

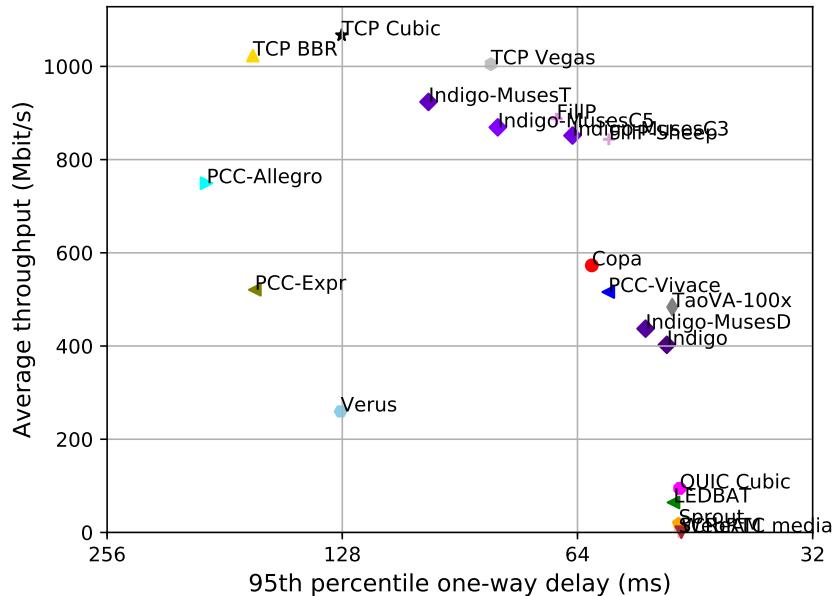
## Pantheon Report

Generated at 2019-01-20 03:54:22 (UTC).  
Data path: GCE Iowa on `ens4` (*remote*) → GCE London on `ens4` (*local*).  
Repeated the test of 21 congestion control schemes 5 times.  
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.  
NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

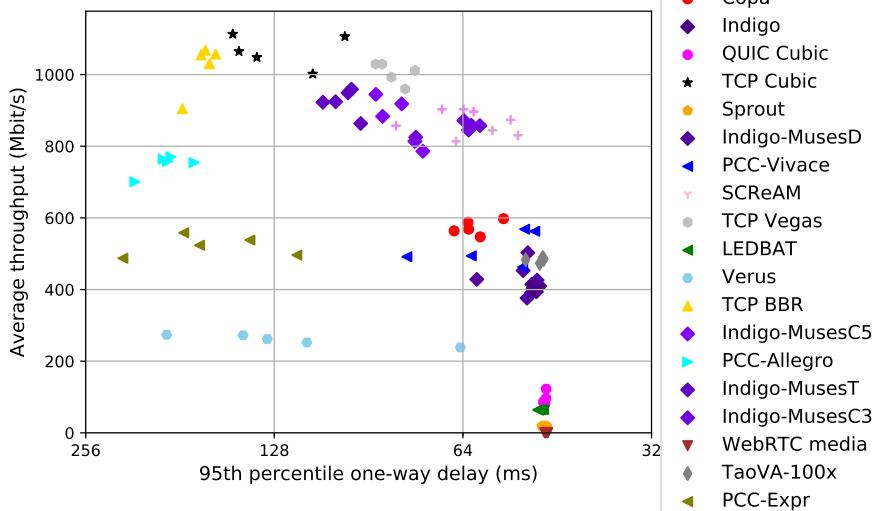
```
System info:  
Linux 4.15.0-1026-gcp  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c  
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170  
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd  
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab  
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
M src/ScreamClient  
M src/ScreamServer  
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26  
M src/examples/cellsim.cc  
M src/examples/sproutbt2.cc  
M src/network/sproutconn.cc  
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494  
M src/verus.hpp  
M tools/plot.py
```

third\_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4  
third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

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



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



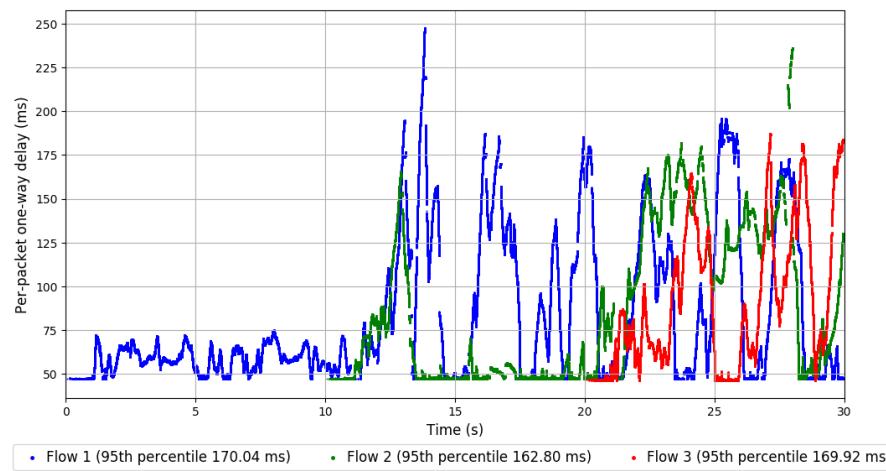
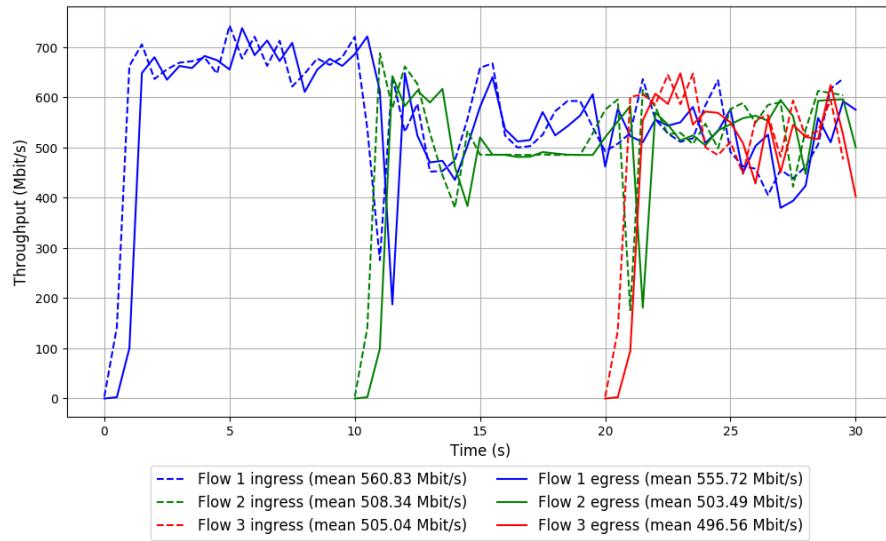
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	534.90	496.32	480.54	171.85	162.66	169.95	1.06	1.40	2.62
Copa	5	294.56	295.02	249.18	57.57	61.48	72.67	0.30	0.49	0.99
TCP Cubic	5	578.91	504.40	461.47	113.32	108.11	105.65	0.37	0.60	1.21
FillP	5	568.39	354.72	254.47	75.18	53.08	50.15	0.38	0.42	0.50
FillP-Sheep	5	536.81	338.19	250.60	63.28	51.15	51.25	0.22	0.46	1.05
Indigo	5	211.96	198.91	178.63	48.97	49.94	48.99	0.33	0.50	1.13
Indigo-MusesC3	5	517.38	420.07	240.96	67.29	59.79	50.70	0.26	0.45	2.09
Indigo-MusesC5	5	510.51	450.17	252.03	83.84	76.06	61.57	0.21	0.52	1.60
Indigo-MusesD	5	294.63	206.37	34.85	53.16	49.35	47.22	0.32	0.56	2.45
Indigo-MusesT	5	554.83	455.01	281.17	100.98	96.05	55.47	0.25	0.50	1.92
LEDBAT	5	41.31	27.85	13.80	48.34	47.92	47.44	0.62	0.94	1.91
PCC-Allegro	5	427.37	358.41	257.35	187.43	198.35	103.76	6.58	5.01	1.43
PCC-Expr	5	298.57	256.41	158.45	159.31	170.24	54.82	2.89	4.36	1.36
QUIC Cubic	5	57.57	41.91	26.60	47.20	47.05	47.24	0.48	0.84	0.55
SCReAM	5	0.22	0.22	0.22	47.05	47.31	47.30	0.26	0.44	1.02
Sprout	5	9.60	9.51	9.23	47.32	47.39	47.44	0.32	0.52	1.10
TaoVA-100x	5	246.78	241.90	229.86	48.31	48.33	48.16	0.28	0.50	1.03
TCP Vegas	5	524.45	518.18	410.28	77.53	84.60	80.07	0.31	0.56	1.10
Verus	5	148.35	112.64	111.64	107.42	95.77	84.97	0.69	0.28	1.75
PCC-Vivace	5	303.36	263.59	114.39	63.87	67.67	47.75	0.23	0.63	1.19
WebRTC media	5	0.05	0.29	0.05	46.86	47.00	46.85	0.00	0.09	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-19 21:41:20
End at: 2019-01-19 21:41:50
Local clock offset: 0.27 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-01-20 01:02:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1054.93 Mbit/s
95th percentile per-packet one-way delay: 167.492 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 555.72 Mbit/s
95th percentile per-packet one-way delay: 170.044 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 503.49 Mbit/s
95th percentile per-packet one-way delay: 162.796 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 496.56 Mbit/s
95th percentile per-packet one-way delay: 169.918 ms
Loss rate: 2.61%
```

## Run 1: Report of TCP BBR — Data Link

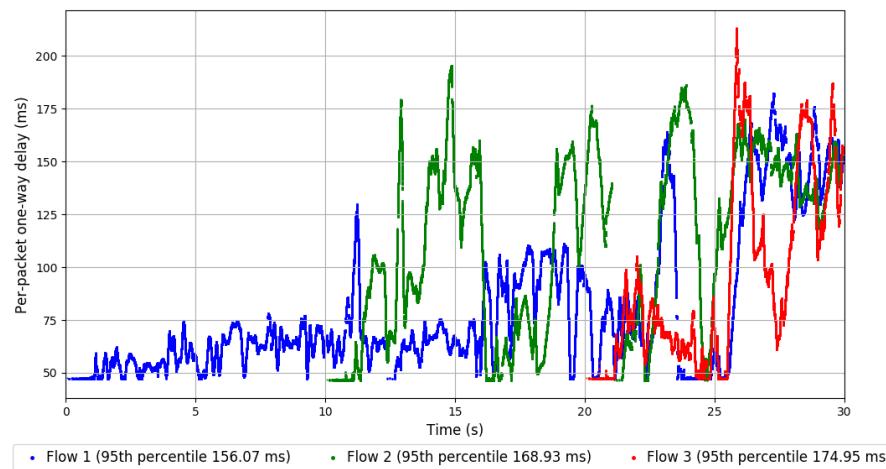
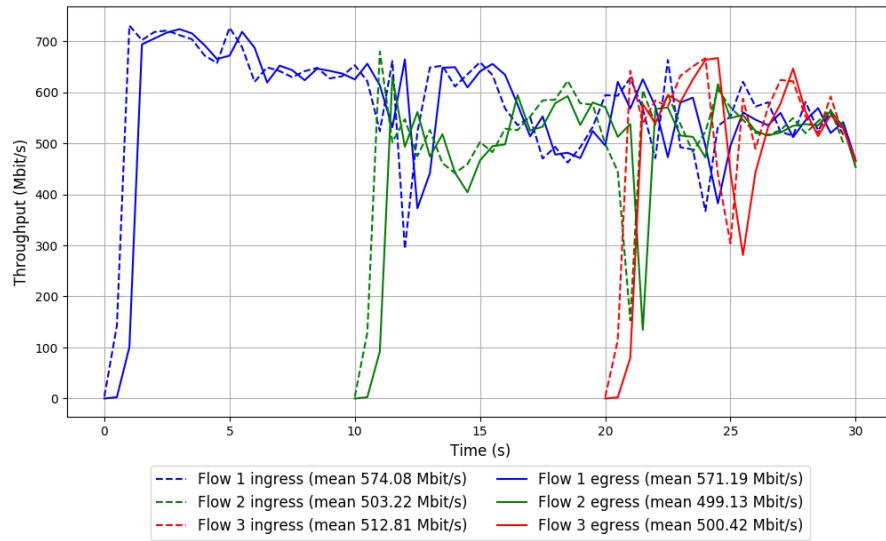


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-19 22:18:46
End at: 2019-01-19 22:19:16
Local clock offset: -0.078 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2019-01-20 01:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1068.35 Mbit/s
95th percentile per-packet one-way delay: 164.960 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 571.19 Mbit/s
95th percentile per-packet one-way delay: 156.072 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 499.13 Mbit/s
95th percentile per-packet one-way delay: 168.928 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 500.42 Mbit/s
95th percentile per-packet one-way delay: 174.946 ms
Loss rate: 3.35%
```

## Run 2: Report of TCP BBR — Data Link

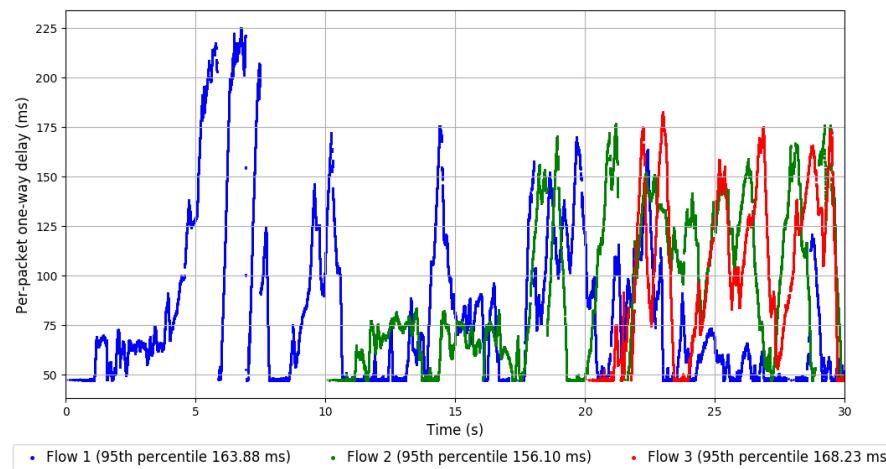
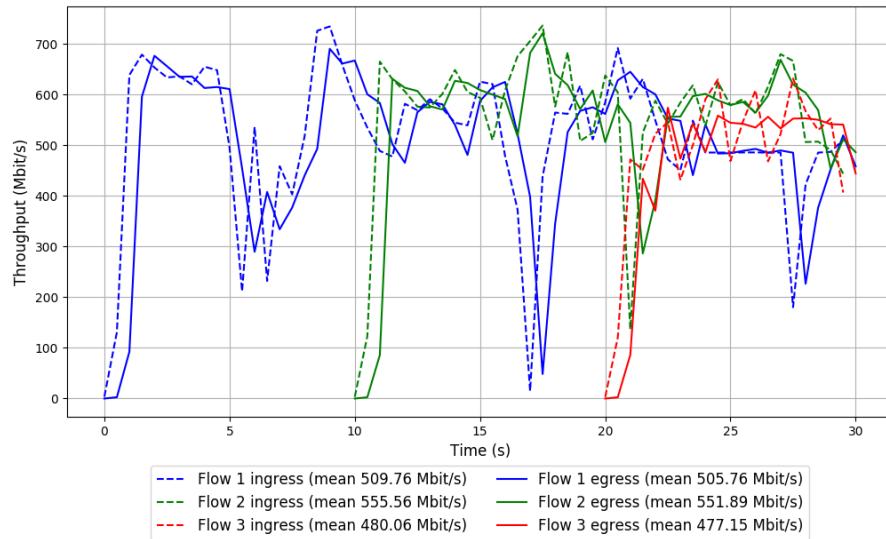


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-19 22:57:04
End at: 2019-01-19 22:57:34
Local clock offset: -0.347 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-01-20 01:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1030.43 Mbit/s
95th percentile per-packet one-way delay: 162.432 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 505.76 Mbit/s
95th percentile per-packet one-way delay: 163.879 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 551.89 Mbit/s
95th percentile per-packet one-way delay: 156.103 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 477.15 Mbit/s
95th percentile per-packet one-way delay: 168.226 ms
Loss rate: 1.55%
```

### Run 3: Report of TCP BBR — Data Link

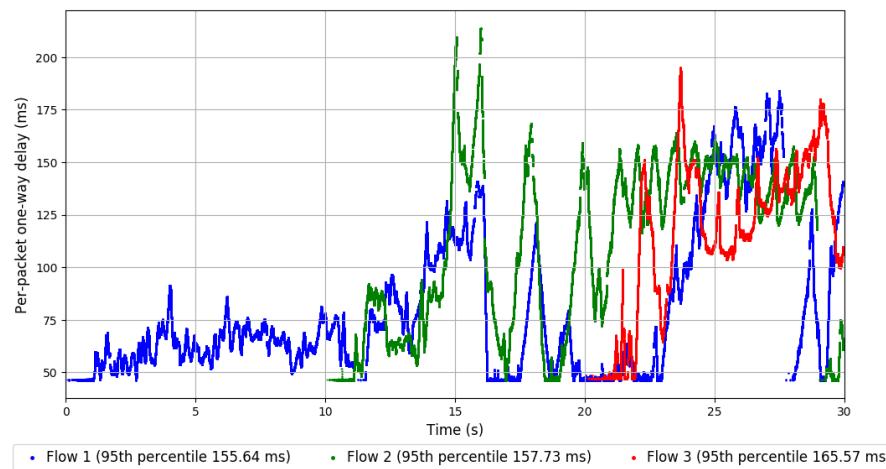
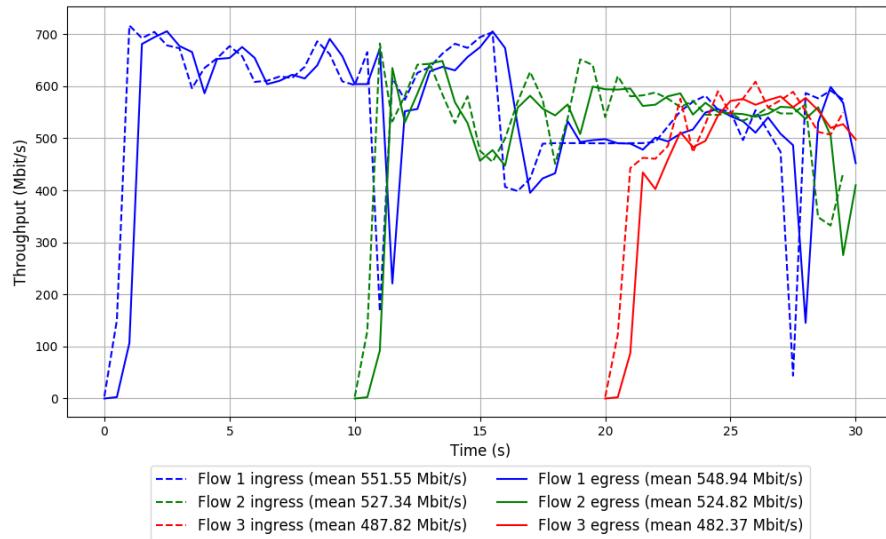


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-19 23:35:11
End at: 2019-01-19 23:35:41
Local clock offset: -0.137 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-01-20 01:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1057.26 Mbit/s
95th percentile per-packet one-way delay: 158.758 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 548.94 Mbit/s
95th percentile per-packet one-way delay: 155.638 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 524.82 Mbit/s
95th percentile per-packet one-way delay: 157.728 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 482.37 Mbit/s
95th percentile per-packet one-way delay: 165.569 ms
Loss rate: 2.06%
```

## Run 4: Report of TCP BBR — Data Link

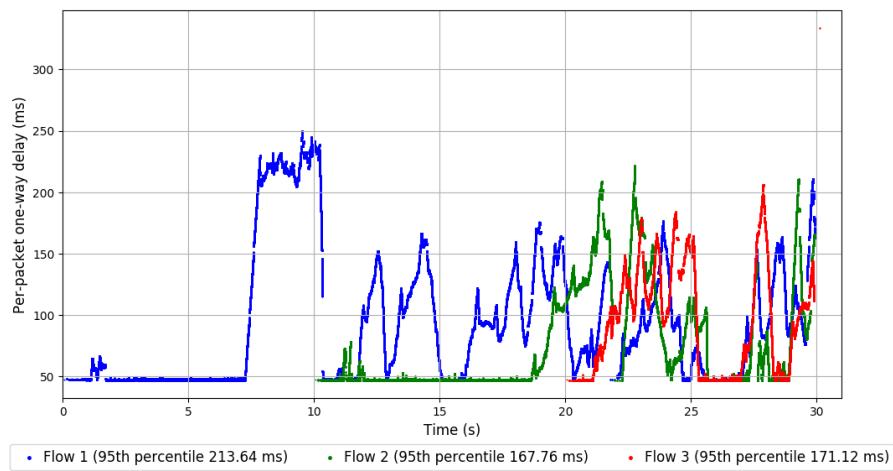
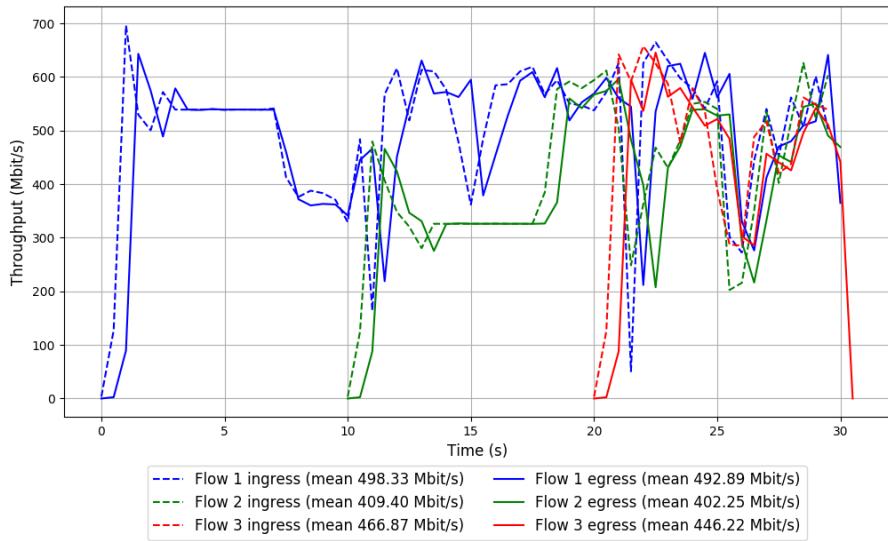


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-20 00:13:34
End at: 2019-01-20 00:14:04
Local clock offset: -0.016 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2019-01-20 01:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 905.03 Mbit/s
95th percentile per-packet one-way delay: 179.465 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 492.89 Mbit/s
95th percentile per-packet one-way delay: 213.640 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 402.25 Mbit/s
95th percentile per-packet one-way delay: 167.758 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 446.22 Mbit/s
95th percentile per-packet one-way delay: 171.116 ms
Loss rate: 3.54%
```

### Run 5: Report of TCP BBR — Data Link

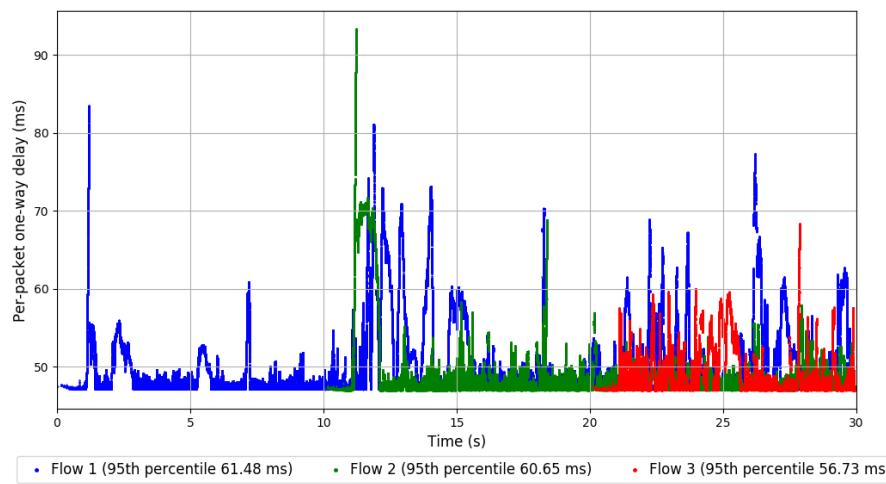
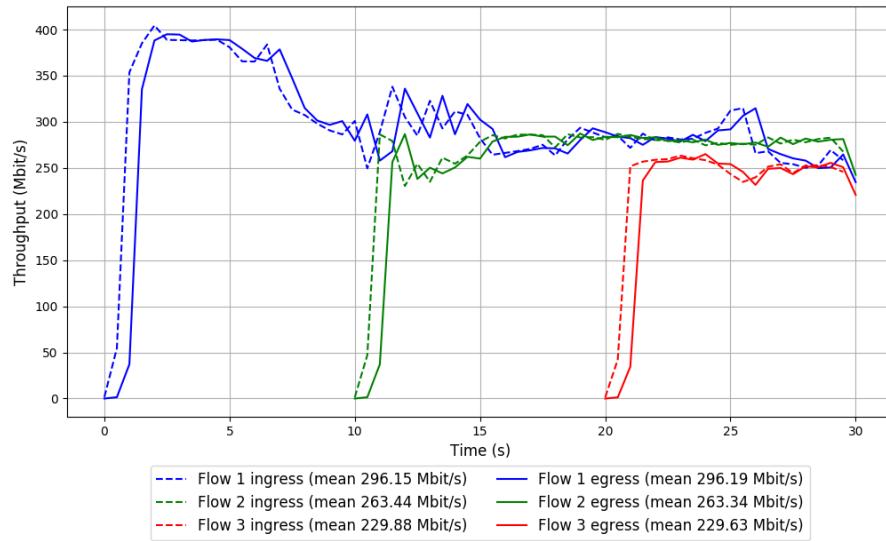


Run 1: Statistics of Copa

```
Start at: 2019-01-19 21:11:46
End at: 2019-01-19 21:12:16
Local clock offset: 0.194 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2019-01-20 01:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 547.05 Mbit/s
95th percentile per-packet one-way delay: 60.057 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 296.19 Mbit/s
95th percentile per-packet one-way delay: 61.481 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 263.34 Mbit/s
95th percentile per-packet one-way delay: 60.652 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 229.63 Mbit/s
95th percentile per-packet one-way delay: 56.729 ms
Loss rate: 1.06%
```

## Run 1: Report of Copa — Data Link

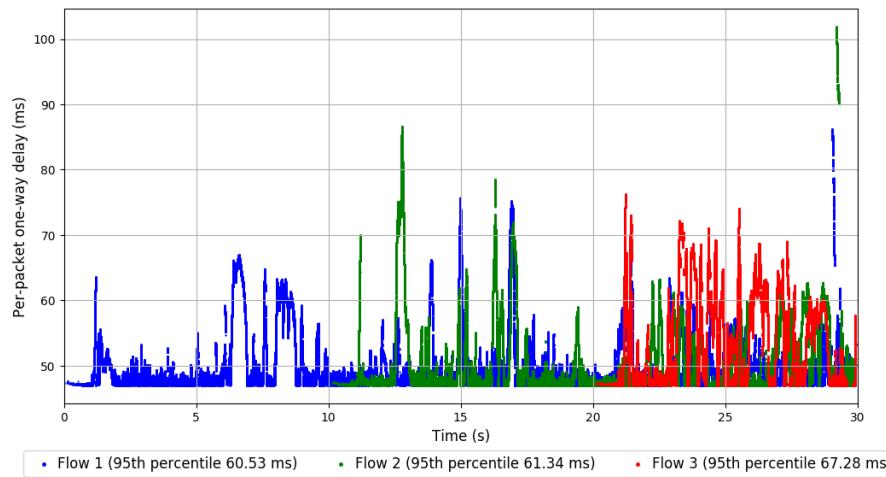
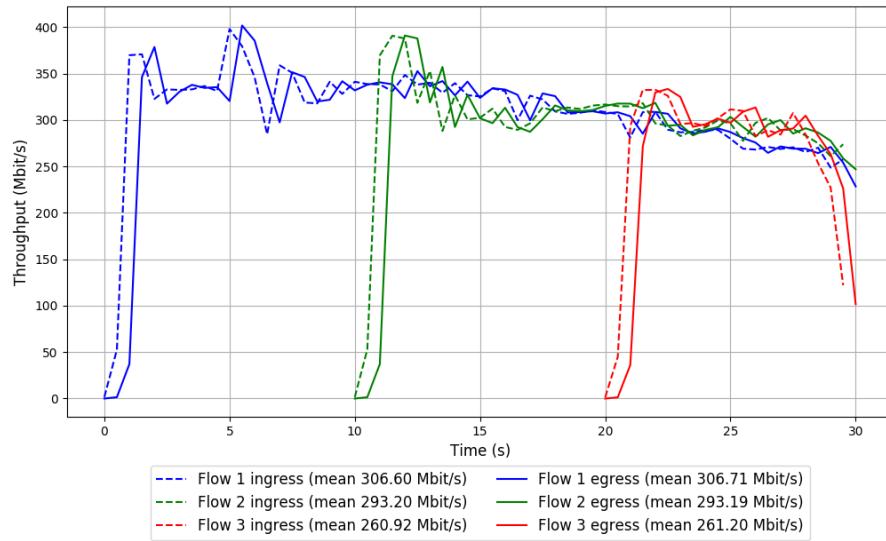


Run 2: Statistics of Copa

```
Start at: 2019-01-19 21:48:53
End at: 2019-01-19 21:49:23
Local clock offset: 0.27 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2019-01-20 01:03:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.86 Mbit/s
95th percentile per-packet one-way delay: 62.831 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 306.71 Mbit/s
95th percentile per-packet one-way delay: 60.535 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 293.19 Mbit/s
95th percentile per-packet one-way delay: 61.340 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 261.20 Mbit/s
95th percentile per-packet one-way delay: 67.275 ms
Loss rate: 0.83%
```

## Run 2: Report of Copa — Data Link

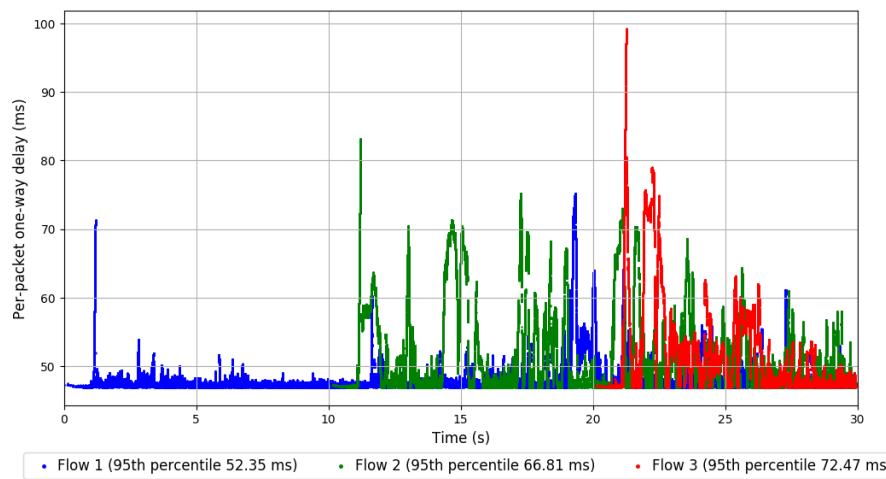
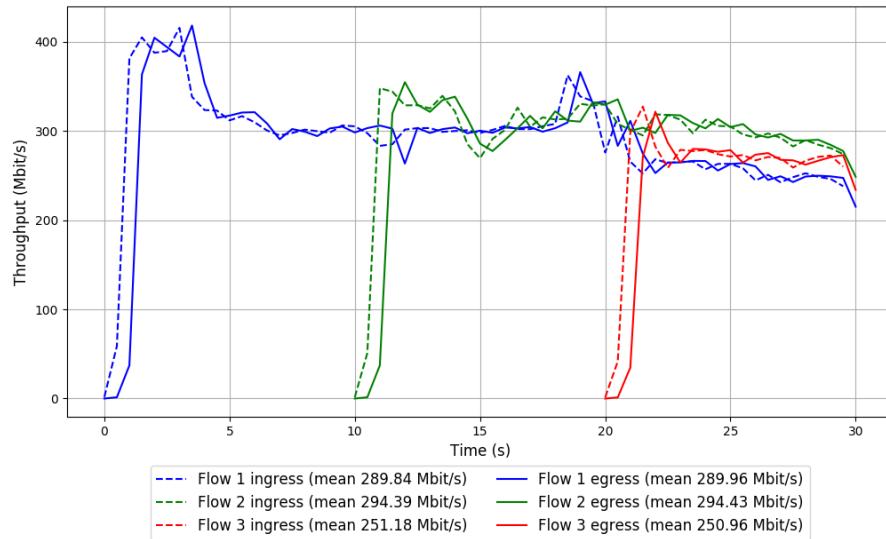


Run 3: Statistics of Copa

```
Start at: 2019-01-19 22:26:45
End at: 2019-01-19 22:27:15
Local clock offset: -0.216 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-01-20 01:03:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 568.52 Mbit/s
95th percentile per-packet one-way delay: 62.667 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 289.96 Mbit/s
95th percentile per-packet one-way delay: 52.355 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 294.43 Mbit/s
95th percentile per-packet one-way delay: 66.807 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 250.96 Mbit/s
95th percentile per-packet one-way delay: 72.475 ms
Loss rate: 1.03%
```

### Run 3: Report of Copa — Data Link

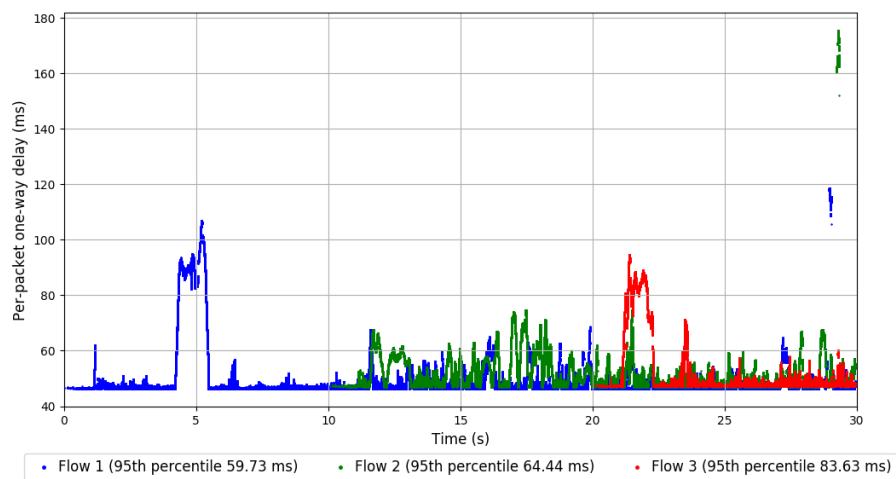
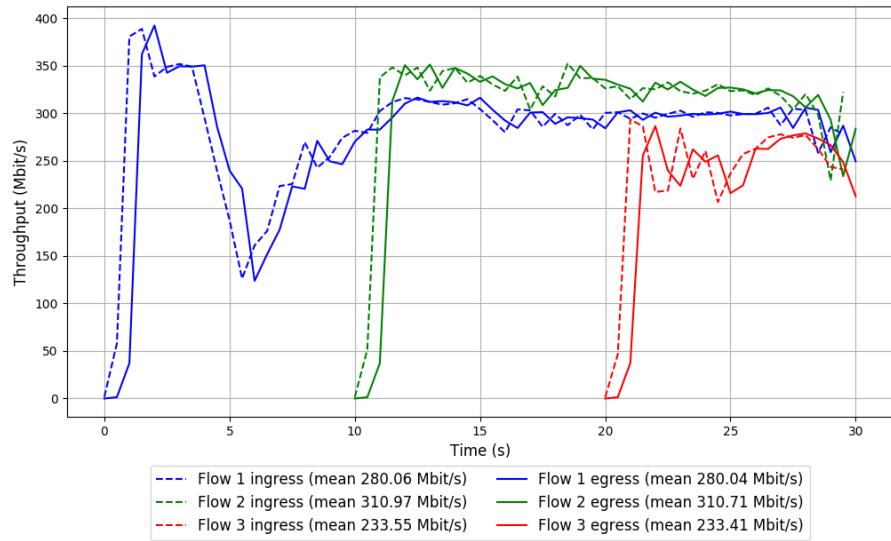


Run 4: Statistics of Copa

```
Start at: 2019-01-19 23:05:08
End at: 2019-01-19 23:05:38
Local clock offset: -0.366 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-01-20 01:21:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 563.74 Mbit/s
95th percentile per-packet one-way delay: 66.093 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 280.04 Mbit/s
95th percentile per-packet one-way delay: 59.727 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 310.71 Mbit/s
95th percentile per-packet one-way delay: 64.438 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 233.41 Mbit/s
95th percentile per-packet one-way delay: 83.626 ms
Loss rate: 1.01%
```

## Run 4: Report of Copa — Data Link

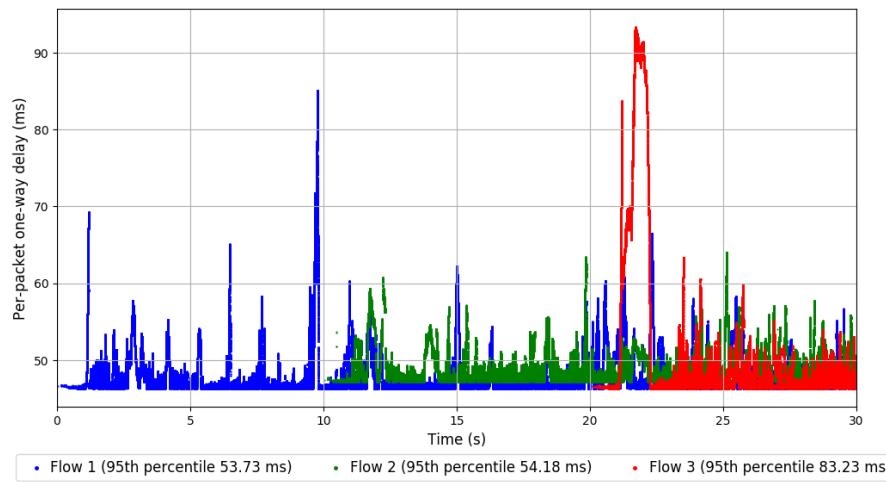
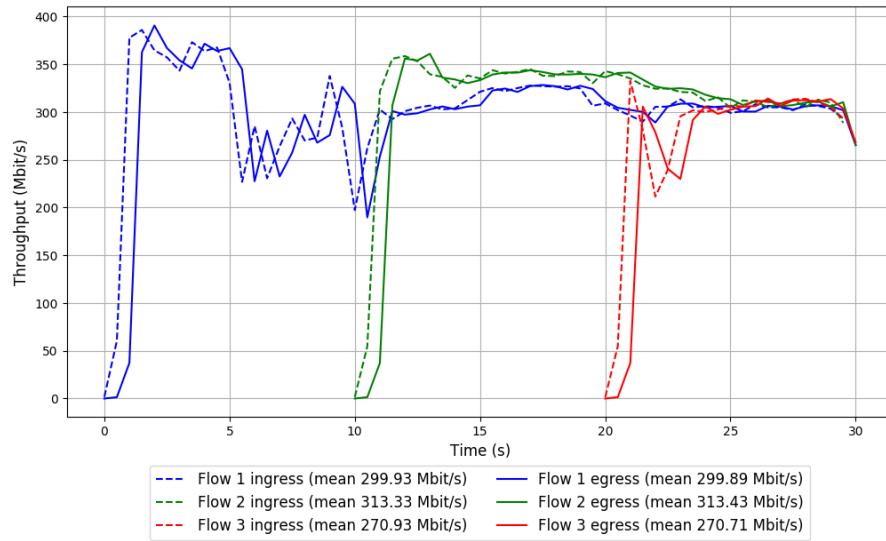


Run 5: Statistics of Copa

```
Start at: 2019-01-19 23:43:00
End at: 2019-01-19 23:43:30
Local clock offset: -0.08 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-01-20 01:25:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 597.86 Mbit/s
95th percentile per-packet one-way delay: 55.132 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 299.89 Mbit/s
95th percentile per-packet one-way delay: 53.731 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 313.43 Mbit/s
95th percentile per-packet one-way delay: 54.178 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 270.71 Mbit/s
95th percentile per-packet one-way delay: 83.233 ms
Loss rate: 1.02%
```

Run 5: Report of Copa — Data Link

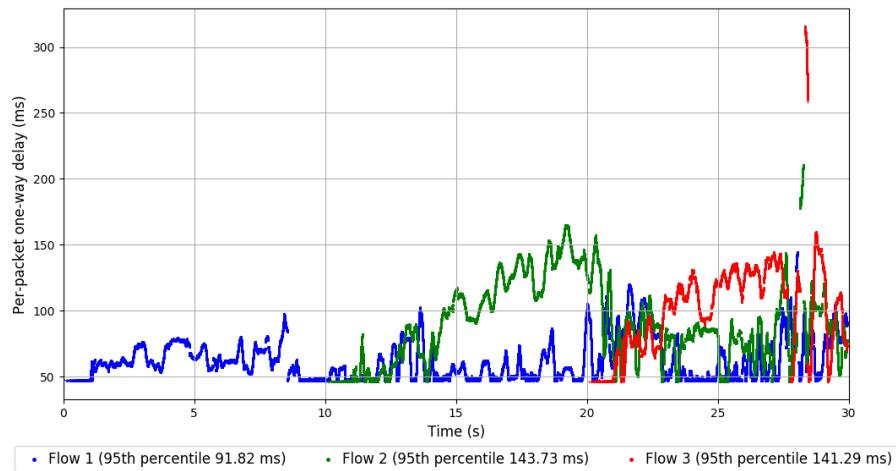
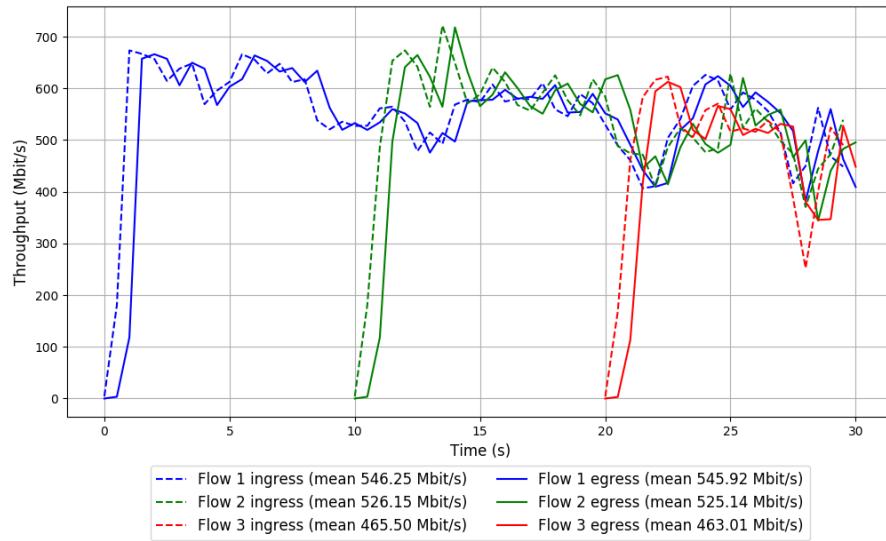


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-19 21:19:34
End at: 2019-01-19 21:20:04
Local clock offset: 0.219 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2019-01-20 01:25:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1048.21 Mbit/s
95th percentile per-packet one-way delay: 136.474 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 545.92 Mbit/s
95th percentile per-packet one-way delay: 91.819 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 525.14 Mbit/s
95th percentile per-packet one-way delay: 143.728 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 463.01 Mbit/s
95th percentile per-packet one-way delay: 141.292 ms
Loss rate: 1.47%
```

Run 1: Report of TCP Cubic — Data Link

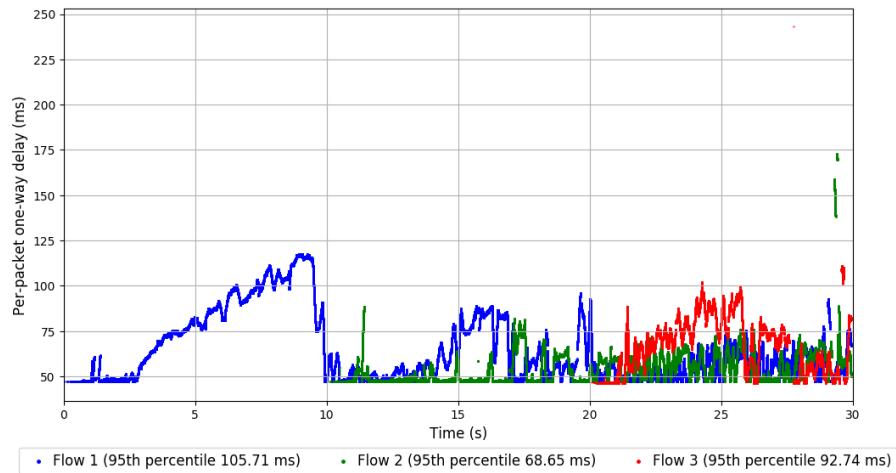
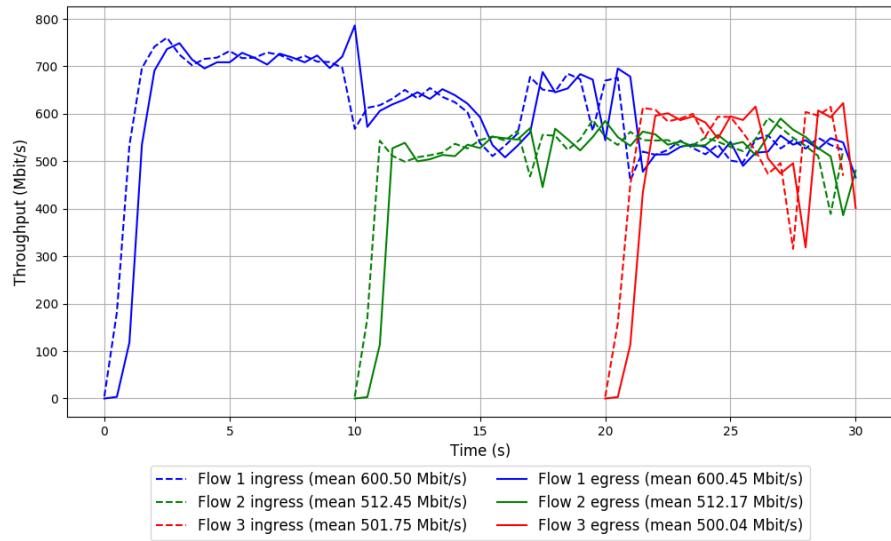


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-19 21:56:44
End at: 2019-01-19 21:57:14
Local clock offset: 0.292 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-01-20 01:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1106.27 Mbit/s
95th percentile per-packet one-way delay: 98.753 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 600.45 Mbit/s
95th percentile per-packet one-way delay: 105.714 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 512.17 Mbit/s
95th percentile per-packet one-way delay: 68.649 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 500.04 Mbit/s
95th percentile per-packet one-way delay: 92.743 ms
Loss rate: 1.27%
```

## Run 2: Report of TCP Cubic — Data Link

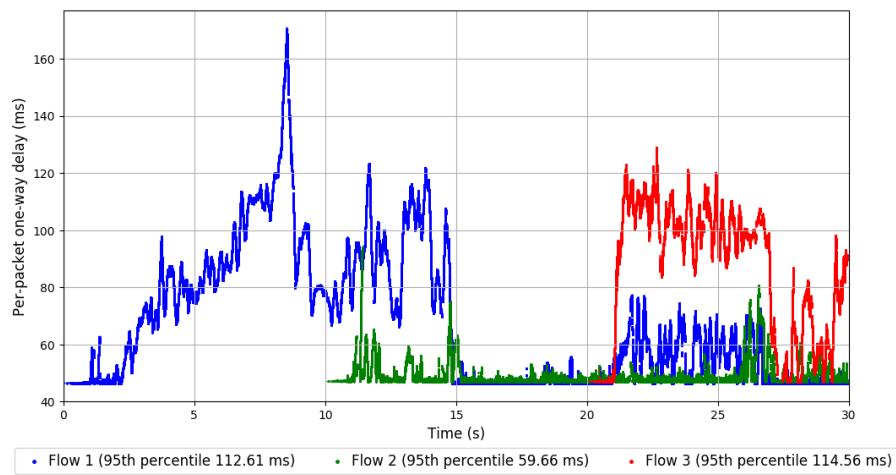
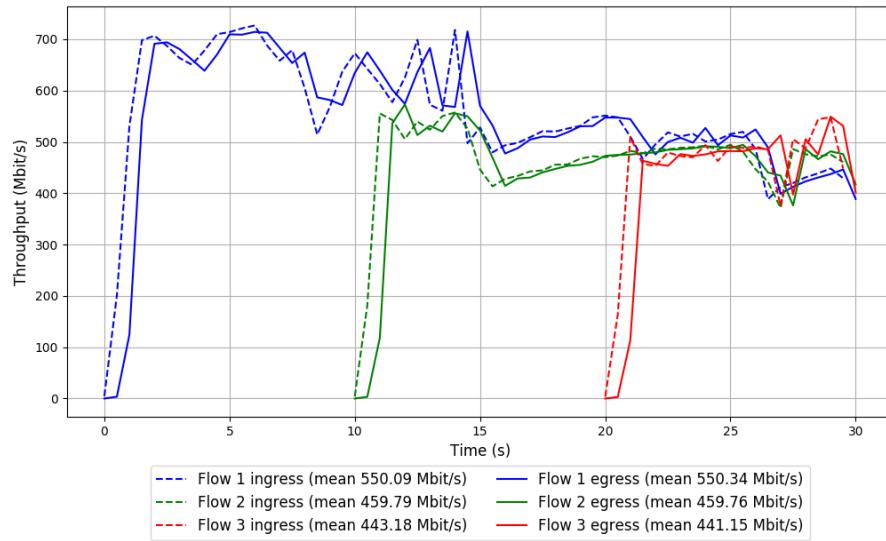


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-19 22:35:07
End at: 2019-01-19 22:35:37
Local clock offset: -0.226 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-01-20 01:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1001.78 Mbit/s
95th percentile per-packet one-way delay: 111.130 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 550.34 Mbit/s
95th percentile per-packet one-way delay: 112.614 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 459.76 Mbit/s
95th percentile per-packet one-way delay: 59.655 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 441.15 Mbit/s
95th percentile per-packet one-way delay: 114.564 ms
Loss rate: 1.39%
```

### Run 3: Report of TCP Cubic — Data Link

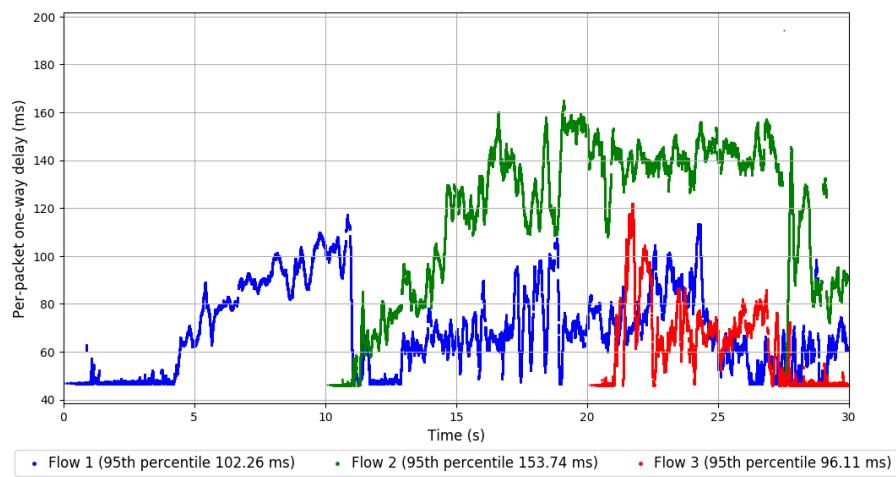
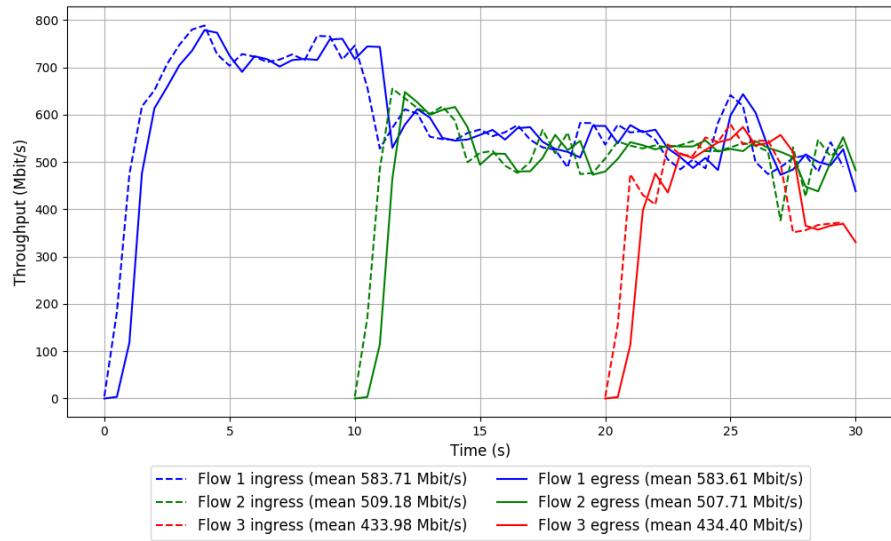


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-19 23:13:44
End at: 2019-01-19 23:14:14
Local clock offset: -0.72 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-01-20 01:25:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1064.72 Mbit/s
95th percentile per-packet one-way delay: 145.764 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 583.61 Mbit/s
95th percentile per-packet one-way delay: 102.257 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 507.71 Mbit/s
95th percentile per-packet one-way delay: 153.736 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 434.40 Mbit/s
95th percentile per-packet one-way delay: 96.105 ms
Loss rate: 0.84%
```

Run 4: Report of TCP Cubic — Data Link

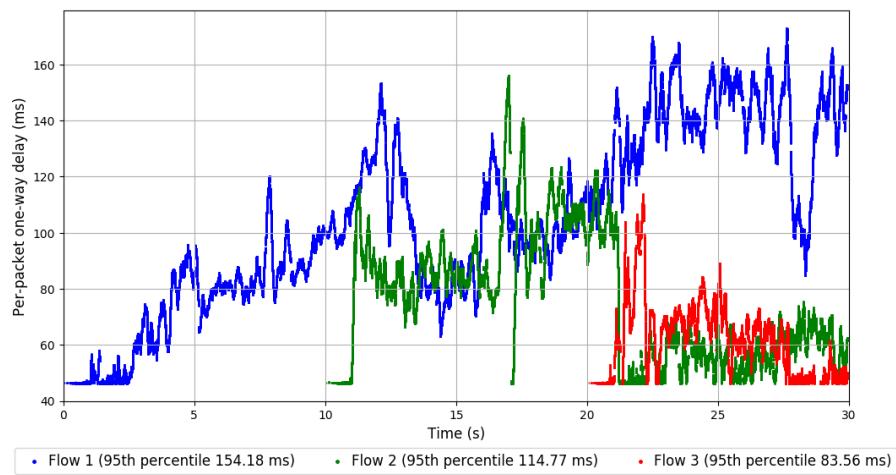
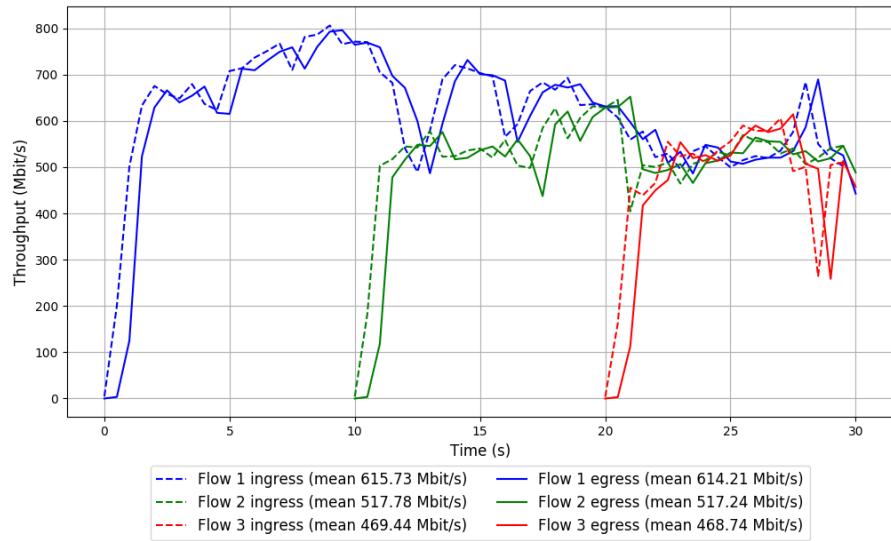


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-19 23:50:57
End at: 2019-01-19 23:51:27
Local clock offset: -0.003 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2019-01-20 01:26:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1113.07 Mbit/s
95th percentile per-packet one-way delay: 149.129 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 614.21 Mbit/s
95th percentile per-packet one-way delay: 154.178 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 517.24 Mbit/s
95th percentile per-packet one-way delay: 114.767 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 468.74 Mbit/s
95th percentile per-packet one-way delay: 83.563 ms
Loss rate: 1.09%
```

Run 5: Report of TCP Cubic — Data Link

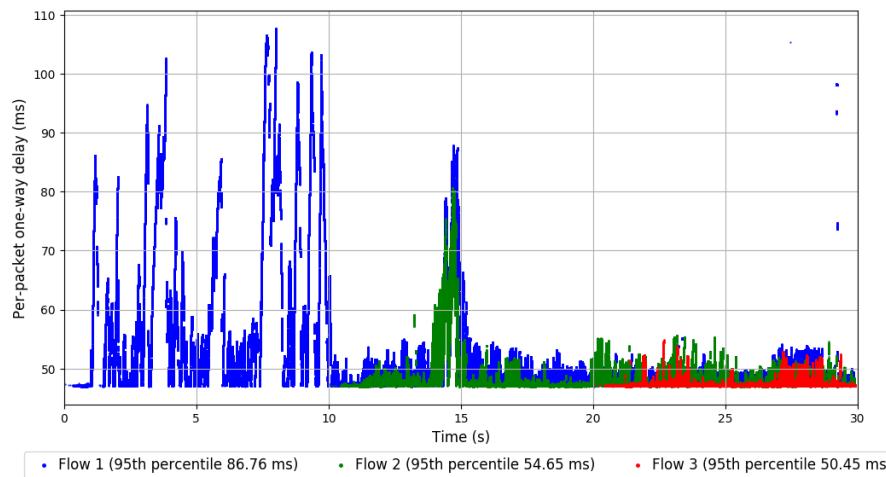
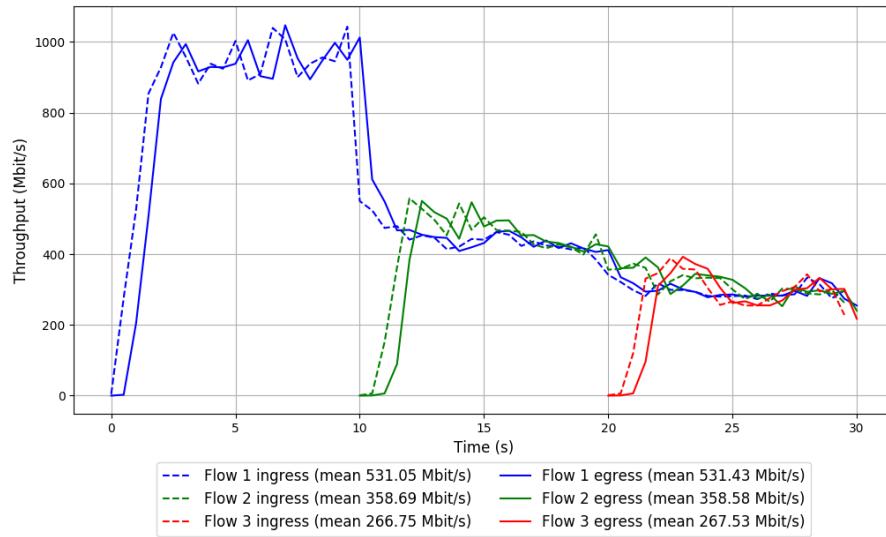


```
Run 1: Statistics of FillP

Start at: 2019-01-19 21:23:20
End at: 2019-01-19 21:23:50
Local clock offset: 0.242 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-01-20 01:26:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 857.35 Mbit/s
95th percentile per-packet one-way delay: 81.825 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 531.43 Mbit/s
95th percentile per-packet one-way delay: 86.763 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 358.58 Mbit/s
95th percentile per-packet one-way delay: 54.649 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 267.53 Mbit/s
95th percentile per-packet one-way delay: 50.450 ms
Loss rate: 0.73%
```

Run 1: Report of FillP — Data Link

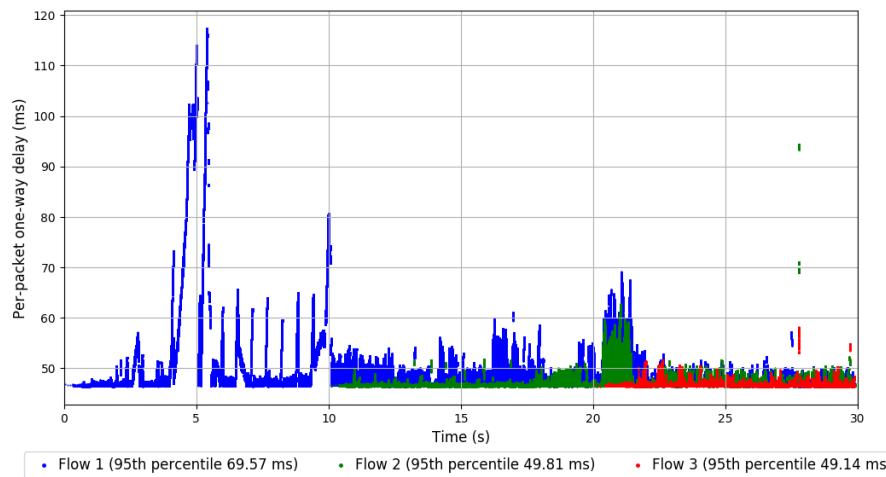
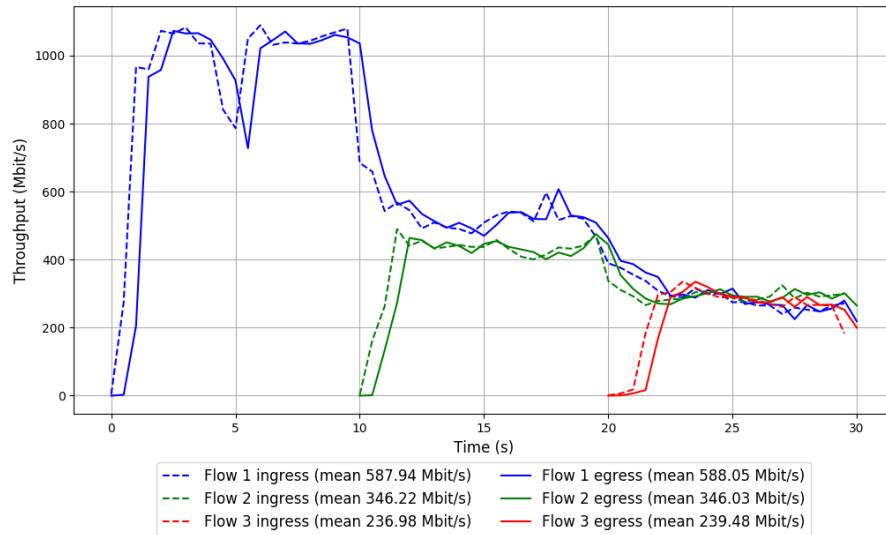


Run 2: Statistics of FillP

```
Start at: 2019-01-19 22:00:19
End at: 2019-01-19 22:00:49
Local clock offset: 0.27 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-01-20 01:44:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 896.42 Mbit/s
95th percentile per-packet one-way delay: 61.525 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 588.05 Mbit/s
95th percentile per-packet one-way delay: 69.572 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 346.03 Mbit/s
95th percentile per-packet one-way delay: 49.815 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 239.48 Mbit/s
95th percentile per-packet one-way delay: 49.138 ms
Loss rate: 0.29%
```

## Run 2: Report of FillP — Data Link

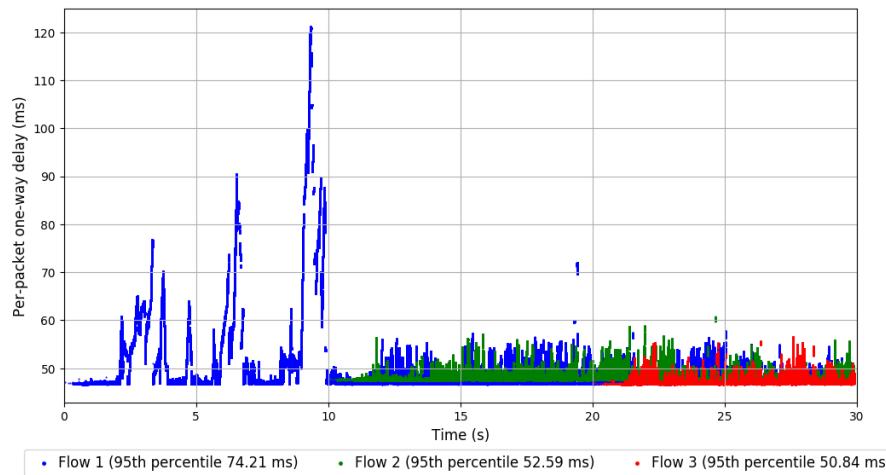
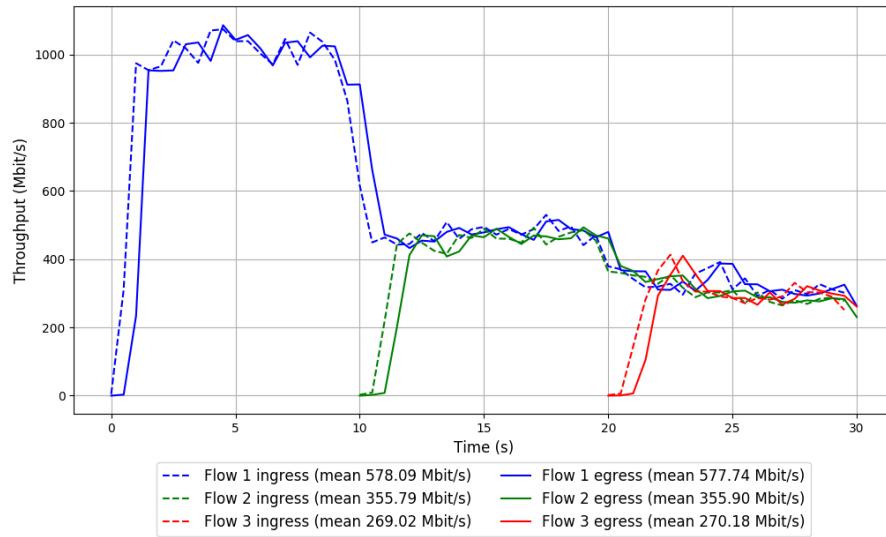


Run 3: Statistics of FillP

```
Start at: 2019-01-19 22:38:35
End at: 2019-01-19 22:39:05
Local clock offset: 0.12 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-01-20 01:46:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 903.09 Mbit/s
95th percentile per-packet one-way delay: 63.870 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 577.74 Mbit/s
95th percentile per-packet one-way delay: 74.207 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 355.90 Mbit/s
95th percentile per-packet one-way delay: 52.588 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 270.18 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.55%
```

### Run 3: Report of FillP — Data Link

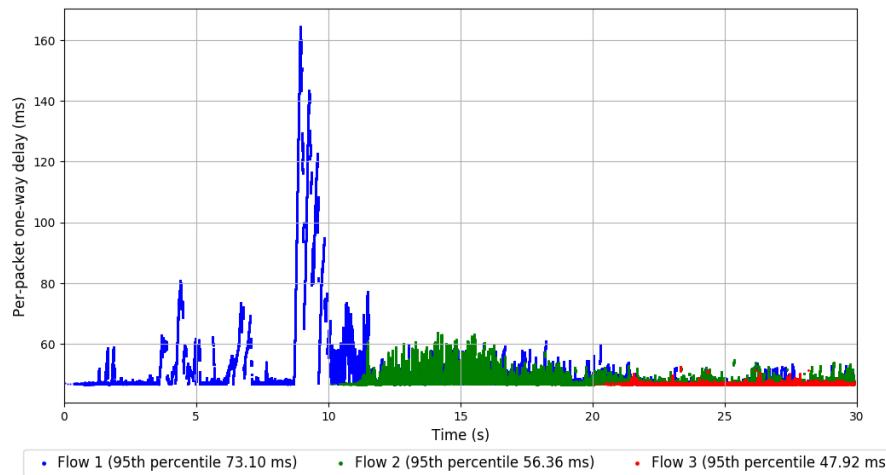
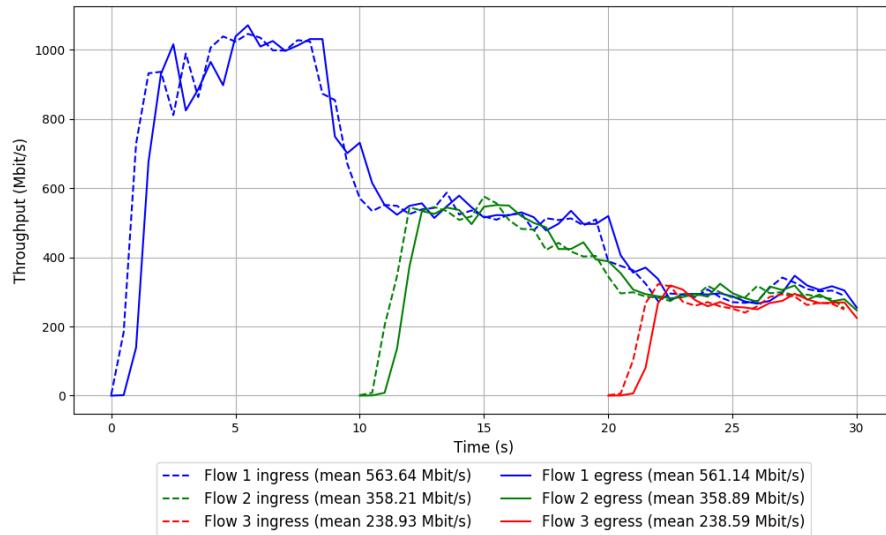


Run 4: Statistics of FillP

```
Start at: 2019-01-19 23:17:09
End at: 2019-01-19 23:17:39
Local clock offset: -0.636 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-01-20 01:46:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 877.92 Mbit/s
95th percentile per-packet one-way delay: 63.998 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 561.14 Mbit/s
95th percentile per-packet one-way delay: 73.098 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 358.89 Mbit/s
95th percentile per-packet one-way delay: 56.356 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 238.59 Mbit/s
95th percentile per-packet one-way delay: 47.923 ms
Loss rate: 0.94%
```

## Run 4: Report of FillP — Data Link

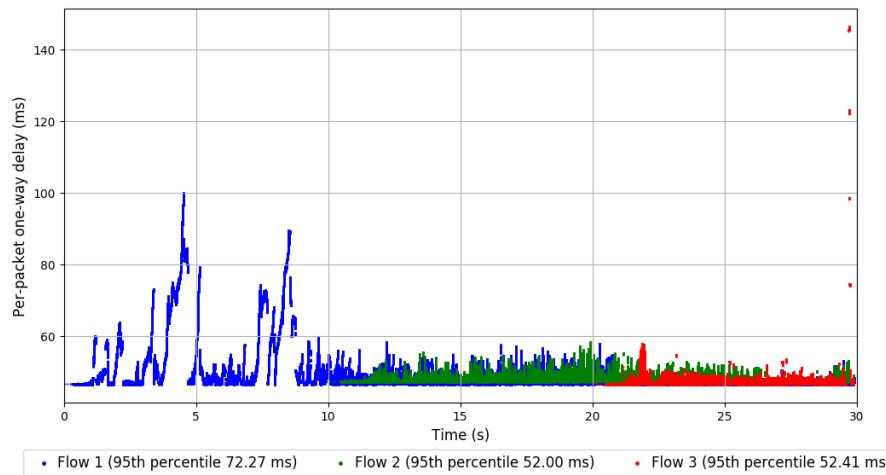
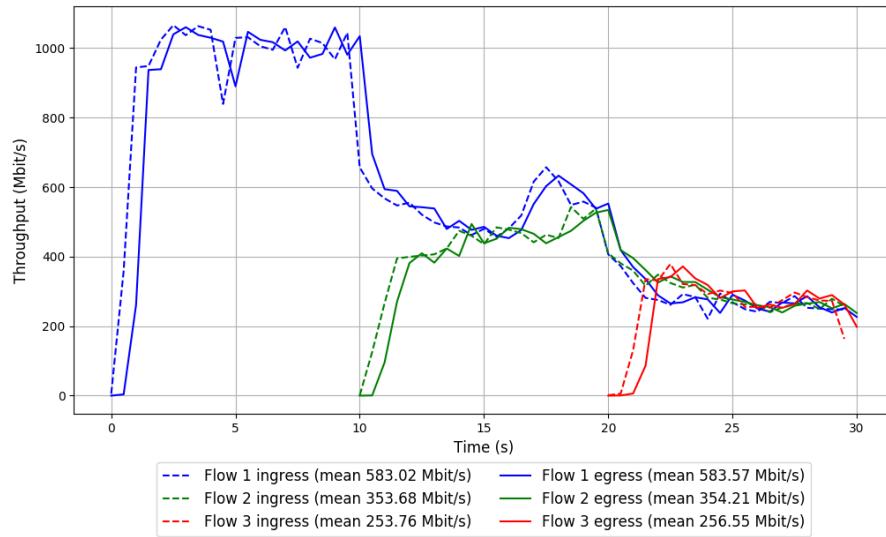


```
Run 5: Statistics of FillP
```

```
Start at: 2019-01-19 23:54:40
End at: 2019-01-19 23:55:10
Local clock offset: 0.031 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2019-01-20 01:47:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 903.19 Mbit/s
95th percentile per-packet one-way delay: 69.097 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 583.57 Mbit/s
95th percentile per-packet one-way delay: 72.270 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 354.21 Mbit/s
95th percentile per-packet one-way delay: 51.997 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 256.55 Mbit/s
95th percentile per-packet one-way delay: 52.411 ms
Loss rate: 0.00%
```

## Run 5: Report of FillP — Data Link

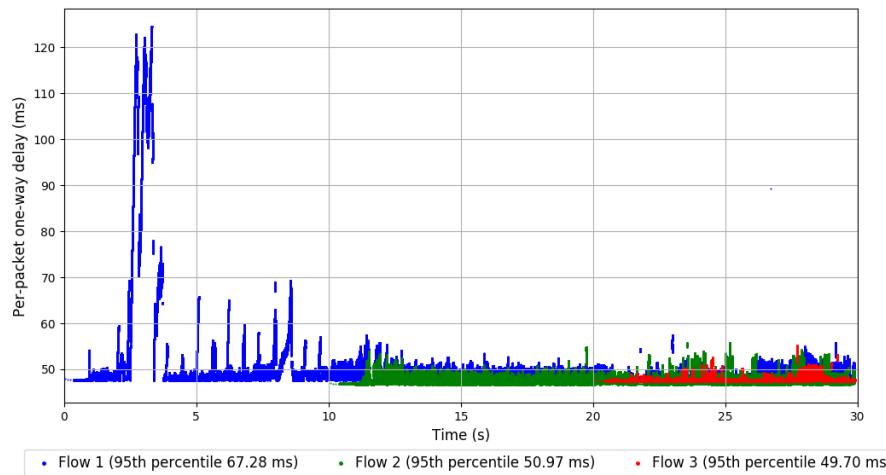
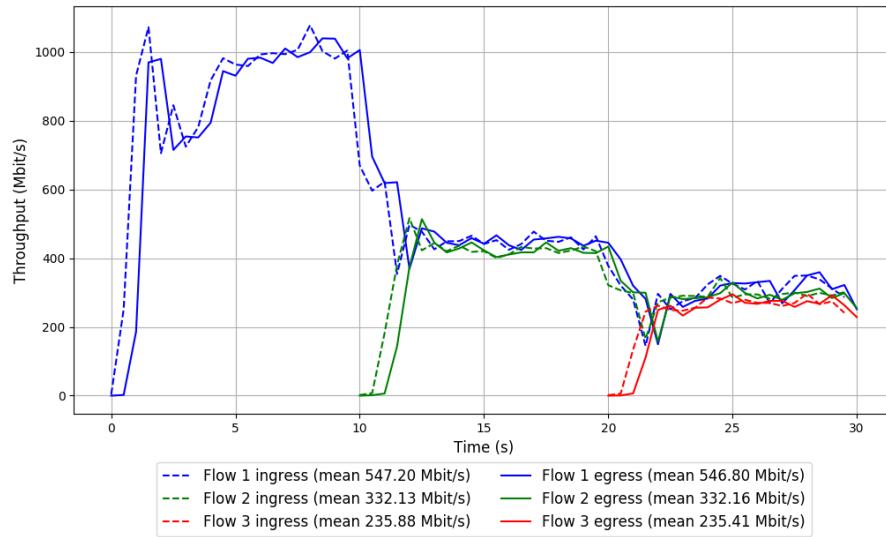


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-01-19 21:17:49
End at: 2019-01-19 21:18:19
Local clock offset: 0.568 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-01-20 01:47:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 844.32 Mbit/s
95th percentile per-packet one-way delay: 57.421 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 546.80 Mbit/s
95th percentile per-packet one-way delay: 67.284 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 332.16 Mbit/s
95th percentile per-packet one-way delay: 50.971 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 235.41 Mbit/s
95th percentile per-packet one-way delay: 49.704 ms
Loss rate: 0.94%
```

Run 1: Report of FillP-Sheep — Data Link

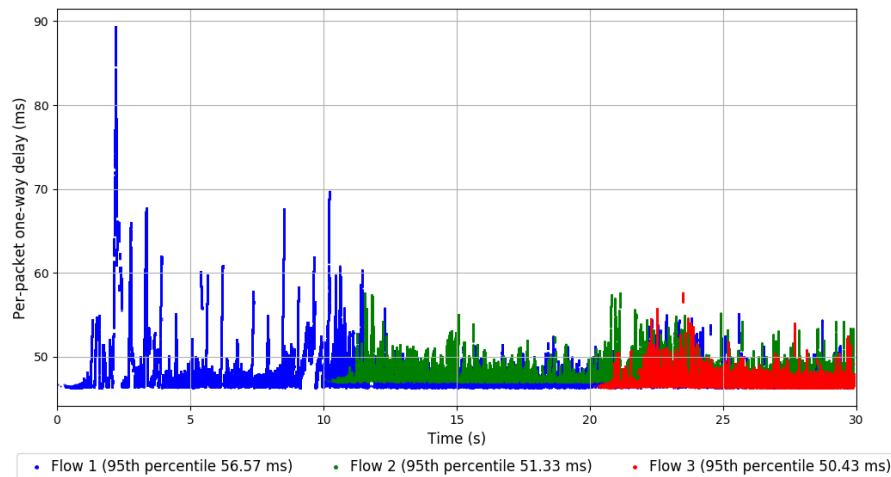
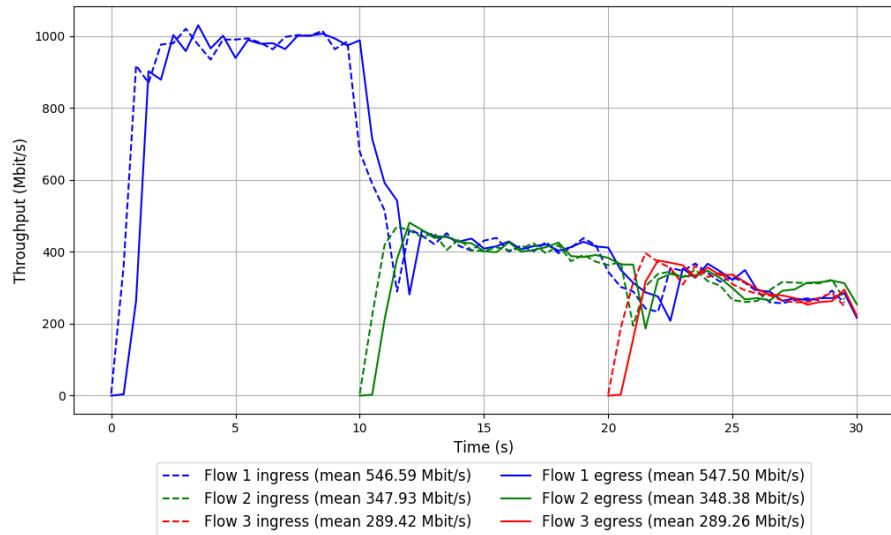


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-19 21:54:58
End at: 2019-01-19 21:55:28
Local clock offset: 0.306 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2019-01-20 01:47:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 873.71 Mbit/s
95th percentile per-packet one-way delay: 53.693 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 547.50 Mbit/s
95th percentile per-packet one-way delay: 56.574 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 348.38 Mbit/s
95th percentile per-packet one-way delay: 51.327 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 289.26 Mbit/s
95th percentile per-packet one-way delay: 50.430 ms
Loss rate: 0.82%
```

## Run 2: Report of FillP-Sheep — Data Link

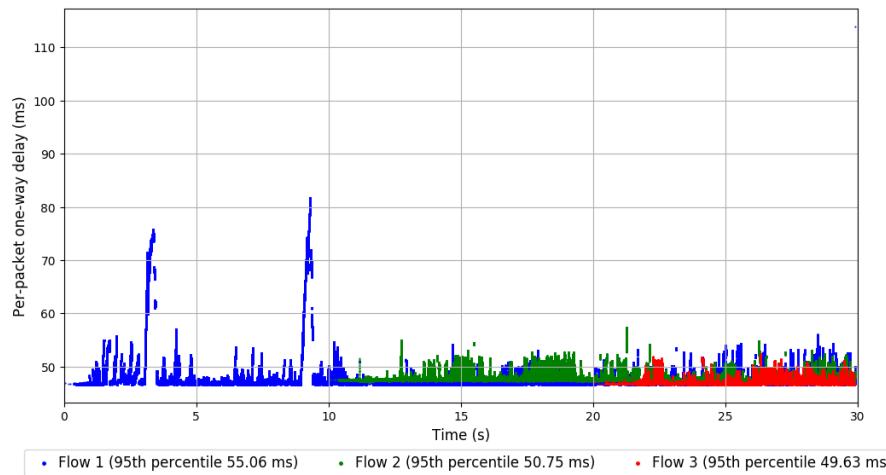
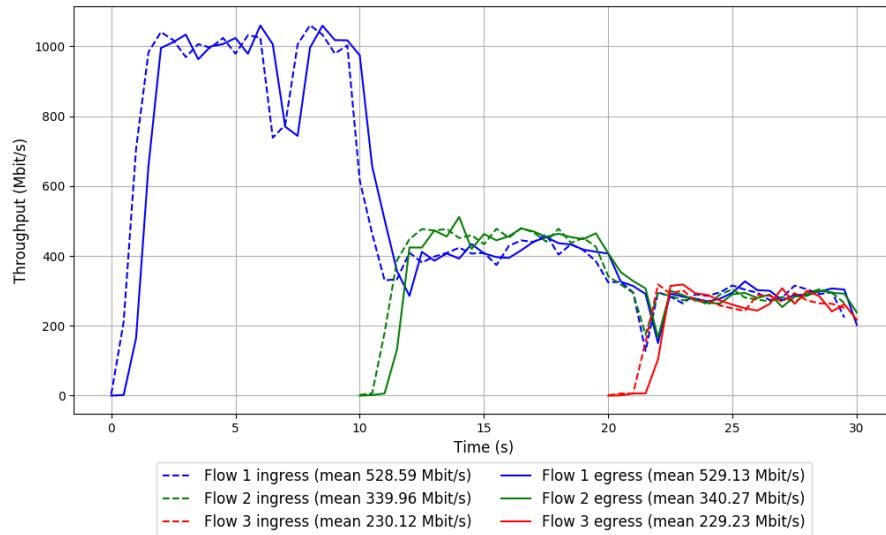


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-19 22:33:11
End at: 2019-01-19 22:33:41
Local clock offset: 0.156 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-01-20 01:47:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 830.45 Mbit/s
95th percentile per-packet one-way delay: 52.282 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 529.13 Mbit/s
95th percentile per-packet one-way delay: 55.056 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 340.27 Mbit/s
95th percentile per-packet one-way delay: 50.750 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 229.23 Mbit/s
95th percentile per-packet one-way delay: 49.632 ms
Loss rate: 1.47%
```

### Run 3: Report of FillP-Sheep — Data Link

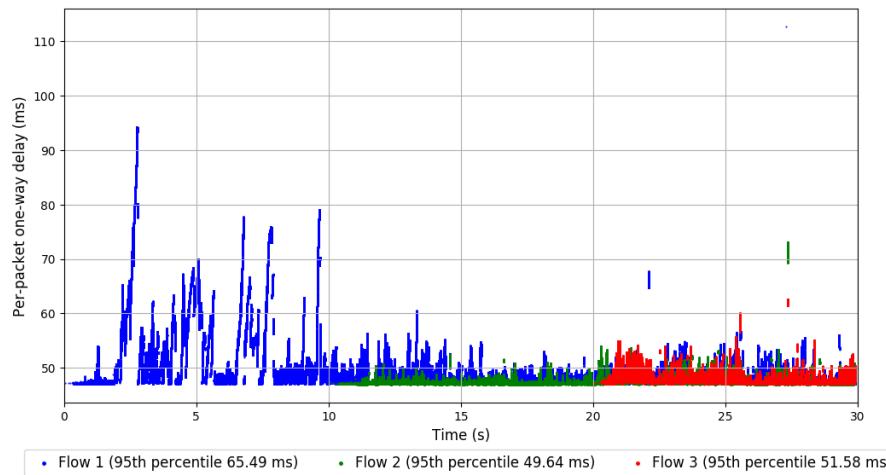
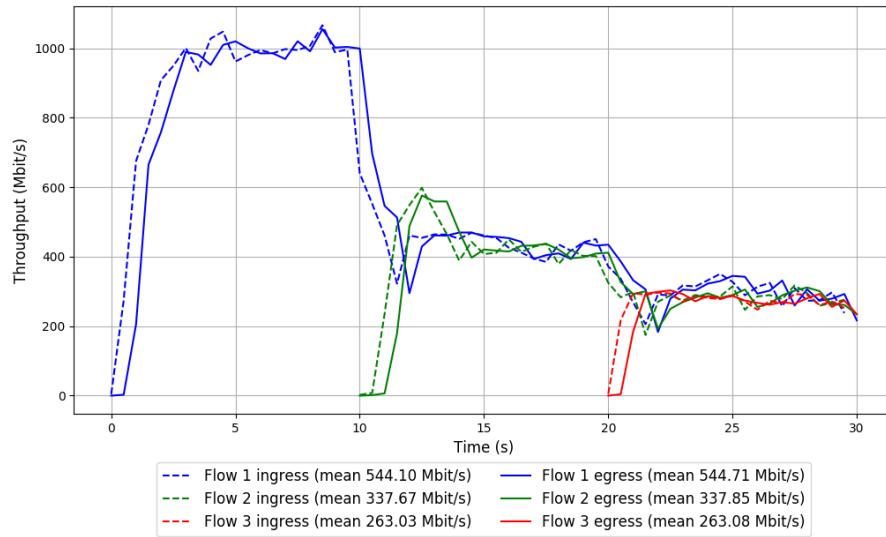


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-19 23:11:56
End at: 2019-01-19 23:12:26
Local clock offset: -0.4 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-01-20 01:48:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 855.75 Mbit/s
95th percentile per-packet one-way delay: 62.696 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 544.71 Mbit/s
95th percentile per-packet one-way delay: 65.494 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 337.85 Mbit/s
95th percentile per-packet one-way delay: 49.636 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 263.08 Mbit/s
95th percentile per-packet one-way delay: 51.577 ms
Loss rate: 1.00%
```

Run 4: Report of FillP-Sheep — Data Link

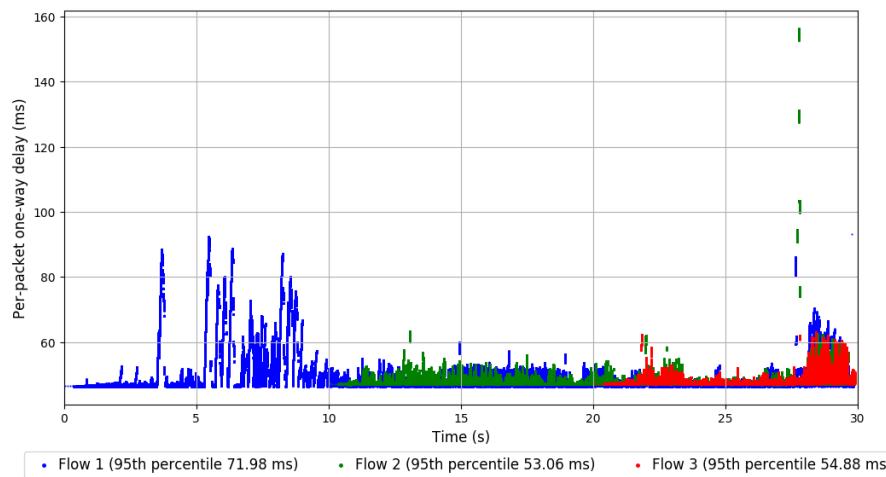
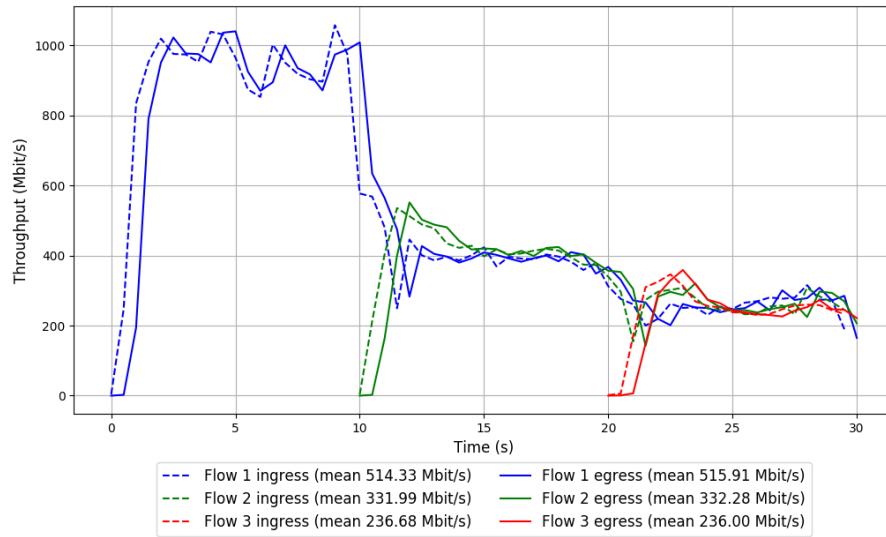


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-19 23:49:05
End at: 2019-01-19 23:49:35
Local clock offset: -0.05 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2019-01-20 02:05:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 813.54 Mbit/s
95th percentile per-packet one-way delay: 65.641 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 515.91 Mbit/s
95th percentile per-packet one-way delay: 71.976 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 332.28 Mbit/s
95th percentile per-packet one-way delay: 53.059 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 236.00 Mbit/s
95th percentile per-packet one-way delay: 54.885 ms
Loss rate: 1.02%
```

Run 5: Report of FillP-Sheep — Data Link

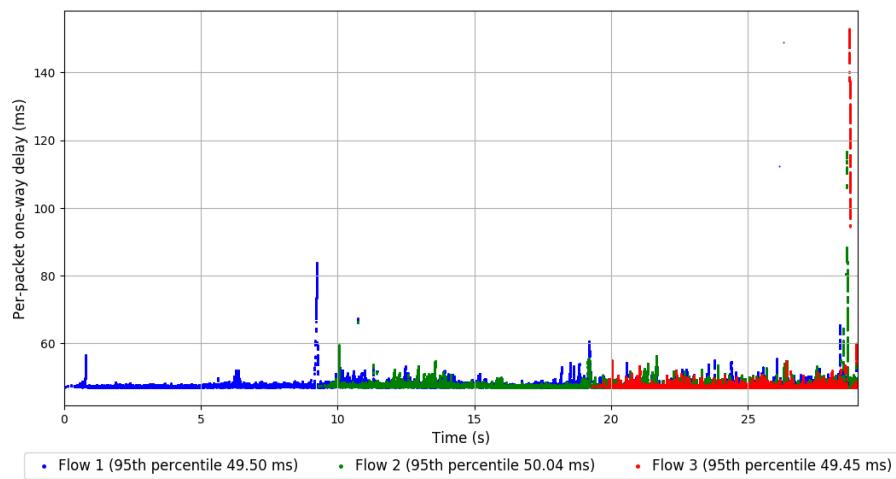
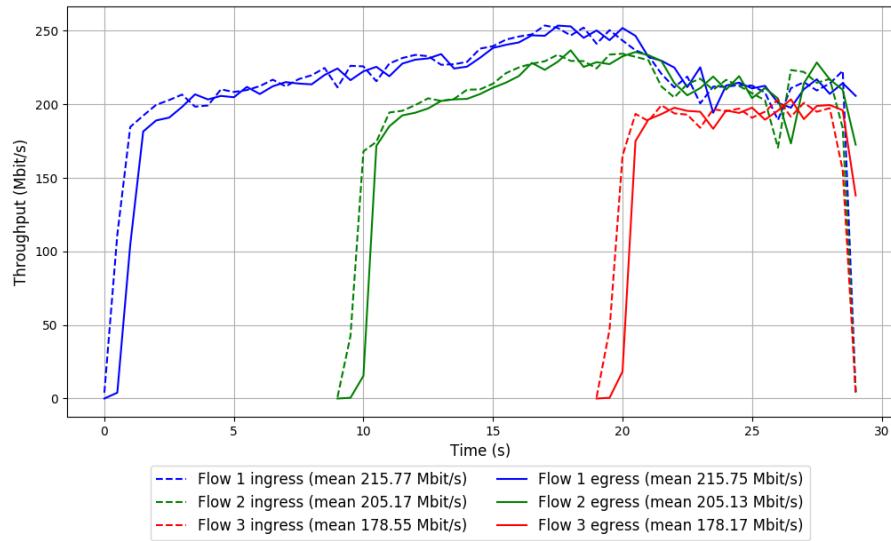


Run 1: Statistics of Indigo

```
Start at: 2019-01-19 21:47:03
End at: 2019-01-19 21:47:33
Local clock offset: 0.287 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-01-20 02:05:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.79 Mbit/s
95th percentile per-packet one-way delay: 49.676 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 215.75 Mbit/s
95th percentile per-packet one-way delay: 49.498 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 205.13 Mbit/s
95th percentile per-packet one-way delay: 50.044 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 178.17 Mbit/s
95th percentile per-packet one-way delay: 49.449 ms
Loss rate: 1.17%
```

## Run 1: Report of Indigo — Data Link

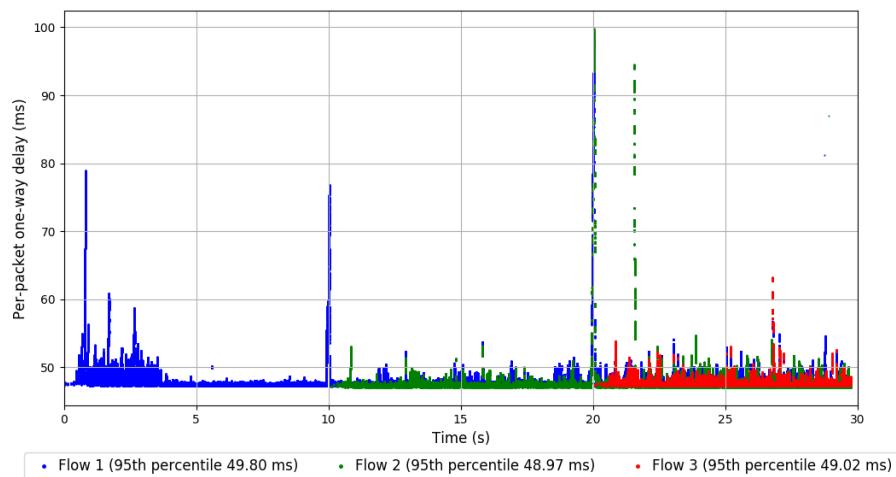
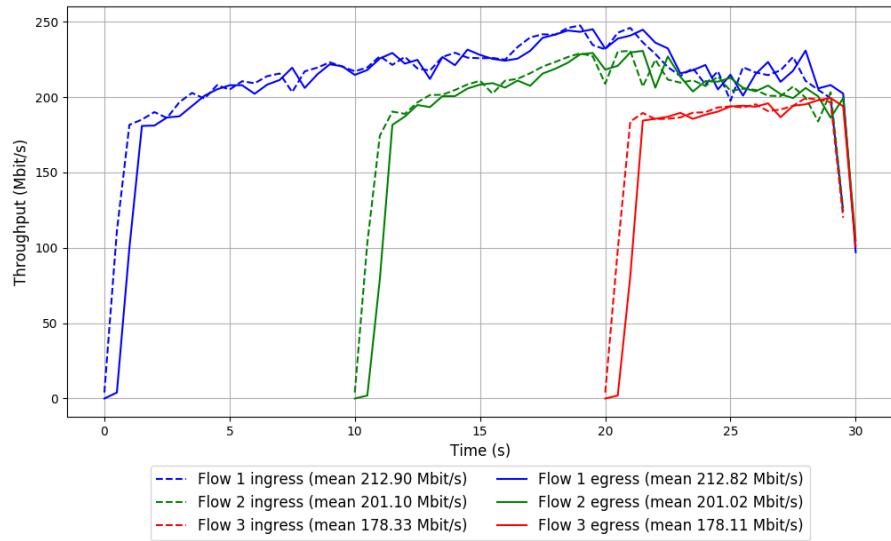


Run 2: Statistics of Indigo

```
Start at: 2019-01-19 22:24:49
End at: 2019-01-19 22:25:19
Local clock offset: -0.117 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2019-01-20 02:05:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.70 Mbit/s
95th percentile per-packet one-way delay: 49.453 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 212.82 Mbit/s
95th percentile per-packet one-way delay: 49.797 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 201.02 Mbit/s
95th percentile per-packet one-way delay: 48.966 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 178.11 Mbit/s
95th percentile per-packet one-way delay: 49.016 ms
Loss rate: 1.14%
```

## Run 2: Report of Indigo — Data Link

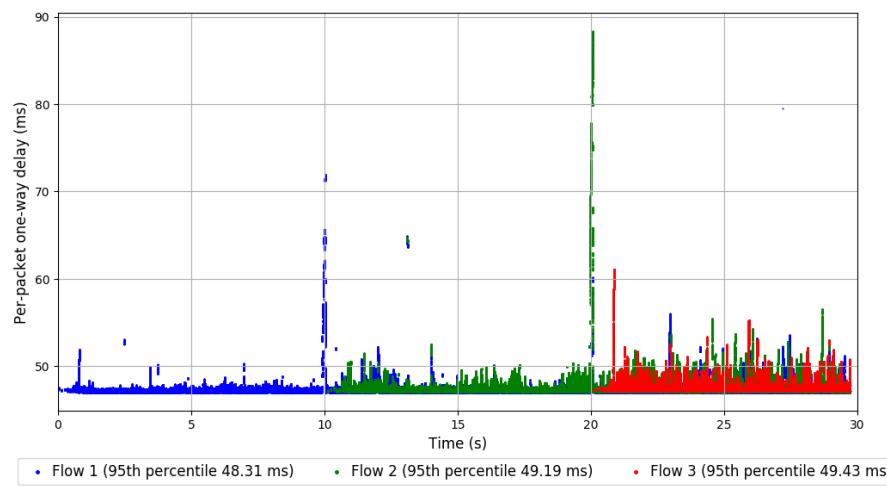
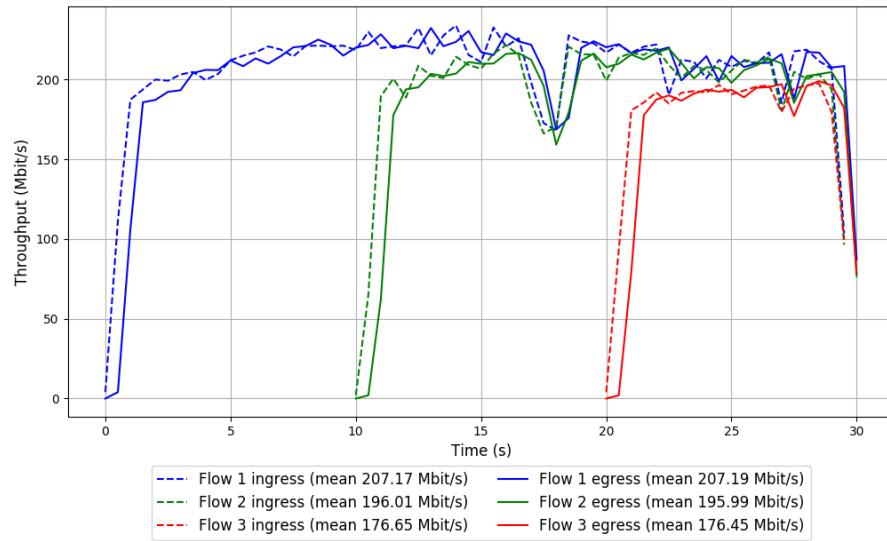


Run 3: Statistics of Indigo

```
Start at: 2019-01-19 23:03:17
End at: 2019-01-19 23:03:47
Local clock offset: -0.392 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-01-20 02:05:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.85 Mbit/s
95th percentile per-packet one-way delay: 48.863 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 207.19 Mbit/s
95th percentile per-packet one-way delay: 48.312 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 195.99 Mbit/s
95th percentile per-packet one-way delay: 49.187 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 176.45 Mbit/s
95th percentile per-packet one-way delay: 49.434 ms
Loss rate: 1.08%
```

Run 3: Report of Indigo — Data Link

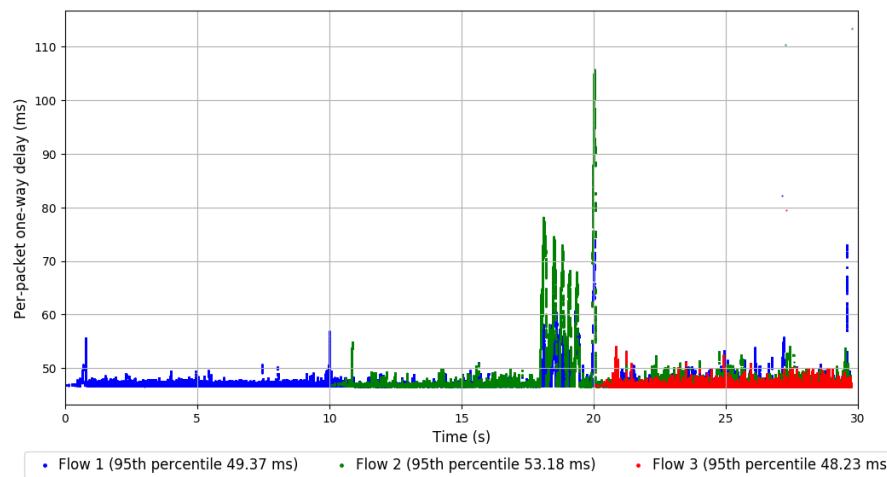
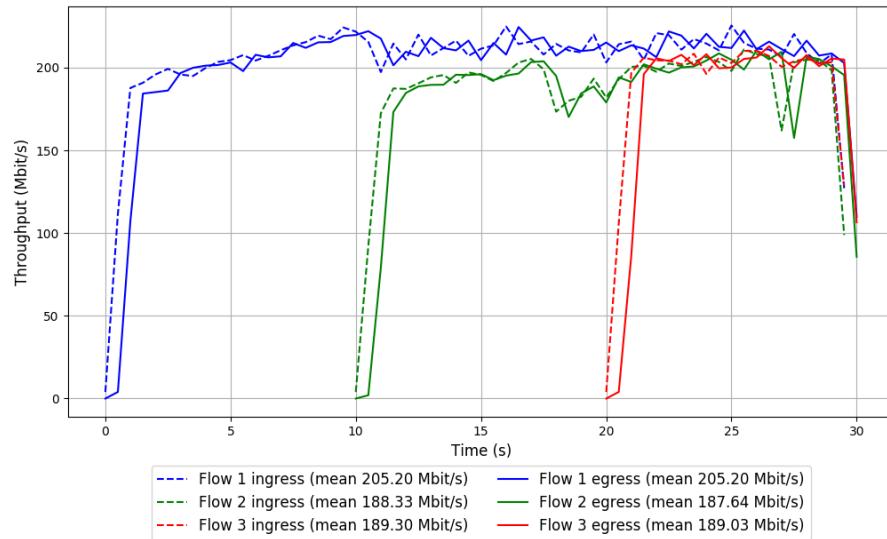


Run 4: Statistics of Indigo

```
Start at: 2019-01-19 23:41:12
End at: 2019-01-19 23:41:42
Local clock offset: 0.275 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-01-20 02:05:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.93 Mbit/s
95th percentile per-packet one-way delay: 49.686 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 205.20 Mbit/s
95th percentile per-packet one-way delay: 49.370 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 187.64 Mbit/s
95th percentile per-packet one-way delay: 53.181 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 189.03 Mbit/s
95th percentile per-packet one-way delay: 48.226 ms
Loss rate: 1.09%
```

## Run 4: Report of Indigo — Data Link

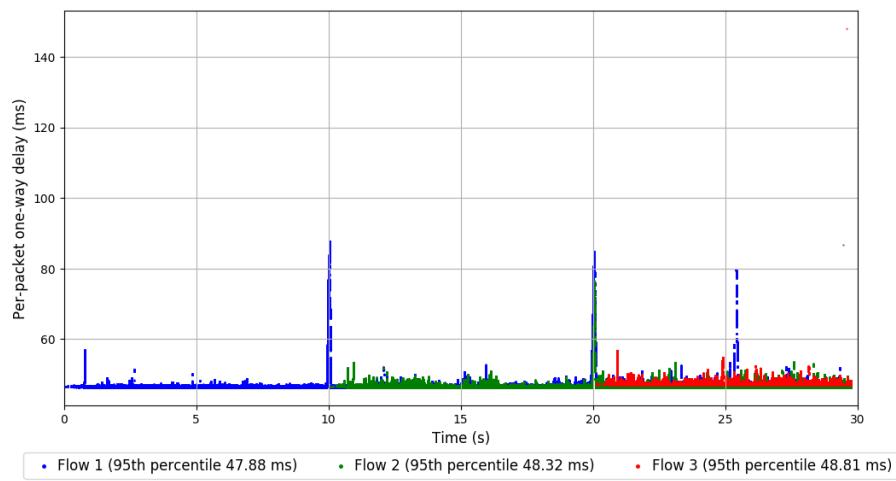
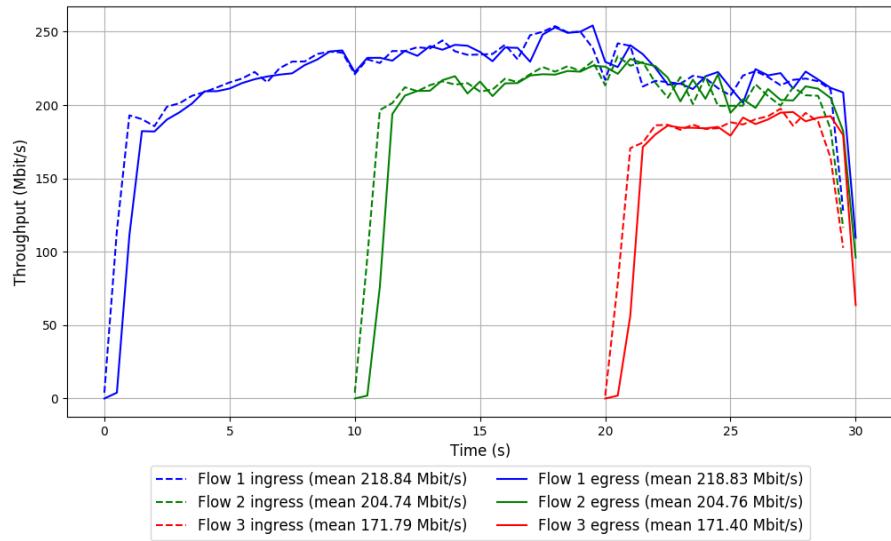


Run 5: Statistics of Indigo

```
Start at: 2019-01-20 00:19:37
End at: 2019-01-20 00:20:07
Local clock offset: 0.069 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2019-01-20 02:05:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 409.70 Mbit/s
95th percentile per-packet one-way delay: 48.248 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 218.83 Mbit/s
95th percentile per-packet one-way delay: 47.877 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 204.76 Mbit/s
95th percentile per-packet one-way delay: 48.318 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 171.40 Mbit/s
95th percentile per-packet one-way delay: 48.807 ms
Loss rate: 1.18%
```

## Run 5: Report of Indigo — Data Link

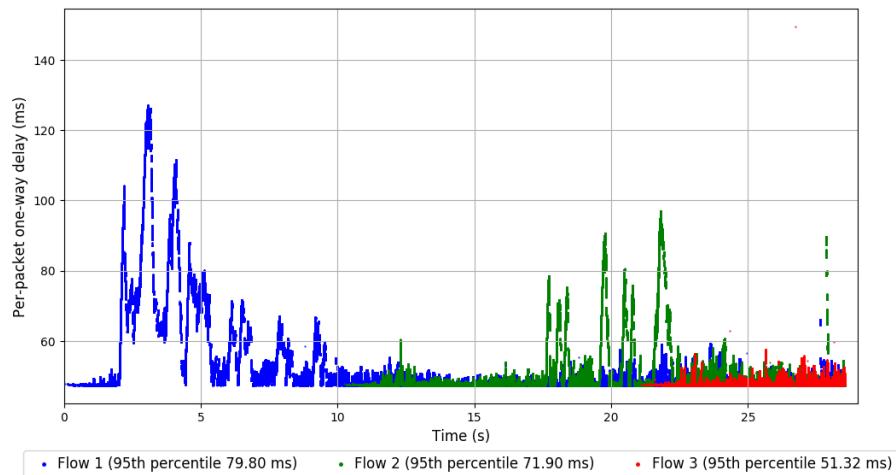
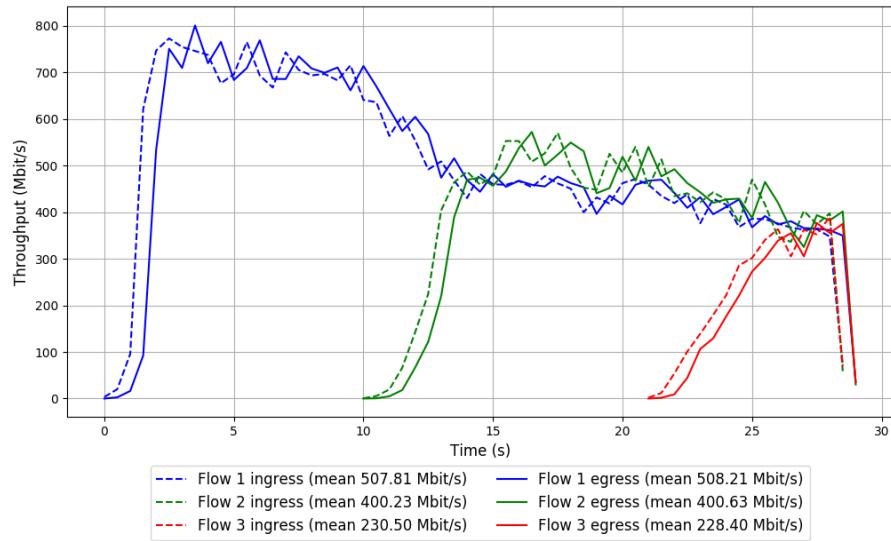


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-01-19 21:43:30
End at: 2019-01-19 21:44:00
Local clock offset: 0.662 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-01-20 02:05:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 825.25 Mbit/s
95th percentile per-packet one-way delay: 76.115 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 508.21 Mbit/s
95th percentile per-packet one-way delay: 79.798 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 400.63 Mbit/s
95th percentile per-packet one-way delay: 71.899 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 228.40 Mbit/s
95th percentile per-packet one-way delay: 51.319 ms
Loss rate: 2.16%
```

Run 1: Report of Indigo-MusesC3 — Data Link

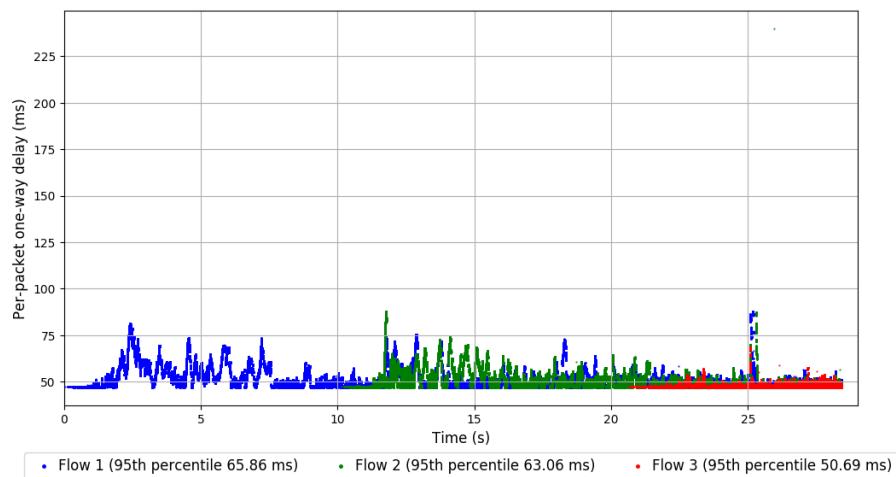
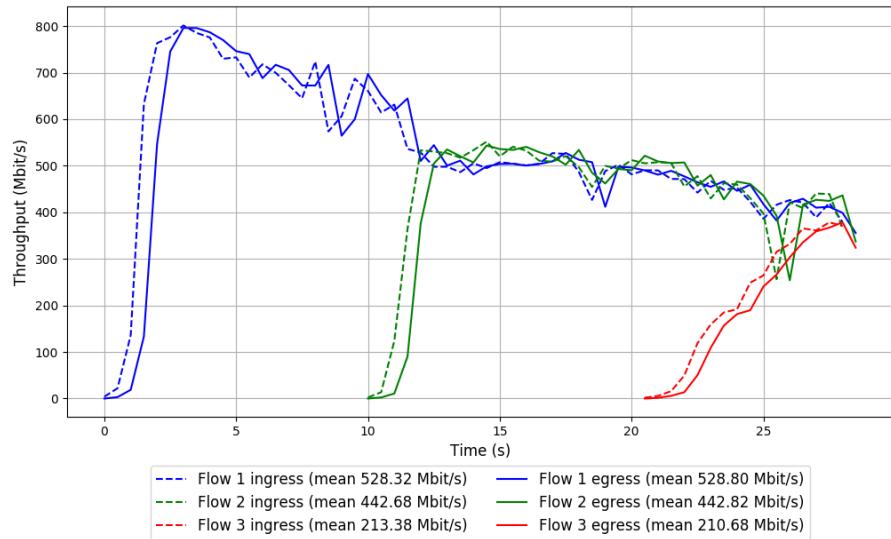


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-19 22:20:55
End at: 2019-01-19 22:21:25
Local clock offset: -0.121 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-01-20 02:06:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 871.62 Mbit/s
95th percentile per-packet one-way delay: 63.777 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 528.80 Mbit/s
95th percentile per-packet one-way delay: 65.858 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 442.82 Mbit/s
95th percentile per-packet one-way delay: 63.060 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 210.68 Mbit/s
95th percentile per-packet one-way delay: 50.693 ms
Loss rate: 2.41%
```

## Run 2: Report of Indigo-MusesC3 — Data Link

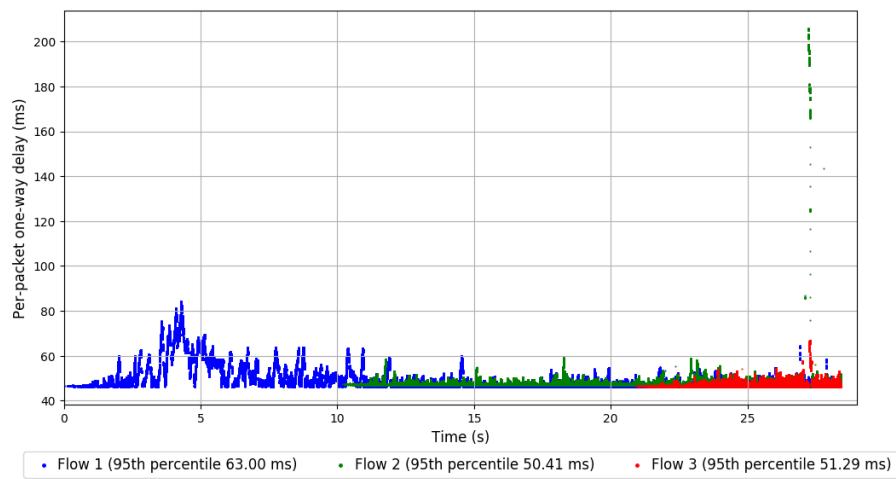
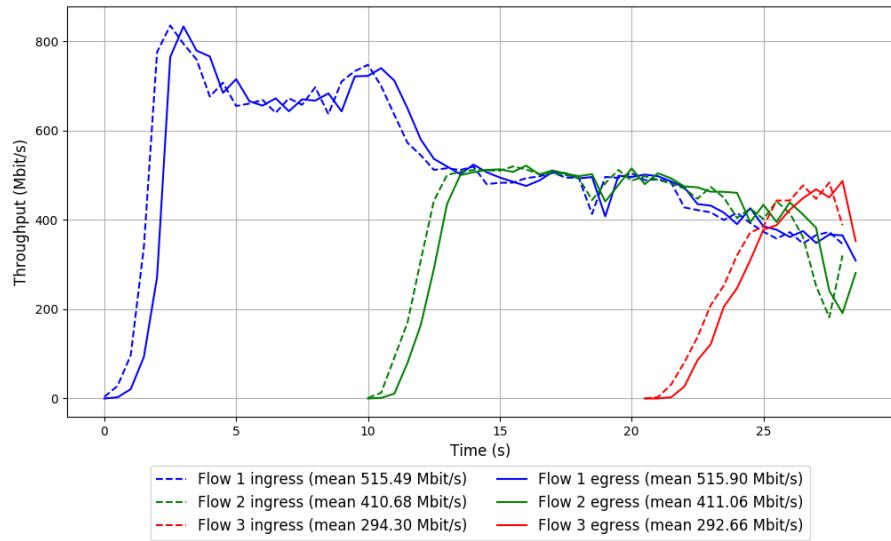


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-19 22:59:20
End at: 2019-01-19 22:59:50
Local clock offset: -0.33 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-01-20 02:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 857.52 Mbit/s
95th percentile per-packet one-way delay: 60.124 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 515.90 Mbit/s
95th percentile per-packet one-way delay: 63.003 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 411.06 Mbit/s
95th percentile per-packet one-way delay: 50.405 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 292.66 Mbit/s
95th percentile per-packet one-way delay: 51.287 ms
Loss rate: 1.80%
```

### Run 3: Report of Indigo-MusesC3 — Data Link

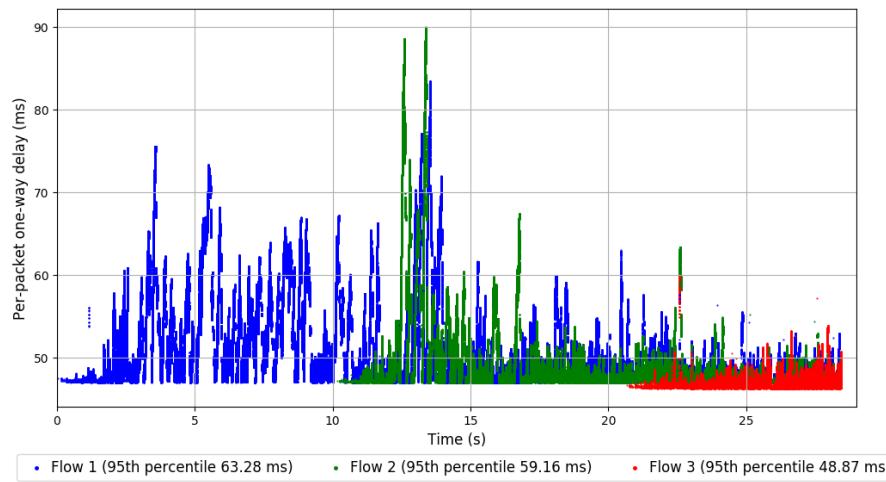
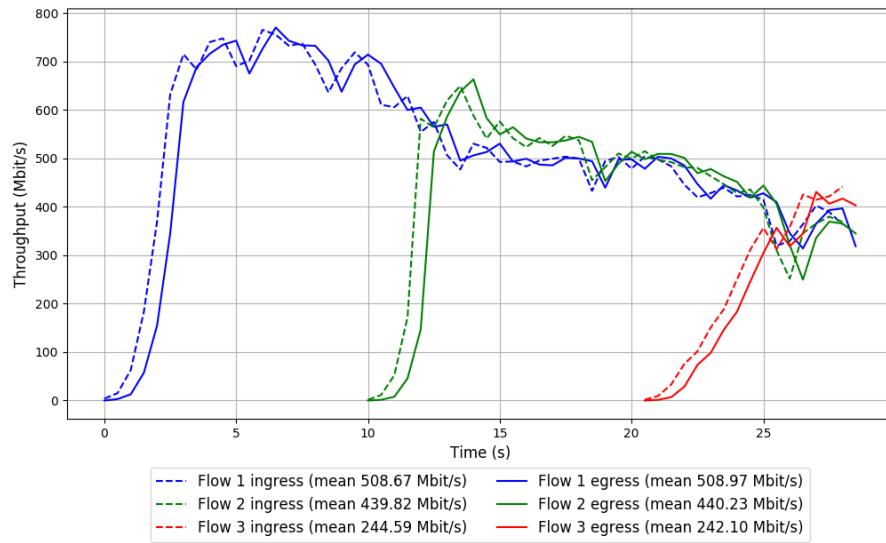


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-19 23:37:28
End at: 2019-01-19 23:37:58
Local clock offset: -0.06 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2019-01-20 02:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 858.78 Mbit/s
95th percentile per-packet one-way delay: 62.064 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 508.97 Mbit/s
95th percentile per-packet one-way delay: 63.284 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 440.23 Mbit/s
95th percentile per-packet one-way delay: 59.160 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 242.10 Mbit/s
95th percentile per-packet one-way delay: 48.874 ms
Loss rate: 2.22%
```

Run 4: Report of Indigo-MusesC3 — Data Link

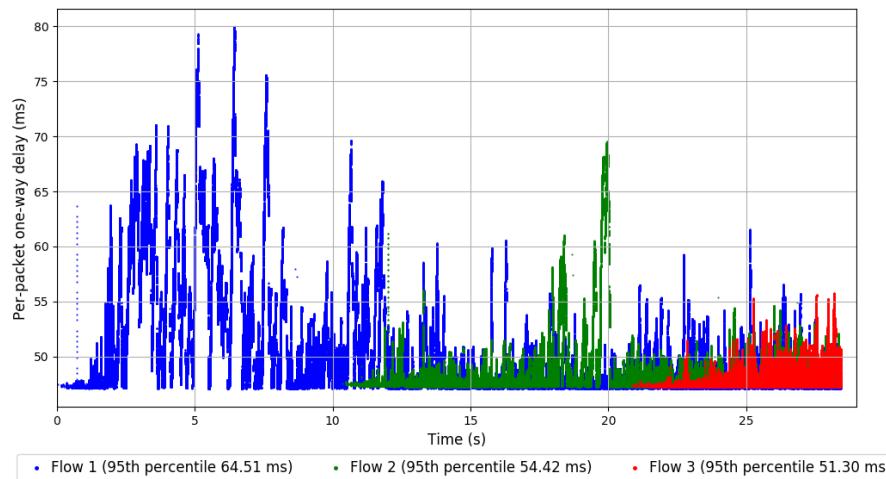
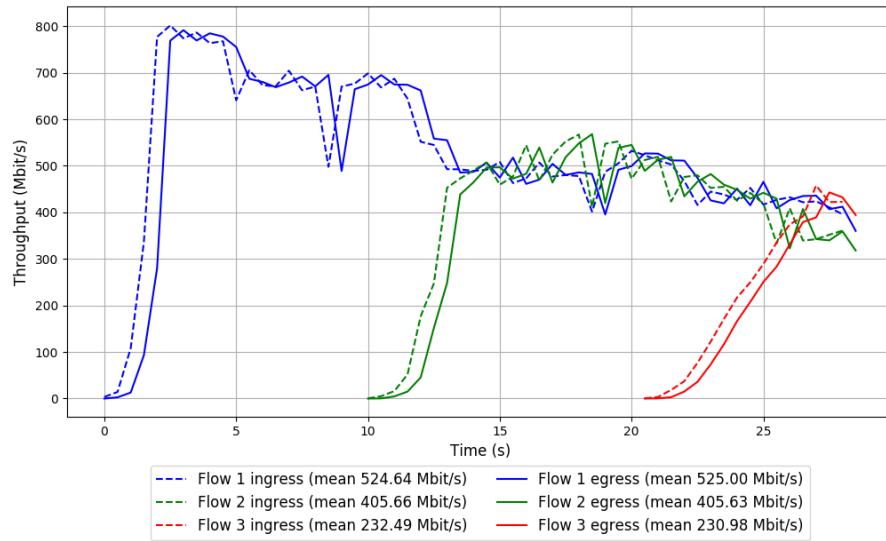


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-20 00:15:48
End at: 2019-01-20 00:16:18
Local clock offset: 0.041 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2019-01-20 02:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 845.15 Mbit/s
95th percentile per-packet one-way delay: 62.677 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 525.00 Mbit/s
95th percentile per-packet one-way delay: 64.509 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 405.63 Mbit/s
95th percentile per-packet one-way delay: 54.418 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 230.98 Mbit/s
95th percentile per-packet one-way delay: 51.304 ms
Loss rate: 1.87%
```

Run 5: Report of Indigo-MusesC3 — Data Link

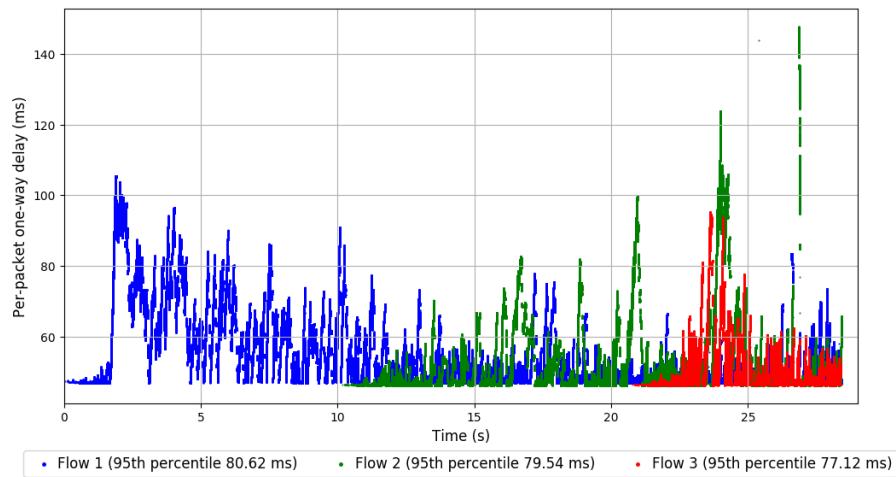
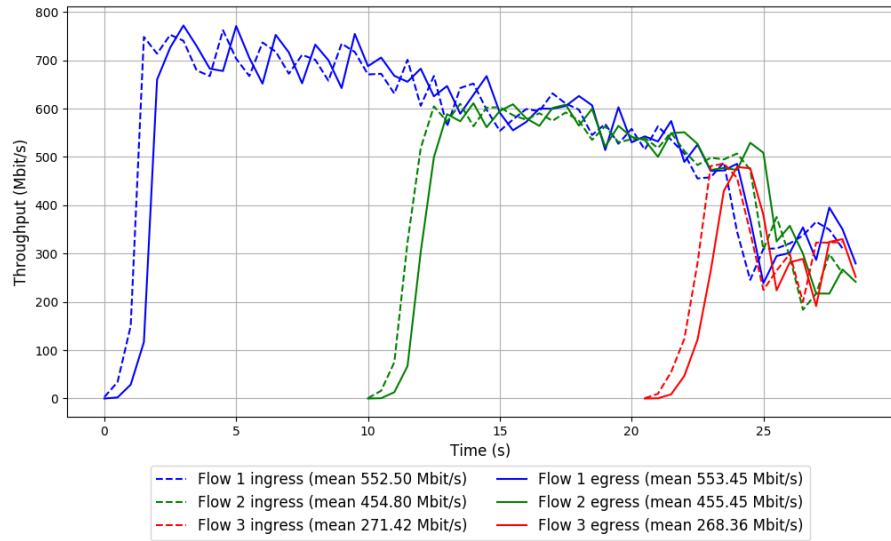


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-01-19 21:28:33
End at: 2019-01-19 21:29:03
Local clock offset: 0.213 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-01-20 02:21:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 918.40 Mbit/s
95th percentile per-packet one-way delay: 80.141 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 553.45 Mbit/s
95th percentile per-packet one-way delay: 80.622 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 455.45 Mbit/s
95th percentile per-packet one-way delay: 79.538 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 268.36 Mbit/s
95th percentile per-packet one-way delay: 77.116 ms
Loss rate: 2.30%
```

Run 1: Report of Indigo-MusesC5 — Data Link

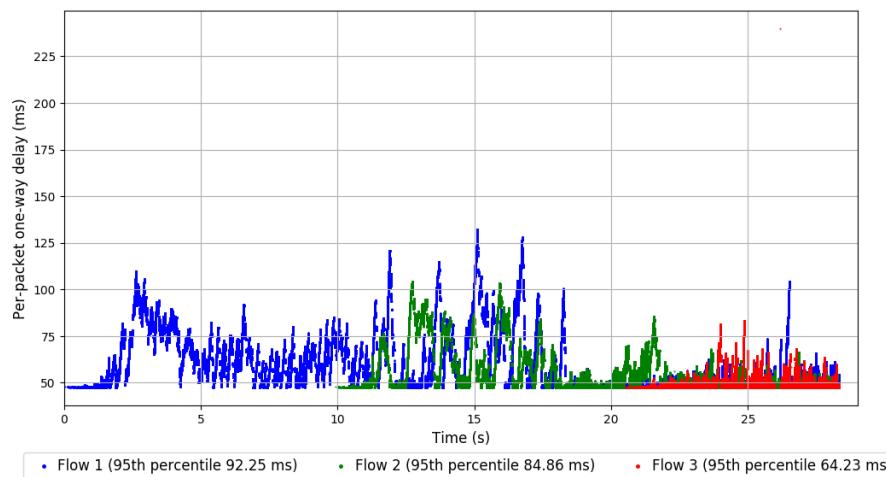
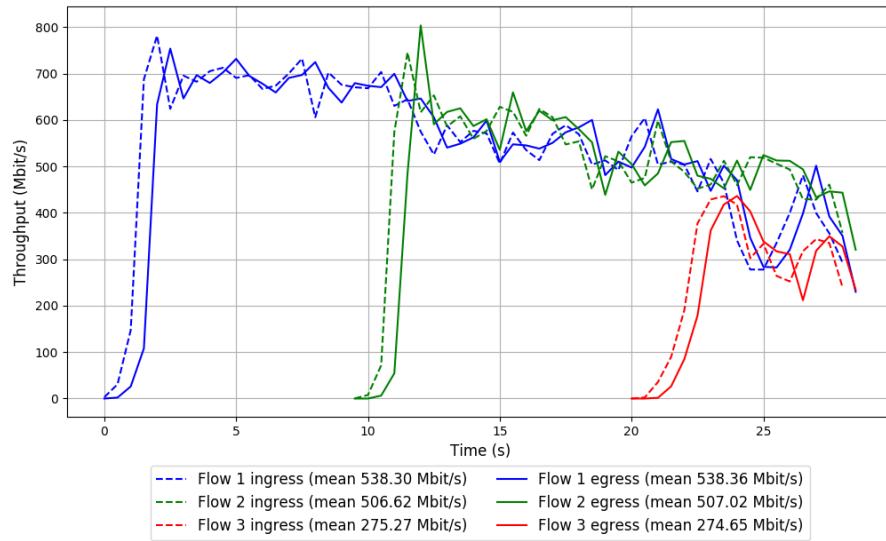


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-19 22:05:53
End at: 2019-01-19 22:06:23
Local clock offset: 0.547 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-01-20 02:23:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 944.79 Mbit/s
95th percentile per-packet one-way delay: 88.136 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 538.36 Mbit/s
95th percentile per-packet one-way delay: 92.253 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 507.02 Mbit/s
95th percentile per-packet one-way delay: 84.859 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 274.65 Mbit/s
95th percentile per-packet one-way delay: 64.235 ms
Loss rate: 1.06%
```

## Run 2: Report of Indigo-MusesC5 — Data Link

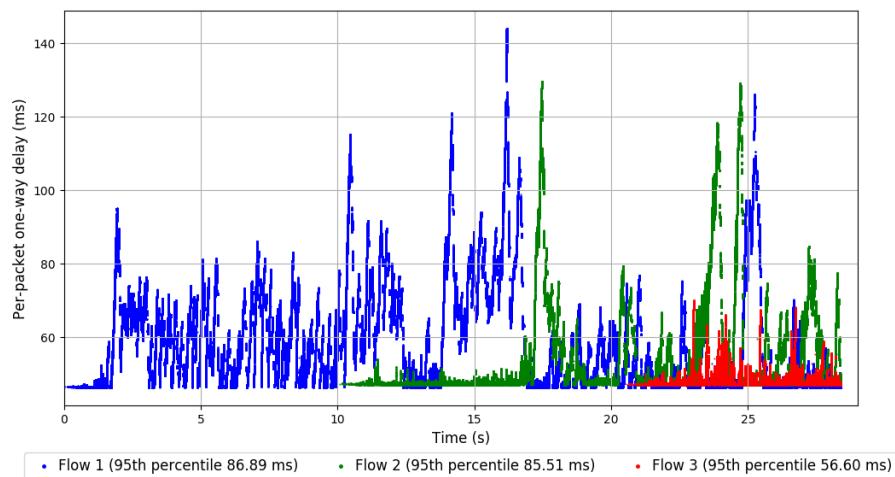
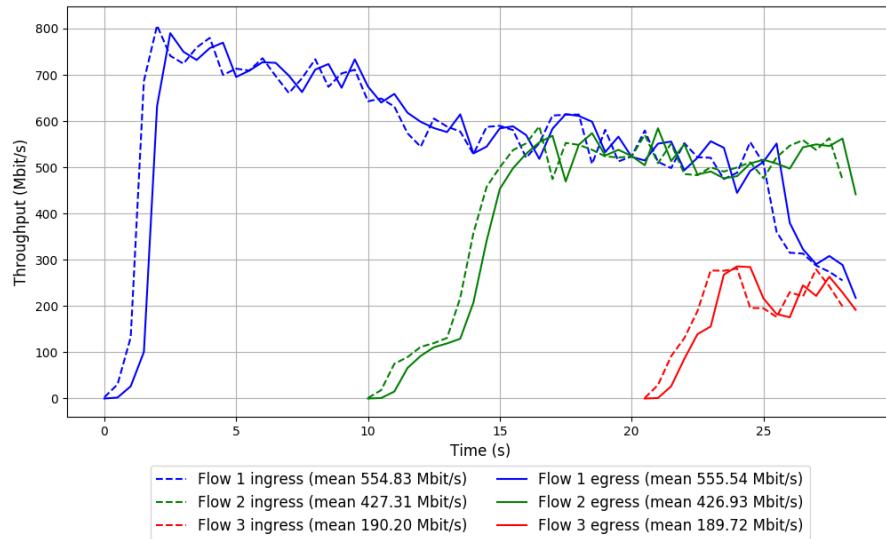


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-19 22:44:00
End at: 2019-01-19 22:44:30
Local clock offset: -0.273 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2019-01-20 02:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 883.55 Mbit/s
95th percentile per-packet one-way delay: 85.973 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 555.54 Mbit/s
95th percentile per-packet one-way delay: 86.892 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 426.93 Mbit/s
95th percentile per-packet one-way delay: 85.512 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 189.72 Mbit/s
95th percentile per-packet one-way delay: 56.604 ms
Loss rate: 1.44%
```

### Run 3: Report of Indigo-MusesC5 — Data Link

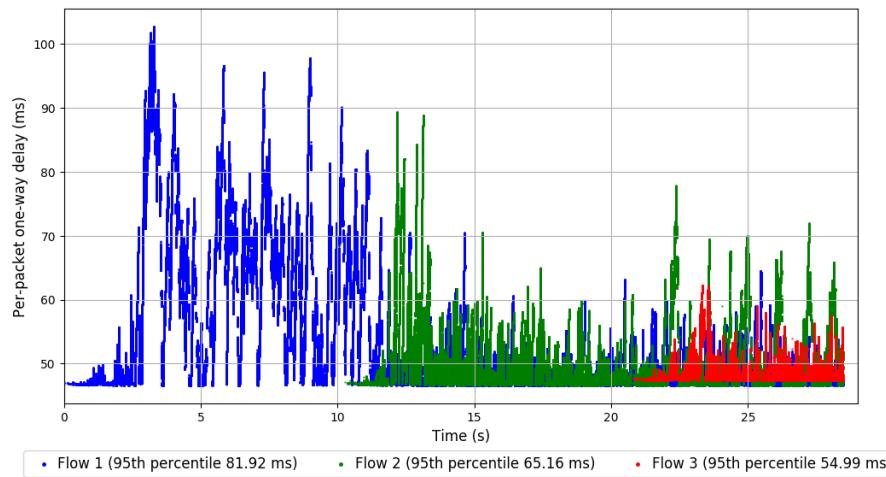
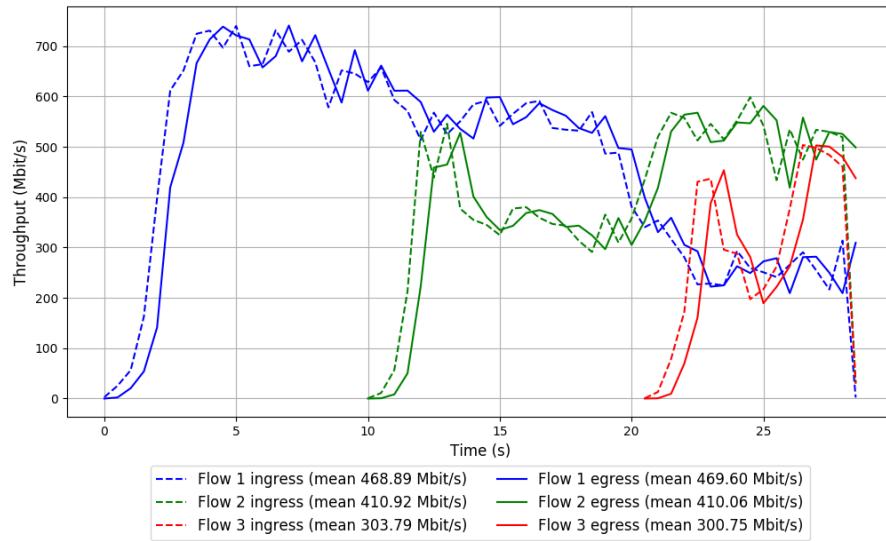


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-19 23:22:20
End at: 2019-01-19 23:22:50
Local clock offset: 0.206 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-01-20 02:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 813.62 Mbit/s
95th percentile per-packet one-way delay: 76.358 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 469.60 Mbit/s
95th percentile per-packet one-way delay: 81.919 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 410.06 Mbit/s
95th percentile per-packet one-way delay: 65.158 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 300.75 Mbit/s
95th percentile per-packet one-way delay: 54.990 ms
Loss rate: 2.23%
```

Run 4: Report of Indigo-MusesC5 — Data Link

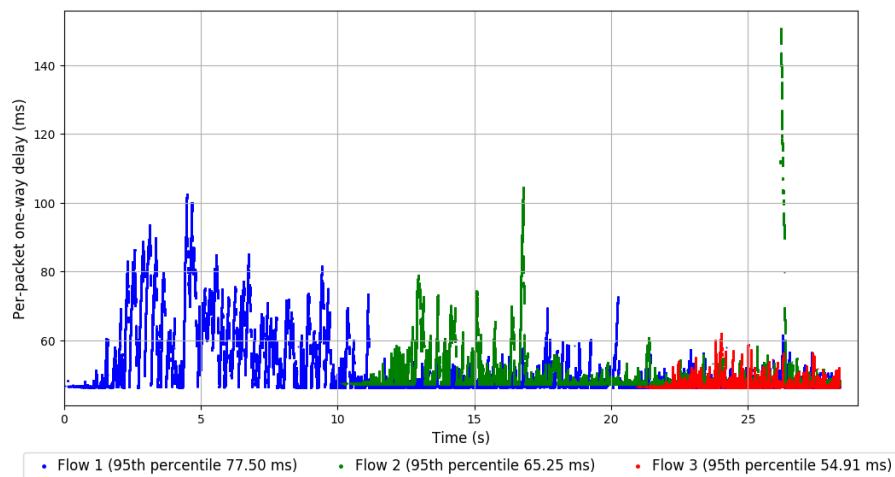
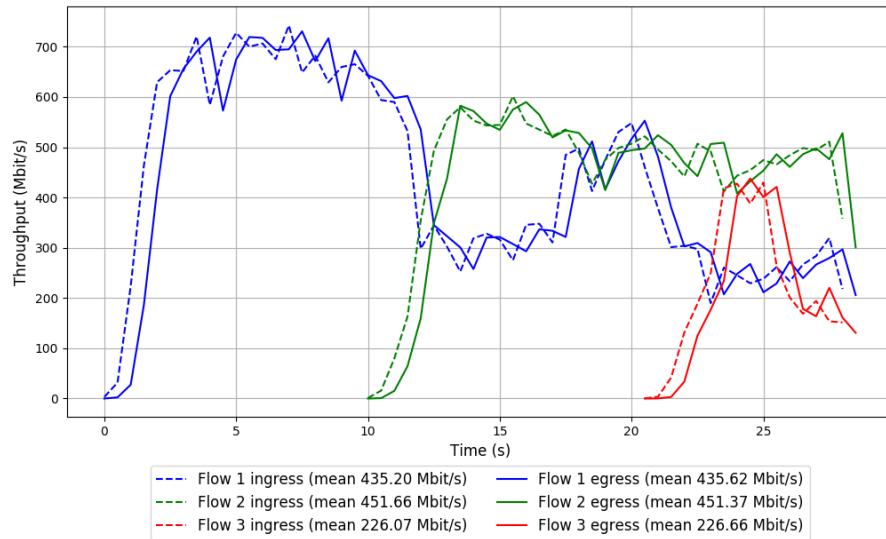


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-20 00:00:15
End at: 2019-01-20 00:00:45
Local clock offset: 0.036 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-01-20 02:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 785.94 Mbit/s
95th percentile per-packet one-way delay: 74.138 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 435.62 Mbit/s
95th percentile per-packet one-way delay: 77.501 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 451.37 Mbit/s
95th percentile per-packet one-way delay: 65.252 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 226.66 Mbit/s
95th percentile per-packet one-way delay: 54.912 ms
Loss rate: 0.95%
```

## Run 5: Report of Indigo-MusesC5 — Data Link

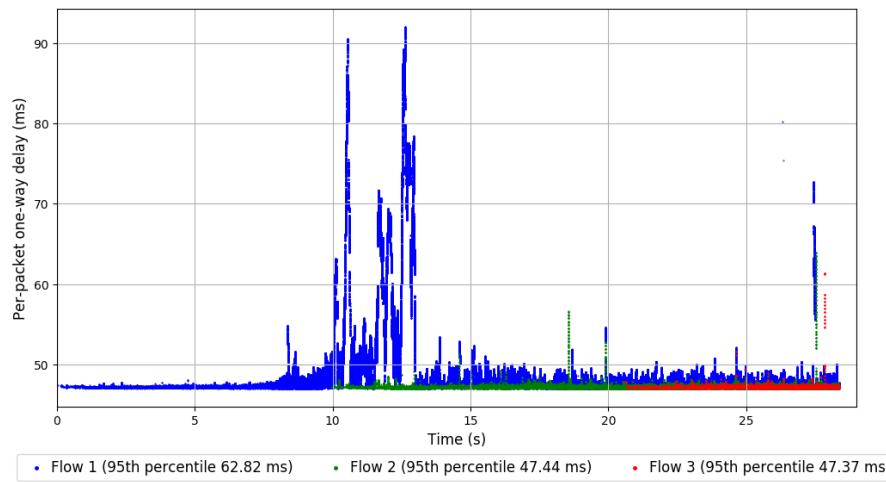
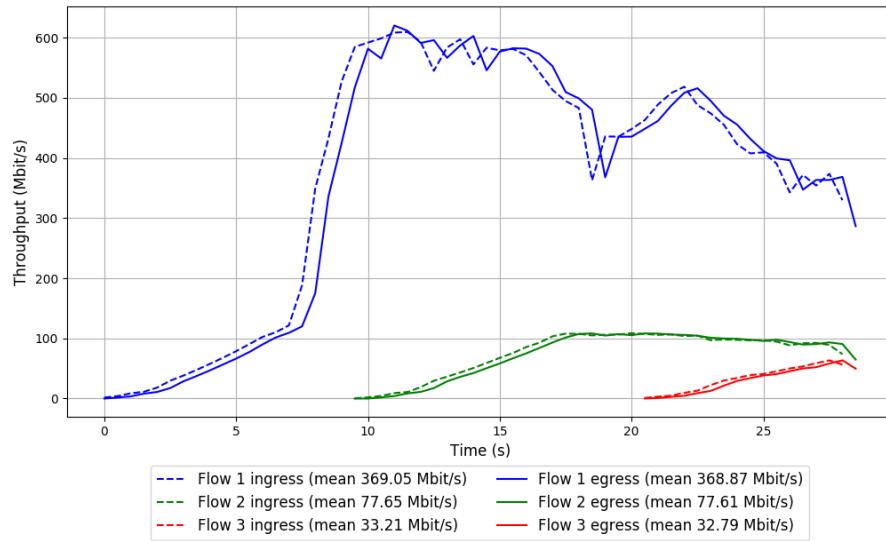


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-19 21:39:46
End at: 2019-01-19 21:40:16
Local clock offset: 0.28 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-01-20 02:28:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.39 Mbit/s
95th percentile per-packet one-way delay: 60.824 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 368.87 Mbit/s
95th percentile per-packet one-way delay: 62.818 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 77.61 Mbit/s
95th percentile per-packet one-way delay: 47.440 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 32.79 Mbit/s
95th percentile per-packet one-way delay: 47.374 ms
Loss rate: 2.40%
```

Run 1: Report of Indigo-MusesD — Data Link

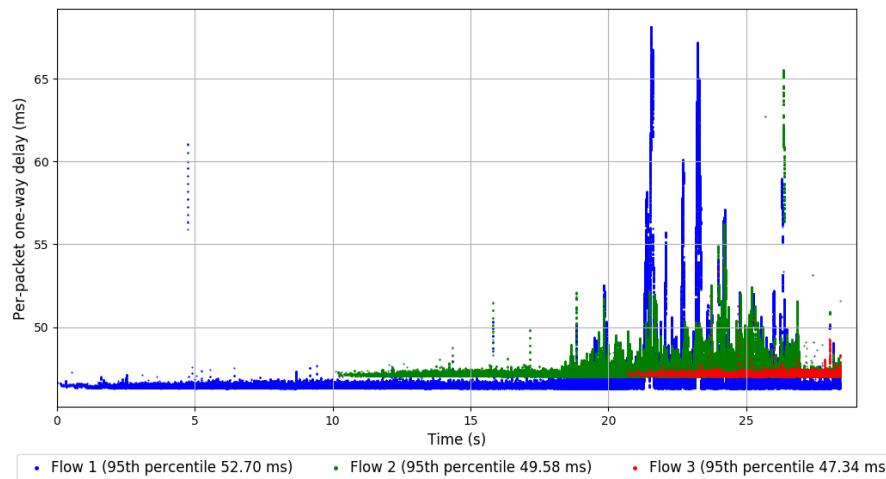
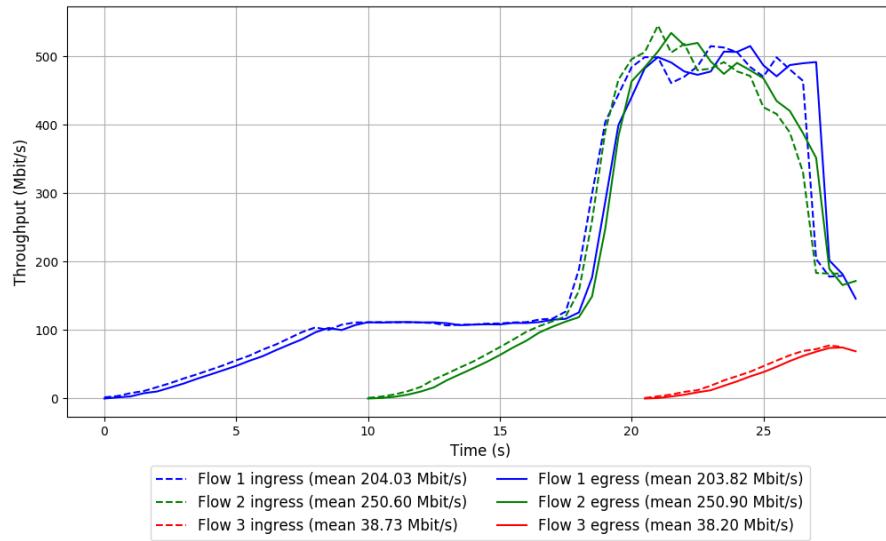


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-19 22:17:15
End at: 2019-01-19 22:17:45
Local clock offset: -0.061 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2019-01-20 02:28:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.10 Mbit/s
95th percentile per-packet one-way delay: 50.564 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 203.82 Mbit/s
95th percentile per-packet one-way delay: 52.701 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 250.90 Mbit/s
95th percentile per-packet one-way delay: 49.584 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 47.342 ms
Loss rate: 2.47%
```

Run 2: Report of Indigo-MusesD — Data Link

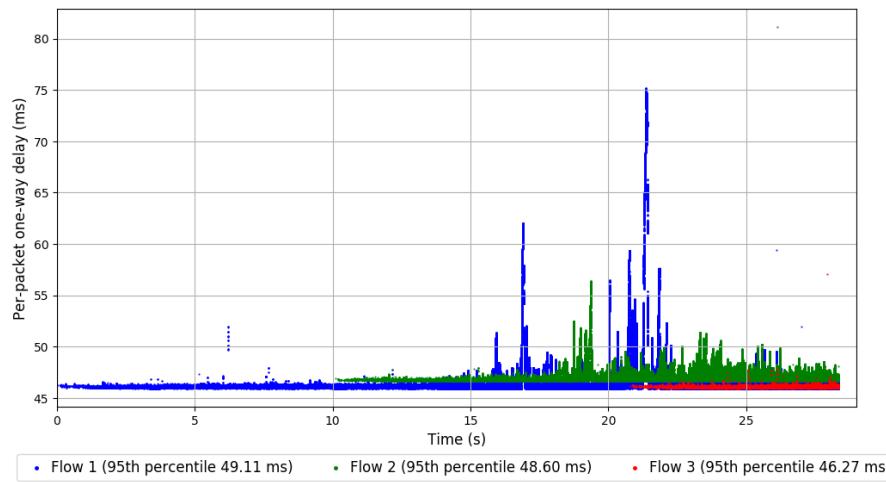
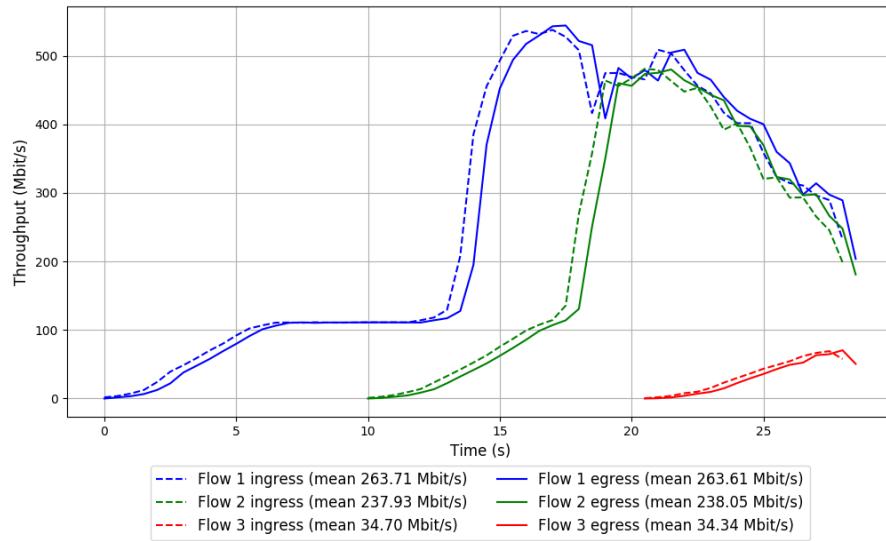


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-19 22:55:29
End at: 2019-01-19 22:55:59
Local clock offset: -0.717 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-01-20 02:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.22 Mbit/s
95th percentile per-packet one-way delay: 48.723 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 263.61 Mbit/s
95th percentile per-packet one-way delay: 49.111 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 238.05 Mbit/s
95th percentile per-packet one-way delay: 48.601 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 34.34 Mbit/s
95th percentile per-packet one-way delay: 46.273 ms
Loss rate: 2.33%
```

### Run 3: Report of Indigo-MusesD — Data Link

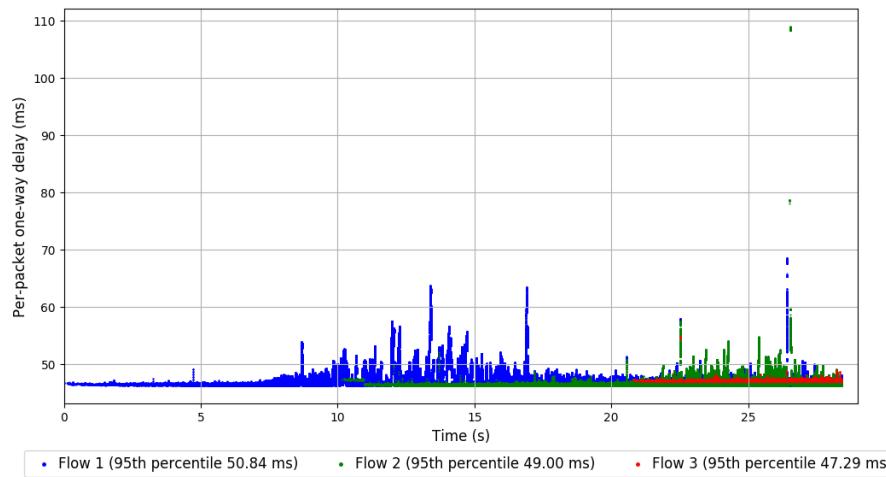
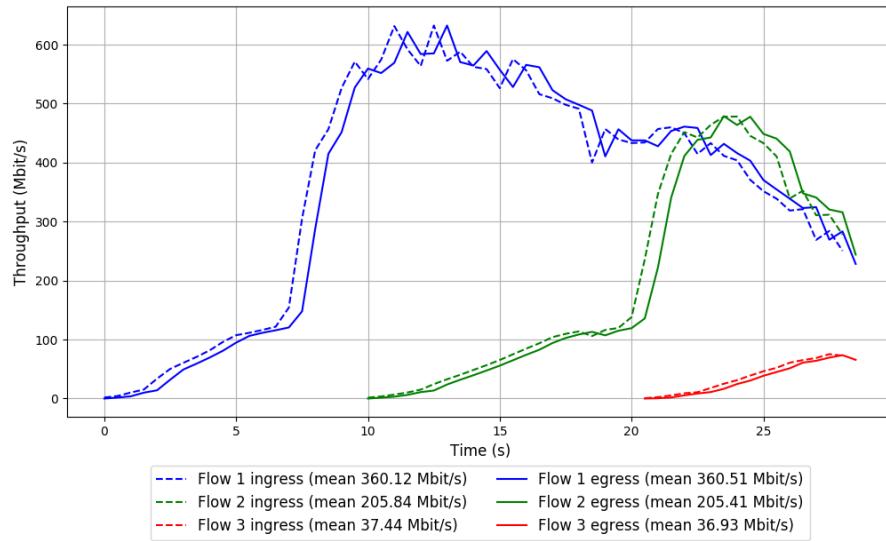


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-19 23:33:31
End at: 2019-01-19 23:34:01
Local clock offset: -0.126 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-01-20 02:31:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.74 Mbit/s
95th percentile per-packet one-way delay: 50.421 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 360.51 Mbit/s
95th percentile per-packet one-way delay: 50.835 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 205.41 Mbit/s
95th percentile per-packet one-way delay: 49.003 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 36.93 Mbit/s
95th percentile per-packet one-way delay: 47.291 ms
Loss rate: 2.57%
```

## Run 4: Report of Indigo-MusesD — Data Link

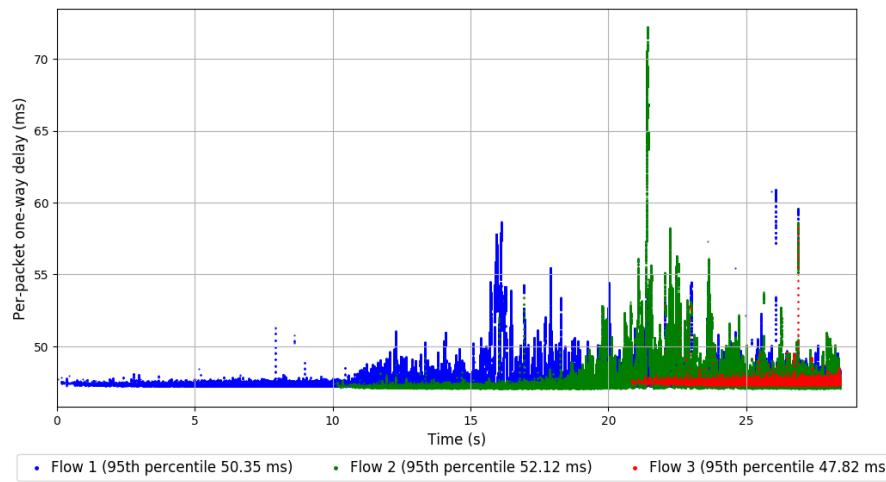
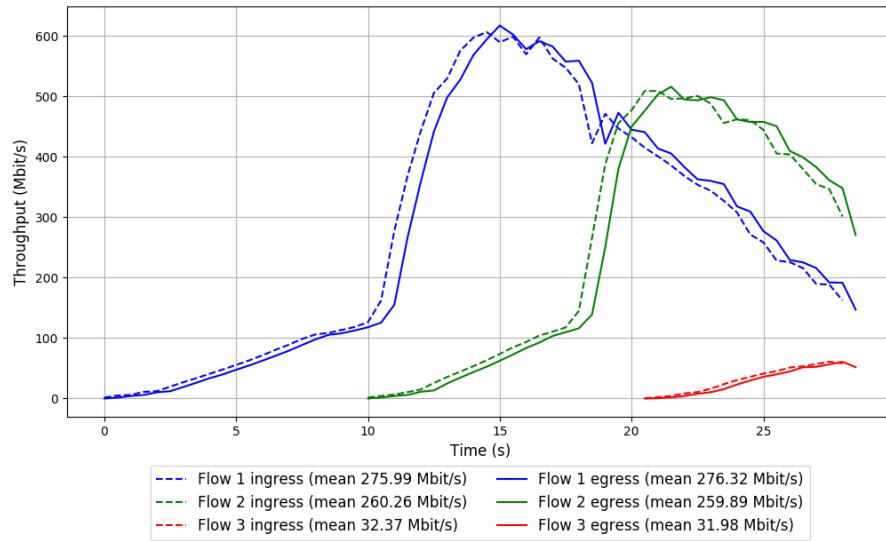


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-20 00:11:58
End at: 2019-01-20 00:12:28
Local clock offset: 0.13 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-01-20 02:31:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.92 Mbit/s
95th percentile per-packet one-way delay: 51.295 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 276.32 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 259.89 Mbit/s
95th percentile per-packet one-way delay: 52.123 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 31.98 Mbit/s
95th percentile per-packet one-way delay: 47.821 ms
Loss rate: 2.47%
```

## Run 5: Report of Indigo-MusesD — Data Link

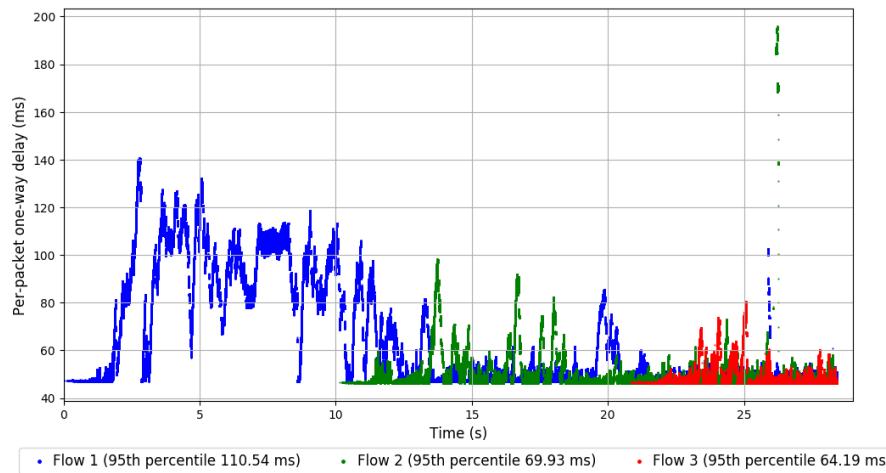
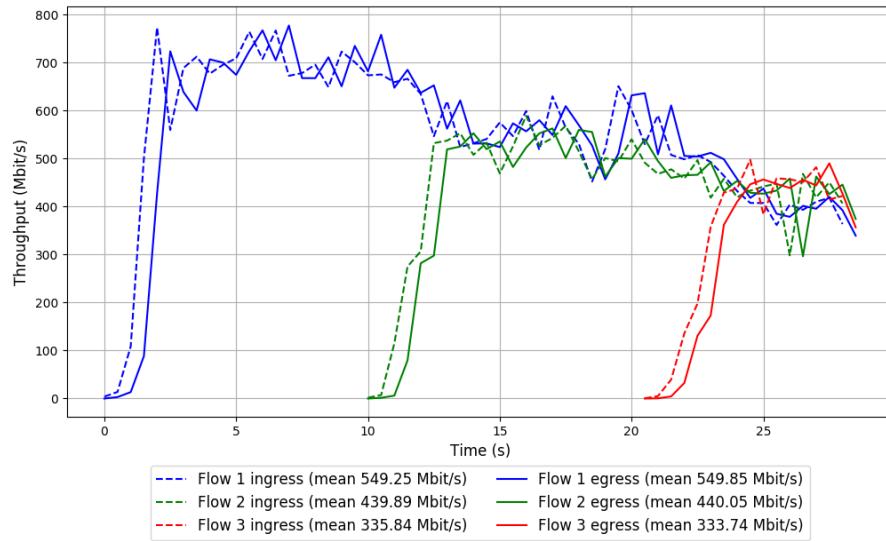


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-19 21:31:40
End at: 2019-01-19 21:32:10
Local clock offset: 0.257 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-01-20 02:41:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 922.85 Mbit/s
95th percentile per-packet one-way delay: 107.059 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 549.85 Mbit/s
95th percentile per-packet one-way delay: 110.541 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 440.05 Mbit/s
95th percentile per-packet one-way delay: 69.933 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 333.74 Mbit/s
95th percentile per-packet one-way delay: 64.188 ms
Loss rate: 1.83%
```

Run 1: Report of Indigo-MusesT — Data Link

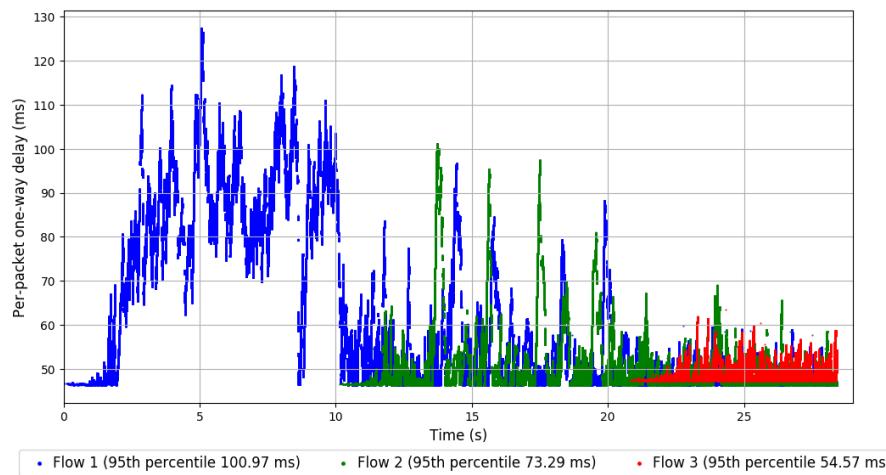
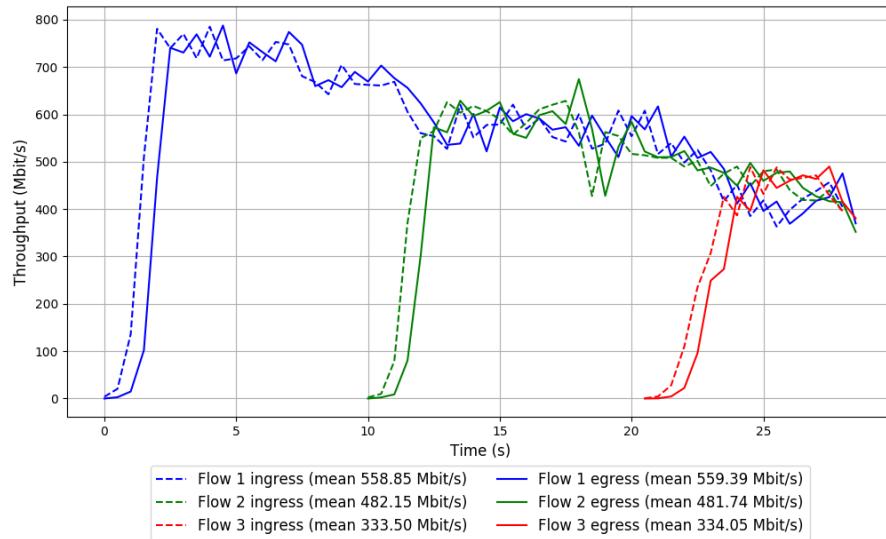


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-19 22:09:15
End at: 2019-01-19 22:09:45
Local clock offset: 0.106 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-01-20 02:42:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 959.01 Mbit/s
95th percentile per-packet one-way delay: 96.387 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 559.39 Mbit/s
95th percentile per-packet one-way delay: 100.967 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 481.74 Mbit/s
95th percentile per-packet one-way delay: 73.287 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 334.05 Mbit/s
95th percentile per-packet one-way delay: 54.567 ms
Loss rate: 1.07%
```

## Run 2: Report of Indigo-MusesT — Data Link

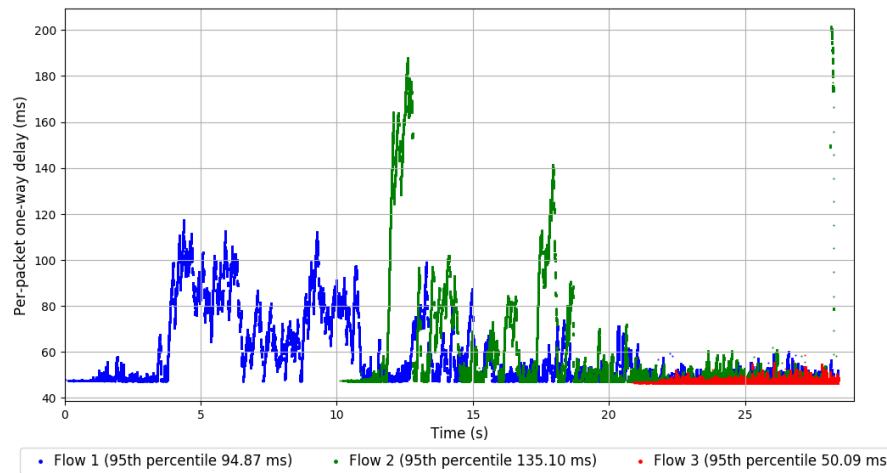
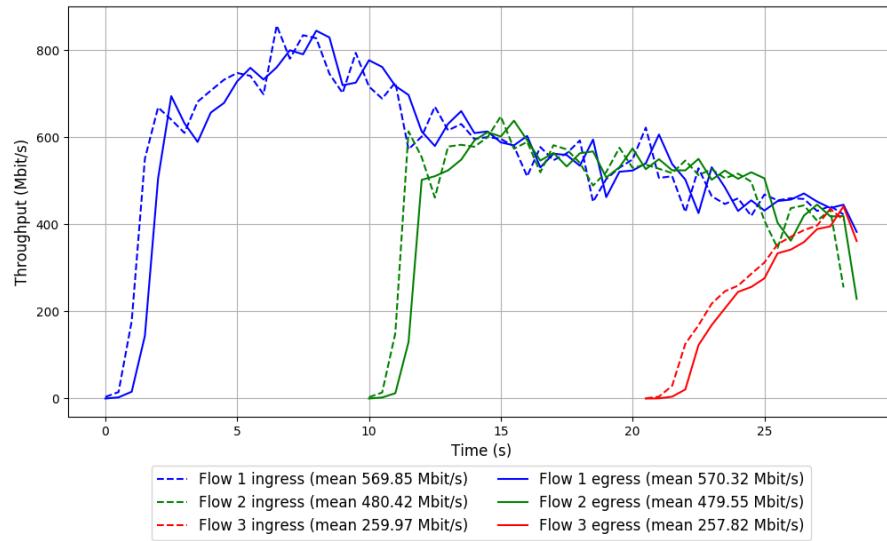


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-19 22:47:18
End at: 2019-01-19 22:47:48
Local clock offset: -0.271 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-01-20 02:42:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 949.14 Mbit/s
95th percentile per-packet one-way delay: 97.623 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 570.32 Mbit/s
95th percentile per-packet one-way delay: 94.874 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 479.55 Mbit/s
95th percentile per-packet one-way delay: 135.096 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 257.82 Mbit/s
95th percentile per-packet one-way delay: 50.090 ms
Loss rate: 2.04%
```

### Run 3: Report of Indigo-MusesT — Data Link

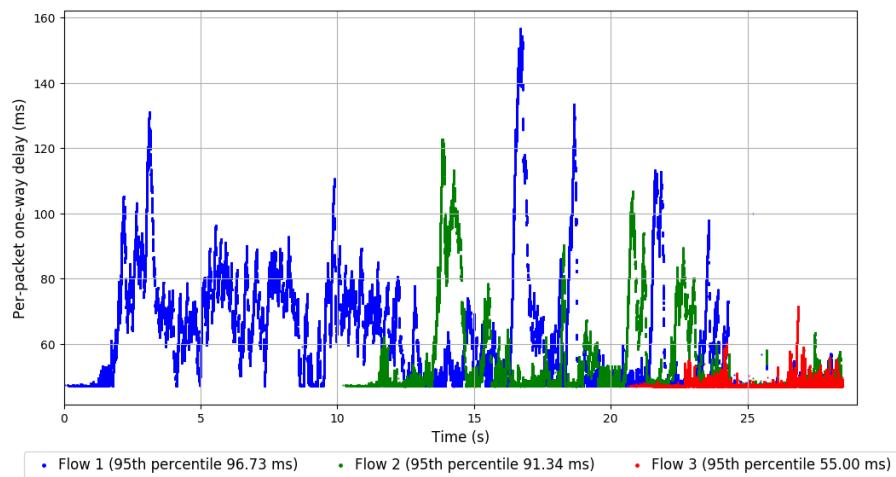
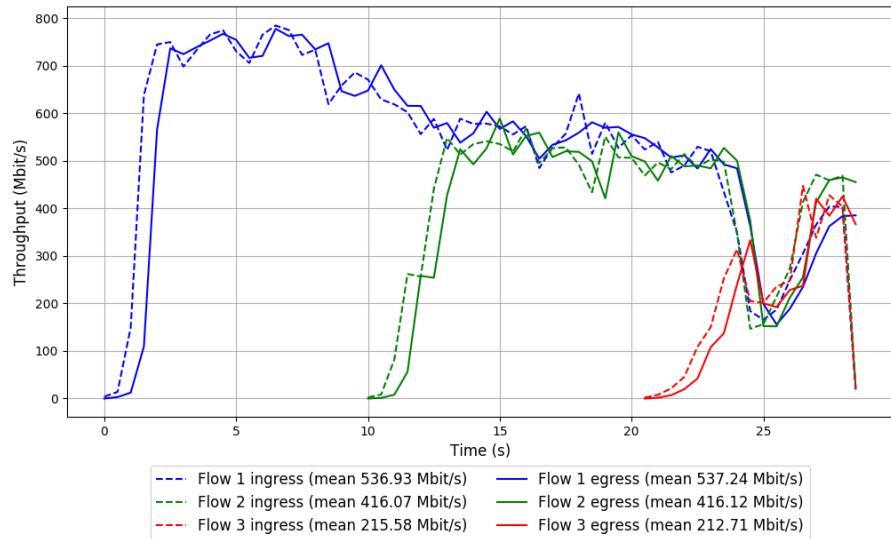


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-19 23:25:27
End at: 2019-01-19 23:25:57
Local clock offset: -0.125 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-01-20 02:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 863.47 Mbit/s
95th percentile per-packet one-way delay: 93.190 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 537.24 Mbit/s
95th percentile per-packet one-way delay: 96.729 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 416.12 Mbit/s
95th percentile per-packet one-way delay: 91.339 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 212.71 Mbit/s
95th percentile per-packet one-way delay: 55.002 ms
Loss rate: 2.51%
```

## Run 4: Report of Indigo-MusesT — Data Link

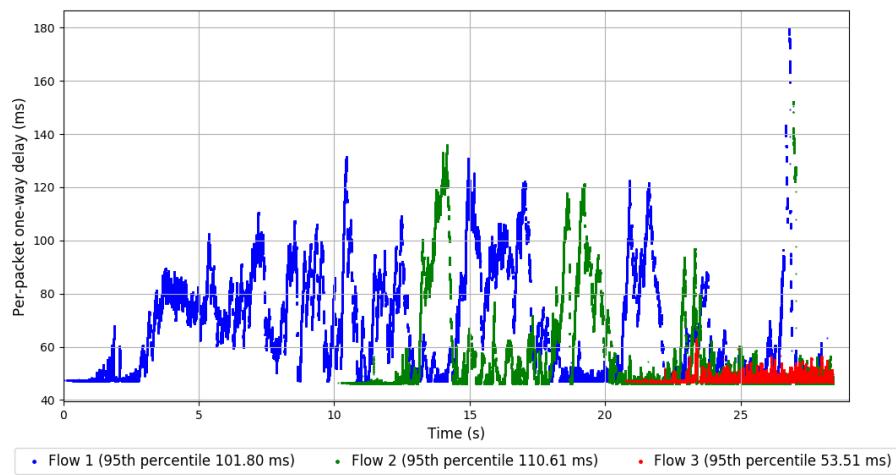
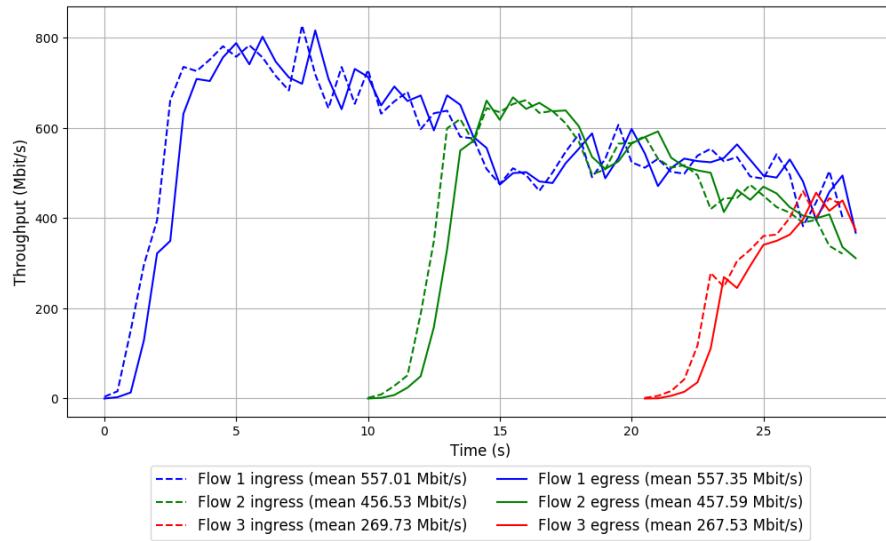


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-20 00:03:30
End at: 2019-01-20 00:04:00
Local clock offset: -0.047 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2019-01-20 02:46:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 924.44 Mbit/s
95th percentile per-packet one-way delay: 102.171 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 557.35 Mbit/s
95th percentile per-packet one-way delay: 101.797 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 457.59 Mbit/s
95th percentile per-packet one-way delay: 110.614 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 267.53 Mbit/s
95th percentile per-packet one-way delay: 53.514 ms
Loss rate: 2.17%
```

Run 5: Report of Indigo-MusesT — Data Link

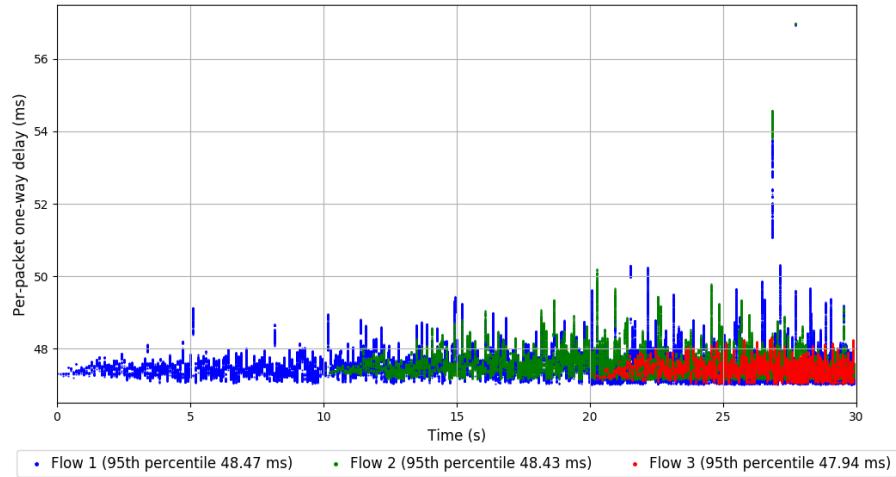
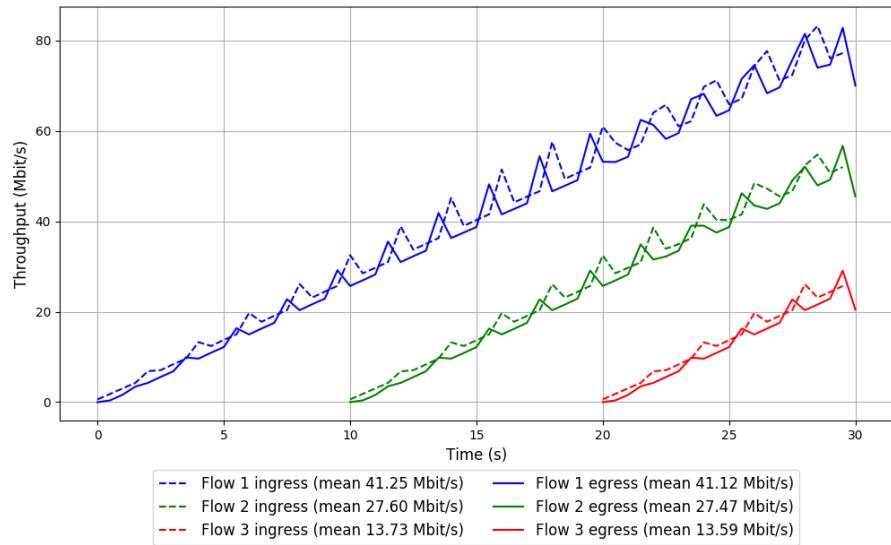


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-19 21:22:01
End at: 2019-01-19 21:22:31
Local clock offset: 0.232 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-01-20 02:46:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.84 Mbit/s
95th percentile per-packet one-way delay: 48.430 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 41.12 Mbit/s
95th percentile per-packet one-way delay: 48.465 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 27.47 Mbit/s
95th percentile per-packet one-way delay: 48.426 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 47.940 ms
Loss rate: 1.92%
```

Run 1: Report of LEDBAT — Data Link

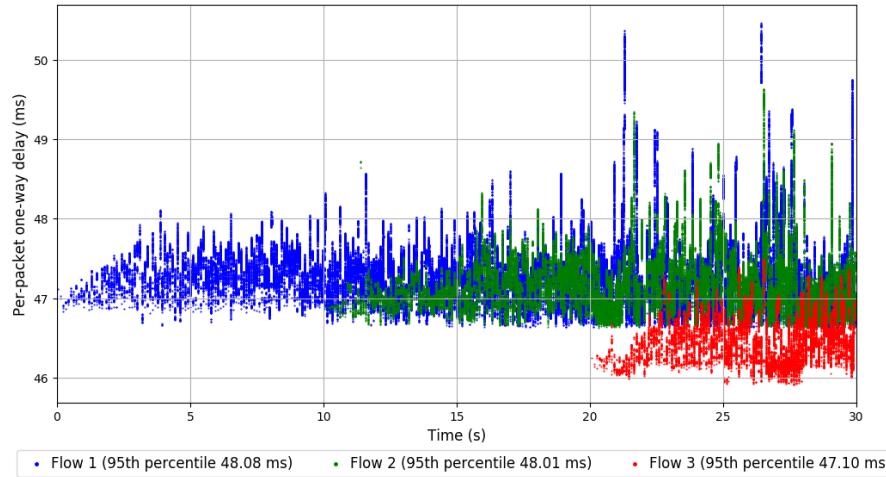
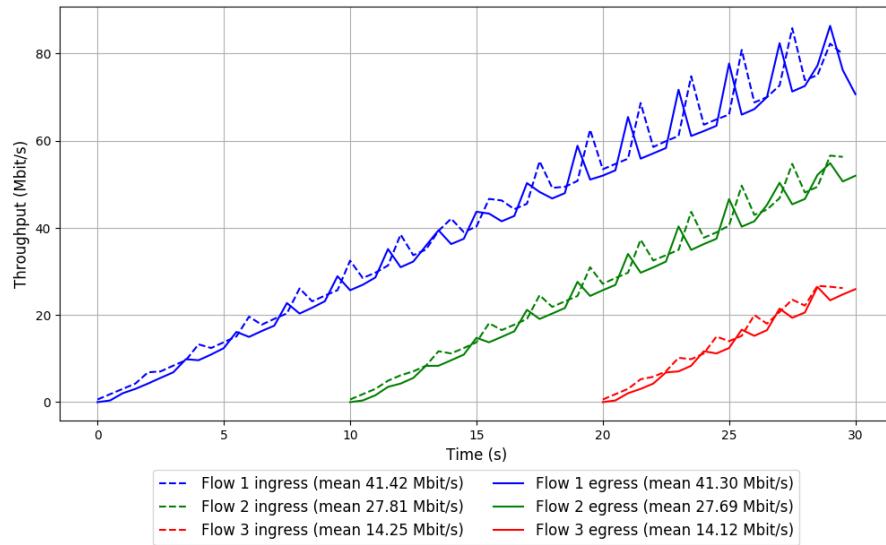


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-19 21:58:59
End at: 2019-01-19 21:59:29
Local clock offset: -0.067 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2019-01-20 02:46:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.36 Mbit/s
95th percentile per-packet one-way delay: 48.019 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 41.30 Mbit/s
95th percentile per-packet one-way delay: 48.076 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 27.69 Mbit/s
95th percentile per-packet one-way delay: 48.010 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 14.12 Mbit/s
95th percentile per-packet one-way delay: 47.097 ms
Loss rate: 1.89%
```

Run 2: Report of LEDBAT — Data Link

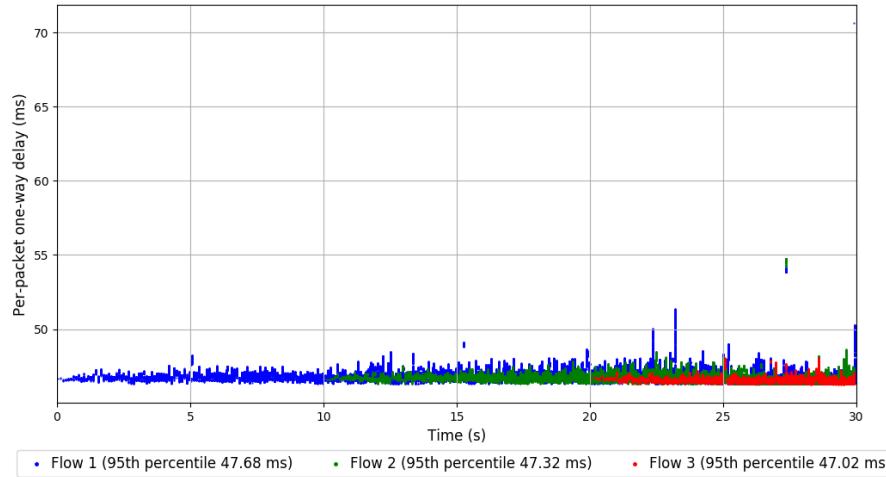
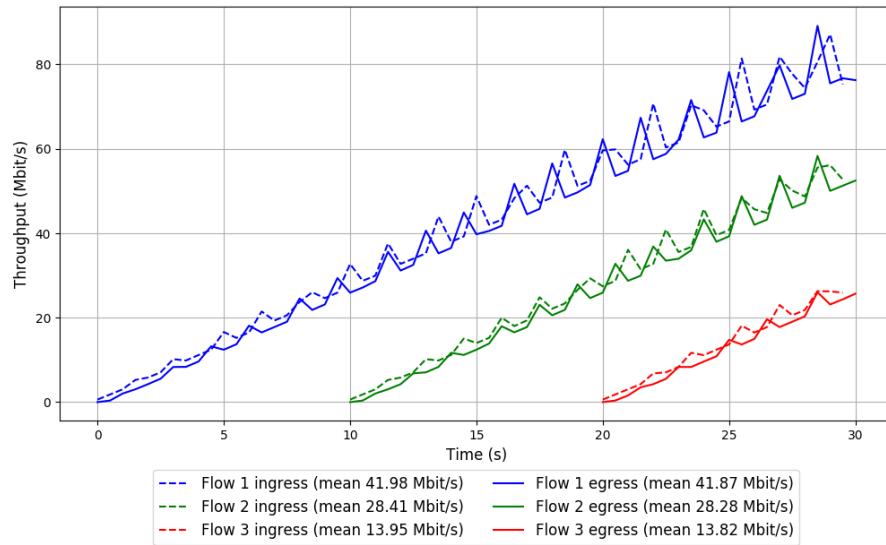


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-19 22:37:17
End at: 2019-01-19 22:37:47
Local clock offset: -0.228 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-01-20 02:46:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.20 Mbit/s
95th percentile per-packet one-way delay: 47.588 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 41.87 Mbit/s
95th percentile per-packet one-way delay: 47.676 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 28.28 Mbit/s
95th percentile per-packet one-way delay: 47.323 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 13.82 Mbit/s
95th percentile per-packet one-way delay: 47.022 ms
Loss rate: 1.91%
```

Run 3: Report of LEDBAT — Data Link

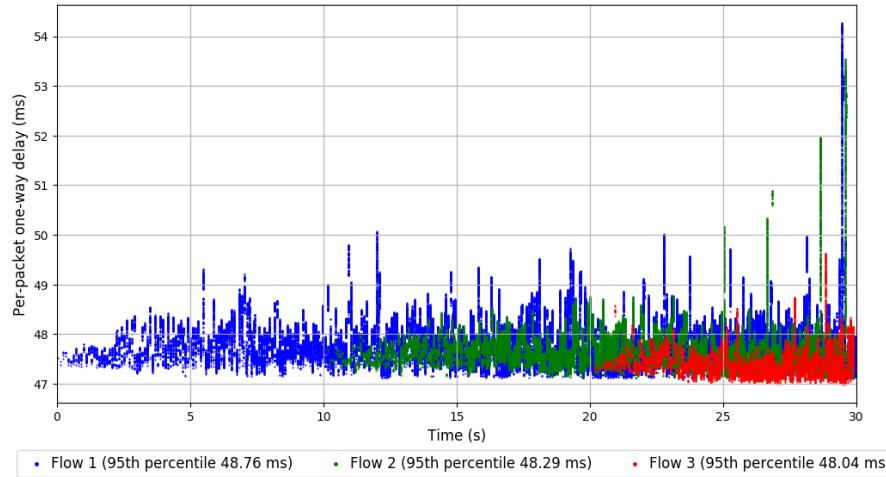
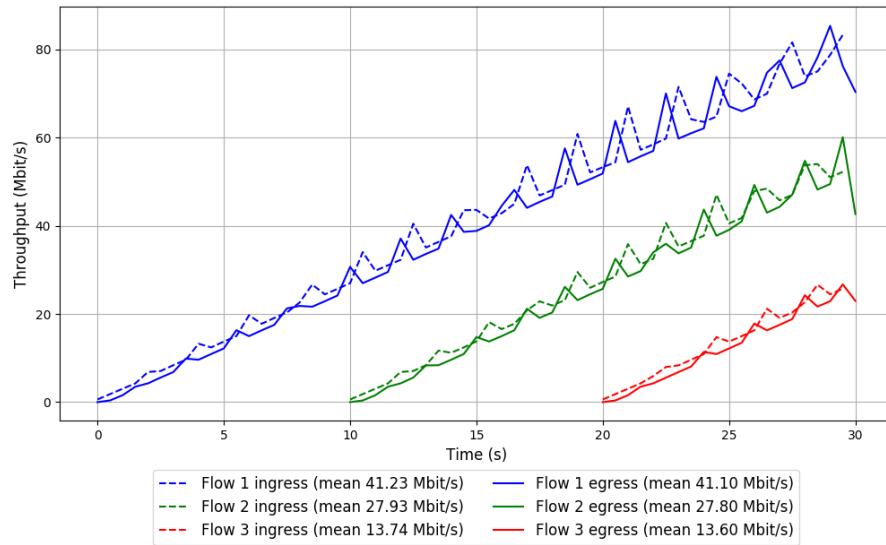


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-19 23:15:51
End at: 2019-01-19 23:16:21
Local clock offset: -0.258 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-01-20 02:46:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.01 Mbit/s
95th percentile per-packet one-way delay: 48.611 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 41.10 Mbit/s
95th percentile per-packet one-way delay: 48.755 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 27.80 Mbit/s
95th percentile per-packet one-way delay: 48.290 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 13.60 Mbit/s
95th percentile per-packet one-way delay: 48.041 ms
Loss rate: 1.92%
```

Run 4: Report of LEDBAT — Data Link

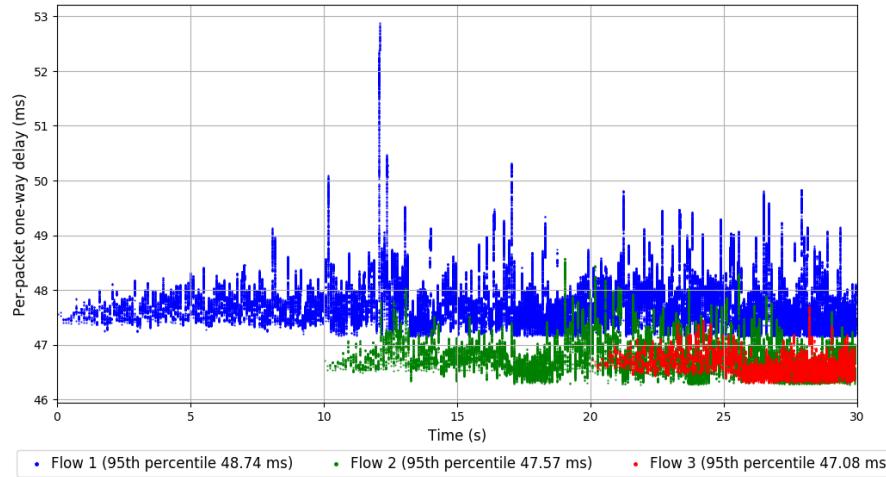
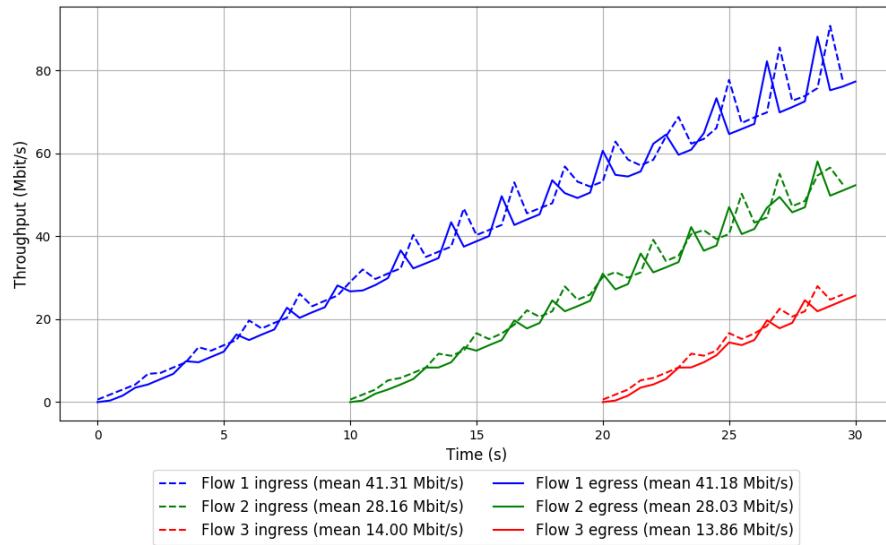


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-19 23:53:22
End at: 2019-01-19 23:53:52
Local clock offset: -0.026 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2019-01-20 02:46:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.37 Mbit/s
95th percentile per-packet one-way delay: 48.515 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 41.18 Mbit/s
95th percentile per-packet one-way delay: 48.739 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 28.03 Mbit/s
95th percentile per-packet one-way delay: 47.567 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 47.075 ms
Loss rate: 1.91%
```

Run 5: Report of LEDBAT — Data Link

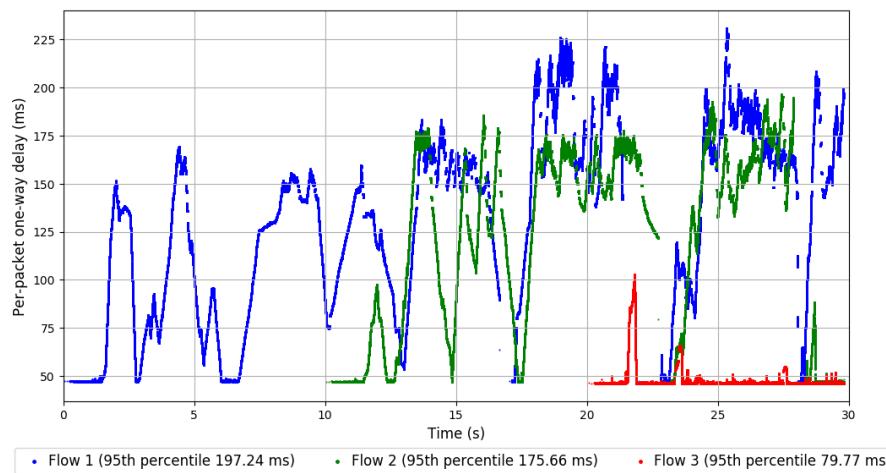
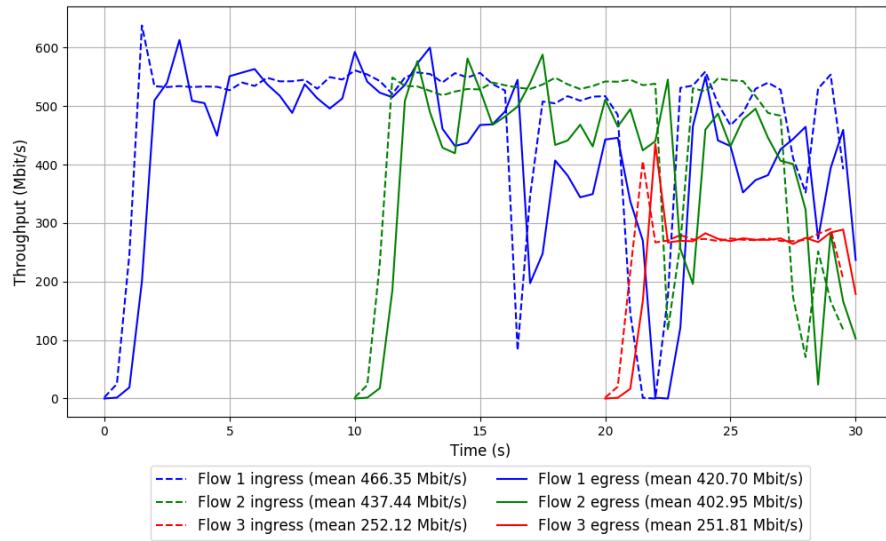


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-19 21:34:47
End at: 2019-01-19 21:35:17
Local clock offset: 0.248 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2019-01-20 03:06:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 770.41 Mbit/s
95th percentile per-packet one-way delay: 187.163 ms
Loss rate: 8.58%
-- Flow 1:
Average throughput: 420.70 Mbit/s
95th percentile per-packet one-way delay: 197.237 ms
Loss rate: 10.08%
-- Flow 2:
Average throughput: 402.95 Mbit/s
95th percentile per-packet one-way delay: 175.663 ms
Loss rate: 8.32%
-- Flow 3:
Average throughput: 251.81 Mbit/s
95th percentile per-packet one-way delay: 79.766 ms
Loss rate: 1.08%
```

Run 1: Report of PCC-Allegro — Data Link

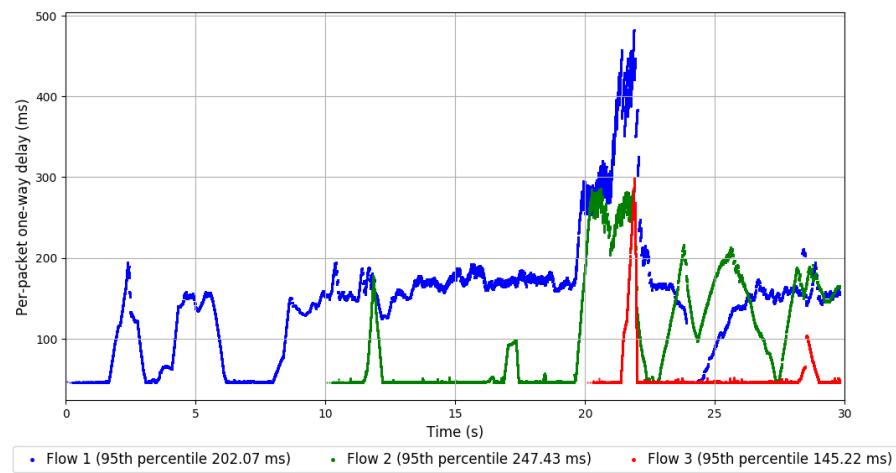
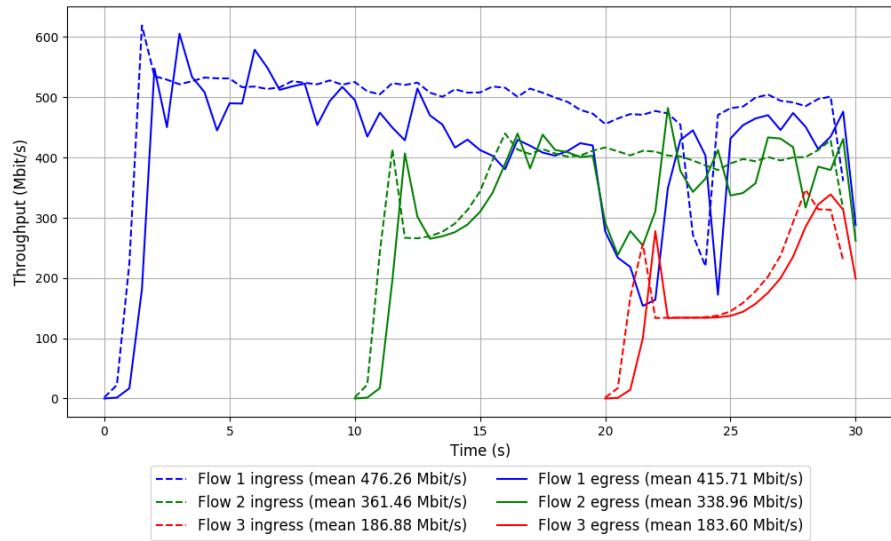


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-19 22:12:24
End at: 2019-01-19 22:12:54
Local clock offset: -0.349 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-01-20 03:06:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 700.68 Mbit/s
95th percentile per-packet one-way delay: 213.727 ms
Loss rate: 10.22%
-- Flow 1:
Average throughput: 415.71 Mbit/s
95th percentile per-packet one-way delay: 202.075 ms
Loss rate: 12.99%
-- Flow 2:
Average throughput: 338.96 Mbit/s
95th percentile per-packet one-way delay: 247.430 ms
Loss rate: 6.66%
-- Flow 3:
Average throughput: 183.60 Mbit/s
95th percentile per-packet one-way delay: 145.224 ms
Loss rate: 2.67%
```

## Run 2: Report of PCC-Allegro — Data Link

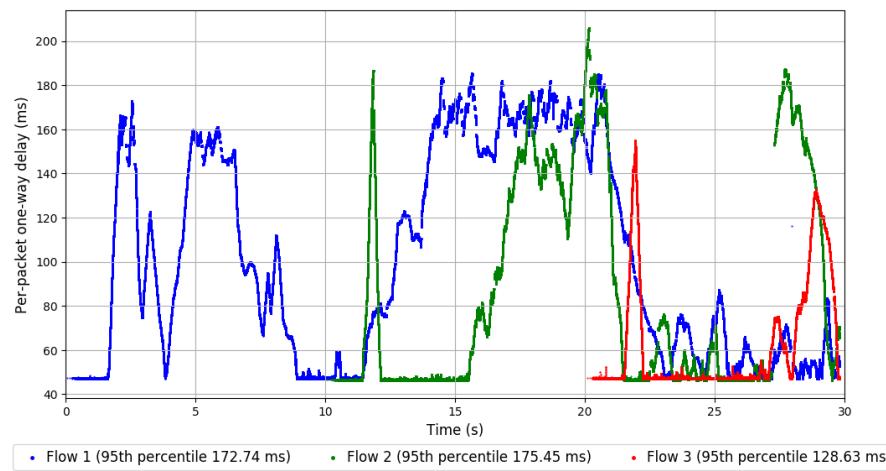
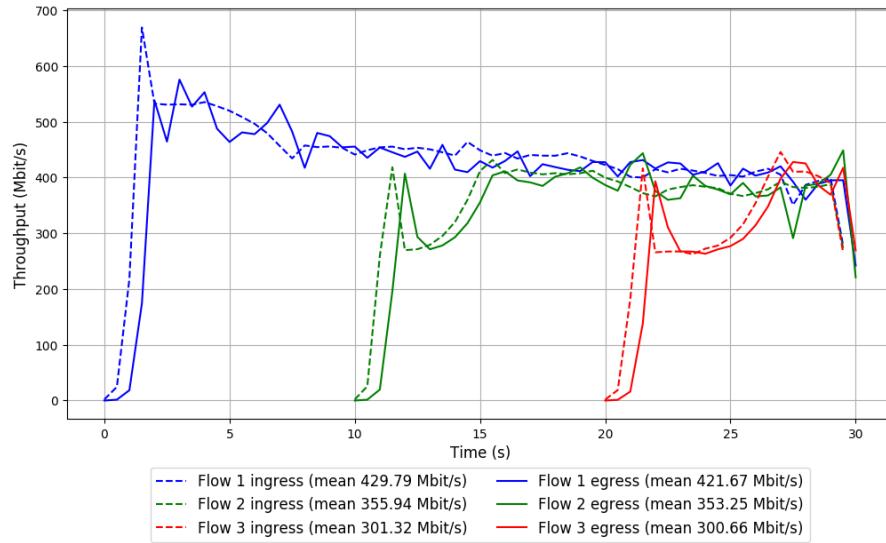


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-19 22:50:32
End at: 2019-01-19 22:51:02
Local clock offset: -0.306 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-01-20 03:06:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 754.42 Mbit/s
95th percentile per-packet one-way delay: 171.821 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 421.67 Mbit/s
95th percentile per-packet one-way delay: 172.735 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 353.25 Mbit/s
95th percentile per-packet one-way delay: 175.452 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 300.66 Mbit/s
95th percentile per-packet one-way delay: 128.634 ms
Loss rate: 1.19%
```

### Run 3: Report of PCC-Allegro — Data Link

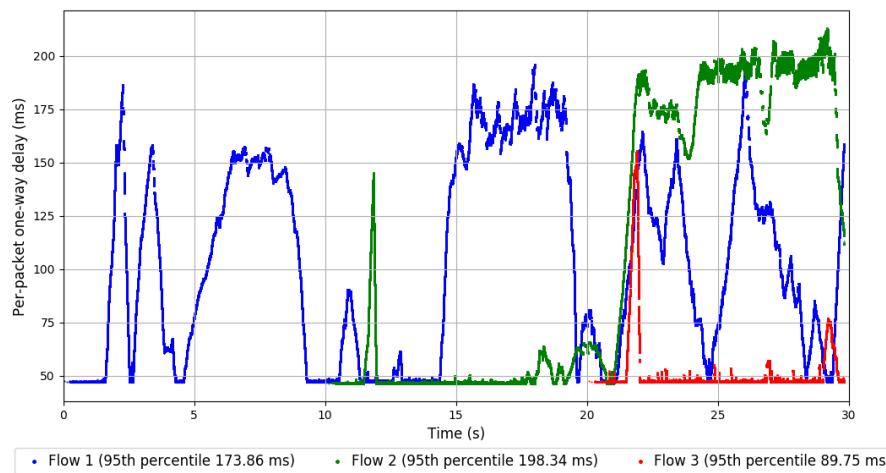
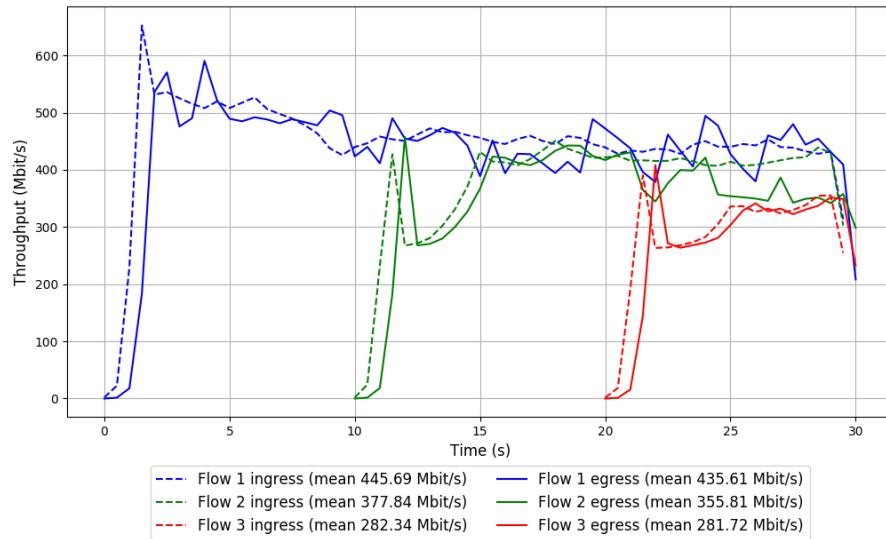


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-19 23:28:35
End at: 2019-01-19 23:29:05
Local clock offset: -0.068 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-01-20 03:12:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 763.82 Mbit/s
95th percentile per-packet one-way delay: 192.517 ms
Loss rate: 3.57%
-- Flow 1:
Average throughput: 435.61 Mbit/s
95th percentile per-packet one-way delay: 173.863 ms
Loss rate: 2.56%
-- Flow 2:
Average throughput: 355.81 Mbit/s
95th percentile per-packet one-way delay: 198.342 ms
Loss rate: 6.26%
-- Flow 3:
Average throughput: 281.72 Mbit/s
95th percentile per-packet one-way delay: 89.755 ms
Loss rate: 1.15%
```

Run 4: Report of PCC-Allegro — Data Link

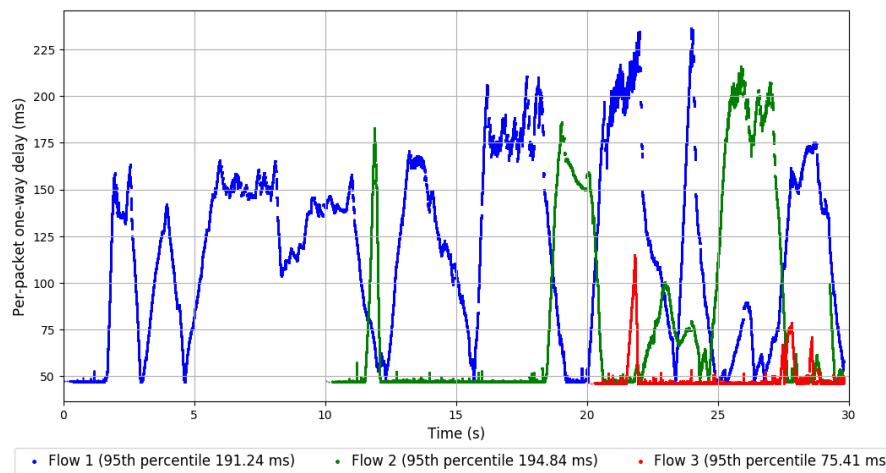
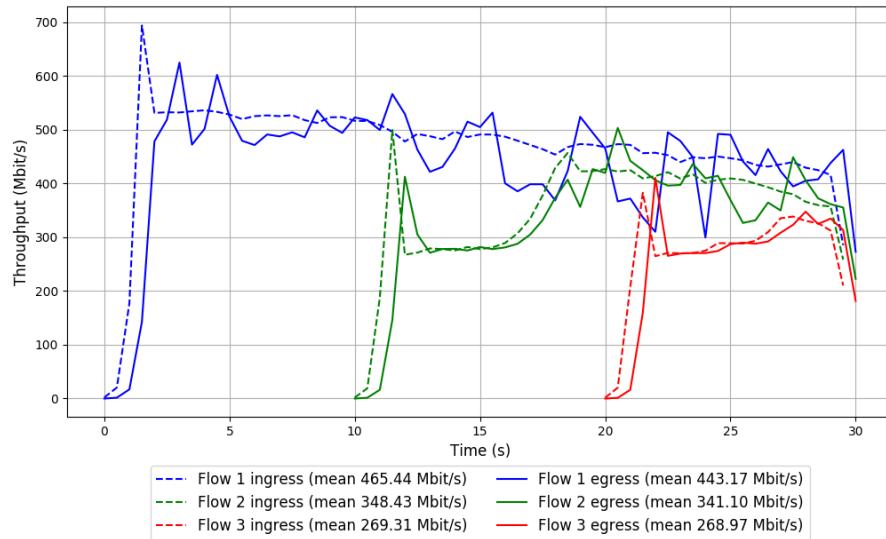


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-20 00:06:41
End at: 2019-01-20 00:07:11
Local clock offset: -0.024 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-01-20 03:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 757.41 Mbit/s
95th percentile per-packet one-way delay: 189.457 ms
Loss rate: 3.89%
-- Flow 1:
Average throughput: 443.17 Mbit/s
95th percentile per-packet one-way delay: 191.235 ms
Loss rate: 5.08%
-- Flow 2:
Average throughput: 341.10 Mbit/s
95th percentile per-packet one-way delay: 194.845 ms
Loss rate: 2.57%
-- Flow 3:
Average throughput: 268.97 Mbit/s
95th percentile per-packet one-way delay: 75.412 ms
Loss rate: 1.08%
```

Run 5: Report of PCC-Allegro — Data Link

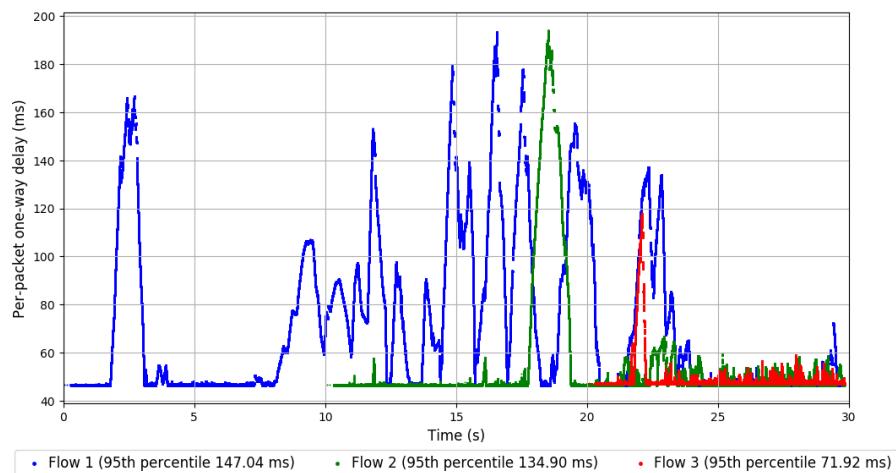
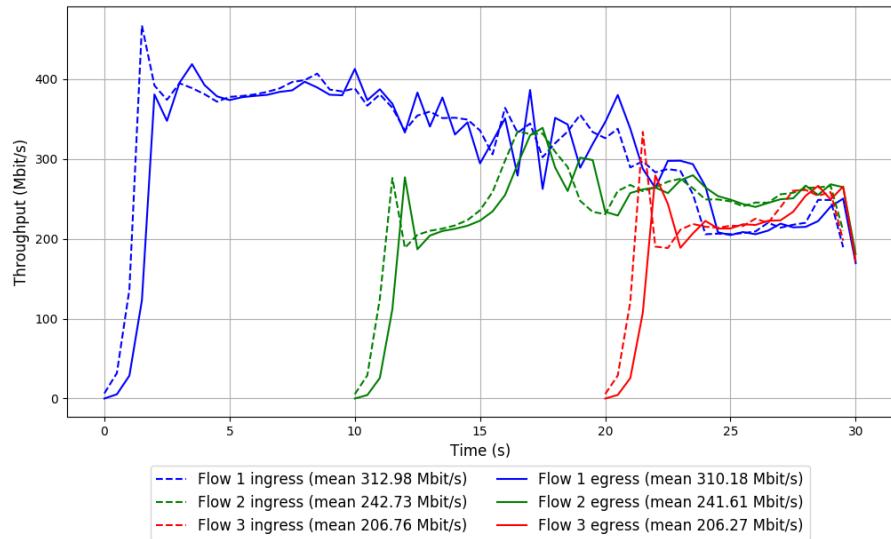


Run 1: Statistics of PCC-Expr

```
Start at: 2019-01-19 21:25:15
End at: 2019-01-19 21:25:45
Local clock offset: 0.276 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2019-01-20 03:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 538.13 Mbit/s
95th percentile per-packet one-way delay: 140.018 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 310.18 Mbit/s
95th percentile per-packet one-way delay: 147.037 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 241.61 Mbit/s
95th percentile per-packet one-way delay: 134.903 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 206.27 Mbit/s
95th percentile per-packet one-way delay: 71.917 ms
Loss rate: 1.20%
```

Run 1: Report of PCC-Expr — Data Link

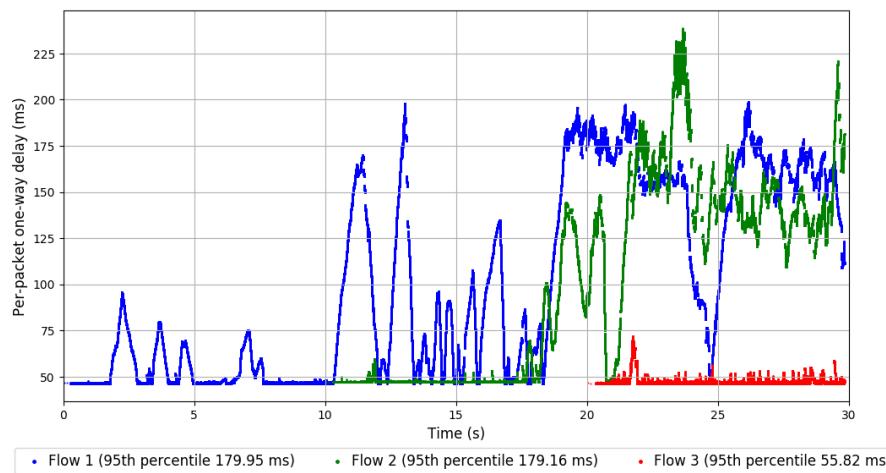
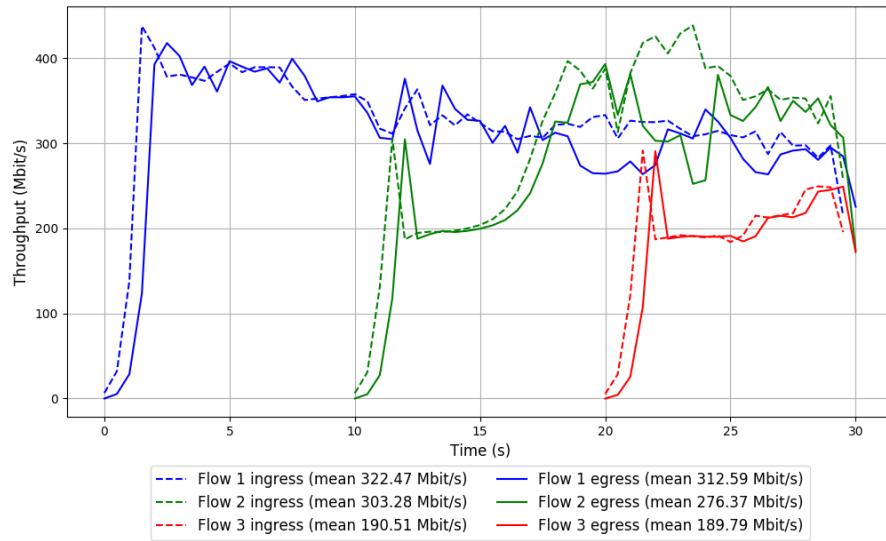


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-19 22:02:21
End at: 2019-01-19 22:02:51
Local clock offset: 0.285 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-01-20 03:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.44 Mbit/s
95th percentile per-packet one-way delay: 178.558 ms
Loss rate: 5.19%
-- Flow 1:
Average throughput: 312.59 Mbit/s
95th percentile per-packet one-way delay: 179.947 ms
Loss rate: 3.37%
-- Flow 2:
Average throughput: 276.37 Mbit/s
95th percentile per-packet one-way delay: 179.157 ms
Loss rate: 9.31%
-- Flow 3:
Average throughput: 189.79 Mbit/s
95th percentile per-packet one-way delay: 55.820 ms
Loss rate: 1.34%
```

Run 2: Report of PCC-Expr — Data Link

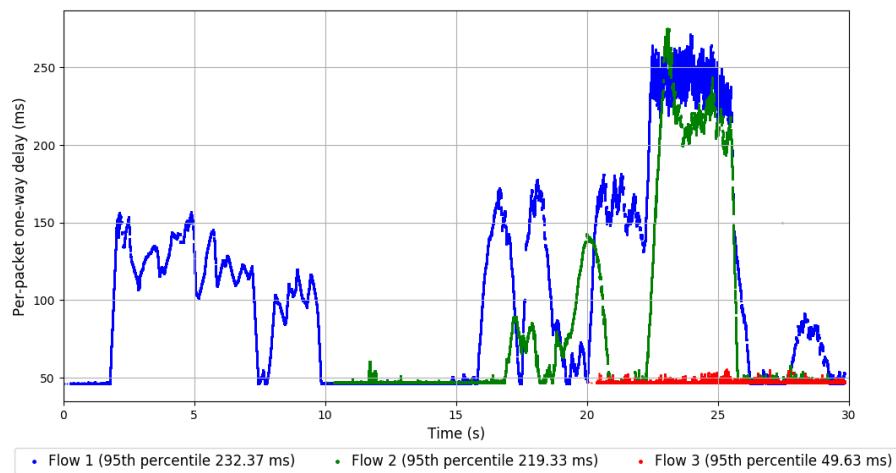
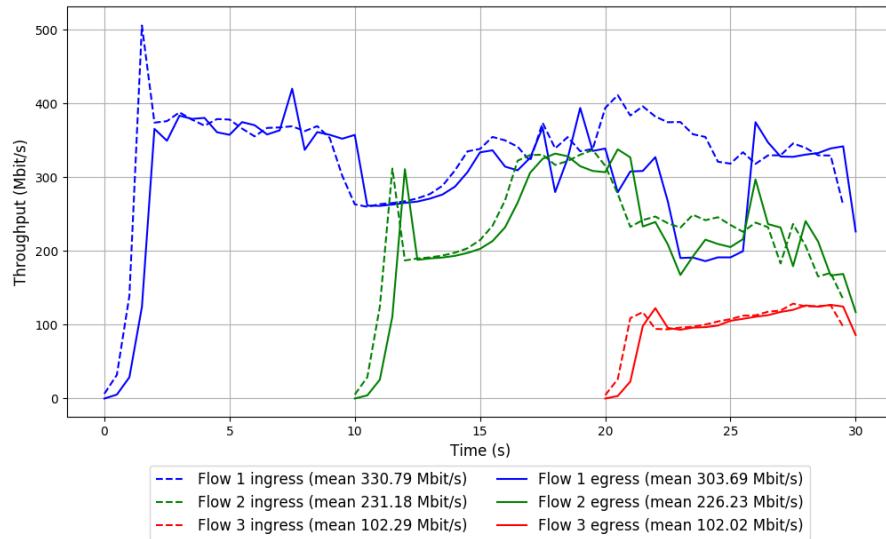


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-19 22:40:37
End at: 2019-01-19 22:41:07
Local clock offset: -0.297 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-01-20 03:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 487.31 Mbit/s
95th percentile per-packet one-way delay: 223.343 ms
Loss rate: 6.27%
-- Flow 1:
Average throughput: 303.69 Mbit/s
95th percentile per-packet one-way delay: 232.366 ms
Loss rate: 8.48%
-- Flow 2:
Average throughput: 226.23 Mbit/s
95th percentile per-packet one-way delay: 219.328 ms
Loss rate: 2.61%
-- Flow 3:
Average throughput: 102.02 Mbit/s
95th percentile per-packet one-way delay: 49.630 ms
Loss rate: 1.23%
```

Run 3: Report of PCC-Expr — Data Link

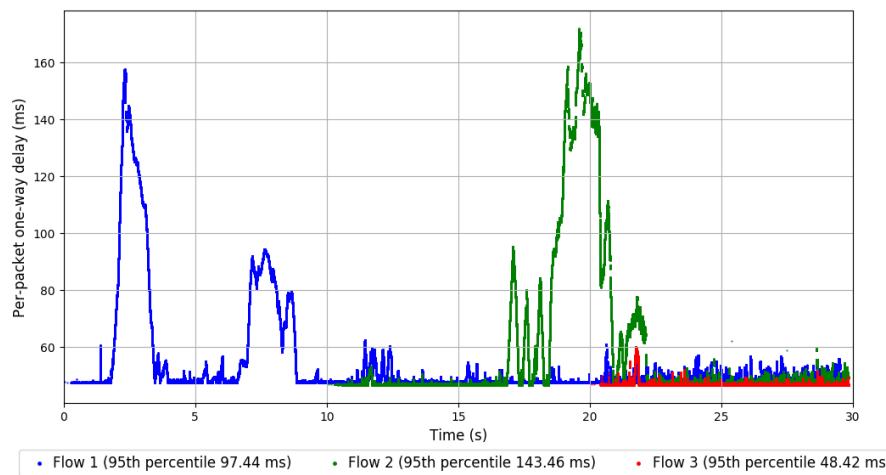
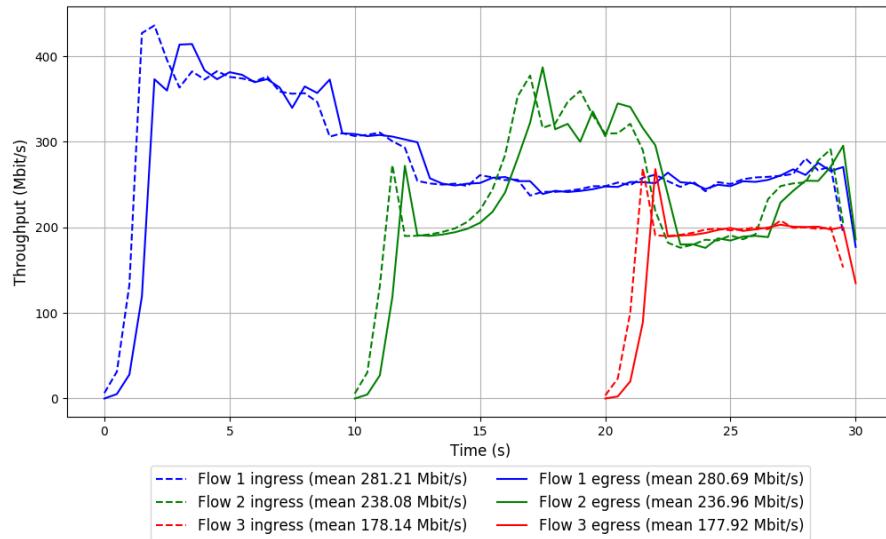


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-19 23:18:59
End at: 2019-01-19 23:19:29
Local clock offset: 0.165 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-01-20 03:21:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.18 Mbit/s
95th percentile per-packet one-way delay: 117.829 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 280.69 Mbit/s
95th percentile per-packet one-way delay: 97.439 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 236.96 Mbit/s
95th percentile per-packet one-way delay: 143.458 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 177.92 Mbit/s
95th percentile per-packet one-way delay: 48.417 ms
Loss rate: 1.07%
```

Run 4: Report of PCC-Expr — Data Link

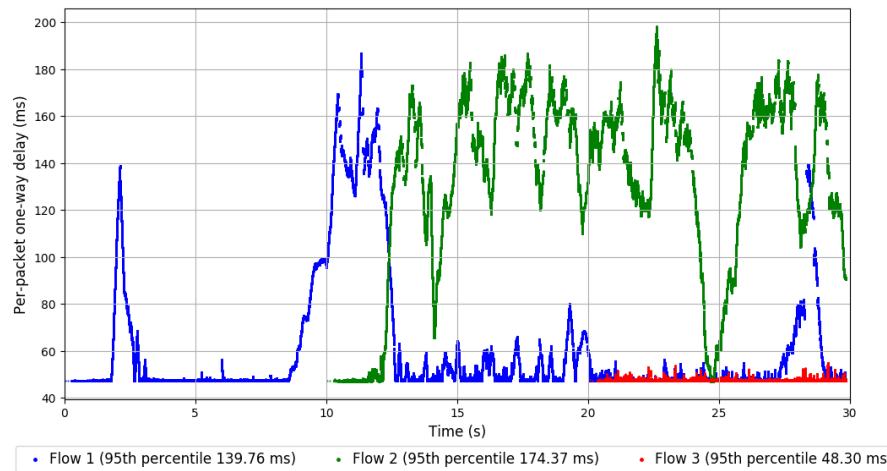
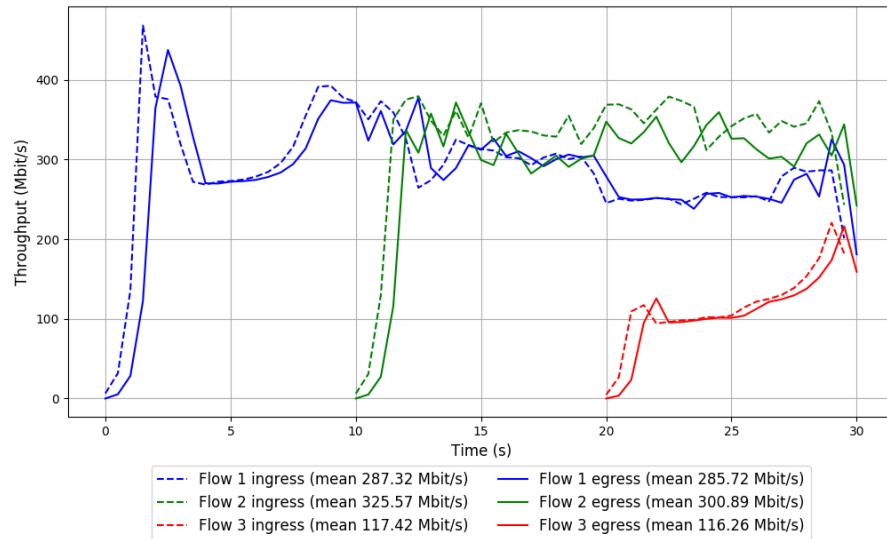


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-19 23:56:36
End at: 2019-01-19 23:57:06
Local clock offset: -0.002 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 523.63 Mbit/s
95th percentile per-packet one-way delay: 168.507 ms
Loss rate: 3.80%
-- Flow 1:
Average throughput: 285.72 Mbit/s
95th percentile per-packet one-way delay: 139.756 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 300.89 Mbit/s
95th percentile per-packet one-way delay: 174.368 ms
Loss rate: 8.02%
-- Flow 3:
Average throughput: 116.26 Mbit/s
95th percentile per-packet one-way delay: 48.301 ms
Loss rate: 1.95%
```

Run 5: Report of PCC-Expr — Data Link

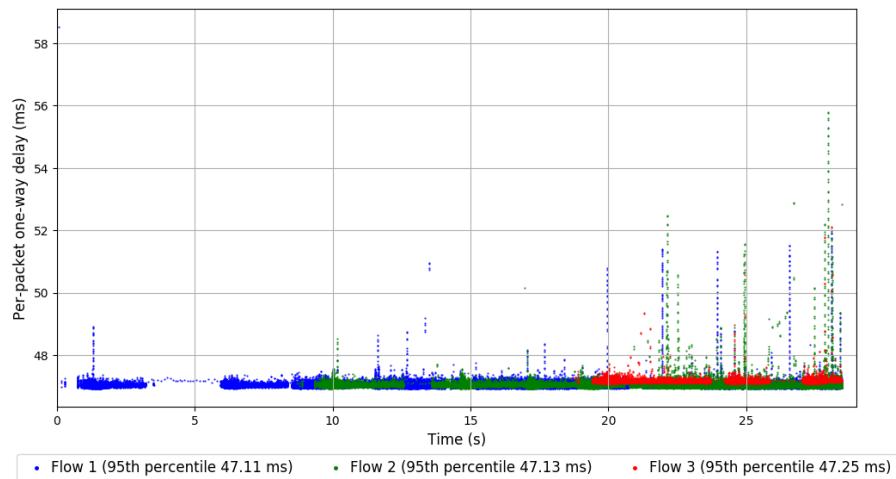
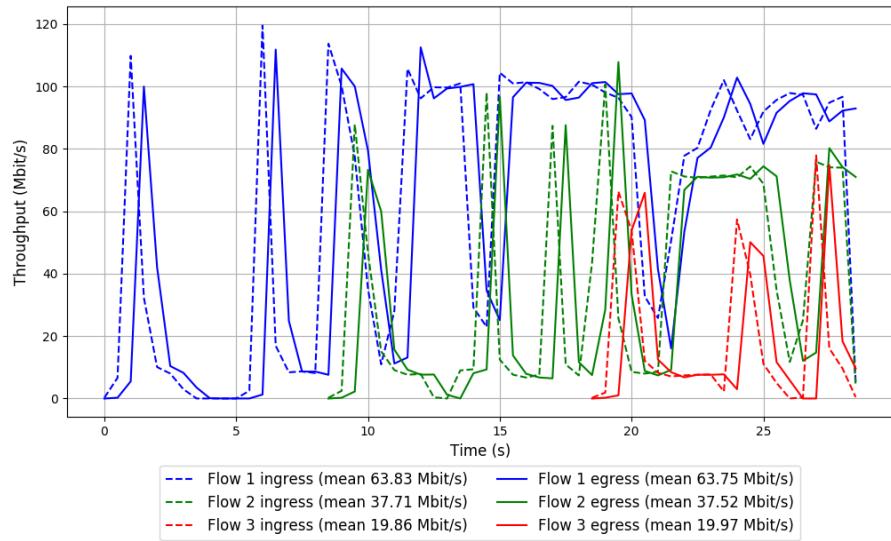


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-01-19 21:27:16
End at: 2019-01-19 21:27:46
Local clock offset: 0.217 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.74 Mbit/s
95th percentile per-packet one-way delay: 47.157 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 63.75 Mbit/s
95th percentile per-packet one-way delay: 47.107 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: 47.135 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 19.97 Mbit/s
95th percentile per-packet one-way delay: 47.246 ms
Loss rate: 0.40%
```

Run 1: Report of QUIC Cubic — Data Link

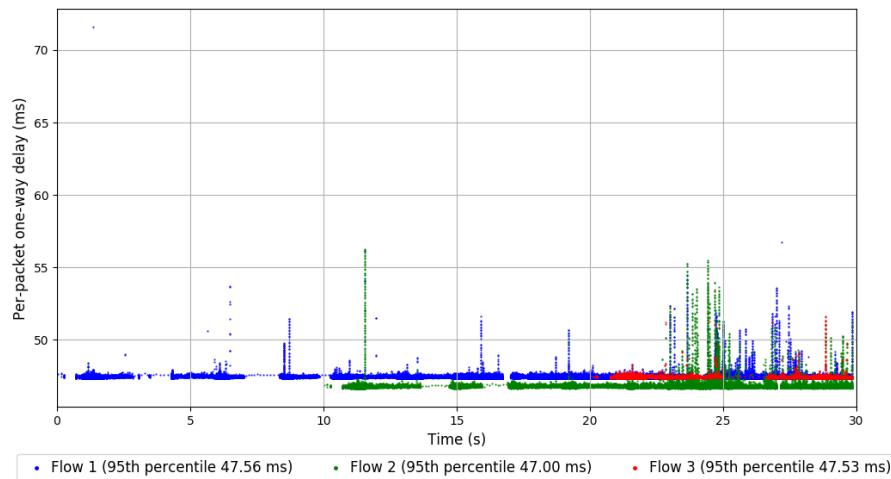
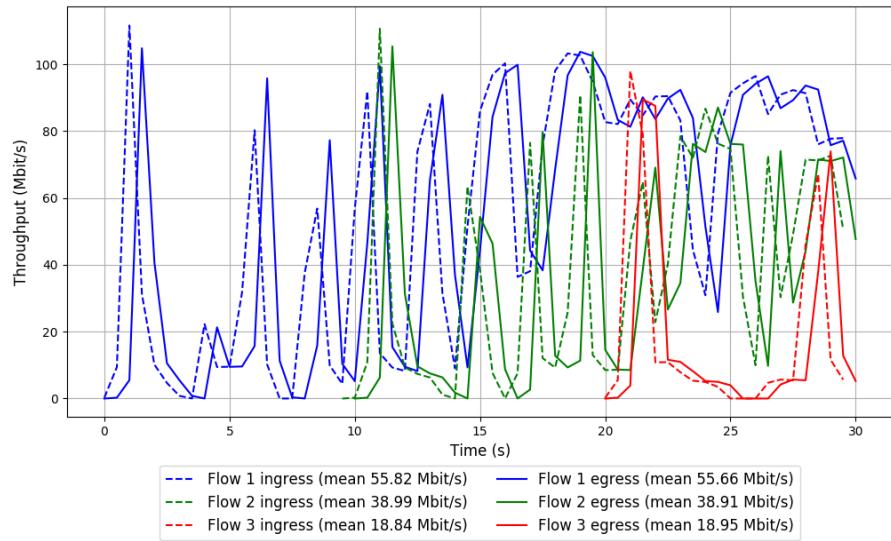


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-19 22:04:37
End at: 2019-01-19 22:05:07
Local clock offset: 0.598 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.75 Mbit/s
95th percentile per-packet one-way delay: 47.543 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 55.66 Mbit/s
95th percentile per-packet one-way delay: 47.560 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 47.004 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 18.95 Mbit/s
95th percentile per-packet one-way delay: 47.532 ms
Loss rate: 0.33%
```

Run 2: Report of QUIC Cubic — Data Link

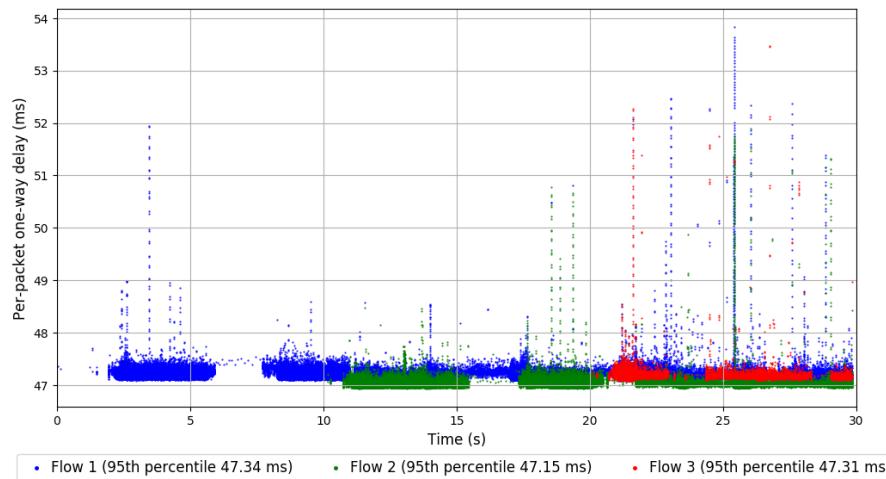
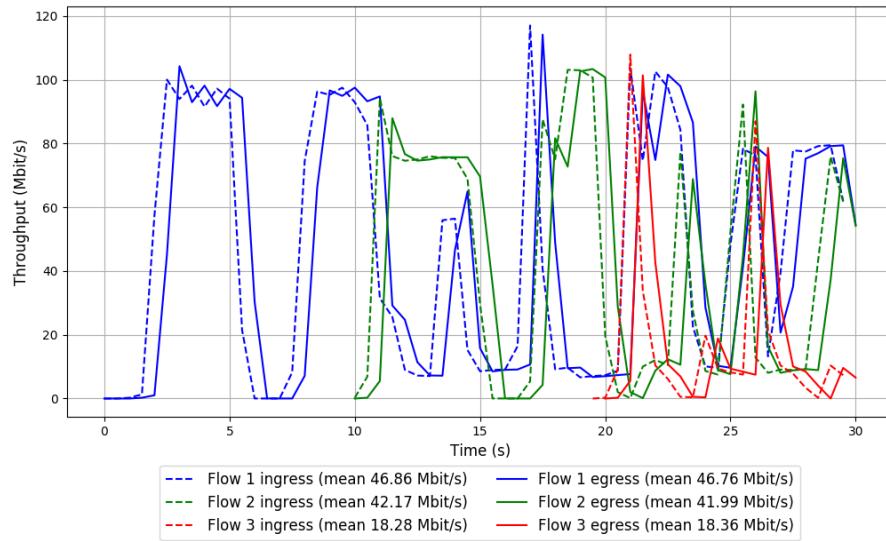


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-19 22:42:43
End at: 2019-01-19 22:43:13
Local clock offset: -0.288 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.68 Mbit/s
95th percentile per-packet one-way delay: 47.315 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 46.76 Mbit/s
95th percentile per-packet one-way delay: 47.341 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 41.99 Mbit/s
95th percentile per-packet one-way delay: 47.147 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 18.36 Mbit/s
95th percentile per-packet one-way delay: 47.307 ms
Loss rate: 0.48%
```

Run 3: Report of QUIC Cubic — Data Link

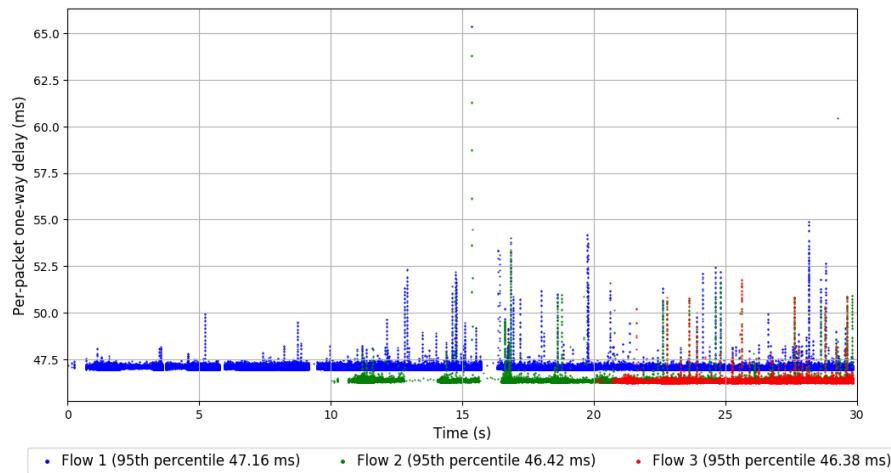
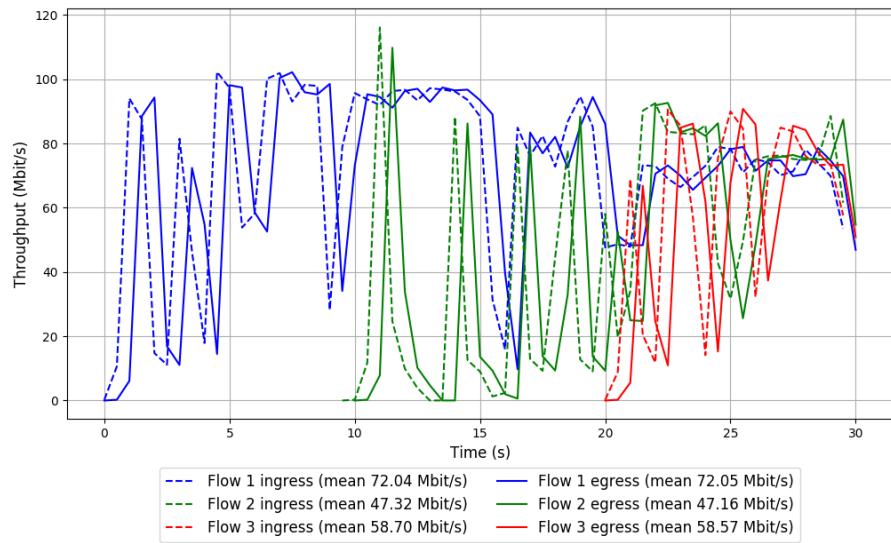


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-19 23:21:01
End at: 2019-01-19 23:21:31
Local clock offset: -0.202 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.60 Mbit/s
95th percentile per-packet one-way delay: 47.126 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 72.05 Mbit/s
95th percentile per-packet one-way delay: 47.158 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 47.16 Mbit/s
95th percentile per-packet one-way delay: 46.423 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 58.57 Mbit/s
95th percentile per-packet one-way delay: 46.380 ms
Loss rate: 1.17%
```

Run 4: Report of QUIC Cubic — Data Link

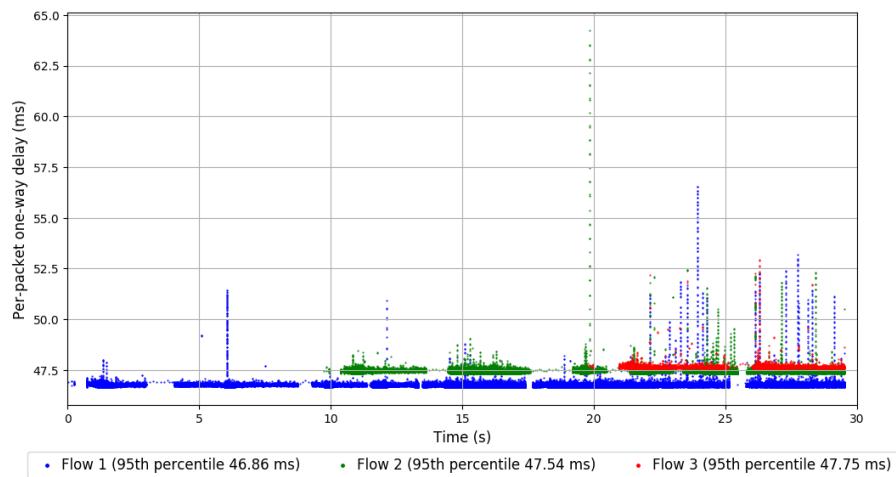
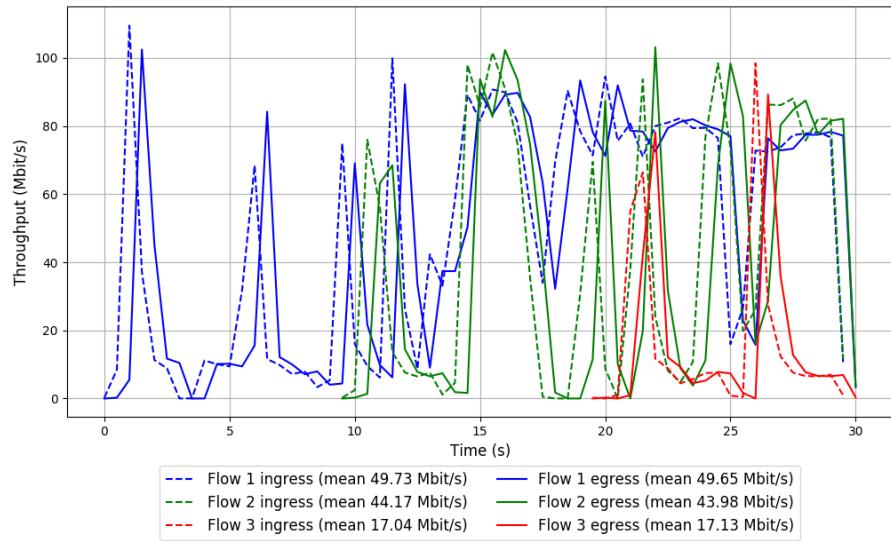


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-19 23:58:57
End at: 2019-01-19 23:59:27
Local clock offset: 0.362 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.88 Mbit/s
95th percentile per-packet one-way delay: 47.616 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 49.65 Mbit/s
95th percentile per-packet one-way delay: 46.856 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 43.98 Mbit/s
95th percentile per-packet one-way delay: 47.540 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 17.13 Mbit/s
95th percentile per-packet one-way delay: 47.752 ms
Loss rate: 0.39%
```

Run 5: Report of QUIC Cubic — Data Link

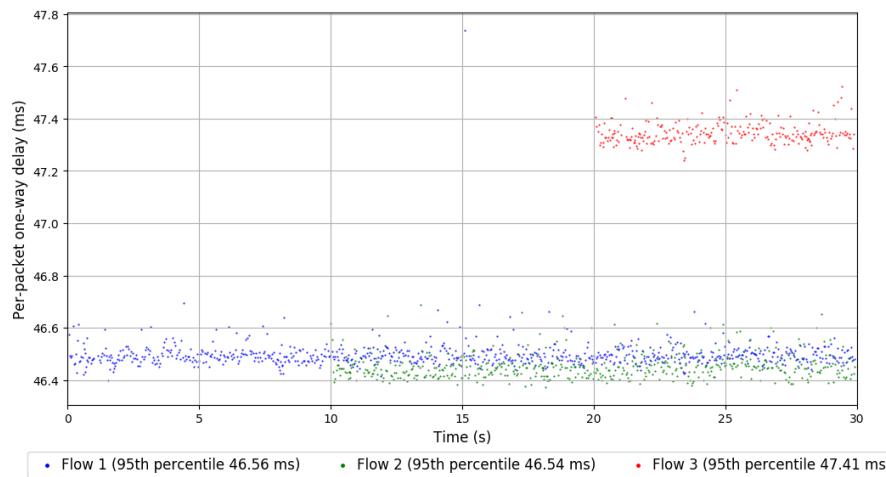
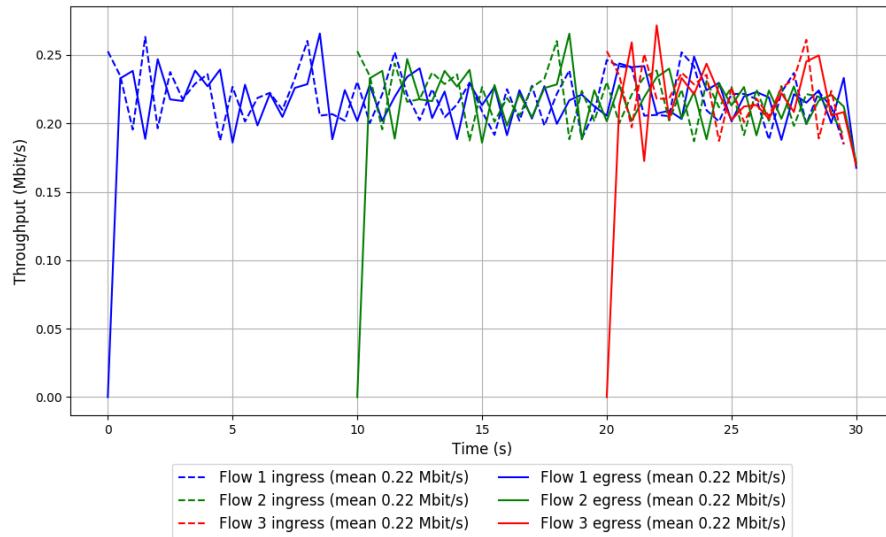


```
Run 1: Statistics of SCReAM

Start at: 2019-01-19 21:33:36
End at: 2019-01-19 21:34:06
Local clock offset: 0.2 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.355 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.561 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.543 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.414 ms
Loss rate: 1.09%
```

Run 1: Report of SCReAM — Data Link

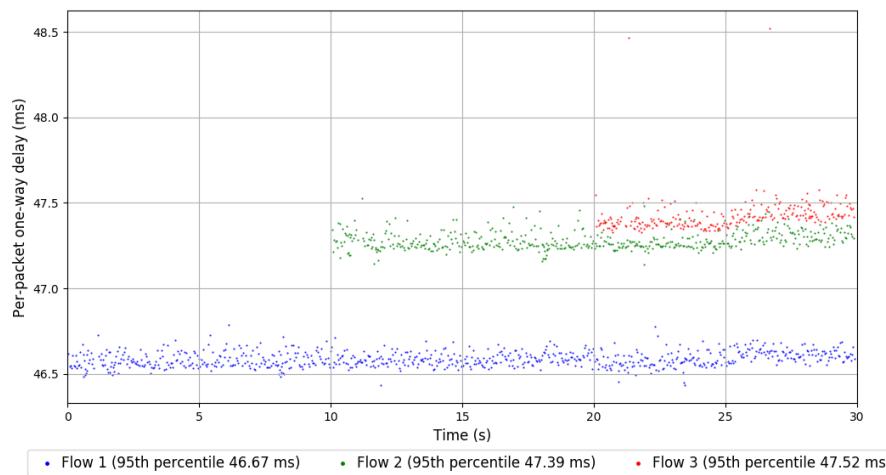
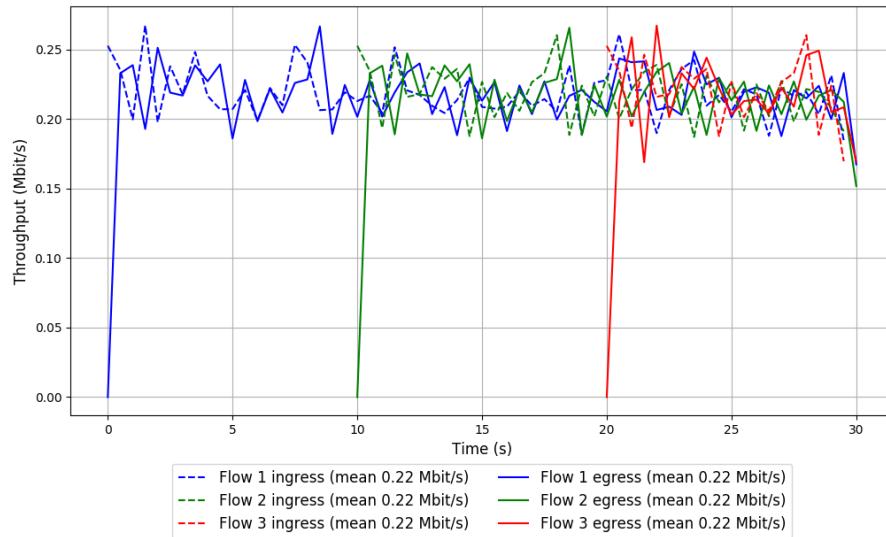


Run 2: Statistics of SCReAM

```
Start at: 2019-01-19 22:11:13
End at: 2019-01-19 22:11:43
Local clock offset: 0.01 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.444 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.667 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.387 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.521 ms
Loss rate: 0.74%
```

## Run 2: Report of SCReAM — Data Link

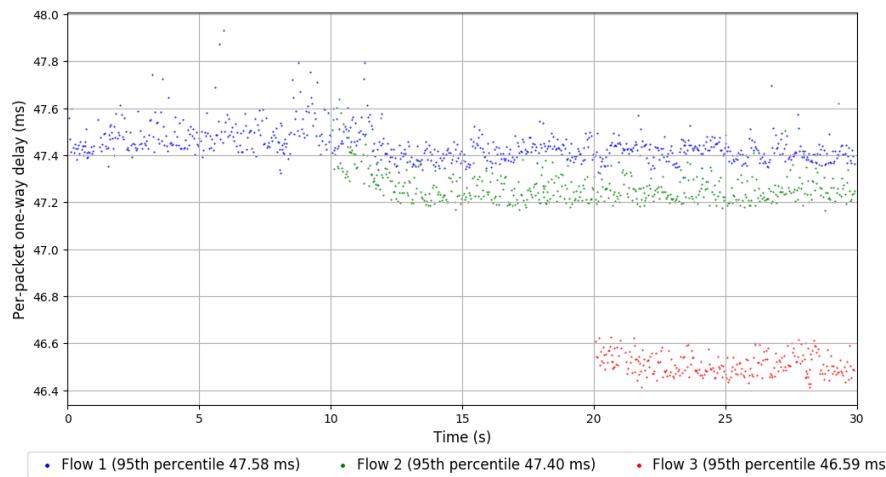
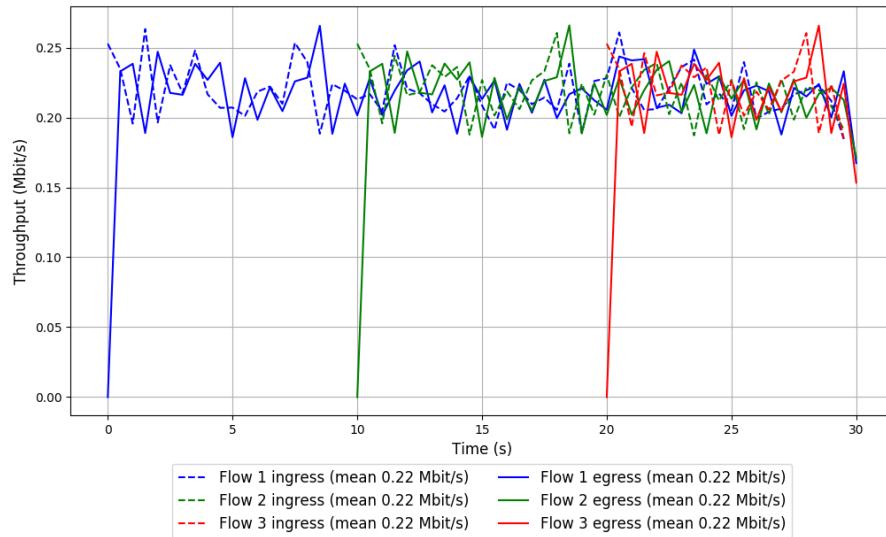


Run 3: Statistics of SCReAM

```
Start at: 2019-01-19 22:49:21
End at: 2019-01-19 22:49:51
Local clock offset: -0.276 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.536 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.576 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.404 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.592 ms
Loss rate: 1.09%
```

### Run 3: Report of SCReAM — Data Link

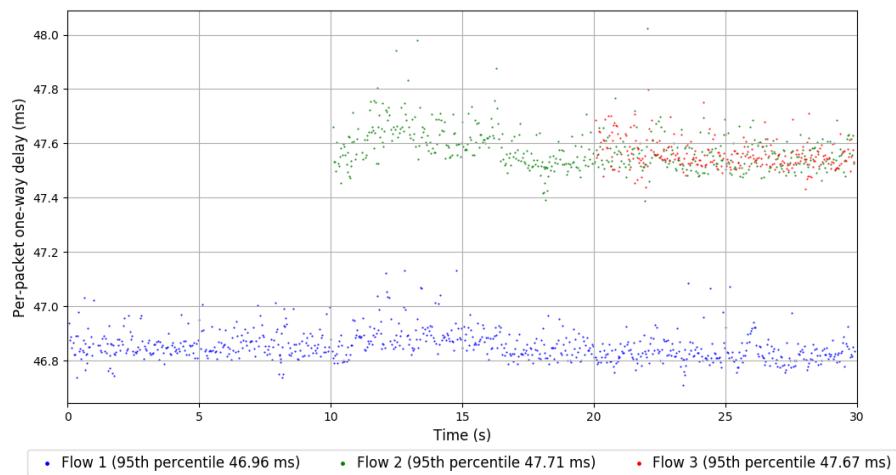
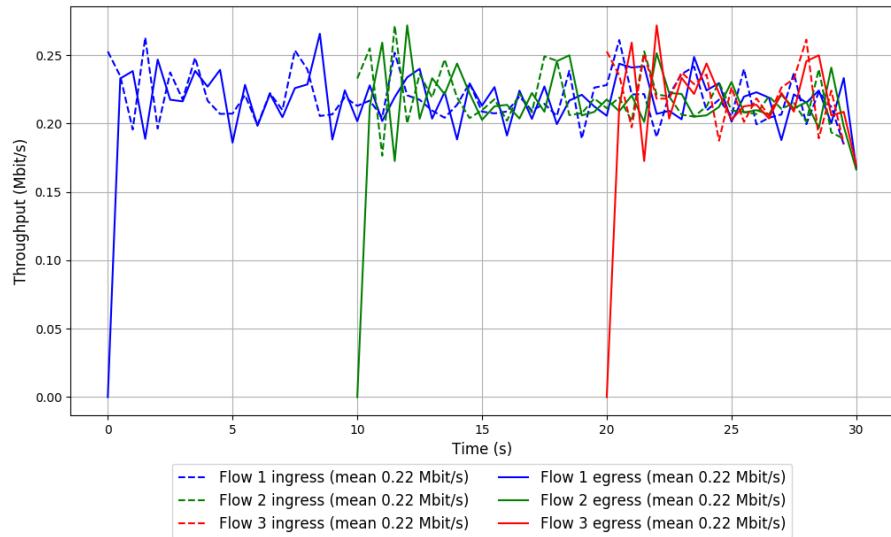


Run 4: Statistics of SCReAM

```
Start at: 2019-01-19 23:27:24
End at: 2019-01-19 23:27:54
Local clock offset: 0.228 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.660 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.956 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.708 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.667 ms
Loss rate: 1.09%
```

## Run 4: Report of SCReAM — Data Link

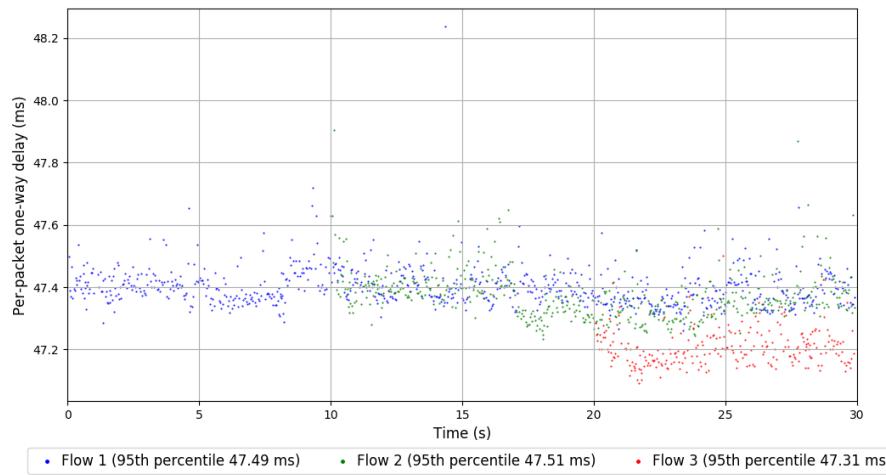
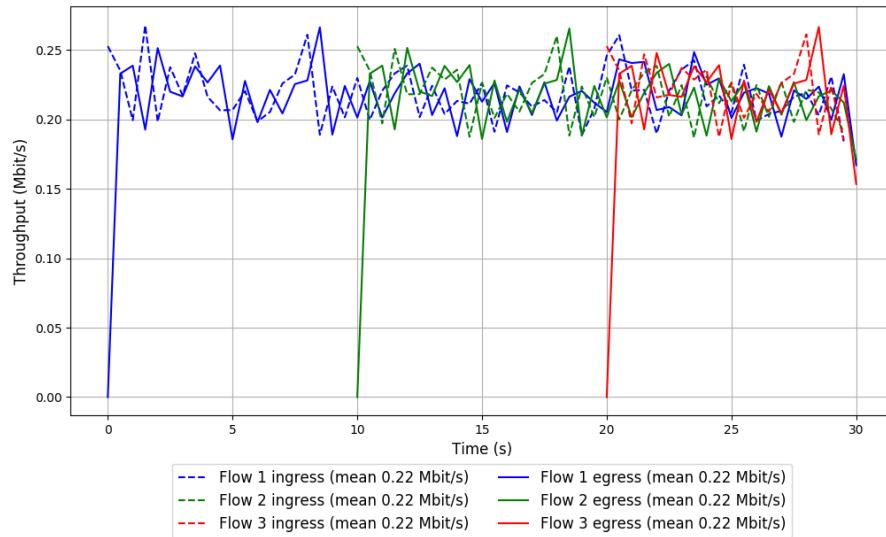


Run 5: Statistics of SCReAM

```
Start at: 2019-01-20 00:05:30
End at: 2019-01-20 00:06:00
Local clock offset: 0.005 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 47.493 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.495 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.510 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.311 ms
Loss rate: 1.09%
```

## Run 5: Report of SCReAM — Data Link

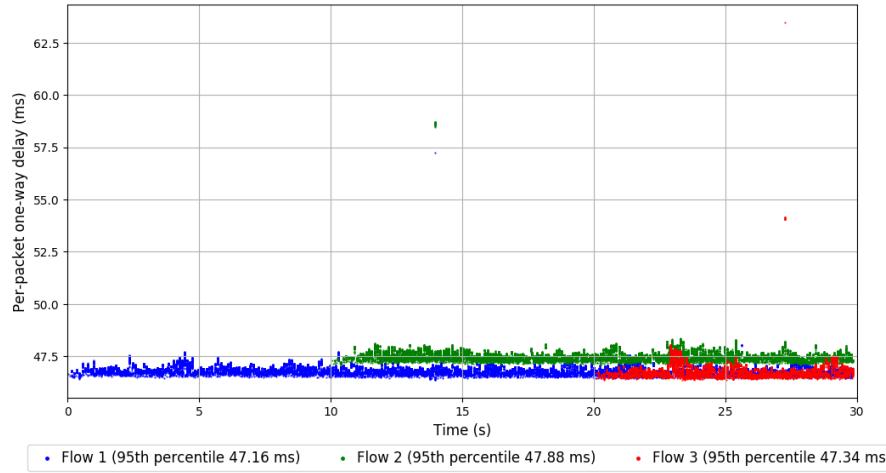
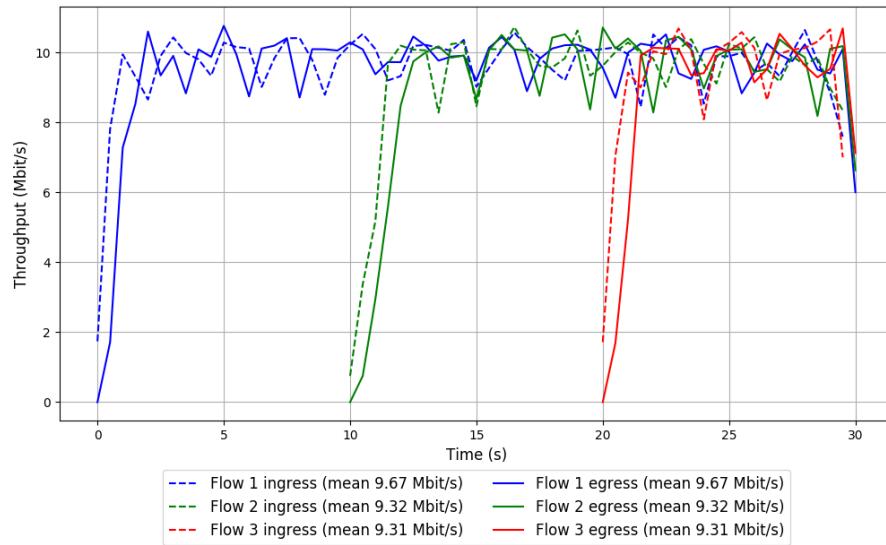


Run 1: Statistics of Sprout

```
Start at: 2019-01-19 21:30:27
End at: 2019-01-19 21:30:57
Local clock offset: 0.284 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.90 Mbit/s
95th percentile per-packet one-way delay: 47.703 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 9.67 Mbit/s
95th percentile per-packet one-way delay: 47.155 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: 47.876 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 47.338 ms
Loss rate: 1.04%
```

## Run 1: Report of Sprout — Data Link

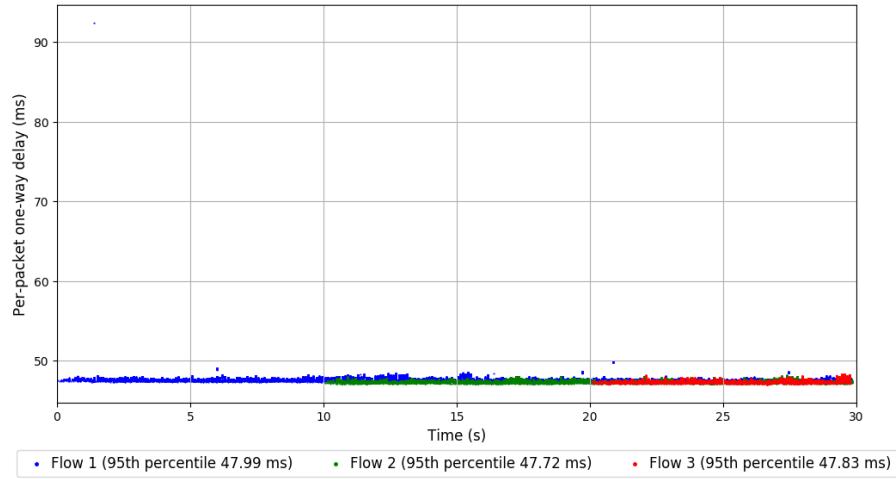
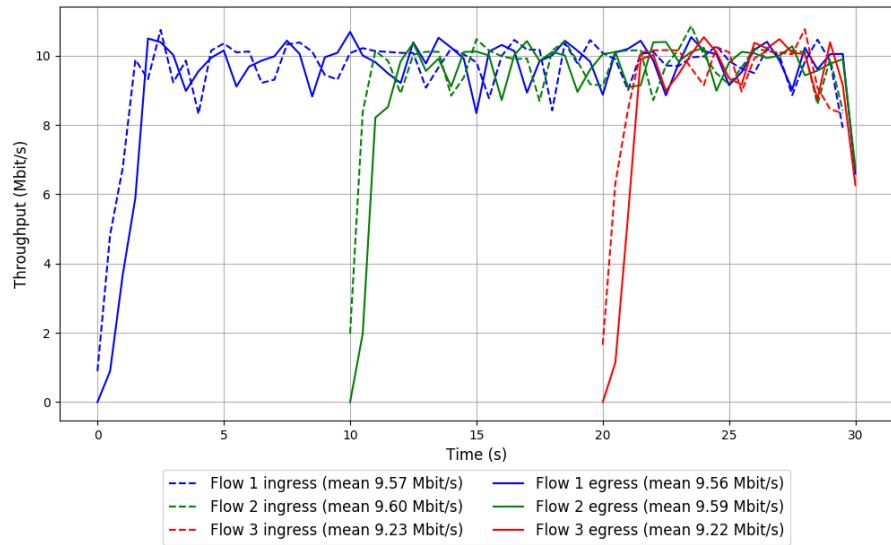


Run 2: Statistics of Sprout

```
Start at: 2019-01-19 22:08:02
End at: 2019-01-19 22:08:32
Local clock offset: 0.113 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.95 Mbit/s
95th percentile per-packet one-way delay: 47.911 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 47.987 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.59 Mbit/s
95th percentile per-packet one-way delay: 47.721 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 9.22 Mbit/s
95th percentile per-packet one-way delay: 47.825 ms
Loss rate: 1.14%
```

## Run 2: Report of Sprout — Data Link

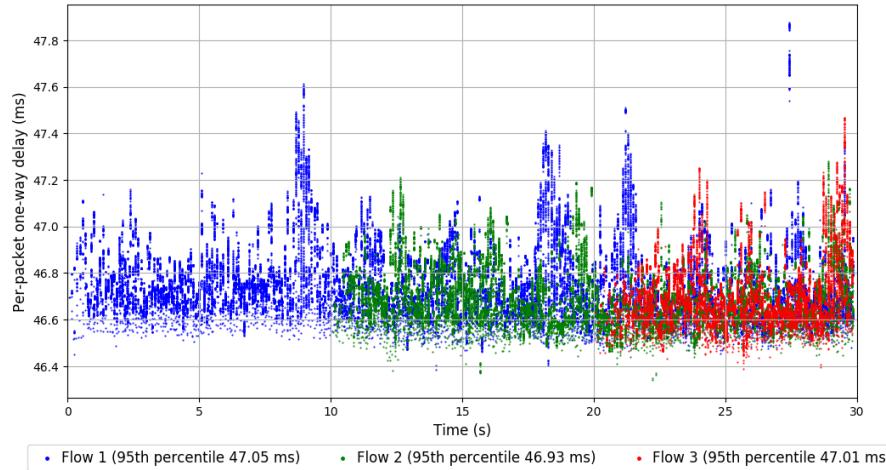
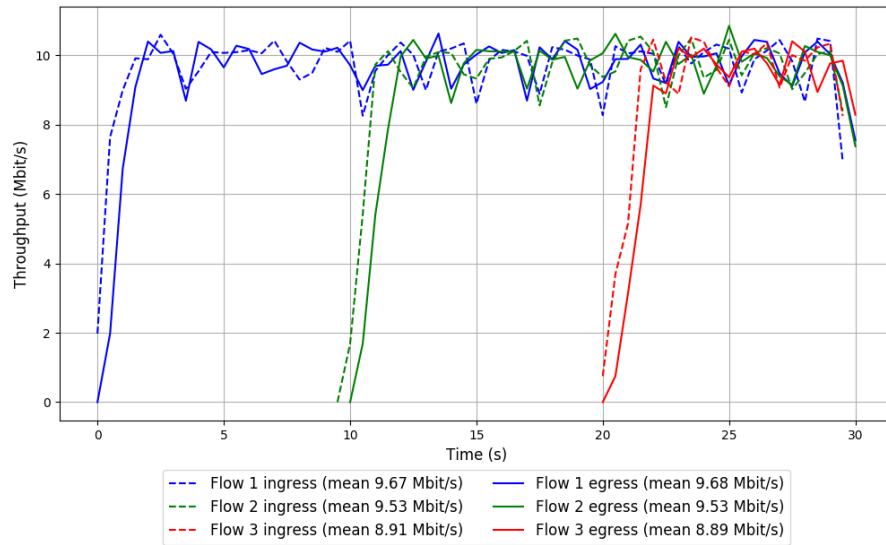


Run 3: Statistics of Sprout

```
Start at: 2019-01-19 22:46:05
End at: 2019-01-19 22:46:35
Local clock offset: -0.276 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.92 Mbit/s
95th percentile per-packet one-way delay: 47.009 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: 47.046 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 46.934 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 8.89 Mbit/s
95th percentile per-packet one-way delay: 47.008 ms
Loss rate: 1.16%
```

Run 3: Report of Sprout — Data Link

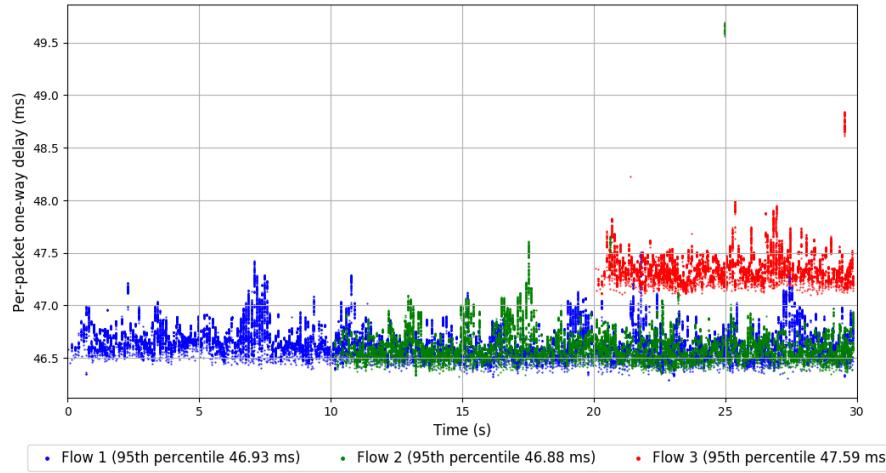
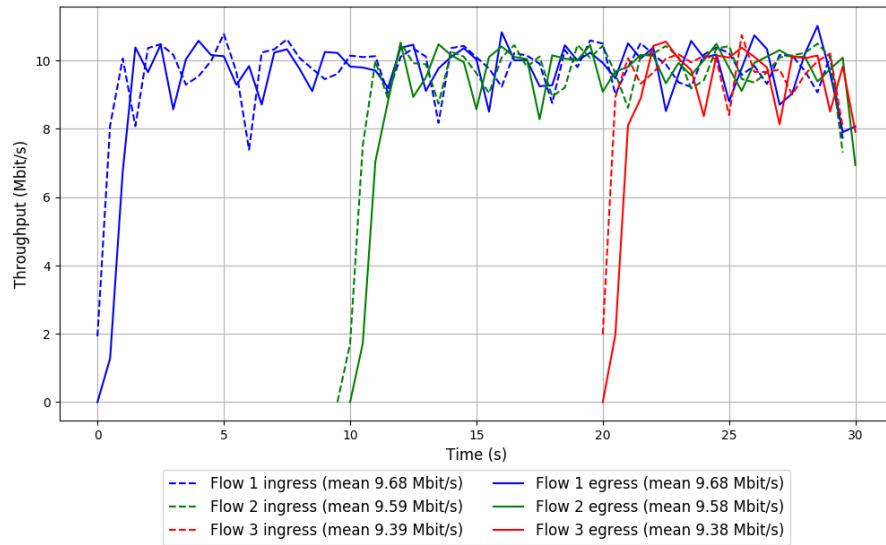


Run 4: Statistics of Sprout

```
Start at: 2019-01-19 23:24:14
End at: 2019-01-19 23:24:44
Local clock offset: -0.181 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.12 Mbit/s
95th percentile per-packet one-way delay: 47.405 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: 46.927 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 46.881 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 9.38 Mbit/s
95th percentile per-packet one-way delay: 47.594 ms
Loss rate: 1.08%
```

## Run 4: Report of Sprout — Data Link

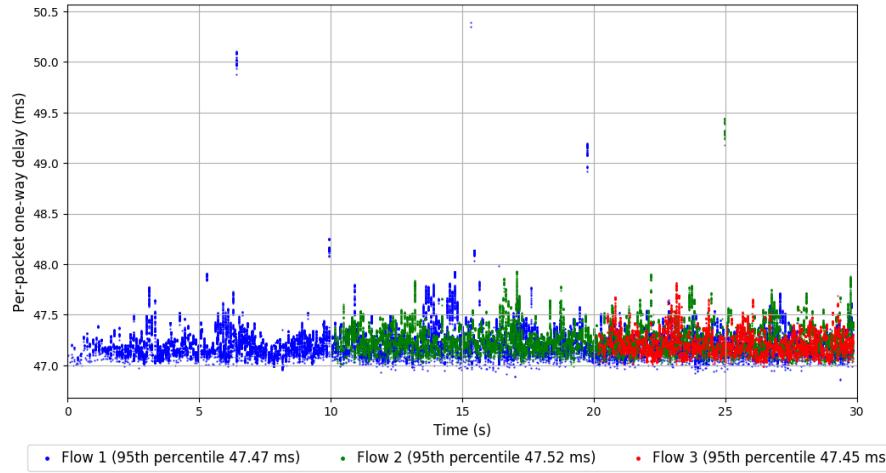
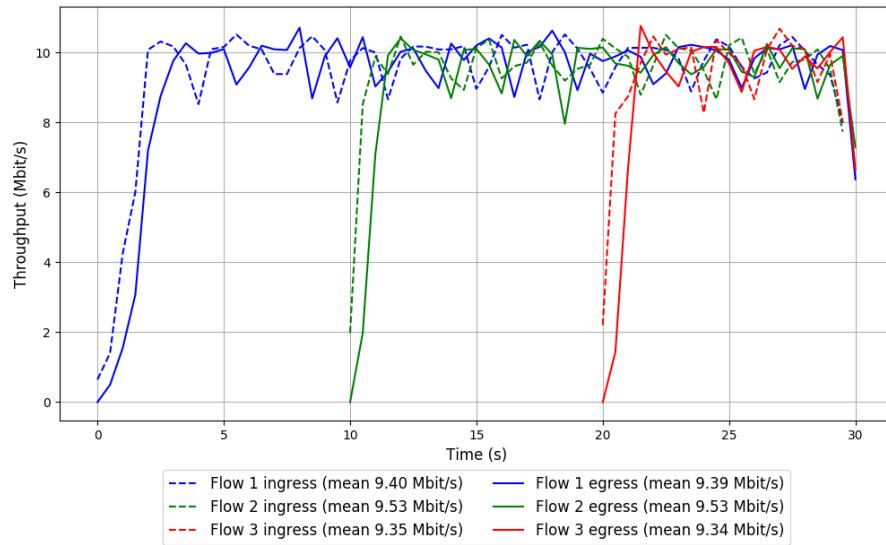


Run 5: Statistics of Sprout

```
Start at: 2019-01-20 00:02:17
End at: 2019-01-20 00:02:47
Local clock offset: -0.314 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2019-01-20 03:24:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.78 Mbit/s
95th percentile per-packet one-way delay: 47.488 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 9.39 Mbit/s
95th percentile per-packet one-way delay: 47.470 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 47.522 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 9.34 Mbit/s
95th percentile per-packet one-way delay: 47.451 ms
Loss rate: 1.10%
```

Run 5: Report of Sprout — Data Link

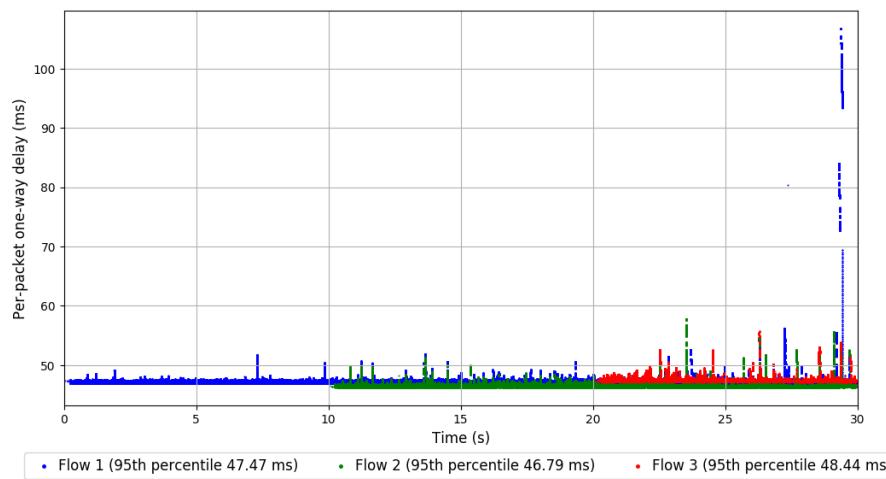
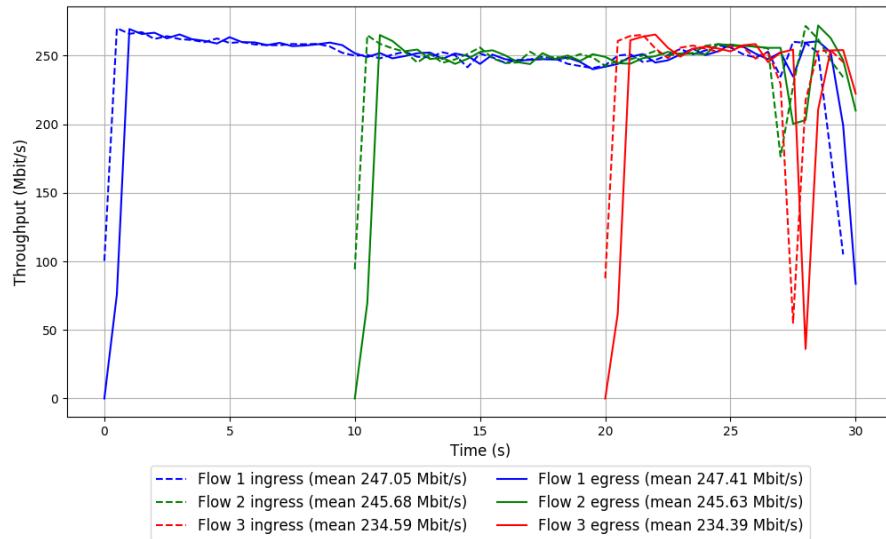


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-19 21:13:48
End at: 2019-01-19 21:14:18
Local clock offset: 0.232 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2019-01-20 03:29:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.06 Mbit/s
95th percentile per-packet one-way delay: 47.653 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 247.41 Mbit/s
95th percentile per-packet one-way delay: 47.471 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 245.63 Mbit/s
95th percentile per-packet one-way delay: 46.794 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 234.39 Mbit/s
95th percentile per-packet one-way delay: 48.438 ms
Loss rate: 1.03%
```

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

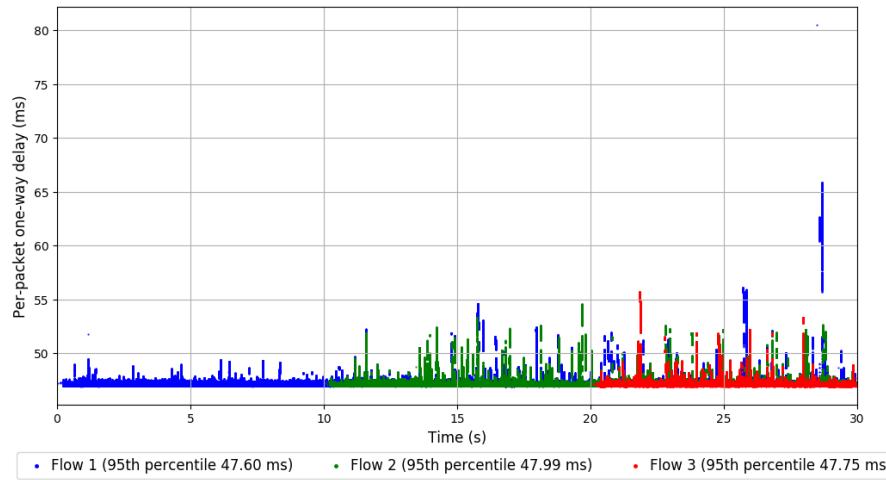
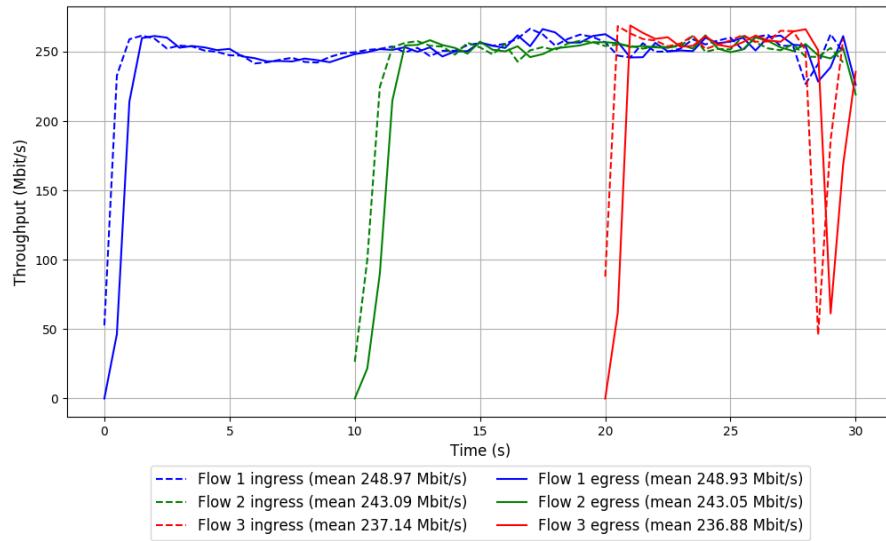


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-19 21:51:00
End at: 2019-01-19 21:51:30
Local clock offset: 0.282 ms
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2019-01-20 03:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.76 Mbit/s
95th percentile per-packet one-way delay: 47.747 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 248.93 Mbit/s
95th percentile per-packet one-way delay: 47.605 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 243.05 Mbit/s
95th percentile per-packet one-way delay: 47.995 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 236.88 Mbit/s
95th percentile per-packet one-way delay: 47.751 ms
Loss rate: 1.05%
```

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

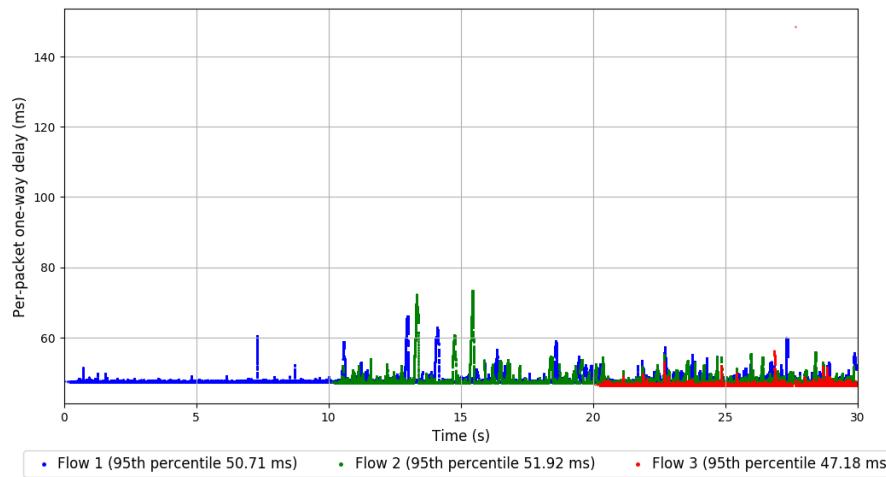
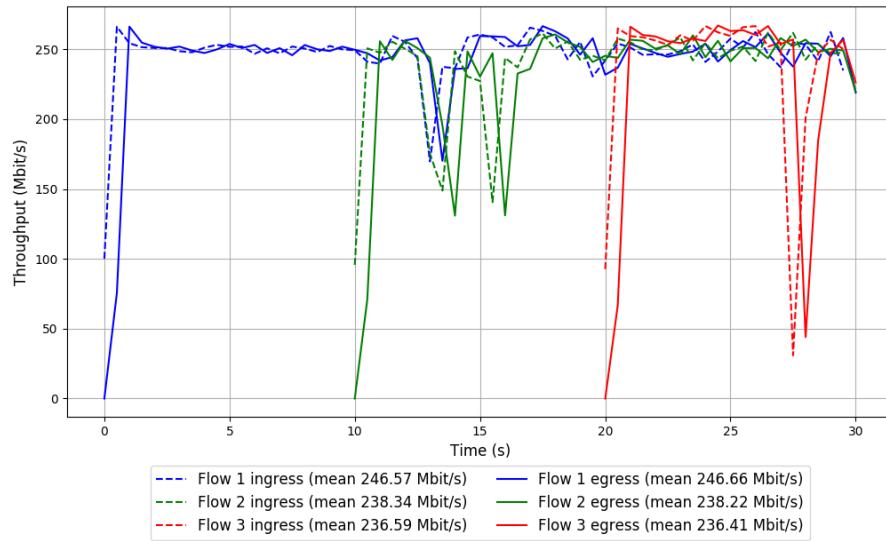


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-19 22:28:56
End at: 2019-01-19 22:29:26
Local clock offset: -0.149 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-01-20 03:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 483.15 Mbit/s
95th percentile per-packet one-way delay: 50.822 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 246.66 Mbit/s
95th percentile per-packet one-way delay: 50.712 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 238.22 Mbit/s
95th percentile per-packet one-way delay: 51.916 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 236.41 Mbit/s
95th percentile per-packet one-way delay: 47.179 ms
Loss rate: 1.01%
```

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

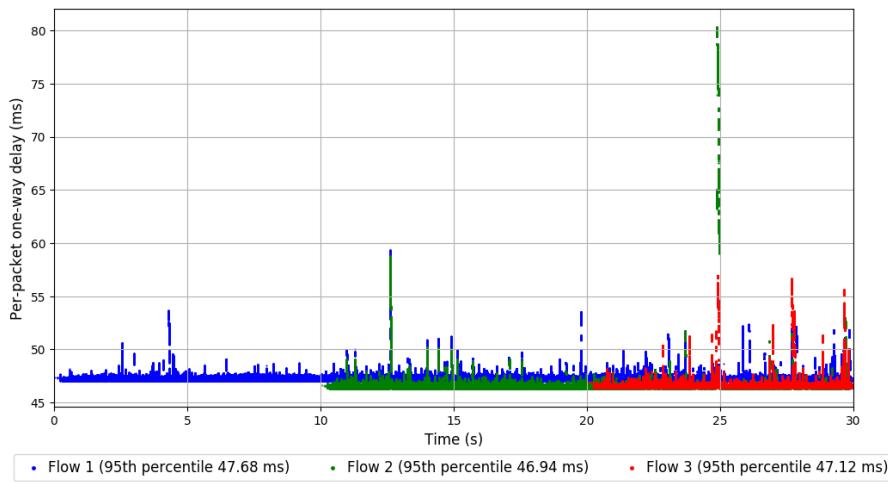
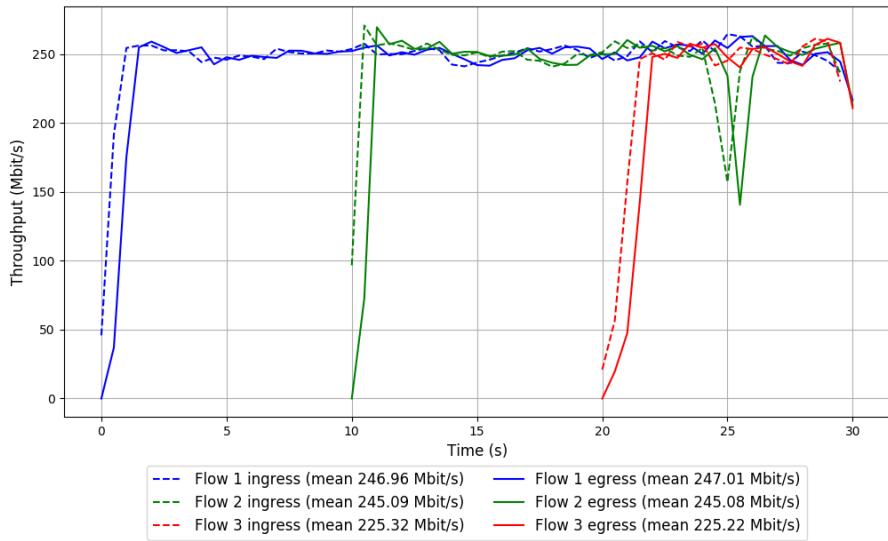


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-19 23:07:28
End at: 2019-01-19 23:07:58
Local clock offset: -0.386 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2019-01-20 03:30:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.36 Mbit/s
95th percentile per-packet one-way delay: 47.541 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 247.01 Mbit/s
95th percentile per-packet one-way delay: 47.680 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 245.08 Mbit/s
95th percentile per-packet one-way delay: 46.936 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 225.22 Mbit/s
95th percentile per-packet one-way delay: 47.125 ms
Loss rate: 0.98%
```

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

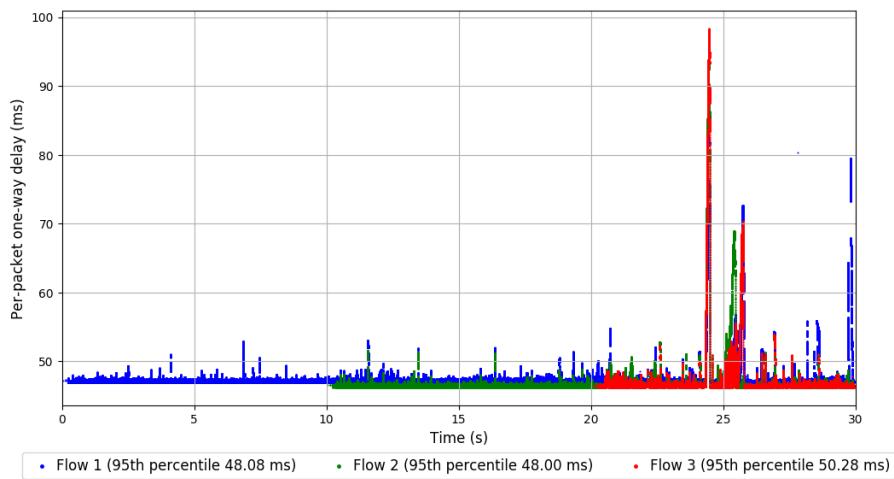
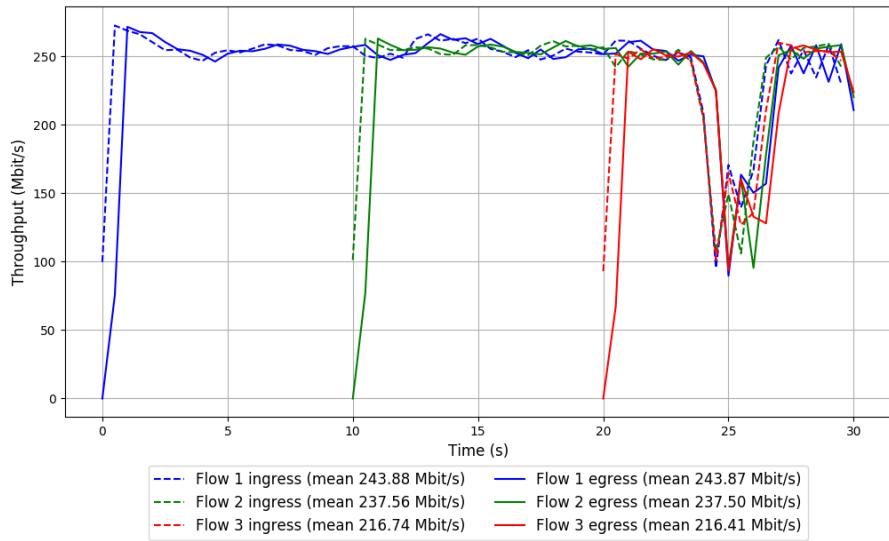


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-19 23:45:07
End at: 2019-01-19 23:45:37
Local clock offset: -0.062 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-01-20 03:31:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.34 Mbit/s
95th percentile per-packet one-way delay: 48.266 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 243.87 Mbit/s
95th percentile per-packet one-way delay: 48.076 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 237.50 Mbit/s
95th percentile per-packet one-way delay: 47.996 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 216.41 Mbit/s
95th percentile per-packet one-way delay: 50.284 ms
Loss rate: 1.09%
```

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

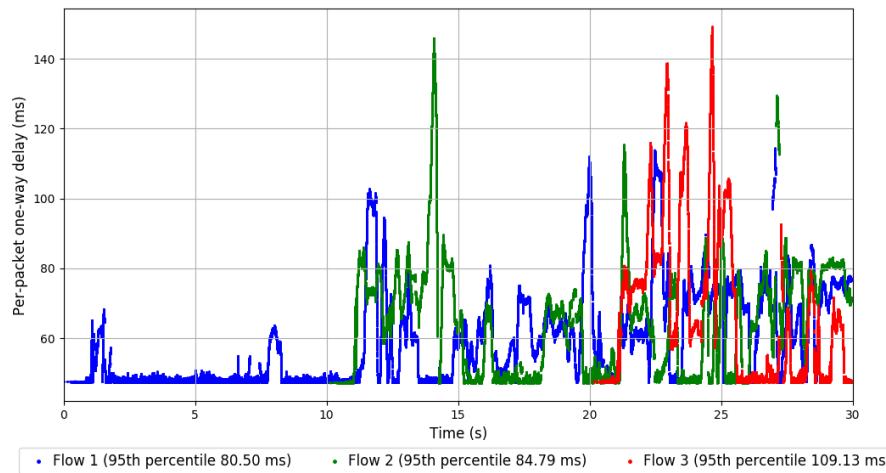
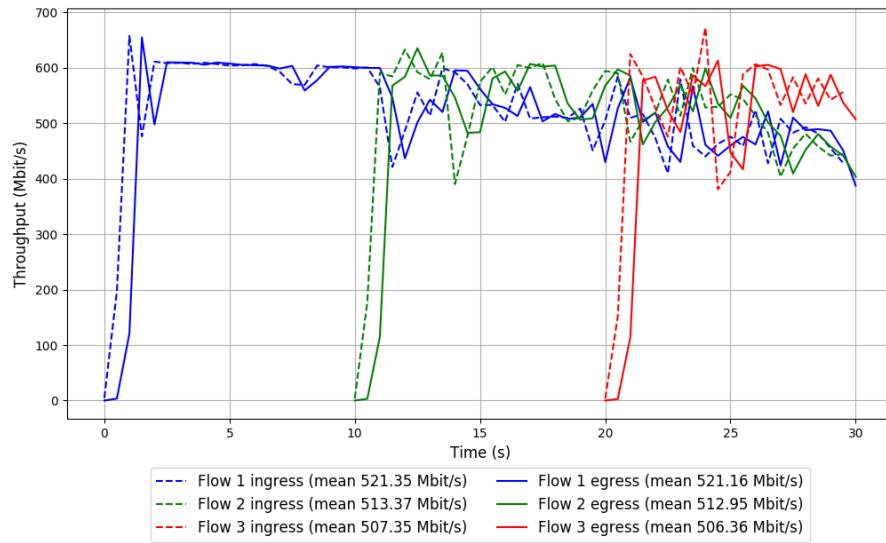


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-19 21:15:45
End at: 2019-01-19 21:16:15
Local clock offset: 0.284 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-01-20 03:34:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1029.32 Mbit/s
95th percentile per-packet one-way delay: 88.234 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 521.16 Mbit/s
95th percentile per-packet one-way delay: 80.503 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 512.95 Mbit/s
95th percentile per-packet one-way delay: 84.792 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 506.36 Mbit/s
95th percentile per-packet one-way delay: 109.127 ms
Loss rate: 1.14%
```

Run 1: Report of TCP Vegas — Data Link

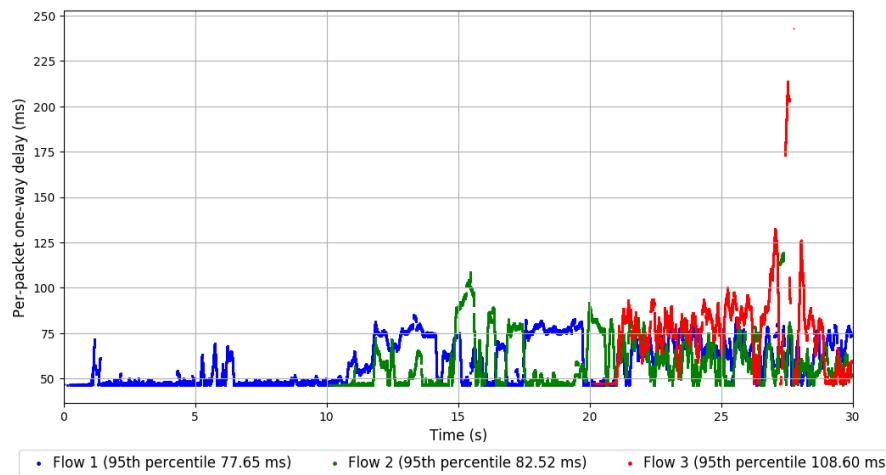
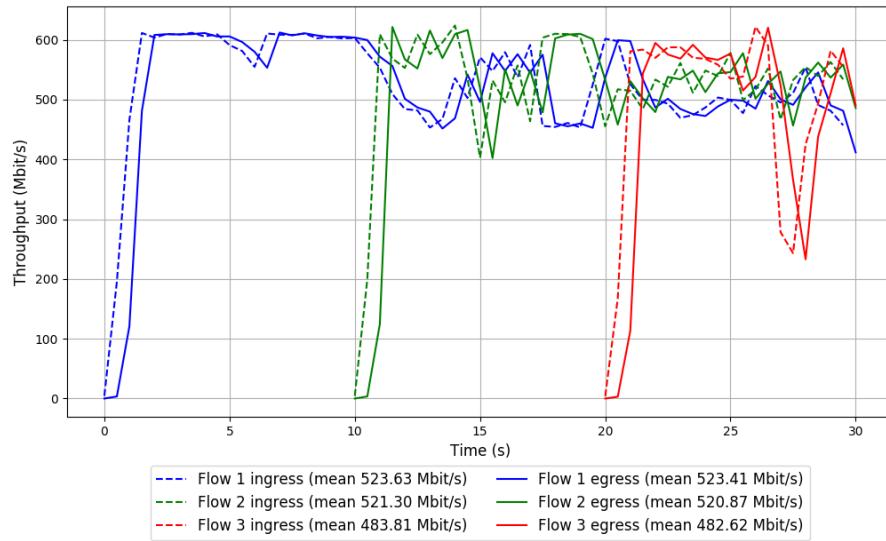


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-19 21:52:56
End at: 2019-01-19 21:53:26
Local clock offset: 0.281 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2019-01-20 03:45:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1029.24 Mbit/s
95th percentile per-packet one-way delay: 86.120 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 523.41 Mbit/s
95th percentile per-packet one-way delay: 77.649 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 520.87 Mbit/s
95th percentile per-packet one-way delay: 82.518 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 482.62 Mbit/s
95th percentile per-packet one-way delay: 108.596 ms
Loss rate: 1.18%
```

Run 2: Report of TCP Vegas — Data Link

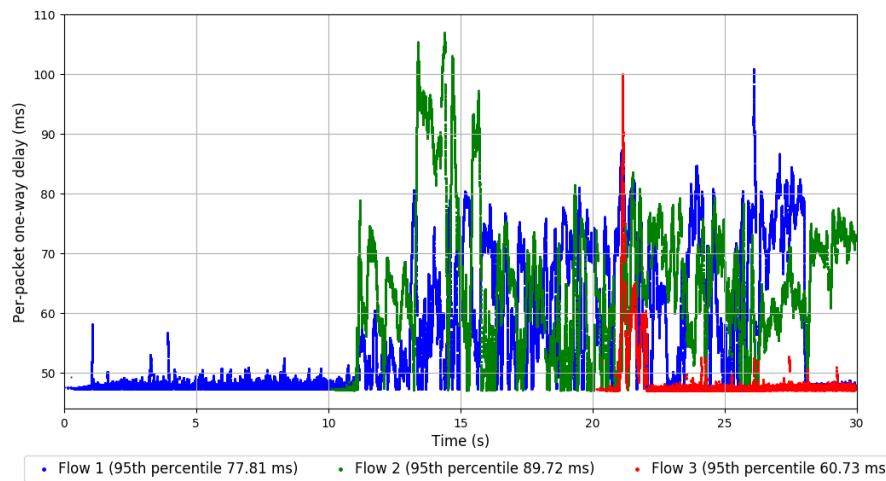
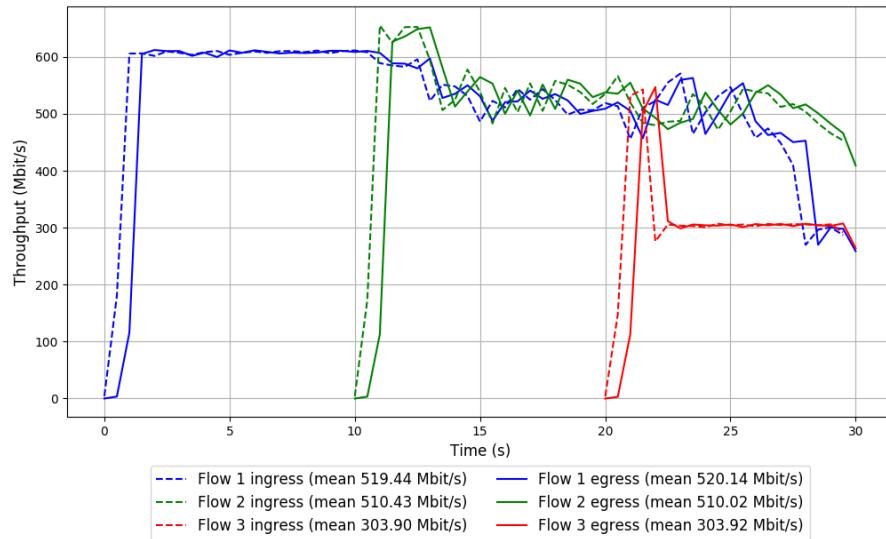


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-19 22:31:01
End at: 2019-01-19 22:31:31
Local clock offset: -0.162 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-01-20 03:45:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 959.78 Mbit/s
95th percentile per-packet one-way delay: 79.159 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 520.14 Mbit/s
95th percentile per-packet one-way delay: 77.815 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 510.02 Mbit/s
95th percentile per-packet one-way delay: 89.717 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 303.92 Mbit/s
95th percentile per-packet one-way delay: 60.731 ms
Loss rate: 0.94%
```

Run 3: Report of TCP Vegas — Data Link

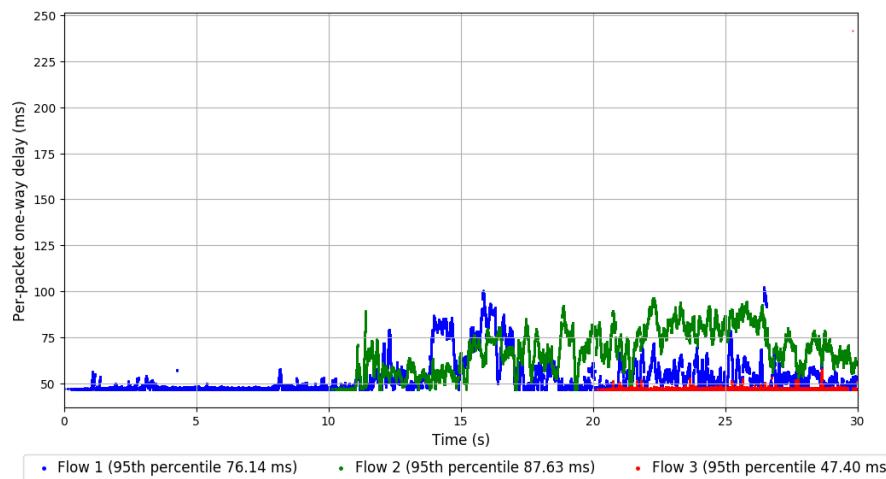
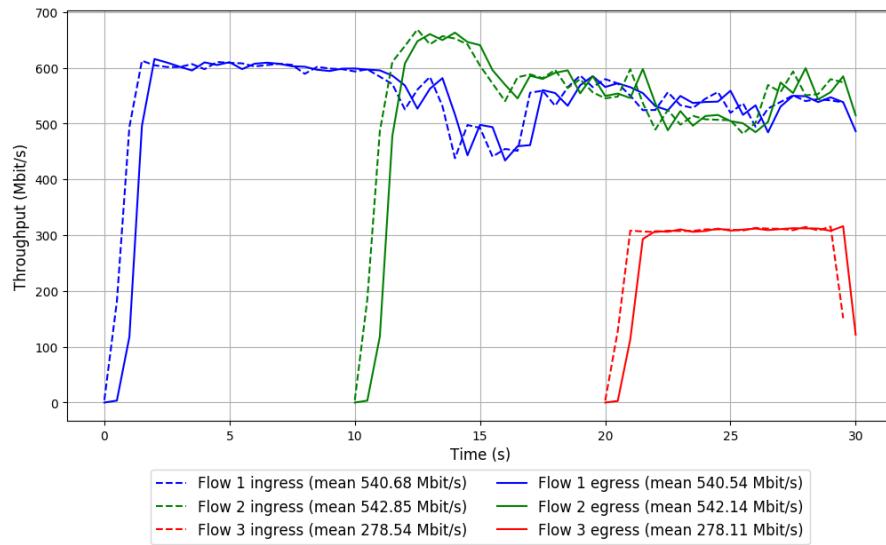


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-19 23:09:36
End at: 2019-01-19 23:10:06
Local clock offset: -0.765 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-01-20 03:51:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 992.88 Mbit/s
95th percentile per-packet one-way delay: 83.229 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 540.54 Mbit/s
95th percentile per-packet one-way delay: 76.145 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 542.14 Mbit/s
95th percentile per-packet one-way delay: 87.629 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 278.11 Mbit/s
95th percentile per-packet one-way delay: 47.396 ms
Loss rate: 1.07%
```

### Run 4: Report of TCP Vegas — Data Link

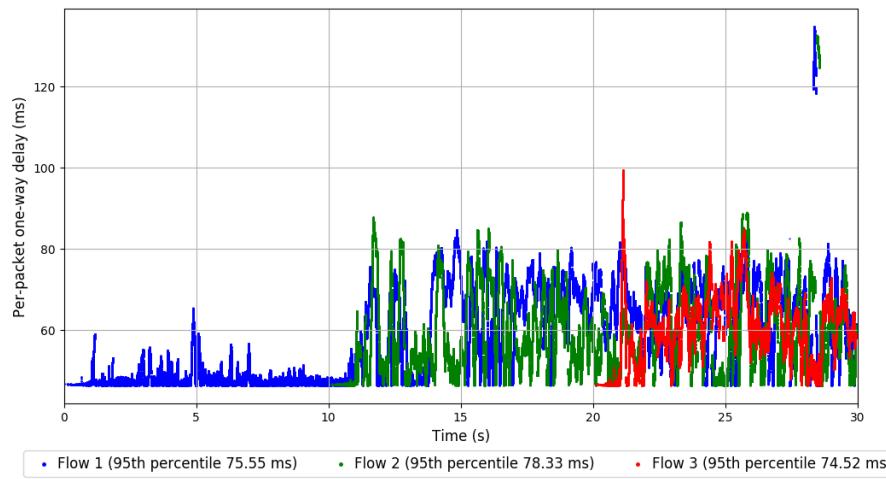
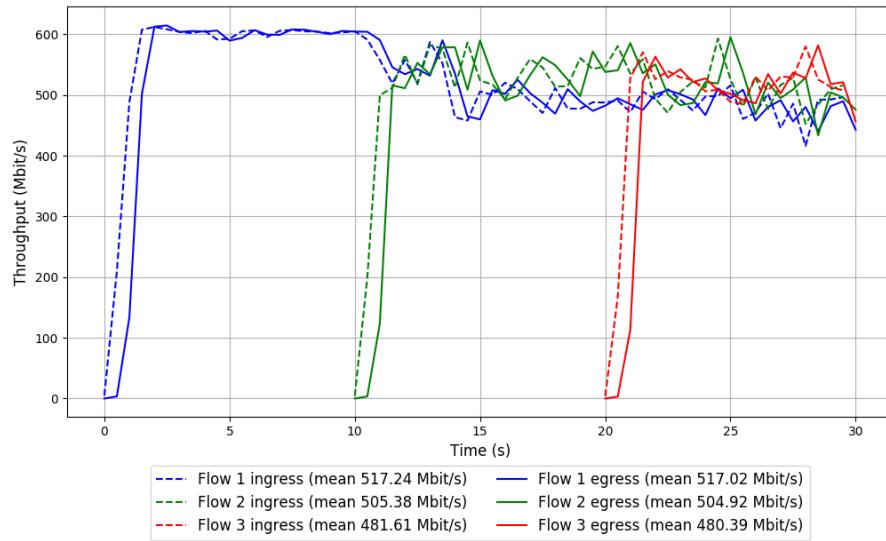


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-19 23:47:04
End at: 2019-01-19 23:47:34
Local clock offset: -0.047 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-01-20 03:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1011.55 Mbit/s
95th percentile per-packet one-way delay: 76.345 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 517.02 Mbit/s
95th percentile per-packet one-way delay: 75.551 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 504.92 Mbit/s
95th percentile per-packet one-way delay: 78.333 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 480.39 Mbit/s
95th percentile per-packet one-way delay: 74.515 ms
Loss rate: 1.19%
```

Run 5: Report of TCP Vegas — Data Link

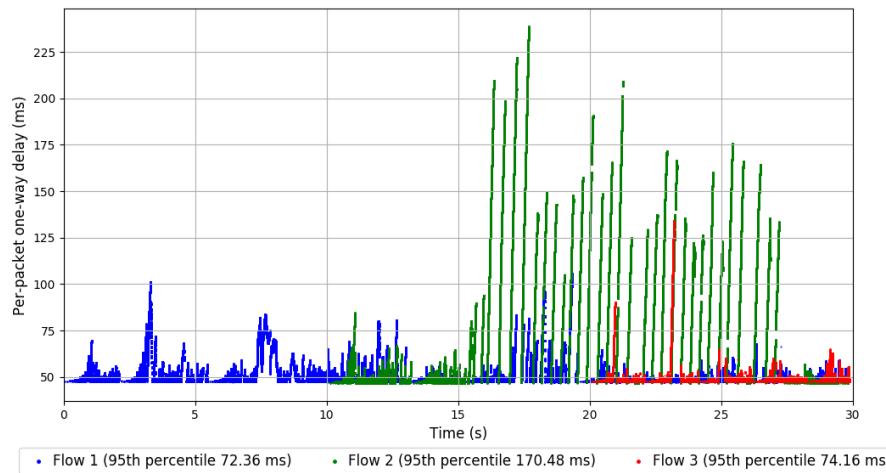
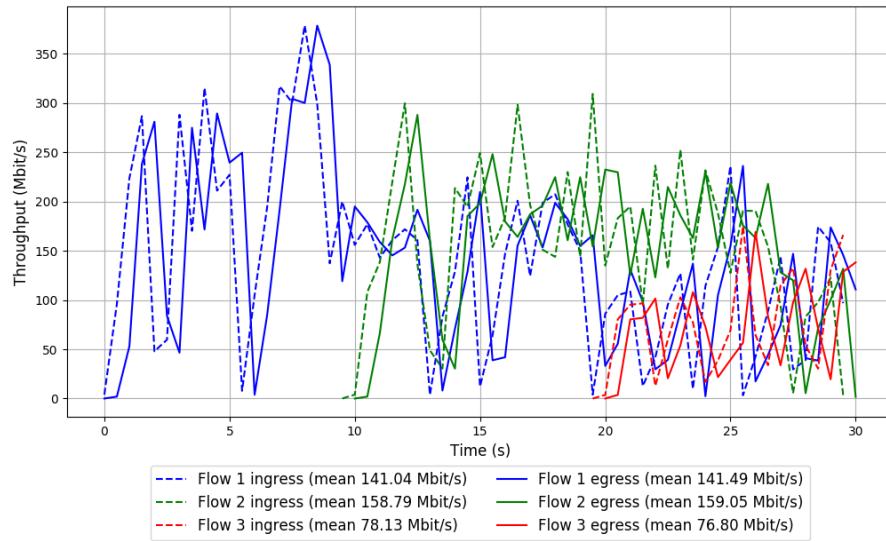


Run 1: Statistics of Verus

```
Start at: 2019-01-19 21:36:53
End at: 2019-01-19 21:37:23
Local clock offset: 0.588 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-01-20 03:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 272.22 Mbit/s
95th percentile per-packet one-way delay: 143.599 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 141.49 Mbit/s
95th percentile per-packet one-way delay: 72.355 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 159.05 Mbit/s
95th percentile per-packet one-way delay: 170.480 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 76.80 Mbit/s
95th percentile per-packet one-way delay: 74.156 ms
Loss rate: 2.64%
```

Run 1: Report of Verus — Data Link

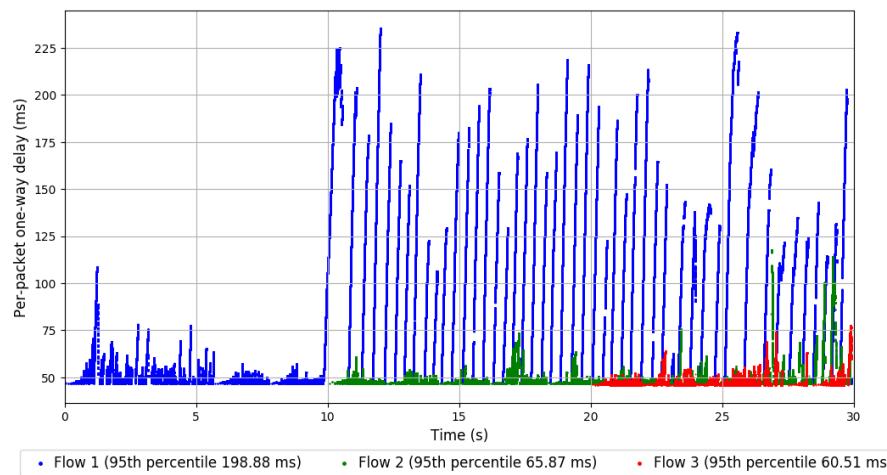
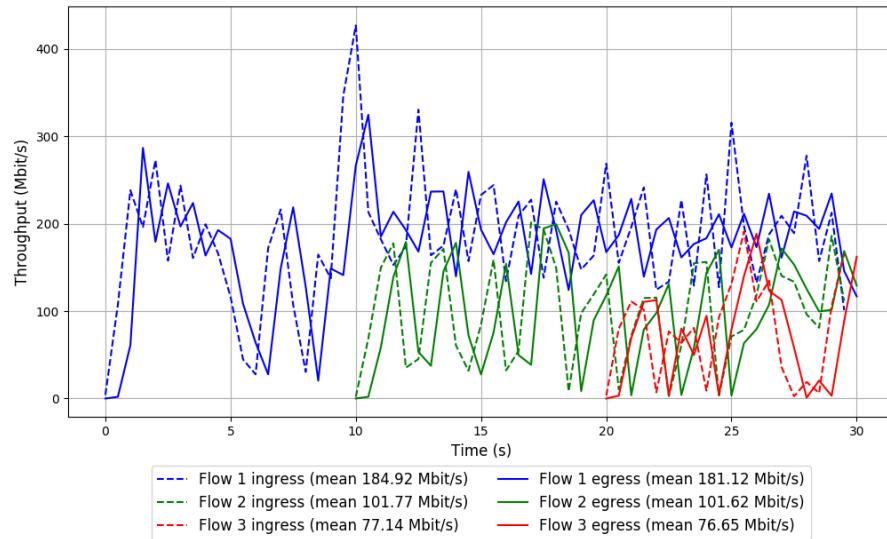


Run 2: Statistics of Verus

```
Start at: 2019-01-19 22:14:26
End at: 2019-01-19 22:14:56
Local clock offset: -0.367 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2019-01-20 03:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.80 Mbit/s
95th percentile per-packet one-way delay: 190.098 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 181.12 Mbit/s
95th percentile per-packet one-way delay: 198.880 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 101.62 Mbit/s
95th percentile per-packet one-way delay: 65.873 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.65 Mbit/s
95th percentile per-packet one-way delay: 60.507 ms
Loss rate: 1.54%
```

Run 2: Report of Verus — Data Link

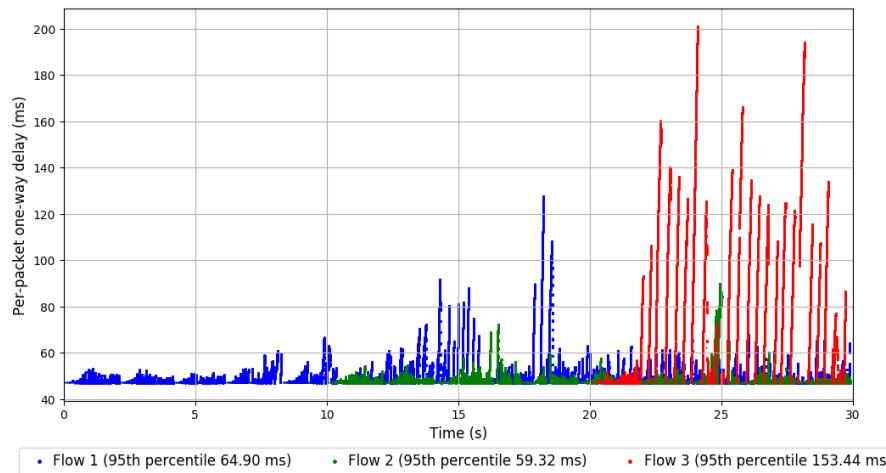
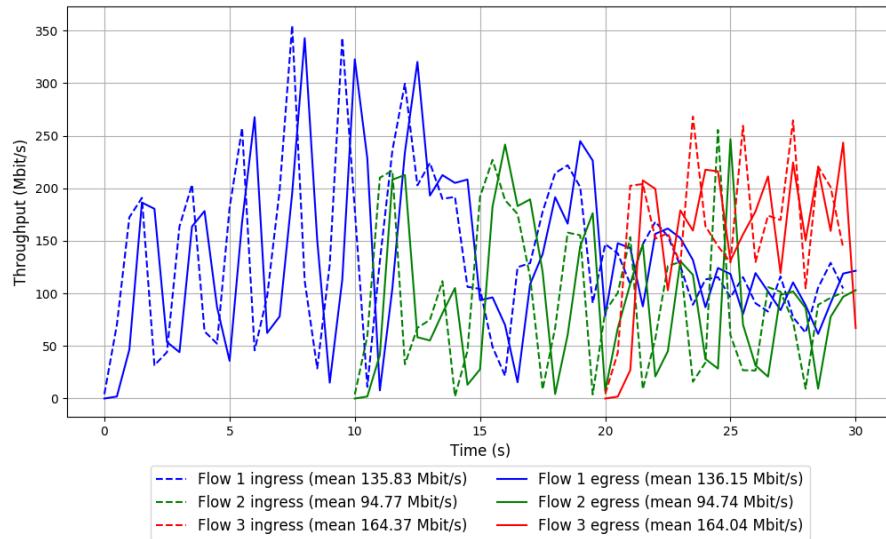


Run 3: Statistics of Verus

```
Start at: 2019-01-19 22:52:37
End at: 2019-01-19 22:53:07
Local clock offset: -0.26 ms
Remote clock offset: 0.08 ms

# Below is generated by plot.py at 2019-01-20 03:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.16 Mbit/s
95th percentile per-packet one-way delay: 113.583 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 136.15 Mbit/s
95th percentile per-packet one-way delay: 64.896 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 94.74 Mbit/s
95th percentile per-packet one-way delay: 59.324 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 164.04 Mbit/s
95th percentile per-packet one-way delay: 153.443 ms
Loss rate: 2.91%
```

### Run 3: Report of Verus — Data Link

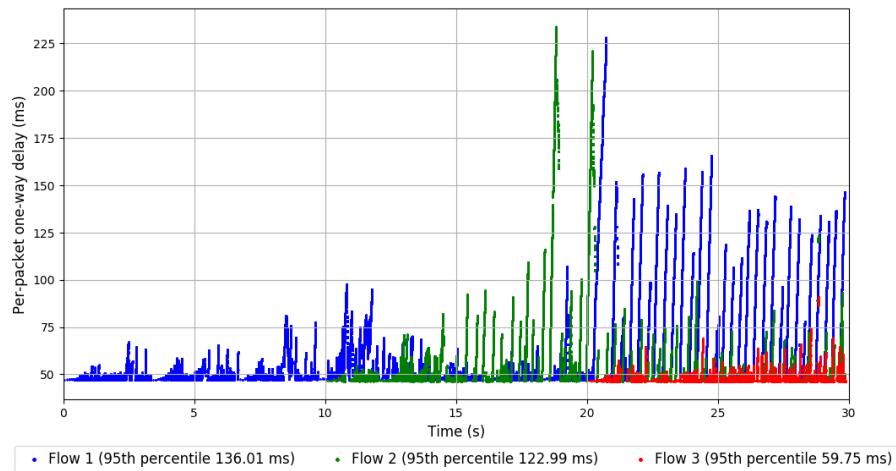
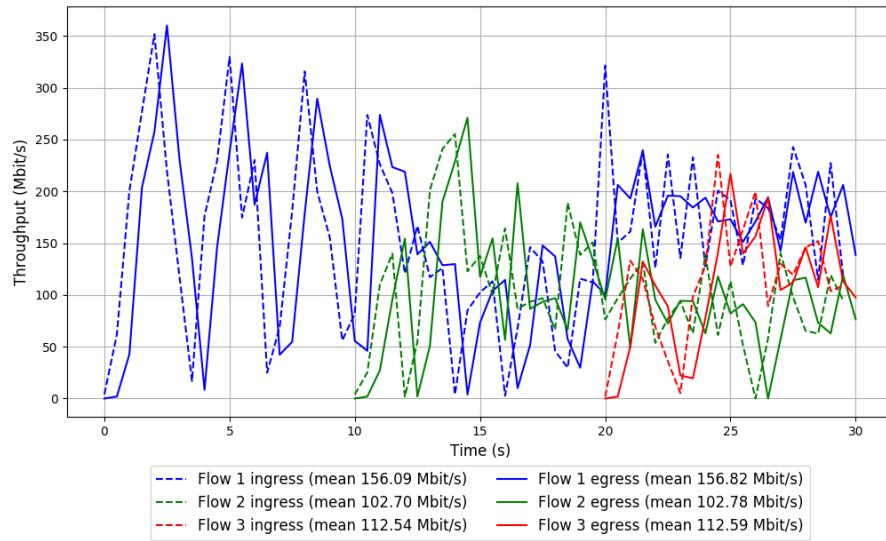


Run 4: Statistics of Verus

```
Start at: 2019-01-19 23:30:41
End at: 2019-01-19 23:31:11
Local clock offset: -0.081 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-01-20 03:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.99 Mbit/s
95th percentile per-packet one-way delay: 131.330 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 156.82 Mbit/s
95th percentile per-packet one-way delay: 136.009 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 102.78 Mbit/s
95th percentile per-packet one-way delay: 122.989 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 112.59 Mbit/s
95th percentile per-packet one-way delay: 59.751 ms
Loss rate: 0.83%
```

## Run 4: Report of Verus — Data Link

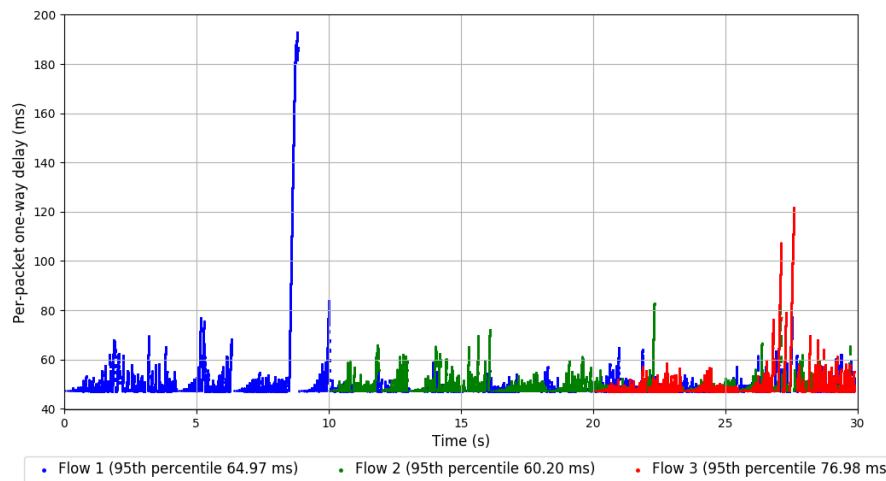
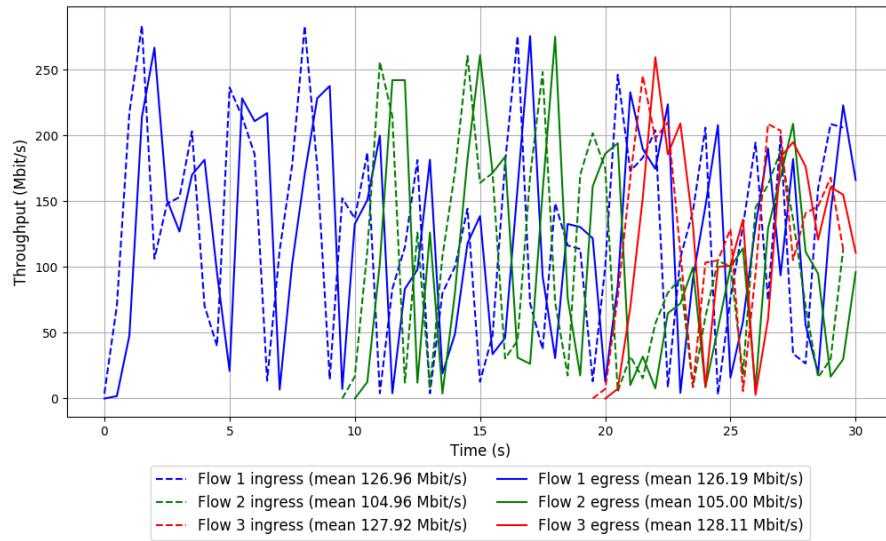


Run 5: Statistics of Verus

```
Start at: 2019-01-20 00:09:09
End at: 2019-01-20 00:09:39
Local clock offset: 0.092 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2019-01-20 03:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.44 Mbit/s
95th percentile per-packet one-way delay: 64.585 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 126.19 Mbit/s
95th percentile per-packet one-way delay: 64.971 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 105.00 Mbit/s
95th percentile per-packet one-way delay: 60.205 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 128.11 Mbit/s
95th percentile per-packet one-way delay: 76.977 ms
Loss rate: 0.83%
```

Run 5: Report of Verus — Data Link

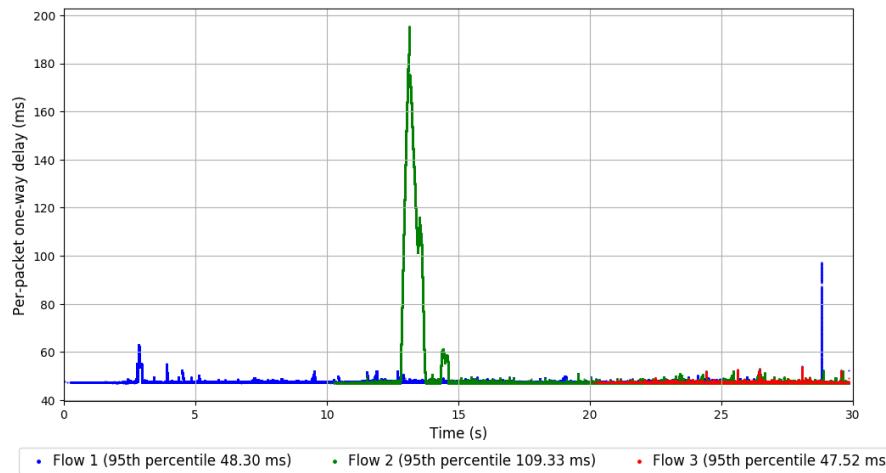
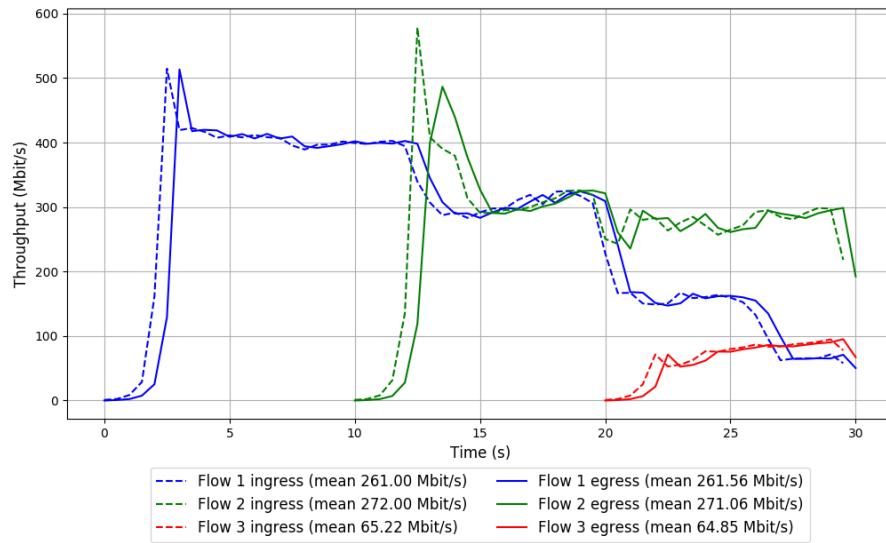


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-01-19 21:45:20
End at: 2019-01-19 21:45:50
Local clock offset: 0.296 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-01-20 03:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.83 Mbit/s
95th percentile per-packet one-way delay: 51.383 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 261.56 Mbit/s
95th percentile per-packet one-way delay: 48.305 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 271.06 Mbit/s
95th percentile per-packet one-way delay: 109.327 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 64.85 Mbit/s
95th percentile per-packet one-way delay: 47.525 ms
Loss rate: 1.51%
```

Run 1: Report of PCC-Vivace — Data Link

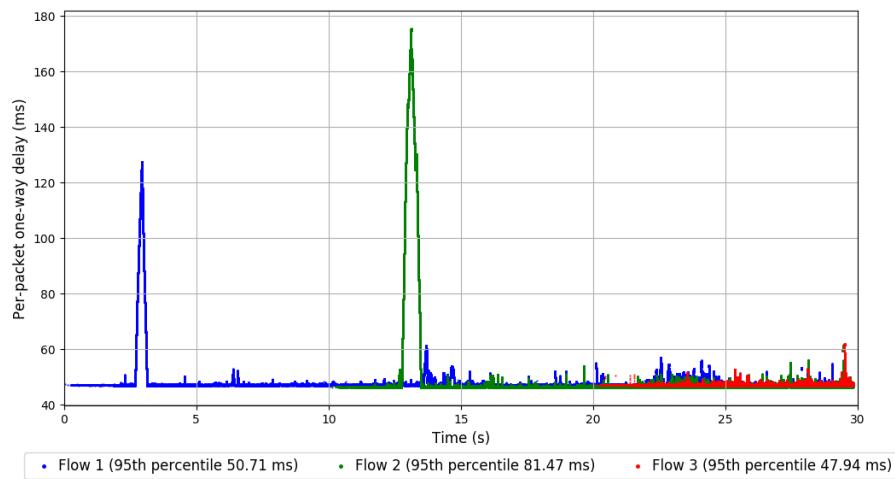
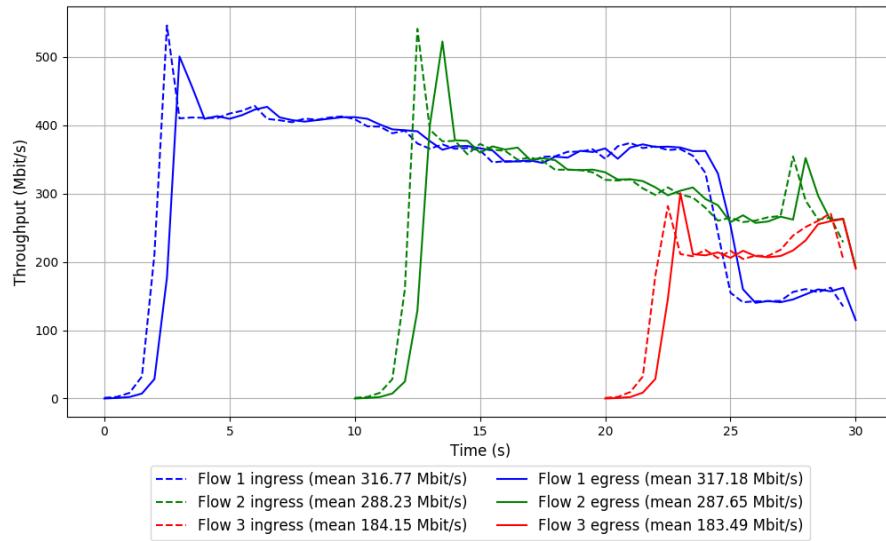


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-19 22:22:52
End at: 2019-01-19 22:23:22
Local clock offset: -0.139 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-01-20 03:53:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 568.31 Mbit/s
95th percentile per-packet one-way delay: 51.011 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 317.18 Mbit/s
95th percentile per-packet one-way delay: 50.706 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 287.65 Mbit/s
95th percentile per-packet one-way delay: 81.466 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 183.49 Mbit/s
95th percentile per-packet one-way delay: 47.944 ms
Loss rate: 1.31%
```

Run 2: Report of PCC-Vivace — Data Link

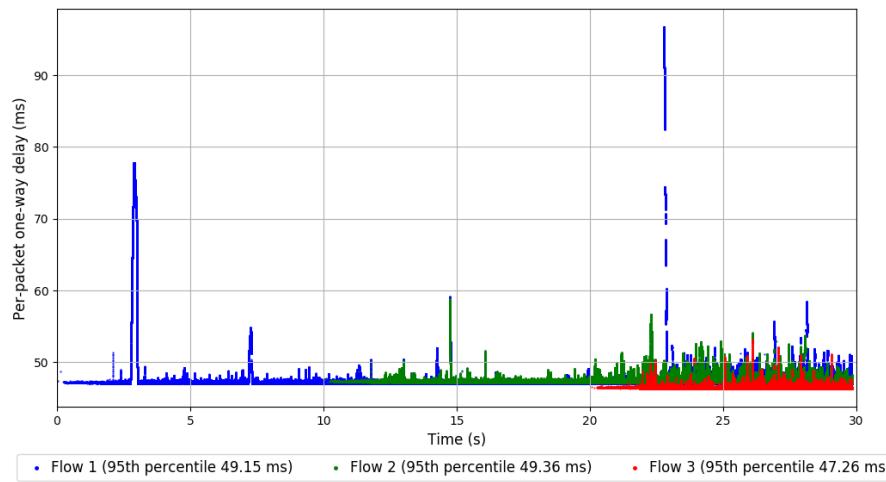
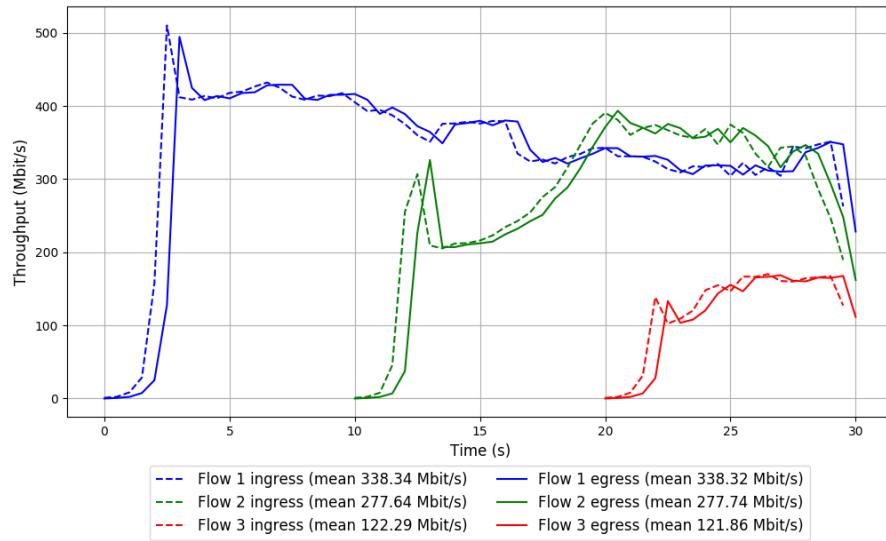


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-19 23:01:21
End at: 2019-01-19 23:01:51
Local clock offset: -0.302 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-01-20 03:54:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.61 Mbit/s
95th percentile per-packet one-way delay: 49.159 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 338.32 Mbit/s
95th percentile per-packet one-way delay: 49.148 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 277.74 Mbit/s
95th percentile per-packet one-way delay: 49.364 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 121.86 Mbit/s
95th percentile per-packet one-way delay: 47.263 ms
Loss rate: 1.29%
```

Run 3: Report of PCC-Vivace — Data Link

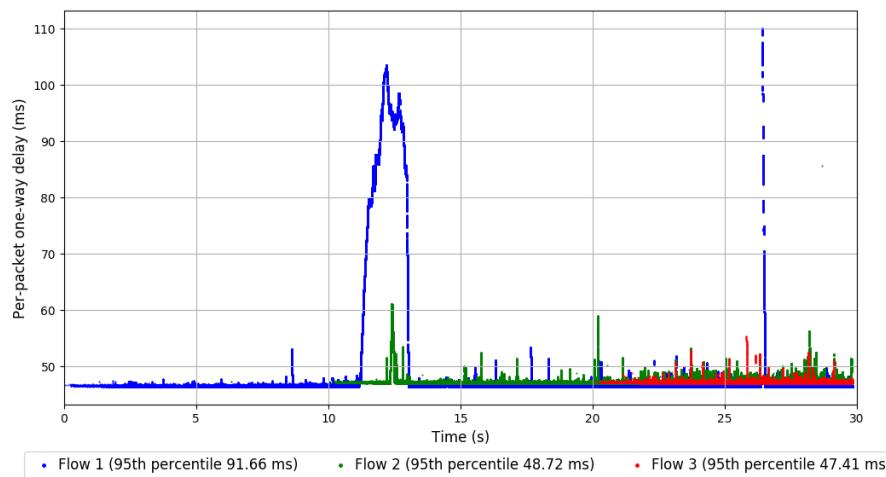
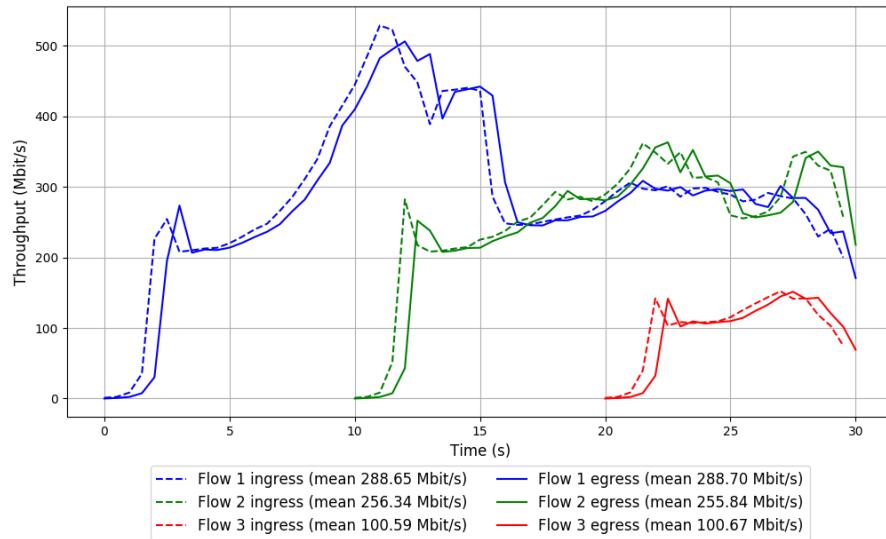


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-19 23:39:26
End at: 2019-01-19 23:39:56
Local clock offset: -0.081 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-01-20 03:54:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 491.56 Mbit/s
95th percentile per-packet one-way delay: 78.641 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 288.70 Mbit/s
95th percentile per-packet one-way delay: 91.657 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 255.84 Mbit/s
95th percentile per-packet one-way delay: 48.717 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 100.67 Mbit/s
95th percentile per-packet one-way delay: 47.410 ms
Loss rate: 0.88%
```

Run 4: Report of PCC-Vivace — Data Link

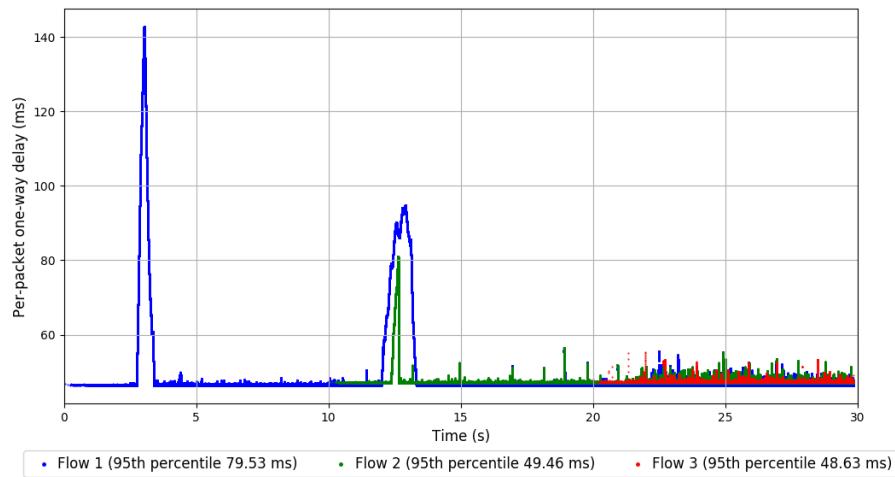
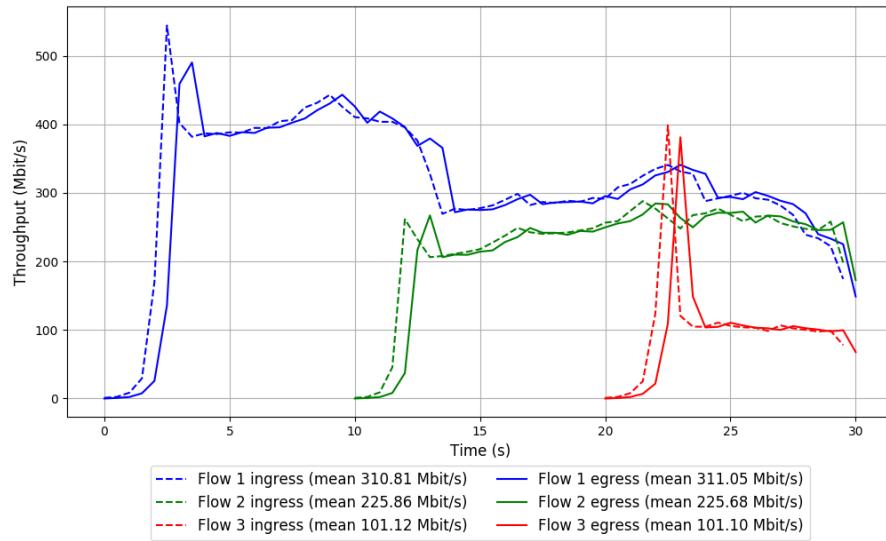


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-20 00:17:49
End at: 2019-01-20 00:18:19
Local clock offset: 0.066 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2019-01-20 03:54:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 494.04 Mbit/s
95th percentile per-packet one-way delay: 62.070 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 311.05 Mbit/s
95th percentile per-packet one-way delay: 79.533 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 225.68 Mbit/s
95th percentile per-packet one-way delay: 49.457 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 101.10 Mbit/s
95th percentile per-packet one-way delay: 48.631 ms
Loss rate: 0.97%
```

Run 5: Report of PCC-Vivace — Data Link

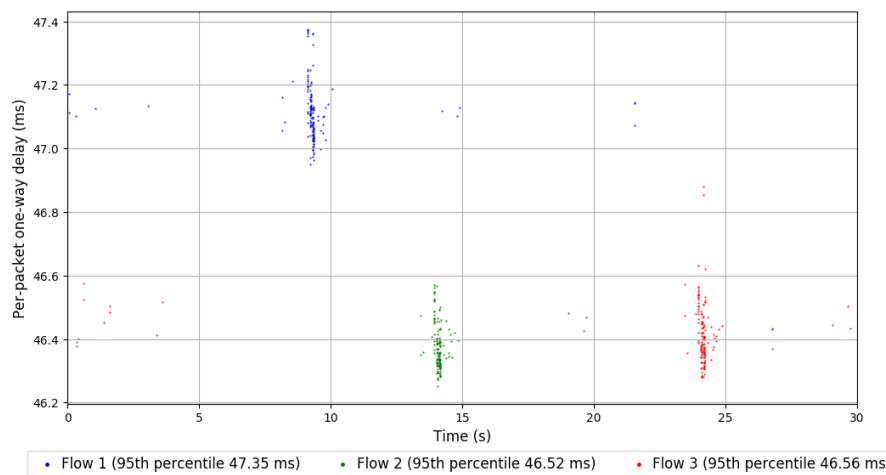
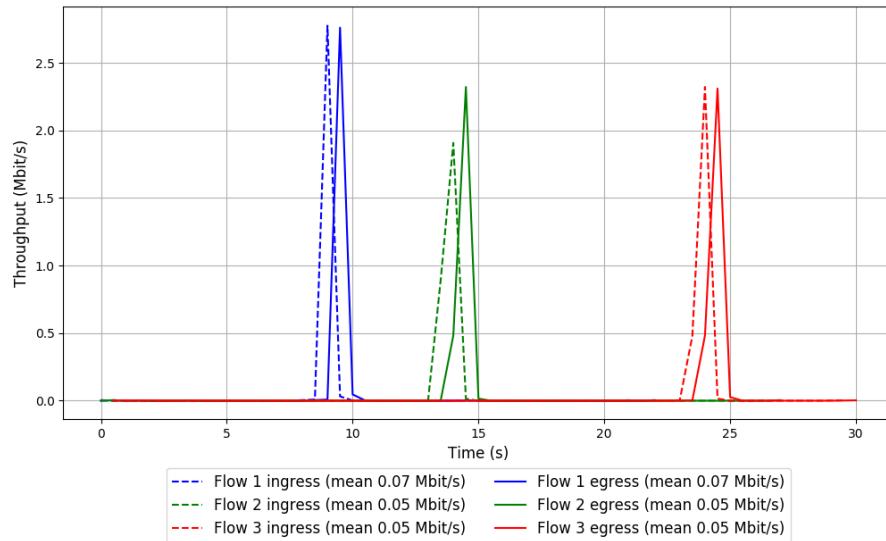


Run 1: Statistics of WebRTC media

```
Start at: 2019-01-19 21:38:35
End at: 2019-01-19 21:39:05
Local clock offset: 0.187 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-01-20 03:54:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.197 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 47.353 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.523 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.561 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

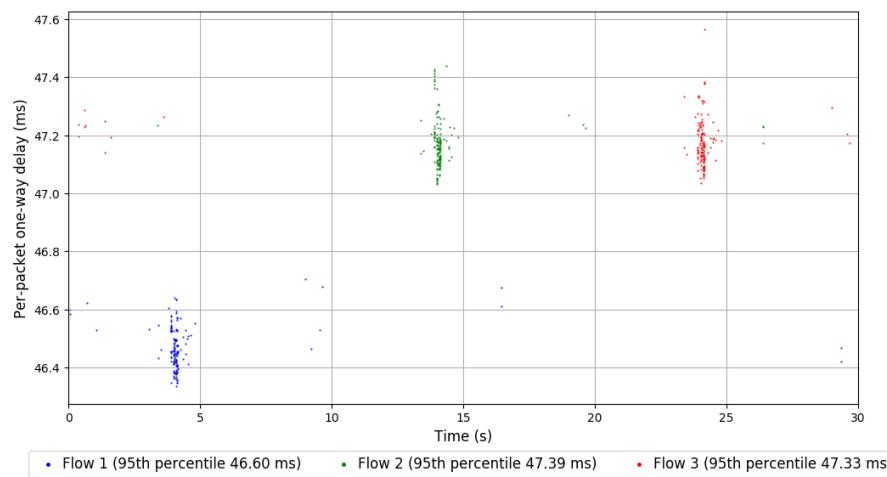
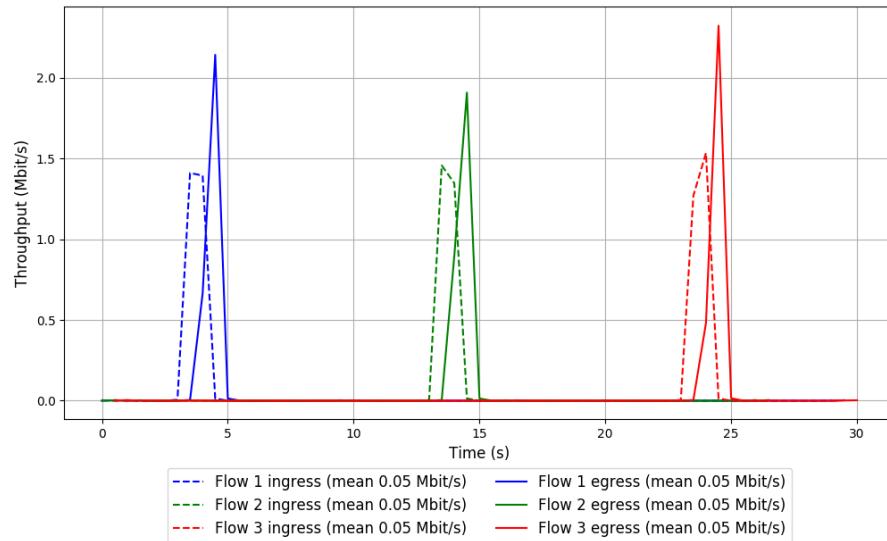


```
Run 2: Statistics of WebRTC media

Start at: 2019-01-19 22:16:05
End at: 2019-01-19 22:16:35
Local clock offset: -0.025 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-01-20 03:54:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.317 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.605 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.386 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.333 ms
Loss rate: 0.00%
```

## Run 2: Report of WebRTC media — Data Link

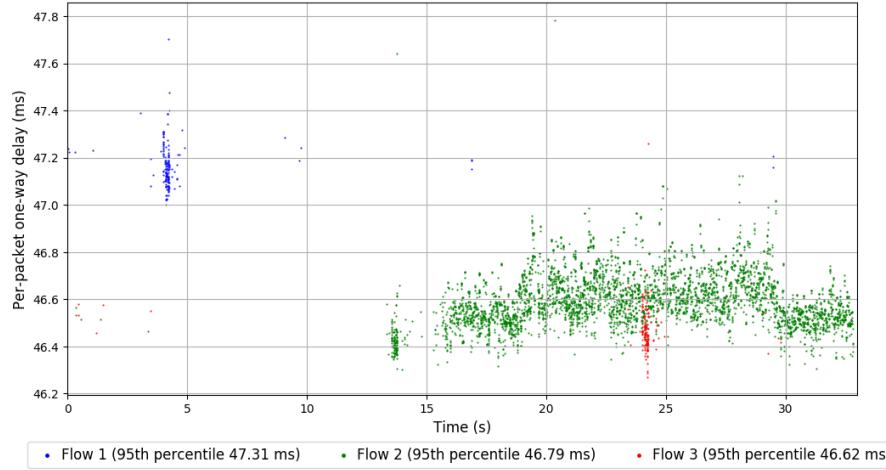
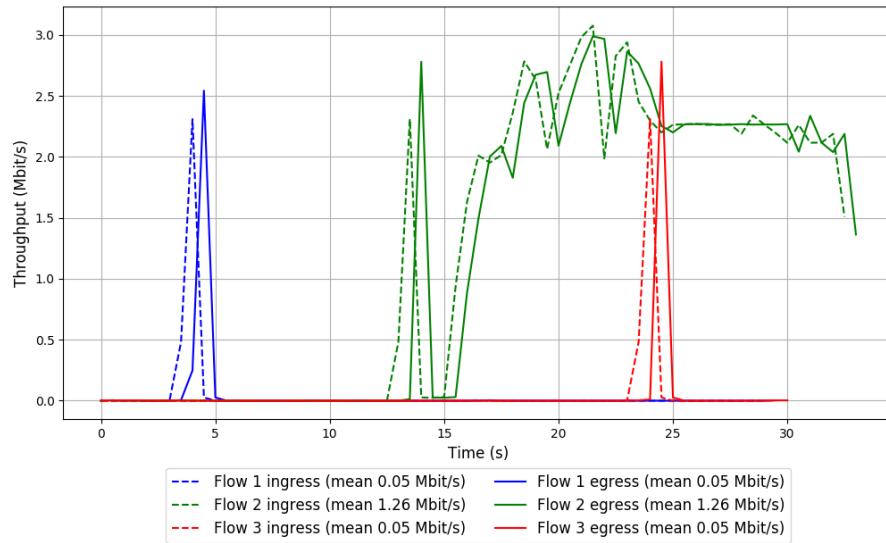


Run 3: Statistics of WebRTC media

```
Start at: 2019-01-19 22:54:17
End at: 2019-01-19 22:54:47
Local clock offset: -0.369 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-01-20 03:54:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 46.852 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 46.788 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.618 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

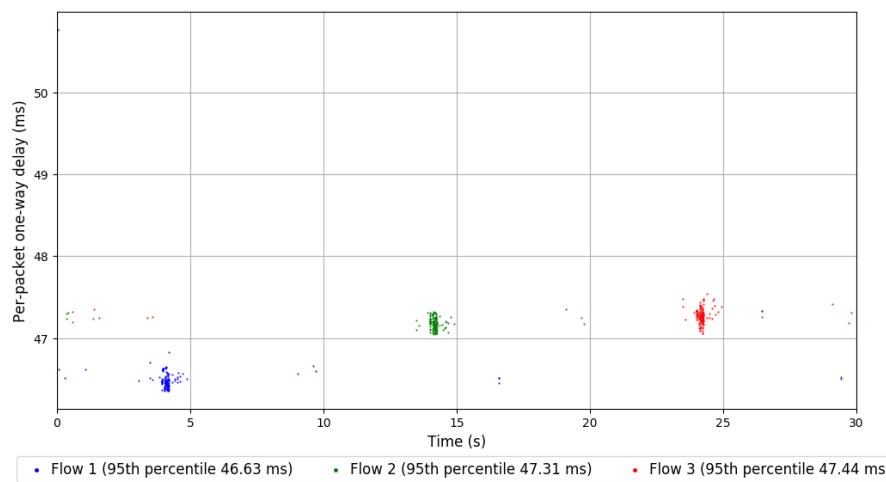
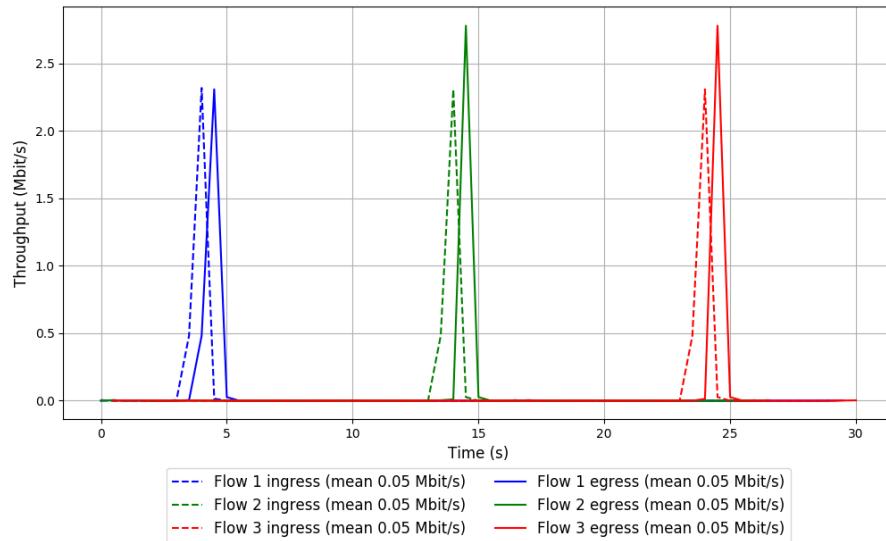


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-19 23:32:20
End at: 2019-01-19 23:32:50
Local clock offset: -0.07 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-01-20 03:54:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 47.368 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.633 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.311 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.442 ms
Loss rate: 0.00%
```

#### Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-01-20 00:10:47
End at: 2019-01-20 00:11:17
Local clock offset: -0.375 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-01-20 03:54:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 46.896 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.992 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 46.290 ms
Loss rate: 0.00%
```

### Run 5: Report of WebRTC media — Data Link

