

Pantheon Report

Generated at 2019-03-10 03:18:26 (UTC).
Data path: GCE London on `ens4 (local)` → GCE Iowa 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:

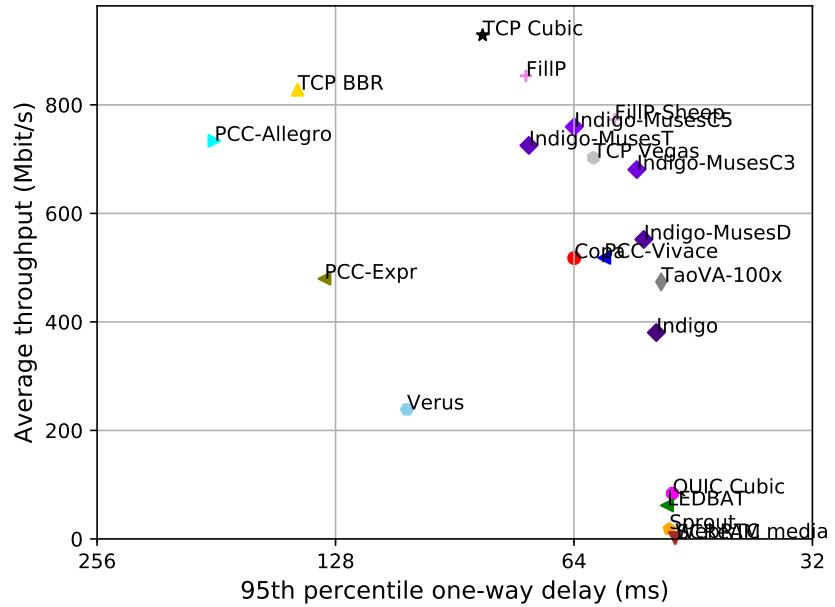
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

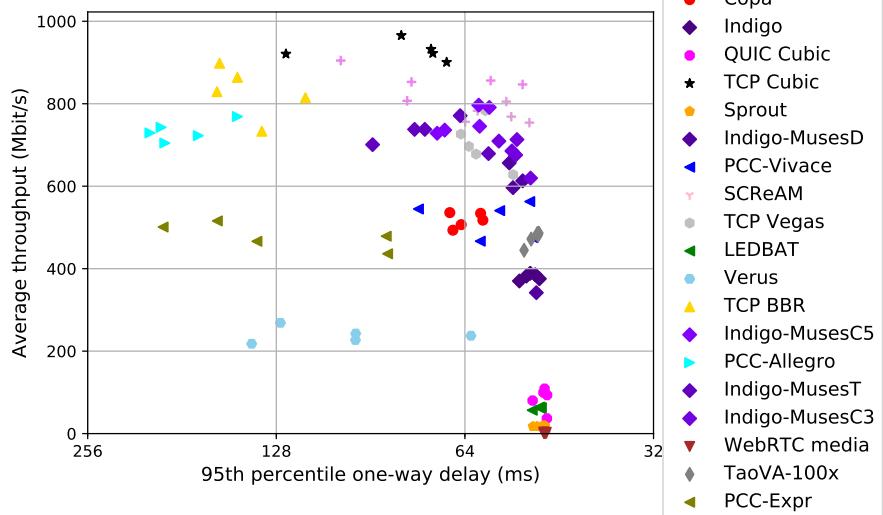
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

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

test from GCE London to GCE Iowa, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



4

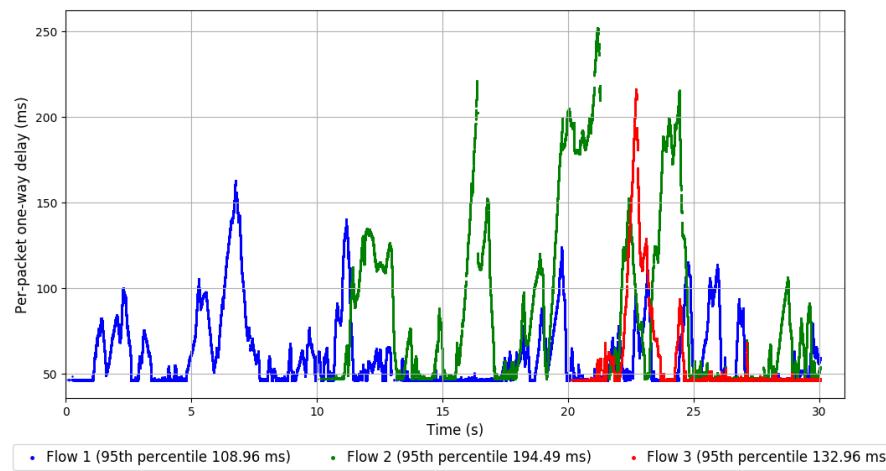
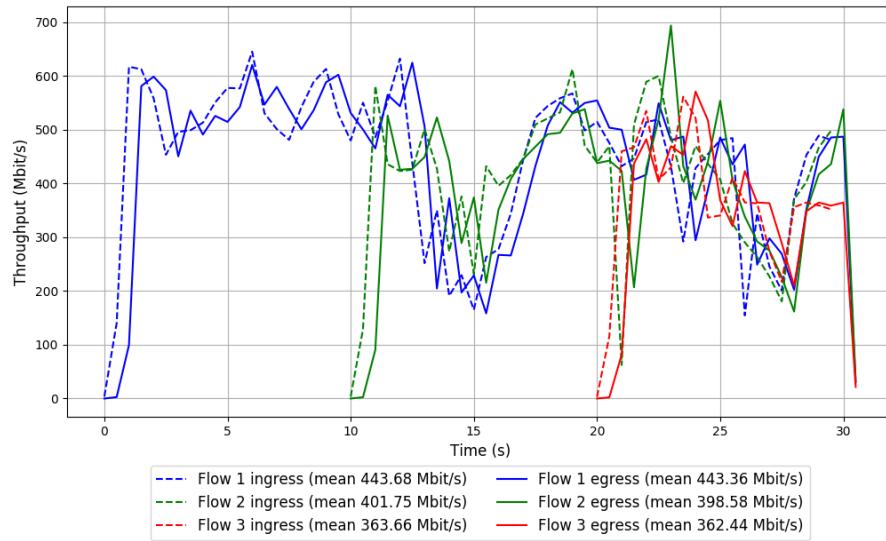
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	435.60	402.08	374.70	118.64	163.53	115.17	0.09	0.28	0.68
Copa	5	274.91	246.71	235.94	59.58	66.07	74.95	0.00	0.02	0.02
TCP Cubic	5	491.43	451.21	410.01	86.05	73.37	70.26	0.03	0.01	0.22
FillP	5	540.26	348.45	246.67	78.24	51.66	50.25	0.25	0.00	0.00
FillP-Sheep	5	498.22	303.45	221.16	61.51	50.18	49.02	0.02	0.00	0.01
Indigo	5	197.63	194.64	165.49	49.98	51.24	49.43	0.00	0.00	0.00
Indigo-MusesC3	5	411.19	332.14	207.68	54.54	50.62	49.96	0.00	0.00	0.00
Indigo-MusesC5	5	461.66	373.46	222.02	64.35	64.54	51.30	0.01	0.00	0.00
Indigo-MusesD	4	311.06	291.86	199.56	54.00	51.04	48.77	0.00	0.00	0.00
Indigo-MusesT	5	461.21	372.02	98.60	76.06	63.57	48.05	0.01	0.00	0.00
LEDBAT	5	40.41	25.37	13.59	48.96	48.10	47.76	0.00	0.00	0.00
PCC-Allegro	5	416.23	345.69	266.14	182.40	170.63	98.46	5.81	3.84	0.04
PCC-Expr	5	274.51	231.57	154.97	115.53	115.91	75.06	2.20	2.24	0.01
QUIC Cubic	5	39.67	47.30	38.72	48.05	47.34	47.67	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	47.06	47.52	46.86	0.00	0.00	0.00
Sprout	5	9.02	9.27	9.26	48.60	47.74	47.67	0.00	0.00	0.00
TaoVA-100x	5	241.76	233.83	228.92	49.07	50.65	48.76	0.00	0.01	0.00
TCP Vegas	5	370.91	332.15	331.98	57.81	56.55	60.71	0.00	0.00	0.07
Verus	5	130.88	120.80	84.22	95.17	108.18	64.10	0.01	0.29	0.00
PCC-Vivace	5	304.95	241.83	158.39	65.69	49.91	51.89	0.00	0.00	0.00
WebRTC media	5	0.86	0.56	0.15	47.69	47.01	47.68	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-03-09 21:41:47
End at: 2019-03-09 21:42:17
Local clock offset: -0.135 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2019-03-10 00:54:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 829.22 Mbit/s
95th percentile per-packet one-way delay: 159.173 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 443.36 Mbit/s
95th percentile per-packet one-way delay: 108.957 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 398.58 Mbit/s
95th percentile per-packet one-way delay: 194.494 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 362.44 Mbit/s
95th percentile per-packet one-way delay: 132.959 ms
Loss rate: 0.34%
```

Run 1: Report of TCP BBR — Data Link

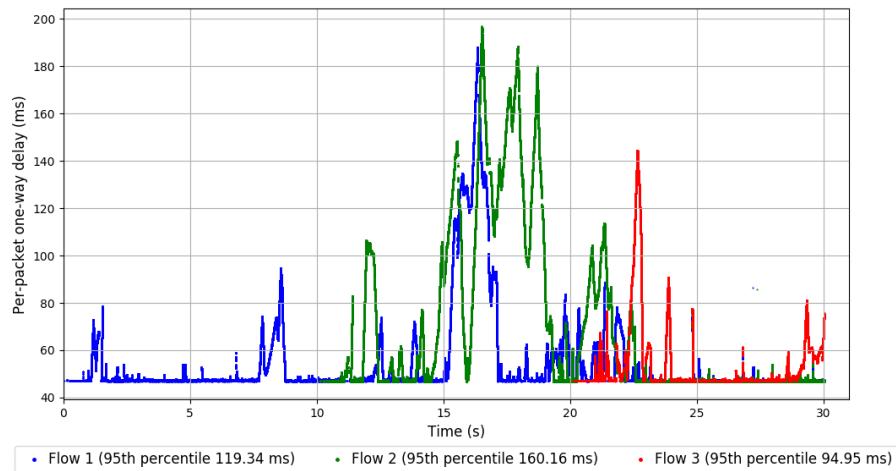
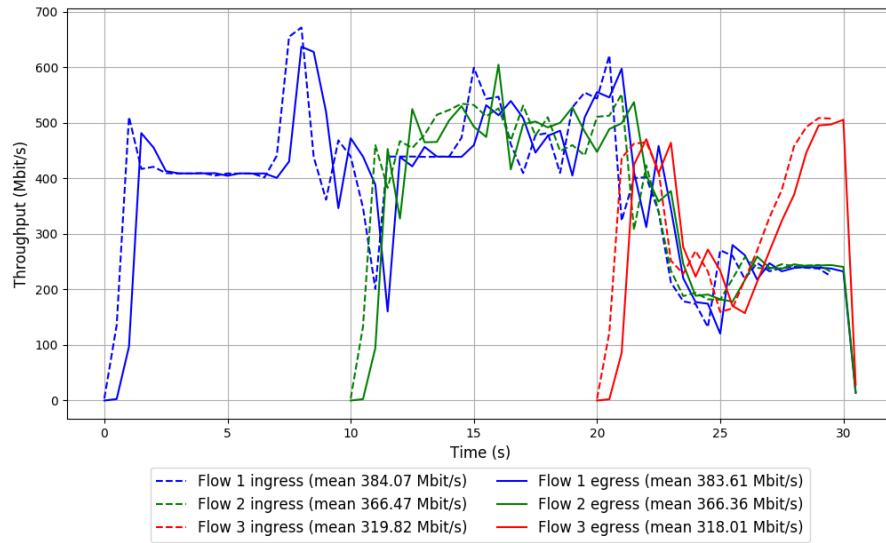


Run 2: Statistics of TCP BBR

```
Start at: 2019-03-09 22:17:07
End at: 2019-03-09 22:17:37
Local clock offset: 0.219 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-03-10 00:54:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 733.30 Mbit/s
95th percentile per-packet one-way delay: 134.987 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 383.61 Mbit/s
95th percentile per-packet one-way delay: 119.345 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 366.36 Mbit/s
95th percentile per-packet one-way delay: 160.161 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 318.01 Mbit/s
95th percentile per-packet one-way delay: 94.948 ms
Loss rate: 0.55%
```

Run 2: Report of TCP BBR — Data Link

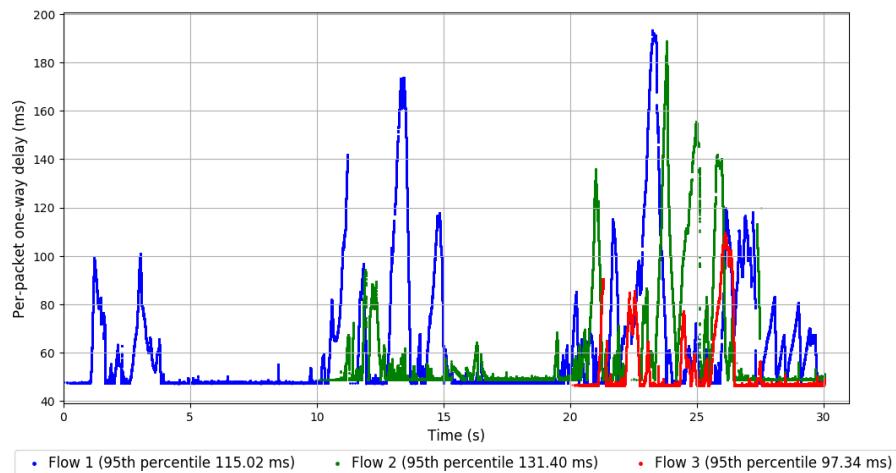
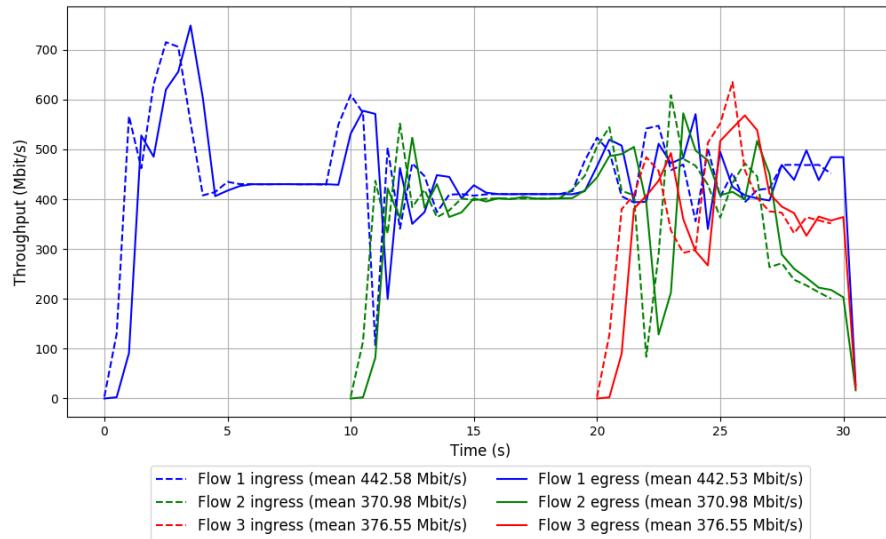


Run 3: Statistics of TCP BBR

```
Start at: 2019-03-09 22:54:31
End at: 2019-03-09 22:55:01
Local clock offset: -0.108 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-03-10 00:54:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 814.73 Mbit/s
95th percentile per-packet one-way delay: 115.004 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 442.53 Mbit/s
95th percentile per-packet one-way delay: 115.015 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 370.98 Mbit/s
95th percentile per-packet one-way delay: 131.404 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 376.55 Mbit/s
95th percentile per-packet one-way delay: 97.336 ms
Loss rate: 0.00%
```

Run 3: Report of TCP BBR — Data Link

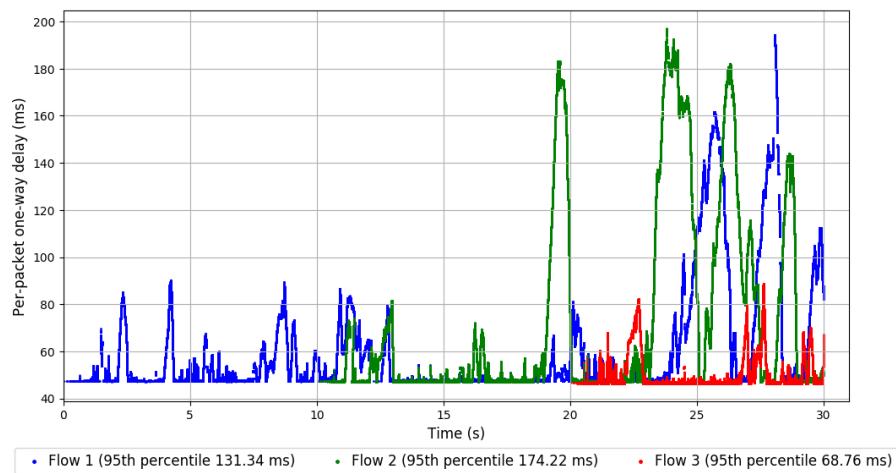
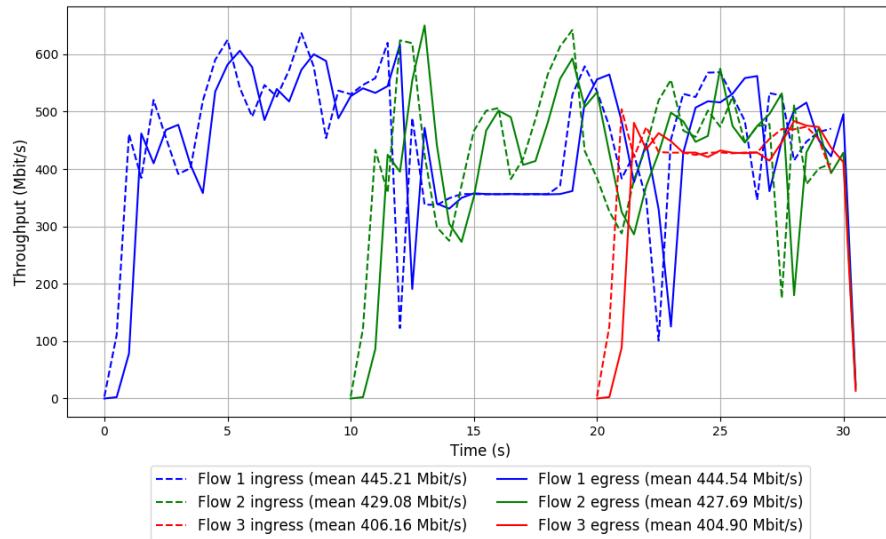


Run 4: Statistics of TCP BBR

```
Start at: 2019-03-09 23:31:02
End at: 2019-03-09 23:31:32
Local clock offset: 0.0 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-03-10 00:54:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 863.98 Mbit/s
95th percentile per-packet one-way delay: 147.641 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 444.54 Mbit/s
95th percentile per-packet one-way delay: 131.336 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 427.69 Mbit/s
95th percentile per-packet one-way delay: 174.216 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 404.90 Mbit/s
95th percentile per-packet one-way delay: 68.760 ms
Loss rate: 0.29%
```

Run 4: Report of TCP BBR — Data Link

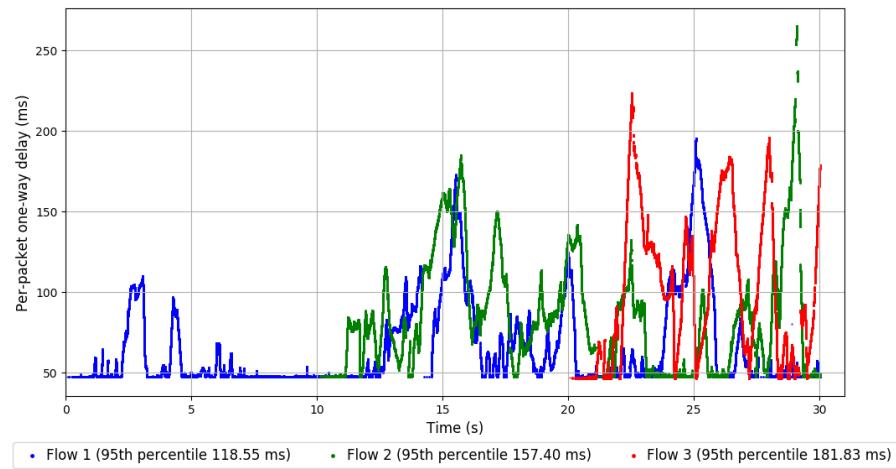
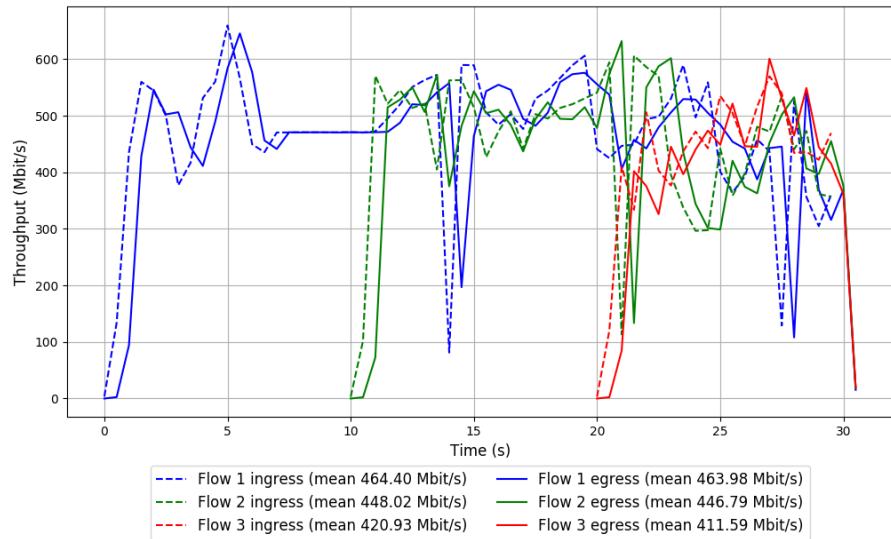


Run 5: Statistics of TCP BBR

```
Start at: 2019-03-10 00:07:39
End at: 2019-03-10 00:08:09
Local clock offset: 0.037 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2019-03-10 00:55:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 898.25 Mbit/s
95th percentile per-packet one-way delay: 157.657 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 463.98 Mbit/s
95th percentile per-packet one-way delay: 118.547 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 446.79 Mbit/s
95th percentile per-packet one-way delay: 157.398 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 411.59 Mbit/s
95th percentile per-packet one-way delay: 181.826 ms
Loss rate: 2.20%
```

Run 5: Report of TCP BBR — Data Link

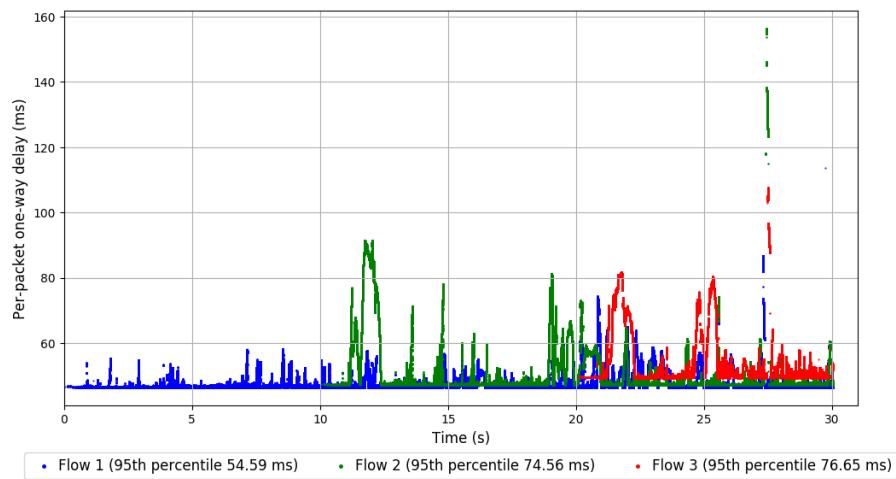
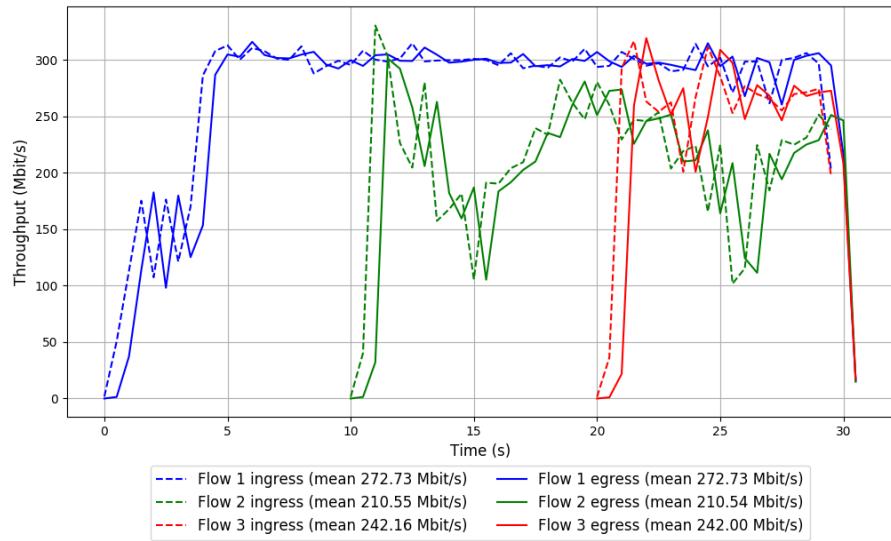


Run 1: Statistics of Copa

```
Start at: 2019-03-09 21:50:53
End at: 2019-03-09 21:51:23
Local clock offset: -0.146 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2019-03-10 00:55:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 493.28 Mbit/s
95th percentile per-packet one-way delay: 66.887 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 272.73 Mbit/s
95th percentile per-packet one-way delay: 54.587 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 210.54 Mbit/s
95th percentile per-packet one-way delay: 74.562 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 242.00 Mbit/s
95th percentile per-packet one-way delay: 76.654 ms
Loss rate: 0.07%
```

Run 1: Report of Copa — Data Link

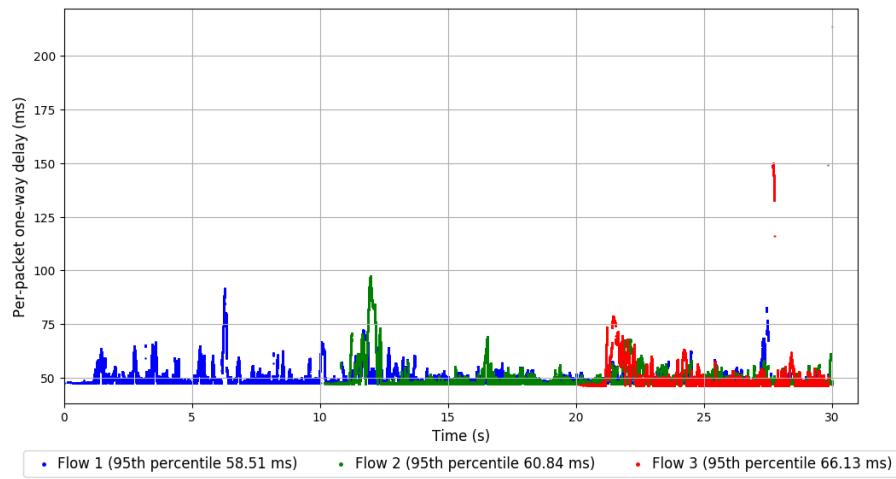
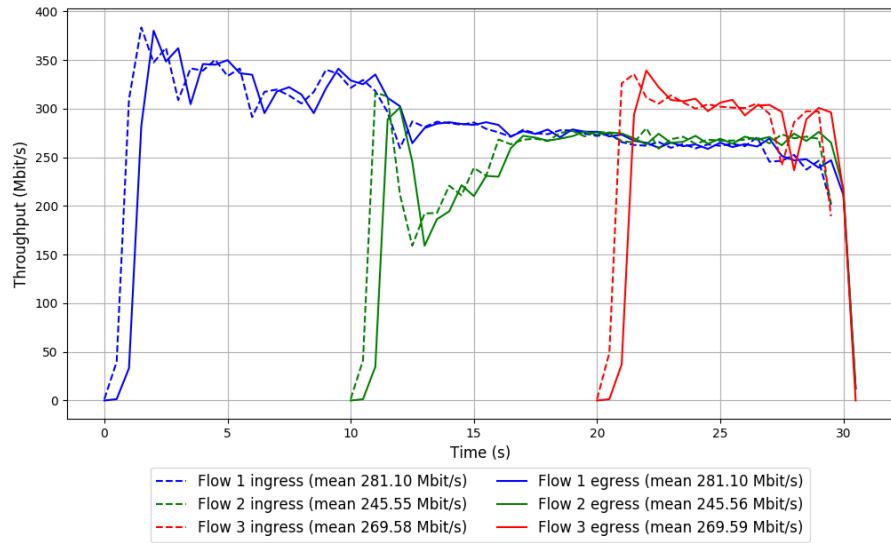


Run 2: Statistics of Copa

```
Start at: 2019-03-09 22:26:30
End at: 2019-03-09 22:27:00
Local clock offset: -0.165 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2019-03-10 00:57:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 534.21 Mbit/s
95th percentile per-packet one-way delay: 60.413 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 281.10 Mbit/s
95th percentile per-packet one-way delay: 58.507 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 245.56 Mbit/s
95th percentile per-packet one-way delay: 60.842 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 269.59 Mbit/s
95th percentile per-packet one-way delay: 66.134 ms
Loss rate: 0.00%
```

Run 2: Report of Copa — Data Link

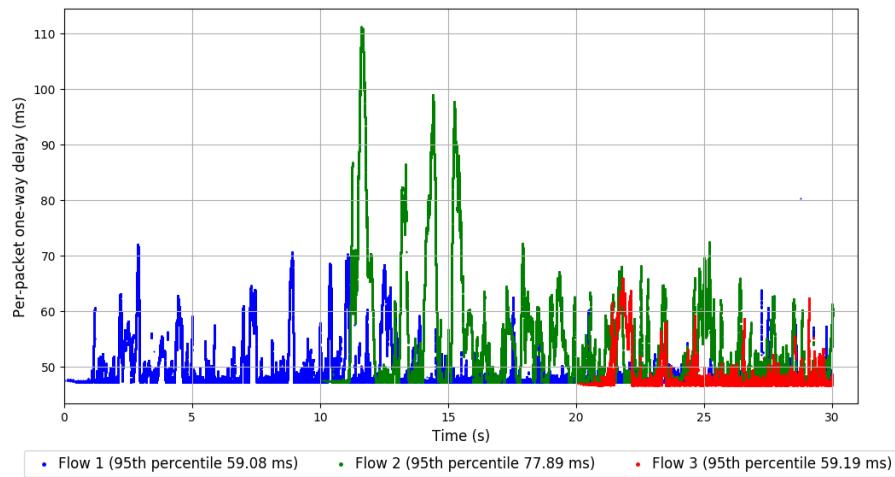
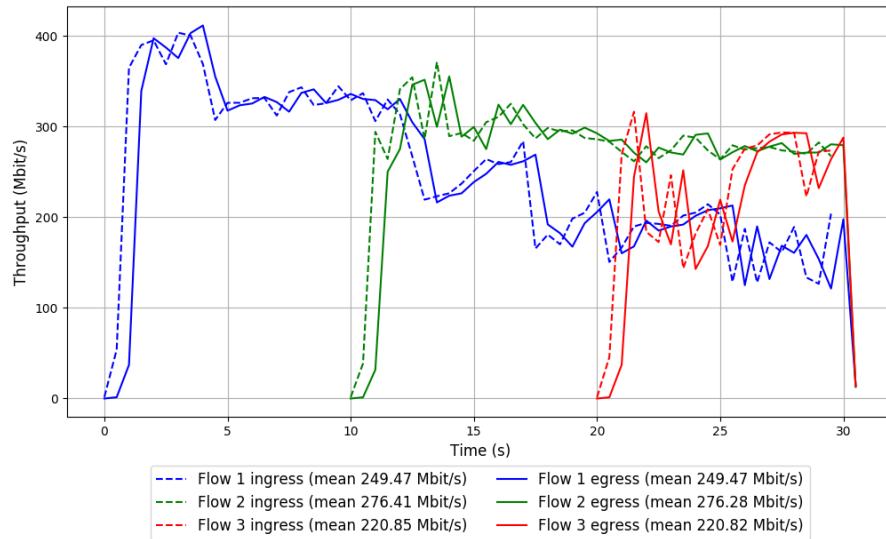


Run 3: Statistics of Copa

```
Start at: 2019-03-09 23:04:32
End at: 2019-03-09 23:05:02
Local clock offset: -0.103 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2019-03-10 00:57:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 506.80 Mbit/s
95th percentile per-packet one-way delay: 64.874 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 249.47 Mbit/s
95th percentile per-packet one-way delay: 59.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 276.28 Mbit/s
95th percentile per-packet one-way delay: 77.890 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 220.82 Mbit/s
95th percentile per-packet one-way delay: 59.186 ms
Loss rate: 0.00%
```

Run 3: Report of Copa — Data Link

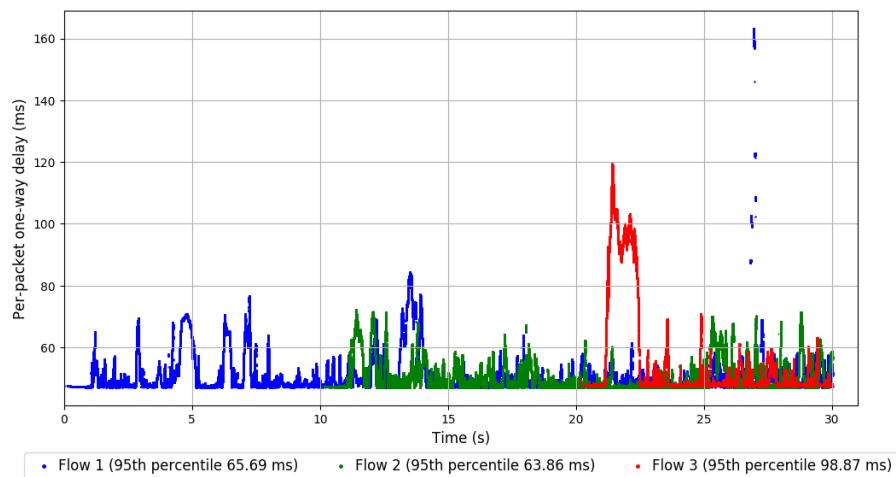
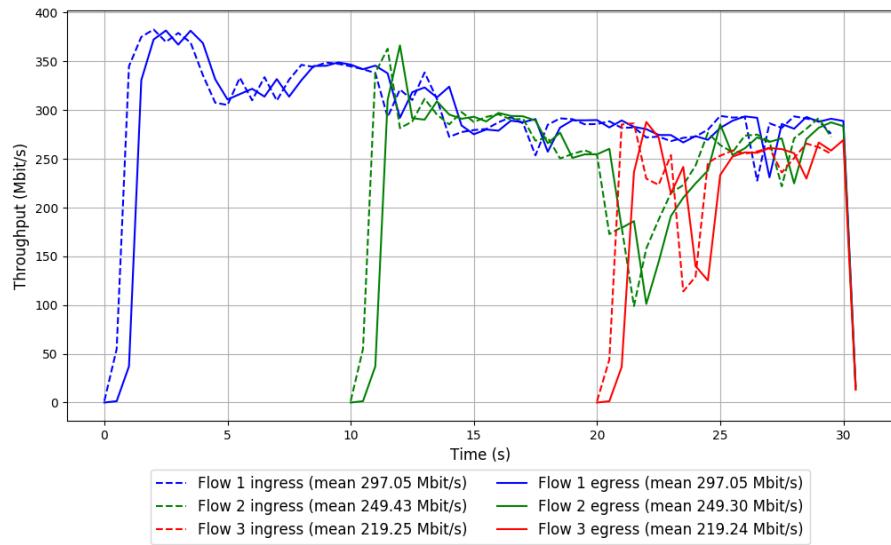


Run 4: Statistics of Copa

```
Start at: 2019-03-09 23:40:53
End at: 2019-03-09 23:41:23
Local clock offset: 0.079 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-03-10 01:11:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 535.95 Mbit/s
95th percentile per-packet one-way delay: 67.657 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 297.05 Mbit/s
95th percentile per-packet one-way delay: 65.686 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 249.30 Mbit/s
95th percentile per-packet one-way delay: 63.863 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 219.24 Mbit/s
95th percentile per-packet one-way delay: 98.871 ms
Loss rate: 0.01%
```

Run 4: Report of Copa — Data Link

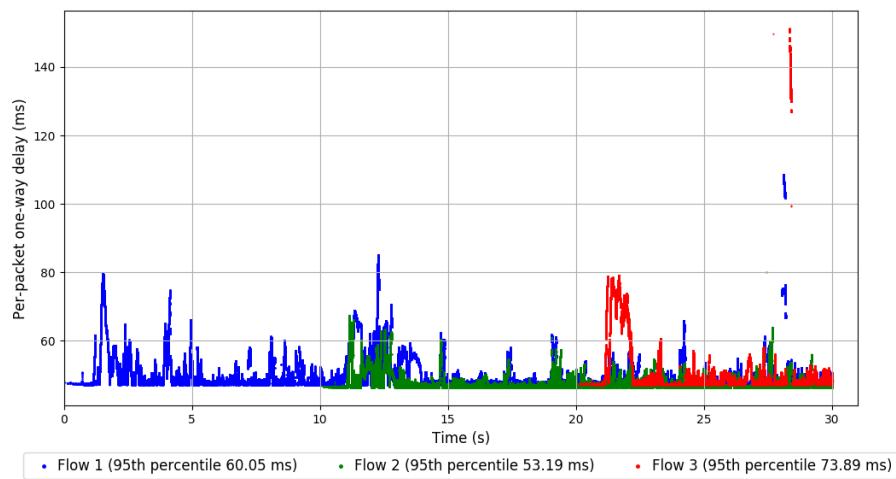
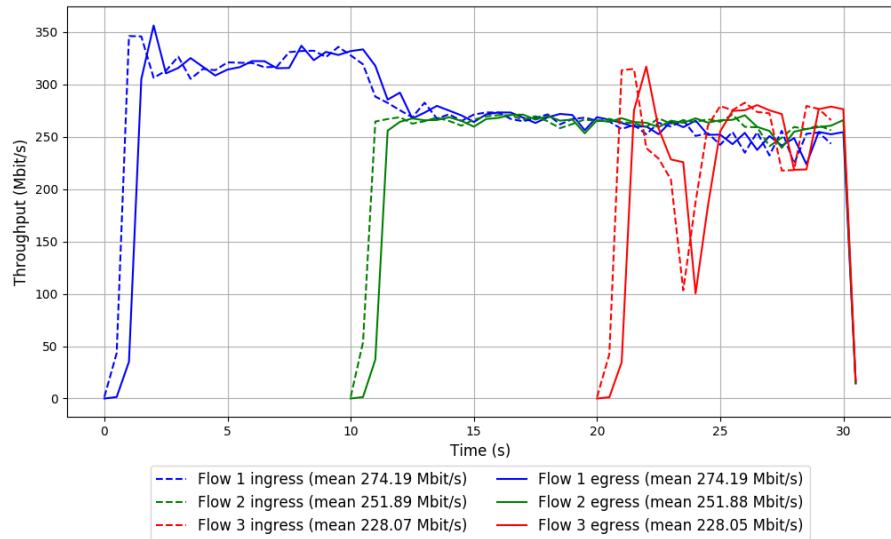


Run 5: Statistics of Copa

```
Start at: 2019-03-10 00:17:28
End at: 2019-03-10 00:17:58
Local clock offset: 0.141 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2019-03-10 01:12:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 517.67 Mbit/s
95th percentile per-packet one-way delay: 59.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 274.19 Mbit/s
95th percentile per-packet one-way delay: 60.051 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 251.88 Mbit/s
95th percentile per-packet one-way delay: 53.192 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 228.05 Mbit/s
95th percentile per-packet one-way delay: 73.895 ms
Loss rate: 0.00%
```

Run 5: Report of Copa — Data Link

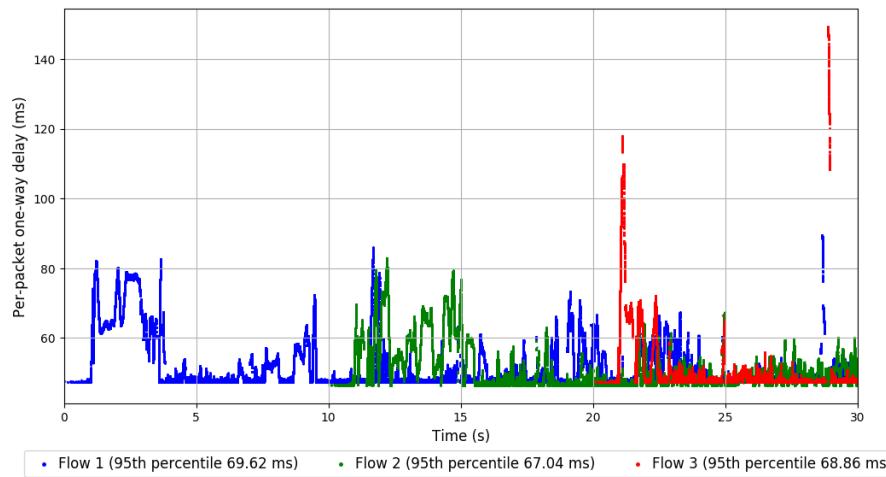
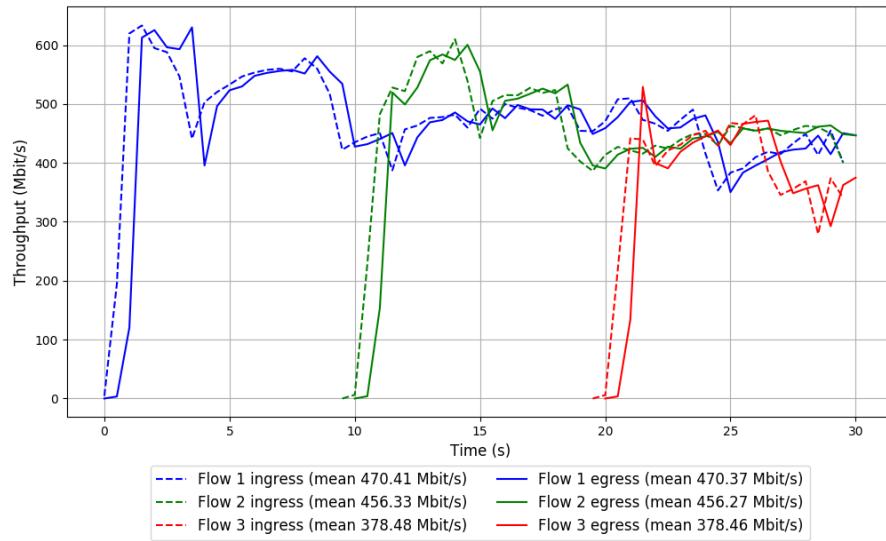


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-03-09 21:19:39
End at: 2019-03-09 21:20:09
Local clock offset: -0.13 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2019-03-10 01:12:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 900.69 Mbit/s
95th percentile per-packet one-way delay: 68.450 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 470.37 Mbit/s
95th percentile per-packet one-way delay: 69.622 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 456.27 Mbit/s
95th percentile per-packet one-way delay: 67.040 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 378.46 Mbit/s
95th percentile per-packet one-way delay: 68.856 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Cubic — Data Link

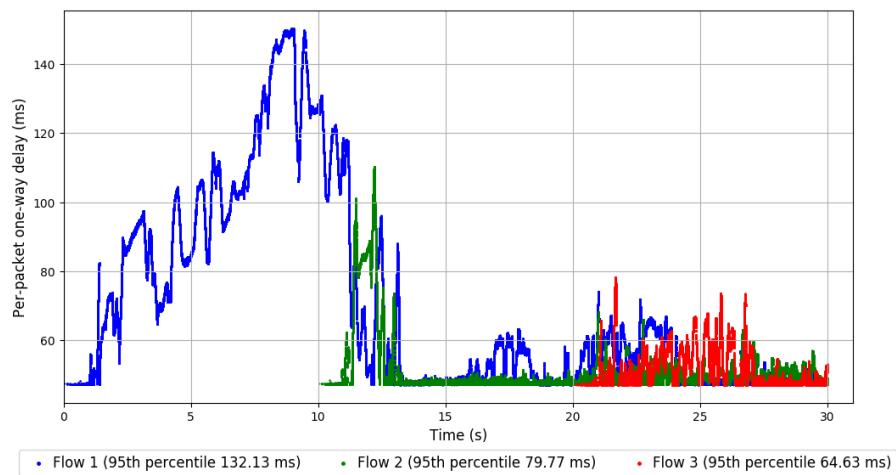
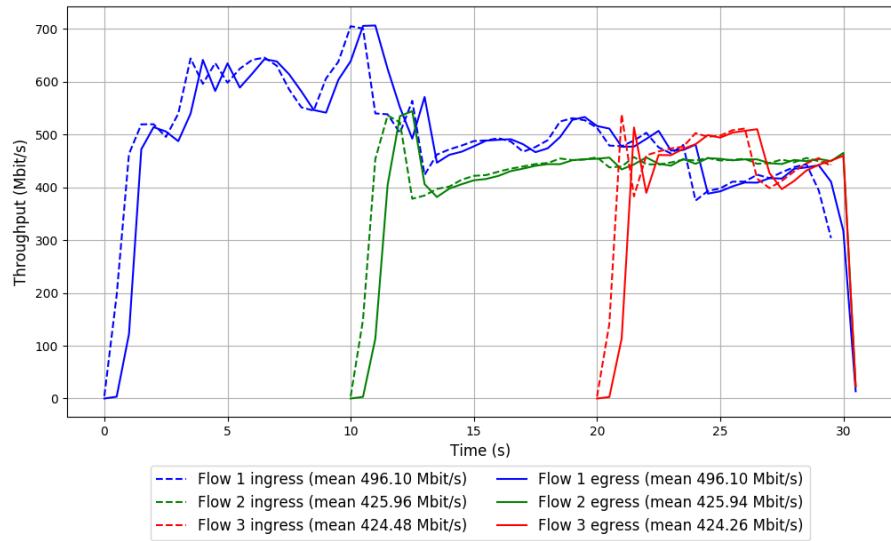


Run 2: Statistics of TCP Cubic

```
Start at: 2019-03-09 21:54:36
End at: 2019-03-09 21:55:06
Local clock offset: -0.143 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-03-10 01:12:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 920.74 Mbit/s
95th percentile per-packet one-way delay: 123.546 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 496.10 Mbit/s
95th percentile per-packet one-way delay: 132.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 425.94 Mbit/s
95th percentile per-packet one-way delay: 79.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 424.26 Mbit/s
95th percentile per-packet one-way delay: 64.633 ms
Loss rate: 0.06%
```

Run 2: Report of TCP Cubic — Data Link

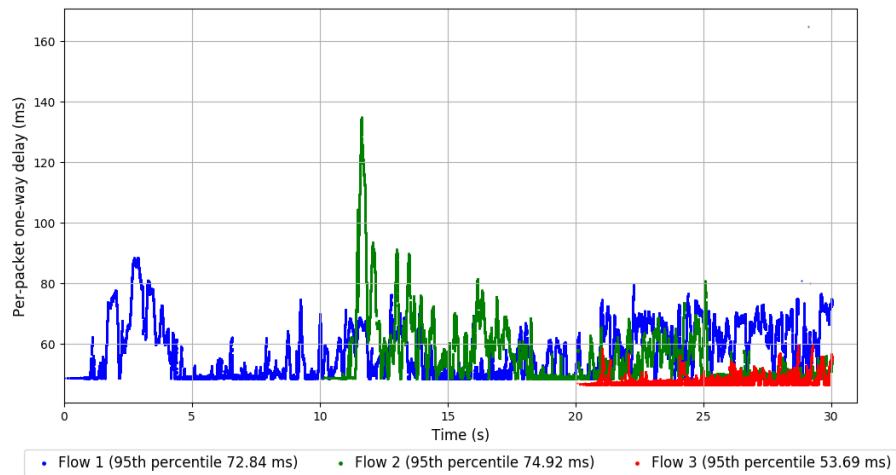
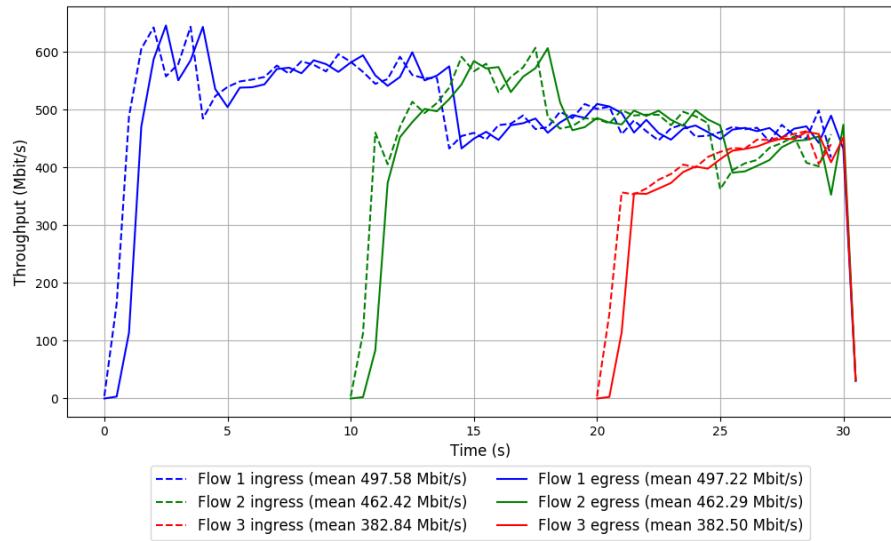


Run 3: Statistics of TCP Cubic

```
Start at: 2019-03-09 22:30:36
End at: 2019-03-09 22:31:06
Local clock offset: -0.155 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-03-10 01:13:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 932.26 Mbit/s
95th percentile per-packet one-way delay: 72.484 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 497.22 Mbit/s
95th percentile per-packet one-way delay: 72.839 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 462.29 Mbit/s
95th percentile per-packet one-way delay: 74.915 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 382.50 Mbit/s
95th percentile per-packet one-way delay: 53.687 ms
Loss rate: 0.02%
```

Run 3: Report of TCP Cubic — Data Link

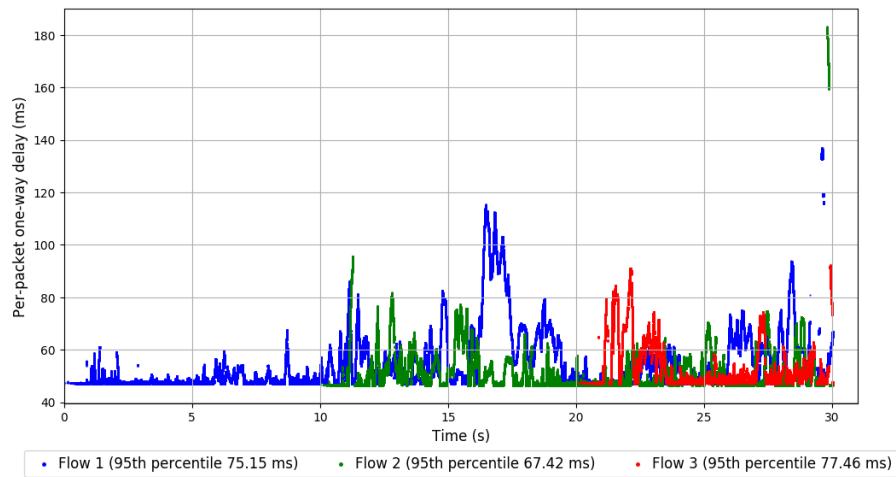
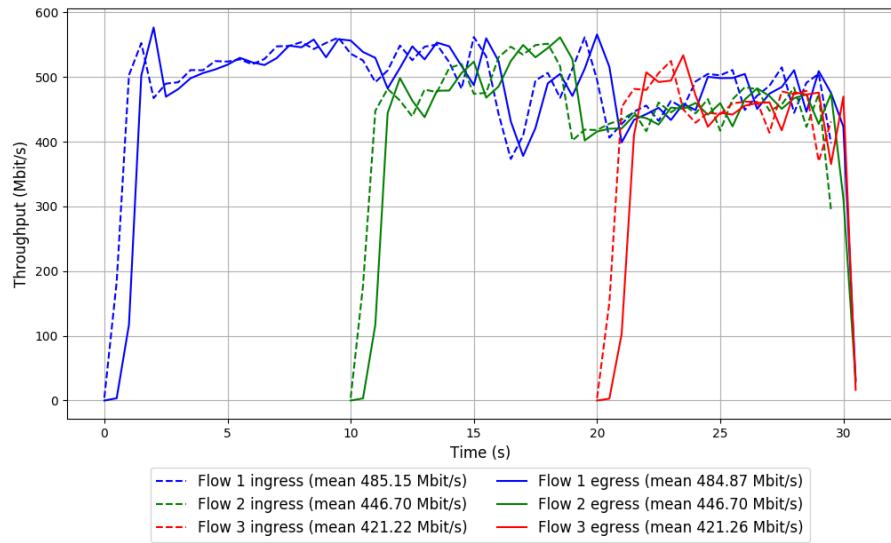


Run 4: Statistics of TCP Cubic

```
Start at: 2019-03-09 23:08:21
End at: 2019-03-09 23:08:51
Local clock offset: -0.156 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-03-10 01:13:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 922.42 Mbit/s
95th percentile per-packet one-way delay: 72.015 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 484.87 Mbit/s
95th percentile per-packet one-way delay: 75.146 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 446.70 Mbit/s
95th percentile per-packet one-way delay: 67.417 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 421.26 Mbit/s
95th percentile per-packet one-way delay: 77.457 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Cubic — Data Link

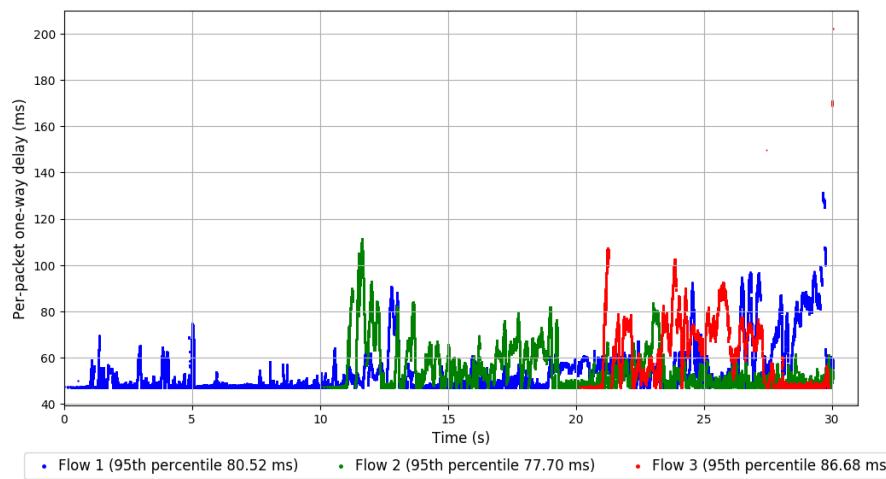
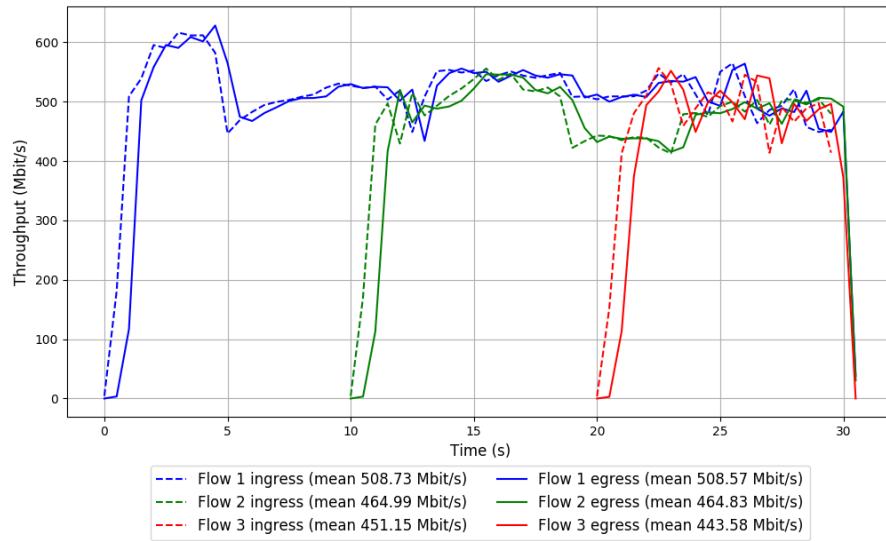


Run 5: Statistics of TCP Cubic

```
Start at: 2019-03-09 23:45:02
End at: 2019-03-09 23:45:32
Local clock offset: 0.054 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2019-03-10 01:14:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 965.71 Mbit/s
95th percentile per-packet one-way delay: 80.846 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 508.57 Mbit/s
95th percentile per-packet one-way delay: 80.517 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 464.83 Mbit/s
95th percentile per-packet one-way delay: 77.702 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 443.58 Mbit/s
95th percentile per-packet one-way delay: 86.680 ms
Loss rate: 1.01%
```

Run 5: Report of TCP Cubic — Data Link

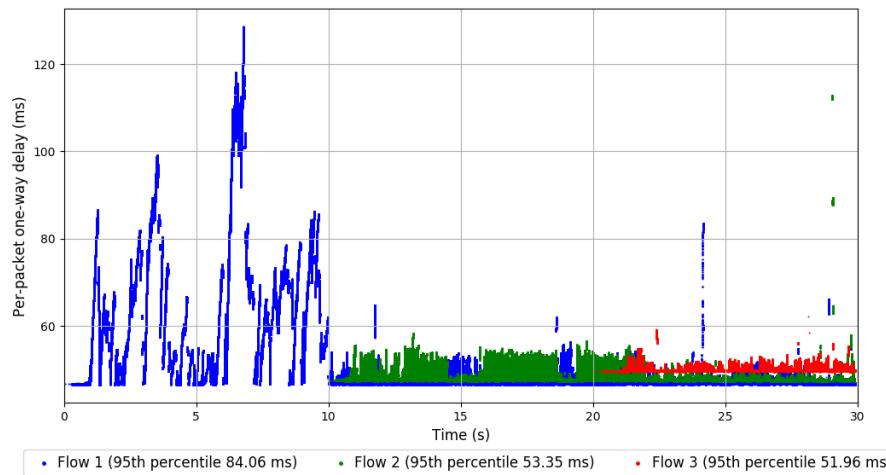
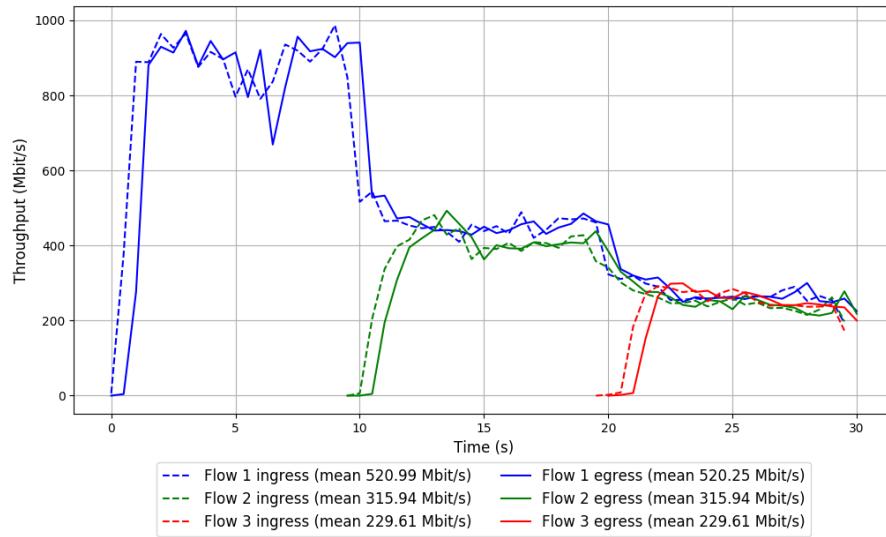


```
Run 1: Statistics of FillP

Start at: 2019-03-09 21:31:25
End at: 2019-03-09 21:31:55
Local clock offset: -0.143 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-03-10 01:16:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 807.04 Mbit/s
95th percentile per-packet one-way delay: 79.128 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 520.25 Mbit/s
95th percentile per-packet one-way delay: 84.055 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 315.94 Mbit/s
95th percentile per-packet one-way delay: 53.349 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 229.61 Mbit/s
95th percentile per-packet one-way delay: 51.961 ms
Loss rate: 0.00%
```

Run 1: Report of FillP — Data Link

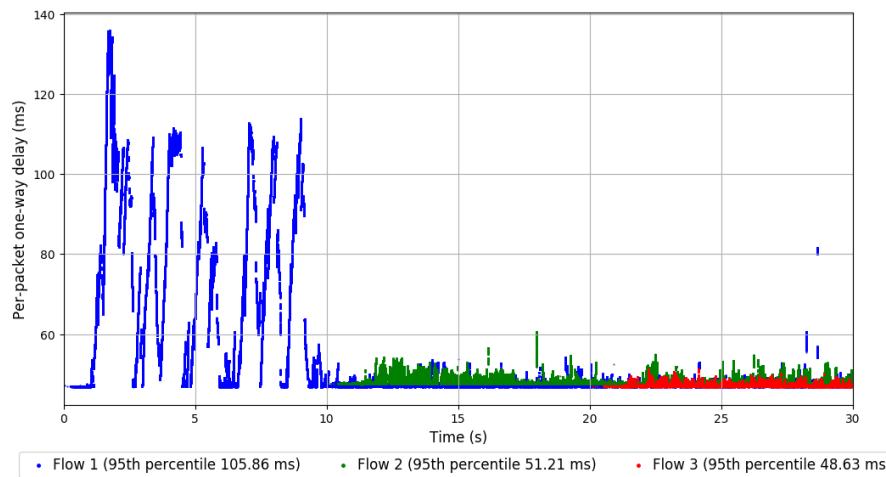
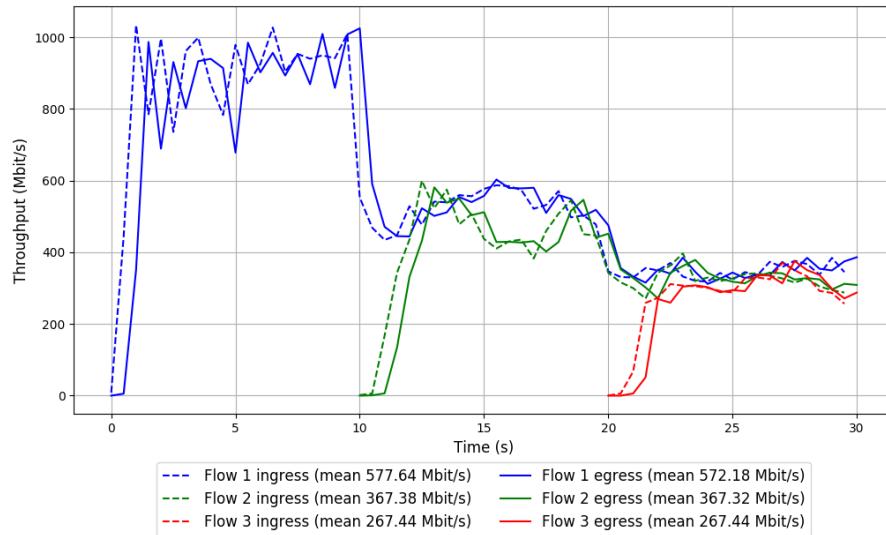


Run 2: Statistics of FillP

```
Start at: 2019-03-09 22:06:19
End at: 2019-03-09 22:06:49
Local clock offset: -0.511 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-03-10 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 904.72 Mbit/s
95th percentile per-packet one-way delay: 101.002 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 572.18 Mbit/s
95th percentile per-packet one-way delay: 105.864 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 367.32 Mbit/s
95th percentile per-packet one-way delay: 51.207 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 267.44 Mbit/s
95th percentile per-packet one-way delay: 48.631 ms
Loss rate: 0.00%
```

Run 2: Report of FillP — Data Link

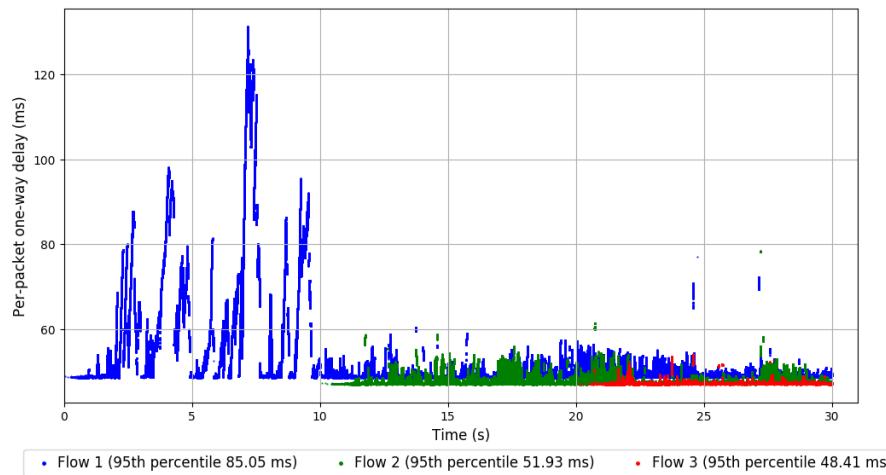
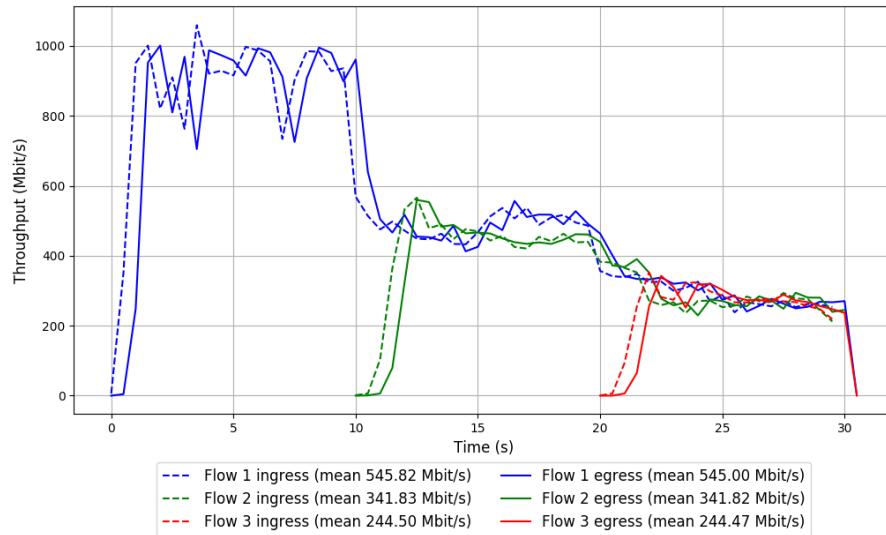


Run 3: Statistics of FillP

```
Start at: 2019-03-09 22:43:39
End at: 2019-03-09 22:44:09
Local clock offset: -0.136 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-03-10 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 852.93 Mbit/s
95th percentile per-packet one-way delay: 77.884 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 545.00 Mbit/s
95th percentile per-packet one-way delay: 85.047 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 341.82 Mbit/s
95th percentile per-packet one-way delay: 51.931 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.47 Mbit/s
95th percentile per-packet one-way delay: 48.405 ms
Loss rate: 0.01%
```

Run 3: Report of FillP — Data Link

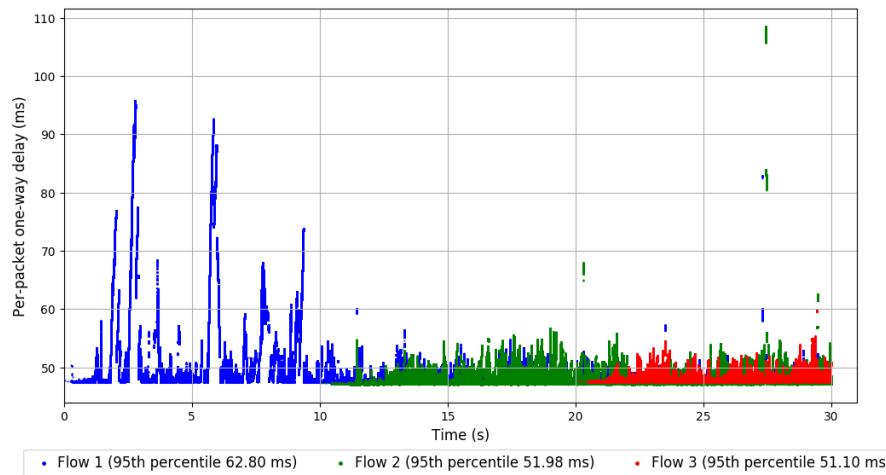
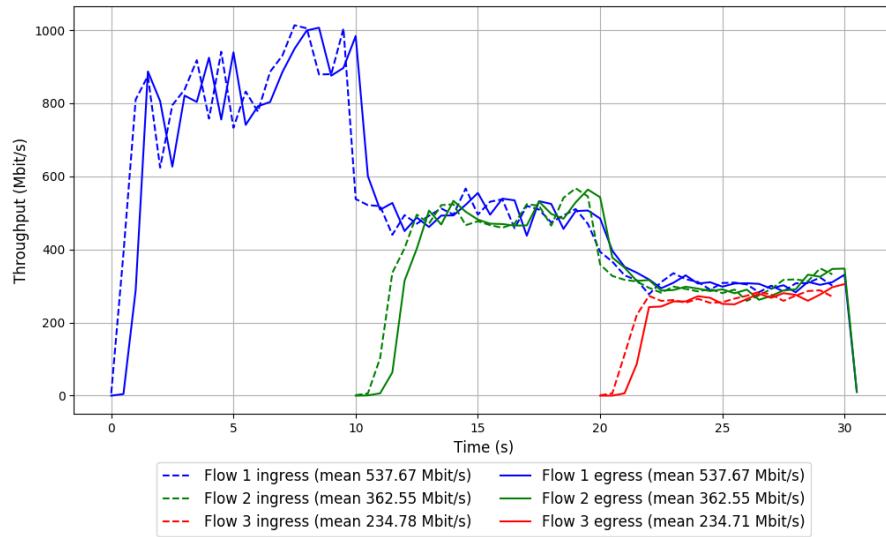


Run 4: Statistics of FillP

```
Start at: 2019-03-09 23:20:23
End at: 2019-03-09 23:20:53
Local clock offset: -0.019 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-03-10 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 856.22 Mbit/s
95th percentile per-packet one-way delay: 58.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 537.67 Mbit/s
95th percentile per-packet one-way delay: 62.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 362.55 Mbit/s
95th percentile per-packet one-way delay: 51.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.71 Mbit/s
95th percentile per-packet one-way delay: 51.105 ms
Loss rate: 0.00%
```

Run 4: Report of FillP — Data Link

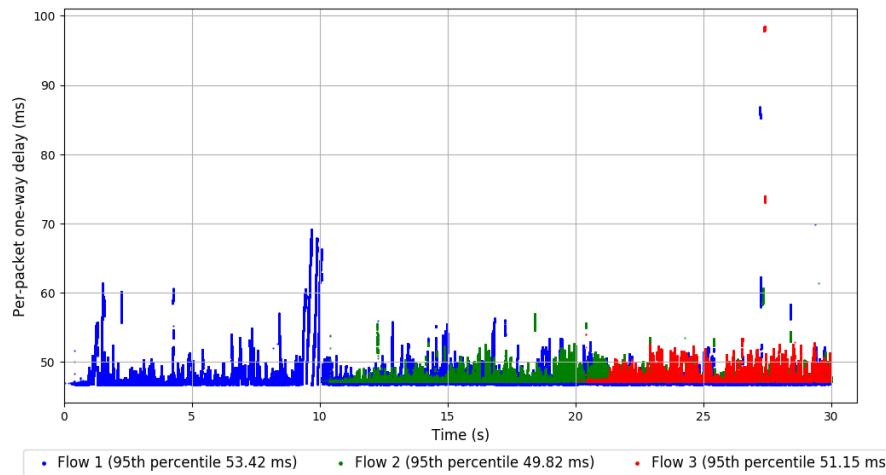
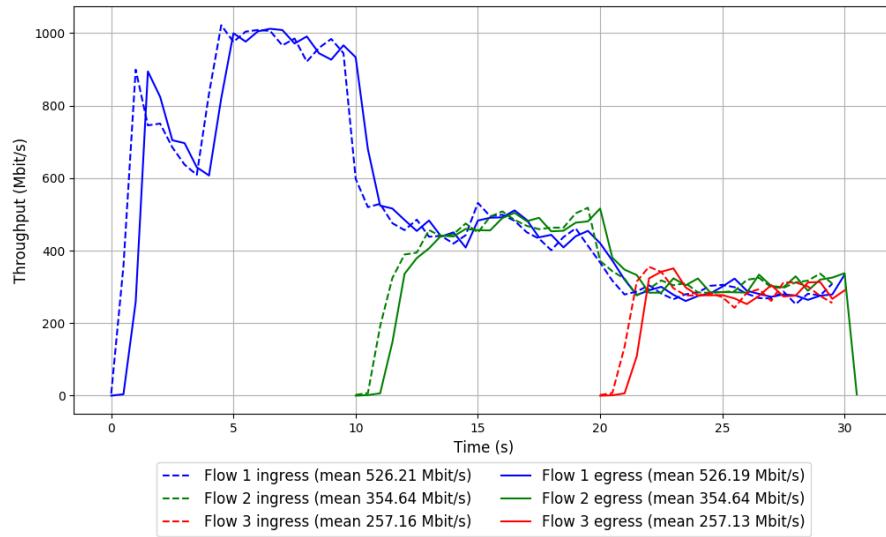


Run 5: Statistics of FillP

```
Start at: 2019-03-09 23:57:09
End at: 2019-03-09 23:57:39
Local clock offset: 0.061 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-03-10 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 846.80 Mbit/s
95th percentile per-packet one-way delay: 51.777 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 526.19 Mbit/s
95th percentile per-packet one-way delay: 53.420 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 354.64 Mbit/s
95th percentile per-packet one-way delay: 49.817 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 257.13 Mbit/s
95th percentile per-packet one-way delay: 51.147 ms
Loss rate: 0.00%
```

Run 5: Report of FillP — Data Link

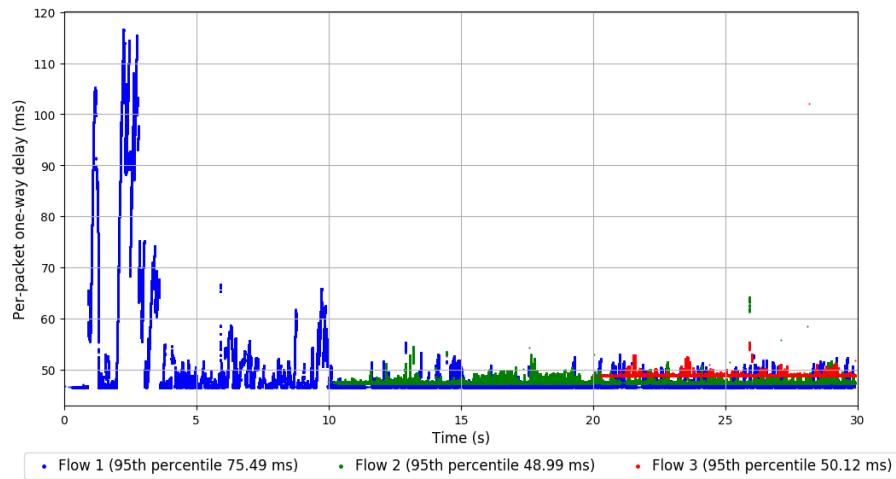
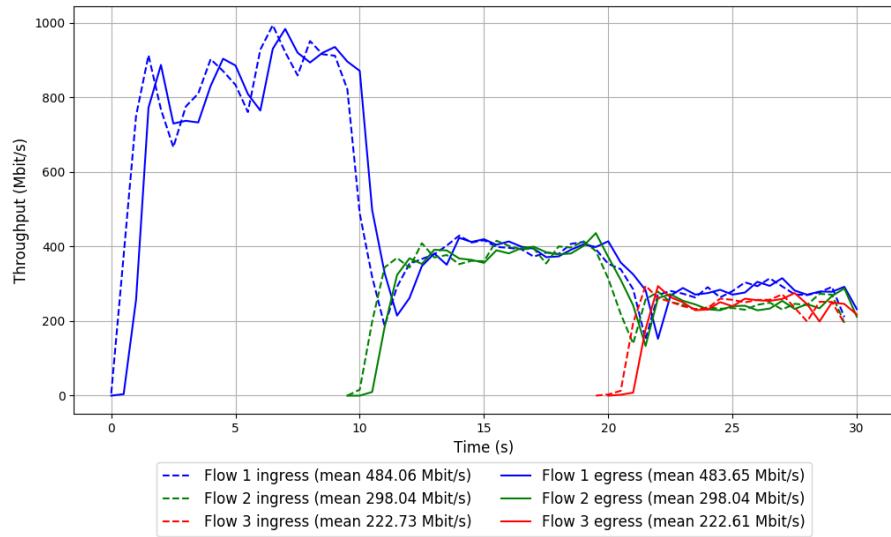


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-03-09 21:49:11
End at: 2019-03-09 21:49:41
Local clock offset: -0.155 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-03-10 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 756.20 Mbit/s
95th percentile per-packet one-way delay: 63.932 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 483.65 Mbit/s
95th percentile per-packet one-way delay: 75.494 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 298.04 Mbit/s
95th percentile per-packet one-way delay: 48.992 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 222.61 Mbit/s
95th percentile per-packet one-way delay: 50.125 ms
Loss rate: 0.04%
```

Run 1: Report of FillP-Sheep — Data Link

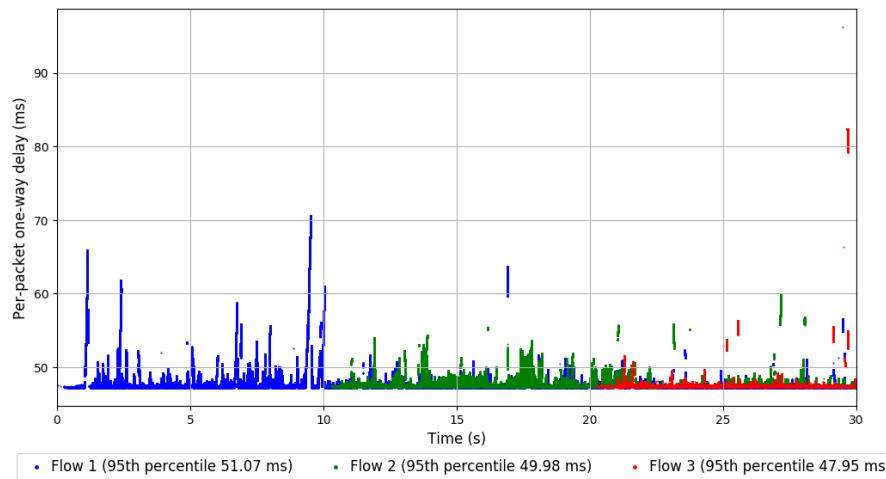
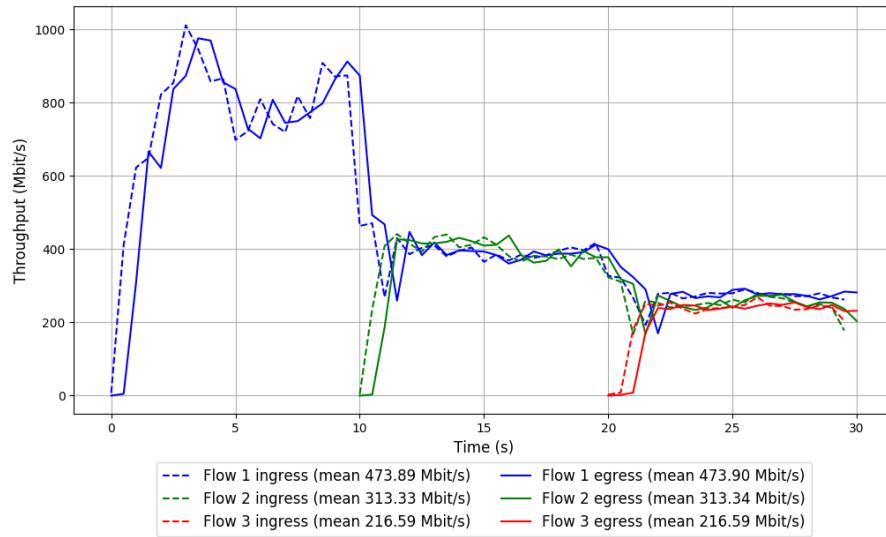


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-03-09 22:24:47
End at: 2019-03-09 22:25:17
Local clock offset: -0.17 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-03-10 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 754.13 Mbit/s
95th percentile per-packet one-way delay: 50.494 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 473.90 Mbit/s
95th percentile per-packet one-way delay: 51.073 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 313.34 Mbit/s
95th percentile per-packet one-way delay: 49.976 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 216.59 Mbit/s
95th percentile per-packet one-way delay: 47.947 ms
Loss rate: 0.00%
```

Run 2: Report of FillP-Sheep — Data Link

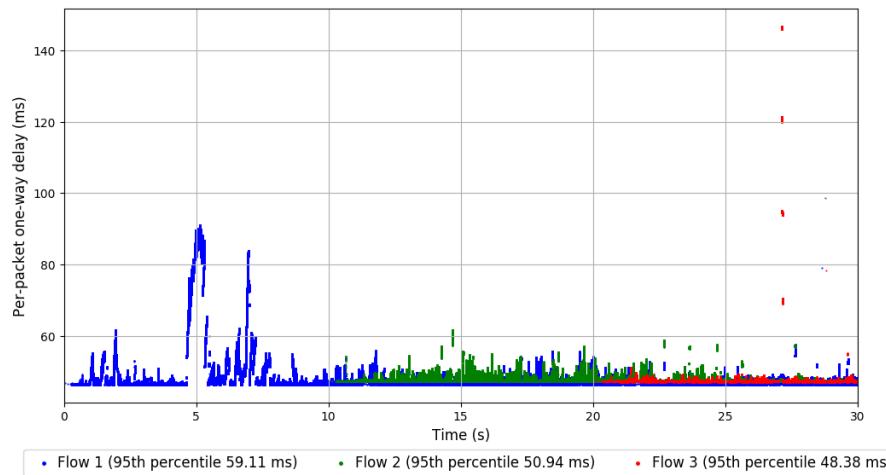
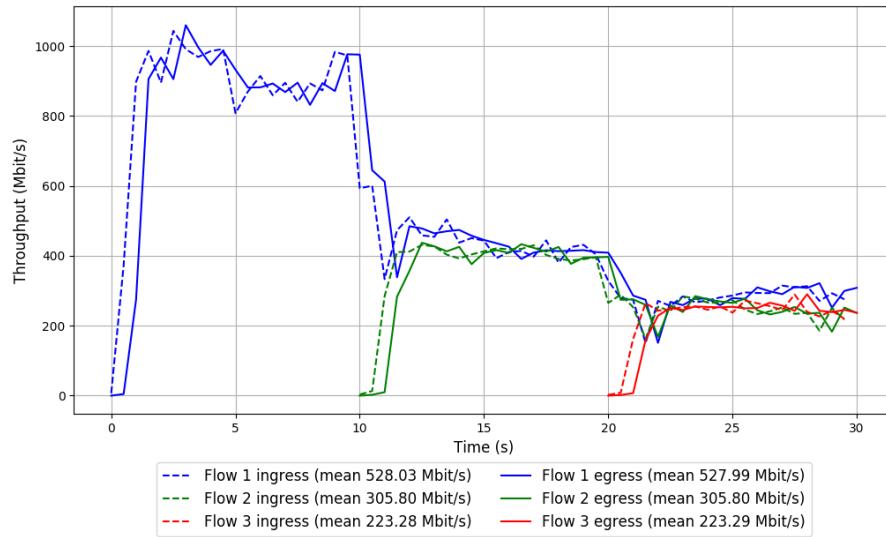


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-03-09 23:02:48
End at: 2019-03-09 23:03:18
Local clock offset: -0.109 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-03-10 01:33:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 805.24 Mbit/s
95th percentile per-packet one-way delay: 54.968 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 527.99 Mbit/s
95th percentile per-packet one-way delay: 59.113 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 305.80 Mbit/s
95th percentile per-packet one-way delay: 50.938 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 223.29 Mbit/s
95th percentile per-packet one-way delay: 48.380 ms
Loss rate: 0.00%
```

Run 3: Report of FillP-Sheep — Data Link

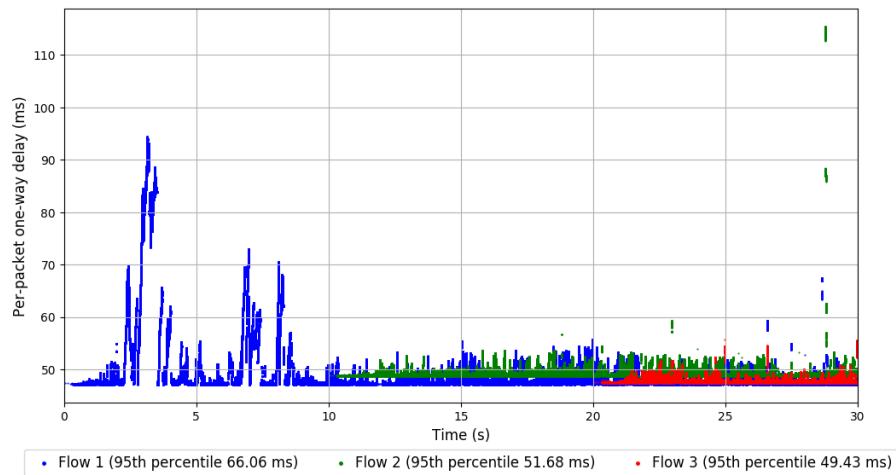
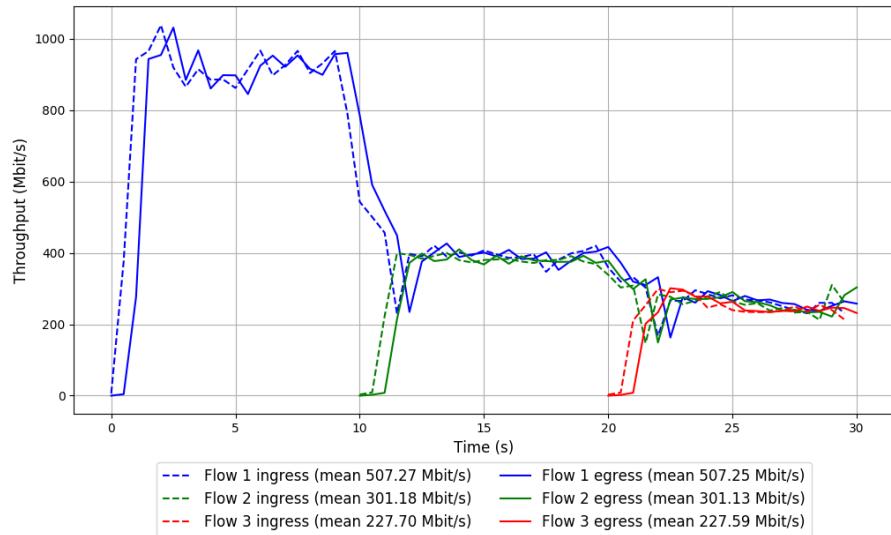


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-03-09 23:39:05
End at: 2019-03-09 23:39:35
Local clock offset: 0.05 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2019-03-10 01:34:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 782.93 Mbit/s
95th percentile per-packet one-way delay: 61.101 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 507.25 Mbit/s
95th percentile per-packet one-way delay: 66.056 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 301.13 Mbit/s
95th percentile per-packet one-way delay: 51.681 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 227.59 Mbit/s
95th percentile per-packet one-way delay: 49.429 ms
Loss rate: 0.00%
```

Run 4: Report of FillP-Sheep — Data Link

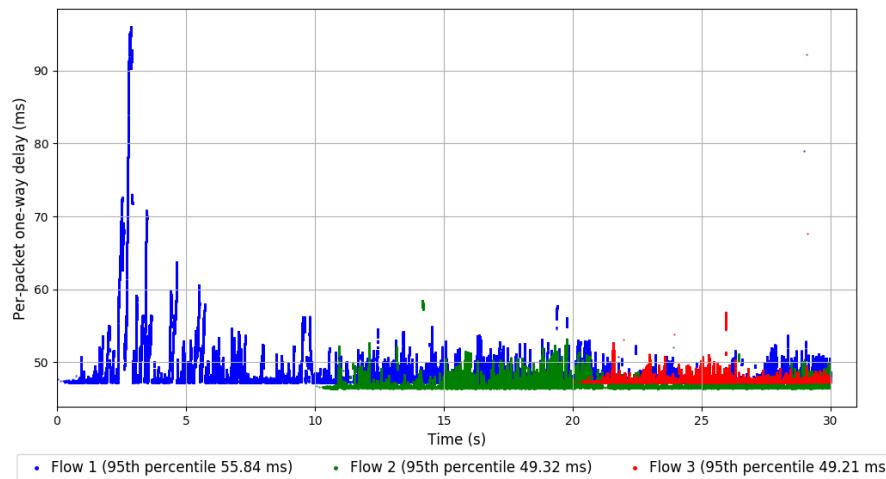
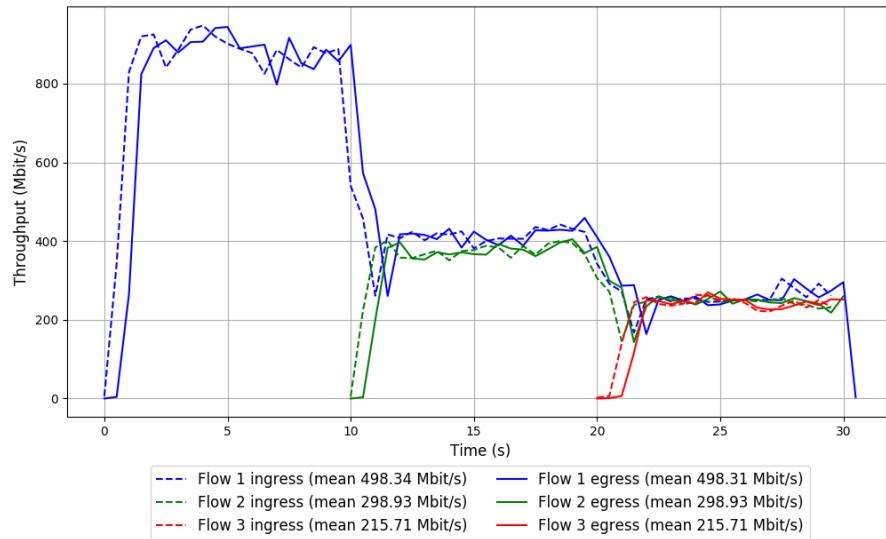


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-03-10 00:15:42
End at: 2019-03-10 00:16:12
Local clock offset: 0.134 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2019-03-10 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 768.66 Mbit/s
95th percentile per-packet one-way delay: 53.976 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 498.31 Mbit/s
95th percentile per-packet one-way delay: 55.838 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 298.93 Mbit/s
95th percentile per-packet one-way delay: 49.317 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 215.71 Mbit/s
95th percentile per-packet one-way delay: 49.207 ms
Loss rate: 0.00%
```

Run 5: Report of FillP-Sheep — Data Link

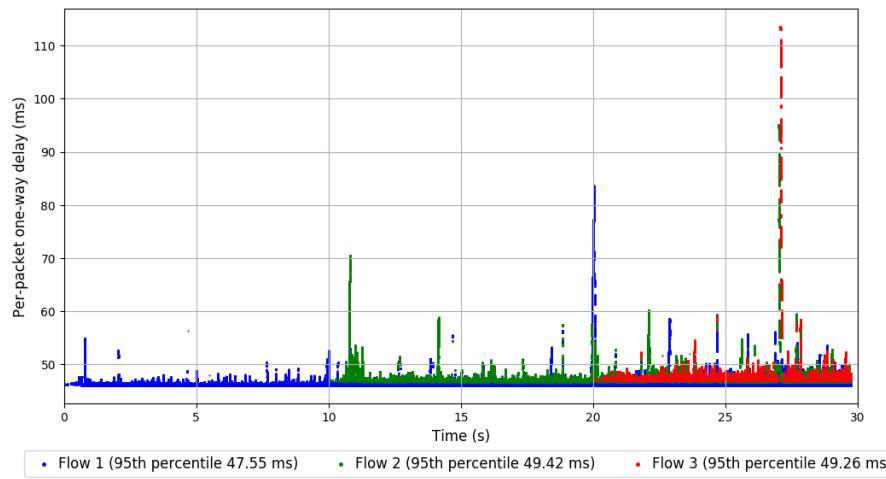
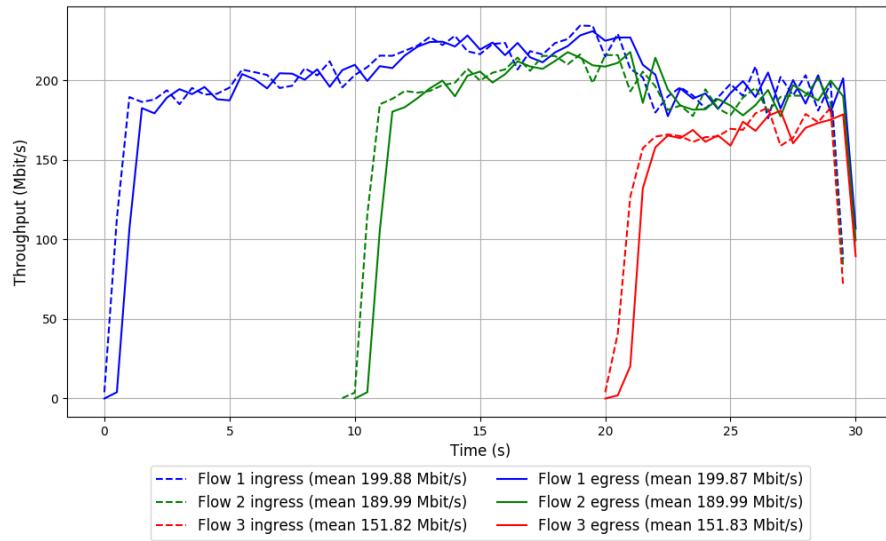


Run 1: Statistics of Indigo

```
Start at: 2019-03-09 21:29:39
End at: 2019-03-09 21:30:09
Local clock offset: 0.269 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-03-10 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.48 Mbit/s
95th percentile per-packet one-way delay: 48.677 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.87 Mbit/s
95th percentile per-packet one-way delay: 47.546 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.99 Mbit/s
95th percentile per-packet one-way delay: 49.418 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 151.83 Mbit/s
95th percentile per-packet one-way delay: 49.257 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

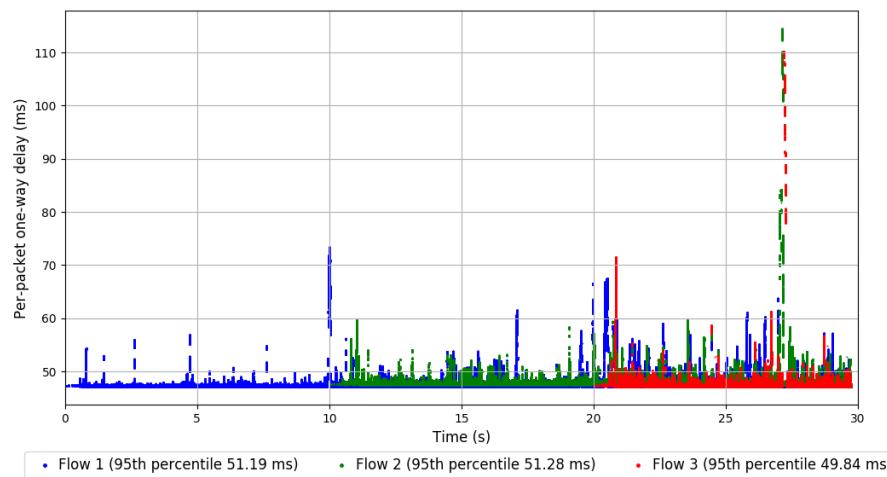
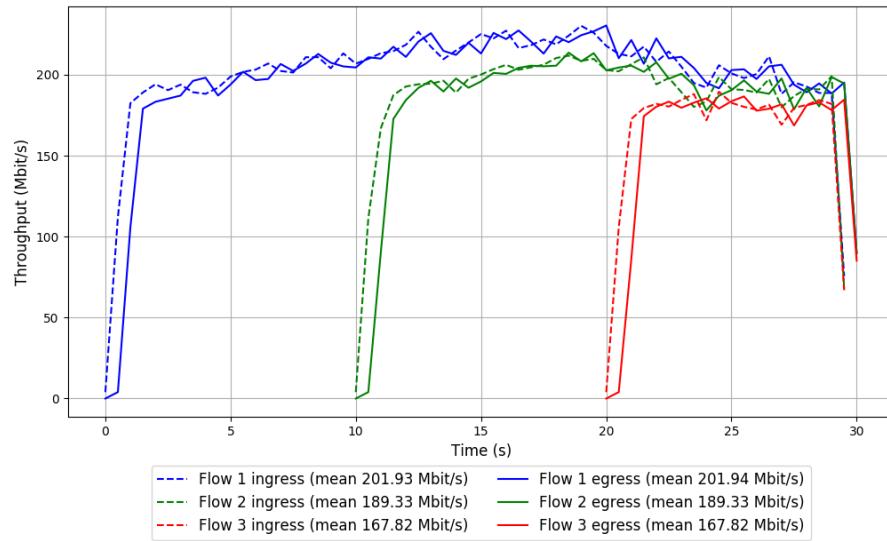


Run 2: Statistics of Indigo

```
Start at: 2019-03-09 22:04:32
End at: 2019-03-09 22:05:02
Local clock offset: -0.162 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-03-10 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 382.01 Mbit/s
95th percentile per-packet one-way delay: 51.051 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 201.94 Mbit/s
95th percentile per-packet one-way delay: 51.191 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.33 Mbit/s
95th percentile per-packet one-way delay: 51.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.82 Mbit/s
95th percentile per-packet one-way delay: 49.841 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

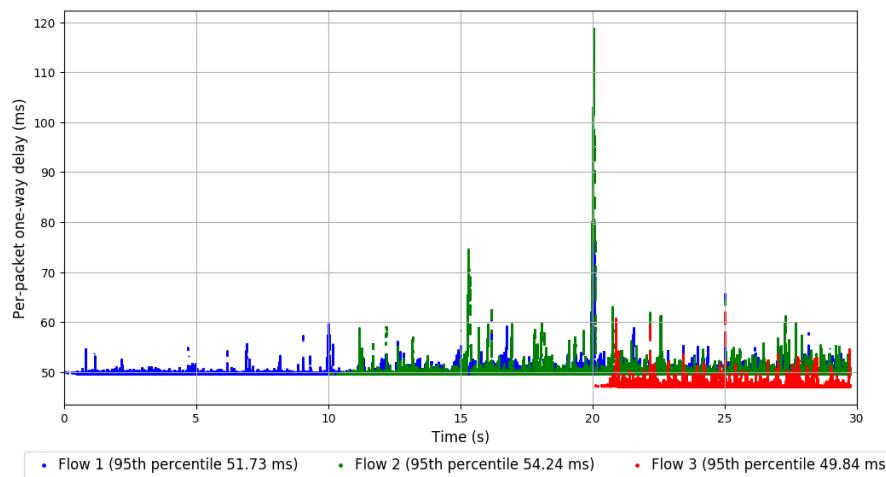
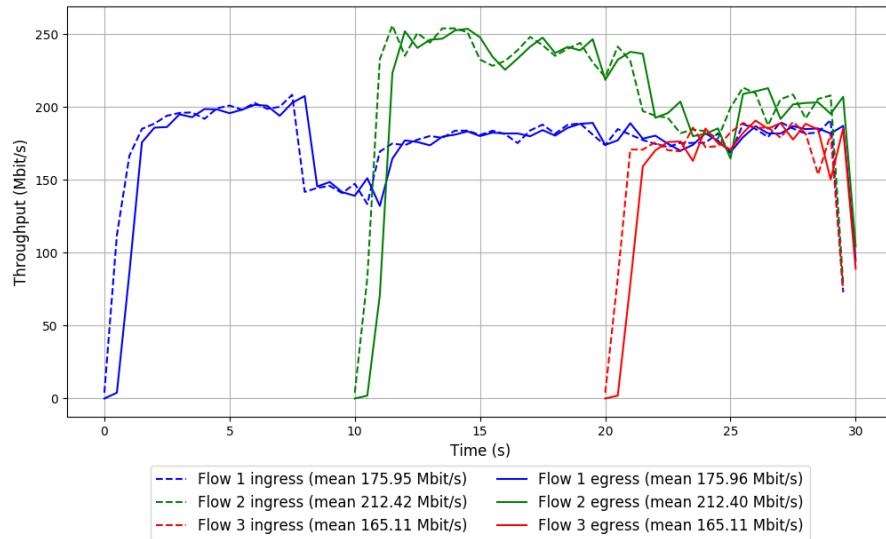


Run 3: Statistics of Indigo

```
Start at: 2019-03-09 22:41:36
End at: 2019-03-09 22:42:06
Local clock offset: -0.136 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2019-03-10 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.13 Mbit/s
95th percentile per-packet one-way delay: 52.393 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 175.96 Mbit/s
95th percentile per-packet one-way delay: 51.727 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 212.40 Mbit/s
95th percentile per-packet one-way delay: 54.238 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 165.11 Mbit/s
95th percentile per-packet one-way delay: 49.839 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

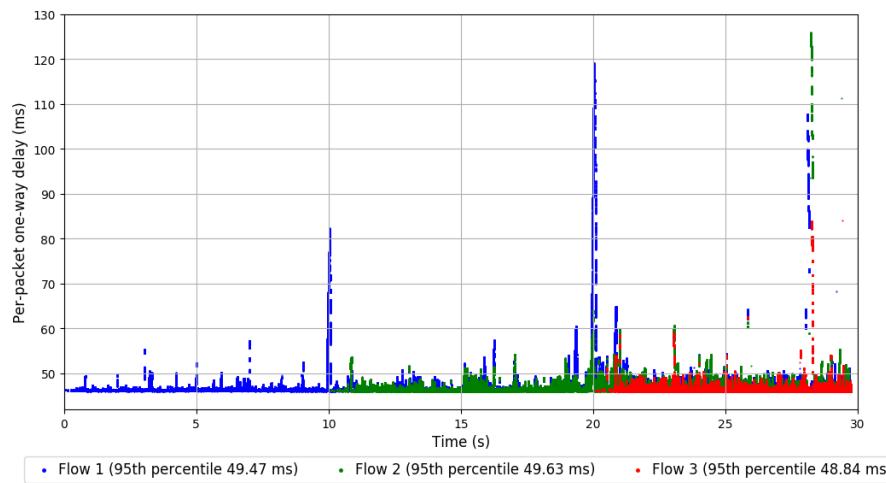
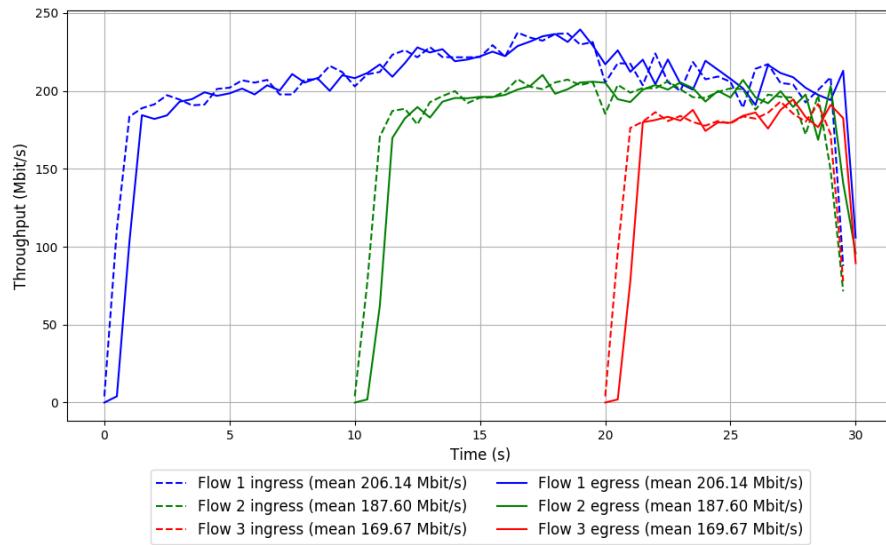


Run 4: Statistics of Indigo

```
Start at: 2019-03-09 23:18:36
End at: 2019-03-09 23:19:06
Local clock offset: 0.325 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2019-03-10 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.35 Mbit/s
95th percentile per-packet one-way delay: 49.431 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 206.14 Mbit/s
95th percentile per-packet one-way delay: 49.471 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.60 Mbit/s
95th percentile per-packet one-way delay: 49.629 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.67 Mbit/s
95th percentile per-packet one-way delay: 48.840 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

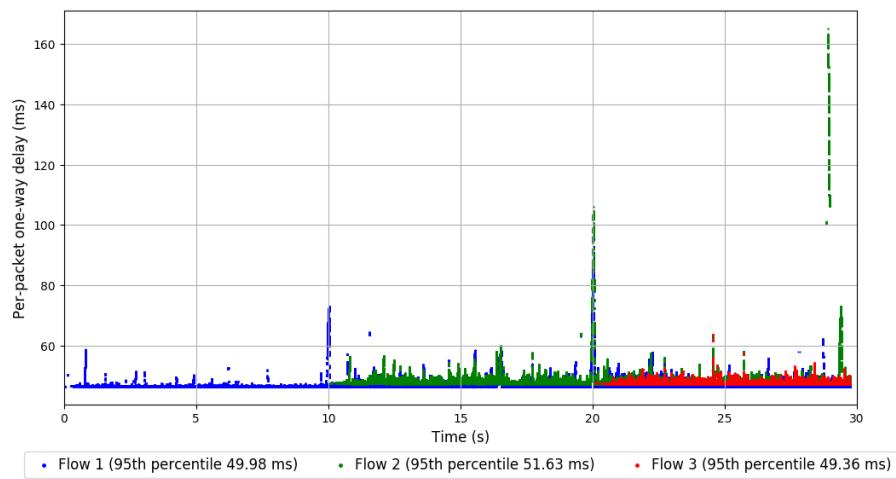
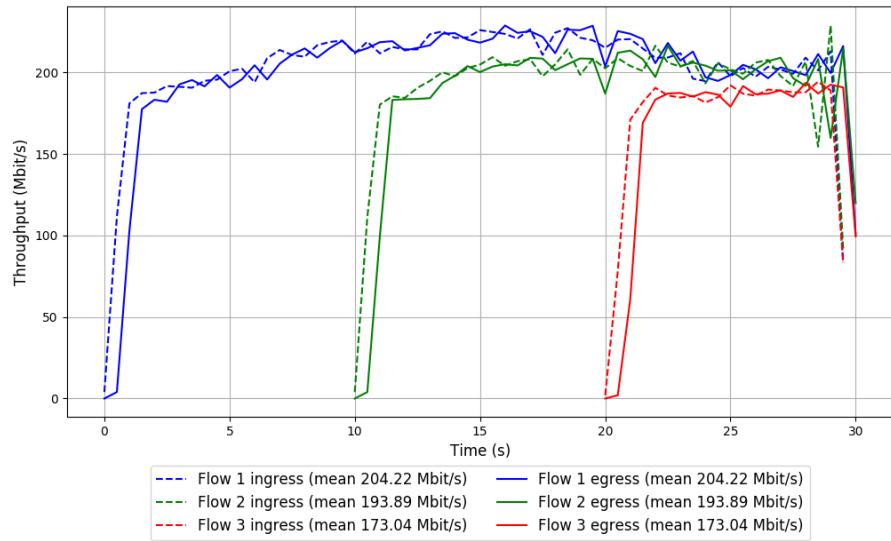


Run 5: Statistics of Indigo

```
Start at: 2019-03-09 23:55:22
End at: 2019-03-09 23:55:52
Local clock offset: 0.048 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-03-10 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 388.82 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 204.22 Mbit/s
95th percentile per-packet one-way delay: 49.979 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.89 Mbit/s
95th percentile per-packet one-way delay: 51.630 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 173.04 Mbit/s
95th percentile per-packet one-way delay: 49.358 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

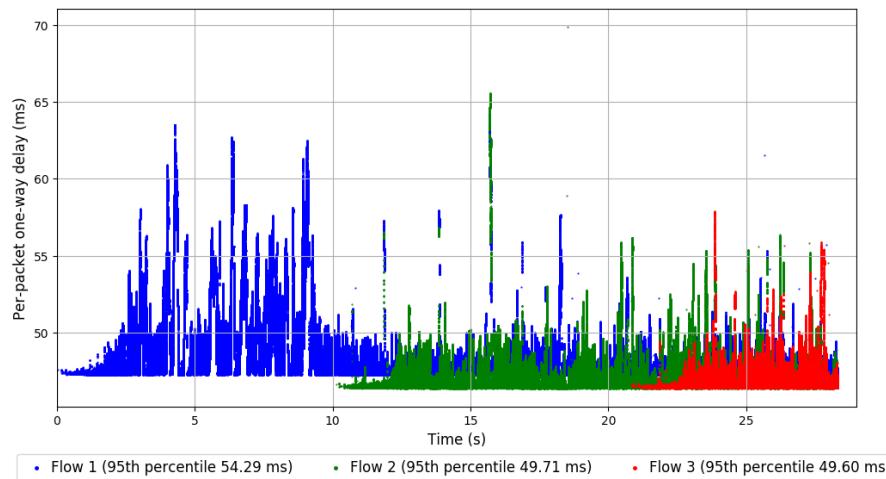
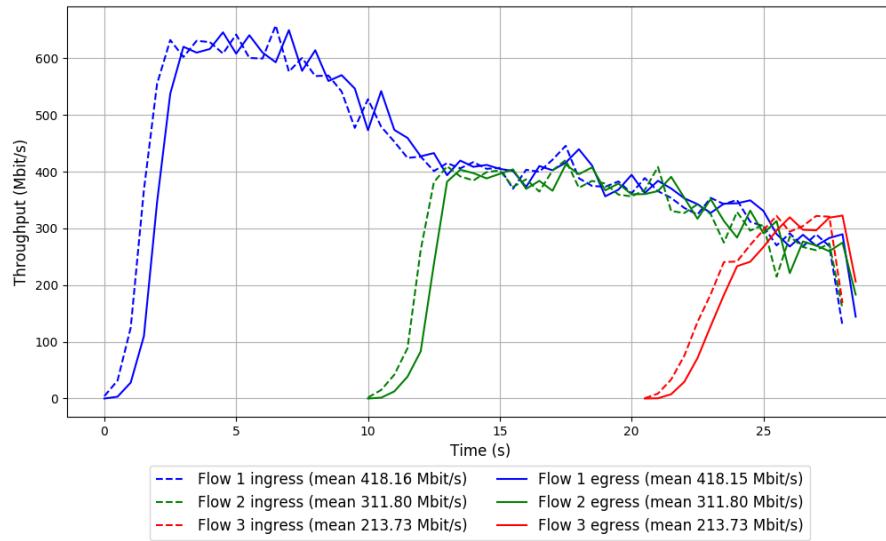


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 21:45:44
End at: 2019-03-09 21:46:14
Local clock offset: -0.103 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-03-10 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 675.66 Mbit/s
95th percentile per-packet one-way delay: 53.108 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 418.15 Mbit/s
95th percentile per-packet one-way delay: 54.292 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 311.80 Mbit/s
95th percentile per-packet one-way delay: 49.712 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 213.73 Mbit/s
95th percentile per-packet one-way delay: 49.597 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC3 — Data Link

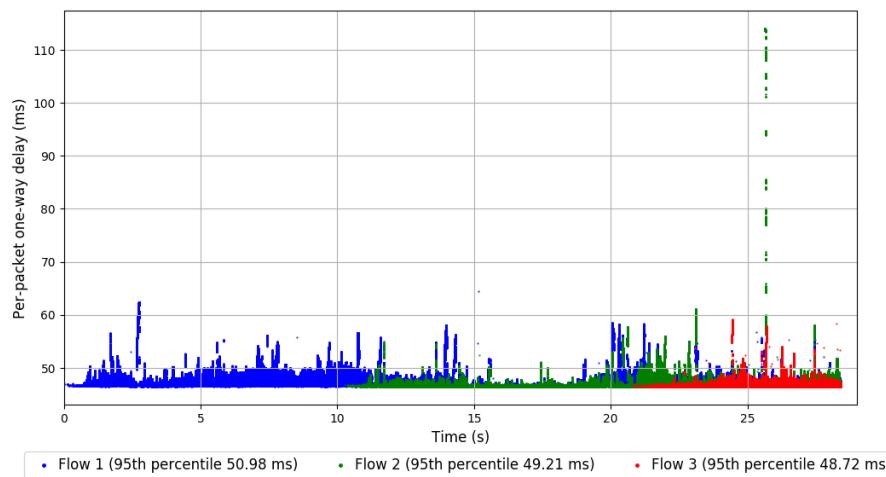
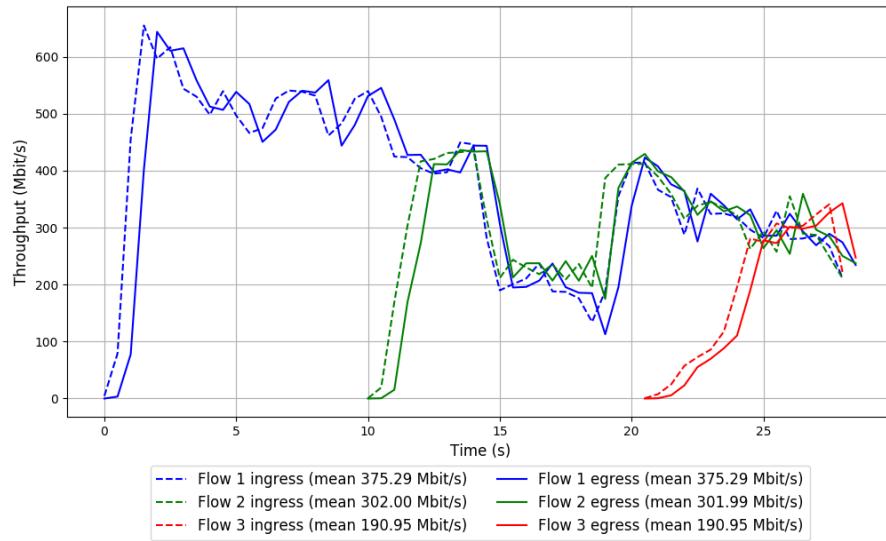


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 22:21:18
End at: 2019-03-09 22:21:48
Local clock offset: -0.193 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-03-10 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 619.68 Mbit/s
95th percentile per-packet one-way delay: 50.282 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 375.29 Mbit/s
95th percentile per-packet one-way delay: 50.976 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 301.99 Mbit/s
95th percentile per-packet one-way delay: 49.210 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 190.95 Mbit/s
95th percentile per-packet one-way delay: 48.717 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

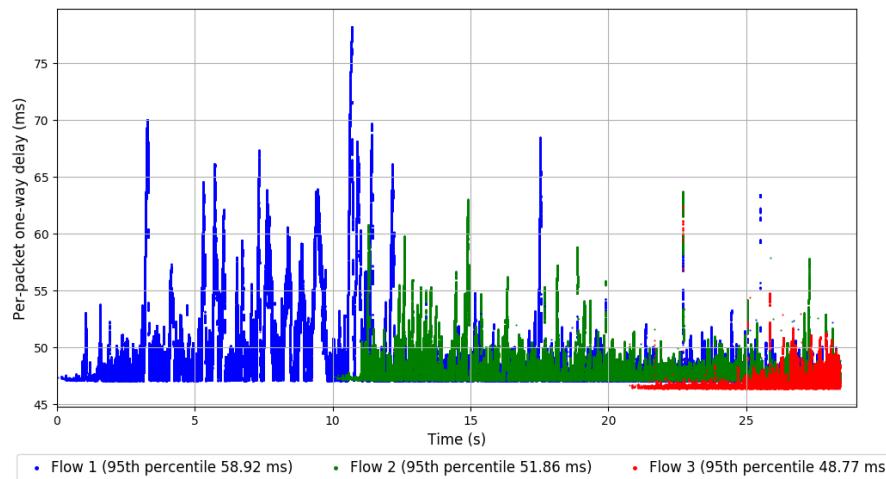
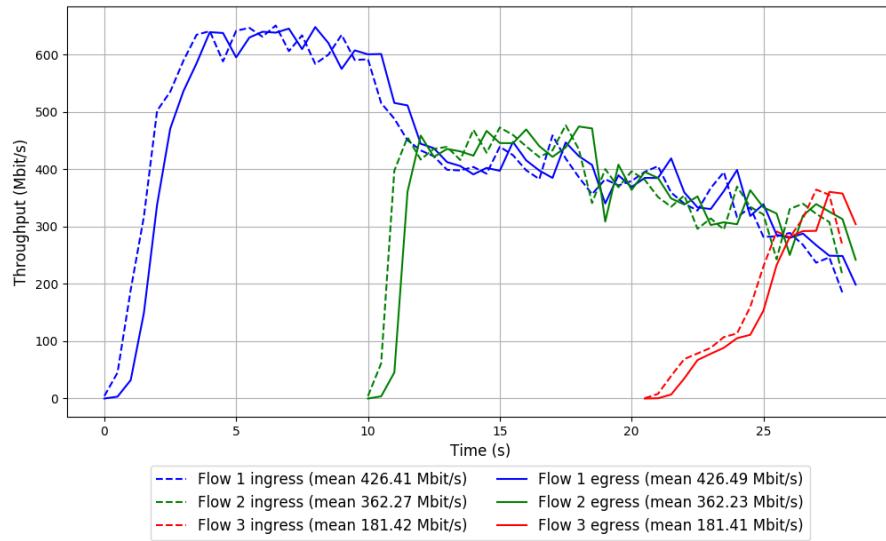


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 22:58:57
End at: 2019-03-09 22:59:27
Local clock offset: -0.106 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2019-03-10 01:57:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 709.30 Mbit/s
95th percentile per-packet one-way delay: 56.489 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 426.49 Mbit/s
95th percentile per-packet one-way delay: 58.921 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 362.23 Mbit/s
95th percentile per-packet one-way delay: 51.864 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 181.41 Mbit/s
95th percentile per-packet one-way delay: 48.769 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

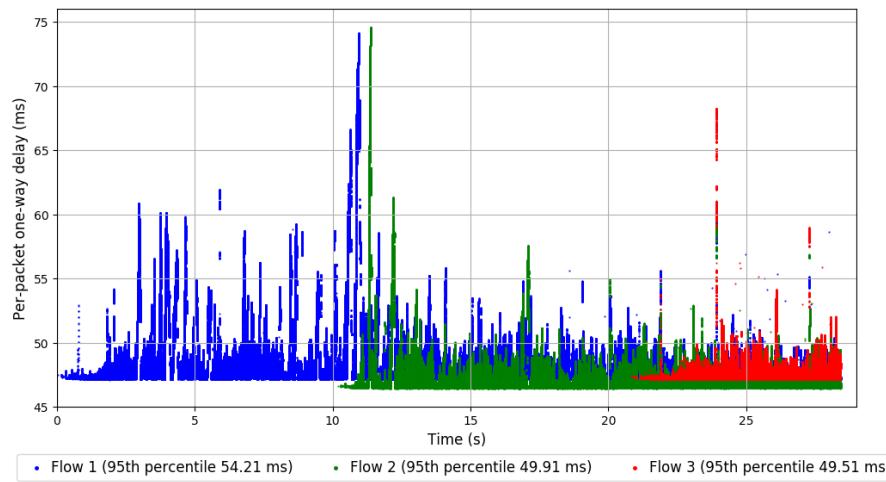
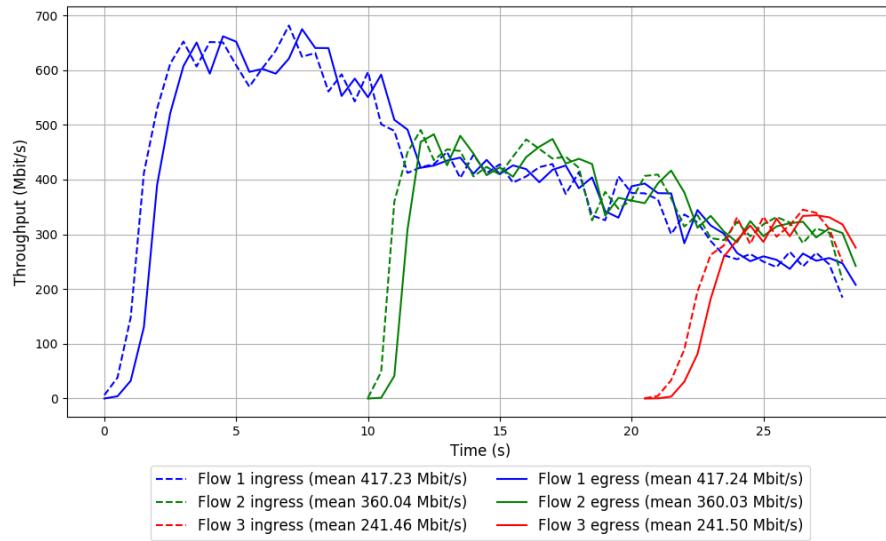


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-03-09 23:35:13
End at: 2019-03-09 23:35:43
Local clock offset: -0.023 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-03-10 01:58:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 713.15 Mbit/s
95th percentile per-packet one-way delay: 52.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 417.24 Mbit/s
95th percentile per-packet one-way delay: 54.210 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 360.03 Mbit/s
95th percentile per-packet one-way delay: 49.914 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.50 Mbit/s
95th percentile per-packet one-way delay: 49.514 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

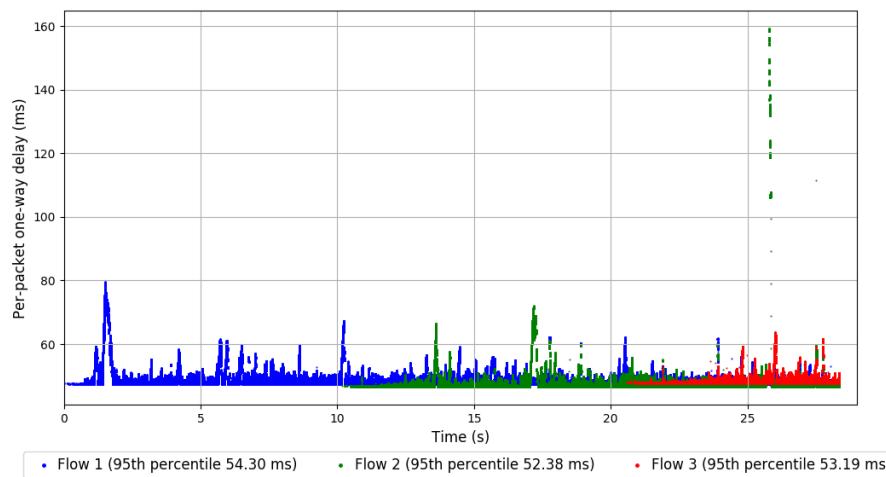
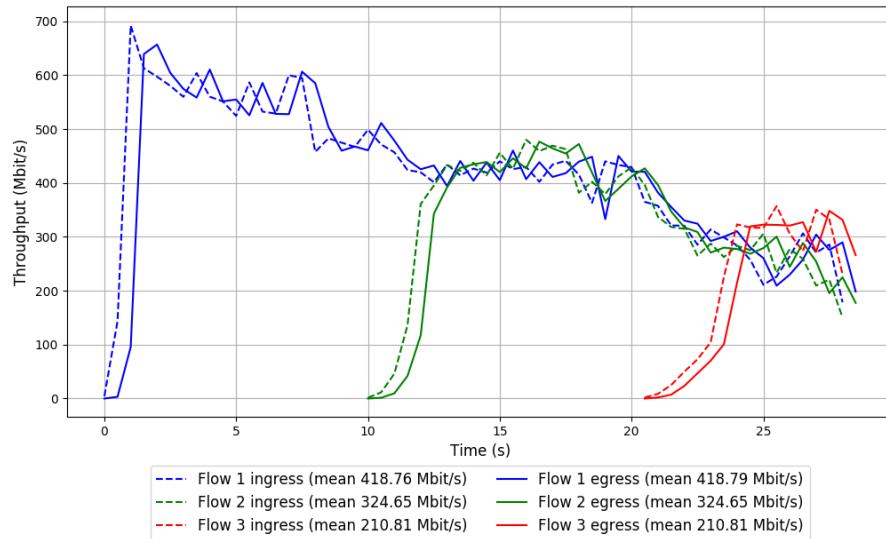


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-03-10 00:11:54
End at: 2019-03-10 00:12:24
Local clock offset: 0.055 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2019-03-10 01:58:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 685.51 Mbit/s
95th percentile per-packet one-way delay: 53.852 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 418.79 Mbit/s
95th percentile per-packet one-way delay: 54.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 324.65 Mbit/s
95th percentile per-packet one-way delay: 52.376 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 210.81 Mbit/s
95th percentile per-packet one-way delay: 53.189 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link

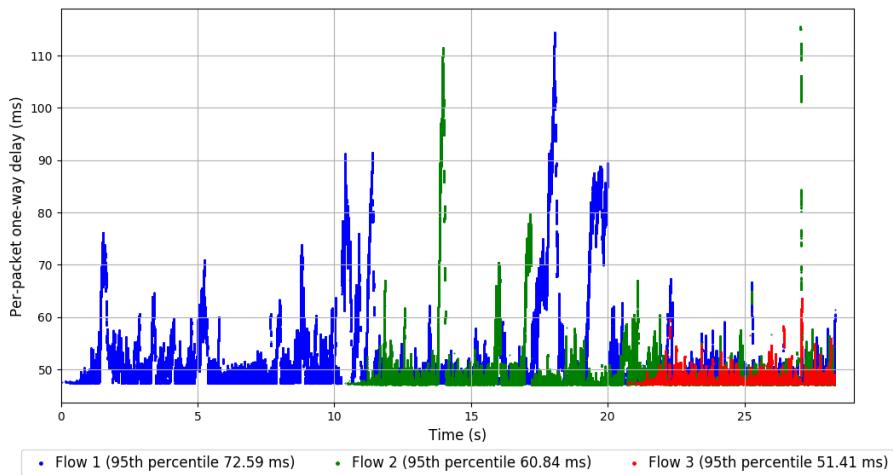
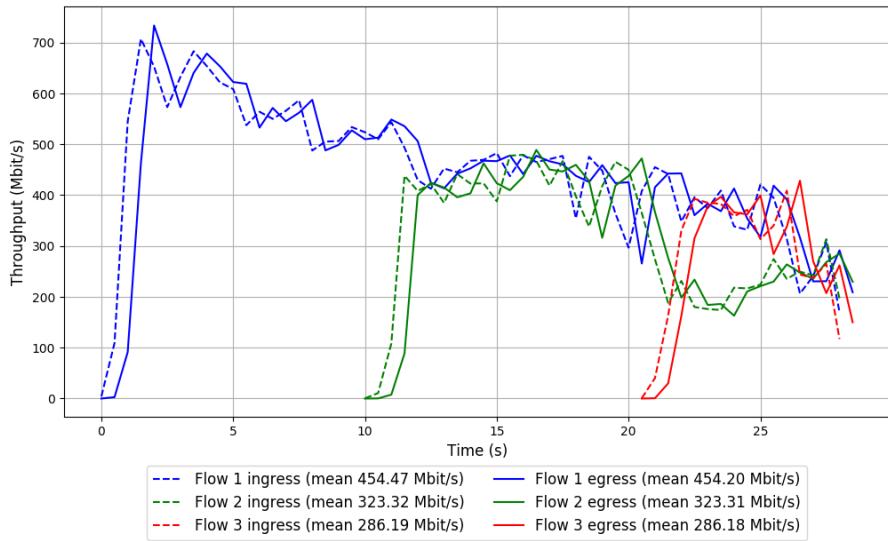


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-03-09 21:52:50
End at: 2019-03-09 21:53:20
Local clock offset: -0.126 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-03-10 01:59:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 736.09 Mbit/s
95th percentile per-packet one-way delay: 68.936 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 454.20 Mbit/s
95th percentile per-packet one-way delay: 72.587 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 323.31 Mbit/s
95th percentile per-packet one-way delay: 60.836 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 286.18 Mbit/s
95th percentile per-packet one-way delay: 51.413 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

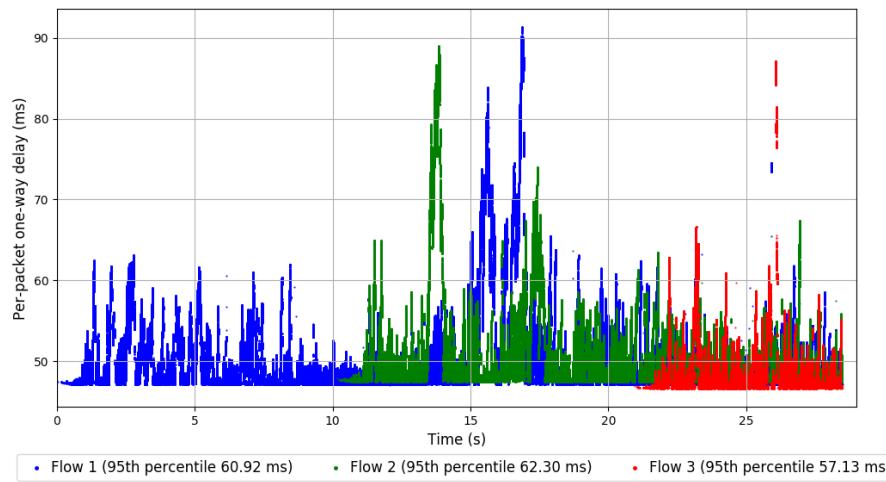
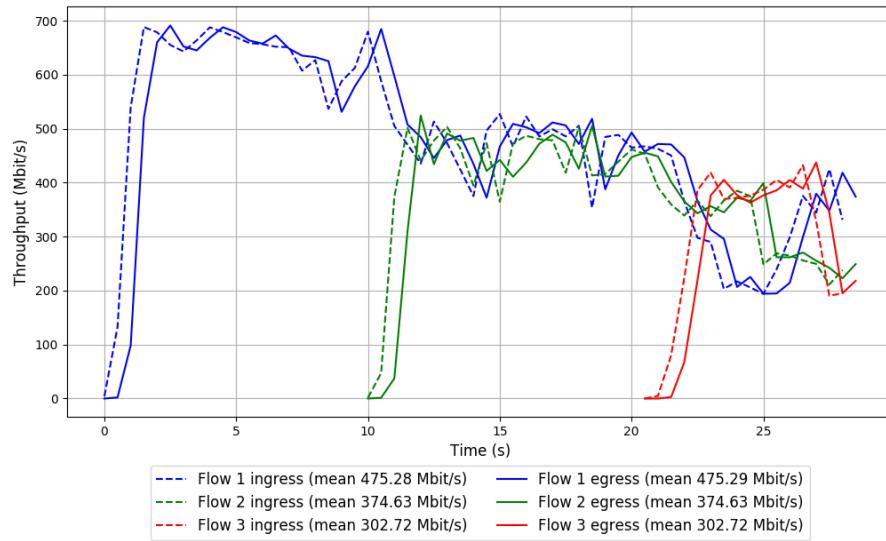


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-03-09 22:28:39
End at: 2019-03-09 22:29:09
Local clock offset: -0.161 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-03-10 02:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 796.68 Mbit/s
95th percentile per-packet one-way delay: 60.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 475.29 Mbit/s
95th percentile per-packet one-way delay: 60.916 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 374.63 Mbit/s
95th percentile per-packet one-way delay: 62.305 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 302.72 Mbit/s
95th percentile per-packet one-way delay: 57.135 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC5 — Data Link

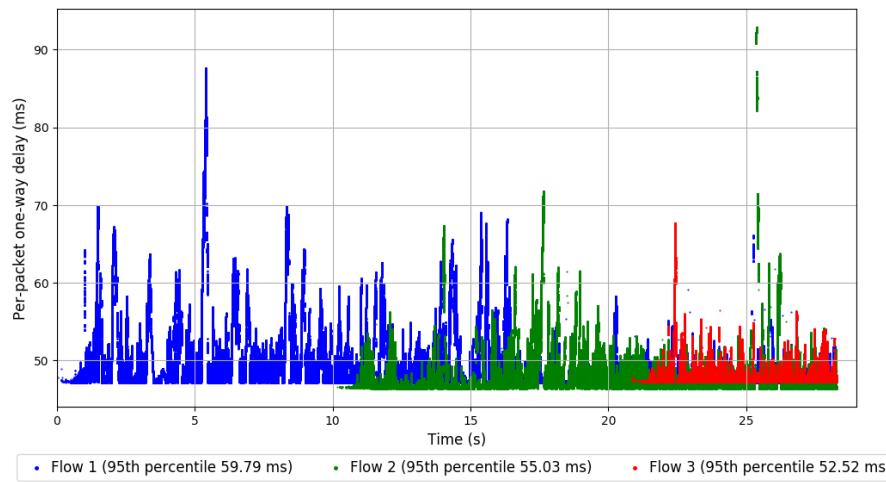
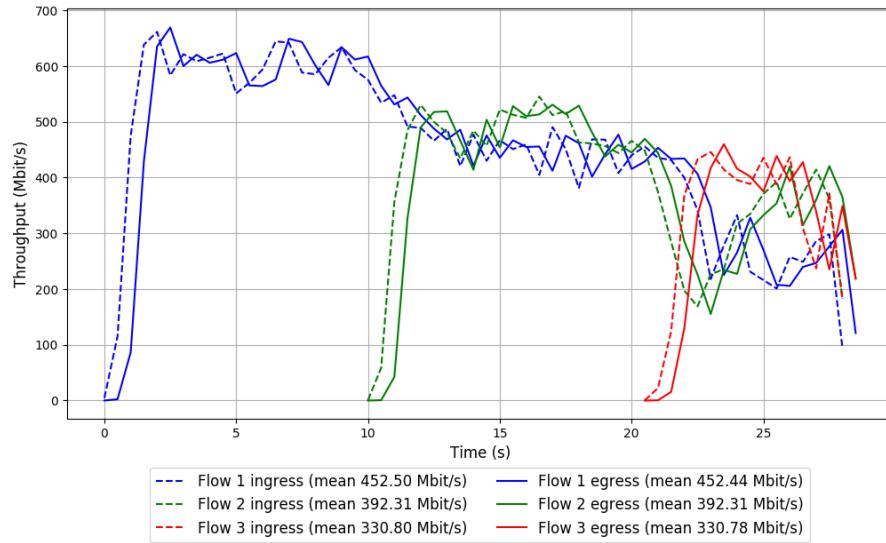


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-03-09 23:06:31
End at: 2019-03-09 23:07:01
Local clock offset: -0.145 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-03-10 02:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 791.00 Mbit/s
95th percentile per-packet one-way delay: 58.513 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 452.44 Mbit/s
95th percentile per-packet one-way delay: 59.791 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 392.31 Mbit/s
95th percentile per-packet one-way delay: 55.033 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 330.78 Mbit/s
95th percentile per-packet one-way delay: 52.515 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

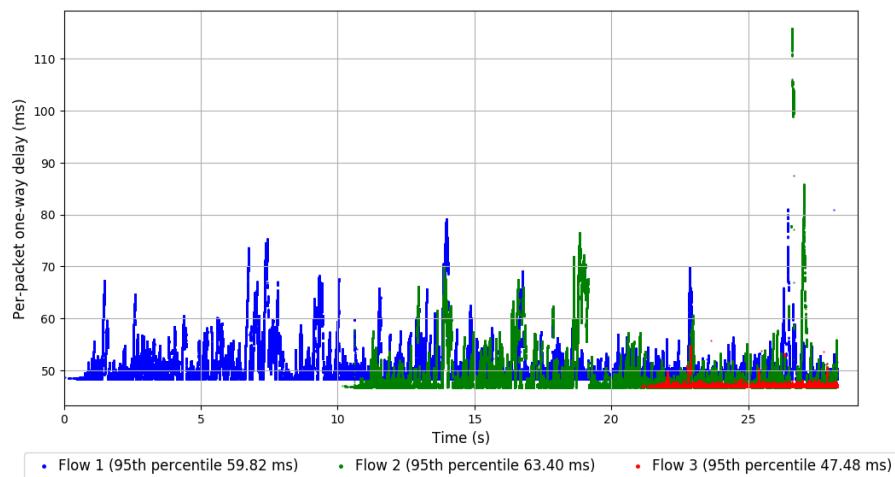
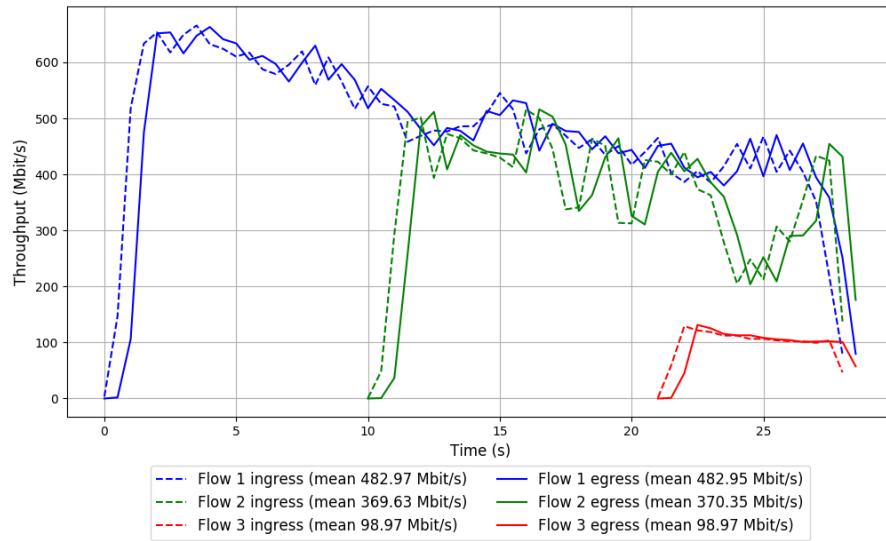


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-03-09 23:43:05
End at: 2019-03-09 23:43:35
Local clock offset: 0.409 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-03-10 02:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 745.31 Mbit/s
95th percentile per-packet one-way delay: 60.628 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 482.95 Mbit/s
95th percentile per-packet one-way delay: 59.818 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 370.35 Mbit/s
95th percentile per-packet one-way delay: 63.399 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.97 Mbit/s
95th percentile per-packet one-way delay: 47.478 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

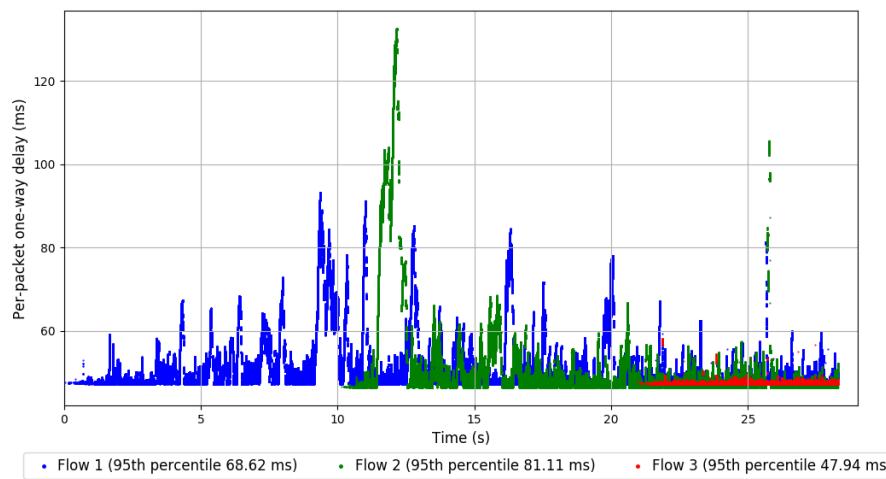
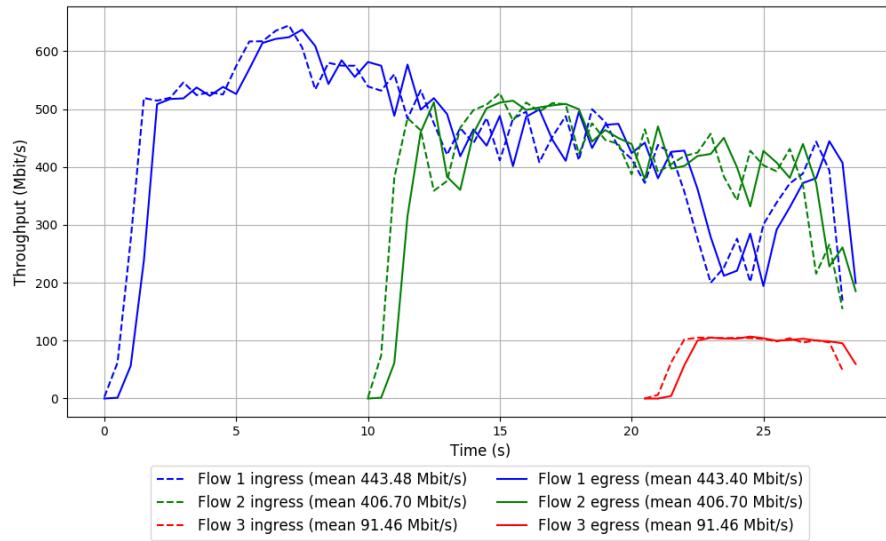


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-03-10 00:19:34
End at: 2019-03-10 00:20:04
Local clock offset: 0.088 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2019-03-10 02:02:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 728.42 Mbit/s
95th percentile per-packet one-way delay: 70.868 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 443.40 Mbit/s
95th percentile per-packet one-way delay: 68.620 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 406.70 Mbit/s
95th percentile per-packet one-way delay: 81.115 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.46 Mbit/s
95th percentile per-packet one-way delay: 47.941 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

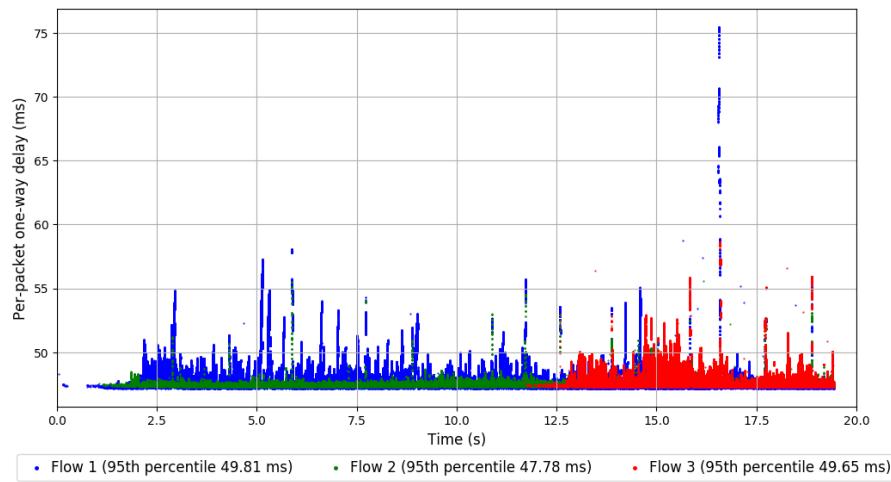
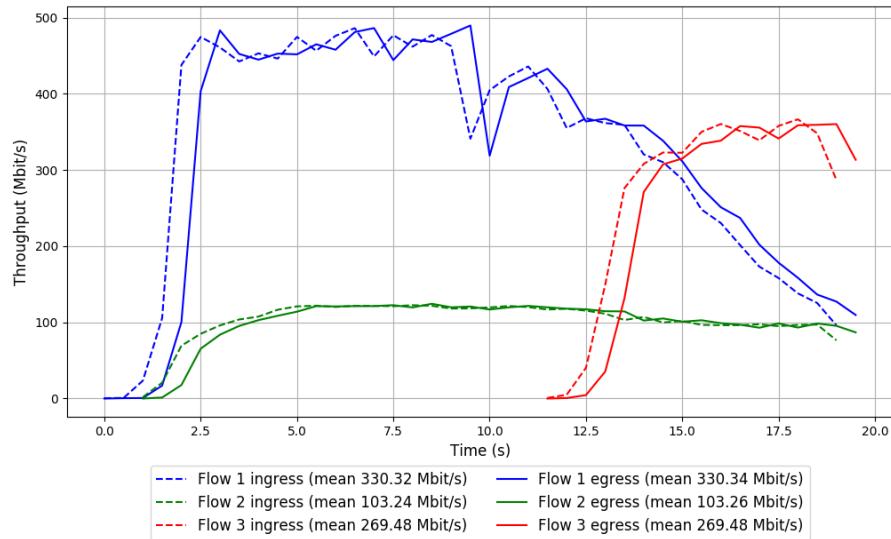
Start at: 2019-03-09 21:22:48

End at: 2019-03-09 21:23:18

Local clock offset: -0.181 ms

Remote clock offset: -0.069 ms

Run 1: Report of Indigo-MusesD — Data Link

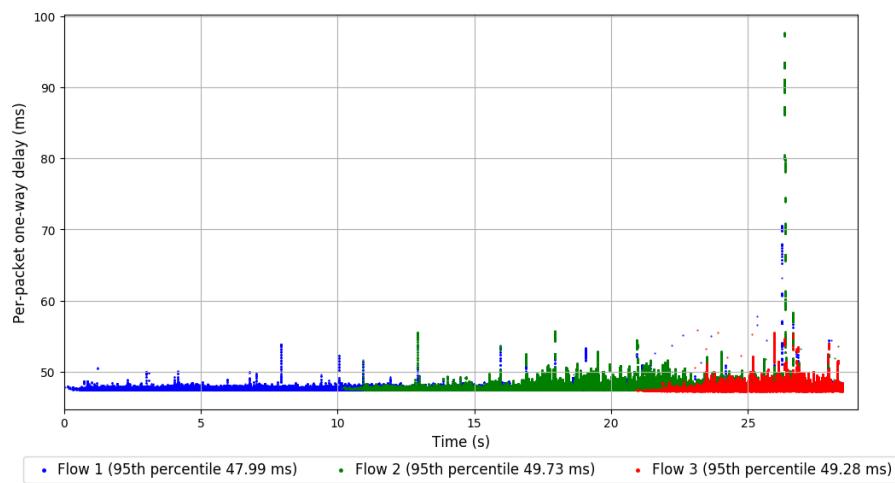
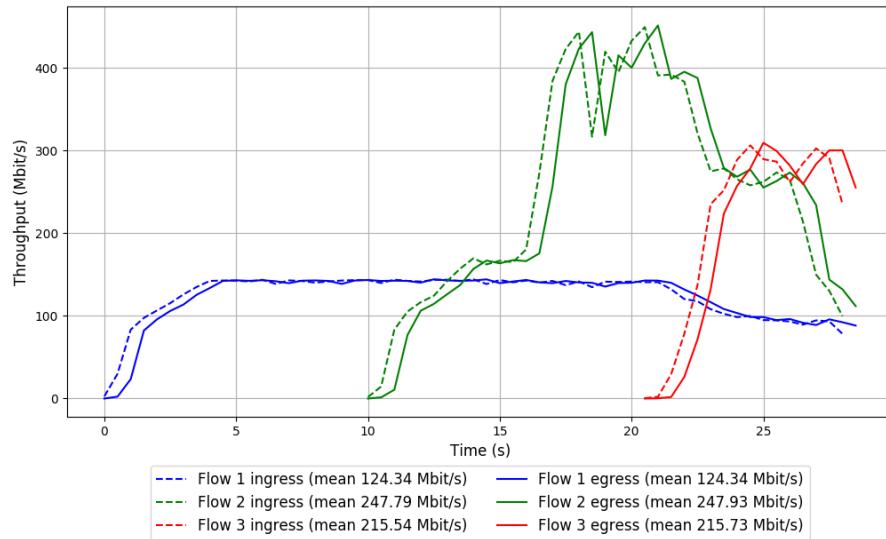


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 21:57:45
End at: 2019-03-09 21:58:15
Local clock offset: -0.174 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2019-03-10 02:04:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.79 Mbit/s
95th percentile per-packet one-way delay: 49.228 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 124.34 Mbit/s
95th percentile per-packet one-way delay: 47.990 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 247.93 Mbit/s
95th percentile per-packet one-way delay: 49.732 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 215.73 Mbit/s
95th percentile per-packet one-way delay: 49.283 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesD — Data Link

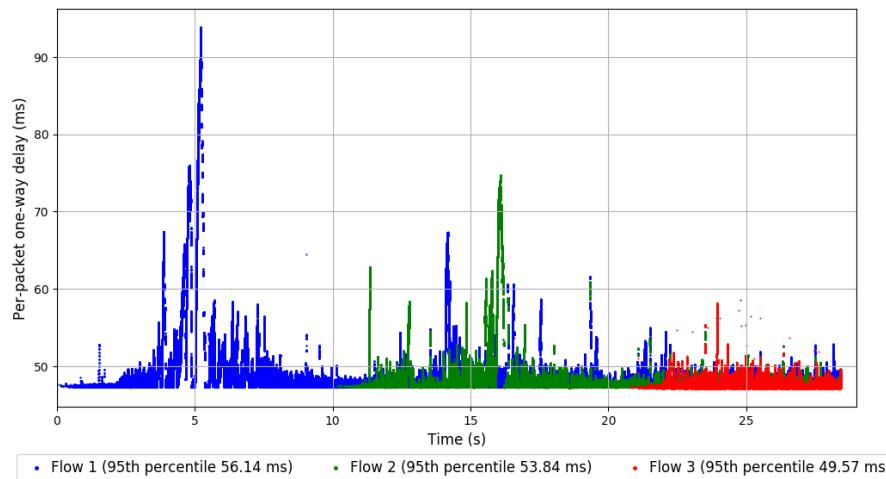
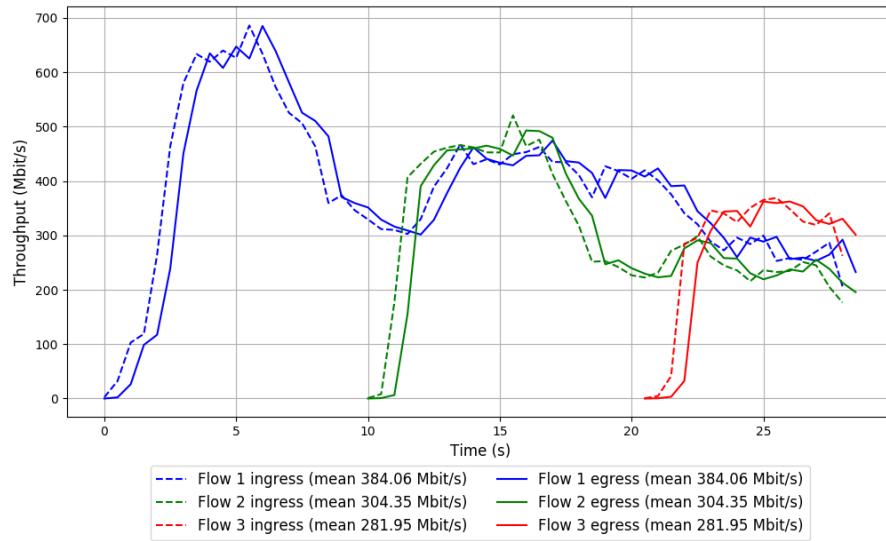


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 22:33:56
End at: 2019-03-09 22:34:26
Local clock offset: -0.173 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-03-10 02:09:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 656.37 Mbit/s
95th percentile per-packet one-way delay: 54.374 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 384.06 Mbit/s
95th percentile per-packet one-way delay: 56.140 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 304.35 Mbit/s
95th percentile per-packet one-way delay: 53.845 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 281.95 Mbit/s
95th percentile per-packet one-way delay: 49.567 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

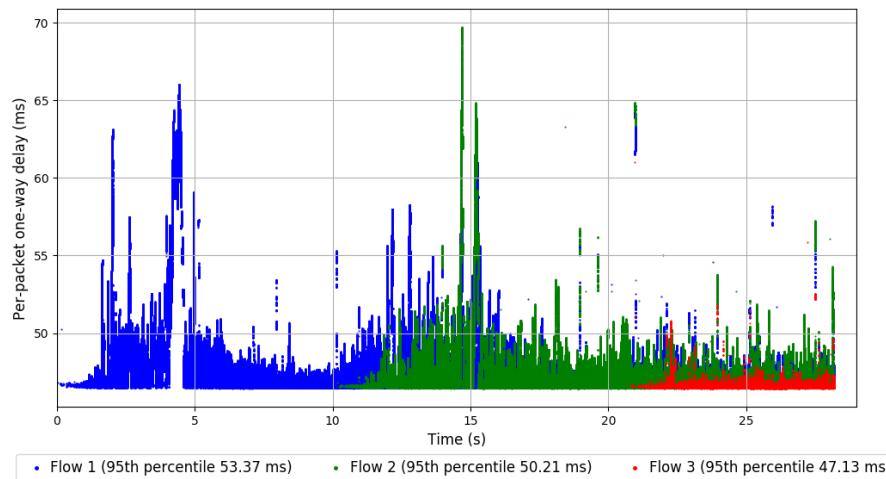
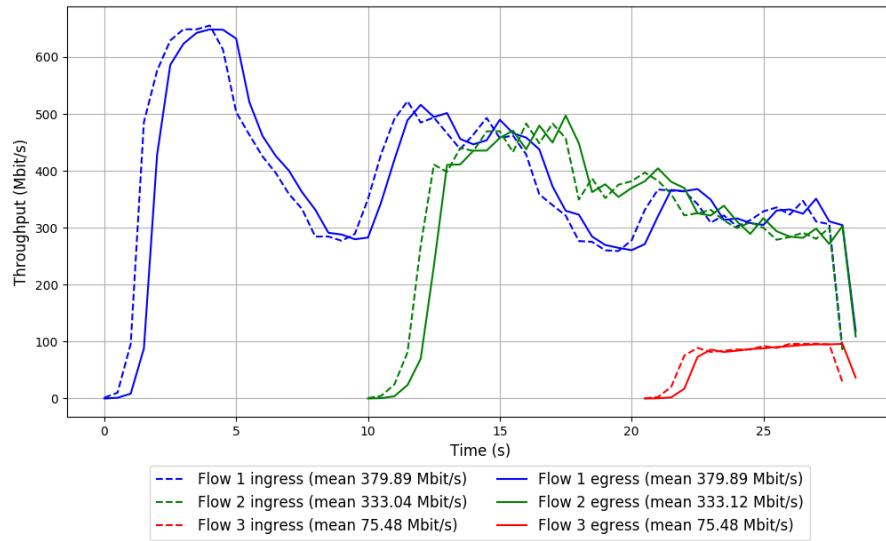


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 23:11:31
End at: 2019-03-09 23:12:01
Local clock offset: -0.113 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-03-10 02:09:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 613.02 Mbit/s
95th percentile per-packet one-way delay: 51.754 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 379.89 Mbit/s
95th percentile per-packet one-way delay: 53.365 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 333.12 Mbit/s
95th percentile per-packet one-way delay: 50.211 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.48 Mbit/s
95th percentile per-packet one-way delay: 47.131 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesD — Data Link

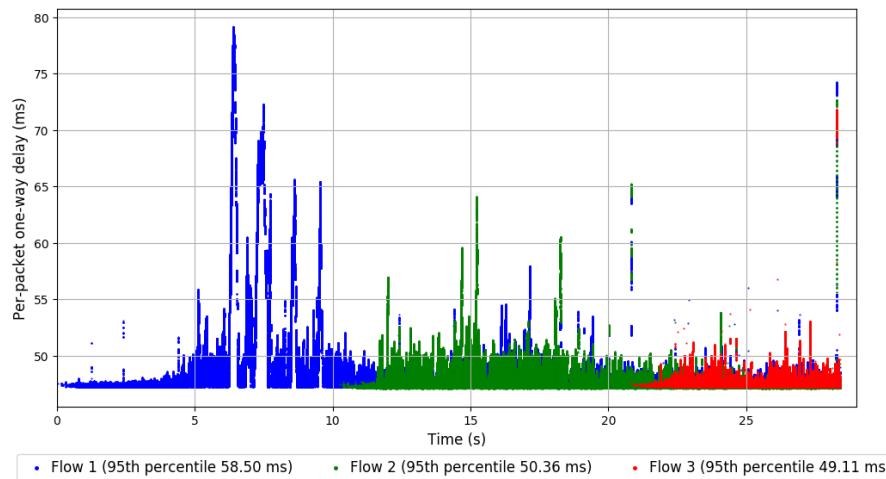
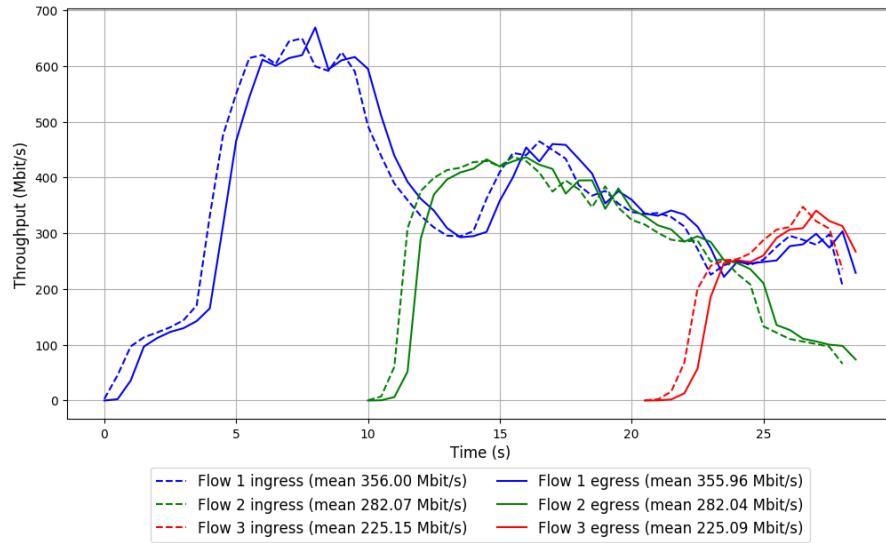


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-03-09 23:48:24
End at: 2019-03-09 23:48:54
Local clock offset: 0.058 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-03-10 02:11:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 596.48 Mbit/s
95th percentile per-packet one-way delay: 53.632 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 355.96 Mbit/s
95th percentile per-packet one-way delay: 58.499 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 282.04 Mbit/s
95th percentile per-packet one-way delay: 50.358 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 225.09 Mbit/s
95th percentile per-packet one-way delay: 49.112 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

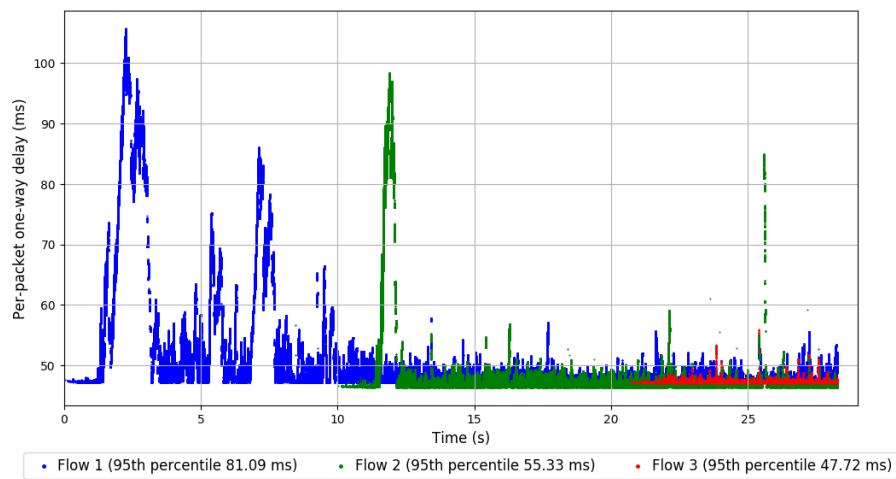
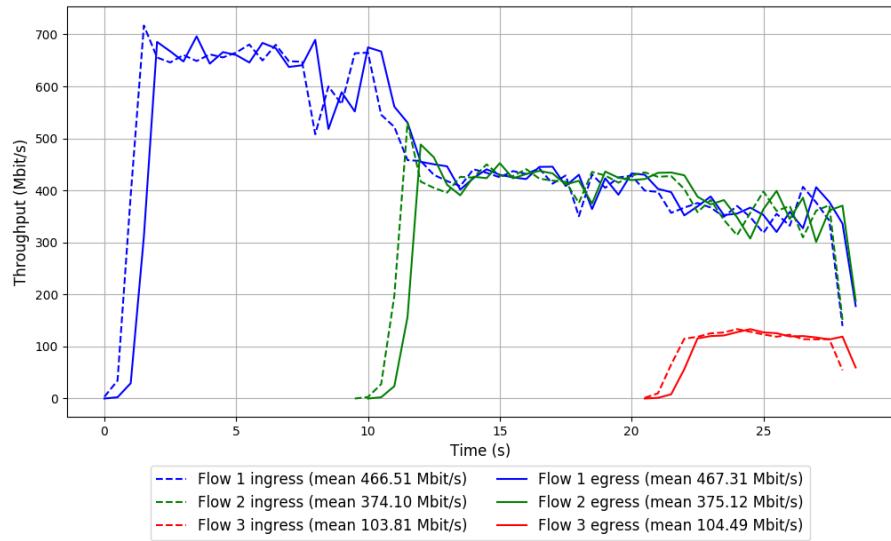


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 21:24:18
End at: 2019-03-09 21:24:48
Local clock offset: -0.104 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2019-03-10 02:15:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 737.77 Mbit/s
95th percentile per-packet one-way delay: 77.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 467.31 Mbit/s
95th percentile per-packet one-way delay: 81.091 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 375.12 Mbit/s
95th percentile per-packet one-way delay: 55.333 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 104.49 Mbit/s
95th percentile per-packet one-way delay: 47.718 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo-MusesT — Data Link

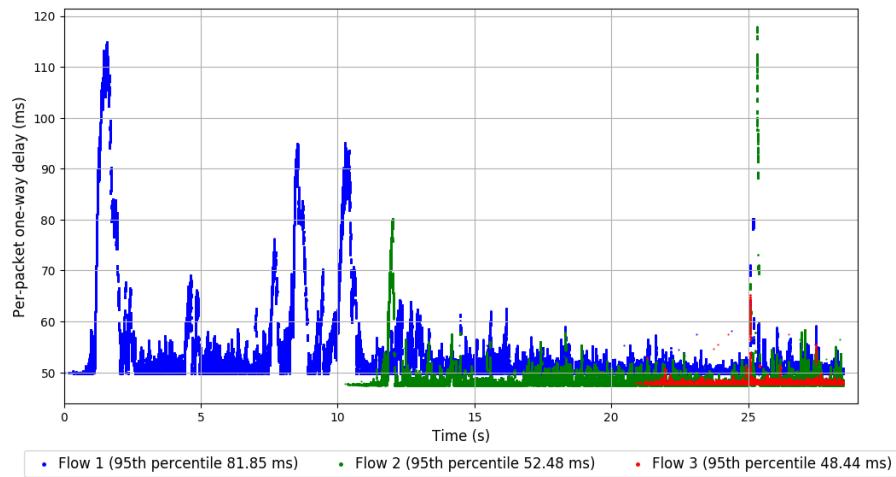
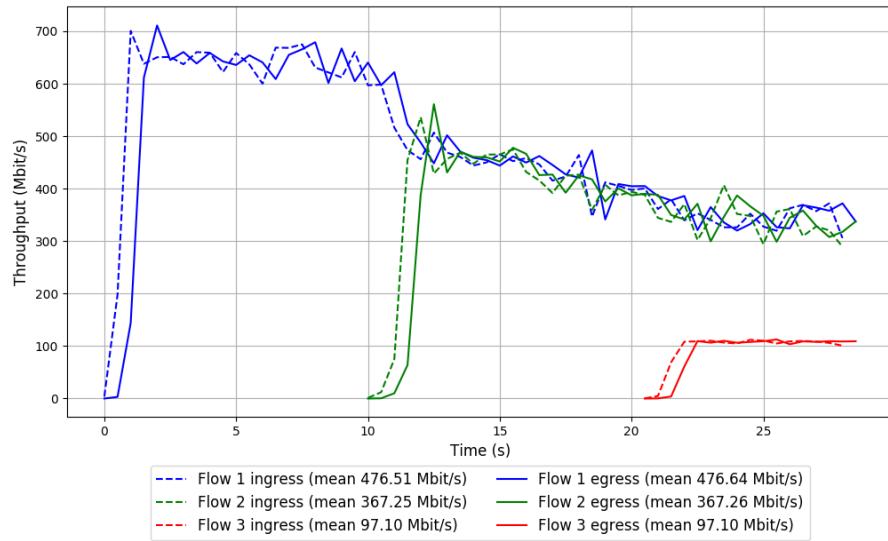


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 21:59:14
End at: 2019-03-09 21:59:44
Local clock offset: -0.468 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2019-03-10 02:15:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 737.79 Mbit/s
95th percentile per-packet one-way delay: 74.158 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 476.64 Mbit/s
95th percentile per-packet one-way delay: 81.850 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 367.26 Mbit/s
95th percentile per-packet one-way delay: 52.478 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 97.10 Mbit/s
95th percentile per-packet one-way delay: 48.444 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesT — Data Link

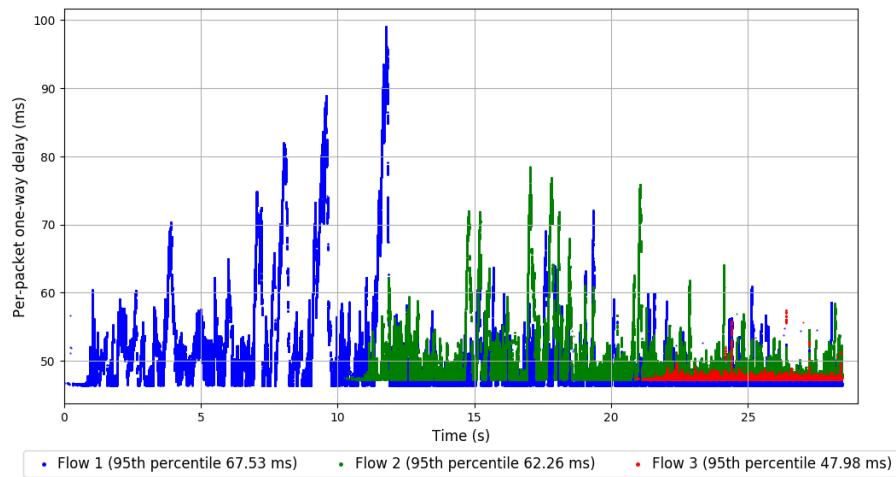
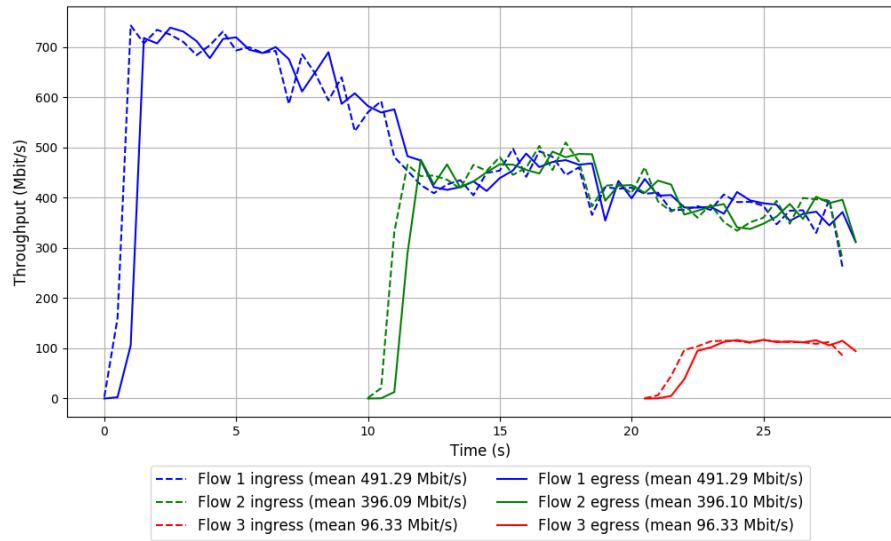


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 22:35:45
End at: 2019-03-09 22:36:15
Local clock offset: -0.176 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-03-10 02:17:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 771.07 Mbit/s
95th percentile per-packet one-way delay: 65.125 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 491.29 Mbit/s
95th percentile per-packet one-way delay: 67.529 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 396.10 Mbit/s
95th percentile per-packet one-way delay: 62.261 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 47.976 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesT — Data Link

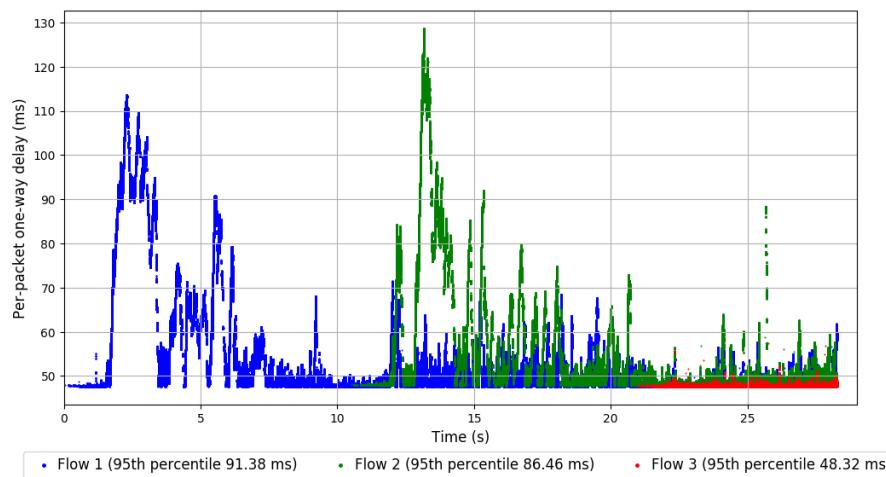
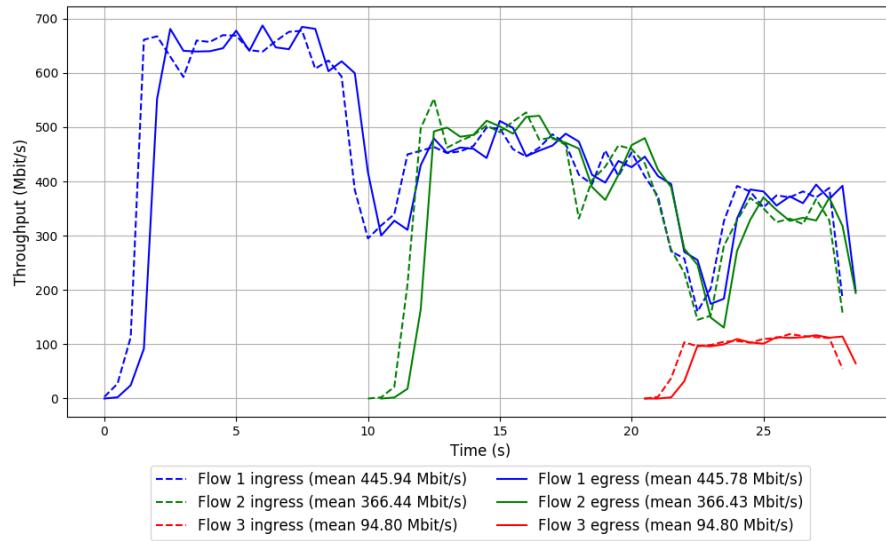


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 23:13:14
End at: 2019-03-09 23:13:44
Local clock offset: -0.462 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2019-03-10 02:17:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 700.77 Mbit/s
95th percentile per-packet one-way delay: 89.848 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 445.78 Mbit/s
95th percentile per-packet one-way delay: 91.383 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 366.43 Mbit/s
95th percentile per-packet one-way delay: 86.460 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.80 Mbit/s
95th percentile per-packet one-way delay: 48.324 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesT — Data Link

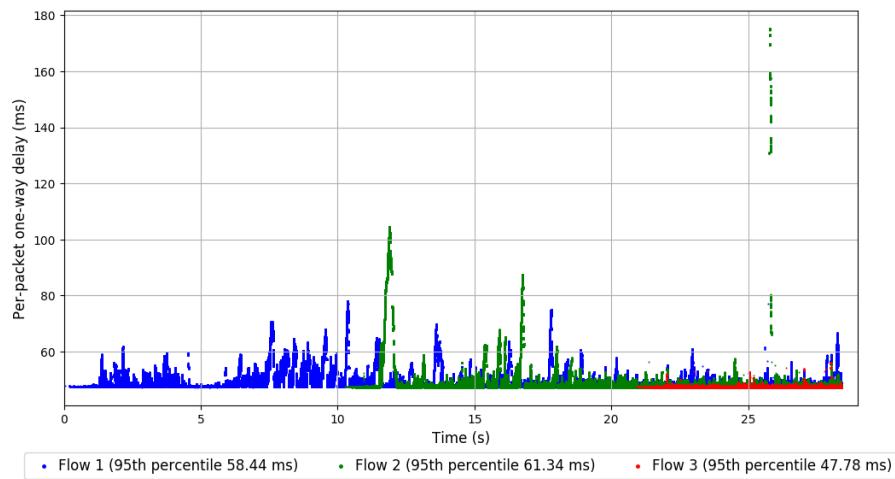
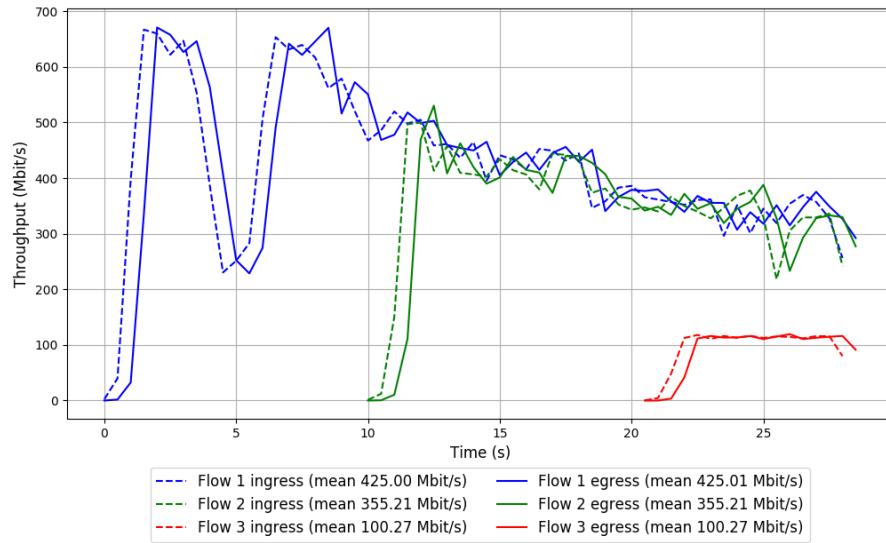


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-03-09 23:50:06
End at: 2019-03-09 23:50:36
Local clock offset: 0.053 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2019-03-10 02:17:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 679.00 Mbit/s
95th percentile per-packet one-way delay: 58.683 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 425.01 Mbit/s
95th percentile per-packet one-way delay: 58.438 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 355.21 Mbit/s
95th percentile per-packet one-way delay: 61.336 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.27 Mbit/s
95th percentile per-packet one-way delay: 47.780 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesT — Data Link

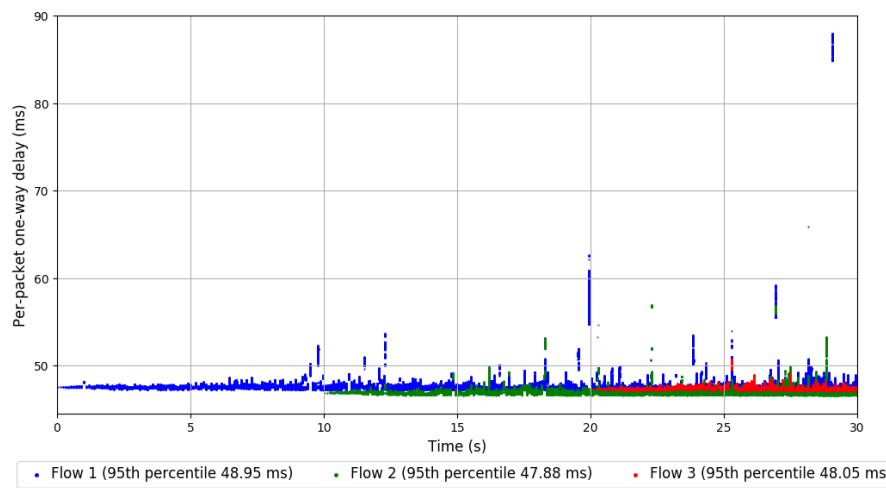
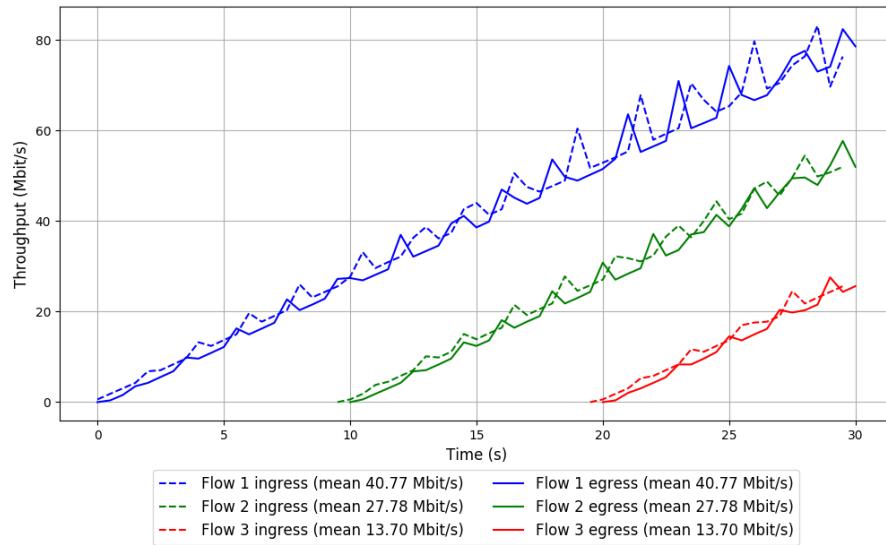


```
Run 1: Statistics of LEDBAT

Start at: 2019-03-09 21:37:31
End at: 2019-03-09 21:38:01
Local clock offset: -0.129 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2019-03-10 02:17:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.81 Mbit/s
95th percentile per-packet one-way delay: 48.661 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.77 Mbit/s
95th percentile per-packet one-way delay: 48.953 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.78 Mbit/s
95th percentile per-packet one-way delay: 47.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.70 Mbit/s
95th percentile per-packet one-way delay: 48.054 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

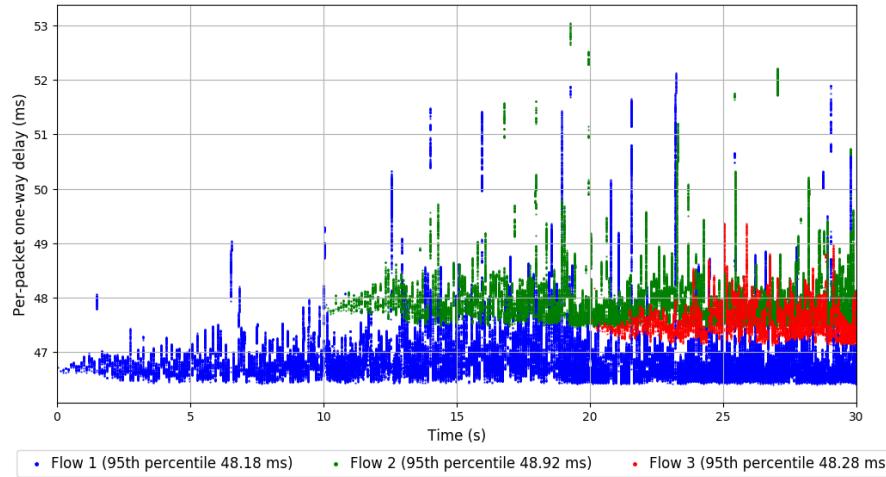
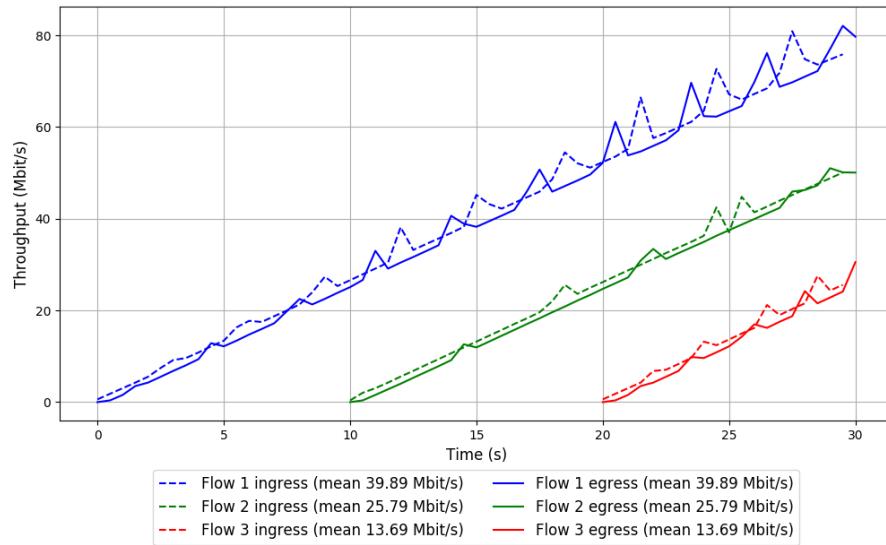


Run 2: Statistics of LEDBAT

```
Start at: 2019-03-09 22:12:47
End at: 2019-03-09 22:13:17
Local clock offset: -0.146 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2019-03-10 02:17:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.59 Mbit/s
95th percentile per-packet one-way delay: 48.535 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.89 Mbit/s
95th percentile per-packet one-way delay: 48.177 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.79 Mbit/s
95th percentile per-packet one-way delay: 48.921 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.69 Mbit/s
95th percentile per-packet one-way delay: 48.282 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

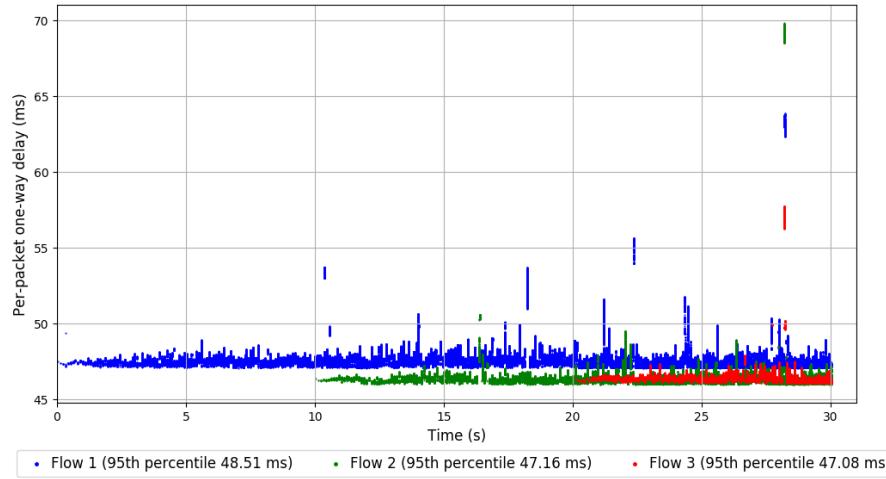
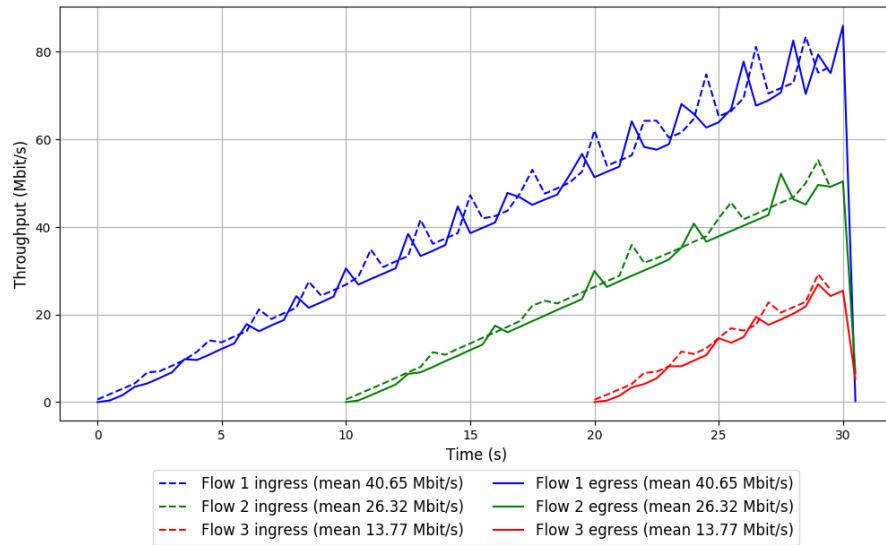


Run 3: Statistics of LEDBAT

```
Start at: 2019-03-09 22:50:15
End at: 2019-03-09 22:50:45
Local clock offset: 0.241 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2019-03-10 02:17:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 48.334 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 48.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.32 Mbit/s
95th percentile per-packet one-way delay: 47.156 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.77 Mbit/s
95th percentile per-packet one-way delay: 47.083 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

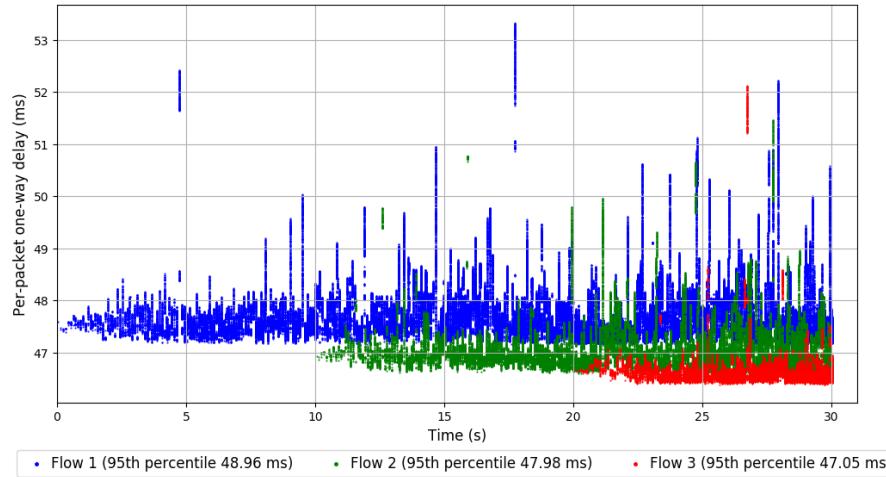
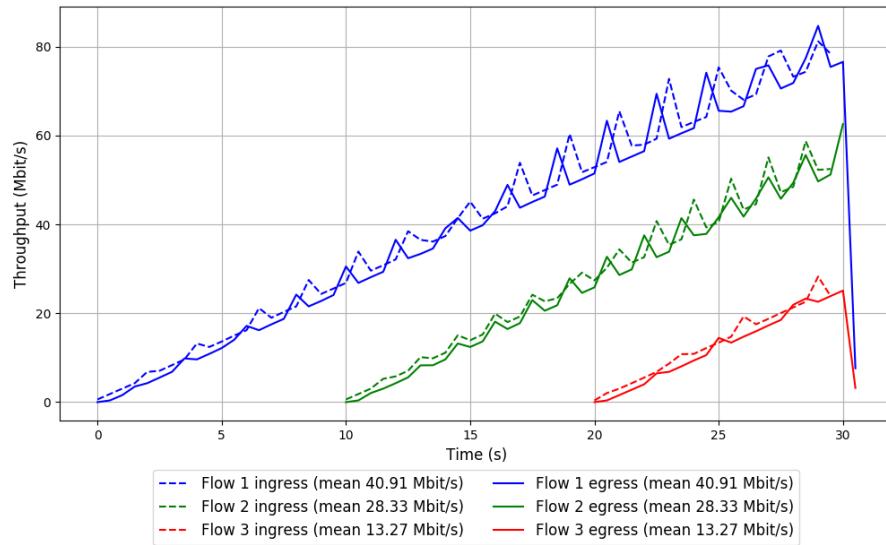


Run 4: Statistics of LEDBAT

```
Start at: 2019-03-09 23:26:39
End at: 2019-03-09 23:27:09
Local clock offset: 0.016 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-03-10 02:17:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.15 Mbit/s
95th percentile per-packet one-way delay: 48.655 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.91 Mbit/s
95th percentile per-packet one-way delay: 48.959 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.33 Mbit/s
95th percentile per-packet one-way delay: 47.981 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.27 Mbit/s
95th percentile per-packet one-way delay: 47.046 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

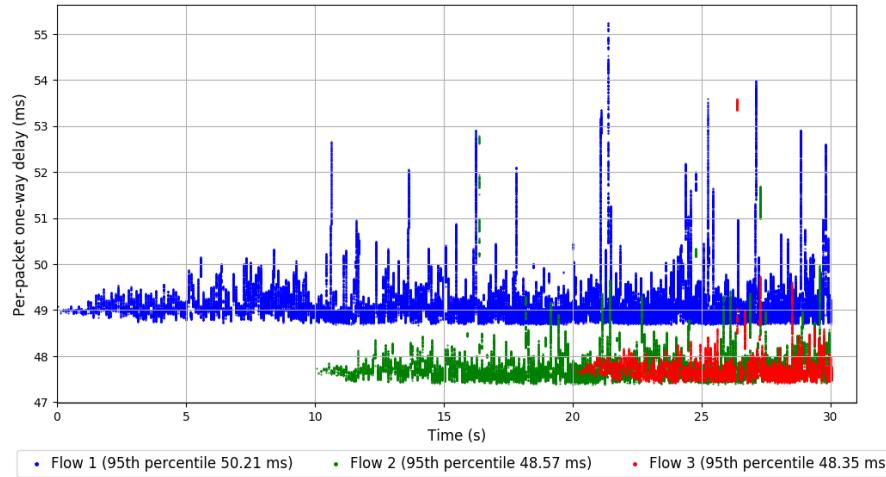
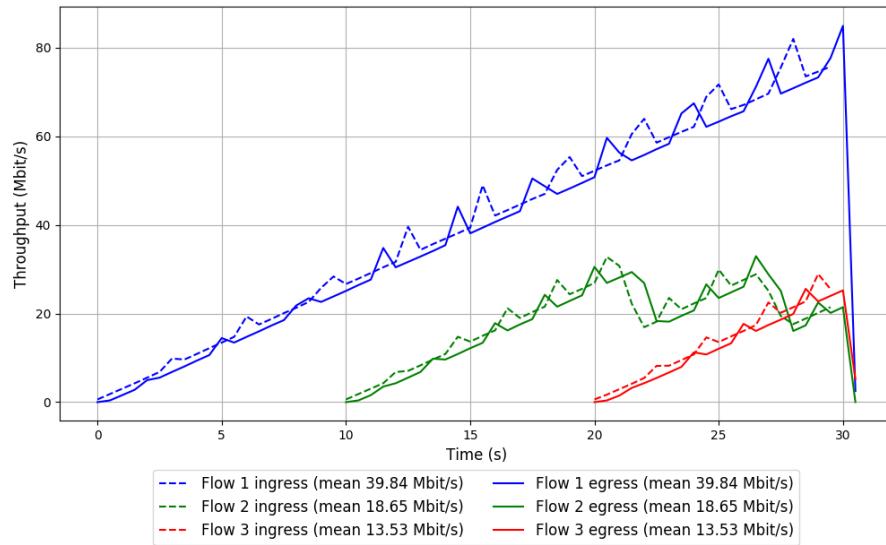


Run 5: Statistics of LEDBAT

```
Start at: 2019-03-10 00:03:18
End at: 2019-03-10 00:03:48
Local clock offset: 0.129 ms
Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2019-03-10 02:17:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.72 Mbit/s
95th percentile per-packet one-way delay: 49.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.84 Mbit/s
95th percentile per-packet one-way delay: 50.214 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.65 Mbit/s
95th percentile per-packet one-way delay: 48.572 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.53 Mbit/s
95th percentile per-packet one-way delay: 48.346 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

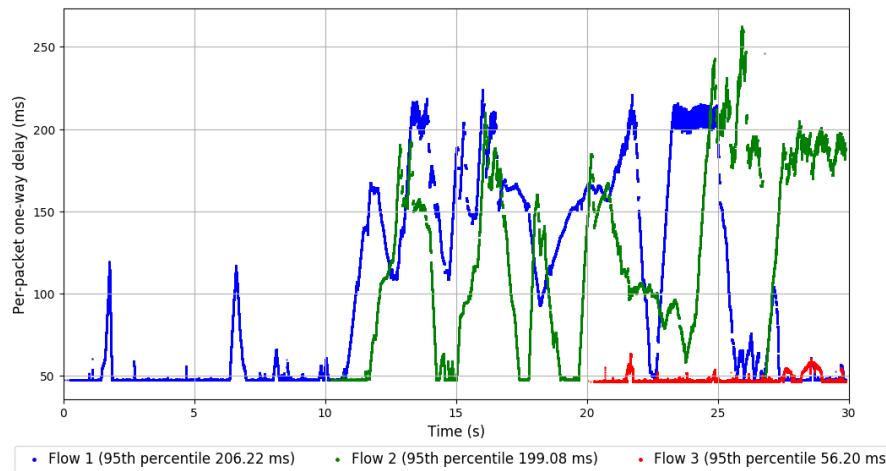
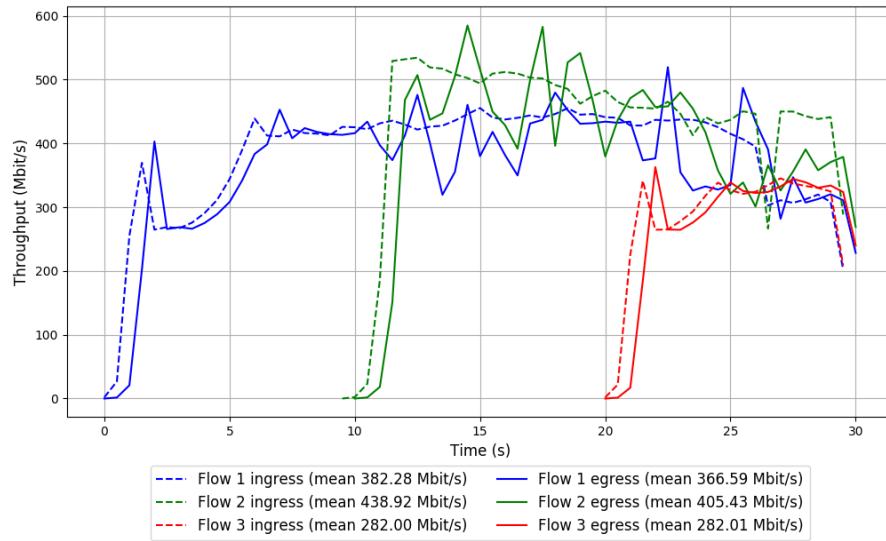


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-03-09 21:43:45
End at: 2019-03-09 21:44:15
Local clock offset: -0.471 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-03-10 02:40:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 729.23 Mbit/s
95th percentile per-packet one-way delay: 203.633 ms
Loss rate: 4.95%
-- Flow 1:
Average throughput: 366.59 Mbit/s
95th percentile per-packet one-way delay: 206.219 ms
Loss rate: 4.10%
-- Flow 2:
Average throughput: 405.43 Mbit/s
95th percentile per-packet one-way delay: 199.083 ms
Loss rate: 7.62%
-- Flow 3:
Average throughput: 282.01 Mbit/s
95th percentile per-packet one-way delay: 56.202 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Allegro — Data Link

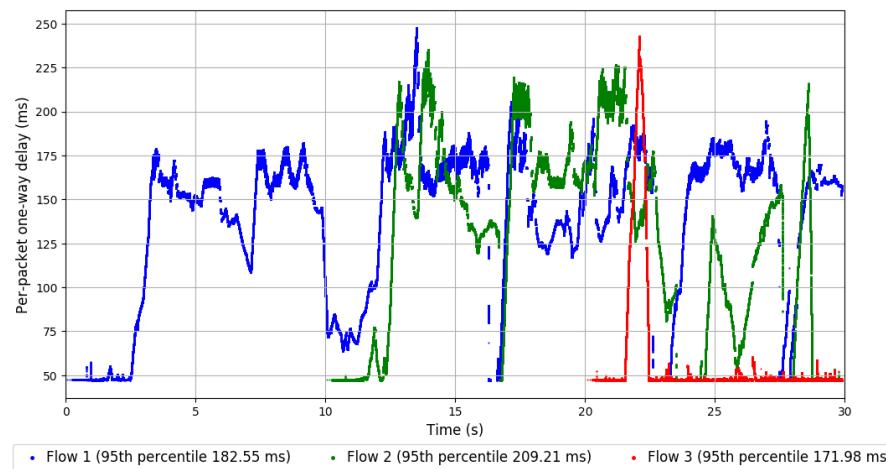
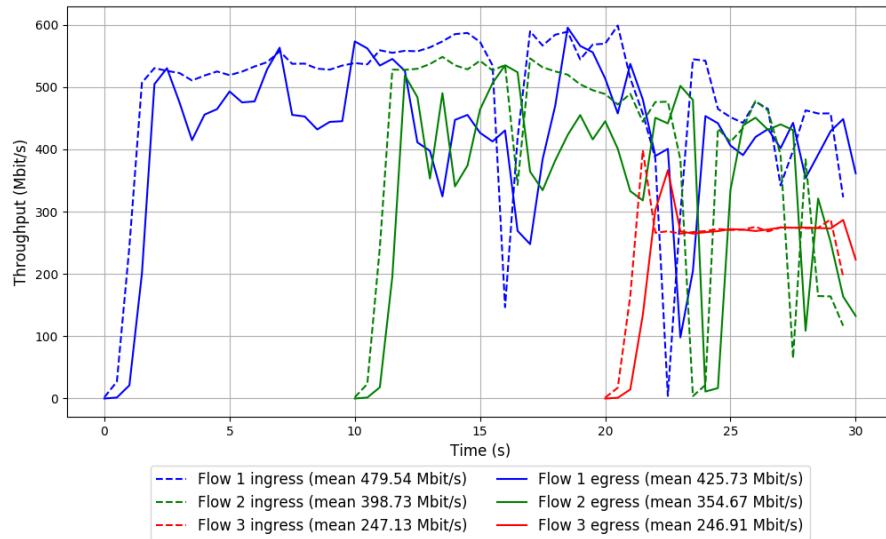


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-03-09 22:19:06
End at: 2019-03-09 22:19:36
Local clock offset: -0.158 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-03-10 02:43:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 742.74 Mbit/s
95th percentile per-packet one-way delay: 195.472 ms
Loss rate: 10.07%
-- Flow 1:
Average throughput: 425.73 Mbit/s
95th percentile per-packet one-way delay: 182.550 ms
Loss rate: 11.21%
-- Flow 2:
Average throughput: 354.67 Mbit/s
95th percentile per-packet one-way delay: 209.208 ms
Loss rate: 11.05%
-- Flow 3:
Average throughput: 246.91 Mbit/s
95th percentile per-packet one-way delay: 171.984 ms
Loss rate: 0.09%
```

Run 2: Report of PCC-Allegro — Data Link

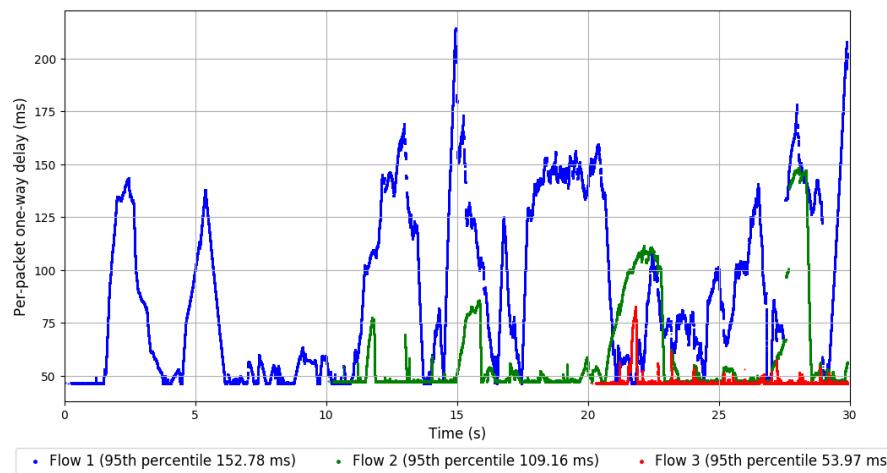
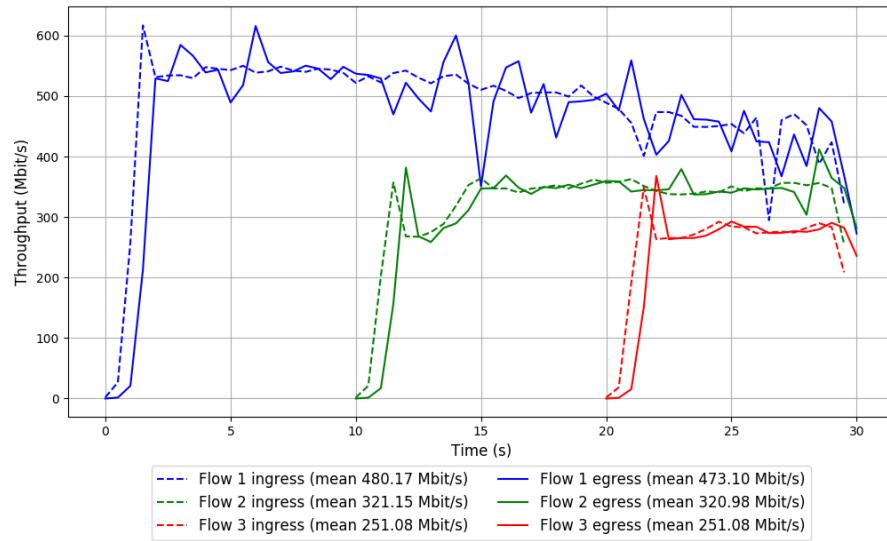


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-03-09 22:56:39
End at: 2019-03-09 22:57:10
Local clock offset: -0.112 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2019-03-10 02:43:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 768.93 Mbit/s
95th percentile per-packet one-way delay: 147.635 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 473.10 Mbit/s
95th percentile per-packet one-way delay: 152.776 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 320.98 Mbit/s
95th percentile per-packet one-way delay: 109.159 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 251.08 Mbit/s
95th percentile per-packet one-way delay: 53.970 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Allegro — Data Link

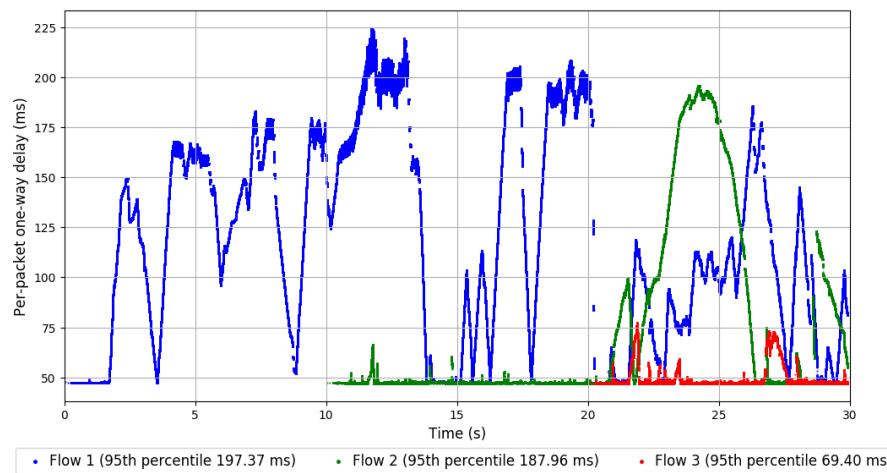
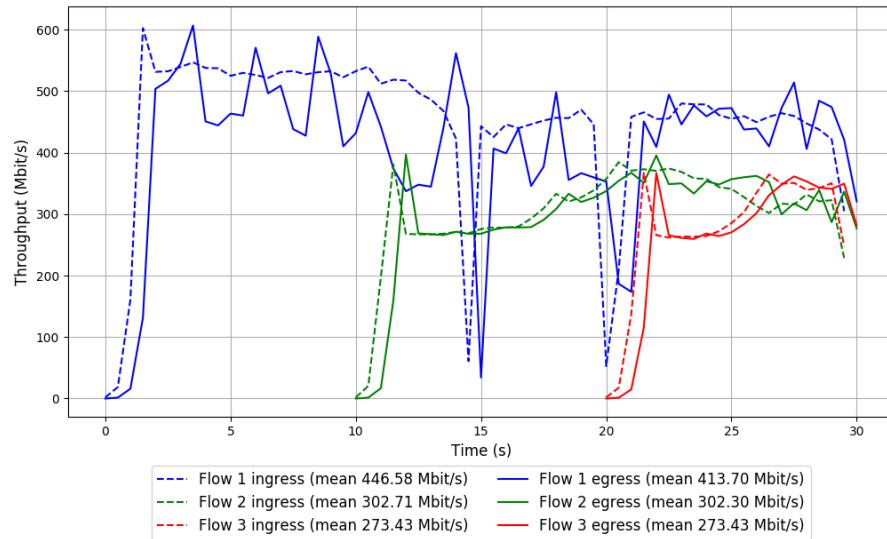


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-03-09 23:33:07
End at: 2019-03-09 23:33:37
Local clock offset: 0.034 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-03-10 02:43:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 704.73 Mbit/s
95th percentile per-packet one-way delay: 192.801 ms
Loss rate: 4.49%
-- Flow 1:
Average throughput: 413.70 Mbit/s
95th percentile per-packet one-way delay: 197.374 ms
Loss rate: 7.35%
-- Flow 2:
Average throughput: 302.30 Mbit/s
95th percentile per-packet one-way delay: 187.955 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 273.43 Mbit/s
95th percentile per-packet one-way delay: 69.399 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Allegro — Data Link

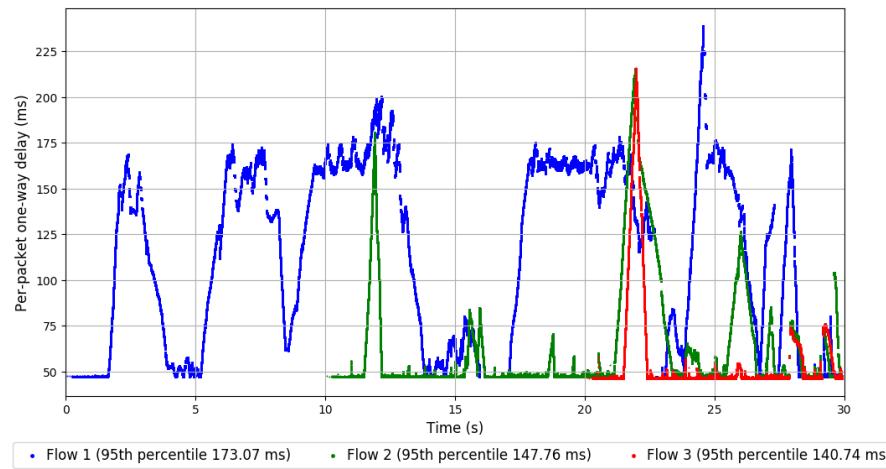
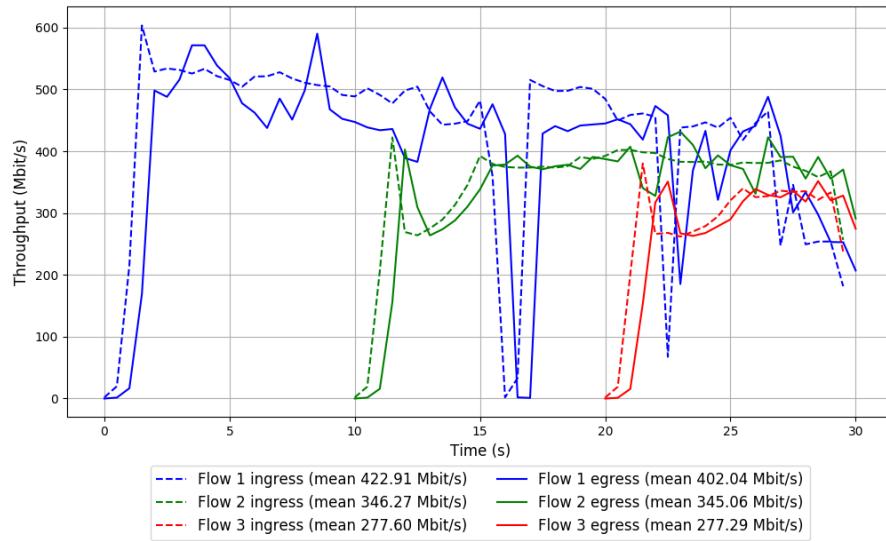


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-03-10 00:09:48
End at: 2019-03-10 00:10:18
Local clock offset: 0.076 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-03-10 02:43:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 722.65 Mbit/s
95th percentile per-packet one-way delay: 170.475 ms
Loss rate: 2.93%
-- Flow 1:
Average throughput: 402.04 Mbit/s
95th percentile per-packet one-way delay: 173.072 ms
Loss rate: 4.94%
-- Flow 2:
Average throughput: 345.06 Mbit/s
95th percentile per-packet one-way delay: 147.764 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 277.29 Mbit/s
95th percentile per-packet one-way delay: 140.743 ms
Loss rate: 0.11%
```

Run 5: Report of PCC-Allegro — Data Link

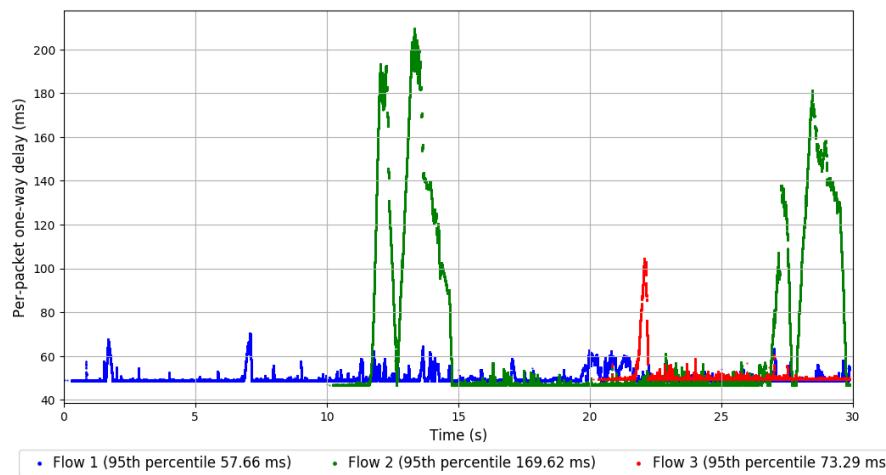
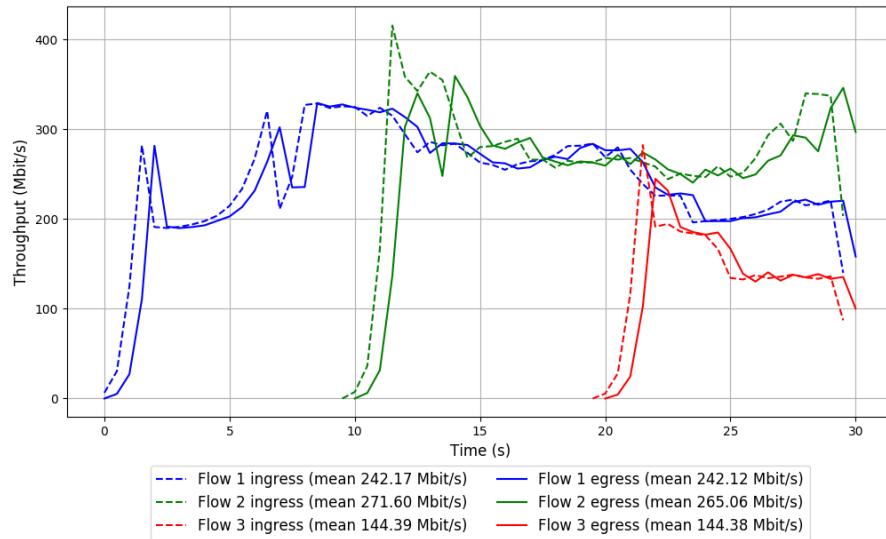


Run 1: Statistics of PCC-Expr

```
Start at: 2019-03-09 21:33:11
End at: 2019-03-09 21:33:41
Local clock offset: -0.165 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-03-10 02:43:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.35 Mbit/s
95th percentile per-packet one-way delay: 137.453 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 242.12 Mbit/s
95th percentile per-packet one-way delay: 57.665 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 265.06 Mbit/s
95th percentile per-packet one-way delay: 169.619 ms
Loss rate: 2.41%
-- Flow 3:
Average throughput: 144.38 Mbit/s
95th percentile per-packet one-way delay: 73.291 ms
Loss rate: 0.02%
```

Run 1: Report of PCC-Expr — Data Link

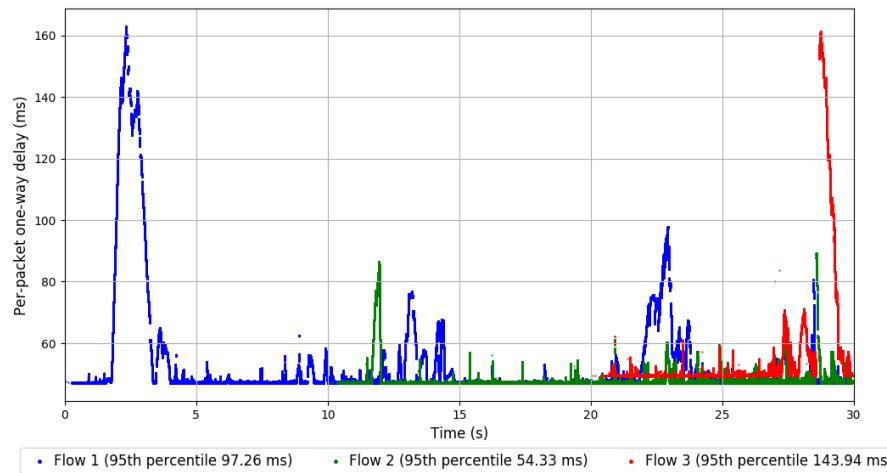
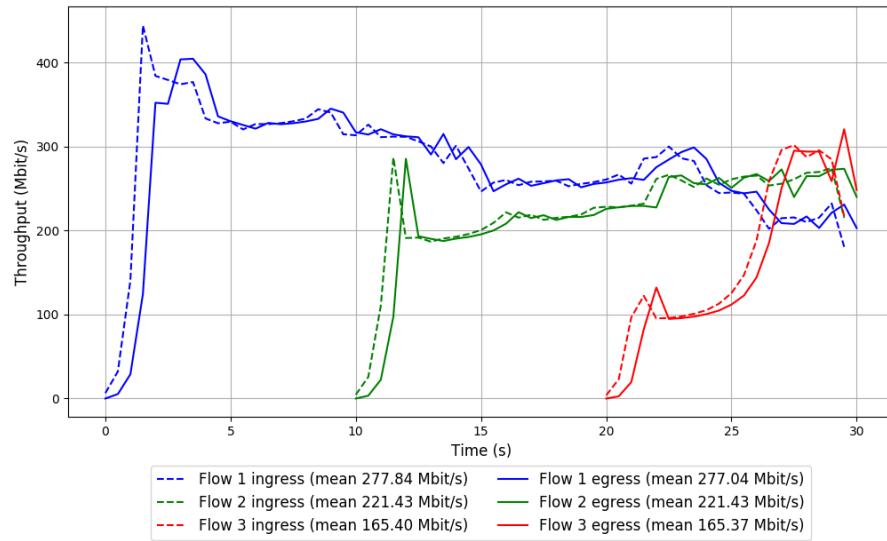


Run 2: Statistics of PCC-Expr

```
Start at: 2019-03-09 22:08:07
End at: 2019-03-09 22:08:37
Local clock offset: -0.115 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2019-03-10 02:43:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.74 Mbit/s
95th percentile per-packet one-way delay: 85.471 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 277.04 Mbit/s
95th percentile per-packet one-way delay: 97.262 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 221.43 Mbit/s
95th percentile per-packet one-way delay: 54.328 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.37 Mbit/s
95th percentile per-packet one-way delay: 143.942 ms
Loss rate: 0.02%
```

Run 2: Report of PCC-Expr — Data Link

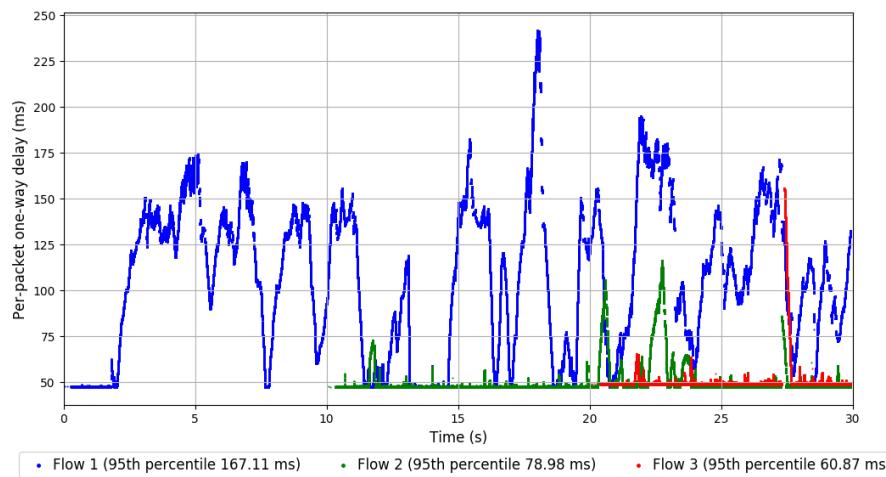
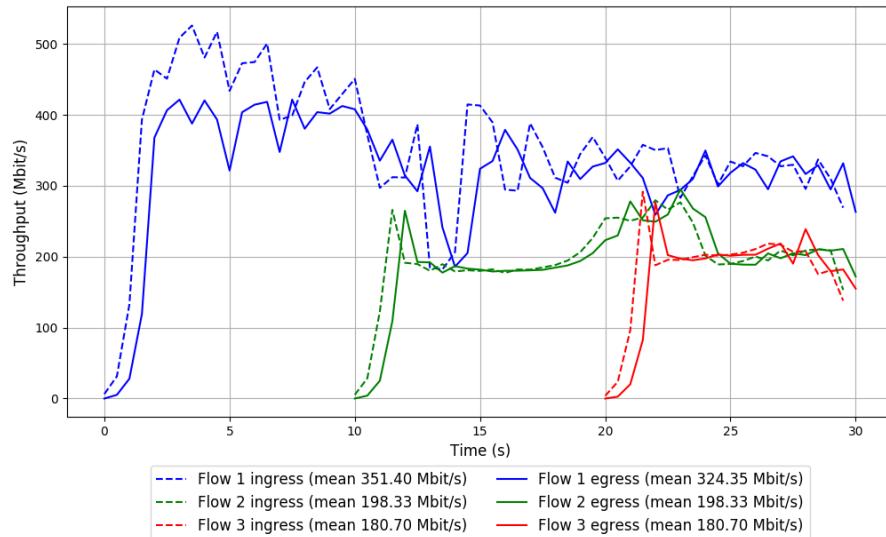


Run 3: Statistics of PCC-Expr

```
Start at: 2019-03-09 22:45:35
End at: 2019-03-09 22:46:05
Local clock offset: -0.179 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2019-03-10 02:43:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 515.80 Mbit/s
95th percentile per-packet one-way delay: 158.989 ms
Loss rate: 4.99%
-- Flow 1:
Average throughput: 324.35 Mbit/s
95th percentile per-packet one-way delay: 167.109 ms
Loss rate: 7.71%
-- Flow 2:
Average throughput: 198.33 Mbit/s
95th percentile per-packet one-way delay: 78.977 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 180.70 Mbit/s
95th percentile per-packet one-way delay: 60.873 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Expr — Data Link

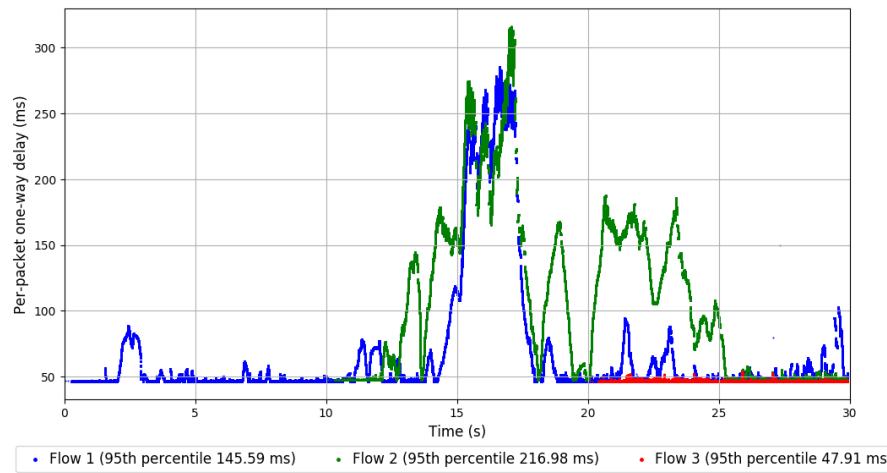
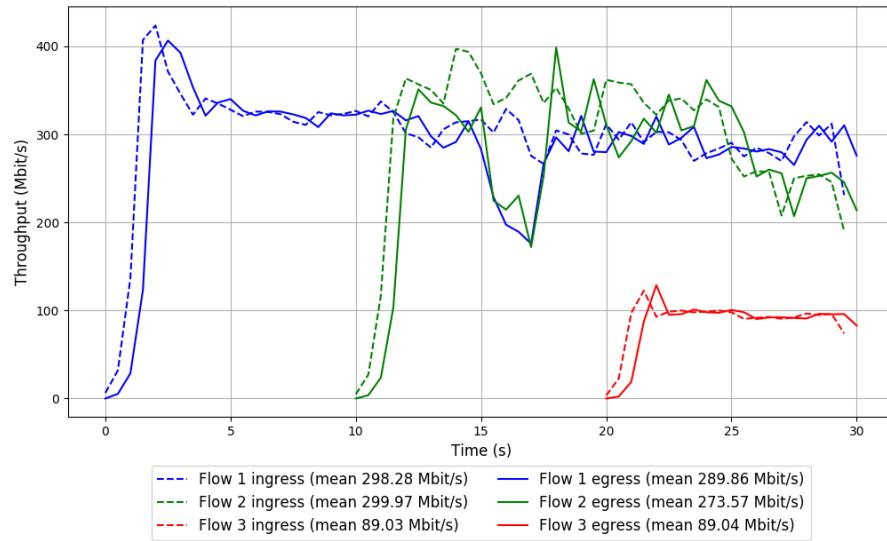


Run 4: Statistics of PCC-Expr

```
Start at: 2019-03-09 23:22:11
End at: 2019-03-09 23:22:41
Local clock offset: 0.019 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 500.99 Mbit/s
95th percentile per-packet one-way delay: 194.039 ms
Loss rate: 4.92%
-- Flow 1:
Average throughput: 289.86 Mbit/s
95th percentile per-packet one-way delay: 145.594 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 273.57 Mbit/s
95th percentile per-packet one-way delay: 216.980 ms
Loss rate: 8.80%
-- Flow 3:
Average throughput: 89.04 Mbit/s
95th percentile per-packet one-way delay: 47.910 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Expr — Data Link

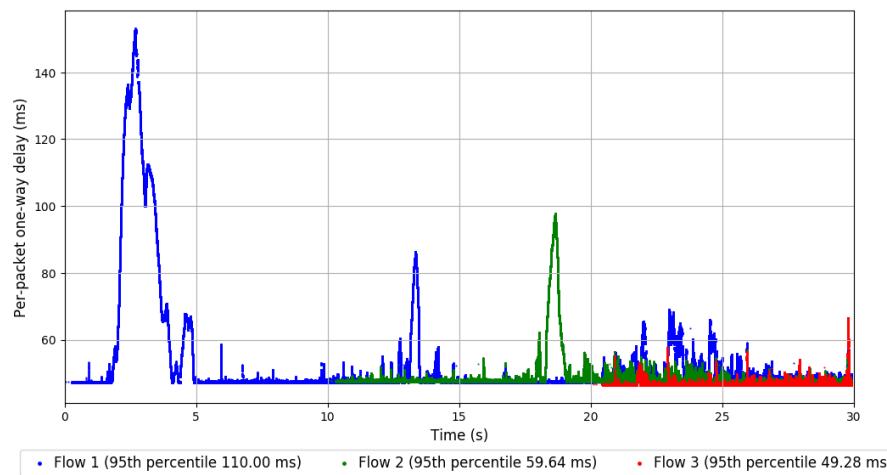
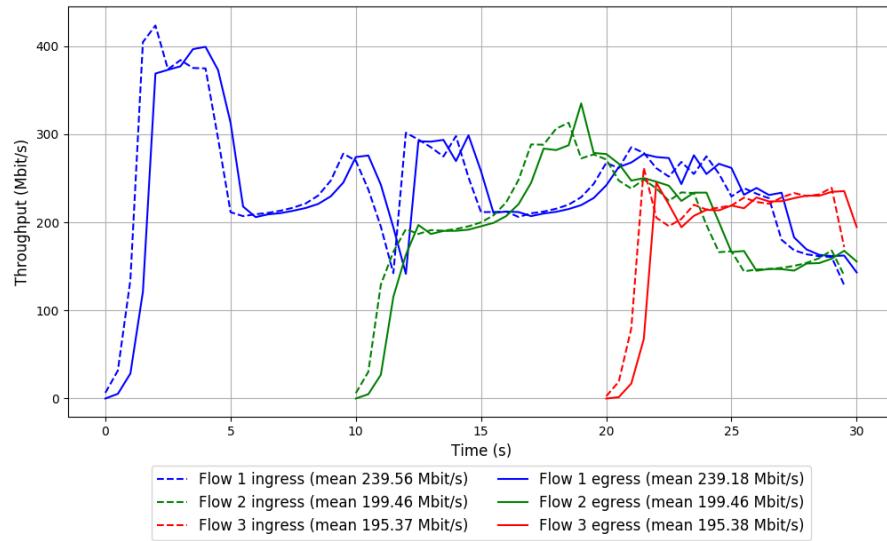


Run 5: Statistics of PCC-Expr

```
Start at: 2019-03-09 23:58:57
End at: 2019-03-09 23:59:27
Local clock offset: 0.03 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 436.12 Mbit/s
95th percentile per-packet one-way delay: 85.037 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 239.18 Mbit/s
95th percentile per-packet one-way delay: 109.995 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 199.46 Mbit/s
95th percentile per-packet one-way delay: 59.638 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 195.38 Mbit/s
95th percentile per-packet one-way delay: 49.283 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Expr — Data Link

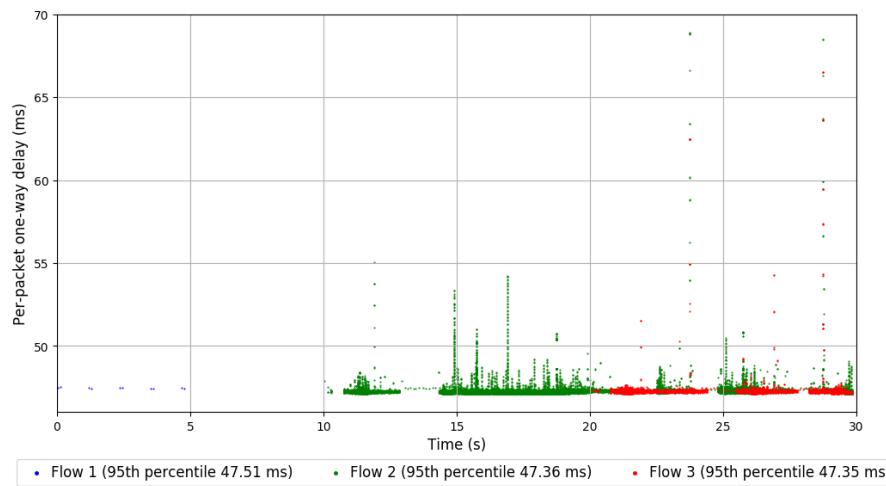
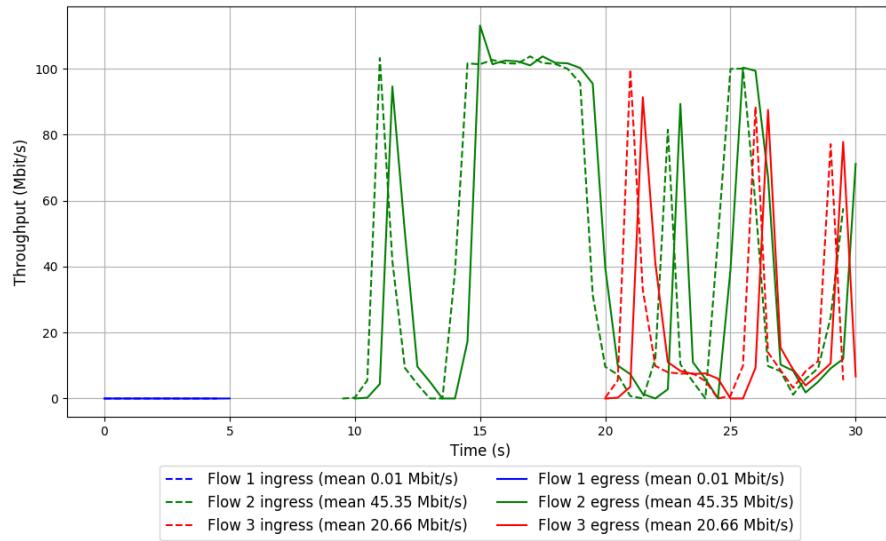


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-03-09 21:36:18
End at: 2019-03-09 21:36:48
Local clock offset: -0.167 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.92 Mbit/s
95th percentile per-packet one-way delay: 47.354 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 47.507 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.35 Mbit/s
95th percentile per-packet one-way delay: 47.356 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.66 Mbit/s
95th percentile per-packet one-way delay: 47.350 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

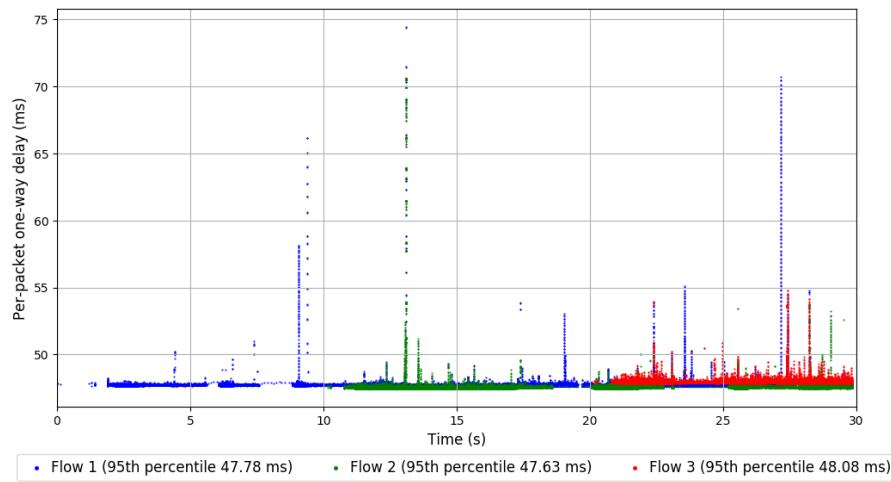
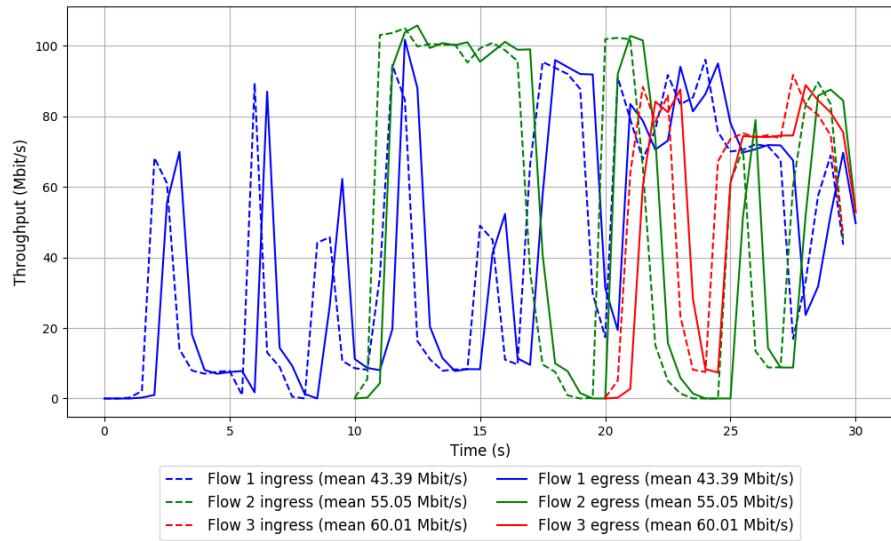


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-03-09 22:11:29
End at: 2019-03-09 22:11:59
Local clock offset: -0.548 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.70 Mbit/s
95th percentile per-packet one-way delay: 47.955 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.39 Mbit/s
95th percentile per-packet one-way delay: 47.782 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.05 Mbit/s
95th percentile per-packet one-way delay: 47.629 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.01 Mbit/s
95th percentile per-packet one-way delay: 48.078 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

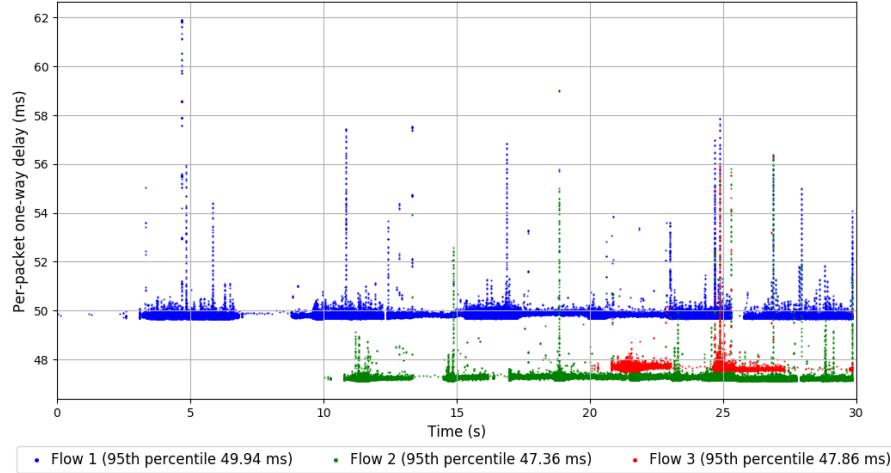
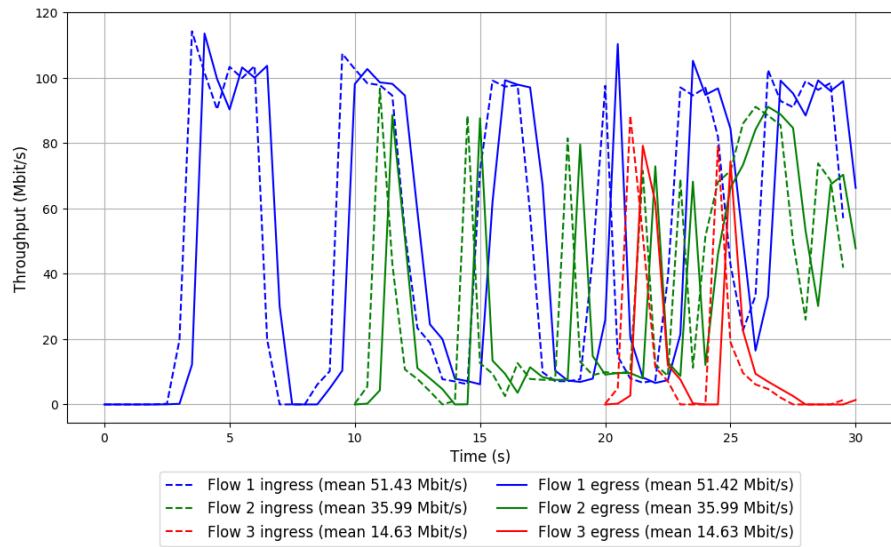


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-03-09 22:48:59
End at: 2019-03-09 22:49:29
Local clock offset: -0.149 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.14 Mbit/s
95th percentile per-packet one-way delay: 49.903 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 51.42 Mbit/s
95th percentile per-packet one-way delay: 49.941 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 47.358 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.63 Mbit/s
95th percentile per-packet one-way delay: 47.858 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

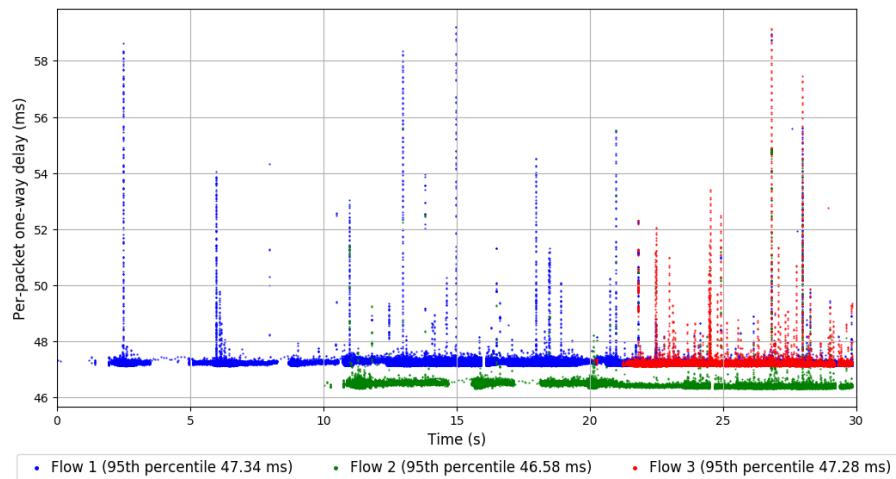
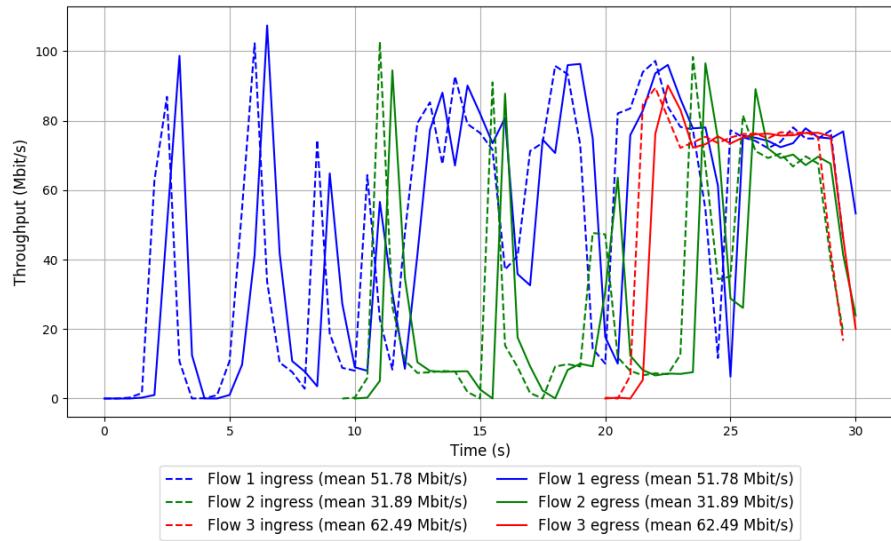


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-03-09 23:25:22
End at: 2019-03-09 23:25:52
Local clock offset: 0.052 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.49 Mbit/s
95th percentile per-packet one-way delay: 47.320 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.78 Mbit/s
95th percentile per-packet one-way delay: 47.344 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.89 Mbit/s
95th percentile per-packet one-way delay: 46.577 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.49 Mbit/s
95th percentile per-packet one-way delay: 47.284 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

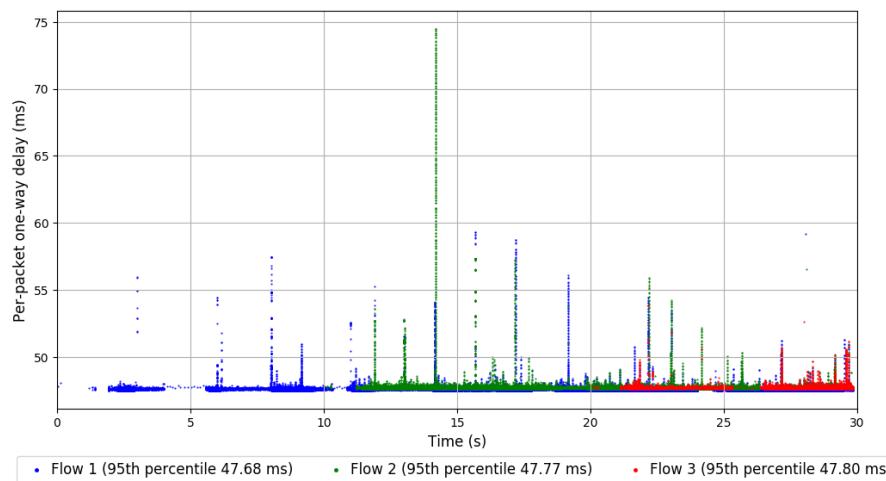
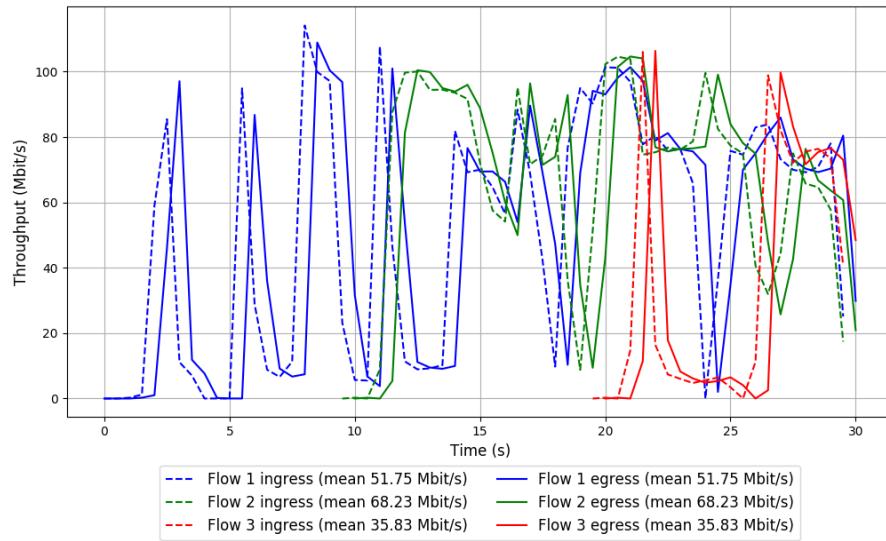


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-03-10 00:02:00
End at: 2019-03-10 00:02:30
Local clock offset: -0.283 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 108.88 Mbit/s
95th percentile per-packet one-way delay: 47.754 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.75 Mbit/s
95th percentile per-packet one-way delay: 47.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.23 Mbit/s
95th percentile per-packet one-way delay: 47.774 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.83 Mbit/s
95th percentile per-packet one-way delay: 47.796 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

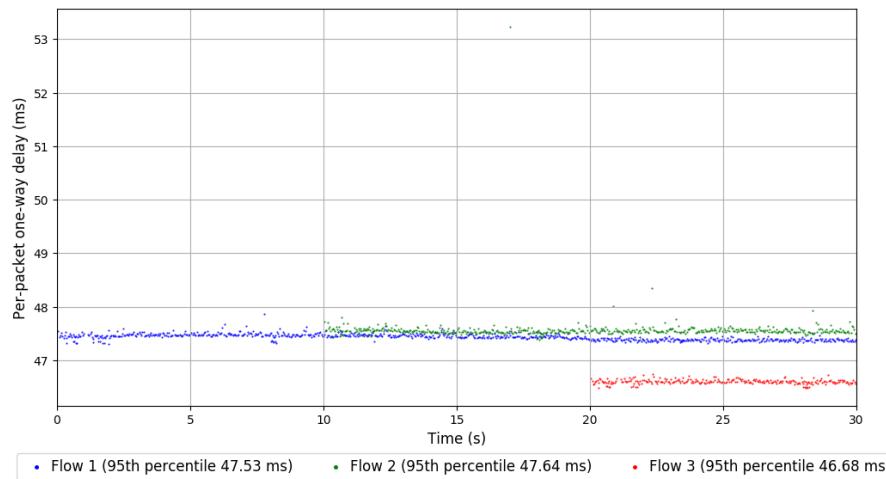
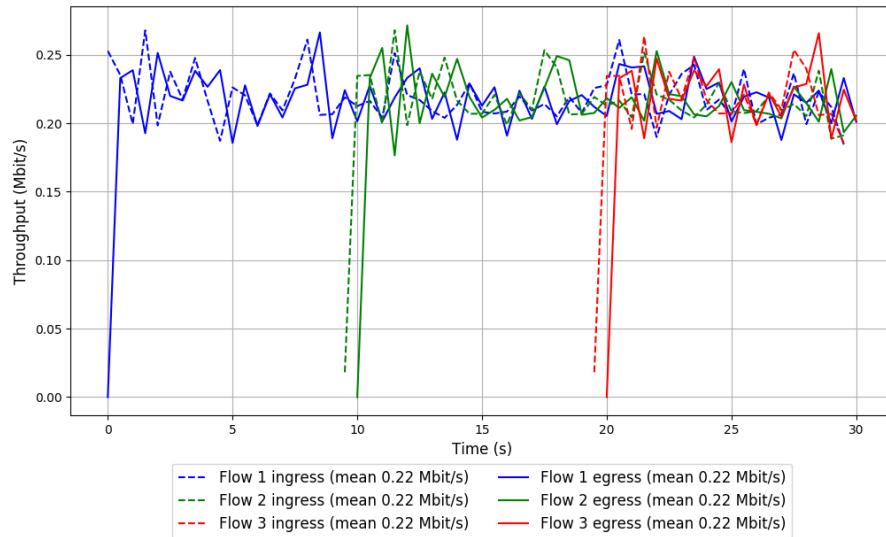


```
Run 1: Statistics of SCReAM

Start at: 2019-03-09 21:38:49
End at: 2019-03-09 21:39:19
Local clock offset: -0.115 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.593 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.526 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.644 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.678 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

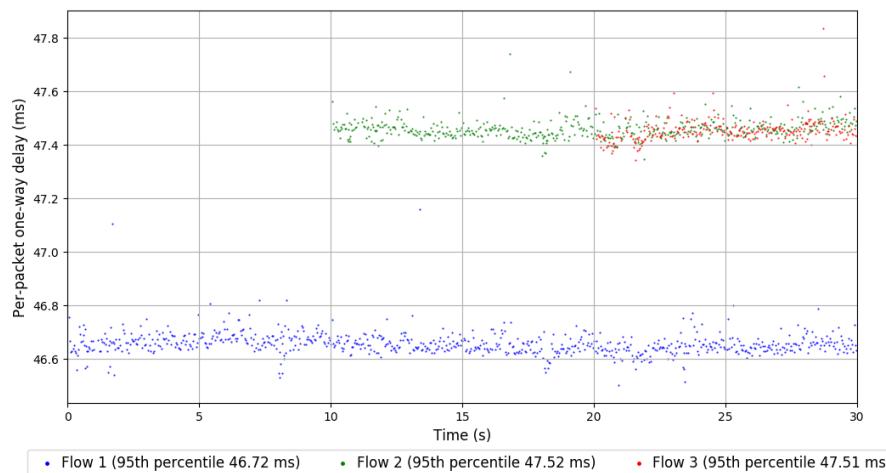
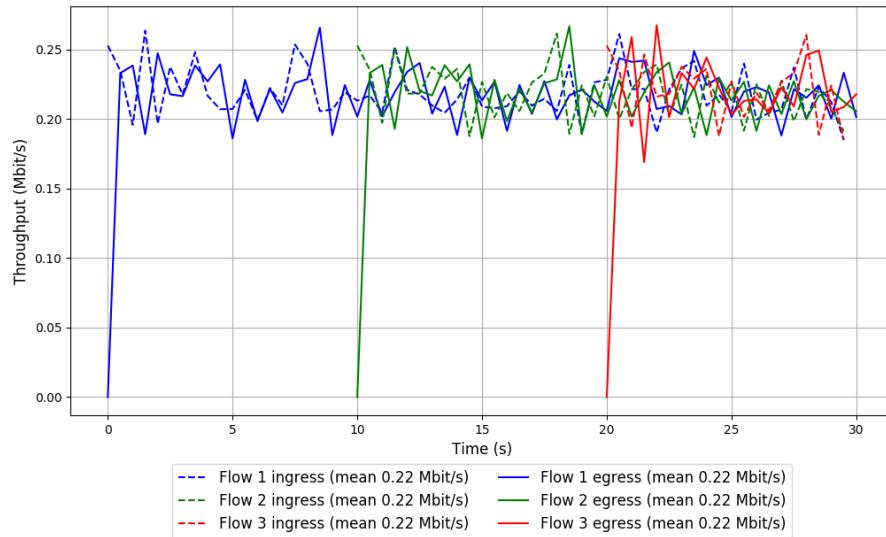


Run 2: Statistics of SCReAM

```
Start at: 2019-03-09 22:14:05
End at: 2019-03-09 22:14:35
Local clock offset: -0.149 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.498 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.716 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.518 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.509 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

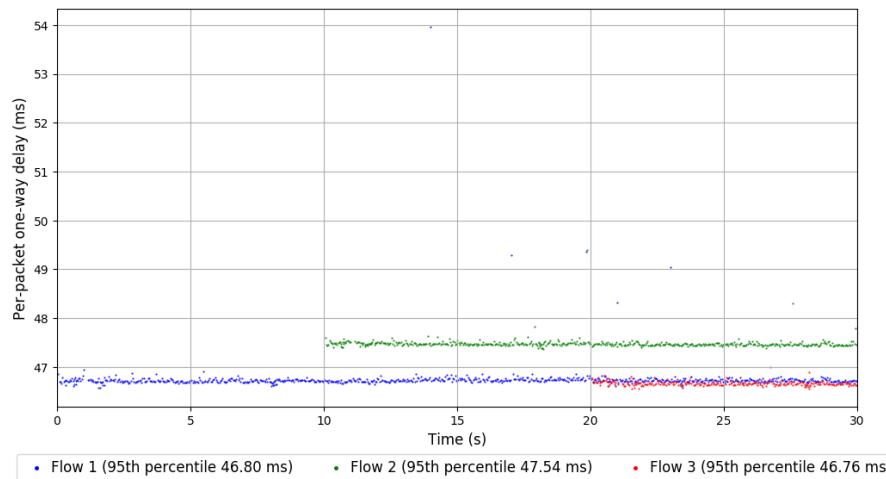
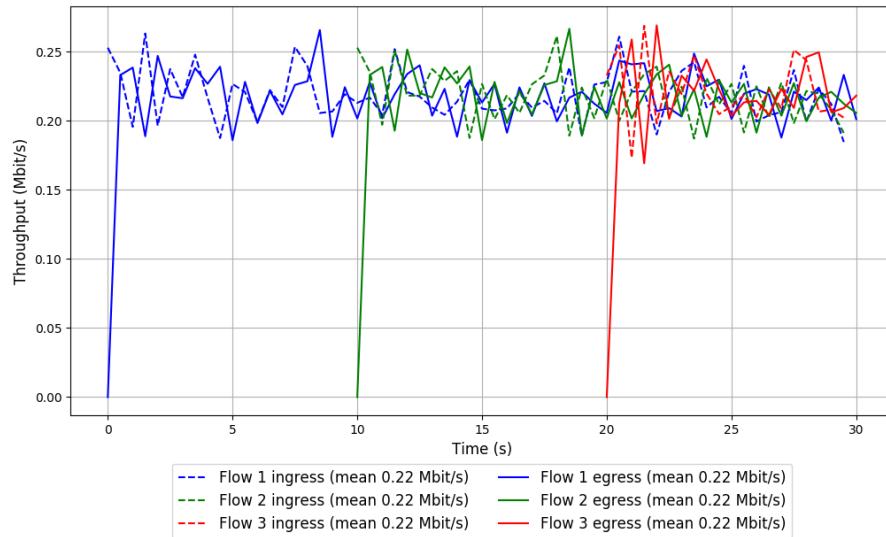


Run 3: Statistics of SCReAM

```
Start at: 2019-03-09 22:51:34
End at: 2019-03-09 22:52:04
Local clock offset: -0.151 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.797 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.539 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.755 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

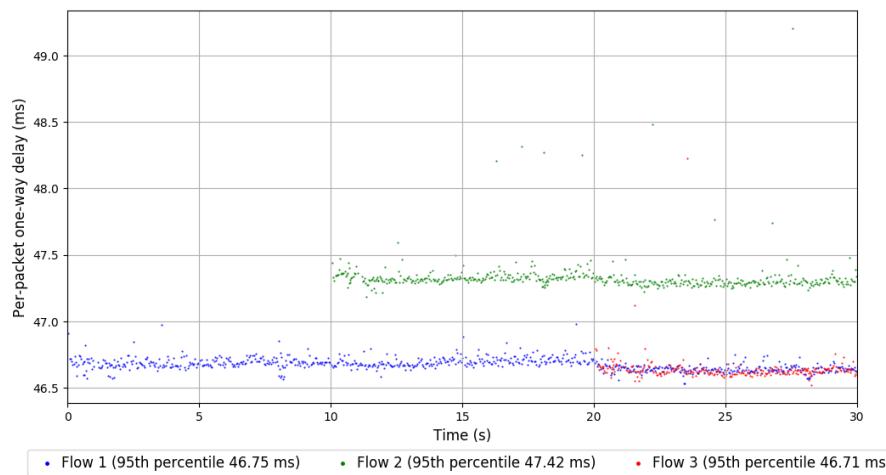
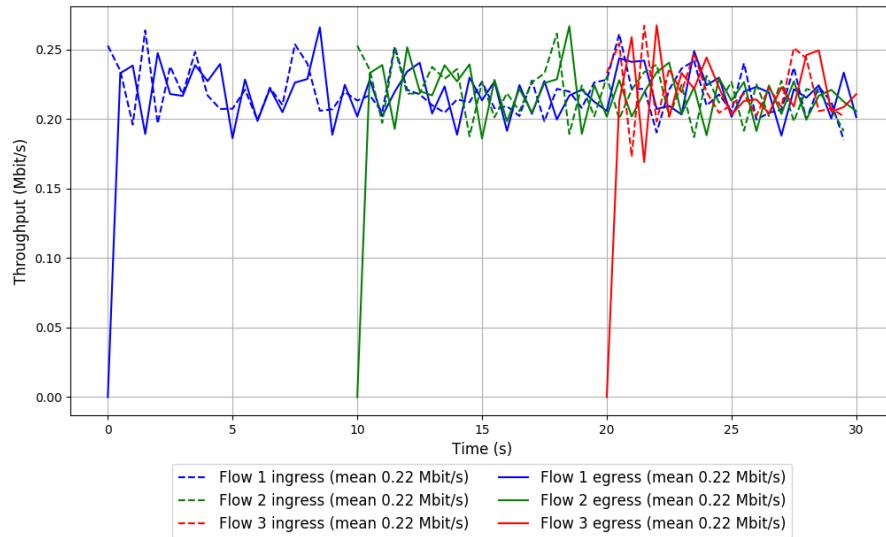


Run 4: Statistics of SCReAM

```
Start at: 2019-03-09 23:27:57
End at: 2019-03-09 23:28:27
Local clock offset: 0.01 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.352 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.747 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.417 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.707 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

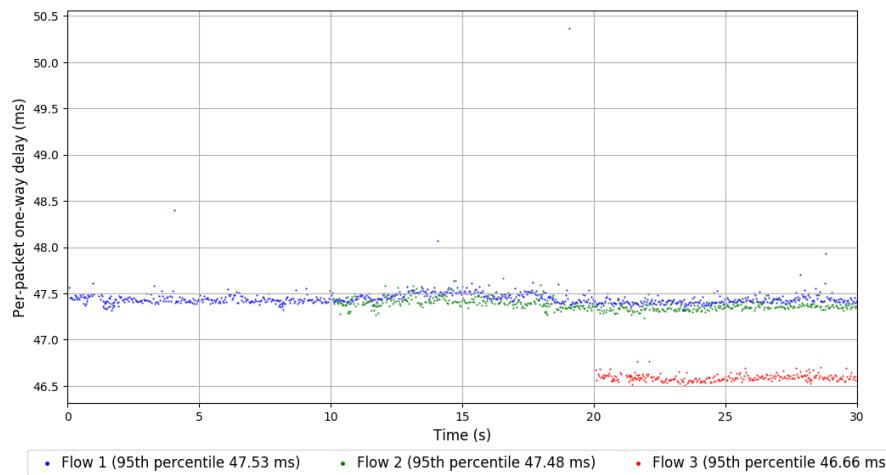
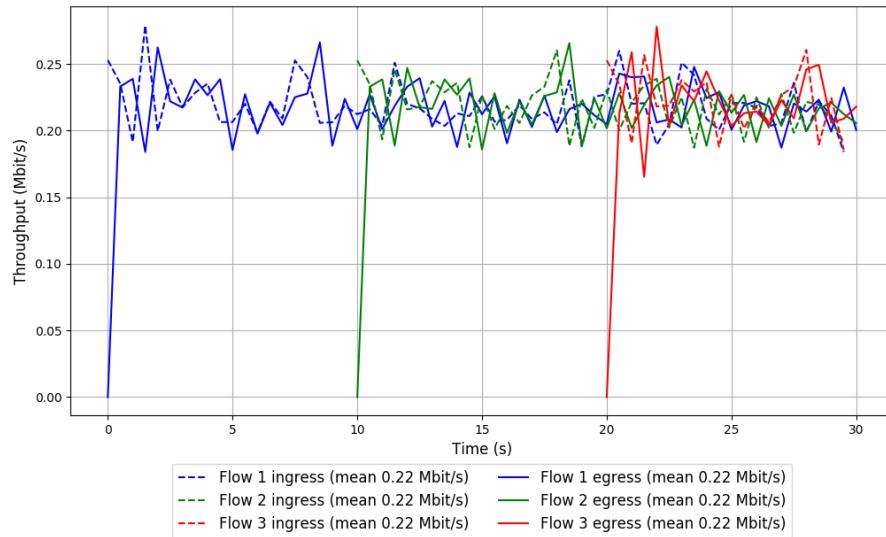


Run 5: Statistics of SCReAM

```
Start at: 2019-03-10 00:04:36
End at: 2019-03-10 00:05:06
Local clock offset: 0.076 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.516 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.532 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.481 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.655 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

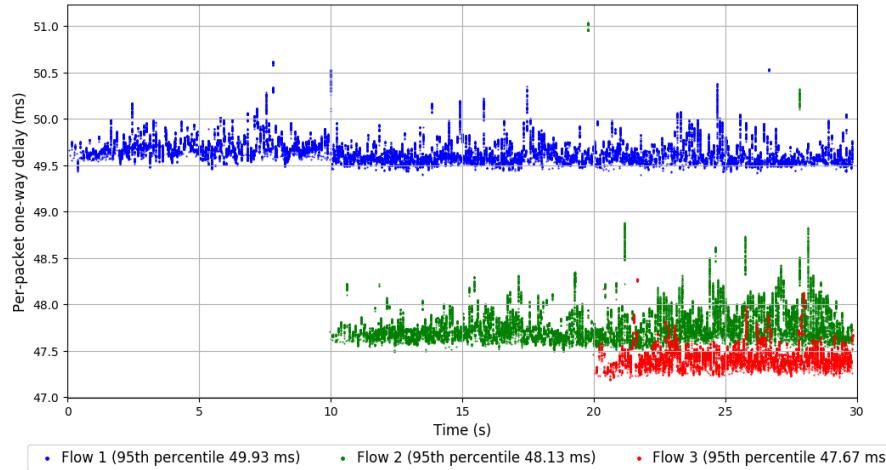
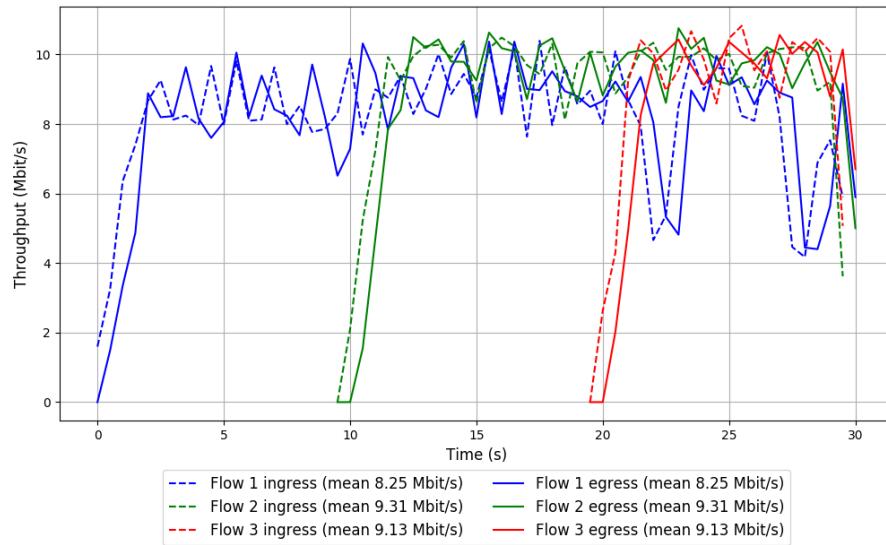


Run 1: Statistics of Sprout

```
Start at: 2019-03-09 21:35:05
End at: 2019-03-09 21:35:35
Local clock offset: -0.139 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.47 Mbit/s
95th percentile per-packet one-way delay: 49.834 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 49.929 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 48.130 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 47.666 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

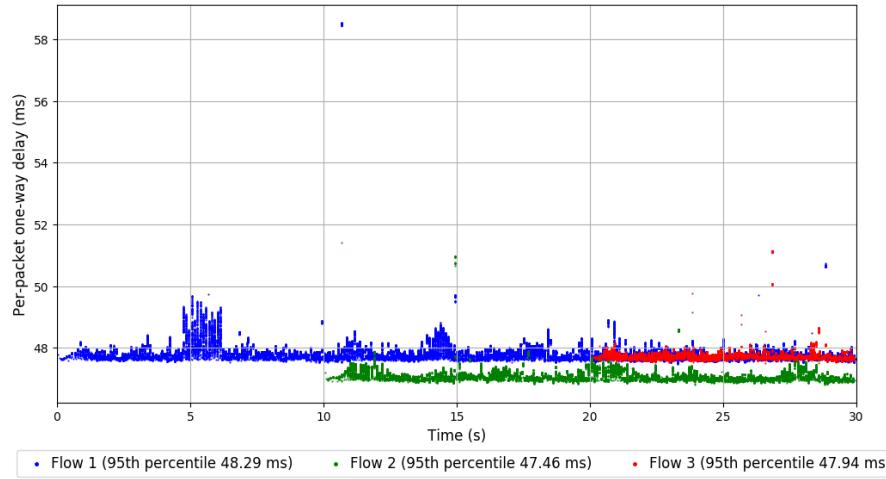
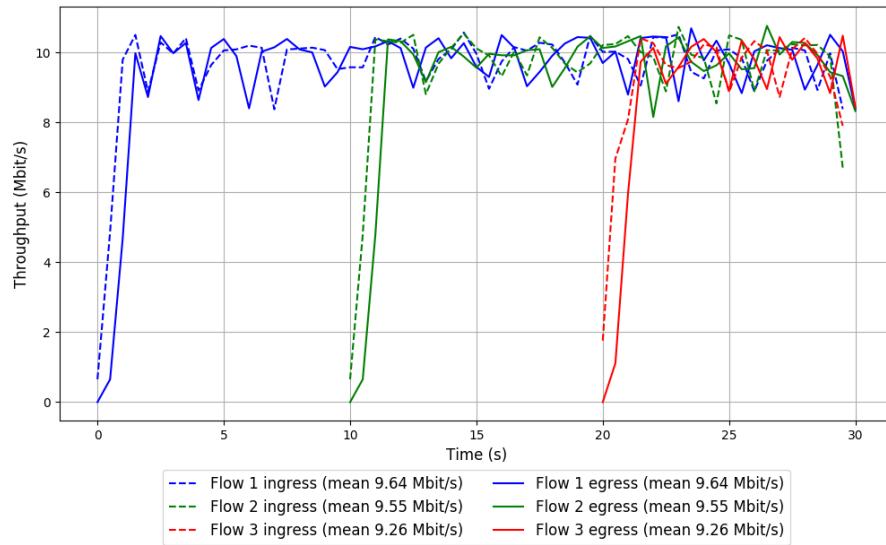


Run 2: Statistics of Sprout

```
Start at: 2019-03-09 22:10:16
End at: 2019-03-09 22:10:46
Local clock offset: -0.522 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.04 Mbit/s
95th percentile per-packet one-way delay: 48.109 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 48.286 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 47.461 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.26 Mbit/s
95th percentile per-packet one-way delay: 47.937 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

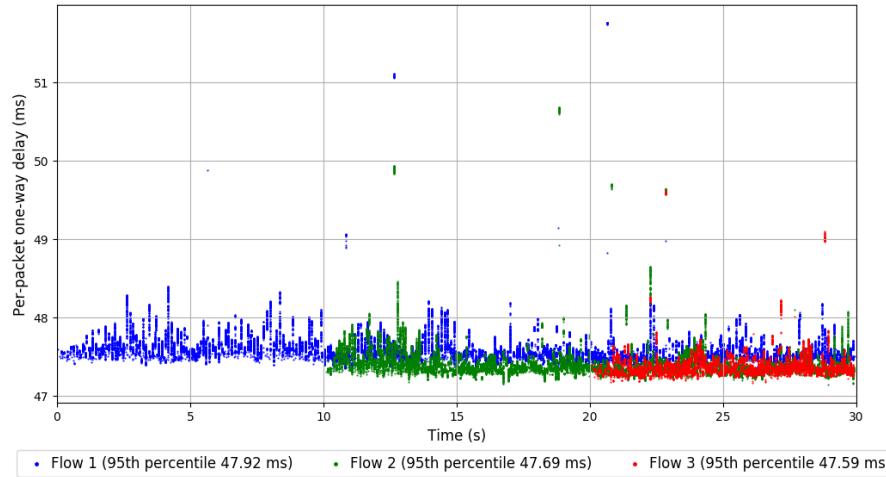
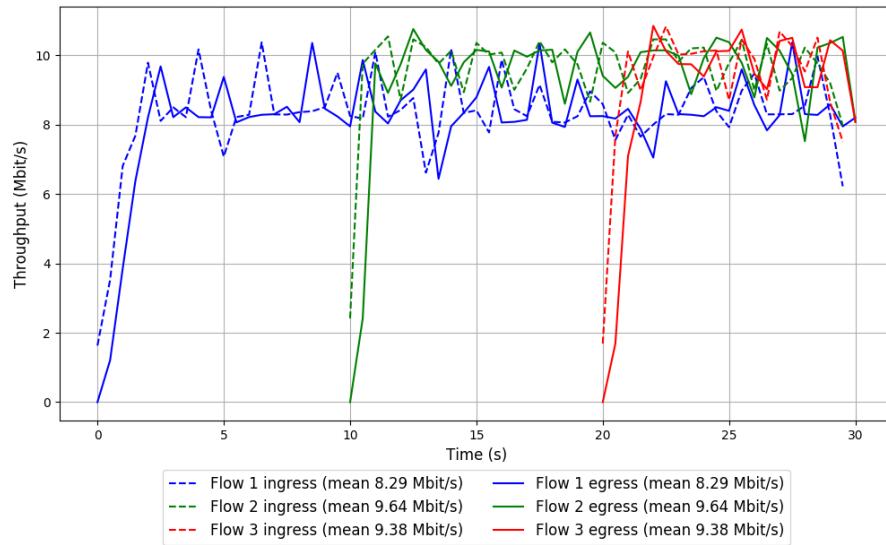


Run 3: Statistics of Sprout

```
Start at: 2019-03-09 22:47:46
End at: 2019-03-09 22:48:16
Local clock offset: -0.181 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.78 Mbit/s
95th percentile per-packet one-way delay: 47.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 47.919 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 47.687 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.38 Mbit/s
95th percentile per-packet one-way delay: 47.595 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

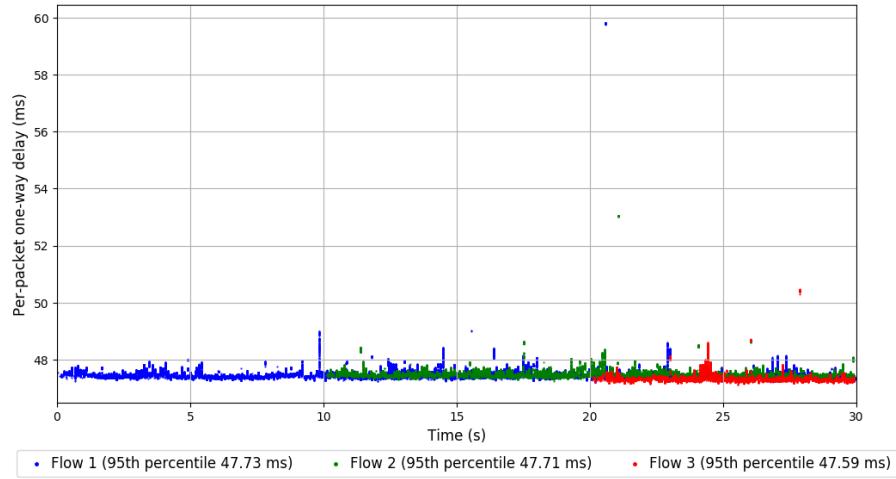
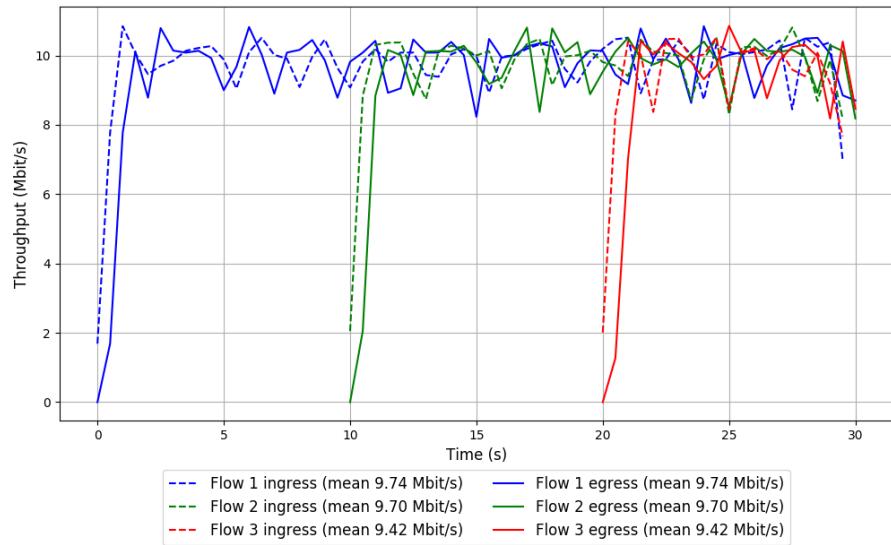


Run 4: Statistics of Sprout

```
Start at: 2019-03-09 23:24:09
End at: 2019-03-09 23:24:39
Local clock offset: -0.007 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.28 Mbit/s
95th percentile per-packet one-way delay: 47.717 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.74 Mbit/s
95th percentile per-packet one-way delay: 47.735 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.70 Mbit/s
95th percentile per-packet one-way delay: 47.712 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 47.586 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

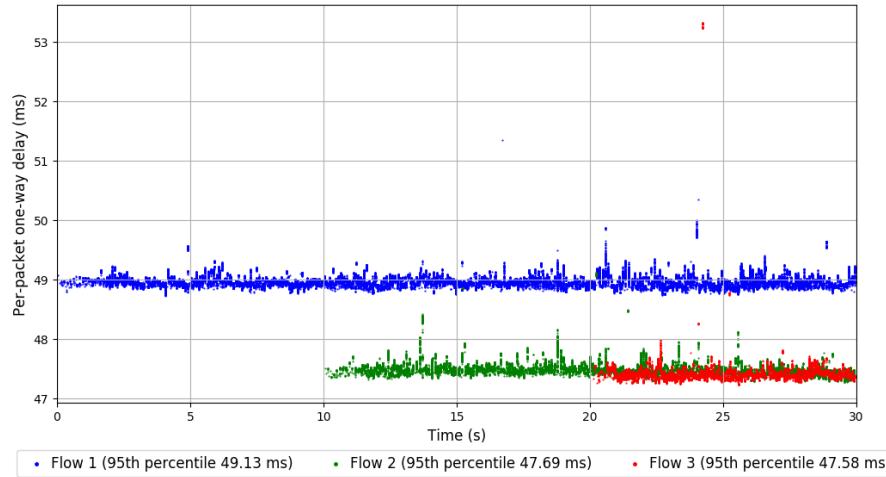
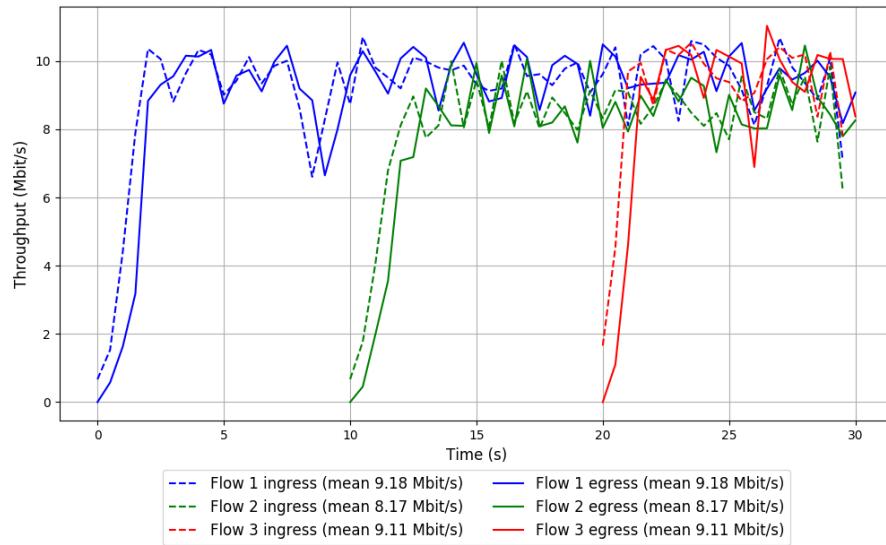


Run 5: Statistics of Sprout

```
Start at: 2019-03-10 00:00:47
End at: 2019-03-10 00:01:17
Local clock offset: 0.099 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-03-10 02:51:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.60 Mbit/s
95th percentile per-packet one-way delay: 49.080 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.18 Mbit/s
95th percentile per-packet one-way delay: 49.135 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 47.688 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 47.576 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

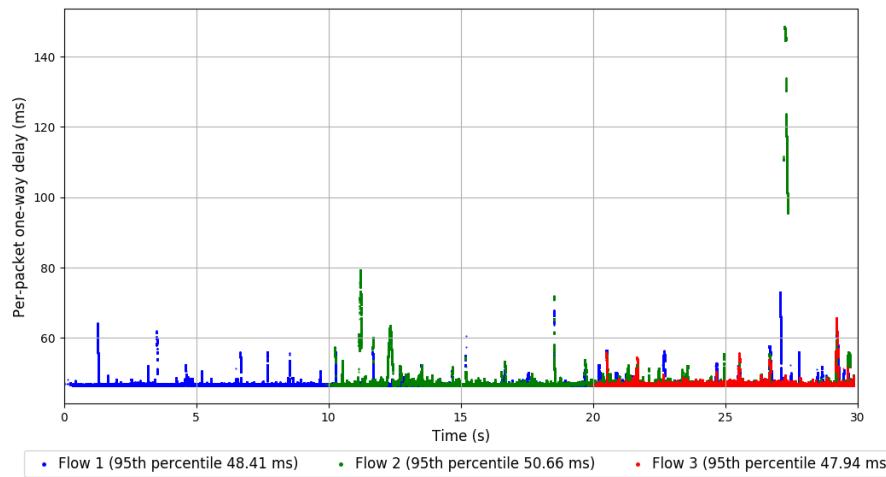
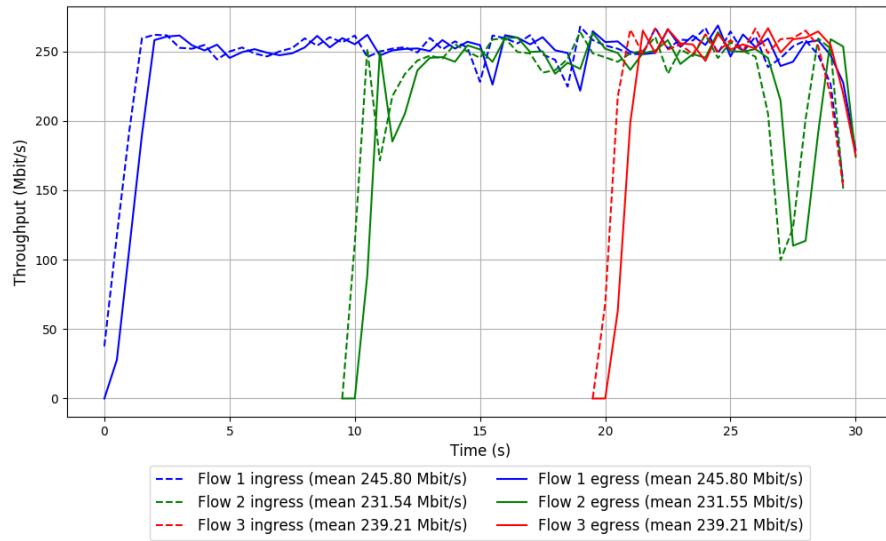


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-03-09 21:27:43
End at: 2019-03-09 21:28:13
Local clock offset: -0.11 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2019-03-10 03:00:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 480.76 Mbit/s
95th percentile per-packet one-way delay: 48.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 245.80 Mbit/s
95th percentile per-packet one-way delay: 48.405 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 231.55 Mbit/s
95th percentile per-packet one-way delay: 50.663 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 239.21 Mbit/s
95th percentile per-packet one-way delay: 47.941 ms
Loss rate: 0.00%
```

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

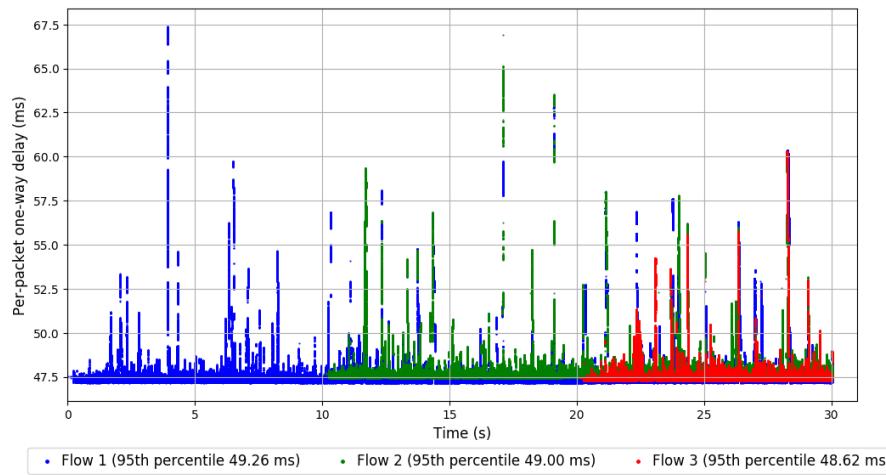
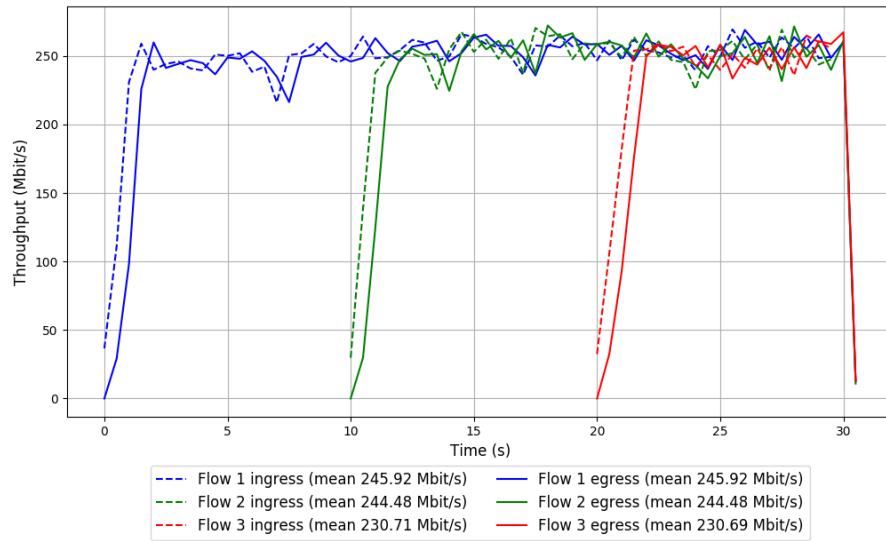


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-03-09 22:02:35
End at: 2019-03-09 22:03:05
Local clock offset: -0.164 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2019-03-10 03:01:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 485.32 Mbit/s
95th percentile per-packet one-way delay: 49.027 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 245.92 Mbit/s
95th percentile per-packet one-way delay: 49.263 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 244.48 Mbit/s
95th percentile per-packet one-way delay: 48.998 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 230.69 Mbit/s
95th percentile per-packet one-way delay: 48.624 ms
Loss rate: 0.00%
```

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

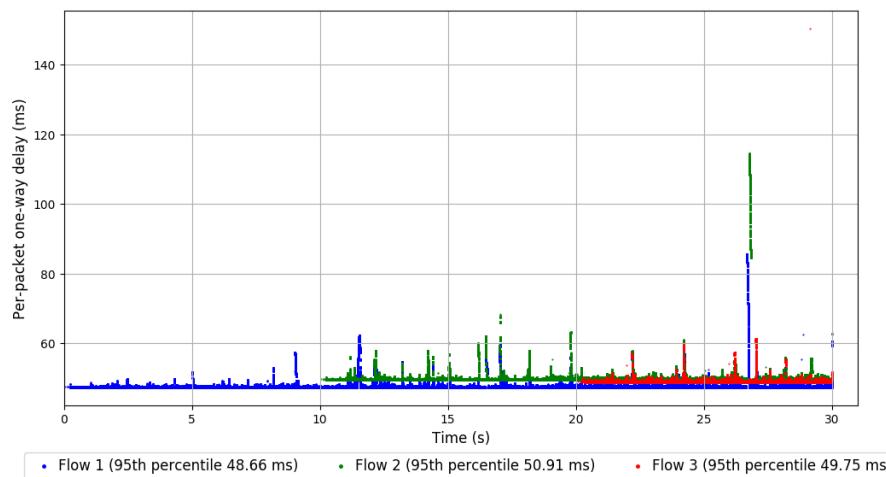
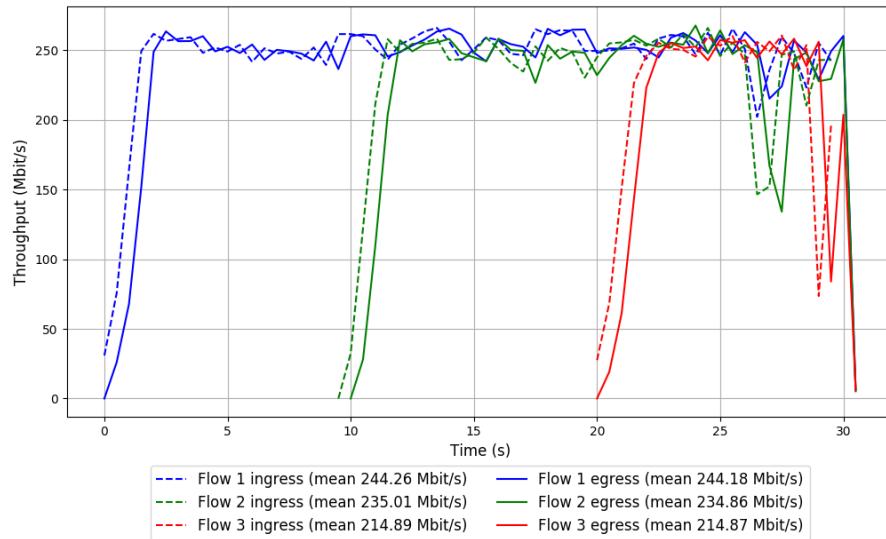


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-03-09 22:39:27
End at: 2019-03-09 22:39:57
Local clock offset: -0.165 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-03-10 03:01:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.80 Mbit/s
95th percentile per-packet one-way delay: 50.170 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 244.18 Mbit/s
95th percentile per-packet one-way delay: 48.658 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 234.86 Mbit/s
95th percentile per-packet one-way delay: 50.905 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 214.87 Mbit/s
95th percentile per-packet one-way delay: 49.751 ms
Loss rate: 0.00%
```

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

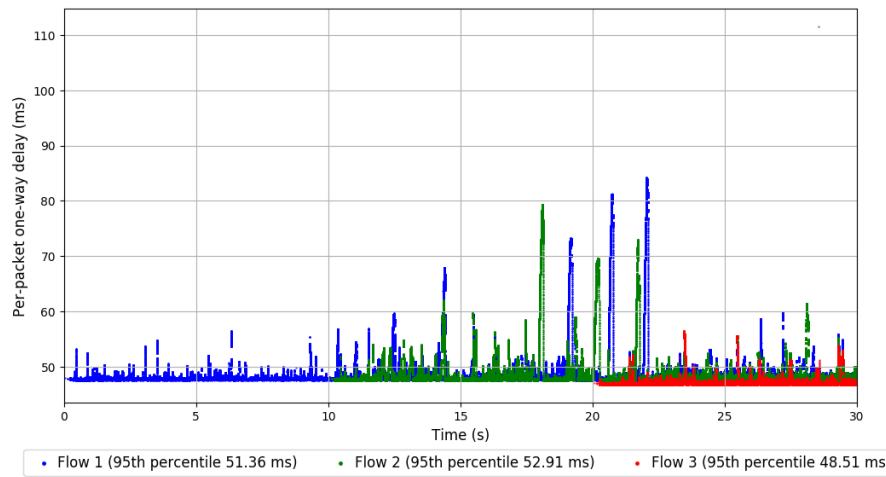
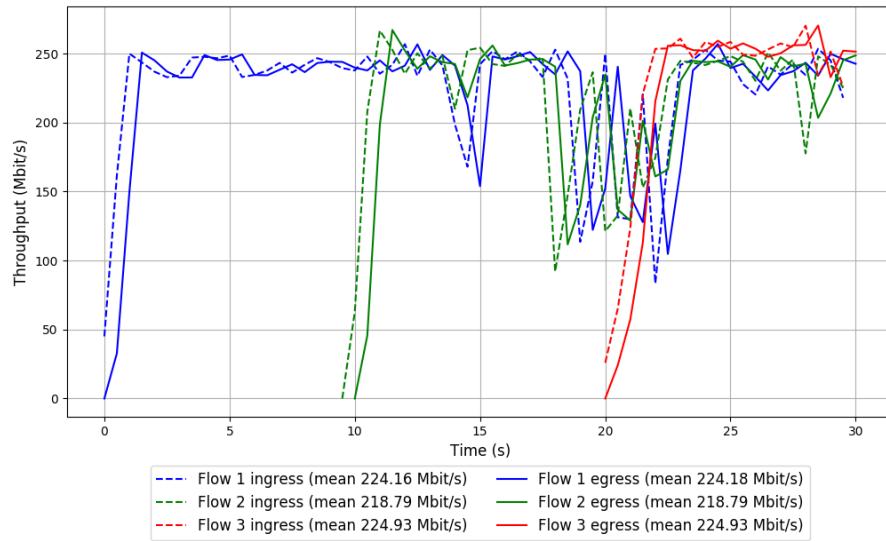


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-03-09 23:16:37
End at: 2019-03-09 23:17:07
Local clock offset: -0.407 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-03-10 03:01:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 444.66 Mbit/s
95th percentile per-packet one-way delay: 51.492 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 224.18 Mbit/s
95th percentile per-packet one-way delay: 51.356 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 218.79 Mbit/s
95th percentile per-packet one-way delay: 52.909 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 224.93 Mbit/s
95th percentile per-packet one-way delay: 48.509 ms
Loss rate: 0.00%
```

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

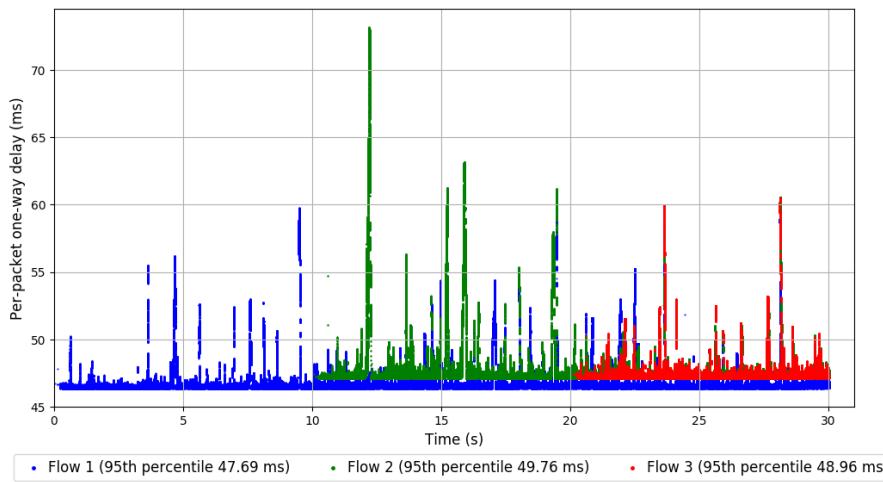
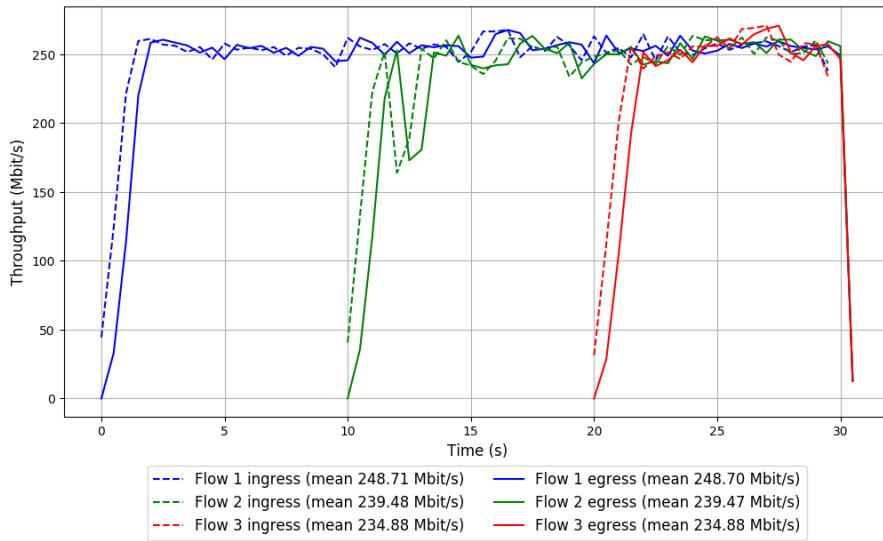


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-03-09 23:53:24
End at: 2019-03-09 23:53:54
Local clock offset: 0.054 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-03-10 03:01:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 486.05 Mbit/s
95th percentile per-packet one-way delay: 48.766 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 248.70 Mbit/s
95th percentile per-packet one-way delay: 47.688 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 239.47 Mbit/s
95th percentile per-packet one-way delay: 49.761 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.88 Mbit/s
95th percentile per-packet one-way delay: 48.964 ms
Loss rate: 0.00%
```

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

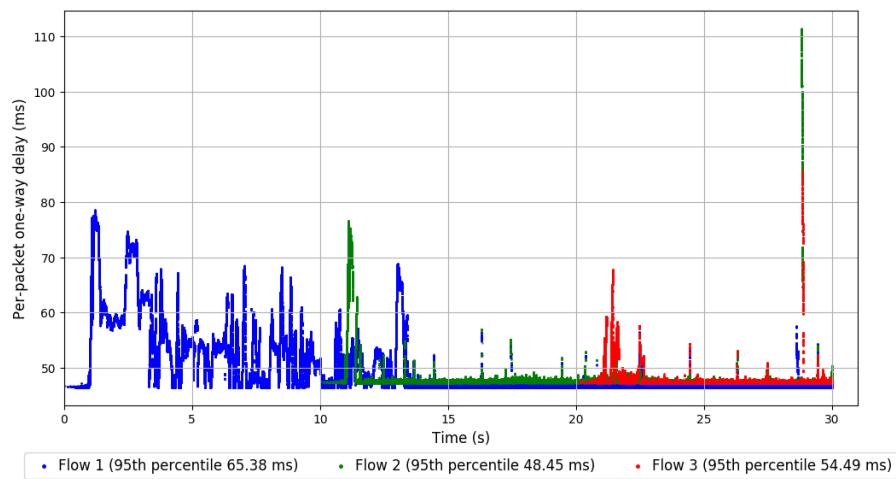
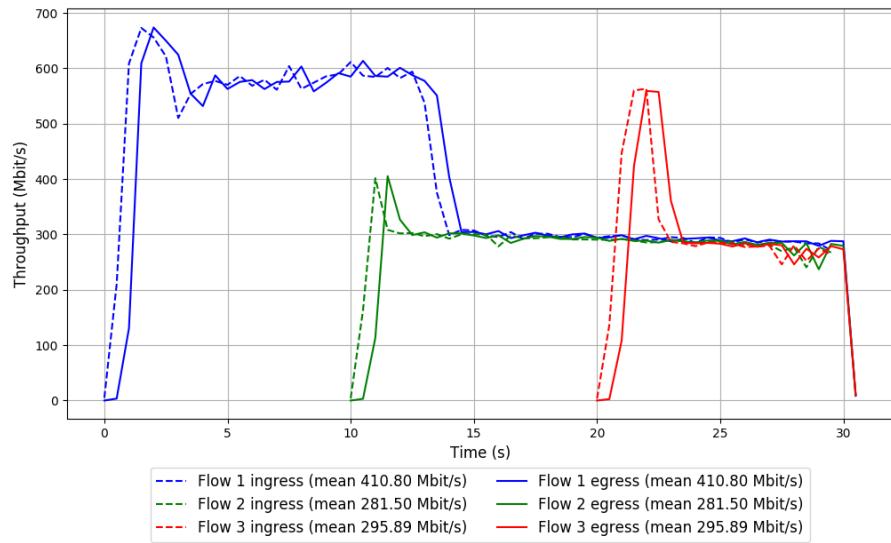


Run 1: Statistics of TCP Vegas

```
Start at: 2019-03-09 21:40:00
End at: 2019-03-09 21:40:30
Local clock offset: -0.132 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2019-03-10 03:01:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 696.56 Mbit/s
95th percentile per-packet one-way delay: 63.070 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 410.80 Mbit/s
95th percentile per-packet one-way delay: 65.378 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 281.50 Mbit/s
95th percentile per-packet one-way delay: 48.455 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 295.89 Mbit/s
95th percentile per-packet one-way delay: 54.489 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

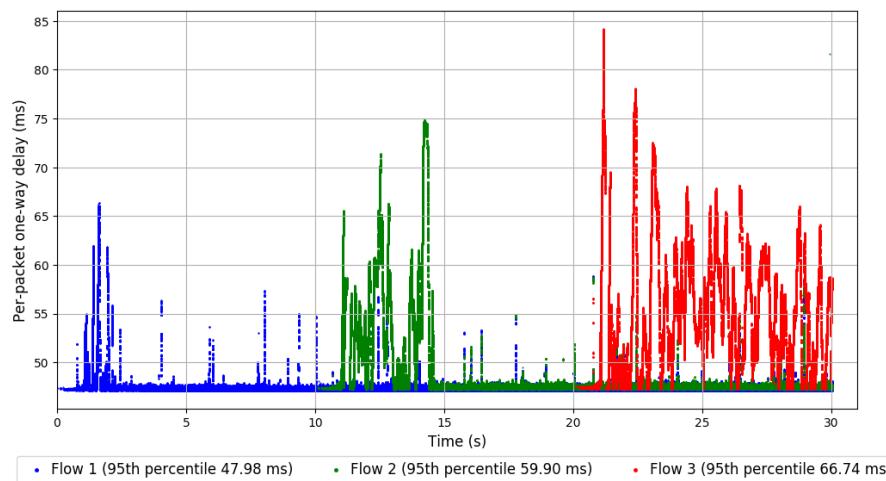
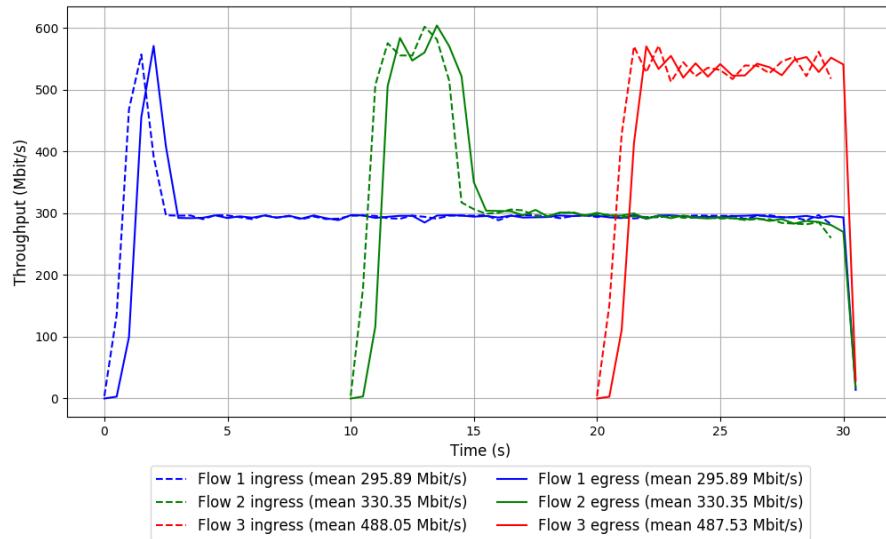


Run 2: Statistics of TCP Vegas

```
Start at: 2019-03-09 22:15:16
End at: 2019-03-09 22:15:46
Local clock offset: -0.193 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-03-10 03:04:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 677.89 Mbit/s
95th percentile per-packet one-way delay: 61.438 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 295.89 Mbit/s
95th percentile per-packet one-way delay: 47.983 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 330.35 Mbit/s
95th percentile per-packet one-way delay: 59.903 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 487.53 Mbit/s
95th percentile per-packet one-way delay: 66.738 ms
Loss rate: 0.11%
```

Run 2: Report of TCP Vegas — Data Link

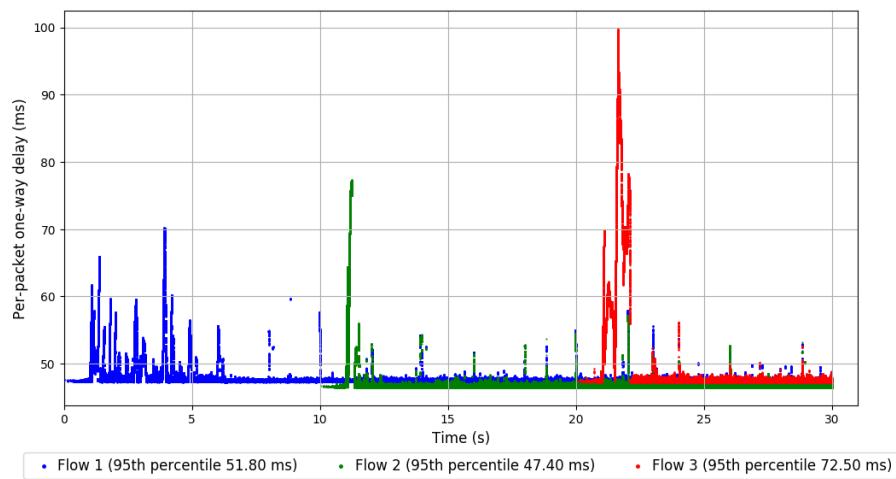
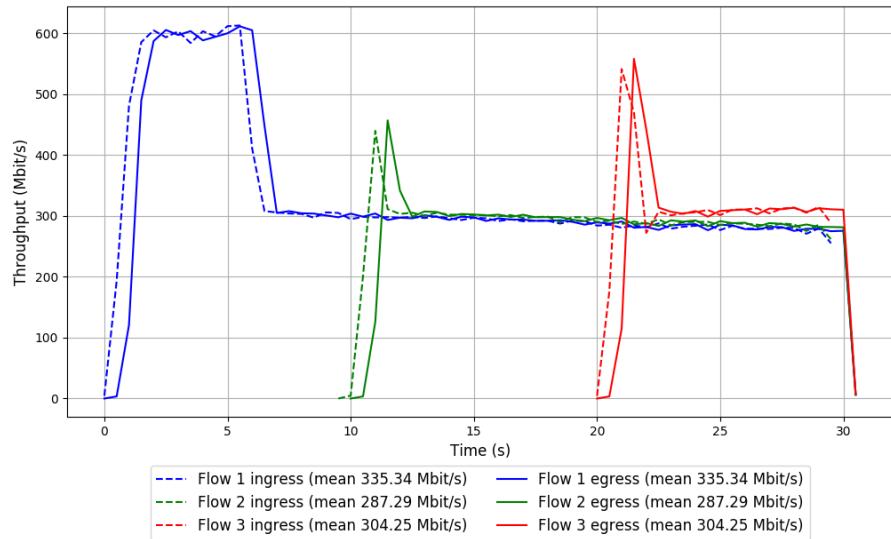


Run 3: Statistics of TCP Vegas

```
Start at: 2019-03-09 22:52:45
End at: 2019-03-09 22:53:15
Local clock offset: -0.154 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-03-10 03:05:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 627.92 Mbit/s
95th percentile per-packet one-way delay: 53.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 335.34 Mbit/s
95th percentile per-packet one-way delay: 51.803 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 287.29 Mbit/s
95th percentile per-packet one-way delay: 47.396 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 304.25 Mbit/s
95th percentile per-packet one-way delay: 72.505 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

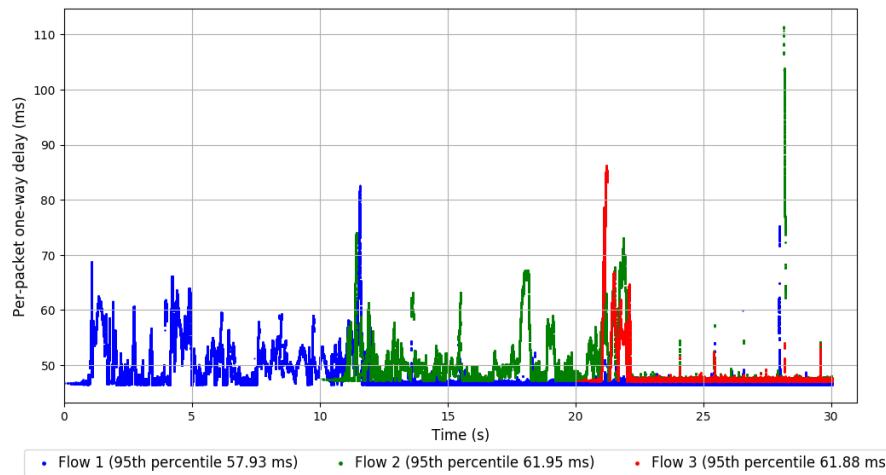
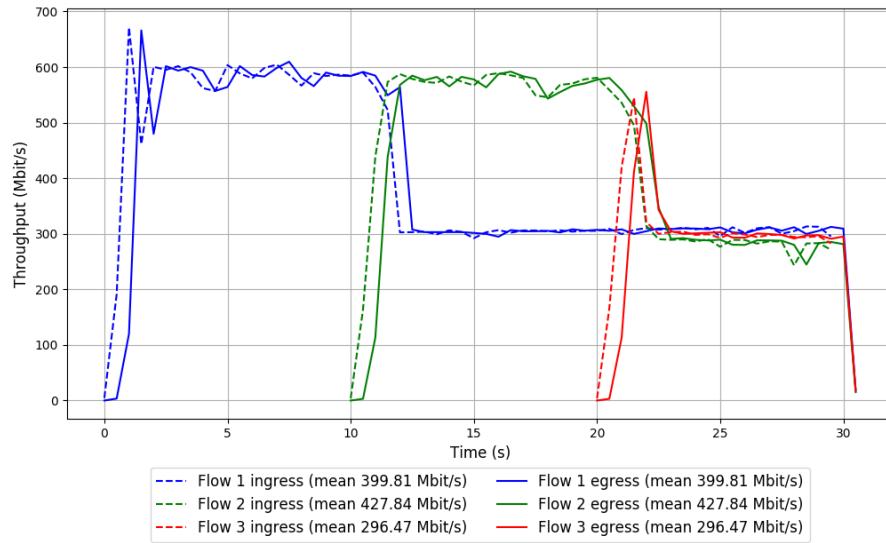


Run 4: Statistics of TCP Vegas

```
Start at: 2019-03-09 23:29:08
End at: 2019-03-09 23:29:38
Local clock offset: 0.007 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-03-10 03:13:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 783.34 Mbit/s
95th percentile per-packet one-way delay: 59.340 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 399.81 Mbit/s
95th percentile per-packet one-way delay: 57.926 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 427.84 Mbit/s
95th percentile per-packet one-way delay: 61.955 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 296.47 Mbit/s
95th percentile per-packet one-way delay: 61.882 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Vegas — Data Link

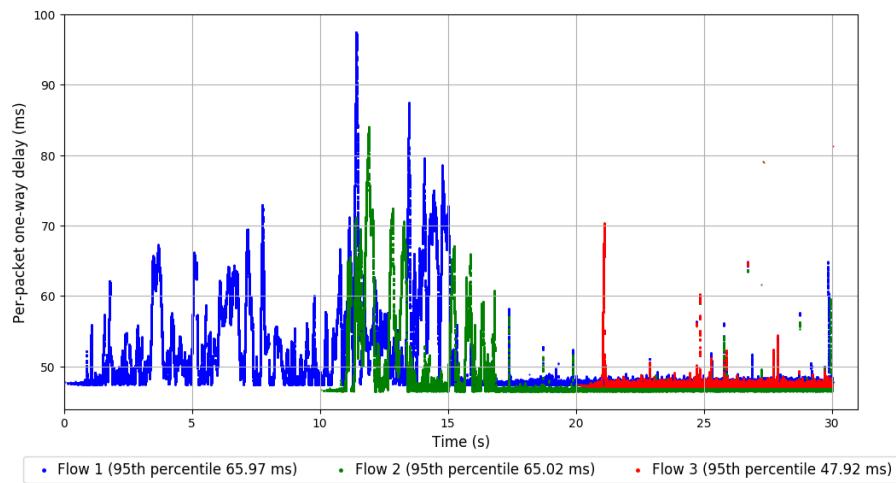
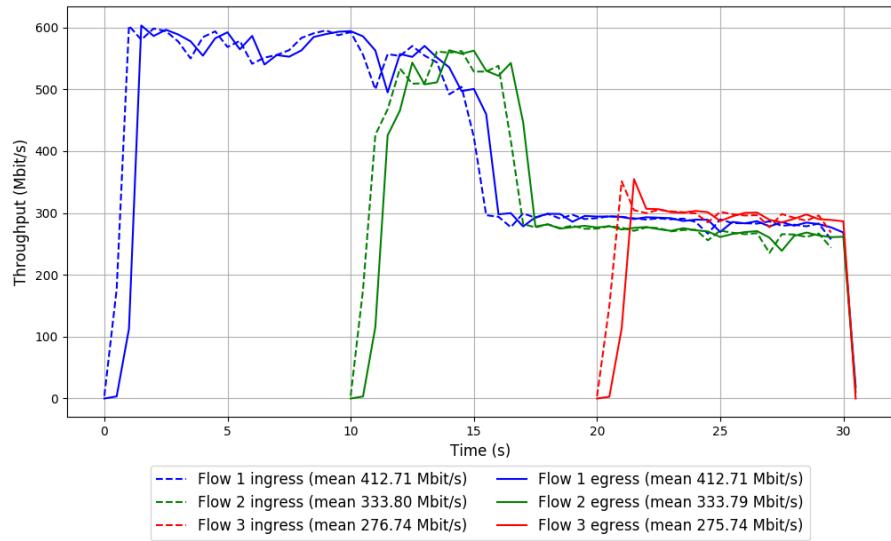


Run 5: Statistics of TCP Vegas

```
Start at: 2019-03-10 00:05:47
End at: 2019-03-10 00:06:17
Local clock offset: 0.055 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2019-03-10 03:14:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 726.38 Mbit/s
95th percentile per-packet one-way delay: 64.960 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 412.71 Mbit/s
95th percentile per-packet one-way delay: 65.969 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 333.79 Mbit/s
95th percentile per-packet one-way delay: 65.016 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 275.74 Mbit/s
95th percentile per-packet one-way delay: 47.916 ms
Loss rate: 0.24%
```

Run 5: Report of TCP Vegas — Data Link

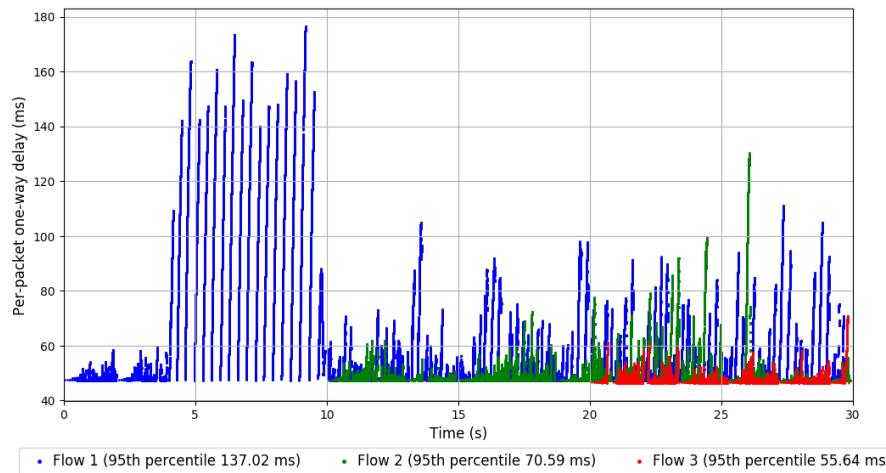
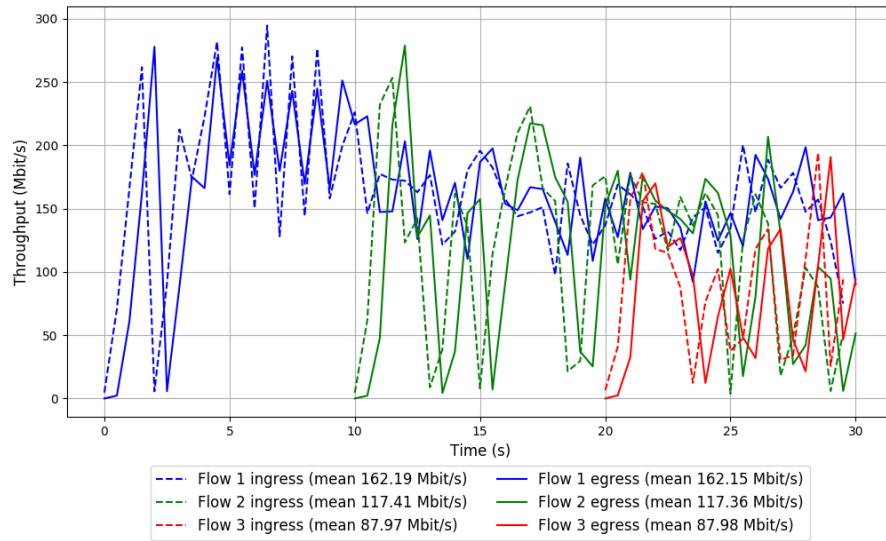


Run 1: Statistics of Verus

```
Start at: 2019-03-09 21:26:05
End at: 2019-03-09 21:26:35
Local clock offset: -0.109 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-03-10 03:14:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 268.64 Mbit/s
95th percentile per-packet one-way delay: 126.045 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 162.15 Mbit/s
95th percentile per-packet one-way delay: 137.021 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 117.36 Mbit/s
95th percentile per-packet one-way delay: 70.593 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 87.98 Mbit/s
95th percentile per-packet one-way delay: 55.640 ms
Loss rate: 0.00%
```

Run 1: Report of Verus — Data Link

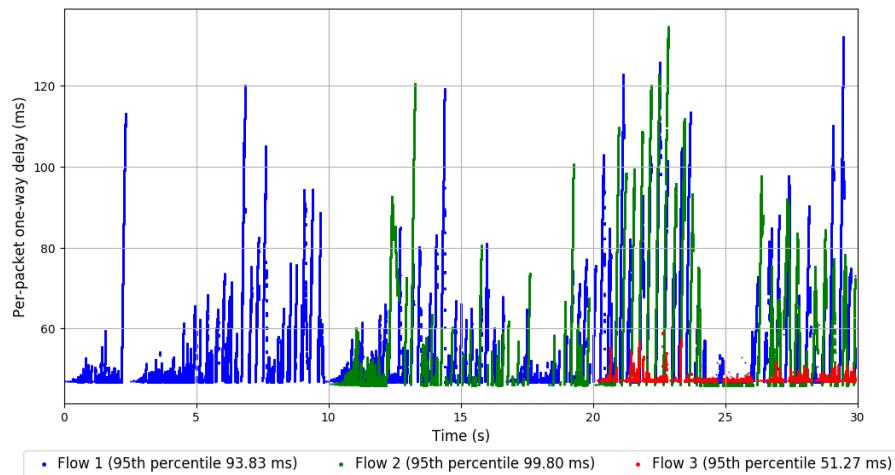
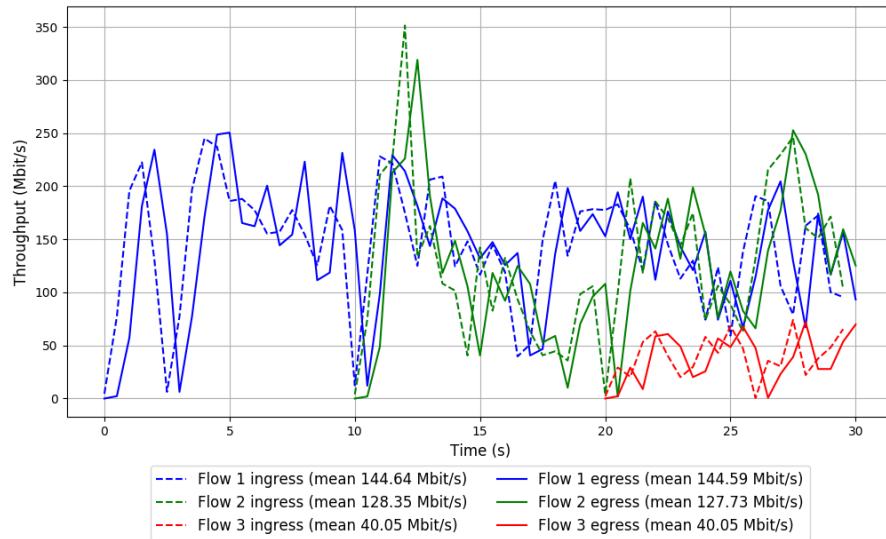


Run 2: Statistics of Verus

```
Start at: 2019-03-09 22:01:00
End at: 2019-03-09 22:01:30
Local clock offset: 0.23 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-03-10 03:14:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 242.71 Mbit/s
95th percentile per-packet one-way delay: 95.594 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 144.59 Mbit/s
95th percentile per-packet one-way delay: 93.833 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 127.73 Mbit/s
95th percentile per-packet one-way delay: 99.803 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 40.05 Mbit/s
95th percentile per-packet one-way delay: 51.275 ms
Loss rate: 0.00%
```

Run 2: Report of Verus — Data Link

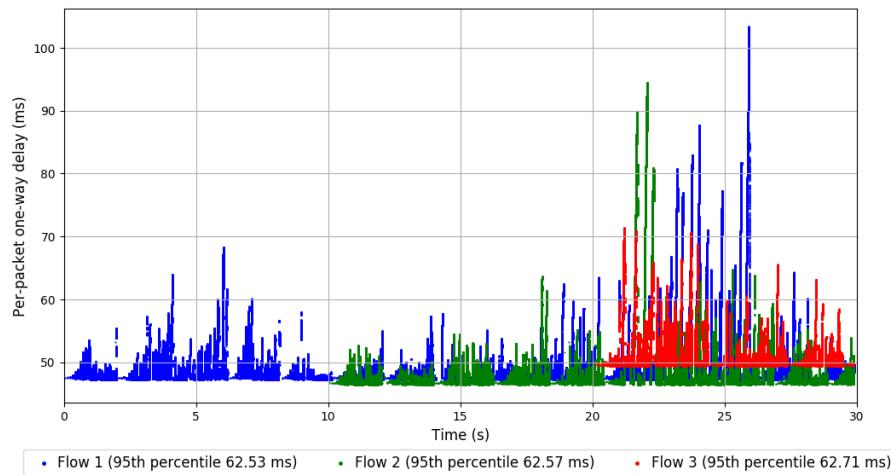
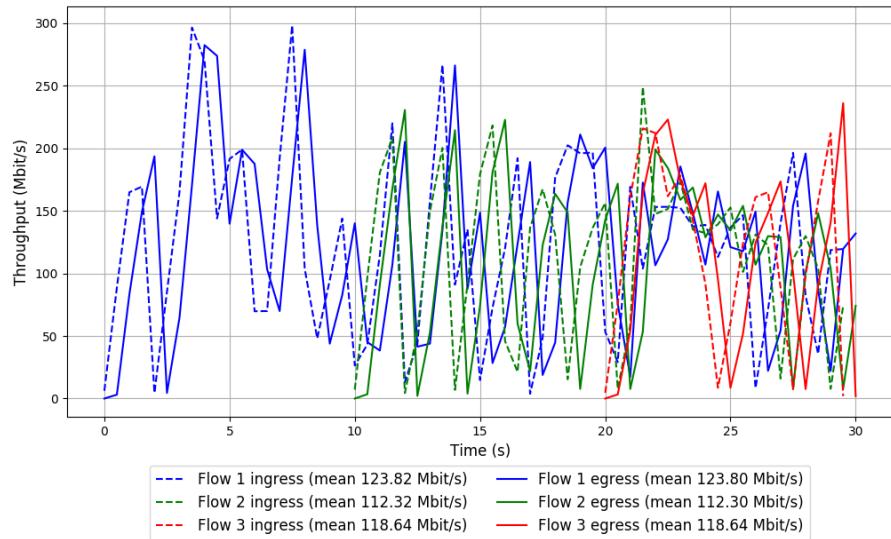


Run 3: Statistics of Verus

```
Start at: 2019-03-09 22:37:45
End at: 2019-03-09 22:38:15
Local clock offset: -0.182 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-03-10 03:14:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.33 Mbit/s
95th percentile per-packet one-way delay: 62.595 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 123.80 Mbit/s
95th percentile per-packet one-way delay: 62.526 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 112.30 Mbit/s
95th percentile per-packet one-way delay: 62.571 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 118.64 Mbit/s
95th percentile per-packet one-way delay: 62.713 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

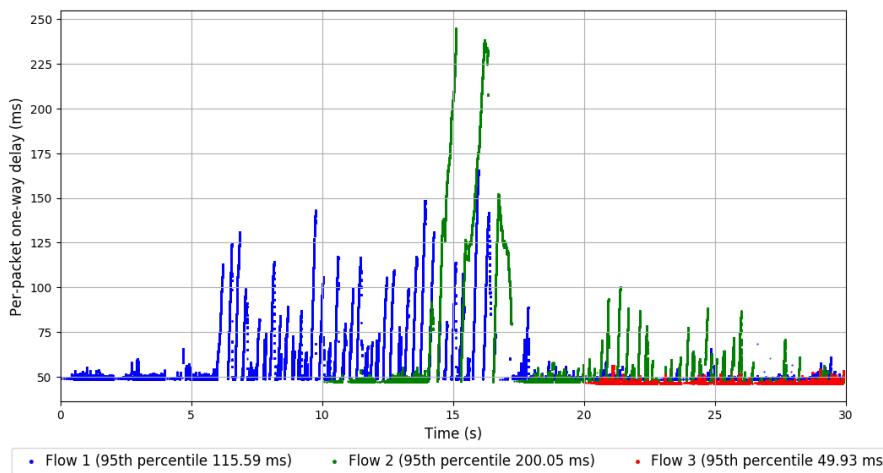
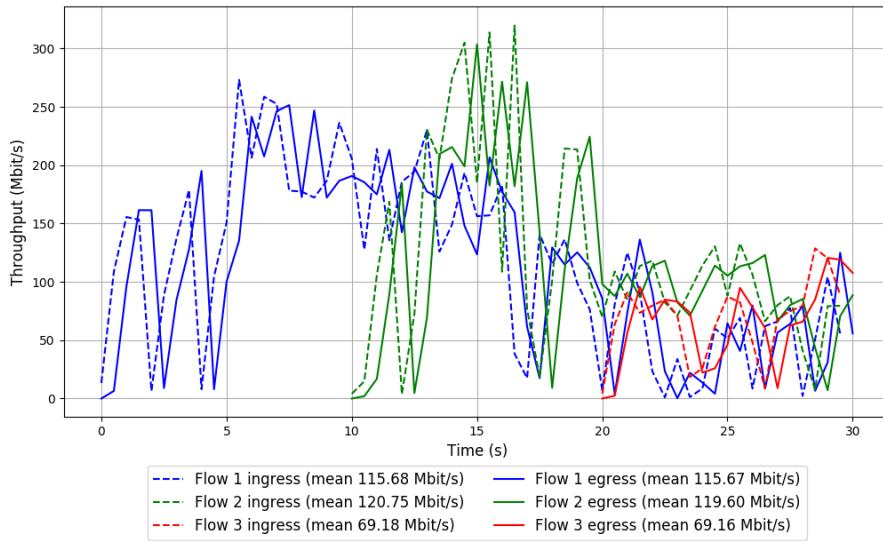


Run 4: Statistics of Verus

```
Start at: 2019-03-09 23:15:02
End at: 2019-03-09 23:15:32
Local clock offset: -0.039 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-03-10 03:14:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 217.94 Mbit/s
95th percentile per-packet one-way delay: 140.123 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 115.67 Mbit/s
95th percentile per-packet one-way delay: 115.589 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 119.60 Mbit/s
95th percentile per-packet one-way delay: 200.050 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 69.16 Mbit/s
95th percentile per-packet one-way delay: 49.926 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link

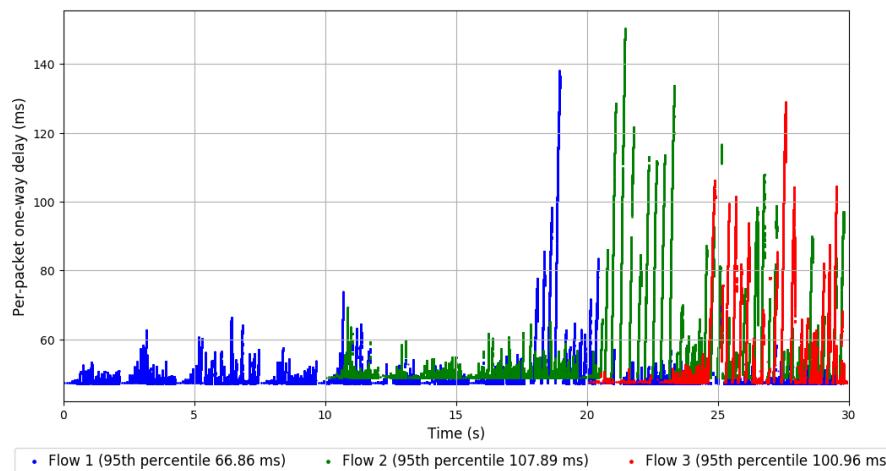
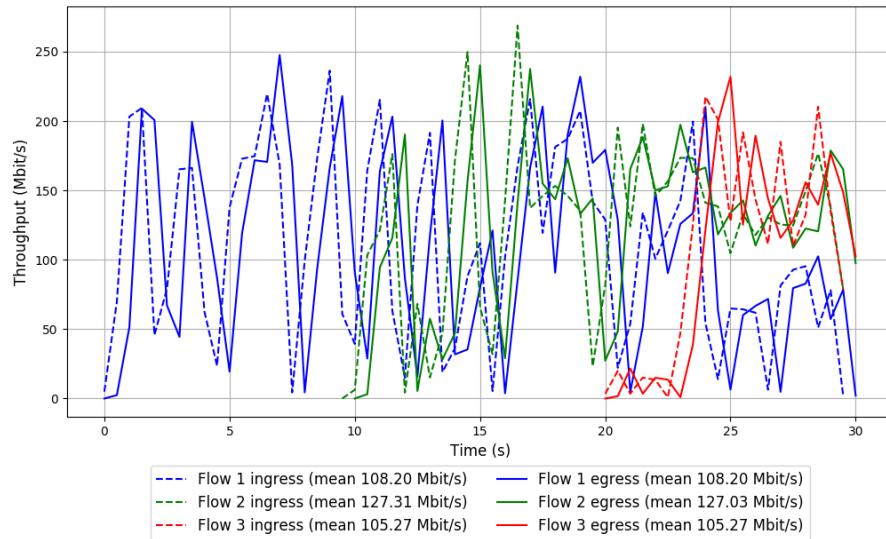


Run 5: Statistics of Verus

```
Start at: 2019-03-09 23:51:50
End at: 2019-03-09 23:52:20
Local clock offset: 0.093 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-03-10 03:14:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.00 Mbit/s
95th percentile per-packet one-way delay: 95.686 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 108.20 Mbit/s
95th percentile per-packet one-way delay: 66.862 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.03 Mbit/s
95th percentile per-packet one-way delay: 107.885 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 105.27 Mbit/s
95th percentile per-packet one-way delay: 100.960 ms
Loss rate: 0.00%
```

Run 5: Report of Verus — Data Link

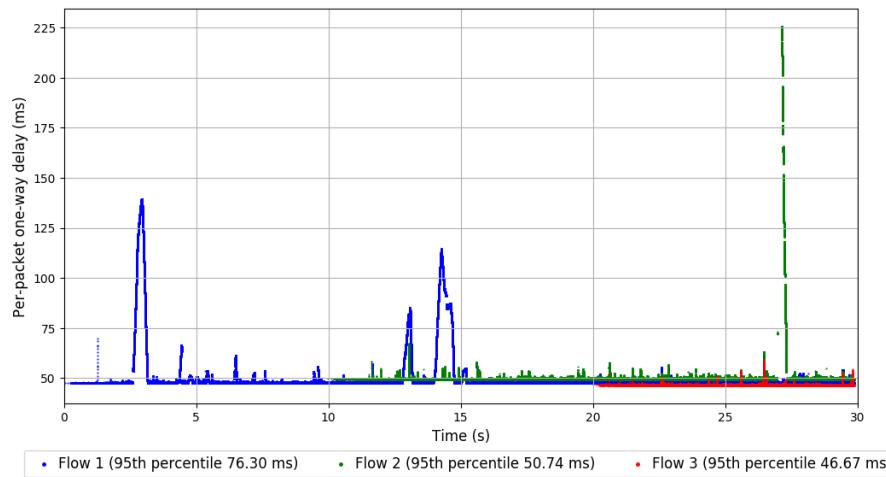
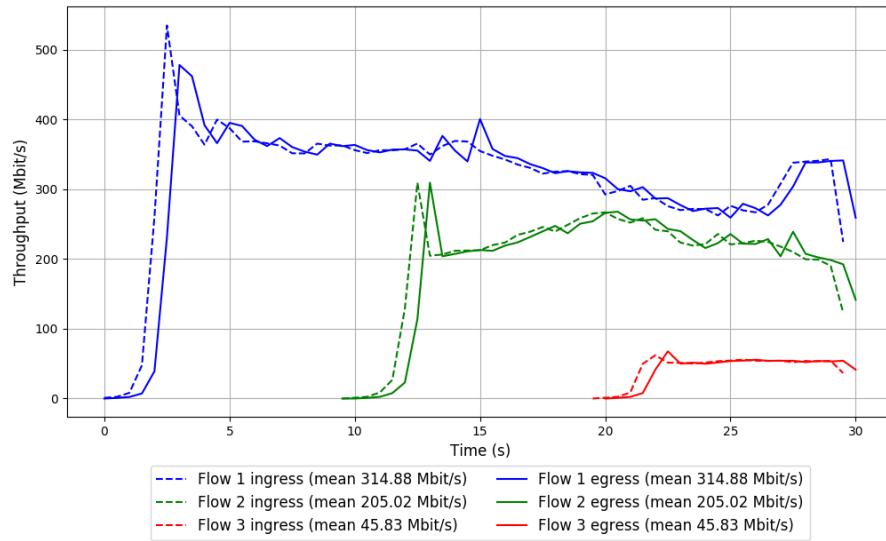


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-03-09 21:47:27
End at: 2019-03-09 21:47:57
Local clock offset: -0.124 ms
Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2019-03-10 03:15:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.65 Mbit/s
95th percentile per-packet one-way delay: 60.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 314.88 Mbit/s
95th percentile per-packet one-way delay: 76.298 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 205.02 Mbit/s
95th percentile per-packet one-way delay: 50.741 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.83 Mbit/s
95th percentile per-packet one-way delay: 46.669 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

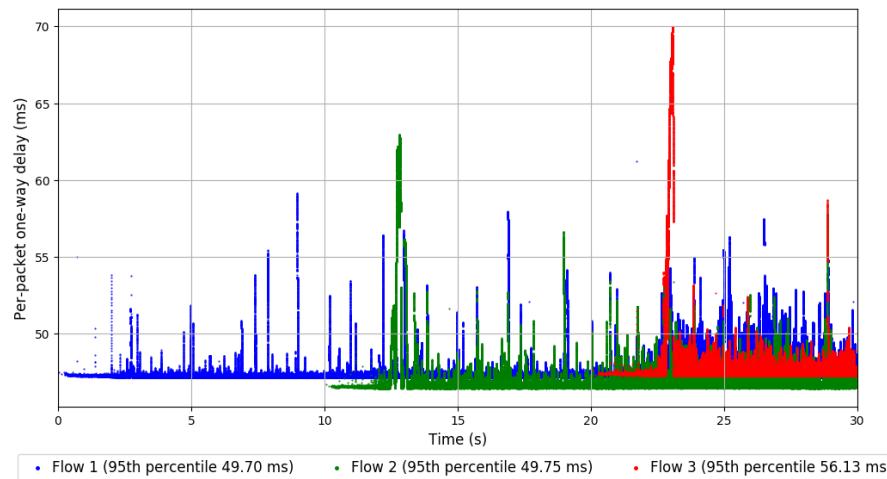
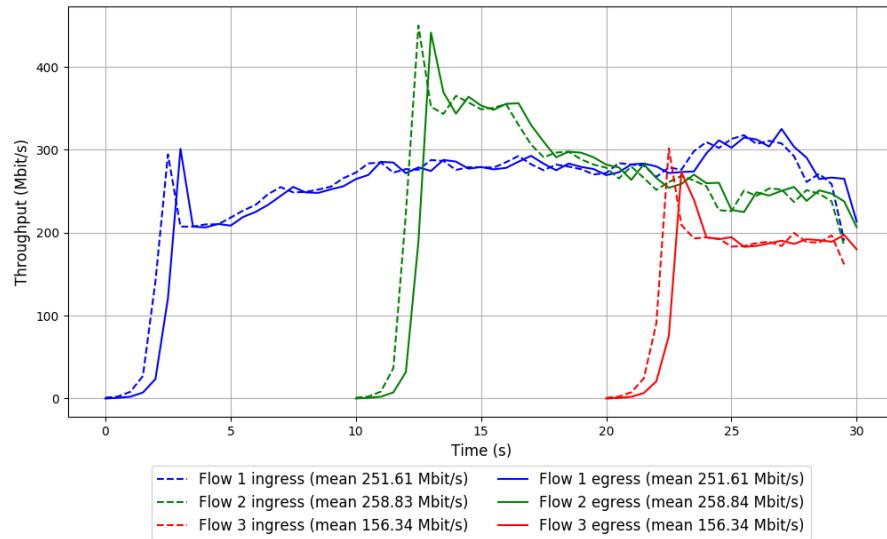


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-03-09 22:23:01
End at: 2019-03-09 22:23:31
Local clock offset: -0.174 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-03-10 03:17:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 475.25 Mbit/s
95th percentile per-packet one-way delay: 49.853 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 251.61 Mbit/s
95th percentile per-packet one-way delay: 49.700 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.84 Mbit/s
95th percentile per-packet one-way delay: 49.750 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.34 Mbit/s
95th percentile per-packet one-way delay: 56.128 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

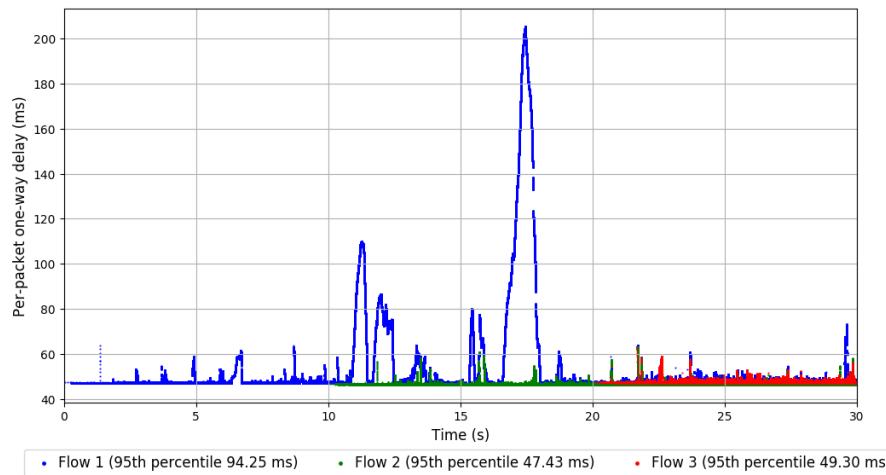
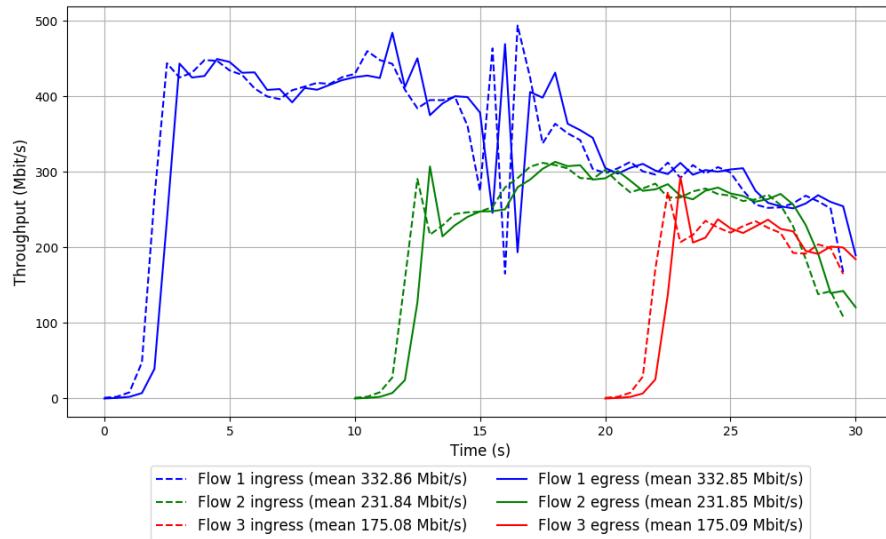


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-03-09 23:00:53
End at: 2019-03-09 23:01:23
Local clock offset: -0.135 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2019-03-10 03:18:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 544.75 Mbit/s
95th percentile per-packet one-way delay: 75.934 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 332.85 Mbit/s
95th percentile per-packet one-way delay: 94.247 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 231.85 Mbit/s
95th percentile per-packet one-way delay: 47.432 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 175.09 Mbit/s
95th percentile per-packet one-way delay: 49.302 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

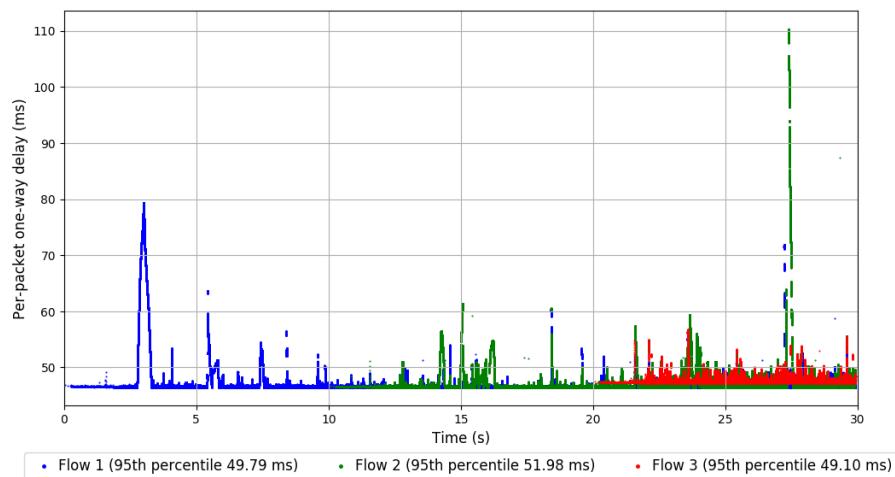
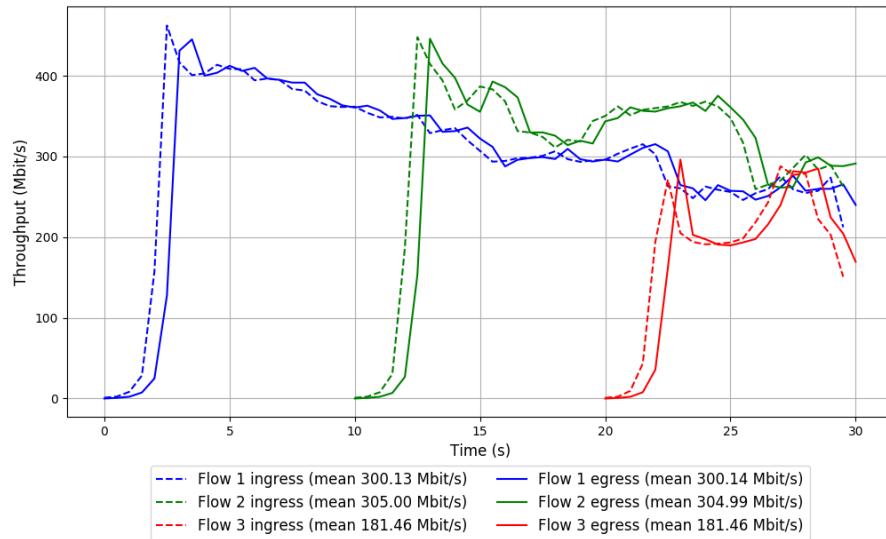


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-03-09 23:37:08
End at: 2019-03-09 23:37:38
Local clock offset: -0.003 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-03-10 03:18:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.75 Mbit/s
95th percentile per-packet one-way delay: 50.437 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 300.14 Mbit/s
95th percentile per-packet one-way delay: 49.790 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 304.99 Mbit/s
95th percentile per-packet one-way delay: 51.981 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 181.46 Mbit/s
95th percentile per-packet one-way delay: 49.103 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

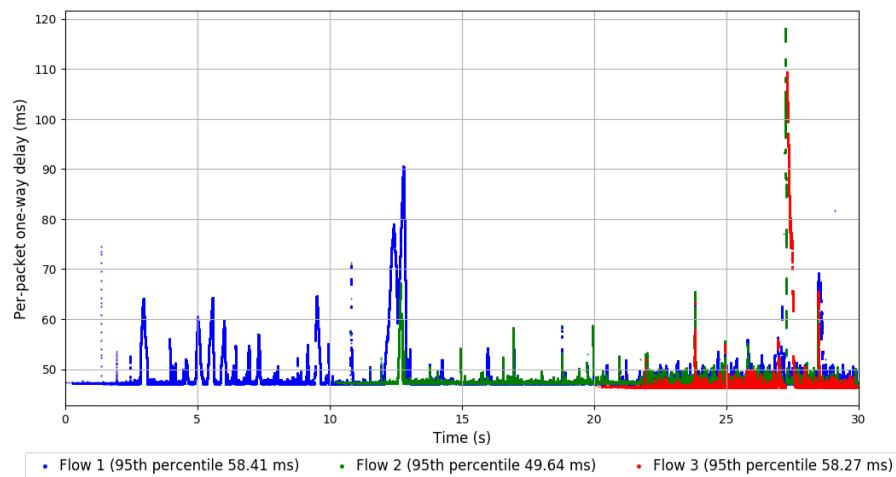
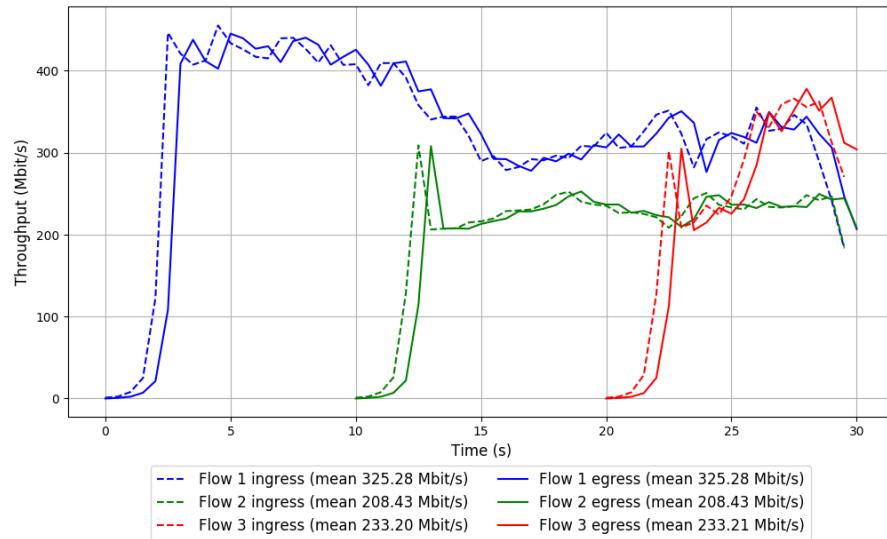


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-03-10 00:13:48
End at: 2019-03-10 00:14:18
Local clock offset: 0.122 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-03-10 03:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 540.79 Mbit/s
95th percentile per-packet one-way delay: 56.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 325.28 Mbit/s
95th percentile per-packet one-way delay: 58.415 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 208.43 Mbit/s
95th percentile per-packet one-way delay: 49.643 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 233.21 Mbit/s
95th percentile per-packet one-way delay: 58.268 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

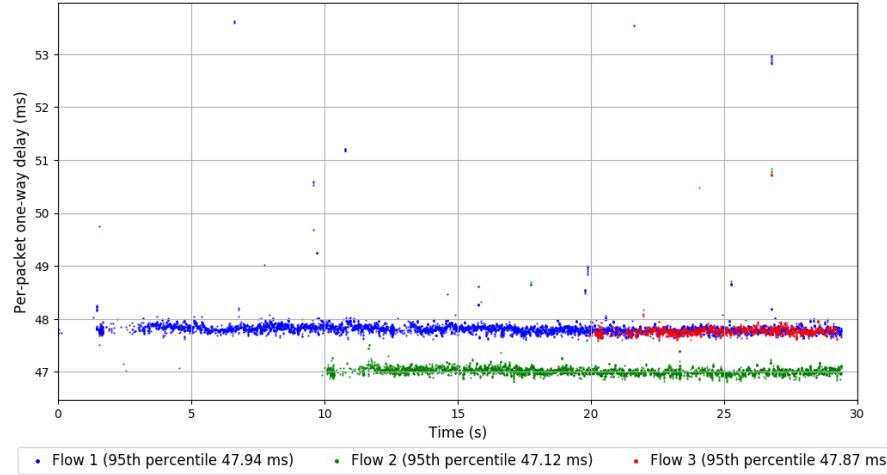
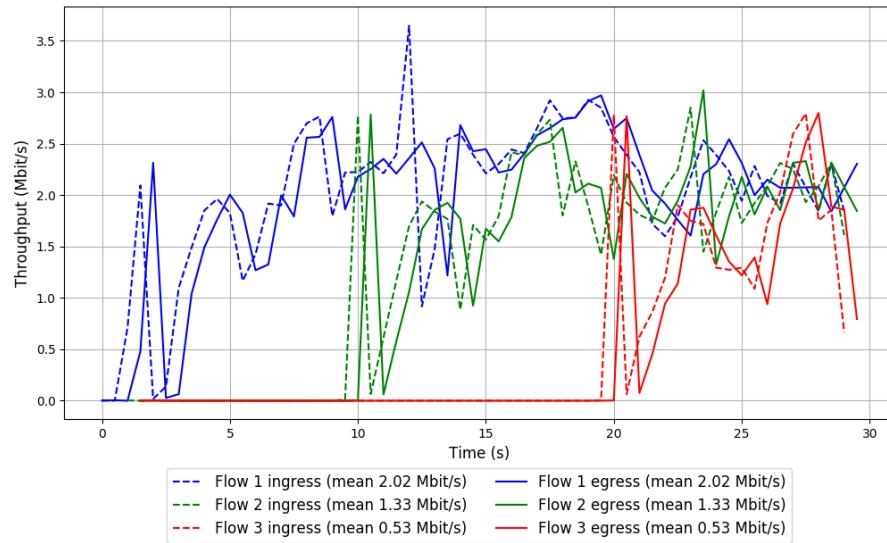


```
Run 1: Statistics of WebRTC media

Start at: 2019-03-09 21:21:36
End at: 2019-03-09 21:22:06
Local clock offset: -0.482 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-03-10 03:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 47.904 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 47.938 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 47.119 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 47.865 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

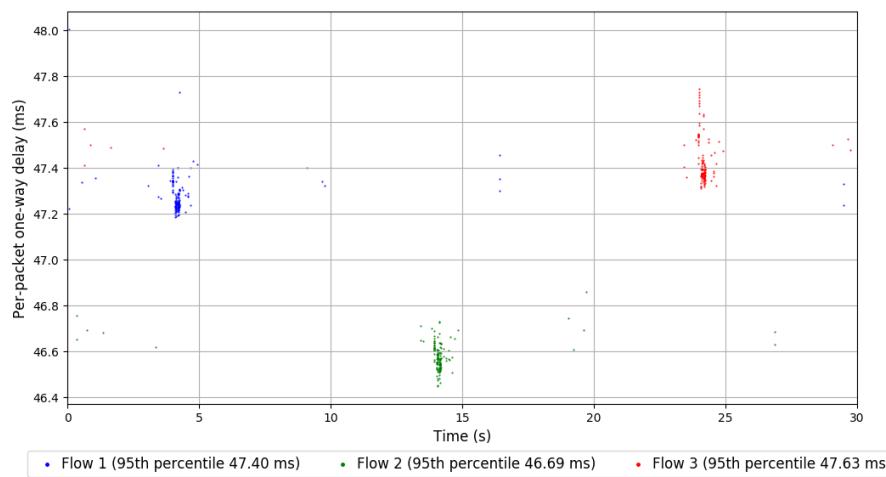
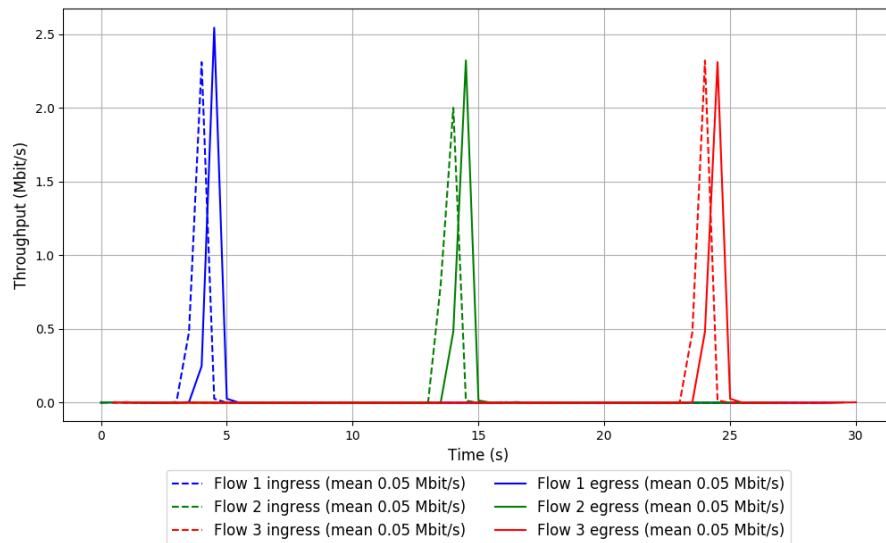


Run 2: Statistics of WebRTC media

```
Start at: 2019-03-09 21:56:34
End at: 2019-03-09 21:57:04
Local clock offset: -0.124 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2019-03-10 03:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.536 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.692 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.635 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

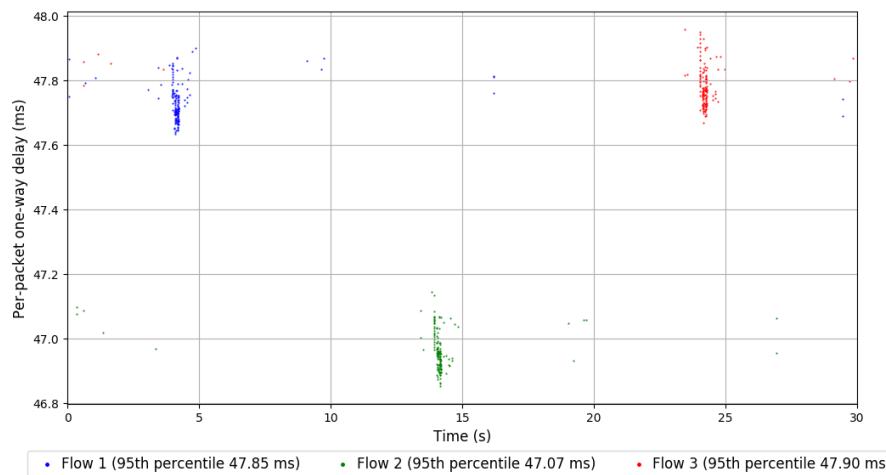
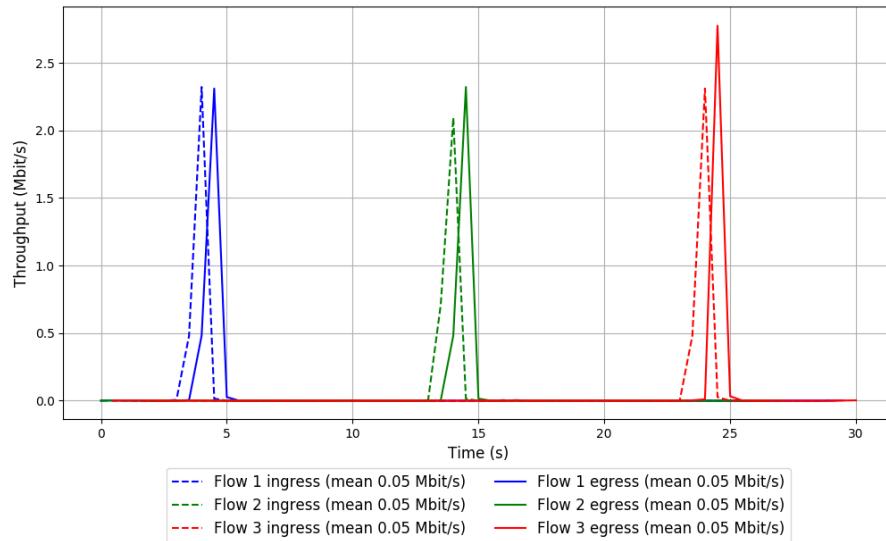


Run 3: Statistics of WebRTC media

```
Start at: 2019-03-09 22:32:45
End at: 2019-03-09 22:33:15
Local clock offset: -0.547 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-03-10 03:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.867 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.848 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.068 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.902 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

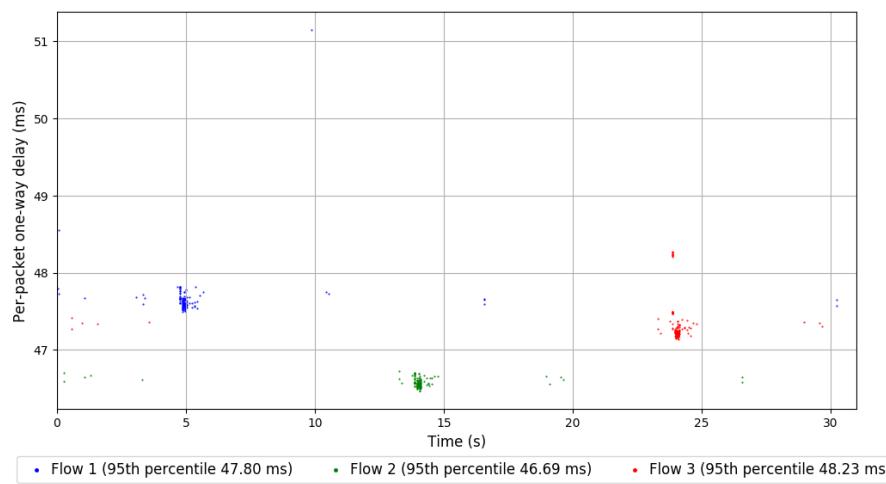
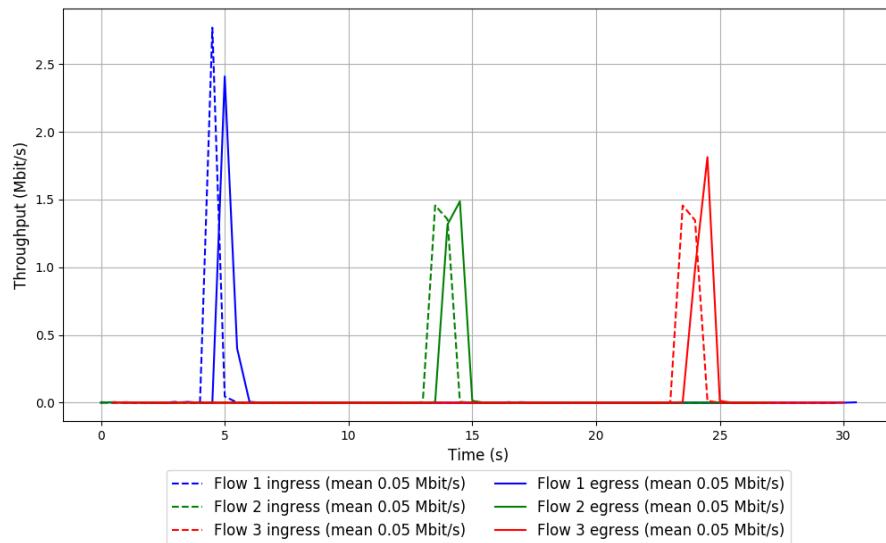


Run 4: Statistics of WebRTC media

```
Start at: 2019-03-09 23:10:20
End at: 2019-03-09 23:10:50
Local clock offset: -0.078 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2019-03-10 03:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.777 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.801 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 48.229 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-03-09 23:47:12
End at: 2019-03-09 23:47:42
Local clock offset: 0.059 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-03-10 03:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 47.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 47.458 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 47.495 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.770 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

