

## Pantheon Report

Generated at 2019-07-18 13:36:40 (UTC).

Data path: Mexico on **em1** (*remote*) → AWS California 2 on **ens5** (*local*).

Repeated the test of 24 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.stanford.edu** and have been applied to correct the timestamps in logs.

### System info:

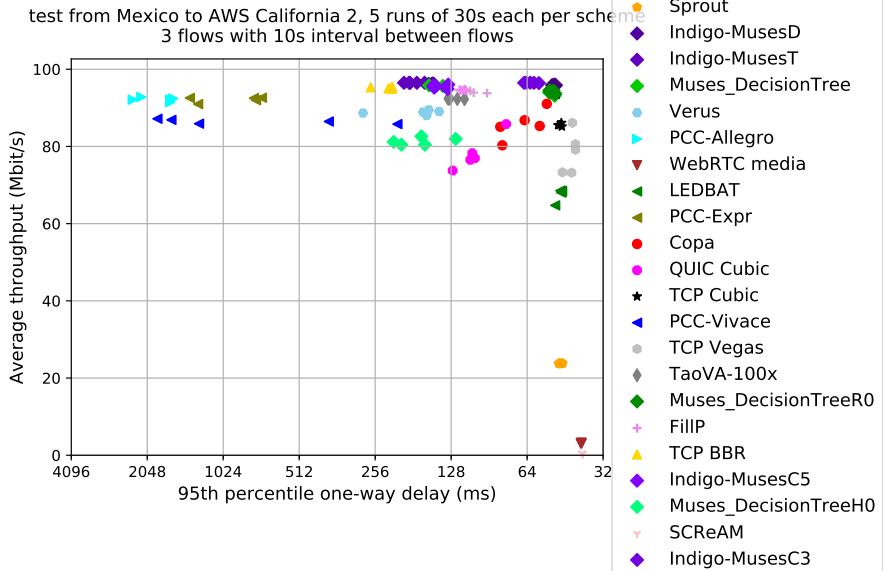
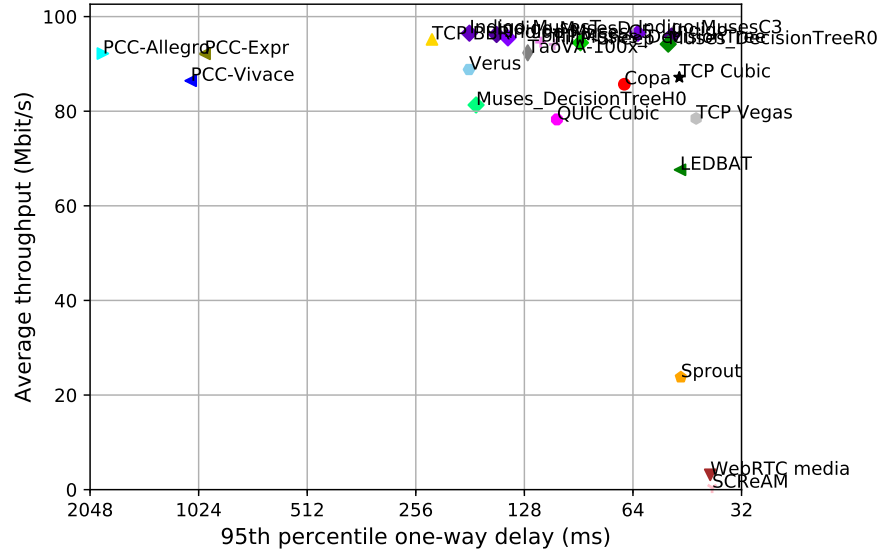
```
Linux 4.15.0-1043-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
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-quick @ 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 Mexico to AWS California 2, 5 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



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	58.02	39.74	32.33	184.84	168.81	394.10	1.33	1.47	5.67
Copa	5	53.65	33.74	28.94	90.41	54.43	50.25	0.20	0.29	0.59
TCP Cubic	5	49.92	39.54	33.00	50.67	46.88	49.16	0.19	0.30	0.65
FillP	5	55.72	44.47	28.04	110.91	120.88	116.10	0.47	1.99	2.52
FillP-Sheep	5	57.46	39.26	31.90	96.06	122.36	101.96	0.26	0.56	1.18
Indigo	5	60.53	40.01	26.80	50.35	51.10	51.13	0.19	0.35	0.76
Indigo-MusesC3	5	62.36	41.10	26.52	57.29	68.11	66.64	0.21	0.44	1.02
Indigo-MusesC5	5	59.26	41.57	32.39	131.15	147.14	139.24	1.46	2.86	5.26
Indigo-MusesD	5	60.87	41.81	28.89	154.40	131.63	95.01	5.63	9.33	4.79
Indigo-MusesT	5	62.45	38.73	31.28	115.55	241.05	229.28	1.86	4.73	8.10
LEDBAT	5	39.61	31.61	21.06	47.46	47.47	47.26	0.15	0.38	1.01
Muses_DecisionTree	5	58.24	41.08	27.80	89.96	50.72	50.11	2.79	0.32	0.83
Muses_DecisionTreeH0	5	50.98	33.02	26.23	163.36	196.66	154.18	0.42	0.81	0.64
Muses_DecisionTreeR0	5	55.11	43.16	32.36	49.70	51.08	55.63	0.14	0.29	0.84
PCC-Allegro	5	57.70	38.86	26.36	1916.31	1124.21	295.94	17.43	10.57	2.71
PCC-Expr	5	58.00	36.39	30.24	865.27	1016.81	151.83	33.45	19.68	1.34
QUIC Cubic	5	44.20	35.98	30.81	93.89	120.97	125.86	0.18	0.42	0.95
SCReAM	5	0.21	0.21	0.22	38.59	38.60	38.62	0.23	0.36	0.64
Sprout	5	11.99	11.93	11.73	46.79	47.14	47.91	0.22	0.29	0.82
TaoVA-100x	5	56.56	39.25	29.09	118.27	131.14	125.05	0.59	1.21	2.56
TCP Vegas	5	40.97	39.62	33.59	53.07	40.83	44.77	0.17	0.33	0.73
Verus	5	52.88	37.63	32.94	157.38	248.88	271.31	0.30	0.53	1.19
PCC-Vivace	5	54.33	35.58	25.74	831.45	1075.40	137.22	2.73	6.54	1.63
WebRTC media	5	1.75	1.00	0.39	39.01	39.11	39.19	0.10	0.21	0.69

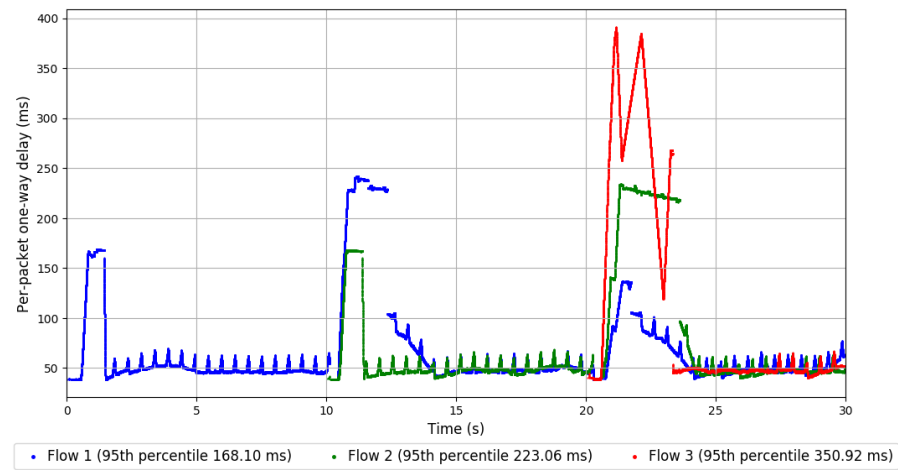
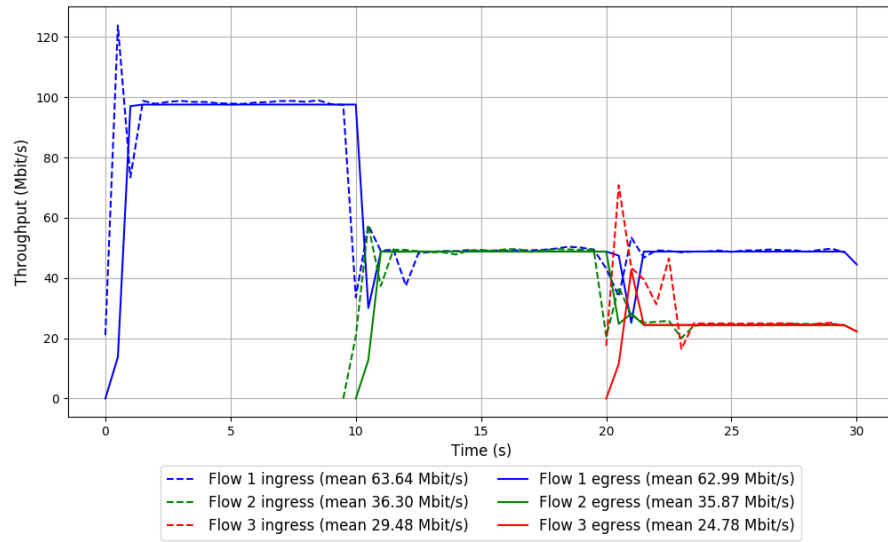


Run 1: Statistics of TCP BBR

Start at: 2019-07-18 10:49:45  
End at: 2019-07-18 10:50:15  
Local clock offset: -3.361 ms  
Remote clock offset: -3.392 ms

# Below is generated by plot.py at 2019-07-18 13:21:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.08 Mbit/s  
95th percentile per-packet one-way delay: 226.678 ms  
Loss rate: 2.83%  
-- Flow 1:  
Average throughput: 62.99 Mbit/s  
95th percentile per-packet one-way delay: 168.096 ms  
Loss rate: 1.23%  
-- Flow 2:  
Average throughput: 35.87 Mbit/s  
95th percentile per-packet one-way delay: 223.055 ms  
Loss rate: 1.49%  
-- Flow 3:  
Average throughput: 24.78 Mbit/s  
95th percentile per-packet one-way delay: 350.915 ms  
Loss rate: 16.49%

# Run 1: Report of TCP BBR — Data Link

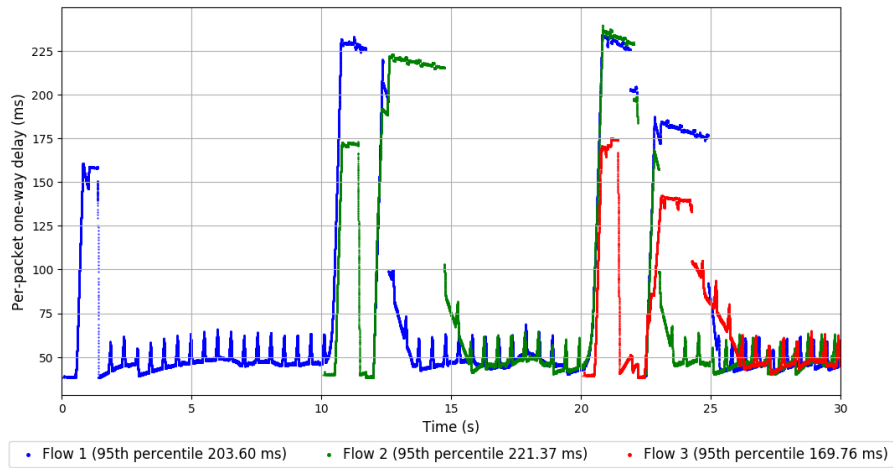
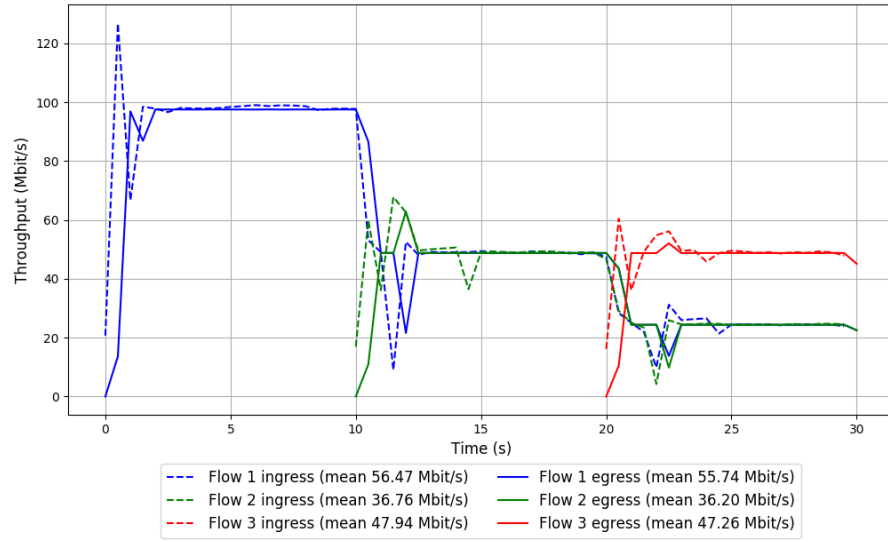


Run 2: Statistics of TCP BBR

Start at: 2019-07-18 11:22:23  
End at: 2019-07-18 11:22:53  
Local clock offset: -3.163 ms  
Remote clock offset: -2.224 ms

# Below is generated by plot.py at 2019-07-18 13:21:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.48 Mbit/s  
95th percentile per-packet one-way delay: 219.276 ms  
Loss rate: 1.68%  
-- Flow 1:  
Average throughput: 55.74 Mbit/s  
95th percentile per-packet one-way delay: 203.604 ms  
Loss rate: 1.51%  
-- Flow 2:  
Average throughput: 36.20 Mbit/s  
95th percentile per-packet one-way delay: 221.367 ms  
Loss rate: 1.83%  
-- Flow 3:  
Average throughput: 47.26 Mbit/s  
95th percentile per-packet one-way delay: 169.756 ms  
Loss rate: 2.04%

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

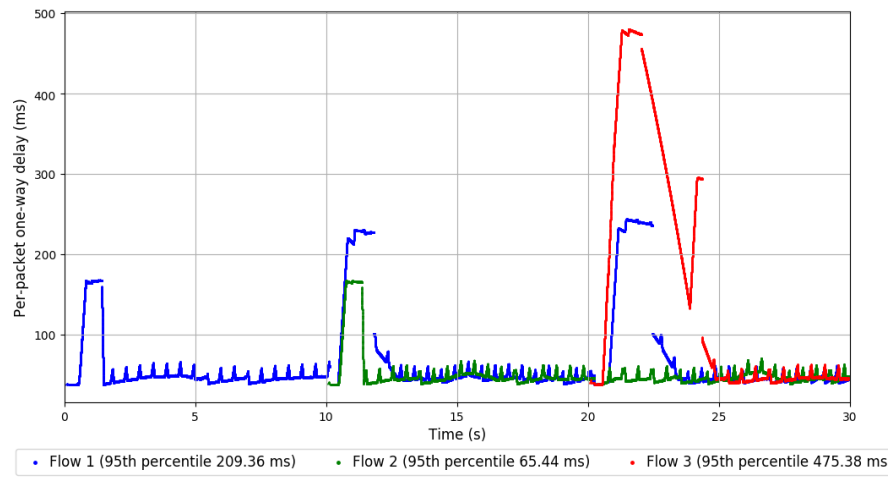
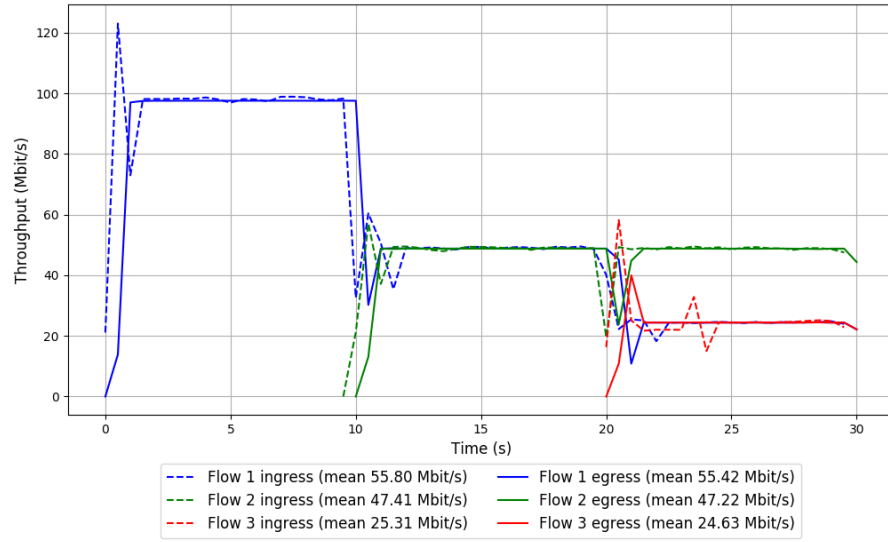


Run 3: Statistics of TCP BBR

Start at: 2019-07-18 11:55:08  
End at: 2019-07-18 11:55:38  
Local clock offset: -3.585 ms  
Remote clock offset: -1.164 ms

# Below is generated by plot.py at 2019-07-18 13:21:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.01 Mbit/s  
95th percentile per-packet one-way delay: 219.629 ms  
Loss rate: 1.05%  
-- Flow 1:  
Average throughput: 55.42 Mbit/s  
95th percentile per-packet one-way delay: 209.358 ms  
Loss rate: 0.88%  
-- Flow 2:  
Average throughput: 47.22 Mbit/s  
95th percentile per-packet one-way delay: 65.438 ms  
Loss rate: 0.73%  
-- Flow 3:  
Average throughput: 24.63 Mbit/s  
95th percentile per-packet one-way delay: 475.376 ms  
Loss rate: 3.33%

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

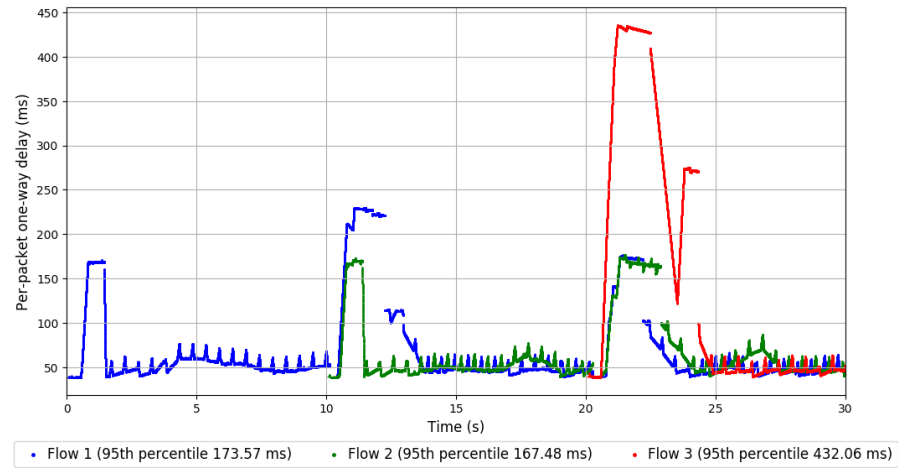
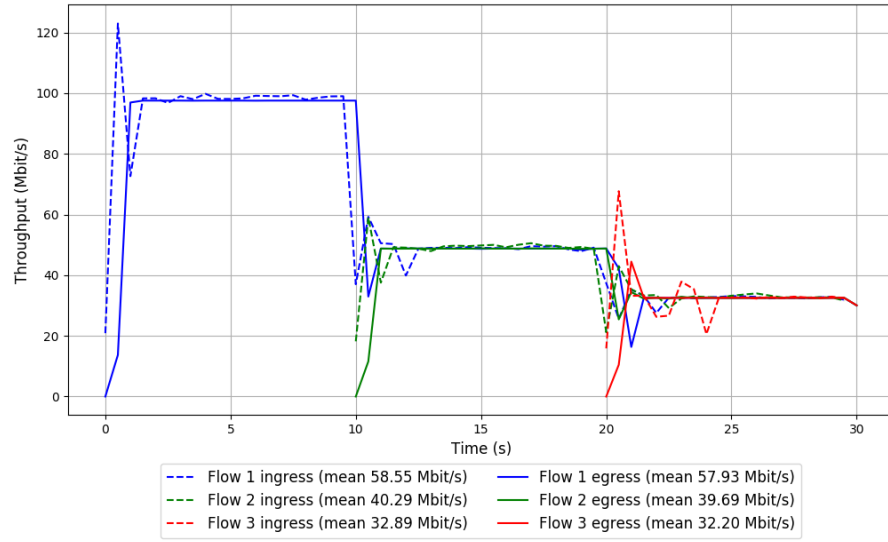


Run 4: Statistics of TCP BBR

Start at: 2019-07-18 12:26:55  
End at: 2019-07-18 12:27:25  
Local clock offset: 1.151 ms  
Remote clock offset: -1.093 ms

# Below is generated by plot.py at 2019-07-18 13:21:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.99 Mbit/s  
95th percentile per-packet one-way delay: 222.090 ms  
Loss rate: 1.59%  
-- Flow 1:  
Average throughput: 57.93 Mbit/s  
95th percentile per-packet one-way delay: 173.573 ms  
Loss rate: 1.28%  
-- Flow 2:  
Average throughput: 39.69 Mbit/s  
95th percentile per-packet one-way delay: 167.481 ms  
Loss rate: 1.82%  
-- Flow 3:  
Average throughput: 32.20 Mbit/s  
95th percentile per-packet one-way delay: 432.056 ms  
Loss rate: 2.73%

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



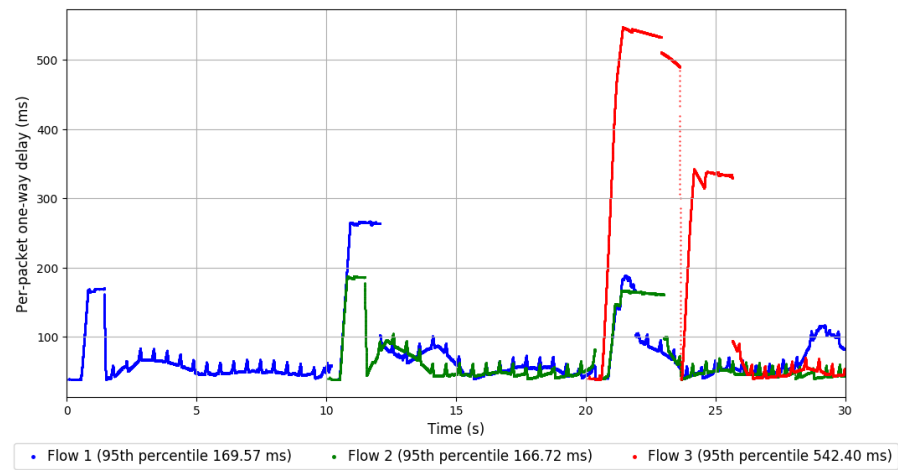
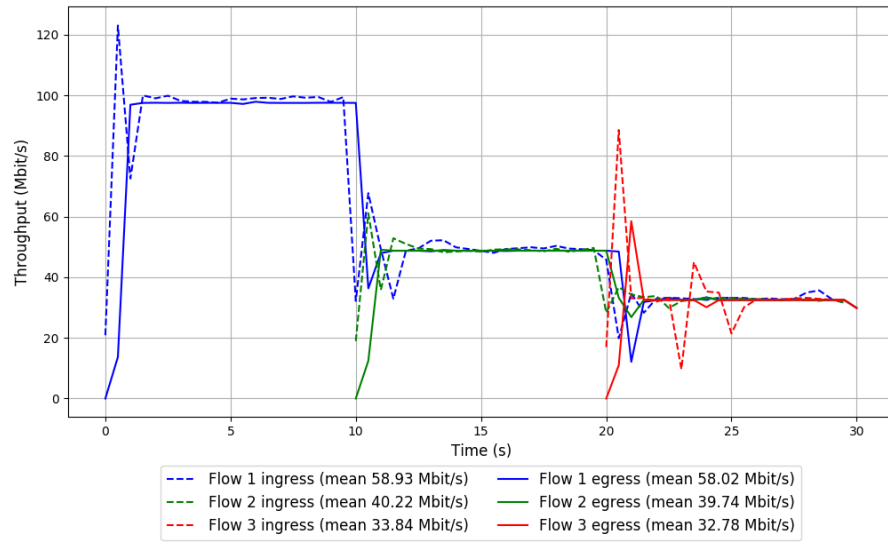


Run 5: Statistics of TCP BBR

Start at: 2019-07-18 12:59:12  
End at: 2019-07-18 12:59:42  
Local clock offset: -0.616 ms  
Remote clock offset: -0.936 ms

# Below is generated by plot.py at 2019-07-18 13:21:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.33 Mbit/s  
95th percentile per-packet one-way delay: 266.599 ms  
Loss rate: 1.91%  
-- Flow 1:  
Average throughput: 58.02 Mbit/s  
95th percentile per-packet one-way delay: 169.575 ms  
Loss rate: 1.75%  
-- Flow 2:  
Average throughput: 39.74 Mbit/s  
95th percentile per-packet one-way delay: 166.716 ms  
Loss rate: 1.50%  
-- Flow 3:  
Average throughput: 32.78 Mbit/s  
95th percentile per-packet one-way delay: 542.398 ms  
Loss rate: 3.75%

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

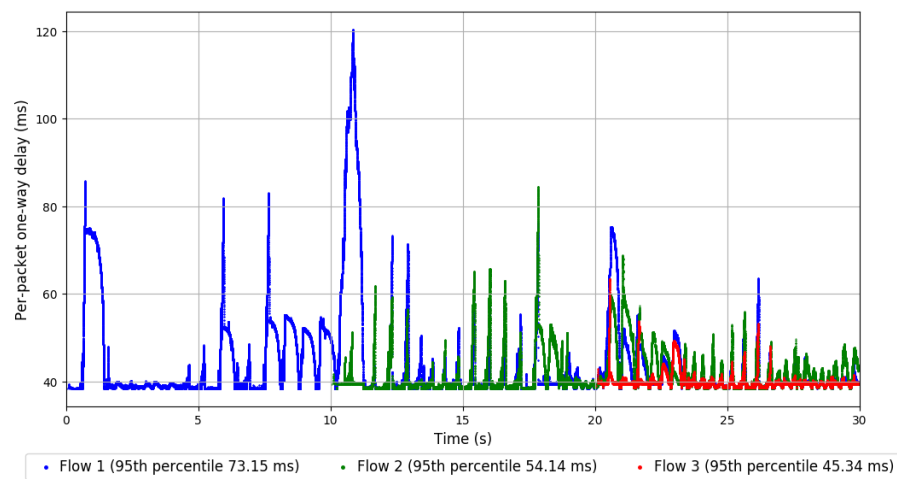
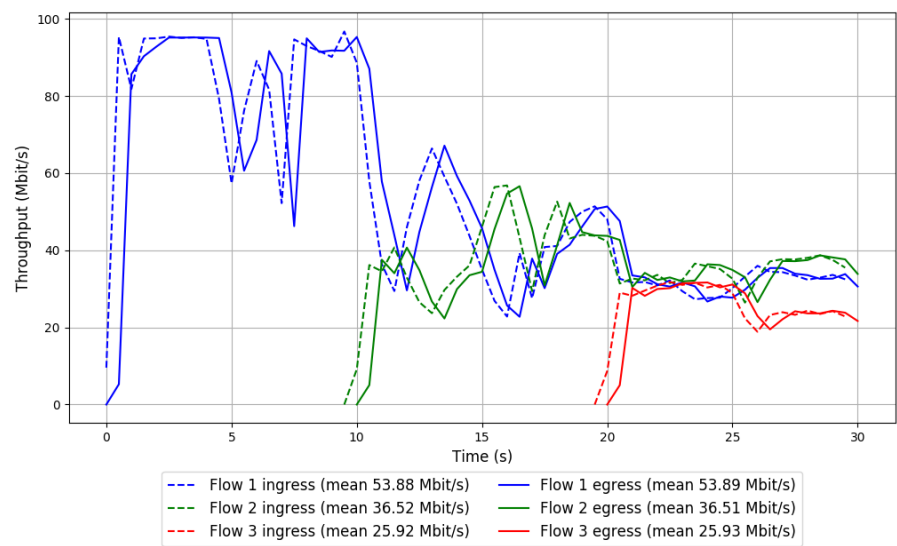


Run 1: Statistics of Copa

Start at: 2019-07-18 10:54:02  
End at: 2019-07-18 10:54:32  
Local clock offset: -3.626 ms  
Remote clock offset: -3.219 ms

# Below is generated by plot.py at 2019-07-18 13:22:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.79 Mbit/s  
95th percentile per-packet one-way delay: 65.474 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 53.89 Mbit/s  
95th percentile per-packet one-way delay: 73.146 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 36.51 Mbit/s  
95th percentile per-packet one-way delay: 54.139 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 25.93 Mbit/s  
95th percentile per-packet one-way delay: 45.345 ms  
Loss rate: 0.60%

Run 1: Report of Copa — Data Link

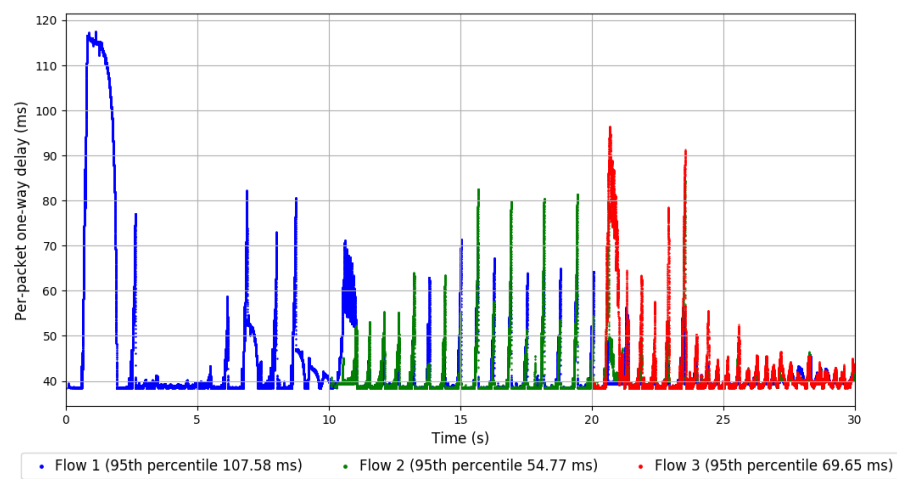
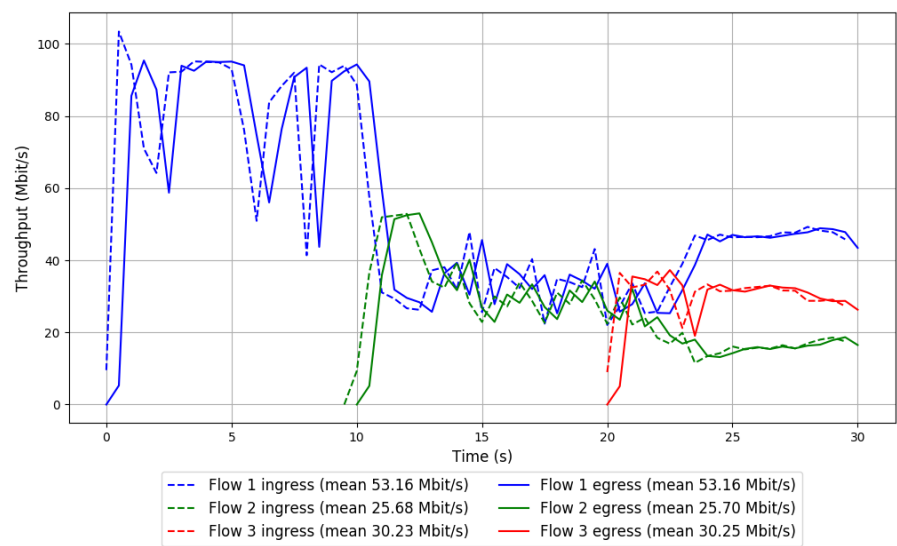


Run 2: Statistics of Copa

Start at: 2019-07-18 11:26:45  
End at: 2019-07-18 11:27:15  
Local clock offset: -3.279 ms  
Remote clock offset: -2.056 ms

# Below is generated by plot.py at 2019-07-18 13:22:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.29 Mbit/s  
95th percentile per-packet one-way delay: 80.269 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 53.16 Mbit/s  
95th percentile per-packet one-way delay: 107.578 ms  
Loss rate: 0.23%  
-- Flow 2:  
Average throughput: 25.70 Mbit/s  
95th percentile per-packet one-way delay: 54.766 ms  
Loss rate: 0.24%  
-- Flow 3:  
Average throughput: 30.25 Mbit/s  
95th percentile per-packet one-way delay: 69.647 ms  
Loss rate: 0.60%

Run 2: Report of Copa — Data Link

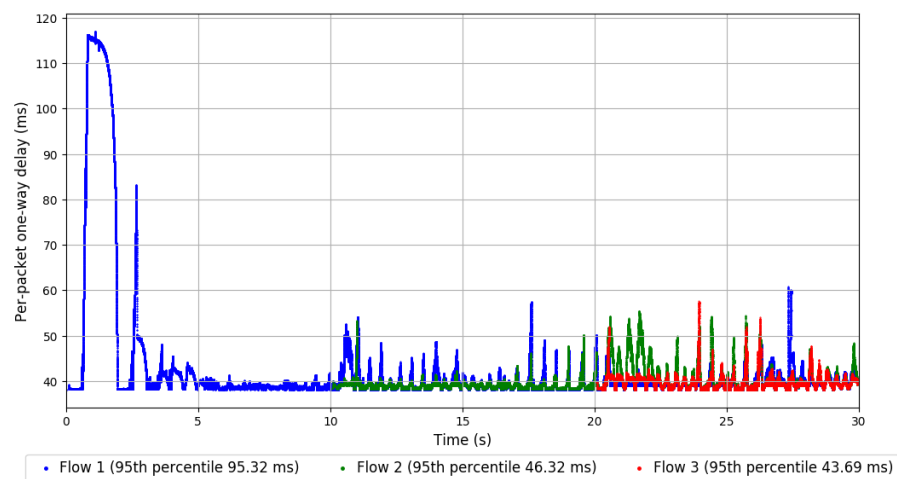
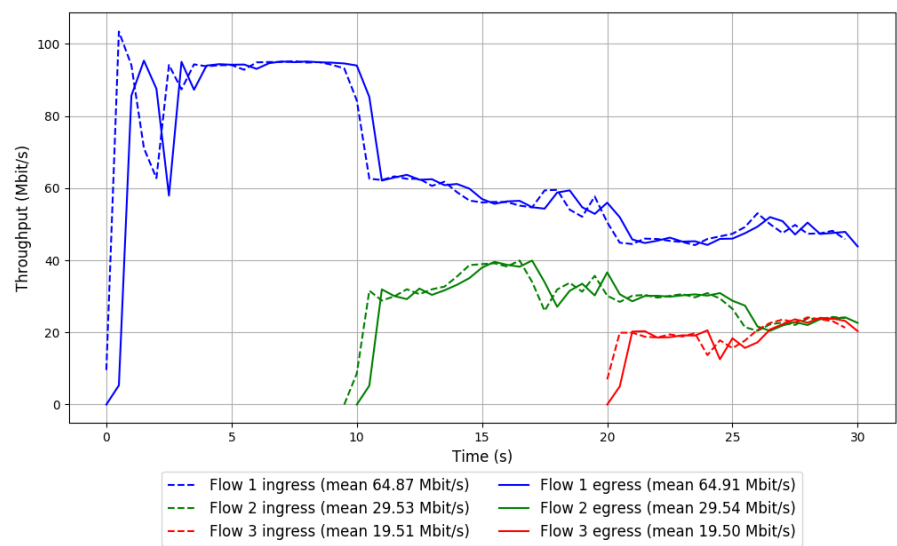


Run 3: Statistics of Copa

Start at: 2019-07-18 11:59:06  
End at: 2019-07-18 11:59:36  
Local clock offset: -2.043 ms  
Remote clock offset: -1.154 ms

# Below is generated by plot.py at 2019-07-18 13:22:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 91.03 Mbit/s  
95th percentile per-packet one-way delay: 53.494 ms  
Loss rate: 0.23%  
-- Flow 1:  
Average throughput: 64.91 Mbit/s  
95th percentile per-packet one-way delay: 95.321 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 29.54 Mbit/s  
95th percentile per-packet one-way delay: 46.316 ms  
Loss rate: 0.28%  
-- Flow 3:  
Average throughput: 19.50 Mbit/s  
95th percentile per-packet one-way delay: 43.692 ms  
Loss rate: 0.69%

Run 3: Report of Copa — Data Link



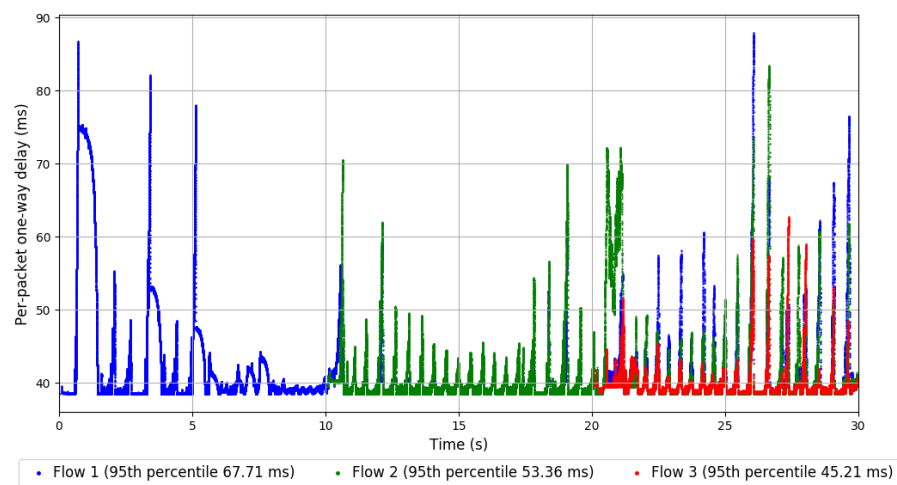
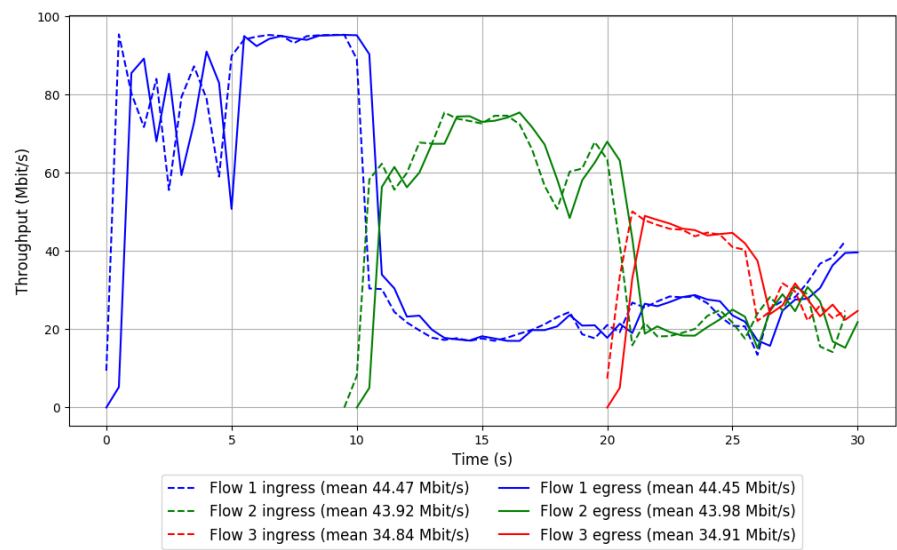


Run 4: Statistics of Copa

Start at: 2019-07-18 12:31:19  
End at: 2019-07-18 12:31:49  
Local clock offset: 0.903 ms  
Remote clock offset: -1.097 ms

# Below is generated by plot.py at 2019-07-18 13:23:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.29 Mbit/s  
95th percentile per-packet one-way delay: 57.051 ms  
Loss rate: 0.25%  
-- Flow 1:  
Average throughput: 44.45 Mbit/s  
95th percentile per-packet one-way delay: 67.714 ms  
Loss rate: 0.24%  
-- Flow 2:  
Average throughput: 43.98 Mbit/s  
95th percentile per-packet one-way delay: 53.357 ms  
Loss rate: 0.19%  
-- Flow 3:  
Average throughput: 34.91 Mbit/s  
95th percentile per-packet one-way delay: 45.213 ms  
Loss rate: 0.44%

Run 4: Report of Copa — Data Link

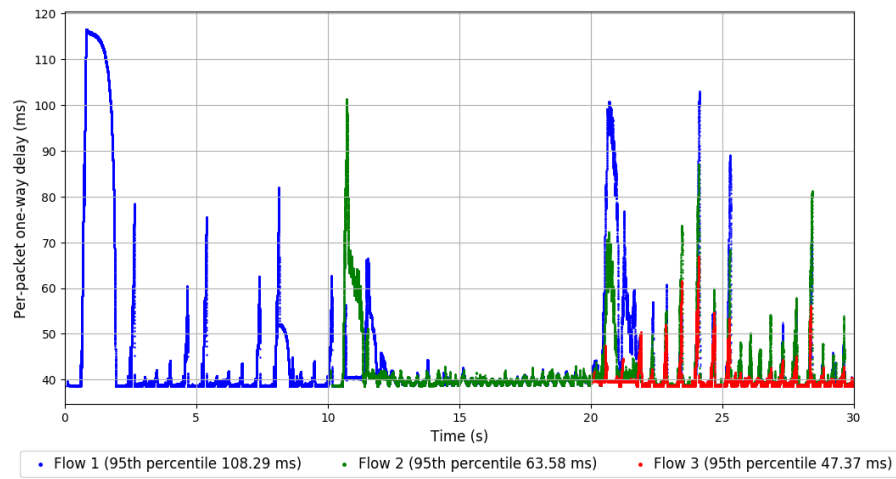
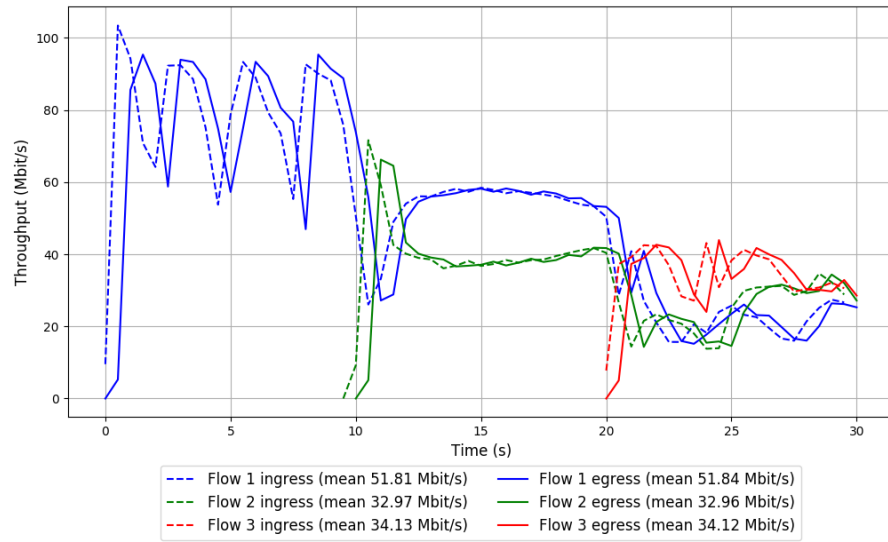


Run 5: Statistics of Copa

Start at: 2019-07-18 13:03:21  
End at: 2019-07-18 13:03:51  
Local clock offset: -1.585 ms  
Remote clock offset: -0.964 ms

# Below is generated by plot.py at 2019-07-18 13:23:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.09 Mbit/s  
95th percentile per-packet one-way delay: 81.771 ms  
Loss rate: 0.27%  
-- Flow 1:  
Average throughput: 51.84 Mbit/s  
95th percentile per-packet one-way delay: 108.287 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 32.96 Mbit/s  
95th percentile per-packet one-way delay: 63.580 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 34.12 Mbit/s  
95th percentile per-packet one-way delay: 47.365 ms  
Loss rate: 0.64%

# Run 5: Report of Copa — Data Link

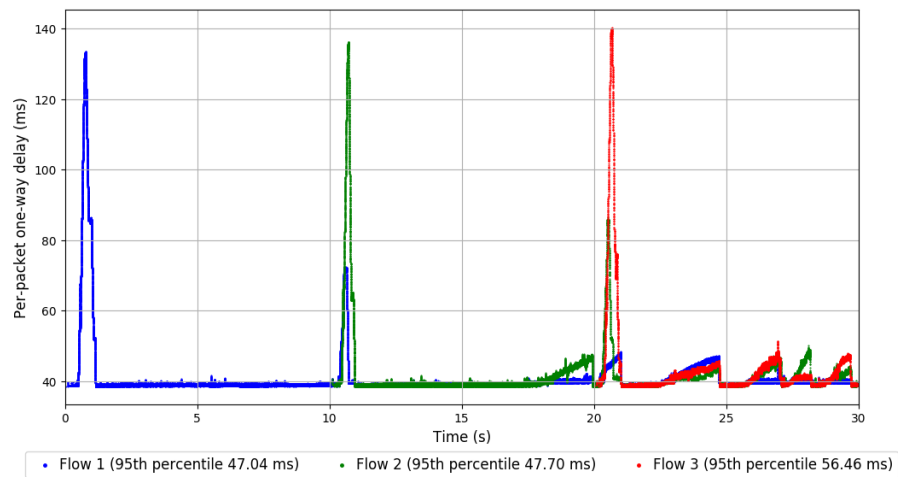
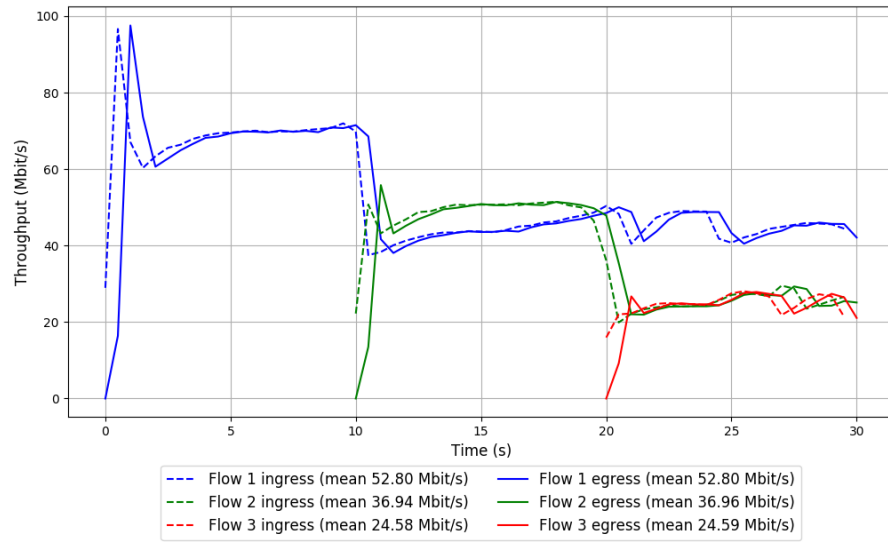


Run 1: Statistics of TCP Cubic

Start at: 2019-07-18 10:47:01  
End at: 2019-07-18 10:47:31  
Local clock offset: -3.216 ms  
Remote clock offset: -3.489 ms

# Below is generated by plot.py at 2019-07-18 13:23:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.53 Mbit/s  
95th percentile per-packet one-way delay: 47.532 ms  
Loss rate: 0.26%  
-- Flow 1:  
Average throughput: 52.80 Mbit/s  
95th percentile per-packet one-way delay: 47.037 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 36.96 Mbit/s  
95th percentile per-packet one-way delay: 47.704 ms  
Loss rate: 0.28%  
-- Flow 3:  
Average throughput: 24.59 Mbit/s  
95th percentile per-packet one-way delay: 56.458 ms  
Loss rate: 0.60%

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

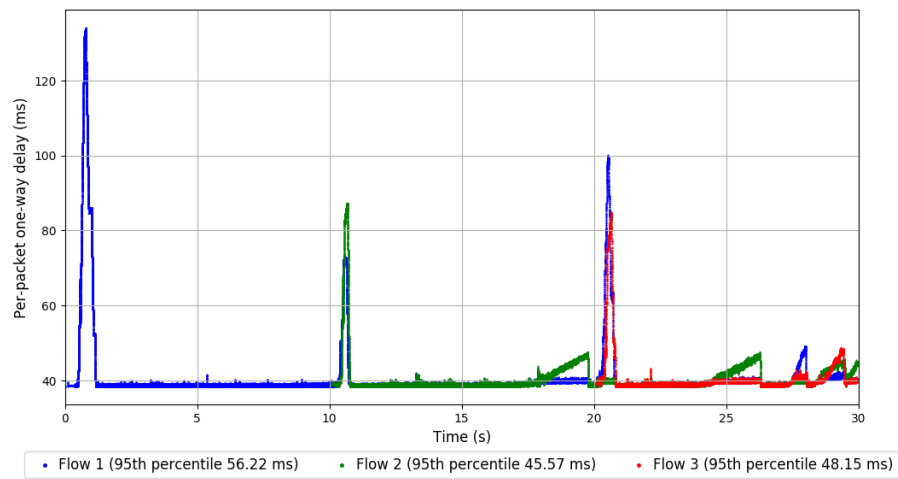
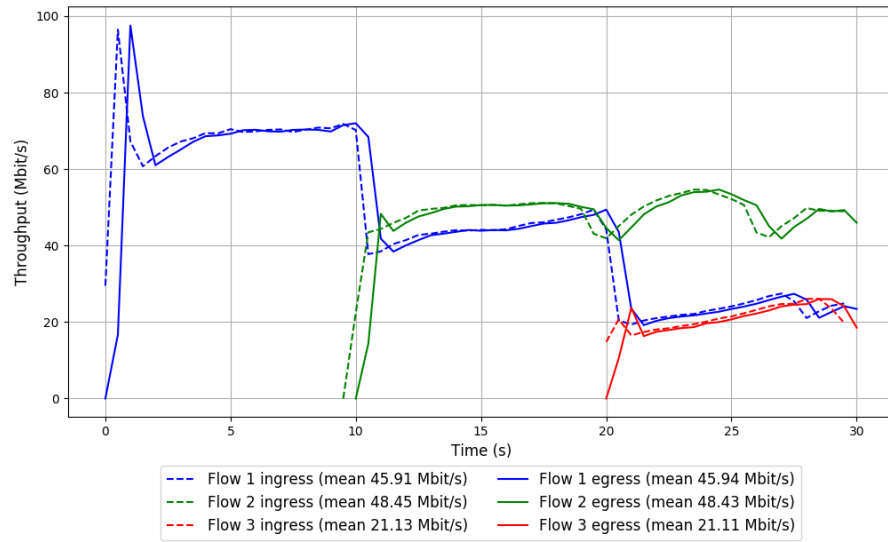


Run 2: Statistics of TCP Cubic

Start at: 2019-07-18 11:19:21  
End at: 2019-07-18 11:19:51  
Local clock offset: -3.117 ms  
Remote clock offset: -2.366 ms

# Below is generated by plot.py at 2019-07-18 13:23:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.16 Mbit/s  
95th percentile per-packet one-way delay: 46.591 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 45.94 Mbit/s  
95th percentile per-packet one-way delay: 56.224 ms  
Loss rate: 0.15%  
-- Flow 2:  
Average throughput: 48.43 Mbit/s  
95th percentile per-packet one-way delay: 45.566 ms  
Loss rate: 0.37%  
-- Flow 3:  
Average throughput: 21.11 Mbit/s  
95th percentile per-packet one-way delay: 48.153 ms  
Loss rate: 0.72%

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



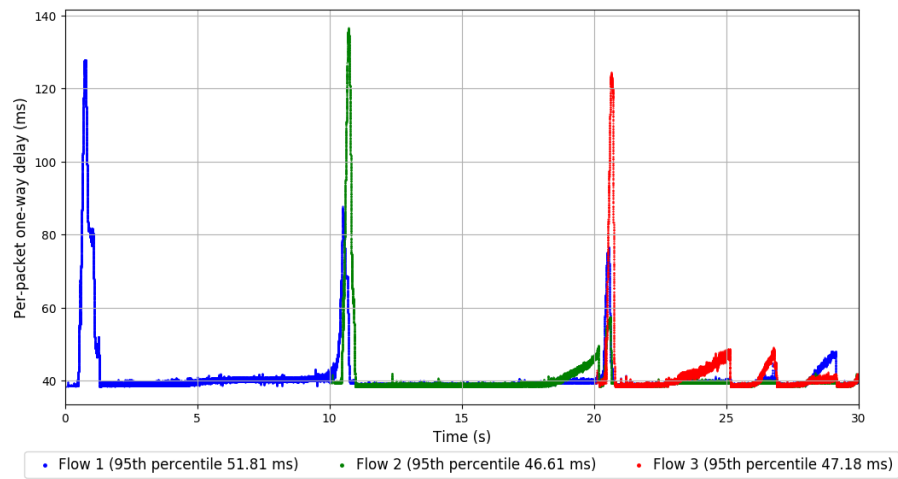
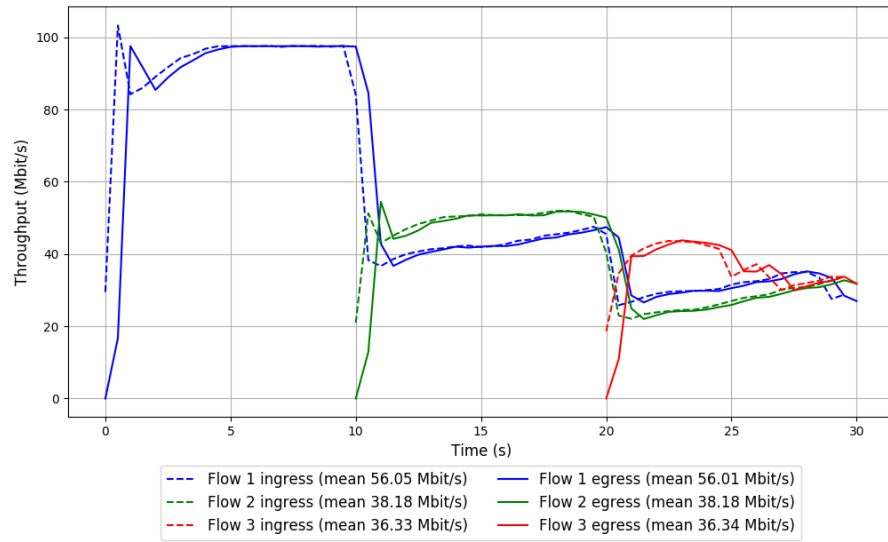


Run 3: Statistics of TCP Cubic

Start at: 2019-07-18 11:52:22  
End at: 2019-07-18 11:52:52  
Local clock offset: -3.728 ms  
Remote clock offset: -1.075 ms

# Below is generated by plot.py at 2019-07-18 13:23:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 93.46 Mbit/s  
95th percentile per-packet one-way delay: 48.814 ms  
Loss rate: 0.33%  
-- Flow 1:  
Average throughput: 56.01 Mbit/s  
95th percentile per-packet one-way delay: 51.810 ms  
Loss rate: 0.27%  
-- Flow 2:  
Average throughput: 38.18 Mbit/s  
95th percentile per-packet one-way delay: 46.612 ms  
Loss rate: 0.32%  
-- Flow 3:  
Average throughput: 36.34 Mbit/s  
95th percentile per-packet one-way delay: 47.176 ms  
Loss rate: 0.63%

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

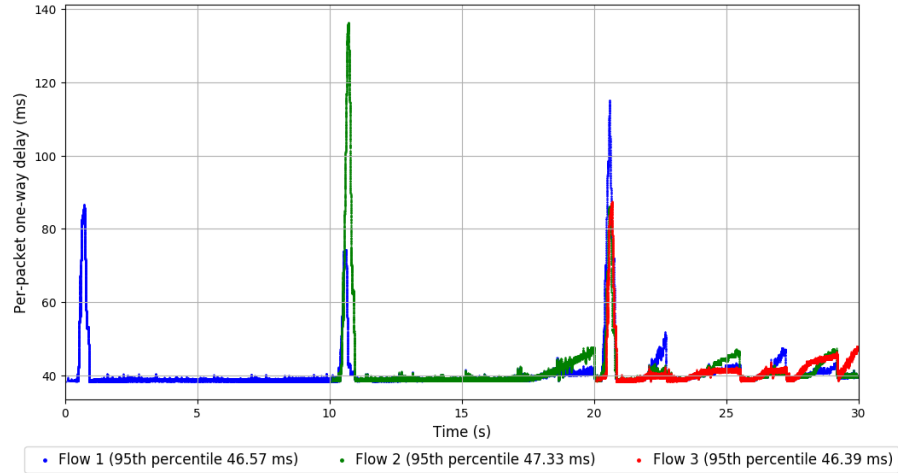
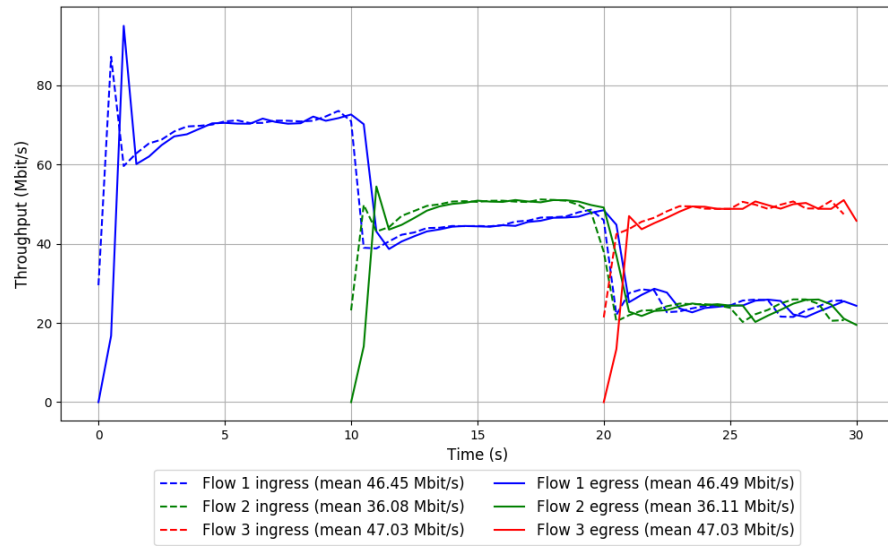


Run 4: Statistics of TCP Cubic

Start at: 2019-07-18 12:24:09  
End at: 2019-07-18 12:24:39  
Local clock offset: 1.275 ms  
Remote clock offset: -1.089 ms

# Below is generated by plot.py at 2019-07-18 13:23:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.11 Mbit/s  
95th percentile per-packet one-way delay: 46.827 ms  
Loss rate: 0.26%  
-- Flow 1:  
Average throughput: 46.49 Mbit/s  
95th percentile per-packet one-way delay: 46.571 ms  
Loss rate: 0.15%  
-- Flow 2:  
Average throughput: 36.11 Mbit/s  
95th percentile per-packet one-way delay: 47.328 ms  
Loss rate: 0.23%  
-- Flow 3:  
Average throughput: 47.03 Mbit/s  
95th percentile per-packet one-way delay: 46.392 ms  
Loss rate: 0.64%

# Run 4: Report of TCP Cubic — Data Link

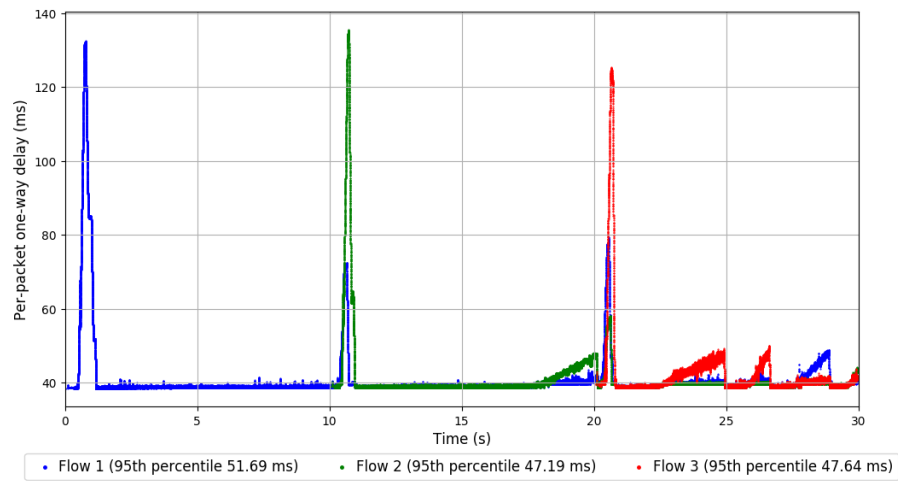
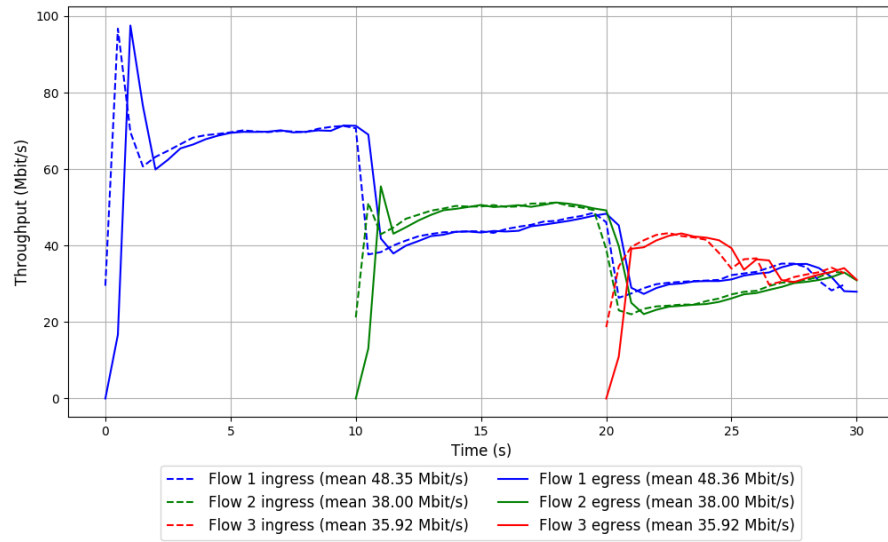


Run 5: Statistics of TCP Cubic

Start at: 2019-07-18 12:56:28  
End at: 2019-07-18 12:56:58  
Local clock offset: 0.205 ms  
Remote clock offset: -0.904 ms

# Below is generated by plot.py at 2019-07-18 13:23:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.53 Mbit/s  
95th percentile per-packet one-way delay: 48.279 ms  
Loss rate: 0.29%  
-- Flow 1:  
Average throughput: 48.36 Mbit/s  
95th percentile per-packet one-way delay: 51.691 ms  
Loss rate: 0.19%  
-- Flow 2:  
Average throughput: 38.00 Mbit/s  
95th percentile per-packet one-way delay: 47.185 ms  
Loss rate: 0.32%  
-- Flow 3:  
Average throughput: 35.92 Mbit/s  
95th percentile per-packet one-way delay: 47.641 ms  
Loss rate: 0.64%

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

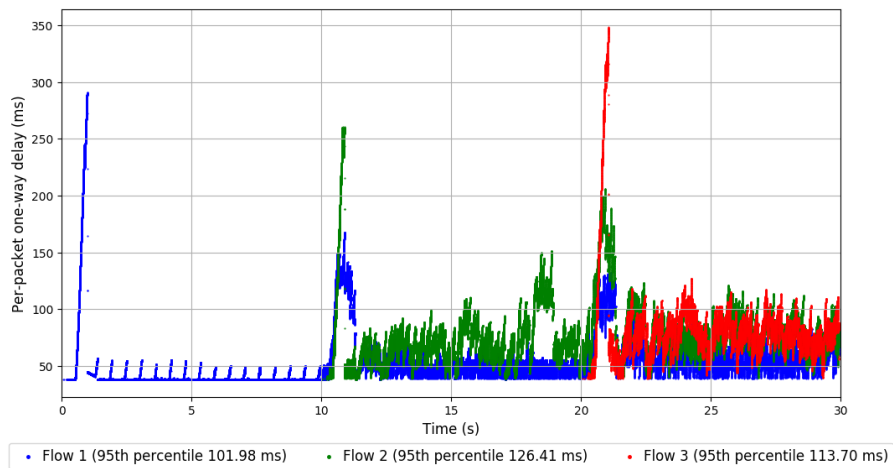
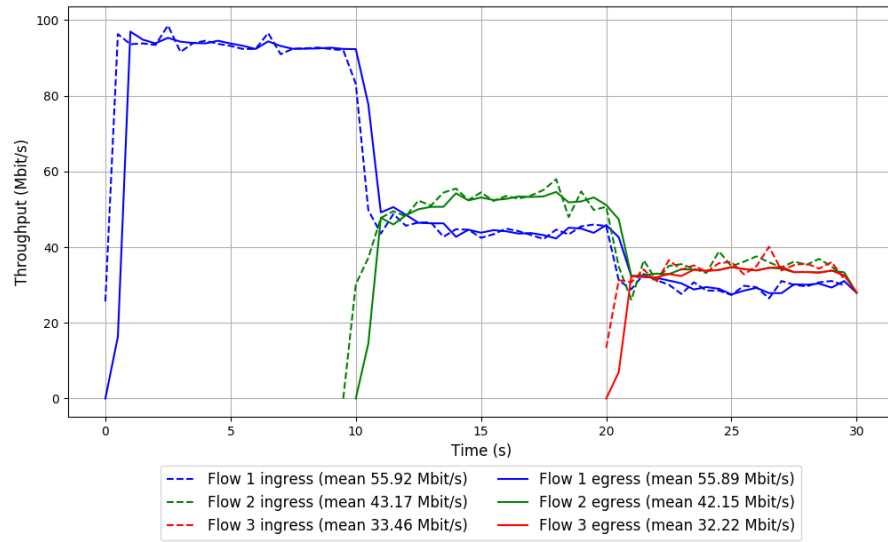


Run 1: Statistics of FillP

Start at: 2019-07-18 11:06:01  
End at: 2019-07-18 11:06:31  
Local clock offset: -3.127 ms  
Remote clock offset: -2.828 ms

# Below is generated by plot.py at 2019-07-18 13:24:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.59 Mbit/s  
95th percentile per-packet one-way delay: 115.410 ms  
Loss rate: 1.43%  
-- Flow 1:  
Average throughput: 55.89 Mbit/s  
95th percentile per-packet one-way delay: 101.978 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 42.15 Mbit/s  
95th percentile per-packet one-way delay: 126.408 ms  
Loss rate: 2.60%  
-- Flow 3:  
Average throughput: 32.22 Mbit/s  
95th percentile per-packet one-way delay: 113.701 ms  
Loss rate: 4.33%

## Run 1: Report of FillP — Data Link



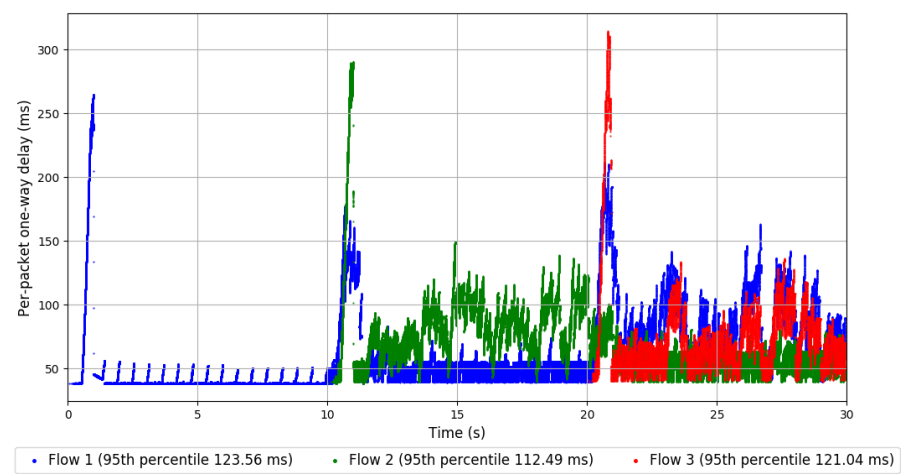
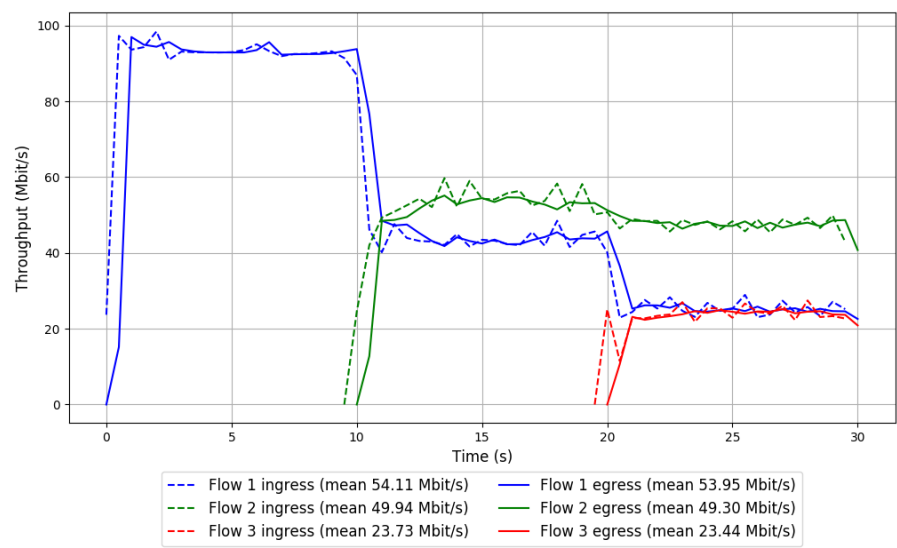


Run 2: Statistics of FillP

Start at: 2019-07-18 11:39:01  
End at: 2019-07-18 11:39:31  
Local clock offset: -3.506 ms  
Remote clock offset: -1.515 ms

# Below is generated by plot.py at 2019-07-18 13:24:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.53 Mbit/s  
95th percentile per-packet one-way delay: 117.849 ms  
Loss rate: 0.96%  
-- Flow 1:  
Average throughput: 53.95 Mbit/s  
95th percentile per-packet one-way delay: 123.558 ms  
Loss rate: 0.47%  
-- Flow 2:  
Average throughput: 49.30 Mbit/s  
95th percentile per-packet one-way delay: 112.491 ms  
Loss rate: 1.60%  
-- Flow 3:  
Average throughput: 23.44 Mbit/s  
95th percentile per-packet one-way delay: 121.042 ms  
Loss rate: 1.65%

Run 2: Report of FillP — Data Link

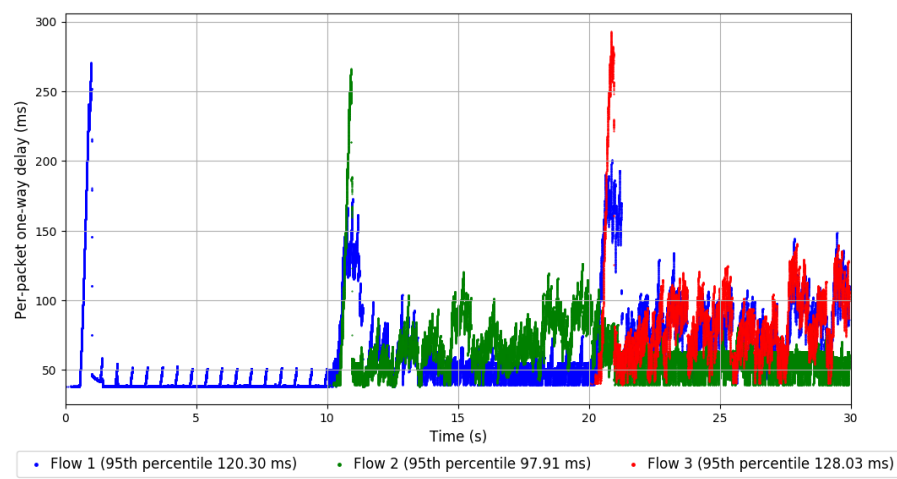
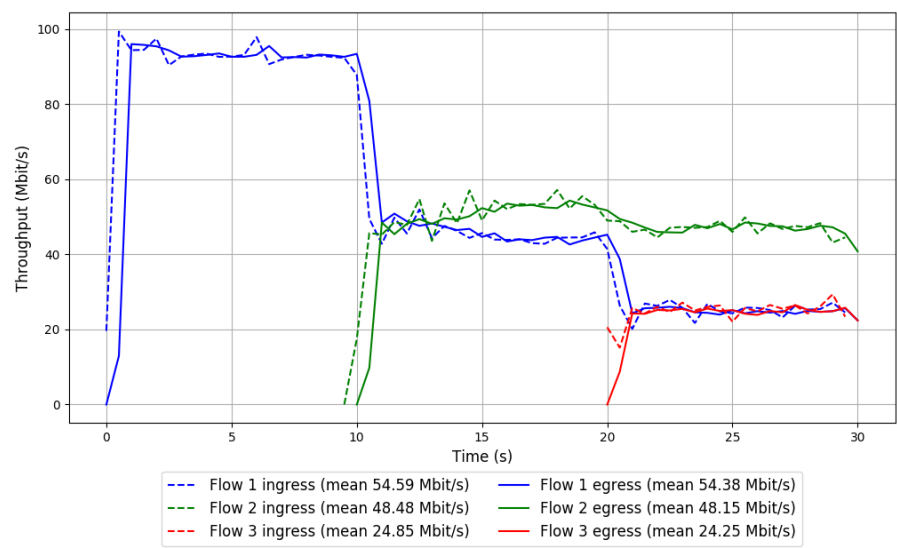


Run 3: Statistics of FillP

Start at: 2019-07-18 12:10:59  
End at: 2019-07-18 12:11:29  
Local clock offset: 0.256 ms  
Remote clock offset: -1.155 ms

# Below is generated by plot.py at 2019-07-18 13:24:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.45 Mbit/s  
95th percentile per-packet one-way delay: 112.200 ms  
Loss rate: 0.94%  
-- Flow 1:  
Average throughput: 54.38 Mbit/s  
95th percentile per-packet one-way delay: 120.298 ms  
Loss rate: 0.59%  
-- Flow 2:  
Average throughput: 48.15 Mbit/s  
95th percentile per-packet one-way delay: 97.905 ms  
Loss rate: 0.98%  
-- Flow 3:  
Average throughput: 24.25 Mbit/s  
95th percentile per-packet one-way delay: 128.026 ms  
Loss rate: 3.04%

Run 3: Report of FillP — Data Link

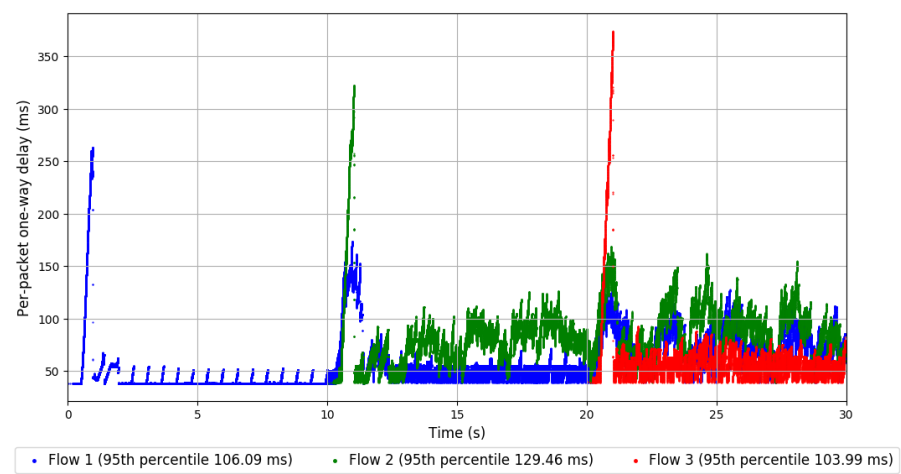
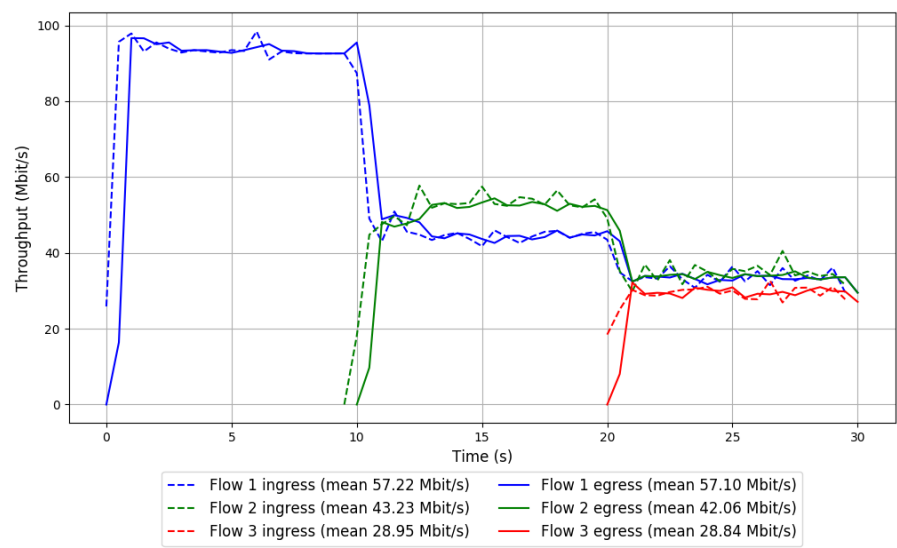


Run 4: Statistics of FillP

Start at: 2019-07-18 12:43:22  
End at: 2019-07-18 12:43:52  
Local clock offset: 0.82 ms  
Remote clock offset: -0.929 ms

# Below is generated by plot.py at 2019-07-18 13:24:18  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.64 Mbit/s  
95th percentile per-packet one-way delay: 118.477 ms  
Loss rate: 1.22%  
-- Flow 1:  
Average throughput: 57.10 Mbit/s  
95th percentile per-packet one-way delay: 106.086 ms  
Loss rate: 0.42%  
-- Flow 2:  
Average throughput: 42.06 Mbit/s  
95th percentile per-packet one-way delay: 129.462 ms  
Loss rate: 2.91%  
-- Flow 3:  
Average throughput: 28.84 Mbit/s  
95th percentile per-packet one-way delay: 103.987 ms  
Loss rate: 0.89%

Run 4: Report of FillP — Data Link

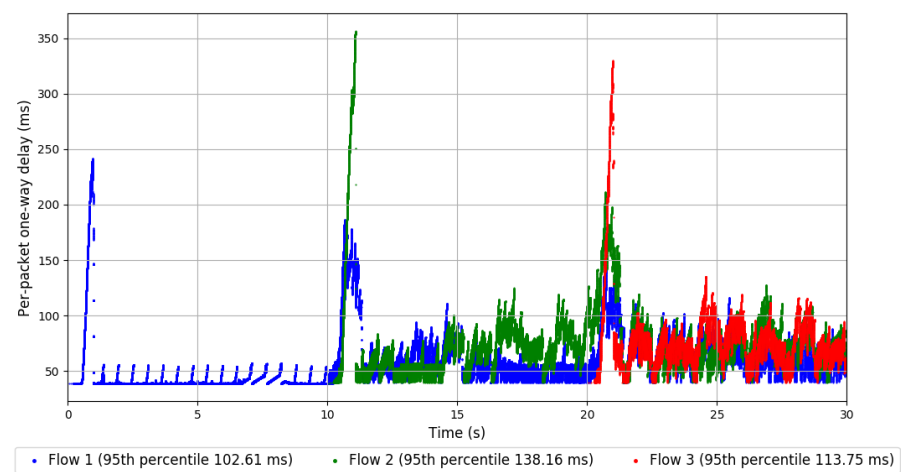
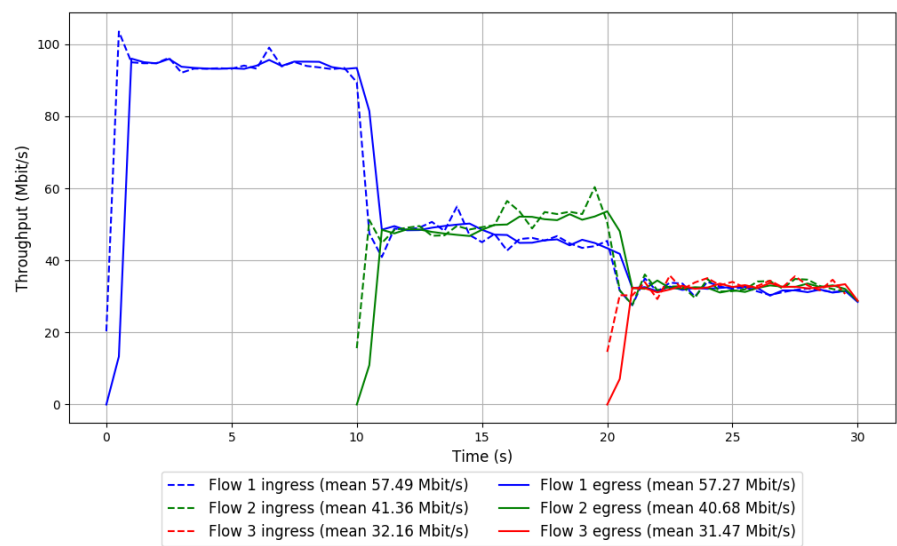


Run 5: Statistics of FillP

Start at: 2019-07-18 13:15:03  
End at: 2019-07-18 13:15:33  
Local clock offset: -2.984 ms  
Remote clock offset: -0.756 ms

# Below is generated by plot.py at 2019-07-18 13:24:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.73 Mbit/s  
95th percentile per-packet one-way delay: 112.664 ms  
Loss rate: 1.20%  
-- Flow 1:  
Average throughput: 57.27 Mbit/s  
95th percentile per-packet one-way delay: 102.606 ms  
Loss rate: 0.59%  
-- Flow 2:  
Average throughput: 40.68 Mbit/s  
95th percentile per-packet one-way delay: 138.159 ms  
Loss rate: 1.87%  
-- Flow 3:  
Average throughput: 31.47 Mbit/s  
95th percentile per-packet one-way delay: 113.746 ms  
Loss rate: 2.71%

Run 5: Report of FillP — Data Link



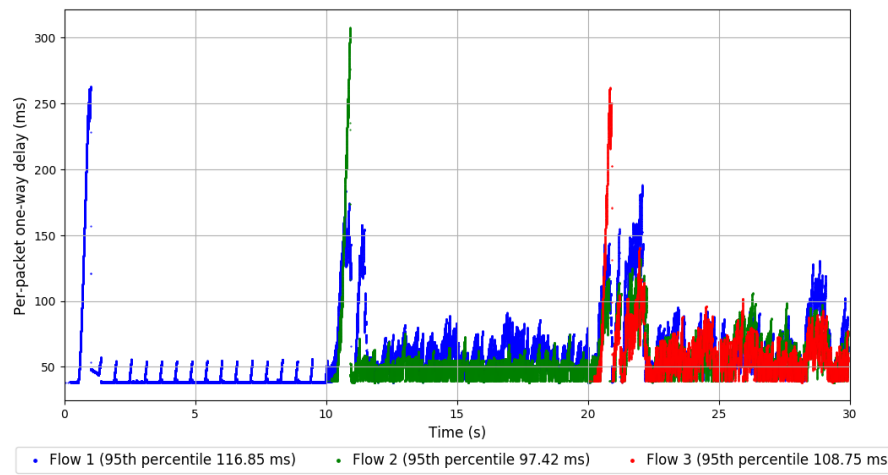
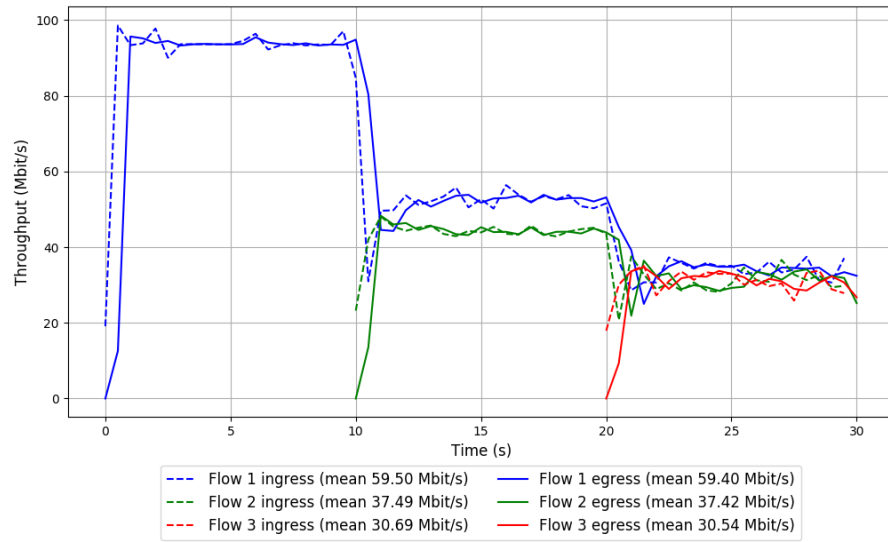


Run 1: Statistics of FillP-Sheep

Start at: 2019-07-18 10:56:43  
End at: 2019-07-18 10:57:13  
Local clock offset: -3.482 ms  
Remote clock offset: -2.935 ms

# Below is generated by plot.py at 2019-07-18 13:24:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.39 Mbit/s  
95th percentile per-packet one-way delay: 107.553 ms  
Loss rate: 0.45%  
-- Flow 1:  
Average throughput: 59.40 Mbit/s  
95th percentile per-packet one-way delay: 116.854 ms  
Loss rate: 0.34%  
-- Flow 2:  
Average throughput: 37.42 Mbit/s  
95th percentile per-packet one-way delay: 97.423 ms  
Loss rate: 0.51%  
-- Flow 3:  
Average throughput: 30.54 Mbit/s  
95th percentile per-packet one-way delay: 108.746 ms  
Loss rate: 0.97%

## Run 1: Report of FillP-Sheep — Data Link

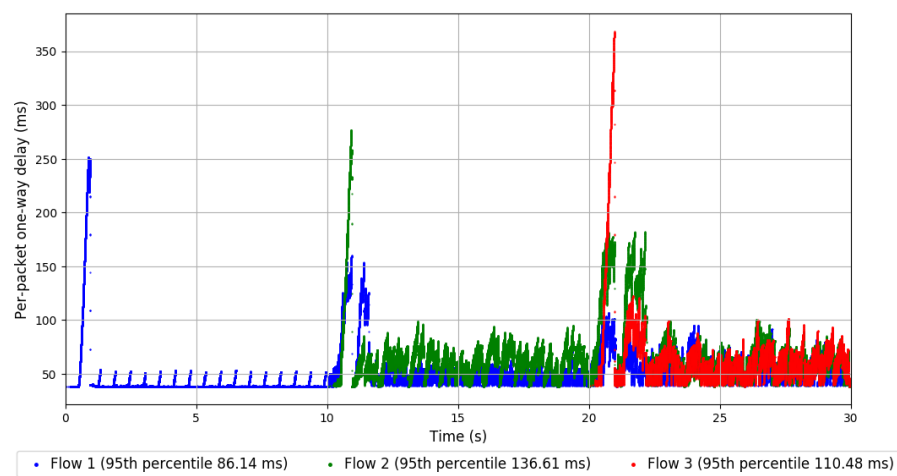
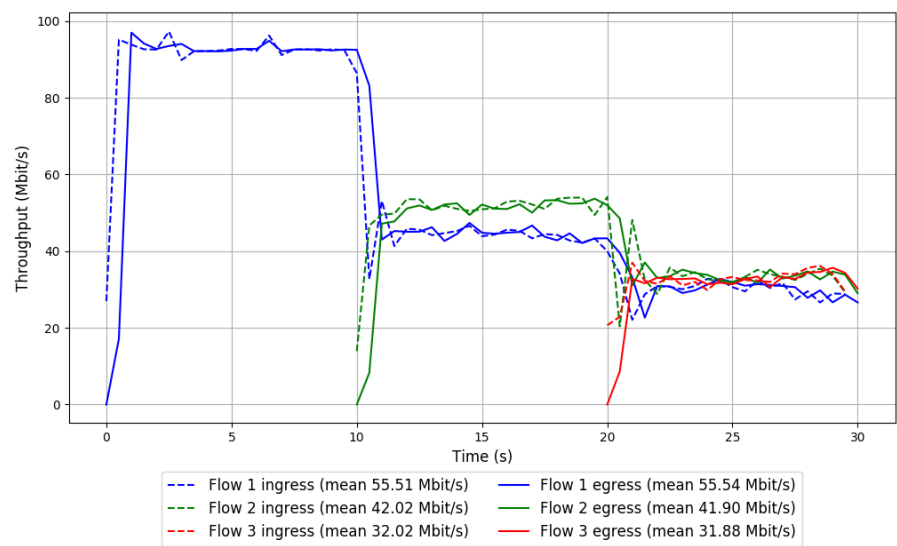


Run 2: Statistics of FillP-Sheep

Start at: 2019-07-18 11:29:28  
End at: 2019-07-18 11:29:58  
Local clock offset: -3.302 ms  
Remote clock offset: -1.868 ms

# Below is generated by plot.py at 2019-07-18 13:25:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 93.94 Mbit/s  
95th percentile per-packet one-way delay: 104.250 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 55.54 Mbit/s  
95th percentile per-packet one-way delay: 86.141 ms  
Loss rate: 0.21%  
-- Flow 2:  
Average throughput: 41.90 Mbit/s  
95th percentile per-packet one-way delay: 136.611 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 31.88 Mbit/s  
95th percentile per-packet one-way delay: 110.478 ms  
Loss rate: 0.94%

Run 2: Report of FillP-Sheep — Data Link

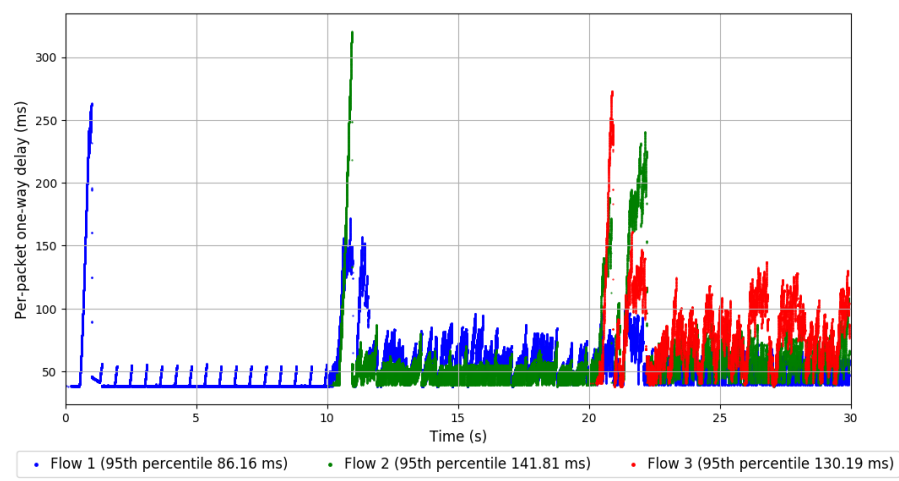
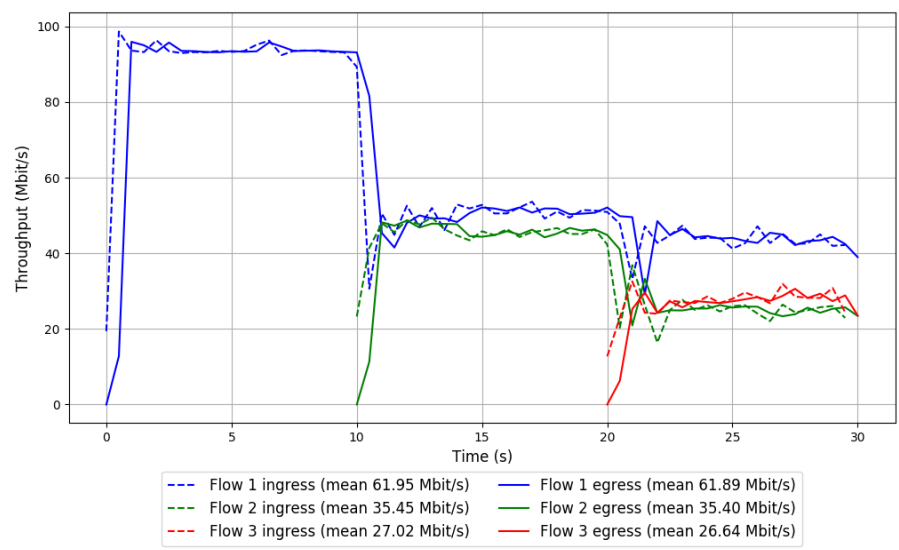


Run 3: Statistics of FillP-Sheep

Start at: 2019-07-18 12:01:56  
End at: 2019-07-18 12:02:26  
Local clock offset: -1.241 ms  
Remote clock offset: -1.134 ms

# Below is generated by plot.py at 2019-07-18 13:25:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.26 Mbit/s  
95th percentile per-packet one-way delay: 113.903 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 61.89 Mbit/s  
95th percentile per-packet one-way delay: 86.164 ms  
Loss rate: 0.31%  
-- Flow 2:  
Average throughput: 35.40 Mbit/s  
95th percentile per-packet one-way delay: 141.811 ms  
Loss rate: 0.36%  
-- Flow 3:  
Average throughput: 26.64 Mbit/s  
95th percentile per-packet one-way delay: 130.187 ms  
Loss rate: 2.07%

Run 3: Report of FillP-Sheep — Data Link

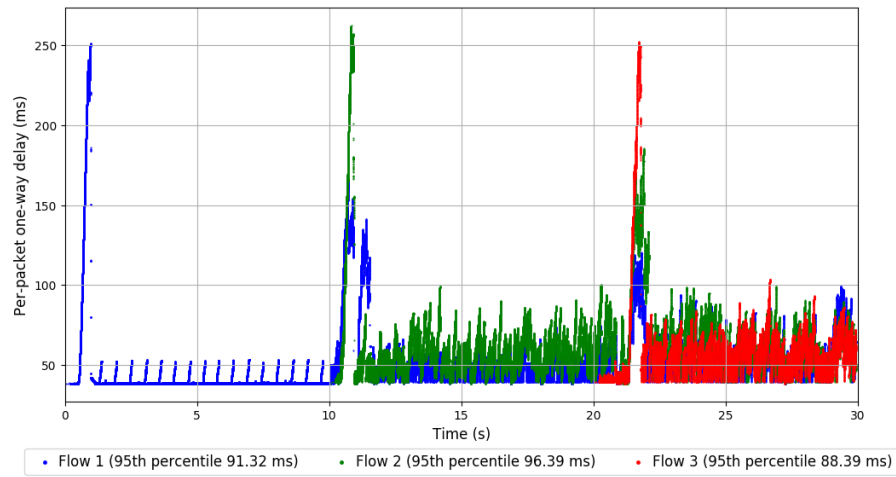
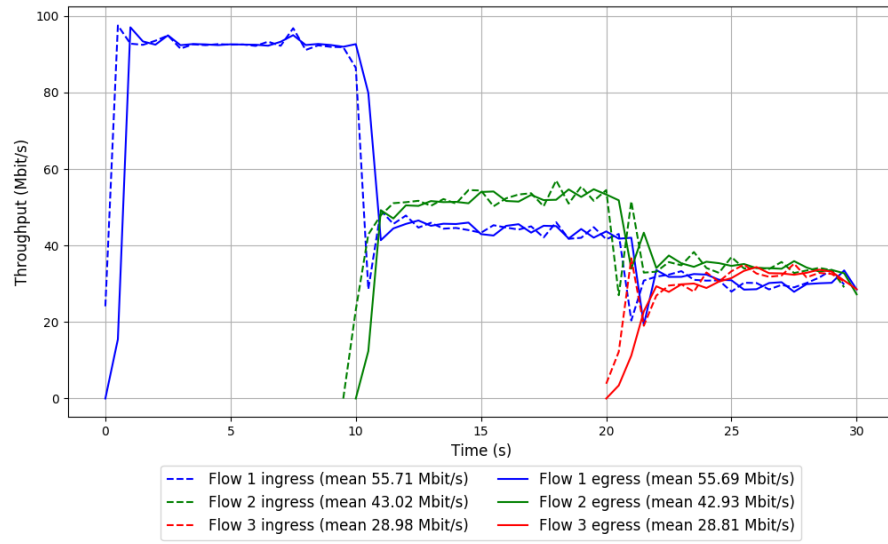


Run 4: Statistics of FillP-Sheep

Start at: 2019-07-18 12:34:09  
End at: 2019-07-18 12:34:39  
Local clock offset: 0.83 ms  
Remote clock offset: -1.079 ms

# Below is generated by plot.py at 2019-07-18 13:25:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 93.80 Mbit/s  
95th percentile per-packet one-way delay: 92.210 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 55.69 Mbit/s  
95th percentile per-packet one-way delay: 91.318 ms  
Loss rate: 0.24%  
-- Flow 2:  
Average throughput: 42.93 Mbit/s  
95th percentile per-packet one-way delay: 96.388 ms  
Loss rate: 0.53%  
-- Flow 3:  
Average throughput: 28.81 Mbit/s  
95th percentile per-packet one-way delay: 88.395 ms  
Loss rate: 1.24%

#### Run 4: Report of FillP-Sheep — Data Link



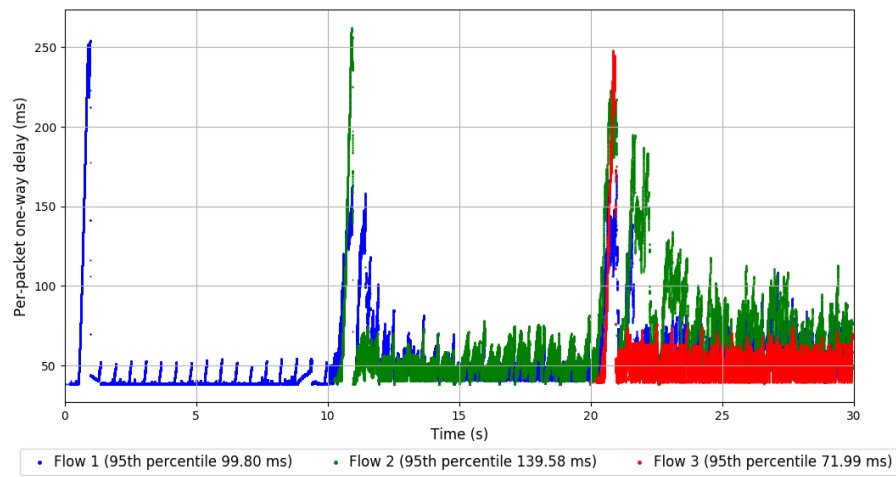
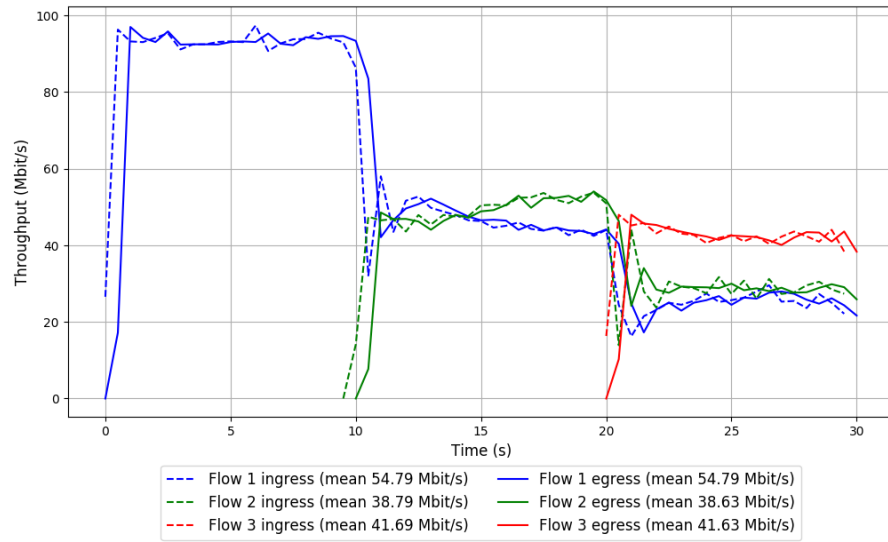


Run 5: Statistics of FillP-Sheep

Start at: 2019-07-18 13:06:02  
End at: 2019-07-18 13:06:32  
Local clock offset: -2.068 ms  
Remote clock offset: -0.957 ms

# Below is generated by plot.py at 2019-07-18 13:25:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.26 Mbit/s  
95th percentile per-packet one-way delay: 111.084 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 54.79 Mbit/s  
95th percentile per-packet one-way delay: 99.801 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 38.63 Mbit/s  
95th percentile per-packet one-way delay: 139.583 ms  
Loss rate: 0.73%  
-- Flow 3:  
Average throughput: 41.63 Mbit/s  
95th percentile per-packet one-way delay: 71.989 ms  
Loss rate: 0.70%

## Run 5: Report of FillP-Sheep — Data Link

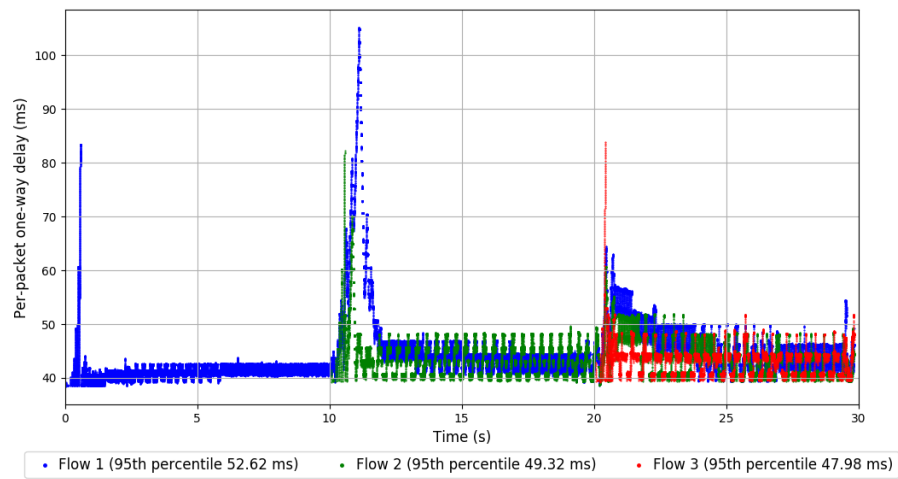
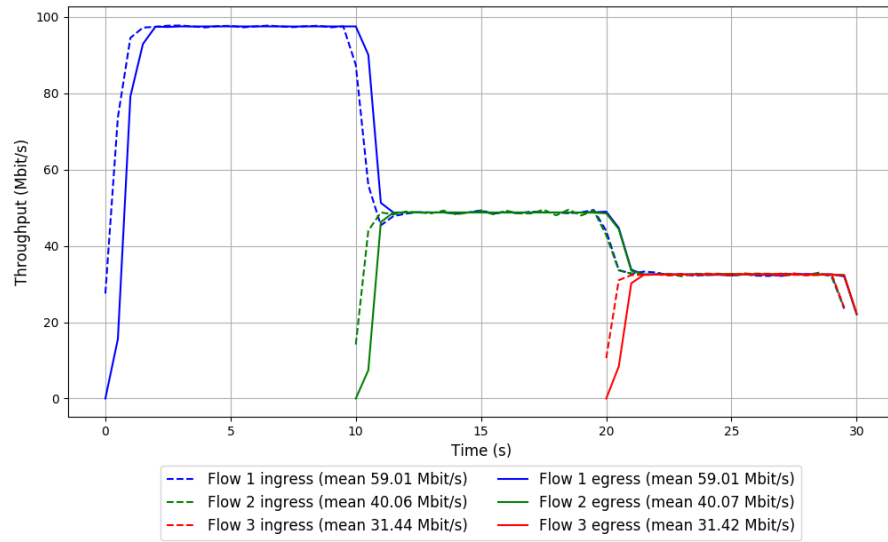


Run 1: Statistics of Indigo

Start at: 2019-07-18 11:08:32  
End at: 2019-07-18 11:09:02  
Local clock offset: -3.102 ms  
Remote clock offset: -2.774 ms

# Below is generated by plot.py at 2019-07-18 13:25:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.87 Mbit/s  
95th percentile per-packet one-way delay: 50.957 ms  
Loss rate: 0.29%  
-- Flow 1:  
Average throughput: 59.01 Mbit/s  
95th percentile per-packet one-way delay: 52.619 ms  
Loss rate: 0.21%  
-- Flow 2:  
Average throughput: 40.07 Mbit/s  
95th percentile per-packet one-way delay: 49.324 ms  
Loss rate: 0.30%  
-- Flow 3:  
Average throughput: 31.42 Mbit/s  
95th percentile per-packet one-way delay: 47.978 ms  
Loss rate: 0.73%

## Run 1: Report of Indigo — Data Link

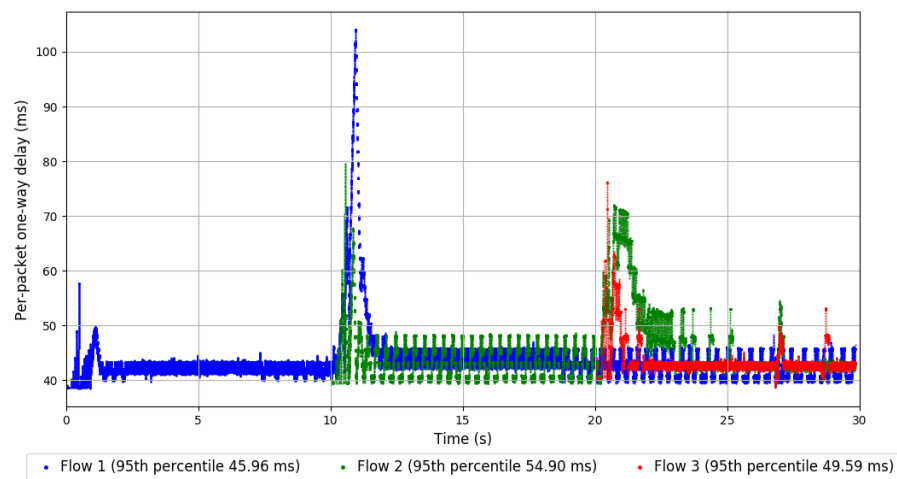
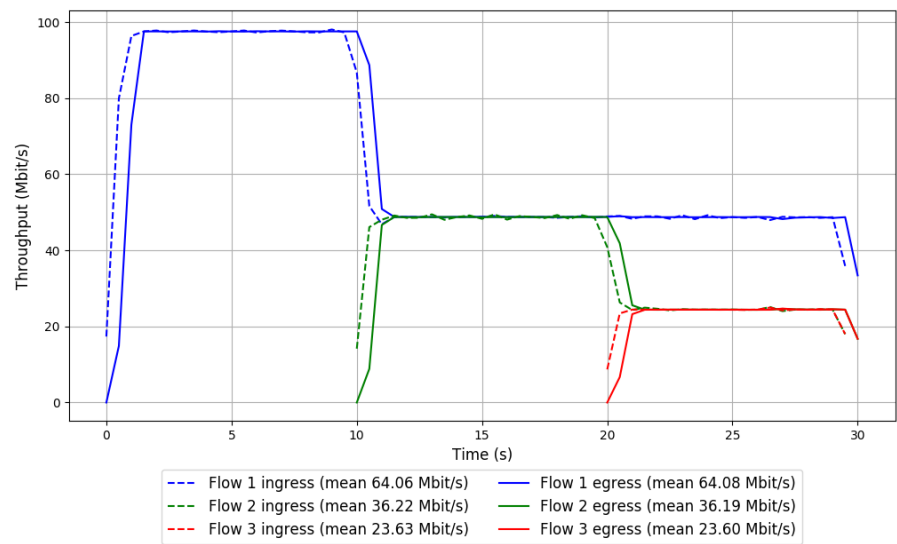


Run 2: Statistics of Indigo

Start at: 2019-07-18 11:41:52  
End at: 2019-07-18 11:42:22  
Local clock offset: -3.54 ms  
Remote clock offset: -1.398 ms

# Below is generated by plot.py at 2019-07-18 13:25:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.85 Mbit/s  
95th percentile per-packet one-way delay: 49.487 ms  
Loss rate: 0.29%  
-- Flow 1:  
Average throughput: 64.08 Mbit/s  
95th percentile per-packet one-way delay: 45.963 ms  
Loss rate: 0.19%  
-- Flow 2:  
Average throughput: 36.19 Mbit/s  
95th percentile per-packet one-way delay: 54.899 ms  
Loss rate: 0.41%  
-- Flow 3:  
Average throughput: 23.60 Mbit/s  
95th percentile per-packet one-way delay: 49.587 ms  
Loss rate: 0.75%

Run 2: Report of Indigo — Data Link

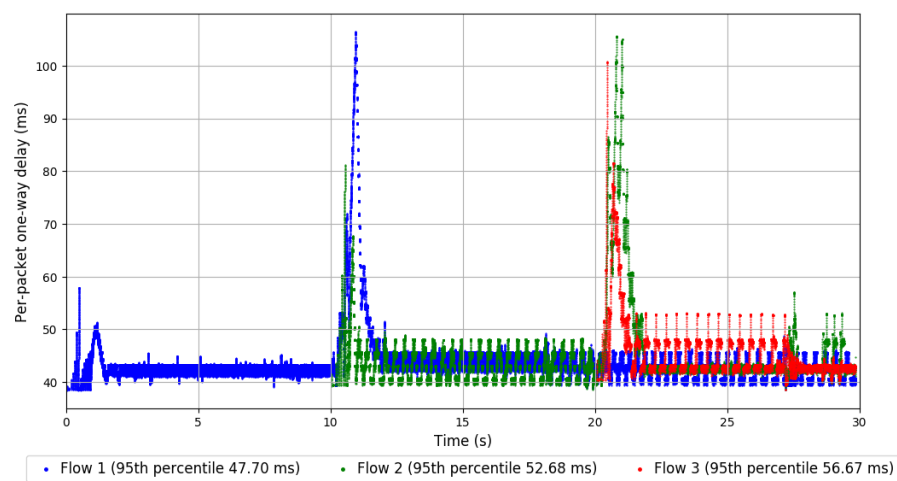
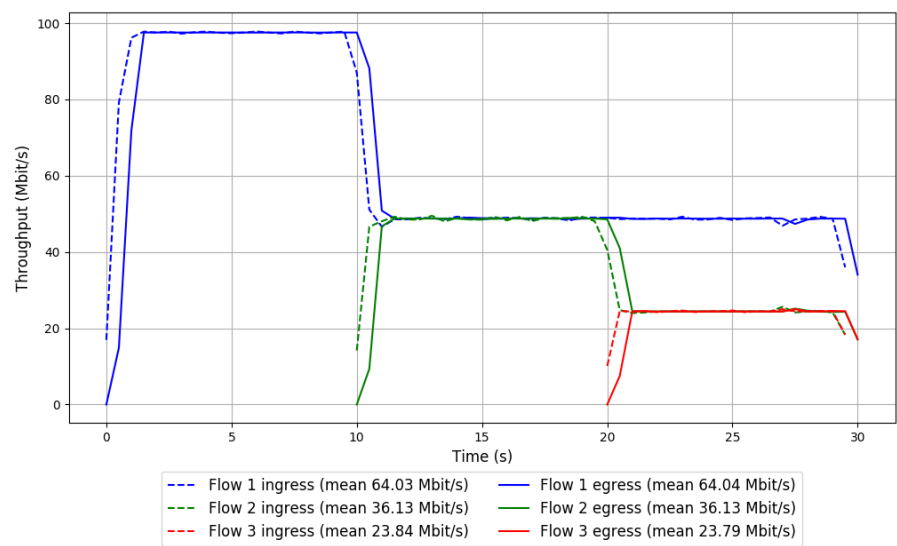


Run 3: Statistics of Indigo

Start at: 2019-07-18 12:13:32  
End at: 2019-07-18 12:14:02  
Local clock offset: 0.558 ms  
Remote clock offset: -1.128 ms

# Below is generated by plot.py at 2019-07-18 13:25:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.84 Mbit/s  
95th percentile per-packet one-way delay: 49.223 ms  
Loss rate: 0.27%  
-- Flow 1:  
Average throughput: 64.04 Mbit/s  
95th percentile per-packet one-way delay: 47.697 ms  
Loss rate: 0.19%  
-- Flow 2:  
Average throughput: 36.13 Mbit/s  
95th percentile per-packet one-way delay: 52.680 ms  
Loss rate: 0.31%  
-- Flow 3:  
Average throughput: 23.79 Mbit/s  
95th percentile per-packet one-way delay: 56.673 ms  
Loss rate: 0.86%

Run 3: Report of Indigo — Data Link



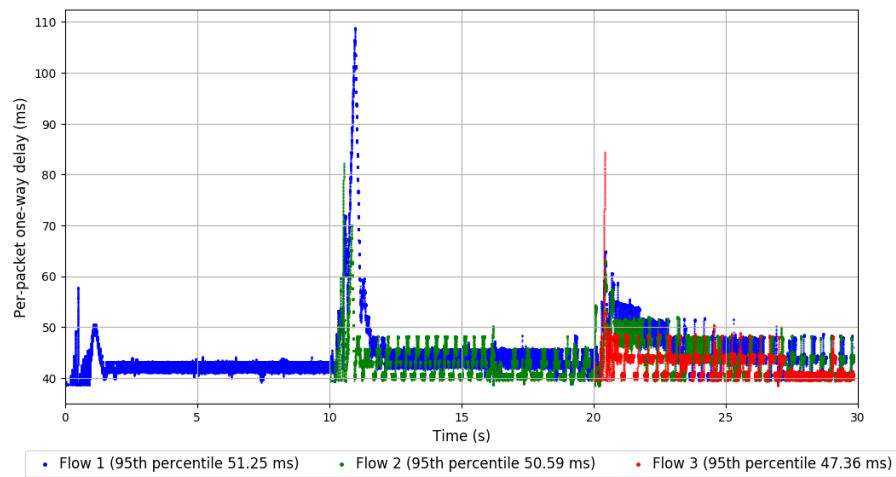
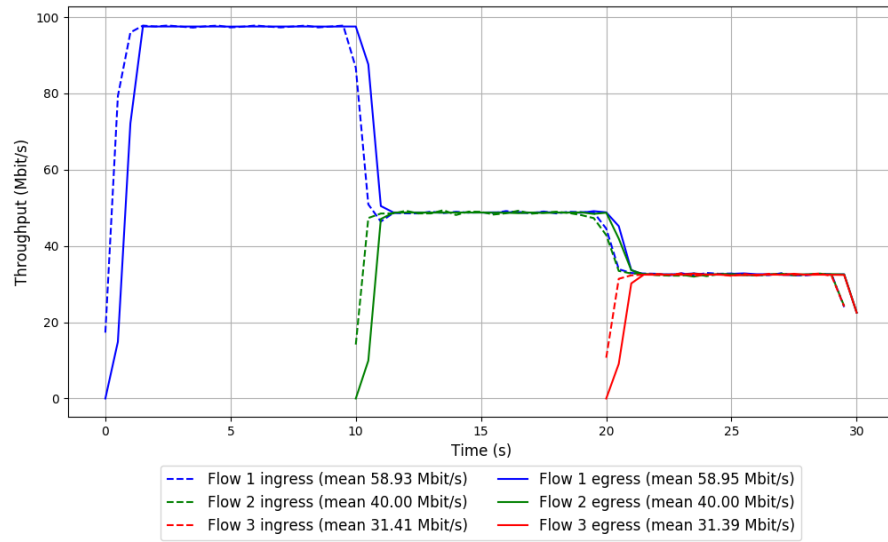


Run 4: Statistics of Indigo

Start at: 2019-07-18 12:45:53  
End at: 2019-07-18 12:46:23  
Local clock offset: 0.86 ms  
Remote clock offset: -0.993 ms

# Below is generated by plot.py at 2019-07-18 13:26:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.82 Mbit/s  
95th percentile per-packet one-way delay: 50.648 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 58.95 Mbit/s  
95th percentile per-packet one-way delay: 51.250 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 40.00 Mbit/s  
95th percentile per-packet one-way delay: 50.589 ms  
Loss rate: 0.31%  
-- Flow 3:  
Average throughput: 31.39 Mbit/s  
95th percentile per-packet one-way delay: 47.364 ms  
Loss rate: 0.69%

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

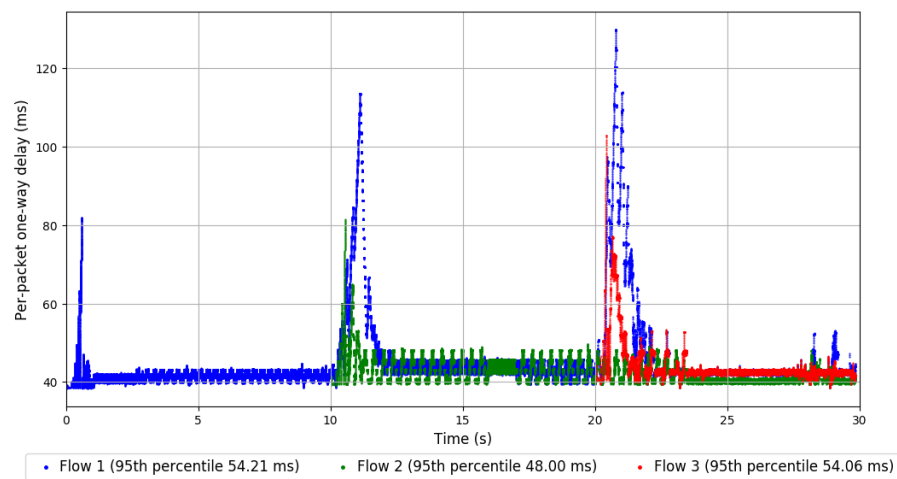
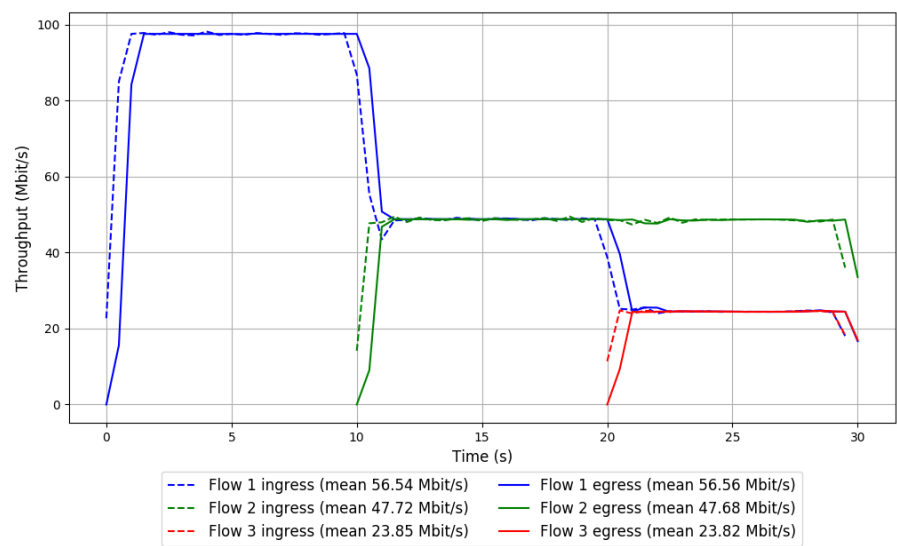


Run 5: Statistics of Indigo

Start at: 2019-07-18 13:17:46  
End at: 2019-07-18 13:18:16  
Local clock offset: -3.153 ms  
Remote clock offset: -0.751 ms

# Below is generated by plot.py at 2019-07-18 13:26:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.05 Mbit/s  
95th percentile per-packet one-way delay: 49.879 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 56.56 Mbit/s  
95th percentile per-packet one-way delay: 54.213 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 47.68 Mbit/s  
95th percentile per-packet one-way delay: 48.004 ms  
Loss rate: 0.41%  
-- Flow 3:  
Average throughput: 23.82 Mbit/s  
95th percentile per-packet one-way delay: 54.056 ms  
Loss rate: 0.79%

Run 5: Report of Indigo — Data Link

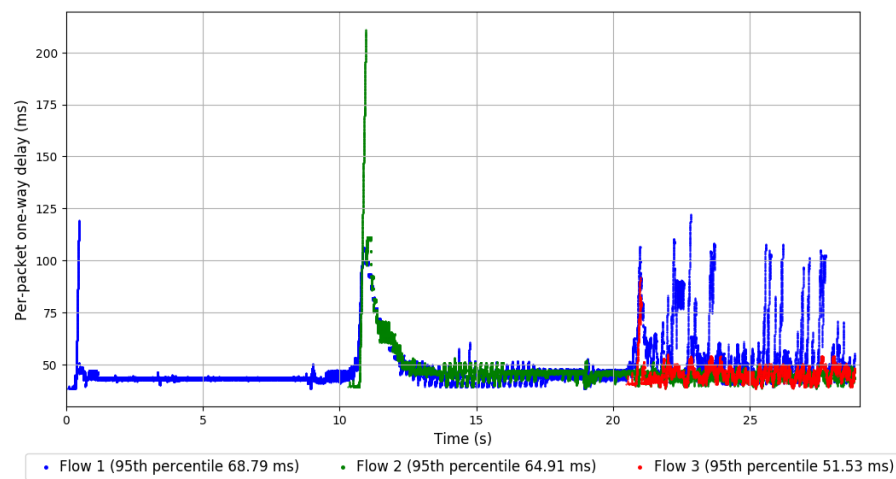
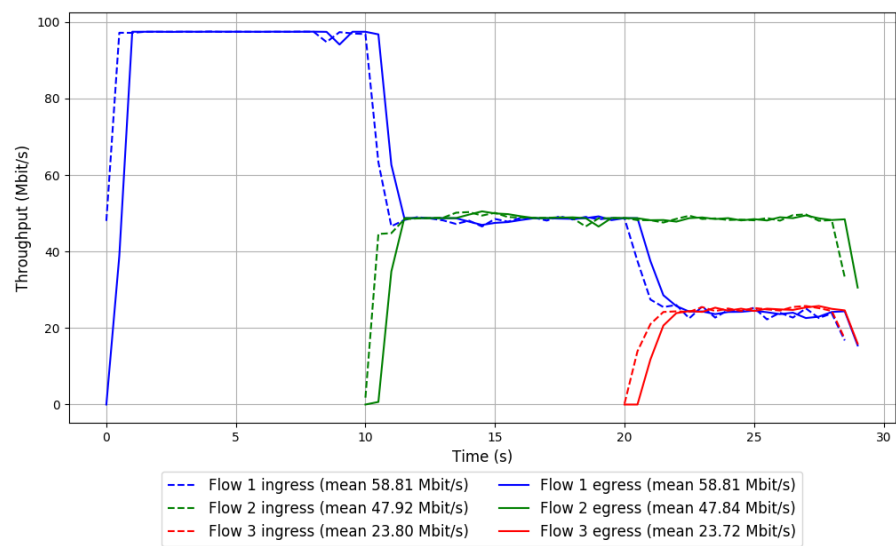


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-07-18 10:39:08  
End at: 2019-07-18 10:39:38  
Local clock offset: -2.56 ms  
Remote clock offset: -3.769 ms

# Below is generated by plot.py at 2019-07-18 13:26:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.48 Mbit/s  
95th percentile per-packet one-way delay: 65.776 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 58.81 Mbit/s  
95th percentile per-packet one-way delay: 68.794 ms  
Loss rate: 0.21%  
-- Flow 2:  
Average throughput: 47.84 Mbit/s  
95th percentile per-packet one-way delay: 64.911 ms  
Loss rate: 0.52%  
-- Flow 3:  
Average throughput: 23.72 Mbit/s  
95th percentile per-packet one-way delay: 51.530 ms  
Loss rate: 1.14%

Run 1: Report of Indigo-MusesC3 — Data Link

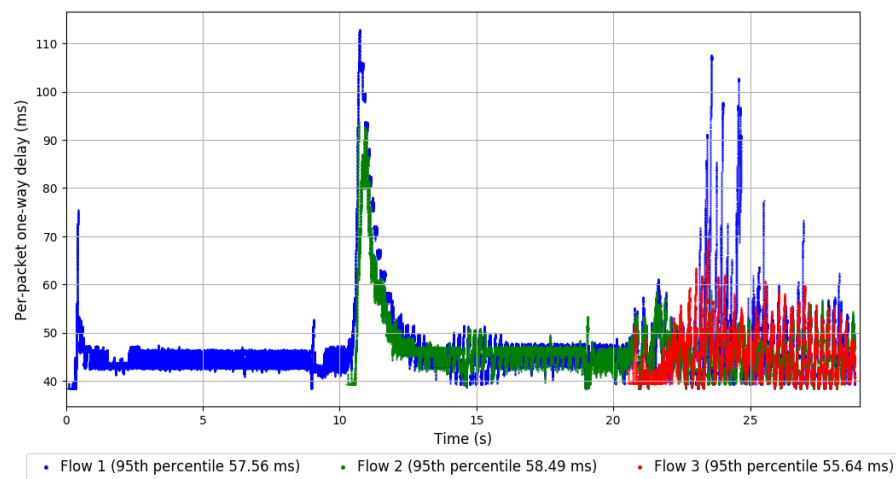
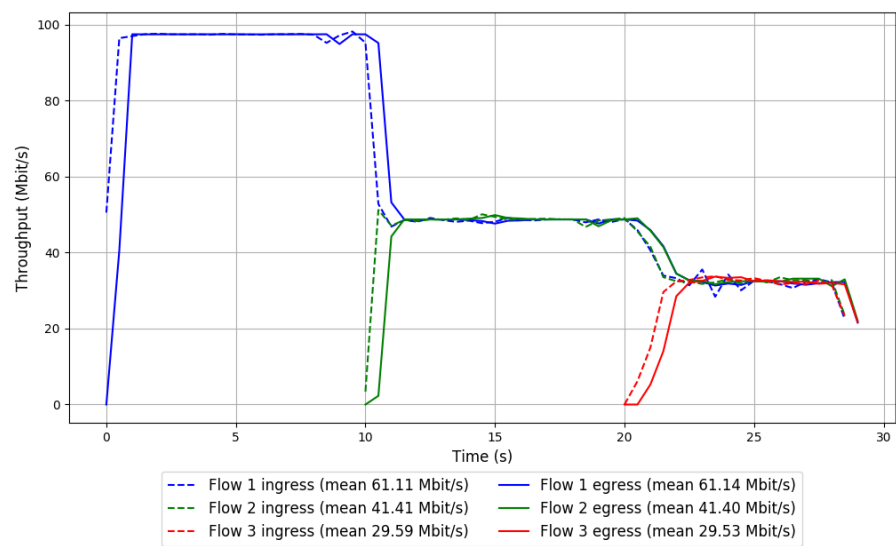


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-07-18 11:11:15  
End at: 2019-07-18 11:11:45  
Local clock offset: -3.076 ms  
Remote clock offset: -2.716 ms

# Below is generated by plot.py at 2019-07-18 13:26:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.41 Mbit/s  
95th percentile per-packet one-way delay: 57.476 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 61.14 Mbit/s  
95th percentile per-packet one-way delay: 57.565 ms  
Loss rate: 0.19%  
-- Flow 2:  
Average throughput: 41.40 Mbit/s  
95th percentile per-packet one-way delay: 58.491 ms  
Loss rate: 0.38%  
-- Flow 3:  
Average throughput: 29.53 Mbit/s  
95th percentile per-packet one-way delay: 55.639 ms  
Loss rate: 0.97%

Run 2: Report of Indigo-MusesC3 — Data Link



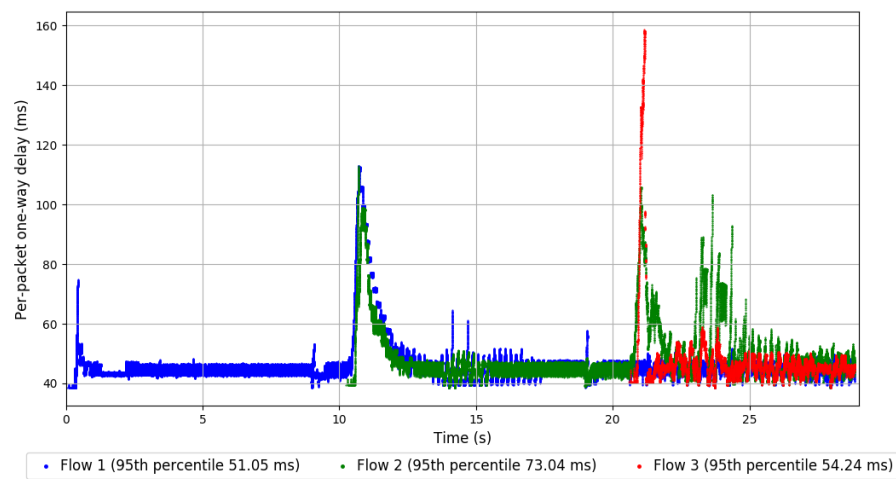
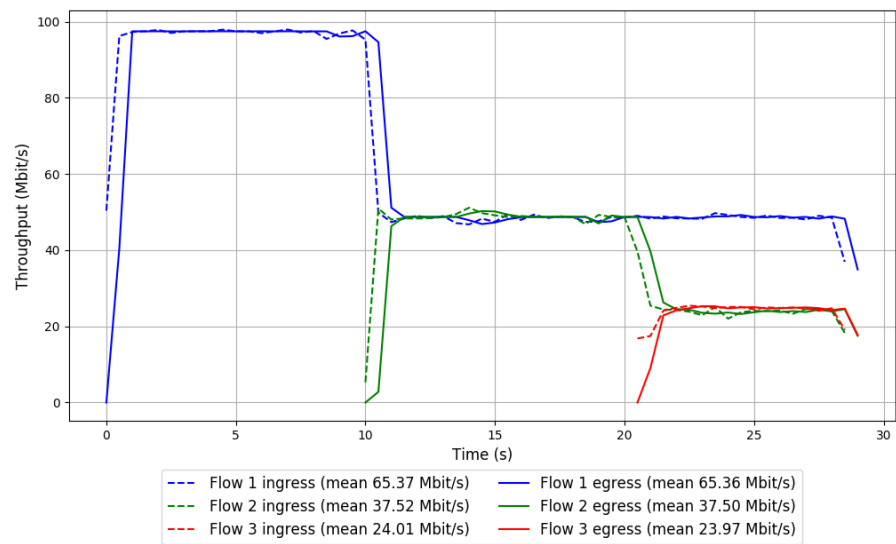


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-07-18 11:44:38  
End at: 2019-07-18 11:45:08  
Local clock offset: -3.599 ms  
Remote clock offset: -1.292 ms

# Below is generated by plot.py at 2019-07-18 13:26:28  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.48 Mbit/s  
95th percentile per-packet one-way delay: 60.131 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 65.36 Mbit/s  
95th percentile per-packet one-way delay: 51.054 ms  
Loss rate: 0.23%  
-- Flow 2:  
Average throughput: 37.50 Mbit/s  
95th percentile per-packet one-way delay: 73.038 ms  
Loss rate: 0.40%  
-- Flow 3:  
Average throughput: 23.97 Mbit/s  
95th percentile per-packet one-way delay: 54.243 ms  
Loss rate: 0.94%

Run 3: Report of Indigo-MusesC3 — Data Link

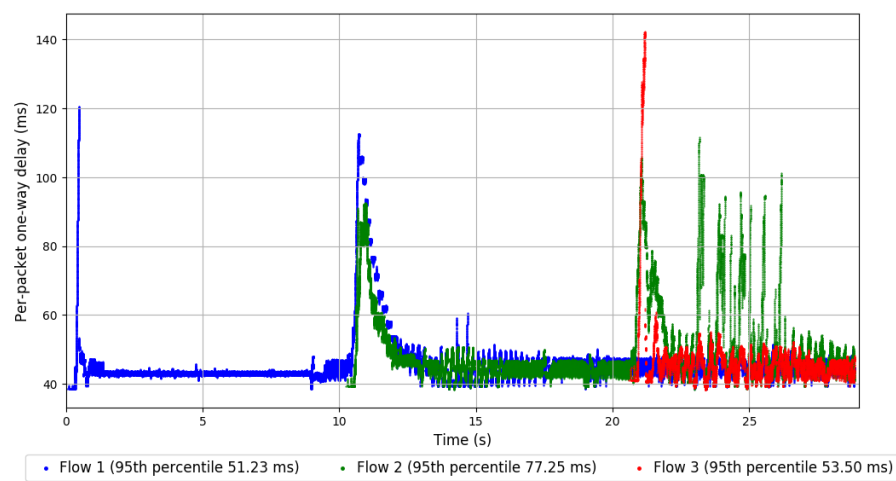
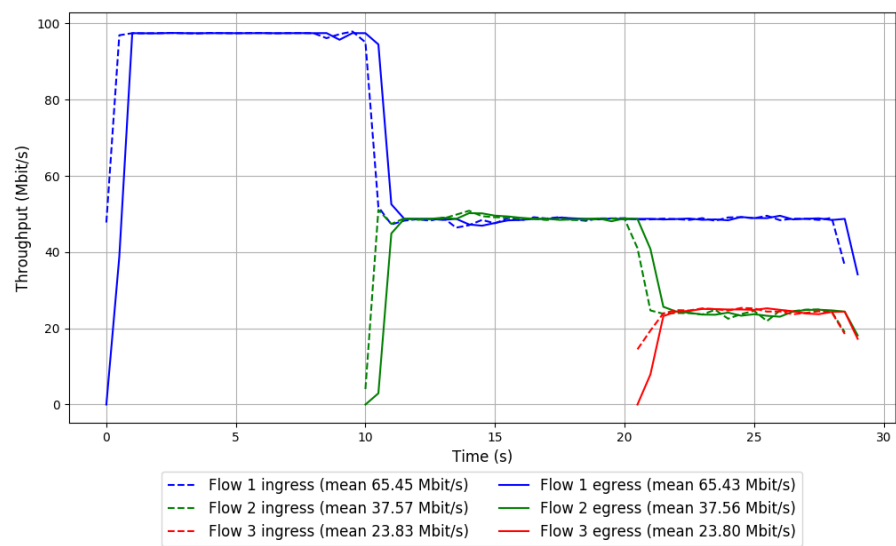


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-07-18 12:16:23  
End at: 2019-07-18 12:16:53  
Local clock offset: 0.749 ms  
Remote clock offset: -1.077 ms

# Below is generated by plot.py at 2019-07-18 13:26:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.52 Mbit/s  
95th percentile per-packet one-way delay: 62.245 ms  
Loss rate: 0.33%  
-- Flow 1:  
Average throughput: 65.43 Mbit/s  
95th percentile per-packet one-way delay: 51.225 ms  
Loss rate: 0.24%  
-- Flow 2:  
Average throughput: 37.56 Mbit/s  
95th percentile per-packet one-way delay: 77.253 ms  
Loss rate: 0.41%  
-- Flow 3:  
Average throughput: 23.80 Mbit/s  
95th percentile per-packet one-way delay: 53.499 ms  
Loss rate: 0.91%

Run 4: Report of Indigo-MusesC3 — Data Link

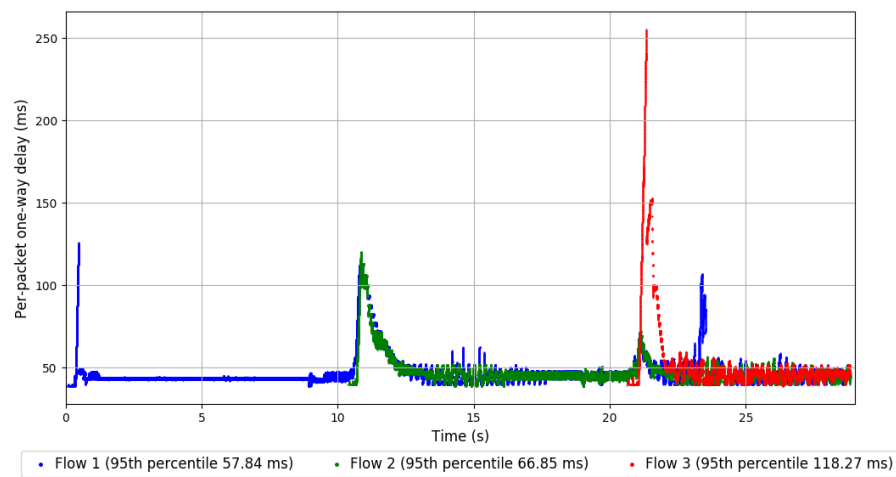
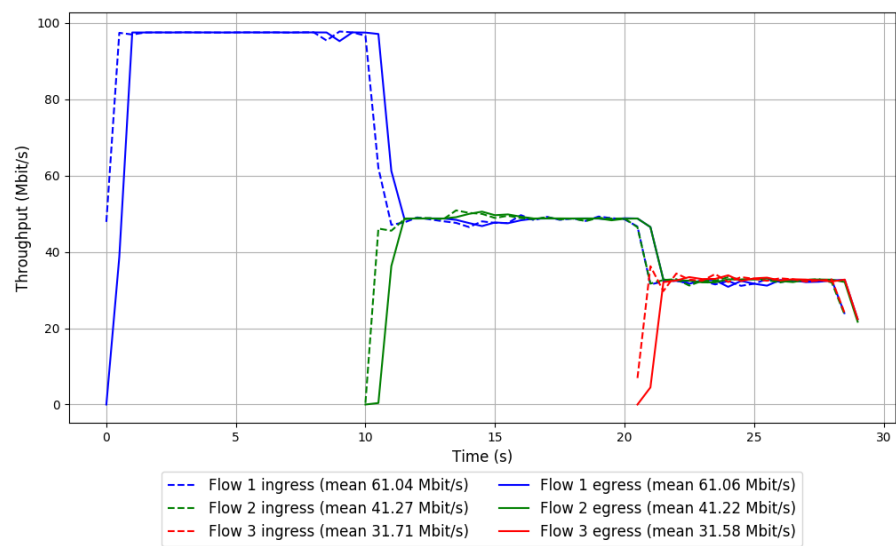


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-07-18 12:48:35  
End at: 2019-07-18 12:49:05  
Local clock offset: 0.927 ms  
Remote clock offset: -0.999 ms

# Below is generated by plot.py at 2019-07-18 13:26:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.51 Mbit/s  
95th percentile per-packet one-way delay: 64.569 ms  
Loss rate: 0.36%  
-- Flow 1:  
Average throughput: 61.06 Mbit/s  
95th percentile per-packet one-way delay: 57.835 ms  
Loss rate: 0.19%  
-- Flow 2:  
Average throughput: 41.22 Mbit/s  
95th percentile per-packet one-way delay: 66.846 ms  
Loss rate: 0.47%  
-- Flow 3:  
Average throughput: 31.58 Mbit/s  
95th percentile per-packet one-way delay: 118.268 ms  
Loss rate: 1.14%

Run 5: Report of Indigo-MusesC3 — Data Link

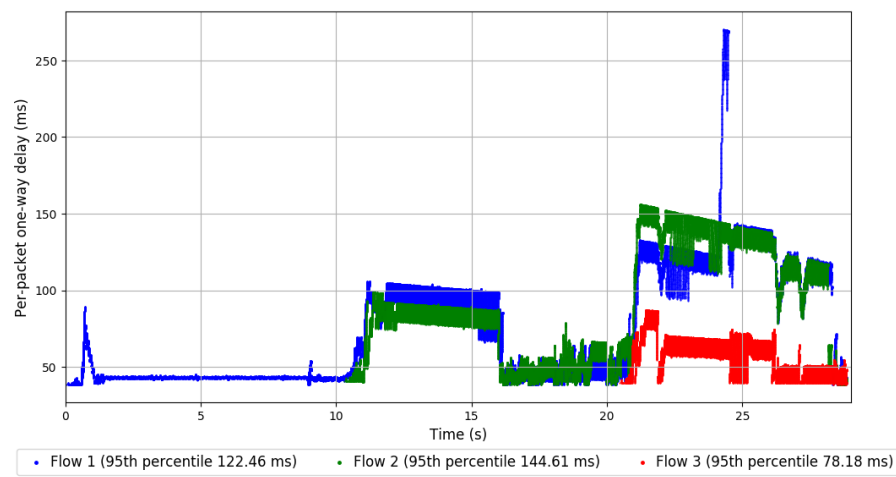
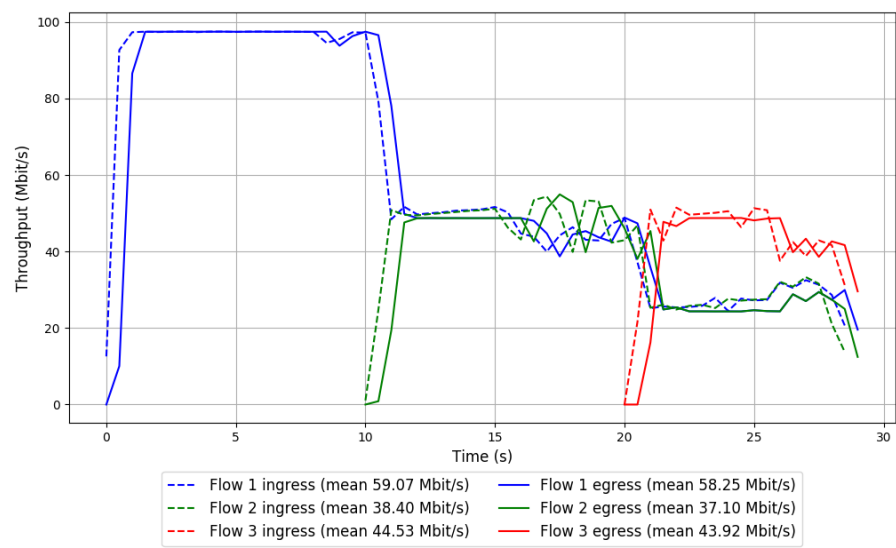


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-07-18 10:48:25  
End at: 2019-07-18 10:48:55  
Local clock offset: -3.279 ms  
Remote clock offset: -3.444 ms

# Below is generated by plot.py at 2019-07-18 13:27:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.90 Mbit/s  
95th percentile per-packet one-way delay: 132.226 ms  
Loss rate: 2.20%  
-- Flow 1:  
Average throughput: 58.25 Mbit/s  
95th percentile per-packet one-way delay: 122.461 ms  
Loss rate: 1.61%  
-- Flow 2:  
Average throughput: 37.10 Mbit/s  
95th percentile per-packet one-way delay: 144.607 ms  
Loss rate: 3.73%  
-- Flow 3:  
Average throughput: 43.92 Mbit/s  
95th percentile per-packet one-way delay: 78.177 ms  
Loss rate: 1.97%

Run 1: Report of Indigo-MusesC5 — Data Link



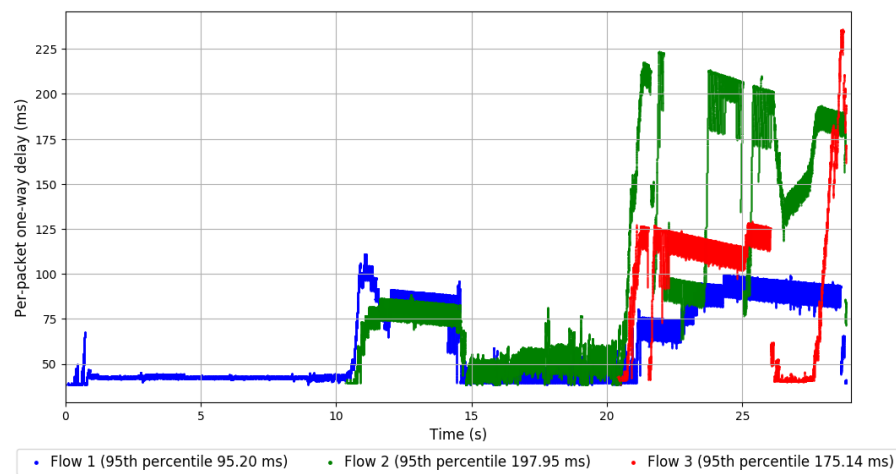
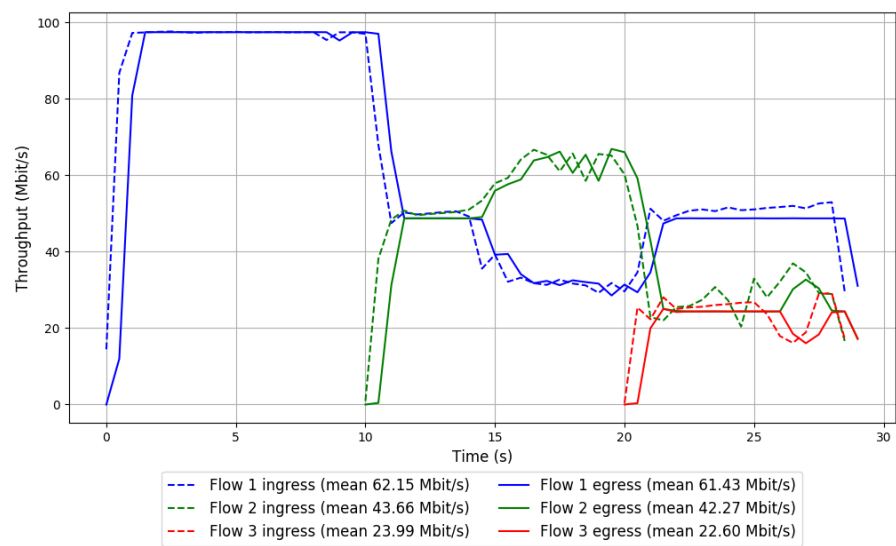


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-07-18 11:20:45  
End at: 2019-07-18 11:21:15  
Local clock offset: -3.154 ms  
Remote clock offset: -2.341 ms

# Below is generated by plot.py at 2019-07-18 13:27:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.24 Mbit/s  
95th percentile per-packet one-way delay: 149.474 ms  
Loss rate: 2.35%  
-- Flow 1:  
Average throughput: 61.43 Mbit/s  
95th percentile per-packet one-way delay: 95.204 ms  
Loss rate: 1.35%  
-- Flow 2:  
Average throughput: 42.27 Mbit/s  
95th percentile per-packet one-way delay: 197.954 ms  
Loss rate: 3.49%  
-- Flow 3:  
Average throughput: 22.60 Mbit/s  
95th percentile per-packet one-way delay: 175.140 ms  
Loss rate: 6.54%

Run 2: Report of Indigo-MusesC5 — Data Link

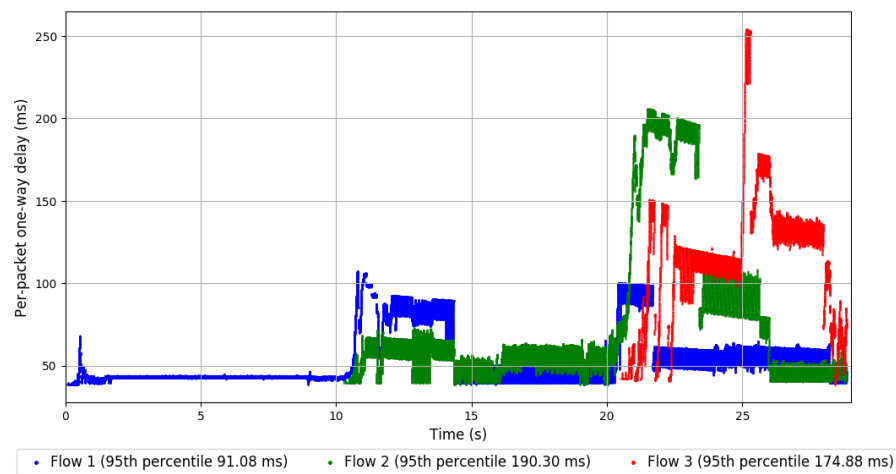
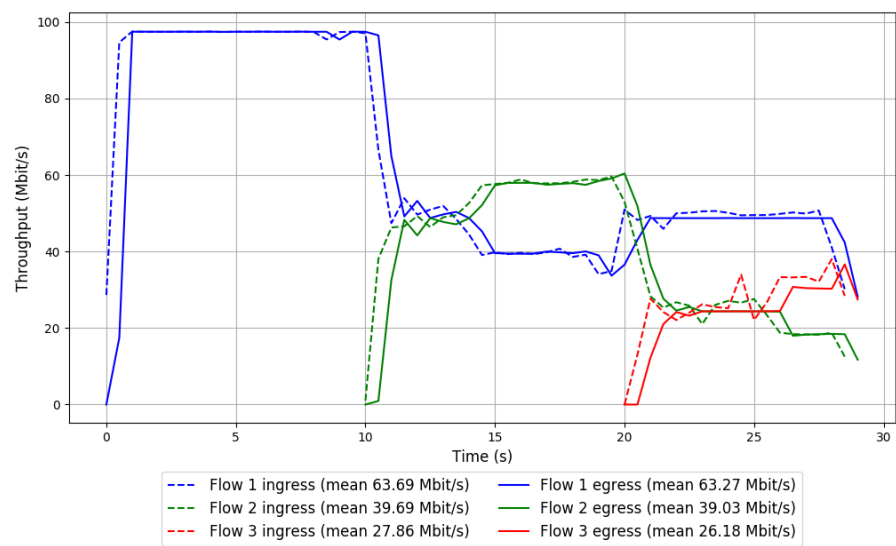


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-07-18 11:53:40  
End at: 2019-07-18 11:54:10  
Local clock offset: -3.751 ms  
Remote clock offset: -1.137 ms

# Below is generated by plot.py at 2019-07-18 13:27:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.02 Mbit/s  
95th percentile per-packet one-way delay: 131.346 ms  
Loss rate: 1.60%  
-- Flow 1:  
Average throughput: 63.27 Mbit/s  
95th percentile per-packet one-way delay: 91.078 ms  
Loss rate: 0.86%  
-- Flow 2:  
Average throughput: 39.03 Mbit/s  
95th percentile per-packet one-way delay: 190.304 ms  
Loss rate: 1.78%  
-- Flow 3:  
Average throughput: 26.18 Mbit/s  
95th percentile per-packet one-way delay: 174.880 ms  
Loss rate: 6.82%

Run 3: Report of Indigo-MusesC5 — Data Link

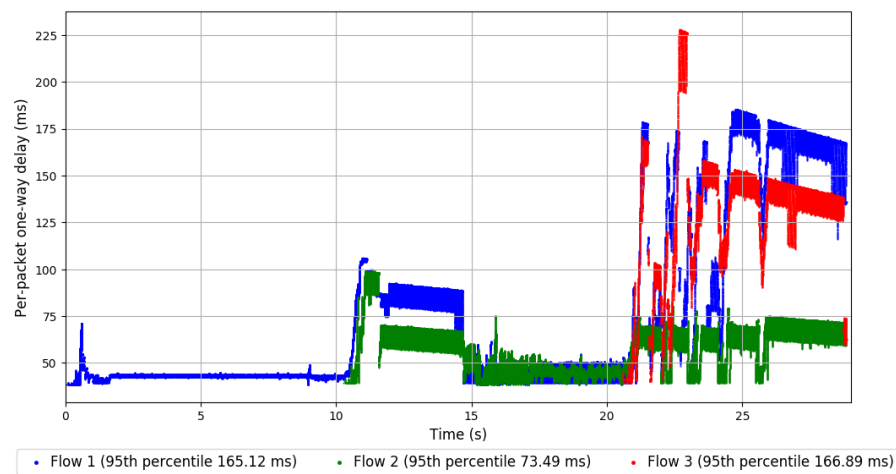
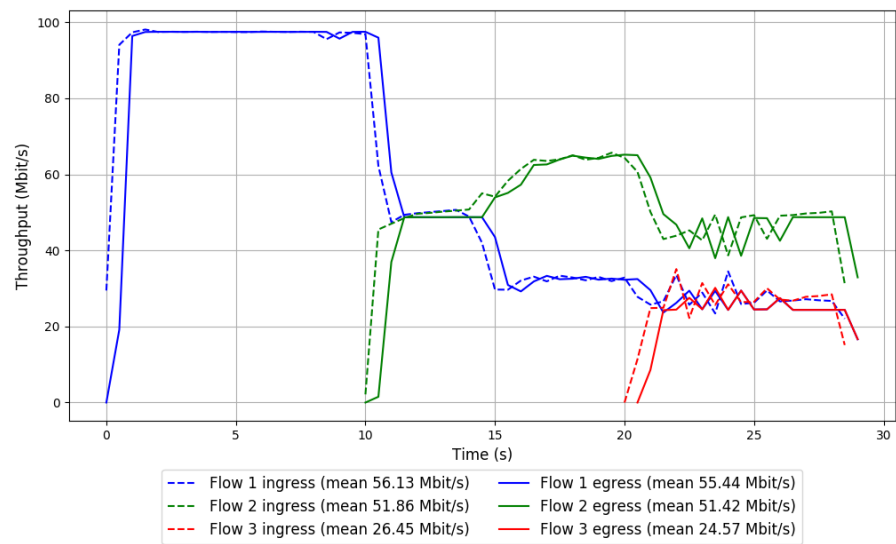


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-07-18 12:25:29  
End at: 2019-07-18 12:25:59  
Local clock offset: 1.251 ms  
Remote clock offset: -1.087 ms

# Below is generated by plot.py at 2019-07-18 13:27:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.68 Mbit/s  
95th percentile per-packet one-way delay: 150.731 ms  
Loss rate: 1.85%  
-- Flow 1:  
Average throughput: 55.44 Mbit/s  
95th percentile per-packet one-way delay: 165.120 ms  
Loss rate: 1.44%  
-- Flow 2:  
Average throughput: 51.42 Mbit/s  
95th percentile per-packet one-way delay: 73.486 ms  
Loss rate: 1.16%  
-- Flow 3:  
Average throughput: 24.57 Mbit/s  
95th percentile per-packet one-way delay: 166.892 ms  
Loss rate: 7.80%

Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-07-18 12:57:51

End at: 2019-07-18 12:58:21

Local clock offset: -0.204 ms

Remote clock offset: -0.9 ms

# Below is generated by plot.py at 2019-07-18 13:27:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.66 Mbit/s

95th percentile per-packet one-way delay: 147.231 ms

Loss rate: 2.73%

-- Flow 1:

Average throughput: 57.92 Mbit/s

95th percentile per-packet one-way delay: 181.881 ms

Loss rate: 2.03%

-- Flow 2:

Average throughput: 38.01 Mbit/s

95th percentile per-packet one-way delay: 129.353 ms

Loss rate: 4.12%

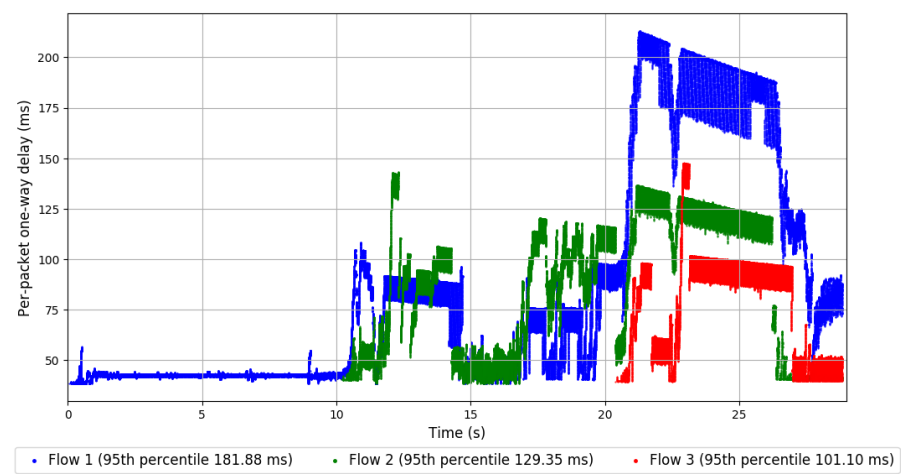
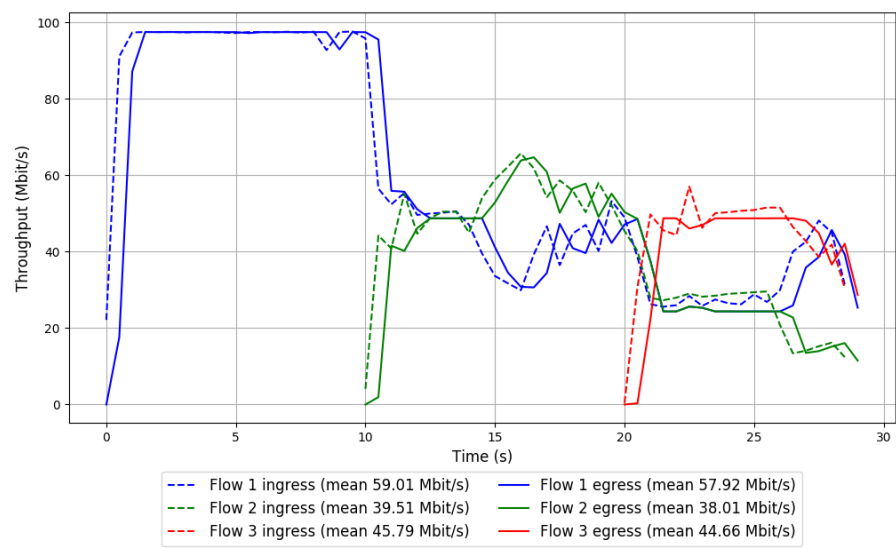
-- Flow 3:

Average throughput: 44.66 Mbit/s

95th percentile per-packet one-way delay: 101.097 ms

Loss rate: 3.18%

Run 5: Report of Indigo-MusesC5 — Data Link



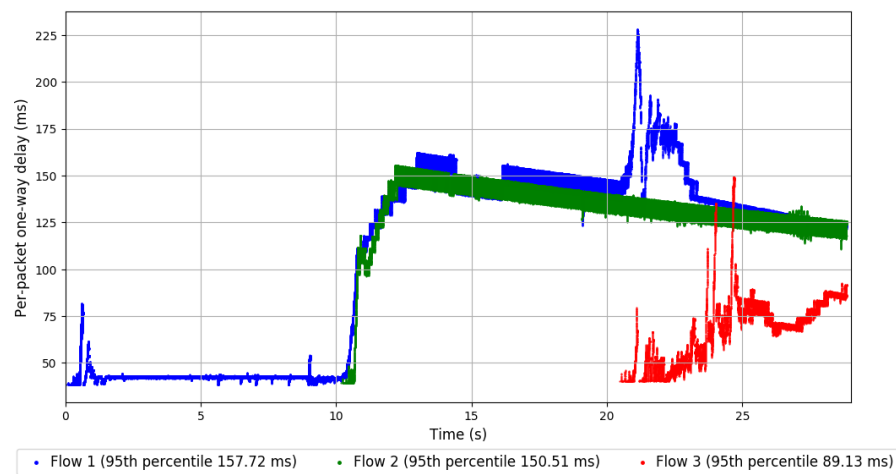
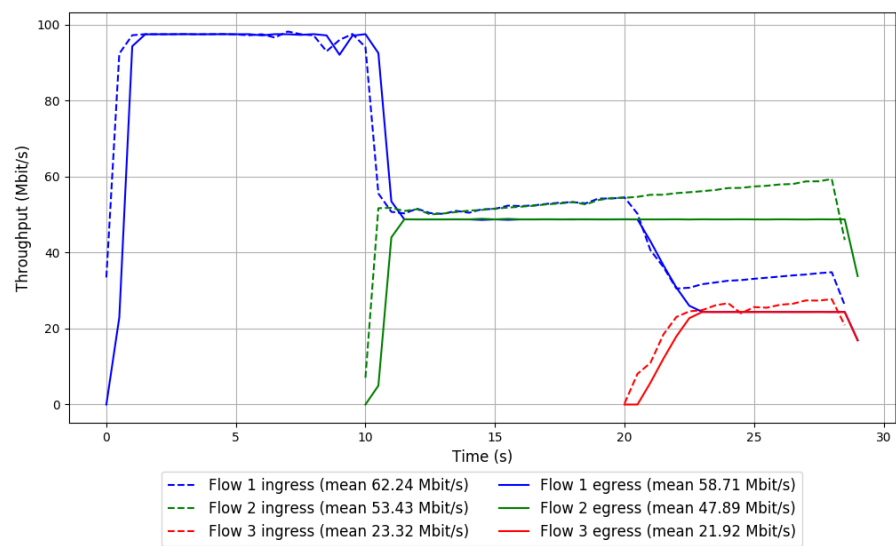


Run 1: Statistics of Indigo-MusesD

Start at: 2019-07-18 11:07:16  
End at: 2019-07-18 11:07:46  
Local clock offset: -3.089 ms  
Remote clock offset: -2.792 ms

# Below is generated by plot.py at 2019-07-18 13:27:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.13 Mbit/s  
95th percentile per-packet one-way delay: 153.458 ms  
Loss rate: 7.54%  
-- Flow 1:  
Average throughput: 58.71 Mbit/s  
95th percentile per-packet one-way delay: 157.721 ms  
Loss rate: 5.88%  
-- Flow 2:  
Average throughput: 47.89 Mbit/s  
95th percentile per-packet one-way delay: 150.512 ms  
Loss rate: 10.67%  
-- Flow 3:  
Average throughput: 21.92 Mbit/s  
95th percentile per-packet one-way delay: 89.128 ms  
Loss rate: 6.71%

Run 1: Report of Indigo-MusesD — Data Link

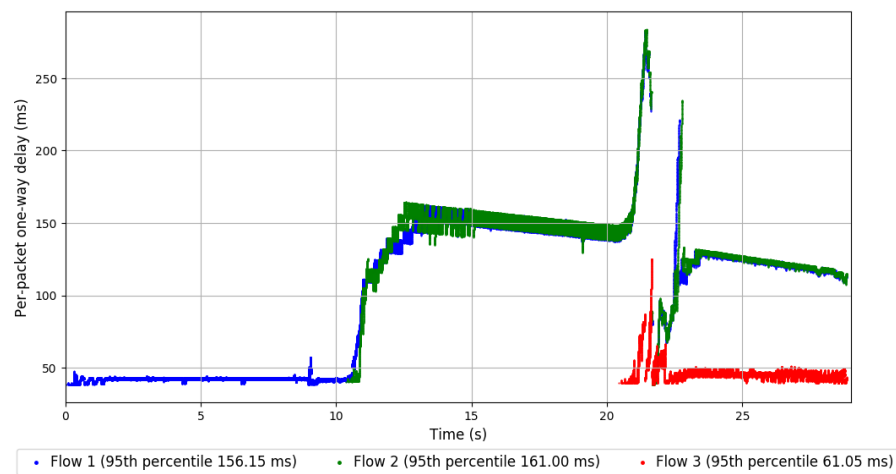
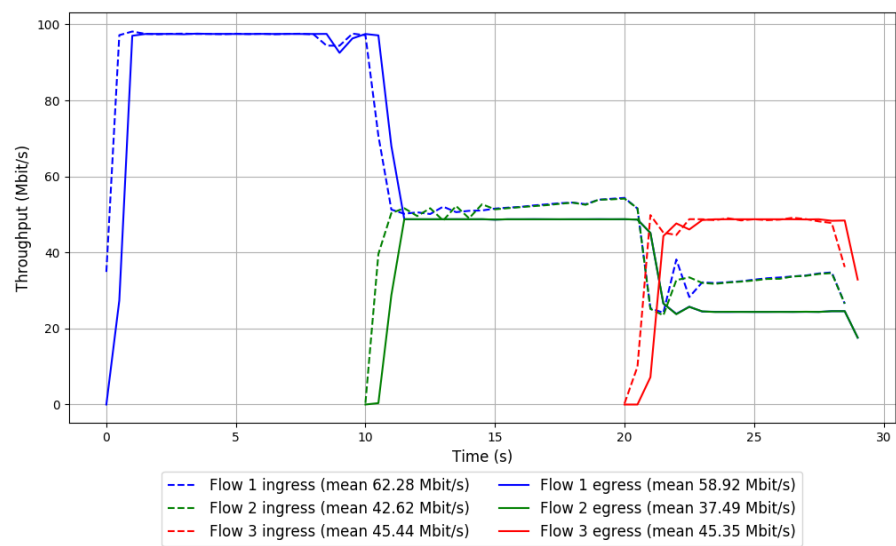


Run 2: Statistics of Indigo-MusesD

Start at: 2019-07-18 11:40:32  
End at: 2019-07-18 11:41:02  
Local clock offset: -3.517 ms  
Remote clock offset: -1.444 ms

# Below is generated by plot.py at 2019-07-18 13:27:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.21 Mbit/s  
95th percentile per-packet one-way delay: 157.154 ms  
Loss rate: 6.78%  
-- Flow 1:  
Average throughput: 58.92 Mbit/s  
95th percentile per-packet one-way delay: 156.150 ms  
Loss rate: 5.58%  
-- Flow 2:  
Average throughput: 37.49 Mbit/s  
95th percentile per-packet one-way delay: 160.999 ms  
Loss rate: 12.34%  
-- Flow 3:  
Average throughput: 45.35 Mbit/s  
95th percentile per-packet one-way delay: 61.048 ms  
Loss rate: 0.94%

Run 2: Report of Indigo-MusesD — Data Link

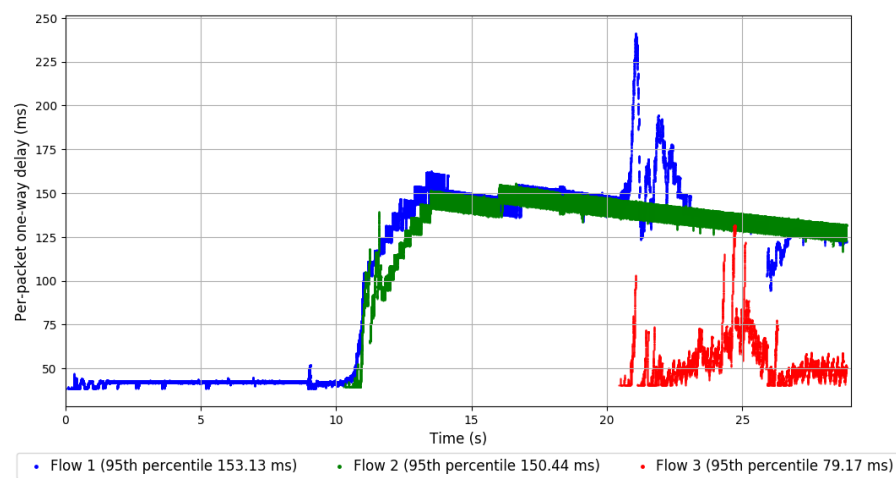
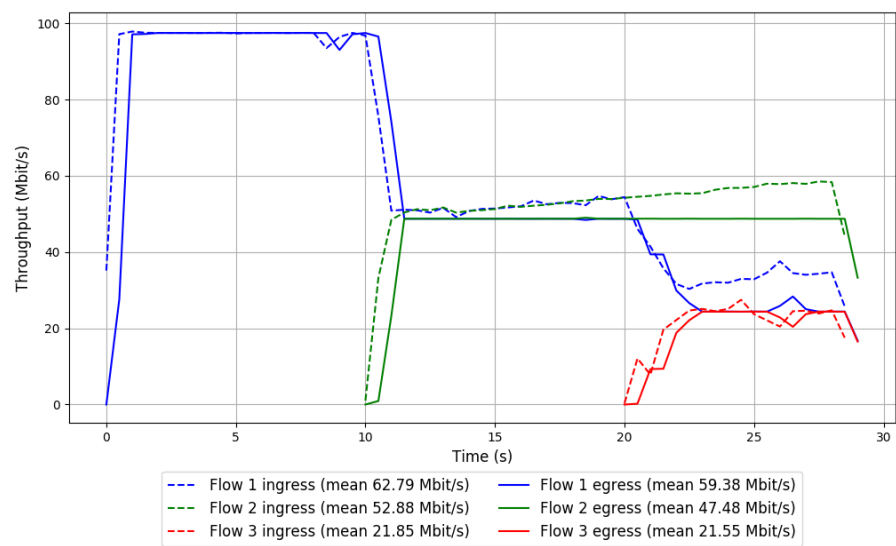


Run 3: Statistics of Indigo-MusesD

Start at: 2019-07-18 12:12:15  
End at: 2019-07-18 12:12:45  
Local clock offset: 0.432 ms  
Remote clock offset: -1.077 ms

# Below is generated by plot.py at 2019-07-18 13:27:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.29 Mbit/s  
95th percentile per-packet one-way delay: 151.726 ms  
Loss rate: 7.03%  
-- Flow 1:  
Average throughput: 59.38 Mbit/s  
95th percentile per-packet one-way delay: 153.129 ms  
Loss rate: 5.64%  
-- Flow 2:  
Average throughput: 47.48 Mbit/s  
95th percentile per-packet one-way delay: 150.439 ms  
Loss rate: 10.53%  
-- Flow 3:  
Average throughput: 21.55 Mbit/s  
95th percentile per-packet one-way delay: 79.174 ms  
Loss rate: 2.09%

Run 3: Report of Indigo-MusesD — Data Link

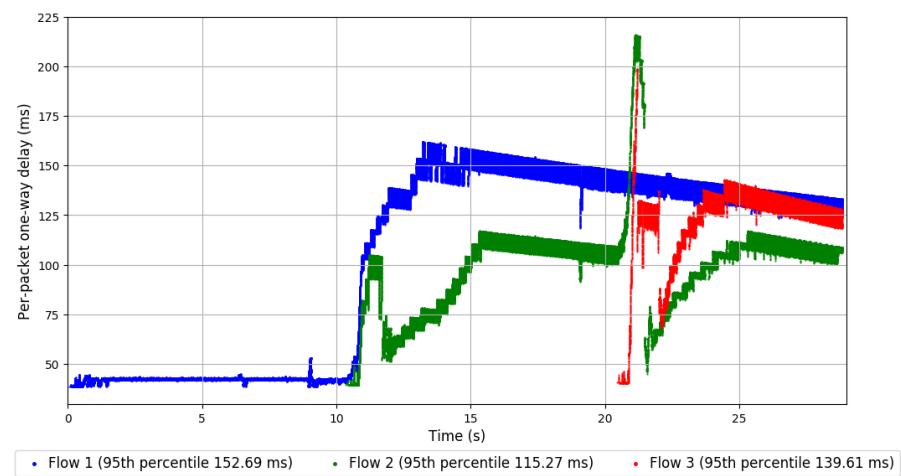
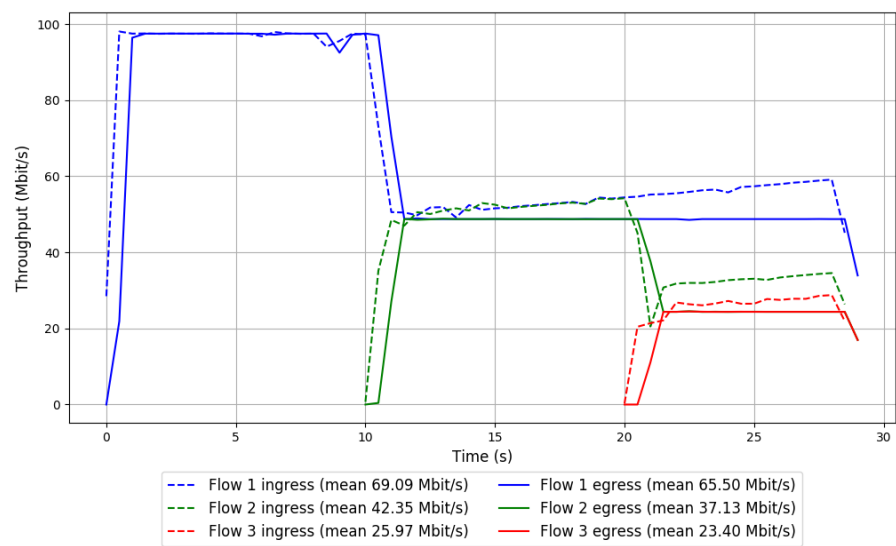


Run 4: Statistics of Indigo-MusesD

Start at: 2019-07-18 12:44:38  
End at: 2019-07-18 12:45:08  
Local clock offset: 0.855 ms  
Remote clock offset: -0.994 ms

# Below is generated by plot.py at 2019-07-18 13:28:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.17 Mbit/s  
95th percentile per-packet one-way delay: 151.506 ms  
Loss rate: 7.68%  
-- Flow 1:  
Average throughput: 65.50 Mbit/s  
95th percentile per-packet one-way delay: 152.689 ms  
Loss rate: 5.41%  
-- Flow 2:  
Average throughput: 37.13 Mbit/s  
95th percentile per-packet one-way delay: 115.272 ms  
Loss rate: 12.63%  
-- Flow 3:  
Average throughput: 23.40 Mbit/s  
95th percentile per-packet one-way delay: 139.612 ms  
Loss rate: 10.59%

Run 4: Report of Indigo-MusesD — Data Link



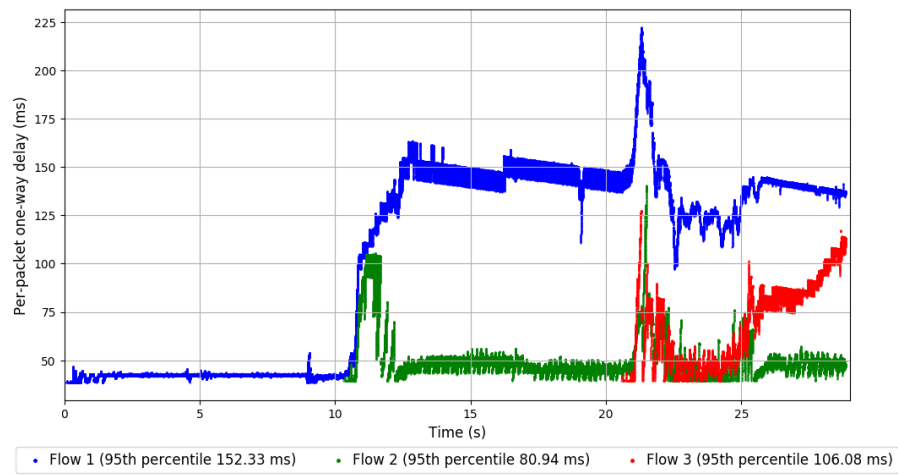
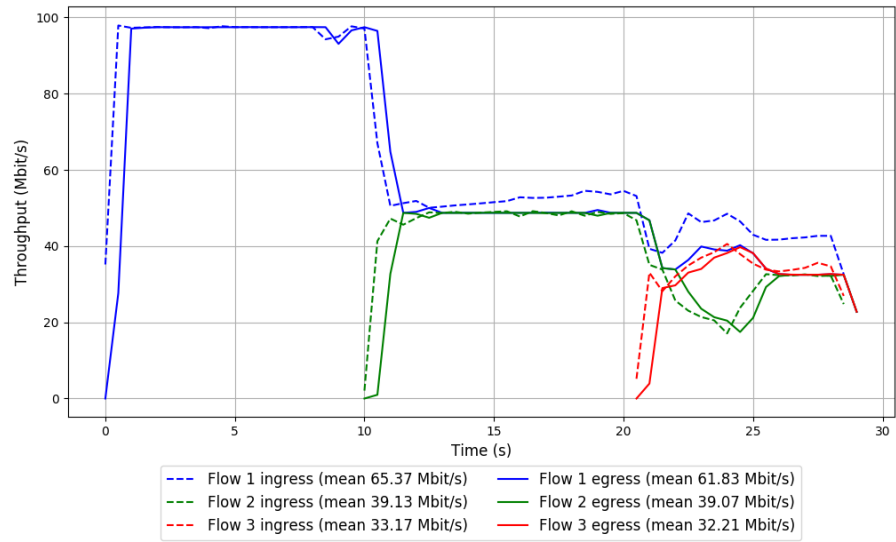


Run 5: Statistics of Indigo-MusesD

Start at: 2019-07-18 13:16:24  
End at: 2019-07-18 13:16:54  
Local clock offset: -3.047 ms  
Remote clock offset: -0.766 ms

# Below is generated by plot.py at 2019-07-18 13:28:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.27 Mbit/s  
95th percentile per-packet one-way delay: 150.451 ms  
Loss rate: 4.13%  
-- Flow 1:  
Average throughput: 61.83 Mbit/s  
95th percentile per-packet one-way delay: 152.326 ms  
Loss rate: 5.62%  
-- Flow 2:  
Average throughput: 39.07 Mbit/s  
95th percentile per-packet one-way delay: 80.945 ms  
Loss rate: 0.47%  
-- Flow 3:  
Average throughput: 32.21 Mbit/s  
95th percentile per-packet one-way delay: 106.085 ms  
Loss rate: 3.63%

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

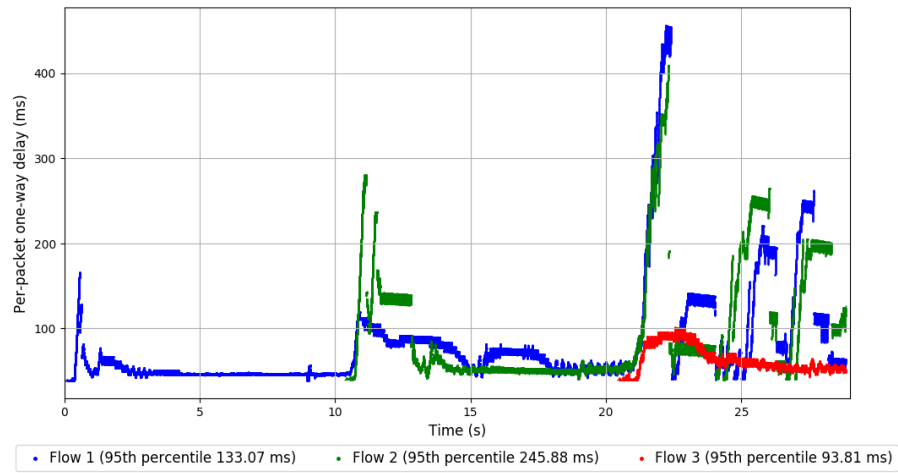
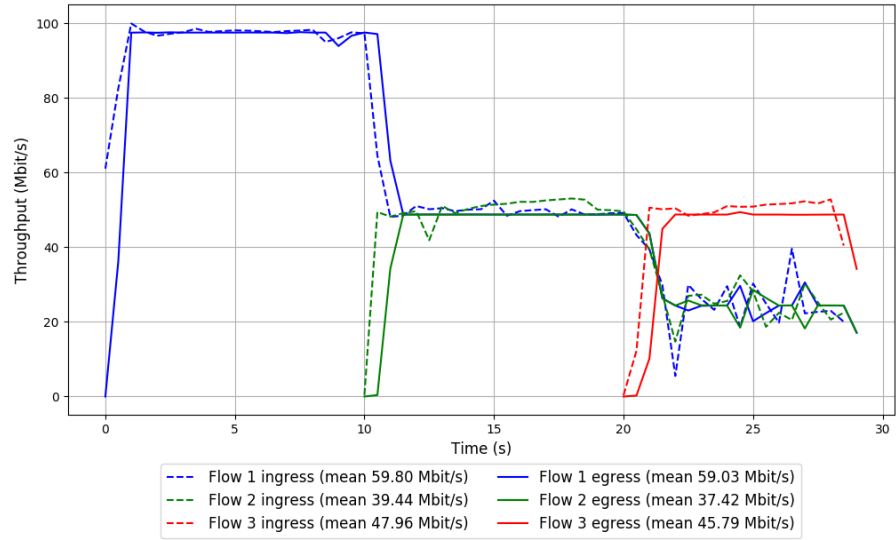


Run 1: Statistics of Indigo-MusesT

Start at: 2019-07-18 10:43:05  
End at: 2019-07-18 10:43:35  
Local clock offset: -2.941 ms  
Remote clock offset: -3.618 ms

# Below is generated by plot.py at 2019-07-18 13:28:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.45 Mbit/s  
95th percentile per-packet one-way delay: 186.269 ms  
Loss rate: 2.95%  
-- Flow 1:  
Average throughput: 59.03 Mbit/s  
95th percentile per-packet one-way delay: 133.067 ms  
Loss rate: 1.48%  
-- Flow 2:  
Average throughput: 37.42 Mbit/s  
95th percentile per-packet one-way delay: 245.875 ms  
Loss rate: 5.16%  
-- Flow 3:  
Average throughput: 45.79 Mbit/s  
95th percentile per-packet one-way delay: 93.815 ms  
Loss rate: 5.22%

# Run 1: Report of Indigo-MusesT — Data Link

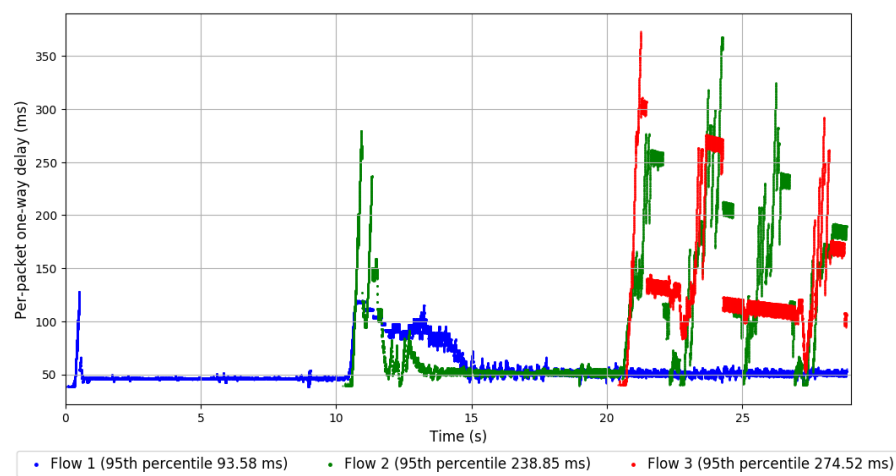
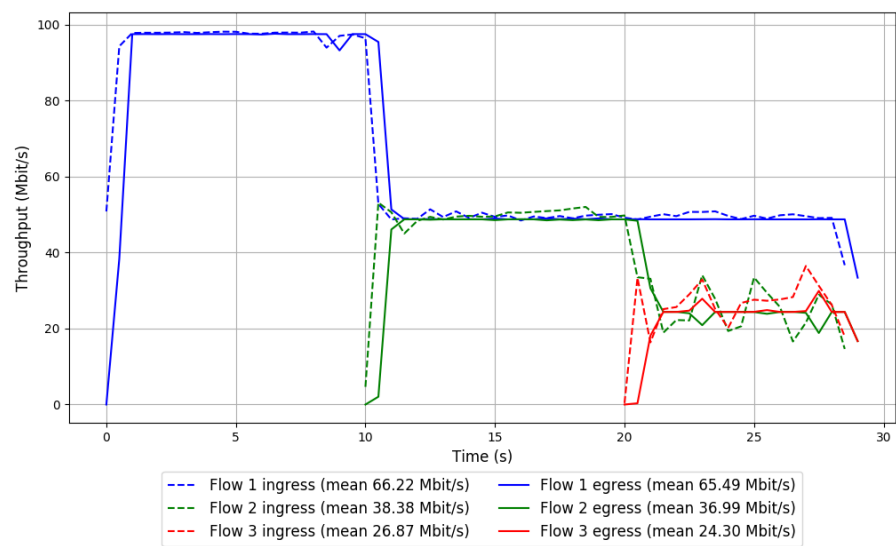


Run 2: Statistics of Indigo-MusesT

Start at: 2019-07-18 11:15:15  
End at: 2019-07-18 11:15:45  
Local clock offset: -3.122 ms  
Remote clock offset: -2.583 ms

# Below is generated by plot.py at 2019-07-18 13:28:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.49 Mbit/s  
95th percentile per-packet one-way delay: 175.024 ms  
Loss rate: 2.69%  
-- Flow 1:  
Average throughput: 65.49 Mbit/s  
95th percentile per-packet one-way delay: 93.582 ms  
Loss rate: 1.32%  
-- Flow 2:  
Average throughput: 36.99 Mbit/s  
95th percentile per-packet one-way delay: 238.854 ms  
Loss rate: 3.94%  
-- Flow 3:  
Average throughput: 24.30 Mbit/s  
95th percentile per-packet one-way delay: 274.525 ms  
Loss rate: 10.22%

Run 2: Report of Indigo-MusesT — Data Link

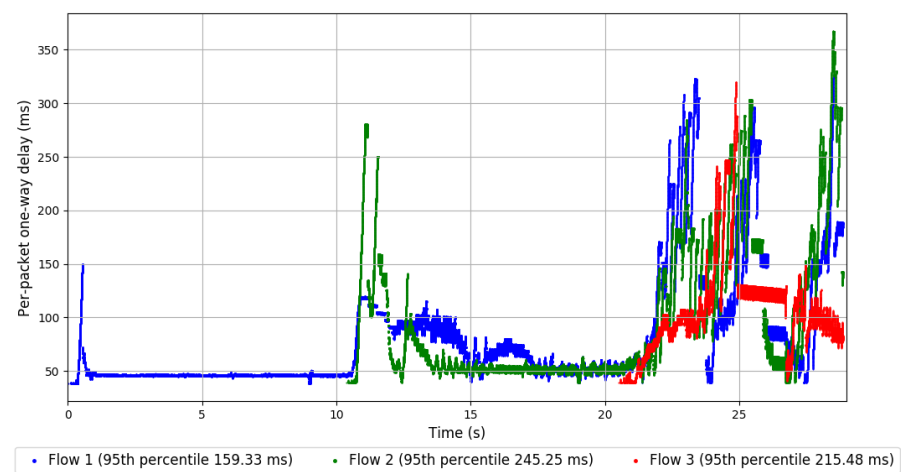
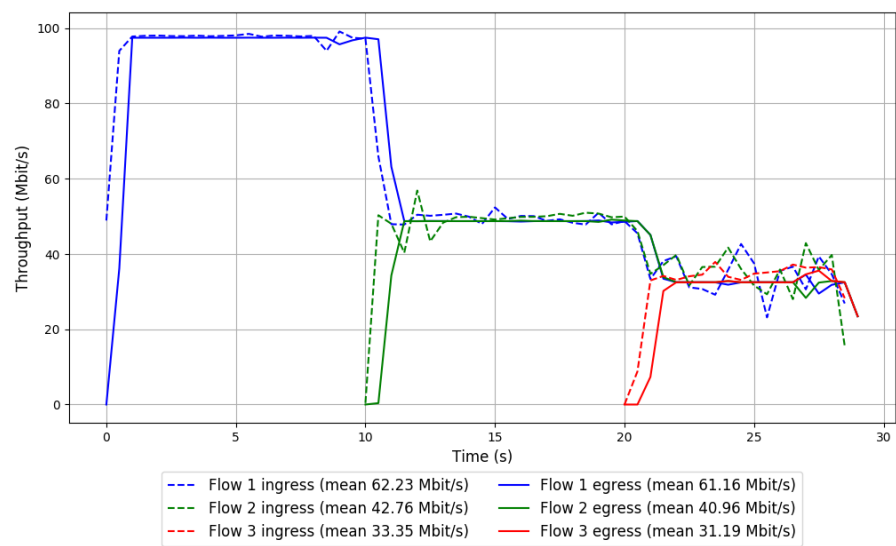


Run 3: Statistics of Indigo-MusesT

Start at: 2019-07-18 11:48:34  
End at: 2019-07-18 11:49:04  
Local clock offset: -3.669 ms  
Remote clock offset: -1.116 ms

# Below is generated by plot.py at 2019-07-18 13:28:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.49 Mbit/s  
95th percentile per-packet one-way delay: 196.801 ms  
Loss rate: 3.16%  
-- Flow 1:  
Average throughput: 61.16 Mbit/s  
95th percentile per-packet one-way delay: 159.333 ms  
Loss rate: 1.92%  
-- Flow 2:  
Average throughput: 40.96 Mbit/s  
95th percentile per-packet one-way delay: 245.255 ms  
Loss rate: 4.51%  
-- Flow 3:  
Average throughput: 31.19 Mbit/s  
95th percentile per-packet one-way delay: 215.484 ms  
Loss rate: 7.19%

Run 3: Report of Indigo-MusesT — Data Link





Run 4: Statistics of Indigo-MusesT

Start at: 2019-07-18 12:20:20

End at: 2019-07-18 12:20:50

Local clock offset: 1.033 ms

Remote clock offset: -1.1 ms

# Below is generated by plot.py at 2019-07-18 13:28:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 96.51 Mbit/s

95th percentile per-packet one-way delay: 187.929 ms

Loss rate: 3.70%

-- Flow 1:

Average throughput: 61.12 Mbit/s

95th percentile per-packet one-way delay: 106.847 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 40.86 Mbit/s

95th percentile per-packet one-way delay: 220.451 ms

Loss rate: 5.19%

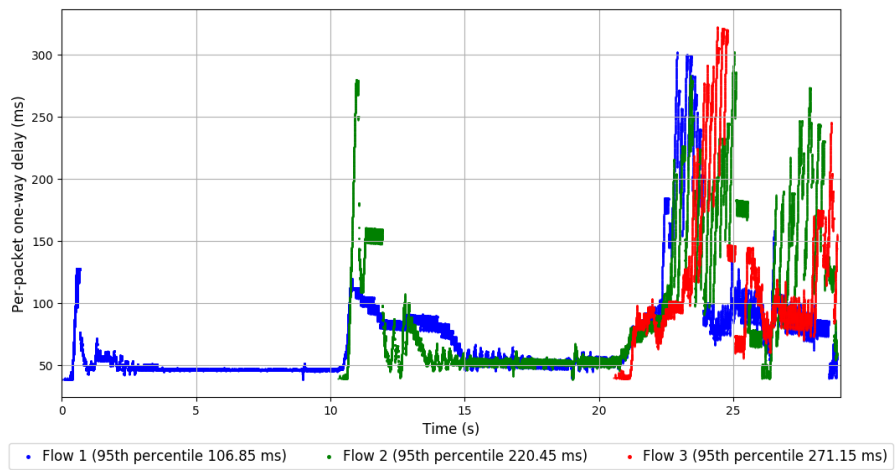
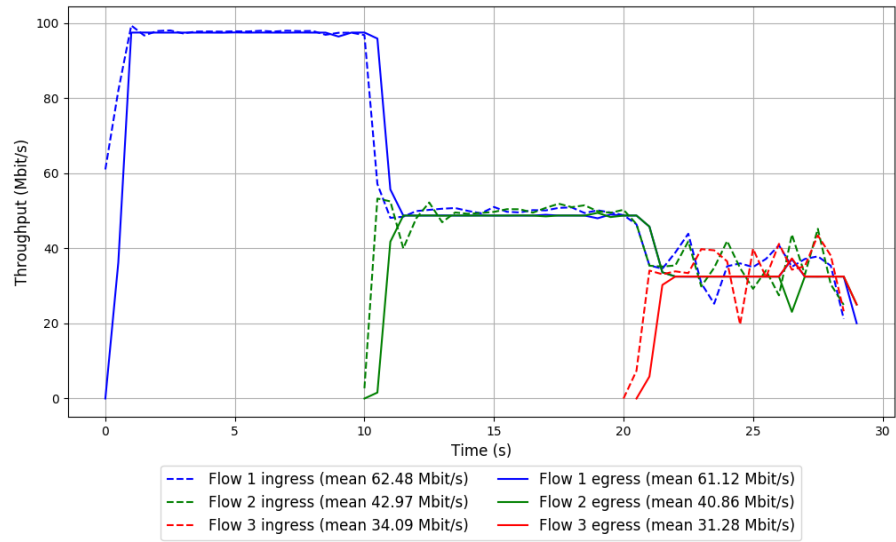
-- Flow 3:

Average throughput: 31.28 Mbit/s

95th percentile per-packet one-way delay: 271.146 ms

Loss rate: 7.84%

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

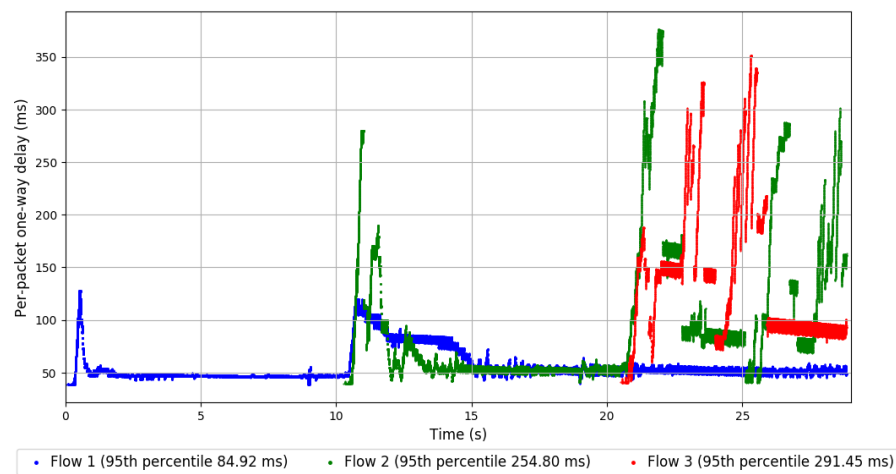
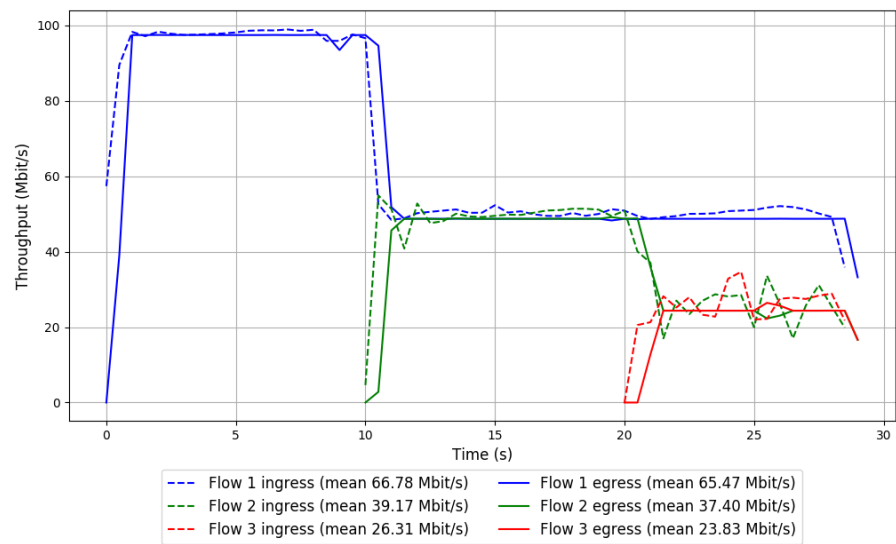


Run 5: Statistics of Indigo-MusesT

Start at: 2019-07-18 12:52:41  
End at: 2019-07-18 12:53:11  
Local clock offset: 0.991 ms  
Remote clock offset: -1.004 ms

# Below is generated by plot.py at 2019-07-18 13:28:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.51 Mbit/s  
95th percentile per-packet one-way delay: 163.113 ms  
Loss rate: 3.45%  
-- Flow 1:  
Average throughput: 65.47 Mbit/s  
95th percentile per-packet one-way delay: 84.921 ms  
Loss rate: 2.17%  
-- Flow 2:  
Average throughput: 37.40 Mbit/s  
95th percentile per-packet one-way delay: 254.801 ms  
Loss rate: 4.84%  
-- Flow 3:  
Average throughput: 23.83 Mbit/s  
95th percentile per-packet one-way delay: 291.446 ms  
Loss rate: 10.05%

Run 5: Report of Indigo-MusesT — Data Link

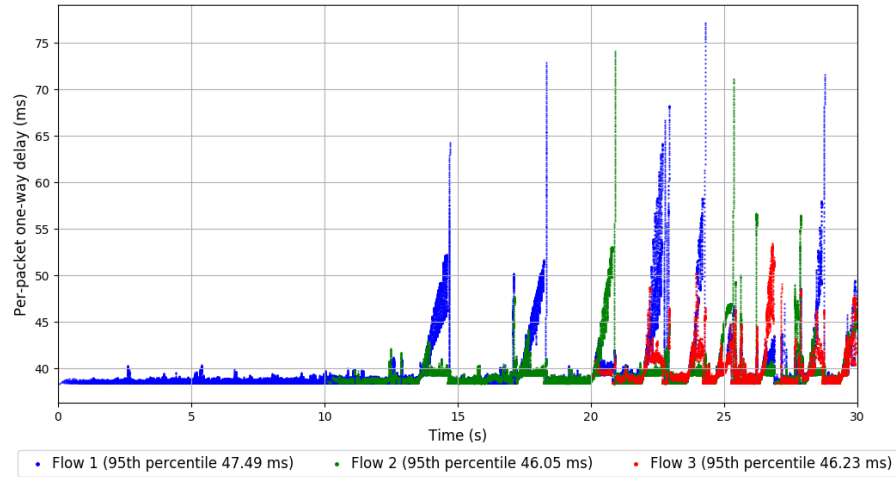
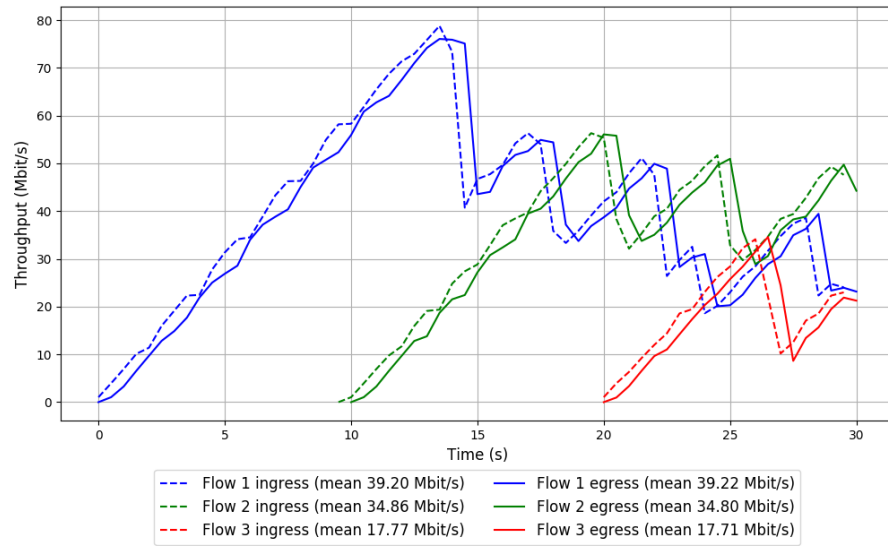


```
Run 1: Statistics of LEDBAT

Start at: 2019-07-18 10:55:24
End at: 2019-07-18 10:55:54
Local clock offset: -3.592 ms
Remote clock offset: -3.11 ms

# Below is generated by plot.py at 2019-07-18 13:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.26 Mbit/s
95th percentile per-packet one-way delay: 46.590 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 39.22 Mbit/s
95th percentile per-packet one-way delay: 47.487 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 34.80 Mbit/s
95th percentile per-packet one-way delay: 46.052 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 17.71 Mbit/s
95th percentile per-packet one-way delay: 46.230 ms
Loss rate: 1.00%
```

## Run 1: Report of LEDBAT — Data Link

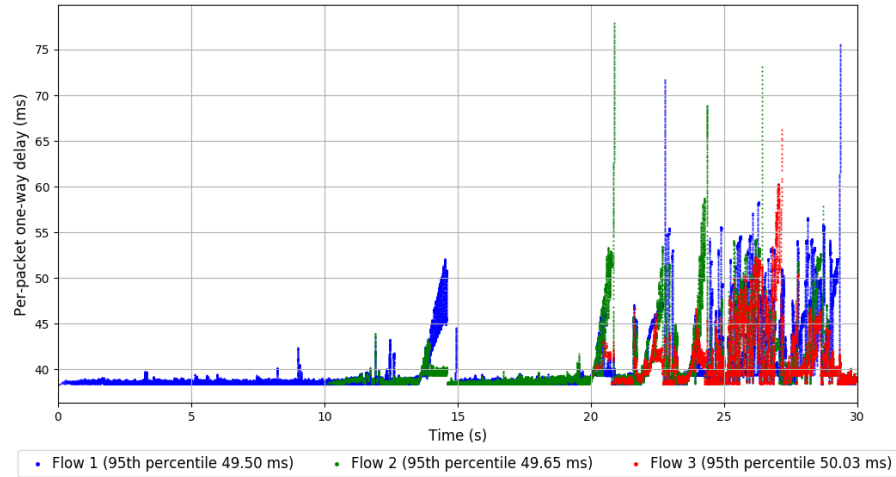
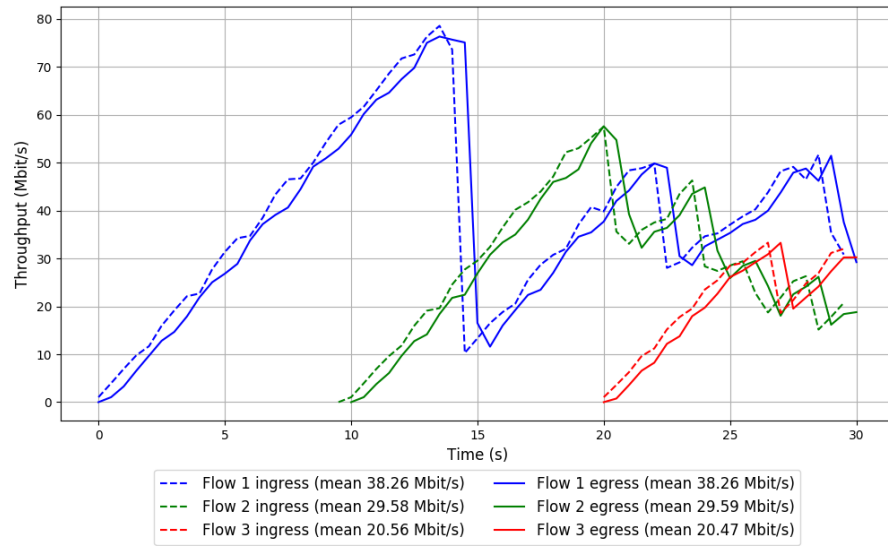


Run 2: Statistics of LEDBAT

Start at: 2019-07-18 11:28:08  
End at: 2019-07-18 11:28:38  
Local clock offset: -3.308 ms  
Remote clock offset: -1.966 ms

# Below is generated by plot.py at 2019-07-18 13:28:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 64.73 Mbit/s  
95th percentile per-packet one-way delay: 49.564 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 38.26 Mbit/s  
95th percentile per-packet one-way delay: 49.497 ms  
Loss rate: 0.20%  
-- Flow 2:  
Average throughput: 29.59 Mbit/s  
95th percentile per-packet one-way delay: 49.650 ms  
Loss rate: 0.25%  
-- Flow 3:  
Average throughput: 20.47 Mbit/s  
95th percentile per-packet one-way delay: 50.028 ms  
Loss rate: 1.11%

## Run 2: Report of LEDBAT — Data Link



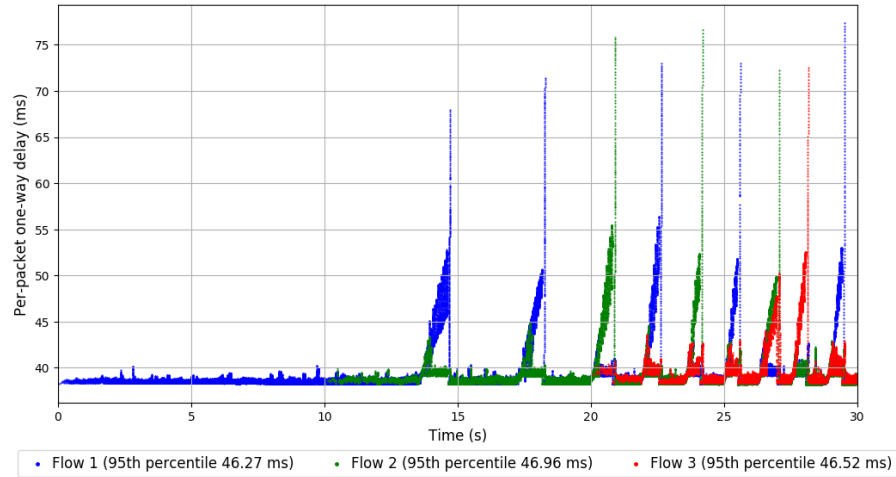
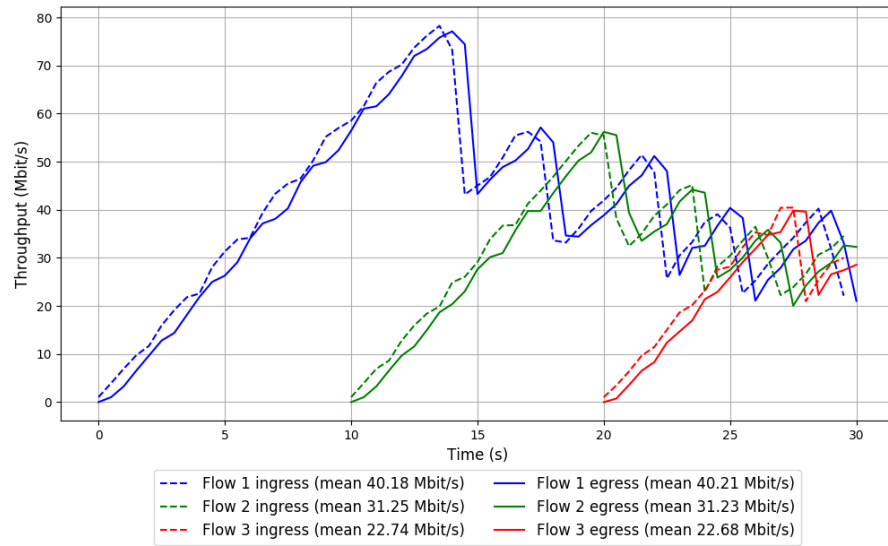


Run 3: Statistics of LEDBAT

Start at: 2019-07-18 12:00:36  
End at: 2019-07-18 12:01:06  
Local clock offset: -1.564 ms  
Remote clock offset: -1.171 ms

# Below is generated by plot.py at 2019-07-18 13:28:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 68.49 Mbit/s  
95th percentile per-packet one-way delay: 46.569 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 40.21 Mbit/s  
95th percentile per-packet one-way delay: 46.270 ms  
Loss rate: 0.14%  
-- Flow 2:  
Average throughput: 31.23 Mbit/s  
95th percentile per-packet one-way delay: 46.956 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 22.68 Mbit/s  
95th percentile per-packet one-way delay: 46.517 ms  
Loss rate: 0.94%

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



Run 4: Statistics of LEDBAT

Start at: 2019-07-18 12:32:50

End at: 2019-07-18 12:33:20

Local clock offset: 0.837 ms

Remote clock offset: -1.07 ms

# Below is generated by plot.py at 2019-07-18 13:28:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 68.05 Mbit/s

95th percentile per-packet one-way delay: 46.922 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 40.09 Mbit/s

95th percentile per-packet one-way delay: 46.981 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 31.25 Mbit/s

95th percentile per-packet one-way delay: 47.300 ms

Loss rate: 0.38%

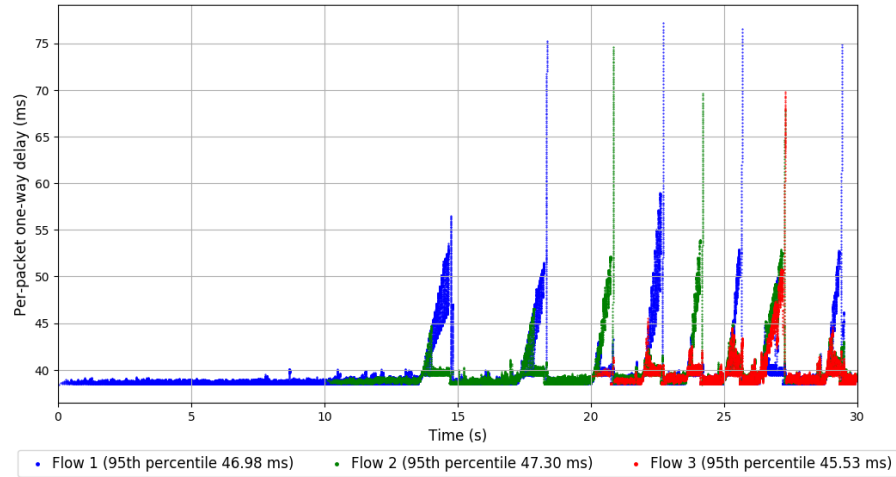
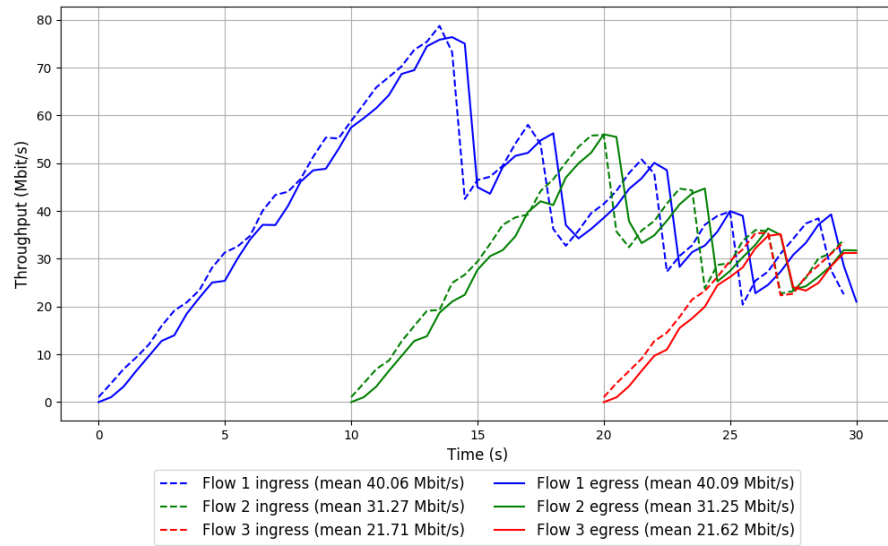
-- Flow 3:

Average throughput: 21.62 Mbit/s

95th percentile per-packet one-way delay: 45.534 ms

Loss rate: 1.07%

#### Run 4: Report of LEDBAT — Data Link

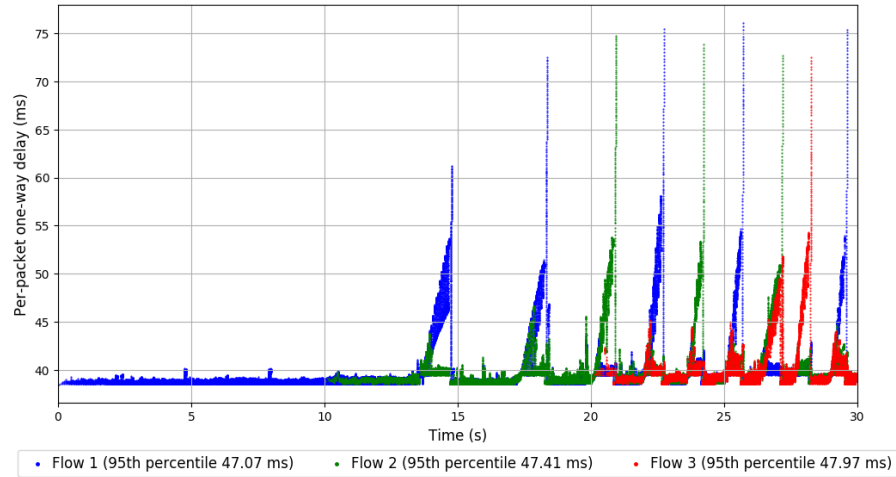
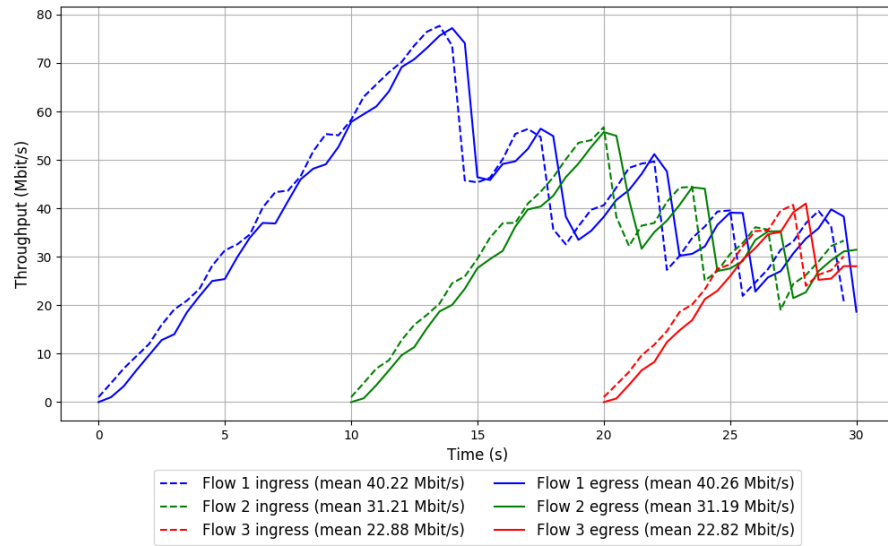


Run 5: Statistics of LEDBAT

Start at: 2019-07-18 13:04:41  
End at: 2019-07-18 13:05:11  
Local clock offset: -1.864 ms  
Remote clock offset: -0.968 ms

# Below is generated by plot.py at 2019-07-18 13:29:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 68.54 Mbit/s  
95th percentile per-packet one-way delay: 47.311 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 40.26 Mbit/s  
95th percentile per-packet one-way delay: 47.074 ms  
Loss rate: 0.13%  
-- Flow 2:  
Average throughput: 31.19 Mbit/s  
95th percentile per-packet one-way delay: 47.410 ms  
Loss rate: 0.38%  
-- Flow 3:  
Average throughput: 22.82 Mbit/s  
95th percentile per-packet one-way delay: 47.969 ms  
Loss rate: 0.93%

## Run 5: Report of LEDBAT — Data Link

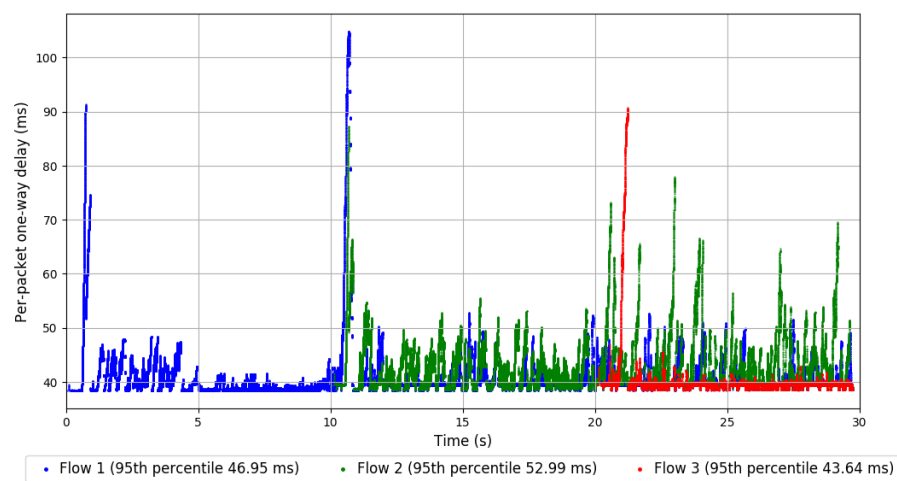
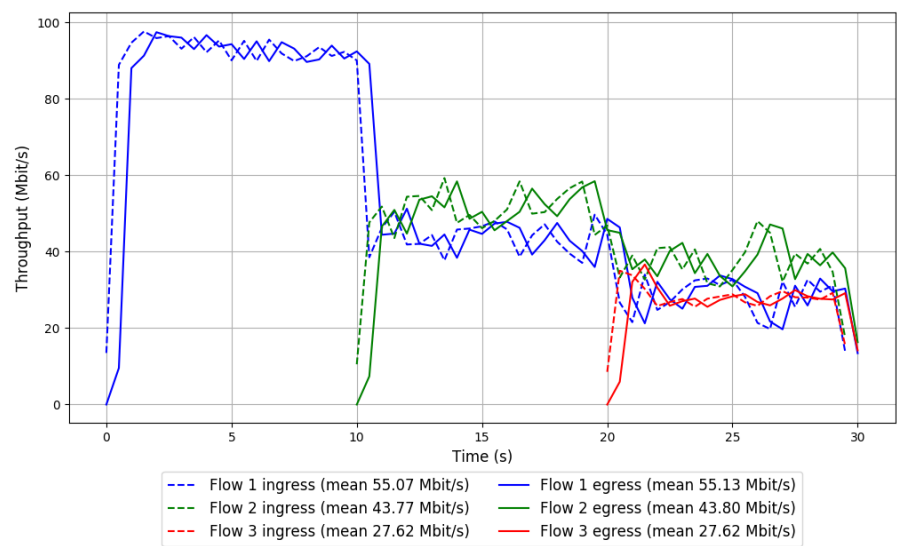


Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-07-18 10:52:44  
End at: 2019-07-18 10:53:14  
Local clock offset: -3.538 ms  
Remote clock offset: -3.244 ms

# Below is generated by plot.py at 2019-07-18 13:29:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 93.13 Mbit/s  
95th percentile per-packet one-way delay: 49.789 ms  
Loss rate: 0.22%  
-- Flow 1:  
Average throughput: 55.13 Mbit/s  
95th percentile per-packet one-way delay: 46.951 ms  
Loss rate: 0.11%  
-- Flow 2:  
Average throughput: 43.80 Mbit/s  
95th percentile per-packet one-way delay: 52.991 ms  
Loss rate: 0.27%  
-- Flow 3:  
Average throughput: 27.62 Mbit/s  
95th percentile per-packet one-way delay: 43.643 ms  
Loss rate: 0.70%

Run 1: Report of Muses\_DecisionTree — Data Link





Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-07-18 11:25:26

End at: 2019-07-18 11:25:56

Local clock offset: -3.204 ms

Remote clock offset: -2.13 ms

# Below is generated by plot.py at 2019-07-18 13:29:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.73 Mbit/s

95th percentile per-packet one-way delay: 50.734 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 46.244 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 38.43 Mbit/s

95th percentile per-packet one-way delay: 55.002 ms

Loss rate: 0.29%

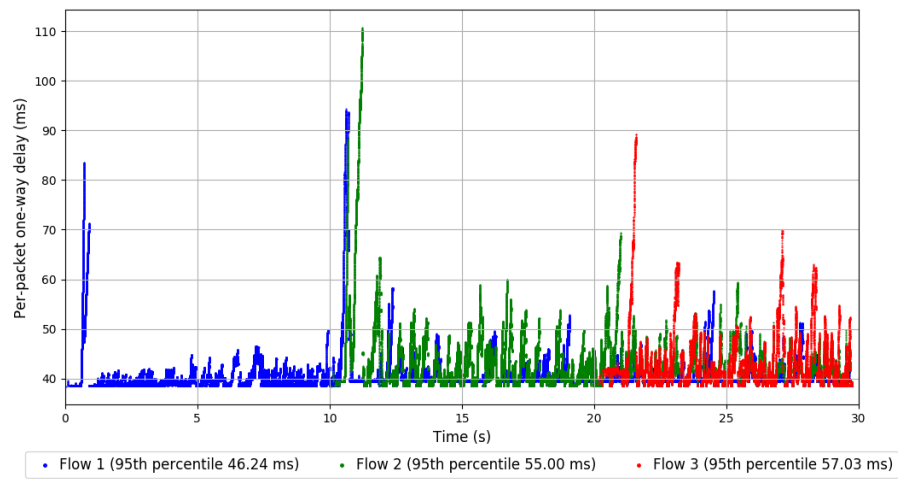
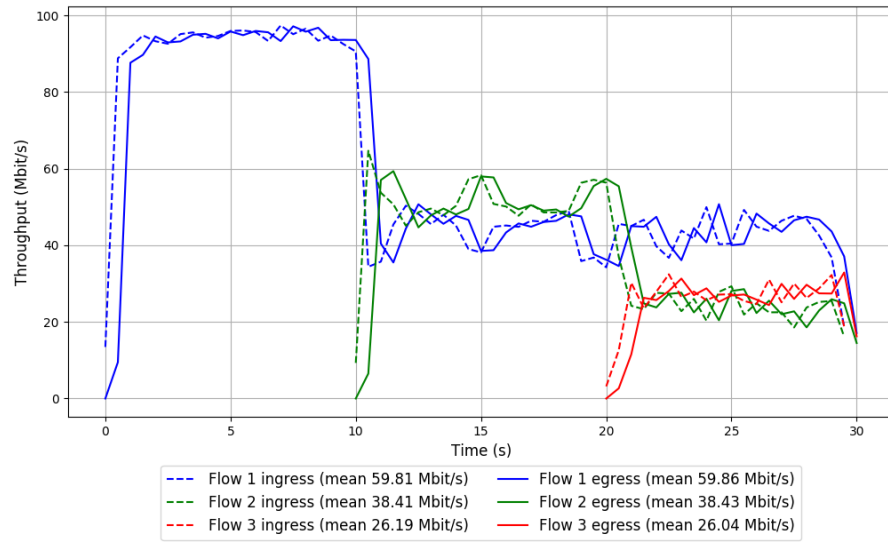
-- Flow 3:

Average throughput: 26.04 Mbit/s

95th percentile per-packet one-way delay: 57.026 ms

Loss rate: 1.23%

## Run 2: Report of Muses\_DecisionTree — Data Link

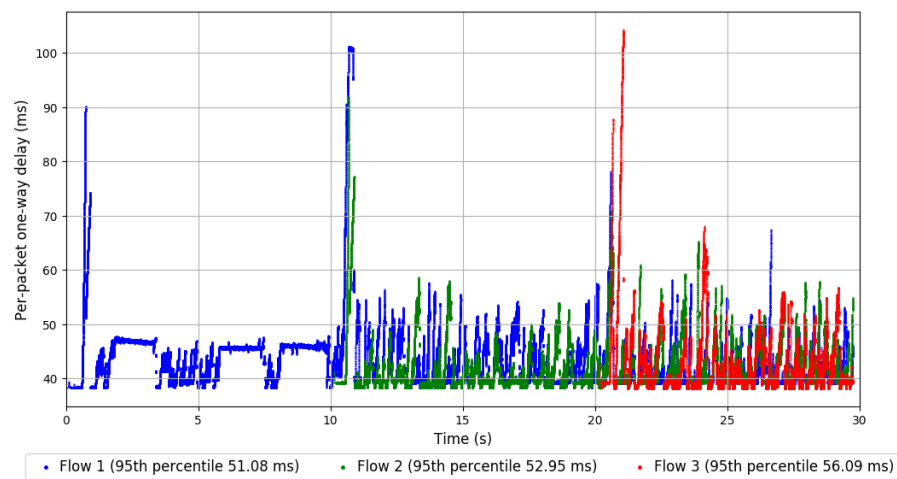
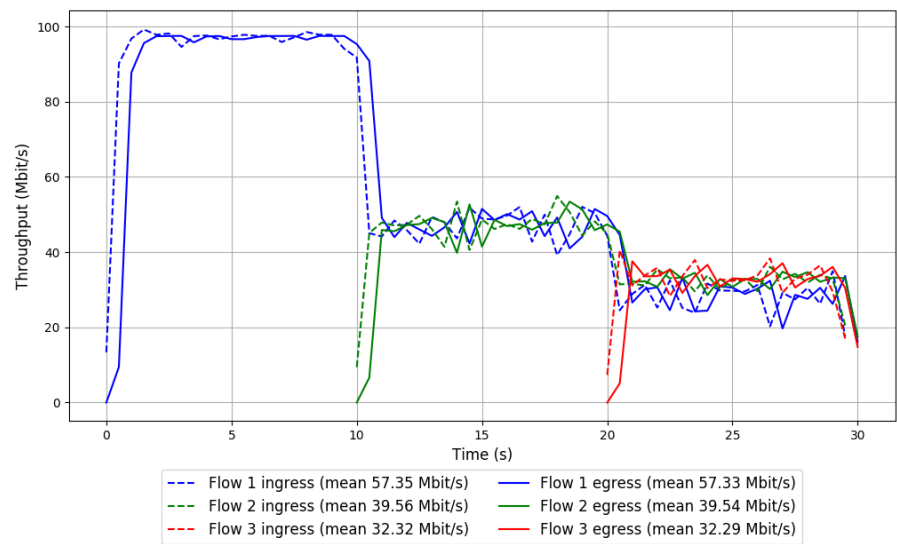


Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-07-18 11:57:49  
End at: 2019-07-18 11:58:19  
Local clock offset: -2.421 ms  
Remote clock offset: -1.208 ms

# Below is generated by plot.py at 2019-07-18 13:29:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.00 Mbit/s  
95th percentile per-packet one-way delay: 52.390 ms  
Loss rate: 0.33%  
-- Flow 1:  
Average throughput: 57.33 Mbit/s  
95th percentile per-packet one-way delay: 51.084 ms  
Loss rate: 0.24%  
-- Flow 2:  
Average throughput: 39.54 Mbit/s  
95th percentile per-packet one-way delay: 52.946 ms  
Loss rate: 0.37%  
-- Flow 3:  
Average throughput: 32.29 Mbit/s  
95th percentile per-packet one-way delay: 56.095 ms  
Loss rate: 0.75%

Run 3: Report of Muses\_DecisionTree — Data Link

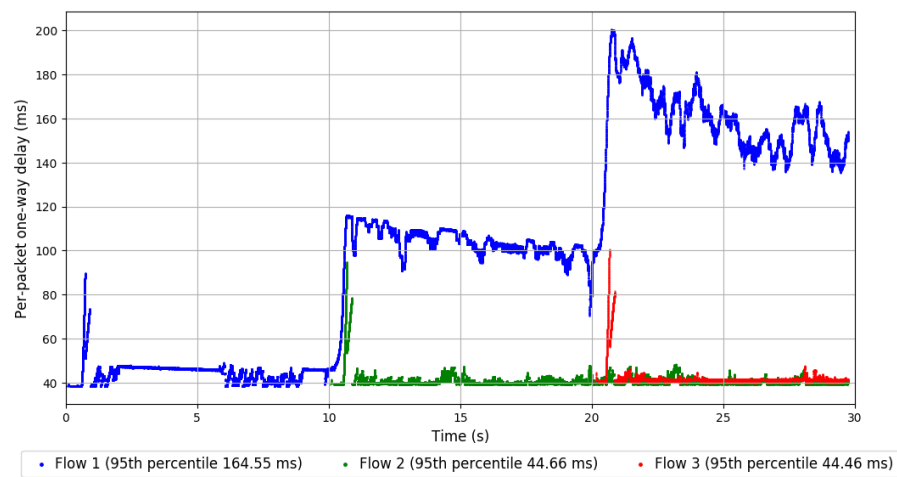
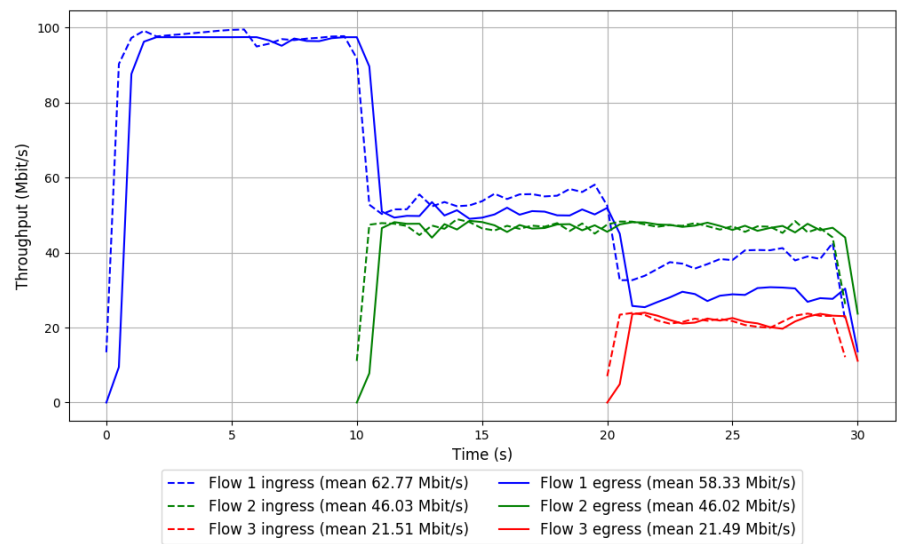


Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-07-18 12:29:56  
End at: 2019-07-18 12:30:26  
Local clock offset: 0.953 ms  
Remote clock offset: -0.999 ms

# Below is generated by plot.py at 2019-07-18 13:29:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.82 Mbit/s  
95th percentile per-packet one-way delay: 156.470 ms  
Loss rate: 4.70%  
-- Flow 1:  
Average throughput: 58.33 Mbit/s  
95th percentile per-packet one-way delay: 164.550 ms  
Loss rate: 7.26%  
-- Flow 2:  
Average throughput: 46.02 Mbit/s  
95th percentile per-packet one-way delay: 44.658 ms  
Loss rate: 0.35%  
-- Flow 3:  
Average throughput: 21.49 Mbit/s  
95th percentile per-packet one-way delay: 44.459 ms  
Loss rate: 0.74%

Run 4: Report of Muses\_DecisionTree — Data Link

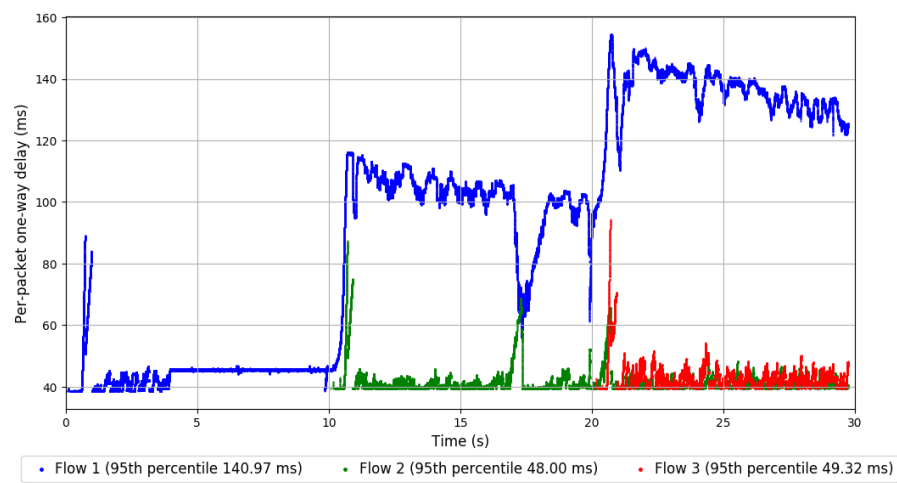
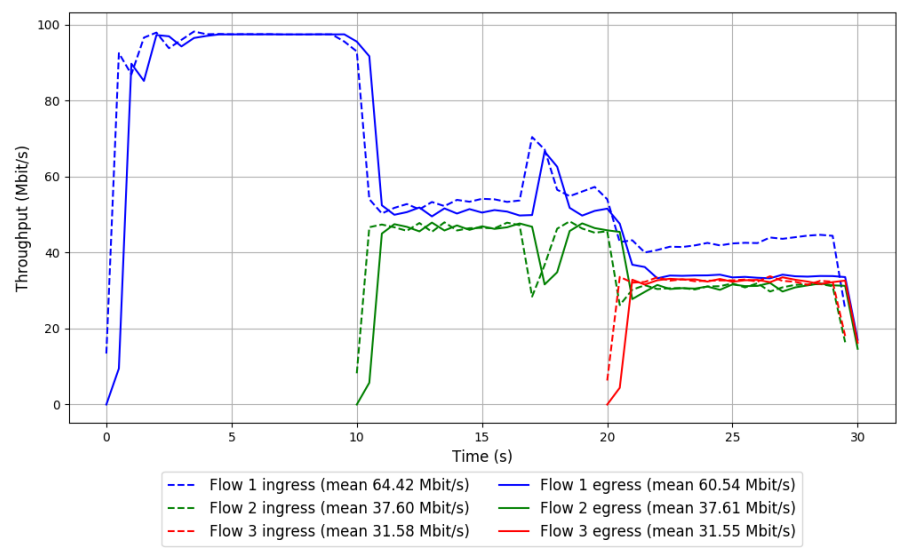


Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-07-18 13:02:01  
End at: 2019-07-18 13:02:31  
Local clock offset: -1.322 ms  
Remote clock offset: -0.875 ms

# Below is generated by plot.py at 2019-07-18 13:30:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.66 Mbit/s  
95th percentile per-packet one-way delay: 138.102 ms  
Loss rate: 4.18%  
-- Flow 1:  
Average throughput: 60.54 Mbit/s  
95th percentile per-packet one-way delay: 140.967 ms  
Loss rate: 6.22%  
-- Flow 2:  
Average throughput: 37.61 Mbit/s  
95th percentile per-packet one-way delay: 47.996 ms  
Loss rate: 0.30%  
-- Flow 3:  
Average throughput: 31.55 Mbit/s  
95th percentile per-packet one-way delay: 49.319 ms  
Loss rate: 0.75%

Run 5: Report of Muses\_DecisionTree — Data Link



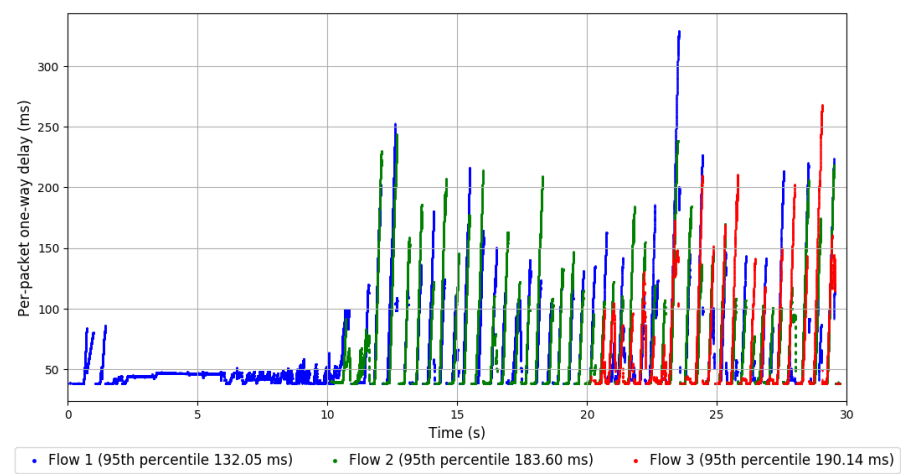
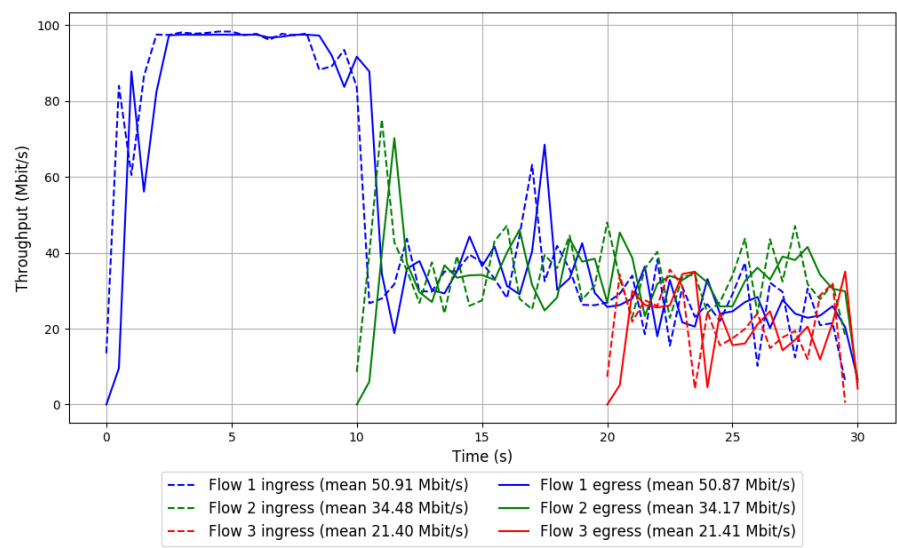


Run 1: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-18 11:03:18  
End at: 2019-07-18 11:03:48  
Local clock offset: -3.152 ms  
Remote clock offset: -2.944 ms

# Below is generated by plot.py at 2019-07-18 13:30:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.44 Mbit/s  
95th percentile per-packet one-way delay: 162.644 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 50.87 Mbit/s  
95th percentile per-packet one-way delay: 132.046 ms  
Loss rate: 0.31%  
-- Flow 2:  
Average throughput: 34.17 Mbit/s  
95th percentile per-packet one-way delay: 183.604 ms  
Loss rate: 1.23%  
-- Flow 3:  
Average throughput: 21.41 Mbit/s  
95th percentile per-packet one-way delay: 190.142 ms  
Loss rate: 0.28%

Run 1: Report of Muses\_DecisionTreeH0 — Data Link

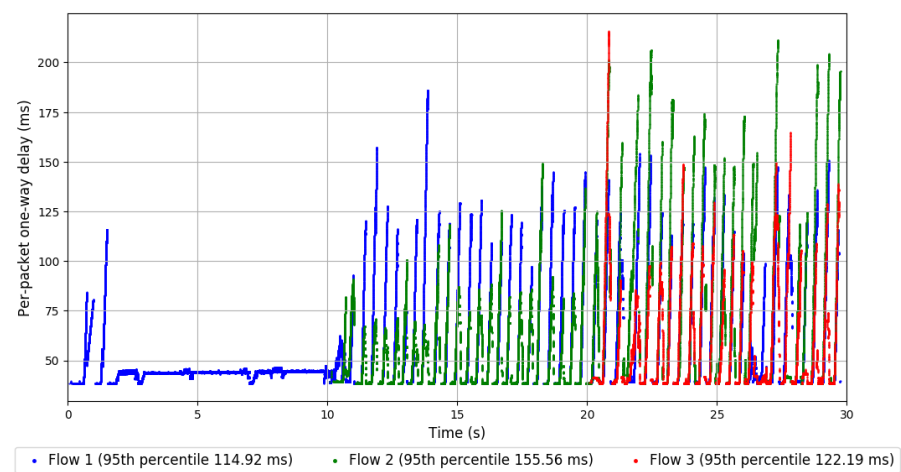
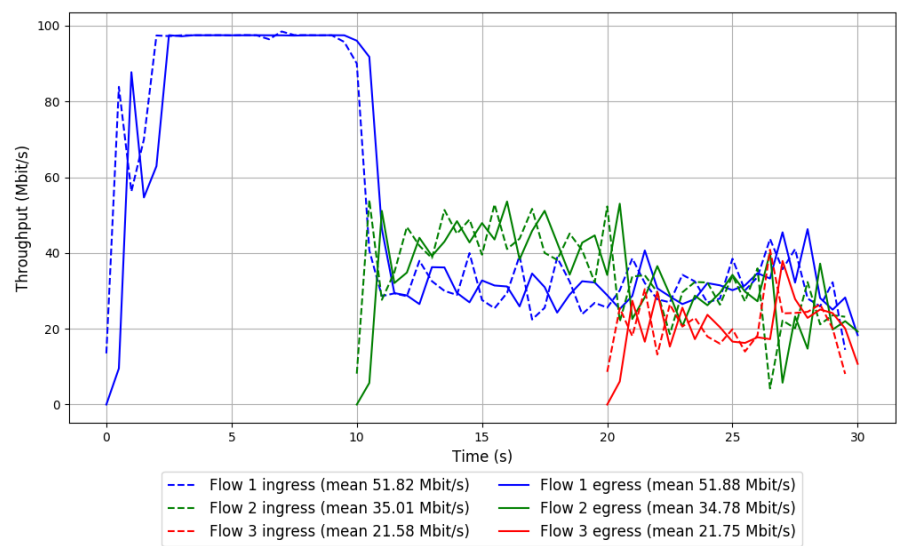


Run 2: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-18 11:36:18  
End at: 2019-07-18 11:36:48  
Local clock offset: -3.458 ms  
Remote clock offset: -1.698 ms

# Below is generated by plot.py at 2019-07-18 13:30:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.95 Mbit/s  
95th percentile per-packet one-way delay: 122.791 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 51.88 Mbit/s  
95th percentile per-packet one-way delay: 114.919 ms  
Loss rate: 0.08%  
-- Flow 2:  
Average throughput: 34.78 Mbit/s  
95th percentile per-packet one-way delay: 155.563 ms  
Loss rate: 0.68%  
-- Flow 3:  
Average throughput: 21.75 Mbit/s  
95th percentile per-packet one-way delay: 122.190 ms  
Loss rate: 0.35%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link

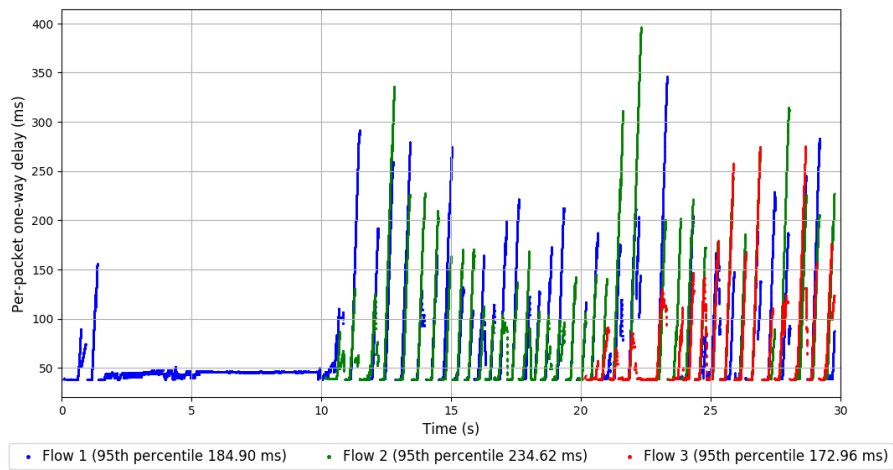
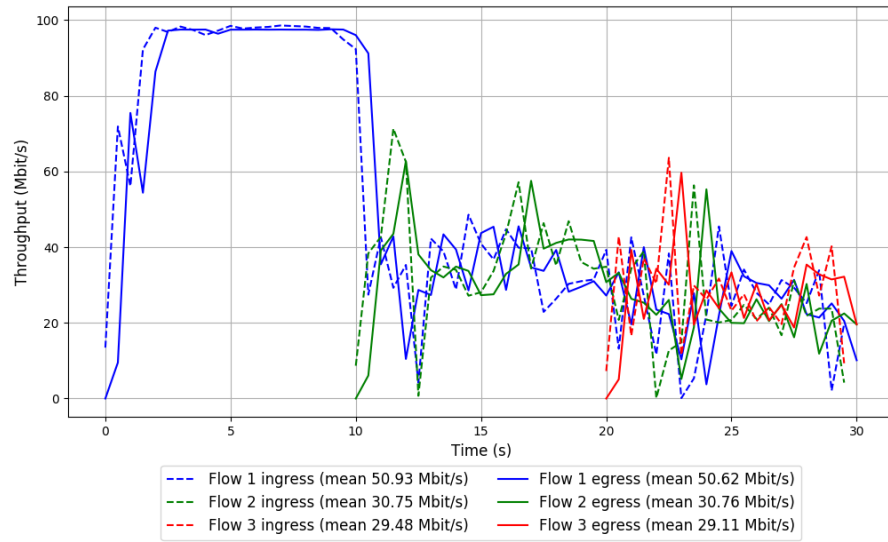


Run 3: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-18 12:08:22  
End at: 2019-07-18 12:08:52  
Local clock offset: -0.042 ms  
Remote clock offset: -1.199 ms

# Below is generated by plot.py at 2019-07-18 13:30:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.44 Mbit/s  
95th percentile per-packet one-way delay: 201.593 ms  
Loss rate: 0.56%  
-- Flow 1:  
Average throughput: 50.62 Mbit/s  
95th percentile per-packet one-way delay: 184.895 ms  
Loss rate: 0.64%  
-- Flow 2:  
Average throughput: 30.76 Mbit/s  
95th percentile per-packet one-way delay: 234.622 ms  
Loss rate: 0.28%  
-- Flow 3:  
Average throughput: 29.11 Mbit/s  
95th percentile per-packet one-way delay: 172.959 ms  
Loss rate: 0.76%

### Run 3: Report of Muses\_DecisionTreeH0 — Data Link

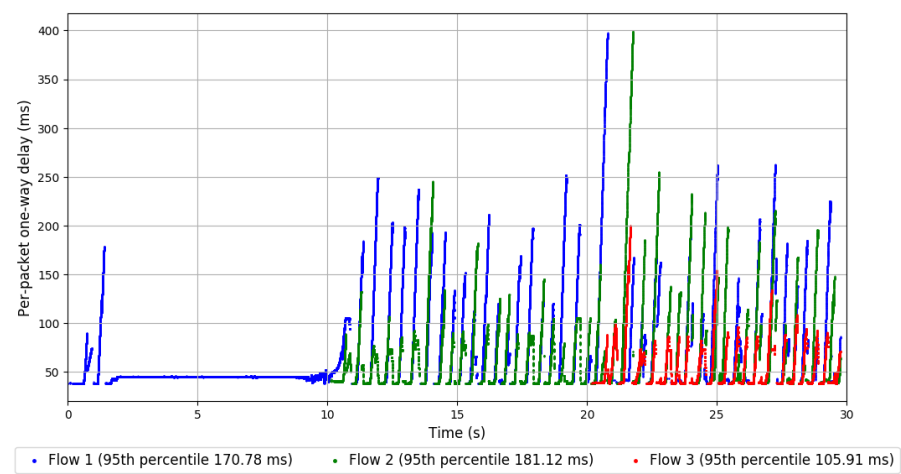
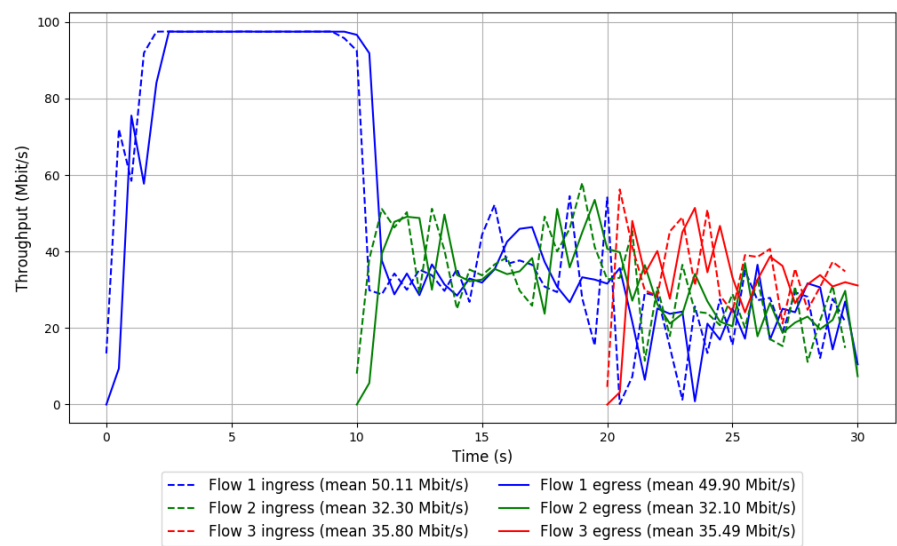


Run 4: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-18 12:40:42  
End at: 2019-07-18 12:41:12  
Local clock offset: 0.81 ms  
Remote clock offset: -1.016 ms

# Below is generated by plot.py at 2019-07-18 13:30:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 82.61 Mbit/s  
95th percentile per-packet one-way delay: 167.939 ms  
Loss rate: 0.76%  
-- Flow 1:  
Average throughput: 49.90 Mbit/s  
95th percentile per-packet one-way delay: 170.784 ms  
Loss rate: 0.52%  
-- Flow 2:  
Average throughput: 32.10 Mbit/s  
95th percentile per-packet one-way delay: 181.118 ms  
Loss rate: 0.90%  
-- Flow 3:  
Average throughput: 35.49 Mbit/s  
95th percentile per-packet one-way delay: 105.908 ms  
Loss rate: 1.52%

Run 4: Report of Muses\_DecisionTreeH0 — Data Link



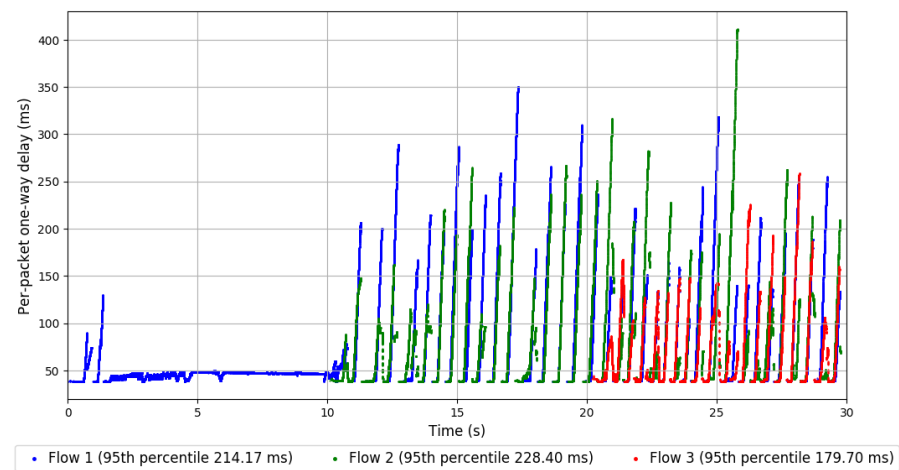
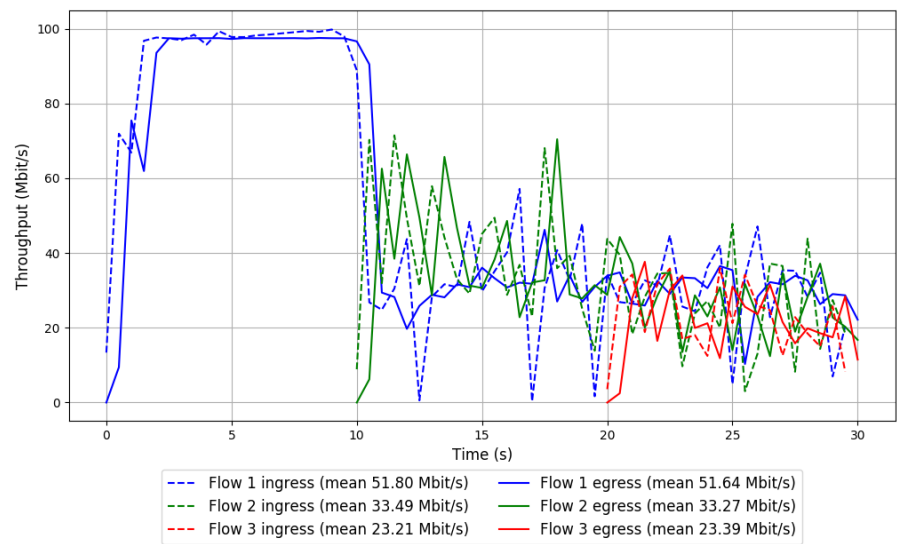


Run 5: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-18 13:12:24  
End at: 2019-07-18 13:12:54  
Local clock offset: -2.795 ms  
Remote clock offset: -0.821 ms

# Below is generated by plot.py at 2019-07-18 13:30:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.16 Mbit/s  
95th percentile per-packet one-way delay: 216.256 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 51.64 Mbit/s  
95th percentile per-packet one-way delay: 214.171 ms  
Loss rate: 0.57%  
-- Flow 2:  
Average throughput: 33.27 Mbit/s  
95th percentile per-packet one-way delay: 228.398 ms  
Loss rate: 0.98%  
-- Flow 3:  
Average throughput: 23.39 Mbit/s  
95th percentile per-packet one-way delay: 179.696 ms  
Loss rate: 0.30%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link

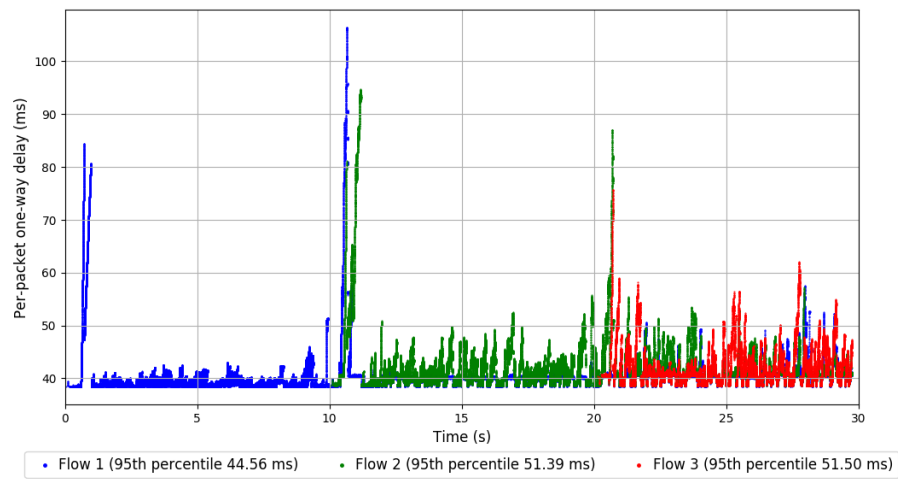
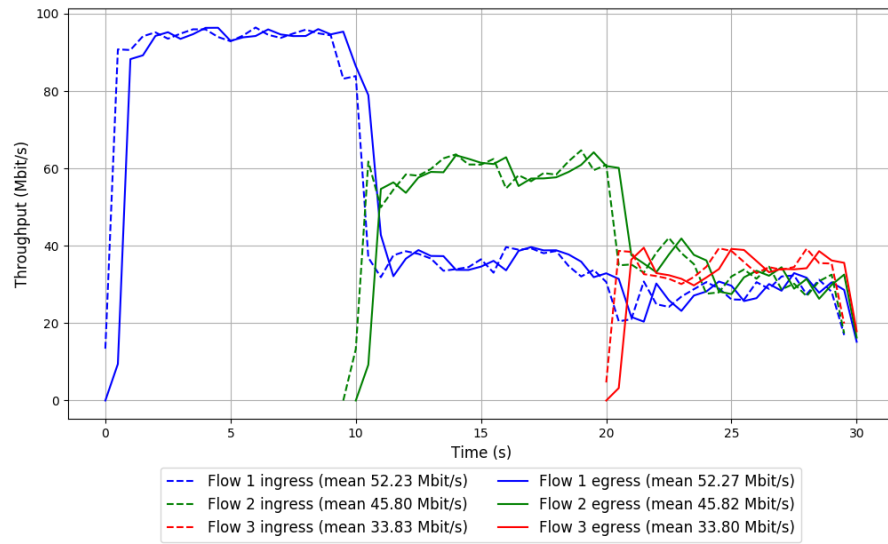


Run 1: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-18 10:45:36  
End at: 2019-07-18 10:46:06  
Local clock offset: -3.111 ms  
Remote clock offset: -3.528 ms

# Below is generated by plot.py at 2019-07-18 13:30:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 93.60 Mbit/s  
95th percentile per-packet one-way delay: 49.585 ms  
Loss rate: 0.26%  
-- Flow 1:  
Average throughput: 52.27 Mbit/s  
95th percentile per-packet one-way delay: 44.564 ms  
Loss rate: 0.14%  
-- Flow 2:  
Average throughput: 45.82 Mbit/s  
95th percentile per-packet one-way delay: 51.392 ms  
Loss rate: 0.27%  
-- Flow 3:  
Average throughput: 33.80 Mbit/s  
95th percentile per-packet one-way delay: 51.496 ms  
Loss rate: 0.78%

# Run 1: Report of Muses\_DecisionTreeR0 — Data Link

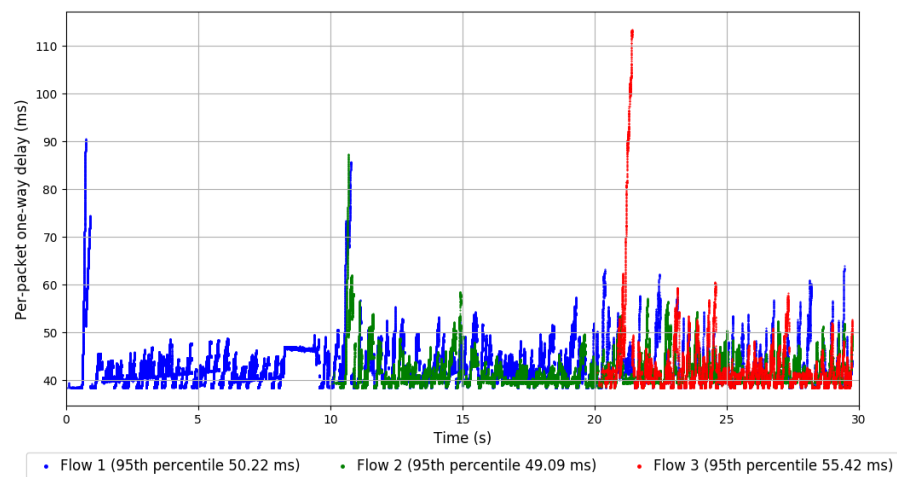
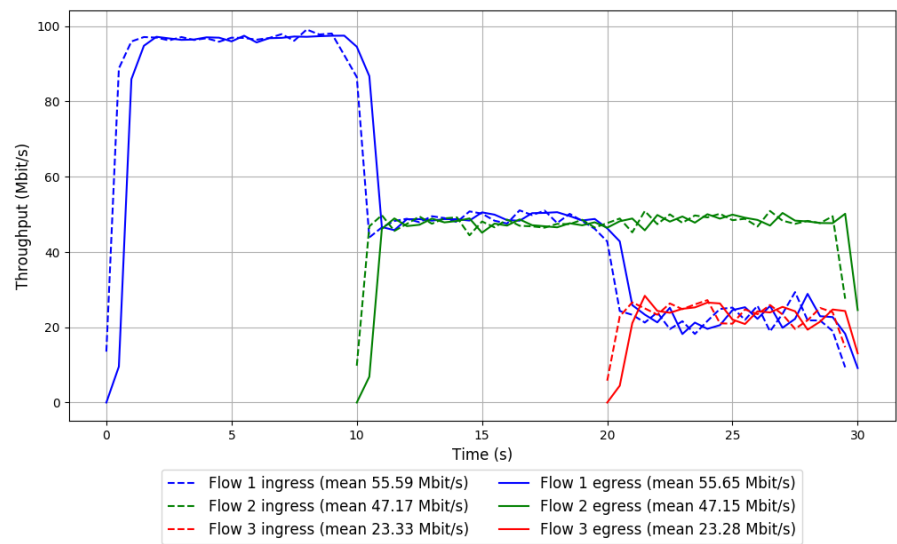


Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-18 11:17:50  
End at: 2019-07-18 11:18:20  
Local clock offset: -3.136 ms  
Remote clock offset: -2.416 ms

# Below is generated by plot.py at 2019-07-18 13:30:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.44 Mbit/s  
95th percentile per-packet one-way delay: 50.250 ms  
Loss rate: 0.25%  
-- Flow 1:  
Average throughput: 55.65 Mbit/s  
95th percentile per-packet one-way delay: 50.224 ms  
Loss rate: 0.10%  
-- Flow 2:  
Average throughput: 47.15 Mbit/s  
95th percentile per-packet one-way delay: 49.095 ms  
Loss rate: 0.37%  
-- Flow 3:  
Average throughput: 23.28 Mbit/s  
95th percentile per-packet one-way delay: 55.423 ms  
Loss rate: 0.86%

Run 2: Report of Muses\_DecisionTreeR0 — Data Link

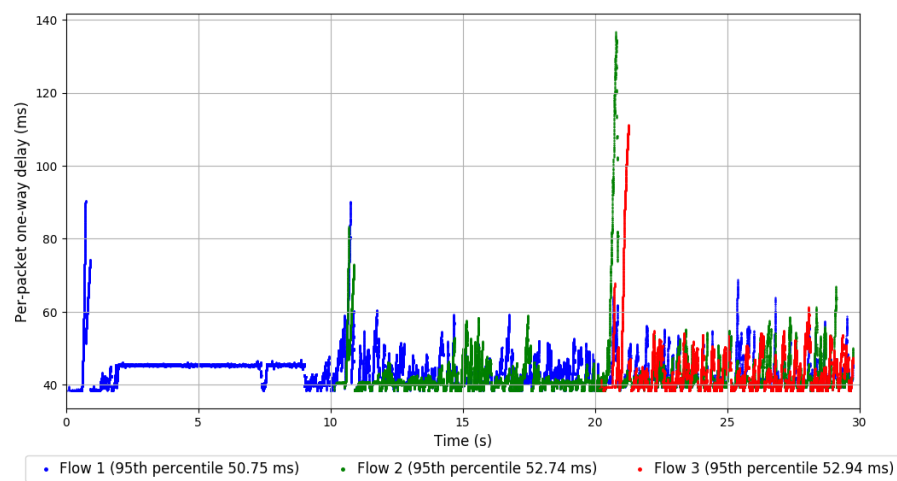
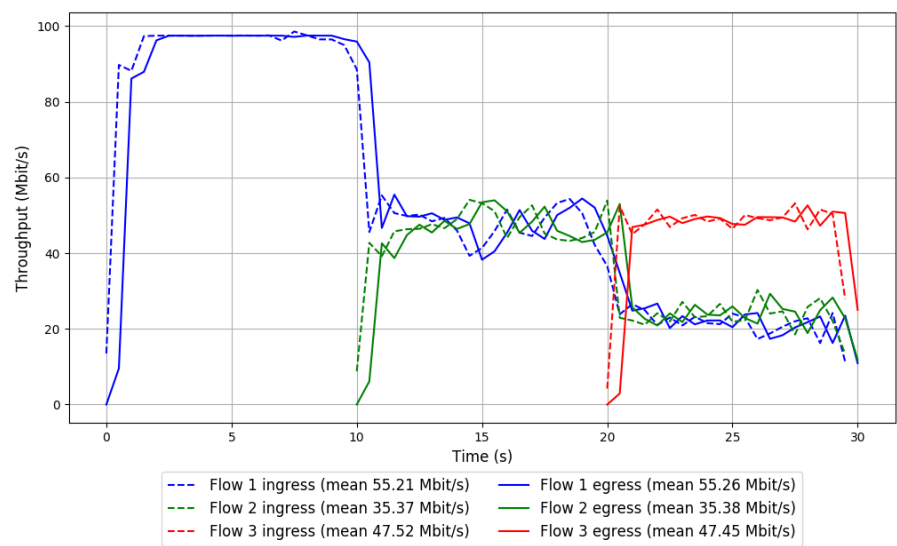


Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-18 11:50:56  
End at: 2019-07-18 11:51:26  
Local clock offset: -3.701 ms  
Remote clock offset: -1.105 ms

# Below is generated by plot.py at 2019-07-18 13:30:57  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.00 Mbit/s  
95th percentile per-packet one-way delay: 51.767 ms  
Loss rate: 0.26%  
-- Flow 1:  
Average throughput: 55.26 Mbit/s  
95th percentile per-packet one-way delay: 50.749 ms  
Loss rate: 0.11%  
-- Flow 2:  
Average throughput: 35.38 Mbit/s  
95th percentile per-packet one-way delay: 52.739 ms  
Loss rate: 0.26%  
-- Flow 3:  
Average throughput: 47.45 Mbit/s  
95th percentile per-packet one-way delay: 52.940 ms  
Loss rate: 0.83%

Run 3: Report of Muses\_DecisionTreeR0 — Data Link



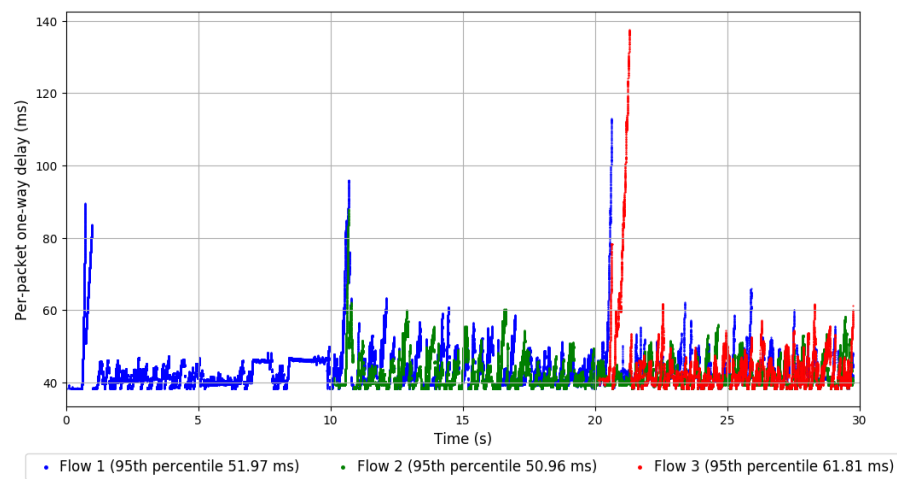
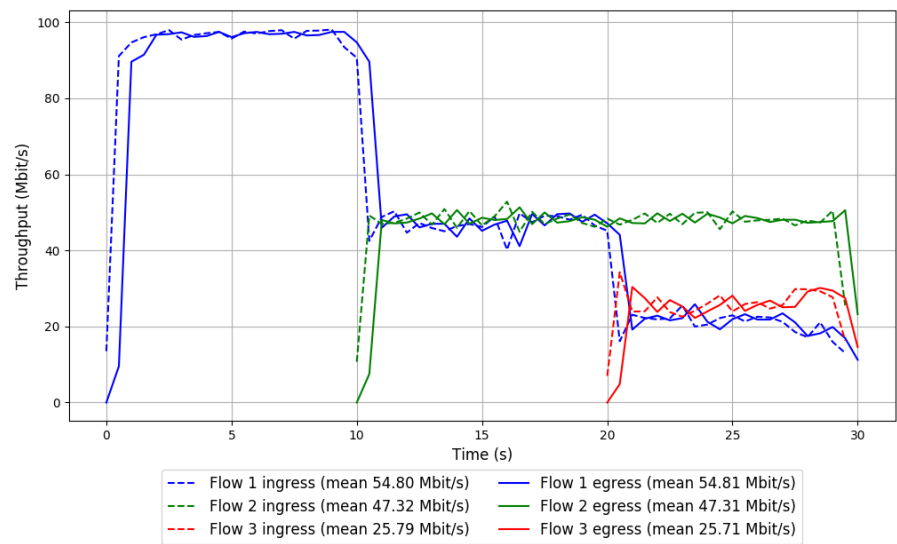


Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-18 12:22:46  
End at: 2019-07-18 12:23:16  
Local clock offset: 1.195 ms  
Remote clock offset: -1.089 ms

# Below is generated by plot.py at 2019-07-18 13:30:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.52 Mbit/s  
95th percentile per-packet one-way delay: 52.222 ms  
Loss rate: 0.29%  
-- Flow 1:  
Average throughput: 54.81 Mbit/s  
95th percentile per-packet one-way delay: 51.971 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 47.31 Mbit/s  
95th percentile per-packet one-way delay: 50.964 ms  
Loss rate: 0.34%  
-- Flow 3:  
Average throughput: 25.71 Mbit/s  
95th percentile per-packet one-way delay: 61.806 ms  
Loss rate: 0.94%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link

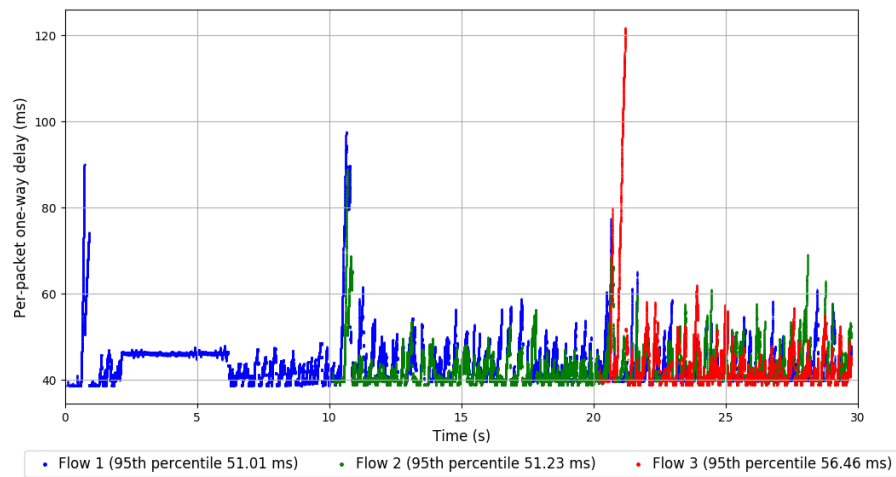
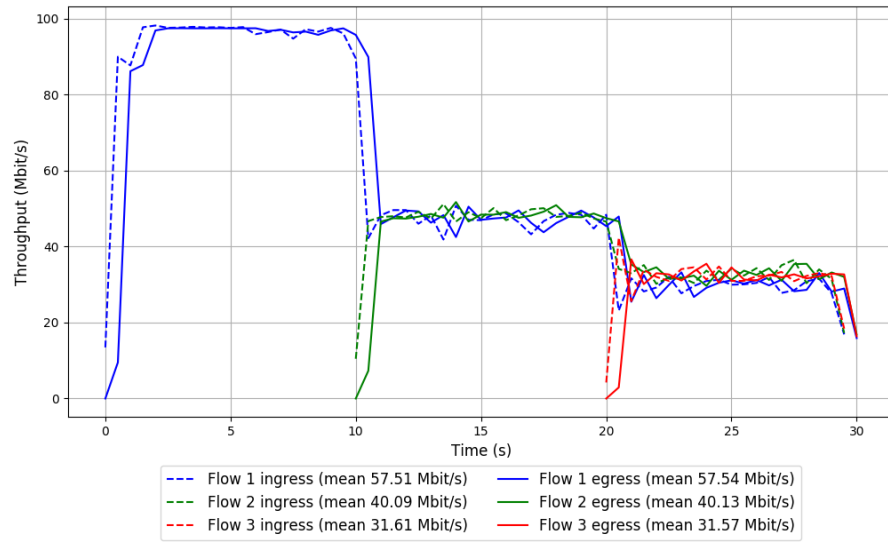


Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-18 12:55:11  
End at: 2019-07-18 12:55:41  
Local clock offset: 0.874 ms  
Remote clock offset: -0.972 ms

# Below is generated by plot.py at 2019-07-18 13:31:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.32 Mbit/s  
95th percentile per-packet one-way delay: 51.681 ms  
Loss rate: 0.25%  
-- Flow 1:  
Average throughput: 57.54 Mbit/s  
95th percentile per-packet one-way delay: 51.014 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 40.13 Mbit/s  
95th percentile per-packet one-way delay: 51.228 ms  
Loss rate: 0.23%  
-- Flow 3:  
Average throughput: 31.57 Mbit/s  
95th percentile per-packet one-way delay: 56.464 ms  
Loss rate: 0.78%

# Run 5: Report of Muses\_DecisionTreeR0 — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-07-18 11:04:40

End at: 2019-07-18 11:05:10

Local clock offset: -3.138 ms

Remote clock offset: -2.89 ms

# Below is generated by plot.py at 2019-07-18 13:31:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 92.12 Mbit/s

95th percentile per-packet one-way delay: 2336.851 ms

Loss rate: 7.01%

-- Flow 1:

Average throughput: 55.78 Mbit/s

95th percentile per-packet one-way delay: 2442.638 ms

Loss rate: 10.80%

-- Flow 2:

Average throughput: 44.38 Mbit/s

95th percentile per-packet one-way delay: 47.998 ms

Loss rate: 0.39%

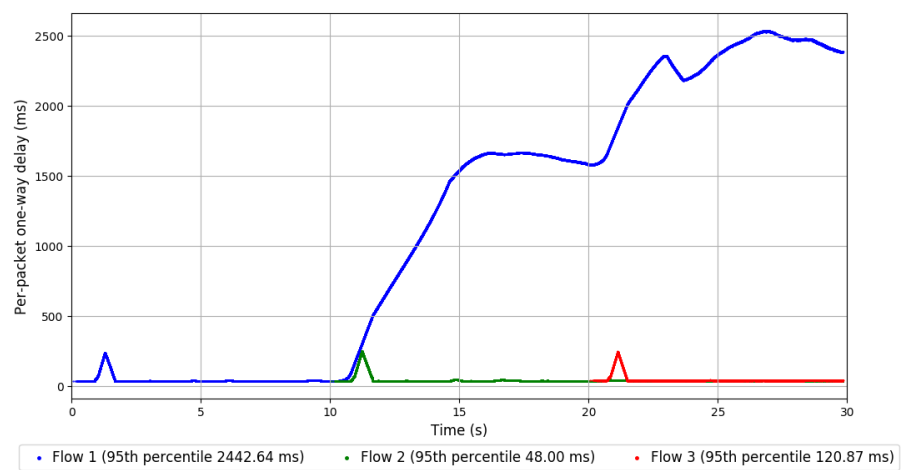
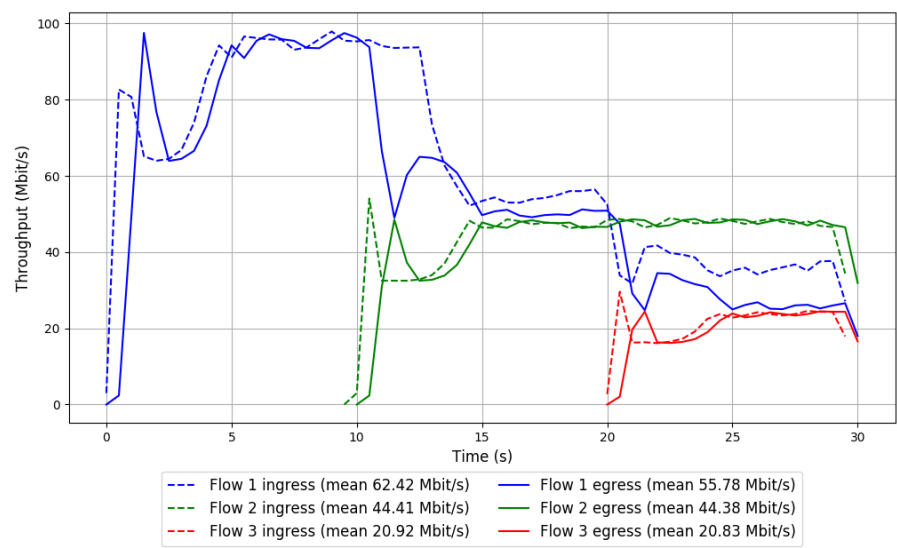
-- Flow 3:

Average throughput: 20.83 Mbit/s

95th percentile per-packet one-way delay: 120.868 ms

Loss rate: 1.08%

Run 1: Report of PCC-Allegro — Data Link

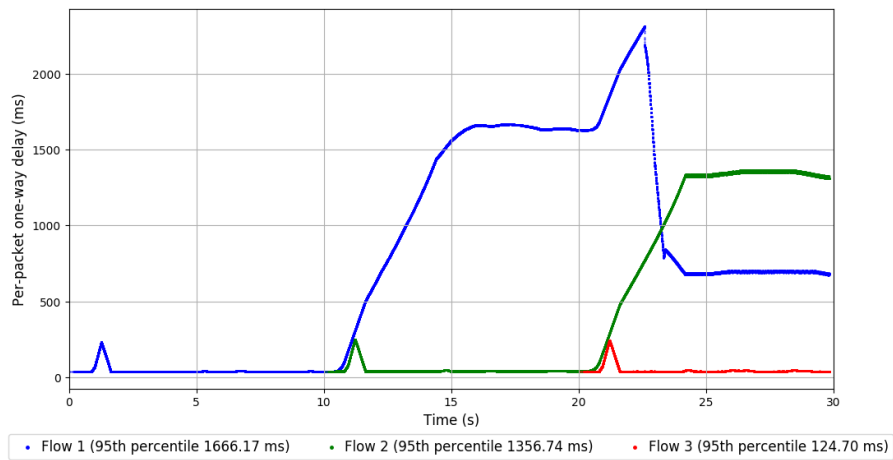
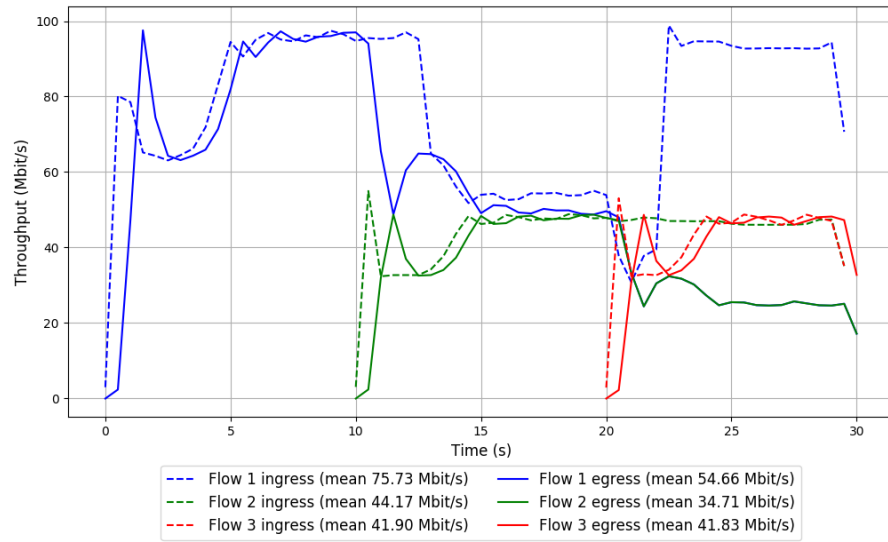


Run 2: Statistics of PCC-Allegro

Start at: 2019-07-18 11:37:38  
End at: 2019-07-18 11:38:08  
Local clock offset: -3.457 ms  
Remote clock offset: -1.627 ms

# Below is generated by plot.py at 2019-07-18 13:31:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 91.47 Mbit/s  
95th percentile per-packet one-way delay: 1660.009 ms  
Loss rate: 23.26%  
-- Flow 1:  
Average throughput: 54.66 Mbit/s  
95th percentile per-packet one-way delay: 1666.175 ms  
Loss rate: 27.97%  
-- Flow 2:  
Average throughput: 34.71 Mbit/s  
95th percentile per-packet one-way delay: 1356.737 ms  
Loss rate: 21.67%  
-- Flow 3:  
Average throughput: 41.83 Mbit/s  
95th percentile per-packet one-way delay: 124.704 ms  
Loss rate: 0.82%

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



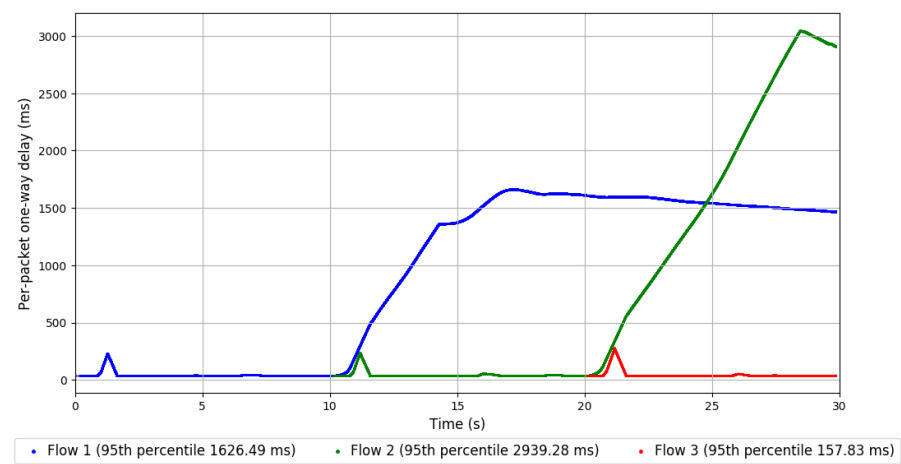
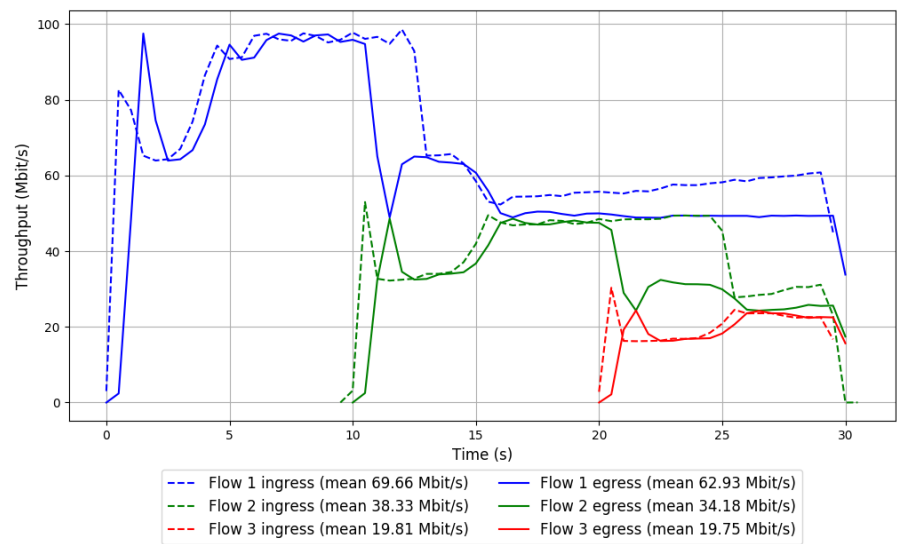


Run 3: Statistics of PCC-Allegro

Start at: 2019-07-18 12:09:40  
End at: 2019-07-18 12:10:10  
Local clock offset: 0.118 ms  
Remote clock offset: -1.175 ms

# Below is generated by plot.py at 2019-07-18 13:31:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.14 Mbit/s  
95th percentile per-packet one-way delay: 1660.649 ms  
Loss rate: 10.54%  
-- Flow 1:  
Average throughput: 62.93 Mbit/s  
95th percentile per-packet one-way delay: 1626.495 ms  
Loss rate: 9.85%  
-- Flow 2:  
Average throughput: 34.18 Mbit/s  
95th percentile per-packet one-way delay: 2939.276 ms  
Loss rate: 14.70%  
-- Flow 3:  
Average throughput: 19.75 Mbit/s  
95th percentile per-packet one-way delay: 157.830 ms  
Loss rate: 0.92%

Run 3: Report of PCC-Allegro — Data Link

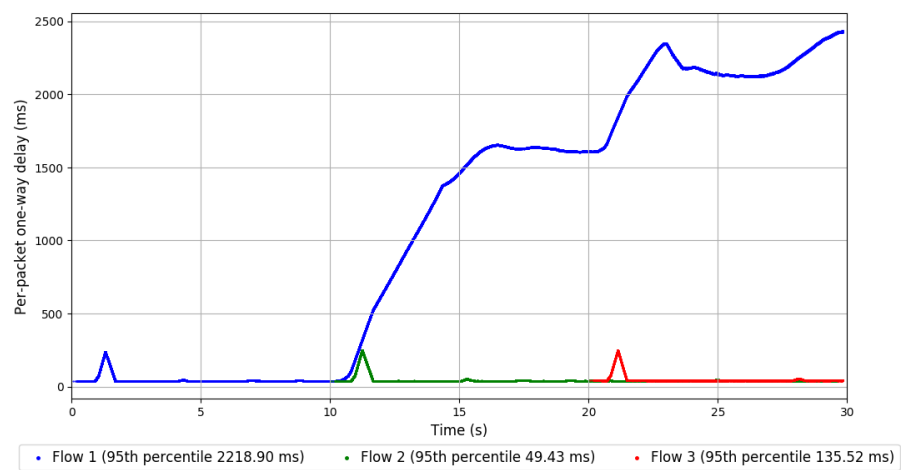
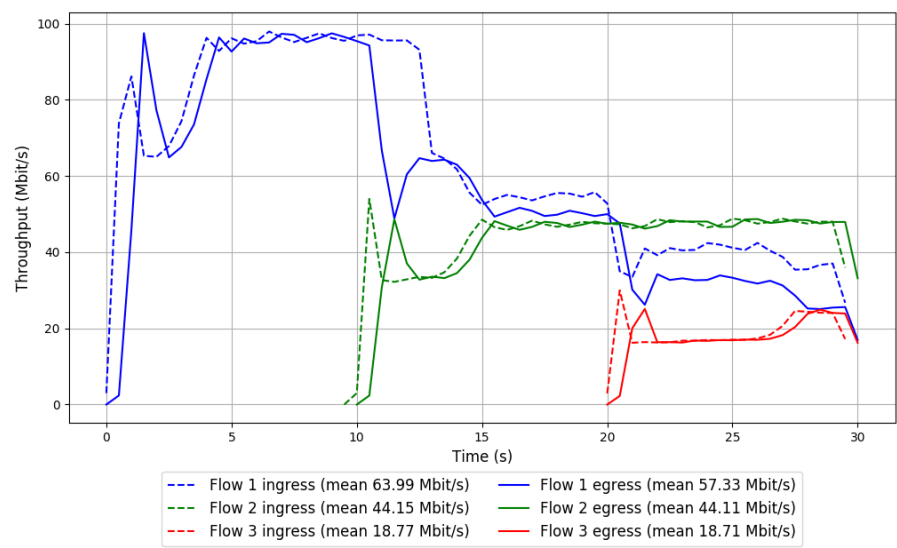


Run 4: Statistics of PCC-Allegro

Start at: 2019-07-18 12:42:03  
End at: 2019-07-18 12:42:33  
Local clock offset: 0.841 ms  
Remote clock offset: -0.994 ms

# Below is generated by plot.py at 2019-07-18 13:31:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.80 Mbit/s  
95th percentile per-packet one-way delay: 2160.947 ms  
Loss rate: 6.99%  
-- Flow 1:  
Average throughput: 57.33 Mbit/s  
95th percentile per-packet one-way delay: 2218.904 ms  
Loss rate: 10.59%  
-- Flow 2:  
Average throughput: 44.11 Mbit/s  
95th percentile per-packet one-way delay: 49.430 ms  
Loss rate: 0.41%  
-- Flow 3:  
Average throughput: 18.71 Mbit/s  
95th percentile per-packet one-way delay: 135.517 ms  
Loss rate: 0.98%

Run 4: Report of PCC-Allegro — Data Link

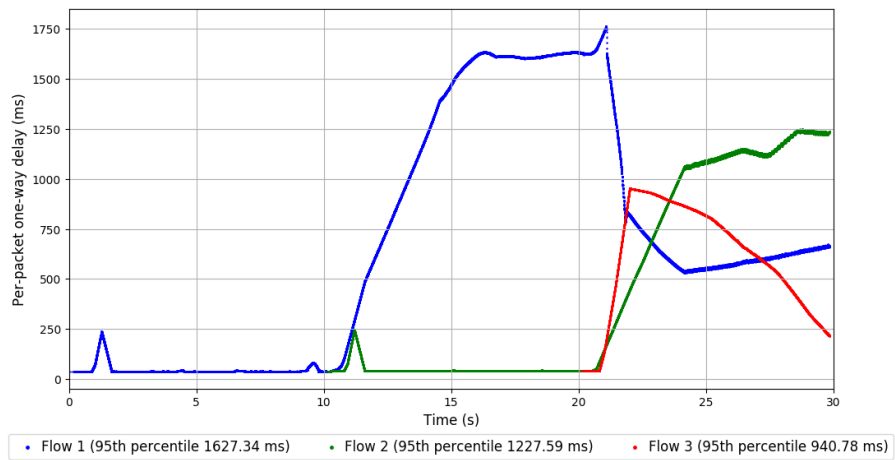
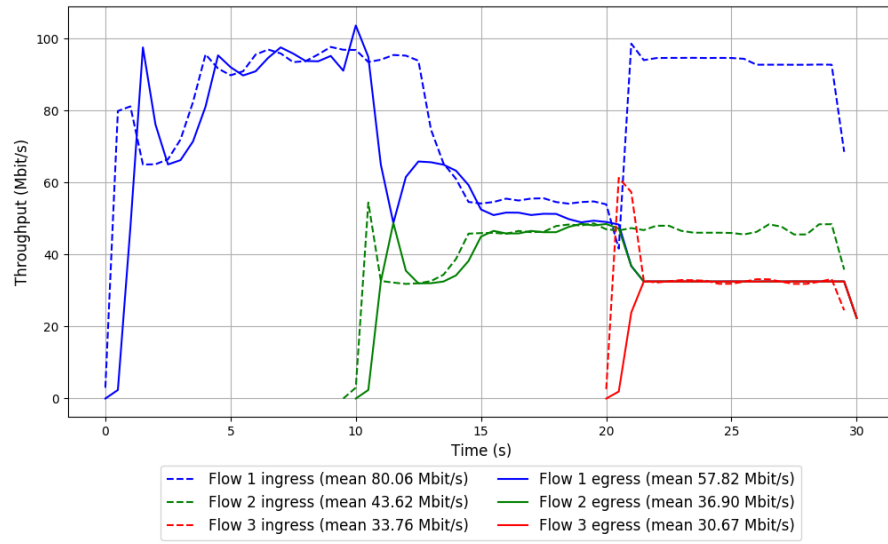


Run 5: Statistics of PCC-Allegro

Start at: 2019-07-18 13:13:46  
End at: 2019-07-18 13:14:16  
Local clock offset: -2.867 ms  
Remote clock offset: -0.815 ms

# Below is generated by plot.py at 2019-07-18 13:31:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.41 Mbit/s  
95th percentile per-packet one-way delay: 1617.321 ms  
Loss rate: 23.29%  
-- Flow 1:  
Average throughput: 57.82 Mbit/s  
95th percentile per-packet one-way delay: 1627.337 ms  
Loss rate: 27.93%  
-- Flow 2:  
Average throughput: 36.90 Mbit/s  
95th percentile per-packet one-way delay: 1227.594 ms  
Loss rate: 15.67%  
-- Flow 3:  
Average throughput: 30.67 Mbit/s  
95th percentile per-packet one-way delay: 940.776 ms  
Loss rate: 9.76%

# Run 5: Report of PCC-Allegro — Data Link

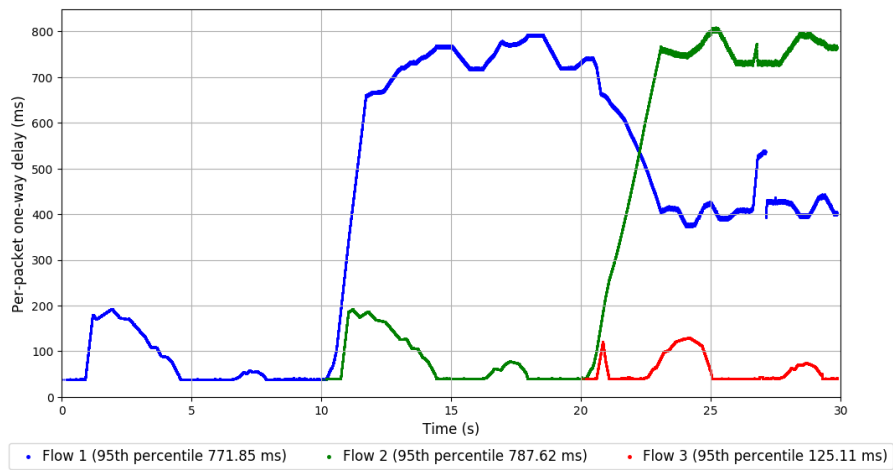
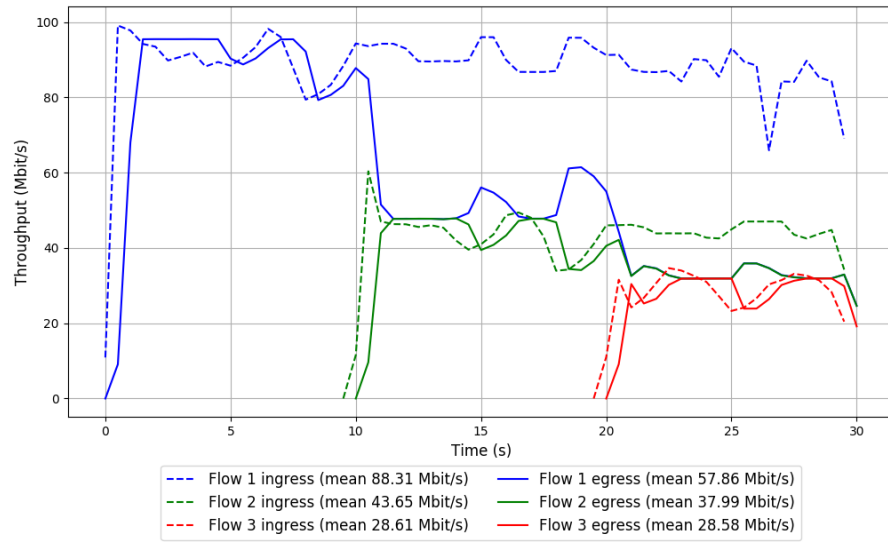


```
Run 1: Statistics of PCC-Expr

Start at: 2019-07-18 10:58:02
End at: 2019-07-18 10:58:32
Local clock offset: -3.339 ms
Remote clock offset: -2.986 ms

# Below is generated by plot.py at 2019-07-18 13:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.52 Mbit/s
95th percentile per-packet one-way delay: 774.005 ms
Loss rate: 27.20%
-- Flow 1:
Average throughput: 57.86 Mbit/s
95th percentile per-packet one-way delay: 771.845 ms
Loss rate: 34.62%
-- Flow 2:
Average throughput: 37.99 Mbit/s
95th percentile per-packet one-way delay: 787.620 ms
Loss rate: 13.25%
-- Flow 3:
Average throughput: 28.58 Mbit/s
95th percentile per-packet one-way delay: 125.105 ms
Loss rate: 0.75%
```

# Run 1: Report of PCC-Expr — Data Link



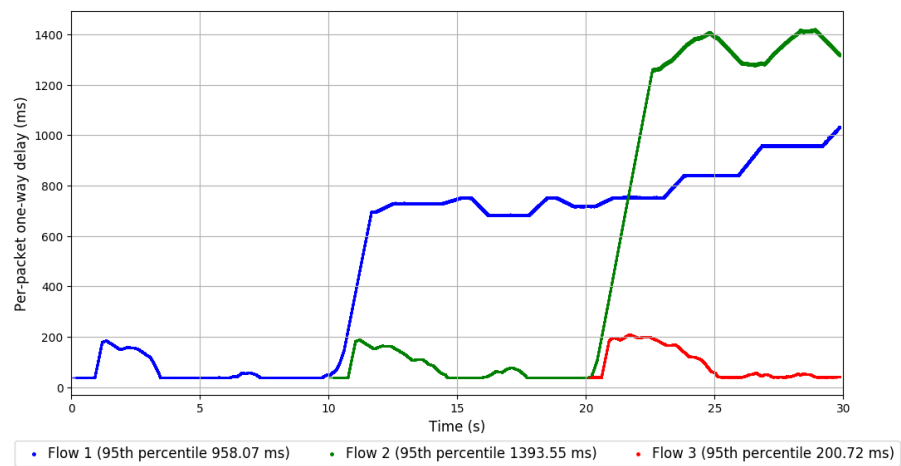
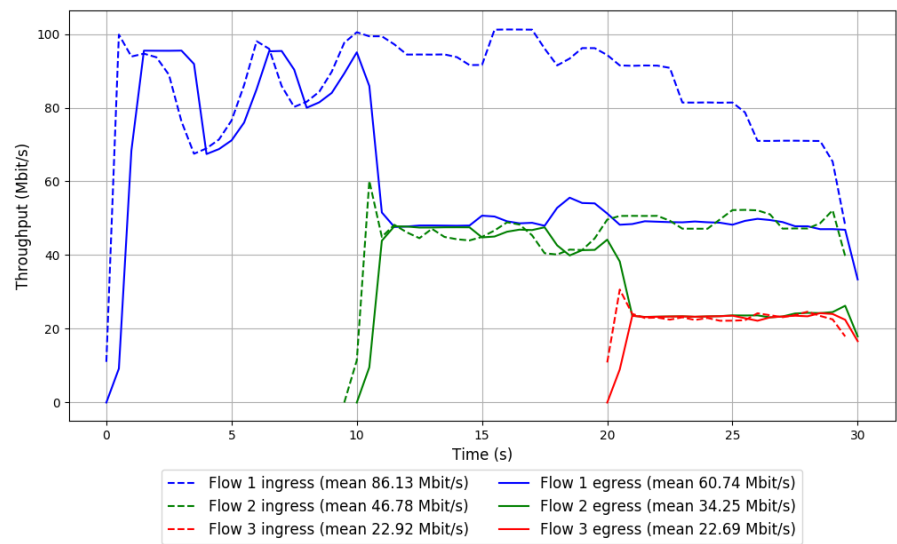


Run 2: Statistics of PCC-Expr

Start at: 2019-07-18 11:30:52  
End at: 2019-07-18 11:31:22  
Local clock offset: -3.349 ms  
Remote clock offset: -1.827 ms

# Below is generated by plot.py at 2019-07-18 13:32:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 90.98 Mbit/s  
95th percentile per-packet one-way delay: 1287.864 ms  
Loss rate: 27.28%  
-- Flow 1:  
Average throughput: 60.74 Mbit/s  
95th percentile per-packet one-way delay: 958.066 ms  
Loss rate: 29.62%  
-- Flow 2:  
Average throughput: 34.25 Mbit/s  
95th percentile per-packet one-way delay: 1393.551 ms  
Loss rate: 27.04%  
-- Flow 3:  
Average throughput: 22.69 Mbit/s  
95th percentile per-packet one-way delay: 200.715 ms  
Loss rate: 1.64%

Run 2: Report of PCC-Expr — Data Link

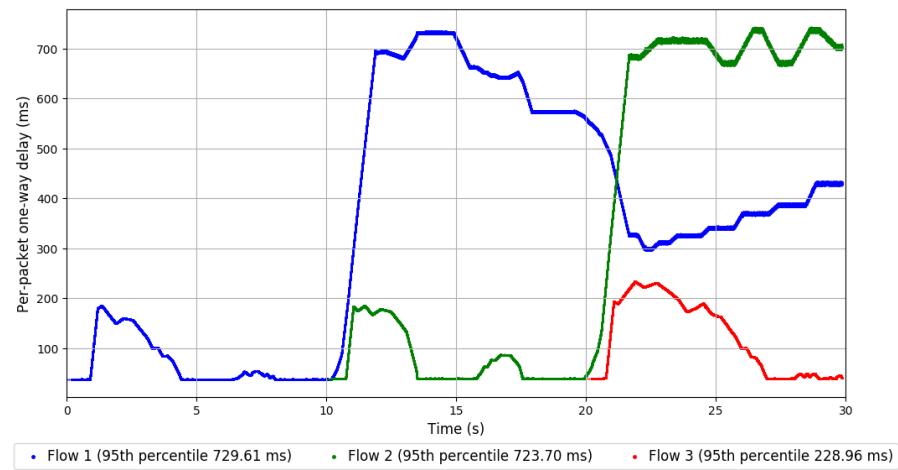
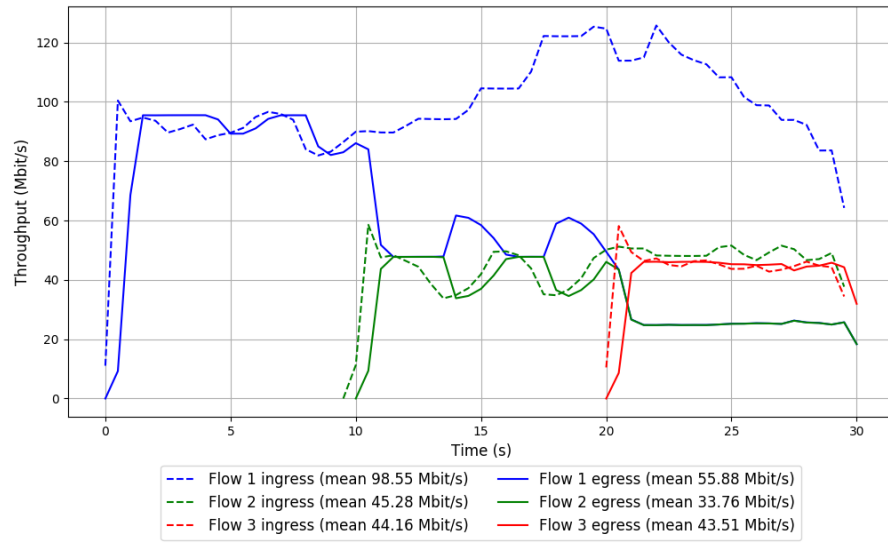


Run 3: Statistics of PCC-Expr

Start at: 2019-07-18 12:03:14  
End at: 2019-07-18 12:03:44  
Local clock offset: -0.897 ms  
Remote clock offset: -1.108 ms

# Below is generated by plot.py at 2019-07-18 13:33:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.62 Mbit/s  
95th percentile per-packet one-way delay: 719.682 ms  
Loss rate: 35.48%  
-- Flow 1:  
Average throughput: 55.88 Mbit/s  
95th percentile per-packet one-way delay: 729.611 ms  
Loss rate: 43.41%  
-- Flow 2:  
Average throughput: 33.76 Mbit/s  
95th percentile per-packet one-way delay: 723.697 ms  
Loss rate: 25.67%  
-- Flow 3:  
Average throughput: 43.51 Mbit/s  
95th percentile per-packet one-way delay: 228.962 ms  
Loss rate: 2.11%

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

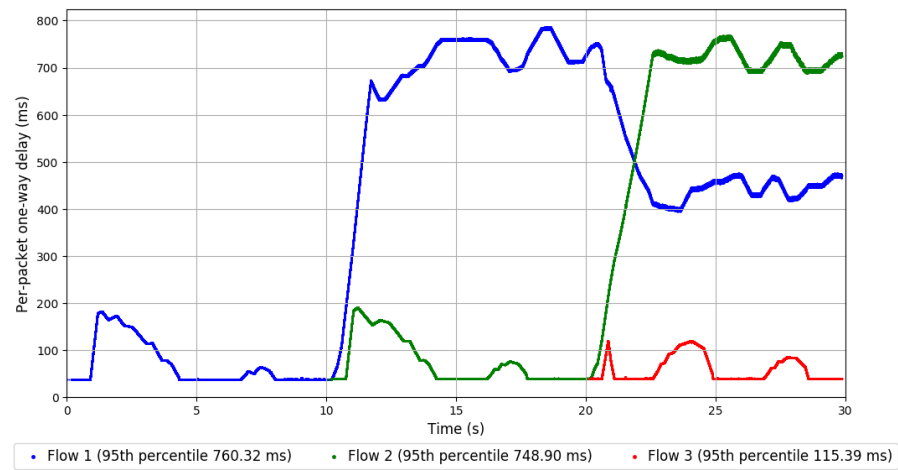
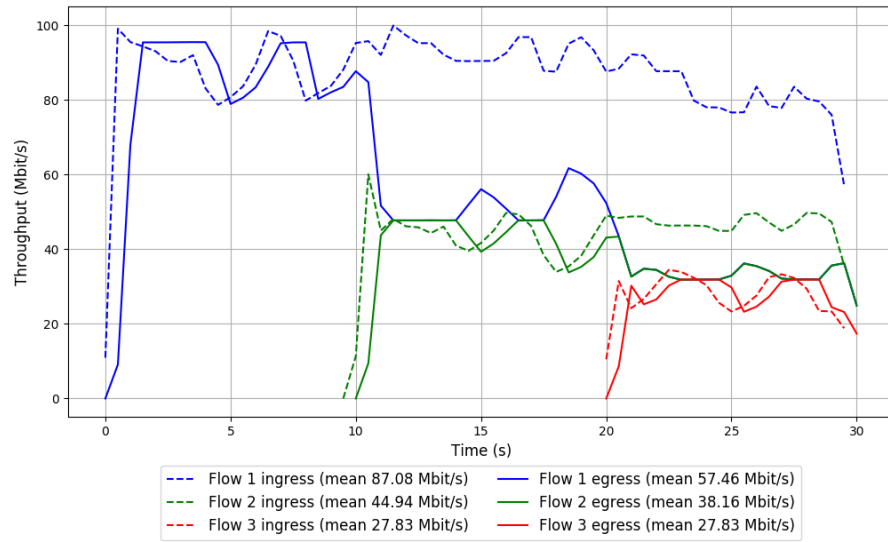


Run 4: Statistics of PCC-Expr

Start at: 2019-07-18 12:35:29  
End at: 2019-07-18 12:35:59  
Local clock offset: 0.801 ms  
Remote clock offset: -0.981 ms

# Below is generated by plot.py at 2019-07-18 13:33:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 91.97 Mbit/s  
95th percentile per-packet one-way delay: 758.966 ms  
Loss rate: 27.26%  
-- Flow 1:  
Average throughput: 57.46 Mbit/s  
95th percentile per-packet one-way delay: 760.324 ms  
Loss rate: 34.15%  
-- Flow 2:  
Average throughput: 38.16 Mbit/s  
95th percentile per-packet one-way delay: 748.905 ms  
Loss rate: 15.35%  
-- Flow 3:  
Average throughput: 27.83 Mbit/s  
95th percentile per-packet one-way delay: 115.391 ms  
Loss rate: 0.73%

# Run 4: Report of PCC-Expr — Data Link

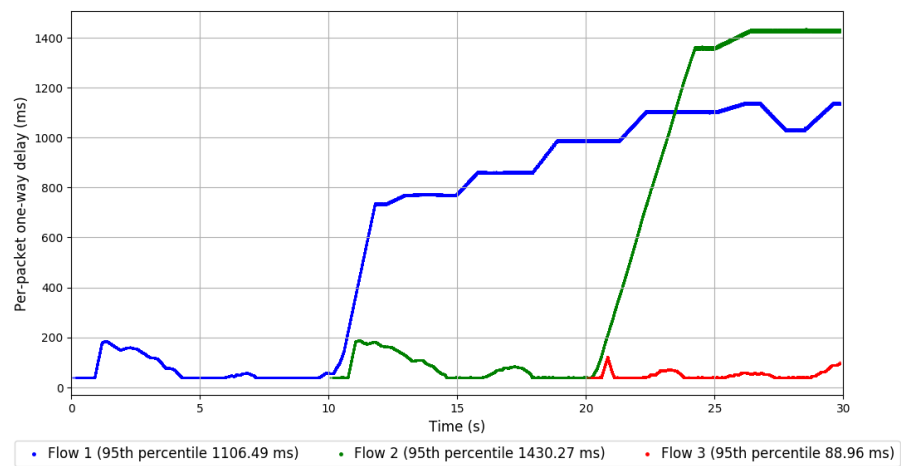
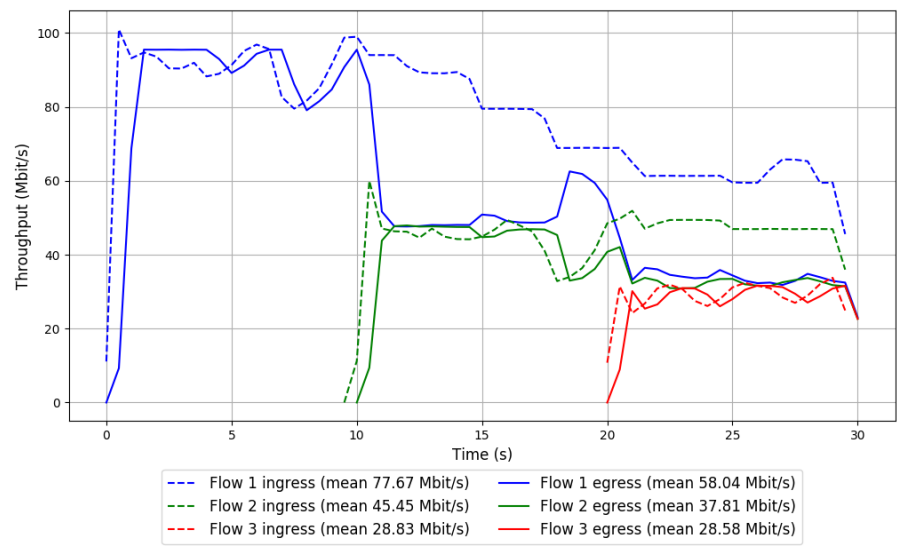


Run 5: Statistics of PCC-Expr

Start at: 2019-07-18 13:07:17  
End at: 2019-07-18 13:07:47  
Local clock offset: -2.215 ms  
Remote clock offset: -0.896 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.56 Mbit/s  
95th percentile per-packet one-way delay: 1389.231 ms  
Loss rate: 21.34%  
-- Flow 1:  
Average throughput: 58.04 Mbit/s  
95th percentile per-packet one-way delay: 1106.493 ms  
Loss rate: 25.44%  
-- Flow 2:  
Average throughput: 37.81 Mbit/s  
95th percentile per-packet one-way delay: 1430.265 ms  
Loss rate: 17.07%  
-- Flow 3:  
Average throughput: 28.58 Mbit/s  
95th percentile per-packet one-way delay: 88.959 ms  
Loss rate: 1.45%

Run 5: Report of PCC-Expr — Data Link



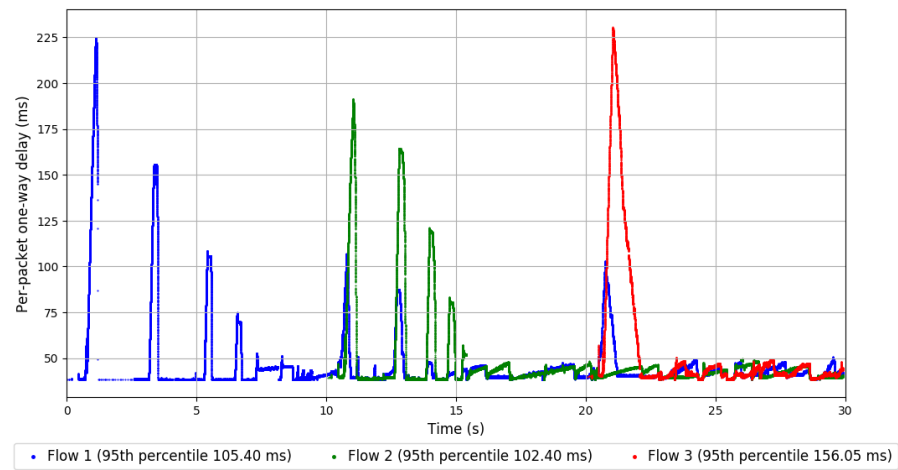
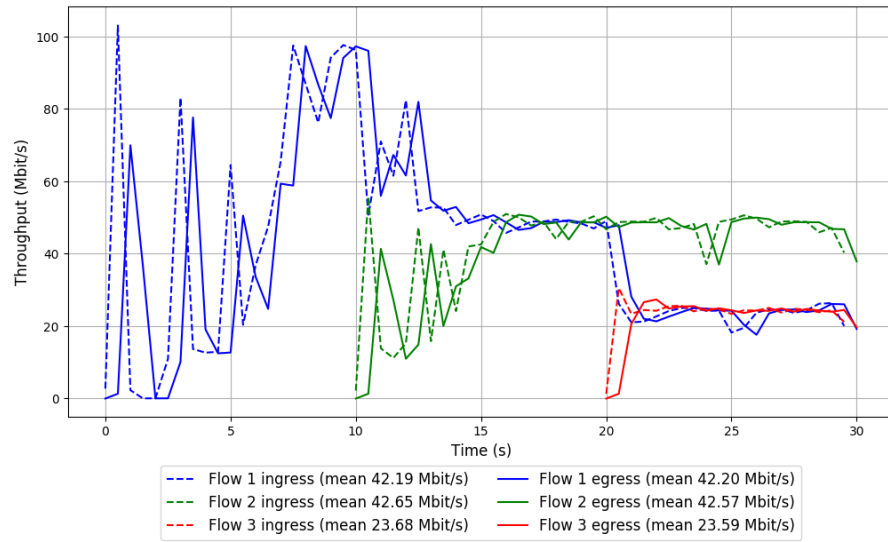


Run 1: Statistics of QUIC Cubic

Start at: 2019-07-18 11:01:59  
End at: 2019-07-18 11:02:29  
Local clock offset: -3.173 ms  
Remote clock offset: -2.952 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 78.26 Mbit/s  
95th percentile per-packet one-way delay: 105.609 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 42.20 Mbit/s  
95th percentile per-packet one-way delay: 105.401 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 42.57 Mbit/s  
95th percentile per-packet one-way delay: 102.397 ms  
Loss rate: 0.52%  
-- Flow 3:  
Average throughput: 23.59 Mbit/s  
95th percentile per-packet one-way delay: 156.050 ms  
Loss rate: 1.02%

## Run 1: Report of QUIC Cubic — Data Link

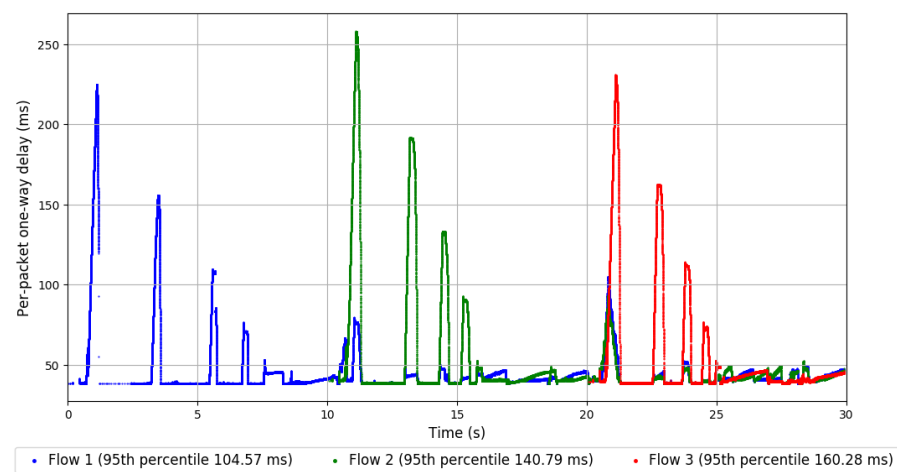
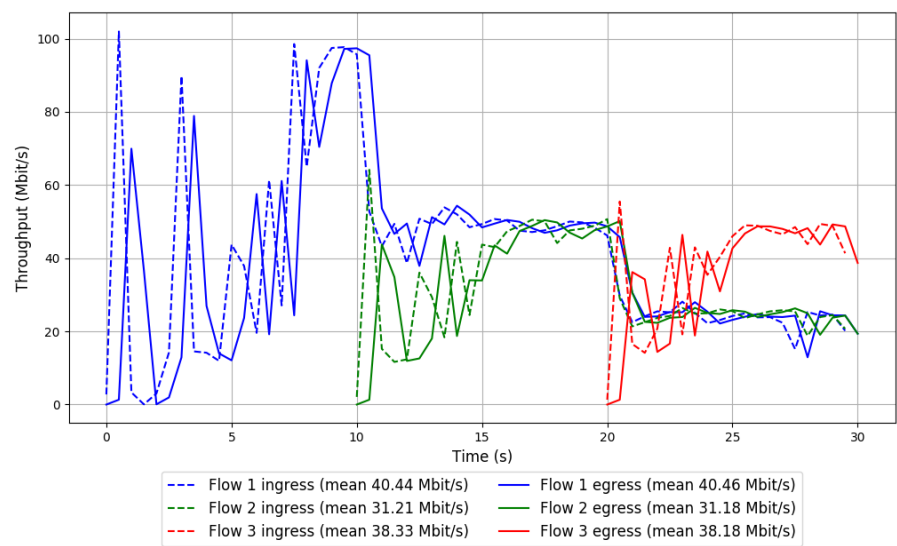


Run 2: Statistics of QUIC Cubic

Start at: 2019-07-18 11:34:56  
End at: 2019-07-18 11:35:26  
Local clock offset: -3.46 ms  
Remote clock offset: -1.706 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 73.76 Mbit/s  
95th percentile per-packet one-way delay: 126.289 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 40.46 Mbit/s  
95th percentile per-packet one-way delay: 104.574 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 31.18 Mbit/s  
95th percentile per-packet one-way delay: 140.786 ms  
Loss rate: 0.40%  
-- Flow 3:  
Average throughput: 38.18 Mbit/s  
95th percentile per-packet one-way delay: 160.284 ms  
Loss rate: 1.03%

Run 2: Report of QUIC Cubic — Data Link

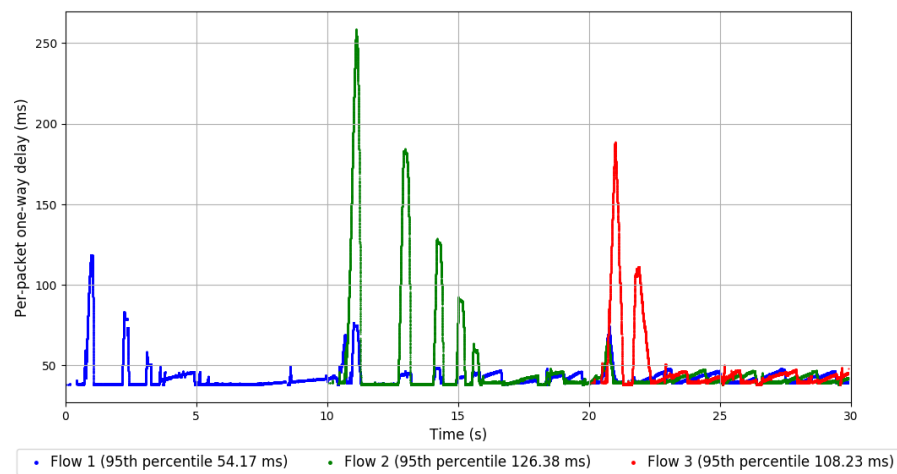
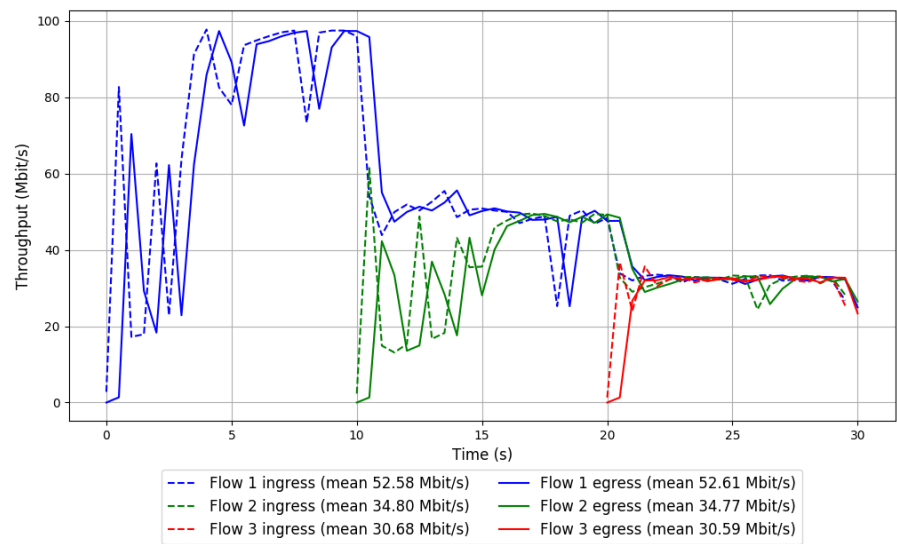


Run 3: Statistics of QUIC Cubic

Start at: 2019-07-18 12:07:05  
End at: 2019-07-18 12:07:35  
Local clock offset: -0.231 ms  
Remote clock offset: -1.128 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.79 Mbit/s  
95th percentile per-packet one-way delay: 77.482 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 52.61 Mbit/s  
95th percentile per-packet one-way delay: 54.174 ms  
Loss rate: 0.15%  
-- Flow 2:  
Average throughput: 34.77 Mbit/s  
95th percentile per-packet one-way delay: 126.377 ms  
Loss rate: 0.42%  
-- Flow 3:  
Average throughput: 30.59 Mbit/s  
95th percentile per-packet one-way delay: 108.230 ms  
Loss rate: 0.92%

Run 3: Report of QUIC Cubic — Data Link

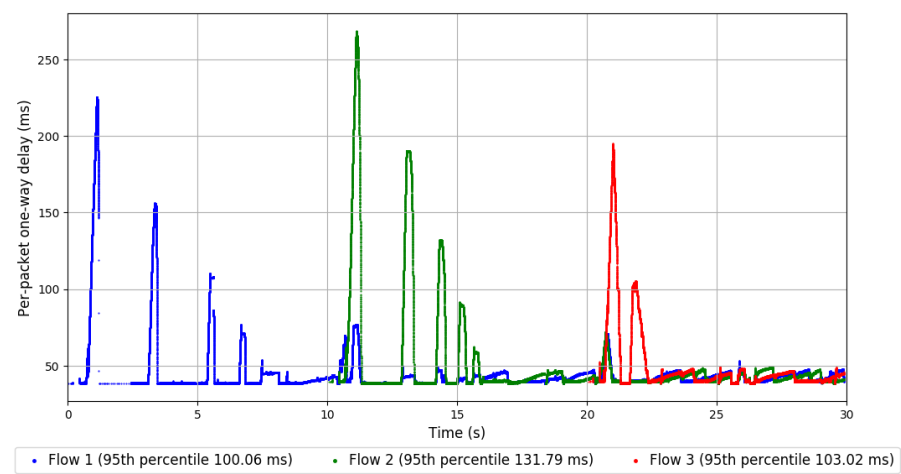
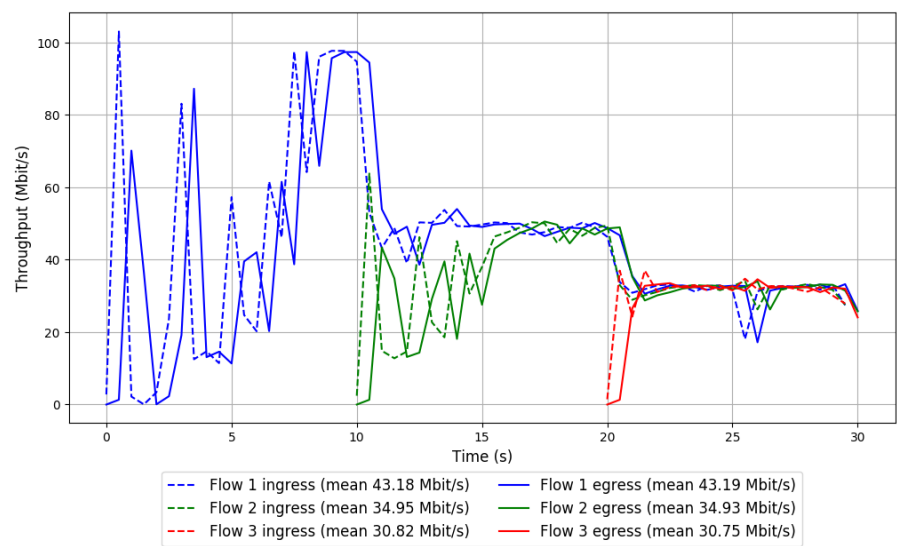


Run 4: Statistics of QUIC Cubic

Start at: 2019-07-18 12:39:20  
End at: 2019-07-18 12:39:50  
Local clock offset: 0.819 ms  
Remote clock offset: -1.053 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 76.54 Mbit/s  
95th percentile per-packet one-way delay: 107.509 ms  
Loss rate: 0.34%  
-- Flow 1:  
Average throughput: 43.19 Mbit/s  
95th percentile per-packet one-way delay: 100.057 ms  
Loss rate: 0.19%  
-- Flow 2:  
Average throughput: 34.93 Mbit/s  
95th percentile per-packet one-way delay: 131.786 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 30.75 Mbit/s  
95th percentile per-packet one-way delay: 103.022 ms  
Loss rate: 0.89%

Run 4: Report of QUIC Cubic — Data Link



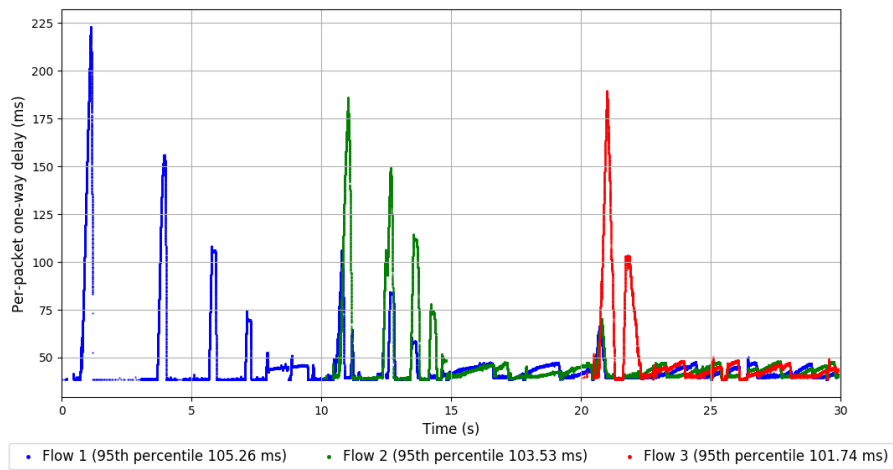
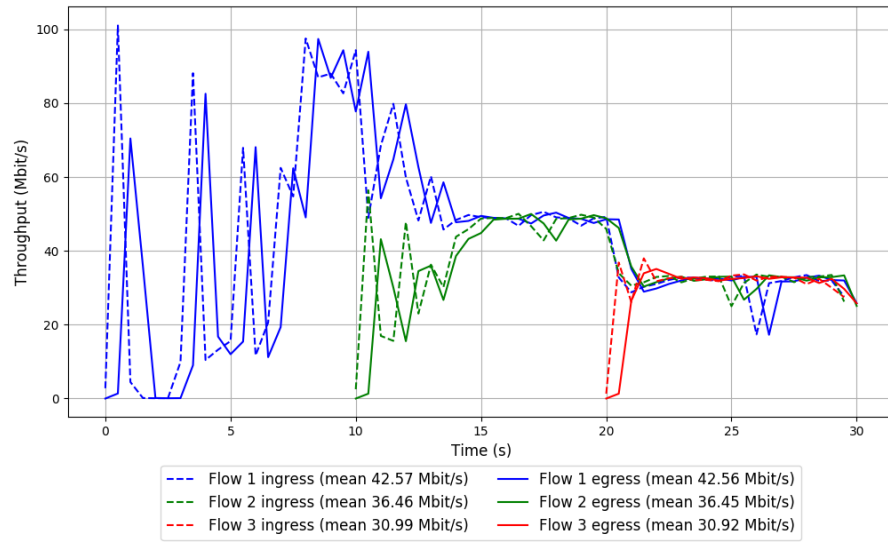


Run 5: Statistics of QUIC Cubic

Start at: 2019-07-18 13:11:05  
End at: 2019-07-18 13:11:35  
Local clock offset: -2.62 ms  
Remote clock offset: -0.776 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 76.98 Mbit/s  
95th percentile per-packet one-way delay: 103.024 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 42.56 Mbit/s  
95th percentile per-packet one-way delay: 105.262 ms  
Loss rate: 0.23%  
-- Flow 2:  
Average throughput: 36.45 Mbit/s  
95th percentile per-packet one-way delay: 103.529 ms  
Loss rate: 0.35%  
-- Flow 3:  
Average throughput: 30.92 Mbit/s  
95th percentile per-packet one-way delay: 101.736 ms  
Loss rate: 0.88%

## Run 5: Report of QUIC Cubic — Data Link

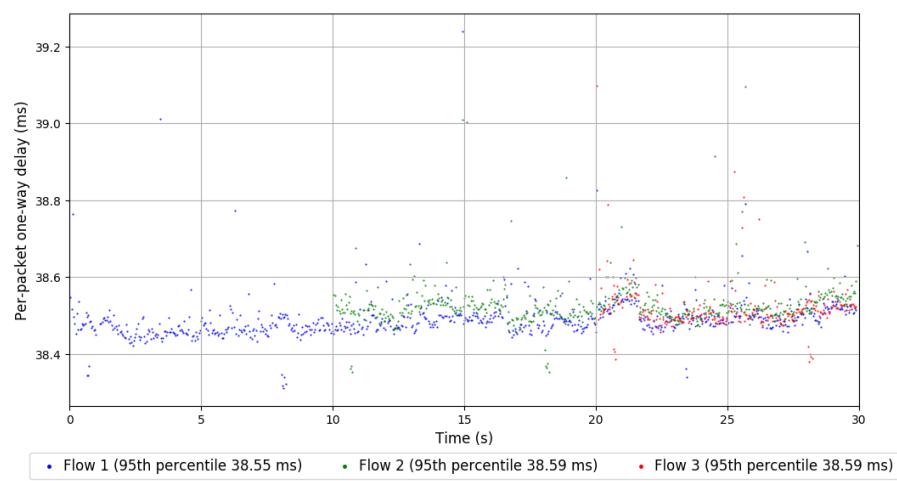
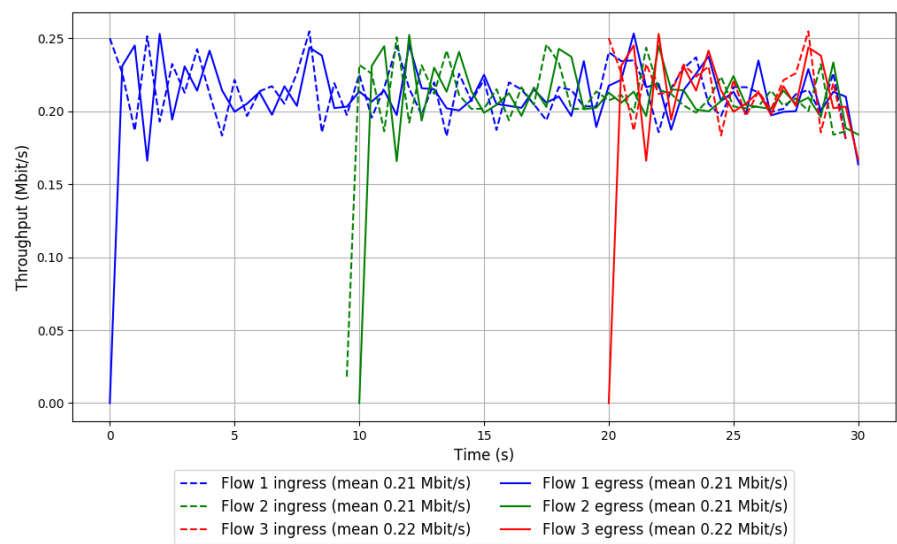


```
Run 1: Statistics of SReAM

Start at: 2019-07-18 10:44:27
End at: 2019-07-18 10:44:57
Local clock offset: -3.061 ms
Remote clock offset: -3.559 ms

# Below is generated by plot.py at 2019-07-18 13:33:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 38.584 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 38.553 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 38.594 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 38.588 ms
Loss rate: 0.71%
```

Run 1: Report of SReAM — Data Link

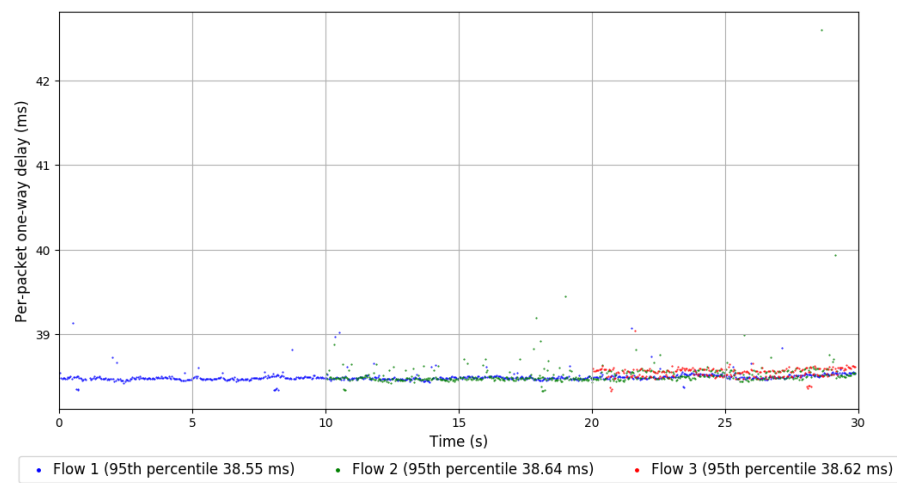
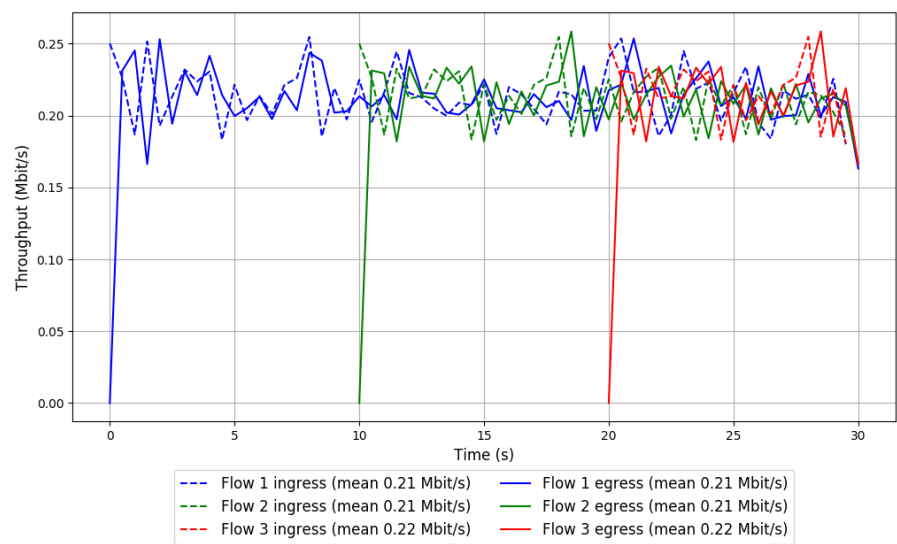


Run 2: Statistics of SReAM

Start at: 2019-07-18 11:16:41  
End at: 2019-07-18 11:17:11  
Local clock offset: -3.094 ms  
Remote clock offset: -2.492 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 38.609 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 38.545 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 38.638 ms  
Loss rate: 0.40%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 38.619 ms  
Loss rate: 0.71%

Run 2: Report of SReAM — Data Link

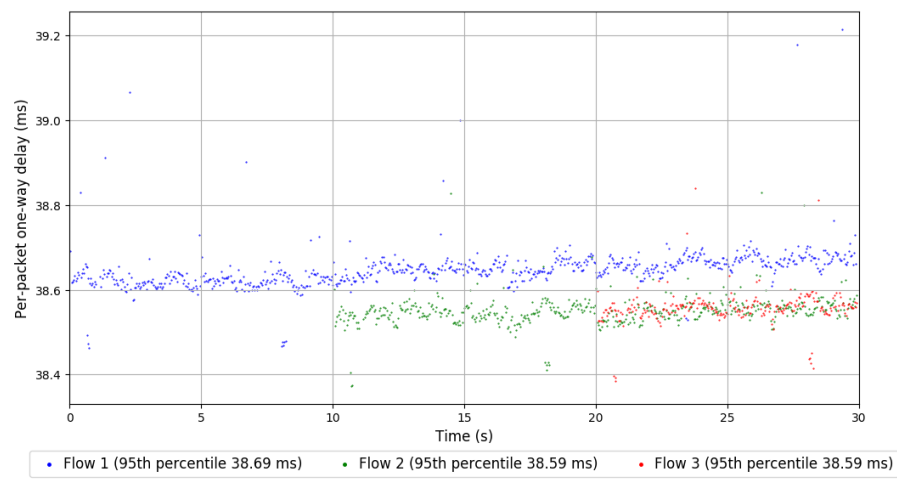
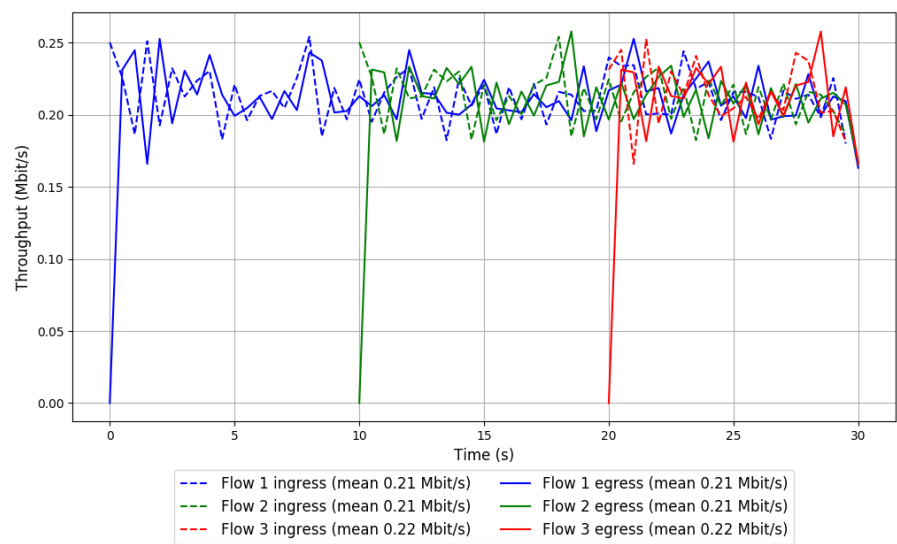


Run 3: Statistics of SReAM

Start at: 2019-07-18 11:49:47  
End at: 2019-07-18 11:50:17  
Local clock offset: -3.677 ms  
Remote clock offset: -1.151 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 38.682 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 38.692 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 38.595 ms  
Loss rate: 0.40%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 38.594 ms  
Loss rate: 0.35%

Run 3: Report of SCRaM — Data Link





Run 4: Statistics of SReAM

Start at: 2019-07-18 12:21:38

End at: 2019-07-18 12:22:08

Local clock offset: 1.101 ms

Remote clock offset: -1.06 ms

# Below is generated by plot.py at 2019-07-18 13:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 38.488 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.494 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.422 ms

Loss rate: 0.40%

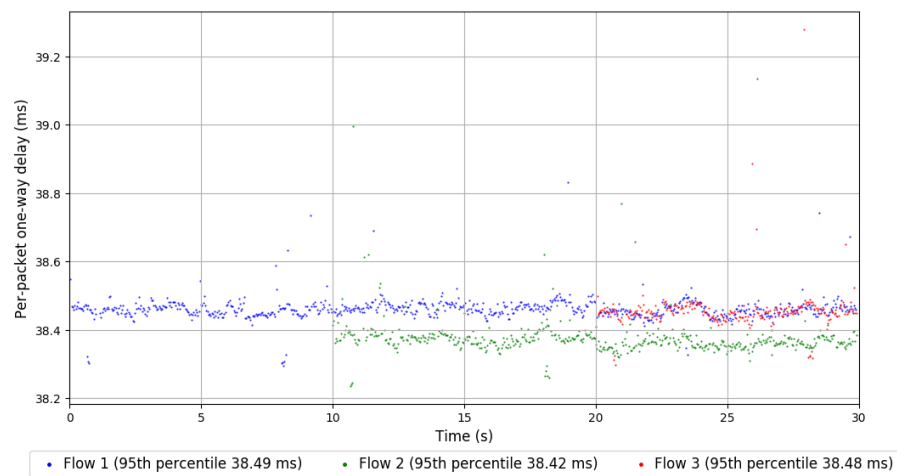
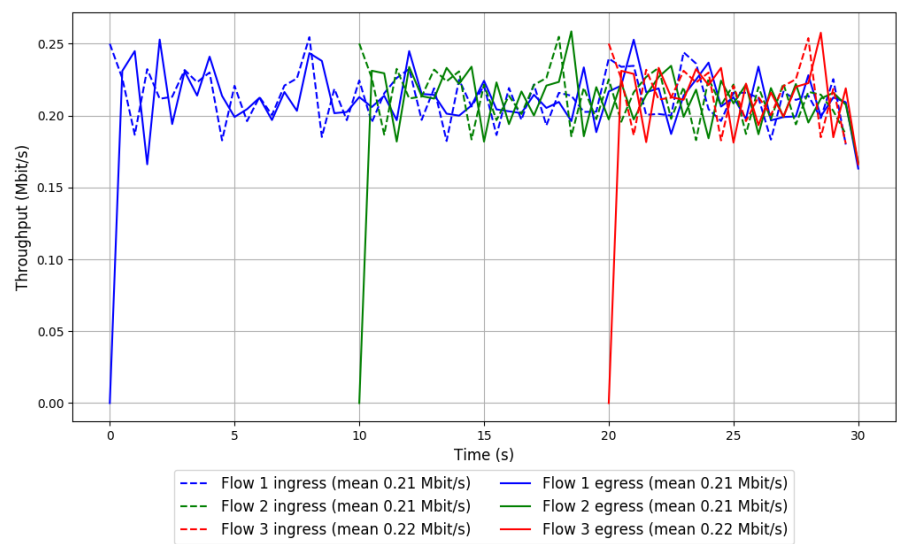
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 38.483 ms

Loss rate: 0.71%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2019-07-18 12:54:02

End at: 2019-07-18 12:54:32

Local clock offset: 0.999 ms

Remote clock offset: -0.99 ms

# Below is generated by plot.py at 2019-07-18 13:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 38.728 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.649 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.747 ms

Loss rate: 0.40%

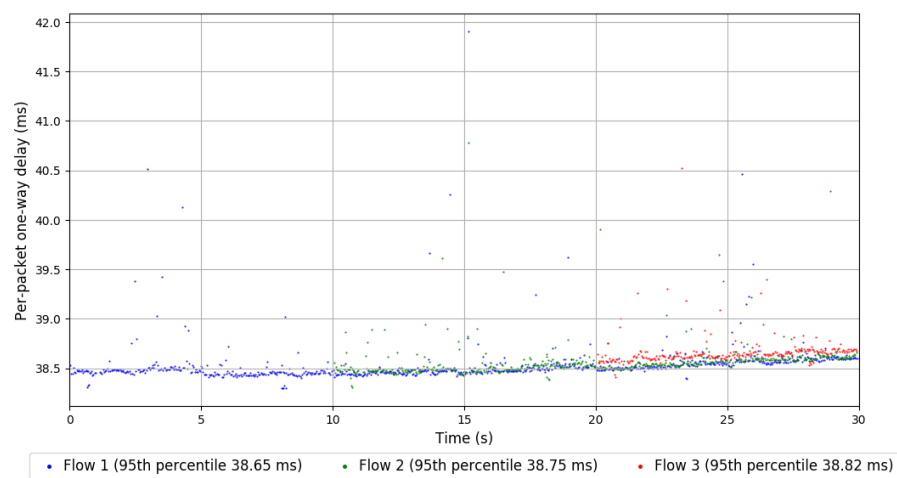
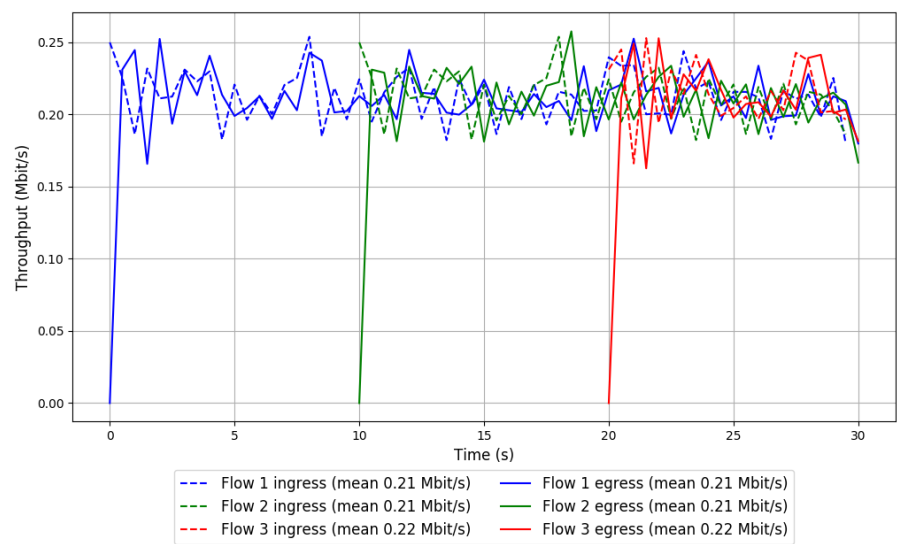
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 38.817 ms

Loss rate: 0.71%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-07-18 11:00:46

End at: 2019-07-18 11:01:16

Local clock offset: -3.244 ms

Remote clock offset: -2.98 ms

# Below is generated by plot.py at 2019-07-18 13:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.87 Mbit/s

95th percentile per-packet one-way delay: 47.583 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 12.03 Mbit/s

95th percentile per-packet one-way delay: 47.409 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 11.94 Mbit/s

95th percentile per-packet one-way delay: 47.390 ms

Loss rate: 0.16%

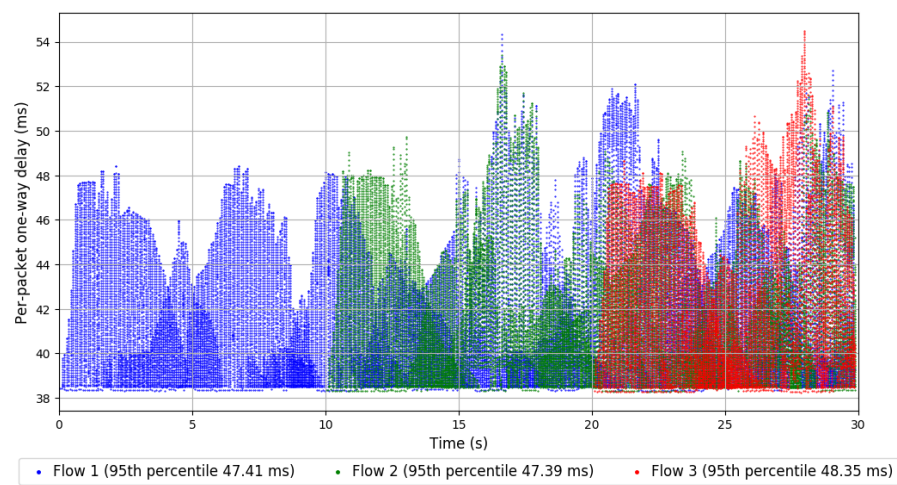
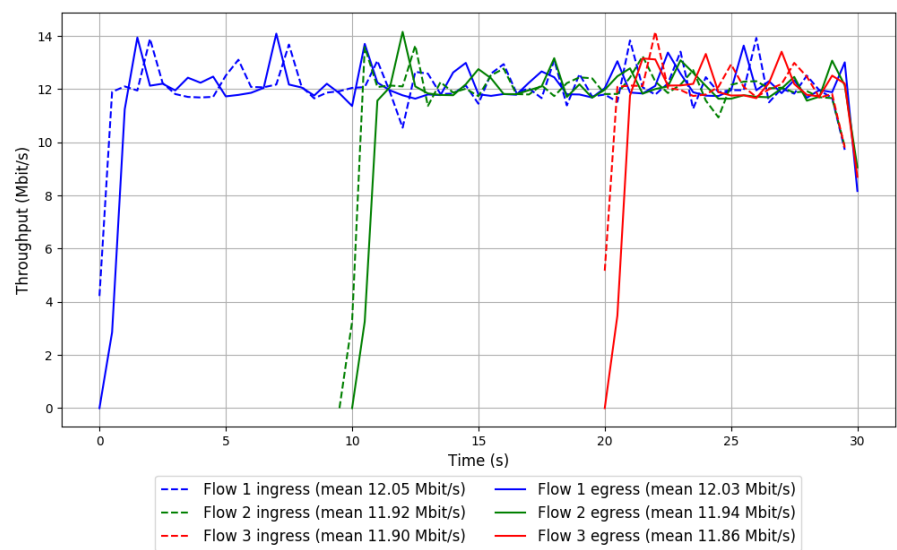
-- Flow 3:

Average throughput: 11.86 Mbit/s

95th percentile per-packet one-way delay: 48.349 ms

Loss rate: 0.77%

Run 1: Report of Sprout — Data Link

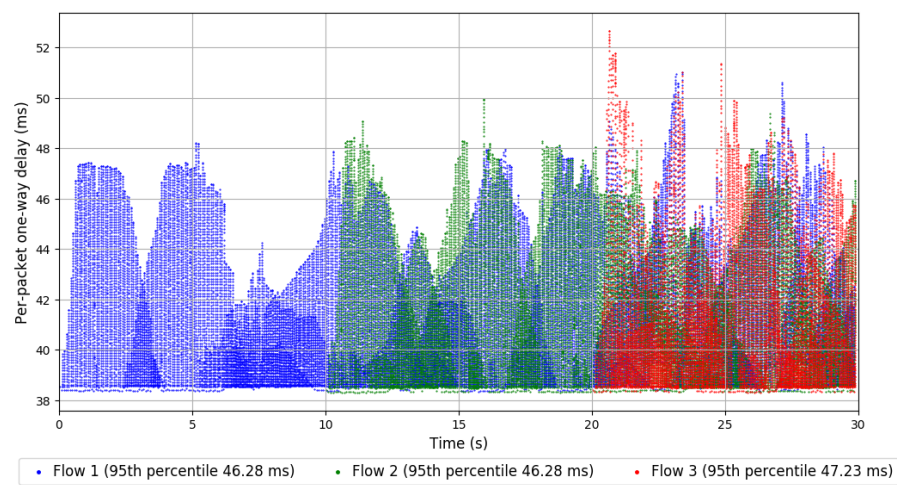
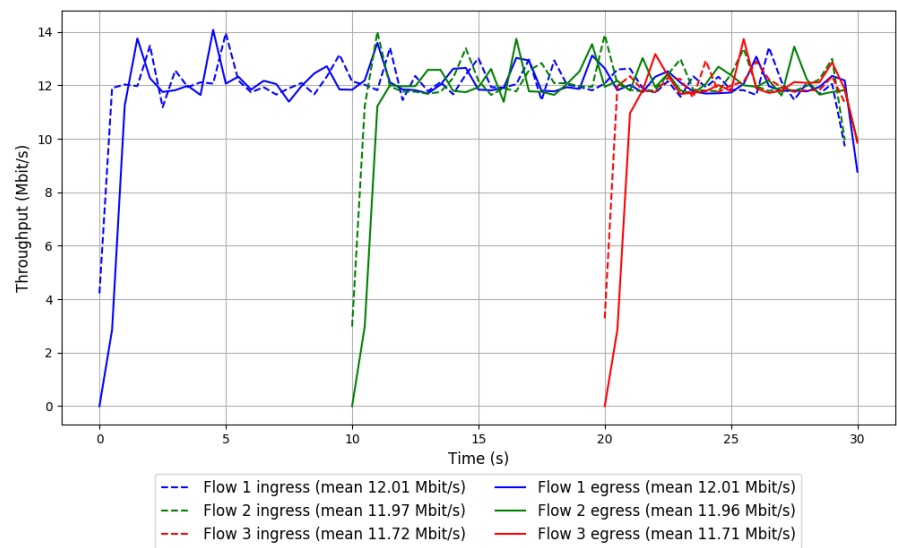


Run 2: Statistics of Sprout

Start at: 2019-07-18 11:33:43  
End at: 2019-07-18 11:34:13  
Local clock offset: -3.396 ms  
Remote clock offset: -1.746 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 23.81 Mbit/s  
95th percentile per-packet one-way delay: 46.398 ms  
Loss rate: 0.41%  
-- Flow 1:  
Average throughput: 12.01 Mbit/s  
95th percentile per-packet one-way delay: 46.283 ms  
Loss rate: 0.27%  
-- Flow 2:  
Average throughput: 11.96 Mbit/s  
95th percentile per-packet one-way delay: 46.283 ms  
Loss rate: 0.42%  
-- Flow 3:  
Average throughput: 11.71 Mbit/s  
95th percentile per-packet one-way delay: 47.235 ms  
Loss rate: 0.85%

Run 2: Report of Sprout — Data Link



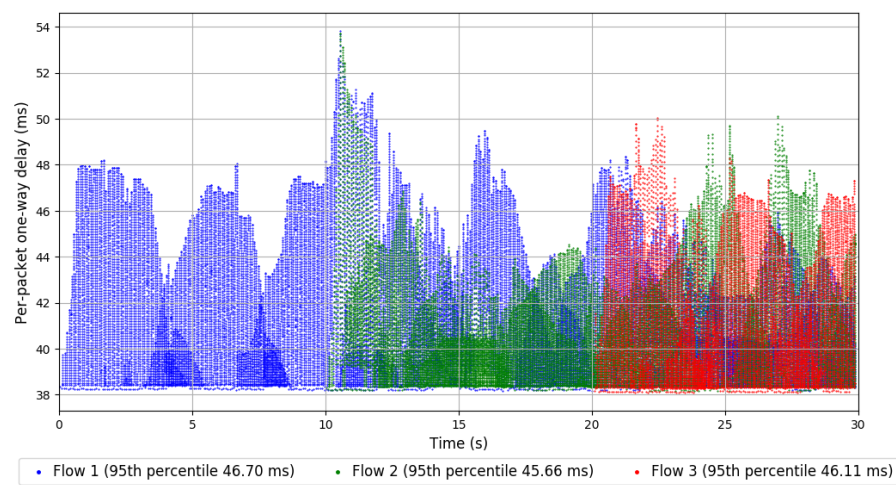
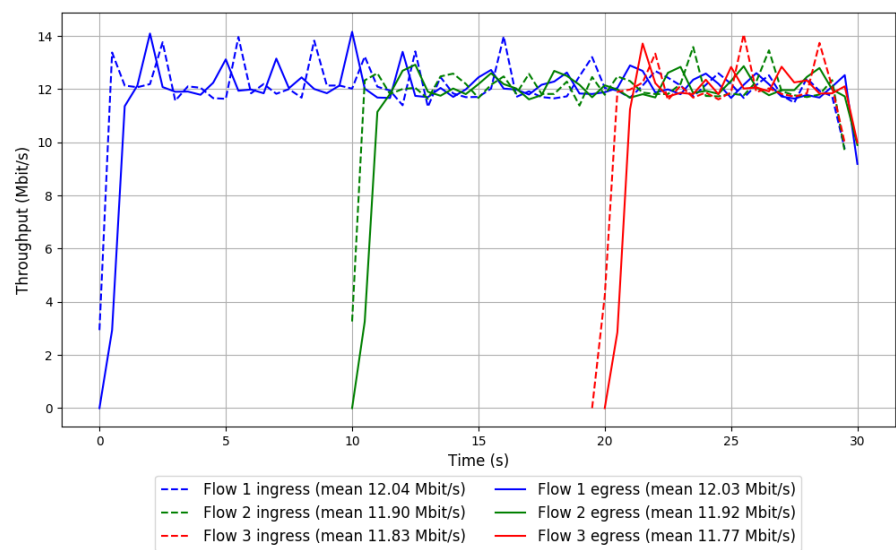


### Run 3: Statistics of Sprout

Start at: 2019-07-18 12:05:54  
End at: 2019-07-18 12:06:24  
Local clock offset: -0.43 ms  
Remote clock offset: -1.114 ms

```
# Below is generated by plot.py at 2019-07-18 13:33:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.84 Mbit/s
95th percentile per-packet one-way delay: 46.342 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 46.697 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 45.658 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 11.77 Mbit/s
95th percentile per-packet one-way delay: 46.106 ms
Loss rate: 0.84%
```

Run 3: Report of Sprout — Data Link

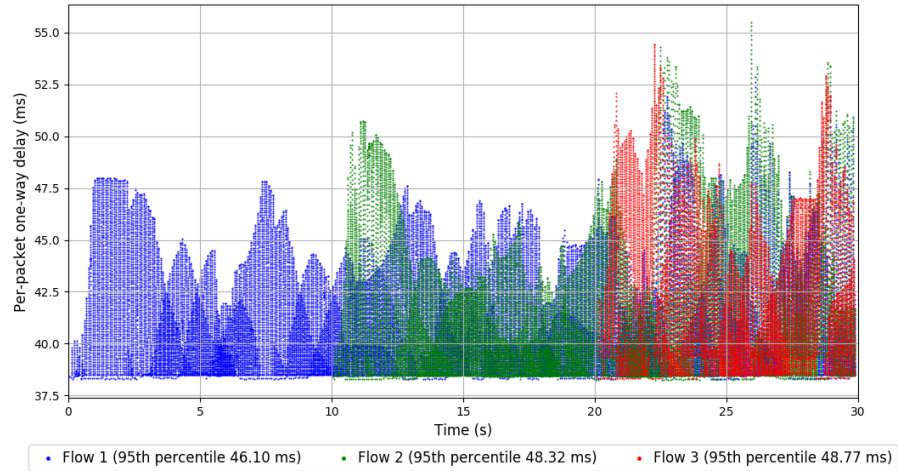
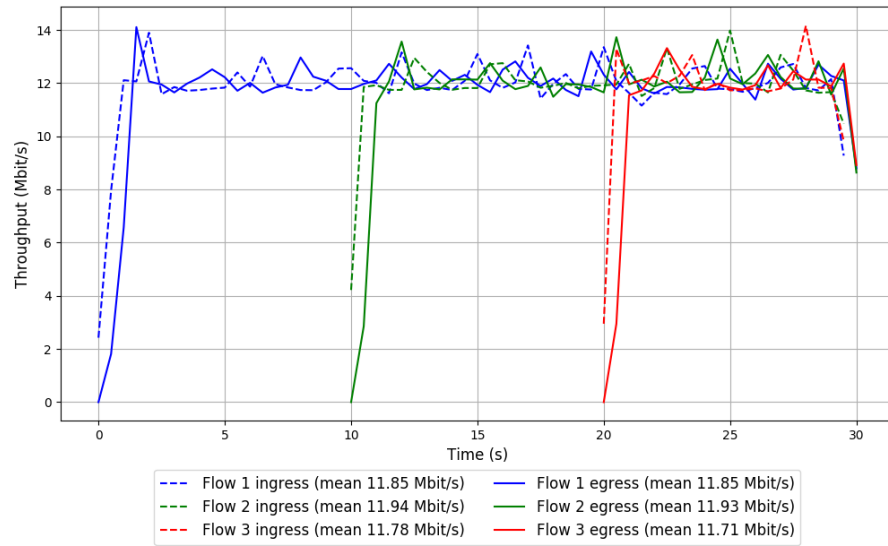


Run 4: Statistics of Sprout

Start at: 2019-07-18 12:38:09  
End at: 2019-07-18 12:38:39  
Local clock offset: 0.814 ms  
Remote clock offset: -0.963 ms

# Below is generated by plot.py at 2019-07-18 13:33:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 23.64 Mbit/s  
95th percentile per-packet one-way delay: 47.421 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 11.85 Mbit/s  
95th percentile per-packet one-way delay: 46.101 ms  
Loss rate: 0.15%  
-- Flow 2:  
Average throughput: 11.93 Mbit/s  
95th percentile per-packet one-way delay: 48.317 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 11.71 Mbit/s  
95th percentile per-packet one-way delay: 48.767 ms  
Loss rate: 0.84%

#### Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2019-07-18 13:09:52

End at: 2019-07-18 13:10:22

Local clock offset: -2.549 ms

Remote clock offset: -0.83 ms

# Below is generated by plot.py at 2019-07-18 13:33:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.76 Mbit/s

95th percentile per-packet one-way delay: 47.976 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 12.04 Mbit/s

95th percentile per-packet one-way delay: 47.459 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 48.048 ms

Loss rate: 0.41%

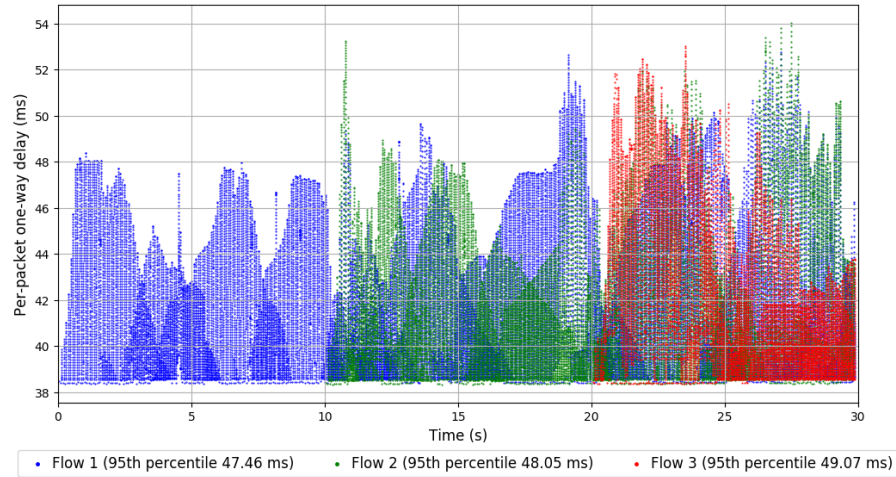
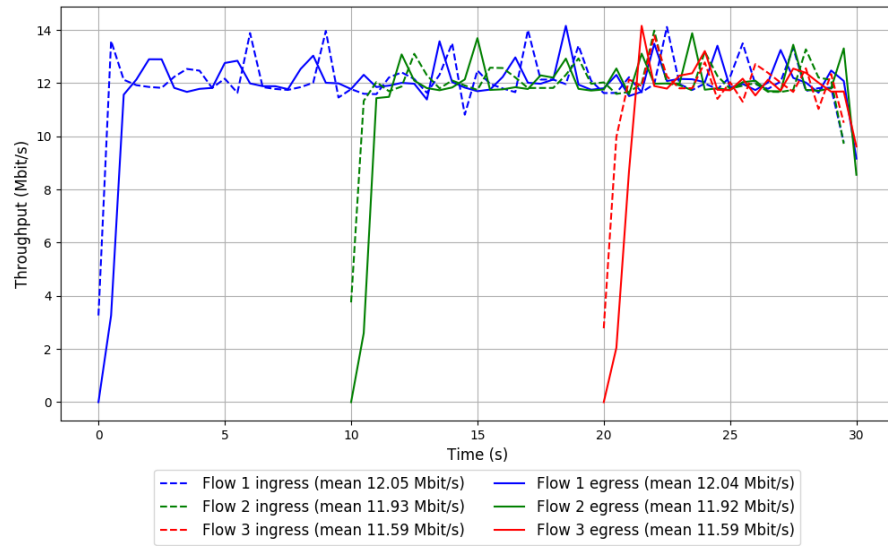
-- Flow 3:

Average throughput: 11.59 Mbit/s

95th percentile per-packet one-way delay: 49.073 ms

Loss rate: 0.78%

## Run 5: Report of Sprout — Data Link

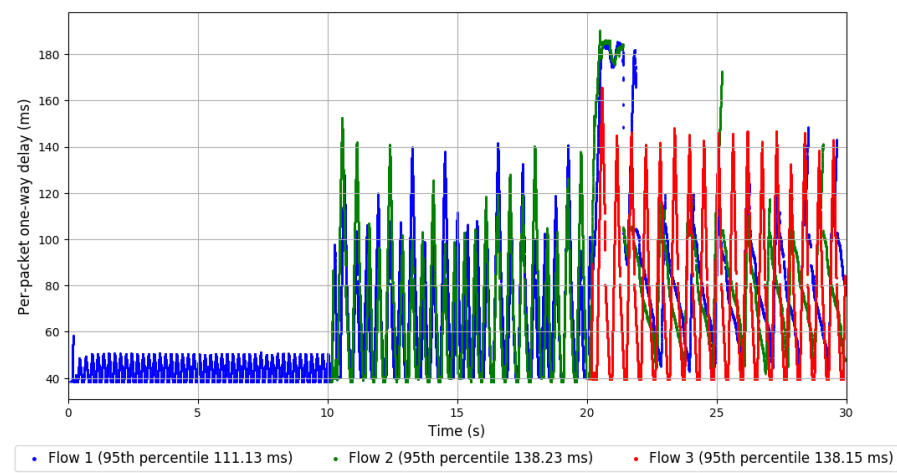
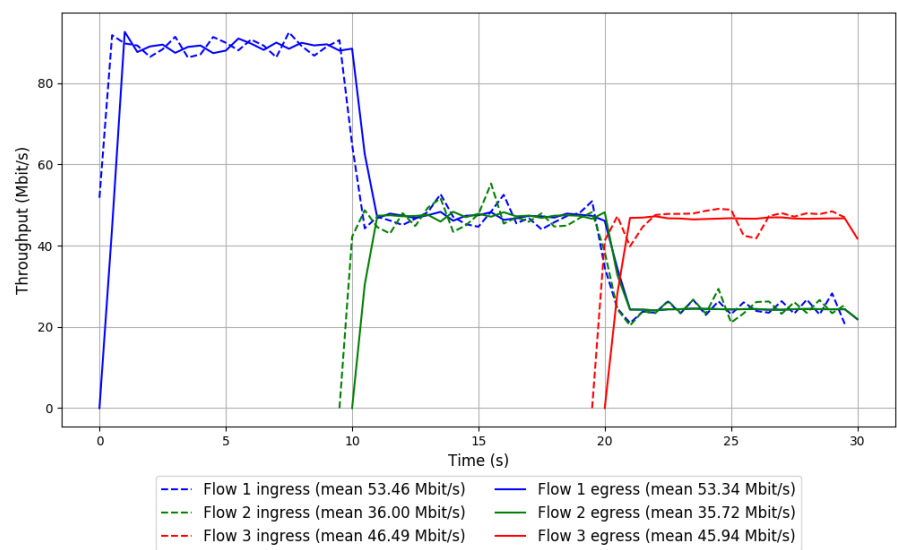


Run 1: Statistics of TaoVA-100x

Start at: 2019-07-18 10:51:12  
End at: 2019-07-18 10:51:42  
Local clock offset: -3.464 ms  
Remote clock offset: -3.336 ms

# Below is generated by plot.py at 2019-07-18 13:35:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.36 Mbit/s  
95th percentile per-packet one-way delay: 129.275 ms  
Loss rate: 0.84%  
-- Flow 1:  
Average throughput: 53.34 Mbit/s  
95th percentile per-packet one-way delay: 111.128 ms  
Loss rate: 0.44%  
-- Flow 2:  
Average throughput: 35.72 Mbit/s  
95th percentile per-packet one-way delay: 138.234 ms  
Loss rate: 1.12%  
-- Flow 3:  
Average throughput: 45.94 Mbit/s  
95th percentile per-packet one-way delay: 138.154 ms  
Loss rate: 1.83%

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





Run 2: Statistics of TaoVA-100x

Start at: 2019-07-18 11:23:52

End at: 2019-07-18 11:24:22

Local clock offset: -3.188 ms

Remote clock offset: -2.2 ms

# Below is generated by plot.py at 2019-07-18 13:35:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 92.37 Mbit/s

95th percentile per-packet one-way delay: 131.635 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 55.71 Mbit/s

95th percentile per-packet one-way delay: 131.410 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 39.22 Mbit/s

95th percentile per-packet one-way delay: 131.858 ms

Loss rate: 1.88%

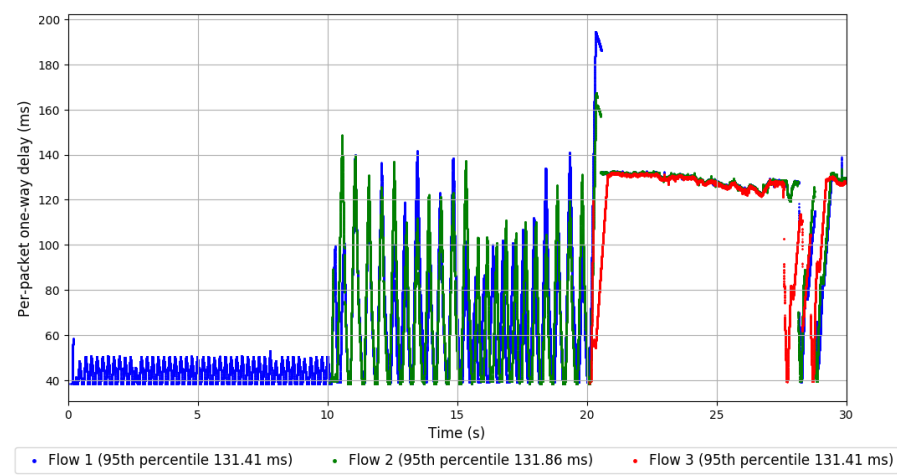
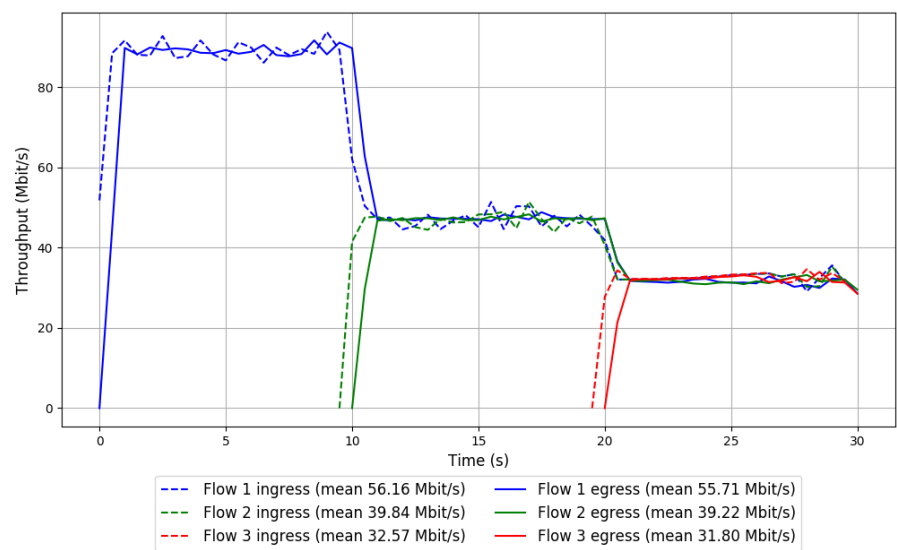
-- Flow 3:

Average throughput: 31.80 Mbit/s

95th percentile per-packet one-way delay: 131.405 ms

Loss rate: 3.00%

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

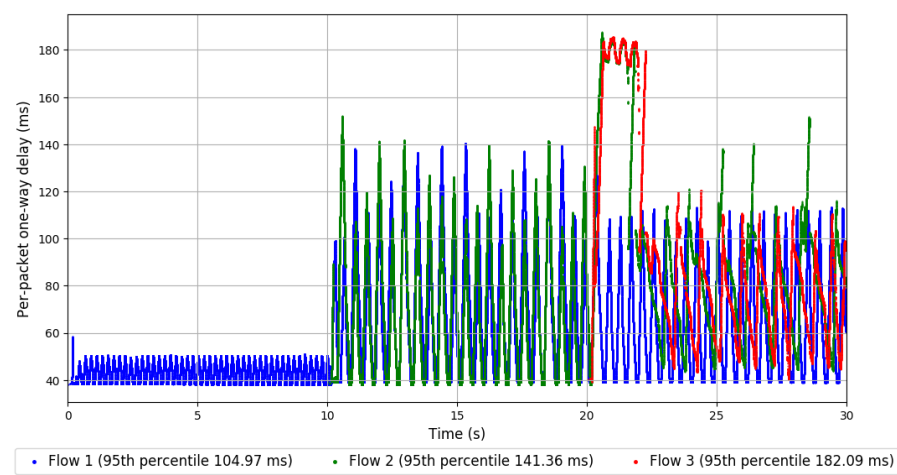
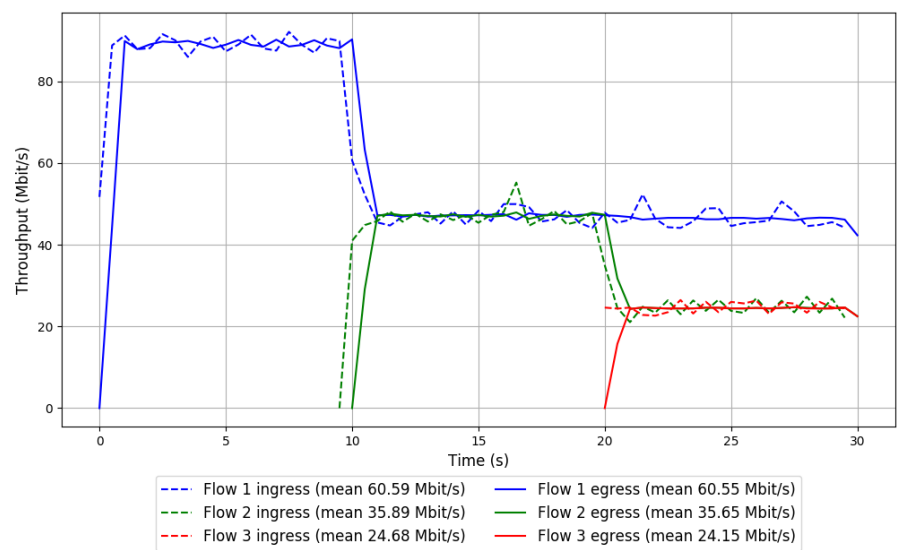


Run 3: Statistics of TaoVA-100x

Start at: 2019-07-18 11:56:28  
End at: 2019-07-18 11:56:58  
Local clock offset: -2.97 ms  
Remote clock offset: -1.173 ms

# Below is generated by plot.py at 2019-07-18 13:35:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.29 Mbit/s  
95th percentile per-packet one-way delay: 120.976 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 60.55 Mbit/s  
95th percentile per-packet one-way delay: 104.974 ms  
Loss rate: 0.27%  
-- Flow 2:  
Average throughput: 35.65 Mbit/s  
95th percentile per-packet one-way delay: 141.356 ms  
Loss rate: 0.98%  
-- Flow 3:  
Average throughput: 24.15 Mbit/s  
95th percentile per-packet one-way delay: 182.094 ms  
Loss rate: 2.80%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-07-18 12:28:23

End at: 2019-07-18 12:28:53

Local clock offset: 1.032 ms

Remote clock offset: -1.08 ms

# Below is generated by plot.py at 2019-07-18 13:35:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 92.24 Mbit/s

95th percentile per-packet one-way delay: 113.317 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 57.32 Mbit/s

95th percentile per-packet one-way delay: 113.612 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 46.31 Mbit/s

95th percentile per-packet one-way delay: 112.754 ms

Loss rate: 0.51%

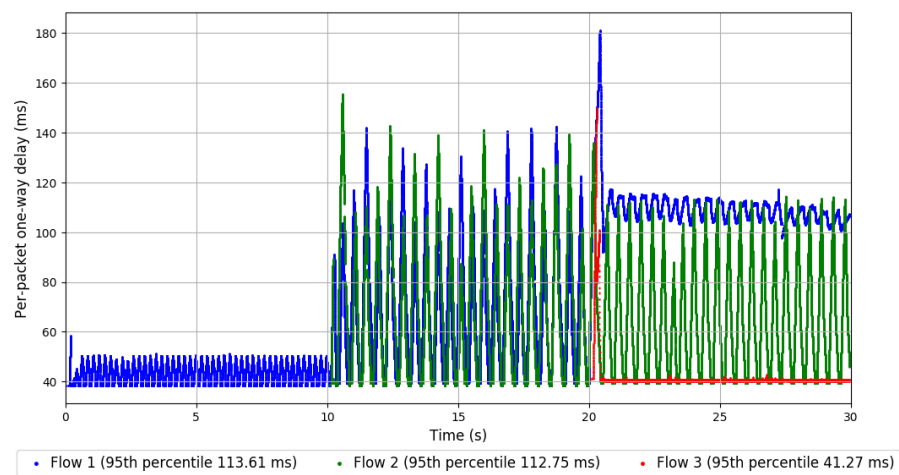
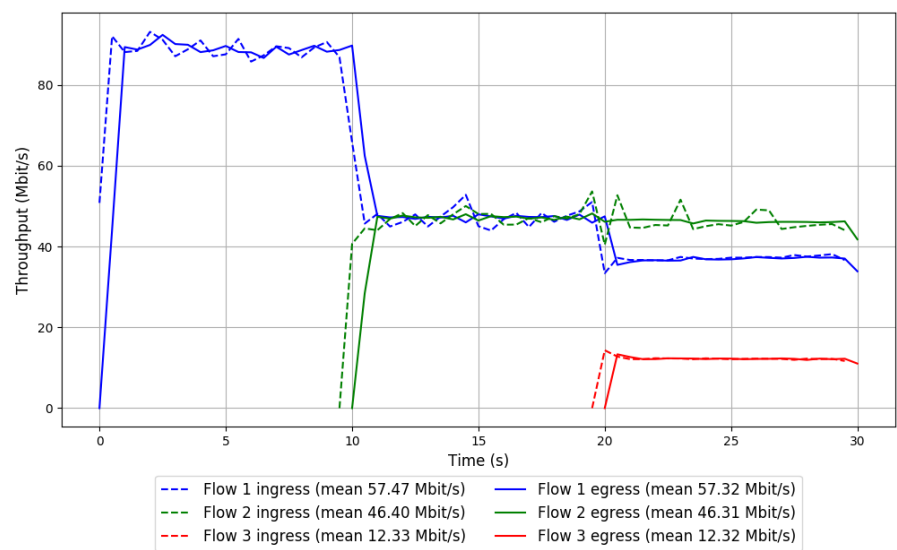
-- Flow 3:

Average throughput: 12.32 Mbit/s

95th percentile per-packet one-way delay: 41.268 ms

Loss rate: 0.71%

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

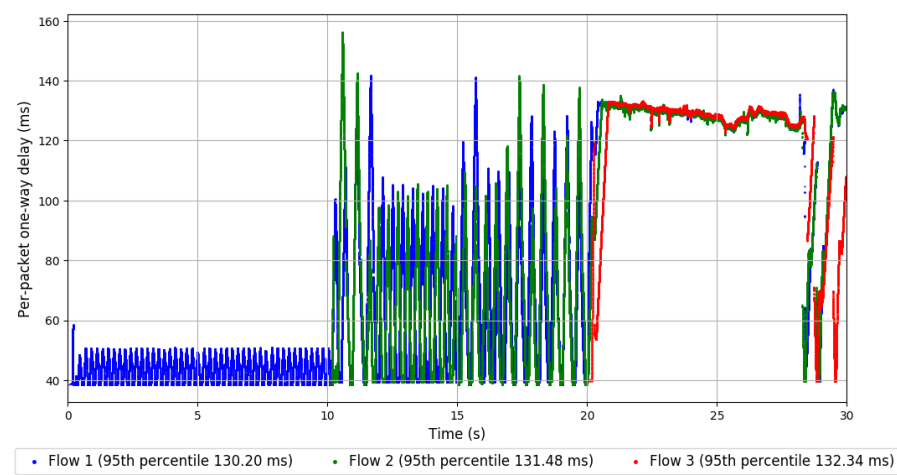
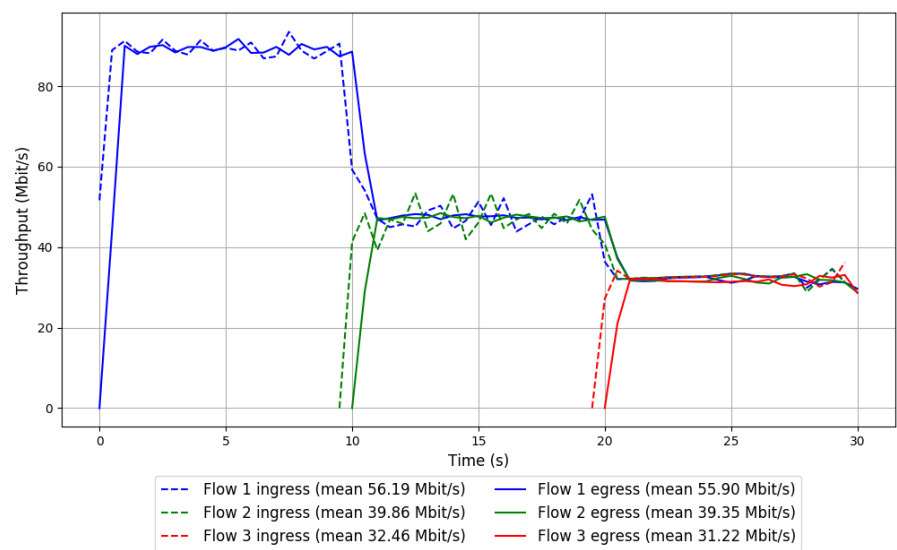


Run 5: Statistics of TaoVA-100x

Start at: 2019-07-18 13:00:33  
End at: 2019-07-18 13:01:03  
Local clock offset: -0.97 ms  
Remote clock offset: -0.946 ms

# Below is generated by plot.py at 2019-07-18 13:35:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.45 Mbit/s  
95th percentile per-packet one-way delay: 131.348 ms  
Loss rate: 1.40%  
-- Flow 1:  
Average throughput: 55.90 Mbit/s  
95th percentile per-packet one-way delay: 130.204 ms  
Loss rate: 0.73%  
-- Flow 2:  
Average throughput: 39.35 Mbit/s  
95th percentile per-packet one-way delay: 131.476 ms  
Loss rate: 1.58%  
-- Flow 3:  
Average throughput: 31.22 Mbit/s  
95th percentile per-packet one-way delay: 132.336 ms  
Loss rate: 4.44%

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



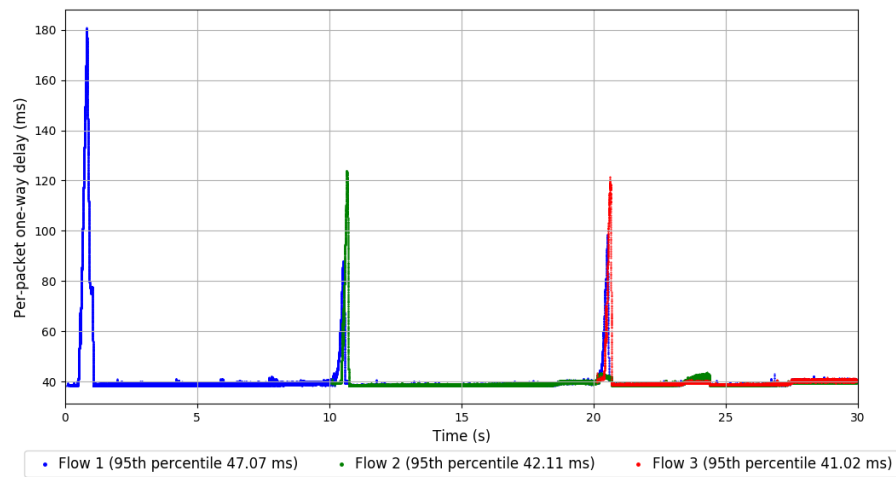
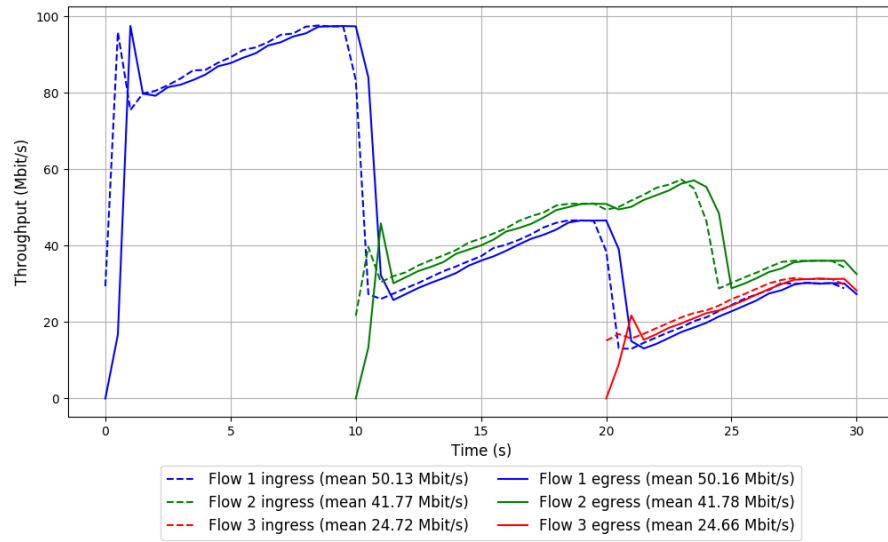


Run 1: Statistics of TCP Vegas

Start at: 2019-07-18 10:40:23  
End at: 2019-07-18 10:40:53  
Local clock offset: -2.689 ms  
Remote clock offset: -3.787 ms

# Below is generated by plot.py at 2019-07-18 13:35:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.12 Mbit/s  
95th percentile per-packet one-way delay: 42.360 ms  
Loss rate: 0.26%  
-- Flow 1:  
Average throughput: 50.16 Mbit/s  
95th percentile per-packet one-way delay: 47.070 ms  
Loss rate: 0.14%  
-- Flow 2:  
Average throughput: 41.78 Mbit/s  
95th percentile per-packet one-way delay: 42.109 ms  
Loss rate: 0.29%  
-- Flow 3:  
Average throughput: 24.66 Mbit/s  
95th percentile per-packet one-way delay: 41.020 ms  
Loss rate: 0.89%

# Run 1: Report of TCP Vegas — Data Link

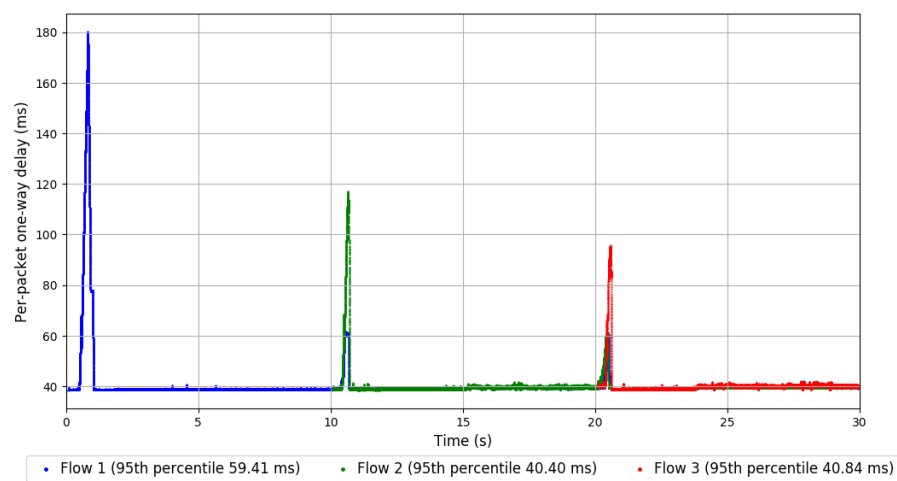
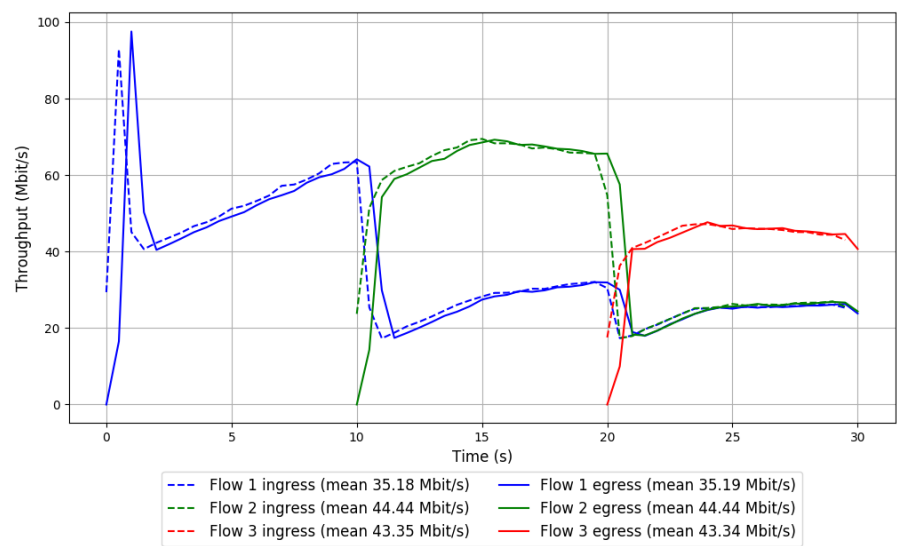


Run 2: Statistics of TCP Vegas

Start at: 2019-07-18 11:12:35  
End at: 2019-07-18 11:13:05  
Local clock offset: -3.081 ms  
Remote clock offset: -2.718 ms

# Below is generated by plot.py at 2019-07-18 13:35:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 79.14 Mbit/s  
95th percentile per-packet one-way delay: 41.171 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 35.19 Mbit/s  
95th percentile per-packet one-way delay: 59.411 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 44.44 Mbit/s  
95th percentile per-packet one-way delay: 40.403 ms  
Loss rate: 0.32%  
-- Flow 3:  
Average throughput: 43.34 Mbit/s  
95th percentile per-packet one-way delay: 40.842 ms  
Loss rate: 0.68%

Run 2: Report of TCP Vegas — Data Link

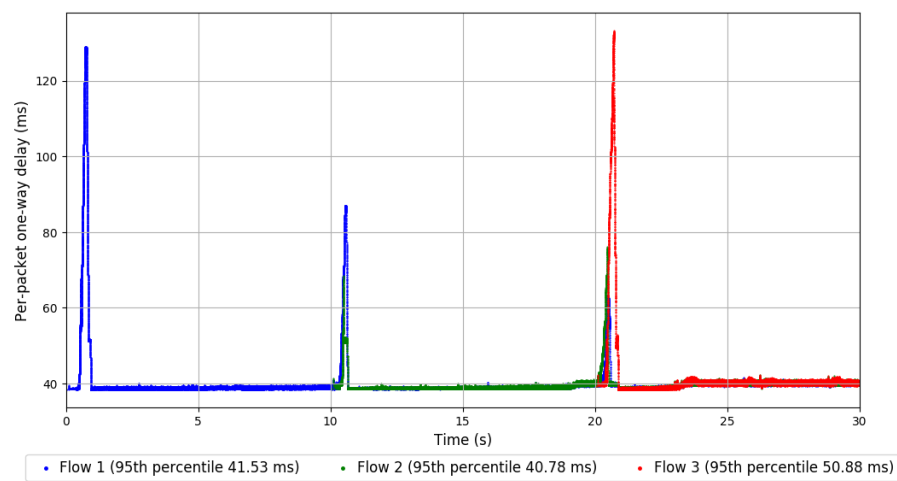
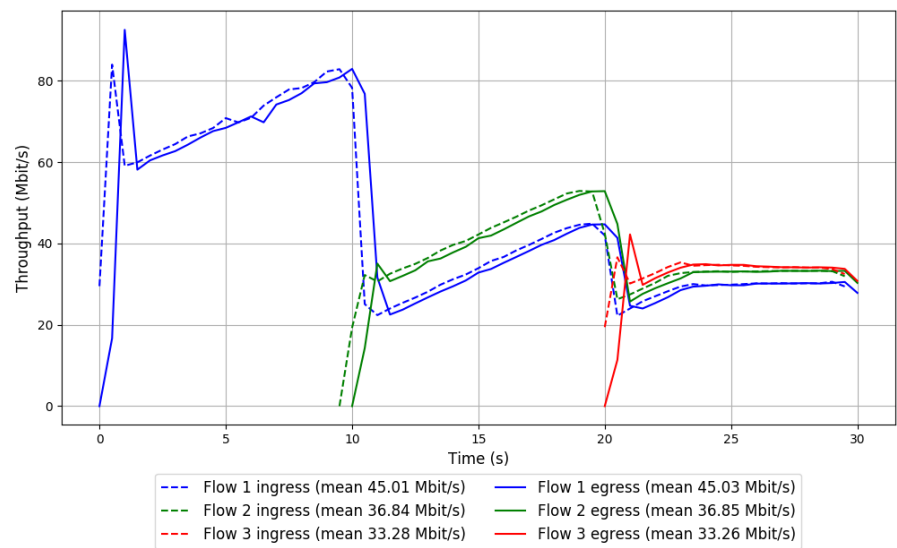


Run 3: Statistics of TCP Vegas

Start at: 2019-07-18 11:46:01  
End at: 2019-07-18 11:46:31  
Local clock offset: -3.634 ms  
Remote clock offset: -1.261 ms

# Below is generated by plot.py at 2019-07-18 13:35:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.58 Mbit/s  
95th percentile per-packet one-way delay: 41.223 ms  
Loss rate: 0.27%  
-- Flow 1:  
Average throughput: 45.03 Mbit/s  
95th percentile per-packet one-way delay: 41.527 ms  
Loss rate: 0.16%  
-- Flow 2:  
Average throughput: 36.85 Mbit/s  
95th percentile per-packet one-way delay: 40.780 ms  
Loss rate: 0.30%  
-- Flow 3:  
Average throughput: 33.26 Mbit/s  
95th percentile per-packet one-way delay: 50.881 ms  
Loss rate: 0.68%

Run 3: Report of TCP Vegas — Data Link

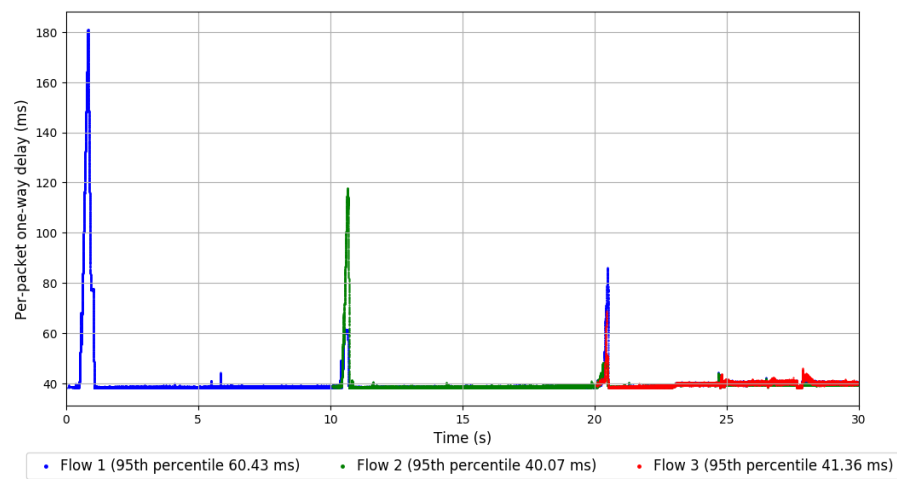
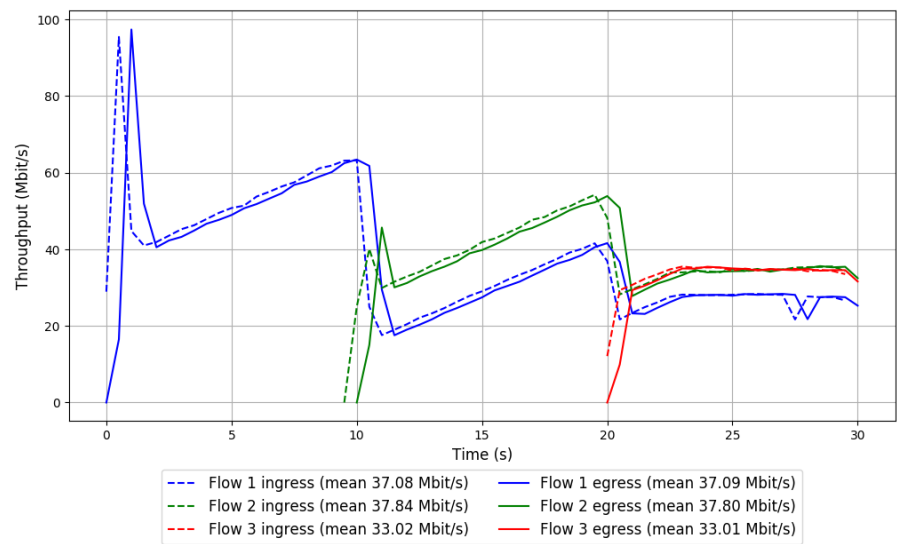


Run 4: Statistics of TCP Vegas

Start at: 2019-07-18 12:17:43  
End at: 2019-07-18 12:18:13  
Local clock offset: 0.857 ms  
Remote clock offset: -1.076 ms

# Below is generated by plot.py at 2019-07-18 13:35:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 73.20 Mbit/s  
95th percentile per-packet one-way delay: 42.644 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 37.09 Mbit/s  
95th percentile per-packet one-way delay: 60.427 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 37.80 Mbit/s  
95th percentile per-packet one-way delay: 40.068 ms  
Loss rate: 0.44%  
-- Flow 3:  
Average throughput: 33.01 Mbit/s  
95th percentile per-packet one-way delay: 41.357 ms  
Loss rate: 0.69%

Run 4: Report of TCP Vegas — Data Link



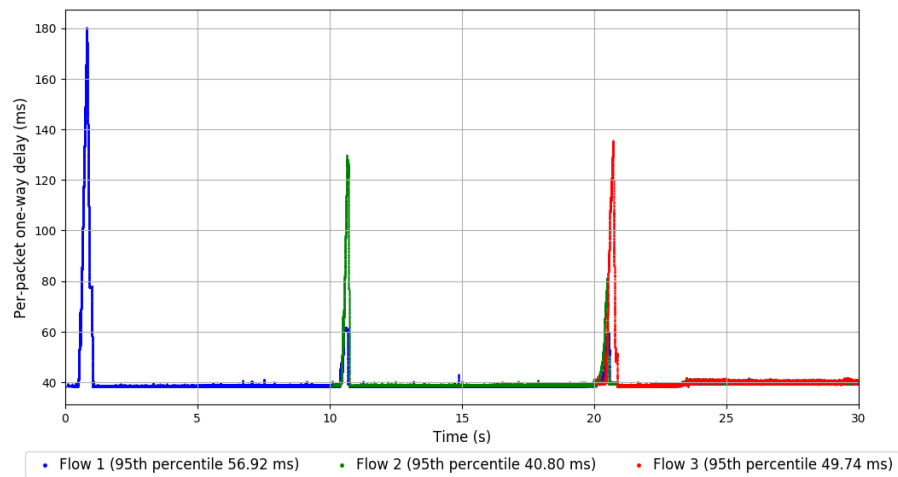
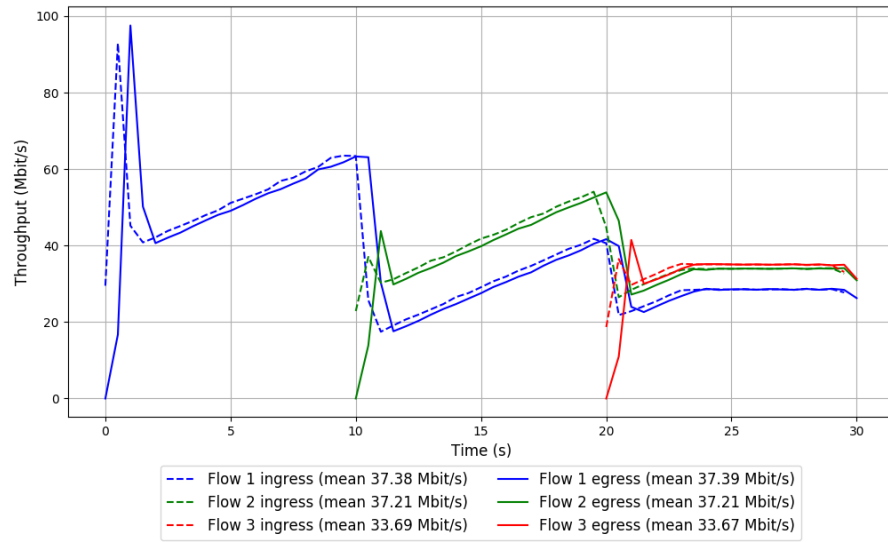


Run 5: Statistics of TCP Vegas

Start at: 2019-07-18 12:49:52  
End at: 2019-07-18 12:50:22  
Local clock offset: 0.935 ms  
Remote clock offset: -0.965 ms

# Below is generated by plot.py at 2019-07-18 13:35:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 73.30 Mbit/s  
95th percentile per-packet one-way delay: 46.379 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 37.39 Mbit/s  
95th percentile per-packet one-way delay: 56.919 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 37.21 Mbit/s  
95th percentile per-packet one-way delay: 40.801 ms  
Loss rate: 0.31%  
-- Flow 3:  
Average throughput: 33.67 Mbit/s  
95th percentile per-packet one-way delay: 49.743 ms  
Loss rate: 0.70%

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

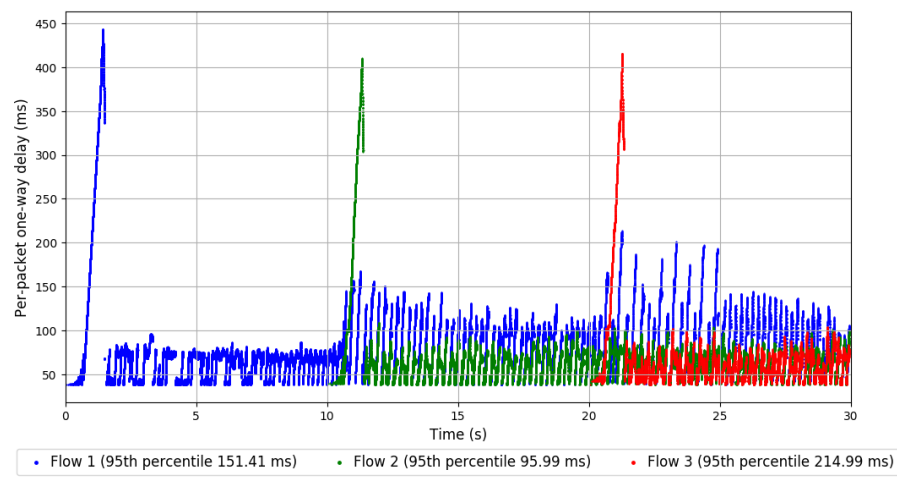
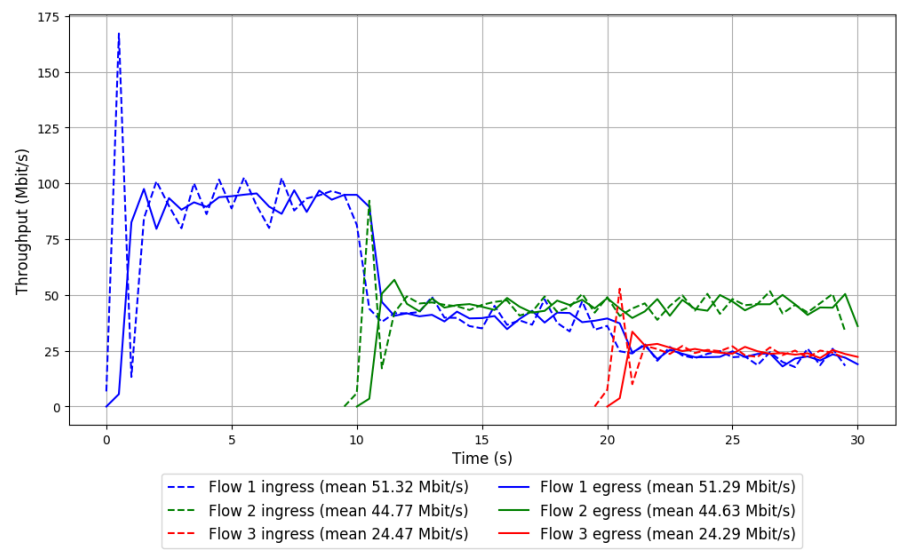


Run 1: Statistics of Verus

Start at: 2019-07-18 10:37:53  
End at: 2019-07-18 10:38:23  
Local clock offset: -2.43 ms  
Remote clock offset: -3.776 ms

# Below is generated by plot.py at 2019-07-18 13:35:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.05 Mbit/s  
95th percentile per-packet one-way delay: 142.858 ms  
Loss rate: 0.41%  
-- Flow 1:  
Average throughput: 51.29 Mbit/s  
95th percentile per-packet one-way delay: 151.406 ms  
Loss rate: 0.25%  
-- Flow 2:  
Average throughput: 44.63 Mbit/s  
95th percentile per-packet one-way delay: 95.992 ms  
Loss rate: 0.46%  
-- Flow 3:  
Average throughput: 24.29 Mbit/s  
95th percentile per-packet one-way delay: 214.992 ms  
Loss rate: 1.27%

Run 1: Report of Verus — Data Link

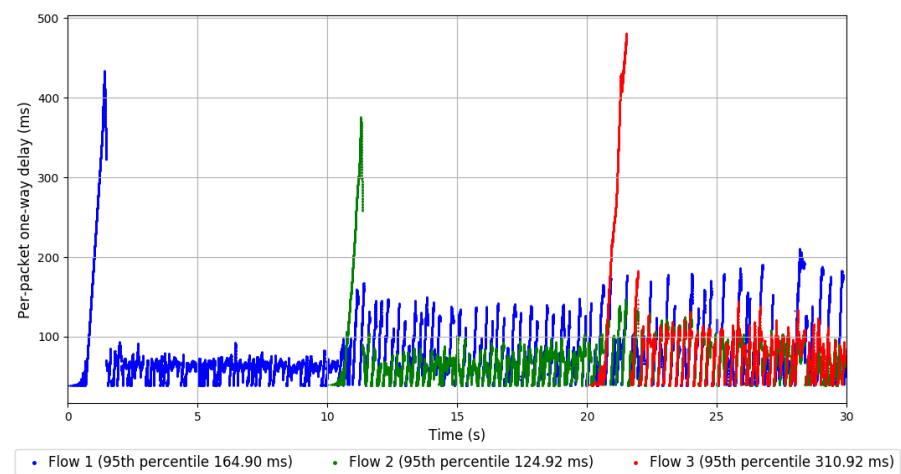
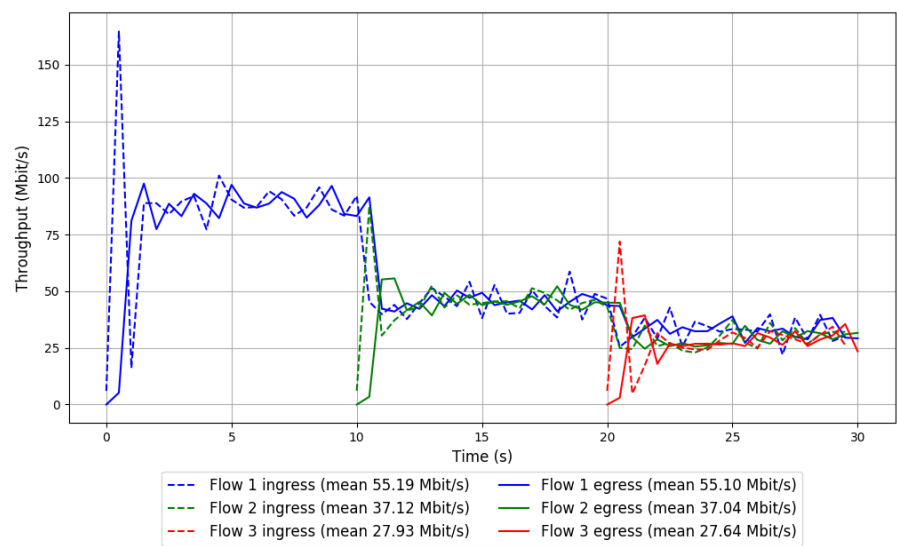


Run 2: Statistics of Verus

Start at: 2019-07-18 11:09:51  
End at: 2019-07-18 11:10:21  
Local clock offset: -3.084 ms  
Remote clock offset: -2.774 ms

# Below is generated by plot.py at 2019-07-18 13:36:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.90 Mbit/s  
95th percentile per-packet one-way delay: 165.456 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 55.10 Mbit/s  
95th percentile per-packet one-way delay: 164.904 ms  
Loss rate: 0.37%  
-- Flow 2:  
Average throughput: 37.04 Mbit/s  
95th percentile per-packet one-way delay: 124.916 ms  
Loss rate: 0.52%  
-- Flow 3:  
Average throughput: 27.64 Mbit/s  
95th percentile per-packet one-way delay: 310.923 ms  
Loss rate: 1.60%

Run 2: Report of Verus — Data Link

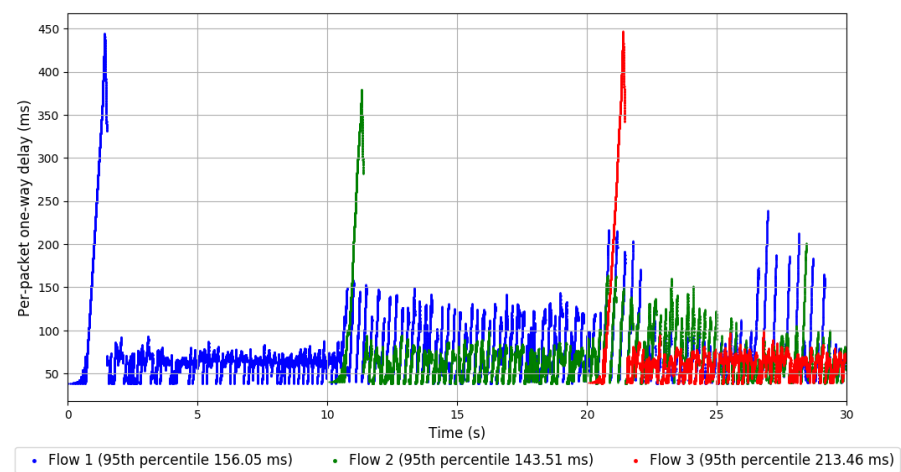
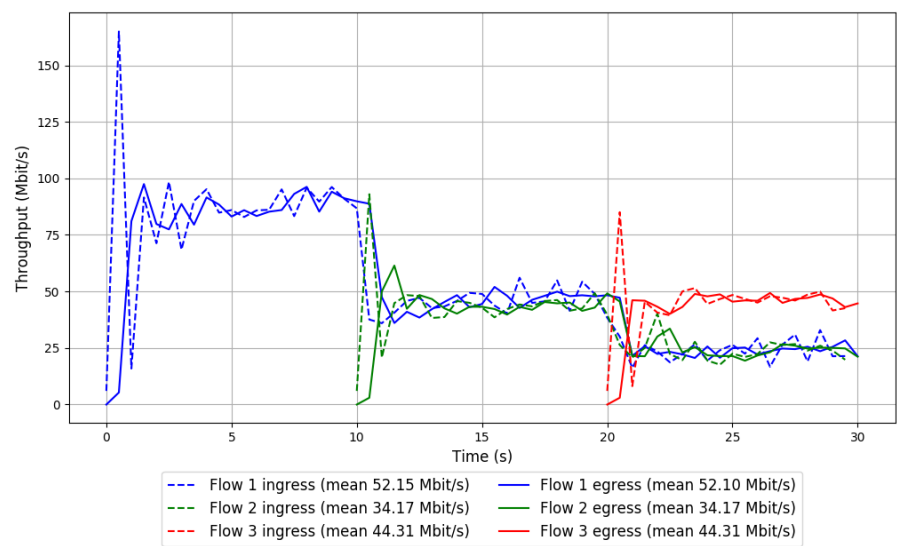


Run 3: Statistics of Verus

Start at: 2019-07-18 11:43:15  
End at: 2019-07-18 11:43:45  
Local clock offset: -3.564 ms  
Remote clock offset: -1.319 ms

# Below is generated by plot.py at 2019-07-18 13:36:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.47 Mbit/s  
95th percentile per-packet one-way delay: 157.012 ms  
Loss rate: 0.36%  
-- Flow 1:  
Average throughput: 52.10 Mbit/s  
95th percentile per-packet one-way delay: 156.051 ms  
Loss rate: 0.30%  
-- Flow 2:  
Average throughput: 34.17 Mbit/s  
95th percentile per-packet one-way delay: 143.509 ms  
Loss rate: 0.31%  
-- Flow 3:  
Average throughput: 44.31 Mbit/s  
95th percentile per-packet one-way delay: 213.455 ms  
Loss rate: 0.64%

Run 3: Report of Verus — Data Link



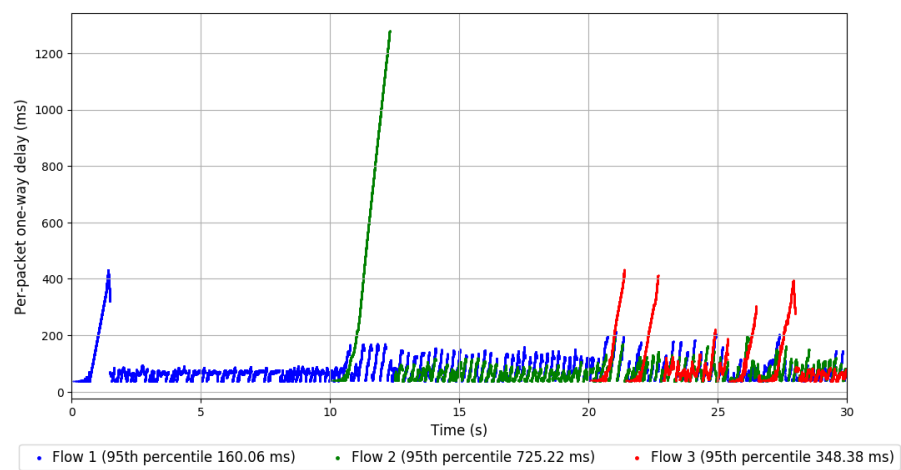
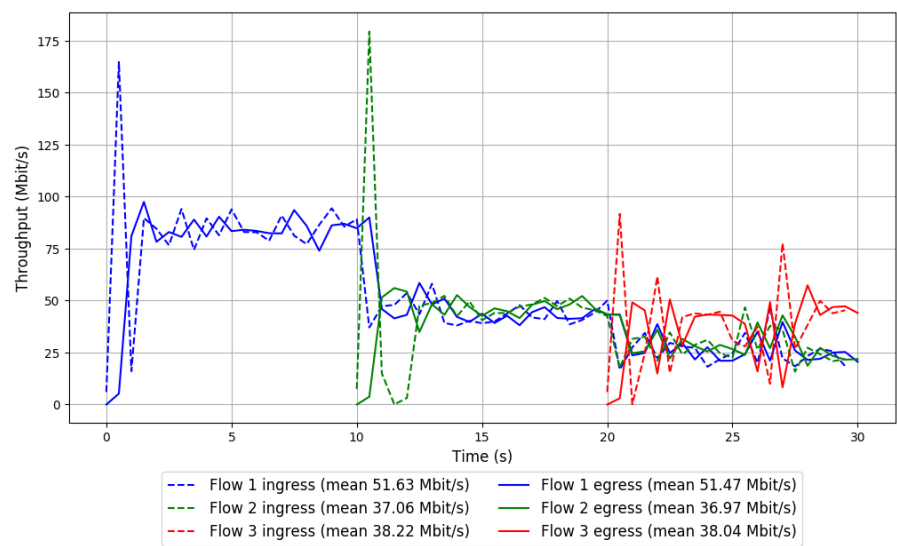


Run 4: Statistics of Verus

Start at: 2019-07-18 12:15:01  
End at: 2019-07-18 12:15:31  
Local clock offset: 0.651 ms  
Remote clock offset: -1.066 ms

# Below is generated by plot.py at 2019-07-18 13:36:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.65 Mbit/s  
95th percentile per-packet one-way delay: 285.925 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 51.47 Mbit/s  
95th percentile per-packet one-way delay: 160.059 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 36.97 Mbit/s  
95th percentile per-packet one-way delay: 725.219 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 38.04 Mbit/s  
95th percentile per-packet one-way delay: 348.384 ms  
Loss rate: 1.11%

Run 4: Report of Verus — Data Link

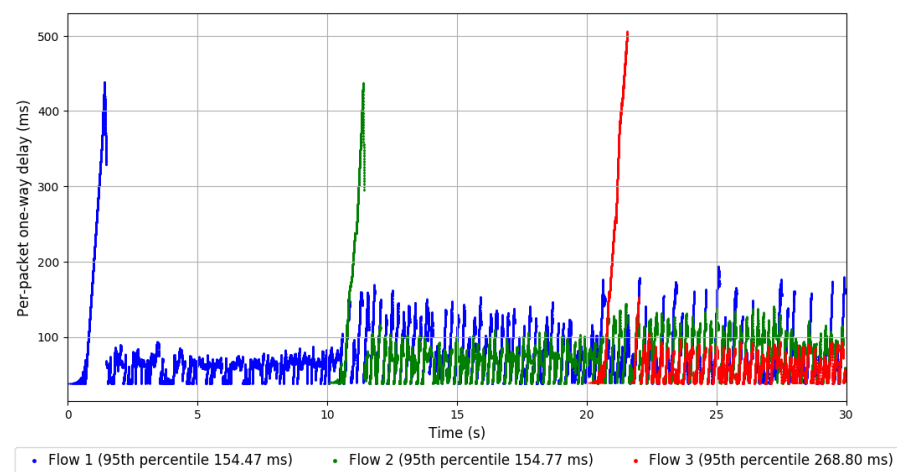
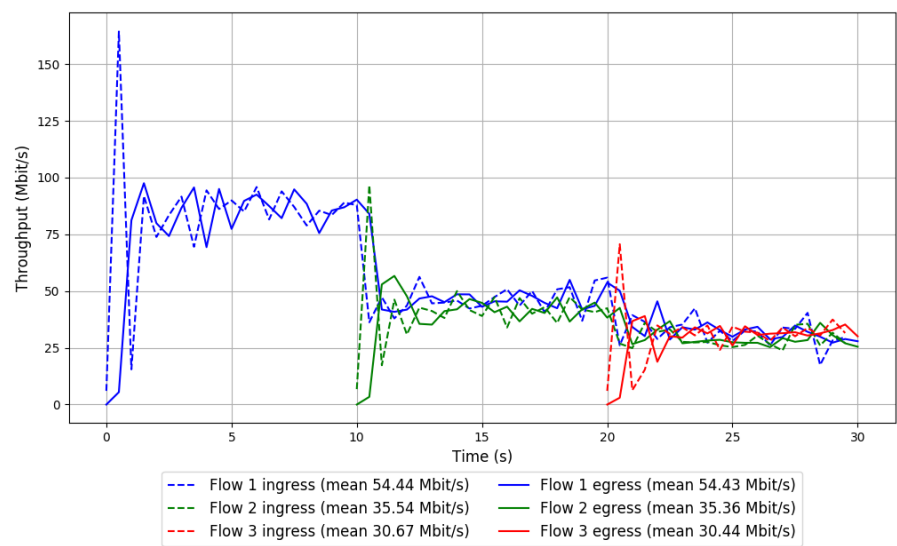


Run 5: Statistics of Verus

Start at: 2019-07-18 12:47:10  
End at: 2019-07-18 12:47:40  
Local clock offset: 0.859 ms  
Remote clock offset: -0.913 ms

# Below is generated by plot.py at 2019-07-18 13:36:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.01 Mbit/s  
95th percentile per-packet one-way delay: 160.150 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 54.43 Mbit/s  
95th percentile per-packet one-way delay: 154.468 ms  
Loss rate: 0.26%  
-- Flow 2:  
Average throughput: 35.36 Mbit/s  
95th percentile per-packet one-way delay: 154.773 ms  
Loss rate: 0.80%  
-- Flow 3:  
Average throughput: 30.44 Mbit/s  
95th percentile per-packet one-way delay: 268.800 ms  
Loss rate: 1.35%

Run 5: Report of Verus — Data Link

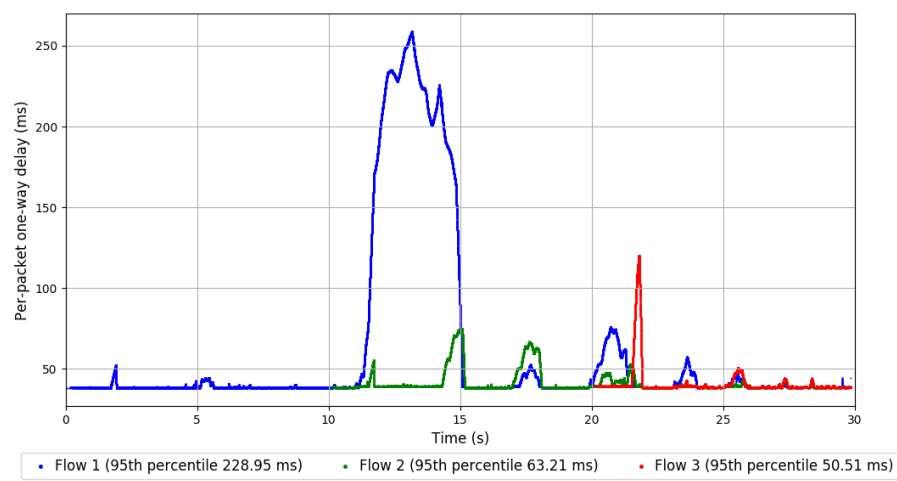
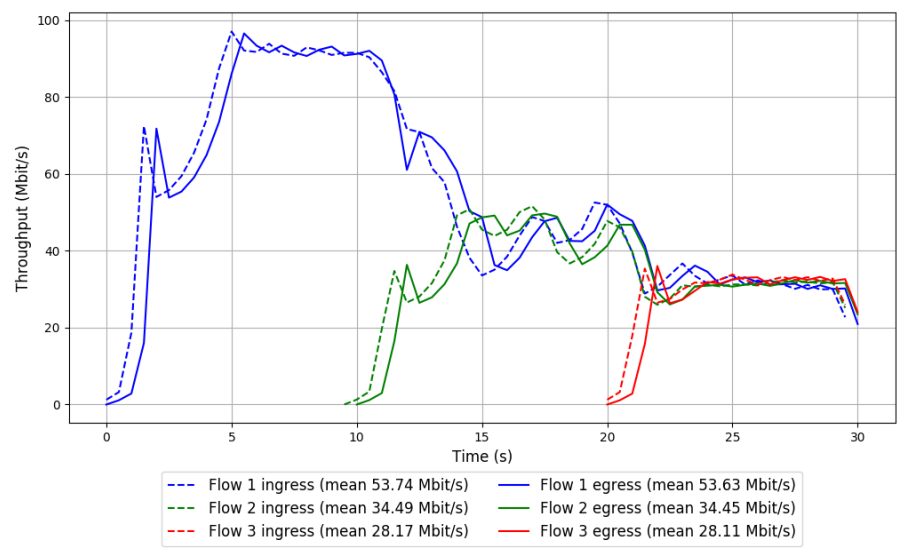


Run 1: Statistics of PCC-Vivace

Start at: 2019-07-18 10:41:42  
End at: 2019-07-18 10:42:12  
Local clock offset: -2.841 ms  
Remote clock offset: -3.669 ms

# Below is generated by plot.py at 2019-07-18 13:36:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.78 Mbit/s  
95th percentile per-packet one-way delay: 209.093 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 53.63 Mbit/s  
95th percentile per-packet one-way delay: 228.948 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 34.45 Mbit/s  
95th percentile per-packet one-way delay: 63.213 ms  
Loss rate: 0.40%  
-- Flow 3:  
Average throughput: 28.11 Mbit/s  
95th percentile per-packet one-way delay: 50.506 ms  
Loss rate: 0.86%

Run 1: Report of PCC-Vivace — Data Link

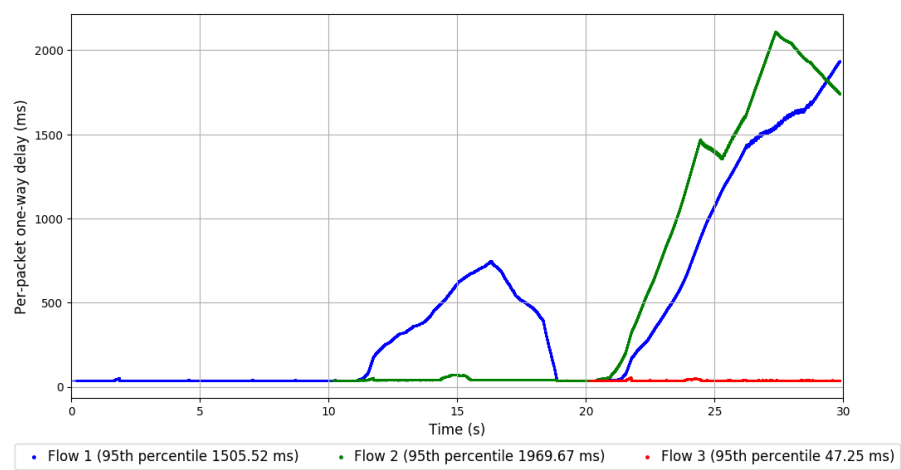
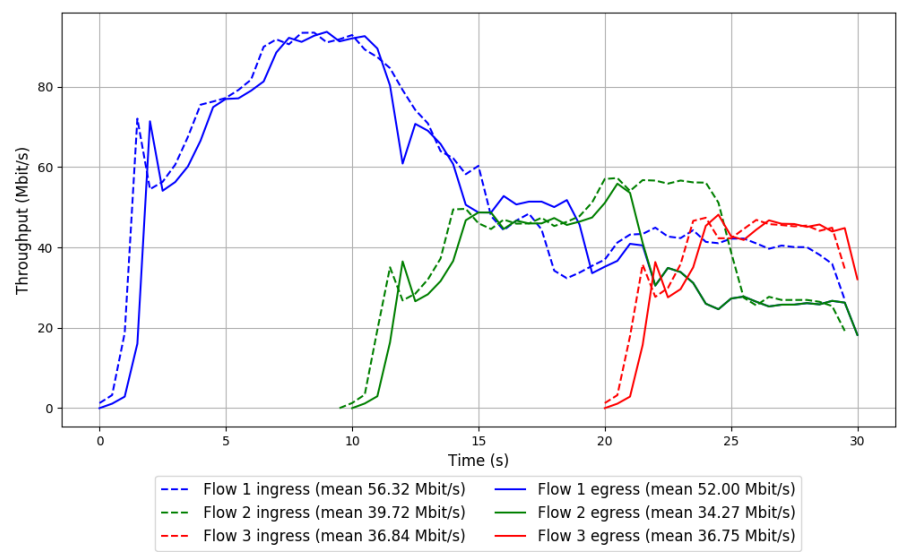


Run 2: Statistics of PCC-Vivace

Start at: 2019-07-18 11:13:51  
End at: 2019-07-18 11:14:21  
Local clock offset: -3.108 ms  
Remote clock offset: -2.672 ms

# Below is generated by plot.py at 2019-07-18 13:36:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.88 Mbit/s  
95th percentile per-packet one-way delay: 1643.633 ms  
Loss rate: 8.67%  
-- Flow 1:  
Average throughput: 52.00 Mbit/s  
95th percentile per-packet one-way delay: 1505.520 ms  
Loss rate: 7.86%  
-- Flow 2:  
Average throughput: 34.27 Mbit/s  
95th percentile per-packet one-way delay: 1969.673 ms  
Loss rate: 13.99%  
-- Flow 3:  
Average throughput: 36.75 Mbit/s  
95th percentile per-packet one-way delay: 47.250 ms  
Loss rate: 0.87%

Run 2: Report of PCC-Vivace — Data Link



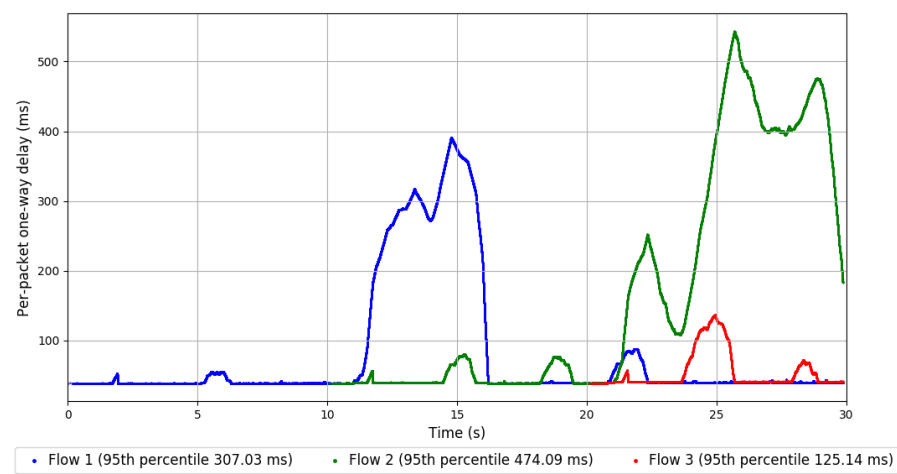
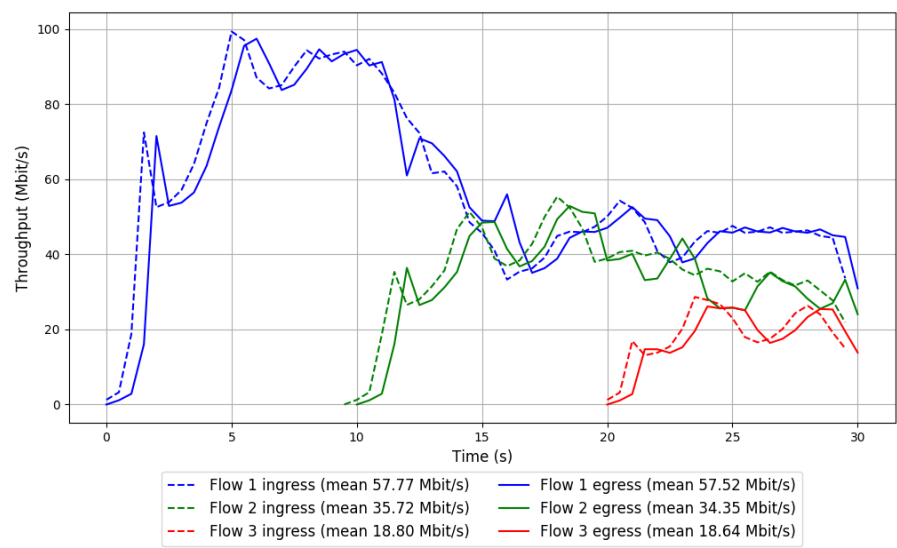


Run 3: Statistics of PCC-Vivace

Start at: 2019-07-18 11:47:19  
End at: 2019-07-18 11:47:49  
Local clock offset: -3.684 ms  
Remote clock offset: -1.196 ms

# Below is generated by plot.py at 2019-07-18 13:36:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.46 Mbit/s  
95th percentile per-packet one-way delay: 390.951 ms  
Loss rate: 1.65%  
-- Flow 1:  
Average throughput: 57.52 Mbit/s  
95th percentile per-packet one-way delay: 307.033 ms  
Loss rate: 0.65%  
-- Flow 2:  
Average throughput: 34.35 Mbit/s  
95th percentile per-packet one-way delay: 474.094 ms  
Loss rate: 4.12%  
-- Flow 3:  
Average throughput: 18.64 Mbit/s  
95th percentile per-packet one-way delay: 125.139 ms  
Loss rate: 1.49%

Run 3: Report of PCC-Vivace — Data Link

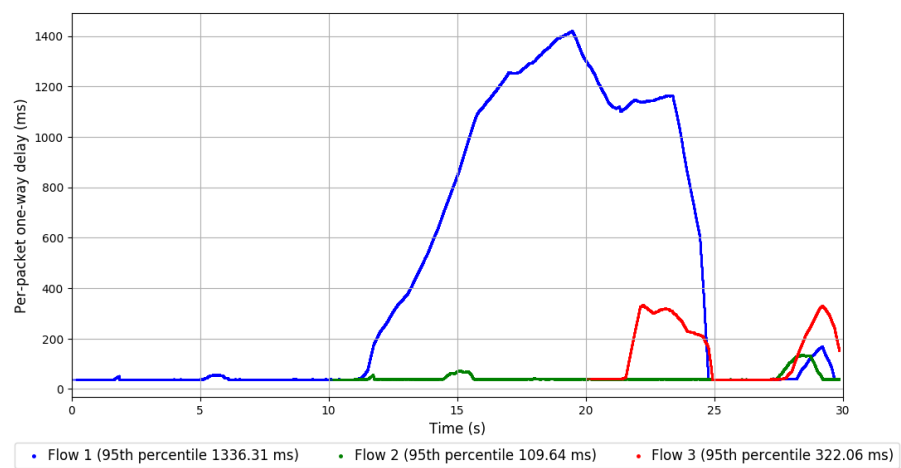
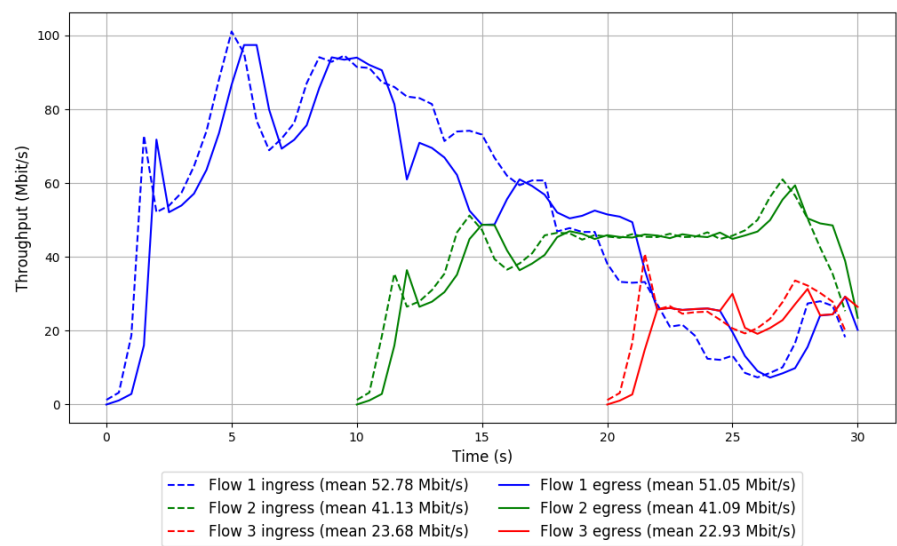


Run 4: Statistics of PCC-Vivace

Start at: 2019-07-18 12:18:59  
End at: 2019-07-18 12:19:29  
Local clock offset: 0.946 ms  
Remote clock offset: -1.111 ms

# Below is generated by plot.py at 2019-07-18 13:36:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.90 Mbit/s  
95th percentile per-packet one-way delay: 1276.928 ms  
Loss rate: 2.56%  
-- Flow 1:  
Average throughput: 51.05 Mbit/s  
95th percentile per-packet one-way delay: 1336.314 ms  
Loss rate: 3.49%  
-- Flow 2:  
Average throughput: 41.09 Mbit/s  
95th percentile per-packet one-way delay: 109.645 ms  
Loss rate: 0.42%  
-- Flow 3:  
Average throughput: 22.93 Mbit/s  
95th percentile per-packet one-way delay: 322.058 ms  
Loss rate: 3.80%

Run 4: Report of PCC-Vivace — Data Link

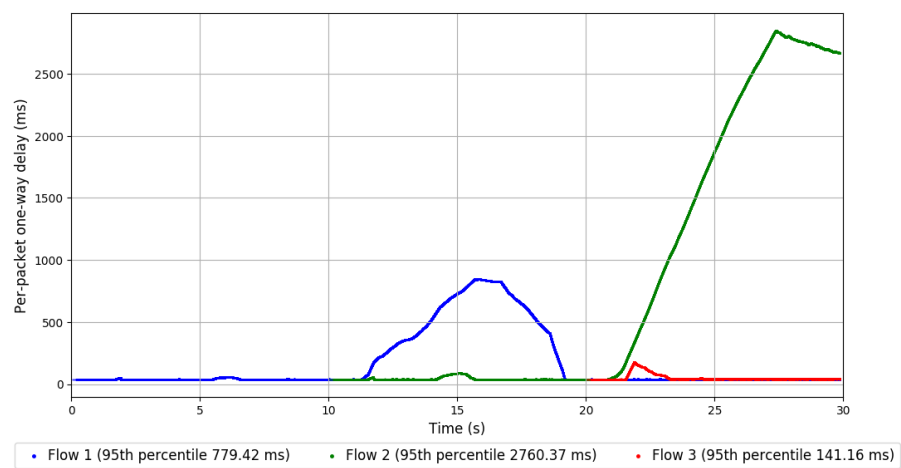
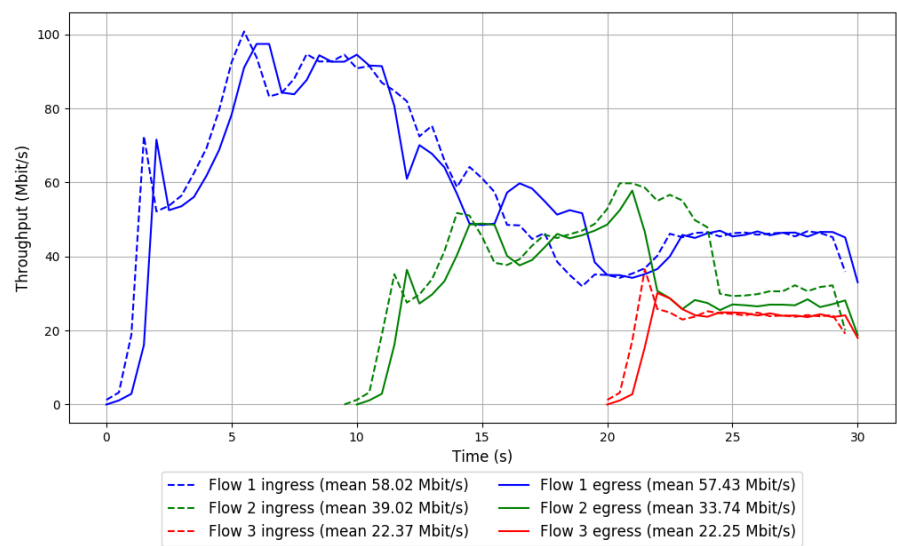


Run 5: Statistics of PCC-Vivace

Start at: 2019-07-18 12:51:13  
End at: 2019-07-18 12:51:43  
Local clock offset: 0.949 ms  
Remote clock offset: -0.977 ms

# Below is generated by plot.py at 2019-07-18 13:36:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.17 Mbit/s  
95th percentile per-packet one-way delay: 1866.447 ms  
Loss rate: 4.79%  
-- Flow 1:  
Average throughput: 57.43 Mbit/s  
95th percentile per-packet one-way delay: 779.418 ms  
Loss rate: 1.23%  
-- Flow 2:  
Average throughput: 33.74 Mbit/s  
95th percentile per-packet one-way delay: 2760.371 ms  
Loss rate: 13.79%  
-- Flow 3:  
Average throughput: 22.25 Mbit/s  
95th percentile per-packet one-way delay: 141.155 ms  
Loss rate: 1.14%

Run 5: Report of PCC-Vivace — Data Link

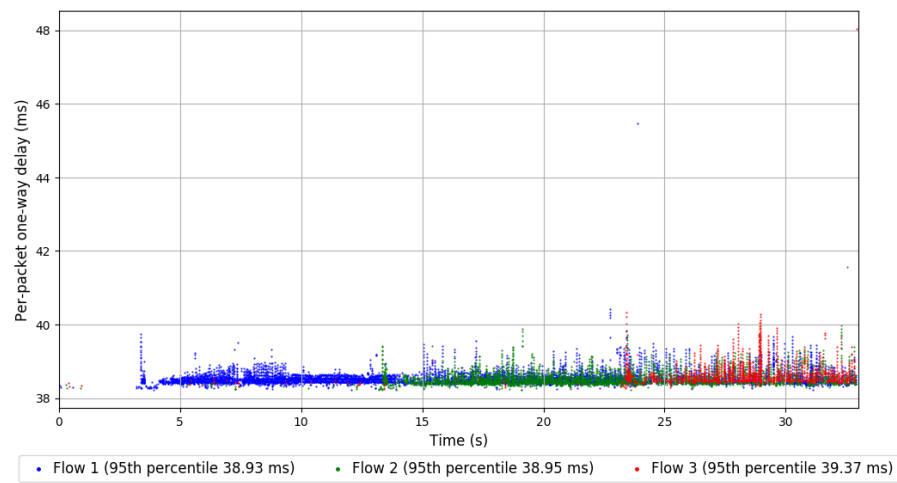
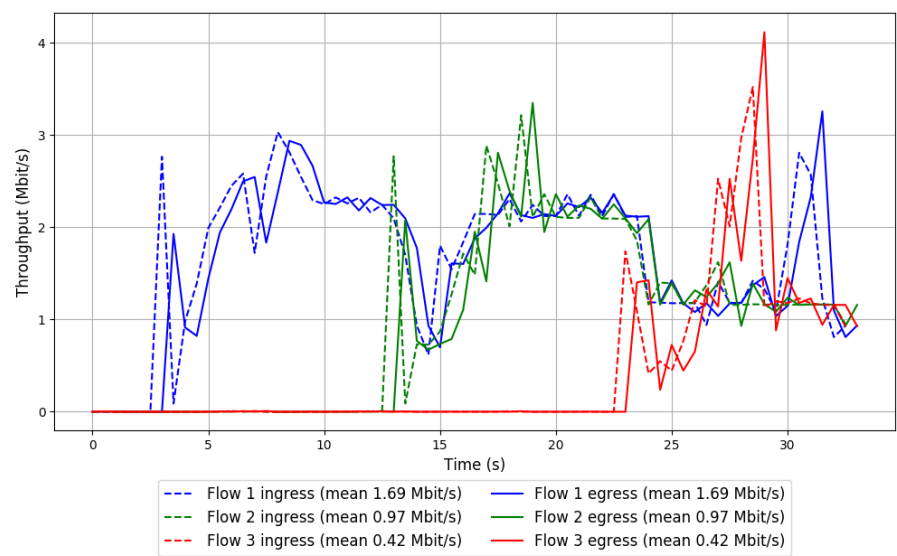


Run 1: Statistics of WebRTC media

Start at: 2019-07-18 10:59:37  
End at: 2019-07-18 11:00:07  
Local clock offset: -3.309 ms  
Remote clock offset: -2.958 ms

# Below is generated by plot.py at 2019-07-18 13:36:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.07 Mbit/s  
95th percentile per-packet one-way delay: 39.004 ms  
Loss rate: 0.19%  
-- Flow 1:  
Average throughput: 1.69 Mbit/s  
95th percentile per-packet one-way delay: 38.930 ms  
Loss rate: 0.12%  
-- Flow 2:  
Average throughput: 0.97 Mbit/s  
95th percentile per-packet one-way delay: 38.953 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 0.42 Mbit/s  
95th percentile per-packet one-way delay: 39.370 ms  
Loss rate: 0.83%

Run 1: Report of WebRTC media — Data Link



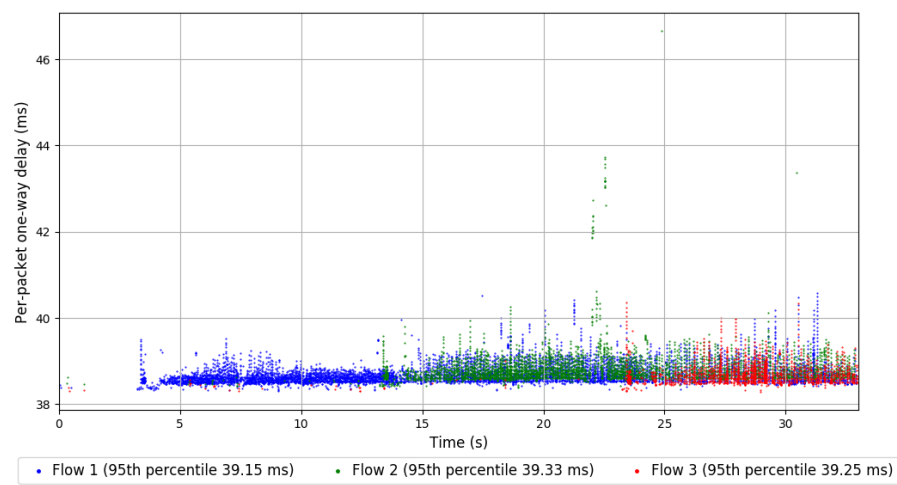
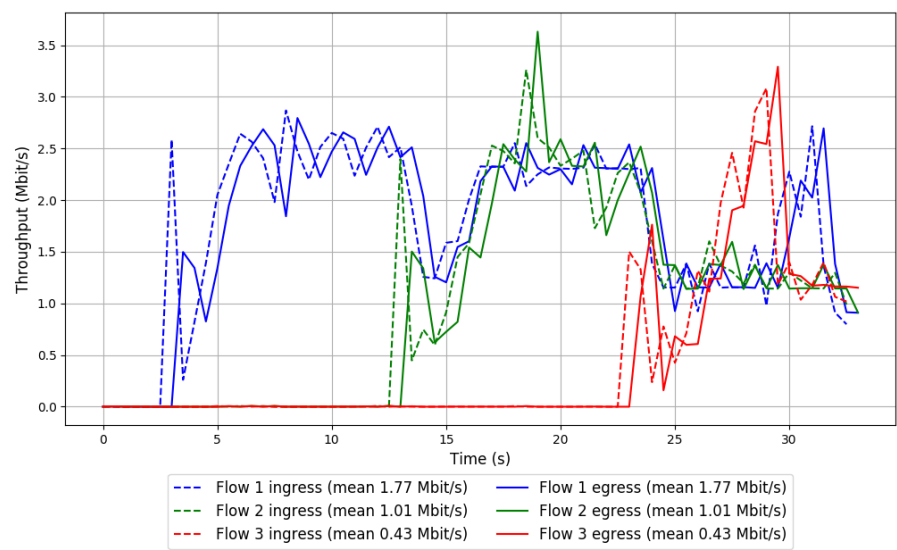


Run 2: Statistics of WebRTC media

Start at: 2019-07-18 11:32:33  
End at: 2019-07-18 11:33:03  
Local clock offset: -3.392 ms  
Remote clock offset: -1.798 ms

# Below is generated by plot.py at 2019-07-18 13:36:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.20 Mbit/s  
95th percentile per-packet one-way delay: 39.228 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 1.77 Mbit/s  
95th percentile per-packet one-way delay: 39.149 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 1.01 Mbit/s  
95th percentile per-packet one-way delay: 39.325 ms  
Loss rate: 0.34%  
-- Flow 3:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 39.247 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

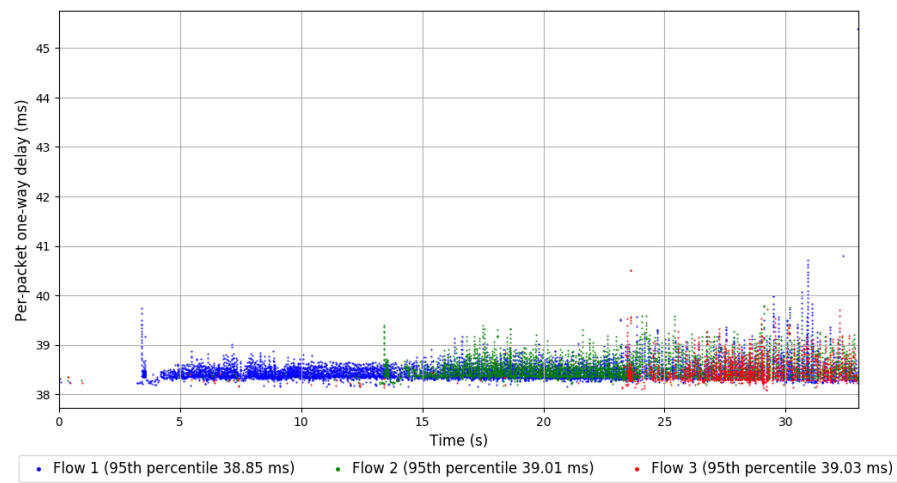
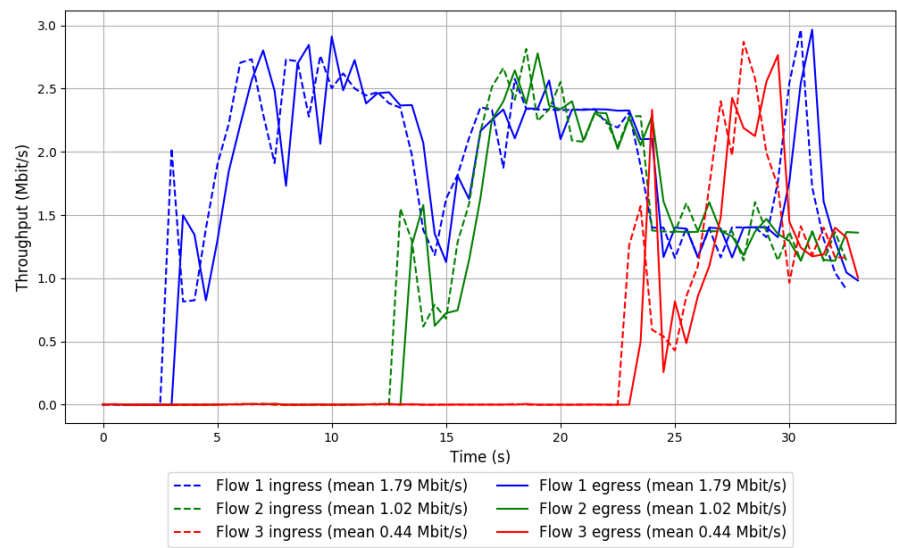


Run 3: Statistics of WebRTC media

Start at: 2019-07-18 12:04:45  
End at: 2019-07-18 12:05:15  
Local clock offset: -0.625 ms  
Remote clock offset: -1.114 ms

# Below is generated by plot.py at 2019-07-18 13:36:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.24 Mbit/s  
95th percentile per-packet one-way delay: 38.956 ms  
Loss rate: 0.14%  
-- Flow 1:  
Average throughput: 1.79 Mbit/s  
95th percentile per-packet one-way delay: 38.853 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 1.02 Mbit/s  
95th percentile per-packet one-way delay: 39.009 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 39.028 ms  
Loss rate: 0.81%

Run 3: Report of WebRTC media — Data Link

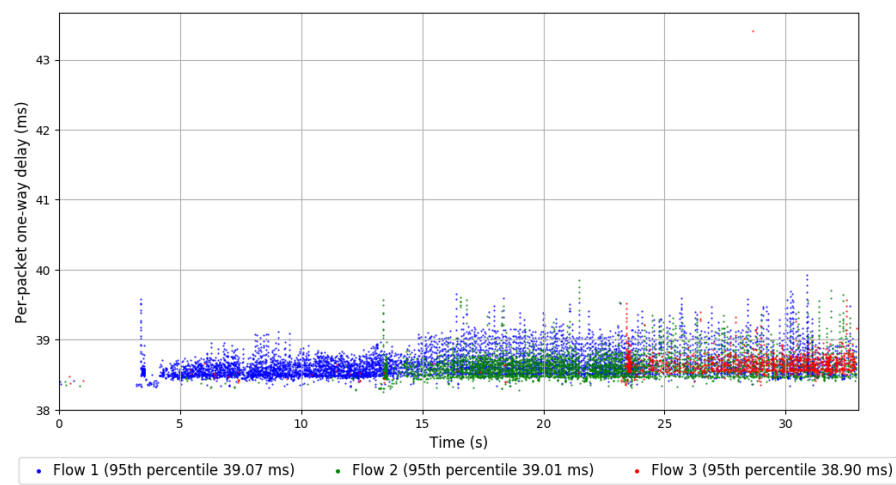
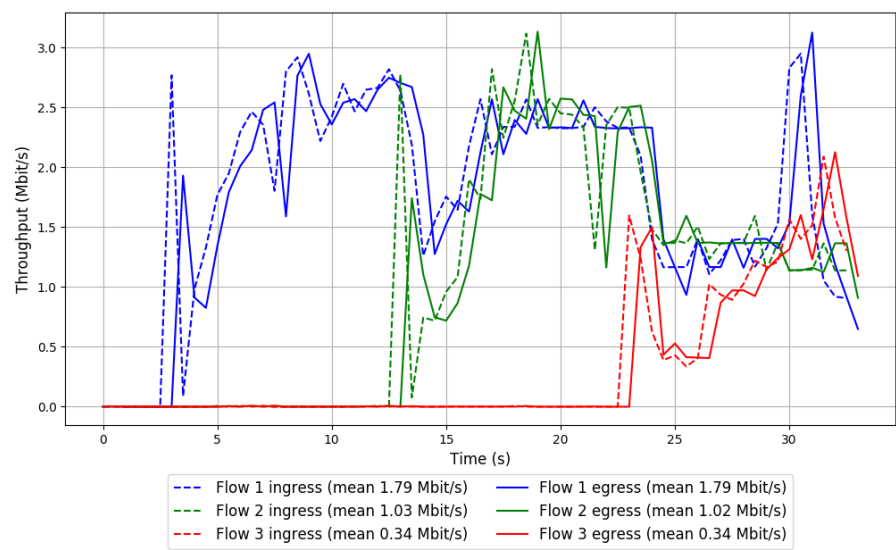


Run 4: Statistics of WebRTC media

Start at: 2019-07-18 12:36:59  
End at: 2019-07-18 12:37:29  
Local clock offset: 0.808 ms  
Remote clock offset: -0.968 ms

# Below is generated by plot.py at 2019-07-18 13:36:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.14 Mbit/s  
95th percentile per-packet one-way delay: 39.047 ms  
Loss rate: 0.34%  
-- Flow 1:  
Average throughput: 1.79 Mbit/s  
95th percentile per-packet one-way delay: 39.072 ms  
Loss rate: 0.22%  
-- Flow 2:  
Average throughput: 1.02 Mbit/s  
95th percentile per-packet one-way delay: 39.007 ms  
Loss rate: 0.34%  
-- Flow 3:  
Average throughput: 0.34 Mbit/s  
95th percentile per-packet one-way delay: 38.898 ms  
Loss rate: 0.97%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-07-18 13:08:42

End at: 2019-07-18 13:09:12

Local clock offset: -2.385 ms

Remote clock offset: -0.86 ms

# Below is generated by plot.py at 2019-07-18 13:36:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 39.160 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 39.053 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 39.261 ms

Loss rate: 0.36%

-- Flow 3:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 39.431 ms

Loss rate: 0.83%

Run 5: Report of WebRTC media — Data Link

