

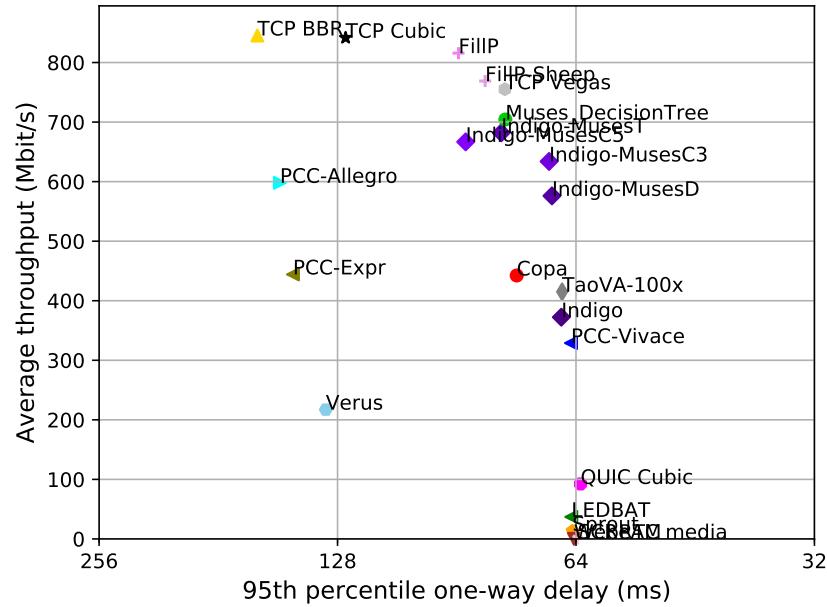
Pantheon Report

Generated at 2019-06-28 14:45:49 (UTC).
Data path: GCE Tokyo on `ens4` (*remote*) → GCE Iowa on `ens4` (*local*).
Repeated the test of 22 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.

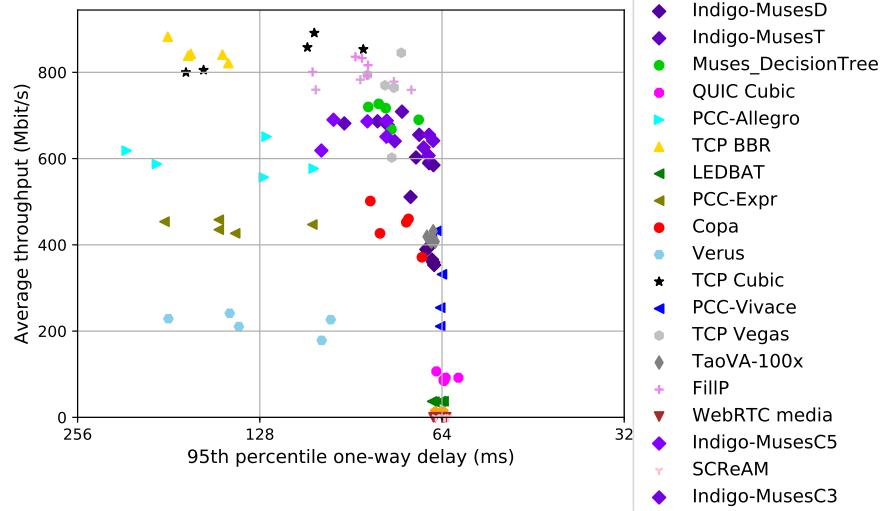
```
System info:  
Linux 4.15.0-1032-gcp  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef  
third_party/fillp @ d6da1459332fce56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/muses_dtree @ 11c9498ecb1596b02cc896791a02d03172af7ed  
M helpers/__init__.pyc  
M helpers/context.pyc  
M helpers/utils.pyc  
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd  
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 Tokyo to GCE Iowa, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



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



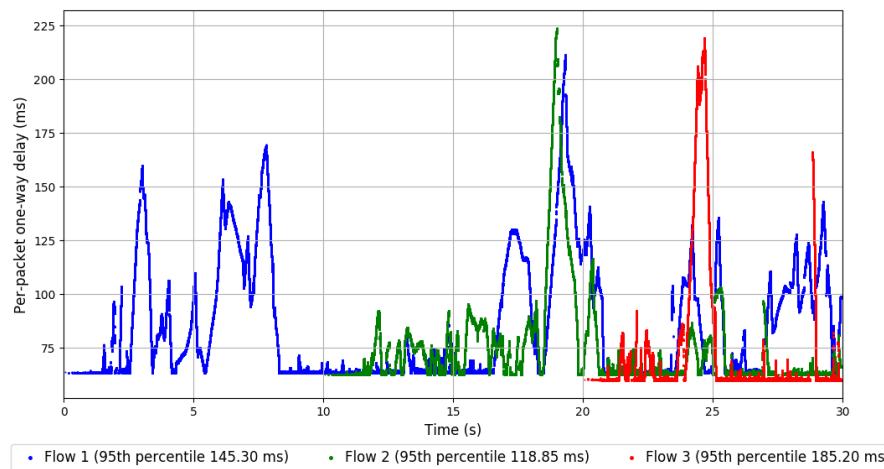
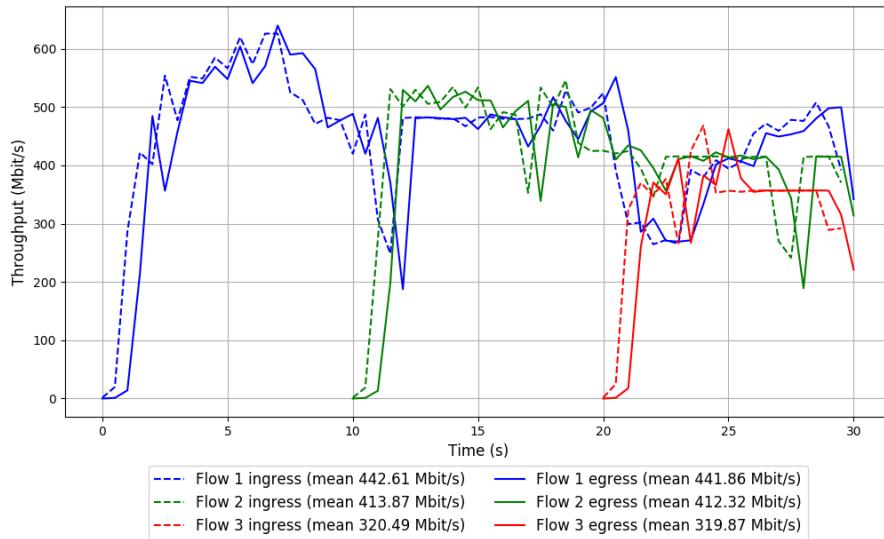
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	445.16	416.29	374.80	165.06	132.22	174.11	0.79	0.89	2.23
Copa	5	232.29	218.73	196.53	72.63	78.14	73.97	0.38	0.65	1.55
TCP Cubic	5	449.66	413.18	355.41	102.66	119.46	132.16	0.46	0.68	1.79
FillP	5	512.51	341.27	233.54	97.15	70.49	64.58	0.59	0.46	1.42
FillP-Sheep	5	482.68	316.42	232.16	90.32	66.43	67.06	0.47	0.52	1.11
Indigo	5	203.04	173.01	163.01	66.41	66.19	67.14	0.41	0.72	1.33
Indigo-MusesC3	5	388.24	316.26	188.34	68.74	71.37	65.06	0.31	0.62	3.18
Indigo-MusesC5	5	428.75	346.36	82.89	97.30	77.38	63.83	0.40	0.61	2.51
Indigo-MusesD	5	345.96	309.33	132.10	69.29	68.58	63.26	0.27	0.54	2.35
Indigo-MusesT	5	433.38	352.84	98.66	81.83	74.59	62.12	0.34	0.56	1.97
LEDBAT	5	23.71	16.17	7.88	64.15	63.51	63.96	0.83	1.24	2.51
Muses.DecisionTree	5	415.73	372.96	135.72	81.19	76.16	63.44	0.33	0.43	1.29
PCC-Allegro	5	325.64	289.94	245.25	151.61	105.46	105.93	3.49	0.95	1.53
PCC-Expr	5	256.97	206.97	152.57	132.48	119.90	88.63	2.43	1.11	1.85
QUIC Cubic	5	54.84	41.15	27.29	62.69	62.48	60.98	0.57	1.07	2.21
SCReAM	5	0.22	0.22	0.22	62.28	62.04	63.68	0.38	0.65	1.09
Sprout	5	6.91	6.81	6.22	63.20	62.07	64.38	0.42	0.60	1.62
TaoVA-100x	5	211.68	206.06	201.69	64.96	65.94	68.19	0.37	0.53	1.33
TCP Vegas	5	387.34	360.86	388.40	73.77	75.83	82.52	0.37	0.49	1.45
Verus	5	118.36	103.59	93.72	132.80	108.40	110.11	1.05	0.62	1.41
PCC-Vivace	5	187.76	157.84	111.38	63.93	64.82	64.28	0.61	1.43	1.85
WebRTC media	5	0.05	0.05	0.05	63.13	62.86	62.18	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-06-28 09:03:02
End at: 2019-06-28 09:03:32
Local clock offset: -0.048 ms
Remote clock offset: -0.231 ms

# Below is generated by plot.py at 2019-06-28 12:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 821.57 Mbit/s
95th percentile per-packet one-way delay: 144.289 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 441.86 Mbit/s
95th percentile per-packet one-way delay: 145.300 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 412.32 Mbit/s
95th percentile per-packet one-way delay: 118.854 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 319.87 Mbit/s
95th percentile per-packet one-way delay: 185.201 ms
Loss rate: 1.43%
```

Run 1: Report of TCP BBR — Data Link

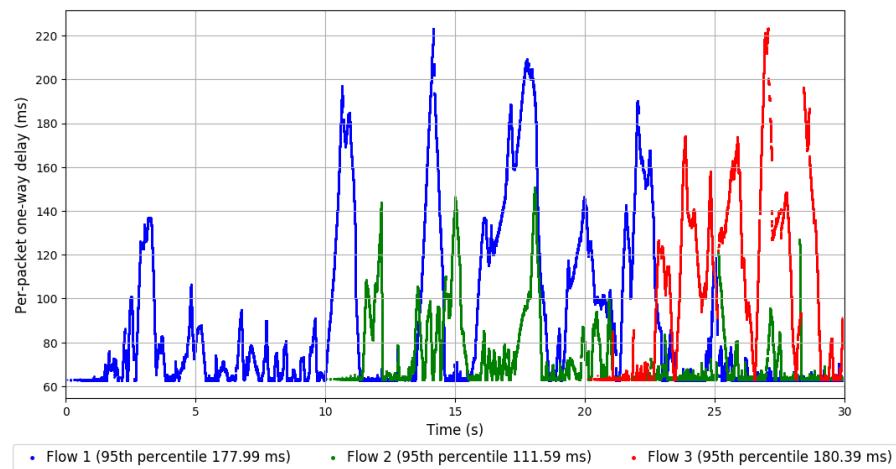
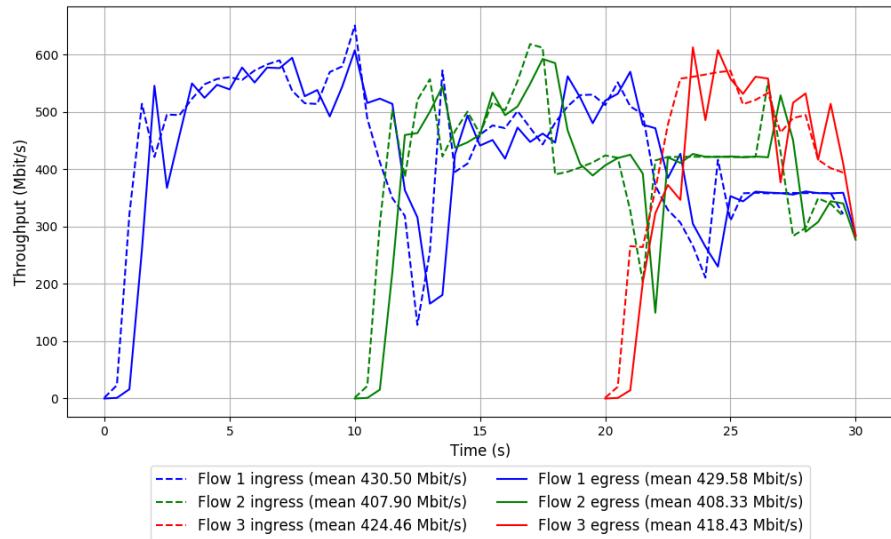


Run 2: Statistics of TCP BBR

```
Start at: 2019-06-28 09:40:02
End at: 2019-06-28 09:40:32
Local clock offset: -0.016 ms
Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2019-06-28 12:32:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 838.61 Mbit/s
95th percentile per-packet one-way delay: 168.085 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 429.58 Mbit/s
95th percentile per-packet one-way delay: 177.985 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 408.33 Mbit/s
95th percentile per-packet one-way delay: 111.594 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 418.43 Mbit/s
95th percentile per-packet one-way delay: 180.392 ms
Loss rate: 2.64%
```

Run 2: Report of TCP BBR — Data Link

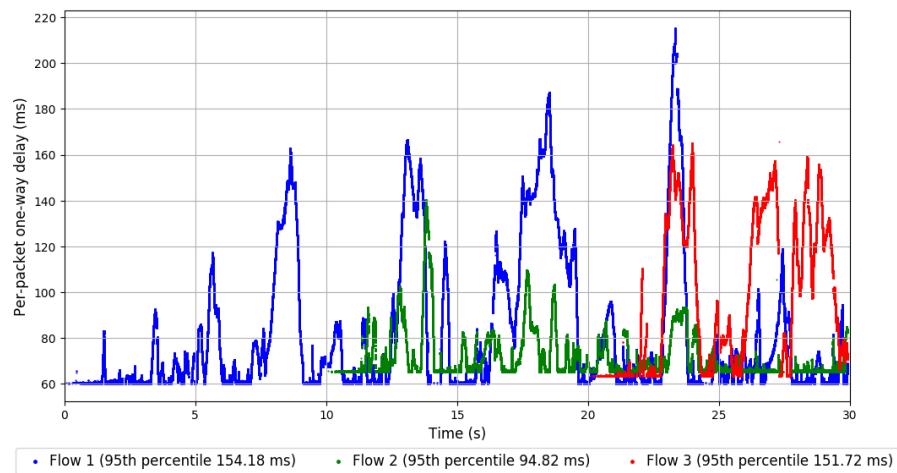
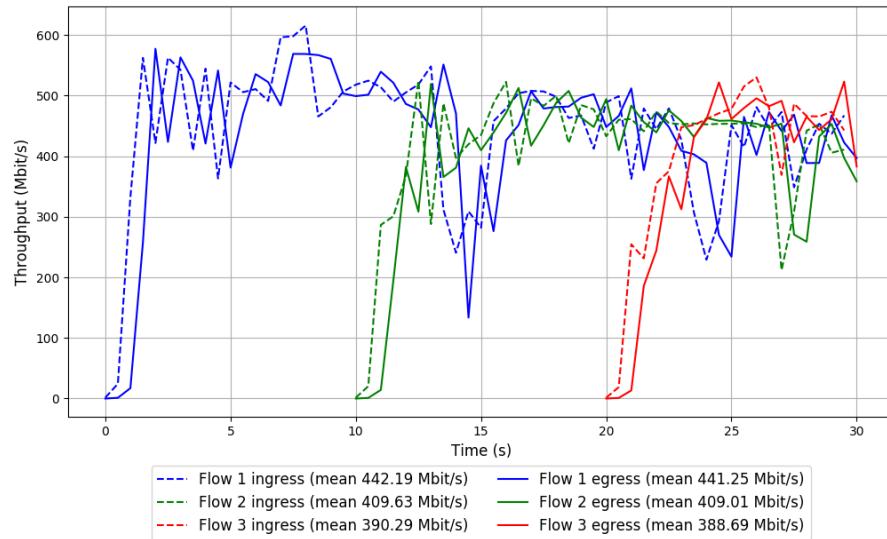


Run 3: Statistics of TCP BBR

```
Start at: 2019-06-28 10:17:22
End at: 2019-06-28 10:17:52
Local clock offset: 0.047 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2019-06-28 12:32:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 841.19 Mbit/s
95th percentile per-packet one-way delay: 147.538 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 441.25 Mbit/s
95th percentile per-packet one-way delay: 154.182 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 409.01 Mbit/s
95th percentile per-packet one-way delay: 94.824 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 388.69 Mbit/s
95th percentile per-packet one-way delay: 151.720 ms
Loss rate: 1.65%
```

Run 3: Report of TCP BBR — Data Link

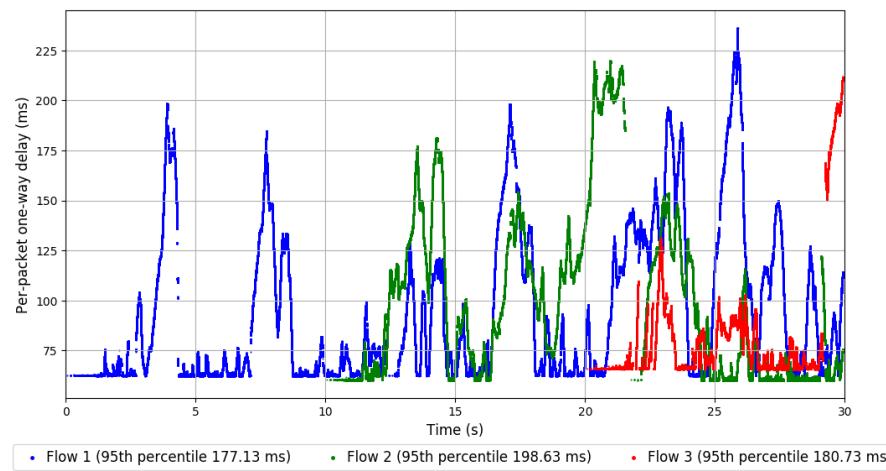
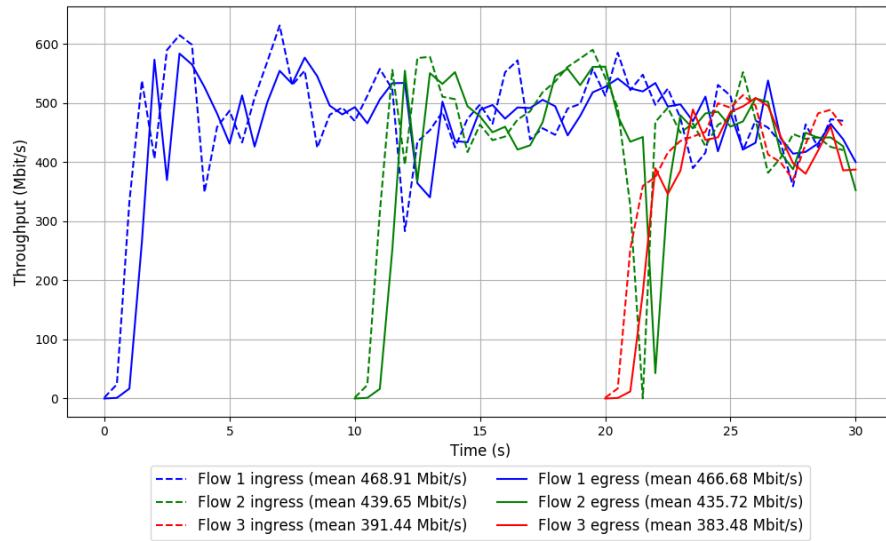


Run 4: Statistics of TCP BBR

```
Start at: 2019-06-28 10:54:35
End at: 2019-06-28 10:55:05
Local clock offset: -0.098 ms
Remote clock offset: -0.596 ms

# Below is generated by plot.py at 2019-06-28 12:33:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 882.70 Mbit/s
95th percentile per-packet one-way delay: 181.649 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 466.68 Mbit/s
95th percentile per-packet one-way delay: 177.130 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 435.72 Mbit/s
95th percentile per-packet one-way delay: 198.632 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 383.48 Mbit/s
95th percentile per-packet one-way delay: 180.726 ms
Loss rate: 3.28%
```

Run 4: Report of TCP BBR — Data Link

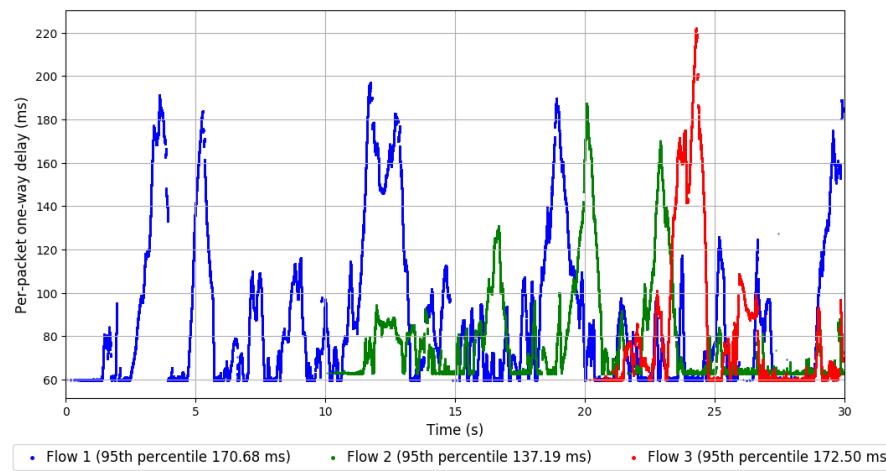
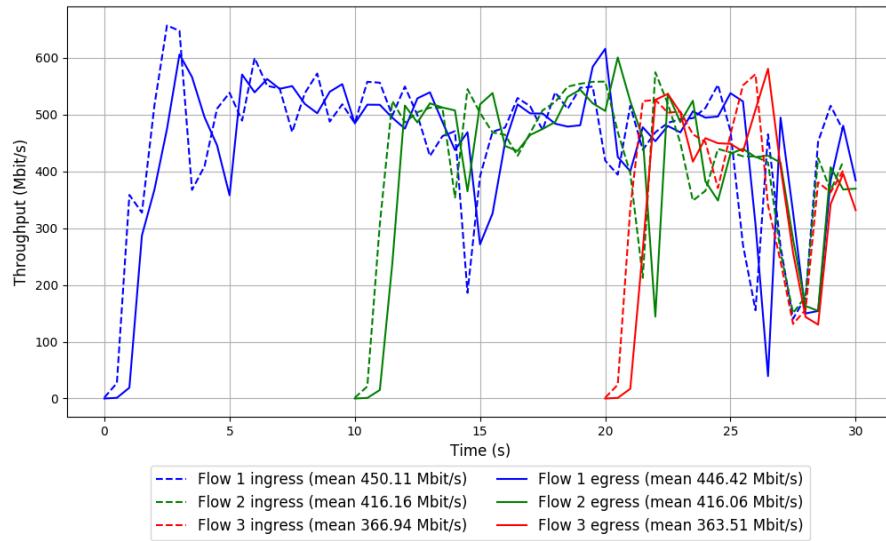


Run 5: Statistics of TCP BBR

```
Start at: 2019-06-28 11:31:47
End at: 2019-06-28 11:32:17
Local clock offset: -0.039 ms
Remote clock offset: -0.515 ms

# Below is generated by plot.py at 2019-06-28 12:33:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 842.77 Mbit/s
95th percentile per-packet one-way delay: 166.394 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 446.42 Mbit/s
95th percentile per-packet one-way delay: 170.678 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 416.06 Mbit/s
95th percentile per-packet one-way delay: 137.193 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 363.51 Mbit/s
95th percentile per-packet one-way delay: 172.496 ms
Loss rate: 2.14%
```

Run 5: Report of TCP BBR — Data Link

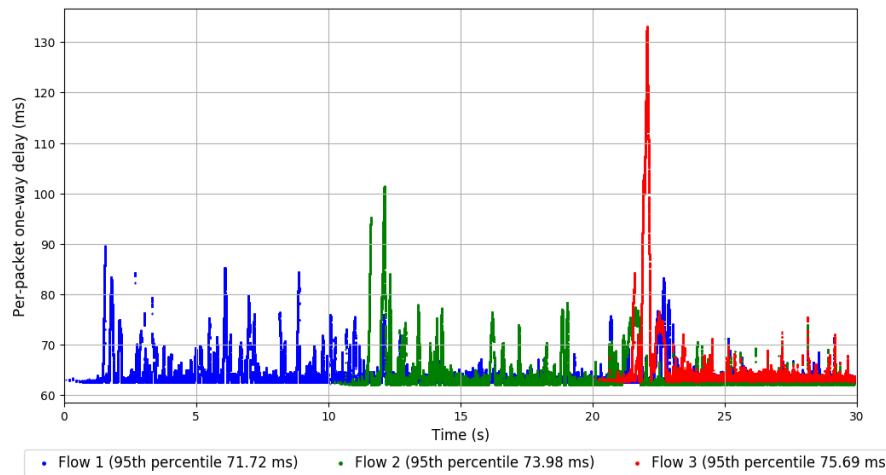
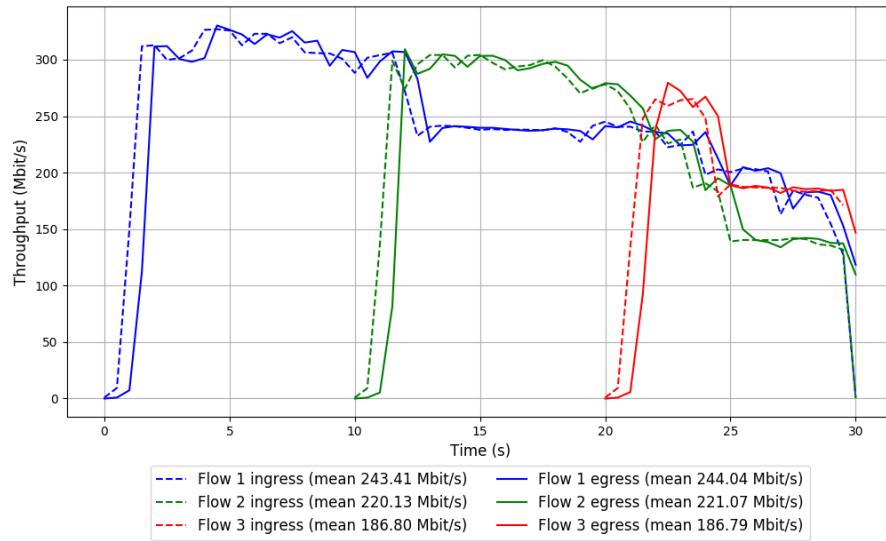


Run 1: Statistics of Copa

```
Start at: 2019-06-28 09:06:54
End at: 2019-06-28 09:07:24
Local clock offset: -0.014 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-06-28 12:33:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.37 Mbit/s
95th percentile per-packet one-way delay: 73.303 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 244.04 Mbit/s
95th percentile per-packet one-way delay: 71.723 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 221.07 Mbit/s
95th percentile per-packet one-way delay: 73.981 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 186.79 Mbit/s
95th percentile per-packet one-way delay: 75.686 ms
Loss rate: 1.25%
```

Run 1: Report of Copa — Data Link

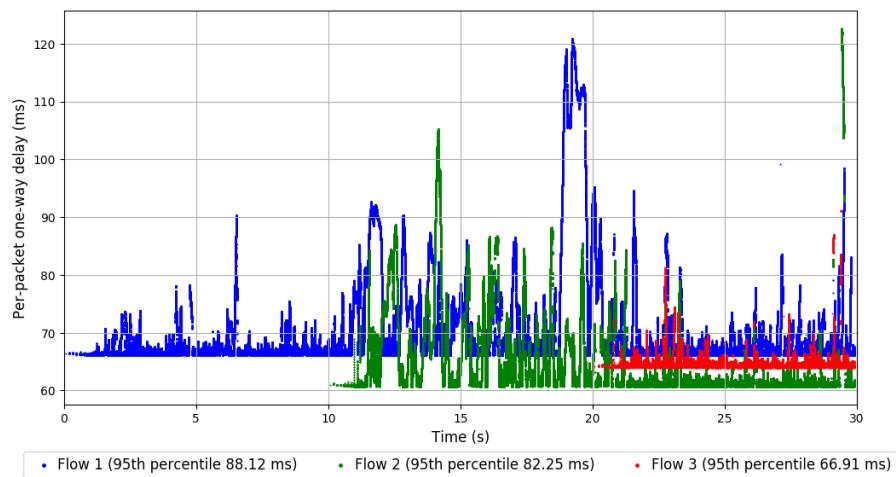
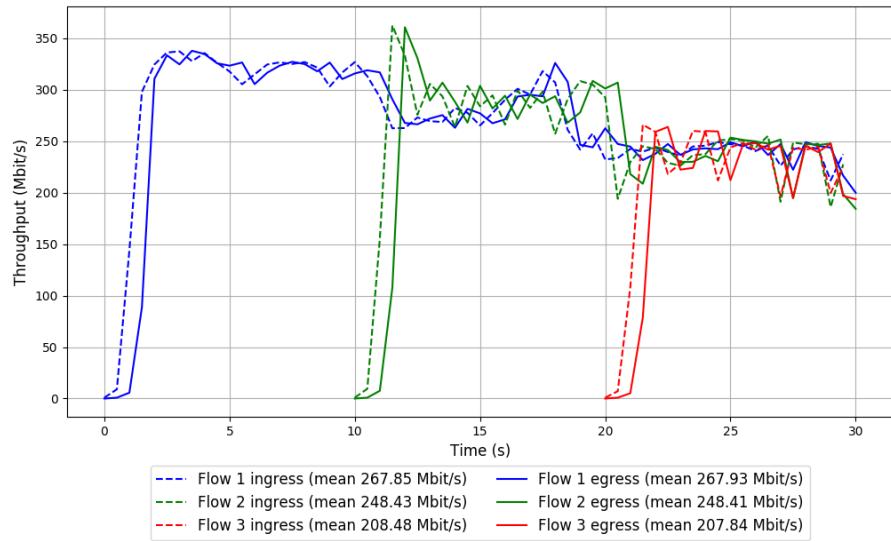


Run 2: Statistics of Copa

```
Start at: 2019-06-28 09:43:58
End at: 2019-06-28 09:44:28
Local clock offset: 0.003 ms
Remote clock offset: -0.833 ms

# Below is generated by plot.py at 2019-06-28 12:34:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 501.57 Mbit/s
95th percentile per-packet one-way delay: 84.058 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 267.93 Mbit/s
95th percentile per-packet one-way delay: 88.124 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 248.41 Mbit/s
95th percentile per-packet one-way delay: 82.246 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 207.84 Mbit/s
95th percentile per-packet one-way delay: 66.906 ms
Loss rate: 1.55%
```

Run 2: Report of Copa — Data Link

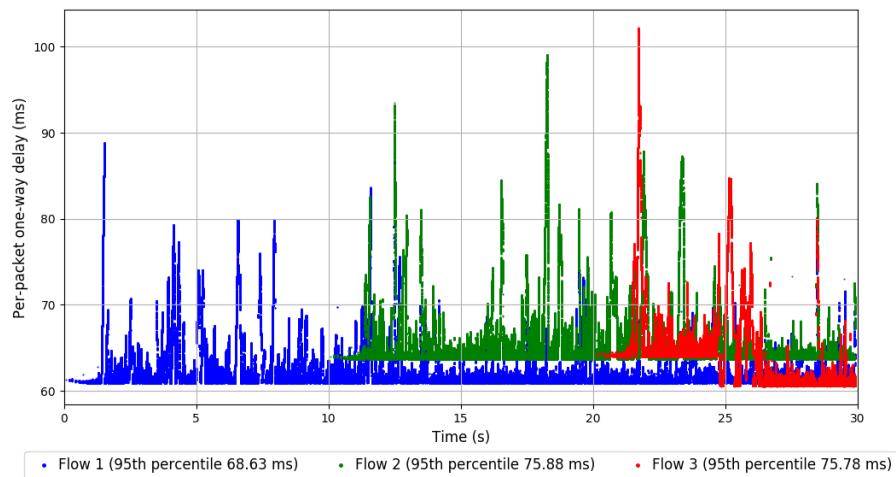
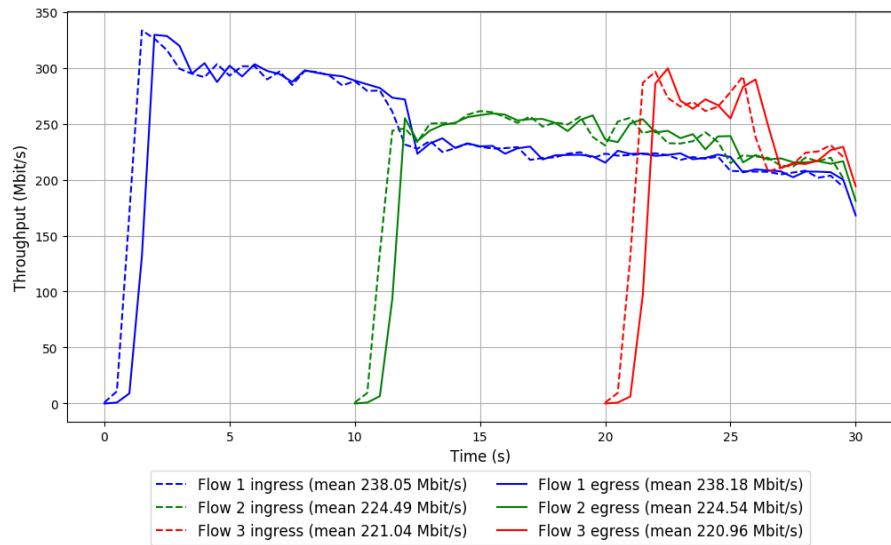


Run 3: Statistics of Copa

```
Start at: 2019-06-28 10:21:19
End at: 2019-06-28 10:21:49
Local clock offset: 0.016 ms
Remote clock offset: -0.803 ms

# Below is generated by plot.py at 2019-06-28 12:34:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.14 Mbit/s
95th percentile per-packet one-way delay: 72.712 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 238.18 Mbit/s
95th percentile per-packet one-way delay: 68.627 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 224.54 Mbit/s
95th percentile per-packet one-way delay: 75.877 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 220.96 Mbit/s
95th percentile per-packet one-way delay: 75.776 ms
Loss rate: 1.28%
```

Run 3: Report of Copa — Data Link

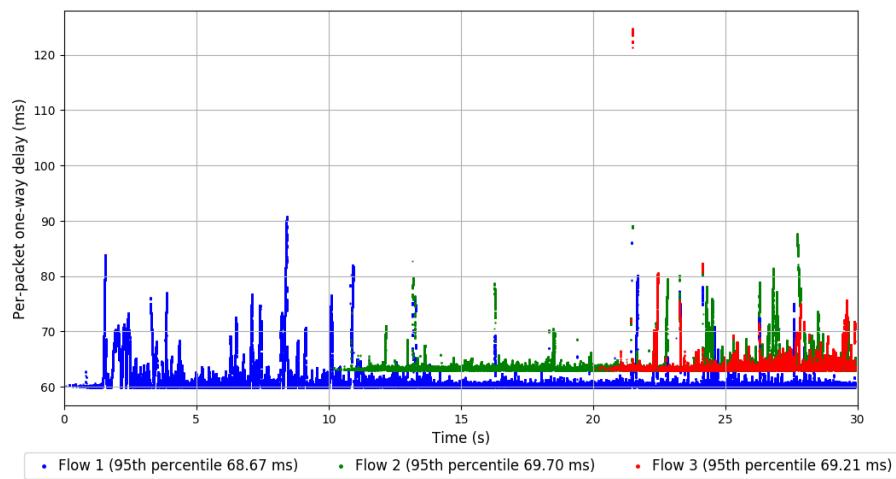
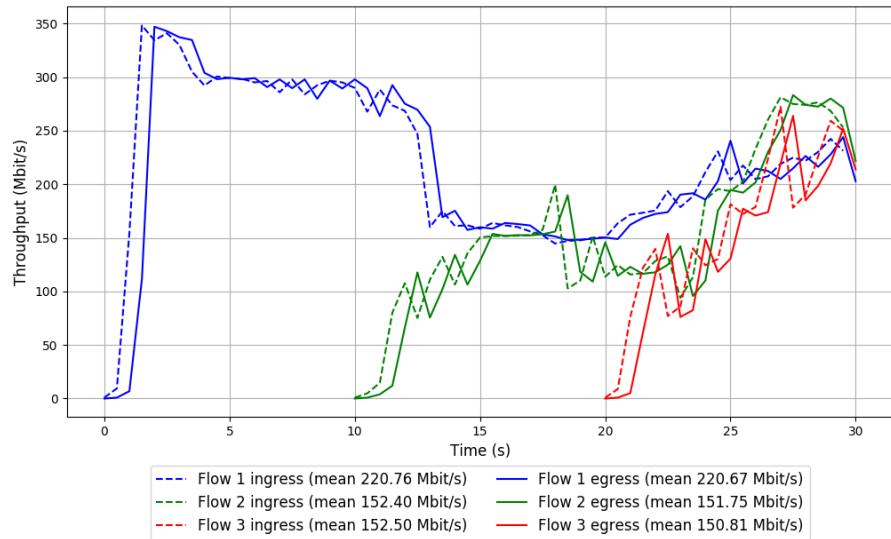


Run 4: Statistics of Copa

```
Start at: 2019-06-28 10:58:35
End at: 2019-06-28 10:59:05
Local clock offset: -0.103 ms
Remote clock offset: -0.458 ms

# Below is generated by plot.py at 2019-06-28 12:43:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.23 Mbit/s
95th percentile per-packet one-way delay: 69.086 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 220.67 Mbit/s
95th percentile per-packet one-way delay: 68.668 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 151.75 Mbit/s
95th percentile per-packet one-way delay: 69.702 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 150.81 Mbit/s
95th percentile per-packet one-way delay: 69.213 ms
Loss rate: 2.34%
```

Run 4: Report of Copa — Data Link

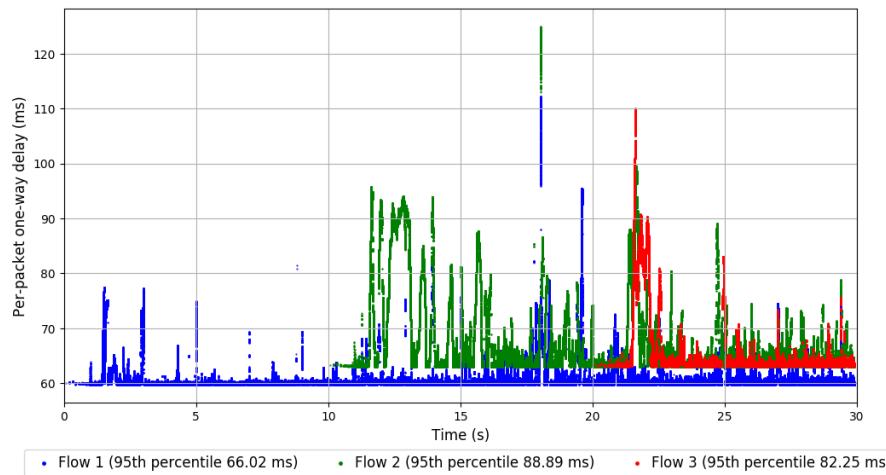
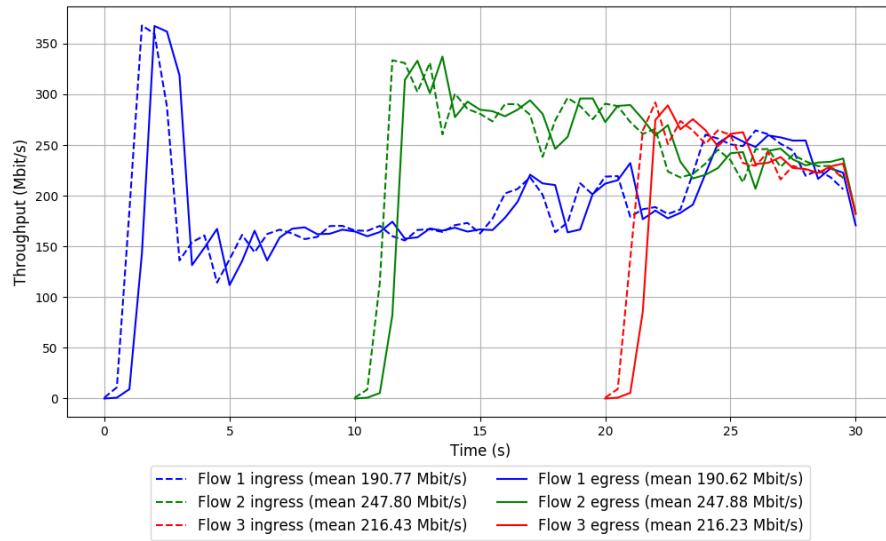


Run 5: Statistics of Copa

```
Start at: 2019-06-28 11:35:39
End at: 2019-06-28 11:36:09
Local clock offset: -0.048 ms
Remote clock offset: -0.667 ms

# Below is generated by plot.py at 2019-06-28 12:46:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.57 Mbit/s
95th percentile per-packet one-way delay: 81.025 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 190.62 Mbit/s
95th percentile per-packet one-way delay: 66.022 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 247.88 Mbit/s
95th percentile per-packet one-way delay: 88.893 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 216.23 Mbit/s
95th percentile per-packet one-way delay: 82.245 ms
Loss rate: 1.34%
```

Run 5: Report of Copa — Data Link

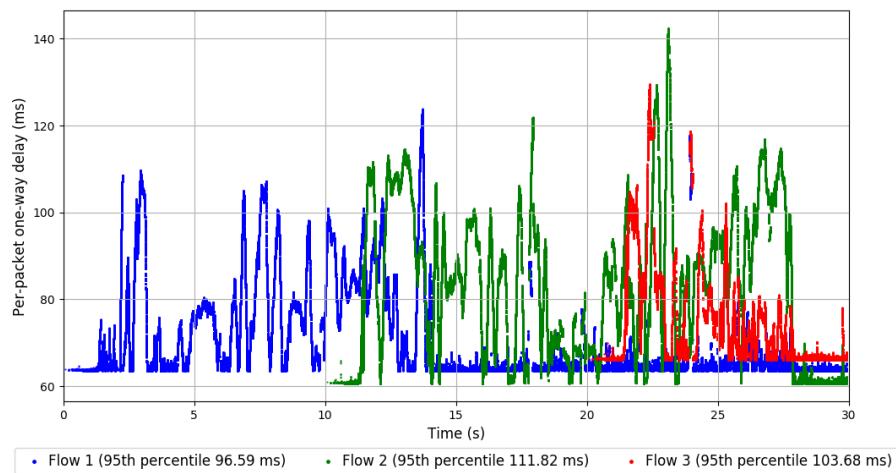
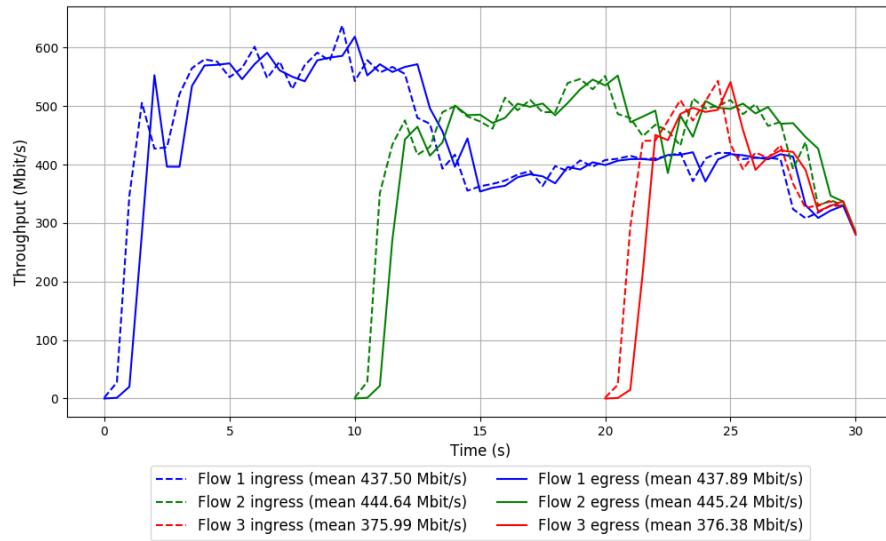


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-06-28 09:21:03
End at: 2019-06-28 09:21:33
Local clock offset: -0.006 ms
Remote clock offset: -0.798 ms

# Below is generated by plot.py at 2019-06-28 12:47:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 857.86 Mbit/s
95th percentile per-packet one-way delay: 106.789 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 437.89 Mbit/s
95th percentile per-packet one-way delay: 96.592 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 445.24 Mbit/s
95th percentile per-packet one-way delay: 111.821 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 376.38 Mbit/s
95th percentile per-packet one-way delay: 103.677 ms
Loss rate: 1.18%
```

Run 1: Report of TCP Cubic — Data Link

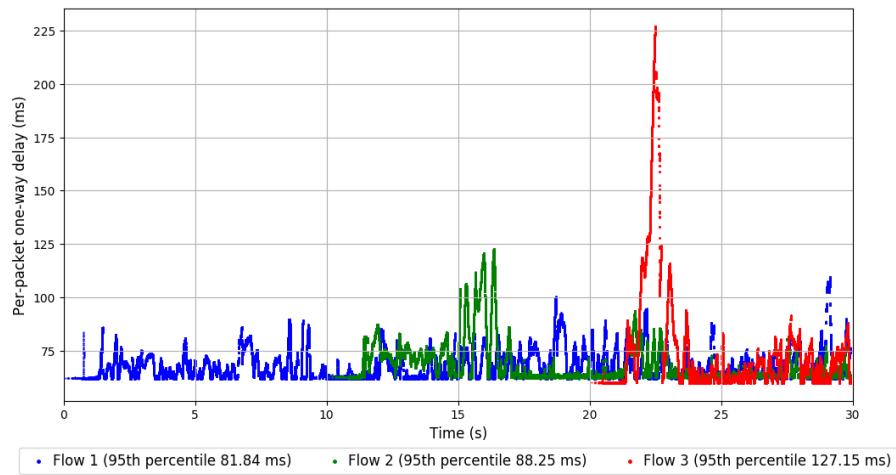
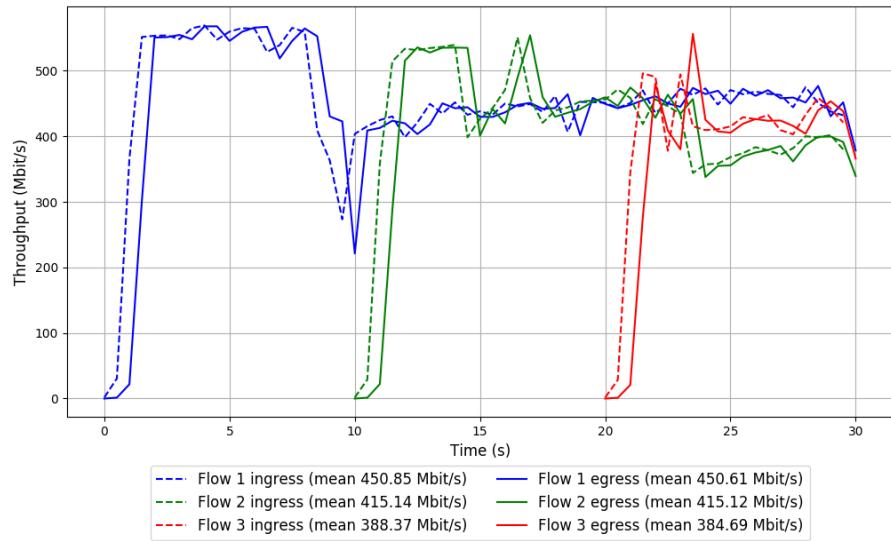


Run 2: Statistics of TCP Cubic

```
Start at: 2019-06-28 09:58:26
End at: 2019-06-28 09:58:56
Local clock offset: -0.049 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-06-28 12:47:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 853.36 Mbit/s
95th percentile per-packet one-way delay: 86.331 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 450.61 Mbit/s
95th percentile per-packet one-way delay: 81.842 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 415.12 Mbit/s
95th percentile per-packet one-way delay: 88.248 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 384.69 Mbit/s
95th percentile per-packet one-way delay: 127.146 ms
Loss rate: 2.16%
```

Run 2: Report of TCP Cubic — Data Link

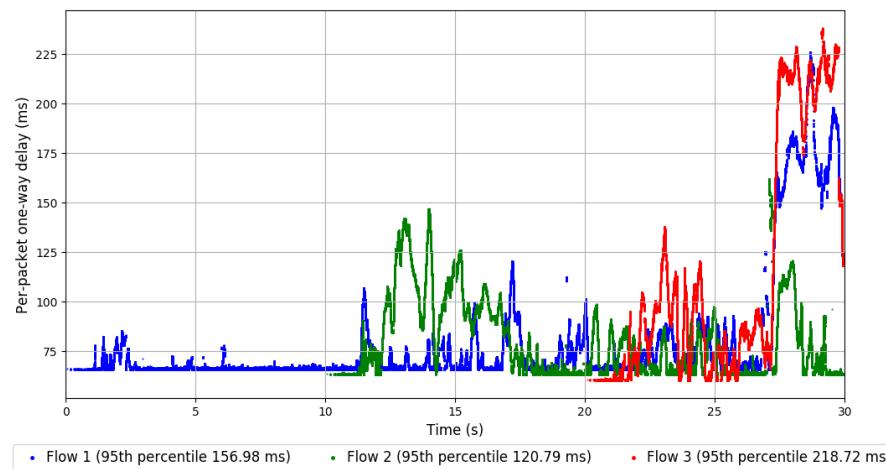
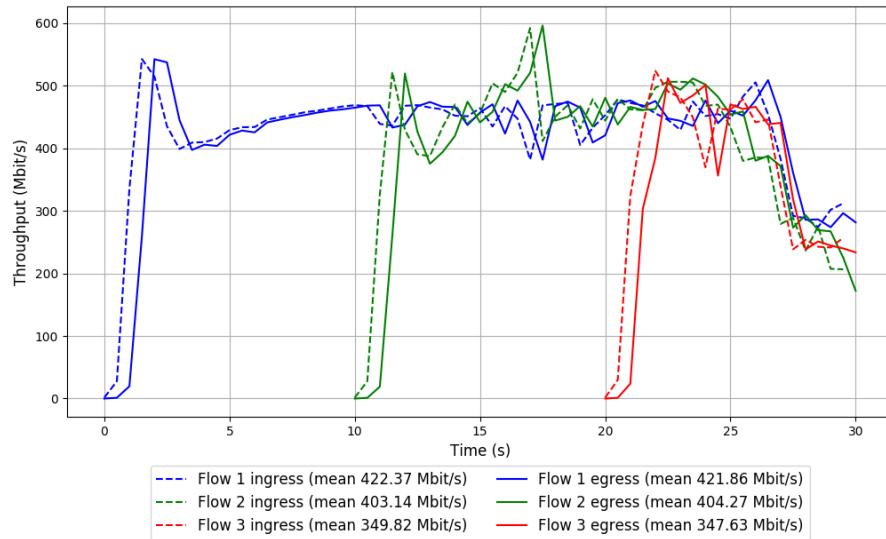


Run 3: Statistics of TCP Cubic

```
Start at: 2019-06-28 10:35:38
End at: 2019-06-28 10:36:08
Local clock offset: -0.019 ms
Remote clock offset: -0.357 ms

# Below is generated by plot.py at 2019-06-28 12:47:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 805.20 Mbit/s
95th percentile per-packet one-way delay: 158.528 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 421.86 Mbit/s
95th percentile per-packet one-way delay: 156.984 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 404.27 Mbit/s
95th percentile per-packet one-way delay: 120.787 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 347.63 Mbit/s
95th percentile per-packet one-way delay: 218.719 ms
Loss rate: 1.83%
```

Run 3: Report of TCP Cubic — Data Link

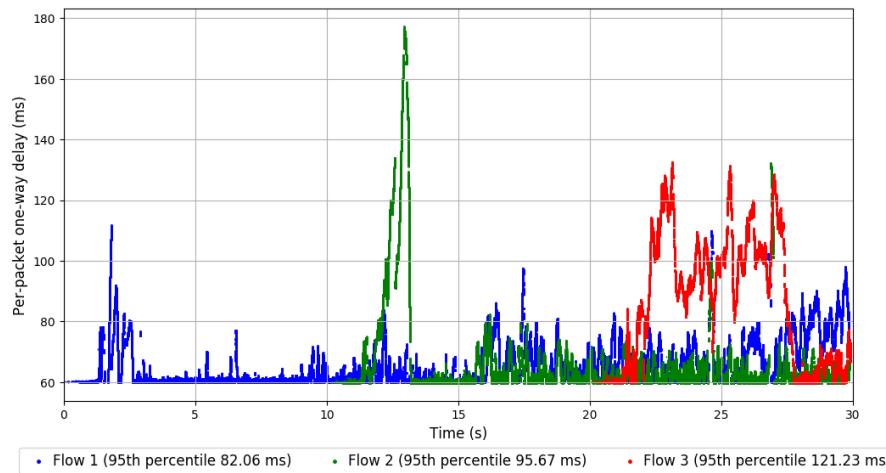
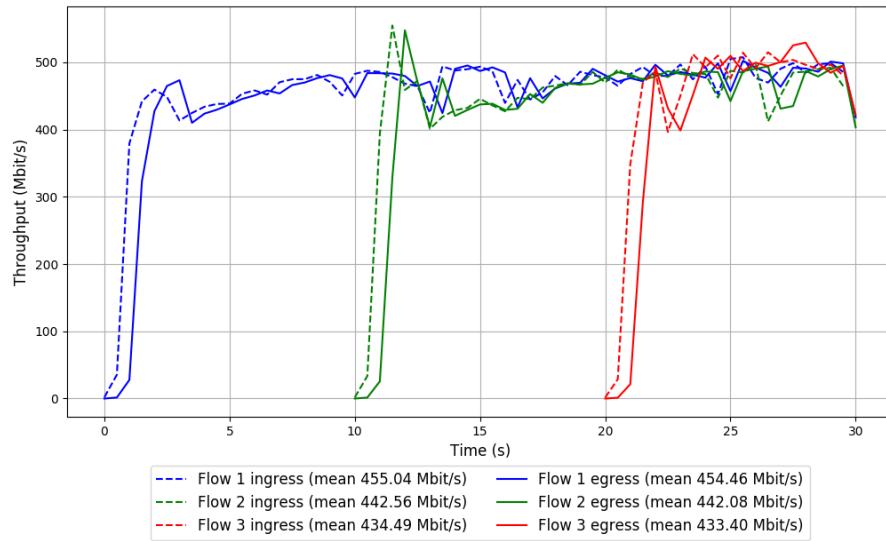


Run 4: Statistics of TCP Cubic

```
Start at: 2019-06-28 11:12:44
End at: 2019-06-28 11:13:14
Local clock offset: -0.088 ms
Remote clock offset: -0.531 ms

# Below is generated by plot.py at 2019-06-28 12:48:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 891.24 Mbit/s
95th percentile per-packet one-way delay: 104.022 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 454.46 Mbit/s
95th percentile per-packet one-way delay: 82.064 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 442.08 Mbit/s
95th percentile per-packet one-way delay: 95.671 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 433.40 Mbit/s
95th percentile per-packet one-way delay: 121.234 ms
Loss rate: 1.48%
```

Run 4: Report of TCP Cubic — Data Link

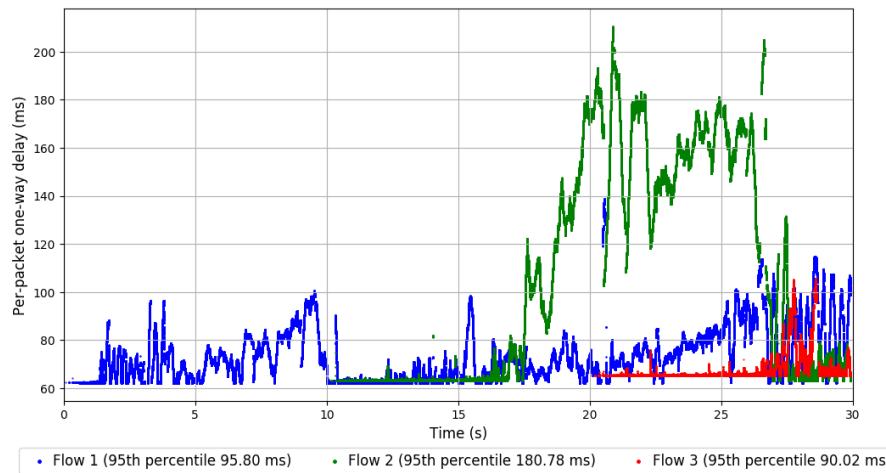
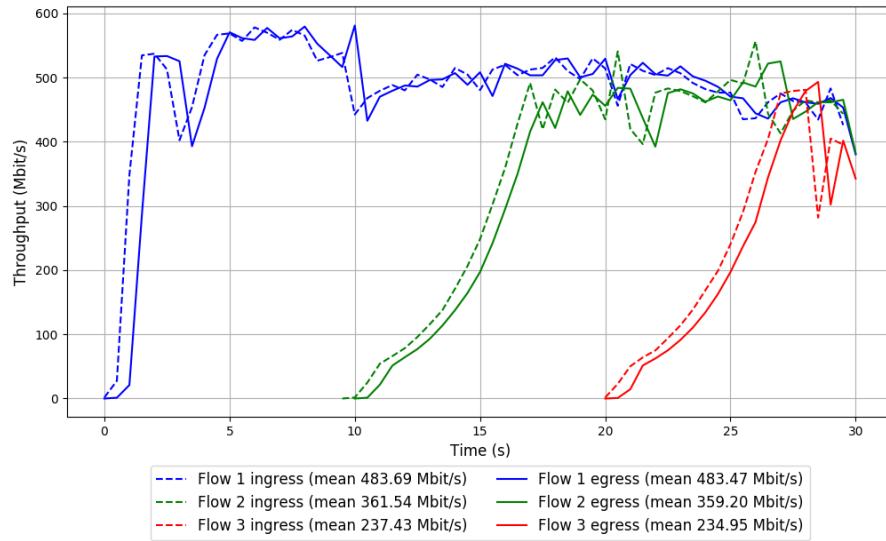


Run 5: Statistics of TCP Cubic

```
Start at: 2019-06-28 11:49:36
End at: 2019-06-28 11:50:06
Local clock offset: -0.035 ms
Remote clock offset: 0.163 ms

# Below is generated by plot.py at 2019-06-28 12:48:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 799.81 Mbit/s
95th percentile per-packet one-way delay: 169.526 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 483.47 Mbit/s
95th percentile per-packet one-way delay: 95.802 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 359.20 Mbit/s
95th percentile per-packet one-way delay: 180.777 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 234.95 Mbit/s
95th percentile per-packet one-way delay: 90.024 ms
Loss rate: 2.29%
```

Run 5: Report of TCP Cubic — Data Link

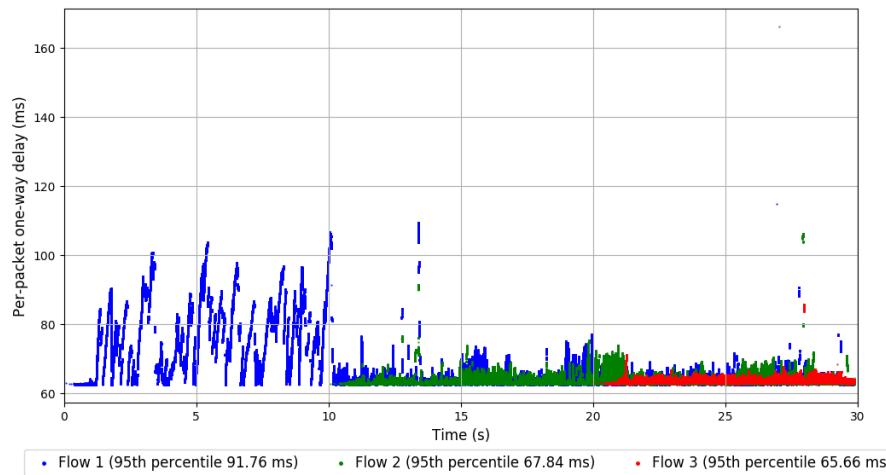
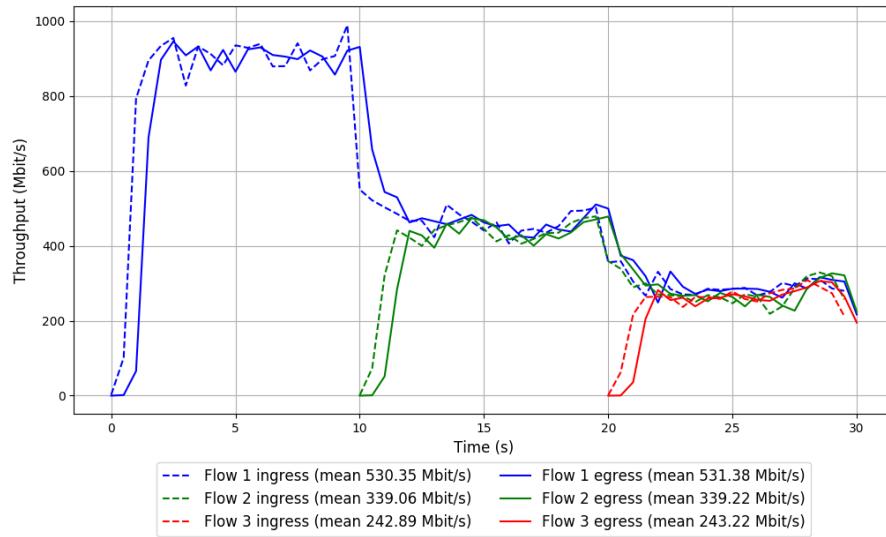


```
Run 1: Statistics of FillP

Start at: 2019-06-28 09:01:13
End at: 2019-06-28 09:01:43
Local clock offset: -0.048 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-06-28 12:52:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 836.04 Mbit/s
95th percentile per-packet one-way delay: 88.975 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 531.38 Mbit/s
95th percentile per-packet one-way delay: 91.764 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 339.22 Mbit/s
95th percentile per-packet one-way delay: 67.842 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 243.22 Mbit/s
95th percentile per-packet one-way delay: 65.657 ms
Loss rate: 1.20%
```

Run 1: Report of FillP — Data Link

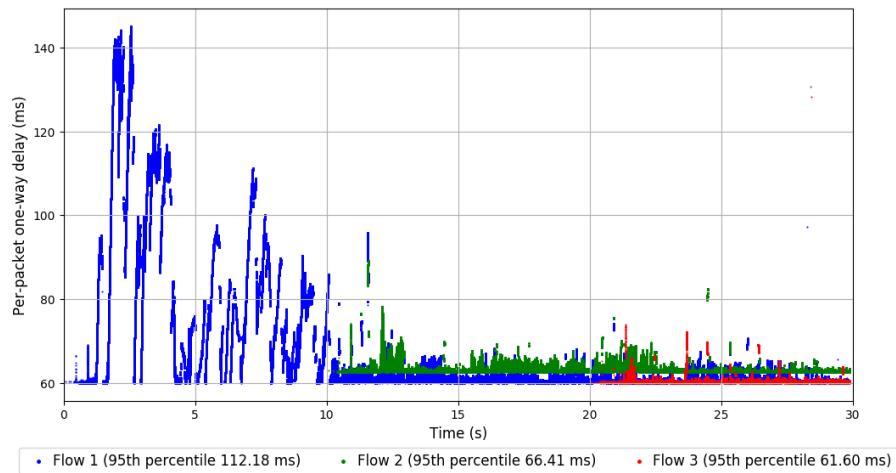
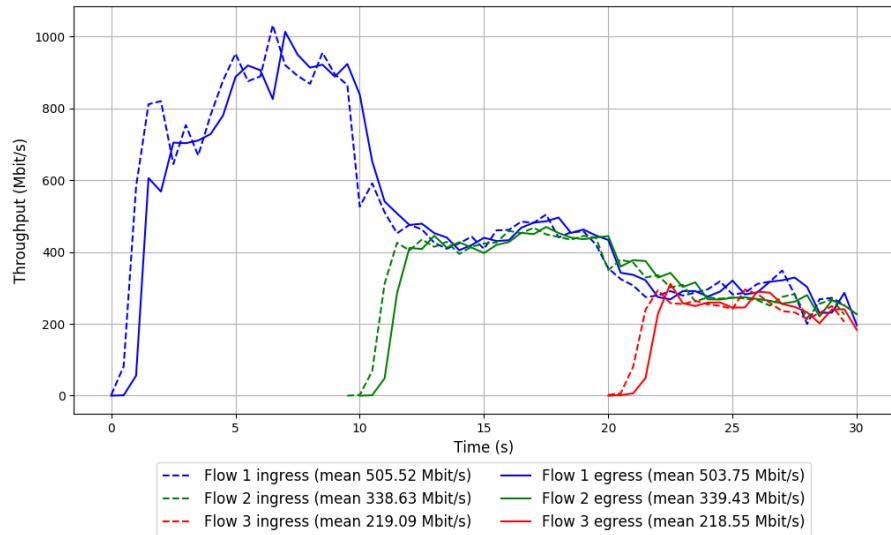


Run 2: Statistics of FillP

```
Start at: 2019-06-28 09:38:15
End at: 2019-06-28 09:38:45
Local clock offset: -0.031 ms
Remote clock offset: 0.166 ms

# Below is generated by plot.py at 2019-06-28 13:01:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 800.80 Mbit/s
95th percentile per-packet one-way delay: 104.709 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 503.75 Mbit/s
95th percentile per-packet one-way delay: 112.183 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 339.43 Mbit/s
95th percentile per-packet one-way delay: 66.407 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 218.55 Mbit/s
95th percentile per-packet one-way delay: 61.599 ms
Loss rate: 1.36%
```

Run 2: Report of FillP — Data Link

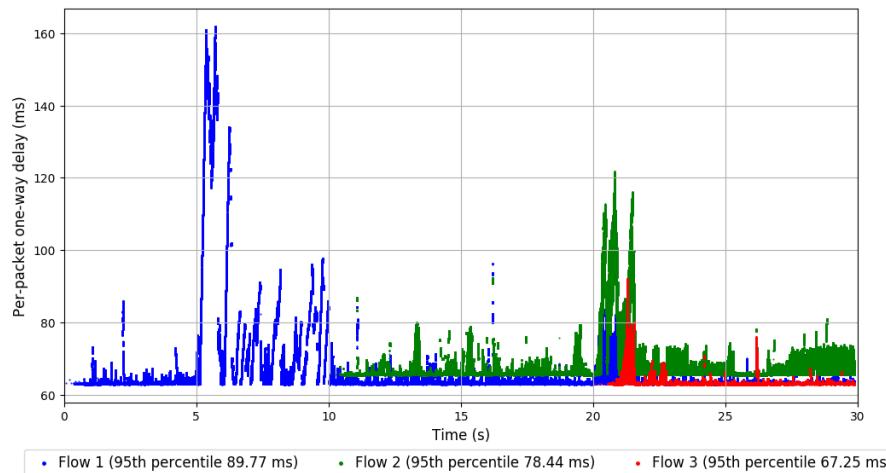
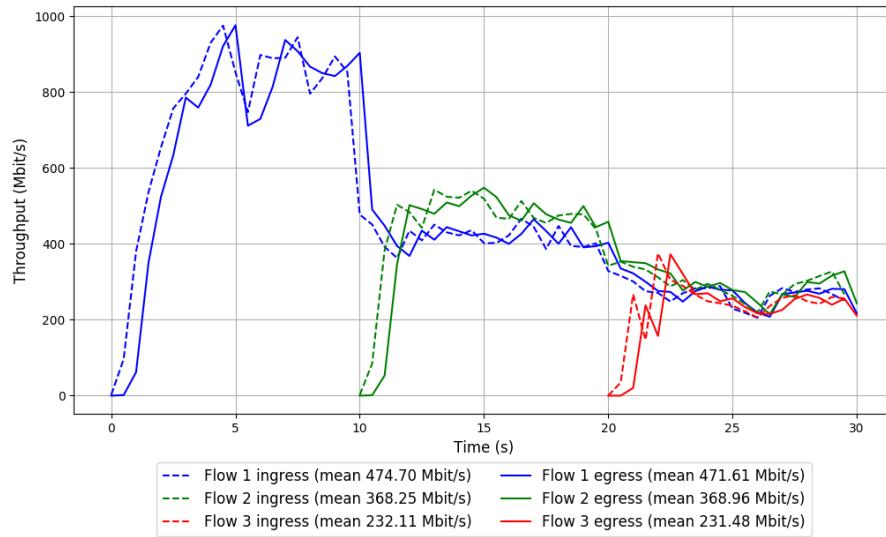


Run 3: Statistics of FillP

```
Start at: 2019-06-28 10:15:36
End at: 2019-06-28 10:16:06
Local clock offset: 0.012 ms
Remote clock offset: -0.194 ms

# Below is generated by plot.py at 2019-06-28 13:03:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 792.65 Mbit/s
95th percentile per-packet one-way delay: 85.034 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 471.61 Mbit/s
95th percentile per-packet one-way delay: 89.768 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 368.96 Mbit/s
95th percentile per-packet one-way delay: 78.444 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 231.48 Mbit/s
95th percentile per-packet one-way delay: 67.251 ms
Loss rate: 1.72%
```

Run 3: Report of FillP — Data Link

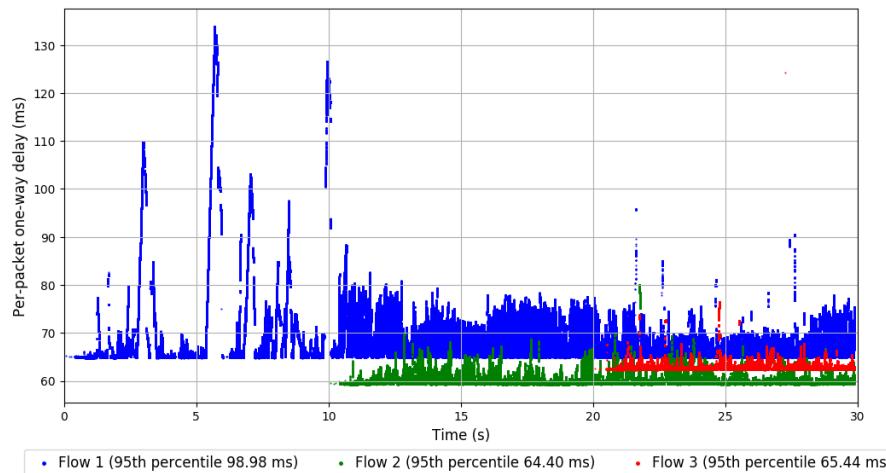
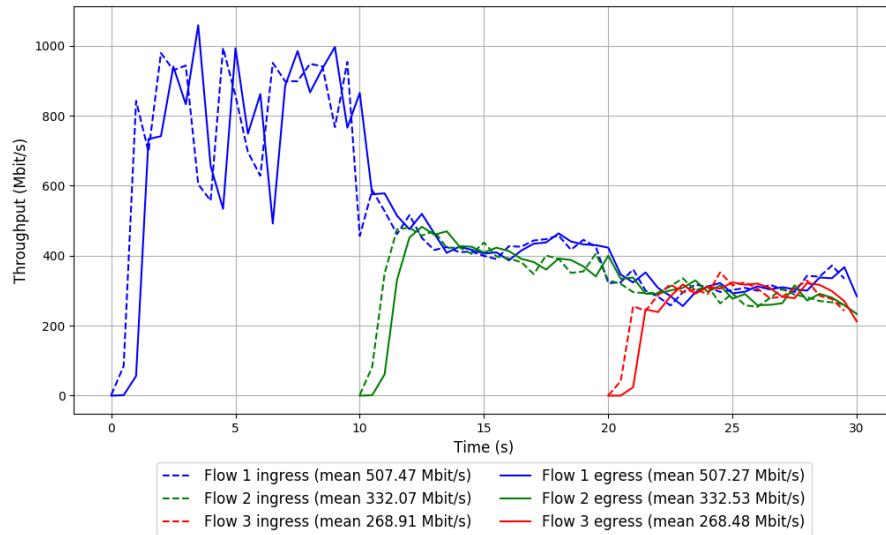


Run 4: Statistics of FillP

```
Start at: 2019-06-28 10:52:47
End at: 2019-06-28 10:53:17
Local clock offset: -0.098 ms
Remote clock offset: 0.266 ms

# Below is generated by plot.py at 2019-06-28 13:04:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 816.48 Mbit/s
95th percentile per-packet one-way delay: 84.807 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 507.27 Mbit/s
95th percentile per-packet one-way delay: 98.977 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 332.53 Mbit/s
95th percentile per-packet one-way delay: 64.396 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 268.48 Mbit/s
95th percentile per-packet one-way delay: 65.440 ms
Loss rate: 1.21%
```

Run 4: Report of FillP — Data Link

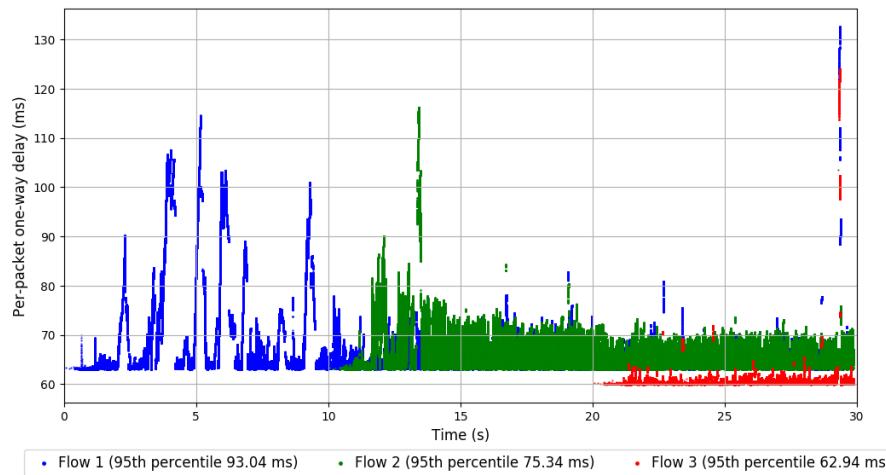
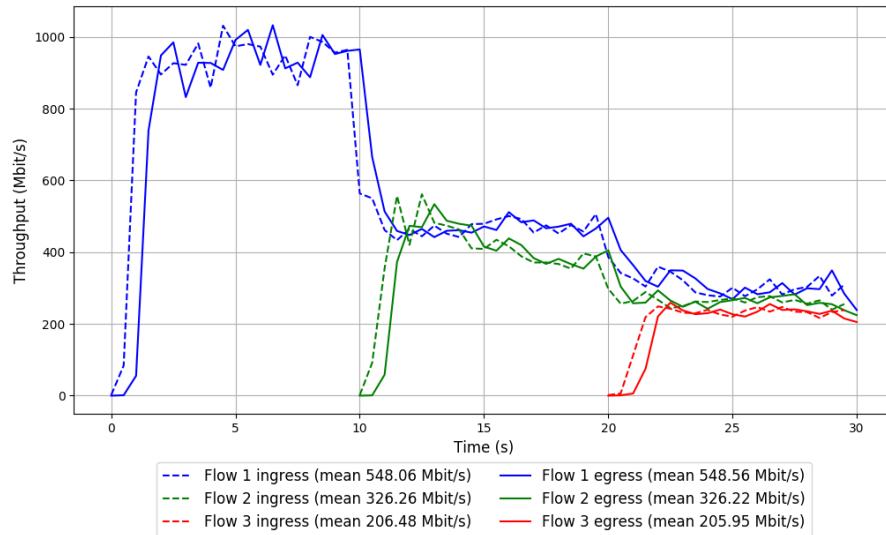


Run 5: Statistics of FillP

```
Start at: 2019-06-28 11:29:58
End at: 2019-06-28 11:30:28
Local clock offset: -0.053 ms
Remote clock offset: -0.583 ms

# Below is generated by plot.py at 2019-06-28 13:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 832.90 Mbit/s
95th percentile per-packet one-way delay: 86.777 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 548.56 Mbit/s
95th percentile per-packet one-way delay: 93.039 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 326.22 Mbit/s
95th percentile per-packet one-way delay: 75.337 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 205.95 Mbit/s
95th percentile per-packet one-way delay: 62.944 ms
Loss rate: 1.60%
```

Run 5: Report of FillP — Data Link

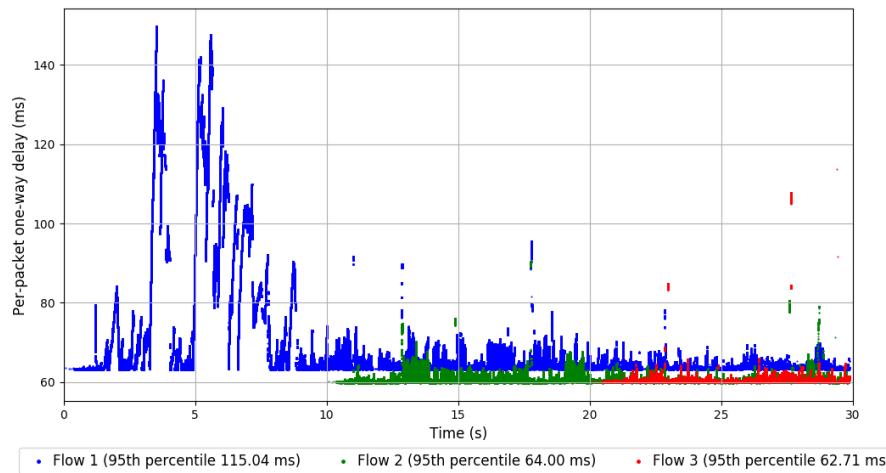
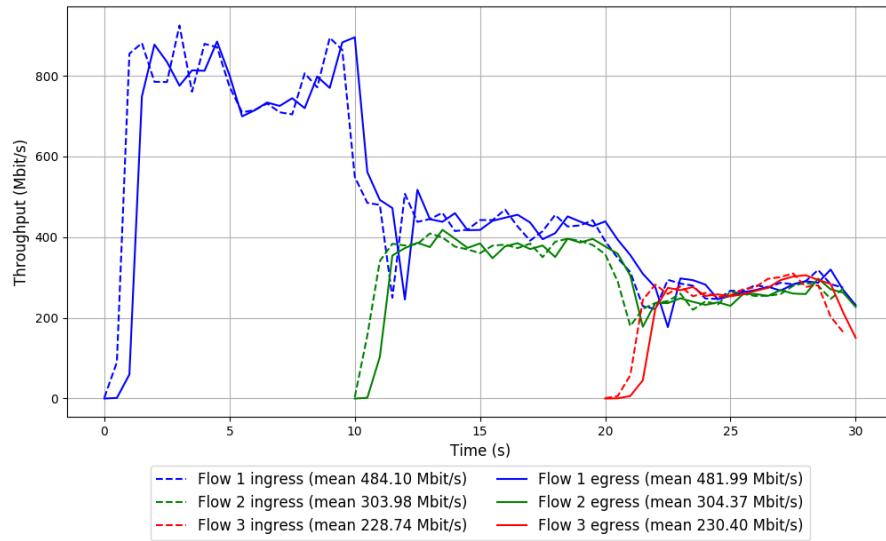


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-06-28 09:24:46
End at: 2019-06-28 09:25:16
Local clock offset: -0.035 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2019-06-28 13:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 759.63 Mbit/s
95th percentile per-packet one-way delay: 103.454 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 481.99 Mbit/s
95th percentile per-packet one-way delay: 115.042 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 304.37 Mbit/s
95th percentile per-packet one-way delay: 63.996 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 230.40 Mbit/s
95th percentile per-packet one-way delay: 62.713 ms
Loss rate: 0.62%
```

Run 1: Report of FillP-Sheep — Data Link

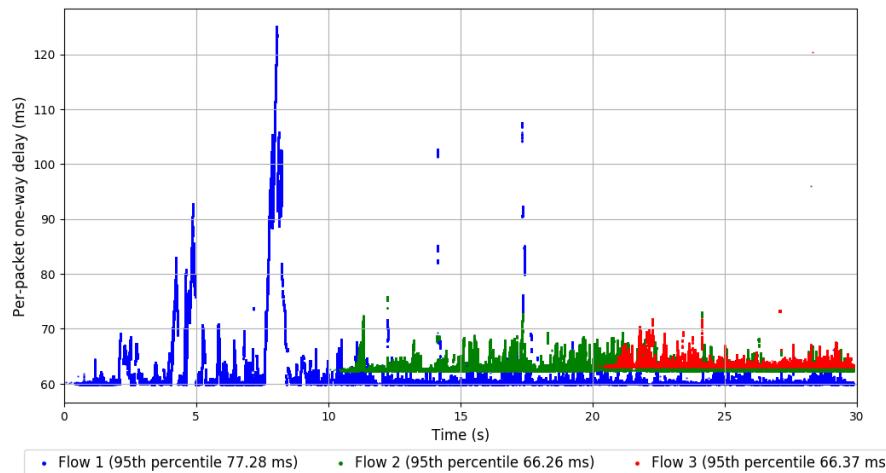
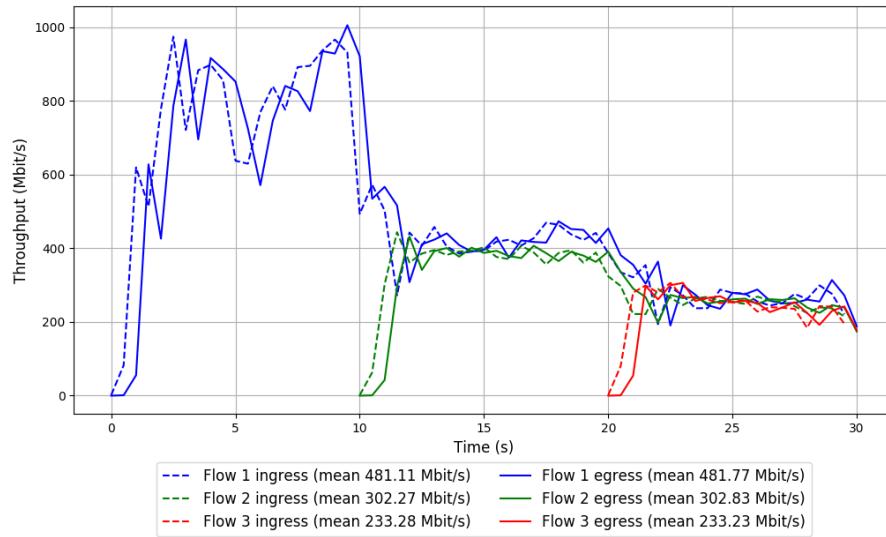


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-06-28 10:02:09
End at: 2019-06-28 10:02:39
Local clock offset: -0.003 ms
Remote clock offset: -0.186 ms

# Below is generated by plot.py at 2019-06-28 13:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 759.29 Mbit/s
95th percentile per-packet one-way delay: 71.918 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 481.77 Mbit/s
95th percentile per-packet one-way delay: 77.277 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 302.83 Mbit/s
95th percentile per-packet one-way delay: 66.262 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 233.23 Mbit/s
95th percentile per-packet one-way delay: 66.370 ms
Loss rate: 1.12%
```

Run 2: Report of FillP-Sheep — Data Link

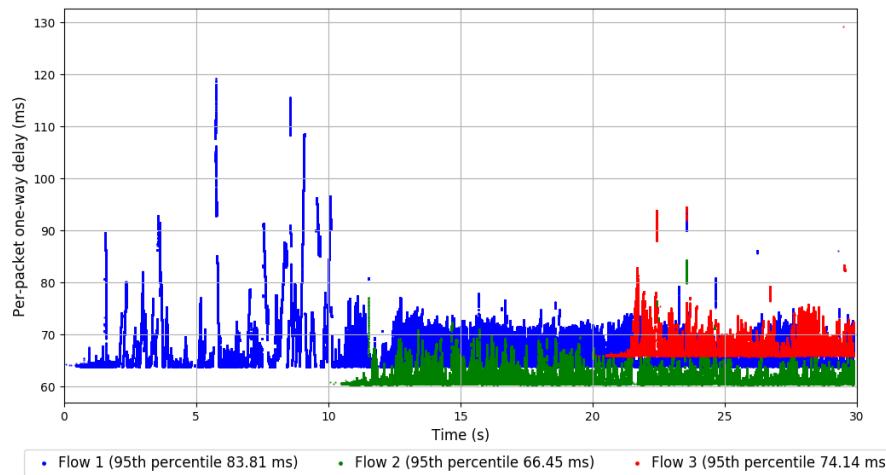
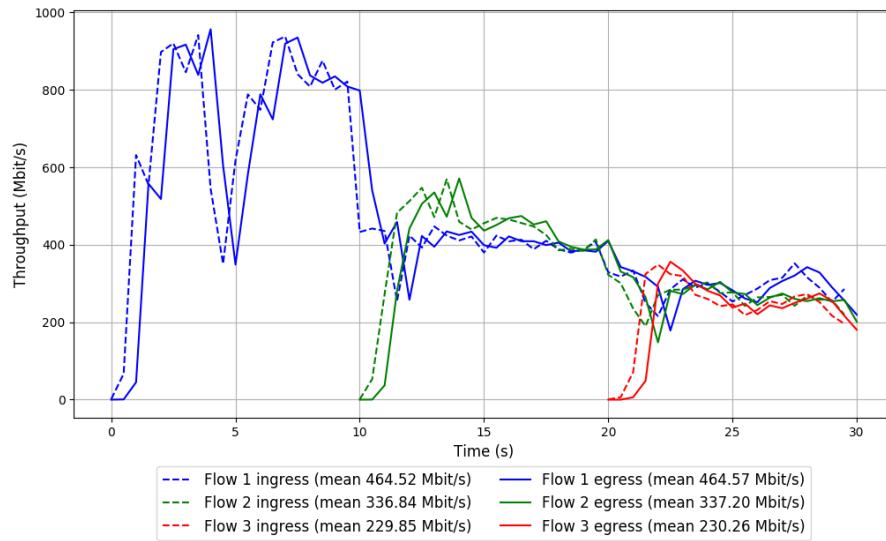


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-06-28 10:39:21
End at: 2019-06-28 10:39:51
Local clock offset: -0.076 ms
Remote clock offset: -0.785 ms

# Below is generated by plot.py at 2019-06-28 13:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 764.11 Mbit/s
95th percentile per-packet one-way delay: 77.186 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 464.57 Mbit/s
95th percentile per-packet one-way delay: 83.815 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 337.20 Mbit/s
95th percentile per-packet one-way delay: 66.453 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 230.26 Mbit/s
95th percentile per-packet one-way delay: 74.136 ms
Loss rate: 1.12%
```

Run 3: Report of FillP-Sheep — Data Link

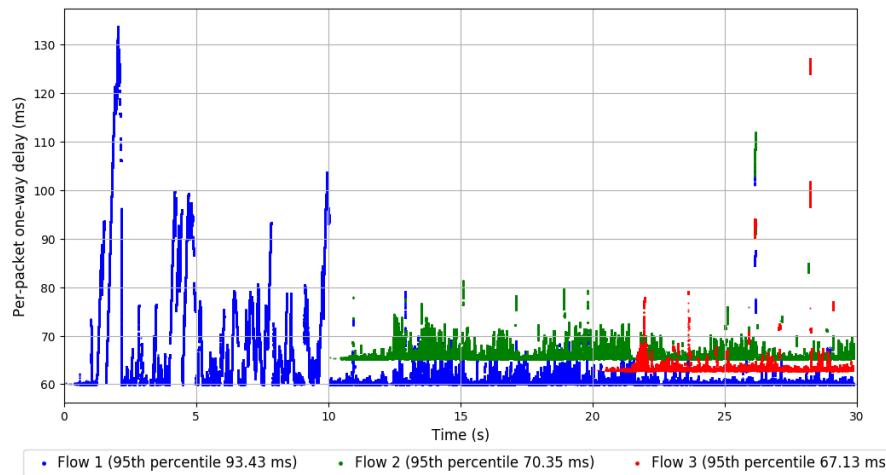
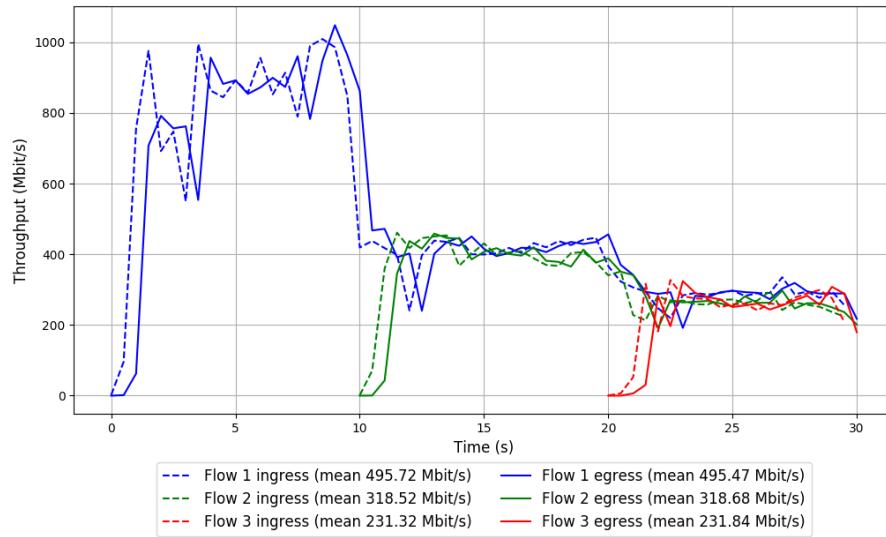


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-06-28 11:16:31
End at: 2019-06-28 11:17:01
Local clock offset: -0.075 ms
Remote clock offset: -0.447 ms

# Below is generated by plot.py at 2019-06-28 13:10:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 782.95 Mbit/s
95th percentile per-packet one-way delay: 87.311 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 495.47 Mbit/s
95th percentile per-packet one-way delay: 93.426 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 318.68 Mbit/s
95th percentile per-packet one-way delay: 70.353 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 231.84 Mbit/s
95th percentile per-packet one-way delay: 67.126 ms
Loss rate: 1.29%
```

Run 4: Report of FillP-Sheep — Data Link

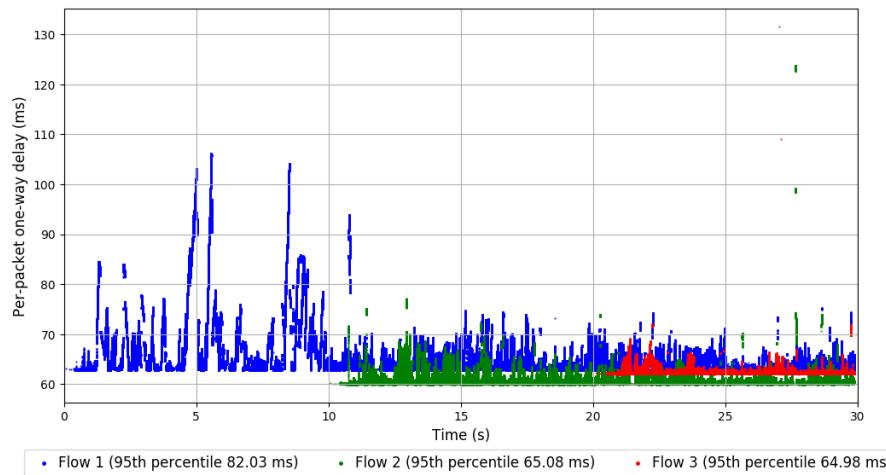
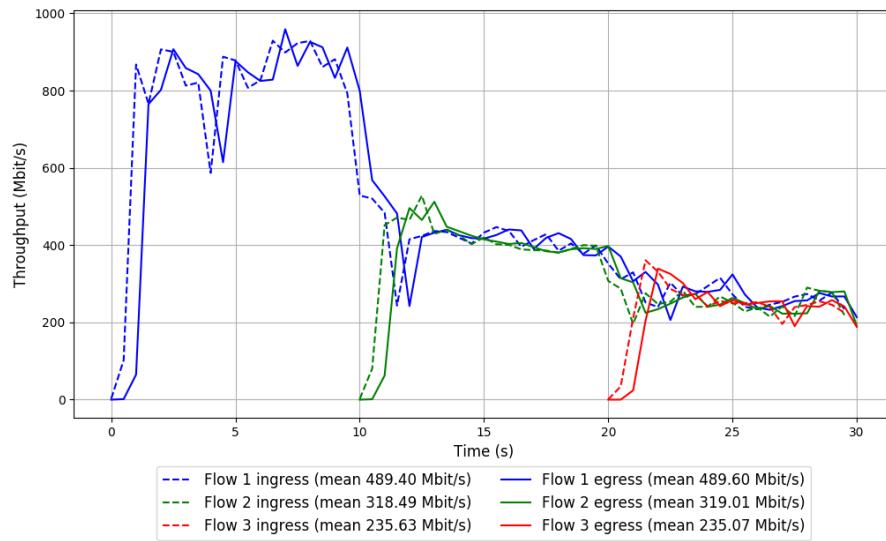


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-06-28 11:53:18
End at: 2019-06-28 11:53:48
Local clock offset: -0.019 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-06-28 13:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 778.43 Mbit/s
95th percentile per-packet one-way delay: 76.851 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 489.60 Mbit/s
95th percentile per-packet one-way delay: 82.025 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 319.01 Mbit/s
95th percentile per-packet one-way delay: 65.080 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 235.07 Mbit/s
95th percentile per-packet one-way delay: 64.978 ms
Loss rate: 1.40%
```

Run 5: Report of FillP-Sheep — Data Link

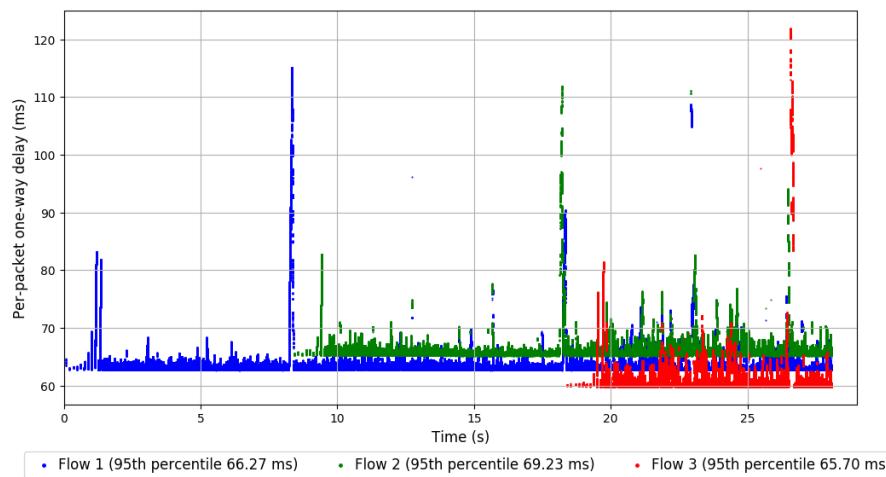
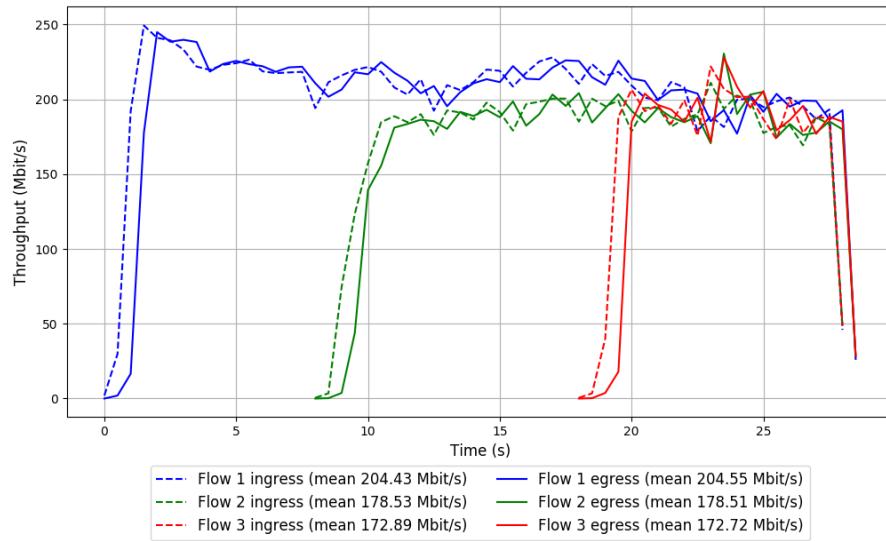


Run 1: Statistics of Indigo

```
Start at: 2019-06-28 09:12:16
End at: 2019-06-28 09:12:46
Local clock offset: -0.027 ms
Remote clock offset: -0.189 ms

# Below is generated by plot.py at 2019-06-28 13:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.30 Mbit/s
95th percentile per-packet one-way delay: 67.924 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 204.55 Mbit/s
95th percentile per-packet one-way delay: 66.268 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 178.51 Mbit/s
95th percentile per-packet one-way delay: 69.226 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 172.72 Mbit/s
95th percentile per-packet one-way delay: 65.704 ms
Loss rate: 1.36%
```

Run 1: Report of Indigo — Data Link

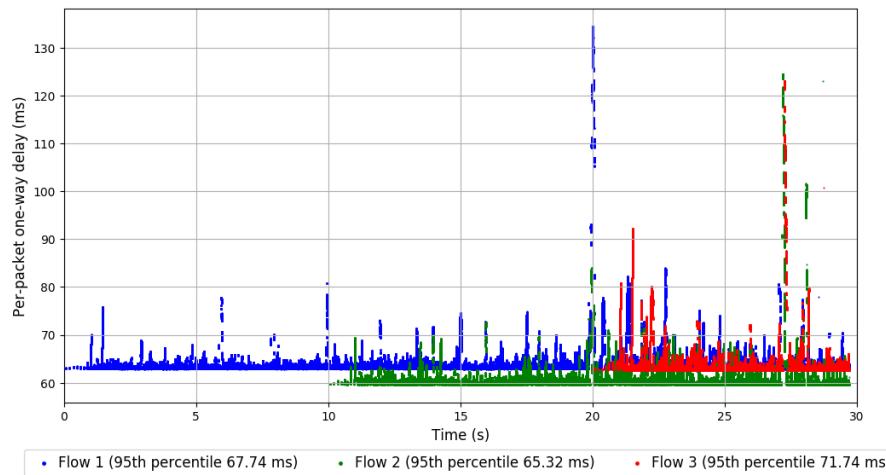
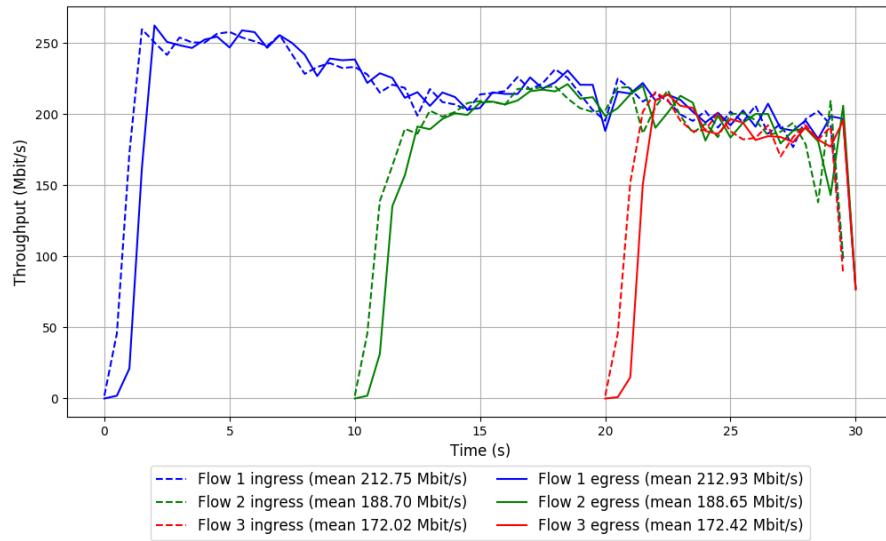


Run 2: Statistics of Indigo

```
Start at: 2019-06-28 09:49:29
End at: 2019-06-28 09:49:59
Local clock offset: -0.028 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2019-06-28 13:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.81 Mbit/s
95th percentile per-packet one-way delay: 67.410 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 212.93 Mbit/s
95th percentile per-packet one-way delay: 67.742 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 188.65 Mbit/s
95th percentile per-packet one-way delay: 65.317 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 172.42 Mbit/s
95th percentile per-packet one-way delay: 71.741 ms
Loss rate: 1.06%
```

Run 2: Report of Indigo — Data Link

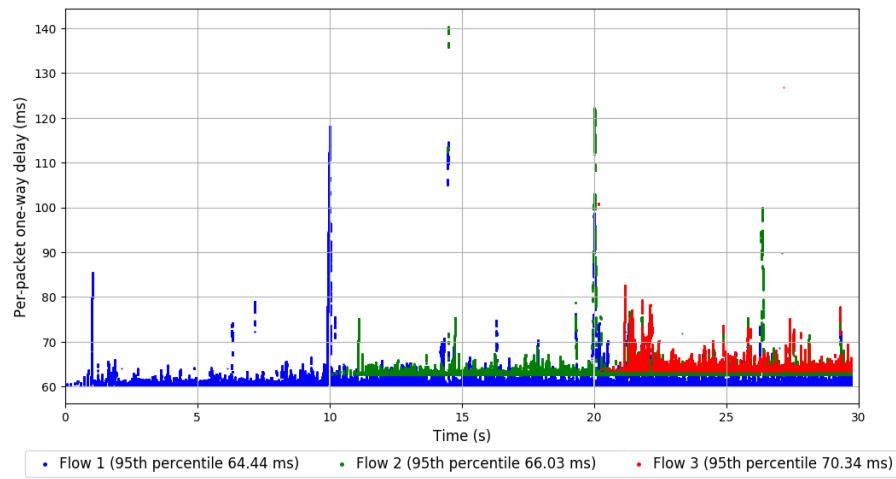
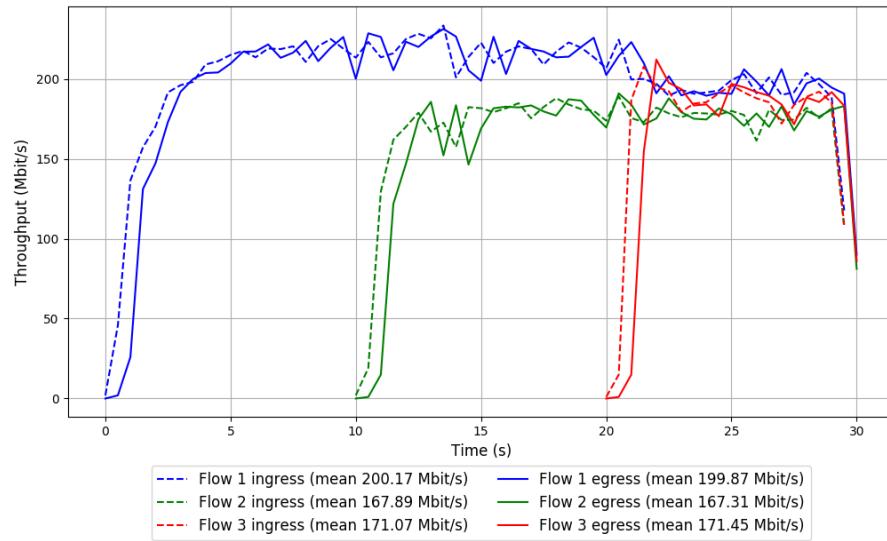


Run 3: Statistics of Indigo

```
Start at: 2019-06-28 10:26:42
End at: 2019-06-28 10:27:12
Local clock offset: 0.061 ms
Remote clock offset: -0.162 ms

# Below is generated by plot.py at 2019-06-28 13:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.90 Mbit/s
95th percentile per-packet one-way delay: 66.517 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 199.87 Mbit/s
95th percentile per-packet one-way delay: 64.441 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 167.31 Mbit/s
95th percentile per-packet one-way delay: 66.029 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 171.45 Mbit/s
95th percentile per-packet one-way delay: 70.336 ms
Loss rate: 1.45%
```

Run 3: Report of Indigo — Data Link

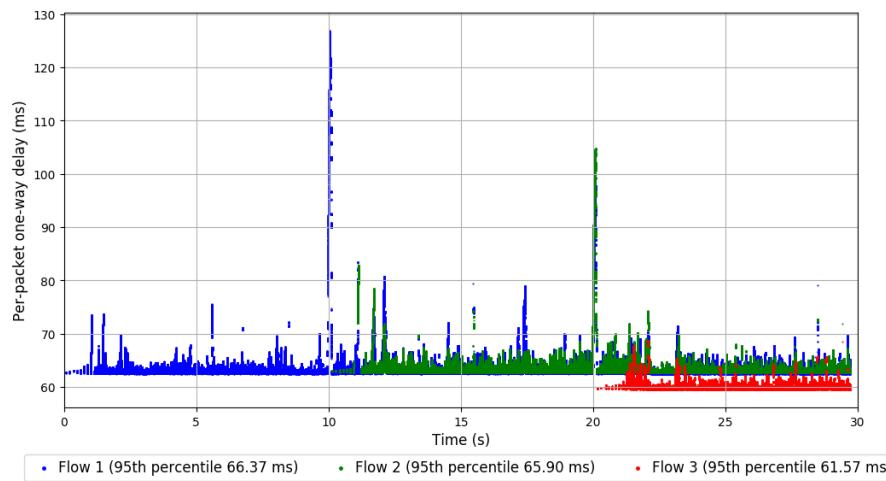
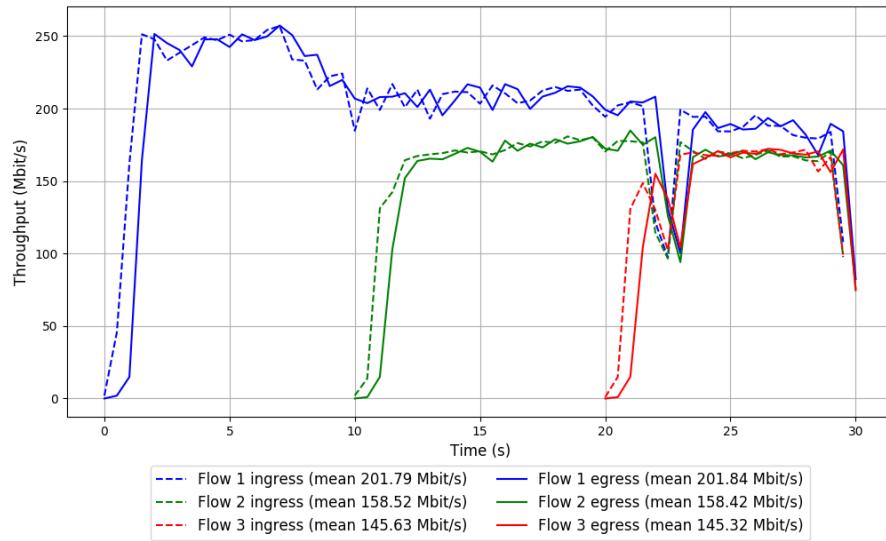


Run 4: Statistics of Indigo

```
Start at: 2019-06-28 11:03:48
End at: 2019-06-28 11:04:18
Local clock offset: -0.133 ms
Remote clock offset: -0.222 ms

# Below is generated by plot.py at 2019-06-28 13:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.29 Mbit/s
95th percentile per-packet one-way delay: 65.934 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 201.84 Mbit/s
95th percentile per-packet one-way delay: 66.372 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 158.42 Mbit/s
95th percentile per-packet one-way delay: 65.897 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 145.32 Mbit/s
95th percentile per-packet one-way delay: 61.573 ms
Loss rate: 1.46%
```

Run 4: Report of Indigo — Data Link

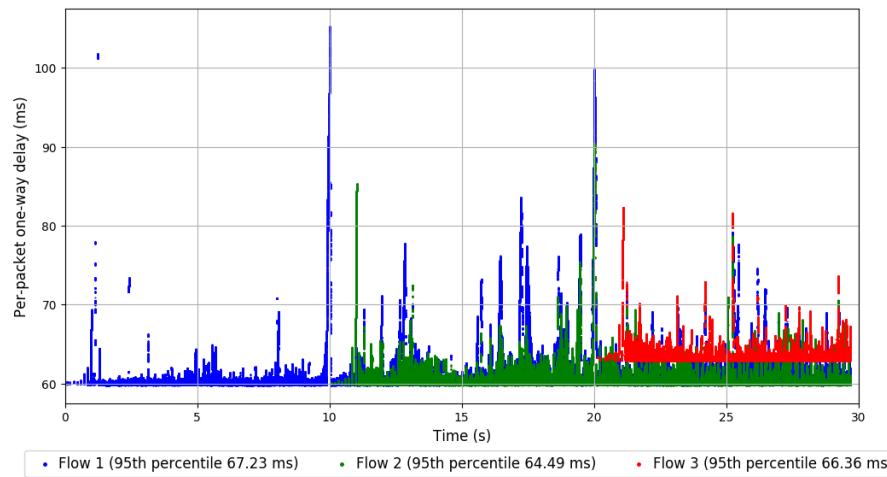
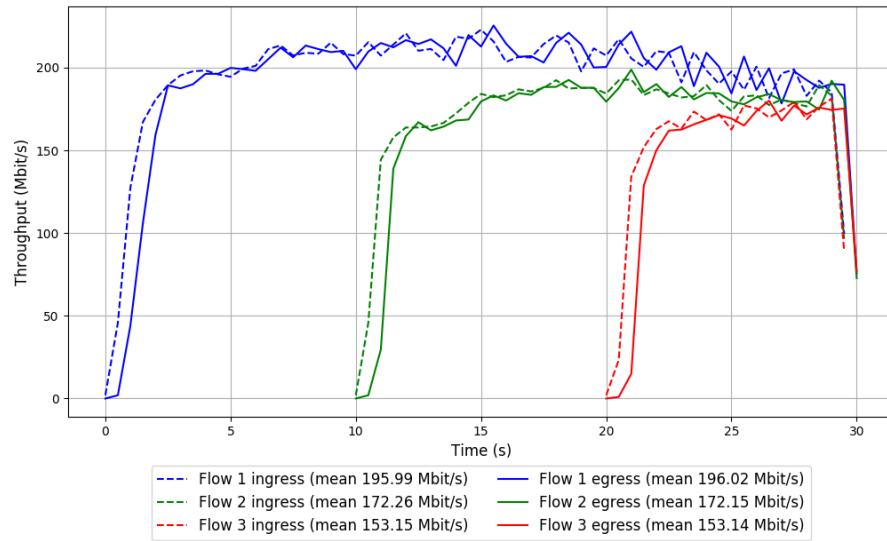


Run 5: Statistics of Indigo

```
Start at: 2019-06-28 11:40:55
End at: 2019-06-28 11:41:25
Local clock offset: -0.054 ms
Remote clock offset: -0.342 ms

# Below is generated by plot.py at 2019-06-28 13:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.49 Mbit/s
95th percentile per-packet one-way delay: 66.161 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 196.02 Mbit/s
95th percentile per-packet one-way delay: 67.230 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 172.15 Mbit/s
95th percentile per-packet one-way delay: 64.492 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 153.14 Mbit/s
95th percentile per-packet one-way delay: 66.360 ms
Loss rate: 1.34%
```

Run 5: Report of Indigo — Data Link

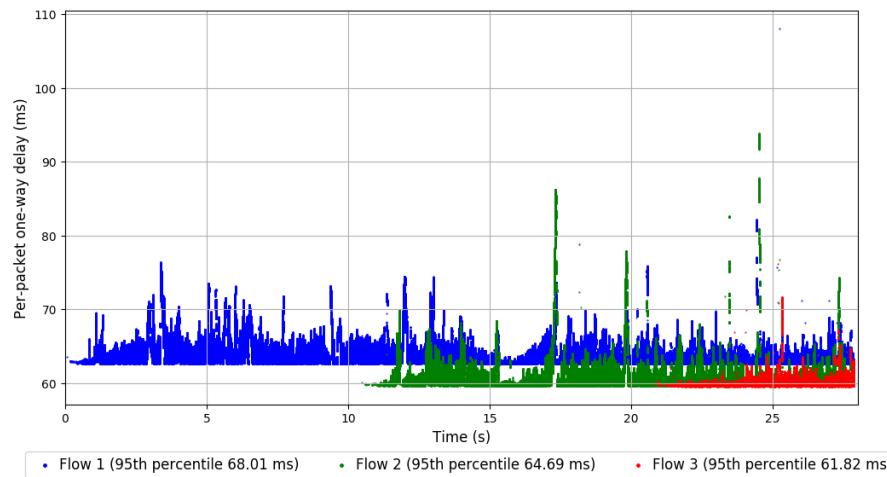
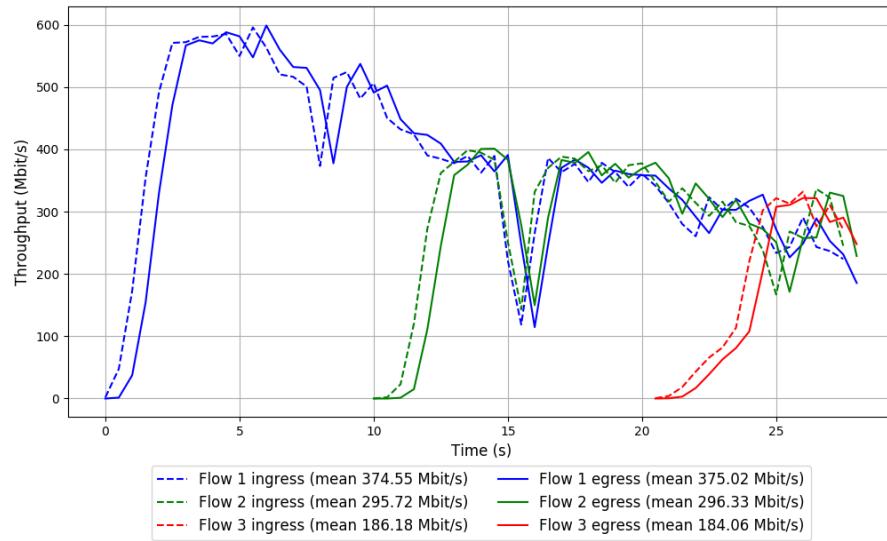


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-06-28 08:59:31
End at: 2019-06-28 09:00:01
Local clock offset: -0.061 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2019-06-28 13:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 607.10 Mbit/s
95th percentile per-packet one-way delay: 67.363 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 375.02 Mbit/s
95th percentile per-packet one-way delay: 68.007 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 296.33 Mbit/s
95th percentile per-packet one-way delay: 64.689 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 184.06 Mbit/s
95th percentile per-packet one-way delay: 61.824 ms
Loss rate: 2.81%
```

Run 1: Report of Indigo-MusesC3 — Data Link

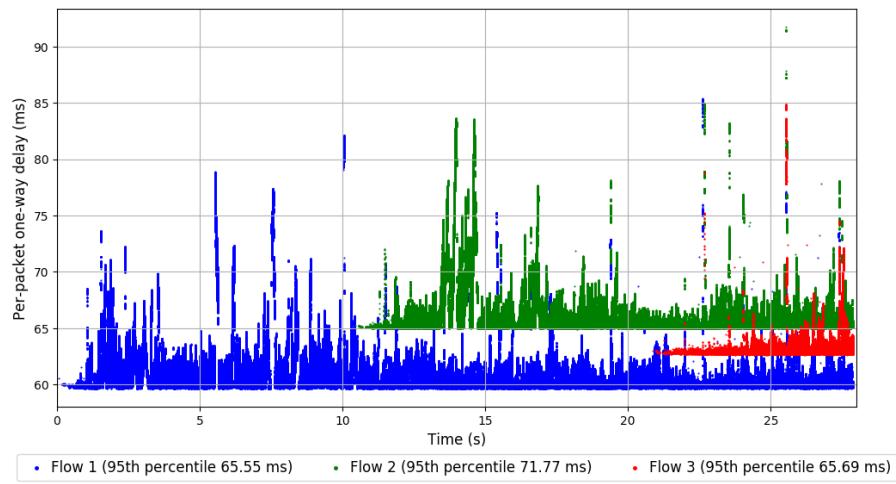
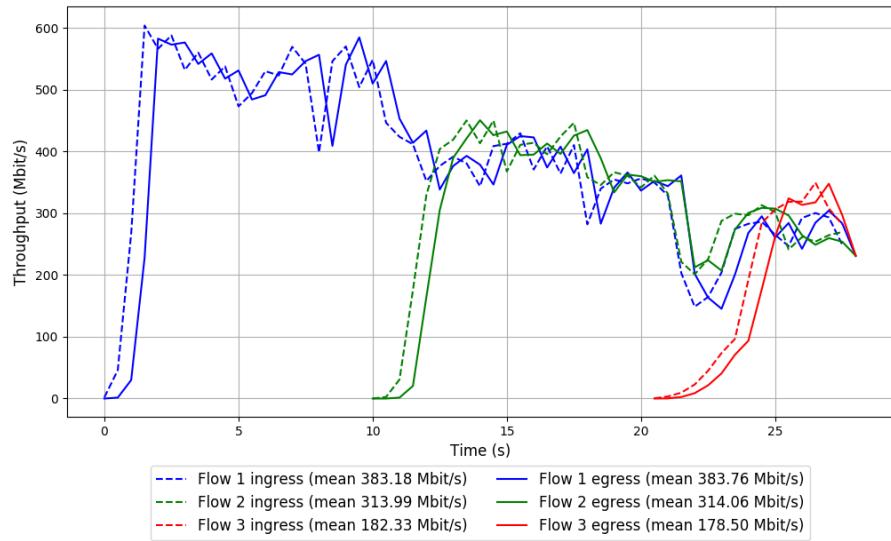


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 09:36:32
End at: 2019-06-28 09:37:02
Local clock offset: -0.023 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-06-28 13:22:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 625.68 Mbit/s
95th percentile per-packet one-way delay: 68.627 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 383.76 Mbit/s
95th percentile per-packet one-way delay: 65.553 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 314.06 Mbit/s
95th percentile per-packet one-way delay: 71.774 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 178.50 Mbit/s
95th percentile per-packet one-way delay: 65.686 ms
Loss rate: 3.87%
```

Run 2: Report of Indigo-MusesC3 — Data Link

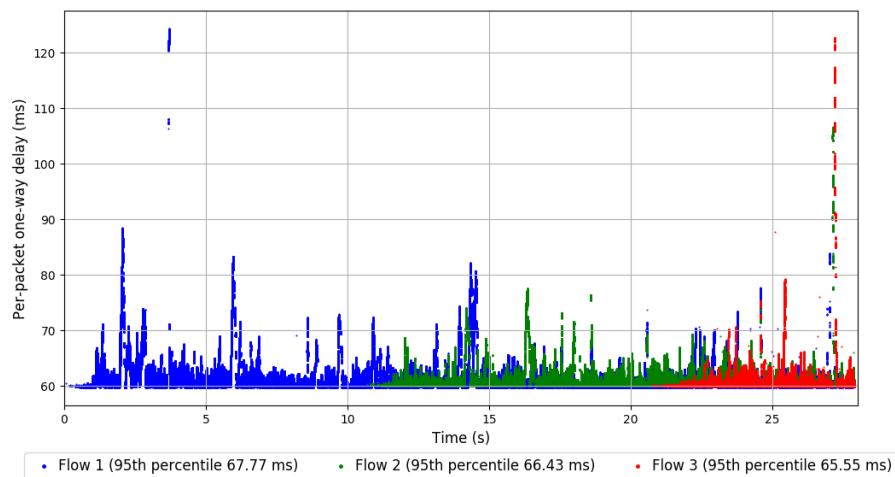
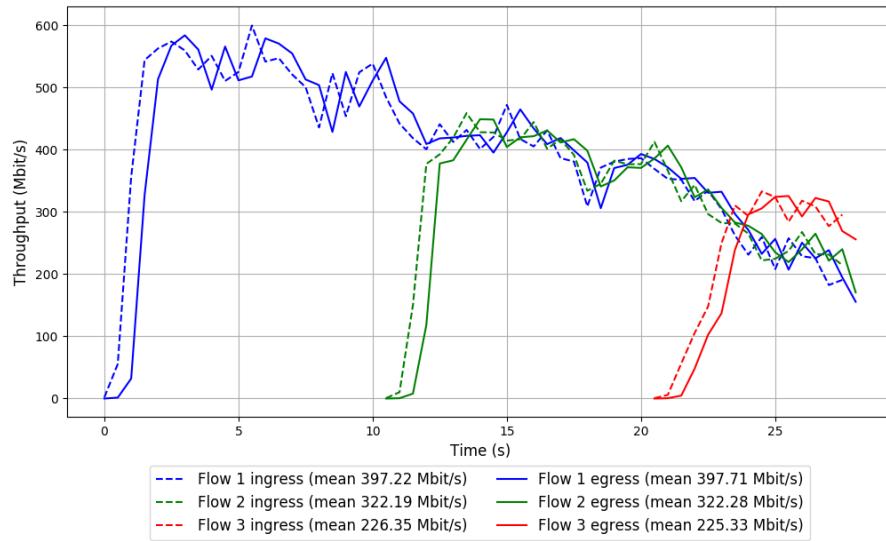


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 10:13:51
End at: 2019-06-28 10:14:21
Local clock offset: 0.01 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2019-06-28 13:28:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 655.06 Mbit/s
95th percentile per-packet one-way delay: 67.237 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 397.71 Mbit/s
95th percentile per-packet one-way delay: 67.769 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 322.28 Mbit/s
95th percentile per-packet one-way delay: 66.426 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 225.33 Mbit/s
95th percentile per-packet one-way delay: 65.545 ms
Loss rate: 2.12%
```

Run 3: Report of Indigo-MusesC3 — Data Link

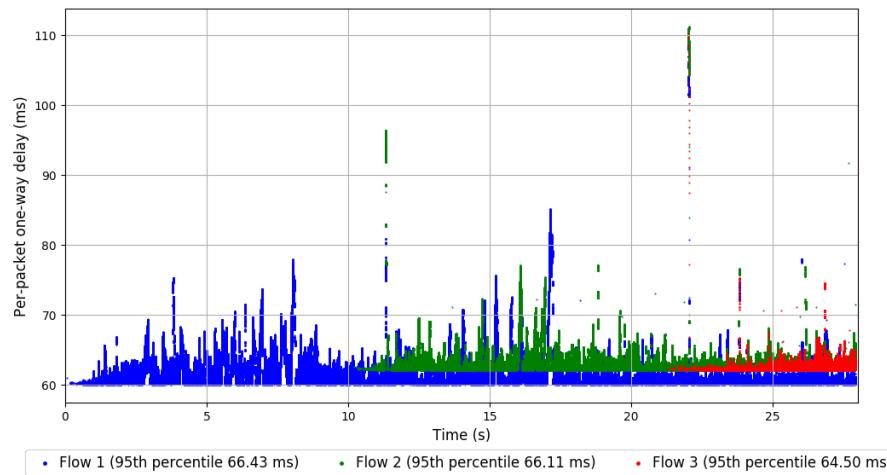
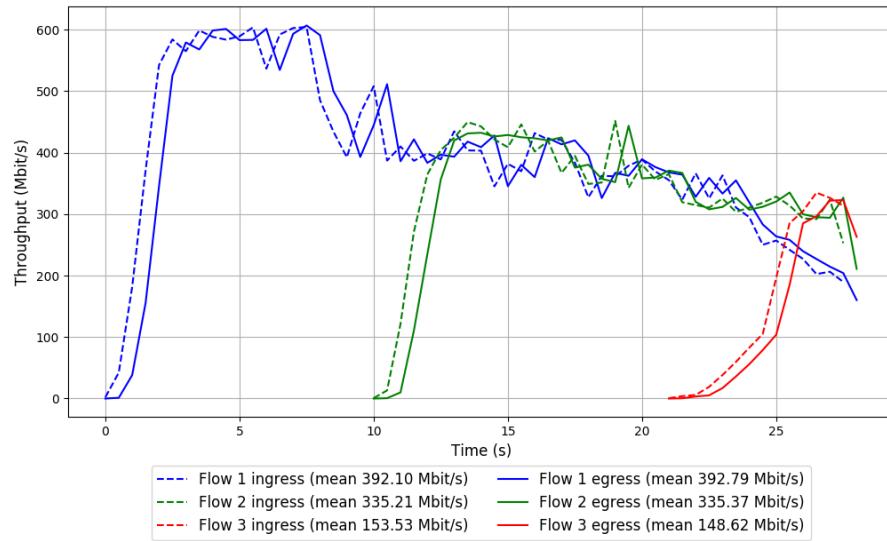


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 10:51:03
End at: 2019-06-28 10:51:33
Local clock offset: -0.125 ms
Remote clock offset: -0.268 ms

# Below is generated by plot.py at 2019-06-28 13:28:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 641.33 Mbit/s
95th percentile per-packet one-way delay: 66.182 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 392.79 Mbit/s
95th percentile per-packet one-way delay: 66.433 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 335.37 Mbit/s
95th percentile per-packet one-way delay: 66.114 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 148.62 Mbit/s
95th percentile per-packet one-way delay: 64.500 ms
Loss rate: 4.90%
```

Run 4: Report of Indigo-MusesC3 — Data Link

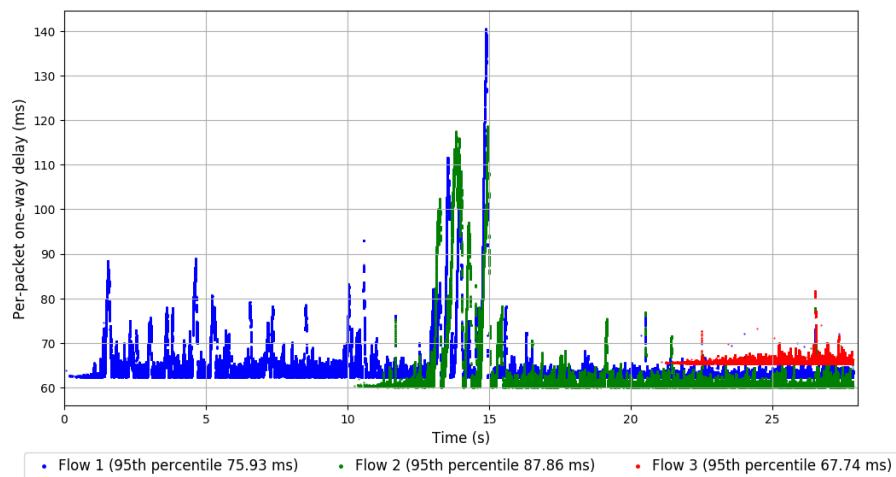
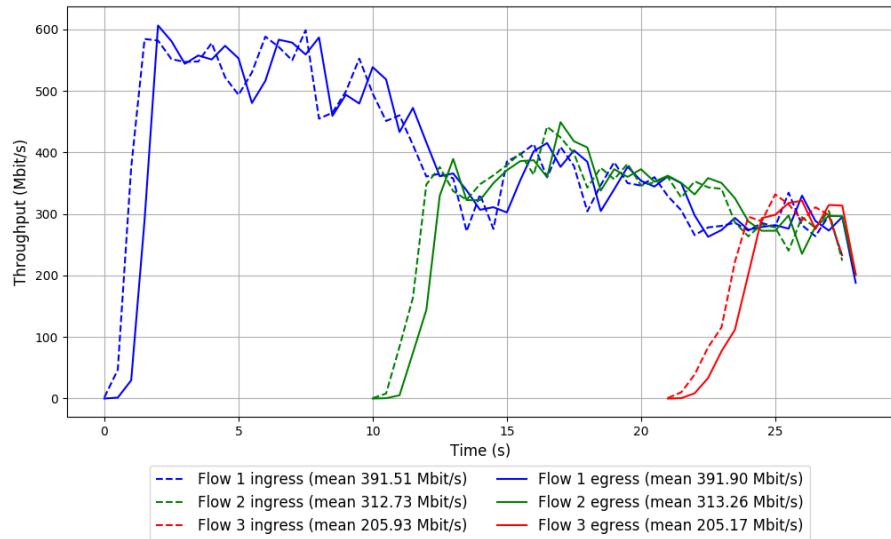


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 11:28:13
End at: 2019-06-28 11:28:43
Local clock offset: -0.023 ms
Remote clock offset: -0.695 ms

# Below is generated by plot.py at 2019-06-28 13:28:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 640.32 Mbit/s
95th percentile per-packet one-way delay: 76.612 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 391.90 Mbit/s
95th percentile per-packet one-way delay: 75.928 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 313.26 Mbit/s
95th percentile per-packet one-way delay: 87.862 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 205.17 Mbit/s
95th percentile per-packet one-way delay: 67.738 ms
Loss rate: 2.19%
```

Run 5: Report of Indigo-MusesC3 — Data Link

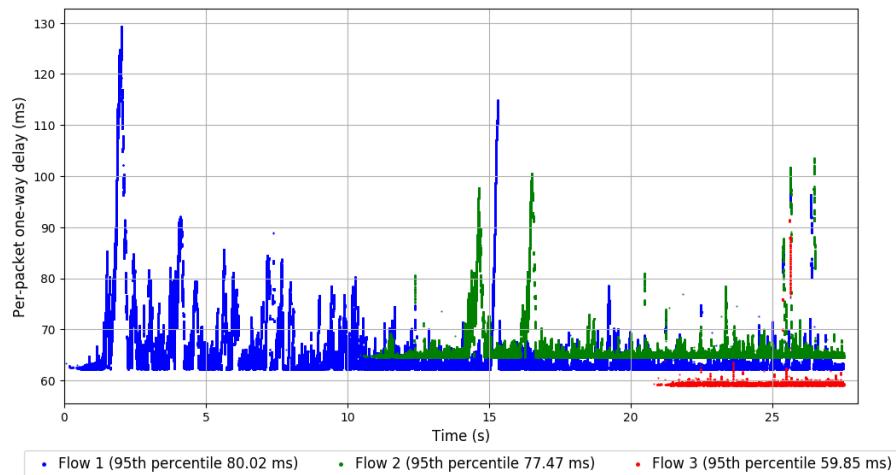
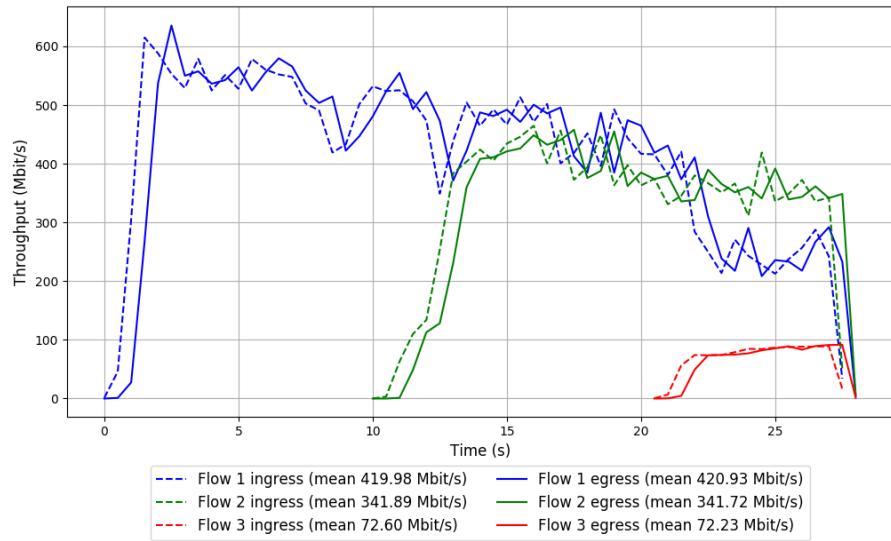


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 08:56:29
End at: 2019-06-28 08:56:59
Local clock offset: -0.051 ms
Remote clock offset: 0.527 ms

# Below is generated by plot.py at 2019-06-28 13:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 650.75 Mbit/s
95th percentile per-packet one-way delay: 79.067 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 420.93 Mbit/s
95th percentile per-packet one-way delay: 80.023 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 341.72 Mbit/s
95th percentile per-packet one-way delay: 77.474 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 72.23 Mbit/s
95th percentile per-packet one-way delay: 59.847 ms
Loss rate: 2.33%
```

Run 1: Report of Indigo-MusesC5 — Data Link

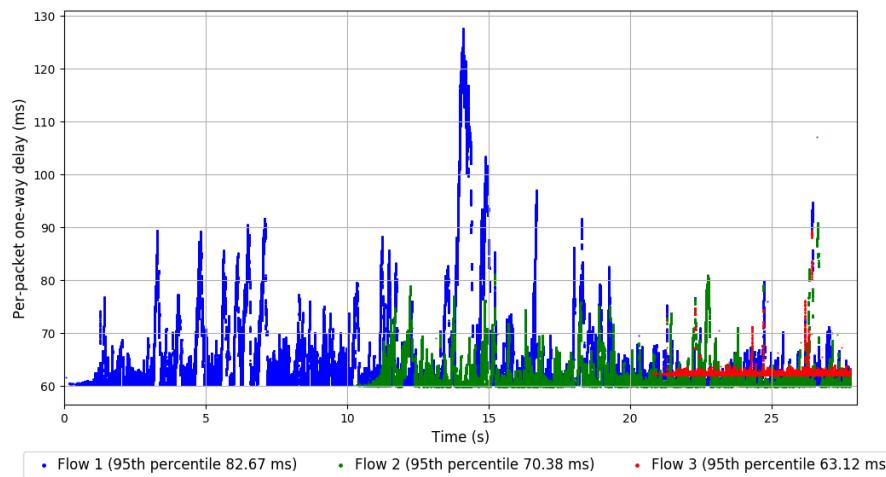
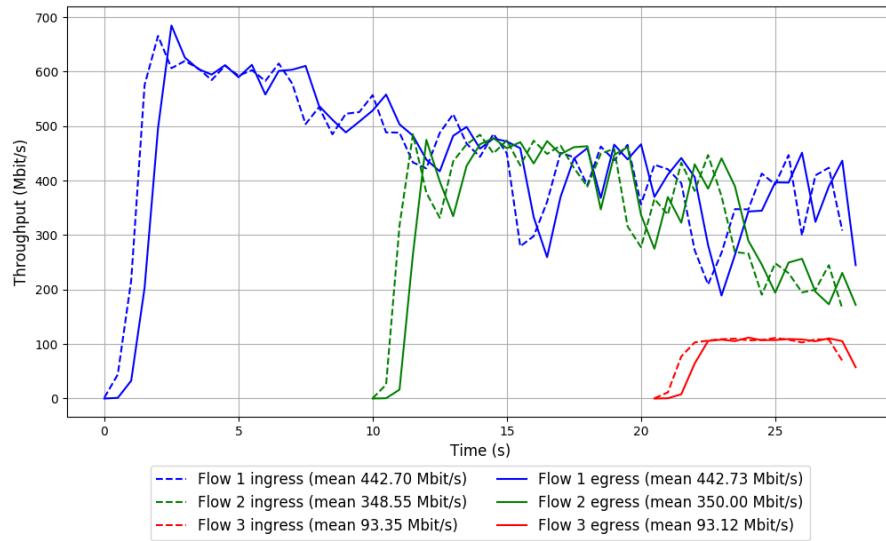


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 09:33:28
End at: 2019-06-28 09:33:58
Local clock offset: -0.028 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-06-28 13:30:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 687.91 Mbit/s
95th percentile per-packet one-way delay: 78.974 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 442.73 Mbit/s
95th percentile per-packet one-way delay: 82.669 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 350.00 Mbit/s
95th percentile per-packet one-way delay: 70.375 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 93.12 Mbit/s
95th percentile per-packet one-way delay: 63.117 ms
Loss rate: 1.92%
```

Run 2: Report of Indigo-MusesC5 — Data Link

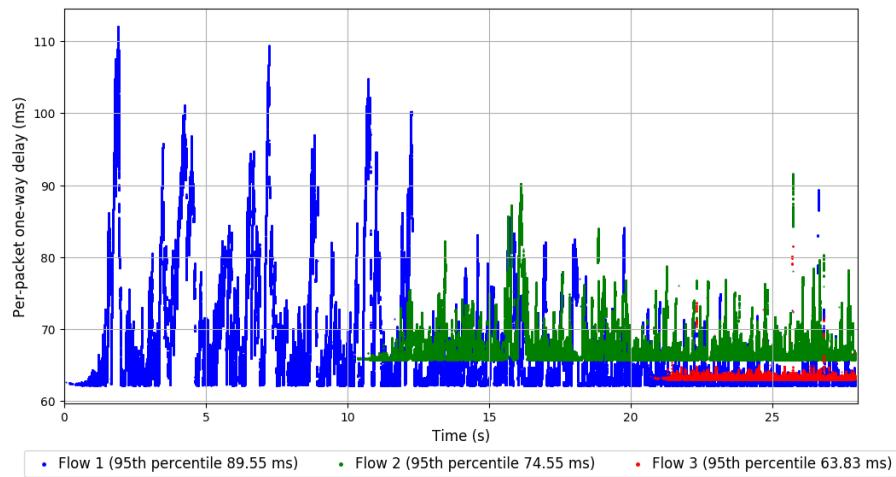
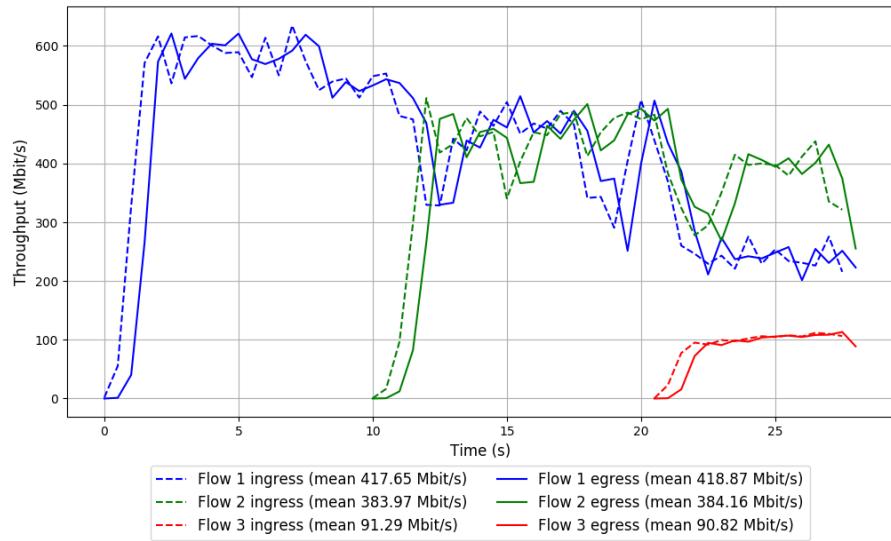


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 10:10:46
End at: 2019-06-28 10:11:16
Local clock offset: -0.002 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2019-06-28 13:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.37 Mbit/s
95th percentile per-packet one-way delay: 84.991 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 418.87 Mbit/s
95th percentile per-packet one-way delay: 89.547 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 384.16 Mbit/s
95th percentile per-packet one-way delay: 74.547 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 90.82 Mbit/s
95th percentile per-packet one-way delay: 63.827 ms
Loss rate: 2.20%
```

Run 3: Report of Indigo-MusesC5 — Data Link

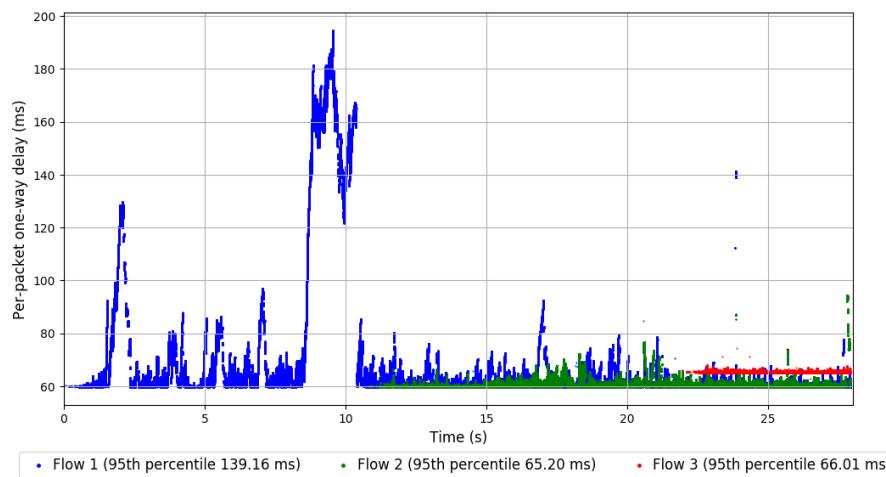
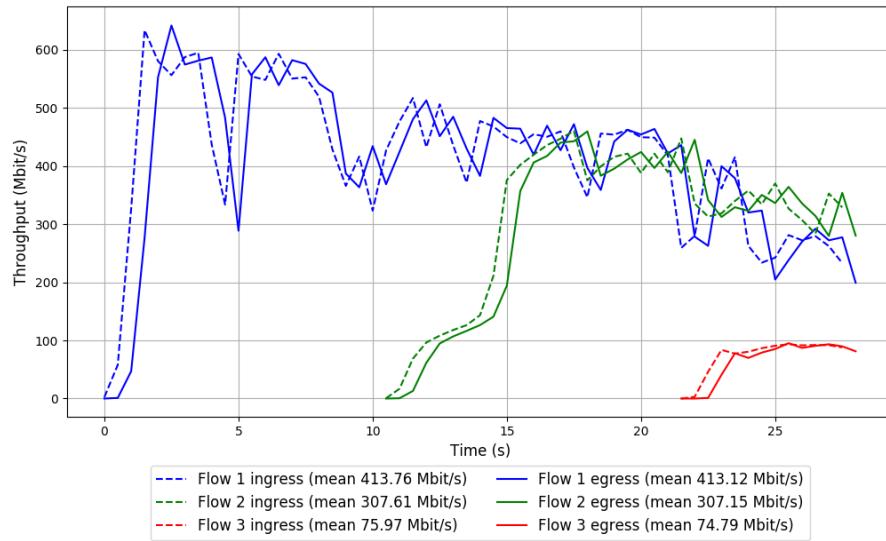


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 10:48:01
End at: 2019-06-28 10:48:31
Local clock offset: -0.106 ms
Remote clock offset: -0.364 ms

# Below is generated by plot.py at 2019-06-28 13:31:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 618.75 Mbit/s
95th percentile per-packet one-way delay: 101.273 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 413.12 Mbit/s
95th percentile per-packet one-way delay: 139.155 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 307.15 Mbit/s
95th percentile per-packet one-way delay: 65.203 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 74.79 Mbit/s
95th percentile per-packet one-way delay: 66.014 ms
Loss rate: 3.59%
```

Run 4: Report of Indigo-MusesC5 — Data Link

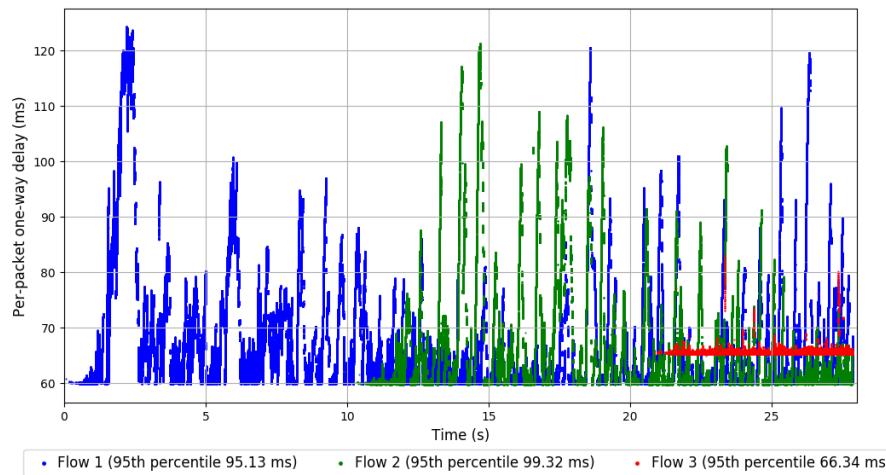
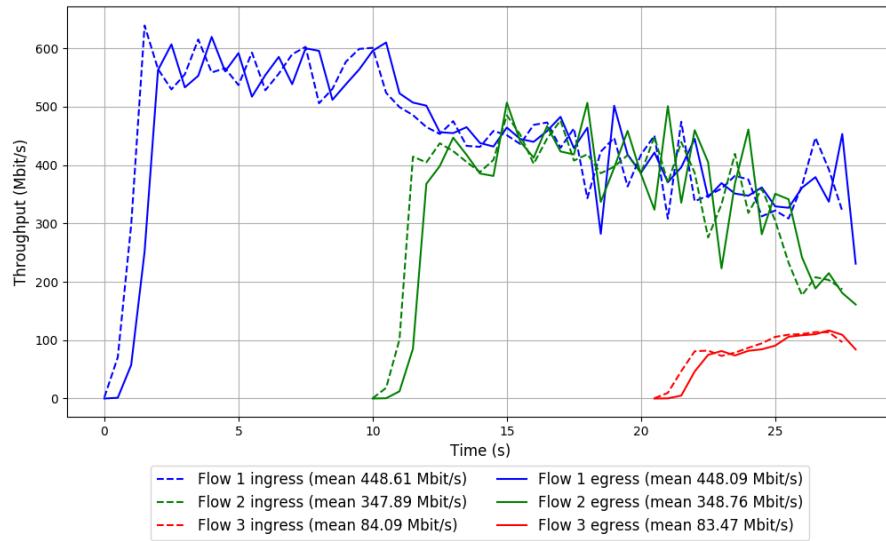


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 11:25:08
End at: 2019-06-28 11:25:38
Local clock offset: -0.065 ms
Remote clock offset: -0.607 ms

# Below is generated by plot.py at 2019-06-28 13:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 690.00 Mbit/s
95th percentile per-packet one-way delay: 96.700 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 448.09 Mbit/s
95th percentile per-packet one-way delay: 95.130 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 348.76 Mbit/s
95th percentile per-packet one-way delay: 99.319 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 83.47 Mbit/s
95th percentile per-packet one-way delay: 66.345 ms
Loss rate: 2.52%
```

Run 5: Report of Indigo-MusesC5 — Data Link

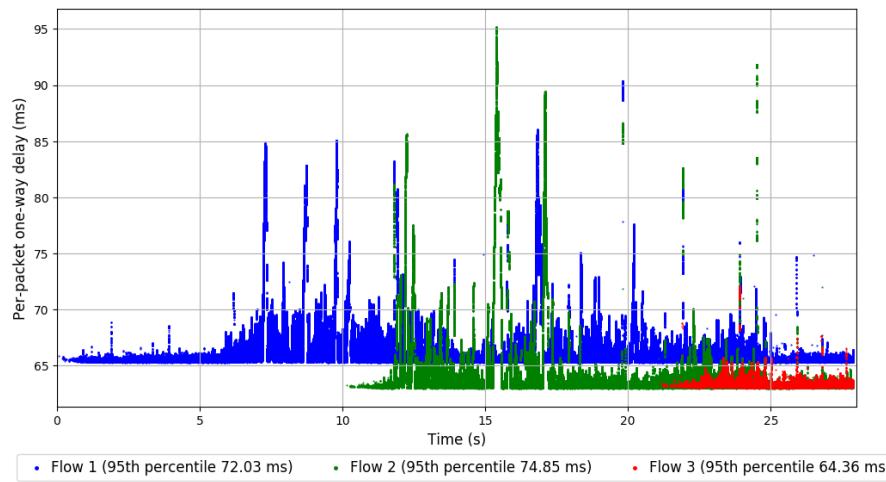
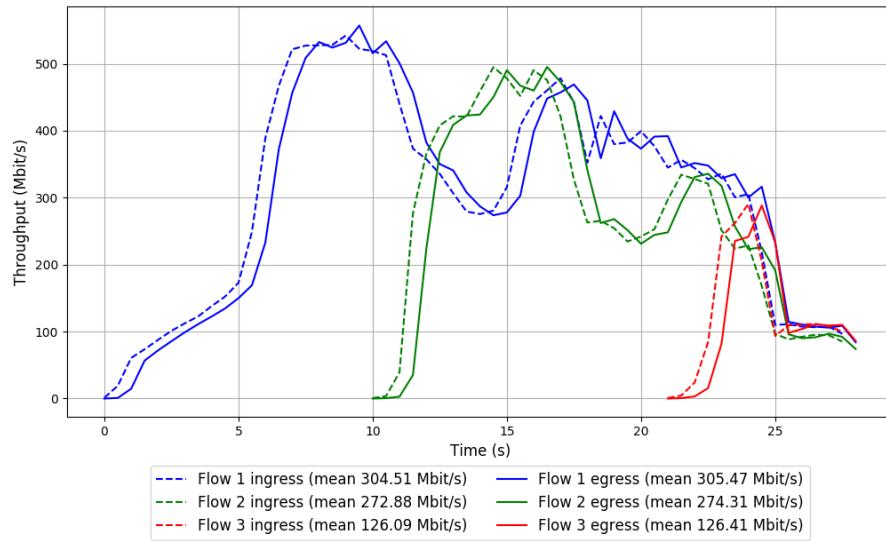


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 09:19:25
End at: 2019-06-28 09:19:55
Local clock offset: -0.0 ms
Remote clock offset: -0.172 ms

# Below is generated by plot.py at 2019-06-28 13:36:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 511.05 Mbit/s
95th percentile per-packet one-way delay: 72.133 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 305.47 Mbit/s
95th percentile per-packet one-way delay: 72.028 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 274.31 Mbit/s
95th percentile per-packet one-way delay: 74.847 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 126.41 Mbit/s
95th percentile per-packet one-way delay: 64.355 ms
Loss rate: 1.58%
```

Run 1: Report of Indigo-MusesD — Data Link

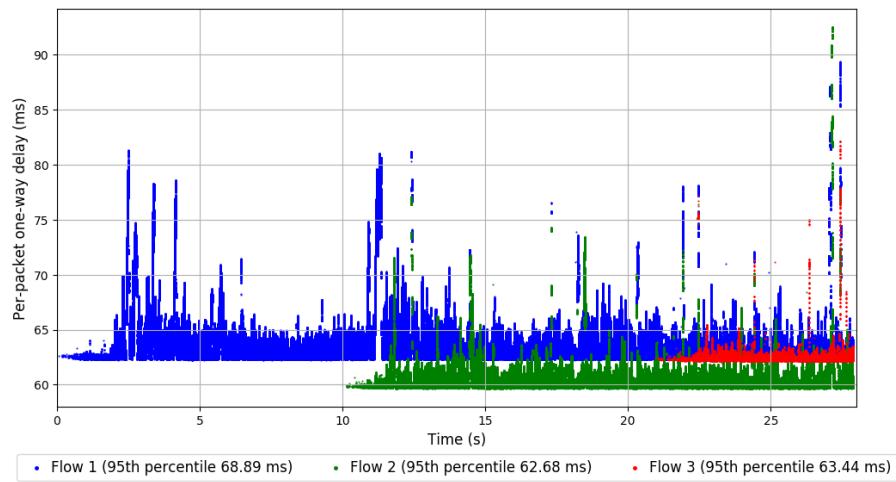
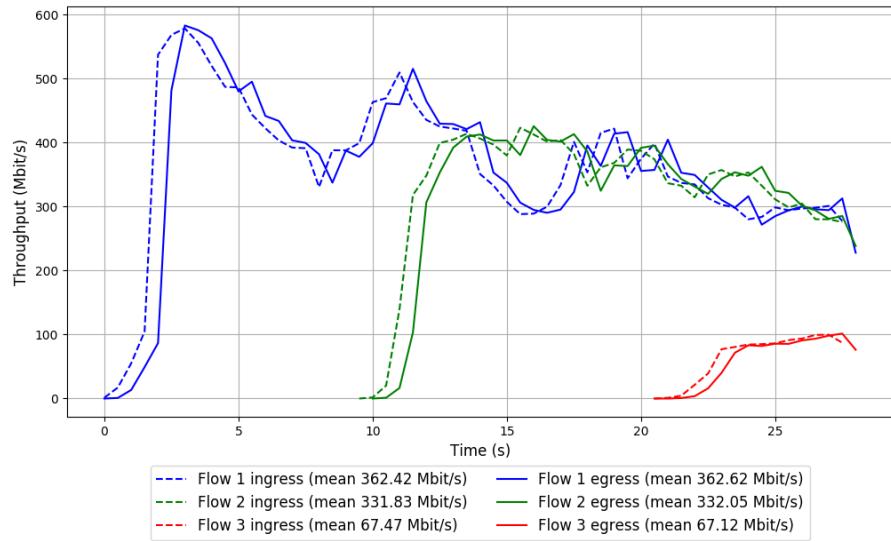


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 09:56:44
End at: 2019-06-28 09:57:14
Local clock offset: 0.001 ms
Remote clock offset: 0.2 ms

# Below is generated by plot.py at 2019-06-28 13:39:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 592.62 Mbit/s
95th percentile per-packet one-way delay: 67.030 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 362.62 Mbit/s
95th percentile per-packet one-way delay: 68.890 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 332.05 Mbit/s
95th percentile per-packet one-way delay: 62.676 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 67.12 Mbit/s
95th percentile per-packet one-way delay: 63.439 ms
Loss rate: 2.29%
```

Run 2: Report of Indigo-MusesD — Data Link

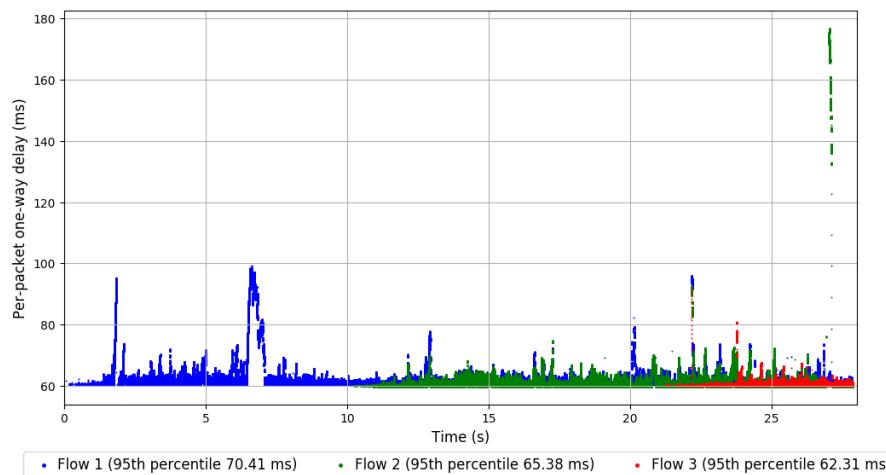
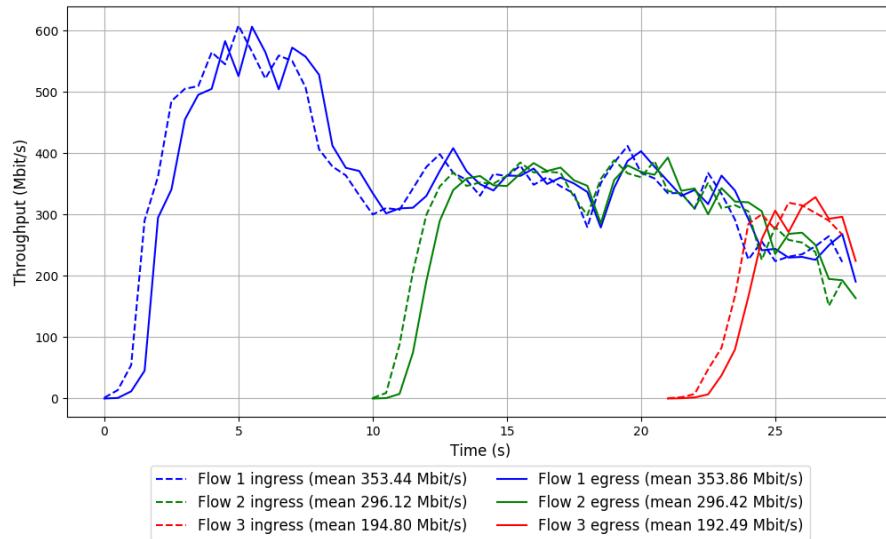


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 10:33:52
End at: 2019-06-28 10:34:22
Local clock offset: -0.025 ms
Remote clock offset: -0.23 ms

# Below is generated by plot.py at 2019-06-28 13:39:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.32 Mbit/s
95th percentile per-packet one-way delay: 67.212 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 353.86 Mbit/s
95th percentile per-packet one-way delay: 70.414 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 296.42 Mbit/s
95th percentile per-packet one-way delay: 65.384 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 192.49 Mbit/s
95th percentile per-packet one-way delay: 62.312 ms
Loss rate: 2.91%
```

Run 3: Report of Indigo-MusesD — Data Link

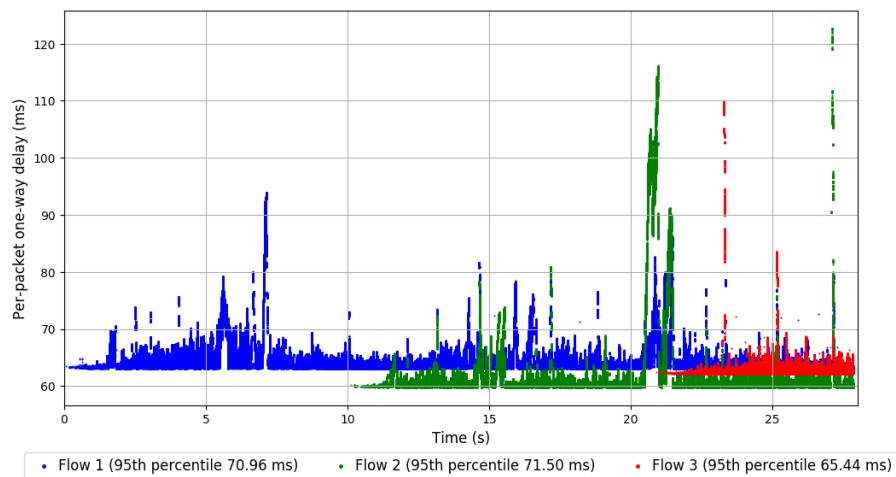
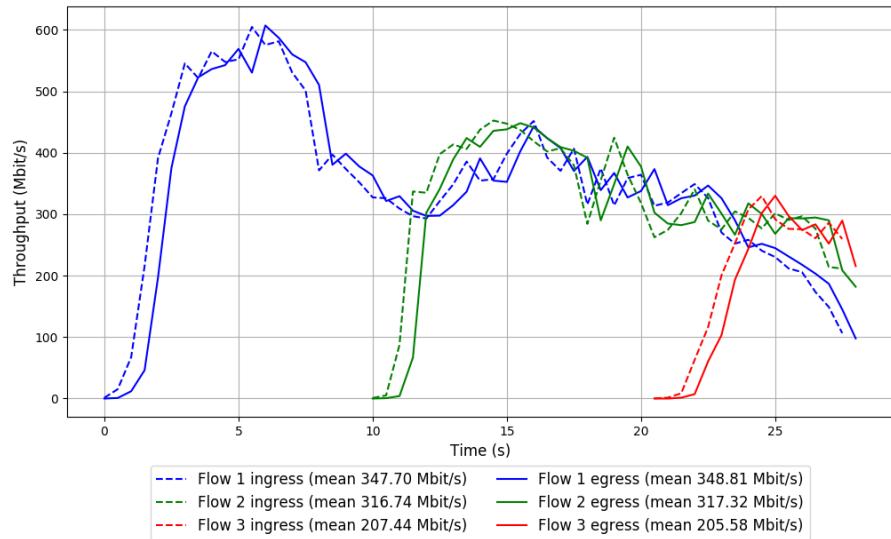


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 11:11:02
End at: 2019-06-28 11:11:32
Local clock offset: -0.083 ms
Remote clock offset: -0.616 ms

# Below is generated by plot.py at 2019-06-28 13:39:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 602.63 Mbit/s
95th percentile per-packet one-way delay: 70.658 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 348.81 Mbit/s
95th percentile per-packet one-way delay: 70.959 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 317.32 Mbit/s
95th percentile per-packet one-way delay: 71.505 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 205.58 Mbit/s
95th percentile per-packet one-way delay: 65.438 ms
Loss rate: 2.62%
```

Run 4: Report of Indigo-MusesD — Data Link

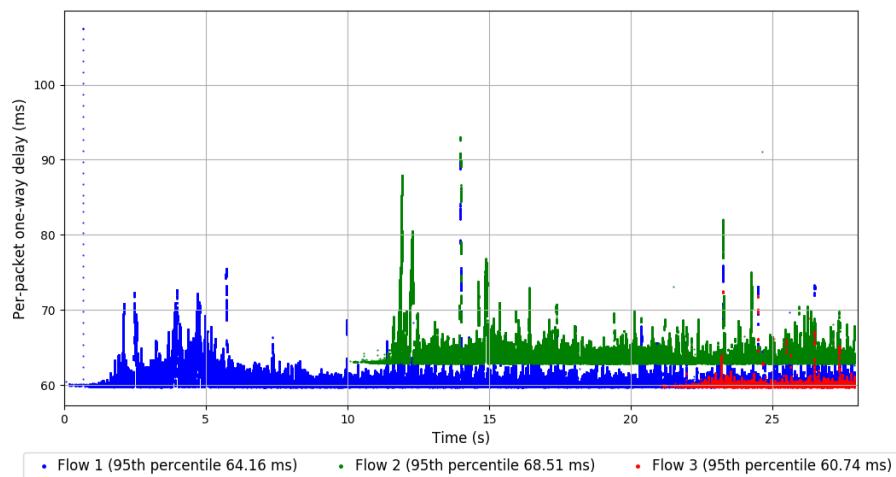
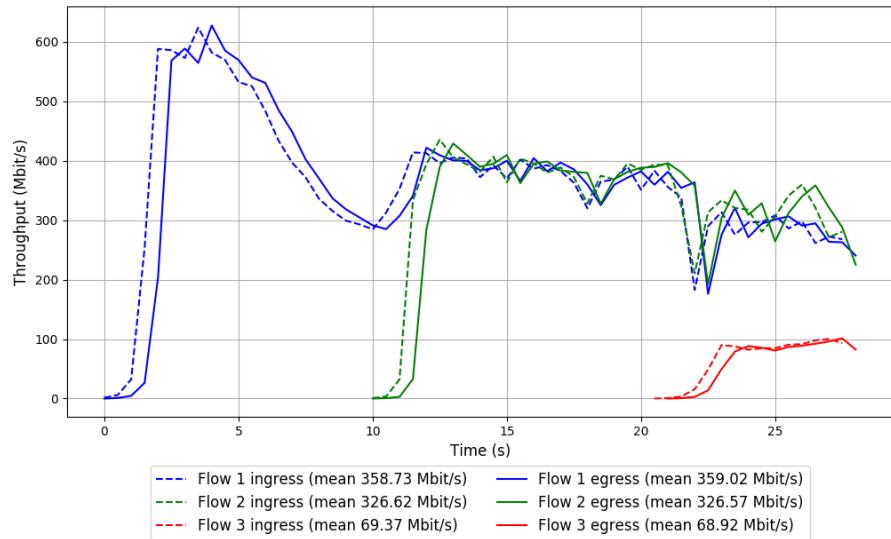


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 11:47:54
End at: 2019-06-28 11:48:24
Local clock offset: -0.033 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-06-28 13:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 584.80 Mbit/s
95th percentile per-packet one-way delay: 66.120 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 359.02 Mbit/s
95th percentile per-packet one-way delay: 64.159 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 326.57 Mbit/s
95th percentile per-packet one-way delay: 68.512 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 68.92 Mbit/s
95th percentile per-packet one-way delay: 60.745 ms
Loss rate: 2.37%
```

Run 5: Report of Indigo-MusesD — Data Link

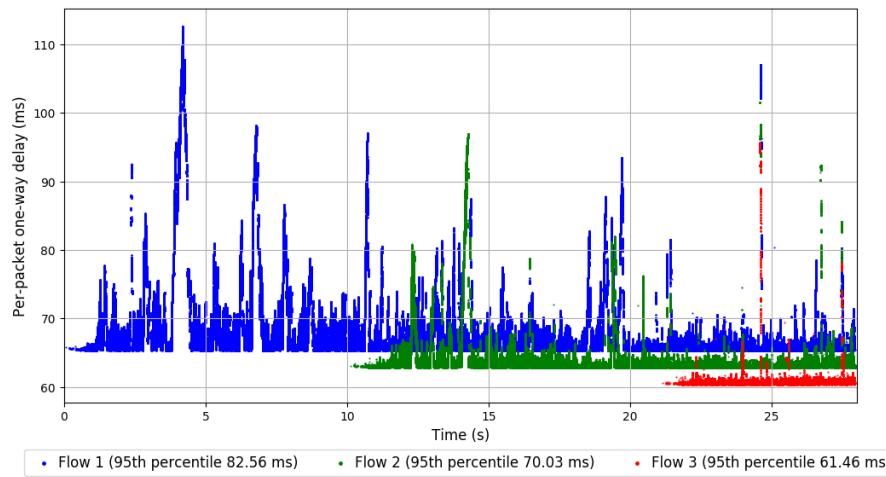
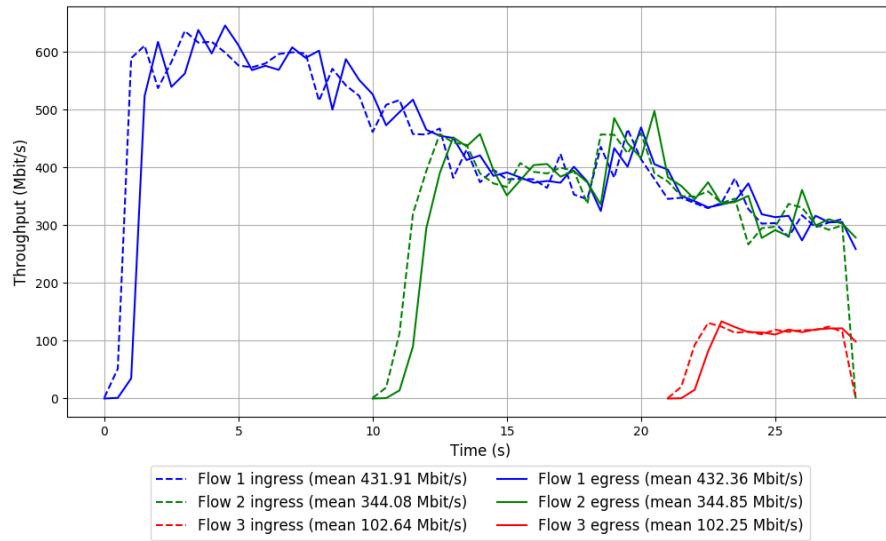


```
Run 1: Statistics of Indigo-MusesT
```

```
Start at: 2019-06-28 09:23:00
End at: 2019-06-28 09:23:30
Local clock offset: -0.027 ms
Remote clock offset: -0.314 ms

# Below is generated by plot.py at 2019-06-28 13:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 677.85 Mbit/s
95th percentile per-packet one-way delay: 78.679 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 432.36 Mbit/s
95th percentile per-packet one-way delay: 82.555 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 344.85 Mbit/s
95th percentile per-packet one-way delay: 70.033 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 102.25 Mbit/s
95th percentile per-packet one-way delay: 61.464 ms
Loss rate: 2.19%
```

Run 1: Report of Indigo-MusesT — Data Link

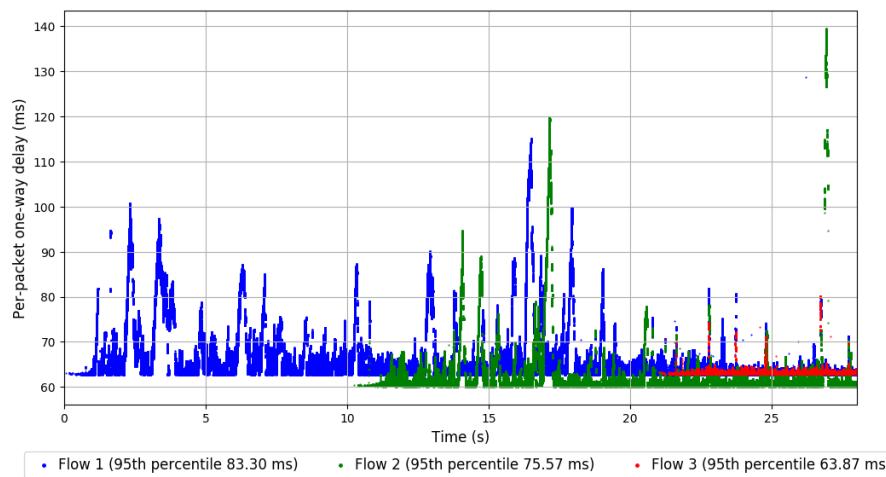
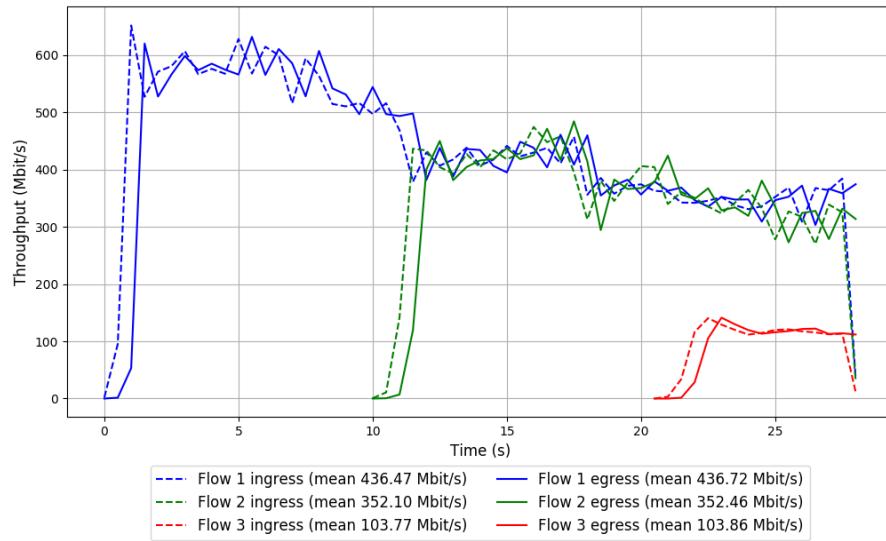


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 10:00:23
End at: 2019-06-28 10:00:53
Local clock offset: -0.017 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2019-06-28 13:43:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.50 Mbit/s
95th percentile per-packet one-way delay: 81.790 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 436.72 Mbit/s
95th percentile per-packet one-way delay: 83.300 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 352.46 Mbit/s
95th percentile per-packet one-way delay: 75.573 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 103.86 Mbit/s
95th percentile per-packet one-way delay: 63.867 ms
Loss rate: 1.65%
```

Run 2: Report of Indigo-MusesT — Data Link

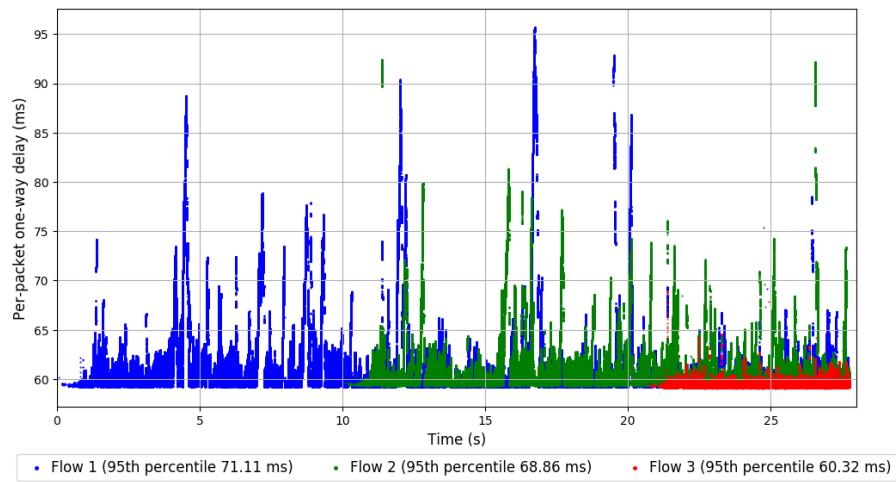
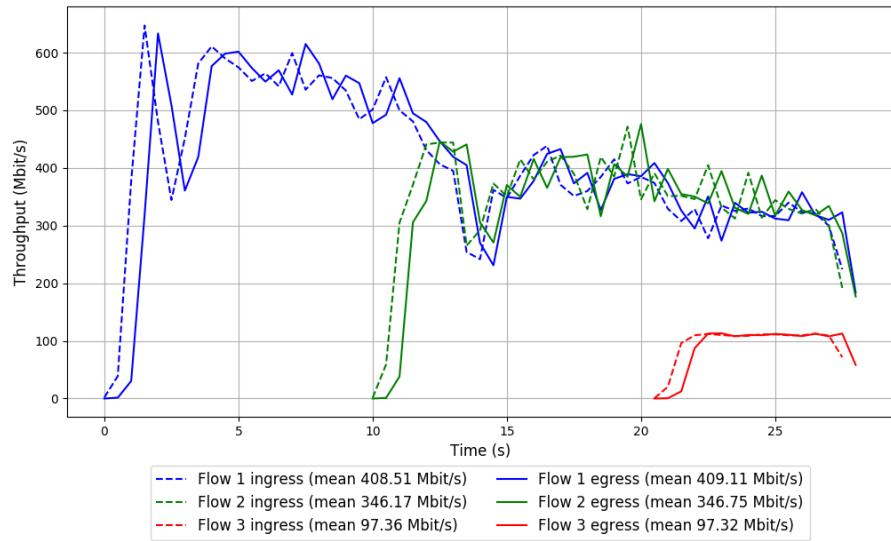


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 10:37:35
End at: 2019-06-28 10:38:05
Local clock offset: -0.058 ms
Remote clock offset: 0.465 ms

# Below is generated by plot.py at 2019-06-28 13:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 655.18 Mbit/s
95th percentile per-packet one-way delay: 69.791 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 409.11 Mbit/s
95th percentile per-packet one-way delay: 71.114 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 346.75 Mbit/s
95th percentile per-packet one-way delay: 68.863 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 97.32 Mbit/s
95th percentile per-packet one-way delay: 60.324 ms
Loss rate: 1.76%
```

Run 3: Report of Indigo-MusesT — Data Link

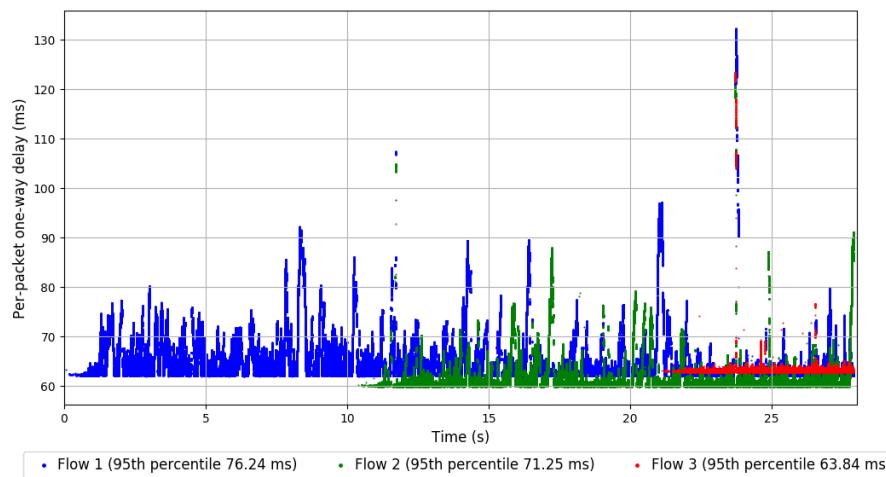
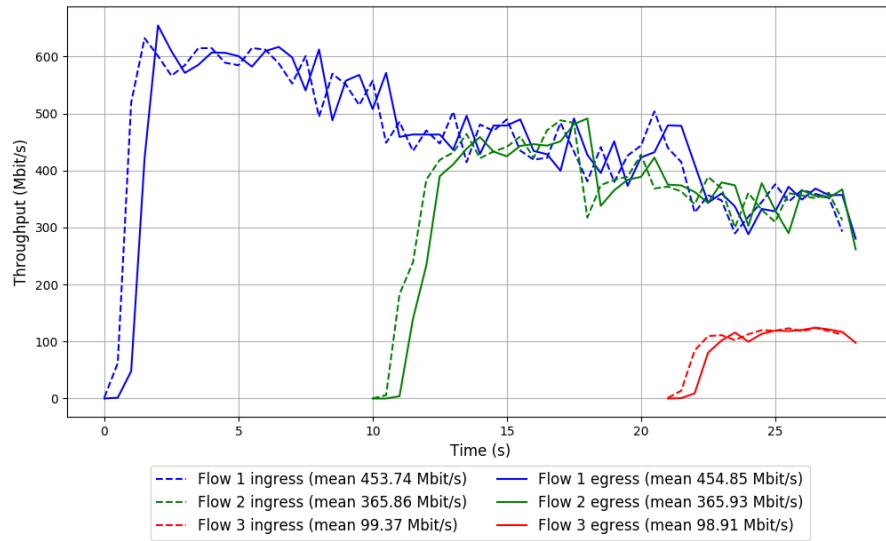


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 11:14:43
End at: 2019-06-28 11:15:13
Local clock offset: -0.054 ms
Remote clock offset: -0.438 ms

# Below is generated by plot.py at 2019-06-28 13:49:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 708.90 Mbit/s
95th percentile per-packet one-way delay: 74.523 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 454.85 Mbit/s
95th percentile per-packet one-way delay: 76.244 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 365.93 Mbit/s
95th percentile per-packet one-way delay: 71.253 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 98.91 Mbit/s
95th percentile per-packet one-way delay: 63.838 ms
Loss rate: 2.25%
```

Run 4: Report of Indigo-MusesT — Data Link

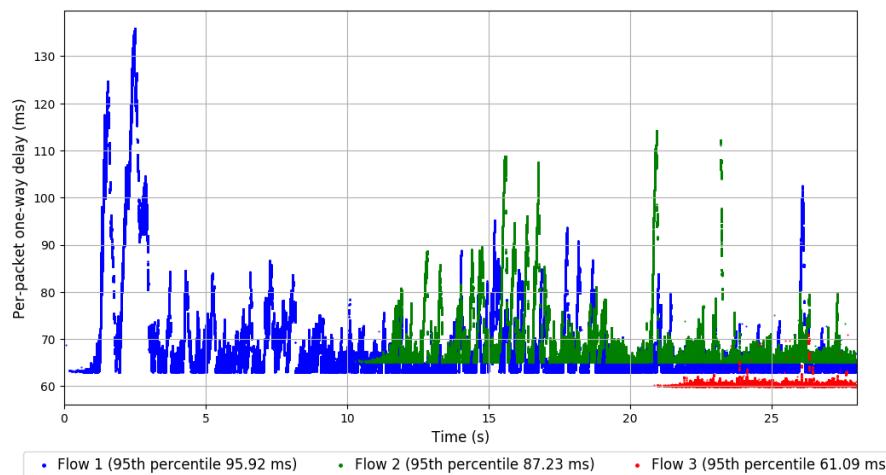
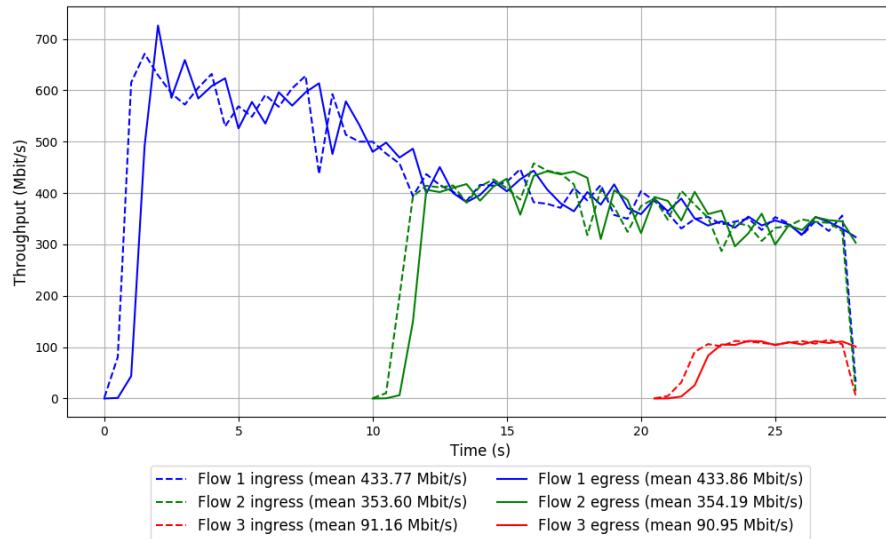


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 11:51:32
End at: 2019-06-28 11:52:02
Local clock offset: -0.026 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-06-28 13:50:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 681.64 Mbit/s
95th percentile per-packet one-way delay: 92.804 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 433.86 Mbit/s
95th percentile per-packet one-way delay: 95.915 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 354.19 Mbit/s
95th percentile per-packet one-way delay: 87.232 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 61.091 ms
Loss rate: 1.99%
```

Run 5: Report of Indigo-MusesT — Data Link

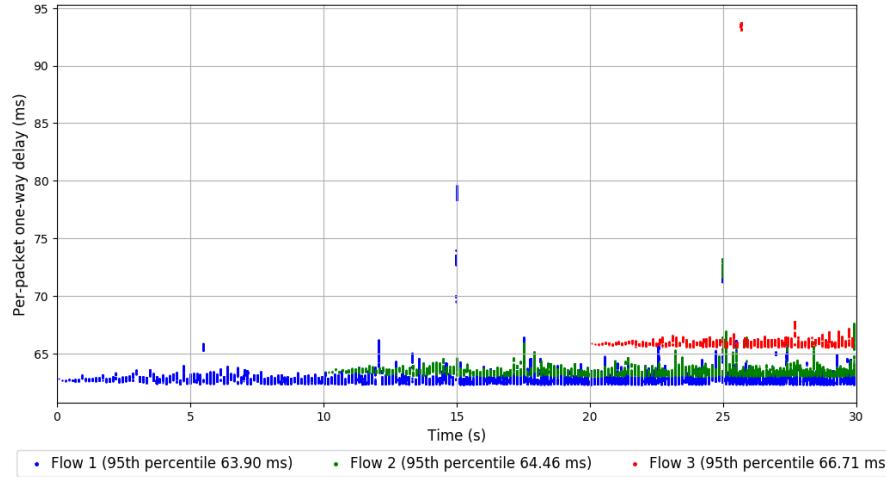
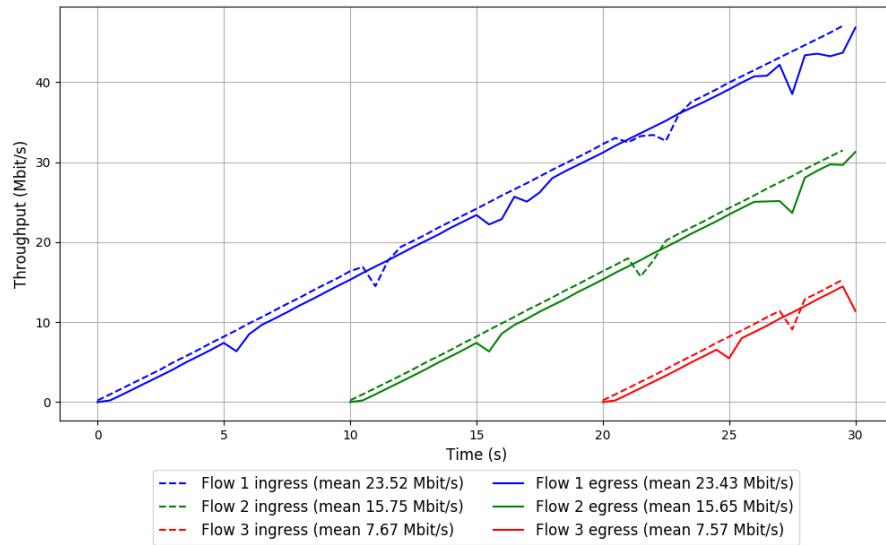


```
Run 1: Statistics of LEDBAT

Start at: 2019-06-28 09:16:31
End at: 2019-06-28 09:17:01
Local clock offset: -0.027 ms
Remote clock offset: -0.253 ms

# Below is generated by plot.py at 2019-06-28 13:50:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.30 Mbit/s
95th percentile per-packet one-way delay: 65.874 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 63.900 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 64.458 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 66.713 ms
Loss rate: 2.57%
```

Run 1: Report of LEDBAT — Data Link

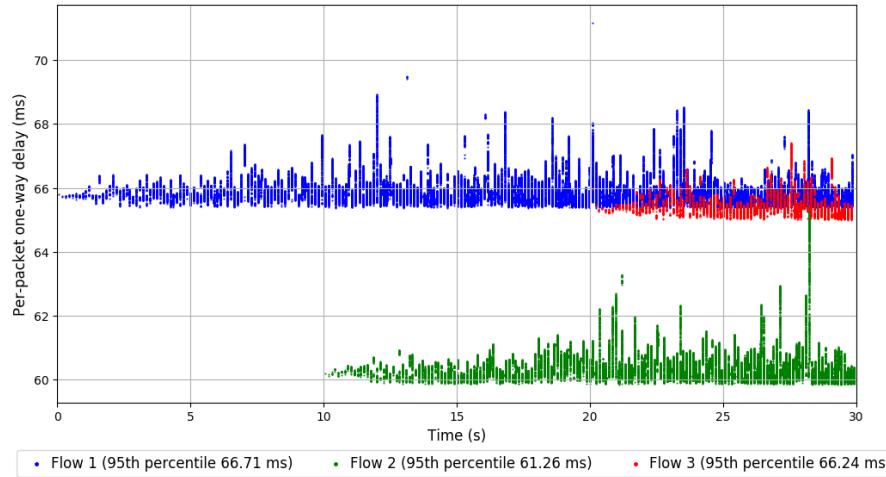
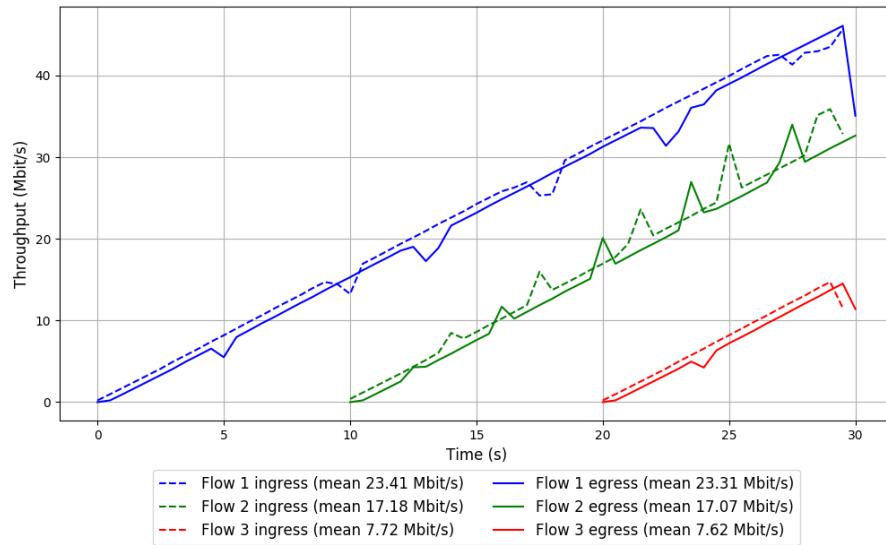


Run 2: Statistics of LEDBAT

```
Start at: 2019-06-28 09:53:46
End at: 2019-06-28 09:54:16
Local clock offset: -0.032 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2019-06-28 13:50:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.08 Mbit/s
95th percentile per-packet one-way delay: 66.446 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 23.31 Mbit/s
95th percentile per-packet one-way delay: 66.707 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 17.07 Mbit/s
95th percentile per-packet one-way delay: 61.259 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 66.244 ms
Loss rate: 2.56%
```

Run 2: Report of LEDBAT — Data Link

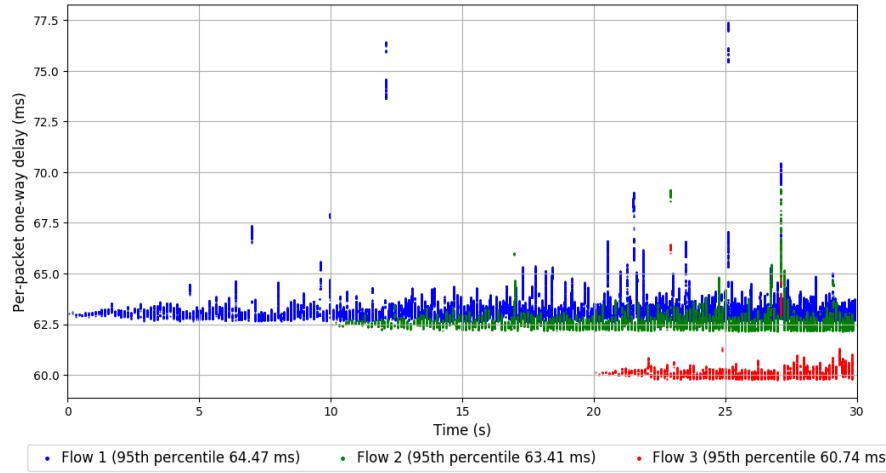
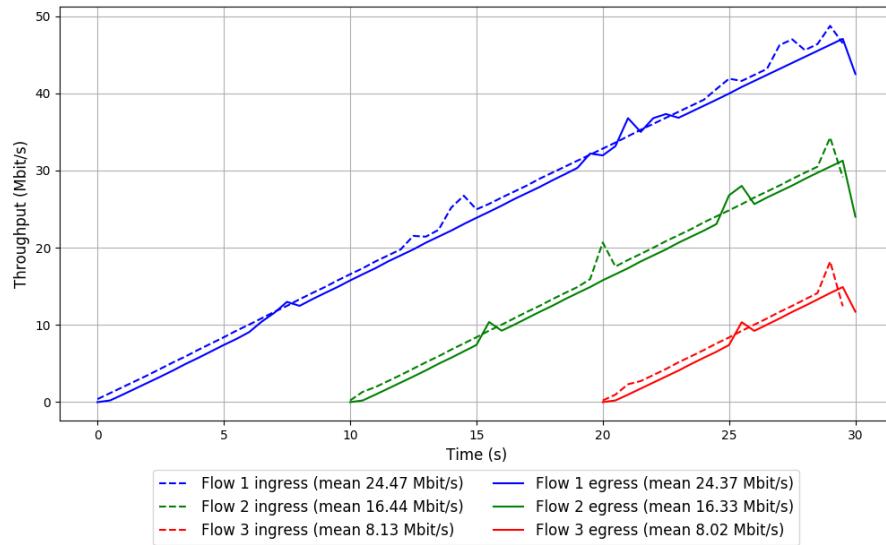


Run 3: Statistics of LEDBAT

```
Start at: 2019-06-28 10:30:57
End at: 2019-06-28 10:31:27
Local clock offset: -0.015 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-06-28 13:50:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.80 Mbit/s
95th percentile per-packet one-way delay: 64.218 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 24.37 Mbit/s
95th percentile per-packet one-way delay: 64.473 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 16.33 Mbit/s
95th percentile per-packet one-way delay: 63.413 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 60.740 ms
Loss rate: 2.51%
```

Run 3: Report of LEDBAT — Data Link

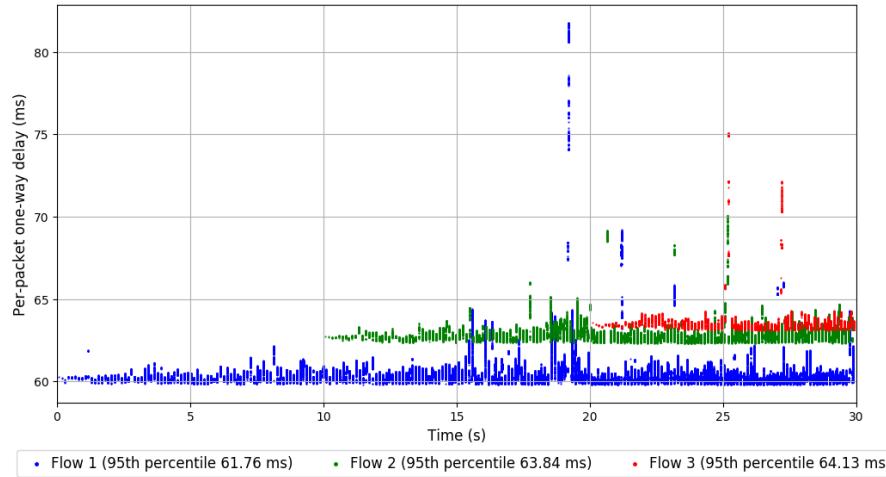
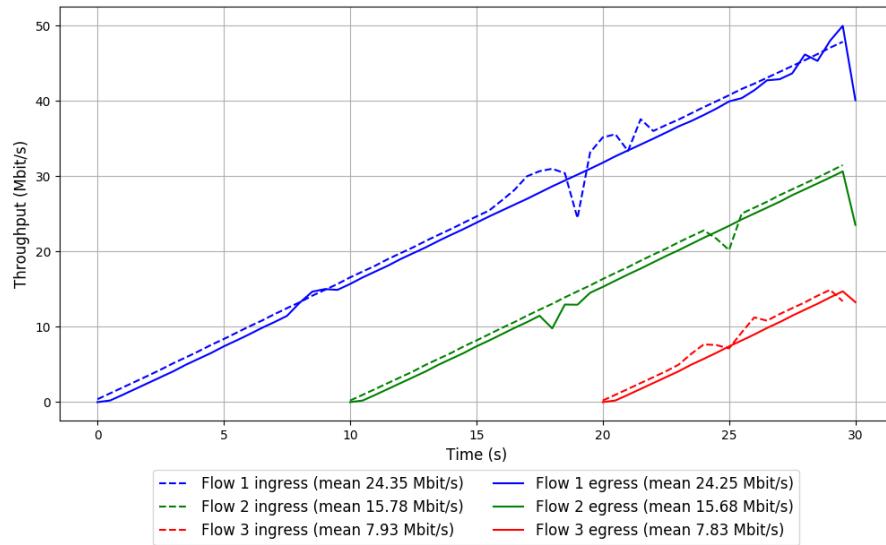


Run 4: Statistics of LEDBAT

```
Start at: 2019-06-28 11:08:02
End at: 2019-06-28 11:08:32
Local clock offset: -0.068 ms
Remote clock offset: -0.352 ms

# Below is generated by plot.py at 2019-06-28 13:50:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.18 Mbit/s
95th percentile per-packet one-way delay: 63.633 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 61.757 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 15.68 Mbit/s
95th percentile per-packet one-way delay: 63.836 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 64.134 ms
Loss rate: 2.48%
```

Run 4: Report of LEDBAT — Data Link

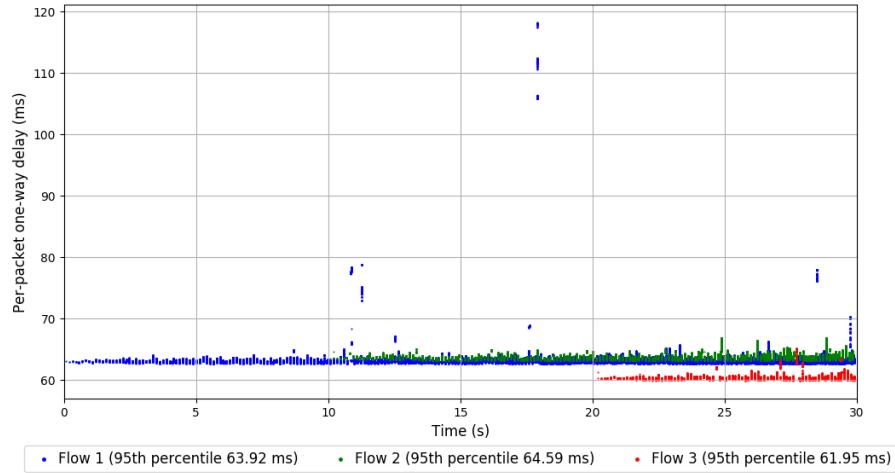
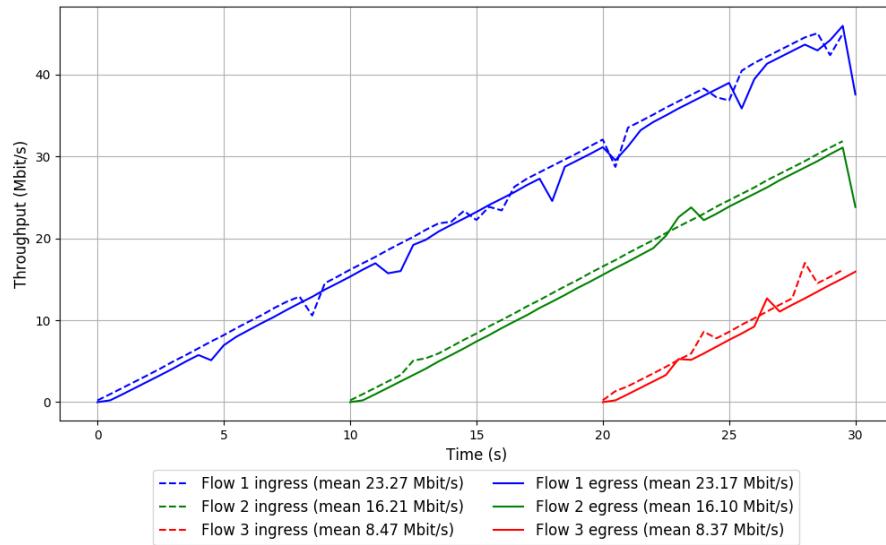


Run 5: Statistics of LEDBAT

```
Start at: 2019-06-28 11:45:09
End at: 2019-06-28 11:45:39
Local clock offset: -0.048 ms
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2019-06-28 13:50:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.59 Mbit/s
95th percentile per-packet one-way delay: 64.239 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 23.17 Mbit/s
95th percentile per-packet one-way delay: 63.921 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 16.10 Mbit/s
95th percentile per-packet one-way delay: 64.587 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 61.947 ms
Loss rate: 2.44%
```

Run 5: Report of LEDBAT — Data Link

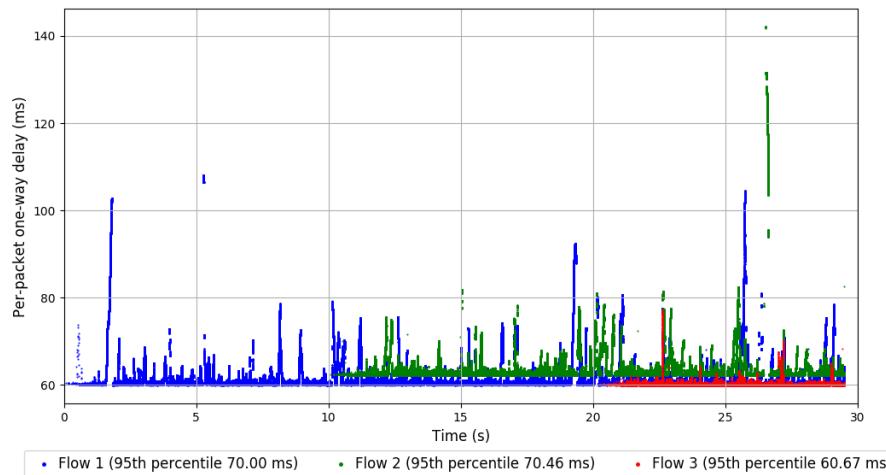
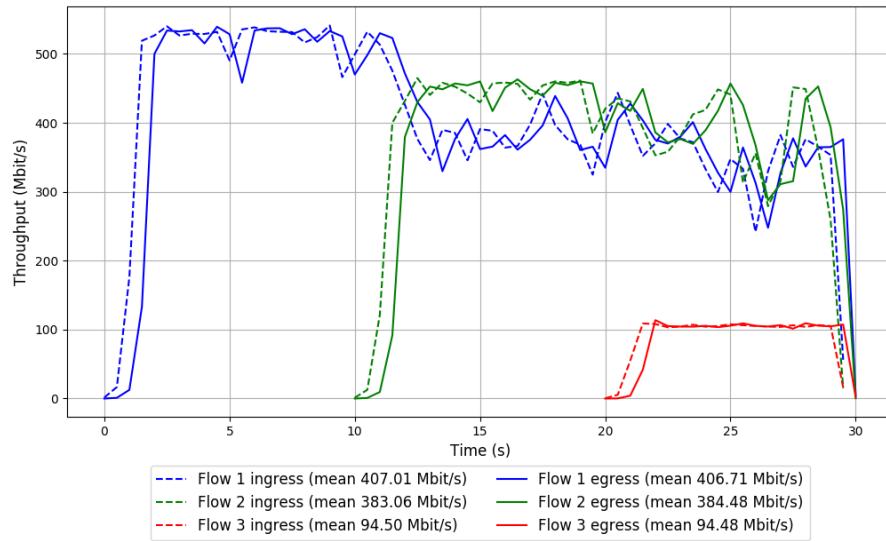


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 09:08:51
End at: 2019-06-28 09:09:21
Local clock offset: -0.03 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2019-06-28 13:54:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 689.93 Mbit/s
95th percentile per-packet one-way delay: 69.927 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 406.71 Mbit/s
95th percentile per-packet one-way delay: 69.995 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 384.48 Mbit/s
95th percentile per-packet one-way delay: 70.463 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 60.671 ms
Loss rate: 1.36%
```

Run 1: Report of Muses_DecisionTree — Data Link

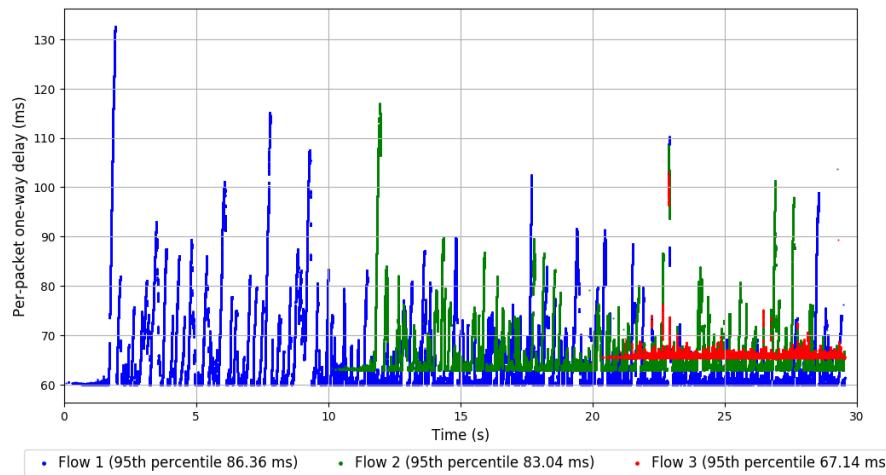
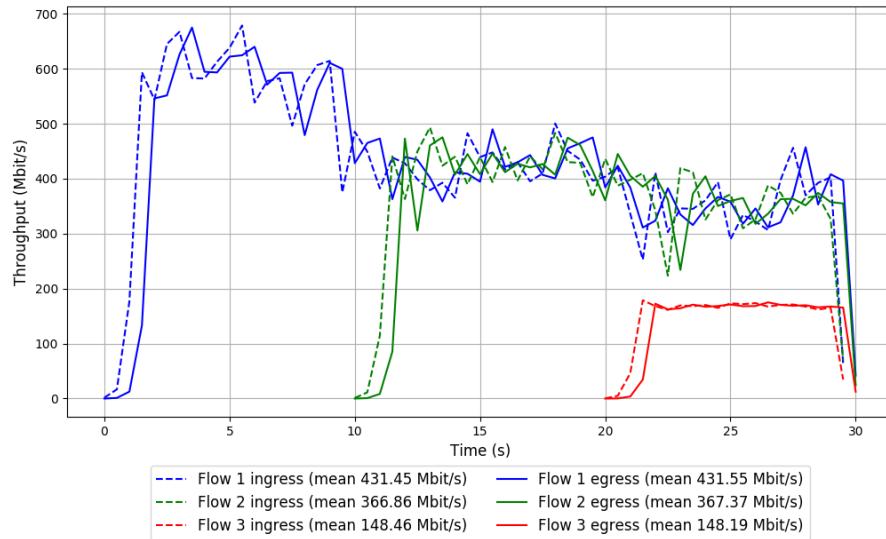


```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 09:46:04
End at: 2019-06-28 09:46:34
Local clock offset: -0.031 ms
Remote clock offset: -0.198 ms

# Below is generated by plot.py at 2019-06-28 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 719.79 Mbit/s
95th percentile per-packet one-way delay: 84.720 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 431.55 Mbit/s
95th percentile per-packet one-way delay: 86.363 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 367.37 Mbit/s
95th percentile per-packet one-way delay: 83.043 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 148.19 Mbit/s
95th percentile per-packet one-way delay: 67.145 ms
Loss rate: 1.52%
```

Run 2: Report of Muses_DecisionTree — Data Link

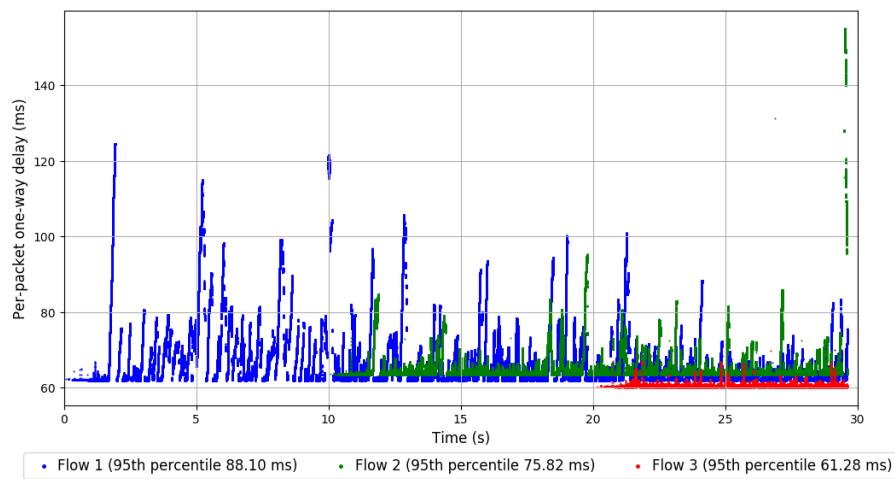
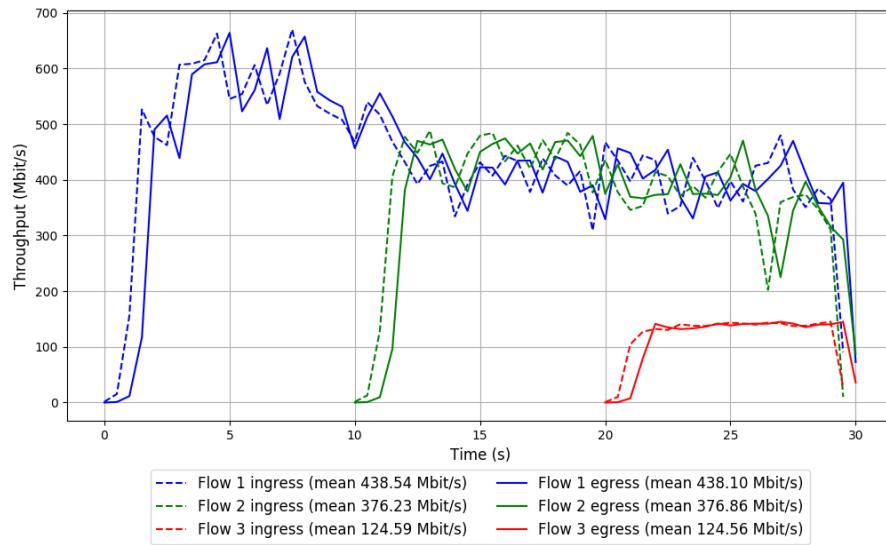


```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 10:23:16
End at: 2019-06-28 10:23:46
Local clock offset: 0.018 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2019-06-28 13:55:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 726.88 Mbit/s
95th percentile per-packet one-way delay: 81.428 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 438.10 Mbit/s
95th percentile per-packet one-way delay: 88.100 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 376.86 Mbit/s
95th percentile per-packet one-way delay: 75.824 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 124.56 Mbit/s
95th percentile per-packet one-way delay: 61.285 ms
Loss rate: 0.46%
```

Run 3: Report of Muses_DecisionTree — Data Link

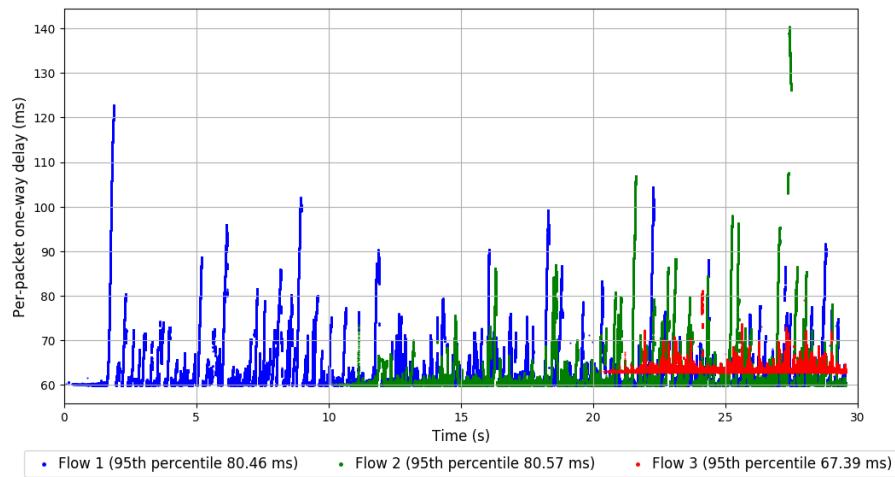
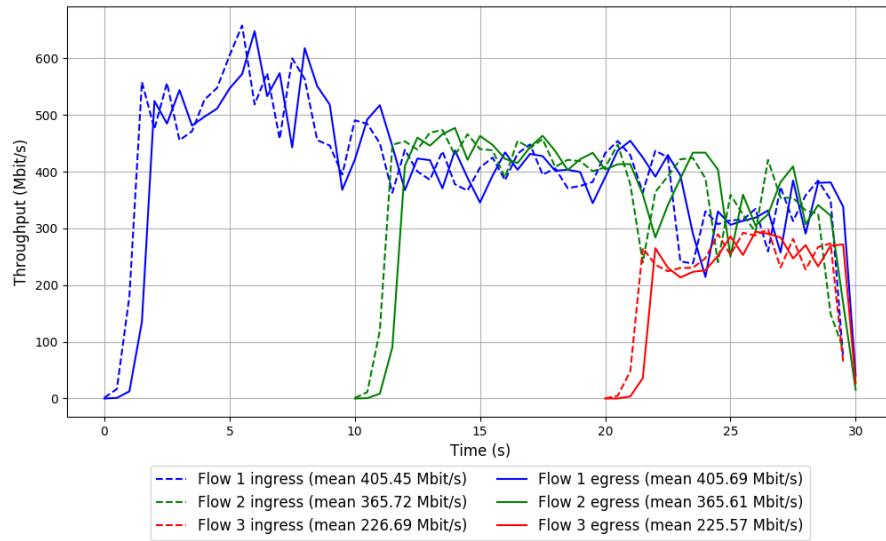


```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 11:00:24
End at: 2019-06-28 11:00:54
Local clock offset: -0.097 ms
Remote clock offset: -0.429 ms

# Below is generated by plot.py at 2019-06-28 13:55:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 717.05 Mbit/s
95th percentile per-packet one-way delay: 79.298 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 405.69 Mbit/s
95th percentile per-packet one-way delay: 80.462 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 365.61 Mbit/s
95th percentile per-packet one-way delay: 80.567 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 225.57 Mbit/s
95th percentile per-packet one-way delay: 67.393 ms
Loss rate: 1.80%
```

Run 4: Report of Muses_DecisionTree — Data Link

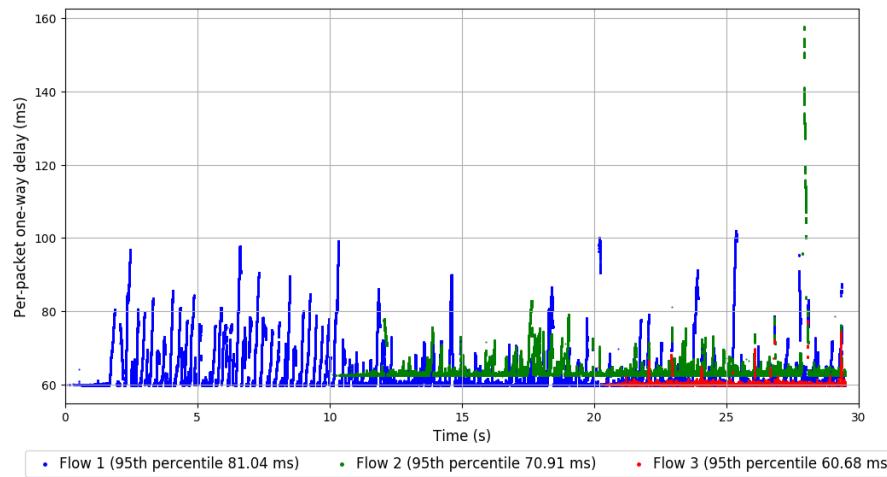
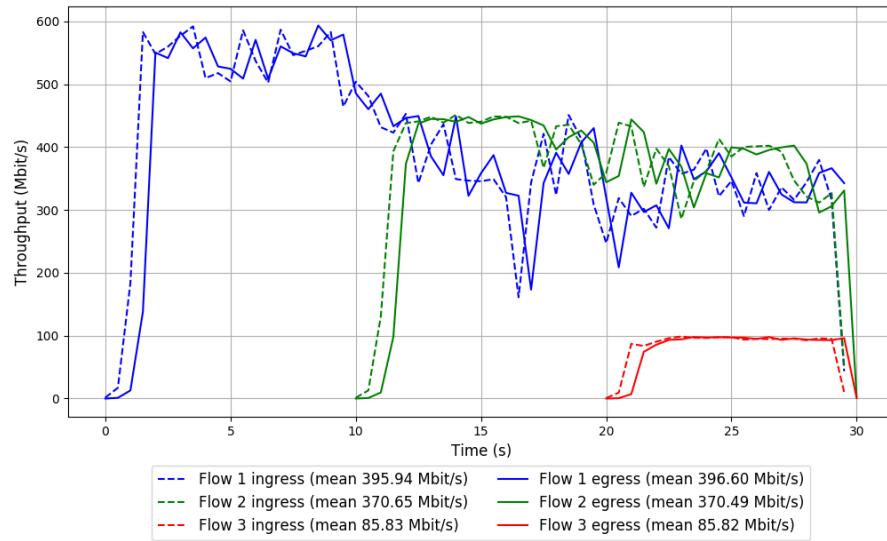


```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 11:37:36
End at: 2019-06-28 11:38:06
Local clock offset: -0.044 ms
Remote clock offset: -0.52 ms

# Below is generated by plot.py at 2019-06-28 13:56:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 667.82 Mbit/s
95th percentile per-packet one-way delay: 77.585 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 396.60 Mbit/s
95th percentile per-packet one-way delay: 81.044 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 370.49 Mbit/s
95th percentile per-packet one-way delay: 70.906 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 85.82 Mbit/s
95th percentile per-packet one-way delay: 60.684 ms
Loss rate: 1.32%
```

Run 5: Report of Muses_DecisionTree — Data Link

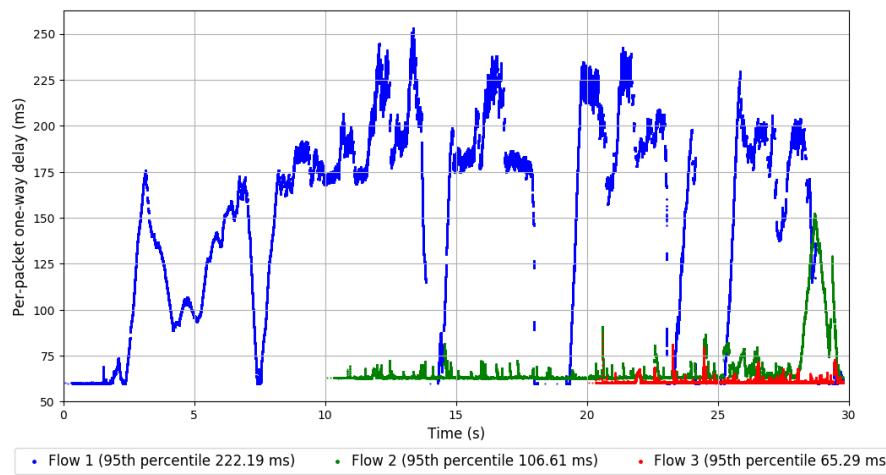
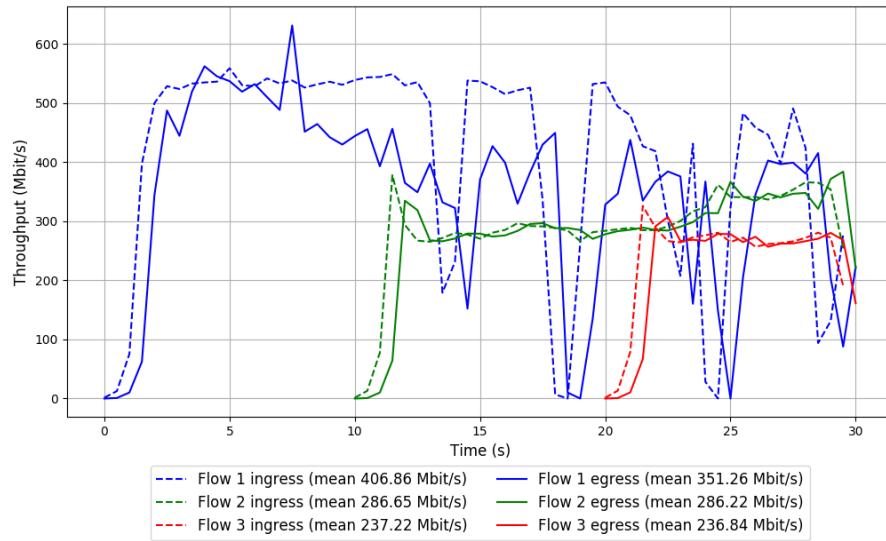


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-06-28 09:28:27
End at: 2019-06-28 09:28:57
Local clock offset: -0.085 ms
Remote clock offset: -0.176 ms

# Below is generated by plot.py at 2019-06-28 14:11:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 618.48 Mbit/s
95th percentile per-packet one-way delay: 212.381 ms
Loss rate: 8.82%
-- Flow 1:
Average throughput: 351.26 Mbit/s
95th percentile per-packet one-way delay: 222.190 ms
Loss rate: 14.02%
-- Flow 2:
Average throughput: 286.22 Mbit/s
95th percentile per-packet one-way delay: 106.605 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 236.84 Mbit/s
95th percentile per-packet one-way delay: 65.292 ms
Loss rate: 1.44%
```

Run 1: Report of PCC-Allegro — Data Link

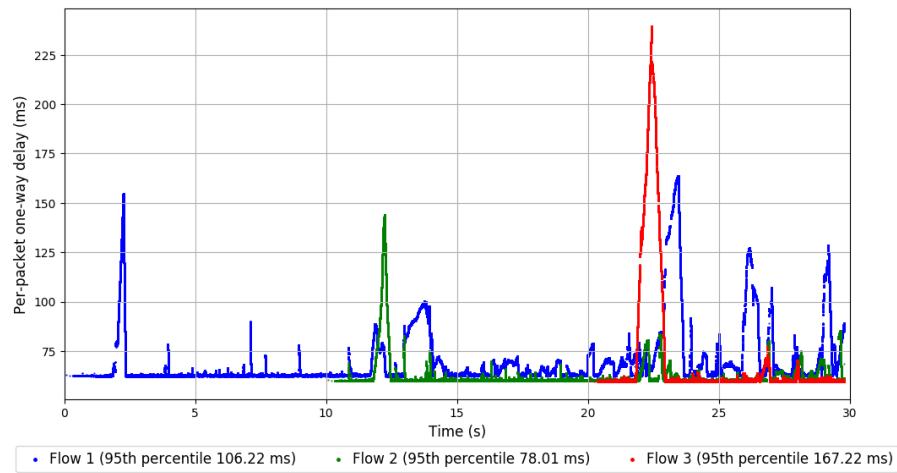
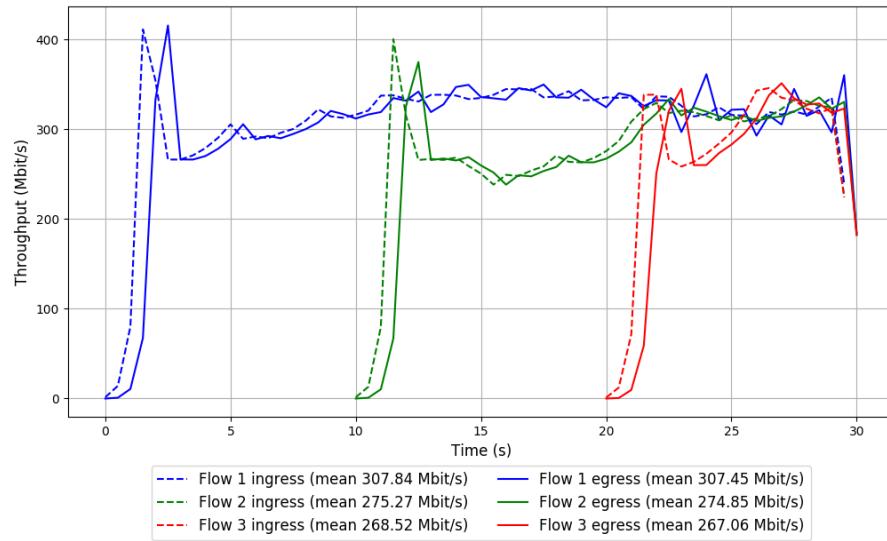


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-06-28 10:05:50
End at: 2019-06-28 10:06:20
Local clock offset: 0.023 ms
Remote clock offset: 0.387 ms

# Below is generated by plot.py at 2019-06-28 14:11:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 576.81 Mbit/s
95th percentile per-packet one-way delay: 104.242 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 307.45 Mbit/s
95th percentile per-packet one-way delay: 106.218 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 274.85 Mbit/s
95th percentile per-packet one-way delay: 78.008 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 267.06 Mbit/s
95th percentile per-packet one-way delay: 167.222 ms
Loss rate: 1.75%
```

Run 2: Report of PCC-Allegro — Data Link

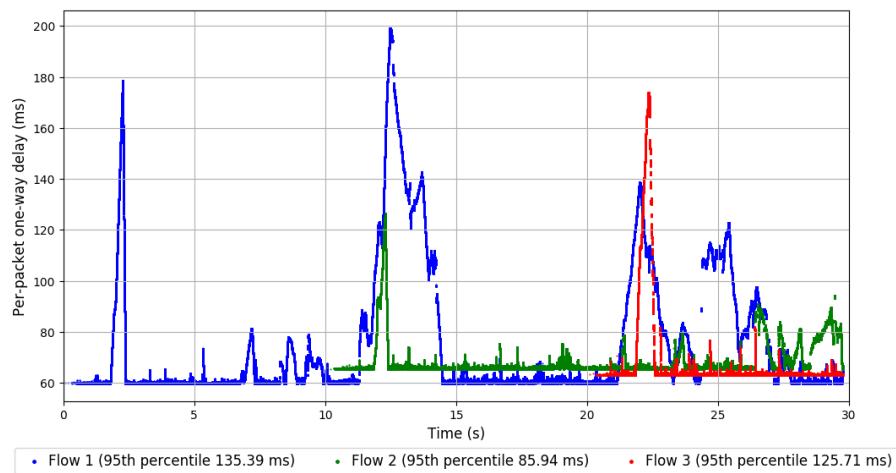
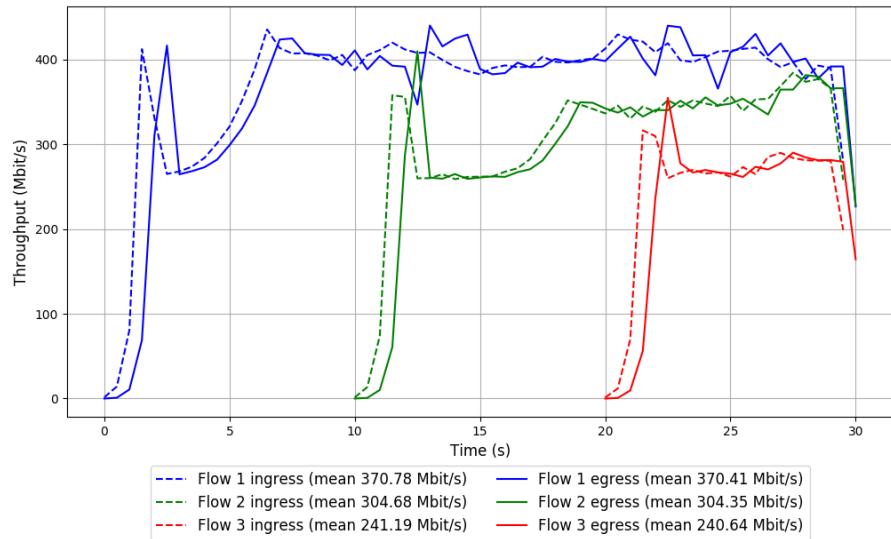


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-06-28 10:43:00
End at: 2019-06-28 10:43:30
Local clock offset: -0.062 ms
Remote clock offset: -0.365 ms

# Below is generated by plot.py at 2019-06-28 14:14:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 650.79 Mbit/s
95th percentile per-packet one-way delay: 124.723 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 370.41 Mbit/s
95th percentile per-packet one-way delay: 135.394 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 304.35 Mbit/s
95th percentile per-packet one-way delay: 85.945 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 240.64 Mbit/s
95th percentile per-packet one-way delay: 125.712 ms
Loss rate: 1.49%
```

Run 3: Report of PCC-Allegro — Data Link

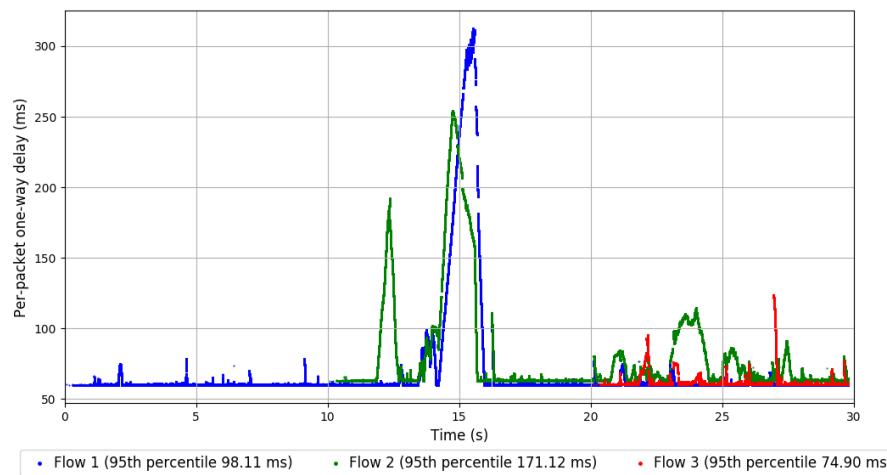
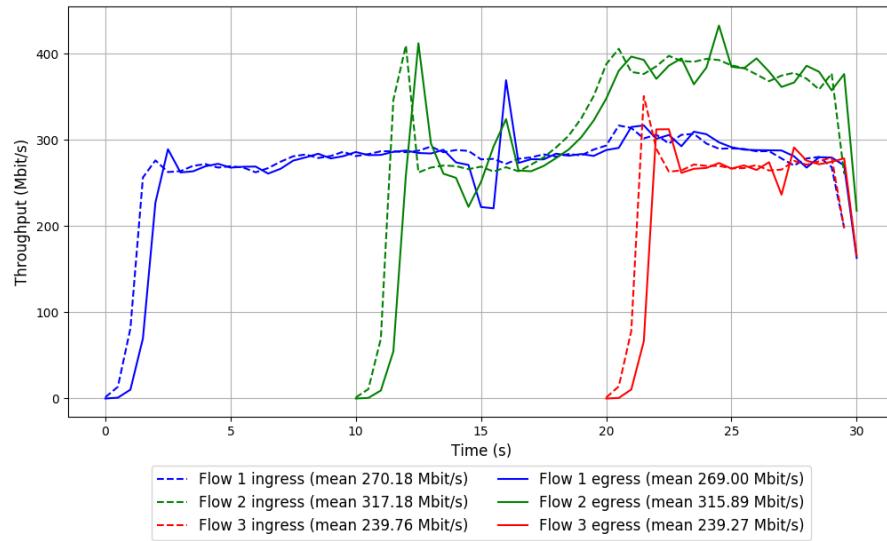


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-06-28 11:20:10
End at: 2019-06-28 11:20:40
Local clock offset: -0.05 ms
Remote clock offset: -0.59 ms

# Below is generated by plot.py at 2019-06-28 14:14:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 556.52 Mbit/s
95th percentile per-packet one-way delay: 126.068 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 269.00 Mbit/s
95th percentile per-packet one-way delay: 98.107 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 315.89 Mbit/s
95th percentile per-packet one-way delay: 171.121 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 239.27 Mbit/s
95th percentile per-packet one-way delay: 74.896 ms
Loss rate: 1.40%
```

Run 4: Report of PCC-Allegro — Data Link

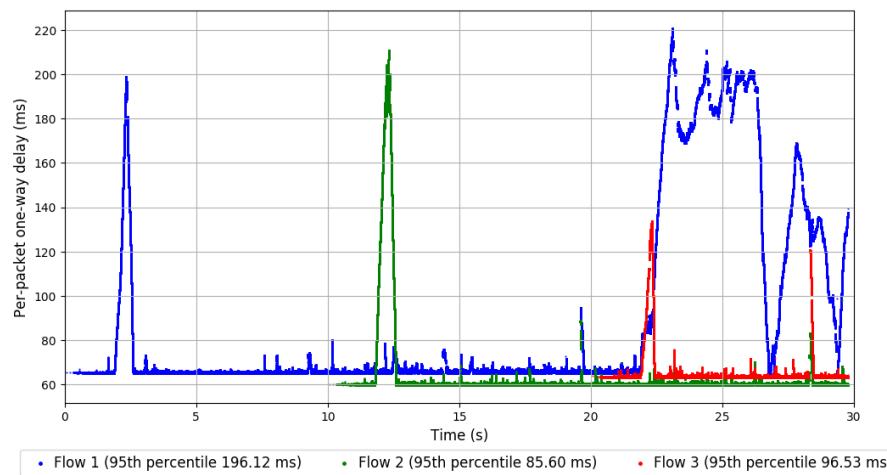
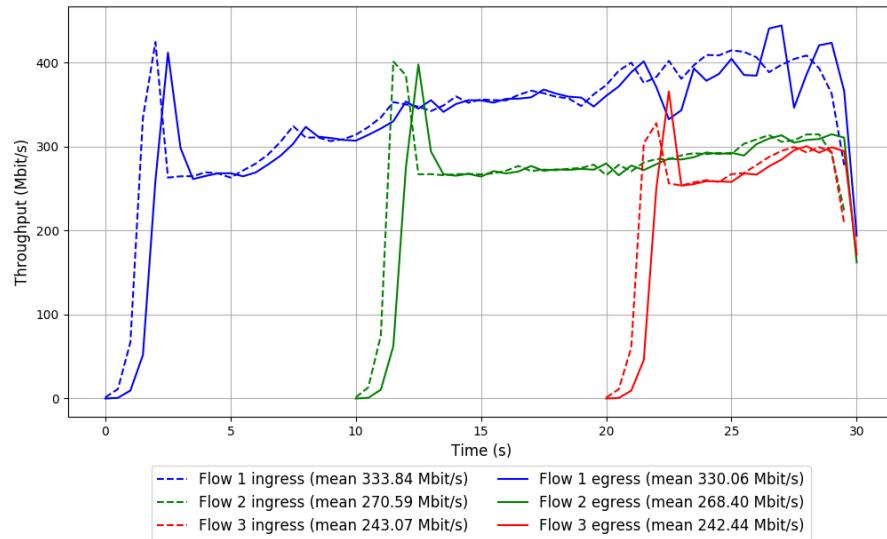


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-06-28 11:56:58
End at: 2019-06-28 11:57:28
Local clock offset: -0.039 ms
Remote clock offset: 0.091 ms

# Below is generated by plot.py at 2019-06-28 14:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.23 Mbit/s
95th percentile per-packet one-way delay: 189.283 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 330.06 Mbit/s
95th percentile per-packet one-way delay: 196.119 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 268.40 Mbit/s
95th percentile per-packet one-way delay: 85.601 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 242.44 Mbit/s
95th percentile per-packet one-way delay: 96.525 ms
Loss rate: 1.57%
```

Run 5: Report of PCC-Allegro — Data Link

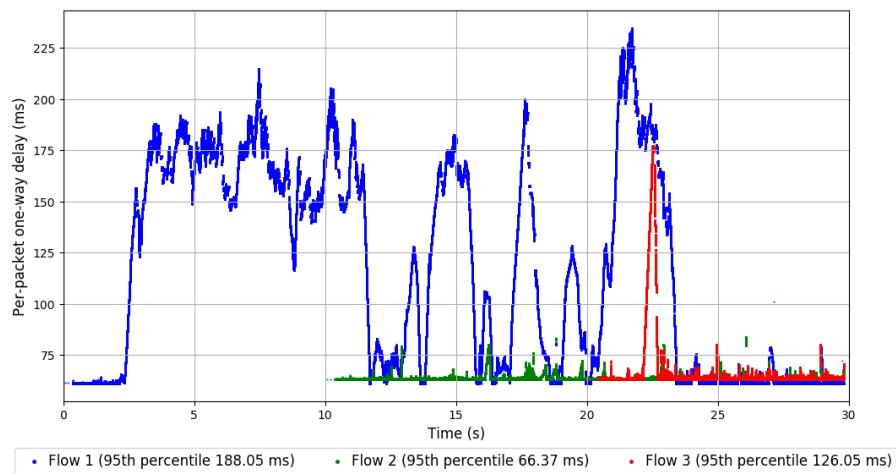
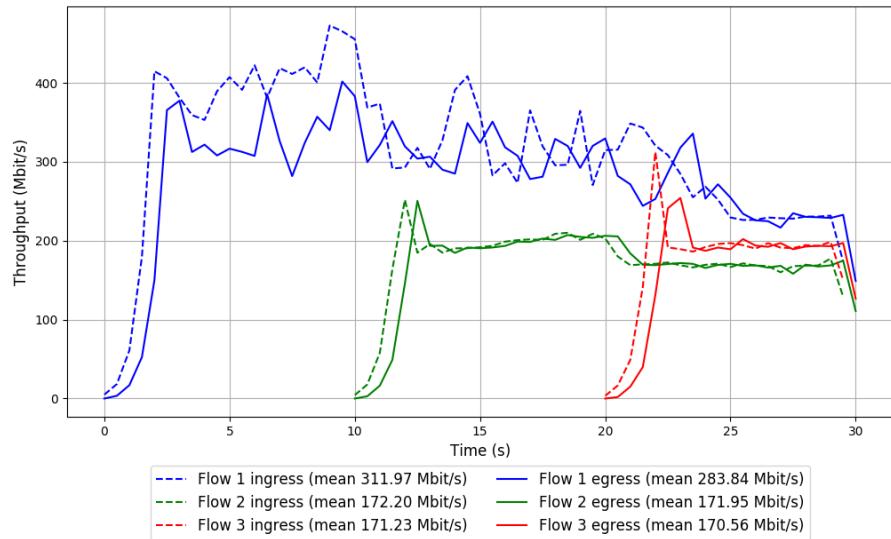


Run 1: Statistics of PCC-Expr

```
Start at: 2019-06-28 09:26:31
End at: 2019-06-28 09:27:01
Local clock offset: -0.005 ms
Remote clock offset: -0.887 ms

# Below is generated by plot.py at 2019-06-28 14:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 453.68 Mbit/s
95th percentile per-packet one-way delay: 183.976 ms
Loss rate: 6.43%
-- Flow 1:
Average throughput: 283.84 Mbit/s
95th percentile per-packet one-way delay: 188.050 ms
Loss rate: 9.38%
-- Flow 2:
Average throughput: 171.95 Mbit/s
95th percentile per-packet one-way delay: 66.370 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 170.56 Mbit/s
95th percentile per-packet one-way delay: 126.046 ms
Loss rate: 1.62%
```

Run 1: Report of PCC-Expr — Data Link

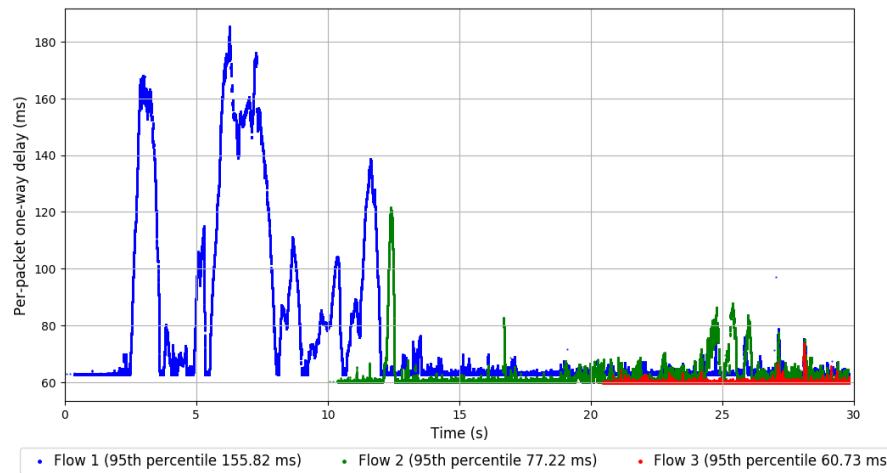
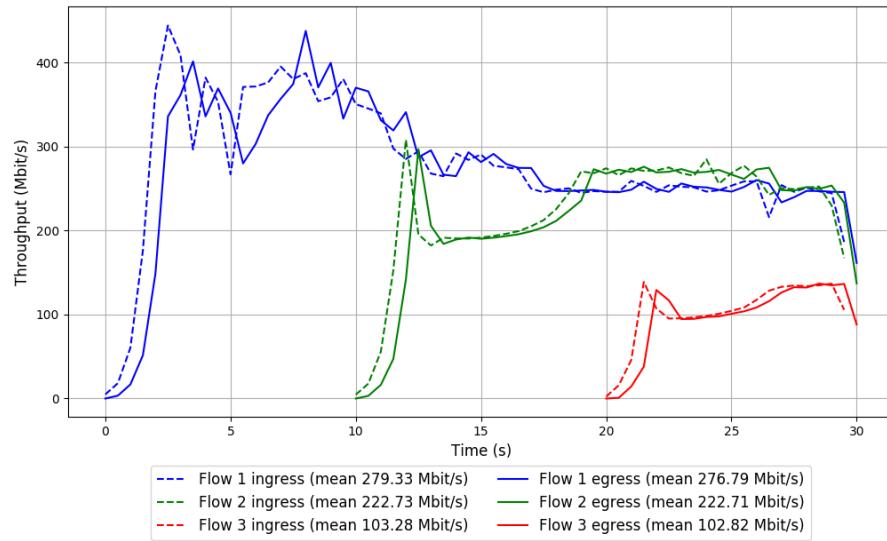


Run 2: Statistics of PCC-Expr

```
Start at: 2019-06-28 10:03:55
End at: 2019-06-28 10:04:25
Local clock offset: -0.01 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-06-28 14:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 458.23 Mbit/s
95th percentile per-packet one-way delay: 149.617 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 276.79 Mbit/s
95th percentile per-packet one-way delay: 155.822 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 222.71 Mbit/s
95th percentile per-packet one-way delay: 77.224 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 102.82 Mbit/s
95th percentile per-packet one-way delay: 60.727 ms
Loss rate: 1.67%
```

Run 2: Report of PCC-Expr — Data Link

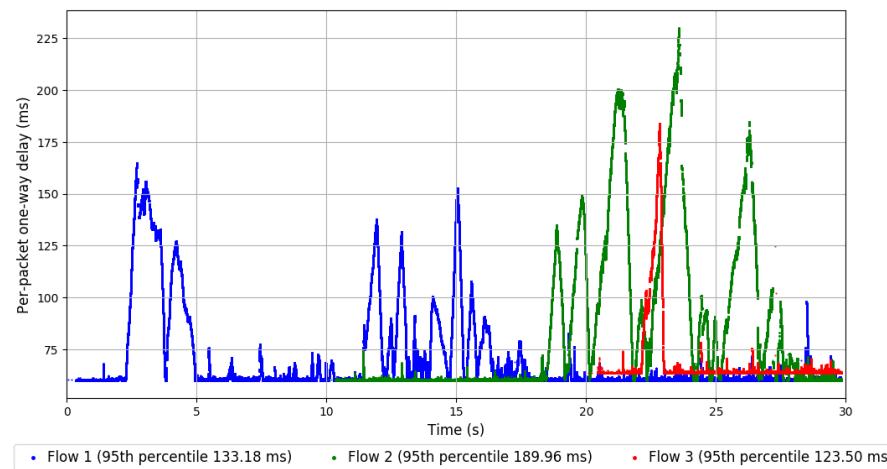
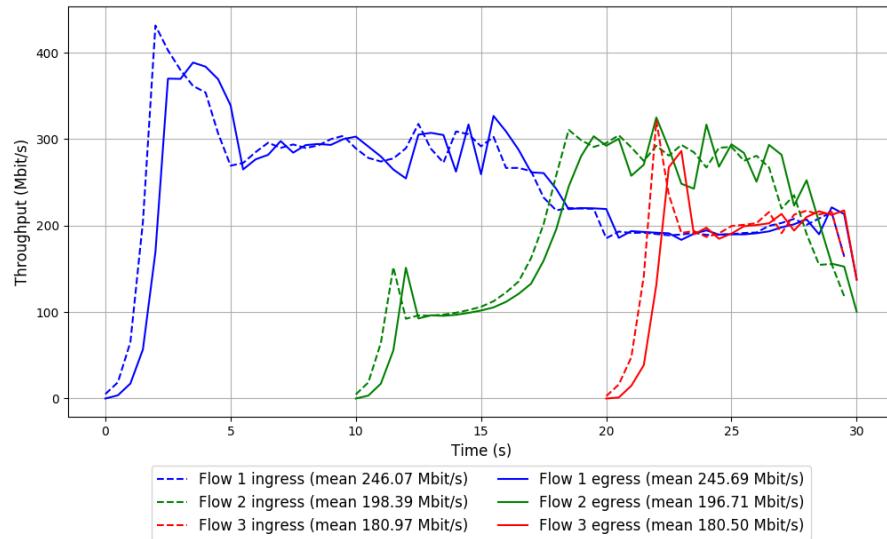


Run 3: Statistics of PCC-Expr

```
Start at: 2019-06-28 10:41:07
End at: 2019-06-28 10:41:37
Local clock offset: -0.036 ms
Remote clock offset: -0.442 ms

# Below is generated by plot.py at 2019-06-28 14:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.20 Mbit/s
95th percentile per-packet one-way delay: 149.622 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 245.69 Mbit/s
95th percentile per-packet one-way delay: 133.181 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 196.71 Mbit/s
95th percentile per-packet one-way delay: 189.957 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 180.50 Mbit/s
95th percentile per-packet one-way delay: 123.495 ms
Loss rate: 1.51%
```

Run 3: Report of PCC-Expr — Data Link

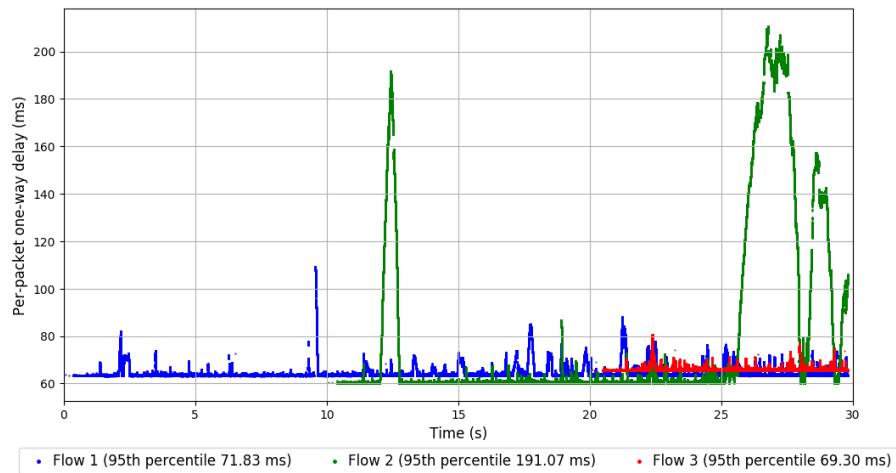
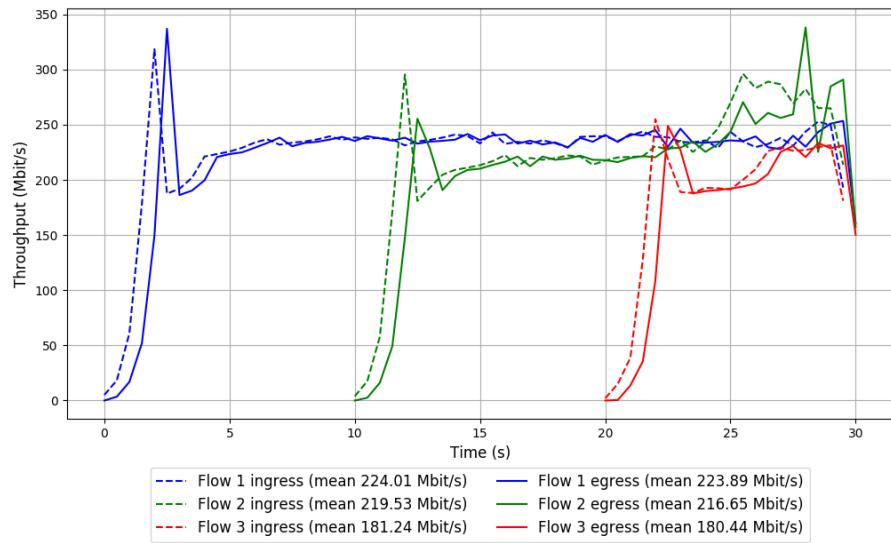


Run 4: Statistics of PCC-Expr

```
Start at: 2019-06-28 11:18:17
End at: 2019-06-28 11:18:47
Local clock offset: -0.042 ms
Remote clock offset: -0.726 ms

# Below is generated by plot.py at 2019-06-28 14:25:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.64 Mbit/s
95th percentile per-packet one-way delay: 140.578 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 223.89 Mbit/s
95th percentile per-packet one-way delay: 71.830 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 216.65 Mbit/s
95th percentile per-packet one-way delay: 191.073 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 180.44 Mbit/s
95th percentile per-packet one-way delay: 69.297 ms
Loss rate: 1.71%
```

Run 4: Report of PCC-Expr — Data Link

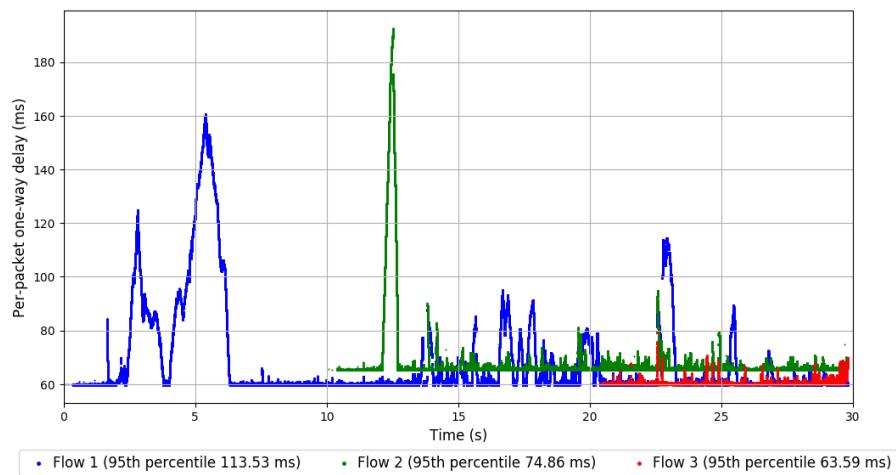
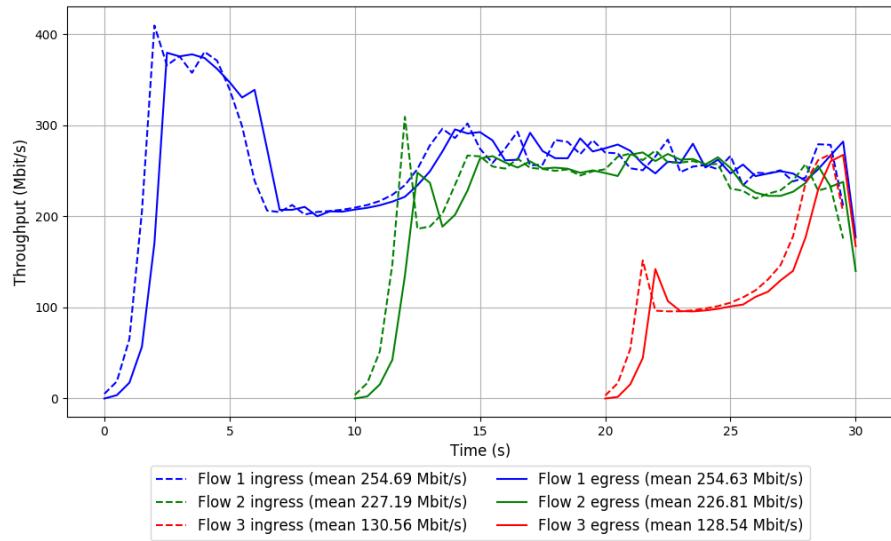


Run 5: Statistics of PCC-Expr

```
Start at: 2019-06-28 11:55:04
End at: 2019-06-28 11:55:34
Local clock offset: -0.047 ms
Remote clock offset: 0.135 ms

# Below is generated by plot.py at 2019-06-28 14:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 447.12 Mbit/s
95th percentile per-packet one-way delay: 104.813 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 254.63 Mbit/s
95th percentile per-packet one-way delay: 113.527 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 226.81 Mbit/s
95th percentile per-packet one-way delay: 74.865 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 128.54 Mbit/s
95th percentile per-packet one-way delay: 63.591 ms
Loss rate: 2.76%
```

Run 5: Report of PCC-Expr — Data Link

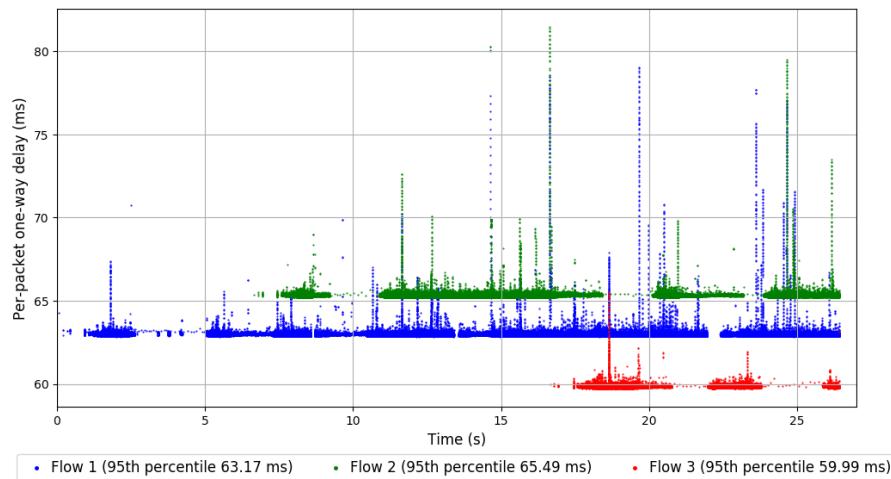
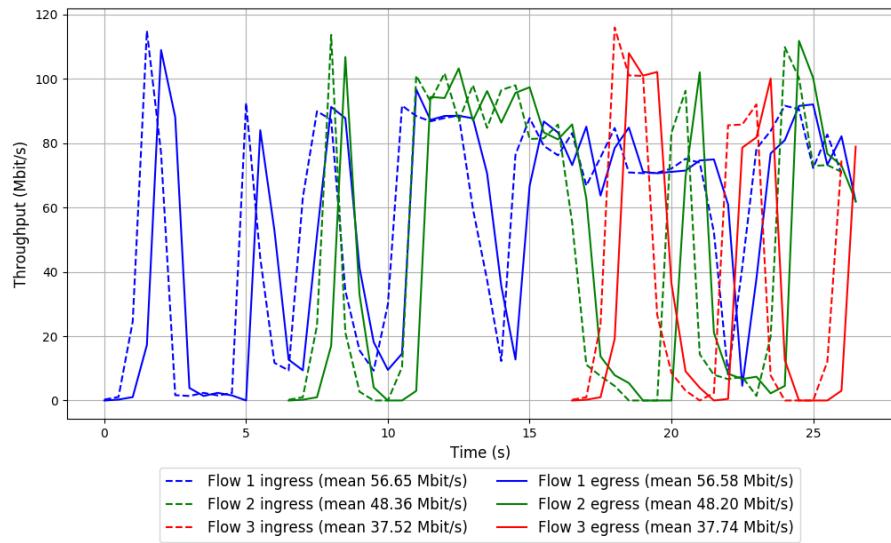


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-06-28 08:58:13
End at: 2019-06-28 08:58:43
Local clock offset: -0.074 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2019-06-28 14:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.67 Mbit/s
95th percentile per-packet one-way delay: 65.391 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 56.58 Mbit/s
95th percentile per-packet one-way delay: 63.168 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 48.20 Mbit/s
95th percentile per-packet one-way delay: 65.490 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 37.74 Mbit/s
95th percentile per-packet one-way delay: 59.990 ms
Loss rate: 0.63%
```

Run 1: Report of QUIC Cubic — Data Link

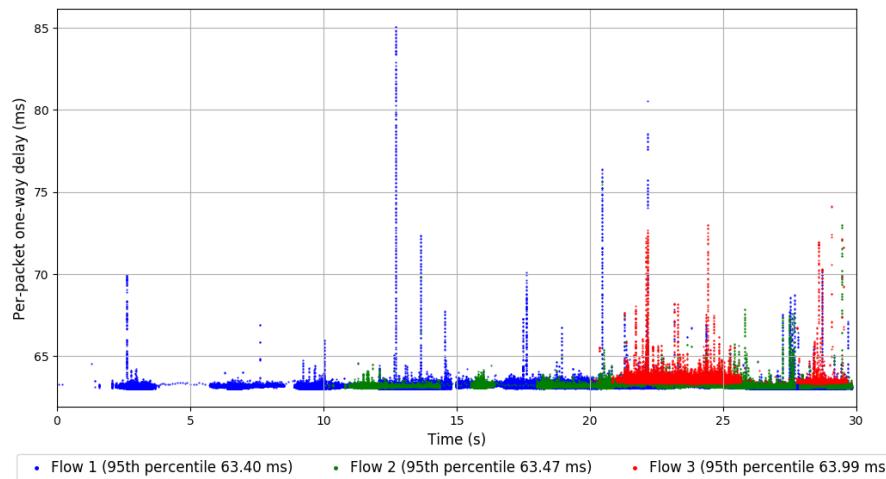
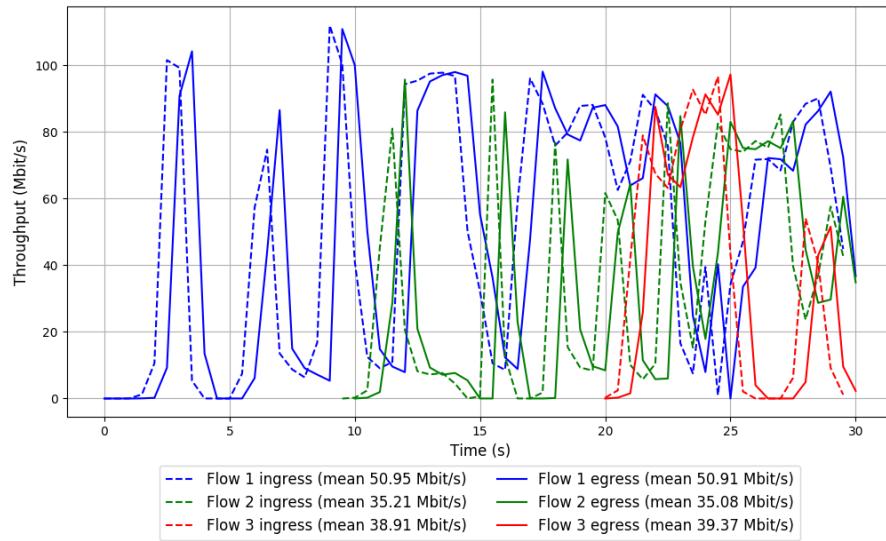


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-06-28 09:35:14
End at: 2019-06-28 09:35:44
Local clock offset: -0.027 ms
Remote clock offset: -0.229 ms

# Below is generated by plot.py at 2019-06-28 14:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.07 Mbit/s
95th percentile per-packet one-way delay: 63.640 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 50.91 Mbit/s
95th percentile per-packet one-way delay: 63.400 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 63.467 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 39.37 Mbit/s
95th percentile per-packet one-way delay: 63.994 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

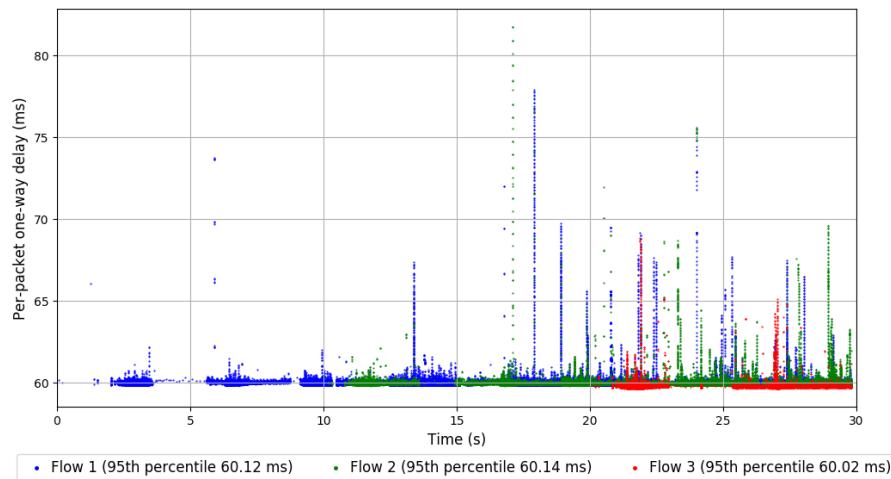
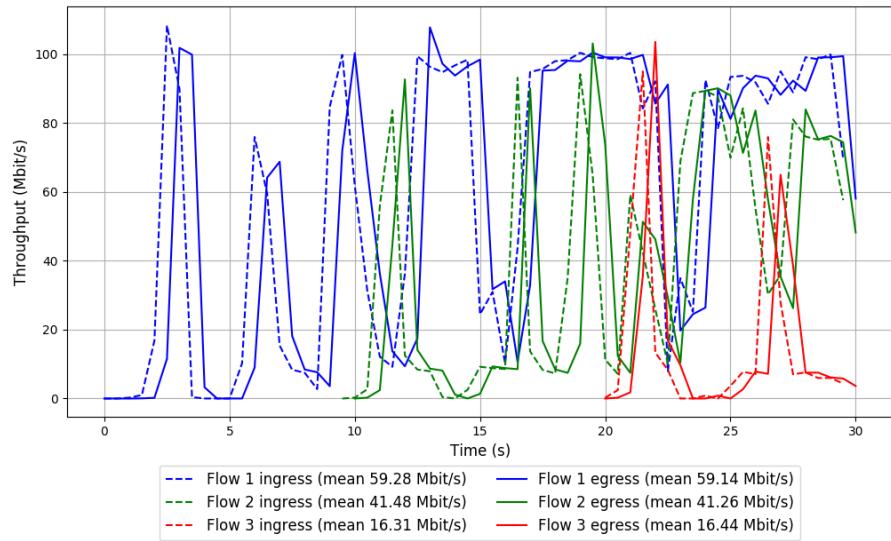


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-06-28 10:12:33
End at: 2019-06-28 10:13:03
Local clock offset: 0.019 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2019-06-28 14:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.92 Mbit/s
95th percentile per-packet one-way delay: 60.121 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 59.14 Mbit/s
95th percentile per-packet one-way delay: 60.116 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 41.26 Mbit/s
95th percentile per-packet one-way delay: 60.143 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 16.44 Mbit/s
95th percentile per-packet one-way delay: 60.019 ms
Loss rate: 0.44%
```

Run 3: Report of QUIC Cubic — Data Link

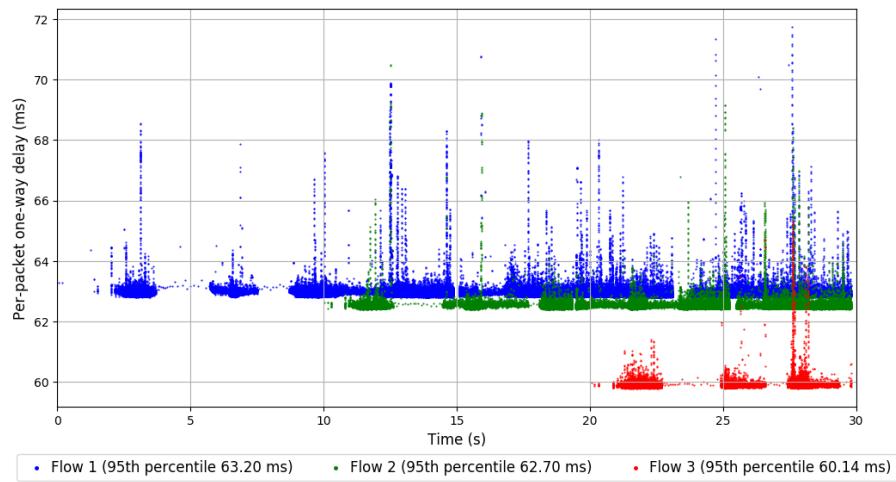
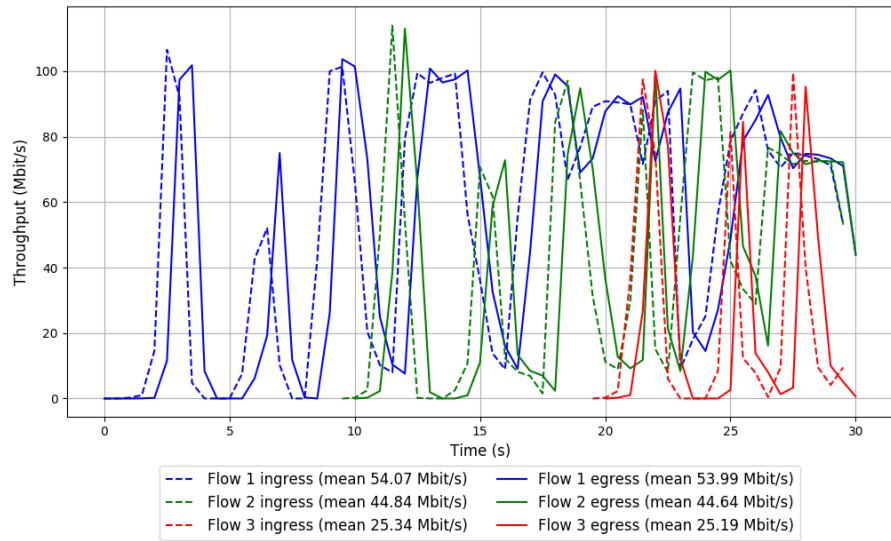


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-06-28 10:49:44
End at: 2019-06-28 10:50:14
Local clock offset: -0.125 ms
Remote clock offset: -0.374 ms

# Below is generated by plot.py at 2019-06-28 14:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.93 Mbit/s
95th percentile per-packet one-way delay: 63.111 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 53.99 Mbit/s
95th percentile per-packet one-way delay: 63.197 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 44.64 Mbit/s
95th percentile per-packet one-way delay: 62.696 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 25.19 Mbit/s
95th percentile per-packet one-way delay: 60.138 ms
Loss rate: 1.78%
```

Run 4: Report of QUIC Cubic — Data Link

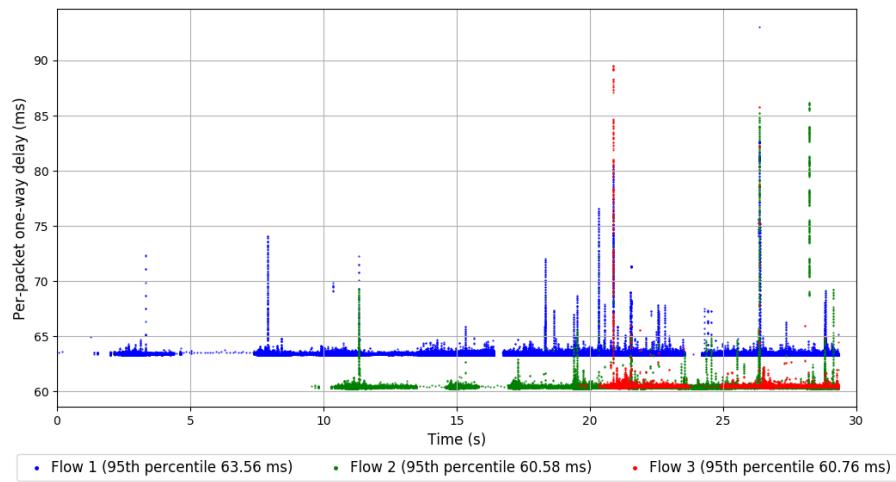
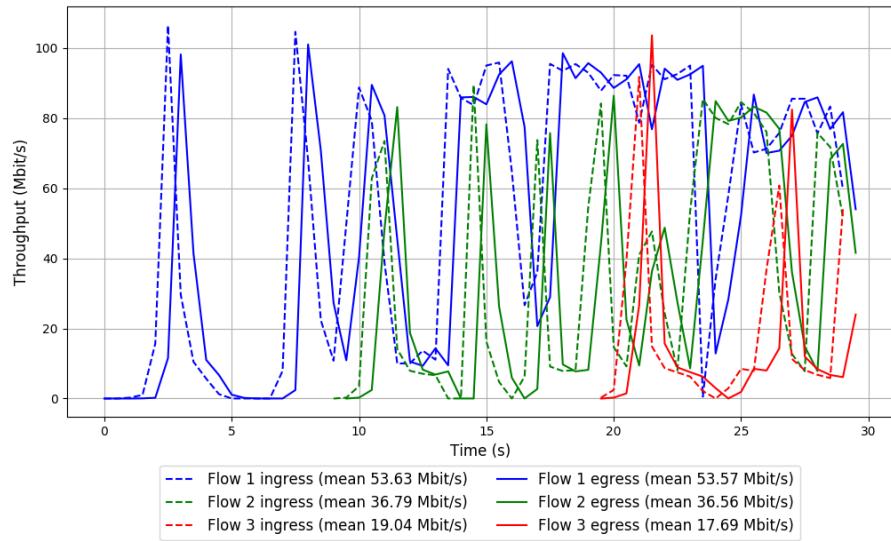


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-06-28 11:26:55
End at: 2019-06-28 11:27:25
Local clock offset: -0.08 ms
Remote clock offset: -0.922 ms

# Below is generated by plot.py at 2019-06-28 14:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.17 Mbit/s
95th percentile per-packet one-way delay: 63.520 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 63.560 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 36.56 Mbit/s
95th percentile per-packet one-way delay: 60.582 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 17.69 Mbit/s
95th percentile per-packet one-way delay: 60.756 ms
Loss rate: 8.20%
```

Run 5: Report of QUIC Cubic — Data Link

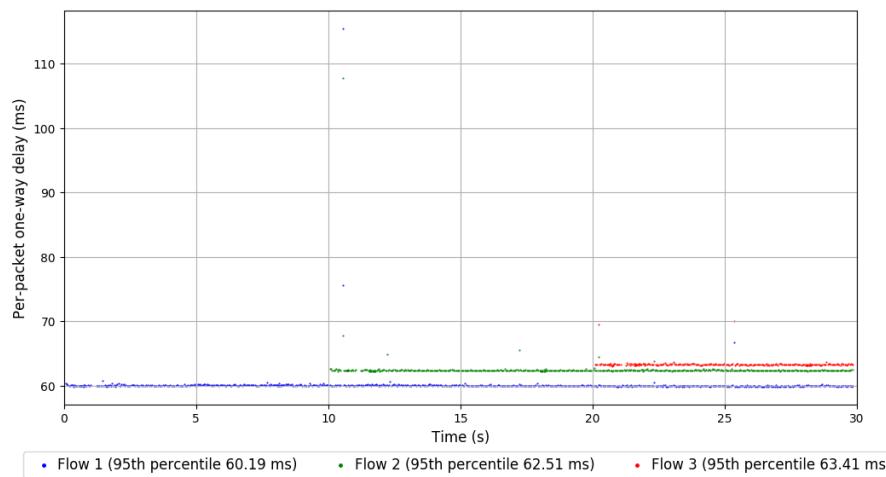
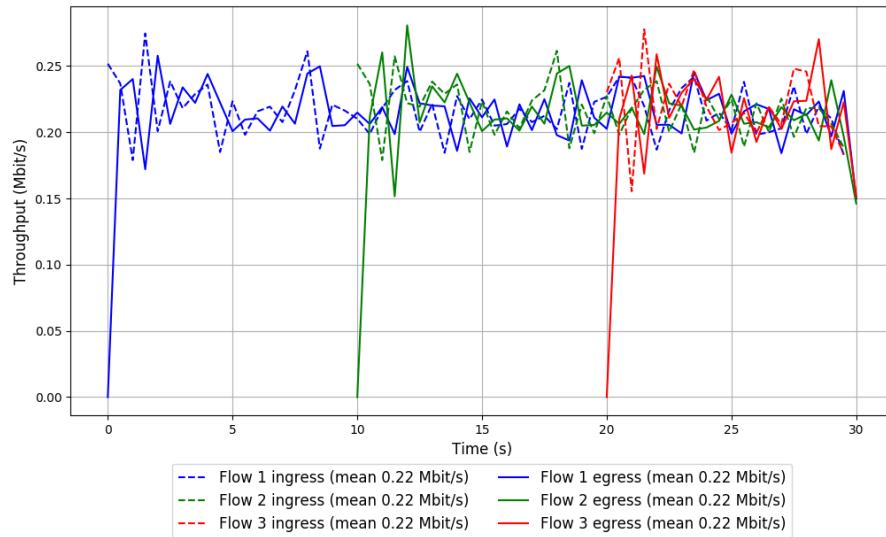


```
Run 1: Statistics of SCReAM

Start at: 2019-06-28 08:55:16
End at: 2019-06-28 08:55:46
Local clock offset: -0.082 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2019-06-28 14:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.323 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.193 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.514 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.411 ms
Loss rate: 1.10%
```

Run 1: Report of SCReAM — Data Link

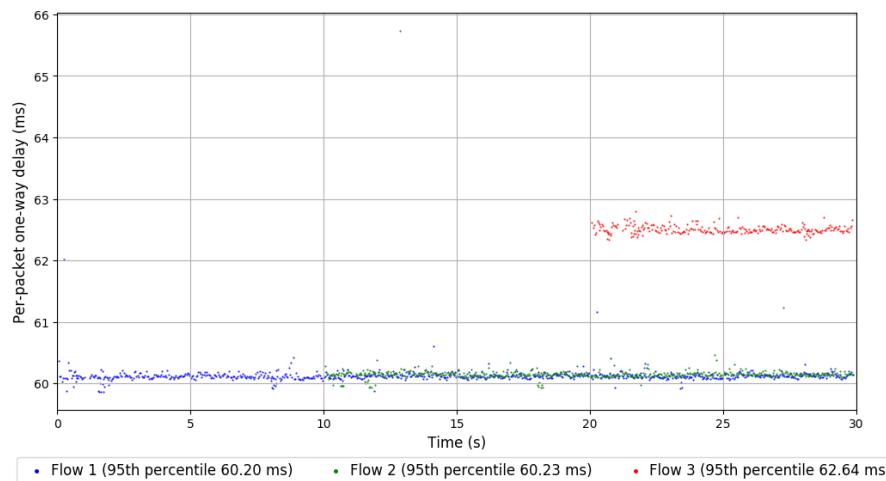
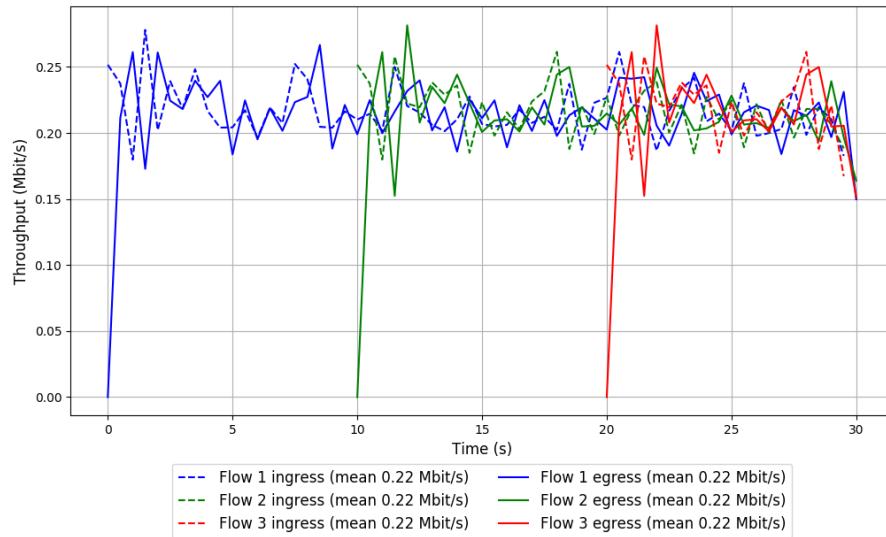


Run 2: Statistics of SCReAM

```
Start at: 2019-06-28 09:32:16
End at: 2019-06-28 09:32:46
Local clock offset: -0.044 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 62.534 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.202 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.228 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.637 ms
Loss rate: 1.10%
```

Run 2: Report of SCReAM — Data Link

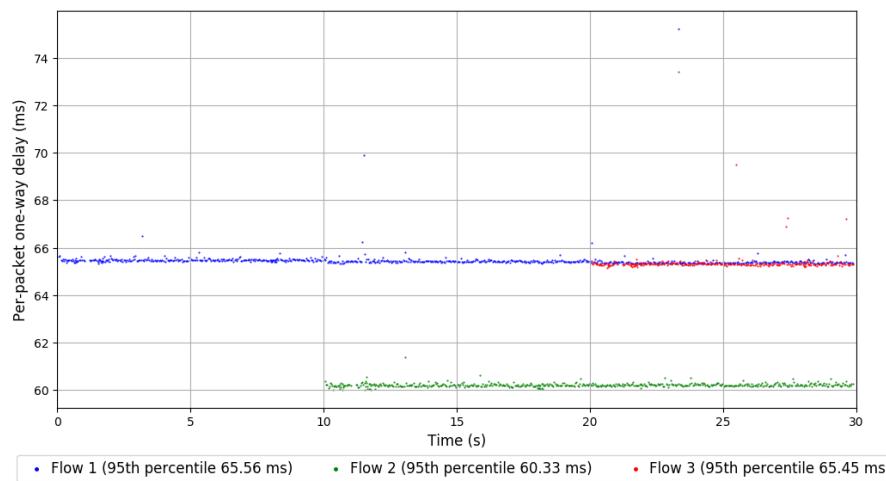
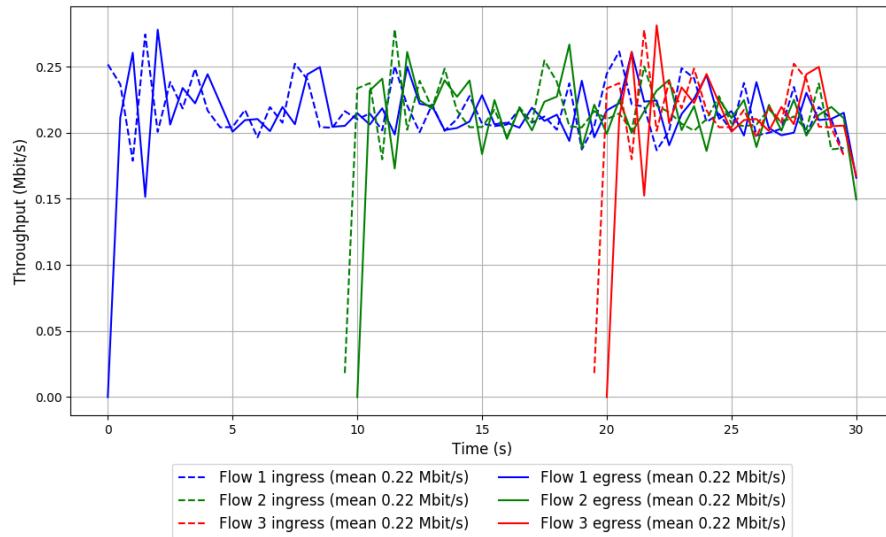


Run 3: Statistics of SCReAM

```
Start at: 2019-06-28 10:09:34
End at: 2019-06-28 10:10:04
Local clock offset: -0.01 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 65.520 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.560 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.333 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.446 ms
Loss rate: 1.08%
```

Run 3: Report of SCReAM — Data Link

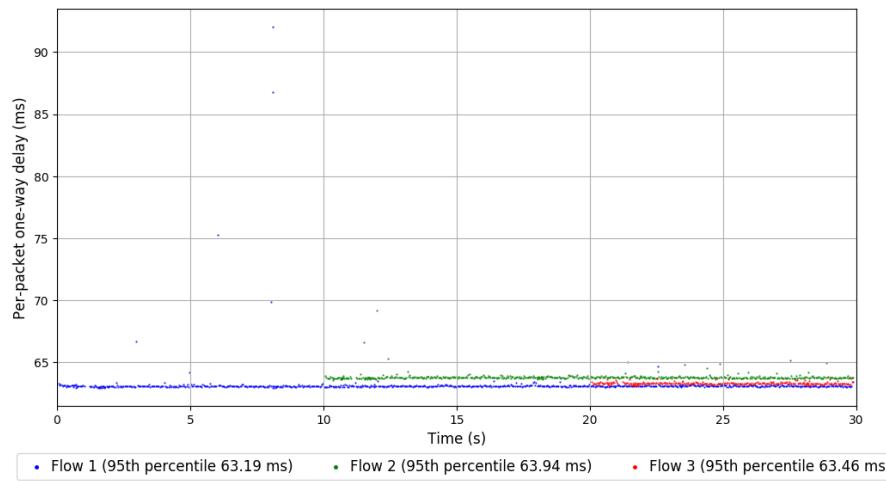
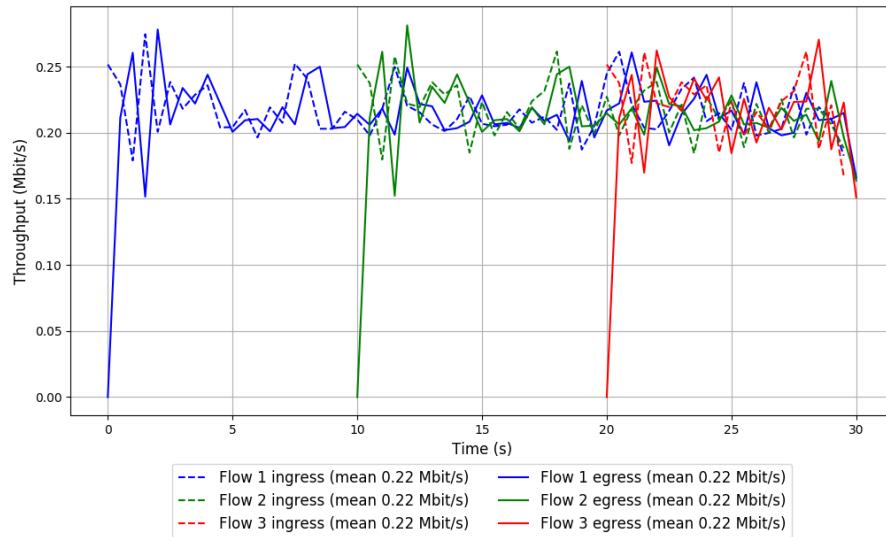


Run 4: Statistics of SCReAM

```
Start at: 2019-06-28 10:46:49
End at: 2019-06-28 10:47:19
Local clock offset: -0.1 ms
Remote clock offset: -0.97 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.845 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.188 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.937 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.457 ms
Loss rate: 1.10%
```

Run 4: Report of SCReAM — Data Link

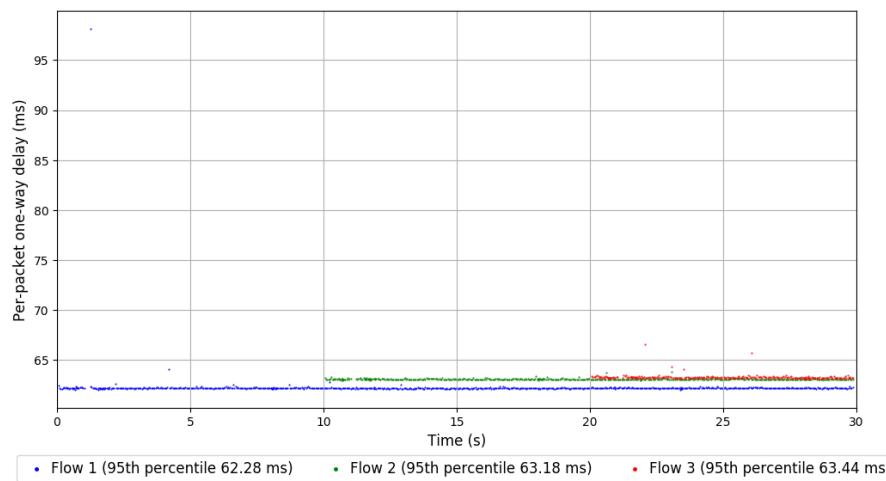
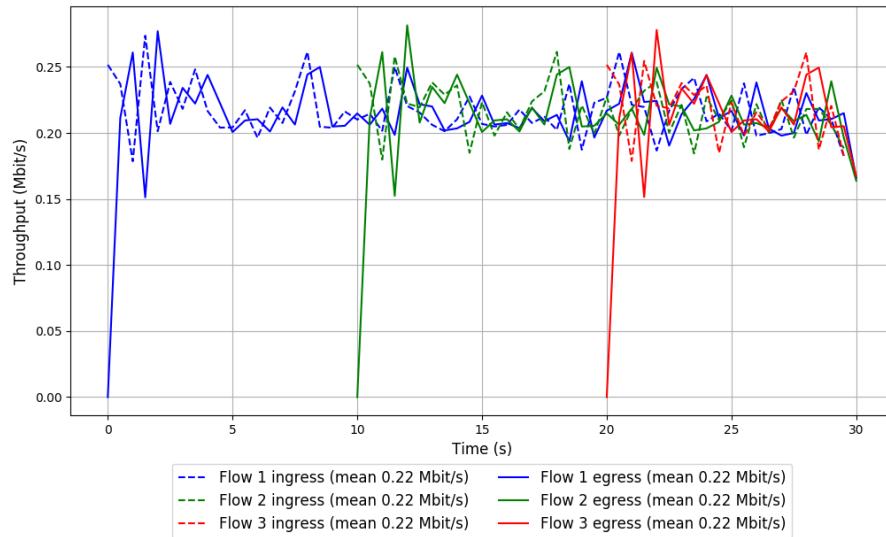


Run 5: Statistics of SCReAM

```
Start at: 2019-06-28 11:23:56
End at: 2019-06-28 11:24:26
Local clock offset: -0.041 ms
Remote clock offset: -0.466 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.299 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.282 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.177 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.435 ms
Loss rate: 1.08%
```

Run 5: Report of SCReAM — Data Link

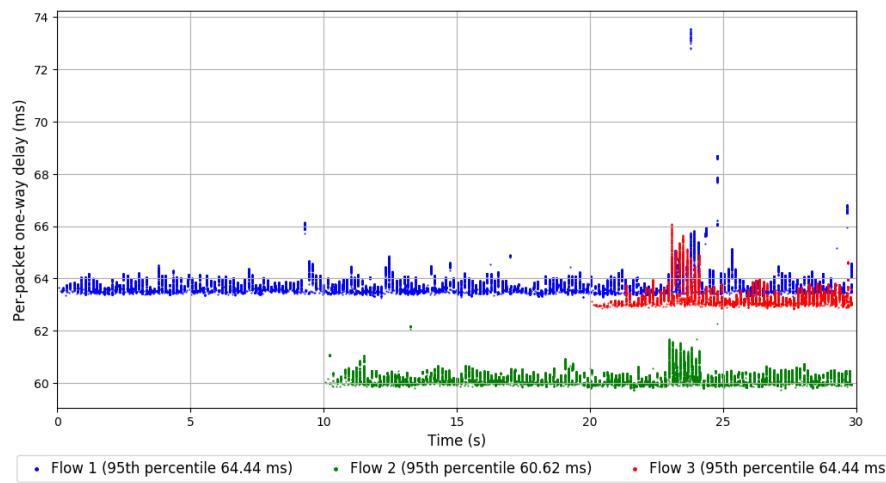
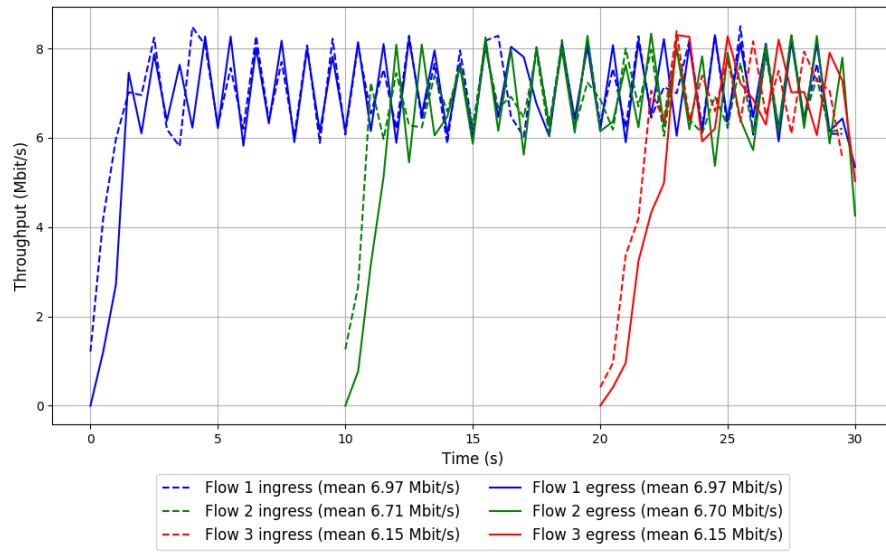


Run 1: Statistics of Sprout

```
Start at: 2019-06-28 09:15:17
End at: 2019-06-28 09:15:47
Local clock offset: -0.04 ms
Remote clock offset: -0.242 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.42 Mbit/s
95th percentile per-packet one-way delay: 64.247 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 64.441 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 60.622 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 64.438 ms
Loss rate: 1.31%
```

Run 1: Report of Sprout — Data Link

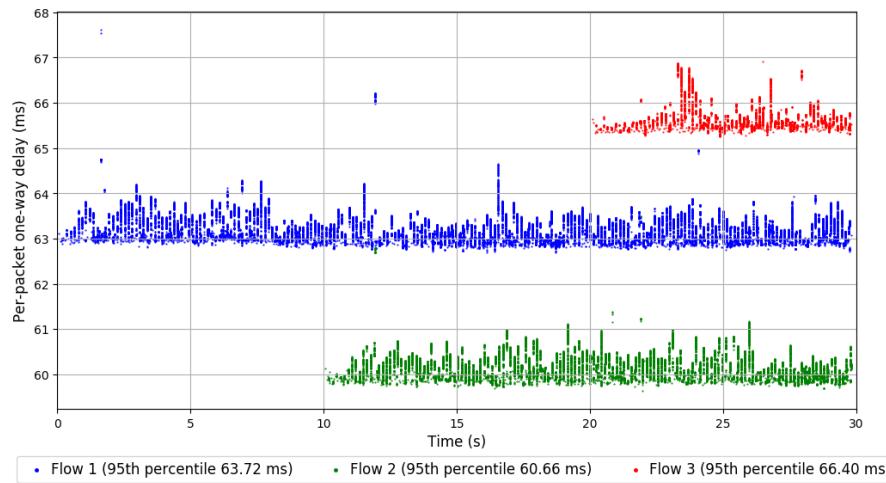
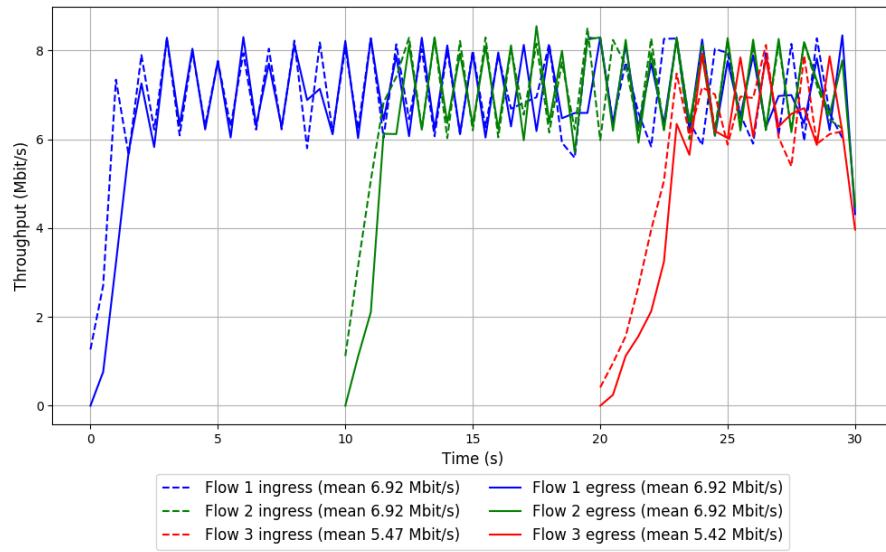


Run 2: Statistics of Sprout

```
Start at: 2019-06-28 09:52:32
End at: 2019-06-28 09:53:02
Local clock offset: -0.02 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 65.661 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 63.719 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 60.662 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: 66.399 ms
Loss rate: 2.05%
```

Run 2: Report of Sprout — Data Link

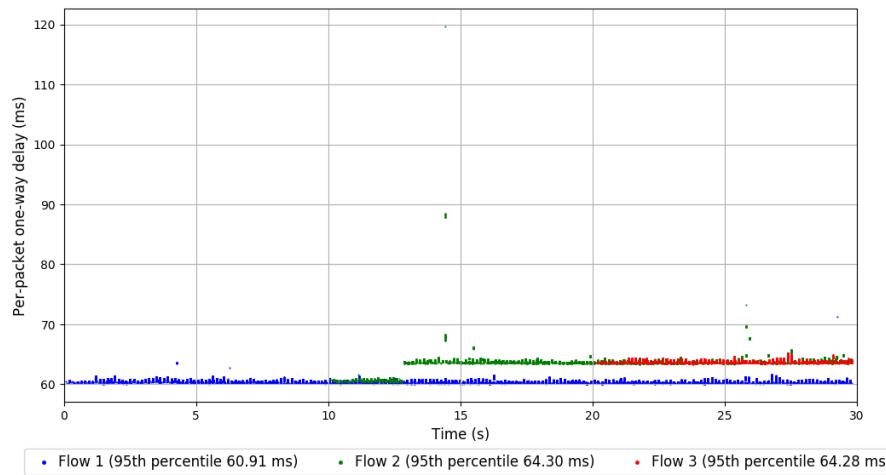
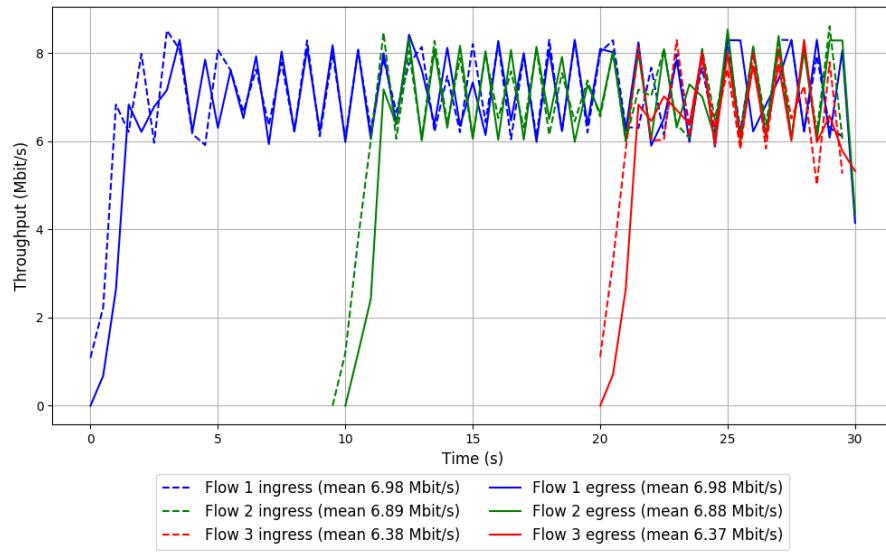


Run 3: Statistics of Sprout

```
Start at: 2019-06-28 10:29:42
End at: 2019-06-28 10:30:12
Local clock offset: 0.007 ms
Remote clock offset: -0.241 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.63 Mbit/s
95th percentile per-packet one-way delay: 64.109 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 60.912 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 64.304 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 6.37 Mbit/s
95th percentile per-packet one-way delay: 64.285 ms
Loss rate: 1.55%
```

Run 3: Report of Sprout — Data Link

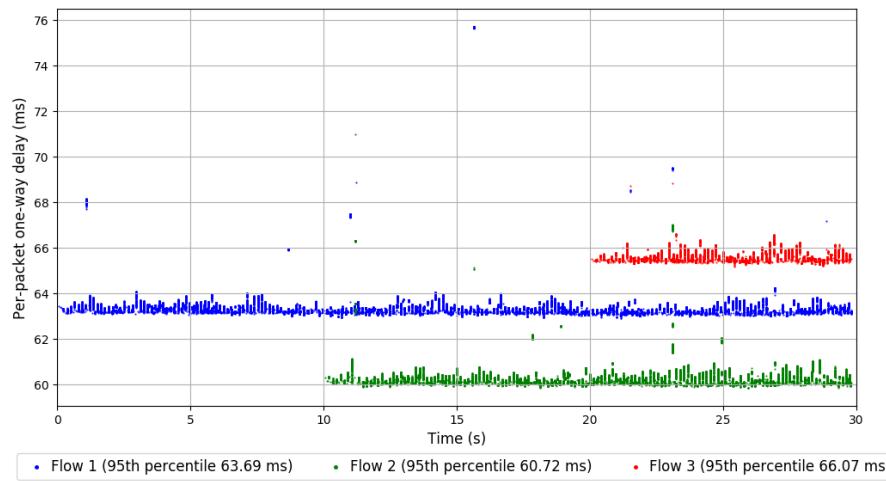
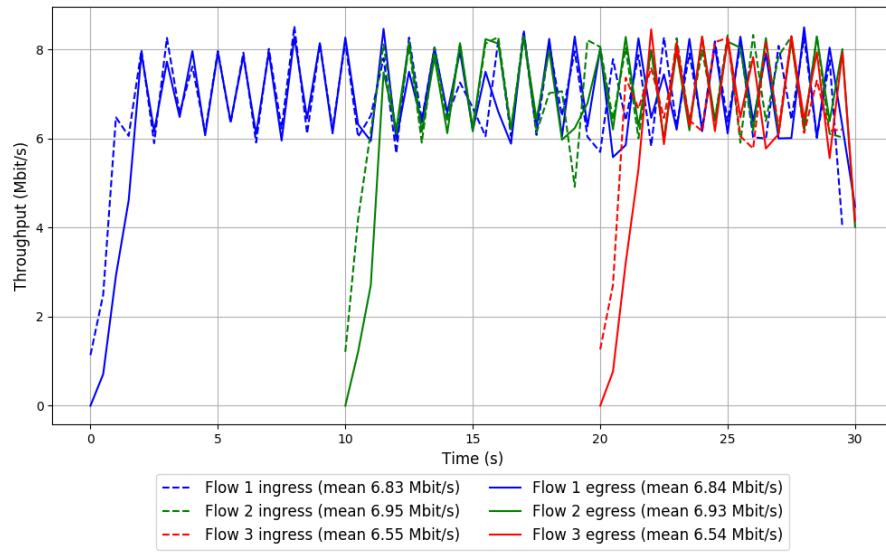


Run 4: Statistics of Sprout

```
Start at: 2019-06-28 11:06:48
End at: 2019-06-28 11:07:18
Local clock offset: -0.104 ms
Remote clock offset: -0.375 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.58 Mbit/s
95th percentile per-packet one-way delay: 65.697 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 6.84 Mbit/s
95th percentile per-packet one-way delay: 63.689 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 60.721 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 66.074 ms
Loss rate: 1.60%
```

Run 4: Report of Sprout — Data Link

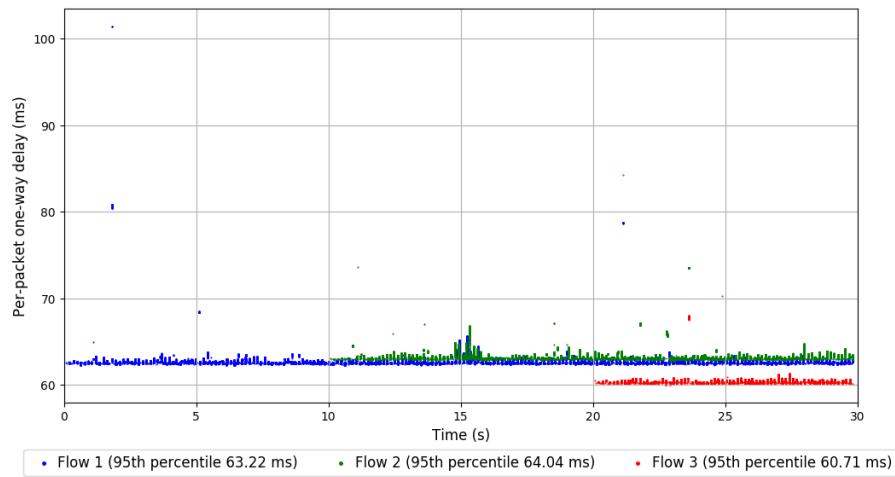
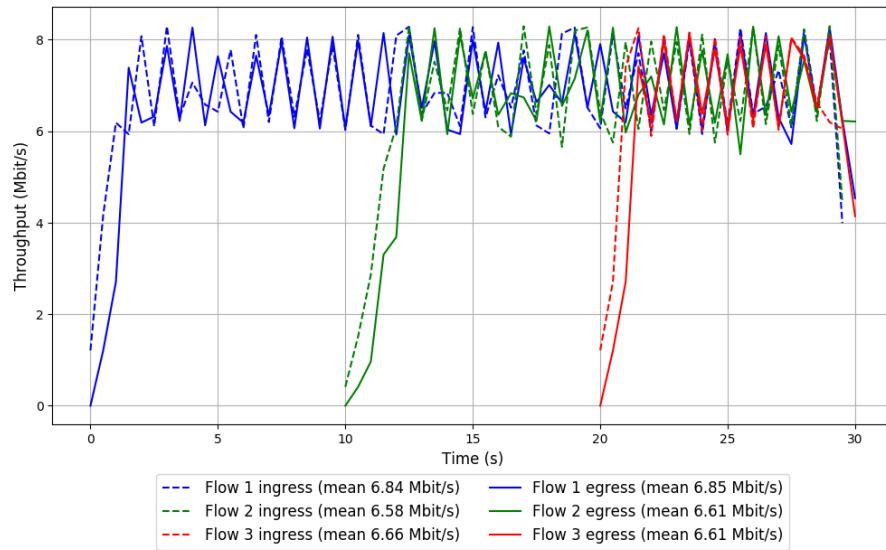


Run 5: Statistics of Sprout

```
Start at: 2019-06-28 11:43:55
End at: 2019-06-28 11:44:25
Local clock offset: -0.033 ms
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2019-06-28 14:26:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.39 Mbit/s
95th percentile per-packet one-way delay: 63.638 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 63.220 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 64.041 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 60.713 ms
Loss rate: 1.59%
```

Run 5: Report of Sprout — Data Link

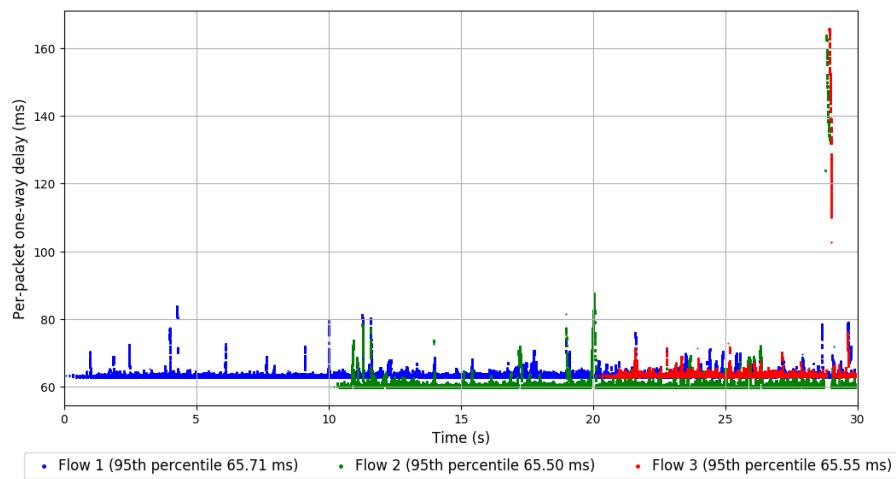
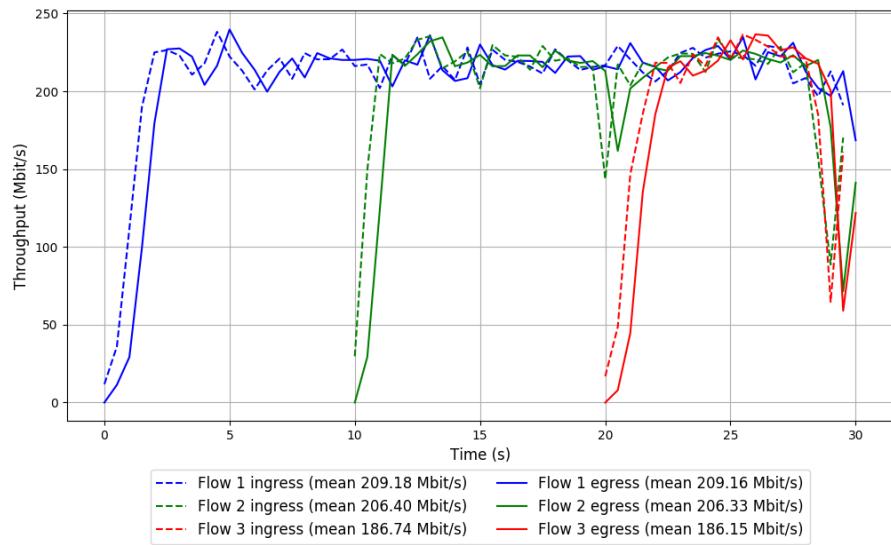


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-06-28 08:53:23
End at: 2019-06-28 08:53:53
Local clock offset: -0.073 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2019-06-28 14:29:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.43 Mbit/s
95th percentile per-packet one-way delay: 65.656 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 209.16 Mbit/s
95th percentile per-packet one-way delay: 65.709 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 206.33 Mbit/s
95th percentile per-packet one-way delay: 65.503 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 186.15 Mbit/s
95th percentile per-packet one-way delay: 65.548 ms
Loss rate: 1.59%
```

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

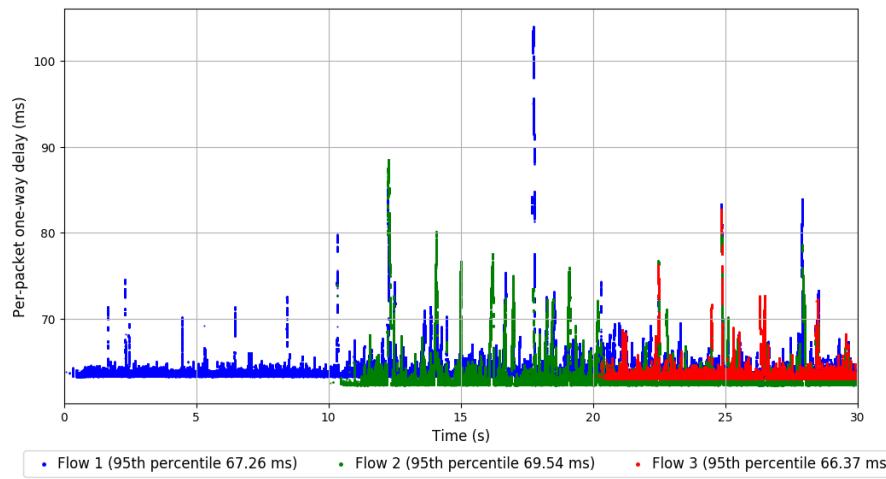
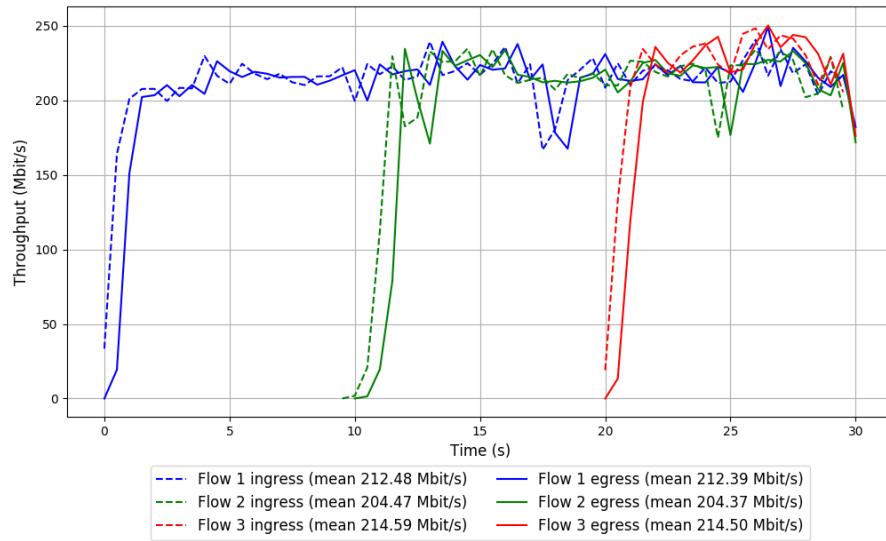


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-06-28 09:30:23
End at: 2019-06-28 09:30:53
Local clock offset: -0.027 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2019-06-28 14:30:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 418.95 Mbit/s
95th percentile per-packet one-way delay: 67.777 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 212.39 Mbit/s
95th percentile per-packet one-way delay: 67.257 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 204.37 Mbit/s
95th percentile per-packet one-way delay: 69.538 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 214.50 Mbit/s
95th percentile per-packet one-way delay: 66.369 ms
Loss rate: 1.29%
```

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

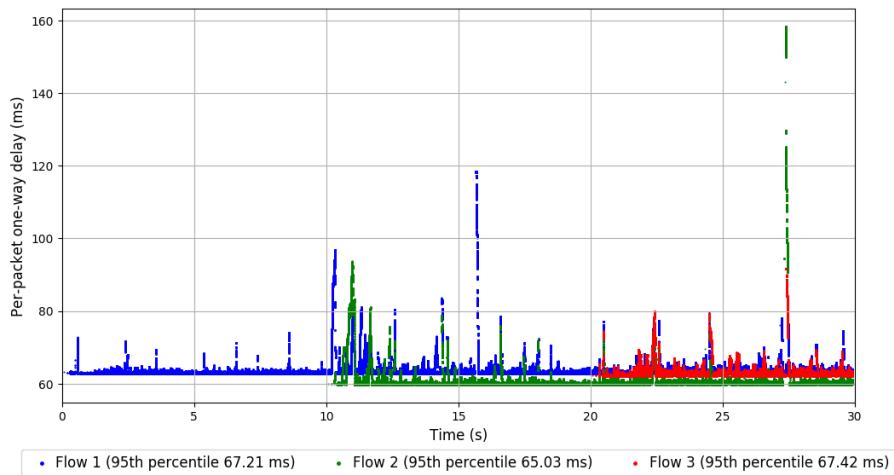
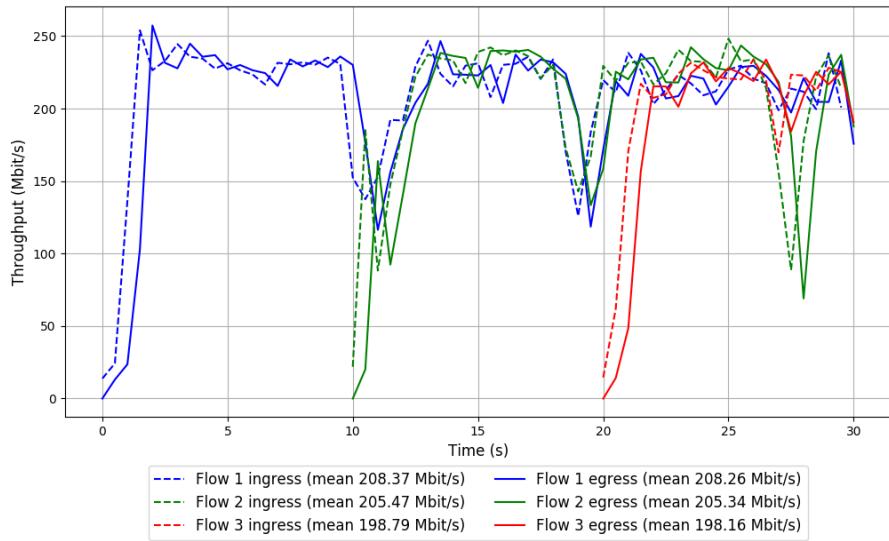


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-06-28 10:07:41
End at: 2019-06-28 10:08:11
Local clock offset: 0.023 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2019-06-28 14:30:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 410.10 Mbit/s
95th percentile per-packet one-way delay: 66.957 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 208.26 Mbit/s
95th percentile per-packet one-way delay: 67.208 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 205.34 Mbit/s
95th percentile per-packet one-way delay: 65.030 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 198.16 Mbit/s
95th percentile per-packet one-way delay: 67.415 ms
Loss rate: 1.56%
```

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

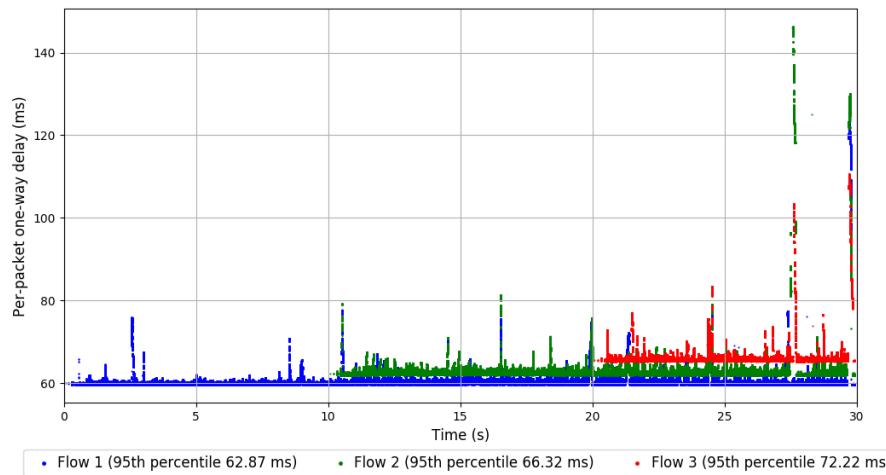
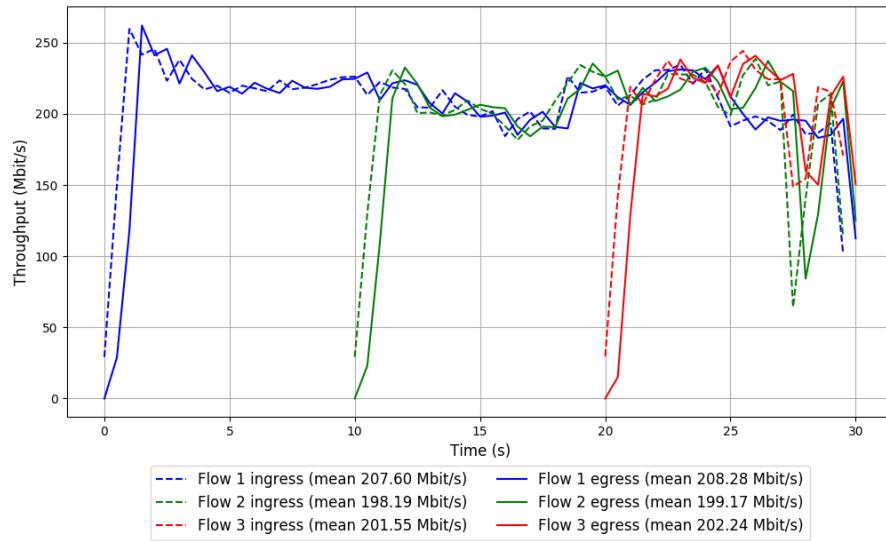


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-06-28 10:44:57
End at: 2019-06-28 10:45:27
Local clock offset: -0.095 ms
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2019-06-28 14:30:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.24 Mbit/s
95th percentile per-packet one-way delay: 66.614 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 208.28 Mbit/s
95th percentile per-packet one-way delay: 62.871 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 199.17 Mbit/s
95th percentile per-packet one-way delay: 66.316 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 202.24 Mbit/s
95th percentile per-packet one-way delay: 72.220 ms
Loss rate: 0.94%
```

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

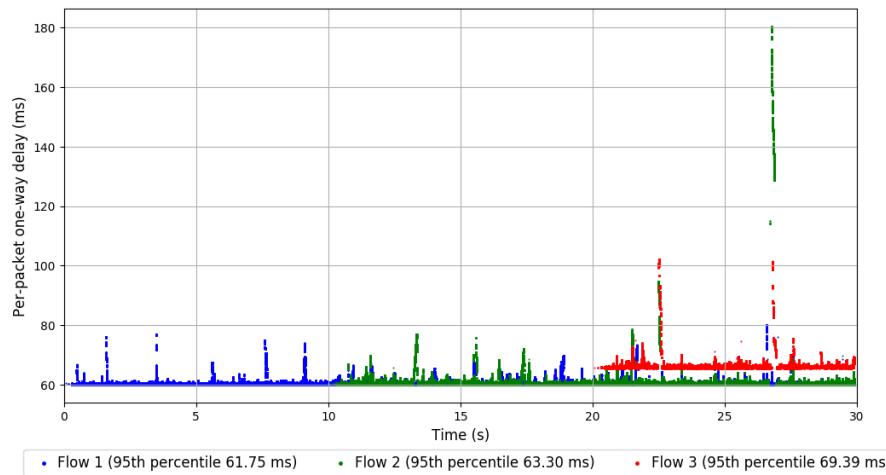
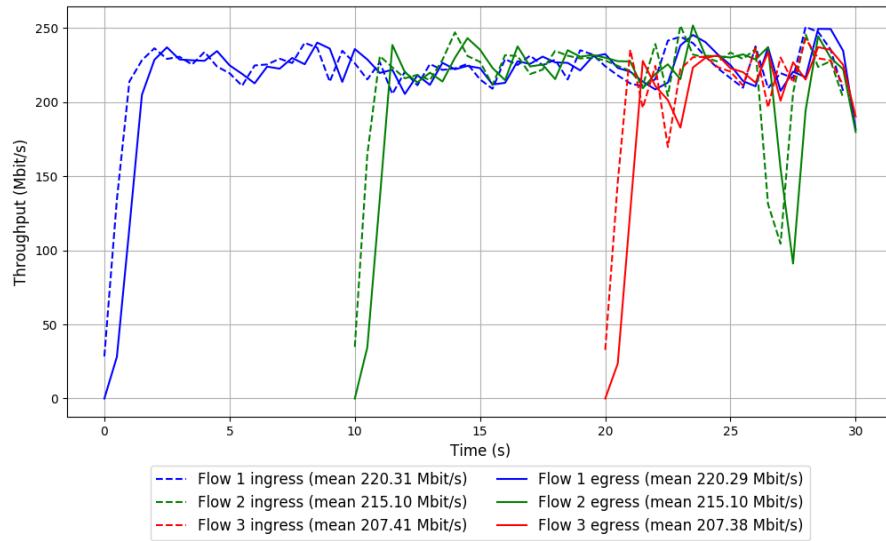


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-06-28 11:22:01
End at: 2019-06-28 11:22:31
Local clock offset: -0.061 ms
Remote clock offset: -0.557 ms

# Below is generated by plot.py at 2019-06-28 14:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 431.62 Mbit/s
95th percentile per-packet one-way delay: 66.169 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 220.29 Mbit/s
95th percentile per-packet one-way delay: 61.751 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 215.10 Mbit/s
95th percentile per-packet one-way delay: 63.297 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 207.38 Mbit/s
95th percentile per-packet one-way delay: 69.388 ms
Loss rate: 1.28%
```

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

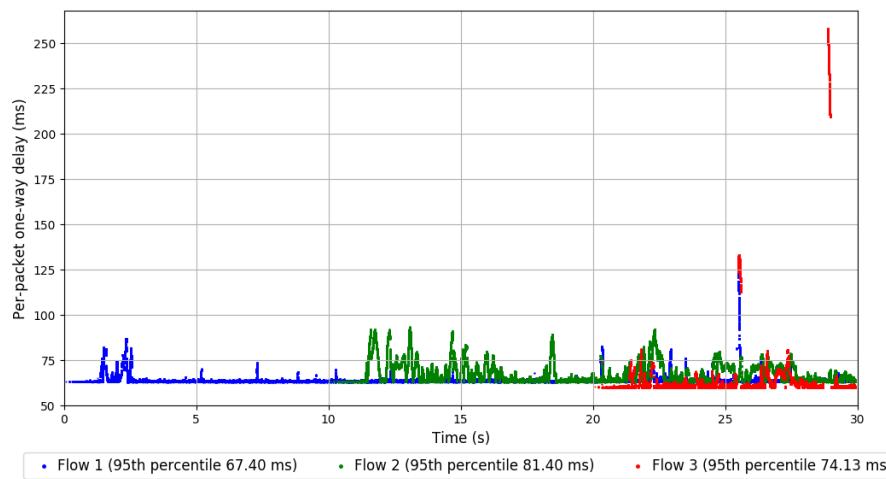
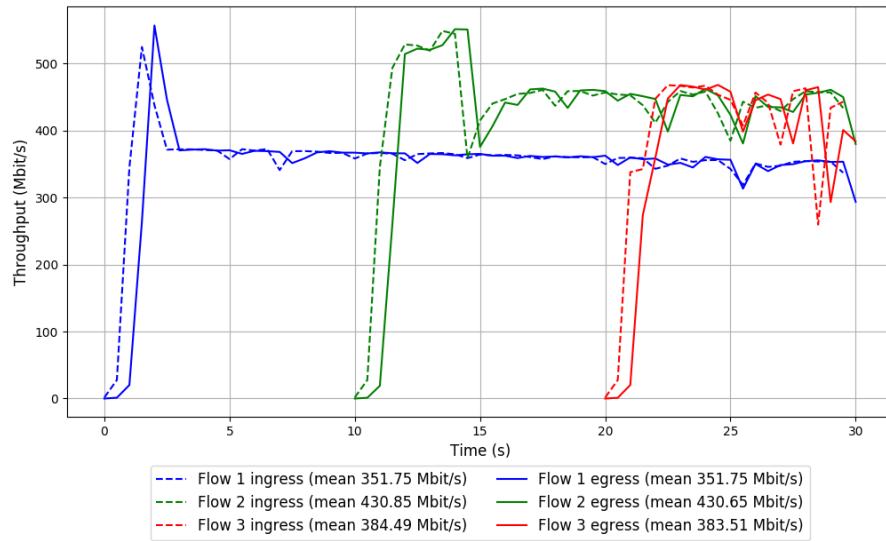


Run 1: Statistics of TCP Vegas

```
Start at: 2019-06-28 09:05:01
End at: 2019-06-28 09:05:31
Local clock offset: -0.042 ms
Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2019-06-28 14:31:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 764.45 Mbit/s
95th percentile per-packet one-way delay: 76.786 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 351.75 Mbit/s
95th percentile per-packet one-way delay: 67.403 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 430.65 Mbit/s
95th percentile per-packet one-way delay: 81.398 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 383.51 Mbit/s
95th percentile per-packet one-way delay: 74.126 ms
Loss rate: 1.49%
```

Run 1: Report of TCP Vegas — Data Link

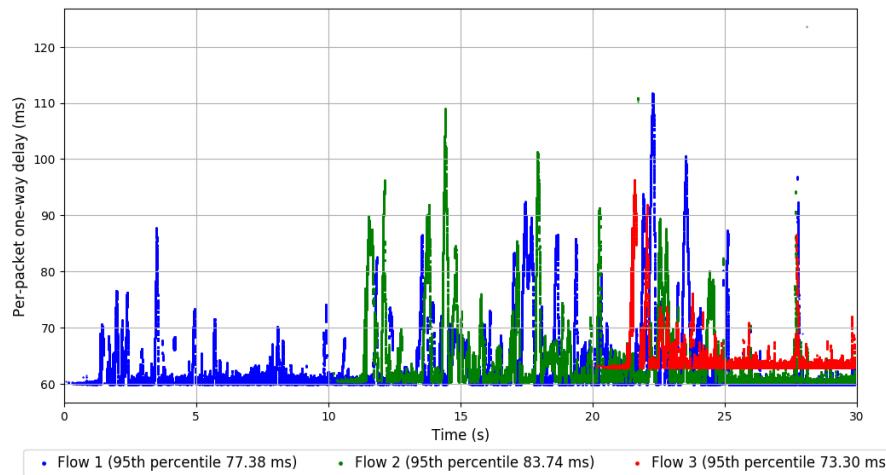
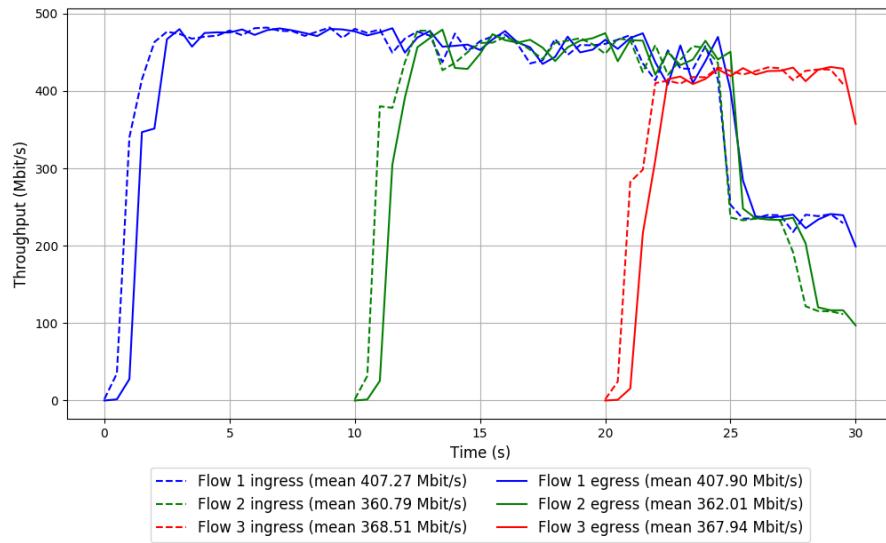


Run 2: Statistics of TCP Vegas

```
Start at: 2019-06-28 09:42:02
End at: 2019-06-28 09:42:32
Local clock offset: -0.019 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2019-06-28 14:40:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 769.78 Mbit/s
95th percentile per-packet one-way delay: 79.503 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 407.90 Mbit/s
95th percentile per-packet one-way delay: 77.379 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 362.01 Mbit/s
95th percentile per-packet one-way delay: 83.742 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 367.94 Mbit/s
95th percentile per-packet one-way delay: 73.301 ms
Loss rate: 1.41%
```

Run 2: Report of TCP Vegas — Data Link

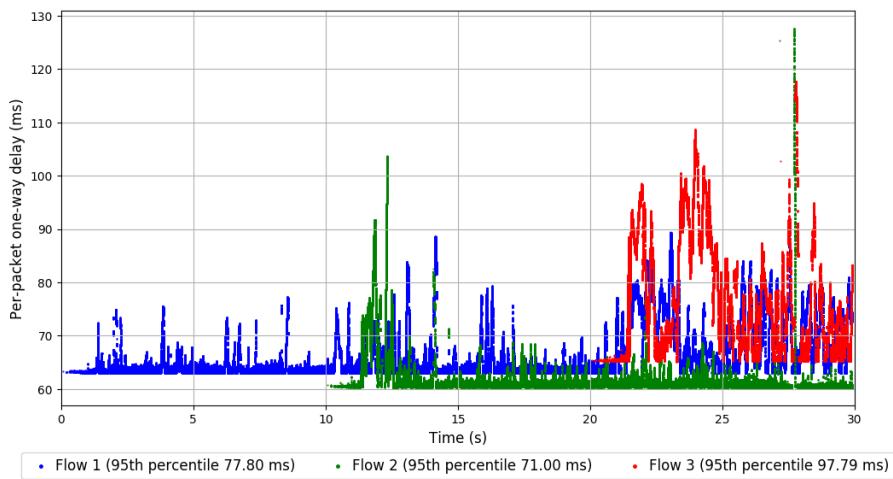
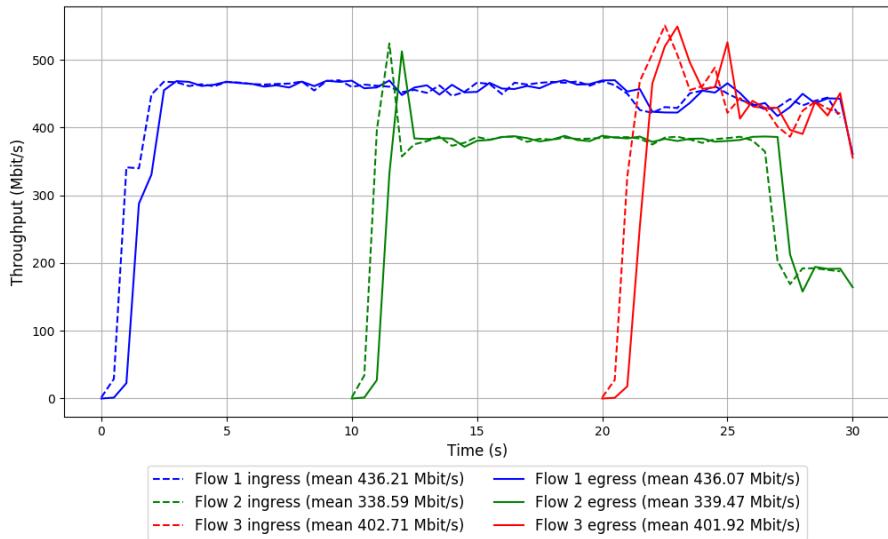


Run 3: Statistics of TCP Vegas

```
Start at: 2019-06-28 10:19:25
End at: 2019-06-28 10:19:55
Local clock offset: 0.013 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2019-06-28 14:42:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 794.22 Mbit/s
95th percentile per-packet one-way delay: 84.987 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 436.07 Mbit/s
95th percentile per-packet one-way delay: 77.795 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 339.47 Mbit/s
95th percentile per-packet one-way delay: 71.002 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 401.92 Mbit/s
95th percentile per-packet one-way delay: 97.791 ms
Loss rate: 1.45%
```

Run 3: Report of TCP Vegas — Data Link

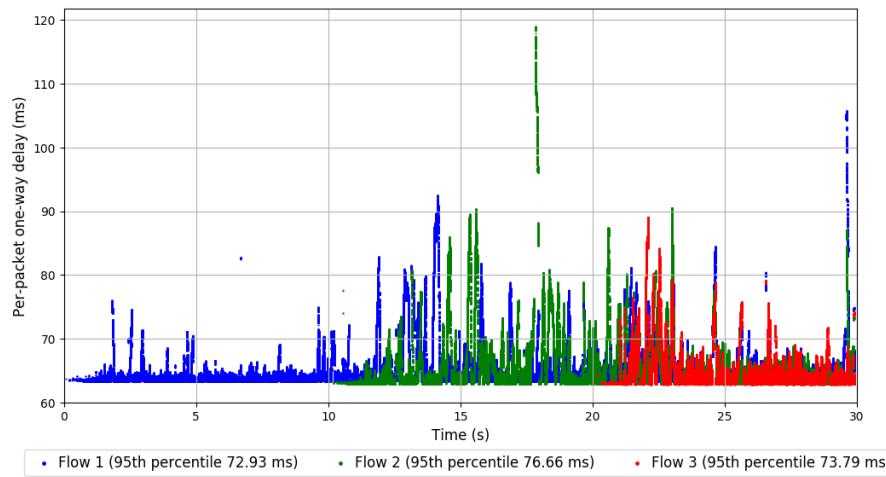
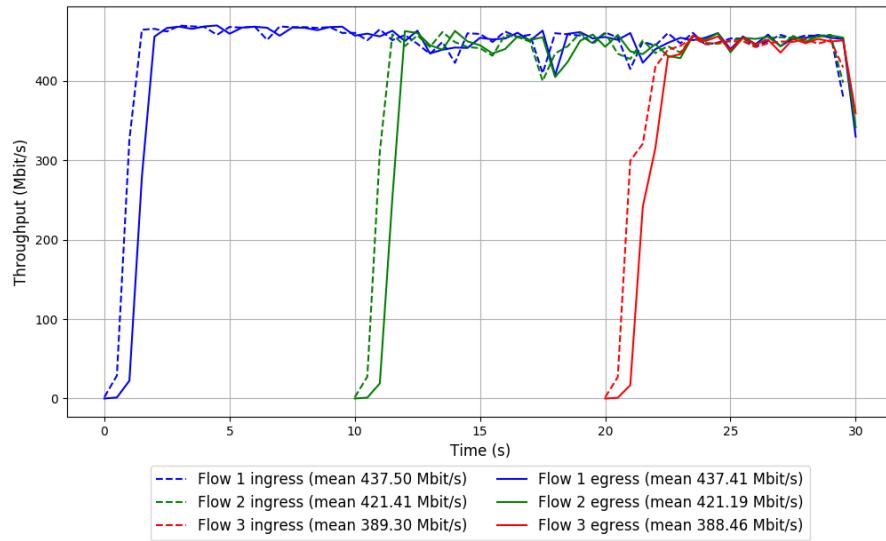


Run 4: Statistics of TCP Vegas

```
Start at: 2019-06-28 10:56:39
End at: 2019-06-28 10:57:09
Local clock offset: -0.102 ms
Remote clock offset: -0.539 ms

# Below is generated by plot.py at 2019-06-28 14:45:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 845.35 Mbit/s
95th percentile per-packet one-way delay: 74.728 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 437.41 Mbit/s
95th percentile per-packet one-way delay: 72.934 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 421.19 Mbit/s
95th percentile per-packet one-way delay: 76.656 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 388.46 Mbit/s
95th percentile per-packet one-way delay: 73.788 ms
Loss rate: 1.46%
```

Run 4: Report of TCP Vegas — Data Link

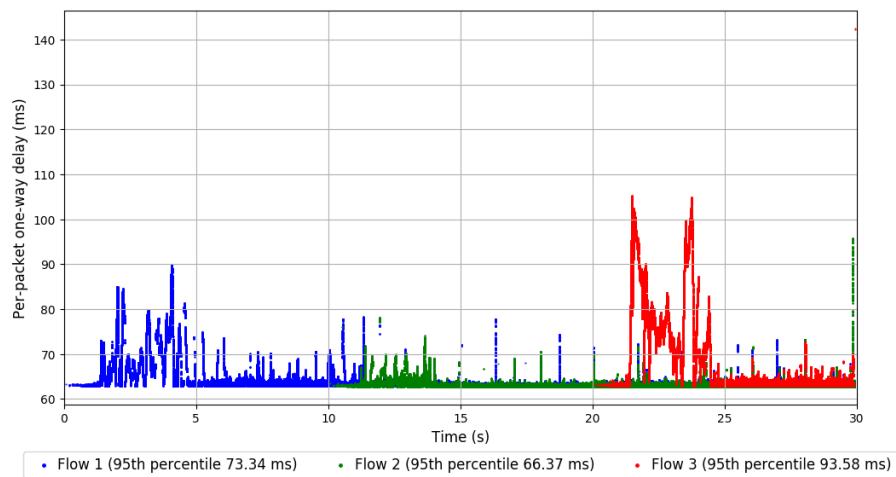
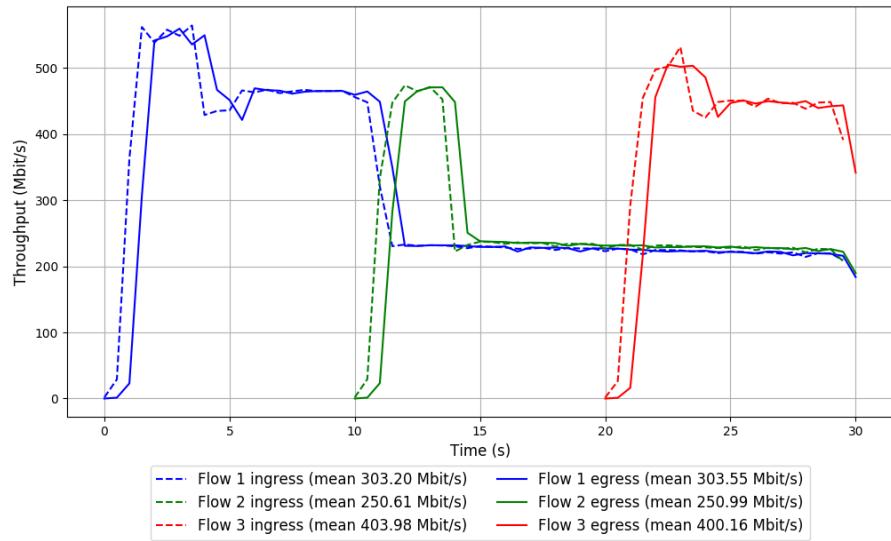


Run 5: Statistics of TCP Vegas

```
Start at: 2019-06-28 11:33:52
End at: 2019-06-28 11:34:22
Local clock offset: -0.014 ms
Remote clock offset: -0.622 ms

# Below is generated by plot.py at 2019-06-28 14:45:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 602.22 Mbit/s
95th percentile per-packet one-way delay: 77.475 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 303.55 Mbit/s
95th percentile per-packet one-way delay: 73.344 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 250.99 Mbit/s
95th percentile per-packet one-way delay: 66.366 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 400.16 Mbit/s
95th percentile per-packet one-way delay: 93.576 ms
Loss rate: 1.44%
```

Run 5: Report of TCP Vegas — Data Link

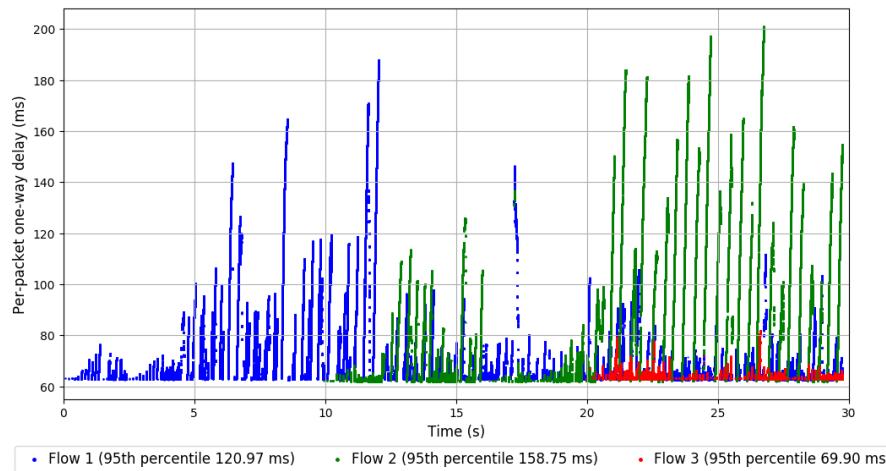
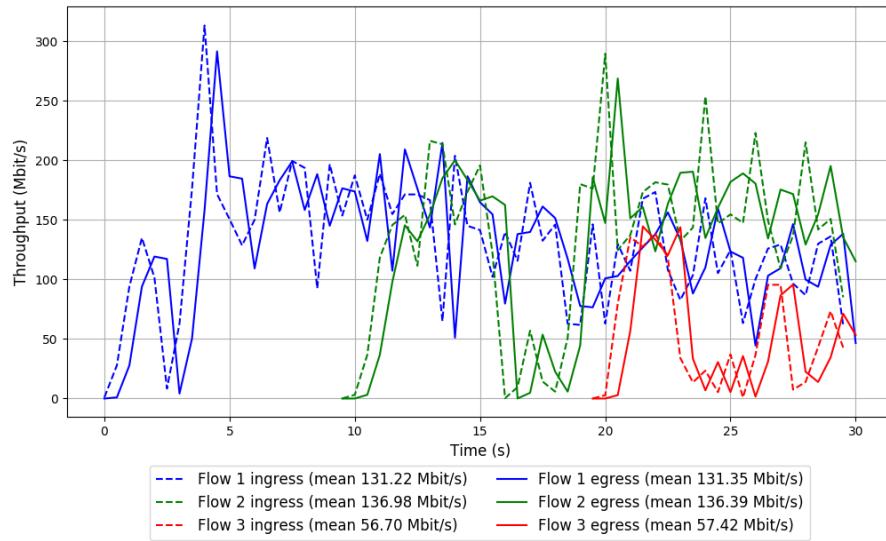


Run 1: Statistics of Verus

```
Start at: 2019-06-28 09:10:40
End at: 2019-06-28 09:11:10
Local clock offset: -0.039 ms
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2019-06-28 14:45:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 241.28 Mbit/s
95th percentile per-packet one-way delay: 143.509 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 131.35 Mbit/s
95th percentile per-packet one-way delay: 120.970 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 136.39 Mbit/s
95th percentile per-packet one-way delay: 158.751 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 57.42 Mbit/s
95th percentile per-packet one-way delay: 69.904 ms
Loss rate: 0.00%
```

Run 1: Report of Verus — Data Link

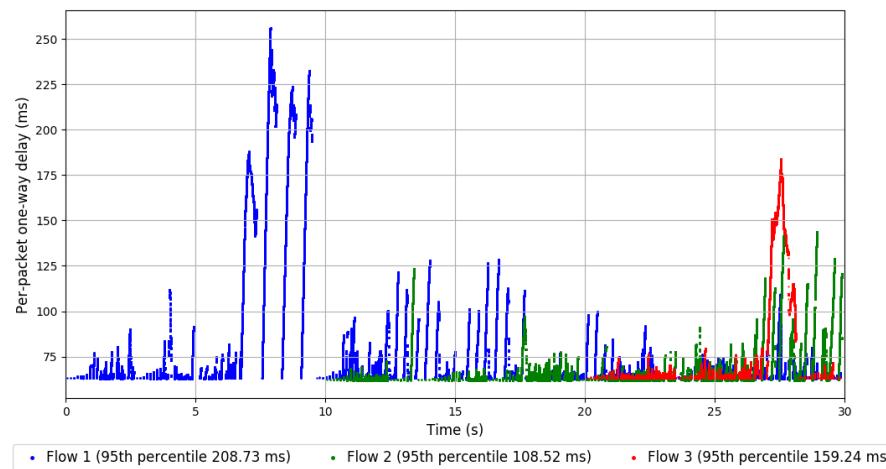
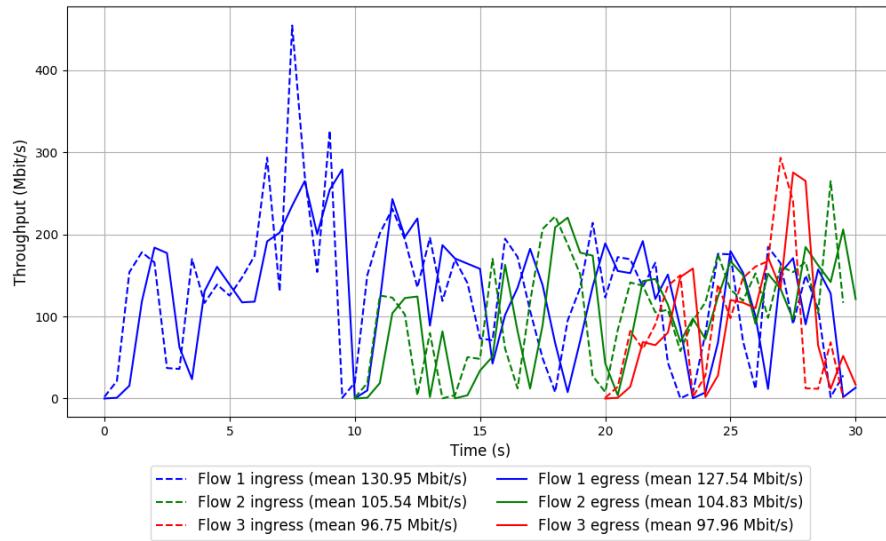


Run 2: Statistics of Verus

```
Start at: 2019-06-28 09:47:53
End at: 2019-06-28 09:48:23
Local clock offset: -0.011 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-06-28 14:45:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.85 Mbit/s
95th percentile per-packet one-way delay: 181.232 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 127.54 Mbit/s
95th percentile per-packet one-way delay: 208.727 ms
Loss rate: 3.03%
-- Flow 2:
Average throughput: 104.83 Mbit/s
95th percentile per-packet one-way delay: 108.524 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 97.96 Mbit/s
95th percentile per-packet one-way delay: 159.237 ms
Loss rate: 0.04%
```

Run 2: Report of Verus — Data Link

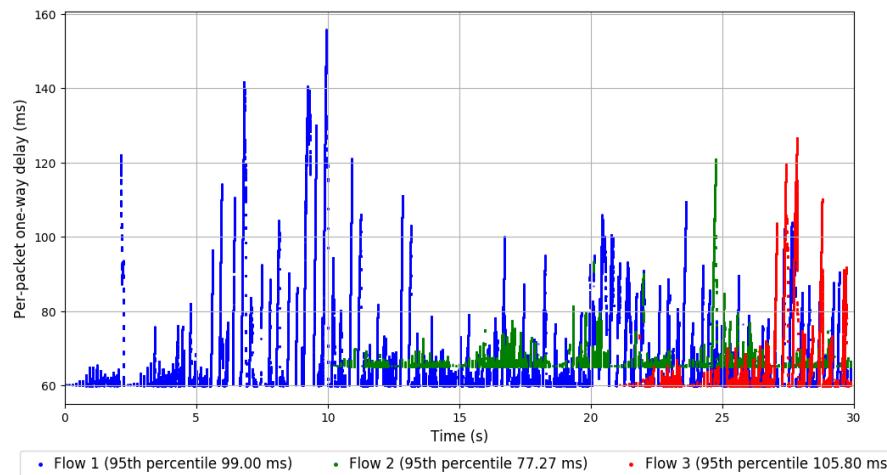
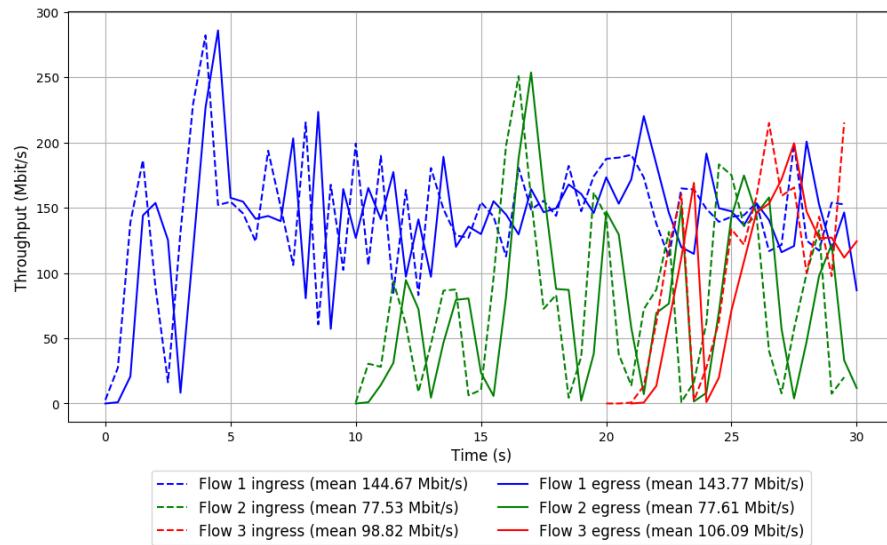


Run 3: Statistics of Verus

```
Start at: 2019-06-28 10:25:07
End at: 2019-06-28 10:25:37
Local clock offset: 0.047 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-06-28 14:45:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 226.50 Mbit/s
95th percentile per-packet one-way delay: 97.737 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 143.77 Mbit/s
95th percentile per-packet one-way delay: 99.000 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 77.61 Mbit/s
95th percentile per-packet one-way delay: 77.266 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 106.09 Mbit/s
95th percentile per-packet one-way delay: 105.799 ms
Loss rate: 4.75%
```

Run 3: Report of Verus — Data Link

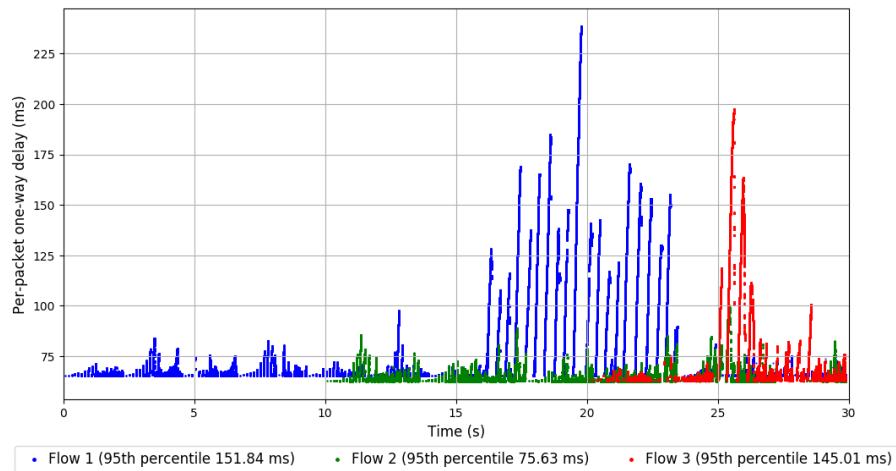
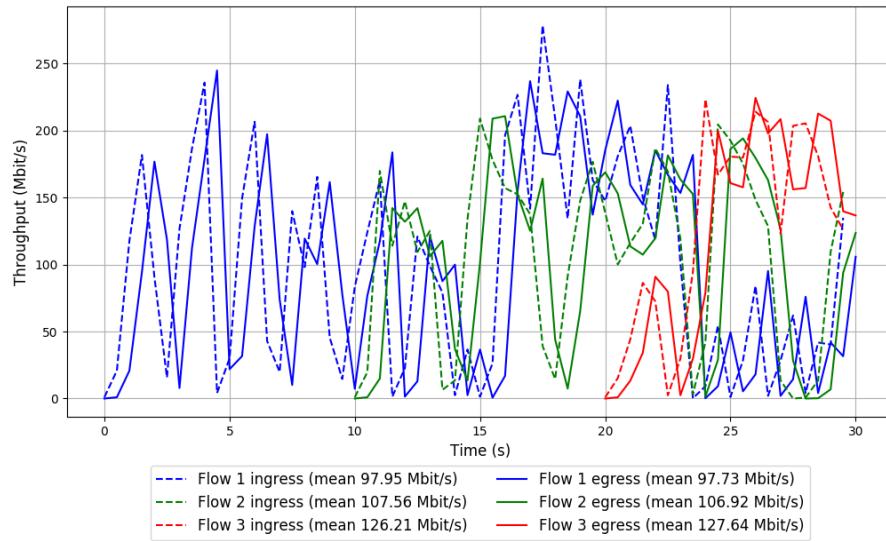


Run 4: Statistics of Verus

```
Start at: 2019-06-28 11:02:14
End at: 2019-06-28 11:02:44
Local clock offset: -0.117 ms
Remote clock offset: -0.455 ms

# Below is generated by plot.py at 2019-06-28 14:45:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.49 Mbit/s
95th percentile per-packet one-way delay: 138.597 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 97.73 Mbit/s
95th percentile per-packet one-way delay: 151.844 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 106.92 Mbit/s
95th percentile per-packet one-way delay: 75.629 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 127.64 Mbit/s
95th percentile per-packet one-way delay: 145.012 ms
Loss rate: 0.38%
```

Run 4: Report of Verus — Data Link

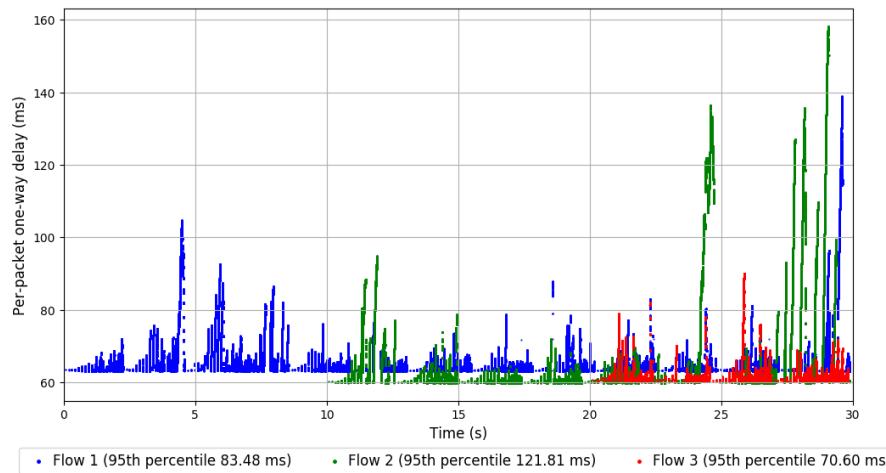
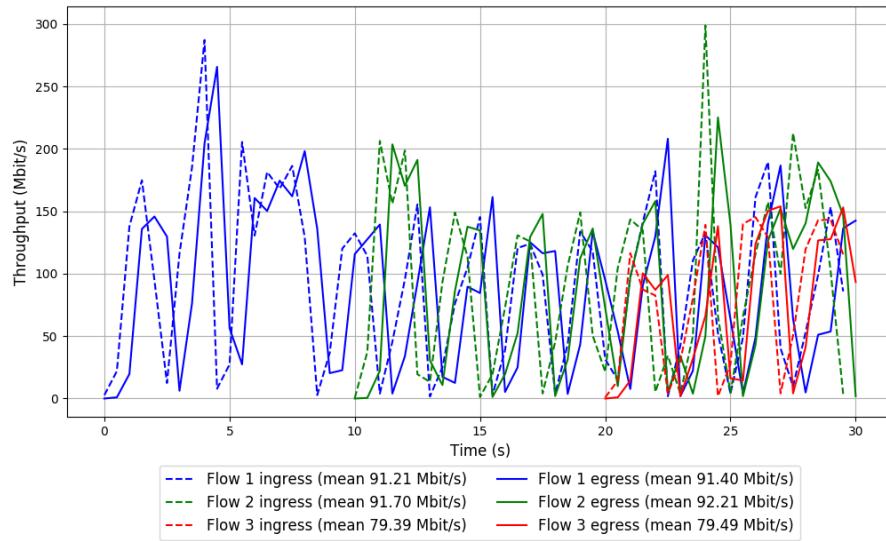


Run 5: Statistics of Verus

```
Start at: 2019-06-28 11:39:24
End at: 2019-06-28 11:39:54
Local clock offset: -0.012 ms
Remote clock offset: -0.548 ms

# Below is generated by plot.py at 2019-06-28 14:45:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.50 Mbit/s
95th percentile per-packet one-way delay: 101.148 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 91.40 Mbit/s
95th percentile per-packet one-way delay: 83.480 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 92.21 Mbit/s
95th percentile per-packet one-way delay: 121.807 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 79.49 Mbit/s
95th percentile per-packet one-way delay: 70.597 ms
Loss rate: 1.90%
```

Run 5: Report of Verus — Data Link

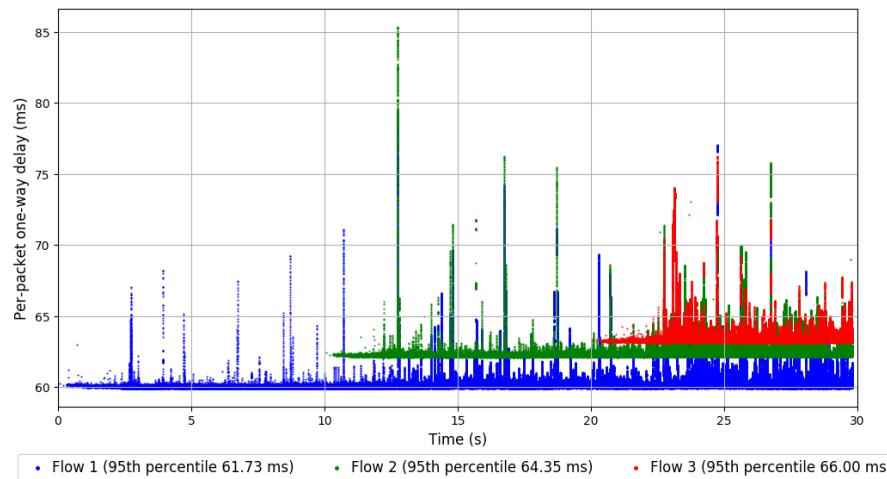
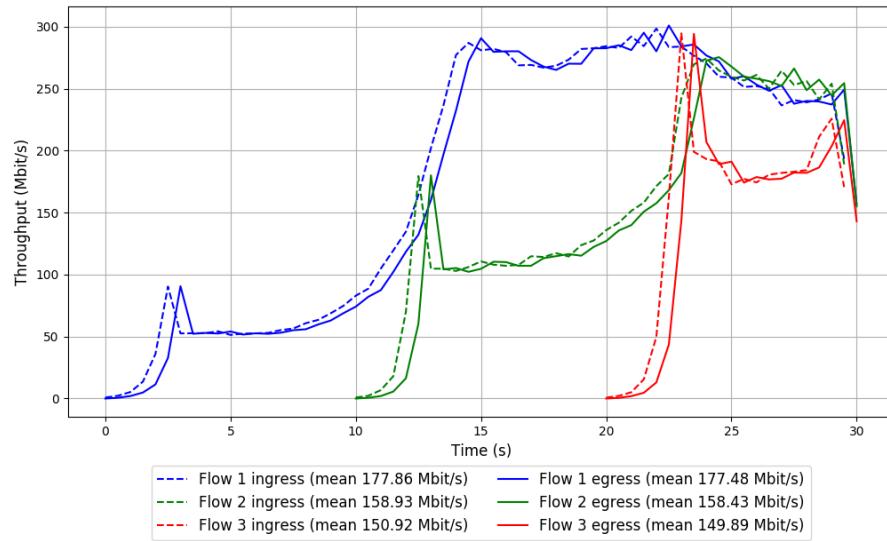


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-06-28 09:17:48
End at: 2019-06-28 09:18:18
Local clock offset: -0.032 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2019-06-28 14:45:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.60 Mbit/s
95th percentile per-packet one-way delay: 64.016 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 177.48 Mbit/s
95th percentile per-packet one-way delay: 61.727 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 158.43 Mbit/s
95th percentile per-packet one-way delay: 64.351 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 149.89 Mbit/s
95th percentile per-packet one-way delay: 66.003 ms
Loss rate: 1.95%
```

Run 1: Report of PCC-Vivace — Data Link

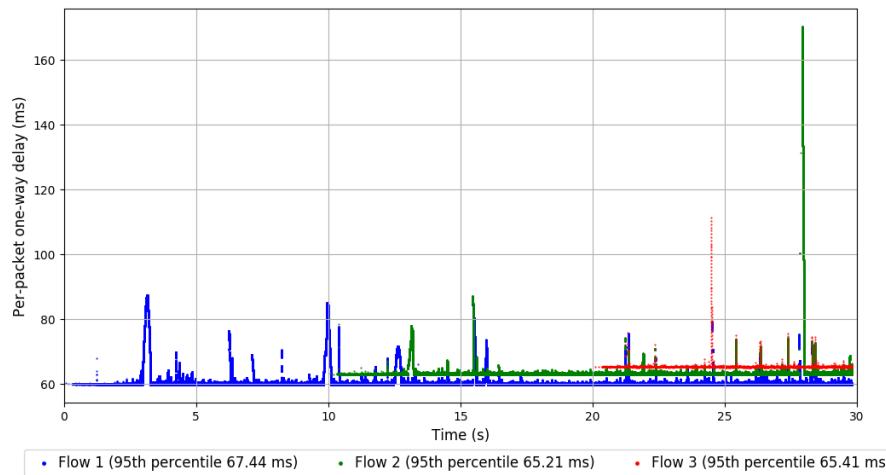
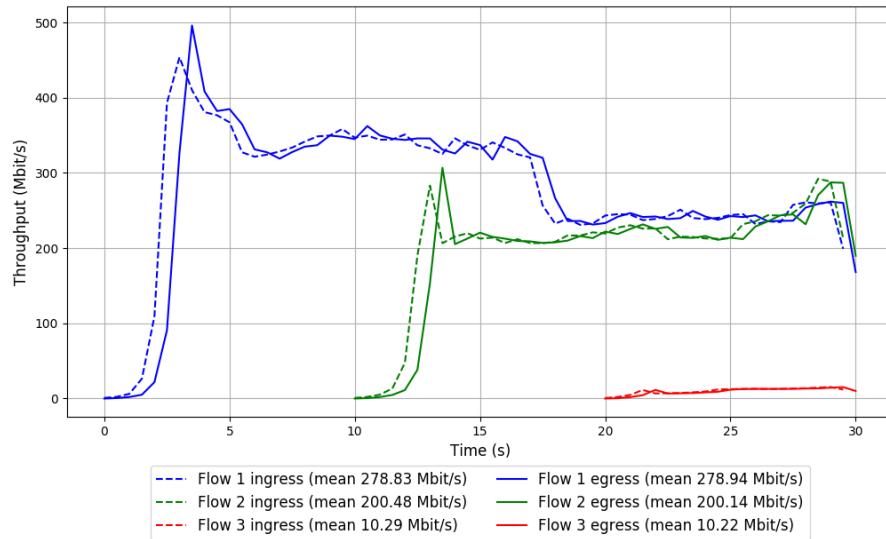


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-06-28 09:55:02
End at: 2019-06-28 09:55:32
Local clock offset: -0.028 ms
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2019-06-28 14:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 415.07 Mbit/s
95th percentile per-packet one-way delay: 66.522 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 278.94 Mbit/s
95th percentile per-packet one-way delay: 67.438 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 200.14 Mbit/s
95th percentile per-packet one-way delay: 65.207 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 65.414 ms
Loss rate: 1.94%
```

Run 2: Report of PCC-Vivace — Data Link

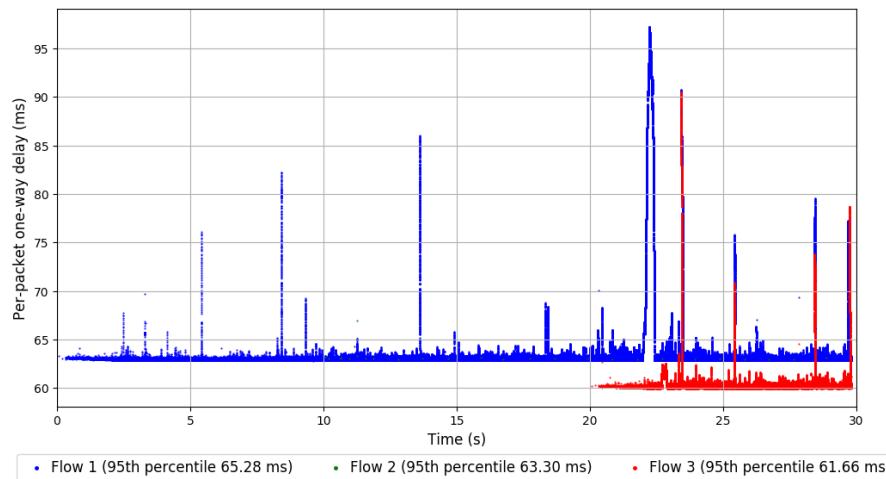
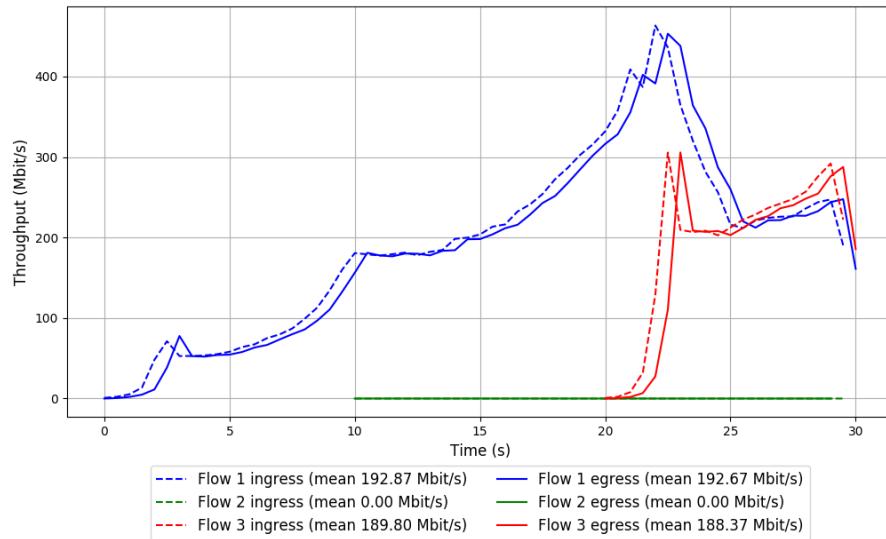


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-06-28 10:32:13
End at: 2019-06-28 10:32:43
Local clock offset: 0.003 ms
Remote clock offset: -0.336 ms

# Below is generated by plot.py at 2019-06-28 14:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 254.32 Mbit/s
95th percentile per-packet one-way delay: 64.446 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 192.67 Mbit/s
95th percentile per-packet one-way delay: 65.278 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 63.295 ms
Loss rate: 3.78%
-- Flow 3:
Average throughput: 188.37 Mbit/s
95th percentile per-packet one-way delay: 61.664 ms
Loss rate: 1.96%
```

Run 3: Report of PCC-Vivace — Data Link

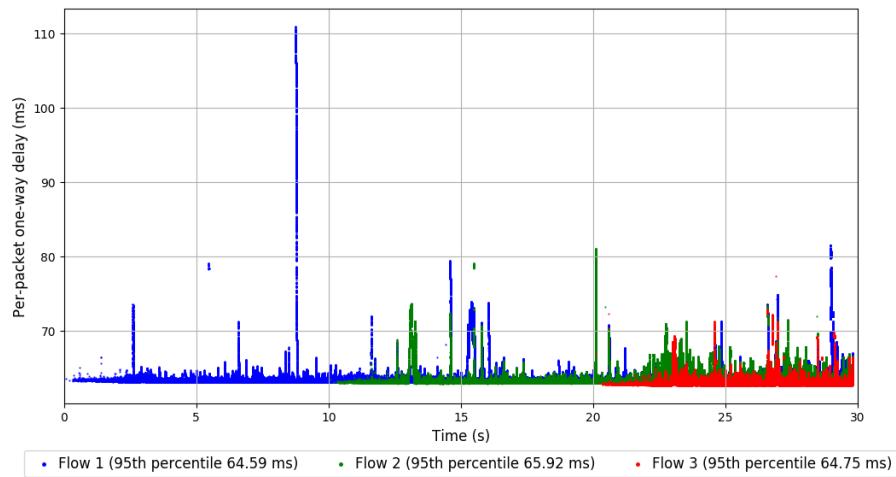
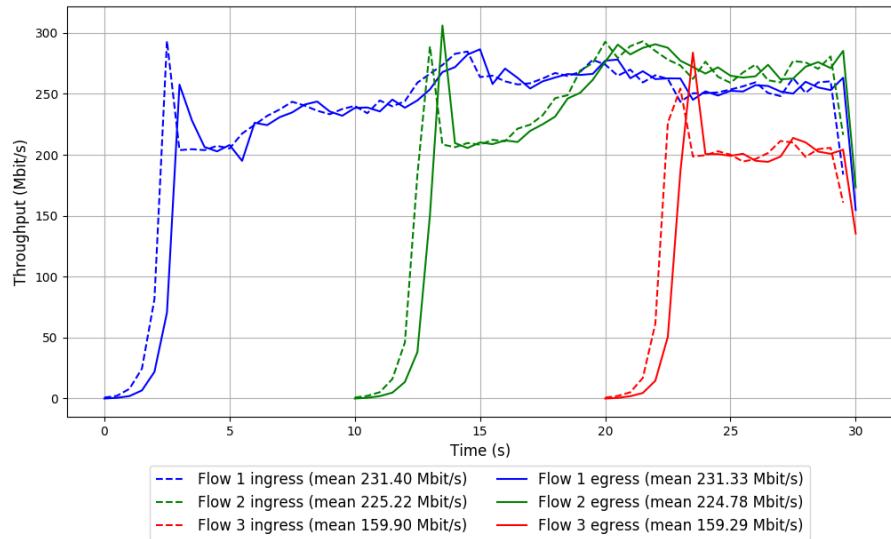


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-06-28 11:09:18
End at: 2019-06-28 11:09:48
Local clock offset: -0.078 ms
Remote clock offset: -0.492 ms

# Below is generated by plot.py at 2019-06-28 14:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.58 Mbit/s
95th percentile per-packet one-way delay: 65.269 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 231.33 Mbit/s
95th percentile per-packet one-way delay: 64.589 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 224.78 Mbit/s
95th percentile per-packet one-way delay: 65.919 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 159.29 Mbit/s
95th percentile per-packet one-way delay: 64.753 ms
Loss rate: 1.69%
```

Run 4: Report of PCC-Vivace — Data Link

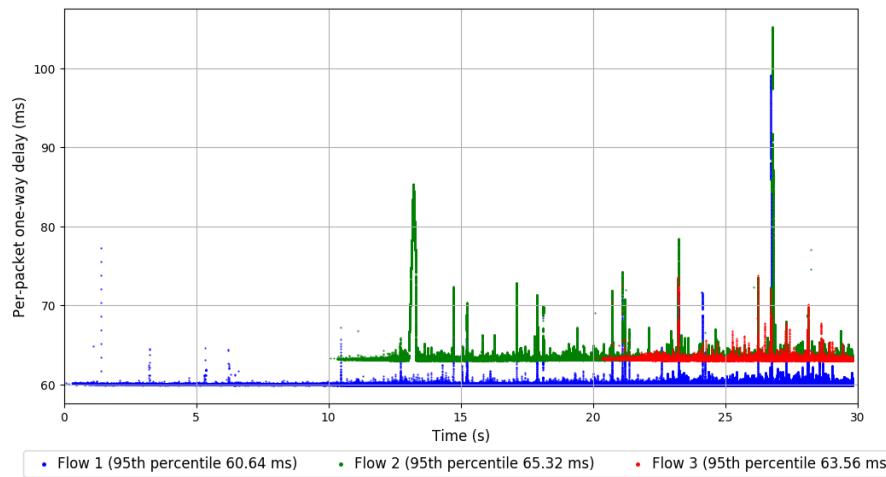
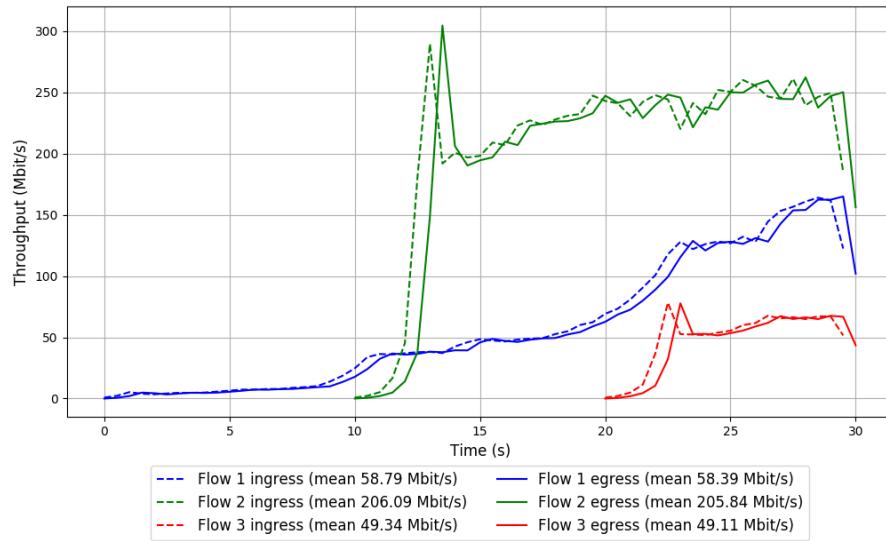


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-06-28 11:46:25
End at: 2019-06-28 11:46:55
Local clock offset: -0.054 ms
Remote clock offset: -0.215 ms

# Below is generated by plot.py at 2019-06-28 14:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.04 Mbit/s
95th percentile per-packet one-way delay: 64.459 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 58.39 Mbit/s
95th percentile per-packet one-way delay: 60.641 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 205.84 Mbit/s
95th percentile per-packet one-way delay: 65.321 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 63.562 ms
Loss rate: 1.73%
```

Run 5: Report of PCC-Vivace — Data Link

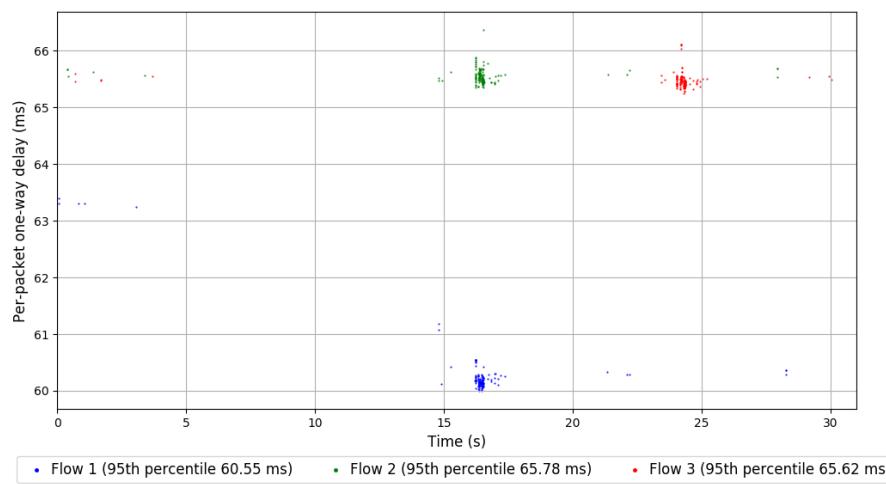
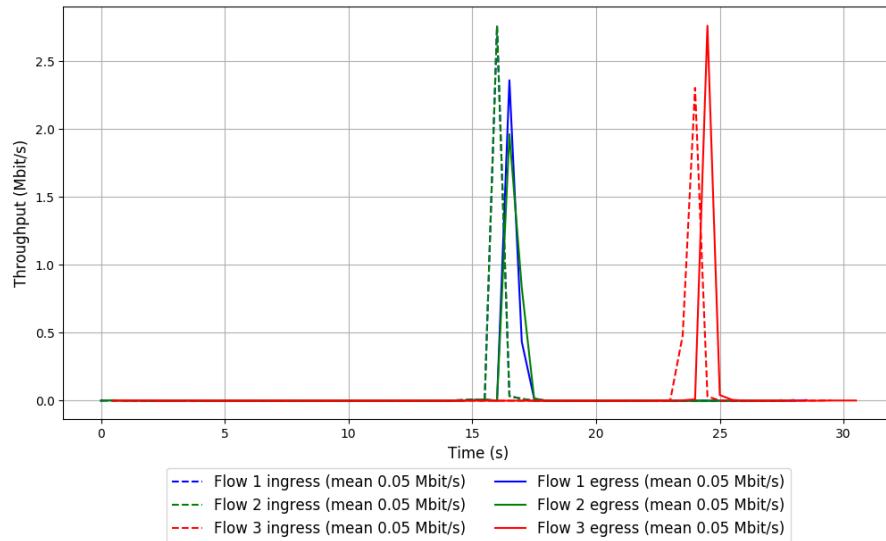


```
Run 1: Statistics of WebRTC media

Start at: 2019-06-28 09:14:04
End at: 2019-06-28 09:14:34
Local clock offset: -0.045 ms
Remote clock offset: -0.229 ms

# Below is generated by plot.py at 2019-06-28 14:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 65.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.547 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.779 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.619 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

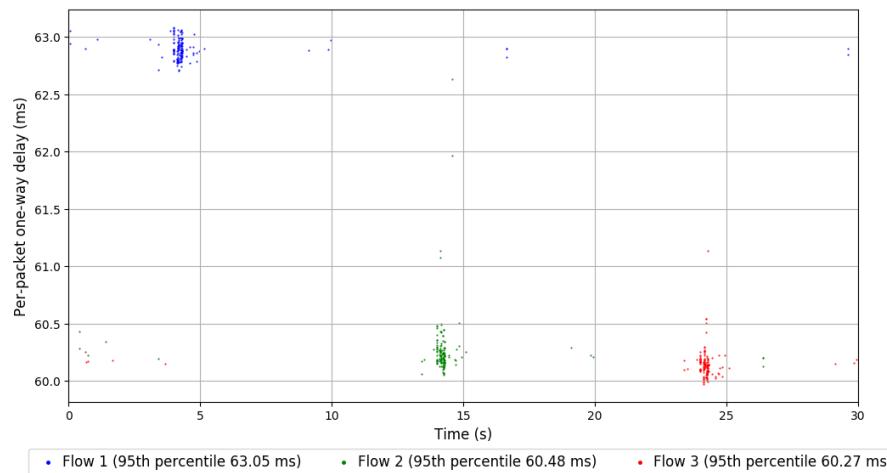
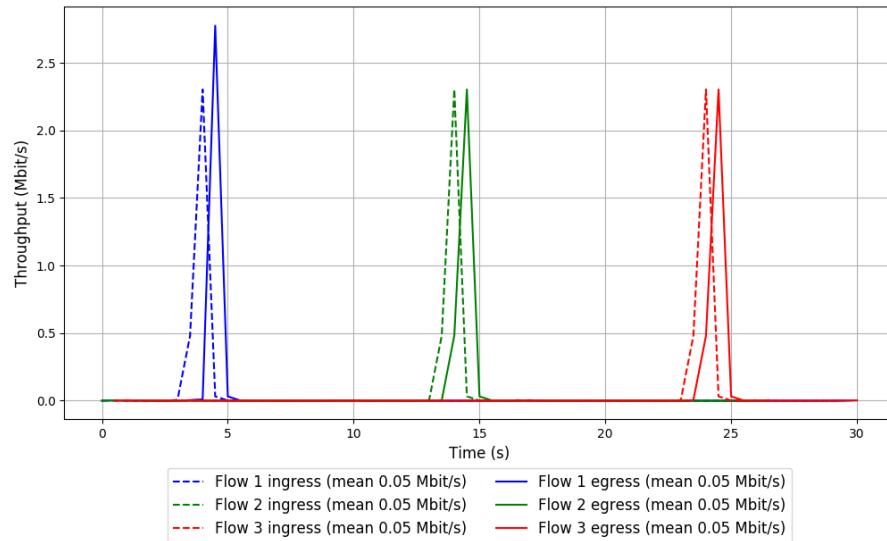


Run 2: Statistics of WebRTC media

```
Start at: 2019-06-28 09:51:19
End at: 2019-06-28 09:51:49
Local clock offset: -0.041 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-06-28 14:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 62.989 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.484 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.269 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

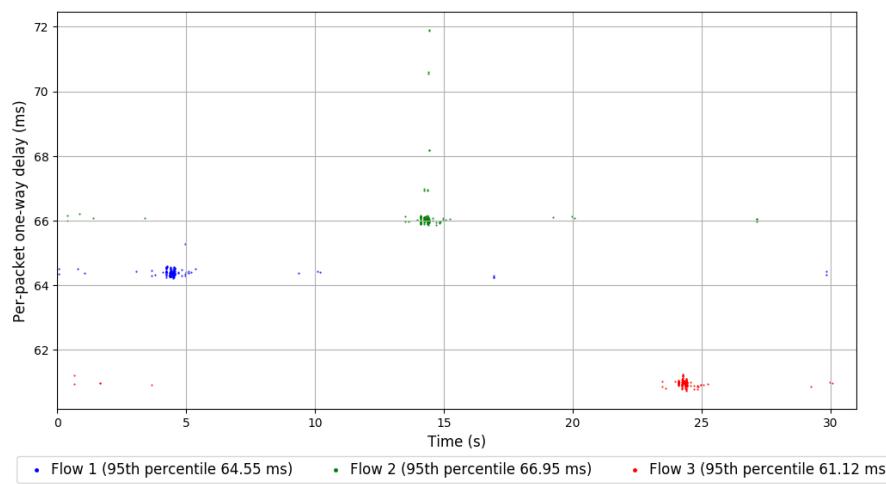
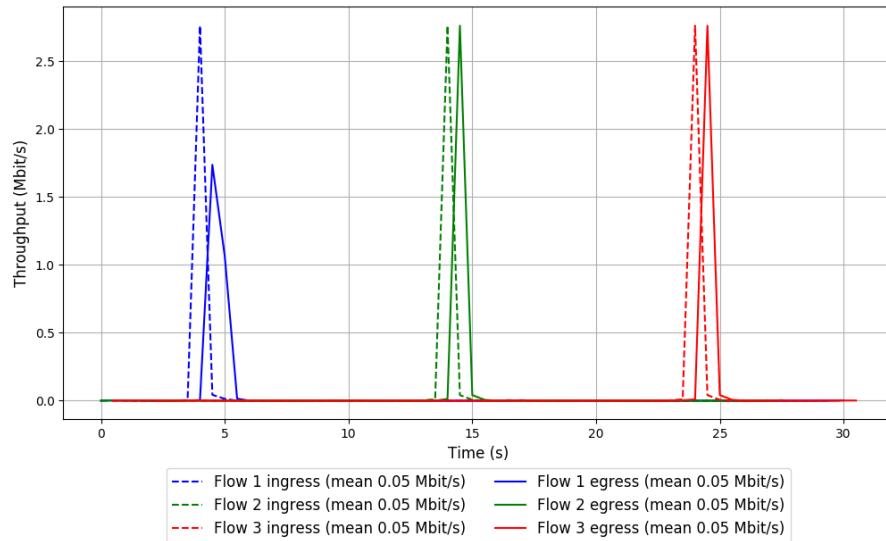


```
Run 3: Statistics of WebRTC media

Start at: 2019-06-28 10:28:30
End at: 2019-06-28 10:29:00
Local clock offset: 0.056 ms
Remote clock offset: -0.745 ms

# Below is generated by plot.py at 2019-06-28 14:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 66.109 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.545 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.950 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 61.121 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

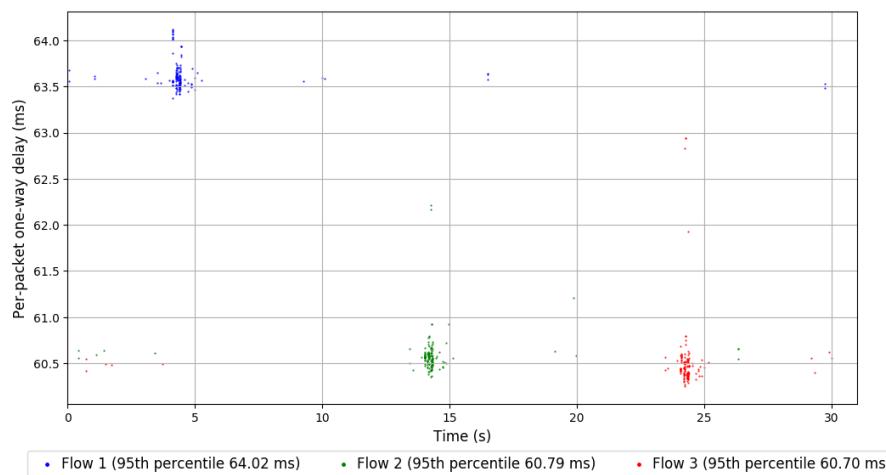
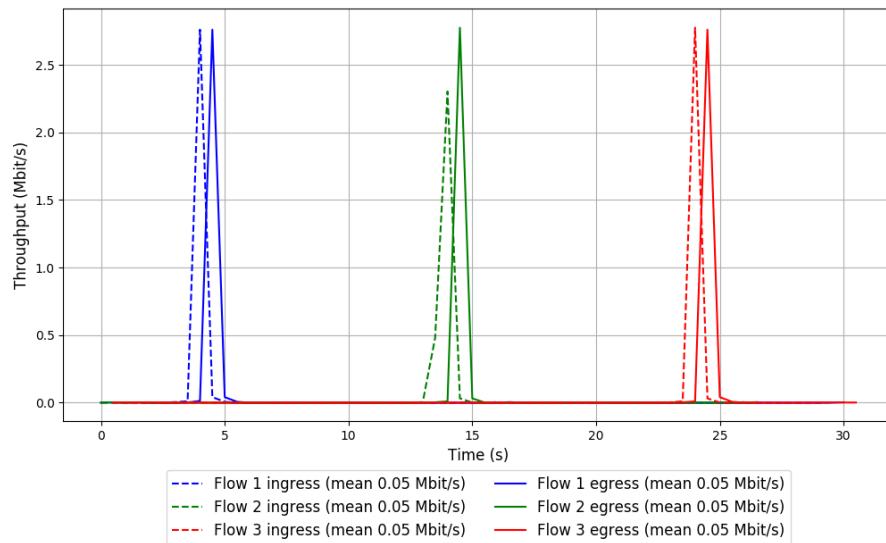


Run 4: Statistics of WebRTC media

```
Start at: 2019-06-28 11:05:35
End at: 2019-06-28 11:06:05
Local clock offset: -0.096 ms
Remote clock offset: -0.823 ms

# Below is generated by plot.py at 2019-06-28 14:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.707 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.019 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.700 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-06-28 11:42:43
End at: 2019-06-28 11:43:13
Local clock offset: -0.038 ms
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2019-06-28 14:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.441 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.474 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.316 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.211 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

