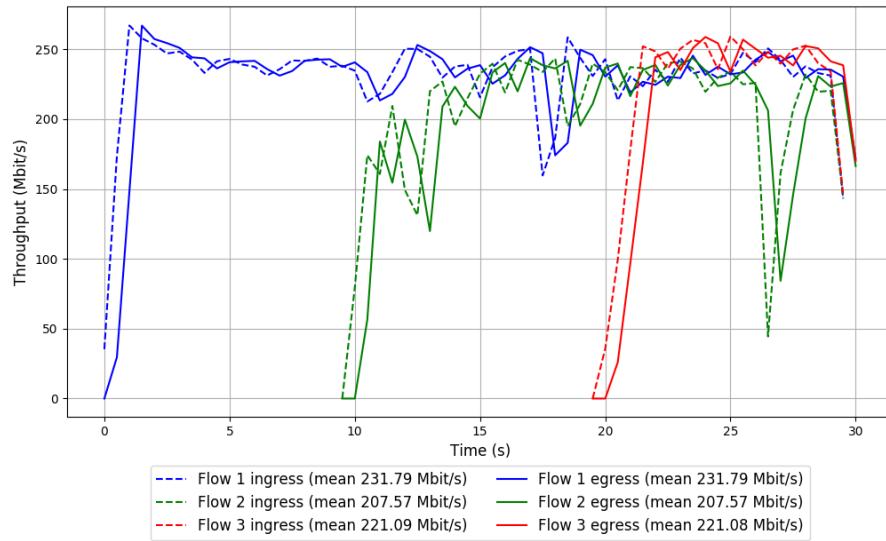


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-18 09:32:06
End at: 2019-01-18 09:32:36
Local clock offset: -0.512 ms
Remote clock offset: -1.196 ms

# Below is generated by plot.py at 2019-01-18 15:08:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 444.73 Mbit/s
95th percentile per-packet one-way delay: 66.595 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 231.79 Mbit/s
95th percentile per-packet one-way delay: 64.623 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 207.57 Mbit/s
95th percentile per-packet one-way delay: 71.305 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 221.08 Mbit/s
95th percentile per-packet one-way delay: 62.067 ms
Loss rate: 0.01%
```

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

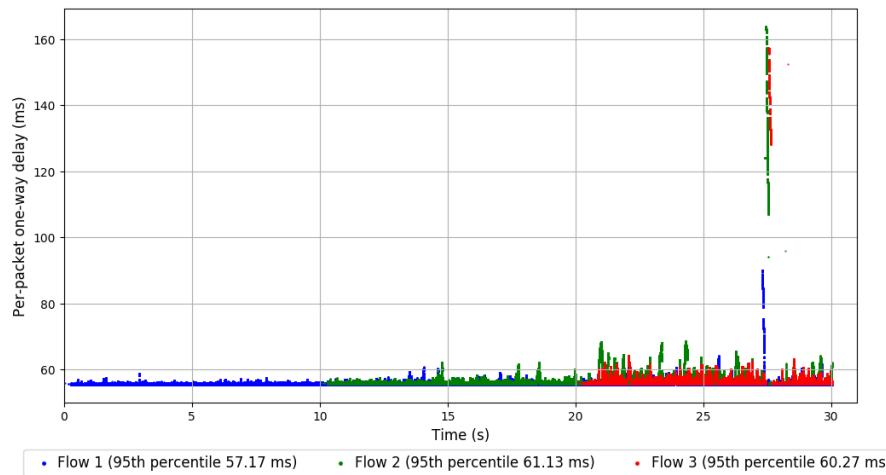
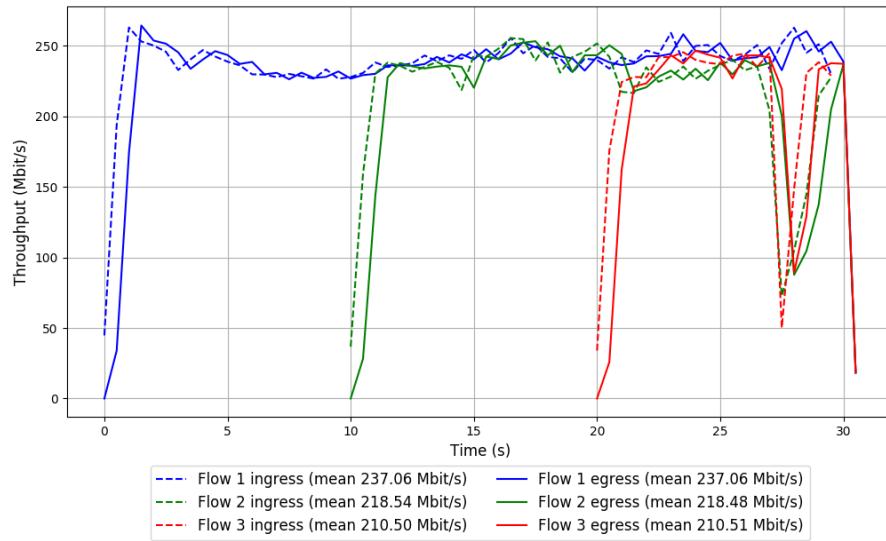


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-18 10:09:25
End at: 2019-01-18 10:09:55
Local clock offset: 0.137 ms
Remote clock offset: -1.268 ms

# Below is generated by plot.py at 2019-01-18 15:09:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.57 Mbit/s
95th percentile per-packet one-way delay: 59.229 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 237.06 Mbit/s
95th percentile per-packet one-way delay: 57.175 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 218.48 Mbit/s
95th percentile per-packet one-way delay: 61.128 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 210.51 Mbit/s
95th percentile per-packet one-way delay: 60.275 ms
Loss rate: 0.00%
```

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

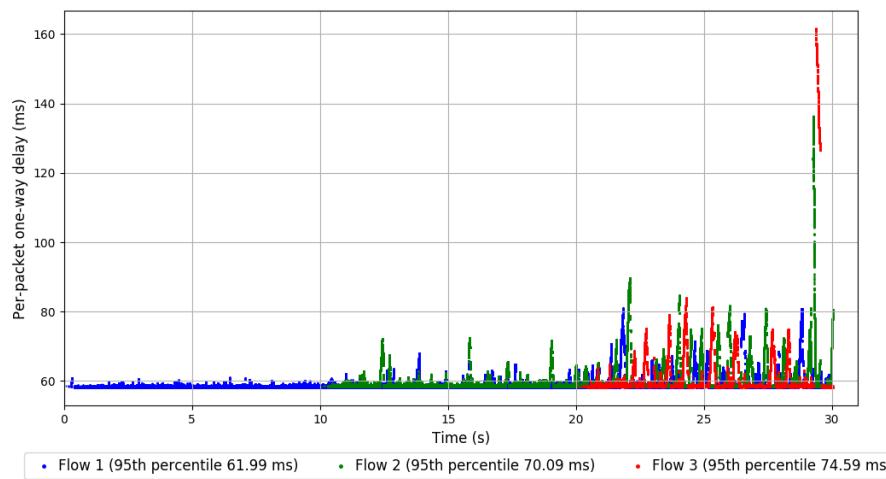
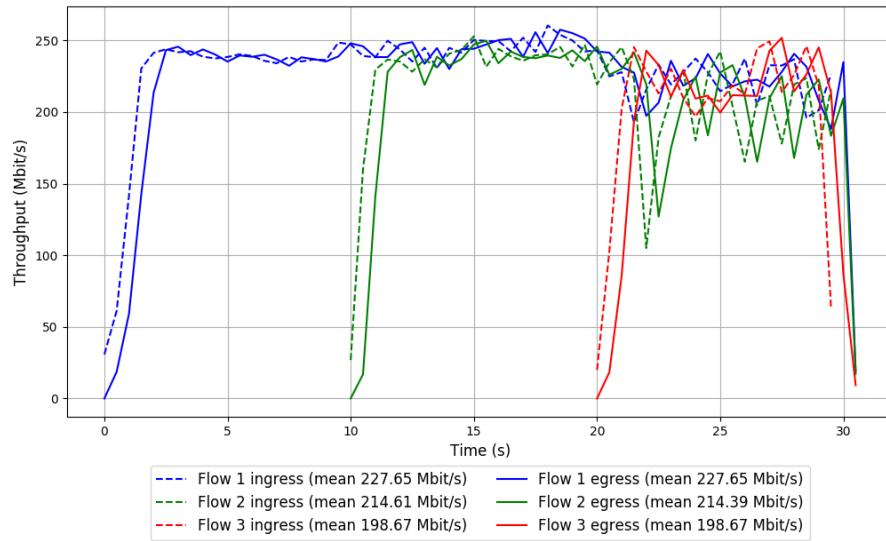


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-18 10:46:20
End at: 2019-01-18 10:46:50
Local clock offset: -0.318 ms
Remote clock offset: 0.797 ms

# Below is generated by plot.py at 2019-01-18 15:09:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 436.46 Mbit/s
95th percentile per-packet one-way delay: 67.613 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 227.65 Mbit/s
95th percentile per-packet one-way delay: 61.990 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 214.39 Mbit/s
95th percentile per-packet one-way delay: 70.091 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 198.67 Mbit/s
95th percentile per-packet one-way delay: 74.587 ms
Loss rate: 0.00%
```

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

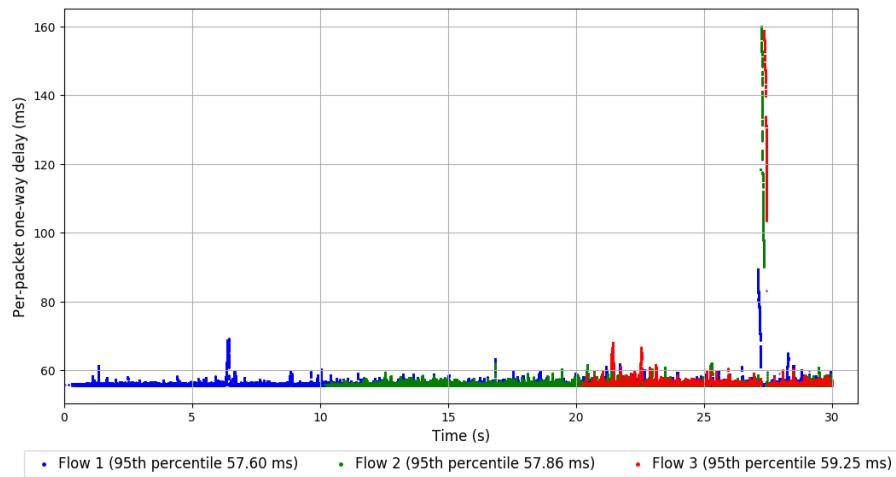
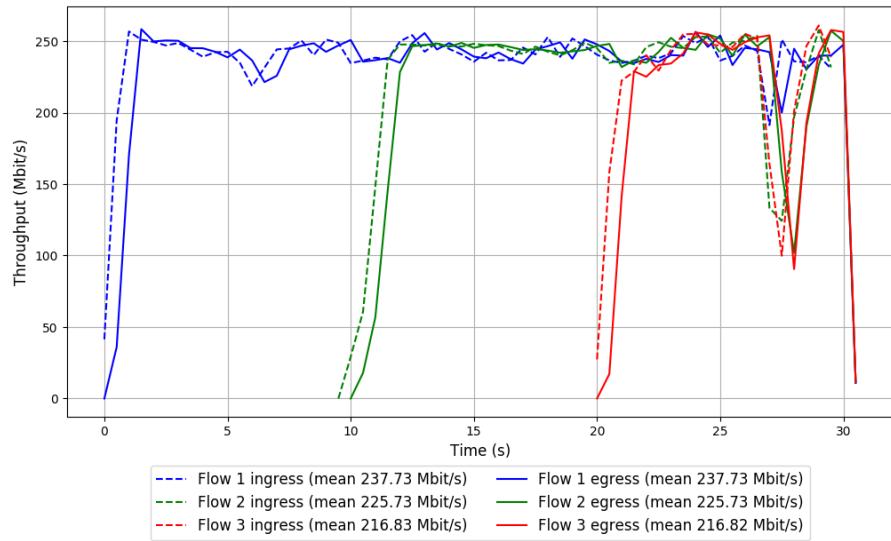


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-18 11:22:45
End at: 2019-01-18 11:23:15
Local clock offset: -0.069 ms
Remote clock offset: -1.387 ms

# Below is generated by plot.py at 2019-01-18 15:09:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.20 Mbit/s
95th percentile per-packet one-way delay: 57.900 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 237.73 Mbit/s
95th percentile per-packet one-way delay: 57.597 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 225.73 Mbit/s
95th percentile per-packet one-way delay: 57.858 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 216.82 Mbit/s
95th percentile per-packet one-way delay: 59.247 ms
Loss rate: 0.00%
```

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

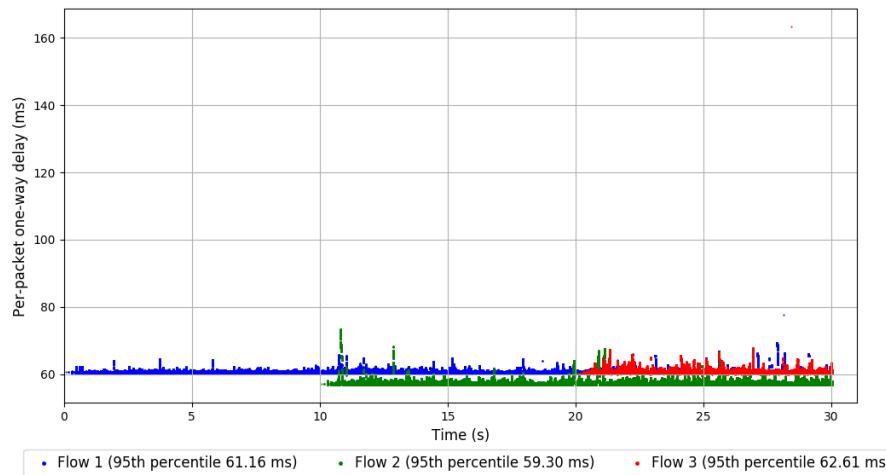
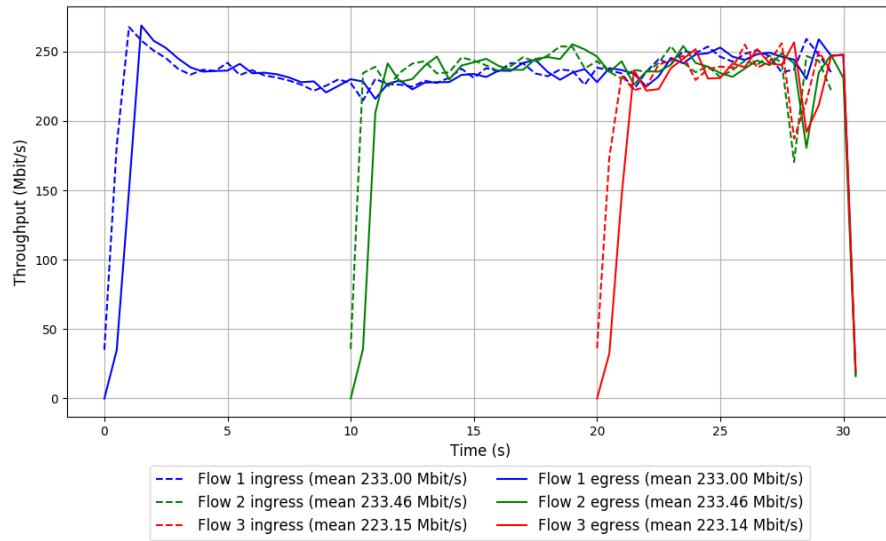


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-18 11:59:50
End at: 2019-01-18 12:00:20
Local clock offset: 0.126 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2019-01-18 15:09:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.60 Mbit/s
95th percentile per-packet one-way delay: 61.362 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 233.00 Mbit/s
95th percentile per-packet one-way delay: 61.157 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 233.46 Mbit/s
95th percentile per-packet one-way delay: 59.298 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 223.14 Mbit/s
95th percentile per-packet one-way delay: 62.609 ms
Loss rate: 0.02%
```

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

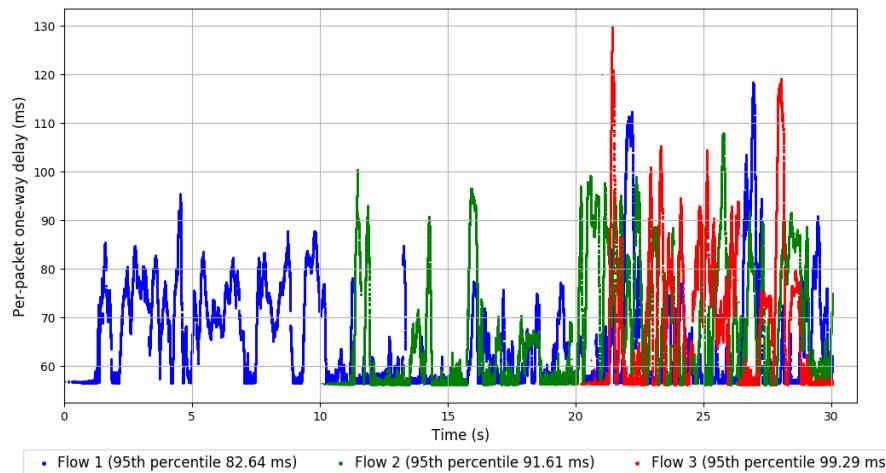
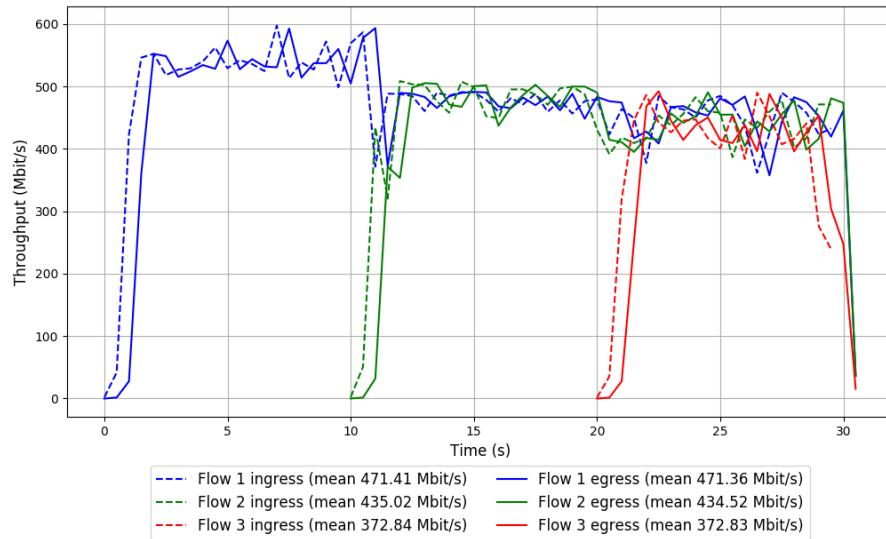


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-18 09:38:19
End at: 2019-01-18 09:38:49
Local clock offset: 0.149 ms
Remote clock offset: -0.4 ms

# Below is generated by plot.py at 2019-01-18 15:10:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 884.69 Mbit/s
95th percentile per-packet one-way delay: 89.463 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 471.36 Mbit/s
95th percentile per-packet one-way delay: 82.642 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 434.52 Mbit/s
95th percentile per-packet one-way delay: 91.611 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 372.83 Mbit/s
95th percentile per-packet one-way delay: 99.290 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

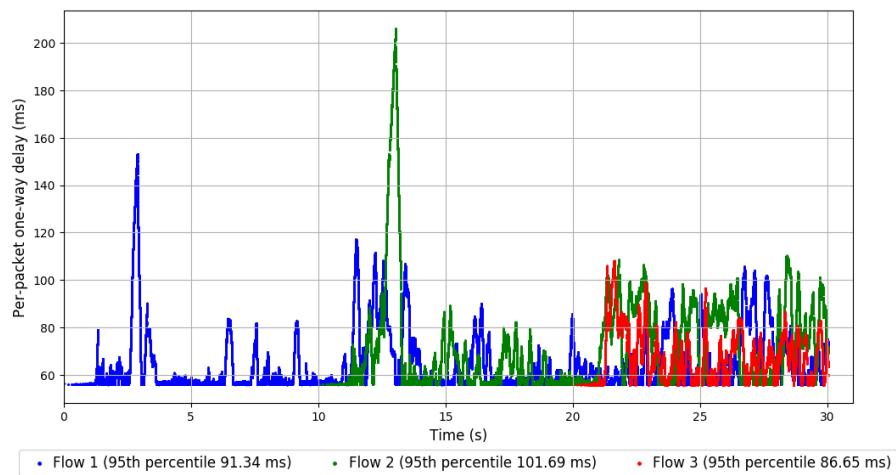
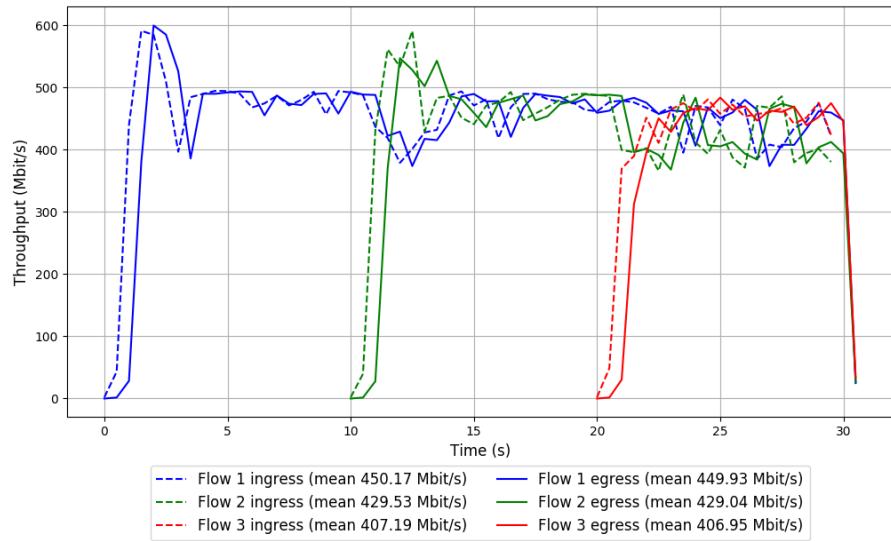


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-18 10:15:11
End at: 2019-01-18 10:15:41
Local clock offset: 0.147 ms
Remote clock offset: -1.129 ms

# Below is generated by plot.py at 2019-01-18 15:20:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 870.92 Mbit/s
95th percentile per-packet one-way delay: 95.770 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 449.93 Mbit/s
95th percentile per-packet one-way delay: 91.339 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 429.04 Mbit/s
95th percentile per-packet one-way delay: 101.691 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 406.95 Mbit/s
95th percentile per-packet one-way delay: 86.648 ms
Loss rate: 0.06%
```

Run 2: Report of TCP Vegas — Data Link

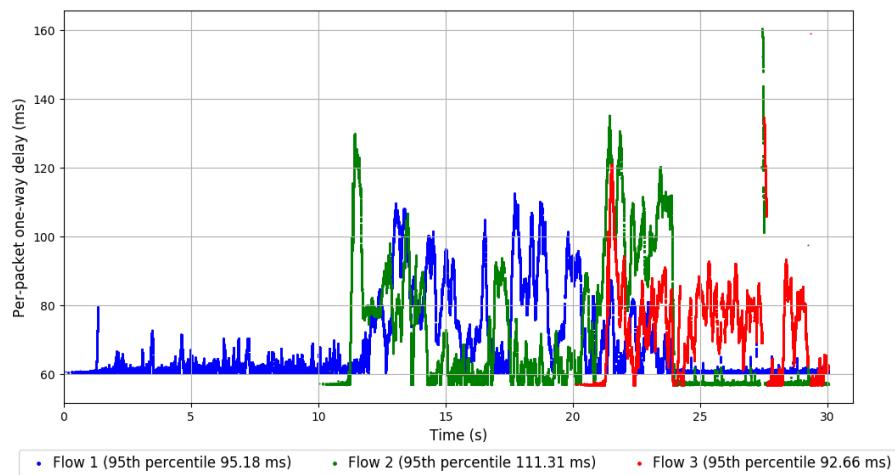
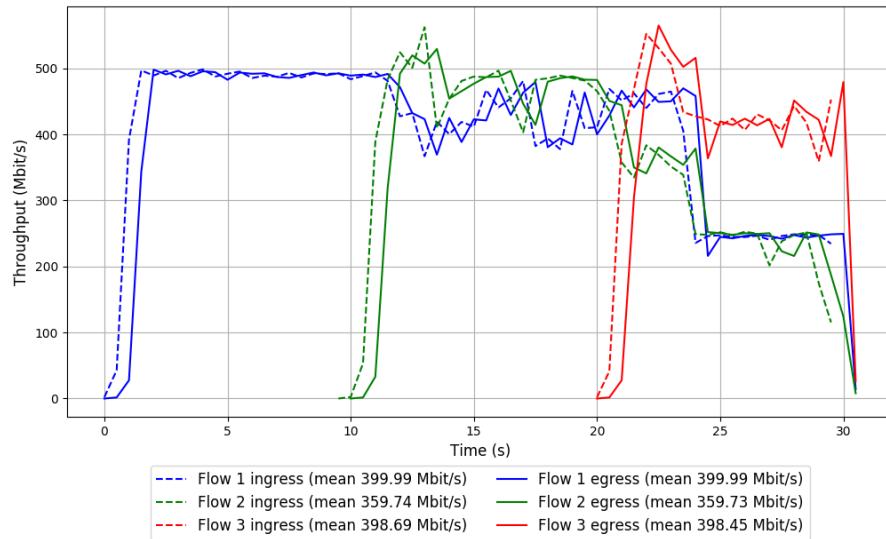


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-18 10:52:26
End at: 2019-01-18 10:52:56
Local clock offset: -0.058 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-01-18 15:20:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 772.21 Mbit/s
95th percentile per-packet one-way delay: 102.351 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 399.99 Mbit/s
95th percentile per-packet one-way delay: 95.176 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 359.73 Mbit/s
95th percentile per-packet one-way delay: 111.315 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 398.45 Mbit/s
95th percentile per-packet one-way delay: 92.658 ms
Loss rate: 0.05%
```

Run 3: Report of TCP Vegas — Data Link

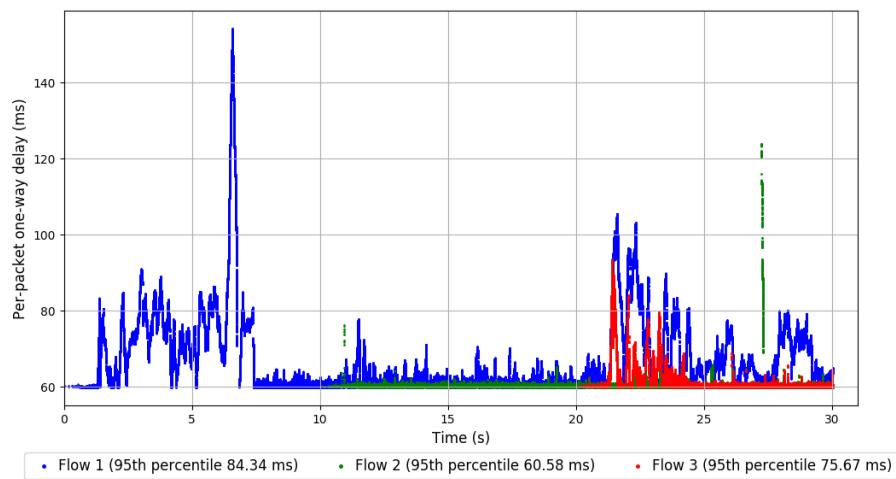
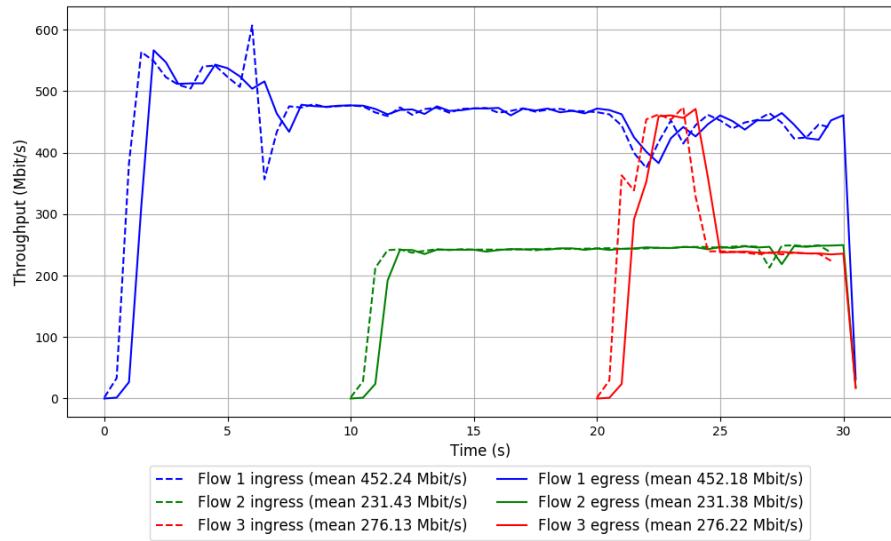


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-18 11:28:36
End at: 2019-01-18 11:29:06
Local clock offset: -0.112 ms
Remote clock offset: -0.651 ms

# Below is generated by plot.py at 2019-01-18 15:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 697.97 Mbit/s
95th percentile per-packet one-way delay: 81.908 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 452.18 Mbit/s
95th percentile per-packet one-way delay: 84.337 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 231.38 Mbit/s
95th percentile per-packet one-way delay: 60.576 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 276.22 Mbit/s
95th percentile per-packet one-way delay: 75.665 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Vegas — Data Link

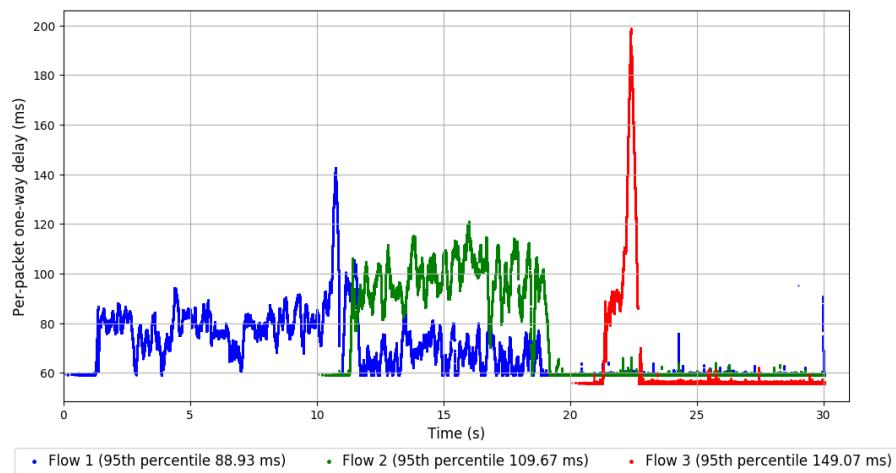
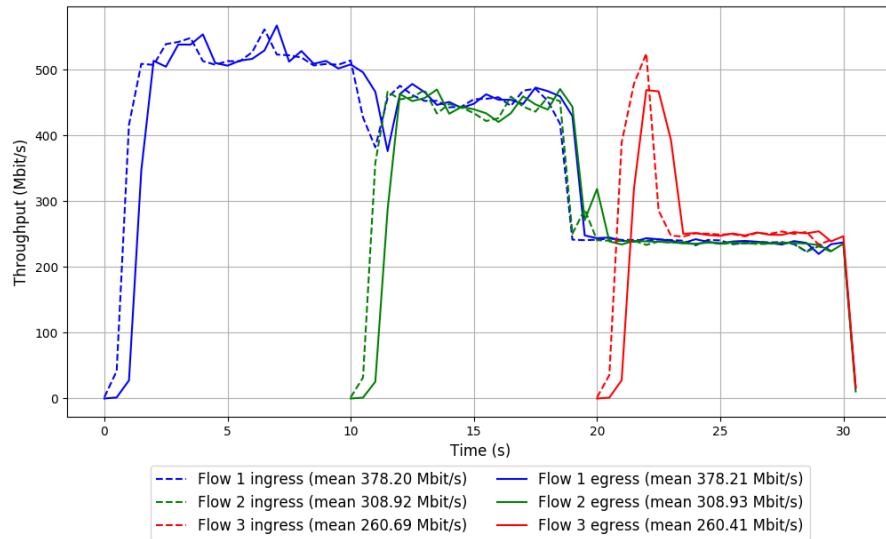


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-18 12:05:43
End at: 2019-01-18 12:06:13
Local clock offset: 0.006 ms
Remote clock offset: -1.071 ms

# Below is generated by plot.py at 2019-01-18 15:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 670.42 Mbit/s
95th percentile per-packet one-way delay: 106.512 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 378.21 Mbit/s
95th percentile per-packet one-way delay: 88.926 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 308.93 Mbit/s
95th percentile per-packet one-way delay: 109.671 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 260.41 Mbit/s
95th percentile per-packet one-way delay: 149.070 ms
Loss rate: 0.11%
```

Run 5: Report of TCP Vegas — Data Link

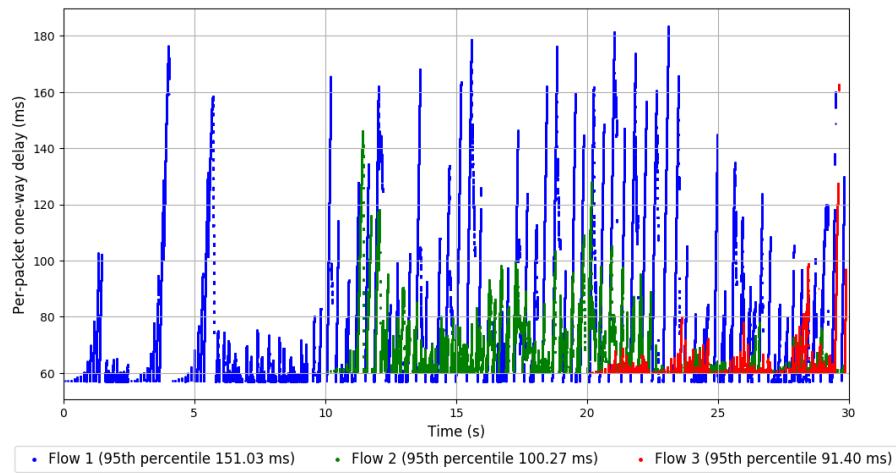
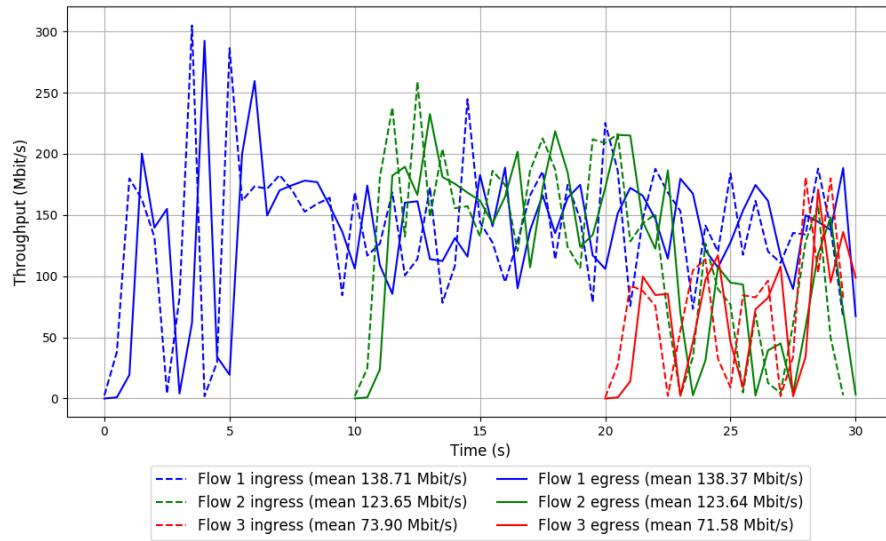


Run 1: Statistics of Verus

```
Start at: 2019-01-18 09:30:25
End at: 2019-01-18 09:30:55
Local clock offset: 0.136 ms
Remote clock offset: 0.13 ms

# Below is generated by plot.py at 2019-01-18 15:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 243.30 Mbit/s
95th percentile per-packet one-way delay: 140.449 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 138.37 Mbit/s
95th percentile per-packet one-way delay: 151.027 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 123.64 Mbit/s
95th percentile per-packet one-way delay: 100.268 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 71.58 Mbit/s
95th percentile per-packet one-way delay: 91.403 ms
Loss rate: 3.15%
```

Run 1: Report of Verus — Data Link

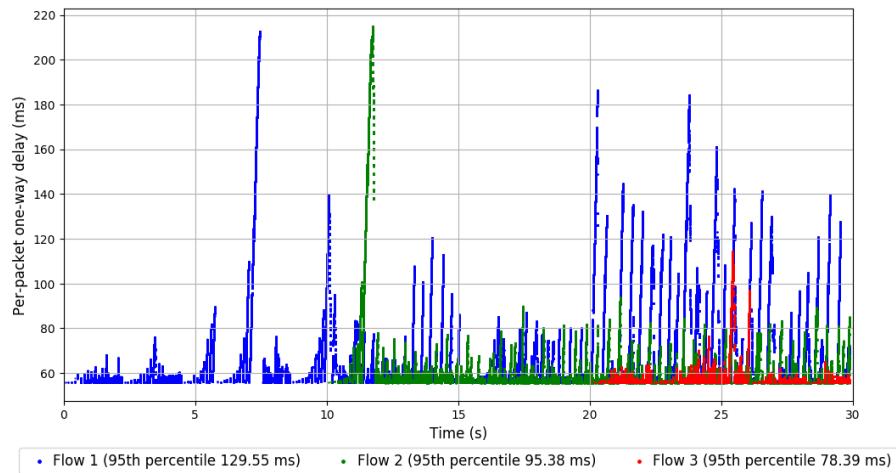
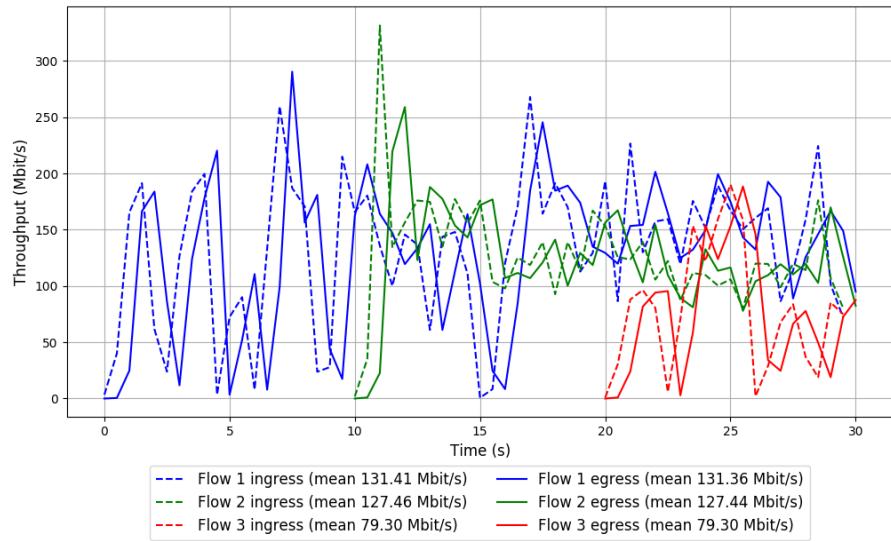


Run 2: Statistics of Verus

```
Start at: 2019-01-18 10:07:48
End at: 2019-01-18 10:08:18
Local clock offset: -0.082 ms
Remote clock offset: -1.288 ms

# Below is generated by plot.py at 2019-01-18 15:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 242.03 Mbit/s
95th percentile per-packet one-way delay: 122.911 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 131.36 Mbit/s
95th percentile per-packet one-way delay: 129.554 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 127.44 Mbit/s
95th percentile per-packet one-way delay: 95.381 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 79.30 Mbit/s
95th percentile per-packet one-way delay: 78.388 ms
Loss rate: 0.00%
```

Run 2: Report of Verus — Data Link

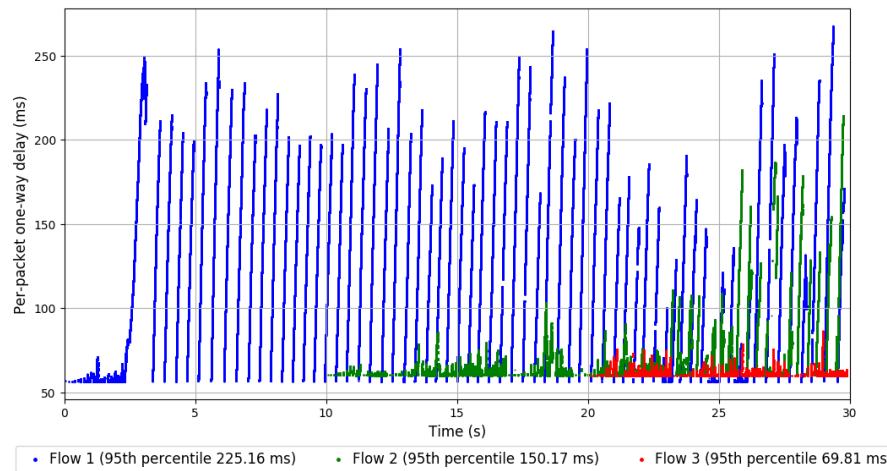
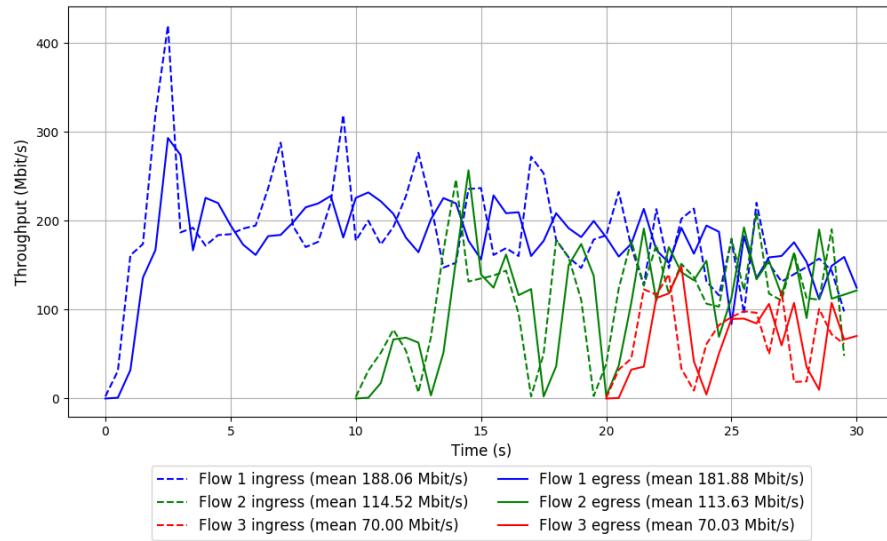


Run 3: Statistics of Verus

```
Start at: 2019-01-18 10:44:29
End at: 2019-01-18 10:44:59
Local clock offset: -0.207 ms
Remote clock offset: -0.564 ms

# Below is generated by plot.py at 2019-01-18 15:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.25 Mbit/s
95th percentile per-packet one-way delay: 214.046 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 181.88 Mbit/s
95th percentile per-packet one-way delay: 225.163 ms
Loss rate: 2.91%
-- Flow 2:
Average throughput: 113.63 Mbit/s
95th percentile per-packet one-way delay: 150.167 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.03 Mbit/s
95th percentile per-packet one-way delay: 69.813 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

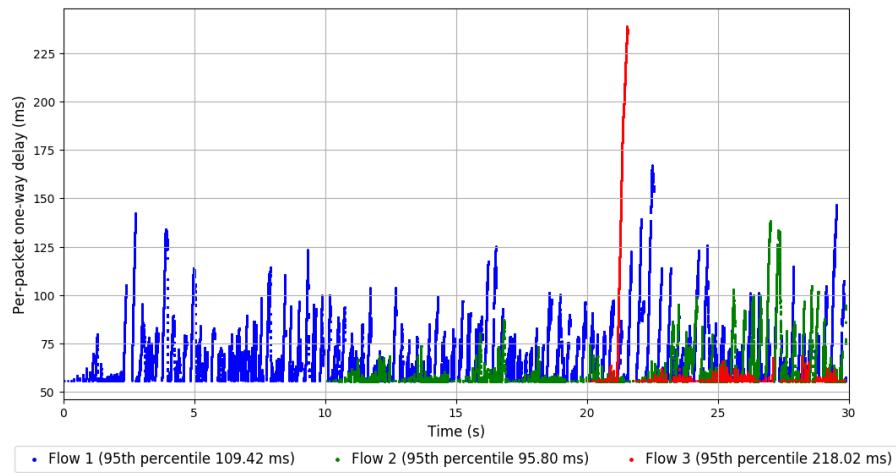
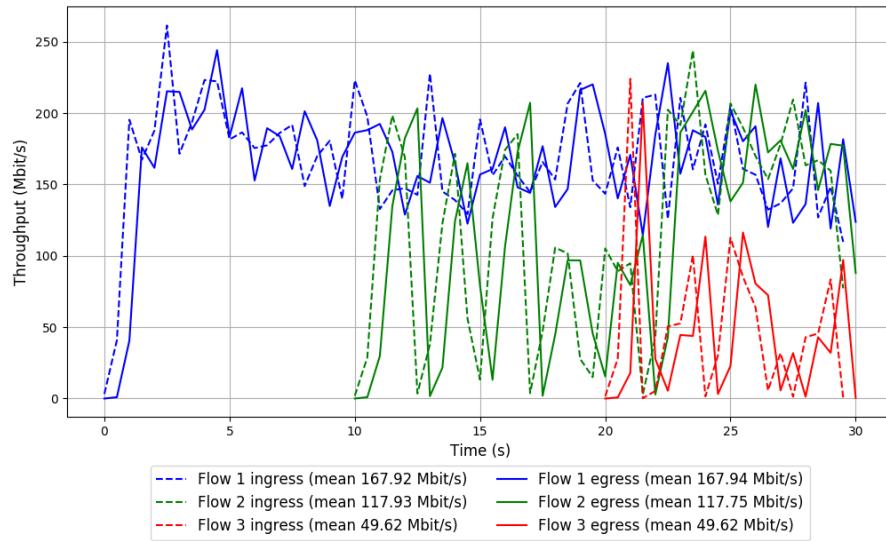


Run 4: Statistics of Verus

```
Start at: 2019-01-18 11:21:07
End at: 2019-01-18 11:21:37
Local clock offset: 0.217 ms
Remote clock offset: -1.274 ms

# Below is generated by plot.py at 2019-01-18 15:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.41 Mbit/s
95th percentile per-packet one-way delay: 109.388 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 167.94 Mbit/s
95th percentile per-packet one-way delay: 109.419 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 117.75 Mbit/s
95th percentile per-packet one-way delay: 95.802 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 49.62 Mbit/s
95th percentile per-packet one-way delay: 218.024 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link

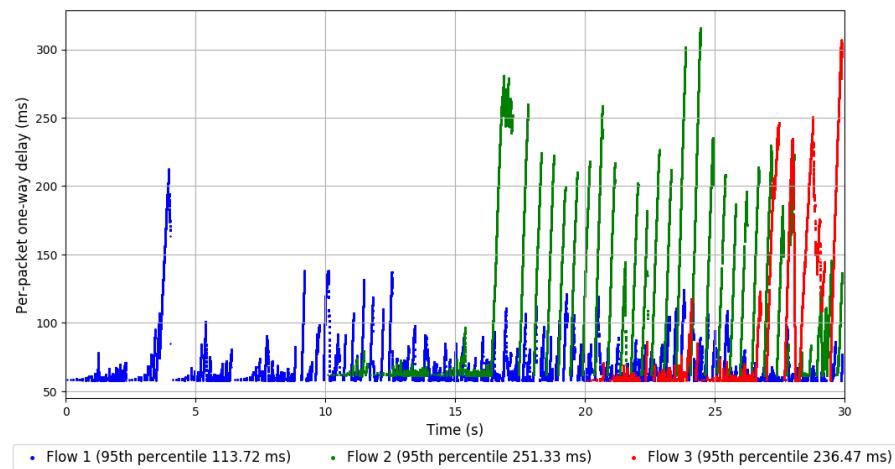
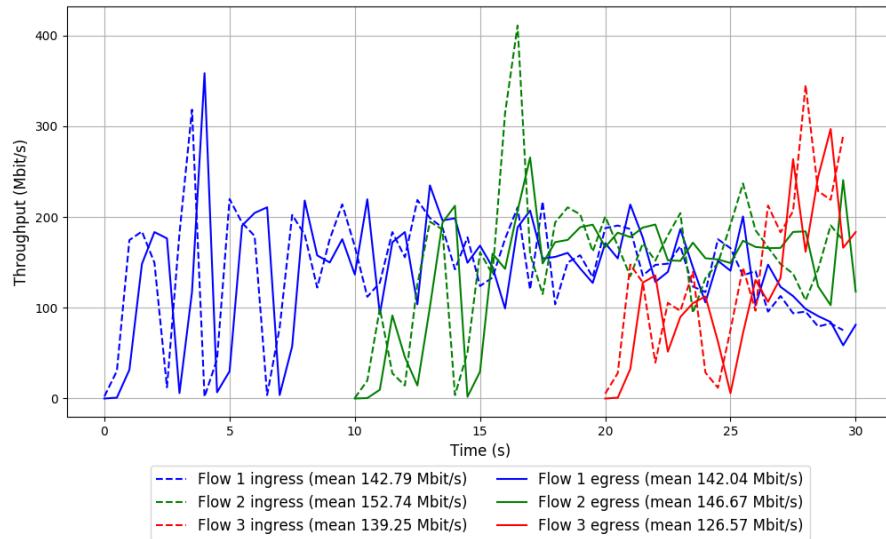


Run 5: Statistics of Verus

```
Start at: 2019-01-18 11:58:05
End at: 2019-01-18 11:58:35
Local clock offset: -0.428 ms
Remote clock offset: 0.78 ms

# Below is generated by plot.py at 2019-01-18 15:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.05 Mbit/s
95th percentile per-packet one-way delay: 218.674 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 142.04 Mbit/s
95th percentile per-packet one-way delay: 113.722 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 146.67 Mbit/s
95th percentile per-packet one-way delay: 251.331 ms
Loss rate: 3.98%
-- Flow 3:
Average throughput: 126.57 Mbit/s
95th percentile per-packet one-way delay: 236.465 ms
Loss rate: 9.09%
```

Run 5: Report of Verus — Data Link

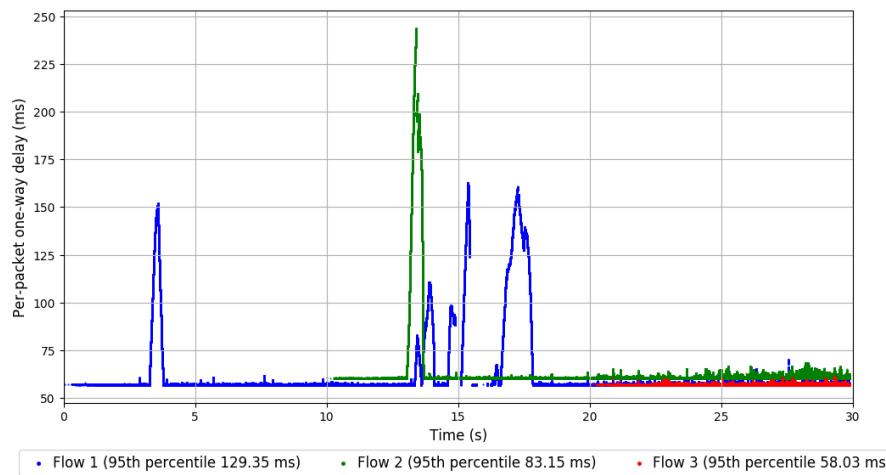
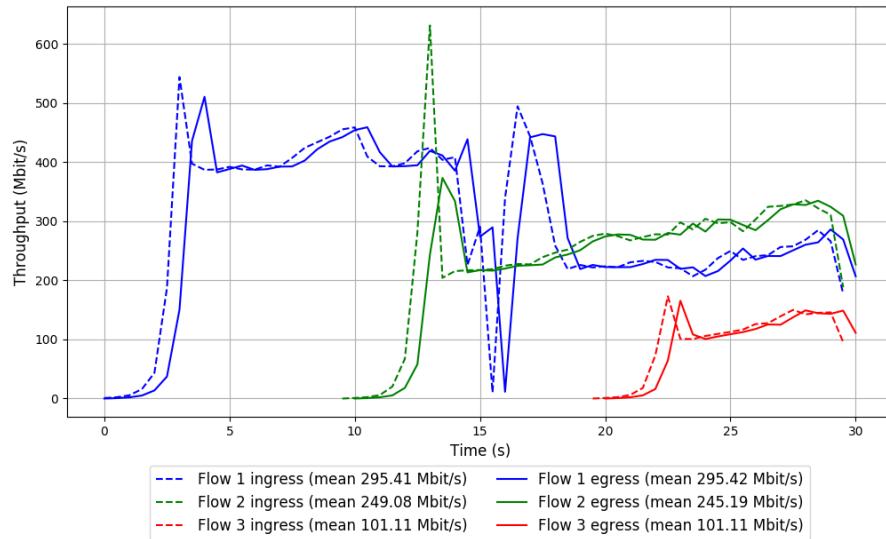


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-18 09:27:23
End at: 2019-01-18 09:27:53
Local clock offset: 0.271 ms
Remote clock offset: 0.212 ms

# Below is generated by plot.py at 2019-01-18 15:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.12 Mbit/s
95th percentile per-packet one-way delay: 121.337 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 295.42 Mbit/s
95th percentile per-packet one-way delay: 129.347 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 245.19 Mbit/s
95th percentile per-packet one-way delay: 83.146 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 101.11 Mbit/s
95th percentile per-packet one-way delay: 58.027 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

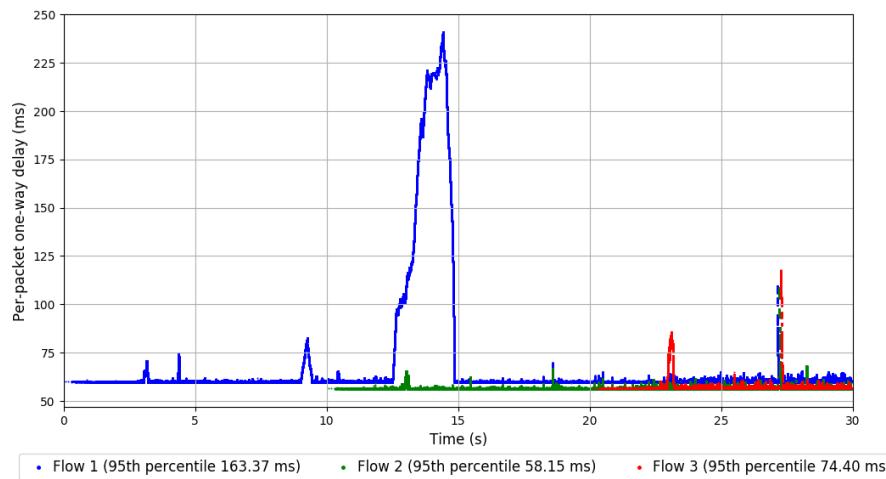
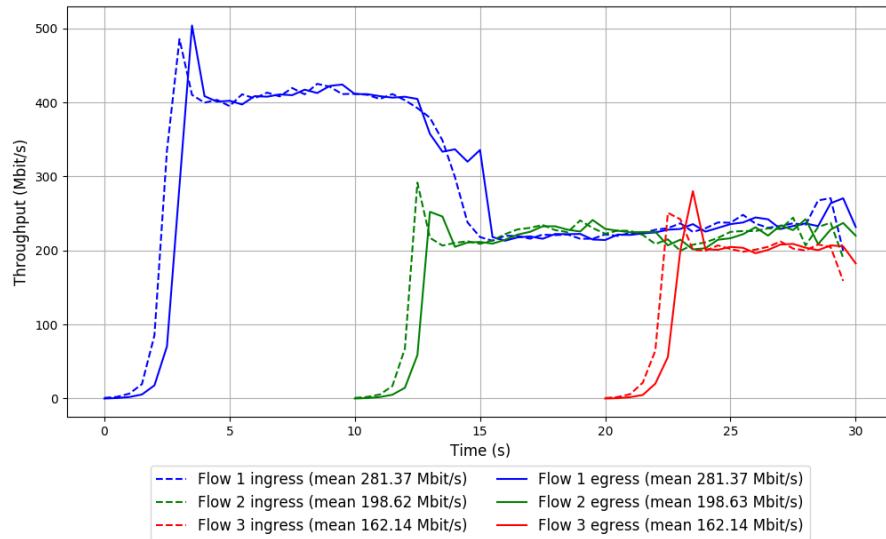


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-18 10:04:51
End at: 2019-01-18 10:05:21
Local clock offset: -0.057 ms
Remote clock offset: -0.758 ms

# Below is generated by plot.py at 2019-01-18 15:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.79 Mbit/s
95th percentile per-packet one-way delay: 100.855 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 281.37 Mbit/s
95th percentile per-packet one-way delay: 163.365 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 198.63 Mbit/s
95th percentile per-packet one-way delay: 58.153 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.14 Mbit/s
95th percentile per-packet one-way delay: 74.397 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

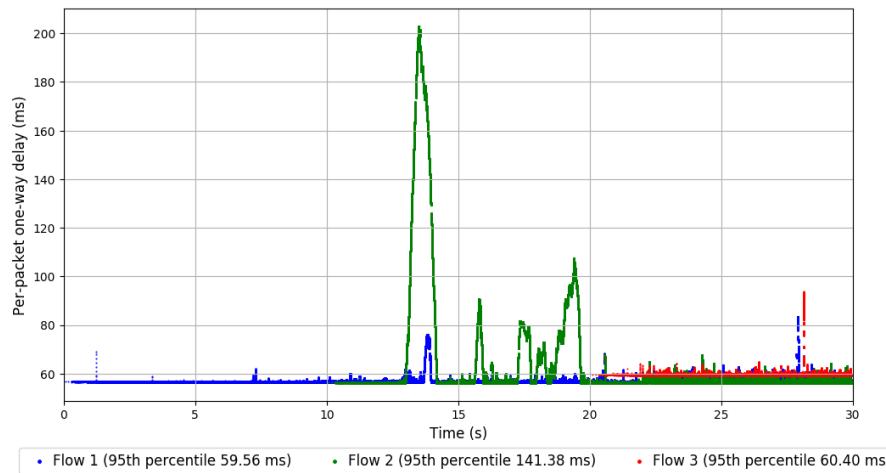
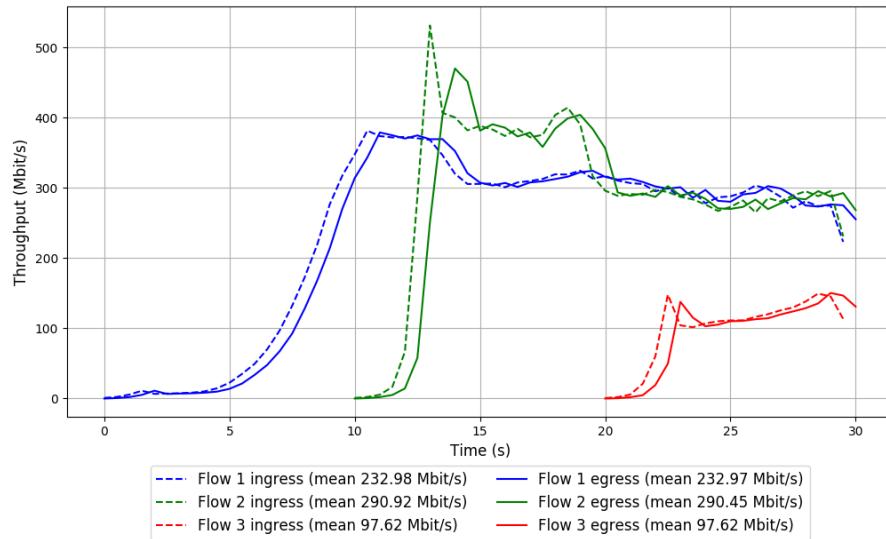


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-18 10:41:16
End at: 2019-01-18 10:41:46
Local clock offset: 0.112 ms
Remote clock offset: -0.446 ms

# Below is generated by plot.py at 2019-01-18 15:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 458.21 Mbit/s
95th percentile per-packet one-way delay: 85.278 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 232.97 Mbit/s
95th percentile per-packet one-way delay: 59.560 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 290.45 Mbit/s
95th percentile per-packet one-way delay: 141.382 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 97.62 Mbit/s
95th percentile per-packet one-way delay: 60.398 ms
Loss rate: 0.02%
```

Run 3: Report of PCC-Vivace — Data Link

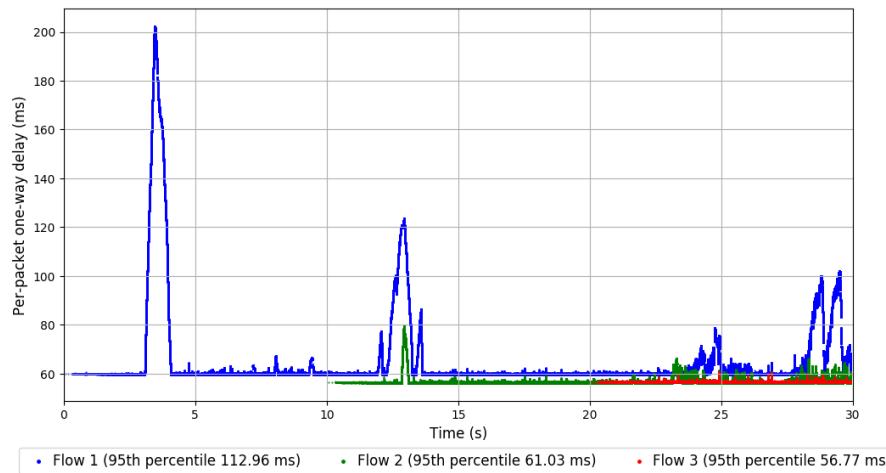
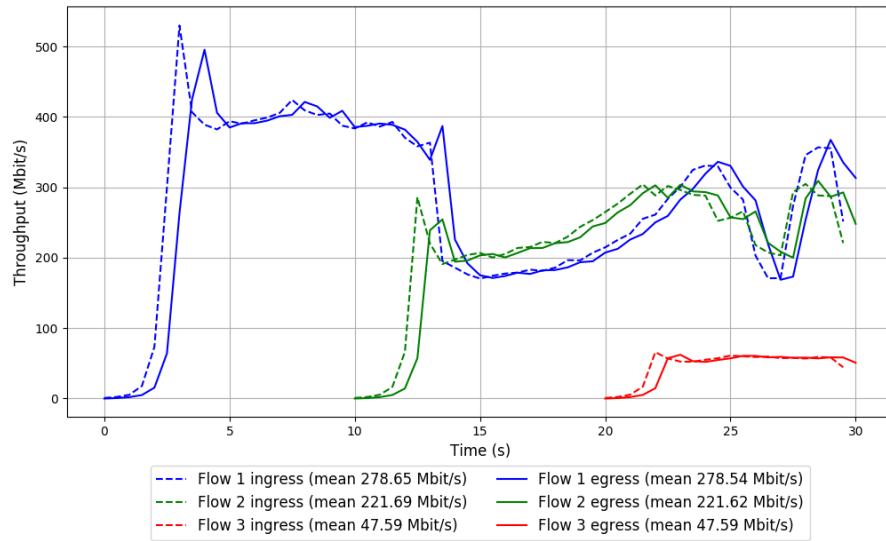


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-18 11:18:11
End at: 2019-01-18 11:18:41
Local clock offset: -0.046 ms
Remote clock offset: -0.762 ms

# Below is generated by plot.py at 2019-01-18 15:28:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 441.55 Mbit/s
95th percentile per-packet one-way delay: 94.706 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 278.54 Mbit/s
95th percentile per-packet one-way delay: 112.963 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 221.62 Mbit/s
95th percentile per-packet one-way delay: 61.031 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 47.59 Mbit/s
95th percentile per-packet one-way delay: 56.773 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

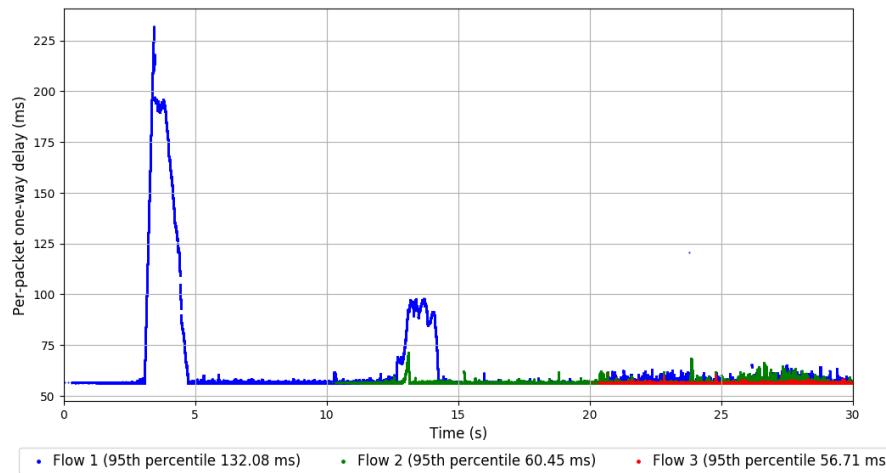
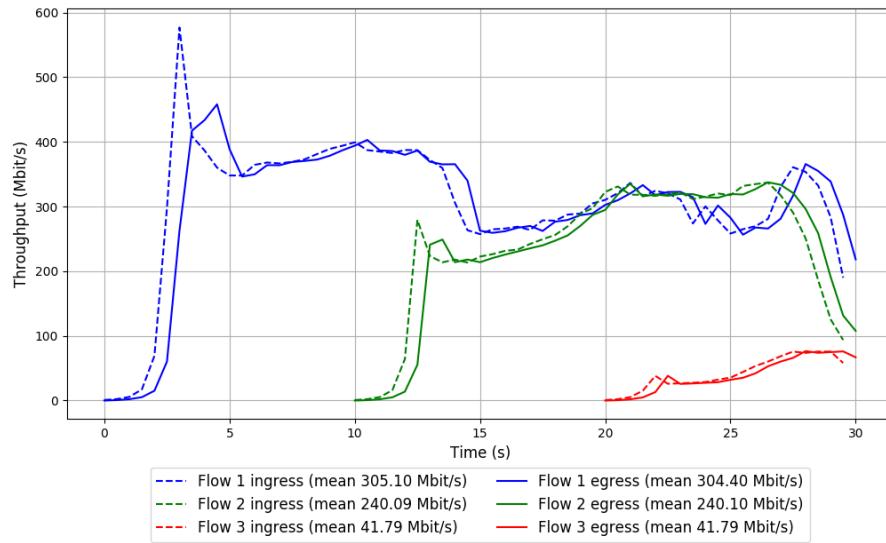


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-18 11:54:56
End at: 2019-01-18 11:55:26
Local clock offset: -0.146 ms
Remote clock offset: -0.58 ms

# Below is generated by plot.py at 2019-01-18 15:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 477.71 Mbit/s
95th percentile per-packet one-way delay: 94.420 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 304.40 Mbit/s
95th percentile per-packet one-way delay: 132.079 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 240.10 Mbit/s
95th percentile per-packet one-way delay: 60.453 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 41.79 Mbit/s
95th percentile per-packet one-way delay: 56.710 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

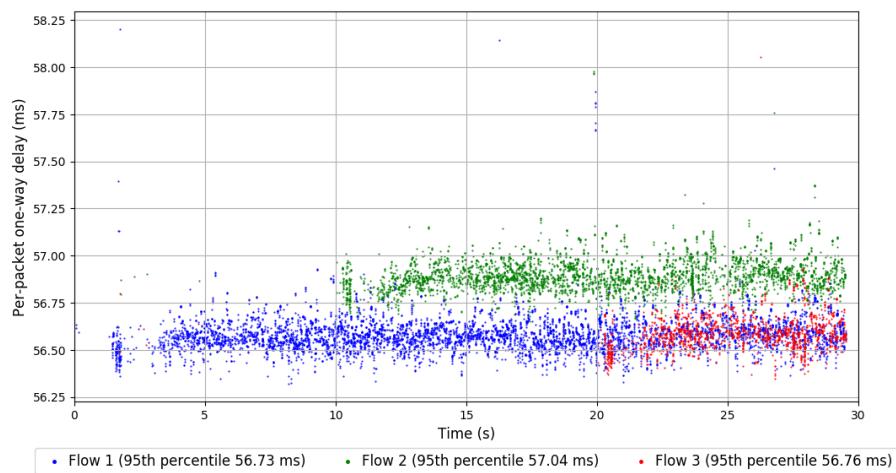
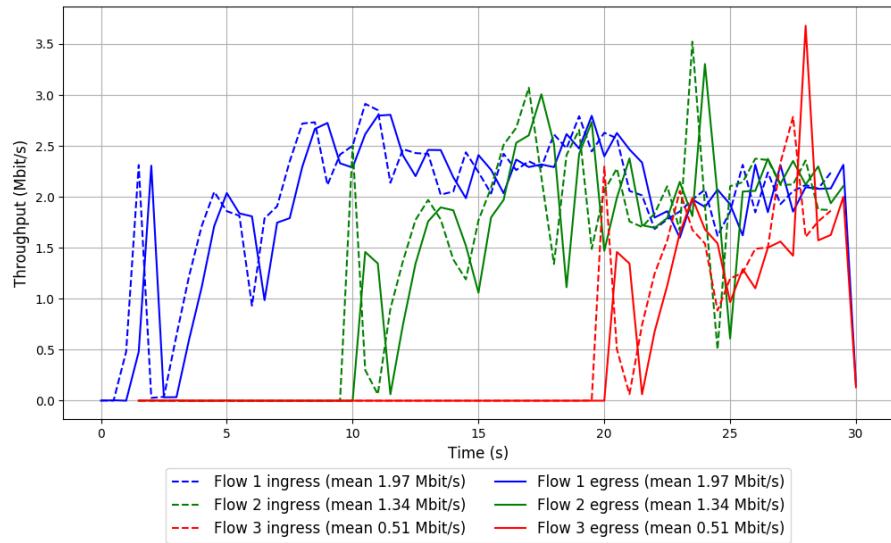


Run 1: Statistics of WebRTC media

```
Start at: 2019-01-18 09:29:12
End at: 2019-01-18 09:29:42
Local clock offset: -0.281 ms
Remote clock offset: -0.568 ms

# Below is generated by plot.py at 2019-01-18 15:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 56.976 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 56.729 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 57.043 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 56.755 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

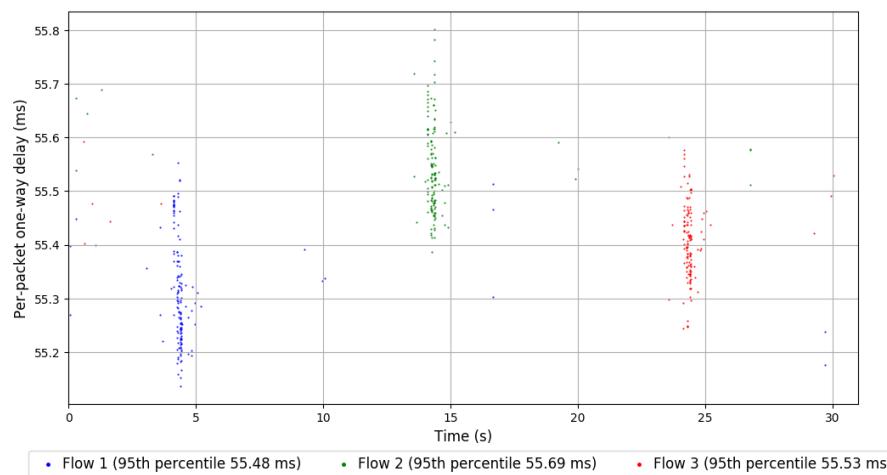
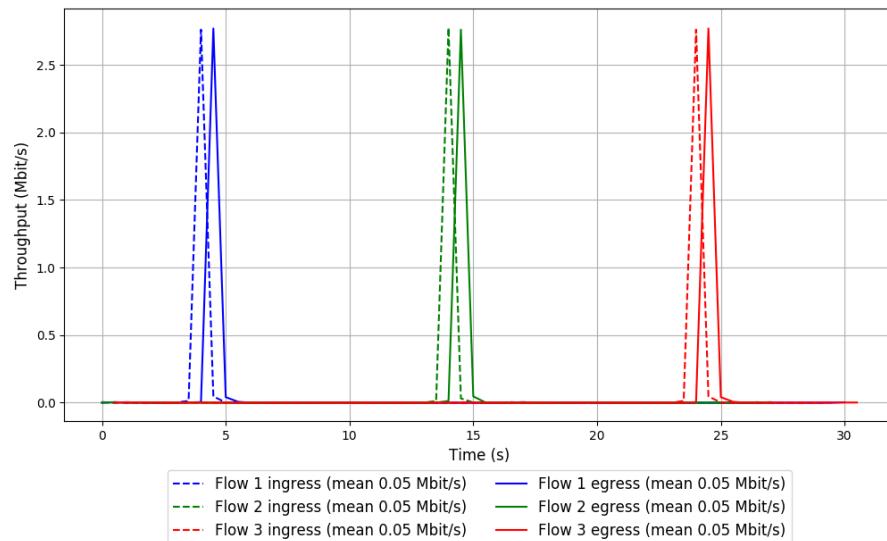


Run 2: Statistics of WebRTC media

```
Start at: 2019-01-18 10:06:36
End at: 2019-01-18 10:07:06
Local clock offset: 0.161 ms
Remote clock offset: -1.515 ms

# Below is generated by plot.py at 2019-01-18 15:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 55.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 55.483 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 55.689 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 55.529 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

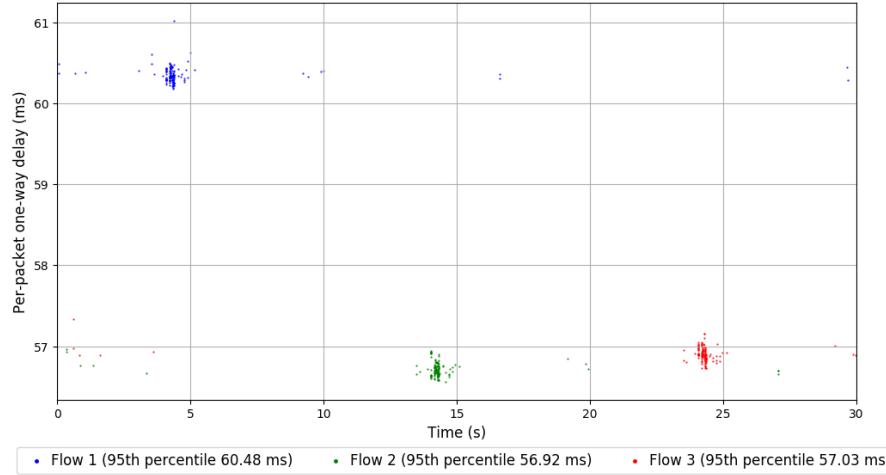
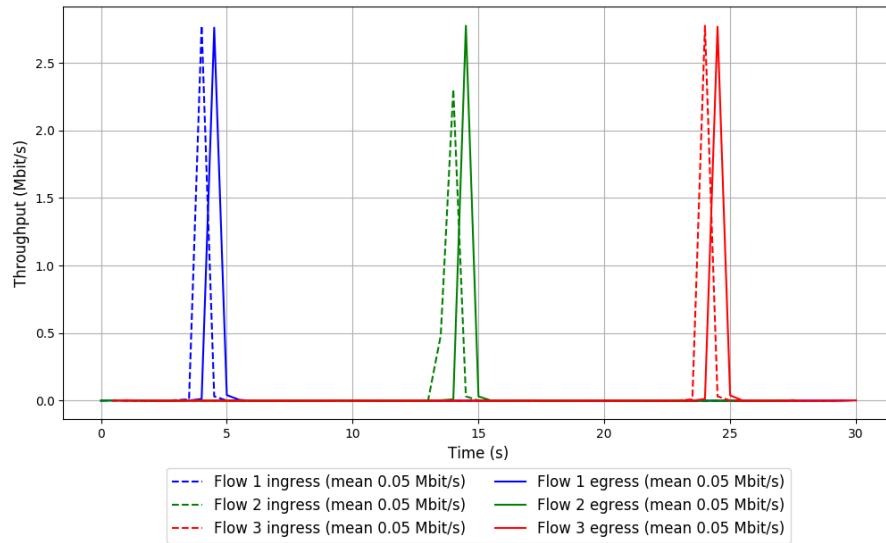


Run 3: Statistics of WebRTC media

```
Start at: 2019-01-18 10:43:17
End at: 2019-01-18 10:43:47
Local clock offset: -0.322 ms
Remote clock offset: -0.454 ms

# Below is generated by plot.py at 2019-01-18 15:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.434 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.482 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.919 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.031 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

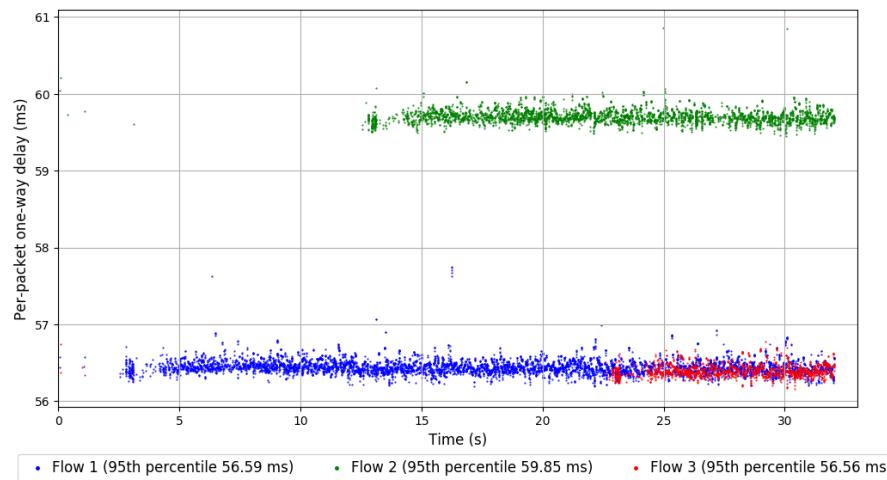
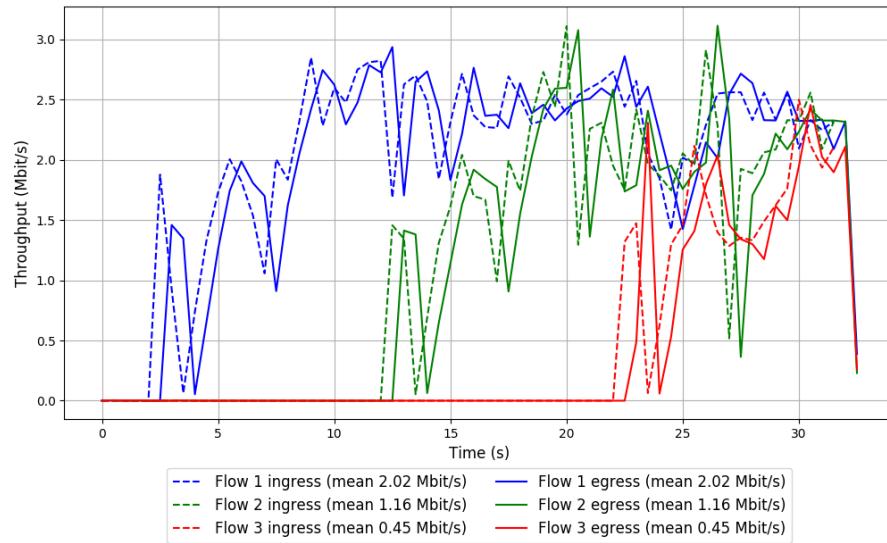


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-18 11:19:54
End at: 2019-01-18 11:20:24
Local clock offset: 0.335 ms
Remote clock offset: -0.63 ms

# Below is generated by plot.py at 2019-01-18 15:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 59.780 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 56.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 59.850 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 56.563 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-01-18 11:56:53
End at: 2019-01-18 11:57:23
Local clock offset: 0.352 ms
Remote clock offset: 0.109 ms

# Below is generated by plot.py at 2019-01-18 15:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 60.256 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.321 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.231 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 56.946 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

